

To craft a megalodon

Diego Conti, Federico A. Rossi and Romeo Segnan Dalmaso

December 7, 2023

This ancillary file contains the output of Algorithm 1 in dimensions 6, 7 and 8. We restrict to surjective root matrix and the situation where (N5) defines $|\mathcal{A}|$ independent equations, i.e. A is uniquely determined from the data. The resulting solutions of

$$\text{Ric} = -\text{tr}((D^s)^2) \text{Id} - \frac{1}{2}[D, D^*] + (\text{tr } D)D^s, \quad \text{tr}(\text{ad } v \circ D^*) = 0, \quad v \in \mathfrak{g}, \quad (1)$$

are given in tables, one for each dimension. Each row of the table contains a Lie algebra \mathfrak{g} , a derivation D , and then the list of compatible metrics. The derivation D is expressed as a sum $v + \sum a_{ij}e^i \otimes e_j$, where v is a vector representing the diagonal derivation v^D . Since the nice basis is orthonormal, the metric is specified by giving the indices of the timelike vectors in the basis. Thus, for instance, 12 represents the metric $\text{diag}(-1, -1, 1, \dots, 1)$. The column **S** in each table indicates the set of admissible signatures represented in this way.

A Dimension 6

Table A: Solutions of (1) obtained with Algorithm 1 with $n = 6$

Name Δ	\mathfrak{g}	D	S
64321:1	$0, 0, \frac{4}{13}\sqrt{2}e^{12}, \frac{4}{13}\sqrt{3}e^{13}, \frac{4}{13}\sqrt{5}e^{14}, \frac{8}{13}e^{15}$	$(\frac{3}{13}, -\frac{5}{13}, -\frac{2}{13}, \frac{1}{13}, \frac{4}{13}, \frac{7}{13})$ $+ \frac{4}{13}\sqrt{10}e^1 \otimes e_2$	{146, 2}
6431:1	$0, 0, \frac{9}{122}\sqrt{61}e^{12}, \frac{9}{61}\sqrt{2}e^{13}, \frac{9}{61}\sqrt{21}e^{23}, \frac{9}{122}\sqrt{61}e^{14}$	$(-\frac{27}{122}, \frac{99}{244}, \frac{45}{244}, -\frac{9}{244}, \frac{36}{61}, -\frac{63}{244})$ $+ \frac{9}{61}\sqrt{46}e^2 \otimes e_6$	{23, 46}
6321:1	$0, 0, 0, \frac{3}{38}\sqrt{19}e^{12}, \frac{6}{19}e^{14}, \frac{3}{38}\sqrt{19}e^{15}$	$(-\frac{3}{38}, \frac{21}{76}, -\frac{6}{19}, \frac{15}{76}, \frac{9}{76}, \frac{3}{76})$ $+ \frac{3}{19}\sqrt{7}e^2 \otimes e_6 + \frac{9}{19}e^1 \otimes e_3$	{125, 146}
6321:1	$0, 0, 0, \frac{12}{115}\sqrt{5}e^{12}, \frac{12}{115}\sqrt{15}e^{14}, \frac{3}{115}\sqrt{410}e^{15}$	$(\frac{3}{23}, -\frac{6}{23}, \frac{12}{23}, -\frac{3}{23}, 0, \frac{3}{23})$ $+ \frac{3}{115}\sqrt{430}e^3 \otimes e_6 + \frac{3}{23}\sqrt{22}e^1 \otimes e_2$	{135, 23}
6321:1	$0, 0, 0, \frac{4}{35}\sqrt{5}e^{12}, \frac{4}{35}\sqrt{15}e^{14}, \frac{8}{35}\sqrt{15}e^{15}$	$(-\frac{1}{7}, \frac{2}{7}, 1, \frac{1}{7}, 0, -\frac{1}{7})$ $+ \frac{4}{35}\sqrt{130}e^3 \otimes e_6$	{1246, 135, 23, 456}
6321:1	$0, 0, 0, \frac{3}{46}\sqrt{115}e^{12}, \frac{3}{23}\sqrt{10}e^{14}, \frac{3}{46}\sqrt{115}e^{15}$	$(-\frac{15}{46}, \frac{3}{4}, \frac{6}{23}, \frac{39}{92}, \frac{9}{92}, -\frac{21}{92})$ $+ \frac{3}{23}\sqrt{85}e^2 \otimes e_6$	{1235, 125, 1346, 146}

Table A – Continued to next page

Table A – Continued from previous page

Name Δ	g	D	S
6321:1	$0, 0, 0, \frac{8}{35}\sqrt{15}e^{12}, \frac{4}{35}\sqrt{15}e^{14}, \frac{4}{35}\sqrt{5}e^{15}$	$(-\frac{1}{7}, \frac{23}{35}, -\frac{17}{35}, \frac{18}{35}, \frac{13}{35}, \frac{8}{35})$ $+\frac{4}{35}\sqrt{130}e^2 \otimes e_3$	{1256, 134, 245, 36}
6321:1	$0, 0, 0, \frac{1}{3}\sqrt{3}e^{12}, \frac{2}{3}e^{14}, \frac{1}{3}\sqrt{3}e^{15}$	$(\frac{1}{6}, 0, -\frac{1}{2}, \frac{1}{6}, \frac{1}{3}, \frac{1}{2})$ $+e^1 \otimes e_3$	{125, 146, 23456, 3}
6321:1	$0, 0, 0, \frac{4}{183}\sqrt{114}e^{12}, \frac{4}{183}\sqrt{1159}e^{14}, \frac{4}{61}\sqrt{133}e^{15}$	$(\frac{65}{183}, -\frac{29}{61}, \frac{15}{61}, -\frac{22}{183}, \frac{43}{183}, \frac{36}{61})$ $+\frac{4}{183}\sqrt{2622}e^1 \otimes e_2$	{135, 15, 2, 23}
6321:2	$0, 0, 0, \frac{11}{106}\sqrt{74}e^{12}, \frac{33}{106}\sqrt{2}e^{14}, \frac{11}{106}\sqrt{5}e^{15} + \frac{11}{106}\sqrt{5}e^{23}$	$(-\frac{33}{212}, \frac{143}{212}, -\frac{99}{212}, \frac{55}{106}, \frac{77}{212}, \frac{11}{53})$ $+\frac{11}{106}\sqrt{158}e^2 \otimes e_3$	{134, 245}
6321:3	$0, 0, 0, \frac{34}{389}\sqrt{78}e^{12}, \frac{51}{389}\sqrt{6}e^{14}, \frac{17}{389}\sqrt{158}e^{15} + \frac{17}{389}\sqrt{330}e^{24}$	$(\frac{34}{389}, \frac{68}{389}, -\frac{221}{389}, \frac{102}{389}, \frac{136}{389}, \frac{170}{389})$ $+\frac{17}{389}\sqrt{610}e^2 \otimes e_3$	{13456, 35}
6321:3	$0, 0, 0, \frac{4}{13}\sqrt{3}e^{12}, \frac{4}{13}\sqrt{5}e^{14}, \frac{8}{13}e^{15} + \frac{4}{13}\sqrt{2}e^{24}$	$(\frac{1}{13}, \frac{2}{13}, -\frac{7}{13}, \frac{3}{13}, \frac{4}{13}, \frac{5}{13})$ $+\frac{4}{13}\sqrt{10}e^1 \otimes e_3$	{125, 23456}
632:1	$0, 0, 0, \frac{4}{183}\sqrt{1159}e^{12}, \frac{4}{61}\sqrt{133}e^{14}, \frac{4}{183}\sqrt{114}e^{24}$	$(\frac{59}{183}, -\frac{10}{183}, -\frac{31}{61}, \frac{49}{183}, \frac{36}{61}, \frac{13}{61})$ $+\frac{4}{183}\sqrt{2622}e^1 \otimes e_3$	{125, 14, 23456, 36}
632:1	$0, 0, 0, \frac{4}{35}\sqrt{15}e^{12}, \frac{8}{35}\sqrt{15}e^{14}, \frac{4}{35}\sqrt{5}e^{24}$	$(-\frac{6}{35}, \frac{1}{5}, \frac{1}{35}, -\frac{1}{7}, \frac{8}{35})$ $+\frac{4}{35}\sqrt{130}e^3 \otimes e_5$	{125, 134, 2456, 36}
632:2	$0, 0, 0, \frac{68}{383}\sqrt{19}e^{12}, \frac{17}{383}\sqrt{302}e^{14}, \frac{17}{383}\sqrt{146}e^{13} + \frac{17}{383}\sqrt{6}e^{24}$	$(\frac{153}{383}, -\frac{68}{383}, -\frac{136}{383}, \frac{85}{383}, \frac{238}{383}, \frac{17}{383})$ $+\frac{68}{383}\sqrt{37}e^1 \otimes e_3$	{2345, 3}
632:2	$0, 0, 0, \frac{38}{371}\sqrt{3}e^{12}, \frac{38}{371}\sqrt{51}e^{14}, \frac{19}{371}\sqrt{210}e^{13} + \frac{76}{371}\sqrt{5}e^{24}$	$(-\frac{114}{371}, \frac{19}{53}, \frac{38}{53}, \frac{19}{371}, -\frac{95}{371}, \frac{152}{371})$ $+\frac{38}{371}\sqrt{142}e^3 \otimes e_5$	{156, 45}
631:1	$0, 0, 0, \frac{4}{53}\sqrt{105}e^{12}, \frac{20}{53}\sqrt{2}e^{13}, \frac{4}{53}\sqrt{105}e^{14}$	$(\frac{21}{53}, -\frac{9}{53}, -\frac{19}{53}, \frac{12}{53}, \frac{2}{53}, \frac{33}{53})$ $+\frac{4}{53}\sqrt{205}e^1 \otimes e_3$	{126, 14, 2346, 3}
631:1	$0, 0, 0, \frac{13}{419}\sqrt{282}e^{12}, \frac{26}{419}\sqrt{2}e^{13}, \frac{78}{419}\sqrt{5}e^{14}$	$(\frac{39}{419}, \frac{78}{419}, -\frac{130}{419}, \frac{117}{419}, -\frac{91}{419}, \frac{156}{419})$ $+\frac{260}{419}e^1 \otimes e_3 + \frac{39}{419}\sqrt{34}e^2 \otimes e_5$	{126, 2346}
631:1	$0, 0, 0, \frac{14}{139}\sqrt{3}e^{12}, \frac{7}{139}\sqrt{74}e^{13}, \frac{14}{139}\sqrt{17}e^{14}$	$(\frac{14}{139}, -\frac{35}{139}, \frac{42}{139}, -\frac{21}{139}, \frac{56}{139}, -\frac{7}{139})$ $+\frac{14}{139}\sqrt{30}e^1 \otimes e_2 + \frac{14}{139}\sqrt{30}e^3 \otimes e_6$	{156, 235}
631:1	$0, 0, 0, \frac{6}{19}e^{12}, \frac{3}{19}\sqrt{10}e^{13}, \frac{6}{19}e^{14}$	$(-\frac{6}{19}, \frac{9}{19}, \frac{6}{19}, \frac{3}{19}, 0, -\frac{3}{19})$ $+\frac{12}{19}e^2 \otimes e_5 + \frac{12}{19}e^3 \otimes e_6$	{246, 35}
631:2	$0, 0, 0, \frac{7}{134}\sqrt{78}e^{12}, \frac{7}{134}\sqrt{34}e^{13}, \frac{7}{67}\sqrt{15}e^{24}$	$(\frac{21}{268}, \frac{21}{134}, -\frac{77}{268}, \frac{63}{268}, -\frac{14}{67}, \frac{105}{268})$ $+\frac{21}{134}\sqrt{15}e^2 \otimes e_5 + \frac{7}{67}\sqrt{22}e^1 \otimes e_3$	{1456, 35}
631:2	$0, 0, 0, \frac{1}{3}\sqrt{3}e^{12}, \frac{1}{3}\sqrt{3}e^{13}, \frac{2}{3}e^{24}$	$(-\frac{1}{4}, \frac{5}{12}, 0, \frac{1}{6}, -\frac{1}{4}, \frac{7}{12})$ $+e^2 \otimes e_5$	{1236, 1456, 24, 35}
631:2	$0, 0, 0, \frac{4}{183}\sqrt{114}e^{12}, \frac{4}{61}\sqrt{133}e^{13}, \frac{4}{183}\sqrt{1159}e^{24}$	$(-\frac{4}{61}, -\frac{10}{183}, \frac{40}{61}, -\frac{22}{183}, \frac{36}{61}, -\frac{32}{183})$ $+\frac{4}{183}\sqrt{2622}e^3 \otimes e_6$	{1234, 13, 26, 46}

Table A – Continued to next page

Table A – Continued from previous page

Name Δ	g	D	S
631:2	$0, 0, 0, \frac{1}{30}\sqrt{30}e^{12}, \frac{1}{10}\sqrt{10}e^{13}, \frac{1}{3}e^{24}$	$(-\frac{1}{4}, \frac{1}{6}, \frac{1}{4}, -\frac{1}{12}, 0, \frac{1}{12})$ $+ \frac{1}{10}\sqrt{15}e^2 \otimes e_5 + \frac{1}{15}\sqrt{30}e^3 \otimes e_6$	{1456, 35}
631:2	$0, 0, 0, \frac{8}{35}\sqrt{15}e^{12}, \frac{4}{35}\sqrt{5}e^{13}, \frac{4}{35}\sqrt{15}e^{24}$	$(\frac{24}{35}, -\frac{6}{35}, -\frac{16}{35}, \frac{18}{35}, \frac{8}{35}, \frac{12}{35})$ $+ \frac{4}{35}\sqrt{130}e^1 \otimes e_3$	{126, 146, 234, 3}
631:3	$0, 0, 0, \frac{9}{91}\sqrt{34}e^{12}, \frac{18}{91}\sqrt{10}e^{13}, \frac{18}{91}\sqrt{3}e^{14} + \frac{18}{91}\sqrt{10}e^{23}$	$(-\frac{9}{91}, \frac{54}{91}, -\frac{18}{91}, \frac{45}{91}, -\frac{27}{91}, \frac{36}{91})$ $+ \frac{9}{91}\sqrt{138}e^2 \otimes e_5$	{123, 356}
63:1	$0, 0, 0, \frac{3}{35}\sqrt{14}e^{12}, \frac{3}{35}\sqrt{14}e^{13}, \frac{3}{35}\sqrt{14}e^{23}$	$(\frac{6}{35}, \frac{6}{35}, -\frac{9}{35}, \frac{12}{35}, -\frac{3}{35}, -\frac{3}{35})$ $+ \frac{3}{35}\sqrt{30}e^1 \otimes e_6 - \frac{3}{35}\sqrt{30}e^2 \otimes e_5$	{123, 145, 356}
63:1	$0, 0, 0, \frac{3}{35}\sqrt{14}e^{12}, \frac{3}{35}\sqrt{14}e^{13}, \frac{3}{35}\sqrt{14}e^{23}$	$(\frac{6}{35}, \frac{6}{35}, -\frac{9}{35}, \frac{12}{35}, -\frac{3}{35}, -\frac{3}{35})$ $+ \frac{3}{35}\sqrt{30}e^1 \otimes e_6 + \frac{3}{35}\sqrt{30}e^2 \otimes e_5$	{123, 145, 356}
63:1	$0, 0, 0, \frac{3}{5}e^{12}, \frac{3}{5}e^{13}, \frac{3}{5}e^{23}$	$(\frac{3}{5}, -\frac{3}{20}, -\frac{3}{20}, \frac{9}{20}, \frac{9}{20}, -\frac{3}{10})$ $+ \frac{3}{10}\sqrt{15}e^1 \otimes e_6$	{123, 145, 246}
621:1	$0, 0, 0, 0, \frac{1}{3}\sqrt{5}e^{12}, \frac{1}{3}\sqrt{5}e^{15}$	$(\frac{1}{3}, -\frac{1}{12}, -\frac{1}{2}, \frac{1}{4}, \frac{1}{4}, \frac{7}{12})$ $+ \frac{1}{2}\sqrt{5}e^1 \otimes e_3$	{1246, 126, 145, 15, 23456, 2356, 3, 34}
621:1	$0, 0, 0, 0, \frac{2}{57}\sqrt{138}e^{12}, \frac{1}{57}\sqrt{874}e^{15}$	$(\frac{5}{57}, -\frac{19}{19}, \frac{10}{19}, -\frac{6}{19}, \frac{2}{57}, \frac{7}{57})$ $+ \frac{1}{19}\sqrt{138}e^1 \otimes e_4 + \frac{1}{57}\sqrt{966}e^3 \otimes e_6$	{126, 135, 2456, 34}
621:1	$0, 0, 0, 0, \frac{1}{57}\sqrt{874}e^{12}, \frac{2}{57}\sqrt{138}e^{15}$	$(\frac{5}{57}, \frac{11}{57}, -\frac{6}{19}, -\frac{4}{19}, \frac{16}{57}, \frac{7}{19})$ $+ \frac{1}{19}\sqrt{138}e^1 \otimes e_3 + \frac{1}{57}\sqrt{966}e^2 \otimes e_4$	{126, 145, 2356, 34}
621:1	$0, 0, 0, 0, \frac{2}{69}\sqrt{237}e^{12}, \frac{1}{69}\sqrt{3634}e^{15}$	$(-\frac{11}{69}, \frac{4}{23}, 1, \frac{6}{23}, \frac{1}{69}, -\frac{10}{69})$ $+ \frac{1}{69}\sqrt{8058}e^3 \otimes e_6$	{1246, 126, 1345, 135, 2456, 256, 3, 34}
621:1	$0, 0, 0, 0, \frac{1}{60}\sqrt{186}e^{12}, \frac{1}{30}\sqrt{310}e^{15}$	$(\frac{23}{120}, -\frac{13}{40}, \frac{23}{40}, \frac{3}{20}, -\frac{2}{15}, \frac{7}{120})$ $+ \frac{1}{60}\sqrt{1581}e^1 \otimes e_2 + \frac{1}{60}\sqrt{1581}e^3 \otimes e_6$	{1345, 135, 2456, 256}
621:1	$0, 0, 0, 0, \frac{2}{69}\sqrt{237}e^{12}, \frac{1}{69}\sqrt{3634}e^{15}$	$(\frac{40}{69}, -\frac{13}{23}, \frac{6}{23}, \frac{6}{23}, \frac{1}{69}, \frac{41}{69})$ $+ \frac{1}{69}\sqrt{8058}e^1 \otimes e_2$	{1345, 135, 15, 23456, 2356, 256}
621:1	$0, 0, 0, 0, \frac{4}{41}\sqrt{26}e^{12}, \frac{4}{41}\sqrt{26}e^{15}$	$(-\frac{9}{41}, \frac{16}{41}, \frac{24}{41}, -\frac{10}{41}, \frac{7}{41}, -\frac{2}{41})$ $+ \frac{2}{41}\sqrt{221}e^2 \otimes e_4 + \frac{2}{41}\sqrt{221}e^3 \otimes e_6$	{126, 1345, 256, 34}
621:1	$0, 0, 0, 0, \frac{4}{217}\sqrt{237}e^{12}, \frac{2}{217}\sqrt{3634}e^{15}$	$(\frac{80}{217}, -\frac{78}{217}, \frac{115}{217}, -\frac{43}{217}, \frac{2}{217}, \frac{82}{217})$ $+ \frac{158}{217}e^3 \otimes e_4 + \frac{2}{217}\sqrt{8058}e^1 \otimes e_2$	{135, 145, 2356, 2456}
621:1	$0, 0, 0, 0, \frac{1}{69}\sqrt{3634}e^{12}, \frac{2}{69}\sqrt{237}e^{15}$	$(-\frac{11}{69}, \frac{2}{3}, -\frac{11}{23}, \frac{6}{23}, \frac{35}{69}, \frac{8}{23})$ $+ \frac{1}{69}\sqrt{8058}e^2 \otimes e_3$	{1246, 126, 1345, 135, 2456, 256, 3, 34}
621:1	$0, 0, 0, 0, \frac{4}{11}\sqrt{2}e^{12}, \frac{4}{11}\sqrt{2}e^{15}$	$(\frac{1}{11}, \frac{2}{11}, 1, -\frac{5}{11}, \frac{3}{11}, \frac{4}{11})$ $+ \frac{16}{11}e^3 \otimes e_4$	{1236, 1246, 135, 145, 2356, 2456, 3, 4}
621:2	$0, 0, 0, 0, \frac{4}{157}\sqrt{1246}e^{12}, \frac{2}{157}\sqrt{979}e^{13} + \frac{2}{157}\sqrt{1513}e^{25}$	$(\frac{112}{157}, -\frac{33}{157}, -\frac{66}{157}, \frac{40}{157}, \frac{79}{157}, \frac{46}{157})$ $+ \frac{6}{157}\sqrt{1157}e^1 \otimes e_3$	{2345, 235, 3, 34}

Table A – Continued to next page

Table A – Continued from previous page

Name Δ	\mathfrak{g}	D	S
621:2	$0, 0, 0, 0, \frac{4}{53}\sqrt{105}e^{12}, \frac{20}{53}\sqrt{2}e^{13} + \frac{4}{53}\sqrt{105}e^{25}$	$(\frac{1}{53}, \frac{11}{53}, \frac{22}{53}, -\frac{29}{53}, \frac{12}{53}, \frac{23}{53})$ $+ \frac{4}{53}\sqrt{205}e^2 \otimes e_4$	{1236, 13456, 235, 34}
621:2	$0, 0, 0, 0, \frac{13}{503}\sqrt{394}e^{12}, \frac{52}{503}\sqrt{11}e^{13} + \frac{52}{503}\sqrt{17}e^{25}$	$(\frac{143}{503}, -\frac{13}{503}, -\frac{26}{503}, -\frac{182}{503}, \frac{130}{503}, \frac{117}{503})$ $+ \frac{13}{503}\sqrt{366}e^1 \otimes e_3 + \frac{13}{503}\sqrt{502}e^2 \otimes e_4$	{235, 34}
621:2	$0, 0, 0, 0, \frac{1}{25}\sqrt{58}e^{12}, \frac{3}{25}\sqrt{58}e^{13} + \frac{1}{25}\sqrt{58}e^{25}$	$(-\frac{2}{25}, \frac{8}{25}, \frac{16}{25}, -\frac{13}{25}, \frac{6}{25}, \frac{14}{25})$ $+ \frac{1}{25}\sqrt{1102}e^3 \otimes e_4$	{12456, 146, 24, 45}
621:2	$0, 0, 0, 0, \frac{4}{13}\sqrt{2}e^{12}, \frac{2}{13}\sqrt{5}e^{13} + \frac{6}{13}e^{25}$	$(\frac{4}{13}, -\frac{2}{13}, -\frac{4}{13}, \frac{8}{13}, \frac{2}{13}, 0)$ $+ \frac{2}{13}\sqrt{23}e^4 \otimes e_6 + \frac{4}{13}\sqrt{5}e^1 \otimes e_3$	{126, 156}
621:3	$0, 0, 0, 0, \frac{4}{35}\sqrt{15}e^{12}, \frac{8}{35}\sqrt{15}e^{15} + \frac{4}{35}\sqrt{5}e^{34}$	$(\frac{4}{7}, -\frac{4}{7}, \frac{2}{7}, \frac{2}{7}, 0, \frac{4}{7})$ $+ \frac{4}{35}\sqrt{130}e^1 \otimes e_2$	{135, 23456, 256}
621:3	$0, 0, 0, 0, \frac{4}{55}\sqrt{15}e^{12}, \frac{8}{55}\sqrt{15}e^{15} + \frac{4}{55}\sqrt{5}e^{34}$	$(\frac{4}{11}, -\frac{4}{11}, \frac{6}{11}, -\frac{2}{11}, 0, \frac{4}{11})$ $+ \frac{4}{55}\sqrt{130}e^1 \otimes e_2 + \frac{8}{11}e^3 \otimes e_4$	{135, 145}
621:3	$0, 0, 0, 0, \frac{4}{43}\sqrt{31}e^{12}, \frac{2}{43}\sqrt{93}e^{15} + \frac{2}{43}\sqrt{93}e^{34}$	$(\frac{5}{43}, \frac{8}{43}, \frac{40}{43}, -\frac{22}{43}, \frac{13}{43}, \frac{18}{43})$ $+ \frac{62}{43}e^3 \otimes e_4$	{1236, 1246, 2356, 2456}
62:1	$0, 0, 0, 0, \frac{4}{55}\sqrt{38}e^{12}, \frac{4}{55}\sqrt{38}e^{13}$	$(\frac{16}{55}, -\frac{2}{5}, \frac{1}{55}, \frac{32}{55}, -\frac{6}{55}, \frac{17}{55})$ $+ \frac{2}{55}\sqrt{437}e^1 \otimes e_2 + \frac{2}{55}\sqrt{437}e^4 \otimes e_5$	{135, 156, 2356, 25}
62:1	$0, 0, 0, 0, \frac{1}{61}\sqrt{2982}e^{12}, \frac{2}{61}\sqrt{71}e^{13}$	$(-\frac{4}{61}, \frac{40}{61}, \frac{17}{61}, -\frac{31}{61}, \frac{36}{61}, \frac{13}{61})$ $+ \frac{2}{61}\sqrt{1633}e^2 \otimes e_4$	{12, 1236, 13456, 145, 235, 256, 34, 46}
62:1	$0, 0, 0, 0, \frac{1}{2}\sqrt{2}e^{12}, \frac{1}{2}\sqrt{2}e^{13}$	$(-\frac{1}{4}, \frac{3}{4}, 0, \frac{1}{4}, \frac{1}{2}, -\frac{1}{4})$ $+ \frac{1}{2}\sqrt{6}e^2 \otimes e_6$	{123, 1234, 1456, 156, 245, 25, 346, 36}
62:1	$0, 0, 0, 0, \frac{1}{10}\sqrt{30}e^{12}, \frac{1}{10}\sqrt{10}e^{13}$	$(\frac{3}{20}, \frac{3}{10}, -\frac{7}{20}, \frac{3}{20}, \frac{9}{20}, -\frac{1}{5})$ $+ \frac{1}{5}\sqrt{10}e^1 \otimes e_3 + \frac{3}{10}\sqrt{5}e^2 \otimes e_6$	{1456, 156, 346, 36}
62:1	$0, 0, 0, 0, \frac{1}{14}\sqrt{35}e^{12}, \frac{1}{14}\sqrt{35}e^{13}$	$(-\frac{5}{14}, \frac{9}{28}, \frac{9}{28}, \frac{1}{7}, -\frac{1}{28}, -\frac{1}{28})$ $+ \frac{1}{7}\sqrt{15}e^2 \otimes e_6 - \frac{1}{7}\sqrt{15}e^3 \otimes e_5$	{123, 1234, 1456, 156, 245, 25}
62:1	$0, 0, 0, 0, \frac{1}{14}\sqrt{35}e^{12}, \frac{1}{14}\sqrt{35}e^{13}$	$(-\frac{5}{14}, \frac{9}{28}, \frac{9}{28}, \frac{1}{7}, -\frac{1}{28}, -\frac{1}{28})$ $+ \frac{1}{7}\sqrt{15}e^2 \otimes e_6 + \frac{1}{7}\sqrt{15}e^3 \otimes e_5$	{123, 1234, 1456, 156, 245, 25}
62:1	$0, 0, 0, 0, \frac{3}{53}\sqrt{114}e^{12}, \frac{6}{53}\sqrt{6}e^{13}$	$(\frac{15}{53}, \frac{11}{53}, -\frac{12}{53}, -\frac{16}{53}, \frac{26}{53}, \frac{3}{53})$ $+ \frac{3}{53}\sqrt{138}e^1 \otimes e_3 + \frac{3}{53}\sqrt{138}e^2 \otimes e_4$	{12, 145, 235, 34}
62:1	$0, 0, 0, 0, \frac{1}{2}\sqrt{2}e^{12}, \frac{1}{2}\sqrt{2}e^{13}$	$(\frac{1}{2}, 0, 0, -\frac{1}{2}, \frac{1}{2}, \frac{1}{2})$ $+ \frac{1}{2}\sqrt{6}e^1 \otimes e_4$	{123, 126, 156, 23456, 245, 4}
62:1	$0, 0, 0, 0, \frac{2}{61}\sqrt{71}e^{12}, \frac{1}{61}\sqrt{2982}e^{13}$	$(\frac{42}{61}, -\frac{29}{61}, -\frac{6}{61}, \frac{15}{61}, \frac{13}{61}, \frac{36}{61})$ $+ \frac{2}{61}\sqrt{1633}e^1 \otimes e_2$	{13, 134, 146, 16, 2, 2346, 236, 24}
62:1	$0, 0, 0, 0, \frac{1}{10}\sqrt{30}e^{12}, \frac{1}{10}\sqrt{10}e^{13}$	$(-\frac{1}{4}, \frac{1}{4}, \frac{1}{2}, -\frac{1}{4}, 0, \frac{1}{4})$ $+ \frac{1}{5}\sqrt{10}e^2 \otimes e_4 + \frac{3}{10}\sqrt{5}e^3 \otimes e_5$	{123, 1456, 25, 346}

Table A – Continued to next page

Table A – Continued from previous page

Name Δ	\mathbf{g}	D	\mathbf{S}
62:1	$0, 0, 0, 0, \frac{1}{10}\sqrt{30}e^{12}, \frac{1}{10}\sqrt{10}e^{13}$	$(-\frac{1}{4}, \frac{3}{10}, \frac{1}{20}, \frac{11}{20}, \frac{1}{20}, -\frac{1}{5})$ $+\frac{1}{5}\sqrt{10}e^4 \otimes e_5 + \frac{3}{10}\sqrt{5}e^2 \otimes e_6$	{1234, 156, 25, 346}
62:1	$0, 0, 0, 0, \frac{6}{53}\sqrt{6}e^{12}, \frac{3}{53}\sqrt{114}e^{13}$	$(\frac{15}{53}, -\frac{12}{53}, -\frac{12}{53}, \frac{30}{53}, \frac{3}{53}, \frac{3}{53})$ $+\frac{3}{53}\sqrt{138}e^1 \otimes e_2 + \frac{3}{53}\sqrt{138}e^4 \otimes e_6$	{134, 16, 236, 24}
62:1	$0, 0, 0, 0, \frac{1}{14}\sqrt{35}e^{12}, \frac{1}{14}\sqrt{35}e^{13}$	$(\frac{1}{14}, \frac{9}{28}, -\frac{3}{28}, -\frac{2}{7}, \frac{11}{28}, -\frac{1}{28})$ $+\frac{1}{7}\sqrt{15}e^1 \otimes e_4 + \frac{1}{7}\sqrt{15}e^2 \otimes e_6$	{123, 156, 245, 346}
62:1	$0, 0, 0, 0, \frac{1}{61}\sqrt{2982}e^{12}, \frac{2}{61}\sqrt{71}e^{13}$	$(-\frac{4}{61}, -\frac{6}{61}, \frac{17}{61}, 1, -\frac{10}{61}, \frac{13}{61})$ $+\frac{2}{61}\sqrt{1633}e^4 \otimes e_5$	{12346, 124, 1356, 15, 235, 256, 34, 46}
62:2	$0, 0, 0, 0, \frac{4}{19}\sqrt{2}e^{12}, \frac{4}{19}\sqrt{2}e^{34}$	$(\frac{10}{19}, -\frac{6}{19}, \frac{10}{19}, -\frac{6}{19}, \frac{4}{19}, \frac{4}{19})$ $+\frac{16}{19}e^1 \otimes e_2 + \frac{16}{19}e^3 \otimes e_4$	{1356, 1456, 2456}
62:2	$0, 0, 0, 0, \frac{4}{11}\sqrt{2}e^{12}, \frac{4}{11}\sqrt{2}e^{34}$	$(\frac{10}{11}, -\frac{6}{11}, \frac{2}{11}, \frac{2}{11}, \frac{4}{11}, \frac{4}{11})$ $+\frac{16}{11}e^1 \otimes e_2$	{1345, 1356, 15, 2345, 2356, 25}
62:2	$0, 0, 0, 0, \frac{2}{21}\sqrt{14}e^{12}, \frac{2}{21}\sqrt{14}e^{34}$	$(\frac{5}{21}, -\frac{4}{21}, \frac{5}{21}, -\frac{4}{21}, \frac{1}{21}, \frac{1}{21})$ $+\frac{2}{7}\sqrt{2}e^1 \otimes e_6 + \frac{2}{7}\sqrt{2}e^3 \otimes e_5$	{1234, 15, 2456}
62:2	$0, 0, 0, 0, \frac{1}{3}\sqrt{5}e^{12}, \frac{1}{3}\sqrt{5}e^{34}$	$(\frac{2}{3}, -\frac{1}{12}, -\frac{1}{12}, -\frac{1}{12}, \frac{7}{12}, -\frac{1}{6})$ $+\frac{1}{2}\sqrt{5}e^1 \otimes e_6$	{12, 1234, 1345, 15, 2356, 36}
62:2	$0, 0, 0, 0, \frac{4}{17}\sqrt{5}e^{12}, \frac{4}{17}\sqrt{5}e^{34}$	$(\frac{4}{17}, -\frac{6}{17}, \frac{8}{17}, -\frac{1}{17}, -\frac{2}{17}, \frac{7}{17})$ $+\frac{10}{17}e^1 \otimes e_2 + \frac{6}{17}\sqrt{5}e^3 \otimes e_5$	{1456, 15, 2456, 25}
62:3	$0, 0, 0, 0, \frac{1}{4}\sqrt{6}e^{12}, \frac{1}{4}e^{13} + \frac{1}{4}e^{24}$	$(\frac{1}{4}, \frac{1}{4}, -\frac{1}{4}, -\frac{1}{4}, \frac{1}{2}, 0)$ $+\frac{1}{4}\sqrt{7}e^1 \otimes e_3 - \frac{1}{4}\sqrt{7}e^2 \otimes e_4$	{12, 145, 34}
62:3	$0, 0, 0, 0, \frac{1}{4}\sqrt{6}e^{12}, \frac{1}{4}e^{13} + \frac{1}{4}e^{24}$	$(\frac{1}{4}, \frac{1}{4}, -\frac{1}{4}, -\frac{1}{4}, \frac{1}{2}, 0)$ $+\frac{1}{4}\sqrt{7}e^1 \otimes e_3 + \frac{1}{4}\sqrt{7}e^2 \otimes e_4$	{12, 145, 34}
62:3	$0, 0, 0, 0, \frac{1}{37}\sqrt{1118}e^{12}, \frac{1}{37}\sqrt{86}e^{13} + \frac{1}{37}\sqrt{86}e^{24}$	$(\frac{25}{37}, -\frac{3}{37}, -\frac{18}{37}, \frac{10}{37}, \frac{22}{37}, \frac{7}{37})$ $+\frac{2}{37}\sqrt{602}e^1 \otimes e_3$	{12, 145, 235, 34}
62:3	$0, 0, 0, 0, \frac{3}{95}\sqrt{310}e^{12}, \frac{6}{19}e^{13} + \frac{6}{95}\sqrt{30}e^{24}$	$(\frac{6}{19}, -\frac{6}{19}, -\frac{3}{19}, \frac{9}{19}, 0, \frac{3}{19})$ $+\frac{6}{95}\sqrt{110}e^4 \otimes e_5 + \frac{6}{95}\sqrt{95}e^1 \otimes e_3$	{124, 15}
62:3	$0, 0, 0, 0, \frac{1}{38}\sqrt{777}e^{12}, \frac{1}{38}\sqrt{777}e^{13} + \frac{1}{19}\sqrt{74}e^{24}$	$(-\frac{6}{19}, \frac{5}{76}, \frac{55}{76}, \frac{13}{38}, -\frac{1}{4}, \frac{31}{76})$ $+\frac{1}{38}\sqrt{2146}e^3 \otimes e_5$	{123, 156, 25, 36}
61:1	$0, 0, 0, 0, 0, \frac{1}{3}\sqrt{7}e^{12}$	$(-\frac{1}{12}, -\frac{1}{12}, 1, \frac{1}{4}, \frac{1}{4}, -\frac{1}{6})$ $+\frac{1}{2}\sqrt{7}e^3 \otimes e_6$	{123, 1234, 12345, 1456, 146, 16, 3, 34, 345}
61:1	$0, 0, 0, 0, 0, \frac{2}{23}\sqrt{34}e^{12}$	$(\frac{4}{23}, \frac{4}{23}, 1, -\frac{11}{23}, \frac{6}{23}, \frac{8}{23})$ $+\frac{34}{23}e^3 \otimes e_4$	{123, 1235, 124, 1245, 1356, 136, 1456, 146, 3, 35, 4, 45}
61:1	$0, 0, 0, 0, 0, \frac{1}{20}\sqrt{34}e^{12}$	$(\frac{21}{40}, -\frac{13}{40}, \frac{23}{40}, -\frac{11}{40}, \frac{3}{20}, \frac{1}{5})$ $+\frac{17}{20}e^1 \otimes e_2 + \frac{17}{20}e^3 \otimes e_4$	{1356, 136, 1456, 146, 2356, 236, 2456, 246}

Table A – Continued to next page

Table A – Continued from previous page

Name Δ	g	D	S
61:1	$0, 0, 0, 0, 0, \frac{1}{3}\sqrt{7}e^{12}$	$(\frac{2}{3}, -\frac{1}{12}, -\frac{1}{2}, \frac{1}{4}, \frac{1}{4}, \frac{7}{12})$ $+\frac{1}{2}\sqrt{7}e^1 \otimes e_3$	$\{12, 124, 1245, 1456, 146, 16, 23456, 2346,$ $236, 3, 34, 345\}$
61:1	$0, 0, 0, 0, 0, \frac{1}{21}\sqrt{154}e^{12}$	$(\frac{5}{21}, \frac{5}{21}, -\frac{2}{7}, -\frac{2}{7}, \frac{1}{7}, \frac{10}{21})$ $+\frac{1}{7}\sqrt{22}e^1 \otimes e_3 + \frac{1}{7}\sqrt{22}e^2 \otimes e_4$	$\{12, 125, 1456, 146, 34, 345\}$
61:1	$0, 0, 0, 0, 0, \frac{1}{21}\sqrt{154}e^{12}$	$(\frac{5}{21}, -\frac{4}{21}, \frac{4}{7}, -\frac{2}{7}, \frac{1}{7}, \frac{1}{21})$ $+\frac{1}{7}\sqrt{22}e^1 \otimes e_4 + \frac{1}{7}\sqrt{22}e^3 \otimes e_6$	$\{123, 1235, 156, 16, 2456, 246, 34, 345\}$
61:1	$0, 0, 0, 0, 0, \frac{4}{19}\sqrt{7}e^{12}$	$(\frac{8}{19}, -\frac{1}{19}, \frac{10}{19}, -\frac{6}{19}, -\frac{4}{19}, \frac{7}{19})$ $+\frac{14}{19}e^3 \otimes e_5 + \frac{6}{19}\sqrt{7}e^1 \otimes e_4$	$\{123, 125, 136, 156, 2346, 2456, 34, 45\}$
61:1	$0, 0, 0, 0, 0, \frac{2}{23}\sqrt{34}e^{12}$	$(\frac{21}{23}, -\frac{13}{23}, \frac{6}{23}, \frac{6}{23}, \frac{6}{23}, \frac{8}{23})$ $+\frac{34}{23}e^1 \otimes e_2$	$\{13456, 1346, 136, 16, 23456, 2346, 236, 26\}$
61:1	$0, 0, 0, 0, 0, \frac{2}{13}\sqrt{7}e^{12}$	$(\frac{3}{13}, -\frac{4}{13}, \frac{5}{13}, -\frac{2}{13}, \frac{6}{13}, -\frac{1}{13})$ $+\frac{3}{13}\sqrt{7}e^5 \otimes e_6 + \frac{7}{13}e^1 \otimes e_2 + \frac{7}{13}e^3 \otimes e_4$	$\{136, 146, 236, 246\}$
61:1	$0, 0, 0, 0, 0, \frac{2}{15}\sqrt{10}e^{12}$	$(\frac{1}{15}, \frac{1}{15}, -\frac{1}{5}, -\frac{1}{5}, \frac{2}{5}, \frac{2}{15})$ $+\frac{2}{5}e^1 \otimes e_3 + \frac{2}{5}e^2 \otimes e_4 + \frac{2}{5}e^5 \otimes e_6$	$\{125, 146, 345\}$
61:1	$0, 0, 0, 0, 0, \frac{4}{19}\sqrt{7}e^{12}$	$(\frac{6}{19}, -\frac{8}{19}, \frac{12}{19}, \frac{3}{19}, \frac{3}{19}, -\frac{2}{19})$ $+\frac{14}{19}e^1 \otimes e_2 + \frac{6}{19}\sqrt{7}e^3 \otimes e_6$	$\{1456, 146, 16, 2456, 246, 26\}$
61:1	$0, 0, 0, 0, 0, \frac{4}{19}\sqrt{7}e^{12}$	$(-\frac{1}{19}, -\frac{1}{19}, \frac{10}{19}, \frac{12}{19}, -\frac{4}{19}, -\frac{2}{19})$ $+\frac{14}{19}e^3 \otimes e_5 + \frac{6}{19}\sqrt{7}e^4 \otimes e_6$	$\{1234, 1245, 136, 156, 34, 45\}$
61:2	$0, 0, 0, 0, 0, \frac{4}{193}\sqrt{71}e^{12} + \frac{2}{193}\sqrt{2982}e^{34}$	$(\frac{105}{193}, -\frac{37}{193}, \frac{80}{193}, -\frac{12}{193}, -\frac{62}{193}, \frac{68}{193})$ $+\frac{142}{193}e^1 \otimes e_2 + \frac{4}{193}\sqrt{1633}e^3 \otimes e_5$	$\{134, 15, 234, 25\}$
61:2	$0, 0, 0, 0, 0, \frac{1}{61}\sqrt{2982}e^{12} + \frac{2}{61}\sqrt{71}e^{34}$	$(\frac{40}{61}, -\frac{6}{61}, \frac{17}{61}, \frac{17}{61}, -\frac{31}{61}, \frac{34}{61})$ $+\frac{2}{61}\sqrt{1633}e^1 \otimes e_5$	$\{123, 1346, 16, 23456, 256, 35\}$
61:2	$0, 0, 0, 0, 0, \frac{2}{15}\sqrt{11}e^{12} + \frac{2}{15}\sqrt{11}e^{34}$	$(\frac{14}{15}, -\frac{8}{15}, \frac{1}{5}, \frac{1}{5}, \frac{4}{15}, \frac{2}{5})$ $+\frac{22}{15}e^1 \otimes e_2$	$\{1356, 136, 2356, 236\}$
61:2	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{2}e^{12} + \frac{1}{4}\sqrt{2}e^{34}$	$(\frac{1}{4}, -\frac{1}{4}, \frac{1}{4}, -\frac{1}{4}, \frac{1}{2}, 0)$ $+\frac{1}{2}e^1 \otimes e_2 + \frac{1}{2}e^3 \otimes e_4 + \frac{1}{4}\sqrt{6}e^5 \otimes e_6$	$\{136, 146, 246\}$
61:2	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{2}e^{12} + \frac{1}{4}\sqrt{2}e^{34}$	$(\frac{1}{4}, -\frac{1}{4}, \frac{1}{4}, -\frac{1}{4}, \frac{1}{2}, 0)$ $+\frac{1}{2}e^1 \otimes e_2 - \frac{1}{2}e^3 \otimes e_4 + \frac{1}{4}\sqrt{6}e^5 \otimes e_6$	$\{136, 146, 246\}$
61:2	$0, 0, 0, 0, 0, \frac{1}{3}\sqrt{2}e^{12} + \frac{1}{3}\sqrt{2}e^{34}$	$(\frac{1}{3}, -\frac{1}{3}, 0, 0, \frac{2}{3}, 0)$ $+\frac{1}{3}\sqrt{6}e^5 \otimes e_6 + \frac{2}{3}e^1 \otimes e_2$	$\{136, 236\}$
61:2	$0, 0, 0, 0, 0, \frac{1}{13}\sqrt{11}e^{12} + \frac{1}{13}\sqrt{11}e^{34}$	$(\frac{7}{13}, -\frac{4}{13}, \frac{7}{13}, -\frac{4}{13}, \frac{2}{13}, \frac{3}{13})$ $+\frac{11}{13}e^1 \otimes e_2 + \frac{11}{13}e^3 \otimes e_4$	$\{1356, 136, 1456, 146, 2456, 246\}$
61:2	$0, 0, 0, 0, 0, \frac{1}{13}\sqrt{11}e^{12} + \frac{1}{13}\sqrt{11}e^{34}$	$(\frac{7}{13}, -\frac{4}{13}, \frac{7}{13}, -\frac{4}{13}, \frac{2}{13}, \frac{3}{13})$ $+\frac{11}{13}e^1 \otimes e_2 - \frac{11}{13}e^3 \otimes e_4$	$\{1356, 136, 1456, 146, 2456, 246\}$

Table A – Continued to next page

Table A – Continued from previous page

Name Δ	\mathfrak{g}	D	S
61:2	$0, 0, 0, 0, 0, \frac{1}{2}\sqrt{2}e^{12} + \frac{1}{2}\sqrt{2}e^{34}$	$(0, 0, 0, 0, 1, 0)$ $+ \frac{1}{2}\sqrt{6}e^5 \otimes e_6$	$\{12345, 125, 136, 5\}$
6:1	$0, 0, 0, 0, 0, 0$	$(1, -\frac{1}{2}, \frac{1}{4}, \frac{1}{4}, \frac{1}{4})$ $+ \frac{3}{2}e^1 \otimes e_2$	$\{1, 13, 134, 1345, 13456, 2, 23, 234, 2345, 23456\}$
6:1	$0, 0, 0, 0, 0, 0$	$(\frac{4}{7}, \frac{4}{7}, -\frac{2}{7}, -\frac{2}{7}, \frac{1}{7}, \frac{1}{7})$ $+ \frac{6}{7}e^1 \otimes e_3 + \frac{6}{7}e^2 \otimes e_4$	$\{12, 125, 1256, 14, 145, 1456, 34, 345, 3456\}$
6:1	$0, 0, 0, 0, 0, 0$	$(\frac{2}{5}, \frac{2}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{2}{5}, -\frac{1}{5})$ $+ \frac{3}{5}e^1 \otimes e_3 + \frac{3}{5}e^2 \otimes e_4 + \frac{3}{5}e^5 \otimes e_6$	$\{125, 126, 146, 346\}$

End of Table A

B Dimension 7

Table B: Solutions of (1) obtained with Algorithm 1 with $n = 7$

Name Δ	\mathfrak{g}	D	S
754321:1	$0, 0, \frac{55}{236}\sqrt{5}e^{12}, \frac{33}{236}\sqrt{6}e^{13}, \frac{11}{118}\sqrt{39}e^{14}, \frac{11}{236}\sqrt{181}e^{15}, \frac{11}{236}\sqrt{129}e^{16}$	$(\frac{77}{472}, -\frac{165}{472}, -\frac{11}{59}, -\frac{11}{472}, \frac{33}{236}, \frac{143}{472}, \frac{55}{118})$ $+ \frac{11}{236}\sqrt{381}e^1 \otimes e_2$	$\{146, 2\}$
754321:1	$0, 0, \frac{10}{49}\sqrt{14}e^{12}, \frac{10}{49}e^{13}, \frac{10}{49}\sqrt{6}e^{14}, \frac{10}{49}e^{15}, \frac{10}{49}\sqrt{14}e^{16}$	$(-\frac{10}{49}, \frac{5}{7}, \frac{25}{49}, \frac{15}{49}, \frac{5}{49}, -\frac{5}{49}, -\frac{15}{49})$ $+ \frac{10}{49}\sqrt{39}e^2 \otimes e_7$	$\{235, 467\}$
7542:1	$0, 0, \frac{9}{161}\sqrt{46}e^{12}, \frac{36}{161}\sqrt{7}e^{13}, \frac{9}{161}\sqrt{14}e^{23}, \frac{18}{161}\sqrt{23}e^{14}, \frac{18}{161}\sqrt{23}e^{25}$	$(\frac{36}{161}, -\frac{27}{161}, \frac{9}{161}, \frac{45}{161}, -\frac{18}{161}, \frac{81}{161}, -\frac{45}{161})$ $+ \frac{54}{161}\sqrt{7}e^1 \otimes e_7$	$\{136, 57\}$
74321:1	$0, 0, 0, \frac{16}{33}e^{12}, \frac{8}{33}\sqrt{6}e^{14}, \frac{8}{33}\sqrt{6}e^{15}, \frac{16}{33}e^{16}$	$(\frac{1}{11}, \frac{4}{99}, -\frac{5}{9}, \frac{13}{99}, \frac{2}{9}, \frac{31}{99}, \frac{40}{99})$ $+ \frac{8}{99}\sqrt{154}e^1 \otimes e_3$	$\{1257, 146, 234567, 3\}$
74321:1	$0, 0, 0, \frac{4}{147}\sqrt{1218}e^{12}, \frac{2}{49}\sqrt{145}e^{14}, \frac{4}{147}\sqrt{174}e^{15}, \frac{2}{147}\sqrt{1131}e^{16}$	$(-\frac{6}{49}, \frac{13}{21}, -\frac{83}{147}, \frac{73}{147}, \frac{55}{147}, \frac{37}{147}, \frac{19}{147})$ $+ \frac{2}{147}\sqrt{10005}e^2 \otimes e_3$	$\{12567, 134, 2457, 36\}$
74321:1	$0, 0, 0, \frac{2}{147}\sqrt{1131}e^{12}, \frac{4}{147}\sqrt{174}e^{14}, \frac{2}{49}\sqrt{145}e^{15}, \frac{4}{147}\sqrt{1218}e^{16}$	$(-\frac{6}{49}, \frac{15}{49}, 1, \frac{9}{49}, \frac{3}{49}, -\frac{3}{49}, -\frac{9}{49})$ $+ \frac{2}{147}\sqrt{10005}e^3 \otimes e_7$	$\{12457, 136, 2567, 34\}$
74321:1	$0, 0, 0, \frac{35}{149}\sqrt{2}e^{12}, \frac{7}{149}\sqrt{30}e^{14}, \frac{7}{149}\sqrt{82}e^{15}, \frac{7}{149}\sqrt{106}e^{16}$	$(\frac{14}{149}, -\frac{35}{149}, \frac{70}{149}, -\frac{21}{149}, -\frac{7}{149}, \frac{7}{149}, \frac{21}{149})$ $+ \frac{7}{149}\sqrt{102}e^3 \otimes e_7 + \frac{7}{149}\sqrt{158}e^1 \otimes e_2$	$\{157, 23\}$
74321:1	$0, 0, 0, \frac{52}{157}\sqrt{2}e^{12}, \frac{24}{157}\sqrt{13}e^{14}, \frac{4}{157}\sqrt{793}e^{15}, \frac{28}{157}\sqrt{13}e^{16}$	$(\frac{37}{157}, -\frac{67}{157}, \frac{32}{157}, -\frac{30}{157}, \frac{7}{157}, \frac{44}{157}, \frac{81}{157})$ $+ \frac{20}{157}\sqrt{65}e^1 \otimes e_2$	$\{1357, 157, 2, 23\}$
74321:2	$0, 0, 0, \frac{315}{1037}\sqrt{10}e^{12}, \frac{70}{1037}\sqrt{51}e^{14}, \frac{35}{1037}\sqrt{122}e^{15}, \frac{70}{1037}\sqrt{42}e^{16} + \frac{35}{1037}\sqrt{66}e^{23}$	$(-\frac{140}{1037}, \frac{665}{1037}, -\frac{560}{1037}, \frac{525}{1037}, \frac{385}{1037}, \frac{245}{1037}, \frac{105}{1037})$ $+ \frac{35}{1037}\sqrt{1630}e^2 \otimes e_3$	$\{134, 36\}$

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
74321:3	$0, 0, 0, \frac{2}{33}\sqrt{33}e^{12}, \frac{2}{33}\sqrt{66}e^{14}, \frac{1}{11}\sqrt{22}e^{15}, \frac{2}{33}\sqrt{165}e^{16} + \frac{1}{11}\sqrt{66}e^{24}$	$(0, 0, 1, 0, 0, 0, 0)$ $+ \frac{2}{33}\sqrt{429}e^3 \otimes e_7$	{136, 2567}
74321:3	$0, 0, 0, \frac{540}{1169}e^{12}, \frac{54}{1169}\sqrt{173}e^{14}, \frac{27}{1169}\sqrt{646}e^{15}, \frac{54}{1169}\sqrt{123}e^{16} + \frac{27}{1169}\sqrt{230}e^{24}$	$(\frac{54}{1169}, \frac{162}{1169}, -\frac{675}{1169}, \frac{216}{1169}, \frac{270}{1169}, \frac{324}{1169}, \frac{54}{167})$ $+ \frac{54}{1169}\sqrt{461}e^1 \otimes e_3$	{146, 234567}
7431:1	$0, 0, 0, \frac{1}{46}\sqrt{759}e^{12}, \frac{1}{23}\sqrt{33}e^{14}, \frac{2}{23}\sqrt{66}e^{24}, \frac{1}{46}\sqrt{759}e^{15}$	$(-\frac{11}{46}, \frac{37}{92}, \frac{5}{23}, \frac{15}{92}, -\frac{7}{92}, \frac{13}{23}, -\frac{29}{92})$ $+ \frac{3}{23}\sqrt{66}e^2 \otimes e_7$	{234, 24, 357, 57}
7431:1	$0, 0, 0, \frac{1}{46}\sqrt{759}e^{12}, \frac{2}{23}\sqrt{66}e^{14}, \frac{1}{23}\sqrt{33}e^{24}, \frac{1}{46}\sqrt{759}e^{15}$	$(\frac{7}{46}, \frac{1}{92}, -\frac{13}{23}, \frac{15}{92}, \frac{29}{92}, \frac{4}{23}, \frac{43}{92})$ $+ \frac{3}{23}\sqrt{66}e^1 \otimes e_3$	{125, 147, 234567, 36}
7431:1	$0, 0, 0, \frac{1}{26}\sqrt{62}e^{12}, \frac{1}{26}\sqrt{93}e^{14}, \frac{1}{26}\sqrt{93}e^{24}, \frac{3}{26}\sqrt{62}e^{15}$	$(-\frac{7}{52}, \frac{11}{52}, 1, \frac{1}{13}, -\frac{3}{52}, \frac{15}{52}, -\frac{5}{26})$ $+ \frac{1}{13}\sqrt{310}e^3 \otimes e_7$	{1247, 135, 236, 4567}
7431:1	$0, 0, 0, \frac{1}{26}\sqrt{93}e^{12}, \frac{1}{26}\sqrt{62}e^{14}, \frac{3}{26}\sqrt{62}e^{24}, \frac{1}{26}\sqrt{93}e^{15}$	$(\frac{2}{13}, -\frac{9}{52}, 1, -\frac{1}{52}, \frac{7}{52}, -\frac{5}{26}, \frac{15}{52})$ $+ \frac{1}{13}\sqrt{310}e^3 \otimes e_6$	{1267, 1456, 234, 357}
7431:1	$0, 0, 0, \frac{1}{33}\sqrt{667}e^{12}, \frac{1}{33}\sqrt{87}e^{14}, \frac{1}{33}\sqrt{667}e^{24}, \frac{1}{33}\sqrt{87}e^{15}$	$(-\frac{1}{22}, \frac{10}{33}, -\frac{19}{33}, \frac{17}{66}, \frac{7}{33}, \frac{37}{66}, \frac{1}{6})$ $+ \frac{2}{33}\sqrt{377}e^2 \otimes e_3$	{126, 134567, 247, 35}
7431:1	$0, 0, 0, \frac{24}{419}\sqrt{34}e^{12}, \frac{12}{419}\sqrt{62}e^{14}, \frac{120}{419}\sqrt{3}e^{24}, \frac{24}{419}\sqrt{34}e^{15}$	$(-\frac{48}{419}, \frac{54}{419}, \frac{204}{419}, \frac{6}{419}, -\frac{42}{419}, \frac{60}{419}, -\frac{90}{419})$ $+ \frac{12}{419}\sqrt{430}e^2 \otimes e_7 + \frac{84}{419}\sqrt{6}e^3 \otimes e_6$	{234, 357}
7431:1	$0, 0, 0, \frac{1}{14}\sqrt{21}e^{12}, \frac{1}{7}\sqrt{3}e^{14}, \frac{1}{7}\sqrt{3}e^{24}, \frac{1}{14}\sqrt{21}e^{15}$	$(-\frac{1}{14}, \frac{5}{28}, -\frac{2}{7}, \frac{3}{28}, \frac{1}{28}, \frac{2}{7}, -\frac{1}{28})$ $+ \frac{3}{7}e^1 \otimes e_3 + \frac{3}{7}e^2 \otimes e_7$	{1256, 1467}
7431:2	$0, 0, 0, \frac{16}{251}\sqrt{62}e^{12}, \frac{32}{251}\sqrt{3}e^{14}, \frac{80}{251}\sqrt{6}e^{13} + \frac{32}{251}\sqrt{3}e^{24}, \frac{16}{251}\sqrt{138}e^{15}$	$(-\frac{56}{251}, \frac{88}{251}, \frac{176}{251}, \frac{32}{251}, -\frac{24}{251}, \frac{120}{251}, -\frac{80}{251})$ $+ \frac{320}{251}e^3 \otimes e_7$	{167, 257}
7431:2	$0, 0, 0, \frac{4}{89}\sqrt{174}e^{12}, \frac{8}{89}\sqrt{3}e^{14}, \frac{36}{89}\sqrt{2}e^{13} + \frac{8}{89}\sqrt{57}e^{24}, \frac{4}{89}\sqrt{174}e^{15}$	$(-\frac{16}{89}, \frac{22}{89}, \frac{44}{89}, \frac{6}{89}, -\frac{10}{89}, \frac{28}{89}, -\frac{26}{89})$ $+ \frac{48}{89}\sqrt{3}e^2 \otimes e_7$	{12356, 13467}
7431:2	$0, 0, 0, \frac{4}{89}\sqrt{174}e^{12}, \frac{8}{89}\sqrt{57}e^{14}, \frac{36}{89}\sqrt{2}e^{13} + \frac{8}{89}\sqrt{3}e^{24}, \frac{4}{89}\sqrt{174}e^{15}$	$(\frac{20}{89}, -\frac{14}{89}, -\frac{28}{89}, \frac{6}{89}, \frac{26}{89}, -\frac{8}{89}, \frac{46}{89})$ $+ \frac{48}{89}\sqrt{3}e^1 \otimes e_3$	{23457, 3}
7431:7	$0, 0, 0, \frac{1}{3}\sqrt{2}e^{12}, -\frac{1}{3}e^{14}, \frac{1}{3}e^{24}, \frac{1}{3}\sqrt{5}e^{15} + \frac{1}{3}\sqrt{5}e^{26}$	$(0, 0, 1, 0, 0, 0, 0)$ $+ \frac{1}{3}\sqrt{14}e^3 \otimes e_7$	{1247, 135, 4567, 1247, 135, 4567}
7431:7	$0, 0, 0, \frac{1}{3}\sqrt{2}e^{12}, \frac{1}{3}e^{14}, \frac{1}{3}e^{24}, \frac{1}{3}\sqrt{5}e^{15} + \frac{1}{3}\sqrt{5}e^{26}$	$(0, 0, 1, 0, 0, 0, 0)$ $+ \frac{1}{3}\sqrt{14}e^3 \otimes e_7$	{1247, 135, 4567, 1247, 135, 4567}
7431:7	$0, 0, 0, \frac{30}{329}\sqrt{46}e^{12}, -\frac{15}{329}\sqrt{230}e^{14}, \frac{60}{329}\sqrt{2}e^{24}, \frac{30}{329}\sqrt{46}e^{15} + \frac{15}{329}\sqrt{78}e^{26}$	$(\frac{30}{329}, \frac{30}{329}, -\frac{195}{329}, \frac{60}{329}, \frac{90}{329}, \frac{90}{329}, \frac{120}{329})$ $+ \frac{30}{329}\sqrt{131}e^1 \otimes e_3$	{125, 147, 234567, 36, 125, 147, 234567, 36}
7431:7	$0, 0, 0, \frac{30}{329}\sqrt{46}e^{12}, \frac{15}{329}\sqrt{230}e^{14}, \frac{60}{329}\sqrt{2}e^{24}, \frac{30}{329}\sqrt{46}e^{15} + \frac{15}{329}\sqrt{78}e^{26}$	$(\frac{30}{329}, \frac{30}{329}, -\frac{195}{329}, \frac{60}{329}, \frac{90}{329}, \frac{90}{329}, \frac{120}{329})$ $+ \frac{30}{329}\sqrt{131}e^1 \otimes e_3$	{125, 147, 234567, 36, 125, 147, 234567, 36}
7421:1	$0, 0, 0, \frac{4}{37}\sqrt{30}e^{12}, \frac{2}{37}\sqrt{110}e^{13}, \frac{8}{37}\sqrt{10}e^{14}, \frac{4}{37}\sqrt{30}e^{16}$	$(\frac{8}{37}, -\frac{5}{37}, -\frac{12}{37}, \frac{3}{37}, -\frac{4}{37}, \frac{11}{37}, \frac{19}{37})$ $+ \frac{20}{37}\sqrt{3}e^1 \otimes e_3$	{126, 147, 23467, 3}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
7421:1	$0, 0, 0, \frac{4}{447}\sqrt{1794}e^{12}, \frac{20}{447}\sqrt{138}e^{13}, \frac{8}{447}\sqrt{1426}e^{14}, \frac{4}{447}\sqrt{6302}e^{16}$	$(\frac{50}{149}, -\frac{218}{447}, \frac{20}{447}, -\frac{68}{447}, \frac{170}{447}, \frac{82}{447}, \frac{232}{447})$ $+ \frac{32}{447}\sqrt{253}e^1 \otimes e_2$	{136, 156, 2, 235}
7421:1	$0, 0, 0, \frac{4}{47}\sqrt{78}e^{12}, \frac{4}{47}\sqrt{82}e^{13}, \frac{8}{47}\sqrt{2}e^{14}, \frac{4}{47}\sqrt{34}e^{16}$	$(-\frac{10}{47}, \frac{34}{47}, -\frac{4}{47}, \frac{24}{47}, -\frac{14}{47}, \frac{14}{47}, \frac{4}{47})$ $+ \frac{16}{47}\sqrt{14}e^2 \otimes e_5$	{123, 14567, 247, 356}
7421:1	$0, 0, 0, \frac{2}{7}e^{12}, \frac{1}{35}\sqrt{170}e^{13}, \frac{4}{35}\sqrt{5}e^{14}, \frac{1}{35}\sqrt{210}e^{16}$	$(\frac{1}{14}, -\frac{3}{14}, \frac{2}{7}, -\frac{1}{7}, \frac{5}{14}, -\frac{1}{14}, 0)$ $+ \frac{1}{35}\sqrt{290}e^3 \otimes e_7 + \frac{1}{35}\sqrt{330}e^1 \otimes e_2$	{136, 235}
7421:1	$0, 0, 0, \frac{4}{119}\sqrt{57}e^{12}, \frac{6}{119}\sqrt{22}e^{13}, \frac{12}{119}\sqrt{6}e^{14}, \frac{4}{119}\sqrt{57}e^{16}$	$(-\frac{4}{119}, \frac{19}{119}, -\frac{16}{119}, \frac{15}{119}, -\frac{20}{119}, \frac{11}{119}, \frac{1}{17})$ $+ \frac{4}{119}\sqrt{66}e^2 \otimes e_7 + \frac{4}{119}\sqrt{93}e^1 \otimes e_3$	{126, 147}
7421:1	$0, 0, 0, \frac{1}{8}\sqrt{15}e^{12}, \frac{1}{8}\sqrt{5}e^{13}, \frac{1}{8}\sqrt{13}e^{14}, \frac{1}{4}\sqrt{2}e^{16}$	$(\frac{1}{16}, \frac{1}{8}, -\frac{5}{16}, \frac{3}{16}, -\frac{1}{4}, \frac{1}{4}, \frac{5}{16})$ $+ \frac{1}{8}\sqrt{14}e^2 \otimes e_5 + \frac{3}{8}\sqrt{3}e^1 \otimes e_3$	{126, 23467}
7421:1	$0, 0, 0, \frac{4}{47}\sqrt{34}e^{12}, \frac{4}{47}\sqrt{82}e^{13}, \frac{8}{47}\sqrt{2}e^{14}, \frac{4}{47}\sqrt{78}e^{16}$	$(-\frac{10}{47}, \frac{46}{141}, \frac{100}{141}, \frac{16}{141}, \frac{70}{141}, -\frac{14}{141}, -\frac{44}{141})$ $+ \frac{16}{47}\sqrt{14}e^3 \otimes e_7$	{12346, 157, 267, 345}
7421:1	$0, 0, 0, \frac{24}{55}\sqrt{3}e^{12}, \frac{18}{55}\sqrt{3}e^{13}, \frac{6}{55}\sqrt{21}e^{14}, \frac{24}{55}\sqrt{3}e^{16}$	$(-\frac{18}{55}, \frac{39}{55}, \frac{21}{55}, \frac{21}{55}, \frac{3}{55}, \frac{3}{55}, -\frac{3}{11})$ $+ \frac{6}{55}\sqrt{129}e^2 \otimes e_7$	{12356, 126, 13457, 147}
7421:2	$0, 0, 0, \frac{8}{21}e^{12}, \frac{8}{21}\sqrt{2}e^{13}, \frac{8}{63}\sqrt{21}e^{24}, \frac{8}{21}\sqrt{2}e^{26}$	$(-\frac{13}{63}, \frac{5}{21}, -\frac{4}{63}, \frac{2}{63}, -\frac{17}{63}, \frac{17}{63}, \frac{32}{63})$ $+ \frac{8}{9}e^2 \otimes e_5$	{1236, 14567, 247, 35}
7421:2	$0, 0, 0, \frac{7}{149}\sqrt{66}e^{12}, \frac{35}{149}\sqrt{2}e^{13}, \frac{42}{149}\sqrt{2}e^{24}, \frac{35}{149}\sqrt{2}e^{26}$	$(\frac{7}{149}, \frac{14}{149}, -\frac{42}{149}, \frac{21}{149}, -\frac{35}{149}, \frac{35}{149}, \frac{49}{149})$ $+ \frac{14}{149}\sqrt{42}e^2 \otimes e_5 + \frac{7}{149}\sqrt{82}e^1 \otimes e_3$	{14567, 35}
7421:2	$0, 0, 0, \frac{7}{41}\sqrt{30}e^{12}, \frac{14}{41}e^{13}, \frac{7}{41}\sqrt{6}e^{24}, \frac{14}{41}e^{26}$	$(\frac{28}{41}, -\frac{7}{41}, -\frac{21}{41}, \frac{21}{41}, \frac{7}{41}, \frac{14}{41}, \frac{7}{41})$ $+ \frac{56}{41}e^1 \otimes e_3$	{1267, 146, 234, 37}
7421:2	$0, 0, 0, \frac{3}{203}\sqrt{58}e^{12}, \frac{6}{203}\sqrt{29}e^{13}, \frac{6}{203}\sqrt{21}e^{24}, \frac{6}{203}\sqrt{29}e^{26}$	$(\frac{18}{203}, -\frac{3}{203}, -\frac{30}{203}, \frac{15}{203}, -\frac{12}{203}, \frac{12}{203}, \frac{9}{203})$ $+ \frac{3}{203}\sqrt{154}e^1 \otimes e_7 + \frac{6}{29}e^2 \otimes e_5$	{1236, 247}
7421:2	$0, 0, 0, \frac{68}{173}\sqrt{2}e^{12}, \frac{4}{173}\sqrt{1173}e^{13}, \frac{8}{173}\sqrt{51}e^{24}, \frac{4}{173}\sqrt{1173}e^{26}$	$(\frac{1}{173}, -\frac{11}{173}, \frac{104}{173}, -\frac{10}{173}, \frac{105}{173}, -\frac{21}{173}, -\frac{32}{173})$ $+ \frac{4}{173}\sqrt{2329}e^3 \otimes e_7$	{12457, 13, 2356, 467}
7421:2	$0, 0, 0, \frac{5}{91}\sqrt{78}e^{12}, \frac{10}{91}\sqrt{39}e^{13}, \frac{5}{91}\sqrt{42}e^{24}, \frac{10}{91}\sqrt{39}e^{26}$	$(\frac{4}{7}, -\frac{25}{91}, -\frac{5}{91}, \frac{27}{91}, \frac{47}{91}, \frac{2}{91}, -\frac{23}{91})$ $+ \frac{10}{91}\sqrt{105}e^1 \otimes e_7$	{1236, 1256, 23457, 247}
7421:3	$0, 0, 0, \frac{5}{28}\sqrt{13}e^{12}, \frac{5}{42}\sqrt{30}e^{13}, \frac{5}{84}\sqrt{6}e^{14}, \frac{5}{42}\sqrt{21}e^{16} + \frac{5}{28}\sqrt{13}e^{23}$	$(-\frac{5}{56}, \frac{15}{28}, -\frac{15}{56}, \frac{25}{56}, -\frac{5}{14}, \frac{5}{14}, \frac{15}{56})$ $+ \frac{5}{84}\sqrt{402}e^2 \otimes e_5$	{123, 247}
7421:4	$0, 0, 0, \frac{1}{8}\sqrt{15}e^{12}, \frac{1}{8}\sqrt{22}e^{13}, \frac{1}{8}\sqrt{14}e^{14}, \frac{1}{8}\sqrt{19}e^{16} + \frac{3}{8}\sqrt{3}e^{24}$	$(\frac{1}{16}, \frac{1}{8}, -\frac{5}{16}, \frac{3}{16}, -\frac{1}{4}, \frac{1}{4}, \frac{5}{16})$ $+ \frac{1}{8}\sqrt{41}e^2 \otimes e_5$	{14567, 356}
7421:4	$0, 0, 0, \frac{1}{8}\sqrt{15}e^{12}, \frac{1}{8}\sqrt{19}e^{13}, \frac{3}{8}\sqrt{3}e^{14}, \frac{1}{8}\sqrt{22}e^{16} + \frac{1}{8}\sqrt{14}e^{24}$	$(\frac{1}{16}, \frac{1}{8}, -\frac{5}{16}, \frac{3}{16}, -\frac{1}{4}, \frac{1}{4}, \frac{5}{16})$ $+ \frac{1}{8}\sqrt{41}e^1 \otimes e_3$	{126, 23467}
7421:4	$0, 0, 0, \frac{13}{56}\sqrt{3}e^{12}, \frac{65}{224}\sqrt{7}e^{13}, \frac{13}{224}\sqrt{83}e^{14}, \frac{39}{224}\sqrt{6}e^{16} + \frac{13}{224}\sqrt{159}e^{24}$	$(-\frac{13}{448}, -\frac{13}{224}, \frac{39}{64}, -\frac{39}{448}, \frac{65}{112}, -\frac{13}{112}, -\frac{65}{448})$ $+ \frac{143}{224}\sqrt{3}e^3 \otimes e_7$	{12346, 267}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
7421:5	$0, 0, 0, \frac{5}{107}\sqrt{6}e^{12}, \frac{35}{107}\sqrt{2}e^{13}, \frac{50}{107}e^{24}, \frac{5}{107}\sqrt{86}e^{14} + \frac{35}{107}\sqrt{2}e^{26}$	$(\frac{10}{107}, \frac{5}{107}, -\frac{30}{107}, \frac{15}{107}, -\frac{20}{107}, \frac{20}{107}, \frac{25}{107})$ $+ \frac{20}{107}\sqrt{11}e^2 \otimes e_5$	{1236, 14567}
7421:5	$0, 0, 0, \frac{9}{313}\sqrt{330}e^{12}, \frac{9}{313}\sqrt{690}e^{13}, \frac{18}{313}\sqrt{21}e^{24}, \frac{9}{313}\sqrt{138}e^{14} + \frac{9}{313}\sqrt{690}e^{26}$	$(-\frac{18}{313}, -\frac{9}{313}, \frac{198}{313}, -\frac{27}{313}, \frac{180}{313}, -\frac{36}{313}, -\frac{45}{313})$ $+ \frac{36}{313}\sqrt{93}e^3 \otimes e_7$	{2356, 467}
7421:5	$0, 0, 0, \frac{7}{89}\sqrt{102}e^{12}, \frac{56}{89}e^{13}, \frac{7}{89}\sqrt{30}e^{24}, \frac{28}{89}\sqrt{7}e^{14} + \frac{56}{89}e^{26}$	$(\frac{14}{89}, \frac{7}{89}, -\frac{35}{89}, \frac{21}{89}, -\frac{21}{89}, \frac{28}{89}, \frac{35}{89})$ $+ \frac{14}{89}\sqrt{39}e^1 \otimes e_3$	{23467, 36}
7421:6	$0, 0, 0, \frac{30}{571}\sqrt{181}e^{12}, \frac{150}{571}\sqrt{3}e^{13}, \frac{30}{571}\sqrt{67}e^{14}, \frac{30}{571}\sqrt{103}e^{16} + \frac{60}{571}\sqrt{39}e^{35}$	$(-\frac{150}{571}, \frac{390}{571}, \frac{45}{571}, \frac{240}{571}, -\frac{105}{571}, \frac{90}{571}, -\frac{60}{571})$ $+ \frac{30}{571}\sqrt{445}e^2 \otimes e_7$	{12356, 126}
7421:6	$0, 0, 0, \frac{10}{183}\sqrt{51}e^{12}, \frac{10}{61}\sqrt{10}e^{13}, \frac{10}{61}\sqrt{17}e^{14}, \frac{10}{183}\sqrt{177}e^{16} + \frac{10}{183}\sqrt{21}e^{35}$	$(\frac{20}{61}, -\frac{30}{61}, \frac{5}{61}, -\frac{10}{61}, \frac{25}{61}, \frac{10}{61}, \frac{30}{61})$ $+ \frac{10}{183}\sqrt{435}e^1 \otimes e_2$	{136, 156}
7421:8	$0, 0, 0, \frac{105}{1217}\sqrt{78}e^{12}, \frac{70}{1217}\sqrt{15}e^{13}, \frac{35}{1217}\sqrt{174}e^{24}, \frac{140}{1217}\sqrt{42}e^{15} + \frac{70}{1217}\sqrt{71}e^{26}$	$(\frac{560}{1217}, -\frac{35}{1217}, -\frac{665}{1217}, \frac{525}{1217}, -\frac{105}{1217}, \frac{490}{1217}, \frac{455}{1217})$ $+ \frac{70}{1217}\sqrt{478}e^1 \otimes e_3$	{1267, 234}
742:1	$0, 0, 0, \frac{5}{368}\sqrt{42}e^{12}, \frac{85}{368}e^{13}, \frac{5}{368}\sqrt{173}e^{14}, \frac{5}{368}\sqrt{303}e^{24}$	$(-\frac{85}{736}, \frac{35}{368}, \frac{105}{736}, -\frac{15}{736}, \frac{5}{184}, -\frac{25}{184}, \frac{55}{736})$ $+ \frac{15}{368}\sqrt{38}e^2 \otimes e_5 + \frac{5}{368}\sqrt{321}e^3 \otimes e_7$	{14567, 356}
742:1	$0, 0, 0, \frac{1}{37}\sqrt{870}e^{12}, \frac{4}{37}\sqrt{29}e^{13}, \frac{4}{37}\sqrt{58}e^{14}, \frac{1}{37}\sqrt{174}e^{24}$	$(\frac{14}{37}, -\frac{5}{37}, -\frac{15}{37}, \frac{9}{37}, -\frac{1}{37}, \frac{23}{37}, \frac{4}{37})$ $+ \frac{2}{37}\sqrt{435}e^1 \otimes e_3$	{126, 14, 23467, 37}
742:1	$0, 0, 0, \frac{1}{37}\sqrt{174}e^{12}, \frac{4}{37}\sqrt{58}e^{13}, \frac{4}{37}\sqrt{29}e^{14}, \frac{1}{37}\sqrt{870}e^{24}$	$(\frac{2}{37}, -\frac{5}{37}, \frac{21}{37}, -\frac{3}{37}, \frac{23}{37}, -\frac{1}{37}, -\frac{8}{37})$ $+ \frac{2}{37}\sqrt{435}e^3 \otimes e_7$	{12346, 13, 267, 47}
742:1	$0, 0, 0, \frac{1}{8}\sqrt{15}e^{12}, \frac{1}{8}\sqrt{3}e^{13}, \frac{1}{8}\sqrt{5}e^{14}, \frac{1}{4}\sqrt{2}e^{24}$	$(\frac{1}{16}, \frac{1}{8}, -\frac{5}{16}, \frac{3}{16}, -\frac{1}{4}, \frac{1}{4}, \frac{5}{16})$ $+ \frac{1}{8}\sqrt{19}e^1 \otimes e_3 + \frac{1}{8}\sqrt{22}e^2 \otimes e_5$	{1457, 35}
742:1	$0, 0, 0, \frac{14}{377}\sqrt{69}e^{12}, \frac{28}{377}\sqrt{42}e^{13}, \frac{7}{377}\sqrt{30}e^{14}, \frac{7}{377}\sqrt{510}e^{24}$	$(-\frac{98}{377}, \frac{119}{377}, \frac{70}{377}, \frac{21}{377}, -\frac{28}{377}, -\frac{77}{377}, \frac{140}{377})$ $+ \frac{21}{377}\sqrt{130}e^2 \otimes e_5 + \frac{7}{377}\sqrt{762}e^3 \otimes e_6$	{1237, 14567}
742:1	$0, 0, 0, \frac{24}{157}\sqrt{13}e^{12}, \frac{28}{157}\sqrt{13}e^{13}, \frac{52}{157}\sqrt{2}e^{14}, \frac{4}{157}\sqrt{793}e^{24}$	$(-\frac{27}{157}, \frac{60}{157}, -\frac{17}{157}, \frac{33}{157}, -\frac{44}{157}, \frac{6}{157}, \frac{93}{157})$ $+ \frac{20}{157}\sqrt{65}e^2 \otimes e_5$	{1237, 14567, 24, 356}
742:1	$0, 0, 0, \frac{8}{91}\sqrt{3}e^{12}, \frac{8}{91}\sqrt{69}e^{13}, \frac{8}{91}\sqrt{69}e^{14}, \frac{8}{91}\sqrt{3}e^{24}$	$(-\frac{25}{91}, \frac{22}{91}, \frac{68}{91}, -\frac{3}{91}, \frac{43}{91}, -\frac{4}{13}, \frac{19}{91})$ $+ \frac{8}{91}\sqrt{213}e^3 \otimes e_6$	{12347, 1567, 235, 46}
742:2	$0, 0, 0, \frac{75}{917}\sqrt{30}e^{12}, \frac{275}{917}\sqrt{6}e^{13}, \frac{50}{917}\sqrt{159}e^{24}, \frac{25}{917}\sqrt{482}e^{14} + \frac{50}{917}\sqrt{102}e^{23}$	$(\frac{25}{131}, -\frac{225}{917}, \frac{50}{131}, -\frac{50}{917}, \frac{75}{917}, -\frac{275}{917}, \frac{125}{917})$ $+ \frac{25}{917}\sqrt{1510}e^3 \otimes e_6$	{267, 46}
742:2	$0, 0, 0, \frac{25}{983}\sqrt{390}e^{12}, \frac{25}{983}\sqrt{574}e^{13}, \frac{200}{983}\sqrt{11}e^{24}, \frac{100}{983}\sqrt{23}e^{14} + \frac{25}{983}\sqrt{222}e^{23}$	$(-\frac{100}{983}, \frac{325}{983}, -\frac{200}{983}, \frac{225}{983}, -\frac{300}{983}, \frac{550}{983}, \frac{125}{983})$ $+ \frac{25}{983}\sqrt{1570}e^2 \otimes e_5$	{1236, 357}
742:3	$0, 0, 0, \frac{5}{32}\sqrt{11}e^{12}, \frac{5}{32}\sqrt{23}e^{13}, \frac{5}{32}\sqrt{6}e^{14}, \frac{5}{32}\sqrt{23}e^{15}$	$(\frac{23}{64}, -\frac{27}{64}, -\frac{5}{32}, -\frac{1}{16}, \frac{13}{64}, \frac{19}{64}, \frac{9}{16})$ $+ \frac{5}{32}\sqrt{51}e^1 \otimes e_2$	{1367, 156, 2, 2357}
742:3	$0, 0, 0, \frac{8}{127}\sqrt{134}e^{12}, \frac{2}{127}\sqrt{67}e^{13}, \frac{2}{127}\sqrt{67}e^{14}, \frac{8}{127}\sqrt{134}e^{15}$	$(-\frac{34}{127}, \frac{95}{127}, \frac{29}{127}, \frac{61}{127}, -\frac{5}{127}, \frac{27}{127}, -\frac{39}{127})$ $+ \frac{6}{127}\sqrt{737}e^2 \otimes e_7$	{1235, 1467, 234, 567}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
742:3	$0, 0, 0, \frac{2}{13}\sqrt{6}e^{12}, \frac{2}{13}\sqrt{6}e^{13}, \frac{2}{13}\sqrt{6}e^{14}, \frac{2}{13}\sqrt{6}e^{15}$	$(-\frac{4}{13}, \frac{6}{13}, \frac{6}{13}, \frac{2}{13}, \frac{2}{13}, -\frac{2}{13}, -\frac{2}{13})$ $+ \frac{2}{13}\sqrt{22}e^2 \otimes e_7 - \frac{2}{13}\sqrt{22}e^3 \otimes e_6$	{1256, 246}
742:3	$0, 0, 0, \frac{2}{13}\sqrt{6}e^{12}, \frac{2}{13}\sqrt{6}e^{13}, \frac{2}{13}\sqrt{6}e^{14}, \frac{2}{13}\sqrt{6}e^{15}$	$(-\frac{4}{13}, \frac{6}{13}, \frac{6}{13}, \frac{2}{13}, \frac{2}{13}, -\frac{2}{13}, -\frac{2}{13})$ $+ \frac{2}{13}\sqrt{22}e^2 \otimes e_7 + \frac{2}{13}\sqrt{22}e^3 \otimes e_6$	{1256, 246}
742:3	$0, 0, 0, \frac{76}{173}e^{12}, \frac{152}{1211}\sqrt{5}e^{13}, \frac{114}{1211}\sqrt{13}e^{14}, \frac{19}{1211}\sqrt{390}e^{15}$	$(\frac{76}{1211}, \frac{228}{1211}, -\frac{285}{1211}, \frac{304}{1211}, -\frac{209}{1211}, \frac{380}{1211}, -\frac{19}{173})$ $+ \frac{19}{1211}\sqrt{1182}e^1 \otimes e_3 + \frac{38}{1211}\sqrt{237}e^2 \otimes e_7$	{147, 2346}
742:4	$0, 0, 0, \frac{28}{543}\sqrt{138}e^{12}, \frac{28}{543}\sqrt{6}e^{13}, \frac{28}{543}\sqrt{181}e^{24}, \frac{28}{181}\sqrt{15}e^{15}$	$(-\frac{49}{181}, \frac{224}{543}, \frac{42}{181}, \frac{77}{543}, -\frac{7}{181}, \frac{301}{543}, -\frac{56}{181})$ $+ \frac{28}{181}\sqrt{47}e^2 \otimes e_7$	{12356, 1467, 234, 57}
742:4	$0, 0, 0, \frac{84}{1739}\sqrt{58}e^{12}, \frac{42}{1739}\sqrt{39}e^{13}, \frac{42}{1739}\sqrt{179}e^{24}, \frac{105}{1739}\sqrt{34}e^{15}$	$(\frac{84}{1739}, \frac{252}{1739}, -\frac{357}{1739}, \frac{336}{1739}, -\frac{273}{1739}, \frac{588}{1739}, -\frac{189}{1739})$ $+ \frac{21}{1739}\sqrt{1330}e^1 \otimes e_3 + \frac{42}{1739}\sqrt{422}e^2 \otimes e_7$	{1467, 234}
742:4	$0, 0, 0, \frac{7}{159}\sqrt{30}e^{12}, \frac{28}{159}\sqrt{3}e^{13}, \frac{7}{159}\sqrt{106}e^{24}, \frac{7}{53}\sqrt{6}e^{15}$	$(-\frac{14}{53}, \frac{28}{159}, \frac{21}{53}, -\frac{14}{159}, \frac{7}{53}, \frac{14}{159}, -\frac{7}{53})$ $+ \frac{28}{53}e^2 \otimes e_7 + \frac{7}{53}\sqrt{14}e^3 \otimes e_6$	{1256, 357}
742:4	$0, 0, 0, \frac{1}{267}\sqrt{9618}e^{12}, \frac{8}{267}\sqrt{687}e^{13}, \frac{1}{267}\sqrt{40762}e^{24}, \frac{1}{89}\sqrt{1374}e^{15}$	$(-\frac{14}{89}, -\frac{8}{267}, \frac{57}{89}, -\frac{50}{267}, \frac{43}{89}, -\frac{58}{267}, \frac{29}{89})$ $+ \frac{1}{89}\sqrt{10534}e^3 \otimes e_6$	{12347, 137, 26, 46}
742:4	$0, 0, 0, \frac{2}{261}\sqrt{8943}e^{12}, \frac{2}{261}\sqrt{271}e^{13}, \frac{2}{261}\sqrt{2710}e^{24}, \frac{1}{261}\sqrt{35230}e^{15}$	$(\frac{44}{87}, -\frac{26}{261}, -\frac{139}{261}, \frac{106}{261}, -\frac{7}{261}, \frac{80}{261}, \frac{125}{261})$ $+ \frac{1}{261}\sqrt{108942}e^1 \otimes e_3$	{1267, 1467, 234, 3}
742:5	$0, 0, 0, \frac{1}{21}\sqrt{6}e^{12}, \frac{1}{21}\sqrt{6}e^{13}, \frac{1}{21}\sqrt{14}e^{24}, \frac{1}{21}\sqrt{14}e^{35}$	$(-\frac{1}{7}, \frac{2}{21}, \frac{2}{21}, -\frac{1}{21}, -\frac{1}{21}, \frac{1}{21}, \frac{1}{21})$ $+ \frac{1}{7}\sqrt{2}e^2 \otimes e_7 + \frac{1}{7}\sqrt{2}e^3 \otimes e_6$	{14567, 2345}
742:5	$0, 0, 0, \frac{4}{69}\sqrt{114}e^{12}, \frac{2}{69}\sqrt{57}e^{13}, \frac{2}{69}\sqrt{437}e^{24}, \frac{2}{69}\sqrt{437}e^{35}$	$(-\frac{2}{23}, \frac{22}{69}, -\frac{5}{69}, \frac{16}{69}, -\frac{11}{69}, \frac{38}{69}, -\frac{16}{69})$ $+ \frac{2}{23}\sqrt{114}e^2 \otimes e_7$	{12356, 126, 37, 57}
742:6	$0, 0, 0, \frac{50}{803}\sqrt{15}e^{12}, \frac{25}{803}\sqrt{174}e^{13}, \frac{25}{803}\sqrt{562}e^{14}, \frac{25}{803}\sqrt{254}e^{15} + \frac{25}{803}\sqrt{582}e^{23}$	$(-\frac{50}{803}, -\frac{100}{803}, \frac{425}{803}, -\frac{150}{803}, \frac{375}{803}, -\frac{200}{803}, \frac{325}{803})$ $+ \frac{50}{803}\sqrt{321}e^3 \otimes e_6$	{1234, 235}
742:7	$0, 0, 0, \frac{29}{1031}\sqrt{210}e^{12}, \frac{116}{1031}\sqrt{41}e^{13}, \frac{29}{1031}\sqrt{586}e^{24}, \frac{29}{1031}\sqrt{118}e^{15} + \frac{116}{1031}\sqrt{19}e^{23}$	$(-\frac{58}{1031}, -\frac{116}{1031}, \frac{551}{1031}, -\frac{174}{1031}, \frac{493}{1031}, -\frac{290}{1031}, \frac{435}{1031})$ $+ \frac{29}{1031}\sqrt{1614}e^3 \otimes e_6$	{137, 46}
742:8	$0, 0, 0, \frac{124}{911}e^{12}, \frac{31}{911}\sqrt{458}e^{13}, \frac{124}{911}\sqrt{29}e^{14}, \frac{31}{911}\sqrt{10}e^{15} + \frac{93}{911}\sqrt{2}e^{24}$	$(-\frac{248}{911}, \frac{217}{911}, \frac{682}{911}, -\frac{31}{911}, \frac{434}{911}, -\frac{279}{911}, \frac{186}{911})$ $+ \frac{93}{911}\sqrt{158}e^3 \otimes e_6$	{1567, 235}
742:9	$0, 0, 0, -\frac{7}{148}\sqrt{6}e^{12}, \frac{7}{148}\sqrt{138}e^{13}, \frac{7}{74}\sqrt{46}e^{14}, \frac{49}{148}\sqrt{2}e^{24} + \frac{7}{148}\sqrt{230}e^{35}$	$(-\frac{49}{148}, \frac{14}{37}, \frac{14}{37}, \frac{7}{148}, \frac{7}{148}, -\frac{21}{74}, \frac{63}{148})$ $+ \frac{7}{74}\sqrt{118}e^3 \otimes e_6$	{12347, 1567, 235, 46, 12347, 1567, 235, 46}
742:9	$0, 0, 0, \frac{7}{148}\sqrt{6}e^{12}, \frac{7}{148}\sqrt{138}e^{13}, \frac{7}{74}\sqrt{46}e^{14}, \frac{49}{148}\sqrt{2}e^{24} + \frac{7}{148}\sqrt{230}e^{35}$	$(-\frac{49}{148}, \frac{14}{37}, \frac{14}{37}, \frac{7}{148}, \frac{7}{148}, -\frac{21}{74}, \frac{63}{148})$ $+ \frac{7}{74}\sqrt{118}e^3 \otimes e_6$	{12347, 1567, 235, 46, 12347, 1567, 235, 46}
742:11	$0, 0, 0, \frac{1}{25}\sqrt{30}e^{12}, \frac{1}{25}\sqrt{130}e^{13}, \frac{2}{25}\sqrt{30}e^{24}, \frac{1}{25}\sqrt{110}e^{14} + \frac{2}{25}\sqrt{30}e^{35}$	$(\frac{1}{5}, -\frac{1}{5}, 0, 0, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{1}{25}\sqrt{210}e^3 \otimes e_6$	{12347, 46}
741:1	$0, 0, 0, \frac{3}{112}\sqrt{535}e^{12}, \frac{1}{56}\sqrt{1177}e^{13}, \frac{3}{112}\sqrt{535}e^{23}, \frac{1}{112}\sqrt{214}e^{14}$	$(-\frac{41}{224}, \frac{67}{112}, -\frac{39}{224}, \frac{93}{224}, -\frac{5}{14}, \frac{95}{224}, \frac{13}{56})$ $+ \frac{1}{112}\sqrt{18618}e^2 \otimes e_5$	{1237, 145, 2467, 356}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
741:1	$0, 0, 0, \frac{36}{371}\sqrt{10}e^{12}, \frac{9}{371}\sqrt{102}e^{13}, \frac{36}{371}\sqrt{10}e^{23}, \frac{18}{371}\sqrt{29}e^{14}$	$(\frac{36}{371}, \frac{36}{371}, -\frac{81}{371}, \frac{72}{371}, -\frac{45}{371}, -\frac{45}{371}, \frac{108}{371})$ $+ \frac{18}{371}\sqrt{73}e^2 \otimes e_5 + \frac{45}{371}\sqrt{14}e^1 \otimes e_6$	{1237, 145, 2467, 356}
741:1	$0, 0, 0, \frac{36}{371}\sqrt{10}e^{12}, \frac{9}{371}\sqrt{102}e^{13}, \frac{36}{371}\sqrt{10}e^{23}, \frac{18}{371}\sqrt{29}e^{14}$	$(\frac{36}{371}, \frac{36}{371}, -\frac{81}{371}, \frac{72}{371}, -\frac{45}{371}, -\frac{45}{371}, \frac{108}{371})$ $- \frac{18}{371}\sqrt{73}e^2 \otimes e_5 + \frac{45}{371}\sqrt{14}e^1 \otimes e_6$	{1237, 145, 2467, 356}
741:1	$0, 0, 0, \frac{4}{447}\sqrt{1794}e^{12}, \frac{20}{447}\sqrt{138}e^{13}, \frac{4}{447}\sqrt{6302}e^{23}, \frac{8}{447}\sqrt{1426}e^{14}$	$(-\frac{65}{447}, -\frac{1}{149}, \frac{235}{447}, -\frac{68}{447}, \frac{170}{447}, \frac{232}{447}, -\frac{133}{447})$ $+ \frac{32}{447}\sqrt{253}e^3 \otimes e_7$	{1234, 157, 235, 47}
741:1	$0, 0, 0, \frac{84}{1331}\sqrt{5}e^{12}, \frac{336}{1331}\sqrt{2}e^{13}, \frac{21}{1331}\sqrt{690}e^{23}, \frac{42}{1331}\sqrt{89}e^{14}$	$(-\frac{294}{1331}, \frac{336}{1331}, \frac{189}{1331}, \frac{42}{1331}, -\frac{105}{1331}, \frac{525}{1331}, -\frac{252}{1331})$ $+ \frac{21}{1331}\sqrt{1082}e^2 \otimes e_5 + \frac{42}{1331}\sqrt{305}e^3 \otimes e_7$	{2467, 356}
741:1	$0, 0, 0, \frac{18}{295}\sqrt{5}e^{12}, \frac{3}{295}\sqrt{370}e^{13}, \frac{12}{59}\sqrt{2}e^{23}, \frac{6}{295}\sqrt{215}e^{14}$	$(\frac{6}{59}, -\frac{12}{59}, \frac{9}{59}, -\frac{6}{59}, \frac{15}{59}, -\frac{3}{59}, 0)$ $+ \frac{3}{295}\sqrt{1330}e^1 \otimes e_6 + \frac{6}{295}\sqrt{310}e^3 \otimes e_7$	{2467, 356}
741:1	$0, 0, 0, \frac{1}{39}\sqrt{498}e^{12}, \frac{1}{39}\sqrt{166}e^{13}, \frac{1}{39}\sqrt{498}e^{23}, \frac{2}{39}\sqrt{166}e^{14}$	$(\frac{5}{13}, -\frac{28}{117}, -\frac{10}{117}, \frac{17}{117}, \frac{35}{117}, -\frac{38}{117}, \frac{62}{117})$ $+ \frac{1}{117}\sqrt{15106}e^1 \otimes e_6$	{1237, 145, 2467, 356}
741:2	$0, 0, 0, \frac{25}{947}\sqrt{66}e^{12}, \frac{50}{947}\sqrt{105}e^{13}, \frac{50}{947}\sqrt{142}e^{23}, \frac{50}{947}\sqrt{177}e^{15} + \frac{50}{947}\sqrt{74}e^{24}$	$(\frac{350}{947}, \frac{25}{947}, -\frac{300}{947}, \frac{375}{947}, \frac{50}{947}, -\frac{275}{947}, \frac{400}{947})$ $+ \frac{25}{947}\sqrt{1506}e^1 \otimes e_6$	{145, 3567}
741:3	$0, 0, 0, -\frac{24}{67}\sqrt{3}e^{12}, \frac{24}{67}\sqrt{3}e^{13}, \frac{8}{67}\sqrt{26}e^{23}, \frac{8}{67}e^{24} + \frac{8}{67}e^{35}$	$(\frac{40}{67}, -\frac{12}{67}, -\frac{12}{67}, \frac{28}{67}, \frac{28}{67}, -\frac{24}{67}, \frac{16}{67})$ $+ \frac{16}{67}\sqrt{26}e^1 \otimes e_6$	{1237, 1457, 246, 1237, 1457, 246}
741:3	$0, 0, 0, \frac{24}{67}\sqrt{3}e^{12}, \frac{24}{67}\sqrt{3}e^{13}, \frac{8}{67}\sqrt{26}e^{23}, \frac{8}{67}e^{24} + \frac{8}{67}e^{35}$	$(\frac{40}{67}, -\frac{12}{67}, -\frac{12}{67}, \frac{28}{67}, \frac{28}{67}, -\frac{24}{67}, \frac{16}{67})$ $+ \frac{16}{67}\sqrt{26}e^1 \otimes e_6$	{1237, 1457, 246, 1237, 1457, 246}
7321:1	$0, 0, 0, 0, \frac{2}{199}\sqrt{366}e^{12}, \frac{2}{199}\sqrt{2806}e^{15}, \frac{8}{199}\sqrt{183}e^{16}$	$(\frac{50}{199}, -\frac{72}{199}, \frac{91}{199}, -\frac{31}{199}, -\frac{22}{199}, \frac{28}{199}, \frac{78}{199})$ $+ \frac{122}{199}e^3 \otimes e_4 + \frac{12}{199}\sqrt{183}e^1 \otimes e_2$	{136, 146, 23, 24}
7321:1	$0, 0, 0, 0, \frac{1}{199}\sqrt{32982}e^{12}, \frac{1}{199}\sqrt{7170}e^{15}, \frac{4}{199}\sqrt{239}e^{16}$	$(-\frac{31}{199}, \frac{130}{199}, -\frac{109}{199}, \frac{45}{199}, \frac{99}{199}, \frac{68}{199}, \frac{37}{199})$ $+ \frac{2}{199}\sqrt{18403}e^2 \otimes e_3$	{12467, 1267, 1345, 135, 2456, 256, 347, 37}
7321:1	$0, 0, 0, 0, \frac{3}{26}\sqrt{39}e^{12}, \frac{3}{13}\sqrt{3}e^{15}, \frac{3}{26}\sqrt{39}e^{16}$	$(-\frac{9}{26}, \frac{3}{4}, \frac{3}{13}, \frac{3}{13}, \frac{21}{52}, \frac{3}{52}, -\frac{15}{52})$ $+ \frac{3}{13}\sqrt{30}e^2 \otimes e_7$	{12346, 1236, 126, 13457, 1357, 157}
7321:1	$0, 0, 0, 0, \frac{1}{58}\sqrt{435}e^{12}, \frac{3}{29}\sqrt{10}e^{15}, \frac{1}{58}\sqrt{435}e^{16}$	$(-\frac{5}{58}, \frac{31}{116}, -\frac{10}{29}, \frac{4}{29}, \frac{21}{116}, \frac{11}{116}, \frac{1}{116})$ $+ \frac{1}{29}\sqrt{165}e^2 \otimes e_7 + \frac{1}{29}\sqrt{210}e^1 \otimes e_3$	{1246, 126, 1457, 157}
7321:1	$0, 0, 0, 0, \frac{4}{39}\sqrt{6}e^{12}, \frac{16}{39}e^{15}, \frac{8}{39}\sqrt{7}e^{16}$	$(\frac{5}{39}, -\frac{11}{39}, \frac{20}{39}, \frac{5}{39}, -\frac{2}{13}, -\frac{1}{39}, \frac{4}{39})$ $+ \frac{4}{39}\sqrt{30}e^3 \otimes e_7 + \frac{4}{39}\sqrt{38}e^1 \otimes e_2$	{1346, 136, 23, 234}
7321:1	$0, 0, 0, 0, \frac{4}{199}\sqrt{239}e^{12}, \frac{1}{199}\sqrt{7170}e^{15}, \frac{1}{199}\sqrt{32982}e^{16}$	$(-\frac{31}{199}, \frac{53}{199}, 1, \frac{45}{199}, \frac{22}{199}, -\frac{9}{199}, -\frac{40}{199})$ $+ \frac{2}{199}\sqrt{18403}e^3 \otimes e_7$	{12457, 1257, 1346, 136, 23, 234, 4567, 567}
7321:1	$0, 0, 0, 0, \frac{6}{79}\sqrt{39}e^{12}, \frac{12}{79}\sqrt{3}e^{15}, \frac{6}{79}\sqrt{39}e^{16}$	$(-\frac{18}{79}, \frac{39}{79}, \frac{39}{79}, -\frac{15}{79}, \frac{21}{79}, \frac{3}{79}, -\frac{15}{79})$ $+ \frac{12}{79}\sqrt{30}e^2 \otimes e_7 + \frac{54}{79}e^3 \otimes e_4$	{1236, 1246, 1357, 1457}
7321:1	$0, 0, 0, 0, \frac{1}{69}\sqrt{366}e^{12}, \frac{1}{69}\sqrt{2806}e^{15}, \frac{4}{69}\sqrt{183}e^{16}$	$(\frac{25}{69}, -\frac{12}{23}, \frac{5}{23}, \frac{5}{23}, -\frac{11}{69}, \frac{14}{69}, \frac{13}{23})$ $+ \frac{2}{23}\sqrt{183}e^1 \otimes e_2$	{1346, 136, 16, 2, 23, 234}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
7321:1	$0, 0, 0, 0, \frac{2}{49}\sqrt{111}e^{12}, \frac{4}{49}\sqrt{37}e^{15}, \frac{2}{49}\sqrt{111}e^{16}$	$(\frac{2}{49}, \frac{9}{49}, 1, -\frac{25}{49}, \frac{11}{49}, \frac{13}{49}, \frac{15}{49})$ $+ \frac{74}{49}e^3 \otimes e_4$	{1236, 1246, 1357, 1457, 23567, 24567, 3, 4}
7321:1	$0, 0, 0, 0, \frac{1}{6}\sqrt{13}e^{12}, \frac{1}{9}\sqrt{39}e^{15}, \frac{1}{6}\sqrt{13}e^{16}$	$(\frac{1}{6}, -\frac{1}{36}, -\frac{5}{9}, \frac{2}{9}, \frac{5}{36}, \frac{11}{36}, \frac{17}{36})$ $+ \frac{1}{9}\sqrt{91}e^1 \otimes e_3$	{1246, 126, 1457, 157, 234567, 23567, 3, 34}
7321:1	$0, 0, 0, 0, \frac{8}{41}\sqrt{6}e^{12}, \frac{12}{41}\sqrt{2}e^{15}, \frac{4}{41}\sqrt{10}e^{16}$	$(\frac{1}{41}, \frac{8}{41}, \frac{15}{41}, -\frac{8}{41}, \frac{9}{41}, \frac{10}{41}, \frac{11}{41})$ $+ \frac{4}{41}\sqrt{42}e^1 \otimes e_3 + \frac{8}{41}\sqrt{7}e^2 \otimes e_4$	{126, 1457, 23567, 34}
7321:1	$0, 0, 0, 0, \frac{16}{181}\sqrt{26}e^{12}, \frac{48}{181}e^{15}, \frac{16}{181}\sqrt{26}e^{16}$	$(-\frac{34}{181}, \frac{78}{181}, \frac{104}{181}, -\frac{50}{181}, \frac{44}{181}, \frac{10}{181}, -\frac{24}{181})$ $+ \frac{16}{181}\sqrt{77}e^2 \otimes e_4 + \frac{16}{181}\sqrt{77}e^3 \otimes e_7$	{1236, 1457, 2567, 34}
7321:1	$0, 0, 0, 0, \frac{4}{41}\sqrt{10}e^{12}, \frac{12}{41}\sqrt{2}e^{15}, \frac{8}{41}\sqrt{6}e^{16}$	$(\frac{1}{41}, \frac{1}{41}, \frac{20}{41}, -\frac{15}{41}, \frac{2}{41}, \frac{3}{41}, \frac{4}{41})$ $+ \frac{4}{41}\sqrt{42}e^1 \otimes e_4 + \frac{8}{41}\sqrt{7}e^3 \otimes e_7$	{1236, 157, 24567, 34}
7321:2	$0, 0, 0, 0, \frac{20}{167}\sqrt{15}e^{12}, \frac{10}{167}\sqrt{70}e^{15}, \frac{10}{167}\sqrt{30}e^{16} + \frac{20}{167}\sqrt{15}e^{34}$	$(\frac{10}{167}, \frac{30}{167}, \frac{155}{167}, -\frac{95}{167}, \frac{40}{167}, \frac{50}{167}, \frac{60}{167})$ $+ \frac{250}{167}e^3 \otimes e_4$	{1357, 1457, 23567, 24567}
7321:2	$0, 0, 0, 0, \frac{10}{91}\sqrt{39}e^{12}, \frac{5}{91}\sqrt{42}e^{15}, \frac{5}{91}\sqrt{78}e^{16} + \frac{10}{91}\sqrt{39}e^{34}$	$(-\frac{25}{91}, \frac{5}{7}, -\frac{5}{91}, -\frac{5}{91}, \frac{40}{91}, \frac{15}{91}, -\frac{10}{91})$ $+ \frac{10}{91}\sqrt{105}e^2 \otimes e_7$	{12346, 126, 1357}
7321:2	$0, 0, 0, 0, \frac{5}{41}\sqrt{3}e^{12}, \frac{5}{41}\sqrt{19}e^{15}, \frac{5}{41}\sqrt{21}e^{16} + \frac{5}{41}\sqrt{3}e^{34}$	$(\frac{10}{41}, -\frac{15}{41}, \frac{20}{41}, -\frac{5}{41}, -\frac{5}{41}, \frac{5}{41}, \frac{15}{41})$ $+ \frac{15}{41}\sqrt{5}e^1 \otimes e_2 - \frac{25}{41}e^3 \otimes e_4$	{136, 146, 23, 24}
7321:2	$0, 0, 0, 0, \frac{5}{41}\sqrt{3}e^{12}, \frac{5}{41}\sqrt{19}e^{15}, \frac{5}{41}\sqrt{21}e^{16} + \frac{5}{41}\sqrt{3}e^{34}$	$(\frac{10}{41}, -\frac{15}{41}, \frac{20}{41}, -\frac{5}{41}, -\frac{5}{41}, \frac{5}{41}, \frac{15}{41})$ $+ \frac{15}{41}\sqrt{5}e^1 \otimes e_2 + \frac{25}{41}e^3 \otimes e_4$	{136, 146, 23, 24}
7321:2	$0, 0, 0, 0, \frac{20}{257}\sqrt{39}e^{12}, \frac{10}{257}\sqrt{42}e^{15}, \frac{10}{257}\sqrt{78}e^{16} + \frac{20}{257}\sqrt{39}e^{34}$	$(-\frac{50}{257}, \frac{130}{257}, \frac{65}{257}, -\frac{85}{257}, \frac{80}{257}, \frac{30}{257}, -\frac{20}{257})$ $+ \frac{150}{257}e^3 \otimes e_4 + \frac{20}{257}\sqrt{105}e^2 \otimes e_7$	{1357, 1457}
7321:2	$0, 0, 0, 0, \frac{10}{57}\sqrt{3}e^{12}, \frac{10}{57}\sqrt{19}e^{15}, \frac{10}{57}\sqrt{21}e^{16} + \frac{10}{57}\sqrt{3}e^{34}$	$(\frac{20}{57}, -\frac{10}{19}, \frac{5}{19}, \frac{5}{19}, -\frac{10}{57}, \frac{10}{57}, \frac{10}{19})$ $+ \frac{10}{19}\sqrt{5}e^1 \otimes e_2$	{136, 23}
7321:3	$0, 0, 0, 0, \frac{5}{124}\sqrt{345}e^{12}, \frac{15}{124}\sqrt{10}e^{15}, \frac{5}{62}\sqrt{35}e^{16} + \frac{5}{124}\sqrt{345}e^{23}$	$(-\frac{5}{248}, \frac{55}{124}, -\frac{15}{248}, -\frac{35}{62}, \frac{105}{248}, \frac{25}{62}, \frac{95}{248})$ $+ \frac{5}{124}\sqrt{970}e^2 \otimes e_4$	{1267, 145, 2356, 347}
7321:3	$0, 0, 0, 0, \frac{5}{62}\sqrt{35}e^{12}, \frac{15}{124}\sqrt{10}e^{15}, \frac{5}{124}\sqrt{345}e^{16} + \frac{5}{124}\sqrt{345}e^{23}$	$(-\frac{5}{248}, \frac{13}{248}, -\frac{15}{248}, 1, \frac{1}{31}, \frac{3}{248}, -\frac{1}{124})$ $+ \frac{5}{124}\sqrt{970}e^4 \otimes e_7$	{1257, 146, 234, 3567}
7321:3	$0, 0, 0, 0, \frac{2}{43}\sqrt{178}e^{12}, \frac{1}{129}\sqrt{7654}e^{15}, \frac{2}{43}\sqrt{178}e^{16} + \frac{1}{129}\sqrt{2670}e^{23}$	$(\frac{14}{129}, \frac{2}{43}, \frac{14}{43}, -\frac{25}{43}, \frac{20}{129}, \frac{34}{129}, \frac{16}{43})$ $+ \frac{2}{129}\sqrt{4539}e^1 \otimes e_4$	{126, 157, 234567, 34}
7321:3	$0, 0, 0, 0, \frac{2}{121}\sqrt{290}e^{12}, \frac{3}{121}\sqrt{290}e^{15}, \frac{2}{121}\sqrt{290}e^{16} + \frac{1}{121}\sqrt{12470}e^{23}$	$(\frac{26}{121}, -\frac{12}{121}, \frac{78}{121}, -\frac{67}{121}, \frac{14}{121}, \frac{40}{121}, \frac{6}{11})$ $+ \frac{2}{121}\sqrt{6815}e^3 \otimes e_4$	{1235, 1367, 247, 456}
7321:3	$0, 0, 0, 0, \frac{1}{121}\sqrt{12470}e^{12}, \frac{3}{121}\sqrt{290}e^{15}, \frac{2}{121}\sqrt{290}e^{16} + \frac{2}{121}\sqrt{290}e^{23}$	$(-\frac{21}{121}, \frac{82}{121}, -\frac{63}{121}, \frac{27}{121}, \frac{61}{121}, \frac{40}{121}, \frac{19}{121})$ $+ \frac{2}{121}\sqrt{6815}e^2 \otimes e_3$	{1345, 135, 2456, 256}
7321:3	$0, 0, 0, 0, \frac{28}{293}\sqrt{13}e^{12}, \frac{14}{293}\sqrt{30}e^{15}, \frac{14}{293}\sqrt{78}e^{16} + \frac{14}{293}\sqrt{78}e^{23}$	$(-\frac{35}{293}, \frac{91}{293}, -\frac{105}{293}, \frac{182}{293}, \frac{56}{293}, \frac{21}{293}, -\frac{14}{293})$ $+ \frac{14}{293}\sqrt{222}e^2 \otimes e_3 + \frac{14}{293}\sqrt{274}e^4 \otimes e_7$	{1357, 2567}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
7321:3	$0, 0, 0, 0, \frac{23}{1469}\sqrt{942}e^{12}, \frac{23}{1469}\sqrt{646}e^{15}, \frac{23}{1469}\sqrt{442}e^{16} + \frac{23}{1469}\sqrt{330}e^{23}$	$(-\frac{46}{1469}, \frac{391}{1469}, -\frac{138}{1469}, -\frac{575}{1469}, \frac{345}{1469}, \frac{23}{113}, \frac{253}{1469})$ $+ \frac{230}{1469}\sqrt{10}e^2 \otimes e_3 + \frac{46}{1469}\sqrt{386}e^1 \otimes e_4$	{126, 34}
7321:4	$0, 0, 0, 0, \frac{2}{89}\sqrt{402}e^{12}, \frac{2}{89}\sqrt{402}e^{15}, \frac{4}{89}\sqrt{67}e^{16} + \frac{4}{89}\sqrt{67}e^{25}$	$(\frac{6}{89}, \frac{12}{89}, 1, -\frac{45}{89}, \frac{18}{89}, \frac{24}{89}, \frac{30}{89})$ $+ \frac{134}{89}e^3 \otimes e_4$	{1357, 1457, 3, 4}
7321:4	$0, 0, 0, 0, \frac{24}{157}\sqrt{13}e^{12}, \frac{4}{157}\sqrt{793}e^{15}, \frac{28}{157}\sqrt{13}e^{16} + \frac{52}{157}\sqrt{2}e^{25}$	$(\frac{11}{157}, \frac{22}{157}, -\frac{93}{157}, \frac{32}{157}, \frac{33}{157}, \frac{44}{157}, \frac{55}{157})$ $+ \frac{20}{157}\sqrt{65}e^1 \otimes e_3$	{1246, 126, 234567, 23567}
7321:4	$0, 0, 0, 0, \frac{1}{37}\sqrt{870}e^{12}, \frac{1}{37}\sqrt{174}e^{15}, \frac{4}{37}\sqrt{29}e^{16} + \frac{4}{37}\sqrt{58}e^{25}$	$(\frac{3}{37}, \frac{6}{37}, -\frac{23}{37}, \frac{7}{37}, \frac{9}{37}, \frac{12}{37}, \frac{15}{37})$ $+ \frac{2}{37}\sqrt{435}e^2 \otimes e_3$	{134567, 13567, 346, 36}
7321:4	$0, 0, 0, 0, \frac{11}{296}\sqrt{129}e^{12}, \frac{11}{74}\sqrt{3}e^{15}, \frac{11}{296}\sqrt{17}e^{16} + \frac{11}{296}\sqrt{219}e^{25}$	$(\frac{11}{592}, \frac{11}{296}, \frac{297}{592}, -\frac{55}{148}, \frac{33}{592}, \frac{11}{148}, \frac{55}{592})$ $+ \frac{11}{296}\sqrt{222}e^3 \otimes e_7 + \frac{11}{296}\sqrt{295}e^2 \otimes e_4$	{14567, 346}
7321:4	$0, 0, 0, 0, \frac{14}{377}\sqrt{69}e^{12}, \frac{7}{377}\sqrt{510}e^{15}, \frac{28}{377}\sqrt{42}e^{16} + \frac{7}{377}\sqrt{30}e^{25}$	$(\frac{7}{377}, \frac{14}{377}, \frac{14}{29}, -\frac{140}{377}, \frac{21}{377}, \frac{28}{377}, \frac{35}{377})$ $+ \frac{21}{377}\sqrt{130}e^1 \otimes e_4 + \frac{7}{377}\sqrt{762}e^3 \otimes e_7$	{1236, 24567}
7321:4	$0, 0, 0, 0, \frac{1}{8}\sqrt{15}e^{12}, \frac{1}{4}\sqrt{2}e^{15}, \frac{1}{8}\sqrt{3}e^{16} + \frac{1}{8}\sqrt{5}e^{25}$	$(\frac{1}{16}, \frac{1}{8}, -\frac{5}{16}, -\frac{1}{4}, \frac{3}{16}, \frac{1}{4}, \frac{5}{16})$ $+ \frac{1}{8}\sqrt{19}e^2 \otimes e_4 + \frac{1}{8}\sqrt{22}e^1 \otimes e_3$	{1457, 34}
7321:4	$0, 0, 0, 0, \frac{8}{91}\sqrt{3}e^{12}, \frac{8}{91}\sqrt{3}e^{15}, \frac{8}{91}\sqrt{69}e^{16} + \frac{8}{91}\sqrt{69}e^{25}$	$(-\frac{1}{91}, -\frac{2}{91}, 1, \frac{20}{91}, -\frac{3}{91}, -\frac{4}{91}, -\frac{5}{91})$ $+ \frac{8}{91}\sqrt{213}e^3 \otimes e_7$	{123456, 12356, 2467, 267}
7321:5	$0, 0, 0, 0, \frac{16}{107}\sqrt{10}e^{12}, \frac{16}{107}\sqrt{10}e^{15}, \frac{8}{107}\sqrt{15}e^{16} + \frac{8}{107}\sqrt{15}e^{25} + \frac{8}{107}\sqrt{35}e^{34}$	$(\frac{8}{107}, \frac{16}{107}, \frac{100}{107}, -\frac{60}{107}, \frac{24}{107}, \frac{32}{107}, \frac{40}{107})$ $+ \frac{160}{107}e^3 \otimes e_4$	{1357, 1457}
732:1	$0, 0, 0, 0, \frac{48}{181}e^{12}, \frac{16}{181}\sqrt{26}e^{15}, \frac{16}{181}\sqrt{26}e^{25}$	$(-\frac{8}{181}, -\frac{8}{181}, \frac{104}{181}, \frac{104}{181}, -\frac{16}{181}, -\frac{24}{181}, -\frac{24}{181})$ $+ \frac{16}{181}\sqrt{77}e^3 \otimes e_6 + \frac{16}{181}\sqrt{77}e^4 \otimes e_7$	{1267, 1357, 34}
732:1	$0, 0, 0, 0, \frac{1}{199}\sqrt{7170}e^{12}, \frac{1}{199}\sqrt{32982}e^{15}, \frac{4}{199}\sqrt{239}e^{25}$	$(-\frac{39}{199}, \frac{38}{199}, 1, \frac{45}{199}, -\frac{1}{199}, -\frac{40}{199}, \frac{37}{199})$ $+ \frac{2}{199}\sqrt{18403}e^3 \otimes e_6$	{1246, 126, 1345, 135, 24567, 2567, 347, 37}
732:1	$0, 0, 0, 0, \frac{1}{69}\sqrt{2806}e^{12}, \frac{4}{69}\sqrt{183}e^{15}, \frac{1}{69}\sqrt{366}e^{25}$	$(\frac{22}{69}, -\frac{5}{69}, -\frac{13}{23}, \frac{5}{23}, \frac{17}{69}, \frac{13}{23}, \frac{4}{23})$ $+ \frac{2}{23}\sqrt{183}e^1 \otimes e_3$	{1246, 126, 145, 15, 234567, 23567, 347, 37}
732:1	$0, 0, 0, 0, \frac{4}{49}\sqrt{37}e^{12}, \frac{2}{49}\sqrt{111}e^{15}, \frac{2}{49}\sqrt{111}e^{25}$	$(\frac{5}{49}, \frac{5}{49}, 1, -\frac{25}{49}, \frac{10}{49}, \frac{15}{49}, \frac{15}{49})$ $+ \frac{74}{49}e^3 \otimes e_4$	{12367, 12467, 1357, 1457, 3, 4}
732:1	$0, 0, 0, 0, \frac{4}{21}\sqrt{7}e^{12}, \frac{4}{21}\sqrt{3}e^{15}, \frac{4}{21}\sqrt{3}e^{25}$	$(\frac{2}{21}, \frac{2}{21}, -\frac{2}{7}, -\frac{2}{7}, \frac{4}{21}, \frac{2}{7}, \frac{2}{7})$ $+ \frac{4}{7}e^1 \otimes e_3 + \frac{4}{7}e^2 \otimes e_4$	{1267, 1457, 34}
732:1	$0, 0, 0, 0, \frac{16}{39}e^{12}, \frac{8}{39}\sqrt{7}e^{15}, \frac{4}{39}\sqrt{6}e^{25}$	$(\frac{2}{39}, 0, \frac{20}{39}, -\frac{14}{39}, \frac{2}{39}, \frac{4}{39}, \frac{2}{39})$ $+ \frac{4}{39}\sqrt{30}e^3 \otimes e_6 + \frac{4}{39}\sqrt{38}e^1 \otimes e_4$	{126, 135, 24567, 347}
732:1	$0, 0, 0, 0, \frac{42}{83}e^{12}, \frac{7}{83}\sqrt{30}e^{15}, \frac{21}{83}\sqrt{2}e^{25}$	$(\frac{21}{83}, -\frac{14}{83}, \frac{42}{83}, -\frac{28}{83}, \frac{7}{83}, \frac{28}{83}, -\frac{7}{83})$ $+ \frac{7}{83}\sqrt{58}e^3 \otimes e_7 + \frac{7}{83}\sqrt{82}e^1 \otimes e_4$	{1267, 157, 23456, 34}
732:2	$0, 0, 0, 0, \frac{8}{47}\sqrt{2}e^{12}, \frac{4}{47}\sqrt{78}e^{15}, \frac{4}{47}\sqrt{82}e^{13} + \frac{4}{47}\sqrt{34}e^{25}$	$(-\frac{1}{3}, \frac{50}{141}, \frac{100}{141}, \frac{29}{141}, \frac{1}{47}, -\frac{44}{141}, \frac{53}{141})$ $+ \frac{16}{47}\sqrt{14}e^3 \otimes e_6$	{1467, 167, 456, 56}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
732:2	$0, 0, 0, 0, \frac{22}{347}\sqrt{46}e^{12}, \frac{22}{347}\sqrt{70}e^{15}, \frac{11}{347}\sqrt{119}e^{13} + \frac{33}{347}\sqrt{3}e^{25}$	$(\frac{44}{347}, -\frac{77}{694}, -\frac{77}{347}, \frac{341}{694}, \frac{11}{694}, \frac{99}{694}, -\frac{33}{347})$ $+ \frac{11}{347}\sqrt{353}e^1 \otimes e_3 + \frac{33}{347}\sqrt{29}e^4 \otimes e_6$	{126, 145}
732:2	$0, 0, 0, 0, \frac{1}{4}e^{12}, \frac{1}{4}e^{15}, \frac{1}{4}\sqrt{5}e^{13} + \frac{1}{4}e^{25}$	$(-\frac{3}{16}, \frac{1}{8}, \frac{1}{4}, \frac{9}{16}, -\frac{1}{16}, -\frac{1}{4}, \frac{1}{16})$ $+ \frac{1}{4}\sqrt{7}e^3 \otimes e_6 + \frac{1}{4}\sqrt{7}e^4 \otimes e_7$	{12345, 237}
732:2	$0, 0, 0, 0, \frac{8}{447}\sqrt{1426}e^{12}, \frac{4}{447}\sqrt{6302}e^{15}, \frac{20}{447}\sqrt{138}e^{13} + \frac{4}{447}\sqrt{1794}e^{25}$	$(\frac{37}{149}, \frac{10}{447}, \frac{20}{447}, -\frac{257}{447}, \frac{121}{447}, \frac{232}{447}, \frac{131}{447})$ $+ \frac{32}{447}\sqrt{253}e^1 \otimes e_4$	{1236, 135, 234567, 347}
732:2	$0, 0, 0, 0, \frac{8}{47}\sqrt{2}e^{12}, \frac{4}{47}\sqrt{34}e^{15}, \frac{4}{47}\sqrt{82}e^{13} + \frac{4}{47}\sqrt{78}e^{25}$	$(\frac{3}{47}, -\frac{2}{47}, -\frac{4}{47}, 1, \frac{1}{47}, \frac{4}{47}, -\frac{1}{47})$ $+ \frac{16}{47}\sqrt{14}e^4 \otimes e_7$	{123456, 134, 2367, 357}
732:2	$0, 0, 0, 0, \frac{1}{17}\sqrt{41}e^{12}, \frac{1}{34}\sqrt{123}e^{15}, \frac{1}{34}\sqrt{1066}e^{13} + \frac{1}{34}\sqrt{123}e^{25}$	$(-\frac{5}{68}, \frac{21}{68}, \frac{21}{34}, -\frac{10}{17}, \frac{4}{17}, \frac{11}{68}, \frac{37}{68})$ $+ \frac{3}{34}\sqrt{246}e^3 \otimes e_4$	{124567, 147, 246, 45}
732:2	$0, 0, 0, 0, \frac{3}{11}\sqrt{3}e^{12}, \frac{1}{11}\sqrt{13}e^{15}, \frac{1}{11}\sqrt{15}e^{13} + \frac{1}{11}\sqrt{13}e^{25}$	$(\frac{2}{11}, -\frac{1}{22}, -\frac{1}{11}, -\frac{7}{22}, \frac{3}{22}, \frac{7}{22}, \frac{1}{11})$ $+ \frac{1}{11}\sqrt{29}e^1 \otimes e_3 + \frac{1}{11}\sqrt{29}e^2 \otimes e_4$	{2356, 34}
732:2	$0, 0, 0, 0, \frac{4}{427}\sqrt{2667}e^{12}, \frac{4}{427}\sqrt{9906}e^{15}, \frac{2}{427}\sqrt{7874}e^{13} + \frac{4}{427}\sqrt{635}e^{25}$	$(-\frac{72}{427}, \frac{9}{61}, \frac{18}{61}, 1, -\frac{9}{427}, -\frac{81}{427}, \frac{54}{427})$ $+ \frac{4}{427}\sqrt{21082}e^4 \otimes e_6$	{126, 145, 2567, 47}
732:2	$0, 0, 0, 0, \frac{4}{35}\sqrt{5}e^{12}, \frac{1}{35}\sqrt{210}e^{15}, \frac{1}{35}\sqrt{170}e^{13} + \frac{2}{7}e^{25}$	$(-\frac{1}{14}, \frac{1}{7}, \frac{2}{7}, -\frac{5}{14}, \frac{1}{14}, 0, \frac{3}{14})$ $+ \frac{1}{35}\sqrt{290}e^3 \otimes e_6 + \frac{1}{35}\sqrt{330}e^1 \otimes e_4$	{135, 347}
732:3	$0, 0, 0, 0, \frac{3}{22}\sqrt{2}e^{12}, \frac{1}{22}\sqrt{30}e^{15}, \frac{1}{22}\sqrt{2}e^{25} + \frac{1}{22}\sqrt{30}e^{34}$	$(\frac{3}{44}, -\frac{1}{22}, \frac{2}{11}, -\frac{9}{44}, \frac{1}{44}, \frac{1}{11}, -\frac{1}{44})$ $+ \frac{1}{22}\sqrt{34}e^3 \otimes e_6 - \frac{1}{22}\sqrt{42}e^1 \otimes e_7$	{126, 1345, 24567, 37}
732:3	$0, 0, 0, 0, \frac{3}{22}\sqrt{2}e^{12}, \frac{1}{22}\sqrt{30}e^{15}, \frac{1}{22}\sqrt{2}e^{25} + \frac{1}{22}\sqrt{30}e^{34}$	$(\frac{3}{44}, -\frac{1}{22}, \frac{2}{11}, -\frac{9}{44}, \frac{1}{44}, \frac{1}{11}, -\frac{1}{44})$ $+ \frac{1}{22}\sqrt{34}e^3 \otimes e_6 + \frac{1}{22}\sqrt{42}e^1 \otimes e_7$	{126, 1345, 24567, 37}
732:3	$0, 0, 0, 0, \frac{10}{167}\sqrt{70}e^{12}, \frac{20}{167}\sqrt{15}e^{15}, \frac{10}{167}\sqrt{30}e^{25} + \frac{20}{167}\sqrt{15}e^{34}$	$(\frac{16}{167}, \frac{22}{167}, \frac{155}{167}, -\frac{95}{167}, \frac{38}{167}, \frac{54}{167}, \frac{60}{167})$ $+ \frac{250}{167}e^3 \otimes e_4$	{12367, 12467, 1357, 1457}
732:3	$0, 0, 0, 0, \frac{8}{173}\sqrt{51}e^{12}, \frac{4}{173}\sqrt{1173}e^{15}, \frac{68}{173}\sqrt{2}e^{25} + \frac{4}{173}\sqrt{1173}e^{34}$	$(-\frac{45}{173}, \frac{58}{173}, \frac{104}{173}, -\frac{33}{173}, \frac{13}{173}, -\frac{32}{173}, \frac{71}{173})$ $+ \frac{4}{173}\sqrt{2329}e^3 \otimes e_6$	{126, 1345, 24567, 37}
732:4	$0, 0, 0, 0, \frac{14}{53}\sqrt{5}e^{12}, \frac{7}{53}\sqrt{15}e^{15} - \frac{7}{53}\sqrt{39}e^{23}, \frac{7}{53}\sqrt{39}e^{13} + \frac{7}{53}\sqrt{15}e^{25}$	$(\frac{7}{53}, \frac{7}{53}, \frac{14}{53}, -\frac{35}{53}, \frac{14}{53}, \frac{21}{53}, \frac{21}{53})$ $+ \frac{14}{53}\sqrt{22}e^3 \otimes e_4$	{124567, 147, 45, 124567, 147, 45}
732:4	$0, 0, 0, 0, \frac{14}{53}\sqrt{5}e^{12}, \frac{7}{53}\sqrt{15}e^{15} + \frac{7}{53}\sqrt{39}e^{23}, \frac{7}{53}\sqrt{39}e^{13} + \frac{7}{53}\sqrt{15}e^{25}$	$(\frac{7}{53}, \frac{7}{53}, \frac{14}{53}, -\frac{35}{53}, \frac{14}{53}, \frac{21}{53}, \frac{21}{53})$ $+ \frac{14}{53}\sqrt{22}e^3 \otimes e_4$	{124567, 147, 45, 124567, 147, 45}
732:4	$0, 0, 0, 0, \frac{52}{233}\sqrt{10}e^{12}, \frac{13}{233}\sqrt{167}e^{15} - \frac{13}{233}\sqrt{101}e^{23}, \frac{13}{233}\sqrt{87}e^{13} + \frac{13}{233}\sqrt{21}e^{25}$	$(\frac{26}{233}, \frac{26}{233}, \frac{52}{233}, -\frac{143}{233}, \frac{52}{233}, \frac{78}{233}, \frac{78}{233})$ $+ \frac{26}{233}\sqrt{94}e^1 \otimes e_4$	{1236, 135, 234567, 347, 1236, 135, 234567, 347}
732:4	$0, 0, 0, 0, \frac{52}{233}\sqrt{10}e^{12}, \frac{13}{233}\sqrt{167}e^{15} + \frac{13}{233}\sqrt{101}e^{23}, \frac{13}{233}\sqrt{87}e^{13} + \frac{13}{233}\sqrt{21}e^{25}$	$(\frac{26}{233}, \frac{26}{233}, \frac{52}{233}, -\frac{143}{233}, \frac{52}{233}, \frac{78}{233}, \frac{78}{233})$ $+ \frac{26}{233}\sqrt{94}e^1 \otimes e_4$	{1236, 135, 234567, 347, 1236, 135, 234567, 347}
732:5	$0, 0, 0, 0, \frac{3}{37}\sqrt{2}e^{12}, \frac{3}{37}\sqrt{38}e^{13} + \frac{3}{37}\sqrt{78}e^{25}, \frac{15}{37}\sqrt{2}e^{15} + \frac{3}{37}\sqrt{78}e^{34}$	$(\frac{9}{37}, -\frac{6}{37}, -\frac{12}{37}, \frac{24}{37}, \frac{3}{37}, -\frac{3}{37}, \frac{12}{37})$ $+ \frac{3}{37}\sqrt{178}e^4 \otimes e_6$	{126, 47}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
732:5	$0, 0, 0, 0, \frac{11}{101}\sqrt{14}e^{12}, \frac{11}{101}\sqrt{82}e^{13} + \frac{22}{101}\sqrt{3}e^{25}, \frac{11}{101}\sqrt{6}e^{15} + \frac{22}{101}\sqrt{3}e^{34}$	$(-\frac{11}{101}, \frac{33}{101}, \frac{66}{101}, -\frac{55}{101}, \frac{22}{101}, \frac{55}{101}, \frac{11}{101})$ $+ \frac{99}{101}\sqrt{2}e^3 \otimes e_4$	{146, 45}
732:6	$0, 0, 0, 0, \frac{7}{83}\sqrt{94}e^{12}, \frac{14}{83}\sqrt{22}e^{15} + \frac{7}{83}\sqrt{58}e^{23}, \frac{7}{83}\sqrt{58}e^{14} + \frac{21}{83}\sqrt{2}e^{25}$	$(\frac{21}{83}, -\frac{14}{83}, \frac{42}{83}, -\frac{28}{83}, \frac{7}{83}, \frac{28}{83}, -\frac{7}{83})$ $+ \frac{14}{83}\sqrt{35}e^1 \otimes e_4$	{23456, 34}
732:6	$0, 0, 0, 0, \frac{7}{83}\sqrt{46}e^{12}, \frac{14}{83}\sqrt{13}e^{15} + \frac{7}{83}\sqrt{82}e^{23}, \frac{7}{83}\sqrt{82}e^{14} + \frac{21}{83}\sqrt{2}e^{25}$	$(\frac{21}{83}, -\frac{14}{83}, \frac{42}{83}, -\frac{28}{83}, \frac{7}{83}, \frac{28}{83}, -\frac{7}{83})$ $+ \frac{14}{83}\sqrt{35}e^3 \otimes e_7$	{2467, 457}
731:1	$0, 0, 0, 0, \frac{2}{181}\sqrt{191}e^{12}, \frac{2}{181}\sqrt{4393}e^{13}, \frac{3}{181}\sqrt{1910}e^{15}$	$(\frac{92}{181}, -\frac{99}{181}, -\frac{6}{181}, \frac{40}{181}, -\frac{7}{181}, \frac{86}{181}, \frac{85}{181})$ $+ \frac{1}{181}\sqrt{53862}e^1 \otimes e_2$	{1347, 137, 1467, 167, 2, 2346, 236, 24}
731:1	$0, 0, 0, 0, \frac{6}{89}\sqrt{53}e^{12}, \frac{2}{89}\sqrt{371}e^{13}, \frac{8}{89}\sqrt{106}e^{15}$	$(-\frac{14}{89}, \frac{11}{89}, \frac{27}{89}, 1, -\frac{3}{89}, \frac{13}{89}, -\frac{17}{89})$ $+ \frac{2}{89}\sqrt{3657}e^4 \otimes e_7$	{12367, 127, 13456, 145, 2357, 2567, 34, 46}
731:1	$0, 0, 0, 0, \frac{8}{189}\sqrt{39}e^{12}, \frac{8}{189}\sqrt{186}e^{13}, \frac{32}{189}\sqrt{3}e^{15}$	$(\frac{5}{21}, -\frac{17}{63}, -\frac{13}{63}, \frac{34}{63}, -\frac{2}{63}, \frac{2}{63}, \frac{13}{63})$ $+ \frac{8}{189}\sqrt{237}e^4 \otimes e_6 + \frac{8}{63}\sqrt{29}e^1 \otimes e_2$	{1347, 167, 236, 24}
731:1	$0, 0, 0, 0, \frac{1}{19}\sqrt{46}e^{12}, \frac{1}{19}\sqrt{322}e^{13}, \frac{1}{19}\sqrt{46}e^{15}$	$(-\frac{1}{19}, \frac{5}{19}, \frac{12}{19}, -\frac{11}{19}, \frac{4}{19}, \frac{11}{19}, \frac{3}{19})$ $+ \frac{1}{19}\sqrt{690}e^3 \otimes e_4$	{12357, 124567, 13, 146, 2367, 247, 356, 45}
731:1	$0, 0, 0, 0, \frac{32}{189}\sqrt{3}e^{12}, \frac{8}{189}\sqrt{186}e^{13}, \frac{8}{189}\sqrt{39}e^{15}$	$(-\frac{2}{9}, \frac{94}{189}, \frac{40}{189}, -\frac{8}{27}, \frac{52}{189}, -\frac{2}{189}, \frac{10}{189})$ $+ \frac{8}{189}\sqrt{237}e^3 \otimes e_4 + \frac{8}{63}\sqrt{29}e^2 \otimes e_6$	{123, 14567, 245, 367}
731:1	$0, 0, 0, 0, \frac{3}{181}\sqrt{1910}e^{12}, \frac{2}{181}\sqrt{4393}e^{13}, \frac{2}{181}\sqrt{191}e^{15}$	$(-\frac{49}{181}, \frac{136}{181}, -\frac{6}{181}, \frac{40}{181}, \frac{87}{181}, -\frac{55}{181}, \frac{38}{181})$ $+ \frac{1}{181}\sqrt{53862}e^2 \otimes e_6$	{123, 1234, 14567, 1567, 245, 25, 3467, 367}
731:1	$0, 0, 0, 0, \frac{8}{189}\sqrt{39}e^{12}, \frac{8}{189}\sqrt{186}e^{13}, \frac{32}{189}\sqrt{3}e^{15}$	$(\frac{5}{21}, -\frac{17}{63}, \frac{40}{189}, -\frac{8}{27}, -\frac{2}{63}, \frac{85}{189}, \frac{13}{63})$ $+ \frac{8}{189}\sqrt{237}e^3 \otimes e_4 + \frac{8}{63}\sqrt{29}e^1 \otimes e_2$	{137, 1467, 236, 24}
731:1	$0, 0, 0, 0, \frac{6}{53}\sqrt{17}e^{12}, \frac{2}{53}\sqrt{85}e^{13}, \frac{4}{53}\sqrt{34}e^{15}$	$(-\frac{14}{53}, \frac{23}{53}, \frac{3}{53}, \frac{29}{53}, \frac{9}{53}, -\frac{11}{53}, -\frac{5}{53})$ $+ \frac{2}{53}\sqrt{357}e^4 \otimes e_7 + \frac{4}{53}\sqrt{102}e^2 \otimes e_6$	{1237, 1456, 257, 346}
731:1	$0, 0, 0, 0, \frac{2}{15}\sqrt{5}e^{12}, \frac{1}{15}\sqrt{30}e^{13}, \frac{2}{15}\sqrt{10}e^{15}$	$(0, 0, \frac{1}{3}, -\frac{1}{3}, 0, \frac{1}{3}, 0)$ $+ \frac{1}{15}\sqrt{70}e^1 \otimes e_4 + \frac{2}{15}\sqrt{15}e^3 \otimes e_7$	{1267, 135, 2457, 346}
731:1	$0, 0, 0, 0, \frac{2}{181}\sqrt{191}e^{12}, \frac{2}{181}\sqrt{4393}e^{13}, \frac{3}{181}\sqrt{1910}e^{15}$	$(-\frac{49}{181}, \frac{42}{181}, \frac{135}{181}, \frac{40}{181}, -\frac{7}{181}, \frac{86}{181}, -\frac{56}{181})$ $+ \frac{1}{181}\sqrt{53862}e^3 \otimes e_7$	{12345, 1235, 1467, 167, 2346, 236, 457, 57}
731:1	$0, 0, 0, 0, \frac{4}{193}\sqrt{442}e^{12}, \frac{2}{193}\sqrt{1190}e^{13}, \frac{4}{193}\sqrt{646}e^{15}$	$(\frac{28}{193}, -\frac{29}{193}, -\frac{40}{193}, \frac{95}{193}, -\frac{1}{193}, -\frac{12}{193}, \frac{27}{193})$ $+ \frac{24}{193}\sqrt{17}e^4 \otimes e_7 + \frac{28}{193}\sqrt{17}e^1 \otimes e_3$	{127, 145, 2357, 34}
731:1	$0, 0, 0, 0, \frac{1}{40}\sqrt{59}e^{12}, \frac{1}{160}\sqrt{5074}e^{13}, \frac{1}{160}\sqrt{4602}e^{15}$	$(\frac{31}{320}, -\frac{87}{320}, \frac{93}{320}, \frac{19}{160}, -\frac{7}{40}, \frac{31}{80}, -\frac{5}{64})$ $+ \frac{1}{160}\sqrt{8319}e^1 \otimes e_2 + \frac{1}{160}\sqrt{8319}e^3 \otimes e_7$	{1467, 167, 2346, 236}
731:1	$0, 0, 0, 0, \frac{2}{287}\sqrt{298}e^{12}, \frac{2}{287}\sqrt{1937}e^{13}, \frac{1}{287}\sqrt{25926}e^{15}$	$(\frac{52}{287}, -\frac{97}{287}, \frac{12}{287}, \frac{156}{287}, -\frac{45}{287}, \frac{64}{287}, \frac{1}{41})$ $+ \frac{1}{287}\sqrt{39038}e^1 \otimes e_2 + \frac{2}{287}\sqrt{8791}e^4 \otimes e_7$	{1345, 1456, 23567, 257}
731:1	$0, 0, 0, 0, \frac{4}{53}\sqrt{34}e^{12}, \frac{2}{53}\sqrt{85}e^{13}, \frac{6}{53}\sqrt{17}e^{15}$	$(-\frac{14}{53}, \frac{21}{53}, \frac{27}{53}, -\frac{13}{53}, \frac{7}{53}, \frac{13}{53}, -\frac{7}{53})$ $+ \frac{2}{53}\sqrt{357}e^2 \otimes e_4 + \frac{4}{53}\sqrt{102}e^3 \otimes e_7$	{1267, 1345, 257, 346}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
731:1	$0, 0, 0, 0, \frac{2}{15}\sqrt{10}e^{12}, \frac{1}{15}\sqrt{30}e^{13}, \frac{2}{15}\sqrt{5}e^{15}$	$(0, \frac{4}{15}, -\frac{1}{15}, -\frac{1}{3}, \frac{4}{15}, -\frac{1}{15}, \frac{4}{15})$ $+ \frac{1}{15}\sqrt{70}e^1 \otimes e_4 + \frac{2}{15}\sqrt{15}e^2 \otimes e_6$	{1237, 156, 2457, 346}
731:1	$0, 0, 0, 0, \frac{4}{193}\sqrt{646}e^{12}, \frac{2}{193}\sqrt{1190}e^{13}, \frac{4}{193}\sqrt{442}e^{15}$	$(\frac{28}{193}, \frac{19}{193}, -\frac{40}{193}, -\frac{49}{193}, \frac{47}{193}, -\frac{12}{193}, \frac{75}{193})$ $+ \frac{24}{193}\sqrt{17}e^2 \otimes e_4 + \frac{28}{193}\sqrt{17}e^1 \otimes e_3$	{127, 145, 2357, 34}
731:1	$0, 0, 0, 0, \frac{8}{89}\sqrt{106}e^{12}, \frac{2}{89}\sqrt{371}e^{13}, \frac{6}{89}\sqrt{53}e^{15}$	$(-\frac{14}{89}, \frac{57}{89}, \frac{27}{89}, -\frac{49}{89}, \frac{43}{89}, \frac{13}{89}, \frac{29}{89})$ $+ \frac{2}{89}\sqrt{3657}e^2 \otimes e_4$	{12367, 127, 13456, 145, 2357, 2567, 34, 46}
731:1	$0, 0, 0, 0, \frac{6}{109}\sqrt{33}e^{12}, \frac{6}{109}\sqrt{87}e^{13}, \frac{6}{109}\sqrt{33}e^{15}$	$(-\frac{36}{109}, \frac{51}{109}, \frac{33}{109}, \frac{15}{109}, \frac{15}{109}, -\frac{3}{109}, -\frac{21}{109})$ $+ \frac{6}{109}\sqrt{141}e^2 \otimes e_6 + \frac{6}{109}\sqrt{141}e^3 \otimes e_7$	{2457, 257, 346, 36}
731:1	$0, 0, 0, 0, \frac{1}{19}\sqrt{46}e^{12}, \frac{1}{19}\sqrt{322}e^{13}, \frac{1}{19}\sqrt{46}e^{15}$	$(-\frac{1}{19}, \frac{5}{19}, -\frac{3}{19}, 1, \frac{4}{19}, -\frac{4}{19}, \frac{3}{19})$ $+ \frac{1}{19}\sqrt{690}e^4 \otimes e_6$	{123457, 12567, 134, 16, 2367, 247, 356, 45}
731:1	$0, 0, 0, 0, \frac{4}{5}e^{12}, \frac{2}{5}\sqrt{2}e^{13}, \frac{4}{5}e^{15}$	$(\frac{2}{5}, -\frac{1}{5}, -\frac{2}{5}, \frac{1}{5}, \frac{1}{5}, 0, \frac{3}{5})$ $+ \frac{4}{5}\sqrt{2}e^1 \otimes e_3$	{1247, 127, 145, 15, 23457, 2357, 3, 34}
731:1	$0, 0, 0, 0, \frac{8}{189}\sqrt{39}e^{12}, \frac{8}{189}\sqrt{186}e^{13}, \frac{32}{189}\sqrt{3}e^{15}$	$(-\frac{2}{9}, \frac{4}{21}, \frac{16}{63}, \frac{34}{63}, -\frac{2}{63}, \frac{2}{63}, -\frac{16}{63})$ $+ \frac{8}{189}\sqrt{237}e^4 \otimes e_6 + \frac{8}{63}\sqrt{29}e^3 \otimes e_7$	{12345, 167, 236, 457}
731:1	$0, 0, 0, 0, \frac{2}{21}\sqrt{53}e^{12}, \frac{1}{21}\sqrt{106}e^{13}, \frac{2}{21}\sqrt{53}e^{15}$	$(\frac{2}{7}, -\frac{4}{63}, \frac{5}{63}, -\frac{5}{9}, \frac{2}{9}, \frac{23}{63}, \frac{32}{63})$ $+ \frac{1}{9}\sqrt{106}e^1 \otimes e_4$	{1237, 1267, 135, 156, 234567, 2457, 346, 4}
731:1	$0, 0, 0, 0, \frac{3}{40}\sqrt{51}e^{12}, \frac{1}{40}\sqrt{17}e^{13}, \frac{17}{40}e^{15}$	$(\frac{7}{80}, \frac{7}{40}, -\frac{27}{80}, \frac{11}{80}, \frac{21}{80}, -\frac{1}{4}, \frac{7}{20})$ $+ \frac{1}{40}\sqrt{510}e^2 \otimes e_6 + \frac{1}{40}\sqrt{663}e^1 \otimes e_3$	{1247, 127, 23457, 2357}
731:2	$0, 0, 0, 0, \frac{4}{69}\sqrt{183}e^{12}, \frac{1}{69}\sqrt{366}e^{13}, \frac{1}{69}\sqrt{2806}e^{25}$	$(-\frac{2}{23}, \frac{22}{69}, \frac{6}{23}, -\frac{13}{23}, \frac{16}{69}, \frac{4}{23}, \frac{38}{69})$ $+ \frac{2}{23}\sqrt{183}e^2 \otimes e_4$	{12367, 127, 134567, 1457, 235, 256, 34, 46}
731:2	$0, 0, 0, 0, \frac{16}{687}\sqrt{66}e^{12}, \frac{16}{229}\sqrt{23}e^{13}, \frac{16}{687}\sqrt{229}e^{25}$	$(-\frac{61}{229}, \frac{110}{687}, \frac{55}{229}, \frac{30}{229}, -\frac{73}{687}, -\frac{6}{229}, \frac{37}{687})$ $+ \frac{16}{229}\sqrt{35}e^2 \otimes e_6 + \frac{16}{687}\sqrt{282}e^3 \otimes e_7$	{14567, 1567, 346, 36}
731:2	$0, 0, 0, 0, \frac{1}{69}\sqrt{366}e^{12}, \frac{4}{69}\sqrt{183}e^{13}, \frac{1}{69}\sqrt{2806}e^{25}$	$(-\frac{2}{23}, -\frac{5}{69}, \frac{15}{23}, \frac{5}{23}, -\frac{11}{69}, \frac{13}{23}, -\frac{16}{69})$ $+ \frac{2}{23}\sqrt{183}e^3 \otimes e_7$	{12345, 1235, 13, 134, 247, 27, 457, 57}
731:2	$0, 0, 0, 0, \frac{1}{299}\sqrt{23246}e^{12}, \frac{1}{299}\sqrt{1970}e^{13}, \frac{1}{299}\sqrt{22458}e^{25}$	$(\frac{118}{299}, -\frac{72}{299}, -\frac{79}{299}, \frac{171}{299}, \frac{2}{13}, \frac{3}{23}, -\frac{2}{23})$ $+ \frac{16}{299}\sqrt{197}e^1 \otimes e_3 + \frac{1}{299}\sqrt{50038}e^4 \otimes e_7$	{127, 157, 2345, 34}
731:2	$0, 0, 0, 0, \frac{8}{41}\sqrt{6}e^{12}, \frac{4}{41}\sqrt{10}e^{13}, \frac{12}{41}\sqrt{2}e^{25}$	$(\frac{3}{41}, \frac{6}{41}, -\frac{13}{41}, \frac{6}{41}, \frac{9}{41}, -\frac{10}{41}, \frac{15}{41})$ $+ \frac{4}{41}\sqrt{42}e^2 \otimes e_6 + \frac{8}{41}\sqrt{7}e^1 \otimes e_3$	{14567, 1567, 346, 36}
731:2	$0, 0, 0, 0, \frac{4}{309}\sqrt{381}e^{12}, \frac{1}{309}\sqrt{24130}e^{13}, \frac{2}{309}\sqrt{3937}e^{25}$	$(\frac{16}{103}, -\frac{14}{103}, \frac{91}{309}, -\frac{79}{309}, \frac{2}{103}, \frac{139}{309}, -\frac{12}{103})$ $+ \frac{1}{309}\sqrt{31242}e^1 \otimes e_4 + \frac{2}{309}\sqrt{9017}e^3 \otimes e_7$	{1267, 1567, 23456, 346}
731:2	$0, 0, 0, 0, \frac{4}{199}\sqrt{239}e^{12}, \frac{1}{199}\sqrt{32982}e^{13}, \frac{1}{199}\sqrt{7170}e^{25}$	$(-\frac{16}{199}, \frac{38}{199}, \frac{130}{199}, -\frac{109}{199}, \frac{22}{199}, \frac{114}{199}, \frac{60}{199})$ $+ \frac{2}{199}\sqrt{18403}e^3 \otimes e_4$	{1235, 12456, 13, 146, 2367, 247, 3567, 457}
731:2	$0, 0, 0, 0, \frac{16}{181}\sqrt{26}e^{12}, \frac{16}{181}\sqrt{26}e^{13}, \frac{48}{181}e^{25}$	$(\frac{52}{181}, -\frac{8}{181}, -\frac{76}{181}, \frac{104}{181}, \frac{44}{181}, -\frac{24}{181}, \frac{36}{181})$ $+ \frac{16}{181}\sqrt{77}e^1 \otimes e_3 + \frac{16}{181}\sqrt{77}e^4 \otimes e_6$	{1267, 1567, 2356, 36}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
731:2	$0, 0, 0, 0, \frac{1}{58}\sqrt{435}e^{12}, \frac{1}{58}\sqrt{435}e^{13}, \frac{3}{29}\sqrt{10}e^{25}$	$(\frac{1}{58}, \frac{19}{116}, -\frac{13}{116}, -\frac{7}{29}, \frac{21}{116}, -\frac{11}{116}, \frac{10}{29})$ $+ \frac{1}{29}\sqrt{165}e^1 \otimes e_4 + \frac{1}{29}\sqrt{210}e^2 \otimes e_6$	{1237, 1567, 245, 346}
731:2	$0, 0, 0, 0, \frac{8}{39}\sqrt{7}e^{12}, \frac{4}{39}\sqrt{6}e^{13}, \frac{16}{39}e^{25}$	$(\frac{3}{13}, \frac{2}{39}, -\frac{7}{39}, -\frac{14}{39}, \frac{11}{39}, \frac{2}{39}, \frac{1}{3})$ $+ \frac{4}{39}\sqrt{30}e^1 \otimes e_3 + \frac{4}{39}\sqrt{38}e^2 \otimes e_4$	{127, 1457, 235, 34}
731:2	$0, 0, 0, 0, \frac{4}{39}\sqrt{6}e^{12}, \frac{8}{39}\sqrt{7}e^{13}, \frac{16}{39}e^{25}$	$(-\frac{2}{13}, 0, \frac{10}{39}, \frac{20}{39}, -\frac{2}{13}, \frac{4}{39}, -\frac{2}{13})$ $+ \frac{4}{39}\sqrt{30}e^4 \otimes e_6 + \frac{4}{39}\sqrt{38}e^3 \otimes e_7$	{12345, 134, 247, 457}
731:2	$0, 0, 0, 0, \frac{1}{51}\sqrt{366}e^{12}, \frac{1}{51}\sqrt{366}e^{13}, \frac{1}{51}\sqrt{2074}e^{25}$	$(\frac{2}{17}, -\frac{8}{51}, \frac{3}{17}, 1, -\frac{2}{51}, \frac{5}{17}, -\frac{10}{51})$ $+ \frac{1}{51}\sqrt{4758}e^4 \otimes e_7$	{1237, 1267, 1357, 1567, 23456, 245, 346, 4}
731:2	$0, 0, 0, 0, \frac{1}{199}\sqrt{32982}e^{12}, \frac{4}{199}\sqrt{239}e^{13}, \frac{1}{199}\sqrt{7170}e^{25}$	$(\frac{138}{199}, -\frac{39}{199}, -\frac{101}{199}, \frac{45}{199}, \frac{99}{199}, \frac{37}{199}, \frac{60}{199})$ $+ \frac{2}{199}\sqrt{18403}e^1 \otimes e_3$	{1247, 127, 1457, 157, 2345, 235, 3, 34}
731:2	$0, 0, 0, 0, \frac{3}{26}\sqrt{39}e^{12}, \frac{3}{26}\sqrt{39}e^{13}, \frac{3}{13}\sqrt{3}e^{25}$	$(\frac{1}{2}, -\frac{5}{52}, -\frac{1}{52}, -\frac{7}{13}, \frac{21}{52}, \frac{25}{52}, \frac{4}{13})$ $+ \frac{3}{13}\sqrt{30}e^1 \otimes e_4$	{1237, 1267, 1357, 1567, 23456, 245, 346, 4}
731:2	$0, 0, 0, 0, \frac{1}{55}\sqrt{354}e^{12}, \frac{1}{55}\sqrt{354}e^{13}, \frac{1}{165}\sqrt{6490}e^{25}$	$(-\frac{2}{11}, \frac{26}{165}, -\frac{1}{55}, \frac{27}{55}, -\frac{4}{165}, -\frac{1}{5}, \frac{2}{15})$ $+ \frac{1}{165}\sqrt{6726}e^4 \otimes e_7 + \frac{2}{165}\sqrt{2478}e^2 \otimes e_6$	{1237, 1567, 245, 346}
731:2	$0, 0, 0, 0, \frac{4}{41}\sqrt{10}e^{12}, \frac{8}{41}\sqrt{6}e^{13}, \frac{12}{41}\sqrt{2}e^{25}$	$(-\frac{11}{41}, \frac{13}{41}, \frac{8}{41}, -\frac{8}{41}, \frac{2}{41}, -\frac{3}{41}, \frac{15}{41})$ $+ \frac{4}{41}\sqrt{42}e^2 \otimes e_6 + \frac{8}{41}\sqrt{7}e^3 \otimes e_4$	{1237, 14567, 245, 36}
731:2	$0, 0, 0, 0, \frac{1}{6}\sqrt{13}e^{12}, \frac{1}{6}\sqrt{13}e^{13}, \frac{1}{9}\sqrt{39}e^{25}$	$(-\frac{5}{18}, \frac{5}{12}, -\frac{1}{36}, \frac{2}{9}, \frac{5}{36}, -\frac{11}{36}, \frac{5}{9})$ $+ \frac{1}{9}\sqrt{91}e^2 \otimes e_6$	{12347, 1237, 14567, 1567, 245, 25, 346, 36}
731:2	$0, 0, 0, 0, \frac{4}{21}\sqrt{3}e^{12}, \frac{4}{21}\sqrt{3}e^{13}, \frac{4}{21}\sqrt{7}e^{25}$	$(-\frac{1}{7}, \frac{2}{21}, \frac{3}{7}, -\frac{2}{7}, -\frac{1}{21}, \frac{2}{7}, \frac{1}{21})$ $+ \frac{4}{7}e^2 \otimes e_4 + \frac{4}{7}e^3 \otimes e_7$	{1267, 14567, 2356, 346}
731:2	$0, 0, 0, 0, \frac{4}{199}\sqrt{239}e^{12}, \frac{1}{199}\sqrt{32982}e^{13}, \frac{1}{199}\sqrt{7170}e^{25}$	$(-\frac{16}{199}, \frac{38}{199}, -\frac{24}{199}, 1, \frac{22}{199}, -\frac{40}{199}, \frac{60}{199})$ $+ \frac{2}{199}\sqrt{18403}e^4 \otimes e_6$	{12345, 1256, 134, 16, 2367, 247, 3567, 457}
731:3	$0, 0, 0, 0, \frac{2}{39}\sqrt{51}e^{12}, \frac{2}{39}\sqrt{221}e^{34}, \frac{2}{39}\sqrt{221}e^{15}$	$(-\frac{7}{39}, \frac{2}{13}, \frac{2}{3}, -\frac{4}{39}, -\frac{1}{39}, \frac{22}{39}, -\frac{8}{39})$ $+ \frac{2}{39}\sqrt{510}e^3 \otimes e_7$	{12467, 127, 1345, 1356, 24567, 257, 34, 36}
731:3	$0, 0, 0, 0, \frac{2}{75}\sqrt{267}e^{12}, \frac{2}{75}\sqrt{267}e^{34}, \frac{1}{15}\sqrt{178}e^{15}$	$(\frac{44}{75}, -\frac{3}{5}, \frac{4}{25}, \frac{4}{25}, -\frac{1}{75}, \frac{8}{25}, \frac{43}{75})$ $+ \frac{1}{75}\sqrt{10146}e^1 \otimes e_2$	{1345, 1356, 15, 23457, 23567, 257}
731:3	$0, 0, 0, 0, \frac{2}{23}\sqrt{30}e^{12}, \frac{2}{23}\sqrt{30}e^{34}, \frac{2}{23}\sqrt{30}e^{15}$	$(\frac{6}{23}, -\frac{2}{23}, \frac{3}{23}, -\frac{7}{23}, \frac{4}{23}, -\frac{4}{23}, \frac{10}{23})$ $+ \frac{10}{23}e^3 \otimes e_4 + \frac{2}{23}\sqrt{70}e^1 \otimes e_6$	{23567, 24567, 36, 46}
731:3	$0, 0, 0, 0, \frac{4}{29}\sqrt{2}e^{12}, \frac{4}{87}\sqrt{29}e^{34}, \frac{4}{87}\sqrt{29}e^{15}$	$(\frac{7}{87}, -\frac{2}{29}, \frac{16}{87}, -\frac{17}{87}, \frac{1}{87}, -\frac{1}{87}, \frac{8}{87})$ $+ \frac{4}{87}\sqrt{33}e^3 \otimes e_7 + \frac{4}{87}\sqrt{42}e^1 \otimes e_6$	{127, 1345, 24567, 36}
731:3	$0, 0, 0, 0, \frac{2}{47}\sqrt{69}e^{12}, \frac{2}{141}\sqrt{1081}e^{34}, \frac{2}{47}\sqrt{69}e^{15}$	$(-\frac{11}{47}, \frac{18}{47}, \frac{34}{141}, -\frac{26}{141}, \frac{7}{47}, \frac{8}{141}, -\frac{4}{47})$ $+ \frac{4}{141}\sqrt{345}e^2 \otimes e_6 + \frac{4}{141}\sqrt{345}e^3 \otimes e_7$	{127, 1356, 257, 36}
731:3	$0, 0, 0, 0, \frac{2}{125}\sqrt{157}e^{12}, \frac{2}{375}\sqrt{6123}e^{34}, \frac{1}{75}\sqrt{1570}e^{15}$	$(\frac{52}{375}, -\frac{7}{25}, \frac{52}{125}, -\frac{8}{125}, -\frac{53}{375}, \frac{44}{125}, -\frac{1}{375})$ $+ \frac{1}{375}\sqrt{44274}e^1 \otimes e_2 + \frac{2}{125}\sqrt{1570}e^3 \otimes e_7$	{1345, 1356, 24567, 257}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
731:3	$0, 0, 0, 0, \frac{1}{2}e^{12}, \frac{1}{2}e^{34}, \frac{1}{2}e^{15}$	$(\frac{1}{12}, \frac{1}{6}, \frac{11}{12}, -\frac{7}{12}, \frac{1}{4}, \frac{1}{3}, \frac{1}{3})$ $+\frac{3}{2}e^3 \otimes e_4$	{12367, 12467, 1356, 1456, 23567, 24567, 36, 46}
731:3	$0, 0, 0, 0, \frac{1}{28}\sqrt{221}e^{12}, \frac{1}{28}\sqrt{221}e^{34}, \frac{1}{28}\sqrt{51}e^{15}$	$(-\frac{1}{8}, \frac{13}{28}, \frac{13}{56}, -\frac{3}{8}, \frac{19}{56}, -\frac{1}{7}, \frac{3}{14})$ $+\frac{17}{28}e^3 \otimes e_4 + \frac{1}{28}\sqrt{510}e^2 \otimes e_6$	{1356, 1456, 36, 46}
731:3	$0, 0, 0, 0, \frac{1}{9}\sqrt{30}e^{12}, \frac{1}{9}\sqrt{30}e^{34}, \frac{1}{9}\sqrt{30}e^{15}$	$(\frac{1}{3}, -\frac{1}{9}, -\frac{1}{9}, -\frac{1}{9}, \frac{2}{9}, -\frac{2}{9}, \frac{5}{9})$ $+\frac{1}{9}\sqrt{70}e^1 \otimes e_6$	{12347, 127, 1345, 15, 23567, 36}
731:3	$0, 0, 0, 0, \frac{2}{39}\sqrt{221}e^{12}, \frac{2}{39}\sqrt{221}e^{34}, \frac{2}{39}\sqrt{51}e^{15}$	$(-\frac{7}{39}, \frac{2}{3}, -\frac{4}{39}, -\frac{4}{39}, \frac{19}{39}, -\frac{8}{39}, \frac{4}{13})$ $+\frac{2}{39}\sqrt{510}e^2 \otimes e_6$	{12347, 127, 1356, 23457, 257, 36}
731:3	$0, 0, 0, 0, \frac{4}{239}\sqrt{267}e^{12}, \frac{4}{239}\sqrt{267}e^{34}, \frac{10}{239}\sqrt{178}e^{15}$	$(\frac{88}{239}, -\frac{90}{239}, \frac{113}{239}, -\frac{65}{239}, -\frac{2}{239}, \frac{48}{239}, \frac{86}{239})$ $+\frac{178}{239}e^3 \otimes e_4 + \frac{2}{239}\sqrt{10146}e^1 \otimes e_2$	{1356, 1456, 23567, 24567}
731:4	$0, 0, 0, 0, \frac{20}{317}\sqrt{2}e^{12}, \frac{10}{317}\sqrt{186}e^{13}, \frac{10}{317}\sqrt{102}e^{15} + \frac{10}{317}\sqrt{186}e^{23}$	$(-\frac{5}{317}, \frac{85}{317}, -\frac{10}{317}, \frac{110}{317}, \frac{80}{317}, -\frac{15}{317}, \frac{75}{317})$ $+\frac{10}{317}\sqrt{282}e^2 \otimes e_6 + \frac{10}{317}\sqrt{286}e^3 \otimes e_4$	{146, 247}
731:4	$0, 0, 0, 0, \frac{19}{1091}\sqrt{606}e^{12}, \frac{38}{1091}\sqrt{111}e^{13}, \frac{342}{1091}e^{15} + \frac{76}{1091}\sqrt{5}e^{23}$	$(-\frac{19}{1091}, \frac{304}{1091}, -\frac{38}{1091}, -\frac{380}{1091}, \frac{285}{1091}, -\frac{57}{1091}, \frac{266}{1091})$ $+\frac{38}{1091}\sqrt{262}e^1 \otimes e_4 + \frac{57}{1091}\sqrt{94}e^2 \otimes e_6$	{1237, 346}
731:4	$0, 0, 0, 0, \frac{1}{103}\sqrt{3686}e^{12}, \frac{1}{103}\sqrt{4462}e^{13}, \frac{4}{103}\sqrt{97}e^{15} + \frac{1}{103}\sqrt{4462}e^{23}$	$(-\frac{12}{103}, \frac{61}{103}, -\frac{24}{103}, \frac{22}{103}, \frac{49}{103}, -\frac{36}{103}, \frac{37}{103})$ $+\frac{9}{103}\sqrt{194}e^2 \otimes e_6$	{123, 1234, 3467, 367}
731:4	$0, 0, 0, 0, \frac{1}{32}\sqrt{310}e^{12}, \frac{1}{32}\sqrt{651}e^{13}, \frac{1}{32}\sqrt{310}e^{15} + \frac{1}{32}\sqrt{651}e^{23}$	$(\frac{11}{64}, \frac{1}{64}, \frac{11}{32}, -\frac{5}{8}, \frac{3}{16}, \frac{33}{64}, \frac{23}{64})$ $+\frac{1}{16}\sqrt{403}e^3 \otimes e_4$	{124567, 146, 247, 45}
731:4	$0, 0, 0, 0, \frac{4}{403}\sqrt{5871}e^{12}, \frac{14}{403}\sqrt{206}e^{13}, \frac{8}{403}\sqrt{103}e^{15} + \frac{4}{403}\sqrt{5665}e^{23}$	$(\frac{12}{403}, \frac{179}{403}, \frac{24}{403}, -\frac{233}{403}, \frac{191}{403}, \frac{36}{403}, \frac{203}{403})$ $+\frac{4}{403}\sqrt{16377}e^2 \otimes e_4$	{127, 145, 2567, 46}
731:4	$0, 0, 0, 0, \frac{69}{1079}\sqrt{22}e^{12}, \frac{23}{1079}\sqrt{110}e^{13}, \frac{92}{1079}\sqrt{11}e^{15} + \frac{69}{1079}\sqrt{62}e^{23}$	$(-\frac{92}{1079}, \frac{253}{1079}, -\frac{184}{1079}, \frac{46}{83}, \frac{161}{1079}, -\frac{276}{1079}, \frac{69}{1079})$ $+\frac{184}{1079}\sqrt{14}e^4 \otimes e_7 + \frac{23}{1079}\sqrt{962}e^2 \otimes e_6$	{1456, 257}
731:4	$0, 0, 0, 0, \frac{40}{137}\sqrt{6}e^{12}, \frac{40}{137}\sqrt{3}e^{13}, \frac{40}{137}\sqrt{6}e^{15} + \frac{10}{137}\sqrt{62}e^{23}$	$(\frac{17}{137}, \frac{10}{137}, \frac{34}{137}, -\frac{83}{137}, \frac{27}{137}, \frac{51}{137}, \frac{44}{137})$ $+\frac{20}{137}\sqrt{55}e^1 \otimes e_4$	{1237, 135, 234567, 346}
731:4	$0, 0, 0, 0, \frac{8}{403}\sqrt{103}e^{12}, \frac{14}{403}\sqrt{206}e^{13}, \frac{4}{403}\sqrt{5871}e^{15} + \frac{4}{403}\sqrt{5665}e^{23}$	$(\frac{12}{403}, -\frac{33}{403}, \frac{24}{403}, 1, -\frac{21}{403}, \frac{36}{403}, -\frac{9}{403})$ $+\frac{4}{403}\sqrt{16377}e^4 \otimes e_7$	{127, 145, 2567, 46}
731:4	$0, 0, 0, 0, \frac{4}{43}\sqrt{13}e^{12}, \frac{8}{43}\sqrt{26}e^{13}, \frac{4}{43}\sqrt{13}e^{15} + \frac{2}{43}\sqrt{26}e^{23}$	$(-\frac{3}{43}, \frac{12}{43}, -\frac{6}{43}, 1, \frac{9}{43}, -\frac{9}{43}, \frac{6}{43})$ $+\frac{4}{43}\sqrt{221}e^4 \otimes e_6$	{123457, 134, 2367, 356}
731:5	$0, 0, 0, 0, \frac{1}{17}\sqrt{41}e^{12}, \frac{1}{34}\sqrt{1066}e^{13}, \frac{1}{34}\sqrt{123}e^{15} + \frac{1}{34}\sqrt{123}e^{34}$	$(-\frac{5}{68}, \frac{9}{34}, \frac{45}{68}, -\frac{37}{68}, \frac{13}{68}, \frac{10}{17}, \frac{2}{17})$ $+\frac{3}{34}\sqrt{246}e^3 \otimes e_4$	{13, 146, 356, 45}
731:5	$0, 0, 0, 0, \frac{8}{47}\sqrt{2}e^{12}, \frac{4}{47}\sqrt{82}e^{13}, \frac{4}{47}\sqrt{78}e^{15} + \frac{4}{47}\sqrt{34}e^{34}$	$(\frac{65}{141}, -\frac{79}{141}, \frac{5}{141}, \frac{46}{141}, -\frac{14}{141}, \frac{70}{141}, \frac{17}{47})$ $+\frac{16}{47}\sqrt{14}e^1 \otimes e_2$	{1347, 167, 236, 24}
731:5	$0, 0, 0, 0, \frac{3}{109}\sqrt{690}e^{12}, \frac{2}{109}\sqrt{1610}e^{13}, \frac{1}{109}\sqrt{230}e^{15} + \frac{1}{109}\sqrt{230}e^{34}$	$(-\frac{30}{109}, \frac{82}{109}, -\frac{3}{109}, \frac{25}{109}, \frac{52}{109}, -\frac{33}{109}, \frac{22}{109})$ $+\frac{5}{109}\sqrt{782}e^2 \otimes e_6$	{123, 1567, 245, 3467}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
731:5	$0, 0, 0, 0, \frac{1}{13}\sqrt{13}e^{12}, \frac{3}{26}\sqrt{26}e^{13}, \frac{1}{26}\sqrt{39}e^{15} + \frac{1}{26}\sqrt{39}e^{34}$	$(-\frac{1}{4}, \frac{1}{2}, \frac{1}{4}, -\frac{1}{4}, \frac{1}{4}, 0, 0)$ $+ \frac{1}{13}\sqrt{78}e^2 \otimes e_6 + \frac{1}{26}\sqrt{286}e^3 \otimes e_4$	{123, 245}
731:5	$0, 0, 0, 0, \frac{8}{47}\sqrt{2}e^{12}, \frac{4}{47}\sqrt{82}e^{13}, \frac{4}{47}\sqrt{34}e^{15} + \frac{4}{47}\sqrt{78}e^{34}$	$(\frac{3}{47}, \frac{11}{47}, -\frac{17}{47}, \frac{34}{47}, \frac{14}{47}, -\frac{14}{47}, \frac{17}{47})$ $+ \frac{16}{47}\sqrt{14}e^4 \otimes e_6$	{134, 16, 2367, 247}
731:5	$0, 0, 0, 0, \frac{1}{53}\sqrt{230}e^{12}, \frac{1}{53}\sqrt{970}e^{13}, \frac{10}{53}\sqrt{3}e^{15} + \frac{1}{53}\sqrt{330}e^{34}$	$(\frac{10}{53}, -\frac{15}{53}, \frac{15}{53}, -\frac{10}{53}, -\frac{5}{53}, \frac{25}{53}, \frac{5}{53})$ $+ \frac{1}{53}\sqrt{1110}e^3 \otimes e_4 + \frac{6}{53}\sqrt{35}e^1 \otimes e_2$	{236, 24}
731:6	$0, 0, 0, 0, \frac{24}{157}\sqrt{13}e^{12}, \frac{28}{157}\sqrt{13}e^{13}, \frac{4}{157}\sqrt{793}e^{25} + \frac{52}{157}\sqrt{2}e^{34}$	$(-\frac{53}{157}, \frac{60}{157}, \frac{9}{157}, \frac{58}{157}, \frac{7}{157}, -\frac{44}{157}, \frac{67}{157})$ $+ \frac{20}{157}\sqrt{65}e^2 \otimes e_6$	{12347, 1567, 245, 36}
731:6	$0, 0, 0, 0, \frac{7}{149}\sqrt{30}e^{12}, \frac{7}{149}\sqrt{106}e^{13}, \frac{7}{149}\sqrt{82}e^{25} + \frac{35}{149}\sqrt{2}e^{34}$	$(-\frac{49}{149}, \frac{42}{149}, \frac{42}{149}, -\frac{7}{149}, -\frac{7}{149}, -\frac{7}{149}, \frac{35}{149})$ $+ \frac{7}{149}\sqrt{102}e^3 \otimes e_4 + \frac{7}{149}\sqrt{158}e^2 \otimes e_6$	{245, 36}
731:6	$0, 0, 0, 0, \frac{4}{147}\sqrt{174}e^{12}, \frac{4}{147}\sqrt{1218}e^{13}, \frac{2}{49}\sqrt{145}e^{25} + \frac{2}{147}\sqrt{1131}e^{34}$	$(-\frac{16}{147}, \frac{25}{147}, \frac{104}{147}, -\frac{10}{21}, \frac{3}{49}, \frac{88}{147}, \frac{34}{147})$ $+ \frac{2}{147}\sqrt{10005}e^3 \otimes e_4$	{1235, 12456, 13, 146}
731:7	$0, 0, 0, 0, \frac{1}{109}\sqrt{230}e^{12}, \frac{2}{109}\sqrt{1610}e^{13} + \frac{1}{109}\sqrt{230}e^{24}, \frac{3}{109}\sqrt{690}e^{15}$	$(-\frac{30}{109}, \frac{26}{109}, \frac{81}{109}, \frac{25}{109}, -\frac{4}{109}, \frac{51}{109}, -\frac{34}{109})$ $+ \frac{5}{109}\sqrt{782}e^3 \otimes e_7$	{1235, 167, 2346, 457}
731:7	$0, 0, 0, 0, \frac{4}{427}\sqrt{9906}e^{12}, \frac{2}{427}\sqrt{7874}e^{13} + \frac{4}{427}\sqrt{635}e^{24}, \frac{4}{427}\sqrt{2667}e^{15}$	$(-\frac{72}{427}, \frac{281}{427}, \frac{18}{61}, -\frac{227}{427}, \frac{209}{427}, \frac{54}{427}, \frac{137}{427})$ $+ \frac{4}{427}\sqrt{21082}e^2 \otimes e_4$	{127, 145, 2357, 34}
731:7	$0, 0, 0, 0, \frac{22}{347}\sqrt{70}e^{12}, \frac{11}{347}\sqrt{119}e^{13} + \frac{33}{347}\sqrt{3}e^{24}, \frac{22}{347}\sqrt{46}e^{15}$	$(\frac{44}{347}, \frac{44}{347}, -\frac{77}{347}, -\frac{77}{347}, \frac{88}{347}, -\frac{33}{347}, \frac{132}{347})$ $+ \frac{11}{347}\sqrt{353}e^1 \otimes e_3 + \frac{33}{347}\sqrt{29}e^2 \otimes e_4$	{127, 145, 2357, 34}
731:7	$0, 0, 0, 0, \frac{22}{347}\sqrt{70}e^{12}, \frac{11}{347}\sqrt{119}e^{13} + \frac{33}{347}\sqrt{3}e^{24}, \frac{22}{347}\sqrt{46}e^{15}$	$(\frac{44}{347}, \frac{44}{347}, -\frac{77}{347}, -\frac{77}{347}, \frac{88}{347}, -\frac{33}{347}, \frac{132}{347})$ $+ \frac{11}{347}\sqrt{353}e^1 \otimes e_3 - \frac{33}{347}\sqrt{29}e^2 \otimes e_4$	{127, 145, 2357, 34}
731:7	$0, 0, 0, 0, \frac{3}{127}\sqrt{366}e^{12}, \frac{12}{127}\sqrt{15}e^{13} + \frac{9}{127}\sqrt{10}e^{24}, \frac{9}{127}\sqrt{42}e^{15}$	$(-\frac{36}{127}, \frac{54}{127}, \frac{63}{127}, -\frac{27}{127}, \frac{18}{127}, \frac{27}{127}, -\frac{18}{127})$ $+ \frac{12}{127}\sqrt{57}e^2 \otimes e_4 + \frac{3}{127}\sqrt{1038}e^3 \otimes e_7$	{1345, 257}
731:8	$0, 0, 0, 0, \frac{2}{5}e^{12}, \frac{2}{5}e^{34}, \frac{2}{5}\sqrt{6}e^{13} + \frac{2}{5}e^{25}$	$(-\frac{2}{15}, \frac{1}{3}, \frac{2}{3}, -\frac{8}{15}, \frac{1}{5}, \frac{2}{15}, \frac{8}{15})$ $+ \frac{4}{5}\sqrt{3}e^3 \otimes e_4$	{12457, 147, 24, 45}
731:8	$0, 0, 0, 0, \frac{16}{67}\sqrt{2}e^{12}, \frac{16}{67}\sqrt{2}e^{34}, \frac{24}{67}\sqrt{2}e^{13} + \frac{8}{67}\sqrt{3}e^{25}$	$(\frac{16}{67}, \frac{4}{67}, \frac{8}{67}, -\frac{24}{67}, \frac{20}{67}, -\frac{16}{67}, \frac{24}{67})$ $+ \frac{40}{67}e^3 \otimes e_4 + \frac{8}{67}\sqrt{33}e^1 \otimes e_6$	{23567, 367}
731:8	$0, 0, 0, 0, \frac{2}{7}e^{12}, \frac{2}{7}\sqrt{2}e^{34}, \frac{2}{7}e^{13} + \frac{2}{7}e^{25}$	$(\frac{2}{7}, -\frac{1}{7}, -\frac{2}{7}, \frac{2}{7}, \frac{1}{7}, 0, 0)$ $+ \frac{2}{7}\sqrt{3}e^1 \otimes e_6 + \frac{2}{7}\sqrt{3}e^4 \otimes e_7$	{127, 157, 2456, 46}
731:8	$0, 0, 0, 0, \frac{2}{7}e^{12}, \frac{2}{7}\sqrt{2}e^{34}, \frac{2}{7}e^{13} + \frac{2}{7}e^{25}$	$(\frac{2}{7}, -\frac{1}{7}, -\frac{2}{7}, \frac{2}{7}, \frac{1}{7}, 0, 0)$ $+ \frac{2}{7}\sqrt{3}e^1 \otimes e_6 - \frac{2}{7}\sqrt{3}e^4 \otimes e_7$	{127, 157, 2456, 46}
731:8	$0, 0, 0, 0, \frac{8}{17}e^{12}, \frac{8}{17}e^{34}, \frac{2}{17}\sqrt{14}e^{13} + \frac{8}{17}e^{25}$	$(\frac{2}{17}, \frac{1}{17}, \frac{2}{17}, -\frac{5}{17}, \frac{3}{17}, -\frac{3}{17}, \frac{4}{17})$ $+ \frac{4}{17}\sqrt{7}e^2 \otimes e_6$	{12347, 13567, 2345, 36}
731:8	$0, 0, 0, 0, \frac{1}{5}\sqrt{6}e^{12}, \frac{1}{5}\sqrt{6}e^{34}, \frac{1}{5}\sqrt{6}e^{13} + \frac{1}{5}\sqrt{6}e^{25}$	$(\frac{1}{5}, 0, 0, -\frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{1}{5}\sqrt{10}e^2 \otimes e_6 + \frac{1}{5}\sqrt{2}e^3 \otimes e_4$	{12347, 2345}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
731:8	$0, 0, 0, 0, \frac{6}{31}\sqrt{13}e^{12}, \frac{6}{31}\sqrt{13}e^{34}, \frac{4}{31}\sqrt{13}e^{13} + \frac{2}{31}\sqrt{13}e^{25}$	$(\frac{18}{31}, -\frac{3}{31}, -\frac{6}{31}, -\frac{2}{31}, \frac{15}{31}, -\frac{8}{31}, \frac{12}{31})$ $+ \frac{4}{31}\sqrt{78}e^1 \otimes e_6$	{127, 157, 2456, 46}
731:8	$0, 0, 0, 0, \frac{1}{131}\sqrt{82}e^{12}, \frac{6}{131}\sqrt{3}e^{34}, \frac{1}{131}\sqrt{62}e^{13} + \frac{6}{131}\sqrt{3}e^{25}$	$(\frac{7}{131}, -\frac{3}{131}, -\frac{6}{131}, \frac{2}{131}, \frac{4}{131}, -\frac{4}{131}, \frac{1}{131})$ $+ \frac{1}{131}\sqrt{78}e^4 \otimes e_7 + \frac{5}{131}\sqrt{6}e^2 \otimes e_6$	{13567, 2345}
731:8	$0, 0, 0, 0, \frac{2}{31}\sqrt{13}e^{12}, \frac{6}{31}\sqrt{13}e^{34}, \frac{4}{31}\sqrt{13}e^{13} + \frac{6}{31}\sqrt{13}e^{25}$	$(\frac{2}{31}, -\frac{3}{31}, -\frac{6}{31}, \frac{22}{31}, -\frac{1}{31}, \frac{16}{31}, -\frac{4}{31})$ $+ \frac{4}{31}\sqrt{78}e^4 \otimes e_7$	{127, 157, 2456, 46}
731:9	$0, 0, 0, 0, \frac{24}{55}\sqrt{3}e^{12}, \frac{24}{55}\sqrt{3}e^{13}, \frac{18}{55}\sqrt{3}e^{14} + \frac{6}{55}\sqrt{21}e^{25}$	$(\frac{32}{55}, -\frac{1}{5}, -\frac{4}{55}, -\frac{2}{5}, \frac{21}{55}, \frac{28}{55}, \frac{2}{11})$ $+ \frac{6}{55}\sqrt{129}e^1 \otimes e_4$	{23456, 245, 346, 4}
731:9	$0, 0, 0, 0, \frac{2}{7}e^{12}, \frac{1}{35}\sqrt{210}e^{13}, \frac{1}{35}\sqrt{170}e^{14} + \frac{4}{35}\sqrt{5}e^{25}$	$(-\frac{2}{7}, \frac{1}{7}, \frac{2}{7}, \frac{2}{7}, -\frac{1}{7}, 0, 0)$ $- \frac{1}{35}\sqrt{290}e^4 \otimes e_6 + \frac{1}{35}\sqrt{330}e^3 \otimes e_7$	{12345, 134, 247, 457}
731:9	$0, 0, 0, 0, \frac{2}{7}e^{12}, \frac{1}{35}\sqrt{210}e^{13}, \frac{1}{35}\sqrt{170}e^{14} + \frac{4}{35}\sqrt{5}e^{25}$	$(-\frac{2}{7}, \frac{1}{7}, \frac{2}{7}, \frac{2}{7}, -\frac{1}{7}, 0, 0)$ $+ \frac{1}{35}\sqrt{290}e^4 \otimes e_6 + \frac{1}{35}\sqrt{330}e^3 \otimes e_7$	{12345, 134, 247, 457}
731:9	$0, 0, 0, 0, \frac{4}{47}\sqrt{78}e^{12}, \frac{4}{47}\sqrt{34}e^{13}, \frac{4}{47}\sqrt{82}e^{14} + \frac{8}{47}\sqrt{2}e^{25}$	$(\frac{26}{47}, -\frac{2}{47}, -\frac{22}{47}, -\frac{4}{47}, \frac{24}{47}, \frac{4}{47}, \frac{22}{47})$ $+ \frac{16}{47}\sqrt{14}e^1 \otimes e_3$	{124, 145, 23457, 347}
731:9	$0, 0, 0, 0, \frac{4}{119}\sqrt{57}e^{12}, \frac{4}{119}\sqrt{57}e^{13}, \frac{6}{119}\sqrt{22}e^{14} + \frac{12}{119}\sqrt{6}e^{25}$	$(\frac{2}{17}, \frac{1}{119}, -\frac{25}{119}, \frac{2}{119}, \frac{15}{119}, -\frac{11}{119}, \frac{16}{119})$ $+ \frac{4}{119}\sqrt{66}e^1 \otimes e_4 + \frac{4}{119}\sqrt{93}e^2 \otimes e_6$	{245, 346}
731:9	$0, 0, 0, 0, \frac{4}{447}\sqrt{1794}e^{12}, \frac{4}{447}\sqrt{6302}e^{13}, \frac{20}{447}\sqrt{138}e^{14} + \frac{8}{447}\sqrt{1426}e^{25}$	$(-\frac{26}{149}, \frac{10}{447}, \frac{310}{447}, \frac{20}{447}, -\frac{68}{447}, \frac{232}{447}, -\frac{58}{447})$ $+ \frac{32}{447}\sqrt{253}e^3 \otimes e_7$	{12345, 134, 247, 457}
731:9	$0, 0, 0, 0, \frac{1}{8}\sqrt{15}e^{12}, \frac{1}{4}\sqrt{2}e^{13}, \frac{1}{8}\sqrt{5}e^{14} + \frac{1}{8}\sqrt{13}e^{25}$	$(\frac{1}{16}, \frac{1}{8}, -\frac{5}{16}, \frac{1}{4}, \frac{3}{16}, -\frac{1}{4}, \frac{5}{16})$ $+ \frac{1}{8}\sqrt{14}e^1 \otimes e_3 + \frac{3}{8}\sqrt{3}e^2 \otimes e_6$	{14567, 346}
731:9	$0, 0, 0, 0, \frac{63}{296}e^{12}, \frac{7}{37}\sqrt{3}e^{13}, \frac{7}{296}\sqrt{65}e^{14} + \frac{7}{296}\sqrt{219}e^{25}$	$(-\frac{133}{592}, \frac{35}{296}, \frac{105}{592}, \frac{35}{148}, -\frac{63}{592}, -\frac{7}{148}, \frac{7}{592})$ $+ \frac{7}{296}\sqrt{222}e^3 \otimes e_7 + \frac{7}{296}\sqrt{295}e^2 \otimes e_6$	{14567, 346}
731:9	$0, 0, 0, 0, \frac{4}{47}\sqrt{34}e^{12}, \frac{4}{47}\sqrt{78}e^{13}, \frac{4}{47}\sqrt{82}e^{14} + \frac{8}{47}\sqrt{2}e^{25}$	$(-\frac{34}{141}, \frac{50}{141}, -\frac{10}{141}, \frac{100}{141}, \frac{16}{141}, -\frac{44}{141}, \frac{22}{47})$ $+ \frac{16}{47}\sqrt{14}e^4 \otimes e_6$	{12567, 167, 236, 356}
731:9	$0, 0, 0, 0, \frac{44}{589}\sqrt{11}e^{12}, \frac{132}{589}\sqrt{5}e^{13}, \frac{22}{589}\sqrt{5}e^{14} + \frac{66}{589}\sqrt{13}e^{25}$	$(\frac{88}{589}, -\frac{77}{589}, \frac{176}{589}, -\frac{154}{589}, \frac{11}{589}, \frac{264}{589}, -\frac{66}{589})$ $+ \frac{22}{589}\sqrt{233}e^1 \otimes e_4 + \frac{88}{589}\sqrt{17}e^3 \otimes e_7$	{1267, 1567}
731:9	$0, 0, 0, 0, \frac{4}{37}\sqrt{30}e^{12}, \frac{4}{37}\sqrt{30}e^{13}, \frac{2}{37}\sqrt{110}e^{14} + \frac{8}{37}\sqrt{10}e^{25}$	$(-\frac{6}{37}, \frac{9}{37}, -\frac{5}{37}, \frac{18}{37}, \frac{3}{37}, -\frac{11}{37}, \frac{12}{37})$ $+ \frac{20}{37}\sqrt{3}e^2 \otimes e_6$	{12347, 14567, 245, 346}
731:10	$0, 0, 0, 0, \frac{5}{77}\sqrt{6}e^{12}, \frac{1}{77}\sqrt{870}e^{13}, \frac{5}{77}\sqrt{6}e^{15} + \frac{1}{77}\sqrt{870}e^{24}$	$(-\frac{10}{77}, \frac{19}{77}, \frac{2}{11}, -\frac{20}{77}, \frac{9}{77}, \frac{4}{77}, -\frac{1}{77})$ $+ \frac{2}{77}\sqrt{255}e^2 \otimes e_6 + \frac{2}{77}\sqrt{255}e^3 \otimes e_7$	{27, 356}
731:10	$0, 0, 0, 0, \frac{7}{83}\sqrt{6}e^{12}, \frac{7}{83}\sqrt{30}e^{13}, \frac{21}{83}\sqrt{2}e^{15} + \frac{7}{83}\sqrt{30}e^{24}$	$(-\frac{14}{83}, \frac{21}{83}, \frac{42}{83}, -\frac{28}{83}, \frac{7}{83}, \frac{28}{83}, -\frac{7}{83})$ $+ \frac{14}{83}\sqrt{13}e^2 \otimes e_4 + \frac{14}{83}\sqrt{22}e^3 \otimes e_7$	{1267, 257}
731:10	$0, 0, 0, 0, \frac{1}{25}\sqrt{130}e^{12}, \frac{1}{25}\sqrt{70}e^{13}, \frac{2}{5}e^{15} + \frac{1}{25}\sqrt{70}e^{24}$	$(0, \frac{1}{5}, -\frac{1}{5}, 0, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{2}{25}\sqrt{35}e^1 \otimes e_3 + \frac{3}{25}\sqrt{10}e^2 \otimes e_4$	{145, 34}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
731:10	$0, 0, 0, 0, \frac{1}{32}\sqrt{19}e^{12}, \frac{1}{32}\sqrt{31}e^{13}, \frac{1}{32}\sqrt{10}e^{15} + \frac{1}{32}\sqrt{31}e^{24}$	$(\frac{3}{64}, -\frac{7}{64}, \frac{1}{64}, \frac{3}{32}, -\frac{1}{16}, \frac{1}{16}, -\frac{1}{64})$ $+ \frac{1}{8}\sqrt{2}e^4 \otimes e_6 + \frac{3}{32}\sqrt{3}e^3 \otimes e_7$	{12567, 356}
731:10	$0, 0, 0, 0, \frac{5}{32}\sqrt{6}e^{12}, \frac{5}{32}\sqrt{23}e^{13}, \frac{5}{32}\sqrt{11}e^{15} + \frac{5}{32}\sqrt{23}e^{24}$	$(-\frac{5}{64}, \frac{35}{64}, -\frac{5}{32}, -\frac{5}{32}, \frac{15}{32}, -\frac{15}{64}, \frac{25}{64})$ $+ \frac{5}{32}\sqrt{51}e^2 \otimes e_6$	{1234, 14567, 245, 3467}
731:10	$0, 0, 0, 0, \frac{8}{13}e^{12}, \frac{4}{13}\sqrt{7}e^{13}, \frac{8}{13}e^{15} + \frac{4}{13}\sqrt{7}e^{24}$	$(\frac{3}{13}, -\frac{1}{13}, -\frac{5}{13}, \frac{6}{13}, \frac{2}{13}, -\frac{2}{13}, \frac{5}{13})$ $+ \frac{4}{13}\sqrt{11}e^4 \otimes e_6$	{12567, 16, 2367, 356}
731:10	$0, 0, 0, 0, \frac{5}{32}\sqrt{11}e^{12}, \frac{5}{32}\sqrt{23}e^{13}, \frac{5}{32}\sqrt{6}e^{15} + \frac{5}{32}\sqrt{23}e^{24}$	$(-\frac{5}{64}, \frac{1}{64}, \frac{41}{64}, -\frac{5}{32}, -\frac{1}{16}, \frac{9}{16}, -\frac{9}{64})$ $+ \frac{5}{32}\sqrt{51}e^3 \otimes e_7$	{12345, 1467, 2346, 457}
731:10	$0, 0, 0, 0, \frac{5}{61}\sqrt{142}e^{12}, \frac{1}{61}\sqrt{994}e^{13}, \frac{3}{61}\sqrt{142}e^{15} + \frac{1}{61}\sqrt{994}e^{24}$	$(-\frac{14}{61}, \frac{43}{61}, \frac{20}{61}, -\frac{28}{61}, \frac{29}{61}, \frac{6}{61}, \frac{15}{61})$ $+ \frac{4}{61}\sqrt{426}e^2 \otimes e_4$	{13456, 145, 34, 46}
731:10	$0, 0, 0, 0, \frac{4}{13}\sqrt{7}e^{12}, \frac{8}{13}e^{13}, \frac{4}{13}\sqrt{7}e^{15} + \frac{8}{13}e^{24}$	$(\frac{3}{13}, -\frac{1}{13}, -\frac{5}{13}, \frac{6}{13}, \frac{2}{13}, -\frac{2}{13}, \frac{5}{13})$ $+ \frac{4}{13}\sqrt{11}e^1 \otimes e_3$	{1247, 145, 23457, 34}
731:10	$0, 0, 0, 0, \frac{5}{59}\sqrt{42}e^{12}, \frac{10}{59}e^{13}, \frac{10}{59}\sqrt{7}e^{15} + \frac{10}{59}e^{24}$	$(\frac{5}{59}, \frac{10}{59}, -\frac{20}{59}, \frac{10}{59}, \frac{15}{59}, -\frac{15}{59}, \frac{20}{59})$ $+ \frac{10}{59}\sqrt{15}e^1 \otimes e_3 + \frac{5}{59}\sqrt{42}e^2 \otimes e_6$	{1247, 23457}
731:12	$0, 0, 0, 0, \frac{13}{233}\sqrt{21}e^{12}, \frac{13}{233}\sqrt{167}e^{14} + \frac{13}{233}\sqrt{101}e^{23}, \frac{13}{233}\sqrt{87}e^{13} + \frac{52}{233}\sqrt{10}e^{25}$	$(-\frac{143}{466}, \frac{26}{233}, \frac{52}{233}, \frac{299}{466}, -\frac{91}{466}, \frac{78}{233}, -\frac{39}{466})$ $+ \frac{26}{233}\sqrt{94}e^4 \otimes e_7$	{134, 357}
731:13	$0, 0, 0, 0, \frac{2}{233}\sqrt{1205}e^{12}, \frac{1}{233}\sqrt{10122}e^{13}, \frac{2}{233}\sqrt{7471}e^{16} + \frac{1}{233}\sqrt{27474}e^{25}$	$(-\frac{20}{233}, \frac{6}{233}, \frac{32}{233}, 1, -\frac{14}{233}, \frac{12}{233}, -\frac{8}{233})$ $+ \frac{6}{233}\sqrt{2410}e^4 \otimes e_7$	{12456, 146, 2367, 3567}
731:13	$0, 0, 0, 0, \frac{1}{237}\sqrt{13134}e^{12}, \frac{2}{237}\sqrt{6766}e^{13}, \frac{2}{237}\sqrt{6965}e^{16} + \frac{2}{237}\sqrt{597}e^{25}$	$(\frac{22}{79}, \frac{25}{237}, -\frac{16}{237}, -\frac{133}{237}, \frac{91}{237}, \frac{50}{237}, \frac{116}{237})$ $+ \frac{1}{237}\sqrt{73630}e^1 \otimes e_4$	{126, 156, 234567, 3467}
731:13	$0, 0, 0, 0, \frac{4}{37}\sqrt{58}e^{12}, \frac{1}{37}\sqrt{174}e^{13}, \frac{4}{37}\sqrt{29}e^{16} + \frac{1}{37}\sqrt{870}e^{25}$	$(\frac{2}{37}, \frac{6}{37}, \frac{10}{37}, -\frac{23}{37}, \frac{8}{37}, \frac{12}{37}, \frac{14}{37})$ $+ \frac{2}{37}\sqrt{435}e^2 \otimes e_4$	{12367, 134567, 256, 46}
731:13	$0, 0, 0, 0, \frac{4}{227}\sqrt{538}e^{12}, \frac{9}{227}\sqrt{538}e^{13}, \frac{1}{227}\sqrt{10222}e^{16} + \frac{1}{227}\sqrt{5918}e^{25}$	$(-\frac{32}{227}, \frac{57}{227}, \frac{146}{227}, -\frac{123}{227}, \frac{25}{227}, \frac{114}{227}, \frac{82}{227})$ $+ \frac{5}{227}\sqrt{3766}e^3 \otimes e_4$	{12456, 146, 2367, 3567}
731:14	$0, 0, 0, 0, -\frac{1}{33}\sqrt{667}e^{12}, \frac{1}{33}\sqrt{87}e^{13}, \frac{1}{33}\sqrt{667}e^{25} + \frac{1}{33}\sqrt{87}e^{36}$	$(-\frac{1}{11}, \frac{10}{33}, \frac{10}{33}, -\frac{19}{33}, \frac{7}{33}, \frac{7}{33}, \frac{17}{33})$ $+ \frac{2}{33}\sqrt{377}e^2 \otimes e_4$	{12367, 127, 134567, 1457, 235, 256, 34, 46, 12367, 127, 134567, 1457, 235, 256, 34, 46}
731:14	$0, 0, 0, 0, \frac{1}{33}\sqrt{667}e^{12}, \frac{1}{33}\sqrt{87}e^{13}, \frac{1}{33}\sqrt{667}e^{25} + \frac{1}{33}\sqrt{87}e^{36}$	$(-\frac{1}{11}, \frac{10}{33}, \frac{10}{33}, -\frac{19}{33}, \frac{7}{33}, \frac{7}{33}, \frac{17}{33})$ $+ \frac{2}{33}\sqrt{377}e^2 \otimes e_4$	{12367, 127, 134567, 1457, 235, 256, 34, 46, 12367, 127, 134567, 1457, 235, 256, 34, 46}
731:14	$0, 0, 0, 0, -\frac{1}{34}\sqrt{595}e^{12}, \frac{1}{34}\sqrt{595}e^{13}, \frac{1}{17}\sqrt{35}e^{25} + \frac{1}{17}\sqrt{35}e^{36}$	$(\frac{1}{2}, -\frac{5}{68}, -\frac{5}{68}, -\frac{9}{17}, \frac{29}{68}, \frac{29}{68}, \frac{6}{17})$ $+ \frac{1}{17}\sqrt{455}e^1 \otimes e_4$	{1237, 1267, 1567, 23456, 245, 4, 1237, 1267, 1567, 23456, 245, 4}
731:14	$0, 0, 0, 0, \frac{1}{34}\sqrt{595}e^{12}, \frac{1}{34}\sqrt{595}e^{13}, \frac{1}{17}\sqrt{35}e^{25} + \frac{1}{17}\sqrt{35}e^{36}$	$(\frac{1}{2}, -\frac{5}{68}, -\frac{5}{68}, -\frac{9}{17}, \frac{29}{68}, \frac{29}{68}, \frac{6}{17})$ $+ \frac{1}{17}\sqrt{455}e^1 \otimes e_4$	{1237, 1267, 1567, 23456, 245, 4, 1237, 1267, 1567, 23456, 245, 4}
731:14	$0, 0, 0, 0, -\frac{1}{17}\sqrt{35}e^{12}, \frac{1}{17}\sqrt{35}e^{13}, \frac{1}{34}\sqrt{595}e^{25} + \frac{1}{34}\sqrt{595}e^{36}$	$(\frac{2}{17}, -\frac{5}{68}, -\frac{5}{68}, 1, \frac{3}{68}, \frac{3}{68}, -\frac{1}{34})$ $+ \frac{1}{17}\sqrt{455}e^4 \otimes e_7$	{1237, 1267, 1567, 23456, 245, 4, 1237, 1267, 1567, 23456, 245, 4}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
731:14	$0, 0, 0, 0, \frac{1}{17}\sqrt{35}e^{12}, \frac{1}{17}\sqrt{35}e^{13}, \frac{1}{34}\sqrt{595}e^{25} + \frac{1}{34}\sqrt{595}e^{36}$	$(\frac{2}{17}, -\frac{5}{68}, -\frac{5}{68}, 1, \frac{3}{68}, \frac{3}{68}, -\frac{1}{34})$ $+ \frac{1}{17}\sqrt{455}e^4 \otimes e_7$	{1237, 1267, 1567, 23456, 245, 4, 1237, 1267, 1567, 23456, 245, 4}
731:16	$0, 0, 0, 0, -\frac{16}{67}\sqrt{10}e^{12}, \frac{16}{67}\sqrt{10}e^{13}, \frac{8}{67}\sqrt{26}e^{14} + \frac{8}{67}\sqrt{14}e^{25} + \frac{8}{67}\sqrt{14}e^{36}$	$(\frac{40}{67}, -\frac{12}{67}, -\frac{12}{67}, -\frac{24}{67}, \frac{28}{67}, \frac{28}{67}, \frac{16}{67})$ $+ \frac{16}{67}\sqrt{26}e^1 \otimes e_4$	{23456, 245, 4, 23456, 245, 4}
731:16	$0, 0, 0, 0, \frac{16}{67}\sqrt{10}e^{12}, \frac{16}{67}\sqrt{10}e^{13}, \frac{8}{67}\sqrt{26}e^{14} + \frac{8}{67}\sqrt{14}e^{25} + \frac{8}{67}\sqrt{14}e^{36}$	$(\frac{40}{67}, -\frac{12}{67}, -\frac{12}{67}, -\frac{24}{67}, \frac{28}{67}, \frac{28}{67}, \frac{16}{67})$ $+ \frac{16}{67}\sqrt{26}e^1 \otimes e_4$	{23456, 245, 4, 23456, 245, 4}
731:17	$0, 0, 0, 0, \frac{64}{445}\sqrt{46}e^{12}, \frac{128}{445}\sqrt{3}e^{13}, \frac{32}{445}\sqrt{57}e^{15} + \frac{32}{445}\sqrt{59}e^{24} + \frac{32}{445}\sqrt{33}e^{36}$	$(-\frac{96}{445}, \frac{64}{89}, \frac{112}{445}, -\frac{192}{445}, \frac{224}{445}, \frac{16}{445}, \frac{128}{445})$ $+ \frac{64}{445}\sqrt{87}e^2 \otimes e_4$	{13456, 145}
731:19	$0, 0, 0, 0, \frac{2}{191}\sqrt{1695}e^{12}, \frac{2}{191}\sqrt{1695}e^{34}, \frac{2}{191}\sqrt{7458}e^{15} + \frac{2}{191}\sqrt{791}e^{36}$	$(\frac{110}{191}, -\frac{116}{191}, \frac{37}{191}, \frac{30}{191}, -\frac{6}{191}, \frac{67}{191}, \frac{104}{191})$ $+ \frac{2}{191}\sqrt{16498}e^1 \otimes e_2$	{1345, 1456, 23567, 257}
731:19	$0, 0, 0, 0, \frac{33}{173}\sqrt{2}e^{12}, \frac{33}{173}\sqrt{2}e^{34}, \frac{55}{173}\sqrt{2}e^{15} + \frac{55}{173}\sqrt{2}e^{36}$	$(\frac{66}{173}, -\frac{55}{173}, \frac{66}{173}, -\frac{55}{173}, \frac{11}{173}, \frac{11}{173}, \frac{77}{173})$ $+ \frac{11}{173}\sqrt{146}e^1 \otimes e_2 + \frac{11}{173}\sqrt{146}e^3 \otimes e_4$	{1356, 24567}
73:1	$0, 0, 0, 0, \frac{1}{133}\sqrt{4958}e^{12}, \frac{1}{133}\sqrt{1474}e^{13}, \frac{1}{133}\sqrt{1474}e^{23}$	$(\frac{33}{133}, -\frac{30}{133}, -\frac{4}{133}, \frac{10}{19}, \frac{3}{133}, \frac{29}{133}, -\frac{34}{133})$ $+ \frac{2}{133}\sqrt{1742}e^4 \otimes e_5 + \frac{3}{133}\sqrt{938}e^1 \otimes e_7$	{1234, 156, 257, 3467}
73:1	$0, 0, 0, 0, \frac{1}{10}\sqrt{11}e^{12}, \frac{1}{10}\sqrt{11}e^{13}, \frac{1}{10}\sqrt{11}e^{23}$	$(\frac{13}{80}, \frac{13}{80}, -\frac{11}{40}, \frac{1}{8}, \frac{13}{40}, -\frac{9}{80}, -\frac{9}{80})$ $+ \frac{1}{40}\sqrt{385}e^1 \otimes e_7 + \frac{1}{40}\sqrt{385}e^2 \otimes e_6$	{123, 1234, 1456, 156, 3467, 367}
73:1	$0, 0, 0, 0, \frac{1}{10}\sqrt{11}e^{12}, \frac{1}{10}\sqrt{11}e^{13}, \frac{1}{10}\sqrt{11}e^{23}$	$(\frac{13}{80}, \frac{13}{80}, -\frac{11}{40}, \frac{1}{8}, \frac{13}{40}, -\frac{9}{80}, -\frac{9}{80})$ $+ \frac{1}{40}\sqrt{385}e^1 \otimes e_7 - \frac{1}{40}\sqrt{385}e^2 \otimes e_6$	{123, 1234, 1456, 156, 3467, 367}
73:1	$0, 0, 0, 0, \frac{4}{43}\sqrt{66}e^{12}, \frac{4}{43}\sqrt{66}e^{13}, \frac{2}{43}\sqrt{110}e^{23}$	$(\frac{19}{43}, \frac{2}{43}, \frac{2}{43}, -\frac{25}{43}, \frac{21}{43}, \frac{21}{43}, \frac{4}{43})$ $+ \frac{4}{43}\sqrt{187}e^1 \otimes e_4$	{1237, 126, 1567, 234567, 245, 47}
73:1	$0, 0, 0, 0, \frac{1}{14}\sqrt{170}e^{12}, \frac{1}{14}\sqrt{17}e^{13}, \frac{1}{14}\sqrt{17}e^{23}$	$(-\frac{3}{28}, -\frac{3}{28}, \frac{2}{7}, 1, -\frac{3}{14}, \frac{5}{28}, \frac{5}{28})$ $+ \frac{1}{14}\sqrt{374}e^4 \otimes e_5$	{123467, 124, 1356, 157, 34, 467}
73:1	$0, 0, 0, 0, \frac{1}{15}\sqrt{86}e^{12}, \frac{1}{15}\sqrt{86}e^{13}, \frac{1}{15}\sqrt{86}e^{23}$	$(\frac{3}{5}, -\frac{8}{45}, -\frac{8}{45}, \frac{2}{9}, \frac{19}{45}, \frac{19}{45}, -\frac{16}{45})$ $+ \frac{1}{45}\sqrt{3010}e^1 \otimes e_7$	{123, 1234, 1456, 156, 2457, 257}
73:1	$0, 0, 0, 0, \frac{1}{142}\sqrt{3657}e^{12}, \frac{1}{142}\sqrt{3657}e^{13}, \frac{1}{71}\sqrt{106}e^{23}$	$(\frac{5}{71}, \frac{85}{284}, -\frac{41}{284}, -\frac{43}{142}, \frac{105}{284}, -\frac{21}{284}, \frac{11}{71})$ $+ \frac{1}{142}\sqrt{6466}e^1 \otimes e_4 + \frac{3}{142}\sqrt{742}e^2 \otimes e_6$	{123, 156, 2457, 3467}
73:2	$0, 0, 0, 0, \frac{4}{157}\sqrt{110}e^{12}, \frac{60}{157}\sqrt{2}e^{13}, \frac{4}{157}\sqrt{110}e^{14}$	$(-\frac{46}{157}, \frac{78}{157}, \frac{44}{157}, \frac{10}{157}, \frac{32}{157}, -\frac{2}{157}, -\frac{36}{157})$ $+ \frac{8}{157}\sqrt{170}e^2 \otimes e_6 + \frac{8}{157}\sqrt{170}e^3 \otimes e_7$	{1234, 1567, 2457, 36}
73:2	$0, 0, 0, 0, \frac{1}{19}\sqrt{66}e^{12}, \frac{6}{19}e^{13}, \frac{1}{19}\sqrt{66}e^{14}$	$(\frac{5}{38}, \frac{5}{19}, -\frac{7}{38}, -\frac{7}{38}, \frac{15}{38}, -\frac{19}{19}, -\frac{19}{19})$ $+ \frac{1}{19}\sqrt{102}e^1 \otimes e_3 + \frac{1}{19}\sqrt{102}e^2 \otimes e_7$	{124, 157, 235, 347}
73:2	$0, 0, 0, 0, \frac{4}{43}\sqrt{66}e^{12}, \frac{4}{43}\sqrt{66}e^{13}, \frac{2}{43}\sqrt{110}e^{14}$	$(-\frac{10}{43}, \frac{31}{43}, -\frac{3}{43}, \frac{14}{43}, \frac{21}{43}, -\frac{13}{43}, \frac{4}{43})$ $+ \frac{4}{43}\sqrt{187}e^2 \otimes e_6$	{123, 12347, 14567, 156, 245, 257, 346, 367}
73:2	$0, 0, 0, 0, \frac{60}{157}\sqrt{2}e^{12}, \frac{4}{157}\sqrt{110}e^{13}, \frac{4}{157}\sqrt{110}e^{14}$	$(\frac{22}{157}, \frac{44}{157}, -\frac{58}{157}, \frac{10}{157}, \frac{66}{157}, -\frac{36}{157}, \frac{32}{157})$ $+ \frac{8}{157}\sqrt{170}e^1 \otimes e_3 + \frac{8}{157}\sqrt{170}e^2 \otimes e_6$	{1456, 1567, 3467, 36}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
73:2	$0, 0, 0, 0, \frac{1}{19}\sqrt{66}e^{12}, \frac{1}{19}\sqrt{66}e^{13}, \frac{6}{19}e^{14}$	$(-\frac{6}{19}, \frac{5}{19}, \frac{5}{19}, \frac{5}{19}, -\frac{1}{19}, -\frac{1}{19}, -\frac{1}{19})$ $+\frac{1}{19}\sqrt{102}e^2 \otimes e_6 + \frac{1}{19}\sqrt{102}e^3 \otimes e_5$	{123, 12347, 14567, 156, 245, 257}
73:2	$0, 0, 0, 0, \frac{1}{19}\sqrt{66}e^{12}, \frac{1}{19}\sqrt{66}e^{13}, \frac{6}{19}e^{14}$	$(-\frac{6}{19}, \frac{5}{19}, \frac{5}{19}, \frac{5}{19}, -\frac{1}{19}, -\frac{1}{19}, -\frac{1}{19})$ $+\frac{1}{19}\sqrt{102}e^2 \otimes e_6 - \frac{1}{19}\sqrt{102}e^3 \otimes e_5$	{123, 12347, 14567, 156, 245, 257}
73:2	$0, 0, 0, 0, \frac{2}{43}\sqrt{110}e^{12}, \frac{4}{43}\sqrt{66}e^{13}, \frac{4}{43}\sqrt{66}e^{14}$	$(\frac{24}{43}, -\frac{20}{43}, -\frac{3}{43}, -\frac{3}{43}, \frac{4}{43}, \frac{21}{43}, \frac{21}{43})$ $+\frac{4}{43}\sqrt{187}e^1 \otimes e_2$	{134, 137, 167, 2, 23467, 236}
73:3	$0, 0, 0, 0, \frac{2}{5}\sqrt{2}e^{12}, \frac{4}{5}e^{13}, \frac{4}{5}e^{24}$	$(0, 0, \frac{3}{5}, -\frac{1}{5}, 0, \frac{3}{5}, -\frac{1}{5})$ $+\frac{4}{5}\sqrt{2}e^3 \otimes e_7$	{12345, 12567, 13, 1467, 2346, 27, 356, 457}
73:3	$0, 0, 0, 0, \frac{1}{21}\sqrt{106}e^{12}, \frac{2}{21}\sqrt{53}e^{13}, \frac{2}{21}\sqrt{53}e^{24}$	$(\frac{4}{7}, -\frac{13}{63}, -\frac{4}{63}, -\frac{4}{63}, \frac{23}{63}, \frac{32}{63}, -\frac{17}{63})$ $+\frac{1}{9}\sqrt{106}e^1 \otimes e_7$	{1234, 1246, 135, 156, 23567, 257, 3467, 47}
73:3	$0, 0, 0, 0, \frac{2}{181}\sqrt{4393}e^{12}, \frac{3}{181}\sqrt{1910}e^{13}, \frac{2}{181}\sqrt{191}e^{24}$	$(-\frac{51}{181}, -\frac{4}{181}, \frac{136}{181}, \frac{42}{181}, -\frac{55}{181}, \frac{85}{181}, \frac{38}{181})$ $+\frac{1}{181}\sqrt{53862}e^3 \otimes e_5$	{123, 12347, 1456, 1567, 2457, 25, 346, 367}
73:3	$0, 0, 0, 0, \frac{2}{53}\sqrt{26}e^{12}, \frac{4}{53}\sqrt{11}e^{13}, \frac{4}{53}\sqrt{11}e^{24}$	$(-\frac{4}{53}, -\frac{4}{53}, \frac{7}{53}, \frac{7}{53}, -\frac{8}{53}, \frac{3}{53}, \frac{3}{53})$ $+\frac{8}{53}\sqrt{3}e^3 \otimes e_7 + \frac{8}{53}\sqrt{3}e^4 \otimes e_6$	{12345, 12567, 356}
73:3	$0, 0, 0, 0, \frac{3}{14}e^{12}, \frac{3}{14}\sqrt{2}e^{13}, \frac{3}{14}\sqrt{2}e^{24}$	$(\frac{15}{112}, \frac{15}{112}, -\frac{9}{56}, -\frac{9}{56}, \frac{15}{56}, -\frac{3}{112}, -\frac{3}{112})$ $+\frac{3}{8}e^1 \otimes e_7 + \frac{3}{8}e^2 \otimes e_6$	{1234, 156, 3467}
73:3	$0, 0, 0, 0, \frac{20}{197}\sqrt{2}e^{12}, \frac{4}{197}\sqrt{345}e^{13}, \frac{4}{197}\sqrt{345}e^{24}$	$(\frac{49}{197}, -\frac{35}{197}, -\frac{45}{197}, \frac{44}{197}, \frac{14}{197}, \frac{4}{197}, \frac{9}{197})$ $+\frac{4}{197}\sqrt{445}e^4 \otimes e_6 + \frac{8}{197}\sqrt{105}e^1 \otimes e_7$	{12345, 16, 2367, 457}
73:3	$0, 0, 0, 0, \frac{1}{85}\sqrt{1722}e^{12}, \frac{1}{85}\sqrt{902}e^{13}, \frac{1}{85}\sqrt{902}e^{24}$	$(\frac{11}{85}, \frac{22}{85}, -\frac{6}{17}, \frac{1}{85}, \frac{33}{85}, -\frac{19}{85}, \frac{23}{85})$ $+\frac{1}{85}\sqrt{2542}e^1 \otimes e_3 + \frac{2}{85}\sqrt{861}e^2 \otimes e_6$	{14567, 156, 3467, 36}
73:3	$0, 0, 0, 0, \frac{1}{5}\sqrt{10}e^{12}, \frac{1}{10}\sqrt{10}e^{13}, \frac{1}{10}\sqrt{10}e^{24}$	$(\frac{1}{4}, \frac{1}{4}, -\frac{1}{4}, -\frac{1}{4}, \frac{1}{2}, 0, 0)$ $+\frac{3}{10}\sqrt{5}e^1 \otimes e_3 + \frac{3}{10}\sqrt{5}e^2 \otimes e_4$	{12, 145, 34}
73:3	$0, 0, 0, 0, \frac{1}{19}\sqrt{322}e^{12}, \frac{1}{19}\sqrt{46}e^{13}, \frac{1}{19}\sqrt{46}e^{24}$	$(\frac{13}{19}, -\frac{2}{19}, -\frac{10}{19}, \frac{5}{19}, \frac{11}{19}, \frac{3}{19}, \frac{3}{19})$ $+\frac{1}{19}\sqrt{690}e^1 \otimes e_3$	{12, 1247, 145, 157, 23457, 235, 34, 37}
73:3	$0, 0, 0, 0, \frac{1}{15}\sqrt{30}e^{12}, \frac{2}{15}\sqrt{5}e^{13}, \frac{2}{15}\sqrt{10}e^{24}$	$(\frac{4}{15}, -\frac{1}{3}, 0, \frac{4}{15}, -\frac{1}{15}, \frac{4}{15}, -\frac{1}{15})$ $+\frac{1}{15}\sqrt{70}e^1 \otimes e_7 - \frac{2}{15}\sqrt{15}e^4 \otimes e_5$	{1234, 1246, 135, 156, 23567, 257, 3467, 47}
73:3	$0, 0, 0, 0, \frac{1}{15}\sqrt{30}e^{12}, \frac{2}{15}\sqrt{5}e^{13}, \frac{2}{15}\sqrt{10}e^{24}$	$(\frac{4}{15}, -\frac{1}{3}, 0, \frac{4}{15}, -\frac{1}{15}, \frac{4}{15}, -\frac{1}{15})$ $+\frac{1}{15}\sqrt{70}e^1 \otimes e_7 + \frac{2}{15}\sqrt{15}e^4 \otimes e_5$	{1234, 1246, 135, 156, 23567, 257, 3467, 47}
73:3	$0, 0, 0, 0, \frac{1}{15}\sqrt{30}e^{12}, \frac{2}{15}\sqrt{10}e^{13}, \frac{2}{15}\sqrt{5}e^{24}$	$(\frac{2}{15}, -\frac{1}{5}, \frac{4}{15}, 0, -\frac{1}{15}, \frac{2}{5}, -\frac{1}{5})$ $+\frac{1}{15}\sqrt{70}e^1 \otimes e_7 + \frac{2}{15}\sqrt{15}e^3 \otimes e_5$	{1234, 156, 257, 3467}
73:3	$0, 0, 0, 0, \frac{1}{40}\sqrt{17}e^{12}, \frac{3}{40}\sqrt{51}e^{13}, \frac{17}{40}e^{24}$	$(-\frac{3}{16}, -\frac{1}{16}, \frac{7}{40}, \frac{33}{80}, -\frac{1}{4}, -\frac{1}{80}, \frac{7}{20})$ $+\frac{1}{40}\sqrt{510}e^3 \otimes e_5 + \frac{1}{40}\sqrt{663}e^4 \otimes e_6$	{12567, 1347, 2367, 457}
73:3	$0, 0, 0, 0, \frac{8}{189}\sqrt{186}e^{12}, \frac{8}{189}\sqrt{39}e^{13}, \frac{32}{189}\sqrt{3}e^{24}$	$(\frac{53}{189}, -\frac{55}{189}, -\frac{43}{189}, \frac{94}{189}, -\frac{2}{189}, \frac{10}{189}, \frac{13}{63})$ $+\frac{8}{189}\sqrt{237}e^1 \otimes e_3 + \frac{8}{63}\sqrt{29}e^4 \otimes e_5$	{124, 15, 2357, 347}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
73:4	$0, 0, 0, 0, \frac{8}{103}\sqrt{69}e^{12}, \frac{8}{103}\sqrt{69}e^{13}, \frac{2}{103}\sqrt{782}e^{14} + \frac{8}{103}\sqrt{69}e^{23}$	$(-\frac{10}{103}, \frac{55}{103}, -\frac{27}{103}, \frac{38}{103}, \frac{45}{103}, -\frac{37}{103}, \frac{28}{103})$ $+ \frac{4}{103}\sqrt{943}e^2 \otimes e_6$	{123, 156, 257, 367}
73:4	$0, 0, 0, 0, \frac{1}{5}\sqrt{15}e^{12}, \frac{1}{5}\sqrt{5}e^{13}, \frac{1}{5}\sqrt{15}e^{14} + \frac{1}{5}\sqrt{5}e^{23}$	$(-\frac{3}{10}, 0, \frac{2}{5}, \frac{7}{10}, -\frac{3}{10}, \frac{1}{10}, \frac{2}{5})$ $+ \frac{2}{5}\sqrt{10}e^4 \otimes e_5$	{124, 157, 256, 467}
73:4	$0, 0, 0, 0, \frac{12}{65}\sqrt{5}e^{12}, \frac{12}{65}\sqrt{5}e^{13}, \frac{2}{65}\sqrt{110}e^{14} + \frac{4}{65}\sqrt{10}e^{23}$	$(\frac{2}{13}, \frac{3}{13}, -\frac{3}{13}, -\frac{2}{13}, \frac{5}{13}, -\frac{1}{13}, 0)$ $+ \frac{4}{13}\sqrt{3}e^2 \otimes e_6 + \frac{4}{65}\sqrt{70}e^1 \otimes e_4$	{123, 156}
73:4	$0, 0, 0, 0, \frac{1}{11}\sqrt{33}e^{12}, \frac{1}{22}\sqrt{33}e^{13}, \frac{1}{22}\sqrt{22}e^{14} + \frac{1}{22}\sqrt{33}e^{23}$	$(-\frac{1}{4}, \frac{1}{4}, 0, \frac{1}{2}, 0, -\frac{1}{4}, \frac{1}{4})$ $+ \frac{1}{11}\sqrt{55}e^2 \otimes e_6 + \frac{3}{22}\sqrt{22}e^4 \otimes e_5$	{1234, 3467}
73:4	$0, 0, 0, 0, \frac{8}{91}\sqrt{11}e^{12}, \frac{8}{91}\sqrt{11}e^{13}, \frac{4}{91}\sqrt{38}e^{14} + \frac{8}{91}\sqrt{11}e^{23}$	$(-\frac{16}{91}, \frac{6}{91}, \frac{6}{91}, \frac{4}{13}, -\frac{10}{91}, -\frac{10}{91}, \frac{12}{91})$ $+ \frac{4}{91}\sqrt{82}e^2 \otimes e_6 - \frac{4}{91}\sqrt{82}e^3 \otimes e_5$	{123, 156, 257}
73:4	$0, 0, 0, 0, \frac{8}{91}\sqrt{11}e^{12}, \frac{8}{91}\sqrt{11}e^{13}, \frac{4}{91}\sqrt{38}e^{14} + \frac{8}{91}\sqrt{11}e^{23}$	$(-\frac{16}{91}, \frac{6}{91}, \frac{6}{91}, \frac{4}{13}, -\frac{10}{91}, -\frac{10}{91}, \frac{12}{91})$ $+ \frac{4}{91}\sqrt{82}e^2 \otimes e_6 + \frac{4}{91}\sqrt{82}e^3 \otimes e_5$	{123, 156, 257}
73:4	$0, 0, 0, 0, \frac{1}{5}\sqrt{15}e^{12}, \frac{1}{5}\sqrt{15}e^{13}, \frac{1}{5}\sqrt{5}e^{14} + \frac{1}{5}\sqrt{5}e^{23}$	$(\frac{1}{2}, 0, 0, -\frac{1}{2}, \frac{1}{2}, \frac{1}{2}, 0)$ $+ \frac{2}{5}\sqrt{10}e^1 \otimes e_4$	{126, 245}
73:5	$0, 0, 0, 0, \frac{40}{137}\sqrt{6}e^{12}, \frac{40}{137}\sqrt{6}e^{34}, \frac{40}{137}\sqrt{3}e^{13} + \frac{10}{137}\sqrt{62}e^{24}$	$(\frac{65}{137}, \frac{10}{137}, -\frac{45}{137}, \frac{10}{137}, \frac{75}{137}, -\frac{35}{137}, \frac{20}{137})$ $+ \frac{20}{137}\sqrt{55}e^1 \otimes e_6$	{1345, 157, 367, 46}
73:5	$0, 0, 0, 0, \frac{3}{25}\sqrt{10}e^{12}, \frac{3}{25}\sqrt{10}e^{34}, \frac{1}{25}\sqrt{10}e^{13} + \frac{1}{25}\sqrt{10}e^{24}$	$(\frac{6}{25}, -\frac{1}{5}, -\frac{1}{5}, \frac{6}{25}, \frac{1}{25}, \frac{1}{25}, \frac{25}{25})$ $+ \frac{1}{25}\sqrt{110}e^1 \otimes e_6 + \frac{1}{25}\sqrt{110}e^4 \otimes e_5$	{12347, 2356}
73:6	$0, 0, 0, 0, \frac{7}{58}\sqrt{30}e^{12}, \frac{7}{58}\sqrt{17}e^{14} - \frac{7}{58}\sqrt{30}e^{23}, \frac{7}{58}\sqrt{30}e^{13} + \frac{7}{58}\sqrt{17}e^{24}$	$(-\frac{21}{116}, -\frac{21}{116}, \frac{14}{29}, \frac{14}{29}, -\frac{21}{58}, \frac{35}{116}, \frac{35}{116})$ $+ \frac{7}{58}\sqrt{94}e^3 \otimes e_5$	{123, 157, 367, 123, 157, 367}
73:6	$0, 0, 0, 0, \frac{7}{58}\sqrt{30}e^{12}, \frac{7}{58}\sqrt{17}e^{14} + \frac{7}{58}\sqrt{30}e^{23}, \frac{7}{58}\sqrt{30}e^{13} + \frac{7}{58}\sqrt{17}e^{24}$	$(-\frac{21}{116}, -\frac{21}{116}, \frac{14}{29}, \frac{14}{29}, -\frac{21}{58}, \frac{35}{116}, \frac{35}{116})$ $+ \frac{7}{58}\sqrt{94}e^3 \otimes e_5$	{123, 157, 367, 123, 157, 367}
721:1	$0, 0, 0, 0, 0, \frac{1}{39}\sqrt{282}e^{12}, \frac{1}{39}\sqrt{1222}e^{16}$	$(\frac{23}{39}, -\frac{8}{13}, \frac{3}{13}, \frac{3}{13}, \frac{3}{13}, -\frac{1}{39}, \frac{22}{39})$ $+ \frac{2}{39}\sqrt{705}e^1 \otimes e_2$	{13456, 1346, 136, 16, 234567, 23467, 2367, 267}
721:1	$0, 0, 0, 0, 0, \frac{2}{125}\sqrt{282}e^{12}, \frac{2}{125}\sqrt{1222}e^{16}$	$(-\frac{14}{125}, \frac{12}{125}, \frac{13}{25}, \frac{13}{125}, -\frac{29}{125}, -\frac{2}{125}, -\frac{16}{125})$ $+ \frac{4}{125}\sqrt{705}e^4 \otimes e_7 + \frac{94}{125}e^3 \otimes e_5$	{1237, 1257, 1346, 1456, 2367, 2567, 34, 45}
721:1	$0, 0, 0, 0, 0, \frac{8}{129}\sqrt{34}e^{12}, \frac{8}{129}\sqrt{34}e^{16}$	$(-\frac{1}{129}, \frac{5}{43}, -\frac{35}{129}, -\frac{19}{129}, \frac{47}{129}, \frac{14}{129}, \frac{13}{129})$ $+ \frac{14}{129}\sqrt{17}e^1 \otimes e_3 + \frac{2}{129}\sqrt{561}e^2 \otimes e_4 + \frac{2}{129}\sqrt{561}e^5 \otimes e_7$	{127, 1456, 2367, 345}
721:1	$0, 0, 0, 0, 0, \frac{1}{39}\sqrt{1222}e^{12}, \frac{1}{39}\sqrt{282}e^{16}$	$(-\frac{7}{39}, \frac{2}{3}, -\frac{7}{13}, \frac{3}{13}, \frac{3}{13}, \frac{19}{39}, \frac{4}{13})$ $+ \frac{2}{39}\sqrt{705}e^2 \otimes e_3$	{12457, 1247, 127, 13456, 1346, 136, 24567, 2467, 267, 3, 34, 345}
721:1	$0, 0, 0, 0, 0, \frac{1}{39}\sqrt{282}e^{12}, \frac{1}{39}\sqrt{1222}e^{16}$	$(-\frac{7}{39}, \frac{2}{13}, 1, \frac{3}{13}, \frac{3}{13}, -\frac{1}{39}, -\frac{8}{39})$ $+ \frac{2}{39}\sqrt{705}e^3 \otimes e_7$	{12457, 1247, 127, 13456, 1346, 136, 24567, 2467, 267, 3, 34, 345}
721:1	$0, 0, 0, 0, 0, \frac{2}{125}\sqrt{1222}e^{12}, \frac{2}{125}\sqrt{282}e^{16}$	$(-\frac{14}{125}, \frac{52}{125}, \frac{13}{25}, -\frac{42}{125}, -\frac{29}{125}, \frac{38}{125}, \frac{24}{125})$ $+ \frac{4}{125}\sqrt{705}e^2 \otimes e_4 + \frac{94}{125}e^3 \otimes e_5$	{1237, 1257, 1346, 1456, 2367, 2567, 34, 45}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
721:1	$0, 0, 0, 0, 0, \frac{2}{25}\sqrt{38}e^{12}, \frac{2}{25}\sqrt{38}e^{16}$	$(\frac{2}{25}, \frac{4}{25}, 1, -\frac{13}{25}, \frac{6}{25}, \frac{6}{25}, \frac{8}{25})$ $+ \frac{38}{25}e^3 \otimes e_4$	{12357, 1237, 12457, 1247, 1356, 136, 1456, 146, 23567, 2367, 24567, 2467, 3, 35, 4, 45}
721:1	$0, 0, 0, 0, 0, \frac{3}{47}\sqrt{62}e^{12}, \frac{3}{47}\sqrt{62}e^{16}$	$(-\frac{11}{47}, \frac{18}{47}, \frac{27}{47}, -\frac{13}{47}, \frac{7}{47}, \frac{7}{47}, -\frac{4}{47})$ $+ \frac{2}{47}\sqrt{310}e^2 \otimes e_4 + \frac{2}{47}\sqrt{310}e^3 \otimes e_7$	{1257, 127, 13456, 1346, 2567, 267, 34, 345}
721:1	$0, 0, 0, 0, 0, \frac{4}{13}\sqrt{3}e^{12}, \frac{4}{13}\sqrt{3}e^{16}$	$(\frac{3}{13}, -\frac{1}{13}, \frac{6}{13}, -\frac{5}{13}, -\frac{2}{13}, \frac{2}{13}, \frac{5}{13})$ $+ \frac{4}{13}\sqrt{7}e^1 \otimes e_4 + \frac{8}{13}e^3 \otimes e_5$	{1237, 1257, 136, 156, 23467, 24567, 34, 45}
721:1	$0, 0, 0, 0, 0, \frac{2}{125}\sqrt{282}e^{12}, \frac{2}{125}\sqrt{1222}e^{16}$	$(\frac{46}{125}, -\frac{48}{125}, \frac{13}{25}, -\frac{29}{125}, \frac{18}{125}, -\frac{2}{125}, \frac{44}{125})$ $+ \frac{4}{125}\sqrt{705}e^1 \otimes e_2 + \frac{94}{125}e^3 \otimes e_4$	{1356, 136, 1456, 146, 23567, 2367, 24567, 2467}
721:1	$0, 0, 0, 0, 0, \frac{2}{175}\sqrt{222}e^{12}, \frac{2}{175}\sqrt{1702}e^{16}$	$(\frac{26}{175}, -\frac{48}{175}, \frac{11}{35}, -\frac{19}{175}, \frac{78}{175}, -\frac{22}{175}, \frac{4}{175})$ $+ \frac{4}{175}\sqrt{555}e^1 \otimes e_2 + \frac{4}{175}\sqrt{555}e^5 \otimes e_7 + \frac{74}{175}e^3 \otimes e_4$	{1356, 1456, 2367, 2467}
721:1	$0, 0, 0, 0, 0, \frac{2}{29}\sqrt{37}e^{12}, \frac{1}{87}\sqrt{2146}e^{16}$	$(\frac{7}{87}, -\frac{2}{29}, \frac{15}{29}, -\frac{10}{29}, \frac{4}{29}, \frac{1}{87}, \frac{8}{87})$ $+ \frac{1}{87}\sqrt{2442}e^3 \otimes e_7 + \frac{2}{87}\sqrt{777}e^1 \otimes e_4$	{1257, 127, 1356, 136, 24567, 2467, 34, 345}
721:1	$0, 0, 0, 0, 0, \frac{1}{87}\sqrt{2146}e^{12}, \frac{2}{29}\sqrt{37}e^{16}$	$(\frac{7}{87}, \frac{16}{87}, -\frac{10}{29}, -\frac{7}{29}, \frac{4}{29}, \frac{23}{87}, \frac{10}{29})$ $+ \frac{1}{87}\sqrt{2442}e^2 \otimes e_4 + \frac{2}{87}\sqrt{777}e^1 \otimes e_3$	{1257, 127, 1456, 146, 23567, 2367, 34, 345}
721:1	$0, 0, 0, 0, 0, \frac{1}{69}\sqrt{222}e^{12}, \frac{1}{69}\sqrt{1702}e^{16}$	$(\frac{13}{69}, -\frac{8}{23}, \frac{13}{23}, \frac{3}{23}, \frac{3}{23}, -\frac{11}{69}, \frac{2}{69})$ $+ \frac{2}{69}\sqrt{555}e^1 \otimes e_2 + \frac{2}{69}\sqrt{555}e^3 \otimes e_7$	{13456, 1346, 136, 24567, 2467, 267}
721:1	$0, 0, 0, 0, 0, \frac{4}{9}\sqrt{3}e^{12}, \frac{4}{9}\sqrt{3}e^{16}$	$(\frac{1}{3}, -\frac{1}{9}, -\frac{5}{9}, \frac{2}{9}, \frac{2}{9}, \frac{2}{9}, \frac{5}{9})$ $+ \frac{4}{9}\sqrt{7}e^1 \otimes e_3$	{12457, 1247, 127, 1456, 146, 16, 234567, 23467, 2367, 3, 34, 345}
721:2	$0, 0, 0, 0, 0, \frac{8}{189}\sqrt{39}e^{12}, \frac{8}{189}\sqrt{186}e^{13} + \frac{32}{189}\sqrt{3}e^{26}$	$(-\frac{26}{189}, \frac{20}{189}, \frac{40}{189}, \frac{110}{189}, -\frac{8}{27}, -\frac{2}{63}, \frac{2}{27})$ $+ \frac{8}{189}\sqrt{237}e^3 \otimes e_5 + \frac{8}{63}\sqrt{29}e^4 \otimes e_7$	{12346, 134, 237, 367}
721:2	$0, 0, 0, 0, 0, \frac{8}{89}\sqrt{106}e^{12}, \frac{2}{89}\sqrt{371}e^{13} + \frac{6}{89}\sqrt{53}e^{26}$	$(\frac{64}{89}, -\frac{21}{89}, -\frac{42}{89}, \frac{20}{89}, \frac{20}{89}, \frac{43}{89}, \frac{22}{89})$ $+ \frac{2}{89}\sqrt{3657}e^1 \otimes e_3$	{23456, 2346, 236, 3, 34, 345}
721:2	$0, 0, 0, 0, 0, \frac{4}{53}\sqrt{34}e^{12}, \frac{2}{53}\sqrt{85}e^{13} + \frac{6}{53}\sqrt{17}e^{26}$	$(\frac{16}{53}, -\frac{9}{53}, -\frac{18}{53}, \frac{32}{53}, \frac{8}{53}, \frac{7}{53}, -\frac{2}{53})$ $+ \frac{2}{53}\sqrt{357}e^1 \otimes e_3 + \frac{4}{53}\sqrt{102}e^4 \otimes e_7$	{1257, 127, 1567, 167}
721:2	$0, 0, 0, 0, 0, \frac{3}{181}\sqrt{1910}e^{12}, \frac{2}{181}\sqrt{4393}e^{13} + \frac{2}{181}\sqrt{191}e^{26}$	$(\frac{90}{181}, -\frac{3}{181}, -\frac{6}{181}, -\frac{101}{181}, \frac{40}{181}, \frac{87}{181}, \frac{84}{181})$ $+ \frac{1}{181}\sqrt{53862}e^1 \otimes e_4$	{123, 1235, 1356, 136, 234567, 23467, 3457, 347}
721:2	$0, 0, 0, 0, 0, \frac{6}{109}\sqrt{33}e^{12}, \frac{6}{109}\sqrt{87}e^{13} + \frac{6}{109}\sqrt{33}e^{26}$	$(\frac{22}{109}, -\frac{7}{109}, -\frac{14}{109}, \frac{62}{109}, -\frac{32}{109}, \frac{15}{109}, \frac{8}{109})$ $+ \frac{6}{109}\sqrt{141}e^1 \otimes e_5 + \frac{6}{109}\sqrt{141}e^4 \otimes e_7$	{127, 167, 2456, 45}
721:2	$0, 0, 0, 0, 0, \frac{17}{40}e^{12}, \frac{1}{40}\sqrt{17}e^{13} + \frac{3}{40}\sqrt{51}e^{26}$	$(-\frac{1}{16}, \frac{3}{40}, \frac{3}{20}, \frac{41}{80}, -\frac{7}{20}, \frac{1}{80}, \frac{7}{80})$ $+ \frac{1}{40}\sqrt{510}e^4 \otimes e_7 + \frac{1}{40}\sqrt{663}e^2 \otimes e_5$	{1237, 13567, 2346, 345}
721:2	$0, 0, 0, 0, 0, \frac{32}{189}\sqrt{3}e^{12}, \frac{8}{189}\sqrt{186}e^{13} + \frac{8}{189}\sqrt{39}e^{26}$	$(\frac{32}{189}, \frac{20}{189}, \frac{40}{189}, -\frac{64}{189}, -\frac{8}{27}, \frac{52}{189}, \frac{8}{21})$ $+ \frac{8}{189}\sqrt{237}e^3 \otimes e_5 + \frac{8}{63}\sqrt{29}e^1 \otimes e_4$	{123, 136, 23467, 347}
721:2	$0, 0, 0, 0, 0, \frac{4}{193}\sqrt{646}e^{12}, \frac{2}{193}\sqrt{1190}e^{13} + \frac{4}{193}\sqrt{442}e^{26}$	$(\frac{54}{193}, -\frac{7}{193}, -\frac{14}{193}, -\frac{75}{193}, \frac{23}{193}, \frac{47}{193}, \frac{40}{193})$ $+ \frac{24}{193}\sqrt{17}e^1 \otimes e_3 + \frac{28}{193}\sqrt{17}e^2 \otimes e_4$	{2356, 236, 34, 345}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
721:2	$0, 0, 0, 0, 0, \frac{4}{5}e^{12}, \frac{2}{5}\sqrt{2}e^{13} + \frac{4}{5}e^{26}$	$(0, \frac{1}{5}, \frac{2}{5}, -\frac{3}{5}, \frac{1}{5}, \frac{1}{5}, \frac{2}{5})$ $+ \frac{4}{5}\sqrt{2}e^2 \otimes e_4$	{12357, 1237, 134567, 13467, 2356, 236, 34, 345}
721:2	$0, 0, 0, 0, 0, \frac{1}{19}\sqrt{46}e^{12}, \frac{1}{19}\sqrt{322}e^{13} + \frac{1}{19}\sqrt{46}e^{26}$	$(-\frac{2}{19}, \frac{6}{19}, \frac{12}{19}, -\frac{11}{19}, \frac{4}{19}, \frac{4}{19}, \frac{10}{19})$ $+ \frac{1}{19}\sqrt{690}e^3 \otimes e_4$	{124567, 12467, 1457, 147, 24, 245, 456, 46}
721:2	$0, 0, 0, 0, 0, \frac{4}{29}\sqrt{11}e^{12}, \frac{2}{29}\sqrt{22}e^{13} + \frac{4}{29}\sqrt{11}e^{26}$	$(\frac{4}{29}, \frac{3}{29}, \frac{6}{29}, 1, -\frac{15}{29}, \frac{7}{29}, \frac{10}{29})$ $+ \frac{44}{29}e^4 \otimes e_5$	{1247, 1257, 1467, 1567, 246, 256, 4, 5}
721:2	$0, 0, 0, 0, 0, \frac{4}{71}\sqrt{106}e^{12}, \frac{1}{71}\sqrt{371}e^{13} + \frac{3}{71}\sqrt{53}e^{26}$	$(\frac{32}{71}, -\frac{21}{142}, -\frac{21}{71}, \frac{73}{142}, -\frac{33}{142}, \frac{43}{142}, \frac{11}{71})$ $+ \frac{1}{71}\sqrt{3657}e^1 \otimes e_3 + \frac{53}{71}e^4 \otimes e_5$	{2346, 2356, 34, 35}
721:2	$0, 0, 0, 0, 0, \frac{3}{40}\sqrt{51}e^{12}, \frac{1}{40}\sqrt{17}e^{13} + \frac{17}{40}e^{26}$	$(\frac{3}{16}, \frac{3}{40}, \frac{3}{20}, -\frac{19}{80}, -\frac{7}{20}, \frac{21}{80}, \frac{27}{80})$ $+ \frac{1}{40}\sqrt{510}e^1 \otimes e_4 + \frac{1}{40}\sqrt{663}e^2 \otimes e_5$	{1237, 13567, 2346, 345}
721:2	$0, 0, 0, 0, 0, \frac{1}{67}\sqrt{646}e^{12}, \frac{1}{67}\sqrt{170}e^{13} + \frac{6}{67}\sqrt{17}e^{26}$	$(\frac{11}{67}, -\frac{3}{67}, -\frac{6}{67}, -\frac{20}{67}, \frac{22}{67}, \frac{8}{67}, \frac{5}{67})$ $+ \frac{1}{67}\sqrt{510}e^5 \otimes e_7 + \frac{3}{67}\sqrt{102}e^2 \otimes e_4 + \frac{6}{67}\sqrt{17}e^1 \otimes e_3$	{2356, 345}
721:2	$0, 0, 0, 0, 0, \frac{2}{181}\sqrt{191}e^{12}, \frac{2}{181}\sqrt{4393}e^{13} + \frac{3}{181}\sqrt{1910}e^{26}$	$(-\frac{4}{181}, -\frac{3}{181}, -\frac{6}{181}, 1, \frac{40}{181}, -\frac{7}{181}, -\frac{10}{181})$ $+ \frac{1}{181}\sqrt{53862}e^4 \otimes e_7$	{123456, 12346, 134, 1345, 2357, 237, 3567, 367}
721:3	$0, 0, 0, 0, 0, \frac{1}{69}\sqrt{2806}e^{12}, \frac{4}{69}\sqrt{183}e^{16} + \frac{1}{69}\sqrt{366}e^{34}$	$(\frac{22}{69}, -\frac{8}{69}, \frac{6}{23}, \frac{6}{23}, -\frac{13}{23}, \frac{14}{23}, \frac{12}{23})$ $+ \frac{2}{23}\sqrt{183}e^1 \otimes e_5$	{12347, 127, 136, 234567, 2567, 35}
721:3	$0, 0, 0, 0, 0, \frac{12}{79}\sqrt{3}e^{12}, \frac{6}{79}\sqrt{39}e^{16} + \frac{6}{79}\sqrt{39}e^{34}$	$(-\frac{5}{79}, \frac{8}{79}, \frac{26}{79}, -\frac{28}{79}, \frac{52}{79}, \frac{3}{79}, -\frac{2}{79})$ $+ \frac{12}{79}\sqrt{30}e^5 \otimes e_7 + \frac{54}{79}e^3 \otimes e_4$	{1237, 1247, 2367, 2467}
721:3	$0, 0, 0, 0, 0, \frac{1}{51}\sqrt{2074}e^{12}, \frac{1}{51}\sqrt{366}e^{16} + \frac{1}{51}\sqrt{366}e^{34}$	$(-\frac{8}{51}, \frac{2}{3}, \frac{3}{17}, \frac{3}{17}, -\frac{9}{17}, \frac{26}{51}, \frac{6}{17})$ $+ \frac{1}{51}\sqrt{4758}e^2 \otimes e_5$	{1237, 13456, 156, 2367, 345, 5}
721:3	$0, 0, 0, 0, 0, \frac{48}{181}e^{12}, \frac{16}{181}\sqrt{26}e^{16} + \frac{16}{181}\sqrt{26}e^{34}$	$(\frac{69}{181}, -\frac{59}{181}, \frac{78}{181}, \frac{1}{181}, -\frac{50}{181}, \frac{10}{181}, \frac{79}{181})$ $+ \frac{16}{181}\sqrt{77}e^1 \otimes e_2 + \frac{16}{181}\sqrt{77}e^3 \otimes e_5$	{1346, 156, 2367, 24567}
721:3	$0, 0, 0, 0, 0, \frac{1}{199}\sqrt{7170}e^{12}, \frac{4}{199}\sqrt{239}e^{16} + \frac{1}{199}\sqrt{32982}e^{34}$	$(\frac{38}{199}, \frac{30}{199}, \frac{130}{199}, -\frac{24}{199}, -\frac{109}{199}, \frac{68}{199}, \frac{106}{199})$ $+ \frac{2}{199}\sqrt{18403}e^3 \otimes e_5$	{1234, 125, 1367, 14567, 2346, 256, 37, 457}
721:3	$0, 0, 0, 0, 0, \frac{3}{13}\sqrt{3}e^{12}, \frac{3}{26}\sqrt{39}e^{16} + \frac{3}{26}\sqrt{39}e^{34}$	$(-\frac{5}{52}, \frac{2}{13}, -\frac{1}{52}, -\frac{1}{52}, 1, \frac{3}{52}, -\frac{1}{26})$ $+ \frac{3}{13}\sqrt{30}e^5 \otimes e_7$	{1237, 13456, 156, 2367, 345, 5}
721:3	$0, 0, 0, 0, 0, \frac{4}{49}\sqrt{37}e^{12}, \frac{2}{49}\sqrt{111}e^{16} + \frac{2}{49}\sqrt{111}e^{34}$	$(\frac{5}{49}, \frac{8}{49}, \frac{46}{49}, -\frac{4}{7}, \frac{12}{49}, \frac{13}{49}, \frac{18}{49})$ $+ \frac{74}{49}e^3 \otimes e_4$	{12357, 1237, 12457, 1247, 23567, 2367, 24567, 2467}
721:3	$0, 0, 0, 0, 0, \frac{1}{199}\sqrt{7170}e^{12}, \frac{1}{199}\sqrt{32982}e^{16} + \frac{4}{199}\sqrt{239}e^{34}$	$(\frac{115}{199}, -\frac{124}{199}, \frac{53}{199}, \frac{53}{199}, \frac{45}{199}, -\frac{9}{199}, \frac{106}{199})$ $+ \frac{2}{199}\sqrt{18403}e^1 \otimes e_2$	{1356, 136, 234567, 23467, 2567, 267}
721:3	$0, 0, 0, 0, 0, \frac{2}{199}\sqrt{2806}e^{12}, \frac{8}{199}\sqrt{183}e^{16} + \frac{2}{199}\sqrt{366}e^{34}$	$(\frac{44}{199}, -\frac{16}{199}, \frac{97}{199}, -\frac{25}{199}, -\frac{78}{199}, \frac{28}{199}, \frac{72}{199})$ $+ \frac{122}{199}e^3 \otimes e_4 + \frac{12}{199}\sqrt{183}e^1 \otimes e_5$	{136, 146, 35, 45}
721:3	$0, 0, 0, 0, 0, \frac{13}{329}\sqrt{30}e^{12}, \frac{39}{329}\sqrt{22}e^{16} + \frac{104}{329}e^{34}$	$(\frac{65}{329}, -\frac{104}{329}, \frac{13}{329}, \frac{13}{329}, \frac{195}{329}, -\frac{39}{329}, \frac{26}{329})$ $+ \frac{130}{329}\sqrt{3}e^5 \otimes e_7 + \frac{26}{329}\sqrt{67}e^1 \otimes e_2$	{13456, 156, 2367}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
721:3	$0, 0, 0, 0, 0, \frac{2}{637}\sqrt{7170}e^{12}, \frac{2}{637}\sqrt{32982}e^{16} + \frac{8}{637}\sqrt{239}e^{34}$	$(\frac{230}{637}, -\frac{248}{637}, \frac{345}{637}, -\frac{19}{91}, \frac{90}{637}, -\frac{18}{637}, \frac{212}{637})$ $+ \frac{478}{637}e^3 \otimes e_4 + \frac{4}{637}\sqrt{18403}e^1 \otimes e_2$	{1356, 136, 1456, 146}
721:3	$0, 0, 0, 0, 0, \frac{26}{827}\sqrt{30}e^{12}, \frac{78}{827}\sqrt{22}e^{16} + \frac{208}{827}e^{34}$	$(\frac{130}{827}, -\frac{208}{827}, \frac{195}{827}, -\frac{143}{827}, \frac{390}{827}, -\frac{78}{827}, \frac{52}{827})$ $+ \frac{260}{827}\sqrt{3}e^5 \otimes e_7 + \frac{338}{827}e^3 \otimes e_4 + \frac{52}{827}\sqrt{67}e^1 \otimes e_2$	{2367, 2467}
721:3	$0, 0, 0, 0, 0, \frac{2}{163}\sqrt{2074}e^{12}, \frac{2}{163}\sqrt{366}e^{16} + \frac{2}{163}\sqrt{366}e^{34}$	$(-\frac{16}{163}, \frac{68}{163}, \frac{79}{163}, -\frac{43}{163}, -\frac{54}{163}, \frac{52}{163}, \frac{36}{163})$ $+ \frac{122}{163}e^3 \otimes e_4 + \frac{2}{163}\sqrt{4758}e^2 \otimes e_5$	{1237, 1247, 2367, 2467}
721:4	$0, 0, 0, 0, 0, \frac{32}{109}\sqrt{10}e^{12}, \frac{16}{109}\sqrt{11}e^{13} + \frac{48}{109}e^{26} + \frac{48}{109}e^{45}$	$(\frac{80}{109}, -\frac{24}{109}, -\frac{48}{109}, \frac{16}{109}, \frac{16}{109}, \frac{56}{109}, \frac{32}{109})$ $+ \frac{32}{109}\sqrt{21}e^1 \otimes e_3$	{23456, 236, 3, 345}
721:4	$0, 0, 0, 0, 0, \frac{8}{53}\sqrt{10}e^{12}, \frac{4}{53}\sqrt{10}e^{13} + \frac{4}{53}\sqrt{30}e^{26} + \frac{4}{53}\sqrt{30}e^{45}$	$(\frac{8}{53}, \frac{6}{53}, \frac{12}{53}, \frac{50}{53}, -\frac{30}{53}, \frac{14}{53}, \frac{20}{53})$ $+ \frac{80}{53}e^4 \otimes e_5$	{1247, 1257, 1467, 1567}
72:1	$0, 0, 0, 0, 0, \frac{2}{17}\sqrt{13}e^{12}, \frac{2}{17}\sqrt{13}e^{13}$	$(\frac{2}{17}, \frac{3}{17}, \frac{3}{17}, 1, -\frac{9}{17}, \frac{5}{17}, \frac{5}{17})$ $+ \frac{26}{17}e^4 \otimes e_5$	{1234, 1235, 1247, 1257, 1467, 1567, 23467, 23567, 246, 256, 4, 5}
72:1	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{3}e^{12}, \frac{1}{4}\sqrt{3}e^{13}$	$(-\frac{3}{8}, \frac{5}{16}, \frac{5}{16}, \frac{1}{8}, \frac{1}{8}, -\frac{1}{16}, -\frac{1}{16})$ $+ \frac{1}{8}\sqrt{21}e^2 \otimes e_7 - \frac{1}{8}\sqrt{21}e^3 \otimes e_6$	{123, 1234, 12345, 14567, 1467, 167, 2456, 246, 26}
72:1	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{3}e^{12}, \frac{1}{4}\sqrt{3}e^{13}$	$(-\frac{3}{8}, \frac{5}{16}, \frac{5}{16}, \frac{1}{8}, \frac{1}{8}, -\frac{1}{16}, -\frac{1}{16})$ $+ \frac{1}{8}\sqrt{21}e^2 \otimes e_7 + \frac{1}{8}\sqrt{21}e^3 \otimes e_6$	{123, 1234, 12345, 14567, 1467, 167, 2456, 246, 26}
72:1	$0, 0, 0, 0, 0, \frac{1}{229}\sqrt{16422}e^{12}, \frac{2}{229}\sqrt{1309}e^{13}$	$(-\frac{61}{229}, \frac{66}{229}, \frac{8}{229}, \frac{124}{229}, \frac{30}{229}, \frac{5}{229}, -\frac{53}{229})$ $+ \frac{2}{229}\sqrt{5593}e^4 \otimes e_6 + \frac{7}{229}\sqrt{510}e^2 \otimes e_7$	{1234, 12345, 1567, 167, 256, 26, 3457, 347}
72:1	$0, 0, 0, 0, 0, \frac{3}{32}\sqrt{14}e^{12}, \frac{1}{32}\sqrt{70}e^{13}$	$(-\frac{1}{64}, \frac{9}{64}, -\frac{1}{16}, -\frac{15}{64}, \frac{11}{32}, \frac{1}{8}, -\frac{5}{64})$ $+ \frac{1}{8}\sqrt{7}e^5 \otimes e_6 + \frac{7}{32}\sqrt{3}e^1 \otimes e_4 + \frac{7}{32}\sqrt{3}e^2 \otimes e_7$	{1235, 167, 246, 3457}
72:1	$0, 0, 0, 0, 0, \frac{6}{55}\sqrt{19}e^{12}, \frac{6}{55}\sqrt{19}e^{13}$	$(-\frac{2}{11}, \frac{27}{55}, -\frac{1}{55}, \frac{27}{55}, -\frac{1}{5}, \frac{17}{55}, -\frac{1}{5})$ $+ \frac{38}{55}e^4 \otimes e_5 + \frac{4}{55}\sqrt{133}e^2 \otimes e_7$	{1234, 1235, 1467, 1567, 246, 256, 347, 357}
72:1	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{3}e^{12}, \frac{1}{4}\sqrt{3}e^{13}$	$(\frac{1}{16}, \frac{5}{16}, -\frac{1}{8}, -\frac{5}{16}, \frac{1}{8}, \frac{3}{8}, -\frac{1}{16})$ $+ \frac{1}{8}\sqrt{21}e^1 \otimes e_4 + \frac{1}{8}\sqrt{21}e^2 \otimes e_7$	{123, 1235, 1567, 167, 2456, 246, 3457, 347}
72:1	$0, 0, 0, 0, 0, \frac{1}{229}\sqrt{16422}e^{12}, \frac{2}{229}\sqrt{1309}e^{13}$	$(-\frac{61}{229}, \frac{55}{229}, \frac{113}{229}, -\frac{64}{229}, \frac{30}{229}, -\frac{6}{229}, \frac{52}{229})$ $+ \frac{2}{229}\sqrt{5593}e^2 \otimes e_4 + \frac{7}{229}\sqrt{510}e^3 \otimes e_6$	{123, 1235, 14567, 1467, 256, 26, 3457, 347}
72:1	$0, 0, 0, 0, 0, \frac{16}{175}\sqrt{22}e^{12}, \frac{2}{175}\sqrt{374}e^{13}$	$(\frac{4}{35}, \frac{3}{175}, -\frac{24}{175}, -\frac{41}{175}, \frac{67}{175}, \frac{23}{175}, -\frac{4}{175})$ $+ \frac{12}{175}\sqrt{33}e^1 \otimes e_3 + \frac{12}{175}\sqrt{33}e^2 \otimes e_4 + \frac{12}{175}\sqrt{33}e^5 \otimes e_6$	{125, 146, 236, 345}
72:1	$0, 0, 0, 0, 0, \frac{1}{229}\sqrt{16422}e^{12}, \frac{2}{229}\sqrt{1309}e^{13}$	$(\frac{33}{229}, \frac{66}{229}, -\frac{86}{229}, \frac{30}{229}, \frac{30}{229}, \frac{99}{229}, -\frac{53}{229})$ $+ \frac{2}{229}\sqrt{5593}e^1 \otimes e_3 + \frac{7}{229}\sqrt{510}e^2 \otimes e_7$	{14567, 1467, 167, 3457, 347, 37}
72:1	$0, 0, 0, 0, 0, \frac{1}{7}\sqrt{10}e^{12}, \frac{1}{7}\sqrt{10}e^{13}$	$(-\frac{1}{7}, \frac{3}{7}, \frac{3}{7}, -\frac{2}{7}, -\frac{2}{7}, \frac{2}{7}, \frac{2}{7})$ $+ \frac{1}{7}\sqrt{30}e^2 \otimes e_4 + \frac{1}{7}\sqrt{30}e^3 \otimes e_5$	{123, 1257, 14567, 2367, 256, 45}
72:1	$0, 0, 0, 0, 0, \frac{8}{23}\sqrt{7}e^{12}, \frac{2}{23}\sqrt{14}e^{13}$	$(-\frac{2}{23}, -\frac{3}{23}, \frac{6}{23}, 1, \frac{5}{23}, -\frac{5}{23}, \frac{4}{23})$ $+ \frac{12}{23}\sqrt{7}e^4 \otimes e_6$	{123457, 12347, 124, 1245, 13567, 1367, 156, 16, 2356, 236, 2567, 267, 34, 345, 457, 47}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
72:1	$0, 0, 0, 0, 0, \frac{1}{7}\sqrt{10}e^{12}, \frac{1}{7}\sqrt{10}e^{13}$	$(\frac{2}{7}, -\frac{3}{7}, 0, \frac{4}{7}, \frac{1}{7}, -\frac{1}{7}, \frac{2}{7})$ $+ \frac{1}{7}\sqrt{30}e^1 \otimes e_2 + \frac{1}{7}\sqrt{30}e^4 \otimes e_6$	{1356, 136, 1567, 167, 23567, 2367, 256, 26}
72:1	$0, 0, 0, 0, 0, \frac{1}{20}\sqrt{85}e^{12}, \frac{1}{40}\sqrt{34}e^{13}$	$(\frac{13}{80}, \frac{3}{16}, -\frac{21}{80}, -\frac{19}{80}, \frac{13}{40}, \frac{7}{20}, -\frac{1}{10})$ $+ \frac{3}{40}\sqrt{34}e^5 \otimes e_7 + \frac{3}{40}\sqrt{51}e^1 \otimes e_3 + \frac{3}{40}\sqrt{51}e^2 \otimes e_4$	{127, 1467, 2367, 347}
72:1	$0, 0, 0, 0, 0, \frac{1}{7}\sqrt{10}e^{12}, \frac{1}{7}\sqrt{10}e^{13}$	$(-\frac{1}{7}, \frac{3}{7}, 0, \frac{4}{7}, -\frac{2}{7}, \frac{2}{7}, -\frac{1}{7})$ $+ \frac{1}{7}\sqrt{30}e^2 \otimes e_5 + \frac{1}{7}\sqrt{30}e^4 \otimes e_7$	{1234, 127, 13456, 1567, 2367, 246, 357, 45}
72:1	$0, 0, 0, 0, 0, \frac{1}{7}\sqrt{10}e^{12}, \frac{1}{7}\sqrt{10}e^{13}$	$(-\frac{1}{7}, 0, 0, \frac{4}{7}, \frac{4}{7}, -\frac{1}{7}, -\frac{1}{7})$ $+ \frac{1}{7}\sqrt{30}e^4 \otimes e_6 + \frac{1}{7}\sqrt{30}e^5 \otimes e_7$	{12345, 1247, 167, 2367, 256, 45}
72:1	$0, 0, 0, 0, 0, \frac{1}{40}\sqrt{34}e^{12}, \frac{1}{20}\sqrt{85}e^{13}$	$(\frac{13}{80}, -\frac{21}{80}, -\frac{3}{20}, \frac{13}{40}, \frac{7}{16}, -\frac{1}{10}, \frac{1}{80})$ $+ \frac{3}{40}\sqrt{34}e^4 \otimes e_6 + \frac{3}{40}\sqrt{51}e^1 \otimes e_2 + \frac{3}{40}\sqrt{51}e^5 \otimes e_7$	{1356, 167, 2367, 256}
72:1	$0, 0, 0, 0, 0, \frac{8}{23}\sqrt{7}e^{12}, \frac{2}{23}\sqrt{14}e^{13}$	$(-\frac{2}{23}, \frac{15}{23}, \frac{6}{23}, -\frac{13}{23}, \frac{5}{23}, \frac{13}{23}, \frac{4}{23})$ $+ \frac{12}{23}\sqrt{7}e^2 \otimes e_4$	{12, 12357, 1237, 125, 134567, 13467, 1456, 146, 2356, 236, 2567, 267, 34, 345, 457, 47}
72:1	$0, 0, 0, 0, 0, \frac{8}{175}\sqrt{62}e^{12}, \frac{8}{175}\sqrt{62}e^{13}$	$(-\frac{46}{175}, \frac{33}{175}, \frac{7}{25}, -\frac{29}{175}, \frac{13}{35}, -\frac{13}{175}, \frac{3}{175})$ $+ \frac{2}{175}\sqrt{1457}e^2 \otimes e_4 + \frac{2}{175}\sqrt{1457}e^5 \otimes e_7 + \frac{6}{175}\sqrt{217}e^3 \otimes e_6$	{1235, 1467, 256, 347}
72:1	$0, 0, 0, 0, 0, \frac{1}{6}\sqrt{19}e^{12}, \frac{1}{6}\sqrt{19}e^{13}$	$(-\frac{5}{18}, \frac{3}{4}, -\frac{1}{36}, \frac{2}{9}, \frac{2}{9}, \frac{17}{36}, -\frac{11}{36})$ $+ \frac{1}{9}\sqrt{133}e^2 \otimes e_7$	{123, 1234, 12345, 14567, 1467, 167, 2456, 246, 26, 3457, 347, 37}
72:1	$0, 0, 0, 0, 0, \frac{8}{61}\sqrt{22}e^{12}, \frac{8}{61}\sqrt{5}e^{13}$	$(\frac{17}{61}, \frac{12}{61}, -\frac{15}{61}, -\frac{20}{61}, \frac{7}{61}, \frac{29}{61}, \frac{2}{61})$ $+ \frac{24}{61}\sqrt{3}e^1 \otimes e_3 + \frac{24}{61}\sqrt{3}e^2 \otimes e_4$	{12, 125, 1456, 146, 2356, 236, 34, 345}
72:1	$0, 0, 0, 0, 0, \frac{2}{23}\sqrt{14}e^{12}, \frac{8}{23}\sqrt{7}e^{13}$	$(\frac{16}{23}, -\frac{12}{23}, -\frac{3}{23}, \frac{5}{23}, \frac{5}{23}, \frac{4}{23}, \frac{13}{23})$ $+ \frac{12}{23}\sqrt{7}e^1 \otimes e_2$	{13, 134, 1345, 1457, 147, 17, 2, 23457, 2347, 237, 24, 245}
72:1	$0, 0, 0, 0, 0, \frac{1}{229}\sqrt{16422}e^{12}, \frac{2}{229}\sqrt{1309}e^{13}$	$(\frac{44}{229}, -\frac{39}{229}, \frac{8}{229}, \frac{124}{229}, -\frac{75}{229}, \frac{5}{229}, \frac{52}{229})$ $+ \frac{2}{229}\sqrt{5593}e^4 \otimes e_6 + \frac{7}{229}\sqrt{510}e^1 \otimes e_5$	{1234, 1247, 136, 167, 23567, 256, 3457, 45}
72:1	$0, 0, 0, 0, 0, \frac{2}{37}\sqrt{14}e^{12}, \frac{8}{37}\sqrt{7}e^{13}$	$(\frac{16}{37}, -\frac{12}{37}, -\frac{3}{37}, \frac{19}{37}, -\frac{9}{37}, \frac{4}{37}, \frac{13}{37})$ $+ \frac{12}{37}\sqrt{7}e^1 \otimes e_2 + \frac{28}{37}e^4 \otimes e_5$	{134, 135, 147, 157, 2347, 2357, 24, 25}
72:1	$0, 0, 0, 0, 0, \frac{8}{61}\sqrt{5}e^{12}, \frac{8}{61}\sqrt{22}e^{13}$	$(\frac{17}{61}, -\frac{15}{61}, -\frac{15}{61}, \frac{34}{61}, \frac{7}{61}, \frac{2}{61}, \frac{2}{61})$ $+ \frac{24}{61}\sqrt{3}e^1 \otimes e_2 + \frac{24}{61}\sqrt{3}e^4 \otimes e_7$	{134, 1345, 157, 17, 2357, 237, 24, 245}
72:1	$0, 0, 0, 0, 0, \frac{2}{577}\sqrt{16422}e^{12}, \frac{4}{577}\sqrt{1309}e^{13}$	$(\frac{66}{577}, \frac{132}{577}, -\frac{172}{577}, -\frac{59}{577}, \frac{179}{577}, \frac{198}{577}, -\frac{106}{577})$ $+ \frac{14}{577}\sqrt{510}e^2 \otimes e_7 + \frac{238}{577}e^5 \otimes e_4 + \frac{4}{577}\sqrt{5593}e^1 \otimes e_3$	{1467, 1567, 347, 357}
72:1	$0, 0, 0, 0, 0, \frac{1}{6}\sqrt{19}e^{12}, \frac{1}{6}\sqrt{19}e^{13}$	$(\frac{1}{2}, -\frac{1}{36}, -\frac{1}{36}, -\frac{5}{9}, \frac{2}{9}, \frac{17}{36}, \frac{17}{36})$ $+ \frac{1}{9}\sqrt{133}e^1 \otimes e_4$	{123, 1235, 1257, 127, 1567, 167, 234567, 23467, 2456, 246, 4, 45}
72:1	$0, 0, 0, 0, 0, \frac{1}{229}\sqrt{16422}e^{12}, \frac{2}{229}\sqrt{1309}e^{13}$	$(\frac{44}{229}, \frac{55}{229}, \frac{8}{229}, -\frac{75}{229}, -\frac{64}{229}, \frac{99}{229}, \frac{52}{229})$ $+ \frac{2}{229}\sqrt{5593}e^2 \otimes e_5 + \frac{7}{229}\sqrt{510}e^1 \otimes e_4$	{123, 127, 1356, 1567, 23467, 246, 3457, 45}
72:1	$0, 0, 0, 0, 0, \frac{8}{61}\sqrt{22}e^{12}, \frac{8}{61}\sqrt{5}e^{13}$	$(-\frac{10}{61}, \frac{12}{61}, \frac{12}{61}, \frac{34}{61}, -\frac{20}{61}, \frac{2}{61}, \frac{2}{61})$ $+ \frac{24}{61}\sqrt{3}e^2 \otimes e_5 + \frac{24}{61}\sqrt{3}e^4 \otimes e_6$	{12347, 124, 13567, 156, 236, 267, 345, 457}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
72:1	$0, 0, 0, 0, 0, \frac{4}{19}\sqrt{3}e^{12}, \frac{4}{19}\sqrt{3}e^{13}$	$(-\frac{6}{19}, \frac{5}{19}, \frac{5}{19}, -\frac{1}{19}, \frac{5}{19}, -\frac{1}{19}, -\frac{1}{19})$ $+ \frac{2}{19}\sqrt{21}e^2 \otimes e_7 + \frac{2}{19}\sqrt{21}e^3 \otimes e_6 + \frac{6}{19}e^5 \otimes e_4$	{1234, 1235, 1467, 1567, 246, 256}
72:1	$0, 0, 0, 0, 0, \frac{4}{19}\sqrt{3}e^{12}, \frac{4}{19}\sqrt{3}e^{13}$	$(-\frac{6}{19}, \frac{5}{19}, \frac{5}{19}, -\frac{1}{19}, \frac{5}{19}, -\frac{1}{19}, -\frac{1}{19})$ $+ \frac{2}{19}\sqrt{21}e^2 \otimes e_7 - \frac{2}{19}\sqrt{21}e^3 \otimes e_6 + \frac{6}{19}e^5 \otimes e_4$	{1234, 1235, 1467, 1567, 246, 256}
72:1	$0, 0, 0, 0, 0, \frac{1}{157}\sqrt{4386}e^{12}, \frac{2}{157}\sqrt{86}e^{13}$	$(\frac{6}{157}, \frac{12}{157}, -\frac{37}{157}, \frac{14}{157}, \frac{61}{157}, \frac{18}{157}, -\frac{31}{157})$ $+ \frac{1}{157}\sqrt{4042}e^1 \otimes e_3 + \frac{1}{157}\sqrt{4042}e^5 \otimes e_6 + \frac{7}{157}\sqrt{86}e^2 \otimes e_7$	{1467, 167, 3457, 357}
72:2	$0, 0, 0, 0, 0, \frac{12}{211}\sqrt{37}e^{12}, \frac{2}{211}\sqrt{2146}e^{34}$	$(\frac{25}{211}, -\frac{49}{211}, \frac{50}{211}, -\frac{34}{211}, \frac{90}{211}, -\frac{24}{211}, \frac{16}{211})$ $+ \frac{2}{211}\sqrt{2442}e^5 \otimes e_7 + \frac{4}{211}\sqrt{777}e^3 \otimes e_6 + \frac{74}{211}e^1 \otimes e_2$	{1467, 156, 2467, 256}
72:2	$0, 0, 0, 0, 0, \frac{1}{87}\sqrt{2146}e^{12}, \frac{2}{29}\sqrt{37}e^{34}$	$(\frac{16}{87}, \frac{25}{87}, -\frac{2}{29}, -\frac{2}{29}, -\frac{7}{87}, \frac{41}{87}, -\frac{4}{29})$ $+ \frac{1}{87}\sqrt{2442}e^1 \otimes e_5 + \frac{2}{87}\sqrt{777}e^2 \otimes e_7$	{12, 1234, 1367, 23456, 256, 357}
72:2	$0, 0, 0, 0, 0, \frac{4}{9}\sqrt{3}e^{12}, \frac{4}{9}\sqrt{3}e^{34}$	$(\frac{2}{3}, -\frac{1}{9}, -\frac{1}{9}, -\frac{1}{9}, \frac{2}{9}, \frac{5}{9}, -\frac{2}{9})$ $+ \frac{4}{9}\sqrt{7}e^1 \otimes e_7$	{12, 1234, 12345, 125, 13456, 1346, 156, 16, 23567, 2367, 357, 37}
72:2	$0, 0, 0, 0, 0, \frac{1}{39}\sqrt{1222}e^{12}, \frac{1}{39}\sqrt{282}e^{34}$	$(-\frac{4}{39}, -\frac{4}{39}, \frac{2}{13}, \frac{2}{13}, 1, -\frac{8}{39}, \frac{4}{13})$ $+ \frac{2}{39}\sqrt{705}e^5 \otimes e_6$	{12345, 12357, 125, 1346, 1367, 16, 345, 357, 5}
72:2	$0, 0, 0, 0, 0, \frac{1}{87}\sqrt{2146}e^{12}, \frac{2}{29}\sqrt{37}e^{34}$	$(\frac{25}{87}, -\frac{17}{87}, -\frac{2}{29}, -\frac{2}{29}, \frac{15}{87}, \frac{8}{87}, -\frac{4}{29})$ $+ \frac{1}{87}\sqrt{2442}e^5 \otimes e_6 + \frac{2}{87}\sqrt{777}e^1 \otimes e_7$	{12345, 125, 1346, 16, 2367, 357}
72:2	$0, 0, 0, 0, 0, \frac{2}{125}\sqrt{282}e^{12}, \frac{2}{125}\sqrt{1222}e^{34}$	$(\frac{59}{125}, -\frac{7}{25}, \frac{52}{125}, -\frac{8}{125}, \frac{42}{125}, \frac{24}{125}, \frac{44}{125})$ $+ \frac{4}{125}\sqrt{705}e^3 \otimes e_5 + \frac{94}{125}e^1 \otimes e_2$	{1346, 1367, 14567, 156, 2346, 2367, 24567, 256}
72:2	$0, 0, 0, 0, 0, \frac{1}{86}\sqrt{1222}e^{12}, \frac{1}{86}\sqrt{282}e^{34}$	$(\frac{39}{172}, -\frac{55}{172}, \frac{59}{172}, -\frac{35}{172}, \frac{39}{86}, -\frac{4}{43}, \frac{6}{43})$ $+ \frac{1}{43}\sqrt{705}e^5 \otimes e_6 + \frac{47}{86}e^1 \otimes e_2 + \frac{47}{86}e^3 \otimes e_4$	{1367, 1467, 2367, 2467}
72:2	$0, 0, 0, 0, 0, \frac{2}{25}\sqrt{38}e^{12}, \frac{2}{25}\sqrt{38}e^{34}$	$(\frac{23}{25}, -\frac{3}{5}, \frac{4}{25}, \frac{4}{25}, \frac{6}{25}, \frac{8}{25}, \frac{8}{25})$ $+ \frac{38}{25}e^1 \otimes e_2$	{13456, 1346, 13567, 1367, 156, 16, 23456, 2346, 23567, 2367, 256, 26}
72:2	$0, 0, 0, 0, 0, \frac{1}{39}\sqrt{1222}e^{12}, \frac{1}{39}\sqrt{282}e^{34}$	$(\frac{2}{3}, -\frac{4}{39}, \frac{2}{13}, \frac{2}{13}, -\frac{7}{13}, \frac{22}{39}, \frac{4}{13})$ $+ \frac{2}{39}\sqrt{705}e^1 \otimes e_5$	{12, 1234, 1237, 1346, 1367, 16, 23456, 23567, 256, 345, 357, 5}
72:2	$0, 0, 0, 0, 0, \frac{1}{6}\sqrt{5}e^{12}, \frac{1}{6}\sqrt{5}e^{34}$	$(\frac{11}{48}, -\frac{5}{24}, \frac{11}{48}, -\frac{5}{24}, \frac{1}{8}, \frac{1}{48}, \frac{1}{48})$ $+ \frac{1}{24}\sqrt{105}e^1 \otimes e_7 + \frac{1}{24}\sqrt{105}e^3 \otimes e_6$	{1234, 12345, 156, 16, 24567, 2467}
72:2	$0, 0, 0, 0, 0, \frac{2}{125}\sqrt{282}e^{12}, \frac{2}{125}\sqrt{1222}e^{34}$	$(\frac{59}{125}, -\frac{7}{25}, -\frac{8}{125}, -\frac{8}{125}, \frac{78}{125}, \frac{24}{125}, -\frac{16}{125})$ $+ \frac{4}{125}\sqrt{705}e^5 \otimes e_7 + \frac{94}{125}e^1 \otimes e_2$	{13456, 1367, 156, 23456, 2367, 256}
72:2	$0, 0, 0, 0, 0, \frac{2}{125}\sqrt{1222}e^{12}, \frac{2}{125}\sqrt{282}e^{34}$	$(\frac{39}{125}, -\frac{11}{25}, \frac{12}{125}, \frac{12}{125}, \frac{78}{125}, -\frac{16}{125}, \frac{24}{125})$ $+ \frac{4}{125}\sqrt{705}e^5 \otimes e_6 + \frac{94}{125}e^1 \otimes e_2$	{1346, 1367, 16, 2346, 2367, 26}
72:2	$0, 0, 0, 0, 0, \frac{1}{87}\sqrt{2146}e^{12}, \frac{2}{29}\sqrt{37}e^{34}$	$(\frac{16}{87}, -\frac{17}{87}, \frac{12}{29}, -\frac{2}{29}, -\frac{7}{29}, -\frac{1}{87}, \frac{10}{29})$ $+ \frac{1}{87}\sqrt{2442}e^1 \otimes e_5 + \frac{2}{87}\sqrt{777}e^3 \otimes e_6$	{1234, 1237, 1467, 16, 24567, 256, 345, 357}
72:2	$0, 0, 0, 0, 0, \frac{4}{13}\sqrt{3}e^{12}, \frac{4}{13}\sqrt{3}e^{34}$	$(\frac{3}{13}, -\frac{5}{13}, \frac{6}{13}, -\frac{1}{13}, \frac{2}{13}, -\frac{2}{13}, \frac{5}{13})$ $+ \frac{4}{13}\sqrt{7}e^3 \otimes e_6 + \frac{8}{13}e^1 \otimes e_2$	{14567, 1467, 156, 16, 24567, 2467, 256, 26}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
72:2	$0, 0, 0, 0, 0, \frac{1}{22}\sqrt{38}e^{12}, \frac{1}{22}\sqrt{38}e^{34}$	$(\frac{23}{44}, -\frac{15}{44}, \frac{23}{44}, -\frac{15}{44}, \frac{3}{22}, \frac{2}{11}, \frac{2}{11})$ $+\frac{19}{22}e^1 \otimes e_2 + \frac{19}{22}e^3 \otimes e_4$	{13567, 1367, 14567, 1467, 24567, 2467}
72:3	$0, 0, 0, 0, 0, \frac{2}{43}\sqrt{110}e^{12}, \frac{4}{43}\sqrt{66}e^{13} + \frac{4}{43}\sqrt{66}e^{24}$	$(\frac{2}{43}, \frac{2}{43}, -\frac{3}{43}, -\frac{3}{43}, 1, \frac{4}{43}, -\frac{1}{43})$ $+\frac{4}{43}\sqrt{187}e^5 \otimes e_7$	{123456, 1267, 135, 147, 3467, 56}
72:3	$0, 0, 0, 0, 0, \frac{4}{157}\sqrt{110}e^{12}, \frac{60}{157}\sqrt{2}e^{13} + \frac{4}{157}\sqrt{110}e^{24}$	$(-\frac{35}{157}, -\frac{1}{157}, \frac{44}{157}, \frac{10}{157}, \frac{89}{157}, -\frac{36}{157}, \frac{9}{157})$ $+\frac{8}{157}\sqrt{170}e^3 \otimes e_6 + \frac{8}{157}\sqrt{170}e^5 \otimes e_7$	{12345, 1467, 2456, 347}
72:3	$0, 0, 0, 0, 0, \frac{8}{17}e^{12}, \frac{2}{17}\sqrt{6}e^{13} + \frac{8}{17}e^{24}$	$(\frac{8}{17}, -\frac{3}{17}, -\frac{4}{17}, \frac{7}{17}, -\frac{5}{17}, \frac{5}{17}, \frac{4}{17})$ $+\frac{4}{17}\sqrt{11}e^1 \otimes e_3 + \frac{4}{17}\sqrt{11}e^4 \otimes e_5$	{124, 156, 2346, 35}
72:3	$0, 0, 0, 0, 0, \frac{4}{43}\sqrt{66}e^{12}, \frac{4}{43}\sqrt{66}e^{13} + \frac{2}{43}\sqrt{110}e^{24}$	$(\frac{19}{43}, \frac{2}{43}, -\frac{3}{43}, \frac{14}{43}, -\frac{25}{43}, \frac{21}{43}, \frac{16}{43})$ $+\frac{4}{43}\sqrt{187}e^1 \otimes e_5$	{123, 1247, 1346, 167, 234567, 256, 357, 45}
72:3	$0, 0, 0, 0, 0, \frac{10}{59}\sqrt{7}e^{12}, \frac{5}{59}\sqrt{3}e^{13} + \frac{5}{59}\sqrt{3}e^{24}$	$(\frac{10}{59}, \frac{10}{59}, -\frac{15}{59}, -\frac{15}{59}, \frac{20}{59}, \frac{20}{59}, -\frac{5}{59})$ $+\frac{10}{59}\sqrt{7}e^5 \otimes e_7 + \frac{5}{59}\sqrt{39}e^1 \otimes e_3 - \frac{5}{59}\sqrt{39}e^2 \otimes e_4$	{127, 1467, 347}
72:3	$0, 0, 0, 0, 0, \frac{10}{59}\sqrt{7}e^{12}, \frac{5}{59}\sqrt{3}e^{13} + \frac{5}{59}\sqrt{3}e^{24}$	$(\frac{10}{59}, \frac{10}{59}, -\frac{15}{59}, -\frac{15}{59}, \frac{20}{59}, \frac{20}{59}, -\frac{5}{59})$ $+\frac{10}{59}\sqrt{7}e^5 \otimes e_7 + \frac{5}{59}\sqrt{39}e^1 \otimes e_3 + \frac{5}{59}\sqrt{39}e^2 \otimes e_4$	{127, 1467, 347}
72:3	$0, 0, 0, 0, 0, \frac{5}{106}\sqrt{82}e^{12}, \frac{5}{106}\sqrt{17}e^{13} + \frac{5}{106}\sqrt{17}e^{24}$	$(\frac{15}{212}, \frac{15}{212}, -\frac{35}{212}, -\frac{35}{212}, \frac{20}{53}, \frac{15}{106}, -\frac{5}{53})$ $+\frac{5}{106}\sqrt{66}e^1 \otimes e_3 - \frac{5}{106}\sqrt{66}e^2 \otimes e_4 + \frac{5}{106}\sqrt{66}e^5 \otimes e_6$	{125, 146, 345}
72:3	$0, 0, 0, 0, 0, \frac{5}{106}\sqrt{82}e^{12}, \frac{5}{106}\sqrt{17}e^{13} + \frac{5}{106}\sqrt{17}e^{24}$	$(\frac{15}{212}, \frac{15}{212}, -\frac{35}{212}, -\frac{35}{212}, \frac{20}{53}, \frac{15}{106}, -\frac{5}{53})$ $+\frac{5}{106}\sqrt{66}e^1 \otimes e_3 + \frac{5}{106}\sqrt{66}e^2 \otimes e_4 + \frac{5}{106}\sqrt{66}e^5 \otimes e_6$	{125, 146, 345}
72:3	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{170}e^{12}, \frac{1}{14}\sqrt{17}e^{13} + \frac{1}{14}\sqrt{17}e^{24}$	$(\frac{19}{28}, -\frac{3}{28}, -\frac{15}{28}, \frac{1}{4}, \frac{3}{14}, \frac{4}{7}, \frac{1}{7})$ $+\frac{1}{14}\sqrt{374}e^1 \otimes e_3$	{12, 125, 1456, 146, 2356, 236, 34, 345}
72:3	$0, 0, 0, 0, 0, \frac{3}{34}\sqrt{23}e^{12}, \frac{1}{34}\sqrt{138}e^{13} + \frac{3}{34}\sqrt{23}e^{24}$	$(-\frac{5}{68}, -\frac{2}{17}, \frac{15}{34}, \frac{33}{68}, -\frac{4}{17}, -\frac{13}{68}, \frac{25}{68})$ $+\frac{1}{34}\sqrt{598}e^3 \otimes e_5 + \frac{2}{17}\sqrt{46}e^4 \otimes e_6$	{1234, 136, 2367, 347}
72:3	$0, 0, 0, 0, 0, \frac{19}{1019}\sqrt{370}e^{12}, \frac{19}{1019}\sqrt{6}e^{13} + \frac{38}{1019}\sqrt{93}e^{24}$	$(\frac{190}{1019}, -\frac{266}{1019}, -\frac{171}{1019}, \frac{285}{1019}, \frac{380}{1019}, -\frac{76}{1019}, \frac{19}{1019})$ $+\frac{19}{1019}\sqrt{546}e^1 \otimes e_3 + \frac{38}{1019}\sqrt{183}e^4 \otimes e_6 + \frac{95}{1019}\sqrt{22}e^5 \otimes e_7$	{2367, 347}
72:3	$0, 0, 0, 0, 0, \frac{2}{37}\sqrt{133}e^{12}, \frac{1}{37}\sqrt{95}e^{13} + \frac{1}{37}\sqrt{95}e^{24}$	$(\frac{9}{37}, -\frac{15}{74}, -\frac{10}{37}, \frac{13}{74}, \frac{41}{74}, \frac{3}{74}, -\frac{1}{37})$ $+\frac{1}{37}\sqrt{627}e^1 \otimes e_3 + \frac{1}{37}\sqrt{627}e^5 \otimes e_6$	{125, 146, 236, 345}
72:3	$0, 0, 0, 0, 0, \frac{60}{157}\sqrt{2}e^{12}, \frac{4}{157}\sqrt{110}e^{13} + \frac{4}{157}\sqrt{110}e^{24}$	$(\frac{33}{157}, -\frac{35}{157}, \frac{10}{157}, \frac{78}{157}, -\frac{47}{157}, -\frac{2}{157}, \frac{43}{157})$ $+\frac{8}{157}\sqrt{170}e^1 \otimes e_5 + \frac{8}{157}\sqrt{170}e^4 \otimes e_6$	{1234, 136, 23567, 3457}
72:3	$0, 0, 0, 0, 0, \frac{1}{19}\sqrt{66}e^{12}, \frac{1}{19}\sqrt{66}e^{13} + \frac{6}{19}e^{24}$	$(-\frac{1}{38}, -\frac{1}{38}, \frac{5}{19}, \frac{5}{19}, -\frac{13}{38}, -\frac{1}{19}, \frac{9}{38})$ $+\frac{1}{19}\sqrt{102}e^1 \otimes e_5 + \frac{1}{19}\sqrt{102}e^3 \otimes e_6$	{123, 167, 256, 357}
72:3	$0, 0, 0, 0, 0, \frac{1}{34}\sqrt{138}e^{12}, \frac{3}{34}\sqrt{23}e^{13} + \frac{3}{34}\sqrt{23}e^{24}$	$(\frac{21}{68}, -\frac{5}{68}, -\frac{25}{68}, \frac{1}{68}, \frac{21}{34}, \frac{4}{17}, -\frac{1}{17})$ $+\frac{1}{34}\sqrt{598}e^1 \otimes e_3 + \frac{2}{17}\sqrt{46}e^5 \otimes e_7$	{127, 1467, 2367, 347}
72:3	$0, 0, 0, 0, 0, \frac{12}{547}\sqrt{670}e^{12}, \frac{2}{547}\sqrt{8174}e^{13} + \frac{4}{547}\sqrt{2278}e^{24}$	$(\frac{170}{547}, -\frac{183}{547}, -\frac{98}{547}, \frac{255}{547}, \frac{65}{547}, -\frac{13}{547}, \frac{72}{547})$ $+\frac{16}{547}\sqrt{469}e^1 \otimes e_3 + \frac{4}{547}\sqrt{8643}e^4 \otimes e_6$	{124, 1245, 156, 16}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
72:3	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{170}e^{12}, \frac{1}{14}\sqrt{17}e^{13} + \frac{1}{14}\sqrt{17}e^{24}$	$(-\frac{3}{28}, -\frac{3}{28}, \frac{1}{4}, \frac{1}{4}, 1, -\frac{3}{14}, \frac{1}{7})$ $+ \frac{1}{14}\sqrt{374}e^5 \otimes e_6$	{123457, 125, 1367, 146, 345, 57}
72:3	$0, 0, 0, 0, 0, \frac{12}{547}\sqrt{670}e^{12}, \frac{2}{547}\sqrt{8174}e^{13} + \frac{4}{547}\sqrt{2278}e^{24}$	$(\frac{170}{547}, \frac{75}{547}, -\frac{98}{547}, -\frac{3}{547}, -\frac{193}{547}, \frac{245}{547}, \frac{72}{547})$ $+ \frac{16}{547}\sqrt{469}e^1 \otimes e_3 + \frac{4}{547}\sqrt{8643}e^2 \otimes e_5$	{124, 156, 2346, 35}
72:3	$0, 0, 0, 0, 0, \frac{4}{43}\sqrt{66}e^{12}, \frac{4}{43}\sqrt{66}e^{13} + \frac{2}{43}\sqrt{110}e^{24}$	$(-\frac{15}{43}, \frac{2}{43}, \frac{31}{43}, \frac{14}{43}, \frac{9}{43}, -\frac{13}{43}, \frac{16}{43})$ $+ \frac{4}{43}\sqrt{187}e^3 \otimes e_6$	{123, 1235, 1567, 167, 256, 26, 357, 37}
72:3	$0, 0, 0, 0, 0, \frac{2}{37}\sqrt{133}e^{12}, \frac{1}{37}\sqrt{95}e^{13} + \frac{1}{37}\sqrt{95}e^{24}$	$(\frac{9}{37}, \frac{9}{37}, -\frac{10}{37}, -\frac{10}{37}, \frac{4}{37}, \frac{18}{37}, -\frac{1}{37})$ $+ \frac{1}{37}\sqrt{627}e^1 \otimes e_3 - \frac{1}{37}\sqrt{627}e^2 \otimes e_4$	{12, 125, 1456, 146, 34, 345}
72:3	$0, 0, 0, 0, 0, \frac{2}{37}\sqrt{133}e^{12}, \frac{1}{37}\sqrt{95}e^{13} + \frac{1}{37}\sqrt{95}e^{24}$	$(\frac{9}{37}, \frac{9}{37}, -\frac{10}{37}, -\frac{10}{37}, \frac{4}{37}, \frac{18}{37}, -\frac{1}{37})$ $+ \frac{1}{37}\sqrt{627}e^1 \otimes e_3 + \frac{1}{37}\sqrt{627}e^2 \otimes e_4$	{12, 125, 1456, 146, 34, 345}
72:3	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{17}e^{12}, \frac{1}{14}\sqrt{170}e^{13} + \frac{1}{14}\sqrt{17}e^{24}$	$(-\frac{3}{28}, \frac{2}{7}, \frac{9}{14}, \frac{1}{4}, -\frac{4}{7}, \frac{5}{28}, \frac{15}{28})$ $+ \frac{1}{14}\sqrt{374}e^3 \otimes e_5$	{1236, 124567, 134, 157, 2347, 25, 367, 456}
72:4	$0, 0, 0, 0, 0, \frac{1}{5}\sqrt{15}e^{13} + \frac{1}{5}\sqrt{5}e^{24}, -\frac{1}{5}\sqrt{15}e^{12} + \frac{1}{5}\sqrt{5}e^{34}$	$(\frac{2}{5}, 0, 0, \frac{2}{5}, -\frac{3}{5}, \frac{2}{5}, \frac{2}{5})$ $+ \frac{2}{5}\sqrt{10}e^1 \otimes e_5$	{123, 1246, 167, 234567, 257, 45, 123, 1246, 167, 234567, 257, 45}
72:4	$0, 0, 0, 0, 0, \frac{1}{5}\sqrt{15}e^{13} + \frac{1}{5}\sqrt{5}e^{24}, \frac{1}{5}\sqrt{15}e^{12} + \frac{1}{5}\sqrt{5}e^{34}$	$(\frac{2}{5}, 0, 0, \frac{2}{5}, -\frac{3}{5}, \frac{2}{5}, \frac{2}{5})$ $+ \frac{2}{5}\sqrt{10}e^1 \otimes e_5$	{123, 1246, 167, 234567, 257, 45, 123, 1246, 167, 234567, 257, 45}
72:4	$0, 0, 0, 0, 0, \frac{1}{5}\sqrt{15}e^{13} + \frac{1}{5}\sqrt{15}e^{24}, -\frac{1}{5}\sqrt{5}e^{12} + \frac{1}{5}\sqrt{5}e^{34}$	$(0, 0, 0, 0, 1, 0, 0)$ $+ \frac{2}{5}\sqrt{10}e^5 \otimes e_6$	{123457, 1267, 135, 146, 57, 123457, 1267, 135, 146, 57}
72:4	$0, 0, 0, 0, 0, \frac{1}{5}\sqrt{15}e^{13} + \frac{1}{5}\sqrt{15}e^{24}, \frac{1}{5}\sqrt{5}e^{12} + \frac{1}{5}\sqrt{5}e^{34}$	$(0, 0, 0, 0, 1, 0, 0)$ $+ \frac{2}{5}\sqrt{10}e^5 \otimes e_6$	{123457, 1267, 135, 146, 57, 123457, 1267, 135, 146, 57}
72:5	$0, 0, 0, 0, 0, \frac{6}{553}\sqrt{1910}e^{12}, \frac{4}{553}\sqrt{4393}e^{13} + \frac{4}{553}\sqrt{191}e^{45}$	$(-\frac{102}{553}, -\frac{10}{553}, \frac{270}{553}, \frac{275}{553}, -\frac{107}{553}, -\frac{16}{79}, \frac{24}{79})$ $+ \frac{2}{553}\sqrt{53862}e^3 \otimes e_6 + \frac{382}{553}e^4 \otimes e_5$	{1234, 1235, 246, 256}
72:5	$0, 0, 0, 0, 0, \frac{1}{19}\sqrt{46}e^{12}, \frac{1}{19}\sqrt{322}e^{13} + \frac{1}{19}\sqrt{46}e^{45}$	$(\frac{13}{19}, -\frac{10}{19}, -\frac{3}{19}, \frac{5}{19}, \frac{5}{19}, \frac{3}{19}, \frac{10}{19})$ $+ \frac{1}{19}\sqrt{690}e^1 \otimes e_2$	{134, 1457, 17, 23457, 237, 24}
72:5	$0, 0, 0, 0, 0, \frac{44}{573}\sqrt{46}e^{12}, \frac{22}{573}\sqrt{21}e^{13} + \frac{22}{573}\sqrt{113}e^{45}$	$(\frac{88}{573}, \frac{176}{573}, -\frac{154}{573}, -\frac{11}{191}, -\frac{11}{191}, \frac{88}{191}, -\frac{22}{191})$ $+ \frac{22}{573}\sqrt{213}e^1 \otimes e_3 + \frac{44}{573}\sqrt{70}e^2 \otimes e_7$	{1467, 347}
72:5	$0, 0, 0, 0, 0, \frac{11}{1487}\sqrt{1066}e^{12}, \frac{44}{1487}\sqrt{14}e^{13} + \frac{44}{1487}\sqrt{53}e^{45}$	$(\frac{44}{1487}, \frac{88}{1487}, -\frac{77}{1487}, -\frac{286}{1487}, \frac{253}{1487}, \frac{132}{1487}, -\frac{33}{1487})$ $+ \frac{11}{1487}\sqrt{654}e^1 \otimes e_3 + \frac{11}{1487}\sqrt{966}e^2 \otimes e_7 + \frac{77}{1487}\sqrt{22}e^5 \otimes e_6$	{1245, 236}
72:5	$0, 0, 0, 0, 0, \frac{4}{197}\sqrt{345}e^{12}, \frac{20}{197}\sqrt{2}e^{13} + \frac{4}{197}\sqrt{345}e^{45}$	$(-\frac{35}{197}, \frac{39}{197}, \frac{34}{197}, \frac{44}{197}, -\frac{45}{197}, \frac{4}{197}, -\frac{1}{197})$ $+ \frac{4}{197}\sqrt{445}e^4 \otimes e_6 + \frac{8}{197}\sqrt{105}e^2 \otimes e_7$	{1245, 13567, 236, 47}
72:5	$0, 0, 0, 0, 0, \frac{4}{5}e^{12}, \frac{2}{5}\sqrt{2}e^{13} + \frac{4}{5}e^{45}$	$(0, -\frac{1}{5}, \frac{2}{5}, \frac{3}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{2}{5})$ $+ \frac{4}{5}\sqrt{2}e^4 \otimes e_6$	{12347, 1245, 13567, 16, 236, 2567, 345, 47}
72:5	$0, 0, 0, 0, 0, \frac{4}{29}\sqrt{11}e^{12}, \frac{2}{29}\sqrt{22}e^{13} + \frac{4}{29}\sqrt{11}e^{45}$	$(\frac{4}{29}, \frac{5}{29}, \frac{6}{29}, \frac{27}{29}, -\frac{17}{29}, \frac{9}{29}, \frac{10}{29})$ $+ \frac{44}{29}e^4 \otimes e_5$	{1247, 1257, 1467, 1567, 23467, 23567, 347, 357}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
72:5	$0, 0, 0, 0, 0, \frac{2}{21}\sqrt{53}e^{12}, \frac{1}{21}\sqrt{106}e^{13} + \frac{2}{21}\sqrt{53}e^{45}$	$(-\frac{13}{63}, \frac{5}{7}, \frac{5}{63}, -\frac{4}{63}, -\frac{4}{63}, \frac{32}{63}, -\frac{8}{63})$ $+ \frac{1}{9}\sqrt{106}e^2 \otimes e_7$	{123, 12345, 1467, 2456, 26, 347}
72:5	$0, 0, 0, 0, 0, \frac{2}{15}\sqrt{10}e^{12}, \frac{1}{15}\sqrt{30}e^{13} + \frac{2}{15}\sqrt{5}e^{45}$	$(-\frac{1}{3}, \frac{1}{3}, \frac{1}{3}, 0, 0, 0, 0)$ $+ \frac{1}{15}\sqrt{70}e^2 \otimes e_7 - \frac{2}{15}\sqrt{15}e^3 \otimes e_6$	{123, 12345, 1467, 2456, 26, 347}
72:5	$0, 0, 0, 0, 0, \frac{2}{15}\sqrt{10}e^{12}, \frac{1}{15}\sqrt{30}e^{13} + \frac{2}{15}\sqrt{5}e^{45}$	$(-\frac{1}{3}, \frac{1}{3}, \frac{1}{3}, 0, 0, 0, 0)$ $+ \frac{1}{15}\sqrt{70}e^2 \otimes e_7 + \frac{2}{15}\sqrt{15}e^3 \otimes e_6$	{123, 12345, 1467, 2456, 26, 347}
72:5	$0, 0, 0, 0, 0, \frac{3}{181}\sqrt{1910}e^{12}, \frac{2}{181}\sqrt{4393}e^{13} + \frac{2}{181}\sqrt{191}e^{45}$	$(-\frac{51}{181}, -\frac{5}{181}, \frac{135}{181}, \frac{42}{181}, \frac{42}{181}, -\frac{56}{181}, \frac{84}{181})$ $+ \frac{1}{181}\sqrt{53862}e^3 \otimes e_6$	{1234, 14567, 167, 246, 3457, 37}
72:5	$0, 0, 0, 0, 0, \frac{4}{193}\sqrt{646}e^{12}, \frac{2}{193}\sqrt{1190}e^{13} + \frac{4}{193}\sqrt{442}e^{45}$	$(\frac{54}{193}, -\frac{53}{193}, -\frac{14}{193}, \frac{69}{193}, -\frac{29}{193}, \frac{1}{193}, \frac{40}{193})$ $+ \frac{24}{193}\sqrt{17}e^1 \otimes e_3 + \frac{28}{193}\sqrt{17}e^4 \otimes e_6$	{1245, 16, 236, 345}
72:5	$0, 0, 0, 0, 0, \frac{22}{347}\sqrt{46}e^{12}, \frac{11}{347}\sqrt{21}e^{13} + \frac{11}{347}\sqrt{113}e^{45}$	$(\frac{44}{347}, \frac{88}{347}, -\frac{77}{347}, -\frac{77}{347}, \frac{44}{347}, \frac{132}{347}, -\frac{33}{347})$ $+ \frac{11}{347}\sqrt{213}e^1 \otimes e_3 - \frac{121}{347}e^5 \otimes e_4 + \frac{22}{347}\sqrt{70}e^2 \otimes e_7$	{1467, 1567, 347, 357}
72:5	$0, 0, 0, 0, 0, \frac{22}{347}\sqrt{46}e^{12}, \frac{11}{347}\sqrt{21}e^{13} + \frac{11}{347}\sqrt{113}e^{45}$	$(\frac{44}{347}, \frac{88}{347}, -\frac{77}{347}, -\frac{77}{347}, \frac{44}{347}, \frac{132}{347}, -\frac{33}{347})$ $+ \frac{11}{347}\sqrt{213}e^1 \otimes e_3 + \frac{121}{347}e^5 \otimes e_4 + \frac{22}{347}\sqrt{70}e^2 \otimes e_7$	{1467, 1567, 347, 357}
72:5	$0, 0, 0, 0, 0, \frac{32}{189}\sqrt{3}e^{12}, \frac{8}{189}\sqrt{186}e^{13} + \frac{8}{189}\sqrt{39}e^{45}$	$(\frac{8}{63}, -\frac{8}{21}, \frac{16}{63}, \frac{4}{21}, \frac{4}{21}, -\frac{16}{63}, \frac{8}{21})$ $+ \frac{8}{189}\sqrt{237}e^1 \otimes e_2 + \frac{8}{63}\sqrt{29}e^3 \otimes e_6$	{14567, 167, 246}
72:5	$0, 0, 0, 0, 0, \frac{32}{237}\sqrt{3}e^{12}, \frac{8}{237}\sqrt{186}e^{13} + \frac{8}{237}\sqrt{39}e^{45}$	$(\frac{8}{79}, -\frac{24}{79}, \frac{16}{79}, -\frac{4}{79}, \frac{28}{79}, -\frac{16}{79}, \frac{24}{79})$ $+ \frac{32}{79}e^5 \otimes e_4 + \frac{8}{237}\sqrt{237}e^1 \otimes e_2 + \frac{8}{79}\sqrt{29}e^3 \otimes e_6$	{246, 256}
72:5	$0, 0, 0, 0, 0, \frac{4}{35}\sqrt{10}e^{12}, \frac{2}{35}\sqrt{30}e^{13} + \frac{4}{35}\sqrt{5}e^{45}$	$(-\frac{2}{7}, \frac{2}{7}, \frac{2}{7}, -\frac{1}{7}, \frac{1}{7}, 0, 0)$ $+ \frac{2}{35}\sqrt{70}e^2 \otimes e_7 + \frac{2}{7}e^5 \otimes e_4 + \frac{4}{35}\sqrt{15}e^3 \otimes e_6$	{1467, 1567, 347, 357}
72:5	$0, 0, 0, 0, 0, \frac{4}{35}\sqrt{10}e^{12}, \frac{2}{35}\sqrt{30}e^{13} + \frac{4}{35}\sqrt{5}e^{45}$	$(-\frac{2}{7}, \frac{2}{7}, \frac{2}{7}, -\frac{1}{7}, \frac{1}{7}, 0, 0)$ $+ \frac{2}{35}\sqrt{70}e^2 \otimes e_7 + \frac{2}{7}e^5 \otimes e_4 - \frac{4}{35}\sqrt{15}e^3 \otimes e_6$	{1467, 1567, 347, 357}
72:5	$0, 0, 0, 0, 0, \frac{8}{89}\sqrt{106}e^{12}, \frac{2}{89}\sqrt{371}e^{13} + \frac{6}{89}\sqrt{53}e^{45}$	$(\frac{64}{89}, -\frac{12}{89}, -\frac{42}{89}, \frac{11}{89}, \frac{11}{89}, \frac{52}{89}, \frac{22}{89})$ $+ \frac{2}{89}\sqrt{3657}e^1 \otimes e_3$	{12, 1245, 1456, 16, 23456, 236, 3, 345}
72:5	$0, 0, 0, 0, 0, \frac{2}{61}\sqrt{46}e^{12}, \frac{2}{61}\sqrt{322}e^{13} + \frac{2}{61}\sqrt{46}e^{45}$	$(\frac{26}{61}, -\frac{20}{61}, -\frac{6}{61}, \frac{33}{61}, -\frac{13}{61}, \frac{6}{61}, \frac{20}{61})$ $+ \frac{2}{61}\sqrt{690}e^1 \otimes e_2 + \frac{46}{61}e^4 \otimes e_5$	{134, 135, 24, 25}
72:5	$0, 0, 0, 0, 0, \frac{12}{179}\sqrt{53}e^{12}, \frac{6}{179}\sqrt{106}e^{13} + \frac{12}{179}\sqrt{53}e^{45}$	$(-\frac{26}{179}, \frac{90}{179}, \frac{10}{179}, \frac{45}{179}, -\frac{61}{179}, \frac{64}{179}, -\frac{16}{179})$ $+ \frac{106}{179}e^4 \otimes e_5 + \frac{14}{179}\sqrt{106}e^2 \otimes e_7$	{1467, 1567, 347, 357}
72:6	$0, 0, 0, 0, 0, \frac{1}{13}\sqrt{42}e^{13} + \frac{3}{13}\sqrt{2}e^{24}, \frac{1}{13}\sqrt{42}e^{12} + \frac{3}{13}\sqrt{2}e^{35}$	$(-\frac{3}{13}, \frac{6}{13}, \frac{6}{13}, -\frac{3}{13}, -\frac{3}{13}, \frac{3}{13}, \frac{3}{13})$ $+ \frac{1}{13}\sqrt{102}e^2 \otimes e_4 + \frac{1}{13}\sqrt{102}e^3 \otimes e_5$	{123, 45}
72:6	$0, 0, 0, 0, 0, \frac{1}{25}\sqrt{10}e^{13} + \frac{3}{25}\sqrt{10}e^{24}, \frac{1}{25}\sqrt{10}e^{12} + \frac{3}{25}\sqrt{10}e^{35}$	$(\frac{1}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, 0)$ $+ \frac{1}{25}\sqrt{110}e^4 \otimes e_7 + \frac{1}{25}\sqrt{110}e^5 \otimes e_6$	{12367, 2345}
72:6	$0, 0, 0, 0, 0, \frac{2}{43}\sqrt{26}e^{13} + \frac{4}{43}\sqrt{13}e^{24}, \frac{8}{43}\sqrt{26}e^{12} + \frac{4}{43}\sqrt{13}e^{35}$	$(-\frac{6}{43}, \frac{29}{43}, \frac{12}{43}, -\frac{23}{43}, \frac{11}{43}, \frac{6}{43}, \frac{23}{43})$ $+ \frac{4}{43}\sqrt{221}e^2 \otimes e_4$	{125, 147, 2357, 34}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
72:6	$0, 0, 0, 0, 0, \frac{10}{137}\sqrt{62}e^{13} + \frac{40}{137}\sqrt{6}e^{24} + \frac{40}{137}\sqrt{3}e^{12} + \frac{40}{137}\sqrt{6}e^{35}$	$(\frac{34}{137}, -\frac{45}{137}, \frac{10}{137}, \frac{89}{137}, -\frac{21}{137}, \frac{44}{137}, -\frac{11}{137})$ $+ \frac{20}{137}\sqrt{55}e^4 \otimes e_7$	{124, 157, 2567, 46}
72:6	$0, 0, 0, 0, 0, \frac{21}{83}\sqrt{2}e^{13} + \frac{42}{83}e^{24} + \frac{7}{83}\sqrt{6}e^{12} + \frac{42}{83}e^{35}$	$(\frac{7}{83}, \frac{21}{83}, -\frac{14}{83}, -\frac{28}{83}, \frac{42}{83}, -\frac{7}{83}, \frac{28}{83})$ $+ \frac{7}{83}\sqrt{46}e^2 \otimes e_4 + \frac{7}{83}\sqrt{94}e^5 \otimes e_6$	{146, 3467}
71:1	$0, 0, 0, 0, 0, 0, \frac{2}{29}\sqrt{66}e^{12}$	$(-\frac{2}{29}, -\frac{2}{29}, \frac{15}{29}, \frac{18}{29}, -\frac{7}{29}, \frac{4}{29}, -\frac{4}{29})$ $+ \frac{22}{29}e^3 \otimes e_5 + \frac{2}{29}\sqrt{154}e^4 \otimes e_7$	{1234, 12346, 1245, 12456, 1367, 137, 1567, 157, 34, 346, 45, 456}
71:1	$0, 0, 0, 0, 0, 0, \frac{2}{23}\sqrt{10}e^{12}$	$(\frac{2}{23}, \frac{2}{23}, \frac{13}{23}, \frac{13}{23}, -\frac{7}{23}, -\frac{7}{23}, \frac{4}{23})$ $+ \frac{20}{23}e^3 \otimes e_5 + \frac{20}{23}e^4 \otimes e_6$	{1234, 1236, 1256, 1347, 1367, 1567, 34, 36, 56}
71:1	$0, 0, 0, 0, 0, 0, \frac{1}{69}\sqrt{874}e^{12}$	$(\frac{4}{69}, \frac{4}{69}, -\frac{5}{23}, -\frac{5}{23}, \frac{9}{23}, \frac{2}{23}, \frac{8}{69})$ $+ \frac{1}{69}\sqrt{798}e^1 \otimes e_3 + \frac{1}{69}\sqrt{798}e^2 \otimes e_4 + \frac{1}{69}\sqrt{798}e^5 \otimes e_7$	{125, 1256, 1467, 147, 345, 3456}
71:1	$0, 0, 0, 0, 0, 0, \frac{2}{23}\sqrt{10}e^{12}$	$(\frac{12}{23}, -\frac{8}{23}, \frac{13}{23}, -\frac{7}{23}, \frac{3}{23}, \frac{3}{23}, \frac{4}{23})$ $+ \frac{20}{23}e^1 \otimes e_2 + \frac{20}{23}e^3 \otimes e_4$	{13567, 1357, 137, 14567, 1457, 147, 23567, 2357, 237, 24567, 2457, 247}
71:1	$0, 0, 0, 0, 0, 0, \frac{8}{61}\sqrt{13}e^{12}$	$(\frac{11}{61}, \frac{11}{61}, -\frac{15}{61}, -\frac{15}{61}, \frac{19}{61}, -\frac{7}{61}, \frac{22}{61})$ $+ \frac{26}{61}e^5 \otimes e_6 + \frac{2}{61}\sqrt{273}e^1 \otimes e_3 + \frac{2}{61}\sqrt{273}e^2 \otimes e_4$	{125, 126, 1457, 1467, 345, 346}
71:1	$0, 0, 0, 0, 0, 0, \frac{1}{20}\sqrt{66}e^{12}$	$(\frac{9}{40}, -\frac{13}{40}, \frac{3}{8}, -\frac{7}{40}, \frac{9}{20}, \frac{1}{10}, -\frac{1}{10})$ $+ \frac{11}{20}e^1 \otimes e_2 + \frac{11}{20}e^3 \otimes e_4 + \frac{1}{20}\sqrt{154}e^5 \otimes e_7$	{1367, 137, 1467, 147, 2367, 237, 2467, 247}
71:1	$0, 0, 0, 0, 0, 0, \frac{1}{6}\sqrt{13}e^{12}$	$(\frac{11}{48}, \frac{11}{48}, -\frac{5}{16}, -\frac{5}{16}, \frac{1}{8}, \frac{1}{8}, \frac{11}{24})$ $+ \frac{1}{24}\sqrt{273}e^1 \otimes e_3 + \frac{1}{24}\sqrt{273}e^2 \otimes e_4$	{12, 125, 1256, 14567, 1457, 147, 34, 345, 3456}
71:1	$0, 0, 0, 0, 0, 0, \frac{2}{29}\sqrt{66}e^{12}$	$(\frac{12}{29}, -\frac{2}{29}, \frac{15}{29}, -\frac{10}{29}, -\frac{7}{29}, \frac{4}{29}, \frac{10}{29})$ $+ \frac{22}{29}e^3 \otimes e_5 + \frac{2}{29}\sqrt{154}e^1 \otimes e_4$	{123, 1236, 125, 1256, 1367, 137, 1567, 157, 23467, 2347, 24567, 2457, 34, 346, 45, 456}
71:1	$0, 0, 0, 0, 0, 0, \frac{2}{29}\sqrt{66}e^{12}$	$(\frac{9}{29}, -\frac{13}{29}, \frac{18}{29}, \frac{4}{29}, \frac{4}{29}, \frac{4}{29}, -\frac{4}{29})$ $+ \frac{22}{29}e^1 \otimes e_2 + \frac{2}{29}\sqrt{154}e^3 \otimes e_7$	{14567, 1457, 147, 17, 24567, 2457, 247, 27}
71:1	$0, 0, 0, 0, 0, 0, \frac{1}{9}\sqrt{66}e^{12}$	$(\frac{2}{3}, -\frac{1}{9}, -\frac{5}{9}, \frac{2}{9}, \frac{2}{9}, \frac{2}{9}, \frac{5}{9})$ $+ \frac{1}{9}\sqrt{154}e^1 \otimes e_3$	{12, 124, 1245, 12456, 14567, 1457, 147, 17, 234567, 23457, 2347, 237, 3, 34, 345, 3456}
71:1	$0, 0, 0, 0, 0, 0, \frac{8}{61}\sqrt{13}e^{12}$	$(\frac{11}{61}, -\frac{10}{61}, \frac{19}{61}, -\frac{15}{61}, \frac{27}{61}, -\frac{7}{61}, \frac{1}{61})$ $+ \frac{26}{61}e^3 \otimes e_6 + \frac{2}{61}\sqrt{273}e^1 \otimes e_4 + \frac{2}{61}\sqrt{273}e^5 \otimes e_7$	{1235, 1256, 137, 167, 2347, 2467, 345, 456}
71:1	$0, 0, 0, 0, 0, 0, \frac{2}{13}\sqrt{10}e^{12}$	$(\frac{2}{13}, \frac{2}{13}, 1, -\frac{7}{13}, \frac{3}{13}, \frac{3}{13}, \frac{4}{13})$ $+ \frac{20}{13}e^3 \otimes e_4$	{123, 1235, 12356, 124, 1245, 12456, 13567, 1357, 137, 14567, 1457, 147, 3, 35, 356, 4, 45, 456}
71:1	$0, 0, 0, 0, 0, 0, \frac{2}{13}\sqrt{10}e^{12}$	$(\frac{12}{13}, -\frac{8}{13}, \frac{3}{13}, \frac{3}{13}, \frac{3}{13}, \frac{3}{13}, \frac{4}{13})$ $+ \frac{20}{13}e^1 \otimes e_2$	{134567, 13457, 1347, 137, 17, 234567, 23457, 2347, 237, 27}
71:1	$0, 0, 0, 0, 0, 0, \frac{1}{9}\sqrt{66}e^{12}$	$(-\frac{1}{9}, -\frac{1}{9}, 1, \frac{2}{9}, \frac{2}{9}, \frac{2}{9}, -\frac{2}{9})$ $+ \frac{1}{9}\sqrt{154}e^3 \otimes e_7$	{123, 1234, 12345, 123456, 14567, 1457, 147, 17, 3, 34, 345, 3456}
71:1	$0, 0, 0, 0, 0, 0, \frac{2}{33}\sqrt{10}e^{12}$	$(\frac{4}{11}, -\frac{8}{33}, \frac{13}{33}, -\frac{7}{33}, \frac{13}{33}, -\frac{7}{33}, \frac{4}{33})$ $+ \frac{20}{33}e^1 \otimes e_2 + \frac{20}{33}e^3 \otimes e_4 + \frac{20}{33}e^5 \otimes e_6$	{1357, 1367, 1467, 2357, 2367, 2467}

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
71:1	$0, 0, 0, 0, 0, 0, \frac{1}{6}\sqrt{13}e^{12}$	$\left(\frac{11}{48}, -\frac{5}{24}, \frac{9}{16}, -\frac{5}{16}, \frac{1}{8}, \frac{1}{8}, \frac{1}{48}\right) + \frac{1}{24}\sqrt{273}e^1 \otimes e_4 + \frac{1}{24}\sqrt{273}e^3 \otimes e_7$	$\{123, 1235, 12356, 1567, 157, 17, 24567, 2457, 247, 34, 345, 3456\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{1}{15}\sqrt{13}e^{12} + \frac{1}{15}\sqrt{13}e^{34}$	$\left(\frac{8}{15}, -\frac{1}{3}, \frac{8}{15}, -\frac{1}{3}, \frac{2}{15}, \frac{2}{15}, \frac{1}{5}\right) + \frac{13}{15}e^1 \otimes e_2 - \frac{13}{15}e^3 \otimes e_4$	$\{13567, 1357, 137, 14567, 1457, 147, 24567, 2457, 247\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{1}{15}\sqrt{13}e^{12} + \frac{1}{15}\sqrt{13}e^{34}$	$\left(\frac{8}{15}, -\frac{1}{3}, \frac{8}{15}, -\frac{1}{3}, \frac{2}{15}, \frac{2}{15}, \frac{1}{5}\right) + \frac{13}{15}e^1 \otimes e_2 + \frac{13}{15}e^3 \otimes e_4$	$\{13567, 1357, 137, 14567, 1457, 147, 24567, 2457, 247\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{1}{7}\sqrt{10}e^{12} + \frac{1}{7}\sqrt{10}e^{34}$	$\left(\frac{3}{7}, 0, \frac{3}{7}, 0, -\frac{2}{7}, -\frac{2}{7}, \frac{3}{7}\right) + \frac{1}{7}\sqrt{30}e^1 \otimes e_5 + \frac{1}{7}\sqrt{30}e^3 \otimes e_6$	$\{1234, 126, 137, 1467, 24567, 56\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{1}{15}\sqrt{13}e^{12} + \frac{1}{15}\sqrt{13}e^{34}$	$\left(\frac{8}{15}, -\frac{1}{3}, \frac{1}{10}, \frac{1}{10}, \frac{17}{30}, -\frac{3}{10}, \frac{1}{5}\right) + \frac{13}{15}e^1 \otimes e_2 + \frac{13}{15}e^5 \otimes e_6$	$\{1357, 1367, 2357, 2367\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{3}{37}\sqrt{19}e^{12} + \frac{3}{37}\sqrt{19}e^{34}$	$\left(\frac{9}{37}, -\frac{10}{37}, \frac{9}{37}, -\frac{10}{37}, \frac{18}{37}, \frac{4}{37}, -\frac{1}{37}\right) + \frac{19}{37}e^1 \otimes e_2 + \frac{19}{37}e^3 \otimes e_4 + \frac{2}{37}\sqrt{133}e^5 \otimes e_7$	$\{1367, 137, 1467, 147, 2467, 247\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{3}{37}\sqrt{19}e^{12} + \frac{3}{37}\sqrt{19}e^{34}$	$\left(\frac{9}{37}, -\frac{10}{37}, \frac{9}{37}, -\frac{10}{37}, \frac{18}{37}, \frac{4}{37}, -\frac{1}{37}\right) + \frac{19}{37}e^1 \otimes e_2 - \frac{19}{37}e^3 \otimes e_4 + \frac{2}{37}\sqrt{133}e^5 \otimes e_7$	$\{1367, 137, 1467, 147, 2467, 247\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{2}{37}\sqrt{14}e^{12} + \frac{8}{37}\sqrt{7}e^{34}$	$\left(\frac{20}{37}, -\frac{8}{37}, \frac{15}{37}, -\frac{3}{37}, -\frac{13}{37}, \frac{5}{37}, \frac{12}{37}\right) + \frac{12}{37}\sqrt{7}e^3 \otimes e_5 + \frac{28}{37}e^1 \otimes e_2$	$\{134, 1346, 15, 156, 234, 2346, 25, 256\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{8}{23}\sqrt{7}e^{12} + \frac{2}{23}\sqrt{14}e^{34}$	$\left(\frac{15}{23}, -\frac{3}{23}, \frac{6}{23}, \frac{6}{23}, -\frac{13}{23}, \frac{5}{23}, \frac{12}{23}\right) + \frac{12}{23}\sqrt{7}e^1 \otimes e_5$	$\{123, 1236, 13467, 1347, 167, 17, 234567, 23457, 2567, 257, 35, 356\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{2}{17}\sqrt{13}e^{12} + \frac{2}{17}\sqrt{13}e^{34}$	$\left(\frac{3}{17}, \frac{3}{17}, \frac{3}{17}, \frac{3}{17}, 1, -\frac{9}{17}, \frac{6}{17}\right) + \frac{26}{17}e^5 \otimes e_6$	$\{12345, 12346, 125, 126, 1357, 1367, 5, 6\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{8}{61}\sqrt{22}e^{12} + \frac{8}{61}\sqrt{5}e^{34}$	$\left(\frac{12}{61}, \frac{12}{61}, \frac{12}{61}, \frac{12}{61}, -\frac{20}{61}, -\frac{20}{61}, \frac{24}{61}\right) + \frac{24}{61}\sqrt{3}e^1 \otimes e_5 + \frac{24}{61}\sqrt{3}e^2 \otimes e_6$	$\{123, 13467, 167, 356\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{6}{55}\sqrt{19}e^{12} + \frac{6}{55}\sqrt{19}e^{34}$	$\left(\frac{18}{55}, -\frac{4}{11}, -\frac{1}{55}, -\frac{1}{55}, \frac{36}{55}, \frac{8}{55}, -\frac{2}{55}\right) + \frac{38}{55}e^1 \otimes e_2 + \frac{4}{55}\sqrt{133}e^5 \otimes e_7$	$\{1367, 137, 2367, 237\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{1}{6}\sqrt{19}e^{12} + \frac{1}{6}\sqrt{19}e^{34}$	$\left(-\frac{1}{36}, -\frac{1}{36}, -\frac{1}{36}, -\frac{1}{36}, 1, \frac{2}{9}, -\frac{1}{18}\right) + \frac{1}{9}\sqrt{133}e^5 \otimes e_7$	$\{12345, 123456, 125, 1256, 1367, 137, 5, 56\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{2}{17}\sqrt{13}e^{12} + \frac{2}{17}\sqrt{13}e^{34}$	$\left(\frac{16}{17}, -\frac{10}{17}, \frac{3}{17}, \frac{3}{17}, \frac{4}{17}, \frac{4}{17}, \frac{6}{17}\right) + \frac{26}{17}e^1 \otimes e_2$	$\{13567, 1357, 137, 23567, 2357, 237\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{1}{229}\sqrt{16422}e^{12} + \frac{2}{229}\sqrt{1309}e^{34}$	$\left(\frac{55}{229}, -\frac{39}{229}, \frac{8}{229}, \frac{8}{229}, \frac{135}{229}, -\frac{64}{229}, \frac{16}{229}\right) + \frac{2}{229}\sqrt{5593}e^1 \otimes e_6 + \frac{7}{229}\sqrt{510}e^5 \otimes e_7$	$\{12345, 125, 137, 2367, 3456, 56\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{2}{43}\sqrt{13}e^{12} + \frac{2}{43}\sqrt{13}e^{34}$	$\left(\frac{16}{43}, -\frac{10}{43}, \frac{16}{43}, -\frac{10}{43}, \frac{17}{43}, -\frac{9}{43}, \frac{6}{43}\right) + \frac{26}{43}e^1 \otimes e_2 - \frac{26}{43}e^3 \otimes e_4 + \frac{26}{43}e^5 \otimes e_6$	$\{1357, 1367, 1457, 1467, 2457, 2467\}$
71:2	$0, 0, 0, 0, 0, 0, \frac{2}{43}\sqrt{13}e^{12} + \frac{2}{43}\sqrt{13}e^{34}$	$\left(\frac{16}{43}, -\frac{10}{43}, \frac{16}{43}, -\frac{10}{43}, \frac{17}{43}, -\frac{9}{43}, \frac{6}{43}\right) + \frac{26}{43}e^1 \otimes e_2 + \frac{26}{43}e^3 \otimes e_4 + \frac{26}{43}e^5 \otimes e_6$	$\{1357, 1367, 1457, 1467, 2457, 2467\}$

Table B – Continued to next page

Table B – Continued from previous page

Name Δ	g	D	S
71:2	$0, 0, 0, 0, 0, \frac{4}{577}\sqrt{1309}e^{12} + \frac{2}{577}\sqrt{16422}e^{34}$	$\left(\frac{135}{577}, -\frac{103}{577}, \frac{110}{577}, -\frac{78}{577}, \frac{270}{577}, -\frac{128}{577}, \frac{32}{577}\right)$ $+ \frac{14}{577}\sqrt{510}e^5 \otimes e_7 + \frac{238}{577}e^1 \otimes e_2 + \frac{4}{577}\sqrt{5593}e^3 \otimes e_6$	{137, 1467, 237, 2467}
71:3	$0, 0, 0, 0, 0, \frac{8}{21}e^{12} + \frac{8}{21}e^{34} + \frac{8}{21}e^{56}$	$\left(\frac{20}{21}, -\frac{4}{7}, \frac{4}{21}, \frac{4}{21}, \frac{4}{21}, \frac{4}{21}, \frac{8}{21}\right)$ $+ \frac{32}{21}e^1 \otimes e_2$	{1357, 2357}
71:3	$0, 0, 0, 0, 0, \frac{8}{37}e^{12} + \frac{8}{37}e^{34} + \frac{8}{37}e^{56}$	$\left(\frac{20}{37}, -\frac{12}{37}, \frac{20}{37}, -\frac{12}{37}, \frac{4}{37}, \frac{4}{37}, \frac{8}{37}\right)$ $+ \frac{32}{37}e^1 \otimes e_2 + \frac{32}{37}e^3 \otimes e_4$	{1357, 1457, 2457}
71:3	$0, 0, 0, 0, 0, \frac{8}{37}e^{12} + \frac{8}{37}e^{34} + \frac{8}{37}e^{56}$	$\left(\frac{20}{37}, -\frac{12}{37}, \frac{20}{37}, -\frac{12}{37}, \frac{4}{37}, \frac{4}{37}, \frac{8}{37}\right)$ $+ \frac{32}{37}e^1 \otimes e_2 - \frac{32}{37}e^3 \otimes e_4$	{1357, 1457, 2457}
71:3	$0, 0, 0, 0, 0, \frac{8}{53}e^{12} + \frac{8}{53}e^{34} + \frac{8}{53}e^{56}$	$\left(\frac{20}{53}, -\frac{12}{53}, \frac{20}{53}, -\frac{12}{53}, \frac{20}{53}, -\frac{12}{53}, \frac{8}{53}\right)$ $+ \frac{32}{53}e^1 \otimes e_2 + \frac{32}{53}e^3 \otimes e_4 + \frac{32}{53}e^5 \otimes e_6$	{1357, 1367, 1467, 2467}
71:3	$0, 0, 0, 0, 0, \frac{8}{53}e^{12} + \frac{8}{53}e^{34} + \frac{8}{53}e^{56}$	$\left(\frac{20}{53}, -\frac{12}{53}, \frac{20}{53}, -\frac{12}{53}, \frac{20}{53}, -\frac{12}{53}, \frac{8}{53}\right)$ $+ \frac{32}{53}e^1 \otimes e_2 + \frac{32}{53}e^3 \otimes e_4 - \frac{32}{53}e^5 \otimes e_6$	{1357, 1367, 1457, 1467, 2457, 2467}
7:1	$0, 0, 0, 0, 0, 0$	$\left(1, -\frac{5}{9}, \frac{2}{9}, \frac{2}{9}, \frac{2}{9}, \frac{2}{9}, \frac{2}{9}\right)$ $+ \frac{14}{9}e^1 \otimes e_2$	{1, 13, 134, 1345, 13456, 134567, 2, 23, 234, 2345, 23456, 234567}
7:1	$0, 0, 0, 0, 0, 0$	$\left(\frac{9}{23}, \frac{9}{23}, -\frac{5}{23}, -\frac{5}{23}, \frac{9}{23}, -\frac{5}{23}, \frac{2}{23}\right)$ $+ \frac{14}{23}e^1 \otimes e_3 + \frac{14}{23}e^2 \otimes e_4 + \frac{14}{23}e^5 \otimes e_6$	{125, 1257, 126, 1267, 146, 1467, 346, 3467}
7:1	$0, 0, 0, 0, 0, 0$	$\left(\frac{9}{16}, \frac{9}{16}, -\frac{5}{16}, -\frac{5}{16}, \frac{1}{8}, \frac{1}{8}, \frac{1}{8}\right)$ $+ \frac{7}{8}e^1 \otimes e_3 + \frac{7}{8}e^2 \otimes e_4$	{12, 125, 1256, 12567, 14, 145, 1456, 14567, 34, 345, 3456, 34567}

End of Table B

C Dimension 8

Table C: Solutions of (1) obtained with Algorithm 1 with $n = 8$

Name Δ	g	D	S
8654321:1	$0, 0, \frac{58}{1919}\sqrt{339}e^{12}, \frac{29}{1919}\sqrt{30}e^{13}, \frac{58}{1919}\sqrt{238}e^{14}, \frac{29}{1919}\sqrt{1410}e^{15},$ $\frac{174}{1919}\sqrt{39}e^{16}, \frac{29}{1919}\sqrt{934}e^{17}$	$\left(\frac{232}{1919}, -\frac{609}{1919}, -\frac{377}{1919}, -\frac{145}{1919}, \frac{87}{1919}, \frac{319}{1919}, \frac{29}{101}, \frac{783}{1919}\right)$ $+ \frac{29}{1919}\sqrt{3206}e^1 \otimes e_2$	{1468, 2}
865321:1	$0, 0, \frac{10}{313}\sqrt{302}e^{12}, \frac{10}{313}\sqrt{278}e^{13}, \frac{10}{313}\sqrt{510}e^{23}, \frac{20}{313}\sqrt{47}e^{14},$ $\frac{10}{313}\sqrt{62}e^{16}, \frac{20}{313}\sqrt{118}e^{17}$	$\left(-\frac{40}{313}, \frac{110}{313}, \frac{70}{313}, \frac{30}{313}, \frac{180}{313}, -\frac{10}{313}, -\frac{50}{313}, -\frac{90}{313}\right)$ $+ \frac{10}{313}\sqrt{1042}e^2 \otimes e_8$	{1257, 134568}
86531:1	$0, 0, \frac{40}{1701}\sqrt{177}e^{12}, \frac{40}{1701}\sqrt{327}e^{13}, \frac{1040}{1701}e^{23}, \frac{40}{567}\sqrt{5}e^{14},$ $\frac{80}{1701}\sqrt{127}e^{25}, \frac{40}{1701}\sqrt{617}e^{16}$	$\left(-\frac{200}{1701}, \frac{340}{1701}, \frac{20}{243}, -\frac{20}{567}, \frac{160}{567}, -\frac{260}{1701}, \frac{820}{1701}, -\frac{460}{1701}\right)$ $- \frac{40}{1701}\sqrt{1389}e^2 \otimes e_8$	{1256, 134578, 237, 468}
86531:1	$0, 0, \frac{40}{1701}\sqrt{177}e^{12}, \frac{40}{1701}\sqrt{327}e^{13}, \frac{1040}{1701}e^{23}, \frac{40}{567}\sqrt{5}e^{14},$ $\frac{80}{1701}\sqrt{127}e^{25}, \frac{40}{1701}\sqrt{617}e^{16}$	$\left(-\frac{200}{1701}, \frac{340}{1701}, \frac{20}{243}, -\frac{20}{567}, \frac{160}{567}, -\frac{260}{1701}, \frac{820}{1701}, -\frac{460}{1701}\right)$ $+ \frac{40}{1701}\sqrt{1389}e^2 \otimes e_8$	{1256, 134578, 237, 468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
86531:1	$0, 0, \frac{2}{91}\sqrt{78}e^{12}, \frac{12}{91}\sqrt{13}e^{13}, \frac{2}{91}\sqrt{39}e^{23}, \frac{1}{91}\sqrt{2262}e^{14},$ $\frac{1}{91}\sqrt{2262}e^{25}, \frac{3}{91}\sqrt{182}e^{16}$	$(\frac{1}{7}, -\frac{1}{7}, 0, \frac{1}{7}, -\frac{1}{7}, \frac{2}{7}, -\frac{2}{7}, \frac{3}{7})$ $+\frac{1}{91}\sqrt{5694}e^1 \otimes e_7$	{136, 57}
854321:1	$0, 0, 0, \frac{6}{35}\sqrt{35}e^{12}, \frac{2}{35}\sqrt{105}e^{14}, \frac{3}{35}\sqrt{14}e^{15}, \frac{3}{35}\sqrt{42}e^{16},$ $\frac{4}{35}\sqrt{21}e^{17}$	$(-\frac{1}{10}, \frac{4}{7}, -\frac{22}{35}, \frac{33}{70}, \frac{13}{35}, \frac{19}{70}, \frac{6}{35}, \frac{1}{14})$ $+\frac{3}{35}\sqrt{266}e^2 \otimes e_3$	{125678, 134, 2457, 368}
854321:1	$0, 0, 0, \frac{4}{49}\sqrt{21}e^{12}, \frac{1}{49}\sqrt{14}e^{14}, \frac{1}{49}\sqrt{266}e^{15}, \frac{2}{49}\sqrt{105}e^{16},$ $\frac{2}{49}\sqrt{119}e^{17}$	$(\frac{1}{14}, -\frac{3}{14}, \frac{3}{7}, -\frac{1}{7}, -\frac{1}{14}, 0, \frac{1}{14}, \frac{1}{7})$ $+\frac{1}{49}\sqrt{434}e^3 \otimes e_8 + \frac{4}{7}e^1 \otimes e_2$	{1357, 23}
854321:1	$0, 0, 0, \frac{4}{35}\sqrt{21}e^{12}, \frac{3}{35}\sqrt{42}e^{14}, \frac{3}{35}\sqrt{14}e^{15}, \frac{2}{35}\sqrt{105}e^{16},$ $\frac{6}{35}\sqrt{35}e^{17}$	$(-\frac{1}{10}, \frac{3}{10}, 1, \frac{1}{5}, \frac{1}{10}, 0, -\frac{1}{10}, -\frac{1}{5})$ $+\frac{3}{35}\sqrt{266}e^3 \otimes e_8$	{124568, 137, 235, 4678}
854321:1	$0, 0, 0, \frac{48}{1055}\sqrt{145}e^{12}, \frac{48}{1055}\sqrt{59}e^{14}, \frac{72}{1055}\sqrt{78}e^{15}, \frac{24}{1055}\sqrt{818}e^{16},$ $\frac{48}{1055}\sqrt{146}e^{17}$	$(\frac{35}{211}, -\frac{401}{1055}, \frac{182}{1055}, -\frac{226}{1055}, -\frac{51}{1055}, \frac{124}{1055}, \frac{299}{1055}, \frac{474}{1055})$ $+\frac{72}{1055}\sqrt{194}e^1 \otimes e_2$	{1357, 157, 2, 23}
854321:1	$0, 0, 0, \frac{40}{157}\sqrt{2}e^{12}, \frac{10}{157}\sqrt{17}e^{14}, \frac{20}{157}\sqrt{3}e^{15}, \frac{10}{157}\sqrt{17}e^{16},$ $\frac{40}{157}\sqrt{2}e^{17}$	$(-\frac{10}{157}, \frac{45}{157}, -\frac{60}{157}, \frac{35}{157}, \frac{25}{157}, \frac{15}{157}, \frac{5}{157}, -\frac{5}{157})$ $+\frac{10}{157}\sqrt{57}e^2 \otimes e_8 + \frac{40}{157}\sqrt{5}e^1 \otimes e_3$	{1257, 1468}
854321:1	$0, 0, 0, \frac{11}{37}\sqrt{2}e^{12}, \frac{44}{185}\sqrt{5}e^{14}, \frac{33}{185}\sqrt{10}e^{15}, \frac{44}{185}\sqrt{5}e^{16},$ $\frac{11}{37}\sqrt{2}e^{17}$	$(\frac{2}{37}, \frac{12}{185}, -\frac{3}{5}, \frac{22}{185}, \frac{32}{185}, \frac{42}{185}, \frac{52}{185}, \frac{62}{185})$ $+\frac{22}{185}\sqrt{74}e^1 \otimes e_3$	{1257, 1468, 2345678, 3}
854321:1	$0, 0, 0, \frac{40}{331}\sqrt{42}e^{12}, \frac{30}{331}\sqrt{7}e^{14}, \frac{20}{331}\sqrt{77}e^{15}, \frac{30}{331}\sqrt{7}e^{16},$ $\frac{40}{331}\sqrt{42}e^{17}$	$(-\frac{70}{331}, \frac{235}{331}, \frac{60}{331}, \frac{165}{331}, \frac{95}{331}, \frac{25}{331}, -\frac{45}{331}, -\frac{115}{331})$ $+\frac{10}{331}\sqrt{1897}e^2 \otimes e_8$	{2346, 246, 3578, 578}
854321:2	$0, 0, 0, \frac{51}{727}\sqrt{218}e^{12}, \frac{170}{727}\sqrt{6}e^{14}, \frac{102}{727}\sqrt{7}e^{15}, \frac{51}{727}\sqrt{66}e^{16},$ $\frac{17}{727}\sqrt{426}e^{17} + \frac{102}{727}\sqrt{7}e^{23}$	$(-\frac{85}{727}, \frac{442}{727}, -\frac{425}{727}, \frac{357}{727}, \frac{272}{727}, \frac{187}{727}, \frac{102}{727}, \frac{17}{727})$ $+\frac{51}{727}\sqrt{398}e^2 \otimes e_3$	{134, 2457}
854321:3	$0, 0, 0, \frac{1}{7}\sqrt{10}e^{12}, \frac{2}{7}\sqrt{5}e^{14}, \frac{1}{7}\sqrt{2}e^{15}, \frac{4}{7}e^{16},$ $\frac{1}{7}\sqrt{34}e^{17} + \frac{2}{7}\sqrt{7}e^{24}$	$(0, 0, 1, 0, 0, 0, 0, 0)$ $+\frac{4}{7}\sqrt{5}e^3 \otimes e_8$	{137, 4678}
854321:3	$0, 0, 0, \frac{33}{149}\sqrt{15}e^{12}, \frac{11}{149}\sqrt{11}e^{14}, \frac{11}{149}\sqrt{5}e^{15}, \frac{44}{149}\sqrt{2}e^{16},$ $\frac{11}{149}\sqrt{70}e^{17} + \frac{11}{149}\sqrt{119}e^{24}$	$(\frac{11}{298}, \frac{22}{149}, -\frac{99}{149}, \frac{55}{298}, \frac{33}{149}, \frac{77}{298}, \frac{44}{149}, \frac{99}{298})$ $+\frac{22}{149}\sqrt{62}e^2 \otimes e_3$	{125678, 2457}
854321:3	$0, 0, 0, \frac{41}{2609}\sqrt{690}e^{12}, \frac{328}{2609}\sqrt{19}e^{14}, \frac{123}{2609}\sqrt{138}e^{15},$ $\frac{164}{2609}\sqrt{69}e^{16} + \frac{41}{2609}\sqrt{802}e^{17} + \frac{164}{2609}\sqrt{21}e^{24}$	$(\frac{82}{2609}, \frac{328}{2609}, -\frac{1599}{2609}, \frac{410}{2609}, \frac{492}{2609}, \frac{574}{2609}, \frac{656}{2609}, \frac{738}{2609})$ $+\frac{164}{2609}\sqrt{263}e^1 \otimes e_3$	{1257, 2345678}
85421:1	$0, 0, 0, \frac{1}{5}\sqrt{6}e^{12}, \frac{1}{5}\sqrt{6}e^{14}, \frac{1}{5}\sqrt{6}e^{24}, \frac{1}{5}\sqrt{6}e^{15},$ $\frac{2}{5}\sqrt{6}e^{17}$	$(-\frac{1}{10}, \frac{1}{5}, 1, \frac{1}{10}, 0, \frac{3}{10}, -\frac{1}{10}, -\frac{1}{5})$ $+\frac{4}{5}\sqrt{3}e^3 \otimes e_8$	{12458, 137, 25678, 346}
85421:1	$0, 0, 0, \frac{6}{1385}\sqrt{13462}e^{12}, \frac{6}{1385}\sqrt{20829}e^{14}, \frac{12}{1385}\sqrt{530}e^{24},$ $\frac{6}{1385}\sqrt{19981}e^{15}, \frac{6}{1385}\sqrt{13038}e^{17}$	$(\frac{23}{277}, \frac{59}{1385}, -\frac{839}{1385}, \frac{174}{1385}, \frac{289}{1385}, \frac{233}{1385}, \frac{404}{1385}, \frac{519}{1385})$ $+\frac{12}{1385}\sqrt{14734}e^1 \otimes e_3$	{1258, 147, 2345678, 36}
85421:1	$0, 0, 0, \frac{4}{1305}\sqrt{4782}e^{12}, \frac{2}{1305}\sqrt{83685}e^{14}, \frac{2}{1305}\sqrt{374590}e^{24},$ $\frac{2}{1305}\sqrt{66151}e^{15}, \frac{2}{1305}\sqrt{94046}e^{17}$	$(\frac{17}{145}, -\frac{221}{1305}, 1, -\frac{68}{1305}, \frac{17}{261}, -\frac{289}{1305}, \frac{238}{1305}, \frac{391}{1305})$ $+\frac{4}{1305}\sqrt{205626}e^3 \otimes e_6$	{1267, 14568, 234, 3578}
85421:1	$0, 0, 0, \frac{2}{81}\sqrt{1110}e^{12}, \frac{2}{81}\sqrt{111}e^{14}, \frac{4}{81}\sqrt{259}e^{24}, \frac{2}{81}\sqrt{185}e^{15},$ $\frac{4}{81}\sqrt{37}e^{17}$	$(-\frac{1}{27}, \frac{23}{81}, -\frac{17}{27}, \frac{20}{81}, \frac{17}{81}, \frac{43}{81}, \frac{14}{81}, \frac{11}{81})$ $+\frac{2}{81}\sqrt{2442}e^2 \otimes e_3$	{126, 1345678, 247, 358}
85421:2	$0, 0, 0, \frac{1}{77}\sqrt{1254}e^{12}, \frac{9}{77}\sqrt{22}e^{14}, \frac{1}{77}\sqrt{1914}e^{13} + \frac{1}{77}\sqrt{330}e^{24},$ $\frac{1}{77}\sqrt{1914}e^{15}, \frac{2}{77}\sqrt{330}e^{17}$	$(\frac{1}{7}, -\frac{1}{7}, -\frac{2}{7}, 0, \frac{1}{7}, -\frac{1}{7}, \frac{2}{7}, \frac{3}{7})$ $+\frac{8}{77}\sqrt{66}e^1 \otimes e_3$	{234578, 3}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
85421:2	$0, 0, 0, \frac{9}{308}\sqrt{354}e^{12}, \frac{81}{308}\sqrt{2}e^{14}, \frac{9}{154}\sqrt{94}e^{13} + \frac{9}{308}\sqrt{590}e^{24},$ $\frac{9}{308}\sqrt{74}e^{15}, \frac{9}{154}\sqrt{118}e^{17}$	$(-\frac{81}{616}, \frac{18}{77}, \frac{36}{77}, \frac{9}{88}, -\frac{9}{308}, \frac{207}{616}, -\frac{9}{56}, -\frac{45}{154})$ $+\frac{9}{154}\sqrt{258}e^2 \otimes e_8$	{12367, 134568, 234, 3578}
85421:2	$0, 0, 0, \frac{9}{308}\sqrt{354}e^{12}, \frac{81}{308}\sqrt{2}e^{14}, \frac{9}{154}\sqrt{94}e^{13} + \frac{9}{308}\sqrt{590}e^{24},$ $\frac{9}{308}\sqrt{74}e^{15}, \frac{9}{154}\sqrt{118}e^{17}$	$(-\frac{81}{616}, \frac{18}{77}, \frac{36}{77}, \frac{9}{88}, -\frac{9}{308}, \frac{207}{616}, -\frac{9}{56}, -\frac{45}{154})$ $-\frac{9}{154}\sqrt{258}e^2 \otimes e_8$	{12367, 134568, 234, 3578}
85421:3	$0, 0, 0, \frac{53}{2601}\sqrt{258}e^{12}, \frac{106}{2601}\sqrt{21}e^{14}, \frac{530}{2601}\sqrt{13}e^{24},$ $\frac{106}{2601}\sqrt{109}e^{15}, \frac{53}{2601}\sqrt{2}e^{17} + \frac{53}{867}\sqrt{154}e^{23}$	$(\frac{53}{289}, -\frac{689}{2601}, \frac{212}{289}, -\frac{212}{2601}, \frac{265}{2601}, -\frac{53}{153}, \frac{742}{2601}, \frac{1219}{2601})$ $+\frac{106}{2601}\sqrt{1038}e^3 \otimes e_6$	{25678, 46}
85421:3	$0, 0, 0, \frac{11}{51}\sqrt{15}e^{12}, \frac{11}{153}\sqrt{33}e^{14}, \frac{11}{153}\sqrt{139}e^{24}, \frac{11}{153}\sqrt{29}e^{15},$ $\frac{22}{153}\sqrt{2}e^{17} + \frac{11}{153}\sqrt{78}e^{23}$	$(-\frac{11}{102}, \frac{55}{153}, -\frac{22}{51}, \frac{77}{306}, \frac{22}{153}, \frac{11}{18}, \frac{11}{306}, -\frac{11}{153})$ $+\frac{11}{153}\sqrt{258}e^2 \otimes e_3$	{134567, 35}
85421:5	$0, 0, 0, \frac{1}{14}\sqrt{70}e^{12}, \frac{1}{7}\sqrt{7}e^{14}, \frac{1}{14}\sqrt{35}e^{24}, \frac{1}{2}e^{15},$ $\frac{3}{14}\sqrt{14}e^{17} + \frac{2}{7}\sqrt{7}e^{26}$	$(0, 0, 1, 0, 0, 0, 0, 0)$ $+\frac{3}{14}\sqrt{35}e^3 \otimes e_8$	{12458, 137}
85421:5	$0, 0, 0, \frac{94}{3261}\sqrt{330}e^{12}, \frac{47}{3261}\sqrt{1810}e^{14}, \frac{47}{3261}\sqrt{190}e^{24}, \frac{799}{3261}\sqrt{6}e^{15},$ $\frac{47}{3261}\sqrt{1282}e^{17} + \frac{47}{3261}\sqrt{454}e^{26}$	$(\frac{188}{3261}, \frac{94}{1087}, -\frac{2021}{3261}, \frac{470}{3261}, \frac{658}{3261}, \frac{752}{3261}, \frac{282}{1087}, \frac{1034}{3261})$ $+\frac{47}{3261}\sqrt{5282}e^1 \otimes e_3$	{2345678, 36}
85421:5	$0, 0, 0, \frac{12}{397}\sqrt{470}e^{12}, \frac{12}{397}\sqrt{14}e^{14}, \frac{12}{397}\sqrt{534}e^{24}, \frac{24}{397}\sqrt{15}e^{15},$ $\frac{12}{397}\sqrt{202}e^{17} + \frac{24}{397}\sqrt{110}e^{26}$	$(\frac{24}{397}, \frac{36}{397}, -\frac{252}{397}, \frac{60}{397}, \frac{84}{397}, \frac{96}{397}, \frac{108}{397}, \frac{132}{397})$ $+\frac{12}{397}\sqrt{1298}e^2 \otimes e_3$	{126, 1345678}
85321:1	$0, 0, 0, \frac{2}{11}\sqrt{6}e^{12}, \frac{4}{11}e^{13}, \frac{2}{11}\sqrt{6}e^{14}, \frac{2}{11}\sqrt{5}e^{16}, \frac{2}{11}\sqrt{3}e^{17}$	$(\frac{1}{22}, \frac{1}{11}, -\frac{7}{22}, \frac{3}{22}, -\frac{3}{11}, \frac{2}{11}, \frac{5}{22}, \frac{3}{11})$ $+\frac{2}{11}\sqrt{14}e^1 \otimes e_3 + \frac{2}{11}\sqrt{5}e^2 \otimes e_5$	{1268, 234678}
85321:1	$0, 0, 0, \frac{24}{73}\sqrt{2}e^{12}, \frac{8}{73}\sqrt{26}e^{13}, \frac{24}{73}\sqrt{3}e^{14}, \frac{24}{73}\sqrt{3}e^{16},$ $\frac{24}{73}\sqrt{2}e^{17}$	$(\frac{9}{73}, -\frac{6}{73}, -\frac{23}{73}, \frac{3}{73}, -\frac{14}{73}, \frac{12}{73}, \frac{21}{73}, \frac{30}{73})$ $+\frac{8}{73}\sqrt{61}e^1 \otimes e_3$	{1268, 147, 234678, 3}
85321:1	$0, 0, 0, \frac{12}{37}e^{12}, \frac{5}{37}\sqrt{6}e^{13}, \frac{2}{37}\sqrt{3}e^{14}, \frac{2}{37}\sqrt{33}e^{16},$ $\frac{6}{37}\sqrt{6}e^{17}$	$(\frac{2}{37}, -\frac{7}{37}, \frac{10}{37}, -\frac{5}{37}, \frac{12}{37}, -\frac{3}{37}, -\frac{1}{37}, \frac{1}{37})$ $+\frac{2}{37}\sqrt{66}e^3 \otimes e_8 + \frac{4}{37}\sqrt{21}e^1 \otimes e_2$	{1568, 235}
85321:1	$0, 0, 0, \frac{10}{53}\sqrt{2}e^{12}, \frac{5}{53}\sqrt{38}e^{13}, \frac{10}{53}\sqrt{3}e^{14}, \frac{10}{53}\sqrt{3}e^{16},$ $\frac{10}{53}\sqrt{2}e^{17}$	$(-\frac{10}{53}, \frac{25}{53}, \frac{10}{53}, \frac{15}{53}, 0, \frac{5}{53}, -\frac{5}{53}, -\frac{15}{53})$ $+\frac{20}{53}\sqrt{3}e^2 \otimes e_5 + \frac{20}{53}\sqrt{3}e^3 \otimes e_8$	{2478, 356}
85321:1	$0, 0, 0, \frac{2}{61}\sqrt{246}e^{12}, \frac{1}{61}\sqrt{574}e^{13}, \frac{2}{61}\sqrt{246}e^{14}, \frac{2}{61}\sqrt{451}e^{16},$ $\frac{6}{61}\sqrt{41}e^{17}$	$(\frac{14}{61}, -\frac{27}{61}, \frac{4}{61}, -\frac{13}{61}, \frac{18}{61}, \frac{1}{61}, \frac{15}{61}, \frac{29}{61})$ $+\frac{10}{61}\sqrt{41}e^1 \otimes e_2$	{1368, 1568, 2, 235}
85321:2	$0, 0, 0, \frac{4}{395}\sqrt{10038}e^{12}, \frac{8}{395}\sqrt{478}e^{13}, \frac{2}{395}\sqrt{9321}e^{24}, \frac{8}{395}\sqrt{478}e^{26},$ $\frac{6}{395}\sqrt{1195}e^{27}$	$(\frac{259}{395}, -\frac{58}{395}, -\frac{219}{395}, \frac{201}{395}, \frac{8}{79}, \frac{143}{395}, \frac{17}{79}, \frac{27}{395})$ $+\frac{2}{395}\sqrt{77197}e^1 \otimes e_3$	{12678, 1468, 234, 37}
85321:2	$0, 0, 0, \frac{48}{1307}\sqrt{167}e^{12}, \frac{96}{1307}\sqrt{95}e^{13}, \frac{144}{1307}\sqrt{5}e^{24}, \frac{48}{1307}\sqrt{31}e^{26},$ $\frac{48}{1307}\sqrt{395}e^{27}$	$(\frac{760}{1307}, -\frac{288}{1307}, -\frac{120}{1307}, \frac{472}{1307}, \frac{640}{1307}, \frac{184}{1307}, -\frac{104}{1307}, -\frac{392}{1307})$ $-\frac{48}{1307}\sqrt{1047}e^1 \otimes e_8$	{1237, 1257, 134, 145, 234568, 2468, 35678, 678}
85321:2	$0, 0, 0, \frac{48}{1307}\sqrt{167}e^{12}, \frac{96}{1307}\sqrt{95}e^{13}, \frac{144}{1307}\sqrt{5}e^{24}, \frac{48}{1307}\sqrt{31}e^{26},$ $\frac{48}{1307}\sqrt{395}e^{27}$	$(\frac{760}{1307}, -\frac{288}{1307}, -\frac{120}{1307}, \frac{472}{1307}, \frac{640}{1307}, \frac{184}{1307}, -\frac{104}{1307}, -\frac{392}{1307})$ $+\frac{48}{1307}\sqrt{1047}e^1 \otimes e_8$	{1237, 1257, 134, 145, 234568, 2468, 35678, 678}
85321:2	$0, 0, 0, \frac{6}{1265}\sqrt{19451}e^{12}, \frac{24}{1265}\sqrt{1802}e^{13}, \frac{12}{1265}\sqrt{1590}e^{24},$ $\frac{6}{1265}\sqrt{10441}e^{26}, \frac{12}{1265}\sqrt{7738}e^{27}$	$(\frac{47}{1265}, -\frac{14}{253}, \frac{721}{1265}, -\frac{1}{55}, \frac{768}{1265}, -\frac{93}{1265}, -\frac{163}{1265}, -\frac{233}{1265})$ $+\frac{6}{1265}\sqrt{55173}e^3 \otimes e_8$	{124568, 15678, 2357, 345}
85321:2	$0, 0, 0, \frac{2}{235}\sqrt{505}e^{12}, \frac{1}{47}\sqrt{606}e^{13}, \frac{2}{235}\sqrt{3030}e^{24}, \frac{1}{47}\sqrt{606}e^{26},$ $\frac{1}{235}\sqrt{11110}e^{27}$	$(-\frac{38}{235}, \frac{7}{47}, -\frac{28}{235}, -\frac{3}{235}, -\frac{66}{235}, \frac{32}{235}, \frac{67}{235}, \frac{102}{235})$ $+\frac{2}{235}\sqrt{9494}e^2 \otimes e_5$	{12368, 145678, 247, 35}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
85321:2	$0, 0, 0, \frac{20}{157}\sqrt{6}e^{12}, \frac{40}{157}\sqrt{2}e^{13}, \frac{10}{157}\sqrt{33}e^{24}, \frac{40}{157}\sqrt{2}e^{26},$ $\frac{10}{157}\sqrt{21}e^{27}$	$(\frac{5}{157}, \frac{10}{157}, -\frac{45}{157}, \frac{15}{157}, -\frac{40}{157}, \frac{25}{157}, \frac{35}{157}, \frac{45}{157})$ $+\frac{10}{157}\sqrt{37}e^1 \otimes e_3 + \frac{40}{157}\sqrt{6}e^2 \otimes e_5$	{145678, 35}
85321:2	$0, 0, 0, \frac{2}{259}\sqrt{203}e^{12}, \frac{8}{259}\sqrt{42}e^{13}, \frac{4}{259}\sqrt{42}e^{24}, \frac{6}{37}e^{26},$ $\frac{4}{259}\sqrt{154}e^{27}$	$(-\frac{5}{37}, \frac{2}{37}, \frac{5}{37}, -\frac{3}{37}, 0, -\frac{1}{37}, \frac{1}{37}, \frac{3}{37})$ $+\frac{16}{259}\sqrt{14}e^2 \otimes e_5 + \frac{6}{259}\sqrt{77}e^3 \otimes e_8$	{12347, 268}
85321:3	$0, 0, 0, \frac{48}{1343}\sqrt{431}e^{12}, \frac{576}{1343}e^{13}, \frac{48}{1343}\sqrt{67}e^{14}, \frac{144}{1343}e^{16},$ $\frac{48}{1343}\sqrt{203}e^{17} + \frac{96}{1343}\sqrt{95}e^{35}$	$(-\frac{288}{1343}, \frac{912}{1343}, \frac{24}{1343}, \frac{624}{1343}, -\frac{264}{1343}, \frac{336}{1343}, \frac{48}{1343}, -\frac{240}{1343})$ $+\frac{912}{1343}\sqrt{3}e^2 \otimes e_8$	{123567, 1267, 378, 578}
85321:3	$0, 0, 0, \frac{48}{1343}\sqrt{431}e^{12}, \frac{576}{1343}e^{13}, \frac{48}{1343}\sqrt{67}e^{14}, \frac{144}{1343}e^{16},$ $\frac{48}{1343}\sqrt{203}e^{17} + \frac{96}{1343}\sqrt{95}e^{35}$	$(-\frac{288}{1343}, \frac{912}{1343}, \frac{24}{1343}, \frac{624}{1343}, -\frac{264}{1343}, \frac{336}{1343}, \frac{48}{1343}, -\frac{240}{1343})$ $-\frac{912}{1343}\sqrt{3}e^2 \otimes e_8$	{123567, 1267, 378, 578}
85321:5	$0, 0, 0, \frac{180}{253}e^{12}, \frac{15}{253}\sqrt{134}e^{13}, \frac{30}{253}\sqrt{5}e^{14}, \frac{120}{253}e^{16},$ $\frac{90}{253}\sqrt{3}e^{17} + \frac{60}{253}\sqrt{7}e^{23}$	$(-\frac{20}{253}, \frac{125}{253}, -\frac{80}{253}, \frac{105}{253}, -\frac{100}{253}, \frac{85}{253}, \frac{65}{253}, \frac{45}{253})$ $+\frac{30}{253}\sqrt{105}e^2 \otimes e_5$	{145, 2468}
85321:6	$0, 0, 0, \frac{72}{479}\sqrt{30}e^{12}, \frac{108}{479}\sqrt{2}e^{13}, \frac{18}{479}\sqrt{177}e^{24}, \frac{108}{479}\sqrt{2}e^{26},$ $\frac{36}{479}\sqrt{102}e^{15} + \frac{18}{479}\sqrt{267}e^{27}$	$(\frac{207}{479}, -\frac{18}{479}, -\frac{279}{479}, \frac{189}{479}, -\frac{72}{479}, \frac{171}{479}, \frac{153}{479}, \frac{135}{479})$ $-\frac{18}{479}\sqrt{1173}e^1 \otimes e_3$	{12678, 1468, 234, 37}
85321:6	$0, 0, 0, \frac{72}{479}\sqrt{30}e^{12}, \frac{108}{479}\sqrt{2}e^{13}, \frac{18}{479}\sqrt{177}e^{24}, \frac{108}{479}\sqrt{2}e^{26},$ $\frac{36}{479}\sqrt{102}e^{15} + \frac{18}{479}\sqrt{267}e^{27}$	$(\frac{207}{479}, -\frac{18}{479}, -\frac{279}{479}, \frac{189}{479}, -\frac{72}{479}, \frac{171}{479}, \frac{153}{479}, \frac{135}{479})$ $+\frac{18}{479}\sqrt{1173}e^1 \otimes e_3$	{12678, 1468, 234, 37}
85321:7	$0, 0, 0, \frac{123}{2381}\sqrt{78}e^{12}, \frac{41}{2381}\sqrt{1974}e^{13}, \frac{41}{2381}\sqrt{1322}e^{14},$ $\frac{246}{2381}\sqrt{5}e^{16}, \frac{246}{2381}\sqrt{29}e^{17} + \frac{164}{2381}\sqrt{105}e^{24}$	$(-\frac{41}{2381}, -\frac{123}{2381}, \frac{1394}{2381}, -\frac{164}{2381}, \frac{1353}{2381}, -\frac{205}{2381}, -\frac{246}{2381}, -\frac{287}{2381})$ $+\frac{41}{2381}\sqrt{4030}e^3 \otimes e_8$	{123467, 478}
85321:7	$0, 0, 0, \frac{58}{2429}\sqrt{285}e^{12}, \frac{29}{2429}\sqrt{2006}e^{13}, \frac{261}{2429}\sqrt{26}e^{14},$ $\frac{174}{2429}\sqrt{53}e^{16}, \frac{464}{2429}\sqrt{6}e^{17} + \frac{87}{2429}\sqrt{110}e^{24}$	$(\frac{87}{2429}, \frac{261}{2429}, -\frac{754}{2429}, \frac{348}{2429}, -\frac{667}{2429}, \frac{435}{2429}, \frac{522}{2429}, \frac{87}{347})$ $+\frac{29}{2429}\sqrt{4186}e^1 \otimes e_3$	{147, 234678}
85321:7	$0, 0, 0, \frac{62}{2333}\sqrt{439}e^{12}, \frac{31}{2333}\sqrt{2134}e^{13}, \frac{186}{2333}\sqrt{21}e^{14},$ $\frac{31}{2333}\sqrt{1102}e^{16}, \frac{31}{2333}\sqrt{1634}e^{17} + \frac{868}{2333}\sqrt{3}e^{24}$	$(\frac{93}{2333}, \frac{279}{2333}, -\frac{775}{2333}, \frac{372}{2333}, -\frac{682}{2333}, \frac{465}{2333}, \frac{558}{2333}, \frac{651}{2333})$ $+\frac{31}{2333}\sqrt{4082}e^2 \otimes e_5$	{145678, 247}
85321:8	$0, 0, 0, \frac{50}{2669}\sqrt{71}e^{12}, \frac{25}{2669}\sqrt{2446}e^{13}, \frac{600}{2669}\sqrt{3}e^{24}, \frac{25}{2669}\sqrt{1874}e^{26},$ $\frac{50}{2669}\sqrt{429}e^{14} + \frac{25}{2669}\sqrt{1870}e^{27}$	$(\frac{225}{2669}, \frac{75}{2669}, -\frac{775}{2669}, \frac{300}{2669}, -\frac{550}{2669}, \frac{375}{2669}, \frac{450}{2669}, \frac{525}{2669})$ $+\frac{25}{2669}\sqrt{4442}e^2 \otimes e_5$	{15, 268}
85321:8	$0, 0, 0, \frac{70}{2189}\sqrt{699}e^{12}, \frac{35}{2189}\sqrt{1646}e^{13}, \frac{35}{2189}\sqrt{186}e^{24},$ $\frac{70}{2189}\sqrt{195}e^{26}, \frac{35}{2189}\sqrt{2598}e^{14} + \frac{420}{2189}\sqrt{11}e^{27}$	$(\frac{315}{2189}, \frac{105}{2189}, -\frac{910}{2189}, \frac{420}{2189}, -\frac{595}{2189}, \frac{525}{2189}, \frac{630}{2189}, \frac{735}{2189})$ $+\frac{35}{2189}\sqrt{3922}e^1 \otimes e_3$	{147, 234678}
85321:8	$0, 0, 0, \frac{43}{2521}\sqrt{1310}e^{12}, \frac{43}{2521}\sqrt{1946}e^{13}, \frac{602}{2521}\sqrt{3}e^{24},$ $\frac{43}{2521}\sqrt{734}e^{26}, \frac{43}{2521}\sqrt{514}e^{14} + \frac{129}{2521}\sqrt{238}e^{27}$	$(-\frac{129}{2521}, -\frac{43}{2521}, \frac{1548}{2521}, -\frac{172}{2521}, \frac{1419}{2521}, -\frac{215}{2521}, -\frac{258}{2521}, -\frac{301}{2521})$ $+\frac{215}{2521}\sqrt{166}e^3 \otimes e_8$	{15678, 2357}
8542:1	$0, 0, 0, \frac{18}{553}\sqrt{31}e^{12}, \frac{54}{553}\sqrt{15}e^{14}, \frac{36}{553}\sqrt{5}e^{24}, \frac{18}{553}\sqrt{174}e^{15},$ $\frac{18}{553}\sqrt{118}e^{26}$	$(\frac{45}{553}, -\frac{54}{553}, \frac{243}{553}, -\frac{9}{553}, \frac{36}{553}, -\frac{9}{79}, \frac{81}{553}, -\frac{117}{553})$ $+\frac{18}{553}\sqrt{310}e^1 \otimes e_8 + \frac{36}{553}\sqrt{42}e^3 \otimes e_7$	{147, 368}
8542:1	$0, 0, 0, \frac{2}{77}\sqrt{231}e^{12}, \frac{18}{77}\sqrt{7}e^{14}, \frac{4}{77}\sqrt{21}e^{24}, \frac{2}{77}\sqrt{462}e^{15},$ $\frac{2}{77}\sqrt{462}e^{26}$	$(\frac{17}{77}, -\frac{2}{11}, \frac{15}{77}, \frac{3}{77}, \frac{20}{77}, -\frac{1}{7}, \frac{37}{77}, -\frac{25}{77})$ $+\frac{2}{77}\sqrt{1302}e^1 \otimes e_8$	{1347, 147, 368, 68}
8542:1	$0, 0, 0, \frac{2}{1553}\sqrt{236189}e^{12}, \frac{2}{1553}\sqrt{321005}e^{14}, \frac{2}{1553}\sqrt{48298}e^{24},$ $\frac{16}{1553}\sqrt{3534}e^{15}, \frac{2}{1553}\sqrt{20026}e^{26}$	$(\frac{223}{1553}, \frac{14}{1553}, -\frac{955}{1553}, \frac{237}{1553}, \frac{460}{1553}, \frac{251}{1553}, \frac{683}{1553}, \frac{265}{1553})$ $+\frac{38}{1553}\sqrt{2046}e^1 \otimes e_3$	{125, 1478, 2345678, 36}
8542:1	$0, 0, 0, \frac{2}{377}\sqrt{7099}e^{12}, \frac{4}{377}\sqrt{1145}e^{14}, \frac{4}{377}\sqrt{1145}e^{24}, \frac{4}{377}\sqrt{7786}e^{15},$ $\frac{2}{377}\sqrt{8473}e^{26}$	$(-\frac{45}{377}, \frac{54}{377}, 1, \frac{9}{377}, -\frac{36}{377}, \frac{63}{377}, -\frac{81}{377}, \frac{9}{29})$ $+\frac{6}{377}\sqrt{7557}e^3 \otimes e_7$	{12478, 135, 236, 45678}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8542:1	$0, 0, 0, \frac{3}{497}\sqrt{142}e^{12}, \frac{6}{497}\sqrt{35}e^{14}, \frac{6}{497}\sqrt{35}e^{24}, \frac{6}{497}\sqrt{71}e^{15},$ $\frac{6}{497}\sqrt{71}e^{26}$	$(-\frac{3}{497}, -\frac{3}{497}, \frac{9}{71}, -\frac{6}{497}, -\frac{9}{497}, -\frac{9}{497}, -\frac{12}{497}, -\frac{12}{497})$ $+\frac{3}{497}\sqrt{434}e^1 \otimes e_8 + \frac{3}{497}\sqrt{434}e^2 \otimes e_7$	{12356, 1256}
8542:1	$0, 0, 0, \frac{54}{3857}\sqrt{382}e^{12}, \frac{54}{3857}\sqrt{229}e^{14}, \frac{54}{3857}\sqrt{318}e^{24},$ $\frac{27}{3857}\sqrt{2062}e^{15}, \frac{54}{3857}\sqrt{267}e^{26}$	$(-\frac{243}{3857}, \frac{432}{3857}, -\frac{972}{3857}, \frac{27}{551}, -\frac{54}{3857}, \frac{621}{3857}, -\frac{297}{3857}, \frac{1053}{3857})$ $+\frac{27}{3857}\sqrt{2982}e^1 \otimes e_3 + \frac{27}{3857}\sqrt{3694}e^2 \otimes e_7$	{1256, 14678}
8542:2	$0, 0, 0, \frac{351}{2849}\sqrt{22}e^{12}, \frac{39}{2849}\sqrt{2770}e^{14}, \frac{39}{2849}\sqrt{618}e^{24},$ $\frac{39}{2849}\sqrt{1970}e^{15}, \frac{39}{2849}\sqrt{1994}e^{13} + \frac{78}{2849}\sqrt{94}e^{26}$	$(\frac{585}{2849}, -\frac{312}{2849}, -\frac{936}{2849}, \frac{39}{407}, \frac{78}{259}, -\frac{39}{2849}, \frac{39}{77}, -\frac{351}{2849})$ $+\frac{39}{2849}\sqrt{4782}e^1 \otimes e_3$	{147, 234567}
8542:2	$0, 0, 0, \frac{27}{701}\sqrt{186}e^{12}, \frac{27}{701}\sqrt{95}e^{14}, \frac{54}{701}\sqrt{30}e^{24}, \frac{27}{701}\sqrt{386}e^{15},$ $\frac{27}{701}\sqrt{430}e^{13} + \frac{27}{701}\sqrt{7}e^{26}$	$(-\frac{135}{701}, \frac{162}{701}, \frac{486}{701}, \frac{27}{701}, -\frac{108}{701}, \frac{189}{701}, -\frac{243}{701}, \frac{351}{701})$ $+\frac{27}{701}\sqrt{1137}e^3 \otimes e_7$	{2567, 3468}
8542:2	$0, 0, 0, \frac{1}{14}\sqrt{30}e^{12}, \frac{1}{14}\sqrt{6}e^{14}, \frac{3}{14}\sqrt{6}e^{24}, \frac{1}{7}\sqrt{15}e^{15},$ $\frac{1}{14}\sqrt{42}e^{13} + \frac{1}{7}\sqrt{15}e^{26}$	$(-\frac{1}{7}, \frac{1}{7}, \frac{3}{7}, 0, -\frac{1}{7}, \frac{1}{7}, -\frac{2}{7}, \frac{2}{7})$ $+\frac{1}{14}\sqrt{138}e^2 \otimes e_7$	{1256, 134678}
8531:1	$0, 0, 0, \frac{3}{298}\sqrt{1195}e^{12}, \frac{1}{149}\sqrt{16491}e^{13}, \frac{1}{298}\sqrt{33938}e^{14}, \frac{1}{298}\sqrt{58794}e^{24},$ $\frac{3}{298}\sqrt{1195}e^{16}$	$(\frac{13}{149}, -\frac{105}{596}, \frac{80}{149}, -\frac{53}{596}, \frac{93}{149}, -\frac{1}{596}, -\frac{79}{298}, \frac{51}{596})$ $+\frac{5}{149}\sqrt{1195}e^3 \otimes e_7$	{123468, 13, 267, 478}
8531:1	$0, 0, 0, \frac{15}{701}\sqrt{142}e^{12}, \frac{30}{701}\sqrt{57}e^{13}, \frac{150}{701}\sqrt{2}e^{14}, \frac{15}{701}\sqrt{534}e^{24},$ $\frac{15}{701}\sqrt{142}e^{16}$	$(-\frac{75}{701}, \frac{60}{701}, \frac{270}{701}, -\frac{15}{701}, \frac{195}{701}, -\frac{90}{701}, \frac{45}{701}, -\frac{165}{701})$ $+\frac{15}{701}\sqrt{606}e^3 \otimes e_7 + \frac{15}{701}\sqrt{634}e^2 \otimes e_8$	{2345, 3568}
8531:1	$0, 0, 0, \frac{23}{1409}\sqrt{858}e^{12}, \frac{23}{1409}\sqrt{74}e^{13}, \frac{23}{1409}\sqrt{498}e^{14}, \frac{23}{1409}\sqrt{318}e^{24},$ $\frac{23}{1409}\sqrt{318}e^{16}$	$(\frac{69}{1409}, \frac{138}{1409}, -\frac{460}{1409}, \frac{207}{1409}, -\frac{391}{1409}, \frac{276}{1409}, \frac{345}{1409}, \frac{345}{1409})$ $+\frac{138}{1409}\sqrt{30}e^2 \otimes e_5 + \frac{23}{1409}\sqrt{1366}e^1 \otimes e_3$	{1267, 23468}
8531:1	$0, 0, 0, \frac{90}{3917}\sqrt{7}e^{12}, \frac{27}{3917}\sqrt{386}e^{13}, \frac{9}{3917}\sqrt{2078}e^{14}, \frac{18}{3917}\sqrt{826}e^{24},$ $\frac{99}{3917}\sqrt{10}e^{16}$	$(-\frac{171}{3917}, \frac{180}{3917}, \frac{270}{3917}, \frac{9}{3917}, \frac{99}{3917}, -\frac{162}{3917}, \frac{189}{3917}, -\frac{333}{3917})$ $+\frac{18}{3917}\sqrt{955}e^2 \otimes e_5 + \frac{9}{3917}\sqrt{3470}e^3 \otimes e_7$	{145678, 356}
8531:1	$0, 0, 0, \frac{2}{175}\sqrt{2093}e^{12}, \frac{6}{175}\sqrt{546}e^{13}, \frac{4}{175}\sqrt{273}e^{14}, \frac{2}{175}\sqrt{1365}e^{24},$ $\frac{8}{175}\sqrt{273}e^{16}$	$(-\frac{34}{175}, \frac{41}{175}, \frac{121}{175}, \frac{1}{25}, \frac{87}{175}, -\frac{27}{175}, \frac{48}{175}, -\frac{61}{175})$ $+\frac{2}{175}\sqrt{12922}e^3 \otimes e_8$	{12346, 158, 2678, 3457}
8531:1	$0, 0, 0, \frac{10}{1233}\sqrt{5161}e^{12}, \frac{16}{1233}\sqrt{2779}e^{13}, \frac{2}{1233}\sqrt{97662}e^{14},$ $\frac{2}{1233}\sqrt{195721}e^{24}, \frac{2}{1233}\sqrt{75430}e^{16}$	$(-\frac{134}{1233}, \frac{415}{1233}, -\frac{245}{1233}, \frac{281}{1233}, -\frac{379}{1233}, \frac{49}{1233}, \frac{232}{411}, \frac{13}{1233})$ $+\frac{2}{1233}\sqrt{408910}e^2 \otimes e_5$	{1237, 145678, 248, 356}
8531:1	$0, 0, 0, \frac{2}{307}\sqrt{8517}e^{12}, \frac{1}{307}\sqrt{33734}e^{13}, \frac{7}{307}\sqrt{1002}e^{14}, \frac{1}{307}\sqrt{11022}e^{24},$ $\frac{2}{307}\sqrt{8517}e^{16}$	$(\frac{57}{307}, -\frac{21}{307}, -\frac{110}{307}, \frac{36}{307}, -\frac{53}{307}, \frac{93}{307}, \frac{15}{307}, \frac{150}{307})$ $+\frac{1}{307}\sqrt{86506}e^1 \otimes e_3$	{126, 148, 234678, 37}
8531:1	$0, 0, 0, \frac{9}{833}\sqrt{526}e^{12}, \frac{9}{833}\sqrt{438}e^{13}, \frac{9}{833}\sqrt{430}e^{14}, \frac{9}{833}\sqrt{138}e^{24},$ $\frac{9}{833}\sqrt{526}e^{16}$	$(-\frac{27}{833}, \frac{90}{833}, -\frac{108}{833}, \frac{9}{119}, -\frac{135}{833}, \frac{36}{833}, \frac{9}{49}, \frac{9}{833})$ $+\frac{234}{833}e^2 \otimes e_8 + \frac{9}{833}\sqrt{822}e^1 \otimes e_3$	{1267, 1478}
8531:1	$0, 0, 0, \frac{6}{107}\sqrt{130}e^{12}, \frac{26}{107}\sqrt{3}e^{13}, \frac{2}{107}\sqrt{39}e^{14}, \frac{12}{107}\sqrt{39}e^{24},$ $\frac{6}{107}\sqrt{130}e^{16}$	$(-\frac{26}{107}, \frac{41}{107}, \frac{33}{107}, \frac{15}{107}, \frac{7}{107}, -\frac{11}{107}, \frac{56}{107}, -\frac{37}{107})$ $+\frac{6}{107}\sqrt{377}e^2 \otimes e_8$	{234, 245, 368, 568}
8531:2	$0, 0, 0, \frac{30}{1549}\sqrt{83}e^{12}, \frac{30}{1549}\sqrt{518}e^{13}, \frac{30}{1549}\sqrt{399}e^{24}, \frac{60}{1549}\sqrt{22}e^{14},$ $\frac{90}{1549}\sqrt{38}e^{26}$	$(-\frac{300}{1549}, \frac{285}{1549}, \frac{135}{1549}, -\frac{15}{1549}, -\frac{165}{1549}, \frac{270}{1549}, -\frac{315}{1549}, \frac{555}{1549})$ $+\frac{240}{1549}\sqrt{14}e^2 \otimes e_5 + \frac{60}{1549}\sqrt{110}e^3 \otimes e_7$	{1236, 145678}
8531:2	$0, 0, 0, \frac{6}{1385}\sqrt{13462}e^{12}, \frac{6}{1385}\sqrt{13038}e^{13}, \frac{12}{1385}\sqrt{530}e^{24},$ $\frac{6}{1385}\sqrt{20829}e^{14}, \frac{6}{1385}\sqrt{19981}e^{26}$	$(\frac{492}{1385}, -\frac{318}{1385}, \frac{27}{1385}, \frac{174}{1385}, \frac{519}{1385}, -\frac{144}{1385}, \frac{666}{1385}, -\frac{462}{1385})$ $+\frac{12}{1385}\sqrt{14734}e^1 \otimes e_8$	{134, 145, 3568, 68}
8531:2	$0, 0, 0, \frac{2}{1289}\sqrt{150155}e^{12}, \frac{2}{1289}\sqrt{296238}e^{13}, \frac{2}{1289}\sqrt{65661}e^{24},$ $\frac{18}{1289}\sqrt{1018}e^{14}, \frac{8}{1289}\sqrt{16797}e^{26}$	$(\frac{100}{1289}, -\frac{137}{1289}, \frac{707}{1289}, -\frac{37}{1289}, \frac{807}{1289}, -\frac{174}{1289}, \frac{63}{1289}, -\frac{311}{1289})$ $+\frac{4}{1289}\sqrt{135394}e^3 \otimes e_8$	{124578, 13, 23567, 468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8531:2	$0, 0, 0, \frac{264}{4241}\sqrt{10}e^{12}, \frac{132}{4241}\sqrt{114}e^{13}, \frac{66}{4241}\sqrt{113}e^{24},$ $\frac{33}{4241}\sqrt{2370}e^{14}, \frac{132}{4241}\sqrt{97}e^{26}$	$(\frac{231}{4241}, -\frac{363}{4241}, \frac{1188}{4241}, -\frac{132}{4241}, \frac{1419}{4241}, -\frac{495}{4241}, \frac{99}{4241}, -\frac{858}{4241})$ $+\frac{33}{4241}\sqrt{4282}e^1 \otimes e_8 + \frac{99}{4241}\sqrt{354}e^3 \otimes e_7$	{134, 3568}
8531:2	$0, 0, 0, \frac{1}{77}\sqrt{4209}e^{12}, \frac{1}{77}\sqrt{2318}e^{13}, \frac{1}{77}\sqrt{915}e^{24}, \frac{1}{77}\sqrt{4209}e^{14},$ $\frac{1}{77}\sqrt{915}e^{26}$	$(\frac{27}{77}, -\frac{15}{154}, -\frac{34}{77}, \frac{39}{154}, -\frac{1}{11}, \frac{12}{77}, \frac{93}{154}, \frac{9}{154})$ $+\frac{1}{77}\sqrt{7930}e^1 \otimes e_3$	{127, 148, 234678, 36}
8531:2	$0, 0, 0, \frac{2}{1313}\sqrt{46085}e^{12}, \frac{10}{1313}\sqrt{9926}e^{13}, \frac{2}{1313}\sqrt{14889}e^{24},$ $\frac{4}{1313}\sqrt{58138}e^{14}, \frac{2}{1313}\sqrt{77990}e^{26}$	$(-\frac{348}{1313}, \frac{241}{1313}, \frac{963}{1313}, -\frac{107}{1313}, \frac{615}{1313}, \frac{134}{1313}, -\frac{35}{101}, \frac{375}{1313})$ $+\frac{4}{1313}\sqrt{185758}e^3 \otimes e_7$	{12346, 15678, 2358, 47}
8531:2	$0, 0, 0, \frac{25}{1781}\sqrt{834}e^{12}, \frac{25}{1781}\sqrt{514}e^{13}, \frac{150}{1781}\sqrt{22}e^{24}, \frac{100}{1781}\sqrt{6}e^{14},$ $\frac{25}{1781}\sqrt{546}e^{26}$	$(\frac{75}{1781}, \frac{150}{1781}, -\frac{550}{1781}, \frac{225}{1781}, -\frac{475}{1781}, \frac{375}{1781}, \frac{300}{1781}, \frac{525}{1781})$ $+\frac{100}{1781}\sqrt{123}e^2 \otimes e_5 + \frac{25}{1781}\sqrt{1090}e^1 \otimes e_3$	{14568, 35}
8531:2	$0, 0, 0, \frac{15}{3689}\sqrt{1066}e^{12}, \frac{30}{3689}\sqrt{519}e^{13}, \frac{30}{3689}\sqrt{367}e^{24}, \frac{30}{3689}\sqrt{21}e^{14},$ $\frac{30}{3689}\sqrt{526}e^{26}$	$(\frac{285}{3689}, -\frac{75}{3689}, -\frac{585}{3689}, \frac{30}{527}, -\frac{300}{3689}, \frac{135}{3689}, \frac{495}{3689}, \frac{60}{3689})$ $+\frac{15}{217}\sqrt{10}e^1 \otimes e_8 + \frac{45}{3689}\sqrt{398}e^2 \otimes e_5$	{12367, 2478}
8531:2	$0, 0, 0, \frac{10}{1377}\sqrt{2067}e^{12}, \frac{130}{1377}\sqrt{38}e^{13}, \frac{10}{1377}\sqrt{7111}e^{24},$ $\frac{20}{1377}\sqrt{858}e^{14}, \frac{10}{1377}\sqrt{5278}e^{26}$	$(-\frac{140}{1377}, \frac{265}{1377}, -\frac{245}{1377}, \frac{125}{1377}, -\frac{385}{1377}, \frac{130}{459}, -\frac{5}{459}, \frac{655}{1377})$ $+\frac{20}{1377}\sqrt{3666}e^2 \otimes e_5$	{1236, 145678, 248, 357}
8531:3	$0, 0, 0, \frac{6}{133}\sqrt{34}e^{12}, \frac{6}{133}\sqrt{3}e^{13}, \frac{6}{133}\sqrt{31}e^{14}, \frac{6}{133}\sqrt{30}e^{35},$ $\frac{6}{133}\sqrt{34}e^{16}$	$(-\frac{6}{133}, \frac{27}{133}, -\frac{9}{133}, \frac{3}{19}, -\frac{15}{133}, \frac{15}{133}, -\frac{24}{133}, \frac{9}{133})$ $+\frac{36}{133}\sqrt{2}e^1 \otimes e_7 + \frac{6}{133}\sqrt{43}e^2 \otimes e_8$	{12356, 126, 13458, 148}
8531:3	$0, 0, 0, \frac{6}{133}\sqrt{34}e^{12}, \frac{6}{133}\sqrt{3}e^{13}, \frac{6}{133}\sqrt{31}e^{14}, \frac{6}{133}\sqrt{30}e^{35},$ $\frac{6}{133}\sqrt{34}e^{16}$	$(-\frac{6}{133}, \frac{27}{133}, -\frac{9}{133}, \frac{3}{19}, -\frac{15}{133}, \frac{15}{133}, -\frac{24}{133}, \frac{9}{133})$ $-\frac{36}{133}\sqrt{2}e^1 \otimes e_7 + \frac{6}{133}\sqrt{43}e^2 \otimes e_8$	{12356, 126, 13458, 148}
8531:3	$0, 0, 0, \frac{2}{479}\sqrt{38173}e^{12}, \frac{2}{1437}\sqrt{71817}e^{13}, \frac{4}{1437}\sqrt{21351}e^{14},$ $\frac{2}{1437}\sqrt{309913}e^{35}, \frac{2}{479}\sqrt{3235}e^{16}$	$(-\frac{74}{479}, \frac{302}{479}, -\frac{83}{1437}, \frac{228}{479}, -\frac{305}{1437}, \frac{154}{479}, -\frac{388}{1437}, \frac{80}{479})$ $+\frac{16}{479}\sqrt{1294}e^2 \otimes e_7$	{123568, 1268, 378, 578}
8531:3	$0, 0, 0, \frac{2}{1425}\sqrt{96162}e^{12}, \frac{94}{475}\sqrt{11}e^{13}, \frac{2}{475}\sqrt{3102}e^{14}, \frac{2}{285}\sqrt{9823}e^{35},$ $\frac{44}{475}\sqrt{47}e^{16}$	$(-\frac{106}{475}, \frac{149}{475}, \frac{527}{1425}, \frac{43}{475}, \frac{11}{75}, -\frac{63}{475}, \frac{736}{1425}, -\frac{169}{475})$ $+\frac{4}{1425}\sqrt{150447}e^3 \otimes e_8$	{123467, 1578, 268, 345}
8531:3	$0, 0, 0, \frac{58}{4289}\sqrt{314}e^{12}, \frac{348}{4289}\sqrt{15}e^{13}, \frac{58}{4289}\sqrt{199}e^{14}, \frac{58}{4289}\sqrt{415}e^{35},$ $\frac{29}{4289}\sqrt{2558}e^{16}$	$(\frac{145}{4289}, -\frac{696}{4289}, \frac{580}{4289}, -\frac{551}{4289}, \frac{725}{4289}, -\frac{406}{4289}, \frac{1305}{4289}, -\frac{261}{4289})$ $+\frac{29}{4289}\sqrt{3598}e^1 \otimes e_2 + \frac{29}{4289}\sqrt{4030}e^3 \otimes e_8$	{1367, 235}
8531:3	$0, 0, 0, \frac{6}{89}\sqrt{130}e^{12}, \frac{30}{89}\sqrt{3}e^{13}, \frac{6}{89}\sqrt{55}e^{14}, \frac{6}{89}\sqrt{30}e^{35},$ $\frac{6}{89}\sqrt{130}e^{16}$	$(-\frac{30}{89}, \frac{63}{89}, \frac{27}{89}, \frac{33}{89}, -\frac{3}{89}, \frac{3}{89}, \frac{24}{89}, -\frac{27}{89})$ $+\frac{6}{89}\sqrt{355}e^2 \otimes e_8$	{12356, 126, 13458, 148}
8531:3	$0, 0, 0, \frac{18}{289}\sqrt{41}e^{12}, \frac{14}{289}\sqrt{123}e^{13}, \frac{8}{289}\sqrt{615}e^{14}, \frac{2}{289}\sqrt{2337}e^{35},$ $\frac{2}{289}\sqrt{10947}e^{16}$	$(\frac{98}{289}, -\frac{148}{289}, -\frac{11}{289}, -\frac{50}{289}, \frac{87}{289}, \frac{48}{289}, \frac{76}{289}, \frac{146}{289})$ $+\frac{4}{289}\sqrt{7134}e^1 \otimes e_2$	{1367, 1567, 2, 235}
8531:4	$0, 0, 0, \frac{2}{7}\sqrt{3}e^{12}, \frac{2}{7}\sqrt{6}e^{13}, \frac{1}{7}\sqrt{6}e^{24}, \frac{1}{7}\sqrt{6}e^{35},$ $\frac{2}{7}\sqrt{6}e^{26}$	$(\frac{4}{7}, -\frac{2}{7}, -\frac{1}{7}, \frac{2}{7}, \frac{3}{7}, 0, \frac{2}{7}, -\frac{2}{7})$ $+\frac{1}{7}\sqrt{66}e^1 \otimes e_8$	{12367, 12567, 23458, 248}
8531:4	$0, 0, 0, \frac{2}{291}\sqrt{4290}e^{12}, \frac{13}{97}\sqrt{22}e^{13}, \frac{2}{97}\sqrt{143}e^{24}, \frac{1}{291}\sqrt{27742}e^{35},$ $\frac{13}{97}\sqrt{22}e^{26}$	$(-\frac{1}{97}, -\frac{7}{97}, \frac{77}{291}, -\frac{8}{97}, \frac{74}{291}, -\frac{15}{97}, \frac{151}{291}, -\frac{22}{97})$ $+\frac{1}{291}\sqrt{67782}e^3 \otimes e_8$	{124578, 137, 2356, 468}
8531:4	$0, 0, 0, \frac{8}{203}\sqrt{33}e^{12}, \frac{12}{203}\sqrt{6}e^{13}, \frac{2}{203}\sqrt{534}e^{24}, \frac{2}{203}\sqrt{534}e^{35},$ $\frac{4}{203}\sqrt{159}e^{26}$	$(\frac{36}{203}, -\frac{8}{203}, -\frac{34}{203}, \frac{4}{29}, \frac{2}{203}, \frac{20}{203}, -\frac{32}{203}, \frac{12}{203})$ $+\frac{12}{203}\sqrt{35}e^2 \otimes e_7 + \frac{2}{203}\sqrt{834}e^1 \otimes e_8$	{23458, 248}
8531:4	$0, 0, 0, \frac{2}{303}\sqrt{5109}e^{12}, \frac{2}{303}\sqrt{393}e^{13}, \frac{1}{303}\sqrt{26462}e^{24}, \frac{1}{303}\sqrt{26462}e^{35},$ $\frac{5}{303}\sqrt{786}e^{26}$	$(-\frac{4}{101}, \frac{49}{303}, -\frac{35}{303}, \frac{37}{303}, -\frac{47}{303}, \frac{86}{303}, -\frac{82}{303}, \frac{45}{101})$ $+\frac{3}{101}\sqrt{786}e^2 \otimes e_7$	{12356, 126, 37, 57}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8531:4	$0, 0, 0, \frac{1}{609}\sqrt{210}e^{12}, \frac{2}{203}\sqrt{42}e^{13}, \frac{1}{203}\sqrt{182}e^{24}, \frac{1}{87}\sqrt{58}e^{35},$ $\frac{2}{203}\sqrt{77}e^{26}$	$(-\frac{2}{29}, \frac{1}{29}, \frac{4}{87}, -\frac{1}{29}, -\frac{2}{87}, 0, \frac{2}{87}, \frac{1}{29})$ $+\frac{2}{203}\sqrt{105}e^2 \otimes e_7 + \frac{2}{609}\sqrt{903}e^3 \otimes e_8$	{145678, 248}
8531:5	$0, 0, 0, \frac{1}{77}\sqrt{1254}e^{12}, \frac{2}{77}\sqrt{330}e^{13}, \frac{1}{77}\sqrt{330}e^{24},$ $\frac{9}{77}\sqrt{22}e^{14} + \frac{1}{77}\sqrt{1914}e^{23}, \frac{1}{77}\sqrt{1914}e^{26}$	$(\frac{1}{7}, -\frac{1}{7}, \frac{2}{7}, 0, \frac{3}{7}, -\frac{1}{7}, \frac{1}{7}, -\frac{2}{7})$ $+\frac{8}{77}\sqrt{66}e^1 \otimes e_8$	{12367, 234578}
8531:5	$0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{10}{371}\sqrt{462}e^{13}, \frac{10}{371}\sqrt{511}e^{24},$ $\frac{60}{371}\sqrt{7}e^{14} + \frac{1}{371}\sqrt{70}e^{23}, \frac{30}{371}\sqrt{42}e^{26}$	$(-\frac{5}{53}, \frac{10}{53}, -\frac{10}{53}, \frac{5}{53}, -\frac{15}{53}, \frac{15}{53}, 0, \frac{25}{53})$ $+\frac{20}{371}\sqrt{266}e^2 \otimes e_5$	{1236, 357}
8531:5	$0, 0, 0, \frac{82}{2381}\sqrt{323}e^{12}, \frac{738}{2381}\sqrt{6}e^{13}, \frac{246}{2381}\sqrt{5}e^{24},$ $\frac{246}{2381}\sqrt{22}e^{14} + \frac{533}{2381}\sqrt{6}e^{23}, \frac{164}{2381}\sqrt{105}e^{26}$	$(\frac{451}{2381}, -\frac{410}{2381}, \frac{902}{2381}, \frac{41}{2381}, \frac{1353}{2381}, -\frac{369}{2381}, \frac{492}{2381}, -\frac{779}{2381})$ $+\frac{820}{2381}\sqrt{10}e^3 \otimes e_8$	{124578, 468}
8531:6	$0, 0, 0, \frac{1}{24}\sqrt{399}e^{12}, \frac{7}{24}\sqrt{6}e^{13}, \frac{1}{4}\sqrt{7}e^{14}, \frac{7}{24}\sqrt{6}e^{15},$ $\frac{1}{24}\sqrt{399}e^{16}$	$(-\frac{7}{24}, \frac{29}{48}, \frac{11}{24}, \frac{5}{16}, \frac{1}{6}, \frac{1}{8}, -\frac{1}{8}, -\frac{13}{48})$ $+\frac{1}{12}\sqrt{210}e^2 \otimes e_8$	{123567, 126, 134578, 148}
8531:6	$0, 0, 0, \frac{2}{231}\sqrt{534}e^{12}, \frac{4}{231}\sqrt{123}e^{13}, \frac{2}{77}\sqrt{58}e^{14}, \frac{2}{231}\sqrt{258}e^{15},$ $\frac{2}{231}\sqrt{534}e^{16}$	$(-\frac{4}{231}, \frac{25}{231}, -\frac{16}{231}, \frac{1}{11}, -\frac{20}{231}, \frac{17}{231}, -\frac{8}{77}, \frac{13}{231})$ $+\frac{2}{231}\sqrt{570}e^2 \otimes e_8 + \frac{2}{77}\sqrt{78}e^1 \otimes e_3$	{126, 148}
8531:6	$0, 0, 0, \frac{6}{227}\sqrt{559}e^{12}, \frac{2}{227}\sqrt{4773}e^{13}, \frac{4}{227}\sqrt{1677}e^{14}, \frac{1}{227}\sqrt{2838}e^{15},$ $\frac{6}{227}\sqrt{559}e^{16}$	$(\frac{52}{227}, -\frac{40}{227}, -\frac{77}{227}, \frac{12}{227}, -\frac{25}{227}, \frac{64}{227}, \frac{27}{227}, \frac{116}{227})$ $+\frac{9}{227}\sqrt{602}e^1 \otimes e_3$	{126, 148, 234678, 37}
8531:6	$0, 0, 0, \frac{150}{2291}\sqrt{41}e^{12}, \frac{50}{2291}\sqrt{237}e^{13}, \frac{100}{2291}\sqrt{74}e^{14}, \frac{25}{2291}\sqrt{410}e^{15},$ $\frac{50}{2291}\sqrt{173}e^{16}$	$(\frac{100}{2291}, \frac{300}{2291}, -\frac{525}{2291}, \frac{400}{2291}, -\frac{425}{2291}, \frac{500}{2291}, -\frac{325}{2291}, \frac{600}{2291})$ $+\frac{25}{2291}\sqrt{2506}e^1 \otimes e_3 + \frac{700}{2291}\sqrt{2}e^2 \otimes e_7$	{1478, 23468}
8531:6	$0, 0, 0, \frac{10}{39}e^{12}, \frac{5}{39}\sqrt{14}e^{13}, \frac{5}{39}\sqrt{6}e^{14}, \frac{5}{39}\sqrt{14}e^{15}, \frac{10}{39}e^{16}$	$(-\frac{10}{39}, \frac{20}{39}, \frac{5}{13}, \frac{10}{39}, \frac{5}{39}, 0, -\frac{5}{39}, -\frac{10}{39})$ $+\frac{5}{39}\sqrt{34}e^2 \otimes e_7 + \frac{5}{39}\sqrt{34}e^3 \otimes e_8$	{1258, 13467}
8531:6	$0, 0, 0, \frac{91}{701}\sqrt{6}e^{12}, \frac{13}{701}\sqrt{435}e^{13}, \frac{39}{701}\sqrt{6}e^{14}, \frac{65}{701}\sqrt{10}e^{15},$ $\frac{13}{701}\sqrt{337}e^{16}$	$(\frac{65}{1402}, -\frac{273}{1402}, \frac{130}{701}, -\frac{104}{701}, \frac{325}{1402}, -\frac{143}{1402}, \frac{195}{701}, -\frac{39}{701})$ $+\frac{13}{701}\sqrt{555}e^3 \otimes e_8 + \frac{13}{701}\sqrt{707}e^1 \otimes e_2$	{1367, 2357}
8531:6	$0, 0, 0, \frac{66}{125}\sqrt{2}e^{12}, \frac{2}{125}\sqrt{330}e^{13}, \frac{2}{125}\sqrt{462}e^{14}, \frac{6}{125}\sqrt{286}e^{15},$ $\frac{12}{125}\sqrt{33}e^{16}$	$(-\frac{29}{125}, \frac{92}{125}, \frac{18}{125}, \frac{63}{125}, -\frac{11}{125}, \frac{34}{125}, -\frac{8}{25}, \frac{1}{25})$ $+\frac{12}{125}\sqrt{187}e^2 \otimes e_7$	{125, 134678, 248, 3567}
8531:6	$0, 0, 0, \frac{4}{61}\sqrt{66}e^{12}, \frac{2}{61}\sqrt{374}e^{13}, \frac{6}{61}\sqrt{22}e^{14}, \frac{2}{61}\sqrt{374}e^{15},$ $\frac{2}{61}\sqrt{286}e^{16}$	$(\frac{17}{61}, -\frac{27}{61}, -\frac{6}{61}, -\frac{10}{61}, \frac{11}{61}, \frac{7}{61}, \frac{28}{61}, \frac{24}{61})$ $+\frac{20}{61}\sqrt{11}e^1 \otimes e_2$	{1367, 156, 2, 2357}
8531:6	$0, 0, 0, \frac{12}{125}\sqrt{33}e^{12}, \frac{6}{125}\sqrt{286}e^{13}, \frac{2}{125}\sqrt{462}e^{14}, \frac{2}{125}\sqrt{330}e^{15},$ $\frac{66}{125}\sqrt{2}e^{16}$	$(-\frac{29}{125}, \frac{41}{125}, \frac{86}{125}, \frac{12}{125}, \frac{57}{125}, -\frac{17}{125}, \frac{28}{125}, -\frac{46}{125})$ $+\frac{12}{125}\sqrt{187}e^3 \otimes e_8$	{123467, 158, 268, 3457}
8531:7	$0, 0, 0, \frac{1}{1561}\sqrt{690}e^{12}, \frac{6}{1561}\sqrt{42}e^{13}, \frac{2}{1561}\sqrt{447}e^{24}, \frac{2}{1561}\sqrt{723}e^{15},$ $\frac{2}{1561}\sqrt{723}e^{26}$	$(\frac{22}{1561}, -\frac{1}{1561}, -\frac{48}{1561}, \frac{3}{223}, -\frac{26}{1561}, \frac{20}{1561}, -\frac{4}{1561}, \frac{19}{1561})$ $+\frac{1}{1561}\sqrt{4002}e^1 \otimes e_8 + \frac{6}{1561}\sqrt{115}e^2 \otimes e_7$	{1256, 248}
8531:7	$0, 0, 0, \frac{1}{79}\sqrt{3598}e^{12}, \frac{1}{237}\sqrt{2570}e^{13}, \frac{4}{237}\sqrt{514}e^{24}, \frac{2}{237}\sqrt{7453}e^{15},$ $\frac{1}{237}\sqrt{2570}e^{26}$	$(\frac{121}{237}, -\frac{26}{237}, -\frac{136}{237}, \frac{95}{237}, -\frac{5}{79}, \frac{23}{79}, \frac{106}{237}, \frac{43}{237})$ $+\frac{1}{79}\sqrt{10794}e^1 \otimes e_3$	{12678, 1467, 234, 38}
8531:7	$0, 0, 0, \frac{62}{4419}\sqrt{447}e^{12}, \frac{62}{1473}\sqrt{6}e^{13}, \frac{1364}{4419}e^{24}, \frac{155}{4419}\sqrt{94}e^{15},$ $\frac{62}{4419}\sqrt{335}e^{26}$	$(\frac{124}{4419}, \frac{124}{1473}, -\frac{93}{491}, \frac{496}{4419}, -\frac{713}{4419}, \frac{868}{4419}, -\frac{589}{4419}, \frac{1240}{4419})$ $+\frac{31}{4419}\sqrt{3030}e^1 \otimes e_3 + \frac{62}{4419}\sqrt{1167}e^2 \otimes e_7$	{14678, 2348}
8531:7	$0, 0, 0, \frac{2}{123}\sqrt{1551}e^{12}, \frac{4}{123}\sqrt{611}e^{13}, \frac{4}{123}\sqrt{94}e^{24}, \frac{2}{123}\sqrt{893}e^{15},$ $\frac{4}{123}\sqrt{611}e^{26}$	$(-\frac{14}{123}, -\frac{1}{41}, \frac{71}{123}, -\frac{17}{123}, \frac{19}{41}, -\frac{20}{123}, \frac{43}{123}, -\frac{23}{123})$ $+\frac{2}{41}\sqrt{517}e^3 \otimes e_8$	{12458, 137, 23567, 468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8531:7	$0, 0, 0, \frac{2}{519}\sqrt{9867}e^{12}, \frac{4}{519}\sqrt{429}e^{13}, \frac{2}{519}\sqrt{24739}e^{24}, \frac{10}{519}\sqrt{858}e^{15},$ $\frac{10}{519}\sqrt{858}e^{26}$	$(-\frac{42}{173}, \frac{127}{519}, \frac{31}{173}, \frac{1}{519}, -\frac{11}{173}, \frac{128}{519}, -\frac{53}{173}, \frac{85}{173})$ $+ \frac{2}{173}\sqrt{6578}e^2 \otimes e_7$	{1256, 134678, 248, 357}
8531:7	$0, 0, 0, \frac{2}{63}\sqrt{21}e^{12}, \frac{4}{63}\sqrt{21}e^{13}, \frac{2}{63}\sqrt{91}e^{24}, \frac{2}{9}\sqrt{2}e^{15},$ $\frac{2}{63}\sqrt{154}e^{26}$	$(-\frac{2}{9}, \frac{1}{9}, \frac{1}{3}, -\frac{1}{9}, \frac{1}{9}, 0, -\frac{1}{9}, \frac{1}{9})$ $+ \frac{2}{63}\sqrt{210}e^2 \otimes e_7 + \frac{4}{63}\sqrt{42}e^3 \otimes e_8$	{12458, 137}
8531:8	$0, 0, 0, \frac{117}{2393}\sqrt{134}e^{12}, \frac{39}{2393}\sqrt{1646}e^{13}, \frac{156}{2393}\sqrt{55}e^{14},$ $\frac{78}{2393}\sqrt{446}e^{24}, \frac{234}{2393}\sqrt{22}e^{16} + \frac{39}{2393}\sqrt{314}e^{23}$	$(-\frac{195}{2393}, \frac{741}{2393}, -\frac{585}{2393}, \frac{546}{2393}, -\frac{780}{2393}, \frac{351}{2393}, \frac{1287}{2393}, \frac{156}{2393})$ $+ \frac{234}{2393}\sqrt{111}e^2 \otimes e_5$	{1237, 248}
8531:9	$0, 0, 0, \frac{1}{55}\sqrt{114}e^{12}, \frac{3}{55}\sqrt{26}e^{13}, \frac{2}{55}\sqrt{42}e^{14},$ $\frac{3}{55}\sqrt{26}e^{15} + \frac{2}{55}\sqrt{57}e^{23}, \frac{2}{55}\sqrt{57}e^{16}$	$(-\frac{1}{55}, -\frac{2}{55}, \frac{7}{55}, -\frac{3}{55}, \frac{6}{55}, -\frac{4}{55}, \frac{1}{11}, -\frac{1}{11})$ $+ \frac{7}{55}\sqrt{6}e^2 \otimes e_8$	{134578, 148}
8531:9	$0, 0, 0, \frac{3}{47}\sqrt{66}e^{12}, \frac{3}{47}\sqrt{22}e^{13}, \frac{1}{47}\sqrt{330}e^{14},$ $\frac{2}{47}\sqrt{165}e^{15} + \frac{3}{47}\sqrt{154}e^{23}, \frac{3}{47}\sqrt{154}e^{16}$	$(-\frac{2}{47}, -\frac{4}{47}, \frac{23}{47}, -\frac{6}{47}, \frac{21}{47}, -\frac{8}{47}, \frac{19}{47}, -\frac{10}{47})$ $+ \frac{3}{47}\sqrt{286}e^3 \otimes e_8$	{124578, 235}
8531:10	$0, 0, 0, \frac{126}{199}e^{12}, \frac{14}{199}\sqrt{114}e^{13}, \frac{14}{199}\sqrt{6}e^{24},$ $\frac{14}{199}\sqrt{33}e^{15} + \frac{35}{199}\sqrt{6}e^{23}, \frac{14}{199}\sqrt{114}e^{26}$	$(-\frac{7}{199}, -\frac{14}{199}, \frac{98}{199}, -\frac{21}{199}, \frac{91}{199}, -\frac{35}{199}, \frac{84}{199}, -\frac{49}{199})$ $+ \frac{126}{199}\sqrt{3}e^3 \otimes e_8$	{137, 468}
8531:11	$0, 0, 0, \frac{98}{2929}\sqrt{487}e^{12}, \frac{49}{2929}\sqrt{730}e^{13}, \frac{98}{2929}\sqrt{154}e^{14}, \frac{98}{2929}\sqrt{391}e^{35},$ $\frac{49}{2929}\sqrt{422}e^{16} + \frac{49}{2929}\sqrt{1166}e^{23}$	$(-\frac{147}{2929}, \frac{1372}{2929}, -\frac{441}{2929}, \frac{1225}{2929}, -\frac{588}{2929}, \frac{1078}{2929}, -\frac{1029}{2929}, \frac{931}{2929})$ $+ \frac{98}{2929}\sqrt{1185}e^2 \otimes e_7$	{1268, 378}
8531:12	$0, 0, 0, -\frac{3}{25}\sqrt{13}e^{12}, \frac{3}{25}\sqrt{29}e^{13}, \frac{3}{25}\sqrt{2}e^{14},$ $\frac{3}{25}\sqrt{5}e^{24} + \frac{3}{25}\sqrt{35}e^{35}, \frac{6}{25}\sqrt{7}e^{16}$	$(-\frac{6}{25}, \frac{9}{25}, \frac{9}{25}, \frac{3}{25}, \frac{3}{25}, -\frac{3}{25}, \frac{12}{25}, -\frac{9}{25})$ $+ \frac{3}{25}\sqrt{82}e^3 \otimes e_8$	{123467, 1578, 268, 345, 123467, 1578, 268, 345}
8531:12	$0, 0, 0, \frac{3}{25}\sqrt{13}e^{12}, \frac{3}{25}\sqrt{29}e^{13}, \frac{3}{25}\sqrt{2}e^{14},$ $\frac{3}{25}\sqrt{5}e^{24} + \frac{3}{25}\sqrt{35}e^{35}, \frac{6}{25}\sqrt{7}e^{16}$	$(-\frac{6}{25}, \frac{9}{25}, \frac{9}{25}, \frac{3}{25}, \frac{3}{25}, -\frac{3}{25}, \frac{12}{25}, -\frac{9}{25})$ $+ \frac{3}{25}\sqrt{82}e^3 \otimes e_8$	{123467, 1578, 268, 345, 123467, 1578, 268, 345}
8531:12	$0, 0, 0, -\frac{6}{25}\sqrt{7}e^{12}, \frac{6}{25}\sqrt{3}e^{13}, \frac{3}{25}\sqrt{2}e^{14},$ $\frac{18}{25}e^{24} + \frac{3}{25}\sqrt{6}e^{35}, \frac{6}{25}\sqrt{7}e^{16}$	$(-\frac{6}{25}, \frac{9}{25}, \frac{9}{25}, \frac{3}{25}, \frac{3}{25}, -\frac{3}{25}, \frac{12}{25}, -\frac{9}{25})$ $+ \frac{3}{25}\sqrt{82}e^2 \otimes e_8$	{234, 245, 368, 568, 234, 245, 368, 568}
8531:12	$0, 0, 0, \frac{6}{25}\sqrt{7}e^{12}, \frac{6}{25}\sqrt{3}e^{13}, \frac{3}{25}\sqrt{2}e^{14},$ $\frac{18}{25}e^{24} + \frac{3}{25}\sqrt{6}e^{35}, \frac{6}{25}\sqrt{7}e^{16}$	$(-\frac{6}{25}, \frac{9}{25}, \frac{9}{25}, \frac{3}{25}, \frac{3}{25}, -\frac{3}{25}, \frac{12}{25}, -\frac{9}{25})$ $+ \frac{3}{25}\sqrt{82}e^2 \otimes e_8$	{234, 245, 368, 568, 234, 245, 368, 568}
8531:14	$0, 0, 0, \frac{62}{3285}\sqrt{435}e^{12}, \frac{31}{3285}\sqrt{3482}e^{13}, \frac{124}{3285}\sqrt{66}e^{24},$ $\frac{62}{3285}\sqrt{534}e^{14} + \frac{31}{3285}\sqrt{2902}e^{35}, \frac{31}{3285}\sqrt{2770}e^{26}$	$(\frac{713}{3285}, -\frac{527}{3285}, \frac{31}{1095}, \frac{62}{1095}, \frac{806}{3285}, -\frac{341}{3285}, \frac{899}{3285}, -\frac{868}{3285})$ $+ \frac{31}{3285}\sqrt{5538}e^3 \otimes e_8$	{124578, 468}
8531:14	$0, 0, 0, \frac{2}{35}\sqrt{78}e^{12}, \frac{12}{35}\sqrt{2}e^{13}, \frac{2}{35}\sqrt{15}e^{24},$ $\frac{6}{35}\sqrt{14}e^{14} + \frac{2}{35}\sqrt{15}e^{35}, \frac{2}{35}\sqrt{114}e^{26}$	$(\frac{12}{35}, -\frac{8}{35}, \frac{2}{35}, \frac{4}{35}, \frac{2}{5}, -\frac{4}{35}, \frac{16}{35}, -\frac{12}{35})$ $+ \frac{2}{35}\sqrt{339}e^1 \otimes e_8$	{134, 145}
8531:16	$0, 0, 0, \frac{23}{501}\sqrt{266}e^{12}, \frac{46}{501}\sqrt{10}e^{13}, \frac{23}{501}\sqrt{55}e^{14}, \frac{23}{501}\sqrt{310}e^{15},$ $\frac{23}{501}\sqrt{146}e^{16} + \frac{23}{501}\sqrt{7}e^{35}$	$(-\frac{115}{501}, \frac{368}{501}, \frac{23}{167}, \frac{253}{501}, -\frac{46}{501}, \frac{46}{167}, -\frac{161}{501}, \frac{23}{501})$ $+ \frac{23}{501}\sqrt{817}e^2 \otimes e_7$	{134678, 3567}
8531:16	$0, 0, 0, \frac{111}{2021}\sqrt{106}e^{12}, \frac{888}{2021}\sqrt{2}e^{13}, \frac{74}{2021}\sqrt{129}e^{14},$ $\frac{37}{2021}\sqrt{1342}e^{15}, \frac{1184}{2021}e^{16} + \frac{37}{2021}\sqrt{570}e^{35}$	$(\frac{481}{2021}, -\frac{888}{2021}, \frac{37}{2021}, -\frac{407}{2021}, \frac{518}{2021}, \frac{74}{2021}, \frac{999}{2021}, \frac{555}{2021})$ $+ \frac{37}{2021}\sqrt{3386}e^1 \otimes e_2$	{1367, 156}
8531:16	$0, 0, 0, \frac{33}{679}\sqrt{218}e^{12}, \frac{33}{679}\sqrt{138}e^{13}, \frac{22}{679}\sqrt{303}e^{14}, \frac{11}{679}\sqrt{1758}e^{15},$ $\frac{66}{679}\sqrt{33}e^{16} + \frac{66}{679}\sqrt{43}e^{35}$	$(-\frac{121}{679}, \frac{352}{679}, \frac{55}{679}, \frac{33}{97}, -\frac{66}{679}, \frac{110}{679}, -\frac{187}{679}, -\frac{11}{679})$ $+ \frac{33}{679}\sqrt{382}e^2 \otimes e_8$	{123567, 126}
8531:17	$0, 0, 0, \frac{2}{27}\sqrt{13}e^{12}, \frac{1}{27}\sqrt{26}e^{13}, \frac{1}{9}\sqrt{26}e^{24}, \frac{2}{27}\sqrt{65}e^{15},$ $\frac{2}{27}\sqrt{65}e^{26} + \frac{1}{27}\sqrt{130}e^{35}$	$(-\frac{8}{27}, \frac{2}{9}, \frac{1}{3}, -\frac{2}{27}, \frac{1}{27}, \frac{4}{27}, -\frac{7}{27}, \frac{10}{27})$ $+ \frac{2}{27}\sqrt{143}e^2 \otimes e_7$	{1256, 248}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8531:18	$0, 0, 0, \frac{348}{1223}\sqrt{2}e^{12}, \frac{58}{1223}\sqrt{13}e^{13}, \frac{29}{3669}\sqrt{2446}e^{24}, \frac{29}{1223}\sqrt{358}e^{35},$ $\frac{58}{3669}\sqrt{582}e^{15} + \frac{29}{1223}\sqrt{262}e^{26}$	$(\frac{232}{1223}, -\frac{29}{3669}, -\frac{261}{1223}, \frac{667}{3669}, -\frac{29}{1223}, \frac{638}{3669}, -\frac{290}{1223}, \frac{203}{1223})$ $+ \frac{145}{3669}\sqrt{246}e^2 \otimes e_7$	{126, 57}
8531:19	$0, 0, 0, \frac{26}{675}\sqrt{177}e^{12}, \frac{13}{225}\sqrt{10}e^{13}, \frac{26}{225}\sqrt{7}e^{14}, \frac{26}{675}\sqrt{381}e^{15},$ $\frac{13}{675}\sqrt{978}e^{16} + \frac{91}{675}\sqrt{30}e^{23}$	$(-\frac{13}{225}, \frac{104}{225}, -\frac{13}{75}, \frac{91}{225}, -\frac{52}{225}, \frac{26}{75}, -\frac{13}{45}, \frac{13}{45})$ $+ \frac{26}{675}\sqrt{843}e^2 \otimes e_7$	{1235, 567}
8531:20	$0, 0, 0, \frac{47}{2125}\sqrt{582}e^{12}, \frac{94}{2125}\sqrt{334}e^{13}, \frac{47}{2125}\sqrt{318}e^{14},$ $\frac{47}{2125}\sqrt{70}e^{15} + \frac{47}{425}\sqrt{14}e^{24}, \frac{47}{2125}\sqrt{1142}e^{16}$	$(-\frac{423}{2125}, \frac{517}{2125}, \frac{1457}{2125}, \frac{94}{2125}, \frac{1034}{2125}, -\frac{329}{2125}, \frac{611}{2125}, -\frac{752}{2125})$ $+ \frac{94}{2125}\sqrt{862}e^3 \otimes e_8$	{158, 3457}
8531:20	$0, 0, 0, \frac{3}{7}\sqrt{2}e^{12}, \frac{2}{7}\sqrt{3}e^{13}, \frac{1}{7}\sqrt{6}e^{14},$ $\frac{3}{7}\sqrt{2}e^{15} + \frac{3}{7}\sqrt{2}e^{24}, \frac{3}{7}\sqrt{2}e^{16}$	$(-\frac{1}{7}, \frac{1}{7}, \frac{3}{7}, 0, \frac{2}{7}, -\frac{1}{7}, \frac{1}{7}, -\frac{2}{7})$ $+ \frac{6}{7}e^2 \otimes e_8$	{123567, 134578}
8531:20	$0, 0, 0, \frac{17}{28}e^{12}, \frac{17}{532}\sqrt{358}e^{13}, \frac{17}{532}\sqrt{518}e^{14},$ $\frac{17}{532}\sqrt{22}e^{15} + \frac{17}{532}\sqrt{110}e^{24}, \frac{17}{28}e^{16}$	$(\frac{51}{266}, -\frac{85}{1064}, -\frac{187}{532}, \frac{17}{152}, -\frac{85}{532}, \frac{17}{56}, \frac{17}{532}, \frac{527}{1064})$ $+ \frac{17}{532}\sqrt{898}e^1 \otimes e_3$	{126, 148, 234678, 37}
8531:20	$0, 0, 0, \frac{17}{28}e^{12}, \frac{17}{532}\sqrt{358}e^{13}, \frac{17}{532}\sqrt{518}e^{14},$ $\frac{17}{532}\sqrt{22}e^{15} + \frac{17}{532}\sqrt{110}e^{24}, \frac{17}{28}e^{16}$	$(\frac{51}{266}, -\frac{85}{1064}, -\frac{187}{532}, \frac{17}{152}, -\frac{85}{532}, \frac{17}{56}, \frac{17}{532}, \frac{527}{1064})$ $- \frac{17}{532}\sqrt{898}e^1 \otimes e_3$	{126, 148, 234678, 37}
8531:21	$0, 0, 0, \frac{3}{119}\sqrt{511}e^{12}, \frac{3}{17}\sqrt{3}e^{13}, \frac{3}{119}\sqrt{35}e^{14}, \frac{27}{119}\sqrt{7}e^{24},$ $\frac{6}{119}\sqrt{70}e^{16} + \frac{3}{119}\sqrt{462}e^{35}$	$(-\frac{3}{17}, \frac{6}{17}, 0, \frac{3}{17}, -\frac{3}{17}, 0, \frac{9}{17}, -\frac{3}{17})$ $+ \frac{3}{119}\sqrt{1351}e^2 \otimes e_8$	{368, 568}
8531:21	$0, 0, 0, \frac{528}{3077}e^{12}, \frac{33}{3077}\sqrt{3194}e^{13}, \frac{33}{3077}\sqrt{1634}e^{14}, \frac{66}{3077}\sqrt{649}e^{24},$ $\frac{33}{3077}\sqrt{1538}e^{16} + \frac{66}{3077}\sqrt{641}e^{35}$	$(\frac{33}{181}, -\frac{726}{3077}, \frac{198}{3077}, -\frac{165}{3077}, \frac{759}{3077}, \frac{396}{3077}, -\frac{891}{3077}, \frac{957}{3077})$ $+ \frac{33}{3077}\sqrt{5266}e^3 \otimes e_7$	{123468, 267}
8531:22	$0, 0, 0, \frac{17}{1143}\sqrt{6}e^{12}, \frac{17}{1143}\sqrt{1698}e^{13}, \frac{85}{1143}\sqrt{6}e^{24}, \frac{17}{1143}\sqrt{1770}e^{14},$ $\frac{34}{381}\sqrt{10}e^{26} + \frac{17}{1143}\sqrt{2406}e^{35}$	$(-\frac{119}{381}, \frac{34}{127}, \frac{51}{127}, -\frac{17}{381}, \frac{34}{381}, \frac{85}{381}, -\frac{136}{381}, \frac{187}{381})$ $+ \frac{17}{1143}\sqrt{5538}e^3 \otimes e_7$	{123468, 235}
8531:23	$0, 0, 0, \frac{37}{1007}\sqrt{78}e^{12}, \frac{740}{3021}\sqrt{6}e^{13}, \frac{37}{3021}\sqrt{1182}e^{14}, \frac{37}{3021}\sqrt{2014}e^{35},$ $\frac{407}{3021}\sqrt{6}e^{16} + \frac{37}{159}\sqrt{6}e^{24}$	$(-\frac{37}{1007}, -\frac{74}{1007}, \frac{814}{3021}, -\frac{111}{1007}, \frac{37}{159}, -\frac{148}{1007}, \frac{1517}{3021}, -\frac{185}{1007})$ $+ \frac{111}{1007}\sqrt{62}e^3 \otimes e_8$	{123467, 268}
8531:23	$0, 0, 0, \frac{19}{251}\sqrt{67}e^{12}, \frac{19}{753}\sqrt{57}e^{13}, \frac{19}{753}\sqrt{159}e^{14}, \frac{19}{753}\sqrt{502}e^{35},$ $\frac{38}{251}\sqrt{10}e^{16} + \frac{95}{251}\sqrt{3}e^{24}$	$(\frac{19}{251}, \frac{38}{251}, -\frac{152}{753}, \frac{57}{251}, -\frac{95}{753}, \frac{76}{251}, -\frac{247}{753}, \frac{95}{251})$ $+ \frac{19}{251}\sqrt{139}e^2 \otimes e_7$	{134678, 145678}
8531:24	$0, 0, 0, \frac{1}{27}\sqrt{130}e^{12}, \frac{2}{27}\sqrt{65}e^{13}, \frac{1}{27}\sqrt{26}e^{24}, \frac{1}{9}\sqrt{26}e^{35},$ $\frac{2}{27}\sqrt{13}e^{14} + \frac{2}{27}\sqrt{65}e^{26}$	$(-\frac{2}{27}, -\frac{1}{27}, \frac{8}{27}, -\frac{1}{9}, \frac{2}{9}, -\frac{4}{27}, \frac{14}{27}, -\frac{5}{27})$ $+ \frac{2}{27}\sqrt{143}e^3 \otimes e_8$	{2356, 468}
8531:24	$0, 0, 0, \frac{102}{269}e^{12}, \frac{17}{807}\sqrt{102}e^{13}, \frac{102}{269}\sqrt{2}e^{24}, \frac{17}{807}\sqrt{538}e^{35},$ $\frac{17}{807}\sqrt{330}e^{14} + \frac{34}{269}\sqrt{15}e^{26}$	$(\frac{34}{269}, \frac{17}{269}, -\frac{170}{807}, \frac{51}{269}, -\frac{68}{807}, \frac{68}{269}, -\frac{238}{807}, \frac{85}{269})$ $+ \frac{17}{269}\sqrt{146}e^2 \otimes e_7$	{134678, 145678}
8531:31	$0, 0, 0, \frac{13}{157}\sqrt{11}e^{12}, \frac{52}{157}\sqrt{5}e^{13}, \frac{13}{314}\sqrt{30}e^{24}, \frac{13}{157}\sqrt{85}e^{14},$ $\frac{39}{314}\sqrt{6}e^{15} + \frac{13}{157}\sqrt{29}e^{26}$	$(-\frac{39}{157}, \frac{26}{157}, \frac{117}{157}, -\frac{13}{157}, \frac{78}{157}, \frac{13}{157}, -\frac{52}{157}, \frac{39}{157})$ $+ \frac{13}{314}\sqrt{1006}e^3 \otimes e_7$	{12346, 15678}
8531:31	$0, 0, 0, \frac{172}{2397}\sqrt{123}e^{12}, \frac{43}{2397}\sqrt{1038}e^{13}, \frac{43}{2397}\sqrt{382}e^{24},$ $\frac{43}{2397}\sqrt{1906}e^{14}, \frac{172}{2397}\sqrt{31}e^{15} + \frac{86}{2397}\sqrt{142}e^{26}$	$(\frac{43}{141}, -\frac{43}{799}, -\frac{1118}{2397}, \frac{602}{2397}, -\frac{129}{799}, \frac{473}{2397}, \frac{1333}{2397}, \frac{344}{2397})$ $+ \frac{43}{2397}\sqrt{4034}e^1 \otimes e_3$	{148, 36}
8531:32	$0, 0, 0, \frac{42}{473}\sqrt{31}e^{12}, \frac{14}{473}\sqrt{381}e^{13}, \frac{28}{473}\sqrt{129}e^{14}, \frac{7}{473}\sqrt{678}e^{15},$ $\frac{42}{473}\sqrt{47}e^{16} + \frac{168}{473}\sqrt{2}e^{24}$	$(\frac{28}{473}, \frac{56}{473}, -\frac{119}{473}, \frac{84}{473}, -\frac{91}{473}, \frac{112}{473}, -\frac{63}{473}, \frac{140}{473})$ $+ \frac{21}{473}\sqrt{282}e^1 \otimes e_3$	{126, 234678}
8531:32	$0, 0, 0, \frac{9}{125}\sqrt{17}e^{12}, \frac{3}{125}\sqrt{255}e^{13}, \frac{9}{125}\sqrt{43}e^{14}, \frac{3}{125}\sqrt{474}e^{15},$ $\frac{3}{125}\sqrt{438}e^{16} + \frac{3}{25}\sqrt{21}e^{24}$	$(\frac{6}{125}, \frac{12}{125}, -\frac{27}{125}, \frac{18}{125}, -\frac{21}{125}, \frac{24}{125}, -\frac{3}{25}, \frac{6}{25})$ $+ \frac{9}{125}\sqrt{73}e^2 \otimes e_7$	{134678, 3567}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8531:33	$0, 0, 0, \frac{18}{71}\sqrt{7}e^{12}, \frac{24}{71}\sqrt{6}e^{13}, \frac{18}{71}\sqrt{2}e^{24}, \frac{6}{71}\sqrt{39}e^{15},$ $\frac{12}{71}\sqrt{3}e^{14} + \frac{24}{71}\sqrt{6}e^{26}$	$(-\frac{6}{71}, -\frac{3}{71}, \frac{39}{71}, -\frac{9}{71}, \frac{33}{71}, -\frac{12}{71}, \frac{27}{71}, -\frac{15}{71})$ $+ \frac{18}{71}\sqrt{19}e^3 \otimes e_8$	{12458, 137}
8531:33	$0, 0, 0, \frac{108}{457}\sqrt{13}e^{12}, \frac{18}{457}\sqrt{309}e^{13}, \frac{54}{457}\sqrt{17}e^{24}, \frac{9}{457}\sqrt{402}e^{15},$ $\frac{18}{457}\sqrt{519}e^{14} + \frac{18}{457}\sqrt{309}e^{26}$	$(\frac{72}{457}, \frac{36}{457}, -\frac{171}{457}, \frac{108}{457}, -\frac{99}{457}, \frac{144}{457}, -\frac{27}{457}, \frac{180}{457})$ $+ \frac{27}{457}\sqrt{278}e^1 \otimes e_3$	{234678, 367}
8531:33	$0, 0, 0, \frac{9}{74}\sqrt{2}e^{12}, \frac{7}{74}\sqrt{6}e^{13}, \frac{9}{74}\sqrt{6}e^{24}, \frac{3}{37}\sqrt{15}e^{15},$ $\frac{1}{74}\sqrt{570}e^{14} + \frac{3}{37}\sqrt{15}e^{26}$	$(\frac{2}{37}, \frac{1}{37}, -\frac{6}{37}, \frac{3}{37}, -\frac{4}{37}, \frac{4}{37}, -\frac{2}{37}, \frac{5}{37})$ $+ \frac{3}{74}\sqrt{82}e^2 \otimes e_7$	{12458, 137}
8531:71	$0, 0, 0, \frac{34}{677}\sqrt{138}e^{12}, \frac{17}{677}\sqrt{542}e^{13}, -\frac{17}{677}\sqrt{690}e^{14}, \frac{17}{677}\sqrt{174}e^{24},$ $\frac{34}{677}\sqrt{138}e^{16} + \frac{34}{677}\sqrt{78}e^{27}$	$(\frac{51}{677}, \frac{51}{677}, -\frac{238}{677}, \frac{102}{677}, -\frac{187}{677}, \frac{153}{677}, \frac{153}{677}, \frac{204}{677})$ $+ \frac{17}{677}\sqrt{1186}e^1 \otimes e_3$	{126, 148, 234678, 37, 126, 148, 234678, 37}
8531:71	$0, 0, 0, \frac{34}{677}\sqrt{138}e^{12}, \frac{17}{677}\sqrt{542}e^{13}, \frac{17}{677}\sqrt{690}e^{14}, \frac{17}{677}\sqrt{174}e^{24},$ $\frac{34}{677}\sqrt{138}e^{16} + \frac{34}{677}\sqrt{78}e^{27}$	$(\frac{51}{677}, \frac{51}{677}, -\frac{238}{677}, \frac{102}{677}, -\frac{187}{677}, \frac{153}{677}, \frac{153}{677}, \frac{204}{677})$ $+ \frac{17}{677}\sqrt{1186}e^1 \otimes e_3$	{126, 148, 234678, 37, 126, 148, 234678, 37}
8531:71	$0, 0, 0, \frac{10}{81}\sqrt{6}e^{12}, \frac{5}{81}\sqrt{74}e^{13}, -\frac{5}{81}\sqrt{39}e^{14}, \frac{5}{81}\sqrt{67}e^{24},$ $\frac{5}{27}\sqrt{5}e^{16} + \frac{5}{81}\sqrt{61}e^{27}$	$(\frac{5}{81}, \frac{5}{81}, -\frac{25}{81}, \frac{10}{81}, -\frac{20}{81}, \frac{5}{27}, \frac{5}{27}, \frac{20}{81})$ $+ \frac{5}{81}\sqrt{138}e^2 \otimes e_5$	{1237, 145678, 248, 356, 1237, 145678, 248, 356}
8531:71	$0, 0, 0, \frac{10}{81}\sqrt{6}e^{12}, \frac{5}{81}\sqrt{74}e^{13}, \frac{5}{81}\sqrt{39}e^{14}, \frac{5}{81}\sqrt{67}e^{24},$ $\frac{5}{27}\sqrt{5}e^{16} + \frac{5}{81}\sqrt{61}e^{27}$	$(\frac{5}{81}, \frac{5}{81}, -\frac{25}{81}, \frac{10}{81}, -\frac{20}{81}, \frac{5}{27}, \frac{5}{27}, \frac{20}{81})$ $+ \frac{5}{81}\sqrt{138}e^2 \otimes e_5$	{1237, 145678, 248, 356, 1237, 145678, 248, 356}
8531:87	$0, 0, 0, \frac{17}{1063}\sqrt{1374}e^{12}, \frac{153}{1063}\sqrt{10}e^{13}, \frac{136}{1063}\sqrt{6}e^{24}, \frac{34}{1063}\sqrt{417}e^{15},$ $\frac{68}{1063}\sqrt{138}e^{17} + \frac{153}{1063}\sqrt{10}e^{26}$	$(\frac{323}{1063}, \frac{34}{1063}, -\frac{544}{1063}, \frac{357}{1063}, -\frac{221}{1063}, \frac{391}{1063}, \frac{102}{1063}, \frac{425}{1063})$ $+ \frac{17}{1063}\sqrt{5226}e^1 \otimes e_3$	{1467, 234}
8531:87	$0, 0, 0, \frac{6}{35}\sqrt{14}e^{12}, \frac{4}{35}\sqrt{39}e^{13}, \frac{6}{35}\sqrt{3}e^{24}, \frac{2}{35}\sqrt{69}e^{15},$ $\frac{2}{35}\sqrt{78}e^{17} + \frac{4}{35}\sqrt{39}e^{26}$	$(-\frac{8}{35}, \frac{2}{35}, \frac{22}{35}, -\frac{6}{35}, \frac{2}{35}, -\frac{4}{35}, \frac{6}{35}, -\frac{2}{35})$ $+ \frac{2}{35}\sqrt{339}e^3 \otimes e_8$	{12458, 137}
8531:88	$0, 0, 0, \frac{3}{35}\sqrt{42}e^{12}, \frac{3}{35}\sqrt{42}e^{13}, \frac{3}{35}\sqrt{15}e^{24}, \frac{3}{35}\sqrt{15}e^{35},$ $\frac{3}{35}\sqrt{42}e^{26} + \frac{3}{35}\sqrt{42}e^{37}$	$(\frac{3}{5}, -\frac{9}{35}, -\frac{9}{35}, \frac{12}{35}, \frac{12}{35}, \frac{3}{35}, \frac{3}{35}, -\frac{6}{35})$ $+ \frac{3}{35}\sqrt{165}e^1 \otimes e_8$	{12367, 23458}
8521:1	$0, 0, 0, \frac{18}{559}\sqrt{427}e^{12}, \frac{6}{559}\sqrt{3965}e^{13}, \frac{3}{559}\sqrt{12322}e^{23}, \frac{12}{559}\sqrt{61}e^{14},$ $\frac{30}{559}\sqrt{61}e^{17}$	$(-\frac{92}{559}, \frac{332}{559}, -\frac{125}{559}, \frac{240}{559}, -\frac{217}{559}, \frac{207}{559}, \frac{148}{559}, \frac{56}{559})$ $+ \frac{3}{559}\sqrt{55266}e^2 \otimes e_5$	{123, 14578, 2468, 3567}
8521:1	$0, 0, 0, \frac{8}{373}\sqrt{62}e^{12}, \frac{8}{373}\sqrt{330}e^{13}, \frac{16}{373}\sqrt{102}e^{23}, \frac{24}{373}\sqrt{6}e^{14},$ $\frac{8}{373}\sqrt{210}e^{17}$	$(-\frac{64}{373}, \frac{104}{373}, \frac{40}{373}, \frac{40}{373}, -\frac{24}{373}, \frac{144}{373}, -\frac{24}{373}, -\frac{88}{373})$ $+ \frac{24}{373}\sqrt{66}e^2 \otimes e_5 - \frac{8}{373}\sqrt{730}e^3 \otimes e_8$	{12347, 158, 2678, 3456}
8521:1	$0, 0, 0, \frac{8}{373}\sqrt{62}e^{12}, \frac{8}{373}\sqrt{330}e^{13}, \frac{16}{373}\sqrt{102}e^{23}, \frac{24}{373}\sqrt{6}e^{14},$ $\frac{8}{373}\sqrt{210}e^{17}$	$(-\frac{64}{373}, \frac{104}{373}, \frac{40}{373}, \frac{40}{373}, -\frac{24}{373}, \frac{144}{373}, -\frac{24}{373}, -\frac{88}{373})$ $+ \frac{24}{373}\sqrt{66}e^2 \otimes e_5 + \frac{8}{373}\sqrt{730}e^3 \otimes e_8$	{12347, 158, 2678, 3456}
8521:1	$0, 0, 0, \frac{130}{827}\sqrt{3}e^{12}, \frac{26}{827}\sqrt{37}e^{13}, \frac{13}{827}\sqrt{402}e^{23}, \frac{52}{827}\sqrt{19}e^{14},$ $\frac{26}{827}\sqrt{51}e^{17}$	$(\frac{52}{827}, \frac{52}{827}, -\frac{169}{827}, \frac{104}{827}, -\frac{117}{827}, \frac{117}{827}, \frac{156}{827}, \frac{208}{827})$ $- \frac{39}{827}\sqrt{66}e^2 \otimes e_5 + \frac{52}{827}\sqrt{53}e^1 \otimes e_6$	{1237, 1458, 24678, 356}
8521:1	$0, 0, 0, \frac{130}{827}\sqrt{3}e^{12}, \frac{26}{827}\sqrt{37}e^{13}, \frac{13}{827}\sqrt{402}e^{23}, \frac{52}{827}\sqrt{19}e^{14},$ $\frac{26}{827}\sqrt{51}e^{17}$	$(\frac{52}{827}, \frac{52}{827}, -\frac{169}{827}, \frac{104}{827}, -\frac{117}{827}, \frac{117}{827}, \frac{156}{827}, \frac{208}{827})$ $+ \frac{39}{827}\sqrt{66}e^2 \otimes e_5 + \frac{52}{827}\sqrt{53}e^1 \otimes e_6$	{1237, 1458, 24678, 356}
8521:1	$0, 0, 0, \frac{4}{623}\sqrt{78}e^{12}, \frac{6}{623}\sqrt{35}e^{13}, \frac{8}{623}\sqrt{39}e^{23}, \frac{2}{623}\sqrt{465}e^{14},$ $\frac{8}{623}\sqrt{39}e^{17}$	$(-\frac{2}{623}, \frac{23}{623}, -\frac{31}{623}, \frac{3}{89}, -\frac{33}{623}, -\frac{8}{623}, \frac{19}{623}, \frac{17}{623})$ $+ \frac{24}{623}\sqrt{6}e^1 \otimes e_6 + \frac{2}{623}\sqrt{789}e^2 \otimes e_8$	{12357, 148}
8521:1	$0, 0, 0, \frac{2}{205}\sqrt{1695}e^{12}, \frac{1}{205}\sqrt{1130}e^{13}, \frac{2}{205}\sqrt{3390}e^{23}, \frac{2}{205}\sqrt{3955}e^{14},$ $\frac{2}{205}\sqrt{3390}e^{17}$	$(\frac{10}{41}, -\frac{49}{205}, -\frac{14}{205}, \frac{1}{205}, \frac{36}{205}, -\frac{63}{205}, \frac{51}{205}, \frac{101}{205})$ $+ \frac{2}{205}\sqrt{9266}e^1 \otimes e_6$	{12357, 148, 245678, 36}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8521:1	$0, 0, 0, \frac{4}{43}\sqrt{30}e^{12}, \frac{2}{43}\sqrt{195}e^{13}, \frac{8}{43}\sqrt{15}e^{23}, \frac{2}{43}\sqrt{105}e^{14},$ $\frac{8}{43}\sqrt{15}e^{17}$	$(-\frac{10}{43}, \frac{19}{43}, \frac{5}{43}, \frac{9}{43}, -\frac{5}{43}, \frac{24}{43}, -\frac{1}{43}, -\frac{11}{43})$ $+\frac{10}{43}\sqrt{21}e^2 \otimes e_8$	{12357, 1267, 134568, 148}
8521:2	$0, 0, 0, \frac{30}{529}\sqrt{2}e^{12}, \frac{5}{529}\sqrt{906}e^{13}, \frac{10}{529}\sqrt{483}e^{23}, \frac{10}{529}\sqrt{489}e^{14},$ $\frac{10}{529}\sqrt{483}e^{17} + \frac{10}{529}\sqrt{447}e^{24}$	$(\frac{20}{529}, \frac{40}{529}, -\frac{95}{529}, \frac{60}{529}, -\frac{75}{529}, -\frac{55}{529}, \frac{80}{529}, \frac{100}{529})$ $+\frac{15}{529}\sqrt{302}e^1 \otimes e_6$	{12357, 245678}
8521:2	$0, 0, 0, \frac{42}{473}\sqrt{31}e^{12}, \frac{42}{473}\sqrt{47}e^{13}, \frac{7}{473}\sqrt{678}e^{23}, \frac{168}{473}\sqrt{2}e^{14},$ $\frac{14}{473}\sqrt{381}e^{17} + \frac{28}{473}\sqrt{129}e^{24}$	$(\frac{28}{473}, \frac{56}{473}, -\frac{119}{473}, \frac{84}{473}, -\frac{91}{473}, -\frac{63}{473}, \frac{112}{473}, \frac{140}{473})$ $+\frac{21}{473}\sqrt{282}e^2 \otimes e_5$	{145678, 357}
8521:2	$0, 0, 0, \frac{3}{47}\sqrt{66}e^{12}, \frac{1}{47}\sqrt{858}e^{13}, \frac{11}{47}\sqrt{6}e^{23}, \frac{1}{47}\sqrt{330}e^{14},$ $\frac{11}{47}\sqrt{6}e^{17} + \frac{2}{47}\sqrt{165}e^{24}$	$(-\frac{2}{47}, -\frac{4}{47}, \frac{23}{47}, -\frac{6}{47}, \frac{21}{47}, \frac{19}{47}, -\frac{8}{47}, -\frac{10}{47})$ $+\frac{3}{47}\sqrt{286}e^3 \otimes e_8$	{12347, 2678}
8521:3	$0, 0, 0, \frac{26}{763}\sqrt{249}e^{12}, \frac{39}{763}\sqrt{134}e^{13}, \frac{13}{763}\sqrt{1398}e^{23}, \frac{13}{763}\sqrt{690}e^{14},$ $\frac{13}{763}\sqrt{1398}e^{17} + \frac{39}{763}\sqrt{66}e^{35}$	$(-\frac{169}{763}, \frac{52}{109}, \frac{13}{763}, \frac{195}{763}, -\frac{156}{763}, \frac{377}{763}, \frac{26}{763}, -\frac{143}{763})$ $+\frac{13}{763}\sqrt{3714}e^2 \otimes e_8$	{12357, 1267}
8521:3	$0, 0, 0, \frac{22}{769}\sqrt{111}e^{12}, \frac{11}{769}\sqrt{390}e^{13}, \frac{66}{769}\sqrt{51}e^{23}, \frac{22}{769}\sqrt{417}e^{14},$ $\frac{66}{769}\sqrt{51}e^{17} + \frac{22}{769}\sqrt{237}e^{35}$	$(\frac{176}{769}, -\frac{242}{769}, \frac{55}{769}, -\frac{66}{769}, \frac{231}{769}, -\frac{187}{769}, \frac{110}{769}, \frac{286}{769})$ $+\frac{11}{769}\sqrt{3786}e^1 \otimes e_6$	{148, 36}
8521:4	$0, 0, 0, \frac{50}{637}\sqrt{73}e^{12}, \frac{50}{637}\sqrt{58}e^{13}, \frac{25}{637}\sqrt{286}e^{23}, \frac{25}{637}\sqrt{14}e^{24},$ $\frac{50}{637}\sqrt{30}e^{27} + \frac{25}{637}\sqrt{26}e^{35}$	$(\frac{375}{637}, -\frac{100}{637}, -\frac{150}{637}, \frac{275}{637}, \frac{225}{637}, -\frac{250}{637}, \frac{25}{91}, \frac{75}{637})$ $+\frac{25}{637}\sqrt{1030}e^1 \otimes e_6$	{1458, 3567}
853:1	$0, 0, 0, \frac{13}{651}\sqrt{382}e^{12}, \frac{13}{651}\sqrt{114}e^{13}, \frac{13}{651}\sqrt{110}e^{14}, \frac{13}{651}\sqrt{214}e^{24},$ $\frac{13}{217}\sqrt{30}e^{15}$	$(\frac{26}{651}, \frac{26}{217}, -\frac{143}{651}, \frac{104}{651}, -\frac{39}{217}, \frac{130}{651}, \frac{26}{93}, -\frac{13}{93})$ $+\frac{13}{651}\sqrt{602}e^2 \otimes e_8 + \frac{65}{651}\sqrt{22}e^1 \otimes e_3$	{1478, 2346}
853:1	$0, 0, 0, \frac{18}{269}\sqrt{62}e^{12}, \frac{2}{269}\sqrt{1581}e^{13}, \frac{2}{269}\sqrt{5115}e^{14}, \frac{36}{269}\sqrt{31}e^{24},$ $\frac{6}{269}\sqrt{930}e^{15}$	$(-\frac{56}{269}, \frac{107}{269}, \frac{33}{269}, \frac{51}{269}, -\frac{23}{269}, -\frac{5}{269}, \frac{158}{269}, -\frac{79}{269})$ $+\frac{6}{269}\sqrt{2263}e^2 \otimes e_8$	{1257, 134678, 24, 3568}
853:1	$0, 0, 0, \frac{24}{511}\sqrt{274}e^{12}, \frac{1}{511}\sqrt{84666}e^{13}, \frac{1}{511}\sqrt{168510}e^{14}, \frac{3}{511}\sqrt{3562}e^{24},$ $\frac{2}{511}\sqrt{7809}e^{15}$	$(\frac{179}{511}, -\frac{65}{511}, -\frac{232}{511}, \frac{114}{511}, -\frac{53}{511}, \frac{293}{511}, \frac{7}{73}, \frac{18}{73})$ $+\frac{3}{511}\sqrt{38634}e^1 \otimes e_3$	{1268, 148, 23467, 37}
853:1	$0, 0, 0, \frac{3}{47}\sqrt{66}e^{12}, \frac{12}{47}\sqrt{11}e^{13}, \frac{4}{47}\sqrt{66}e^{14}, \frac{3}{47}\sqrt{154}e^{24},$ $\frac{11}{47}\sqrt{6}e^{15}$	$(-\frac{2}{47}, -\frac{4}{47}, \frac{23}{47}, -\frac{6}{47}, \frac{21}{47}, -\frac{8}{47}, -\frac{10}{47}, \frac{19}{47})$ $+\frac{3}{47}\sqrt{286}e^3 \otimes e_7$	{123468, 138, 267, 47}
853:1	$0, 0, 0, \frac{6}{257}\sqrt{47}e^{12}, \frac{16}{257}\sqrt{141}e^{13}, \frac{4}{257}\sqrt{2397}e^{14}, \frac{6}{257}\sqrt{94}e^{24},$ $\frac{2}{257}\sqrt{705}e^{15}$	$(-\frac{74}{257}, \frac{59}{257}, \frac{193}{257}, -\frac{15}{257}, \frac{119}{257}, -\frac{89}{257}, \frac{44}{257}, \frac{45}{257})$ $+\frac{6}{257}\sqrt{3243}e^3 \otimes e_6$	{12347, 15678, 235, 468}
853:1	$0, 0, 0, \frac{11}{695}\sqrt{10}e^{12}, \frac{44}{139}e^{13}, \frac{44}{695}\sqrt{26}e^{14}, \frac{11}{695}\sqrt{602}e^{24},$ $\frac{11}{695}\sqrt{398}e^{15}$	$(-\frac{22}{139}, \frac{88}{695}, \frac{187}{695}, -\frac{22}{695}, \frac{77}{695}, -\frac{132}{695}, \frac{66}{695}, -\frac{33}{695})$ $+\frac{11}{695}\sqrt{622}e^3 \otimes e_7 + \frac{22}{695}\sqrt{154}e^2 \otimes e_8$	{138, 267}
853:2	$0, 0, 0, \frac{38}{499}\sqrt{15}e^{12}, \frac{38}{499}\sqrt{73}e^{13}, \frac{38}{1497}\sqrt{339}e^{14}, \frac{76}{499}\sqrt{17}e^{24},$ $\frac{38}{1497}\sqrt{499}e^{35}$	$(\frac{23}{499}, -\frac{75}{499}, \frac{341}{1497}, -\frac{52}{499}, \frac{410}{1497}, -\frac{29}{499}, -\frac{127}{499}, \frac{751}{1497})$ $+\frac{38}{1497}\sqrt{1245}e^3 \otimes e_7$	{123468, 138, 267, 47}
853:2	$0, 0, 0, \frac{10}{57}\sqrt{3}e^{12}, \frac{5}{57}\sqrt{6}e^{13}, \frac{5}{57}\sqrt{6}e^{14}, \frac{10}{57}\sqrt{3}e^{24},$ $\frac{1}{57}\sqrt{570}e^{35}$	$(-\frac{4}{19}, \frac{5}{19}, \frac{2}{19}, \frac{1}{19}, -\frac{2}{19}, -\frac{3}{19}, \frac{6}{19}, 0)$ $+\frac{2}{57}\sqrt{165}e^3 \otimes e_6 + \frac{3}{19}\sqrt{10}e^2 \otimes e_8$	{13478, 246}
853:2	$0, 0, 0, \frac{1}{13}\sqrt{69}e^{12}, \frac{1}{39}\sqrt{69}e^{13}, \frac{1}{39}\sqrt{69}e^{14}, \frac{1}{13}\sqrt{69}e^{24},$ $\frac{1}{39}\sqrt{598}e^{35}$	$(-\frac{1}{13}, \frac{4}{13}, -\frac{4}{39}, \frac{3}{13}, -\frac{7}{39}, \frac{2}{13}, \frac{7}{13}, -\frac{11}{39})$ $+\frac{1}{13}\sqrt{161}e^2 \otimes e_8$	{12357, 127, 368, 568}
853:2	$0, 0, 0, \frac{1}{51}\sqrt{78}e^{12}, \frac{13}{51}\sqrt{6}e^{13}, \frac{13}{51}\sqrt{6}e^{14}, \frac{1}{51}\sqrt{78}e^{24},$ $\frac{1}{51}\sqrt{1326}e^{35}$	$(-\frac{5}{17}, \frac{4}{17}, \frac{7}{17}, -\frac{1}{17}, \frac{2}{17}, -\frac{6}{17}, \frac{3}{17}, \frac{9}{17})$ $+\frac{1}{51}\sqrt{3198}e^3 \otimes e_6$	{123478, 15678, 235, 46}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
853:2	$0, 0, 0, \frac{1}{339}\sqrt{213}e^{12}, \frac{1}{339}\sqrt{435}e^{13}, \frac{1}{113}\sqrt{37}e^{14}, \frac{1}{339}\sqrt{789}e^{24},$ $\frac{1}{339}\sqrt{678}e^{35}$	$(-\frac{5}{113}, \frac{4}{113}, \frac{4}{113}, -\frac{1}{113}, -\frac{1}{113}, -\frac{6}{113}, \frac{3}{113}, \frac{3}{113})$ $+\frac{1}{339}\sqrt{849}e^2 \otimes e_8 + \frac{8}{339}\sqrt{15}e^3 \otimes e_7$	{145678, 2345}
853:2	$0, 0, 0, \frac{130}{1213}\sqrt{5}e^{12}, \frac{26}{1213}\sqrt{223}e^{13}, \frac{26}{1213}\sqrt{11}e^{14}, \frac{52}{1213}\sqrt{102}e^{24},$ $\frac{78}{1213}\sqrt{29}e^{35}$	$(-\frac{169}{1213}, \frac{65}{1213}, \frac{299}{1213}, -\frac{104}{1213}, \frac{130}{1213}, -\frac{273}{1213}, -\frac{39}{1213}, \frac{429}{1213})$ $+\frac{26}{1213}\sqrt{430}e^2 \otimes e_6 + \frac{26}{1213}\sqrt{615}e^3 \otimes e_7$	{12578, 145678, 2345, 356}
853:2	$0, 0, 0, \frac{130}{1213}\sqrt{5}e^{12}, \frac{26}{1213}\sqrt{223}e^{13}, \frac{26}{1213}\sqrt{11}e^{14}, \frac{52}{1213}\sqrt{102}e^{24},$ $\frac{78}{1213}\sqrt{29}e^{35}$	$(-\frac{169}{1213}, \frac{65}{1213}, \frac{299}{1213}, -\frac{104}{1213}, \frac{130}{1213}, -\frac{273}{1213}, -\frac{39}{1213}, \frac{429}{1213})$ $-\frac{26}{1213}\sqrt{430}e^2 \otimes e_6 + \frac{26}{1213}\sqrt{615}e^3 \otimes e_7$	{12578, 145678, 2345, 356}
853:3	$0, 0, 0, \frac{15}{119}\sqrt{2}e^{12}, \frac{5}{119}\sqrt{30}e^{13}, \frac{10}{119}\sqrt{102}e^{14}, \frac{45}{119}\sqrt{3}e^{24},$ $\frac{5}{119}\sqrt{237}e^{15} + \frac{15}{119}\sqrt{46}e^{23}$	$(-\frac{5}{119}, -\frac{10}{119}, \frac{55}{119}, -\frac{15}{119}, \frac{50}{119}, -\frac{20}{119}, -\frac{25}{119}, \frac{45}{119})$ $+\frac{15}{119}\sqrt{69}e^3 \otimes e_6$	{167, 456}
853:4	$0, 0, 0, \frac{33}{679}\sqrt{138}e^{12}, \frac{33}{679}\sqrt{218}e^{13}, \frac{66}{679}\sqrt{43}e^{24},$ $\frac{11}{679}\sqrt{1758}e^{14} + \frac{66}{679}\sqrt{33}e^{23}, \frac{22}{679}\sqrt{303}e^{15}$	$(\frac{11}{97}, -\frac{143}{679}, \frac{22}{97}, -\frac{66}{679}, \frac{33}{97}, -\frac{209}{679}, \frac{11}{679}, \frac{44}{97})$ $+\frac{33}{679}\sqrt{382}e^3 \otimes e_6$	{267, 46}
853:4	$0, 0, 0, \frac{17}{531}\sqrt{107}e^{12}, \frac{17}{531}\sqrt{31}e^{13}, \frac{17}{531}\sqrt{359}e^{24},$ $\frac{17}{531}\sqrt{305}e^{14} + \frac{17}{531}\sqrt{290}e^{23}, \frac{34}{531}\sqrt{105}e^{15}$	$(-\frac{34}{531}, \frac{17}{59}, -\frac{68}{531}, \frac{119}{531}, -\frac{34}{177}, \frac{272}{531}, \frac{85}{531}, -\frac{136}{531})$ $+\frac{17}{531}\sqrt{877}e^2 \otimes e_8$	{134678, 3578}
853:5	$0, 0, 0, \frac{10}{371}\sqrt{3}e^{12}, \frac{10}{371}\sqrt{553}e^{13}, \frac{60}{371}\sqrt{14}e^{24},$ $\frac{30}{371}\sqrt{35}e^{14} + \frac{5}{371}\sqrt{406}e^{23}, \frac{10}{371}\sqrt{399}e^{35}$	$(\frac{5}{53}, -\frac{10}{53}, \frac{10}{53}, -\frac{5}{53}, \frac{15}{53}, -\frac{15}{53}, 0, \frac{25}{53})$ $+\frac{10}{371}\sqrt{1085}e^3 \otimes e_6$	{267, 46}
853:5	$0, 0, 0, \frac{1}{17}\sqrt{115}e^{12}, \frac{1}{17}\sqrt{15}e^{13}, \frac{1}{17}\sqrt{115}e^{24},$ $\frac{1}{17}\sqrt{15}e^{14} + \frac{1}{17}\sqrt{10}e^{23}, \frac{1}{17}\sqrt{110}e^{35}$	$(-\frac{1}{17}, \frac{5}{17}, -\frac{2}{17}, \frac{4}{17}, -\frac{3}{17}, \frac{9}{17}, \frac{3}{17}, -\frac{5}{17})$ $+\frac{5}{17}\sqrt{11}e^2 \otimes e_8$	{12356, 378}
853:9	$0, 0, 0, \frac{7}{213}\sqrt{258}e^{12}, \frac{14}{213}\sqrt{21}e^{13}, \frac{14}{213}\sqrt{129}e^{24}, \frac{14}{213}\sqrt{105}e^{15},$ $\frac{7}{213}\sqrt{30}e^{14} + \frac{7}{213}\sqrt{30}e^{35}$	$(-\frac{14}{71}, \frac{28}{71}, \frac{7}{71}, \frac{14}{71}, -\frac{7}{71}, \frac{42}{71}, -\frac{21}{71}, 0)$ $+\frac{7}{213}\sqrt{1038}e^2 \otimes e_7$	{134678, 24}
853:9	$0, 0, 0, \frac{11}{623}\sqrt{222}e^{12}, \frac{22}{623}\sqrt{174}e^{13}, \frac{11}{623}\sqrt{622}e^{24}, \frac{55}{623}\sqrt{6}e^{15},$ $\frac{22}{623}\sqrt{155}e^{14} + \frac{22}{623}\sqrt{143}e^{35}$	$(\frac{88}{623}, -\frac{110}{623}, -\frac{11}{623}, -\frac{22}{623}, \frac{11}{89}, -\frac{132}{623}, \frac{165}{623}, \frac{66}{623})$ $+\frac{11}{623}\sqrt{1066}e^3 \otimes e_6$	{123478, 46}
852:1	$0, 0, 0, \frac{9}{529}\sqrt{1066}e^{12}, \frac{3}{529}\sqrt{1394}e^{13}, \frac{3}{529}\sqrt{13202}e^{23}, \frac{60}{529}\sqrt{41}e^{14},$ $\frac{12}{529}\sqrt{451}e^{24}$	$(\frac{195}{529}, -\frac{93}{529}, -\frac{81}{529}, \frac{102}{529}, \frac{114}{529}, -\frac{174}{529}, \frac{297}{529}, \frac{9}{529})$ $+\frac{36}{529}\sqrt{246}e^1 \otimes e_6$	{1237, 145, 24678, 3568}
852:1	$0, 0, 0, \frac{36}{1007}\sqrt{143}e^{12}, \frac{132}{1007}\sqrt{11}e^{13}, \frac{240}{1007}\sqrt{11}e^{23}, \frac{12}{53}\sqrt{11}e^{14},$ $\frac{12}{1007}\sqrt{2167}e^{24}$	$(-\frac{195}{1007}, \frac{84}{1007}, \frac{486}{1007}, -\frac{111}{1007}, \frac{291}{1007}, \frac{30}{53}, -\frac{306}{1007}, -\frac{27}{1007})$ $+\frac{36}{1007}\sqrt{1023}e^3 \otimes e_7$	{12348, 1578, 235, 47}
852:1	$0, 0, 0, \frac{90}{3347}\sqrt{7}e^{12}, \frac{15}{3347}\sqrt{458}e^{13}, \frac{30}{3347}\sqrt{623}e^{23}, \frac{60}{3347}\sqrt{161}e^{14},$ $\frac{30}{3347}\sqrt{373}e^{24}$	$(\frac{210}{3347}, -\frac{330}{3347}, \frac{315}{3347}, -\frac{120}{3347}, \frac{525}{3347}, -\frac{15}{3347}, \frac{90}{3347}, -\frac{450}{3347})$ $+\frac{45}{3347}\sqrt{346}e^1 \otimes e_6 + \frac{90}{3347}\sqrt{83}e^3 \otimes e_7$	{24678, 3568}
852:1	$0, 0, 0, \frac{2}{27}\sqrt{6}e^{12}, \frac{1}{27}\sqrt{102}e^{13}, \frac{2}{9}\sqrt{3}e^{23}, \frac{4}{27}\sqrt{3}e^{14}, \frac{2}{9}e^{24}$	$(\frac{2}{9}, -\frac{2}{9}, \frac{1}{9}, 0, \frac{1}{3}, -\frac{1}{9}, \frac{2}{9}, -\frac{2}{9})$ $+\frac{1}{27}\sqrt{222}e^1 \otimes e_6 + \frac{2}{27}\sqrt{51}e^3 \otimes e_8$	{1458, 356}
852:1	$0, 0, 0, \frac{9}{41}\sqrt{2}e^{12}, \frac{3}{41}\sqrt{14}e^{13}, \frac{3}{41}\sqrt{14}e^{23}, \frac{6}{41}\sqrt{2}e^{14},$ $\frac{6}{41}\sqrt{2}e^{24}$	$(\frac{3}{41}, \frac{3}{41}, -\frac{9}{41}, \frac{6}{41}, -\frac{6}{41}, -\frac{6}{41}, \frac{9}{41}, \frac{9}{41})$ $+\frac{18}{41}e^1 \otimes e_6 - \frac{18}{41}e^2 \otimes e_5$	{12378, 1458, 356}
852:1	$0, 0, 0, \frac{9}{41}\sqrt{2}e^{12}, \frac{3}{41}\sqrt{14}e^{13}, \frac{3}{41}\sqrt{14}e^{23}, \frac{6}{41}\sqrt{2}e^{14},$ $\frac{6}{41}\sqrt{2}e^{24}$	$(\frac{3}{41}, \frac{3}{41}, -\frac{9}{41}, \frac{6}{41}, -\frac{6}{41}, -\frac{6}{41}, \frac{9}{41}, \frac{9}{41})$ $+\frac{18}{41}e^1 \otimes e_6 + \frac{18}{41}e^2 \otimes e_5$	{12378, 1458, 356}
852:2	$0, 0, 0, \frac{11}{37}\sqrt{2}e^{12}, \frac{11}{37}\sqrt{2}e^{13}, \frac{33}{185}\sqrt{10}e^{23}, \frac{44}{185}\sqrt{5}e^{14},$ $\frac{44}{185}\sqrt{5}e^{15}$	$(\frac{11}{37}, -\frac{33}{185}, -\frac{33}{185}, \frac{22}{185}, \frac{22}{185}, -\frac{66}{185}, \frac{77}{185}, \frac{77}{185})$ $+\frac{22}{185}\sqrt{74}e^1 \otimes e_6$	{12378, 145, 2467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
852:2	$0, 0, 0, \frac{44}{1693}\sqrt{65}e^{12}, \frac{22}{1693}\sqrt{29}e^{13}, \frac{132}{1693}\sqrt{13}e^{23}, \frac{22}{1693}\sqrt{185}e^{14},$ $\frac{88}{1693}\sqrt{26}e^{15}$	$(\frac{110}{1693}, \frac{165}{1693}, -\frac{297}{1693}, \frac{275}{1693}, -\frac{187}{1693}, -\frac{132}{1693}, \frac{385}{1693}, -\frac{77}{1693})$ $+ \frac{440}{1693}\sqrt{2}e^1 \otimes e_6 + \frac{66}{1693}\sqrt{77}e^2 \otimes e_8$	{2467, 3568}
852:2	$0, 0, 0, \frac{8}{325}\sqrt{38}e^{12}, \frac{8}{325}\sqrt{38}e^{13}, \frac{16}{325}\sqrt{102}e^{23}, \frac{8}{325}\sqrt{174}e^{14},$ $\frac{8}{325}\sqrt{174}e^{15}$	$(-\frac{64}{325}, \frac{72}{325}, \frac{72}{325}, \frac{8}{325}, \frac{8}{325}, \frac{144}{325}, -\frac{56}{325}, -\frac{56}{325})$ $+ \frac{8}{325}\sqrt{566}e^2 \otimes e_8 + \frac{8}{325}\sqrt{566}e^3 \otimes e_7$	{12567, 2467}
852:2	$0, 0, 0, \frac{8}{325}\sqrt{38}e^{12}, \frac{8}{325}\sqrt{38}e^{13}, \frac{16}{325}\sqrt{102}e^{23}, \frac{8}{325}\sqrt{174}e^{14},$ $\frac{8}{325}\sqrt{174}e^{15}$	$(-\frac{64}{325}, \frac{72}{325}, \frac{72}{325}, \frac{8}{325}, \frac{8}{325}, \frac{144}{325}, -\frac{56}{325}, -\frac{56}{325})$ $+ \frac{8}{325}\sqrt{566}e^2 \otimes e_8 - \frac{8}{325}\sqrt{566}e^3 \otimes e_7$	{12567, 2467}
852:2	$0, 0, 0, \frac{12}{1049}\sqrt{2265}e^{12}, \frac{2}{1049}\sqrt{46659}e^{13}, \frac{36}{1049}\sqrt{453}e^{23},$ $\frac{2}{1049}\sqrt{2265}e^{14}, \frac{24}{1049}\sqrt{906}e^{15}$	$(-\frac{170}{1049}, \frac{545}{1049}, -\frac{21}{1049}, \frac{375}{1049}, -\frac{191}{1049}, \frac{524}{1049}, \frac{205}{1049}, -\frac{361}{1049})$ $+ \frac{6}{1049}\sqrt{42733}e^2 \otimes e_8$	{12357, 148, 2347, 58}
852:3	$0, 0, 0, \frac{8}{259}\sqrt{286}e^{12}, \frac{24}{259}\sqrt{11}e^{13}, \frac{8}{259}\sqrt{286}e^{23}, \frac{4}{259}\sqrt{1518}e^{24},$ $\frac{4}{259}\sqrt{1518}e^{15}$	$(-\frac{53}{259}, \frac{86}{259}, \frac{16}{259}, \frac{33}{259}, -\frac{1}{7}, \frac{102}{259}, \frac{17}{37}, -\frac{90}{259})$ $+ \frac{44}{259}\sqrt{38}e^2 \otimes e_8$	{12357, 1478, 234, 58}
852:3	$0, 0, 0, \frac{50}{617}\sqrt{3}e^{12}, \frac{130}{617}\sqrt{3}e^{13}, \frac{90}{617}\sqrt{5}e^{23}, \frac{20}{617}\sqrt{51}e^{24},$ $\frac{10}{617}\sqrt{381}e^{15}$	$(\frac{85}{617}, -\frac{100}{617}, \frac{35}{617}, -\frac{15}{617}, \frac{120}{617}, -\frac{65}{617}, -\frac{115}{617}, \frac{205}{617})$ $+ \frac{10}{617}\sqrt{834}e^1 \otimes e_6 + \frac{30}{617}\sqrt{87}e^3 \otimes e_7$	{12348, 267}
852:3	$0, 0, 0, \frac{23}{3891}\sqrt{1110}e^{12}, \frac{46}{3891}\sqrt{114}e^{13}, \frac{46}{3891}\sqrt{443}e^{23}, \frac{230}{1297}e^{24},$ $\frac{92}{3891}\sqrt{139}e^{15}$	$(\frac{230}{3891}, \frac{115}{1297}, -\frac{644}{3891}, \frac{575}{3891}, -\frac{138}{1297}, -\frac{299}{3891}, \frac{920}{3891}, -\frac{184}{3891})$ $+ \frac{23}{3891}\sqrt{3310}e^1 \otimes e_6 + \frac{46}{3891}\sqrt{883}e^2 \otimes e_8$	{246, 3568}
852:3	$0, 0, 0, \frac{354}{1277}\sqrt{3}e^{12}, \frac{6}{1277}\sqrt{24013}e^{13}, \frac{6}{1277}\sqrt{13747}e^{23},$ $\frac{12}{1277}\sqrt{5133}e^{24}, \frac{6}{1277}\sqrt{8437}e^{15}$	$(-\frac{121}{1277}, -\frac{152}{1277}, \frac{637}{1277}, -\frac{273}{1277}, \frac{516}{1277}, \frac{485}{1277}, -\frac{425}{1277}, \frac{395}{1277})$ $+ \frac{30}{1277}\sqrt{2419}e^3 \otimes e_7$	{12348, 1368, 267, 47}
852:3	$0, 0, 0, \frac{7}{649}\sqrt{978}e^{12}, \frac{1}{649}\sqrt{145722}e^{13}, \frac{3}{649}\sqrt{16626}e^{23}, \frac{4}{649}\sqrt{489}e^{24},$ $\frac{20}{649}\sqrt{489}e^{15}$	$(\frac{251}{649}, -\frac{65}{649}, -\frac{173}{649}, \frac{186}{649}, \frac{78}{649}, -\frac{238}{649}, \frac{11}{59}, \frac{329}{649})$ $+ \frac{4}{649}\sqrt{31785}e^1 \otimes e_6$	{1238, 145, 2467, 35678}
852:3	$0, 0, 0, \frac{464}{3449}e^{12}, \frac{174}{3449}\sqrt{19}e^{13}, \frac{406}{3449}\sqrt{7}e^{23}, \frac{29}{3449}\sqrt{1842}e^{24},$ $\frac{58}{3449}\sqrt{321}e^{15}$	$(-\frac{667}{3449}, \frac{319}{3449}, \frac{812}{3449}, -\frac{348}{3449}, \frac{145}{3449}, \frac{1131}{3449}, -\frac{29}{3449}, -\frac{522}{3449})$ $+ \frac{29}{3449}\sqrt{3218}e^2 \otimes e_8 + \frac{87}{3449}\sqrt{310}e^3 \otimes e_7$	{12567, 3568}
852:4	$0, 0, 0, \frac{10}{389}\sqrt{26}e^{12}, \frac{10}{389}\sqrt{26}e^{13}, \frac{5}{389}\sqrt{22}e^{23}, \frac{30}{389}\sqrt{7}e^{24},$ $\frac{30}{389}\sqrt{7}e^{35}$	$(-\frac{55}{389}, \frac{30}{389}, \frac{30}{389}, -\frac{25}{389}, -\frac{25}{389}, \frac{60}{389}, \frac{5}{389}, \frac{5}{389})$ $+ \frac{10}{389}\sqrt{85}e^2 \otimes e_8 + \frac{10}{389}\sqrt{85}e^3 \otimes e_7$	{14578, 2345}
852:4	$0, 0, 0, \frac{5}{211}\sqrt{730}e^{12}, \frac{10}{211}\sqrt{30}e^{13}, \frac{10}{211}\sqrt{10}e^{23}, \frac{5}{211}\sqrt{690}e^{24},$ $\frac{5}{211}\sqrt{690}e^{35}$	$(-\frac{20}{211}, \frac{65}{211}, -\frac{20}{211}, \frac{45}{211}, -\frac{20}{211}, \frac{45}{211}, \frac{110}{211}, -\frac{60}{211})$ $+ \frac{50}{211}\sqrt{17}e^2 \otimes e_8$	{12357, 1267, 368, 58}
852:4	$0, 0, 0, \frac{30}{271}\sqrt{13}e^{12}, \frac{20}{271}\sqrt{3}e^{13}, \frac{5}{271}\sqrt{174}e^{23}, \frac{35}{271}\sqrt{6}e^{24},$ $\frac{35}{271}\sqrt{6}e^{35}$	$(\frac{45}{271}, \frac{20}{271}, -\frac{50}{271}, \frac{65}{271}, -\frac{5}{271}, -\frac{30}{271}, \frac{85}{271}, -\frac{55}{271})$ $+ \frac{10}{271}\sqrt{210}e^2 \otimes e_8 + \frac{5}{271}\sqrt{570}e^1 \otimes e_6$	{14578, 246}
852:5	$0, 0, 0, \frac{11}{683}\sqrt{354}e^{12}, \frac{11}{683}\sqrt{354}e^{13}, \frac{11}{683}\sqrt{1482}e^{23}, \frac{220}{683}\sqrt{3}e^{14},$ $\frac{220}{683}\sqrt{3}e^{15} + \frac{44}{683}\sqrt{66}e^{24}$	$(\frac{165}{683}, -\frac{11}{683}, -\frac{187}{683}, \frac{154}{683}, -\frac{22}{683}, -\frac{198}{683}, \frac{319}{683}, \frac{143}{683})$ $+ \frac{66}{683}\sqrt{94}e^1 \otimes e_6$	{145, 3568}
852:5	$0, 0, 0, \frac{26}{651}\sqrt{141}e^{12}, \frac{26}{651}\sqrt{129}e^{13}, \frac{26}{651}\sqrt{399}e^{23}, \frac{13}{651}\sqrt{1326}e^{14},$ $\frac{13}{651}\sqrt{246}e^{15} + \frac{13}{651}\sqrt{834}e^{24}$	$(-\frac{143}{651}, \frac{26}{217}, \frac{299}{651}, -\frac{65}{651}, \frac{52}{217}, \frac{377}{651}, -\frac{208}{651}, \frac{13}{651})$ $+ \frac{78}{217}\sqrt{10}e^3 \otimes e_7$	{12348, 47}
852:6	$0, 0, 0, -\frac{9}{308}\sqrt{114}e^{12}, \frac{9}{308}\sqrt{166}e^{13}, \frac{9}{154}\sqrt{94}e^{23}, \frac{9}{154}\sqrt{118}e^{14},$ $\frac{45}{308}\sqrt{14}e^{24} + \frac{9}{308}\sqrt{402}e^{35}$	$(-\frac{81}{308}, \frac{18}{77}, \frac{18}{77}, -\frac{9}{308}, -\frac{9}{308}, \frac{36}{77}, -\frac{45}{154}, \frac{9}{44})$ $+ \frac{9}{154}\sqrt{258}e^3 \otimes e_7$	{12348, 1578, 235, 47, 12348, 1578, 235, 47}
852:6	$0, 0, 0, \frac{9}{308}\sqrt{114}e^{12}, \frac{9}{308}\sqrt{166}e^{13}, \frac{9}{154}\sqrt{94}e^{23}, \frac{9}{154}\sqrt{118}e^{14},$ $\frac{45}{308}\sqrt{14}e^{24} + \frac{9}{308}\sqrt{402}e^{35}$	$(-\frac{81}{308}, \frac{18}{77}, \frac{18}{77}, -\frac{9}{308}, -\frac{9}{308}, \frac{36}{77}, -\frac{45}{154}, \frac{9}{44})$ $+ \frac{9}{154}\sqrt{258}e^3 \otimes e_7$	{12348, 1578, 235, 47, 12348, 1578, 235, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
852:8	$0, 0, 0, \frac{60}{589}\sqrt{2}e^{12}, \frac{5}{589}\sqrt{2262}e^{13}, \frac{10}{589}\sqrt{231}e^{23}, \frac{5}{31}\sqrt{6}e^{24},$ $\frac{10}{589}\sqrt{510}e^{14} + \frac{5}{31}\sqrt{6}e^{35}$	$(\frac{90}{589}, -\frac{80}{589}, \frac{5}{589}, \frac{10}{589}, \frac{5}{31}, -\frac{75}{589}, -\frac{70}{589}, \frac{100}{589})$ $+ \frac{30}{589}\sqrt{85}e^3 \otimes e_7$	{123468, 467}
852:8	$0, 0, 0, \frac{45}{139}\sqrt{2}e^{12}, \frac{5}{139}\sqrt{78}e^{13}, \frac{5}{139}\sqrt{426}e^{23}, \frac{10}{139}\sqrt{66}e^{24},$ $\frac{20}{139}\sqrt{30}e^{14} + \frac{10}{139}\sqrt{66}e^{35}$	$(\frac{45}{139}, -\frac{35}{139}, \frac{5}{139}, \frac{10}{139}, \frac{50}{139}, -\frac{30}{139}, -\frac{25}{139}, \frac{55}{139})$ $+ \frac{60}{139}\sqrt{5}e^1 \otimes e_6$	{12358, 367}
852:16	$0, 0, 0, \frac{43}{2721}\sqrt{374}e^{12}, \frac{86}{2721}\sqrt{273}e^{13}, \frac{43}{2721}\sqrt{1090}e^{23},$ $\frac{215}{2721}\sqrt{58}e^{14}, \frac{43}{2721}\sqrt{10}e^{26} + \frac{43}{2721}\sqrt{1454}e^{35}$	$(-\frac{559}{2721}, \frac{172}{2721}, \frac{301}{907}, -\frac{129}{907}, \frac{344}{2721}, \frac{1075}{2721}, -\frac{946}{2721}, \frac{1247}{2721})$ $+ \frac{86}{907}\sqrt{122}e^3 \otimes e_7$	{1578, 235}
84321:1	$0, 0, 0, 0, \frac{2}{55}\sqrt{190}e^{12}, \frac{2}{55}\sqrt{285}e^{15}, \frac{2}{55}\sqrt{285}e^{16}, \frac{2}{55}\sqrt{190}e^{17}$	$(\frac{1}{11}, \frac{1}{55}, -\frac{3}{5}, \frac{1}{5}, \frac{6}{55}, \frac{1}{5}, \frac{16}{55}, \frac{21}{55})$ $+ \frac{4}{55}\sqrt{209}e^1 \otimes e_3$	{12468, 1268, 1457, 157, 2345678, 235678, 3, 34}
84321:1	$0, 0, 0, 0, \frac{4}{31}\sqrt{57}e^{12}, \frac{2}{31}\sqrt{57}e^{15}, \frac{2}{31}\sqrt{38}e^{16}, \frac{2}{31}\sqrt{57}e^{17}$	$(-\frac{4}{31}, \frac{19}{31}, -\frac{19}{31}, \frac{6}{31}, \frac{15}{31}, \frac{11}{31}, \frac{7}{31}, \frac{3}{31})$ $+ \frac{10}{31}\sqrt{19}e^2 \otimes e_3$	{124678, 12678, 1345, 135, 24568, 2568, 347, 37}
84321:1	$0, 0, 0, 0, \frac{1}{25}\sqrt{78}e^{12}, \frac{3}{25}\sqrt{13}e^{15}, \frac{3}{25}\sqrt{13}e^{16}, \frac{1}{25}\sqrt{78}e^{17}$	$(\frac{1}{50}, \frac{9}{50}, 1, -\frac{14}{25}, \frac{1}{5}, \frac{11}{50}, \frac{6}{25}, \frac{13}{50})$ $+ \frac{39}{25}e^3 \otimes e_4$	{12368, 12468, 1357, 1457, 235678, 245678, 3, 4}
84321:1	$0, 0, 0, 0, \frac{4}{507}\sqrt{1914}e^{12}, \frac{14}{507}\sqrt{87}e^{15}, \frac{2}{507}\sqrt{12093}e^{16}, \frac{2}{507}\sqrt{15834}e^{17}$	$(\frac{47}{507}, -\frac{127}{507}, \frac{235}{507}, \frac{19}{169}, -\frac{80}{507}, -\frac{11}{169}, \frac{14}{507}, \frac{61}{507})$ $+ \frac{2}{507}\sqrt{15486}e^3 \otimes e_8 + \frac{8}{507}\sqrt{1479}e^1 \otimes e_2$	{1468, 168, 23, 234}
84321:1	$0, 0, 0, 0, \frac{2}{31}\sqrt{57}e^{12}, \frac{2}{31}\sqrt{38}e^{15}, \frac{2}{31}\sqrt{57}e^{16}, \frac{4}{31}\sqrt{57}e^{17}$	$(-\frac{4}{31}, \frac{9}{31}, 1, \frac{6}{31}, \frac{5}{31}, \frac{1}{31}, -\frac{3}{31}, -\frac{7}{31})$ $+ \frac{10}{31}\sqrt{19}e^3 \otimes e_8$	{124568, 12568, 1347, 137, 24678, 2678, 345, 35}
84321:1	$0, 0, 0, 0, \frac{2}{183}\sqrt{1742}e^{12}, \frac{2}{183}\sqrt{67}e^{15}, \frac{2}{183}\sqrt{67}e^{16}, \frac{2}{183}\sqrt{1742}e^{17}$	$(-\frac{9}{61}, \frac{77}{183}, \frac{103}{183}, -\frac{19}{61}, \frac{50}{183}, \frac{23}{183}, -\frac{4}{183}, -\frac{31}{183})$ $+ \frac{8}{183}\sqrt{335}e^2 \otimes e_4 + \frac{8}{183}\sqrt{335}e^3 \otimes e_8$	{128, 134567, 2578, 346}
84321:1	$0, 0, 0, 0, \frac{4}{15}\sqrt{3}e^{12}, \frac{2}{5}e^{15}, \frac{2}{15}\sqrt{6}e^{16}, \frac{2}{15}\sqrt{3}e^{17}$	$(0, \frac{1}{5}, -\frac{2}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5})$ $+ \frac{2}{15}\sqrt{15}e^2 \otimes e_4 + \frac{4}{15}\sqrt{6}e^1 \otimes e_3$	{1268, 1457, 235678, 34}
84321:1	$0, 0, 0, 0, \frac{2}{15}\sqrt{3}e^{12}, \frac{2}{15}\sqrt{6}e^{15}, \frac{2}{5}e^{16}, \frac{4}{15}\sqrt{3}e^{17}$	$(0, \frac{1}{15}, \frac{7}{15}, -\frac{2}{5}, \frac{1}{15}, \frac{1}{15}, \frac{1}{15}, \frac{1}{15})$ $+ \frac{2}{15}\sqrt{15}e^3 \otimes e_8 + \frac{4}{15}\sqrt{6}e^1 \otimes e_4$	{1268, 1357, 245678, 34}
84321:1	$0, 0, 0, 0, \frac{92}{355}\sqrt{2}e^{12}, \frac{8}{355}\sqrt{345}e^{15}, \frac{4}{355}\sqrt{2369}e^{16}, \frac{4}{355}\sqrt{1909}e^{17}$	$(\frac{63}{355}, -\frac{121}{355}, \frac{28}{71}, -\frac{44}{355}, -\frac{58}{355}, \frac{1}{71}, \frac{68}{355}, \frac{131}{355})$ $+ \frac{184}{355}e^3 \otimes e_4 + \frac{4}{355}\sqrt{4945}e^1 \otimes e_2$	{1368, 1468, 23, 24}
84321:1	$0, 0, 0, 0, \frac{92}{263}\sqrt{2}e^{12}, \frac{8}{263}\sqrt{345}e^{15}, \frac{4}{263}\sqrt{2369}e^{16}, \frac{4}{263}\sqrt{1909}e^{17}$	$(\frac{63}{263}, -\frac{121}{263}, \frac{48}{263}, \frac{48}{263}, -\frac{58}{263}, \frac{5}{263}, \frac{68}{263}, \frac{131}{263})$ $+ \frac{4}{263}\sqrt{4945}e^1 \otimes e_2$	{13468, 1368, 168, 2, 23, 234}
84321:2	$0, 0, 0, 0, \frac{6}{245}\sqrt{238}e^{12}, \frac{12}{245}\sqrt{70}e^{15}, \frac{36}{245}\sqrt{14}e^{16},$ $\frac{6}{245}\sqrt{434}e^{17} + \frac{6}{245}\sqrt{70}e^{34}$	$(\frac{6}{35}, -\frac{12}{35}, \frac{3}{7}, -\frac{3}{35}, -\frac{6}{35}, 0, \frac{6}{35}, \frac{12}{35})$ $+ \frac{18}{35}e^3 \otimes e_4 + \frac{6}{49}\sqrt{42}e^1 \otimes e_2$	{23, 24}
84321:2	$0, 0, 0, 0, \frac{48}{1307}\sqrt{395}e^{12}, \frac{48}{1307}\sqrt{31}e^{15}, \frac{144}{1307}\sqrt{5}e^{16},$ $\frac{48}{1307}\sqrt{167}e^{17} + \frac{96}{1307}\sqrt{95}e^{34}$	$(-\frac{288}{1307}, \frac{912}{1307}, -\frac{120}{1307}, -\frac{120}{1307}, \frac{624}{1307}, \frac{336}{1307}, \frac{48}{1307}, -\frac{240}{1307})$ $- \frac{48}{1307}\sqrt{1047}e^2 \otimes e_8$	{123467, 1267, 1358, 23456, 256, 378}
84321:2	$0, 0, 0, 0, \frac{48}{1307}\sqrt{395}e^{12}, \frac{48}{1307}\sqrt{31}e^{15}, \frac{144}{1307}\sqrt{5}e^{16},$ $\frac{48}{1307}\sqrt{167}e^{17} + \frac{96}{1307}\sqrt{95}e^{34}$	$(-\frac{288}{1307}, \frac{912}{1307}, -\frac{120}{1307}, -\frac{120}{1307}, \frac{624}{1307}, \frac{336}{1307}, \frac{48}{1307}, -\frac{240}{1307})$ $+ \frac{48}{1307}\sqrt{1047}e^2 \otimes e_8$	{123467, 1267, 1358, 23456, 256, 378}
84321:2	$0, 0, 0, 0, \frac{2}{415}\sqrt{7062}e^{12}, \frac{6}{415}\sqrt{1070}e^{15}, \frac{12}{415}\sqrt{214}e^{16},$ $\frac{4}{415}\sqrt{321}e^{17} + \frac{6}{415}\sqrt{1070}e^{34}$	$(\frac{14}{415}, \frac{72}{415}, \frac{77}{83}, -\frac{257}{415}, \frac{86}{415}, \frac{20}{83}, \frac{114}{415}, \frac{128}{415})$ $+ \frac{642}{415}e^3 \otimes e_4$	{12368, 12468, 235678, 245678}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
84321:2	$0, 0, 0, 0, \frac{48}{1883}\sqrt{395}e^{12}, \frac{48}{1883}\sqrt{31}e^{15}, \frac{144}{1883}\sqrt{5}e^{16},$ $\frac{48}{1883}\sqrt{167}e^{17} + \frac{96}{1883}\sqrt{95}e^{34}$	$(-\frac{288}{1883}, \frac{912}{1883}, \frac{456}{1883}, -\frac{696}{1883}, \frac{624}{1883}, \frac{48}{269}, \frac{48}{1883}, -\frac{240}{1883})$ $+ \frac{1152}{1883}e^3 \otimes e_4 - \frac{48}{1883}\sqrt{1047}e^2 \otimes e_8$	{1358, 1458, 378, 478}
84321:2	$0, 0, 0, 0, \frac{48}{1883}\sqrt{395}e^{12}, \frac{48}{1883}\sqrt{31}e^{15}, \frac{144}{1883}\sqrt{5}e^{16},$ $\frac{48}{1883}\sqrt{167}e^{17} + \frac{96}{1883}\sqrt{95}e^{34}$	$(-\frac{288}{1883}, \frac{912}{1883}, \frac{456}{1883}, -\frac{696}{1883}, \frac{624}{1883}, \frac{48}{269}, \frac{48}{1883}, -\frac{240}{1883})$ $+ \frac{1152}{1883}e^3 \otimes e_4 + \frac{48}{1883}\sqrt{1047}e^2 \otimes e_8$	{1358, 1458, 378, 478}
84321:2	$0, 0, 0, 0, \frac{3}{91}\sqrt{238}e^{12}, \frac{6}{91}\sqrt{70}e^{15}, \frac{18}{91}\sqrt{14}e^{16},$ $\frac{3}{91}\sqrt{434}e^{17} + \frac{3}{91}\sqrt{70}e^{34}$	$(\frac{3}{13}, -\frac{6}{13}, \frac{3}{13}, \frac{3}{13}, -\frac{3}{13}, 0, \frac{3}{13}, \frac{6}{13})$ $+ \frac{15}{91}\sqrt{42}e^1 \otimes e_2$	{13468, 168, 23}
84321:3	$0, 0, 0, 0, \frac{43}{2661}\sqrt{410}e^{12}, \frac{86}{2661}e^{15}, \frac{301}{2661}\sqrt{2}e^{16},$ $\frac{86}{2661}\sqrt{179}e^{17} + \frac{43}{2661}\sqrt{714}e^{23}$	$(-\frac{86}{887}, \frac{817}{2661}, -\frac{344}{887}, \frac{1634}{2661}, \frac{559}{2661}, \frac{301}{2661}, \frac{43}{2661}, -\frac{215}{2661})$ $+ \frac{43}{2661}\sqrt{2054}e^2 \otimes e_3 + \frac{86}{2661}\sqrt{641}e^4 \otimes e_8$	{13568, 3678}
84321:3	$0, 0, 0, 0, \frac{2}{47}\sqrt{123}e^{12}, \frac{18}{47}e^{15}, \frac{1}{47}\sqrt{210}e^{16}, \frac{5}{47}\sqrt{6}e^{17} + \frac{12}{47}e^{23}$	$(-\frac{3}{94}, \frac{12}{47}, -\frac{6}{47}, -\frac{39}{94}, \frac{21}{94}, \frac{9}{47}, \frac{15}{94}, \frac{6}{47})$ $+ \frac{1}{47}\sqrt{570}e^2 \otimes e_3 + \frac{4}{47}\sqrt{57}e^1 \otimes e_4$	{1357, 34}
84321:3	$0, 0, 0, 0, \frac{8}{259}\sqrt{286}e^{12}, \frac{4}{259}\sqrt{1518}e^{15}, \frac{4}{259}\sqrt{1518}e^{16},$ $\frac{8}{259}\sqrt{286}e^{17} + \frac{24}{259}\sqrt{11}e^{23}$	$(\frac{17}{259}, \frac{16}{259}, \frac{68}{259}, -\frac{159}{259}, \frac{33}{259}, \frac{50}{259}, \frac{67}{259}, \frac{12}{37})$ $+ \frac{44}{259}\sqrt{38}e^1 \otimes e_4$	{12368, 1357, 2345678, 34}
84321:3	$0, 0, 0, 0, \frac{4}{61}\sqrt{37}e^{12}, \frac{1}{61}\sqrt{814}e^{15}, \frac{1}{61}\sqrt{814}e^{16},$ $\frac{4}{61}\sqrt{37}e^{17} + \frac{2}{61}\sqrt{851}e^{23}$	$(\frac{19}{122}, -\frac{13}{122}, \frac{38}{61}, -\frac{36}{61}, \frac{3}{61}, \frac{25}{122}, \frac{22}{61}, \frac{63}{122})$ $+ \frac{1}{61}\sqrt{7178}e^3 \otimes e_4$	{124578, 146, 248, 4567}
84321:3	$0, 0, 0, 0, \frac{6}{1217}\sqrt{14835}e^{12}, \frac{72}{1217}\sqrt{23}e^{15}, \frac{6}{1217}\sqrt{10281}e^{16},$ $\frac{12}{1217}\sqrt{6486}e^{17} + \frac{24}{1217}\sqrt{1518}e^{23}$	$(-\frac{30}{1217}, \frac{95}{1217}, -\frac{120}{1217}, 1, \frac{65}{1217}, \frac{35}{1217}, \frac{5}{1217}, -\frac{25}{1217})$ $+ \frac{6}{1217}\sqrt{67965}e^4 \otimes e_8$	{12568, 147, 2678, 45}
84321:3	$0, 0, 0, 0, \frac{6}{293}\sqrt{2327}e^{12}, \frac{6}{293}\sqrt{537}e^{15}, \frac{1}{293}\sqrt{14678}e^{16},$ $\frac{1}{293}\sqrt{18258}e^{17} + \frac{4}{293}\sqrt{537}e^{23}$	$(-\frac{85}{586}, \frac{188}{293}, -\frac{170}{293}, \frac{111}{586}, \frac{291}{586}, \frac{103}{293}, \frac{121}{586}, \frac{18}{293})$ $+ \frac{5}{293}\sqrt{6802}e^2 \otimes e_3$	{1345, 135, 347, 37}
84321:3	$0, 0, 0, 0, \frac{12}{1217}\sqrt{6486}e^{12}, \frac{6}{1217}\sqrt{10281}e^{15}, \frac{72}{1217}\sqrt{23}e^{16},$ $\frac{6}{1217}\sqrt{14835}e^{17} + \frac{24}{1217}\sqrt{1518}e^{23}$	$(-\frac{30}{1217}, \frac{489}{1217}, -\frac{120}{1217}, -\frac{753}{1217}, \frac{459}{1217}, \frac{429}{1217}, \frac{399}{1217}, \frac{369}{1217})$ $+ \frac{6}{1217}\sqrt{67965}e^2 \otimes e_4$	{12678, 145, 2568, 47}
84321:4	$0, 0, 0, 0, \frac{10}{399}\sqrt{354}e^{12}, \frac{10}{133}\sqrt{21}e^{15}, \frac{10}{399}\sqrt{123}e^{16},$ $\frac{20}{399}\sqrt{3}e^{17} + \frac{40}{133}e^{25}$	$(\frac{5}{133}, \frac{15}{133}, -\frac{45}{133}, -\frac{5}{19}, \frac{20}{133}, \frac{25}{133}, \frac{30}{133}, \frac{5}{19})$ $+ \frac{10}{399}\sqrt{474}e^2 \otimes e_4 + \frac{20}{399}\sqrt{141}e^1 \otimes e_3$	{1268, 34}
84321:4	$0, 0, 0, 0, \frac{4}{175}\sqrt{273}e^{12}, \frac{2}{175}\sqrt{2093}e^{15}, \frac{2}{175}\sqrt{1365}e^{16},$ $\frac{6}{175}\sqrt{546}e^{17} + \frac{8}{175}\sqrt{273}e^{25}$	$(-\frac{1}{175}, -\frac{3}{175}, 1, \frac{33}{175}, -\frac{4}{175}, -\frac{1}{35}, -\frac{6}{175}, -\frac{1}{25})$ $+ \frac{2}{175}\sqrt{12922}e^3 \otimes e_8$	{1347, 137, 24678, 2678}
84321:4	$0, 0, 0, 0, \frac{2}{1305}\sqrt{96126}e^{12}, \frac{2}{1305}\sqrt{168437}e^{15}, \frac{38}{1305}\sqrt{433}e^{16},$ $\frac{2}{1305}\sqrt{120374}e^{17} + \frac{4}{1305}\sqrt{15155}e^{25}$	$(\frac{11}{261}, \frac{11}{87}, -\frac{811}{1305}, \frac{247}{1305}, \frac{44}{261}, \frac{55}{261}, \frac{22}{87}, \frac{77}{261})$ $+ \frac{46}{1305}\sqrt{866}e^1 \otimes e_3$	{1457, 157, 2345678, 235678}
84321:4	$0, 0, 0, 0, \frac{2}{305}\sqrt{3318}e^{12}, \frac{6}{305}\sqrt{395}e^{15}, \frac{6}{305}\sqrt{474}e^{16},$ $\frac{4}{305}\sqrt{474}e^{17} + \frac{6}{305}\sqrt{395}e^{25}$	$(\frac{13}{305}, \frac{39}{305}, 1, -\frac{169}{305}, \frac{52}{305}, \frac{13}{61}, \frac{78}{305}, \frac{91}{305})$ $+ \frac{474}{305}e^3 \otimes e_4$	{12368, 12468, 3, 4}
84321:4	$0, 0, 0, 0, \frac{180}{1537}\sqrt{13}e^{12}, \frac{36}{1537}\sqrt{131}e^{15}, \frac{72}{1537}\sqrt{13}e^{16},$ $\frac{108}{1537}e^{17} + \frac{36}{1537}\sqrt{553}e^{25}$	$(\frac{18}{1537}, \frac{54}{1537}, \frac{774}{1537}, -\frac{594}{1537}, \frac{72}{1537}, \frac{90}{1537}, \frac{108}{1537}, \frac{126}{1537})$ $+ \frac{36}{1537}\sqrt{763}e^2 \otimes e_4 + \frac{396}{1537}\sqrt{5}e^3 \otimes e_8$	{128, 346}
84321:4	$0, 0, 0, 0, \frac{2}{1209}\sqrt{261290}e^{12}, \frac{2}{1209}\sqrt{3451}e^{15}, \frac{2}{1209}\sqrt{53737}e^{16},$ $\frac{136}{1209}\sqrt{29}e^{17} + \frac{8}{1209}\sqrt{15283}e^{25}$	$(\frac{61}{1209}, \frac{61}{403}, -\frac{803}{1209}, \frac{203}{1209}, \frac{244}{1209}, \frac{305}{1209}, \frac{122}{403}, \frac{427}{1209})$ $+ \frac{2}{1209}\sqrt{495958}e^2 \otimes e_3$	{1345678, 135678, 2457, 257}
84321:4	$0, 0, 0, 0, \frac{136}{1453}\sqrt{6}e^{12}, \frac{170}{1453}\sqrt{7}e^{15}, \frac{34}{1453}\sqrt{285}e^{16},$ $\frac{102}{1453}\sqrt{42}e^{17} + \frac{136}{1453}\sqrt{3}e^{25}$	$(\frac{17}{1453}, \frac{51}{1453}, \frac{697}{1453}, -\frac{561}{1453}, \frac{68}{1453}, \frac{85}{1453}, \frac{102}{1453}, \frac{119}{1453})$ $+ \frac{204}{1453}\sqrt{21}e^1 \otimes e_4 + \frac{34}{1453}\sqrt{502}e^3 \otimes e_8$	{1268, 34}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
84321:7	$0, 0, 0, 0, \frac{11}{235}\sqrt{78}e^{12}, \frac{33}{235}\sqrt{10}e^{15}, \frac{99}{235}e^{16},$ $\frac{11}{235}\sqrt{6}e^{17} + \frac{33}{235}\sqrt{5}e^{25} + \frac{33}{235}\sqrt{10}e^{34}$	$(\frac{11}{235}, \frac{33}{235}, \frac{44}{47}, -\frac{143}{235}, \frac{44}{235}, \frac{11}{47}, \frac{66}{235}, \frac{77}{235})$ $+ \frac{363}{235}e^3 \otimes e_4$	{12368, 12468}
8431:1	$0, 0, 0, 0, \frac{3}{154}\sqrt{1001}e^{12}, \frac{9}{77}\sqrt{39}e^{15}, \frac{6}{77}\sqrt{13}e^{25}, \frac{3}{154}\sqrt{1001}e^{16}$	$(\frac{23}{154}, -\frac{1}{308}, -\frac{47}{77}, \frac{15}{77}, \frac{45}{308}, \frac{13}{44}, \frac{1}{7}, \frac{137}{308})$ $+ \frac{3}{77}\sqrt{806}e^1 \otimes e_3$	{1246, 126, 1458, 158, 2345678, 235678, 347, 37}
8431:1	$0, 0, 0, 0, \frac{38}{1777}\sqrt{211}e^{12}, \frac{342}{1777}\sqrt{5}e^{15}, \frac{76}{1777}\sqrt{15}e^{25}, \frac{114}{1777}\sqrt{58}e^{16}$	$(\frac{17}{1777}, \frac{74}{1777}, \frac{847}{1777}, -\frac{705}{1777}, \frac{91}{1777}, \frac{108}{1777}, \frac{165}{1777}, \frac{125}{1777})$ $+ \frac{38}{1777}\sqrt{622}e^3 \otimes e_8 + \frac{38}{1777}\sqrt{930}e^1 \otimes e_4$	{1236, 158, 245678, 347}
8431:1	$0, 0, 0, 0, \frac{36}{1921}\sqrt{515}e^{12}, \frac{18}{1921}\sqrt{805}e^{15}, \frac{18}{1921}\sqrt{3470}e^{25},$ $\frac{18}{1921}\sqrt{335}e^{16}$	$(\frac{27}{1921}, \frac{63}{1921}, \frac{963}{1921}, -\frac{747}{1921}, \frac{90}{1921}, \frac{117}{1921}, \frac{9}{113}, \frac{144}{1921})$ $+ \frac{18}{1921}\sqrt{4790}e^2 \otimes e_4 + \frac{72}{1921}\sqrt{235}e^3 \otimes e_7$	{127, 145678, 2358, 346}
8431:1	$0, 0, 0, 0, \frac{1}{142}\sqrt{2343}e^{12}, \frac{1}{71}\sqrt{330}e^{15}, \frac{1}{71}\sqrt{330}e^{25}, \frac{1}{142}\sqrt{2343}e^{16}$	$(-\frac{11}{142}, \frac{49}{284}, -\frac{22}{71}, \frac{9}{71}, \frac{27}{284}, \frac{5}{284}, \frac{19}{71}, -\frac{17}{284})$ $+ \frac{1}{71}\sqrt{1023}e^1 \otimes e_3 + \frac{1}{71}\sqrt{1023}e^2 \otimes e_8$	{12467, 1267, 14578, 1578}
8431:1	$0, 0, 0, 0, \frac{2}{1473}\sqrt{122434}e^{12}, \frac{2}{1473}\sqrt{64541}e^{15}, \frac{4}{1473}\sqrt{12742}e^{25},$ $\frac{14}{1473}\sqrt{831}e^{16}$	$(\frac{61}{1473}, \frac{53}{491}, -\frac{493}{1473}, -\frac{395}{1473}, \frac{220}{1473}, \frac{281}{1473}, \frac{379}{1473}, \frac{114}{491})$ $+ \frac{2}{1473}\sqrt{163430}e^2 \otimes e_4 + \frac{8}{1473}\sqrt{11911}e^1 \otimes e_3$	{1267, 14578, 23568, 34}
8431:1	$0, 0, 0, 0, \frac{1}{9}\sqrt{14}e^{12}, \frac{1}{9}\sqrt{14}e^{15}, \frac{1}{9}\sqrt{14}e^{25}, \frac{1}{9}\sqrt{14}e^{16}$	$(\frac{1}{18}, \frac{1}{9}, 1, -\frac{5}{9}, \frac{1}{6}, \frac{2}{9}, \frac{5}{18}, \frac{5}{18})$ $+ \frac{14}{9}e^3 \otimes e_4$	{12367, 12467, 13578, 14578, 23568, 24568, 3, 4}
8431:1	$0, 0, 0, 0, \frac{1}{146}\sqrt{2715}e^{12}, \frac{1}{146}\sqrt{2534}e^{15}, \frac{1}{146}\sqrt{18462}e^{25}, \frac{1}{146}\sqrt{2715}e^{16}$	$(\frac{11}{73}, -\frac{57}{292}, 1, \frac{15}{73}, -\frac{13}{292}, \frac{31}{292}, -\frac{35}{146}, \frac{75}{292})$ $+ \frac{1}{73}\sqrt{10498}e^3 \otimes e_7$	{12478, 1278, 14567, 1567, 2345, 235, 3468, 368}
8431:1	$0, 0, 0, 0, \frac{6}{133}\sqrt{15}e^{12}, \frac{6}{133}\sqrt{15}e^{15}, \frac{6}{133}\sqrt{130}e^{25}, \frac{6}{133}\sqrt{130}e^{16}$	$(-\frac{3}{133}, -\frac{6}{133}, \frac{75}{133}, \frac{75}{133}, -\frac{9}{133}, -\frac{12}{133}, -\frac{15}{133}, -\frac{15}{133})$ $+ \frac{6}{133}\sqrt{290}e^3 \otimes e_7 + \frac{6}{133}\sqrt{290}e^4 \otimes e_8$	{123456, 138, 2678, 457}
8431:1	$0, 0, 0, 0, \frac{2}{1433}\sqrt{112309}e^{12}, \frac{2}{1433}\sqrt{18354}e^{15}, \frac{2}{1433}\sqrt{140277}e^{25},$ $\frac{10}{1433}\sqrt{2622}e^{16}$	$(-\frac{170}{1433}, \frac{343}{1433}, \frac{707}{1433}, -\frac{531}{1433}, \frac{173}{1433}, \frac{3}{1433}, \frac{516}{1433}, -\frac{167}{1433})$ $+ \frac{22}{1433}\sqrt{2622}e^2 \otimes e_4 + \frac{32}{1433}\sqrt{874}e^3 \otimes e_8$	{1278, 134567, 235, 468}
8431:1	$0, 0, 0, 0, \frac{2}{37}\sqrt{221}e^{12}, \frac{2}{37}\sqrt{34}e^{15}, \frac{2}{37}\sqrt{221}e^{25}, \frac{2}{37}\sqrt{34}e^{16}$	$(-\frac{2}{37}, \frac{11}{37}, -\frac{23}{37}, \frac{7}{37}, \frac{9}{37}, \frac{7}{37}, \frac{20}{37}, \frac{5}{37})$ $+ \frac{2}{37}\sqrt{510}e^2 \otimes e_3$	{1247, 127, 1345678, 135678, 2458, 258, 346, 36}
8431:1	$0, 0, 0, 0, \frac{6}{425}\sqrt{1001}e^{12}, \frac{24}{425}\sqrt{13}e^{15}, \frac{36}{425}\sqrt{39}e^{25}, \frac{6}{425}\sqrt{1001}e^{16}$	$(-\frac{78}{425}, \frac{123}{425}, \frac{177}{425}, -\frac{57}{425}, \frac{9}{85}, -\frac{33}{425}, \frac{168}{425}, -\frac{111}{425})$ $+ \frac{12}{425}\sqrt{806}e^2 \otimes e_8 + \frac{234}{425}e^3 \otimes e_4$	{235, 245, 368, 468}
8431:1	$0, 0, 0, 0, \frac{3}{154}\sqrt{1001}e^{12}, \frac{6}{77}\sqrt{13}e^{15}, \frac{9}{77}\sqrt{39}e^{25}, \frac{3}{154}\sqrt{1001}e^{16}$	$(-\frac{39}{154}, \frac{123}{308}, \frac{15}{77}, \frac{15}{77}, \frac{45}{308}, -\frac{3}{28}, \frac{6}{11}, -\frac{111}{308})$ $+ \frac{3}{77}\sqrt{806}e^2 \otimes e_8$	{2345, 235, 25, 3468, 368, 68}
8431:1	$0, 0, 0, 0, \frac{1}{146}\sqrt{2534}e^{12}, \frac{1}{146}\sqrt{2715}e^{15}, \frac{1}{146}\sqrt{2715}e^{25}, \frac{1}{146}\sqrt{18462}e^{16}$	$(-\frac{43}{292}, \frac{59}{292}, 1, \frac{15}{73}, \frac{4}{73}, -\frac{27}{292}, \frac{75}{292}, -\frac{35}{146})$ $+ \frac{1}{73}\sqrt{10498}e^3 \otimes e_8$	{12458, 1258, 1346, 136, 2347, 237, 45678, 5678}
8431:1	$0, 0, 0, 0, \frac{6}{25}\sqrt{2}e^{12}, \frac{6}{25}e^{15}, \frac{9}{25}\sqrt{2}e^{25}, \frac{6}{25}\sqrt{2}e^{16}$	$(-\frac{3}{25}, \frac{3}{25}, \frac{12}{25}, \frac{3}{25}, 0, -\frac{3}{25}, \frac{3}{25}, -\frac{6}{25})$ $+ \frac{3}{25}\sqrt{26}e^2 \otimes e_8 + \frac{9}{25}\sqrt{2}e^3 \otimes e_7$	{2345, 235, 3468, 368}
8431:1	$0, 0, 0, 0, \frac{4}{349}\sqrt{1410}e^{12}, \frac{4}{349}\sqrt{1645}e^{15}, \frac{4}{349}\sqrt{705}e^{25}, \frac{4}{349}\sqrt{1410}e^{16}$	$(\frac{50}{349}, -\frac{39}{349}, \frac{160}{349}, -\frac{138}{349}, \frac{11}{349}, \frac{61}{349}, -\frac{28}{349}, \frac{111}{349})$ $+ \frac{2}{349}\sqrt{10246}e^3 \otimes e_7 + \frac{6}{349}\sqrt{1974}e^1 \otimes e_4$	{1267, 1578, 234568, 34}
8431:2	$0, 0, 0, 0, \frac{1}{4}\sqrt{6}e^{12}, \frac{1}{8}\sqrt{6}e^{15}, \frac{3}{4}e^{25} + \frac{1}{8}\sqrt{6}e^{34}, \frac{1}{4}\sqrt{6}e^{16}$	$(-\frac{1}{4}, \frac{3}{8}, \frac{1}{4}, \frac{1}{4}, \frac{1}{8}, -\frac{1}{8}, \frac{1}{2}, -\frac{3}{8})$ $+ \frac{1}{8}\sqrt{78}e^2 \otimes e_8$	{235, 368}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8431:2	$0, 0, 0, 0, \frac{2}{1529}\sqrt{54115}e^{12}, \frac{24}{1529}\sqrt{685}e^{15},$ $\frac{2}{1529}\sqrt{91105}e^{25} + \frac{2}{1529}\sqrt{379490}e^{34}, \frac{4}{1529}\sqrt{91790}e^{16}$	$(-\frac{302}{1529}, \frac{511}{1529}, \frac{975}{1529}, -\frac{255}{1529}, \frac{19}{139}, -\frac{93}{1529}, \frac{720}{1529}, -\frac{395}{1529})$ $+ \frac{10}{1529}\sqrt{33702}e^3 \otimes e_8$	{124578, 1367, 234, 568}
8431:2	$0, 0, 0, 0, \frac{2}{123}\sqrt{665}e^{12}, \frac{4}{123}\sqrt{190}e^{15}, \frac{4}{123}\sqrt{95}e^{25} + \frac{4}{123}\sqrt{190}e^{34},$ $\frac{2}{123}\sqrt{665}e^{16}$	$(\frac{2}{41}, \frac{17}{123}, \frac{115}{123}, -\frac{25}{41}, \frac{23}{123}, \frac{29}{123}, \frac{40}{123}, \frac{35}{123})$ $+ \frac{190}{123}e^3 \otimes e_4$	{12367, 12467, 13578, 14578}
8431:2	$0, 0, 0, 0, \frac{2}{11}\sqrt{6}e^{12}, \frac{1}{11}\sqrt{6}e^{15}, \frac{6}{11}e^{25} + \frac{1}{11}\sqrt{6}e^{34},$ $\frac{2}{11}\sqrt{6}e^{16}$	$(-\frac{2}{11}, \frac{3}{11}, \frac{5}{11}, -\frac{1}{11}, \frac{1}{11}, -\frac{1}{11}, \frac{4}{11}, -\frac{3}{11})$ $+ \frac{1}{11}\sqrt{78}e^2 \otimes e_8 + \frac{6}{11}e^3 \otimes e_4$	{235, 245, 368, 468}
8431:2	$0, 0, 0, 0, \frac{2}{11}\sqrt{6}e^{12}, \frac{1}{11}\sqrt{6}e^{15}, \frac{6}{11}e^{25} + \frac{1}{11}\sqrt{6}e^{34},$ $\frac{2}{11}\sqrt{6}e^{16}$	$(-\frac{2}{11}, \frac{3}{11}, \frac{5}{11}, -\frac{1}{11}, \frac{1}{11}, -\frac{1}{11}, \frac{4}{11}, -\frac{3}{11})$ $+ \frac{1}{11}\sqrt{78}e^2 \otimes e_8 - \frac{6}{11}e^3 \otimes e_4$	{235, 245, 368, 468}
8431:3	$0, 0, 0, 0, \frac{84}{383}\sqrt{5}e^{12}, \frac{28}{383}\sqrt{55}e^{15}, \frac{28}{383}\sqrt{30}e^{13} + \frac{28}{383}\sqrt{15}e^{25},$ $\frac{84}{383}\sqrt{5}e^{16}$	$(\frac{70}{383}, -\frac{63}{383}, -\frac{126}{383}, \frac{140}{383}, \frac{7}{383}, \frac{77}{383}, -\frac{56}{383}, \frac{147}{383})$ $+ \frac{126}{383}\sqrt{6}e^1 \otimes e_3 + \frac{14}{383}\sqrt{166}e^4 \otimes e_7$	{234568, 34}
8431:3	$0, 0, 0, 0, \frac{2}{283}\sqrt{5681}e^{12}, \frac{3}{283}\sqrt{598}e^{15}, \frac{1}{283}\sqrt{52026}e^{13} + \frac{3}{283}\sqrt{598}e^{25},$ $\frac{26}{283}\sqrt{69}e^{16}$	$(-\frac{67}{283}, \frac{98}{283}, \frac{196}{283}, \frac{51}{283}, \frac{31}{283}, \frac{36}{283}, \frac{129}{283}, -\frac{103}{283})$ $+ \frac{4}{283}\sqrt{8671}e^3 \otimes e_8$	{1478, 178, 2468, 268}
8431:3	$0, 0, 0, 0, \frac{1}{73}\sqrt{3599}e^{12}, \frac{1}{73}\sqrt{61}e^{15}, \frac{1}{73}\sqrt{1830}e^{13} + \frac{1}{73}\sqrt{3599}e^{25},$ $\frac{1}{73}\sqrt{61}e^{16}$	$(-\frac{1}{146}, \frac{14}{73}, \frac{28}{73}, -\frac{47}{73}, \frac{27}{146}, \frac{13}{73}, \frac{55}{146}, \frac{25}{146})$ $+ \frac{2}{73}\sqrt{1830}e^2 \otimes e_4$	{1237, 1345678, 2358, 346}
8431:3	$0, 0, 0, 0, \frac{3}{283}\sqrt{598}e^{12}, \frac{2}{283}\sqrt{5681}e^{15}, \frac{1}{283}\sqrt{52026}e^{13} + \frac{26}{283}\sqrt{69}e^{25},$ $\frac{3}{283}\sqrt{598}e^{16}$	$(\frac{20}{283}, -\frac{18}{283}, -\frac{36}{283}, \frac{1}{283}, \frac{2}{283}, \frac{22}{283}, -\frac{16}{283}, \frac{42}{283})$ $+ \frac{4}{283}\sqrt{8671}e^4 \otimes e_7$	{1234568, 134, 2367, 3578}
8431:3	$0, 0, 0, 0, \frac{1}{17}\sqrt{42}e^{12}, \frac{1}{17}\sqrt{42}e^{15}, \frac{7}{17}\sqrt{6}e^{13} + \frac{1}{17}\sqrt{42}e^{25},$ $\frac{1}{17}\sqrt{42}e^{16}$	$(-\frac{1}{17}, \frac{5}{17}, \frac{10}{17}, -\frac{11}{17}, \frac{4}{17}, \frac{3}{17}, \frac{9}{17}, \frac{2}{17})$ $+ \frac{14}{17}\sqrt{3}e^3 \otimes e_4$	{1245678, 147, 246, 458}
8431:3	$0, 0, 0, 0, \frac{1}{307}\sqrt{31326}e^{12}, \frac{10}{307}\sqrt{454}e^{15}, \frac{1}{307}\sqrt{14074}e^{13} + \frac{4}{307}\sqrt{681}e^{25},$ $\frac{1}{307}\sqrt{31326}e^{16}$	$(\frac{38}{307}, \frac{14}{307}, \frac{28}{307}, -\frac{189}{307}, \frac{52}{307}, \frac{90}{307}, \frac{66}{307}, \frac{128}{307})$ $+ \frac{4}{307}\sqrt{7037}e^1 \otimes e_4$	{1236, 1358, 2345678, 347}
8431:3	$0, 0, 0, 0, \frac{240}{707}e^{12}, \frac{12}{707}\sqrt{214}e^{15}, \frac{12}{707}\sqrt{186}e^{13} + \frac{24}{707}\sqrt{69}e^{25},$ $\frac{240}{707}e^{16}$	$(-\frac{48}{707}, \frac{90}{707}, \frac{180}{707}, -\frac{192}{707}, \frac{6}{101}, -\frac{6}{707}, \frac{132}{707}, -\frac{54}{707})$ $+ \frac{12}{707}\sqrt{682}e^2 \otimes e_8 + \frac{36}{707}\sqrt{62}e^1 \otimes e_4$	{12367, 13578}
8431:3	$0, 0, 0, 0, \frac{22}{1119}\sqrt{87}e^{12}, \frac{22}{1119}\sqrt{273}e^{15}, \frac{11}{1119}\sqrt{1398}e^{13} + \frac{88}{373}e^{25},$ $\frac{22}{373}\sqrt{46}e^{16}$	$(-\frac{22}{373}, \frac{55}{373}, \frac{110}{373}, -\frac{143}{373}, \frac{33}{373}, \frac{11}{373}, \frac{88}{373}, -\frac{11}{373})$ $+ \frac{22}{1119}\sqrt{654}e^3 \otimes e_8 + \frac{22}{1119}\sqrt{834}e^1 \otimes e_4$	{1236, 347}
8431:3	$0, 0, 0, 0, \frac{42}{299}\sqrt{19}e^{12}, \frac{3}{299}\sqrt{4902}e^{15}, \frac{3}{299}\sqrt{3534}e^{13} + \frac{3}{299}\sqrt{190}e^{25},$ $\frac{42}{299}\sqrt{19}e^{16}$	$(\frac{67}{299}, -\frac{4}{23}, -\frac{8}{23}, \frac{51}{299}, \frac{15}{299}, \frac{82}{299}, -\frac{37}{299}, \frac{149}{299})$ $+ \frac{12}{299}\sqrt{589}e^1 \otimes e_3$	{234568, 23568, 3, 34}
8431:3	$0, 0, 0, 0, \frac{50}{287}\sqrt{7}e^{12}, \frac{15}{287}\sqrt{14}e^{15}, \frac{5}{287}\sqrt{42}e^{13} + \frac{15}{41}\sqrt{2}e^{25},$ $\frac{10}{287}\sqrt{105}e^{16}$	$(-\frac{5}{41}, \frac{10}{41}, \frac{20}{41}, -\frac{15}{41}, \frac{5}{41}, 0, \frac{15}{41}, -\frac{5}{41})$ $+ \frac{20}{287}\sqrt{91}e^3 \otimes e_8 + \frac{60}{287}\sqrt{14}e^2 \otimes e_4$	{1278, 468}
8431:3	$0, 0, 0, 0, \frac{42}{299}\sqrt{19}e^{12}, \frac{3}{299}\sqrt{190}e^{15}, \frac{3}{299}\sqrt{3534}e^{13} + \frac{3}{299}\sqrt{4902}e^{25},$ $\frac{42}{299}\sqrt{19}e^{16}$	$(-\frac{57}{299}, \frac{72}{299}, \frac{144}{299}, \frac{51}{299}, \frac{15}{299}, -\frac{42}{299}, \frac{87}{299}, -\frac{99}{299})$ $+ \frac{12}{299}\sqrt{589}e^2 \otimes e_8$	{123467, 12367, 134578, 13578}
8431:3	$0, 0, 0, 0, \frac{31}{3373}\sqrt{1306}e^{12}, \frac{31}{3373}\sqrt{2054}e^{15},$ $\frac{31}{3373}\sqrt{1706}e^{13} + \frac{31}{3373}\sqrt{138}e^{25}, \frac{31}{3373}\sqrt{2382}e^{16}$	$(\frac{279}{3373}, -\frac{341}{3373}, -\frac{682}{3373}, \frac{1457}{3373}, -\frac{62}{3373}, \frac{217}{3373}, -\frac{403}{3373}, \frac{496}{3373})$ $+ \frac{62}{3373}\sqrt{538}e^4 \otimes e_8 + \frac{62}{3373}\sqrt{958}e^1 \otimes e_3$	{23568, 34}
8431:3	$0, 0, 0, 0, \frac{15}{644}\sqrt{247}e^{12}, \frac{15}{644}\sqrt{74}e^{15}, \frac{15}{644}\sqrt{114}e^{13} + \frac{15}{322}\sqrt{123}e^{25},$ $\frac{15}{644}\sqrt{247}e^{16}$	$(-\frac{75}{644}, \frac{135}{1288}, \frac{135}{644}, \frac{285}{644}, -\frac{15}{1288}, -\frac{165}{1288}, \frac{15}{161}, -\frac{45}{184})$ $+ \frac{15}{644}\sqrt{718}e^2 \otimes e_8 + \frac{45}{644}\sqrt{46}e^4 \otimes e_7$	{2345, 3468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8431:3	$0, 0, 0, 0, \frac{1}{291}\sqrt{4970}e^{12}, \frac{2}{291}\sqrt{3905}e^{15}, \frac{1}{291}\sqrt{20590}e^{13} + \frac{2}{291}\sqrt{3905}e^{25},$ $\frac{1}{291}\sqrt{77390}e^{16}$	$(-\frac{12}{97}, \frac{44}{291}, \frac{88}{291}, 1, \frac{8}{291}, -\frac{28}{291}, \frac{52}{291}, -\frac{64}{291})$ $+ \frac{4}{291}\sqrt{10295}e^4 \otimes e_8$	{1258, 146, 247, 5678}
8431:3	$0, 0, 0, 0, \frac{6}{257}\sqrt{195}e^{12}, \frac{6}{257}\sqrt{195}e^{15}, \frac{3}{257}\sqrt{2262}e^{13} + \frac{6}{257}\sqrt{182}e^{25},$ $\frac{6}{257}\sqrt{182}e^{16}$	$(-\frac{30}{257}, \frac{27}{257}, \frac{54}{257}, \frac{141}{257}, -\frac{3}{257}, -\frac{33}{257}, \frac{24}{257}, -\frac{63}{257})$ $+ \frac{6}{257}\sqrt{754}e^3 \otimes e_8 + \frac{6}{257}\sqrt{754}e^4 \otimes e_7$	{123456, 357}
8431:3	$0, 0, 0, 0, \frac{50}{2849}\sqrt{526}e^{12}, \frac{25}{2849}\sqrt{1366}e^{15},$ $\frac{25}{2849}\sqrt{1622}e^{13} + \frac{25}{2849}\sqrt{1030}e^{25}, \frac{300}{2849}\sqrt{7}e^{16}$	$(\frac{325}{2849}, -\frac{150}{2849}, -\frac{300}{2849}, -\frac{775}{2849}, \frac{25}{407}, \frac{500}{2849}, \frac{25}{2849}, \frac{75}{259})$ $+ \frac{100}{2849}\sqrt{137}e^2 \otimes e_4 + \frac{100}{2849}\sqrt{179}e^1 \otimes e_3$	{23568, 34}
8431:3	$0, 0, 0, 0, \frac{5}{143}\sqrt{210}e^{12}, \frac{5}{143}\sqrt{6}e^{15}, \frac{5}{143}\sqrt{138}e^{13} + \frac{5}{143}\sqrt{282}e^{25},$ $\frac{5}{143}\sqrt{210}e^{16}$	$(-\frac{25}{143}, \frac{35}{143}, \frac{70}{143}, -\frac{5}{143}, \frac{10}{143}, -\frac{15}{143}, \frac{45}{143}, -\frac{40}{143})$ $+ \frac{10}{143}\sqrt{39}e^3 \otimes e_4 + \frac{120}{143}e^2 \otimes e_8$	{235, 368}
8431:4	$0, 0, 0, 0, \frac{24}{1529}\sqrt{685}e^{12}, \frac{2}{1529}\sqrt{54115}e^{15}, \frac{4}{1529}\sqrt{91790}e^{25},$ $\frac{2}{1529}\sqrt{91105}e^{16} + \frac{2}{1529}\sqrt{379490}e^{34}$	$(\frac{367}{1529}, -\frac{381}{1529}, \frac{975}{1529}, -\frac{255}{1529}, -\frac{14}{1529}, \frac{353}{1529}, -\frac{395}{1529}, \frac{720}{1529})$ $+ \frac{10}{1529}\sqrt{33702}e^3 \otimes e_7$	{127, 145678, 2358, 346}
8431:4	$0, 0, 0, 0, \frac{1}{49}\sqrt{462}e^{12}, \frac{2}{49}\sqrt{21}e^{15}, \frac{9}{49}\sqrt{7}e^{25},$ $\frac{1}{49}\sqrt{231}e^{16} + \frac{1}{49}\sqrt{462}e^{34}$	$(-\frac{1}{7}, \frac{2}{7}, \frac{1}{7}, -\frac{2}{7}, \frac{1}{7}, 0, \frac{3}{7}, -\frac{1}{7})$ $+ \frac{1}{49}\sqrt{1302}e^2 \otimes e_8 + \frac{3}{7}e^3 \otimes e_4$	{368, 468}
8431:4	$0, 0, 0, 0, \frac{2}{77}\sqrt{462}e^{12}, \frac{4}{77}\sqrt{21}e^{15}, \frac{18}{77}\sqrt{7}e^{25},$ $\frac{2}{77}\sqrt{231}e^{16} + \frac{2}{77}\sqrt{462}e^{34}$	$(-\frac{2}{11}, \frac{4}{11}, -\frac{1}{11}, -\frac{1}{11}, \frac{2}{11}, 0, \frac{6}{11}, -\frac{2}{11})$ $+ \frac{2}{77}\sqrt{1302}e^2 \otimes e_8$	{2345, 25, 368}
8431:4	$0, 0, 0, 0, \frac{4}{123}\sqrt{190}e^{12}, \frac{2}{123}\sqrt{665}e^{15}, \frac{2}{123}\sqrt{665}e^{25},$ $\frac{4}{123}\sqrt{95}e^{16} + \frac{4}{123}\sqrt{190}e^{34}$	$(\frac{3}{41}, \frac{13}{123}, \frac{115}{123}, -\frac{25}{41}, \frac{22}{123}, \frac{31}{123}, \frac{35}{123}, \frac{40}{123})$ $+ \frac{190}{123}e^3 \otimes e_4$	{13578, 14578, 23568, 24568}
8431:4	$0, 0, 0, 0, \frac{3}{707}\sqrt{1918}e^{12}, \frac{6}{707}\sqrt{203}e^{15}, \frac{3}{707}\sqrt{3570}e^{25},$ $\frac{3}{707}\sqrt{322}e^{16} + \frac{6}{707}\sqrt{798}e^{34}$	$(-\frac{3}{101}, \frac{6}{101}, \frac{18}{101}, -\frac{21}{101}, \frac{3}{101}, 0, \frac{9}{101}, -\frac{3}{101})$ $+ \frac{3}{101}\sqrt{78}e^3 \otimes e_7 + \frac{3}{707}\sqrt{4942}e^2 \otimes e_8$	{2345, 368}
8431:5	$0, 0, 0, 0, \frac{6}{107}\sqrt{130}e^{12}, \frac{12}{107}\sqrt{39}e^{15}, \frac{2}{107}\sqrt{39}e^{25},$ $\frac{6}{107}\sqrt{130}e^{16} + \frac{26}{107}\sqrt{3}e^{23}$	$(\frac{11}{107}, \frac{4}{107}, \frac{33}{107}, -\frac{67}{107}, \frac{15}{107}, \frac{26}{107}, \frac{19}{107}, \frac{37}{107})$ $+ \frac{6}{107}\sqrt{377}e^1 \otimes e_4$	{126, 158, 2345678, 347}
8431:5	$0, 0, 0, 0, \frac{1}{19}\sqrt{69}e^{12}, \frac{1}{38}\sqrt{230}e^{15}, \frac{1}{19}\sqrt{345}e^{25},$ $\frac{1}{19}\sqrt{69}e^{16} + \frac{3}{38}\sqrt{46}e^{23}$	$(\frac{2}{19}, -\frac{3}{19}, \frac{6}{19}, 1, -\frac{1}{19}, \frac{1}{19}, -\frac{4}{19}, \frac{3}{19})$ $+ \frac{1}{38}\sqrt{2806}e^4 \otimes e_7$	{12378, 13567, 245, 468}
8431:5	$0, 0, 0, 0, \frac{9}{245}\sqrt{133}e^{12}, \frac{9}{490}\sqrt{230}e^{15}, \frac{9}{245}\sqrt{217}e^{25},$ $\frac{9}{245}\sqrt{5}e^{16} + \frac{27}{490}\sqrt{46}e^{23}$	$(-\frac{18}{245}, \frac{27}{245}, -\frac{54}{245}, \frac{117}{245}, \frac{9}{245}, -\frac{9}{245}, \frac{36}{245}, -\frac{27}{245})$ $+ \frac{144}{245}e^2 \otimes e_3 + \frac{9}{490}\sqrt{758}e^4 \otimes e_7$	{13567, 245}
8431:5	$0, 0, 0, 0, \frac{15}{749}\sqrt{527}e^{12}, \frac{15}{749}\sqrt{183}e^{15}, \frac{15}{749}\sqrt{307}e^{25},$ $\frac{15}{749}\sqrt{206}e^{16} + \frac{255}{749}e^{23}$	$(-\frac{30}{749}, \frac{135}{749}, -\frac{90}{749}, -\frac{255}{749}, \frac{15}{107}, \frac{75}{749}, \frac{240}{749}, \frac{45}{749})$ $+ \frac{15}{749}\sqrt{642}e^2 \otimes e_3 + \frac{15}{749}\sqrt{683}e^1 \otimes e_4$	{1267, 34}
8431:5	$0, 0, 0, 0, \frac{2}{175}\sqrt{2093}e^{12}, \frac{2}{175}\sqrt{1365}e^{15}, \frac{4}{175}\sqrt{273}e^{25},$ $\frac{8}{175}\sqrt{273}e^{16} + \frac{6}{175}\sqrt{546}e^{23}$	$(-\frac{1}{25}, \frac{2}{25}, -\frac{3}{25}, 1, \frac{1}{25}, 0, \frac{3}{25}, -\frac{1}{25})$ $+ \frac{2}{175}\sqrt{12922}e^4 \otimes e_8$	{12578, 1467, 234, 3568}
8431:5	$0, 0, 0, 0, \frac{2}{1257}\sqrt{210990}e^{12}, \frac{2}{1257}\sqrt{23263}e^{15}, \frac{4}{1257}\sqrt{49231}e^{25},$ $\frac{22}{1257}\sqrt{541}e^{16} + \frac{8}{1257}\sqrt{7033}e^{23}$	$(\frac{3}{419}, \frac{295}{1257}, \frac{9}{419}, -\frac{787}{1257}, \frac{304}{1257}, \frac{313}{1257}, \frac{599}{1257}, \frac{322}{1257})$ $+ \frac{2}{1257}\sqrt{552902}e^2 \otimes e_4$	{1237, 1345678, 258, 46}
8431:5	$0, 0, 0, 0, \frac{8}{297}\sqrt{181}e^{12}, \frac{2}{297}\sqrt{5249}e^{15}, \frac{2}{297}\sqrt{5611}e^{25},$ $\frac{8}{297}\sqrt{181}e^{16} + \frac{4}{297}\sqrt{5430}e^{23}$	$(\frac{59}{297}, -\frac{17}{297}, \frac{59}{99}, -\frac{185}{297}, \frac{14}{99}, \frac{101}{297}, \frac{25}{297}, \frac{160}{297})$ $+ \frac{2}{297}\sqrt{43621}e^3 \otimes e_4$	{12357, 13678, 248, 456}
8431:5	$0, 0, 0, 0, \frac{8}{1209}\sqrt{15283}e^{12}, \frac{2}{1209}\sqrt{53737}e^{15}, \frac{2}{1209}\sqrt{261290}e^{25},$ $\frac{2}{1209}\sqrt{3451}e^{16} + \frac{136}{1209}\sqrt{29}e^{23}$	$(-\frac{59}{403}, \frac{35}{93}, -\frac{177}{403}, \frac{203}{1209}, \frac{278}{1209}, \frac{101}{1209}, \frac{733}{1209}, -\frac{76}{1209})$ $+ \frac{2}{1209}\sqrt{495958}e^2 \otimes e_3$	{1247, 127, 346, 36}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8431:5	$0, 0, 0, 0, \frac{5}{287}\sqrt{742}e^{12}, \frac{15}{287}\sqrt{14}e^{15}, \frac{10}{287}\sqrt{231}e^{25},$ $\frac{10}{287}\sqrt{105}e^{16} + \frac{5}{287}\sqrt{42}e^{23}$	$(-\frac{5}{41}, \frac{10}{41}, -\frac{15}{41}, \frac{20}{41}, \frac{5}{41}, 0, \frac{15}{41}, -\frac{5}{41})$ $+ \frac{5}{287}\sqrt{1414}e^4 \otimes e_8 + \frac{5}{41}\sqrt{42}e^2 \otimes e_3$	{134567, 245}
8431:6	$0, 0, 0, 0, \frac{4}{19}\sqrt{3}e^{12}, \frac{1}{19}\sqrt{6}e^{15}, \frac{3}{19}\sqrt{6}e^{13} + \frac{3}{19}\sqrt{6}e^{25},$ $\frac{2}{19}\sqrt{6}e^{16} + \frac{4}{19}\sqrt{3}e^{34}$	$(-\frac{1}{19}, \frac{2}{19}, \frac{4}{19}, -\frac{5}{19}, \frac{1}{19}, 0, \frac{3}{19}, -\frac{1}{19})$ $+ \frac{4}{19}\sqrt{6}e^2 \otimes e_8$	{123467, 13578}
8431:6	$0, 0, 0, 0, \frac{376}{2653}\sqrt{3}e^{12}, \frac{94}{2653}\sqrt{139}e^{15},$ $\frac{611}{2653}\sqrt{6}e^{13} + \frac{188}{2653}\sqrt{101}e^{25}, \frac{94}{2653}\sqrt{157}e^{16} + \frac{94}{2653}\sqrt{410}e^{34}$	$(\frac{470}{2653}, -\frac{423}{2653}, -\frac{846}{2653}, \frac{1833}{2653}, \frac{47}{2653}, \frac{517}{2653}, -\frac{376}{2653}, \frac{141}{379})$ $+ \frac{94}{2653}\sqrt{1086}e^4 \otimes e_7$	{127, 2458}
8431:6	$0, 0, 0, 0, \frac{36}{199}\sqrt{6}e^{12}, \frac{18}{199}\sqrt{21}e^{15}, \frac{9}{199}\sqrt{534}e^{13} + \frac{18}{199}\sqrt{21}e^{25},$ $\frac{36}{199}\sqrt{3}e^{16} + \frac{36}{199}\sqrt{6}e^{34}$	$(-\frac{18}{199}, \frac{63}{199}, \frac{126}{199}, -\frac{117}{199}, \frac{45}{199}, \frac{27}{199}, \frac{108}{199}, \frac{9}{199})$ $+ \frac{18}{199}\sqrt{249}e^3 \otimes e_4$	{147, 246}
8431:7	$0, 0, 0, 0, \frac{29}{693}\sqrt{82}e^{12}, \frac{232}{693}\sqrt{2}e^{15}, \frac{29}{693}\sqrt{130}e^{25} + \frac{29}{693}\sqrt{66}e^{34},$ $\frac{29}{693}\sqrt{82}e^{16} + \frac{29}{693}\sqrt{582}e^{23}$	$(\frac{145}{693}, -\frac{58}{693}, \frac{145}{231}, -\frac{58}{99}, \frac{29}{231}, \frac{232}{693}, \frac{29}{693}, \frac{377}{693})$ $+ \frac{58}{693}\sqrt{283}e^3 \otimes e_4$	{248, 456}
8431:7	$0, 0, 0, 0, \frac{1}{61}\sqrt{658}e^{12}, \frac{4}{61}\sqrt{42}e^{15}, \frac{1}{61}\sqrt{910}e^{25} + \frac{7}{61}\sqrt{38}e^{34},$ $\frac{1}{61}\sqrt{1778}e^{16} + \frac{1}{61}\sqrt{1302}e^{23}$	$(-\frac{7}{61}, \frac{14}{61}, \frac{21}{61}, \frac{42}{61}, \frac{7}{61}, 0, \frac{21}{61}, -\frac{7}{61})$ $+ \frac{2}{61}\sqrt{1218}e^4 \otimes e_8$	{1467, 234}
8431:8	$0, 0, 0, 0, \frac{168}{629}\sqrt{5}e^{12}, \frac{168}{629}\sqrt{6}e^{15}, \frac{105}{629}\sqrt{6}e^{13} + \frac{42}{629}\sqrt{11}e^{25},$ $\frac{168}{629}\sqrt{5}e^{16} + \frac{42}{629}\sqrt{43}e^{23}$	$(\frac{42}{629}, \frac{63}{629}, \frac{126}{629}, -\frac{399}{629}, \frac{105}{629}, \frac{147}{629}, \frac{168}{629}, \frac{189}{629})$ $+ \frac{42}{629}\sqrt{257}e^1 \otimes e_4$	{2345678, 347}
8431:8	$0, 0, 0, 0, \frac{43}{2441}\sqrt{1770}e^{12}, \frac{258}{2441}\sqrt{3}e^{15},$ $\frac{43}{2441}\sqrt{1126}e^{13} + \frac{86}{2441}\sqrt{413}e^{25}, \frac{43}{2441}\sqrt{246}e^{16} + \frac{172}{2441}\sqrt{59}e^{23}$	$(\frac{172}{2441}, \frac{258}{2441}, \frac{516}{2441}, -\frac{1591}{2441}, \frac{430}{2441}, \frac{602}{2441}, \frac{688}{2441}, \frac{774}{2441})$ $+ \frac{1032}{2441}\sqrt{7}e^2 \otimes e_4$	{2356, 348}
8431:8	$0, 0, 0, 0, \frac{1}{7}\sqrt{10}e^{12}, \frac{2}{7}\sqrt{3}e^{15}, \frac{1}{7}\sqrt{14}e^{13} + \frac{2}{7}e^{25},$ $\frac{1}{7}\sqrt{30}e^{16} + \frac{4}{7}\sqrt{2}e^{23}$	$(0, 0, 0, 1, 0, 0, 0, 0)$ $+ \frac{4}{7}\sqrt{5}e^4 \otimes e_8$	{234, 3568}
8431:8	$0, 0, 0, 0, \frac{46}{557}\sqrt{42}e^{12}, \frac{46}{557}\sqrt{3}e^{15}, \frac{23}{557}\sqrt{422}e^{13} + \frac{46}{557}\sqrt{55}e^{25},$ $\frac{46}{557}\sqrt{42}e^{16} + \frac{92}{557}\sqrt{26}e^{23}$	$(\frac{46}{557}, \frac{69}{557}, \frac{138}{557}, -\frac{391}{557}, \frac{115}{557}, \frac{161}{557}, \frac{184}{557}, \frac{207}{557})$ $+ \frac{46}{557}\sqrt{237}e^3 \otimes e_4$	{1245678, 147}
8431:9	$0, 0, 0, 0, \frac{3}{7}\sqrt{2}e^{12}, \frac{3}{7}\sqrt{2}e^{15}, \frac{3}{7}\sqrt{2}e^{13} + \frac{1}{7}\sqrt{6}e^{25},$ $\frac{3}{7}\sqrt{2}e^{16} + \frac{2}{7}\sqrt{3}e^{24}$	$(\frac{1}{7}, -\frac{1}{7}, -\frac{2}{7}, \frac{3}{7}, 0, \frac{1}{7}, -\frac{1}{7}, \frac{2}{7})$ $+ \frac{6}{7}e^1 \otimes e_3$	{234568, 34}
8431:9	$0, 0, 0, 0, \frac{10}{287}\sqrt{329}e^{12}, \frac{15}{287}\sqrt{14}e^{15}, \frac{5}{41}\sqrt{42}e^{13} + \frac{45}{287}\sqrt{14}e^{25},$ $\frac{10}{287}\sqrt{105}e^{16} + \frac{60}{287}\sqrt{14}e^{24}$	$(-\frac{5}{41}, \frac{10}{41}, \frac{20}{41}, -\frac{15}{41}, \frac{5}{41}, 0, \frac{15}{41}, -\frac{5}{41})$ $+ \frac{20}{287}\sqrt{217}e^3 \otimes e_8$	{1478, 268}
8431:9	$0, 0, 0, 0, \frac{10}{41}\sqrt{11}e^{12}, \frac{15}{287}\sqrt{14}e^{15}, \frac{5}{287}\sqrt{1414}e^{13} + \frac{5}{287}\sqrt{2338}e^{25},$ $\frac{10}{287}\sqrt{105}e^{16} + \frac{20}{287}\sqrt{91}e^{24}$	$(-\frac{5}{41}, \frac{10}{41}, \frac{20}{41}, -\frac{15}{41}, \frac{5}{41}, 0, \frac{15}{41}, -\frac{5}{41})$ $+ \frac{20}{287}\sqrt{217}e^2 \otimes e_4$	{134567, 235}
8431:18	$0, 0, 0, 0, \frac{4}{89}\sqrt{69}e^{12}, -\frac{2}{89}\sqrt{345}e^{15}, \frac{2}{89}\sqrt{345}e^{25},$ $\frac{4}{89}\sqrt{69}e^{16} + \frac{4}{89}\sqrt{69}e^{27}$	$(\frac{7}{89}, \frac{7}{89}, 1, -\frac{49}{89}, \frac{14}{89}, \frac{21}{89}, \frac{21}{89}, \frac{28}{89})$ $+ \frac{138}{89}e^3 \otimes e_4$	{12367, 12467, 13578, 14578, 3, 4, 12367, 12467, 13578, 14578, 3, 4}
8431:18	$0, 0, 0, 0, \frac{4}{89}\sqrt{69}e^{12}, \frac{2}{89}\sqrt{345}e^{15}, \frac{2}{89}\sqrt{345}e^{25},$ $\frac{4}{89}\sqrt{69}e^{16} + \frac{4}{89}\sqrt{69}e^{27}$	$(\frac{7}{89}, \frac{7}{89}, 1, -\frac{49}{89}, \frac{14}{89}, \frac{21}{89}, \frac{21}{89}, \frac{28}{89})$ $+ \frac{138}{89}e^3 \otimes e_4$	{12367, 12467, 13578, 14578, 3, 4, 12367, 12467, 13578, 14578, 3, 4}
8431:18	$0, 0, 0, 0, \frac{160}{349}e^{12}, -\frac{24}{349}\sqrt{22}e^{15}, \frac{24}{349}\sqrt{22}e^{25},$ $\frac{56}{349}\sqrt{2}e^{16} + \frac{56}{349}\sqrt{2}e^{27}$	$(\frac{24}{349}, \frac{24}{349}, -\frac{104}{349}, -\frac{104}{349}, \frac{48}{349}, \frac{72}{349}, \frac{72}{349}, \frac{96}{349})$ $+ \frac{16}{349}\sqrt{151}e^1 \otimes e_3 + \frac{16}{349}\sqrt{151}e^2 \otimes e_4$	{1267, 14578, 34, 1267, 14578, 34}
8431:18	$0, 0, 0, 0, \frac{160}{349}e^{12}, \frac{24}{349}\sqrt{22}e^{15}, \frac{24}{349}\sqrt{22}e^{25},$ $\frac{56}{349}\sqrt{2}e^{16} + \frac{56}{349}\sqrt{2}e^{27}$	$(\frac{24}{349}, \frac{24}{349}, -\frac{104}{349}, -\frac{104}{349}, \frac{48}{349}, \frac{72}{349}, \frac{72}{349}, \frac{96}{349})$ $+ \frac{16}{349}\sqrt{151}e^1 \otimes e_3 + \frac{16}{349}\sqrt{151}e^2 \otimes e_4$	{1267, 14578, 34, 1267, 14578, 34}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8431:18	$0, 0, 0, 0, \frac{4}{369}\sqrt{3458}e^{12}, -\frac{2}{369}\sqrt{17290}e^{15}, \frac{14}{369}\sqrt{57}e^{25},$ $\frac{4}{369}\sqrt{3458}e^{16} + \frac{2}{369}\sqrt{6251}e^{27}$	$(\frac{31}{369}, \frac{31}{369}, -\frac{235}{369}, \frac{67}{369}, \frac{62}{369}, \frac{31}{123}, \frac{31}{123}, \frac{124}{369})$ $+ \frac{2}{369}\sqrt{40166}e^1 \otimes e_3$	{1246, 126, 1458, 158, 2345678, 235678, 347, 37, 1246, 126, 1458, 158, 2345678, 235678, 347, 37}
8431:18	$0, 0, 0, 0, \frac{4}{369}\sqrt{3458}e^{12}, \frac{2}{369}\sqrt{17290}e^{15}, \frac{14}{369}\sqrt{57}e^{25},$ $\frac{4}{369}\sqrt{3458}e^{16} + \frac{2}{369}\sqrt{6251}e^{27}$	$(\frac{31}{369}, \frac{31}{369}, -\frac{235}{369}, \frac{67}{369}, \frac{62}{369}, \frac{31}{123}, \frac{31}{123}, \frac{124}{369})$ $+ \frac{2}{369}\sqrt{40166}e^1 \otimes e_3$	{1246, 126, 1458, 158, 2345678, 235678, 347, 37, 1246, 126, 1458, 158, 2345678, 235678, 347, 37}
8431:18	$0, 0, 0, 0, \frac{1}{91}\sqrt{2090}e^{12}, -\frac{3}{91}\sqrt{95}e^{15}, \frac{3}{91}\sqrt{95}e^{25},$ $\frac{1}{91}\sqrt{4845}e^{16} + \frac{1}{91}\sqrt{4845}e^{27}$	$(-\frac{1}{91}, -\frac{1}{91}, 1, \frac{18}{91}, -\frac{2}{91}, -\frac{3}{91}, -\frac{3}{91}, -\frac{4}{91})$ $+ \frac{1}{91}\sqrt{13870}e^3 \otimes e_8$	{12458, 1258, 1346, 136, 45678, 5678, 12458, 1258, 1346, 136, 45678, 5678}
8431:18	$0, 0, 0, 0, \frac{1}{91}\sqrt{2090}e^{12}, \frac{3}{91}\sqrt{95}e^{15}, \frac{3}{91}\sqrt{95}e^{25},$ $\frac{1}{91}\sqrt{4845}e^{16} + \frac{1}{91}\sqrt{4845}e^{27}$	$(-\frac{1}{91}, -\frac{1}{91}, 1, \frac{18}{91}, -\frac{2}{91}, -\frac{3}{91}, -\frac{3}{91}, -\frac{4}{91})$ $+ \frac{1}{91}\sqrt{13870}e^3 \otimes e_8$	{12458, 1258, 1346, 136, 45678, 5678, 12458, 1258, 1346, 136, 45678, 5678}
8431:20	$0, 0, 0, 0, \frac{6}{35}\sqrt{6}e^{12}, -\frac{6}{35}\sqrt{6}e^{15}, \frac{6}{35}\sqrt{6}e^{25},$ $\frac{6}{35}\sqrt{3}e^{16} + \frac{6}{35}\sqrt{3}e^{27} + \frac{6}{35}\sqrt{6}e^{34}$	$(\frac{3}{35}, \frac{3}{35}, \frac{33}{35}, -\frac{3}{5}, \frac{6}{35}, \frac{9}{35}, \frac{9}{35}, \frac{12}{35})$ $+ \frac{54}{35}e^3 \otimes e_4$	{13578, 14578, 13578, 14578}
8431:20	$0, 0, 0, 0, \frac{6}{35}\sqrt{6}e^{12}, \frac{6}{35}\sqrt{6}e^{15}, \frac{6}{35}\sqrt{6}e^{25},$ $\frac{6}{35}\sqrt{3}e^{16} + \frac{6}{35}\sqrt{3}e^{27} + \frac{6}{35}\sqrt{6}e^{34}$	$(\frac{3}{35}, \frac{3}{35}, \frac{33}{35}, -\frac{3}{5}, \frac{6}{35}, \frac{9}{35}, \frac{9}{35}, \frac{12}{35})$ $+ \frac{54}{35}e^3 \otimes e_4$	{13578, 14578, 13578, 14578}
8421:1	$0, 0, 0, 0, \frac{26}{223}\sqrt{47}e^{12}, \frac{1}{669}\sqrt{272506}e^{34}, \frac{1}{223}\sqrt{6110}e^{15}, \frac{1}{669}\sqrt{40326}e^{17}$	$(-\frac{37}{223}, \frac{145}{223}, -\frac{88}{669}, -\frac{88}{669}, \frac{108}{223}, -\frac{176}{669}, \frac{71}{223}, \frac{34}{223})$ $+ \frac{2}{669}\sqrt{163137}e^2 \otimes e_6$	{123478, 1278, 1356, 23457, 257, 368}
8421:1	$0, 0, 0, 0, \frac{22}{615}\sqrt{87}e^{12}, \frac{22}{615}\sqrt{205}e^{34}, \frac{22}{205}\sqrt{3}e^{15}, \frac{22}{615}\sqrt{87}e^{17}$	$(-\frac{8}{41}, \frac{87}{205}, \frac{143}{615}, -\frac{124}{615}, \frac{47}{205}, \frac{19}{615}, \frac{7}{205}, -\frac{33}{205})$ $+ \frac{22}{615}\sqrt{267}e^2 \otimes e_6 + \frac{22}{615}\sqrt{267}e^3 \otimes e_8$	{12347, 14568, 2578, 36}
8421:1	$0, 0, 0, 0, \frac{2}{53}\sqrt{123}e^{12}, \frac{4}{53}\sqrt{41}e^{34}, \frac{4}{53}\sqrt{41}e^{15}, \frac{2}{53}\sqrt{123}e^{17}$	$(\frac{2}{53}, \frac{9}{53}, \frac{49}{53}, -\frac{33}{53}, \frac{11}{53}, \frac{16}{53}, \frac{13}{53}, \frac{15}{53})$ $+ \frac{82}{53}e^3 \otimes e_4$	{12367, 12467, 13568, 14568, 235678, 245678, 36, 46}
8421:1	$0, 0, 0, 0, \frac{1}{14}\sqrt{105}e^{12}, \frac{1}{14}\sqrt{30}e^{34}, \frac{1}{14}\sqrt{30}e^{15}, \frac{1}{14}\sqrt{105}e^{17}$	$(-\frac{5}{14}, \frac{3}{7}, \frac{1}{7}, \frac{11}{28}, \frac{2}{7}, \frac{1}{28}, -\frac{9}{28})$ $+ \frac{1}{14}\sqrt{330}e^2 \otimes e_8$	{12347, 12367, 127, 13458, 13568, 158}
8421:1	$0, 0, 0, 0, \frac{1}{1041}\sqrt{19434}e^{12}, \frac{1}{1041}\sqrt{54826}e^{34}, \frac{5}{347}\sqrt{158}e^{15},$ $\frac{2}{347}\sqrt{1343}e^{17}$	$(\frac{7}{347}, \frac{4}{347}, \frac{154}{1041}, -\frac{212}{1041}, \frac{11}{347}, -\frac{58}{1041}, \frac{18}{347}, \frac{25}{347})$ $+ \frac{2}{1041}\sqrt{14457}e^3 \otimes e_8 + \frac{2}{347}\sqrt{2370}e^1 \otimes e_6$	{12347, 158, 245678, 36}
8421:1	$0, 0, 0, 0, \frac{156}{1949}\sqrt{47}e^{12}, \frac{2}{1949}\sqrt{272506}e^{34}, \frac{6}{1949}\sqrt{6110}e^{15},$ $\frac{2}{1949}\sqrt{40326}e^{17}$	$(-\frac{222}{1949}, \frac{870}{1949}, \frac{435}{1949}, -\frac{787}{1949}, \frac{648}{1949}, -\frac{352}{1949}, \frac{426}{1949}, \frac{204}{1949})$ $+ \frac{1222}{1949}e^3 \otimes e_4 + \frac{4}{1949}\sqrt{163137}e^2 \otimes e_6$	{1356, 1456, 368, 468}
8421:1	$0, 0, 0, 0, \frac{1}{669}\sqrt{40326}e^{12}, \frac{1}{223}\sqrt{6110}e^{34}, \frac{1}{669}\sqrt{272506}e^{15}, \frac{26}{223}\sqrt{47}e^{17}$	$(\frac{245}{669}, -\frac{122}{223}, \frac{30}{223}, \frac{30}{223}, -\frac{121}{669}, \frac{60}{223}, \frac{124}{669}, \frac{123}{223})$ $+ \frac{2}{669}\sqrt{163137}e^1 \otimes e_2$	{1347, 1367, 17, 2, 234, 236}
8421:1	$0, 0, 0, 0, \frac{2}{73}\sqrt{195}e^{12}, \frac{4}{73}\sqrt{65}e^{34}, \frac{4}{73}\sqrt{65}e^{15}, \frac{2}{73}\sqrt{195}e^{17}$	$(\frac{10}{73}, -\frac{3}{73}, \frac{5}{73}, -\frac{21}{73}, \frac{7}{73}, -\frac{16}{73}, \frac{17}{73}, \frac{27}{73})$ $+ \frac{26}{73}e^3 \otimes e_4 + \frac{8}{73}\sqrt{39}e^1 \otimes e_6$	{235678, 245678, 36, 46}
8421:1	$0, 0, 0, 0, \frac{1}{22}\sqrt{33}e^{12}, \frac{1}{22}\sqrt{30}e^{34}, \frac{1}{22}\sqrt{30}e^{15}, \frac{1}{22}\sqrt{33}e^{17}$	$(-\frac{1}{22}, \frac{9}{44}, -\frac{1}{11}, -\frac{1}{11}, \frac{7}{44}, -\frac{2}{11}, \frac{5}{44}, \frac{3}{44})$ $+ \frac{1}{22}\sqrt{42}e^2 \otimes e_8 + \frac{3}{11}\sqrt{2}e^1 \otimes e_6$	{12347, 127, 13458, 158}
8421:1	$0, 0, 0, 0, \frac{1}{30}\sqrt{195}e^{12}, \frac{1}{15}\sqrt{65}e^{34}, \frac{1}{15}\sqrt{65}e^{15}, \frac{1}{30}\sqrt{195}e^{17}$	$(\frac{1}{6}, -\frac{1}{20}, -\frac{2}{15}, -\frac{2}{15}, \frac{7}{60}, -\frac{4}{15}, \frac{17}{60}, \frac{9}{20})$ $+ \frac{2}{15}\sqrt{39}e^1 \otimes e_6$	{12347, 127, 13458, 158, 235678, 36}
8421:1	$0, 0, 0, 0, \frac{2}{1949}\sqrt{40326}e^{12}, \frac{6}{1949}\sqrt{6110}e^{34}, \frac{2}{1949}\sqrt{272506}e^{15},$ $\frac{156}{1949}\sqrt{47}e^{17}$	$(\frac{490}{1949}, -\frac{732}{1949}, \frac{791}{1949}, -\frac{431}{1949}, -\frac{242}{1949}, \frac{360}{1949}, \frac{248}{1949}, \frac{738}{1949})$ $+ \frac{1222}{1949}e^3 \otimes e_4 + \frac{4}{1949}\sqrt{163137}e^1 \otimes e_2$	{1367, 1467, 236, 246}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:1	$0, 0, 0, 0, \frac{2}{43}\sqrt{105}e^{12}, \frac{2}{43}\sqrt{30}e^{34}, \frac{2}{43}\sqrt{30}e^{15}, \frac{2}{43}\sqrt{105}e^{17}$	$(-\frac{10}{43}, \frac{21}{43}, \frac{19}{43}, -\frac{11}{43}, \frac{11}{43}, \frac{8}{43}, \frac{1}{43}, -\frac{9}{43})$ $+\frac{2}{43}\sqrt{330}e^2 \otimes e_8 + \frac{30}{43}e^3 \otimes e_4$	{12367, 12467, 13568, 14568}
8421:1	$0, 0, 0, 0, \frac{4}{203}\sqrt{134}e^{12}, \frac{2}{203}\sqrt{1273}e^{34}, \frac{2}{203}\sqrt{1273}e^{15}, \frac{1}{203}\sqrt{9782}e^{17}$	$(\frac{19}{203}, -\frac{48}{203}, \frac{76}{203}, -\frac{13}{203}, -\frac{1}{7}, \frac{9}{29}, -\frac{10}{203}, \frac{9}{203})$ $+\frac{1}{203}\sqrt{11926}e^1 \otimes e_2 + \frac{1}{203}\sqrt{11926}e^3 \otimes e_8$	{1347, 1367, 234, 236}
8421:1	$0, 0, 0, 0, \frac{1}{669}\sqrt{40326}e^{12}, \frac{1}{669}\sqrt{272506}e^{34}, \frac{1}{223}\sqrt{6110}e^{15}, \frac{26}{223}\sqrt{47}e^{17}$	$(-\frac{37}{223}, \frac{56}{223}, \frac{2}{3}, -\frac{88}{669}, \frac{19}{223}, \frac{358}{669}, -\frac{18}{223}, -\frac{55}{223})$ $+\frac{2}{669}\sqrt{163137}e^3 \otimes e_8$	{124568, 1258, 1347, 1367, 234, 236, 45678, 578}
8421:2	$0, 0, 0, 0, \frac{2}{115}\sqrt{429}e^{12}, \frac{3}{115}\sqrt{1430}e^{13}, \frac{4}{115}\sqrt{143}e^{15}, \frac{2}{115}\sqrt{429}e^{17}$	$(-\frac{4}{115}, \frac{27}{115}, \frac{14}{23}, -\frac{73}{115}, \frac{1}{5}, \frac{66}{115}, \frac{19}{115}, \frac{3}{23})$ $+\frac{2}{115}\sqrt{6721}e^3 \otimes e_4$	{123578, 1245678, 13, 146, 2367, 247, 3568, 458}
8421:2	$0, 0, 0, 0, \frac{2}{115}\sqrt{429}e^{12}, \frac{3}{115}\sqrt{1430}e^{13}, \frac{4}{115}\sqrt{143}e^{15}, \frac{2}{115}\sqrt{429}e^{17}$	$(-\frac{4}{115}, \frac{27}{115}, -\frac{24}{115}, 1, \frac{1}{5}, -\frac{28}{115}, \frac{19}{115}, \frac{3}{23})$ $+\frac{2}{115}\sqrt{6721}e^4 \otimes e_6$	{1234578, 125678, 134, 16, 2367, 247, 3568, 458}
8421:2	$0, 0, 0, 0, \frac{1}{27}\sqrt{91}e^{12}, \frac{2}{27}\sqrt{65}e^{13}, \frac{1}{27}\sqrt{65}e^{15}, \frac{1}{27}\sqrt{78}e^{17}$	$(-\frac{1}{6}, \frac{2}{9}, \frac{11}{54}, \frac{14}{27}, \frac{1}{18}, \frac{1}{27}, -\frac{1}{9}, -\frac{5}{18})$ $+\frac{13}{27}\sqrt{2}e^3 \otimes e_8 + \frac{1}{27}\sqrt{299}e^4 \otimes e_6$	{123457, 168, 2478, 356}
8421:2	$0, 0, 0, 0, \frac{4}{499}\sqrt{2586}e^{12}, \frac{1}{499}\sqrt{73270}e^{13}, \frac{2}{499}\sqrt{29739}e^{15}, \frac{2}{499}\sqrt{33187}e^{17}$	$(\frac{170}{499}, -\frac{261}{499}, \frac{10}{499}, \frac{95}{499}, -\frac{91}{499}, \frac{180}{499}, \frac{79}{499}, \frac{249}{499})$ $+\frac{2}{499}\sqrt{87062}e^1 \otimes e_2$	{1347, 137, 1467, 167, 2, 2346, 236, 24}
8421:2	$0, 0, 0, 0, \frac{40}{1399}\sqrt{246}e^{12}, \frac{40}{1399}\sqrt{173}e^{13}, \frac{20}{1399}\sqrt{866}e^{15}, \frac{20}{1399}\sqrt{538}e^{17}$	$(\frac{105}{1399}, \frac{110}{1399}, -\frac{295}{1399}, -\frac{290}{1399}, \frac{215}{1399}, -\frac{190}{1399}, \frac{320}{1399}, \frac{425}{1399})$ $+\frac{20}{1399}\sqrt{1594}e^1 \otimes e_3 + \frac{40}{1399}\sqrt{223}e^2 \otimes e_4$	{127, 1458, 23578, 34}
8421:2	$0, 0, 0, 0, \frac{16}{307}\sqrt{30}e^{12}, \frac{16}{307}\sqrt{19}e^{13}, \frac{16}{307}\sqrt{57}e^{15}, \frac{16}{307}\sqrt{106}e^{17}$	$(\frac{38}{307}, -\frac{90}{307}, \frac{16}{307}, \frac{152}{307}, -\frac{52}{307}, \frac{54}{307}, -\frac{14}{307}, \frac{24}{307})$ $+\frac{16}{307}\sqrt{155}e^1 \otimes e_2 + \frac{48}{307}\sqrt{13}e^4 \otimes e_8$	{1347, 1467, 2346, 24}
8421:2	$0, 0, 0, 0, \frac{3}{479}\sqrt{1970}e^{12}, \frac{1}{479}\sqrt{43734}e^{13}, \frac{2}{479}\sqrt{13002}e^{15}, \frac{3}{479}\sqrt{23246}e^{17}$	$(-\frac{74}{479}, \frac{110}{479}, \frac{132}{479}, 1, \frac{36}{479}, \frac{58}{479}, -\frac{38}{479}, -\frac{112}{479})$ $+\frac{48}{479}\sqrt{197}e^4 \otimes e_8$	{123568, 1258, 13467, 147, 234, 246, 3578, 5678}
8421:2	$0, 0, 0, 0, \frac{9}{124}\sqrt{71}e^{12}, \frac{1}{62}\sqrt{1349}e^{13}, \frac{3}{62}\sqrt{213}e^{15}, \frac{9}{124}\sqrt{71}e^{17}$	$(\frac{27}{124}, -\frac{39}{248}, -\frac{11}{31}, \frac{21}{124}, \frac{15}{248}, -\frac{17}{124}, \frac{69}{248}, \frac{123}{248})$ $+\frac{1}{124}\sqrt{14626}e^1 \otimes e_3$	{1247, 127, 1458, 158, 234578, 23578, 3, 34}
8421:2	$0, 0, 0, 0, \frac{12}{199}\sqrt{39}e^{12}, \frac{18}{199}\sqrt{3}e^{13}, \frac{6}{199}\sqrt{129}e^{15}, \frac{12}{199}\sqrt{39}e^{17}$	$(-\frac{18}{199}, \frac{51}{199}, \frac{33}{199}, -\frac{72}{199}, \frac{33}{199}, \frac{15}{199}, \frac{15}{199}, -\frac{3}{199})$ $+\frac{6}{199}\sqrt{237}e^2 \otimes e_8 + \frac{72}{199}\sqrt{2}e^1 \otimes e_4$	{12367, 127, 13568, 158}
8421:2	$0, 0, 0, 0, \frac{6}{19}e^{12}, \frac{4}{19}\sqrt{6}e^{13}, \frac{1}{19}\sqrt{39}e^{15}, \frac{1}{19}\sqrt{51}e^{17}$	$(\frac{7}{38}, -\frac{11}{38}, \frac{4}{19}, -\frac{5}{19}, -\frac{2}{19}, \frac{15}{38}, \frac{3}{38}, \frac{5}{19})$ $+\frac{1}{19}\sqrt{129}e^3 \otimes e_4 + \frac{1}{19}\sqrt{174}e^1 \otimes e_2$	{137, 1467, 236, 24}
8421:2	$0, 0, 0, 0, \frac{6}{19}e^{12}, \frac{4}{19}\sqrt{6}e^{13}, \frac{1}{19}\sqrt{39}e^{15}, \frac{1}{19}\sqrt{51}e^{17}$	$(\frac{7}{38}, -\frac{11}{38}, -\frac{1}{6}, \frac{28}{57}, -\frac{2}{19}, \frac{1}{57}, \frac{3}{38}, \frac{5}{19})$ $+\frac{1}{19}\sqrt{129}e^4 \otimes e_6 + \frac{1}{19}\sqrt{174}e^1 \otimes e_2$	{1347, 167, 236, 24}
8421:2	$0, 0, 0, 0, \frac{3}{479}\sqrt{23246}e^{12}, \frac{1}{479}\sqrt{43734}e^{13}, \frac{2}{479}\sqrt{13002}e^{15}, \frac{3}{479}\sqrt{1970}e^{17}$	$(-\frac{74}{479}, \frac{302}{479}, \frac{132}{479}, -\frac{289}{479}, \frac{228}{479}, \frac{58}{479}, \frac{154}{479}, \frac{80}{479})$ $+\frac{48}{479}\sqrt{197}e^2 \otimes e_4$	{123678, 1278, 13456, 145, 2357, 2567, 348, 468}
8421:2	$0, 0, 0, 0, \frac{8}{61}\sqrt{15}e^{12}, \frac{8}{61}\sqrt{10}e^{13}, \frac{16}{61}\sqrt{5}e^{15}, \frac{8}{61}\sqrt{15}e^{17}$	$(\frac{10}{61}, -\frac{6}{61}, -\frac{22}{61}, \frac{20}{61}, \frac{4}{61}, -\frac{12}{61}, \frac{14}{61}, \frac{24}{61})$ $+\frac{8}{61}\sqrt{11}e^4 \otimes e_6 + \frac{8}{61}\sqrt{41}e^1 \otimes e_3$	{1247, 1458, 234578, 34}
8421:2	$0, 0, 0, 0, \frac{20}{1399}\sqrt{538}e^{12}, \frac{40}{1399}\sqrt{173}e^{13}, \frac{20}{1399}\sqrt{866}e^{15}, \frac{40}{1399}\sqrt{246}e^{17}$	$(\frac{105}{1399}, -\frac{113}{1399}, -\frac{295}{1399}, \frac{602}{1399}, -\frac{8}{1399}, -\frac{190}{1399}, \frac{97}{1399}, \frac{202}{1399})$ $+\frac{20}{1399}\sqrt{1594}e^1 \otimes e_3 + \frac{40}{1399}\sqrt{223}e^4 \otimes e_8$	{1247, 158, 23578, 34}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:2	$0, 0, 0, 0, \frac{12}{41}\sqrt{7}e^{12}, \frac{14}{41}\sqrt{3}e^{13}, \frac{2}{41}\sqrt{105}e^{15}, \frac{12}{41}\sqrt{7}e^{17}$	$(-\frac{14}{41}, \frac{29}{41}, \frac{15}{41}, \frac{8}{41}, \frac{15}{41}, \frac{1}{41}, \frac{1}{41}, -\frac{13}{41})$ $+ \frac{6}{41}\sqrt{77}e^2 \otimes e_8$	{123467, 12367, 1247, 127, 134568, 13568, 1458, 158}
8421:2	$0, 0, 0, 0, \frac{3}{272}\sqrt{1533}e^{12}, \frac{63}{272}\sqrt{2}e^{13}, \frac{3}{272}\sqrt{210}e^{15}, \frac{3}{272}\sqrt{1533}e^{17}$	$(-\frac{63}{272}, \frac{261}{544}, \frac{15}{272}, \frac{141}{272}, \frac{135}{544}, -\frac{3}{17}, \frac{9}{544}, -\frac{117}{544})$ $+ \frac{3}{272}\sqrt{5502}e^2 \otimes e_8 + \frac{63}{272}\sqrt{10}e^4 \otimes e_6$	{12347, 1267, 13458, 1568}
8421:2	$0, 0, 0, 0, \frac{1}{27}\sqrt{78}e^{12}, \frac{2}{27}\sqrt{65}e^{13}, \frac{1}{27}\sqrt{65}e^{15}, \frac{1}{27}\sqrt{91}e^{17}$	$(-\frac{1}{6}, \frac{25}{54}, \frac{4}{27}, -\frac{1}{3}, \frac{8}{27}, -\frac{1}{54}, \frac{7}{54}, -\frac{1}{27})$ $+ \frac{13}{27}\sqrt{2}e^2 \otimes e_6 + \frac{1}{27}\sqrt{299}e^3 \otimes e_4$	{123, 145678, 2458, 367}
8421:2	$0, 0, 0, 0, \frac{6}{79}\sqrt{7}e^{12}, \frac{3}{79}\sqrt{86}e^{13}, \frac{6}{79}\sqrt{17}e^{15}, \frac{6}{79}\sqrt{30}e^{17}$	$(-\frac{2}{79}, \frac{5}{79}, \frac{26}{79}, -\frac{29}{79}, \frac{3}{79}, \frac{24}{79}, \frac{1}{79}, -\frac{1}{79})$ $+ \frac{6}{79}\sqrt{46}e^3 \otimes e_8 + \frac{6}{79}\sqrt{58}e^1 \otimes e_4$	{1237, 1568, 24578, 346}
8421:2	$0, 0, 0, 0, \frac{7}{65}\sqrt{30}e^{12}, \frac{7}{65}\sqrt{10}e^{13}, \frac{14}{65}\sqrt{10}e^{15}, \frac{7}{65}\sqrt{30}e^{17}$	$(\frac{2}{13}, -\frac{2}{65}, \frac{8}{65}, -\frac{3}{5}, \frac{8}{65}, \frac{18}{65}, \frac{18}{65}, \frac{28}{65})$ $+ \frac{14}{65}\sqrt{26}e^1 \otimes e_4$	{1237, 1267, 1358, 1568, 2345678, 24578, 346, 4}
8421:2	$0, 0, 0, 0, \frac{16}{325}\sqrt{102}e^{12}, \frac{16}{325}\sqrt{34}e^{13}, \frac{16}{325}\sqrt{87}e^{15}, \frac{16}{325}\sqrt{53}e^{17}$	$(\frac{19}{325}, \frac{38}{325}, -\frac{109}{325}, \frac{42}{325}, \frac{57}{325}, \frac{18}{65}, \frac{76}{325}, \frac{19}{65})$ $+ \frac{112}{325}\sqrt{2}e^2 \otimes e_6 + \frac{16}{325}\sqrt{185}e^1 \otimes e_3$	{1247, 127, 234578, 23578}
8421:2	$0, 0, 0, 0, \frac{3}{272}\sqrt{1533}e^{12}, \frac{63}{272}\sqrt{2}e^{13}, \frac{3}{272}\sqrt{210}e^{15}, \frac{3}{272}\sqrt{1533}e^{17}$	$(-\frac{63}{272}, \frac{261}{544}, \frac{15}{34}, -\frac{69}{272}, \frac{135}{544}, \frac{57}{272}, \frac{9}{544}, -\frac{117}{544})$ $+ \frac{3}{272}\sqrt{5502}e^2 \otimes e_8 + \frac{63}{272}\sqrt{10}e^3 \otimes e_4$	{1237, 12467, 1358, 14568}
8421:2	$0, 0, 0, 0, \frac{118}{397}e^{12}, \frac{1}{397}\sqrt{23010}e^{13}, \frac{4}{397}\sqrt{649}e^{15}, \frac{1}{397}\sqrt{28202}e^{17}$	$(\frac{55}{794}, -\frac{181}{794}, \frac{110}{397}, \frac{40}{397}, -\frac{63}{397}, \frac{275}{794}, -\frac{71}{794}, -\frac{8}{397})$ $+ \frac{1}{397}\sqrt{39530}e^3 \otimes e_8 + \frac{1}{397}\sqrt{44722}e^1 \otimes e_2$	{1347, 137, 2346, 236}
8421:2	$0, 0, 0, 0, \frac{2}{475}\sqrt{33198}e^{12}, \frac{1}{475}\sqrt{141846}e^{13}, \frac{6}{475}\sqrt{503}e^{15}, \frac{2}{475}\sqrt{15593}e^{17}$	$(-\frac{106}{475}, \frac{343}{475}, \frac{54}{475}, \frac{87}{475}, \frac{237}{475}, -\frac{32}{95}, \frac{131}{475}, \frac{1}{19})$ $+ \frac{2}{475}\sqrt{97582}e^2 \otimes e_6$	{123, 1234, 145678, 15678, 2458, 258, 3467, 367}
8421:2	$0, 0, 0, 0, \frac{6}{79}\sqrt{30}e^{12}, \frac{3}{79}\sqrt{86}e^{13}, \frac{6}{79}\sqrt{17}e^{15}, \frac{6}{79}\sqrt{7}e^{17}$	$(-\frac{2}{79}, \frac{61}{237}, -\frac{14}{237}, -\frac{29}{79}, \frac{55}{237}, -\frac{20}{237}, \frac{49}{237}, \frac{43}{237})$ $+ \frac{6}{79}\sqrt{46}e^2 \otimes e_6 + \frac{6}{79}\sqrt{58}e^1 \otimes e_4$	{1237, 1568, 24578, 346}
8421:2	$0, 0, 0, 0, \frac{3}{404}\sqrt{1295}e^{12}, \frac{3}{202}\sqrt{285}e^{13}, \frac{3}{202}\sqrt{305}e^{15}, \frac{3}{404}\sqrt{1295}e^{17}$	$(-\frac{15}{404}, \frac{123}{808}, -\frac{15}{101}, \frac{39}{404}, \frac{93}{808}, -\frac{75}{404}, \frac{63}{808}, \frac{33}{808})$ $+ \frac{3}{101}\sqrt{95}e^2 \otimes e_8 + \frac{3}{404}\sqrt{2130}e^1 \otimes e_3$	{1247, 127, 1458, 158}
8421:2	$0, 0, 0, 0, \frac{2}{475}\sqrt{15593}e^{12}, \frac{1}{475}\sqrt{141846}e^{13}, \frac{6}{475}\sqrt{503}e^{15}, \frac{2}{475}\sqrt{33198}e^{17}$	$(-\frac{106}{475}, \frac{149}{475}, \frac{334}{475}, \frac{87}{475}, \frac{43}{475}, \frac{12}{25}, -\frac{63}{475}, -\frac{169}{475})$ $+ \frac{2}{475}\sqrt{97582}e^3 \otimes e_8$	{123457, 12357, 1468, 168, 2478, 278, 3456, 356}
8421:3	$0, 0, 0, 0, \frac{2}{1889}\sqrt{119009}e^{12}, \frac{2}{1889}\sqrt{254386}e^{13}, \frac{2}{1889}\sqrt{23529}e^{25}, \frac{4}{1889}\sqrt{43307}e^{27}$	$(-\frac{190}{1889}, -\frac{21}{1889}, \frac{429}{1889}, \frac{921}{1889}, -\frac{211}{1889}, \frac{239}{1889}, -\frac{232}{1889}, -\frac{253}{1889})$ $+ \frac{2}{1889}\sqrt{243474}e^4 \otimes e_6 + \frac{44}{1889}\sqrt{682}e^3 \otimes e_8$	{12568, 134, 2367, 4578}
8421:3	$0, 0, 0, 0, \frac{1}{71}\sqrt{62}e^{12}, \frac{4}{71}\sqrt{93}e^{13}, \frac{1}{71}\sqrt{186}e^{25}, \frac{1}{71}\sqrt{930}e^{27}$	$(\frac{13}{71}, -\frac{8}{71}, \frac{20}{71}, -\frac{18}{71}, \frac{5}{71}, \frac{33}{71}, -\frac{3}{71}, -\frac{11}{71})$ $+ \frac{1}{71}\sqrt{2170}e^3 \otimes e_8 + \frac{3}{71}\sqrt{186}e^1 \otimes e_4$	{12568, 13, 23467, 4578}
8421:3	$0, 0, 0, 0, \frac{16}{1727}\sqrt{2967}e^{12}, \frac{8}{1727}\sqrt{2451}e^{13}, \frac{12}{1727}\sqrt{3526}e^{25}, \frac{4}{1727}\sqrt{15910}e^{27}$	$(\frac{392}{1727}, \frac{1}{1727}, -\frac{296}{1727}, -\frac{687}{1727}, \frac{393}{1727}, \frac{96}{1727}, \frac{394}{1727}, \frac{395}{1727})$ $+ \frac{4}{1727}\sqrt{77142}e^2 \otimes e_4 + \frac{8}{1727}\sqrt{13330}e^1 \otimes e_3$	{127, 14578, 2358, 34}
8421:3	$0, 0, 0, 0, \frac{10}{203}\sqrt{7}e^{12}, \frac{12}{203}\sqrt{35}e^{13}, \frac{2}{203}\sqrt{1365}e^{25}, \frac{2}{203}\sqrt{2310}e^{27}$	$(-\frac{2}{29}, \frac{1}{29}, \frac{11}{29}, -\frac{9}{29}, -\frac{1}{29}, \frac{9}{29}, 0, \frac{1}{29})$ $+ \frac{2}{203}\sqrt{3010}e^3 \otimes e_8 + \frac{30}{203}\sqrt{14}e^2 \otimes e_4$	{1237, 145678, 258, 346}
8421:3	$0, 0, 0, 0, \frac{40}{97}\sqrt{2}e^{12}, \frac{4}{97}\sqrt{390}e^{13}, \frac{8}{97}\sqrt{15}e^{25}, \frac{4}{97}\sqrt{390}e^{27}$	$(-\frac{1}{97}, -\frac{7}{97}, \frac{58}{97}, \frac{18}{97}, -\frac{8}{97}, \frac{57}{97}, -\frac{15}{97}, -\frac{22}{97})$ $+ \frac{4}{97}\sqrt{790}e^3 \otimes e_8$	{124568, 12568, 13, 134, 23467, 2367, 4578, 578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:3	$0, 0, 0, 0, \frac{1}{18}\sqrt{66}e^{12}, \frac{1}{18}\sqrt{77}e^{13}, \frac{1}{18}\sqrt{55}e^{25}, \frac{1}{18}\sqrt{286}e^{27}$	$(\frac{7}{36}, -\frac{5}{36}, \frac{1}{9}, 1, \frac{1}{18}, \frac{11}{36}, -\frac{1}{12}, -\frac{2}{9})$ $+\frac{1}{18}\sqrt{627}e^4 \otimes e_8$	{12358, 12568, 134, 146, 23467, 247, 35678, 578}
8421:3	$0, 0, 0, 0, \frac{2}{27}\sqrt{6}e^{12}, \frac{2}{27}\sqrt{23}e^{13}, \frac{10}{27}e^{25}, \frac{2}{27}\sqrt{34}e^{27}$	$(-\frac{7}{54}, \frac{5}{54}, -\frac{2}{27}, \frac{4}{9}, -\frac{1}{27}, -\frac{11}{54}, \frac{1}{18}, \frac{4}{27})$ $+\frac{2}{27}\sqrt{33}e^4 \otimes e_8 + \frac{4}{27}\sqrt{15}e^2 \otimes e_6$	{12347, 15678, 258, 346}
8421:3	$0, 0, 0, 0, \frac{1}{253}\sqrt{10146}e^{12}, \frac{1}{253}\sqrt{7298}e^{13}, \frac{2}{253}\sqrt{2670}e^{25}, \frac{1}{253}\sqrt{7298}e^{27}$	$(\frac{1}{23}, \frac{2}{23}, -\frac{78}{253}, \frac{36}{253}, \frac{3}{23}, -\frac{67}{253}, \frac{5}{23}, \frac{7}{23})$ $+\frac{12}{253}\sqrt{178}e^2 \otimes e_6 + \frac{1}{253}\sqrt{12994}e^1 \otimes e_3$	{145678, 15678, 346, 36}
8421:3	$0, 0, 0, 0, \frac{1}{18}\sqrt{66}e^{12}, \frac{1}{18}\sqrt{286}e^{13}, \frac{1}{18}\sqrt{55}e^{25}, \frac{1}{18}\sqrt{77}e^{27}$	$(-\frac{5}{72}, \frac{1}{8}, -\frac{11}{72}, 1, \frac{1}{18}, -\frac{2}{9}, \frac{13}{72}, \frac{11}{36})$ $+\frac{1}{18}\sqrt{627}e^4 \otimes e_6$	{123458, 12568, 134, 16, 2367, 247, 35678, 4578}
8421:3	$0, 0, 0, 0, \frac{2}{105}\sqrt{435}e^{12}, \frac{2}{105}\sqrt{870}e^{13}, \frac{2}{105}\sqrt{1015}e^{25}, \frac{2}{105}\sqrt{870}e^{27}$	$(-\frac{8}{35}, \frac{5}{21}, -\frac{3}{35}, \frac{1}{5}, \frac{1}{105}, -\frac{11}{35}, \frac{26}{105}, \frac{17}{35})$ $+\frac{4}{105}\sqrt{609}e^2 \otimes e_6$	{12347, 1237, 145678, 15678, 2458, 258, 346, 36}
8421:3	$0, 0, 0, 0, \frac{1}{18}\sqrt{66}e^{12}, \frac{1}{18}\sqrt{286}e^{13}, \frac{1}{18}\sqrt{55}e^{25}, \frac{1}{18}\sqrt{77}e^{27}$	$(-\frac{5}{72}, \frac{1}{8}, \frac{23}{36}, -\frac{7}{12}, \frac{1}{18}, \frac{41}{72}, \frac{13}{72}, \frac{11}{36})$ $+\frac{1}{18}\sqrt{627}e^3 \otimes e_4$	{12358, 124568, 13, 146, 2367, 247, 35678, 4578}
8421:3	$0, 0, 0, 0, \frac{2}{909}\sqrt{17313}e^{12}, \frac{7}{909}\sqrt{1990}e^{13}, \frac{20}{909}\sqrt{199}e^{25}, \frac{2}{909}\sqrt{14129}e^{27}$	$(\frac{10}{909}, \frac{28}{303}, -\frac{125}{909}, -\frac{21}{101}, \frac{94}{909}, -\frac{115}{909}, \frac{178}{909}, \frac{262}{909})$ $+\frac{1}{909}\sqrt{122982}e^1 \otimes e_4 + \frac{8}{909}\sqrt{2985}e^2 \otimes e_6$	{1237, 15678, 2458, 346}
8421:3	$0, 0, 0, 0, \frac{6}{377}\sqrt{822}e^{12}, \frac{1}{377}\sqrt{822}e^{13}, \frac{1}{377}\sqrt{9042}e^{25}, \frac{2}{377}\sqrt{7261}e^{27}$	$(\frac{161}{377}, -\frac{74}{377}, -\frac{113}{377}, \frac{213}{377}, \frac{3}{377}, \frac{48}{377}, \frac{29}{377}, -\frac{61}{377})$ $+\frac{1}{377}\sqrt{89598}e^4 \otimes e_8 + \frac{4}{377}\sqrt{5617}e^1 \otimes e_3$	{1247, 1578, 2358, 34}
8421:3	$0, 0, 0, 0, \frac{18}{373}\sqrt{13}e^{12}, \frac{36}{373}\sqrt{30}e^{13}, \frac{72}{373}e^{25}, \frac{18}{373}\sqrt{73}e^{27}$	$(\frac{99}{373}, -\frac{54}{373}, -\frac{72}{373}, \frac{189}{373}, \frac{45}{373}, \frac{27}{373}, -\frac{9}{373}, -\frac{63}{373})$ $+\frac{18}{373}\sqrt{141}e^4 \otimes e_6 + \frac{36}{373}\sqrt{46}e^1 \otimes e_8$	{12347, 1267, 23568, 2458}
8421:3	$0, 0, 0, 0, \frac{4}{303}\sqrt{2262}e^{12}, \frac{4}{303}\sqrt{174}e^{13}, \frac{4}{303}\sqrt{2929}e^{25}, \frac{20}{303}\sqrt{87}e^{27}$	$(-\frac{4}{101}, \frac{49}{303}, \frac{22}{101}, -\frac{61}{101}, \frac{37}{303}, \frac{18}{101}, \frac{86}{303}, \frac{45}{101})$ $+\frac{12}{101}\sqrt{87}e^2 \otimes e_4$	{12367, 127, 1345678, 14578, 2358, 2568, 34, 46}
8421:3	$0, 0, 0, 0, \frac{1}{203}\sqrt{10266}e^{12}, \frac{2}{203}\sqrt{5133}e^{13}, \frac{2}{203}\sqrt{1239}e^{25}, \frac{2}{203}\sqrt{5133}e^{27}$	$(\frac{4}{7}, -\frac{59}{203}, -\frac{16}{203}, \frac{6}{29}, \frac{57}{203}, \frac{100}{203}, -\frac{2}{203}, -\frac{61}{203})$ $+\frac{1}{203}\sqrt{56994}e^1 \otimes e_8$	{12347, 1237, 12467, 1267, 234568, 23568, 2458, 258}
8421:3	$0, 0, 0, 0, \frac{1}{185}\sqrt{31602}e^{12}, \frac{1}{185}\sqrt{5038}e^{13}, \frac{2}{185}\sqrt{1374}e^{25}, \frac{1}{185}\sqrt{5038}e^{27}$	$(\frac{127}{185}, -\frac{34}{185}, -\frac{102}{185}, \frac{36}{185}, \frac{93}{185}, \frac{5}{37}, \frac{59}{185}, \frac{5}{37})$ $+\frac{1}{185}\sqrt{68242}e^1 \otimes e_3$	{12478, 1278, 1457, 157, 2345, 235, 348, 38}
8421:3	$0, 0, 0, 0, \frac{1}{49}\sqrt{42}e^{12}, \frac{2}{49}\sqrt{21}e^{13}, \frac{2}{49}\sqrt{15}e^{25}, \frac{2}{49}\sqrt{21}e^{27}$	$(\frac{4}{49}, -\frac{1}{49}, -\frac{8}{49}, \frac{6}{49}, \frac{3}{49}, -\frac{4}{49}, \frac{2}{49}, \frac{1}{49})$ $+\frac{12}{49}e^2 \otimes e_6 + \frac{1}{49}\sqrt{114}e^1 \otimes e_8$	{12347, 1237, 2458, 258}
8421:3	$0, 0, 0, 0, \frac{6}{377}\sqrt{822}e^{12}, \frac{2}{377}\sqrt{7261}e^{13}, \frac{1}{377}\sqrt{9042}e^{25}, \frac{1}{377}\sqrt{822}e^{27}$	$(\frac{213}{754}, -\frac{3}{58}, -\frac{335}{754}, \frac{213}{377}, \frac{3}{13}, -\frac{61}{377}, \frac{135}{754}, \frac{48}{377})$ $+\frac{1}{377}\sqrt{89598}e^4 \otimes e_6 + \frac{4}{377}\sqrt{5617}e^1 \otimes e_3$	{12678, 1567, 2356, 368}
8421:3	$0, 0, 0, 0, \frac{18}{373}\sqrt{13}e^{12}, \frac{36}{373}\sqrt{30}e^{13}, \frac{72}{373}e^{25}, \frac{18}{373}\sqrt{73}e^{27}$	$(\frac{99}{373}, -\frac{54}{373}, \frac{69}{373}, -\frac{93}{373}, \frac{45}{373}, \frac{168}{373}, -\frac{9}{373}, -\frac{63}{373})$ $+\frac{18}{373}\sqrt{141}e^3 \otimes e_4 + \frac{36}{373}\sqrt{46}e^1 \otimes e_8$	{1237, 12467, 23568, 2458}
8421:3	$0, 0, 0, 0, \frac{2}{117}\sqrt{1905}e^{12}, \frac{1}{117}\sqrt{7366}e^{13}, \frac{4}{117}\sqrt{127}e^{25}, \frac{2}{117}\sqrt{127}e^{27}$	$(\frac{58}{117}, -\frac{4}{39}, -\frac{5}{117}, -\frac{23}{39}, \frac{46}{117}, \frac{53}{117}, \frac{34}{117}, \frac{22}{117})$ $+\frac{1}{117}\sqrt{23622}e^1 \otimes e_4$	{12378, 12678, 1357, 1567, 23456, 245, 3468, 48}
8421:3	$0, 0, 0, 0, \frac{30}{913}\sqrt{95}e^{12}, \frac{30}{913}\sqrt{51}e^{13}, \frac{30}{913}\sqrt{89}e^{25}, \frac{15}{913}\sqrt{482}e^{27}$	$(\frac{204}{913}, -\frac{75}{913}, \frac{15}{913}, -\frac{300}{913}, \frac{129}{913}, \frac{219}{913}, \frac{54}{913}, -\frac{21}{913})$ $+\frac{15}{913}\sqrt{758}e^1 \otimes e_8 + \frac{15}{913}\sqrt{834}e^2 \otimes e_4$	{1237, 1267, 23568, 258}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:3	$0, 0, 0, 0, \frac{2}{27}\sqrt{6}e^{12}, \frac{2}{27}\sqrt{34}e^{13}, \frac{10}{27}e^{25}, \frac{2}{27}\sqrt{23}e^{27}$	$(-\frac{25}{108}, \frac{7}{36}, \frac{7}{54}, -\frac{1}{6}, -\frac{1}{27}, -\frac{11}{108}, \frac{17}{108}, \frac{19}{54})$ $+ \frac{2}{27}\sqrt{33}e^3 \otimes e_4 + \frac{4}{27}\sqrt{15}e^2 \otimes e_6$	{1237, 145678, 2458, 36}
8421:4	$0, 0, 0, 0, \frac{3}{34}\sqrt{2}e^{12}, \frac{6}{17}\sqrt{5}e^{13}, \frac{3}{34}\sqrt{10}e^{15},$ $\frac{9}{17}e^{17} + \frac{3}{17}\sqrt{19}e^{34}$	$(\frac{7}{136}, \frac{3}{17}, -\frac{53}{136}, \frac{49}{68}, \frac{31}{136}, -\frac{23}{68}, \frac{19}{68}, \frac{45}{136})$ $+ \frac{3}{34}\sqrt{222}e^4 \otimes e_6$	{1234, 126, 23568, 2458}
8421:4	$0, 0, 0, 0, \frac{1}{23}\sqrt{114}e^{12}, \frac{1}{23}\sqrt{190}e^{13}, \frac{2}{23}\sqrt{57}e^{15},$ $\frac{4}{23}\sqrt{19}e^{17} + \frac{1}{23}\sqrt{114}e^{34}$	$(\frac{7}{23}, -\frac{12}{23}, \frac{2}{23}, \frac{7}{23}, -\frac{5}{23}, \frac{9}{23}, \frac{2}{23}, \frac{9}{23})$ $+ \frac{19}{23}\sqrt{2}e^1 \otimes e_2$	{137, 1467, 236, 24}
8421:4	$0, 0, 0, 0, \frac{8}{43}\sqrt{15}e^{12}, \frac{2}{43}\sqrt{195}e^{13}, \frac{2}{43}\sqrt{105}e^{15},$ $\frac{4}{43}\sqrt{30}e^{17} + \frac{8}{43}\sqrt{15}e^{34}$	$(-\frac{10}{43}, \frac{27}{43}, \frac{5}{43}, -\frac{8}{43}, \frac{17}{43}, -\frac{5}{43}, \frac{7}{43}, -\frac{3}{43})$ $+ \frac{10}{43}\sqrt{21}e^2 \otimes e_8$	{123467, 127, 13568, 1458}
8421:4	$0, 0, 0, 0, \frac{1}{7}\sqrt{6}e^{12}, \frac{1}{7}\sqrt{14}e^{13}, \frac{2}{7}e^{15}, \frac{2}{7}\sqrt{2}e^{17} + \frac{1}{7}\sqrt{6}e^{34}$	$(\frac{1}{7}, -\frac{2}{7}, \frac{2}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{3}{7}, 0, \frac{1}{7})$ $+ \frac{1}{7}\sqrt{22}e^1 \otimes e_2 + \frac{4}{7}e^3 \otimes e_4$	{137, 1467, 236, 24}
8421:4	$0, 0, 0, 0, \frac{1}{7}\sqrt{6}e^{12}, \frac{1}{7}\sqrt{14}e^{13}, \frac{2}{7}e^{15}, \frac{2}{7}\sqrt{2}e^{17} + \frac{1}{7}\sqrt{6}e^{34}$	$(\frac{1}{7}, -\frac{2}{7}, \frac{2}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{3}{7}, 0, \frac{1}{7})$ $+ \frac{1}{7}\sqrt{22}e^1 \otimes e_2 - \frac{4}{7}e^3 \otimes e_4$	{137, 1467, 236, 24}
8421:4	$0, 0, 0, 0, \frac{22}{607}\sqrt{219}e^{12}, \frac{33}{607}\sqrt{38}e^{13}, \frac{77}{607}\sqrt{6}e^{15},$ $\frac{11}{607}\sqrt{438}e^{17} + \frac{22}{607}\sqrt{219}e^{34}$	$(-\frac{121}{607}, \frac{308}{607}, \frac{154}{607}, -\frac{209}{607}, \frac{187}{607}, \frac{33}{607}, \frac{66}{607}, -\frac{55}{607})$ $+ \frac{22}{607}\sqrt{546}e^2 \otimes e_8 + \frac{33}{607}\sqrt{102}e^3 \otimes e_4$	{13568, 1458}
8421:4	$0, 0, 0, 0, \frac{3}{17}\sqrt{19}e^{12}, \frac{6}{17}\sqrt{5}e^{13}, \frac{3}{34}\sqrt{10}e^{15},$ $\frac{9}{17}e^{17} + \frac{3}{34}\sqrt{2}e^{34}$	$(-\frac{15}{68}, \frac{49}{68}, -\frac{2}{17}, \frac{3}{17}, \frac{1}{2}, -\frac{23}{68}, \frac{19}{68}, \frac{1}{17})$ $+ \frac{3}{34}\sqrt{222}e^2 \otimes e_6$	{1234, 145678, 2458, 3467}
8421:4	$0, 0, 0, 0, \frac{30}{371}\sqrt{14}e^{12}, \frac{5}{371}\sqrt{1414}e^{13}, \frac{10}{53}\sqrt{3}e^{15},$ $\frac{50}{371}\sqrt{7}e^{17} + \frac{10}{371}\sqrt{42}e^{34}$	$(\frac{10}{53}, -\frac{15}{53}, -\frac{10}{53}, \frac{25}{53}, -\frac{5}{53}, 0, \frac{5}{53}, \frac{15}{53})$ $+ \frac{20}{371}\sqrt{161}e^1 \otimes e_2 + \frac{60}{371}\sqrt{14}e^4 \otimes e_6$	{1347, 167}
8421:4	$0, 0, 0, 0, \frac{1}{77}\sqrt{1122}e^{12}, \frac{1}{77}\sqrt{330}e^{13}, \frac{1}{77}\sqrt{330}e^{15},$ $\frac{2}{77}\sqrt{66}e^{17} + \frac{2}{77}\sqrt{429}e^{34}$	$(-\frac{1}{7}, \frac{3}{7}, -\frac{1}{7}, \frac{1}{7}, \frac{2}{7}, -\frac{2}{7}, \frac{1}{7}, 0)$ $+ \frac{4}{77}\sqrt{165}e^2 \otimes e_8 + \frac{9}{77}\sqrt{22}e^4 \otimes e_6$	{13568, 1458}
8421:4	$0, 0, 0, 0, \frac{5}{53}\sqrt{10}e^{12}, \frac{5}{53}\sqrt{42}e^{13}, \frac{5}{53}\sqrt{11}e^{15},$ $\frac{10}{53}\sqrt{3}e^{17} + \frac{5}{53}\sqrt{7}e^{34}$	$(-\frac{10}{53}, \frac{25}{53}, \frac{10}{53}, -\frac{15}{53}, \frac{15}{53}, 0, \frac{5}{53}, -\frac{5}{53})$ $+ \frac{5}{53}\sqrt{46}e^3 \otimes e_4 + \frac{5}{53}\sqrt{51}e^2 \otimes e_6$	{123, 367}
8421:4	$0, 0, 0, 0, \frac{1}{43}\sqrt{318}e^{12}, \frac{6}{43}\sqrt{53}e^{13}, \frac{1}{43}\sqrt{371}e^{15},$ $\frac{2}{43}\sqrt{159}e^{17} + \frac{1}{43}\sqrt{318}e^{34}$	$(-\frac{5}{86}, \frac{21}{86}, \frac{28}{43}, -\frac{25}{43}, \frac{8}{43}, \frac{51}{86}, \frac{11}{86}, \frac{3}{43})$ $+ \frac{1}{43}\sqrt{3763}e^3 \otimes e_4$	{13, 146, 2367, 247}
8421:5	$0, 0, 0, 0, \frac{65}{1267}\sqrt{6}e^{12}, \frac{10}{1267}\sqrt{570}e^{13}, \frac{10}{1267}\sqrt{393}e^{25},$ $\frac{10}{1267}\sqrt{570}e^{27} + \frac{30}{1267}\sqrt{7}e^{34}$	$(\frac{85}{1267}, -\frac{25}{1267}, -\frac{185}{1267}, \frac{195}{1267}, \frac{60}{1267}, -\frac{100}{1267}, \frac{5}{181}, \frac{10}{1267})$ $+ \frac{15}{1267}\sqrt{422}e^2 \otimes e_6 + \frac{5}{1267}\sqrt{2886}e^1 \otimes e_8$	{1237, 258}
8421:5	$0, 0, 0, 0, \frac{2}{145}\sqrt{1653}e^{12}, \frac{2}{145}\sqrt{1653}e^{13}, \frac{2}{145}\sqrt{570}e^{25},$ $\frac{2}{145}\sqrt{1653}e^{27} + \frac{2}{145}\sqrt{1653}e^{34}$	$(\frac{3}{5}, -\frac{38}{145}, -\frac{28}{145}, \frac{1}{145}, \frac{49}{145}, \frac{59}{145}, \frac{11}{145}, -\frac{27}{145})$ $+ \frac{2}{145}\sqrt{6555}e^1 \otimes e_8$	{12347, 1267, 23568, 2458}
8421:5	$0, 0, 0, 0, \frac{2}{411}\sqrt{1115}e^{12}, \frac{4}{411}\sqrt{5798}e^{13}, \frac{4}{411}\sqrt{1561}e^{25},$ $\frac{2}{411}\sqrt{1115}e^{27} + \frac{4}{411}\sqrt{5798}e^{34}$	$(-\frac{5}{137}, \frac{22}{137}, -\frac{124}{411}, \frac{307}{411}, \frac{17}{137}, -\frac{139}{411}, \frac{39}{137}, \frac{61}{137})$ $+ \frac{2}{411}\sqrt{72921}e^4 \otimes e_6$	{12345, 1256, 23678, 2478}
8421:5	$0, 0, 0, 0, \frac{4}{99}\sqrt{177}e^{12}, \frac{2}{99}\sqrt{2419}e^{13}, \frac{1}{99}\sqrt{1534}e^{25},$ $\frac{1}{99}\sqrt{3422}e^{27} + \frac{4}{99}\sqrt{177}e^{34}$	$(-\frac{19}{198}, \frac{7}{66}, \frac{70}{99}, -\frac{16}{33}, \frac{1}{99}, \frac{11}{18}, \frac{23}{198}, \frac{2}{9})$ $+ \frac{1}{99}\sqrt{18762}e^3 \otimes e_4$	{13, 146, 2367, 247}
8421:5	$0, 0, 0, 0, \frac{4}{33}\sqrt{6}e^{12}, \frac{8}{33}\sqrt{6}e^{13}, \frac{4}{33}\sqrt{22}e^{25},$ $\frac{8}{33}\sqrt{6}e^{27} + \frac{8}{33}\sqrt{3}e^{34}$	$(-\frac{3}{11}, \frac{7}{33}, 0, \frac{4}{11}, -\frac{2}{33}, -\frac{3}{11}, \frac{5}{33}, \frac{4}{11})$ $+ \frac{4}{11}\sqrt{6}e^2 \otimes e_6$	{1237, 15678, 258, 36}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:5	$0, 0, 0, 0, \frac{1}{91}\sqrt{390}e^{12}, \frac{9}{91}\sqrt{26}e^{13}, \frac{2}{91}\sqrt{78}e^{25},$ $\frac{4}{91}\sqrt{78}e^{27} + \frac{1}{91}\sqrt{390}e^{34}$	$(\frac{2}{7}, -\frac{1}{7}, \frac{1}{7}, -\frac{2}{7}, \frac{1}{7}, \frac{3}{7}, 0, -\frac{1}{7})$ $+ \frac{2}{91}\sqrt{897}e^1 \otimes e_8 + \frac{3}{91}\sqrt{286}e^3 \otimes e_4$	{23568, 2458}
8421:5	$0, 0, 0, 0, \frac{12}{83}\sqrt{3}e^{12}, \frac{45}{166}\sqrt{2}e^{13}, \frac{3}{83}\sqrt{21}e^{25},$ $\frac{12}{83}\sqrt{3}e^{27} + \frac{45}{166}\sqrt{2}e^{34}$	$(\frac{24}{83}, -\frac{9}{83}, -\frac{27}{83}, \frac{24}{83}, \frac{15}{83}, -\frac{3}{83}, \frac{6}{83}, -\frac{3}{83})$ $+ \frac{3}{166}\sqrt{966}e^1 \otimes e_8 + \frac{9}{166}\sqrt{86}e^4 \otimes e_6$	{12347, 1267, 23568, 2458}
8421:5	$0, 0, 0, 0, \frac{12}{83}\sqrt{3}e^{12}, \frac{45}{166}\sqrt{2}e^{13}, \frac{3}{83}\sqrt{21}e^{25},$ $\frac{12}{83}\sqrt{3}e^{27} + \frac{45}{166}\sqrt{2}e^{34}$	$(\frac{24}{83}, -\frac{9}{83}, -\frac{27}{83}, \frac{24}{83}, \frac{15}{83}, -\frac{3}{83}, \frac{6}{83}, -\frac{3}{83})$ $+ \frac{3}{166}\sqrt{966}e^1 \otimes e_8 + \frac{9}{166}\sqrt{86}e^4 \otimes e_6$	{12347, 1267, 23568, 2458}
8421:6	$0, 0, 0, 0, \frac{12}{361}\sqrt{851}e^{12}, \frac{2}{361}\sqrt{5106}e^{13} + \frac{6}{361}\sqrt{370}e^{24}, \frac{2}{361}\sqrt{6882}e^{15},$ $\frac{6}{361}\sqrt{370}e^{17}$	$(-\frac{61}{361}, \frac{238}{361}, \frac{93}{361}, -\frac{206}{361}, \frac{177}{361}, \frac{32}{361}, \frac{116}{361}, \frac{55}{361})$ $+ \frac{6}{361}\sqrt{7178}e^2 \otimes e_4$	{1278, 145, 2357, 348}
8421:6	$0, 0, 0, 0, \frac{6}{77}\sqrt{2}e^{12}, \frac{6}{385}\sqrt{66}e^{13} + \frac{6}{385}\sqrt{39}e^{24}, \frac{6}{385}\sqrt{59}e^{15},$ $\frac{3}{385}\sqrt{278}e^{17}$	$(-\frac{3}{385}, \frac{24}{385}, -\frac{12}{385}, -\frac{39}{385}, \frac{5}{385}, -\frac{3}{77}, \frac{18}{385}, \frac{3}{77})$ $+ \frac{3}{385}\sqrt{326}e^2 \otimes e_8 + \frac{3}{385}\sqrt{366}e^1 \otimes e_3$	{1247, 158}
8421:6	$0, 0, 0, 0, \frac{36}{1151}\sqrt{354}e^{12}, \frac{72}{1151}\sqrt{94}e^{13} + \frac{36}{1151}\sqrt{74}e^{24}, \frac{36}{1151}\sqrt{509}e^{15},$ $\frac{36}{1151}\sqrt{391}e^{17}$	$(\frac{273}{1151}, -\frac{228}{1151}, -\frac{375}{1151}, \frac{126}{1151}, \frac{45}{1151}, -\frac{102}{1151}, \frac{318}{1151}, \frac{591}{1151})$ $+ \frac{36}{1151}\sqrt{951}e^1 \otimes e_3$	{1247, 158, 234578, 3}
8421:6	$0, 0, 0, 0, \frac{9}{91}\sqrt{14}e^{12}, \frac{3}{91}\sqrt{182}e^{13} + \frac{3}{13}e^{24}, \frac{3}{91}\sqrt{7}e^{15},$ $\frac{3}{91}\sqrt{154}e^{17}$	$(-\frac{3}{13}, \frac{6}{13}, \frac{6}{13}, -\frac{3}{13}, \frac{3}{13}, \frac{3}{13}, 0, -\frac{3}{13})$ $+ \frac{18}{91}\sqrt{14}e^2 \otimes e_4 + \frac{3}{91}\sqrt{609}e^3 \otimes e_8$	{13457, 478}
8421:6	$0, 0, 0, 0, \frac{4}{43}\sqrt{30}e^{12}, \frac{2}{43}\sqrt{195}e^{13} + \frac{8}{43}\sqrt{15}e^{24}, \frac{2}{43}\sqrt{105}e^{15},$ $\frac{8}{43}\sqrt{15}e^{17}$	$(-\frac{10}{43}, \frac{19}{43}, \frac{21}{43}, -\frac{8}{43}, \frac{9}{43}, \frac{11}{43}, -\frac{1}{43}, -\frac{11}{43})$ $+ \frac{10}{43}\sqrt{21}e^2 \otimes e_8$	{12367, 1247, 134568, 158}
8421:6	$0, 0, 0, 0, \frac{132}{373}\sqrt{2}e^{12}, \frac{8}{373}\sqrt{759}e^{13} + \frac{12}{373}\sqrt{649}e^{24}, \frac{8}{373}\sqrt{429}e^{15},$ $\frac{12}{373}\sqrt{649}e^{17}$	$(-\frac{7}{373}, -\frac{47}{373}, \frac{156}{373}, \frac{196}{373}, -\frac{54}{373}, \frac{149}{373}, -\frac{61}{373}, -\frac{68}{373})$ $+ \frac{12}{373}\sqrt{1133}e^4 \otimes e_8$	{123568, 13467, 234, 3578}
8421:6	$0, 0, 0, 0, \frac{6}{385}\sqrt{105}e^{12}, \frac{3}{55}\sqrt{34}e^{13} + \frac{3}{385}\sqrt{1358}e^{24}, \frac{3}{385}\sqrt{1610}e^{15},$ $\frac{6}{385}\sqrt{553}e^{17}$	$(\frac{6}{55}, -\frac{12}{55}, -\frac{3}{55}, \frac{3}{11}, -\frac{6}{55}, \frac{3}{55}, 0, \frac{6}{55})$ $+ \frac{3}{385}\sqrt{2226}e^4 \otimes e_8 + \frac{3}{385}\sqrt{2562}e^1 \otimes e_3$	{1247, 158}
8421:6	$0, 0, 0, 0, \frac{9}{17}e^{12}, \frac{6}{17}\sqrt{5}e^{13} + \frac{3}{34}\sqrt{2}e^{24}, \frac{3}{34}\sqrt{10}e^{15},$ $\frac{3}{17}\sqrt{19}e^{17}$	$(-\frac{15}{68}, \frac{21}{68}, \frac{12}{17}, \frac{3}{17}, \frac{3}{34}, \frac{33}{68}, -\frac{9}{68}, -\frac{6}{17})$ $+ \frac{3}{34}\sqrt{222}e^3 \otimes e_8$	{123457, 1468, 2478, 3456}
8421:7	$0, 0, 0, 0, \frac{3}{124}\sqrt{267}e^{12}, \frac{3}{62}\sqrt{89}e^{34}, \frac{1}{186}\sqrt{5518}e^{15},$ $\frac{3}{124}\sqrt{267}e^{17} + \frac{1}{186}\sqrt{5073}e^{23}$	$(\frac{5}{372}, \frac{37}{248}, \frac{5}{124}, -\frac{33}{124}, \frac{121}{744}, -\frac{7}{31}, \frac{131}{744}, \frac{47}{248})$ $+ \frac{1}{372}\sqrt{55002}e^1 \otimes e_6$	{127, 158, 235678, 36}
8421:7	$0, 0, 0, 0, \frac{2}{289}\sqrt{10947}e^{12}, \frac{8}{289}\sqrt{615}e^{34}, \frac{2}{289}\sqrt{2337}e^{15},$ $\frac{18}{289}\sqrt{41}e^{17} + \frac{14}{289}\sqrt{123}e^{23}$	$(-\frac{24}{289}, \frac{151}{289}, -\frac{72}{289}, -\frac{23}{289}, \frac{127}{289}, -\frac{95}{289}, \frac{103}{289}, \frac{79}{289})$ $+ \frac{4}{289}\sqrt{7134}e^2 \otimes e_6$	{1278, 1456, 23457, 368}
8421:7	$0, 0, 0, 0, \frac{1}{319}\sqrt{1254}e^{12}, \frac{1}{319}\sqrt{2706}e^{34}, \frac{5}{319}\sqrt{66}e^{15},$ $\frac{4}{319}\sqrt{143}e^{17} + \frac{10}{319}\sqrt{11}e^{23}$	$(-\frac{1}{29}, \frac{3}{29}, -\frac{3}{29}, \frac{1}{29}, \frac{2}{29}, -\frac{2}{29}, \frac{1}{29}, 0)$ $+ \frac{1}{319}\sqrt{4070}e^1 \otimes e_6 + \frac{2}{319}\sqrt{517}e^4 \otimes e_8$	{158, 235678}
8421:7	$0, 0, 0, 0, \frac{18}{289}\sqrt{41}e^{12}, \frac{8}{289}\sqrt{615}e^{34}, \frac{2}{289}\sqrt{2337}e^{15},$ $\frac{18}{289}\sqrt{10947}e^{17} + \frac{14}{289}\sqrt{123}e^{23}$	$(-\frac{24}{289}, \frac{35}{289}, -\frac{72}{289}, \frac{209}{289}, \frac{11}{289}, \frac{137}{289}, -\frac{13}{289}, -\frac{37}{289})$ $+ \frac{4}{289}\sqrt{7134}e^4 \otimes e_8$	{1258, 1467, 234, 35678}
8421:7	$0, 0, 0, 0, \frac{43}{3941}\sqrt{1182}e^{12}, \frac{43}{3941}\sqrt{910}e^{34}, \frac{86}{3941}\sqrt{78}e^{15},$ $\frac{172}{3941}\sqrt{51}e^{17} + \frac{43}{3941}\sqrt{2202}e^{23}$	$(\frac{129}{3941}, \frac{774}{3941}, \frac{387}{3941}, -\frac{1462}{3941}, \frac{129}{563}, -\frac{1075}{3941}, \frac{1032}{3941}, \frac{1161}{3941})$ $+ \frac{215}{3941}\sqrt{118}e^3 \otimes e_4 + \frac{258}{3941}\sqrt{111}e^2 \otimes e_6$	{1456, 368}
8421:7	$0, 0, 0, 0, \frac{4}{17}\sqrt{3}e^{12}, \frac{8}{17}e^{34}, \frac{4}{17}\sqrt{3}e^{15},$ $\frac{4}{17}\sqrt{3}e^{17} + \frac{4}{17}\sqrt{3}e^{23}$	$(0, \frac{3}{17}, 0, -\frac{4}{17}, \frac{3}{17}, -\frac{4}{17}, \frac{3}{17}, \frac{3}{17})$ $+ \frac{2}{17}\sqrt{2}e^3 \otimes e_4 + \frac{2}{17}\sqrt{30}e^1 \otimes e_6$	{127, 158}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:7	$0, 0, 0, 0, \frac{1}{332}\sqrt{13497}e^{12}, \frac{1}{166}\sqrt{4499}e^{34}, \frac{1}{332}\sqrt{17178}e^{15},$ $\frac{1}{332}\sqrt{13497}e^{17} + \frac{1}{332}\sqrt{105522}e^{23}$	$(\frac{75}{332}, -\frac{99}{664}, \frac{225}{332}, -\frac{46}{83}, \frac{51}{664}, \frac{41}{332}, \frac{201}{664}, \frac{351}{664})$ $+ \frac{1}{332}\sqrt{220042}e^3 \otimes e_4$	{1235, 1378, 248, 457}
8421:7	$0, 0, 0, 0, \frac{12}{83}\sqrt{3}e^{12}, \frac{3}{166}\sqrt{546}e^{34}, \frac{3}{83}\sqrt{21}e^{15},$ $\frac{12}{83}\sqrt{3}e^{17} + \frac{3}{166}\sqrt{354}e^{23}$	$(-\frac{9}{83}, \frac{24}{83}, -\frac{27}{83}, \frac{24}{83}, \frac{15}{83}, -\frac{3}{83}, \frac{6}{83}, -\frac{3}{83})$ $+ \frac{3}{166}\sqrt{870}e^2 \otimes e_6 + \frac{3}{166}\sqrt{870}e^4 \otimes e_8$	{12347, 13568, 2578, 46}
8421:7	$0, 0, 0, 0, \frac{12}{83}\sqrt{3}e^{12}, \frac{3}{166}\sqrt{546}e^{34}, \frac{3}{83}\sqrt{21}e^{15},$ $\frac{12}{83}\sqrt{3}e^{17} + \frac{3}{166}\sqrt{354}e^{23}$	$(-\frac{9}{83}, \frac{24}{83}, -\frac{27}{83}, \frac{24}{83}, \frac{15}{83}, -\frac{3}{83}, \frac{6}{83}, -\frac{3}{83})$ $+ \frac{3}{166}\sqrt{870}e^2 \otimes e_6 - \frac{3}{166}\sqrt{870}e^4 \otimes e_8$	{12347, 13568, 2578, 46}
8421:8	$0, 0, 0, 0, \frac{1}{67}\sqrt{498}e^{12}, \frac{3}{67}\sqrt{498}e^{13}, \frac{1}{67}\sqrt{830}e^{15},$ $\frac{1}{67}\sqrt{498}e^{17} + \frac{1}{67}\sqrt{498}e^{23}$	$(-\frac{4}{67}, \frac{18}{67}, -\frac{12}{67}, 1, \frac{14}{67}, -\frac{16}{67}, \frac{10}{67}, \frac{6}{67})$ $+ \frac{1}{67}\sqrt{9130}e^4 \otimes e_6$	{1234578, 134, 247, 458}
8421:8	$0, 0, 0, 0, \frac{9}{284}\sqrt{190}e^{12}, \frac{1}{284}\sqrt{24510}e^{13}, \frac{7}{21}\sqrt{285}e^{15},$ $\frac{9}{284}\sqrt{190}e^{17} + \frac{3}{284}\sqrt{5605}e^{23}$	$(\frac{5}{568}, -\frac{17}{568}, \frac{15}{568}, 1, -\frac{3}{142}, \frac{5}{142}, -\frac{7}{568}, -\frac{1}{284})$ $+ \frac{3}{284}\sqrt{14630}e^4 \otimes e_8$	{1258, 147, 234, 3578}
8421:8	$0, 0, 0, 0, \frac{62}{2813}\sqrt{354}e^{12}, \frac{403}{2813}\sqrt{6}e^{13}, \frac{62}{2813}\sqrt{201}e^{15},$ $\frac{62}{2813}\sqrt{79}e^{17} + \frac{124}{2813}\sqrt{3}e^{23}$	$(-\frac{62}{2813}, \frac{713}{2813}, -\frac{186}{2813}, -\frac{1023}{2813}, \frac{651}{2813}, -\frac{248}{2813}, \frac{589}{2813}, \frac{527}{2813})$ $+ \frac{310}{2813}\sqrt{22}e^2 \otimes e_6 + \frac{372}{2813}\sqrt{19}e^1 \otimes e_4$	{1237, 24578}
8421:8	$0, 0, 0, 0, \frac{2}{283}\sqrt{8679}e^{12}, \frac{1}{283}\sqrt{36294}e^{13}, \frac{2}{283}\sqrt{789}e^{15},$ $\frac{10}{283}\sqrt{263}e^{17} + \frac{2}{283}\sqrt{8679}e^{23}$	$(-\frac{28}{283}, \frac{151}{283}, -\frac{84}{283}, \frac{51}{283}, \frac{123}{283}, -\frac{112}{283}, \frac{95}{283}, \frac{67}{283})$ $+ \frac{4}{283}\sqrt{7627}e^2 \otimes e_6$	{123, 1234, 2458, 258}
8421:8	$0, 0, 0, 0, \frac{3}{284}\sqrt{5605}e^{12}, \frac{1}{284}\sqrt{24510}e^{13}, \frac{7}{21}\sqrt{285}e^{15},$ $\frac{9}{284}\sqrt{190}e^{17} + \frac{3}{284}\sqrt{5605}e^{23}$	$(\frac{5}{568}, \frac{107}{284}, \frac{15}{568}, -\frac{89}{142}, \frac{219}{568}, \frac{5}{142}, \frac{28}{71}, \frac{229}{568})$ $+ \frac{3}{284}\sqrt{14630}e^2 \otimes e_4$	{1278, 145, 2357, 348}
8421:8	$0, 0, 0, 0, \frac{132}{3581}\sqrt{23}e^{12}, \frac{33}{3581}\sqrt{2230}e^{13}, \frac{198}{3581}\sqrt{15}e^{15},$ $\frac{66}{3581}\sqrt{329}e^{17} + \frac{462}{3581}\sqrt{10}e^{23}$	$(-\frac{66}{3581}, \frac{825}{3581}, -\frac{198}{3581}, -\frac{1287}{3581}, \frac{759}{3581}, -\frac{264}{3581}, \frac{693}{3581}, \frac{627}{3581})$ $+ \frac{132}{3581}\sqrt{199}e^3 \otimes e_4 + \frac{66}{3581}\sqrt{842}e^2 \otimes e_6$	{123, 2458}
8421:8	$0, 0, 0, 0, \frac{1}{27}\sqrt{266}e^{12}, \frac{1}{27}\sqrt{114}e^{13}, \frac{4}{27}\sqrt{19}e^{15},$ $\frac{1}{27}\sqrt{266}e^{17} + \frac{2}{27}\sqrt{38}e^{23}$	$(\frac{2}{27}, \frac{2}{27}, \frac{2}{9}, -\frac{17}{27}, \frac{4}{27}, \frac{8}{27}, \frac{2}{9}, \frac{8}{27})$ $+ \frac{2}{27}\sqrt{209}e^1 \otimes e_4$	{1267, 1568, 2345678, 346}
8421:8	$0, 0, 0, 0, \frac{37}{2657}\sqrt{354}e^{12}, \frac{259}{2657}\sqrt{6}e^{13}, \frac{74}{2657}\sqrt{30}e^{15},$ $\frac{592}{2657}e^{17} + \frac{259}{2657}\sqrt{30}e^{23}$	$(-\frac{185}{2657}, \frac{629}{2657}, -\frac{555}{2657}, \frac{1443}{2657}, \frac{444}{2657}, -\frac{740}{2657}, \frac{259}{2657}, \frac{74}{2657})$ $+ \frac{222}{2657}\sqrt{62}e^4 \otimes e_8 + \frac{74}{2657}\sqrt{607}e^2 \otimes e_6$	{12347, 2578}
8421:8	$0, 0, 0, 0, \frac{1}{273}\sqrt{17422}e^{12}, \frac{1}{273}\sqrt{50018}e^{13}, \frac{2}{273}\sqrt{1967}e^{15},$ $\frac{1}{273}\sqrt{17422}e^{17} + \frac{2}{273}\sqrt{11521}e^{23}$	$(\frac{34}{273}, -\frac{4}{273}, \frac{34}{91}, -\frac{179}{273}, \frac{10}{91}, \frac{136}{273}, \frac{64}{273}, \frac{14}{39})$ $+ \frac{2}{273}\sqrt{31753}e^3 \otimes e_4$	{1245678, 146, 2367, 3568}
8421:9	$0, 0, 0, 0, \frac{2}{125}\sqrt{987}e^{12}, \frac{8}{125}\sqrt{141}e^{13}, \frac{6}{125}\sqrt{47}e^{15},$ $\frac{2}{125}\sqrt{1457}e^{17} + \frac{6}{125}\sqrt{235}e^{24}$	$(-\frac{8}{125}, \frac{59}{125}, -\frac{27}{125}, -\frac{24}{125}, \frac{51}{125}, -\frac{7}{25}, \frac{43}{125}, \frac{7}{25})$ $+ \frac{4}{125}\sqrt{1222}e^2 \otimes e_6$	{1234, 145678, 258, 367}
8421:9	$0, 0, 0, 0, \frac{1}{319}\sqrt{1914}e^{12}, \frac{1}{319}\sqrt{3410}e^{13}, \frac{3}{319}\sqrt{110}e^{15},$ $\frac{2}{319}\sqrt{77}e^{17} + \frac{2}{319}\sqrt{770}e^{24}$	$(\frac{1}{29}, -\frac{3}{29}, \frac{1}{29}, \frac{3}{29}, -\frac{2}{29}, \frac{2}{29}, -\frac{1}{29}, 0)$ $+ \frac{2}{319}\sqrt{803}e^3 \otimes e_8 + \frac{3}{319}\sqrt{374}e^4 \otimes e_6$	{125678, 458}
8421:9	$0, 0, 0, 0, \frac{2}{125}\sqrt{1457}e^{12}, \frac{8}{125}\sqrt{141}e^{13}, \frac{6}{125}\sqrt{47}e^{15},$ $\frac{2}{125}\sqrt{987}e^{17} + \frac{6}{125}\sqrt{235}e^{24}$	$(-\frac{8}{125}, \frac{7}{125}, \frac{77}{125}, -\frac{24}{125}, -\frac{1}{125}, \frac{69}{125}, -\frac{9}{125}, -\frac{17}{125})$ $+ \frac{4}{125}\sqrt{1222}e^3 \otimes e_8$	{123457, 1468, 278, 356}
8421:9	$0, 0, 0, 0, \frac{1}{268}\sqrt{21809}e^{12}, \frac{1}{134}\sqrt{13317}e^{13}, \frac{1}{268}\sqrt{12738}e^{15},$ $\frac{1}{268}\sqrt{21809}e^{17} + \frac{1}{268}\sqrt{49022}e^{24}$	$(\frac{47}{268}, -\frac{63}{536}, -\frac{99}{268}, \frac{141}{268}, \frac{31}{536}, -\frac{13}{67}, \frac{125}{536}, \frac{219}{536})$ $+ \frac{1}{268}\sqrt{88394}e^4 \otimes e_6$	{125678, 16, 247, 458}
8421:9	$0, 0, 0, 0, \frac{2}{1105}\sqrt{291110}e^{12}, \frac{2}{1105}\sqrt{69054}e^{13}, \frac{2}{1105}\sqrt{71085}e^{15},$ $\frac{8}{1105}\sqrt{677}e^{17} + \frac{2}{1105}\sqrt{45359}e^{24}$	$(-\frac{12}{65}, \frac{742}{1105}, \frac{63}{221}, -\frac{36}{65}, \frac{538}{1105}, \frac{111}{1105}, \frac{334}{1105}, \frac{2}{17})$ $+ \frac{4}{1105}\sqrt{150971}e^2 \otimes e_4$	{13456, 145, 2357, 2567}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:9	$0, 0, 0, 0, \frac{25}{3101}\sqrt{2566e^{12}}, \frac{25}{3101}\sqrt{1898e^{13}}, \frac{100}{3101}\sqrt{129e^{15}},$ $\frac{50}{3101}\sqrt{403e^{17}} + \frac{275}{3101}\sqrt{10e^{24}}$	$(-\frac{25}{3101}, \frac{550}{3101}, -\frac{650}{3101}, -\frac{75}{3101}, \frac{75}{443}, -\frac{675}{3101}, \frac{500}{3101}, \frac{475}{3101})$ $+ \frac{150}{3101}\sqrt{53e^2} \otimes e_4 + \frac{25}{3101}\sqrt{3746e^1} \otimes e_3$	{127, 34}
8421:9	$0, 0, 0, 0, \frac{1}{92}\sqrt{3139e^{12}}, \frac{1}{46}\sqrt{731e^{13}}, \frac{1}{46}\sqrt{903e^{15}},$ $\frac{1}{92}\sqrt{3139e^{17}} + \frac{1}{46}\sqrt{430e^{24}}$	$(\frac{11}{92}, -\frac{7}{184}, -\frac{8}{23}, \frac{33}{92}, \frac{15}{184}, -\frac{21}{92}, \frac{37}{184}, \frac{59}{184})$ $+ \frac{1}{92}\sqrt{6794e^1} \otimes e_3$	{127, 158, 234578, 34}
8421:9	$0, 0, 0, 0, \frac{4}{17}\sqrt{15e^{12}}, \frac{8}{17}\sqrt{5e^{13}}, \frac{4}{17}\sqrt{15e^{15}},$ $\frac{4}{17}\sqrt{15e^{17}} + \frac{4}{17}\sqrt{15e^{24}}$	$(0, \frac{3}{17}, -\frac{4}{17}, 0, \frac{3}{17}, -\frac{4}{17}, \frac{3}{17}, \frac{3}{17})$ $+ \frac{2}{17}\sqrt{66e^4} \otimes e_6 + \frac{2}{17}\sqrt{94e^1} \otimes e_3$	{127, 158}
8421:9	$0, 0, 0, 0, \frac{5}{287}\sqrt{182e^{12}}, \frac{10}{287}\sqrt{231e^{13}}, \frac{15}{287}\sqrt{14e^{15}},$ $\frac{10}{287}\sqrt{105e^{17}} + \frac{15}{41}\sqrt{2e^{24}}$	$(-\frac{5}{41}, \frac{10}{41}, \frac{20}{41}, -\frac{15}{41}, \frac{5}{41}, \frac{15}{41}, 0, -\frac{5}{41})$ $+ \frac{45}{287}\sqrt{14e^2} \otimes e_4 + \frac{5}{287}\sqrt{2338e^3} \otimes e_8$	{1468, 278}
8421:9	$0, 0, 0, 0, \frac{7}{125}\sqrt{82e^{12}}, \frac{7}{125}\sqrt{34e^{13}}, \frac{42}{125}\sqrt{2e^{15}},$ $\frac{28}{125}\sqrt{3e^{17}} + \frac{7}{125}\sqrt{10e^{24}}$	$(\frac{7}{125}, \frac{14}{125}, -\frac{42}{125}, \frac{21}{125}, \frac{21}{125}, -\frac{7}{25}, \frac{28}{125}, \frac{7}{25})$ $+ \frac{14}{125}\sqrt{17e^2} \otimes e_6 + \frac{7}{25}\sqrt{6e^1} \otimes e_3$	{127, 234578}
8421:10	$0, 0, 0, 0, \frac{4}{87}\sqrt{274e^{12}}, \frac{2}{261}\sqrt{10138e^{13}}, \frac{2}{261}\sqrt{2329e^{25}},$ $\frac{2}{261}\sqrt{4521e^{14}} + \frac{4}{261}\sqrt{137e^{27}}$	$(\frac{148}{261}, -\frac{14}{87}, -\frac{23}{261}, -\frac{14}{29}, \frac{106}{261}, \frac{125}{261}, \frac{64}{261}, \frac{22}{261})$ $+ \frac{2}{261}\sqrt{28770e^1} \otimes e_4$	{1237, 1267, 346, 4}
8421:10	$0, 0, 0, 0, \frac{2}{261}\sqrt{4521e^{12}}, \frac{2}{261}\sqrt{10138e^{13}}, \frac{2}{261}\sqrt{2329e^{25}},$ $\frac{4}{87}\sqrt{274e^{14}} + \frac{4}{261}\sqrt{137e^{27}}$	$(-\frac{62}{261}, \frac{7}{29}, -\frac{23}{261}, \frac{21}{29}, \frac{1}{261}, -\frac{85}{261}, \frac{64}{261}, \frac{127}{261})$ $+ \frac{2}{261}\sqrt{28770e^4} \otimes e_6$	{12568, 134, 2367, 4578}
8421:10	$0, 0, 0, 0, \frac{1}{104}\sqrt{7107e^{12}}, \frac{1}{104}\sqrt{3502e^{13}}, \frac{1}{52}\sqrt{309e^{25}},$ $\frac{1}{104}\sqrt{7107e^{14}} + \frac{1}{104}\sqrt{3502e^{27}}$	$(\frac{1}{2}, -\frac{11}{208}, -\frac{51}{104}, -\frac{33}{208}, \frac{93}{208}, \frac{104}{104}, \frac{41}{104}, \frac{71}{208})$ $+ \frac{1}{52}\sqrt{4429e^1} \otimes e_3$	{1278, 1457, 235, 348}
8421:10	$0, 0, 0, 0, \frac{2}{17}\sqrt{11e^{12}}, \frac{2}{17}\sqrt{22e^{13}}, \frac{2}{51}\sqrt{187e^{25}},$ $\frac{4}{51}\sqrt{33e^{14}} + \frac{2}{17}\sqrt{22e^{27}}$	$(-\frac{2}{17}, \frac{7}{51}, -\frac{3}{17}, \frac{7}{17}, \frac{1}{51}, -\frac{5}{17}, \frac{8}{51}, \frac{5}{17})$ $+ \frac{2}{51}\sqrt{462e^2} \otimes e_6$	{1237, 145678, 258, 346}
8421:10	$0, 0, 0, 0, \frac{3}{79}\sqrt{106e^{12}}, \frac{21}{79}\sqrt{2e^{13}}, \frac{6}{79}\sqrt{30e^{25}},$ $\frac{6}{79}\sqrt{10e^{14}} + \frac{21}{79}\sqrt{2e^{27}}$	$(\frac{3}{79}, \frac{6}{79}, -\frac{24}{79}, \frac{18}{79}, \frac{9}{79}, -\frac{21}{79}, \frac{15}{79}, \frac{21}{79})$ $+ \frac{3}{79}\sqrt{114e^1} \otimes e_3 + \frac{6}{79}\sqrt{73e^2} \otimes e_6$	{145678, 346}
8421:10	$0, 0, 0, 0, \frac{2}{443}\sqrt{17201e^{12}}, \frac{4}{443}\sqrt{6513e^{13}}, \frac{6}{443}\sqrt{501e^{25}},$ $\frac{4}{443}\sqrt{13026e^{14}} + \frac{4}{443}\sqrt{6513e^{27}}$	$(-\frac{50}{443}, \frac{1}{443}, \frac{287}{443}, \frac{3}{443}, -\frac{49}{443}, \frac{237}{443}, -\frac{48}{443}, -\frac{47}{443})$ $+ \frac{2}{443}\sqrt{60454e^3} \otimes e_8$	{12568, 134, 2367, 4578}
8421:10	$0, 0, 0, 0, \frac{2}{9}e^{12}, \frac{1}{9}\sqrt{6e^{13}}, \frac{2}{9}e^{25}, \frac{2}{9}e^{14} + \frac{2}{9}e^{27}$	$(\frac{1}{9}, 0, -\frac{2}{9}, 0, \frac{1}{9}, -\frac{1}{9}, \frac{1}{9}, \frac{1}{9})$ $+ \frac{1}{9}\sqrt{10e^2} \otimes e_6 + \frac{1}{9}\sqrt{6e^1} \otimes e_4$	{1237, 346}
8421:10	$0, 0, 0, 0, \frac{451}{3389}\sqrt{6e^{12}}, \frac{205}{3389}\sqrt{10e^{13}}, \frac{246}{3389}\sqrt{7e^{25}},$ $\frac{82}{3389}\sqrt{543e^{14}} + \frac{41}{3389}\sqrt{714e^{27}}$	$(\frac{369}{3389}, \frac{246}{3389}, -\frac{1312}{3389}, \frac{738}{3389}, \frac{615}{3389}, -\frac{943}{3389}, \frac{861}{3389}, \frac{1107}{3389})$ $+ \frac{41}{3389}\sqrt{3130e^1} \otimes e_3 + \frac{82}{3389}\sqrt{723e^4} \otimes e_6$	{12678, 2356}
8421:10	$0, 0, 0, 0, \frac{8}{133}\sqrt{29e^{12}}, \frac{20}{133}\sqrt{7e^{13}}, \frac{12}{133}\sqrt{2e^{25}},$ $\frac{4}{133}\sqrt{123e^{14}} + \frac{8}{133}\sqrt{26e^{27}}$	$(-\frac{32}{133}, \frac{12}{133}, \frac{36}{133}, \frac{36}{133}, -\frac{20}{133}, \frac{4}{133}, -\frac{8}{133}, \frac{4}{133})$ $+ \frac{4}{133}\sqrt{213e^4} \otimes e_6 + \frac{4}{133}\sqrt{265e^3} \otimes e_8$	{12568, 134, 2367, 4578}
8421:10	$0, 0, 0, 0, \frac{8}{133}\sqrt{29e^{12}}, \frac{20}{133}\sqrt{7e^{13}}, \frac{12}{133}\sqrt{2e^{25}},$ $\frac{4}{133}\sqrt{123e^{14}} + \frac{8}{133}\sqrt{26e^{27}}$	$(-\frac{32}{133}, \frac{12}{133}, \frac{36}{133}, \frac{36}{133}, -\frac{20}{133}, \frac{4}{133}, -\frac{8}{133}, \frac{4}{133})$ $- \frac{4}{133}\sqrt{213e^4} \otimes e_6 + \frac{4}{133}\sqrt{265e^3} \otimes e_8$	{12568, 134, 2367, 4578}
8421:10	$0, 0, 0, 0, \frac{37}{3161}\sqrt{170e^{12}}, \frac{74}{3161}\sqrt{519e^{13}}, \frac{111}{3161}\sqrt{30e^{25}},$ $\frac{74}{3161}\sqrt{66e^{14}} + \frac{37}{3161}\sqrt{1302e^{27}}$	$(\frac{481}{3161}, -\frac{296}{3161}, \frac{962}{3161}, -\frac{888}{3161}, \frac{185}{3161}, \frac{1443}{3161}, -\frac{111}{3161}, -\frac{407}{3161})$ $+ \frac{111}{3161}\sqrt{258e^1} \otimes e_4 + \frac{37}{3161}\sqrt{3190e^3} \otimes e_8$	{12568, 4578}
8421:12	$0, 0, 0, 0, \frac{76}{499}\sqrt{17e^{12}}, \frac{38}{1497}\sqrt{499e^{34}}, \frac{38}{499}\sqrt{15e^{15}},$ $\frac{38}{1497}\sqrt{339e^{17}} + \frac{38}{499}\sqrt{73e^{25}}$	$(\frac{38}{499}, \frac{76}{499}, -\frac{247}{1497}, -\frac{247}{1497}, \frac{114}{499}, -\frac{494}{1497}, \frac{152}{499}, \frac{190}{499})$ $+ \frac{38}{1497}\sqrt{1245e^2} \otimes e_6$	{135678, 367}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:12	$0, 0, 0, 0, \frac{34}{263}\sqrt{10}e^{12}, \frac{17}{789}\sqrt{526}e^{34}, \frac{17}{789}\sqrt{618}e^{15},$ $\frac{17}{789}\sqrt{498}e^{17} + \frac{34}{789}\sqrt{69}e^{25}$	$(\frac{17}{263}, \frac{34}{263}, -\frac{119}{789}, -\frac{119}{789}, \frac{51}{263}, -\frac{238}{789}, \frac{68}{263}, \frac{85}{263})$ $+ \frac{17}{789}\sqrt{1290}e^1 \otimes e_6$	{12347, 127, 235678}
8421:12	$0, 0, 0, 0, \frac{204}{1867}\sqrt{10}e^{12}, \frac{34}{1867}\sqrt{526}e^{34}, \frac{34}{1867}\sqrt{618}e^{15},$ $\frac{34}{1867}\sqrt{498}e^{17} + \frac{68}{1867}\sqrt{69}e^{25}$	$(\frac{102}{1867}, \frac{204}{1867}, \frac{51}{1867}, -\frac{527}{1867}, \frac{306}{1867}, -\frac{476}{1867}, \frac{408}{1867}, \frac{510}{1867})$ $+ \frac{34}{1867}\sqrt{1290}e^1 \otimes e_6 + \frac{578}{1867}e^3 \otimes e_4$	{235678, 245678}
8421:12	$0, 0, 0, 0, \frac{1}{51}\sqrt{78}e^{12}, \frac{1}{51}\sqrt{1326}e^{34}, \frac{1}{51}\sqrt{78}e^{15},$ $\frac{13}{51}\sqrt{6}e^{17} + \frac{13}{51}\sqrt{6}e^{25}$	$(-\frac{1}{51}, -\frac{2}{51}, \frac{2}{3}, -\frac{7}{51}, -\frac{1}{17}, \frac{9}{17}, -\frac{4}{51}, -\frac{5}{51})$ $+ \frac{1}{51}\sqrt{3198}e^3 \otimes e_8$	{123457, 123567, 24678, 278}
8421:12	$0, 0, 0, 0, \frac{6}{289}\sqrt{446}e^{12}, \frac{2}{289}\sqrt{4906}e^{34}, \frac{6}{289}\sqrt{446}e^{15},$ $\frac{4}{289}\sqrt{669}e^{17} + \frac{4}{289}\sqrt{669}e^{25}$	$(\frac{18}{289}, \frac{36}{289}, \frac{267}{289}, -\frac{179}{289}, \frac{54}{289}, \frac{88}{289}, \frac{72}{289}, \frac{90}{289})$ $+ \frac{446}{289}e^3 \otimes e_4$	{13568, 14568, 36, 46}
8421:12	$0, 0, 0, 0, \frac{114}{929}\sqrt{17}e^{12}, \frac{19}{929}\sqrt{499}e^{34}, \frac{57}{929}\sqrt{15}e^{15},$ $\frac{19}{929}\sqrt{339}e^{17} + \frac{57}{929}\sqrt{73}e^{25}$	$(\frac{57}{929}, \frac{114}{929}, \frac{57}{929}, -\frac{304}{929}, \frac{171}{929}, -\frac{247}{929}, \frac{228}{929}, \frac{285}{929})$ $+ \frac{19}{929}\sqrt{1245}e^2 \otimes e_6 - \frac{361}{929}e^3 \otimes e_4$	{135678, 145678, 367, 467}
8421:12	$0, 0, 0, 0, \frac{114}{929}\sqrt{17}e^{12}, \frac{19}{929}\sqrt{499}e^{34}, \frac{57}{929}\sqrt{15}e^{15},$ $\frac{19}{929}\sqrt{339}e^{17} + \frac{57}{929}\sqrt{73}e^{25}$	$(\frac{57}{929}, \frac{114}{929}, \frac{57}{929}, -\frac{304}{929}, \frac{171}{929}, -\frac{247}{929}, \frac{228}{929}, \frac{285}{929})$ $+ \frac{19}{929}\sqrt{1245}e^2 \otimes e_6 + \frac{361}{929}e^3 \otimes e_4$	{135678, 145678, 367, 467}
8421:12	$0, 0, 0, 0, \frac{17}{3831}\sqrt{906}e^{12}, \frac{17}{3831}\sqrt{2554}e^{34}, \frac{17}{1277}\sqrt{190}e^{15},$ $\frac{34}{3831}\sqrt{573}e^{17} + \frac{34}{3831}\sqrt{30}e^{25}$	$(\frac{17}{1277}, \frac{34}{1277}, \frac{544}{3831}, -\frac{782}{3831}, \frac{51}{1277}, -\frac{238}{3831}, \frac{68}{1277}, \frac{85}{1277})$ $+ \frac{34}{3831}\sqrt{1005}e^1 \otimes e_6 + \frac{34}{3831}\sqrt{663}e^3 \otimes e_8$	{12347, 245678}
8421:12	$0, 0, 0, 0, \frac{19}{1343}\sqrt{194}e^{12}, \frac{19}{4029}\sqrt{2686}e^{34}, \frac{19}{1343}\sqrt{78}e^{15},$ $\frac{19}{4029}\sqrt{258}e^{17} + \frac{19}{1343}\sqrt{334}e^{25}$	$(\frac{19}{1343}, \frac{38}{1343}, \frac{38}{237}, -\frac{893}{4029}, \frac{57}{1343}, -\frac{247}{4029}, \frac{76}{1343}, \frac{95}{1343})$ $+ \frac{57}{1343}\sqrt{38}e^3 \otimes e_8 + \frac{76}{4029}\sqrt{255}e^2 \otimes e_6$	{145678, 367}
8421:13	$0, 0, 0, 0, \frac{24}{199}\sqrt{46}e^{12}, \frac{8}{199}\sqrt{138}e^{13} + \frac{72}{199}\sqrt{2}e^{24}, \frac{8}{199}\sqrt{114}e^{15},$ $\frac{72}{199}\sqrt{2}e^{17} + \frac{24}{199}\sqrt{46}e^{23}$	$(-\frac{4}{199}, \frac{88}{199}, -\frac{12}{199}, -\frac{104}{199}, \frac{84}{199}, -\frac{16}{199}, \frac{80}{199}, \frac{76}{199})$ $+ \frac{24}{199}\sqrt{110}e^2 \otimes e_4$	{1278, 145, 2357, 348}
8421:13	$0, 0, 0, 0, \frac{24}{199}\sqrt{46}e^{12}, \frac{8}{199}\sqrt{138}e^{13} + \frac{72}{199}\sqrt{2}e^{24}, \frac{8}{199}\sqrt{114}e^{15},$ $\frac{72}{199}\sqrt{2}e^{17} + \frac{24}{199}\sqrt{46}e^{23}$	$(-\frac{4}{199}, \frac{88}{199}, -\frac{12}{199}, -\frac{104}{199}, \frac{84}{199}, -\frac{16}{199}, \frac{80}{199}, \frac{76}{199})$ $- \frac{24}{199}\sqrt{110}e^2 \otimes e_4$	{1278, 145, 2357, 348}
8421:13	$0, 0, 0, 0, \frac{39}{835}\sqrt{114}e^{12}, \frac{13}{835}\sqrt{1398}e^{13} + \frac{78}{835}\sqrt{59}e^{24}, \frac{26}{835}\sqrt{186}e^{15},$ $\frac{78}{835}\sqrt{59}e^{17} + \frac{39}{835}\sqrt{118}e^{23}$	$(\frac{13}{167}, -\frac{221}{835}, \frac{39}{167}, \frac{481}{835}, -\frac{156}{835}, \frac{52}{167}, -\frac{91}{835}, -\frac{26}{835})$ $+ \frac{156}{835}\sqrt{29}e^4 \otimes e_8$	{234, 3578}
8421:14	$0, 0, 0, 0, \frac{16}{325}\sqrt{102}e^{12}, \frac{16}{325}\sqrt{151}e^{13}, \frac{112}{325}\sqrt{2}e^{15},$ $\frac{32}{325}\sqrt{33}e^{17} + \frac{16}{325}\sqrt{185}e^{25}$	$(\frac{19}{325}, \frac{38}{325}, -\frac{109}{325}, \frac{42}{325}, \frac{57}{325}, -\frac{18}{65}, \frac{76}{325}, \frac{19}{65})$ $+ \frac{16}{325}\sqrt{283}e^2 \otimes e_6$	{145678, 15678, 3467, 367}
8421:14	$0, 0, 0, 0, \frac{16}{325}\sqrt{102}e^{12}, \frac{32}{325}\sqrt{33}e^{13}, \frac{16}{325}\sqrt{185}e^{15},$ $\frac{16}{325}\sqrt{151}e^{17} + \frac{112}{325}\sqrt{2}e^{25}$	$(\frac{19}{325}, \frac{38}{325}, -\frac{109}{325}, \frac{42}{325}, \frac{57}{325}, -\frac{18}{65}, \frac{76}{325}, \frac{19}{65})$ $+ \frac{16}{325}\sqrt{283}e^1 \otimes e_3$	{1247, 127, 234578, 23578}
8421:14	$0, 0, 0, 0, \frac{3}{35}\sqrt{14}e^{12}, \frac{6}{35}\sqrt{35}e^{13}, \frac{3}{35}\sqrt{42}e^{15},$ $\frac{4}{35}\sqrt{21}e^{17} + \frac{2}{35}\sqrt{105}e^{25}$	$(\frac{3}{70}, \frac{3}{35}, -\frac{17}{70}, \frac{1}{70}, \frac{9}{70}, -\frac{1}{5}, \frac{6}{35}, \frac{3}{14})$ $+ \frac{3}{35}\sqrt{266}e^4 \otimes e_6$	{134, 16, 3568, 458}
8421:14	$0, 0, 0, 0, \frac{5}{178}\sqrt{246}e^{12}, \frac{15}{178}\sqrt{22}e^{13}, \frac{5}{178}\sqrt{254}e^{15},$ $\frac{5}{89}\sqrt{43}e^{17} + \frac{25}{178}\sqrt{2}e^{25}$	$(\frac{5}{89}, \frac{10}{89}, -\frac{20}{89}, -\frac{15}{89}, \frac{15}{89}, -\frac{15}{89}, \frac{20}{89}, \frac{25}{89})$ $+ \frac{15}{178}\sqrt{22}e^2 \otimes e_4 + \frac{5}{89}\sqrt{109}e^1 \otimes e_3$	{127, 23578}
8421:14	$0, 0, 0, 0, \frac{1}{42}\sqrt{154}e^{12}, \frac{1}{42}\sqrt{266}e^{13}, \frac{1}{42}\sqrt{210}e^{15},$ $\frac{1}{21}\sqrt{21}e^{17} + \frac{1}{6}\sqrt{10}e^{25}$	$(0, 0, \frac{1}{3}, -\frac{1}{3}, 0, \frac{1}{3}, 0, 0)$ $+ \frac{1}{21}\sqrt{133}e^3 \otimes e_8 + \frac{1}{42}\sqrt{518}e^2 \otimes e_4$	{145678, 3467}
8421:14	$0, 0, 0, 0, \frac{45}{127}\sqrt{2}e^{12}, \frac{10}{127}\sqrt{53}e^{13}, \frac{35}{127}\sqrt{6}e^{15},$ $\frac{20}{127}\sqrt{15}e^{17} + \frac{10}{127}\sqrt{39}e^{25}$	$(\frac{15}{254}, \frac{15}{127}, -\frac{85}{254}, \frac{15}{127}, \frac{45}{254}, -\frac{35}{127}, \frac{30}{127}, \frac{75}{254})$ $+ \frac{45}{127}\sqrt{7}e^1 \otimes e_3 + \frac{5}{127}\sqrt{6}e^4 \otimes e_6$	{127, 23578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:14	$0, 0, 0, 0, \frac{3}{511}\sqrt{1122}e^{12}, \frac{1}{511}\sqrt{5610}e^{13}, \frac{4}{511}\sqrt{561}e^{15},$ $\frac{66}{511}\sqrt{34}e^{17} + \frac{3}{511}\sqrt{16082}e^{25}$	$(-\frac{10}{511}, -\frac{20}{511}, \frac{15}{73}, 1, -\frac{30}{511}, \frac{95}{511}, -\frac{40}{511}, -\frac{50}{511})$ $+ \frac{3}{511}\sqrt{51238}e^4 \otimes e_8$	{1234567, 12457, 2378, 2678}
8421:14	$0, 0, 0, 0, \frac{2}{27}\sqrt{6}e^{12}, \frac{1}{27}\sqrt{102}e^{13}, \frac{4}{27}\sqrt{3}e^{15},$ $\frac{2}{9}\sqrt{3}e^{17} + \frac{2}{9}e^{25}$	$(0, 0, \frac{1}{3}, -\frac{1}{3}, 0, \frac{1}{3}, 0, 0)$ $+ \frac{1}{27}\sqrt{222}e^1 \otimes e_4 + \frac{2}{27}\sqrt{51}e^3 \otimes e_8$	{1568, 346}
8421:14	$0, 0, 0, 0, \frac{23}{2111}\sqrt{894}e^{12}, \frac{23}{2111}\sqrt{1306}e^{13}, \frac{92}{2111}\sqrt{106}e^{15},$ $\frac{92}{2111}\sqrt{110}e^{17} + \frac{23}{2111}\sqrt{646}e^{25}$	$(\frac{46}{2111}, \frac{92}{2111}, -\frac{483}{2111}, \frac{759}{2111}, \frac{138}{2111}, -\frac{437}{2111}, \frac{184}{2111}, \frac{230}{2111})$ $+ \frac{1196}{2111}e^1 \otimes e_3 + \frac{23}{2111}\sqrt{1086}e^4 \otimes e_8$	{1247, 23578}
8421:14	$0, 0, 0, 0, \frac{9}{529}\sqrt{1066}e^{12}, \frac{3}{529}\sqrt{1394}e^{13}, \frac{60}{529}\sqrt{41}e^{15},$ $\frac{3}{529}\sqrt{13202}e^{17} + \frac{12}{529}\sqrt{451}e^{25}$	$(\frac{34}{529}, \frac{68}{529}, \frac{80}{529}, -\frac{335}{529}, \frac{102}{529}, \frac{114}{529}, \frac{136}{529}, \frac{170}{529})$ $+ \frac{36}{529}\sqrt{246}e^1 \otimes e_4$	{1237, 1267, 2345678, 24578}
8421:14	$0, 0, 0, 0, \frac{6}{251}\sqrt{1139}e^{12}, \frac{2}{251}\sqrt{969}e^{13}, \frac{2}{251}\sqrt{2703}e^{15},$ $\frac{12}{251}\sqrt{170}e^{17} + \frac{30}{251}\sqrt{51}e^{25}$	$(\frac{19}{251}, \frac{38}{251}, \frac{33}{251}, -\frac{166}{251}, \frac{57}{251}, \frac{52}{251}, \frac{76}{251}, \frac{95}{251})$ $+ \frac{6}{251}\sqrt{2363}e^2 \otimes e_4$	{134578, 145678, 3467, 47}
8421:14	$0, 0, 0, 0, \frac{16}{387}\sqrt{46}e^{12}, \frac{16}{387}\sqrt{170}e^{13}, \frac{64}{387}\sqrt{5}e^{15},$ $\frac{16}{387}\sqrt{3}e^{17} + \frac{16}{387}\sqrt{105}e^{25}$	$(-\frac{4}{129}, -\frac{8}{129}, \frac{68}{387}, \frac{184}{387}, -\frac{4}{43}, \frac{56}{387}, -\frac{16}{129}, -\frac{20}{129})$ $+ \frac{16}{387}\sqrt{149}e^4 \otimes e_6 + \frac{16}{387}\sqrt{203}e^3 \otimes e_8$	{123457, 2478}
8421:14	$0, 0, 0, 0, \frac{3}{35}\sqrt{14}e^{12}, \frac{6}{35}\sqrt{35}e^{13}, \frac{3}{35}\sqrt{42}e^{15},$ $\frac{4}{35}\sqrt{21}e^{17} + \frac{2}{35}\sqrt{105}e^{25}$	$(\frac{3}{70}, \frac{3}{35}, \frac{4}{7}, -\frac{22}{35}, \frac{9}{70}, \frac{43}{70}, \frac{6}{35}, \frac{3}{14})$ $+ \frac{3}{35}\sqrt{266}e^3 \otimes e_4$	{13, 146, 3568, 458}
8421:14	$0, 0, 0, 0, \frac{38}{2741}\sqrt{255}e^{12}, \frac{19}{2741}\sqrt{2626}e^{13}, \frac{19}{2741}\sqrt{1538}e^{15},$ $\frac{19}{2741}\sqrt{1878}e^{17} + \frac{38}{2741}\sqrt{602}e^{25}$	$(\frac{95}{2741}, \frac{190}{2741}, -\frac{266}{2741}, -\frac{627}{2741}, \frac{285}{2741}, -\frac{171}{2741}, \frac{380}{2741}, \frac{475}{2741})$ $+ \frac{418}{2741}\sqrt{7}e^2 \otimes e_6 + \frac{57}{2741}\sqrt{186}e^3 \otimes e_4$	{145678, 367}
8421:14	$0, 0, 0, 0, \frac{9}{328}\sqrt{2}e^{12}, \frac{1}{328}\sqrt{606}e^{13}, \frac{1}{328}\sqrt{390}e^{15},$ $\frac{1}{328}\sqrt{278}e^{17} + \frac{1}{164}\sqrt{165}e^{25}$	$(-\frac{1}{328}, -\frac{1}{164}, -\frac{3}{328}, \frac{3}{41}, -\frac{3}{328}, -\frac{1}{82}, -\frac{1}{82}, \frac{5}{328})$ $+ \frac{1}{328}\sqrt{498}e^3 \otimes e_8 + \frac{1}{328}\sqrt{718}e^2 \otimes e_6$	{145678, 15678, 3467, 367}
8421:14	$0, 0, 0, 0, \frac{9}{328}\sqrt{2}e^{12}, \frac{1}{328}\sqrt{606}e^{13}, \frac{1}{328}\sqrt{390}e^{15},$ $\frac{1}{328}\sqrt{278}e^{17} + \frac{1}{164}\sqrt{165}e^{25}$	$(-\frac{1}{328}, -\frac{1}{164}, -\frac{3}{328}, \frac{3}{41}, -\frac{3}{328}, -\frac{1}{82}, -\frac{1}{82}, -\frac{5}{328})$ $- \frac{1}{328}\sqrt{498}e^3 \otimes e_8 + \frac{1}{328}\sqrt{718}e^2 \otimes e_6$	{145678, 15678, 3467, 367}
8421:14	$0, 0, 0, 0, \frac{76}{1451}\sqrt{51}e^{12}, \frac{19}{1451}\sqrt{906}e^{13}, \frac{114}{1451}\sqrt{5}e^{15},$ $\frac{38}{1451}\sqrt{113}e^{17} + \frac{38}{1451}\sqrt{219}e^{25}$	$(\frac{76}{1451}, \frac{152}{1451}, -\frac{285}{1451}, -\frac{285}{1451}, \frac{228}{1451}, -\frac{209}{1451}, \frac{304}{1451}, \frac{380}{1451})$ $+ \frac{19}{1451}\sqrt{906}e^1 \otimes e_4 + \frac{38}{1451}\sqrt{415}e^2 \otimes e_6$	{15678, 3467}
8421:14	$0, 0, 0, 0, \frac{23}{2111}\sqrt{894}e^{12}, \frac{23}{2111}\sqrt{1398}e^{13}, \frac{276}{2111}\sqrt{7}e^{15},$ $\frac{92}{2111}\sqrt{59}e^{17} + \frac{161}{2111}\sqrt{42}e^{25}$	$(\frac{46}{2111}, \frac{92}{2111}, -\frac{483}{2111}, \frac{759}{2111}, \frac{138}{2111}, -\frac{437}{2111}, \frac{184}{2111}, \frac{230}{2111})$ $+ \frac{1196}{2111}e^2 \otimes e_6 + \frac{23}{2111}\sqrt{1086}e^4 \otimes e_8$	{15678, 3467}
8421:14	$0, 0, 0, 0, \frac{36}{1007}\sqrt{143}e^{12}, \frac{240}{1007}\sqrt{11}e^{13}, \frac{12}{1007}\sqrt{2167}e^{15},$ $\frac{132}{1007}\sqrt{11}e^{17} + \frac{12}{53}\sqrt{11}e^{25}$	$(-\frac{37}{1007}, -\frac{74}{1007}, \frac{607}{1007}, \frac{170}{1007}, -\frac{111}{1007}, \frac{30}{53}, -\frac{148}{1007}, -\frac{185}{1007})$ $+ \frac{36}{1007}\sqrt{1023}e^3 \otimes e_8$	{123457, 12357, 2478, 278}
8421:15	$0, 0, 0, 0, \frac{34}{1617}\sqrt{319}e^{12}, \frac{34}{1617}\sqrt{670}e^{13}, \frac{34}{1617}\sqrt{83}e^{25},$ $\frac{34}{1617}\sqrt{74}e^{15} + \frac{34}{1617}\sqrt{462}e^{27}$	$(-\frac{34}{539}, -\frac{17}{539}, \frac{323}{1617}, \frac{799}{1617}, -\frac{51}{539}, \frac{221}{1617}, -\frac{68}{539}, -\frac{85}{539})$ $+ \frac{136}{1617}\sqrt{39}e^4 \otimes e_6 + \frac{34}{1617}\sqrt{818}e^3 \otimes e_8$	{12568, 134}
8421:15	$0, 0, 0, 0, \frac{14}{1453}\sqrt{57}e^{12}, \frac{14}{1453}\sqrt{682}e^{13}, \frac{14}{1453}\sqrt{533}e^{25},$ $\frac{28}{1453}\sqrt{134}e^{15} + \frac{28}{1453}\sqrt{138}e^{27}$	$(\frac{70}{1453}, \frac{35}{1453}, -\frac{133}{1453}, -\frac{231}{1453}, \frac{105}{1453}, -\frac{63}{1453}, \frac{140}{1453}, \frac{175}{1453})$ $+ \frac{14}{1453}\sqrt{390}e^3 \otimes e_4 + \frac{28}{1453}\sqrt{226}e^2 \otimes e_6$	{12358, 146}
8421:15	$0, 0, 0, 0, \frac{75}{1169}\sqrt{118}e^{12}, \frac{25}{1169}\sqrt{542}e^{13}, \frac{75}{1169}\sqrt{34}e^{25},$ $\frac{50}{1169}\sqrt{291}e^{15} + \frac{50}{1169}\sqrt{165}e^{27}$	$(\frac{150}{1169}, \frac{75}{1169}, -\frac{475}{1169}, \frac{300}{1169}, \frac{225}{1169}, -\frac{325}{1169}, \frac{300}{1169}, \frac{375}{1169})$ $+ \frac{25}{1169}\sqrt{1738}e^1 \otimes e_3 + \frac{25}{1169}\sqrt{354}e^4 \otimes e_6$	{234578, 347}
8421:15	$0, 0, 0, 0, \frac{6}{1025}\sqrt{9353}e^{12}, \frac{6}{1025}\sqrt{1194}e^{13}, \frac{6}{1025}\sqrt{8557}e^{25},$ $\frac{8}{1025}\sqrt{27462}e^{15} + \frac{8}{1025}\sqrt{6567}e^{27}$	$(\frac{78}{1025}, \frac{39}{1025}, \frac{23}{41}, -\frac{619}{1025}, \frac{117}{1025}, \frac{653}{1025}, \frac{156}{1025}, \frac{39}{205})$ $+ \frac{6}{1025}\sqrt{54526}e^3 \otimes e_4$	{12358, 124568, 13, 146}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:15	$0, 0, 0, 0, \frac{1}{42}\sqrt{14}e^{12}, \frac{1}{42}\sqrt{238}e^{13}, \frac{1}{42}\sqrt{266}e^{25},$ $\frac{1}{6}\sqrt{2}e^{15} + \frac{1}{21}\sqrt{105}e^{27}$	$(0, 0, \frac{1}{3}, -\frac{1}{3}, 0, \frac{1}{3}, 0, 0)$ $+ \frac{1}{21}\sqrt{119}e^3 \otimes e_8 + \frac{1}{42}\sqrt{546}e^2 \otimes e_4$	{1237, 145678}
8421:15	$0, 0, 0, 0, \frac{4}{87}\sqrt{29}e^{12}, \frac{1}{87}\sqrt{1102}e^{13}, \frac{2}{87}\sqrt{58}e^{25},$ $\frac{2}{87}\sqrt{319}e^{15} + \frac{2}{87}\sqrt{87}e^{27}$	$(0, 0, \frac{1}{3}, -\frac{1}{3}, 0, \frac{1}{3}, 0, 0)$ $+ \frac{1}{87}\sqrt{2262}e^1 \otimes e_4 + \frac{2}{87}\sqrt{551}e^3 \otimes e_8$	{1268, 135}
8421:15	$0, 0, 0, 0, \frac{6}{257}\sqrt{47}e^{12}, \frac{2}{257}\sqrt{705}e^{13}, \frac{6}{257}\sqrt{94}e^{25},$ $\frac{4}{257}\sqrt{2397}e^{15} + \frac{16}{257}\sqrt{141}e^{27}$	$(-\frac{10}{257}, -\frac{5}{257}, \frac{55}{257}, 1, -\frac{15}{257}, \frac{45}{257}, -\frac{20}{257}, -\frac{25}{257})$ $+ \frac{6}{257}\sqrt{3243}e^4 \otimes e_8$	{1234567, 12457, 13678, 178}
8421:15	$0, 0, 0, 0, \frac{2}{305}\sqrt{15222}e^{12}, \frac{2}{305}\sqrt{9718}e^{13}, \frac{12}{305}\sqrt{129}e^{25},$ $\frac{2}{305}\sqrt{16770}e^{15} + \frac{2}{305}\sqrt{9718}e^{27}$	$(\frac{46}{305}, \frac{23}{305}, -\frac{126}{305}, \frac{33}{305}, \frac{69}{305}, -\frac{16}{61}, \frac{92}{305}, \frac{23}{61})$ $+ \frac{8}{305}\sqrt{1462}e^1 \otimes e_3$	{234578, 23578, 347, 37}
8421:15	$0, 0, 0, 0, \frac{11}{359}\sqrt{303}e^{12}, \frac{11}{359}\sqrt{141}e^{13}, \frac{11}{359}\sqrt{51}e^{25},$ $\frac{11}{359}\sqrt{195}e^{15} + \frac{55}{359}\sqrt{2}e^{27}$	$(\frac{44}{359}, \frac{22}{359}, -\frac{77}{359}, -\frac{99}{359}, \frac{66}{359}, -\frac{33}{359}, \frac{88}{359}, \frac{110}{359})$ $+ \frac{11}{359}\sqrt{273}e^2 \otimes e_4 + \frac{11}{359}\sqrt{370}e^1 \otimes e_3$	{1278, 1457}
8421:15	$0, 0, 0, 0, \frac{10}{241}\sqrt{3}e^{12}, \frac{20}{241}\sqrt{22}e^{13}, \frac{10}{241}\sqrt{89}e^{25},$ $\frac{20}{241}\sqrt{17}e^{15} + \frac{10}{241}\sqrt{102}e^{27}$	$(\frac{10}{241}, \frac{5}{241}, -\frac{55}{241}, \frac{75}{241}, \frac{15}{241}, -\frac{45}{241}, \frac{20}{241}, \frac{25}{241})$ $+ \frac{10}{241}\sqrt{166}e^2 \otimes e_6 + \frac{10}{241}\sqrt{42}e^4 \otimes e_8$	{12347, 15678}
8421:15	$0, 0, 0, 0, \frac{6}{1025}\sqrt{9353}e^{12}, \frac{6}{205}\sqrt{1194}e^{13}, \frac{6}{1025}\sqrt{8557}e^{25},$ $\frac{4}{1025}\sqrt{27462}e^{15} + \frac{8}{1025}\sqrt{6567}e^{27}$	$(\frac{78}{1025}, \frac{39}{1025}, -\frac{247}{1025}, 1, \frac{117}{1025}, -\frac{169}{1025}, \frac{156}{1025}, \frac{39}{205})$ $+ \frac{6}{1025}\sqrt{54526}e^4 \otimes e_6$	{123458, 12568, 134, 16}
8421:15	$0, 0, 0, 0, \frac{34}{1571}\sqrt{93}e^{12}, \frac{153}{1571}\sqrt{14}e^{13}, \frac{34}{1571}\sqrt{254}e^{25},$ $\frac{34}{1571}\sqrt{158}e^{15} + \frac{34}{1571}\sqrt{223}e^{27}$	$(\frac{136}{1571}, \frac{68}{1571}, -\frac{357}{1571}, -\frac{153}{1571}, \frac{204}{1571}, -\frac{221}{1571}, \frac{272}{1571}, \frac{340}{1571})$ $+ \frac{187}{1571}\sqrt{6}e^1 \otimes e_4 + \frac{34}{1571}\sqrt{499}e^2 \otimes e_6$	{1237, 15678}
8421:15	$0, 0, 0, 0, \frac{24}{511}\sqrt{274}e^{12}, \frac{2}{511}\sqrt{7809}e^{13}, \frac{3}{511}\sqrt{3562}e^{25},$ $\frac{1}{511}\sqrt{168510}e^{15} + \frac{1}{511}\sqrt{84666}e^{27}$	$(\frac{76}{511}, \frac{38}{511}, \frac{50}{511}, -\frac{335}{511}, \frac{114}{511}, \frac{18}{73}, \frac{152}{511}, \frac{190}{511})$ $+ \frac{3}{511}\sqrt{38634}e^1 \otimes e_4$	{2345678, 24578, 3467, 47}
8421:15	$0, 0, 0, 0, \frac{3}{11}\sqrt{2}e^{12}, \frac{1}{11}\sqrt{38}e^{13}, \frac{4}{11}\sqrt{2}e^{25},$ $\frac{2}{11}\sqrt{11}e^{15} + \frac{1}{11}\sqrt{38}e^{27}$	$(0, 0, -\frac{1}{11}, \frac{3}{11}, 0, -\frac{1}{11}, 0, 0)$ $+ \frac{1}{11}\sqrt{30}e^1 \otimes e_3 + \frac{1}{11}\sqrt{46}e^2 \otimes e_6$	{123458, 12358}
8421:15	$0, 0, 0, 0, \frac{18}{269}\sqrt{62}e^{12}, \frac{2}{269}\sqrt{1581}e^{13}, \frac{36}{269}\sqrt{31}e^{25},$ $\frac{2}{269}\sqrt{5115}e^{15} + \frac{6}{269}\sqrt{930}e^{27}$	$(\frac{34}{269}, \frac{17}{269}, \frac{33}{269}, -\frac{169}{269}, \frac{51}{269}, \frac{67}{269}, \frac{68}{269}, \frac{85}{269})$ $+ \frac{6}{269}\sqrt{2263}e^2 \otimes e_4$	{1237, 1267, 134578, 145678}
8421:15	$0, 0, 0, 0, \frac{6}{359}\sqrt{47}e^{12}, \frac{2}{359}\sqrt{7802}e^{13}, \frac{26}{359}\sqrt{47}e^{25},$ $\frac{4}{359}\sqrt{1739}e^{15} + \frac{2}{359}\sqrt{7802}e^{27}$	$(\frac{30}{359}, \frac{15}{359}, -\frac{109}{359}, \frac{57}{359}, \frac{45}{359}, -\frac{79}{359}, \frac{60}{359}, \frac{75}{359})$ $+ \frac{2}{359}\sqrt{14194}e^2 \otimes e_6$	{12347, 1237, 145678, 15678}
8421:15	$0, 0, 0, 0, \frac{2}{27}\sqrt{55}e^{12}, \frac{2}{27}\sqrt{110}e^{13}, \frac{2}{27}\sqrt{11}e^{25},$ $\frac{2}{27}\sqrt{22}e^{15} + \frac{2}{27}\sqrt{110}e^{27}$	$(-\frac{2}{27}, -\frac{1}{27}, \frac{17}{27}, \frac{5}{27}, -\frac{1}{9}, \frac{5}{9}, -\frac{4}{27}, -\frac{5}{27})$ $+ \frac{22}{27}\sqrt{2}e^3 \otimes e_8$	{23467, 2367, 4578, 578}
8421:15	$0, 0, 0, 0, \frac{156}{581}\sqrt{3}e^{12}, \frac{13}{581}\sqrt{321}e^{13}, \frac{13}{581}\sqrt{177}e^{25},$ $\frac{13}{581}\sqrt{618}e^{15} + \frac{13}{581}\sqrt{194}e^{27}$	$(\frac{26}{581}, \frac{13}{581}, -\frac{143}{581}, \frac{234}{581}, \frac{39}{581}, -\frac{117}{581}, \frac{52}{581}, \frac{65}{581})$ $+ \frac{13}{581}\sqrt{381}e^4 \otimes e_8 + \frac{13}{581}\sqrt{694}e^1 \otimes e_3$	{23578, 347}
8421:16	$0, 0, 0, 0, \frac{46}{1233}\sqrt{127}e^{12}, \frac{92}{1233}\sqrt{51}e^{13}, \frac{322}{1233}\sqrt{7}e^{15},$ $\frac{46}{137}\sqrt{5}e^{17} + \frac{46}{1233}\sqrt{59}e^{36}$	$(\frac{136}{411}, -\frac{650}{1233}, \frac{83}{1233}, \frac{76}{411}, -\frac{242}{1233}, \frac{491}{1233}, \frac{166}{1233}, \frac{574}{1233})$ $+ \frac{46}{1233}\sqrt{1005}e^1 \otimes e_2$	{1347, 137, 1467, 167}
8421:16	$0, 0, 0, 0, \frac{38}{1773}\sqrt{157}e^{12}, \frac{38}{1773}\sqrt{114}e^{13}, \frac{38}{1773}\sqrt{319}e^{15},$ $\frac{38}{197}\sqrt{7}e^{17} + \frac{38}{1773}\sqrt{115}e^{36}$	$(\frac{76}{591}, -\frac{494}{1773}, -\frac{19}{1773}, \frac{304}{591}, -\frac{266}{1773}, \frac{209}{1773}, -\frac{38}{1773}, \frac{190}{1773})$ $+ \frac{38}{1773}\sqrt{861}e^1 \otimes e_2 + \frac{38}{591}\sqrt{78}e^4 \otimes e_8$	{2346, 24}
8421:16	$0, 0, 0, 0, \frac{1}{649}\sqrt{145722}e^{12}, \frac{7}{649}\sqrt{978}e^{13}, \frac{20}{649}\sqrt{489}e^{15},$ $\frac{3}{649}\sqrt{16626}e^{17} + \frac{4}{649}\sqrt{489}e^{36}$	$(\frac{98}{649}, -\frac{20}{649}, \frac{8}{59}, -\frac{391}{649}, \frac{78}{649}, \frac{186}{649}, \frac{16}{59}, \frac{274}{649})$ $+ \frac{4}{649}\sqrt{31785}e^1 \otimes e_4$	{1237, 1267, 2345678, 24578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:16	$0, 0, 0, 0, \frac{6}{1277}\sqrt{24013e^{12}}, \frac{354}{1277}\sqrt{3e^{13}}, \frac{6}{1277}\sqrt{8437e^{15}},$ $\frac{6}{1277}\sqrt{13747e^{17}} + \frac{12}{1277}\sqrt{5133e^{36}}$	$(-\frac{354}{1277}, \frac{870}{1277}, \frac{81}{1277}, \frac{252}{1277}, \frac{516}{1277}, -\frac{273}{1277}, \frac{162}{1277}, -\frac{192}{1277})$ $+ \frac{30}{1277}\sqrt{2419e^2} \otimes e_8$	{123467, 12367, 1247, 127}
8421:16	$0, 0, 0, 0, \frac{130}{617}\sqrt{3e^{12}}, \frac{50}{617}\sqrt{3e^{13}}, \frac{10}{617}\sqrt{381e^{15}},$ $\frac{90}{617}\sqrt{5e^{17}} + \frac{20}{617}\sqrt{51e^{36}}$	$(-\frac{50}{617}, \frac{170}{617}, \frac{35}{617}, -\frac{200}{617}, \frac{120}{617}, -\frac{15}{617}, \frac{70}{617}, \frac{20}{617})$ $+ \frac{10}{617}\sqrt{834e^1} \otimes e_4 + \frac{30}{617}\sqrt{87e^2} \otimes e_8$	{12367, 127}
8421:16	$0, 0, 0, 0, \frac{44}{293}\sqrt{3e^{12}}, \frac{11}{879}\sqrt{1698e^{13}}, \frac{11}{879}\sqrt{390e^{15}},$ $\frac{11}{879}\sqrt{222e^{17}} + \frac{22}{293}\sqrt{26e^{36}}$	$(\frac{55}{293}, -\frac{66}{293}, \frac{22}{293}, -\frac{99}{293}, -\frac{11}{293}, \frac{77}{293}, \frac{44}{293}, \frac{99}{293})$ $+ \frac{11}{879}\sqrt{2406e^3} \otimes e_4 + \frac{22}{879}\sqrt{561e^4} \otimes e_2$	{236, 24}
8421:16	$0, 0, 0, 0, \frac{1}{27}\sqrt{22e^{12}}, \frac{4}{27}\sqrt{33e^{13}}, \frac{1}{27}\sqrt{110e^{15}},$ $\frac{2}{27}\sqrt{66e^{17}} + \frac{22}{27}e^{36}$	$(\frac{1}{18}, \frac{5}{27}, \frac{4}{27}, -\frac{2}{3}, \frac{13}{54}, \frac{11}{54}, \frac{8}{27}, \frac{19}{54})$ $+ \frac{1}{9}\sqrt{110e^3} \otimes e_4$	{123578, 1245678, 2367, 247}
8421:16	$0, 0, 0, 0, \frac{2}{621}\sqrt{1342e^{12}}, \frac{2}{621}\sqrt{10065e^{13}}, \frac{2}{621}\sqrt{17446e^{15}},$ $\frac{4}{621}\sqrt{14091e^{17}} + \frac{1}{621}\sqrt{202642e^{36}}$	$(-\frac{20}{207}, \frac{130}{621}, \frac{5}{621}, 1, \frac{70}{621}, -\frac{55}{621}, \frac{10}{621}, -\frac{50}{621})$ $+ \frac{11}{207}\sqrt{610e^4} \otimes e_8$	{13467, 147, 3578, 5678}
8421:16	$0, 0, 0, 0, \frac{66}{2741}\sqrt{193e^{12}}, \frac{33}{2741}\sqrt{870e^{13}}, \frac{33}{2741}\sqrt{62e^{15}},$ $\frac{33}{2741}\sqrt{170e^{17}} + \frac{66}{2741}\sqrt{471e^{36}}$	$(-\frac{363}{2741}, \frac{1122}{2741}, \frac{198}{2741}, -\frac{891}{2741}, \frac{759}{2741}, -\frac{165}{2741}, \frac{396}{2741}, \frac{33}{2741})$ $+ \frac{66}{2741}\sqrt{583e^2} \otimes e_8 + \frac{99}{2741}\sqrt{274e^3} \otimes e_4$	{13578, 145678}
8421:16	$0, 0, 0, 0, \frac{2}{61}\sqrt{851e^{12}}, \frac{4}{61}\sqrt{37e^{13}}, \frac{1}{61}\sqrt{814e^{15}},$ $\frac{4}{61}\sqrt{37e^{17}} + \frac{1}{61}\sqrt{814e^{36}}$	$(-\frac{8}{61}, \frac{38}{61}, \frac{11}{61}, -\frac{36}{61}, \frac{30}{61}, \frac{3}{61}, \frac{22}{61}, \frac{14}{61})$ $+ \frac{1}{61}\sqrt{7178e^2} \otimes e_4$	{13456, 145, 348, 468}
8421:17	$0, 0, 0, 0, \frac{13}{51}\sqrt{6e^{12}}, \frac{1}{51}\sqrt{78e^{13}}, \frac{1}{51}\sqrt{1326e^{25}},$ $\frac{13}{51}\sqrt{6e^{27}} + \frac{1}{51}\sqrt{78e^{36}}$	$(-\frac{2}{51}, \frac{8}{51}, \frac{4}{17}, -\frac{31}{51}, \frac{2}{17}, \frac{10}{51}, \frac{14}{51}, \frac{22}{51})$ $+ \frac{1}{51}\sqrt{3198e^2} \otimes e_4$	{1345678, 14578, 34, 46}
8421:17	$0, 0, 0, 0, \frac{2}{377}\sqrt{20301e^{12}}, \frac{4}{377}\sqrt{4623e^{13}}, \frac{1}{377}\sqrt{21306e^{25}},$ $\frac{6}{377}\sqrt{402e^{27}} + \frac{1}{377}\sqrt{26130e^{36}}$	$(\frac{184}{377}, -\frac{30}{377}, -\frac{45}{377}, -\frac{218}{377}, \frac{154}{377}, \frac{139}{377}, \frac{124}{377}, \frac{94}{377})$ $+ \frac{1}{377}\sqrt{239190e^1} \otimes e_4$	{12378, 12678, 23456, 245}
8421:17	$0, 0, 0, 0, \frac{2}{301}\sqrt{1507e^{12}}, \frac{4}{301}\sqrt{3562e^{13}}, \frac{4}{301}\sqrt{685e^{25}},$ $\frac{2}{301}\sqrt{1507e^{27}} + \frac{4}{301}\sqrt{3562e^{36}}$	$(-\frac{33}{301}, \frac{62}{301}, \frac{93}{301}, -\frac{181}{301}, \frac{29}{301}, \frac{60}{301}, \frac{13}{43}, \frac{153}{301})$ $+ \frac{2}{301}\sqrt{33017e^3} \otimes e_4$	{138, 1468, 3567, 457}
8421:17	$0, 0, 0, 0, \frac{6}{377}\sqrt{402e^{12}}, \frac{1}{377}\sqrt{26130e^{13}}, \frac{1}{377}\sqrt{21306e^{25}},$ $\frac{2}{377}\sqrt{20301e^{27}} + \frac{4}{377}\sqrt{4623e^{36}}$	$(\frac{5}{29}, -\frac{30}{377}, -\frac{45}{377}, 1, \frac{35}{377}, \frac{20}{377}, \frac{5}{377}, -\frac{25}{377})$ $+ \frac{1}{377}\sqrt{239190e^4} \otimes e_8$	{12358, 12568, 23467, 247}
8421:18	$0, 0, 0, 0, \frac{94}{1901}\sqrt{71e^{12}}, \frac{141}{1901}\sqrt{210e^{13}}, \frac{47}{1901}\sqrt{662e^{15}},$ $\frac{47}{1901}\sqrt{390e^{17}} + \frac{94}{1901}\sqrt{186e^{25}} + \frac{94}{1901}\sqrt{133e^{34}}$	$(\frac{47}{1901}, \frac{94}{1901}, \frac{1222}{1901}, -\frac{987}{1901}, \frac{141}{1901}, \frac{1269}{1901}, \frac{188}{1901}, \frac{235}{1901})$ $+ \frac{47}{1901}\sqrt{3154e^3} \otimes e_4$	{13, 146}
8421:18	$0, 0, 0, 0, \frac{11}{461}\sqrt{246e^{12}}, \frac{55}{461}\sqrt{22e^{13}}, \frac{11}{461}\sqrt{365e^{15}},$ $\frac{11}{461}\sqrt{366e^{17}} + \frac{22}{461}\sqrt{158e^{25}} + \frac{99}{461}\sqrt{3e^{34}}$	$(\frac{11}{461}, \frac{22}{461}, -\frac{110}{461}, \frac{165}{461}, \frac{33}{461}, -\frac{99}{461}, \frac{44}{461}, \frac{55}{461})$ $+ \frac{11}{461}\sqrt{835e^2} \otimes e_6$	{15678, 367}
8421:19	$0, 0, 0, 0, \frac{47}{727}\sqrt{302e^{12}}, \frac{94}{2181}\sqrt{365e^{13}}, \frac{47}{2181}\sqrt{574e^{25}},$ $\frac{329}{727}\sqrt{2e^{15}} + \frac{47}{2181}\sqrt{286e^{27}} + \frac{47}{2181}\sqrt{1166e^{34}}$	$(\frac{94}{727}, \frac{47}{727}, -\frac{893}{2181}, \frac{1598}{2181}, \frac{141}{727}, -\frac{611}{2181}, \frac{188}{727}, \frac{235}{727})$ $+ \frac{47}{2181}\sqrt{3522e^4} \otimes e_6$	{134, 16}
8421:19	$0, 0, 0, 0, \frac{49}{111}\sqrt{2e^{12}}, \frac{245}{2109}\sqrt{82e^{13}}, \frac{98}{2109}\sqrt{127e^{25}},$ $\frac{98}{2109}\sqrt{183e^{15}} + \frac{98}{2109}\sqrt{227e^{27}} + \frac{49}{2109}\sqrt{478e^{34}}$	$(\frac{98}{2109}, \frac{49}{2109}, \frac{441}{703}, -\frac{1078}{2109}, \frac{49}{703}, \frac{1421}{2109}, \frac{196}{2109}, \frac{245}{2109})$ $+ \frac{49}{2109}\sqrt{3426e^3} \otimes e_4$	{13, 146}
8421:19	$0, 0, 0, 0, \frac{7}{733}\sqrt{102e^{12}}, \frac{196}{733}\sqrt{3e^{13}}, \frac{28}{733}\sqrt{129e^{25}},$ $\frac{7}{733}\sqrt{1794e^{15}} + \frac{196}{733}\sqrt{3e^{27}} + \frac{28}{733}\sqrt{762e^{34}}$	$(\frac{28}{733}, \frac{14}{733}, -\frac{161}{733}, \frac{231}{733}, \frac{42}{733}, -\frac{133}{733}, \frac{56}{733}, \frac{70}{733})$ $+ \frac{7}{733}\sqrt{3774e^2} \otimes e_6$	{123458, 146}
8421:20	$0, 0, 0, 0, \frac{3}{47}\sqrt{66e^{12}}, \frac{1}{47}\sqrt{858e^{13}} + \frac{12}{47}\sqrt{11e^{24}}, \frac{4}{47}\sqrt{33e^{15}},$ $\frac{12}{47}\sqrt{11e^{17}} + \frac{3}{47}\sqrt{22e^{25}}$	$(-\frac{2}{47}, -\frac{4}{47}, \frac{21}{47}, \frac{23}{47}, -\frac{6}{47}, \frac{19}{47}, -\frac{8}{47}, -\frac{10}{47})$ $+ \frac{3}{47}\sqrt{286e^4} \otimes e_8$	{123568, 234}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:20	$0, 0, 0, 0, \frac{15}{119}\sqrt{2}e^{12}, \frac{15}{119}\sqrt{46}e^{13} + \frac{5}{119}\sqrt{237}e^{24}, \frac{45}{119}\sqrt{3}e^{15},$ $\frac{5}{119}\sqrt{30}e^{17} + \frac{10}{119}\sqrt{102}e^{25}$	$(-\frac{5}{119}, -\frac{10}{119}, \frac{50}{119}, \frac{55}{119}, -\frac{15}{119}, \frac{45}{119}, -\frac{20}{119}, -\frac{25}{119})$ $+ \frac{15}{119}\sqrt{69}e^3 \otimes e_8$	{134, 458}
8421:20	$0, 0, 0, 0, \frac{9}{125}\sqrt{17}e^{12}, \frac{3}{125}\sqrt{438}e^{13} + \frac{3}{125}\sqrt{255}e^{24}, \frac{3}{25}\sqrt{21}e^{15},$ $\frac{3}{125}\sqrt{474}e^{17} + \frac{9}{125}\sqrt{43}e^{25}$	$(\frac{6}{125}, \frac{12}{125}, -\frac{21}{125}, -\frac{27}{125}, \frac{18}{125}, -\frac{3}{25}, \frac{24}{125}, \frac{6}{25})$ $+ \frac{9}{125}\sqrt{73}e^1 \otimes e_3$	{1247, 234578}
8421:20	$0, 0, 0, 0, \frac{3}{14}\sqrt{11}e^{12}, \frac{1}{14}\sqrt{51}e^{13} + \frac{3}{14}\sqrt{10}e^{24}, \frac{1}{14}\sqrt{57}e^{15},$ $\frac{3}{14}\sqrt{10}e^{17} + \frac{3}{14}\sqrt{15}e^{25}$	$(\frac{1}{14}, \frac{1}{7}, -\frac{3}{14}, -\frac{2}{7}, \frac{3}{14}, -\frac{1}{7}, \frac{2}{7}, \frac{5}{14})$ $+ \frac{3}{14}\sqrt{17}e^2 \otimes e_4$	{134578, 47}
8421:22	$0, 0, 0, 0, \frac{30}{89}\sqrt{3}e^{12}, \frac{6}{89}\sqrt{55}e^{13}, \frac{6}{89}\sqrt{30}e^{25},$ $\frac{6}{89}\sqrt{130}e^{16} + \frac{6}{89}\sqrt{130}e^{27}$	$(-\frac{4}{89}, \frac{1}{89}, \frac{7}{89}, 1, -\frac{3}{89}, \frac{3}{89}, -\frac{2}{89}, -\frac{1}{89})$ $+ \frac{6}{89}\sqrt{355}e^4 \otimes e_8$	{12358, 146, 247, 35678}
8421:22	$0, 0, 0, 0, \frac{94}{475}\sqrt{11}e^{12}, \frac{2}{475}\sqrt{3102}e^{13}, \frac{2}{475}\sqrt{9823}e^{25},$ $\frac{2}{1425}\sqrt{96162}e^{16} + \frac{44}{475}\sqrt{47}e^{27}$	$(\frac{26}{475}, \frac{131}{1425}, \frac{21}{95}, -\frac{301}{475}, \frac{11}{75}, \frac{131}{475}, \frac{68}{285}, \frac{157}{475})$ $+ \frac{4}{1425}\sqrt{150447}e^2 \otimes e_4$	{127, 1345678, 2358, 46}
8421:22	$0, 0, 0, 0, \frac{14}{289}\sqrt{123}e^{12}, \frac{8}{289}\sqrt{615}e^{13}, \frac{2}{289}\sqrt{2337}e^{25},$ $\frac{2}{289}\sqrt{10947}e^{16} + \frac{18}{289}\sqrt{41}e^{27}$	$(\frac{71}{289}, \frac{16}{289}, -\frac{23}{289}, \frac{175}{289}, \frac{87}{289}, \frac{48}{289}, \frac{103}{289}, \frac{7}{17})$ $+ \frac{4}{289}\sqrt{7134}e^1 \otimes e_4$	{12378, 1567, 245, 3468}
8421:22	$0, 0, 0, 0, \frac{33}{233}\sqrt{3}e^{12}, \frac{11}{466}\sqrt{42}e^{13}, \frac{11}{466}\sqrt{78}e^{25},$ $\frac{33}{233}\sqrt{15}e^{16} + \frac{11}{233}\sqrt{34}e^{27}$	$(\frac{44}{233}, -\frac{11}{233}, -\frac{77}{233}, \frac{132}{233}, \frac{33}{233}, -\frac{33}{233}, \frac{22}{233}, \frac{11}{233})$ $+ \frac{11}{233}\sqrt{202}e^1 \otimes e_3 + \frac{11}{466}\sqrt{822}e^4 \otimes e_8$	{12467, 23568}
8421:22	$0, 0, 0, 0, \frac{444}{3449}\sqrt{15}e^{12}, \frac{37}{3449}\sqrt{438}e^{13}, \frac{814}{3449}\sqrt{3}e^{25},$ $\frac{37}{3449}\sqrt{186}e^{16} + \frac{37}{3449}\sqrt{670}e^{27}$	$(\frac{740}{3449}, \frac{37}{3449}, -\frac{629}{3449}, -\frac{1332}{3449}, \frac{777}{3449}, \frac{111}{3449}, \frac{814}{3449}, \frac{851}{3449})$ $+ \frac{111}{3449}\sqrt{390}e^2 \otimes e_4 + \frac{37}{3449}\sqrt{2542}e^1 \otimes e_3$	{14578, 34}
8421:22	$0, 0, 0, 0, \frac{2}{353}\sqrt{7881}e^{12}, \frac{2}{353}\sqrt{27690}e^{13}, \frac{10}{353}\sqrt{213}e^{25},$ $\frac{4}{353}\sqrt{1491}e^{16} + \frac{4}{353}\sqrt{1491}e^{27}$	$(-\frac{46}{353}, \frac{59}{353}, \frac{223}{353}, -\frac{203}{353}, \frac{13}{353}, \frac{177}{353}, \frac{72}{353}, \frac{131}{353})$ $+ \frac{2}{353}\sqrt{59214}e^3 \otimes e_4$	{12358, 146, 247, 35678}
8421:22	$0, 0, 0, 0, \frac{18}{1373}\sqrt{3595}e^{12}, \frac{8}{1373}\sqrt{2157}e^{13}, \frac{2}{1373}\sqrt{62553}e^{25},$ $\frac{2}{1373}\sqrt{273939}e^{16} + \frac{10}{1373}\sqrt{5033}e^{27}$	$(\frac{635}{1373}, -\frac{56}{1373}, -\frac{803}{1373}, \frac{261}{1373}, \frac{579}{1373}, -\frac{168}{1373}, \frac{523}{1373}, \frac{467}{1373})$ $+ \frac{4}{1373}\sqrt{199882}e^1 \otimes e_3$	{12478, 1278, 2345, 235}
8421:23	$0, 0, 0, 0, \frac{1}{14}\sqrt{33}e^{12}, \frac{1}{28}\sqrt{30}e^{34}, \frac{1}{28}\sqrt{30}e^{15},$ $\frac{1}{14}\sqrt{6}e^{17} + \frac{3}{14}\sqrt{6}e^{36}$	$(-\frac{1}{7}, \frac{3}{7}, \frac{1}{7}, -\frac{2}{7}, \frac{2}{7}, -\frac{1}{7}, \frac{1}{7}, 0)$ $+ \frac{1}{28}\sqrt{330}e^2 \otimes e_8 + \frac{3}{14}\sqrt{7}e^3 \otimes e_4$	{12367, 14568}
8421:23	$0, 0, 0, 0, \frac{4}{81}\sqrt{7}e^{12}, \frac{1}{27}\sqrt{42}e^{34}, \frac{2}{81}\sqrt{427}e^{15},$ $\frac{4}{81}\sqrt{30}e^{17} + \frac{1}{81}\sqrt{826}e^{36}$	$(\frac{7}{27}, -\frac{28}{81}, \frac{28}{81}, -\frac{7}{27}, -\frac{7}{81}, \frac{7}{81}, \frac{14}{81}, \frac{35}{81})$ $+ \frac{1}{81}\sqrt{2814}e^3 \otimes e_4 + \frac{1}{81}\sqrt{3990}e^1 \otimes e_2$	{1367, 236}
8421:23	$0, 0, 0, 0, \frac{2}{555}\sqrt{8283}e^{12}, \frac{4}{185}\sqrt{251}e^{34}, \frac{2}{555}\sqrt{46435}e^{15},$ $\frac{2}{185}\sqrt{5773}e^{17} + \frac{2}{555}\sqrt{8283}e^{36}$	$(\frac{196}{555}, -\frac{102}{185}, \frac{7}{37}, \frac{24}{185}, -\frac{22}{111}, \frac{59}{185}, \frac{86}{555}, \frac{94}{185})$ $+ \frac{2}{555}\sqrt{112197}e^1 \otimes e_2$	{1347, 1467, 234, 246}
8421:23	$0, 0, 0, 0, \frac{2}{7}\sqrt{6}e^{12}, \frac{1}{7}\sqrt{6}e^{34}, \frac{1}{7}\sqrt{6}e^{15},$ $\frac{2}{7}\sqrt{3}e^{17} + \frac{2}{7}\sqrt{6}e^{36}$	$(-\frac{2}{7}, \frac{5}{7}, -\frac{1}{7}, \frac{1}{7}, \frac{3}{7}, 0, \frac{1}{7}, -\frac{1}{7})$ $+ \frac{1}{7}\sqrt{66}e^2 \otimes e_8$	{12367, 127, 13458, 14568}
8421:23	$0, 0, 0, 0, \frac{2}{111}\sqrt{737}e^{12}, \frac{4}{111}\sqrt{134}e^{34}, \frac{4}{111}\sqrt{134}e^{15},$ $\frac{2}{37}\sqrt{67}e^{17} + \frac{4}{111}\sqrt{670}e^{36}$	$(\frac{14}{111}, \frac{13}{111}, \frac{21}{37}, -\frac{71}{111}, \frac{9}{37}, -\frac{8}{111}, \frac{41}{111}, \frac{55}{111})$ $+ \frac{2}{111}\sqrt{5829}e^3 \otimes e_4$	{124678, 1356, 23567, 468}
8421:28	$0, 0, 0, 0, \frac{7}{82}\sqrt{134}e^{12}, \frac{7}{41}\sqrt{7}e^{13}, \frac{7}{82}\sqrt{31}e^{15},$ $\frac{14}{41}e^{17} + \frac{7}{82}\sqrt{30}e^{24} + \frac{7}{82}\sqrt{37}e^{36}$	$(-\frac{7}{41}, \frac{28}{41}, \frac{7}{41}, -\frac{21}{41}, \frac{21}{41}, 0, \frac{14}{41}, \frac{7}{41})$ $+ \frac{7}{82}\sqrt{263}e^2 \otimes e_4$	{13456, 145}
8421:29	$0, 0, 0, 0, \frac{14}{97}\sqrt{29}e^{12}, \frac{28}{97}\sqrt{7}e^{13}, \frac{7}{97}\sqrt{26}e^{25},$ $\frac{56}{97}e^{14} + \frac{14}{97}\sqrt{2}e^{27} + \frac{35}{97}\sqrt{2}e^{36}$	$(\frac{56}{97}, -\frac{14}{97}, -\frac{21}{97}, -\frac{42}{97}, \frac{42}{97}, \frac{35}{97}, \frac{28}{97}, \frac{14}{97})$ $+ \frac{7}{97}\sqrt{310}e^1 \otimes e_4$	{23456, 245}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8421:30	$0, 0, 0, 0, \frac{9}{211}\sqrt{222}e^{12}, \frac{9}{211}\sqrt{570}e^{13}, \frac{18}{211}\sqrt{21}e^{25},$ $\frac{9}{211}\sqrt{174}e^{16} + \frac{9}{211}\sqrt{174}e^{27} + \frac{9}{211}\sqrt{222}e^{34}$	$(-\frac{45}{211}, \frac{36}{211}, \frac{153}{211}, -\frac{90}{211}, -\frac{9}{211}, \frac{108}{211}, \frac{27}{211}, \frac{63}{211})$ $+ \frac{117}{211}\sqrt{6}e^3 \otimes e_4$	{146, 247}
8421:38	$0, 0, 0, 0, \frac{22}{301}\sqrt{113}e^{12}, \frac{22}{301}\sqrt{22}e^{13}, \frac{11}{301}\sqrt{94}e^{25},$ $\frac{22}{301}\sqrt{122}e^{15} + \frac{44}{301}\sqrt{15}e^{27} + \frac{11}{301}\sqrt{14}e^{36}$	$(\frac{44}{301}, \frac{22}{301}, \frac{33}{301}, -\frac{198}{301}, \frac{66}{301}, \frac{11}{301}, \frac{88}{301}, \frac{110}{301})$ $+ \frac{11}{301}\sqrt{998}e^1 \otimes e_4$	{2345678, 24578}
8421:38	$0, 0, 0, 0, \frac{7}{213}\sqrt{258}e^{12}, \frac{14}{213}\sqrt{21}e^{13}, \frac{14}{213}\sqrt{129}e^{25},$ $\frac{7}{213}\sqrt{30}e^{15} + \frac{14}{213}\sqrt{105}e^{27} + \frac{7}{213}\sqrt{30}e^{36}$	$(\frac{28}{213}, \frac{14}{213}, \frac{7}{213}, -\frac{133}{213}, \frac{14}{213}, \frac{49}{213}, \frac{56}{213}, \frac{70}{213})$ $+ \frac{7}{213}\sqrt{1038}e^2 \otimes e_4$	{134578, 145678}
8421:38	$0, 0, 0, 0, \frac{172}{2481}\sqrt{38}e^{12}, \frac{86}{2481}\sqrt{595}e^{13}, \frac{86}{2481}\sqrt{205}e^{25},$ $\frac{43}{2481}\sqrt{1570}e^{15} + \frac{43}{2481}\sqrt{334}e^{27} + \frac{43}{2481}\sqrt{2066}e^{36}$	$(\frac{344}{2481}, \frac{172}{2481}, \frac{86}{2481}, -\frac{1591}{2481}, \frac{172}{2481}, \frac{602}{2481}, \frac{688}{2481}, \frac{860}{2481})$ $+ \frac{86}{2481}\sqrt{1018}e^3 \otimes e_4$	{12358, 124568}
8421:43	$0, 0, 0, 0, \frac{13}{141}\sqrt{26}e^{12}, \frac{26}{141}\sqrt{5}e^{34}, \frac{13}{141}\sqrt{26}e^{15},$ $\frac{13}{47}\sqrt{2}e^{17} + \frac{13}{47}\sqrt{2}e^{25} + \frac{13}{141}\sqrt{106}e^{36}$	$(\frac{13}{141}, \frac{26}{141}, \frac{26}{47}, -\frac{91}{141}, \frac{13}{47}, -\frac{13}{141}, \frac{52}{141}, \frac{65}{141})$ $+ \frac{13}{141}\sqrt{222}e^3 \otimes e_4$	{1356, 468}
842:1	$0, 0, 0, 0, \frac{6}{13}\sqrt{3}e^{12}, \frac{2}{13}\sqrt{3}e^{13}, \frac{2}{13}\sqrt{3}e^{15}, \frac{6}{13}\sqrt{3}e^{25}$	$(-\frac{1}{13}, \frac{4}{13}, \frac{3}{13}, -\frac{8}{13}, \frac{3}{13}, \frac{2}{13}, \frac{2}{13}, \frac{7}{13})$ $+ \frac{6}{13}\sqrt{7}e^2 \otimes e_4$	{12368, 128, 1345678, 14578, 235, 256, 347, 467}
842:1	$0, 0, 0, 0, \frac{2}{339}\sqrt{2059}e^{12}, \frac{58}{339}\sqrt{5}e^{13}, \frac{2}{339}\sqrt{3219}e^{15}, \frac{2}{339}\sqrt{7627}e^{25}$	$(-\frac{5}{113}, \frac{4}{113}, \frac{125}{339}, -\frac{104}{339}, -\frac{1}{113}, \frac{110}{339}, -\frac{6}{113}, \frac{3}{113})$ $+ \frac{16}{339}\sqrt{145}e^3 \otimes e_8 + \frac{2}{339}\sqrt{8207}e^2 \otimes e_4$	{1268, 145678, 2356, 3467}
842:1	$0, 0, 0, 0, \frac{14}{507}\sqrt{87}e^{12}, \frac{2}{507}\sqrt{15834}e^{13}, \frac{4}{507}\sqrt{1914}e^{15}, \frac{2}{507}\sqrt{12093}e^{25}$	$(-\frac{86}{507}, \frac{47}{169}, \frac{53}{507}, -\frac{121}{507}, \frac{55}{507}, -\frac{11}{169}, -\frac{31}{507}, \frac{196}{507})$ $+ \frac{2}{507}\sqrt{15486}e^3 \otimes e_4 + \frac{8}{507}\sqrt{1479}e^2 \otimes e_6$	{1238, 145678, 245, 367}
842:1	$0, 0, 0, 0, \frac{2}{31}\sqrt{38}e^{12}, \frac{4}{31}\sqrt{57}e^{13}, \frac{2}{31}\sqrt{57}e^{15}, \frac{2}{31}\sqrt{57}e^{25}$	$(-\frac{1}{31}, \frac{5}{31}, \frac{19}{31}, -\frac{19}{31}, \frac{4}{31}, \frac{18}{31}, \frac{3}{31}, \frac{9}{31})$ $+ \frac{10}{31}\sqrt{19}e^3 \otimes e_4$	{12357, 124567, 13, 146, 23678, 2478, 3568, 458}
842:1	$0, 0, 0, 0, \frac{3}{679}\sqrt{898}e^{12}, \frac{3}{679}\sqrt{11674}e^{13}, \frac{2}{679}\sqrt{13919}e^{15}, \frac{1}{679}\sqrt{90698}e^{25}$	$(-\frac{80}{679}, -\frac{2}{679}, \frac{41}{97}, \frac{365}{679}, -\frac{82}{679}, \frac{207}{679}, -\frac{162}{679}, -\frac{12}{97})$ $+ \frac{2}{679}\sqrt{70493}e^3 \otimes e_7 + \frac{5}{679}\sqrt{9878}e^4 \otimes e_8$	{12345, 1467, 2368, 578}
842:1	$0, 0, 0, 0, \frac{2}{339}\sqrt{7627}e^{12}, \frac{2}{339}\sqrt{3219}e^{13}, \frac{58}{339}\sqrt{5}e^{15}, \frac{2}{339}\sqrt{2059}e^{25}$	$(\frac{49}{339}, \frac{4}{113}, -\frac{67}{339}, -\frac{104}{339}, \frac{61}{339}, -\frac{6}{113}, \frac{110}{339}, \frac{73}{339})$ $+ \frac{16}{339}\sqrt{145}e^1 \otimes e_3 + \frac{2}{339}\sqrt{8207}e^2 \otimes e_4$	{1278, 1458, 2357, 34}
842:1	$0, 0, 0, 0, \frac{68}{849}\sqrt{14}e^{12}, \frac{34}{849}\sqrt{82}e^{13}, \frac{119}{849}\sqrt{10}e^{15}, \frac{170}{849}e^{25}$	$(-\frac{7}{283}, \frac{11}{283}, \frac{280}{849}, -\frac{310}{849}, \frac{4}{283}, \frac{259}{849}, -\frac{3}{283}, \frac{15}{283})$ $+ \frac{17}{849}\sqrt{698}e^3 \otimes e_7 + \frac{51}{283}\sqrt{10}e^1 \otimes e_4$	{1267, 135, 24578, 3468}
842:1	$0, 0, 0, 0, \frac{4}{529}\sqrt{8873}e^{12}, \frac{1}{529}\sqrt{68182}e^{13}, \frac{2}{529}\sqrt{36893}e^{15}, \frac{6}{529}\sqrt{467}e^{25}$	$(\frac{146}{529}, -\frac{30}{529}, \frac{31}{529}, -\frac{321}{529}, \frac{116}{529}, \frac{177}{529}, \frac{262}{529}, \frac{86}{529})$ $+ \frac{5}{529}\sqrt{15878}e^1 \otimes e_4$	{1237, 1267, 135, 156, 2345678, 24578, 3468, 48}
842:1	$0, 0, 0, 0, \frac{1}{557}\sqrt{96254}e^{12}, \frac{1}{557}\sqrt{45866}e^{13}, \frac{68}{557}\sqrt{19}e^{15}, \frac{1}{557}\sqrt{25194}e^{25}$	$(\frac{162}{557}, -\frac{116}{557}, -\frac{161}{557}, \frac{253}{557}, \frac{46}{557}, \frac{1}{557}, \frac{208}{557}, -\frac{70}{557})$ $+ \frac{1}{557}\sqrt{116926}e^4 \otimes e_8 + \frac{76}{557}\sqrt{34}e^1 \otimes e_3$	{1278, 158, 23457, 34}
842:1	$0, 0, 0, 0, \frac{2}{405}\sqrt{7437}e^{12}, \frac{13}{405}\sqrt{134}e^{13}, \frac{2}{405}\sqrt{11993}e^{15}, \frac{1}{405}\sqrt{12730}e^{25}$	$(\frac{43}{405}, -\frac{1}{15}, -\frac{91}{405}, \frac{193}{405}, \frac{16}{405}, -\frac{16}{135}, \frac{59}{405}, -\frac{11}{405})$ $+ \frac{1}{405}\sqrt{41942}e^4 \otimes e_7 + \frac{4}{405}\sqrt{3551}e^1 \otimes e_3$	{127, 145, 23578, 348}
842:1	$0, 0, 0, 0, \frac{2}{57}\sqrt{170}e^{12}, \frac{2}{57}\sqrt{85}e^{13}, \frac{2}{57}\sqrt{85}e^{15}, \frac{2}{57}\sqrt{170}e^{25}$	$(-\frac{4}{19}, \frac{5}{19}, \frac{25}{57}, -\frac{1}{3}, \frac{1}{19}, \frac{13}{57}, -\frac{3}{19}, \frac{6}{19})$ $+ \frac{2}{19}\sqrt{51}e^2 \otimes e_4 + \frac{2}{57}\sqrt{374}e^3 \otimes e_7$	{12678, 13458, 257, 346}
842:1	$0, 0, 0, 0, \frac{3}{509}\sqrt{2926}e^{12}, \frac{1}{509}\sqrt{51414}e^{13}, \frac{4}{509}\sqrt{3135}e^{15}, \frac{3}{509}\sqrt{25498}e^{25}$	$(\frac{82}{509}, -\frac{100}{509}, \frac{63}{509}, 1, -\frac{18}{509}, \frac{145}{509}, \frac{64}{509}, -\frac{118}{509})$ $+ \frac{9}{509}\sqrt{6270}e^4 \otimes e_8$	{1238, 1268, 13578, 15678, 23456, 245, 3467, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:1	$0, 0, 0, 0, \frac{2}{147}\sqrt{421}e^{12}, \frac{2}{1617}\sqrt{226498}e^{13}, \frac{4}{1617}\sqrt{13051}e^{15}, \frac{2}{1617}\sqrt{7157}e^{25}$	$(-\frac{122}{539}, \frac{93}{539}, \frac{389}{1617}, \frac{865}{1617}, -\frac{29}{539}, \frac{23}{1617}, -\frac{151}{539}, \frac{64}{539}) + \frac{2}{1617}\sqrt{290490}e^4 \otimes e_6 + \frac{8}{1617}\sqrt{19787}e^3 \otimes e_7$	{12345, 167, 2368, 4578}
842:1	$0, 0, 0, 0, \frac{10}{79}\sqrt{3}e^{12}, \frac{5}{79}\sqrt{78}e^{13}, \frac{10}{79}e^{15}, \frac{5}{79}\sqrt{74}e^{25}$	$(-\frac{5}{79}, -\frac{5}{79}, \frac{35}{79}, \frac{35}{79}, -\frac{10}{79}, \frac{30}{79}, -\frac{15}{79}, -\frac{15}{79}) + \frac{20}{79}\sqrt{11}e^3 \otimes e_8 + \frac{35}{79}\sqrt{2}e^4 \otimes e_7$	{12357, 134, 278, 458}
842:1	$0, 0, 0, 0, \frac{2}{31}\sqrt{57}e^{12}, \frac{2}{31}\sqrt{57}e^{13}, \frac{4}{31}\sqrt{57}e^{15}, \frac{2}{31}\sqrt{38}e^{25}$	$(-\frac{6}{31}, \frac{5}{31}, \frac{9}{31}, 1, -\frac{1}{31}, \frac{3}{31}, -\frac{7}{31}, \frac{4}{31}) + \frac{10}{31}\sqrt{19}e^4 \otimes e_7$	{12367, 127, 13456, 145, 23578, 25678, 348, 468}
842:1	$0, 0, 0, 0, \frac{3}{499}\sqrt{4070}e^{12}, \frac{1}{499}\sqrt{178266}e^{13}, \frac{1}{499}\sqrt{91982}e^{15}, \frac{2}{499}\sqrt{41514}e^{25}$	$(\frac{23}{499}, -\frac{75}{499}, \frac{280}{499}, \frac{84}{499}, -\frac{52}{499}, \frac{303}{499}, -\frac{29}{499}, -\frac{127}{499}) + \frac{1}{499}\sqrt{337810}e^3 \otimes e_8$	{123457, 12357, 13, 134, 2478, 278, 458, 58}
842:1	$0, 0, 0, 0, \frac{2}{31}\sqrt{38}e^{12}, \frac{4}{31}\sqrt{57}e^{13}, \frac{2}{31}\sqrt{57}e^{15}, \frac{2}{31}\sqrt{57}e^{25}$	$(-\frac{1}{31}, \frac{5}{31}, -\frac{6}{31}, 1, \frac{4}{31}, -\frac{7}{31}, \frac{3}{31}, \frac{9}{31}) + \frac{10}{31}\sqrt{19}e^4 \otimes e_6$	{123457, 12567, 134, 16, 23678, 2478, 3568, 458}
842:1	$0, 0, 0, 0, \frac{6}{1277}\sqrt{4379}e^{12}, \frac{6}{1277}\sqrt{11078}e^{13}, \frac{12}{1277}\sqrt{145}e^{15}, \frac{6}{1277}\sqrt{8265}e^{25}$	$(-\frac{348}{1277}, \frac{399}{1277}, \frac{225}{1277}, \frac{165}{1277}, \frac{51}{1277}, -\frac{123}{1277}, -\frac{297}{1277}, \frac{450}{1277}) + \frac{6}{1277}\sqrt{12818}e^3 \otimes e_7 + \frac{6}{1277}\sqrt{19430}e^2 \otimes e_6$	{12348, 1238, 145678, 15678}
842:1	$0, 0, 0, 0, \frac{1}{815}\sqrt{59110}e^{12}, \frac{1}{815}\sqrt{94062}e^{13}, \frac{4}{815}\sqrt{4369}e^{15}, \frac{1}{815}\sqrt{162938}e^{25}$	$(-\frac{14}{163}, \frac{96}{815}, -\frac{91}{815}, \frac{379}{815}, \frac{26}{815}, -\frac{161}{815}, -\frac{44}{815}, \frac{122}{815}) + \frac{1}{815}\sqrt{147518}e^4 \otimes e_8 + \frac{2}{815}\sqrt{56026}e^2 \otimes e_6$	{1238, 15678, 245, 3467}
842:1	$0, 0, 0, 0, \frac{2}{499}\sqrt{41514}e^{12}, \frac{1}{499}\sqrt{91982}e^{13}, \frac{1}{499}\sqrt{178266}e^{15}, \frac{3}{499}\sqrt{4070}e^{25}$	$(\frac{189}{499}, -\frac{75}{499}, -\frac{218}{499}, \frac{84}{499}, \frac{114}{499}, -\frac{29}{499}, \frac{303}{499}, \frac{39}{499}) + \frac{1}{499}\sqrt{337810}e^1 \otimes e_3$	{1247, 127, 145, 15, 234578, 23578, 348, 38}
842:1	$0, 0, 0, 0, \frac{4}{51}\sqrt{7}e^{12}, \frac{4}{51}\sqrt{91}e^{13}, \frac{4}{51}\sqrt{91}e^{15}, \frac{4}{51}\sqrt{7}e^{25}$	$(-\frac{5}{17}, \frac{4}{17}, \frac{38}{51}, \frac{10}{51}, -\frac{1}{17}, \frac{23}{51}, -\frac{6}{17}, \frac{3}{17}) + \frac{4}{51}\sqrt{287}e^3 \otimes e_7$	{123458, 12358, 14678, 1678, 2346, 236, 457, 57}
842:1	$0, 0, 0, 0, \frac{16}{325}\sqrt{102}e^{12}, \frac{16}{325}\sqrt{19}e^{13}, \frac{16}{325}\sqrt{34}e^{15}, \frac{16}{325}\sqrt{53}e^{25}$	$(\frac{19}{325}, \frac{38}{325}, -\frac{109}{325}, \frac{42}{325}, \frac{57}{325}, -\frac{18}{65}, \frac{76}{325}, \frac{19}{65}) + \frac{16}{325}\sqrt{151}e^2 \otimes e_6 + \frac{32}{325}\sqrt{33}e^1 \otimes e_3$	{14568, 1568, 346, 36}
842:1	$0, 0, 0, 0, \frac{8}{263}\sqrt{345}e^{12}, \frac{4}{263}\sqrt{1909}e^{13}, \frac{92}{263}\sqrt{2}e^{15}, \frac{4}{263}\sqrt{2369}e^{25}$	$(-\frac{49}{263}, \frac{100}{263}, -\frac{35}{263}, \frac{48}{263}, \frac{51}{263}, -\frac{84}{263}, \frac{2}{263}, \frac{151}{263}) + \frac{4}{263}\sqrt{4945}e^2 \otimes e_6$	{12348, 1238, 145678, 15678, 245, 25, 3467, 367}
842:1	$0, 0, 0, 0, \frac{1}{705}\sqrt{69094}e^{12}, \frac{4}{705}\sqrt{4053}e^{13}, \frac{2}{705}\sqrt{2123}e^{15}, \frac{2}{705}\sqrt{12931}e^{25}$	$(-\frac{1}{705}, \frac{37}{235}, -\frac{27}{235}, -\frac{194}{705}, \frac{22}{141}, -\frac{82}{705}, \frac{109}{705}, \frac{221}{705}) + \frac{1}{705}\sqrt{108466}e^1 \otimes e_4 + \frac{1}{705}\sqrt{130082}e^2 \otimes e_6$	{12378, 1568, 2457, 346}
842:1	$0, 0, 0, 0, \frac{16}{557}\sqrt{10}e^{12}, \frac{16}{1671}\sqrt{661}e^{13}, \frac{16}{1671}\sqrt{402}e^{15}, \frac{16}{1671}\sqrt{691}e^{25}$	$(-\frac{203}{1671}, \frac{50}{557}, \frac{75}{557}, \frac{146}{1671}, -\frac{53}{1671}, \frac{22}{1671}, -\frac{256}{1671}, \frac{97}{1671}) + \frac{16}{1671}\sqrt{785}e^2 \otimes e_6 + \frac{32}{1671}\sqrt{185}e^3 \otimes e_8$	{145678, 15678, 3467, 367}
842:1	$0, 0, 0, 0, \frac{1}{21}\sqrt{30}e^{12}, \frac{1}{21}\sqrt{114}e^{13}, \frac{1}{21}\sqrt{6}e^{15}, \frac{2}{7}\sqrt{2}e^{25}$	$(\frac{1}{7}, -\frac{1}{7}, \frac{2}{7}, -\frac{2}{7}, 0, \frac{3}{7}, \frac{1}{7}, -\frac{1}{7}) + \frac{1}{21}\sqrt{174}e^3 \otimes e_8 + \frac{2}{21}\sqrt{39}e^1 \otimes e_4$	{12678, 1568, 234567, 346}
842:1	$0, 0, 0, 0, \frac{5}{79}\sqrt{74}e^{12}, \frac{10}{79}e^{13}, \frac{5}{79}\sqrt{78}e^{15}, \frac{10}{79}\sqrt{3}e^{25}$	$(\frac{35}{158}, -\frac{5}{79}, -\frac{65}{158}, \frac{35}{79}, \frac{25}{158}, -\frac{15}{79}, \frac{30}{79}, \frac{15}{158}) + \frac{20}{79}\sqrt{11}e^1 \otimes e_3 + \frac{35}{79}\sqrt{2}e^4 \otimes e_6$	{1247, 145, 234578, 348}
842:1	$0, 0, 0, 0, \frac{1}{405}\sqrt{12730}e^{12}, \frac{2}{405}\sqrt{11993}e^{13}, \frac{13}{405}\sqrt{134}e^{15}, \frac{2}{405}\sqrt{7437}e^{25}$	$(-\frac{7}{270}, -\frac{1}{15}, \frac{139}{810}, \frac{193}{405}, -\frac{5}{54}, \frac{59}{405}, -\frac{16}{135}, -\frac{43}{270}) + \frac{1}{405}\sqrt{41942}e^4 \otimes e_6 + \frac{4}{405}\sqrt{3551}e^3 \otimes e_8$	{123457, 134, 2478, 458}
842:2	$0, 0, 0, 0, \frac{10}{281}\sqrt{94}e^{12}, \frac{1}{843}\sqrt{132070}e^{34}, \frac{10}{843}\sqrt{705}e^{15}, \frac{10}{281}\sqrt{47}e^{25}$	$(\frac{70}{281}, -\frac{51}{281}, \frac{139}{843}, -\frac{164}{843}, \frac{19}{281}, -\frac{25}{843}, \frac{89}{281}, -\frac{32}{281}) + \frac{1}{843}\sqrt{142410}e^3 \otimes e_8 + \frac{47}{281}\sqrt{10}e^1 \otimes e_6$	{1278, 158, 23567, 36}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:2	$0, 0, 0, 0, \frac{1}{223}\sqrt{6110}e^{12}, \frac{1}{669}\sqrt{272506}e^{34}, \frac{26}{223}\sqrt{47}e^{15}, \frac{1}{669}\sqrt{40326}e^{25}$	$(-\frac{48}{223}, \frac{41}{223}, \frac{2}{3}, -\frac{88}{669}, -\frac{7}{223}, \frac{358}{669}, -\frac{55}{223}, \frac{34}{223})$ $+ \frac{2}{669}\sqrt{163137}e^3 \otimes e_7$	{12467, 127, 1345, 1356, 245678, 2578, 348, 368}
842:2	$0, 0, 0, 0, \frac{1}{231}\sqrt{21098}e^{12}, \frac{1}{231}\sqrt{21098}e^{34}, \frac{3}{77}\sqrt{274}e^{15}, \frac{2}{231}\sqrt{822}e^{25}$	$(\frac{73}{231}, -\frac{20}{231}, -\frac{32}{231}, -\frac{32}{231}, \frac{53}{231}, \frac{231}{231}, -\frac{64}{231}, \frac{6}{11}, \frac{1}{7})$ $+ \frac{2}{231}\sqrt{12741}e^1 \otimes e_6$	{12347, 127, 1345, 15, 235678, 368}
842:2	$0, 0, 0, 0, \frac{4}{53}\sqrt{41}e^{12}, \frac{4}{53}\sqrt{41}e^{34}, \frac{2}{53}\sqrt{123}e^{15}, \frac{2}{53}\sqrt{123}e^{25}$	$(\frac{5}{53}, \frac{5}{53}, \frac{49}{53}, -\frac{33}{53}, \frac{10}{53}, \frac{16}{53}, \frac{15}{53}, \frac{15}{53})$ $+ \frac{82}{53}e^3 \otimes e_4$	{123678, 124678, 13568, 14568, 36, 46}
842:2	$0, 0, 0, 0, \frac{22}{205}\sqrt{3}e^{12}, \frac{22}{615}\sqrt{205}e^{34}, \frac{22}{615}\sqrt{87}e^{15}, \frac{22}{615}\sqrt{87}e^{25}$	$(-\frac{11}{205}, -\frac{11}{205}, \frac{143}{615}, \frac{143}{615}, -\frac{22}{205}, \frac{286}{615}, -\frac{33}{205}, -\frac{33}{205})$ $+ \frac{22}{615}\sqrt{267}e^3 \otimes e_7 + \frac{22}{615}\sqrt{267}e^4 \otimes e_8$	{1278, 13568, 34}
842:2	$0, 0, 0, 0, \frac{4}{2253}\sqrt{11742}e^{12}, \frac{2}{2253}\sqrt{77353}e^{34}, \frac{2}{2253}\sqrt{83739}e^{15}, \frac{2}{2253}\sqrt{19158}e^{25}$	$(\frac{33}{751}, -\frac{5}{751}, \frac{389}{2253}, -\frac{496}{2253}, \frac{28}{751}, -\frac{107}{2253}, \frac{61}{751}, \frac{23}{751})$ $+ \frac{2}{2253}\sqrt{114639}e^1 \otimes e_6 + \frac{2}{2253}\sqrt{91155}e^3 \otimes e_7$	{127, 1345, 245678, 368}
842:2	$0, 0, 0, 0, \frac{2}{599}\sqrt{21098}e^{12}, \frac{2}{599}\sqrt{21098}e^{34}, \frac{18}{599}\sqrt{274}e^{15}, \frac{4}{599}\sqrt{822}e^{25}$	$(\frac{146}{599}, -\frac{40}{599}, \frac{73}{599}, -\frac{201}{599}, \frac{106}{599}, -\frac{128}{599}, \frac{252}{599}, \frac{66}{599})$ $+ \frac{274}{599}e^3 \otimes e_4 + \frac{4}{599}\sqrt{12741}e^1 \otimes e_6$	{235678, 245678, 368, 468}
842:3	$0, 0, 0, 0, \frac{10}{1033}\sqrt{1258}e^{12}, \frac{4}{1033}\sqrt{64787}e^{13}, \frac{6}{1033}\sqrt{8177}e^{25}, \frac{2}{1033}\sqrt{55981}e^{15} + \frac{16}{1033}\sqrt{629}e^{23}$	$(-\frac{75}{1033}, \frac{195}{1033}, -\frac{150}{1033}, 1, \frac{120}{1033}, -\frac{225}{1033}, \frac{315}{1033}, \frac{45}{1033})$ $+ \frac{2}{1033}\sqrt{525215}e^4 \otimes e_6$	{123458, 134, 23678, 3567}
842:3	$0, 0, 0, 0, \frac{26}{1267}\sqrt{345}e^{12}, \frac{26}{1267}\sqrt{311}e^{13}, \frac{26}{1267}\sqrt{249}e^{25}, \frac{52}{1267}\sqrt{17}e^{15} + \frac{26}{1267}\sqrt{79}e^{23}$	$(-\frac{39}{1267}, \frac{221}{1267}, -\frac{78}{1267}, -\frac{377}{1267}, \frac{26}{1267}, \frac{181}{1267}, -\frac{117}{1267}, \frac{403}{1267}, \frac{143}{1267})$ $+ \frac{26}{1267}\sqrt{582}e^2 \otimes e_6 + \frac{78}{1267}\sqrt{59}e^1 \otimes e_4$	{12378, 346}
842:3	$0, 0, 0, 0, \frac{2}{37}\sqrt{3}e^{12}, \frac{6}{37}\sqrt{6}e^{13}, \frac{2}{37}\sqrt{33}e^{25}, \frac{12}{37}e^{15} + \frac{5}{37}\sqrt{6}e^{23}$	$(-\frac{1}{37}, \frac{6}{37}, -\frac{2}{37}, -\frac{11}{37}, \frac{5}{37}, -\frac{3}{37}, \frac{11}{37}, \frac{4}{37})$ $+ \frac{2}{37}\sqrt{66}e^3 \otimes e_4 + \frac{4}{37}\sqrt{21}e^2 \otimes e_6$	{1237, 368}
842:3	$0, 0, 0, 0, \frac{32}{1633}\sqrt{219}e^{12}, \frac{192}{1633}\sqrt{10}e^{13}, \frac{32}{1633}\sqrt{622}e^{25}, \frac{32}{1633}\sqrt{282}e^{15} + \frac{224}{1633}e^{23}$	$(-\frac{112}{1633}, \frac{176}{1633}, -\frac{224}{1633}, \frac{752}{1633}, \frac{64}{1633}, -\frac{336}{1633}, \frac{240}{1633}, -\frac{48}{1633})$ $+ \frac{288}{1633}\sqrt{7}e^4 \otimes e_7 + \frac{32}{1633}\sqrt{881}e^2 \otimes e_6$	{1237, 3468}
842:3	$0, 0, 0, 0, \frac{4}{27}\sqrt{23}e^{12}, \frac{2}{27}\sqrt{23}e^{13}, \frac{4}{27}\sqrt{23}e^{25}, \frac{2}{27}\sqrt{23}e^{15} + \frac{1}{27}\sqrt{230}e^{23}$	$(\frac{1}{27}, \frac{2}{9}, \frac{2}{27}, -\frac{17}{27}, \frac{7}{27}, \frac{1}{27}, \frac{13}{27}, \frac{8}{27})$ $+ \frac{2}{27}\sqrt{253}e^2 \otimes e_4$	{12367, 1345678, 235, 348}
842:3	$0, 0, 0, 0, \frac{3}{86}\sqrt{183}e^{12}, \frac{1}{86}\sqrt{4209}e^{13}, \frac{1}{43}\sqrt{915}e^{25}, \frac{1}{86}\sqrt{2867}e^{15} + \frac{1}{86}\sqrt{2379}e^{23}$	$(\frac{8}{43}, -\frac{45}{172}, \frac{16}{43}, \frac{27}{172}, -\frac{13}{172}, \frac{24}{43}, -\frac{29}{86}, \frac{19}{172})$ $+ \frac{1}{86}\sqrt{8845}e^3 \otimes e_7$	{2478, 278, 457, 57}
842:3	$0, 0, 0, 0, \frac{39}{701}\sqrt{6}e^{12}, \frac{65}{701}\sqrt{10}e^{13}, \frac{13}{701}\sqrt{462}e^{25}, \frac{91}{701}\sqrt{6}e^{15} + \frac{13}{701}\sqrt{310}e^{23}$	$(\frac{65}{701}, -\frac{52}{701}, \frac{130}{701}, -\frac{221}{701}, \frac{13}{701}, \frac{195}{701}, -\frac{39}{701}, \frac{78}{701})$ $+ \frac{13}{701}\sqrt{582}e^2 \otimes e_4 + \frac{26}{701}\sqrt{170}e^3 \otimes e_7$	{2356, 3468}
842:3	$0, 0, 0, 0, \frac{2}{359}\sqrt{17399}e^{12}, \frac{2}{359}\sqrt{8905}e^{13}, \frac{6}{359}\sqrt{137}e^{25}, \frac{4}{359}\sqrt{4247}e^{15} + \frac{2}{359}\sqrt{11919}e^{23}$	$(\frac{43}{359}, \frac{15}{359}, \frac{86}{359}, -\frac{231}{359}, \frac{58}{359}, \frac{129}{359}, \frac{73}{359}, \frac{101}{359})$ $+ \frac{2}{359}\sqrt{40415}e^1 \otimes e_4$	{12378, 1357, 234568, 346}
842:3	$0, 0, 0, 0, \frac{2}{61}\sqrt{246}e^{12}, \frac{6}{61}\sqrt{41}e^{13}, \frac{2}{61}\sqrt{451}e^{25}, \frac{2}{61}\sqrt{246}e^{15} + \frac{1}{61}\sqrt{574}e^{23}$	$(-\frac{7}{61}, \frac{20}{61}, -\frac{14}{61}, \frac{11}{61}, \frac{13}{61}, -\frac{21}{61}, \frac{33}{61}, \frac{6}{61})$ $+ \frac{10}{61}\sqrt{41}e^2 \otimes e_6$	{12347, 1237, 3468, 368}
842:3	$0, 0, 0, 0, \frac{2}{1057}\sqrt{44870}e^{12}, \frac{2}{1057}\sqrt{66023}e^{13}, \frac{4}{1057}\sqrt{65382}e^{25}, \frac{2}{1057}\sqrt{42306}e^{15} + \frac{2}{1057}\sqrt{64741}e^{23}$	$(\frac{15}{151}, -\frac{165}{1057}, \frac{30}{151}, 1, -\frac{60}{1057}, \frac{45}{151}, -\frac{225}{1057}, \frac{45}{1057})$ $+ \frac{26}{1057}\sqrt{3205}e^4 \otimes e_7$	{1267, 15678, 245, 48}
842:3	$0, 0, 0, 0, \frac{10}{3437}\sqrt{6}e^{12}, \frac{10}{3437}\sqrt{629}e^{13}, \frac{10}{3437}\sqrt{627}e^{25}, \frac{10}{3437}\sqrt{478}e^{15} + \frac{5}{3437}\sqrt{1262}e^{23}$	$(-\frac{15}{3437}, -\frac{20}{3437}, -\frac{30}{3437}, \frac{275}{3437}, -\frac{5}{491}, -\frac{45}{3437}, -\frac{55}{3437}, -\frac{50}{3437})$ $+ \frac{10}{3437}\sqrt{789}e^2 \otimes e_6 + \frac{60}{3437}\sqrt{22}e^3 \otimes e_7$	{2478, 278}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:3	$0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{15}{53}\sqrt{2}e^{13}, \frac{5}{53}\sqrt{14}e^{25},$ $\frac{10}{53}e^{15} + \frac{5}{53}\sqrt{30}e^{23}$	$(\frac{5}{53}, -\frac{10}{53}, \frac{10}{53}, \frac{25}{53}, -\frac{5}{53}, \frac{15}{53}, -\frac{15}{53}, 0)$ $+ \frac{10}{53}\sqrt{14}e^3 \otimes e_7 + \frac{5}{53}\sqrt{38}e^4 \otimes e_8$	{278, 457}
842:3	$0, 0, 0, 0, \frac{31}{3149}\sqrt{942}e^{12}, \frac{341}{3149}\sqrt{22}e^{13}, \frac{372}{3149}\sqrt{11}e^{25},$ $\frac{217}{3149}\sqrt{30}e^{15} + \frac{62}{3149}\sqrt{181}e^{23}$	$(\frac{155}{3149}, -\frac{403}{3149}, \frac{310}{3149}, \frac{1426}{3149}, -\frac{248}{3149}, \frac{465}{3149}, -\frac{651}{3149}, -\frac{93}{3149})$ $+ \frac{31}{3149}\sqrt{3446}e^3 \otimes e_7 + \frac{62}{3149}\sqrt{573}e^4 \otimes e_6$	{2478, 457}
842:4	$0, 0, 0, 0, \frac{2}{83}\sqrt{345}e^{12}, \frac{2}{83}\sqrt{874}e^{13}, \frac{46}{83}e^{15},$ $\frac{2}{83}\sqrt{989}e^{25} + \frac{46}{83}e^{34}$	$(-\frac{18}{83}, \frac{25}{83}, -\frac{3}{83}, \frac{35}{83}, \frac{7}{83}, -\frac{21}{83}, -\frac{11}{83}, \frac{32}{83})$ $+ \frac{2}{83}\sqrt{1633}e^2 \otimes e_6$	{12348, 15678, 245, 367}
842:4	$0, 0, 0, 0, \frac{6}{37}e^{12}, \frac{2}{37}\sqrt{7}e^{13}, \frac{8}{37}e^{15}, \frac{4}{37}e^{25} + \frac{8}{37}e^{34}$	$(\frac{2}{37}, -\frac{1}{37}, -\frac{5}{37}, \frac{5}{37}, \frac{1}{37}, -\frac{3}{37}, \frac{3}{37}, 0)$ $+ \frac{2}{37}\sqrt{17}e^4 \otimes e_7 + \frac{8}{37}e^1 \otimes e_8$	{127, 13456, 23578, 468}
842:4	$0, 0, 0, 0, \frac{6}{37}e^{12}, \frac{2}{37}\sqrt{7}e^{13}, \frac{8}{37}e^{15}, \frac{4}{37}e^{25} + \frac{8}{37}e^{34}$	$(\frac{2}{37}, -\frac{1}{37}, -\frac{5}{37}, \frac{5}{37}, \frac{1}{37}, -\frac{3}{37}, \frac{3}{37}, 0)$ $+ \frac{2}{37}\sqrt{17}e^4 \otimes e_7 - \frac{8}{37}e^1 \otimes e_8$	{127, 13456, 23578, 468}
842:4	$0, 0, 0, 0, \frac{2}{83}\sqrt{345}e^{12}, \frac{2}{83}\sqrt{759}e^{13}, \frac{8}{83}\sqrt{69}e^{15},$ $\frac{4}{83}\sqrt{161}e^{25} + \frac{8}{83}\sqrt{69}e^{34}$	$(-\frac{18}{83}, \frac{25}{83}, -\frac{3}{83}, \frac{35}{83}, \frac{7}{83}, -\frac{21}{83}, -\frac{11}{83}, \frac{32}{83})$ $+ \frac{2}{83}\sqrt{1633}e^4 \otimes e_7$	{127, 13456, 23578, 468}
842:4	$0, 0, 0, 0, \frac{4}{59}\sqrt{21}e^{12}, \frac{4}{59}\sqrt{57}e^{13}, \frac{2}{59}\sqrt{30}e^{15},$ $\frac{12}{59}\sqrt{5}e^{25} + \frac{2}{59}\sqrt{30}e^{34}$	$(-\frac{16}{59}, \frac{18}{59}, \frac{10}{59}, \frac{10}{59}, \frac{2}{59}, -\frac{6}{59}, -\frac{14}{59}, \frac{20}{59})$ $+ \frac{2}{59}\sqrt{390}e^2 \otimes e_6 + \frac{4}{59}\sqrt{57}e^3 \otimes e_7$	{12348, 15678}
842:4	$0, 0, 0, 0, \frac{1}{10}\sqrt{2}e^{12}, \frac{1}{5}\sqrt{5}e^{13}, \frac{1}{10}\sqrt{11}e^{15},$ $\frac{2}{5}e^{25} + \frac{1}{10}\sqrt{11}e^{34}$	$(-\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, 0, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{1}{10}\sqrt{14}e^3 \otimes e_4 + \frac{1}{10}\sqrt{23}e^2 \otimes e_6$	{245, 367}
842:4	$0, 0, 0, 0, \frac{2}{323}\sqrt{5921}e^{12}, \frac{10}{323}\sqrt{1146}e^{13}, \frac{8}{323}\sqrt{573}e^{15},$ $\frac{2}{323}\sqrt{9741}e^{25} + \frac{8}{323}\sqrt{573}e^{34}$	$(-\frac{14}{323}, \frac{37}{323}, \frac{13}{19}, -\frac{161}{323}, \frac{23}{323}, \frac{207}{323}, \frac{9}{323}, \frac{60}{323})$ $+ \frac{2}{323}\sqrt{50806}e^3 \otimes e_4$	{12357, 124567, 13, 146}
842:4	$0, 0, 0, 0, \frac{2}{27}\sqrt{11}e^{12}, \frac{2}{27}\sqrt{22}e^{13}, \frac{2}{27}\sqrt{110}e^{15},$ $\frac{2}{27}\sqrt{55}e^{25} + \frac{2}{27}\sqrt{110}e^{34}$	$(-\frac{8}{27}, \frac{1}{3}, \frac{5}{9}, -\frac{5}{27}, \frac{1}{27}, \frac{7}{27}, -\frac{7}{27}, \frac{10}{27})$ $+ \frac{22}{27}\sqrt{2}e^3 \otimes e_7$	{1267, 1345, 24578, 368}
842:4	$0, 0, 0, 0, \frac{6}{539}\sqrt{291}e^{12}, \frac{6}{539}\sqrt{102}e^{13}, \frac{6}{539}\sqrt{510}e^{15},$ $\frac{6}{539}\sqrt{15}e^{25} + \frac{6}{539}\sqrt{510}e^{34}$	$(\frac{24}{539}, -\frac{27}{539}, \frac{75}{539}, -\frac{15}{77}, -\frac{3}{539}, \frac{9}{49}, \frac{3}{77}, -\frac{30}{539})$ $+ \frac{12}{539}\sqrt{195}e^1 \otimes e_8 + \frac{6}{539}\sqrt{642}e^3 \otimes e_7$	{1267, 1345, 24578, 368}
842:4	$0, 0, 0, 0, \frac{6}{539}\sqrt{291}e^{12}, \frac{6}{539}\sqrt{102}e^{13}, \frac{6}{539}\sqrt{510}e^{15},$ $\frac{6}{539}\sqrt{15}e^{25} + \frac{6}{539}\sqrt{510}e^{34}$	$(\frac{24}{539}, -\frac{27}{539}, \frac{75}{539}, -\frac{15}{77}, -\frac{3}{539}, \frac{9}{49}, \frac{3}{77}, -\frac{30}{539})$ $- \frac{12}{539}\sqrt{195}e^1 \otimes e_8 + \frac{6}{539}\sqrt{642}e^3 \otimes e_7$	{1267, 1345, 24578, 368}
842:5	$0, 0, 0, 0, \frac{7}{3711}\sqrt{402}e^{12}, \frac{14}{3711}\sqrt{658}e^{13}, \frac{28}{3711}\sqrt{199}e^{25},$ $\frac{7}{3711}\sqrt{2130}e^{15} + \frac{7}{3711}\sqrt{1254}e^{34}$	$(-\frac{112}{3711}, \frac{42}{1237}, \frac{63}{1237}, -\frac{287}{3711}, \frac{14}{3711}, \frac{77}{3711}, \frac{140}{3711}, -\frac{98}{3711})$ $+ \frac{112}{3711}\sqrt{14}e^3 \otimes e_7 + \frac{7}{3711}\sqrt{3158}e^2 \otimes e_6$	{145678, 368}
842:5	$0, 0, 0, 0, \frac{38}{3969}\sqrt{181}e^{12}, \frac{19}{3969}\sqrt{2846}e^{13}, \frac{38}{3969}\sqrt{606}e^{25},$ $\frac{38}{3969}\sqrt{590}e^{15} + \frac{1323}{3969}\sqrt{69}e^{34}$	$(\frac{152}{1323}, -\frac{19}{147}, -\frac{209}{3969}, \frac{608}{3969}, -\frac{19}{1323}, \frac{247}{3969}, -\frac{190}{1323}, \frac{19}{189})$ $+ \frac{19}{3969}\sqrt{3026}e^4 \otimes e_6 + \frac{19}{3969}\sqrt{4238}e^3 \otimes e_7$	{134, 2478}
842:5	$0, 0, 0, 0, \frac{70}{3593}\sqrt{166}e^{12}, \frac{735}{3593}\sqrt{6}e^{13}, \frac{630}{3593}\sqrt{6}e^{25},$ $\frac{35}{3593}\sqrt{1194}e^{15} + \frac{35}{3593}\sqrt{222}e^{34}$	$(-\frac{665}{3593}, \frac{1015}{3593}, \frac{455}{3593}, -\frac{770}{3593}, \frac{350}{3593}, -\frac{210}{3593}, \frac{1365}{3593}, -\frac{315}{3593})$ $+ \frac{210}{3593}\sqrt{107}e^2 \otimes e_6 + \frac{490}{3593}\sqrt{13}e^3 \otimes e_4$	{1237, 245}
842:5	$0, 0, 0, 0, \frac{8}{1223}\sqrt{1677}e^{12}, \frac{48}{1223}\sqrt{258}e^{13}, \frac{4}{1223}\sqrt{46182}e^{25},$ $\frac{8}{1223}\sqrt{8342}e^{15} + \frac{4}{1223}\sqrt{33798}e^{34}$	$(\frac{232}{1223}, -\frac{261}{1223}, \frac{398}{1223}, -\frac{195}{1223}, -\frac{29}{1223}, \frac{630}{1223}, -\frac{290}{1223}, \frac{203}{1223})$ $+ \frac{20}{1223}\sqrt{3526}e^3 \otimes e_7$	{12358, 134, 2478, 57}
842:5	$0, 0, 0, 0, \frac{3}{619}\sqrt{5090}e^{12}, \frac{1}{619}\sqrt{21378}e^{13}, \frac{1}{619}\sqrt{251446}e^{25},$ $\frac{2}{619}\sqrt{31049}e^{15} + \frac{2}{619}\sqrt{64643}e^{34}$	$(\frac{212}{619}, -\frac{178}{619}, -\frac{119}{619}, \frac{365}{619}, \frac{34}{619}, \frac{93}{619}, -\frac{144}{619}, \frac{246}{619})$ $+ \frac{1}{619}\sqrt{514090}e^4 \otimes e_7$	{127, 135678, 2345, 468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:5	$0, 0, 0, 0, \frac{72}{1217}\sqrt{23}e^{12}, \frac{12}{1217}\sqrt{6486}e^{13}, \frac{6}{1217}\sqrt{10281}e^{25},$ $\frac{6}{1217}\sqrt{14835}e^{15} + \frac{24}{1217}\sqrt{1518}e^{34}$	$(\frac{119}{1217}, \frac{131}{1217}, -\frac{496}{1217}, \frac{865}{1217}, \frac{250}{1217}, -\frac{377}{1217}, \frac{381}{1217}, \frac{369}{1217})$ $+ \frac{6}{1217}\sqrt{67965}e^4 \otimes e_6$	{134, 16, 23678, 2478}
842:5	$0, 0, 0, 0, \frac{21}{631}\sqrt{290}e^{12}, \frac{294}{631}\sqrt{2}e^{13}, \frac{84}{631}\sqrt{31}e^{25},$ $\frac{21}{631}\sqrt{226}e^{15} + \frac{21}{631}\sqrt{22}e^{34}$	$(-\frac{112}{631}, \frac{238}{631}, -\frac{91}{631}, \frac{105}{631}, \frac{126}{631}, -\frac{203}{631}, \frac{364}{631}, \frac{14}{631})$ $+ \frac{21}{631}\sqrt{1030}e^2 \otimes e_6$	{12347, 145678, 25, 368}
842:5	$0, 0, 0, 0, \frac{1}{293}\sqrt{14678}e^{12}, \frac{6}{293}\sqrt{2327}e^{13}, \frac{6}{293}\sqrt{537}e^{25},$ $\frac{1}{293}\sqrt{18258}e^{15} + \frac{4}{293}\sqrt{537}e^{34}$	$(-\frac{31}{586}, \frac{49}{293}, \frac{188}{293}, -\frac{170}{293}, \frac{67}{586}, \frac{345}{586}, \frac{165}{586}, \frac{18}{293})$ $+ \frac{5}{293}\sqrt{6802}e^3 \otimes e_4$	{13, 146, 3567, 457}
842:6	$0, 0, 0, 0, \frac{3}{511}\sqrt{1122}e^{12}, \frac{66}{511}\sqrt{34}e^{13} + \frac{1}{511}\sqrt{5610}e^{24}, \frac{3}{511}\sqrt{16082}e^{15},$ $\frac{4}{511}\sqrt{561}e^{25}$	$(-\frac{152}{511}, \frac{122}{511}, \frac{379}{511}, \frac{15}{73}, -\frac{30}{511}, \frac{227}{511}, -\frac{26}{73}, \frac{92}{511})$ $+ \frac{3}{511}\sqrt{51238}e^3 \otimes e_7$	{12358, 1678, 2346, 457}
842:6	$0, 0, 0, 0, \frac{10}{79}\sqrt{3}e^{12}, \frac{5}{79}\sqrt{39}e^{13} + \frac{5}{79}\sqrt{39}e^{24}, \frac{5}{79}\sqrt{35}e^{15},$ $\frac{5}{79}\sqrt{35}e^{25}$	$(-\frac{5}{79}, -\frac{5}{79}, \frac{35}{79}, \frac{35}{79}, -\frac{10}{79}, \frac{30}{79}, -\frac{15}{79}, -\frac{15}{79})$ $+ \frac{5}{79}\sqrt{137}e^3 \otimes e_7 + \frac{5}{79}\sqrt{137}e^4 \otimes e_8$	{12345, 1467, 578}
842:6	$0, 0, 0, 0, \frac{10}{79}\sqrt{3}e^{12}, \frac{5}{79}\sqrt{39}e^{13} + \frac{5}{79}\sqrt{39}e^{24}, \frac{5}{79}\sqrt{35}e^{15},$ $\frac{5}{79}\sqrt{35}e^{25}$	$(-\frac{5}{79}, -\frac{5}{79}, \frac{35}{79}, \frac{35}{79}, -\frac{10}{79}, \frac{30}{79}, -\frac{15}{79}, -\frac{15}{79})$ $+ \frac{5}{79}\sqrt{137}e^3 \otimes e_7 - \frac{5}{79}\sqrt{137}e^4 \otimes e_8$	{12345, 1467, 578}
842:6	$0, 0, 0, 0, \frac{1}{31}\sqrt{238}e^{12}, \frac{1}{31}\sqrt{170}e^{13} + \frac{2}{31}\sqrt{34}e^{24}, \frac{4}{31}\sqrt{17}e^{15},$ $\frac{1}{31}\sqrt{34}e^{25}$	$(\frac{10}{31}, -\frac{8}{31}, -\frac{7}{31}, \frac{11}{31}, \frac{2}{31}, \frac{3}{31}, \frac{12}{31}, -\frac{6}{31})$ $+ \frac{1}{31}\sqrt{374}e^4 \otimes e_8 + \frac{4}{31}\sqrt{34}e^1 \otimes e_3$	{158, 23457}
842:6	$0, 0, 0, 0, \frac{6}{251}\sqrt{1139}e^{12}, \frac{12}{251}\sqrt{170}e^{13} + \frac{2}{251}\sqrt{969}e^{24}, \frac{30}{251}\sqrt{51}e^{15},$ $\frac{2}{251}\sqrt{2703}e^{25}$	$(\frac{98}{251}, -\frac{41}{251}, -\frac{106}{251}, \frac{33}{251}, \frac{57}{251}, -\frac{8}{251}, \frac{155}{251}, \frac{16}{251})$ $+ \frac{6}{251}\sqrt{2363}e^1 \otimes e_3$	{1247, 15, 234578, 38}
842:6	$0, 0, 0, 0, \frac{56}{155}\sqrt{2}e^{12}, \frac{7}{155}\sqrt{37}e^{13} + \frac{7}{155}\sqrt{37}e^{24}, \frac{14}{155}\sqrt{13}e^{15},$ $\frac{14}{155}\sqrt{13}e^{25}$	$(\frac{14}{155}, \frac{14}{155}, -\frac{7}{31}, -\frac{7}{31}, \frac{28}{155}, -\frac{21}{155}, \frac{42}{155}, \frac{42}{155})$ $+ \frac{7}{155}\sqrt{139}e^1 \otimes e_3 + \frac{7}{155}\sqrt{139}e^2 \otimes e_4$	{1278, 1458, 34}
842:6	$0, 0, 0, 0, \frac{56}{155}\sqrt{2}e^{12}, \frac{7}{155}\sqrt{37}e^{13} + \frac{7}{155}\sqrt{37}e^{24}, \frac{14}{155}\sqrt{13}e^{15},$ $\frac{14}{155}\sqrt{13}e^{25}$	$(\frac{14}{155}, \frac{14}{155}, -\frac{7}{31}, -\frac{7}{31}, \frac{28}{155}, -\frac{21}{155}, \frac{42}{155}, \frac{42}{155})$ $+ \frac{7}{155}\sqrt{139}e^1 \otimes e_3 - \frac{7}{155}\sqrt{139}e^2 \otimes e_4$	{1278, 1458, 34}
842:6	$0, 0, 0, 0, \frac{10}{79}\sqrt{3}e^{12}, \frac{20}{79}\sqrt{11}e^{13} + \frac{35}{79}\sqrt{2}e^{24}, \frac{5}{79}\sqrt{102}e^{15},$ $\frac{10}{79}\sqrt{43}e^{25}$	$(-\frac{5}{79}, -\frac{5}{79}, \frac{35}{79}, \frac{35}{79}, -\frac{10}{79}, \frac{30}{79}, -\frac{15}{79}, -\frac{15}{79})$ $+ \frac{5}{79}\sqrt{274}e^3 \otimes e_8$	{12357, 134, 278, 458}
842:7	$0, 0, 0, 0, \frac{68}{4013}\sqrt{82}e^{12}, \frac{34}{4013}\sqrt{599}e^{34}, \frac{34}{4013}\sqrt{673}e^{15},$ $\frac{17}{4013}\sqrt{838}e^{13} + \frac{34}{4013}\sqrt{222}e^{25}$	$(-\frac{34}{4013}, \frac{221}{4013}, \frac{442}{4013}, -\frac{765}{4013}, \frac{187}{4013}, -\frac{323}{4013}, \frac{153}{4013}, \frac{408}{4013})$ $+ \frac{34}{4013}\sqrt{813}e^3 \otimes e_7 + \frac{34}{4013}\sqrt{977}e^1 \otimes e_6$	{1345, 368}
842:7	$0, 0, 0, 0, \frac{4}{89}\sqrt{109}e^{12}, \frac{4}{89}\sqrt{109}e^{34}, \frac{2}{89}\sqrt{327}e^{15},$ $\frac{1}{89}\sqrt{8502}e^{13} + \frac{2}{89}\sqrt{327}e^{25}$	$(-\frac{10}{89}, \frac{29}{89}, \frac{58}{89}, -\frac{51}{89}, \frac{19}{89}, \frac{7}{89}, \frac{9}{89}, \frac{48}{89})$ $+ \frac{2}{89}\sqrt{4033}e^3 \otimes e_4$	{124578, 148, 247, 45}
842:7	$0, 0, 0, 0, \frac{5}{211}\sqrt{690}e^{12}, \frac{5}{211}\sqrt{690}e^{34}, \frac{5}{211}\sqrt{730}e^{15},$ $\frac{10}{211}\sqrt{10}e^{13} + \frac{10}{211}\sqrt{30}e^{25}$	$(\frac{65}{211}, -\frac{16}{211}, -\frac{32}{211}, -\frac{28}{211}, \frac{49}{211}, -\frac{60}{211}, \frac{114}{211}, \frac{33}{211})$ $+ \frac{50}{211}\sqrt{17}e^1 \otimes e_6$	{12347, 1345, 235678, 368}
842:7	$0, 0, 0, 0, \frac{19}{1967}\sqrt{1402}e^{12}, \frac{19}{1967}\sqrt{1686}e^{34}, \frac{38}{1967}\sqrt{105}e^{15},$ $\frac{38}{1967}\sqrt{281}e^{13} + \frac{19}{1967}\sqrt{1262}e^{25}$	$(-\frac{76}{1967}, \frac{209}{1967}, \frac{418}{1967}, -\frac{570}{1967}, \frac{19}{1967}, -\frac{152}{1967}, \frac{57}{1967}, \frac{342}{1967})$ $+ \frac{38}{1967}\sqrt{213}e^3 \otimes e_7 + \frac{38}{1967}\sqrt{634}e^2 \otimes e_6$	{13568, 36}
842:7	$0, 0, 0, 0, \frac{22}{293}\sqrt{26}e^{12}, \frac{22}{293}\sqrt{26}e^{34}, \frac{22}{293}\sqrt{30}e^{15},$ $\frac{11}{293}\sqrt{102}e^{13} + \frac{44}{293}\sqrt{3}e^{25}$	$(\frac{44}{293}, \frac{11}{293}, \frac{22}{293}, -\frac{99}{293}, \frac{55}{293}, -\frac{77}{293}, \frac{99}{293}, \frac{66}{293})$ $+ \frac{22}{293}\sqrt{43}e^3 \otimes e_4 + \frac{44}{293}\sqrt{21}e^1 \otimes e_6$	{235678, 368}
842:7	$0, 0, 0, 0, \frac{16}{1927}\sqrt{453}e^{12}, \frac{192}{1927}\sqrt{5}e^{34}, \frac{16}{1927}\sqrt{754}e^{15},$ $\frac{16}{1927}\sqrt{233}e^{13} + \frac{16}{1927}\sqrt{102}e^{25}$	$(\frac{152}{1927}, -\frac{136}{1927}, -\frac{272}{1927}, \frac{296}{1927}, \frac{16}{1927}, \frac{24}{1927}, \frac{168}{1927}, -\frac{120}{1927})$ $+ \frac{16}{1927}\sqrt{911}e^1 \otimes e_6 + \frac{48}{1927}\sqrt{89}e^4 \otimes e_7$	{127, 468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:7	$0, 0, 0, 0, \frac{2}{607}\sqrt{22137e^{12}}, \frac{6}{607}\sqrt{6751e^{34}}, \frac{3}{607}\sqrt{26690e^{15}},$ $\frac{1}{607}\sqrt{157314e^{13}} + \frac{3}{607}\sqrt{942e^{25}}$	$(-\frac{67}{607}, \frac{12}{607}, \frac{24}{607}, \frac{349}{607}, -\frac{55}{607}, \frac{373}{607}, -\frac{122}{607}, -\frac{43}{607})$ $+ \frac{6}{607}\sqrt{12874e^4} \otimes e_7$	{123678, 13458, 23567, 34}
842:7	$0, 0, 0, 0, \frac{1}{601}\sqrt{5190e^{12}}, \frac{1}{601}\sqrt{173346e^{34}}, \frac{3}{601}\sqrt{6574e^{15}},$ $\frac{10}{601}\sqrt{1038e^{13}} + \frac{6}{601}\sqrt{5363e^{25}}$	$(\frac{67}{601}, -\frac{76}{601}, -\frac{152}{601}, \frac{434}{601}, -\frac{9}{601}, \frac{282}{601}, \frac{58}{601}, -\frac{85}{601})$ $+ \frac{54}{601}\sqrt{173e^4} \otimes e_8$	{128, 1578, 2456, 467}
842:7	$0, 0, 0, 0, \frac{22}{1103}\sqrt{39e^{12}}, \frac{22}{1103}\sqrt{447e^{34}}, \frac{66}{1103}\sqrt{17e^{15}},$ $\frac{1}{1103}\sqrt{1254e^{13}} + \frac{66}{1103}\sqrt{17e^{25}}$	$(-\frac{154}{1103}, \frac{55}{1103}, \frac{110}{1103}, \frac{319}{1103}, -\frac{99}{1103}, \frac{429}{1103}, -\frac{253}{1103}, -\frac{44}{1103})$ $+ \frac{594}{1103}e^3 \otimes e_7 + \frac{594}{1103}e^4 \otimes e_8$	{12345, 2368}
842:7	$0, 0, 0, 0, \frac{14}{205}\sqrt{53e^{12}}, \frac{14}{205}\sqrt{53e^{34}}, \frac{3}{205}\sqrt{106e^{15}},$ $\frac{1}{205}\sqrt{9434e^{13}} + \frac{1}{205}\sqrt{10070e^{25}}$	$(\frac{3}{41}, \frac{12}{205}, \frac{24}{205}, -\frac{13}{41}, \frac{27}{205}, -\frac{1}{5}, \frac{42}{205}, \frac{39}{205})$ $+ \frac{2}{205}\sqrt{4558e^2} \otimes e_6$	{123478, 13568, 23457, 36}
842:7	$0, 0, 0, 0, \frac{8}{1519}\sqrt{465e^{12}}, \frac{8}{1519}\sqrt{622e^{34}}, \frac{8}{1519}\sqrt{39e^{15}},$ $\frac{8}{1519}\sqrt{347e^{13}} + \frac{8}{1519}\sqrt{635e^{25}}$	$(\frac{92}{1519}, -\frac{52}{1519}, -\frac{104}{1519}, \frac{20}{1519}, \frac{40}{1519}, -\frac{12}{217}, \frac{132}{1519}, -\frac{12}{1519})$ $+ \frac{8}{1519}\sqrt{471e^4} \otimes e_8 + \frac{8}{1519}\sqrt{877e^2} \otimes e_6$	{135678, 2345}
842:7	$0, 0, 0, 0, \frac{10}{113}\sqrt{35e^{12}}, \frac{10}{113}\sqrt{35e^{34}}, \frac{15}{113}\sqrt{2e^{15}},$ $\frac{5}{113}\sqrt{146e^{13}} + \frac{5}{113}\sqrt{134e^{25}}$	$(\frac{15}{113}, 0, 0, -\frac{25}{113}, \frac{15}{113}, -\frac{25}{113}, \frac{30}{113}, \frac{15}{113})$ $+ \frac{10}{113}\sqrt{58e^2} \otimes e_6 + \frac{20}{113}\sqrt{3e^3} \otimes e_4$	{123478, 23457}
842:7	$0, 0, 0, 0, \frac{1}{601}\sqrt{5190e^{12}}, \frac{1}{601}\sqrt{173346e^{34}}, \frac{6}{601}\sqrt{5363e^{15}},$ $\frac{10}{601}\sqrt{1038e^{13}} + \frac{3}{601}\sqrt{6574e^{25}}$	$(-\frac{176}{601}, \frac{167}{601}, \frac{334}{601}, -\frac{52}{601}, -\frac{9}{601}, \frac{282}{601}, -\frac{185}{601}, \frac{158}{601})$ $+ \frac{54}{601}\sqrt{173e^3} \otimes e_7$	{1345, 1356, 348, 368}
842:7	$0, 0, 0, 0, \frac{14}{373}\sqrt{66e^{12}}, \frac{105}{373}\sqrt{2e^{34}}, \frac{14}{373}\sqrt{55e^{15}},$ $\frac{7}{373}\sqrt{142e^{13}} + \frac{14}{373}\sqrt{33e^{25}}$	$(\frac{77}{373}, -\frac{49}{373}, -\frac{98}{373}, \frac{77}{373}, \frac{28}{373}, -\frac{21}{373}, \frac{105}{373}, -\frac{21}{373})$ $+ \frac{21}{373}\sqrt{62e^4} \otimes e_8 + \frac{7}{373}\sqrt{734e^1} \otimes e_6$	{1278, 158, 24567, 46}
842:7	$0, 0, 0, 0, \frac{14}{373}\sqrt{66e^{12}}, \frac{105}{373}\sqrt{2e^{34}}, \frac{14}{373}\sqrt{55e^{15}},$ $\frac{7}{373}\sqrt{142e^{13}} + \frac{14}{373}\sqrt{33e^{25}}$	$(\frac{77}{373}, -\frac{49}{373}, -\frac{98}{373}, \frac{77}{373}, \frac{28}{373}, -\frac{21}{373}, \frac{105}{373}, -\frac{21}{373})$ $- \frac{21}{373}\sqrt{62e^4} \otimes e_8 + \frac{7}{373}\sqrt{734e^1} \otimes e_6$	{1278, 158, 24567, 46}
842:8	$0, 0, 0, 0, \frac{11}{157}\sqrt{51e^{12}}, \frac{11}{314}\sqrt{67e^{13}}, \frac{11}{314}\sqrt{51e^{15}},$ $\frac{11}{314}\sqrt{51e^{14}} + \frac{33}{314}\sqrt{15e^{25}}$	$(\frac{33}{628}, \frac{33}{314}, -\frac{209}{628}, \frac{33}{157}, \frac{99}{628}, -\frac{44}{157}, \frac{33}{157}, \frac{165}{628})$ $+ \frac{11}{314}\sqrt{223e^1} \otimes e_3 + \frac{99}{157}e^2 \otimes e_6$	{14568, 346}
842:8	$0, 0, 0, 0, \frac{22}{233}\sqrt{30e^{12}}, \frac{33}{233}\sqrt{15e^{13}}, \frac{11}{233}\sqrt{30e^{15}},$ $\frac{33}{233}\sqrt{10e^{14}} + \frac{55}{233}\sqrt{7e^{25}}$	$(-\frac{33}{233}, \frac{55}{233}, -\frac{33}{233}, \frac{110}{233}, \frac{22}{233}, -\frac{66}{233}, -\frac{11}{233}, \frac{77}{233})$ $+ \frac{11}{233}\sqrt{61e^4} \otimes e_7 + \frac{44}{233}\sqrt{21e^2} \otimes e_6$	{12348, 245}
842:8	$0, 0, 0, 0, \frac{72}{1063}\sqrt{71e^{12}}, \frac{4}{1063}\sqrt{28045e^{13}}, \frac{284}{1063}\sqrt{2e^{15}},$ $\frac{16}{1063}\sqrt{1349e^{14}} + \frac{4}{1063}\sqrt{35713e^{25}}$	$(-\frac{105}{1063}, \frac{236}{1063}, -\frac{227}{1063}, \frac{472}{1063}, \frac{131}{1063}, -\frac{332}{1063}, \frac{26}{1063}, \frac{367}{1063})$ $+ \frac{4}{1063}\sqrt{63545e^2} \otimes e_6$	{12348, 145678, 245, 3467}
842:8	$0, 0, 0, 0, \frac{232}{3449}\sqrt{21e^{12}}, \frac{58}{3449}\sqrt{398e^{13}}, \frac{29}{3449}\sqrt{2282e^{15}},$ $\frac{116}{3449}\sqrt{94e^{14}} + \frac{174}{3449}e^{25}$	$(\frac{203}{3449}, -\frac{319}{3449}, \frac{928}{3449}, -\frac{638}{3449}, -\frac{116}{3449}, \frac{1131}{3449}, \frac{87}{3449}, -\frac{435}{3449})$ $+ \frac{145}{3449}\sqrt{138e^1} \otimes e_4 + \frac{29}{3449}\sqrt{2778e^3} \otimes e_7$	{1267, 135}
842:8	$0, 0, 0, 0, \frac{110}{821}\sqrt{3e^{12}}, \frac{11}{821}\sqrt{442e^{13}}, \frac{22}{821}\sqrt{161e^{15}},$ $\frac{11}{821}\sqrt{494e^{14}} + \frac{33}{821}\sqrt{38e^{25}}$	$(-\frac{22}{821}, \frac{77}{821}, -\frac{143}{821}, \frac{154}{821}, \frac{55}{821}, -\frac{165}{821}, \frac{33}{821}, \frac{132}{821})$ $+ \frac{11}{821}\sqrt{690e^4} \otimes e_7 + \frac{22}{821}\sqrt{210e^1} \otimes e_3$	{145, 348}
842:8	$0, 0, 0, 0, \frac{2}{359}\sqrt{17399e^{12}}, \frac{2}{359}\sqrt{8905e^{13}}, \frac{4}{359}\sqrt{4247e^{15}},$ $\frac{2}{359}\sqrt{11919e^{14}} + \frac{6}{359}\sqrt{137e^{25}}$	$(\frac{130}{359}, -\frac{72}{359}, -\frac{1}{359}, -\frac{144}{359}, \frac{58}{359}, \frac{129}{359}, \frac{188}{359}, -\frac{14}{359})$ $+ \frac{2}{359}\sqrt{40415e^1} \otimes e_4$	{234567, 2457, 346, 4}
842:8	$0, 0, 0, 0, \frac{1}{98}\sqrt{105e^{12}}, \frac{1}{98}\sqrt{553e^{13}}, \frac{3}{98}\sqrt{35e^{15}},$ $\frac{1}{98}\sqrt{77e^{14}} + \frac{1}{7}\sqrt{3e^{25}}$	$(-\frac{3}{28}, \frac{1}{14}, \frac{3}{28}, \frac{1}{7}, -\frac{1}{28}, 0, -\frac{1}{7}, \frac{1}{28})$ $+ \frac{1}{98}\sqrt{581e^3} \otimes e_8 + \frac{2}{49}\sqrt{42e^2} \otimes e_6$	{145678, 3467}
842:8	$0, 0, 0, 0, \frac{27}{2551}\sqrt{982e^{12}}, \frac{54}{2551}\sqrt{445e^{13}}, \frac{27}{2551}\sqrt{46e^{15}},$ $\frac{27}{2551}\sqrt{1266e^{14}} + \frac{54}{2551}\sqrt{390e^{25}}$	$(-\frac{486}{2551}, \frac{459}{2551}, \frac{216}{2551}, \frac{918}{2551}, -\frac{27}{2551}, -\frac{251}{2551}, -\frac{513}{2551}, \frac{432}{2551})$ $+ \frac{27}{2551}\sqrt{1642e^3} \otimes e_7 + \frac{459}{2551}\sqrt{10e^2} \otimes e_6$	{2457, 346}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:8	$0, 0, 0, 0, \frac{8}{211}\sqrt{21}e^{12}, \frac{8}{211}\sqrt{413}e^{13}, \frac{8}{211}\sqrt{413}e^{15},$ $\frac{112}{211}e^{14} + \frac{8}{211}\sqrt{21}e^{25}$	$(-\frac{53}{211}, \frac{34}{211}, \frac{152}{211}, \frac{68}{211}, -\frac{19}{211}, \frac{99}{211}, -\frac{72}{211}, \frac{15}{211})$ $+ \frac{24}{211}\sqrt{133}e^3 \otimes e_7$	{124678, 13458, 2457, 346}
842:8	$0, 0, 0, 0, \frac{1}{43}\sqrt{915}e^{12}, \frac{1}{86}\sqrt{2867}e^{13}, \frac{1}{86}\sqrt{4209}e^{15},$ $\frac{1}{86}\sqrt{2379}e^{14} + \frac{3}{86}\sqrt{183}e^{25}$	$(\frac{51}{172}, -\frac{3}{86}, -\frac{71}{172}, -\frac{3}{43}, \frac{45}{172}, -\frac{5}{43}, \frac{24}{43}, \frac{39}{172})$ $+ \frac{1}{86}\sqrt{8845}e^1 \otimes e_3$	{1247, 145, 234578, 348}
842:8	$0, 0, 0, 0, \frac{17}{2849}\sqrt{1894}e^{12}, \frac{68}{2849}\sqrt{105}e^{13}, \frac{34}{2849}\sqrt{107}e^{15},$ $\frac{136}{2849}\sqrt{26}e^{14} + \frac{102}{2849}\sqrt{43}e^{25}$	$(\frac{255}{2849}, -\frac{17}{2849}, -\frac{51}{259}, -\frac{34}{2849}, \frac{34}{407}, -\frac{306}{2849}, \frac{493}{2849}, \frac{221}{2849})$ $+ \frac{17}{2849}\sqrt{2290}e^1 \otimes e_4 + \frac{85}{2849}\sqrt{114}e^2 \otimes e_6$	{2457, 346}
842:8	$0, 0, 0, 0, \frac{33}{821}\sqrt{38}e^{12}, \frac{22}{821}\sqrt{161}e^{13}, \frac{11}{821}\sqrt{442}e^{15},$ $\frac{11}{821}\sqrt{494}e^{14} + \frac{110}{821}\sqrt{3}e^{25}$	$(-\frac{121}{821}, \frac{77}{821}, \frac{154}{821}, \frac{154}{821}, -\frac{44}{821}, \frac{33}{821}, -\frac{165}{821}, \frac{33}{821})$ $- \frac{11}{821}\sqrt{690}e^4 \otimes e_6 + \frac{22}{821}\sqrt{210}e^3 \otimes e_8$	{123457, 134, 2478, 458}
842:8	$0, 0, 0, 0, \frac{33}{821}\sqrt{38}e^{12}, \frac{22}{821}\sqrt{161}e^{13}, \frac{11}{821}\sqrt{442}e^{15},$ $\frac{11}{821}\sqrt{494}e^{14} + \frac{110}{821}\sqrt{3}e^{25}$	$(-\frac{121}{821}, \frac{77}{821}, \frac{154}{821}, \frac{154}{821}, -\frac{44}{821}, \frac{33}{821}, -\frac{165}{821}, \frac{33}{821})$ $+ \frac{11}{821}\sqrt{690}e^4 \otimes e_6 + \frac{22}{821}\sqrt{210}e^3 \otimes e_8$	{123457, 134, 2478, 458}
842:8	$0, 0, 0, 0, \frac{5}{53}\sqrt{14}e^{12}, \frac{10}{53}e^{13}, \frac{15}{53}\sqrt{2}e^{15},$ $\frac{5}{53}\sqrt{30}e^{14} + \frac{10}{53}\sqrt{3}e^{25}$	$(\frac{5}{53}, \frac{5}{53}, -\frac{20}{53}, \frac{10}{53}, \frac{10}{53}, -\frac{15}{53}, \frac{15}{53}, \frac{15}{53})$ $+ \frac{10}{53}\sqrt{14}e^1 \otimes e_3 + \frac{5}{53}\sqrt{38}e^4 \otimes e_6$	{1247, 145, 234578, 348}
842:8	$0, 0, 0, 0, \frac{5}{53}\sqrt{14}e^{12}, \frac{10}{53}e^{13}, \frac{15}{53}\sqrt{2}e^{15},$ $\frac{5}{53}\sqrt{30}e^{14} + \frac{10}{53}\sqrt{3}e^{25}$	$(\frac{5}{53}, \frac{5}{53}, -\frac{20}{53}, \frac{10}{53}, \frac{10}{53}, -\frac{15}{53}, \frac{15}{53}, \frac{15}{53})$ $+ \frac{10}{53}\sqrt{14}e^1 \otimes e_3 - \frac{5}{53}\sqrt{38}e^4 \otimes e_6$	{1247, 145, 234578, 348}
842:8	$0, 0, 0, 0, \frac{3}{86}\sqrt{183}e^{12}, \frac{1}{86}\sqrt{4209}e^{13}, \frac{1}{86}\sqrt{2867}e^{15},$ $\frac{1}{86}\sqrt{2379}e^{14} + \frac{1}{43}\sqrt{915}e^{25}$	$(-\frac{7}{172}, -\frac{3}{86}, \frac{103}{172}, -\frac{3}{43}, -\frac{13}{172}, \frac{24}{43}, -\frac{5}{43}, -\frac{19}{172})$ $+ \frac{1}{86}\sqrt{8845}e^3 \otimes e_8$	{123457, 134, 2478, 458}
842:8	$0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{15}{53}\sqrt{2}e^{13}, \frac{10}{53}e^{15},$ $\frac{5}{53}\sqrt{30}e^{14} + \frac{5}{53}\sqrt{14}e^{25}$	$(-\frac{10}{53}, \frac{5}{53}, \frac{25}{53}, \frac{10}{53}, -\frac{5}{53}, \frac{15}{53}, \frac{15}{53}, 0)$ $+ \frac{10}{53}\sqrt{14}e^3 \otimes e_8 + \frac{5}{53}\sqrt{38}e^4 \otimes e_7$	{134, 458}
842:8	$0, 0, 0, 0, \frac{111}{2741}\sqrt{66}e^{12}, \frac{74}{2741}\sqrt{437}e^{13}, \frac{37}{2741}\sqrt{218}e^{15},$ $\frac{37}{2741}\sqrt{614}e^{14} + \frac{74}{2741}\sqrt{21}e^{25}$	$(-\frac{703}{2741}, \frac{629}{2741}, \frac{592}{2741}, \frac{1258}{2741}, -\frac{74}{2741}, -\frac{111}{2741}, -\frac{777}{2741}, \frac{555}{2741})$ $+ \frac{1036}{2741}\sqrt{3}e^3 \otimes e_7 + \frac{185}{2741}\sqrt{102}e^4 \otimes e_6$	{1678, 236}
842:9	$0, 0, 0, 0, \frac{2}{251}\sqrt{2703}e^{12}, \frac{30}{251}\sqrt{51}e^{13}, \frac{6}{251}\sqrt{1139}e^{25},$ $\frac{12}{251}\sqrt{170}e^{15} + \frac{2}{251}\sqrt{969}e^{24}$	$(\frac{33}{502}, -\frac{41}{251}, \frac{277}{502}, \frac{33}{251}, -\frac{49}{502}, \frac{155}{251}, -\frac{131}{502}, -\frac{8}{251})$ $+ \frac{6}{251}\sqrt{2363}e^3 \otimes e_7$	{12358, 13, 278, 57}
842:9	$0, 0, 0, 0, \frac{2}{201}\sqrt{3}e^{12}, \frac{10}{201}\sqrt{7}e^{13}, \frac{2}{201}\sqrt{151}e^{25},$ $\frac{4}{201}\sqrt{30}e^{15} + \frac{2}{201}\sqrt{69}e^{24}$	$(-\frac{17}{402}, \frac{3}{67}, \frac{9}{134}, -\frac{17}{201}, \frac{1}{402}, \frac{5}{201}, \frac{19}{402}, -\frac{8}{201})$ $+ \frac{20}{201}\sqrt{2}e^2 \otimes e_6 + \frac{2}{201}\sqrt{167}e^3 \otimes e_7$	{12358, 278}
842:9	$0, 0, 0, 0, \frac{65}{161}e^{12}, \frac{10}{161}\sqrt{21}e^{13}, \frac{5}{161}\sqrt{51}e^{25},$ $\frac{5}{161}\sqrt{107}e^{15} + \frac{5}{161}\sqrt{101}e^{24}$	$(-\frac{5}{322}, \frac{20}{161}, -\frac{55}{322}, -\frac{5}{161}, \frac{5}{46}, -\frac{30}{161}, \frac{75}{322}, \frac{15}{161})$ $+ \frac{15}{161}\sqrt{15}e^2 \otimes e_4 + \frac{5}{161}\sqrt{163}e^1 \otimes e_3$	{1457, 34}
842:9	$0, 0, 0, 0, \frac{48}{1055}\sqrt{59}e^{12}, \frac{24}{1055}\sqrt{818}e^{13}, \frac{72}{1055}\sqrt{78}e^{25},$ $\frac{48}{1055}\sqrt{145}e^{15} + \frac{48}{1055}\sqrt{146}e^{24}$	$(-\frac{11}{211}, \frac{294}{1055}, -\frac{227}{1055}, -\frac{22}{211}, \frac{239}{1055}, -\frac{282}{1055}, \frac{533}{1055}, \frac{184}{1055})$ $+ \frac{72}{1055}\sqrt{194}e^2 \otimes e_6$	{12347, 145678, 245, 3468}
842:9	$0, 0, 0, 0, \frac{31}{2681}\sqrt{1002}e^{12}, \frac{186}{2681}\sqrt{41}e^{13}, \frac{31}{2681}\sqrt{278}e^{25},$ $\frac{31}{2681}\sqrt{214}e^{15} + \frac{310}{2681}\sqrt{21}e^{24}$	$(\frac{155}{2681}, -\frac{403}{2681}, \frac{124}{383}, \frac{310}{2681}, -\frac{248}{2681}, \frac{1023}{2681}, -\frac{93}{383}, -\frac{93}{2681})$ $+ \frac{155}{2681}\sqrt{86}e^4 \otimes e_7 + \frac{31}{2681}\sqrt{2642}e^3 \otimes e_8$	{278, 3567}
842:9	$0, 0, 0, 0, \frac{14}{155}\sqrt{13}e^{12}, \frac{14}{155}\sqrt{13}e^{13}, \frac{56}{155}\sqrt{2}e^{25},$ $\frac{7}{155}\sqrt{37}e^{15} + \frac{7}{155}\sqrt{37}e^{24}$	$(-\frac{7}{62}, \frac{14}{155}, \frac{119}{310}, -\frac{7}{31}, -\frac{7}{310}, \frac{42}{155}, \frac{21}{310}, -\frac{21}{155})$ $+ \frac{7}{155}\sqrt{139}e^2 \otimes e_4 + \frac{7}{155}\sqrt{139}e^3 \otimes e_7$	{1267, 2356}
842:9	$0, 0, 0, 0, \frac{30}{251}\sqrt{51}e^{12}, \frac{2}{251}\sqrt{2703}e^{13}, \frac{6}{251}\sqrt{1139}e^{25},$ $\frac{2}{251}\sqrt{969}e^{15} + \frac{12}{251}\sqrt{170}e^{24}$	$(-\frac{53}{251}, \frac{98}{251}, \frac{69}{251}, -\frac{106}{251}, \frac{45}{251}, \frac{16}{251}, \frac{143}{251}, -\frac{8}{251})$ $+ \frac{6}{251}\sqrt{2363}e^2 \otimes e_4$	{134567, 1457, 34, 46}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:9	$0, 0, 0, 0, \frac{10}{79}\sqrt{43}e^{12}, \frac{5}{79}\sqrt{102}e^{13}, \frac{10}{79}\sqrt{3}e^{25},$ $\frac{20}{79}\sqrt{11}e^{15} + \frac{35}{79}\sqrt{2}e^{24}$	$(\frac{35}{158}, -\frac{5}{79}, -\frac{65}{158}, \frac{35}{79}, \frac{25}{158}, -\frac{15}{79}, \frac{15}{158}, \frac{30}{79})$ $+ \frac{5}{79}\sqrt{274}e^1 \otimes e_3$	{1248, 145, 234578, 347}
842:9	$0, 0, 0, 0, \frac{13}{287}\sqrt{65}e^{12}, \frac{65}{287}\sqrt{3}e^{13}, \frac{65}{287}\sqrt{3}e^{25},$ $\frac{39}{287}\sqrt{5}e^{15} + \frac{65}{287}\sqrt{2}e^{24}$	$(-\frac{52}{287}, \frac{65}{287}, \frac{130}{287}, -\frac{104}{287}, \frac{13}{287}, \frac{78}{287}, \frac{78}{287}, -\frac{39}{287})$ $+ \frac{13}{287}\sqrt{239}e^2 \otimes e_4 + \frac{13}{287}\sqrt{254}e^3 \otimes e_8$	{12678, 258}
842:9	$0, 0, 0, 0, \frac{10}{127}\sqrt{39}e^{12}, \frac{5}{127}\sqrt{34}e^{13}, \frac{10}{127}\sqrt{21}e^{25},$ $\frac{20}{127}\sqrt{3}e^{15} + \frac{5}{127}\sqrt{6}e^{24}$	$(\frac{15}{254}, \frac{15}{127}, -\frac{85}{254}, \frac{15}{127}, \frac{45}{254}, -\frac{35}{127}, \frac{75}{254}, \frac{30}{127})$ $+ \frac{20}{127}\sqrt{15}e^2 \otimes e_6 + \frac{5}{127}\sqrt{202}e^1 \otimes e_3$	{1567, 36}
842:9	$0, 0, 0, 0, \frac{1}{119}\sqrt{210}e^{12}, \frac{2}{119}\sqrt{483}e^{13}, \frac{3}{119}\sqrt{70}e^{25},$ $\frac{2}{17}\sqrt{3}e^{15} + \frac{1}{119}\sqrt{1722}e^{24}$	$(-\frac{2}{17}, \frac{3}{17}, \frac{2}{17}, -\frac{4}{17}, \frac{1}{17}, 0, \frac{4}{17}, -\frac{1}{17})$ $+ \frac{1}{119}\sqrt{1974}e^3 \otimes e_8 + \frac{1}{119}\sqrt{2478}e^2 \otimes e_6$	{278, 3567}
842:9	$0, 0, 0, 0, \frac{468}{1013}e^{12}, \frac{26}{1013}\sqrt{501}e^{13}, \frac{78}{1013}\sqrt{97}e^{25},$ $\frac{26}{1013}\sqrt{615}e^{15} + \frac{78}{1013}\sqrt{115}e^{24}$	$(\frac{334}{1013}, -\frac{340}{1013}, \frac{21}{1013}, \frac{668}{1013}, -\frac{6}{1013}, \frac{355}{1013}, -\frac{346}{1013}, \frac{328}{1013})$ $+ \frac{390}{1013}\sqrt{11}e^4 \otimes e_7$	{23678, 278, 3567, 57}
842:9	$0, 0, 0, 0, \frac{12}{1007}\sqrt{2167}e^{12}, \frac{12}{53}\sqrt{11}e^{13}, \frac{36}{1007}\sqrt{143}e^{25},$ $\frac{132}{1007}\sqrt{11}e^{15} + \frac{240}{1007}\sqrt{11}e^{24}$	$(-\frac{115}{1007}, \frac{84}{1007}, \frac{34}{53}, -\frac{230}{1007}, -\frac{31}{1007}, \frac{531}{1007}, \frac{1}{19}, -\frac{146}{1007})$ $+ \frac{36}{1007}\sqrt{1023}e^3 \otimes e_8$	{123457, 14678, 2346, 458}
842:9	$0, 0, 0, 0, \frac{38}{3241}e^{12}, \frac{38}{3241}\sqrt{489}e^{13}, \frac{19}{3241}\sqrt{2078}e^{25},$ $\frac{38}{3241}\sqrt{457}e^{15} + \frac{38}{3241}\sqrt{519}e^{24}$	$(\frac{247}{3241}, -\frac{57}{3241}, -\frac{95}{463}, \frac{494}{3241}, \frac{190}{3241}, -\frac{418}{3241}, \frac{19}{463}, \frac{437}{3241})$ $+ \frac{19}{3241}\sqrt{2438}e^4 \otimes e_7 + \frac{19}{3241}\sqrt{3418}e^2 \otimes e_6$	{245, 3468}
842:9	$0, 0, 0, 0, \frac{5}{79}\sqrt{102}e^{12}, \frac{10}{79}\sqrt{43}e^{13}, \frac{10}{79}\sqrt{3}e^{25},$ $\frac{35}{79}\sqrt{2}e^{15} + \frac{20}{79}\sqrt{11}e^{24}$	$(\frac{35}{158}, -\frac{5}{79}, -\frac{65}{158}, \frac{35}{79}, \frac{25}{158}, -\frac{15}{79}, \frac{15}{158}, \frac{30}{79})$ $+ \frac{5}{79}\sqrt{274}e^4 \otimes e_6$	{125678, 167, 2368, 356}
842:9	$0, 0, 0, 0, \frac{50}{1109}\sqrt{199}e^{12}, \frac{25}{1109}\sqrt{426}e^{13}, \frac{25}{1109}\sqrt{114}e^{25},$ $\frac{25}{1109}\sqrt{758}e^{15} + \frac{50}{1109}\sqrt{71}e^{24}$	$(\frac{275}{1109}, -\frac{175}{1109}, -\frac{350}{1109}, \frac{550}{1109}, \frac{100}{1109}, \frac{75}{1109}, -\frac{75}{1109}, \frac{375}{1109})$ $+ \frac{150}{1109}\sqrt{15}e^4 \otimes e_7 + \frac{25}{1109}\sqrt{1402}e^1 \otimes e_3$	{23458, 34}
842:9	$0, 0, 0, 0, \frac{5}{3077}\sqrt{1938}e^{12}, \frac{10}{3077}\sqrt{742}e^{13}, \frac{5}{3077}\sqrt{678}e^{25},$ $\frac{10}{3077}\sqrt{203}e^{15} + \frac{5}{3077}\sqrt{3194}e^{24}$	$(\frac{65}{3077}, -\frac{115}{3077}, \frac{40}{3077}, \frac{130}{3077}, -\frac{50}{3077}, \frac{105}{3077}, -\frac{165}{3077}, \frac{15}{3077})$ $+ \frac{150}{3077}\sqrt{3}e^3 \otimes e_8 + \frac{5}{3077}\sqrt{3106}e^4 \otimes e_6$	{125678, 356}
842:10	$0, 0, 0, 0, \frac{41}{2079}\sqrt{206}e^{12}, \frac{82}{2079}\sqrt{94}e^{13} + \frac{41}{297}\sqrt{26}e^{24}, \frac{41}{2079}\sqrt{1490}e^{15},$ $\frac{164}{2079}\sqrt{43}e^{25} + \frac{164}{297}\sqrt{2}e^{34}$	$(-\frac{656}{2079}, \frac{82}{231}, \frac{41}{77}, -\frac{41}{297}, \frac{82}{2079}, \frac{41}{189}, -\frac{82}{297}, \frac{820}{2079})$ $+ \frac{41}{2079}\sqrt{3398}e^3 \otimes e_7$	{1345, 368}
842:10	$0, 0, 0, 0, \frac{20}{473}\sqrt{3}e^{12}, \frac{5}{473}\sqrt{543}e^{13} + \frac{45}{473}\sqrt{6}e^{24}, \frac{20}{473}\sqrt{42}e^{15},$ $\frac{5}{473}\sqrt{527}e^{25} + \frac{5}{473}\sqrt{510}e^{34}$	$(-\frac{45}{473}, \frac{40}{473}, \frac{60}{473}, -\frac{25}{473}, -\frac{5}{473}, \frac{15}{473}, -\frac{50}{473}, \frac{35}{473})$ $+ \frac{5}{473}\sqrt{859}e^4 \otimes e_7$	{13456, 468}
842:11	$0, 0, 0, 0, \frac{130}{197}e^{12}, \frac{26}{197}\sqrt{46}e^{13}, \frac{52}{197}\sqrt{7}e^{15} + \frac{13}{197}\sqrt{166}e^{23},$ $\frac{78}{197}e^{25} + \frac{52}{197}\sqrt{7}e^{34}$	$(\frac{39}{197}, -\frac{26}{197}, \frac{78}{197}, -\frac{91}{197}, \frac{13}{197}, \frac{117}{197}, \frac{52}{197}, -\frac{13}{197})$ $+ \frac{26}{197}\sqrt{86}e^3 \otimes e_4$	{124567, 146}
842:11	$0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{20}{53}\sqrt{3}e^{13}, \frac{30}{53}e^{15} + \frac{5}{53}\sqrt{22}e^{23},$ $\frac{10}{53}\sqrt{13}e^{25} + \frac{30}{53}e^{34}$	$(-\frac{5}{53}, \frac{10}{53}, -\frac{10}{53}, \frac{25}{53}, \frac{5}{53}, -\frac{15}{53}, 0, \frac{15}{53})$ $+ \frac{10}{53}\sqrt{23}e^2 \otimes e_6$	{12348, 367}
842:11	$0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{10}{53}\sqrt{11}e^{13}, \frac{10}{53}\sqrt{14}e^{15} + \frac{5}{53}\sqrt{22}e^{23},$ $\frac{10}{53}\sqrt{10}e^{25} + \frac{10}{53}\sqrt{14}e^{34}$	$(-\frac{5}{53}, \frac{10}{53}, -\frac{10}{53}, \frac{25}{53}, \frac{5}{53}, -\frac{15}{53}, 0, \frac{15}{53})$ $+ \frac{10}{53}\sqrt{23}e^4 \otimes e_7$	{127, 468}
842:12	$0, 0, 0, 0, \frac{210}{2333}\sqrt{14}e^{12}, \frac{420}{2333}\sqrt{11}e^{13},$ $\frac{35}{2333}\sqrt{654}e^{14} + \frac{70}{2333}\sqrt{465}e^{25}, \frac{980}{2333}\sqrt{2}e^{15} + \frac{210}{2333}\sqrt{37}e^{34}$	$(\frac{280}{2333}, -\frac{315}{2333}, \frac{875}{2333}, -\frac{630}{2333}, -\frac{35}{2333}, \frac{1155}{2333}, -\frac{350}{2333}, \frac{245}{2333})$ $+ \frac{70}{2333}\sqrt{985}e^3 \otimes e_7$	{134, 2478}
842:12	$0, 0, 0, 0, \frac{70}{2377}\sqrt{381}e^{12}, \frac{245}{2377}\sqrt{34}e^{13},$ $\frac{70}{2377}\sqrt{371}e^{14} + \frac{140}{2377}\sqrt{145}e^{25}, \frac{665}{2377}\sqrt{2}e^{15} + \frac{35}{2377}\sqrt{438}e^{34}$	$(-\frac{105}{2377}, \frac{455}{2377}, -\frac{665}{2377}, \frac{910}{2377}, \frac{350}{2377}, -\frac{770}{2377}, \frac{805}{2377}, \frac{245}{2377})$ $+ \frac{70}{2377}\sqrt{995}e^2 \otimes e_6$	{12347, 145678}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:12	$0, 0, 0, 0, \frac{120}{253}e^{12}, \frac{180}{253}e^{13}, \frac{15}{253}\sqrt{134}e^{14} + \frac{30}{253}\sqrt{5}e^{25},$ $\frac{90}{253}\sqrt{3}e^{15} + \frac{60}{253}\sqrt{7}e^{34}$	$(-\frac{10}{253}, \frac{65}{253}, -\frac{85}{253}, \frac{130}{253}, \frac{5}{23}, -\frac{95}{253}, \frac{120}{253}, \frac{45}{253})$ $+ \frac{30}{253}\sqrt{105}e^4 \otimes e_6$	{134, 2478}
842:13	$0, 0, 0, 0, \frac{4}{115}\sqrt{6}e^{12}, \frac{2}{115}\sqrt{138}e^{13}, \frac{1}{115}\sqrt{435}e^{15} + \frac{1}{115}\sqrt{426}e^{24},$ $\frac{3}{115}\sqrt{42}e^{25} + \frac{1}{115}\sqrt{435}e^{34}$	$(\frac{1}{23}, -\frac{3}{115}, -\frac{11}{115}, \frac{2}{23}, \frac{2}{115}, -\frac{6}{115}, \frac{7}{115}, -\frac{1}{115})$ $+ \frac{3}{115}\sqrt{71}e^2 \otimes e_6$	{12357, 278}
842:13	$0, 0, 0, 0, \frac{1}{47}\sqrt{330}e^{12}, \frac{2}{47}\sqrt{165}e^{13}, \frac{11}{47}\sqrt{6}e^{15} + \frac{1}{47}\sqrt{858}e^{24},$ $\frac{3}{47}\sqrt{66}e^{25} + \frac{11}{47}\sqrt{6}e^{34}$	$(-\frac{8}{47}, \frac{9}{47}, \frac{26}{47}, -\frac{16}{47}, \frac{1}{47}, \frac{18}{47}, -\frac{7}{47}, \frac{10}{47})$ $+ \frac{3}{47}\sqrt{286}e^3 \otimes e_7$	{14678, 2346}
842:13	$0, 0, 0, 0, \frac{45}{119}\sqrt{3}e^{12}, \frac{10}{119}\sqrt{102}e^{13}, \frac{5}{119}\sqrt{237}e^{15} + \frac{15}{119}\sqrt{46}e^{24},$ $\frac{15}{119}\sqrt{2}e^{25} + \frac{5}{119}\sqrt{30}e^{34}$	$(\frac{55}{238}, -\frac{10}{119}, -\frac{95}{238}, \frac{55}{119}, \frac{5}{34}, -\frac{20}{119}, \frac{45}{119}, \frac{15}{238})$ $- \frac{15}{119}\sqrt{69}e^4 \otimes e_6$	{125678, 168, 2367, 356}
842:13	$0, 0, 0, 0, \frac{45}{119}\sqrt{3}e^{12}, \frac{10}{119}\sqrt{102}e^{13}, \frac{5}{119}\sqrt{237}e^{15} + \frac{15}{119}\sqrt{46}e^{24},$ $\frac{15}{119}\sqrt{2}e^{25} + \frac{5}{119}\sqrt{30}e^{34}$	$(\frac{55}{238}, -\frac{10}{119}, -\frac{95}{238}, \frac{55}{119}, \frac{5}{34}, -\frac{20}{119}, \frac{45}{119}, \frac{15}{238})$ $+ \frac{15}{119}\sqrt{69}e^4 \otimes e_6$	{125678, 168, 2367, 356}
842:14	$0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{10}{53}\sqrt{14}e^{14} + \frac{5}{53}\sqrt{38}e^{23}, \frac{5}{53}\sqrt{42}e^{15},$ $\frac{5}{53}\sqrt{30}e^{13} + \frac{10}{53}\sqrt{13}e^{25}$	$(-\frac{10}{53}, \frac{5}{53}, \frac{10}{53}, \frac{25}{53}, -\frac{5}{53}, \frac{15}{53}, -\frac{15}{53}, 0)$ $+ \frac{5}{53}\sqrt{94}e^4 \otimes e_8$	{134, 358}
842:14	$0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{5}{53}\sqrt{38}e^{14} + \frac{10}{53}\sqrt{14}e^{23}, \frac{10}{53}\sqrt{13}e^{15},$ $\frac{5}{53}\sqrt{30}e^{13} + \frac{5}{53}\sqrt{42}e^{25}$	$(-\frac{10}{53}, \frac{5}{53}, \frac{10}{53}, \frac{25}{53}, -\frac{5}{53}, \frac{15}{53}, -\frac{15}{53}, 0)$ $+ \frac{5}{53}\sqrt{94}e^3 \otimes e_7$	{178, 457}
842:14	$0, 0, 0, 0, \frac{141}{2081}\sqrt{6}e^{12}, \frac{47}{2081}\sqrt{1154}e^{14} + \frac{47}{2081}\sqrt{30}e^{23},$ $\frac{94}{2081}\sqrt{293}e^{15}, \frac{94}{2081}\sqrt{139}e^{13} + \frac{188}{2081}\sqrt{3}e^{25}$	$(-\frac{517}{2081}, \frac{329}{2081}, \frac{658}{2081}, \frac{1504}{2081}, -\frac{188}{2081}, \frac{987}{2081}, -\frac{705}{2081}, \frac{141}{2081})$ $+ \frac{94}{2081}\sqrt{843}e^4 \otimes e_7$	{2357, 346}
842:14	$0, 0, 0, 0, \frac{19}{509}\sqrt{354}e^{12}, \frac{38}{509}\sqrt{70}e^{14} + \frac{19}{509}\sqrt{6}e^{23}, \frac{19}{509}\sqrt{410}e^{15},$ $\frac{19}{509}\sqrt{230}e^{13} + \frac{171}{509}\sqrt{2}e^{25}$	$(\frac{152}{509}, -\frac{19}{509}, -\frac{38}{509}, -\frac{209}{509}, \frac{133}{509}, -\frac{57}{509}, \frac{285}{509}, \frac{114}{509})$ $+ \frac{19}{509}\sqrt{858}e^1 \otimes e_4$	{1237, 234578}
842:15	$0, 0, 0, 0, \frac{1}{2}\sqrt{2}e^{12}, \frac{1}{2}\sqrt{2}e^{34}, \frac{1}{4}\sqrt{6}e^{15} - \frac{1}{4}\sqrt{13}e^{23},$ $\frac{1}{4}\sqrt{13}e^{13} + \frac{1}{4}\sqrt{6}e^{25}$	$(\frac{1}{8}, \frac{1}{8}, \frac{1}{4}, -\frac{1}{2}, \frac{1}{4}, -\frac{1}{4}, \frac{3}{8}, \frac{3}{8})$ $+ \frac{1}{4}\sqrt{22}e^3 \otimes e_4$	{124578, 148, 45, 124578, 148, 45}
842:15	$0, 0, 0, 0, \frac{1}{2}\sqrt{2}e^{12}, \frac{1}{2}\sqrt{2}e^{34}, \frac{1}{4}\sqrt{6}e^{15} + \frac{1}{4}\sqrt{13}e^{23},$ $\frac{1}{4}\sqrt{13}e^{13} + \frac{1}{4}\sqrt{6}e^{25}$	$(\frac{1}{8}, \frac{1}{8}, \frac{1}{4}, -\frac{1}{2}, \frac{1}{4}, -\frac{1}{4}, \frac{3}{8}, \frac{3}{8})$ $+ \frac{1}{4}\sqrt{22}e^3 \otimes e_4$	{124578, 148, 45, 124578, 148, 45}
842:15	$0, 0, 0, 0, \frac{60}{271}\sqrt{3}e^{12}, \frac{20}{271}\sqrt{101}e^{34}, \frac{30}{271}\sqrt{46}e^{15} - \frac{10}{271}\sqrt{158}e^{23},$ $\frac{10}{271}\sqrt{286}e^{13} + \frac{10}{271}\sqrt{30}e^{25}$	$(-\frac{10}{271}, -\frac{10}{271}, -\frac{20}{271}, \frac{170}{271}, -\frac{20}{271}, \frac{150}{271}, -\frac{30}{271}, -\frac{30}{271})$ $+ \frac{20}{271}\sqrt{222}e^4 \otimes e_7$	{127, 1456, 2578, 468, 127, 1456, 2578, 468}
842:15	$0, 0, 0, 0, \frac{60}{271}\sqrt{3}e^{12}, \frac{20}{271}\sqrt{101}e^{34}, \frac{30}{271}\sqrt{46}e^{15} + \frac{10}{271}\sqrt{158}e^{23},$ $\frac{10}{271}\sqrt{286}e^{13} + \frac{10}{271}\sqrt{30}e^{25}$	$(-\frac{10}{271}, -\frac{10}{271}, -\frac{20}{271}, \frac{170}{271}, -\frac{20}{271}, \frac{150}{271}, -\frac{30}{271}, -\frac{30}{271})$ $+ \frac{20}{271}\sqrt{222}e^4 \otimes e_7$	{127, 1456, 2578, 468, 127, 1456, 2578, 468}
842:15	$0, 0, 0, 0, \frac{4}{31}\sqrt{15}e^{12}, \frac{4}{31}\sqrt{15}e^{34}, \frac{2}{31}\sqrt{58}e^{15} - \frac{6}{31}\sqrt{6}e^{23},$ $\frac{2}{31}\sqrt{2}e^{13} + \frac{2}{31}\sqrt{6}e^{25}$	$(\frac{2}{31}, \frac{2}{31}, \frac{4}{31}, -\frac{10}{31}, \frac{4}{31}, -\frac{6}{31}, \frac{6}{31}, \frac{6}{31})$ $+ \frac{4}{31}\sqrt{26}e^1 \otimes e_6$	{123478, 13458, 23567, 36, 123478, 13458, 23567, 36}
842:15	$0, 0, 0, 0, \frac{4}{31}\sqrt{15}e^{12}, \frac{4}{31}\sqrt{15}e^{34}, \frac{2}{31}\sqrt{58}e^{15} + \frac{6}{31}\sqrt{6}e^{23},$ $\frac{2}{31}\sqrt{2}e^{13} + \frac{2}{31}\sqrt{6}e^{25}$	$(\frac{2}{31}, \frac{2}{31}, \frac{4}{31}, -\frac{10}{31}, \frac{4}{31}, -\frac{6}{31}, \frac{6}{31}, \frac{6}{31})$ $+ \frac{4}{31}\sqrt{26}e^1 \otimes e_6$	{123478, 13458, 23567, 36, 123478, 13458, 23567, 36}
842:16	$0, 0, 0, 0, \frac{9}{397}\sqrt{690}e^{12}, \frac{9}{397}\sqrt{6}e^{34}, \frac{27}{397}\sqrt{86}e^{15} + \frac{180}{397}\sqrt{3}e^{23},$ $\frac{180}{397}\sqrt{3}e^{14} + \frac{54}{397}\sqrt{7}e^{25}$	$(\frac{99}{397}, -\frac{72}{397}, \frac{198}{397}, -\frac{144}{397}, \frac{27}{397}, \frac{54}{397}, \frac{126}{397}, -\frac{45}{397})$ $+ \frac{54}{397}\sqrt{57}e^3 \otimes e_8$	{2478, 458}
842:16	$0, 0, 0, 0, \frac{3}{445}\sqrt{1902}e^{12}, \frac{3}{445}\sqrt{1902}e^{34}, \frac{9}{445}\sqrt{190}e^{15} + \frac{6}{445}\sqrt{474}e^{23},$ $\frac{6}{445}\sqrt{285}e^{14} + \frac{445}{445}e^{25}$	$(\frac{33}{445}, -\frac{6}{89}, \frac{66}{445}, -\frac{12}{89}, \frac{3}{445}, \frac{6}{445}, \frac{36}{445}, -\frac{27}{445})$ $+ \frac{54}{445}\sqrt{7}e^1 \otimes e_6$	{123478, 13458}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:17	$0, 0, 0, 0, \frac{31}{1799}\sqrt{1110}e^{12}, \frac{31}{1799}\sqrt{1346}e^{13},$ $\frac{62}{1799}\sqrt{118}e^{15} + \frac{31}{1799}\sqrt{34}e^{23}, \frac{186}{1799}\sqrt{29}e^{14} + \frac{62}{1799}\sqrt{429}e^{25}$	$(-\frac{186}{1799}, \frac{403}{1799}, -\frac{372}{1799}, \frac{806}{1799}, \frac{31}{257}, -\frac{558}{1799}, \frac{31}{1799}, \frac{620}{1799})$ $+ \frac{31}{1799}\sqrt{3030}e^2 \otimes e_6$	{145678, 245}
842:17	$0, 0, 0, 0, \frac{2}{11}\sqrt{6}e^{12}, \frac{4}{11}\sqrt{2}e^{13}, \frac{4}{11}e^{15} + \frac{2}{11}\sqrt{14}e^{23},$ $\frac{2}{11}\sqrt{14}e^{14} + \frac{2}{11}\sqrt{10}e^{25}$	$(-\frac{1}{11}, \frac{2}{11}, -\frac{2}{11}, \frac{4}{11}, \frac{1}{11}, -\frac{3}{11}, 0, \frac{3}{11})$ $+ \frac{4}{11}\sqrt{5}e^4 \otimes e_7$	{13678, 357}
842:17	$0, 0, 0, 0, \frac{123}{1709}\sqrt{78}e^{12}, \frac{82}{1709}\sqrt{263}e^{13},$ $\frac{41}{1709}\sqrt{658}e^{15} + \frac{164}{1709}\sqrt{21}e^{23}, \frac{41}{1709}\sqrt{1286}e^{14} + \frac{82}{1709}\sqrt{33}e^{25}$	$(-\frac{205}{1709}, \frac{533}{1709}, -\frac{410}{1709}, \frac{1066}{1709}, \frac{328}{1709}, -\frac{615}{1709}, \frac{123}{1709}, \frac{861}{1709})$ $+ \frac{205}{1709}\sqrt{114}e^4 \otimes e_6$	{125678, 168}
842:17	$0, 0, 0, 0, \frac{2}{21}\sqrt{51}e^{12}, \frac{1}{21}\sqrt{114}e^{13}, \frac{2}{7}\sqrt{5}e^{15} + \frac{1}{21}\sqrt{174}e^{23},$ $\frac{1}{21}\sqrt{174}e^{14} + \frac{2}{7}\sqrt{2}e^{25}$	$(\frac{1}{7}, -\frac{1}{7}, \frac{2}{7}, -\frac{2}{7}, 0, \frac{3}{7}, \frac{1}{7}, -\frac{1}{7})$ $+ \frac{1}{21}\sqrt{330}e^1 \otimes e_4$	{234567, 346}
842:17	$0, 0, 0, 0, \frac{1}{7}\sqrt{14}e^{12}, \frac{1}{21}\sqrt{114}e^{13}, \frac{5}{21}\sqrt{6}e^{15} + \frac{2}{21}\sqrt{39}e^{23},$ $\frac{2}{21}\sqrt{39}e^{14} + \frac{2}{7}\sqrt{2}e^{25}$	$(\frac{1}{7}, -\frac{1}{7}, \frac{2}{7}, -\frac{2}{7}, 0, \frac{3}{7}, \frac{1}{7}, -\frac{1}{7})$ $+ \frac{1}{21}\sqrt{330}e^3 \otimes e_8$	{2478, 458}
842:18	$0, 0, 0, 0, \frac{171}{509}\sqrt{2}e^{12}, \frac{19}{509}\sqrt{410}e^{13}, \frac{19}{509}\sqrt{149}e^{15} - \frac{19}{509}\sqrt{435}e^{24},$ $\frac{19}{509}\sqrt{199}e^{14} + \frac{95}{509}\sqrt{3}e^{25}$	$(-\frac{19}{509}, -\frac{19}{509}, \frac{304}{509}, -\frac{38}{509}, -\frac{38}{509}, \frac{285}{509}, -\frac{57}{509}, -\frac{57}{509})$ $+ \frac{19}{509}\sqrt{858}e^3 \otimes e_7$	{123458, 14678, 2346, 457, 123458, 14678, 2346, 457}
842:18	$0, 0, 0, 0, \frac{171}{509}\sqrt{2}e^{12}, \frac{19}{509}\sqrt{410}e^{13}, \frac{19}{509}\sqrt{149}e^{15} + \frac{19}{509}\sqrt{435}e^{24},$ $\frac{19}{509}\sqrt{199}e^{14} + \frac{95}{509}\sqrt{3}e^{25}$	$(-\frac{19}{509}, -\frac{19}{509}, \frac{304}{509}, -\frac{38}{509}, -\frac{38}{509}, \frac{285}{509}, -\frac{57}{509}, -\frac{57}{509})$ $+ \frac{19}{509}\sqrt{858}e^3 \otimes e_7$	{123458, 14678, 2346, 457, 123458, 14678, 2346, 457}
842:18	$0, 0, 0, 0, \frac{26}{521}\sqrt{47}e^{12}, \frac{117}{521}\sqrt{6}e^{13}, \frac{13}{521}\sqrt{255}e^{15} - \frac{13}{521}\sqrt{341}e^{24},$ $\frac{13}{521}\sqrt{349}e^{14} + \frac{13}{521}\sqrt{435}e^{25}$	$(\frac{39}{521}, \frac{39}{521}, -\frac{169}{521}, \frac{78}{521}, \frac{78}{521}, -\frac{130}{521}, \frac{117}{521}, \frac{117}{521})$ $+ \frac{13}{521}\sqrt{894}e^2 \otimes e_6$	{12348, 145678, 245, 3467, 12348, 145678, 245, 3467}
842:18	$0, 0, 0, 0, \frac{26}{521}\sqrt{47}e^{12}, \frac{117}{521}\sqrt{6}e^{13}, \frac{13}{521}\sqrt{255}e^{15} + \frac{13}{521}\sqrt{341}e^{24},$ $\frac{13}{521}\sqrt{349}e^{14} + \frac{13}{521}\sqrt{435}e^{25}$	$(\frac{39}{521}, \frac{39}{521}, -\frac{169}{521}, \frac{78}{521}, \frac{78}{521}, -\frac{130}{521}, \frac{117}{521}, \frac{117}{521})$ $+ \frac{13}{521}\sqrt{894}e^2 \otimes e_6$	{12348, 145678, 245, 3467, 12348, 145678, 245, 3467}
842:18	$0, 0, 0, 0, \frac{5}{53}\sqrt{42}e^{12}, \frac{10}{53}\sqrt{13}e^{13}, \frac{5}{53}\sqrt{38}e^{15} - \frac{10}{53}\sqrt{14}e^{24},$ $\frac{5}{53}\sqrt{30}e^{14} + \frac{10}{53}\sqrt{3}e^{25}$	$(\frac{5}{53}, \frac{5}{53}, -\frac{20}{53}, \frac{10}{53}, \frac{10}{53}, -\frac{15}{53}, \frac{15}{53}, \frac{15}{53})$ $+ \frac{5}{53}\sqrt{94}e^4 \otimes e_6$	{125678, 168, 2367, 356, 125678, 168, 2367, 356}
842:18	$0, 0, 0, 0, \frac{5}{53}\sqrt{42}e^{12}, \frac{10}{53}\sqrt{13}e^{13}, \frac{5}{53}\sqrt{38}e^{15} + \frac{10}{53}\sqrt{14}e^{24},$ $\frac{5}{53}\sqrt{30}e^{14} + \frac{10}{53}\sqrt{3}e^{25}$	$(\frac{5}{53}, \frac{5}{53}, -\frac{20}{53}, \frac{10}{53}, \frac{10}{53}, -\frac{15}{53}, \frac{15}{53}, \frac{15}{53})$ $+ \frac{5}{53}\sqrt{94}e^4 \otimes e_6$	{125678, 168, 2367, 356, 125678, 168, 2367, 356}
842:18	$0, 0, 0, 0, \frac{10}{53}\sqrt{13}e^{12}, \frac{5}{53}\sqrt{42}e^{13}, \frac{10}{53}\sqrt{14}e^{15} - \frac{5}{53}\sqrt{38}e^{24},$ $\frac{5}{53}\sqrt{30}e^{14} + \frac{10}{53}\sqrt{3}e^{25}$	$(\frac{5}{53}, \frac{5}{53}, -\frac{20}{53}, \frac{10}{53}, \frac{10}{53}, -\frac{15}{53}, \frac{15}{53}, \frac{15}{53})$ $+ \frac{5}{53}\sqrt{94}e^1 \otimes e_3$	{1247, 145, 234578, 348, 1247, 145, 234578, 348}
842:18	$0, 0, 0, 0, \frac{10}{53}\sqrt{13}e^{12}, \frac{5}{53}\sqrt{42}e^{13}, \frac{10}{53}\sqrt{14}e^{15} + \frac{5}{53}\sqrt{38}e^{24},$ $\frac{5}{53}\sqrt{30}e^{14} + \frac{10}{53}\sqrt{3}e^{25}$	$(\frac{5}{53}, \frac{5}{53}, -\frac{20}{53}, \frac{10}{53}, \frac{10}{53}, -\frac{15}{53}, \frac{15}{53}, \frac{15}{53})$ $+ \frac{5}{53}\sqrt{94}e^1 \otimes e_3$	{1247, 145, 234578, 348, 1247, 145, 234578, 348}
842:21	$0, 0, 0, 0, \frac{3}{137}\sqrt{2090}e^{12}, \frac{1}{137}\sqrt{5610}e^{13}, \frac{10}{137}\sqrt{66}e^{15}, \frac{1}{137}\sqrt{5610}e^{16}$	$(-\frac{17}{137}, \frac{80}{137}, \frac{43}{137}, -\frac{85}{137}, \frac{63}{137}, \frac{26}{137}, \frac{46}{137}, \frac{9}{137})$ $+ \frac{3}{137}\sqrt{4070}e^2 \otimes e_4$	{123678, 127, 134568, 145, 23578, 2567, 348, 46}
842:21	$0, 0, 0, 0, \frac{6}{71}\sqrt{78}e^{12}, \frac{2}{71}\sqrt{39}e^{13}, \frac{2}{71}\sqrt{39}e^{15}, \frac{6}{71}\sqrt{78}e^{16}$	$(-\frac{20}{71}, \frac{53}{71}, \frac{15}{71}, \frac{14}{71}, \frac{33}{71}, -\frac{5}{71}, \frac{13}{71}, -\frac{25}{71})$ $+ \frac{6}{71}\sqrt{247}e^2 \otimes e_8$	{12346, 1236, 14578, 1578, 2345, 235, 4678, 678}
842:21	$0, 0, 0, 0, \frac{2}{181}\sqrt{534}e^{12}, \frac{1}{181}\sqrt{5162}e^{13}, \frac{1}{181}\sqrt{7298}e^{15}, \frac{1}{181}\sqrt{5162}e^{16}$	$(\frac{29}{181}, -\frac{60}{181}, -\frac{7}{181}, \frac{87}{181}, -\frac{31}{181}, \frac{22}{181}, -\frac{2}{181}, \frac{51}{181})$ $+ \frac{1}{181}\sqrt{11570}e^4 \otimes e_7 + \frac{2}{181}\sqrt{4183}e^1 \otimes e_2$	{1378, 167, 23468, 24}
842:21	$0, 0, 0, 0, \frac{8}{1319}\sqrt{3810}e^{12}, \frac{40}{1319}\sqrt{219}e^{13}, \frac{8}{1319}\sqrt{435}e^{15},$ $\frac{24}{1319}\sqrt{890}e^{16}$	$(\frac{196}{1319}, -\frac{284}{1319}, -\frac{228}{1319}, \frac{644}{1319}, -\frac{88}{1319}, -\frac{32}{1319}, \frac{108}{1319}, \frac{164}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^4 \otimes e_8 + \frac{360}{1319}\sqrt{5}e^1 \otimes e_2$	{138, 146, 23678, 247}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:21	$0, 0, 0, 0, \frac{6}{11}e^{12}, \frac{6}{11}\sqrt{2}e^{13}, \frac{3}{11}\sqrt{2}e^{15}, \frac{6}{11}\sqrt{2}e^{16}$	$(\frac{4}{11}, -\frac{5}{11}, -\frac{2}{11}, \frac{2}{11}, -\frac{1}{11}, \frac{2}{11}, \frac{3}{11}, \frac{6}{11})$ $+ \frac{9}{11}\sqrt{2}e^1 \otimes e_2$	{13478, 1378, 1467, 167, 2, 23468, 2368, 24}
842:21	$0, 0, 0, 0, \frac{24}{1319}\sqrt{890}e^{12}, \frac{8}{1319}\sqrt{3810}e^{13}, \frac{40}{1319}\sqrt{219}e^{15}, \frac{8}{1319}\sqrt{435}e^{16}$	$(\frac{196}{1319}, \frac{110}{1319}, -\frac{284}{1319}, -\frac{370}{1319}, \frac{306}{1319}, -\frac{88}{1319}, \frac{502}{1319}, \frac{108}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^2 \otimes e_4 + \frac{360}{1319}\sqrt{5}e^1 \otimes e_3$	{127, 145, 23578, 348}
842:21	$0, 0, 0, 0, \frac{4}{79}\sqrt{102}e^{12}, \frac{1}{79}\sqrt{714}e^{13}, \frac{3}{79}\sqrt{170}e^{15}, \frac{1}{79}\sqrt{510}e^{16}$	$(-\frac{19}{79}, \frac{30}{79}, \frac{17}{79}, \frac{43}{79}, \frac{11}{79}, -\frac{2}{79}, -\frac{8}{79}, -\frac{21}{79})$ $+ \frac{3}{79}\sqrt{374}e^4 \otimes e_7 + \frac{6}{79}\sqrt{102}e^2 \otimes e_8$	{12367, 1458, 2357, 468}
842:21	$0, 0, 0, 0, \frac{1}{685}\sqrt{94998}e^{12}, \frac{2}{685}\sqrt{10011}e^{13}, \frac{6}{685}\sqrt{1562}e^{15}, \frac{2}{685}\sqrt{11715}e^{16}$	$(\frac{41}{685}, \frac{123}{685}, -\frac{172}{685}, \frac{73}{685}, \frac{164}{685}, -\frac{131}{685}, \frac{41}{137}, -\frac{18}{137})$ $+ \frac{3}{685}\sqrt{12922}e^2 \otimes e_8 + \frac{3}{685}\sqrt{16046}e^1 \otimes e_3$	{1458, 158, 23457, 2357}
842:21	$0, 0, 0, 0, \frac{1}{22}\sqrt{70}e^{12}, \frac{1}{22}\sqrt{70}e^{13}, \frac{1}{22}\sqrt{70}e^{15}, \frac{1}{22}\sqrt{70}e^{16}$	$(-\frac{7}{22}, \frac{5}{11}, \frac{5}{11}, \frac{3}{22}, \frac{3}{22}, \frac{3}{22}, -\frac{2}{11}, -\frac{2}{11})$ $+ \frac{1}{22}\sqrt{266}e^2 \otimes e_8 + \frac{1}{22}\sqrt{266}e^3 \otimes e_7$	{12467, 1267, 2457, 257}
842:21	$0, 0, 0, 0, \frac{1}{22}\sqrt{70}e^{12}, \frac{1}{22}\sqrt{70}e^{13}, \frac{1}{22}\sqrt{70}e^{15}, \frac{1}{22}\sqrt{70}e^{16}$	$(-\frac{7}{22}, \frac{5}{11}, \frac{5}{11}, \frac{3}{22}, \frac{3}{22}, \frac{3}{22}, -\frac{2}{11}, -\frac{2}{11})$ $+ \frac{1}{22}\sqrt{266}e^2 \otimes e_8 - \frac{1}{22}\sqrt{266}e^3 \otimes e_7$	{12467, 1267, 2457, 257}
842:21	$0, 0, 0, 0, \frac{3}{79}\sqrt{170}e^{12}, \frac{1}{79}\sqrt{510}e^{13}, \frac{4}{79}\sqrt{102}e^{15}, \frac{1}{79}\sqrt{714}e^{16}$	$(-\frac{19}{79}, \frac{28}{79}, \frac{41}{79}, -\frac{23}{79}, \frac{9}{79}, \frac{22}{79}, -\frac{10}{79}, \frac{3}{79})$ $+ \frac{3}{79}\sqrt{374}e^2 \otimes e_4 + \frac{6}{79}\sqrt{102}e^3 \otimes e_7$	{12678, 1345, 2578, 346}
842:21	$0, 0, 0, 0, \frac{2}{5}\sqrt{2}e^{12}, \frac{2}{5}\sqrt{2}e^{13}, \frac{2}{5}\sqrt{2}e^{15}, \frac{2}{5}\sqrt{2}e^{16}$	$(\frac{1}{5}, 0, 0, -\frac{3}{5}, \frac{1}{5}, \frac{1}{5}, \frac{2}{5}, \frac{2}{5})$ $+ \frac{4}{5}\sqrt{2}e^1 \otimes e_4$	{12378, 1267, 156, 2345678, 2457, 4}
842:21	$0, 0, 0, 0, \frac{2}{115}\sqrt{494}e^{12}, \frac{2}{115}\sqrt{209}e^{13}, \frac{2}{115}\sqrt{209}e^{15}, \frac{2}{115}\sqrt{494}e^{16}$	$(-\frac{4}{115}, \frac{33}{115}, \frac{3}{115}, -\frac{42}{115}, \frac{29}{115}, -\frac{1}{115}, \frac{5}{23}, -\frac{1}{23})$ $+ \frac{4}{115}\sqrt{266}e^1 \otimes e_4 + \frac{6}{115}\sqrt{95}e^2 \otimes e_8$	{1267, 1358, 2457, 3468}
842:21	$0, 0, 0, 0, \frac{10}{137}\sqrt{66}e^{12}, \frac{1}{137}\sqrt{5610}e^{13}, \frac{3}{137}\sqrt{2090}e^{15}, \frac{1}{137}\sqrt{5610}e^{16}$	$(-\frac{17}{137}, \frac{6}{137}, \frac{43}{137}, 1, -\frac{11}{137}, \frac{26}{137}, -\frac{28}{137}, \frac{9}{137})$ $+ \frac{3}{137}\sqrt{4070}e^4 \otimes e_7$	{123678, 127, 134568, 145, 23578, 2567, 348, 46}
842:22	$0, 0, 0, 0, \frac{20}{1739}\sqrt{105}e^{12}, \frac{40}{1739}\sqrt{426}e^{13}, \frac{20}{1739}\sqrt{978}e^{25}, \frac{20}{1739}\sqrt{957}e^{16}$	$(\frac{70}{1739}, -\frac{130}{1739}, \frac{410}{1739}, -\frac{530}{1739}, -\frac{60}{1739}, \frac{480}{1739}, -\frac{190}{1739}, \frac{550}{1739})$ $+ \frac{20}{1739}\sqrt{2283}e^1 \otimes e_4 + \frac{60}{1739}\sqrt{249}e^3 \otimes e_7$	{1267, 1567, 234568, 3468}
842:22	$0, 0, 0, 0, \frac{4}{303}\sqrt{2262}e^{12}, \frac{4}{303}\sqrt{174}e^{13}, \frac{4}{303}\sqrt{2929}e^{25}, \frac{20}{303}\sqrt{87}e^{16}$	$(-\frac{29}{101}, \frac{124}{303}, \frac{22}{101}, \frac{20}{101}, \frac{37}{303}, -\frac{7}{101}, \frac{161}{303}, -\frac{36}{101})$ $+ \frac{12}{101}\sqrt{87}e^2 \otimes e_8$	{123467, 12367, 14578, 1578, 2345, 235, 468, 68}
842:22	$0, 0, 0, 0, \frac{30}{913}\sqrt{95}e^{12}, \frac{30}{913}\sqrt{51}e^{13}, \frac{30}{913}\sqrt{89}e^{25}, \frac{15}{913}\sqrt{482}e^{16}$	$(-\frac{37}{913}, \frac{2}{11}, \frac{15}{913}, -\frac{262}{913}, \frac{129}{913}, -\frac{2}{83}, \frac{295}{913}, -\frac{59}{913})$ $+ \frac{15}{913}\sqrt{758}e^1 \otimes e_4 + \frac{15}{913}\sqrt{834}e^2 \otimes e_8$	{1267, 13578, 245, 3468}
842:22	$0, 0, 0, 0, \frac{1}{4}\sqrt{11}e^{12}, \frac{1}{24}\sqrt{66}e^{13}, \frac{1}{6}\sqrt{22}e^{25}, \frac{1}{24}\sqrt{66}e^{16}$	$(-\frac{1}{16}, \frac{7}{24}, \frac{1}{4}, -\frac{5}{8}, \frac{11}{48}, \frac{3}{16}, \frac{25}{48}, \frac{1}{8})$ $+ \frac{1}{24}\sqrt{858}e^2 \otimes e_4$	{123678, 127, 1345678, 1457, 2358, 256, 348, 46}
842:22	$0, 0, 0, 0, \frac{2}{117}\sqrt{1905}e^{12}, \frac{2}{117}\sqrt{127}e^{13}, \frac{4}{117}\sqrt{127}e^{25}, \frac{1}{117}\sqrt{7366}e^{16}$	$(\frac{20}{39}, -\frac{14}{117}, -\frac{67}{117}, \frac{8}{39}, \frac{46}{117}, -\frac{7}{117}, \frac{32}{117}, \frac{53}{117})$ $+ \frac{1}{117}\sqrt{23622}e^1 \otimes e_3$	{12478, 1278, 14578, 1578, 2345, 235, 3, 34}
842:22	$0, 0, 0, 0, \frac{38}{579}\sqrt{65}e^{12}, \frac{38}{1737}\sqrt{127}e^{13}, \frac{266}{1737}\sqrt{7}e^{25}, \frac{38}{1737}\sqrt{109}e^{16}$	$(\frac{115}{579}, \frac{101}{1737}, -\frac{377}{1737}, -\frac{69}{193}, \frac{446}{1737}, -\frac{32}{1737}, \frac{547}{1737}, \frac{313}{1737})$ $+ \frac{190}{1737}\sqrt{33}e^2 \otimes e_4 + \frac{76}{1737}\sqrt{177}e^1 \otimes e_3$	{1278, 14578, 235, 34}
842:22	$0, 0, 0, 0, \frac{6}{353}\sqrt{465}e^{12}, \frac{4}{353}\sqrt{930}e^{13}, \frac{8}{353}\sqrt{465}e^{25}, \frac{2}{353}\sqrt{6045}e^{16}$	$(-\frac{98}{353}, \frac{115}{353}, \frac{125}{353}, -\frac{61}{353}, \frac{17}{353}, \frac{27}{353}, \frac{132}{353}, -\frac{71}{353})$ $+ \frac{2}{353}\sqrt{10509}e^3 \otimes e_4 + \frac{4}{353}\sqrt{4371}e^2 \otimes e_8$	{12467, 13578, 245, 368}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:22	$0, 0, 0, 0, \frac{7}{597}\sqrt{1122}e^{12}, \frac{28}{199}\sqrt{33}e^{13}, \frac{7}{597}\sqrt{4378}e^{25}, \frac{7}{597}\sqrt{1254}e^{16}$	$(-\frac{34}{199}, -\frac{28}{597}, \frac{127}{199}, \frac{40}{199}, -\frac{130}{597}, \frac{93}{199}, -\frac{158}{597}, \frac{59}{199})$ $+ \frac{7}{199}\sqrt{1166}e^3 \otimes e_7$	{123458, 12358, 1348, 138, 247, 27, 457, 57}
842:22	$0, 0, 0, 0, \frac{9}{101}\sqrt{14}e^{12}, \frac{9}{101}\sqrt{33}e^{13}, \frac{3}{101}\sqrt{255}e^{25}, \frac{3}{101}\sqrt{246}e^{16}$	$(-\frac{21}{101}, \frac{3}{101}, \frac{39}{101}, \frac{51}{101}, -\frac{18}{101}, \frac{18}{101}, -\frac{15}{101}, -\frac{3}{101})$ $+ \frac{30}{101}\sqrt{6}e^3 \otimes e_7 + \frac{3}{101}\sqrt{447}e^4 \otimes e_8$	{12358, 138, 247, 457}
842:22	$0, 0, 0, 0, \frac{5}{807}\sqrt{1590}e^{12}, \frac{20}{807}\sqrt{159}e^{13}, \frac{1}{807}\sqrt{142570}e^{25}, \frac{5}{269}\sqrt{318}e^{16}$	$(-\frac{74}{269}, \frac{136}{807}, \frac{105}{269}, \frac{36}{269}, -\frac{86}{807}, \frac{31}{269}, \frac{50}{807}, -\frac{43}{269})$ $+ \frac{1}{807}\sqrt{173310}e^3 \otimes e_7 + \frac{2}{807}\sqrt{49290}e^2 \otimes e_8$	{12467, 1267, 3468, 368}
842:22	$0, 0, 0, 0, \frac{1}{18}\sqrt{66}e^{12}, \frac{1}{18}\sqrt{286}e^{13}, \frac{1}{18}\sqrt{55}e^{25}, \frac{1}{18}\sqrt{77}e^{16}$	$(-\frac{1}{6}, \frac{2}{9}, \frac{23}{36}, -\frac{7}{12}, \frac{1}{18}, \frac{17}{36}, \frac{5}{18}, \frac{11}{36})$ $+ \frac{1}{18}\sqrt{627}e^3 \otimes e_4$	{12358, 12456, 138, 146, 23678, 247, 35678, 457}
842:22	$0, 0, 0, 0, \frac{10}{523}\sqrt{313}e^{12}, \frac{2}{1569}\sqrt{68547}e^{13}, \frac{2}{1569}\sqrt{163699}e^{25}, \frac{2}{523}\sqrt{313}e^{16}$	$(-\frac{79}{523}, \frac{137}{1569}, \frac{221}{523}, -\frac{163}{523}, -\frac{100}{1569}, \frac{142}{523}, \frac{37}{1569}, \frac{63}{523})$ $+ \frac{2}{1569}\sqrt{215031}e^2 \otimes e_4 + \frac{4}{523}\sqrt{5947}e^3 \otimes e_7$	{12678, 145678, 2356, 346}
842:22	$0, 0, 0, 0, \frac{2}{939}\sqrt{27534}e^{12}, \frac{2}{939}\sqrt{2118}e^{13}, \frac{1}{939}\sqrt{220978}e^{25}, \frac{10}{939}\sqrt{1059}e^{16}$	$(-\frac{58}{313}, \frac{137}{939}, \frac{44}{313}, \frac{151}{313}, -\frac{37}{939}, -\frac{14}{313}, \frac{100}{939}, -\frac{72}{313})$ $+ \frac{1}{313}\sqrt{26122}e^4 \otimes e_7 + \frac{6}{313}\sqrt{1059}e^2 \otimes e_8$	{12367, 1578, 2345, 468}
842:22	$0, 0, 0, 0, \frac{53}{197}\sqrt{2}e^{12}, \frac{2}{197}\sqrt{265}e^{13}, \frac{4}{197}\sqrt{265}e^{25}, \frac{4}{197}\sqrt{318}e^{16}$	$(\frac{9}{197}, \frac{27}{197}, -\frac{44}{197}, \frac{23}{197}, \frac{36}{197}, -\frac{35}{197}, \frac{63}{197}, -\frac{26}{197})$ $+ \frac{1}{197}\sqrt{10282}e^2 \otimes e_8 + \frac{1}{197}\sqrt{8162}e^1 \otimes e_3$	{14578, 1578, 2345, 235}
842:22	$0, 0, 0, 0, \frac{1}{117}\sqrt{1302}e^{12}, \frac{1}{117}\sqrt{155}e^{13}, \frac{1}{117}\sqrt{589}e^{25}, \frac{1}{117}\sqrt{4402}e^{16}$	$(\frac{7}{39}, -\frac{1}{117}, -\frac{41}{117}, \frac{7}{13}, \frac{20}{117}, -\frac{20}{117}, \frac{19}{117}, \frac{1}{117})$ $+ \frac{1}{117}\sqrt{6045}e^4 \otimes e_8 + \frac{2}{39}\sqrt{186}e^1 \otimes e_3$	{12467, 14567, 23568, 368}
842:22	$0, 0, 0, 0, \frac{1}{18}\sqrt{66}e^{12}, \frac{1}{18}\sqrt{77}e^{13}, \frac{1}{18}\sqrt{55}e^{25}, \frac{1}{18}\sqrt{286}e^{16}$	$(-\frac{1}{6}, \frac{2}{9}, \frac{1}{9}, 1, \frac{1}{18}, -\frac{1}{18}, \frac{5}{18}, -\frac{2}{9})$ $+ \frac{1}{18}\sqrt{627}e^4 \otimes e_8$	{12358, 12456, 138, 146, 23678, 247, 35678, 457}
842:22	$0, 0, 0, 0, \frac{4}{1683}\sqrt{33405}e^{12}, \frac{8}{1683}\sqrt{262}e^{13}, \frac{4}{1683}\sqrt{39562}e^{25}, \frac{4}{1683}\sqrt{32881}e^{16}$	$(\frac{10}{33}, -\frac{326}{1683}, -\frac{538}{1683}, \frac{302}{561}, \frac{184}{1683}, -\frac{28}{1683}, -\frac{142}{1683}, \frac{482}{1683})$ $+ \frac{20}{561}\sqrt{393}e^4 \otimes e_7 + \frac{4}{1683}\sqrt{101787}e^1 \otimes e_3$	{1278, 1578, 2345, 34}
842:22	$0, 0, 0, 0, \frac{1}{203}\sqrt{10266}e^{12}, \frac{2}{203}\sqrt{5133}e^{13}, \frac{2}{203}\sqrt{1239}e^{25}, \frac{2}{203}\sqrt{5133}e^{16}$	$(\frac{2}{7}, -\frac{1}{203}, -\frac{16}{203}, -\frac{17}{29}, \frac{57}{203}, \frac{6}{29}, \frac{8}{29}, \frac{100}{203})$ $+ \frac{1}{203}\sqrt{56994}e^1 \otimes e_4$	{12378, 1267, 13578, 1567, 234568, 245, 3468, 4}
842:22	$0, 0, 0, 0, \frac{2}{195}\sqrt{723}e^{12}, \frac{2}{195}\sqrt{1446}e^{13}, \frac{1}{195}\sqrt{31330}e^{25}, \frac{2}{195}\sqrt{1446}e^{16}$	$(\frac{4}{65}, -\frac{29}{195}, \frac{2}{13}, 1, -\frac{17}{195}, \frac{14}{65}, -\frac{46}{195}, \frac{18}{65})$ $+ \frac{1}{65}\sqrt{8194}e^4 \otimes e_7$	{12378, 1267, 13578, 1567, 234568, 245, 3468, 4}
842:23	$0, 0, 0, 0, \frac{6}{169}\sqrt{114}e^{12}, \frac{4}{169}\sqrt{38}e^{13}, \frac{4}{39}\sqrt{19}e^{25}, \frac{2}{507}\sqrt{8778}e^{36}$	$(-\frac{12}{169}, \frac{56}{507}, -\frac{10}{169}, \frac{76}{169}, \frac{20}{507}, -\frac{22}{169}, \frac{76}{507}, -\frac{32}{169})$ $+ \frac{2}{507}\sqrt{12198}e^4 \otimes e_7 + \frac{4}{169}\sqrt{589}e^2 \otimes e_8$	{12367, 127, 348, 468}
842:23	$0, 0, 0, 0, \frac{3}{77}\sqrt{274}e^{12}, \frac{2}{231}\sqrt{822}e^{13}, \frac{1}{231}\sqrt{21098}e^{25}, \frac{1}{231}\sqrt{21098}e^{36}$	$(-\frac{8}{77}, \frac{73}{231}, -\frac{20}{231}, \frac{15}{77}, \frac{7}{33}, -\frac{4}{21}, \frac{122}{231}, -\frac{64}{231})$ $+ \frac{2}{231}\sqrt{12741}e^2 \otimes e_8$	{123467, 12367, 1247, 127, 348, 38, 468, 68}
842:23	$0, 0, 0, 0, \frac{10}{281}\sqrt{47}e^{12}, \frac{10}{843}\sqrt{705}e^{13}, \frac{1}{843}\sqrt{132070}e^{25}, \frac{10}{281}\sqrt{94}e^{36}$	$(-\frac{41}{281}, \frac{49}{843}, \frac{70}{281}, -\frac{62}{281}, -\frac{74}{843}, \frac{29}{281}, -\frac{25}{843}, \frac{99}{281})$ $+ \frac{1}{843}\sqrt{142410}e^2 \otimes e_4 + \frac{47}{281}\sqrt{10}e^3 \otimes e_7$	{12678, 145678, 2356, 346}
842:23	$0, 0, 0, 0, \frac{26}{223}\sqrt{47}e^{12}, \frac{1}{669}\sqrt{40326}e^{13}, \frac{1}{669}\sqrt{272506}e^{25}, \frac{1}{223}\sqrt{6110}e^{36}$	$(-\frac{22}{223}, \frac{212}{669}, \frac{41}{223}, -\frac{133}{223}, \frac{146}{669}, \frac{19}{223}, \frac{358}{669}, \frac{60}{223})$ $+ \frac{2}{669}\sqrt{163137}e^2 \otimes e_4$	{12367, 127, 134567, 1457, 2358, 2568, 348, 468}
842:23	$0, 0, 0, 0, \frac{1}{14}\sqrt{105}e^{12}, \frac{1}{14}\sqrt{105}e^{13}, \frac{1}{14}\sqrt{30}e^{25}, \frac{1}{14}\sqrt{30}e^{36}$	$(\frac{1}{2}, -\frac{3}{28}, -\frac{3}{28}, -\frac{4}{7}, \frac{11}{28}, \frac{11}{28}, \frac{2}{7}, \frac{2}{7})$ $+ \frac{1}{14}\sqrt{330}e^1 \otimes e_4$	{12378, 12678, 15678, 23456, 245, 4}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:23	$0, 0, 0, 0, \frac{14}{155} \sqrt{23}e^{12}, \frac{4}{155} \sqrt{46}e^{13}, \frac{23}{155} \sqrt{6}e^{25}, \frac{23}{155} \sqrt{6}e^{36}$	$(\frac{16}{155}, \frac{4}{31}, -\frac{21}{155}, -\frac{6}{31}, \frac{36}{155}, -\frac{1}{31}, \frac{56}{155}, -\frac{26}{155})$ $+ \frac{1}{155} \sqrt{4738}e^1 \otimes e_4 + \frac{2}{155} \sqrt{1886}e^2 \otimes e_8$	{13578, 15678, 23456, 245}
842:23	$0, 0, 0, 0, \frac{2}{213} \sqrt{210}e^{12}, \frac{2}{213} \sqrt{210}e^{13}, \frac{2}{213} \sqrt{497}e^{25}, \frac{2}{213} \sqrt{497}e^{36}$	$(-\frac{11}{71}, \frac{19}{213}, \frac{19}{213}, \frac{9}{71}, -\frac{14}{213}, -\frac{14}{213}, \frac{5}{213}, \frac{5}{213})$ $+ \frac{2}{213} \sqrt{651}e^2 \otimes e_8 + \frac{2}{213} \sqrt{651}e^3 \otimes e_7$	{145678, 15678, 23456, 2356}
842:23	$0, 0, 0, 0, \frac{1}{55} \sqrt{406}e^{12}, \frac{1}{55} \sqrt{406}e^{13}, \frac{1}{165} \sqrt{22330}e^{25}, \frac{2}{165} \sqrt{1218}e^{36}$	$(\frac{6}{55}, -\frac{28}{165}, \frac{1}{11}, 1, -\frac{2}{33}, \frac{1}{5}, -\frac{38}{165}, \frac{16}{55})$ $+ \frac{1}{165} \sqrt{52374}e^4 \otimes e_7$	{12378, 12678, 13578, 15678, 23456, 245, 346, 4}
842:24	$0, 0, 0, 0, \frac{9}{775} \sqrt{786}e^{12}, \frac{81}{775} \sqrt{6}e^{13}, \frac{18}{775} \sqrt{357}e^{15},$ $\frac{9}{775} \sqrt{1194}e^{16} + \frac{18}{775} \sqrt{462}e^{23}$	$(-\frac{9}{775}, -\frac{18}{775}, \frac{207}{775}, -\frac{261}{775}, -\frac{27}{775}, \frac{198}{775}, -\frac{36}{775}, \frac{189}{775})$ $+ \frac{54}{775} \sqrt{59}e^3 \otimes e_7 + \frac{9}{775} \sqrt{2046}e^2 \otimes e_4$	{134568, 348}
842:24	$0, 0, 0, 0, \frac{6}{899} \sqrt{1586}e^{12}, \frac{2}{899} \sqrt{35502}e^{13}, \frac{2}{899} \sqrt{116022}e^{15},$ $\frac{2}{899} \sqrt{54534}e^{16} + \frac{12}{899} \sqrt{3355}e^{23}$	$(-\frac{65}{899}, -\frac{130}{899}, \frac{472}{899}, \frac{161}{899}, -\frac{195}{899}, \frac{407}{899}, -\frac{260}{899}, \frac{342}{899})$ $+ \frac{12}{899} \sqrt{7503}e^3 \otimes e_7$	{12345, 1235, 2346, 236}
842:24	$0, 0, 0, 0, \frac{12}{125} \sqrt{33}e^{12}, \frac{6}{125} \sqrt{286}e^{13}, \frac{2}{125} \sqrt{462}e^{15},$ $\frac{2}{125} \sqrt{330}e^{16} + \frac{66}{125} \sqrt{2}e^{23}$	$(\frac{4}{125}, \frac{8}{125}, \frac{53}{125}, -\frac{79}{125}, \frac{12}{125}, \frac{57}{125}, \frac{16}{125}, \frac{61}{125})$ $+ \frac{12}{125} \sqrt{187}e^3 \otimes e_4$	{138, 146, 3568, 45}
842:24	$0, 0, 0, 0, \frac{1}{24} \sqrt{399}e^{12}, \frac{7}{24} \sqrt{6}e^{13}, \frac{1}{4} \sqrt{7}e^{15},$ $\frac{7}{24} \sqrt{6}e^{16} + \frac{1}{24} \sqrt{399}e^{23}$	$(\frac{5}{48}, \frac{5}{24}, \frac{1}{16}, -\frac{2}{3}, \frac{5}{16}, \frac{1}{6}, \frac{5}{12}, \frac{13}{48})$ $+ \frac{1}{12} \sqrt{210}e^2 \otimes e_4$	{134568, 145, 348, 46}
842:24	$0, 0, 0, 0, \frac{12}{125} \sqrt{33}e^{12}, \frac{2}{125} \sqrt{330}e^{13}, \frac{2}{125} \sqrt{462}e^{15},$ $\frac{6}{125} \sqrt{286}e^{16} + \frac{66}{125} \sqrt{2}e^{23}$	$(\frac{4}{125}, \frac{8}{125}, -\frac{3}{25}, 1, \frac{12}{125}, -\frac{11}{125}, \frac{16}{125}, -\frac{7}{125})$ $+ \frac{12}{125} \sqrt{187}e^4 \otimes e_8$	{138, 146, 3568, 45}
842:24	$0, 0, 0, 0, \frac{10}{73} \sqrt{17}e^{12}, \frac{1}{73} \sqrt{2210}e^{13}, \frac{1}{73} \sqrt{5610}e^{15},$ $\frac{1}{73} \sqrt{2210}e^{16} + \frac{10}{73} \sqrt{17}e^{23}$	$(-\frac{3}{73}, -\frac{6}{73}, \frac{17}{73}, 1, -\frac{9}{73}, \frac{14}{73}, -\frac{12}{73}, \frac{11}{73})$ $+ \frac{1}{73} \sqrt{10030}e^4 \otimes e_7$	{134568, 145, 348, 46}
842:24	$0, 0, 0, 0, \frac{26}{521} \sqrt{22}e^{12}, \frac{13}{521} \sqrt{211}e^{13}, \frac{13}{521} \sqrt{255}e^{15},$ $\frac{13}{521} \sqrt{66}e^{16} + \frac{13}{521} \sqrt{66}e^{23}$	$(-\frac{13}{1042}, -\frac{13}{521}, \frac{143}{521}, -\frac{351}{1042}, -\frac{39}{1042}, \frac{273}{1042}, -\frac{26}{521}, \frac{130}{521})$ $+ \frac{13}{521} \sqrt{435}e^3 \otimes e_7 + \frac{13}{521} \sqrt{479}e^1 \otimes e_4$	{1358, 3468}
842:24	$0, 0, 0, 0, \frac{2}{61} \sqrt{286}e^{12}, \frac{2}{61} \sqrt{374}e^{13}, \frac{6}{61} \sqrt{22}e^{15},$ $\frac{2}{61} \sqrt{374}e^{16} + \frac{4}{61} \sqrt{66}e^{23}$	$(\frac{5}{61}, \frac{10}{61}, \frac{6}{61}, -\frac{39}{61}, \frac{15}{61}, \frac{11}{61}, \frac{20}{61}, \frac{16}{61})$ $+ \frac{20}{61} \sqrt{11}e^1 \otimes e_4$	{12378, 1267, 2345678, 2457}
842:24	$0, 0, 0, 0, \frac{31}{2319} \sqrt{514}e^{12}, \frac{31}{773} \sqrt{38}e^{13}, \frac{62}{2319} \sqrt{190}e^{15},$ $\frac{31}{2319} \sqrt{190}e^{16} + \frac{62}{2319} \sqrt{385}e^{23}$	$(-\frac{124}{2319}, -\frac{248}{2319}, \frac{155}{773}, \frac{1178}{2319}, -\frac{124}{773}, \frac{341}{2319}, -\frac{496}{2319}, \frac{217}{2319})$ $+ \frac{31}{2319} \sqrt{1826}e^4 \otimes e_8 + \frac{31}{2319} \sqrt{2282}e^3 \otimes e_7$	{1467, 457}
842:25	$0, 0, 0, 0, \frac{9}{17} e^{12}, \frac{3}{17} \sqrt{19}e^{13}, \frac{3}{34} \sqrt{10}e^{25},$ $\frac{3}{34} \sqrt{2}e^{16} + \frac{6}{17} \sqrt{5}e^{23}$	$(\frac{1}{34}, \frac{1}{17}, \frac{29}{68}, -\frac{43}{68}, \frac{3}{34}, \frac{31}{68}, \frac{5}{34}, \frac{33}{68})$ $+ \frac{3}{34} \sqrt{222}e^3 \otimes e_4$	{1378, 1467, 3568, 45}
842:25	$0, 0, 0, 0, \frac{4}{91} \sqrt{15}e^{12}, \frac{8}{91} \sqrt{30}e^{13}, \frac{2}{91} \sqrt{285}e^{25},$ $\frac{20}{91} \sqrt{3}e^{16} + \frac{6}{91} \sqrt{15}e^{23}$	$(-\frac{1}{91}, -\frac{2}{91}, \frac{25}{91}, -\frac{31}{91}, -\frac{3}{91}, \frac{24}{91}, -\frac{5}{91}, \frac{23}{91})$ $+ \frac{12}{91} \sqrt{15}e^3 \otimes e_7 + \frac{2}{91} \sqrt{645}e^1 \otimes e_4$	{1267, 234568}
842:25	$0, 0, 0, 0, \frac{2}{379} \sqrt{4313}e^{12}, \frac{2}{379} \sqrt{8626}e^{13}, \frac{24}{379} \sqrt{227}e^{25},$ $\frac{2}{379} \sqrt{8626}e^{16} + \frac{2}{379} \sqrt{12031}e^{23}$	$(-\frac{15}{379}, -\frac{30}{379}, \frac{95}{379}, 1, -\frac{45}{379}, \frac{80}{379}, -\frac{75}{379}, \frac{65}{379})$ $+ \frac{2}{379} \sqrt{67873}e^4 \otimes e_7$	{12378, 1267, 234568, 245}
842:25	$0, 0, 0, 0, \frac{4}{43} \sqrt{30}e^{12}, \frac{8}{43} \sqrt{15}e^{13}, \frac{2}{43} \sqrt{105}e^{25},$ $\frac{8}{43} \sqrt{15}e^{16} + \frac{2}{43} \sqrt{195}e^{23}$	$(\frac{3}{43}, \frac{6}{43}, \frac{5}{43}, -\frac{27}{43}, \frac{9}{43}, \frac{8}{43}, \frac{15}{43}, \frac{11}{43})$ $+ \frac{10}{43} \sqrt{21}e^1 \otimes e_4$	{12378, 1267, 234568, 245}
842:25	$0, 0, 0, 0, \frac{9}{577} \sqrt{770}e^{12}, \frac{12}{577} \sqrt{1265}e^{13}, \frac{3}{577} \sqrt{17930}e^{25},$ $\frac{3}{577} \sqrt{3190}e^{16} + \frac{132}{577} \sqrt{5}e^{23}$	$(-\frac{38}{577}, -\frac{76}{577}, \frac{305}{577}, \frac{112}{577}, -\frac{114}{577}, \frac{267}{577}, -\frac{190}{577}, \frac{229}{577})$ $+ \frac{15}{577} \sqrt{2046}e^3 \otimes e_7$	{1348, 138, 457, 57}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:25	$0, 0, 0, 0, \frac{4}{23}\sqrt{19}e^{12}, \frac{1}{23}\sqrt{114}e^{13}, \frac{2}{23}\sqrt{57}e^{25},$ $\frac{1}{23}\sqrt{114}e^{16} + \frac{1}{23}\sqrt{190}e^{23}$	$(\frac{2}{23}, \frac{4}{23}, \frac{2}{23}, -\frac{15}{23}, \frac{6}{23}, \frac{4}{23}, \frac{10}{23}, \frac{6}{23})$ $+ \frac{19}{23}\sqrt{2}e^2 \otimes e_4$	{1345678, 1457, 348, 46}
842:25	$0, 0, 0, 0, \frac{62}{3005}\sqrt{181}e^{12}, \frac{62}{3005}\sqrt{111}e^{13}, \frac{62}{3005}\sqrt{399}e^{25},$ $\frac{62}{3005}\sqrt{105}e^{16} + \frac{31}{3005}\sqrt{1222}e^{23}$	$(-\frac{31}{3005}, -\frac{62}{3005}, \frac{806}{3005}, -\frac{1023}{3005}, -\frac{93}{3005}, \frac{155}{601}, -\frac{31}{601}, \frac{744}{3005})$ $+ \frac{1116}{3005}\sqrt{2}e^3 \otimes e_7 + \frac{62}{3005}\sqrt{683}e^2 \otimes e_4$	{12678, 2356}
842:25	$0, 0, 0, 0, \frac{1}{7}\sqrt{6}e^{12}, \frac{1}{7}\sqrt{7}e^{13}, \frac{1}{7}\sqrt{5}e^{25},$ $\frac{1}{7}\sqrt{6}e^{16} + \frac{1}{7}\sqrt{10}e^{23}$	$(-\frac{1}{21}, -\frac{2}{21}, \frac{4}{21}, \frac{11}{21}, -\frac{1}{7}, \frac{1}{7}, -\frac{5}{21}, \frac{2}{21})$ $+ \frac{1}{7}\sqrt{17}e^4 \otimes e_8 + \frac{2}{7}\sqrt{5}e^3 \otimes e_7$	{138, 457}
842:25	$0, 0, 0, 0, \frac{9}{17}e^{12}, \frac{3}{34}\sqrt{2}e^{13}, \frac{3}{34}\sqrt{10}e^{25},$ $\frac{3}{17}\sqrt{19}e^{16} + \frac{6}{17}\sqrt{5}e^{23}$	$(\frac{1}{34}, \frac{1}{17}, -\frac{2}{17}, \frac{1}{34}, -\frac{3}{34}, \frac{5}{34}, -\frac{1}{17})$ $+ \frac{3}{34}\sqrt{222}e^4 \otimes e_8$	{1378, 1467, 3568, 45}
842:26	$0, 0, 0, 0, \frac{240}{1007}\sqrt{11}e^{12}, \frac{12}{1007}\sqrt{2167}e^{13}, \frac{12}{53}\sqrt{11}e^{15},$ $\frac{132}{1007}\sqrt{11}e^{16} + \frac{36}{1007}\sqrt{143}e^{24}$	$(\frac{322}{1007}, -\frac{113}{1007}, -\frac{470}{1007}, \frac{287}{1007}, \frac{11}{53}, -\frac{148}{1007}, \frac{531}{1007}, \frac{174}{1007})$ $+ \frac{36}{1007}\sqrt{1023}e^1 \otimes e_3$	{12478, 158, 2357, 34}
842:26	$0, 0, 0, 0, \frac{1}{42}\sqrt{266}e^{12}, \frac{1}{42}\sqrt{210}e^{13}, \frac{1}{6}\sqrt{10}e^{15},$ $\frac{1}{21}\sqrt{21}e^{16} + \frac{1}{42}\sqrt{154}e^{24}$	$(\frac{1}{6}, -\frac{1}{4}, -\frac{1}{6}, \frac{5}{12}, -\frac{1}{12}, 0, \frac{1}{12}, \frac{1}{6})$ $+ \frac{1}{21}\sqrt{133}e^1 \otimes e_3 + \frac{1}{42}\sqrt{518}e^4 \otimes e_7$	{23578, 348}
842:26	$0, 0, 0, 0, \frac{2}{251}\sqrt{969}e^{12}, \frac{2}{251}\sqrt{2703}e^{13}, \frac{30}{251}\sqrt{51}e^{15},$ $\frac{12}{251}\sqrt{170}e^{16} + \frac{6}{251}\sqrt{1139}e^{24}$	$(\frac{7}{251}, -\frac{135}{502}, \frac{69}{251}, \frac{301}{502}, -\frac{121}{502}, \frac{76}{251}, -\frac{107}{502}, \frac{83}{251})$ $+ \frac{6}{251}\sqrt{2363}e^4 \otimes e_7$	{123678, 134568, 23578, 348}
842:26	$0, 0, 0, 0, \frac{2}{347}\sqrt{2431}e^{12}, \frac{6}{347}\sqrt{1870}e^{13}, \frac{6}{347}\sqrt{1870}e^{15},$ $\frac{2}{347}\sqrt{2431}e^{16} + \frac{8}{347}\sqrt{374}e^{24}$	$(-\frac{84}{347}, \frac{51}{347}, \frac{257}{347}, \frac{38}{347}, -\frac{33}{347}, \frac{173}{347}, -\frac{117}{347}, \frac{89}{347})$ $+ \frac{2}{347}\sqrt{51799}e^3 \otimes e_7$	{12345, 14678, 2346, 4578}
842:26	$0, 0, 0, 0, \frac{16}{387}\sqrt{170}e^{12}, \frac{64}{387}\sqrt{5}e^{13}, \frac{16}{387}\sqrt{105}e^{15},$ $\frac{16}{387}\sqrt{3}e^{16} + \frac{16}{387}\sqrt{46}e^{24}$	$(\frac{40}{387}, \frac{20}{129}, -\frac{88}{387}, -\frac{68}{387}, \frac{100}{387}, -\frac{16}{129}, \frac{140}{387}, -\frac{8}{387})$ $+ \frac{16}{387}\sqrt{149}e^2 \otimes e_4 + \frac{16}{387}\sqrt{203}e^1 \otimes e_3$	{2357, 34}
842:26	$0, 0, 0, 0, \frac{41}{2605}\sqrt{970}e^{12}, \frac{533}{2605}\sqrt{2}e^{13}, \frac{82}{2605}\sqrt{265}e^{15},$ $\frac{41}{2605}\sqrt{474}e^{16} + \frac{82}{2605}\sqrt{14}e^{24}$	$(-\frac{123}{521}, \frac{902}{2605}, \frac{1353}{2605}, -\frac{779}{2605}, \frac{287}{2605}, \frac{738}{2605}, -\frac{328}{2605}, \frac{123}{2605})$ $+ \frac{779}{2605}\sqrt{6}e^2 \otimes e_4 + \frac{82}{2605}\sqrt{595}e^3 \otimes e_7$	{12678, 2578}
842:26	$0, 0, 0, 0, \frac{6}{35}\sqrt{35}e^{12}, \frac{3}{35}\sqrt{42}e^{13}, \frac{2}{35}\sqrt{105}e^{15},$ $\frac{4}{35}\sqrt{21}e^{16} + \frac{3}{35}\sqrt{14}e^{24}$	$(-\frac{1}{7}, \frac{43}{70}, \frac{11}{35}, -\frac{41}{70}, \frac{33}{70}, \frac{6}{35}, \frac{23}{70}, \frac{1}{35})$ $+ \frac{3}{35}\sqrt{266}e^2 \otimes e_4$	{127, 145, 2567, 46}
842:27	$0, 0, 0, 0, \frac{2}{253}\sqrt{1921}e^{12}, \frac{6}{253}\sqrt{1130}e^{13}, \frac{6}{253}\sqrt{1130}e^{25},$ $\frac{4}{253}\sqrt{791}e^{16} + \frac{2}{253}\sqrt{1921}e^{24}$	$(-\frac{51}{253}, -\frac{6}{253}, \frac{163}{253}, \frac{67}{253}, -\frac{57}{253}, \frac{112}{253}, -\frac{63}{253}, \frac{61}{253})$ $+ \frac{2}{253}\sqrt{22939}e^3 \otimes e_7$	{123458, 138, 27, 457}
842:27	$0, 0, 0, 0, \frac{33}{3581}\sqrt{2930}e^{12}, \frac{165}{3581}\sqrt{30}e^{13}, \frac{462}{3581}\sqrt{10}e^{25},$ $\frac{66}{3581}\sqrt{197}e^{16} + \frac{231}{3581}\sqrt{34}e^{24}$	$(\frac{330}{3581}, \frac{495}{3581}, -\frac{759}{3581}, -\frac{594}{3581}, \frac{825}{3581}, -\frac{429}{3581}, \frac{1320}{3581}, -\frac{99}{3581})$ $+ \frac{33}{3581}\sqrt{3534}e^2 \otimes e_4 + \frac{66}{3581}\sqrt{737}e^1 \otimes e_3$	{235, 34}
842:27	$0, 0, 0, 0, \frac{12}{1217}\sqrt{6486}e^{12}, \frac{72}{1217}\sqrt{23}e^{13}, \frac{6}{1217}\sqrt{10281}e^{25},$ $\frac{24}{1217}\sqrt{1518}e^{16} + \frac{6}{1217}\sqrt{14835}e^{24}$	$(\frac{537}{1217}, -\frac{78}{1217}, -\frac{705}{1217}, \frac{447}{1217}, \frac{459}{1217}, -\frac{168}{1217}, \frac{381}{1217}, \frac{369}{1217})$ $+ \frac{6}{1217}\sqrt{67965}e^1 \otimes e_3$	{12478, 1578, 235, 34}
842:27	$0, 0, 0, 0, \frac{33}{3197}\sqrt{1310}e^{12}, \frac{33}{3197}\sqrt{698}e^{13}, \frac{66}{3197}\sqrt{623}e^{25},$ $\frac{66}{3197}\sqrt{41}e^{16} + \frac{33}{3197}\sqrt{1082}e^{24}$	$(-\frac{726}{3197}, \frac{495}{3197}, \frac{1353}{3197}, -\frac{594}{3197}, -\frac{231}{3197}, \frac{627}{3197}, \frac{264}{3197}, -\frac{99}{3197})$ $+ \frac{33}{3197}\sqrt{2990}e^2 \otimes e_4 + \frac{66}{3197}\sqrt{671}e^3 \otimes e_7$	{1267, 14567}
842:27	$0, 0, 0, 0, \frac{2}{621}\sqrt{10065}e^{12}, \frac{2}{621}\sqrt{17446}e^{13}, \frac{1}{621}\sqrt{202642}e^{25},$ $\frac{2}{621}\sqrt{1342}e^{16} + \frac{4}{621}\sqrt{14091}e^{24}$	$(\frac{4}{23}, -\frac{163}{621}, \frac{74}{621}, \frac{151}{207}, -\frac{55}{621}, \frac{182}{621}, -\frac{218}{621}, \frac{290}{621})$ $+ \frac{11}{207}\sqrt{610}e^4 \otimes e_7$	{12345, 1468, 278, 3567}
842:27	$0, 0, 0, 0, \frac{4}{27}\sqrt{33}e^{12}, \frac{1}{27}\sqrt{110}e^{13}, \frac{22}{27}e^{25},$ $\frac{1}{27}\sqrt{22}e^{16} + \frac{2}{27}\sqrt{66}e^{24}$	$(-\frac{1}{6}, \frac{10}{27}, \frac{7}{27}, -\frac{4}{9}, \frac{11}{54}, \frac{5}{54}, \frac{31}{54}, -\frac{2}{27})$ $+ \frac{1}{9}\sqrt{110}e^2 \otimes e_4$	{127, 1457, 256, 46}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	\mathfrak{g}	D	S
842:28	$0, 0, 0, 0, \frac{30}{559}\sqrt{61}e^{12}, \frac{18}{559}\sqrt{427}e^{13}, \frac{3}{559}\sqrt{12322}e^{15},$ $\frac{6}{559}\sqrt{3965}e^{14} + \frac{12}{559}\sqrt{61}e^{36}$	$(\frac{252}{559}, -\frac{297}{559}, -\frac{12}{559}, -\frac{24}{559}, -\frac{45}{559}, \frac{240}{559}, \frac{207}{559}, \frac{228}{559})$ $+ \frac{3}{559}\sqrt{55266}e^1 \otimes e_2$	{1347, 1467, 23468, 248}
842:28	$0, 0, 0, 0, \frac{1}{7}\sqrt{7}e^{12}, \frac{1}{7}\sqrt{6}e^{13}, \frac{1}{7}\sqrt{6}e^{15},$ $\frac{1}{7}\sqrt{10}e^{14} + \frac{1}{7}\sqrt{5}e^{36}$	$(-\frac{2}{7}, \frac{3}{7}, \frac{1}{7}, \frac{2}{7}, \frac{1}{7}, -\frac{1}{7}, -\frac{1}{7}, 0)$ $+ \frac{1}{7}\sqrt{17}e^4 \otimes e_7 + \frac{2}{7}\sqrt{5}e^2 \otimes e_8$	{348, 468}
842:28	$0, 0, 0, 0, \frac{9}{221}\sqrt{35}e^{12}, \frac{27}{221}\sqrt{2}e^{13}, \frac{63}{221}\sqrt{2}e^{15},$ $\frac{9}{221}\sqrt{130}e^{14} + \frac{9}{221}\sqrt{29}e^{36}$	$(\frac{18}{221}, -\frac{63}{221}, \frac{27}{221}, \frac{54}{221}, -\frac{45}{221}, \frac{45}{221}, -\frac{27}{221}, \frac{72}{221})$ $+ \frac{18}{221}\sqrt{51}e^1 \otimes e_2 + \frac{9}{221}\sqrt{195}e^4 \otimes e_7$	{23468, 248}
842:28	$0, 0, 0, 0, \frac{8}{43}\sqrt{15}e^{12}, \frac{4}{43}\sqrt{30}e^{13}, \frac{8}{43}\sqrt{15}e^{15},$ $\frac{2}{43}\sqrt{195}e^{14} + \frac{2}{43}\sqrt{105}e^{36}$	$(\frac{16}{43}, -\frac{8}{43}, -\frac{7}{43}, -\frac{14}{43}, \frac{8}{43}, \frac{9}{43}, \frac{24}{43}, \frac{2}{43})$ $+ \frac{10}{43}\sqrt{21}e^1 \otimes e_4$	{234567, 2457, 346, 4}
842:28	$0, 0, 0, 0, \frac{8}{91}\sqrt{30}e^{12}, \frac{4}{91}\sqrt{15}e^{13}, \frac{20}{91}\sqrt{3}e^{15},$ $\frac{6}{91}\sqrt{15}e^{14} + \frac{2}{91}\sqrt{285}e^{36}$	$(\frac{8}{91}, \frac{16}{91}, -\frac{11}{91}, -\frac{22}{91}, \frac{24}{91}, -\frac{3}{91}, \frac{32}{91}, -\frac{2}{13})$ $+ \frac{12}{91}\sqrt{15}e^2 \otimes e_8 + \frac{2}{91}\sqrt{645}e^1 \otimes e_4$	{234567, 2457}
842:28	$0, 0, 0, 0, \frac{756}{2423}e^{12}, \frac{27}{2423}\sqrt{654}e^{13}, \frac{27}{2423}\sqrt{1046}e^{15},$ $\frac{108}{2423}\sqrt{41}e^{14} + \frac{27}{2423}\sqrt{1834}e^{36}$	$(-\frac{594}{2423}, \frac{783}{2423}, \frac{324}{2423}, \frac{648}{2423}, \frac{189}{2423}, -\frac{270}{2423}, \frac{405}{2423}, \frac{54}{2423})$ $+ \frac{216}{2423}\sqrt{39}e^3 \otimes e_7 + \frac{81}{2423}\sqrt{190}e^2 \otimes e_8$	{13458, 2457}
842:28	$0, 0, 0, 0, \frac{3}{34}\sqrt{2}e^{12}, \frac{9}{17}e^{13}, \frac{3}{17}\sqrt{19}e^{15},$ $\frac{6}{17}\sqrt{5}e^{14} + \frac{3}{34}\sqrt{10}e^{36}$	$(-\frac{9}{34}, \frac{3}{17}, \frac{6}{17}, \frac{12}{17}, -\frac{3}{34}, \frac{3}{34}, -\frac{6}{17}, \frac{15}{34})$ $+ \frac{3}{34}\sqrt{222}e^4 \otimes e_7$	{123678, 1278, 2357, 2567}
842:28	$0, 0, 0, 0, \frac{12}{577}\sqrt{1265}e^{12}, \frac{9}{577}\sqrt{770}e^{13}, \frac{3}{577}\sqrt{3190}e^{15},$ $\frac{132}{577}\sqrt{5}e^{14} + \frac{3}{577}\sqrt{17930}e^{36}$	$(-\frac{126}{577}, \frac{393}{577}, \frac{12}{577}, \frac{24}{577}, \frac{267}{577}, -\frac{114}{577}, \frac{141}{577}, -\frac{102}{577})$ $+ \frac{15}{577}\sqrt{2046}e^2 \otimes e_8$	{123467, 1247, 348, 468}
842:28	$0, 0, 0, 0, \frac{6}{385}\sqrt{39}e^{12}, \frac{6}{77}\sqrt{2}e^{13}, \frac{3}{385}\sqrt{278}e^{15},$ $\frac{6}{385}\sqrt{66}e^{14} + \frac{6}{385}\sqrt{59}e^{36}$	$(\frac{17}{385}, -\frac{39}{385}, \frac{4}{385}, \frac{8}{385}, -\frac{2}{35}, \frac{3}{55}, -\frac{1}{77}, \frac{5}{77})$ $+ \frac{3}{385}\sqrt{326}e^4 \otimes e_4 + \frac{3}{385}\sqrt{366}e^3 \otimes e_7$	{2457, 346}
842:28	$0, 0, 0, 0, \frac{54}{2891}\sqrt{29}e^{12}, \frac{54}{2891}\sqrt{411}e^{13}, \frac{27}{2891}\sqrt{1586}e^{15},$ $\frac{54}{2891}\sqrt{155}e^{14} + \frac{108}{2891}\sqrt{91}e^{36}$	$(\frac{108}{2891}, -\frac{621}{2891}, \frac{324}{2891}, \frac{648}{2891}, -\frac{513}{2891}, \frac{432}{2891}, -\frac{405}{2891}, \frac{108}{413})$ $+ \frac{81}{2891}\sqrt{226}e^1 \otimes e_2 + \frac{864}{2891}\sqrt{3}e^3 \otimes e_7$	{14678, 2346}
842:28	$0, 0, 0, 0, \frac{36}{1151}\sqrt{74}e^{12}, \frac{36}{1151}\sqrt{354}e^{13}, \frac{36}{1151}\sqrt{391}e^{15},$ $\frac{72}{1151}\sqrt{94}e^{14} + \frac{36}{1151}\sqrt{509}e^{36}$	$(-\frac{243}{1151}, \frac{126}{1151}, \frac{288}{1151}, \frac{576}{1151}, -\frac{117}{1151}, \frac{45}{1151}, -\frac{360}{1151}, \frac{333}{1151})$ $+ \frac{36}{1151}\sqrt{951}e^3 \otimes e_7$	{124678, 13458, 2457, 346}
842:29	$0, 0, 0, 0, \frac{4}{79}\sqrt{102}e^{12}, \frac{4}{79}\sqrt{138}e^{13}, \frac{12}{79}\sqrt{19}e^{15},$ $\frac{4}{79}\sqrt{138}e^{16} + \frac{12}{79}\sqrt{19}e^{34}$	$(\frac{11}{79}, -\frac{24}{79}, -\frac{1}{79}, \frac{22}{79}, -\frac{13}{79}, \frac{10}{79}, -\frac{2}{79}, \frac{21}{79})$ $+ \frac{12}{79}\sqrt{23}e^4 \otimes e_7$	{123678, 127, 23578, 2567}
842:29	$0, 0, 0, 0, \frac{6}{79}\sqrt{30}e^{12}, \frac{2}{79}\sqrt{138}e^{13}, \frac{6}{79}\sqrt{30}e^{15},$ $\frac{2}{79}\sqrt{138}e^{16} + \frac{4}{79}\sqrt{102}e^{34}$	$(-\frac{12}{79}, \frac{22}{79}, \frac{22}{79}, -\frac{24}{79}, \frac{10}{79}, \frac{10}{79}, -\frac{2}{79}, -\frac{2}{79})$ $+ \frac{6}{79}\sqrt{46}e^2 \otimes e_8 - \frac{6}{79}\sqrt{46}e^3 \otimes e_7$	{127, 13568, 2567, 38}
842:29	$0, 0, 0, 0, \frac{6}{79}\sqrt{30}e^{12}, \frac{2}{79}\sqrt{138}e^{13}, \frac{6}{79}\sqrt{30}e^{15},$ $\frac{2}{79}\sqrt{138}e^{16} + \frac{4}{79}\sqrt{102}e^{34}$	$(-\frac{12}{79}, \frac{22}{79}, \frac{22}{79}, -\frac{24}{79}, \frac{10}{79}, \frac{10}{79}, -\frac{2}{79}, -\frac{2}{79})$ $+ \frac{6}{79}\sqrt{46}e^2 \otimes e_8 + \frac{6}{79}\sqrt{46}e^3 \otimes e_7$	{127, 13568, 2567, 38}
842:29	$0, 0, 0, 0, \frac{14}{473}\sqrt{102}e^{12}, \frac{14}{473}\sqrt{237}e^{13}, \frac{7}{473}\sqrt{438}e^{15},$ $\frac{168}{473}e^{16} + \frac{42}{473}e^{34}$	$(\frac{28}{473}, -\frac{119}{473}, \frac{84}{473}, \frac{56}{473}, -\frac{91}{473}, \frac{112}{473}, -\frac{63}{473}, \frac{140}{473})$ $+ \frac{21}{473}\sqrt{158}e^1 \otimes e_2 + \frac{42}{473}\sqrt{31}e^3 \otimes e_7$	{1467, 23468}
842:29	$0, 0, 0, 0, \frac{2}{19}\sqrt{39}e^{12}, \frac{2}{19}\sqrt{66}e^{13}, \frac{2}{19}\sqrt{6}e^{15},$ $\frac{2}{19}\sqrt{66}e^{16} + \frac{2}{19}\sqrt{39}e^{34}$	$(\frac{9}{38}, -\frac{15}{38}, -\frac{2}{19}, \frac{9}{19}, -\frac{3}{19}, \frac{5}{38}, \frac{3}{38}, \frac{7}{19})$ $+ \frac{6}{19}\sqrt{11}e^1 \otimes e_2$	{1348, 146, 234678, 247}
842:29	$0, 0, 0, 0, \frac{4}{25}\sqrt{15}e^{12}, \frac{2}{25}\sqrt{87}e^{13}, \frac{1}{25}\sqrt{282}e^{15},$ $\frac{2}{25}\sqrt{87}e^{16} + \frac{2}{25}\sqrt{87}e^{34}$	$(0, -\frac{3}{25}, \frac{4}{25}, 0, -\frac{3}{25}, \frac{4}{25}, -\frac{3}{25}, \frac{4}{25})$ $+ \frac{18}{25}e^4 \otimes e_7 + \frac{3}{25}\sqrt{22}e^1 \otimes e_2$	{123678, 127}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:29	$0, 0, 0, 0, \frac{3}{175}\sqrt{381}e^{12}, \frac{9}{175}\sqrt{74}e^{13}, \frac{3}{175}\sqrt{186}e^{15},$ $\frac{12}{175}\sqrt{33}e^{16} + \frac{3}{175}\sqrt{381}e^{34}$	$(\frac{3}{350}, -\frac{51}{350}, \frac{6}{35}, \frac{3}{175}, -\frac{24}{175}, \frac{9}{50}, -\frac{9}{70}, \frac{33}{175})$ $+ \frac{9}{175}\sqrt{46}e^3 \otimes e_4 + \frac{9}{175}\sqrt{65}e^1 \otimes e_2$	{146, 247}
842:29	$0, 0, 0, 0, \frac{1}{605}\sqrt{1578}e^{12}, \frac{1}{605}\sqrt{1794}e^{13}, \frac{3}{605}\sqrt{206}e^{15},$ $\frac{2}{605}\sqrt{345}e^{16} + \frac{18}{605}\sqrt{7}e^{34}$	$(\frac{2}{121}, -\frac{3}{605}, -\frac{26}{605}, \frac{4}{121}, \frac{7}{605}, -\frac{16}{605}, \frac{17}{605}, -\frac{6}{605})$ $+ \frac{3}{605}\sqrt{138}e^2 \otimes e_8 + \frac{3}{605}\sqrt{230}e^4 \otimes e_7$	{127, 2567}
842:29	$0, 0, 0, 0, \frac{2}{75}\sqrt{714}e^{12}, \frac{28}{25}e^{13}, \frac{2}{75}\sqrt{714}e^{15},$ $\frac{14}{25}\sqrt{2}e^{16} + \frac{2}{75}\sqrt{714}e^{34}$	$(-\frac{17}{75}, \frac{29}{75}, \frac{2}{3}, -\frac{34}{75}, \frac{4}{25}, \frac{11}{25}, -\frac{1}{15}, \frac{16}{75})$ $+ \frac{14}{25}\sqrt{6}e^3 \otimes e_4$	{124567, 146, 247, 45}
842:29	$0, 0, 0, 0, \frac{18}{397}\sqrt{105}e^{12}, \frac{27}{397}\sqrt{10}e^{13}, \frac{9}{397}\sqrt{6}e^{15},$ $\frac{9}{397}\sqrt{258}e^{16} + \frac{18}{397}\sqrt{105}e^{34}$	$(-\frac{72}{397}, \frac{198}{397}, \frac{99}{397}, -\frac{144}{397}, \frac{126}{397}, \frac{27}{397}, \frac{54}{397}, -\frac{45}{397})$ $+ \frac{27}{397}\sqrt{142}e^2 \otimes e_8 + \frac{27}{397}\sqrt{86}e^3 \otimes e_4$	{13578, 3678}
842:30	$0, 0, 0, 0, \frac{2}{1361}\sqrt{1034}e^{12}, \frac{22}{1361}\sqrt{1457}e^{13}, \frac{4}{1361}\sqrt{43945}e^{15},$ $\frac{2}{1361}\sqrt{36190}e^{24} + \frac{6}{1361}\sqrt{27401}e^{36}$	$(-\frac{414}{1361}, \frac{337}{1361}, \frac{543}{1361}, \frac{335}{1361}, -\frac{77}{1361}, \frac{129}{1361}, -\frac{491}{1361}, \frac{672}{1361})$ $+ \frac{4}{1361}\sqrt{141658}e^3 \otimes e_7$	{123458, 1678, 236, 457}
842:30	$0, 0, 0, 0, \frac{4}{81}\sqrt{37}e^{12}, \frac{2}{81}\sqrt{111}e^{13}, \frac{4}{81}\sqrt{259}e^{15},$ $\frac{2}{81}\sqrt{1110}e^{24} + \frac{2}{81}\sqrt{185}e^{36}$	$(-\frac{2}{27}, -\frac{11}{81}, \frac{23}{81}, \frac{17}{27}, -\frac{17}{81}, \frac{17}{81}, -\frac{23}{81}, \frac{40}{81})$ $+ \frac{2}{81}\sqrt{2442}e^4 \otimes e_7$	{234, 246, 357, 567}
842:30	$0, 0, 0, 0, \frac{5}{98}\sqrt{58}e^{12}, \frac{5}{49}\sqrt{11}e^{13}, \frac{5}{98}\sqrt{73}e^{15},$ $\frac{5}{98}\sqrt{34}e^{24} + \frac{15}{98}\sqrt{11}e^{36}$	$(-\frac{15}{49}, \frac{20}{49}, \frac{15}{49}, -\frac{5}{49}, \frac{5}{49}, 0, -\frac{10}{49}, \frac{15}{49})$ $+ \frac{10}{49}\sqrt{13}e^3 \otimes e_7 + \frac{5}{98}\sqrt{129}e^2 \otimes e_4$	{257, 346}
842:30	$0, 0, 0, 0, \frac{2}{5}\sqrt{6}e^{12}, \frac{1}{5}\sqrt{6}e^{13}, \frac{1}{5}\sqrt{6}e^{15},$ $\frac{1}{5}\sqrt{6}e^{24} + \frac{1}{5}\sqrt{6}e^{36}$	$(-\frac{1}{5}, \frac{7}{10}, \frac{1}{5}, -\frac{1}{2}, \frac{1}{2}, 0, \frac{3}{10}, \frac{1}{5})$ $+ \frac{4}{5}\sqrt{3}e^2 \otimes e_4$	{12367, 127, 13456, 145}
842:31	$0, 0, 0, 0, \frac{2}{115}\sqrt{314}e^{12}, \frac{2}{115}\sqrt{314}e^{13}, \frac{2}{345}\sqrt{18055}e^{25},$ $\frac{2}{115}\sqrt{2355}e^{14} + \frac{4}{345}\sqrt{942}e^{36}$	$(-\frac{12}{115}, -\frac{34}{345}, \frac{7}{23}, \frac{14}{23}, -\frac{14}{69}, \frac{1}{5}, -\frac{104}{345}, \frac{58}{115})$ $+ \frac{2}{345}\sqrt{44274}e^4 \otimes e_7$	{237, 267, 357, 567}
842:31	$0, 0, 0, 0, \frac{1}{5}e^{12}, \frac{1}{35}\sqrt{182}e^{13}, \frac{1}{70}\sqrt{434}e^{25},$ $\frac{1}{35}\sqrt{105}e^{14} + \frac{1}{70}\sqrt{574}e^{36}$	$(\frac{1}{5}, -\frac{1}{5}, 0, 0, 0, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{1}{35}\sqrt{266}e^3 \otimes e_7 + \frac{1}{70}\sqrt{658}e^1 \otimes e_4$	{23456, 346}
842:31	$0, 0, 0, 0, \frac{5}{1167}\sqrt{1002}e^{12}, \frac{10}{1167}\sqrt{267}e^{13}, \frac{5}{1167}\sqrt{2334}e^{25},$ $\frac{5}{389}\sqrt{22}e^{14} + \frac{100}{1167}\sqrt{6}e^{36}$	$(-\frac{55}{389}, \frac{30}{389}, \frac{30}{389}, \frac{60}{389}, -\frac{25}{389}, -\frac{25}{389}, \frac{5}{389}, \frac{5}{389})$ $+ \frac{5}{1167}\sqrt{2994}e^2 \otimes e_8 + \frac{5}{1167}\sqrt{3126}e^3 \otimes e_7$	{145678, 23456}
842:31	$0, 0, 0, 0, \frac{6}{89}\sqrt{130}e^{12}, \frac{6}{89}\sqrt{130}e^{13}, \frac{6}{89}\sqrt{30}e^{25},$ $\frac{30}{89}\sqrt{3}e^{14} + \frac{6}{89}\sqrt{55}e^{36}$	$(\frac{52}{89}, -\frac{14}{89}, -\frac{19}{89}, -\frac{38}{89}, \frac{38}{89}, \frac{33}{89}, \frac{24}{89}, \frac{14}{89})$ $+ \frac{6}{89}\sqrt{355}e^1 \otimes e_4$	{23456, 245, 346, 4}
842:31	$0, 0, 0, 0, \frac{2}{57}\sqrt{34}e^{12}, \frac{4}{57}\sqrt{6}e^{13}, \frac{4}{57}\sqrt{19}e^{25},$ $\frac{16}{57}e^{14} + \frac{2}{57}\sqrt{26}e^{36}$	$(-\frac{4}{19}, \frac{8}{57}, \frac{2}{19}, \frac{4}{19}, -\frac{4}{57}, -\frac{2}{19}, \frac{4}{57}, 0)$ $+ \frac{2}{57}\sqrt{86}e^4 \otimes e_7 + \frac{4}{57}\sqrt{29}e^2 \otimes e_8$	{348, 468}
842:31	$0, 0, 0, 0, \frac{2}{1497}\sqrt{183414}e^{12}, \frac{8}{499}\sqrt{397}e^{13}, \frac{2}{1497}\sqrt{198103}e^{25},$ $\frac{2}{1497}\sqrt{101235}e^{14} + \frac{2}{499}\sqrt{18262}e^{36}$	$(-\frac{96}{499}, \frac{536}{1497}, \frac{5}{499}, \frac{10}{499}, \frac{248}{1497}, -\frac{91}{499}, \frac{784}{1497}, -\frac{86}{499})$ $+ \frac{4}{1497}\sqrt{120291}e^2 \otimes e_8$	{123467, 1247, 348, 468}
842:31	$0, 0, 0, 0, \frac{2}{487}\sqrt{367}e^{12}, \frac{2}{1461}\sqrt{216897}e^{13}, \frac{2}{1461}\sqrt{178729}e^{25},$ $\frac{2}{1461}\sqrt{111201}e^{14} + \frac{28}{1461}\sqrt{1101}e^{36}$	$(-\frac{6}{487}, -\frac{217}{1461}, \frac{94}{487}, \frac{188}{487}, -\frac{235}{1461}, \frac{88}{487}, -\frac{452}{1461}, \frac{182}{487})$ $+ \frac{40}{1461}\sqrt{1101}e^3 \otimes e_7$	{123458, 1348, 247, 457}
842:31	$0, 0, 0, 0, \frac{4}{109}\sqrt{134}e^{12}, \frac{16}{109}e^{13}, \frac{12}{109}\sqrt{11}e^{25},$ $\frac{12}{109}\sqrt{2}e^{14} + \frac{4}{109}\sqrt{93}e^{36}$	$(\frac{8}{109}, \frac{16}{109}, -\frac{12}{109}, -\frac{24}{109}, \frac{24}{109}, -\frac{4}{109}, \frac{40}{109}, -\frac{16}{109})$ $+ \frac{4}{109}\sqrt{139}e^1 \otimes e_4 + \frac{8}{109}\sqrt{59}e^2 \otimes e_8$	{13578, 15678}
842:32	$0, 0, 0, 0, \frac{4}{411}\sqrt{2685}e^{12}, \frac{2}{411}\sqrt{9129}e^{13}, \frac{2}{411}\sqrt{24523}e^{25},$ $\frac{2}{411}\sqrt{9129}e^{16} + \frac{2}{137}\sqrt{3401}e^{34}$	$(\frac{40}{137}, -\frac{119}{411}, -\frac{14}{137}, \frac{80}{137}, \frac{1}{411}, \frac{26}{137}, -\frac{118}{411}, \frac{66}{137})$ $+ \frac{2}{137}\sqrt{6623}e^4 \otimes e_7$	{123678, 127, 135678, 157}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:32	$0, 0, 0, 0, \frac{3}{35}\sqrt{30}e^{12}, \frac{2}{35}\sqrt{15}e^{13}, \frac{1}{35}\sqrt{285}e^{25},$ $\frac{1}{35}\sqrt{105}e^{16} + \frac{3}{35}\sqrt{30}e^{34}$	$(-\frac{1}{7}, \frac{2}{7}, \frac{1}{7}, -\frac{2}{7}, \frac{1}{7}, 0, \frac{3}{7}, -\frac{1}{7})$ $+ \frac{1}{35}\sqrt{195}e^3 \otimes e_4 + \frac{1}{35}\sqrt{690}e^2 \otimes e_8$	{14578, 468}
842:32	$0, 0, 0, 0, \frac{11}{3957}\sqrt{2190}e^{12}, \frac{22}{3957}\sqrt{381}e^{13}, \frac{11}{3957}\sqrt{2638}e^{25},$ $\frac{11}{3957}\sqrt{174}e^{16} + \frac{22}{1319}\sqrt{89}e^{34}$	$(\frac{55}{1319}, \frac{22}{3957}, -\frac{143}{1319}, \frac{110}{1319}, \frac{187}{3957}, -\frac{88}{1319}, \frac{209}{3957}, -\frac{33}{1319})$ $+ \frac{143}{1319}\sqrt{2}e^4 \otimes e_7 + \frac{165}{1319}\sqrt{2}e^2 \otimes e_8$	{127, 135678}
842:32	$0, 0, 0, 0, \frac{8}{33}\sqrt{6}e^{12}, \frac{8}{33}\sqrt{3}e^{13}, \frac{4}{33}\sqrt{22}e^{25},$ $\frac{4}{33}\sqrt{6}e^{16} + \frac{8}{33}\sqrt{6}e^{34}$	$(-\frac{1}{11}, \frac{10}{33}, 0, -\frac{2}{11}, \frac{7}{33}, -\frac{1}{11}, \frac{17}{33}, -\frac{2}{11})$ $+ \frac{4}{11}\sqrt{6}e^2 \otimes e_8$	{123467, 14578, 2345, 468}
842:32	$0, 0, 0, 0, \frac{1}{213}\sqrt{978}e^{12}, \frac{2}{71}\sqrt{489}e^{13}, \frac{1}{213}\sqrt{23146}e^{25},$ $\frac{1}{213}\sqrt{978}e^{16} + \frac{2}{71}\sqrt{489}e^{34}$	$(-\frac{2}{71}, -\frac{26}{213}, \frac{35}{71}, -\frac{4}{71}, -\frac{32}{213}, \frac{33}{71}, -\frac{58}{213}, \frac{31}{71})$ $+ \frac{1}{71}\sqrt{6194}e^3 \otimes e_7$	{12345, 134, 2478, 4578}
842:32	$0, 0, 0, 0, \frac{95}{1133}\sqrt{6}e^{12}, \frac{76}{3399}\sqrt{3}e^{13}, \frac{19}{3399}\sqrt{2266}e^{25},$ $\frac{19}{3399}\sqrt{222}e^{16} + \frac{76}{3399}\sqrt{138}e^{34}$	$(-\frac{114}{1133}, \frac{304}{3399}, \frac{19}{103}, -\frac{228}{1133}, -\frac{38}{3399}, \frac{95}{1133}, \frac{266}{3399}, -\frac{19}{1133})$ $+ \frac{19}{1133}\sqrt{286}e^3 \otimes e_7 + \frac{38}{1133}\sqrt{94}e^2 \otimes e_8$	{14578, 2345}
842:32	$0, 0, 0, 0, \frac{4}{99}\sqrt{177}e^{12}, \frac{2}{99}\sqrt{2419}e^{13}, \frac{1}{99}\sqrt{1534}e^{25},$ $\frac{1}{99}\sqrt{3422}e^{16} + \frac{4}{99}\sqrt{177}e^{34}$	$(-\frac{8}{33}, \frac{25}{99}, \frac{70}{99}, -\frac{16}{33}, \frac{46}{99}, \frac{26}{99}, \frac{2}{9})$ $+ \frac{1}{99}\sqrt{18762}e^3 \otimes e_4$	{12456, 146, 247, 457}
842:33	$0, 0, 0, 0, \frac{3}{317}\sqrt{1330}e^{12}, \frac{18}{317}\sqrt{57}e^{13}, \frac{228}{317}e^{25},$ $\frac{6}{317}\sqrt{1691}e^{24} + \frac{3}{317}\sqrt{646}e^{36}$	$(\frac{54}{317}, -\frac{84}{317}, \frac{45}{317}, \frac{228}{317}, -\frac{30}{317}, \frac{99}{317}, -\frac{114}{317}, \frac{144}{317})$ $+ \frac{39}{317}\sqrt{114}e^4 \otimes e_7$	{12345, 12456, 23678, 278}
842:33	$0, 0, 0, 0, \frac{12}{1265}\sqrt{7738}e^{12}, \frac{12}{1265}\sqrt{1590}e^{13}, \frac{24}{1265}\sqrt{1802}e^{25},$ $\frac{6}{1265}\sqrt{19451}e^{24} + \frac{6}{1265}\sqrt{10441}e^{36}$	$(-\frac{48}{253}, \frac{504}{1265}, \frac{147}{1265}, -\frac{90}{253}, \frac{24}{115}, -\frac{93}{1265}, \frac{768}{1265}, \frac{54}{1265})$ $+ \frac{6}{1265}\sqrt{55173}e^2 \otimes e_4$	{12367, 127, 134567, 1457}
842:33	$0, 0, 0, 0, \frac{2}{443}\sqrt{1221}e^{12}, \frac{24}{443}\sqrt{111}e^{13}, \frac{12}{443}\sqrt{555}e^{25},$ $\frac{3}{443}\sqrt{10767}e^{24} + \frac{12}{443}\sqrt{555}e^{36}$	$(-\frac{75}{443}, -\frac{14}{443}, \frac{119}{443}, \frac{177}{443}, -\frac{89}{443}, \frac{44}{443}, -\frac{103}{443}, \frac{163}{443})$ $+ \frac{66}{443}\sqrt{37}e^3 \otimes e_7$	{124678, 15678, 2356, 346}
842:33	$0, 0, 0, 0, \frac{6}{65}\sqrt{7}e^{12}, \frac{6}{455}\sqrt{210}e^{13}, \frac{3}{455}\sqrt{2702}e^{25},$ $\frac{6}{455}\sqrt{434}e^{24} + \frac{6}{455}\sqrt{469}e^{36}$	$(-\frac{3}{13}, \frac{9}{65}, \frac{12}{65}, 0, -\frac{6}{65}, -\frac{3}{65}, \frac{3}{65}, \frac{9}{65})$ $+ \frac{3}{455}\sqrt{2478}e^2 \otimes e_4 + \frac{9}{91}\sqrt{14}e^3 \otimes e_7$	{2356, 346}
842:34	$0, 0, 0, 0, \frac{380}{1191}e^{12}, \frac{266}{1191}\sqrt{5}e^{13}, \frac{38}{397}e^{15},$ $\frac{38}{1191}\sqrt{211}e^{16} + \frac{266}{1191}\sqrt{161}e^{25}$	$(-\frac{209}{1191}, \frac{95}{1191}, \frac{133}{397}, \frac{703}{1191}, -\frac{38}{397}, \frac{190}{1191}, -\frac{323}{1191}, -\frac{19}{1191})$ $+ \frac{38}{1191}\sqrt{547}e^4 \otimes e_8 + \frac{76}{1191}\sqrt{122}e^3 \otimes e_7$	{1467, 2368}
842:34	$0, 0, 0, 0, \frac{2}{35}\sqrt{105}e^{12}, \frac{3}{35}\sqrt{42}e^{13}, \frac{6}{35}\sqrt{35}e^{15},$ $\frac{4}{35}\sqrt{21}e^{16} + \frac{3}{35}\sqrt{14}e^{25}$	$(-\frac{1}{7}, \frac{3}{35}, \frac{11}{35}, 1, -\frac{2}{35}, \frac{6}{35}, -\frac{1}{5}, \frac{1}{35})$ $+ \frac{3}{35}\sqrt{266}e^4 \otimes e_7$	{127, 145, 23578, 348}
842:34	$0, 0, 0, 0, \frac{30}{251}\sqrt{51}e^{12}, \frac{2}{251}\sqrt{2703}e^{13}, \frac{2}{251}\sqrt{969}e^{15},$ $\frac{12}{251}\sqrt{170}e^{16} + \frac{6}{251}\sqrt{1139}e^{25}$	$(\frac{7}{251}, \frac{38}{251}, \frac{69}{251}, -\frac{166}{251}, \frac{45}{251}, \frac{76}{251}, \frac{52}{251}, \frac{83}{251})$ $+ \frac{6}{251}\sqrt{2363}e^2 \otimes e_4$	{123678, 134568, 2567, 46}
842:34	$0, 0, 0, 0, \frac{2}{1001}\sqrt{70446}e^{12}, \frac{12}{1001}\sqrt{6965}e^{13}, \frac{6}{1001}\sqrt{9353}e^{15},$ $\frac{16}{1001}\sqrt{1194}e^{16} + \frac{6}{1001}\sqrt{4577}e^{25}$	$(-\frac{95}{1001}, \frac{243}{1001}, \frac{83}{143}, -\frac{613}{1001}, \frac{148}{1001}, \frac{486}{1001}, \frac{53}{1001}, \frac{391}{1001})$ $+ \frac{6}{1001}\sqrt{53531}e^3 \otimes e_4$	{124567, 146, 23678, 3568}
842:34	$0, 0, 0, 0, \frac{468}{1013}e^{12}, \frac{26}{1013}\sqrt{501}e^{13}, \frac{26}{1013}\sqrt{615}e^{15},$ $\frac{78}{1013}\sqrt{115}e^{16} + \frac{78}{1013}\sqrt{97}e^{25}$	$(-\frac{11}{1013}, \frac{5}{1013}, \frac{21}{1013}, 1, -\frac{6}{1013}, \frac{10}{1013}, -\frac{17}{1013}, -\frac{1}{1013})$ $+ \frac{390}{1013}\sqrt{11}e^4 \otimes e_8$	{124567, 146, 23678, 3568}
842:34	$0, 0, 0, 0, \frac{224}{1633}\sqrt{3}e^{12}, \frac{192}{1633}\sqrt{10}e^{13}, \frac{32}{1633}\sqrt{406}e^{15},$ $\frac{32}{1633}\sqrt{193}e^{16} + \frac{32}{1633}\sqrt{138}e^{25}$	$(-\frac{112}{1633}, \frac{176}{1633}, \frac{464}{1633}, -\frac{624}{1633}, \frac{64}{1633}, \frac{352}{1633}, -\frac{48}{1633}, \frac{240}{1633})$ $+ \frac{32}{1633}\sqrt{809}e^1 \otimes e_4 + \frac{96}{1633}\sqrt{71}e^3 \otimes e_7$	{1267, 3468}
842:34	$0, 0, 0, 0, \frac{4}{511}\sqrt{561}e^{12}, \frac{3}{511}\sqrt{16082}e^{13}, \frac{66}{511}\sqrt{34}e^{15},$ $\frac{1}{511}\sqrt{5610}e^{16} + \frac{3}{511}\sqrt{1122}e^{25}$	$(-\frac{148}{511}, \frac{117}{511}, \frac{382}{511}, \frac{100}{511}, -\frac{31}{511}, \frac{234}{511}, -\frac{179}{511}, \frac{86}{511})$ $+ \frac{3}{511}\sqrt{51238}e^3 \otimes e_7$	{14678, 1678, 2346, 236}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:34	$0, 0, 0, 0, \frac{2}{355}\sqrt{9591}e^{12}, \frac{2}{355}\sqrt{9591}e^{13}, \frac{2}{355}\sqrt{10981}e^{15},$ $\frac{2}{355}\sqrt{10981}e^{16} + \frac{2}{355}\sqrt{4170}e^{25}$	$(\frac{59}{355}, \frac{29}{355}, -\frac{1}{355}, -\frac{219}{355}, \frac{88}{355}, \frac{58}{355}, \frac{147}{355}, \frac{117}{355})$ $+ \frac{2}{355}\sqrt{39893}e^1 \otimes e_4$	{1267, 156, 2345678, 3468}
842:34	$0, 0, 0, 0, \frac{4}{31}\sqrt{17}e^{12}, \frac{1}{31}\sqrt{34}e^{13}, \frac{2}{31}\sqrt{34}e^{15},$ $\frac{1}{31}\sqrt{170}e^{16} + \frac{1}{31}\sqrt{238}e^{25}$	$(-\frac{4}{31}, \frac{5}{31}, \frac{14}{31}, -\frac{12}{31}, \frac{1}{31}, \frac{10}{31}, -\frac{3}{31}, \frac{6}{31})$ $+ \frac{1}{31}\sqrt{374}e^3 \otimes e_7 + \frac{4}{31}\sqrt{34}e^2 \otimes e_4$	{12678, 346}
842:34	$0, 0, 0, 0, \frac{32}{1051}\sqrt{159}e^{12}, \frac{32}{1051}\sqrt{57}e^{13}, \frac{32}{1051}\sqrt{142}e^{15},$ $\frac{32}{1051}\sqrt{233}e^{16} + \frac{32}{1051}\sqrt{51}e^{25}$	$(\frac{176}{1051}, -\frac{80}{1051}, -\frac{336}{1051}, \frac{528}{1051}, \frac{96}{1051}, -\frac{160}{1051}, \frac{272}{1051}, \frac{16}{1051})$ $+ \frac{32}{1051}\sqrt{398}e^4 \otimes e_8 + \frac{32}{1051}\sqrt{523}e^1 \otimes e_3$	{1278, 158, 23457, 34}
842:34	$0, 0, 0, 0, \frac{32}{1051}\sqrt{159}e^{12}, \frac{32}{1051}\sqrt{57}e^{13}, \frac{32}{1051}\sqrt{142}e^{15},$ $\frac{32}{1051}\sqrt{233}e^{16} + \frac{32}{1051}\sqrt{51}e^{25}$	$(\frac{176}{1051}, -\frac{80}{1051}, -\frac{336}{1051}, \frac{528}{1051}, \frac{96}{1051}, -\frac{160}{1051}, \frac{272}{1051}, \frac{16}{1051})$ $+ \frac{32}{1051}\sqrt{398}e^4 \otimes e_8 - \frac{32}{1051}\sqrt{523}e^1 \otimes e_3$	{1278, 158, 23457, 34}
842:35	$0, 0, 0, 0, -\frac{1}{5}\sqrt{6}e^{12}, \frac{1}{5}\sqrt{6}e^{13}, \frac{2}{5}\sqrt{6}e^{15},$ $\frac{1}{5}\sqrt{6}e^{25} + \frac{1}{5}\sqrt{6}e^{36}$	$(-\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 1, 0, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{4}{5}\sqrt{3}e^4 \otimes e_7$	{12367, 127, 13456, 145, 23578, 25678, 348, 468, 12367, 127, 13456, 145, 23578, 25678, 348, 468}
842:35	$0, 0, 0, 0, \frac{1}{5}\sqrt{6}e^{12}, \frac{1}{5}\sqrt{6}e^{13}, \frac{2}{5}\sqrt{6}e^{15},$ $\frac{1}{5}\sqrt{6}e^{25} + \frac{1}{5}\sqrt{6}e^{36}$	$(-\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 1, 0, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{4}{5}\sqrt{3}e^4 \otimes e_7$	{12367, 127, 13456, 145, 23578, 25678, 348, 468, 12367, 127, 13456, 145, 23578, 25678, 348, 468}
842:35	$0, 0, 0, 0, -\frac{1}{83}\sqrt{174}e^{12}, \frac{1}{83}\sqrt{2262}e^{13}, \frac{2}{83}\sqrt{754}e^{15},$ $\frac{29}{83}\sqrt{2}e^{25} + \frac{1}{83}\sqrt{3770}e^{36}$	$(-\frac{29}{83}, \frac{31}{83}, \frac{31}{83}, \frac{15}{83}, \frac{2}{83}, \frac{2}{83}, -\frac{27}{83}, \frac{33}{83})$ $+ \frac{4}{83}\sqrt{493}e^3 \otimes e_7$	{123458, 12358, 14678, 1678, 2346, 236, 457, 57, 123458, 12358, 14678, 1678, 2346, 236, 457, 57}
842:35	$0, 0, 0, 0, \frac{1}{83}\sqrt{174}e^{12}, \frac{1}{83}\sqrt{2262}e^{13}, \frac{2}{83}\sqrt{754}e^{15},$ $\frac{29}{83}\sqrt{2}e^{25} + \frac{1}{83}\sqrt{3770}e^{36}$	$(-\frac{29}{83}, \frac{31}{83}, \frac{31}{83}, \frac{15}{83}, \frac{2}{83}, \frac{2}{83}, -\frac{27}{83}, \frac{33}{83})$ $+ \frac{4}{83}\sqrt{493}e^3 \otimes e_7$	{123458, 12358, 14678, 1678, 2346, 236, 457, 57, 123458, 12358, 14678, 1678, 2346, 236, 457, 57}
842:35	$0, 0, 0, 0, -\frac{9}{431}\sqrt{22}e^{12}, \frac{9}{431}\sqrt{286}e^{13}, \frac{18}{431}\sqrt{70}e^{15},$ $\frac{9}{431}\sqrt{10}e^{25} + \frac{153}{431}\sqrt{2}e^{36}$	$(-\frac{81}{431}, \frac{63}{431}, \frac{63}{431}, \frac{207}{431}, -\frac{18}{431}, -\frac{18}{431}, -\frac{99}{431}, \frac{45}{431})$ $+ \frac{36}{431}\sqrt{38}e^4 \otimes e_8 + \frac{72}{431}\sqrt{14}e^3 \otimes e_7$	{12358, 1678, 2346, 457, 12358, 1678, 2346, 457}
842:35	$0, 0, 0, 0, \frac{9}{431}\sqrt{22}e^{12}, \frac{9}{431}\sqrt{286}e^{13}, \frac{18}{431}\sqrt{70}e^{15},$ $\frac{9}{431}\sqrt{10}e^{25} + \frac{153}{431}\sqrt{2}e^{36}$	$(-\frac{81}{431}, \frac{63}{431}, \frac{63}{431}, \frac{207}{431}, -\frac{18}{431}, -\frac{18}{431}, -\frac{99}{431}, \frac{45}{431})$ $+ \frac{36}{431}\sqrt{38}e^4 \otimes e_8 + \frac{72}{431}\sqrt{14}e^3 \otimes e_7$	{12358, 1678, 2346, 457, 12358, 1678, 2346, 457}
842:35	$0, 0, 0, 0, -\frac{4}{61}\sqrt{30}e^{12}, \frac{4}{61}\sqrt{30}e^{13}, \frac{8}{61}\sqrt{10}e^{15},$ $\frac{4}{61}\sqrt{10}e^{25} + \frac{20}{61}\sqrt{2}e^{36}$	$(-\frac{16}{61}, \frac{20}{61}, \frac{20}{61}, -\frac{12}{61}, \frac{4}{61}, \frac{4}{61}, -\frac{12}{61}, \frac{24}{61})$ $+ \frac{8}{61}\sqrt{21}e^2 \otimes e_4 + \frac{8}{61}\sqrt{31}e^3 \otimes e_7$	{12678, 13458, 257, 346, 12678, 13458, 257, 346}
842:35	$0, 0, 0, 0, \frac{4}{61}\sqrt{30}e^{12}, \frac{4}{61}\sqrt{30}e^{13}, \frac{8}{61}\sqrt{10}e^{15},$ $\frac{4}{61}\sqrt{10}e^{25} + \frac{20}{61}\sqrt{2}e^{36}$	$(-\frac{16}{61}, \frac{20}{61}, \frac{20}{61}, -\frac{12}{61}, \frac{4}{61}, \frac{4}{61}, -\frac{12}{61}, \frac{24}{61})$ $+ \frac{8}{61}\sqrt{21}e^2 \otimes e_4 + \frac{8}{61}\sqrt{31}e^3 \otimes e_7$	{12678, 13458, 257, 346, 12678, 13458, 257, 346}
842:35	$0, 0, 0, 0, -\frac{4}{81}\sqrt{259}e^{12}, \frac{2}{81}\sqrt{111}e^{13}, \frac{4}{81}\sqrt{37}e^{15},$ $\frac{2}{81}\sqrt{1110}e^{25} + \frac{2}{81}\sqrt{185}e^{36}$	$(-\frac{2}{27}, \frac{23}{81}, \frac{23}{81}, -\frac{17}{27}, \frac{17}{81}, \frac{17}{81}, \frac{11}{81}, \frac{40}{81})$ $+ \frac{2}{81}\sqrt{2442}e^2 \otimes e_4$	{12368, 128, 1345678, 14578, 235, 256, 347, 467, 12368, 128, 1345678, 14578, 235, 256, 347, 467}
842:35	$0, 0, 0, 0, \frac{4}{81}\sqrt{259}e^{12}, \frac{2}{81}\sqrt{111}e^{13}, \frac{4}{81}\sqrt{37}e^{15},$ $\frac{2}{81}\sqrt{1110}e^{25} + \frac{2}{81}\sqrt{185}e^{36}$	$(-\frac{2}{27}, \frac{23}{81}, \frac{23}{81}, -\frac{17}{27}, \frac{17}{81}, \frac{17}{81}, \frac{11}{81}, \frac{40}{81})$ $+ \frac{2}{81}\sqrt{2442}e^2 \otimes e_4$	{12368, 128, 1345678, 14578, 235, 256, 347, 467, 12368, 128, 1345678, 14578, 235, 256, 347, 467}
842:35	$0, 0, 0, 0, -\frac{2}{81}\sqrt{185}e^{12}, \frac{2}{81}\sqrt{1110}e^{13}, \frac{4}{81}\sqrt{37}e^{15},$ $\frac{2}{81}\sqrt{111}e^{25} + \frac{4}{81}\sqrt{259}e^{36}$	$(-\frac{2}{27}, \frac{23}{81}, \frac{23}{81}, -\frac{17}{27}, \frac{17}{81}, \frac{17}{81}, \frac{11}{81}, \frac{40}{81})$ $+ \frac{2}{81}\sqrt{2442}e^3 \otimes e_4$	{123578, 1245678, 138, 1468, 2367, 247, 356, 45, 123578, 1245678, 138, 1468, 2367, 247, 356, 45}
842:35	$0, 0, 0, 0, \frac{2}{81}\sqrt{185}e^{12}, \frac{2}{81}\sqrt{1110}e^{13}, \frac{4}{81}\sqrt{37}e^{15},$ $\frac{2}{81}\sqrt{111}e^{25} + \frac{4}{81}\sqrt{259}e^{36}$	$(-\frac{2}{27}, \frac{23}{81}, \frac{23}{81}, -\frac{17}{27}, \frac{17}{81}, \frac{17}{81}, \frac{11}{81}, \frac{40}{81})$ $+ \frac{2}{81}\sqrt{2442}e^3 \otimes e_4$	{123578, 1245678, 138, 1468, 2367, 247, 356, 45, 123578, 1245678, 138, 1468, 2367, 247, 356, 45}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:35	$0, 0, 0, 0, -\frac{1}{333}\sqrt{11098}e^{12}, \frac{1}{111}\sqrt{1790}e^{13}, \frac{2}{333}\sqrt{2506}e^{15},$ $\frac{1}{333}\sqrt{63366}e^{25} + \frac{1}{333}\sqrt{58354}e^{36}$	$(\frac{5}{37}, -\frac{35}{333}, -\frac{35}{333}, 1, \frac{10}{333}, \frac{10}{333}, \frac{55}{333}, -\frac{25}{333})$ $+ \frac{4}{333}\sqrt{11814}e^4 \otimes e_8$	{1238, 1268, 13578, 15678, 23456, 245, 3467, 47, 1238, 1268, 13578, 15678, 23456, 245, 3467, 47}
842:35	$0, 0, 0, 0, \frac{1}{333}\sqrt{11098}e^{12}, \frac{1}{111}\sqrt{1790}e^{13}, \frac{2}{333}\sqrt{2506}e^{15},$ $\frac{1}{333}\sqrt{63366}e^{25} + \frac{1}{333}\sqrt{58354}e^{36}$	$(\frac{5}{37}, -\frac{35}{333}, -\frac{35}{333}, 1, \frac{10}{333}, \frac{10}{333}, \frac{55}{333}, -\frac{25}{333})$ $+ \frac{4}{333}\sqrt{11814}e^4 \otimes e_8$	{1238, 1268, 13578, 15678, 23456, 245, 3467, 47, 1238, 1268, 13578, 15678, 23456, 245, 3467, 47}
842:37	$0, 0, 0, 0, \frac{1}{15}\sqrt{6}e^{12}, \frac{1}{15}\sqrt{42}e^{13}, \frac{2}{5}e^{25}, \frac{1}{15}\sqrt{30}e^{15} + \frac{2}{5}e^{36}$	$(\frac{1}{5}, -\frac{1}{5}, 0, 0, 0, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{1}{15}\sqrt{66}e^3 \otimes e_7 + \frac{2}{15}\sqrt{3}e^1 \otimes e_4$	{12358, 457}
842:37	$0, 0, 0, 0, \frac{4}{127}\sqrt{2}e^{12}, \frac{2}{127}\sqrt{34}e^{13}, \frac{2}{127}\sqrt{51}e^{25},$ $\frac{2}{127}\sqrt{26}e^{15} + \frac{2}{127}\sqrt{51}e^{36}$	$(-\frac{1}{127}, -\frac{1}{127}, -\frac{1}{127}, \frac{15}{127}, -\frac{2}{127}, -\frac{2}{127}, -\frac{3}{127}, -\frac{3}{127})$ $- \frac{2}{127}\sqrt{43}e^2 \otimes e_8 + \frac{2}{127}\sqrt{69}e^3 \otimes e_7$	{145678, 15678, 23456, 2356}
842:37	$0, 0, 0, 0, \frac{4}{127}\sqrt{2}e^{12}, \frac{2}{127}\sqrt{34}e^{13}, \frac{2}{127}\sqrt{51}e^{25},$ $\frac{2}{127}\sqrt{26}e^{15} + \frac{2}{127}\sqrt{51}e^{36}$	$(-\frac{1}{127}, -\frac{1}{127}, -\frac{1}{127}, \frac{15}{127}, -\frac{2}{127}, -\frac{2}{127}, -\frac{3}{127}, -\frac{3}{127})$ $+ \frac{2}{127}\sqrt{43}e^2 \otimes e_8 + \frac{2}{127}\sqrt{69}e^3 \otimes e_7$	{145678, 15678, 23456, 2356}
842:37	$0, 0, 0, 0, \frac{18}{317}\sqrt{57}e^{12}, \frac{3}{317}\sqrt{1330}e^{13}, \frac{3}{317}\sqrt{646}e^{25},$ $\frac{6}{317}\sqrt{1691}e^{15} + \frac{228}{317}e^{36}$	$(-\frac{35}{317}, \frac{45}{317}, \frac{5}{317}, 1, \frac{10}{317}, -\frac{30}{317}, \frac{55}{317}, -\frac{25}{317})$ $+ \frac{39}{317}\sqrt{114}e^4 \otimes e_8$	{13456, 145, 23578, 25678}
842:37	$0, 0, 0, 0, \frac{3}{10}e^{12}, \frac{1}{5}\sqrt{6}e^{13}, \frac{3}{10}\sqrt{10}e^{25},$ $\frac{1}{10}\sqrt{30}e^{15} + \frac{3}{10}\sqrt{3}e^{36}$	$(\frac{1}{5}, -\frac{1}{5}, 0, 1, 0, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{3}{10}\sqrt{21}e^4 \otimes e_7$	{13578, 15678, 23456, 245}
842:37	$0, 0, 0, 0, \frac{30}{271}\sqrt{3}e^{12}, \frac{5}{271}\sqrt{462}e^{13}, \frac{5}{271}\sqrt{426}e^{25},$ $\frac{10}{271}\sqrt{89}e^{15} + \frac{20}{271}\sqrt{30}e^{36}$	$(\frac{35}{271}, -\frac{45}{271}, -\frac{5}{271}, \frac{75}{271}, -\frac{10}{271}, \frac{30}{271}, -\frac{55}{271}, \frac{25}{271})$ $+ \frac{140}{271}e^3 \otimes e_7 + \frac{45}{271}\sqrt{2}e^4 \otimes e_8$	{12358, 457}
842:37	$0, 0, 0, 0, \frac{52}{1213}\sqrt{53}e^{12}, \frac{52}{1213}\sqrt{34}e^{13}, \frac{78}{1213}\sqrt{29}e^{25},$ $\frac{26}{1213}\sqrt{11}e^{15} + \frac{52}{1213}\sqrt{102}e^{36}$	$(-\frac{169}{1213}, \frac{299}{1213}, \frac{65}{1213}, -\frac{273}{1213}, \frac{130}{1213}, -\frac{104}{1213}, \frac{429}{1213}, -\frac{39}{1213})$ $+ \frac{52}{1213}\sqrt{151}e^2 \otimes e_8 + \frac{546}{1213}e^3 \otimes e_4$	{13578, 145678, 2356, 245}
842:37	$0, 0, 0, 0, \frac{52}{1213}\sqrt{53}e^{12}, \frac{52}{1213}\sqrt{34}e^{13}, \frac{78}{1213}\sqrt{29}e^{25},$ $\frac{26}{1213}\sqrt{11}e^{15} + \frac{52}{1213}\sqrt{102}e^{36}$	$(-\frac{169}{1213}, \frac{299}{1213}, \frac{65}{1213}, -\frac{273}{1213}, \frac{130}{1213}, -\frac{104}{1213}, \frac{429}{1213}, -\frac{39}{1213})$ $- \frac{52}{1213}\sqrt{151}e^2 \otimes e_8 + \frac{546}{1213}e^3 \otimes e_4$	{13578, 145678, 2356, 245}
842:37	$0, 0, 0, 0, \frac{7}{695}\sqrt{6}e^{12}, \frac{42}{695}\sqrt{14}e^{13}, \frac{14}{695}\sqrt{157}e^{25},$ $\frac{7}{695}\sqrt{494}e^{15} + \frac{7}{695}\sqrt{506}e^{36}$	$(\frac{14}{139}, -\frac{56}{695}, \frac{7}{695}, -\frac{21}{139}, \frac{77}{695}, \frac{7}{695}, -\frac{42}{695}, \frac{84}{695})$ $+ \frac{14}{695}\sqrt{217}e^3 \otimes e_7 + \frac{7}{695}\sqrt{366}e^2 \otimes e_4$	{145678, 2356}
842:37	$0, 0, 0, 0, \frac{21}{163}\sqrt{37}e^{12}, \frac{7}{163}\sqrt{21}e^{13}, \frac{21}{163}\sqrt{39}e^{25},$ $\frac{35}{163}\sqrt{3}e^{15} + \frac{21}{163}\sqrt{10}e^{36}$	$(-\frac{7}{163}, \frac{49}{163}, \frac{21}{163}, -\frac{98}{163}, \frac{42}{163}, \frac{14}{163}, \frac{91}{163}, \frac{35}{163})$ $+ \frac{21}{163}\sqrt{87}e^2 \otimes e_4$	{12367, 127, 348, 468}
842:37	$0, 0, 0, 0, \frac{3}{211}\sqrt{282}e^{12}, \frac{1}{211}\sqrt{10434}e^{13}, \frac{2}{211}\sqrt{2397}e^{25},$ $\frac{1}{211}\sqrt{8930}e^{15} + \frac{2}{211}\sqrt{2397}e^{36}$	$(\frac{41}{211}, -\frac{45}{211}, -\frac{2}{211}, \frac{30}{211}, -\frac{4}{211}, \frac{39}{211}, -\frac{49}{211}, \frac{37}{211})$ $+ \frac{1}{211}\sqrt{17014}e^3 \otimes e_7$	{123458, 12358, 457, 57}
842:37	$0, 0, 0, 0, \frac{12}{1265}\sqrt{1590}e^{12}, \frac{12}{1265}\sqrt{7738}e^{13}, \frac{6}{1265}\sqrt{10441}e^{25},$ $\frac{6}{1265}\sqrt{19451}e^{15} + \frac{24}{1265}\sqrt{1802}e^{36}$	$(\frac{127}{1265}, \frac{147}{1265}, \frac{137}{1265}, -\frac{817}{1265}, \frac{274}{1265}, \frac{24}{1265}, \frac{421}{1265}, \frac{401}{1265})$ $+ \frac{6}{1265}\sqrt{55173}e^3 \otimes e_4$	{12358, 124568, 3567, 457}
842:37	$0, 0, 0, 0, \frac{2}{107}\sqrt{1457}e^{12}, \frac{2}{107}\sqrt{658}e^{13}, \frac{3}{107}\sqrt{94}e^{25},$ $\frac{2}{107}\sqrt{1598}e^{15} + \frac{3}{107}\sqrt{94}e^{36}$	$(\frac{28}{107}, -\frac{6}{107}, \frac{11}{107}, -\frac{66}{107}, \frac{22}{107}, \frac{39}{107}, \frac{16}{107}, \frac{50}{107})$ $+ \frac{1}{107}\sqrt{16262}e^1 \otimes e_4$	{135, 156, 2345678, 24578}
842:39	$0, 0, 0, 0, \frac{18}{481}\sqrt{105}e^{12}, \frac{18}{481}\sqrt{370}e^{13}, \frac{9}{481}\sqrt{790}e^{14} + \frac{18}{481}\sqrt{370}e^{25},$ $\frac{72}{481}\sqrt{5}e^{16} + \frac{18}{481}\sqrt{105}e^{24}$	$(-\frac{126}{481}, \frac{27}{481}, \frac{9}{13}, \frac{54}{481}, -\frac{99}{481}, \frac{207}{481}, -\frac{72}{481}, \frac{81}{481})$ $+ \frac{90}{481}\sqrt{39}e^3 \otimes e_7$	{123458, 457}
842:39	$0, 0, 0, 0, \frac{180}{253}e^{12}, \frac{120}{253}e^{13}, \frac{15}{253}\sqrt{134}e^{14} + \frac{30}{253}\sqrt{5}e^{25},$ $\frac{60}{253}\sqrt{7}e^{16} + \frac{90}{253}\sqrt{3}e^{24}$	$(\frac{90}{253}, \frac{15}{253}, -\frac{135}{253}, \frac{30}{253}, \frac{105}{253}, -\frac{45}{253}, \frac{120}{253}, \frac{45}{253})$ $+ \frac{30}{253}\sqrt{105}e^1 \otimes e_3$	{1578, 235}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:40	$0, 0, 0, 0, -\frac{3}{193}\sqrt{129}e^{12}, \frac{9}{193}\sqrt{59}e^{13}, \frac{3}{193}\sqrt{201}e^{15} + \frac{9}{193}\sqrt{59}e^{24},$ $\frac{39}{193}\sqrt{3}e^{14} + \frac{3}{193}\sqrt{555}e^{36}$	$(\frac{12}{193}, -\frac{39}{193}, \frac{12}{193}, \frac{24}{193}, -\frac{27}{193}, \frac{24}{193}, -\frac{15}{193}, \frac{36}{193})$ $+ \frac{9}{193}\sqrt{110}e^3 \otimes e_7$	{123458, 14678, 2346, 457, 123458, 14678, 2346, 457}
842:40	$0, 0, 0, 0, \frac{3}{193}\sqrt{129}e^{12}, \frac{9}{193}\sqrt{59}e^{13}, \frac{3}{193}\sqrt{201}e^{15} + \frac{9}{193}\sqrt{59}e^{24},$ $\frac{39}{193}\sqrt{3}e^{14} + \frac{3}{193}\sqrt{555}e^{36}$	$(\frac{12}{193}, -\frac{39}{193}, \frac{12}{193}, \frac{24}{193}, -\frac{27}{193}, \frac{24}{193}, -\frac{15}{193}, \frac{36}{193})$ $+ \frac{9}{193}\sqrt{110}e^3 \otimes e_7$	{123458, 14678, 2346, 457, 123458, 14678, 2346, 457}
842:40	$0, 0, 0, 0, -\frac{14}{197}\sqrt{69}e^{12}, \frac{7}{197}\sqrt{42}e^{13}, \frac{7}{197}\sqrt{42}e^{15} + \frac{14}{197}\sqrt{69}e^{24},$ $\frac{14}{197}\sqrt{30}e^{14} + \frac{7}{197}\sqrt{354}e^{36}$	$(-\frac{14}{197}, \frac{105}{197}, -\frac{14}{197}, -\frac{28}{197}, \frac{91}{197}, -\frac{28}{197}, \frac{77}{197}, -\frac{42}{197})$ $+ \frac{21}{197}\sqrt{106}e^2 \otimes e_8$	{12346, 124, 3478, 4678, 12346, 124, 3478, 4678}
842:40	$0, 0, 0, 0, \frac{14}{197}\sqrt{69}e^{12}, \frac{7}{197}\sqrt{42}e^{13}, \frac{7}{197}\sqrt{42}e^{15} + \frac{14}{197}\sqrt{69}e^{24},$ $\frac{14}{197}\sqrt{30}e^{14} + \frac{7}{197}\sqrt{354}e^{36}$	$(-\frac{14}{197}, \frac{105}{197}, -\frac{14}{197}, -\frac{28}{197}, \frac{91}{197}, -\frac{28}{197}, \frac{77}{197}, -\frac{42}{197})$ $+ \frac{21}{197}\sqrt{106}e^2 \otimes e_8$	{12346, 124, 3478, 4678, 12346, 124, 3478, 4678}
842:42	$0, 0, 0, 0, \frac{33}{2741}\sqrt{86}e^{12}, \frac{33}{2741}\sqrt{1446}e^{13},$ $\frac{33}{2741}\sqrt{1230}e^{14} + \frac{33}{2741}\sqrt{1910}e^{25}, \frac{33}{2741}\sqrt{1478}e^{24} + \frac{132}{2741}\sqrt{145}e^{36}$	$(-\frac{825}{2741}, \frac{297}{2741}, \frac{858}{2741}, \frac{594}{2741}, -\frac{528}{2741}, \frac{33}{2741}, -\frac{231}{2741}, \frac{891}{2741})$ $+ \frac{33}{2741}\sqrt{4542}e^3 \otimes e_7$	{123458, 457}
842:47	$0, 0, 0, 0, \frac{2}{55}\sqrt{57}e^{12}, \frac{1}{55}\sqrt{114}e^{13}, \frac{2}{55}\sqrt{57}e^{15} + \frac{3}{55}\sqrt{26}e^{23},$ $\frac{3}{55}\sqrt{26}e^{14} + \frac{2}{55}\sqrt{42}e^{36}$	$(-\frac{1}{55}, \frac{7}{55}, -\frac{2}{55}, -\frac{4}{55}, \frac{6}{55}, -\frac{3}{55}, \frac{1}{11}, -\frac{1}{11})$ $+ \frac{7}{55}\sqrt{6}e^1 \otimes e_4$	{234567, 346}
842:47	$0, 0, 0, 0, \frac{1}{14}\sqrt{57}e^{12}, \frac{3}{14}\sqrt{6}e^{13}, \frac{1}{14}\sqrt{6}e^{15} + \frac{1}{7}\sqrt{30}e^{23},$ $\frac{1}{7}\sqrt{30}e^{14} + \frac{5}{14}\sqrt{3}e^{36}$	$(\frac{1}{14}, -\frac{2}{7}, \frac{1}{7}, \frac{2}{7}, -\frac{3}{14}, \frac{3}{14}, -\frac{1}{7}, \frac{5}{14})$ $+ \frac{3}{14}\sqrt{17}e^4 \otimes e_7$	{12578, 267}
842:47	$0, 0, 0, 0, \frac{4}{47}\sqrt{33}e^{12}, \frac{3}{47}\sqrt{66}e^{13}, \frac{1}{47}\sqrt{330}e^{15} + \frac{4}{47}\sqrt{66}e^{23},$ $\frac{4}{47}\sqrt{66}e^{14} + \frac{1}{47}\sqrt{330}e^{36}$	$(-\frac{2}{47}, \frac{23}{47}, -\frac{4}{47}, -\frac{8}{47}, \frac{21}{47}, -\frac{6}{47}, \frac{19}{47}, -\frac{10}{47})$ $+ \frac{3}{47}\sqrt{286}e^2 \otimes e_8$	{12346, 3478}
842:48	$0, 0, 0, 0, \frac{5}{313}\sqrt{1086}e^{12}, \frac{15}{313}\sqrt{138}e^{13}, \frac{15}{313}\sqrt{182}e^{15} + \frac{15}{313}\sqrt{46}e^{23},$ $\frac{10}{313}\sqrt{345}e^{16} + \frac{15}{313}\sqrt{182}e^{34}$	$(\frac{20}{313}, -\frac{75}{313}, \frac{40}{313}, \frac{40}{313}, -\frac{55}{313}, \frac{60}{313}, -\frac{35}{313}, \frac{80}{313})$ $+ \frac{30}{313}\sqrt{46}e^4 \otimes e_7$	{123678, 23578}
842:48	$0, 0, 0, 0, \frac{9}{337}\sqrt{582}e^{12}, \frac{27}{337}\sqrt{46}e^{13}, \frac{9}{337}\sqrt{30}e^{15} + \frac{27}{337}\sqrt{46}e^{23},$ $\frac{18}{337}\sqrt{69}e^{16} + \frac{9}{337}\sqrt{582}e^{34}$	$(-\frac{18}{337}, \frac{171}{337}, -\frac{36}{337}, -\frac{36}{337}, \frac{153}{337}, -\frac{54}{337}, \frac{135}{337}, -\frac{72}{337})$ $+ \frac{54}{337}\sqrt{46}e^2 \otimes e_8$	{1458, 468}
842:49	$0, 0, 0, 0, \frac{44}{149}\sqrt{2}e^{12}, \frac{22}{149}\sqrt{6}e^{13}, \frac{22}{149}\sqrt{21}e^{15} + \frac{11}{149}\sqrt{70}e^{23},$ $\frac{110}{149}e^{24} + \frac{22}{149}\sqrt{10}e^{36}$	$(\frac{11}{149}, -\frac{44}{149}, \frac{22}{149}, \frac{99}{149}, -\frac{33}{149}, \frac{33}{149}, -\frac{22}{149}, \frac{55}{149})$ $+ \frac{22}{149}\sqrt{62}e^4 \otimes e_7$	{234, 357}
842:50	$0, 0, 0, 0, \frac{19}{459}\sqrt{365}e^{12}, \frac{19}{459}\sqrt{107}e^{13}, \frac{19}{459}e^{15} + \frac{19}{459}\sqrt{110}e^{23},$ $\frac{38}{153}\sqrt{5}e^{16} + \frac{19}{459}\sqrt{329}e^{25}$	$(\frac{38}{459}, \frac{19}{153}, \frac{76}{459}, -\frac{304}{459}, \frac{95}{459}, \frac{38}{153}, \frac{133}{459}, \frac{152}{459})$ $+ \frac{19}{459}\sqrt{763}e^2 \otimes e_4$	{2567, 46}
842:50	$0, 0, 0, 0, \frac{1}{43}\sqrt{430}e^{12}, \frac{1}{43}\sqrt{602}e^{13}, \frac{3}{43}\sqrt{86}e^{15} + \frac{1}{43}\sqrt{86}e^{23},$ $\frac{1}{43}\sqrt{1290}e^{16} + \frac{2}{43}\sqrt{258}e^{25}$	$(0, 0, 0, 1, 0, 0, 0, 0)$ $+ \frac{1}{43}\sqrt{3010}e^4 \otimes e_8$	{124567, 146}
842:50	$0, 0, 0, 0, \frac{13}{591}\sqrt{1122}e^{12}, \frac{26}{591}\sqrt{345}e^{13}, \frac{169}{591}\sqrt{6}e^{15} + \frac{13}{591}\sqrt{1542}e^{23},$ $\frac{52}{197}\sqrt{7}e^{16} + \frac{78}{197}e^{25}$	$(\frac{52}{591}, \frac{26}{197}, \frac{104}{591}, -\frac{403}{591}, \frac{130}{591}, \frac{52}{197}, \frac{182}{591}, \frac{208}{591})$ $+ \frac{13}{591}\sqrt{2982}e^3 \otimes e_4$	{247, 45}
842:50	$0, 0, 0, 0, \frac{148}{1901}\sqrt{65}e^{12}, \frac{37}{1901}\sqrt{802}e^{13},$ $\frac{37}{1901}\sqrt{1070}e^{15} + \frac{37}{1901}\sqrt{714}e^{23}, \frac{111}{1901}\sqrt{66}e^{16} + \frac{111}{1901}\sqrt{10}e^{25}$	$(\frac{148}{1901}, \frac{222}{1901}, \frac{296}{1901}, -\frac{1221}{1901}, \frac{370}{1901}, \frac{444}{1901}, \frac{518}{1901}, \frac{592}{1901})$ $+ \frac{37}{1901}\sqrt{3122}e^1 \otimes e_4$	{2345678, 3468}
842:51	$0, 0, 0, 0, -\frac{22}{149}\sqrt{21}e^{12}, \frac{22}{149}\sqrt{6}e^{13}, \frac{44}{149}\sqrt{2}e^{15} + \frac{11}{149}\sqrt{70}e^{23},$ $\frac{110}{149}e^{25} + \frac{22}{149}\sqrt{10}e^{36}$	$(\frac{11}{149}, \frac{22}{149}, \frac{22}{149}, -\frac{99}{149}, \frac{33}{149}, \frac{33}{149}, \frac{44}{149}, \frac{55}{149})$ $+ \frac{22}{149}\sqrt{62}e^2 \otimes e_4$	{12368, 1345678, 235, 347, 12368, 1345678, 235, 347}
842:51	$0, 0, 0, 0, \frac{22}{149}\sqrt{21}e^{12}, \frac{22}{149}\sqrt{6}e^{13}, \frac{44}{149}\sqrt{2}e^{15} + \frac{11}{149}\sqrt{70}e^{23},$ $\frac{110}{149}e^{25} + \frac{22}{149}\sqrt{10}e^{36}$	$(\frac{11}{149}, \frac{22}{149}, \frac{22}{149}, -\frac{99}{149}, \frac{33}{149}, \frac{33}{149}, \frac{44}{149}, \frac{55}{149})$ $+ \frac{22}{149}\sqrt{62}e^2 \otimes e_4$	{12368, 1345678, 235, 347, 12368, 1345678, 235, 347}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:51	$0, 0, 0, 0, -\frac{22}{149}\sqrt{10}e^{12}, \frac{110}{149}e^{13}, \frac{44}{149}\sqrt{2}e^{15} + \frac{11}{149}\sqrt{70}e^{23},$ $\frac{22}{149}\sqrt{6}e^{25} + \frac{22}{149}\sqrt{21}e^{36}$	$(\frac{11}{149}, \frac{22}{149}, \frac{22}{149}, -\frac{99}{149}, \frac{33}{149}, \frac{33}{149}, \frac{44}{149}, \frac{55}{149})$ $+ \frac{22}{149}\sqrt{62}e^3 \otimes e_4$	{1245678, 1468, 247, 45, 1245678, 1468, 247, 45}
842:51	$0, 0, 0, 0, \frac{22}{149}\sqrt{10}e^{12}, \frac{110}{149}e^{13}, \frac{44}{149}\sqrt{2}e^{15} + \frac{11}{149}\sqrt{70}e^{23},$ $\frac{22}{149}\sqrt{6}e^{25} + \frac{22}{149}\sqrt{21}e^{36}$	$(\frac{11}{149}, \frac{22}{149}, \frac{22}{149}, -\frac{99}{149}, \frac{33}{149}, \frac{33}{149}, \frac{44}{149}, \frac{55}{149})$ $+ \frac{22}{149}\sqrt{62}e^3 \otimes e_4$	{1245678, 1468, 247, 45, 1245678, 1468, 247, 45}
842:55	$0, 0, 0, 0, \frac{26}{475}\sqrt{174}e^{12}, \frac{39}{475}\sqrt{194}e^{13}, \frac{39}{475}\sqrt{94}e^{15},$ $\frac{13}{475}\sqrt{798}e^{16} + \frac{39}{95}\sqrt{2}e^{25} + \frac{39}{475}\sqrt{94}e^{34}$	$(-\frac{91}{475}, \frac{117}{475}, \frac{13}{19}, -\frac{182}{475}, \frac{26}{475}, \frac{234}{475}, -\frac{13}{95}, \frac{143}{475})$ $+ \frac{39}{475}\sqrt{266}e^3 \otimes e_4$	{124567, 146}
842:55	$0, 0, 0, 0, \frac{1}{115}\sqrt{330}e^{12}, \frac{3}{115}\sqrt{57}e^{13}, \frac{3}{115}\sqrt{70}e^{15},$ $\frac{1}{115}\sqrt{426}e^{16} + \frac{3}{115}\sqrt{29}e^{25} + \frac{3}{115}\sqrt{70}e^{34}$	$(\frac{1}{23}, -\frac{3}{115}, -\frac{11}{115}, \frac{2}{23}, \frac{2}{115}, -\frac{6}{115}, \frac{7}{115}, -\frac{1}{115})$ $+ \frac{3}{115}\sqrt{71}e^4 \otimes e_7$	{127, 23578}
842:55	$0, 0, 0, 0, \frac{4}{47}\sqrt{33}e^{12}, \frac{3}{47}\sqrt{22}e^{13}, \frac{12}{47}\sqrt{11}e^{15},$ $\frac{1}{47}\sqrt{858}e^{16} + \frac{3}{47}\sqrt{66}e^{25} + \frac{12}{47}\sqrt{11}e^{34}$	$(-\frac{8}{47}, \frac{9}{47}, \frac{26}{47}, -\frac{16}{47}, \frac{1}{47}, \frac{18}{47}, -\frac{7}{47}, \frac{10}{47})$ $+ \frac{3}{47}\sqrt{286}e^3 \otimes e_7$	{127, 38}
842:56	$0, 0, 0, 0, \frac{1}{12}\sqrt{30}e^{12}, \frac{1}{3}\sqrt{3}e^{13}, \frac{1}{6}\sqrt{21}e^{25},$ $\frac{1}{6}\sqrt{15}e^{15} + \frac{1}{3}\sqrt{6}e^{24} + \frac{1}{12}\sqrt{6}e^{36}$	$(\frac{1}{3}, -\frac{1}{3}, 0, \frac{2}{3}, 0, \frac{1}{3}, -\frac{1}{3}, \frac{1}{3})$ $+ \frac{1}{4}\sqrt{26}e^4 \otimes e_7$	{3567, 57}
842:56	$0, 0, 0, 0, \frac{7}{195}\sqrt{537}e^{12}, \frac{7}{195}\sqrt{105}e^{13}, \frac{7}{15}\sqrt{3}e^{25},$ $\frac{7}{195}\sqrt{15}e^{15} + \frac{28}{195}\sqrt{21}e^{24} + \frac{7}{195}\sqrt{186}e^{36}$	$(-\frac{7}{39}, \frac{77}{195}, \frac{7}{65}, -\frac{14}{39}, \frac{14}{65}, -\frac{14}{195}, \frac{119}{195}, \frac{7}{195})$ $+ \frac{7}{65}\sqrt{107}e^2 \otimes e_4$	{12367, 127}
842:56	$0, 0, 0, 0, \frac{7}{775}\sqrt{354}e^{12}, \frac{21}{775}\sqrt{258}e^{13}, \frac{42}{775}\sqrt{67}e^{25},$ $\frac{21}{775}\sqrt{218}e^{15} + \frac{28}{775}\sqrt{39}e^{24} + \frac{42}{775}\sqrt{67}e^{36}$	$(\frac{21}{155}, -\frac{133}{775}, -\frac{14}{775}, \frac{42}{155}, -\frac{28}{775}, \frac{91}{775}, -\frac{161}{775}, \frac{77}{775})$ $+ \frac{21}{775}\sqrt{446}e^3 \otimes e_7$	{123458, 457}
842:58	$0, 0, 0, 0, \frac{21}{499}\sqrt{186}e^{12}, \frac{7}{499}\sqrt{1266}e^{13}, \frac{14}{499}\sqrt{435}e^{15} + \frac{21}{499}\sqrt{230}e^{24},$ $\frac{21}{499}\sqrt{230}e^{16} + \frac{21}{499}\sqrt{22}e^{25}$	$(\frac{77}{499}, -\frac{35}{499}, -\frac{147}{499}, \frac{154}{499}, \frac{42}{499}, -\frac{70}{499}, \frac{119}{499}, \frac{7}{499})$ $+ \frac{21}{499}\sqrt{290}e^4 \otimes e_8$	{23678, 3568}
842:58	$0, 0, 0, 0, \frac{10}{119}\sqrt{102}e^{12}, \frac{45}{119}\sqrt{3}e^{13}, \frac{15}{119}\sqrt{46}e^{15} + \frac{5}{119}\sqrt{237}e^{24},$ $\frac{5}{119}\sqrt{30}e^{16} + \frac{15}{119}\sqrt{2}e^{25}$	$(\frac{55}{238}, -\frac{10}{119}, -\frac{95}{238}, \frac{55}{119}, \frac{5}{34}, -\frac{20}{119}, \frac{45}{119}, \frac{15}{238})$ $+ \frac{15}{119}\sqrt{69}e^1 \otimes e_3$	{1247, 145, 234578, 348}
842:58	$0, 0, 0, 0, \frac{10}{119}\sqrt{102}e^{12}, \frac{45}{119}\sqrt{3}e^{13}, \frac{15}{119}\sqrt{46}e^{15} + \frac{5}{119}\sqrt{237}e^{24},$ $\frac{5}{119}\sqrt{30}e^{16} + \frac{15}{119}\sqrt{2}e^{25}$	$(\frac{55}{238}, -\frac{10}{119}, -\frac{95}{238}, \frac{55}{119}, \frac{5}{34}, -\frac{20}{119}, \frac{45}{119}, \frac{15}{238})$ $- \frac{15}{119}\sqrt{69}e^1 \otimes e_3$	{1247, 145, 234578, 348}
842:58	$0, 0, 0, 0, \frac{3}{14}\sqrt{15}e^{12}, \frac{1}{14}\sqrt{57}e^{13}, \frac{1}{14}\sqrt{51}e^{15} + \frac{3}{14}\sqrt{10}e^{24},$ $\frac{3}{14}\sqrt{10}e^{16} + \frac{3}{14}\sqrt{11}e^{25}$	$(-\frac{1}{7}, \frac{1}{7}, \frac{3}{7}, -\frac{2}{7}, 0, \frac{2}{7}, -\frac{1}{7}, \frac{1}{7})$ $+ \frac{3}{14}\sqrt{17}e^2 \otimes e_4$	{134568, 46}
842:59	$0, 0, 0, 0, \frac{46}{641}\sqrt{6}e^{12}, \frac{23}{641}\sqrt{161}e^{13}, \frac{23}{641}\sqrt{454}e^{14} + \frac{299}{641}e^{25},$ $\frac{23}{641}\sqrt{274}e^{15} + \frac{92}{641}\sqrt{21}e^{36}$	$(-\frac{161}{641}, \frac{207}{641}, \frac{23}{641}, \frac{414}{641}, \frac{46}{641}, -\frac{138}{641}, \frac{253}{641}, -\frac{115}{641})$ $+ \frac{23}{641}\sqrt{1061}e^4 \otimes e_8$	{358, 568}
842:59	$0, 0, 0, 0, \frac{39}{2597}\sqrt{122}e^{12}, \frac{13}{2597}\sqrt{2514}e^{13},$ $\frac{156}{2597}\sqrt{10}e^{14} + \frac{26}{2597}\sqrt{537}e^{25}, \frac{13}{2597}\sqrt{2690}e^{15} + \frac{78}{2597}\sqrt{73}e^{36}$	$(\frac{247}{2597}, -\frac{195}{2597}, \frac{26}{2597}, -\frac{390}{2597}, \frac{52}{2597}, \frac{39}{371}, -\frac{143}{2597}, \frac{299}{2597})$ $+ \frac{13}{2597}\sqrt{4534}e^3 \otimes e_7$	{123458, 457}
842:59	$0, 0, 0, 0, \frac{22}{161}\sqrt{29}e^{12}, \frac{11}{161}\sqrt{55}e^{13}, \frac{99}{161}e^{14} + \frac{33}{322}\sqrt{2}e^{25},$ $\frac{11}{161}\sqrt{122}e^{15} + \frac{33}{322}\sqrt{10}e^{36}$	$(\frac{55}{161}, -\frac{33}{161}, \frac{11}{161}, -\frac{66}{161}, \frac{22}{161}, \frac{66}{161}, -\frac{11}{161}, \frac{11}{23})$ $+ \frac{11}{322}\sqrt{1070}e^1 \otimes e_4$	{234568, 2458}
842:60	$0, 0, 0, 0, -\frac{11}{153}\sqrt{139}e^{12}, \frac{11}{153}\sqrt{33}e^{13}, \frac{22}{153}\sqrt{2}e^{15} + \frac{11}{153}\sqrt{78}e^{24},$ $\frac{11}{51}\sqrt{15}e^{25} + \frac{11}{153}\sqrt{29}e^{36}$	$(-\frac{11}{51}, \frac{55}{153}, \frac{55}{153}, -\frac{22}{51}, \frac{22}{153}, \frac{22}{153}, -\frac{11}{153}, \frac{77}{153})$ $+ \frac{11}{153}\sqrt{258}e^2 \otimes e_4$	{134568, 1458, 34, 46, 134568, 1458, 34, 46}
842:60	$0, 0, 0, 0, \frac{11}{153}\sqrt{139}e^{12}, \frac{11}{153}\sqrt{33}e^{13}, \frac{22}{153}\sqrt{2}e^{15} + \frac{11}{153}\sqrt{78}e^{24},$ $\frac{11}{51}\sqrt{15}e^{25} + \frac{11}{153}\sqrt{29}e^{36}$	$(-\frac{11}{51}, \frac{55}{153}, \frac{55}{153}, -\frac{22}{51}, \frac{22}{153}, \frac{22}{153}, -\frac{11}{153}, \frac{77}{153})$ $+ \frac{11}{153}\sqrt{258}e^2 \otimes e_4$	{134568, 1458, 34, 46, 134568, 1458, 34, 46}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:60	$0, 0, 0, 0, -\frac{7}{324}\sqrt{282}e^{12}, \frac{7}{324}\sqrt{454}e^{13}, \frac{7}{54}\sqrt{6}e^{15} + \frac{7}{162}\sqrt{146}e^{24},$ $\frac{7}{324}\sqrt{390}e^{25} + \frac{7}{324}\sqrt{562}e^{36}$	$(-\frac{49}{324}, \frac{35}{162}, \frac{35}{162}, -\frac{49}{162}, \frac{7}{108}, \frac{7}{108}, -\frac{7}{81}, \frac{91}{324})$ $+ \frac{7}{81}\sqrt{69}e^3 \otimes e_7$	{123458, 14678, 2346, 457, 123458, 14678, 2346, 457}
842:60	$0, 0, 0, 0, \frac{7}{324}\sqrt{282}e^{12}, \frac{7}{324}\sqrt{454}e^{13}, \frac{7}{54}\sqrt{6}e^{15} + \frac{7}{162}\sqrt{146}e^{24},$ $\frac{7}{324}\sqrt{390}e^{25} + \frac{7}{324}\sqrt{562}e^{36}$	$(-\frac{49}{324}, \frac{35}{162}, \frac{35}{162}, -\frac{49}{162}, \frac{7}{108}, \frac{7}{108}, -\frac{7}{81}, \frac{91}{324})$ $+ \frac{7}{81}\sqrt{69}e^3 \otimes e_7$	{123458, 14678, 2346, 457, 123458, 14678, 2346, 457}
842:63	$0, 0, 0, 0, \frac{148}{2457}\sqrt{26}e^{12}, \frac{37}{2457}\sqrt{254}e^{13},$ $\frac{37}{2457}\sqrt{1646}e^{15} + \frac{37}{2457}\sqrt{2102}e^{34}, \frac{74}{2457}\sqrt{449}e^{16} + \frac{74}{2457}\sqrt{397}e^{25}$	$(\frac{407}{2457}, -\frac{185}{2457}, -\frac{37}{117}, \frac{1406}{2457}, \frac{74}{819}, -\frac{370}{2457}, \frac{629}{2457}, \frac{37}{2457})$ $+ \frac{148}{2457}\sqrt{257}e^4 \otimes e_8$	{124567, 23678}
842:63	$0, 0, 0, 0, \frac{424}{787}e^{12}, \frac{53}{2361}\sqrt{2030}e^{13}, \frac{53}{2361}\sqrt{622}e^{15} + \frac{53}{2361}\sqrt{170}e^{34},$ $\frac{106}{2361}\sqrt{149}e^{16} + \frac{106}{2361}\sqrt{77}e^{25}$	$(-\frac{265}{2361}, \frac{583}{2361}, \frac{477}{787}, -\frac{1378}{2361}, \frac{106}{787}, \frac{1166}{2361}, \frac{53}{2361}, \frac{901}{2361})$ $+ \frac{212}{2361}\sqrt{239}e^3 \otimes e_4$	{146, 3568}
842:64	$0, 0, 0, 0, -\frac{11}{153}\sqrt{29}e^{12}, \frac{11}{51}\sqrt{15}e^{13}, \frac{22}{153}\sqrt{2}e^{15} + \frac{11}{153}\sqrt{78}e^{34},$ $\frac{11}{153}\sqrt{33}e^{25} + \frac{11}{153}\sqrt{139}e^{36}$	$(-\frac{11}{51}, \frac{55}{153}, \frac{55}{153}, -\frac{22}{51}, \frac{22}{153}, \frac{22}{153}, -\frac{11}{153}, \frac{77}{153})$ $+ \frac{11}{153}\sqrt{258}e^3 \otimes e_4$	{12358, 124568, 236, 24, 12358, 124568, 236, 24}
842:64	$0, 0, 0, 0, \frac{11}{153}\sqrt{29}e^{12}, \frac{11}{51}\sqrt{15}e^{13}, \frac{22}{153}\sqrt{2}e^{15} + \frac{11}{153}\sqrt{78}e^{34},$ $\frac{11}{153}\sqrt{33}e^{25} + \frac{11}{153}\sqrt{139}e^{36}$	$(-\frac{11}{51}, \frac{55}{153}, \frac{55}{153}, -\frac{22}{51}, \frac{22}{153}, \frac{22}{153}, -\frac{11}{153}, \frac{77}{153})$ $+ \frac{11}{153}\sqrt{258}e^3 \otimes e_4$	{12358, 124568, 236, 24, 12358, 124568, 236, 24}
842:66	$0, 0, 0, 0, \frac{45}{139}\sqrt{2}e^{12}, \frac{10}{139}\sqrt{93}e^{13}, \frac{5}{139}\sqrt{318}e^{25} + \frac{5}{139}\sqrt{534}e^{34},$ $\frac{5}{139}\sqrt{534}e^{15} + \frac{5}{139}\sqrt{78}e^{36}$	$(-\frac{35}{139}, \frac{45}{139}, \frac{5}{139}, \frac{50}{139}, \frac{10}{139}, -\frac{30}{139}, \frac{55}{139}, -\frac{25}{139})$ $+ \frac{60}{139}\sqrt{5}e^4 \otimes e_8$	{128, 467}
842:66	$0, 0, 0, 0, \frac{15}{523}\sqrt{94}e^{12}, \frac{10}{523}\sqrt{699}e^{13}, \frac{5}{523}\sqrt{1554}e^{25} + \frac{5}{523}\sqrt{2202}e^{34},$ $\frac{5}{523}\sqrt{2202}e^{15} + \frac{5}{523}\sqrt{2514}e^{36}$	$(\frac{85}{523}, -\frac{75}{523}, \frac{5}{523}, -\frac{70}{523}, \frac{10}{523}, \frac{90}{523}, -\frac{65}{523}, \frac{95}{523})$ $+ \frac{120}{523}\sqrt{5}e^3 \otimes e_4$	{12358, 124568}
842:68	$0, 0, 0, 0, \frac{14}{65}\sqrt{6}e^{12}, \frac{14}{65}\sqrt{6}e^{13}, \frac{7}{65}\sqrt{34}e^{16} + \frac{7}{65}\sqrt{15}e^{25},$ $\frac{7}{65}\sqrt{34}e^{15} + \frac{7}{65}\sqrt{15}e^{36}$	$(\frac{7}{65}, \frac{7}{65}, \frac{7}{65}, -\frac{42}{65}, \frac{14}{65}, \frac{14}{65}, \frac{21}{65}, \frac{21}{65})$ $+ \frac{7}{65}\sqrt{107}e^1 \otimes e_4$	{156, 2345678}
842:68	$0, 0, 0, 0, \frac{1}{12}\sqrt{30}e^{12}, \frac{1}{3}\sqrt{3}e^{13}, \frac{1}{3}\sqrt{6}e^{16} + \frac{1}{6}\sqrt{21}e^{25},$ $\frac{1}{6}\sqrt{15}e^{15} + \frac{1}{12}\sqrt{6}e^{36}$	$(0, 0, 0, 1, 0, 0, 0, 0)$ $+ \frac{1}{4}\sqrt{26}e^4 \otimes e_7$	{124568, 3567}
842:68	$0, 0, 0, 0, \frac{7}{195}\sqrt{537}e^{12}, \frac{7}{195}\sqrt{105}e^{13}, \frac{28}{195}\sqrt{21}e^{16} + \frac{7}{15}\sqrt{3}e^{25},$ $\frac{7}{195}\sqrt{15}e^{15} + \frac{7}{195}\sqrt{186}e^{36}$	$(\frac{7}{65}, \frac{7}{65}, \frac{7}{65}, -\frac{42}{65}, \frac{14}{65}, \frac{14}{65}, \frac{21}{65}, \frac{21}{65})$ $+ \frac{7}{65}\sqrt{107}e^2 \otimes e_4$	{12367, 468}
842:89	$0, 0, 0, 0, \frac{1}{13}\sqrt{30}e^{12}, \frac{1}{13}\sqrt{30}e^{34}, \frac{1}{13}\sqrt{30}e^{15}, \frac{1}{13}\sqrt{30}e^{36}$	$(-\frac{3}{13}, \frac{5}{13}, -\frac{3}{13}, \frac{5}{13}, \frac{2}{13}, \frac{2}{13}, -\frac{1}{13}, -\frac{1}{13})$ $+ \frac{1}{13}\sqrt{66}e^2 \otimes e_8 - \frac{1}{13}\sqrt{66}e^4 \otimes e_7$	{12367, 127, 14568, 257}
842:89	$0, 0, 0, 0, \frac{1}{13}\sqrt{30}e^{12}, \frac{1}{13}\sqrt{30}e^{34}, \frac{1}{13}\sqrt{30}e^{15}, \frac{1}{13}\sqrt{30}e^{36}$	$(-\frac{3}{13}, \frac{5}{13}, -\frac{3}{13}, \frac{5}{13}, \frac{2}{13}, \frac{2}{13}, -\frac{1}{13}, -\frac{1}{13})$ $+ \frac{1}{13}\sqrt{66}e^2 \otimes e_8 + \frac{1}{13}\sqrt{66}e^4 \otimes e_7$	{12367, 127, 14568, 257}
842:89	$0, 0, 0, 0, \frac{2}{159}\sqrt{30}e^{12}, \frac{2}{159}\sqrt{30}e^{34}, \frac{2}{159}\sqrt{53}e^{15}, \frac{2}{159}\sqrt{53}e^{36}$	$(\frac{7}{159}, -\frac{3}{53}, \frac{7}{159}, -\frac{3}{53}, -\frac{2}{159}, -\frac{2}{159}, \frac{5}{159}, \frac{5}{159})$ $+ \frac{2}{159}\sqrt{69}e^1 \otimes e_8 + \frac{2}{159}\sqrt{69}e^3 \otimes e_7$	{127, 1356, 245678}
842:89	$0, 0, 0, 0, \frac{1}{17}\sqrt{11}e^{12}, \frac{1}{51}\sqrt{462}e^{34}, \frac{2}{51}\sqrt{187}e^{15}, \frac{1}{17}\sqrt{11}e^{36}$	$(\frac{7}{51}, -\frac{5}{17}, -\frac{2}{17}, \frac{7}{17}, -\frac{8}{51}, \frac{5}{17}, -\frac{1}{51}, \frac{3}{17})$ $+ \frac{11}{17}e^4 \otimes e_7 + \frac{1}{51}\sqrt{858}e^1 \otimes e_2$	{13458, 14568, 23567, 257}
842:89	$0, 0, 0, 0, \frac{2}{127}\sqrt{113}e^{12}, \frac{1}{381}\sqrt{19662}e^{34}, \frac{1}{381}\sqrt{28702}e^{15}, \frac{1}{381}\sqrt{19662}e^{36}$	$(\frac{29}{381}, -\frac{28}{127}, \frac{29}{127}, -\frac{11}{127}, -\frac{55}{381}, \frac{18}{127}, -\frac{26}{381}, \frac{47}{127})$ $+ \frac{1}{127}\sqrt{5198}e^3 \otimes e_7 + \frac{4}{381}\sqrt{1695}e^1 \otimes e_2$	{13458, 1356, 245678, 257}
842:89	$0, 0, 0, 0, \frac{10}{177}\sqrt{30}e^{12}, \frac{20}{177}\sqrt{6}e^{34}, \frac{4}{177}\sqrt{295}e^{15}, \frac{10}{177}\sqrt{30}e^{36}$	$(\frac{16}{177}, -\frac{4}{59}, -\frac{14}{59}, \frac{20}{177}, \frac{4}{177}, \frac{6}{59}, \frac{20}{177}, -\frac{8}{59})$ $+ \frac{2}{177}\sqrt{1290}e^4 \otimes e_7 + \frac{4}{177}\sqrt{435}e^1 \otimes e_8$	{12367, 127, 348, 468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:89	$0, 0, 0, 0, \frac{1}{87}\sqrt{2958}e^{12}, \frac{2}{29}\sqrt{17}e^{34}, \frac{1}{87}\sqrt{2958}e^{15}, \frac{1}{87}\sqrt{2958}e^{36}$	$(\frac{1}{3}, -\frac{11}{87}, -\frac{17}{87}, \frac{4}{29}, \frac{6}{29}, -\frac{5}{87}, \frac{47}{87}, -\frac{22}{87})$ $+\frac{1}{29}\sqrt{782}e^1 \otimes e_8$	{12367, 127, 1356, 15, 234578, 245678, 348, 468}
842:89	$0, 0, 0, 0, \frac{2}{21}\sqrt{7}e^{12}, \frac{2}{21}\sqrt{7}e^{34}, \frac{4}{21}\sqrt{7}e^{15}, \frac{4}{21}\sqrt{7}e^{36}$	$(\frac{1}{3}, -\frac{1}{3}, \frac{1}{3}, -\frac{1}{3}, 0, 0, \frac{1}{3}, \frac{1}{3})$ $+\frac{2}{7}\sqrt{7}e^1 \otimes e_2 + \frac{2}{7}\sqrt{7}e^3 \otimes e_4$	{1356, 14568, 245678}
842:89	$0, 0, 0, 0, \frac{1}{21}\sqrt{266}e^{12}, \frac{1}{21}\sqrt{57}e^{34}, \frac{1}{21}\sqrt{57}e^{15}, \frac{1}{21}\sqrt{266}e^{36}$	$(-\frac{4}{21}, \frac{2}{3}, -\frac{4}{21}, \frac{1}{7}, \frac{10}{21}, -\frac{1}{21}, \frac{2}{7}, -\frac{5}{21})$ $+\frac{1}{21}\sqrt{627}e^2 \otimes e_8$	{12367, 127, 13458, 14568, 23567, 257, 348, 468}
842:89	$0, 0, 0, 0, \frac{2}{27}\sqrt{33}e^{12}, \frac{2}{27}\sqrt{33}e^{34}, \frac{1}{9}\sqrt{66}e^{15}, \frac{2}{27}\sqrt{33}e^{36}$	$(\frac{16}{27}, -\frac{17}{27}, \frac{2}{27}, \frac{4}{27}, -\frac{1}{27}, \frac{2}{9}, \frac{5}{9}, \frac{8}{27})$ $+\frac{1}{9}\sqrt{154}e^1 \otimes e_2$	{13458, 1356, 14568, 15, 234578, 23567, 245678, 257}
842:90	$0, 0, 0, 0, \frac{2}{63}\sqrt{69}e^{12}, \frac{2}{63}\sqrt{69}e^{34}, \frac{2}{21}\sqrt{69}e^{13} + \frac{2}{63}\sqrt{69}e^{25},$ $\frac{1}{21}\sqrt{230}e^{36}$	$(-\frac{4}{63}, \frac{16}{63}, \frac{32}{63}, -\frac{37}{63}, \frac{4}{21}, -\frac{5}{63}, \frac{4}{9}, \frac{3}{7})$ $+\frac{1}{21}\sqrt{782}e^3 \otimes e_4$	{12457, 147, 24, 45}
842:90	$0, 0, 0, 0, \frac{12}{47}\sqrt{2}e^{12}, \frac{2}{47}\sqrt{33}e^{34}, \frac{10}{47}\sqrt{3}e^{13} + \frac{12}{47}\sqrt{2}e^{25},$ $\frac{12}{47}\sqrt{2}e^{36}$	$(\frac{9}{47}, -\frac{1}{47}, -\frac{2}{47}, -\frac{3}{47}, \frac{8}{47}, -\frac{5}{47}, \frac{7}{47}, -\frac{7}{47})$ $+\frac{6}{47}\sqrt{13}e^2 \otimes e_8$	{12367, 134578, 2356, 348}
842:90	$0, 0, 0, 0, \frac{9}{79}\sqrt{6}e^{12}, \frac{3}{79}\sqrt{21}e^{34}, \frac{3}{79}\sqrt{114}e^{13} + \frac{3}{79}\sqrt{21}e^{25},$ $\frac{6}{79}\sqrt{30}e^{36}$	$(\frac{18}{79}, \frac{3}{79}, \frac{6}{79}, -\frac{21}{79}, \frac{21}{79}, -\frac{15}{79}, \frac{24}{79}, -\frac{9}{79})$ $+\frac{45}{79}e^1 \otimes e_8 + \frac{9}{79}\sqrt{22}e^3 \otimes e_4$	{23578, 378}
842:90	$0, 0, 0, 0, \frac{2}{125}\sqrt{435}e^{12}, \frac{2}{125}\sqrt{195}e^{34}, \frac{2}{125}\sqrt{435}e^{13} + \frac{2}{125}\sqrt{435}e^{25},$ $\frac{1}{125}\sqrt{1830}e^{36}$	$(\frac{4}{25}, 0, 0, -\frac{3}{25}, \frac{4}{25}, -\frac{3}{25}, \frac{4}{25}, -\frac{3}{25})$ $+\frac{24}{125}\sqrt{5}e^2 \otimes e_8 + \frac{3}{125}\sqrt{30}e^3 \otimes e_4$	{12367, 2356}
842:90	$0, 0, 0, 0, \frac{1}{7}\sqrt{6}e^{12}, \frac{1}{7}\sqrt{6}e^{34}, \frac{1}{7}\sqrt{6}e^{13} + \frac{1}{7}\sqrt{6}e^{25},$ $\frac{1}{7}\sqrt{6}e^{36}$	$(\frac{2}{7}, -\frac{1}{7}, -\frac{2}{7}, \frac{3}{7}, \frac{1}{7}, \frac{1}{7}, 0, -\frac{1}{7})$ $+\frac{3}{7}\sqrt{2}e^1 \otimes e_8 - \frac{3}{7}\sqrt{2}e^4 \otimes e_7$	{127, 157, 24568, 468}
842:90	$0, 0, 0, 0, \frac{1}{7}\sqrt{6}e^{12}, \frac{1}{7}\sqrt{6}e^{34}, \frac{1}{7}\sqrt{6}e^{13} + \frac{1}{7}\sqrt{6}e^{25},$ $\frac{1}{7}\sqrt{6}e^{36}$	$(\frac{2}{7}, -\frac{1}{7}, -\frac{2}{7}, \frac{3}{7}, \frac{1}{7}, \frac{1}{7}, 0, -\frac{1}{7})$ $+\frac{3}{7}\sqrt{2}e^1 \otimes e_8 + \frac{3}{7}\sqrt{2}e^4 \otimes e_7$	{127, 157, 24568, 468}
842:90	$0, 0, 0, 0, \frac{2}{95}\sqrt{114}e^{12}, \frac{2}{95}\sqrt{69}e^{34}, \frac{2}{95}\sqrt{111}e^{13} + \frac{4}{95}\sqrt{33}e^{25},$ $\frac{2}{95}\sqrt{114}e^{36}$	$(\frac{13}{95}, -\frac{1}{19}, -\frac{2}{19}, \frac{9}{95}, \frac{8}{95}, -\frac{1}{95}, \frac{3}{95}, -\frac{11}{95})$ $+\frac{6}{95}\sqrt{21}e^2 \otimes e_8 + \frac{6}{95}\sqrt{6}e^4 \otimes e_7$	{12367, 348}
842:90	$0, 0, 0, 0, \frac{1}{17}\sqrt{15}e^{12}, \frac{5}{17}\sqrt{6}e^{34}, \frac{2}{17}\sqrt{15}e^{13} + \frac{5}{17}\sqrt{6}e^{25},$ $\frac{1}{17}\sqrt{15}e^{36}$	$(\frac{1}{17}, -\frac{2}{17}, -\frac{4}{17}, \frac{12}{17}, -\frac{1}{17}, \frac{8}{17}, -\frac{3}{17}, \frac{4}{17})$ $+\frac{9}{17}\sqrt{5}e^4 \otimes e_7$	{127, 157, 24568, 468}
842:90	$0, 0, 0, 0, \frac{5}{17}\sqrt{6}e^{12}, \frac{1}{17}\sqrt{15}e^{34}, \frac{2}{17}\sqrt{15}e^{13} + \frac{1}{17}\sqrt{15}e^{25},$ $\frac{5}{17}\sqrt{6}e^{36}$	$(\frac{10}{17}, -\frac{2}{17}, -\frac{4}{17}, \frac{3}{17}, \frac{8}{17}, -\frac{1}{17}, \frac{6}{17}, -\frac{5}{17})$ $+\frac{9}{17}\sqrt{5}e^1 \otimes e_8$	{127, 157, 24568, 468}
842:91	$0, 0, 0, 0, \frac{2}{57}\sqrt{30}e^{12}, \frac{4}{57}\sqrt{6}e^{34}, \frac{4}{57}\sqrt{19}e^{15},$ $\frac{8}{57}\sqrt{3}e^{23} + \frac{2}{57}\sqrt{30}e^{46}$	$(\frac{8}{57}, -\frac{4}{19}, \frac{4}{19}, -\frac{2}{19}, -\frac{4}{57}, \frac{2}{19}, \frac{4}{57}, 0)$ $+\frac{2}{19}\sqrt{10}e^3 \otimes e_7 + \frac{4}{19}\sqrt{3}e^1 \otimes e_8$	{348, 368}
842:91	$0, 0, 0, 0, \frac{1}{4047}\sqrt{1686}e^{12}, \frac{4}{4047}\sqrt{114}e^{34}, \frac{1}{4047}\sqrt{2698}e^{15},$ $\frac{1}{4047}\sqrt{690}e^{23} + \frac{4}{4047}\sqrt{183}e^{46}$	$(-\frac{8}{4047}, \frac{10}{1349}, -\frac{13}{1349}, \frac{5}{1349}, \frac{22}{4047}, -\frac{8}{1349}, \frac{14}{4047}, -\frac{3}{1349})$ $+\frac{3}{1349}\sqrt{46}e^4 \otimes e_7 + \frac{4}{1349}\sqrt{23}e^1 \otimes e_8$	{127, 235678}
842:91	$0, 0, 0, 0, \frac{1}{255}\sqrt{8814}e^{12}, \frac{2}{85}\sqrt{678}e^{34}, \frac{1}{255}\sqrt{19210}e^{15},$ $\frac{1}{255}\sqrt{15594}e^{23} + \frac{2}{85}\sqrt{678}e^{46}$	$(-\frac{76}{255}, \frac{26}{85}, \frac{3}{85}, \frac{13}{85}, \frac{2}{255}, \frac{16}{85}, -\frac{74}{255}, \frac{29}{85})$ $+\frac{1}{85}\sqrt{5198}e^4 \otimes e_7$	{123678, 127, 235678, 257}
842:91	$0, 0, 0, 0, \frac{10}{519}\sqrt{858}e^{12}, \frac{4}{519}\sqrt{429}e^{34}, \frac{2}{519}\sqrt{24739}e^{15},$ $\frac{2}{519}\sqrt{9867}e^{23} + \frac{10}{519}\sqrt{858}e^{46}$	$(\frac{196}{519}, -\frac{38}{173}, \frac{8}{173}, -\frac{19}{173}, \frac{82}{519}, -\frac{11}{173}, \frac{278}{519}, -\frac{30}{173})$ $+\frac{2}{173}\sqrt{6578}e^1 \otimes e_8$	{1456, 15, 348, 368}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
842:91	$0, 0, 0, 0, \frac{2}{123}\sqrt{141}e^{12}, \frac{2}{123}\sqrt{1410}e^{34}, \frac{2}{123}\sqrt{1927}e^{15},$ $\frac{2}{123}\sqrt{1551}e^{23} + \frac{2}{123}\sqrt{141}e^{46}$	$(-\frac{14}{123}, -\frac{2}{41}, \frac{20}{41}, -\frac{1}{41}, -\frac{20}{123}, \frac{19}{41}, -\frac{34}{123}, \frac{18}{41})$ $+ \frac{2}{41}\sqrt{517}e^3 \otimes e_7$	{12345, 12356, 234, 236}
842:92	$0, 0, 0, 0, \frac{2}{97}\sqrt{143}e^{12}, \frac{1}{291}\sqrt{27742}e^{34}, \frac{13}{97}\sqrt{22}e^{15},$ $\frac{2}{291}\sqrt{4290}e^{25} + \frac{13}{97}\sqrt{22}e^{36}$	$(-\frac{27}{97}, \frac{32}{97}, \frac{77}{291}, -\frac{43}{291}, \frac{5}{97}, \frac{34}{291}, -\frac{22}{97}, \frac{37}{97})$ $+ \frac{1}{291}\sqrt{67782}e^3 \otimes e_7$	{127, 1356, 245678, 348}
842:92	$0, 0, 0, 0, \frac{2}{797}\sqrt{438}e^{12}, \frac{2}{797}\sqrt{462}e^{34}, \frac{6}{797}\sqrt{93}e^{15},$ $\frac{4}{797}\sqrt{30}e^{25} + \frac{6}{797}\sqrt{93}e^{36}$	$(\frac{13}{797}, -\frac{3}{797}, \frac{29}{797}, -\frac{51}{797}, \frac{10}{797}, -\frac{22}{797}, \frac{23}{797}, \frac{7}{797})$ $- \frac{2}{797}\sqrt{1005}e^1 \otimes e_8 + \frac{2}{797}\sqrt{1077}e^3 \otimes e_7$	{127, 1356, 245678, 348}
842:92	$0, 0, 0, 0, \frac{2}{797}\sqrt{438}e^{12}, \frac{2}{797}\sqrt{462}e^{34}, \frac{6}{797}\sqrt{93}e^{15},$ $\frac{4}{797}\sqrt{30}e^{25} + \frac{6}{797}\sqrt{93}e^{36}$	$(\frac{13}{797}, -\frac{3}{797}, \frac{29}{797}, -\frac{51}{797}, \frac{10}{797}, -\frac{22}{797}, \frac{23}{797}, \frac{7}{797})$ $+ \frac{2}{797}\sqrt{1005}e^1 \otimes e_8 + \frac{2}{797}\sqrt{1077}e^3 \otimes e_7$	{127, 1356, 245678, 348}
842:92	$0, 0, 0, 0, \frac{4}{111}\sqrt{134}e^{12}, \frac{4}{111}\sqrt{134}e^{34}, \frac{2}{111}\sqrt{737}e^{15},$ $\frac{2}{37}\sqrt{67}e^{25} + \frac{4}{111}\sqrt{670}e^{36}$	$(\frac{5}{111}, \frac{25}{111}, \frac{21}{37}, -\frac{71}{111}, \frac{10}{37}, -\frac{8}{111}, \frac{35}{111}, \frac{55}{111})$ $+ \frac{2}{111}\sqrt{5829}e^3 \otimes e_4$	{12367, 1356, 245678, 468}
842:92	$0, 0, 0, 0, \frac{1}{9}\sqrt{10}e^{12}, \frac{4}{9}\sqrt{3}e^{34}, \frac{2}{9}\sqrt{13}e^{15},$ $\frac{2}{9}\sqrt{3}e^{25} + \frac{1}{9}\sqrt{14}e^{36}$	$(-\frac{2}{9}, \frac{2}{9}, -\frac{2}{9}, \frac{2}{9}, 0, \frac{4}{9}, -\frac{2}{9}, \frac{2}{9})$ $+ \frac{1}{9}\sqrt{114}e^4 \otimes e_7$	{12367, 127, 348, 468}
842:95	$0, 0, 0, 0, \frac{28}{199}\sqrt{15}e^{12}, \frac{14}{199}\sqrt{21}e^{34}, \frac{14}{199}\sqrt{21}e^{15} + \frac{126}{199}e^{23},$ $\frac{35}{199}\sqrt{6}e^{13} + \frac{14}{199}\sqrt{87}e^{46}$	$(-\frac{14}{199}, \frac{105}{199}, -\frac{28}{199}, -\frac{7}{199}, \frac{91}{199}, -\frac{35}{199}, \frac{77}{199}, -\frac{42}{199})$ $+ \frac{126}{199}\sqrt{3}e^2 \otimes e_8$	{123, 12346}
842:95	$0, 0, 0, 0, \frac{5}{841}\sqrt{942}e^{12}, \frac{5}{841}\sqrt{2346}e^{34}, \frac{5}{841}\sqrt{2346}e^{15} + \frac{15}{841}\sqrt{78}e^{23},$ $\frac{5}{841}\sqrt{2694}e^{13} + \frac{10}{841}\sqrt{645}e^{46}$	$(\frac{40}{841}, -\frac{135}{841}, \frac{80}{841}, \frac{20}{841}, -\frac{95}{841}, \frac{100}{841}, -\frac{55}{841}, \frac{120}{841})$ $+ \frac{90}{841}\sqrt{13}e^4 \otimes e_7$	{127, 1456}
842:96	$0, 0, 0, 0, \frac{1}{5}\sqrt{6}e^{12}, \frac{1}{5}\sqrt{15}e^{34}, \frac{1}{5}\sqrt{15}e^{15} + \frac{2}{5}\sqrt{6}e^{23},$ $\frac{2}{5}\sqrt{6}e^{14} + \frac{1}{5}\sqrt{6}e^{36}$	$(0, \frac{2}{5}, 0, -\frac{1}{5}, \frac{2}{5}, -\frac{1}{5}, \frac{2}{5}, -\frac{1}{5})$ $+ \frac{3}{5}\sqrt{3}e^2 \otimes e_8$	{267, 458}
842:97	$0, 0, 0, 0, \frac{68}{823}\sqrt{15}e^{12}, \frac{68}{823}\sqrt{15}e^{34}, \frac{17}{823}\sqrt{1590}e^{13} + \frac{34}{823}\sqrt{3}e^{25},$ $\frac{102}{823}\sqrt{19}e^{15} + \frac{136}{823}\sqrt{21}e^{36}$	$(\frac{34}{823}, \frac{187}{823}, \frac{374}{823}, -\frac{493}{823}, \frac{221}{823}, -\frac{119}{823}, \frac{408}{823}, \frac{255}{823})$ $+ \frac{102}{823}\sqrt{113}e^3 \otimes e_4$	{147, 45}
842:97	$0, 0, 0, 0, \frac{1}{14}\sqrt{6}e^{12}, \frac{2}{7}\sqrt{6}e^{34}, \frac{2}{7}\sqrt{3}e^{13} + \frac{3}{7}\sqrt{3}e^{25},$ $\frac{3}{7}e^{15} + \frac{3}{14}\sqrt{2}e^{36}$	$(\frac{1}{7}, -\frac{1}{7}, -\frac{2}{7}, \frac{5}{7}, 0, \frac{3}{7}, -\frac{1}{7}, \frac{1}{7})$ $+ \frac{3}{14}\sqrt{30}e^4 \otimes e_7$	{127, 468}
842:98	$0, 0, 0, 0, \frac{1}{185}\sqrt{1230}e^{12}, \frac{3}{185}\sqrt{310}e^{34}, \frac{6}{185}\sqrt{85}e^{15},$ $\frac{2}{185}\sqrt{705}e^{13} + \frac{9}{185}\sqrt{10}e^{25} + \frac{6}{185}\sqrt{85}e^{46}$	$(-\frac{4}{37}, \frac{3}{37}, \frac{6}{37}, -\frac{2}{37}, -\frac{1}{37}, \frac{4}{37}, -\frac{5}{37}, \frac{2}{37})$ $+ \frac{6}{185}\sqrt{130}e^4 \otimes e_7$	{127, 1456}
842:98	$0, 0, 0, 0, \frac{1}{14}\sqrt{6}e^{12}, \frac{2}{7}\sqrt{6}e^{34}, \frac{3}{7}\sqrt{3}e^{15},$ $\frac{2}{7}\sqrt{3}e^{13} + \frac{3}{7}e^{25} + \frac{3}{14}\sqrt{2}e^{46}$	$(-\frac{2}{7}, \frac{2}{7}, \frac{4}{7}, -\frac{1}{7}, 0, \frac{3}{7}, -\frac{2}{7}, \frac{2}{7})$ $+ \frac{3}{14}\sqrt{30}e^3 \otimes e_7$	{348, 368}
842:99	$0, 0, 0, 0, \frac{5}{147}\sqrt{14}e^{12}, \frac{5}{441}\sqrt{1582}e^{34}, \frac{10}{441}\sqrt{357}e^{13} + \frac{10}{63}\sqrt{11}e^{25},$ $\frac{5}{441}\sqrt{1722}e^{15} + \frac{10}{441}\sqrt{658}e^{46}$	$(\frac{5}{21}, -\frac{10}{63}, -\frac{20}{63}, \frac{20}{63}, \frac{5}{63}, 0, -\frac{5}{63}, \frac{20}{63})$ $+ \frac{10}{441}\sqrt{1281}e^4 \otimes e_7$	{123458, 23678}
841:1	$0, 0, 0, 0, \frac{4}{499}\sqrt{2586}e^{12}, \frac{1}{499}\sqrt{73270}e^{13}, \frac{2}{499}\sqrt{33187}e^{23},$ $\frac{2}{499}\sqrt{29739}e^{15}$	$(-\frac{80}{499}, -\frac{11}{499}, \frac{260}{499}, \frac{95}{499}, -\frac{91}{499}, \frac{180}{499}, \frac{249}{499}, -\frac{171}{499})$ $+ \frac{2}{499}\sqrt{87062}e^3 \otimes e_8$	{12345, 1235, 1468, 168, 2346, 236, 458, 58}
841:1	$0, 0, 0, 0, \frac{6}{751}\sqrt{290}e^{12}, \frac{6}{751}\sqrt{2117}e^{13}, \frac{3}{751}\sqrt{11310}e^{23}, \frac{42}{751}\sqrt{29}e^{15}$	$(-\frac{174}{751}, \frac{186}{751}, \frac{99}{751}, \frac{12}{751}, -\frac{75}{751}, \frac{285}{751}, -\frac{162}{751})$ $+ \frac{30}{751}\sqrt{203}e^3 \otimes e_8 + \frac{3}{751}\sqrt{18038}e^2 \otimes e_6$	{24578, 2578, 3467, 367}
841:1	$0, 0, 0, 0, \frac{12}{65}\sqrt{5}e^{12}, \frac{8}{65}\sqrt{5}e^{13}, \frac{12}{65}\sqrt{5}e^{23}, \frac{4}{13}\sqrt{2}e^{15}$	$(-\frac{14}{65}, \frac{22}{65}, -\frac{4}{65}, \frac{34}{65}, \frac{8}{65}, -\frac{18}{65}, \frac{18}{65}, -\frac{6}{65})$ $+ \frac{4}{13}\sqrt{5}e^4 \otimes e_8 + \frac{4}{65}\sqrt{155}e^2 \otimes e_6$	{1238, 1456, 2578, 3467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:1	$0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{5}{53}\sqrt{22}e^{13}, \frac{10}{53}\sqrt{3}e^{23}, \frac{20}{53}e^{15}$	$(\frac{10}{53}, -\frac{5}{53}, -\frac{10}{53}, \frac{25}{53}, \frac{5}{53}, 0, -\frac{15}{53}, \frac{15}{53})$ $+ \frac{10}{53}\sqrt{14}e^1 \otimes e_7 + \frac{30}{53}e^4 \otimes e_6$	{12348, 156, 24578, 367}
841:1	$0, 0, 0, 0, \frac{7}{65}\sqrt{30}e^{12}, \frac{7}{65}\sqrt{10}e^{13}, \frac{7}{65}\sqrt{30}e^{23}, \frac{14}{65}\sqrt{10}e^{15}$	$(\frac{5}{13}, -\frac{17}{65}, -\frac{7}{65}, \frac{1}{5}, \frac{8}{65}, \frac{18}{65}, -\frac{24}{65}, \frac{33}{65})$ $+ \frac{14}{65}\sqrt{26}e^1 \otimes e_7$	{12348, 1238, 1456, 156, 24578, 2578, 3467, 367}
841:1	$0, 0, 0, 0, \frac{12}{41}\sqrt{7}e^{12}, \frac{14}{41}\sqrt{3}e^{13}, \frac{12}{41}\sqrt{7}e^{23}, \frac{2}{41}\sqrt{105}e^{15}$	$(-\frac{2}{41}, \frac{17}{41}, \frac{3}{41}, -\frac{25}{41}, \frac{15}{41}, \frac{1}{41}, \frac{20}{41}, \frac{13}{41})$ $+ \frac{6}{41}\sqrt{77}e^2 \otimes e_4$	{12368, 1278, 134567, 145, 2358, 25678, 347, 46}
841:1	$0, 0, 0, 0, \frac{2}{499}\sqrt{33187}e^{12}, \frac{1}{499}\sqrt{73270}e^{13}, \frac{4}{499}\sqrt{2586}e^{23}, \frac{2}{499}\sqrt{29739}e^{15}$	$(\frac{122}{499}, -\frac{11}{499}, \frac{58}{499}, -\frac{309}{499}, \frac{111}{499}, \frac{180}{499}, \frac{47}{499}, \frac{233}{499})$ $+ \frac{2}{499}\sqrt{87062}e^1 \otimes e_4$	{12378, 1268, 135, 1567, 2345678, 2458, 346, 47}
841:1	$0, 0, 0, 0, \frac{12}{199}\sqrt{39}e^{12}, \frac{18}{199}\sqrt{3}e^{13}, \frac{12}{199}\sqrt{39}e^{23}, \frac{6}{199}\sqrt{129}e^{15}$	$(\frac{34}{199}, -\frac{1}{199}, -\frac{19}{199}, -\frac{55}{199}, \frac{33}{199}, \frac{15}{199}, -\frac{20}{199}, \frac{67}{199})$ $+ \frac{6}{199}\sqrt{237}e^2 \otimes e_4 + \frac{72}{199}\sqrt{2}e^1 \otimes e_7$	{12368, 145, 25678, 347}
841:1	$0, 0, 0, 0, \frac{1}{122}\sqrt{2831}e^{12}, \frac{1}{122}\sqrt{3874}e^{13}, \frac{1}{122}\sqrt{2831}e^{23}, \frac{3}{122}\sqrt{1490}e^{15}$	$(-\frac{33}{244}, \frac{3}{61}, \frac{57}{244}, 1, -\frac{21}{244}, \frac{6}{61}, \frac{69}{244}, -\frac{27}{122})$ $+ \frac{1}{122}\sqrt{28906}e^4 \otimes e_8$	{12368, 1278, 134567, 145, 2358, 25678, 347, 46}
841:1	$0, 0, 0, 0, \frac{2}{115}\sqrt{429}e^{12}, \frac{3}{115}\sqrt{1430}e^{13}, \frac{2}{115}\sqrt{429}e^{23}, \frac{4}{115}\sqrt{143}e^{15}$	$(-\frac{2}{23}, \frac{33}{115}, -\frac{18}{115}, 1, \frac{1}{5}, -\frac{28}{115}, \frac{3}{23}, \frac{13}{115})$ $+ \frac{2}{115}\sqrt{6721}e^4 \otimes e_6$	{1234578, 12568, 134, 167, 23678, 248, 356, 457}
841:1	$0, 0, 0, 0, \frac{16}{307}\sqrt{30}e^{12}, \frac{16}{307}\sqrt{19}e^{13}, \frac{16}{307}\sqrt{106}e^{23}, \frac{16}{307}\sqrt{57}e^{15}$	$(-\frac{11}{307}, -\frac{41}{307}, \frac{65}{307}, \frac{152}{307}, -\frac{52}{307}, \frac{54}{307}, \frac{24}{307}, -\frac{63}{307})$ $+ \frac{16}{307}\sqrt{155}e^3 \otimes e_8 + \frac{48}{307}\sqrt{13}e^4 \otimes e_7$	{12345, 1468, 2346, 458}
841:1	$0, 0, 0, 0, \frac{2}{475}\sqrt{15593}e^{12}, \frac{1}{475}\sqrt{141846}e^{13}, \frac{2}{475}\sqrt{33198}e^{23}, \frac{6}{475}\sqrt{503}e^{15}$	$(\frac{26}{475}, \frac{17}{475}, \frac{202}{475}, -\frac{301}{475}, \frac{43}{475}, \frac{12}{25}, \frac{219}{475}, \frac{69}{475})$ $+ \frac{2}{475}\sqrt{97582}e^3 \otimes e_4$	{12358, 1245678, 137, 146, 2368, 2478, 3567, 45}
841:1	$0, 0, 0, 0, \frac{1}{749}\sqrt{47458}e^{12}, \frac{1}{749}\sqrt{42790}e^{13}, \frac{1}{749}\sqrt{164158}e^{23}, \frac{2}{749}\sqrt{2334}e^{15}$	$(-\frac{37}{749}, \frac{177}{749}, -\frac{25}{107}, \frac{391}{749}, \frac{20}{107}, -\frac{212}{749}, \frac{2}{749}, \frac{103}{749})$ $+ \frac{10}{749}\sqrt{2334}e^4 \otimes e_7 + \frac{2}{749}\sqrt{69631}e^2 \otimes e_6$	{12348, 1456, 2578, 367}
841:1	$0, 0, 0, 0, \frac{2}{113}\sqrt{43}e^{12}, \frac{2}{113}\sqrt{645}e^{13}, \frac{3}{113}\sqrt{258}e^{23}, \frac{2}{113}\sqrt{129}e^{15}$	$(-\frac{14}{113}, \frac{34}{113}, \frac{5}{113}, -\frac{38}{113}, \frac{20}{113}, -\frac{9}{113}, \frac{39}{113}, \frac{6}{113})$ $+ \frac{10}{113}\sqrt{43}e^3 \otimes e_4 + \frac{1}{113}\sqrt{4386}e^2 \otimes e_6$	{123, 14568, 2457, 3678}
841:1	$0, 0, 0, 0, \frac{3}{194}\sqrt{511}e^{12}, \frac{1}{194}\sqrt{146}e^{13}, \frac{3}{194}\sqrt{511}e^{23}, \frac{1}{194}\sqrt{9490}e^{15}$	$(\frac{59}{388}, -\frac{19}{97}, -\frac{11}{388}, \frac{47}{97}, -\frac{17}{388}, \frac{12}{97}, -\frac{87}{388}, \frac{21}{194})$ $+ \frac{1}{194}\sqrt{10074}e^4 \otimes e_8 + \frac{5}{97}\sqrt{146}e^1 \otimes e_7$	{12368, 145, 25678, 347}
841:1	$0, 0, 0, 0, \frac{3}{479}\sqrt{1970}e^{12}, \frac{1}{479}\sqrt{43734}e^{13}, \frac{3}{479}\sqrt{23246}e^{23}, \frac{2}{479}\sqrt{13002}e^{15}$	$(\frac{103}{479}, -\frac{67}{479}, -\frac{45}{479}, 1, \frac{36}{479}, \frac{58}{479}, -\frac{112}{479}, \frac{139}{479})$ $+ \frac{48}{479}\sqrt{197}e^4 \otimes e_7$	{123456, 1257, 13678, 148, 234, 267, 3578, 4568}
841:1	$0, 0, 0, 0, \frac{6}{79}\sqrt{7}e^{12}, \frac{3}{79}\sqrt{86}e^{13}, \frac{6}{79}\sqrt{30}e^{23}, \frac{6}{79}\sqrt{17}e^{15}$	$(\frac{18}{79}, -\frac{15}{79}, \frac{6}{79}, -\frac{21}{79}, \frac{3}{79}, \frac{24}{79}, -\frac{9}{79}, \frac{21}{79})$ $+ \frac{6}{79}\sqrt{46}e^3 \otimes e_4 + \frac{6}{79}\sqrt{58}e^1 \otimes e_7$	{1238, 1456, 24578, 367}
841:1	$0, 0, 0, 0, \frac{2}{115}\sqrt{209}e^{12}, \frac{1}{115}\sqrt{1558}e^{13}, \frac{2}{115}\sqrt{209}e^{23}, \frac{3}{115}\sqrt{266}e^{15}$	$(\frac{3}{230}, -\frac{8}{115}, \frac{33}{115}, -\frac{73}{230}, -\frac{13}{230}, \frac{3}{10}, \frac{5}{23}, -\frac{1}{23})$ $+ \frac{1}{115}\sqrt{3838}e^1 \otimes e_4 + \frac{1}{115}\sqrt{3838}e^3 \otimes e_8$	{12678, 1357, 24578, 3467}
841:1	$0, 0, 0, 0, \frac{6}{19}e^{12}, \frac{4}{19}\sqrt{6}e^{13}, \frac{1}{19}\sqrt{51}e^{23}, \frac{1}{19}\sqrt{39}e^{15}$	$(-\frac{10}{57}, \frac{4}{57}, \frac{11}{57}, \frac{28}{57}, -\frac{2}{19}, \frac{1}{57}, \frac{5}{19}, -\frac{16}{57})$ $+ \frac{1}{19}\sqrt{129}e^4 \otimes e_6 + \frac{1}{19}\sqrt{174}e^3 \otimes e_8$	{12345, 168, 236, 458}
841:1	$0, 0, 0, 0, \frac{3}{751}\sqrt{11310}e^{12}, \frac{6}{751}\sqrt{2117}e^{13}, \frac{6}{751}\sqrt{290}e^{23}, \frac{42}{751}\sqrt{29}e^{15}$	$(\frac{1}{751}, \frac{186}{751}, -\frac{76}{751}, -\frac{260}{751}, \frac{187}{751}, -\frac{75}{751}, \frac{110}{751}, \frac{188}{751})$ $+ \frac{30}{751}\sqrt{203}e^1 \otimes e_4 + \frac{3}{751}\sqrt{18038}e^2 \otimes e_6$	{1238, 156, 24578, 3467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:1	$0, 0, 0, 0, \frac{4}{831}\sqrt{834}e^{12}, \frac{1}{831}\sqrt{29190}e^{13}, \frac{2}{831}\sqrt{15707}e^{23}, \frac{22}{831}\sqrt{139}e^{15}$	$(\frac{80}{831}, -\frac{179}{831}, \frac{40}{277}, \frac{95}{831}, -\frac{33}{277}, \frac{200}{831}, -\frac{59}{831}, -\frac{19}{831})$ $+\frac{2}{831}\sqrt{24742}e^3 \otimes e_8 + \frac{2}{831}\sqrt{26410}e^1 \otimes e_7$	{24578, 2578, 3467, 367}
841:1	$0, 0, 0, 0, \frac{21}{209}\sqrt{10}e^{12}, \frac{7}{209}\sqrt{58}e^{13}, \frac{21}{209}\sqrt{10}e^{23}, \frac{56}{209}e^{15}$	$(\frac{1}{11}, \frac{1}{11}, -\frac{49}{209}, \frac{25}{209}, \frac{2}{11}, -\frac{30}{209}, -\frac{30}{209}, \frac{3}{11})$ $+\frac{14}{209}\sqrt{42}e^2 \otimes e_6 + \frac{70}{209}\sqrt{2}e^1 \otimes e_7$	{12348, 1238, 1456, 156, 24578, 2578, 3467, 367}
841:1	$0, 0, 0, 0, \frac{21}{209}\sqrt{10}e^{12}, \frac{7}{209}\sqrt{58}e^{13}, \frac{21}{209}\sqrt{10}e^{23}, \frac{56}{209}e^{15}$	$(\frac{1}{11}, \frac{1}{11}, -\frac{49}{209}, \frac{25}{209}, \frac{2}{11}, -\frac{30}{209}, -\frac{30}{209}, \frac{3}{11})$ $-\frac{14}{209}\sqrt{42}e^2 \otimes e_6 + \frac{70}{209}\sqrt{2}e^1 \otimes e_7$	{12348, 1238, 1456, 156, 24578, 2578, 3467, 367}
841:1	$0, 0, 0, 0, \frac{8}{443}\sqrt{190}e^{12}, \frac{2}{443}\sqrt{285}e^{13}, \frac{4}{443}\sqrt{3230}e^{23}, \frac{2}{443}\sqrt{8265}e^{15}$	$(-\frac{66}{443}, \frac{67}{443}, \frac{125}{443}, -\frac{123}{443}, \frac{1}{443}, \frac{59}{443}, \frac{192}{443}, -\frac{65}{443})$ $+\frac{2}{443}\sqrt{17005}e^2 \otimes e_4 + \frac{8}{443}\sqrt{1235}e^3 \otimes e_8$	{12678, 13457, 2578, 3467}
841:2	$0, 0, 0, 0, \frac{15}{149}\sqrt{6}e^{12}, \frac{10}{149}\sqrt{66}e^{13}, \frac{5}{149}\sqrt{78}e^{34}, \frac{5}{149}\sqrt{78}e^{15}$	$(\frac{35}{149}, -\frac{40}{149}, -\frac{40}{149}, \frac{70}{149}, -\frac{5}{149}, -\frac{5}{149}, \frac{30}{149}, \frac{30}{149})$ $+\frac{30}{149}\sqrt{11}e^1 \otimes e_2 + \frac{30}{149}\sqrt{11}e^4 \otimes e_6$	{1348, 168, 2367, 247}
841:2	$0, 0, 0, 0, \frac{2}{85}\sqrt{429}e^{12}, \frac{2}{85}\sqrt{759}e^{13}, \frac{12}{85}\sqrt{33}e^{34}, \frac{12}{85}\sqrt{33}e^{15}$	$(-\frac{2}{17}, \frac{3}{85}, \frac{3}{85}, \frac{49}{85}, -\frac{7}{85}, -\frac{7}{85}, \frac{52}{85}, -\frac{1}{5})$ $+\frac{6}{85}\sqrt{253}e^4 \otimes e_8$	{123678, 128, 13456, 1457, 23578, 2568, 34, 467}
841:2	$0, 0, 0, 0, \frac{2}{137}\sqrt{165}e^{12}, \frac{2}{137}\sqrt{95}e^{13}, \frac{4}{137}\sqrt{65}e^{34}, \frac{4}{137}\sqrt{65}e^{15}$	$(\frac{14}{137}, -\frac{17}{137}, -\frac{17}{137}, \frac{21}{137}, -\frac{3}{137}, -\frac{3}{137}, \frac{4}{137}, \frac{11}{137})$ $+\frac{16}{137}\sqrt{5}e^1 \otimes e_7 + \frac{2}{137}\sqrt{285}e^4 \otimes e_8$	{128, 13456, 23578, 467}
841:2	$0, 0, 0, 0, \frac{120}{1349}\sqrt{19}e^{12}, \frac{30}{1349}\sqrt{115}e^{13}, \frac{60}{1349}\sqrt{122}e^{34}, \frac{30}{1349}\sqrt{281}e^{15}$	$(-\frac{294}{1349}, \frac{493}{1349}, \frac{5}{19}, -\frac{312}{1349}, \frac{199}{1349}, \frac{61}{1349}, \frac{43}{1349}, -\frac{5}{71})$ $+\frac{60}{1349}\sqrt{138}e^3 \otimes e_8 + \frac{90}{1349}\sqrt{69}e^2 \otimes e_7$	{128, 13567, 2568, 37}
841:2	$0, 0, 0, 0, \frac{2}{823}\sqrt{3990}e^{12}, \frac{2}{823}\sqrt{25365}e^{13}, \frac{5}{823}\sqrt{4902}e^{34}, \frac{6}{823}\sqrt{1615}e^{15}$	$(-\frac{158}{823}, \frac{122}{823}, \frac{91}{823}, \frac{218}{823}, -\frac{36}{823}, -\frac{67}{823}, \frac{309}{823}, -\frac{194}{823})$ $+\frac{30}{823}\sqrt{247}e^3 \otimes e_8 + \frac{3}{823}\sqrt{21470}e^4 \otimes e_6$	{12345, 168, 2367, 4578}
841:2	$0, 0, 0, 0, \frac{1}{8}\sqrt{6}e^{12}, \frac{1}{4}\sqrt{6}e^{13}, \frac{1}{8}\sqrt{6}e^{34}, \frac{1}{4}e^{15}$	$(\frac{7}{32}, -\frac{9}{32}, \frac{1}{4}, -\frac{1}{4}, -\frac{1}{16}, \frac{15}{32}, 0, \frac{5}{32})$ $+\frac{1}{4}\sqrt{7}e^3 \otimes e_4 + \frac{1}{8}\sqrt{30}e^1 \otimes e_2$	{138, 1468, 236, 24}
841:2	$0, 0, 0, 0, \frac{2}{83}\sqrt{345}e^{12}, \frac{2}{83}\sqrt{115}e^{13}, \frac{4}{83}\sqrt{115}e^{34}, \frac{4}{83}\sqrt{115}e^{15}$	$(-\frac{18}{83}, \frac{25}{83}, -\frac{3}{83}, \frac{35}{83}, \frac{7}{83}, -\frac{21}{83}, \frac{32}{83}, -\frac{11}{83})$ $+\frac{2}{83}\sqrt{989}e^4 \otimes e_8 + \frac{4}{83}\sqrt{161}e^2 \otimes e_6$	{128, 13456, 23578, 467}
841:2	$0, 0, 0, 0, \frac{3}{41}\sqrt{10}e^{12}, \frac{3}{41}\sqrt{110}e^{13}, \frac{30}{41}e^{34}, \frac{3}{41}\sqrt{10}e^{15}$	$(-\frac{1}{41}, \frac{9}{41}, -\frac{13}{41}, \frac{31}{41}, \frac{8}{41}, -\frac{14}{41}, \frac{18}{41}, \frac{7}{41})$ $+\frac{3}{41}\sqrt{330}e^4 \otimes e_6$	{123458, 12568, 134, 16, 23678, 2478, 3567, 457}
841:2	$0, 0, 0, 0, \frac{30}{41}e^{12}, \frac{3}{41}\sqrt{110}e^{13}, \frac{3}{41}\sqrt{10}e^{34}, \frac{3}{41}\sqrt{10}e^{15}$	$(-\frac{12}{41}, \frac{31}{41}, -\frac{2}{41}, \frac{9}{41}, \frac{19}{41}, -\frac{14}{41}, \frac{7}{41}, \frac{7}{41})$ $+\frac{3}{41}\sqrt{330}e^2 \otimes e_6$	{123, 12347, 14568, 15678, 245, 257, 34678, 368}
841:2	$0, 0, 0, 0, \frac{2}{289}\sqrt{754}e^{12}, \frac{1}{289}\sqrt{1102}e^{13}, \frac{6}{289}\sqrt{145}e^{34}, \frac{6}{289}\sqrt{145}e^{15}$	$(\frac{14}{289}, -\frac{1}{17}, \frac{40}{289}, -\frac{55}{289}, -\frac{3}{289}, \frac{54}{289}, -\frac{15}{289}, \frac{11}{289})$ $+\frac{2}{289}\sqrt{1653}e^3 \otimes e_8 + \frac{2}{289}\sqrt{2030}e^1 \otimes e_7$	{1268, 1345, 24578, 367}
841:2	$0, 0, 0, 0, \frac{12}{85}\sqrt{33}e^{12}, \frac{2}{85}\sqrt{759}e^{13}, \frac{12}{85}\sqrt{33}e^{34}, \frac{2}{85}\sqrt{429}e^{15}$	$(-\frac{2}{17}, \frac{49}{85}, \frac{3}{85}, -\frac{4}{17}, \frac{39}{85}, -\frac{7}{85}, -\frac{1}{5}, \frac{29}{85})$ $+\frac{6}{85}\sqrt{253}e^2 \otimes e_7$	{123468, 128, 13567, 1457, 23458, 2568, 37, 467}
841:2	$0, 0, 0, 0, \frac{3}{643}\sqrt{2294}e^{12}, \frac{3}{643}\sqrt{1798}e^{13}, \frac{3}{643}\sqrt{8990}e^{34}, \frac{24}{643}\sqrt{217}e^{15}$	$(\frac{87}{643}, -\frac{192}{643}, -\frac{34}{643}, \frac{261}{643}, -\frac{105}{643}, \frac{53}{643}, \frac{227}{643}, -\frac{18}{643})$ $+\frac{3}{643}\sqrt{14694}e^1 \otimes e_2 + \frac{54}{643}\sqrt{62}e^4 \otimes e_8$	{13456, 1457, 23578, 2568}
841:2	$0, 0, 0, 0, \frac{3}{643}\sqrt{8990}e^{12}, \frac{3}{643}\sqrt{1798}e^{13}, \frac{24}{643}\sqrt{217}e^{34}, \frac{3}{643}\sqrt{2294}e^{15}$	$(-\frac{71}{643}, \frac{261}{643}, -\frac{113}{643}, \frac{95}{643}, \frac{190}{643}, -\frac{184}{643}, -\frac{18}{643}, \frac{119}{643})$ $+\frac{3}{643}\sqrt{14694}e^4 \otimes e_6 + \frac{54}{643}\sqrt{62}e^2 \otimes e_7$	{13567, 1457, 23458, 2568}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:2	$0, 0, 0, 0, \frac{1}{4}e^{12}, \frac{1}{4}\sqrt{6}e^{13}, \frac{1}{8}\sqrt{6}e^{34}, \frac{1}{8}\sqrt{6}e^{15}$	$(-\frac{1}{4}, \frac{1}{2}, \frac{1}{4}, -\frac{1}{4}, \frac{1}{4}, 0, 0, 0)$ $+\frac{1}{4}\sqrt{7}e^3 \otimes e_4 + \frac{1}{8}\sqrt{30}e^2 \otimes e_6$	{123, 14568, 245, 368}
841:2	$0, 0, 0, 0, \frac{6}{19}e^{12}, \frac{6}{19}\sqrt{2}e^{13}, \frac{3}{19}\sqrt{5}e^{34}, \frac{3}{19}\sqrt{5}e^{15}$	$(-\frac{6}{19}, \frac{8}{19}, \frac{5}{19}, 0, \frac{2}{19}, -\frac{1}{19}, \frac{5}{19}, -\frac{4}{19})$ $+\frac{3}{19}\sqrt{15}e^2 \otimes e_6 + \frac{9}{19}\sqrt{2}e^3 \otimes e_8$	{24578, 258, 346, 367}
841:2	$0, 0, 0, 0, \frac{2}{17}\sqrt{14}e^{12}, \frac{7}{17}\sqrt{6}e^{13}, \frac{2}{17}\sqrt{14}e^{34}, \frac{2}{17}\sqrt{14}e^{15}$	$(-\frac{4}{51}, \frac{13}{51}, \frac{2}{3}, -\frac{29}{51}, \frac{3}{17}, \frac{10}{17}, \frac{5}{51}, \frac{5}{51})$ $+\frac{14}{17}\sqrt{3}e^3 \otimes e_4$	{12358, 124568, 13, 146, 2368, 248, 356, 45}
841:2	$0, 0, 0, 0, \frac{3}{41}\sqrt{10}e^{12}, \frac{3}{41}\sqrt{110}e^{13}, \frac{3}{41}\sqrt{10}e^{34}, \frac{30}{41}e^{15}$	$(\frac{21}{41}, -\frac{24}{41}, -\frac{2}{41}, \frac{9}{41}, -\frac{3}{41}, \frac{19}{41}, \frac{7}{41}, \frac{18}{41})$ $+\frac{3}{41}\sqrt{330}e^1 \otimes e_2$	{13478, 138, 1468, 1678, 23467, 236, 24, 27}
841:2	$0, 0, 0, 0, \frac{1}{61}\sqrt{374}e^{12}, \frac{1}{61}\sqrt{238}e^{13}, \frac{6}{61}\sqrt{17}e^{34}, \frac{1}{61}\sqrt{374}e^{15}$	$(\frac{11}{61}, -\frac{3}{61}, -\frac{17}{61}, \frac{11}{61}, \frac{8}{61}, -\frac{6}{61}, -\frac{6}{61}, \frac{19}{61})$ $+\frac{1}{61}\sqrt{714}e^4 \otimes e_6 + \frac{8}{61}\sqrt{17}e^1 \otimes e_7$	{12348, 1268, 1345, 156, 235678, 24578, 367, 47}
841:2	$0, 0, 0, 0, \frac{1}{61}\sqrt{374}e^{12}, \frac{1}{61}\sqrt{238}e^{13}, \frac{6}{61}\sqrt{17}e^{34}, \frac{1}{61}\sqrt{374}e^{15}$	$(\frac{11}{61}, -\frac{3}{61}, -\frac{17}{61}, \frac{11}{61}, \frac{8}{61}, -\frac{6}{61}, -\frac{6}{61}, \frac{19}{61})$ $-\frac{1}{61}\sqrt{714}e^4 \otimes e_6 + \frac{8}{61}\sqrt{17}e^1 \otimes e_7$	{12348, 1268, 1345, 156, 235678, 24578, 367, 47}
841:2	$0, 0, 0, 0, \frac{2}{823}\sqrt{3990}e^{12}, \frac{2}{823}\sqrt{25365}e^{13}, \frac{6}{823}\sqrt{1615}e^{34}, \frac{5}{823}\sqrt{4902}e^{15}$	$(\frac{68}{823}, -\frac{217}{823}, \frac{204}{823}, -\frac{8}{823}, -\frac{149}{823}, \frac{272}{823}, \frac{196}{823}, -\frac{81}{823})$ $+\frac{30}{823}\sqrt{247}e^3 \otimes e_8 + \frac{3}{823}\sqrt{21470}e^1 \otimes e_2$	{14678, 168, 2346, 2367}
841:2	$0, 0, 0, 0, \frac{4}{293}\sqrt{1679}e^{12}, \frac{8}{293}\sqrt{69}e^{13}, \frac{4}{293}\sqrt{1679}e^{34}, \frac{12}{293}\sqrt{46}e^{15}$	$(-\frac{37}{293}, \frac{134}{293}, \frac{67}{293}, -\frac{117}{293}, \frac{97}{293}, \frac{30}{293}, -\frac{50}{293}, \frac{60}{293})$ $+\frac{4}{293}\sqrt{1978}e^3 \otimes e_4 + \frac{4}{293}\sqrt{3795}e^2 \otimes e_7$	{13567, 1457, 37, 467}
841:2	$0, 0, 0, 0, \frac{6}{173}\sqrt{34}e^{12}, \frac{3}{173}\sqrt{782}e^{13}, \frac{30}{173}\sqrt{17}e^{34}, \frac{30}{173}\sqrt{17}e^{15}$	$(-\frac{42}{173}, \frac{31}{173}, \frac{100}{173}, -\frac{15}{173}, -\frac{11}{173}, \frac{58}{173}, \frac{85}{173}, -\frac{53}{173})$ $+\frac{6}{173}\sqrt{1173}e^3 \otimes e_8$	{124678, 1268, 1345, 1357, 24578, 258, 346, 367}
841:2	$0, 0, 0, 0, \frac{6}{155}\sqrt{66}e^{12}, \frac{6}{155}\sqrt{69}e^{13}, \frac{3}{155}\sqrt{402}e^{34}, \frac{6}{155}\sqrt{66}e^{15}$	$(-\frac{5}{31}, \frac{42}{155}, -\frac{4}{155}, \frac{19}{155}, \frac{17}{155}, -\frac{29}{155}, \frac{3}{31}, -\frac{8}{155})$ $+\frac{9}{155}\sqrt{46}e^2 \otimes e_7 + \frac{9}{155}\sqrt{46}e^4 \otimes e_8$	{128, 1457, 2568, 467}
841:2	$0, 0, 0, 0, \frac{6}{61}\sqrt{17}e^{12}, \frac{1}{61}\sqrt{238}e^{13}, \frac{1}{61}\sqrt{374}e^{34}, \frac{1}{61}\sqrt{374}e^{15}$	$(\frac{4}{61}, \frac{11}{61}, -\frac{10}{61}, -\frac{3}{61}, \frac{15}{61}, -\frac{6}{61}, -\frac{13}{61}, \frac{19}{61})$ $+\frac{1}{61}\sqrt{714}e^2 \otimes e_6 + \frac{8}{61}\sqrt{17}e^1 \otimes e_7$	{12348, 156, 24578, 367}
841:2	$0, 0, 0, 0, \frac{2}{7}\sqrt{2}e^{12}, \frac{1}{7}\sqrt{6}e^{13}, \frac{2}{7}\sqrt{2}e^{34}, \frac{2}{7}\sqrt{2}e^{15}$	$(\frac{4}{21}, -\frac{1}{21}, \frac{2}{21}, -\frac{1}{3}, \frac{1}{7}, \frac{2}{7}, -\frac{5}{21}, \frac{1}{3})$ $+\frac{2}{7}\sqrt{3}e^3 \otimes e_4 + \frac{2}{7}\sqrt{6}e^1 \otimes e_7$	{235678, 24578, 367, 47}
841:3	$0, 0, 0, 0, \frac{5}{269}\sqrt{318}e^{12}, \frac{5}{807}\sqrt{1590}e^{13}, \frac{20}{807}\sqrt{159}e^{34}, \frac{1}{807}\sqrt{142570}e^{25}$	$(-\frac{34}{269}, \frac{76}{807}, -\frac{29}{269}, \frac{105}{269}, -\frac{26}{807}, -\frac{63}{269}, \frac{76}{269}, \frac{50}{807})$ $+\frac{1}{807}\sqrt{173310}e^4 \otimes e_8 + \frac{2}{807}\sqrt{49290}e^2 \otimes e_6$	{12378, 1568, 2457, 346}
841:3	$0, 0, 0, 0, \frac{7}{597}\sqrt{1254}e^{12}, \frac{7}{597}\sqrt{1122}e^{13}, \frac{28}{199}\sqrt{33}e^{34}, \frac{7}{597}\sqrt{4378}e^{25}$	$(\frac{38}{199}, -\frac{136}{597}, -\frac{15}{199}, \frac{127}{199}, -\frac{22}{597}, \frac{23}{199}, \frac{112}{199}, -\frac{158}{597})$ $+\frac{7}{199}\sqrt{1166}e^4 \otimes e_8$	{123678, 128, 135678, 158, 2345, 24567, 34, 467}
841:3	$0, 0, 0, 0, \frac{1}{185}\sqrt{5038}e^{12}, \frac{1}{185}\sqrt{31602}e^{13}, \frac{1}{185}\sqrt{5038}e^{34}, \frac{2}{185}\sqrt{1374}e^{25}$	$(-\frac{22}{185}, \frac{7}{37}, \frac{127}{185}, -\frac{102}{185}, \frac{13}{185}, \frac{21}{37}, \frac{5}{37}, \frac{48}{185})$ $+\frac{1}{185}\sqrt{68242}e^3 \otimes e_4$	{1235, 12456, 13, 146, 2368, 248, 3568, 458}
841:3	$0, 0, 0, 0, \frac{4}{123}\sqrt{33}e^{12}, \frac{22}{123}\sqrt{3}e^{13}, \frac{4}{123}\sqrt{33}e^{34}, \frac{2}{123}\sqrt{451}e^{25}$	$(-\frac{10}{41}, \frac{16}{123}, \frac{8}{41}, \frac{1}{41}, -\frac{14}{123}, -\frac{2}{41}, \frac{9}{41}, \frac{2}{123})$ $+\frac{2}{41}\sqrt{66}e^2 \otimes e_6 + \frac{2}{41}\sqrt{66}e^3 \otimes e_8$	{145678, 1568, 346, 367}
841:3	$0, 0, 0, 0, \frac{15}{913}\sqrt{482}e^{12}, \frac{30}{913}\sqrt{95}e^{13}, \frac{30}{913}\sqrt{51}e^{34}, \frac{30}{913}\sqrt{89}e^{25}$	$(\frac{65}{913}, \frac{115}{913}, -\frac{175}{913}, \frac{15}{913}, \frac{180}{913}, -\frac{10}{83}, -\frac{160}{913}, \frac{295}{913})$ $+\frac{15}{913}\sqrt{758}e^1 \otimes e_7 + \frac{15}{913}\sqrt{834}e^2 \otimes e_6$	{12348, 1568, 2457, 367}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:3	$0, 0, 0, 0, \frac{2}{197}\sqrt{265}e^{12}, \frac{53}{197}\sqrt{2}e^{13}, \frac{4}{197}\sqrt{318}e^{34}, \frac{4}{197}\sqrt{265}e^{25}$	$(-\frac{20}{197}, -\frac{7}{197}, \frac{19}{197}, \frac{52}{197}, -\frac{27}{197}, -\frac{1}{197}, \frac{71}{197}, -\frac{34}{197})$ $+\frac{1}{197}\sqrt{10282}e^3 \otimes e_8 + \frac{1}{197}\sqrt{8162}e^4 \otimes e_6$	{12345, 134, 2478, 4578}
841:3	$0, 0, 0, 0, \frac{1}{711}\sqrt{76382}e^{12}, \frac{2}{711}\sqrt{4431}e^{13}, \frac{1}{711}\sqrt{105922}e^{34}, \frac{1}{711}\sqrt{70474}e^{25}$	$(-\frac{43}{711}, \frac{17}{79}, -\frac{113}{711}, \frac{55}{711}, \frac{110}{711}, -\frac{52}{237}, -\frac{58}{711}, \frac{263}{711})$ $+\frac{1}{79}\sqrt{2110}e^2 \otimes e_7 + \frac{2}{711}\sqrt{22155}e^4 \otimes e_6$	{135678, 14578, 2345, 256}
841:3	$0, 0, 0, 0, \frac{2}{117}\sqrt{127}e^{12}, \frac{2}{117}\sqrt{1905}e^{13}, \frac{1}{117}\sqrt{7366}e^{34}, \frac{4}{117}\sqrt{127}e^{25}$	$(-\frac{4}{117}, \frac{2}{13}, -\frac{35}{117}, \frac{88}{117}, \frac{14}{117}, -\frac{1}{3}, \frac{53}{117}, \frac{32}{117})$ $+\frac{1}{117}\sqrt{23622}e^4 \otimes e_6$	{12345, 1256, 134, 16, 23678, 2478, 35678, 4578}
841:3	$0, 0, 0, 0, \frac{1}{277}\sqrt{9590}e^{12}, \frac{1}{277}\sqrt{18906}e^{13}, \frac{1}{277}\sqrt{9590}e^{34}, \frac{2}{277}\sqrt{822}e^{25}$	$(\frac{70}{277}, -\frac{11}{277}, \frac{35}{277}, -\frac{102}{277}, \frac{59}{277}, \frac{105}{277}, -\frac{67}{277}, \frac{48}{277})$ $+\frac{1}{277}\sqrt{28222}e^3 \otimes e_4 + \frac{2}{277}\sqrt{9453}e^1 \otimes e_7$	{23567, 2457, 367, 47}
841:3	$0, 0, 0, 0, \frac{8}{541}\sqrt{209}e^{12}, \frac{16}{1623}\sqrt{33}e^{13}, \frac{4}{541}\sqrt{1342}e^{34}, \frac{4}{1623}\sqrt{11902}e^{25}$	$(-\frac{40}{541}, \frac{119}{1623}, \frac{98}{541}, -\frac{117}{541}, -\frac{1}{1623}, \frac{58}{541}, -\frac{19}{541}, \frac{118}{1623})$ $+\frac{4}{541}\sqrt{1518}e^3 \otimes e_8 + \frac{8}{1623}\sqrt{4422}e^2 \otimes e_7$	{128, 14578, 2345, 37}
841:3	$0, 0, 0, 0, \frac{20}{329}\sqrt{74}e^{12}, \frac{4}{329}\sqrt{555}e^{13}, \frac{20}{329}\sqrt{74}e^{34}, \frac{12}{329}\sqrt{185}e^{25}$	$(-\frac{19}{329}, \frac{80}{329}, \frac{40}{329}, -\frac{108}{329}, \frac{61}{329}, \frac{3}{47}, -\frac{68}{329}, \frac{3}{7})$ $+\frac{2}{329}\sqrt{16206}e^2 \otimes e_7 + \frac{2}{329}\sqrt{4366}e^3 \otimes e_4$	{135678, 14578, 37, 467}
841:3	$0, 0, 0, 0, \frac{8}{1965}\sqrt{1023}e^{12}, \frac{2}{1965}\sqrt{11346}e^{13}, \frac{2}{1965}\sqrt{24087}e^{34}, \frac{2}{1965}\sqrt{20305}e^{25}$	$(\frac{3}{131}, \frac{7}{393}, -\frac{68}{655}, \frac{59}{655}, \frac{16}{393}, -\frac{53}{655}, -\frac{9}{655}, \frac{23}{393})$ $+\frac{2}{1965}\sqrt{31341}e^2 \otimes e_7 + \frac{2}{655}\sqrt{2573}e^4 \otimes e_8$	{128, 135678, 2345, 467}
841:3	$0, 0, 0, 0, \frac{4}{1727}\sqrt{15910}e^{12}, \frac{16}{1727}\sqrt{2967}e^{13}, \frac{8}{1727}\sqrt{2451}e^{34}, \frac{12}{1727}\sqrt{3526}e^{25}$	$(-\frac{527}{1727}, \frac{553}{1727}, \frac{392}{1727}, -\frac{296}{1727}, \frac{26}{1727}, -\frac{135}{1727}, \frac{96}{1727}, \frac{579}{1727})$ $+\frac{4}{1727}\sqrt{77142}e^2 \otimes e_6 + \frac{8}{1727}\sqrt{13330}e^3 \otimes e_4$	{1238, 14568, 245, 36}
841:3	$0, 0, 0, 0, \frac{30}{913}\sqrt{51}e^{12}, \frac{30}{913}\sqrt{95}e^{13}, \frac{15}{913}\sqrt{482}e^{34}, \frac{30}{913}\sqrt{89}e^{25}$	$(\frac{204}{913}, -\frac{163}{913}, \frac{103}{913}, -\frac{124}{913}, \frac{41}{913}, \frac{307}{913}, -\frac{21}{913}, -\frac{122}{913})$ $+\frac{15}{913}\sqrt{758}e^1 \otimes e_7 + \frac{15}{913}\sqrt{834}e^3 \otimes e_8$	{1268, 1568, 23567, 367}
841:3	$0, 0, 0, 0, \frac{4}{61}\sqrt{21}e^{12}, \frac{7}{122}\sqrt{42}e^{13}, \frac{1}{122}\sqrt{2730}e^{34}, \frac{1}{61}\sqrt{105}e^{25}$	$(\frac{16}{61}, -\frac{3}{61}, -\frac{21}{61}, \frac{16}{61}, \frac{13}{61}, -\frac{5}{61}, -\frac{5}{61}, \frac{10}{61})$ $+\frac{1}{122}\sqrt{4830}e^1 \otimes e_7 + \frac{3}{122}\sqrt{462}e^4 \otimes e_6$	{12348, 1268, 13458, 1568, 23567, 2457, 367, 47}
841:3	$0, 0, 0, 0, \frac{4}{61}\sqrt{21}e^{12}, \frac{7}{122}\sqrt{42}e^{13}, \frac{1}{122}\sqrt{2730}e^{34}, \frac{1}{61}\sqrt{105}e^{25}$	$(\frac{16}{61}, -\frac{3}{61}, -\frac{21}{61}, \frac{16}{61}, \frac{13}{61}, -\frac{5}{61}, -\frac{5}{61}, \frac{10}{61})$ $+\frac{1}{122}\sqrt{4830}e^1 \otimes e_7 - \frac{3}{122}\sqrt{462}e^4 \otimes e_6$	{12348, 1268, 13458, 1568, 23567, 2457, 367, 47}
841:3	$0, 0, 0, 0, \frac{20}{303}\sqrt{87}e^{12}, \frac{4}{303}\sqrt{2262}e^{13}, \frac{4}{303}\sqrt{174}e^{34}, \frac{4}{303}\sqrt{2929}e^{25}$	$(-\frac{31}{101}, \frac{127}{303}, -\frac{4}{101}, \frac{22}{101}, \frac{34}{303}, -\frac{35}{101}, \frac{18}{101}, \frac{161}{303})$ $+\frac{12}{101}\sqrt{87}e^2 \otimes e_6$	{123478, 1238, 14568, 15678, 245, 257, 3467, 36}
841:3	$0, 0, 0, 0, \frac{3}{67}\sqrt{202}e^{12}, \frac{2}{201}\sqrt{2121}e^{13}, \frac{3}{67}\sqrt{202}e^{34}, \frac{1}{201}\sqrt{13534}e^{25}$	$(-\frac{1}{67}, \frac{53}{201}, -\frac{1}{67}, -\frac{15}{67}, \frac{50}{201}, -\frac{2}{67}, -\frac{16}{67}, \frac{103}{201})$ $+\frac{1}{201}\sqrt{33330}e^2 \otimes e_7$	{123468, 128, 135678, 14578, 2345, 256, 37, 467}
841:3	$0, 0, 0, 0, \frac{2}{203}\sqrt{5133}e^{12}, \frac{1}{203}\sqrt{10266}e^{13}, \frac{2}{203}\sqrt{5133}e^{34}, \frac{2}{203}\sqrt{1239}e^{25}$	$(\frac{4}{7}, -\frac{30}{203}, -\frac{45}{203}, -\frac{16}{203}, \frac{86}{203}, \frac{71}{203}, -\frac{61}{203}, \frac{8}{29})$ $+\frac{1}{203}\sqrt{56994}e^1 \otimes e_7$	{12348, 1268, 13458, 1568, 23567, 2457, 367, 47}
841:3	$0, 0, 0, 0, \frac{20}{1739}\sqrt{957}e^{12}, \frac{20}{1739}\sqrt{105}e^{13}, \frac{40}{1739}\sqrt{426}e^{34}, \frac{20}{1739}\sqrt{978}e^{25}$	$(\frac{638}{1739}, -\frac{414}{1739}, -\frac{372}{1739}, \frac{410}{1739}, \frac{224}{1739}, \frac{266}{1739}, \frac{38}{1739}, -\frac{190}{1739})$ $+\frac{20}{1739}\sqrt{2283}e^1 \otimes e_7 + \frac{60}{1739}\sqrt{249}e^4 \otimes e_8$	{1268, 1568, 2457, 47}
841:3	$0, 0, 0, 0, \frac{4}{303}\sqrt{174}e^{12}, \frac{4}{303}\sqrt{2262}e^{13}, \frac{20}{303}\sqrt{87}e^{34}, \frac{4}{303}\sqrt{2929}e^{25}$	$(-\frac{4}{101}, -\frac{35}{303}, \frac{50}{101}, -\frac{5}{101}, -\frac{47}{303}, \frac{46}{101}, \frac{45}{101}, -\frac{82}{303})$ $+\frac{12}{101}\sqrt{87}e^3 \otimes e_8$	{12345, 12357, 134, 137, 2478, 28, 4578, 58}
841:4	$0, 0, 0, 0, \frac{16}{73}\sqrt{6}e^{12}, \frac{8}{73}\sqrt{2}e^{13}, \frac{8}{73}\sqrt{3}e^{14}, \frac{8}{73}\sqrt{15}e^{15}$	$(\frac{6}{73}, \frac{12}{73}, -\frac{26}{73}, \frac{6}{73}, \frac{18}{73}, -\frac{20}{73}, \frac{12}{73}, \frac{24}{73})$ $+\frac{24}{73}\sqrt{3}e^2 \otimes e_6 + \frac{8}{73}\sqrt{37}e^1 \otimes e_3$	{1248, 1278, 234578, 2358}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:4	$0, 0, 0, 0, \frac{3}{41}\sqrt{30}e^{12}, \frac{6}{41}\sqrt{5}e^{13}, \frac{1}{41}\sqrt{190}e^{14}, \frac{4}{41}\sqrt{10}e^{15}$	$(\frac{5}{82}, \frac{7}{41}, -\frac{15}{82}, -\frac{11}{82}, \frac{19}{82}, -\frac{5}{41}, -\frac{3}{41}, \frac{12}{41})$ $+ \frac{1}{41}\sqrt{330}e^2 \otimes e_7 + \frac{1}{41}\sqrt{410}e^1 \otimes e_3$	{1248, 157, 2358, 347}
841:4	$0, 0, 0, 0, \frac{2}{115}\sqrt{565}e^{12}, \frac{2}{115}\sqrt{1469}e^{13}, \frac{2}{115}\sqrt{1469}e^{14}, \frac{1}{115}\sqrt{4746}e^{15}$	$(\frac{52}{115}, -\frac{61}{115}, -\frac{4}{115}, -\frac{4}{115}, -\frac{9}{115}, \frac{48}{115}, \frac{48}{115}, \frac{43}{115})$ $+ \frac{1}{115}\sqrt{21018}e^1 \otimes e_2$	{1348, 1378, 1678, 2, 23467, 236}
841:4	$0, 0, 0, 0, \frac{2}{17}\sqrt{39}e^{12}, \frac{2}{17}\sqrt{26}e^{13}, \frac{1}{17}\sqrt{78}e^{14}, \frac{2}{17}\sqrt{39}e^{15}$	$(\frac{6}{17}, -\frac{3}{17}, -\frac{7}{17}, 0, \frac{3}{17}, -\frac{1}{17}, \frac{6}{17}, \frac{9}{17})$ $+ \frac{2}{17}\sqrt{91}e^1 \otimes e_3$	{1248, 1278, 145, 157, 234578, 2358, 3, 347}
841:4	$0, 0, 0, 0, \frac{1}{14}\sqrt{21}e^{12}, \frac{1}{14}\sqrt{21}e^{13}, \frac{3}{14}\sqrt{7}e^{14}, \frac{1}{14}\sqrt{7}e^{15}$	$(-\frac{1}{4}, \frac{3}{14}, \frac{13}{28}, \frac{3}{14}, -\frac{1}{28}, \frac{3}{14}, -\frac{1}{28}, -\frac{2}{7})$ $+ \frac{1}{14}\sqrt{91}e^3 \otimes e_7 + \frac{1}{7}\sqrt{21}e^4 \otimes e_8$	{12345, 1678, 247, 3568}
841:4	$0, 0, 0, 0, \frac{4}{141}\sqrt{230}e^{12}, \frac{4}{141}\sqrt{115}e^{13}, \frac{4}{141}\sqrt{115}e^{14}, \frac{4}{141}\sqrt{230}e^{15}$	$(-\frac{41}{141}, \frac{20}{47}, \frac{70}{141}, \frac{3}{47}, \frac{19}{141}, \frac{29}{141}, -\frac{32}{141}, -\frac{22}{141})$ $+ \frac{2}{141}\sqrt{2806}e^2 \otimes e_7 + \frac{2}{141}\sqrt{2806}e^3 \otimes e_8$	{12468, 1357, 258, 3467}
841:4	$0, 0, 0, 0, \frac{4}{41}\sqrt{10}e^{12}, \frac{1}{41}\sqrt{190}e^{13}, \frac{6}{41}\sqrt{5}e^{14}, \frac{3}{41}\sqrt{30}e^{15}$	$(\frac{5}{82}, -\frac{4}{41}, \frac{11}{41}, -\frac{15}{82}, -\frac{3}{82}, \frac{27}{82}, -\frac{5}{41}, \frac{1}{41})$ $+ \frac{1}{41}\sqrt{330}e^3 \otimes e_8 + \frac{1}{41}\sqrt{410}e^1 \otimes e_4$	{1268, 135, 2458, 346}
841:4	$0, 0, 0, 0, \frac{1}{14}\sqrt{7}e^{12}, \frac{3}{14}\sqrt{7}e^{13}, \frac{1}{14}\sqrt{21}e^{14}, \frac{1}{14}\sqrt{21}e^{15}$	$(-\frac{1}{4}, \frac{1}{2}, \frac{1}{4}, 0, \frac{1}{4}, 0, -\frac{1}{4}, 0)$ $+ \frac{1}{14}\sqrt{91}e^3 \otimes e_7 + \frac{1}{7}\sqrt{21}e^2 \otimes e_6$	{1234, 15678, 2457, 368}
841:4	$0, 0, 0, 0, \frac{1}{60}\sqrt{390}e^{12}, \frac{1}{120}\sqrt{2769}e^{13}, \frac{1}{120}\sqrt{2769}e^{14}, \frac{1}{60}\sqrt{39}e^{15}$	$(\frac{2}{15}, -\frac{23}{120}, \frac{61}{240}, -\frac{49}{240}, -\frac{7}{120}, \frac{31}{80}, -\frac{17}{240}, \frac{3}{40})$ $+ \frac{1}{120}\sqrt{4290}e^3 \otimes e_7 + \frac{3}{20}\sqrt{13}e^1 \otimes e_2$	{134, 167, 2368, 2478}
841:4	$0, 0, 0, 0, \frac{16}{451}\sqrt{479}e^{12}, \frac{5}{451}\sqrt{4790}e^{13}, \frac{2}{451}\sqrt{13891}e^{14}, \frac{2}{451}\sqrt{1437}e^{15}$	$(-\frac{116}{451}, \frac{323}{451}, -\frac{40}{451}, \frac{13}{41}, \frac{207}{451}, -\frac{156}{451}, \frac{27}{451}, \frac{91}{451})$ $+ \frac{2}{451}\sqrt{87657}e^2 \otimes e_6$	{123478, 1238, 14567, 156, 2458, 2578, 346, 367}
841:4	$0, 0, 0, 0, \frac{2}{147}\sqrt{277}e^{12}, \frac{2}{735}\sqrt{26869}e^{13}, \frac{2}{735}\sqrt{4709}e^{14}, \frac{13}{735}\sqrt{554}e^{15}$	$(\frac{68}{735}, -\frac{209}{735}, \frac{68}{245}, \frac{44}{735}, -\frac{47}{245}, \frac{272}{735}, \frac{16}{105}, -\frac{73}{735})$ $+ \frac{1}{735}\sqrt{186698}e^1 \otimes e_2 + \frac{8}{735}\sqrt{2770}e^3 \otimes e_8$	{1468, 1678, 23467, 236}
841:4	$0, 0, 0, 0, \frac{3}{137}\sqrt{266}e^{12}, \frac{12}{137}\sqrt{35}e^{13}, \frac{21}{137}\sqrt{6}e^{14}, \frac{3}{137}\sqrt{266}e^{15}$	$(-\frac{42}{137}, \frac{57}{137}, \frac{36}{137}, \frac{36}{137}, \frac{15}{137}, -\frac{6}{137}, -\frac{6}{137}, -\frac{27}{137})$ $+ \frac{3}{137}\sqrt{854}e^2 \otimes e_6 + \frac{3}{137}\sqrt{854}e^3 \otimes e_8$	{2458, 2578, 346, 367}
841:4	$0, 0, 0, 0, \frac{2}{451}\sqrt{1437}e^{12}, \frac{5}{451}\sqrt{4790}e^{13}, \frac{2}{451}\sqrt{13891}e^{14}, \frac{16}{451}\sqrt{479}e^{15}$	$(-\frac{116}{451}, \frac{79}{451}, \frac{326}{451}, \frac{13}{41}, -\frac{37}{451}, \frac{210}{451}, \frac{27}{451}, -\frac{153}{451})$ $+ \frac{2}{451}\sqrt{87657}e^3 \otimes e_8$	{124678, 1268, 13457, 135, 2458, 2578, 346, 367}
841:4	$0, 0, 0, 0, \frac{7}{32}\sqrt{2}e^{12}, \frac{1}{32}\sqrt{161}e^{13}, \frac{1}{32}\sqrt{161}e^{14}, \frac{7}{32}\sqrt{2}e^{15}$	$(-\frac{7}{32}, \frac{9}{32}, \frac{11}{64}, \frac{11}{64}, \frac{1}{16}, -\frac{3}{64}, -\frac{3}{64}, -\frac{5}{32})$ $+ \frac{1}{32}\sqrt{210}e^3 \otimes e_7 - \frac{1}{32}\sqrt{210}e^4 \otimes e_6$	{123458, 125678, 134, 167, 2368, 356}
841:4	$0, 0, 0, 0, \frac{7}{32}\sqrt{2}e^{12}, \frac{1}{32}\sqrt{161}e^{13}, \frac{1}{32}\sqrt{161}e^{14}, \frac{7}{32}\sqrt{2}e^{15}$	$(-\frac{7}{32}, \frac{9}{32}, \frac{11}{64}, \frac{11}{64}, \frac{1}{16}, -\frac{3}{64}, -\frac{3}{64}, -\frac{5}{32})$ $+ \frac{1}{32}\sqrt{210}e^3 \otimes e_7 + \frac{1}{32}\sqrt{210}e^4 \otimes e_6$	{123458, 125678, 134, 167, 2368, 356}
841:4	$0, 0, 0, 0, \frac{1}{3}\sqrt{3}e^{12}, \frac{1}{3}\sqrt{6}e^{13}, \frac{1}{3}\sqrt{6}e^{14}, \frac{1}{3}\sqrt{3}e^{15}$	$(-\frac{1}{6}, \frac{1}{3}, \frac{2}{3}, -\frac{1}{6}, \frac{1}{6}, \frac{1}{2}, -\frac{1}{3}, 0)$ $+ \frac{1}{3}\sqrt{15}e^3 \otimes e_7$	{123458, 125678, 134, 167, 2368, 2478, 356, 457}
841:5	$0, 0, 0, 0, \frac{14}{467}\sqrt{95}e^{12}, \frac{2}{467}\sqrt{12730}e^{13}, \frac{8}{467}\sqrt{95}e^{14}, \frac{6}{467}\sqrt{1045}e^{25}$	$(-\frac{138}{467}, \frac{149}{467}, \frac{97}{467}, \frac{45}{467}, \frac{11}{467}, -\frac{41}{467}, -\frac{93}{467}, \frac{160}{467})$ $+ \frac{10}{467}\sqrt{646}e^3 \otimes e_7 + \frac{4}{467}\sqrt{5605}e^2 \otimes e_6$	{12348, 15678, 2457, 36}
841:5	$0, 0, 0, 0, \frac{4}{1857}\sqrt{8949}e^{12}, \frac{2}{1857}\sqrt{96555}e^{13}, \frac{4}{619}\sqrt{942}e^{14}, \frac{2}{1857}\sqrt{97183}e^{25}$	$(-\frac{144}{619}, \frac{236}{1857}, \frac{118}{619}, \frac{137}{619}, -\frac{196}{1857}, -\frac{26}{619}, -\frac{7}{619}, \frac{40}{1857})$ $+ \frac{2}{619}\sqrt{13502}e^3 \otimes e_8 + \frac{4}{1857}\sqrt{34854}e^2 \otimes e_6$	{145678, 1568, 346, 367}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:5	$0, 0, 0, 0, \frac{2}{467}\sqrt{12730}e^{12}, \frac{14}{467}\sqrt{95}e^{13}, \frac{8}{467}\sqrt{95}e^{14}, \frac{6}{467}\sqrt{1045}e^{25}$	$(\frac{32}{467}, \frac{64}{467}, -\frac{158}{467}, \frac{45}{467}, \frac{96}{467}, -\frac{126}{467}, \frac{77}{467}, \frac{160}{467})$ $+ \frac{10}{467}\sqrt{646}e^1 \otimes e_3 + \frac{4}{467}\sqrt{5605}e^2 \otimes e_6$	{14568, 15678, 3467, 36}
841:5	$0, 0, 0, 0, \frac{2}{1669}\sqrt{59965}e^{12}, \frac{6}{1669}\sqrt{6365}e^{13}, \frac{2}{1669}\sqrt{187265}e^{14}, \frac{2}{1669}\sqrt{108205}e^{25}$	$(-\frac{358}{1669}, \frac{49}{1669}, \frac{722}{1669}, \frac{410}{1669}, -\frac{309}{1669}, \frac{364}{1669}, \frac{52}{1669}, -\frac{260}{1669})$ $+ \frac{20}{1669}\sqrt{2345}e^3 \otimes e_7 + \frac{4}{1669}\sqrt{64990}e^4 \otimes e_8$	{12345, 134, 2368, 3568}
841:5	$0, 0, 0, 0, \frac{5}{23}\sqrt{2}e^{12}, \frac{10}{69}\sqrt{3}e^{13}, \frac{5}{23}\sqrt{2}e^{14}, \frac{5}{69}\sqrt{46}e^{25}$	$(-\frac{5}{23}, \frac{10}{69}, \frac{10}{23}, 0, -\frac{5}{69}, \frac{5}{23}, -\frac{5}{23}, \frac{5}{69})$ $+ \frac{5}{23}\sqrt{6}e^3 \otimes e_8 + \frac{5}{69}\sqrt{66}e^2 \otimes e_7$	{12468, 15678, 2356, 3467}
841:5	$0, 0, 0, 0, \frac{10}{31}e^{12}, \frac{6}{31}\sqrt{5}e^{13}, \frac{6}{31}\sqrt{5}e^{14}, \frac{2}{31}\sqrt{5}e^{25}$	$(-\frac{10}{31}, \frac{7}{31}, \frac{8}{31}, \frac{8}{31}, -\frac{3}{31}, -\frac{2}{31}, -\frac{2}{31}, \frac{4}{31})$ $+ \frac{2}{31}\sqrt{70}e^3 \otimes e_7 + \frac{2}{31}\sqrt{70}e^4 \otimes e_6$	{12345, 12567, 134, 167, 2368, 3568}
841:5	$0, 0, 0, 0, \frac{10}{31}e^{12}, \frac{6}{31}\sqrt{5}e^{13}, \frac{6}{31}\sqrt{5}e^{14}, \frac{2}{31}\sqrt{5}e^{25}$	$(-\frac{10}{31}, \frac{7}{31}, \frac{8}{31}, \frac{8}{31}, -\frac{3}{31}, -\frac{2}{31}, -\frac{2}{31}, \frac{4}{31})$ $+ \frac{2}{31}\sqrt{70}e^3 \otimes e_7 - \frac{2}{31}\sqrt{70}e^4 \otimes e_6$	{12345, 12567, 134, 167, 2368, 3568}
841:5	$0, 0, 0, 0, \frac{6}{1669}\sqrt{6365}e^{12}, \frac{2}{1669}\sqrt{187265}e^{13}, \frac{2}{1669}\sqrt{59965}e^{14}, \frac{2}{1669}\sqrt{108205}e^{25}$	$(\frac{342}{1669}, -\frac{301}{1669}, \frac{410}{1669}, -\frac{328}{1669}, \frac{41}{1669}, \frac{752}{1669}, \frac{14}{1669}, -\frac{260}{1669})$ $+ \frac{20}{1669}\sqrt{2345}e^1 \otimes e_4 + \frac{4}{1669}\sqrt{64990}e^3 \otimes e_8$	{1268, 1568, 23456, 346}
841:5	$0, 0, 0, 0, \frac{2}{73}\sqrt{95}e^{12}, \frac{2}{73}\sqrt{399}e^{13}, \frac{2}{73}\sqrt{95}e^{14}, \frac{2}{73}\sqrt{57}e^{25}$	$(\frac{10}{73}, \frac{1}{73}, \frac{20}{73}, -\frac{28}{73}, \frac{11}{73}, \frac{30}{73}, -\frac{18}{73}, \frac{12}{73})$ $+ \frac{8}{73}\sqrt{38}e^1 \otimes e_4 + \frac{8}{73}\sqrt{38}e^3 \otimes e_7$	{12678, 15678, 2457, 47}
841:5	$0, 0, 0, 0, \frac{2}{141}\sqrt{390}e^{12}, \frac{2}{141}\sqrt{3315}e^{13}, \frac{2}{141}\sqrt{390}e^{14}, \frac{2}{141}\sqrt{3055}e^{25}$	$(-\frac{4}{47}, -\frac{14}{141}, \frac{30}{47}, \frac{11}{47}, -\frac{26}{141}, \frac{26}{47}, \frac{7}{47}, -\frac{40}{141})$ $+ \frac{2}{141}\sqrt{7410}e^3 \otimes e_8$	{123457, 1235, 13, 1347, 248, 278, 458, 578}
841:5	$0, 0, 0, 0, \frac{1}{16}\sqrt{105}e^{12}, \frac{1}{16}\sqrt{105}e^{13}, \frac{1}{24}\sqrt{105}e^{14}, \frac{1}{12}\sqrt{70}e^{25}$	$(-\frac{1}{4}, \frac{37}{96}, -\frac{3}{32}, \frac{5}{16}, \frac{13}{96}, -\frac{11}{32}, \frac{1}{16}, \frac{25}{48})$ $+ \frac{1}{48}\sqrt{2730}e^2 \otimes e_6$	{123478, 1238, 145678, 1568, 245, 257, 346, 367}
841:5	$0, 0, 0, 0, \frac{1}{468}\sqrt{27371}e^{12}, \frac{1}{234}\sqrt{3737}e^{13}, \frac{1}{468}\sqrt{27371}e^{14}, \frac{1}{234}\sqrt{4747}e^{25}$	$(\frac{19}{234}, \frac{35}{312}, -\frac{7}{52}, -\frac{173}{936}, \frac{181}{936}, -\frac{25}{468}, -\frac{97}{936}, \frac{11}{36})$ $+ \frac{1}{234}\sqrt{9393}e^1 \otimes e_3 + \frac{1}{468}\sqrt{47066}e^2 \otimes e_7$	{1248, 1578, 235, 347}
841:5	$0, 0, 0, 0, \frac{2}{139}\sqrt{2847}e^{12}, \frac{2}{139}\sqrt{1241}e^{13}, \frac{2}{139}\sqrt{2847}e^{14}, \frac{6}{139}\sqrt{73}e^{25}$	$(\frac{78}{139}, -\frac{21}{139}, -\frac{68}{139}, -\frac{12}{139}, \frac{57}{139}, \frac{10}{139}, \frac{66}{139}, \frac{36}{139})$ $+ \frac{8}{139}\sqrt{511}e^1 \otimes e_3$	{1248, 1278, 1458, 1578, 23457, 235, 3, 347}
841:5	$0, 0, 0, 0, \frac{2}{139}\sqrt{1241}e^{12}, \frac{2}{139}\sqrt{2847}e^{13}, \frac{2}{139}\sqrt{2847}e^{14}, \frac{6}{139}\sqrt{73}e^{25}$	$(-\frac{34}{139}, \frac{35}{139}, \frac{100}{139}, -\frac{12}{139}, \frac{1}{139}, \frac{66}{139}, -\frac{46}{139}, \frac{36}{139})$ $+ \frac{8}{139}\sqrt{511}e^3 \otimes e_7$	{12345, 12567, 134, 167, 2368, 2478, 3568, 4578}
841:6	$0, 0, 0, 0, \frac{58}{339}\sqrt{5}e^{12}, \frac{2}{339}\sqrt{3219}e^{13}, \frac{2}{339}\sqrt{2059}e^{24}, \frac{2}{339}\sqrt{7627}e^{15}$	$(\frac{49}{339}, -\frac{47}{226}, -\frac{67}{339}, \frac{287}{678}, -\frac{43}{678}, -\frac{6}{113}, \frac{73}{339}, \frac{55}{678})$ $+ \frac{16}{339}\sqrt{145}e^1 \otimes e_3 + \frac{2}{339}\sqrt{8207}e^4 \otimes e_8$	{1278, 1457, 23578, 347}
841:6	$0, 0, 0, 0, \frac{2}{405}\sqrt{11993}e^{12}, \frac{13}{405}\sqrt{134}e^{13}, \frac{1}{405}\sqrt{12730}e^{24}, \frac{2}{405}\sqrt{7437}e^{15}$	$(\frac{43}{405}, \frac{41}{270}, -\frac{91}{405}, -\frac{29}{162}, \frac{209}{810}, -\frac{16}{135}, -\frac{11}{405}, \frac{59}{405})$ $+ \frac{1}{405}\sqrt{41942}e^2 \otimes e_4 + \frac{4}{405}\sqrt{3551}e^1 \otimes e_3$	{128, 145, 2358, 34}
841:6	$0, 0, 0, 0, \frac{1}{529}\sqrt{68182}e^{12}, \frac{2}{529}\sqrt{36893}e^{13}, \frac{4}{529}\sqrt{8873}e^{24}, \frac{6}{529}\sqrt{467}e^{15}$	$(-\frac{109}{529}, \frac{304}{529}, -\frac{54}{529}, -\frac{48}{529}, \frac{195}{529}, -\frac{163}{529}, \frac{256}{529}, \frac{86}{529})$ $+ \frac{5}{529}\sqrt{15878}e^2 \otimes e_6$	{1234, 1237, 145678, 1568, 245, 257, 34678, 368}
841:6	$0, 0, 0, 0, \frac{4}{551}\sqrt{530}e^{12}, \frac{2}{551}\sqrt{11395}e^{13}, \frac{2}{551}\sqrt{10441}e^{24}, \frac{6}{551}\sqrt{318}e^{15}$	$(-\frac{68}{551}, \frac{135}{551}, \frac{97}{551}, -\frac{144}{551}, \frac{67}{551}, \frac{1}{19}, -\frac{9}{551}, -\frac{1}{551})$ $+ \frac{2}{551}\sqrt{12667}e^2 \otimes e_6 + \frac{2}{551}\sqrt{13727}e^3 \otimes e_7$	{123458, 1467, 278, 356}
841:6	$0, 0, 0, 0, \frac{2}{55}\sqrt{190}e^{12}, \frac{2}{55}\sqrt{190}e^{13}, \frac{2}{55}\sqrt{285}e^{24}, \frac{2}{55}\sqrt{285}e^{15}$	$(\frac{4}{11}, -\frac{14}{55}, \frac{1}{55}, -\frac{4}{55}, \frac{6}{55}, \frac{21}{55}, -\frac{18}{55}, \frac{26}{55})$ $+ \frac{4}{55}\sqrt{209}e^1 \otimes e_7$	{12348, 12468, 135, 156, 235678, 2578, 3467, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:6	$0, 0, 0, 0, \frac{2}{521}\sqrt{7319}e^{12}, \frac{2}{521}\sqrt{39410}e^{13}, \frac{2}{521}\sqrt{12386}e^{24}, \frac{1}{521}\sqrt{143002}e^{15}$	$(-\frac{135}{521}, \frac{88}{521}, \frac{381}{521}, \frac{62}{521}, -\frac{47}{521}, \frac{246}{521}, \frac{150}{521}, -\frac{182}{521}) + \frac{1}{521}\sqrt{467290}e^3 \otimes e_8$	{12345, 12357, 14678, 168, 2346, 2367, 4578, 58}
841:6	$0, 0, 0, 0, \frac{1}{885}\sqrt{35814}e^{12}, \frac{2}{885}\sqrt{13589}e^{13}, \frac{4}{885}\sqrt{3937}e^{24}, \frac{2}{885}\sqrt{6477}e^{15}$	$(\frac{21}{295}, \frac{16}{177}, -\frac{22}{177}, -\frac{48}{295}, \frac{143}{885}, -\frac{47}{885}, -\frac{64}{885}, \frac{206}{885}) + \frac{1}{885}\sqrt{92710}e^2 \otimes e_6 + \frac{8}{885}\sqrt{1651}e^1 \otimes e_7$	{12348, 156, 2578, 3467}
841:6	$0, 0, 0, 0, \frac{1}{499}\sqrt{91982}e^{12}, \frac{1}{499}\sqrt{178266}e^{13}, \frac{2}{499}\sqrt{41514}e^{24}, \frac{3}{499}\sqrt{4070}e^{15}$	$(\frac{23}{499}, -\frac{7}{499}, -\frac{135}{499}, \frac{295}{499}, \frac{16}{499}, -\frac{112}{499}, \frac{288}{499}, \frac{39}{499}) + \frac{1}{499}\sqrt{337810}e^4 \otimes e_6$	{123458, 125678, 1347, 16, 23678, 248, 356, 457}
841:6	$0, 0, 0, 0, \frac{4}{15}\sqrt{3}e^{12}, \frac{2}{15}\sqrt{3}e^{13}, \frac{2}{15}\sqrt{6}e^{24}, \frac{2}{5}e^{15}$	$(\frac{2}{15}, \frac{1}{15}, \frac{1}{15}, -\frac{1}{3}, \frac{1}{5}, \frac{1}{5}, -\frac{4}{15}, \frac{1}{3}) + \frac{2}{15}\sqrt{15}e^2 \otimes e_4 + \frac{4}{15}\sqrt{6}e^1 \otimes e_7$	{235678, 2578, 3467, 47}
841:6	$0, 0, 0, 0, \frac{1}{499}\sqrt{91982}e^{12}, \frac{1}{499}\sqrt{178266}e^{13}, \frac{2}{499}\sqrt{41514}e^{24}, \frac{3}{499}\sqrt{4070}e^{15}$	$(\frac{23}{499}, -\frac{7}{499}, \frac{280}{499}, -\frac{120}{499}, \frac{16}{499}, \frac{303}{499}, -\frac{127}{499}, \frac{39}{499}) + \frac{1}{499}\sqrt{337810}e^3 \otimes e_7$	{123458, 125678, 13, 1467, 23468, 278, 356, 457}
841:6	$0, 0, 0, 0, \frac{36}{1523}\sqrt{61}e^{12}, \frac{288}{1523}\sqrt{7}e^{13}, \frac{36}{1523}\sqrt{285}e^{24}, \frac{36}{1523}\sqrt{118}e^{15}$	$(-\frac{432}{1523}, \frac{570}{1523}, \frac{354}{1523}, -\frac{90}{1523}, \frac{138}{1523}, -\frac{78}{1523}, \frac{480}{1523}, -\frac{294}{1523}) + \frac{36}{1523}\sqrt{607}e^3 \otimes e_8 + \frac{36}{1523}\sqrt{721}e^2 \otimes e_6$	{2458, 2578, 3467, 36}
841:6	$0, 0, 0, 0, \frac{4}{193}\sqrt{290}e^{12}, \frac{4}{193}\sqrt{290}e^{13}, \frac{4}{193}\sqrt{435}e^{24}, \frac{4}{193}\sqrt{435}e^{15}$	$(\frac{40}{193}, -\frac{23}{193}, -\frac{76}{193}, \frac{80}{193}, \frac{17}{193}, -\frac{36}{193}, \frac{57}{193}, \frac{57}{193}) + \frac{2}{193}\sqrt{4814}e^1 \otimes e_3 + \frac{2}{193}\sqrt{4814}e^4 \otimes e_6$	{12678, 156, 235678, 36}
841:6	$0, 0, 0, 0, \frac{1}{499}\sqrt{178266}e^{12}, \frac{1}{499}\sqrt{91982}e^{13}, \frac{3}{499}\sqrt{4070}e^{24}, \frac{2}{499}\sqrt{41514}e^{15}$	$(\frac{189}{499}, -\frac{90}{499}, -\frac{218}{499}, \frac{129}{499}, \frac{99}{499}, -\frac{29}{499}, \frac{39}{499}, \frac{288}{499}) + \frac{1}{499}\sqrt{337810}e^1 \otimes e_3$	{12478, 128, 145, 157, 234578, 2358, 34, 37}
841:6	$0, 0, 0, 0, \frac{2}{21}\sqrt{3}e^{12}, \frac{2}{21}\sqrt{3}e^{13}, \frac{2}{21}\sqrt{13}e^{24}, \frac{2}{21}\sqrt{13}e^{15}$	$(\frac{1}{7}, -\frac{11}{42}, \frac{1}{21}, \frac{3}{14}, -\frac{5}{42}, \frac{4}{21}, -\frac{1}{21}, \frac{1}{42}) + \frac{2}{21}\sqrt{17}e^4 \otimes e_8 + \frac{4}{21}\sqrt{5}e^1 \otimes e_7$	{235678, 2578, 3467, 47}
841:6	$0, 0, 0, 0, \frac{2}{845}\sqrt{6913}e^{12}, \frac{2}{845}\sqrt{20962}e^{13}, \frac{2}{845}\sqrt{17394}e^{24}, \frac{1}{845}\sqrt{97674}e^{15}$	$(\frac{61}{845}, -\frac{112}{845}, \frac{233}{845}, -\frac{10}{169}, -\frac{51}{845}, \frac{294}{845}, -\frac{162}{845}, \frac{2}{169}) + \frac{3}{845}\sqrt{15610}e^3 \otimes e_8 + \frac{4}{845}\sqrt{11819}e^1 \otimes e_7$	{12468, 135, 2578, 3467}
841:6	$0, 0, 0, 0, \frac{1}{21}\sqrt{114}e^{12}, \frac{1}{21}\sqrt{6}e^{13}, \frac{1}{21}\sqrt{30}e^{24}, \frac{2}{7}\sqrt{2}e^{15}$	$(\frac{5}{63}, \frac{10}{63}, -\frac{22}{63}, \frac{1}{21}, \frac{5}{21}, -\frac{17}{63}, \frac{13}{63}, \frac{20}{63}) + \frac{1}{21}\sqrt{174}e^1 \otimes e_3 + \frac{2}{21}\sqrt{39}e^2 \otimes e_6$	{14567, 156, 3467, 36}
841:6	$0, 0, 0, 0, \frac{4}{31}\sqrt{57}e^{12}, \frac{2}{31}\sqrt{57}e^{13}, \frac{2}{31}\sqrt{38}e^{24}, \frac{2}{31}\sqrt{57}e^{15}$	$(-\frac{6}{31}, \frac{21}{31}, \frac{9}{31}, -\frac{17}{31}, \frac{15}{31}, \frac{3}{31}, \frac{4}{31}, \frac{9}{31}) + \frac{10}{31}\sqrt{19}e^2 \otimes e_4$	{12368, 128, 13456, 145, 2358, 2568, 34, 46}
841:6	$0, 0, 0, 0, \frac{1}{35}\sqrt{14}e^{12}, \frac{1}{35}\sqrt{154}e^{13}, \frac{2}{35}\sqrt{42}e^{24}, \frac{1}{35}\sqrt{42}e^{15}$	$(\frac{1}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, 0, 0, \frac{1}{5}) + \frac{1}{35}\sqrt{210}e^4 \otimes e_6 + \frac{4}{35}\sqrt{14}e^1 \otimes e_7$	{12345, 168, 2367, 4578}
841:6	$0, 0, 0, 0, \frac{20}{1321}\sqrt{874}e^{12}, \frac{22}{1321}\sqrt{437}e^{13}, \frac{4}{1321}\sqrt{874}e^{24}, \frac{2}{1321}\sqrt{96577}e^{15}$	$(-\frac{366}{1321}, \frac{521}{1321}, \frac{663}{1321}, -\frac{353}{1321}, \frac{155}{1321}, \frac{297}{1321}, \frac{168}{1321}, -\frac{211}{1321}) + \frac{152}{1321}\sqrt{46}e^3 \otimes e_8 + \frac{2}{1321}\sqrt{234669}e^2 \otimes e_4$	{1268, 1345, 258, 346}
841:6	$0, 0, 0, 0, \frac{2}{1489}\sqrt{71285}e^{12}, \frac{2}{1489}\sqrt{151985}e^{13}, \frac{2}{1489}\sqrt{105179}e^{24}, \frac{2}{1489}\sqrt{15871}e^{15}$	$(-\frac{198}{1489}, \frac{35}{1489}, \frac{177}{1489}, \frac{517}{1489}, -\frac{163}{1489}, -\frac{21}{1489}, \frac{552}{1489}, -\frac{361}{1489}) + \frac{2}{1489}\sqrt{156289}e^3 \otimes e_8 + \frac{6}{1489}\sqrt{22327}e^4 \otimes e_6$	{12345, 168, 2367, 4578}
841:6	$0, 0, 0, 0, \frac{2}{339}\sqrt{3219}e^{12}, \frac{58}{339}\sqrt{5}e^{13}, \frac{2}{339}\sqrt{7627}e^{24}, \frac{2}{339}\sqrt{2059}e^{15}$	$(-\frac{5}{113}, -\frac{77}{678}, \frac{125}{339}, \frac{95}{678}, -\frac{107}{678}, \frac{110}{339}, \frac{3}{113}, -\frac{137}{678}) + \frac{16}{339}\sqrt{145}e^3 \otimes e_7 + \frac{2}{339}\sqrt{8207}e^4 \otimes e_8$	{12345, 138, 2346, 3568}
841:6	$0, 0, 0, 0, \frac{2}{1401}\sqrt{15789}e^{12}, \frac{2}{1401}\sqrt{50137}e^{13}, \frac{16}{1401}\sqrt{1939}e^{24}, \frac{20}{1401}\sqrt{554}e^{15}$	$(-\frac{86}{467}, \frac{295}{1401}, -\frac{1}{1401}, \frac{111}{467}, \frac{37}{1401}, -\frac{259}{1401}, \frac{628}{1401}, -\frac{221}{1401}) + \frac{2}{1401}\sqrt{166477}e^4 \otimes e_8 + \frac{4}{1401}\sqrt{42935}e^2 \otimes e_6$	{12378, 14567, 2578, 3467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:6	$0, 0, 0, 0, \frac{10}{79}e^{12}, \frac{5}{79}\sqrt{78}e^{13}, \frac{5}{79}\sqrt{74}e^{24}, \frac{10}{79}\sqrt{3}e^{15}$	$(-\frac{5}{79}, \frac{35}{158}, \frac{35}{79}, -\frac{65}{158}, \frac{25}{158}, \frac{30}{79}, -\frac{15}{79}, \frac{15}{158})$ $+\frac{20}{79}\sqrt{11}e^3 \otimes e_7 + \frac{35}{79}\sqrt{2}e^2 \otimes e_4$	{125678, 1467, 278, 457}
841:6	$0, 0, 0, 0, \frac{1}{444}\sqrt{4182}e^{12}, \frac{1}{444}\sqrt{7106}e^{13}, \frac{1}{148}\sqrt{714}e^{24}, \frac{1}{222}\sqrt{510}e^{15}$	$(\frac{1}{148}, -\frac{1}{12}, \frac{55}{888}, \frac{95}{888}, -\frac{17}{222}, \frac{61}{888}, \frac{7}{296}, -\frac{31}{444})$ $+\frac{1}{444}\sqrt{7055}e^3 \otimes e_7 + \frac{1}{444}\sqrt{7055}e^4 \otimes e_6$	{123458, 125678, 356, 457}
841:6	$0, 0, 0, 0, \frac{2}{13}\sqrt{3}e^{12}, \frac{2}{13}\sqrt{3}e^{13}, \frac{6}{13}\sqrt{3}e^{24}, \frac{6}{13}\sqrt{3}e^{15}$	$(-\frac{1}{13}, -\frac{3}{26}, \frac{3}{13}, \frac{17}{26}, -\frac{5}{26}, \frac{2}{13}, \frac{7}{13}, -\frac{7}{26})$ $+\frac{6}{13}\sqrt{7}e^4 \otimes e_8$	{123456, 1245, 1368, 18, 234, 246, 358, 568}
841:7	$0, 0, 0, 0, \frac{36}{1151}\sqrt{74}e^{12}, \frac{36}{1151}\sqrt{391}e^{34}, \frac{72}{1151}\sqrt{94}e^{13} + \frac{36}{1151}\sqrt{354}e^{24},$ $\frac{36}{1151}\sqrt{509}e^{15}$	$(-\frac{7}{1151}, -\frac{228}{1151}, \frac{185}{1151}, \frac{406}{1151}, -\frac{235}{1151}, \frac{591}{1151}, \frac{178}{1151}, -\frac{242}{1151})$ $+\frac{36}{1151}\sqrt{951}e^4 \otimes e_8$	{123678, 13457, 2578, 467}
841:7	$0, 0, 0, 0, \frac{8}{43}\sqrt{15}e^{12}, \frac{8}{43}\sqrt{15}e^{34}, \frac{2}{43}\sqrt{195}e^{13} + \frac{4}{43}\sqrt{30}e^{24},$ $\frac{2}{43}\sqrt{105}e^{15}$	$(-\frac{2}{43}, \frac{19}{43}, \frac{5}{43}, -\frac{16}{43}, \frac{17}{43}, -\frac{11}{43}, \frac{3}{43}, \frac{15}{43})$ $+\frac{10}{43}\sqrt{21}e^2 \otimes e_6$	{23458, 2578, 36, 467}
841:7	$0, 0, 0, 0, \frac{3}{577}\sqrt{3190}e^{12}, \frac{12}{577}\sqrt{1265}e^{34}, \frac{132}{577}\sqrt{5}e^{13} + \frac{9}{577}\sqrt{770}e^{24},$ $\frac{3}{577}\sqrt{17930}e^{15}$	$(-\frac{168}{577}, \frac{146}{577}, \frac{305}{577}, -\frac{9}{577}, -\frac{22}{577}, \frac{296}{577}, \frac{137}{577}, -\frac{190}{577})$ $+\frac{15}{577}\sqrt{2046}e^3 \otimes e_8$	{124678, 1345, 258, 367}
841:7	$0, 0, 0, 0, \frac{3}{98}\sqrt{35}e^{12}, \frac{1}{98}\sqrt{511}e^{34}, \frac{1}{98}\sqrt{203}e^{13} + \frac{1}{98}\sqrt{42}e^{24},$ $\frac{5}{98}\sqrt{21}e^{15}$	$(\frac{3}{28}, -\frac{1}{7}, -\frac{3}{28}, \frac{1}{7}, -\frac{1}{28}, \frac{1}{28}, 0, \frac{1}{14})$ $+\frac{1}{7}\sqrt{3}e^4 \otimes e_8 + \frac{1}{98}\sqrt{623}e^1 \otimes e_6$	{13457, 467}
841:7	$0, 0, 0, 0, \frac{20}{91}\sqrt{3}e^{12}, \frac{8}{91}\sqrt{30}e^{34}, \frac{6}{91}\sqrt{15}e^{13} + \frac{4}{91}\sqrt{15}e^{24},$ $\frac{2}{91}\sqrt{285}e^{15}$	$(-\frac{18}{91}, \frac{31}{91}, \frac{25}{91}, -\frac{24}{91}, \frac{1}{7}, \frac{1}{91}, \frac{1}{13}, -\frac{5}{91})$ $+\frac{12}{91}\sqrt{15}e^3 \otimes e_8 + \frac{2}{91}\sqrt{645}e^2 \otimes e_6$	{2578, 36}
841:7	$0, 0, 0, 0, \frac{16}{539}\sqrt{7}e^{12}, \frac{6}{539}\sqrt{77}e^{34}, \frac{1}{539}\sqrt{742}e^{13} + \frac{6}{539}\sqrt{42}e^{24},$ $\frac{18}{539}\sqrt{7}e^{15}$	$(-\frac{2}{77}, \frac{5}{77}, \frac{2}{77}, -\frac{5}{77}, \frac{3}{77}, -\frac{3}{77}, 0, \frac{1}{77})$ $+\frac{2}{539}\sqrt{959}e^1 \otimes e_6 + \frac{2}{77}\sqrt{15}e^3 \otimes e_8$	{1345, 367}
841:7	$0, 0, 0, 0, \frac{1}{14}\sqrt{77}e^{12}, \frac{1}{14}\sqrt{77}e^{34}, \frac{1}{14}\sqrt{7}e^{13} + \frac{1}{14}\sqrt{42}e^{24},$ $\frac{3}{14}\sqrt{7}e^{15}$	$(\frac{1}{4}, 0, -\frac{1}{4}, 0, \frac{1}{4}, -\frac{1}{4}, 0, \frac{1}{2})$ $+\frac{1}{14}\sqrt{161}e^1 \otimes e_6$	{1345, 157, 367, 46}
841:7	$0, 0, 0, 0, \frac{6}{385}\sqrt{39}e^{12}, \frac{3}{385}\sqrt{278}e^{34}, \frac{6}{385}\sqrt{66}e^{13} + \frac{6}{77}\sqrt{2}e^{24},$ $\frac{6}{385}\sqrt{59}e^{15}$	$(-\frac{5}{77}, \frac{24}{385}, \frac{32}{385}, -\frac{17}{385}, -\frac{1}{385}, \frac{3}{77}, \frac{1}{55}, -\frac{26}{385})$ $+\frac{3}{385}\sqrt{326}e^2 \otimes e_6 + \frac{3}{385}\sqrt{366}e^4 \otimes e_8$	{2578, 467}
841:8	$0, 0, 0, 0, \frac{2}{61}\sqrt{246}e^{12}, \frac{1}{61}\sqrt{574}e^{13}, \frac{6}{61}\sqrt{41}e^{23},$ $\frac{2}{61}\sqrt{451}e^{15} + \frac{2}{61}\sqrt{246}e^{34}$	$(\frac{20}{61}, -\frac{19}{61}, -\frac{2}{61}, \frac{23}{61}, \frac{1}{61}, \frac{18}{61}, -\frac{21}{61}, \frac{21}{61})$ $+\frac{10}{61}\sqrt{41}e^1 \otimes e_7$	{12348, 1456, 2578, 367}
841:8	$0, 0, 0, 0, \frac{69}{539}\sqrt{22}e^{12}, \frac{46}{539}\sqrt{59}e^{13}, \frac{46}{539}\sqrt{62}e^{23},$ $\frac{46}{539}\sqrt{6}e^{15} + \frac{230}{539}e^{34}$	$(-\frac{125}{539}, \frac{316}{539}, -\frac{8}{49}, \frac{2}{7}, \frac{191}{539}, -\frac{213}{539}, \frac{228}{539}, \frac{6}{49})$ $+\frac{23}{539}\sqrt{870}e^2 \otimes e_6$	{12348, 1456, 2578, 367}
841:8	$0, 0, 0, 0, \frac{22}{1119}\sqrt{30}e^{12}, \frac{11}{1119}\sqrt{2022}e^{13}, \frac{44}{1119}\sqrt{123}e^{23},$ $\frac{22}{373}\sqrt{3}e^{15} + \frac{22}{1119}\sqrt{273}e^{34}$	$(-\frac{66}{373}, \frac{99}{373}, \frac{44}{373}, -\frac{77}{373}, \frac{33}{373}, -\frac{22}{373}, \frac{143}{373}, -\frac{33}{373})$ $+\frac{22}{1119}\sqrt{771}e^3 \otimes e_4 + \frac{44}{373}\sqrt{21}e^2 \otimes e_6$	{146, 3567}
841:8	$0, 0, 0, 0, \frac{12}{49}e^{12}, \frac{2}{49}\sqrt{34}e^{13}, \frac{6}{49}\sqrt{6}e^{23}, \frac{4}{49}\sqrt{10}e^{15} + \frac{12}{49}e^{34}$	$(\frac{2}{49}, \frac{2}{49}, -\frac{8}{49}, \frac{2}{7}, \frac{4}{49}, -\frac{6}{49}, -\frac{6}{49}, \frac{6}{49})$ $-\frac{2}{49}\sqrt{78}e^2 \otimes e_6 + \frac{2}{7}\sqrt{2}e^1 \otimes e_7$	{12348, 1456, 2578, 367}
841:8	$0, 0, 0, 0, \frac{12}{49}e^{12}, \frac{2}{49}\sqrt{34}e^{13}, \frac{6}{49}\sqrt{6}e^{23}, \frac{4}{49}\sqrt{10}e^{15} + \frac{12}{49}e^{34}$	$(\frac{2}{49}, \frac{2}{49}, -\frac{8}{49}, \frac{2}{7}, \frac{4}{49}, -\frac{6}{49}, -\frac{6}{49}, \frac{6}{49})$ $+\frac{2}{49}\sqrt{78}e^2 \otimes e_6 + \frac{2}{7}\sqrt{2}e^1 \otimes e_7$	{12348, 1456, 2578, 367}
841:8	$0, 0, 0, 0, \frac{114}{1423}\sqrt{14}e^{12}, \frac{38}{1423}\sqrt{71}e^{13}, \frac{38}{1423}\sqrt{371}e^{23},$ $\frac{38}{1423}\sqrt{3}e^{15} + \frac{38}{1423}\sqrt{113}e^{34}$	$(-\frac{19}{1423}, \frac{323}{1423}, -\frac{380}{1423}, \frac{665}{1423}, \frac{304}{1423}, -\frac{399}{1423}, -\frac{57}{1423}, \frac{285}{1423})$ $+\frac{114}{1423}\sqrt{67}e^4 \otimes e_7 + \frac{38}{1423}\sqrt{645}e^2 \otimes e_6$	{1234, 14568, 257, 3678}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:8	$0, 0, 0, 0, \frac{114}{1423}\sqrt{14}e^{12}, \frac{38}{1423}\sqrt{71}e^{13}, \frac{38}{1423}\sqrt{371}e^{23},$ $\frac{38}{1423}\sqrt{3}e^{15} + \frac{38}{1423}\sqrt{113}e^{34}$	$(-\frac{19}{1423}, \frac{323}{1423}, -\frac{380}{1423}, \frac{665}{1423}, \frac{304}{1423}, -\frac{399}{1423}, -\frac{57}{1423}, \frac{285}{1423})$ $-\frac{114}{1423}\sqrt{67}e^4 \otimes e_7 + \frac{38}{1423}\sqrt{645}e^2 \otimes e_6$	{1234, 14568, 257, 3678}
841:8	$0, 0, 0, 0, \frac{2}{37}\sqrt{3}e^{12}, \frac{5}{37}\sqrt{6}e^{13}, \frac{6}{37}\sqrt{6}e^{23},$ $\frac{2}{37}\sqrt{33}e^{15} + \frac{17}{37}e^{34}$	$(\frac{6}{37}, -\frac{9}{37}, \frac{6}{37}, -\frac{3}{37}, -\frac{3}{37}, \frac{12}{37}, -\frac{3}{37}, \frac{3}{37})$ $+\frac{2}{37}\sqrt{66}e^3 \otimes e_4 + \frac{4}{37}\sqrt{21}e^1 \otimes e_7$	{1456, 367}
841:9	$0, 0, 0, 0, \frac{1}{20}\sqrt{114}e^{12}, \frac{1}{20}\sqrt{285}e^{13}, \frac{1}{20}\sqrt{285}e^{14} + \frac{1}{20}\sqrt{114}e^{23},$ $\frac{1}{10}\sqrt{38}e^{15}$	$(-\frac{1}{4}, \frac{9}{20}, -\frac{3}{40}, \frac{5}{8}, \frac{1}{5}, -\frac{13}{40}, \frac{3}{8}, -\frac{1}{20})$ $+\frac{1}{20}\sqrt{646}e^4 \otimes e_6$	{134, 167, 356, 457}
841:9	$0, 0, 0, 0, \frac{18}{349}\sqrt{55}e^{12}, \frac{45}{349}\sqrt{6}e^{13}, \frac{18}{349}\sqrt{41}e^{14} + \frac{18}{349}\sqrt{13}e^{23},$ $\frac{18}{349}\sqrt{35}e^{15}$	$(\frac{30}{349}, \frac{45}{349}, -\frac{66}{349}, -\frac{51}{349}, \frac{75}{349}, -\frac{36}{349}, -\frac{21}{349}, \frac{105}{349})$ $+\frac{18}{349}\sqrt{73}e^2 \otimes e_6 + \frac{36}{349}\sqrt{21}e^1 \otimes e_4$	{1238, 156}
841:9	$0, 0, 0, 0, \frac{1}{29}\sqrt{462}e^{12}, \frac{11}{29}\sqrt{2}e^{13}, \frac{1}{29}\sqrt{286}e^{14} + \frac{1}{29}\sqrt{66}e^{23},$ $\frac{2}{29}\sqrt{110}e^{15}$	$(\frac{19}{58}, -\frac{4}{29}, \frac{1}{29}, -\frac{25}{58}, \frac{11}{58}, \frac{21}{58}, -\frac{3}{29}, \frac{15}{29})$ $+\frac{4}{29}\sqrt{66}e^1 \otimes e_4$	{1268, 135, 2458, 346}
841:9	$0, 0, 0, 0, \frac{1}{29}\sqrt{66}e^{12}, \frac{11}{29}\sqrt{2}e^{13}, \frac{1}{29}\sqrt{286}e^{14} + \frac{1}{29}\sqrt{462}e^{23},$ $\frac{2}{29}\sqrt{110}e^{15}$	$(-\frac{5}{58}, -\frac{4}{29}, \frac{13}{29}, \frac{23}{58}, -\frac{13}{58}, \frac{21}{58}, \frac{9}{29}, -\frac{9}{29})$ $+\frac{4}{29}\sqrt{66}e^3 \otimes e_8$	{1235, 168, 2346, 458}
841:9	$0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{5}{53}\sqrt{30}e^{13}, \frac{10}{53}e^{14} + \frac{5}{53}\sqrt{14}e^{23},$ $\frac{5}{53}\sqrt{10}e^{15}$	$(-\frac{10}{53}, \frac{5}{53}, \frac{10}{53}, \frac{25}{53}, -\frac{5}{53}, 0, \frac{15}{53}, -\frac{15}{53})$ $+\frac{10}{53}\sqrt{13}e^3 \otimes e_8 + \frac{5}{53}\sqrt{42}e^4 \otimes e_6$	{12345, 236}
841:9	$0, 0, 0, 0, \frac{72}{263}\sqrt{6}e^{12}, \frac{27}{263}\sqrt{38}e^{13}, \frac{90}{263}\sqrt{3}e^{14} + \frac{72}{263}\sqrt{6}e^{23},$ $\frac{18}{263}\sqrt{21}e^{15}$	$(-\frac{36}{263}, \frac{135}{263}, -\frac{72}{263}, \frac{99}{263}, \frac{99}{263}, -\frac{108}{263}, \frac{63}{263}, \frac{63}{263})$ $+\frac{18}{263}\sqrt{321}e^2 \otimes e_6$	{1238, 156, 2578, 367}
841:9	$0, 0, 0, 0, \frac{18}{349}\sqrt{13}e^{12}, \frac{45}{349}\sqrt{6}e^{13}, \frac{18}{349}\sqrt{41}e^{14} + \frac{18}{349}\sqrt{55}e^{23},$ $\frac{18}{349}\sqrt{35}e^{15}$	$(-\frac{54}{349}, \frac{45}{349}, \frac{18}{349}, \frac{117}{349}, -\frac{9}{349}, -\frac{36}{349}, \frac{63}{349}, -\frac{63}{349})$ $+\frac{18}{349}\sqrt{73}e^2 \otimes e_6 + \frac{36}{349}\sqrt{21}e^3 \otimes e_8$	{2578, 367}
841:9	$0, 0, 0, 0, \frac{36}{527}\sqrt{35}e^{12}, \frac{36}{527}\sqrt{15}e^{13}, \frac{36}{527}\sqrt{5}e^{14} + \frac{36}{527}\sqrt{35}e^{23},$ $\frac{72}{527}\sqrt{10}e^{15}$	$(-\frac{117}{527}, \frac{180}{527}, -\frac{27}{527}, \frac{270}{527}, \frac{63}{527}, -\frac{144}{527}, \frac{9}{31}, -\frac{54}{527})$ $+\frac{18}{527}\sqrt{494}e^2 \otimes e_6 + \frac{54}{527}\sqrt{46}e^4 \otimes e_8$	{1456, 3467}
841:9	$0, 0, 0, 0, \frac{5}{259}\sqrt{66}e^{12}, \frac{10}{259}\sqrt{187}e^{13}, \frac{5}{259}\sqrt{1562}e^{14} + \frac{5}{259}\sqrt{66}e^{23},$ $\frac{10}{259}\sqrt{407}e^{15}$	$(-\frac{65}{259}, \frac{43}{259}, \frac{80}{259}, \frac{188}{259}, -\frac{22}{259}, \frac{15}{259}, \frac{123}{259}, -\frac{87}{259})$ $+\frac{10}{259}\sqrt{1155}e^4 \otimes e_8$	{1278, 145, 2358, 347}
841:10	$0, 0, 0, 0, \frac{1}{286}\sqrt{717}e^{12}, \frac{1}{286}\sqrt{717}e^{13}, \frac{1}{286}\sqrt{13862}e^{14} + \frac{1}{286}\sqrt{28202}e^{23},$ $\frac{1}{286}\sqrt{54970}e^{25}$	$(-\frac{31}{143}, -\frac{7}{572}, \frac{223}{572}, \frac{85}{143}, -\frac{131}{572}, \frac{9}{52}, \frac{54}{143}, -\frac{69}{286})$ $+\frac{1}{286}\sqrt{112330}e^4 \otimes e_8$	{1245, 1346, 268, 358}
841:10	$0, 0, 0, 0, \frac{3}{284}\sqrt{5605}e^{12}, \frac{3}{284}\sqrt{5605}e^{13}, \frac{9}{284}\sqrt{190}e^{14} + \frac{1}{284}\sqrt{24510}e^{23},$ $\frac{2}{71}\sqrt{285}e^{25}$	$(\frac{67}{142}, -\frac{49}{568}, \frac{15}{568}, -\frac{151}{284}, \frac{219}{568}, \frac{283}{568}, -\frac{17}{284}, \frac{85}{284})$ $+\frac{3}{284}\sqrt{14630}e^1 \otimes e_4$	{1268, 1358, 245, 346}
841:10	$0, 0, 0, 0, \frac{1}{27}\sqrt{266}e^{12}, \frac{1}{27}\sqrt{266}e^{13}, \frac{2}{27}\sqrt{38}e^{14} + \frac{1}{27}\sqrt{114}e^{23},$ $\frac{4}{27}\sqrt{19}e^{25}$	$(-\frac{5}{27}, \frac{1}{3}, -\frac{5}{27}, \frac{1}{3}, \frac{4}{27}, -\frac{10}{27}, \frac{4}{27}, \frac{13}{27})$ $+\frac{2}{27}\sqrt{209}e^2 \otimes e_6$	{1238, 1568, 257, 367}
841:10	$0, 0, 0, 0, \frac{15}{626}\sqrt{167}e^{12}, \frac{15}{626}\sqrt{167}e^{13}, \frac{60}{313}\sqrt{2}e^{14} + \frac{75}{626}\sqrt{2}e^{23},$ $\frac{15}{626}\sqrt{434}e^{25}$	$(-\frac{75}{313}, \frac{195}{1252}, \frac{45}{1252}, \frac{135}{313}, -\frac{105}{1252}, -\frac{255}{1252}, \frac{60}{313}, \frac{45}{626})$ $+\frac{15}{313}\sqrt{146}e^2 \otimes e_6 + \frac{15}{626}\sqrt{506}e^4 \otimes e_8$	{12378, 15678}
841:10	$0, 0, 0, 0, \frac{7}{613}\sqrt{570}e^{12}, \frac{14}{613}\sqrt{505}e^{13}, \frac{7}{613}\sqrt{690}e^{14} + \frac{7}{613}\sqrt{190}e^{23},$ $\frac{14}{613}\sqrt{285}e^{25}$	$(\frac{133}{613}, -\frac{119}{613}, \frac{140}{613}, -\frac{112}{613}, \frac{14}{613}, \frac{273}{613}, \frac{21}{613}, -\frac{105}{613})$ $+\frac{42}{613}\sqrt{70}e^1 \otimes e_4 + \frac{70}{613}\sqrt{29}e^3 \otimes e_8$	{1568, 23456}
841:10	$0, 0, 0, 0, \frac{7}{613}\sqrt{690}e^{12}, \frac{14}{613}\sqrt{505}e^{13}, \frac{7}{613}\sqrt{570}e^{14} + \frac{7}{613}\sqrt{190}e^{23},$ $\frac{14}{613}\sqrt{285}e^{25}$	$(-\frac{119}{613}, \frac{7}{613}, \frac{140}{613}, \frac{266}{613}, -\frac{112}{613}, \frac{21}{613}, \frac{147}{613}, -\frac{105}{613})$ $+\frac{42}{613}\sqrt{70}e^4 \otimes e_6 + \frac{70}{613}\sqrt{29}e^3 \otimes e_8$	{12345, 2478}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:10	$0, 0, 0, 0, \frac{28}{289}\sqrt{15}e^{12}, \frac{14}{289}\sqrt{235}e^{13}, \frac{28}{289}\sqrt{15}e^{14} + \frac{35}{289}\sqrt{22}e^{23},$ $\frac{14}{289}\sqrt{195}e^{25}$	$(\frac{7}{289}, -\frac{56}{289}, \frac{140}{289}, \frac{77}{289}, -\frac{49}{289}, \frac{147}{289}, \frac{84}{289}, -\frac{105}{289})$ $+ \frac{14}{289}\sqrt{590}e^3 \otimes e_8$	{1235, 1347, 278, 458}
841:10	$0, 0, 0, 0, \frac{14}{909}\sqrt{530}e^{12}, \frac{14}{909}\sqrt{530}e^{13}, \frac{28}{909}\sqrt{71}e^{14} + \frac{14}{303}\sqrt{2}e^{23},$ $\frac{14}{909}\sqrt{370}e^{25}$	$(\frac{70}{909}, \frac{35}{303}, -\frac{161}{909}, -\frac{14}{101}, \frac{175}{909}, -\frac{91}{909}, -\frac{56}{909}, \frac{280}{909})$ $+ \frac{14}{909}\sqrt{902}e^2 \otimes e_6 + \frac{154}{909}\sqrt{6}e^1 \otimes e_4$	{245, 346}
841:10	$0, 0, 0, 0, \frac{9}{284}\sqrt{190}e^{12}, \frac{3}{284}\sqrt{5605}e^{13}, \frac{3}{284}\sqrt{5605}e^{14} + \frac{1}{284}\sqrt{24510}e^{23},$ $\frac{2}{71}\sqrt{285}e^{25}$	$(-\frac{97}{284}, \frac{91}{284}, \frac{15}{568}, \frac{391}{568}, -\frac{3}{142}, -\frac{179}{568}, \frac{197}{568}, \frac{85}{284})$ $+ \frac{3}{284}\sqrt{14630}e^4 \otimes e_6$	{134, 167, 3568, 4578}
841:10	$0, 0, 0, 0, \frac{84}{3797}\sqrt{41}e^{12}, \frac{42}{3797}\sqrt{571}e^{13},$ $\frac{84}{3797}\sqrt{71}e^{14} + \frac{21}{3797}\sqrt{1222}e^{23}, \frac{126}{3797}\sqrt{59}e^{25}$	$(-\frac{525}{3797}, \frac{168}{3797}, \frac{252}{3797}, \frac{945}{3797}, -\frac{357}{3797}, -\frac{273}{3797}, \frac{420}{3797}, -\frac{189}{3797})$ $+ \frac{336}{3797}\sqrt{14}e^2 \otimes e_6 + \frac{42}{3797}\sqrt{814}e^3 \otimes e_8$	{1568, 367}
841:11	$0, 0, 0, 0, \frac{1}{163}\sqrt{1038}e^{12}, \frac{2}{163}\sqrt{3806}e^{13}, \frac{1}{163}\sqrt{16262}e^{34},$ $\frac{1}{163}\sqrt{1038}e^{15} + \frac{2}{163}\sqrt{1903}e^{23}$	$(-\frac{19}{163}, \frac{50}{163}, -\frac{38}{163}, \frac{116}{163}, \frac{31}{163}, -\frac{57}{163}, \frac{78}{163}, \frac{12}{163})$ $+ \frac{2}{163}\sqrt{11418}e^4 \otimes e_6$	{12348, 1345, 235678, 367}
841:11	$0, 0, 0, 0, \frac{1}{20}\sqrt{114}e^{12}, \frac{1}{20}\sqrt{209}e^{13}, \frac{1}{20}\sqrt{95}e^{34},$ $\frac{1}{20}\sqrt{95}e^{15} + \frac{1}{20}\sqrt{209}e^{23}$	$(-\frac{1}{8}, \frac{23}{40}, -\frac{1}{4}, \frac{3}{10}, \frac{9}{20}, -\frac{3}{8}, \frac{1}{20}, \frac{13}{40})$ $+ \frac{1}{20}\sqrt{627}e^2 \otimes e_6$	{123, 12347, 34678, 368}
841:11	$0, 0, 0, 0, \frac{40}{169}\sqrt{10}e^{12}, \frac{10}{169}\sqrt{115}e^{13}, \frac{40}{169}\sqrt{10}e^{34},$ $\frac{30}{169}\sqrt{5}e^{15} + \frac{5}{169}\sqrt{230}e^{23}$	$(-\frac{5}{169}, \frac{82}{169}, -\frac{10}{169}, -\frac{33}{169}, \frac{77}{169}, -\frac{15}{169}, -\frac{43}{169}, \frac{72}{169})$ $+ \frac{10}{169}\sqrt{345}e^2 \otimes e_7$	{128, 1457, 2568, 467}
841:11	$0, 0, 0, 0, \frac{2}{5}\sqrt{2}e^{12}, \frac{1}{5}\sqrt{2}e^{13}, \frac{2}{5}\sqrt{2}e^{34},$ $\frac{2}{5}\sqrt{2}e^{15} + \frac{2}{5}\sqrt{2}e^{23}$	$(0, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{2}{5}\sqrt{3}e^1 \otimes e_7 + \frac{2}{5}e^3 \otimes e_4$	{123468, 13456}
841:11	$0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{10}{53}e^{13}, \frac{20}{53}e^{34}, \frac{20}{53}e^{15} + \frac{5}{53}\sqrt{22}e^{23}$	$(-\frac{5}{53}, \frac{10}{53}, -\frac{10}{53}, \frac{25}{53}, \frac{5}{53}, -\frac{15}{53}, \frac{15}{53}, 0)$ $+ \frac{10}{53}\sqrt{10}e^2 \otimes e_6 + \frac{10}{53}\sqrt{13}e^4 \otimes e_8$	{128, 467}
841:11	$0, 0, 0, 0, \frac{2}{5}e^{12}, \frac{1}{15}\sqrt{6}e^{13}, \frac{1}{15}\sqrt{30}e^{34},$ $\frac{1}{15}\sqrt{30}e^{15} + \frac{2}{15}\sqrt{6}e^{23}$	$(0, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{1}{5}\sqrt{2}e^2 \otimes e_6 + \frac{2}{15}\sqrt{15}e^1 \otimes e_7$	{12348, 367}
841:11	$0, 0, 0, 0, \frac{30}{169}\sqrt{5}e^{12}, \frac{10}{169}\sqrt{115}e^{13}, \frac{40}{169}\sqrt{10}e^{34},$ $\frac{40}{169}\sqrt{10}e^{15} + \frac{5}{169}\sqrt{230}e^{23}$	$(-\frac{5}{169}, -\frac{10}{169}, -\frac{10}{169}, \frac{105}{169}, -\frac{15}{169}, -\frac{15}{169}, \frac{95}{169}, -\frac{20}{169})$ $+ \frac{10}{169}\sqrt{345}e^4 \otimes e_8$	{128, 1457, 2568, 467}
841:11	$0, 0, 0, 0, \frac{4}{37}\sqrt{3}e^{12}, \frac{1}{37}\sqrt{14}e^{13}, \frac{1}{37}\sqrt{62}e^{34},$ $\frac{4}{37}\sqrt{3}e^{15} + \frac{2}{37}\sqrt{13}e^{23}$	$(-\frac{1}{37}, \frac{5}{37}, -\frac{2}{37}, -\frac{1}{37}, \frac{4}{37}, -\frac{3}{37}, -\frac{3}{37}, \frac{3}{37})$ $- \frac{1}{37}\sqrt{42}e^4 \otimes e_6 + \frac{3}{37}\sqrt{10}e^1 \otimes e_7$	{12348, 1345, 235678, 367}
841:11	$0, 0, 0, 0, \frac{4}{37}\sqrt{3}e^{12}, \frac{1}{37}\sqrt{14}e^{13}, \frac{1}{37}\sqrt{62}e^{34},$ $\frac{4}{37}\sqrt{3}e^{15} + \frac{2}{37}\sqrt{13}e^{23}$	$(-\frac{1}{37}, \frac{5}{37}, -\frac{2}{37}, -\frac{1}{37}, \frac{4}{37}, -\frac{3}{37}, -\frac{3}{37}, \frac{3}{37})$ $+ \frac{1}{37}\sqrt{42}e^4 \otimes e_6 + \frac{3}{37}\sqrt{10}e^1 \otimes e_7$	{12348, 1345, 235678, 367}
841:11	$0, 0, 0, 0, \frac{6}{55}\sqrt{7}e^{12}, \frac{12}{55}e^{13}, \frac{6}{55}\sqrt{7}e^{34},$ $\frac{6}{55}\sqrt{6}e^{15} + \frac{3}{55}\sqrt{94}e^{23}$	$(\frac{3}{55}, \frac{12}{55}, \frac{6}{55}, -\frac{21}{55}, \frac{3}{11}, \frac{9}{55}, -\frac{3}{11}, \frac{18}{55})$ $+ \frac{6}{55}\sqrt{34}e^3 \otimes e_4 + \frac{6}{55}\sqrt{39}e^2 \otimes e_7$	{13578, 3678}
841:11	$0, 0, 0, 0, \frac{96}{1183}\sqrt{29}e^{12}, \frac{32}{1183}\sqrt{58}e^{13}, \frac{64}{1183}\sqrt{101}e^{34},$ $\frac{64}{1183}\sqrt{15}e^{15} + \frac{32}{1183}\sqrt{29}e^{23}$	$(-\frac{16}{169}, \frac{464}{1183}, -\frac{32}{169}, \frac{176}{1183}, \frac{352}{1183}, -\frac{48}{169}, -\frac{48}{1183}, \frac{240}{1183})$ $+ \frac{32}{1183}\sqrt{429}e^4 \otimes e_6 + \frac{96}{1183}\sqrt{67}e^2 \otimes e_7$	{1457, 2568}
841:11	$0, 0, 0, 0, \frac{1}{5}e^{12}, \frac{2}{5}e^{13}, \frac{1}{10}\sqrt{10}e^{34}, \frac{1}{10}\sqrt{10}e^{15} + \frac{2}{5}e^{23}$	$(0, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{1}{5}\sqrt{5}e^3 \otimes e_4 + \frac{3}{10}\sqrt{2}e^2 \otimes e_6$	{146, 248}
841:11	$0, 0, 0, 0, \frac{6}{77}\sqrt{10}e^{12}, \frac{2}{77}\sqrt{115}e^{13}, \frac{1}{77}\sqrt{590}e^{34},$ $\frac{6}{77}\sqrt{10}e^{15} + \frac{1}{77}\sqrt{230}e^{23}$	$(-\frac{5}{77}, \frac{13}{77}, -\frac{10}{77}, \frac{13}{77}, \frac{8}{77}, -\frac{15}{77}, \frac{3}{77}, \frac{3}{77})$ $+ \frac{1}{77}\sqrt{690}e^2 \otimes e_7 - \frac{1}{77}\sqrt{690}e^4 \otimes e_8$	{128, 1457, 2568, 467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:11	$0, 0, 0, 0, \frac{6}{77}\sqrt{10}e^{12}, \frac{2}{77}\sqrt{115}e^{13}, \frac{1}{77}\sqrt{590}e^{34},$ $\frac{6}{77}\sqrt{10}e^{15} + \frac{1}{77}\sqrt{230}e^{23}$	$(-\frac{5}{77}, \frac{13}{77}, -\frac{10}{77}, \frac{13}{77}, \frac{8}{77}, -\frac{15}{77}, \frac{3}{77}, \frac{3}{77})$ $+ \frac{1}{77}\sqrt{690}e^2 \otimes e_7 + \frac{1}{77}\sqrt{690}e^4 \otimes e_8$	{128, 1457, 2568, 467}
841:11	$0, 0, 0, 0, \frac{1}{4}\sqrt{7}e^{12}, \frac{7}{8}e^{13}, \frac{1}{4}\sqrt{7}e^{34}, \frac{1}{4}\sqrt{7}e^{15} + \frac{7}{8}e^{23}$	$(\frac{3}{16}, -\frac{1}{16}, \frac{3}{8}, -\frac{1}{2}, \frac{1}{8}, \frac{9}{16}, -\frac{1}{8}, \frac{5}{16})$ $+ \frac{7}{8}\sqrt{2}e^3 \otimes e_4$	{124568, 146, 248, 45}
841:12	$0, 0, 0, 0, \frac{5}{84}\sqrt{66}e^{12}, \frac{5}{84}\sqrt{141}e^{13}, \frac{5}{84}\sqrt{141}e^{14},$ $\frac{5}{84}\sqrt{102}e^{15} + \frac{5}{14}\sqrt{3}e^{34}$	$(-\frac{5}{84}, \frac{25}{84}, \frac{85}{168}, -\frac{55}{168}, \frac{5}{21}, \frac{25}{56}, -\frac{65}{168}, \frac{5}{28})$ $+ \frac{5}{42}\sqrt{105}e^3 \otimes e_7$	{134, 167, 2368, 2478}
841:12	$0, 0, 0, 0, \frac{5}{224}\sqrt{82}e^{12}, \frac{5}{224}\sqrt{137}e^{13}, \frac{5}{224}\sqrt{137}e^{14},$ $\frac{5}{224}\sqrt{114}e^{15} + \frac{5}{56}\sqrt{6}e^{34}$	$(-\frac{25}{224}, \frac{55}{224}, \frac{448}{448}, \frac{5}{112}, -\frac{45}{448}, -\frac{45}{448}, \frac{5}{224})$ $+ \frac{5}{224}\sqrt{210}e^3 \otimes e_7 + \frac{5}{224}\sqrt{210}e^4 \otimes e_6$	{134, 167, 2368}
841:12	$0, 0, 0, 0, \frac{5}{224}\sqrt{82}e^{12}, \frac{5}{224}\sqrt{137}e^{13}, \frac{5}{224}\sqrt{137}e^{14},$ $\frac{5}{224}\sqrt{114}e^{15} + \frac{5}{56}\sqrt{6}e^{34}$	$(-\frac{25}{224}, \frac{55}{224}, \frac{5}{448}, \frac{5}{448}, \frac{15}{112}, -\frac{45}{448}, -\frac{45}{448}, \frac{5}{224})$ $+ \frac{5}{224}\sqrt{210}e^3 \otimes e_7 - \frac{5}{224}\sqrt{210}e^4 \otimes e_6$	{134, 167, 2368}
841:12	$0, 0, 0, 0, \frac{5}{84}\sqrt{66}e^{12}, \frac{5}{84}\sqrt{141}e^{13}, \frac{5}{84}\sqrt{141}e^{14},$ $\frac{5}{14}\sqrt{3}e^{15} + \frac{5}{84}\sqrt{102}e^{34}$	$(\frac{5}{14}, -\frac{15}{28}, \frac{5}{56}, \frac{5}{56}, -\frac{5}{28}, \frac{25}{56}, \frac{25}{56}, \frac{5}{28})$ $+ \frac{5}{42}\sqrt{105}e^1 \otimes e_2$	{1348, 1678, 236}
841:12	$0, 0, 0, 0, \frac{20}{371}\sqrt{14}e^{12}, \frac{5}{371}\sqrt{1526}e^{13}, \frac{10}{371}\sqrt{119}e^{14},$ $\frac{20}{371}\sqrt{42}e^{15} + \frac{10}{53}\sqrt{3}e^{34}$	$(-\frac{10}{53}, \frac{25}{53}, \frac{10}{53}, -\frac{5}{53}, \frac{15}{53}, 0, -\frac{15}{53}, \frac{5}{53})$ $+ \frac{30}{371}\sqrt{70}e^3 \otimes e_7 + \frac{10}{371}\sqrt{21}e^2 \otimes e_6$	{1234, 368}
841:12	$0, 0, 0, 0, \frac{10}{259}\sqrt{407}e^{12}, \frac{5}{259}\sqrt{1562}e^{13}, \frac{10}{259}\sqrt{187}e^{14},$ $\frac{5}{259}\sqrt{66}e^{15} + \frac{5}{259}\sqrt{66}e^{34}$	$(-\frac{65}{259}, \frac{5}{7}, -\frac{25}{259}, \frac{80}{259}, \frac{120}{259}, -\frac{90}{259}, \frac{15}{259}, \frac{55}{259})$ $+ \frac{10}{259}\sqrt{1155}e^2 \otimes e_6$	{1238, 156, 2458, 346}
841:13	$0, 0, 0, 0, \frac{2}{1161}\sqrt{116321}e^{12}, \frac{4}{1161}\sqrt{37715}e^{13}, \frac{14}{1161}\sqrt{794}e^{14},$ $\frac{2}{1161}\sqrt{176665}e^{25} + \frac{2}{1161}\sqrt{69078}e^{34}$	$(-\frac{370}{1161}, \frac{47}{129}, -\frac{1}{1161}, \frac{53}{129}, \frac{53}{1161}, \frac{371}{1161}, \frac{107}{1161}, \frac{476}{1161})$ $+ \frac{4}{1161}\sqrt{94883}e^2 \otimes e_6$	{123478, 1568, 245, 367}
841:13	$0, 0, 0, 0, \frac{32}{1261}\sqrt{131}e^{12}, \frac{32}{1261}\sqrt{370}e^{13}, \frac{32}{1261}\sqrt{47}e^{14},$ $\frac{96}{1261}\sqrt{31}e^{25} + \frac{96}{1261}\sqrt{3}e^{34}$	$(-\frac{384}{1261}, \frac{400}{1261}, \frac{272}{1261}, \frac{144}{1261}, \frac{16}{1261}, -\frac{112}{1261}, -\frac{240}{1261}, \frac{32}{97})$ $- \frac{32}{1261}\sqrt{451}e^3 \otimes e_7 + \frac{32}{1261}\sqrt{646}e^2 \otimes e_6$	{12348, 15678, 2457, 36}
841:13	$0, 0, 0, 0, \frac{32}{1261}\sqrt{131}e^{12}, \frac{32}{1261}\sqrt{370}e^{13}, \frac{32}{1261}\sqrt{47}e^{14},$ $\frac{96}{1261}\sqrt{31}e^{25} + \frac{96}{1261}\sqrt{3}e^{34}$	$(-\frac{384}{1261}, \frac{400}{1261}, \frac{272}{1261}, \frac{144}{1261}, \frac{16}{1261}, -\frac{112}{1261}, -\frac{240}{1261}, \frac{32}{97})$ $+ \frac{32}{1261}\sqrt{451}e^3 \otimes e_7 + \frac{32}{1261}\sqrt{646}e^2 \otimes e_6$	{12348, 15678, 2457, 36}
841:13	$0, 0, 0, 0, \frac{10}{287}\sqrt{141}e^{12}, \frac{2}{287}\sqrt{9165}e^{13}, \frac{2}{287}\sqrt{9165}e^{14},$ $\frac{2}{287}\sqrt{141}e^{25} + \frac{4}{287}\sqrt{1833}e^{34}$	$(-\frac{50}{287}, \frac{79}{287}, \frac{170}{287}, -\frac{62}{287}, \frac{29}{287}, \frac{120}{287}, -\frac{16}{41}, \frac{108}{287})$ $+ \frac{4}{287}\sqrt{8178}e^3 \otimes e_7$	{12345, 12567, 134, 167, 2368, 2478, 3568, 4578}
841:13	$0, 0, 0, 0, \frac{10}{287}\sqrt{141}e^{12}, \frac{2}{287}\sqrt{9165}e^{13}, \frac{2}{287}\sqrt{9165}e^{14},$ $\frac{2}{287}\sqrt{141}e^{25} + \frac{4}{287}\sqrt{1833}e^{34}$	$(-\frac{50}{287}, \frac{79}{287}, \frac{170}{287}, -\frac{62}{287}, \frac{29}{287}, \frac{120}{287}, -\frac{16}{41}, \frac{108}{287})$ $- \frac{4}{287}\sqrt{8178}e^3 \otimes e_7$	{12345, 12567, 134, 167, 2368, 2478, 3568, 4578}
841:14	$0, 0, 0, 0, \frac{12}{1007}\sqrt{2167}e^{12}, \frac{240}{1007}\sqrt{11}e^{13}, \frac{12}{53}\sqrt{11}e^{24},$ $\frac{36}{1007}\sqrt{143}e^{15} + \frac{132}{1007}\sqrt{11}e^{34}$	$(\frac{84}{1007}, \frac{6}{1007}, -\frac{351}{1007}, \frac{525}{1007}, \frac{90}{1007}, -\frac{267}{1007}, \frac{531}{1007}, \frac{174}{1007})$ $+ \frac{36}{1007}\sqrt{1023}e^4 \otimes e_6$	{1347, 16, 23678, 248}
841:14	$0, 0, 0, 0, \frac{3}{3395}\sqrt{614}e^{12}, \frac{6}{3395}\sqrt{569}e^{13}, \frac{12}{3395}\sqrt{167}e^{24},$ $\frac{18}{3395}\sqrt{33}e^{15} + \frac{12}{3395}\sqrt{115}e^{34}$	$(-\frac{39}{3395}, \frac{12}{679}, \frac{18}{679}, -\frac{108}{3395}, \frac{3}{485}, \frac{51}{3395}, -\frac{48}{3395}, -\frac{18}{3395})$ $+ \frac{18}{3395}\sqrt{94}e^1 \otimes e_7 + \frac{9}{3395}\sqrt{310}e^2 \otimes e_6$	{12348, 2578}
841:14	$0, 0, 0, 0, \frac{1}{119}\sqrt{210}e^{12}, \frac{1}{119}\sqrt{1722}e^{13}, \frac{2}{119}\sqrt{483}e^{24},$ $\frac{3}{119}\sqrt{70}e^{15} + \frac{2}{17}\sqrt{3}e^{34}$	$(\frac{3}{17}, -\frac{4}{17}, -\frac{2}{17}, \frac{4}{17}, -\frac{1}{17}, \frac{1}{17}, 0, \frac{2}{17})$ $+ \frac{1}{119}\sqrt{1974}e^4 \otimes e_6 + \frac{2}{119}\sqrt{2478}e^1 \otimes e_7$	{168, 2367}
841:14	$0, 0, 0, 0, \frac{48}{1055}\sqrt{59}e^{12}, \frac{48}{1055}\sqrt{146}e^{13}, \frac{24}{1055}\sqrt{818}e^{24},$ $\frac{12}{1055}\sqrt{78}e^{15} + \frac{48}{1055}\sqrt{145}e^{34}$	$(\frac{294}{1055}, -\frac{69}{211}, \frac{36}{211}, \frac{63}{1055}, -\frac{51}{1055}, \frac{474}{1055}, -\frac{282}{1055}, \frac{243}{1055})$ $+ \frac{12}{1055}\sqrt{194}e^1 \otimes e_7$	{12348, 135, 2578, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:14	$0, 0, 0, 0, \frac{8}{509}\sqrt{123}e^{12}, \frac{8}{509}\sqrt{618}e^{13}, \frac{8}{509}\sqrt{573}e^{24},$ $\frac{24}{509}\sqrt{15}e^{15} + \frac{8}{509}\sqrt{69}e^{34}$	$(-\frac{72}{509}, \frac{124}{509}, \frac{100}{509}, -\frac{120}{509}, \frac{52}{509}, \frac{28}{509}, \frac{4}{509}, -\frac{20}{509})$ $+ \frac{8}{509}\sqrt{678}e^2 \otimes e_6 - \frac{8}{509}\sqrt{705}e^3 \otimes e_7$	{123458, 1467, 278, 356}
841:14	$0, 0, 0, 0, \frac{8}{509}\sqrt{123}e^{12}, \frac{8}{509}\sqrt{618}e^{13}, \frac{8}{509}\sqrt{573}e^{24},$ $\frac{24}{509}\sqrt{15}e^{15} + \frac{8}{509}\sqrt{69}e^{34}$	$(-\frac{72}{509}, \frac{124}{509}, \frac{100}{509}, -\frac{120}{509}, \frac{52}{509}, \frac{28}{509}, \frac{4}{509}, -\frac{20}{509})$ $+ \frac{8}{509}\sqrt{678}e^2 \otimes e_6 + \frac{8}{509}\sqrt{705}e^3 \otimes e_7$	{123458, 1467, 278, 356}
841:15	$0, 0, 0, 0, \frac{2}{377}\sqrt{7486}e^{12}, \frac{6}{377}\sqrt{266}e^{13}, \frac{2}{377}\sqrt{7486}e^{34},$ $\frac{2}{377}\sqrt{5738}e^{14} + \frac{8}{377}\sqrt{418}e^{25}$	$(\frac{71}{377}, \frac{4}{377}, -\frac{80}{377}, \frac{8}{377}, \frac{75}{377}, \frac{9}{377}, -\frac{72}{377}, \frac{79}{377})$ $+ \frac{38}{377}\sqrt{34}e^2 \otimes e_7$	{123468, 14578, 2345, 467}
841:15	$0, 0, 0, 0, \frac{34}{1571}\sqrt{347}e^{12}, \frac{34}{1571}\sqrt{93}e^{13}, \frac{17}{1571}\sqrt{1506}e^{34},$ $\frac{34}{1571}\sqrt{251}e^{14} + \frac{68}{1571}\sqrt{79}e^{25}$	$(\frac{204}{1571}, \frac{68}{1571}, -\frac{357}{1571}, \frac{136}{1571}, \frac{272}{1571}, -\frac{153}{1571}, -\frac{221}{1571}, \frac{340}{1571})$ $+ \frac{136}{1571}\sqrt{37}e^2 \otimes e_7 + \frac{17}{1571}\sqrt{354}e^4 \otimes e_6$	{14578, 2345}
841:15	$0, 0, 0, 0, \frac{14}{443}\sqrt{35}e^{12}, \frac{14}{443}\sqrt{85}e^{13}, \frac{7}{443}\sqrt{410}e^{34},$ $\frac{7}{443}\sqrt{202}e^{14} + \frac{14}{443}\sqrt{69}e^{25}$	$(\frac{70}{443}, -\frac{49}{443}, \frac{70}{443}, -\frac{98}{443}, \frac{21}{443}, \frac{140}{443}, -\frac{28}{443}, -\frac{28}{443})$ $+ \frac{63}{443}\sqrt{10}e^3 \otimes e_8 + \frac{7}{443}\sqrt{742}e^1 \otimes e_7$	{1268, 1568, 23567, 367}
841:15	$0, 0, 0, 0, \frac{14}{443}\sqrt{35}e^{12}, \frac{14}{443}\sqrt{85}e^{13}, \frac{7}{443}\sqrt{410}e^{34},$ $\frac{7}{443}\sqrt{202}e^{14} + \frac{14}{443}\sqrt{69}e^{25}$	$(\frac{70}{443}, -\frac{49}{443}, \frac{70}{443}, -\frac{98}{443}, \frac{21}{443}, \frac{140}{443}, -\frac{28}{443}, -\frac{28}{443})$ $- \frac{63}{443}\sqrt{10}e^3 \otimes e_8 + \frac{7}{443}\sqrt{742}e^1 \otimes e_7$	{1268, 1568, 23567, 367}
841:15	$0, 0, 0, 0, \frac{36}{1151}\sqrt{391}e^{12}, \frac{36}{1151}\sqrt{354}e^{13}, \frac{36}{1151}\sqrt{74}e^{34},$ $\frac{72}{1151}\sqrt{94}e^{14} + \frac{36}{1151}\sqrt{509}e^{25}$	$(-\frac{169}{1151}, \frac{251}{1151}, -\frac{228}{1151}, \frac{502}{1151}, \frac{82}{1151}, -\frac{397}{1151}, \frac{274}{1151}, \frac{333}{1151})$ $+ \frac{36}{1151}\sqrt{951}e^2 \otimes e_6$	{12348, 145678, 2457, 346}
841:15	$0, 0, 0, 0, \frac{30}{559}\sqrt{61}e^{12}, \frac{18}{559}\sqrt{427}e^{13}, \frac{3}{559}\sqrt{12322}e^{34},$ $\frac{6}{559}\sqrt{3965}e^{14} + \frac{12}{559}\sqrt{61}e^{25}$	$(-\frac{100}{559}, \frac{164}{559}, -\frac{121}{559}, \frac{328}{559}, \frac{64}{559}, -\frac{17}{559}, \frac{207}{559}, \frac{228}{559})$ $+ \frac{3}{559}\sqrt{55266}e^4 \otimes e_6$	{12568, 168, 2367, 3567}
841:15	$0, 0, 0, 0, \frac{10}{197}\sqrt{167}e^{12}, \frac{5}{197}\sqrt{334}e^{13}, \frac{10}{197}\sqrt{167}e^{34},$ $\frac{2}{197}\sqrt{1837}e^{14} + \frac{2}{197}\sqrt{501}e^{25}$	$(\frac{100}{197}, -\frac{16}{197}, -\frac{35}{197}, -\frac{32}{197}, \frac{84}{197}, \frac{65}{197}, -\frac{67}{197}, \frac{68}{197})$ $+ \frac{1}{197}\sqrt{52438}e^1 \otimes e_7$	{1268, 1568, 23567, 367}
841:15	$0, 0, 0, 0, \frac{42}{589}\sqrt{14}e^{12}, \frac{252}{589}\sqrt{2}e^{13}, \frac{42}{589}\sqrt{65}e^{34},$ $\frac{21}{589}\sqrt{110}e^{14} + \frac{42}{589}\sqrt{89}e^{25}$	$(-\frac{56}{589}, -\frac{35}{589}, \frac{315}{589}, -\frac{70}{589}, -\frac{91}{589}, \frac{259}{589}, \frac{245}{589}, -\frac{126}{589})$ $+ \frac{42}{589}\sqrt{237}e^3 \otimes e_8$	{12345, 134, 2478, 4578}
841:15	$0, 0, 0, 0, \frac{4}{29}\sqrt{2}e^{12}, \frac{1}{29}\sqrt{82}e^{13}, \frac{7}{29}\sqrt{2}e^{34},$ $\frac{2}{29}\sqrt{22}e^{14} + \frac{2}{29}\sqrt{3}e^{25}$	$(\frac{4}{29}, \frac{2}{29}, -\frac{8}{29}, \frac{4}{29}, \frac{6}{29}, -\frac{4}{29}, -\frac{4}{29}, \frac{8}{29})$ $+ \frac{1}{29}\sqrt{214}e^1 \otimes e_7 + \frac{3}{29}\sqrt{22}e^4 \otimes e_6$	{1234, 1345, 24578, 478}
841:15	$0, 0, 0, 0, \frac{4}{29}\sqrt{2}e^{12}, \frac{1}{29}\sqrt{82}e^{13}, \frac{7}{29}\sqrt{2}e^{34},$ $\frac{2}{29}\sqrt{22}e^{14} + \frac{2}{29}\sqrt{3}e^{25}$	$(\frac{4}{29}, \frac{2}{29}, -\frac{8}{29}, \frac{4}{29}, \frac{6}{29}, -\frac{4}{29}, -\frac{4}{29}, \frac{8}{29})$ $+ \frac{1}{29}\sqrt{214}e^1 \otimes e_7 - \frac{3}{29}\sqrt{22}e^4 \otimes e_6$	{1234, 1345, 24578, 478}
841:15	$0, 0, 0, 0, \frac{98}{467}e^{12}, \frac{7}{467}\sqrt{458}e^{13}, \frac{42}{467}\sqrt{10}e^{34},$ $\frac{7}{467}\sqrt{330}e^{14} + \frac{112}{467}e^{25}$	$(-\frac{98}{467}, \frac{35}{467}, \frac{70}{467}, \frac{70}{467}, -\frac{63}{467}, -\frac{28}{467}, \frac{140}{467}, -\frac{28}{467})$ $+ \frac{7}{467}\sqrt{770}e^4 \otimes e_6 + \frac{7}{467}\sqrt{898}e^3 \otimes e_8$	{12345, 134, 2478, 4578}
841:15	$0, 0, 0, 0, \frac{98}{467}e^{12}, \frac{7}{467}\sqrt{458}e^{13}, \frac{42}{467}\sqrt{10}e^{34},$ $\frac{7}{467}\sqrt{330}e^{14} + \frac{112}{467}e^{25}$	$(-\frac{98}{467}, \frac{35}{467}, \frac{70}{467}, \frac{70}{467}, -\frac{63}{467}, -\frac{28}{467}, \frac{140}{467}, -\frac{28}{467})$ $- \frac{7}{467}\sqrt{770}e^4 \otimes e_6 + \frac{7}{467}\sqrt{898}e^3 \otimes e_8$	{12345, 134, 2478, 4578}
841:15	$0, 0, 0, 0, \frac{14}{1013}\sqrt{231}e^{12}, \frac{7}{1013}\sqrt{1758}e^{13}, \frac{35}{1013}\sqrt{30}e^{34},$ $\frac{7}{1013}\sqrt{870}e^{14} + \frac{14}{1013}\sqrt{579}e^{25}$	$(-\frac{182}{1013}, \frac{70}{1013}, \frac{105}{1013}, \frac{140}{1013}, -\frac{112}{1013}, -\frac{77}{1013}, \frac{245}{1013}, -\frac{42}{1013})$ $+ \frac{7}{1013}\sqrt{2418}e^3 \otimes e_8 + \frac{98}{1013}\sqrt{15}e^2 \otimes e_6$	{145678, 346}
841:15	$0, 0, 0, 0, \frac{14}{2423}\sqrt{399}e^{12}, \frac{7}{2423}\sqrt{174}e^{13}, \frac{7}{2423}\sqrt{2066}e^{34},$ $\frac{7}{2423}\sqrt{1178}e^{14} + \frac{14}{2423}\sqrt{502}e^{25}$	$(\frac{154}{2423}, -\frac{84}{2423}, \frac{35}{2423}, -\frac{168}{2423}, \frac{70}{2423}, \frac{189}{2423}, -\frac{133}{2423}, -\frac{14}{2423})$ $+ \frac{14}{2423}\sqrt{721}e^2 \otimes e_7 + \frac{7}{2423}\sqrt{1410}e^3 \otimes e_8$	{14578, 2345}
841:15	$0, 0, 0, 0, \frac{50}{2947}\sqrt{447}e^{12}, \frac{25}{2947}\sqrt{1390}e^{13}, \frac{50}{2947}\sqrt{199}e^{34},$ $\frac{50}{2947}\sqrt{215}e^{14} + \frac{50}{2947}\sqrt{381}e^{25}$	$(\frac{300}{2947}, \frac{200}{2947}, -\frac{725}{2947}, \frac{400}{2947}, \frac{500}{2947}, -\frac{425}{2947}, -\frac{325}{2947}, \frac{100}{421})$ $+ \frac{100}{2947}\sqrt{186}e^2 \otimes e_6 + \frac{25}{2947}\sqrt{2182}e^1 \otimes e_7$	{12348, 2457}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:16	$0, 0, 0, 0, \frac{4}{101}\sqrt{3}e^{12}, \frac{1}{505}\sqrt{366}e^{13}, \frac{2}{505}\sqrt{366}e^{34},$ $\frac{2}{505}\sqrt{366}e^{15} + \frac{2}{505}\sqrt{249}e^{24}$	$(-\frac{2}{101}, \frac{24}{505}, \frac{7}{505}, -\frac{4}{101}, \frac{14}{505}, -\frac{3}{505}, -\frac{13}{505}, \frac{4}{505})$ $+ \frac{3}{505}\sqrt{210}e^1 \otimes e_7 + \frac{6}{505}\sqrt{22}e^3 \otimes e_8$	{13456, 245678}
841:16	$0, 0, 0, 0, \frac{2}{85}\sqrt{330}e^{12}, \frac{2}{85}\sqrt{759}e^{13}, \frac{2}{85}\sqrt{429}e^{34},$ $\frac{2}{85}\sqrt{429}e^{15} + \frac{2}{85}\sqrt{759}e^{24}$	$(-\frac{2}{17}, \frac{3}{85}, \frac{49}{85}, -\frac{4}{17}, -\frac{7}{85}, \frac{39}{85}, \frac{29}{85}, -\frac{1}{5})$ $+ \frac{6}{85}\sqrt{253}e^3 \otimes e_8$	{12345, 14678, 2346, 4578}
841:16	$0, 0, 0, 0, \frac{2}{17}\sqrt{3}e^{12}, \frac{4}{17}\sqrt{3}e^{13}, \frac{1}{17}\sqrt{15}e^{34},$ $\frac{1}{17}\sqrt{15}e^{15} + \frac{4}{17}\sqrt{3}e^{24}$	$(-\frac{2}{17}, \frac{4}{17}, \frac{3}{17}, -\frac{4}{17}, \frac{2}{17}, \frac{1}{17}, -\frac{1}{17}, 0)$ $+ \frac{1}{17}\sqrt{42}e^3 \otimes e_8 + \frac{1}{17}\sqrt{51}e^2 \otimes e_6$	{278, 356}
841:16	$0, 0, 0, 0, \frac{42}{473}e^{12}, \frac{168}{473}e^{13}, \frac{7}{473}\sqrt{438}e^{34},$ $\frac{14}{473}\sqrt{102}e^{15} + \frac{14}{473}\sqrt{237}e^{24}$	$(\frac{28}{473}, \frac{84}{473}, -\frac{119}{473}, \frac{56}{473}, \frac{112}{473}, -\frac{91}{473}, -\frac{63}{473}, \frac{140}{473})$ $+ \frac{21}{473}\sqrt{158}e^4 \otimes e_6 + \frac{42}{473}\sqrt{31}e^2 \otimes e_7$	{12568, 3567}
841:16	$0, 0, 0, 0, \frac{2}{25}\sqrt{30}e^{12}, \frac{1}{25}\sqrt{78}e^{13}, \frac{2}{25}\sqrt{33}e^{34},$ $\frac{2}{25}\sqrt{33}e^{15} + \frac{2}{25}\sqrt{33}e^{24}$	$(\frac{2}{25}, 0, -\frac{1}{5}, \frac{4}{25}, \frac{2}{25}, -\frac{3}{25}, -\frac{1}{25}, \frac{4}{25})$ $+ \frac{6}{25}e^2 \otimes e_6 + \frac{9}{25}\sqrt{2}e^1 \otimes e_7$	{123468, 245678}
841:16	$0, 0, 0, 0, \frac{1}{21}\sqrt{78}e^{12}, \frac{2}{7}e^{13}, \frac{1}{21}\sqrt{78}e^{34},$ $\frac{1}{21}\sqrt{78}e^{15} + \frac{2}{7}\sqrt{2}e^{24}$	$(\frac{1}{21}, \frac{2}{21}, -\frac{4}{21}, \frac{2}{21}, \frac{1}{7}, -\frac{1}{7}, -\frac{2}{21}, \frac{4}{21})$ $+ \frac{2}{7}\sqrt{3}e^1 \otimes e_7$	{123468, 13456, 245678, 467}
841:16	$0, 0, 0, 0, \frac{6}{745}\sqrt{330}e^{12}, \frac{6}{745}\sqrt{534}e^{13}, \frac{3}{745}\sqrt{66}e^{34},$ $\frac{18}{745}\sqrt{19}e^{15} + \frac{6}{745}\sqrt{534}e^{24}$	$(\frac{6}{149}, -\frac{84}{745}, \frac{3}{745}, \frac{12}{149}, -\frac{54}{745}, \frac{33}{745}, \frac{63}{745}, -\frac{24}{745})$ $+ \frac{18}{745}\sqrt{53}e^3 \otimes e_8 + \frac{9}{149}\sqrt{10}e^4 \otimes e_6$	{12568, 3567}
841:16	$0, 0, 0, 0, \frac{2}{19}\sqrt{6}e^{12}, \frac{2}{19}\sqrt{66}e^{13}, \frac{2}{19}\sqrt{39}e^{34},$ $\frac{2}{19}\sqrt{39}e^{15} + \frac{2}{19}\sqrt{66}e^{24}$	$(-\frac{1}{19}, \frac{9}{19}, -\frac{2}{19}, -\frac{2}{19}, \frac{8}{19}, -\frac{3}{19}, -\frac{4}{19}, \frac{7}{19})$ $+ \frac{6}{19}\sqrt{11}e^2 \otimes e_6$	{12358, 167, 278, 356}
841:16	$0, 0, 0, 0, \frac{2}{19}\sqrt{39}e^{12}, \frac{2}{19}\sqrt{66}e^{13}, \frac{2}{19}\sqrt{6}e^{34},$ $\frac{2}{19}\sqrt{39}e^{15} + \frac{2}{19}\sqrt{66}e^{24}$	$(\frac{9}{38}, -\frac{2}{19}, -\frac{15}{38}, \frac{9}{19}, \frac{5}{38}, -\frac{3}{19}, \frac{3}{38}, \frac{7}{19})$ $+ \frac{6}{19}\sqrt{11}e^4 \otimes e_6$	{125678, 167, 2368, 356}
841:16	$0, 0, 0, 0, \frac{2}{25}\sqrt{33}e^{12}, \frac{1}{25}\sqrt{78}e^{13}, \frac{2}{25}\sqrt{30}e^{34},$ $\frac{2}{25}\sqrt{33}e^{15} + \frac{2}{25}\sqrt{33}e^{24}$	$(0, \frac{4}{25}, -\frac{3}{25}, 0, \frac{4}{25}, -\frac{3}{25}, -\frac{3}{25}, \frac{4}{25})$ $+ \frac{6}{25}e^4 \otimes e_6 + \frac{9}{25}\sqrt{2}e^1 \otimes e_7$	{123468, 13456, 245678, 467}
841:16	$0, 0, 0, 0, \frac{2}{25}\sqrt{33}e^{12}, \frac{1}{25}\sqrt{78}e^{13}, \frac{2}{25}\sqrt{30}e^{34},$ $\frac{2}{25}\sqrt{33}e^{15} + \frac{2}{25}\sqrt{33}e^{24}$	$(0, \frac{4}{25}, -\frac{3}{25}, 0, \frac{4}{25}, -\frac{3}{25}, -\frac{3}{25}, \frac{4}{25})$ $- \frac{6}{25}e^4 \otimes e_6 + \frac{9}{25}\sqrt{2}e^1 \otimes e_7$	{123468, 13456, 245678, 467}
841:17	$0, 0, 0, 0, \frac{10}{59}\sqrt{6}e^{12}, \frac{10}{59}\sqrt{6}e^{13}, \frac{5}{59}\sqrt{66}e^{23},$ $\frac{10}{59}\sqrt{15}e^{14} + \frac{20}{59}\sqrt{2}e^{25}$	$(0, \frac{10}{59}, -\frac{15}{59}, \frac{20}{59}, \frac{10}{59}, -\frac{15}{59}, -\frac{5}{59}, \frac{20}{59})$ $+ \frac{10}{59}\sqrt{22}e^4 \otimes e_7 + \frac{15}{59}\sqrt{2}e^2 \otimes e_6$	{12578, 13678}
841:17	$0, 0, 0, 0, \frac{2}{21}\sqrt{6}e^{12}, \frac{1}{21}\sqrt{114}e^{13}, \frac{1}{21}\sqrt{6}e^{23},$ $\frac{1}{21}\sqrt{6}e^{14} + \frac{2}{7}\sqrt{2}e^{25}$	$(\frac{1}{7}, -\frac{1}{7}, \frac{2}{7}, -\frac{2}{7}, 0, \frac{3}{7}, \frac{1}{7}, -\frac{1}{7})$ $+ \frac{2}{7}\sqrt{5}e^3 \otimes e_8 + \frac{5}{21}\sqrt{6}e^1 \otimes e_4$	{12678, 1568}
841:17	$0, 0, 0, 0, \frac{14}{65}\sqrt{6}e^{12}, \frac{14}{65}\sqrt{6}e^{13}, \frac{6}{65}\sqrt{70}e^{23},$ $\frac{6}{65}\sqrt{70}e^{14} + \frac{28}{65}\sqrt{2}e^{25}$	$(\frac{3}{65}, \frac{2}{13}, -\frac{18}{65}, \frac{4}{13}, \frac{1}{5}, -\frac{3}{13}, -\frac{8}{65}, \frac{23}{65})$ $+ \frac{2}{65}\sqrt{826}e^4 \otimes e_7$	{12578, 13678, 267, 357}
841:17	$0, 0, 0, 0, \frac{4}{61}\sqrt{66}e^{12}, \frac{2}{61}\sqrt{286}e^{13}, \frac{2}{61}\sqrt{374}e^{23},$ $\frac{2}{61}\sqrt{374}e^{14} + \frac{6}{61}\sqrt{22}e^{25}$	$(-\frac{7}{61}, -\frac{3}{61}, \frac{31}{61}, -\frac{6}{61}, -\frac{10}{61}, \frac{24}{61}, \frac{28}{61}, -\frac{13}{61})$ $+ \frac{20}{61}\sqrt{11}e^3 \otimes e_8$	{12345, 1347, 2478, 458}
841:17	$0, 0, 0, 0, \frac{152}{2219}\sqrt{6}e^{12}, \frac{38}{2219}\sqrt{322}e^{13}, \frac{285}{2219}\sqrt{2}e^{23},$ $\frac{38}{2219}\sqrt{65}e^{14} + \frac{38}{2219}\sqrt{354}e^{25}$	$(-\frac{456}{2219}, \frac{190}{2219}, \frac{285}{2219}, \frac{380}{2219}, -\frac{38}{317}, -\frac{171}{2219}, \frac{475}{2219}, -\frac{76}{2219})$ $+ \frac{19}{2219}\sqrt{2130}e^2 \otimes e_6 + \frac{76}{2219}\sqrt{113}e^3 \otimes e_8$	{14568, 3467}
841:17	$0, 0, 0, 0, \frac{1}{24}\sqrt{399}e^{12}, \frac{1}{24}\sqrt{399}e^{13}, \frac{7}{24}\sqrt{6}e^{23},$ $\frac{7}{24}\sqrt{6}e^{14} + \frac{1}{4}\sqrt{7}e^{25}$	$(\frac{1}{2}, -\frac{3}{16}, \frac{1}{16}, -\frac{3}{8}, \frac{5}{16}, \frac{9}{16}, -\frac{1}{8}, \frac{1}{8})$ $+ \frac{1}{12}\sqrt{210}e^1 \otimes e_4$	{234567, 245, 346, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:17	$0, 0, 0, 0, \frac{58}{2731}\sqrt{53}e^{12}, \frac{29}{2731}\sqrt{898}e^{13}, \frac{116}{2731}\sqrt{70}e^{23},$ $\frac{58}{2731}\sqrt{465}e^{14} + \frac{58}{2731}\sqrt{201}e^{25}$	$(\frac{348}{2731}, \frac{232}{2731}, -\frac{725}{2731}, \frac{464}{2731}, \frac{580}{2731}, -\frac{377}{2731}, -\frac{493}{2731}, \frac{812}{2731})$ $+ \frac{29}{2731}\sqrt{2674}e^1 \otimes e_7 + \frac{58}{2731}\sqrt{555}e^4 \otimes e_6$	{168, 3567}
841:17	$0, 0, 0, 0, \frac{6}{59}e^{12}, \frac{1}{59}\sqrt{13}e^{13}, \frac{8}{59}e^{23}, \frac{8}{59}e^{14} + \frac{5}{59}e^{25}$	$(-\frac{4}{59}, \frac{2}{59}, \frac{1}{59}, \frac{4}{59}, -\frac{2}{59}, -\frac{3}{59}, \frac{3}{59}, 0)$ $+ \frac{1}{59}\sqrt{46}e^3 \otimes e_8 + \frac{1}{59}\sqrt{65}e^4 \otimes e_7$	{12578, 357}
841:17	$0, 0, 0, 0, \frac{14}{913}\sqrt{114}e^{12}, \frac{63}{913}\sqrt{10}e^{13}, \frac{14}{913}\sqrt{438}e^{23},$ $\frac{14}{913}\sqrt{438}e^{14} + \frac{14}{913}\sqrt{33}e^{25}$	$(\frac{140}{913}, -\frac{98}{913}, \frac{91}{913}, -\frac{196}{913}, \frac{42}{913}, \frac{21}{913}, -\frac{7}{913}, -\frac{56}{913})$ $+ \frac{14}{913}\sqrt{633}e^3 \otimes e_8 + \frac{7}{913}\sqrt{2370}e^1 \otimes e_7$	{168, 3567}
841:17	$0, 0, 0, 0, \frac{1}{76}\sqrt{793}e^{12}, \frac{1}{76}\sqrt{793}e^{13}, \frac{5}{76}\sqrt{122}e^{23},$ $\frac{5}{76}\sqrt{122}e^{14} + \frac{1}{38}\sqrt{366}e^{25}$	$(\frac{1}{2}, -\frac{11}{152}, -\frac{35}{152}, -\frac{11}{76}, \frac{65}{152}, \frac{41}{152}, -\frac{23}{76}, \frac{27}{76})$ $+ \frac{1}{38}\sqrt{1891}e^1 \otimes e_7$	{1234, 1456, 24578, 34678}
841:17	$0, 0, 0, 0, \frac{91}{701}\sqrt{6}e^{12}, \frac{13}{701}\sqrt{337}e^{13}, \frac{65}{701}\sqrt{10}e^{23},$ $\frac{13}{701}\sqrt{435}e^{14} + \frac{39}{701}\sqrt{6}e^{25}$	$(-\frac{169}{701}, \frac{65}{701}, \frac{130}{701}, \frac{130}{701}, -\frac{104}{701}, -\frac{39}{701}, \frac{195}{701}, -\frac{39}{701})$ $+ \frac{13}{701}\sqrt{555}e^4 \otimes e_6 + \frac{13}{701}\sqrt{707}e^3 \otimes e_8$	{12345, 1347, 2478, 458}
841:17	$0, 0, 0, 0, \frac{91}{701}\sqrt{6}e^{12}, \frac{13}{701}\sqrt{337}e^{13}, \frac{65}{701}\sqrt{10}e^{23},$ $\frac{13}{701}\sqrt{435}e^{14} + \frac{39}{701}\sqrt{6}e^{25}$	$(-\frac{169}{701}, \frac{65}{701}, \frac{130}{701}, \frac{130}{701}, -\frac{104}{701}, -\frac{39}{701}, \frac{195}{701}, -\frac{39}{701})$ $- \frac{13}{701}\sqrt{555}e^4 \otimes e_6 + \frac{13}{701}\sqrt{707}e^3 \otimes e_8$	{12345, 1347, 2478, 458}
841:17	$0, 0, 0, 0, \frac{22}{523}\sqrt{61}e^{12}, \frac{22}{523}\sqrt{61}e^{13}, \frac{11}{523}\sqrt{122}e^{23},$ $\frac{22}{523}\sqrt{13}e^{14} + \frac{88}{523}\sqrt{3}e^{25}$	$(\frac{44}{523}, \frac{44}{523}, -\frac{121}{523}, \frac{88}{523}, \frac{88}{523}, -\frac{77}{523}, -\frac{77}{523}, \frac{132}{523})$ $+ \frac{220}{523}e^1 \otimes e_7 - \frac{33}{523}\sqrt{58}e^2 \otimes e_6$	{12348, 14568, 2457, 3467}
841:17	$0, 0, 0, 0, \frac{22}{523}\sqrt{61}e^{12}, \frac{22}{523}\sqrt{61}e^{13}, \frac{11}{523}\sqrt{122}e^{23},$ $\frac{22}{523}\sqrt{13}e^{14} + \frac{88}{523}\sqrt{3}e^{25}$	$(\frac{44}{523}, \frac{44}{523}, -\frac{121}{523}, \frac{88}{523}, \frac{88}{523}, -\frac{77}{523}, -\frac{77}{523}, \frac{132}{523})$ $+ \frac{220}{523}e^1 \otimes e_7 + \frac{33}{523}\sqrt{58}e^2 \otimes e_6$	{12348, 14568, 2457, 3467}
841:17	$0, 0, 0, 0, \frac{6}{227}\sqrt{559}e^{12}, \frac{6}{227}\sqrt{559}e^{13}, \frac{1}{227}\sqrt{2838}e^{23},$ $\frac{6}{227}\sqrt{4773}e^{14} + \frac{4}{227}\sqrt{1677}e^{25}$	$(-\frac{44}{227}, \frac{56}{227}, -\frac{29}{227}, \frac{112}{227}, \frac{12}{227}, -\frac{73}{227}, \frac{27}{227}, \frac{68}{227})$ $+ \frac{9}{227}\sqrt{602}e^2 \otimes e_6$	{123478, 145678, 245, 346}
841:17	$0, 0, 0, 0, \frac{2}{231}\sqrt{534}e^{12}, \frac{2}{231}\sqrt{534}e^{13}, \frac{2}{231}\sqrt{258}e^{23},$ $\frac{4}{231}\sqrt{123}e^{14} + \frac{2}{77}\sqrt{58}e^{25}$	$(\frac{6}{77}, \frac{1}{77}, -\frac{9}{77}, \frac{2}{77}, \frac{1}{11}, -\frac{3}{77}, -\frac{8}{77}, \frac{8}{77})$ $+ \frac{2}{231}\sqrt{570}e^1 \otimes e_4 + \frac{2}{77}\sqrt{78}e^2 \otimes e_6$	{245, 346}
841:17	$0, 0, 0, 0, \frac{12}{125}\sqrt{33}e^{12}, \frac{66}{125}\sqrt{2}e^{13}, \frac{2}{125}\sqrt{330}e^{23},$ $\frac{6}{125}\sqrt{286}e^{14} + \frac{2}{125}\sqrt{462}e^{25}$	$(-\frac{31}{125}, \frac{43}{125}, -\frac{3}{25}, \frac{86}{125}, \frac{12}{125}, -\frac{46}{125}, \frac{28}{125}, \frac{11}{25})$ $+ \frac{12}{125}\sqrt{187}e^4 \otimes e_6$	{125678, 168, 236, 3567}
841:18	$0, 0, 0, 0, \frac{2}{5}e^{12}, \frac{3}{35}\sqrt{14}e^{13}, \frac{2}{35}\sqrt{35}e^{14},$ $\frac{2}{35}\sqrt{35}e^{15} + \frac{2}{35}\sqrt{21}e^{23}$	$(0, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{2}{35}\sqrt{42}e^2 \otimes e_6 + \frac{2}{35}\sqrt{70}e^1 \otimes e_4$	{1238, 346}
841:18	$0, 0, 0, 0, \frac{3}{77}\sqrt{6}e^{12}, \frac{1}{77}\sqrt{46}e^{13}, \frac{6}{77}\sqrt{2}e^{14},$ $\frac{3}{77}\sqrt{6}e^{15} + \frac{2}{77}\sqrt{13}e^{23}$	$(-\frac{1}{77}, \frac{5}{77}, -\frac{2}{77}, -\frac{2}{77}, \frac{4}{77}, -\frac{3}{77}, -\frac{3}{77}, \frac{3}{77})$ $+ \frac{1}{77}\sqrt{86}e^3 \otimes e_7 + \frac{2}{77}\sqrt{15}e^4 \otimes e_6$	{125678, 167, 2478, 457}
841:18	$0, 0, 0, 0, \frac{3}{77}\sqrt{6}e^{12}, \frac{1}{77}\sqrt{46}e^{13}, \frac{6}{77}\sqrt{2}e^{14},$ $\frac{3}{77}\sqrt{6}e^{15} + \frac{2}{77}\sqrt{13}e^{23}$	$(-\frac{1}{77}, \frac{5}{77}, -\frac{2}{77}, -\frac{2}{77}, \frac{4}{77}, -\frac{3}{77}, -\frac{3}{77}, \frac{3}{77})$ $+ \frac{1}{77}\sqrt{86}e^3 \otimes e_7 - \frac{2}{77}\sqrt{15}e^4 \otimes e_6$	{125678, 167, 2478, 457}
841:18	$0, 0, 0, 0, \frac{3}{29}\sqrt{2}e^{12}, \frac{1}{29}\sqrt{2}e^{13}, \frac{2}{29}\sqrt{7}e^{14},$ $\frac{1}{29}\sqrt{10}e^{15} + \frac{2}{29}\sqrt{7}e^{23}$	$(\frac{1}{29}, -\frac{3}{29}, \frac{2}{29}, 0, -\frac{2}{29}, \frac{3}{29}, \frac{1}{29}, -\frac{1}{29})$ $+ \frac{1}{29}\sqrt{30}e^3 \otimes e_7 + \frac{2}{29}\sqrt{6}e^4 \otimes e_8$	{125678, 457}
841:18	$0, 0, 0, 0, \frac{4}{7}e^{12}, \frac{2}{7}e^{13}, \frac{1}{7}\sqrt{5}e^{14}, \frac{2}{7}\sqrt{3}e^{15} + \frac{1}{7}\sqrt{5}e^{23}$	$(\frac{1}{14}, \frac{1}{7}, \frac{1}{7}, -\frac{5}{14}, \frac{3}{14}, \frac{3}{14}, -\frac{2}{7}, \frac{2}{7})$ $+ \frac{2}{7}\sqrt{3}e^2 \otimes e_7 + \frac{5}{7}e^1 \otimes e_4$	{1238, 234568}
841:18	$0, 0, 0, 0, \frac{1}{2}\sqrt{2}e^{12}, \frac{1}{2}e^{13}, \frac{1}{4}\sqrt{6}e^{14}, \frac{1}{2}\sqrt{2}e^{15} + \frac{1}{4}\sqrt{6}e^{23}$	$(\frac{1}{8}, 0, \frac{1}{4}, -\frac{3}{8}, \frac{1}{8}, \frac{3}{8}, -\frac{1}{4}, \frac{1}{4})$ $+ \frac{1}{4}\sqrt{14}e^1 \otimes e_4$	{1238, 135, 234568, 346}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:18	$0, 0, 0, 0, \frac{2}{35}\sqrt{21}e^{12}, \frac{3}{35}\sqrt{14}e^{13}, \frac{2}{35}\sqrt{35}e^{14},$ $\frac{2}{35}\sqrt{35}e^{15} + \frac{2}{5}e^{23}$	$(0, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{2}{35}\sqrt{42}e^2 \otimes e_6 + \frac{2}{35}\sqrt{70}e^3 \otimes e_7$	{167, 2478}
841:18	$0, 0, 0, 0, \frac{4}{77}\sqrt{7}e^{12}, \frac{2}{77}\sqrt{14}e^{13}, \frac{2}{77}\sqrt{434}e^{14},$ $\frac{2}{77}\sqrt{210}e^{15} + \frac{2}{11}\sqrt{6}e^{23}$	$(-\frac{1}{11}, \frac{4}{11}, -\frac{2}{11}, \frac{1}{11}, \frac{3}{11}, -\frac{3}{11}, 0, \frac{2}{11})$ $+ \frac{2}{77}\sqrt{546}e^2 \otimes e_7 + \frac{4}{77}\sqrt{105}e^4 \otimes e_6$	{167, 457}
841:18	$0, 0, 0, 0, \frac{8}{155}\sqrt{151}e^{12}, \frac{1}{155}\sqrt{11174}e^{13}, \frac{2}{155}\sqrt{755}e^{14},$ $\frac{2}{155}\sqrt{755}e^{15} + \frac{8}{155}\sqrt{151}e^{23}$	$(-\frac{4}{31}, \frac{91}{155}, -\frac{8}{31}, \frac{39}{155}, \frac{71}{155}, -\frac{12}{31}, \frac{19}{155}, \frac{51}{155})$ $+ \frac{6}{155}\sqrt{1057}e^2 \otimes e_6$	{123, 12347, 3468, 3678}
841:18	$0, 0, 0, 0, \frac{1}{74}\sqrt{2117}e^{12}, \frac{1}{74}\sqrt{3431}e^{13}, \frac{1}{74}\sqrt{3869}e^{14},$ $\frac{1}{74}\sqrt{2117}e^{15} + \frac{1}{37}\sqrt{219}e^{23}$	$(-\frac{17}{148}, \frac{21}{74}, -\frac{17}{74}, \frac{95}{148}, \frac{25}{148}, -\frac{51}{148}, \frac{39}{74}, \frac{2}{37})$ $+ \frac{1}{74}\sqrt{8979}e^4 \otimes e_6$	{125678, 167, 2478, 457}
841:18	$0, 0, 0, 0, \frac{8}{61}\sqrt{11}e^{12}, \frac{2}{61}\sqrt{286}e^{13}, \frac{10}{61}\sqrt{22}e^{14},$ $\frac{6}{61}\sqrt{22}e^{15} + \frac{10}{61}\sqrt{22}e^{23}$	$(-\frac{1}{61}, \frac{28}{61}, -\frac{2}{61}, -\frac{15}{61}, \frac{27}{61}, -\frac{3}{61}, -\frac{16}{61}, \frac{26}{61})$ $+ \frac{2}{61}\sqrt{1122}e^2 \otimes e_7$	{12346, 135678, 235, 3478}
841:18	$0, 0, 0, 0, \frac{29}{1919}\sqrt{30}e^{12}, \frac{29}{1919}\sqrt{106}e^{13}, \frac{58}{1919}\sqrt{201}e^{14},$ $\frac{58}{1919}\sqrt{38}e^{15} + \frac{203}{1919}\sqrt{26}e^{23}$	$(-\frac{174}{1919}, \frac{319}{1919}, -\frac{348}{1919}, \frac{812}{1919}, \frac{145}{1919}, -\frac{522}{1919}, \frac{638}{1919}, -\frac{29}{1919})$ $+ \frac{29}{1919}\sqrt{1410}e^2 \otimes e_6 + \frac{58}{1919}\sqrt{489}e^4 \otimes e_8$	{13678, 2347}
841:18	$0, 0, 0, 0, \frac{1}{37}\sqrt{6}e^{12}, \frac{3}{37}\sqrt{6}e^{13}, \frac{4}{37}\sqrt{6}e^{14},$ $\frac{1}{37}\sqrt{6}e^{15} + \frac{4}{37}\sqrt{6}e^{23}$	$(-\frac{2}{37}, \frac{5}{37}, -\frac{4}{37}, \frac{4}{37}, \frac{3}{37}, -\frac{6}{37}, \frac{2}{37}, \frac{1}{37})$ $+ \frac{1}{37}\sqrt{102}e^2 \otimes e_7 + \frac{1}{37}\sqrt{102}e^4 \otimes e_8$	{268, 4567}
841:18	$0, 0, 0, 0, \frac{1}{4}\sqrt{6}e^{12}, \frac{1}{2}e^{13}, \frac{1}{2}\sqrt{2}e^{14}, \frac{1}{4}\sqrt{6}e^{15} + \frac{1}{2}\sqrt{2}e^{23}$	$(\frac{1}{8}, 0, \frac{1}{4}, -\frac{3}{8}, \frac{1}{8}, \frac{3}{8}, -\frac{1}{4}, \frac{1}{4})$ $+ \frac{1}{4}\sqrt{14}e^3 \otimes e_7$	{125678, 167, 2478, 457}
841:18	$0, 0, 0, 0, \frac{6}{61}\sqrt{22}e^{12}, \frac{2}{61}\sqrt{286}e^{13}, \frac{10}{61}\sqrt{22}e^{14},$ $\frac{8}{61}\sqrt{11}e^{15} + \frac{10}{61}\sqrt{22}e^{23}$	$(-\frac{1}{61}, -\frac{6}{61}, -\frac{2}{61}, \frac{36}{61}, -\frac{7}{61}, -\frac{3}{61}, \frac{35}{61}, -\frac{8}{61})$ $+ \frac{2}{61}\sqrt{1122}e^4 \otimes e_8$	{123456, 13678, 2347, 358}
841:19	$0, 0, 0, 0, \frac{2}{27}\sqrt{23}e^{12}, \frac{2}{27}\sqrt{23}e^{13}, \frac{4}{27}\sqrt{23}e^{24},$ $\frac{4}{27}\sqrt{23}e^{15} + \frac{1}{27}\sqrt{230}e^{23}$	$(\frac{1}{27}, -\frac{2}{9}, \frac{2}{27}, \frac{19}{27}, -\frac{5}{27}, \frac{1}{9}, \frac{13}{27}, -\frac{4}{27})$ $+ \frac{2}{27}\sqrt{253}e^4 \otimes e_8$	{123456, 1368, 234, 358}
841:19	$0, 0, 0, 0, \frac{1}{86}\sqrt{2867}e^{12}, \frac{1}{86}\sqrt{4209}e^{13}, \frac{1}{43}\sqrt{915}e^{24},$ $\frac{3}{86}\sqrt{183}e^{15} + \frac{1}{86}\sqrt{2379}e^{23}$	$(\frac{8}{43}, -\frac{25}{172}, \frac{16}{43}, -\frac{33}{172}, \frac{7}{172}, \frac{24}{43}, -\frac{29}{86}, \frac{39}{172})$ $+ \frac{1}{86}\sqrt{8845}e^3 \otimes e_7$	{125678, 1467, 278, 457}
841:19	$0, 0, 0, 0, \frac{1}{413}\sqrt{238}e^{12}, \frac{1}{413}\sqrt{2086}e^{13}, \frac{2}{413}\sqrt{609}e^{24},$ $\frac{5}{413}\sqrt{42}e^{15} + \frac{6}{59}e^{23}$	$(\frac{1}{59}, -\frac{4}{59}, \frac{2}{59}, \frac{4}{59}, -\frac{3}{59}, \frac{3}{59}, 0, -\frac{2}{59})$ $+ \frac{1}{413}\sqrt{2310}e^4 \otimes e_6 + \frac{1}{413}\sqrt{2954}e^1 \otimes e_7$	{12348, 235678}
841:19	$0, 0, 0, 0, \frac{17}{2891}\sqrt{1110}e^{12}, \frac{34}{2891}\sqrt{381}e^{13}, \frac{204}{2891}\sqrt{13}e^{24},$ $\frac{102}{2891}\sqrt{29}e^{15} + \frac{68}{2891}\sqrt{59}e^{23}$	$(\frac{17}{2891}, \frac{340}{2891}, \frac{34}{2891}, -\frac{612}{2891}, \frac{51}{413}, \frac{51}{2891}, -\frac{272}{2891}, \frac{374}{2891})$ $+ \frac{34}{2891}\sqrt{766}e^1 \otimes e_7 + \frac{51}{2891}\sqrt{230}e^2 \otimes e_6$	{12348, 3467}
841:19	$0, 0, 0, 0, \frac{380}{3413}\sqrt{2}e^{12}, \frac{38}{3413}\sqrt{609}e^{13}, \frac{38}{3413}\sqrt{519}e^{24},$ $\frac{114}{3413}\sqrt{30}e^{15} + \frac{19}{3413}\sqrt{1398}e^{23}$	$(\frac{19}{3413}, \frac{418}{3413}, \frac{38}{3413}, -\frac{741}{3413}, \frac{437}{3413}, \frac{57}{3413}, -\frac{323}{3413}, \frac{456}{3413})$ $+ \frac{1026}{3413}e^2 \otimes e_6 + \frac{38}{3413}\sqrt{829}e^3 \otimes e_7$	{1467, 278}
841:19	$0, 0, 0, 0, \frac{2}{1027}\sqrt{79130}e^{12}, \frac{2}{1027}\sqrt{187982}e^{13}, \frac{2}{1027}\sqrt{181806}e^{24},$ $\frac{8}{1027}\sqrt{1158}e^{15} + \frac{2}{1027}\sqrt{69866}e^{23}$	$(-\frac{72}{1027}, \frac{77}{1027}, -\frac{144}{1027}, \frac{556}{1027}, \frac{5}{1027}, -\frac{216}{1027}, \frac{633}{1027}, -\frac{67}{1027})$ $+ \frac{2}{1027}\sqrt{333890}e^4 \otimes e_6$	{123458, 1347, 23678, 356}
841:19	$0, 0, 0, 0, \frac{1}{551}\sqrt{56242}e^{12}, \frac{10}{551}\sqrt{1383}e^{13}, \frac{4}{551}\sqrt{7837}e^{24},$ $\frac{2}{551}\sqrt{9681}e^{15} + \frac{2}{551}\sqrt{18901}e^{23}$	$(-\frac{63}{551}, \frac{272}{551}, -\frac{126}{551}, -\frac{30}{551}, \frac{11}{29}, -\frac{189}{551}, \frac{242}{551}, \frac{146}{551})$ $+ \frac{1}{551}\sqrt{410290}e^2 \otimes e_6$	{1234, 1237, 34678, 368}
841:19	$0, 0, 0, 0, \frac{10}{53}e^{12}, \frac{15}{53}\sqrt{2}e^{13}, \frac{5}{53}\sqrt{14}e^{24},$ $\frac{10}{53}\sqrt{3}e^{15} + \frac{5}{53}\sqrt{30}e^{23}$	$(\frac{5}{53}, \frac{5}{53}, \frac{10}{53}, -\frac{20}{53}, \frac{10}{53}, \frac{15}{53}, -\frac{15}{53}, \frac{15}{53})$ $- \frac{10}{53}\sqrt{14}e^3 \otimes e_7 + \frac{5}{53}\sqrt{38}e^2 \otimes e_4$	{125678, 1467, 278, 457}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:19	$0, 0, 0, 0, \frac{10}{53}e^{12}, \frac{15}{53}\sqrt{2}e^{13}, \frac{5}{53}\sqrt{14}e^{24},$ $\frac{10}{53}\sqrt{3}e^{15} + \frac{5}{53}\sqrt{30}e^{23}$	$(\frac{5}{53}, \frac{5}{53}, \frac{10}{53}, -\frac{20}{53}, \frac{10}{53}, \frac{15}{53}, -\frac{15}{53}, \frac{15}{53})$ $+ \frac{10}{53}\sqrt{14}e^3 \otimes e_7 + \frac{5}{53}\sqrt{38}e^2 \otimes e_4$	{125678, 1467, 278, 457}
841:19	$0, 0, 0, 0, \frac{2}{11}\sqrt{6}e^{12}, \frac{2}{11}\sqrt{3}e^{13}, \frac{2}{11}\sqrt{5}e^{24},$ $\frac{2}{11}\sqrt{6}e^{15} + \frac{4}{11}e^{23}$	$(\frac{1}{11}, \frac{1}{22}, \frac{2}{11}, -\frac{7}{22}, \frac{3}{22}, \frac{3}{11}, -\frac{3}{11}, \frac{5}{22})$ $+ \frac{2}{11}\sqrt{14}e^1 \otimes e_7 + \frac{2}{11}\sqrt{5}e^2 \otimes e_4$	{235678, 3467}
841:19	$0, 0, 0, 0, \frac{1}{13}\sqrt{6}e^{12}, \frac{1}{13}\sqrt{6}e^{13}, \frac{3}{13}\sqrt{2}e^{24},$ $\frac{3}{13}\sqrt{2}e^{15} + \frac{2}{13}\sqrt{2}e^{23}$	$(\frac{1}{13}, -\frac{5}{26}, \frac{2}{13}, \frac{3}{26}, -\frac{3}{26}, \frac{3}{13}, -\frac{1}{13}, -\frac{1}{26})$ $+ \frac{2}{13}\sqrt{7}e^1 \otimes e_7 + \frac{3}{13}\sqrt{2}e^4 \otimes e_8$	{235678, 3467}
841:19	$0, 0, 0, 0, \frac{186}{2909}e^{12}, \frac{62}{2909}\sqrt{137}e^{13}, \frac{372}{2909}\sqrt{11}e^{24},$ $\frac{124}{2909}\sqrt{35}e^{15} + \frac{31}{2909}\sqrt{1030}e^{23}$	$(-\frac{217}{2909}, \frac{310}{2909}, -\frac{434}{2909}, \frac{837}{2909}, \frac{93}{2909}, -\frac{651}{2909}, \frac{1147}{2909}, -\frac{124}{2909})$ $+ \frac{434}{2909}\sqrt{13}e^4 \otimes e_8 + \frac{496}{2909}\sqrt{10}e^2 \otimes e_6$	{14567, 2578}
841:19	$0, 0, 0, 0, \frac{91}{701}\sqrt{6}e^{12}, \frac{65}{701}\sqrt{10}e^{13}, \frac{13}{701}\sqrt{462}e^{24},$ $\frac{39}{701}\sqrt{6}e^{15} + \frac{13}{701}\sqrt{310}e^{23}$	$(\frac{65}{701}, -\frac{169}{701}, \frac{130}{701}, \frac{130}{701}, -\frac{104}{701}, \frac{195}{701}, -\frac{39}{701}, -\frac{39}{701})$ $+ \frac{13}{701}\sqrt{582}e^4 \otimes e_8 + \frac{26}{701}\sqrt{170}e^3 \otimes e_7$	{12345, 138, 2346, 3568}
841:19	$0, 0, 0, 0, \frac{91}{701}\sqrt{6}e^{12}, \frac{65}{701}\sqrt{10}e^{13}, \frac{13}{701}\sqrt{462}e^{24},$ $\frac{39}{701}\sqrt{6}e^{15} + \frac{13}{701}\sqrt{310}e^{23}$	$(\frac{65}{701}, -\frac{169}{701}, \frac{130}{701}, \frac{130}{701}, -\frac{104}{701}, \frac{195}{701}, -\frac{39}{701}, -\frac{39}{701})$ $- \frac{13}{701}\sqrt{582}e^4 \otimes e_8 + \frac{26}{701}\sqrt{170}e^3 \otimes e_7$	{12345, 138, 2346, 3568}
841:19	$0, 0, 0, 0, \frac{11}{3269}\sqrt{1842}e^{12}, \frac{11}{3269}\sqrt{3046}e^{13}, \frac{132}{3269}\sqrt{19}e^{24},$ $\frac{11}{3269}\sqrt{930}e^{15} + \frac{22}{3269}\sqrt{43}e^{23}$	$(\frac{11}{467}, -\frac{319}{3269}, \frac{22}{467}, \frac{352}{3269}, -\frac{242}{3269}, \frac{33}{467}, \frac{33}{3269}, -\frac{165}{3269})$ $+ \frac{11}{3269}\sqrt{3098}e^3 \otimes e_7 + \frac{22}{3269}\sqrt{753}e^4 \otimes e_6$	{125678, 457}
841:19	$0, 0, 0, 0, \frac{24}{73}\sqrt{2}e^{12}, \frac{24}{73}\sqrt{2}e^{13}, \frac{24}{73}\sqrt{3}e^{24},$ $\frac{24}{73}\sqrt{3}e^{15} + \frac{8}{73}\sqrt{26}e^{23}$	$(\frac{10}{73}, -\frac{7}{73}, \frac{20}{73}, -\frac{15}{73}, \frac{3}{73}, \frac{30}{73}, -\frac{22}{73}, \frac{13}{73})$ $+ \frac{8}{73}\sqrt{61}e^1 \otimes e_7$	{12348, 135, 235678, 3467}
841:20	$0, 0, 0, 0, \frac{5}{32}\sqrt{6}e^{12}, \frac{5}{32}\sqrt{21}e^{13}, \frac{5}{32}\sqrt{21}e^{14} + \frac{5}{32}\sqrt{15}e^{23},$ $\frac{5}{32}\sqrt{17}e^{15} + \frac{13}{32}\sqrt{2}e^{34}$	$(-\frac{5}{32}, \frac{15}{32}, -\frac{15}{64}, \frac{25}{64}, \frac{5}{16}, -\frac{25}{64}, \frac{15}{64}, \frac{5}{32})$ $+ \frac{5}{32}\sqrt{55}e^4 \otimes e_6$	{134, 167}
841:20	$0, 0, 0, 0, \frac{90}{2213}\sqrt{254}e^{12}, \frac{585}{2213}\sqrt{6}e^{13},$ $\frac{90}{2213}\sqrt{199}e^{14} + \frac{90}{2213}\sqrt{290}e^{23}, \frac{90}{2213}\sqrt{73}e^{15} + \frac{540}{2213}\sqrt{2}e^{34}$	$(-\frac{360}{2213}, \frac{1125}{2213}, -\frac{540}{2213}, \frac{945}{2213}, \frac{765}{2213}, -\frac{900}{2213}, \frac{585}{2213}, \frac{405}{2213})$ $+ \frac{90}{2213}\sqrt{905}e^2 \otimes e_6$	{2578, 367}
841:21	$0, 0, 0, 0, \frac{23}{576}\sqrt{58}e^{12}, \frac{23}{576}\sqrt{295}e^{13}, \frac{23}{576}\sqrt{295}e^{14} + \frac{23}{576}\sqrt{206}e^{23},$ $\frac{23}{288}\sqrt{15}e^{25} + \frac{23}{288}\sqrt{59}e^{34}$	$(-\frac{161}{576}, \frac{23}{64}, -\frac{115}{1152}, \frac{69}{128}, \frac{23}{288}, -\frac{437}{1152}, \frac{299}{1152}, \frac{253}{576})$ $- \frac{23}{576}\sqrt{942}e^4 \otimes e_6$	{134, 167, 3568, 4578}
841:21	$0, 0, 0, 0, \frac{23}{576}\sqrt{58}e^{12}, \frac{23}{576}\sqrt{295}e^{13}, \frac{23}{576}\sqrt{295}e^{14} + \frac{23}{576}\sqrt{206}e^{23},$ $\frac{23}{288}\sqrt{15}e^{25} + \frac{23}{288}\sqrt{59}e^{34}$	$(-\frac{161}{576}, \frac{23}{64}, -\frac{115}{1152}, \frac{69}{128}, \frac{23}{288}, -\frac{437}{1152}, \frac{299}{1152}, \frac{253}{576})$ $+ \frac{23}{576}\sqrt{942}e^4 \otimes e_6$	{134, 167, 3568, 4578}
841:21	$0, 0, 0, 0, \frac{26}{261}\sqrt{29}e^{12}, \frac{52}{261}\sqrt{10}e^{13}, \frac{26}{261}\sqrt{14}e^{14} + \frac{13}{261}\sqrt{70}e^{23},$ $\frac{26}{87}\sqrt{5}e^{25} + \frac{26}{261}\sqrt{22}e^{34}$	$(-\frac{65}{261}, \frac{26}{87}, -\frac{26}{261}, \frac{13}{29}, \frac{13}{261}, -\frac{91}{261}, \frac{52}{261}, \frac{91}{261})$ $+ \frac{52}{87}\sqrt{3}e^2 \otimes e_6$	{1568, 367}
841:22	$0, 0, 0, 0, \frac{7}{65}\sqrt{6}e^{12}, \frac{14}{65}\sqrt{7}e^{14} - \frac{28}{65}\sqrt{3}e^{23},$ $\frac{7}{65}\sqrt{26}e^{13} + \frac{7}{65}\sqrt{6}e^{24}, \frac{14}{65}\sqrt{11}e^{15}$	$(-\frac{7}{65}, -\frac{7}{65}, \frac{28}{65}, \frac{28}{65}, -\frac{14}{65}, \frac{21}{65}, \frac{21}{65}, -\frac{21}{65})$ $+ \frac{42}{65}\sqrt{3}e^3 \otimes e_8$	{1235, 178, 2347, 458, 1235, 178, 2347, 458}
841:22	$0, 0, 0, 0, \frac{7}{65}\sqrt{6}e^{12}, \frac{14}{65}\sqrt{7}e^{14} + \frac{28}{65}\sqrt{3}e^{23},$ $\frac{7}{65}\sqrt{26}e^{13} + \frac{7}{65}\sqrt{6}e^{24}, \frac{14}{65}\sqrt{11}e^{15}$	$(-\frac{7}{65}, -\frac{7}{65}, \frac{28}{65}, \frac{28}{65}, -\frac{14}{65}, \frac{21}{65}, \frac{21}{65}, -\frac{21}{65})$ $+ \frac{42}{65}\sqrt{3}e^3 \otimes e_8$	{1235, 178, 2347, 458, 1235, 178, 2347, 458}
841:23	$0, 0, 0, 0, \frac{70}{2237}\sqrt{42}e^{12}, \frac{210}{2237}\sqrt{39}e^{34},$ $\frac{70}{2237}\sqrt{330}e^{14} + \frac{140}{2237}\sqrt{91}e^{23}, \frac{35}{2237}\sqrt{398}e^{13} + \frac{70}{2237}\sqrt{461}e^{25}$	$(-\frac{560}{2237}, \frac{105}{2237}, \frac{210}{2237}, \frac{875}{2237}, -\frac{455}{2237}, \frac{1085}{2237}, \frac{315}{2237}, -\frac{350}{2237})$ $+ \frac{210}{2237}\sqrt{103}e^4 \otimes e_8$	{1578, 467}
841:23	$0, 0, 0, 0, \frac{208}{751}\sqrt{6}e^{12}, \frac{208}{751}\sqrt{6}e^{34}, \frac{208}{751}\sqrt{3}e^{14} + \frac{26}{751}\sqrt{339}e^{23},$ $\frac{117}{751}\sqrt{6}e^{13} + \frac{26}{751}\sqrt{141}e^{25}$	$(\frac{286}{751}, \frac{13}{751}, \frac{26}{751}, -\frac{247}{751}, \frac{299}{751}, -\frac{221}{751}, \frac{39}{751}, \frac{312}{751})$ $+ \frac{26}{751}\sqrt{921}e^1 \otimes e_6$	{1578, 467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:23	$0, 0, 0, 0, \frac{6}{35}\sqrt{7}e^{12}, \frac{6}{35}\sqrt{7}e^{34}, \frac{2}{35}\sqrt{21}e^{14} + \frac{1}{35}\sqrt{14}e^{23},$ $\frac{2}{5}e^{13} + \frac{4}{35}\sqrt{14}e^{25}$	$(\frac{1}{5}, 0, 0, -\frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, 0, \frac{1}{5})$ $+ \frac{2}{35}\sqrt{105}e^2 \otimes e_6$	{2345, 367}
841:24	$0, 0, 0, 0, \frac{1}{19}\sqrt{66}e^{12}, \frac{2}{19}\sqrt{33}e^{13}, \frac{1}{19}\sqrt{110}e^{14} + \frac{1}{19}\sqrt{110}e^{23},$ $\frac{2}{19}\sqrt{22}e^{15} + \frac{2}{19}\sqrt{33}e^{24}$	$(\frac{1}{19}, -\frac{5}{19}, \frac{8}{19}, \frac{2}{19}, -\frac{4}{19}, \frac{9}{19}, \frac{3}{19}, -\frac{3}{19})$ $+ \frac{4}{19}\sqrt{22}e^3 \otimes e_8$	{2346, 458}
841:24	$0, 0, 0, 0, \frac{2}{5}e^{12}, \frac{2}{15}\sqrt{15}e^{13}, \frac{1}{15}\sqrt{30}e^{14} + \frac{2}{5}e^{23},$ $\frac{4}{15}\sqrt{3}e^{15} + \frac{2}{15}\sqrt{15}e^{24}$	$(0, \frac{1}{5}, -\frac{1}{5}, 0, \frac{1}{5}, -\frac{1}{5}, 0, \frac{1}{5})$ $+ \frac{2}{15}\sqrt{21}e^4 \otimes e_6$	{167, 356}
841:26	$0, 0, 0, 0, \frac{1}{27}\sqrt{102}e^{12}, \frac{2}{27}\sqrt{6}e^{13}, \frac{2}{9}\sqrt{3}e^{23},$ $\frac{4}{27}\sqrt{3}e^{16} + \frac{2}{9}e^{25}$	$(\frac{2}{9}, \frac{1}{27}, -\frac{4}{27}, -\frac{8}{27}, \frac{7}{27}, \frac{2}{27}, -\frac{1}{9}, \frac{8}{27})$ $+ \frac{1}{27}\sqrt{222}e^1 \otimes e_7 + \frac{2}{27}\sqrt{51}e^2 \otimes e_4$	{1238, 257}
841:26	$0, 0, 0, 0, \frac{26}{1619}\sqrt{151}e^{12}, \frac{26}{1619}\sqrt{407}e^{13}, \frac{78}{1619}\sqrt{61}e^{23},$ $\frac{26}{1619}\sqrt{469}e^{16} + \frac{52}{1619}\sqrt{71}e^{25}$	$(\frac{247}{1619}, \frac{52}{1619}, -\frac{143}{1619}, -\frac{481}{1619}, \frac{299}{1619}, \frac{104}{1619}, -\frac{91}{1619}, \frac{351}{1619})$ $+ \frac{26}{1619}\sqrt{647}e^3 \otimes e_4 + \frac{26}{1619}\sqrt{806}e^1 \otimes e_7$	{12358, 247}
841:26	$0, 0, 0, 0, \frac{26}{1013}\sqrt{615}e^{12}, \frac{78}{1013}\sqrt{97}e^{13}, \frac{78}{1013}\sqrt{115}e^{23},$ $\frac{26}{1013}\sqrt{501}e^{16} + \frac{468}{1013}e^{25}$	$(-\frac{65}{1013}, \frac{156}{1013}, \frac{377}{1013}, -\frac{637}{1013}, \frac{91}{1013}, \frac{312}{1013}, \frac{533}{1013}, \frac{247}{1013})$ $+ \frac{390}{1013}\sqrt{11}e^3 \otimes e_4$	{12358, 1378, 247, 45}
841:26	$0, 0, 0, 0, \frac{240}{1007}\sqrt{11}e^{12}, \frac{36}{1007}\sqrt{143}e^{13}, \frac{132}{1007}\sqrt{11}e^{23},$ $\frac{12}{1007}\sqrt{2167}e^{16} + \frac{12}{53}\sqrt{11}e^{25}$	$(\frac{84}{1007}, \frac{125}{1007}, \frac{166}{1007}, -\frac{667}{1007}, \frac{11}{53}, \frac{250}{1007}, \frac{291}{1007}, \frac{334}{1007})$ $+ \frac{36}{1007}\sqrt{1023}e^2 \otimes e_4$	{12368, 1345678, 2567, 46}
841:26	$0, 0, 0, 0, \frac{96}{1361}e^{12}, \frac{32}{1361}\sqrt{221}e^{13}, \frac{32}{1361}\sqrt{226}e^{23},$ $\frac{64}{1361}\sqrt{115}e^{16} + \frac{32}{1361}\sqrt{10}e^{25}$	$(\frac{208}{1361}, -\frac{32}{1361}, -\frac{272}{1361}, \frac{656}{1361}, \frac{176}{1361}, -\frac{64}{1361}, -\frac{304}{1361}, \frac{144}{1361})$ $+ \frac{32}{1361}\sqrt{481}e^4 \otimes e_8 + \frac{32}{1361}\sqrt{705}e^1 \otimes e_7$	{12358, 247}
841:26	$0, 0, 0, 0, \frac{4}{35}\sqrt{21}e^{12}, \frac{3}{35}\sqrt{14}e^{13}, \frac{6}{35}\sqrt{35}e^{23},$ $\frac{3}{35}\sqrt{105}e^{16} + \frac{3}{35}\sqrt{42}e^{25}$	$(\frac{1}{5}, 0, -\frac{1}{5}, 1, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{3}{35}\sqrt{266}e^4 \otimes e_7$	{12578, 148, 234, 357}
841:26	$0, 0, 0, 0, \frac{12}{1049}\sqrt{2265}e^{12}, \frac{36}{1049}\sqrt{453}e^{13}, \frac{2}{1049}\sqrt{46659}e^{23},$ $\frac{24}{1049}\sqrt{906}e^{16} + \frac{2}{1049}\sqrt{2265}e^{25}$	$(\frac{257}{1049}, \frac{118}{1049}, -\frac{21}{1049}, -\frac{649}{1049}, \frac{375}{1049}, \frac{236}{1049}, \frac{97}{1049}, \frac{493}{1049})$ $+ \frac{6}{1049}\sqrt{42733}e^1 \otimes e_4$	{12378, 1358, 245, 47}
841:26	$0, 0, 0, 0, \frac{3}{529}\sqrt{1394}e^{12}, \frac{9}{529}\sqrt{1066}e^{13}, \frac{3}{529}\sqrt{13202}e^{23},$ $\frac{60}{529}\sqrt{41}e^{16} + \frac{12}{529}\sqrt{451}e^{25}$	$(\frac{195}{529}, \frac{7}{529}, -\frac{181}{529}, \frac{97}{529}, \frac{202}{529}, \frac{14}{529}, -\frac{174}{529}, \frac{209}{529})$ $+ \frac{36}{529}\sqrt{246}e^1 \otimes e_7$	{1456, 156, 34678, 3678}
841:26	$0, 0, 0, 0, \frac{2}{347}\sqrt{2431}e^{12}, \frac{8}{347}\sqrt{374}e^{13}, \frac{2}{347}\sqrt{2431}e^{23},$ $\frac{6}{347}\sqrt{1870}e^{16} + \frac{6}{347}\sqrt{1870}e^{25}$	$(-\frac{39}{347}, \frac{6}{347}, \frac{51}{347}, 1, -\frac{33}{347}, \frac{12}{347}, \frac{57}{347}, -\frac{27}{347})$ $+ \frac{2}{347}\sqrt{51799}e^4 \otimes e_8$	{12456, 1467, 23678, 3568}
841:27	$0, 0, 0, 0, -\frac{1}{17}\sqrt{42}e^{12}, \frac{1}{17}\sqrt{42}e^{13}, \frac{7}{17}\sqrt{6}e^{23},$ $\frac{1}{17}\sqrt{42}e^{25} + \frac{1}{17}\sqrt{42}e^{36}$	$(\frac{5}{17}, -\frac{2}{17}, -\frac{2}{17}, 1, \frac{3}{17}, \frac{3}{17}, -\frac{4}{17}, \frac{1}{17})$ $+ \frac{14}{17}\sqrt{3}e^4 \otimes e_7$	{1234568, 12578, 148, 234, 267, 456, 1234568, 12578, 148, 234, 267, 456}
841:27	$0, 0, 0, 0, \frac{1}{17}\sqrt{42}e^{12}, \frac{1}{17}\sqrt{42}e^{13}, \frac{7}{17}\sqrt{6}e^{23},$ $\frac{1}{17}\sqrt{42}e^{25} + \frac{1}{17}\sqrt{42}e^{36}$	$(\frac{5}{17}, -\frac{2}{17}, -\frac{2}{17}, 1, \frac{3}{17}, \frac{3}{17}, -\frac{4}{17}, \frac{1}{17})$ $+ \frac{14}{17}\sqrt{3}e^4 \otimes e_7$	{1234568, 12578, 148, 234, 267, 456, 1234568, 12578, 148, 234, 267, 456}
841:27	$0, 0, 0, 0, -\frac{2}{73}\sqrt{671}e^{12}, \frac{4}{73}\sqrt{61}e^{13}, \frac{1}{73}\sqrt{1830}e^{23},$ $\frac{2}{73}\sqrt{671}e^{25} + \frac{4}{73}\sqrt{61}e^{36}$	$(-\frac{1}{73}, \frac{14}{73}, \frac{14}{73}, -\frac{47}{73}, \frac{13}{73}, \frac{13}{73}, \frac{28}{73}, \frac{27}{73})$ $+ \frac{2}{73}\sqrt{1830}e^2 \otimes e_4$	{12368, 1278, 1345678, 1458, 235, 2567, 347, 46, 12368, 1278, 1345678, 1458, 235, 2567, 347, 46}
841:27	$0, 0, 0, 0, \frac{2}{73}\sqrt{671}e^{12}, \frac{4}{73}\sqrt{61}e^{13}, \frac{1}{73}\sqrt{1830}e^{23},$ $\frac{2}{73}\sqrt{671}e^{25} + \frac{4}{73}\sqrt{61}e^{36}$	$(-\frac{1}{73}, \frac{14}{73}, \frac{14}{73}, -\frac{47}{73}, \frac{13}{73}, \frac{13}{73}, \frac{28}{73}, \frac{27}{73})$ $+ \frac{2}{73}\sqrt{1830}e^2 \otimes e_4$	{12368, 1278, 1345678, 1458, 235, 2567, 347, 46, 12368, 1278, 1345678, 1458, 235, 2567, 347, 46}
841:27	$0, 0, 0, 0, -\frac{1}{5}\sqrt{15}e^{12}, \frac{1}{5}\sqrt{15}e^{13}, \frac{1}{5}\sqrt{10}e^{23},$ $\frac{1}{5}\sqrt{5}e^{25} + \frac{1}{5}\sqrt{5}e^{36}$	$(\frac{2}{5}, 0, 0, -\frac{3}{5}, \frac{2}{5}, \frac{2}{5}, 0, \frac{2}{5})$ $+ \frac{2}{5}\sqrt{10}e^1 \otimes e_4$	{12378, 1268, 15678, 234567, 245, 47, 12378, 1268, 15678, 234567, 245, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:27	$0, 0, 0, 0, \frac{1}{5}\sqrt{15}e^{12}, \frac{1}{5}\sqrt{15}e^{13}, \frac{1}{5}\sqrt{10}e^{23},$ $\frac{1}{5}\sqrt{5}e^{25} + \frac{1}{5}\sqrt{5}e^{36}$	$(\frac{2}{5}, 0, 0, -\frac{3}{5}, \frac{2}{5}, \frac{2}{5}, \frac{2}{5}, \frac{2}{5})$ $+ \frac{2}{5}\sqrt{10}e^1 \otimes e_4$	{12378, 1268, 15678, 234567, 245, 47, 12378, 1268, 15678, 234567, 245, 47}
841:27	$0, 0, 0, 0, -\frac{1}{5}\sqrt{5}e^{12}, \frac{1}{5}\sqrt{5}e^{13}, \frac{1}{5}\sqrt{10}e^{23},$ $\frac{1}{5}\sqrt{15}e^{25} + \frac{1}{5}\sqrt{15}e^{36}$	$(0, 0, 0, 1, 0, 0, 0, 0)$ $+ \frac{2}{5}\sqrt{10}e^4 \otimes e_8$	{12378, 1268, 15678, 234567, 245, 47, 12378, 1268, 15678, 234567, 245, 47}
841:27	$0, 0, 0, 0, \frac{1}{5}\sqrt{5}e^{12}, \frac{1}{5}\sqrt{5}e^{13}, \frac{1}{5}\sqrt{10}e^{23},$ $\frac{1}{5}\sqrt{15}e^{25} + \frac{1}{5}\sqrt{15}e^{36}$	$(0, 0, 0, 1, 0, 0, 0, 0)$ $+ \frac{2}{5}\sqrt{10}e^4 \otimes e_8$	{12378, 1268, 15678, 234567, 245, 47, 12378, 1268, 15678, 234567, 245, 47}
841:29	$0, 0, 0, 0, \frac{34}{1723}\sqrt{85}e^{12}, \frac{170}{1723}\sqrt{5}e^{13}, \frac{34}{1723}\sqrt{485}e^{14},$ $\frac{68}{1723}\sqrt{77}e^{16} + \frac{34}{1723}\sqrt{229}e^{25}$	$(\frac{170}{1723}, -\frac{119}{1723}, -\frac{408}{1723}, \frac{510}{1723}, \frac{51}{1723}, -\frac{238}{1723}, \frac{680}{1723}, -\frac{68}{1723})$ $+ \frac{680}{1723}\sqrt{2}e^4 \otimes e_8 + \frac{68}{1723}\sqrt{182}e^1 \otimes e_3$	{1278, 1578, 23457, 347}
841:29	$0, 0, 0, 0, \frac{34}{1723}\sqrt{85}e^{12}, \frac{170}{1723}\sqrt{5}e^{13}, \frac{34}{1723}\sqrt{485}e^{14},$ $\frac{68}{1723}\sqrt{77}e^{16} + \frac{34}{1723}\sqrt{229}e^{25}$	$(\frac{170}{1723}, -\frac{119}{1723}, -\frac{408}{1723}, \frac{510}{1723}, \frac{51}{1723}, -\frac{238}{1723}, \frac{680}{1723}, -\frac{68}{1723})$ $+ \frac{680}{1723}\sqrt{2}e^4 \otimes e_8 - \frac{68}{1723}\sqrt{182}e^1 \otimes e_3$	{1278, 1578, 23457, 347}
841:29	$0, 0, 0, 0, \frac{34}{1327}\sqrt{51}e^{12}, \frac{714}{1327}e^{13}, \frac{34}{1327}\sqrt{47}e^{14},$ $\frac{238}{1327}\sqrt{6}e^{16} + \frac{102}{1327}\sqrt{5}e^{25}$	$(\frac{102}{1327}, \frac{153}{1327}, \frac{204}{1327}, -\frac{476}{1327}, \frac{255}{1327}, \frac{306}{1327}, -\frac{374}{1327}, \frac{408}{1327})$ $+ \frac{306}{1327}\sqrt{6}e^3 \otimes e_7 + \frac{34}{1327}\sqrt{682}e^1 \otimes e_4$	{234568, 3468}
841:29	$0, 0, 0, 0, \frac{216}{1667}\sqrt{6}e^{12}, \frac{36}{1667}\sqrt{190}e^{13}, \frac{72}{1667}\sqrt{130}e^{14},$ $\frac{36}{1667}\sqrt{133}e^{16} + \frac{36}{1667}\sqrt{285}e^{25}$	$(-\frac{432}{1667}, \frac{126}{1667}, \frac{684}{1667}, \frac{468}{1667}, -\frac{306}{1667}, \frac{252}{1667}, \frac{36}{1667}, -\frac{180}{1667})$ $+ \frac{36}{1667}\sqrt{679}e^3 \otimes e_7 + \frac{36}{1667}\sqrt{793}e^4 \otimes e_8$	{2368, 3568}
841:29	$0, 0, 0, 0, \frac{10}{281}\sqrt{102}e^{12}, \frac{30}{281}\sqrt{2}e^{13}, \frac{10}{281}\sqrt{102}e^{14},$ $\frac{50}{281}\sqrt{2}e^{16} + \frac{20}{281}\sqrt{51}e^{25}$	$(-\frac{50}{281}, \frac{35}{281}, \frac{120}{281}, -\frac{15}{281}, -\frac{15}{281}, \frac{70}{281}, -\frac{65}{281}, \frac{20}{281})$ $- \frac{10}{281}\sqrt{186}e^3 \otimes e_8 + \frac{40}{281}\sqrt{19}e^2 \otimes e_7$	{12468, 15678, 2356, 3467}
841:29	$0, 0, 0, 0, \frac{10}{281}\sqrt{102}e^{12}, \frac{30}{281}\sqrt{2}e^{13}, \frac{10}{281}\sqrt{102}e^{14},$ $\frac{50}{281}\sqrt{2}e^{16} + \frac{20}{281}\sqrt{51}e^{25}$	$(-\frac{50}{281}, \frac{35}{281}, \frac{120}{281}, -\frac{15}{281}, -\frac{15}{281}, \frac{70}{281}, -\frac{65}{281}, \frac{20}{281})$ $+ \frac{10}{281}\sqrt{186}e^3 \otimes e_8 + \frac{40}{281}\sqrt{19}e^2 \otimes e_7$	{12468, 15678, 2356, 3467}
841:29	$0, 0, 0, 0, \frac{6}{1141}\sqrt{8985}e^{12}, \frac{2}{1141}\sqrt{189883}e^{13}, \frac{10}{1141}\sqrt{7787}e^{14},$ $\frac{8}{1141}\sqrt{599}e^{16} + \frac{2}{1141}\sqrt{47321}e^{25}$	$(-\frac{270}{1141}, \frac{277}{1141}, \frac{824}{1141}, -\frac{104}{1141}, \frac{1}{163}, \frac{554}{1141}, -\frac{374}{1141}, \frac{284}{1141})$ $+ \frac{4}{1141}\sqrt{137770}e^3 \otimes e_7$	{12345, 134, 2478, 4578}
841:29	$0, 0, 0, 0, \frac{2}{125}\sqrt{987}e^{12}, \frac{6}{125}\sqrt{235}e^{13}, \frac{2}{125}\sqrt{1457}e^{14},$ $\frac{8}{125}\sqrt{141}e^{16} + \frac{6}{125}\sqrt{47}e^{25}$	$(\frac{42}{125}, \frac{9}{125}, -\frac{24}{125}, -\frac{52}{125}, \frac{51}{125}, \frac{18}{125}, -\frac{2}{25}, \frac{12}{25})$ $+ \frac{4}{125}\sqrt{1222}e^1 \otimes e_4$	{126, 156, 234568, 3468}
841:29	$0, 0, 0, 0, \frac{1}{92}\sqrt{3139}e^{12}, \frac{1}{46}\sqrt{430}e^{13}, \frac{1}{92}\sqrt{3139}e^{14},$ $\frac{1}{46}\sqrt{731}e^{16} + \frac{1}{46}\sqrt{903}e^{25}$	$(-\frac{3}{46}, \frac{27}{184}, \frac{33}{92}, -\frac{47}{184}, \frac{15}{184}, \frac{27}{92}, -\frac{59}{184}, \frac{21}{92})$ $+ \frac{1}{92}\sqrt{6794}e^2 \otimes e_7$	{123468, 135678, 256, 467}
841:29	$0, 0, 0, 0, \frac{7}{125}\sqrt{82}e^{12}, \frac{7}{125}\sqrt{10}e^{13}, \frac{28}{125}\sqrt{3}e^{14},$ $\frac{7}{125}\sqrt{34}e^{16} + \frac{42}{125}\sqrt{2}e^{25}$	$(\frac{7}{125}, \frac{14}{125}, \frac{21}{125}, -\frac{42}{125}, \frac{21}{125}, \frac{28}{125}, -\frac{7}{25}, \frac{7}{25})$ $+ \frac{14}{125}\sqrt{17}e^1 \otimes e_4 + \frac{7}{25}\sqrt{6}e^2 \otimes e_7$	{135678, 467}
841:29	$0, 0, 0, 0, \frac{19}{2909}\sqrt{1146}e^{12}, \frac{19}{2909}\sqrt{930}e^{13}, \frac{114}{2909}\sqrt{61}e^{14},$ $\frac{19}{2909}\sqrt{986}e^{16} + \frac{342}{2909}\sqrt{7}e^{25}$	$(-\frac{437}{2909}, \frac{152}{2909}, \frac{741}{2909}, \frac{228}{2909}, -\frac{285}{2909}, \frac{304}{2909}, -\frac{209}{2909}, -\frac{133}{2909})$ $+ \frac{190}{2909}\sqrt{21}e^4 \otimes e_8 + \frac{19}{2909}\sqrt{3166}e^2 \otimes e_7$	{135678, 467}
841:29	$0, 0, 0, 0, \frac{2}{1165}\sqrt{54827}e^{12}, \frac{2}{1165}\sqrt{5533}e^{13}, \frac{22}{1165}\sqrt{1509}e^{14},$ $\frac{28}{1165}\sqrt{503}e^{16} + \frac{2}{1165}\sqrt{162469}e^{25}$	$(-\frac{218}{1165}, \frac{7}{1165}, \frac{232}{1165}, \frac{802}{1165}, -\frac{211}{1165}, \frac{14}{1165}, \frac{584}{1165}, -\frac{204}{1165})$ $+ \frac{8}{1165}\sqrt{29677}e^4 \otimes e_8$	{123456, 1346, 268, 568}
841:29	$0, 0, 0, 0, \frac{2}{287}\sqrt{9165}e^{12}, \frac{10}{287}\sqrt{141}e^{13}, \frac{2}{287}\sqrt{9165}e^{14},$ $\frac{4}{287}\sqrt{1833}e^{16} + \frac{2}{287}\sqrt{141}e^{25}$	$(\frac{130}{287}, -\frac{11}{287}, -\frac{152}{287}, -\frac{10}{287}, \frac{17}{41}, -\frac{22}{287}, \frac{120}{287}, \frac{108}{287})$ $- \frac{4}{287}\sqrt{8178}e^1 \otimes e_3$	{1248, 1278, 1458, 1578, 23457, 235, 3, 347}
841:29	$0, 0, 0, 0, \frac{2}{287}\sqrt{9165}e^{12}, \frac{10}{287}\sqrt{141}e^{13}, \frac{2}{287}\sqrt{9165}e^{14},$ $\frac{4}{287}\sqrt{1833}e^{16} + \frac{2}{287}\sqrt{141}e^{25}$	$(\frac{130}{287}, -\frac{11}{287}, -\frac{152}{287}, -\frac{10}{287}, \frac{17}{41}, -\frac{22}{287}, \frac{120}{287}, \frac{108}{287})$ $+ \frac{4}{287}\sqrt{8178}e^1 \otimes e_3$	{1248, 1278, 1458, 1578, 23457, 235, 3, 347}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:30	$0, 0, 0, 0, \frac{44}{215}\sqrt{15}e^{12}, \frac{33}{215}\sqrt{6}e^{13}, \frac{88}{215}\sqrt{2}e^{24},$ $\frac{11}{215}\sqrt{138}e^{16} + \frac{11}{215}\sqrt{222}e^{25}$	$(0, \frac{33}{215}, \frac{66}{215}, -\frac{88}{215}, \frac{33}{215}, \frac{66}{215}, -\frac{11}{43}, \frac{66}{215})$ $+ \frac{11}{215}\sqrt{30}e^3 \otimes e_7 + \frac{44}{215}\sqrt{22}e^2 \otimes e_4$	{12368, 134568}
841:30	$0, 0, 0, 0, \frac{22}{1505}\sqrt{491}e^{12}, \frac{22}{1505}\sqrt{449}e^{13}, \frac{22}{1505}\sqrt{707}e^{24},$ $\frac{22}{1505}\sqrt{474}e^{16} + \frac{22}{301}\sqrt{5}e^{25}$	$(-\frac{55}{301}, \frac{66}{1505}, \frac{407}{1505}, \frac{99}{1505}, -\frac{209}{1505}, \frac{132}{1505}, \frac{33}{301}, -\frac{143}{1505})$ $+ \frac{22}{1505}\sqrt{649}e^4 \otimes e_8 + \frac{22}{1505}\sqrt{699}e^3 \otimes e_7$	{138, 457}
841:30	$0, 0, 0, 0, \frac{4}{521}\sqrt{267}e^{12}, \frac{36}{521}\sqrt{5}e^{13}, \frac{16}{521}\sqrt{42}e^{24},$ $\frac{16}{521}\sqrt{42}e^{16} + \frac{4}{521}\sqrt{186}e^{25}$	$(\frac{46}{521}, -\frac{16}{521}, -\frac{78}{521}, \frac{38}{521}, \frac{30}{521}, -\frac{32}{521}, \frac{22}{521}, \frac{14}{521})$ $+ \frac{4}{521}\sqrt{615}e^4 \otimes e_8 + \frac{4}{521}\sqrt{777}e^1 \otimes e_7$	{138, 457}
841:30	$0, 0, 0, 0, \frac{4}{47}\sqrt{66}e^{12}, \frac{3}{47}\sqrt{154}e^{13}, \frac{12}{47}\sqrt{11}e^{24},$ $\frac{11}{47}\sqrt{6}e^{16} + \frac{3}{47}\sqrt{66}e^{25}$	$(-\frac{8}{47}, \frac{9}{47}, \frac{26}{47}, -\frac{16}{47}, \frac{1}{47}, \frac{18}{47}, -\frac{7}{47}, \frac{10}{47})$ $+ \frac{3}{47}\sqrt{286}e^3 \otimes e_7$	{123458, 138, 27, 457}
841:30	$0, 0, 0, 0, \frac{170}{1337}\sqrt{2}e^{12}, \frac{34}{1337}\sqrt{74}e^{13}, \frac{34}{1337}\sqrt{287}e^{24},$ $\frac{510}{1337}\sqrt{2}e^{16} + \frac{34}{1337}\sqrt{37}e^{25}$	$(\frac{187}{1337}, -\frac{102}{1337}, -\frac{391}{1337}, \frac{561}{1337}, \frac{85}{1337}, -\frac{204}{1337}, \frac{459}{1337}, -\frac{17}{1337})$ $+ \frac{34}{1337}\sqrt{489}e^1 \otimes e_3 + \frac{884}{1337}e^4 \otimes e_8$	{12456, 1467, 23678, 3568}
841:30	$0, 0, 0, 0, \frac{170}{1337}\sqrt{2}e^{12}, \frac{34}{1337}\sqrt{74}e^{13}, \frac{34}{1337}\sqrt{287}e^{24},$ $\frac{510}{1337}\sqrt{2}e^{16} + \frac{34}{1337}\sqrt{37}e^{25}$	$(\frac{187}{1337}, -\frac{102}{1337}, -\frac{391}{1337}, \frac{561}{1337}, \frac{85}{1337}, -\frac{204}{1337}, \frac{459}{1337}, -\frac{17}{1337})$ $- \frac{34}{1337}\sqrt{489}e^1 \otimes e_3 + \frac{884}{1337}e^4 \otimes e_8$	{12456, 1467, 23678, 3568}
841:30	$0, 0, 0, 0, \frac{5}{59}\sqrt{26}e^{12}, \frac{20}{59}e^{13}, \frac{10}{59}\sqrt{3}e^{24},$ $\frac{10}{59}\sqrt{3}e^{16} + \frac{10}{59}\sqrt{3}e^{25}$	$(\frac{10}{59}, \frac{5}{59}, 0, -\frac{20}{59}, \frac{15}{59}, \frac{10}{59}, -\frac{15}{59}, \frac{20}{59})$ $+ \frac{10}{59}\sqrt{11}e^2 \otimes e_4 + \frac{5}{59}\sqrt{58}e^1 \otimes e_7$	{257, 47}
841:30	$0, 0, 0, 0, \frac{2}{179}\sqrt{3014}e^{12}, \frac{2}{179}\sqrt{1781}e^{13}, \frac{2}{179}\sqrt{4795}e^{24},$ $\frac{2}{179}\sqrt{4795}e^{16} + \frac{1}{179}\sqrt{3562}e^{25}$	$(-\frac{18}{179}, -\frac{5}{179}, \frac{8}{179}, \frac{109}{179}, -\frac{23}{179}, -\frac{10}{179}, \frac{104}{179}, -\frac{28}{179})$ $+ \frac{1}{179}\sqrt{39730}e^4 \otimes e_8$	{12456, 1467, 23678, 3568}
841:30	$0, 0, 0, 0, \frac{2}{305}\sqrt{16770}e^{12}, \frac{12}{305}\sqrt{129}e^{13}, \frac{2}{305}\sqrt{9718}e^{24},$ $\frac{2}{305}\sqrt{9718}e^{16} + \frac{2}{305}\sqrt{15222}e^{25}$	$(\frac{1}{61}, \frac{46}{305}, \frac{87}{305}, -\frac{126}{305}, \frac{51}{305}, \frac{92}{305}, -\frac{16}{61}, \frac{97}{305})$ $+ \frac{8}{305}\sqrt{1462}e^2 \otimes e_4$	{12368, 134568, 256, 46}
841:30	$0, 0, 0, 0, \frac{2}{181}\sqrt{623}e^{12}, \frac{1}{181}\sqrt{11570}e^{13}, \frac{1}{181}\sqrt{14062}e^{24},$ $\frac{1}{181}\sqrt{14062}e^{16} + \frac{2}{181}\sqrt{1869}e^{25}$	$(\frac{51}{181}, \frac{9}{181}, -\frac{33}{181}, -\frac{47}{181}, \frac{60}{181}, \frac{18}{181}, -\frac{38}{181}, \frac{69}{181})$ $+ \frac{1}{181}\sqrt{26522}e^1 \otimes e_7$	{123458, 138, 27, 457}
841:30	$0, 0, 0, 0, \frac{11}{359}\sqrt{195}e^{12}, \frac{11}{359}\sqrt{51}e^{13}, \frac{11}{359}\sqrt{141}e^{24},$ $\frac{55}{359}\sqrt{2}e^{16} + \frac{11}{359}\sqrt{303}e^{25}$	$(-\frac{121}{718}, \frac{44}{359}, \frac{297}{718}, -\frac{77}{359}, -\frac{33}{718}, \frac{88}{359}, -\frac{33}{359}, \frac{55}{718})$ $- \frac{11}{359}\sqrt{273}e^3 \otimes e_8 + \frac{11}{359}\sqrt{370}e^2 \otimes e_4$	{1268, 14568, 2356, 346}
841:30	$0, 0, 0, 0, \frac{11}{359}\sqrt{195}e^{12}, \frac{11}{359}\sqrt{51}e^{13}, \frac{11}{359}\sqrt{141}e^{24},$ $\frac{55}{359}\sqrt{2}e^{16} + \frac{11}{359}\sqrt{303}e^{25}$	$(-\frac{121}{718}, \frac{44}{359}, \frac{297}{718}, -\frac{77}{359}, -\frac{33}{718}, \frac{88}{359}, -\frac{33}{359}, \frac{55}{718})$ $+ \frac{11}{359}\sqrt{273}e^3 \otimes e_8 + \frac{11}{359}\sqrt{370}e^2 \otimes e_4$	{1268, 14568, 2356, 346}
841:31	$0, 0, 0, 0, -\frac{1}{47}\sqrt{142}e^{12}, \frac{1}{47}\sqrt{142}e^{13}, \frac{1}{47}\sqrt{1207}e^{14},$ $\frac{1}{94}\sqrt{3337}e^{25} + \frac{1}{94}\sqrt{3337}e^{36}$	$(-\frac{4}{47}, -\frac{3}{188}, -\frac{3}{188}, \frac{30}{47}, -\frac{19}{188}, -\frac{19}{188}, \frac{26}{47}, -\frac{11}{94})$ $+ \frac{1}{47}\sqrt{2698}e^4 \otimes e_8$	{123456, 1245, 14, 238, 268, 568, 123456, 1245, 14, 238, 268, 568}
841:31	$0, 0, 0, 0, \frac{1}{47}\sqrt{142}e^{12}, \frac{1}{47}\sqrt{142}e^{13}, \frac{1}{47}\sqrt{1207}e^{14},$ $\frac{1}{94}\sqrt{3337}e^{25} + \frac{1}{94}\sqrt{3337}e^{36}$	$(-\frac{4}{47}, -\frac{3}{188}, -\frac{3}{188}, \frac{30}{47}, -\frac{19}{188}, -\frac{19}{188}, \frac{26}{47}, -\frac{11}{94})$ $+ \frac{1}{47}\sqrt{2698}e^4 \otimes e_8$	{123456, 1245, 14, 238, 268, 568, 123456, 1245, 14, 238, 268, 568}
841:31	$0, 0, 0, 0, -\frac{1}{91}\sqrt{4845}e^{12}, \frac{1}{91}\sqrt{4845}e^{13}, \frac{1}{91}\sqrt{2090}e^{14},$ $\frac{3}{91}\sqrt{95}e^{25} + \frac{3}{91}\sqrt{95}e^{36}$	$(\frac{51}{91}, -\frac{12}{91}, -\frac{12}{91}, -\frac{44}{91}, \frac{3}{7}, \frac{3}{7}, \frac{1}{13}, \frac{27}{91})$ $+ \frac{1}{91}\sqrt{13870}e^1 \otimes e_4$	{1238, 1268, 1568, 23456, 245, 4, 1238, 1268, 1568, 23456, 245, 4}
841:31	$0, 0, 0, 0, \frac{1}{91}\sqrt{4845}e^{12}, \frac{1}{91}\sqrt{4845}e^{13}, \frac{1}{91}\sqrt{2090}e^{14},$ $\frac{3}{91}\sqrt{95}e^{25} + \frac{3}{91}\sqrt{95}e^{36}$	$(\frac{51}{91}, -\frac{12}{91}, -\frac{12}{91}, -\frac{44}{91}, \frac{3}{7}, \frac{3}{7}, \frac{1}{13}, \frac{27}{91})$ $+ \frac{1}{91}\sqrt{13870}e^1 \otimes e_4$	{1238, 1268, 1568, 23456, 245, 4, 1238, 1268, 1568, 23456, 245, 4}
841:31	$0, 0, 0, 0, -\frac{4}{369}\sqrt{3458}e^{12}, \frac{2}{369}\sqrt{6251}e^{13}, \frac{4}{369}\sqrt{3458}e^{14},$ $\frac{2}{369}\sqrt{17290}e^{25} + \frac{14}{369}\sqrt{57}e^{36}$	$(-\frac{94}{369}, \frac{15}{41}, \frac{15}{41}, -\frac{37}{369}, \frac{1}{9}, \frac{1}{9}, -\frac{131}{369}, \frac{176}{369})$ $+ \frac{2}{369}\sqrt{40166}e^2 \otimes e_7$	{123468, 1248, 135678, 1578, 235, 256, 347, 467, 123468, 1248, 135678, 1578, 235, 256, 347, 467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:31	$0, 0, 0, 0, \frac{4}{369}\sqrt{3458}e^{12}, \frac{2}{369}\sqrt{6251}e^{13}, \frac{4}{369}\sqrt{3458}e^{14},$ $\frac{2}{369}\sqrt{17290}e^{25} + \frac{14}{369}\sqrt{57}e^{36}$	$(-\frac{94}{369}, \frac{15}{41}, \frac{15}{41}, -\frac{37}{369}, \frac{1}{9}, \frac{1}{9}, -\frac{131}{369}, \frac{176}{369})$ $+ \frac{2}{369}\sqrt{40166}e^2 \otimes e_7$	{123468, 1248, 135678, 1578, 235, 256, 347, 467, 123468, 1248, 135678, 1578, 235, 256, 347, 467}
841:33	$0, 0, 0, 0, \frac{1}{81}\sqrt{1218}e^{12}, \frac{1}{81}\sqrt{2378}e^{13}, \frac{2}{81}\sqrt{493}e^{24},$ $\frac{1}{81}\sqrt{1218}e^{15} + \frac{2}{81}\sqrt{493}e^{36}$	$(\frac{13}{81}, -\frac{1}{81}, \frac{2}{27}, -\frac{22}{81}, \frac{4}{27}, \frac{19}{81}, -\frac{23}{81}, \frac{25}{81})$ $+ \frac{1}{81}\sqrt{4002}e^3 \otimes e_7$	{123458, 125678, 356, 457}
841:33	$0, 0, 0, 0, \frac{52}{1977}\sqrt{30}e^{12}, \frac{52}{1977}\sqrt{39}e^{13}, \frac{26}{1977}\sqrt{619}e^{24},$ $\frac{26}{1977}\sqrt{547}e^{15} + \frac{52}{659}\sqrt{5}e^{36}$	$(\frac{104}{659}, -\frac{494}{1977}, -\frac{91}{1977}, \frac{156}{659}, -\frac{182}{1977}, \frac{221}{1977}, -\frac{26}{1977}, \frac{130}{1977})$ $+ \frac{26}{1977}\sqrt{842}e^4 \otimes e_8 + \frac{26}{1977}\sqrt{890}e^1 \otimes e_7$	{3467, 47}
841:33	$0, 0, 0, 0, \frac{9}{3413}\sqrt{1370}e^{12}, \frac{9}{3413}\sqrt{2074}e^{13}, \frac{18}{3413}\sqrt{683}e^{24},$ $\frac{9}{3413}\sqrt{458}e^{15} + \frac{18}{3413}\sqrt{607}e^{36}$	$(\frac{225}{3413}, -\frac{333}{3413}, -\frac{54}{3413}, \frac{198}{3413}, -\frac{108}{3413}, \frac{171}{3413}, -\frac{135}{3413}, \frac{117}{3413})$ $+ \frac{387}{3413}\sqrt{2}e^3 \otimes e_7 + \frac{72}{3413}\sqrt{38}e^4 \otimes e_8$	{125678, 457}
841:33	$0, 0, 0, 0, \frac{2}{1361}\sqrt{36190}e^{12}, \frac{2}{1361}\sqrt{1034}e^{13}, \frac{6}{1361}\sqrt{27401}e^{24},$ $\frac{22}{1361}\sqrt{1457}e^{15} + \frac{4}{1361}\sqrt{43945}e^{36}$	$(-\frac{4}{1361}, -\frac{142}{1361}, -\frac{73}{1361}, \frac{884}{1361}, -\frac{146}{1361}, -\frac{77}{1361}, \frac{742}{1361}, -\frac{150}{1361})$ $+ \frac{4}{1361}\sqrt{141658}e^4 \otimes e_8$	{123456, 1245, 358, 568}
841:33	$0, 0, 0, 0, \frac{342}{1813}\sqrt{6}e^{12}, \frac{38}{1813}\sqrt{114}e^{13}, \frac{38}{1813}\sqrt{241}e^{24},$ $\frac{38}{1813}\sqrt{381}e^{15} + \frac{152}{1813}\sqrt{3}e^{36}$	$(\frac{228}{1813}, \frac{114}{1813}, \frac{171}{1813}, -\frac{608}{1813}, \frac{342}{1813}, \frac{57}{259}, -\frac{494}{1813}, \frac{570}{1813})$ $+ \frac{684}{1813}\sqrt{3}e^1 \otimes e_7 + \frac{76}{1813}\sqrt{151}e^2 \otimes e_4$	{235678, 2578}
841:33	$0, 0, 0, 0, \frac{6}{1385}\sqrt{13462}e^{12}, \frac{6}{1385}\sqrt{13038}e^{13}, \frac{6}{1385}\sqrt{19981}e^{24},$ $\frac{6}{1385}\sqrt{20829}e^{15} + \frac{12}{1385}\sqrt{530}e^{36}$	$(\frac{492}{1385}, -\frac{358}{1385}, \frac{67}{1385}, -\frac{104}{1385}, \frac{134}{1385}, \frac{559}{1385}, -\frac{462}{1385}, \frac{626}{1385})$ $+ \frac{12}{1385}\sqrt{14734}e^1 \otimes e_7$	{135, 156, 235678, 2578}
841:33	$0, 0, 0, 0, \frac{18}{1265}\sqrt{4638}e^{12}, \frac{2}{1265}\sqrt{88122}e^{13}, \frac{2}{1265}\sqrt{61067}e^{24},$ $\frac{2}{1265}\sqrt{81165}e^{15} + \frac{8}{1265}\sqrt{2319}e^{36}$	$(-\frac{228}{1265}, \frac{78}{115}, \frac{63}{253}, -\frac{688}{1265}, \frac{126}{253}, \frac{87}{1265}, \frac{34}{253}, \frac{402}{1265})$ $+ \frac{4}{1265}\sqrt{196342}e^2 \otimes e_4$	{13456, 145, 2358, 2568}
841:33	$0, 0, 0, 0, \frac{75}{1781}\sqrt{82}e^{12}, \frac{25}{1781}\sqrt{1626}e^{13}, \frac{50}{1781}\sqrt{337}e^{24},$ $\frac{25}{1781}\sqrt{834}e^{15} + \frac{50}{1781}\sqrt{345}e^{36}$	$(\frac{225}{1781}, \frac{75}{1781}, \frac{150}{1781}, -\frac{550}{1781}, \frac{300}{1781}, \frac{375}{1781}, -\frac{475}{1781}, \frac{525}{1781})$ $+ \frac{25}{1781}\sqrt{2802}e^3 \otimes e_7 + \frac{400}{1781}e^2 \otimes e_4$	{125678, 457}
841:34	$0, 0, 0, 0, -\frac{2}{17}\sqrt{30}e^{12}, \frac{2}{17}\sqrt{30}e^{13}, \frac{4}{17}\sqrt{10}e^{24},$ $\frac{2}{17}\sqrt{30}e^{25} + \frac{2}{17}\sqrt{30}e^{36}$	$(\frac{3}{17}, 0, 0, -\frac{4}{17}, \frac{3}{17}, \frac{3}{17}, -\frac{4}{17}, \frac{3}{17})$ $+ \frac{2}{17}\sqrt{26}e^2 \otimes e_4 + \frac{6}{17}\sqrt{6}e^3 \otimes e_7$	{123458, 138, 2346, 356, 123458, 138, 2346, 356}
841:34	$0, 0, 0, 0, \frac{2}{17}\sqrt{30}e^{12}, \frac{2}{17}\sqrt{30}e^{13}, \frac{4}{17}\sqrt{10}e^{24},$ $\frac{2}{17}\sqrt{30}e^{25} + \frac{2}{17}\sqrt{30}e^{36}$	$(\frac{3}{17}, 0, 0, -\frac{4}{17}, \frac{3}{17}, \frac{3}{17}, -\frac{4}{17}, \frac{3}{17})$ $+ \frac{2}{17}\sqrt{26}e^2 \otimes e_4 + \frac{6}{17}\sqrt{6}e^3 \otimes e_7$	{123458, 138, 2346, 356, 123458, 138, 2346, 356}
841:34	$0, 0, 0, 0, -\frac{1}{81}\sqrt{1218}e^{12}, \frac{2}{81}\sqrt{493}e^{13}, \frac{1}{81}\sqrt{2378}e^{24},$ $\frac{1}{81}\sqrt{1218}e^{25} + \frac{2}{81}\sqrt{493}e^{36}$	$(-\frac{1}{81}, \frac{13}{81}, \frac{13}{81}, -\frac{29}{81}, \frac{4}{27}, \frac{4}{27}, -\frac{16}{81}, \frac{25}{81})$ $+ \frac{1}{81}\sqrt{4002}e^3 \otimes e_7$	{123458, 125678, 138, 14678, 2346, 27, 356, 457, 123458, 125678, 138, 14678, 2346, 27, 356, 457}
841:34	$0, 0, 0, 0, \frac{1}{81}\sqrt{1218}e^{12}, \frac{2}{81}\sqrt{493}e^{13}, \frac{1}{81}\sqrt{2378}e^{24},$ $\frac{1}{81}\sqrt{1218}e^{25} + \frac{2}{81}\sqrt{493}e^{36}$	$(-\frac{1}{81}, \frac{13}{81}, \frac{13}{81}, -\frac{29}{81}, \frac{4}{27}, \frac{4}{27}, -\frac{16}{81}, \frac{25}{81})$ $+ \frac{1}{81}\sqrt{4002}e^3 \otimes e_7$	{123458, 125678, 138, 14678, 2346, 27, 356, 457, 123458, 125678, 138, 14678, 2346, 27, 356, 457}
841:34	$0, 0, 0, 0, -\frac{3}{157}\sqrt{42}e^{12}, \frac{9}{157}\sqrt{38}e^{13}, \frac{30}{157}\sqrt{6}e^{24},$ $\frac{9}{157}\sqrt{42}e^{25} + \frac{9}{157}\sqrt{38}e^{36}$	$(\frac{57}{157}, -\frac{36}{157}, -\frac{36}{157}, \frac{39}{157}, \frac{21}{157}, \frac{21}{157}, -\frac{15}{157}, -\frac{15}{157})$ $+ \frac{12}{157}\sqrt{51}e^1 \otimes e_7 + \frac{12}{157}\sqrt{51}e^4 \otimes e_8$	{1358, 1568, 3467, 47, 1358, 1568, 3467, 47}
841:34	$0, 0, 0, 0, \frac{3}{157}\sqrt{42}e^{12}, \frac{9}{157}\sqrt{38}e^{13}, \frac{30}{157}\sqrt{6}e^{24},$ $\frac{3}{157}\sqrt{42}e^{25} + \frac{9}{157}\sqrt{38}e^{36}$	$(\frac{57}{157}, -\frac{36}{157}, -\frac{36}{157}, \frac{39}{157}, \frac{21}{157}, \frac{21}{157}, -\frac{15}{157}, -\frac{15}{157})$ $+ \frac{12}{157}\sqrt{51}e^1 \otimes e_7 + \frac{12}{157}\sqrt{51}e^4 \otimes e_8$	{1358, 1568, 3467, 47, 1358, 1568, 3467, 47}
841:34	$0, 0, 0, 0, -\frac{9}{953}\sqrt{5}e^{12}, \frac{3}{953}\sqrt{61}e^{13}, \frac{5}{953}\sqrt{34}e^{24},$ $\frac{1}{953}\sqrt{239}e^{25} + \frac{1}{953}\sqrt{715}e^{36}$	$(\frac{20}{953}, -\frac{11}{953}, -\frac{11}{953}, -\frac{1}{953}, \frac{9}{953}, \frac{9}{953}, -\frac{12}{953}, -\frac{2}{953})$ $+ \frac{23}{953}\sqrt{2}e^3 \otimes e_7 + \frac{2}{953}\sqrt{166}e^4 \otimes e_8$	{125678, 138, 2346, 457, 125678, 138, 2346, 457}
841:34	$0, 0, 0, 0, \frac{9}{953}\sqrt{5}e^{12}, \frac{3}{953}\sqrt{61}e^{13}, \frac{5}{953}\sqrt{34}e^{24},$ $\frac{1}{953}\sqrt{239}e^{25} + \frac{1}{953}\sqrt{715}e^{36}$	$(\frac{20}{953}, -\frac{11}{953}, -\frac{11}{953}, -\frac{1}{953}, \frac{9}{953}, \frac{9}{953}, -\frac{12}{953}, -\frac{2}{953})$ $+ \frac{23}{953}\sqrt{2}e^3 \otimes e_7 + \frac{2}{953}\sqrt{166}e^4 \otimes e_8$	{125678, 138, 2346, 457, 125678, 138, 2346, 457}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:34	$0, 0, 0, 0, -\frac{1}{77}\sqrt{4209}e^{12}, \frac{1}{77}\sqrt{915}e^{13}, \frac{1}{77}\sqrt{2318}e^{24},$ $\frac{1}{77}\sqrt{4209}e^{25} + \frac{1}{77}\sqrt{915}e^{36}$	$(-\frac{15}{77}, \frac{27}{77}, \frac{27}{77}, -\frac{34}{77}, \frac{12}{77}, \frac{12}{77}, -\frac{1}{11}, \frac{39}{77})$ $+ \frac{1}{77}\sqrt{7930}e^2 \otimes e_4$	{12368, 128, 134568, 1458, 235, 256, 34, 46, 12368, 128, 134568, 1458, 235, 256, 34, 46}
841:34	$0, 0, 0, 0, \frac{1}{77}\sqrt{4209}e^{12}, \frac{1}{77}\sqrt{915}e^{13}, \frac{1}{77}\sqrt{2318}e^{24},$ $\frac{1}{77}\sqrt{4209}e^{25} + \frac{1}{77}\sqrt{915}e^{36}$	$(-\frac{15}{77}, \frac{27}{77}, \frac{27}{77}, -\frac{34}{77}, \frac{12}{77}, \frac{12}{77}, -\frac{1}{11}, \frac{39}{77})$ $+ \frac{1}{77}\sqrt{7930}e^2 \otimes e_4$	{12368, 128, 134568, 1458, 235, 256, 34, 46, 12368, 128, 134568, 1458, 235, 256, 34, 46}
841:36	$0, 0, 0, 0, \frac{26}{675}\sqrt{177}e^{12}, \frac{91}{675}\sqrt{30}e^{13}, \frac{13}{675}\sqrt{978}e^{14} + \frac{13}{225}\sqrt{10}e^{23},$ $\frac{26}{675}\sqrt{381}e^{16} + \frac{26}{225}\sqrt{7}e^{25}$	$(\frac{221}{675}, \frac{52}{675}, -\frac{13}{75}, -\frac{286}{675}, \frac{91}{225}, \frac{104}{675}, -\frac{13}{135}, \frac{13}{27})$ $+ \frac{26}{675}\sqrt{843}e^1 \otimes e_4$	{126, 3468}
841:36	$0, 0, 0, 0, \frac{82}{2065}\sqrt{47}e^{12}, \frac{41}{2065}\sqrt{38}e^{13},$ $\frac{41}{2065}\sqrt{1506}e^{14} + \frac{41}{2065}\sqrt{690}e^{23}, \frac{82}{2065}\sqrt{113}e^{16} + \frac{164}{2065}\sqrt{91}e^{25}$	$(-\frac{533}{2065}, \frac{82}{2065}, \frac{697}{2065}, \frac{1312}{2065}, -\frac{451}{2065}, \frac{164}{2065}, \frac{779}{2065}, -\frac{369}{2065})$ $+ \frac{902}{2065}\sqrt{7}e^4 \otimes e_8$	{12456, 3568}
841:37	$0, 0, 0, 0, -\frac{2}{35}\sqrt{5}e^{12}, \frac{2}{35}\sqrt{5}e^{13}, \frac{2}{7}\sqrt{6}e^{14} + \frac{2}{35}\sqrt{110}e^{23},$ $\frac{2}{35}\sqrt{115}e^{25} + \frac{2}{35}\sqrt{115}e^{36}$	$(-\frac{2}{7}, \frac{1}{7}, \frac{1}{7}, \frac{4}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{2}{7}, 0)$ $+ \frac{2}{35}\sqrt{290}e^4 \otimes e_8$	{12378, 15678, 234567, 47, 12378, 15678, 234567, 47}
841:37	$0, 0, 0, 0, \frac{2}{35}\sqrt{5}e^{12}, \frac{2}{35}\sqrt{5}e^{13}, \frac{2}{7}\sqrt{6}e^{14} + \frac{2}{35}\sqrt{110}e^{23},$ $\frac{2}{35}\sqrt{115}e^{25} + \frac{2}{35}\sqrt{115}e^{36}$	$(-\frac{2}{7}, \frac{1}{7}, \frac{1}{7}, \frac{4}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{2}{7}, 0)$ $+ \frac{2}{35}\sqrt{290}e^4 \otimes e_8$	{12378, 15678, 234567, 47, 12378, 15678, 234567, 47}
841:37	$0, 0, 0, 0, -\frac{13}{172}\sqrt{109}e^{12}, \frac{13}{172}\sqrt{109}e^{13}, \frac{13}{172}\sqrt{30}e^{14} + \frac{13}{172}\sqrt{62}e^{23},$ $\frac{13}{43}\sqrt{2}e^{25} + \frac{13}{43}\sqrt{2}e^{36}$	$(\frac{39}{86}, -\frac{13}{344}, -\frac{13}{344}, -\frac{91}{172}, \frac{143}{344}, \frac{143}{344}, -\frac{13}{172}, \frac{65}{172})$ $+ \frac{13}{172}\sqrt{278}e^1 \otimes e_4$	{1268, 245, 1268, 245}
841:37	$0, 0, 0, 0, \frac{13}{172}\sqrt{109}e^{12}, \frac{13}{172}\sqrt{109}e^{13}, \frac{13}{172}\sqrt{30}e^{14} + \frac{13}{172}\sqrt{62}e^{23},$ $\frac{13}{43}\sqrt{2}e^{25} + \frac{13}{43}\sqrt{2}e^{36}$	$(\frac{39}{86}, -\frac{13}{344}, -\frac{13}{344}, -\frac{91}{172}, \frac{143}{344}, \frac{143}{344}, -\frac{13}{172}, \frac{65}{172})$ $+ \frac{13}{172}\sqrt{278}e^1 \otimes e_4$	{1268, 245, 1268, 245}
841:39	$0, 0, 0, 0, \frac{690}{1087}e^{12}, \frac{46}{1087}\sqrt{69}e^{13}, \frac{46}{1087}\sqrt{263}e^{14},$ $\frac{92}{1087}\sqrt{19}e^{15} + \frac{46}{1087}\sqrt{218}e^{24} + \frac{46}{1087}\sqrt{21}e^{36}$	$(-\frac{138}{1087}, \frac{644}{1087}, \frac{253}{1087}, -\frac{276}{1087}, \frac{506}{1087}, \frac{115}{1087}, -\frac{414}{1087}, \frac{368}{1087})$ $+ \frac{966}{1087}\sqrt{2}e^2 \otimes e_7$	{12346, 124, 3478, 4678}
841:39	$0, 0, 0, 0, \frac{690}{1087}e^{12}, \frac{46}{1087}\sqrt{69}e^{13}, \frac{46}{1087}\sqrt{263}e^{14},$ $\frac{92}{1087}\sqrt{19}e^{15} + \frac{46}{1087}\sqrt{218}e^{24} + \frac{46}{1087}\sqrt{21}e^{36}$	$(-\frac{138}{1087}, \frac{644}{1087}, \frac{253}{1087}, -\frac{276}{1087}, \frac{506}{1087}, \frac{115}{1087}, -\frac{414}{1087}, \frac{368}{1087})$ $- \frac{966}{1087}\sqrt{2}e^2 \otimes e_7$	{12346, 124, 3478, 4678}
841:39	$0, 0, 0, 0, \frac{31}{2093}\sqrt{818}e^{12}, \frac{31}{2093}\sqrt{1586}e^{13}, \frac{62}{2093}\sqrt{431}e^{14},$ $\frac{31}{2093}\sqrt{1478}e^{15} + \frac{62}{2093}\sqrt{69}e^{24} + \frac{186}{2093}\sqrt{55}e^{36}$	$(-\frac{31}{299}, \frac{837}{2093}, \frac{310}{2093}, -\frac{62}{299}, \frac{620}{2093}, \frac{93}{2093}, -\frac{93}{299}, \frac{31}{161})$ $+ \frac{31}{2093}\sqrt{3606}e^3 \otimes e_7$	{123458, 457}
841:40	$0, 0, 0, 0, -\frac{12}{149}\sqrt{7}e^{12}, \frac{4}{149}\sqrt{157}e^{13}, \frac{4}{149}\sqrt{178}e^{24},$ $\frac{4}{149}\sqrt{110}e^{14} + \frac{12}{149}\sqrt{7}e^{25} + \frac{4}{149}\sqrt{157}e^{36}$	$(\frac{26}{149}, -\frac{8}{149}, -\frac{8}{149}, -\frac{16}{149}, \frac{18}{149}, \frac{18}{149}, -\frac{24}{149}, \frac{10}{149})$ $+ \frac{4}{149}\sqrt{262}e^3 \otimes e_7$	{123458, 14678, 2346, 457, 123458, 14678, 2346, 457}
841:40	$0, 0, 0, 0, \frac{12}{149}\sqrt{7}e^{12}, \frac{4}{149}\sqrt{157}e^{13}, \frac{4}{149}\sqrt{178}e^{24},$ $\frac{4}{149}\sqrt{110}e^{14} + \frac{12}{149}\sqrt{7}e^{25} + \frac{4}{149}\sqrt{157}e^{36}$	$(\frac{26}{149}, -\frac{8}{149}, -\frac{8}{149}, -\frac{16}{149}, \frac{18}{149}, \frac{18}{149}, -\frac{24}{149}, \frac{10}{149})$ $+ \frac{4}{149}\sqrt{262}e^3 \otimes e_7$	{123458, 14678, 2346, 457, 123458, 14678, 2346, 457}
841:42	$0, 0, 0, 0, \frac{1}{505}\sqrt{1158}e^{12}, \frac{2}{505}\sqrt{498}e^{13}, \frac{4}{505}\sqrt{141}e^{24},$ $\frac{4}{505}\sqrt{141}e^{16} + \frac{6}{505}\sqrt{22}e^{25} + \frac{2}{505}\sqrt{447}e^{34}$	$(-\frac{2}{101}, \frac{7}{505}, \frac{24}{505}, -\frac{4}{101}, -\frac{3}{505}, \frac{14}{505}, -\frac{13}{505}, \frac{4}{505})$ $+ \frac{3}{505}\sqrt{298}e^1 \otimes e_7$	{123458, 457}
841:43	$0, 0, 0, 0, -\frac{1}{4}e^{12}, \frac{1}{4}e^{13}, \frac{1}{4}\sqrt{10}e^{23},$ $\frac{1}{4}\sqrt{10}e^{14} + \frac{1}{2}e^{25} + \frac{1}{2}e^{36}$	$(\frac{1}{2}, -\frac{1}{8}, -\frac{1}{8}, -\frac{1}{4}, \frac{3}{8}, \frac{3}{8}, -\frac{1}{4}, \frac{1}{4})$ $+ \frac{1}{2}\sqrt{5}e^1 \otimes e_7$	{1234, 1456, 24578, 1234, 1456, 24578}
841:43	$0, 0, 0, 0, \frac{1}{4}e^{12}, \frac{1}{4}e^{13}, \frac{1}{4}\sqrt{10}e^{23}, \frac{1}{4}\sqrt{10}e^{14} + \frac{1}{2}e^{25} + \frac{1}{2}e^{36}$	$(\frac{1}{2}, -\frac{1}{8}, -\frac{1}{8}, -\frac{1}{4}, \frac{3}{8}, \frac{3}{8}, -\frac{1}{4}, \frac{1}{4})$ $+ \frac{1}{2}\sqrt{5}e^1 \otimes e_7$	{1234, 1456, 24578, 1234, 1456, 24578}
841:43	$0, 0, 0, 0, -\frac{1}{4}\sqrt{11}e^{12}, \frac{1}{4}\sqrt{11}e^{13}, \frac{1}{4}\sqrt{10}e^{23},$ $\frac{1}{4}\sqrt{10}e^{14} + \frac{1}{4}\sqrt{6}e^{25} + \frac{1}{4}\sqrt{6}e^{36}$	$(\frac{1}{2}, -\frac{1}{8}, -\frac{1}{8}, -\frac{1}{4}, \frac{3}{8}, \frac{3}{8}, -\frac{1}{4}, \frac{1}{4})$ $+ \frac{1}{2}\sqrt{5}e^1 \otimes e_4$	{234567, 245, 47, 234567, 245, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:43	$0, 0, 0, 0, \frac{1}{4}\sqrt{11}e^{12}, \frac{1}{4}\sqrt{11}e^{13}, \frac{1}{4}\sqrt{10}e^{23},$ $\frac{1}{4}\sqrt{10}e^{14} + \frac{1}{4}\sqrt{6}e^{25} + \frac{1}{4}\sqrt{6}e^{36}$	$(\frac{1}{2}, -\frac{1}{8}, -\frac{1}{8}, -\frac{1}{4}, \frac{3}{8}, \frac{3}{8}, -\frac{1}{4}, \frac{1}{4})$ $+ \frac{1}{2}\sqrt{5}e^1 \otimes e_4$	{234567, 245, 47, 234567, 245, 47}
841:44	$0, 0, 0, 0, \frac{26}{591}\sqrt{345}e^{12}, \frac{13}{591}\sqrt{1122}e^{13}, \frac{13}{591}\sqrt{1542}e^{23},$ $\frac{52}{197}\sqrt{7}e^{15} + \frac{169}{591}\sqrt{6}e^{24} + \frac{78}{197}e^{36}$	$(-\frac{39}{197}, \frac{91}{197}, \frac{26}{197}, -\frac{78}{197}, \frac{52}{197}, -\frac{13}{197}, \frac{117}{197}, \frac{13}{197})$ $+ \frac{13}{591}\sqrt{2982}e^2 \otimes e_4$	{347, 46}
841:44	$0, 0, 0, 0, \frac{186}{1843}\sqrt{34}e^{12}, \frac{31}{1843}\sqrt{318}e^{13}, \frac{124}{1843}\sqrt{94}e^{23},$ $\frac{62}{1843}\sqrt{478}e^{15} + \frac{62}{1843}\sqrt{293}e^{24} + \frac{124}{1843}\sqrt{35}e^{36}$	$(\frac{434}{1843}, -\frac{496}{1843}, -\frac{31}{1843}, \frac{868}{1843}, -\frac{62}{1843}, \frac{403}{1843}, -\frac{527}{1843}, \frac{372}{1843})$ $+ \frac{31}{1843}\sqrt{3122}e^1 \otimes e_7$	{123468, 347}
841:47	$0, 0, 0, 0, \frac{26}{651}\sqrt{129}e^{12}, \frac{26}{651}\sqrt{399}e^{13}, \frac{26}{651}\sqrt{141}e^{23},$ $\frac{13}{651}\sqrt{1326}e^{16} + \frac{13}{651}\sqrt{246}e^{25} + \frac{13}{651}\sqrt{834}e^{37}$	$(\frac{26}{217}, \frac{26}{217}, \frac{26}{217}, -\frac{143}{217}, \frac{52}{217}, \frac{52}{217}, \frac{52}{217}, \frac{78}{217})$ $+ \frac{78}{217}\sqrt{10}e^1 \otimes e_4$	{12378, 47}
841:49	$0, 0, 0, 0, \frac{3}{187}\sqrt{394}e^{12}, \frac{3}{187}\sqrt{394}e^{34}, \frac{2}{187}\sqrt{5910}e^{13},$ $\frac{1}{187}\sqrt{20094}e^{15} + \frac{2}{187}\sqrt{2561}e^{36}$	$(\frac{5}{11}, -\frac{112}{187}, \frac{8}{187}, \frac{42}{187}, -\frac{27}{187}, \frac{50}{187}, \frac{93}{187}, \frac{58}{187})$ $+ \frac{2}{187}\sqrt{15169}e^1 \otimes e_2$	{13468, 1478, 237, 26}
841:49	$0, 0, 0, 0, \frac{26}{341}\sqrt{15}e^{12}, \frac{26}{341}\sqrt{15}e^{34}, \frac{13}{341}\sqrt{246}e^{13},$ $\frac{52}{341}\sqrt{2}e^{15} + \frac{52}{341}\sqrt{2}e^{36}$	$(\frac{78}{341}, -\frac{91}{341}, \frac{78}{341}, -\frac{91}{341}, -\frac{13}{341}, -\frac{13}{341}, \frac{156}{341}, \frac{65}{341})$ $+ \frac{26}{341}\sqrt{77}e^1 \otimes e_2 + \frac{26}{341}\sqrt{77}e^3 \otimes e_4$	{138, 24}
841:49	$0, 0, 0, 0, \frac{1}{145}\sqrt{11130}e^{12}, \frac{2}{145}\sqrt{318}e^{34}, \frac{4}{145}\sqrt{795}e^{13},$ $\frac{3}{145}\sqrt{106}e^{15} + \frac{3}{145}\sqrt{106}e^{36}$	$(-\frac{44}{145}, \frac{22}{29}, -\frac{1}{29}, \frac{32}{145}, \frac{66}{145}, \frac{27}{145}, -\frac{49}{145}, \frac{22}{145})$ $+ \frac{3}{145}\sqrt{4134}e^2 \otimes e_7$	{123, 14578, 256, 34678}
841:49	$0, 0, 0, 0, \frac{5}{106}\sqrt{34}e^{12}, \frac{5}{53}\sqrt{7}e^{34}, \frac{30}{53}e^{13},$ $\frac{10}{53}\sqrt{3}e^{15} + \frac{25}{106}\sqrt{2}e^{36}$	$(\frac{10}{53}, -\frac{15}{53}, -\frac{10}{53}, \frac{25}{53}, -\frac{5}{53}, \frac{15}{53}, 0, \frac{5}{53})$ $+ \frac{35}{53}e^1 \otimes e_2 + \frac{5}{106}\sqrt{186}e^4 \otimes e_7$	{178, 246}
841:50	$0, 0, 0, 0, \frac{1}{207}\sqrt{2270}e^{12}, \frac{1}{207}\sqrt{2270}e^{34}, \frac{1}{207}\sqrt{24970}e^{13},$ $\frac{2}{207}\sqrt{454}e^{25} + \frac{2}{207}\sqrt{5902}e^{36}$	$(-\frac{10}{207}, \frac{49}{207}, \frac{35}{69}, -\frac{122}{207}, \frac{13}{69}, -\frac{17}{207}, \frac{95}{207}, \frac{88}{207})$ $+ \frac{1}{207}\sqrt{75818}e^3 \otimes e_4$	{12358, 138, 24, 45}
841:50	$0, 0, 0, 0, \frac{3}{317}\sqrt{646}e^{12}, \frac{228}{317}e^{34}, \frac{6}{317}\sqrt{1691}e^{13},$ $\frac{18}{317}\sqrt{57}e^{25} + \frac{3}{317}\sqrt{1330}e^{36}$	$(-\frac{17}{317}, \frac{45}{317}, -\frac{84}{317}, \frac{241}{317}, \frac{28}{317}, \frac{157}{317}, -\frac{101}{317}, \frac{73}{317})$ $+ \frac{39}{317}\sqrt{114}e^4 \otimes e_7$	{12345, 134, 23678, 35678}
841:50	$0, 0, 0, 0, \frac{5}{441}\sqrt{658}e^{12}, \frac{5}{441}\sqrt{434}e^{34}, \frac{10}{441}\sqrt{511}e^{13},$ $\frac{50}{441}\sqrt{14}e^{25} + \frac{5}{441}\sqrt{182}e^{36}$	$(-\frac{20}{63}, \frac{20}{63}, \frac{5}{21}, -\frac{10}{63}, 0, \frac{5}{63}, -\frac{5}{63}, \frac{20}{63})$ $+ \frac{10}{147}\sqrt{91}e^2 \otimes e_7 + \frac{10}{63}\sqrt{11}e^3 \otimes e_4$	{14578, 37}
841:50	$0, 0, 0, 0, \frac{6}{91}\sqrt{70}e^{12}, \frac{3}{91}\sqrt{70}e^{34}, \frac{3}{91}\sqrt{434}e^{13},$ $\frac{18}{91}\sqrt{14}e^{25} + \frac{3}{91}\sqrt{238}e^{36}$	$(-\frac{5}{13}, \frac{5}{13}, \frac{1}{13}, \frac{3}{13}, 0, \frac{4}{13}, -\frac{4}{13}, \frac{5}{13})$ $+ \frac{15}{91}\sqrt{42}e^2 \otimes e_7$	{123468, 14578, 256, 37}
841:51	$0, 0, 0, 0, \frac{16}{1553}\sqrt{3534}e^{12}, \frac{2}{1553}\sqrt{20026}e^{34}, \frac{2}{1553}\sqrt{236189}e^{13},$ $\frac{2}{1553}\sqrt{321005}e^{25} + \frac{2}{1553}\sqrt{48298}e^{46}$	$(-\frac{486}{1553}, \frac{624}{1553}, -\frac{68}{1553}, \frac{415}{1553}, \frac{138}{1553}, \frac{347}{1553}, -\frac{554}{1553}, \frac{762}{1553})$ $+ \frac{38}{1553}\sqrt{2046}e^2 \otimes e_7$	{123468, 1238, 245, 256}
841:57	$0, 0, 0, 0, \frac{5}{329}\sqrt{154}e^{12}, \frac{5}{329}\sqrt{1442}e^{34}, \frac{10}{329}\sqrt{413}e^{13},$ $\frac{5}{329}\sqrt{574}e^{15} + \frac{10}{47}\sqrt{7}e^{23} + \frac{10}{329}\sqrt{546}e^{46}$	$(-\frac{5}{47}, \frac{20}{47}, -\frac{10}{47}, \frac{10}{47}, \frac{15}{47}, 0, -\frac{15}{47}, \frac{10}{47})$ $+ \frac{10}{329}\sqrt{966}e^4 \otimes e_7$	{127, 2456}
841:57	$0, 0, 0, 0, \frac{46}{557}\sqrt{42}e^{12}, \frac{23}{557}\sqrt{138}e^{34}, \frac{46}{557}\sqrt{77}e^{13},$ $\frac{23}{557}\sqrt{142}e^{15} + \frac{23}{557}\sqrt{302}e^{23} + \frac{46}{557}\sqrt{3}e^{46}$	$(-\frac{69}{557}, \frac{322}{557}, -\frac{138}{557}, \frac{161}{557}, \frac{253}{557}, \frac{23}{557}, -\frac{207}{557}, \frac{184}{557})$ $+ \frac{69}{557}\sqrt{102}e^2 \otimes e_7$	{123, 12346}
841:58	$0, 0, 0, 0, \frac{3}{85}\sqrt{6}e^{12}, \frac{6}{85}\sqrt{78}e^{34}, \frac{12}{85}\sqrt{30}e^{13},$ $\frac{9}{85}\sqrt{26}e^{15} + \frac{12}{85}\sqrt{30}e^{24} + \frac{9}{85}\sqrt{26}e^{36}$	$(-\frac{12}{85}, \frac{6}{17}, \frac{3}{17}, -\frac{24}{85}, \frac{18}{85}, -\frac{9}{85}, \frac{3}{85}, \frac{6}{85})$ $+ \frac{27}{85}\sqrt{6}e^2 \otimes e_7$	{167, 357}
841:67	$0, 0, 0, 0, -\frac{13}{172}\sqrt{78}e^{12}, \frac{13}{172}\sqrt{78}e^{13}, \frac{13}{172}\sqrt{30}e^{14},$ $\frac{13}{172}\sqrt{62}e^{17} + \frac{13}{172}e^{25} + \frac{13}{172}e^{36}$	$(\frac{39}{86}, -\frac{13}{344}, -\frac{13}{344}, -\frac{91}{172}, \frac{143}{344}, \frac{143}{344}, -\frac{13}{172}, \frac{65}{172})$ $+ \frac{13}{172}\sqrt{278}e^1 \otimes e_4$	{1238, 1268, 1358, 1568, 23456, 245, 346, 4, 1238, 1268, 1358, 1568, 23456, 245, 346, 4}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
841:67	$0, 0, 0, 0, \frac{13}{172}\sqrt{78}e^{12}, \frac{13}{172}\sqrt{78}e^{13}, \frac{13}{172}\sqrt{30}e^{14},$ $\frac{13}{172}\sqrt{62}e^{17} + \frac{13}{172}e^{25} + \frac{13}{172}e^{36}$	$(\frac{39}{86}, -\frac{13}{344}, -\frac{13}{344}, -\frac{91}{172}, \frac{143}{344}, \frac{143}{344}, -\frac{13}{172}, \frac{65}{172})$ $+ \frac{13}{172}\sqrt{278}e^1 \otimes e_4$	{1238, 1268, 1568, 23456, 245, 4, 1238, 1268, 1568, 23456, 245, 4}
841:67	$0, 0, 0, 0, \frac{13}{172}\sqrt{78}e^{12}, \frac{13}{172}\sqrt{78}e^{13}, \frac{13}{172}\sqrt{30}e^{14},$ $\frac{13}{172}\sqrt{62}e^{17} + \frac{13}{172}e^{25} + \frac{13}{172}e^{36}$	$(\frac{39}{86}, -\frac{13}{344}, -\frac{13}{344}, -\frac{91}{172}, \frac{143}{344}, \frac{143}{344}, -\frac{13}{172}, \frac{65}{172})$ $- \frac{13}{172}\sqrt{278}e^1 \otimes e_4$	{1238, 1268, 1568, 23456, 245, 4, 1238, 1268, 1568, 23456, 245, 4}
84:1	$0, 0, 0, 0, \frac{14}{37}\sqrt{2}e^{12}, \frac{14}{37}\sqrt{2}e^{13}, \frac{2}{37}\sqrt{238}e^{23}, \frac{2}{37}\sqrt{238}e^{14}$	$(\frac{3}{37}, -\frac{4}{37}, -\frac{4}{37}, \frac{20}{37}, -\frac{1}{37}, -\frac{1}{37}, -\frac{8}{37}, \frac{23}{37})$ $+ \frac{2}{37}\sqrt{434}e^4 \otimes e_7$	{123456, 12578, 14, 2348, 267, 4568}
84:1	$0, 0, 0, 0, \frac{4}{97}\sqrt{2}e^{12}, \frac{8}{97}\sqrt{6}e^{13}, \frac{4}{97}\sqrt{41}e^{23}, \frac{4}{97}\sqrt{41}e^{14}$	$(-\frac{7}{97}, \frac{13}{97}, -\frac{9}{97}, \frac{12}{97}, \frac{6}{97}, -\frac{16}{97}, \frac{4}{97}, \frac{5}{97})$ $+ \frac{12}{97}\sqrt{5}e^4 \otimes e_7 + \frac{8}{97}\sqrt{11}e^2 \otimes e_8$	{123456, 13678, 267, 4568}
84:1	$0, 0, 0, 0, \frac{1}{17}\sqrt{78}e^{12}, \frac{2}{17}\sqrt{26}e^{13}, \frac{2}{17}\sqrt{39}e^{23}, \frac{2}{17}\sqrt{39}e^{14}$	$(-\frac{2}{17}, \frac{8}{17}, \frac{1}{17}, -\frac{3}{17}, \frac{6}{17}, -\frac{1}{17}, \frac{9}{17}, -\frac{5}{17})$ $+ \frac{2}{17}\sqrt{91}e^2 \otimes e_8$	{12346, 1247, 135678, 158, 235, 2567, 3478, 468}
84:1	$0, 0, 0, 0, \frac{2}{115}\sqrt{1469}e^{12}, \frac{2}{115}\sqrt{1469}e^{13}, \frac{1}{115}\sqrt{4746}e^{23}, \frac{2}{115}\sqrt{565}e^{14}$	$(-\frac{4}{23}, \frac{68}{115}, -\frac{5}{23}, \frac{32}{115}, \frac{48}{115}, -\frac{9}{23}, \frac{43}{115}, \frac{12}{115})$ $+ \frac{1}{115}\sqrt{21018}e^2 \otimes e_6$	{123, 12348, 14568, 156, 2457, 2578, 3467, 3678}
84:1	$0, 0, 0, 0, \frac{4}{205}\sqrt{71}e^{12}, \frac{2}{205}\sqrt{1491}e^{13}, \frac{1}{205}\sqrt{8094}e^{23}, \frac{2}{205}\sqrt{1065}e^{14}$	$(-\frac{8}{41}, \frac{56}{205}, \frac{5}{41}, -\frac{6}{205}, \frac{16}{205}, -\frac{3}{41}, \frac{81}{205}, -\frac{46}{205})$ $+ \frac{2}{41}\sqrt{142}e^3 \otimes e_8 + \frac{9}{205}\sqrt{142}e^2 \otimes e_6$	{12345, 168, 2478, 3567}
84:1	$0, 0, 0, 0, \frac{1}{3}\sqrt{6}e^{12}, \frac{1}{3}\sqrt{6}e^{13}, \frac{1}{3}\sqrt{3}e^{23}, \frac{1}{3}\sqrt{3}e^{14}$	$(\frac{1}{2}, 0, 0, -\frac{1}{2}, \frac{1}{2}, \frac{1}{2}, 0, 0)$ $+ \frac{1}{3}\sqrt{15}e^1 \otimes e_4$	{1237, 126, 1567, 234567, 245, 47}
84:1	$0, 0, 0, 0, \frac{1}{20}\sqrt{85}e^{12}, \frac{1}{20}\sqrt{85}e^{13}, \frac{1}{20}\sqrt{170}e^{23}, \frac{1}{20}\sqrt{170}e^{14}$	$(\frac{1}{2}, -\frac{7}{40}, -\frac{7}{40}, -\frac{1}{20}, \frac{13}{40}, \frac{13}{40}, -\frac{7}{20}, \frac{9}{20})$ $+ \frac{1}{5}\sqrt{34}e^1 \otimes e_7$	{1234, 1238, 1456, 1568, 24578, 257}
84:1	$0, 0, 0, 0, \frac{1}{203}\sqrt{10918}e^{12}, \frac{2}{203}\sqrt{515}e^{13}, \frac{6}{203}\sqrt{103}e^{23}, \frac{4}{203}\sqrt{206}e^{14}$	$(-\frac{54}{203}, \frac{46}{203}, -\frac{3}{203}, \frac{95}{203}, -\frac{8}{203}, -\frac{57}{203}, \frac{43}{203}, \frac{41}{203})$ $+ \frac{2}{203}\sqrt{4429}e^4 \otimes e_5 + \frac{2}{203}\sqrt{4738}e^2 \otimes e_6$	{1234, 1568, 257, 34678}
84:1	$0, 0, 0, 0, \frac{1}{719}\sqrt{72790}e^{12}, \frac{2}{719}\sqrt{251}e^{13}, \frac{2}{719}\sqrt{11797}e^{23}, \frac{8}{719}\sqrt{1506}e^{14}$	$(\frac{90}{719}, -\frac{154}{719}, -\frac{7}{719}, \frac{187}{719}, -\frac{64}{719}, \frac{83}{719}, -\frac{161}{719}, \frac{277}{719})$ $+ \frac{14}{719}\sqrt{753}e^4 \otimes e_5 + \frac{2}{719}\sqrt{42670}e^1 \otimes e_7$	{12346, 158, 2567, 3478}
84:1	$0, 0, 0, 0, \frac{8}{73}\sqrt{3}e^{12}, \frac{8}{73}\sqrt{2}e^{13}, \frac{8}{73}\sqrt{15}e^{23}, \frac{16}{73}\sqrt{6}e^{14}$	$(-\frac{16}{73}, \frac{28}{73}, -\frac{4}{73}, \frac{12}{73}, \frac{12}{73}, -\frac{20}{73}, \frac{24}{73}, -\frac{4}{73})$ $+ \frac{24}{73}\sqrt{3}e^4 \otimes e_6 + \frac{8}{73}\sqrt{37}e^2 \otimes e_8$	{1247, 135678, 2567, 3478}
84:1	$0, 0, 0, 0, \frac{7}{103}\sqrt{26}e^{12}, \frac{7}{103}\sqrt{26}e^{13}, \frac{6}{103}\sqrt{26}e^{23}, \frac{26}{103}e^{14}$	$(-\frac{26}{103}, \frac{14}{103}, \frac{14}{103}, \frac{23}{103}, -\frac{12}{103}, -\frac{12}{103}, \frac{28}{103}, -\frac{3}{103})$ $+ \frac{1}{103}\sqrt{2418}e^2 \otimes e_6 - \frac{1}{103}\sqrt{2418}e^3 \otimes e_5$	{123, 12348, 14568, 156, 2457, 2578}
84:1	$0, 0, 0, 0, \frac{7}{103}\sqrt{26}e^{12}, \frac{7}{103}\sqrt{26}e^{13}, \frac{6}{103}\sqrt{26}e^{23}, \frac{26}{103}e^{14}$	$(-\frac{26}{103}, \frac{14}{103}, \frac{14}{103}, \frac{23}{103}, -\frac{12}{103}, -\frac{12}{103}, \frac{28}{103}, -\frac{3}{103})$ $+ \frac{1}{103}\sqrt{2418}e^2 \otimes e_6 + \frac{1}{103}\sqrt{2418}e^3 \otimes e_5$	{123, 12348, 14568, 156, 2457, 2578}
84:1	$0, 0, 0, 0, \frac{2}{247}\sqrt{218}e^{12}, \frac{2}{247}\sqrt{218}e^{13}, \frac{1}{247}\sqrt{18530}e^{23}, \frac{6}{247}\sqrt{327}e^{14}$	$(-\frac{16}{247}, \frac{42}{247}, -\frac{51}{247}, \frac{100}{247}, \frac{2}{19}, -\frac{67}{247}, -\frac{9}{247}, \frac{84}{247})$ $+ \frac{1}{247}\sqrt{20274}e^2 \otimes e_6 + \frac{2}{247}\sqrt{6758}e^4 \otimes e_7$	{12578, 13678, 2348, 4568}
84:1	$0, 0, 0, 0, \frac{1}{41}\sqrt{190}e^{12}, \frac{6}{41}\sqrt{5}e^{13}, \frac{4}{41}\sqrt{10}e^{23}, \frac{3}{41}\sqrt{30}e^{14}$	$(-\frac{10}{41}, \frac{7}{41}, \frac{5}{41}, \frac{7}{41}, -\frac{3}{41}, -\frac{5}{41}, \frac{12}{41}, -\frac{3}{41})$ $+ \frac{1}{41}\sqrt{330}e^4 \otimes e_5 + \frac{1}{41}\sqrt{410}e^2 \otimes e_8$	{12346, 1247, 135678, 158, 235, 2567, 3478, 468}
84:1	$0, 0, 0, 0, \frac{1}{41}\sqrt{190}e^{12}, \frac{6}{41}\sqrt{5}e^{13}, \frac{4}{41}\sqrt{10}e^{23}, \frac{3}{41}\sqrt{30}e^{14}$	$(-\frac{10}{41}, \frac{7}{41}, \frac{5}{41}, \frac{7}{41}, -\frac{3}{41}, -\frac{5}{41}, \frac{12}{41}, -\frac{3}{41})$ $- \frac{1}{41}\sqrt{330}e^4 \otimes e_5 + \frac{1}{41}\sqrt{410}e^2 \otimes e_8$	{12346, 1247, 135678, 158, 235, 2567, 3478, 468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
84:1	$0, 0, 0, 0, \frac{1}{120}\sqrt{2769}e^{12}, \frac{1}{120}\sqrt{2769}e^{13}, \frac{1}{60}\sqrt{39}e^{23}, \frac{1}{60}\sqrt{390}e^{14}$	$(\frac{1}{8}, \frac{21}{80}, -\frac{3}{16}, -\frac{1}{5}, \frac{31}{80}, -\frac{1}{16}, \frac{3}{40}, -\frac{3}{40})$ $+ \frac{1}{120}\sqrt{4290}e^1 \otimes e_4 + \frac{3}{20}\sqrt{13}e^2 \otimes e_6$	{1237, 1567, 245, 346}
84:1	$0, 0, 0, 0, \frac{1}{253}\sqrt{3198}e^{12}, \frac{2}{253}\sqrt{410}e^{13}, \frac{2}{253}\sqrt{1599}e^{23}, \frac{2}{253}\sqrt{1599}e^{14}$	$(\frac{38}{253}, \frac{28}{253}, -\frac{31}{253}, -\frac{51}{253}, \frac{6}{23}, \frac{7}{253}, -\frac{3}{253}, -\frac{13}{253})$ $+ \frac{2}{253}\sqrt{2419}e^2 \otimes e_8 + \frac{6}{253}\sqrt{246}e^1 \otimes e_7$	{12346, 158, 2567, 3478}
84:1	$0, 0, 0, 0, \frac{5}{451}\sqrt{4790}e^{12}, \frac{2}{451}\sqrt{13891}e^{13}, \frac{2}{451}\sqrt{1437}e^{23}, \frac{16}{451}\sqrt{479}e^{14}$	$(-\frac{10}{41}, -\frac{46}{451}, \frac{137}{451}, \frac{323}{451}, -\frac{156}{451}, \frac{27}{451}, \frac{91}{451}, \frac{213}{451})$ $+ \frac{2}{451}\sqrt{87657}e^4 \otimes e_5$	{12346, 1247, 135678, 158, 235, 2567, 3478, 468}
84:1	$0, 0, 0, 0, \frac{2}{191}\sqrt{901}e^{12}, \frac{2}{191}\sqrt{901}e^{13}, \frac{1}{191}\sqrt{4346}e^{23}, \frac{2}{191}\sqrt{371}e^{14}$	$(\frac{28}{191}, \frac{28}{191}, -\frac{53}{191}, \frac{8}{191}, \frac{56}{191}, -\frac{25}{191}, -\frac{25}{191}, \frac{36}{191})$ $+ \frac{4}{191}\sqrt{583}e^1 \otimes e_7 - \frac{9}{191}\sqrt{106}e^2 \otimes e_6$	{1234, 1238, 1456, 1568, 24578, 257, 34678, 367}
84:1	$0, 0, 0, 0, \frac{2}{191}\sqrt{901}e^{12}, \frac{2}{191}\sqrt{901}e^{13}, \frac{1}{191}\sqrt{4346}e^{23}, \frac{2}{191}\sqrt{371}e^{14}$	$(\frac{28}{191}, \frac{28}{191}, -\frac{53}{191}, \frac{8}{191}, \frac{56}{191}, -\frac{25}{191}, -\frac{25}{191}, \frac{36}{191})$ $+ \frac{4}{191}\sqrt{583}e^1 \otimes e_7 + \frac{9}{191}\sqrt{106}e^2 \otimes e_6$	{1234, 1238, 1456, 1568, 24578, 257, 34678, 367}
84:2	$0, 0, 0, 0, \frac{3}{133}\sqrt{305}e^{12}, \frac{3}{133}\sqrt{110}e^{13}, \frac{3}{133}\sqrt{305}e^{24}, \frac{3}{133}\sqrt{110}e^{34}$	$(\frac{33}{133}, \frac{27}{266}, -\frac{6}{133}, \frac{51}{266}, \frac{93}{266}, \frac{27}{133}, -\frac{12}{133}, -\frac{9}{38})$ $+ \frac{9}{133}\sqrt{65}e^1 \otimes e_7 + \frac{9}{133}\sqrt{65}e^2 \otimes e_8$	{1234, 1358, 257, 478}
84:2	$0, 0, 0, 0, \frac{3}{11}\sqrt{2}e^{12}, \frac{6}{11}\sqrt{2}e^{13}, \frac{6}{11}\sqrt{2}e^{24}, \frac{6}{11}e^{34}$	$(\frac{6}{11}, -\frac{3}{11}, 0, 0, \frac{3}{11}, \frac{6}{11}, -\frac{3}{11}, 0)$ $+ \frac{9}{11}\sqrt{2}e^1 \otimes e_7$	{12348, 1246, 135, 1568, 23567, 2578, 34678, 47}
84:2	$0, 0, 0, 0, \frac{2}{29}\sqrt{6}e^{12}, \frac{2}{29}\sqrt{33}e^{13}, \frac{2}{29}\sqrt{33}e^{24}, \frac{2}{29}\sqrt{6}e^{34}$	$(\frac{7}{29}, -\frac{6}{29}, -\frac{6}{29}, \frac{7}{29}, \frac{1}{29}, \frac{1}{29}, \frac{1}{29}, \frac{1}{29})$ $+ \frac{2}{29}\sqrt{39}e^1 \otimes e_7 + \frac{2}{29}\sqrt{39}e^4 \otimes e_6$	{123458, 168, 2367}
84:2	$0, 0, 0, 0, \frac{3}{133}\sqrt{305}e^{12}, \frac{3}{133}\sqrt{110}e^{13}, \frac{3}{133}\sqrt{305}e^{24}, \frac{3}{133}\sqrt{110}e^{34}$	$(\frac{33}{133}, -\frac{45}{133}, -\frac{6}{133}, \frac{33}{133}, -\frac{12}{133}, \frac{27}{133}, -\frac{12}{133}, \frac{27}{133})$ $+ \frac{9}{133}\sqrt{65}e^1 \otimes e_7 + \frac{9}{133}\sqrt{65}e^4 \otimes e_5$	{1234, 12468, 1358, 156, 235678, 257}
84:2	$0, 0, 0, 0, \frac{3}{133}\sqrt{305}e^{12}, \frac{3}{133}\sqrt{110}e^{13}, \frac{3}{133}\sqrt{305}e^{24}, \frac{3}{133}\sqrt{110}e^{34}$	$(\frac{33}{133}, -\frac{45}{133}, -\frac{6}{133}, \frac{33}{133}, -\frac{12}{133}, \frac{27}{133}, -\frac{12}{133}, \frac{27}{133})$ $+ \frac{9}{133}\sqrt{65}e^1 \otimes e_7 - \frac{9}{133}\sqrt{65}e^4 \otimes e_5$	{1234, 12468, 1358, 156, 235678, 257}
84:2	$0, 0, 0, 0, \frac{3}{64}\sqrt{5}e^{12}, \frac{21}{128}\sqrt{2}e^{13}, \frac{21}{128}\sqrt{2}e^{24}, \frac{3}{128}\sqrt{58}e^{34}$	$(\frac{21}{256}, \frac{21}{256}, -\frac{9}{128}, -\frac{9}{128}, \frac{21}{128}, \frac{3}{256}, \frac{3}{256}, -\frac{9}{64})$ $+ \frac{9}{128}\sqrt{13}e^1 \otimes e_7 + \frac{9}{128}\sqrt{13}e^2 \otimes e_6$	{12348, 1568, 34678}
84:3	$0, 0, 0, 0, \frac{5}{61}\sqrt{6}e^{12}, \frac{2}{61}\sqrt{65}e^{13}, \frac{2}{61}\sqrt{65}e^{24}, \frac{1}{61}\sqrt{10}e^{14} + \frac{1}{61}\sqrt{10}e^{23}$	$(-\frac{5}{61}, -\frac{5}{61}, \frac{8}{61}, \frac{8}{61}, -\frac{10}{61}, \frac{3}{61}, \frac{3}{61}, \frac{3}{61})$ $+ \frac{2}{61}\sqrt{70}e^3 \otimes e_7 + \frac{2}{61}\sqrt{70}e^4 \otimes e_6$	{123458, 12567}
84:3	$0, 0, 0, 0, \frac{33}{821}\sqrt{38}e^{12}, \frac{44}{821}\sqrt{14}e^{13}, \frac{11}{821}\sqrt{454}e^{24}, \frac{33}{821}\sqrt{38}e^{14} + \frac{22}{821}\sqrt{101}e^{23}$	$(\frac{22}{821}, -\frac{121}{821}, \frac{165}{821}, \frac{22}{821}, -\frac{99}{821}, \frac{187}{821}, -\frac{99}{821}, \frac{44}{821})$ $- \frac{11}{821}\sqrt{690}e^4 \otimes e_5 + \frac{11}{821}\sqrt{802}e^1 \otimes e_7$	{1246, 1568, 257, 478}
84:3	$0, 0, 0, 0, \frac{33}{821}\sqrt{38}e^{12}, \frac{44}{821}\sqrt{14}e^{13}, \frac{11}{821}\sqrt{454}e^{24}, \frac{33}{821}\sqrt{38}e^{14} + \frac{22}{821}\sqrt{101}e^{23}$	$(\frac{22}{821}, -\frac{121}{821}, \frac{165}{821}, \frac{22}{821}, -\frac{99}{821}, \frac{187}{821}, -\frac{99}{821}, \frac{44}{821})$ $+ \frac{11}{821}\sqrt{690}e^4 \otimes e_5 + \frac{11}{821}\sqrt{802}e^1 \otimes e_7$	{1246, 1568, 257, 478}
84:3	$0, 0, 0, 0, \frac{6}{83}\sqrt{55}e^{12}, \frac{2}{83}\sqrt{935}e^{13}, \frac{2}{83}\sqrt{935}e^{24}, \frac{6}{83}\sqrt{55}e^{14} + \frac{1}{83}\sqrt{1870}e^{23}$	$(\frac{15}{83}, -\frac{20}{83}, \frac{32}{83}, -\frac{3}{83}, -\frac{5}{83}, \frac{47}{83}, -\frac{23}{83}, \frac{12}{83})$ $+ \frac{10}{83}\sqrt{77}e^3 \otimes e_7$	{2346, 278, 3568, 457}
84:3	$0, 0, 0, 0, \frac{7}{317}\sqrt{102}e^{12}, \frac{14}{317}\sqrt{51}e^{13}, \frac{14}{317}\sqrt{51}e^{24}, \frac{14}{317}\sqrt{10}e^{14} + \frac{14}{317}\sqrt{10}e^{23}$	$(\frac{42}{317}, \frac{42}{317}, -\frac{49}{317}, -\frac{49}{317}, \frac{84}{317}, -\frac{7}{317}, -\frac{7}{317}, -\frac{7}{317})$ $+ \frac{14}{317}\sqrt{71}e^1 \otimes e_7 + \frac{14}{317}\sqrt{71}e^2 \otimes e_6$	{12348, 3467}
84:3	$0, 0, 0, 0, \frac{2}{1087}\sqrt{78}e^{12}, \frac{2}{1087}\sqrt{615}e^{13}, \frac{2}{1087}\sqrt{615}e^{24}, \frac{1}{1087}\sqrt{1230}e^{14} + \frac{4}{1087}\sqrt{111}e^{23}$	$(\frac{10}{1087}, \frac{23}{1087}, -\frac{29}{1087}, -\frac{16}{1087}, \frac{33}{1087}, -\frac{19}{1087}, \frac{7}{1087}, -\frac{6}{1087})$ $+ \frac{2}{1087}\sqrt{771}e^4 \otimes e_6 + \frac{4}{1087}\sqrt{183}e^1 \otimes e_7$	{168, 4578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
84:3	$0, 0, 0, 0, \frac{3}{86}\sqrt{183}e^{12}, \frac{3}{86}\sqrt{366}e^{13}, \frac{3}{86}\sqrt{366}e^{24},$ $\frac{3}{86}\sqrt{183}e^{14} + \frac{1}{43}\sqrt{671}e^{23}$	$(\frac{16}{43}, -\frac{7}{172}, \frac{5}{43}, -\frac{51}{172}, \frac{57}{172}, \frac{21}{43}, -\frac{29}{86}, \frac{13}{172})$ $+ \frac{1}{86}\sqrt{8662}e^1 \otimes e_7$	{1246, 1568, 257, 478}
84:3	$0, 0, 0, 0, \frac{5}{252}\sqrt{1165}e^{12}, \frac{1}{63}\sqrt{1631}e^{13}, \frac{1}{252}\sqrt{6058}e^{24},$ $\frac{1}{252}\sqrt{19106}e^{14} + \frac{5}{252}\sqrt{1165}e^{23}$	$(-\frac{65}{504}, -\frac{67}{252}, \frac{89}{168}, \frac{11}{28}, -\frac{199}{504}, \frac{101}{252}, \frac{8}{63}, \frac{19}{72})$ $+ \frac{1}{84}\sqrt{10718}e^3 \otimes e_5$	{123, 1567, 258, 3678}
84:3	$0, 0, 0, 0, \frac{14}{449}\sqrt{30}e^{12}, \frac{56}{449}\sqrt{19}e^{13}, \frac{42}{449}\sqrt{22}e^{24},$ $\frac{14}{449}\sqrt{46}e^{14} + \frac{14}{449}\sqrt{30}e^{23}$	$(-\frac{105}{449}, -\frac{14}{449}, \frac{77}{449}, \frac{168}{449}, -\frac{119}{449}, -\frac{28}{449}, \frac{154}{449}, \frac{63}{449})$ $+ \frac{14}{449}\sqrt{318}e^3 \otimes e_5 + \frac{14}{449}\sqrt{470}e^4 \otimes e_6$	{1347, 4578}
84:3	$0, 0, 0, 0, \frac{87}{2429}\sqrt{110}e^{12}, \frac{232}{2429}\sqrt{21}e^{13}, \frac{58}{2429}\sqrt{177}e^{24},$ $\frac{174}{2429}e^{14} + \frac{290}{2429}\sqrt{2}e^{23}$	$(\frac{290}{2429}, -\frac{464}{2429}, \frac{667}{2429}, -\frac{87}{2429}, -\frac{174}{2429}, \frac{957}{2429}, -\frac{551}{2429}, \frac{29}{347})$ $+ \frac{174}{2429}\sqrt{53}e^3 \otimes e_5 + \frac{58}{2429}\sqrt{595}e^1 \otimes e_7$	{1568, 257}
84:4	$0, 0, 0, 0, \frac{3}{46}\sqrt{102}e^{12}, \frac{3}{46}\sqrt{102}e^{34}, \frac{3}{46}\sqrt{51}e^{14} - \frac{3}{46}\sqrt{66}e^{23},$ $\frac{3}{46}\sqrt{51}e^{13} + \frac{3}{46}\sqrt{66}e^{24}$	$(\frac{6}{23}, \frac{6}{23}, -\frac{15}{92}, -\frac{15}{92}, \frac{12}{23}, \frac{12}{23}, -\frac{15}{46}, \frac{9}{92}, \frac{9}{92})$ $+ \frac{9}{46}\sqrt{26}e^1 \otimes e_6$	{1345, 1578, 368, 1345, 1578, 368}
84:4	$0, 0, 0, 0, \frac{3}{46}\sqrt{102}e^{12}, \frac{3}{46}\sqrt{102}e^{34}, \frac{3}{46}\sqrt{51}e^{14} + \frac{3}{46}\sqrt{66}e^{23},$ $\frac{3}{46}\sqrt{51}e^{13} + \frac{3}{46}\sqrt{66}e^{24}$	$(\frac{6}{23}, \frac{6}{23}, -\frac{15}{92}, -\frac{15}{92}, \frac{12}{23}, \frac{12}{23}, -\frac{15}{46}, \frac{9}{92}, \frac{9}{92})$ $+ \frac{9}{46}\sqrt{26}e^1 \otimes e_6$	{1345, 1578, 368, 1345, 1578, 368}
8321:1	$0, 0, 0, 0, 0, \frac{2}{347}\sqrt{7242}e^{12}, \frac{10}{347}\sqrt{213}e^{16}, \frac{2}{347}\sqrt{2911}e^{17}$	$(\frac{7}{347}, \frac{65}{347}, -\frac{135}{347}, -\frac{77}{347}, \frac{45}{347}, \frac{72}{347}, \frac{79}{347}, \frac{86}{347})$ $+ \frac{12}{347}\sqrt{355}e^1 \otimes e_3 + \frac{2}{347}\sqrt{8662}e^2 \otimes e_4$	{1257, 127, 14568, 1468, 235678, 23678, 34, 345}
8321:1	$0, 0, 0, 0, 0, \frac{3}{58}\sqrt{203}e^{12}, \frac{3}{29}\sqrt{14}e^{16}, \frac{3}{58}\sqrt{203}e^{17}$	$(-\frac{21}{58}, \frac{3}{4}, \frac{6}{29}, \frac{6}{29}, \frac{6}{29}, \frac{45}{116}, \frac{3}{116}, -\frac{39}{116})$ $+ \frac{3}{29}\sqrt{161}e^2 \otimes e_8$	{123457, 12347, 1237, 127, 134568, 13468, 1368, 168}
8321:1	$0, 0, 0, 0, 0, \frac{2}{223}\sqrt{1529}e^{12}, \frac{2}{223}\sqrt{2085}e^{16}, \frac{2}{223}\sqrt{10842}e^{17}$	$(-\frac{37}{223}, \frac{56}{223}, \frac{1}{223}, \frac{45}{223}, \frac{45}{223}, \frac{19}{223}, -\frac{18}{223}, -\frac{55}{223})$ $+ \frac{2}{223}\sqrt{24742}e^3 \otimes e_8$	{124568, 12468, 1268, 13457, 1347, 137, 23, 234, 2345, 45678, 4678, 678}
8321:1	$0, 0, 0, 0, 0, \frac{1}{181}\sqrt{1529}e^{12}, \frac{1}{181}\sqrt{2085}e^{16}, \frac{1}{181}\sqrt{10842}e^{17}$	$(-\frac{37}{362}, \frac{28}{181}, \frac{92}{181}, \frac{223}{362}, -\frac{47}{181}, \frac{19}{362}, -\frac{9}{181}, -\frac{55}{362})$ $+ \frac{139}{181}e^3 \otimes e_5 + \frac{1}{181}\sqrt{24742}e^4 \otimes e_8$	{12368, 12568, 1347, 1457, 234, 245, 3678, 5678}
8321:1	$0, 0, 0, 0, 0, \frac{4}{231}\sqrt{321}e^{12}, \frac{2}{231}\sqrt{8239}e^{16}, \frac{6}{77}\sqrt{107}e^{17}$	$(\frac{85}{231}, -\frac{43}{77}, \frac{15}{77}, \frac{15}{77}, -\frac{4}{21}, \frac{41}{231}, \frac{6}{11})$ $+ \frac{2}{231}\sqrt{19902}e^1 \otimes e_2$	{13457, 1347, 137, 17, 2, 23, 234, 2345}
8321:1	$0, 0, 0, 0, 0, \frac{1}{181}\sqrt{10842}e^{12}, \frac{1}{181}\sqrt{2085}e^{16}, \frac{1}{181}\sqrt{1529}e^{17}$	$(-\frac{37}{362}, \frac{145}{362}, \frac{92}{181}, -\frac{133}{362}, -\frac{47}{181}, \frac{54}{181}, \frac{71}{362}, \frac{17}{181})$ $+ \frac{139}{181}e^3 \otimes e_5 + \frac{1}{181}\sqrt{24742}e^2 \otimes e_4$	{12378, 12578, 1346, 1456, 2367, 2567, 348, 458}
8321:1	$0, 0, 0, 0, 0, \frac{2}{55}\sqrt{129}e^{12}, \frac{4}{55}\sqrt{43}e^{16}, \frac{2}{55}\sqrt{129}e^{17}$	$(\frac{2}{55}, \frac{9}{55}, 1, -\frac{31}{55}, \frac{12}{55}, \frac{1}{5}, \frac{13}{55}, \frac{3}{11})$ $+ \frac{86}{55}e^3 \otimes e_4$	{12357, 1237, 12457, 1247, 13568, 1368, 14568, 1468, 235678, 23678, 245678, 24678, 3, 35, 4, 45}
8321:1	$0, 0, 0, 0, 0, \frac{2}{751}\sqrt{9889}e^{12}, \frac{4}{751}\sqrt{6061}e^{16}, \frac{1}{751}\sqrt{172898}e^{17}$	$(\frac{95}{751}, -\frac{224}{751}, \frac{380}{751}, \frac{85}{751}, \frac{85}{751}, -\frac{129}{751}, -\frac{34}{751}, \frac{61}{751})$ $+ \frac{1}{751}\sqrt{188210}e^3 \otimes e_8 + \frac{1}{751}\sqrt{236698}e^1 \otimes e_2$	{13457, 1347, 137, 23, 234, 2345}
8321:1	$0, 0, 0, 0, 0, \frac{4}{1821}\sqrt{9889}e^{12}, \frac{8}{1821}\sqrt{6061}e^{16}, \frac{2}{1821}\sqrt{172898}e^{17}$	$(\frac{190}{1821}, -\frac{448}{1821}, \frac{163}{607}, -\frac{149}{1821}, \frac{760}{1821}, -\frac{86}{607}, -\frac{68}{1821}, \frac{122}{1821})$ $+ \frac{2}{1821}\sqrt{188210}e^5 \otimes e_8 + \frac{2}{1821}\sqrt{236698}e^1 \otimes e_2 + \frac{638}{1821}e^3 \otimes e_4$	{1357, 1457, 235, 245}
8321:1	$0, 0, 0, 0, 0, \frac{2}{223}\sqrt{10842}e^{12}, \frac{2}{223}\sqrt{2085}e^{16}, \frac{2}{223}\sqrt{1529}e^{17}$	$(-\frac{37}{223}, \frac{145}{223}, -\frac{133}{223}, \frac{45}{223}, \frac{45}{223}, \frac{108}{223}, \frac{71}{223}, \frac{34}{223})$ $+ \frac{2}{223}\sqrt{24742}e^2 \otimes e_3$	{124578, 12478, 1278, 13456, 1346, 136, 24567, 2467, 267, 3458, 348, 38}
8321:1	$0, 0, 0, 0, 0, \frac{3}{14}\sqrt{3}e^{12}, \frac{3}{49}\sqrt{30}e^{16}, \frac{3}{14}\sqrt{3}e^{17}$	$(-\frac{9}{98}, \frac{51}{196}, -\frac{18}{49}, \frac{6}{49}, \frac{6}{49}, \frac{33}{196}, \frac{15}{196}, -\frac{3}{196})$ $+ \frac{18}{49}\sqrt{2}e^1 \otimes e_3 + \frac{3}{49}\sqrt{57}e^2 \otimes e_8$	{12457, 1247, 127, 14568, 1468, 168}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8321:1	$0, 0, 0, 0, 0, \frac{6}{179}\sqrt{203}e^{12}, \frac{12}{179}\sqrt{14}e^{16}, \frac{6}{179}\sqrt{203}e^{17}$	$(-\frac{42}{179}, \frac{87}{179}, \frac{87}{179}, -\frac{39}{179}, \frac{24}{179}, \frac{45}{179}, \frac{3}{179}, -\frac{39}{179})$ $+\frac{126}{179}e^3 \otimes e_4 + \frac{12}{179}\sqrt{161}e^2 \otimes e_8$	{12357, 1237, 12457, 1247, 13568, 1368, 14568, 1468}
8321:1	$0, 0, 0, 0, 0, \frac{2}{347}\sqrt{2911}e^{12}, \frac{10}{347}\sqrt{213}e^{16}, \frac{2}{347}\sqrt{7242}e^{17}$	$(\frac{7}{347}, \frac{4}{347}, \frac{167}{347}, -\frac{135}{347}, \frac{45}{347}, \frac{11}{347}, \frac{18}{347}, \frac{25}{347})$ $+\frac{12}{347}\sqrt{355}e^1 \otimes e_4 + \frac{2}{347}\sqrt{8662}e^3 \otimes e_8$	{12357, 1237, 1568, 168, 245678, 24678, 34, 345}
8321:1	$0, 0, 0, 0, 0, \frac{1}{205}\sqrt{8642}e^{12}, \frac{3}{205}\sqrt{298}e^{16}, \frac{1}{205}\sqrt{8642}e^{17}$	$(-\frac{8}{41}, \frac{87}{205}, \frac{116}{205}, -\frac{62}{205}, \frac{27}{205}, \frac{47}{205}, \frac{7}{205}, -\frac{33}{205})$ $+\frac{1}{205}\sqrt{26522}e^2 \otimes e_4 + \frac{1}{205}\sqrt{26522}e^3 \otimes e_8$	{12357, 1237, 14568, 1468, 25678, 2678, 34, 345}
8321:1	$0, 0, 0, 0, 0, \frac{2}{83}\sqrt{345}e^{12}, \frac{4}{83}\sqrt{115}e^{16}, \frac{2}{83}\sqrt{345}e^{17}$	$(\frac{10}{83}, -\frac{3}{83}, \frac{35}{83}, -\frac{36}{83}, -\frac{11}{83}, \frac{7}{83}, \frac{17}{83}, \frac{27}{83})$ $+\frac{46}{83}e^3 \otimes e_5 + \frac{8}{83}\sqrt{69}e^1 \otimes e_4$	{1237, 1257, 1368, 1568, 234678, 245678, 34, 45}
8321:1	$0, 0, 0, 0, 0, \frac{1}{30}\sqrt{345}e^{12}, \frac{1}{15}\sqrt{115}e^{16}, \frac{1}{30}\sqrt{345}e^{17}$	$(\frac{1}{6}, -\frac{1}{20}, -\frac{3}{5}, \frac{1}{5}, \frac{1}{5}, \frac{7}{60}, \frac{17}{60}, \frac{9}{20})$ $+\frac{2}{15}\sqrt{69}e^1 \otimes e_3$	{12457, 1247, 127, 14568, 1468, 168, 2345678, 234678, 23678, 3, 34, 345}
8321:1	$0, 0, 0, 0, 0, \frac{42}{223}\sqrt{3}e^{12}, \frac{12}{223}\sqrt{30}e^{16}, \frac{42}{223}\sqrt{3}e^{17}$	$(-\frac{18}{223}, \frac{51}{223}, -\frac{72}{223}, -\frac{3}{223}, \frac{51}{223}, \frac{33}{223}, \frac{15}{223}, -\frac{3}{223})$ $+\frac{12}{223}\sqrt{57}e^2 \otimes e_8 + \frac{54}{223}e^5 \otimes e_4 + \frac{72}{223}\sqrt{2}e^1 \otimes e_3$	{1247, 1257, 1468, 1568}
8321:1	$0, 0, 0, 0, 0, \frac{7}{257}\sqrt{146}e^{12}, \frac{3}{257}\sqrt{730}e^{16}, \frac{7}{257}\sqrt{146}e^{17}$	$(-\frac{8}{257}, \frac{39}{257}, -\frac{81}{257}, -\frac{34}{257}, \frac{88}{257}, \frac{31}{257}, \frac{23}{257}, \frac{15}{257})$ $+\frac{1}{257}\sqrt{8906}e^2 \otimes e_4 + \frac{1}{257}\sqrt{8906}e^5 \otimes e_8 + \frac{6}{257}\sqrt{438}e^1 \otimes e_3$	{1257, 1468, 23678, 345}
8321:1	$0, 0, 0, 0, 0, \frac{2}{169}\sqrt{321}e^{12}, \frac{1}{169}\sqrt{8239}e^{16}, \frac{9}{169}\sqrt{107}e^{17}$	$(\frac{85}{338}, -\frac{129}{338}, \frac{76}{169}, -\frac{31}{169}, \frac{45}{338}, -\frac{22}{169}, \frac{41}{338}, \frac{63}{169})$ $+\frac{107}{169}e^3 \otimes e_4 + \frac{1}{169}\sqrt{19902}e^1 \otimes e_2$	{1357, 137, 1457, 147, 23, 235, 24, 245}
8321:2	$0, 0, 0, 0, 0, \frac{18}{373}\sqrt{73}e^{12}, \frac{72}{373}e^{16}, \frac{18}{373}\sqrt{13}e^{17} + \frac{36}{373}\sqrt{30}e^{34}$	$(-\frac{54}{373}, \frac{159}{373}, \frac{69}{373}, -\frac{72}{373}, -\frac{93}{373}, \frac{105}{373}, \frac{51}{373}, -\frac{3}{373})$ $+\frac{18}{373}\sqrt{141}e^3 \otimes e_5 + \frac{36}{373}\sqrt{46}e^2 \otimes e_8$	{12347, 1257, 1368, 14568}
8321:2	$0, 0, 0, 0, 0, \frac{2}{1377}\sqrt{9262}e^{12}, \frac{2}{1377}\sqrt{124195}e^{16}, \frac{2}{1377}\sqrt{107355}e^{17} + \frac{2}{1377}\sqrt{59782}e^{34}$	$(\frac{7}{27}, -\frac{485}{1377}, \frac{539}{1377}, \frac{47}{1377}, -\frac{101}{459}, -\frac{128}{1377}, \frac{229}{1377}, \frac{586}{1377})$ $+\frac{4}{1377}\sqrt{51783}e^3 \otimes e_5 + \frac{4}{1377}\sqrt{73254}e^1 \otimes e_2$	{1347, 157, 234, 25}
8321:2	$0, 0, 0, 0, 0, \frac{20}{419}\sqrt{87}e^{12}, \frac{4}{419}\sqrt{2929}e^{16}, \frac{4}{419}\sqrt{2262}e^{17} + \frac{4}{419}\sqrt{174}e^{34}$	$(\frac{49}{419}, -\frac{15}{419}, \frac{182}{419}, -\frac{50}{419}, -\frac{183}{419}, \frac{34}{419}, \frac{83}{419}, \frac{132}{419})$ $+\frac{232}{419}e^3 \otimes e_4 + \frac{36}{419}\sqrt{87}e^1 \otimes e_5$	{1237, 1247, 35, 45}
8321:2	$0, 0, 0, 0, 0, \frac{4}{361}\sqrt{127}e^{12}, \frac{8}{361}\sqrt{127}e^{16}, \frac{4}{361}\sqrt{1905}e^{17} + \frac{2}{361}\sqrt{7366}e^{34}$	$(-\frac{24}{361}, \frac{52}{361}, \frac{117}{361}, -\frac{137}{361}, \frac{234}{361}, \frac{28}{361}, \frac{4}{361}, -\frac{20}{361})$ $+\frac{254}{361}e^3 \otimes e_4 + \frac{2}{361}\sqrt{23622}e^5 \otimes e_8$	{12368, 12468, 3678, 4678}
8321:2	$0, 0, 0, 0, 0, \frac{20}{303}\sqrt{87}e^{12}, \frac{4}{303}\sqrt{2929}e^{16}, \frac{4}{303}\sqrt{2262}e^{17} + \frac{4}{303}\sqrt{174}e^{34}$	$(\frac{49}{303}, -\frac{5}{101}, \frac{22}{101}, \frac{22}{101}, -\frac{61}{101}, \frac{34}{303}, \frac{83}{303}, \frac{44}{101})$ $+\frac{12}{101}\sqrt{87}e^1 \otimes e_5$	{1237, 13468, 168, 2345678, 25678, 35}
8321:2	$0, 0, 0, 0, 0, \frac{38}{1737}\sqrt{127}e^{12}, \frac{266}{1737}\sqrt{7}e^{16}, \frac{38}{579}\sqrt{65}e^{17} + \frac{38}{1737}\sqrt{109}e^{34}$	$(\frac{76}{579}, -\frac{494}{1737}, \frac{95}{1737}, \frac{95}{1737}, \frac{304}{579}, -\frac{266}{1737}, -\frac{38}{1737}, \frac{190}{1737})$ $+\frac{190}{1737}\sqrt{33}e^1 \otimes e_2 + \frac{76}{1737}\sqrt{177}e^5 \otimes e_8$	{13457, 157, 2345, 25}
8321:2	$0, 0, 0, 0, 0, \frac{1}{35}\sqrt{66}e^{12}, \frac{4}{35}\sqrt{22}e^{16}, \frac{6}{35}\sqrt{11}e^{17} + \frac{1}{35}\sqrt{66}e^{34}$	$(\frac{17}{70}, -\frac{27}{70}, \frac{17}{35}, -\frac{1}{7}, \frac{9}{70}, -\frac{1}{7}, \frac{1}{10}, \frac{12}{35})$ $+\frac{1}{35}\sqrt{858}e^1 \otimes e_2 - \frac{22}{35}e^3 \otimes e_4$	{1357, 137, 1457, 147, 23, 235, 24, 245}
8321:2	$0, 0, 0, 0, 0, \frac{1}{35}\sqrt{66}e^{12}, \frac{4}{35}\sqrt{22}e^{16}, \frac{6}{35}\sqrt{11}e^{17} + \frac{1}{35}\sqrt{66}e^{34}$	$(\frac{17}{70}, -\frac{27}{70}, \frac{17}{35}, -\frac{1}{7}, \frac{9}{70}, -\frac{1}{7}, \frac{1}{10}, \frac{12}{35})$ $+\frac{1}{35}\sqrt{858}e^1 \otimes e_2 + \frac{22}{35}e^3 \otimes e_4$	{1357, 137, 1457, 147, 23, 235, 24, 245}
8321:2	$0, 0, 0, 0, 0, \frac{15}{913}\sqrt{482}e^{12}, \frac{30}{913}\sqrt{89}e^{16}, \frac{30}{913}\sqrt{95}e^{17} + \frac{30}{913}\sqrt{51}e^{34}$	$(-\frac{75}{913}, \frac{255}{913}, \frac{15}{913}, \frac{15}{913}, -\frac{300}{913}, \frac{180}{913}, \frac{105}{913}, \frac{30}{913})$ $+\frac{15}{913}\sqrt{758}e^2 \otimes e_8 + \frac{15}{913}\sqrt{834}e^1 \otimes e_5$	{12347, 127, 1368}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8321:2	$0, 0, 0, 0, 0, \frac{1}{47}\sqrt{438}e^{12}, \frac{1}{47}\sqrt{511}e^{16}, \frac{1}{47}\sqrt{219}e^{17} + \frac{1}{47}\sqrt{438}e^{34}$	$(\frac{5}{94}, \frac{15}{94}, \frac{44}{47}, -\frac{29}{47}, \frac{21}{94}, \frac{10}{47}, \frac{25}{94}, \frac{15}{47})$ $+ \frac{73}{47}e^3 \otimes e_4$	{13568, 1368, 14568, 1468, 235678, 23678, 245678, 24678}
8321:2	$0, 0, 0, 0, 0, \frac{4}{583}\sqrt{5133}e^{12}, \frac{4}{583}\sqrt{1239}e^{16}, \frac{2}{583}\sqrt{10266}e^{17} + \frac{4}{583}\sqrt{5133}e^{34}$	$(-\frac{118}{583}, \frac{290}{583}, \frac{145}{583}, -\frac{19}{53}, \frac{84}{583}, \frac{172}{583}, \frac{54}{583}, -\frac{64}{583})$ $+ \frac{2}{583}\sqrt{56994}e^2 \otimes e_8 + \frac{354}{583}e^3 \otimes e_4$	{13568, 1368, 14568, 1468}
8321:2	$0, 0, 0, 0, 0, \frac{2}{117}\sqrt{127}e^{12}, \frac{4}{117}\sqrt{127}e^{16}, \frac{2}{117}\sqrt{1905}e^{17} + \frac{1}{117}\sqrt{7366}e^{34}$	$(-\frac{4}{39}, \frac{2}{9}, -\frac{5}{117}, -\frac{5}{117}, \frac{1}{117}, \frac{14}{117}, \frac{2}{117}, -\frac{10}{117})$ $+ \frac{1}{117}\sqrt{23622}e^5 \otimes e_8$	{12368, 13457, 157, 2345, 25, 3678}
8321:2	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{286}e^{12}, \frac{1}{29}\sqrt{55}e^{16}, \frac{1}{29}\sqrt{66}e^{17} + \frac{1}{29}\sqrt{77}e^{34}$	$(-\frac{5}{58}, \frac{23}{58}, \frac{13}{29}, -\frac{9}{29}, -\frac{21}{58}, \frac{9}{29}, \frac{13}{58}, \frac{4}{29})$ $+ \frac{1}{29}\sqrt{627}e^2 \otimes e_5 + \frac{22}{29}e^3 \otimes e_4$	{12378, 12478, 358, 458}
8321:2	$0, 0, 0, 0, 0, \frac{1}{18}\sqrt{286}e^{12}, \frac{1}{18}\sqrt{55}e^{16}, \frac{1}{18}\sqrt{66}e^{17} + \frac{1}{18}\sqrt{77}e^{34}$	$(-\frac{5}{36}, \frac{23}{36}, \frac{1}{9}, \frac{1}{9}, -\frac{7}{12}, \frac{1}{2}, \frac{13}{36}, \frac{2}{9})$ $+ \frac{1}{18}\sqrt{627}e^2 \otimes e_5$	{12378, 13456, 156, 23467, 267, 358}
8321:2	$0, 0, 0, 0, 0, \frac{1}{18}\sqrt{77}e^{12}, \frac{1}{18}\sqrt{55}e^{16}, \frac{1}{18}\sqrt{66}e^{17} + \frac{1}{18}\sqrt{286}e^{34}$	$(\frac{1}{8}, \frac{1}{9}, \frac{23}{36}, -\frac{11}{72}, -\frac{7}{12}, \frac{17}{72}, \frac{13}{36}, \frac{35}{72})$ $+ \frac{1}{18}\sqrt{627}e^3 \otimes e_5$	{12378, 124578, 1346, 156, 23467, 2567, 38, 458}
8321:2	$0, 0, 0, 0, 0, \frac{1}{24}\sqrt{66}e^{12}, \frac{1}{6}\sqrt{22}e^{16}, \frac{1}{4}\sqrt{11}e^{17} + \frac{1}{24}\sqrt{66}e^{34}$	$(\frac{17}{48}, -\frac{9}{16}, \frac{1}{4}, \frac{1}{4}, \frac{3}{16}, -\frac{5}{24}, \frac{7}{48}, \frac{1}{2})$ $+ \frac{1}{24}\sqrt{858}e^1 \otimes e_2$	{1357, 137, 23, 235}
8321:2	$0, 0, 0, 0, 0, \frac{2}{203}\sqrt{5133}e^{12}, \frac{2}{203}\sqrt{1239}e^{16}, \frac{1}{203}\sqrt{10266}e^{17} + \frac{1}{203}\sqrt{5133}e^{34}$	$(-\frac{59}{203}, \frac{5}{7}, -\frac{16}{203}, -\frac{16}{203}, \frac{6}{29}, \frac{86}{203}, \frac{27}{203}, -\frac{32}{203})$ $+ \frac{1}{203}\sqrt{56994}e^2 \otimes e_8$	{123457, 12347, 1257, 127, 13568, 1368}
8321:3	$0, 0, 0, 0, 0, \frac{13}{136}\sqrt{11}e^{12}, \frac{39}{136}\sqrt{2}e^{16}, \frac{13}{136}\sqrt{11}e^{17} + \frac{91}{136}\sqrt{2}e^{23}$	$(\frac{29}{136}, -\frac{33}{272}, \frac{87}{136}, \frac{41}{68}, \frac{27}{136}, \frac{25}{272}, \frac{83}{272}, \frac{141}{272})$ $+ \frac{13}{136}\sqrt{218}e^3 \otimes e_4$	{12356, 1236, 13578, 1378, 2458, 248, 4567, 467}
8321:3	$0, 0, 0, 0, 0, \frac{2}{139}\sqrt{2847}e^{12}, \frac{6}{139}\sqrt{73}e^{16}, \frac{2}{139}\sqrt{1241}e^{17} + \frac{2}{139}\sqrt{2847}e^{23}$	$(-\frac{4}{139}, \frac{61}{139}, -\frac{12}{139}, -\frac{85}{139}, \frac{27}{139}, \frac{57}{139}, \frac{53}{139}, \frac{49}{139})$ $+ \frac{8}{139}\sqrt{511}e^2 \otimes e_4$	{12578, 1278, 1456, 146, 23567, 2367, 3458, 348}
8321:3	$0, 0, 0, 0, 0, \frac{20}{297}\sqrt{41}e^{12}, \frac{4}{297}\sqrt{1435}e^{16}, \frac{20}{297}\sqrt{41}e^{17} + \frac{4}{297}\sqrt{205}e^{23}$	$(\frac{40}{297}, -\frac{17}{297}, \frac{40}{99}, -\frac{124}{297}, -\frac{4}{27}, \frac{23}{297}, \frac{7}{33}, \frac{103}{297})$ $+ \frac{2}{297}\sqrt{13694}e^1 \otimes e_4 + \frac{2}{297}\sqrt{7134}e^3 \otimes e_5$	{1237, 1368, 245678, 45}
8321:3	$0, 0, 0, 0, 0, \frac{1}{332}\sqrt{13282}e^{12}, \frac{1}{332}\sqrt{6870}e^{16}, \frac{1}{332}\sqrt{19923}e^{17} + \frac{1}{332}\sqrt{19923}e^{23}$	$(-\frac{85}{664}, \frac{203}{664}, -\frac{255}{664}, \frac{203}{332}, \frac{45}{332}, \frac{59}{332}, \frac{33}{664}, -\frac{13}{166})$ $+ \frac{1}{166}\sqrt{18091}e^4 \otimes e_8 + \frac{1}{332}\sqrt{59082}e^2 \otimes e_3$	{13568, 1368, 25678, 2678}
8321:3	$0, 0, 0, 0, 0, \frac{29}{2969}\sqrt{1186}e^{12}, \frac{145}{2969}\sqrt{42}e^{16}, \frac{29}{2969}\sqrt{1146}e^{17} + \frac{58}{2969}\sqrt{30}e^{23}$	$(-\frac{116}{2969}, \frac{493}{2969}, -\frac{348}{2969}, -\frac{957}{2969}, \frac{986}{2969}, \frac{377}{2969}, \frac{261}{2969}, \frac{145}{2969})$ $+ \frac{29}{2969}\sqrt{1354}e^5 \otimes e_8 + \frac{29}{2969}\sqrt{1434}e^2 \otimes e_3 + \frac{58}{2969}\sqrt{633}e^1 \otimes e_4$	{1257, 345}
8321:3	$0, 0, 0, 0, 0, \frac{14}{467}\sqrt{95}e^{12}, \frac{6}{467}\sqrt{1045}e^{16}, \frac{2}{467}\sqrt{12730}e^{17} + \frac{8}{467}\sqrt{95}e^{23}$	$(\frac{15}{467}, -\frac{4}{467}, \frac{45}{467}, \frac{231}{467}, -\frac{175}{467}, \frac{11}{467}, \frac{26}{467}, \frac{41}{467})$ $+ \frac{10}{467}\sqrt{646}e^4 \otimes e_8 + \frac{4}{467}\sqrt{5605}e^1 \otimes e_5$	{12347, 1368, 25678, 45}
8321:3	$0, 0, 0, 0, 0, \frac{2}{357}\sqrt{3649}e^{12}, \frac{2}{357}\sqrt{1157}e^{16}, \frac{4}{357}\sqrt{979}e^{17} + \frac{2}{357}\sqrt{10502}e^{23}$	$(\frac{23}{357}, -\frac{38}{357}, \frac{23}{119}, \frac{209}{357}, -\frac{109}{357}, -\frac{5}{119}, \frac{8}{357}, \frac{31}{357})$ $+ \frac{2}{357}\sqrt{15130}e^4 \otimes e_8 + \frac{4}{357}\sqrt{3293}e^3 \otimes e_5$	{12568, 1457, 234, 3678}
8321:3	$0, 0, 0, 0, 0, \frac{2}{139}\sqrt{1241}e^{12}, \frac{6}{139}\sqrt{73}e^{16}, \frac{2}{139}\sqrt{2847}e^{17} + \frac{2}{139}\sqrt{2847}e^{23}$	$(-\frac{4}{139}, \frac{5}{139}, -\frac{12}{139}, \frac{1}{139}, \frac{27}{139}, \frac{1}{139}, -\frac{3}{139}, -\frac{7}{139})$ $+ \frac{8}{139}\sqrt{511}e^4 \otimes e_8$	{12568, 1268, 1457, 147, 234, 2345, 35678, 3678}
8321:3	$0, 0, 0, 0, 0, \frac{2}{467}\sqrt{12730}e^{12}, \frac{6}{467}\sqrt{1045}e^{16}, \frac{14}{467}\sqrt{95}e^{17} + \frac{8}{467}\sqrt{95}e^{23}$	$(\frac{15}{467}, \frac{81}{467}, \frac{45}{467}, -\frac{175}{467}, -\frac{109}{467}, \frac{96}{467}, \frac{111}{467}, \frac{126}{467})$ $+ \frac{10}{467}\sqrt{646}e^2 \otimes e_5 + \frac{4}{467}\sqrt{5605}e^1 \otimes e_4$	{1237, 13568, 24678, 45}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8321:3	$0, 0, 0, 0, 0, \frac{1}{34}\sqrt{159}e^{12}, \frac{1}{34}\sqrt{265}e^{16}, \frac{1}{34}\sqrt{159}e^{17} + \frac{1}{34}\sqrt{159}e^{23}$	$(\frac{1}{17}, \frac{9}{68}, \frac{3}{17}, 1, -\frac{19}{34}, \frac{13}{68}, \frac{1}{4}, \frac{21}{68})$ $+ \frac{53}{34}e^4 \otimes e_5$	{12347, 12357, 13468, 13568, 24678, 25678, 4, 5}
8321:3	$0, 0, 0, 0, 0, \frac{4}{357}\sqrt{979}e^{12}, \frac{2}{357}\sqrt{1157}e^{16}, \frac{2}{357}\sqrt{3649}e^{17} + \frac{2}{357}\sqrt{10502}e^{23}$	$(\frac{23}{357}, \frac{47}{357}, \frac{23}{119}, -\frac{131}{357}, -\frac{109}{357}, \frac{10}{51}, \frac{31}{119}, \frac{116}{357})$ $+ \frac{2}{357}\sqrt{15130}e^2 \otimes e_4 + \frac{4}{357}\sqrt{3293}e^3 \otimes e_5$	{12578, 1456, 2367, 348}
8321:3	$0, 0, 0, 0, 0, \frac{1}{16}\sqrt{105}e^{12}, \frac{1}{12}\sqrt{70}e^{16}, \frac{1}{16}\sqrt{105}e^{17} + \frac{1}{24}\sqrt{105}e^{23}$	$(\frac{5}{48}, \frac{1}{32}, \frac{5}{16}, -\frac{5}{8}, \frac{3}{16}, \frac{13}{96}, \frac{23}{96}, \frac{11}{32})$ $+ \frac{1}{48}\sqrt{2730}e^1 \otimes e_4$	{1257, 127, 1568, 168, 2345678, 234678, 34, 345}
8321:3	$0, 0, 0, 0, 0, \frac{26}{63}\sqrt{2}e^{12}, \frac{26}{147}\sqrt{2}e^{16}, \frac{26}{441}\sqrt{11}e^{17} + \frac{26}{441}\sqrt{11}e^{23}$	$(-\frac{17}{147}, \frac{185}{441}, -\frac{17}{49}, \frac{223}{441}, -\frac{115}{441}, \frac{134}{441}, \frac{83}{441}, \frac{32}{441})$ $+ \frac{26}{441}\sqrt{218}e^2 \otimes e_3 + \frac{338}{441}e^4 \otimes e_5$	{1346, 1356, 2467, 2567}
8321:3	$0, 0, 0, 0, 0, \frac{2}{73}\sqrt{95}e^{12}, \frac{2}{73}\sqrt{57}e^{16}, \frac{2}{73}\sqrt{95}e^{17} + \frac{2}{73}\sqrt{399}e^{23}$	$(-\frac{4}{73}, \frac{15}{73}, -\frac{12}{73}, \frac{41}{73}, -\frac{23}{73}, \frac{11}{73}, \frac{7}{73}, \frac{3}{73})$ $+ \frac{8}{73}\sqrt{38}e^2 \otimes e_5 + \frac{8}{73}\sqrt{38}e^4 \otimes e_8$	{12347, 13568, 2678, 45}
8321:3	$0, 0, 0, 0, 0, \frac{91}{136}\sqrt{2}e^{12}, \frac{39}{136}\sqrt{2}e^{16}, \frac{13}{136}\sqrt{11}e^{17} + \frac{13}{136}\sqrt{11}e^{23}$	$(-\frac{3}{16}, \frac{185}{272}, -\frac{9}{16}, \frac{27}{136}, \frac{27}{136}, \frac{67}{136}, \frac{83}{272}, \frac{2}{17})$ $+ \frac{13}{136}\sqrt{218}e^2 \otimes e_3$	{13456, 1346, 136, 24567, 2467, 267}
8321:3	$0, 0, 0, 0, 0, \frac{2}{1665}\sqrt{168394}e^{12}, \frac{38}{1665}\sqrt{313}e^{16},$ $\frac{2}{1665}\sqrt{77311}e^{17} + \frac{28}{1665}\sqrt{313}e^{23}$	$(-\frac{7}{185}, \frac{437}{1665}, -\frac{21}{185}, -\frac{689}{1665}, \frac{197}{1665}, \frac{374}{1665}, \frac{311}{1665}, \frac{248}{1665})$ $+ \frac{2}{1665}\sqrt{182166}e^2 \otimes e_3 + \frac{2}{1665}\sqrt{277318}e^1 \otimes e_4$	{1257, 127, 34, 345}
8321:4	$0, 0, 0, 0, 0, \frac{3}{25}\sqrt{13}e^{12}, \frac{3}{25}\sqrt{13}e^{16}, \frac{1}{25}\sqrt{78}e^{17} + \frac{1}{25}\sqrt{78}e^{26}$	$(\frac{3}{50}, \frac{3}{25}, 1, -\frac{14}{25}, \frac{11}{50}, \frac{9}{50}, \frac{6}{25}, \frac{3}{10})$ $+ \frac{39}{25}e^3 \otimes e_4$	{13568, 1368, 14568, 1468, 3, 35, 4, 45}
8321:4	$0, 0, 0, 0, 0, \frac{8}{355}\sqrt{345}e^{12}, \frac{4}{355}\sqrt{2369}e^{16}, \frac{4}{355}\sqrt{1909}e^{17} + \frac{92}{355}\sqrt{2}e^{26}$	$(\frac{17}{355}, \frac{34}{355}, \frac{28}{71}, -\frac{167}{355}, -\frac{44}{355}, \frac{51}{355}, \frac{68}{355}, \frac{17}{71})$ $+ \frac{184}{355}e^3 \otimes e_5 + \frac{4}{355}\sqrt{4945}e^1 \otimes e_4$	{1237, 1257, 234678, 245678}
8321:4	$0, 0, 0, 0, 0, \frac{6}{1277}\sqrt{4379}e^{12}, \frac{6}{1277}\sqrt{8265}e^{16},$ $\frac{6}{1277}\sqrt{11078}e^{17} + \frac{12}{1277}\sqrt{145}e^{26}$	$(\frac{17}{1277}, \frac{34}{1277}, \frac{607}{1277}, -\frac{505}{1277}, \frac{165}{1277}, \frac{51}{1277}, \frac{68}{1277}, \frac{85}{1277})$ $+ \frac{6}{1277}\sqrt{12818}e^3 \otimes e_8 + \frac{6}{1277}\sqrt{19430}e^1 \otimes e_4$	{12357, 1237, 245678, 24678}
8321:4	$0, 0, 0, 0, 0, \frac{4}{51}\sqrt{7}e^{12}, \frac{4}{51}\sqrt{7}e^{16}, \frac{4}{51}\sqrt{91}e^{17} + \frac{4}{51}\sqrt{91}e^{26}$	$(-\frac{1}{51}, -\frac{2}{51}, 1, \frac{10}{51}, \frac{10}{51}, -\frac{1}{17}, -\frac{4}{51}, -\frac{5}{51})$ $+ \frac{4}{51}\sqrt{287}e^3 \otimes e_8$	{1234567, 123467, 12367, 24578, 2478, 278}
8321:4	$0, 0, 0, 0, 0, \frac{4}{1405}\sqrt{41514}e^{12}, \frac{6}{1405}\sqrt{4070}e^{16},$ $\frac{2}{1405}\sqrt{91982}e^{17} + \frac{2}{1405}\sqrt{178266}e^{26}$	$(\frac{76}{1405}, \frac{152}{1405}, \frac{115}{281}, -\frac{662}{1405}, -\frac{239}{1405}, \frac{228}{1405}, \frac{304}{1405}, \frac{76}{281})$ $+ \frac{2}{1405}\sqrt{337810}e^2 \otimes e_4 + \frac{814}{1405}e^3 \otimes e_5$	{134678, 145678, 347, 457}
8321:4	$0, 0, 0, 0, 0, \frac{8}{263}\sqrt{345}e^{12}, \frac{4}{263}\sqrt{2369}e^{16}, \frac{4}{263}\sqrt{1909}e^{17} + \frac{92}{263}\sqrt{2}e^{26}$	$(\frac{17}{263}, \frac{34}{263}, -\frac{167}{263}, \frac{48}{263}, \frac{48}{263}, \frac{51}{263}, \frac{68}{263}, \frac{85}{263})$ $+ \frac{4}{263}\sqrt{4945}e^1 \otimes e_3$	{12457, 1247, 127, 2345678, 234678, 23678}
8321:4	$0, 0, 0, 0, 0, \frac{2}{499}\sqrt{41514}e^{12}, \frac{3}{499}\sqrt{4070}e^{16},$ $\frac{1}{499}\sqrt{91982}e^{17} + \frac{1}{499}\sqrt{178266}e^{26}$	$(\frac{38}{499}, \frac{76}{499}, -\frac{331}{499}, \frac{84}{499}, \frac{84}{499}, \frac{114}{499}, \frac{152}{499}, \frac{190}{499})$ $+ \frac{1}{499}\sqrt{337810}e^2 \otimes e_3$	{1345678, 134678, 13678, 3457, 347, 37}
8321:4	$0, 0, 0, 0, 0, \frac{4}{1343}\sqrt{20661}e^{12}, \frac{12}{1343}\sqrt{923}e^{16},$ $\frac{4}{1343}\sqrt{3053}e^{17} + \frac{4}{1343}\sqrt{35571}e^{26}$	$(\frac{19}{1343}, \frac{38}{1343}, \frac{39}{79}, -\frac{530}{1343}, \frac{150}{1343}, \frac{57}{1343}, \frac{76}{1343}, \frac{95}{1343})$ $+ \frac{12}{1343}\sqrt{4047}e^3 \otimes e_8 + \frac{8}{1343}\sqrt{12070}e^2 \otimes e_4$	{145678, 14678, 3457, 347}
8321:4	$0, 0, 0, 0, 0, \frac{16}{325}\sqrt{102}e^{12}, \frac{16}{325}\sqrt{53}e^{16}, \frac{16}{325}\sqrt{19}e^{17} + \frac{16}{325}\sqrt{34}e^{26}$	$(\frac{19}{325}, \frac{38}{325}, -\frac{109}{325}, -\frac{18}{65}, \frac{42}{325}, \frac{57}{325}, \frac{76}{325}, \frac{19}{65})$ $+ \frac{16}{325}\sqrt{151}e^1 \otimes e_3 + \frac{32}{325}\sqrt{33}e^2 \otimes e_4$	{14568, 1468, 34, 345}
8321:4	$0, 0, 0, 0, 0, \frac{23}{2111}\sqrt{894}e^{12}, \frac{23}{2111}\sqrt{390}e^{16},$ $\frac{23}{2111}\sqrt{454}e^{17} + \frac{46}{2111}\sqrt{165}e^{26}$	$(\frac{46}{2111}, \frac{92}{2111}, -\frac{483}{2111}, -\frac{437}{2111}, \frac{759}{2111}, \frac{138}{2111}, \frac{184}{2111}, \frac{230}{2111})$ $+ \frac{23}{2111}\sqrt{1086}e^5 \otimes e_8 + \frac{23}{2111}\sqrt{1306}e^2 \otimes e_4 + \frac{23}{2111}\sqrt{1398}e^1 \otimes e_3$	{1468, 345}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
8321:4	$0, 0, 0, 0, 0, \frac{4}{79}\sqrt{7}e^{12}, \frac{4}{79}\sqrt{7}e^{16}, \frac{4}{79}\sqrt{91}e^{17} + \frac{4}{79}\sqrt{91}e^{26}$	$(-\frac{1}{79}, -\frac{2}{79}, \frac{38}{79}, \frac{51}{79}, -\frac{18}{79}, -\frac{3}{79}, -\frac{4}{79}, -\frac{5}{79})$ $+ \frac{4}{79}\sqrt{287}e^4 \otimes e_8 + \frac{56}{79}e^3 \otimes e_5$	{123467, 124567, 2378, 2578}
8321:5	$0, 0, 0, 0, 0, \frac{2}{107}\sqrt{498}e^{12}, \frac{4}{107}\sqrt{166}e^{16},$ $\frac{2}{107}\sqrt{249}e^{17} + \frac{2}{107}\sqrt{249}e^{23} + \frac{2}{107}\sqrt{498}e^{45}$	$(\frac{7}{107}, \frac{15}{107}, \frac{21}{107}, \frac{101}{107}, -\frac{65}{107}, \frac{22}{107}, \frac{29}{107}, \frac{36}{107})$ $+ \frac{166}{107}e^4 \otimes e_5$	{13468, 13568, 24678, 25678}
8321:5	$0, 0, 0, 0, 0, \frac{14}{81}\sqrt{31}e^{12}, \frac{7}{81}\sqrt{22}e^{16},$ $\frac{14}{81}\sqrt{6}e^{17} + \frac{14}{81}\sqrt{6}e^{23} + \frac{7}{81}\sqrt{38}e^{45}$	$(-\frac{14}{81}, \frac{56}{81}, -\frac{14}{27}, \frac{7}{81}, \frac{7}{81}, \frac{14}{27}, \frac{28}{81}, \frac{14}{81})$ $+ \frac{7}{81}\sqrt{258}e^2 \otimes e_3$	{13456, 136, 24567, 267}
8321:6	$0, 0, 0, 0, 0, \frac{42}{1703}\sqrt{290}e^{12}, \frac{168}{1703}\sqrt{31}e^{16},$ $\frac{588}{1703}\sqrt{2}e^{17} + \frac{42}{1703}\sqrt{226}e^{26} + \frac{42}{1703}\sqrt{22}e^{34}$	$(\frac{84}{1703}, \frac{168}{1703}, \frac{651}{1703}, -\frac{231}{1703}, -\frac{798}{1703}, \frac{252}{1703}, \frac{336}{1703}, \frac{420}{1703})$ $+ \frac{42}{1703}\sqrt{1030}e^1 \otimes e_5 + \frac{882}{1703}e^3 \otimes e_4$	{235678, 245678}
8321:6	$0, 0, 0, 0, 0, \frac{21}{631}\sqrt{290}e^{12}, \frac{84}{631}\sqrt{31}e^{16},$ $\frac{294}{631}\sqrt{2}e^{17} + \frac{21}{631}\sqrt{226}e^{26} + \frac{21}{631}\sqrt{22}e^{34}$	$(\frac{42}{631}, \frac{84}{631}, \frac{105}{631}, \frac{105}{631}, -\frac{399}{631}, \frac{126}{631}, \frac{168}{631}, \frac{210}{631})$ $+ \frac{21}{631}\sqrt{1030}e^1 \otimes e_5$	{12347, 127, 235678}
8321:6	$0, 0, 0, 0, 0, \frac{8}{241}\sqrt{187}e^{12}, \frac{8}{241}\sqrt{187}e^{16},$ $\frac{2}{241}\sqrt{1122}e^{17} + \frac{2}{241}\sqrt{1122}e^{26} + \frac{2}{241}\sqrt{2618}e^{34}$	$(\frac{16}{241}, \frac{32}{241}, \frac{227}{241}, -\frac{147}{241}, \frac{54}{241}, \frac{48}{241}, \frac{64}{241}, \frac{80}{241})$ $+ \frac{374}{241}e^3 \otimes e_4$	{13568, 1368, 14568, 1468}
8321:6	$0, 0, 0, 0, 0, \frac{11}{19}e^{12}, \frac{1}{38}\sqrt{110}e^{16},$ $\frac{1}{19}\sqrt{66}e^{17} + \frac{2}{19}\sqrt{33}e^{26} + \frac{1}{38}\sqrt{22}e^{34}$	$(\frac{1}{19}, \frac{2}{19}, \frac{8}{19}, -\frac{3}{19}, -\frac{9}{19}, \frac{3}{19}, \frac{4}{19}, \frac{5}{19})$ $+ \frac{11}{19}e^3 \otimes e_4 + \frac{3}{38}\sqrt{110}e^2 \otimes e_5$	{357, 457}
8321:6	$0, 0, 0, 0, 0, \frac{22}{27}e^{12}, \frac{1}{27}\sqrt{110}e^{16},$ $\frac{2}{27}\sqrt{66}e^{17} + \frac{4}{27}\sqrt{33}e^{26} + \frac{1}{27}\sqrt{22}e^{34}$	$(\frac{2}{27}, \frac{4}{27}, \frac{5}{27}, \frac{5}{27}, -\frac{2}{3}, \frac{2}{9}, \frac{8}{27}, \frac{10}{27})$ $+ \frac{1}{9}\sqrt{110}e^2 \otimes e_5$	{1345678, 15678, 357}
8321:6	$0, 0, 0, 0, 0, \frac{1}{61}\sqrt{814}e^{12}, \frac{1}{61}\sqrt{814}e^{16},$ $\frac{4}{61}\sqrt{37}e^{17} + \frac{4}{61}\sqrt{37}e^{26} + \frac{2}{61}\sqrt{851}e^{34}$	$(\frac{11}{122}, \frac{11}{61}, \frac{38}{61}, -\frac{21}{122}, -\frac{36}{61}, \frac{33}{122}, \frac{22}{61}, \frac{55}{122})$ $+ \frac{1}{61}\sqrt{7178}e^3 \otimes e_5$	{1346, 156, 38, 458}
832:1	$0, 0, 0, 0, 0, \frac{1}{181}\sqrt{2085}e^{12}, \frac{1}{181}\sqrt{10842}e^{16}, \frac{1}{181}\sqrt{1529}e^{26}$	$(-\frac{24}{181}, \frac{41}{362}, \frac{92}{181}, \frac{223}{362}, -\frac{47}{181}, -\frac{7}{362}, -\frac{55}{362}, \frac{17}{181})$ $+ \frac{139}{181}e^3 \otimes e_5 + \frac{1}{181}\sqrt{24742}e^4 \otimes e_7$	{1237, 1257, 1346, 1456, 23678, 25678, 348, 458}
832:1	$0, 0, 0, 0, 0, \frac{3}{205}\sqrt{298}e^{12}, \frac{1}{205}\sqrt{8642}e^{16}, \frac{1}{205}\sqrt{8642}e^{26}$	$(-\frac{11}{205}, -\frac{11}{205}, \frac{116}{205}, \frac{116}{205}, \frac{27}{205}, -\frac{22}{205}, -\frac{33}{205}, -\frac{33}{205})$ $+ \frac{1}{205}\sqrt{26522}e^3 \otimes e_7 + \frac{1}{205}\sqrt{26522}e^4 \otimes e_8$	{12578, 1278, 13568, 1368, 34, 345}
832:1	$0, 0, 0, 0, 0, \frac{12}{1403}\sqrt{1651}e^{12}, \frac{4}{1403}\sqrt{24130}e^{16}, \frac{4}{1403}\sqrt{381}e^{26}$	$(\frac{88}{1403}, -\frac{99}{1403}, \frac{585}{1403}, -\frac{420}{1403}, \frac{398}{1403}, -\frac{11}{1403}, \frac{77}{1403}, -\frac{110}{1403})$ $+ \frac{2}{1403}\sqrt{142494}e^1 \otimes e_4 + \frac{2}{1403}\sqrt{65278}e^5 \otimes e_8 + \frac{4}{1403}\sqrt{28194}e^3 \otimes e_7$	{1278, 1368, 24567, 345}
832:1	$0, 0, 0, 0, 0, \frac{4}{55}\sqrt{43}e^{12}, \frac{2}{55}\sqrt{129}e^{16}, \frac{2}{55}\sqrt{129}e^{26}$	$(\frac{1}{11}, \frac{1}{11}, 1, -\frac{31}{55}, \frac{12}{55}, \frac{2}{11}, \frac{3}{11}, \frac{3}{11})$ $+ \frac{86}{55}e^3 \otimes e_4$	{123578, 12378, 124578, 12478, 13568, 1368, 14568, 1468, 3, 35, 4, 45}
832:1	$0, 0, 0, 0, 0, \frac{2}{231}\sqrt{8239}e^{12}, \frac{6}{77}\sqrt{107}e^{16}, \frac{4}{231}\sqrt{321}e^{26}$	$(\frac{73}{231}, -\frac{20}{231}, -\frac{47}{77}, \frac{15}{77}, \frac{15}{77}, \frac{53}{231}, \frac{6}{11}, \frac{1}{7})$ $+ \frac{2}{231}\sqrt{19902}e^1 \otimes e_3$	{12457, 1247, 127, 1456, 146, 16, 2345678, 234678, 23678, 3458, 348, 38}
832:1	$0, 0, 0, 0, 0, \frac{4}{751}\sqrt{6061}e^{12}, \frac{1}{751}\sqrt{172898}e^{16}, \frac{2}{751}\sqrt{9889}e^{26}$	$(\frac{33}{751}, -\frac{5}{751}, \frac{380}{751}, -\frac{286}{751}, \frac{85}{751}, \frac{28}{751}, \frac{61}{751}, \frac{23}{751})$ $+ \frac{1}{751}\sqrt{188210}e^3 \otimes e_7 + \frac{1}{751}\sqrt{236698}e^1 \otimes e_4$	{1257, 127, 1356, 136, 245678, 24678, 3458, 348}
832:1	$0, 0, 0, 0, 0, \frac{2}{223}\sqrt{2085}e^{12}, \frac{2}{223}\sqrt{10842}e^{16}, \frac{2}{223}\sqrt{1529}e^{26}$	$(-\frac{48}{223}, \frac{41}{223}, 1, \frac{45}{223}, \frac{45}{223}, -\frac{7}{223}, -\frac{55}{223}, \frac{34}{223})$ $+ \frac{2}{223}\sqrt{24742}e^3 \otimes e_7$	{12457, 1247, 127, 13456, 1346, 136, 245678, 24678, 2678, 3458, 348, 38}
832:1	$0, 0, 0, 0, 0, \frac{1}{213}\sqrt{12070}e^{12}, \frac{10}{213}\sqrt{51}e^{16}, \frac{10}{213}\sqrt{51}e^{26}$	$(\frac{19}{213}, \frac{19}{213}, -\frac{22}{71}, -\frac{22}{71}, \frac{9}{71}, \frac{38}{213}, \frac{19}{71}, \frac{19}{71})$ $+ \frac{1}{213}\sqrt{15810}e^1 \otimes e_3 + \frac{1}{213}\sqrt{15810}e^2 \otimes e_4$	{12578, 1278, 14568, 1468, 34, 345}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
832:1	$0, 0, 0, 0, 0, \frac{1}{169}\sqrt{8239}e^{12}, \frac{9}{169}\sqrt{107}e^{16}, \frac{2}{169}\sqrt{321}e^{26}$	$(\frac{73}{338}, -\frac{10}{169}, \frac{76}{169}, -\frac{141}{338}, -\frac{31}{169}, \frac{53}{338}, \frac{63}{169}, \frac{33}{338})$ $+ \frac{107}{169}e^3 \otimes e_5 + \frac{1}{169}\sqrt{19902}e^1 \otimes e_4$	{1237, 1257, 136, 156, 234678, 245678, 348, 458}
832:1	$0, 0, 0, 0, 0, \frac{4}{281}\sqrt{1290}e^{12}, \frac{20}{281}\sqrt{43}e^{16}, \frac{4}{281}\sqrt{645}e^{26}$	$(\frac{70}{281}, -\frac{51}{281}, \frac{140}{281}, -\frac{102}{281}, \frac{39}{281}, \frac{19}{281}, \frac{89}{281}, -\frac{32}{281})$ $+ \frac{2}{281}\sqrt{12126}e^1 \otimes e_4 + \frac{2}{281}\sqrt{8686}e^3 \otimes e_8$	{12578, 1278, 1568, 168, 234567, 23467, 34, 345}
832:1	$0, 0, 0, 0, 0, \frac{4}{1419}\sqrt{17005}e^{12}, \frac{20}{1419}\sqrt{589}e^{16}, \frac{40}{1419}\sqrt{38}e^{26}$	$(-\frac{1}{473}, \frac{112}{1419}, -\frac{383}{1419}, -\frac{268}{1419}, \frac{162}{473}, \frac{109}{1419}, \frac{106}{1419}, \frac{221}{1419})$ $+ \frac{10}{1419}\sqrt{2622}e^5 \otimes e_7 + \frac{2}{1419}\sqrt{77710}e^2 \otimes e_4 + \frac{4}{1419}\sqrt{24890}e^1 \otimes e_3$	{1278, 14568, 2367, 345}
832:2	$0, 0, 0, 0, 0, \frac{1012}{2945}e^{12}, \frac{23}{2945}\sqrt{1534}e^{16}, \frac{23}{2945}\sqrt{1214}e^{13} + \frac{23}{2945}\sqrt{670}e^{26}$	$(\frac{253}{2945}, -\frac{138}{2945}, -\frac{276}{2945}, -\frac{667}{2945}, \frac{897}{2945}, \frac{23}{589}, \frac{368}{2945}, -\frac{23}{2945})$ $+ \frac{46}{2945}\sqrt{458}e^2 \otimes e_4 + \frac{46}{2945}\sqrt{566}e^1 \otimes e_3 + \frac{828}{2945}e^5 \otimes e_7$	{2367, 345}
832:2	$0, 0, 0, 0, 0, \frac{4}{119}\sqrt{186}e^{12}, \frac{6}{119}\sqrt{62}e^{16}, \frac{2}{119}\sqrt{186}e^{13} + \frac{6}{119}\sqrt{62}e^{26}$	$(\frac{10}{119}, \frac{12}{119}, \frac{24}{119}, 1, -\frac{67}{119}, \frac{22}{119}, \frac{32}{119}, \frac{2}{7})$ $+ \frac{186}{119}e^4 \otimes e_5$	{12478, 12578, 1468, 1568, 2467, 2567, 4, 5}
832:2	$0, 0, 0, 0, 0, \frac{6}{475}\sqrt{503}e^{12}, \frac{2}{475}\sqrt{15593}e^{16}, \frac{1}{475}\sqrt{141846}e^{13} + \frac{2}{475}\sqrt{33198}e^{26}$	$(\frac{26}{475}, -\frac{27}{475}, -\frac{54}{475}, 1, \frac{87}{475}, -\frac{1}{475}, \frac{1}{19}, -\frac{28}{475})$ $+ \frac{2}{475}\sqrt{97582}e^4 \otimes e_8$	{1234567, 123467, 134, 1345, 23578, 2378, 3568, 368}
832:2	$0, 0, 0, 0, 0, \frac{1}{19}\sqrt{39}e^{12}, \frac{1}{19}\sqrt{51}e^{16}, \frac{4}{19}\sqrt{6}e^{13} + \frac{6}{19}e^{26}$	$(\frac{3}{38}, \frac{2}{19}, \frac{4}{19}, -\frac{15}{38}, -\frac{5}{19}, \frac{7}{38}, \frac{5}{19}, \frac{11}{38})$ $+ \frac{1}{19}\sqrt{129}e^3 \otimes e_5 + \frac{1}{19}\sqrt{174}e^1 \otimes e_4$	{1237, 136, 234678, 348}
832:2	$0, 0, 0, 0, 0, \frac{2}{197}\sqrt{1846}e^{12}, \frac{4}{197}\sqrt{710}e^{16}, \frac{1}{197}\sqrt{4899}e^{13} + \frac{1}{197}\sqrt{1207}e^{26}$	$(\frac{24}{197}, -\frac{47}{394}, -\frac{47}{197}, \frac{191}{394}, \frac{20}{197}, \frac{1}{394}, \frac{49}{394}, -\frac{23}{197})$ $+ \frac{1}{197}\sqrt{10721}e^4 \otimes e_7 + \frac{1}{197}\sqrt{14413}e^1 \otimes e_3$	{1257, 127, 1456, 146}
832:2	$0, 0, 0, 0, 0, \frac{18}{587}\sqrt{323}e^{12}, \frac{9}{587}\sqrt{646}e^{16}, \frac{1}{587}\sqrt{65246}e^{13} + \frac{3}{587}\sqrt{9690}e^{26}$	$(-\frac{67}{587}, \frac{88}{587}, \frac{176}{587}, \frac{277}{587}, -\frac{235}{587}, \frac{21}{587}, -\frac{46}{587}, \frac{109}{587})$ $+ \frac{2}{587}\sqrt{32623}e^4 \otimes e_7 + \frac{2}{587}\sqrt{50065}e^2 \otimes e_5$	{12378, 134568, 2367, 345}
832:2	$0, 0, 0, 0, 0, \frac{6}{475}\sqrt{503}e^{12}, \frac{2}{475}\sqrt{33198}e^{16}, \frac{1}{475}\sqrt{141846}e^{13} + \frac{2}{475}\sqrt{15593}e^{26}$	$(-\frac{168}{475}, \frac{167}{475}, \frac{334}{475}, \frac{87}{475}, \frac{87}{475}, -\frac{1}{475}, -\frac{169}{475}, \frac{166}{475})$ $+ \frac{2}{475}\sqrt{97582}e^3 \otimes e_7$	{14578, 1478, 178, 4567, 467, 67}
832:2	$0, 0, 0, 0, 0, \frac{2}{109}\sqrt{210}e^{12}, \frac{2}{109}\sqrt{182}e^{16}, \frac{2}{109}\sqrt{966}e^{13} + \frac{2}{109}\sqrt{182}e^{26}$	$(-\frac{43}{218}, \frac{13}{109}, \frac{26}{109}, \frac{121}{218}, \frac{12}{109}, -\frac{17}{218}, -\frac{30}{109}, \frac{9}{218})$ $+ \frac{2}{109}\sqrt{1358}e^3 \otimes e_7 + \frac{2}{109}\sqrt{1358}e^4 \otimes e_8$	{123456, 12346, 2358, 238}
832:2	$0, 0, 0, 0, 0, \frac{14}{487}\sqrt{814}e^{12}, \frac{1}{487}\sqrt{160358}e^{16}, \frac{1}{487}\sqrt{82214}e^{13} + \frac{1}{487}\sqrt{2442}e^{26}$	$(\frac{195}{487}, -\frac{106}{487}, -\frac{212}{487}, \frac{87}{487}, \frac{87}{487}, \frac{89}{487}, \frac{284}{487}, -\frac{17}{487})$ $+ \frac{20}{487}\sqrt{814}e^1 \otimes e_3$	{12457, 1247, 127, 1456, 146, 16}
832:2	$0, 0, 0, 0, 0, \frac{14}{487}\sqrt{814}e^{12}, \frac{1}{487}\sqrt{2442}e^{16}, \frac{1}{487}\sqrt{82214}e^{13} + \frac{1}{487}\sqrt{160358}e^{26}$	$(-\frac{5}{487}, \frac{94}{487}, \frac{188}{487}, -\frac{313}{487}, \frac{87}{487}, \frac{89}{487}, \frac{84}{487}, \frac{183}{487})$ $+ \frac{20}{487}\sqrt{814}e^2 \otimes e_4$	{12358, 1238, 1345678, 134678, 2356, 236, 3457, 347}
832:2	$0, 0, 0, 0, 0, \frac{80}{1167}\sqrt{58}e^{12}, \frac{4}{1167}\sqrt{9686}e^{16}, \frac{4}{1167}\sqrt{1914}e^{13} + \frac{8}{1167}\sqrt{2581}e^{26}$	$(\frac{112}{1167}, \frac{30}{389}, \frac{60}{389}, -\frac{352}{1167}, -\frac{374}{1167}, \frac{202}{1167}, \frac{314}{1167}, \frac{292}{1167})$ $+ \frac{4}{1167}\sqrt{28942}e^1 \otimes e_4 + \frac{4}{1167}\sqrt{30218}e^2 \otimes e_5$	{12378, 13568, 23467, 345}
832:2	$0, 0, 0, 0, 0, \frac{150}{2933}\sqrt{10}e^{12}, \frac{100}{2933}\sqrt{70}e^{16}, \frac{75}{2933}\sqrt{174}e^{13} + \frac{50}{2933}\sqrt{78}e^{26}$	$(-\frac{200}{2933}, \frac{225}{2933}, \frac{450}{2933}, -\frac{825}{2933}, \frac{125}{419}, \frac{25}{2933}, -\frac{25}{419}, \frac{250}{2933})$ $+ \frac{100}{2933}\sqrt{123}e^3 \otimes e_7 + \frac{50}{2933}\sqrt{313}e^5 \otimes e_8 + \frac{50}{2933}\sqrt{537}e^1 \otimes e_4$	{1356, 348}
832:2	$0, 0, 0, 0, 0, \frac{2}{479}\sqrt{13002}e^{12}, \frac{3}{479}\sqrt{23246}e^{16}, \frac{1}{479}\sqrt{43734}e^{13} + \frac{3}{479}\sqrt{1970}e^{26}$	$(-\frac{89}{479}, \frac{66}{479}, \frac{132}{479}, 1, \frac{95}{479}, -\frac{23}{479}, -\frac{112}{479}, \frac{43}{479})$ $+ \frac{48}{479}\sqrt{197}e^4 \otimes e_7$	{1257, 127, 1456, 146, 25678, 2678, 458, 48}
832:2	$0, 0, 0, 0, 0, \frac{13}{491}\sqrt{105}e^{12}, \frac{13}{491}\sqrt{3}e^{16}, \frac{13}{491}\sqrt{111}e^{13} + \frac{13}{491}\sqrt{217}e^{26}$	$(-\frac{117}{982}, \frac{52}{491}, \frac{104}{491}, -\frac{117}{491}, \frac{429}{982}, -\frac{13}{982}, -\frac{65}{491}, \frac{91}{982})$ $+ \frac{13}{491}\sqrt{223}e^3 \otimes e_7 + \frac{13}{491}\sqrt{330}e^2 \otimes e_4 + \frac{39}{491}\sqrt{37}e^5 \otimes e_8$	{14678, 457}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
832:2	$0, 0, 0, 0, 0, \frac{12}{1453}\sqrt{503}e^{12}, \frac{4}{1453}\sqrt{33198}e^{16},$ $\frac{2}{1453}\sqrt{141846}e^{13} + \frac{4}{1453}\sqrt{15593}e^{26}$	$(-\frac{336}{1453}, \frac{334}{1453}, \frac{668}{1453}, \frac{677}{1453}, -\frac{329}{1453}, -\frac{2}{1453}, -\frac{338}{1453}, \frac{332}{1453})$ $+ \frac{1006}{1453}e^4 \otimes e_5 + \frac{4}{1453}\sqrt{97582}e^3 \otimes e_7$	{1478, 1578, 467, 567}
832:2	$0, 0, 0, 0, 0, \frac{4}{115}\sqrt{143}e^{12}, \frac{2}{115}\sqrt{429}e^{16}, \frac{3}{115}\sqrt{1430}e^{13} + \frac{2}{115}\sqrt{429}e^{26}$	$(-\frac{2}{23}, \frac{7}{23}, \frac{14}{23}, -\frac{73}{115}, \frac{21}{115}, \frac{5}{23}, \frac{3}{23}, \frac{12}{23})$ $+ \frac{2}{115}\sqrt{6721}e^3 \otimes e_4$	{1245678, 124678, 1458, 148, 2457, 247, 456, 46}
832:2	$0, 0, 0, 0, 0, \frac{4}{197}\sqrt{291}e^{12}, \frac{2}{197}\sqrt{970}e^{16}, \frac{1}{197}\sqrt{9118}e^{13} + \frac{2}{197}\sqrt{582}e^{26}$	$(\frac{28}{197}, -\frac{11}{197}, -\frac{22}{197}, \frac{103}{197}, -\frac{69}{197}, \frac{17}{197}, \frac{45}{197}, \frac{6}{197})$ $+ \frac{2}{197}\sqrt{3783}e^4 \otimes e_8 + \frac{2}{197}\sqrt{4559}e^1 \otimes e_5$	{1278, 168, 24567, 45}
832:2	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{46}e^{12}, \frac{1}{14}\sqrt{22}e^{16}, \frac{1}{14}\sqrt{26}e^{13} + \frac{1}{14}\sqrt{22}e^{26}$	$(\frac{5}{28}, -\frac{3}{56}, -\frac{3}{28}, -\frac{19}{56}, \frac{3}{28}, \frac{1}{8}, \frac{17}{56}, \frac{1}{14})$ $+ \frac{5}{14}\sqrt{2}e^1 \otimes e_3 + \frac{5}{14}\sqrt{2}e^2 \otimes e_4$	{23567, 2367, 34, 345}
832:2	$0, 0, 0, 0, 0, \frac{16}{307}\sqrt{57}e^{12}, \frac{16}{307}\sqrt{106}e^{16}, \frac{16}{307}\sqrt{19}e^{13} + \frac{16}{307}\sqrt{30}e^{26}$	$(\frac{8}{307}, \frac{8}{307}, \frac{16}{307}, \frac{152}{307}, -\frac{120}{307}, \frac{16}{307}, \frac{24}{307}, \frac{24}{307})$ $+ \frac{16}{307}\sqrt{155}e^1 \otimes e_5 + \frac{48}{307}\sqrt{13}e^4 \otimes e_7$	{1237, 1346, 235678, 3458}
832:2	$0, 0, 0, 0, 0, \frac{3}{313}\sqrt{226}e^{12}, \frac{8}{313}\sqrt{339}e^{16}, \frac{2}{313}\sqrt{5763}e^{13} + \frac{1}{313}\sqrt{9266}e^{26}$	$(-\frac{57}{313}, \frac{125}{626}, \frac{125}{313}, \frac{349}{626}, -\frac{101}{313}, \frac{11}{626}, -\frac{103}{626}, \frac{68}{313})$ $+ \frac{3}{313}\sqrt{62602}e^3 \otimes e_5 + \frac{2}{313}\sqrt{15481}e^4 \otimes e_7$	{124568, 1578, 245, 567}
832:2	$0, 0, 0, 0, 0, \frac{4}{1263}\sqrt{16549}e^{12}, \frac{4}{1263}\sqrt{7303}e^{16},$ $\frac{4}{1263}\sqrt{1273}e^{13} + \frac{4}{1263}\sqrt{30217}e^{26}$	$(-\frac{14}{1263}, \frac{62}{1263}, \frac{124}{1263}, \frac{646}{1263}, -\frac{158}{421}, \frac{16}{421}, \frac{34}{1263}, \frac{110}{1263})$ $+ \frac{4}{1263}\sqrt{33701}e^4 \otimes e_8 + \frac{4}{1263}\sqrt{41339}e^2 \otimes e_5$	{128, 15678, 246, 457}
832:2	$0, 0, 0, 0, 0, \frac{5}{79}\sqrt{70}e^{12}, \frac{10}{79}\sqrt{3}e^{16}, \frac{10}{79}e^{13} + \frac{5}{79}\sqrt{74}e^{26}$	$(-\frac{5}{79}, \frac{35}{158}, \frac{35}{79}, -\frac{65}{158}, -\frac{15}{79}, \frac{25}{158}, \frac{15}{79}, \frac{30}{79})$ $+ \frac{10}{79}\sqrt{43}e^2 \otimes e_4 + \frac{5}{79}\sqrt{102}e^3 \otimes e_5$	{1258, 145678, 256, 457}
832:2	$0, 0, 0, 0, 0, \frac{28}{1381}\sqrt{814}e^{12}, \frac{2}{1381}\sqrt{160358}e^{16},$ $\frac{2}{1381}\sqrt{82214}e^{13} + \frac{2}{1381}\sqrt{2442}e^{26}$	$(\frac{390}{1381}, -\frac{212}{1381}, -\frac{424}{1381}, \frac{581}{1381}, -\frac{233}{1381}, \frac{178}{1381}, \frac{568}{1381}, -\frac{34}{1381})$ $+ \frac{40}{1381}\sqrt{814}e^1 \otimes e_3 + \frac{814}{1381}e^4 \otimes e_5$	{1247, 1257, 146, 156}
832:2	$0, 0, 0, 0, 0, \frac{1}{27}\sqrt{65}e^{12}, \frac{1}{27}\sqrt{91}e^{16}, \frac{2}{27}\sqrt{65}e^{13} + \frac{1}{27}\sqrt{78}e^{26}$	$(-\frac{1}{18}, \frac{2}{27}, \frac{4}{27}, \frac{31}{54}, -\frac{1}{3}, \frac{1}{54}, -\frac{1}{27}, \frac{5}{54})$ $+ \frac{13}{27}\sqrt{2}e^4 \otimes e_8 + \frac{1}{27}\sqrt{299}e^3 \otimes e_5$	{123467, 134, 2378, 368}
832:2	$0, 0, 0, 0, 0, \frac{11}{497}\sqrt{319}e^{12}, \frac{11}{497}\sqrt{113}e^{16}, \frac{11}{497}\sqrt{131}e^{13} + \frac{165}{497}e^{26}$	$(\frac{66}{497}, -\frac{55}{994}, -\frac{55}{497}, -\frac{297}{994}, \frac{132}{497}, \frac{11}{142}, \frac{209}{994}, \frac{11}{497})$ $+ \frac{11}{497}\sqrt{337}e^1 \otimes e_3 + \frac{11}{497}\sqrt{393}e^2 \otimes e_4 + \frac{22}{497}\sqrt{42}e^5 \otimes e_8$	{23567, 345}
832:2	$0, 0, 0, 0, 0, \frac{78}{491}\sqrt{6}e^{12}, \frac{26}{491}\sqrt{82}e^{16}, \frac{13}{491}\sqrt{111}e^{13} + \frac{13}{491}\sqrt{3}e^{26}$	$(\frac{52}{491}, -\frac{117}{982}, -\frac{117}{491}, \frac{429}{982}, \frac{104}{491}, -\frac{13}{982}, \frac{91}{982}, -\frac{65}{491})$ $+ \frac{273}{491}e^1 \otimes e_3 + \frac{39}{491}\sqrt{37}e^4 \otimes e_7 + \frac{52}{491}\sqrt{7}e^5 \otimes e_8$	{1257, 1456}
832:2	$0, 0, 0, 0, 0, \frac{4}{397}\sqrt{649}e^{12}, \frac{1}{397}\sqrt{28202}e^{16}, \frac{1}{397}\sqrt{23010}e^{13} + \frac{118}{397}e^{26}$	$(-\frac{63}{794}, \frac{55}{397}, \frac{110}{397}, \frac{299}{794}, \frac{40}{397}, \frac{47}{794}, -\frac{8}{397}, \frac{157}{794})$ $+ \frac{1}{397}\sqrt{39530}e^3 \otimes e_7 + \frac{1}{397}\sqrt{44722}e^1 \otimes e_4$	{1356, 136, 3458, 348}
832:2	$0, 0, 0, 0, 0, \frac{2}{499}\sqrt{29739}e^{12}, \frac{2}{499}\sqrt{33187}e^{16},$ $\frac{1}{499}\sqrt{73270}e^{13} + \frac{4}{499}\sqrt{2586}e^{26}$	$(\frac{122}{499}, \frac{5}{499}, \frac{10}{499}, -\frac{309}{499}, \frac{95}{499}, \frac{127}{499}, \frac{249}{499}, \frac{132}{499})$ $+ \frac{2}{499}\sqrt{87062}e^1 \otimes e_4$	{12357, 1237, 1356, 136, 2345678, 234678, 3458, 348}
832:3	$0, 0, 0, 0, 0, \frac{7}{883}\sqrt{1590}e^{12}, \frac{14}{883}\sqrt{865}e^{16}, \frac{35}{883}\sqrt{62}e^{26} + \frac{7}{883}\sqrt{2210}e^{34}$	$(-\frac{28}{883}, \frac{98}{883}, \frac{287}{883}, -\frac{119}{883}, -\frac{273}{883}, \frac{70}{883}, \frac{42}{883}, \frac{168}{883})$ $+ \frac{14}{883}\sqrt{1015}e^3 \otimes e_7 + \frac{175}{883}\sqrt{6}e^1 \otimes e_5$	{127, 1346, 245678, 358}
832:3	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{55}e^{12}, \frac{1}{29}\sqrt{286}e^{16}, \frac{1}{29}\sqrt{66}e^{26} + \frac{1}{29}\sqrt{77}e^{34}$	$(-\frac{4}{29}, \frac{4}{29}, \frac{13}{29}, -\frac{9}{29}, \frac{18}{29}, 0, -\frac{4}{29}, \frac{4}{29})$ $+ \frac{1}{29}\sqrt{627}e^5 \otimes e_7 + \frac{22}{29}e^3 \otimes e_4$	{23678, 24678, 358, 458}
832:3	$0, 0, 0, 0, 0, \frac{1}{18}\sqrt{55}e^{12}, \frac{1}{18}\sqrt{77}e^{16}, \frac{1}{18}\sqrt{66}e^{26} + \frac{1}{18}\sqrt{286}e^{34}$	$(\frac{1}{24}, \frac{2}{9}, \frac{23}{36}, -\frac{11}{72}, -\frac{7}{12}, \frac{19}{72}, \frac{11}{36}, \frac{35}{72})$ $+ \frac{1}{18}\sqrt{627}e^3 \otimes e_5$	{12347, 1257, 1346, 156, 23678, 245678, 38, 458}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
832:3	$0, 0, 0, 0, 0, \frac{2}{1889}\sqrt{23529}e^{12}, \frac{4}{1889}\sqrt{43307}e^{16},$ $\frac{2}{1889}\sqrt{119009}e^{26} + \frac{2}{1889}\sqrt{254386}e^{34}$	$(-\frac{370}{1889}, \frac{487}{1889}, \frac{175}{1889}, \frac{429}{1889}, -\frac{507}{1889}, \frac{117}{1889}, -\frac{253}{1889}, \frac{604}{1889})$ $+ \frac{2}{1889}\sqrt{243474}e^3 \otimes e_5 + \frac{44}{1889}\sqrt{682}e^4 \otimes e_7$	{1257, 1346, 23678, 458}
832:3	$0, 0, 0, 0, 0, \frac{8}{97}\sqrt{15}e^{12}, \frac{4}{97}\sqrt{390}e^{16}, \frac{40}{97}\sqrt{2}e^{26} + \frac{4}{97}\sqrt{390}e^{34}$	$(-\frac{27}{97}, \frac{32}{97}, \frac{58}{97}, -\frac{21}{97}, \frac{18}{97}, \frac{5}{97}, -\frac{22}{97}, \frac{37}{97})$ $+ \frac{4}{97}\sqrt{790}e^3 \otimes e_7$	{1257, 127, 13456, 1346, 245678, 24678, 358, 38}
832:3	$0, 0, 0, 0, 0, \frac{7}{597}\sqrt{4378}e^{12}, \frac{28}{199}\sqrt{33}e^{16}, \frac{7}{597}\sqrt{1122}e^{26} + \frac{7}{597}\sqrt{1254}e^{34}$	$(\frac{182}{597}, -\frac{28}{597}, \frac{21}{199}, \frac{21}{199}, -\frac{119}{199}, \frac{154}{597}, \frac{112}{199}, \frac{42}{199})$ $+ \frac{7}{199}\sqrt{1166}e^1 \otimes e_5$	{12347, 127, 1346, 16, 235678, 358}
832:3	$0, 0, 0, 0, 0, \frac{4}{35}\sqrt{22}e^{12}, \frac{1}{35}\sqrt{66}e^{16}, \frac{6}{35}\sqrt{11}e^{26} + \frac{1}{35}\sqrt{66}e^{34}$	$(-\frac{2}{35}, \frac{1}{5}, \frac{17}{35}, -\frac{1}{7}, -\frac{3}{7}, \frac{1}{7}, \frac{3}{35}, \frac{12}{35})$ $+ \frac{1}{35}\sqrt{858}e^2 \otimes e_5 + \frac{22}{35}e^3 \otimes e_4$	{236, 246, 357, 457}
832:3	$0, 0, 0, 0, 0, \frac{8}{149}\sqrt{15}e^{12}, \frac{4}{149}\sqrt{102}e^{16}, \frac{8}{149}\sqrt{2}e^{26} + \frac{4}{149}\sqrt{102}e^{34}$	$(\frac{9}{149}, -\frac{8}{149}, \frac{26}{149}, -\frac{33}{149}, \frac{18}{149}, \frac{1}{149}, \frac{10}{149}, -\frac{7}{149})$ $+ \frac{48}{149}e^1 \otimes e_8 + \frac{4}{149}\sqrt{118}e^3 \otimes e_7$	{1257, 127, 13456, 1346, 245678, 24678, 358, 38}
832:3	$0, 0, 0, 0, 0, \frac{8}{149}\sqrt{15}e^{12}, \frac{4}{149}\sqrt{102}e^{16}, \frac{8}{149}\sqrt{2}e^{26} + \frac{4}{149}\sqrt{102}e^{34}$	$(\frac{9}{149}, -\frac{8}{149}, \frac{26}{149}, -\frac{33}{149}, \frac{18}{149}, \frac{1}{149}, \frac{10}{149}, -\frac{7}{149})$ $- \frac{48}{149}e^1 \otimes e_8 + \frac{4}{149}\sqrt{118}e^3 \otimes e_7$	{1257, 127, 13456, 1346, 245678, 24678, 358, 38}
832:3	$0, 0, 0, 0, 0, \frac{1}{18}\sqrt{55}e^{12}, \frac{1}{18}\sqrt{286}e^{16}, \frac{1}{18}\sqrt{66}e^{26} + \frac{1}{18}\sqrt{77}e^{34}$	$(-\frac{2}{9}, \frac{2}{9}, \frac{1}{9}, \frac{1}{9}, 1, 0, -\frac{2}{9}, \frac{2}{9})$ $+ \frac{1}{18}\sqrt{627}e^5 \otimes e_7$	{12347, 127, 13456, 156, 23678, 358}
832:3	$0, 0, 0, 0, 0, \frac{8}{361}\sqrt{127}e^{12}, \frac{4}{361}\sqrt{127}e^{16}, \frac{4}{361}\sqrt{1905}e^{26} + \frac{2}{361}\sqrt{7366}e^{34}$	$(\frac{36}{361}, -\frac{28}{361}, \frac{117}{361}, -\frac{137}{361}, \frac{234}{361}, \frac{8}{361}, \frac{44}{361}, -\frac{20}{361})$ $+ \frac{254}{361}e^3 \otimes e_4 + \frac{2}{361}\sqrt{23622}e^5 \otimes e_8$	{1238, 1248, 13678, 14678}
832:3	$0, 0, 0, 0, 0, \frac{4}{117}\sqrt{127}e^{12}, \frac{2}{117}\sqrt{127}e^{16}, \frac{2}{117}\sqrt{1905}e^{26} + \frac{1}{117}\sqrt{7366}e^{34}$	$(\frac{2}{13}, -\frac{14}{117}, -\frac{5}{117}, -\frac{5}{117}, \frac{1}{117}, \frac{4}{117}, \frac{22}{117}, -\frac{10}{117})$ $+ \frac{1}{117}\sqrt{23622}e^5 \otimes e_8$	{1238, 13678, 23456, 256, 3457, 57}
832:3	$0, 0, 0, 0, 0, \frac{1}{6}\sqrt{22}e^{12}, \frac{1}{24}\sqrt{66}e^{16}, \frac{1}{4}\sqrt{11}e^{26} + \frac{1}{24}\sqrt{66}e^{34}$	$(-\frac{1}{12}, \frac{7}{24}, \frac{1}{4}, \frac{1}{4}, -\frac{5}{8}, \frac{5}{24}, \frac{1}{8}, \frac{1}{2})$ $+ \frac{1}{24}\sqrt{858}e^2 \otimes e_5$	{12348, 128, 1345678, 15678, 236, 357}
832:3	$0, 0, 0, 0, 0, \frac{14}{1733}\sqrt{4378}e^{12}, \frac{168}{1733}\sqrt{33}e^{16},$ $\frac{14}{1733}\sqrt{1122}e^{26} + \frac{14}{1733}\sqrt{1254}e^{34}$	$(\frac{364}{1733}, -\frac{56}{1733}, \frac{665}{1733}, -\frac{413}{1733}, -\frac{714}{1733}, \frac{308}{1733}, \frac{672}{1733}, \frac{252}{1733})$ $+ \frac{1078}{1733}e^3 \otimes e_4 + \frac{42}{1733}\sqrt{1166}e^1 \otimes e_5$	{235678, 245678, 358, 458}
832:3	$0, 0, 0, 0, 0, \frac{2}{83}\sqrt{345}e^{12}, \frac{2}{83}\sqrt{345}e^{16}, \frac{2}{83}\sqrt{115}e^{26} + \frac{2}{83}\sqrt{345}e^{34}$	$(-\frac{18}{83}, \frac{25}{83}, \frac{35}{83}, -\frac{3}{83}, -\frac{21}{83}, \frac{7}{83}, -\frac{11}{83}, \frac{32}{83})$ $+ \frac{2}{83}\sqrt{759}e^2 \otimes e_5 + \frac{2}{83}\sqrt{874}e^3 \otimes e_7$	{12478, 13568, 267, 345}
832:3	$0, 0, 0, 0, 0, \frac{1}{47}\sqrt{511}e^{12}, \frac{1}{47}\sqrt{438}e^{16}, \frac{1}{47}\sqrt{219}e^{26} + \frac{1}{47}\sqrt{438}e^{34}$	$(\frac{4}{47}, \frac{11}{94}, \frac{44}{47}, -\frac{29}{47}, \frac{21}{94}, \frac{19}{94}, \frac{27}{94}, \frac{15}{47})$ $+ \frac{73}{47}e^3 \otimes e_4$	{123578, 12378, 124578, 12478, 13568, 1368, 14568, 1468}
832:3	$0, 0, 0, 0, 0, \frac{1}{71}\sqrt{186}e^{12}, \frac{1}{71}\sqrt{930}e^{16}, \frac{1}{71}\sqrt{62}e^{26} + \frac{4}{71}\sqrt{93}e^{34}$	$(-\frac{9}{71}, \frac{7}{71}, \frac{20}{71}, -\frac{15}{71}, \frac{36}{71}, -\frac{2}{71}, -\frac{11}{71}, \frac{5}{71})$ $+ \frac{1}{71}\sqrt{2170}e^3 \otimes e_7 + \frac{3}{71}\sqrt{186}e^5 \otimes e_8$	{1257, 13456, 24678, 38}
832:4	$0, 0, 0, 0, 0, \frac{2}{29}\sqrt{110}e^{12}, \frac{1}{29}\sqrt{462}e^{16} - \frac{1}{29}\sqrt{286}e^{23},$ $\frac{11}{29}\sqrt{2}e^{13} + \frac{1}{29}\sqrt{66}e^{26}$	$(\frac{3}{29}, \frac{3}{29}, \frac{6}{29}, -\frac{19}{29}, \frac{5}{29}, \frac{6}{29}, \frac{9}{29}, \frac{9}{29})$ $+ \frac{4}{29}\sqrt{66}e^1 \otimes e_4$	{12357, 1237, 1356, 136, 2345678, 234678, 3458, 348, 12357, 1237, 1356, 136, 2345678, 234678, 3458, 348}
832:4	$0, 0, 0, 0, 0, \frac{2}{29}\sqrt{110}e^{12}, \frac{1}{29}\sqrt{462}e^{16} + \frac{1}{29}\sqrt{286}e^{23},$ $\frac{11}{29}\sqrt{2}e^{13} + \frac{1}{29}\sqrt{66}e^{26}$	$(\frac{3}{29}, \frac{3}{29}, \frac{6}{29}, -\frac{19}{29}, \frac{5}{29}, \frac{6}{29}, \frac{9}{29}, \frac{9}{29})$ $+ \frac{4}{29}\sqrt{66}e^1 \otimes e_4$	{12357, 1237, 1356, 136, 2345678, 234678, 3458, 348, 12357, 1237, 1356, 136, 2345678, 234678, 3458, 348}
832:4	$0, 0, 0, 0, 0, \frac{14}{247}\sqrt{86}e^{12}, \frac{35}{247}\sqrt{6}e^{16} - \frac{7}{247}\sqrt{22}e^{23},$ $\frac{7}{247}\sqrt{22}e^{13} + \frac{35}{247}\sqrt{6}e^{26}$	$(\frac{21}{247}, \frac{21}{247}, \frac{42}{247}, -\frac{77}{247}, -\frac{77}{247}, \frac{42}{247}, \frac{63}{247}, \frac{63}{247})$ $+ \frac{84}{247}\sqrt{3}e^1 \otimes e_4 + \frac{84}{247}\sqrt{3}e^2 \otimes e_5$	{12378, 13568, 345, 12378, 13568, 345}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
832:4	$0, 0, 0, 0, 0, \frac{14}{247}\sqrt{86}e^{12}, \frac{35}{247}\sqrt{6}e^{16} + \frac{7}{247}\sqrt{22}e^{23},$ $\frac{7}{247}\sqrt{22}e^{13} + \frac{35}{247}\sqrt{6}e^{26}$	$(\frac{21}{247}, \frac{21}{247}, \frac{42}{247}, -\frac{77}{247}, -\frac{77}{247}, \frac{42}{247}, \frac{63}{247}, \frac{63}{247})$ $+ \frac{84}{247}\sqrt{3}e^1 \otimes e_4 + \frac{84}{247}\sqrt{3}e^2 \otimes e_5$	{12378, 13568, 345, 12378, 13568, 345}
832:4	$0, 0, 0, 0, 0, \frac{1}{10}\sqrt{38}e^{12}, \frac{1}{20}\sqrt{114}e^{16} - \frac{1}{20}\sqrt{285}e^{23},$ $\frac{1}{20}\sqrt{285}e^{13} + \frac{1}{20}\sqrt{114}e^{26}$	$(\frac{1}{8}, \frac{1}{8}, \frac{1}{4}, -\frac{7}{10}, \frac{3}{20}, \frac{1}{4}, \frac{3}{8}, \frac{3}{8})$ $+ \frac{1}{20}\sqrt{646}e^3 \otimes e_4$	{1245678, 124678, 1458, 148, 456, 46, 1245678, 124678, 1458, 148, 456, 46}
832:4	$0, 0, 0, 0, 0, \frac{1}{10}\sqrt{38}e^{12}, \frac{1}{20}\sqrt{114}e^{16} + \frac{1}{20}\sqrt{285}e^{23},$ $\frac{1}{20}\sqrt{285}e^{13} + \frac{1}{20}\sqrt{114}e^{26}$	$(\frac{1}{8}, \frac{1}{8}, \frac{1}{4}, -\frac{7}{10}, \frac{3}{20}, \frac{1}{4}, \frac{3}{8}, \frac{3}{8})$ $+ \frac{1}{20}\sqrt{646}e^3 \otimes e_4$	{1245678, 124678, 1458, 148, 456, 46, 1245678, 124678, 1458, 148, 456, 46}
832:4	$0, 0, 0, 0, 0, \frac{2}{253}\sqrt{262}e^{12}, \frac{3}{253}\sqrt{4454}e^{16} - \frac{1}{253}\sqrt{40610}e^{23},$ $\frac{1}{253}\sqrt{13886}e^{13} + \frac{1}{253}\sqrt{14410}e^{26}$	$(-\frac{3}{253}, -\frac{3}{253}, -\frac{6}{253}, 1, \frac{45}{253}, -\frac{6}{253}, -\frac{9}{253}, -\frac{9}{253})$ $+ \frac{1}{253}\sqrt{1703}e^4 \otimes e_7$	{1234568, 123468, 13578, 1378, 234, 2345, 3567, 367, 1234568, 123468, 13578, 1378, 234, 2345, 3567, 367}
832:4	$0, 0, 0, 0, 0, \frac{2}{253}\sqrt{262}e^{12}, \frac{3}{253}\sqrt{4454}e^{16} + \frac{1}{253}\sqrt{40610}e^{23},$ $\frac{1}{253}\sqrt{13886}e^{13} + \frac{1}{253}\sqrt{14410}e^{26}$	$(-\frac{3}{253}, -\frac{3}{253}, -\frac{6}{253}, 1, \frac{45}{253}, -\frac{6}{253}, -\frac{9}{253}, -\frac{9}{253})$ $+ \frac{1}{253}\sqrt{1703}e^4 \otimes e_7$	{1234568, 123468, 13578, 1378, 234, 2345, 3567, 367, 1234568, 123468, 13578, 1378, 234, 2345, 3567, 367}
832:4	$0, 0, 0, 0, 0, \frac{18}{239}\sqrt{6}e^{12}, \frac{9}{239}\sqrt{86}e^{16} - \frac{63}{239}\sqrt{2}e^{23},$ $\frac{63}{239}\sqrt{2}e^{13} + \frac{9}{239}\sqrt{86}e^{26}$	$(-\frac{9}{239}, -\frac{9}{239}, -\frac{18}{239}, \frac{135}{239}, \frac{135}{239}, -\frac{18}{239}, -\frac{27}{239}, -\frac{27}{239})$ $+ \frac{36}{239}\sqrt{26}e^4 \otimes e_7 + \frac{36}{239}\sqrt{26}e^5 \otimes e_8$	{123456, 1357, 3678, 123456, 1357, 3678}
832:4	$0, 0, 0, 0, 0, \frac{18}{239}\sqrt{6}e^{12}, \frac{9}{239}\sqrt{86}e^{16} + \frac{63}{239}\sqrt{2}e^{23},$ $\frac{63}{239}\sqrt{2}e^{13} + \frac{9}{239}\sqrt{86}e^{26}$	$(-\frac{9}{239}, -\frac{9}{239}, -\frac{18}{239}, \frac{135}{239}, \frac{135}{239}, -\frac{18}{239}, -\frac{27}{239}, -\frac{27}{239})$ $+ \frac{36}{239}\sqrt{26}e^4 \otimes e_7 + \frac{36}{239}\sqrt{26}e^5 \otimes e_8$	{123456, 1357, 3678, 123456, 1357, 3678}
832:4	$0, 0, 0, 0, 0, \frac{5}{16}\sqrt{2}e^{12}, \frac{5}{32}\sqrt{6}e^{16} - \frac{5}{32}\sqrt{2}e^{23},$ $\frac{5}{32}\sqrt{2}e^{13} + \frac{5}{32}\sqrt{6}e^{26}$	$(\frac{3}{32}, \frac{3}{32}, \frac{3}{16}, 1, -\frac{9}{16}, \frac{3}{16}, \frac{9}{32}, \frac{9}{32})$ $+ \frac{25}{16}e^4 \otimes e_5$	{12478, 12578, 1468, 1568, 4, 5, 12478, 12578, 1468, 1568, 4, 5}
832:4	$0, 0, 0, 0, 0, \frac{5}{16}\sqrt{2}e^{12}, \frac{5}{32}\sqrt{6}e^{16} + \frac{5}{32}\sqrt{2}e^{23},$ $\frac{5}{32}\sqrt{2}e^{13} + \frac{5}{32}\sqrt{6}e^{26}$	$(\frac{3}{32}, \frac{3}{32}, \frac{3}{16}, 1, -\frac{9}{16}, \frac{3}{16}, \frac{9}{32}, \frac{9}{32})$ $+ \frac{25}{16}e^4 \otimes e_5$	{12478, 12578, 1468, 1568, 4, 5, 12478, 12578, 1468, 1568, 4, 5}
832:5	$0, 0, 0, 0, 0, \frac{41}{2429}\sqrt{58}e^{12}, \frac{615}{2429}\sqrt{2}e^{13} + \frac{82}{2429}\sqrt{43}e^{26},$ $\frac{41}{2429}\sqrt{690}e^{16} + \frac{82}{2429}\sqrt{151}e^{34}$	$(-\frac{41}{347}, \frac{369}{2429}, \frac{738}{2429}, -\frac{943}{2429}, \frac{1476}{2429}, \frac{82}{2429}, \frac{451}{2429}, -\frac{205}{2429})$ $+ \frac{41}{2429}\sqrt{1906}e^3 \otimes e_4 + \frac{82}{2429}\sqrt{582}e^5 \otimes e_8$	{1238, 23678}
832:5	$0, 0, 0, 0, 0, \frac{2}{7}e^{12}, \frac{1}{7}\sqrt{14}e^{13} + \frac{1}{7}\sqrt{6}e^{26}, \frac{2}{7}\sqrt{2}e^{16} + \frac{1}{7}\sqrt{6}e^{34}$	$(0, \frac{1}{7}, \frac{2}{7}, -\frac{1}{7}, -\frac{3}{7}, \frac{1}{7}, \frac{2}{7}, \frac{1}{7})$ $+ \frac{1}{7}\sqrt{22}e^1 \otimes e_5 + \frac{4}{7}e^3 \otimes e_4$	{136, 357}
832:5	$0, 0, 0, 0, 0, \frac{28}{1429}\sqrt{285}e^{12}, \frac{84}{1429}\sqrt{7}e^{13} + \frac{28}{1429}\sqrt{577}e^{26},$ $\frac{28}{1429}\sqrt{239}e^{16} + \frac{112}{1429}\sqrt{23}e^{34}$	$(\frac{182}{1429}, -\frac{70}{1429}, -\frac{140}{1429}, \frac{434}{1429}, -\frac{462}{1429}, \frac{112}{1429}, \frac{42}{1429}, \frac{294}{1429})$ $+ \frac{196}{1429}\sqrt{13}e^4 \otimes e_7 + \frac{28}{1429}\sqrt{627}e^2 \otimes e_5$	{135678, 2346}
832:5	$0, 0, 0, 0, 0, \frac{2}{1121}\sqrt{81618}e^{12}, \frac{4}{1121}\sqrt{22746}e^{13} + \frac{42}{1121}\sqrt{223}e^{26},$ $\frac{30}{1121}\sqrt{223}e^{16} + \frac{12}{1121}\sqrt{8251}e^{34}$	$(\frac{319}{1121}, -\frac{39}{1121}, -\frac{78}{1121}, \frac{677}{1121}, -\frac{661}{1121}, \frac{280}{1121}, \frac{241}{1121}, \frac{599}{1121})$ $+ \frac{18}{1121}\sqrt{7359}e^4 \otimes e_5$	{12347, 135678, 2346, 358}
832:5	$0, 0, 0, 0, 0, \frac{2}{1133}\sqrt{82797}e^{12}, \frac{2}{1133}\sqrt{118695}e^{13} + \frac{12}{1133}\sqrt{579}e^{26},$ $\frac{6}{1133}\sqrt{20651}e^{16} + \frac{6}{1133}\sqrt{21809}e^{34}$	$(-\frac{35}{1133}, \frac{45}{1133}, \frac{90}{1133}, -\frac{115}{1133}, 1, \frac{10}{1133}, \frac{5}{103}, -\frac{25}{1133})$ $+ \frac{6}{1133}\sqrt{58479}e^5 \otimes e_8$	{12378, 134567, 2368, 345}
832:5	$0, 0, 0, 0, 0, \frac{42}{1145}\sqrt{482}e^{12}, \frac{42}{1145}\sqrt{301}e^{13} + \frac{42}{1145}\sqrt{502}e^{26},$ $\frac{84}{1145}\sqrt{15}e^{16} + \frac{42}{1145}\sqrt{191}e^{34}$	$(\frac{91}{1145}, \frac{161}{1145}, \frac{322}{1145}, \frac{21}{1145}, -\frac{721}{1145}, \frac{252}{1145}, \frac{413}{1145}, \frac{343}{1145})$ $+ \frac{42}{1145}\sqrt{933}e^2 \otimes e_5$	{12347, 135678, 2346, 358}
832:5	$0, 0, 0, 0, 0, \frac{2}{23}\sqrt{57}e^{12}, \frac{1}{23}\sqrt{190}e^{13} + \frac{1}{23}\sqrt{114}e^{26},$ $\frac{4}{23}\sqrt{19}e^{16} + \frac{1}{23}\sqrt{114}e^{34}$	$(\frac{4}{23}, \frac{1}{23}, \frac{2}{23}, \frac{7}{23}, -\frac{15}{23}, \frac{5}{23}, \frac{6}{23}, \frac{9}{23})$ $+ \frac{19}{23}\sqrt{2}e^1 \otimes e_5$	{12348, 136, 2345678, 357}
832:5	$0, 0, 0, 0, 0, \frac{102}{1327}\sqrt{5}e^{12}, \frac{34}{1327}\sqrt{33}e^{13} + \frac{68}{1327}\sqrt{69}e^{26},$ $\frac{34}{1327}\sqrt{29}e^{16} + \frac{714}{1327}e^{34}$	$(\frac{119}{1327}, -\frac{153}{1327}, -\frac{306}{1327}, \frac{391}{1327}, \frac{663}{1327}, -\frac{34}{1327}, -\frac{187}{1327}, \frac{85}{1327})$ $+ \frac{102}{1327}\sqrt{55}e^5 \otimes e_8 + \frac{68}{1327}\sqrt{166}e^4 \otimes e_7$	{1257, 48}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
832:5	$0, 0, 0, 0, 0, \frac{174}{3557}\sqrt{11}e^{12}, \frac{29}{3557}\sqrt{1830}e^{13} + \frac{116}{3557}\sqrt{83}e^{26},$ $\frac{58}{3557}\sqrt{401}e^{16} + \frac{58}{3557}\sqrt{574}e^{34}$	$(\frac{406}{3557}, -\frac{145}{3557}, -\frac{290}{3557}, \frac{957}{3557}, -\frac{1131}{3557}, \frac{261}{3557}, \frac{116}{3557}, \frac{667}{3557})$ $+ \frac{116}{3557}\sqrt{223}e^4 \otimes e_7 + \frac{638}{3557}\sqrt{6}e^3 \otimes e_5$	{134, 2378}
832:5	$0, 0, 0, 0, 0, \frac{35}{1973}\sqrt{970}e^{12}, \frac{105}{1973}\sqrt{14}e^{13} + \frac{210}{1973}\sqrt{29}e^{26},$ $\frac{35}{1973}\sqrt{222}e^{16} + \frac{350}{1973}\sqrt{3}e^{34}$	$(-\frac{35}{1973}, \frac{385}{1973}, \frac{770}{1973}, -\frac{455}{1973}, -\frac{840}{1973}, \frac{350}{1973}, \frac{735}{1973}, \frac{315}{1973})$ $+ \frac{210}{1973}\sqrt{62}e^2 \otimes e_5 + \frac{35}{1973}\sqrt{1162}e^3 \otimes e_4$	{135678, 358}
832:5	$0, 0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{5}{53}\sqrt{22}e^{13} + \frac{10}{53}\sqrt{3}e^{26},$ $\frac{10}{53}e^{16} + \frac{10}{53}\sqrt{3}e^{34}$	$(\frac{10}{53}, -\frac{5}{53}, -\frac{10}{53}, \frac{25}{53}, -\frac{15}{53}, \frac{5}{53}, 0, \frac{15}{53})$ $+ \frac{10}{53}\sqrt{11}e^1 \otimes e_5 + \frac{20}{53}\sqrt{3}e^4 \otimes e_7$	{167, 24568}
832:5	$0, 0, 0, 0, 0, \frac{5}{53}\sqrt{11}e^{12}, \frac{5}{53}\sqrt{42}e^{13} + \frac{5}{53}\sqrt{10}e^{26},$ $\frac{10}{53}\sqrt{3}e^{16} + \frac{5}{53}\sqrt{7}e^{34}$	$(-\frac{5}{53}, \frac{5}{53}, \frac{10}{53}, -\frac{15}{53}, \frac{30}{53}, 0, \frac{5}{53}, -\frac{5}{53})$ $+ \frac{5}{53}\sqrt{46}e^3 \otimes e_4 + \frac{5}{53}\sqrt{51}e^5 \otimes e_7$	{135, 367}
832:5	$0, 0, 0, 0, 0, \frac{3}{34}\sqrt{10}e^{12}, \frac{6}{17}\sqrt{5}e^{13} + \frac{3}{34}\sqrt{2}e^{26},$ $\frac{9}{17}e^{16} + \frac{3}{17}\sqrt{19}e^{34}$	$(\frac{1}{17}, \frac{29}{136}, \frac{29}{68}, -\frac{13}{136}, -\frac{43}{68}, \frac{37}{136}, \frac{33}{68}, \frac{45}{136})$ $+ \frac{3}{34}\sqrt{222}e^3 \otimes e_5$	{12368, 134, 2378, 3467}
832:5	$0, 0, 0, 0, 0, \frac{3}{34}\sqrt{10}e^{12}, \frac{6}{17}\sqrt{5}e^{13} + \frac{3}{17}\sqrt{19}e^{26},$ $\frac{9}{17}e^{16} + \frac{3}{34}\sqrt{2}e^{34}$	$(\frac{1}{17}, -\frac{1}{17}, -\frac{2}{17}, \frac{3}{17}, 1, 0, -\frac{1}{17}, \frac{1}{17})$ $+ \frac{3}{34}\sqrt{222}e^5 \otimes e_7$	{123568, 1345, 2378, 3467}
832:5	$0, 0, 0, 0, 0, \frac{1}{43}\sqrt{371}e^{12}, \frac{6}{43}\sqrt{53}e^{13} + \frac{1}{43}\sqrt{318}e^{26},$ $\frac{1}{43}\sqrt{159}e^{16} + \frac{1}{43}\sqrt{318}e^{34}$	$(-\frac{11}{86}, \frac{14}{43}, \frac{28}{43}, -\frac{25}{43}, \frac{15}{86}, \frac{17}{86}, \frac{45}{86}, \frac{3}{43})$ $+ \frac{1}{43}\sqrt{3763}e^3 \otimes e_4$	{1457, 147, 456, 46}
832:6	$0, 0, 0, 0, 0, \frac{1}{99}\sqrt{1534}e^{12}, \frac{1}{99}\sqrt{3422}e^{16} + \frac{4}{99}\sqrt{177}e^{34},$ $\frac{4}{99}\sqrt{177}e^{26} + \frac{2}{99}\sqrt{2419}e^{35}$	$(-\frac{1}{66}, \frac{25}{99}, \frac{70}{99}, -\frac{16}{33}, -\frac{43}{198}, \frac{47}{198}, \frac{2}{9}, \frac{97}{198})$ $+ \frac{1}{99}\sqrt{18762}e^3 \otimes e_4$	{1356, 146, 38, 458}
832:6	$0, 0, 0, 0, 0, \frac{1}{207}\sqrt{4342}e^{12}, \frac{1}{207}\sqrt{12358}e^{16} + \frac{5}{207}\sqrt{1002}e^{34},$ $\frac{5}{207}\sqrt{1002}e^{26} + \frac{1}{207}\sqrt{6346}e^{35}$	$(\frac{7}{23}, -\frac{49}{207}, -\frac{55}{207}, \frac{44}{69}, \frac{20}{207}, \frac{14}{207}, \frac{77}{207}, -\frac{35}{207})$ $+ \frac{4}{207}\sqrt{3507}e^4 \otimes e_8$	{1258, 13678, 23456, 47}
832:6	$0, 0, 0, 0, 0, \frac{37}{3801}\sqrt{274}e^{12}, \frac{185}{3801}\sqrt{58}e^{16} + \frac{37}{3801}\sqrt{3070}e^{34},$ $\frac{37}{3801}\sqrt{2102}e^{26} + \frac{37}{3801}\sqrt{158}e^{35}$	$(\frac{333}{1267}, -\frac{37}{181}, \frac{407}{3801}, \frac{814}{3801}, -\frac{962}{3801}, \frac{74}{1267}, \frac{407}{1267}, -\frac{185}{1267})$ $+ \frac{74}{3801}\sqrt{969}e^4 \otimes e_8 + \frac{814}{3801}\sqrt{6}e^3 \otimes e_5$	{2346, 457}
832:6	$0, 0, 0, 0, 0, \frac{1}{6}e^{12}, \frac{1}{6}\sqrt{2}e^{16} + \frac{1}{12}\sqrt{22}e^{34},$ $\frac{1}{6}\sqrt{2}e^{26} + \frac{1}{12}\sqrt{22}e^{35}$	$(0, 0, -\frac{1}{3}, \frac{1}{3}, \frac{1}{3}, 0, 0, 0)$ $+ \frac{1}{12}\sqrt{42}e^4 \otimes e_8 - \frac{1}{12}\sqrt{42}e^5 \otimes e_7$	{12378, 1568, 345}
832:6	$0, 0, 0, 0, 0, \frac{1}{6}e^{12}, \frac{1}{6}\sqrt{2}e^{16} + \frac{1}{12}\sqrt{22}e^{34},$ $\frac{1}{6}\sqrt{2}e^{26} + \frac{1}{12}\sqrt{22}e^{35}$	$(0, 0, -\frac{1}{3}, \frac{1}{3}, \frac{1}{3}, 0, 0, 0)$ $+ \frac{1}{12}\sqrt{42}e^4 \otimes e_8 + \frac{1}{12}\sqrt{42}e^5 \otimes e_7$	{12378, 1568, 345}
832:6	$0, 0, 0, 0, 0, \frac{36}{581}\sqrt{10}e^{12}, \frac{18}{581}\sqrt{73}e^{16} + \frac{30}{581}\sqrt{6}e^{34},$ $\frac{6}{581}\sqrt{78}e^{26} + \frac{18}{581}\sqrt{73}e^{35}$	$(\frac{3}{83}, -\frac{27}{581}, -\frac{102}{581}, \frac{117}{581}, \frac{69}{581}, -\frac{6}{581}, \frac{15}{581}, -\frac{33}{581})$ $+ \frac{6}{581}\sqrt{663}e^5 \otimes e_7 + \frac{6}{581}\sqrt{879}e^1 \otimes e_8$	{127, 1356, 234678, 458}
832:6	$0, 0, 0, 0, 0, \frac{36}{581}\sqrt{10}e^{12}, \frac{18}{581}\sqrt{73}e^{16} + \frac{30}{581}\sqrt{6}e^{34},$ $\frac{6}{581}\sqrt{78}e^{26} + \frac{18}{581}\sqrt{73}e^{35}$	$(\frac{3}{83}, -\frac{27}{581}, -\frac{102}{581}, \frac{117}{581}, \frac{69}{581}, -\frac{6}{581}, \frac{15}{581}, -\frac{33}{581})$ $+ \frac{6}{581}\sqrt{663}e^5 \otimes e_7 - \frac{6}{581}\sqrt{879}e^1 \otimes e_8$	{127, 1356, 234678, 458}
832:7	$0, 0, 0, 0, 0, \frac{1}{106}\sqrt{4233}e^{12}, \frac{3}{212}\sqrt{1411}e^{16} + \frac{3}{212}\sqrt{5478}e^{23},$ $\frac{1}{212}\sqrt{20418}e^{14} + \frac{3}{212}\sqrt{1411}e^{26}$	$(\frac{113}{424}, -\frac{3}{424}, \frac{113}{212}, -\frac{3}{212}, -\frac{34}{53}, \frac{55}{212}, \frac{223}{424}, \frac{107}{424})$ $+ \frac{3}{106}\sqrt{2407}e^3 \otimes e_5$	{125678, 158, 257, 56}
832:7	$0, 0, 0, 0, 0, \frac{1}{257}\sqrt{310}e^{12}, \frac{2}{257}\sqrt{43}e^{16} + \frac{4}{257}\sqrt{13}e^{23},$ $\frac{4}{257}\sqrt{13}e^{14} + \frac{2}{257}\sqrt{43}e^{26}$	$(-\frac{1}{257}, -\frac{1}{257}, -\frac{2}{257}, -\frac{2}{257}, \frac{15}{257}, -\frac{2}{257}, -\frac{3}{257}, -\frac{3}{257})$ $+ \frac{11}{257}\sqrt{2}e^1 \otimes e_4 + \frac{11}{257}\sqrt{2}e^2 \otimes e_3$	{34, 345}
832:7	$0, 0, 0, 0, 0, \frac{33}{497}\sqrt{2}e^{12}, \frac{165}{497}e^{16} + \frac{11}{497}\sqrt{206}e^{23},$ $\frac{11}{497}\sqrt{337}e^{14} + \frac{44}{497}\sqrt{14}e^{26}$	$(-\frac{55}{994}, \frac{66}{497}, -\frac{55}{497}, \frac{132}{497}, -\frac{297}{994}, \frac{11}{142}, \frac{11}{497}, \frac{209}{994})$ $+ \frac{11}{497}\sqrt{393}e^1 \otimes e_5 + \frac{11}{497}\sqrt{505}e^4 \otimes e_7$	{1378, 3567}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
832:7	$0, 0, 0, 0, 0, \frac{2}{125}\sqrt{462}e^{12}, \frac{66}{125}\sqrt{2}e^{16} + \frac{6}{125}\sqrt{286}e^{23},$ $\frac{2}{125}\sqrt{330}e^{14} + \frac{12}{125}\sqrt{33}e^{26}$	$(-\frac{8}{125}, \frac{9}{125}, -\frac{16}{125}, \frac{18}{125}, 1, \frac{1}{125}, -\frac{7}{125}, \frac{2}{25})$ $+ \frac{12}{125}\sqrt{187}e^5 \otimes e_7$	{123568, 1378, 235, 367}
832:7	$0, 0, 0, 0, 0, \frac{2}{899}\sqrt{116022}e^{12}, \frac{12}{899}\sqrt{3355}e^{16} + \frac{2}{899}\sqrt{54534}e^{23},$ $\frac{2}{899}\sqrt{35502}e^{14} + \frac{6}{899}\sqrt{1586}e^{26}$	$(\frac{5}{29}, \frac{32}{899}, \frac{10}{29}, \frac{64}{899}, -\frac{577}{899}, \frac{187}{899}, \frac{342}{899}, \frac{219}{899})$ $+ \frac{12}{899}\sqrt{7503}e^1 \otimes e_5$	{12347, 1346, 2345678, 3458}
832:7	$0, 0, 0, 0, 0, \frac{69}{1211}\sqrt{10}e^{12}, \frac{23}{1211}\sqrt{122}e^{16} + \frac{46}{1211}\sqrt{141}e^{23},$ $\frac{69}{1211}\sqrt{94}e^{14} + \frac{92}{1211}\sqrt{6}e^{26}$	$(\frac{253}{1211}, -\frac{138}{1211}, \frac{506}{1211}, -\frac{276}{1211}, -\frac{276}{1211}, \frac{115}{1211}, \frac{368}{1211}, -\frac{23}{1211})$ $+ \frac{23}{1211}\sqrt{1282}e^3 \otimes e_8 + \frac{69}{1211}\sqrt{94}e^1 \otimes e_5$	{24578, 4568}
832:7	$0, 0, 0, 0, 0, \frac{26}{491}\sqrt{82}e^{12}, \frac{26}{491}\sqrt{110}e^{16} + \frac{52}{491}\sqrt{7}e^{23},$ $\frac{13}{491}\sqrt{223}e^{14} + \frac{13}{491}\sqrt{3}e^{26}$	$(\frac{52}{491}, -\frac{117}{982}, \frac{104}{491}, -\frac{117}{491}, \frac{429}{982}, -\frac{13}{982}, \frac{91}{982}, -\frac{65}{491})$ $+ \frac{13}{491}\sqrt{553}e^1 \otimes e_4 + \frac{39}{491}\sqrt{37}e^5 \otimes e_7$	{1237, 1356}
832:7	$0, 0, 0, 0, 0, \frac{18}{281}\sqrt{86}e^{12}, \frac{2}{281}\sqrt{7826}e^{16} + \frac{2}{281}\sqrt{12126}e^{23},$ $\frac{2}{281}\sqrt{12126}e^{14} + \frac{4}{281}\sqrt{645}e^{26}$	$(\frac{70}{281}, -\frac{51}{281}, \frac{140}{281}, -\frac{102}{281}, \frac{39}{281}, \frac{19}{281}, \frac{89}{281}, -\frac{32}{281})$ $+ \frac{44}{281}\sqrt{43}e^3 \otimes e_8$	{24578, 2478, 4568, 468}
832:7	$0, 0, 0, 0, 0, \frac{161}{2573}\sqrt{30}e^{12}, \frac{46}{2573}\sqrt{3}e^{16} + \frac{23}{2573}\sqrt{2698}e^{23},$ $\frac{46}{2573}\sqrt{518}e^{14} + \frac{23}{2573}\sqrt{1466}e^{26}$	$(-\frac{115}{2573}, \frac{299}{2573}, -\frac{230}{2573}, \frac{598}{2573}, -\frac{759}{2573}, \frac{184}{2573}, \frac{69}{2573}, \frac{483}{2573})$ $+ \frac{23}{2573}\sqrt{1878}e^3 \otimes e_5 + \frac{46}{2573}\sqrt{727}e^4 \otimes e_7$	{125678, 257}
832:7	$0, 0, 0, 0, 0, \frac{195}{491}e^{12}, \frac{13}{491}\sqrt{113}e^{16} + \frac{273}{491}e^{23},$ $\frac{13}{491}\sqrt{330}e^{14} + \frac{13}{491}\sqrt{3}e^{26}$	$(\frac{52}{491}, -\frac{117}{982}, \frac{104}{491}, -\frac{117}{491}, \frac{429}{982}, -\frac{13}{982}, \frac{91}{982}, -\frac{65}{491})$ $+ \frac{13}{491}\sqrt{553}e^3 \otimes e_8 + \frac{39}{491}\sqrt{37}e^5 \otimes e_7$	{12678, 158}
832:7	$0, 0, 0, 0, 0, \frac{2}{281}\sqrt{13846}e^{12}, \frac{2}{281}\sqrt{12986}e^{16} + \frac{2}{281}\sqrt{8686}e^{23},$ $\frac{2}{281}\sqrt{8686}e^{14} + \frac{4}{281}\sqrt{645}e^{26}$	$(\frac{70}{281}, -\frac{51}{281}, \frac{140}{281}, -\frac{102}{281}, \frac{39}{281}, \frac{19}{281}, \frac{89}{281}, -\frac{32}{281})$ $+ \frac{44}{281}\sqrt{43}e^1 \otimes e_4$	{234567, 23467, 34, 345}
832:7	$0, 0, 0, 0, 0, \frac{1}{257}\sqrt{174}e^{12}, \frac{1}{257}\sqrt{70}e^{16} + \frac{2}{257}\sqrt{69}e^{23},$ $\frac{2}{257}\sqrt{69}e^{14} + \frac{1}{257}\sqrt{70}e^{26}$	$(-\frac{1}{257}, -\frac{1}{257}, -\frac{2}{257}, -\frac{2}{257}, \frac{15}{257}, \frac{2}{257}, -\frac{3}{257}, -\frac{3}{257})$ $+ \frac{11}{257}\sqrt{2}e^3 \otimes e_8 + \frac{11}{257}\sqrt{2}e^4 \otimes e_7$	{125678, 12678}
832:7	$0, 0, 0, 0, 0, \frac{11}{497}\sqrt{487}e^{12}, \frac{11}{497}\sqrt{281}e^{16} + \frac{22}{497}\sqrt{42}e^{23},$ $\frac{11}{497}\sqrt{299}e^{14} + \frac{165}{497}e^{26}$	$(\frac{66}{497}, -\frac{55}{994}, \frac{132}{497}, -\frac{55}{497}, -\frac{297}{994}, \frac{11}{142}, \frac{209}{994}, \frac{11}{497})$ $+ \frac{11}{497}\sqrt{393}e^2 \otimes e_5 + \frac{11}{497}\sqrt{505}e^1 \otimes e_4$	{23467, 345}
832:7	$0, 0, 0, 0, 0, \frac{25}{1199}\sqrt{934}e^{12}, \frac{50}{1199}\sqrt{203}e^{16} + \frac{25}{1199}\sqrt{606}e^{23},$ $\frac{50}{1199}\sqrt{101}e^{14} + \frac{25}{1199}\sqrt{366}e^{26}$	$(\frac{225}{1199}, -\frac{200}{1199}, \frac{450}{1199}, -\frac{400}{1199}, \frac{450}{1199}, \frac{25}{1199}, \frac{250}{1199}, -\frac{175}{1199})$ $+ \frac{25}{1199}\sqrt{1498}e^1 \otimes e_4 + \frac{25}{1199}\sqrt{606}e^5 \otimes e_8$	{234567, 345}
832:7	$0, 0, 0, 0, 0, \frac{25}{1109}\sqrt{910}e^{12}, \frac{50}{1109}\sqrt{218}e^{16} + \frac{25}{1109}\sqrt{398}e^{23},$ $\frac{150}{1109}\sqrt{15}e^{14} + \frac{25}{1109}\sqrt{114}e^{26}$	$(\frac{275}{1109}, -\frac{175}{1109}, \frac{550}{1109}, -\frac{350}{1109}, -\frac{75}{1109}, \frac{100}{1109}, \frac{375}{1109}, -\frac{75}{1109})$ $+ \frac{25}{1109}\sqrt{426}e^3 \otimes e_5 + \frac{50}{1109}\sqrt{379}e^1 \otimes e_4$	{23467, 34}
832:8	$0, 0, 0, 0, 0, \frac{3}{34}\sqrt{10}e^{12}, \frac{3}{17}\sqrt{19}e^{16},$ $\frac{6}{17}\sqrt{5}e^{13} + \frac{9}{17}e^{26} + \frac{3}{34}\sqrt{2}e^{45}$	$(-\frac{6}{17}, \frac{6}{17}, \frac{12}{17}, \frac{3}{17}, \frac{3}{17}, 0, -\frac{6}{17}, \frac{6}{17})$ $+ \frac{3}{34}\sqrt{222}e^3 \otimes e_7$	{1478, 4567, 67}
832:8	$0, 0, 0, 0, 0, \frac{4}{367}\sqrt{1995}e^{12}, \frac{12}{367}\sqrt{190}e^{16},$ $\frac{2}{367}\sqrt{570}e^{13} + \frac{12}{367}\sqrt{95}e^{26} + \frac{12}{367}\sqrt{190}e^{45}$	$(\frac{32}{367}, \frac{42}{367}, \frac{84}{367}, \frac{343}{367}, -\frac{227}{367}, \frac{74}{367}, \frac{106}{367}, \frac{116}{367})$ $+ \frac{570}{367}e^4 \otimes e_5$	{123478, 123578, 13468, 13568}
832:8	$0, 0, 0, 0, 0, \frac{8}{373}\sqrt{429}e^{12}, \frac{12}{373}\sqrt{649}e^{16},$ $\frac{8}{373}\sqrt{759}e^{13} + \frac{132}{373}\sqrt{2}e^{26} + \frac{12}{373}\sqrt{649}e^{45}$	$(-\frac{73}{373}, \frac{78}{373}, \frac{156}{373}, \frac{196}{373}, -\frac{113}{373}, \frac{5}{373}, -\frac{68}{373}, \frac{83}{373})$ $+ \frac{12}{373}\sqrt{1133}e^4 \otimes e_7$	{127, 1456, 25678, 48}
832:8	$0, 0, 0, 0, 0, \frac{42}{3385}\sqrt{458}e^{12}, \frac{21}{3385}\sqrt{3202}e^{16},$ $\frac{42}{3385}\sqrt{469}e^{13} + \frac{168}{3385}\sqrt{15}e^{26} + \frac{42}{3385}\sqrt{554}e^{45}$	$(\frac{231}{3385}, -\frac{21}{677}, -\frac{42}{677}, \frac{798}{3385}, -\frac{777}{3385}, \frac{126}{3385}, \frac{357}{3385}, \frac{21}{3385})$ $+ \frac{21}{3385}\sqrt{2958}e^1 \otimes e_3 + \frac{63}{677}\sqrt{14}e^4 \otimes e_7$	{127, 1456}
832:8	$0, 0, 0, 0, 0, \frac{42}{1145}\sqrt{482}e^{12}, \frac{42}{1145}\sqrt{502}e^{16},$ $\frac{42}{1145}\sqrt{301}e^{13} + \frac{84}{1145}\sqrt{15}e^{26} + \frac{42}{1145}\sqrt{191}e^{45}$	$(\frac{462}{1145}, -\frac{42}{229}, -\frac{84}{229}, \frac{21}{1145}, \frac{21}{1145}, \frac{252}{1145}, \frac{714}{1145}, \frac{42}{1145})$ $+ \frac{42}{1145}\sqrt{933}e^1 \otimes e_3$	{12457, 127, 1456, 16}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
832:8	$0, 0, 0, 0, 0, \frac{3}{52}\sqrt{10}e^{12}, \frac{3}{26}\sqrt{19}e^{16},$ $\frac{3}{13}\sqrt{5}e^{13} + \frac{9}{26}e^{26} + \frac{3}{52}\sqrt{2}e^{45}$	$(-\frac{3}{13}, \frac{3}{13}, \frac{6}{13}, \frac{6}{13}, -\frac{3}{13}, 0, -\frac{3}{13}, \frac{3}{13})$ $+ \frac{3}{52}\sqrt{222}e^3 \otimes e_7 + \frac{9}{13}e^4 \otimes e_5$	{1478, 1578}
832:9	$0, 0, 0, 0, 0, \frac{11}{19}e^{12}, \frac{1}{19}\sqrt{66}e^{13} + \frac{1}{38}\sqrt{22}e^{26},$ $\frac{2}{19}\sqrt{33}e^{16} + \frac{1}{38}\sqrt{110}e^{45}$	$(\frac{5}{19}, -\frac{3}{19}, -\frac{6}{19}, \frac{9}{19}, -\frac{2}{19}, \frac{2}{19}, -\frac{1}{19}, \frac{7}{19})$ $+ \frac{11}{19}e^4 \otimes e_5 + \frac{3}{38}\sqrt{110}e^1 \otimes e_3$	{146, 156}
832:9	$0, 0, 0, 0, 0, \frac{23}{3281}\sqrt{570}e^{12}, \frac{138}{3281}\sqrt{66}e^{13} + \frac{23}{3281}\sqrt{822}e^{26},$ $\frac{23}{3281}\sqrt{818}e^{16} + \frac{46}{3281}\sqrt{615}e^{45}$	$(-\frac{161}{3281}, \frac{207}{3281}, \frac{414}{3281}, \frac{46}{193}, -\frac{897}{3281}, \frac{46}{3281}, \frac{253}{3281}, -\frac{115}{3281})$ $+ \frac{23}{3281}\sqrt{3358}e^4 \otimes e_7 + \frac{69}{3281}\sqrt{282}e^3 \otimes e_8$	{1345, 367}
832:9	$0, 0, 0, 0, 0, \frac{22}{27}e^{12}, \frac{2}{27}\sqrt{66}e^{13} + \frac{1}{27}\sqrt{22}e^{26},$ $\frac{4}{27}\sqrt{33}e^{16} + \frac{1}{27}\sqrt{110}e^{45}$	$(\frac{10}{27}, -\frac{2}{9}, -\frac{4}{9}, \frac{7}{27}, \frac{7}{27}, \frac{4}{27}, -\frac{2}{27}, \frac{14}{27})$ $+ \frac{1}{9}\sqrt{110}e^1 \otimes e_3$	{12458, 128, 146}
832:9	$0, 0, 0, 0, 0, \frac{8}{1223}\sqrt{1677}e^{12}, \frac{48}{1223}\sqrt{258}e^{13} + \frac{4}{1223}\sqrt{33798}e^{26},$ $\frac{8}{1223}\sqrt{8342}e^{16} + \frac{4}{1223}\sqrt{46182}e^{45}$	$(\frac{232}{1223}, -\frac{117}{1223}, -\frac{234}{1223}, \frac{686}{1223}, -\frac{339}{1223}, \frac{115}{1223}, -\frac{2}{1223}, \frac{347}{1223})$ $+ \frac{20}{1223}\sqrt{3526}e^4 \otimes e_7$	{123468, 1345, 23578, 367}
832:9	$0, 0, 0, 0, 0, \frac{8}{241}\sqrt{187}e^{12}, \frac{2}{241}\sqrt{1122}e^{13} + \frac{2}{241}\sqrt{2618}e^{26},$ $\frac{2}{241}\sqrt{1122}e^{16} + \frac{8}{241}\sqrt{187}e^{45}$	$(\frac{26}{241}, \frac{24}{241}, \frac{48}{241}, \frac{225}{241}, -\frac{149}{241}, \frac{50}{241}, \frac{74}{241}, \frac{76}{241})$ $+ \frac{374}{241}e^4 \otimes e_5$	{12478, 12578, 2468, 2568}
832:9	$0, 0, 0, 0, 0, \frac{46}{1233}\sqrt{59}e^{12}, \frac{46}{137}\sqrt{5}e^{13} + \frac{46}{1233}\sqrt{127}e^{26},$ $\frac{92}{1233}\sqrt{51}e^{16} + \frac{322}{1233}\sqrt{7}e^{45}$	$(-\frac{322}{1233}, \frac{46}{137}, \frac{92}{137}, -\frac{115}{1233}, -\frac{115}{1233}, \frac{92}{1233}, \frac{506}{1233}, -\frac{230}{1233})$ $+ \frac{46}{1233}\sqrt{1005}e^3 \otimes e_8$	{1478, 468}
832:9	$0, 0, 0, 0, 0, \frac{23}{881}\sqrt{59}e^{12}, \frac{207}{881}\sqrt{5}e^{13} + \frac{23}{881}\sqrt{127}e^{26},$ $\frac{46}{881}\sqrt{51}e^{16} + \frac{161}{881}\sqrt{7}e^{45}$	$(-\frac{161}{881}, \frac{207}{881}, \frac{414}{881}, \frac{207}{881}, -\frac{322}{881}, \frac{46}{881}, \frac{253}{881}, -\frac{115}{881})$ $+ \frac{23}{881}\sqrt{1005}e^3 \otimes e_8 - \frac{529}{881}e^4 \otimes e_5$	{1478, 1578, 468, 568}
832:9	$0, 0, 0, 0, 0, \frac{23}{881}\sqrt{59}e^{12}, \frac{207}{881}\sqrt{5}e^{13} + \frac{23}{881}\sqrt{127}e^{26},$ $\frac{46}{881}\sqrt{51}e^{16} + \frac{161}{881}\sqrt{7}e^{45}$	$(-\frac{161}{881}, \frac{207}{881}, \frac{414}{881}, \frac{207}{881}, -\frac{322}{881}, \frac{46}{881}, \frac{253}{881}, -\frac{115}{881})$ $+ \frac{23}{881}\sqrt{1005}e^3 \otimes e_8 + \frac{529}{881}e^4 \otimes e_5$	{1478, 1578, 468, 568}
832:9	$0, 0, 0, 0, 0, \frac{11}{233}\sqrt{30}e^{12}, \frac{33}{233}\sqrt{10}e^{13} + \frac{11}{233}\sqrt{105}e^{26},$ $\frac{55}{233}\sqrt{2}e^{16} + \frac{33}{233}\sqrt{15}e^{45}$	$(\frac{55}{233}, -\frac{33}{233}, -\frac{66}{233}, \frac{110}{233}, -\frac{33}{233}, \frac{22}{233}, -\frac{11}{233}, \frac{77}{233})$ $+ \frac{11}{233}\sqrt{111}e^1 \otimes e_3 + \frac{11}{233}\sqrt{286}e^4 \otimes e_7$	{127, 15678}
832:10	$0, 0, 0, 0, 0, \frac{13}{763}\sqrt{690}e^{12}, \frac{39}{763}\sqrt{214}e^{16} + \frac{39}{763}\sqrt{74}e^{34},$ $\frac{26}{763}\sqrt{318}e^{13} + \frac{39}{763}\sqrt{66}e^{26} + \frac{39}{763}\sqrt{214}e^{45}$	$(-\frac{13}{109}, \frac{117}{763}, \frac{234}{763}, -\frac{299}{763}, \frac{442}{763}, \frac{26}{763}, -\frac{65}{763}, \frac{143}{763})$ $+ \frac{78}{763}\sqrt{105}e^5 \otimes e_7$	{24678, 58}
832:10	$0, 0, 0, 0, 0, \frac{17}{739}\sqrt{438}e^{12}, \frac{255}{739}\sqrt{2}e^{16} + \frac{51}{739}\sqrt{214}e^{34},$ $\frac{34}{739}\sqrt{111}e^{13} + \frac{51}{739}\sqrt{82}e^{26} + \frac{255}{739}\sqrt{2}e^{45}$	$(\frac{221}{739}, -\frac{51}{739}, -\frac{102}{739}, \frac{493}{739}, -\frac{374}{739}, \frac{170}{739}, \frac{391}{739}, \frac{119}{739})$ $+ \frac{306}{739}\sqrt{11}e^4 \otimes e_5$	{2346, 357}
832:11	$0, 0, 0, 0, 0, \frac{30}{577}\sqrt{5}e^{12}, -\frac{15}{577}\sqrt{453}e^{13} + \frac{15}{577}\sqrt{463}e^{26},$ $\frac{15}{577}\sqrt{339}e^{16} + \frac{15}{577}\sqrt{349}e^{23} + \frac{15}{577}\sqrt{614}e^{45}$	$(\frac{15}{577}, \frac{15}{577}, \frac{30}{577}, \frac{270}{577}, -\frac{225}{577}, \frac{30}{577}, \frac{45}{577}, \frac{45}{577})$ $+ \frac{45}{577}\sqrt{110}e^4 \otimes e_7$	{127, 15678, 2456, 48, 127, 15678, 2456, 48}
832:11	$0, 0, 0, 0, 0, \frac{30}{577}\sqrt{5}e^{12}, \frac{15}{577}\sqrt{453}e^{13} + \frac{15}{577}\sqrt{463}e^{26},$ $\frac{15}{577}\sqrt{339}e^{16} + \frac{15}{577}\sqrt{349}e^{23} + \frac{15}{577}\sqrt{614}e^{45}$	$(\frac{15}{577}, \frac{15}{577}, \frac{30}{577}, \frac{270}{577}, -\frac{225}{577}, \frac{30}{577}, \frac{45}{577}, \frac{45}{577})$ $+ \frac{45}{577}\sqrt{110}e^4 \otimes e_7$	{127, 15678, 2456, 48, 127, 15678, 2456, 48}
832:12	$0, 0, 0, 0, 0, \frac{5}{14}\sqrt{3}e^{12}, \frac{1}{7}\sqrt{30}e^{13} + \frac{1}{14}\sqrt{6}e^{26},$ $\frac{3}{14}\sqrt{6}e^{16} + \frac{1}{7}\sqrt{30}e^{24} + \frac{1}{14}\sqrt{57}e^{35}$	$(\frac{1}{7}, -\frac{1}{7}, -\frac{2}{7}, \frac{2}{7}, \frac{3}{7}, 0, -\frac{1}{7}, \frac{1}{7})$ $+ \frac{3}{14}\sqrt{17}e^4 \otimes e_7$	{12678, 157}
832:12	$0, 0, 0, 0, 0, \frac{13}{463}\sqrt{714}e^{12}, \frac{39}{463}\sqrt{186}e^{13} + \frac{78}{463}\sqrt{17}e^{26},$ $\frac{39}{463}\sqrt{34}e^{16} + \frac{26}{463}\sqrt{222}e^{24} + \frac{78}{463}\sqrt{17}e^{35}$	$(-\frac{39}{463}, \frac{143}{463}, \frac{286}{463}, -\frac{78}{463}, -\frac{221}{463}, \frac{104}{463}, \frac{247}{463}, \frac{65}{463})$ $+ \frac{39}{463}\sqrt{262}e^3 \otimes e_5$	{157, 56}
832:12	$0, 0, 0, 0, 0, \frac{1}{47}\sqrt{330}e^{12}, \frac{3}{47}\sqrt{22}e^{13} + \frac{3}{47}\sqrt{154}e^{26},$ $\frac{3}{47}\sqrt{66}e^{16} + \frac{2}{47}\sqrt{165}e^{24} + \frac{3}{47}\sqrt{154}e^{35}$	$(\frac{9}{47}, -\frac{8}{47}, -\frac{16}{47}, \frac{18}{47}, \frac{26}{47}, \frac{1}{47}, -\frac{7}{47}, \frac{10}{47})$ $+ \frac{3}{47}\sqrt{286}e^5 \otimes e_7$	{127, 58}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
832:12	$0, 0, 0, 0, 0, \frac{7}{499}\sqrt{2202}e^{12}, \frac{7}{499}\sqrt{1806}e^{13} + \frac{14}{499}\sqrt{534}e^{26},$ $\frac{21}{499}\sqrt{22}e^{16} + \frac{7}{499}\sqrt{1806}e^{24} + \frac{7}{499}\sqrt{1266}e^{35}$	$(-\frac{35}{499}, \frac{77}{499}, \frac{154}{499}, -\frac{70}{499}, -\frac{147}{499}, \frac{42}{499}, \frac{119}{499}, \frac{7}{499})$ $+ \frac{21}{499}\sqrt{290}e^2 \otimes e_4$	{134567, 345}
831:1	$0, 0, 0, 0, 0, \frac{4}{1291}\sqrt{14705}e^{12}, \frac{20}{1291}\sqrt{170}e^{13}, \frac{4}{1291}\sqrt{15555}e^{16}$	$(\frac{33}{1291}, \frac{66}{1291}, -\frac{307}{1291}, \frac{119}{1291}, \frac{472}{1291}, \frac{99}{1291}, -\frac{274}{1291}, \frac{132}{1291})$ $+ \frac{2}{1291}\sqrt{49810}e^2 \otimes e_7 + \frac{2}{1291}\sqrt{60010}e^5 \otimes e_8 + \frac{4}{1291}\sqrt{22355}e^1 \otimes e_3$	{1248, 128, 23468, 2368}
831:1	$0, 0, 0, 0, 0, \frac{4}{65}\sqrt{51}e^{12}, \frac{2}{65}\sqrt{102}e^{13}, \frac{4}{65}\sqrt{51}e^{16}$	$(\frac{4}{65}, \frac{2}{13}, \frac{12}{65}, 1, -\frac{37}{65}, \frac{14}{65}, \frac{16}{65}, \frac{18}{65})$ $+ \frac{102}{65}e^4 \otimes e_5$	{12348, 12358, 12478, 12578, 1346, 1356, 1467, 1567, 234678, 235678, 2468, 2568, 347, 357, 4, 5}
831:1	$0, 0, 0, 0, 0, \frac{4}{65}\sqrt{33}e^{12}, \frac{2}{325}\sqrt{1914}e^{13}, \frac{4}{65}\sqrt{33}e^{16}$	$(\frac{17}{325}, \frac{9}{325}, -\frac{49}{325}, -\frac{57}{325}, \frac{109}{325}, \frac{2}{25}, -\frac{32}{325}, \frac{43}{325})$ $+ \frac{2}{325}\sqrt{2739}e^2 \otimes e_4 + \frac{2}{325}\sqrt{2739}e^5 \otimes e_8 + \frac{2}{325}\sqrt{4389}e^1 \otimes e_3$	{128, 1456, 2368, 345}
831:1	$0, 0, 0, 0, 0, \frac{4}{181}\sqrt{133}e^{12}, \frac{8}{181}\sqrt{95}e^{13}, \frac{4}{181}\sqrt{57}e^{16}$	$(-\frac{43}{181}, \frac{68}{181}, \frac{35}{181}, -\frac{41}{181}, \frac{58}{181}, \frac{25}{181}, -\frac{8}{181}, -\frac{18}{181})$ $+ \frac{2}{181}\sqrt{1558}e^5 \otimes e_8 + \frac{2}{181}\sqrt{2470}e^2 \otimes e_7 + \frac{4}{181}\sqrt{551}e^3 \otimes e_4$	{1238, 14567, 2468, 357}
831:1	$0, 0, 0, 0, 0, \frac{1}{8}\sqrt{10}e^{12}, \frac{1}{4}\sqrt{15}e^{13}, \frac{1}{8}\sqrt{10}e^{16}$	$(-\frac{1}{16}, \frac{1}{4}, -\frac{3}{16}, 1, \frac{3}{16}, \frac{3}{16}, -\frac{1}{4}, \frac{1}{8})$ $+ \frac{1}{8}\sqrt{130}e^4 \otimes e_7$	{1234568, 123468, 125678, 12678, 134, 1345, 157, 17, 23578, 2378, 2458, 248, 3567, 367, 456, 46}
831:1	$0, 0, 0, 0, 0, \frac{2}{57}\sqrt{87}e^{12}, \frac{1}{57}\sqrt{1334}e^{13}, \frac{2}{57}\sqrt{87}e^{16}$	$(-\frac{2}{19}, \frac{11}{57}, \frac{8}{57}, \frac{31}{57}, -\frac{7}{19}, \frac{5}{57}, \frac{2}{57}, -\frac{1}{57})$ $+ \frac{2}{57}\sqrt{377}e^3 \otimes e_5 + \frac{2}{57}\sqrt{377}e^4 \otimes e_7$	{123468, 125678, 134, 157, 2378, 2458, 367, 456}
831:1	$0, 0, 0, 0, 0, \frac{3}{121}\sqrt{474}e^{12}, \frac{1}{121}\sqrt{2054}e^{13}, \frac{3}{121}\sqrt{474}e^{16}$	$(-\frac{26}{121}, \frac{41}{121}, \frac{28}{121}, \frac{68}{121}, -\frac{38}{121}, \frac{15}{121}, \frac{2}{121}, -\frac{11}{121})$ $+ \frac{1}{121}\sqrt{8374}e^2 \otimes e_5 + \frac{1}{121}\sqrt{8374}e^4 \otimes e_8$	{12378, 128, 134567, 1456, 2368, 2678, 345, 457}
831:1	$0, 0, 0, 0, 0, \frac{12}{199}\sqrt{246}e^{12}, \frac{2}{199}\sqrt{2091}e^{13}, \frac{2}{199}\sqrt{2337}e^{16}$	$(-\frac{34}{199}, \frac{127}{199}, \frac{57}{199}, -\frac{119}{199}, \frac{40}{199}, \frac{93}{199}, \frac{23}{199}, \frac{59}{199})$ $+ \frac{6}{199}\sqrt{2173}e^2 \otimes e_4$	{123578, 12378, 1258, 128, 134567, 13467, 1456, 146, 23568, 2368, 25678, 2678, 34, 345, 457, 47}
831:1	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{2}e^{12}, \frac{1}{2}e^{13}, \frac{1}{4}\sqrt{2}e^{16}$	$(\frac{1}{8}, 0, \frac{1}{4}, -\frac{3}{8}, -\frac{1}{4}, \frac{1}{8}, \frac{3}{8}, \frac{1}{4})$ $+ \frac{1}{2}\sqrt{2}e^1 \otimes e_4 + \frac{1}{4}\sqrt{6}e^3 \otimes e_5$	{1238, 12578, 136, 1567, 234678, 24568, 347, 45}
831:1	$0, 0, 0, 0, 0, \frac{4}{655}\sqrt{5258}e^{12}, \frac{2}{655}\sqrt{14579}e^{13}, \frac{1}{655}\sqrt{123802}e^{16}$	$(\frac{93}{655}, -\frac{107}{655}, -\frac{146}{655}, \frac{318}{655}, \frac{69}{655}, -\frac{14}{655}, -\frac{53}{655}, \frac{79}{655})$ $+ \frac{1}{655}\sqrt{119022}e^4 \otimes e_8 + \frac{1}{655}\sqrt{161086}e^1 \otimes e_3$	{1258, 128, 1456, 146, 23568, 2368, 34, 345}
831:1	$0, 0, 0, 0, 0, \frac{4}{643}\sqrt{2010}e^{12}, \frac{1}{643}\sqrt{142710}e^{13}, \frac{2}{643}\sqrt{8710}e^{16}$	$(\frac{152}{643}, -\frac{183}{643}, -\frac{144}{643}, \frac{343}{643}, \frac{69}{643}, -\frac{31}{643}, \frac{8}{643}, \frac{121}{643})$ $+ \frac{10}{643}\sqrt{2010}e^1 \otimes e_2 + \frac{2}{643}\sqrt{45895}e^4 \otimes e_7$	{13458, 1348, 1578, 178, 2357, 237, 24, 245}
831:1	$0, 0, 0, 0, 0, \frac{4}{103}\sqrt{42}e^{12}, \frac{2}{103}\sqrt{462}e^{13}, \frac{4}{103}\sqrt{42}e^{16}$	$(-\frac{28}{103}, \frac{38}{103}, \frac{24}{103}, -\frac{11}{103}, \frac{31}{103}, \frac{10}{103}, -\frac{4}{103}, -\frac{18}{103})$ $+ \frac{12}{103}\sqrt{21}e^2 \otimes e_7 + \frac{12}{103}\sqrt{21}e^3 \otimes e_8 + \frac{42}{103}e^5 \otimes e_4$	{2468, 2568, 347, 357}
831:1	$0, 0, 0, 0, 0, \frac{1}{523}\sqrt{55918}e^{12}, \frac{5}{523}\sqrt{2298}e^{13}, \frac{1}{523}\sqrt{2298}e^{16}$	$(-\frac{79}{523}, \frac{221}{523}, \frac{220}{523}, -\frac{162}{523}, -\frac{163}{523}, \frac{142}{523}, \frac{141}{523}, \frac{63}{523})$ $+ \frac{1}{523}\sqrt{175414}e^3 \otimes e_5 + \frac{2}{523}\sqrt{43662}e^2 \otimes e_4$	{123, 1257, 13468, 145678, 2367, 256, 3478, 458}
831:1	$0, 0, 0, 0, 0, \frac{4}{643}\sqrt{2010}e^{12}, \frac{1}{643}\sqrt{142710}e^{13}, \frac{2}{643}\sqrt{8710}e^{16}$	$(\frac{152}{643}, -\frac{183}{643}, \frac{130}{643}, -\frac{205}{643}, \frac{69}{643}, -\frac{31}{643}, \frac{282}{643}, \frac{121}{643})$ $+ \frac{10}{643}\sqrt{2010}e^1 \otimes e_2 + \frac{2}{643}\sqrt{45895}e^3 \otimes e_4$	{1358, 138, 14578, 1478, 2357, 237, 24, 245}
831:1	$0, 0, 0, 0, 0, \frac{4}{313}\sqrt{111}e^{12}, \frac{4}{313}\sqrt{1443}e^{13}, \frac{10}{313}\sqrt{222}e^{16}$	$(\frac{104}{313}, -\frac{118}{313}, -\frac{12}{313}, \frac{151}{313}, -\frac{71}{313}, -\frac{14}{313}, \frac{92}{313}, \frac{90}{313})$ $+ \frac{18}{313}\sqrt{222}e^1 \otimes e_2 + \frac{222}{313}e^4 \otimes e_5$	{1348, 1358, 1478, 1578, 2347, 2357, 24, 25}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:1	$0, 0, 0, 0, 0, \frac{2}{181}\sqrt{345}e^{12}, \frac{7}{181}\sqrt{138}e^{13}, \frac{2}{181}\sqrt{1518}e^{16}$	$(\frac{17}{181}, -\frac{52}{181}, \frac{51}{181}, \frac{19}{181}, \frac{19}{181}, -\frac{35}{181}, \frac{68}{181}, -\frac{18}{181})$ $+ \frac{9}{181}\sqrt{138}e^1 \otimes e_2 + \frac{9}{181}\sqrt{138}e^3 \otimes e_8$	{14578, 1478, 178, 23457, 2347, 237}
831:1	$0, 0, 0, 0, 0, \frac{2}{101}\sqrt{111}e^{12}, \frac{2}{101}\sqrt{1443}e^{13}, \frac{5}{101}\sqrt{222}e^{16}$	$(\frac{52}{101}, -\frac{59}{101}, -\frac{6}{101}, \frac{20}{101}, \frac{20}{101}, -\frac{7}{101}, \frac{46}{101}, \frac{45}{101})$ $+ \frac{9}{101}\sqrt{222}e^1 \otimes e_2$	{13458, 1348, 138, 14578, 1478, 178, 2, 23457, 2347, 237, 24, 245}
831:1	$0, 0, 0, 0, 0, \frac{12}{95}\sqrt{21}e^{12}, \frac{28}{95}\sqrt{2}e^{13}, \frac{12}{95}\sqrt{21}e^{16}$	$(\frac{27}{95}, -\frac{3}{19}, -\frac{29}{95}, \frac{8}{19}, -\frac{16}{95}, \frac{12}{95}, -\frac{2}{95}, \frac{39}{95})$ $+ \frac{4}{95}\sqrt{385}e^1 \otimes e_3 + \frac{56}{95}e^4 \otimes e_5$	{1248, 1258, 146, 156, 23468, 23568, 34, 35}
831:1	$0, 0, 0, 0, 0, \frac{6}{451}\sqrt{190}e^{12}, \frac{1}{451}\sqrt{26790}e^{13}, \frac{8}{451}\sqrt{190}e^{16}$	$(\frac{14}{451}, -\frac{81}{451}, \frac{42}{451}, \frac{3}{41}, \frac{151}{451}, -\frac{67}{451}, \frac{56}{451}, -\frac{53}{451})$ $+ \frac{10}{451}\sqrt{285}e^1 \otimes e_2 + \frac{10}{451}\sqrt{285}e^3 \otimes e_8 + \frac{2}{451}\sqrt{5605}e^5 \otimes e_7$	{1478, 178, 2347, 237}
831:1	$0, 0, 0, 0, 0, \frac{4}{181}\sqrt{57}e^{12}, \frac{8}{181}\sqrt{95}e^{13}, \frac{4}{181}\sqrt{133}e^{16}$	$(-\frac{43}{181}, \frac{52}{181}, \frac{42}{181}, -\frac{24}{181}, \frac{75}{181}, \frac{9}{181}, -\frac{1}{181}, -\frac{34}{181})$ $+ \frac{2}{181}\sqrt{1558}e^2 \otimes e_4 + \frac{2}{181}\sqrt{2470}e^3 \otimes e_8 + \frac{4}{181}\sqrt{551}e^5 \otimes e_7$	{1278, 13456, 2568, 347}
831:1	$0, 0, 0, 0, 0, \frac{2}{1321}\sqrt{87474}e^{12}, \frac{8}{1321}\sqrt{239}e^{13}, \frac{4}{1321}\sqrt{13623}e^{16}$	$(\frac{90}{1321}, \frac{180}{1321}, -\frac{388}{1321}, -\frac{107}{1321}, \frac{371}{1321}, \frac{270}{1321}, -\frac{298}{1321}, \frac{360}{1321})$ $+ \frac{478}{1321}e^5 \otimes e_4 + \frac{4}{1321}\sqrt{32026}e^1 \otimes e_3 + \frac{6}{1321}\sqrt{10994}e^2 \otimes e_7$	{1248, 1258, 23468, 23568}
831:1	$0, 0, 0, 0, 0, \frac{2}{101}\sqrt{111}e^{12}, \frac{2}{101}\sqrt{1443}e^{13}, \frac{5}{101}\sqrt{222}e^{16}$	$(-\frac{29}{101}, \frac{22}{101}, \frac{75}{101}, \frac{20}{101}, \frac{20}{101}, -\frac{7}{101}, \frac{46}{101}, -\frac{36}{101})$ $+ \frac{9}{101}\sqrt{222}e^3 \otimes e_8$	{123456, 12346, 1236, 14578, 1478, 178, 23457, 2347, 237, 4568, 468, 68}
831:1	$0, 0, 0, 0, 0, \frac{1}{523}\sqrt{2298}e^{12}, \frac{5}{523}\sqrt{2298}e^{13}, \frac{1}{523}\sqrt{55918}e^{16}$	$(-\frac{79}{523}, \frac{69}{523}, -\frac{9}{523}, \frac{295}{523}, \frac{294}{523}, -\frac{10}{523}, -\frac{88}{523}, -\frac{89}{523})$ $+ \frac{1}{523}\sqrt{175414}e^4 \otimes e_7 + \frac{2}{523}\sqrt{43662}e^5 \otimes e_8$	{123456, 12567, 1348, 178, 2357, 245, 3678, 468}
831:1	$0, 0, 0, 0, 0, \frac{4}{261}\sqrt{114}e^{12}, \frac{1}{261}\sqrt{7638}e^{13}, \frac{2}{261}\sqrt{1254}e^{16}$	$(-\frac{4}{87}, \frac{7}{261}, \frac{40}{261}, -\frac{23}{87}, \frac{85}{261}, -\frac{5}{261}, \frac{28}{261}, -\frac{17}{261})$ $+ \frac{2}{261}\sqrt{1767}e^5 \otimes e_7 + \frac{2}{261}\sqrt{2622}e^1 \otimes e_3 + \frac{2}{87}\sqrt{266}e^3 \otimes e_8$	{1278, 1356, 24568, 347}
831:1	$0, 0, 0, 0, 0, \frac{2}{169}\sqrt{649}e^{12}, \frac{2}{169}\sqrt{1003}e^{13}, \frac{3}{169}\sqrt{590}e^{16}$	$(-\frac{1}{169}, -\frac{2}{169}, \frac{55}{169}, -\frac{60}{169}, \frac{20}{169}, -\frac{3}{169}, \frac{54}{169}, -\frac{4}{169})$ $+ \frac{1}{169}\sqrt{8142}e^3 \otimes e_8 + \frac{2}{169}\sqrt{590}e^1 \otimes e_4$	{12578, 1278, 1356, 136, 24568, 2468, 3457, 347}
831:1	$0, 0, 0, 0, 0, \frac{4}{643}\sqrt{2010}e^{12}, \frac{1}{643}\sqrt{142710}e^{13}, \frac{2}{643}\sqrt{8710}e^{16}$	$(-\frac{148}{643}, \frac{117}{643}, \frac{156}{643}, \frac{343}{643}, \frac{69}{643}, -\frac{31}{643}, \frac{8}{643}, -\frac{179}{643})$ $+ \frac{10}{643}\sqrt{2010}e^3 \otimes e_8 + \frac{2}{643}\sqrt{45895}e^4 \otimes e_7$	{123456, 12346, 1578, 178, 2357, 237, 4568, 468}
831:1	$0, 0, 0, 0, 0, \frac{1}{523}\sqrt{2298}e^{12}, \frac{5}{523}\sqrt{2298}e^{13}, \frac{1}{523}\sqrt{55918}e^{16}$	$(-\frac{79}{523}, \frac{69}{523}, \frac{220}{523}, \frac{294}{523}, -\frac{163}{523}, -\frac{10}{523}, \frac{141}{523}, -\frac{89}{523})$ $+ \frac{1}{523}\sqrt{175414}e^3 \otimes e_5 + \frac{2}{523}\sqrt{43662}e^4 \otimes e_8$	{12346, 124567, 138, 1578, 2347, 245, 3678, 568}
831:1	$0, 0, 0, 0, 0, \frac{8}{337}\sqrt{406}e^{12}, \frac{4}{337}\sqrt{551}e^{13}, \frac{4}{337}\sqrt{1073}e^{16}$	$(\frac{36}{337}, \frac{35}{337}, -\frac{80}{337}, -\frac{81}{337}, \frac{72}{337}, \frac{71}{337}, -\frac{44}{337}, \frac{107}{337})$ $+ \frac{2}{337}\sqrt{2262}e^5 \otimes e_7 + \frac{2}{337}\sqrt{8758}e^1 \otimes e_3 + \frac{4}{337}\sqrt{1653}e^2 \otimes e_4$	{1258, 1456, 23568, 345}
831:1	$0, 0, 0, 0, 0, \frac{6}{323}\sqrt{497}e^{12}, \frac{2}{323}\sqrt{781}e^{13}, \frac{4}{323}\sqrt{1846}e^{16}$	$(\frac{22}{323}, -\frac{23}{323}, \frac{29}{323}, \frac{163}{323}, -\frac{120}{323}, -\frac{1}{323}, \frac{3}{323}, \frac{21}{323})$ $+ \frac{2}{323}\sqrt{8733}e^4 \otimes e_8 + \frac{8}{323}\sqrt{710}e^1 \otimes e_5$	{1238, 1278, 1346, 1467, 235678, 2568, 3457, 45}
831:1	$0, 0, 0, 0, 0, \frac{2}{161}\sqrt{174}e^{12}, \frac{8}{161}\sqrt{58}e^{13}, \frac{4}{161}\sqrt{203}e^{16}$	$(\frac{19}{161}, -\frac{39}{161}, -\frac{18}{161}, \frac{59}{161}, \frac{57}{161}, -\frac{20}{161}, \frac{1}{161}, -\frac{1}{161})$ $+ \frac{2}{161}\sqrt{1247}e^5 \otimes e_8 + \frac{2}{161}\sqrt{1711}e^1 \otimes e_2 + \frac{6}{161}\sqrt{145}e^4 \otimes e_7$	{1348, 178, 2357, 245}
831:1	$0, 0, 0, 0, 0, \frac{10}{313}\sqrt{222}e^{12}, \frac{4}{313}\sqrt{1443}e^{13}, \frac{4}{313}\sqrt{111}e^{16}$	$(-\frac{58}{313}, \frac{152}{313}, -\frac{12}{313}, \frac{151}{313}, -\frac{71}{313}, \frac{94}{313}, -\frac{70}{313}, \frac{36}{313})$ $+ \frac{18}{313}\sqrt{222}e^2 \otimes e_7 + \frac{222}{313}e^4 \otimes e_5$	{1234, 1235, 14678, 15678, 246, 256, 3478, 3578}
831:1	$0, 0, 0, 0, 0, \frac{2}{35}\sqrt{155}e^{12}, \frac{1}{35}\sqrt{310}e^{13}, \frac{2}{35}\sqrt{155}e^{16}$	$(\frac{2}{7}, -\frac{3}{35}, \frac{2}{35}, -\frac{3}{5}, \frac{1}{5}, \frac{1}{5}, \frac{12}{35}, \frac{17}{35})$ $+ \frac{2}{35}\sqrt{434}e^1 \otimes e_4$	{12358, 1238, 12578, 1278, 1356, 136, 1567, 167, 2345678, 234678, 24568, 2468, 3457, 347, 4, 45}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:1	$0, 0, 0, 0, 0, \frac{4}{323}\sqrt{1846}e^{12}, \frac{2}{323}\sqrt{781}e^{13}, \frac{6}{323}\sqrt{497}e^{16}$	$(\frac{22}{323}, \frac{59}{323}, \frac{29}{323}, -\frac{120}{323}, -\frac{83}{323}, \frac{81}{323}, \frac{3}{19}, \frac{103}{323})$ $+ \frac{2}{323}\sqrt{8733}e^2 \otimes e_5 + \frac{8}{323}\sqrt{710}e^1 \otimes e_4$	{1238, 1278, 1356, 1567, 234678, 2468, 3457, 45}
831:1	$0, 0, 0, 0, 0, \frac{5}{101}\sqrt{222}e^{12}, \frac{2}{101}\sqrt{1443}e^{13}, \frac{2}{101}\sqrt{111}e^{16}$	$(-\frac{29}{101}, \frac{76}{101}, -\frac{6}{101}, \frac{20}{101}, \frac{20}{101}, \frac{47}{101}, -\frac{35}{101}, \frac{18}{101})$ $+ \frac{9}{101}\sqrt{222}e^2 \otimes e_7$	{123, 1234, 12345, 145678, 14678, 1678, 2456, 246, 26, 34578, 3478, 378}
831:1	$0, 0, 0, 0, 0, \frac{2}{199}\sqrt{2337}e^{12}, \frac{2}{199}\sqrt{2091}e^{13}, \frac{12}{199}\sqrt{246}e^{16}$	$(-\frac{34}{199}, \frac{21}{199}, \frac{57}{199}, 1, \frac{40}{199}, -\frac{13}{199}, \frac{23}{199}, -\frac{47}{199})$ $+ \frac{6}{199}\sqrt{2173}e^4 \otimes e_8$	{123578, 12378, 1258, 128, 134567, 13467, 1456, 146, 23568, 2368, 25678, 2678, 34, 345, 457, 47}
831:1	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{2}e^{12}, \frac{1}{2}e^{13}, \frac{1}{4}\sqrt{2}e^{16}$	$(\frac{1}{8}, 0, -\frac{1}{8}, \frac{1}{2}, -\frac{3}{8}, \frac{1}{8}, 0, \frac{1}{4})$ $+ \frac{1}{2}\sqrt{2}e^1 \otimes e_5 + \frac{1}{4}\sqrt{6}e^4 \otimes e_7$	{12348, 1278, 1346, 167, 235678, 24568, 357, 45}
831:1	$0, 0, 0, 0, 0, \frac{1}{8}\sqrt{10}e^{12}, \frac{1}{4}\sqrt{15}e^{13}, \frac{1}{8}\sqrt{10}e^{16}$	$(-\frac{1}{16}, \frac{1}{4}, \frac{5}{8}, -\frac{5}{8}, \frac{3}{16}, \frac{3}{16}, \frac{9}{16}, \frac{1}{8})$ $+ \frac{1}{8}\sqrt{130}e^3 \otimes e_4$	{123568, 12368, 1245678, 124678, 13, 135, 1457, 147, 23578, 2378, 2458, 248, 3567, 367, 456, 46}
831:1	$0, 0, 0, 0, 0, \frac{6}{269}\sqrt{445}e^{12}, \frac{10}{269}\sqrt{89}e^{13}, \frac{4}{269}\sqrt{890}e^{16}$	$(-\frac{74}{269}, \frac{115}{269}, \frac{11}{269}, \frac{145}{269}, \frac{36}{269}, \frac{41}{269}, -\frac{63}{269}, -\frac{33}{269})$ $+ \frac{2}{269}\sqrt{9701}e^4 \otimes e_8 + \frac{4}{269}\sqrt{2759}e^2 \otimes e_7$	{12358, 1238, 14567, 1467, 2568, 268, 3457, 347}
831:1	$0, 0, 0, 0, 0, \frac{4}{313}\sqrt{111}e^{12}, \frac{4}{313}\sqrt{1443}e^{13}, \frac{10}{313}\sqrt{222}e^{16}$	$(-\frac{58}{313}, \frac{44}{313}, \frac{150}{313}, \frac{151}{313}, -\frac{71}{313}, -\frac{14}{313}, \frac{92}{313}, -\frac{72}{313})$ $+ \frac{18}{313}\sqrt{222}e^3 \otimes e_8 + \frac{222}{313}e^4 \otimes e_5$	{12346, 12356, 1478, 1578, 2347, 2357, 468, 568}
831:1	$0, 0, 0, 0, 0, \frac{2}{161}\sqrt{174}e^{12}, \frac{8}{161}\sqrt{58}e^{13}, \frac{4}{161}\sqrt{203}e^{16}$	$(\frac{19}{161}, -\frac{39}{161}, \frac{27}{161}, -\frac{31}{161}, \frac{57}{161}, -\frac{20}{161}, \frac{2}{7}, -\frac{1}{161})$ $+ \frac{2}{161}\sqrt{1247}e^5 \otimes e_8 + \frac{2}{161}\sqrt{1711}e^1 \otimes e_2 + \frac{6}{161}\sqrt{145}e^3 \otimes e_4$	{138, 1478, 2357, 245}
831:1	$0, 0, 0, 0, 0, \frac{4}{269}\sqrt{890}e^{12}, \frac{10}{269}\sqrt{89}e^{13}, \frac{6}{269}\sqrt{445}e^{16}$	$(-\frac{74}{269}, \frac{105}{269}, \frac{135}{269}, -\frac{73}{269}, \frac{36}{269}, \frac{31}{269}, \frac{61}{269}, -\frac{43}{269})$ $+ \frac{2}{269}\sqrt{9701}e^2 \otimes e_4 + \frac{4}{269}\sqrt{2759}e^3 \otimes e_8$	{12578, 1278, 13456, 1346, 2568, 268, 3457, 347}
831:1	$0, 0, 0, 0, 0, \frac{6}{41}\sqrt{5}e^{12}, \frac{10}{41}e^{13}, \frac{4}{41}\sqrt{10}e^{16}$	$(-\frac{2}{41}, \frac{7}{41}, -\frac{1}{41}, -\frac{12}{41}, \frac{13}{41}, \frac{5}{41}, -\frac{3}{41}, \frac{3}{41})$ $+ \frac{4}{41}\sqrt{15}e^2 \otimes e_7 + \frac{6}{41}\sqrt{5}e^5 \otimes e_8 + \frac{8}{41}\sqrt{5}e^1 \otimes e_4$	{1238, 1567, 2468, 3457}
831:1	$0, 0, 0, 0, 0, \frac{3}{169}\sqrt{590}e^{12}, \frac{2}{169}\sqrt{1003}e^{13}, \frac{2}{169}\sqrt{649}e^{16}$	$(-\frac{1}{169}, \frac{169}{169}, -\frac{14}{169}, -\frac{60}{169}, \frac{20}{169}, \frac{43}{169}, -\frac{15}{169}, \frac{42}{169})$ $+ \frac{1}{169}\sqrt{8142}e^2 \otimes e_7 + \frac{4}{169}\sqrt{590}e^1 \otimes e_4$	{12358, 1238, 1567, 167, 24568, 2468, 3457, 347}
831:1	$0, 0, 0, 0, 0, \frac{1}{541}\sqrt{87474}e^{12}, \frac{4}{541}\sqrt{239}e^{13}, \frac{2}{541}\sqrt{13623}e^{16}$	$(\frac{45}{541}, \frac{90}{541}, -\frac{194}{541}, \frac{66}{541}, \frac{66}{541}, \frac{135}{541}, -\frac{149}{541}, \frac{180}{541})$ $+ \frac{2}{541}\sqrt{32026}e^1 \otimes e_3 + \frac{3}{541}\sqrt{10994}e^2 \otimes e_7$	{12458, 1248, 128, 234568, 23468, 2368}
831:1	$0, 0, 0, 0, 0, \frac{2}{649}\sqrt{1041}e^{12}, \frac{2}{649}\sqrt{10063}e^{13}, \frac{1}{649}\sqrt{136718}e^{16}$	$(\frac{116}{649}, -\frac{21}{59}, \frac{18}{649}, \frac{348}{649}, \frac{76}{649}, -\frac{115}{649}, \frac{134}{649}, \frac{1}{649})$ $+ \frac{1}{649}\sqrt{208894}e^1 \otimes e_2 + \frac{4}{649}\sqrt{11798}e^4 \otimes e_8$	{13456, 1346, 14567, 1467, 235678, 23678, 2568, 268}
831:1	$0, 0, 0, 0, 0, \frac{2}{41}\sqrt{42}e^{12}, \frac{1}{41}\sqrt{462}e^{13}, \frac{2}{41}\sqrt{42}e^{16}$	$(-\frac{14}{41}, \frac{19}{41}, \frac{12}{41}, \frac{5}{41}, \frac{5}{41}, -\frac{2}{41}, -\frac{9}{41})$ $+ \frac{6}{41}\sqrt{21}e^2 \otimes e_7 + \frac{6}{41}\sqrt{21}e^3 \otimes e_8$	{24568, 2468, 268, 3457, 347, 37}
831:1	$0, 0, 0, 0, 0, \frac{2}{441}\sqrt{2486}e^{12}, \frac{1}{441}\sqrt{36386}e^{13}, \frac{2}{441}\sqrt{113}e^{16}$	$(\frac{16}{147}, -\frac{65}{441}, \frac{5}{441}, -\frac{12}{49}, \frac{166}{441}, -\frac{17}{441}, \frac{53}{441}, \frac{31}{441})$ $+ \frac{1}{441}\sqrt{30962}e^3 \otimes e_4 + \frac{1}{441}\sqrt{30962}e^5 \otimes e_7 + \frac{2}{441}\sqrt{7797}e^1 \otimes e_2$	{1358, 1478, 237, 245}
831:1	$0, 0, 0, 0, 0, \frac{4}{431}\sqrt{345}e^{12}, \frac{14}{431}\sqrt{138}e^{13}, \frac{4}{431}\sqrt{1518}e^{16}$	$(\frac{34}{431}, -\frac{104}{431}, \frac{102}{431}, -\frac{31}{431}, \frac{107}{431}, -\frac{70}{431}, \frac{136}{431}, -\frac{36}{431})$ $+ \frac{138}{431}e^5 \otimes e_4 + \frac{18}{431}\sqrt{138}e^1 \otimes e_2 + \frac{18}{431}\sqrt{138}e^3 \otimes e_8$	{1478, 1578, 2347, 2357}
831:1	$0, 0, 0, 0, 0, \frac{4}{337}\sqrt{1073}e^{12}, \frac{4}{337}\sqrt{551}e^{13}, \frac{8}{337}\sqrt{406}e^{16}$	$(\frac{36}{337}, -\frac{41}{337}, -\frac{80}{337}, \frac{72}{337}, \frac{147}{337}, -\frac{5}{337}, -\frac{44}{337}, \frac{31}{337})$ $+ \frac{2}{337}\sqrt{2262}e^4 \otimes e_7 + \frac{2}{337}\sqrt{8758}e^1 \otimes e_3 + \frac{4}{337}\sqrt{1653}e^5 \otimes e_8$	{1248, 1456, 23468, 345}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:1	$0, 0, 0, 0, 0, \frac{2}{643}\sqrt{8710}e^{12}, \frac{1}{643}\sqrt{142710}e^{13}, \frac{4}{643}\sqrt{2010}e^{16}$	$(-\frac{148}{643}, \frac{317}{643}, \frac{130}{643}, -\frac{205}{643}, \frac{69}{643}, \frac{169}{643}, -\frac{18}{643}, \frac{21}{643})$ $+\frac{10}{643}\sqrt{2010}e^2 \otimes e_7 + \frac{2}{643}\sqrt{45895}e^3 \otimes e_4$	{123, 1235, 145678, 14678, 2456, 246, 3578, 378}
831:1	$0, 0, 0, 0, 0, \frac{1}{523}\sqrt{55918}e^{12}, \frac{5}{523}\sqrt{2298}e^{13}, \frac{1}{523}\sqrt{2298}e^{16}$	$(-\frac{79}{523}, \frac{221}{523}, -\frac{9}{523}, \frac{295}{523}, -\frac{162}{523}, \frac{142}{523}, -\frac{88}{523}, \frac{63}{523})$ $+\frac{1}{523}\sqrt{175414}e^4 \otimes e_7 + \frac{2}{523}\sqrt{43662}e^2 \otimes e_5$	{1234, 127, 134568, 15678, 2367, 246, 3578, 458}
831:1	$0, 0, 0, 0, 0, \frac{12}{67}\sqrt{21}e^{12}, \frac{28}{67}\sqrt{2}e^{13}, \frac{12}{67}\sqrt{21}e^{16}$	$(\frac{27}{67}, -\frac{15}{67}, -\frac{29}{67}, \frac{12}{67}, \frac{12}{67}, \frac{12}{67}, -\frac{2}{67}, \frac{39}{67})$ $+\frac{4}{67}\sqrt{385}e^1 \otimes e_3$	{12458, 1248, 128, 1456, 146, 16, 234568, 23468, 2368, 3, 34, 345}
831:1	$0, 0, 0, 0, 0, \frac{1}{655}\sqrt{123802}e^{12}, \frac{2}{655}\sqrt{14579}e^{13}, \frac{4}{655}\sqrt{5258}e^{16}$	$(\frac{93}{655}, \frac{59}{655}, -\frac{146}{655}, -\frac{36}{131}, \frac{69}{655}, \frac{152}{655}, -\frac{53}{655}, \frac{49}{131})$ $+\frac{1}{655}\sqrt{119022}e^2 \otimes e_4 + \frac{1}{655}\sqrt{161086}e^1 \otimes e_3$	{1258, 128, 1456, 146, 23568, 2368, 34, 345}
831:2	$0, 0, 0, 0, 0, \frac{1}{205}\sqrt{8642}e^{12}, \frac{1}{205}\sqrt{8642}e^{13}, \frac{3}{205}\sqrt{298}e^{26}$	$(\frac{58}{205}, -\frac{11}{205}, -\frac{91}{205}, \frac{116}{205}, \frac{27}{205}, \frac{47}{205}, -\frac{33}{205}, \frac{36}{205})$ $+\frac{1}{205}\sqrt{26522}e^1 \otimes e_3 + \frac{1}{205}\sqrt{26522}e^4 \otimes e_7$	{12578, 1278, 15678, 1678, 23567, 2367, 357, 37}
831:2	$0, 0, 0, 0, 0, \frac{2}{223}\sqrt{1529}e^{12}, \frac{2}{223}\sqrt{10842}e^{13}, \frac{2}{223}\sqrt{2085}e^{26}$	$(-\frac{22}{223}, \frac{41}{223}, -\frac{33}{223}, 1, \frac{45}{223}, \frac{19}{223}, -\frac{55}{223}, \frac{60}{223})$ $+\frac{2}{223}\sqrt{24742}e^4 \otimes e_7$	{123456, 12346, 12567, 1267, 134, 1345, 157, 17, 23578, 2378, 2458, 248, 35678, 3678, 4568, 468}
831:2	$0, 0, 0, 0, 0, \frac{2}{347}\sqrt{2911}e^{12}, \frac{2}{347}\sqrt{7242}e^{13}, \frac{10}{347}\sqrt{213}e^{26}$	$(-\frac{98}{347}, \frac{109}{347}, \frac{65}{347}, -\frac{77}{347}, \frac{45}{347}, \frac{11}{347}, -\frac{33}{347}, \frac{120}{347})$ $+\frac{12}{347}\sqrt{355}e^2 \otimes e_7 + \frac{2}{347}\sqrt{8662}e^3 \otimes e_4$	{12358, 1238, 145678, 14678, 2456, 246, 357, 37}
831:2	$0, 0, 0, 0, 0, \frac{2}{149}\sqrt{553}e^{12}, \frac{3}{149}\sqrt{790}e^{13}, \frac{2}{149}\sqrt{237}e^{26}$	$(\frac{28}{149}, -\frac{2}{149}, \frac{35}{149}, -\frac{51}{149}, -\frac{44}{149}, \frac{26}{149}, \frac{63}{149}, \frac{24}{149})$ $+\frac{1}{149}\sqrt{10902}e^1 \otimes e_4 + \frac{2}{149}\sqrt{2449}e^3 \otimes e_5$	{1238, 12578, 1368, 15678, 23467, 2456, 347, 45}
831:2	$0, 0, 0, 0, 0, \frac{1}{209}\sqrt{7242}e^{12}, \frac{1}{209}\sqrt{2911}e^{13}, \frac{5}{209}\sqrt{213}e^{26}$	$(\frac{12}{209}, \frac{24}{209}, -\frac{59}{209}, -\frac{13}{209}, \frac{58}{209}, \frac{36}{209}, -\frac{47}{209}, \frac{60}{209})$ $+\frac{1}{209}\sqrt{8662}e^1 \otimes e_3 + \frac{6}{209}\sqrt{355}e^2 \otimes e_7 + \frac{71}{209}e^5 \otimes e_4$	{14678, 15678, 347, 357}
831:2	$0, 0, 0, 0, 0, \frac{4}{1403}\sqrt{24130}e^{12}, \frac{4}{1403}\sqrt{381}e^{13}, \frac{12}{1403}\sqrt{1651}e^{26}$	$(\frac{199}{1403}, \frac{88}{1403}, -\frac{309}{1403}, -\frac{420}{1403}, \frac{398}{1403}, \frac{287}{1403}, -\frac{110}{1403}, \frac{375}{1403})$ $+\frac{2}{1403}\sqrt{142494}e^2 \otimes e_4 + \frac{2}{1403}\sqrt{65278}e^5 \otimes e_7 + \frac{4}{1403}\sqrt{28194}e^1 \otimes e_3$	{1278, 14678, 2367, 347}
831:2	$0, 0, 0, 0, 0, \frac{5}{93}\sqrt{42}e^{12}, \frac{5}{93}\sqrt{42}e^{13}, \frac{1}{93}\sqrt{2170}e^{26}$	$(-\frac{6}{31}, \frac{14}{93}, -\frac{1}{31}, \frac{15}{31}, \frac{4}{31}, -\frac{4}{93}, -\frac{7}{31}, \frac{10}{93})$ $+\frac{1}{93}\sqrt{2310}e^4 \otimes e_8 + \frac{4}{93}\sqrt{210}e^2 \otimes e_7$	{12358, 1238, 15678, 1678, 2456, 246, 3457, 347}
831:2	$0, 0, 0, 0, 0, \frac{6}{77}\sqrt{107}e^{12}, \frac{4}{231}\sqrt{321}e^{13}, \frac{2}{231}\sqrt{8239}e^{26}$	$(-\frac{8}{77}, \frac{73}{231}, \frac{19}{77}, -\frac{47}{77}, \frac{15}{77}, \frac{7}{33}, \frac{1}{7}, \frac{122}{231})$ $+\frac{2}{231}\sqrt{19902}e^2 \otimes e_4$	{123578, 12378, 1258, 128, 1345678, 134678, 14568, 1468, 2356, 236, 2567, 267, 34, 345, 457, 47}
831:2	$0, 0, 0, 0, 0, \frac{2}{199}\sqrt{901}e^{12}, \frac{12}{199}\sqrt{106}e^{13}, \frac{2}{199}\sqrt{371}e^{26}$	$(-\frac{34}{199}, \frac{31}{199}, \frac{38}{199}, \frac{110}{199}, -\frac{68}{199}, -\frac{3}{199}, \frac{4}{199}, \frac{28}{199})$ $+\frac{2}{199}\sqrt{4717}e^3 \otimes e_5 + \frac{2}{199}\sqrt{4717}e^4 \otimes e_7$	{12346, 12567, 134, 157, 2378, 2458, 3678, 4568}
831:2	$0, 0, 0, 0, 0, \frac{9}{677}\sqrt{170}e^{12}, \frac{3}{677}\sqrt{13566}e^{13}, \frac{3}{677}\sqrt{12954}e^{26}$	$(-\frac{30}{677}, -\frac{24}{677}, \frac{251}{677}, \frac{381}{677}, -\frac{208}{677}, -\frac{54}{677}, \frac{221}{677}, -\frac{78}{677})$ $+\frac{12}{677}\sqrt{1887}e^3 \otimes e_5 + \frac{3}{677}\sqrt{29886}e^4 \otimes e_8$	{12346, 124567, 134, 1457, 2378, 258, 3678, 568}
831:2	$0, 0, 0, 0, 0, \frac{40}{1419}\sqrt{38}e^{12}, \frac{20}{1419}\sqrt{589}e^{13}, \frac{4}{1419}\sqrt{17005}e^{26}$	$(-\frac{83}{473}, \frac{112}{1419}, \frac{355}{1419}, -\frac{268}{1419}, \frac{162}{473}, -\frac{137}{1419}, \frac{106}{1419}, -\frac{25}{1419})$ $+\frac{10}{1419}\sqrt{2622}e^5 \otimes e_7 + \frac{2}{1419}\sqrt{77710}e^2 \otimes e_4 + \frac{4}{1419}\sqrt{24890}e^3 \otimes e_8$	{1278, 14678, 2367, 347}
831:2	$0, 0, 0, 0, 0, \frac{20}{281}\sqrt{43}e^{12}, \frac{4}{281}\sqrt{645}e^{13}, \frac{4}{281}\sqrt{1290}e^{26}$	$(-\frac{41}{281}, \frac{70}{281}, \frac{110}{281}, -\frac{102}{281}, -\frac{62}{281}, \frac{29}{281}, \frac{69}{281}, \frac{99}{281})$ $+\frac{2}{281}\sqrt{12126}e^2 \otimes e_4 + \frac{2}{281}\sqrt{8686}e^3 \otimes e_5$	{1238, 12578, 13468, 145678, 2367, 256, 347, 45}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:2	$0, 0, 0, 0, 0, \frac{2}{55}\sqrt{129}e^{12}, \frac{2}{55}\sqrt{129}e^{13}, \frac{4}{55}\sqrt{43}e^{26}$	$(\frac{6}{55}, \frac{1}{11}, \frac{9}{55}, 1, -\frac{31}{55}, \frac{1}{5}, \frac{3}{11}, \frac{16}{55})$ $+ \frac{86}{55}e^4 \otimes e_5$	{12348, 12358, 12478, 12578, 13468, 13568, 14678, 15678, 23467, 23567, 246, 256, 347, 357, 4, 5}
831:2	$0, 0, 0, 0, 0, \frac{5}{253}\sqrt{246}e^{12}, \frac{5}{253}\sqrt{246}e^{13}, \frac{1}{253}\sqrt{8610}e^{26}$	$(\frac{50}{253}, -\frac{34}{253}, -\frac{73}{253}, \frac{100}{253}, \frac{105}{253}, \frac{16}{253}, -\frac{1}{11}, -\frac{18}{253})$ $+ \frac{1}{253}\sqrt{19434}e^5 \otimes e_8 + \frac{2}{253}\sqrt{4551}e^1 \otimes e_3 + \frac{2}{253}\sqrt{4551}e^4 \otimes e_7$	{1278, 1678, 23567, 357}
831:2	$0, 0, 0, 0, 0, \frac{1}{751}\sqrt{172898}e^{12}, \frac{2}{751}\sqrt{9889}e^{13}, \frac{4}{751}\sqrt{6061}e^{26}$	$(\frac{171}{751}, \frac{33}{751}, -\frac{148}{751}, -\frac{286}{751}, \frac{85}{751}, \frac{204}{751}, \frac{23}{751}, \frac{237}{751})$ $+ \frac{1}{751}\sqrt{188210}e^1 \otimes e_3 + \frac{1}{751}\sqrt{236698}e^2 \otimes e_4$	{1258, 128, 14568, 1468, 2356, 236, 34, 345}
831:2	$0, 0, 0, 0, 0, \frac{3}{58}\sqrt{203}e^{12}, \frac{3}{58}\sqrt{203}e^{13}, \frac{3}{29}\sqrt{14}e^{26}$	$(\frac{1}{2}, -\frac{13}{116}, -\frac{5}{116}, -\frac{17}{29}, \frac{6}{29}, \frac{45}{116}, \frac{53}{116}, \frac{8}{29})$ $+ \frac{3}{29}\sqrt{161}e^1 \otimes e_4$	{12358, 1238, 12578, 1278, 13568, 1368, 15678, 1678, 234567, 23467, 2456, 246, 3457, 347, 4, 45}
831:2	$0, 0, 0, 0, 0, \frac{4}{129}\sqrt{39}e^{12}, \frac{26}{129}\sqrt{3}e^{13}, \frac{2}{129}\sqrt{559}e^{26}$	$(-\frac{12}{43}, \frac{20}{129}, \frac{10}{43}, \frac{5}{43}, \frac{5}{43}, -\frac{16}{129}, -\frac{2}{43}, \frac{4}{129})$ $+ \frac{2}{43}\sqrt{78}e^3 \otimes e_8 + \frac{4}{129}\sqrt{195}e^2 \otimes e_7$	{145678, 14678, 1678, 3457, 347, 37}
831:2	$0, 0, 0, 0, 0, \frac{1}{30}\sqrt{345}e^{12}, \frac{1}{30}\sqrt{345}e^{13}, \frac{1}{15}\sqrt{115}e^{26}$	$(-\frac{3}{10}, \frac{5}{12}, -\frac{1}{20}, \frac{1}{5}, \frac{1}{5}, \frac{7}{60}, -\frac{7}{20}, \frac{8}{15})$ $+ \frac{2}{15}\sqrt{69}e^2 \otimes e_7$	{123458, 12348, 1238, 145678, 14678, 1678, 2456, 246, 26, 3457, 347, 37}
831:2	$0, 0, 0, 0, 0, \frac{2}{71}\sqrt{39}e^{12}, \frac{13}{71}\sqrt{3}e^{13}, \frac{1}{71}\sqrt{559}e^{26}$	$(-\frac{18}{71}, \frac{10}{71}, \frac{15}{71}, \frac{1}{71}, \frac{14}{71}, -\frac{8}{71}, -\frac{3}{71}, \frac{2}{71})$ $+ \frac{13}{71}e^5 \otimes e_4 + \frac{2}{71}\sqrt{195}e^2 \otimes e_7 + \frac{3}{71}\sqrt{78}e^3 \otimes e_8$	{14678, 15678, 347, 357}
831:2	$0, 0, 0, 0, 0, \frac{2}{223}\sqrt{1529}e^{12}, \frac{2}{223}\sqrt{10842}e^{13}, \frac{2}{223}\sqrt{2085}e^{26}$	$(-\frac{22}{223}, \frac{41}{223}, \frac{145}{223}, -\frac{133}{223}, \frac{45}{223}, \frac{19}{223}, \frac{123}{223}, \frac{60}{223})$ $+ \frac{2}{223}\sqrt{24742}e^3 \otimes e_4$	{12356, 1236, 124567, 12467, 13, 135, 1457, 147, 23578, 2378, 2458, 248, 35678, 3678, 4568, 468}
831:2	$0, 0, 0, 0, 0, \frac{2}{83}\sqrt{345}e^{12}, \frac{2}{83}\sqrt{345}e^{13}, \frac{4}{83}\sqrt{115}e^{26}$	$(-\frac{18}{83}, \frac{25}{83}, -\frac{3}{83}, \frac{35}{83}, -\frac{11}{83}, \frac{7}{83}, -\frac{21}{83}, \frac{32}{83})$ $+ \frac{46}{83}e^4 \otimes e_5 + \frac{8}{83}\sqrt{69}e^2 \otimes e_7$	{12348, 12358, 14678, 15678, 246, 256, 347, 357}
831:2	$0, 0, 0, 0, 0, \frac{5}{857}\sqrt{1462}e^{12}, \frac{5}{857}\sqrt{3182}e^{13}, \frac{1}{857}\sqrt{94170}e^{26}$	$(-\frac{182}{857}, \frac{136}{857}, \frac{103}{857}, -\frac{112}{857}, \frac{305}{857}, -\frac{46}{857}, -\frac{79}{857}, \frac{90}{857})$ $+ \frac{1}{857}\sqrt{93310}e^5 \otimes e_8 + \frac{20}{857}\sqrt{215}e^3 \otimes e_4 + \frac{8}{857}\sqrt{2365}e^2 \otimes e_7$	{1238, 14678, 2456, 357}
831:2	$0, 0, 0, 0, 0, \frac{26}{697}\sqrt{46}e^{12}, \frac{1}{697}\sqrt{128570}e^{13}, \frac{46}{697}\sqrt{39}e^{26}$	$(\frac{104}{697}, -\frac{6}{41}, \frac{199}{697}, -\frac{195}{697}, \frac{88}{697}, \frac{2}{697}, \frac{303}{697}, -\frac{100}{697})$ $+ \frac{1}{697}\sqrt{169234}e^1 \otimes e_4 + \frac{2}{697}\sqrt{48737}e^3 \otimes e_8$	{12578, 1278, 15678, 1678, 234567, 23467, 3457, 347}
831:2	$0, 0, 0, 0, 0, \frac{3}{14}\sqrt{3}e^{12}, \frac{3}{14}\sqrt{3}e^{13}, \frac{3}{49}\sqrt{30}e^{26}$	$(\frac{1}{98}, \frac{31}{196}, -\frac{25}{196}, -\frac{13}{49}, \frac{6}{49}, \frac{33}{196}, -\frac{23}{196}, \frac{16}{49})$ $+ \frac{18}{49}\sqrt{2}e^2 \otimes e_7 + \frac{3}{49}\sqrt{57}e^1 \otimes e_4$	{12358, 1238, 15678, 1678, 2456, 246, 3457, 347}
831:2	$0, 0, 0, 0, 0, \frac{2}{751}\sqrt{9889}e^{12}, \frac{1}{751}\sqrt{172898}e^{13}, \frac{4}{751}\sqrt{6061}e^{26}$	$(-\frac{124}{751}, -\frac{5}{751}, \frac{185}{751}, \frac{380}{751}, \frac{85}{751}, -\frac{129}{751}, \frac{61}{751}, -\frac{134}{751})$ $+ \frac{1}{751}\sqrt{188210}e^4 \otimes e_7 + \frac{1}{751}\sqrt{236698}e^3 \otimes e_8$	{123456, 12346, 134, 1345, 2458, 248, 4568, 468}
831:2	$0, 0, 0, 0, 0, \frac{2}{347}\sqrt{7242}e^{12}, \frac{2}{347}\sqrt{2911}e^{13}, \frac{10}{347}\sqrt{213}e^{26}$	$(\frac{24}{347}, \frac{48}{347}, -\frac{118}{347}, \frac{45}{347}, \frac{45}{347}, \frac{72}{347}, -\frac{94}{347}, \frac{120}{347})$ $+ \frac{12}{347}\sqrt{355}e^2 \otimes e_7 + \frac{2}{347}\sqrt{8662}e^1 \otimes e_3$	{145678, 14678, 1678, 3457, 347, 37}
831:2	$0, 0, 0, 0, 0, \frac{5}{857}\sqrt{3182}e^{12}, \frac{5}{857}\sqrt{1462}e^{13}, \frac{1}{857}\sqrt{94170}e^{26}$	$(\frac{18}{857}, \frac{36}{857}, -\frac{197}{857}, \frac{88}{857}, \frac{305}{857}, \frac{54}{857}, -\frac{179}{857}, \frac{90}{857})$ $+ \frac{1}{857}\sqrt{93310}e^5 \otimes e_8 + \frac{20}{857}\sqrt{215}e^1 \otimes e_3 + \frac{8}{857}\sqrt{2365}e^2 \otimes e_7$	{14678, 1678, 3457, 357}
831:2	$0, 0, 0, 0, 0, \frac{9}{677}\sqrt{170}e^{12}, \frac{3}{677}\sqrt{13566}e^{13}, \frac{3}{677}\sqrt{12954}e^{26}$	$(-\frac{30}{677}, -\frac{24}{677}, -\frac{45}{677}, \frac{384}{677}, \frac{381}{677}, -\frac{54}{677}, -\frac{75}{677}, -\frac{78}{677})$ $+ \frac{12}{677}\sqrt{1887}e^4 \otimes e_7 + \frac{3}{677}\sqrt{29886}e^5 \otimes e_8$	{123456, 12567, 1345, 157, 2378, 248, 3678, 468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:2	$0, 0, 0, 0, 0, \frac{60}{227}e^{12}, \frac{60}{227}e^{13}, \frac{12}{227}\sqrt{30}e^{26}$	$(-\frac{2}{227}, \frac{16}{227}, -\frac{22}{227}, -\frac{42}{227}, \frac{70}{227}, \frac{14}{227}, -\frac{24}{227}, \frac{30}{227})$ $+ \frac{20}{227}\sqrt{13}e^1 \otimes e_4 + \frac{4}{227}\sqrt{235}e^5 \otimes e_8 + \frac{8}{227}\sqrt{115}e^2 \otimes e_7$	{1238, 1678, 2456, 3457}
831:2	$0, 0, 0, 0, 0, \frac{3}{677}\sqrt{13566}e^{12}, \frac{9}{677}\sqrt{170}e^{13}, \frac{3}{677}\sqrt{12954}e^{26}$	$(\frac{266}{677}, -\frac{172}{677}, -\frac{193}{677}, \frac{381}{677}, \frac{88}{677}, \frac{94}{677}, \frac{73}{677}, -\frac{78}{677})$ $+ \frac{12}{677}\sqrt{1887}e^1 \otimes e_3 + \frac{3}{677}\sqrt{29886}e^4 \otimes e_8$	{1258, 128, 1568, 168, 23456, 2346, 34, 345}
831:2	$0, 0, 0, 0, 0, \frac{4}{231}\sqrt{321}e^{12}, \frac{6}{77}\sqrt{107}e^{13}, \frac{2}{231}\sqrt{8239}e^{26}$	$(-\frac{8}{77}, -\frac{20}{231}, \frac{50}{77}, \frac{15}{77}, \frac{15}{77}, -\frac{4}{21}, \frac{6}{11}, -\frac{64}{231})$ $+ \frac{2}{231}\sqrt{19902}e^3 \otimes e_8$	{123456, 12346, 1236, 13, 134, 1345, 2458, 248, 28, 4568, 468, 68}
831:2	$0, 0, 0, 0, 0, \frac{2}{149}\sqrt{553}e^{12}, \frac{3}{149}\sqrt{790}e^{13}, \frac{2}{149}\sqrt{237}e^{26}$	$(\frac{28}{149}, -\frac{2}{149}, -\frac{27}{149}, \frac{80}{149}, -\frac{51}{149}, \frac{26}{149}, \frac{1}{149}, \frac{24}{149})$ $+ \frac{1}{149}\sqrt{10902}e^1 \otimes e_5 + \frac{2}{149}\sqrt{2449}e^4 \otimes e_7$	{12348, 1278, 13468, 1678, 23567, 2456, 357, 45}
831:2	$0, 0, 0, 0, 0, \frac{1}{697}\sqrt{128570}e^{12}, \frac{26}{697}\sqrt{46}e^{13}, \frac{46}{697}\sqrt{39}e^{26}$	$(\frac{104}{697}, \frac{61}{697}, \frac{36}{697}, -\frac{195}{697}, -\frac{14}{41}, \frac{165}{697}, \frac{140}{697}, \frac{226}{697})$ $+ \frac{1}{697}\sqrt{169234}e^1 \otimes e_4 + \frac{2}{697}\sqrt{48737}e^2 \otimes e_5$	{1238, 1278, 13568, 15678, 23467, 246, 3457, 45}
831:2	$0, 0, 0, 0, 0, \frac{2}{223}\sqrt{10842}e^{12}, \frac{2}{223}\sqrt{1529}e^{13}, \frac{2}{223}\sqrt{2085}e^{26}$	$(\frac{156}{223}, -\frac{48}{223}, -\frac{122}{223}, \frac{45}{223}, \frac{45}{223}, \frac{108}{223}, \frac{34}{223}, \frac{60}{223})$ $+ \frac{2}{223}\sqrt{24742}e^1 \otimes e_3$	{12458, 1248, 128, 14568, 1468, 168, 23456, 2346, 236, 3, 34, 345}
831:2	$0, 0, 0, 0, 0, \frac{1}{181}\sqrt{10842}e^{12}, \frac{1}{181}\sqrt{1529}e^{13}, \frac{1}{181}\sqrt{2085}e^{26}$	$(\frac{78}{181}, -\frac{24}{181}, -\frac{61}{181}, \frac{92}{181}, -\frac{47}{181}, \frac{54}{181}, \frac{17}{181}, \frac{30}{181})$ $+ \frac{139}{181}e^4 \otimes e_5 + \frac{1}{181}\sqrt{24742}e^1 \otimes e_3$	{1248, 1258, 1468, 1568, 2346, 2356, 34, 35}
831:2	$0, 0, 0, 0, 0, \frac{56}{1849}\sqrt{155}e^{12}, \frac{70}{1849}\sqrt{22}e^{13}, \frac{28}{1849}\sqrt{565}e^{26}$	$(\frac{273}{1849}, -\frac{63}{1849}, -\frac{217}{1849}, -\frac{553}{1849}, \frac{637}{1849}, \frac{210}{1849}, \frac{56}{1849}, \frac{147}{1849})$ $+ \frac{14}{1849}\sqrt{2355}e^5 \otimes e_8 + \frac{14}{1849}\sqrt{2465}e^1 \otimes e_3 + \frac{14}{1849}\sqrt{3595}e^2 \otimes e_4$	{128, 1468, 2356, 345}
831:2	$0, 0, 0, 0, 0, \frac{6}{251}\sqrt{331}e^{12}, \frac{4}{753}\sqrt{993}e^{13}, \frac{1}{753}\sqrt{166162}e^{26}$	$(-\frac{16}{251}, \frac{49}{753}, \frac{38}{251}, \frac{127}{251}, -\frac{94}{251}, \frac{1}{753}, \frac{22}{251}, \frac{50}{753})$ $+ \frac{1}{753}\sqrt{192642}e^4 \otimes e_8 + \frac{2}{753}\sqrt{61566}e^2 \otimes e_5$	{12378, 128, 135678, 1568, 2346, 2467, 345, 457}
831:2	$0, 0, 0, 0, 0, \frac{2}{169}\sqrt{321}e^{12}, \frac{9}{169}\sqrt{107}e^{13}, \frac{1}{169}\sqrt{8239}e^{26}$	$(-\frac{12}{169}, -\frac{10}{169}, \frac{75}{169}, \frac{76}{169}, -\frac{31}{169}, -\frac{22}{169}, \frac{63}{169}, -\frac{32}{169})$ $+ \frac{107}{169}e^4 \otimes e_5 + \frac{1}{169}\sqrt{19902}e^3 \otimes e_8$	{12346, 12356, 134, 135, 248, 258, 468, 568}
831:2	$0, 0, 0, 0, 0, \frac{20}{281}\sqrt{43}e^{12}, \frac{4}{281}\sqrt{645}e^{13}, \frac{4}{281}\sqrt{1290}e^{26}$	$(-\frac{41}{281}, \frac{70}{281}, \frac{9}{281}, \frac{140}{281}, -\frac{102}{281}, \frac{29}{281}, -\frac{32}{281}, \frac{99}{281})$ $+ \frac{2}{281}\sqrt{12126}e^2 \otimes e_5 + \frac{2}{281}\sqrt{8686}e^4 \otimes e_7$	{12348, 1278, 134568, 15678, 2367, 246, 357, 45}
831:2	$0, 0, 0, 0, 0, \frac{10}{213}\sqrt{51}e^{12}, \frac{10}{213}\sqrt{51}e^{13}, \frac{1}{213}\sqrt{12070}e^{26}$	$(-\frac{11}{71}, \frac{19}{213}, \frac{30}{71}, -\frac{22}{71}, \frac{9}{71}, -\frac{14}{213}, \frac{19}{71}, \frac{5}{213})$ $+ \frac{1}{213}\sqrt{15810}e^2 \otimes e_4 + \frac{1}{213}\sqrt{15810}e^3 \otimes e_8$	{12578, 1278, 145678, 14678, 23567, 2367, 3457, 347}
831:2	$0, 0, 0, 0, 0, \frac{1}{57}\sqrt{426}e^{12}, \frac{1}{57}\sqrt{426}e^{13}, \frac{1}{57}\sqrt{2698}e^{26}$	$(\frac{2}{19}, -\frac{10}{57}, \frac{3}{19}, \frac{1}{19}, -\frac{4}{57}, \frac{5}{19}, -\frac{14}{57})$ $+ \frac{1}{19}\sqrt{710}e^4 \otimes e_8$	{12358, 1238, 12578, 1278, 13568, 1368, 15678, 1678, 234567, 23467, 2456, 246, 3457, 347, 4, 45}
831:2	$0, 0, 0, 0, 0, \frac{2}{929}\sqrt{1463}e^{12}, \frac{1}{929}\sqrt{127490}e^{13}, \frac{4}{929}\sqrt{3553}e^{26}$	$(\frac{28}{929}, -\frac{67}{929}, \frac{103}{929}, -\frac{181}{929}, \frac{340}{929}, -\frac{39}{929}, \frac{131}{929}, -\frac{106}{929})$ $+ \frac{1}{929}\sqrt{107426}e^5 \otimes e_7 + \frac{44}{929}\sqrt{57}e^1 \otimes e_4 + \frac{5}{929}\sqrt{5434}e^3 \otimes e_8$	{1278, 1678, 23467, 347}
831:2	$0, 0, 0, 0, 0, \frac{20}{167}\sqrt{13}e^{12}, \frac{20}{167}\sqrt{13}e^{13}, \frac{4}{167}\sqrt{390}e^{26}$	$(\frac{50}{167}, -\frac{32}{167}, -\frac{2}{167}, \frac{90}{167}, -\frac{54}{167}, \frac{18}{167}, \frac{48}{167}, -\frac{14}{167})$ $+ \frac{4}{167}\sqrt{1001}e^1 \otimes e_5 + \frac{4}{167}\sqrt{871}e^4 \otimes e_8$	{1238, 1278, 1368, 1678, 234567, 2456, 3457, 45}
831:3	$0, 0, 0, 0, 0, \frac{4}{127}\sqrt{290}e^{12}, \frac{8}{127}\sqrt{15}e^{34}, \frac{4}{127}\sqrt{290}e^{16}$	$(\frac{29}{127}, -\frac{11}{127}, \frac{52}{127}, -\frac{28}{127}, -\frac{51}{127}, \frac{18}{127}, \frac{24}{127}, \frac{47}{127})$ $+ \frac{4}{127}\sqrt{690}e^1 \otimes e_5 + \frac{80}{127}e^3 \otimes e_4$	{12378, 12478, 1367, 1467, 235678, 245678, 357, 457}
831:3	$0, 0, 0, 0, 0, \frac{2}{849}\sqrt{32277}e^{12}, \frac{1}{849}\sqrt{209986}e^{34}, \frac{2}{283}\sqrt{742}e^{16}$	$(-\frac{34}{283}, \frac{116}{283}, \frac{152}{849}, -\frac{175}{849}, -\frac{73}{283}, \frac{82}{283}, -\frac{23}{849}, \frac{48}{283})$ $+ \frac{1}{849}\sqrt{242634}e^3 \otimes e_5 + \frac{2}{283}\sqrt{8533}e^2 \otimes e_7$	{12348, 1258, 1367, 14567, 23468, 2568, 37, 457}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:3	$0, 0, 0, 0, 0, \frac{2}{21}\sqrt{91}e^{12}, \frac{1}{21}\sqrt{78}e^{34}, \frac{1}{21}\sqrt{78}e^{16}$	$(-\frac{4}{21}, \frac{2}{3}, \frac{1}{7}, \frac{1}{7}, -\frac{4}{7}, \frac{10}{21}, \frac{2}{7}, \frac{2}{7})$ $+\frac{1}{21}\sqrt{858}e^2 \otimes e_5$	{12348, 12378, 128, 13456, 13567, 156, 23468, 23678, 268, 345, 357, 5}
831:3	$0, 0, 0, 0, 0, \frac{4}{87}\sqrt{290}e^{12}, \frac{8}{87}\sqrt{15}e^{34}, \frac{4}{87}\sqrt{290}e^{16}$	$(\frac{1}{3}, -\frac{11}{87}, \frac{4}{29}, \frac{4}{29}, -\frac{17}{29}, \frac{6}{29}, \frac{8}{29}, \frac{47}{87})$ $+\frac{4}{87}\sqrt{690}e^1 \otimes e_5$	{12348, 12378, 128, 1346, 1367, 16, 234568, 235678, 2568, 345, 357, 5}
831:3	$0, 0, 0, 0, 0, \frac{1}{153}\sqrt{1442}e^{12}, \frac{1}{153}\sqrt{5974}e^{34}, \frac{1}{153}\sqrt{5974}e^{16}$	$(\frac{1}{3}, -\frac{52}{153}, -\frac{8}{153}, -\frac{8}{153}, \frac{29}{51}, -\frac{1}{153}, -\frac{16}{153}, \frac{50}{153})$ $+\frac{2}{153}\sqrt{3399}e^1 \otimes e_2 + \frac{2}{153}\sqrt{3399}e^5 \otimes e_7$	{13456, 1367, 156, 234568, 23678, 2568}
831:3	$0, 0, 0, 0, 0, \frac{1}{34}\sqrt{78}e^{12}, \frac{1}{34}\sqrt{78}e^{34}, \frac{1}{17}\sqrt{91}e^{16}$	$(-\frac{2}{17}, \frac{3}{34}, \frac{8}{17}, -\frac{5}{17}, \frac{21}{34}, -\frac{1}{34}, \frac{3}{17}, -\frac{5}{34})$ $+\frac{13}{17}e^3 \otimes e_4 + \frac{1}{34}\sqrt{858}e^5 \otimes e_8$	{12378, 12478, 13567, 14567, 23678, 24678, 357, 457}
831:3	$0, 0, 0, 0, 0, \frac{1}{21}\sqrt{78}e^{12}, \frac{2}{21}\sqrt{91}e^{34}, \frac{1}{21}\sqrt{78}e^{16}$	$(\frac{1}{14}, \frac{1}{7}, \frac{2}{3}, -\frac{5}{42}, -\frac{4}{7}, \frac{3}{14}, \frac{23}{42}, \frac{2}{7})$ $+\frac{1}{21}\sqrt{858}e^3 \otimes e_5$	{12348, 12378, 124578, 1258, 1346, 1367, 14567, 156, 23468, 23678, 245678, 2568, 34, 37, 457, 5}
831:3	$0, 0, 0, 0, 0, \frac{1}{17}\sqrt{91}e^{12}, \frac{1}{34}\sqrt{78}e^{34}, \frac{1}{34}\sqrt{78}e^{16}$	$(-\frac{2}{17}, \frac{7}{17}, \frac{8}{17}, -\frac{5}{17}, -\frac{6}{17}, \frac{5}{17}, \frac{3}{17}, \frac{3}{17})$ $+\frac{13}{17}e^3 \otimes e_4 + \frac{1}{34}\sqrt{858}e^2 \otimes e_5$	{12378, 12478, 13567, 14567, 23678, 24678, 357, 457}
831:3	$0, 0, 0, 0, 0, \frac{10}{159}\sqrt{33}e^{12}, \frac{1}{159}\sqrt{5830}e^{34}, \frac{10}{159}\sqrt{33}e^{16}$	$(-\frac{13}{53}, \frac{20}{53}, \frac{37}{159}, -\frac{32}{159}, \frac{7}{53}, \frac{7}{53}, \frac{5}{159}, -\frac{6}{53})$ $+\frac{1}{159}\sqrt{7590}e^2 \otimes e_7 + \frac{1}{159}\sqrt{7590}e^3 \otimes e_8$	{1258, 128, 13567, 1367, 2568, 268, 357, 37}
831:3	$0, 0, 0, 0, 0, \frac{2}{283}\sqrt{742}e^{12}, \frac{1}{849}\sqrt{209986}e^{34}, \frac{2}{849}\sqrt{32277}e^{16}$	$(-\frac{34}{283}, \frac{24}{283}, \frac{239}{849}, -\frac{175}{849}, \frac{145}{283}, -\frac{10}{283}, \frac{64}{849}, -\frac{44}{283})$ $+\frac{1}{849}\sqrt{242634}e^5 \otimes e_7 + \frac{2}{283}\sqrt{8533}e^3 \otimes e_8$	{12478, 1258, 13456, 1367, 24678, 2568, 345, 37}
831:3	$0, 0, 0, 0, 0, \frac{1}{21}\sqrt{78}e^{12}, \frac{2}{21}\sqrt{91}e^{34}, \frac{1}{21}\sqrt{78}e^{16}$	$(\frac{1}{14}, \frac{1}{7}, -\frac{5}{42}, -\frac{5}{42}, 1, \frac{3}{14}, -\frac{5}{21}, \frac{2}{7})$ $+\frac{1}{21}\sqrt{858}e^5 \otimes e_7$	{123458, 12378, 1258, 13456, 1367, 156, 234568, 23678, 2568, 345, 37, 5}
831:3	$0, 0, 0, 0, 0, \frac{1}{34}\sqrt{78}e^{12}, \frac{1}{34}\sqrt{78}e^{34}, \frac{1}{17}\sqrt{91}e^{16}$	$(\frac{25}{68}, -\frac{27}{68}, \frac{8}{17}, -\frac{5}{17}, \frac{9}{68}, -\frac{1}{34}, \frac{3}{17}, \frac{23}{68})$ $+\frac{13}{17}e^3 \otimes e_4 + \frac{1}{34}\sqrt{858}e^1 \otimes e_2$	{13567, 1367, 14567, 1467, 235678, 23678, 245678, 24678}
831:3	$0, 0, 0, 0, 0, \frac{1}{21}\sqrt{78}e^{12}, \frac{1}{21}\sqrt{78}e^{34}, \frac{2}{21}\sqrt{91}e^{16}$	$(-\frac{4}{21}, \frac{1}{7}, \frac{1}{7}, \frac{1}{7}, 1, -\frac{1}{21}, \frac{2}{7}, -\frac{5}{21})$ $+\frac{1}{21}\sqrt{858}e^5 \otimes e_8$	{12348, 12378, 128, 13456, 13567, 156, 23468, 23678, 268, 345, 357, 5}
831:3	$0, 0, 0, 0, 0, \frac{2}{421}\sqrt{798}e^{12}, \frac{4}{421}\sqrt{1482}e^{34}, \frac{4}{421}\sqrt{1482}e^{16}$	$(\frac{33}{421}, -\frac{81}{421}, \frac{99}{421}, -\frac{62}{421}, \frac{151}{421}, -\frac{48}{421}, \frac{37}{421}, -\frac{15}{421})$ $+\frac{2}{421}\sqrt{6213}e^1 \otimes e_2 + \frac{2}{421}\sqrt{6213}e^5 \otimes e_7 + \frac{2}{421}\sqrt{9177}e^3 \otimes e_8$	{13456, 1367, 24678, 2568}
831:3	$0, 0, 0, 0, 0, \frac{1}{159}\sqrt{5830}e^{12}, \frac{10}{159}\sqrt{33}e^{34}, \frac{10}{159}\sqrt{33}e^{16}$	$(\frac{7}{159}, \frac{37}{159}, -\frac{3}{53}, -\frac{3}{53}, -\frac{16}{53}, \frac{44}{159}, -\frac{6}{53}, \frac{17}{53})$ $+\frac{1}{159}\sqrt{7590}e^1 \otimes e_5 + \frac{1}{159}\sqrt{7590}e^2 \otimes e_7$	{12348, 128, 1367, 234568, 2568, 357}
831:3	$0, 0, 0, 0, 0, \frac{5}{38}\sqrt{6}e^{12}, \frac{5}{38}\sqrt{6}e^{34}, \frac{1}{19}\sqrt{55}e^{16}$	$(\frac{2}{19}, -\frac{3}{38}, \frac{1}{19}, -\frac{4}{19}, \frac{15}{38}, \frac{1}{38}, -\frac{3}{19}, \frac{5}{38})$ $+\frac{1}{38}\sqrt{210}e^5 \otimes e_8 + \frac{3}{19}\sqrt{10}e^1 \otimes e_7 + \frac{5}{19}e^3 \otimes e_4$	{23678, 24678, 357, 457}
831:3	$0, 0, 0, 0, 0, \frac{1}{153}\sqrt{1442}e^{12}, \frac{1}{153}\sqrt{5974}e^{34}, \frac{1}{153}\sqrt{5974}e^{16}$	$(\frac{1}{3}, -\frac{52}{153}, \frac{58}{153}, -\frac{8}{153}, -\frac{5}{17}, -\frac{1}{153}, \frac{50}{153}, \frac{50}{153})$ $+\frac{2}{153}\sqrt{3399}e^1 \otimes e_2 + \frac{2}{153}\sqrt{3399}e^3 \otimes e_5$	{1346, 1367, 14567, 156, 23468, 23678, 245678, 2568}
831:3	$0, 0, 0, 0, 0, \frac{4}{87}\sqrt{290}e^{12}, \frac{4}{87}\sqrt{290}e^{34}, \frac{8}{87}\sqrt{15}e^{16}$	$(-\frac{17}{87}, \frac{2}{3}, -\frac{11}{87}, -\frac{11}{87}, \frac{6}{29}, \frac{41}{87}, -\frac{22}{87}, \frac{8}{29})$ $+\frac{4}{87}\sqrt{690}e^2 \otimes e_7$	{123458, 12348, 1258, 128, 13567, 1367, 234568, 23468, 2568, 268, 357, 37}
831:3	$0, 0, 0, 0, 0, \frac{5}{33}\sqrt{6}e^{12}, \frac{2}{33}\sqrt{55}e^{34}, \frac{5}{33}\sqrt{6}e^{16}$	$(\frac{5}{22}, -\frac{1}{11}, \frac{4}{33}, -\frac{13}{66}, -\frac{2}{11}, \frac{3}{22}, -\frac{5}{66}, \frac{4}{11})$ $+\frac{1}{33}\sqrt{210}e^3 \otimes e_5 + \frac{2}{11}\sqrt{10}e^1 \otimes e_7$	{12348, 1258, 1346, 156, 23678, 245678, 37, 457}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:3	$0, 0, 0, 0, 0, \frac{8}{87}\sqrt{15}e^{12}, \frac{4}{87}\sqrt{290}e^{34}, \frac{4}{87}\sqrt{290}e^{16}$	$(-\frac{17}{87}, \frac{4}{29}, \frac{2}{3}, -\frac{11}{87}, \frac{6}{29}, -\frac{5}{87}, \frac{47}{87}, -\frac{22}{87})$ $+\frac{4}{87}\sqrt{690}e^3 \otimes e_8$	{124578, 12478, 1258, 128, 13456, 1346, 13567, 1367, 245678, 24678, 2568, 268, 34, 345, 357, 37}
831:3	$0, 0, 0, 0, 0, \frac{2}{283}\sqrt{742}e^{12}, \frac{2}{849}\sqrt{32277}e^{34}, \frac{1}{849}\sqrt{209986}e^{16}$	$(\frac{116}{849}, -\frac{85}{283}, \frac{116}{283}, -\frac{22}{283}, \frac{36}{283}, -\frac{139}{849}, \frac{94}{283}, -\frac{23}{849})$ $+\frac{1}{849}\sqrt{242634}e^1 \otimes e_2 + \frac{2}{283}\sqrt{8533}e^3 \otimes e_8$	{13456, 1346, 13567, 1367, 245678, 24678, 2568, 268}
831:3	$0, 0, 0, 0, 0, \frac{8}{147}\sqrt{15}e^{12}, \frac{4}{21}\sqrt{2}e^{34}, \frac{4}{21}\sqrt{2}e^{16}$	$(\frac{11}{147}, -\frac{4}{49}, \frac{26}{147}, -\frac{31}{147}, \frac{6}{49}, -\frac{1}{147}, -\frac{5}{147}, \frac{10}{147})$ $+\frac{16}{49}e^1 \otimes e_7 + \frac{4}{147}\sqrt{114}e^3 \otimes e_8$	{1258, 128, 13456, 1346, 245678, 24678, 357, 37}
831:3	$0, 0, 0, 0, 0, \frac{1}{21}\sqrt{78}e^{12}, \frac{1}{21}\sqrt{78}e^{34}, \frac{2}{21}\sqrt{91}e^{16}$	$(\frac{25}{42}, -\frac{9}{14}, \frac{1}{7}, \frac{1}{7}, \frac{3}{14}, -\frac{1}{21}, \frac{2}{7}, \frac{23}{42})$ $+\frac{1}{21}\sqrt{858}e^1 \otimes e_2$	{13456, 1346, 13567, 1367, 156, 16, 234568, 23468, 235678, 23678, 2568, 268}
831:3	$0, 0, 0, 0, 0, \frac{1}{75}\sqrt{246}e^{12}, \frac{1}{75}\sqrt{246}e^{34}, \frac{1}{15}\sqrt{82}e^{16}$	$(\frac{14}{75}, -\frac{9}{25}, \frac{2}{25}, \frac{2}{25}, \frac{14}{25}, -\frac{13}{75}, \frac{4}{25}, \frac{1}{75})$ $+\frac{1}{75}\sqrt{2706}e^1 \otimes e_2 + \frac{1}{75}\sqrt{2706}e^5 \otimes e_8$	{13456, 13567, 156, 23468, 23678, 268}
831:3	$0, 0, 0, 0, 0, \frac{10}{151}\sqrt{33}e^{12}, \frac{10}{151}\sqrt{33}e^{34}, \frac{4}{151}\sqrt{165}e^{16}$	$(-\frac{28}{151}, \frac{50}{151}, \frac{25}{151}, -\frac{41}{151}, \frac{60}{151}, \frac{22}{151}, -\frac{16}{151}, -\frac{6}{151})$ $+\frac{2}{151}\sqrt{1419}e^5 \otimes e_8 + \frac{2}{151}\sqrt{1914}e^2 \otimes e_7 + \frac{66}{151}e^3 \otimes e_4$	{13567, 14567, 357, 457}
831:3	$0, 0, 0, 0, 0, \frac{4}{127}\sqrt{290}e^{12}, \frac{4}{127}\sqrt{290}e^{34}, \frac{8}{127}\sqrt{15}e^{16}$	$(-\frac{17}{127}, \frac{58}{127}, \frac{29}{127}, -\frac{51}{127}, \frac{18}{127}, \frac{41}{127}, -\frac{22}{127}, \frac{24}{127})$ $+\frac{4}{127}\sqrt{690}e^2 \otimes e_7 + \frac{80}{127}e^3 \otimes e_4$	{13567, 1367, 14567, 1467, 357, 37, 457, 47}
831:3	$0, 0, 0, 0, 0, \frac{2}{191}\sqrt{246}e^{12}, \frac{2}{191}\sqrt{246}e^{34}, \frac{10}{191}\sqrt{82}e^{16}$	$(\frac{28}{191}, -\frac{54}{191}, \frac{53}{191}, -\frac{29}{191}, \frac{84}{191}, -\frac{26}{191}, \frac{24}{191}, \frac{2}{191})$ $+\frac{2}{191}\sqrt{2706}e^1 \otimes e_2 + \frac{2}{191}\sqrt{2706}e^5 \otimes e_8 + \frac{82}{191}e^3 \otimes e_4$	{13567, 14567, 23678, 24678}
831:3	$0, 0, 0, 0, 0, \frac{2}{33}\sqrt{55}e^{12}, \frac{5}{33}\sqrt{6}e^{34}, \frac{5}{33}\sqrt{6}e^{16}$	$(\frac{4}{33}, \frac{4}{33}, -\frac{1}{11}, -\frac{1}{11}, -\frac{1}{11}, \frac{8}{33}, -\frac{2}{11}, \frac{4}{11})$ $+\frac{1}{33}\sqrt{210}e^2 \otimes e_5 + \frac{2}{11}\sqrt{10}e^1 \otimes e_7$	{12348, 128, 13456, 156, 23678, 357}
831:3	$0, 0, 0, 0, 0, \frac{1}{5}\sqrt{10}e^{12}, \frac{1}{5}\sqrt{10}e^{34}, \frac{1}{5}\sqrt{10}e^{16}$	$(\frac{1}{3}, -\frac{2}{15}, -\frac{2}{15}, -\frac{2}{15}, \frac{1}{5}, \frac{1}{5}, -\frac{4}{15}, \frac{8}{15})$ $+\frac{2}{5}\sqrt{6}e^1 \otimes e_7$	{123458, 12348, 1258, 128, 13456, 1346, 156, 16, 235678, 23678, 357, 37}
831:3	$0, 0, 0, 0, 0, \frac{10}{159}\sqrt{33}e^{12}, \frac{10}{159}\sqrt{33}e^{34}, \frac{1}{159}\sqrt{5830}e^{16}$	$(\frac{7}{159}, -\frac{3}{53}, \frac{20}{53}, -\frac{3}{53}, -\frac{16}{53}, -\frac{2}{159}, \frac{17}{53}, \frac{5}{159})$ $+\frac{1}{159}\sqrt{7590}e^1 \otimes e_5 + \frac{1}{159}\sqrt{7590}e^3 \otimes e_8$	{12478, 128, 1346, 1367, 245678, 2568, 345, 357}
831:3	$0, 0, 0, 0, 0, \frac{2}{27}\sqrt{42}e^{12}, \frac{2}{27}\sqrt{42}e^{34}, \frac{2}{27}\sqrt{42}e^{16}$	$(\frac{2}{27}, \frac{4}{27}, \frac{25}{27}, -\frac{17}{27}, \frac{2}{9}, \frac{2}{9}, \frac{8}{27}, \frac{8}{27})$ $+\frac{14}{9}e^3 \otimes e_4$	{123578, 12378, 124578, 12478, 13567, 1367, 14567, 1467, 235678, 23678, 245678, 24678, 357, 37, 457, 47}
831:3	$0, 0, 0, 0, 0, \frac{2}{409}\sqrt{1442}e^{12}, \frac{2}{409}\sqrt{5974}e^{34}, \frac{2}{409}\sqrt{5974}e^{16}$	$(\frac{102}{409}, -\frac{104}{409}, \frac{87}{409}, -\frac{119}{409}, \frac{174}{409}, -\frac{2}{409}, -\frac{32}{409}, \frac{100}{409})$ $+\frac{206}{409}e^3 \otimes e_4 + \frac{4}{409}\sqrt{3399}e^1 \otimes e_2 + \frac{4}{409}\sqrt{3399}e^5 \otimes e_7$	{1367, 1467, 23678, 24678}
831:3	$0, 0, 0, 0, 0, \frac{2}{59}\sqrt{165}e^{12}, \frac{5}{59}\sqrt{33}e^{34}, \frac{5}{59}\sqrt{33}e^{16}$	$(-\frac{14}{59}, \frac{20}{59}, \frac{25}{59}, -\frac{4}{59}, -\frac{13}{59}, \frac{6}{59}, \frac{21}{59}, -\frac{8}{59})$ $+\frac{1}{59}\sqrt{1419}e^2 \otimes e_5 + \frac{1}{59}\sqrt{1914}e^3 \otimes e_8$	{12478, 128, 13456, 13567, 24678, 268, 345, 357}
831:3	$0, 0, 0, 0, 0, \frac{5}{59}\sqrt{33}e^{12}, \frac{5}{59}\sqrt{33}e^{34}, \frac{2}{59}\sqrt{165}e^{16}$	$(-\frac{14}{59}, \frac{25}{59}, -\frac{4}{59}, -\frac{4}{59}, \frac{30}{59}, \frac{11}{59}, -\frac{8}{59}, -\frac{3}{59})$ $+\frac{1}{59}\sqrt{1419}e^5 \otimes e_8 + \frac{1}{59}\sqrt{1914}e^2 \otimes e_7$	{12348, 128, 13567, 23468, 268, 357}
831:3	$0, 0, 0, 0, 0, \frac{1}{34}\sqrt{78}e^{12}, \frac{1}{17}\sqrt{91}e^{34}, \frac{1}{34}\sqrt{78}e^{16}$	$(\frac{3}{68}, \frac{3}{34}, \frac{21}{68}, -\frac{31}{68}, \frac{21}{34}, \frac{9}{68}, -\frac{5}{34}, \frac{3}{17})$ $+\frac{13}{17}e^3 \otimes e_4 + \frac{1}{34}\sqrt{858}e^5 \otimes e_7$	{12378, 12478, 1367, 1467, 23678, 24678, 37, 47}
831:3	$0, 0, 0, 0, 0, \frac{2}{283}\sqrt{742}e^{12}, \frac{1}{849}\sqrt{209986}e^{34}, \frac{2}{849}\sqrt{32277}e^{16}$	$(-\frac{34}{283}, \frac{24}{283}, \frac{152}{849}, \frac{239}{849}, -\frac{73}{283}, -\frac{10}{283}, \frac{391}{849}, -\frac{44}{283})$ $+\frac{1}{849}\sqrt{242634}e^3 \otimes e_5 + \frac{2}{283}\sqrt{8533}e^4 \otimes e_8$	{12378, 1258, 1346, 14567, 23678, 2568, 34, 457}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:3	$0, 0, 0, 0, 0, \frac{5}{33}\sqrt{6}e^{12}, \frac{5}{33}\sqrt{6}e^{34}, \frac{2}{33}\sqrt{55}e^{16}$	$(\frac{4}{33}, -\frac{1}{11}, -\frac{1}{11}, -\frac{1}{11}, \frac{5}{11}, \frac{1}{33}, -\frac{2}{11}, \frac{5}{33})$ $+\frac{1}{33}\sqrt{210}e^5 \otimes e_8 + \frac{2}{11}\sqrt{10}e^1 \otimes e_7$	{12348, 128, 13456, 156, 23678, 357}
831:3	$0, 0, 0, 0, 0, \frac{2}{13}\sqrt{10}e^{12}, \frac{2}{13}\sqrt{10}e^{34}, \frac{2}{13}\sqrt{10}e^{16}$	$(\frac{10}{39}, -\frac{4}{39}, \frac{5}{39}, -\frac{1}{3}, \frac{2}{13}, \frac{2}{13}, -\frac{8}{39}, \frac{16}{39})$ $+\frac{4}{13}\sqrt{6}e^1 \otimes e_7 + \frac{6}{13}e^3 \otimes e_4$	{235678, 23678, 245678, 24678, 357, 37, 457, 47}
831:4	$0, 0, 0, 0, 0, \frac{8}{73}\sqrt{15}e^{12}, \frac{8}{73}\sqrt{3}e^{13}, \frac{16}{73}\sqrt{6}e^{16} + \frac{8}{73}\sqrt{2}e^{23}$	$(\frac{4}{73}, -\frac{4}{73}, \frac{8}{73}, \frac{36}{73}, -\frac{28}{73}, 0, \frac{12}{73}, \frac{4}{73})$ $+\frac{24}{73}\sqrt{3}e^4 \otimes e_8 + \frac{8}{73}\sqrt{37}e^1 \otimes e_5$	{1238, 1346, 235678, 3457}
831:4	$0, 0, 0, 0, 0, \frac{24}{133}\sqrt{3}e^{12}, \frac{8}{133}\sqrt{15}e^{13}, \frac{16}{133}\sqrt{6}e^{16} + \frac{8}{133}\sqrt{6}e^{23}$	$(-\frac{4}{133}, \frac{20}{133}, -\frac{8}{133}, -\frac{36}{133}, \frac{44}{133}, \frac{16}{133}, -\frac{12}{133}, \frac{12}{133})$ $+\frac{16}{133}\sqrt{10}e^2 \otimes e_7 + \frac{8}{133}\sqrt{31}e^5 \otimes e_8 + \frac{8}{19}e^1 \otimes e_4$	{1567, 2468}
831:4	$0, 0, 0, 0, 0, \frac{1}{60}\sqrt{39}e^{12}, \frac{1}{120}\sqrt{2769}e^{13}, \frac{1}{60}\sqrt{390}e^{16} + \frac{1}{120}\sqrt{2769}e^{23}$	$(-\frac{1}{48}, \frac{21}{80}, -\frac{1}{24}, -\frac{11}{30}, \frac{11}{120}, \frac{29}{120}, -\frac{1}{16}, \frac{53}{240})$ $+\frac{1}{120}\sqrt{4290}e^3 \otimes e_4 + \frac{3}{20}\sqrt{13}e^2 \otimes e_7$	{1457, 147, 2458, 248}
831:4	$0, 0, 0, 0, 0, \frac{6}{203}\sqrt{103}e^{12}, \frac{2}{203}\sqrt{515}e^{13}, \frac{4}{203}\sqrt{206}e^{16} + \frac{1}{203}\sqrt{10918}e^{23}$	$(-\frac{19}{203}, \frac{46}{203}, -\frac{38}{203}, \frac{111}{203}, \frac{25}{203}, \frac{27}{203}, -\frac{57}{203}, \frac{8}{203})$ $+\frac{2}{203}\sqrt{4429}e^4 \otimes e_8 + \frac{2}{203}\sqrt{4738}e^2 \otimes e_7$	{14567, 1467, 2568, 268}
831:4	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{21}e^{12}, \frac{1}{14}\sqrt{21}e^{13}, \frac{1}{14}\sqrt{7}e^{16} + \frac{3}{14}\sqrt{7}e^{23}$	$(\frac{1}{14}, -\frac{3}{28}, \frac{1}{7}, \frac{15}{28}, -\frac{5}{14}, -\frac{1}{28}, \frac{3}{14}, \frac{1}{28})$ $+\frac{1}{14}\sqrt{91}e^3 \otimes e_5 + \frac{1}{7}\sqrt{21}e^4 \otimes e_8$	{12346, 138, 2347, 3678}
831:4	$0, 0, 0, 0, 0, \frac{2}{37}\sqrt{58}e^{12}, \frac{2}{37}\sqrt{29}e^{13}, \frac{2}{37}\sqrt{58}e^{16} + \frac{2}{37}\sqrt{29}e^{23}$	$(\frac{3}{37}, \frac{5}{37}, \frac{6}{37}, 1, -\frac{21}{37}, \frac{8}{37}, \frac{9}{37}, \frac{11}{37})$ $+\frac{58}{37}e^4 \otimes e_5$	{12478, 12578, 1467, 1567, 2468, 2568, 4, 5}
831:4	$0, 0, 0, 0, 0, \frac{2}{451}\sqrt{1437}e^{12}, \frac{2}{451}\sqrt{13891}e^{13},$ $\frac{16}{451}\sqrt{479}e^{16} + \frac{5}{451}\sqrt{4790}e^{23}$	$(\frac{9}{451}, -\frac{46}{451}, \frac{18}{451}, 1, \frac{85}{451}, -\frac{37}{451}, \frac{27}{451}, -\frac{28}{451})$ $+\frac{2}{451}\sqrt{87657}e^4 \otimes e_8$	{1258, 128, 1456, 146, 25678, 2678, 457, 47}
831:4	$0, 0, 0, 0, 0, \frac{16}{1063}\sqrt{230}e^{12}, \frac{8}{1063}\sqrt{2438}e^{13},$ $\frac{8}{1063}\sqrt{2967}e^{16} + \frac{8}{1063}\sqrt{3427}e^{23}$	$(-\frac{60}{1063}, \frac{26}{1063}, -\frac{120}{1063}, \frac{556}{1063}, \frac{642}{1063}, -\frac{34}{1063}, -\frac{180}{1063}, -\frac{94}{1063})$ $+\frac{104}{1063}\sqrt{69}e^5 \otimes e_8 + \frac{8}{1063}\sqrt{9683}e^4 \otimes e_7$	{123456, 1348, 2357, 3678}
831:4	$0, 0, 0, 0, 0, \frac{4}{145}\sqrt{181}e^{12}, \frac{1}{145}\sqrt{19910}e^{13}, \frac{4}{145}\sqrt{181}e^{16} + \frac{2}{145}\sqrt{362}e^{23}$	$(-\frac{12}{145}, \frac{39}{145}, -\frac{24}{145}, 1, \frac{27}{145}, \frac{27}{145}, -\frac{36}{145}, \frac{3}{29})$ $+\frac{2}{145}\sqrt{10679}e^4 \otimes e_7$	{1234568, 123468, 134, 1345, 23578, 2378, 3567, 367}
831:4	$0, 0, 0, 0, 0, \frac{2}{205}\sqrt{1691}e^{12}, \frac{1}{205}\sqrt{9790}e^{13}, \frac{2}{205}\sqrt{1691}e^{16} + \frac{6}{205}\sqrt{178}e^{23}$	$(\frac{2}{205}, \frac{21}{205}, \frac{4}{205}, \frac{19}{41}, -\frac{87}{205}, \frac{23}{205}, \frac{6}{205}, \frac{5}{41})$ $+\frac{12}{205}\sqrt{89}e^4 \otimes e_7 + \frac{2}{205}\sqrt{4895}e^1 \otimes e_5$	{12348, 1346, 235678, 357}
831:4	$0, 0, 0, 0, 0, \frac{1}{3}\sqrt{3}e^{12}, \frac{1}{3}\sqrt{6}e^{13}, \frac{1}{3}\sqrt{3}e^{16} + \frac{1}{3}\sqrt{6}e^{23}$	$(\frac{1}{6}, 0, \frac{1}{3}, -\frac{2}{3}, \frac{1}{6}, \frac{1}{6}, \frac{1}{2}, \frac{1}{3})$ $+\frac{1}{3}\sqrt{15}e^3 \otimes e_4$	{1245678, 124678, 1457, 147, 2458, 248, 456, 46}
831:4	$0, 0, 0, 0, 0, \frac{8}{1063}\sqrt{2967}e^{12}, \frac{8}{1063}\sqrt{2438}e^{13},$ $\frac{16}{1063}\sqrt{230}e^{16} + \frac{8}{1063}\sqrt{3427}e^{23}$	$(-\frac{60}{1063}, \frac{364}{1063}, -\frac{120}{1063}, \frac{556}{1063}, -\frac{372}{1063}, \frac{304}{1063}, -\frac{180}{1063}, \frac{244}{1063})$ $+\frac{104}{1063}\sqrt{69}e^2 \otimes e_5 + \frac{8}{1063}\sqrt{9683}e^4 \otimes e_7$	{1234, 134568, 2367, 3578}
831:4	$0, 0, 0, 0, 0, \frac{1}{205}\sqrt{8094}e^{12}, \frac{2}{205}\sqrt{1491}e^{13}, \frac{2}{205}\sqrt{1065}e^{16} + \frac{4}{205}\sqrt{71}e^{23}$	$(-\frac{1}{41}, \frac{56}{205}, -\frac{2}{41}, -\frac{76}{205}, \frac{24}{205}, \frac{51}{205}, -\frac{3}{41}, \frac{46}{205})$ $+\frac{2}{41}\sqrt{142}e^1 \otimes e_4 + \frac{9}{205}\sqrt{142}e^2 \otimes e_7$	{12358, 1238, 3457, 347}
831:4	$0, 0, 0, 0, 0, \frac{2}{17}\sqrt{39}e^{12}, \frac{1}{17}\sqrt{78}e^{13}, \frac{2}{17}\sqrt{39}e^{16} + \frac{2}{17}\sqrt{26}e^{23}$	$(\frac{2}{17}, \frac{1}{17}, \frac{4}{17}, -\frac{11}{17}, \frac{3}{17}, \frac{3}{17}, \frac{6}{17}, \frac{5}{17})$ $+\frac{2}{17}\sqrt{91}e^1 \otimes e_4$	{12358, 1238, 1356, 136, 2345678, 234678, 3457, 347}
831:4	$0, 0, 0, 0, 0, \frac{1}{115}\sqrt{4746}e^{12}, \frac{2}{115}\sqrt{1469}e^{13}, \frac{2}{115}\sqrt{565}e^{16} + \frac{2}{115}\sqrt{1469}e^{23}$	$(-\frac{3}{23}, \frac{68}{115}, -\frac{6}{23}, \frac{22}{115}, \frac{22}{115}, \frac{53}{115}, -\frac{9}{23}, \frac{38}{115})$ $+\frac{1}{115}\sqrt{21018}e^2 \otimes e_7$	{123, 1234, 12345, 34578, 3478, 378}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:4	$0, 0, 0, 0, 0, \frac{3}{29}\sqrt{13}e^{12}, \frac{1}{29}\sqrt{286}e^{13}, \frac{3}{29}\sqrt{13}e^{16} + \frac{1}{29}\sqrt{130}e^{23}$	$(\frac{1}{58}, \frac{2}{29}, \frac{1}{29}, \frac{1}{2}, -\frac{12}{29}, \frac{5}{58}, \frac{3}{58}, \frac{3}{29})$ $+ \frac{1}{29}\sqrt{377}e^3 \otimes e_5 + \frac{2}{29}\sqrt{78}e^4 \otimes e_7$	{125678, 157, 2458, 456}
831:4	$0, 0, 0, 0, 0, \frac{16}{451}\sqrt{479}e^{12}, \frac{2}{451}\sqrt{13891}e^{13},$ $\frac{2}{451}\sqrt{1437}e^{16} + \frac{5}{451}\sqrt{4790}e^{23}$	$(\frac{9}{451}, \frac{18}{41}, \frac{18}{451}, -\frac{281}{451}, \frac{85}{451}, \frac{207}{451}, \frac{27}{451}, \frac{216}{451})$ $+ \frac{2}{451}\sqrt{87657}e^2 \otimes e_4$	{1258, 128, 1456, 146, 25678, 2678, 457, 47}
831:4	$0, 0, 0, 0, 0, \frac{2}{343}\sqrt{4746}e^{12}, \frac{4}{343}\sqrt{1469}e^{13}, \frac{4}{343}\sqrt{565}e^{16} + \frac{4}{343}\sqrt{1469}e^{23}$	$(-\frac{30}{343}, \frac{136}{343}, -\frac{60}{343}, \frac{157}{343}, -\frac{69}{343}, \frac{106}{343}, -\frac{90}{343}, \frac{76}{343})$ $+ \frac{226}{343}e^4 \otimes e_5 + \frac{2}{343}\sqrt{21018}e^2 \otimes e_7$	{1234, 1235, 3478, 3578}
831:4	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{7}e^{12}, \frac{1}{14}\sqrt{21}e^{13}, \frac{1}{14}\sqrt{21}e^{16} + \frac{3}{14}\sqrt{7}e^{23}$	$(\frac{1}{14}, \frac{5}{28}, \frac{1}{7}, -\frac{9}{28}, -\frac{5}{14}, \frac{1}{4}, \frac{3}{14}, \frac{9}{28})$ $+ \frac{1}{14}\sqrt{91}e^3 \otimes e_5 + \frac{1}{7}\sqrt{21}e^2 \otimes e_4$	{123, 13468, 2367, 3478}
831:4	$0, 0, 0, 0, 0, \frac{3}{137}\sqrt{266}e^{12}, \frac{21}{137}\sqrt{6}e^{13}, \frac{3}{137}\sqrt{266}e^{16} + \frac{12}{137}\sqrt{35}e^{23}$	$(-\frac{2}{137}, \frac{17}{137}, -\frac{4}{137}, \frac{76}{137}, -\frac{46}{137}, \frac{15}{137}, -\frac{6}{137}, \frac{13}{137})$ $+ \frac{3}{137}\sqrt{854}e^2 \otimes e_5 + \frac{3}{137}\sqrt{854}e^4 \otimes e_8$	{128, 1456, 2678, 457}
831:4	$0, 0, 0, 0, 0, \frac{16}{73}\sqrt{6}e^{12}, \frac{8}{73}\sqrt{3}e^{13}, \frac{8}{73}\sqrt{15}e^{16} + \frac{8}{73}\sqrt{2}e^{23}$	$(\frac{4}{73}, \frac{14}{73}, \frac{8}{73}, -\frac{28}{73}, -\frac{18}{73}, \frac{18}{73}, \frac{12}{73}, \frac{22}{73})$ $+ \frac{24}{73}\sqrt{3}e^2 \otimes e_5 + \frac{8}{73}\sqrt{37}e^1 \otimes e_4$	{1238, 1356, 234678, 3457}
831:4	$0, 0, 0, 0, 0, \frac{50}{2837}\sqrt{30}e^{12}, \frac{100}{2837}\sqrt{65}e^{13},$ $\frac{50}{2837}\sqrt{82}e^{16} + \frac{275}{2837}\sqrt{14}e^{23}$	$(-\frac{75}{2837}, \frac{400}{2837}, -\frac{150}{2837}, -\frac{775}{2837}, \frac{875}{2837}, \frac{325}{2837}, -\frac{225}{2837}, \frac{250}{2837})$ $+ \frac{50}{2837}\sqrt{327}e^5 \otimes e_8 + \frac{50}{2837}\sqrt{483}e^2 \otimes e_7 + \frac{50}{2837}\sqrt{498}e^3 \otimes e_4$	{1457, 248}
831:5	$0, 0, 0, 0, 0, \frac{1}{27}\sqrt{65}e^{12}, \frac{2}{27}\sqrt{65}e^{13}, \frac{1}{27}\sqrt{78}e^{16} + \frac{1}{27}\sqrt{91}e^{34}$	$(\frac{5}{27}, -\frac{8}{27}, \frac{5}{18}, -\frac{11}{54}, \frac{5}{54}, -\frac{1}{9}, \frac{25}{54}, \frac{2}{27})$ $+ \frac{13}{27}\sqrt{2}e^1 \otimes e_2 + \frac{1}{27}\sqrt{299}e^3 \otimes e_4$	{2357, 237, 24, 245}
831:5	$0, 0, 0, 0, 0, \frac{10}{51}\sqrt{3}e^{12}, \frac{10}{51}\sqrt{11}e^{13}, \frac{5}{17}e^{16} + \frac{5}{17}e^{34}$	$(-\frac{5}{34}, \frac{10}{51}, \frac{10}{51}, -\frac{5}{17}, \frac{55}{102}, \frac{5}{102}, \frac{5}{102}, -\frac{5}{51})$ $+ \frac{5}{51}\sqrt{47}e^3 \otimes e_4 + \frac{5}{51}\sqrt{47}e^5 \otimes e_7$	{135, 147, 367, 456}
831:5	$0, 0, 0, 0, 0, \frac{4}{197}\sqrt{291}e^{12}, \frac{1}{197}\sqrt{9118}e^{13}, \frac{2}{197}\sqrt{970}e^{16} + \frac{2}{197}\sqrt{582}e^{34}$	$(\frac{28}{197}, \frac{1}{197}, -\frac{34}{197}, \frac{91}{197}, -\frac{69}{197}, \frac{29}{197}, -\frac{6}{197}, \frac{57}{197})$ $+ \frac{2}{197}\sqrt{3783}e^4 \otimes e_7 + \frac{2}{197}\sqrt{4559}e^1 \otimes e_5$	{1346, 167, 235678, 24568}
831:5	$0, 0, 0, 0, 0, \frac{6}{431}\sqrt{113}e^{12}, \frac{10}{431}\sqrt{113}e^{13}, \frac{10}{431}\sqrt{565}e^{16} + \frac{2}{431}\sqrt{3503}e^{34}$	$(\frac{81}{431}, -\frac{145}{431}, -\frac{4}{431}, \frac{21}{431}, \frac{243}{431}, -\frac{64}{431}, \frac{77}{431}, \frac{17}{431})$ $+ \frac{2}{431}\sqrt{21583}e^5 \otimes e_8 + \frac{4}{431}\sqrt{5311}e^1 \otimes e_2$	{13456, 1567, 23678, 2468}
831:5	$0, 0, 0, 0, 0, \frac{1}{61}\sqrt{2010}e^{12}, \frac{4}{61}\sqrt{134}e^{13}, \frac{1}{61}\sqrt{134}e^{16} + \frac{1}{61}\sqrt{134}e^{34}$	$(-\frac{18}{61}, \frac{46}{61}, -\frac{3}{61}, \frac{13}{61}, \frac{12}{61}, \frac{28}{61}, -\frac{21}{61}, \frac{10}{61})$ $+ \frac{7}{61}\sqrt{134}e^2 \otimes e_7$	{123, 1235, 15678, 1678, 2456, 246, 34578, 3478}
831:5	$0, 0, 0, 0, 0, \frac{5}{647}\sqrt{3570}e^{12}, \frac{170}{647}\sqrt{2}e^{13}, \frac{5}{647}\sqrt{986}e^{16} + \frac{5}{647}\sqrt{3502}e^{34}$	$(-\frac{60}{647}, \frac{278}{647}, -\frac{87}{647}, \frac{245}{647}, -\frac{180}{647}, \frac{218}{647}, -\frac{147}{647}, \frac{158}{647})$ $+ \frac{20}{647}\sqrt{561}e^4 \otimes e_5 + \frac{5}{647}\sqrt{10166}e^2 \otimes e_7$	{1234, 14678, 256, 3578}
831:5	$0, 0, 0, 0, 0, \frac{1}{310}\sqrt{19522}e^{12}, \frac{3}{310}\sqrt{2270}e^{13}, \frac{1}{310}\sqrt{681}e^{16} + \frac{1}{310}\sqrt{681}e^{34}$	$(-\frac{19}{124}, \frac{131}{310}, \frac{263}{620}, -\frac{191}{620}, -\frac{48}{155}, \frac{167}{620}, \frac{42}{155}, \frac{18}{155})$ $+ \frac{2}{155}\sqrt{3859}e^3 \otimes e_4 + \frac{3}{310}\sqrt{6810}e^2 \otimes e_5$	{123, 1247, 2367, 246}
831:5	$0, 0, 0, 0, 0, \frac{2}{499}\sqrt{29739}e^{12}, \frac{1}{499}\sqrt{73270}e^{13},$ $\frac{2}{499}\sqrt{33187}e^{16} + \frac{4}{499}\sqrt{2586}e^{34}$	$(\frac{122}{499}, -\frac{43}{499}, \frac{58}{499}, \frac{143}{499}, -\frac{309}{499}, \frac{79}{499}, \frac{180}{499}, \frac{201}{499})$ $+ \frac{2}{499}\sqrt{87062}e^1 \otimes e_5$	{12348, 1278, 136, 1467, 2345678, 2568, 357, 45}
831:5	$0, 0, 0, 0, 0, \frac{2}{109}\sqrt{210}e^{12}, \frac{2}{109}\sqrt{966}e^{13}, \frac{2}{109}\sqrt{182}e^{16} + \frac{2}{109}\sqrt{182}e^{34}$	$(\frac{27}{109}, -\frac{29}{109}, \frac{39}{218}, \frac{11}{218}, -\frac{73}{218}, -\frac{2}{109}, \frac{93}{218}, \frac{25}{109})$ $+ \frac{2}{109}\sqrt{1358}e^1 \otimes e_2 + \frac{2}{109}\sqrt{1358}e^3 \otimes e_5$	{138, 14578, 2347, 25}
831:5	$0, 0, 0, 0, 0, \frac{4}{115}\sqrt{143}e^{12}, \frac{3}{115}\sqrt{1430}e^{13}, \frac{2}{115}\sqrt{429}e^{16} + \frac{2}{115}\sqrt{429}e^{34}$	$(-\frac{2}{23}, \frac{29}{115}, -\frac{18}{115}, \frac{27}{115}, 1, \frac{19}{115}, -\frac{28}{115}, \frac{9}{115})$ $+ \frac{2}{115}\sqrt{6721}e^5 \otimes e_7$	{1234568, 12678, 135, 147, 23478, 258, 367, 456}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:5	$0, 0, 0, 0, 0, \frac{4}{1225}\sqrt{16842}e^{12}, \frac{2}{1225}\sqrt{55739}e^{13},$ $\frac{4}{1225}\sqrt{6817}e^{16} + \frac{2}{1225}\sqrt{89423}e^{34}$	$(-\frac{81}{1225}, \frac{19}{49}, -\frac{204}{1225}, \frac{517}{1225}, -\frac{327}{1225}, \frac{394}{1225}, -\frac{57}{245}, \frac{313}{1225})$ $+ \frac{2}{1225}\sqrt{194485}e^2 \otimes e_5 + \frac{2}{1225}\sqrt{233382}e^4 \otimes e_7$	{1234, 127, 3578, 458}
831:5	$0, 0, 0, 0, 0, \frac{1}{19}\sqrt{39}e^{12}, \frac{4}{19}\sqrt{6}e^{13}, \frac{1}{19}\sqrt{51}e^{16} + \frac{6}{19}e^{34}$	$(\frac{3}{38}, 0, \frac{6}{19}, -\frac{3}{19}, -\frac{15}{38}, \frac{3}{38}, \frac{15}{38}, \frac{3}{19})$ $+ \frac{1}{19}\sqrt{129}e^3 \otimes e_4 + \frac{1}{19}\sqrt{174}e^1 \otimes e_5$	{136, 1467, 357, 45}
831:5	$0, 0, 0, 0, 0, \frac{160}{613}e^{12}, \frac{32}{613}\sqrt{62}e^{13}, \frac{16}{613}\sqrt{42}e^{16} + \frac{16}{613}\sqrt{42}e^{34}$	$(-\frac{136}{613}, \frac{224}{613}, \frac{104}{613}, -\frac{152}{613}, \frac{208}{613}, \frac{88}{613}, -\frac{32}{613}, -\frac{48}{613})$ $+ \frac{16}{613}\sqrt{298}e^5 \otimes e_8 + \frac{16}{613}\sqrt{430}e^2 \otimes e_7 + \frac{32}{613}\sqrt{95}e^3 \otimes e_4$	{1238, 2468}
831:5	$0, 0, 0, 0, 0, \frac{3}{272}\sqrt{210}e^{12}, \frac{63}{272}\sqrt{2}e^{13}, \frac{3}{272}\sqrt{1533}e^{16} + \frac{3}{272}\sqrt{1533}e^{34}$	$(-\frac{53}{544}, \frac{31}{272}, \frac{167}{544}, -\frac{211}{544}, \frac{167}{272}, \frac{9}{544}, \frac{57}{272}, -\frac{11}{136})$ $+ \frac{3}{272}\sqrt{5502}e^5 \otimes e_8 + \frac{63}{272}\sqrt{10}e^3 \otimes e_4$	{1238, 12478, 23678, 2468}
831:5	$0, 0, 0, 0, 0, \frac{2}{423}\sqrt{2227}e^{12}, \frac{1}{423}\sqrt{35894}e^{13},$ $\frac{2}{423}\sqrt{4847}e^{16} + \frac{4}{423}\sqrt{1965}e^{34}$	$(\frac{2}{141}, \frac{23}{141}, -\frac{28}{423}, \frac{109}{423}, -\frac{53}{423}, \frac{25}{141}, -\frac{22}{423}, \frac{9}{47})$ $+ \frac{2}{423}\sqrt{12707}e^3 \otimes e_5 + \frac{2}{423}\sqrt{12707}e^4 \otimes e_7$	{134, 157, 2378, 2458}
831:5	$0, 0, 0, 0, 0, \frac{6}{431}\sqrt{113}e^{12}, \frac{10}{431}\sqrt{113}e^{13}, \frac{2}{431}\sqrt{3503}e^{16} + \frac{10}{431}\sqrt{565}e^{34}$	$(-\frac{13}{431}, \frac{43}{431}, -\frac{98}{431}, \frac{115}{431}, \frac{243}{431}, \frac{30}{431}, -\frac{111}{431}, \frac{17}{431})$ $+ \frac{2}{431}\sqrt{21583}e^5 \otimes e_8 + \frac{4}{431}\sqrt{5311}e^4 \otimes e_7$	{13456, 1567, 23678, 2468}
831:5	$0, 0, 0, 0, 0, \frac{31}{2669}\sqrt{210}e^{12}, \frac{31}{2669}\sqrt{1090}e^{13},$ $\frac{62}{2669}\sqrt{233}e^{16} + \frac{93}{2669}\sqrt{6}e^{34}$	$(\frac{310}{2669}, -\frac{651}{2669}, \frac{465}{2669}, -\frac{496}{2669}, \frac{930}{2669}, -\frac{341}{2669}, \frac{775}{2669}, -\frac{31}{2669})$ $+ \frac{310}{2669}\sqrt{14}e^5 \otimes e_8 + \frac{31}{2669}\sqrt{1506}e^3 \otimes e_4 + \frac{62}{2669}\sqrt{493}e^1 \otimes e_2$	{2357, 245}
831:5	$0, 0, 0, 0, 0, \frac{6}{475}\sqrt{503}e^{12}, \frac{1}{475}\sqrt{141846}e^{13},$ $\frac{2}{475}\sqrt{15593}e^{16} + \frac{2}{475}\sqrt{33198}e^{34}$	$(\frac{26}{475}, \frac{21}{95}, -\frac{186}{475}, \frac{343}{475}, \frac{87}{475}, \frac{131}{475}, -\frac{32}{95}, \frac{157}{475})$ $+ \frac{2}{475}\sqrt{97582}e^4 \otimes e_7$	{134, 1345, 157, 17, 23578, 2378, 2458, 248}
831:5	$0, 0, 0, 0, 0, \frac{30}{1037}\sqrt{61}e^{12}, \frac{15}{1037}\sqrt{838}e^{13}, \frac{90}{1037}\sqrt{2}e^{16} + \frac{30}{1037}\sqrt{67}e^{34}$	$(\frac{60}{1037}, -\frac{165}{1037}, \frac{90}{1037}, -\frac{135}{1037}, \frac{375}{1037}, -\frac{105}{1037}, \frac{150}{1037}, -\frac{45}{1037})$ $+ \frac{30}{1037}\sqrt{161}e^3 \otimes e_4 + \frac{30}{1037}\sqrt{161}e^5 \otimes e_7 + \frac{30}{1037}\sqrt{170}e^1 \otimes e_2$	{237, 245}
831:5	$0, 0, 0, 0, 0, \frac{6}{29}\sqrt{5}e^{12}, \frac{6}{29}e^{13}, \frac{12}{29}e^{16} + \frac{12}{29}e^{34}$	$(-\frac{6}{29}, \frac{11}{29}, -\frac{1}{29}, 0, \frac{17}{29}, \frac{5}{29}, -\frac{7}{29}, -\frac{1}{29})$ $+ \frac{12}{29}\sqrt{3}e^2 \otimes e_7 + \frac{6}{29}\sqrt{13}e^5 \otimes e_8$	{1238, 1567, 2468, 3457}
831:5	$0, 0, 0, 0, 0, \frac{3}{803}\sqrt{12190}e^{12}, \frac{2}{803}\sqrt{24115}e^{13},$ $\frac{2}{803}\sqrt{16165}e^{16} + \frac{12}{803}\sqrt{265}e^{34}$	$(-\frac{35}{803}, \frac{208}{803}, -\frac{2}{73}, \frac{160}{803}, -\frac{300}{803}, \frac{173}{803}, -\frac{57}{803}, \frac{138}{803})$ $+ \frac{1}{803}\sqrt{173310}e^2 \otimes e_7 + \frac{2}{803}\sqrt{51410}e^1 \otimes e_5$	{12348, 1467, 2568, 357}
831:5	$0, 0, 0, 0, 0, \frac{4}{115}\sqrt{143}e^{12}, \frac{3}{115}\sqrt{1430}e^{13}, \frac{2}{115}\sqrt{429}e^{16} + \frac{2}{115}\sqrt{429}e^{34}$	$(-\frac{2}{23}, \frac{29}{115}, \frac{76}{115}, -\frac{67}{115}, \frac{21}{115}, \frac{19}{115}, \frac{66}{115}, \frac{9}{115})$ $+ \frac{2}{115}\sqrt{6721}e^3 \otimes e_4$	{13, 135, 1457, 147, 3567, 367, 456, 46}
831:5	$0, 0, 0, 0, 0, \frac{2}{385}\sqrt{2758}e^{12}, \frac{3}{385}\sqrt{5910}e^{13}, \frac{4}{385}\sqrt{591}e^{16} + \frac{4}{385}\sqrt{591}e^{34}$	$(-\frac{20}{77}, \frac{191}{385}, \frac{94}{385}, -\frac{103}{385}, \frac{39}{385}, \frac{13}{55}, -\frac{6}{385}, -\frac{9}{385})$ $+ \frac{2}{385}\sqrt{16351}e^3 \otimes e_4 + \frac{6}{385}\sqrt{1970}e^2 \otimes e_7$	{123, 1235, 2456, 246}
831:5	$0, 0, 0, 0, 0, \frac{3}{721}\sqrt{4602}e^{12}, \frac{108}{721}\sqrt{13}e^{13}, \frac{45}{721}\sqrt{26}e^{16} + \frac{3}{721}\sqrt{6942}e^{34}$	$(-\frac{120}{721}, \frac{334}{721}, \frac{1}{7}, -\frac{9}{721}, -\frac{248}{721}, \frac{214}{721}, -\frac{17}{721}, \frac{94}{721})$ $+ \frac{12}{721}\sqrt{1599}e^3 \otimes e_5 + \frac{3}{721}\sqrt{24414}e^2 \otimes e_7$	{1234, 145678, 256, 378}
831:5	$0, 0, 0, 0, 0, \frac{1}{27}\sqrt{65}e^{12}, \frac{2}{27}\sqrt{65}e^{13}, \frac{1}{27}\sqrt{78}e^{16} + \frac{1}{27}\sqrt{91}e^{34}$	$(\frac{5}{27}, -\frac{8}{27}, -\frac{4}{27}, \frac{2}{9}, \frac{14}{27}, -\frac{9}{27}, \frac{1}{27}, \frac{2}{27})$ $+ \frac{13}{27}\sqrt{2}e^1 \otimes e_2 + \frac{1}{27}\sqrt{299}e^5 \otimes e_7$	{13458, 178, 237, 245}
831:5	$0, 0, 0, 0, 0, \frac{6}{475}\sqrt{503}e^{12}, \frac{1}{475}\sqrt{141846}e^{13},$ $\frac{2}{475}\sqrt{15593}e^{16} + \frac{2}{475}\sqrt{33198}e^{34}$	$(\frac{26}{475}, \frac{21}{95}, \frac{202}{475}, -\frac{9}{95}, -\frac{301}{475}, \frac{131}{475}, \frac{12}{25}, \frac{157}{475})$ $+ \frac{2}{475}\sqrt{97582}e^3 \otimes e_5$	{12368, 1245678, 134, 157, 2378, 2458, 3467, 56}
831:5	$0, 0, 0, 0, 0, \frac{3}{122}\sqrt{1490}e^{12}, \frac{1}{122}\sqrt{3874}e^{13}, \frac{1}{122}\sqrt{2831}e^{16} + \frac{1}{122}\sqrt{2831}e^{34}$	$(-\frac{33}{244}, \frac{77}{122}, \frac{57}{244}, \frac{31}{244}, -\frac{36}{244}, \frac{121}{61}, \frac{6}{61}, \frac{22}{61})$ $+ \frac{1}{122}\sqrt{28906}e^2 \otimes e_5$	{12378, 1248, 134567, 156, 2368, 24678, 345, 57}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:5	$0, 0, 0, 0, 0, \frac{6}{475}\sqrt{503}e^{12}, \frac{1}{475}\sqrt{141846}e^{13},$ $\frac{2}{475}\sqrt{33198}e^{16} + \frac{2}{475}\sqrt{15593}e^{34}$	$(\frac{44}{95}, -\frac{283}{475}, \frac{8}{475}, \frac{149}{475}, \frac{87}{475}, -\frac{63}{475}, \frac{12}{25}, \frac{157}{475})$ $+ \frac{2}{475}\sqrt{97582}e^1 \otimes e_2$	{13458, 1348, 1578, 178, 2357, 237, 24, 245}
831:5	$0, 0, 0, 0, 0, \frac{2}{479}\sqrt{13002}e^{12}, \frac{1}{479}\sqrt{43734}e^{13},$ $\frac{3}{479}\sqrt{1970}e^{16} + \frac{4}{479}\sqrt{23246}e^{34}$	$(\frac{103}{479}, \frac{51}{479}, -\frac{45}{479}, \frac{302}{479}, -\frac{289}{479}, \frac{154}{479}, \frac{58}{479}, \frac{257}{479})$ $+ \frac{48}{479}\sqrt{197}e^4 \otimes e_5$	{12347, 125, 135678, 1468, 2346, 2567, 358, 478}
831:5	$0, 0, 0, 0, 0, \frac{2}{41}\sqrt{105}e^{12}, \frac{14}{41}\sqrt{3}e^{13}, \frac{12}{41}\sqrt{7}e^{16} + \frac{12}{41}\sqrt{7}e^{34}$	$(-\frac{2}{41}, \frac{3}{41}, \frac{3}{41}, -\frac{4}{41}, 1, \frac{1}{41}, \frac{1}{41}, -\frac{1}{41})$ $+ \frac{6}{41}\sqrt{77}e^5 \otimes e_8$	{12378, 1248, 134567, 156, 2368, 24678, 345, 57}
831:6	$0, 0, 0, 0, 0, \frac{2}{1657}\sqrt{54730}e^{12}, \frac{4}{1657}\sqrt{59361}e^{13},$ $\frac{6}{1657}\sqrt{5473}e^{26} + \frac{2}{1657}\sqrt{69465}e^{34}$	$(\frac{260}{1657}, -\frac{61}{1657}, \frac{490}{1657}, -\frac{352}{1657}, -\frac{582}{1657}, \frac{199}{1657}, \frac{750}{1657}, \frac{138}{1657})$ $+ \frac{2}{1657}\sqrt{295963}e^3 \otimes e_4 + \frac{32}{1657}\sqrt{1263}e^1 \otimes e_5$	{23567, 2456, 357, 45}
831:6	$0, 0, 0, 0, 0, \frac{1}{521}\sqrt{143002}e^{12}, \frac{2}{521}\sqrt{39410}e^{13},$ $\frac{2}{521}\sqrt{12386}e^{26} + \frac{2}{521}\sqrt{7319}e^{34}$	$(\frac{254}{521}, -\frac{65}{521}, -\frac{8}{521}, \frac{132}{521}, -\frac{309}{521}, \frac{189}{521}, \frac{246}{521}, \frac{124}{521})$ $+ \frac{1}{521}\sqrt{467290}e^1 \otimes e_5$	{12348, 1278, 13468, 1678, 23567, 2456, 357, 45}
831:6	$0, 0, 0, 0, 0, \frac{6}{857}\sqrt{2123}e^{12}, \frac{1}{857}\sqrt{101518}e^{13},$ $\frac{2}{857}\sqrt{21230}e^{26} + \frac{2}{857}\sqrt{12545}e^{34}$	$(-\frac{41}{857}, \frac{112}{857}, -\frac{40}{857}, \frac{223}{857}, -\frac{234}{857}, \frac{71}{857}, -\frac{81}{857}, \frac{183}{857})$ $+ \frac{1}{857}\sqrt{126222}e^1 \otimes e_5 + \frac{1}{857}\sqrt{168682}e^2 \otimes e_7$	{12348, 1678, 2456, 357}
831:6	$0, 0, 0, 0, 0, \frac{2}{1249}\sqrt{76465}e^{12}, \frac{2}{1249}\sqrt{64902}e^{13},$ $\frac{6}{1249}\sqrt{12309}e^{26} + \frac{2}{1249}\sqrt{38046}e^{34}$	$(-\frac{214}{1249}, \frac{287}{1249}, \frac{553}{1249}, -\frac{193}{1249}, -\frac{459}{1249}, \frac{73}{1249}, \frac{339}{1249}, \frac{360}{1249})$ $+ \frac{4}{1249}\sqrt{42895}e^3 \otimes e_4 + \frac{8}{1249}\sqrt{14547}e^2 \otimes e_5$	{2367, 246, 357, 45}
831:6	$0, 0, 0, 0, 0, \frac{8}{263}\sqrt{345}e^{12}, \frac{4}{263}\sqrt{1909}e^{13}, \frac{4}{263}\sqrt{2369}e^{26} + \frac{92}{263}\sqrt{2}e^{34}$	$(-\frac{95}{263}, \frac{100}{263}, \frac{11}{263}, \frac{94}{263}, \frac{48}{263}, \frac{5}{263}, -\frac{84}{263}, \frac{105}{263})$ $+ \frac{4}{263}\sqrt{4945}e^2 \otimes e_7$	{123458, 12348, 15678, 1678, 2456, 246, 357, 37}
831:6	$0, 0, 0, 0, 0, \frac{2}{31}\sqrt{38}e^{12}, \frac{4}{31}\sqrt{57}e^{13}, \frac{2}{31}\sqrt{57}e^{26} + \frac{2}{31}\sqrt{57}e^{34}$	$(-\frac{4}{31}, \frac{5}{31}, -\frac{3}{31}, \frac{9}{31}, 1, \frac{1}{31}, -\frac{7}{31}, \frac{6}{31})$ $+ \frac{10}{31}\sqrt{19}e^5 \otimes e_7$	{12356, 12467, 135, 147, 23478, 258, 34678, 568}
831:6	$0, 0, 0, 0, 0, \frac{2}{521}\sqrt{12386}e^{12}, \frac{2}{521}\sqrt{7319}e^{13},$ $\frac{1}{521}\sqrt{143002}e^{26} + \frac{2}{521}\sqrt{39410}e^{34}$	$(\frac{88}{521}, -\frac{65}{521}, -\frac{8}{521}, -\frac{34}{521}, 1, \frac{23}{521}, \frac{80}{521}, -\frac{42}{521})$ $+ \frac{1}{521}\sqrt{467290}e^5 \otimes e_8$	{12378, 1248, 13678, 1468, 23456, 2567, 345, 57}
831:6	$0, 0, 0, 0, 0, \frac{6}{1277}\sqrt{4379}e^{12}, \frac{6}{1277}\sqrt{11078}e^{13},$ $\frac{6}{1277}\sqrt{8265}e^{26} + \frac{12}{1277}\sqrt{145}e^{34}$	$(-\frac{368}{1277}, \frac{399}{1277}, \frac{245}{1277}, \frac{185}{1277}, -\frac{277}{1277}, \frac{31}{1277}, -\frac{123}{1277}, \frac{430}{1277})$ $+ \frac{6}{1277}\sqrt{12818}e^3 \otimes e_5 + \frac{6}{1277}\sqrt{19430}e^2 \otimes e_7$	{12348, 15678, 2456, 37}
831:6	$0, 0, 0, 0, 0, \frac{4}{1321}\sqrt{874}e^{12}, \frac{20}{1321}\sqrt{874}e^{13},$ $\frac{2}{1321}\sqrt{96577}e^{26} + \frac{22}{1321}\sqrt{437}e^{34}$	$(-\frac{16}{1321}, -\frac{37}{1321}, \frac{392}{1321}, -\frac{482}{1321}, \frac{784}{1321}, -\frac{53}{1321}, \frac{376}{1321}, -\frac{90}{1321})$ $+ \frac{152}{1321}\sqrt{46}e^5 \otimes e_8 + \frac{2}{1321}\sqrt{234669}e^3 \otimes e_4$	{2378, 248, 3678, 468}
831:6	$0, 0, 0, 0, 0, \frac{2}{441}\sqrt{5123}e^{12}, \frac{2}{441}\sqrt{19838}e^{13},$ $\frac{2}{441}\sqrt{3597}e^{26} + \frac{2}{441}\sqrt{6322}e^{34}$	$(-\frac{94}{441}, \frac{55}{441}, \frac{13}{49}, -\frac{101}{441}, \frac{241}{441}, -\frac{13}{147}, \frac{23}{441}, \frac{16}{441})$ $+ \frac{20}{441}\sqrt{218}e^3 \otimes e_4 + \frac{20}{441}\sqrt{218}e^5 \otimes e_7$	{12356, 12467, 135, 147}
831:6	$0, 0, 0, 0, 0, \frac{6}{13}\sqrt{3}e^{12}, \frac{2}{13}\sqrt{3}e^{13}, \frac{6}{13}\sqrt{3}e^{26} + \frac{2}{13}\sqrt{3}e^{34}$	$(-\frac{3}{26}, \frac{4}{13}, \frac{7}{26}, \frac{3}{13}, -\frac{8}{13}, \frac{5}{26}, \frac{2}{13}, \frac{1}{2})$ $+ \frac{6}{13}\sqrt{7}e^2 \otimes e_5$	{123478, 128, 1345678, 1568, 236, 2467, 35, 457}
831:6	$0, 0, 0, 0, 0, \frac{2}{683}\sqrt{14135}e^{12}, \frac{4}{683}\sqrt{3598}e^{13},$ $\frac{1}{683}\sqrt{117706}e^{26} + \frac{2}{683}\sqrt{514}e^{34}$	$(-\frac{134}{683}, \frac{103}{683}, -\frac{20}{683}, \frac{92}{683}, \frac{329}{683}, -\frac{31}{683}, -\frac{154}{683}, \frac{72}{683})$ $+ \frac{1}{683}\sqrt{123874}e^5 \otimes e_8 + \frac{2}{683}\sqrt{45489}e^2 \otimes e_7$	{12348, 1678, 2456, 357}
831:6	$0, 0, 0, 0, 0, \frac{4}{51}\sqrt{7}e^{12}, \frac{4}{51}\sqrt{91}e^{13}, \frac{4}{51}\sqrt{7}e^{26} + \frac{4}{51}\sqrt{91}e^{34}$	$(-\frac{2}{51}, \frac{4}{17}, \frac{25}{51}, -\frac{1}{17}, -\frac{31}{51}, \frac{10}{51}, \frac{23}{51}, \frac{22}{51})$ $+ \frac{4}{51}\sqrt{287}e^3 \otimes e_5$	{12368, 1245678, 138, 14578, 2347, 25, 3467, 56}
831:6	$0, 0, 0, 0, 0, \frac{14}{507}\sqrt{87}e^{12}, \frac{2}{507}\sqrt{15834}e^{13},$ $\frac{2}{507}\sqrt{12093}e^{26} + \frac{4}{507}\sqrt{1914}e^{34}$	$(-\frac{58}{169}, \frac{47}{169}, \frac{47}{169}, -\frac{11}{169}, \frac{19}{169}, -\frac{11}{169}, -\frac{11}{169}, \frac{36}{169})$ $+ \frac{2}{507}\sqrt{15486}e^3 \otimes e_4 + \frac{8}{507}\sqrt{1479}e^2 \otimes e_7$	{2456, 246, 357, 37}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:6	$0, 0, 0, 0, 0, \frac{2}{31}\sqrt{38}e^{12}, \frac{4}{31}\sqrt{57}e^{13}, \frac{2}{31}\sqrt{57}e^{26} + \frac{2}{31}\sqrt{57}e^{34}$	$(-\frac{4}{31}, \frac{5}{31}, \frac{22}{31}, -\frac{16}{31}, \frac{6}{31}, \frac{1}{31}, \frac{18}{31}, \frac{6}{31})$ $+ \frac{10}{31}\sqrt{19}e^3 \otimes e_4$	{12356, 1236, 124567, 12467, 13, 135, 1457, 147}
831:6	$0, 0, 0, 0, 0, \frac{1}{37}\sqrt{62}e^{12}, \frac{1}{37}\sqrt{166}e^{13}, \frac{1}{37}\sqrt{182}e^{26} + \frac{2}{37}\sqrt{11}e^{34}$	$(-\frac{9}{37}, \frac{6}{37}, \frac{6}{37}, -\frac{3}{37}, \frac{12}{37}, -\frac{3}{37}, -\frac{3}{37}, \frac{3}{37})$ $+ \frac{1}{37}\sqrt{286}e^2 \otimes e_7 + \frac{2}{37}\sqrt{41}e^3 \otimes e_4 + \frac{5}{37}\sqrt{6}e^5 \otimes e_8$	{2456, 357}
831:6	$0, 0, 0, 0, 0, \frac{2}{31}\sqrt{57}e^{12}, \frac{2}{31}\sqrt{57}e^{13}, \frac{2}{31}\sqrt{38}e^{26} + \frac{4}{31}\sqrt{57}e^{34}$	$(\frac{6}{31}, \frac{5}{31}, -\frac{3}{31}, \frac{19}{31}, -\frac{19}{31}, \frac{11}{31}, \frac{3}{31}, \frac{16}{31})$ $+ \frac{10}{31}\sqrt{19}e^4 \otimes e_5$	{12347, 125, 13467, 156, 23568, 24678, 358, 478}
831:7	$0, 0, 0, 0, 0, \frac{28}{485}\sqrt{38}e^{12}, \frac{28}{485}\sqrt{21}e^{13} + \frac{14}{485}\sqrt{10}e^{24}, \frac{28}{485}\sqrt{37}e^{16}$	$(\frac{21}{485}, \frac{21}{485}, -\frac{77}{485}, -\frac{77}{485}, \frac{161}{485}, \frac{42}{485}, -\frac{56}{485}, \frac{63}{485})$ $+ \frac{14}{485}\sqrt{123}e^5 \otimes e_8 + \frac{14}{485}\sqrt{199}e^1 \otimes e_3 + \frac{14}{97}\sqrt{5}e^2 \otimes e_4$	{128, 1456, 2368, 345}
831:7	$0, 0, 0, 0, 0, \frac{28}{485}\sqrt{38}e^{12}, \frac{28}{485}\sqrt{21}e^{13} + \frac{14}{485}\sqrt{10}e^{24}, \frac{28}{485}\sqrt{37}e^{16}$	$(\frac{21}{485}, \frac{21}{485}, -\frac{77}{485}, -\frac{77}{485}, \frac{161}{485}, \frac{42}{485}, -\frac{56}{485}, \frac{63}{485})$ $+ \frac{14}{485}\sqrt{123}e^5 \otimes e_8 + \frac{14}{485}\sqrt{199}e^1 \otimes e_3 - \frac{14}{97}\sqrt{5}e^2 \otimes e_4$	{128, 1456, 2368, 345}
831:7	$0, 0, 0, 0, 0, \frac{1}{487}\sqrt{2442}e^{12}, \frac{1}{487}\sqrt{82214}e^{13} + \frac{1}{487}\sqrt{160358}e^{24}, \frac{14}{487}\sqrt{814}e^{16}$	$(-\frac{5}{487}, -\frac{107}{487}, \frac{188}{487}, \frac{290}{487}, \frac{87}{487}, -\frac{112}{487}, \frac{183}{487}, -\frac{117}{487})$ $+ \frac{20}{487}\sqrt{814}e^4 \otimes e_8$	{12456, 1246, 158, 18, 234, 2345, 3568, 368}
831:7	$0, 0, 0, 0, 0, \frac{2}{499}\sqrt{33187}e^{12}, \frac{1}{499}\sqrt{73270}e^{13} + \frac{4}{499}\sqrt{2586}e^{24}, \frac{2}{499}\sqrt{29739}e^{16}$	$(\frac{122}{499}, -\frac{11}{499}, \frac{10}{499}, \frac{143}{499}, -\frac{309}{499}, \frac{111}{499}, \frac{132}{499}, \frac{233}{499})$ $+ \frac{2}{499}\sqrt{87062}e^1 \otimes e_5$	{1238, 12478, 1346, 167, 2345678, 2568, 357, 45}
831:7	$0, 0, 0, 0, 0, \frac{1}{122}\sqrt{2831}e^{12}, \frac{1}{122}\sqrt{3874}e^{13} + \frac{1}{122}\sqrt{2831}e^{24}, \frac{3}{122}\sqrt{1490}e^{16}$	$(-\frac{33}{244}, \frac{3}{61}, \frac{19}{244}, \frac{31}{244}, 1, -\frac{21}{244}, \frac{43}{244}, -\frac{27}{122})$ $+ \frac{1}{122}\sqrt{28906}e^5 \otimes e_8$	{12378, 1248, 134567, 156, 23468, 2678, 35, 457}
831:7	$0, 0, 0, 0, 0, \frac{10}{79}\sqrt{3}e^{12}, \frac{10}{79}e^{13} + \frac{5}{79}\sqrt{74}e^{24}, \frac{5}{79}\sqrt{70}e^{16}$	$(-\frac{5}{79}, -\frac{5}{79}, \frac{35}{79}, \frac{35}{79}, \frac{15}{79}, -\frac{10}{79}, \frac{30}{79}, -\frac{15}{79})$ $+ \frac{10}{79}\sqrt{43}e^4 \otimes e_8 + \frac{5}{79}\sqrt{102}e^3 \otimes e_5$	{12346, 138, 245, 568}
831:7	$0, 0, 0, 0, 0, \frac{45}{721}\sqrt{26}e^{12}, \frac{108}{721}\sqrt{13}e^{13} + \frac{3}{721}\sqrt{6942}e^{24}, \frac{3}{721}\sqrt{4602}e^{16}$	$(-\frac{120}{721}, \frac{66}{721}, \frac{177}{721}, -\frac{9}{721}, \frac{408}{721}, -\frac{54}{721}, \frac{57}{721}, -\frac{174}{721})$ $+ \frac{12}{721}\sqrt{1599}e^5 \otimes e_7 + \frac{3}{721}\sqrt{24414}e^3 \otimes e_8$	{123456, 1478, 237, 568}
831:7	$0, 0, 0, 0, 0, \frac{3}{587}\sqrt{9690}e^{12}, \frac{1}{587}\sqrt{65246}e^{13} + \frac{9}{587}\sqrt{646}e^{24}, \frac{18}{587}\sqrt{323}e^{16}$	$(\frac{189}{587}, -\frac{141}{587}, -\frac{134}{587}, \frac{196}{587}, -\frac{127}{587}, \frac{48}{587}, \frac{55}{587}, \frac{237}{587})$ $+ \frac{2}{587}\sqrt{32623}e^4 \otimes e_5 + \frac{2}{587}\sqrt{50065}e^1 \otimes e_3$	{1248, 156, 23468, 35}
831:7	$0, 0, 0, 0, 0, \frac{5}{647}\sqrt{3502}e^{12}, \frac{170}{647}\sqrt{2}e^{13} + \frac{5}{647}\sqrt{986}e^{24}, \frac{5}{647}\sqrt{3570}e^{16}$	$(-\frac{192}{647}, \frac{274}{647}, \frac{315}{647}, -\frac{151}{647}, \frac{84}{647}, \frac{82}{647}, \frac{123}{647}, -\frac{110}{647})$ $+ \frac{20}{647}\sqrt{561}e^2 \otimes e_4 + \frac{5}{647}\sqrt{10166}e^3 \otimes e_8$	{13456, 1346, 2568, 268}
831:7	$0, 0, 0, 0, 0, \frac{4}{1167}\sqrt{9686}e^{12}, \frac{4}{1167}\sqrt{1914}e^{13} + \frac{8}{1167}\sqrt{2581}e^{24}, \frac{80}{1167}\sqrt{58}e^{16}$	$(\frac{112}{1167}, -\frac{66}{389}, \frac{60}{389}, \frac{490}{1167}, -\frac{352}{1167}, -\frac{86}{1167}, \frac{292}{1167}, \frac{26}{1167})$ $+ \frac{4}{1167}\sqrt{28942}e^1 \otimes e_5 + \frac{4}{1167}\sqrt{30218}e^4 \otimes e_8$	{12378, 13467, 25678, 457}
831:7	$0, 0, 0, 0, 0, \frac{34}{1585}\sqrt{422}e^{12}, \frac{34}{1585}\sqrt{299}e^{13} + \frac{34}{1585}\sqrt{15}e^{24}, \frac{68}{1585}\sqrt{157}e^{16}$	$(\frac{231}{1585}, -\frac{269}{1585}, -\frac{347}{1585}, \frac{153}{1585}, \frac{771}{1585}, -\frac{38}{1585}, -\frac{116}{1585}, \frac{193}{1585})$ $+ \frac{102}{1585}\sqrt{67}e^5 \otimes e_8 + \frac{34}{1585}\sqrt{814}e^1 \otimes e_3$	{1248, 156, 23468, 35}
831:7	$0, 0, 0, 0, 0, \frac{16}{307}\sqrt{106}e^{12}, \frac{16}{307}\sqrt{19}e^{13} + \frac{16}{307}\sqrt{30}e^{24}, \frac{16}{307}\sqrt{57}e^{16}$	$(\frac{8}{307}, \frac{76}{307}, \frac{16}{307}, -\frac{52}{307}, -\frac{120}{307}, \frac{84}{307}, \frac{24}{307}, \frac{92}{307})$ $+ \frac{16}{307}\sqrt{155}e^1 \otimes e_5 + \frac{48}{307}\sqrt{13}e^2 \otimes e_4$	{1238, 1346, 2568, 45}
831:7	$0, 0, 0, 0, 0, \frac{33}{2671}\sqrt{30}e^{12}, \frac{66}{2671}\sqrt{282}e^{13} + \frac{33}{2671}\sqrt{406}e^{24}, \frac{33}{2671}\sqrt{418}e^{16}$	$(-\frac{528}{2671}, \frac{594}{2671}, \frac{627}{2671}, -\frac{495}{2671}, \frac{1188}{2671}, \frac{66}{2671}, \frac{99}{2671}, -\frac{462}{2671})$ $+ \frac{132}{2671}\sqrt{69}e^2 \otimes e_4 + \frac{231}{2671}\sqrt{38}e^3 \otimes e_8 + \frac{264}{2671}\sqrt{29}e^5 \otimes e_7$	{1278, 347}
831:7	$0, 0, 0, 0, 0, \frac{4}{1263}\sqrt{7303}e^{12}, \frac{4}{1263}\sqrt{1273}e^{13} + \frac{4}{1263}\sqrt{30217}e^{24}, \frac{4}{1263}\sqrt{16549}e^{16}$	$(-\frac{14}{1263}, -\frac{199}{1263}, \frac{124}{1263}, \frac{103}{421}, \frac{646}{1263}, -\frac{71}{421}, \frac{110}{1263}, -\frac{227}{1263})$ $+ \frac{4}{1263}\sqrt{33701}e^5 \otimes e_7 + \frac{4}{1263}\sqrt{41339}e^4 \otimes e_8$	{123456, 1358, 245, 568}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:7	$0, 0, 0, 0, 0, \frac{8}{313}\sqrt{339}e^{12}, \frac{2}{313}\sqrt{5763}e^{13} + \frac{1}{313}\sqrt{9266}e^{24}, \frac{3}{313}\sqrt{226}e^{16}$	$(-\frac{57}{313}, \frac{147}{313}, \frac{125}{313}, -\frac{79}{313}, -\frac{101}{313}, \frac{90}{313}, \frac{68}{313}, \frac{33}{313})$ $+ \frac{1}{313}\sqrt{62602}e^3 \otimes e_5 + \frac{2}{313}\sqrt{15481}e^2 \otimes e_4$	{123, 13468, 256, 458}
831:7	$0, 0, 0, 0, 0, \frac{18}{1469}\sqrt{1605}e^{12}, \frac{18}{1469}\sqrt{951}e^{13} + \frac{18}{1469}\sqrt{543}e^{24}, \frac{18}{1469}\sqrt{1185}e^{16}$	$(\frac{255}{1469}, \frac{45}{1469}, -\frac{231}{1469}, -\frac{21}{1469}, -\frac{441}{1469}, \frac{300}{1469}, \frac{24}{1469}, \frac{555}{1469})$ $+ \frac{108}{1469}\sqrt{59}e^1 \otimes e_3 + \frac{18}{1469}\sqrt{1803}e^2 \otimes e_5$	{1248, 156, 23468, 35}
831:7	$0, 0, 0, 0, 0, \frac{2}{475}\sqrt{15593}e^{12}, \frac{1}{475}\sqrt{141846}e^{13} + \frac{2}{475}\sqrt{33198}e^{24}, \frac{6}{475}\sqrt{503}e^{16}$	$(\frac{26}{475}, \frac{17}{475}, -\frac{54}{475}, -\frac{9}{475}, \frac{1}{475}, \frac{43}{475}, -\frac{28}{475}, \frac{69}{475})$ $+ \frac{2}{475}\sqrt{97582}e^5 \otimes e_7$	{1234568, 12678, 135, 147, 2378, 2458, 3467, 56}
831:7	$0, 0, 0, 0, 0, \frac{2}{803}\sqrt{16165}e^{12}, \frac{2}{803}\sqrt{24115}e^{13} + \frac{12}{803}\sqrt{265}e^{24}, \frac{3}{803}\sqrt{12190}e^{16}$	$(-\frac{35}{803}, \frac{38}{803}, \frac{233}{803}, \frac{160}{803}, -\frac{300}{803}, \frac{3}{803}, \frac{18}{803}, -\frac{32}{803})$ $+ \frac{1}{803}\sqrt{173310}e^3 \otimes e_8 + \frac{2}{803}\sqrt{51410}e^1 \otimes e_5$	{12478, 1346, 2568, 357}
831:7	$0, 0, 0, 0, 0, \frac{12}{29}e^{12}, \frac{6}{29}e^{13} + \frac{12}{29}e^{24}, \frac{6}{29}\sqrt{5}e^{16}$	$(-\frac{6}{29}, \frac{9}{29}, \frac{15}{29}, 0, -\frac{9}{29}, \frac{3}{29}, \frac{9}{29}, -\frac{3}{29})$ $+ \frac{12}{29}\sqrt{3}e^3 \otimes e_8 + \frac{6}{29}\sqrt{13}e^2 \otimes e_5$	{1278, 1356, 2468, 3457}
831:7	$0, 0, 0, 0, 0, \frac{2}{1449}\sqrt{152306}e^{12}, \frac{2}{1449}\sqrt{74261}e^{13} + \frac{2}{1449}\sqrt{2365}e^{24}, \frac{4}{161}\sqrt{473}e^{16}$	$(-\frac{103}{483}, \frac{487}{1449}, \frac{337}{1449}, -\frac{51}{161}, \frac{815}{1449}, \frac{178}{1449}, \frac{4}{207}, -\frac{131}{1449})$ $+ \frac{2}{1449}\sqrt{299882}e^2 \otimes e_4 + \frac{2}{1449}\sqrt{300355}e^5 \otimes e_8$	{12378, 134567, 2678, 457}
831:7	$0, 0, 0, 0, 0, \frac{3}{479}\sqrt{23246}e^{12}, \frac{1}{479}\sqrt{43734}e^{13} + \frac{3}{479}\sqrt{1970}e^{24}, \frac{2}{479}\sqrt{13002}e^{16}$	$(-\frac{89}{479}, \frac{317}{479}, \frac{132}{479}, -\frac{274}{479}, \frac{95}{479}, \frac{228}{479}, \frac{43}{479}, \frac{139}{479})$ $+ \frac{48}{479}\sqrt{197}e^2 \otimes e_4$	{1258, 128, 1456, 146, 23568, 2368, 34, 345}
831:7	$0, 0, 0, 0, 0, \frac{5}{647}\sqrt{986}e^{12}, \frac{170}{647}\sqrt{2}e^{13} + \frac{5}{647}\sqrt{3502}e^{24}, \frac{5}{647}\sqrt{3570}e^{16}$	$(-\frac{60}{647}, \frac{10}{647}, \frac{315}{647}, \frac{245}{647}, -\frac{180}{647}, -\frac{50}{647}, \frac{255}{647}, -\frac{110}{647})$ $+ \frac{20}{647}\sqrt{561}e^4 \otimes e_5 + \frac{5}{647}\sqrt{10166}e^3 \otimes e_8$	{12346, 1478, 2357, 568}
831:7	$0, 0, 0, 0, 0, \frac{26}{491}\sqrt{82}e^{12}, \frac{13}{491}\sqrt{111}e^{13} + \frac{13}{491}\sqrt{3}e^{24}, \frac{78}{491}\sqrt{6}e^{16}$	$(\frac{52}{491}, \frac{52}{491}, -\frac{117}{491}, -\frac{117}{491}, \frac{104}{491}, \frac{104}{491}, -\frac{65}{491}, \frac{156}{491})$ $+ \frac{273}{491}e^1 \otimes e_3 - \frac{39}{491}\sqrt{37}e^2 \otimes e_4 + \frac{52}{491}\sqrt{7}e^5 \otimes e_7$	{1258, 1456, 23568, 345}
831:7	$0, 0, 0, 0, 0, \frac{26}{491}\sqrt{82}e^{12}, \frac{13}{491}\sqrt{111}e^{13} + \frac{13}{491}\sqrt{3}e^{24}, \frac{78}{491}\sqrt{6}e^{16}$	$(\frac{52}{491}, \frac{52}{491}, -\frac{117}{491}, -\frac{117}{491}, \frac{104}{491}, \frac{104}{491}, -\frac{65}{491}, \frac{156}{491})$ $+ \frac{273}{491}e^1 \otimes e_3 + \frac{39}{491}\sqrt{37}e^2 \otimes e_4 + \frac{52}{491}\sqrt{7}e^5 \otimes e_7$	{1258, 1456, 23568, 345}
831:7	$0, 0, 0, 0, 0, \frac{3}{479}\sqrt{1970}e^{12}, \frac{1}{479}\sqrt{43734}e^{13} + \frac{3}{479}\sqrt{23246}e^{24}, \frac{2}{479}\sqrt{13002}e^{16}$	$(\frac{103}{479}, -\frac{67}{479}, \frac{132}{479}, \frac{302}{479}, -\frac{289}{479}, \frac{36}{479}, \frac{235}{479}, \frac{139}{479})$ $+ \frac{48}{479}\sqrt{197}e^4 \otimes e_5$	{123567, 1246, 13478, 158, 234, 257, 3568, 4678}
831:7	$0, 0, 0, 0, 0, \frac{1}{61}\sqrt{134}e^{12}, \frac{4}{61}\sqrt{134}e^{13} + \frac{1}{61}\sqrt{134}e^{24}, \frac{1}{61}\sqrt{2010}e^{16}$	$(-\frac{18}{61}, \frac{14}{61}, \frac{45}{61}, \frac{13}{61}, \frac{12}{61}, -\frac{4}{61}, \frac{27}{61}, -\frac{22}{61})$ $+ \frac{7}{61}\sqrt{134}e^3 \otimes e_8$	{12356, 1236, 1578, 178, 23457, 2347, 4568, 468}
831:7	$0, 0, 0, 0, 0, \frac{4}{197}\sqrt{710}e^{12}, \frac{1}{197}\sqrt{4899}e^{13} + \frac{1}{197}\sqrt{1207}e^{24}, \frac{2}{197}\sqrt{1846}e^{16}$	$(\frac{24}{197}, \frac{24}{197}, -\frac{47}{197}, -\frac{47}{197}, \frac{20}{197}, \frac{48}{197}, -\frac{23}{197}, \frac{72}{197})$ $- \frac{1}{197}\sqrt{10721}e^2 \otimes e_4 + \frac{1}{197}\sqrt{14413}e^1 \otimes e_3$	{1258, 128, 1456, 146, 23568, 2368, 34, 345}
831:7	$0, 0, 0, 0, 0, \frac{4}{197}\sqrt{710}e^{12}, \frac{1}{197}\sqrt{4899}e^{13} + \frac{1}{197}\sqrt{1207}e^{24}, \frac{2}{197}\sqrt{1846}e^{16}$	$(\frac{24}{197}, \frac{24}{197}, -\frac{47}{197}, -\frac{47}{197}, \frac{20}{197}, \frac{48}{197}, -\frac{23}{197}, \frac{72}{197})$ $+ \frac{1}{197}\sqrt{10721}e^2 \otimes e_4 + \frac{1}{197}\sqrt{14413}e^1 \otimes e_3$	{1258, 128, 1456, 146, 23568, 2368, 34, 345}
831:7	$0, 0, 0, 0, 0, \frac{2}{115}\sqrt{429}e^{12}, \frac{3}{115}\sqrt{1430}e^{13} + \frac{2}{115}\sqrt{429}e^{24}, \frac{4}{115}\sqrt{143}e^{16}$	$(-\frac{2}{23}, \frac{33}{115}, \frac{14}{23}, \frac{27}{115}, -\frac{73}{115}, \frac{1}{5}, \frac{12}{23}, \frac{13}{115})$ $+ \frac{2}{115}\sqrt{6721}e^3 \otimes e_5$	{12368, 1245678, 134, 157, 23478, 258, 367, 456}
831:7	$0, 0, 0, 0, 0, \frac{12}{41}\sqrt{7}e^{12}, \frac{14}{41}\sqrt{3}e^{13} + \frac{12}{41}\sqrt{7}e^{24}, \frac{2}{41}\sqrt{105}e^{16}$	$(-\frac{2}{41}, \frac{17}{41}, \frac{15}{41}, -\frac{4}{41}, -\frac{25}{41}, \frac{15}{41}, \frac{13}{41}, \frac{13}{41})$ $+ \frac{6}{41}\sqrt{77}e^2 \otimes e_5$	{12378, 1248, 134567, 156, 23468, 2678, 35, 457}
831:7	$0, 0, 0, 0, 0, \frac{1}{487}\sqrt{160358}e^{12}, \frac{1}{487}\sqrt{82214}e^{13} + \frac{1}{487}\sqrt{2442}e^{24}, \frac{14}{487}\sqrt{814}e^{16}$	$(\frac{195}{487}, -\frac{107}{487}, -\frac{212}{487}, \frac{90}{487}, \frac{87}{487}, \frac{88}{487}, -\frac{17}{487}, \frac{283}{487})$ $+ \frac{20}{487}\sqrt{814}e^1 \otimes e_3$	{1258, 128, 1456, 146, 23568, 2368, 34, 345}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:7	$0, 0, 0, 0, 0, \frac{18}{1469}\sqrt{543}e^{12}, \frac{18}{1469}\sqrt{951}e^{13} + \frac{18}{1469}\sqrt{1605}e^{24},$ $\frac{18}{1469}\sqrt{1185}e^{16}$	$(-\frac{99}{1469}, \frac{45}{1469}, \frac{477}{1469}, \frac{333}{1469}, -\frac{441}{1469}, -\frac{54}{1469}, \frac{378}{1469}, -\frac{153}{1469})$ $+ \frac{108}{1469}\sqrt{59}e^4 \otimes e_8 + \frac{18}{1469}\sqrt{1803}e^2 \otimes e_5$	{12378, 134567, 2678, 457}
831:8	$0, 0, 0, 0, 0, \frac{1}{167}\sqrt{7638}e^{12}, \frac{3}{167}\sqrt{2814}e^{34}, \frac{2}{167}\sqrt{2211}e^{13} + \frac{1}{167}\sqrt{7638}e^{26}$	$(\frac{38}{167}, -\frac{3}{167}, -\frac{6}{167}, -\frac{28}{167}, 1, \frac{35}{167}, -\frac{34}{167}, \frac{32}{167})$ $+ \frac{6}{167}\sqrt{1474}e^5 \otimes e_7$	{123458, 12378, 134568, 13678, 23456, 2367, 345, 37}
831:8	$0, 0, 0, 0, 0, \frac{12}{85}\sqrt{33}e^{12}, \frac{2}{85}\sqrt{429}e^{34}, \frac{2}{85}\sqrt{759}e^{13} + \frac{12}{85}\sqrt{33}e^{26}$	$(\frac{3}{85}, \frac{13}{85}, \frac{26}{85}, \frac{3}{85}, -\frac{53}{85}, \frac{16}{85}, \frac{29}{85}, \frac{29}{85})$ $+ \frac{6}{85}\sqrt{253}e^2 \otimes e_5$	{12348, 12378, 134568, 135678, 2346, 2367, 345, 357}
831:8	$0, 0, 0, 0, 0, \frac{6}{19}e^{12}, \frac{3}{19}\sqrt{5}e^{34}, \frac{6}{19}\sqrt{2}e^{13} + \frac{3}{19}\sqrt{5}e^{26}$	$(\frac{4}{19}, -\frac{2}{19}, -\frac{4}{19}, \frac{9}{19}, -\frac{5}{19}, \frac{2}{19}, \frac{5}{19}, 0)$ $+ \frac{3}{19}\sqrt{15}e^1 \otimes e_5 + \frac{9}{19}\sqrt{2}e^4 \otimes e_8$	{128, 168, 24567, 457}
831:8	$0, 0, 0, 0, 0, \frac{6}{823}\sqrt{1615}e^{12}, \frac{5}{823}\sqrt{4902}e^{34},$ $\frac{2}{823}\sqrt{25365}e^{13} + \frac{2}{823}\sqrt{3990}e^{26}$	$(\frac{204}{823}, \frac{20}{823}, \frac{40}{823}, -\frac{121}{823}, -\frac{245}{823}, \frac{224}{823}, -\frac{81}{823}, \frac{244}{823})$ $+ \frac{30}{823}\sqrt{247}e^1 \otimes e_7 + \frac{3}{823}\sqrt{21470}e^3 \otimes e_5$	{1234, 1346, 23678, 378}
831:8	$0, 0, 0, 0, 0, \frac{30}{41}e^{12}, \frac{3}{41}\sqrt{10}e^{34}, \frac{3}{41}\sqrt{110}e^{13} + \frac{3}{41}\sqrt{10}e^{26}$	$(\frac{20}{41}, -\frac{1}{41}, -\frac{2}{41}, \frac{9}{41}, -\frac{25}{41}, \frac{19}{41}, \frac{7}{41}, \frac{18}{41})$ $+ \frac{3}{41}\sqrt{330}e^1 \otimes e_5$	{123, 12347, 13467, 136, 2345678, 23568, 34578, 358}
831:8	$0, 0, 0, 0, 0, \frac{120}{1349}\sqrt{19}e^{12}, \frac{30}{1349}\sqrt{281}e^{34},$ $\frac{30}{1349}\sqrt{115}e^{13} + \frac{60}{1349}\sqrt{122}e^{26}$	$(-\frac{13}{1349}, \frac{5}{1349}, \frac{10}{1349}, \frac{447}{1349}, -\frac{445}{1349}, -\frac{8}{1349}, \frac{457}{1349}, -\frac{3}{1349})$ $+ \frac{60}{1349}\sqrt{138}e^4 \otimes e_8 + \frac{90}{1349}\sqrt{69}e^2 \otimes e_5$	{12378, 135678, 2346, 345}
831:8	$0, 0, 0, 0, 0, \frac{6}{173}\sqrt{34}e^{12}, \frac{30}{173}\sqrt{17}e^{34}, \frac{3}{173}\sqrt{782}e^{13} + \frac{30}{173}\sqrt{17}e^{26}$	$(\frac{8}{173}, -\frac{19}{173}, -\frac{38}{173}, \frac{123}{173}, \frac{35}{173}, -\frac{11}{173}, \frac{85}{173}, -\frac{30}{173})$ $+ \frac{6}{173}\sqrt{1173}e^4 \otimes e_8$	{1258, 128, 1568, 168, 24567, 2467, 457, 47}
831:8	$0, 0, 0, 0, 0, \frac{4}{55}\sqrt{6}e^{12}, \frac{12}{55}\sqrt{6}e^{34}, \frac{4}{55}\sqrt{3}e^{13} + \frac{4}{55}\sqrt{33}e^{26}$	$(\frac{4}{55}, -\frac{6}{55}, -\frac{12}{55}, \frac{16}{55}, \frac{28}{55}, -\frac{2}{55}, \frac{4}{55}, -\frac{8}{55})$ $+ \frac{12}{55}\sqrt{7}e^5 \otimes e_7 + \frac{36}{55}e^4 \otimes e_8$	{1258, 1568, 2467, 47}
831:8	$0, 0, 0, 0, 0, \frac{3}{41}\sqrt{10}e^{12}, \frac{30}{41}e^{34}, \frac{3}{41}\sqrt{110}e^{13} + \frac{3}{41}\sqrt{10}e^{26}$	$(-\frac{2}{41}, \frac{10}{41}, \frac{20}{41}, -\frac{2}{41}, -\frac{25}{41}, \frac{8}{41}, \frac{18}{41}, \frac{18}{41})$ $+ \frac{3}{41}\sqrt{330}e^3 \otimes e_5$	{1245678, 12568, 14578, 158, 2457, 25, 4567, 56}
831:8	$0, 0, 0, 0, 0, \frac{3}{19}\sqrt{5}e^{12}, \frac{3}{19}\sqrt{5}e^{34}, \frac{6}{19}\sqrt{2}e^{13} + \frac{6}{19}e^{26}$	$(\frac{5}{19}, -\frac{2}{19}, -\frac{4}{19}, 0, \frac{10}{19}, \frac{3}{19}, -\frac{4}{19}, \frac{1}{19})$ $+ \frac{3}{19}\sqrt{15}e^5 \otimes e_8 + \frac{9}{19}\sqrt{2}e^1 \otimes e_7$	{128, 168, 24567, 457}
831:8	$0, 0, 0, 0, 0, \frac{3}{10}\sqrt{2}e^{12}, \frac{3}{10}\sqrt{2}e^{34}, \frac{2}{5}e^{13} + \frac{1}{5}\sqrt{5}e^{26}$	$(\frac{1}{10}, 0, 0, -\frac{1}{5}, \frac{3}{10}, \frac{1}{10}, -\frac{1}{5}, \frac{1}{10})$ $+ \frac{1}{10}\sqrt{6}e^5 \otimes e_8 + \frac{1}{5}e^3 \otimes e_4 + \frac{2}{5}\sqrt{2}e^2 \otimes e_7$	{12348, 23456}
831:8	$0, 0, 0, 0, 0, \frac{4}{77}\sqrt{57}e^{12}, \frac{4}{77}\sqrt{57}e^{34}, \frac{8}{77}\sqrt{11}e^{13} + \frac{4}{77}\sqrt{66}e^{26}$	$(\frac{4}{77}, \frac{2}{77}, \frac{4}{77}, -\frac{18}{77}, \frac{24}{77}, \frac{6}{77}, -\frac{2}{11}, \frac{8}{77})$ $+ \frac{12}{77}\sqrt{3}e^5 \otimes e_8 + \frac{4}{77}\sqrt{106}e^2 \otimes e_7$	{12348, 13678, 23456, 357}
831:8	$0, 0, 0, 0, 0, \frac{60}{1349}\sqrt{122}e^{12}, \frac{30}{1349}\sqrt{281}e^{34},$ $\frac{30}{1349}\sqrt{115}e^{13} + \frac{120}{1349}\sqrt{19}e^{26}$	$(\frac{5}{19}, \frac{5}{1349}, \frac{10}{1349}, -\frac{105}{1349}, -\frac{445}{1349}, \frac{360}{1349}, -\frac{5}{71}, \frac{365}{1349})$ $+ \frac{60}{1349}\sqrt{138}e^1 \otimes e_7 + \frac{90}{1349}\sqrt{69}e^2 \otimes e_5$	{12348, 134568, 2367, 357}
831:8	$0, 0, 0, 0, 0, \frac{4}{293}\sqrt{1679}e^{12}, \frac{12}{293}\sqrt{46}e^{34}, \frac{8}{293}\sqrt{69}e^{13} + \frac{4}{293}\sqrt{1679}e^{26}$	$(-\frac{19}{293}, \frac{61}{293}, \frac{122}{293}, -\frac{62}{293}, -\frac{123}{293}, \frac{42}{293}, \frac{60}{293}, \frac{103}{293})$ $+ \frac{4}{293}\sqrt{1978}e^3 \otimes e_4 + \frac{4}{293}\sqrt{3795}e^2 \otimes e_5$	{12378, 135678, 2367, 357}
831:8	$0, 0, 0, 0, 0, \frac{2}{443}\sqrt{690}e^{12}, \frac{2}{443}\sqrt{915}e^{34}, \frac{2}{443}\sqrt{530}e^{13} + \frac{2}{443}\sqrt{915}e^{26}$	$(\frac{19}{443}, -\frac{13}{443}, -\frac{26}{443}, \frac{3}{443}, \frac{51}{443}, \frac{6}{443}, -\frac{23}{443}, -\frac{7}{443})$ $+ \frac{2}{443}\sqrt{1285}e^2 \otimes e_7 + \frac{30}{443}\sqrt{3}e^4 \otimes e_8$	{135678, 13678, 23456, 2346}
831:8	$0, 0, 0, 0, 0, \frac{4}{79}\sqrt{33}e^{12}, \frac{6}{79}\sqrt{30}e^{34}, \frac{2}{79}\sqrt{138}e^{13} + \frac{4}{79}\sqrt{33}e^{26}$	$(\frac{22}{79}, -\frac{12}{79}, -\frac{24}{79}, \frac{22}{79}, \frac{10}{79}, \frac{10}{79}, -\frac{2}{79}, -\frac{2}{79})$ $+ \frac{6}{79}\sqrt{46}e^1 \otimes e_7 - \frac{6}{79}\sqrt{46}e^4 \otimes e_8$	{1258, 128, 1568, 168, 24567, 2467, 457, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:8	$0, 0, 0, 0, 0, \frac{4}{79}\sqrt{33}e^{12}, \frac{6}{79}\sqrt{30}e^{34}, \frac{2}{79}\sqrt{138}e^{13} + \frac{4}{79}\sqrt{33}e^{26}$	$(\frac{22}{79}, -\frac{12}{79}, -\frac{24}{79}, \frac{22}{79}, \frac{10}{79}, \frac{10}{79}, -\frac{2}{79}, -\frac{2}{79})$ $+ \frac{6}{79}\sqrt{46}e^1 \otimes e_7 + \frac{6}{79}\sqrt{46}e^4 \otimes e_8$	{1258, 128, 1568, 168, 24567, 2467, 457, 47}
831:8	$0, 0, 0, 0, 0, \frac{3}{19}\sqrt{10}e^{12}, \frac{3}{19}\sqrt{10}e^{34}, \frac{4}{19}\sqrt{5}e^{13} + \frac{3}{19}\sqrt{10}e^{26}$	$(\frac{2}{19}, \frac{1}{19}, \frac{2}{19}, -\frac{6}{19}, \frac{3}{19}, \frac{3}{19}, -\frac{4}{19}, \frac{4}{19})$ $+ \frac{4}{19}\sqrt{10}e^2 \otimes e_7$	{123458, 12348, 135678, 13678, 23456, 2346, 357, 37}
831:8	$0, 0, 0, 0, 0, \frac{4}{77}\sqrt{57}e^{12}, \frac{4}{77}\sqrt{66}e^{34}, \frac{8}{77}\sqrt{11}e^{13} + \frac{4}{77}\sqrt{57}e^{26}$	$(\frac{4}{77}, \frac{13}{154}, \frac{13}{77}, -\frac{45}{154}, -\frac{3}{77}, \frac{3}{22}, -\frac{19}{154}, \frac{17}{77})$ $+ \frac{12}{77}\sqrt{3}e^3 \otimes e_5 + \frac{4}{77}\sqrt{106}e^2 \otimes e_7$	{12348, 13678, 2346, 37}
831:8	$0, 0, 0, 0, 0, \frac{2}{407}\sqrt{447}e^{12}, \frac{4}{407}\sqrt{2086}e^{34}, \frac{4}{407}\sqrt{2235}e^{13} + \frac{2}{407}\sqrt{447}e^{26}$	$(-\frac{6}{407}, \frac{57}{407}, \frac{114}{407}, -\frac{184}{407}, \frac{228}{407}, \frac{51}{407}, -\frac{70}{407}, \frac{108}{407})$ $+ \frac{2}{407}\sqrt{26373}e^5 \otimes e_7 + \frac{2}{407}\sqrt{26671}e^3 \otimes e_4$	{124678, 1478, 247, 467}
831:8	$0, 0, 0, 0, 0, \frac{10}{271}\sqrt{15}e^{12}, \frac{10}{271}\sqrt{15}e^{34}, \frac{45}{271}\sqrt{6}e^{13} + \frac{20}{271}\sqrt{3}e^{26}$	$(\frac{20}{271}, \frac{5}{271}, \frac{10}{271}, -\frac{65}{271}, \frac{105}{271}, \frac{25}{271}, -\frac{55}{271}, \frac{30}{271})$ $+ \frac{10}{271}\sqrt{123}e^5 \otimes e_8 + \frac{20}{271}\sqrt{33}e^1 \otimes e_7 + \frac{30}{271}\sqrt{13}e^3 \otimes e_4$	{24567, 457}
831:8	$0, 0, 0, 0, 0, \frac{1}{4}e^{12}, \frac{1}{8}\sqrt{6}e^{34}, \frac{1}{4}\sqrt{6}e^{13} + \frac{1}{8}\sqrt{6}e^{26}$	$(\frac{1}{8}, \frac{1}{8}, \frac{1}{4}, -\frac{1}{4}, -\frac{3}{8}, \frac{1}{4}, 0, \frac{3}{8})$ $+ \frac{1}{4}\sqrt{7}e^3 \otimes e_4 + \frac{1}{8}\sqrt{30}e^1 \otimes e_5$	{123, 136, 23568, 358}
831:8	$0, 0, 0, 0, 0, \frac{1}{167}\sqrt{7638}e^{12}, \frac{3}{167}\sqrt{2814}e^{34}, \frac{2}{167}\sqrt{2211}e^{13} + \frac{1}{167}\sqrt{7638}e^{26}$	$(\frac{38}{167}, -\frac{3}{167}, -\frac{6}{167}, \frac{104}{167}, -\frac{97}{167}, \frac{35}{167}, \frac{98}{167}, \frac{32}{167})$ $+ \frac{6}{167}\sqrt{1474}e^4 \otimes e_5$	{12348, 123578, 13468, 135678, 2346, 23567, 34, 357}
831:8	$0, 0, 0, 0, 0, \frac{4}{17}\sqrt{5}e^{12}, \frac{4}{17}\sqrt{5}e^{34}, \frac{4}{17}\sqrt{5}e^{13} + \frac{4}{17}\sqrt{5}e^{26}$	$(\frac{3}{17}, 0, 0, -\frac{4}{17}, \frac{3}{17}, \frac{3}{17}, -\frac{4}{17}, \frac{3}{17})$ $+ \frac{2}{17}\sqrt{34}e^2 \otimes e_7 + \frac{2}{17}\sqrt{6}e^3 \otimes e_4$	{123458, 12348, 23456, 2346}
831:8	$0, 0, 0, 0, 0, \frac{2}{17}\sqrt{14}e^{12}, \frac{2}{17}\sqrt{14}e^{34}, \frac{7}{17}\sqrt{6}e^{13} + \frac{2}{17}\sqrt{14}e^{26}$	$(-\frac{8}{51}, \frac{1}{3}, \frac{2}{3}, -\frac{29}{51}, \frac{3}{17}, \frac{3}{17}, \frac{5}{51}, \frac{26}{51})$ $+ \frac{14}{17}\sqrt{3}e^3 \otimes e_4$	{124568, 12468, 1458, 148, 24, 245, 456, 46}
831:8	$0, 0, 0, 0, 0, \frac{3}{41}\sqrt{10}e^{12}, \frac{3}{41}\sqrt{10}e^{34}, \frac{3}{41}\sqrt{110}e^{13} + \frac{30}{41}e^{26}$	$(-\frac{2}{41}, -\frac{1}{41}, -\frac{2}{41}, \frac{9}{41}, 1, -\frac{3}{41}, \frac{7}{41}, -\frac{4}{41})$ $+ \frac{3}{41}\sqrt{330}e^5 \otimes e_8$	{1234567, 12356, 13457, 135, 23478, 238, 34678, 368}
831:8	$0, 0, 0, 0, 0, \frac{2}{229}\sqrt{1469}e^{12}, \frac{2}{229}\sqrt{1469}e^{34}, \frac{3}{229}\sqrt{1582}e^{13} + \frac{2}{229}\sqrt{678}e^{26}$	$(\frac{52}{229}, \frac{13}{229}, \frac{26}{229}, -\frac{87}{229}, \frac{27}{229}, \frac{65}{229}, -\frac{61}{229}, \frac{78}{229})$ $+ \frac{2}{229}\sqrt{6441}e^1 \otimes e_7 + \frac{4}{229}\sqrt{1243}e^3 \otimes e_4$	{235678, 23678, 3578, 378}
831:8	$0, 0, 0, 0, 0, \frac{1}{8}\sqrt{6}e^{12}, \frac{1}{8}\sqrt{6}e^{34}, \frac{1}{4}\sqrt{6}e^{13} + \frac{1}{4}e^{26}$	$(-\frac{3}{16}, \frac{1}{8}, \frac{1}{4}, -\frac{1}{4}, \frac{9}{16}, -\frac{1}{16}, 0, \frac{1}{16})$ $+ \frac{1}{4}\sqrt{7}e^3 \otimes e_4 + \frac{1}{8}\sqrt{30}e^5 \otimes e_8$	{12356, 135, 238, 368}
831:8	$0, 0, 0, 0, 0, \frac{30}{173}\sqrt{17}e^{12}, \frac{30}{173}\sqrt{17}e^{34}, \frac{3}{173}\sqrt{782}e^{13} + \frac{6}{173}\sqrt{34}e^{26}$	$(\frac{100}{173}, -\frac{19}{173}, -\frac{38}{173}, -\frac{15}{173}, \frac{35}{173}, \frac{81}{173}, -\frac{53}{173}, \frac{62}{173})$ $+ \frac{6}{173}\sqrt{1173}e^1 \otimes e_7$	{1258, 128, 1568, 168, 24567, 2467, 457, 47}
831:8	$0, 0, 0, 0, 0, \frac{4}{55}\sqrt{33}e^{12}, \frac{12}{55}\sqrt{6}e^{34}, \frac{4}{55}\sqrt{3}e^{13} + \frac{4}{55}\sqrt{6}e^{26}$	$(\frac{2}{5}, -\frac{6}{55}, -\frac{12}{55}, \frac{2}{11}, -\frac{14}{55}, \frac{16}{55}, -\frac{2}{55}, \frac{2}{11})$ $+ \frac{12}{55}\sqrt{7}e^4 \otimes e_5 + \frac{36}{55}e^1 \otimes e_7$	{1258, 1568, 2467, 47}
831:8	$0, 0, 0, 0, 0, \frac{2}{823}\sqrt{3990}e^{12}, \frac{5}{823}\sqrt{4902}e^{34}, \frac{2}{823}\sqrt{25365}e^{13} + \frac{6}{823}\sqrt{1615}e^{26}$	$(-\frac{56}{823}, \frac{20}{823}, \frac{40}{823}, \frac{269}{823}, -\frac{245}{823}, -\frac{36}{823}, \frac{309}{823}, -\frac{16}{823})$ $+ \frac{30}{823}\sqrt{247}e^4 \otimes e_8 + \frac{3}{823}\sqrt{21470}e^3 \otimes e_5$	{12346, 134, 2378, 3678}
831:8	$0, 0, 0, 0, 0, \frac{4}{241}\sqrt{187}e^{12}, \frac{1}{241}\sqrt{3706}e^{34}, \frac{2}{241}\sqrt{731}e^{13} + \frac{4}{241}\sqrt{187}e^{26}$	$(\frac{25}{241}, \frac{2}{241}, \frac{4}{241}, -\frac{19}{241}, -\frac{36}{241}, \frac{27}{241}, -\frac{15}{241}, \frac{29}{241})$ $+ \frac{1}{241}\sqrt{5134}e^2 \otimes e_7 + \frac{3}{241}\sqrt{238}e^4 \otimes e_5$	{12348, 135678, 2346, 357}
831:8	$0, 0, 0, 0, 0, \frac{4}{77}\sqrt{66}e^{12}, \frac{4}{77}\sqrt{57}e^{34}, \frac{8}{77}\sqrt{11}e^{13} + \frac{4}{77}\sqrt{57}e^{26}$	$(\frac{13}{77}, \frac{2}{77}, \frac{4}{77}, -\frac{18}{77}, -\frac{3}{77}, \frac{15}{77}, -\frac{2}{11}, \frac{17}{77})$ $+ \frac{12}{77}\sqrt{3}e^1 \otimes e_5 + \frac{4}{77}\sqrt{106}e^2 \otimes e_7$	{12348, 13678, 23456, 357}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:9	$0, 0, 0, 0, 0, \frac{1}{377}\sqrt{9042}e^{12}, \frac{1}{377}\sqrt{822}e^{34}, \frac{2}{377}\sqrt{7261}e^{16} + \frac{6}{377}\sqrt{822}e^{35}$	$(\frac{287}{754}, -\frac{9}{26}, \frac{161}{377}, -\frac{113}{377}, -\frac{9}{754}, \frac{1}{29}, \frac{48}{377}, \frac{313}{754})$ $+ \frac{1}{377}\sqrt{89598}e^1 \otimes e_2 + \frac{4}{377}\sqrt{5617}e^3 \otimes e_4$	{1356, 146, 2368, 24568}
831:9	$0, 0, 0, 0, 0, \frac{1}{201}\sqrt{13534}e^{12}, \frac{3}{67}\sqrt{202}e^{34}, \frac{3}{67}\sqrt{202}e^{16} + \frac{2}{201}\sqrt{2121}e^{35}$	$(\frac{53}{201}, -\frac{31}{201}, -\frac{1}{67}, -\frac{15}{67}, \frac{26}{67}, \frac{22}{201}, -\frac{16}{67}, \frac{25}{67})$ $+ \frac{1}{201}\sqrt{33330}e^1 \otimes e_7$	{123458, 128, 1346, 156, 235678, 24678, 37, 457}
831:9	$0, 0, 0, 0, 0, \frac{12}{1553}\sqrt{1018}e^{12}, \frac{6}{1553}\sqrt{14761}e^{34},$ $\frac{4}{1553}\sqrt{29522}e^{16} + \frac{2}{1553}\sqrt{73805}e^{35}$	$(\frac{537}{1553}, -\frac{481}{1553}, -\frac{190}{1553}, -\frac{45}{1553}, \frac{783}{1553}, \frac{56}{1553}, -\frac{235}{1553}, \frac{593}{1553})$ $+ \frac{4}{1553}\sqrt{90602}e^5 \otimes e_7 + \frac{50}{1553}\sqrt{509}e^1 \otimes e_2$	{13456, 1467, 23678, 2568}
831:9	$0, 0, 0, 0, 0, \frac{20}{1739}\sqrt{978}e^{12}, \frac{40}{1739}\sqrt{426}e^{34},$ $\frac{20}{1739}\sqrt{957}e^{16} + \frac{20}{1739}\sqrt{105}e^{35}$	$(-\frac{414}{1739}, \frac{652}{1739}, -\frac{372}{1739}, \frac{424}{1739}, \frac{196}{1739}, \frac{238}{1739}, \frac{52}{1739}, -\frac{176}{1739})$ $+ \frac{20}{1739}\sqrt{2283}e^4 \otimes e_8 + \frac{60}{1739}\sqrt{249}e^2 \otimes e_7$	{1258, 1467, 2568, 47}
831:9	$0, 0, 0, 0, 0, \frac{1}{18}\sqrt{55}e^{12}, \frac{1}{18}\sqrt{77}e^{34}, \frac{1}{18}\sqrt{286}e^{16} + \frac{1}{18}\sqrt{66}e^{35}$	$(\frac{41}{72}, -\frac{47}{72}, \frac{7}{36}, \frac{1}{9}, \frac{7}{24}, -\frac{1}{12}, \frac{11}{36}, \frac{35}{72})$ $+ \frac{1}{18}\sqrt{627}e^1 \otimes e_2$	{1346, 1367, 14567, 156, 234568, 235678, 24678, 268}
831:9	$0, 0, 0, 0, 0, \frac{6}{599}\sqrt{406}e^{12}, \frac{2}{599}\sqrt{6235}e^{34}, \frac{2}{599}\sqrt{6235}e^{16} + \frac{2}{599}\sqrt{1334}e^{35}$	$(\frac{37}{599}, -\frac{55}{599}, -\frac{98}{599}, \frac{77}{599}, \frac{117}{599}, -\frac{18}{599}, -\frac{21}{599}, \frac{19}{599})$ $+ \frac{2}{599}\sqrt{6409}e^4 \otimes e_8 + \frac{2}{599}\sqrt{8903}e^1 \otimes e_7$	{128, 1346, 235678, 457}
831:9	$0, 0, 0, 0, 0, \frac{2}{203}\sqrt{1239}e^{12}, \frac{2}{203}\sqrt{5133}e^{34},$ $\frac{2}{203}\sqrt{5133}e^{16} + \frac{1}{203}\sqrt{10266}e^{35}$	$(-\frac{30}{203}, \frac{4}{29}, -\frac{45}{203}, \frac{5}{7}, \frac{13}{203}, -\frac{2}{203}, \frac{100}{203}, -\frac{32}{203})$ $+ \frac{1}{203}\sqrt{56994}e^4 \otimes e_8$	{12378, 1258, 13456, 1467, 23678, 2568, 345, 47}
831:9	$0, 0, 0, 0, 0, \frac{72}{373}e^{12}, \frac{18}{373}\sqrt{73}e^{34}, \frac{36}{373}\sqrt{30}e^{16} + \frac{18}{373}\sqrt{13}e^{35}$	$(\frac{53}{373}, -\frac{109}{373}, -\frac{38}{373}, \frac{159}{373}, \frac{35}{373}, -\frac{56}{373}, \frac{121}{373}, -\frac{3}{373})$ $+ \frac{18}{373}\sqrt{141}e^1 \otimes e_2 + \frac{36}{373}\sqrt{46}e^4 \otimes e_8$	{13456, 1467, 23678, 2568}
831:9	$0, 0, 0, 0, 0, \frac{72}{373}e^{12}, \frac{36}{373}\sqrt{30}e^{34}, \frac{18}{373}\sqrt{73}e^{16} + \frac{18}{373}\sqrt{13}e^{35}$	$(-\frac{41}{373}, \frac{32}{373}, \frac{56}{373}, \frac{112}{373}, -\frac{106}{373}, -\frac{9}{373}, \frac{168}{373}, -\frac{50}{373})$ $+ \frac{18}{373}\sqrt{141}e^3 \otimes e_5 + \frac{36}{373}\sqrt{46}e^4 \otimes e_8$	{12378, 1258, 23678, 2568}
831:9	$0, 0, 0, 0, 0, \frac{7}{685}\sqrt{2514}e^{12}, \frac{2}{685}\sqrt{25978}e^{34},$ $\frac{3}{685}\sqrt{838}e^{16} + \frac{1}{685}\sqrt{57822}e^{35}$	$(-\frac{12}{137}, \frac{294}{685}, \frac{147}{685}, -\frac{272}{685}, \frac{27}{685}, \frac{234}{685}, -\frac{25}{137}, \frac{174}{685})$ $+ \frac{1}{685}\sqrt{289110}e^2 \otimes e_7 + \frac{2}{685}\sqrt{51118}e^3 \otimes e_4$	{13567, 1467, 357, 47}
831:9	$0, 0, 0, 0, 0, \frac{2}{1937}\sqrt{156418}e^{12}, \frac{4}{1937}\sqrt{71063}e^{34},$ $\frac{14}{1937}\sqrt{1191}e^{16} + \frac{2}{1937}\sqrt{83767}e^{35}$	$(-\frac{311}{1937}, \frac{788}{1937}, \frac{480}{1937}, -\frac{486}{1937}, -\frac{314}{1937}, \frac{477}{1937}, -\frac{6}{1937}, \frac{166}{1937})$ $+ \frac{2}{1937}\sqrt{299735}e^3 \otimes e_5 + \frac{4}{1937}\sqrt{94486}e^2 \otimes e_7$	{1367, 14567, 37, 457}
831:9	$0, 0, 0, 0, 0, \frac{2}{185}\sqrt{1374}e^{12}, \frac{1}{185}\sqrt{5038}e^{34},$ $\frac{1}{185}\sqrt{5038}e^{16} + \frac{1}{185}\sqrt{31602}e^{35}$	$(\frac{7}{37}, \frac{24}{185}, \frac{127}{185}, -\frac{102}{185}, -\frac{33}{185}, \frac{59}{185}, \frac{5}{37}, \frac{94}{185})$ $+ \frac{1}{185}\sqrt{68242}e^3 \otimes e_4$	{1235, 124, 1368, 14568, 2356, 246, 38, 458}
831:9	$0, 0, 0, 0, 0, \frac{4}{117}\sqrt{127}e^{12}, \frac{1}{117}\sqrt{7366}e^{34}, \frac{2}{117}\sqrt{127}e^{16} + \frac{2}{117}\sqrt{1905}e^{35}$	$(\frac{2}{13}, \frac{16}{117}, -\frac{35}{117}, -\frac{5}{117}, \frac{29}{39}, \frac{34}{117}, -\frac{40}{117}, \frac{4}{9})$ $+ \frac{1}{117}\sqrt{23622}e^5 \otimes e_7$	{12345, 1247, 13678, 1568, 23456, 2467, 378, 58}
831:9	$0, 0, 0, 0, 0, \frac{2}{349}\sqrt{1695}e^{12}, \frac{2}{349}\sqrt{8814}e^{34}, \frac{2}{349}\sqrt{8814}e^{16} + \frac{2}{349}\sqrt{4181}e^{35}$	$(\frac{104}{349}, -\frac{122}{349}, \frac{156}{349}, -\frac{33}{349}, -\frac{70}{349}, -\frac{18}{349}, \frac{123}{349}, \frac{86}{349})$ $+ \frac{4}{349}\sqrt{4294}e^1 \otimes e_2 + \frac{4}{349}\sqrt{4294}e^3 \otimes e_5$	{1346, 1367, 14567, 156}
831:9	$0, 0, 0, 0, 0, \frac{7}{597}\sqrt{4378}e^{12}, \frac{28}{199}\sqrt{33}e^{34}, \frac{7}{597}\sqrt{1254}e^{16} + \frac{7}{597}\sqrt{1122}e^{35}$	$(-\frac{136}{597}, \frac{2}{3}, -\frac{15}{199}, -\frac{32}{199}, \frac{57}{199}, \frac{262}{597}, -\frac{47}{199}, \frac{42}{199})$ $+ \frac{7}{199}\sqrt{1166}e^2 \otimes e_7$	{123458, 128, 1367, 14567, 234568, 268, 37, 457}
831:9	$0, 0, 0, 0, 0, \frac{1}{18}\sqrt{55}e^{12}, \frac{1}{18}\sqrt{286}e^{34}, \frac{1}{18}\sqrt{77}e^{16} + \frac{1}{18}\sqrt{66}e^{35}$	$(\frac{1}{24}, \frac{5}{36}, \frac{13}{18}, -\frac{11}{72}, -\frac{1}{2}, \frac{13}{72}, \frac{41}{72}, \frac{2}{9})$ $+ \frac{1}{18}\sqrt{627}e^3 \otimes e_5$	{1346, 1367, 14567, 156, 34, 37, 457, 5}
831:9	$0, 0, 0, 0, 0, \frac{39}{3649}\sqrt{238}e^{12}, \frac{78}{3649}\sqrt{143}e^{34},$ $\frac{195}{3649}\sqrt{10}e^{16} + \frac{39}{3649}\sqrt{1610}e^{35}$	$(\frac{936}{3649}, -\frac{585}{3649}, \frac{429}{3649}, -\frac{1092}{3649}, \frac{858}{3649}, \frac{351}{3649}, -\frac{663}{3649}, \frac{1287}{3649})$ $+ \frac{39}{3649}\sqrt{1646}e^1 \otimes e_2 + \frac{39}{3649}\sqrt{2326}e^3 \otimes e_4 + \frac{78}{3649}\sqrt{653}e^5 \otimes e_7$	{1467, 23678}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:9	$0, 0, 0, 0, 0, \frac{1}{61}\sqrt{105}e^{12}, \frac{1}{122}\sqrt{2730}e^{34}, \frac{4}{61}\sqrt{21}e^{16} + \frac{7}{122}\sqrt{42}e^{35}$	$(-\frac{3}{61}, \frac{5}{61}, -\frac{21}{61}, \frac{20}{61}, \frac{20}{61}, \frac{2}{61}, -\frac{1}{61}, -\frac{1}{61})$ $+ \frac{1}{122}\sqrt{4830}e^4 \otimes e_8 - \frac{3}{122}\sqrt{462}e^5 \otimes e_7$	{12378, 1258, 13456, 1467, 23678, 2568, 345, 47}
831:9	$0, 0, 0, 0, 0, \frac{1}{61}\sqrt{105}e^{12}, \frac{1}{122}\sqrt{2730}e^{34}, \frac{4}{61}\sqrt{21}e^{16} + \frac{7}{122}\sqrt{42}e^{35}$	$(-\frac{3}{61}, \frac{5}{61}, -\frac{21}{61}, \frac{20}{61}, \frac{20}{61}, \frac{2}{61}, -\frac{1}{61}, -\frac{1}{61})$ $+ \frac{1}{122}\sqrt{4830}e^4 \otimes e_8 + \frac{3}{122}\sqrt{462}e^5 \otimes e_7$	{12378, 1258, 13456, 1467, 23678, 2568, 345, 47}
831:9	$0, 0, 0, 0, 0, \frac{12}{133}\sqrt{2}e^{12}, \frac{12}{133}\sqrt{13}e^{34}, \frac{8}{133}\sqrt{26}e^{16} + \frac{4}{133}\sqrt{65}e^{35}$	$(\frac{12}{133}, -\frac{20}{133}, -\frac{32}{133}, \frac{36}{133}, \frac{36}{133}, -\frac{8}{133}, \frac{4}{133}, \frac{4}{133})$ $+ \frac{12}{133}\sqrt{23}e^4 \otimes e_8 + \frac{4}{133}\sqrt{155}e^5 \otimes e_7 + \frac{8}{133}\sqrt{29}e^1 \otimes e_2$	{13456, 1467, 23678, 2568}
831:9	$0, 0, 0, 0, 0, \frac{12}{133}\sqrt{2}e^{12}, \frac{12}{133}\sqrt{13}e^{34}, \frac{8}{133}\sqrt{26}e^{16} + \frac{4}{133}\sqrt{65}e^{35}$	$(\frac{12}{133}, -\frac{20}{133}, -\frac{32}{133}, \frac{36}{133}, \frac{36}{133}, -\frac{8}{133}, \frac{4}{133}, \frac{4}{133})$ $+ \frac{12}{133}\sqrt{23}e^4 \otimes e_8 - \frac{4}{133}\sqrt{155}e^5 \otimes e_7 + \frac{8}{133}\sqrt{29}e^1 \otimes e_2$	{13456, 1467, 23678, 2568}
831:9	$0, 0, 0, 0, 0, \frac{2}{1853}\sqrt{33051}e^{12}, \frac{4}{1853}\sqrt{18202}e^{34}, \frac{6}{1853}\sqrt{7185}e^{16} + \frac{12}{1853}\sqrt{8143}e^{35}$	$(\frac{273}{1853}, \frac{138}{1853}, \frac{228}{1853}, -\frac{730}{1853}, \frac{456}{1853}, \frac{411}{1853}, -\frac{502}{1853}, \frac{684}{1853})$ $+ \frac{2}{1853}\sqrt{376015}e^3 \otimes e_4 + \frac{2}{1853}\sqrt{412419}e^5 \otimes e_7$	{1247, 13678, 2467, 378}
831:9	$0, 0, 0, 0, 0, \frac{1}{63}\sqrt{406}e^{12}, \frac{10}{63}\sqrt{7}e^{34}, \frac{1}{63}\sqrt{518}e^{16} + \frac{4}{63}\sqrt{21}e^{35}$	$(\frac{1}{6}, -\frac{1}{9}, \frac{2}{9}, -\frac{5}{18}, 0, \frac{1}{18}, -\frac{1}{18}, \frac{2}{9})$ $+ \frac{1}{63}\sqrt{546}e^3 \otimes e_5 + \frac{4}{21}\sqrt{7}e^1 \otimes e_7$	{1346, 156, 37, 457}
831:9	$0, 0, 0, 0, 0, \frac{12}{329}\sqrt{185}e^{12}, \frac{20}{329}\sqrt{74}e^{34}, \frac{20}{329}\sqrt{74}e^{16} + \frac{4}{329}\sqrt{555}e^{35}$	$(\frac{80}{329}, -\frac{39}{329}, \frac{40}{329}, -\frac{108}{329}, \frac{81}{329}, \frac{41}{329}, -\frac{68}{329}, \frac{121}{329})$ $+ \frac{2}{329}\sqrt{16206}e^1 \otimes e_7 + \frac{2}{329}\sqrt{4366}e^3 \otimes e_4$	{235678, 24678, 37, 457}
831:10	$0, 0, 0, 0, 0, \frac{6}{155}\sqrt{66}e^{12}, \frac{6}{155}\sqrt{69}e^{13} + \frac{6}{155}\sqrt{66}e^{45}, \frac{3}{155}\sqrt{402}e^{16}$	$(\frac{21}{155}, -\frac{27}{155}, -\frac{6}{155}, \frac{42}{155}, -\frac{27}{155}, -\frac{6}{155}, \frac{3}{155}, \frac{3}{155})$ $+ \frac{9}{155}\sqrt{46}e^1 \otimes e_3 + \frac{9}{155}\sqrt{46}e^4 \otimes e_8$	{128, 1456, 2368, 345}
831:10	$0, 0, 0, 0, 0, \frac{30}{1349}\sqrt{281}e^{12}, \frac{30}{1349}\sqrt{115}e^{13} + \frac{60}{1349}\sqrt{122}e^{45}, \frac{120}{1349}\sqrt{19}e^{16}$	$(-\frac{294}{1349}, \frac{447}{1349}, \frac{291}{1349}, \frac{309}{1349}, -\frac{312}{1349}, \frac{153}{1349}, -\frac{3}{1349}, -\frac{141}{1349})$ $+ \frac{60}{1349}\sqrt{138}e^2 \otimes e_7 + \frac{90}{1349}\sqrt{69}e^4 \otimes e_8$	{128, 13467, 2368, 47}
831:10	$0, 0, 0, 0, 0, \frac{6}{47}\sqrt{5}e^{12}, \frac{12}{47}\sqrt{2}e^{13} + \frac{6}{47}\sqrt{5}e^{45}, \frac{12}{47}e^{16}$	$(-\frac{12}{47}, \frac{18}{47}, \frac{12}{47}, -\frac{9}{47}, \frac{9}{47}, \frac{6}{47}, 0, -\frac{6}{47})$ $+ \frac{18}{47}\sqrt{2}e^2 \otimes e_7 + \frac{18}{47}e^5 \otimes e_4 + \frac{6}{47}\sqrt{15}e^3 \otimes e_8$	{347, 357}
831:10	$0, 0, 0, 0, 0, \frac{12}{85}\sqrt{33}e^{12}, \frac{2}{85}\sqrt{759}e^{13} + \frac{2}{85}\sqrt{429}e^{45}, \frac{12}{85}\sqrt{33}e^{16}$	$(\frac{36}{85}, -\frac{4}{17}, -\frac{6}{17}, \frac{3}{85}, \frac{3}{85}, \frac{16}{85}, \frac{6}{85}, \frac{52}{85})$ $+ \frac{6}{85}\sqrt{253}e^1 \otimes e_3$	{12458, 128, 1456, 16, 234568, 2368, 3, 345}
831:10	$0, 0, 0, 0, 0, \frac{3}{611}\sqrt{1730}e^{12}, \frac{15}{611}\sqrt{46}e^{13} + \frac{3}{611}\sqrt{1730}e^{45}, \frac{42}{611}\sqrt{10}e^{16}$	$(\frac{12}{611}, \frac{24}{611}, -\frac{33}{611}, -\frac{114}{611}, \frac{93}{611}, \frac{36}{611}, -\frac{21}{611}, \frac{48}{611})$ $+ \frac{6}{611}\sqrt{345}e^2 \otimes e_7 + \frac{9}{611}\sqrt{230}e^1 \otimes e_3 + \frac{9}{611}\sqrt{230}e^5 \otimes e_8$	{128, 2368}
831:10	$0, 0, 0, 0, 0, \frac{6}{127}\sqrt{10}e^{12}, \frac{6}{127}\sqrt{110}e^{13} + \frac{6}{127}\sqrt{10}e^{45}, \frac{60}{127}e^{16}$	$(-\frac{24}{127}, \frac{18}{127}, \frac{60}{127}, \frac{63}{127}, -\frac{27}{127}, -\frac{6}{127}, \frac{36}{127}, -\frac{30}{127})$ $+ \frac{6}{127}\sqrt{330}e^3 \otimes e_8 + \frac{90}{127}e^4 \otimes e_5$	{12346, 12356, 468, 568}
831:10	$0, 0, 0, 0, 0, \frac{6}{127}\sqrt{10}e^{12}, \frac{6}{127}\sqrt{110}e^{13} + \frac{6}{127}\sqrt{10}e^{45}, \frac{60}{127}e^{16}$	$(\frac{42}{127}, -\frac{48}{127}, -\frac{6}{127}, \frac{63}{127}, -\frac{27}{127}, -\frac{6}{127}, \frac{36}{127}, \frac{36}{127})$ $+ \frac{6}{127}\sqrt{330}e^1 \otimes e_2 + \frac{90}{127}e^4 \otimes e_5$	{1348, 1358, 24, 25}
831:10	$0, 0, 0, 0, 0, \frac{3}{41}\sqrt{10}e^{12}, \frac{3}{41}\sqrt{110}e^{13} + \frac{3}{41}\sqrt{10}e^{45}, \frac{30}{41}e^{16}$	$(-\frac{12}{41}, \frac{9}{41}, \frac{30}{41}, \frac{9}{41}, \frac{9}{41}, -\frac{3}{41}, \frac{18}{41}, -\frac{15}{41})$ $+ \frac{3}{41}\sqrt{330}e^3 \otimes e_8$	{12346, 14578, 178, 23457, 237, 468}
831:10	$0, 0, 0, 0, 0, \frac{3}{41}\sqrt{10}e^{12}, \frac{3}{41}\sqrt{110}e^{13} + \frac{3}{41}\sqrt{10}e^{45}, \frac{30}{41}e^{16}$	$(\frac{21}{41}, -\frac{24}{41}, -\frac{3}{41}, \frac{9}{41}, \frac{9}{41}, -\frac{3}{41}, \frac{18}{41}, \frac{18}{41})$ $+ \frac{3}{41}\sqrt{330}e^1 \otimes e_2$	{1348, 14578, 178, 23457, 237, 24}
831:10	$0, 0, 0, 0, 0, \frac{3}{73}\sqrt{30}e^{12}, \frac{6}{73}\sqrt{33}e^{13} + \frac{3}{73}\sqrt{30}e^{45}, \frac{3}{73}\sqrt{102}e^{16}$	$(\frac{6}{73}, -\frac{21}{73}, \frac{18}{73}, \frac{12}{73}, \frac{12}{73}, -\frac{15}{73}, \frac{24}{73}, -\frac{9}{73})$ $+ \frac{9}{73}\sqrt{22}e^1 \otimes e_2 + \frac{9}{73}\sqrt{22}e^3 \otimes e_8$	{14578, 178, 23457, 237}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:10	$0, 0, 0, 0, 0, \frac{2}{85}\sqrt{429}e^{12}, \frac{2}{85}\sqrt{759}e^{13} + \frac{12}{85}\sqrt{33}e^{45}, \frac{12}{85}\sqrt{33}e^{16}$	$(-\frac{2}{17}, \frac{3}{85}, \frac{39}{85}, \frac{49}{85}, -\frac{4}{17}, -\frac{7}{85}, \frac{29}{85}, -\frac{1}{5})$ $+ \frac{6}{85}\sqrt{253}e^4 \otimes e_8$	{123578, 128, 13467, 1456, 2368, 25678, 345, 47}
831:10	$0, 0, 0, 0, 0, \frac{60}{499}\sqrt{17}e^{12}, \frac{6}{499}\sqrt{782}e^{13} + \frac{60}{499}\sqrt{17}e^{45}, \frac{12}{499}\sqrt{34}e^{16}$	$(-\frac{84}{499}, \frac{246}{499}, \frac{24}{499}, \frac{123}{499}, -\frac{183}{499}, \frac{162}{499}, -\frac{60}{499}, \frac{78}{499})$ $+ \frac{12}{499}\sqrt{1173}e^2 \otimes e_7 + \frac{306}{499}e^4 \otimes e_5$	{1467, 1567, 347, 357}
831:10	$0, 0, 0, 0, 0, \frac{3}{643}\sqrt{2294}e^{12}, \frac{3}{643}\sqrt{1798}e^{13} + \frac{3}{643}\sqrt{8990}e^{45}, \frac{24}{643}\sqrt{217}e^{16}$	$(\frac{87}{643}, -\frac{192}{643}, \frac{111}{643}, \frac{261}{643}, -\frac{63}{643}, -\frac{105}{643}, \frac{198}{643}, -\frac{18}{643})$ $+ \frac{3}{643}\sqrt{14694}e^1 \otimes e_2 + \frac{54}{643}\sqrt{62}e^4 \otimes e_8$	{13467, 1456, 2368, 25678}
831:10	$0, 0, 0, 0, 0, \frac{30}{173}\sqrt{17}e^{12}, \frac{3}{173}\sqrt{782}e^{13} + \frac{30}{173}\sqrt{17}e^{45}, \frac{6}{173}\sqrt{34}e^{16}$	$(-\frac{42}{173}, \frac{123}{173}, \frac{12}{173}, -\frac{15}{173}, -\frac{15}{173}, \frac{81}{173}, -\frac{30}{173}, \frac{39}{173})$ $+ \frac{6}{173}\sqrt{1173}e^2 \otimes e_7$	{123458, 1238, 1467, 24568, 268, 347}
831:10	$0, 0, 0, 0, 0, \frac{3}{19}\sqrt{5}e^{12}, \frac{6}{19}\sqrt{2}e^{13} + \frac{3}{19}\sqrt{5}e^{45}, \frac{6}{19}e^{16}$	$(-\frac{6}{19}, \frac{9}{19}, \frac{6}{19}, 0, 0, \frac{3}{19}, 0, -\frac{3}{19})$ $+ \frac{3}{19}\sqrt{15}e^3 \otimes e_8 + \frac{9}{19}\sqrt{2}e^2 \otimes e_7$	{24568, 268, 347}
831:10	$0, 0, 0, 0, 0, \frac{60}{1349}\sqrt{122}e^{12}, \frac{30}{1349}\sqrt{115}e^{13} + \frac{30}{1349}\sqrt{281}e^{45}, \frac{120}{1349}\sqrt{19}e^{16}$	$(\frac{120}{1349}, \frac{240}{1349}, -\frac{330}{1349}, -\frac{105}{1349}, -\frac{105}{1349}, \frac{360}{1349}, -\frac{210}{1349}, \frac{480}{1349})$ $+ \frac{60}{1349}\sqrt{138}e^2 \otimes e_7 + \frac{90}{1349}\sqrt{69}e^1 \otimes e_3$	{12458, 128, 234568, 2368}
831:11	$0, 0, 0, 0, 0, \frac{1}{323}\sqrt{4326}e^{12}, \frac{1}{969}\sqrt{6798}e^{13} + \frac{4}{969}\sqrt{4017}e^{45}, \frac{1}{969}\sqrt{66538}e^{26}$	$(-\frac{2}{19}, \frac{88}{969}, \frac{29}{323}, \frac{59}{323}, -\frac{64}{323}, -\frac{14}{969}, -\frac{5}{323}, \frac{74}{969})$ $+ \frac{1}{323}\sqrt{8446}e^4 \otimes e_8 + \frac{8}{969}\sqrt{1545}e^2 \otimes e_7$	{1238, 15678, 2456, 347}
831:11	$0, 0, 0, 0, 0, \frac{1}{18}\sqrt{286}e^{12}, \frac{1}{18}\sqrt{66}e^{13} + \frac{1}{18}\sqrt{77}e^{45}, \frac{1}{18}\sqrt{55}e^{26}$	$(\frac{13}{18}, -\frac{2}{9}, -\frac{1}{2}, \frac{1}{9}, \frac{1}{9}, \frac{1}{2}, \frac{2}{9}, \frac{5}{18})$ $+ \frac{1}{18}\sqrt{627}e^1 \otimes e_3$	{12458, 128, 14568, 168, 23456, 236, 3, 345}
831:11	$0, 0, 0, 0, 0, \frac{2}{27}\sqrt{34}e^{12}, \frac{2}{27}\sqrt{6}e^{13} + \frac{2}{27}\sqrt{23}e^{45}, \frac{10}{27}e^{26}$	$(\frac{2}{27}, \frac{4}{27}, -\frac{2}{9}, -\frac{2}{27}, -\frac{2}{27}, \frac{2}{9}, -\frac{4}{27}, \frac{10}{27})$ $+ \frac{2}{27}\sqrt{33}e^1 \otimes e_3 + \frac{4}{27}\sqrt{15}e^2 \otimes e_7$	{14678, 347}
831:11	$0, 0, 0, 0, 0, \frac{1}{24}\sqrt{66}e^{12}, \frac{1}{4}\sqrt{11}e^{13} + \frac{1}{24}\sqrt{66}e^{45}, \frac{1}{6}\sqrt{22}e^{26}$	$(-\frac{1}{8}, -\frac{1}{12}, \frac{5}{8}, \frac{1}{4}, \frac{1}{4}, -\frac{5}{24}, \frac{1}{2}, -\frac{7}{24})$ $+ \frac{1}{24}\sqrt{858}e^3 \otimes e_8$	{12346, 134, 248, 468}
831:11	$0, 0, 0, 0, 0, \frac{1}{12}\sqrt{6}e^{12}, \frac{1}{6}\sqrt{3}e^{13} + \frac{1}{12}\sqrt{6}e^{45}, \frac{1}{3}e^{26}$	$(-\frac{1}{4}, \frac{1}{6}, \frac{1}{4}, 0, 0, -\frac{1}{12}, 0, \frac{1}{12})$ $+ \frac{1}{4}\sqrt{2}e^3 \otimes e_8 + \frac{1}{6}\sqrt{6}e^2 \otimes e_7$	{14678, 347}
831:11	$0, 0, 0, 0, 0, \frac{2}{31}\sqrt{34}e^{12}, \frac{2}{31}\sqrt{6}e^{13} + \frac{2}{31}\sqrt{23}e^{45}, \frac{10}{31}e^{26}$	$(\frac{2}{31}, \frac{4}{31}, -\frac{6}{31}, -\frac{6}{31}, \frac{2}{31}, \frac{6}{31}, -\frac{4}{31}, \frac{10}{31})$ $+ \frac{2}{31}\sqrt{33}e^1 \otimes e_3 + \frac{4}{31}\sqrt{15}e^2 \otimes e_7 - \frac{8}{31}e^5 \otimes e_4$	{14678, 15678, 347, 357}
831:11	$0, 0, 0, 0, 0, \frac{2}{31}\sqrt{34}e^{12}, \frac{2}{31}\sqrt{6}e^{13} + \frac{2}{31}\sqrt{23}e^{45}, \frac{10}{31}e^{26}$	$(\frac{2}{31}, \frac{4}{31}, -\frac{6}{31}, -\frac{6}{31}, \frac{2}{31}, \frac{6}{31}, -\frac{4}{31}, \frac{10}{31})$ $+ \frac{2}{31}\sqrt{33}e^1 \otimes e_3 + \frac{4}{31}\sqrt{15}e^2 \otimes e_7 + \frac{8}{31}e^5 \otimes e_4$	{14678, 15678, 347, 357}
831:11	$0, 0, 0, 0, 0, \frac{1}{47}\sqrt{438}e^{12}, \frac{1}{47}\sqrt{219}e^{13} + \frac{1}{47}\sqrt{438}e^{45}, \frac{1}{47}\sqrt{511}e^{26}$	$(\frac{6}{47}, \frac{4}{47}, \frac{9}{47}, \frac{44}{47}, -\frac{29}{47}, \frac{10}{47}, \frac{15}{47}, \frac{14}{47})$ $+ \frac{73}{47}e^4 \otimes e_5$	{12478, 12578, 14678, 15678, 23467, 23567, 347, 357}
831:11	$0, 0, 0, 0, 0, \frac{1}{67}\sqrt{870}e^{12}, \frac{1}{67}\sqrt{435}e^{13} + \frac{1}{67}\sqrt{870}e^{45}, \frac{1}{67}\sqrt{1015}e^{26}$	$(-\frac{12}{67}, \frac{20}{67}, \frac{3}{67}, \frac{10}{67}, -\frac{19}{67}, \frac{8}{67}, -\frac{9}{67}, \frac{28}{67})$ $+ \frac{29}{67}e^4 \otimes e_5 + \frac{2}{67}\sqrt{609}e^2 \otimes e_7$	{14678, 15678, 347, 357}
831:11	$0, 0, 0, 0, 0, \frac{2}{105}\sqrt{870}e^{12}, \frac{2}{105}\sqrt{435}e^{13} + \frac{2}{105}\sqrt{870}e^{45}, \frac{2}{105}\sqrt{1015}e^{26}$	$(-\frac{8}{35}, \frac{8}{21}, \frac{2}{35}, -\frac{3}{35}, -\frac{3}{35}, \frac{16}{105}, -\frac{6}{35}, \frac{8}{15})$ $+ \frac{4}{105}\sqrt{609}e^2 \otimes e_7$	{123458, 1238, 14678, 2456, 26, 347}
831:11	$0, 0, 0, 0, 0, \frac{2}{127}\sqrt{114}e^{12}, \frac{2}{127}\sqrt{6}e^{13} + \frac{2}{127}\sqrt{143}e^{45}, \frac{2}{127}\sqrt{145}e^{26}$	$(\frac{2}{127}, \frac{4}{127}, -\frac{6}{127}, -\frac{22}{127}, \frac{18}{127}, \frac{6}{127}, -\frac{4}{127}, \frac{10}{127})$ $+ \frac{2}{127}\sqrt{73}e^1 \otimes e_3 + \frac{4}{127}\sqrt{55}e^2 \otimes e_7 + \frac{8}{127}\sqrt{10}e^5 \otimes e_8$	{14678, 357}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:11	$0, 0, 0, 0, 0, \frac{1}{35}\sqrt{66}e^{12}, \frac{6}{35}\sqrt{11}e^{13} + \frac{1}{35}\sqrt{66}e^{45}, \frac{4}{35}\sqrt{22}e^{26}$	$(-\frac{3}{35}, -\frac{2}{35}, \frac{3}{7}, \frac{17}{35}, -\frac{1}{7}, -\frac{1}{7}, \frac{12}{35}, -\frac{1}{5})$ $+ \frac{1}{35}\sqrt{858}e^3 \otimes e_8 + \frac{22}{35}e^4 \otimes e_5$	{12346, 12356, 134, 135, 248, 258, 468, 568}
831:11	$0, 0, 0, 0, 0, \frac{1}{35}\sqrt{66}e^{12}, \frac{6}{35}\sqrt{11}e^{13} + \frac{1}{35}\sqrt{66}e^{45}, \frac{4}{35}\sqrt{22}e^{26}$	$(-\frac{3}{35}, -\frac{2}{35}, \frac{3}{7}, \frac{17}{35}, -\frac{1}{7}, -\frac{1}{7}, \frac{12}{35}, -\frac{1}{5})$ $+ \frac{1}{35}\sqrt{858}e^3 \otimes e_8 - \frac{22}{35}e^4 \otimes e_5$	{12346, 12356, 134, 135, 248, 258, 468, 568}
831:11	$0, 0, 0, 0, 0, \frac{7}{597}\sqrt{1254}e^{12}, \frac{7}{597}\sqrt{1122}e^{13} + \frac{28}{199}\sqrt{33}e^{45}, \frac{7}{597}\sqrt{4378}e^{26}$	$(\frac{38}{199}, -\frac{136}{597}, \frac{57}{199}, \frac{127}{199}, -\frac{32}{199}, -\frac{22}{597}, \frac{95}{199}, -\frac{158}{597})$ $+ \frac{7}{199}\sqrt{1166}e^4 \otimes e_8$	{123578, 128, 135678, 168, 23456, 2467, 345, 47}
831:11	$0, 0, 0, 0, 0, \frac{3}{101}\sqrt{246}e^{12}, \frac{9}{101}\sqrt{14}e^{13} + \frac{9}{101}\sqrt{33}e^{45}, \frac{3}{101}\sqrt{255}e^{26}$	$(\frac{41}{101}, -\frac{28}{101}, -\frac{13}{101}, \frac{39}{101}, -\frac{11}{101}, \frac{13}{101}, \frac{28}{101}, -\frac{15}{101})$ $+ \frac{30}{101}\sqrt{6}e^4 \otimes e_8 + \frac{3}{101}\sqrt{447}e^1 \otimes e_3$	{128, 168, 23456, 345}
831:11	$0, 0, 0, 0, 0, \frac{1}{13}\sqrt{6}e^{12}, \frac{2}{13}\sqrt{3}e^{13} + \frac{1}{13}\sqrt{6}e^{45}, \frac{4}{13}e^{26}$	$(-\frac{3}{13}, \frac{2}{13}, \frac{3}{13}, -\frac{1}{13}, \frac{1}{13}, -\frac{1}{13}, 0, \frac{1}{13})$ $+ \frac{2}{13}\sqrt{6}e^2 \otimes e_7 + \frac{2}{13}e^5 \otimes e_4 + \frac{3}{13}\sqrt{2}e^3 \otimes e_8$	{14678, 15678, 347, 357}
831:11	$0, 0, 0, 0, 0, \frac{1}{13}\sqrt{6}e^{12}, \frac{2}{13}\sqrt{3}e^{13} + \frac{1}{13}\sqrt{6}e^{45}, \frac{4}{13}e^{26}$	$(-\frac{3}{13}, \frac{2}{13}, \frac{3}{13}, -\frac{1}{13}, \frac{1}{13}, -\frac{1}{13}, 0, \frac{1}{13})$ $+ \frac{2}{13}\sqrt{6}e^2 \otimes e_7 - \frac{2}{13}e^5 \otimes e_4 + \frac{3}{13}\sqrt{2}e^3 \otimes e_8$	{14678, 15678, 347, 357}
831:12	$0, 0, 0, 0, 0, \frac{12}{29}e^{12}, \frac{12}{29}e^{13}, \frac{6}{29}e^{14} + \frac{6}{29}\sqrt{5}e^{26}$	$(\frac{8}{29}, -\frac{5}{29}, 0, -\frac{10}{29}, \frac{16}{29}, \frac{3}{29}, \frac{8}{29}, -\frac{2}{29})$ $+ \frac{12}{29}\sqrt{3}e^5 \otimes e_8 + \frac{6}{29}\sqrt{13}e^1 \otimes e_4$	{1238, 1278, 1368, 1678}
831:12	$0, 0, 0, 0, 0, \frac{1}{328}\sqrt{15189}e^{12}, \frac{1}{328}\sqrt{15189}e^{13},$ $\frac{1}{164}\sqrt{1577}e^{14} + \frac{1}{164}\sqrt{3486}e^{26}$	$(\frac{1}{41}, \frac{77}{656}, -\frac{105}{656}, \frac{77}{328}, -\frac{75}{328}, \frac{93}{656}, -\frac{89}{656}, \frac{85}{328})$ $+ \frac{1}{164}\sqrt{4731}e^1 \otimes e_5 + \frac{5}{328}\sqrt{1162}e^2 \otimes e_7$	{12348, 14678, 2456, 3457}
831:12	$0, 0, 0, 0, 0, \frac{1}{487}\sqrt{160358}e^{12}, \frac{1}{487}\sqrt{2442}e^{13},$ $\frac{1}{487}\sqrt{82214}e^{14} + \frac{14}{487}\sqrt{814}e^{26}$	$(-\frac{6}{487}, \frac{94}{487}, \frac{90}{487}, \frac{188}{487}, -\frac{313}{487}, \frac{88}{487}, \frac{84}{487}, \frac{182}{487})$ $+ \frac{20}{487}\sqrt{814}e^2 \otimes e_5$	{123478, 1248, 1345678, 14568, 2346, 2467, 345, 457}
831:12	$0, 0, 0, 0, 0, \frac{3}{479}\sqrt{1970}e^{12}, \frac{3}{479}\sqrt{23246}e^{13},$ $\frac{1}{479}\sqrt{43734}e^{14} + \frac{2}{479}\sqrt{13002}e^{26}$	$(-\frac{30}{479}, \frac{66}{479}, \frac{302}{479}, \frac{132}{479}, -\frac{289}{479}, \frac{36}{479}, \frac{272}{479}, \frac{102}{479})$ $+ \frac{48}{479}\sqrt{197}e^3 \otimes e_5$	{1236, 12567, 13, 157, 2378, 258, 3678, 568}
831:12	$0, 0, 0, 0, 0, \frac{2}{475}\sqrt{33198}e^{12}, \frac{2}{475}\sqrt{15593}e^{13},$ $\frac{1}{475}\sqrt{141846}e^{14} + \frac{6}{475}\sqrt{503}e^{26}$	$(\frac{264}{475}, -\frac{27}{475}, -\frac{239}{475}, -\frac{54}{475}, \frac{87}{475}, \frac{237}{475}, \frac{1}{19}, \frac{42}{95})$ $+ \frac{2}{475}\sqrt{97582}e^1 \otimes e_3$	{124, 1245, 1456, 146, 234568, 23468, 3458, 348}
831:12	$0, 0, 0, 0, 0, \frac{28}{1753}\sqrt{42}e^{12}, \frac{28}{1753}\sqrt{586}e^{13},$ $\frac{28}{1753}\sqrt{47}e^{14} + \frac{28}{1753}\sqrt{267}e^{26}$	$(\frac{84}{1753}, -\frac{154}{1753}, \frac{168}{1753}, -\frac{308}{1753}, \frac{644}{1753}, -\frac{70}{1753}, \frac{252}{1753}, -\frac{224}{1753})$ $+ \frac{28}{1753}\sqrt{489}e^5 \otimes e_7 + \frac{28}{1753}\sqrt{510}e^1 \otimes e_4 + \frac{28}{1753}\sqrt{599}e^3 \otimes e_8$	{23467, 347}
831:12	$0, 0, 0, 0, 0, \frac{4}{499}\sqrt{2586}e^{12}, \frac{2}{499}\sqrt{33187}e^{13},$ $\frac{1}{499}\sqrt{73270}e^{14} + \frac{2}{499}\sqrt{29739}e^{26}$	$(-\frac{96}{499}, \frac{5}{499}, \frac{345}{499}, \frac{10}{499}, \frac{95}{499}, -\frac{91}{499}, \frac{249}{499}, -\frac{86}{499})$ $+ \frac{2}{499}\sqrt{87062}e^3 \otimes e_8$	{123456, 12346, 134, 1345, 2458, 248, 4568, 468}
831:12	$0, 0, 0, 0, 0, \frac{4}{1263}\sqrt{30217}e^{12}, \frac{4}{1263}\sqrt{7303}e^{13},$ $\frac{4}{1263}\sqrt{1273}e^{14} + \frac{1}{1263}\sqrt{16549}e^{26}$	$(\frac{95}{421}, \frac{62}{1263}, -\frac{251}{1263}, \frac{124}{1263}, -\frac{158}{1263}, \frac{347}{1263}, -\frac{421}{1263}, \frac{409}{1263})$ $+ \frac{4}{1263}\sqrt{33701}e^1 \otimes e_3 + \frac{4}{1263}\sqrt{41339}e^2 \otimes e_5$	{128, 1568, 236, 35}
831:12	$0, 0, 0, 0, 0, \frac{16}{325}\sqrt{102}e^{12}, \frac{16}{325}\sqrt{53}e^{13}, \frac{16}{325}\sqrt{34}e^{14} + \frac{16}{325}\sqrt{87}e^{26}$	$(\frac{19}{325}, \frac{38}{325}, -\frac{109}{325}, \frac{76}{325}, \frac{42}{325}, \frac{57}{325}, -\frac{18}{65}, \frac{19}{65})$ $+ \frac{112}{325}\sqrt{2}e^1 \otimes e_3 + \frac{16}{325}\sqrt{185}e^2 \otimes e_7$	{145678, 14678, 3457, 347}
831:12	$0, 0, 0, 0, 0, \frac{8}{61}\sqrt{15}e^{12}, \frac{8}{61}\sqrt{15}e^{13}, \frac{8}{61}\sqrt{10}e^{14} + \frac{16}{61}\sqrt{5}e^{26}$	$(-\frac{11}{61}, \frac{15}{61}, -\frac{6}{61}, \frac{30}{61}, -\frac{2}{61}, \frac{4}{61}, -\frac{17}{61}, \frac{19}{61})$ $+ \frac{8}{61}\sqrt{11}e^4 \otimes e_5 + \frac{8}{61}\sqrt{41}e^2 \otimes e_7$	{12348, 14678, 246, 347}
831:12	$0, 0, 0, 0, 0, \frac{6}{1577}\sqrt{8890}e^{12}, \frac{6}{1577}\sqrt{22606}e^{13},$ $\frac{2}{1577}\sqrt{89535}e^{14} + \frac{2}{1577}\sqrt{52197}e^{26}$	$(\frac{420}{1577}, -\frac{9}{83}, -\frac{358}{1577}, -\frac{18}{83}, \frac{824}{1577}, \frac{3}{19}, \frac{62}{1577}, \frac{78}{1577})$ $+ \frac{36}{1577}\sqrt{762}e^5 \otimes e_7 + \frac{6}{1577}\sqrt{31877}e^1 \otimes e_4$	{23467, 2456, 347, 45}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:12	$0, 0, 0, 0, 0, \frac{3}{479}\sqrt{1970}e^{12}, \frac{3}{479}\sqrt{23246}e^{13}, \frac{1}{479}\sqrt{43734}e^{14} + \frac{2}{479}\sqrt{13002}e^{26}$	$(-\frac{30}{479}, \frac{66}{479}, -\frac{82}{479}, \frac{132}{479}, 1, \frac{36}{479}, -\frac{112}{479}, \frac{102}{479}) + \frac{48}{479}\sqrt{197}e^5 \otimes e_7$	{12356, 1267, 135, 17, 2378, 258, 3678, 568}
831:12	$0, 0, 0, 0, 0, \frac{45}{721}\sqrt{26}e^{12}, \frac{3}{721}\sqrt{6942}e^{13}, \frac{108}{721}\sqrt{13}e^{14} + \frac{3}{721}\sqrt{4602}e^{26}$	$(-\frac{150}{721}, \frac{96}{721}, -\frac{9}{721}, \frac{192}{721}, \frac{393}{721}, -\frac{54}{721}, -\frac{159}{721}, \frac{6}{103}) + \frac{12}{721}\sqrt{1599}e^4 \otimes e_7 + \frac{3}{721}\sqrt{24414}e^5 \otimes e_8$	{123456, 1345, 248, 468}
831:12	$0, 0, 0, 0, 0, \frac{23}{2111}\sqrt{894}e^{12}, \frac{23}{2111}\sqrt{390}e^{13}, \frac{184}{2111}e^{14} + \frac{115}{2111}\sqrt{42}e^{26}$	$(\frac{46}{2111}, \frac{92}{2111}, -\frac{483}{2111}, \frac{184}{2111}, \frac{759}{2111}, \frac{138}{2111}, -\frac{437}{2111}, \frac{230}{2111}) + \frac{23}{2111}\sqrt{1086}e^5 \otimes e_8 + \frac{276}{2111}\sqrt{7}e^1 \otimes e_3 + \frac{92}{2111}\sqrt{106}e^2 \otimes e_7$	{1678, 357}
831:12	$0, 0, 0, 0, 0, \frac{6}{19}e^{12}, \frac{1}{19}\sqrt{51}e^{13}, \frac{4}{19}\sqrt{6}e^{14} + \frac{1}{19}\sqrt{39}e^{26}$	$(-\frac{4}{19}, \frac{2}{19}, \frac{9}{19}, \frac{4}{19}, -\frac{5}{19}, -\frac{2}{19}, \frac{5}{19}, 0) + \frac{1}{19}\sqrt{129}e^4 \otimes e_5 + \frac{1}{19}\sqrt{174}e^3 \otimes e_8$	{12346, 134, 248, 468}
831:12	$0, 0, 0, 0, 0, \frac{6}{751}\sqrt{290}e^{12}, \frac{3}{751}\sqrt{11310}e^{13}, \frac{6}{751}\sqrt{2117}e^{14} + \frac{42}{751}\sqrt{29}e^{26}$	$(\frac{40}{751}, -\frac{28}{751}, \frac{245}{751}, -\frac{56}{751}, -\frac{221}{751}, \frac{12}{751}, \frac{285}{751}, -\frac{16}{751}) + \frac{30}{751}\sqrt{203}e^3 \otimes e_8 + \frac{3}{751}\sqrt{18038}e^1 \otimes e_5$	{1278, 1678, 23567, 357}
831:12	$0, 0, 0, 0, 0, \frac{20}{1399}\sqrt{538}e^{12}, \frac{40}{1399}\sqrt{246}e^{13}, \frac{40}{1399}\sqrt{173}e^{14} + \frac{20}{1399}\sqrt{866}e^{26}$	$(-\frac{259}{1399}, \frac{251}{1399}, \frac{110}{1399}, \frac{502}{1399}, -\frac{290}{1399}, \frac{8}{1399}, -\frac{149}{1399}, \frac{243}{1399}) + \frac{20}{1399}\sqrt{1594}e^2 \otimes e_7 + \frac{40}{1399}\sqrt{223}e^3 \otimes e_5$	{12348, 145678, 2456, 347}
831:12	$0, 0, 0, 0, 0, \frac{8}{443}\sqrt{190}e^{12}, \frac{4}{443}\sqrt{3230}e^{13}, \frac{2}{443}\sqrt{285}e^{14} + \frac{2}{443}\sqrt{8265}e^{26}$	$(\frac{64}{443}, -\frac{63}{443}, \frac{128}{443}, -\frac{126}{443}, \frac{56}{443}, \frac{1}{443}, \frac{192}{443}, -\frac{62}{443}) + \frac{2}{443}\sqrt{17005}e^1 \otimes e_4 + \frac{8}{443}\sqrt{1235}e^3 \otimes e_8$	{12578, 1278, 15678, 1678}
831:12	$0, 0, 0, 0, 0, \frac{5}{269}\sqrt{30}e^{12}, \frac{5}{269}\sqrt{30}e^{13}, \frac{30}{269}\sqrt{14}e^{14} + \frac{5}{269}\sqrt{42}e^{26}$	$(\frac{10}{269}, \frac{10}{269}, -\frac{65}{269}, \frac{20}{269}, \frac{105}{269}, \frac{20}{269}, -\frac{55}{269}, \frac{30}{269}) + \frac{10}{269}\sqrt{123}e^1 \otimes e_3 - \frac{10}{269}\sqrt{123}e^4 \otimes e_7 + \frac{5}{269}\sqrt{498}e^5 \otimes e_8$	{1278, 1678, 23567, 357}
831:12	$0, 0, 0, 0, 0, \frac{5}{269}\sqrt{30}e^{12}, \frac{5}{269}\sqrt{30}e^{13}, \frac{30}{269}\sqrt{14}e^{14} + \frac{5}{269}\sqrt{42}e^{26}$	$(\frac{10}{269}, \frac{10}{269}, -\frac{65}{269}, \frac{20}{269}, \frac{105}{269}, \frac{20}{269}, -\frac{55}{269}, \frac{30}{269}) + \frac{10}{269}\sqrt{123}e^1 \otimes e_3 + \frac{10}{269}\sqrt{123}e^4 \otimes e_7 + \frac{5}{269}\sqrt{498}e^5 \otimes e_8$	{1278, 1678, 23567, 357}
831:12	$0, 0, 0, 0, 0, \frac{6}{1577}\sqrt{8890}e^{12}, \frac{6}{1577}\sqrt{22606}e^{13}, \frac{2}{1577}\sqrt{89535}e^{14} + \frac{2}{1577}\sqrt{52197}e^{26}$	$(\frac{420}{1577}, -\frac{9}{83}, \frac{290}{1577}, -\frac{18}{83}, -\frac{472}{1577}, \frac{3}{1577}, \frac{710}{1577}, \frac{78}{1577}) + \frac{36}{1577}\sqrt{762}e^3 \otimes e_5 + \frac{6}{1577}\sqrt{31877}e^1 \otimes e_4$	{23467, 2456, 347, 45}
831:12	$0, 0, 0, 0, 0, \frac{9}{124}\sqrt{71}e^{12}, \frac{9}{124}\sqrt{71}e^{13}, \frac{1}{62}\sqrt{1349}e^{14} + \frac{3}{62}\sqrt{213}e^{26}$	$(-\frac{11}{62}, \frac{59}{248}, -\frac{39}{248}, \frac{59}{124}, \frac{21}{124}, \frac{15}{248}, -\frac{83}{248}, \frac{37}{124}) + \frac{1}{124}\sqrt{14626}e^2 \otimes e_7$	{123458, 12348, 145678, 14678, 2456, 246, 3457, 347}
831:12	$0, 0, 0, 0, 0, \frac{1}{61}\sqrt{134}e^{12}, \frac{1}{61}\sqrt{134}e^{13}, \frac{4}{61}\sqrt{134}e^{14} + \frac{1}{61}\sqrt{2010}e^{26}$	$(-\frac{2}{61}, -\frac{2}{61}, \frac{13}{61}, -\frac{4}{61}, 1, -\frac{4}{61}, \frac{11}{61}, -\frac{6}{61}) + \frac{7}{61}\sqrt{134}e^5 \otimes e_8$	{1234567, 12456, 13457, 145, 2348, 2478, 3468, 4678}
831:12	$0, 0, 0, 0, 0, \frac{118}{397}e^{12}, \frac{1}{397}\sqrt{28202}e^{13}, \frac{1}{397}\sqrt{23010}e^{14} + \frac{4}{397}\sqrt{649}e^{26}$	$(-\frac{118}{397}, \frac{55}{397}, \frac{110}{397}, \frac{110}{397}, \frac{40}{397}, -\frac{63}{397}, -\frac{8}{397}, -\frac{8}{397}) - \frac{1}{397}\sqrt{39530}e^4 \otimes e_7 + \frac{1}{397}\sqrt{44722}e^3 \otimes e_8$	{123456, 12346, 134, 1345, 2458, 248, 4568, 468}
831:12	$0, 0, 0, 0, 0, \frac{118}{397}e^{12}, \frac{1}{397}\sqrt{28202}e^{13}, \frac{1}{397}\sqrt{23010}e^{14} + \frac{4}{397}\sqrt{649}e^{26}$	$(-\frac{118}{397}, \frac{55}{397}, \frac{110}{397}, \frac{110}{397}, \frac{40}{397}, -\frac{63}{397}, -\frac{8}{397}, -\frac{8}{397}) + \frac{1}{397}\sqrt{39530}e^4 \otimes e_7 + \frac{1}{397}\sqrt{44722}e^3 \otimes e_8$	{123456, 12346, 134, 1345, 2458, 248, 4568, 468}
831:12	$0, 0, 0, 0, 0, \frac{1}{283}\sqrt{11514}e^{12}, \frac{1}{283}\sqrt{11514}e^{13}, \frac{8}{283}\sqrt{101}e^{14} + \frac{1}{283}\sqrt{21210}e^{26}$	$(-\frac{46}{283}, \frac{34}{283}, -\frac{21}{283}, \frac{68}{283}, \frac{123}{283}, -\frac{12}{283}, -\frac{67}{283}, \frac{22}{283}) + \frac{1}{283}\sqrt{17574}e^5 \otimes e_8 + \frac{8}{283}\sqrt{505}e^2 \otimes e_7$	{12348, 14678, 2456, 3457}
831:12	$0, 0, 0, 0, 0, \frac{12}{41}\sqrt{7}e^{12}, \frac{12}{41}\sqrt{7}e^{13}, \frac{14}{41}\sqrt{3}e^{14} + \frac{2}{41}\sqrt{105}e^{26}$	$(\frac{24}{41}, -\frac{9}{41}, -\frac{4}{41}, -\frac{18}{41}, \frac{8}{41}, \frac{15}{41}, \frac{20}{41}, \frac{6}{41}) + \frac{6}{41}\sqrt{77}e^1 \otimes e_4$	{234567, 23467, 2456, 246, 3457, 347, 4, 45}
831:12	$0, 0, 0, 0, 0, \frac{16}{307}\sqrt{30}e^{12}, \frac{16}{307}\sqrt{106}e^{13}, \frac{16}{307}\sqrt{19}e^{14} + \frac{16}{307}\sqrt{57}e^{26}$	$(-\frac{60}{307}, \frac{8}{307}, \frac{84}{307}, \frac{16}{307}, \frac{152}{307}, -\frac{52}{307}, \frac{24}{307}, -\frac{44}{307}) + \frac{16}{307}\sqrt{155}e^3 \otimes e_8 + \frac{48}{307}\sqrt{13}e^5 \otimes e_7$	{123456, 1345, 2458, 4568}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:12	$0, 0, 0, 0, 0, \frac{2}{115}\sqrt{429}e^{12}, \frac{2}{115}\sqrt{429}e^{13}, \frac{3}{115}\sqrt{1430}e^{14} + \frac{4}{115}\sqrt{143}e^{26}$	$(-\frac{12}{115}, \frac{7}{23}, \frac{27}{115}, \frac{14}{23}, -\frac{73}{115}, \frac{1}{5}, \frac{3}{23}, \frac{58}{115})$ $+ \frac{2}{115}\sqrt{6721}e^4 \otimes e_5$	{1235678, 12568, 13578, 158, 235, 257, 356, 567}
831:12	$0, 0, 0, 0, 0, \frac{1}{27}\sqrt{78}e^{12}, \frac{1}{27}\sqrt{91}e^{13}, \frac{2}{27}\sqrt{65}e^{14} + \frac{1}{27}\sqrt{65}e^{26}$	$(\frac{2}{9}, \frac{2}{27}, -\frac{7}{27}, \frac{4}{27}, -\frac{1}{3}, \frac{8}{27}, -\frac{1}{27}, \frac{10}{27})$ $+ \frac{13}{27}\sqrt{2}e^1 \otimes e_3 + \frac{1}{27}\sqrt{299}e^4 \otimes e_5$	{124, 146, 23468, 348}
831:12	$0, 0, 0, 0, 0, \frac{3}{721}\sqrt{6942}e^{12}, \frac{45}{721}\sqrt{26}e^{13}, \frac{108}{721}\sqrt{13}e^{14} + \frac{3}{721}\sqrt{4602}e^{26}$	$(\frac{178}{721}, -\frac{68}{721}, -\frac{173}{721}, -\frac{136}{721}, \frac{393}{721}, \frac{110}{721}, \frac{5}{103}, \frac{6}{103})$ $+ \frac{12}{721}\sqrt{1599}e^1 \otimes e_3 + \frac{3}{721}\sqrt{24414}e^5 \otimes e_8$	{128, 168, 2356, 35}
831:12	$0, 0, 0, 0, 0, \frac{2}{475}\sqrt{15593}e^{12}, \frac{2}{475}\sqrt{33198}e^{13},$ $\frac{1}{475}\sqrt{141846}e^{14} + \frac{6}{475}\sqrt{503}e^{26}$	$(-\frac{124}{475}, \frac{167}{475}, -\frac{9}{95}, \frac{334}{475}, \frac{87}{475}, \frac{43}{475}, -\frac{169}{475}, \frac{42}{95})$ $+ \frac{2}{475}\sqrt{97582}e^4 \otimes e_7$	{125678, 12678, 1578, 178, 2357, 237, 3567, 367}
831:12	$0, 0, 0, 0, 0, \frac{8}{89}\sqrt{6}e^{12}, \frac{4}{89}\sqrt{58}e^{13}, \frac{8}{89}\sqrt{5}e^{14} + \frac{4}{89}\sqrt{66}e^{26}$	$(-\frac{21}{89}, \frac{10}{89}, \frac{15}{89}, \frac{20}{89}, \frac{10}{89}, -\frac{11}{89}, -\frac{6}{89}, -\frac{1}{89})$ $+ \frac{12}{89}\sqrt{10}e^2 \otimes e_7 + \frac{8}{89}\sqrt{17}e^3 \otimes e_8$	{145678, 14678, 3457, 347}
831:12	$0, 0, 0, 0, 0, \frac{2}{113}\sqrt{43}e^{12}, \frac{3}{113}\sqrt{258}e^{13}, \frac{2}{113}\sqrt{645}e^{14} + \frac{2}{113}\sqrt{129}e^{26}$	$(\frac{4}{113}, \frac{16}{113}, -\frac{15}{113}, \frac{32}{113}, -\frac{39}{113}, \frac{20}{113}, -\frac{11}{113}, \frac{36}{113})$ $+ \frac{10}{113}\sqrt{43}e^4 \otimes e_7 + \frac{1}{113}\sqrt{4386}e^1 \otimes e_5$	{1234, 1346, 24568, 458}
831:12	$0, 0, 0, 0, 0, \frac{8}{637}\sqrt{366}e^{12}, \frac{8}{637}\sqrt{366}e^{13}, \frac{16}{637}\sqrt{74}e^{14} + \frac{16}{637}\sqrt{95}e^{26}$	$(\frac{8}{91}, -\frac{4}{637}, -\frac{124}{637}, -\frac{8}{637}, \frac{16}{91}, \frac{4}{49}, -\frac{68}{637}, \frac{48}{637})$ $+ \frac{16}{637}\sqrt{155}e^2 \otimes e_7 + \frac{8}{637}\sqrt{106}e^5 \otimes e_8 + \frac{8}{637}\sqrt{430}e^1 \otimes e_4$	{2456, 3457}
831:12	$0, 0, 0, 0, 0, \frac{8}{1167}\sqrt{2581}e^{12}, \frac{4}{1167}\sqrt{9686}e^{13},$ $\frac{4}{1167}\sqrt{1914}e^{14} + \frac{80}{1167}\sqrt{58}e^{26}$	$(-\frac{55}{389}, \frac{30}{389}, \frac{479}{1167}, \frac{60}{389}, -\frac{374}{1167}, -\frac{25}{389}, \frac{314}{1167}, \frac{5}{389})$ $+ \frac{4}{1167}\sqrt{28942}e^3 \otimes e_8 + \frac{4}{1167}\sqrt{30218}e^2 \otimes e_5$	{12478, 145678, 23467, 3457}
831:12	$0, 0, 0, 0, 0, \frac{18}{1469}\sqrt{1605}e^{12}, \frac{18}{1469}\sqrt{543}e^{13},$ $\frac{18}{1469}\sqrt{951}e^{14} + \frac{18}{1469}\sqrt{1185}e^{26}$	$(\frac{362}{1469}, -\frac{62}{1469}, -\frac{21}{1469}, -\frac{124}{1469}, -\frac{548}{1469}, \frac{300}{1469}, \frac{341}{1469}, \frac{238}{1469})$ $+ \frac{108}{1469}\sqrt{59}e^2 \otimes e_5 + \frac{18}{1469}\sqrt{1803}e^1 \otimes e_4$	{23467, 246, 3457, 45}
831:12	$0, 0, 0, 0, 0, \frac{2}{1525}\sqrt{68557}e^{12}, \frac{12}{1525}\sqrt{5362}e^{13},$ $\frac{16}{1525}\sqrt{1149}e^{14} + \frac{2}{1525}\sqrt{4213}e^{26}$	$(-\frac{358}{1525}, \frac{349}{1525}, \frac{58}{305}, \frac{698}{1525}, -\frac{476}{1525}, -\frac{9}{1525}, -\frac{68}{1525}, \frac{68}{305})$ $+ \frac{2}{1525}\sqrt{243205}e^3 \otimes e_5 + \frac{2}{1525}\sqrt{279973}e^4 \otimes e_7$	{125678, 1578, 237, 367}
831:12	$0, 0, 0, 0, 0, \frac{3}{404}\sqrt{1295}e^{12}, \frac{3}{404}\sqrt{1295}e^{13}, \frac{3}{202}\sqrt{285}e^{14} + \frac{3}{202}\sqrt{305}e^{26}$	$(\frac{23}{202}, \frac{1}{808}, -\frac{181}{808}, \frac{1}{404}, \frac{39}{404}, \frac{93}{808}, -\frac{89}{808}, \frac{47}{404})$ $+ \frac{3}{101}\sqrt{95}e^1 \otimes e_4 + \frac{3}{404}\sqrt{2130}e^2 \otimes e_7$	{2456, 246, 3457, 347}
831:13	$0, 0, 0, 0, 0, \frac{1}{137}\sqrt{5610}e^{12}, \frac{3}{137}\sqrt{2090}e^{13}, \frac{1}{137}\sqrt{5610}e^{16} + \frac{10}{137}\sqrt{66}e^{24}$	$(\frac{3}{137}, \frac{23}{137}, -\frac{31}{137}, \frac{6}{137}, 1, \frac{26}{137}, -\frac{28}{137}, \frac{29}{137})$ $+ \frac{3}{137}\sqrt{4070}e^5 \otimes e_7$	{123568, 12678, 135, 17, 2378, 258, 367, 56}
831:13	$0, 0, 0, 0, 0, \frac{2}{337}\sqrt{2262}e^{12}, \frac{2}{337}\sqrt{6554}e^{13}, \frac{2}{337}\sqrt{4466}e^{16} + \frac{2}{337}\sqrt{8758}e^{24}$	$(\frac{36}{337}, \frac{35}{337}, -\frac{80}{337}, \frac{72}{337}, -\frac{81}{337}, \frac{71}{337}, -\frac{44}{337}, \frac{107}{337})$ $+ \frac{4}{337}\sqrt{1653}e^2 \otimes e_5 + \frac{4}{337}\sqrt{2755}e^4 \otimes e_7$	{12678, 157, 2378, 3567}
831:13	$0, 0, 0, 0, 0, \frac{8}{437}\sqrt{66}e^{12}, \frac{4}{437}\sqrt{426}e^{13}, \frac{8}{437}\sqrt{35}e^{16} + \frac{4}{437}\sqrt{426}e^{24}$	$(\frac{1}{23}, -\frac{51}{437}, \frac{3}{437}, \frac{2}{23}, \frac{30}{437}, -\frac{32}{437}, \frac{22}{437}, -\frac{13}{437})$ $+ \frac{4}{437}\sqrt{442}e^4 \otimes e_7 + \frac{8}{437}\sqrt{93}e^3 \otimes e_8$	{125678, 12678, 3567, 367}
831:13	$0, 0, 0, 0, 0, \frac{2}{11}\sqrt{21}e^{12}, \frac{7}{11}e^{13}, \frac{2}{11}\sqrt{21}e^{16} + \frac{7}{11}e^{24}$	$(\frac{5}{22}, -\frac{1}{11}, -\frac{9}{22}, \frac{5}{11}, \frac{3}{22}, \frac{3}{22}, -\frac{2}{11}, \frac{4}{11})$ $+ \frac{1}{11}\sqrt{133}e^1 \otimes e_3$	{12458, 1248, 1456, 146, 234568, 23468, 34, 345}
831:13	$0, 0, 0, 0, 0, \frac{2}{337}\sqrt{6554}e^{12}, \frac{2}{337}\sqrt{4466}e^{13}, \frac{2}{337}\sqrt{8758}e^{16} + \frac{2}{337}\sqrt{2262}e^{24}$	$(\frac{36}{337}, -\frac{41}{337}, -\frac{80}{337}, \frac{72}{337}, \frac{147}{337}, -\frac{5}{337}, -\frac{44}{337}, \frac{31}{337})$ $+ \frac{4}{337}\sqrt{1653}e^5 \otimes e_8 + \frac{4}{337}\sqrt{2755}e^1 \otimes e_3$	{1248, 1456, 23468, 345}
831:13	$0, 0, 0, 0, 0, \frac{6}{127}\sqrt{93}e^{12}, \frac{6}{127}\sqrt{93}e^{13}, \frac{1}{127}\sqrt{93}e^{16} + \frac{1}{127}\sqrt{93}e^{24}$	$(-\frac{39}{254}, \frac{54}{127}, \frac{107}{254}, -\frac{39}{127}, -\frac{79}{254}, \frac{69}{254}, \frac{34}{127}, \frac{15}{127})$ $+ \frac{3}{127}\sqrt{1147}e^2 \otimes e_4 + \frac{3}{127}\sqrt{1147}e^3 \otimes e_5$	{123, 1257, 2367, 256}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:13	$0, 0, 0, 0, 0, \frac{24}{1319}\sqrt{890}e^{12}, \frac{8}{1319}\sqrt{435}e^{13},$ $\frac{40}{1319}\sqrt{219}e^{16} + \frac{8}{1319}\sqrt{3810}e^{24}$	$(-\frac{58}{1319}, \frac{364}{1319}, \frac{166}{1319}, -\frac{116}{1319}, -\frac{538}{1319}, \frac{306}{1319}, \frac{108}{1319}, \frac{248}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^2 \otimes e_4 + \frac{360}{1319}\sqrt{5}e^1 \otimes e_5$	{13467, 146, 345, 457}
831:13	$0, 0, 0, 0, 0, \frac{1}{137}\sqrt{5610}e^{12}, \frac{3}{137}\sqrt{2090}e^{13}, \frac{1}{137}\sqrt{5610}e^{16} + \frac{10}{137}\sqrt{66}e^{24}$	$(\frac{3}{137}, \frac{23}{137}, \frac{80}{137}, \frac{6}{137}, -\frac{85}{137}, \frac{26}{137}, \frac{83}{137}, \frac{29}{137})$ $+ \frac{3}{137}\sqrt{4070}e^3 \otimes e_5$	{12368, 125678, 13, 157, 2378, 258, 367, 56}
831:13	$0, 0, 0, 0, 0, \frac{6}{127}\sqrt{93}e^{12}, \frac{6}{127}\sqrt{93}e^{13}, \frac{1}{127}\sqrt{93}e^{16} + \frac{1}{127}\sqrt{93}e^{24}$	$(-\frac{39}{254}, \frac{54}{127}, -\frac{2}{127}, -\frac{39}{127}, \frac{143}{254}, \frac{69}{254}, -\frac{43}{254}, \frac{15}{127})$ $+ \frac{3}{127}\sqrt{1147}e^2 \otimes e_4 + \frac{3}{127}\sqrt{1147}e^5 \otimes e_7$	{1235, 127, 2367, 256}
831:13	$0, 0, 0, 0, 0, \frac{2}{29}\sqrt{6}e^{12}, \frac{2}{29}\sqrt{33}e^{13}, \frac{2}{29}\sqrt{6}e^{16} + \frac{2}{29}\sqrt{33}e^{24}$	$(-\frac{4}{29}, \frac{7}{29}, \frac{5}{29}, -\frac{8}{29}, \frac{3}{29}, \frac{3}{29}, \frac{1}{29}, -\frac{1}{29})$ $+ \frac{2}{29}\sqrt{39}e^2 \otimes e_7 + \frac{2}{29}\sqrt{39}e^3 \otimes e_8$	{258, 28, 3567, 367}
831:13	$0, 0, 0, 0, 0, \frac{3}{133}\sqrt{305}e^{12}, \frac{3}{133}\sqrt{305}e^{13}, \frac{3}{133}\sqrt{110}e^{16} + \frac{3}{133}\sqrt{110}e^{24}$	$(\frac{5}{266}, \frac{33}{133}, -\frac{29}{266}, \frac{5}{133}, -\frac{85}{266}, \frac{71}{266}, -\frac{12}{133}, \frac{2}{7})$ $+ \frac{9}{133}\sqrt{65}e^1 \otimes e_5 + \frac{9}{133}\sqrt{65}e^2 \otimes e_7$	{1238, 167, 2568, 357}
831:13	$0, 0, 0, 0, 0, \frac{4}{107}\sqrt{154}e^{12}, \frac{1}{107}\sqrt{1342}e^{13}, \frac{2}{107}\sqrt{473}e^{16} + \frac{1}{107}\sqrt{1342}e^{24}$	$(-\frac{1}{214}, \frac{21}{107}, -\frac{45}{214}, -\frac{1}{107}, \frac{15}{214}, \frac{41}{214}, -\frac{23}{107}, \frac{20}{107})$ $+ \frac{11}{107}\sqrt{22}e^1 \otimes e_3 + \frac{2}{107}\sqrt{429}e^2 \otimes e_4$	{1456, 146, 34, 345}
831:13	$0, 0, 0, 0, 0, \frac{8}{1319}\sqrt{3810}e^{12}, \frac{40}{1319}\sqrt{219}e^{13},$ $\frac{8}{1319}\sqrt{435}e^{16} + \frac{24}{1319}\sqrt{890}e^{24}$	$(\frac{55}{1319}, -\frac{143}{1319}, \frac{447}{1319}, \frac{110}{1319}, -\frac{370}{1319}, -\frac{88}{1319}, \frac{502}{1319}, -\frac{33}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^4 \otimes e_5 + \frac{360}{1319}\sqrt{5}e^3 \otimes e_8$	{125678, 135, 258, 3567}
831:13	$0, 0, 0, 0, 0, \frac{4}{1133}\sqrt{498}e^{12}, \frac{30}{1133}\sqrt{249}e^{13},$ $\frac{2}{1133}\sqrt{9213}e^{16} + \frac{8}{1133}\sqrt{5727}e^{24}$	$(-\frac{114}{1133}, \frac{19}{103}, \frac{479}{1133}, -\frac{228}{1133}, -\frac{289}{1133}, \frac{95}{1133}, \frac{365}{1133}, -\frac{19}{1133})$ $+ \frac{12}{1133}\sqrt{3901}e^3 \otimes e_8 + \frac{6}{1133}\sqrt{11869}e^2 \otimes e_5$	{12346, 14578, 2347, 4568}
831:13	$0, 0, 0, 0, 0, \frac{6}{11}e^{12}, \frac{6}{11}\sqrt{2}e^{13}, \frac{3}{11}\sqrt{2}e^{16} + \frac{6}{11}\sqrt{2}e^{24}$	$(-\frac{1}{11}, 0, \frac{7}{11}, -\frac{2}{11}, \frac{2}{11}, -\frac{1}{11}, \frac{6}{11}, -\frac{2}{11})$ $+ \frac{9}{11}\sqrt{2}e^3 \otimes e_8$	{123456, 12346, 14578, 1478, 23457, 2347, 4568, 468}
831:13	$0, 0, 0, 0, 0, \frac{3}{25}\sqrt{22}e^{12}, \frac{1}{25}\sqrt{22}e^{13}, \frac{2}{25}\sqrt{33}e^{16} + \frac{1}{25}\sqrt{22}e^{24}$	$(\frac{2}{25}, \frac{4}{25}, -\frac{9}{25}, \frac{4}{25}, \frac{3}{25}, \frac{6}{25}, -\frac{7}{25}, \frac{8}{25})$ $+ \frac{1}{25}\sqrt{286}e^1 \otimes e_3 + \frac{3}{25}\sqrt{22}e^2 \otimes e_7$	{12458, 1248, 234568, 23468}
831:13	$0, 0, 0, 0, 0, \frac{1}{107}\sqrt{1342}e^{12}, \frac{4}{107}\sqrt{154}e^{13}, \frac{1}{107}\sqrt{1342}e^{16} + \frac{2}{107}\sqrt{473}e^{24}$	$(\frac{25}{214}, -\frac{5}{107}, -\frac{19}{214}, \frac{25}{107}, -\frac{63}{214}, \frac{15}{214}, \frac{3}{107}, \frac{20}{107})$ $+ \frac{11}{107}\sqrt{22}e^4 \otimes e_7 + \frac{2}{107}\sqrt{429}e^3 \otimes e_5$	{125678, 157, 2378, 367}
831:13	$0, 0, 0, 0, 0, \frac{1}{25}\sqrt{22}e^{12}, \frac{3}{25}\sqrt{22}e^{13}, \frac{1}{25}\sqrt{22}e^{16} + \frac{2}{25}\sqrt{33}e^{24}$	$(\frac{1}{5}, -\frac{2}{25}, -\frac{6}{25}, \frac{2}{5}, -\frac{6}{25}, \frac{3}{25}, -\frac{1}{25}, \frac{8}{25})$ $+ \frac{1}{25}\sqrt{286}e^4 \otimes e_7 + \frac{3}{25}\sqrt{22}e^1 \otimes e_5$	{12678, 17, 23578, 3567}
831:13	$0, 0, 0, 0, 0, \frac{2}{337}\sqrt{4466}e^{12}, \frac{2}{337}\sqrt{6554}e^{13}, \frac{2}{337}\sqrt{2262}e^{16} + \frac{2}{337}\sqrt{8758}e^{24}$	$(\frac{36}{337}, -\frac{41}{337}, -\frac{80}{337}, \frac{72}{337}, \frac{147}{337}, -\frac{5}{337}, -\frac{44}{337}, \frac{31}{337})$ $+ \frac{4}{337}\sqrt{1653}e^5 \otimes e_8 + \frac{4}{337}\sqrt{2755}e^4 \otimes e_7$	{12678, 157, 2378, 3567}
831:13	$0, 0, 0, 0, 0, \frac{52}{491}\sqrt{7}e^{12}, \frac{26}{491}\sqrt{82}e^{13}, \frac{13}{491}\sqrt{3}e^{16} + \frac{13}{491}\sqrt{217}e^{24}$	$(-\frac{117}{982}, \frac{52}{491}, \frac{104}{491}, -\frac{117}{491}, \frac{429}{982}, -\frac{13}{982}, \frac{91}{982}, -\frac{65}{491})$ $+ \frac{13}{491}\sqrt{113}e^2 \otimes e_4 + \frac{26}{491}\sqrt{110}e^3 \otimes e_8 + \frac{39}{491}\sqrt{37}e^5 \otimes e_7$	{12678, 258}
831:13	$0, 0, 0, 0, 0, \frac{7}{11}e^{12}, \frac{2}{11}\sqrt{21}e^{13}, \frac{7}{11}e^{16} + \frac{2}{11}\sqrt{21}e^{24}$	$(\frac{5}{22}, -\frac{1}{11}, -\frac{9}{22}, \frac{5}{11}, \frac{3}{22}, \frac{3}{22}, -\frac{2}{11}, \frac{4}{11})$ $+ \frac{1}{11}\sqrt{133}e^4 \otimes e_7$	{125678, 12678, 157, 17, 23578, 2378, 3567, 367}
831:13	$0, 0, 0, 0, 0, \frac{2}{337}\sqrt{8758}e^{12}, \frac{2}{337}\sqrt{4466}e^{13}, \frac{2}{337}\sqrt{6554}e^{16} + \frac{2}{337}\sqrt{2262}e^{24}$	$(\frac{36}{337}, \frac{35}{337}, -\frac{80}{337}, \frac{72}{337}, -\frac{81}{337}, \frac{71}{337}, -\frac{44}{337}, \frac{107}{337})$ $+ \frac{4}{337}\sqrt{1653}e^2 \otimes e_5 + \frac{4}{337}\sqrt{2755}e^1 \otimes e_3$	{1248, 1456, 23468, 345}
831:13	$0, 0, 0, 0, 0, \frac{4}{281}\sqrt{215}e^{12}, \frac{20}{281}\sqrt{43}e^{13}, \frac{4}{281}\sqrt{645}e^{16} + \frac{20}{281}\sqrt{43}e^{24}$	$(-\frac{51}{281}, \frac{70}{281}, \frac{140}{281}, -\frac{102}{281}, \frac{39}{281}, \frac{19}{281}, \frac{89}{281}, -\frac{32}{281})$ $+ \frac{2}{281}\sqrt{12986}e^3 \otimes e_8 + \frac{2}{281}\sqrt{7826}e^2 \otimes e_4$	{12578, 1278, 2568, 268}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:13	$0, 0, 0, 0, 0, \frac{6}{11}\sqrt{2}e^{12}, \frac{3}{11}\sqrt{2}e^{13}, \frac{6}{11}\sqrt{2}e^{16} + \frac{6}{11}e^{24}$	$(\frac{2}{11}, 0, \frac{1}{11}, \frac{4}{11}, -\frac{7}{11}, \frac{2}{11}, \frac{3}{11}, \frac{4}{11})$ $+ \frac{9}{11}\sqrt{2}e^1 \otimes e_5$	{12348, 12478, 1346, 1467, 2345678, 24568, 3457, 45}
831:13	$0, 0, 0, 0, 0, \frac{8}{1319}\sqrt{435}e^{12}, \frac{40}{1319}\sqrt{219}e^{13},$ $\frac{8}{1319}\sqrt{3810}e^{16} + \frac{24}{1319}\sqrt{890}e^{24}$	$(\frac{55}{1319}, \frac{307}{1319}, -\frac{228}{1319}, \frac{110}{1319}, -\frac{370}{1319}, \frac{362}{1319}, -\frac{173}{1319}, \frac{417}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^4 \otimes e_5 + \frac{360}{1319}\sqrt{5}e^2 \otimes e_7$	{123568, 157, 258, 3567}
831:13	$0, 0, 0, 0, 0, \frac{20}{197}\sqrt{42}e^{12}, \frac{56}{197}\sqrt{2}e^{13}, \frac{20}{197}\sqrt{42}e^{16} + \frac{56}{197}\sqrt{3}e^{24}$	$(\frac{33}{197}, -\frac{9}{197}, -\frac{79}{197}, \frac{66}{197}, \frac{66}{197}, \frac{24}{197}, -\frac{46}{197}, \frac{57}{197})$ $+ \frac{4}{197}\sqrt{1834}e^1 \otimes e_3 + \frac{56}{197}\sqrt{3}e^5 \otimes e_7$	{12458, 1456, 234568, 345}
831:13	$0, 0, 0, 0, 0, \frac{2}{71}\sqrt{39}e^{12}, \frac{2}{71}\sqrt{39}e^{13}, \frac{6}{71}\sqrt{78}e^{16} + \frac{6}{71}\sqrt{78}e^{24}$	$(-\frac{2}{71}, -\frac{3}{71}, \frac{15}{71}, -\frac{4}{71}, 1, -\frac{5}{71}, \frac{13}{71}, -\frac{7}{71})$ $+ \frac{6}{71}\sqrt{247}e^5 \otimes e_8$	{1234567, 12456, 13478, 148, 2345, 2457, 3468, 4678}
831:13	$0, 0, 0, 0, 0, \frac{6}{71}\sqrt{78}e^{12}, \frac{2}{71}\sqrt{39}e^{13}, \frac{2}{71}\sqrt{39}e^{16} + \frac{6}{71}\sqrt{78}e^{24}$	$(-\frac{2}{71}, \frac{35}{71}, \frac{15}{71}, -\frac{4}{71}, -\frac{43}{71}, \frac{33}{71}, \frac{13}{71}, \frac{31}{71})$ $+ \frac{6}{71}\sqrt{247}e^2 \otimes e_5$	{12347, 124, 1345678, 14568, 2346, 2467, 3458, 4578}
831:13	$0, 0, 0, 0, 0, \frac{8}{1319}\sqrt{3810}e^{12}, \frac{24}{1319}\sqrt{890}e^{13},$ $\frac{8}{1319}\sqrt{435}e^{16} + \frac{40}{1319}\sqrt{219}e^{24}$	$(-\frac{114}{1319}, \frac{26}{1319}, \frac{278}{1319}, -\frac{228}{1319}, \frac{644}{1319}, \frac{88}{1319}, \frac{164}{1319}, -\frac{202}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^5 \otimes e_7 + \frac{360}{1319}\sqrt{5}e^3 \otimes e_8$	{12678, 135, 258, 367}
831:13	$0, 0, 0, 0, 0, \frac{19}{1379}\sqrt{678}e^{12}, \frac{95}{1379}\sqrt{6}e^{13},$ $\frac{38}{1379}\sqrt{177}e^{16} + \frac{19}{1379}\sqrt{106}e^{24}$	$(\frac{38}{1379}, \frac{76}{1379}, -\frac{323}{1379}, \frac{76}{1379}, \frac{513}{1379}, \frac{114}{1379}, -\frac{285}{1379}, \frac{152}{1379})$ $+ \frac{19}{1379}\sqrt{1054}e^1 \otimes e_3 + \frac{19}{1379}\sqrt{678}e^2 \otimes e_7 + \frac{304}{1379}\sqrt{3}e^5 \otimes e_8$	{128, 2368}
831:13	$0, 0, 0, 0, 0, \frac{3}{79}\sqrt{170}e^{12}, \frac{1}{79}\sqrt{714}e^{13}, \frac{4}{79}\sqrt{102}e^{16} + \frac{1}{79}\sqrt{510}e^{24}$	$(-\frac{14}{79}, \frac{23}{79}, \frac{17}{79}, -\frac{28}{79}, \frac{46}{79}, \frac{9}{79}, \frac{3}{79}, -\frac{5}{79})$ $+ \frac{3}{79}\sqrt{374}e^2 \otimes e_4 + \frac{6}{79}\sqrt{102}e^5 \otimes e_8$	{12378, 128, 2368, 2678}
831:13	$0, 0, 0, 0, 0, \frac{2}{1133}\sqrt{9213}e^{12}, \frac{30}{1133}\sqrt{249}e^{13},$ $\frac{4}{1133}\sqrt{498}e^{16} + \frac{8}{1133}\sqrt{5727}e^{24}$	$(-\frac{114}{1133}, \frac{299}{1133}, -\frac{85}{1133}, -\frac{228}{1133}, \frac{569}{1133}, \frac{185}{1133}, -\frac{199}{1133}, \frac{71}{1133})$ $+ \frac{12}{1133}\sqrt{3901}e^2 \otimes e_7 + \frac{6}{1133}\sqrt{11869}e^5 \otimes e_8$	{12345, 14678, 2456, 3478}
831:13	$0, 0, 0, 0, 0, \frac{3}{133}\sqrt{110}e^{12}, \frac{3}{133}\sqrt{305}e^{13}, \frac{3}{133}\sqrt{305}e^{16} + \frac{3}{133}\sqrt{110}e^{24}$	$(\frac{5}{266}, -\frac{6}{133}, \frac{44}{133}, \frac{5}{133}, -\frac{85}{266}, -\frac{1}{38}, \frac{93}{266}, -\frac{1}{133})$ $+ \frac{9}{133}\sqrt{65}e^1 \otimes e_5 + \frac{9}{133}\sqrt{65}e^3 \otimes e_8$	{1278, 136, 2568, 357}
831:13	$0, 0, 0, 0, 0, \frac{7}{85}\sqrt{34}e^{12}, \frac{1}{85}\sqrt{986}e^{13}, \frac{2}{85}\sqrt{323}e^{16} + \frac{3}{85}\sqrt{102}e^{24}$	$(0, \frac{1}{5}, -\frac{1}{5}, 0, 0, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{1}{85}\sqrt{1122}e^2 \otimes e_4 + \frac{2}{85}\sqrt{442}e^1 \otimes e_3 + \frac{2}{85}\sqrt{51}e^5 \otimes e_7$	{146, 34}
831:13	$0, 0, 0, 0, 0, \frac{19}{2405}\sqrt{2026}e^{12}, \frac{19}{2405}\sqrt{1186}e^{13},$ $\frac{38}{2405}\sqrt{461}e^{16} + \frac{19}{2405}\sqrt{910}e^{24}$	$(-\frac{38}{2405}, \frac{57}{481}, -\frac{399}{2405}, -\frac{76}{2405}, \frac{114}{481}, \frac{19}{185}, -\frac{437}{2405}, \frac{209}{2405})$ $+ \frac{114}{2405}\sqrt{23}e^5 \otimes e_8 + \frac{19}{2405}\sqrt{1374}e^2 \otimes e_4 + \frac{38}{2405}\sqrt{574}e^1 \otimes e_3$	{1456, 345}
831:13	$0, 0, 0, 0, 0, \frac{8}{1319}\sqrt{435}e^{12}, \frac{24}{1319}\sqrt{890}e^{13},$ $\frac{8}{1319}\sqrt{3810}e^{16} + \frac{40}{1319}\sqrt{219}e^{24}$	$(-\frac{114}{1319}, \frac{476}{1319}, \frac{110}{1319}, -\frac{228}{1319}, -\frac{370}{1319}, \frac{362}{1319}, -\frac{4}{1319}, \frac{248}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^3 \otimes e_5 + \frac{360}{1319}\sqrt{5}e^2 \otimes e_7$	{12368, 157, 258, 367}
831:13	$0, 0, 0, 0, 0, \frac{1}{137}\sqrt{5610}e^{12}, \frac{10}{137}\sqrt{66}e^{13}, \frac{1}{137}\sqrt{5610}e^{16} + \frac{3}{137}\sqrt{2090}e^{24}$	$(\frac{40}{137}, -\frac{14}{137}, \frac{6}{137}, \frac{80}{137}, -\frac{85}{137}, \frac{26}{137}, \frac{46}{137}, \frac{66}{137})$ $+ \frac{3}{137}\sqrt{4070}e^4 \otimes e_5$	{123568, 125678, 135, 157, 23578, 258, 3567, 56}
831:13	$0, 0, 0, 0, 0, \frac{3}{11}\sqrt{2}e^{12}, \frac{6}{11}\sqrt{2}e^{13}, \frac{6}{11}e^{16} + \frac{6}{11}\sqrt{2}e^{24}$	$(-\frac{1}{11}, \frac{6}{11}, -\frac{2}{11}, -\frac{2}{11}, \frac{2}{11}, \frac{5}{11}, -\frac{3}{11}, \frac{4}{11})$ $+ \frac{9}{11}\sqrt{2}e^2 \otimes e_7$	{1234, 12345, 145678, 14678, 2456, 246, 34578, 3478}
831:13	$0, 0, 0, 0, 0, \frac{20}{197}\sqrt{42}e^{12}, \frac{56}{197}\sqrt{3}e^{13}, \frac{20}{197}\sqrt{42}e^{16} + \frac{56}{197}\sqrt{2}e^{24}$	$(\frac{47}{197}, -\frac{23}{197}, -\frac{65}{197}, \frac{94}{197}, -\frac{18}{197}, \frac{24}{197}, -\frac{18}{197}, \frac{71}{197})$ $+ \frac{4}{197}\sqrt{1834}e^1 \otimes e_3 + \frac{56}{197}\sqrt{3}e^4 \otimes e_5$	{1248, 146, 23468, 34}
831:13	$0, 0, 0, 0, 0, \frac{3}{137}\sqrt{2090}e^{12}, \frac{1}{137}\sqrt{5610}e^{13}, \frac{10}{137}\sqrt{66}e^{16} + \frac{1}{137}\sqrt{5610}e^{24}$	$(-\frac{34}{137}, \frac{97}{137}, \frac{43}{137}, -\frac{68}{137}, \frac{26}{137}, \frac{63}{137}, \frac{9}{137}, \frac{29}{137})$ $+ \frac{3}{137}\sqrt{4070}e^2 \otimes e_4$	{134567, 13467, 1456, 146, 34, 345, 457, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:14	$0, 0, 0, 0, 0, \frac{3}{25}\sqrt{13}e^{12}, \frac{1}{25}\sqrt{78}e^{13}, \frac{1}{25}\sqrt{78}e^{16} + \frac{3}{25}\sqrt{13}e^{45}$	$(\frac{2}{25}, \frac{4}{25}, \frac{9}{50}, \frac{47}{50}, -\frac{31}{50}, \frac{6}{25}, \frac{13}{50}, \frac{8}{25})$ $+ \frac{39}{25}e^4 \otimes e_5$	{12348, 12358, 12478, 12578, 234678, 235678, 2468, 2568}
831:14	$0, 0, 0, 0, 0, \frac{6}{551}\sqrt{318}e^{12}, \frac{2}{551}\sqrt{11395}e^{13}, \frac{4}{551}\sqrt{530}e^{16} + \frac{2}{551}\sqrt{10441}e^{45}$	$(-\frac{68}{551}, \frac{107}{551}, \frac{77}{551}, \frac{115}{551}, -\frac{144}{551}, \frac{39}{551}, \frac{9}{551}, -\frac{1}{19})$ $+ \frac{2}{551}\sqrt{12667}e^3 \otimes e_8 + \frac{2}{551}\sqrt{13727}e^4 \otimes e_7$	{125678, 1345, 248, 367}
831:14	$0, 0, 0, 0, 0, \frac{3}{499}\sqrt{4070}e^{12}, \frac{1}{499}\sqrt{178266}e^{13},$ $\frac{1}{499}\sqrt{91982}e^{16} + \frac{2}{499}\sqrt{41514}e^{45}$	$(\frac{23}{499}, \frac{129}{499}, -\frac{135}{499}, \frac{295}{499}, -\frac{120}{499}, \frac{152}{499}, -\frac{112}{499}, \frac{175}{499})$ $+ \frac{1}{499}\sqrt{337810}e^4 \otimes e_7$	{123468, 125678, 1345, 17, 23578, 248, 367, 456}
831:14	$0, 0, 0, 0, 0, \frac{340}{1987}e^{12}, \frac{238}{1987}\sqrt{10}e^{13}, \frac{68}{1987}\sqrt{82}e^{16} + \frac{136}{1987}\sqrt{14}e^{45}$	$(\frac{170}{1987}, -\frac{408}{1987}, \frac{510}{1987}, -\frac{323}{1987}, \frac{255}{1987}, -\frac{238}{1987}, \frac{680}{1987}, -\frac{68}{1987})$ $+ \frac{306}{1987}\sqrt{10}e^3 \otimes e_8 + \frac{34}{1987}\sqrt{698}e^1 \otimes e_2 + \frac{578}{1987}e^5 \otimes e_4$	{1478, 1578}
831:14	$0, 0, 0, 0, 0, \frac{4}{79}\sqrt{7}e^{12}, \frac{4}{79}\sqrt{91}e^{13}, \frac{4}{79}\sqrt{91}e^{16} + \frac{4}{79}\sqrt{7}e^{45}$	$(\frac{26}{79}, -\frac{30}{79}, -\frac{3}{79}, \frac{39}{79}, -\frac{17}{79}, -\frac{4}{79}, \frac{23}{79}, \frac{22}{79})$ $+ \frac{4}{79}\sqrt{287}e^1 \otimes e_2 + \frac{56}{79}e^4 \otimes e_5$	{2347, 2357, 24, 25}
831:14	$0, 0, 0, 0, 0, \frac{4}{1405}\sqrt{41514}e^{12}, \frac{2}{1405}\sqrt{91982}e^{13},$ $\frac{2}{1405}\sqrt{178266}e^{16} + \frac{6}{1405}\sqrt{4070}e^{45}$	$(\frac{378}{1405}, -\frac{48}{281}, -\frac{436}{1405}, \frac{133}{281}, -\frac{149}{1405}, \frac{138}{1405}, -\frac{58}{1405}, \frac{516}{1405})$ $+ \frac{2}{1405}\sqrt{337810}e^1 \otimes e_3 + \frac{814}{1405}e^4 \otimes e_5$	{146, 156, 34, 35}
831:14	$0, 0, 0, 0, 0, \frac{1}{521}\sqrt{143002}e^{12}, \frac{2}{521}\sqrt{39410}e^{13},$ $\frac{2}{521}\sqrt{7319}e^{16} + \frac{2}{521}\sqrt{12386}e^{45}$	$(-\frac{135}{521}, \frac{394}{521}, -\frac{34}{521}, \frac{62}{521}, \frac{62}{521}, \frac{259}{521}, -\frac{169}{521}, \frac{124}{521})$ $+ \frac{1}{521}\sqrt{467290}e^2 \otimes e_7$	{123, 12345, 14678, 2456, 26, 3478}
831:14	$0, 0, 0, 0, 0, \frac{34}{3737}\sqrt{177}e^{12}, \frac{17}{3737}\sqrt{2694}e^{13}, \frac{170}{3737}e^{16} + \frac{34}{3737}\sqrt{474}e^{45}$	$(\frac{85}{3737}, -\frac{204}{3737}, \frac{255}{3737}, -\frac{663}{3737}, \frac{17}{101}, -\frac{119}{3737}, \frac{340}{3737}, -\frac{34}{3737})$ $+ \frac{17}{3737}\sqrt{1686}e^1 \otimes e_2 + \frac{17}{3737}\sqrt{2634}e^3 \otimes e_8 + \frac{34}{3737}\sqrt{646}e^5 \otimes e_7$	{1478, 237}
831:14	$0, 0, 0, 0, 0, \frac{2}{499}\sqrt{41514}e^{12}, \frac{1}{499}\sqrt{91982}e^{13},$ $\frac{1}{499}\sqrt{178266}e^{16} + \frac{3}{499}\sqrt{4070}e^{45}$	$(\frac{189}{499}, -\frac{120}{499}, -\frac{218}{499}, \frac{129}{499}, \frac{129}{499}, \frac{69}{499}, -\frac{29}{499}, \frac{258}{499})$ $+ \frac{1}{499}\sqrt{337810}e^1 \otimes e_3$	{12458, 128, 146, 234568, 2368, 34}
831:14	$0, 0, 0, 0, 0, \frac{12}{1343}\sqrt{923}e^{12}, \frac{4}{1343}\sqrt{35571}e^{13},$ $\frac{4}{1343}\sqrt{3053}e^{16} + \frac{4}{1343}\sqrt{20661}e^{45}$	$(\frac{322}{1343}, -\frac{246}{1343}, -\frac{351}{1343}, \frac{539}{1343}, -\frac{141}{1343}, \frac{76}{1343}, -\frac{29}{1343}, \frac{398}{1343})$ $+ \frac{12}{1343}\sqrt{4047}e^1 \otimes e_2 + \frac{8}{1343}\sqrt{12070}e^4 \otimes e_7$	{1345, 17, 23578, 248}
831:14	$0, 0, 0, 0, 0, \frac{36}{1523}\sqrt{118}e^{12}, \frac{288}{1523}\sqrt{7}e^{13},$ $\frac{36}{1523}\sqrt{61}e^{16} + \frac{36}{1523}\sqrt{285}e^{45}$	$(-\frac{432}{1523}, \frac{684}{1523}, \frac{468}{1523}, -\frac{90}{1523}, -\frac{90}{1523}, \frac{252}{1523}, \frac{36}{1523}, -\frac{180}{1523})$ $+ \frac{36}{1523}\sqrt{607}e^2 \otimes e_7 + \frac{36}{1523}\sqrt{721}e^3 \otimes e_8$	{2468, 3457, 37}
831:14	$0, 0, 0, 0, 0, \frac{170}{849}e^{12}, \frac{119}{849}\sqrt{10}e^{13}, \frac{34}{849}\sqrt{82}e^{16} + \frac{68}{849}\sqrt{14}e^{45}$	$(\frac{85}{849}, -\frac{68}{283}, \frac{85}{283}, -\frac{17}{849}, -\frac{17}{849}, \frac{119}{849}, \frac{340}{849}, -\frac{34}{849})$ $+ \frac{17}{849}\sqrt{698}e^1 \otimes e_2 + \frac{51}{283}\sqrt{10}e^3 \otimes e_8$	{1478, 23457, 237}
831:14	$0, 0, 0, 0, 0, \frac{4}{51}\sqrt{7}e^{12}, \frac{4}{51}\sqrt{91}e^{13}, \frac{4}{51}\sqrt{91}e^{16} + \frac{4}{51}\sqrt{7}e^{45}$	$(\frac{26}{51}, -\frac{10}{17}, -\frac{1}{17}, \frac{11}{51}, \frac{11}{51}, -\frac{4}{51}, \frac{23}{51}, \frac{22}{51})$ $+ \frac{4}{51}\sqrt{287}e^1 \otimes e_2$	{13458, 138, 14578, 178, 2347, 24}
831:14	$0, 0, 0, 0, 0, \frac{6}{529}\sqrt{467}e^{12}, \frac{2}{529}\sqrt{36893}e^{13},$ $\frac{1}{529}\sqrt{68182}e^{16} + \frac{8}{529}\sqrt{8873}e^{45}$	$(-\frac{109}{529}, \frac{122}{529}, \frac{371}{529}, -\frac{48}{529}, -\frac{48}{529}, \frac{13}{529}, \frac{262}{529}, -\frac{96}{529})$ $+ \frac{5}{529}\sqrt{15878}e^3 \otimes e_8$	{123456, 1236, 1478, 23457, 237, 468}
831:14	$0, 0, 0, 0, 0, \frac{4}{193}\sqrt{435}e^{12}, \frac{4}{193}\sqrt{290}e^{13}, \frac{4}{193}\sqrt{290}e^{16} + \frac{4}{193}\sqrt{435}e^{45}$	$(\frac{40}{193}, -\frac{3}{193}, -\frac{76}{193}, \frac{80}{193}, -\frac{3}{193}, \frac{37}{193}, -\frac{36}{193}, \frac{77}{193})$ $+ \frac{2}{193}\sqrt{4814}e^1 \otimes e_3 + \frac{2}{193}\sqrt{4814}e^4 \otimes e_7$	{12578, 167, 235678, 37}
831:14	$0, 0, 0, 0, 0, \frac{12}{1525}\sqrt{467}e^{12}, \frac{4}{1525}\sqrt{36893}e^{13},$ $\frac{2}{1525}\sqrt{68182}e^{16} + \frac{8}{1525}\sqrt{8873}e^{45}$	$(-\frac{218}{1525}, \frac{4}{25}, \frac{742}{1525}, \frac{371}{1525}, -\frac{563}{1525}, \frac{26}{1525}, \frac{524}{1525}, -\frac{192}{1525})$ $+ \frac{2}{305}\sqrt{15878}e^3 \otimes e_8 + \frac{934}{1525}e^4 \otimes e_5$	{1478, 1578, 468, 568}
831:14	$0, 0, 0, 0, 0, \frac{36}{1847}\sqrt{118}e^{12}, \frac{288}{1847}\sqrt{7}e^{13},$ $\frac{36}{1847}\sqrt{61}e^{16} + \frac{36}{1847}\sqrt{285}e^{45}$	$(-\frac{432}{1847}, \frac{684}{1847}, \frac{468}{1847}, -\frac{414}{1847}, \frac{234}{1847}, \frac{252}{1847}, \frac{36}{1847}, -\frac{180}{1847})$ $+ \frac{36}{1847}\sqrt{607}e^2 \otimes e_7 + \frac{36}{1847}\sqrt{721}e^3 \otimes e_8 + \frac{648}{1847}e^5 \otimes e_4$	{2468, 2568}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:14	$0, 0, 0, 0, 0, \frac{255}{659}\sqrt{2}e^{12}, \frac{68}{659}\sqrt{2}e^{13}, \frac{170}{659}\sqrt{3}e^{16} + \frac{68}{659}\sqrt{3}e^{45}$	$(\frac{51}{659}, \frac{102}{659}, -\frac{238}{659}, \frac{102}{659}, \frac{102}{659}, \frac{153}{659}, -\frac{187}{659}, \frac{204}{659})$ $+ \frac{17}{659}\sqrt{498}e^2 \otimes e_7 + \frac{34}{659}\sqrt{166}e^1 \otimes e_3$	{12458, 128, 234568, 2368}
831:14	$0, 0, 0, 0, 0, \frac{2}{1605}\sqrt{143002}e^{12}, \frac{4}{1605}\sqrt{39410}e^{13},$ $\frac{4}{1605}\sqrt{7319}e^{16} + \frac{4}{1605}\sqrt{12386}e^{45}$	$(-\frac{18}{107}, \frac{788}{1605}, -\frac{68}{1605}, \frac{229}{535}, -\frac{439}{1605}, \frac{518}{1605}, -\frac{338}{1605}, \frac{248}{1605})$ $+ \frac{1126}{1605}e^4 \otimes e_5 + \frac{2}{1605}\sqrt{467290}e^2 \otimes e_7$	{14678, 15678, 3478, 3578}
831:15	$0, 0, 0, 0, 0, \frac{1}{9}\sqrt{14}e^{12}, \frac{1}{9}\sqrt{14}e^{13}, \frac{1}{9}\sqrt{14}e^{26} + \frac{1}{9}\sqrt{14}e^{45}$	$(\frac{1}{9}, \frac{1}{9}, \frac{1}{6}, \frac{17}{18}, -\frac{11}{18}, \frac{2}{9}, \frac{5}{18}, \frac{1}{3})$ $+ \frac{14}{9}e^4 \otimes e_5$	{12348, 12358, 12478, 12578, 13468, 13568, 14678, 15678}
831:15	$0, 0, 0, 0, 0, \frac{10}{1433}\sqrt{2622}e^{12}, \frac{2}{1433}\sqrt{112309}e^{13},$ $\frac{2}{1433}\sqrt{18354}e^{26} + \frac{2}{1433}\sqrt{140277}e^{45}$	$(\frac{300}{1433}, \frac{87}{1433}, -\frac{574}{1433}, \frac{600}{1433}, -\frac{126}{1433}, \frac{387}{1433}, -\frac{274}{1433}, \frac{474}{1433})$ $+ \frac{22}{1433}\sqrt{2622}e^4 \otimes e_7 + \frac{32}{1433}\sqrt{874}e^1 \otimes e_3$	{127, 167, 235678, 3578}
831:15	$0, 0, 0, 0, 0, \frac{6}{77}\sqrt{13}e^{12}, \frac{9}{77}\sqrt{39}e^{13}, \frac{3}{154}\sqrt{1001}e^{26} + \frac{3}{154}\sqrt{1001}e^{45}$	$(-\frac{8}{77}, -\frac{1}{308}, \frac{50}{77}, -\frac{17}{308}, -\frac{17}{308}, -\frac{3}{28}, \frac{6}{11}, -\frac{17}{154})$ $+ \frac{3}{77}\sqrt{806}e^3 \otimes e_8$	{123456, 1236, 13, 1345, 248, 468}
831:15	$0, 0, 0, 0, 0, \frac{1}{146}\sqrt{18462}e^{12}, \frac{1}{146}\sqrt{2534}e^{13},$ $\frac{1}{146}\sqrt{2715}e^{26} + \frac{1}{146}\sqrt{2715}e^{45}$	$(\frac{51}{73}, -\frac{57}{292}, -\frac{79}{146}, \frac{45}{292}, \frac{45}{292}, \frac{147}{292}, \frac{23}{146}, \frac{45}{146})$ $+ \frac{1}{73}\sqrt{10498}e^1 \otimes e_3$	{1248, 1468, 23456, 236, 3, 345}
831:15	$0, 0, 0, 0, 0, \frac{57}{1069}\sqrt{58}e^{12}, \frac{19}{1069}\sqrt{211}e^{13},$ $\frac{171}{1069}\sqrt{5}e^{26} + \frac{38}{1069}\sqrt{15}e^{45}$	$(\frac{57}{1069}, \frac{114}{1069}, -\frac{304}{1069}, -\frac{38}{1069}, \frac{323}{1069}, \frac{171}{1069}, -\frac{247}{1069}, \frac{285}{1069})$ $+ \frac{19}{1069}\sqrt{622}e^1 \otimes e_3 + \frac{19}{1069}\sqrt{930}e^2 \otimes e_7 + \frac{361}{1069}e^5 \otimes e_4$	{347, 357}
831:15	$0, 0, 0, 0, 0, \frac{4}{141}\sqrt{39}e^{12}, \frac{2}{141}\sqrt{559}e^{13}, \frac{2}{141}\sqrt{559}e^{26} + \frac{4}{141}\sqrt{39}e^{45}$	$(-\frac{38}{141}, \frac{8}{47}, \frac{12}{47}, \frac{5}{141}, \frac{5}{141}, -\frac{14}{141}, -\frac{2}{141}, \frac{10}{141})$ $+ \frac{2}{141}\sqrt{806}e^2 \otimes e_7 + \frac{2}{141}\sqrt{806}e^3 \otimes e_8$	{14678, 3457, 37}
831:15	$0, 0, 0, 0, 0, \frac{6}{425}\sqrt{1001}e^{12}, \frac{6}{425}\sqrt{1001}e^{13}, \frac{36}{425}\sqrt{39}e^{26} + \frac{24}{425}\sqrt{13}e^{45}$	$(-\frac{94}{425}, \frac{123}{425}, -\frac{1}{25}, \frac{193}{425}, -\frac{41}{425}, \frac{29}{425}, -\frac{111}{425}, \frac{152}{425})$ $+ \frac{12}{425}\sqrt{806}e^2 \otimes e_7 + \frac{234}{425}e^4 \otimes e_5$	{246, 256, 347, 357}
831:15	$0, 0, 0, 0, 0, \frac{2}{77}\sqrt{39}e^{12}, \frac{1}{77}\sqrt{559}e^{13}, \frac{1}{77}\sqrt{559}e^{26} + \frac{2}{77}\sqrt{39}e^{45}$	$(-\frac{19}{77}, \frac{12}{77}, \frac{18}{77}, -\frac{4}{77}, \frac{9}{77}, -\frac{1}{11}, -\frac{1}{77}, \frac{5}{77})$ $+ \frac{13}{77}e^5 \otimes e_4 + \frac{1}{77}\sqrt{806}e^2 \otimes e_7 + \frac{1}{77}\sqrt{806}e^3 \otimes e_8$	{14678, 15678}
831:15	$0, 0, 0, 0, 0, \frac{3}{154}\sqrt{1001}e^{12}, \frac{3}{154}\sqrt{1001}e^{13}, \frac{9}{77}\sqrt{39}e^{26} + \frac{6}{77}\sqrt{13}e^{45}$	$(-\frac{47}{154}, \frac{123}{308}, -\frac{17}{308}, \frac{19}{77}, \frac{19}{77}, \frac{29}{308}, -\frac{111}{308}, \frac{38}{77})$ $+ \frac{3}{77}\sqrt{806}e^2 \otimes e_7$	{123458, 1238, 145678, 1678, 246, 347}
831:15	$0, 0, 0, 0, 0, \frac{2}{37}\sqrt{34}e^{12}, \frac{2}{37}\sqrt{221}e^{13}, \frac{2}{37}\sqrt{34}e^{26} + \frac{2}{37}\sqrt{221}e^{45}$	$(-\frac{4}{37}, \frac{11}{37}, -\frac{6}{37}, \frac{24}{37}, -\frac{6}{37}, \frac{7}{37}, -\frac{10}{37}, \frac{18}{37})$ $+ \frac{2}{37}\sqrt{510}e^4 \otimes e_7$	{123468, 125678, 1348, 1578, 237, 245, 367, 456}
831:15	$0, 0, 0, 0, 0, \frac{114}{1777}\sqrt{58}e^{12}, \frac{38}{1777}\sqrt{211}e^{13},$ $\frac{342}{1777}\sqrt{5}e^{26} + \frac{76}{1777}\sqrt{15}e^{45}$	$(\frac{114}{1777}, \frac{228}{1777}, -\frac{608}{1777}, \frac{285}{1777}, \frac{285}{1777}, \frac{342}{1777}, -\frac{494}{1777}, \frac{570}{1777})$ $+ \frac{38}{1777}\sqrt{622}e^1 \otimes e_3 + \frac{38}{1777}\sqrt{930}e^2 \otimes e_7$	{145678, 1678, 347}
831:15	$0, 0, 0, 0, 0, \frac{2}{473}\sqrt{18462}e^{12}, \frac{2}{473}\sqrt{2534}e^{13},$ $\frac{2}{473}\sqrt{2715}e^{26} + \frac{2}{473}\sqrt{2715}e^{45}$	$(\frac{204}{473}, -\frac{57}{473}, -\frac{158}{473}, \frac{226}{473}, -\frac{136}{473}, \frac{147}{473}, \frac{46}{473}, \frac{90}{473})$ $+ \frac{362}{473}e^4 \otimes e_5 + \frac{4}{473}\sqrt{10498}e^1 \otimes e_3$	{1248, 1258, 1468, 1568}
831:15	$0, 0, 0, 0, 0, \frac{4}{1977}\sqrt{7602}e^{12}, \frac{2}{1977}\sqrt{129415}e^{13},$ $\frac{4}{659}\sqrt{905}e^{26} + \frac{2}{1977}\sqrt{108419}e^{45}$	$(-\frac{112}{659}, \frac{199}{1977}, \frac{424}{1977}, \frac{150}{659}, -\frac{388}{1977}, -\frac{137}{1977}, \frac{88}{1977}, \frac{62}{1977})$ $+ \frac{2}{1977}\sqrt{151678}e^4 \otimes e_7 + \frac{8}{1977}\sqrt{10498}e^3 \otimes e_8$	{123456, 1345, 248, 468}
831:15	$0, 0, 0, 0, 0, \frac{24}{425}\sqrt{13}e^{12}, \frac{36}{425}\sqrt{39}e^{13}, \frac{6}{425}\sqrt{1001}e^{26} + \frac{6}{425}\sqrt{1001}e^{45}$	$(-\frac{32}{425}, -\frac{1}{425}, \frac{8}{17}, \frac{4}{17}, -\frac{134}{425}, -\frac{33}{425}, \frac{168}{425}, -\frac{2}{25})$ $+ \frac{12}{425}\sqrt{806}e^3 \otimes e_8 + \frac{234}{425}e^4 \otimes e_5$	{248, 258, 468, 568}
831:16	$0, 0, 0, 0, 0, \frac{1}{35}\sqrt{66}e^{12}, \frac{4}{35}\sqrt{22}e^{34}, \frac{6}{35}\sqrt{11}e^{15} + \frac{1}{35}\sqrt{66}e^{26}$	$(-\frac{3}{35}, \frac{3}{14}, \frac{3}{14}, -\frac{29}{70}, \frac{3}{7}, \frac{9}{70}, -\frac{1}{5}, \frac{12}{35})$ $- \frac{1}{35}\sqrt{858}e^5 \otimes e_7 + \frac{22}{35}e^3 \otimes e_4$	{123678, 124678, 1378, 1478, 237, 247, 367, 467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:16	$0, 0, 0, 0, 0, \frac{1}{35}\sqrt{66}e^{12}, \frac{4}{35}\sqrt{22}e^{34}, \frac{6}{35}\sqrt{11}e^{15} + \frac{1}{35}\sqrt{66}e^{26}$	$(-\frac{3}{35}, \frac{3}{14}, \frac{3}{14}, -\frac{29}{70}, \frac{3}{7}, \frac{9}{70}, -\frac{1}{5}, \frac{12}{35})$ $+ \frac{1}{35}\sqrt{858}e^5 \otimes e_7 + \frac{22}{35}e^3 \otimes e_4$	{123678, 124678, 1378, 1478, 237, 247, 367, 467}
831:16	$0, 0, 0, 0, 0, \frac{20}{419}\sqrt{87}e^{12}, \frac{4}{419}\sqrt{2929}e^{34}, \frac{4}{419}\sqrt{2262}e^{15} + \frac{4}{419}\sqrt{174}e^{26}$	$(\frac{150}{419}, -\frac{9}{419}, \frac{75}{419}, -\frac{157}{419}, -\frac{18}{419}, \frac{141}{419}, -\frac{82}{419}, \frac{132}{419})$ $+ \frac{232}{419}e^3 \otimes e_4 + \frac{36}{419}\sqrt{87}e^1 \otimes e_7$	{235678, 245678, 3578, 4578}
831:16	$0, 0, 0, 0, 0, \frac{4}{353}\sqrt{930}e^{12}, \frac{8}{353}\sqrt{465}e^{34}, \frac{6}{353}\sqrt{465}e^{15} + \frac{2}{353}\sqrt{6045}e^{26}$	$(\frac{80}{353}, -\frac{53}{353}, \frac{160}{353}, -\frac{28}{353}, -\frac{106}{353}, \frac{27}{353}, \frac{132}{353}, -\frac{26}{353})$ $+ \frac{2}{353}\sqrt{10509}e^1 \otimes e_5 + \frac{4}{353}\sqrt{4371}e^3 \otimes e_8$	{12478, 128, 14678, 168}
831:16	$0, 0, 0, 0, 0, \frac{4}{303}\sqrt{174}e^{12}, \frac{4}{303}\sqrt{2929}e^{34}, \frac{4}{303}\sqrt{2262}e^{15} + \frac{20}{303}\sqrt{87}e^{26}$	$(-\frac{4}{101}, -\frac{3}{101}, \frac{2}{3}, -\frac{41}{303}, -\frac{6}{101}, -\frac{7}{101}, \frac{161}{303}, -\frac{10}{101})$ $+ \frac{12}{101}\sqrt{87}e^3 \otimes e_8$	{123456, 123567, 1345, 1357, 24578, 258, 45678, 568}
831:16	$0, 0, 0, 0, 0, \frac{1}{18}\sqrt{286}e^{12}, \frac{1}{18}\sqrt{55}e^{34}, \frac{1}{18}\sqrt{66}e^{15} + \frac{1}{18}\sqrt{77}e^{26}$	$(\frac{13}{18}, -\frac{1}{4}, \frac{5}{36}, \frac{5}{36}, -\frac{1}{2}, \frac{17}{36}, \frac{5}{18}, \frac{2}{9})$ $+ \frac{1}{18}\sqrt{627}e^1 \otimes e_5$	{23456, 23567, 256, 345, 357, 5}
831:16	$0, 0, 0, 0, 0, \frac{10}{63}\sqrt{7}e^{12}, \frac{1}{63}\sqrt{406}e^{34}, \frac{4}{63}\sqrt{21}e^{15} + \frac{1}{63}\sqrt{518}e^{26}$	$(\frac{2}{9}, 0, -\frac{1}{9}, -\frac{1}{9}, 0, \frac{2}{9}, -\frac{2}{9}, \frac{2}{9})$ $+ \frac{1}{63}\sqrt{546}e^1 \otimes e_5 + \frac{4}{21}\sqrt{7}e^2 \otimes e_7$	{23456, 256, 357}
831:16	$0, 0, 0, 0, 0, \frac{18}{503}\sqrt{202}e^{12}, \frac{2}{503}\sqrt{13534}e^{34},$ $\frac{4}{503}\sqrt{2121}e^{15} + \frac{18}{503}\sqrt{202}e^{26}$	$(-\frac{6}{503}, \frac{78}{503}, \frac{39}{503}, -\frac{163}{503}, \frac{156}{503}, \frac{72}{503}, -\frac{124}{503}, \frac{150}{503})$ $+ \frac{202}{503}e^3 \otimes e_4 + \frac{2}{503}\sqrt{33330}e^2 \otimes e_7$	{135678, 145678, 357, 457}
831:16	$0, 0, 0, 0, 0, \frac{1}{47}\sqrt{438}e^{12}, \frac{1}{47}\sqrt{511}e^{34}, \frac{1}{47}\sqrt{219}e^{15} + \frac{1}{47}\sqrt{438}e^{26}$	$(\frac{6}{47}, \frac{9}{94}, \frac{87}{94}, -\frac{59}{94}, \frac{9}{47}, \frac{21}{94}, \frac{14}{47}, \frac{15}{47})$ $+ \frac{73}{47}e^3 \otimes e_4$	{12378, 12478, 13678, 14678, 2367, 2467, 37, 47}
831:16	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{286}e^{12}, \frac{1}{29}\sqrt{55}e^{34}, \frac{1}{29}\sqrt{66}e^{15} + \frac{1}{29}\sqrt{77}e^{26}$	$(\frac{13}{29}, -\frac{9}{58}, \frac{27}{58}, -\frac{17}{58}, -\frac{9}{29}, \frac{17}{58}, \frac{5}{29}, \frac{4}{29})$ $+ \frac{1}{29}\sqrt{627}e^1 \otimes e_5 + \frac{22}{29}e^3 \otimes e_4$	{23567, 24567, 357, 457}
831:16	$0, 0, 0, 0, 0, \frac{20}{303}\sqrt{87}e^{12}, \frac{4}{303}\sqrt{2929}e^{34}, \frac{4}{303}\sqrt{2262}e^{15} + \frac{4}{303}\sqrt{174}e^{26}$	$(\frac{50}{101}, -\frac{3}{101}, -\frac{41}{303}, -\frac{41}{303}, -\frac{6}{101}, \frac{47}{101}, -\frac{82}{303}, \frac{44}{101})$ $+ \frac{12}{101}\sqrt{87}e^1 \otimes e_7$	{12345, 125, 13456, 156, 235678, 3578}
831:16	$0, 0, 0, 0, 0, \frac{3}{67}\sqrt{202}e^{12}, \frac{1}{201}\sqrt{13534}e^{34}, \frac{2}{201}\sqrt{2121}e^{15} + \frac{3}{67}\sqrt{202}e^{26}$	$(-\frac{1}{67}, \frac{13}{67}, -\frac{31}{201}, -\frac{31}{201}, \frac{26}{67}, \frac{12}{67}, -\frac{62}{201}, \frac{25}{67})$ $+ \frac{1}{201}\sqrt{33330}e^2 \otimes e_7$	{123458, 1258, 135678, 23456, 256, 357}
831:16	$0, 0, 0, 0, 0, \frac{8}{643}\sqrt{181}e^{12}, \frac{2}{1929}\sqrt{116383}e^{34},$ $\frac{2}{643}\sqrt{12851}e^{15} + \frac{4}{1929}\sqrt{7059}e^{26}$	$(-\frac{96}{643}, \frac{65}{643}, \frac{464}{1929}, -\frac{436}{1929}, \frac{130}{643}, -\frac{31}{643}, \frac{28}{1929}, \frac{34}{643})$ $+ \frac{20}{643}\sqrt{181}e^3 \otimes e_8 + \frac{2}{1929}\sqrt{148782}e^5 \otimes e_7$	{123456, 1345, 258, 568}
831:16	$0, 0, 0, 0, 0, \frac{8}{541}\sqrt{209}e^{12}, \frac{4}{1623}\sqrt{11902}e^{34},$ $\frac{16}{1623}\sqrt{33}e^{15} + \frac{4}{541}\sqrt{1342}e^{26}$	$(-\frac{40}{541}, \frac{37}{541}, \frac{278}{1623}, -\frac{343}{1623}, \frac{74}{541}, -\frac{3}{541}, -\frac{65}{1623}, \frac{34}{541})$ $+ \frac{4}{541}\sqrt{1518}e^3 \otimes e_8 + \frac{8}{1623}\sqrt{4422}e^2 \otimes e_7$	{1258, 145678, 23456, 357}
831:16	$0, 0, 0, 0, 0, \frac{4}{123}\sqrt{33}e^{12}, \frac{2}{123}\sqrt{451}e^{34}, \frac{22}{123}\sqrt{3}e^{15} + \frac{4}{123}\sqrt{33}e^{26}$	$(\frac{8}{41}, -\frac{3}{41}, \frac{28}{123}, -\frac{26}{123}, -\frac{6}{41}, \frac{5}{41}, \frac{2}{123}, \frac{2}{41})$ $+ \frac{2}{41}\sqrt{66}e^1 \otimes e_7 + \frac{2}{41}\sqrt{66}e^3 \otimes e_8$	{128, 168, 2367, 37}
831:16	$0, 0, 0, 0, 0, \frac{1}{24}\sqrt{66}e^{12}, \frac{1}{6}\sqrt{22}e^{34}, \frac{1}{4}\sqrt{11}e^{15} + \frac{1}{24}\sqrt{66}e^{26}$	$(-\frac{1}{8}, \frac{5}{16}, -\frac{7}{48}, -\frac{7}{48}, \frac{5}{8}, \frac{3}{16}, -\frac{7}{24}, \frac{1}{2})$ $+ \frac{1}{24}\sqrt{858}e^5 \otimes e_7$	{123678, 1378, 237, 367}
831:17	$0, 0, 0, 0, 0, \frac{6}{1073}\sqrt{8357}e^{12}, \frac{6}{1073}\sqrt{10919}e^{13} + \frac{12}{1073}\sqrt{366}e^{24},$ $\frac{6}{1073}\sqrt{18910}e^{16} + \frac{6}{1073}\sqrt{19642}e^{34}$	$(-\frac{60}{1073}, \frac{95}{1073}, \frac{65}{1073}, -\frac{90}{1073}, 1, \frac{35}{1073}, \frac{5}{1073}, -\frac{25}{1073})$ $+ \frac{6}{1073}\sqrt{52765}e^5 \otimes e_8$	{2368, 24678, 345, 57}
831:17	$0, 0, 0, 0, 0, \frac{6}{1073}\sqrt{18910}e^{12}, \frac{6}{1073}\sqrt{10919}e^{13} + \frac{6}{1073}\sqrt{19642}e^{24},$ $\frac{6}{1073}\sqrt{8357}e^{16} + \frac{12}{1073}\sqrt{366}e^{34}$	$(-\frac{60}{1073}, \frac{441}{1073}, \frac{411}{1073}, -\frac{90}{1073}, -\frac{657}{1073}, \frac{381}{1073}, \frac{351}{1073}, \frac{321}{1073})$ $+ \frac{6}{1073}\sqrt{52765}e^2 \otimes e_5$	{23468, 2678, 35, 457}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:17	$0, 0, 0, 0, 0, \frac{4}{27}\sqrt{23}e^{12}, \frac{1}{27}\sqrt{230}e^{13} + \frac{2}{27}\sqrt{23}e^{24},$ $\frac{4}{27}\sqrt{23}e^{16} + \frac{2}{27}\sqrt{23}e^{34}$	$(\frac{2}{9}, -\frac{1}{27}, \frac{2}{27}, \frac{1}{3}, -\frac{17}{27}, \frac{5}{27}, \frac{8}{27}, \frac{11}{27})$ $+ \frac{2}{27}\sqrt{253}e^1 \otimes e_5$	{2345678, 2568, 357, 45}
831:17	$0, 0, 0, 0, 0, \frac{8}{211}\sqrt{21}e^{12}, \frac{112}{211}e^{13} + \frac{8}{211}\sqrt{413}e^{24},$ $\frac{8}{211}\sqrt{21}e^{16} + \frac{8}{211}\sqrt{413}e^{34}$	$(\frac{62}{211}, -\frac{22}{211}, \frac{9}{211}, \frac{93}{211}, -\frac{131}{211}, \frac{40}{211}, \frac{71}{211}, \frac{102}{211})$ $+ \frac{24}{211}\sqrt{133}e^4 \otimes e_5$	{123578, 1248, 13467, 156}
831:18	$0, 0, 0, 0, 0, \frac{3}{577}\sqrt{17930}e^{12}, \frac{132}{577}\sqrt{5}e^{13} + \frac{12}{577}\sqrt{1265}e^{45},$ $\frac{3}{577}\sqrt{3190}e^{16} + \frac{9}{577}\sqrt{770}e^{34}$	$(-\frac{168}{577}, \frac{414}{577}, \frac{87}{577}, -\frac{9}{577}, -\frac{72}{577}, \frac{246}{577}, -\frac{81}{577}, \frac{78}{577})$ $+ \frac{15}{577}\sqrt{2046}e^2 \otimes e_7$	{123458, 1467, 268, 357}
831:18	$0, 0, 0, 0, 0, \frac{2}{361}\sqrt{6882}e^{12}, \frac{2}{361}\sqrt{5106}e^{13} + \frac{6}{361}\sqrt{370}e^{45},$ $\frac{6}{361}\sqrt{370}e^{16} + \frac{12}{361}\sqrt{851}e^{34}$	$(\frac{77}{361}, \frac{39}{361}, -\frac{45}{361}, \frac{238}{361}, -\frac{206}{361}, \frac{116}{361}, \frac{32}{361}, \frac{193}{361})$ $+ \frac{6}{361}\sqrt{7178}e^4 \otimes e_5$	{125, 1468, 2346, 358}
831:18	$0, 0, 0, 0, 0, \frac{1}{77}\sqrt{330}e^{12}, \frac{1}{77}\sqrt{330}e^{13} + \frac{1}{77}\sqrt{1122}e^{45},$ $\frac{2}{77}\sqrt{429}e^{16} + \frac{2}{77}\sqrt{66}e^{34}$	$(\frac{1}{7}, -\frac{2}{7}, \frac{1}{7}, -\frac{1}{7}, \frac{3}{7}, -\frac{1}{7}, \frac{2}{7}, 0)$ $+ \frac{4}{77}\sqrt{165}e^5 \otimes e_8 + \frac{9}{77}\sqrt{22}e^1 \otimes e_2$	{2368, 24678}
831:18	$0, 0, 0, 0, 0, \frac{3}{34}\sqrt{10}e^{12}, \frac{6}{17}\sqrt{5}e^{13} + \frac{3}{34}\sqrt{2}e^{45},$ $\frac{3}{17}\sqrt{19}e^{16} + \frac{9}{17}e^{34}$	$(\frac{63}{136}, -\frac{81}{136}, \frac{3}{136}, \frac{21}{68}, \frac{3}{17}, -\frac{9}{68}, \frac{33}{68}, \frac{45}{136})$ $+ \frac{3}{34}\sqrt{222}e^1 \otimes e_2$	{13458, 1578, 2357, 245}
831:18	$0, 0, 0, 0, 0, \frac{39}{2527}\sqrt{986}e^{12}, \frac{156}{2527}\sqrt{23}e^{13} + \frac{156}{2527}\sqrt{53}e^{45},$ $\frac{39}{2527}\sqrt{26}e^{16} + \frac{117}{2527}\sqrt{46}e^{34}$	$(-\frac{312}{2527}, \frac{1170}{2527}, -\frac{39}{2527}, \frac{585}{2527}, -\frac{936}{2527}, \frac{858}{2527}, -\frac{351}{2527}, \frac{78}{361})$ $+ \frac{39}{2527}\sqrt{2622}e^2 \otimes e_7 + \frac{936}{2527}\sqrt{3}e^4 \otimes e_5$	{14678, 3578}
831:18	$0, 0, 0, 0, 0, \frac{3}{91}\sqrt{7}e^{12}, \frac{3}{91}\sqrt{182}e^{13} + \frac{3}{13}e^{45},$ $\frac{3}{91}\sqrt{154}e^{16} + \frac{9}{91}\sqrt{14}e^{34}$	$(\frac{9}{26}, -\frac{9}{26}, -\frac{3}{26}, \frac{6}{13}, -\frac{3}{13}, 0, \frac{3}{13}, \frac{9}{26})$ $+ \frac{18}{91}\sqrt{14}e^4 \otimes e_5 + \frac{3}{91}\sqrt{609}e^1 \otimes e_2$	{1358, 25}
831:18	$0, 0, 0, 0, 0, \frac{2}{91}\sqrt{285}e^{12}, \frac{6}{91}\sqrt{15}e^{13} + \frac{8}{91}\sqrt{30}e^{45},$ $\frac{20}{91}\sqrt{3}e^{16} + \frac{9}{91}\sqrt{15}e^{34}$	$(-\frac{18}{91}, \frac{29}{91}, \frac{17}{91}, -\frac{24}{91}, \frac{23}{91}, \frac{11}{91}, -\frac{1}{91}, -\frac{1}{13})$ $+ \frac{12}{91}\sqrt{15}e^2 \otimes e_7 + \frac{2}{91}\sqrt{645}e^5 \otimes e_8$	{2368, 57}
831:18	$0, 0, 0, 0, 0, \frac{2}{43}\sqrt{105}e^{12}, \frac{2}{43}\sqrt{195}e^{13} + \frac{8}{43}\sqrt{15}e^{45},$ $\frac{8}{43}\sqrt{15}e^{16} + \frac{4}{43}\sqrt{30}e^{34}$	$(-\frac{2}{43}, \frac{1}{43}, \frac{13}{43}, -\frac{16}{43}, \frac{27}{43}, -\frac{1}{43}, \frac{11}{43}, -\frac{3}{43})$ $+ \frac{10}{43}\sqrt{21}e^5 \otimes e_8$	{2368, 24678, 345, 57}
831:19	$0, 0, 0, 0, 0, \frac{32}{1287}\sqrt{334}e^{12}, \frac{32}{1287}\sqrt{285}e^{13} + \frac{64}{1287}\sqrt{113}e^{45},$ $\frac{32}{1287}\sqrt{547}e^{26} + \frac{32}{1287}\sqrt{354}e^{34}$	$(-\frac{397}{1287}, \frac{406}{1287}, \frac{97}{429}, \frac{124}{1287}, -\frac{230}{1287}, \frac{1}{143}, -\frac{106}{1287}, \frac{415}{1287})$ $+ \frac{32}{1287}\sqrt{1065}e^2 \otimes e_7$	{123458, 15678, 2456, 357}
831:19	$0, 0, 0, 0, 0, \frac{6}{1277}\sqrt{8437}e^{12}, \frac{354}{1277}\sqrt{3}e^{13} + \frac{6}{1277}\sqrt{24013}e^{45},$ $\frac{6}{1277}\sqrt{5133}e^{26} + \frac{6}{1277}\sqrt{13747}e^{34}$	$(\frac{286}{1277}, -\frac{239}{1277}, \frac{196}{1277}, -\frac{388}{1277}, \frac{870}{1277}, \frac{47}{1277}, \frac{482}{1277}, -\frac{192}{1277})$ $+ \frac{30}{1277}\sqrt{2419}e^5 \otimes e_8$	{23456, 2567, 345, 57}
831:19	$0, 0, 0, 0, 0, \frac{17}{3341}\sqrt{1290}e^{12}, \frac{17}{3341}\sqrt{498}e^{13} + \frac{170}{3341}\sqrt{23}e^{45},$ $\frac{51}{3341}\sqrt{274}e^{26} + \frac{34}{3341}\sqrt{179}e^{34}$	$(-\frac{493}{3341}, \frac{306}{3341}, \frac{510}{3341}, -\frac{391}{3341}, \frac{408}{3341}, -\frac{187}{3341}, \frac{17}{3341}, \frac{119}{3341})$ $+ \frac{17}{3341}\sqrt{2314}e^5 \otimes e_8 + \frac{17}{3341}\sqrt{3566}e^2 \otimes e_7$	{2456, 357}
831:19	$0, 0, 0, 0, 0, \frac{13}{437}\sqrt{210}e^{12}, \frac{13}{437}\sqrt{165}e^{13} + \frac{39}{437}\sqrt{30}e^{45},$ $\frac{65}{437}\sqrt{13}e^{26} + \frac{78}{437}\sqrt{5}e^{34}$	$(-\frac{117}{437}, \frac{130}{437}, \frac{78}{437}, \frac{65}{437}, -\frac{104}{437}, \frac{13}{437}, -\frac{39}{437}, \frac{143}{437})$ $+ \frac{13}{437}\sqrt{654}e^2 \otimes e_7 + \frac{13}{437}\sqrt{79}e^4 \otimes e_5$	{15678, 357}
831:19	$0, 0, 0, 0, 0, \frac{6}{293}\sqrt{537}e^{12}, \frac{1}{293}\sqrt{18258}e^{13} + \frac{4}{293}\sqrt{537}e^{45},$ $\frac{1}{293}\sqrt{14678}e^{26} + \frac{6}{293}\sqrt{2327}e^{34}$	$(\frac{54}{293}, \frac{49}{293}, -\frac{36}{293}, \frac{188}{293}, -\frac{170}{293}, \frac{103}{293}, \frac{18}{293}, \frac{152}{293})$ $+ \frac{5}{293}\sqrt{6802}e^4 \otimes e_5$	{125, 156, 23568, 358}
831:20	$0, 0, 0, 0, 0, \frac{9}{239}\sqrt{86}e^{12}, \frac{9}{239}\sqrt{86}e^{14} + \frac{63}{239}\sqrt{2}e^{23},$ $\frac{63}{239}\sqrt{2}e^{13} + \frac{18}{239}\sqrt{6}e^{26}$	$(\frac{135}{478}, -\frac{9}{239}, -\frac{18}{239}, -\frac{189}{478}, \frac{135}{239}, \frac{117}{478}, -\frac{27}{239}, \frac{99}{478})$ $+ \frac{36}{239}\sqrt{26}e^1 \otimes e_4 + \frac{36}{239}\sqrt{26}e^5 \otimes e_7$	{1367, 3478}
831:20	$0, 0, 0, 0, 0, \frac{10}{53}\sqrt{3}e^{12}, \frac{5}{53}\sqrt{14}e^{14} + \frac{10}{53}e^{23},$ $\frac{5}{53}\sqrt{30}e^{13} + \frac{5}{53}\sqrt{10}e^{26}$	$(-\frac{10}{53}, \frac{5}{53}, \frac{10}{53}, \frac{25}{53}, -\frac{15}{53}, -\frac{5}{53}, \frac{15}{53}, 0)$ $+ \frac{10}{53}\sqrt{13}e^4 \otimes e_8 + \frac{5}{53}\sqrt{42}e^3 \otimes e_5$	{12346, 238}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:20	$0, 0, 0, 0, 0, \frac{1}{128}\sqrt{626}e^{12}, \frac{3}{256}\sqrt{6886}e^{14} + \frac{1}{256}\sqrt{11581}e^{23},$ $\frac{1}{256}\sqrt{11581}e^{13} + \frac{1}{256}\sqrt{18154}e^{26}$	$(-\frac{53}{512}, \frac{87}{512}, \frac{87}{256}, \frac{157}{256}, -\frac{39}{64}, \frac{17}{256}, \frac{261}{512}, \frac{121}{512})$ $+ \frac{1}{128}\sqrt{32239}e^4 \otimes e_5$	{1246, 157, 258, 4678}
831:20	$0, 0, 0, 0, 0, \frac{35}{247}\sqrt{6}e^{12}, \frac{35}{247}\sqrt{6}e^{14} + \frac{7}{247}\sqrt{22}e^{23},$ $\frac{7}{247}\sqrt{22}e^{13} + \frac{14}{247}\sqrt{86}e^{26}$	$(-\frac{77}{494}, \frac{21}{247}, \frac{42}{247}, \frac{203}{494}, -\frac{77}{247}, -\frac{35}{494}, \frac{63}{247}, \frac{7}{494})$ $+ \frac{84}{247}\sqrt{3}e^2 \otimes e_5 + \frac{84}{247}\sqrt{3}e^4 \otimes e_8$	{12378, 23467}
831:20	$0, 0, 0, 0, 0, \frac{3}{253}\sqrt{4454}e^{12}, \frac{1}{253}\sqrt{14410}e^{14} + \frac{1}{253}\sqrt{13886}e^{23},$ $\frac{1}{253}\sqrt{40610}e^{13} + \frac{2}{253}\sqrt{262}e^{26}$	$(\frac{1}{2}, -\frac{3}{253}, -\frac{6}{253}, -\frac{271}{506}, \frac{45}{253}, \frac{247}{506}, -\frac{9}{253}, \frac{241}{506})$ $+ \frac{8}{253}\sqrt{1703}e^1 \otimes e_4$	{1356, 136, 3458, 348}
831:20	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{462}e^{12}, \frac{1}{29}\sqrt{66}e^{14} + \frac{11}{29}\sqrt{2}e^{23},$ $\frac{1}{29}\sqrt{286}e^{13} + \frac{2}{29}\sqrt{110}e^{26}$	$(\frac{5}{58}, \frac{3}{29}, \frac{6}{29}, \frac{13}{58}, -\frac{19}{29}, \frac{11}{58}, \frac{9}{29}, \frac{17}{58})$ $+ \frac{4}{29}\sqrt{66}e^2 \otimes e_5$	{1238, 1345678, 2346, 357}
831:20	$0, 0, 0, 0, 0, \frac{102}{653}\sqrt{2}e^{12}, \frac{17}{653}\sqrt{210}e^{14} + \frac{238}{653}e^{23},$ $\frac{17}{653}\sqrt{478}e^{13} + \frac{17}{653}\sqrt{186}e^{26}$	$(\frac{170}{653}, \frac{17}{653}, \frac{34}{653}, -\frac{119}{653}, -\frac{255}{653}, \frac{187}{653}, \frac{51}{653}, \frac{204}{653})$ $+ \frac{17}{653}\sqrt{626}e^3 \otimes e_5 + \frac{34}{653}\sqrt{141}e^1 \otimes e_4$	{123, 23468}
831:20	$0, 0, 0, 0, 0, \frac{1}{253}\sqrt{14410}e^{12}, \frac{3}{253}\sqrt{4454}e^{14} + \frac{1}{253}\sqrt{40610}e^{23},$ $\frac{1}{253}\sqrt{13886}e^{13} + \frac{2}{253}\sqrt{262}e^{26}$	$(\frac{45}{506}, -\frac{3}{253}, -\frac{6}{253}, -\frac{63}{506}, 1, \frac{39}{506}, -\frac{9}{253}, \frac{3}{46})$ $+ \frac{8}{253}\sqrt{1703}e^5 \otimes e_7$	{1234568, 1378, 235, 3467}
831:20	$0, 0, 0, 0, 0, \frac{18}{349}\sqrt{13}e^{12}, \frac{18}{349}\sqrt{55}e^{14} + \frac{18}{349}\sqrt{41}e^{23},$ $\frac{45}{349}\sqrt{6}e^{13} + \frac{18}{349}\sqrt{35}e^{26}$	$(-\frac{30}{349}, \frac{21}{349}, \frac{42}{349}, \frac{93}{349}, -\frac{111}{349}, -\frac{9}{349}, \frac{63}{349}, \frac{12}{349})$ $+ \frac{18}{349}\sqrt{73}e^1 \otimes e_5 + \frac{36}{349}\sqrt{21}e^4 \otimes e_8$	{1678, 457}
831:20	$0, 0, 0, 0, 0, \frac{1}{20}\sqrt{114}e^{12}, \frac{1}{20}\sqrt{114}e^{14} + \frac{1}{20}\sqrt{285}e^{23},$ $\frac{1}{20}\sqrt{285}e^{13} + \frac{1}{10}\sqrt{38}e^{26}$	$(\frac{3}{40}, \frac{1}{8}, \frac{1}{4}, \frac{3}{10}, -\frac{7}{10}, \frac{1}{5}, \frac{3}{8}, \frac{13}{40})$ $+ \frac{1}{20}\sqrt{646}e^3 \otimes e_5$	{1245678, 158, 257, 456}
831:20	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{66}e^{12}, \frac{1}{29}\sqrt{462}e^{14} + \frac{1}{29}\sqrt{286}e^{23},$ $\frac{11}{29}\sqrt{2}e^{13} + \frac{2}{29}\sqrt{110}e^{26}$	$(-\frac{19}{58}, \frac{3}{29}, \frac{6}{29}, \frac{37}{58}, \frac{5}{29}, -\frac{13}{58}, \frac{9}{29}, -\frac{7}{58})$ $+ \frac{4}{29}\sqrt{66}e^4 \otimes e_8$	{134, 1345, 3568, 368}
831:20	$0, 0, 0, 0, 0, \frac{5}{259}\sqrt{66}e^{12}, \frac{5}{259}\sqrt{66}e^{14} + \frac{10}{259}\sqrt{187}e^{23},$ $\frac{5}{259}\sqrt{1562}e^{13} + \frac{10}{259}\sqrt{407}e^{26}$	$(-\frac{4}{37}, \frac{6}{259}, \frac{12}{259}, \frac{46}{259}, 1, -\frac{22}{259}, \frac{18}{259}, -\frac{16}{259})$ $+ \frac{10}{259}\sqrt{1155}e^5 \otimes e_8$	{1248, 1678, 256, 457}
831:20	$0, 0, 0, 0, 0, \frac{222}{3061}\sqrt{26}e^{12}, \frac{74}{3061}\sqrt{115}e^{14} + \frac{74}{3061}\sqrt{209}e^{23},$ $\frac{37}{3061}\sqrt{1910}e^{13} + \frac{148}{3061}\sqrt{47}e^{26}$	$(\frac{518}{3061}, -\frac{111}{3061}, -\frac{222}{3061}, -\frac{851}{3061}, \frac{1665}{3061}, \frac{407}{3061}, -\frac{333}{3061}, \frac{296}{3061})$ $+ \frac{1110}{3061}\sqrt{3}e^5 \otimes e_8 + \frac{74}{3061}\sqrt{698}e^1 \otimes e_4$	{128, 2456}
831:20	$0, 0, 0, 0, 0, \frac{72}{263}\sqrt{6}e^{12}, \frac{72}{263}\sqrt{6}e^{14} + \frac{90}{263}\sqrt{3}e^{23},$ $\frac{27}{263}\sqrt{38}e^{13} + \frac{18}{263}\sqrt{21}e^{26}$	$(\frac{78}{263}, \frac{21}{263}, \frac{42}{263}, -\frac{15}{263}, -\frac{165}{263}, \frac{99}{263}, \frac{63}{263}, \frac{120}{263})$ $+ \frac{18}{263}\sqrt{321}e^1 \otimes e_5$	{1248, 1678, 256, 457}
831:21	$0, 0, 0, 0, 0, \frac{23}{3101}\sqrt{390}e^{12}, \frac{23}{3101}\sqrt{554}e^{13} + \frac{23}{3101}\sqrt{2382}e^{24},$ $\frac{69}{3101}\sqrt{86}e^{16} + \frac{23}{3101}\sqrt{1994}e^{35}$	$(\frac{414}{3101}, -\frac{667}{3101}, -\frac{391}{3101}, \frac{690}{3101}, \frac{552}{3101}, -\frac{253}{3101}, \frac{23}{3101}, \frac{23}{443})$ $+ \frac{46}{3101}\sqrt{610}e^5 \otimes e_7 + \frac{92}{3101}\sqrt{194}e^4 \otimes e_8$	{158, 2345}
831:21	$0, 0, 0, 0, 0, \frac{4}{73}\sqrt{61}e^{12}, \frac{1}{73}\sqrt{1830}e^{13} + \frac{2}{73}\sqrt{671}e^{24},$ $\frac{4}{73}\sqrt{61}e^{16} + \frac{2}{73}\sqrt{671}e^{35}$	$(\frac{14}{73}, -\frac{1}{73}, -\frac{24}{73}, -\frac{9}{73}, \frac{51}{73}, \frac{13}{73}, -\frac{10}{73}, \frac{27}{73})$ $+ \frac{2}{73}\sqrt{1830}e^5 \otimes e_7$	{135, 147, 2378, 2458}
831:21	$0, 0, 0, 0, 0, \frac{3}{299}\sqrt{190}e^{12}, \frac{3}{299}\sqrt{3534}e^{13} + \frac{3}{299}\sqrt{4902}e^{24},$ $\frac{42}{299}\sqrt{19}e^{16} + \frac{42}{299}\sqrt{19}e^{35}$	$(\frac{41}{299}, -\frac{83}{299}, \frac{2}{13}, \frac{170}{299}, -\frac{47}{299}, -\frac{42}{299}, \frac{87}{299}, -\frac{1}{299})$ $+ \frac{12}{299}\sqrt{589}e^4 \otimes e_8$	{12378, 134567, 25678, 47}
831:21	$0, 0, 0, 0, 0, \frac{23}{733}\sqrt{222}e^{12}, \frac{23}{733}\sqrt{246}e^{13} + \frac{161}{733}\sqrt{2}e^{24},$ $\frac{69}{733}\sqrt{2}e^{16} + \frac{69}{733}\sqrt{2}e^{35}$	$(-\frac{138}{733}, \frac{345}{733}, \frac{299}{733}, -\frac{184}{733}, -\frac{230}{733}, \frac{207}{733}, \frac{161}{733}, \frac{69}{733})$ $+ \frac{184}{733}\sqrt{10}e^2 \otimes e_4 + \frac{46}{733}\sqrt{163}e^3 \otimes e_5$	{123, 256}
831:21	$0, 0, 0, 0, 0, \frac{195}{2557}\sqrt{14}e^{12}, \frac{39}{2557}\sqrt{470}e^{13} + \frac{39}{2557}\sqrt{866}e^{24},$ $\frac{39}{2557}\sqrt{286}e^{16} + \frac{273}{2557}\sqrt{22}e^{35}$	$(\frac{78}{2557}, \frac{585}{2557}, -\frac{429}{2557}, -\frac{936}{2557}, \frac{1170}{2557}, \frac{663}{2557}, -\frac{351}{2557}, \frac{741}{2557})$ $+ \frac{156}{2557}\sqrt{106}e^2 \otimes e_4 + \frac{78}{2557}\sqrt{682}e^5 \otimes e_7$	{127, 3478}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:21	$0, 0, 0, 0, 0, \frac{1}{17}\sqrt{42}e^{12}, \frac{7}{17}\sqrt{6}e^{13} + \frac{1}{17}\sqrt{42}e^{24},$ $\frac{1}{17}\sqrt{42}e^{16} + \frac{1}{17}\sqrt{42}e^{35}$	$(-\frac{2}{17}, \frac{5}{17}, \frac{11}{17}, \frac{4}{17}, -\frac{10}{17}, \frac{3}{17}, \frac{9}{17}, \frac{1}{17})$ $+ \frac{14}{17}\sqrt{3}e^3 \otimes e_5$	{134, 157, 367, 456}
831:21	$0, 0, 0, 0, 0, \frac{1}{291}\sqrt{77390}e^{12}, \frac{1}{291}\sqrt{20590}e^{13} + \frac{1}{291}\sqrt{4970}e^{24},$ $\frac{2}{291}\sqrt{3905}e^{16} + \frac{2}{291}\sqrt{3905}e^{35}$	$(-\frac{43}{291}, \frac{63}{97}, \frac{22}{97}, -\frac{166}{291}, \frac{37}{291}, \frac{146}{291}, \frac{23}{291}, \frac{103}{291})$ $+ \frac{4}{291}\sqrt{10295}e^2 \otimes e_4$	{1258, 146, 2368, 345}
831:21	$0, 0, 0, 0, 0, \frac{5}{143}\sqrt{6}e^{12}, \frac{5}{143}\sqrt{138}e^{13} + \frac{5}{143}\sqrt{282}e^{24},$ $\frac{5}{143}\sqrt{210}e^{16} + \frac{5}{143}\sqrt{210}e^{35}$	$(\frac{10}{143}, -\frac{25}{143}, \frac{35}{143}, \frac{70}{143}, -\frac{40}{143}, -\frac{15}{143}, \frac{45}{143}, -\frac{5}{143})$ $+ \frac{10}{143}\sqrt{39}e^3 \otimes e_5 + \frac{120}{143}e^4 \otimes e_8$	{158, 368}
831:22	$0, 0, 0, 0, 0, \frac{3}{35}\sqrt{14}e^{12}, \frac{4}{35}\sqrt{21}e^{14} + \frac{6}{35}\sqrt{35}e^{23},$ $\frac{2}{35}\sqrt{105}e^{16} + \frac{3}{35}\sqrt{42}e^{35}$	$(\frac{1}{5}, -\frac{1}{5}, \frac{7}{10}, \frac{3}{10}, -\frac{1}{2}, 0, \frac{1}{2}, \frac{1}{5})$ $+ \frac{3}{35}\sqrt{266}e^3 \otimes e_5$	{1236, 124567, 234, 257}
831:22	$0, 0, 0, 0, 0, \frac{25}{343}\sqrt{42}e^{12}, \frac{5}{343}\sqrt{1022}e^{14} + \frac{5}{343}\sqrt{966}e^{23},$ $\frac{10}{343}\sqrt{399}e^{16} + \frac{20}{343}\sqrt{42}e^{35}$	$(\frac{15}{49}, -\frac{15}{49}, \frac{20}{49}, -\frac{10}{49}, -\frac{5}{49}, 0, \frac{5}{49}, \frac{15}{49})$ $+ \frac{10}{343}\sqrt{427}e^3 \otimes e_5 + \frac{10}{49}\sqrt{13}e^4 \otimes e_4$	{156, 45}
831:22	$0, 0, 0, 0, 0, \frac{15}{287}\sqrt{14}e^{12}, \frac{5}{287}\sqrt{742}e^{14} + \frac{5}{287}\sqrt{182}e^{23},$ $\frac{10}{287}\sqrt{105}e^{16} + \frac{50}{287}\sqrt{7}e^{35}$	$(-\frac{5}{41}, \frac{5}{41}, \frac{10}{41}, \frac{20}{41}, -\frac{15}{41}, 0, \frac{15}{41}, -\frac{5}{41})$ $+ \frac{10}{287}\sqrt{329}e^3 \otimes e_5 + \frac{10}{41}\sqrt{11}e^4 \otimes e_8$	{1378, 568}
831:22	$0, 0, 0, 0, 0, \frac{6}{251}\sqrt{1139}e^{12}, \frac{12}{251}\sqrt{170}e^{14} + \frac{2}{251}\sqrt{969}e^{23},$ $\frac{30}{251}\sqrt{51}e^{16} + \frac{2}{251}\sqrt{2703}e^{35}$	$(\frac{98}{251}, -\frac{135}{502}, \frac{119}{502}, -\frac{106}{251}, \frac{69}{251}, \frac{61}{502}, -\frac{8}{251}, \frac{257}{502})$ $+ \frac{6}{251}\sqrt{2363}e^1 \otimes e_4$	{12358, 156, 234568, 45}
831:22	$0, 0, 0, 0, 0, \frac{24}{509}\sqrt{15}e^{12}, \frac{8}{509}\sqrt{618}e^{14} + \frac{8}{509}\sqrt{69}e^{23},$ $\frac{8}{509}\sqrt{123}e^{16} + \frac{8}{509}\sqrt{573}e^{35}$	$(-\frac{72}{509}, \frac{116}{509}, -\frac{120}{509}, \frac{68}{509}, \frac{92}{509}, \frac{44}{509}, -\frac{4}{509}, -\frac{28}{509})$ $+ \frac{8}{509}\sqrt{678}e^4 \otimes e_8 - \frac{8}{509}\sqrt{705}e^5 \otimes e_7$	{123678, 1345, 258, 467}
831:22	$0, 0, 0, 0, 0, \frac{24}{509}\sqrt{15}e^{12}, \frac{8}{509}\sqrt{618}e^{14} + \frac{8}{509}\sqrt{69}e^{23},$ $\frac{8}{509}\sqrt{123}e^{16} + \frac{8}{509}\sqrt{573}e^{35}$	$(-\frac{72}{509}, \frac{116}{509}, -\frac{120}{509}, \frac{68}{509}, \frac{92}{509}, \frac{44}{509}, -\frac{4}{509}, -\frac{28}{509})$ $+ \frac{8}{509}\sqrt{678}e^4 \otimes e_8 + \frac{8}{509}\sqrt{705}e^5 \otimes e_7$	{123678, 1345, 258, 467}
831:23	$0, 0, 0, 0, 0, \frac{8}{377}\sqrt{418}e^{12}, \frac{2}{377}\sqrt{7486}e^{34},$ $\frac{2}{377}\sqrt{5738}e^{13} + \frac{2}{377}\sqrt{7486}e^{26} + \frac{6}{377}\sqrt{266}e^{45}$	$(\frac{1}{13}, \frac{4}{377}, \frac{8}{377}, -\frac{8}{377}, \frac{9}{29}, \frac{33}{377}, -\frac{72}{377}, \frac{37}{377})$ $+ \frac{38}{377}\sqrt{34}e^2 \otimes e_7$	{123458, 13678, 2346, 357}
831:23	$0, 0, 0, 0, 0, \frac{2}{455}\sqrt{574}e^{12}, \frac{1}{455}\sqrt{3178}e^{34},$ $\frac{2}{65}\sqrt{11}e^{13} + \frac{2}{455}\sqrt{658}e^{26} + \frac{12}{455}\sqrt{7}e^{45}$	$(\frac{1}{13}, -\frac{2}{65}, -\frac{4}{65}, \frac{1}{65}, 0, \frac{3}{65}, -\frac{3}{65}, \frac{1}{65})$ $+ \frac{1}{455}\sqrt{4102}e^2 \otimes e_7 + \frac{3}{455}\sqrt{182}e^4 \otimes e_5$	{2346, 357}
831:23	$0, 0, 0, 0, 0, \frac{2}{1121}\sqrt{81618}e^{12}, \frac{12}{1121}\sqrt{8251}e^{34},$ $\frac{4}{1121}\sqrt{22746}e^{13} + \frac{42}{1121}\sqrt{223}e^{26} + \frac{30}{1121}\sqrt{223}e^{45}$	$(\frac{244}{1121}, -\frac{39}{1121}, -\frac{78}{1121}, \frac{752}{1121}, -\frac{586}{1121}, \frac{205}{1121}, \frac{674}{1121}, \frac{166}{1121})$ $+ \frac{18}{1121}\sqrt{7359}e^4 \otimes e_5$	{2346, 23567, 34, 357}
831:23	$0, 0, 0, 0, 0, \frac{3}{577}\sqrt{17930}e^{12}, \frac{12}{577}\sqrt{1265}e^{34},$ $\frac{132}{577}\sqrt{5}e^{13} + \frac{3}{577}\sqrt{3190}e^{26} + \frac{9}{577}\sqrt{770}e^{45}$	$(\frac{326}{577}, -\frac{80}{577}, -\frac{160}{577}, -\frac{9}{577}, \frac{175}{577}, \frac{246}{577}, -\frac{169}{577}, \frac{166}{577})$ $+ \frac{15}{577}\sqrt{2046}e^1 \otimes e_7$	{128, 168, 2467, 47}
831:23	$0, 0, 0, 0, 0, \frac{2}{1133}\sqrt{82797}e^{12}, \frac{6}{1133}\sqrt{21809}e^{34},$ $\frac{2}{1133}\sqrt{118695}e^{13} + \frac{12}{1133}\sqrt{579}e^{26} + \frac{6}{1133}\sqrt{20651}e^{45}$	$(\frac{26}{103}, \frac{45}{1133}, \frac{90}{1133}, -\frac{436}{1133}, \frac{812}{1133}, \frac{331}{1133}, -\frac{346}{1133}, \frac{376}{1133})$ $+ \frac{6}{1133}\sqrt{58479}e^5 \otimes e_7$	{23456, 2367, 345, 37}
831:23	$0, 0, 0, 0, 0, \frac{38}{76}\sqrt{38}e^{12}, \frac{76}{1773}\sqrt{159}e^{34},$ $\frac{76}{1773}\sqrt{17}e^{13} + \frac{38}{1773}\sqrt{115}e^{26} + \frac{38}{1773}\sqrt{203}e^{45}$	$(\frac{76}{197}, -\frac{247}{1773}, -\frac{494}{1773}, \frac{152}{591}, -\frac{266}{1773}, \frac{437}{1773}, -\frac{38}{1773}, \frac{190}{1773})$ $+ \frac{38}{1773}\sqrt{679}e^4 \otimes e_5 + \frac{76}{1773}\sqrt{221}e^1 \otimes e_7$	{2467, 47}
831:24	$0, 0, 0, 0, 0, \frac{3}{577}\sqrt{3190}e^{12}, \frac{9}{577}\sqrt{770}e^{14} + \frac{12}{577}\sqrt{1265}e^{35},$ $\frac{132}{577}\sqrt{5}e^{13} + \frac{3}{577}\sqrt{17930}e^{26}$	$(\frac{58}{577}, -\frac{80}{577}, -\frac{160}{577}, \frac{175}{577}, \frac{393}{577}, -\frac{22}{577}, \frac{233}{577}, -\frac{102}{577})$ $+ \frac{15}{577}\sqrt{2046}e^5 \otimes e_8$	{128, 168, 2567, 57}
831:24	$0, 0, 0, 0, 0, \frac{1}{2639}\sqrt{1590}e^{12}, \frac{3}{2639}\sqrt{62}e^{14} + \frac{4}{2639}\sqrt{129}e^{35},$ $\frac{8}{2639}\sqrt{23}e^{13} + \frac{15}{2639}\sqrt{10}e^{26}$	$(-\frac{2}{203}, \frac{8}{2639}, \frac{16}{2639}, \frac{33}{2639}, -\frac{9}{2639}, -\frac{18}{2639}, \frac{1}{377}, -\frac{10}{2639})$ $+ \frac{3}{2639}\sqrt{158}e^5 \otimes e_8 + \frac{4}{2639}\sqrt{202}e^2 \otimes e_7$	{13678, 2356}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:24	$0, 0, 0, 0, 0, \frac{5}{53}\sqrt{10}e^{12}, \frac{10}{53}\sqrt{3}e^{14} + \frac{5}{53}\sqrt{7}e^{35},$ $\frac{5}{53}\sqrt{42}e^{13} + \frac{5}{53}\sqrt{11}e^{26}$	$(\frac{10}{53}, \frac{5}{53}, \frac{10}{53}, -\frac{15}{53}, -\frac{15}{53}, \frac{15}{53}, -\frac{5}{53}, \frac{20}{53})$ $+ \frac{5}{53}\sqrt{46}e^3 \otimes e_5 + \frac{5}{53}\sqrt{51}e^1 \otimes e_4$	{123, 136, 23468, 348}
831:24	$0, 0, 0, 0, 0, \frac{1}{13}\sqrt{21}e^{12}, \frac{3}{13}e^{14} + \frac{1}{26}\sqrt{78}e^{35},$ $\frac{2}{13}\sqrt{5}e^{13} + \frac{3}{26}\sqrt{10}e^{26}$	$(\frac{1}{26}, \frac{1}{13}, \frac{2}{13}, -\frac{3}{26}, -\frac{3}{26}, \frac{3}{26}, -\frac{1}{13}, \frac{5}{26})$ $+ \frac{2}{13}\sqrt{10}e^2 \otimes e_7 + \frac{3}{26}\sqrt{2}e^1 \otimes e_4$	{13678, 347}
831:24	$0, 0, 0, 0, 0, \frac{5}{53}\sqrt{10}e^{12}, \frac{10}{53}\sqrt{3}e^{14} + \frac{5}{53}\sqrt{7}e^{35},$ $\frac{5}{53}\sqrt{42}e^{13} + \frac{5}{53}\sqrt{11}e^{26}$	$(\frac{10}{53}, \frac{5}{53}, \frac{10}{53}, -\frac{15}{53}, -\frac{15}{53}, \frac{15}{53}, -\frac{5}{53}, \frac{20}{53})$ $- \frac{5}{53}\sqrt{46}e^3 \otimes e_5 + \frac{5}{53}\sqrt{51}e^1 \otimes e_4$	{123, 136, 23468, 348}
831:24	$0, 0, 0, 0, 0, \frac{1}{28}\sqrt{30}e^{12}, \frac{1}{14}\sqrt{7}e^{14} + \frac{1}{28}\sqrt{30}e^{35},$ $\frac{1}{7}\sqrt{2}e^{13} + \frac{1}{7}\sqrt{3}e^{26}$	$(-\frac{3}{28}, \frac{1}{14}, \frac{1}{7}, \frac{3}{28}, -\frac{1}{7}, -\frac{1}{28}, 0, \frac{1}{28})$ $+ \frac{1}{28}\sqrt{26}e^4 \otimes e_8 + \frac{3}{14}\sqrt{2}e^2 \otimes e_7$	{13678, 347}
831:24	$0, 0, 0, 0, 0, \frac{1}{7}\sqrt{6}e^{12}, \frac{2}{7}\sqrt{2}e^{14} + \frac{1}{7}\sqrt{6}e^{35}, \frac{1}{7}\sqrt{14}e^{13} + \frac{2}{7}e^{26}$	$(-\frac{2}{7}, \frac{1}{7}, \frac{2}{7}, \frac{3}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{1}{7}, 0)$ $- \frac{1}{7}\sqrt{22}e^4 \otimes e_8 + \frac{4}{7}e^3 \otimes e_5$	{12346, 134, 238, 368}
831:24	$0, 0, 0, 0, 0, \frac{1}{7}\sqrt{6}e^{12}, \frac{2}{7}\sqrt{2}e^{14} + \frac{1}{7}\sqrt{6}e^{35}, \frac{1}{7}\sqrt{14}e^{13} + \frac{2}{7}e^{26}$	$(-\frac{2}{7}, \frac{1}{7}, \frac{2}{7}, \frac{3}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{1}{7}, 0)$ $+ \frac{1}{7}\sqrt{22}e^4 \otimes e_8 + \frac{4}{7}e^3 \otimes e_5$	{12346, 134, 238, 368}
831:24	$0, 0, 0, 0, 0, \frac{1}{7}\sqrt{6}e^{12}, \frac{1}{7}\sqrt{6}e^{14} + \frac{1}{7}\sqrt{7}e^{35},$ $\frac{1}{7}\sqrt{10}e^{13} + \frac{1}{7}\sqrt{5}e^{26}$	$(\frac{2}{7}, -\frac{1}{7}, -\frac{2}{7}, -\frac{1}{7}, \frac{3}{7}, \frac{1}{7}, \frac{1}{7}, 0)$ $+ \frac{1}{7}\sqrt{17}e^1 \otimes e_4 + \frac{2}{7}\sqrt{5}e^5 \otimes e_8$	{128, 168}
831:24	$0, 0, 0, 0, 0, \frac{1}{23}\sqrt{114}e^{12}, \frac{4}{23}\sqrt{19}e^{14} + \frac{1}{23}\sqrt{114}e^{35},$ $\frac{1}{23}\sqrt{190}e^{13} + \frac{2}{23}\sqrt{57}e^{26}$	$(-\frac{6}{23}, \frac{1}{23}, \frac{2}{23}, \frac{15}{23}, \frac{7}{23}, -\frac{5}{23}, \frac{9}{23}, -\frac{4}{23})$ $+ \frac{19}{23}\sqrt{2}e^4 \otimes e_8$	{12346, 134, 238, 368}
831:24	$0, 0, 0, 0, 0, \frac{144}{389}e^{12}, \frac{72}{389}\sqrt{2}e^{14} + \frac{144}{389}e^{35},$ $\frac{16}{389}\sqrt{89}e^{13} + \frac{24}{389}\sqrt{42}e^{26}$	$(-\frac{5}{389}, \frac{38}{389}, \frac{76}{389}, -\frac{21}{389}, -\frac{102}{389}, \frac{33}{389}, -\frac{26}{389}, \frac{71}{389})$ $+ \frac{8}{389}\sqrt{658}e^2 \otimes e_7$	{123458, 13678, 2356, 347}
831:24	$0, 0, 0, 0, 0, \frac{1}{43}\sqrt{318}e^{12}, \frac{1}{43}\sqrt{159}e^{14} + \frac{1}{43}\sqrt{318}e^{35},$ $\frac{6}{43}\sqrt{53}e^{13} + \frac{1}{43}\sqrt{371}e^{26}$	$(-\frac{6}{43}, \frac{14}{43}, \frac{28}{43}, \frac{9}{43}, -\frac{25}{43}, \frac{8}{43}, \frac{3}{43}, \frac{22}{43})$ $+ \frac{1}{43}\sqrt{3763}e^3 \otimes e_5$	{12568, 158, 245, 456}
831:24	$0, 0, 0, 0, 0, \frac{1}{23}\sqrt{30}e^{12}, \frac{1}{23}\sqrt{15}e^{14} + \frac{1}{23}\sqrt{30}e^{35},$ $\frac{1}{23}\sqrt{10}e^{13} + \frac{1}{23}\sqrt{35}e^{26}$	$(\frac{2}{23}, 0, 0, -\frac{3}{23}, -\frac{1}{23}, \frac{2}{23}, -\frac{1}{23}, \frac{2}{23})$ $+ \frac{1}{23}\sqrt{19}e^3 \otimes e_5 + \frac{2}{23}\sqrt{14}e^2 \otimes e_7$	{123458, 2356}
831:24	$0, 0, 0, 0, 0, \frac{3}{17}\sqrt{19}e^{12}, \frac{9}{17}e^{14} + \frac{3}{34}\sqrt{2}e^{35},$ $\frac{6}{17}\sqrt{5}e^{13} + \frac{3}{34}\sqrt{10}e^{26}$	$(\frac{19}{34}, -\frac{1}{17}, -\frac{2}{17}, -\frac{1}{2}, \frac{3}{17}, \frac{1}{2}, \frac{1}{17}, \frac{15}{34})$ $+ \frac{3}{34}\sqrt{222}e^1 \otimes e_4$	{1235, 1356, 234568, 3458}
831:25	$0, 0, 0, 0, 0, \frac{36}{1151}\sqrt{74}e^{12}, \frac{72}{1151}\sqrt{94}e^{13} + \frac{36}{1151}\sqrt{509}e^{45},$ $\frac{36}{1151}\sqrt{391}e^{16} + \frac{36}{1151}\sqrt{354}e^{23}$	$(\frac{111}{1151}, -\frac{228}{1151}, \frac{222}{1151}, \frac{642}{1151}, -\frac{309}{1151}, -\frac{117}{1151}, \frac{333}{1151}, -\frac{6}{1151})$ $+ \frac{36}{1151}\sqrt{951}e^4 \otimes e_8$	{128, 1456, 25678, 47}
831:25	$0, 0, 0, 0, 0, \frac{42}{589}\sqrt{65}e^{12}, \frac{21}{589}\sqrt{110}e^{13} + \frac{42}{589}\sqrt{89}e^{45},$ $\frac{42}{589}\sqrt{14}e^{16} + \frac{252}{589}\sqrt{2}e^{23}$	$(-\frac{42}{589}, \frac{315}{589}, -\frac{84}{589}, -\frac{63}{589}, -\frac{63}{589}, \frac{273}{589}, -\frac{126}{589}, \frac{231}{589})$ $+ \frac{42}{589}\sqrt{237}e^2 \otimes e_7$	{123, 12345, 3478}
831:25	$0, 0, 0, 0, 0, \frac{12}{367}\sqrt{190}e^{12}, \frac{2}{367}\sqrt{570}e^{13} + \frac{4}{367}\sqrt{1995}e^{45},$ $\frac{12}{367}\sqrt{190}e^{16} + \frac{12}{367}\sqrt{95}e^{23}$	$(\frac{36}{367}, \frac{46}{367}, \frac{72}{367}, \frac{339}{367}, -\frac{231}{367}, \frac{82}{367}, \frac{108}{367}, \frac{118}{367})$ $+ \frac{570}{367}e^4 \otimes e_5$	{24678, 25678, 47, 57}
831:25	$0, 0, 0, 0, 0, \frac{84}{1619}\sqrt{65}e^{12}, \frac{42}{1619}\sqrt{110}e^{13} + \frac{84}{1619}\sqrt{89}e^{45},$ $\frac{84}{1619}\sqrt{14}e^{16} + \frac{504}{1619}\sqrt{2}e^{23}$	$(-\frac{84}{1619}, \frac{630}{1619}, -\frac{168}{1619}, \frac{315}{1619}, -\frac{567}{1619}, \frac{546}{1619}, -\frac{252}{1619}, \frac{462}{1619})$ $+ \frac{84}{1619}\sqrt{237}e^2 \otimes e_7 + \frac{882}{1619}e^4 \otimes e_5$	{3478, 3578}
831:25	$0, 0, 0, 0, 0, \frac{35}{1013}\sqrt{30}e^{12}, \frac{7}{1013}\sqrt{870}e^{13} + \frac{14}{1013}\sqrt{579}e^{45},$ $\frac{14}{1013}\sqrt{231}e^{16} + \frac{7}{1013}\sqrt{1758}e^{23}$	$(-\frac{14}{1013}, \frac{105}{1013}, -\frac{28}{1013}, \frac{224}{1013}, -\frac{266}{1013}, \frac{91}{1013}, -\frac{42}{1013}, \frac{77}{1013})$ $+ \frac{7}{1013}\sqrt{2418}e^2 \otimes e_7 + \frac{98}{1013}\sqrt{15}e^4 \otimes e_8$	{128, 47}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:26	$0, 0, 0, 0, 0, \frac{1}{17}\sqrt{15}e^{12}, \frac{4}{17}\sqrt{3}e^{14} + \frac{1}{17}\sqrt{15}e^{35},$ $\frac{2}{17}\sqrt{3}e^{16} + \frac{4}{17}\sqrt{3}e^{23}$	$(-\frac{2}{17}, \frac{3}{17}, -\frac{4}{17}, \frac{2}{17}, \frac{4}{17}, \frac{1}{17}, 0, -\frac{1}{17})$ $+ \frac{1}{17}\sqrt{42}e^2 \otimes e_7 + \frac{1}{17}\sqrt{51}e^4 \otimes e_8$	{258, 467}
831:26	$0, 0, 0, 0, 0, \frac{3}{175}\sqrt{381}e^{12}, \frac{12}{175}\sqrt{33}e^{14} + \frac{3}{175}\sqrt{381}e^{35},$ $\frac{3}{175}\sqrt{186}e^{16} + \frac{9}{175}\sqrt{74}e^{23}$	$(\frac{3}{35}, -\frac{39}{175}, \frac{6}{35}, \frac{18}{175}, \frac{3}{175}, -\frac{24}{175}, \frac{33}{175}, -\frac{9}{175})$ $+ \frac{9}{175}\sqrt{46}e^3 \otimes e_5 + \frac{9}{175}\sqrt{65}e^4 \otimes e_8$	{145, 258}
831:26	$0, 0, 0, 0, 0, \frac{9}{673}\sqrt{174}e^{12}, \frac{18}{673}\sqrt{303}e^{14} + \frac{9}{673}\sqrt{174}e^{35},$ $\frac{18}{673}\sqrt{213}e^{16} + \frac{27}{673}\sqrt{194}e^{23}$	$(\frac{36}{673}, \frac{144}{673}, \frac{72}{673}, -\frac{135}{673}, -\frac{171}{673}, \frac{180}{673}, -\frac{99}{673}, \frac{216}{673})$ $+ \frac{27}{673}\sqrt{178}e^3 \otimes e_5 + \frac{27}{673}\sqrt{226}e^2 \otimes e_7$	{124568, 258}
831:26	$0, 0, 0, 0, 0, \frac{2}{75}\sqrt{714}e^{12}, \frac{14}{25}\sqrt{2}e^{14} + \frac{2}{75}\sqrt{714}e^{35},$ $\frac{2}{75}\sqrt{714}e^{16} + \frac{28}{25}e^{23}$	$(\frac{1}{3}, -\frac{13}{75}, \frac{2}{3}, -\frac{3}{25}, -\frac{34}{75}, \frac{4}{25}, \frac{16}{75}, \frac{37}{75})$ $+ \frac{14}{25}\sqrt{6}e^3 \otimes e_5$	{124568, 145, 258, 56}
831:26	$0, 0, 0, 0, 0, \frac{2}{85}\sqrt{429}e^{12}, \frac{2}{85}\sqrt{759}e^{14} + \frac{2}{85}\sqrt{429}e^{35},$ $\frac{2}{85}\sqrt{330}e^{16} + \frac{2}{85}\sqrt{759}e^{23}$	$(-\frac{2}{17}, \frac{49}{85}, -\frac{4}{17}, -\frac{7}{85}, \frac{3}{85}, \frac{39}{85}, -\frac{1}{5}, \frac{29}{85})$ $+ \frac{6}{85}\sqrt{253}e^2 \otimes e_7$	{12345, 13678, 2356, 3478}
831:26	$0, 0, 0, 0, 0, \frac{3}{605}\sqrt{206}e^{12}, \frac{1}{605}\sqrt{1794}e^{14} + \frac{1}{605}\sqrt{1578}e^{35},$ $\frac{18}{605}\sqrt{7}e^{16} + \frac{2}{605}\sqrt{345}e^{23}$	$(\frac{2}{121}, -\frac{26}{605}, \frac{4}{121}, \frac{7}{605}, -\frac{3}{605}, -\frac{16}{605}, \frac{17}{605}, -\frac{6}{605})$ $+ \frac{3}{605}\sqrt{138}e^5 \otimes e_8 + \frac{3}{605}\sqrt{230}e^1 \otimes e_4$	{1356, 345}
831:26	$0, 0, 0, 0, 0, \frac{2}{19}\sqrt{39}e^{12}, \frac{2}{19}\sqrt{66}e^{14} + \frac{2}{19}\sqrt{39}e^{35},$ $\frac{2}{19}\sqrt{6}e^{16} + \frac{2}{19}\sqrt{66}e^{23}$	$(-\frac{1}{19}, -\frac{2}{19}, -\frac{2}{19}, \frac{8}{19}, \frac{9}{19}, -\frac{3}{19}, \frac{7}{19}, -\frac{4}{19})$ $+ \frac{6}{19}\sqrt{11}e^4 \otimes e_8$	{12678, 145, 258, 467}
831:26	$0, 0, 0, 0, 0, \frac{5}{313}\sqrt{1086}e^{12}, \frac{5}{313}\sqrt{690}e^{14} + \frac{20}{313}\sqrt{42}e^{35},$ $\frac{10}{313}\sqrt{237}e^{16} + \frac{5}{313}\sqrt{690}e^{23}$	$(\frac{20}{313}, \frac{40}{313}, \frac{40}{313}, -\frac{55}{313}, -\frac{75}{313}, \frac{60}{313}, -\frac{35}{313}, \frac{80}{313})$ $+ \frac{15}{313}\sqrt{138}e^1 \otimes e_4 + \frac{15}{313}\sqrt{46}e^2 \otimes e_7$	{12358, 234568}
831:26	$0, 0, 0, 0, 0, \frac{12}{79}\sqrt{19}e^{12}, \frac{4}{79}\sqrt{138}e^{14} + \frac{4}{79}\sqrt{102}e^{35},$ $\frac{12}{79}\sqrt{19}e^{16} + \frac{4}{79}\sqrt{138}e^{23}$	$(\frac{11}{79}, -\frac{1}{79}, \frac{22}{79}, -\frac{13}{79}, -\frac{24}{79}, \frac{10}{79}, -\frac{2}{79}, \frac{21}{79})$ $+ \frac{12}{79}\sqrt{23}e^1 \otimes e_4$	{12358, 1356, 234568, 345}
831:26	$0, 0, 0, 0, 0, \frac{6}{25}\sqrt{6}e^{12}, \frac{1}{25}\sqrt{183}e^{14} + \frac{1}{25}\sqrt{141}e^{35},$ $\frac{6}{25}\sqrt{6}e^{16} + \frac{6}{25}\sqrt{6}e^{23}$	$(0, \frac{4}{25}, 0, -\frac{3}{25}, -\frac{3}{25}, \frac{4}{25}, -\frac{3}{25}, \frac{4}{25})$ $+ \frac{3}{25}\sqrt{11}e^3 \otimes e_5 + \frac{3}{5}e^1 \otimes e_4$	{12358, 1356, 234568, 345}
831:26	$0, 0, 0, 0, 0, \frac{6}{25}\sqrt{6}e^{12}, \frac{1}{25}\sqrt{183}e^{14} + \frac{1}{25}\sqrt{141}e^{35},$ $\frac{6}{25}\sqrt{6}e^{16} + \frac{6}{25}\sqrt{6}e^{23}$	$(0, \frac{4}{25}, 0, -\frac{3}{25}, -\frac{3}{25}, \frac{4}{25}, -\frac{3}{25}, \frac{4}{25})$ $- \frac{3}{25}\sqrt{11}e^3 \otimes e_5 + \frac{3}{5}e^1 \otimes e_4$	{12358, 1356, 234568, 345}
831:27	$0, 0, 0, 0, 0, \frac{4}{37}\sqrt{7}e^{12}, \frac{1}{37}\sqrt{266}e^{13},$ $\frac{5}{37}\sqrt{6}e^{14} + \frac{1}{37}\sqrt{58}e^{26} + \frac{1}{37}\sqrt{94}e^{35}$	$(-\frac{9}{37}, \frac{6}{37}, \frac{6}{37}, \frac{12}{37}, -\frac{3}{37}, -\frac{3}{37}, -\frac{3}{37}, \frac{3}{37})$ $+ \frac{1}{37}\sqrt{214}e^3 \otimes e_5 + \frac{1}{37}\sqrt{386}e^2 \otimes e_7$	{2456, 347}
831:27	$0, 0, 0, 0, 0, \frac{102}{3457}\sqrt{58}e^{12}, \frac{17}{3457}\sqrt{2482}e^{13},$ $\frac{34}{3457}\sqrt{458}e^{14} + \frac{68}{3457}\sqrt{145}e^{26} + \frac{34}{3457}\sqrt{197}e^{35}$	$(\frac{221}{3457}, -\frac{34}{3457}, -\frac{544}{3457}, -\frac{68}{3457}, \frac{697}{3457}, \frac{187}{3457}, -\frac{323}{3457}, \frac{153}{3457})$ $+ \frac{17}{3457}\sqrt{3734}e^2 \otimes e_7 + \frac{51}{3457}\sqrt{286}e^1 \otimes e_4$	{2456, 347}
831:27	$0, 0, 0, 0, 0, \frac{72}{1063}\sqrt{71}e^{12}, \frac{4}{1063}\sqrt{28045}e^{13},$ $\frac{16}{1063}\sqrt{1349}e^{14} + \frac{4}{1063}\sqrt{35713}e^{26} + \frac{284}{1063}\sqrt{2}e^{35}$	$(-\frac{247}{1063}, \frac{236}{1063}, -\frac{85}{1063}, \frac{472}{1063}, \frac{310}{1063}, -\frac{11}{1063}, -\frac{332}{1063}, \frac{225}{1063})$ $+ \frac{4}{1063}\sqrt{63545}e^2 \otimes e_7$	{123458, 14678, 2456, 347}
831:27	$0, 0, 0, 0, 0, \frac{6}{1073}\sqrt{18910}e^{12}, \frac{6}{1073}\sqrt{19642}e^{13},$ $\frac{6}{1073}\sqrt{10919}e^{14} + \frac{6}{1073}\sqrt{8357}e^{26} + \frac{12}{1073}\sqrt{366}e^{35}$	$(\frac{620}{1073}, -\frac{239}{1073}, -\frac{90}{1073}, -\frac{478}{1073}, \frac{8}{37}, \frac{381}{1073}, \frac{530}{1073}, \frac{142}{1073})$ $+ \frac{6}{1073}\sqrt{52765}e^1 \otimes e_4$	{23467, 2456, 347, 45}
831:27	$0, 0, 0, 0, 0, \frac{10}{1033}\sqrt{1258}e^{12}, \frac{4}{1033}\sqrt{64787}e^{13},$ $\frac{16}{1033}\sqrt{629}e^{14} + \frac{6}{1033}\sqrt{8177}e^{26} + \frac{2}{1033}\sqrt{55981}e^{35}$	$(-\frac{100}{1033}, \frac{131}{1033}, \frac{710}{1033}, \frac{262}{1033}, -\frac{548}{1033}, \frac{31}{1033}, \frac{610}{1033}, \frac{162}{1033})$ $+ \frac{2}{1033}\sqrt{525215}e^3 \otimes e_5$	{1236, 12567, 13, 157}
831:27	$0, 0, 0, 0, 0, \frac{19}{809}\sqrt{247}e^{12}, \frac{19}{809}\sqrt{622}e^{13},$ $\frac{19}{809}\sqrt{262}e^{14} + \frac{76}{809}\sqrt{3}e^{26} + \frac{19}{809}\sqrt{263}e^{35}$	$(-\frac{247}{809}, \frac{171}{809}, \frac{228}{809}, \frac{342}{809}, -\frac{133}{809}, -\frac{76}{809}, -\frac{19}{809}, \frac{95}{809})$ $+ \frac{19}{809}\sqrt{803}e^4 \otimes e_7 + \frac{76}{809}\sqrt{42}e^3 \otimes e_5$	{12346, 134}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:27	$0, 0, 0, 0, 0, \frac{4}{17}\sqrt{2}e^{12}, \frac{4}{85}\sqrt{155}e^{13},$ $\frac{2}{85}\sqrt{230}e^{14} + \frac{12}{85}\sqrt{5}e^{26} + \frac{2}{85}\sqrt{130}e^{35}$	$(\frac{4}{17}, -\frac{2}{17}, \frac{4}{17}, -\frac{4}{17}, -\frac{4}{17}, \frac{2}{17}, \frac{8}{17}, 0)$ $+ \frac{18}{85}\sqrt{10}e^1 \otimes e_4 + \frac{2}{85}\sqrt{710}e^3 \otimes e_5$	{23467, 2456, 347, 45}
831:27	$0, 0, 0, 0, 0, \frac{4}{17}\sqrt{2}e^{12}, \frac{4}{85}\sqrt{155}e^{13},$ $\frac{2}{85}\sqrt{230}e^{14} + \frac{12}{85}\sqrt{5}e^{26} + \frac{2}{85}\sqrt{130}e^{35}$	$(\frac{4}{17}, -\frac{2}{17}, \frac{4}{17}, -\frac{4}{17}, -\frac{4}{17}, \frac{2}{17}, \frac{8}{17}, 0)$ $+ \frac{18}{85}\sqrt{10}e^1 \otimes e_4 - \frac{2}{85}\sqrt{710}e^3 \otimes e_5$	{23467, 2456, 347, 45}
831:28	$0, 0, 0, 0, 0, \frac{69}{539}\sqrt{22}e^{12}, \frac{46}{539}\sqrt{62}e^{13},$ $\frac{230}{539}e^{16} + \frac{46}{539}\sqrt{59}e^{23} + \frac{46}{539}\sqrt{6}e^{45}$	$(-\frac{69}{539}, \frac{46}{77}, -\frac{138}{539}, \frac{92}{539}, \frac{92}{539}, \frac{23}{49}, -\frac{207}{539}, \frac{184}{539})$ $+ \frac{23}{539}\sqrt{870}e^2 \otimes e_7$	{123, 12345, 3478}
831:28	$0, 0, 0, 0, 0, \frac{8}{1027}\sqrt{1158}e^{12}, \frac{2}{1027}\sqrt{187982}e^{13},$ $\frac{2}{1027}\sqrt{79130}e^{16} + \frac{2}{1027}\sqrt{69866}e^{23} + \frac{2}{1027}\sqrt{181806}e^{45}$	$(-\frac{72}{1027}, \frac{391}{1027}, -\frac{144}{1027}, \frac{556}{1027}, -\frac{309}{1027}, \frac{319}{1027}, -\frac{216}{1027}, \frac{19}{79})$ $+ \frac{2}{1027}\sqrt{333890}e^4 \otimes e_7$	{123468, 1345, 23578, 367}
831:28	$0, 0, 0, 0, 0, \frac{4}{209}\sqrt{489}e^{12}, \frac{4}{209}\sqrt{326}e^{13},$ $\frac{4}{209}\sqrt{326}e^{16} + \frac{2}{209}\sqrt{326}e^{23} + \frac{4}{209}\sqrt{489}e^{45}$	$(\frac{18}{209}, \frac{32}{209}, \frac{36}{209}, \frac{197}{209}, -\frac{129}{209}, \frac{50}{209}, \frac{54}{209}, \frac{68}{209})$ $+ \frac{326}{209}e^4 \otimes e_5$	{12478, 12578, 2468, 2568}
831:28	$0, 0, 0, 0, 0, \frac{138}{1607}\sqrt{22}e^{12}, \frac{92}{1607}\sqrt{62}e^{13},$ $\frac{460}{1607}e^{16} + \frac{92}{1607}\sqrt{59}e^{23} + \frac{92}{1607}\sqrt{6}e^{45}$	$(-\frac{138}{1607}, \frac{644}{1607}, -\frac{276}{1607}, \frac{713}{1607}, -\frac{345}{1607}, \frac{506}{1607}, -\frac{414}{1607}, \frac{368}{1607})$ $+ \frac{1058}{1607}e^4 \otimes e_5 + \frac{46}{1607}\sqrt{870}e^2 \otimes e_7$	{3478, 3578}
831:29	$0, 0, 0, 0, 0, \frac{19}{493}\sqrt{138}e^{12}, \frac{19}{493}\sqrt{142}e^{13},$ $\frac{38}{493}e^{16} + \frac{19}{493}\sqrt{2}e^{24} + \frac{38}{493}e^{35}$	$(-\frac{76}{493}, \frac{209}{493}, \frac{209}{493}, -\frac{152}{493}, \frac{152}{493}, \frac{133}{493}, \frac{133}{493}, \frac{57}{493})$ $+ \frac{19}{493}\sqrt{430}e^2 \otimes e_4 - \frac{228}{493}\sqrt{3}e^3 \otimes e_5$	{123, 1257, 2367, 256}
831:29	$0, 0, 0, 0, 0, \frac{19}{493}\sqrt{138}e^{12}, \frac{19}{493}\sqrt{142}e^{13},$ $\frac{38}{493}e^{16} + \frac{19}{493}\sqrt{2}e^{24} + \frac{38}{493}e^{35}$	$(-\frac{76}{493}, \frac{209}{493}, \frac{209}{493}, -\frac{152}{493}, \frac{152}{493}, \frac{133}{493}, \frac{133}{493}, \frac{57}{493})$ $+ \frac{19}{493}\sqrt{430}e^2 \otimes e_4 + \frac{228}{493}\sqrt{3}e^3 \otimes e_5$	{123, 1257, 2367, 256}
831:29	$0, 0, 0, 0, 0, \frac{1}{73}\sqrt{5610}e^{12}, \frac{1}{73}\sqrt{2210}e^{13},$ $\frac{10}{73}\sqrt{17}e^{16} + \frac{1}{73}\sqrt{2210}e^{24} + \frac{10}{73}\sqrt{17}e^{35}$	$(-\frac{16}{73}, \frac{53}{73}, \frac{17}{73}, -\frac{32}{73}, \frac{4}{73}, \frac{37}{73}, \frac{1}{73}, \frac{21}{73})$ $+ \frac{1}{73}\sqrt{10030}e^2 \otimes e_4$	{134567, 146, 345, 47}
831:29	$0, 0, 0, 0, 0, \frac{1}{73}\sqrt{330}e^{12}, \frac{8}{73}\sqrt{55}e^{13},$ $\frac{1}{73}\sqrt{1430}e^{16} + \frac{8}{73}\sqrt{55}e^{24} + \frac{1}{73}\sqrt{1430}e^{35}$	$(-\frac{10}{73}, \frac{38}{73}, -\frac{7}{73}, -\frac{20}{73}, \frac{25}{73}, \frac{28}{73}, -\frac{17}{73}, \frac{18}{73})$ $+ \frac{1}{73}\sqrt{6710}e^2 \otimes e_7$	{1234, 14678, 2456, 34578}
831:29	$0, 0, 0, 0, 0, \frac{14}{673}\sqrt{102}e^{12}, \frac{28}{673}\sqrt{163}e^{13},$ $\frac{14}{673}\sqrt{254}e^{16} + \frac{14}{673}\sqrt{478}e^{24} + \frac{14}{673}\sqrt{254}e^{35}$	$(-\frac{91}{673}, \frac{224}{673}, \frac{119}{673}, -\frac{182}{673}, -\frac{77}{673}, \frac{133}{673}, \frac{28}{673}, \frac{42}{673})$ $+ \frac{14}{673}\sqrt{710}e^2 \otimes e_7 + \frac{42}{673}\sqrt{58}e^3 \otimes e_5$	{157, 367}
831:29	$0, 0, 0, 0, 0, \frac{28}{65}\sqrt{2}e^{12}, \frac{6}{65}\sqrt{70}e^{13},$ $\frac{14}{65}\sqrt{6}e^{16} + \frac{6}{65}\sqrt{70}e^{24} + \frac{14}{65}\sqrt{6}e^{35}$	$(\frac{2}{13}, -\frac{11}{65}, -\frac{18}{65}, \frac{4}{13}, \frac{27}{65}, -\frac{1}{65}, -\frac{8}{65}, \frac{9}{65})$ $+ \frac{2}{65}\sqrt{826}e^4 \otimes e_7$	{12678, 157, 23578, 367}
831:29	$0, 0, 0, 0, 0, \frac{2}{125}\sqrt{462}e^{12}, \frac{6}{125}\sqrt{286}e^{13},$ $\frac{12}{125}\sqrt{33}e^{16} + \frac{2}{125}\sqrt{330}e^{24} + \frac{66}{125}\sqrt{2}e^{35}$	$(\frac{9}{125}, \frac{1}{5}, -\frac{49}{125}, \frac{18}{125}, \frac{92}{125}, \frac{34}{125}, -\frac{8}{25}, \frac{43}{125})$ $+ \frac{12}{125}\sqrt{187}e^5 \otimes e_7$	{135, 17, 2378, 258}
831:29	$0, 0, 0, 0, 0, \frac{10}{629}\sqrt{122}e^{12}, \frac{5}{629}\sqrt{826}e^{13},$ $\frac{5}{629}\sqrt{366}e^{16} + \frac{10}{629}\sqrt{170}e^{24} + \frac{5}{629}\sqrt{366}e^{35}$	$(\frac{35}{629}, -\frac{75}{629}, \frac{10}{629}, \frac{70}{629}, -\frac{15}{629}, -\frac{40}{629}, \frac{45}{629}, -\frac{5}{629})$ $+ \frac{5}{629}\sqrt{438}e^3 \otimes e_5 + \frac{5}{629}\sqrt{778}e^4 \otimes e_7$	{157, 367}
831:29	$0, 0, 0, 0, 0, \frac{37}{2125}\sqrt{762}e^{12}, \frac{37}{2125}\sqrt{326}e^{13},$ $\frac{148}{2125}\sqrt{7}e^{16} + \frac{37}{2125}\sqrt{330}e^{24} + \frac{148}{2125}\sqrt{218}e^{35}$	$(-\frac{222}{2125}, \frac{37}{85}, -\frac{333}{2125}, -\frac{444}{2125}, \frac{814}{2125}, \frac{703}{2125}, -\frac{111}{425}, \frac{481}{2125})$ $+ \frac{148}{2125}\sqrt{123}e^5 \otimes e_7 + \frac{37}{425}\sqrt{70}e^2 \otimes e_4$	{1235, 127}
831:29	$0, 0, 0, 0, 0, \frac{1}{106}\sqrt{4233}e^{12}, \frac{3}{212}\sqrt{5478}e^{13},$ $\frac{3}{212}\sqrt{1411}e^{16} + \frac{1}{212}\sqrt{20418}e^{24} + \frac{3}{212}\sqrt{1411}e^{35}$	$(-\frac{3}{424}, \frac{31}{212}, \frac{277}{424}, -\frac{3}{212}, -\frac{221}{424}, \frac{59}{424}, \frac{137}{212}, \frac{7}{53})$ $+ \frac{3}{106}\sqrt{2407}e^3 \otimes e_5$	{13, 157, 367, 56}
831:30	$0, 0, 0, 0, 0, \frac{1}{24}\sqrt{399}e^{12}, \frac{1}{24}\sqrt{399}e^{13} + \frac{7}{24}\sqrt{6}e^{24},$ $\frac{7}{24}\sqrt{6}e^{15} + \frac{1}{4}\sqrt{7}e^{26}$	$(\frac{1}{2}, -\frac{3}{16}, -\frac{11}{48}, \frac{11}{24}, -\frac{3}{8}, \frac{5}{16}, \frac{13}{48}, \frac{1}{8})$ $+ \frac{1}{12}\sqrt{210}e^1 \otimes e_5$	{234567, 256, 357, 45}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:30	$0, 0, 0, 0, 0, \frac{4}{79}\sqrt{30}e^{12}, \frac{4}{79}\sqrt{30}e^{13} + \frac{8}{79}\sqrt{15}e^{24},$ $\frac{8}{79}\sqrt{15}e^{15} + \frac{8}{79}\sqrt{15}e^{26}$	$(\frac{20}{79}, -\frac{14}{79}, \frac{6}{79}, \frac{40}{79}, -\frac{28}{79}, \frac{6}{79}, \frac{26}{79}, -\frac{8}{79})$ $+ \frac{12}{79}\sqrt{26}e^4 \otimes e_8 + \frac{4}{79}\sqrt{174}e^1 \otimes e_5$	{1278, 1368}
831:30	$0, 0, 0, 0, 0, \frac{1}{73}\sqrt{1430}e^{12}, \frac{1}{73}\sqrt{1430}e^{13} + \frac{8}{73}\sqrt{55}e^{24},$ $\frac{8}{73}\sqrt{55}e^{15} + \frac{1}{73}\sqrt{330}e^{26}$	$(\frac{6}{73}, -\frac{10}{73}, \frac{25}{73}, \frac{41}{73}, -\frac{20}{73}, -\frac{4}{73}, \frac{31}{73}, -\frac{14}{73})$ $+ \frac{1}{73}\sqrt{6710}e^4 \otimes e_8$	{12456, 13457, 2578, 3568}
831:30	$0, 0, 0, 0, 0, \frac{2}{281}\sqrt{12986}e^{12}, \frac{4}{281}\sqrt{645}e^{13} + \frac{2}{281}\sqrt{8686}e^{24},$ $\frac{2}{281}\sqrt{8686}e^{15} + \frac{2}{281}\sqrt{13846}e^{26}$	$(-\frac{41}{281}, \frac{70}{281}, \frac{9}{281}, -\frac{102}{281}, \frac{140}{281}, \frac{29}{281}, -\frac{32}{281}, \frac{99}{281})$ $+ \frac{44}{281}\sqrt{43}e^2 \otimes e_4$	{12358, 134568, 256, 45}
831:30	$0, 0, 0, 0, 0, \frac{44}{497}\sqrt{14}e^{12}, \frac{165}{497}e^{13} + \frac{11}{497}\sqrt{206}e^{24},$ $\frac{11}{497}\sqrt{337}e^{15} + \frac{33}{497}\sqrt{2}e^{26}$	$(-\frac{121}{497}, \frac{66}{497}, \frac{132}{497}, -\frac{55}{497}, \frac{132}{497}, -\frac{55}{497}, \frac{11}{497}, \frac{11}{497})$ $+ \frac{11}{497}\sqrt{393}e^3 \otimes e_8 + \frac{11}{497}\sqrt{505}e^5 \otimes e_7$	{12678, 1478, 237, 3467}
831:30	$0, 0, 0, 0, 0, \frac{44}{497}\sqrt{14}e^{12}, \frac{165}{497}e^{13} + \frac{11}{497}\sqrt{206}e^{24},$ $\frac{11}{497}\sqrt{337}e^{15} + \frac{33}{497}\sqrt{2}e^{26}$	$(-\frac{121}{497}, \frac{66}{497}, \frac{132}{497}, -\frac{55}{497}, \frac{132}{497}, -\frac{55}{497}, \frac{11}{497}, \frac{11}{497})$ $+ \frac{11}{497}\sqrt{393}e^3 \otimes e_8 - \frac{11}{497}\sqrt{505}e^5 \otimes e_7$	{12678, 1478, 237, 3467}
831:30	$0, 0, 0, 0, 0, \frac{29}{2311}\sqrt{2}e^{12}, \frac{29}{2311}\sqrt{890}e^{13} + \frac{464}{2311}\sqrt{5}e^{24},$ $\frac{348}{2311}\sqrt{13}e^{15} + \frac{29}{2311}\sqrt{102}e^{26}$	$(\frac{638}{2311}, -\frac{348}{2311}, -\frac{203}{2311}, \frac{783}{2311}, -\frac{696}{2311}, \frac{290}{2311}, \frac{435}{2311}, -\frac{58}{2311})$ $+ \frac{116}{2311}\sqrt{111}e^1 \otimes e_3 + \frac{377}{2311}\sqrt{14}e^4 \otimes e_8$	{18, 234}
831:30	$0, 0, 0, 0, 0, \frac{26}{491}\sqrt{110}e^{12}, \frac{13}{491}\sqrt{3}e^{13} + \frac{13}{491}\sqrt{223}e^{24},$ $\frac{52}{491}\sqrt{7}e^{15} + \frac{26}{491}\sqrt{82}e^{26}$	$(\frac{52}{491}, \frac{52}{491}, -\frac{117}{491}, -\frac{117}{491}, \frac{104}{491}, \frac{104}{491}, -\frac{65}{491}, \frac{156}{491})$ $+ \frac{13}{491}\sqrt{553}e^2 \otimes e_4 + \frac{39}{491}\sqrt{37}e^1 \otimes e_3$	{1258, 14568, 2356, 345}
831:30	$0, 0, 0, 0, 0, \frac{26}{491}\sqrt{110}e^{12}, \frac{13}{491}\sqrt{3}e^{13} + \frac{13}{491}\sqrt{223}e^{24},$ $\frac{52}{491}\sqrt{7}e^{15} + \frac{26}{491}\sqrt{82}e^{26}$	$(\frac{52}{491}, \frac{52}{491}, -\frac{117}{491}, -\frac{117}{491}, \frac{104}{491}, \frac{104}{491}, -\frac{65}{491}, \frac{156}{491})$ $- \frac{13}{491}\sqrt{553}e^2 \otimes e_4 + \frac{39}{491}\sqrt{37}e^1 \otimes e_3$	{1258, 14568, 2356, 345}
831:30	$0, 0, 0, 0, 0, \frac{6}{899}\sqrt{1586}e^{12}, \frac{12}{899}\sqrt{3355}e^{13} + \frac{2}{899}\sqrt{54534}e^{24},$ $\frac{899}{899}\sqrt{35502}e^{15} + \frac{2}{899}\sqrt{116022}e^{26}$	$(-\frac{227}{899}, \frac{32}{899}, \frac{569}{899}, \frac{10}{899}, \frac{64}{899}, -\frac{195}{899}, \frac{342}{899}, -\frac{163}{899})$ $+ \frac{12}{899}\sqrt{7503}e^3 \otimes e_8$	{12356, 1345, 258, 4568}
831:30	$0, 0, 0, 0, 0, \frac{9}{775}\sqrt{786}e^{12}, \frac{18}{775}\sqrt{462}e^{13} + \frac{9}{775}\sqrt{1194}e^{24},$ $\frac{81}{775}\sqrt{6}e^{15} + \frac{18}{775}\sqrt{357}e^{26}$	$(\frac{63}{775}, -\frac{18}{775}, \frac{126}{775}, \frac{9}{25}, -\frac{36}{775}, -\frac{27}{775}, \frac{189}{775}, -\frac{117}{775})$ $+ \frac{54}{775}\sqrt{59}e^3 \otimes e_8 + \frac{9}{775}\sqrt{2046}e^1 \otimes e_5$	{234567, 357}
831:30	$0, 0, 0, 0, 0, \frac{25}{847}\sqrt{102}e^{12}, \frac{10}{847}\sqrt{309}e^{13} + \frac{5}{847}\sqrt{1902}e^{24},$ $\frac{5}{847}\sqrt{1902}e^{15} + \frac{20}{847}\sqrt{141}e^{26}$	$(\frac{95}{847}, \frac{10}{847}, -\frac{150}{847}, -\frac{65}{847}, \frac{20}{847}, \frac{15}{847}, -\frac{5}{77}, \frac{115}{847})$ $+ \frac{30}{847}\sqrt{73}e^2 \otimes e_4 + \frac{5}{847}\sqrt{2118}e^1 \otimes e_5$	{256, 45}
831:30	$0, 0, 0, 0, 0, \frac{9}{853}\sqrt{170}e^{12}, \frac{3}{853}\sqrt{258}e^{13} + \frac{108}{853}\sqrt{2}e^{24},$ $\frac{108}{853}\sqrt{2}e^{15} + \frac{3}{853}\sqrt{870}e^{26}$	$(-\frac{78}{853}, \frac{24}{853}, \frac{99}{853}, -\frac{3}{853}, \frac{48}{853}, -\frac{54}{853}, \frac{21}{853}, -\frac{30}{853})$ $+ \frac{12}{853}\sqrt{159}e^5 \otimes e_7 + \frac{3}{853}\sqrt{2238}e^4 \otimes e_8$	{123678, 467}
831:30	$0, 0, 0, 0, 0, \frac{2}{281}\sqrt{7826}e^{12}, \frac{4}{281}\sqrt{645}e^{13} + \frac{2}{281}\sqrt{12126}e^{24},$ $\frac{2}{281}\sqrt{12126}e^{15} + \frac{18}{281}\sqrt{86}e^{26}$	$(-\frac{41}{281}, \frac{70}{281}, \frac{9}{281}, -\frac{102}{281}, \frac{140}{281}, \frac{29}{281}, -\frac{32}{281}, \frac{99}{281})$ $+ \frac{44}{281}\sqrt{43}e^5 \otimes e_7$	{12678, 1478, 237, 3467}
831:30	$0, 0, 0, 0, 0, \frac{66}{125}\sqrt{2}e^{12}, \frac{12}{125}\sqrt{33}e^{13} + \frac{2}{125}\sqrt{330}e^{24},$ $\frac{6}{125}\sqrt{286}e^{15} + \frac{2}{125}\sqrt{462}e^{26}$	$(\frac{71}{125}, -\frac{8}{125}, -\frac{61}{125}, \frac{18}{125}, -\frac{16}{125}, \frac{63}{125}, \frac{2}{25}, \frac{11}{25})$ $+ \frac{12}{125}\sqrt{187}e^1 \otimes e_3$	{1245, 156, 234568, 358}
831:31	$0, 0, 0, 0, 0, \frac{10}{593}\sqrt{115}e^{12}, -\frac{5}{593}\sqrt{327}e^{13} + \frac{5}{593}\sqrt{557}e^{45},$ $\frac{5}{593}\sqrt{521}e^{14} + \frac{15}{593}\sqrt{74}e^{26} + \frac{5}{593}\sqrt{291}e^{35}$	$(-\frac{55}{593}, \frac{30}{593}, \frac{60}{593}, \frac{60}{593}, -\frac{55}{593}, -\frac{25}{593}, \frac{5}{593}, \frac{5}{593})$ $+ \frac{5}{593}\sqrt{1030}e^2 \otimes e_7$	{123458, 14678, 2456, 347, 123458, 14678, 2456, 347}
831:31	$0, 0, 0, 0, 0, \frac{10}{593}\sqrt{115}e^{12}, \frac{5}{593}\sqrt{327}e^{13} + \frac{5}{593}\sqrt{557}e^{45},$ $\frac{5}{593}\sqrt{521}e^{14} + \frac{15}{593}\sqrt{74}e^{26} + \frac{5}{593}\sqrt{291}e^{35}$	$(-\frac{55}{593}, \frac{30}{593}, \frac{60}{593}, \frac{60}{593}, -\frac{55}{593}, -\frac{25}{593}, \frac{5}{593}, \frac{5}{593})$ $+ \frac{5}{593}\sqrt{1030}e^2 \otimes e_7$	{123458, 14678, 2456, 347, 123458, 14678, 2456, 347}
831:32	$0, 0, 0, 0, 0, \frac{1}{47}\sqrt{330}e^{12}, \frac{4}{47}\sqrt{66}e^{13} + \frac{4}{47}\sqrt{33}e^{45},$ $\frac{1}{47}\sqrt{330}e^{16} + \frac{4}{47}\sqrt{66}e^{24} + \frac{3}{47}\sqrt{66}e^{35}$	$(-\frac{8}{47}, \frac{26}{47}, \frac{1}{47}, -\frac{16}{47}, \frac{9}{47}, \frac{18}{47}, -\frac{7}{47}, \frac{10}{47})$ $+ \frac{3}{47}\sqrt{286}e^2 \otimes e_7$	{14678, 2456}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:33	$0, 0, 0, 0, 0, \frac{3}{41}\sqrt{14}e^{12}, \frac{5}{41}\sqrt{70}e^{13} + \frac{1}{41}\sqrt{434}e^{24},$ $\frac{14}{41}e^{14} + \frac{2}{41}\sqrt{154}e^{26} + \frac{2}{41}\sqrt{119}e^{35}$	$(-\frac{7}{41}, \frac{7}{41}, \frac{28}{41}, \frac{14}{41}, -\frac{21}{41}, 0, \frac{21}{41}, \frac{7}{41})$ $+ \frac{6}{41}\sqrt{91}e^3 \otimes e_5$	{1236, 157}
831:34	$0, 0, 0, 0, 0, \frac{2}{11}\sqrt{10}e^{12}, \frac{4}{11}e^{13} + \frac{2}{11}\sqrt{14}e^{24},$ $\frac{2}{11}\sqrt{14}e^{15} + \frac{2}{11}\sqrt{6}e^{26} + \frac{4}{11}\sqrt{2}e^{34}$	$(-\frac{3}{11}, \frac{2}{11}, \frac{3}{11}, -\frac{2}{11}, \frac{4}{11}, -\frac{1}{11}, 0, \frac{1}{11})$ $+ \frac{4}{11}\sqrt{5}e^5 \otimes e_7$	{12678, 237}
831:34	$0, 0, 0, 0, 0, \frac{13}{583}\sqrt{1434}e^{12}, \frac{104}{583}\sqrt{21}e^{13} + \frac{13}{583}\sqrt{1074}e^{24},$ $\frac{13}{583}\sqrt{1074}e^{15} + \frac{26}{583}\sqrt{213}e^{26} + \frac{78}{583}\sqrt{5}e^{34}$	$(\frac{299}{583}, -\frac{104}{583}, -\frac{156}{583}, \frac{247}{583}, -\frac{208}{583}, \frac{195}{583}, \frac{13}{53}, \frac{91}{583})$ $+ \frac{13}{583}\sqrt{2910}e^1 \otimes e_5$	{234567, 256}
831:35	$0, 0, 0, 0, 0, \frac{1}{499}\sqrt{178266}e^{12}, \frac{3}{499}\sqrt{4070}e^{13},$ $\frac{1}{499}\sqrt{91982}e^{17} + \frac{2}{499}\sqrt{41514}e^{26}$	$(\frac{23}{499}, \frac{76}{499}, \frac{129}{499}, -\frac{331}{499}, \frac{84}{499}, \frac{99}{499}, \frac{152}{499}, \frac{175}{499})$ $+ \frac{1}{499}\sqrt{337810}e^2 \otimes e_4$	{123578, 12378, 1345678, 134678, 2567, 267, 457, 47}
831:35	$0, 0, 0, 0, 0, \frac{68}{557}\sqrt{19}e^{12}, \frac{1}{557}\sqrt{25194}e^{13},$ $\frac{1}{557}\sqrt{45866}e^{17} + \frac{1}{557}\sqrt{96254}e^{26}$	$(-\frac{32}{557}, \frac{91}{557}, \frac{214}{557}, -\frac{232}{557}, -\frac{109}{557}, \frac{59}{557}, \frac{182}{557}, \frac{150}{557})$ $+ \frac{1}{557}\sqrt{116926}e^3 \otimes e_5 + \frac{76}{557}\sqrt{34}e^2 \otimes e_4$	{12578, 145678, 2367, 347}
831:35	$0, 0, 0, 0, 0, \frac{32}{1491}\sqrt{226}e^{12}, \frac{4}{1491}\sqrt{35030}e^{13},$ $\frac{4}{1491}\sqrt{30397}e^{17} + \frac{4}{1491}\sqrt{23165}e^{26}$	$(-\frac{256}{1491}, \frac{118}{1491}, \frac{164}{497}, \frac{884}{1491}, -\frac{412}{1491}, \frac{46}{497}, \frac{236}{1491}, -\frac{20}{1491})$ $+ \frac{4}{1491}\sqrt{68591}e^3 \otimes e_5 + \frac{4}{1491}\sqrt{77857}e^4 \otimes e_8$	{124567, 1457, 2378, 3678}
831:35	$0, 0, 0, 0, 0, \frac{170}{659}\sqrt{3}e^{12}, \frac{68}{659}\sqrt{3}e^{13}, \frac{68}{659}\sqrt{2}e^{17} + \frac{255}{659}\sqrt{2}e^{26}$	$(-\frac{32}{659}, \frac{35}{659}, \frac{102}{659}, \frac{327}{659}, -\frac{254}{659}, \frac{3}{659}, \frac{70}{659}, \frac{38}{659})$ $+ \frac{17}{659}\sqrt{498}e^4 \otimes e_8 + \frac{34}{659}\sqrt{166}e^2 \otimes e_5$	{12378, 135678, 2467, 457}
831:35	$0, 0, 0, 0, 0, \frac{4}{509}\sqrt{3135}e^{12}, \frac{3}{509}\sqrt{25498}e^{13},$ $\frac{1}{509}\sqrt{51414}e^{17} + \frac{1}{509}\sqrt{2926}e^{26}$	$(-\frac{80}{509}, \frac{123}{509}, \frac{326}{509}, -\frac{301}{509}, \frac{104}{509}, \frac{43}{509}, \frac{246}{509}, \frac{166}{509})$ $+ \frac{9}{509}\sqrt{6270}e^3 \otimes e_4$	{124567, 12467, 1457, 147, 23578, 2378, 35678, 3678}
831:35	$0, 0, 0, 0, 0, \frac{1}{21}\sqrt{114}e^{12}, \frac{1}{21}\sqrt{30}e^{13}, \frac{1}{21}\sqrt{6}e^{17} + \frac{2}{7}\sqrt{2}e^{26}$	$(\frac{1}{7}, \frac{2}{21}, \frac{1}{21}, -\frac{2}{7}, -\frac{1}{3}, \frac{5}{21}, \frac{4}{21}, \frac{1}{3})$ $+ \frac{1}{21}\sqrt{174}e^2 \otimes e_5 + \frac{2}{21}\sqrt{39}e^1 \otimes e_4$	{1238, 13568, 246, 45}
831:35	$0, 0, 0, 0, 0, \frac{36}{1523}\sqrt{61}e^{12}, \frac{36}{1523}\sqrt{285}e^{13},$ $\frac{288}{1523}\sqrt{7}e^{17} + \frac{36}{1523}\sqrt{118}e^{26}$	$(\frac{122}{1523}, \frac{16}{1523}, -\frac{90}{1523}, \frac{802}{1523}, -\frac{526}{1523}, \frac{138}{1523}, \frac{32}{1523}, \frac{154}{1523})$ $+ \frac{36}{1523}\sqrt{607}e^4 \otimes e_8 + \frac{36}{1523}\sqrt{721}e^1 \otimes e_5$	{1238, 1368, 2456, 45}
831:35	$0, 0, 0, 0, 0, \frac{2}{521}\sqrt{7319}e^{12}, \frac{2}{521}\sqrt{12386}e^{13},$ $\frac{2}{521}\sqrt{39410}e^{17} + \frac{1}{521}\sqrt{143002}e^{26}$	$(-\frac{52}{521}, \frac{5}{521}, \frac{62}{521}, 1, \frac{106}{521}, -\frac{47}{521}, \frac{10}{521}, -\frac{42}{521})$ $+ \frac{1}{521}\sqrt{467290}e^4 \otimes e_8$	{124567, 12467, 1457, 147, 23578, 2378, 35678, 3678}
831:35	$0, 0, 0, 0, 0, \frac{1}{25}\sqrt{78}e^{12}, \frac{3}{25}\sqrt{13}e^{13}, \frac{1}{25}\sqrt{78}e^{17} + \frac{3}{25}\sqrt{13}e^{26}$	$(\frac{2}{25}, \frac{3}{25}, \frac{4}{25}, 1, -\frac{14}{25}, \frac{1}{5}, \frac{6}{25}, \frac{8}{25})$ $+ \frac{39}{25}e^4 \otimes e_5$	{12348, 12358, 13468, 13568, 246, 256, 4, 5}
831:35	$0, 0, 0, 0, 0, \frac{308}{1513}\sqrt{3}e^{12}, \frac{140}{1513}\sqrt{3}e^{13}, \frac{28}{1513}\sqrt{91}e^{17} + \frac{84}{1513}\sqrt{37}e^{26}$	$(\frac{182}{1513}, -\frac{14}{1513}, -\frac{210}{1513}, -\frac{406}{1513}, \frac{546}{1513}, \frac{168}{1513}, -\frac{28}{1513}, \frac{154}{1513})$ $+ \frac{112}{1513}\sqrt{34}e^2 \otimes e_4 + \frac{56}{1513}\sqrt{102}e^5 \otimes e_8 - \frac{84}{1513}\sqrt{47}e^1 \otimes e_3$	{128, 1468, 2356, 345}
831:35	$0, 0, 0, 0, 0, \frac{308}{1513}\sqrt{3}e^{12}, \frac{140}{1513}\sqrt{3}e^{13}, \frac{28}{1513}\sqrt{91}e^{17} + \frac{84}{1513}\sqrt{37}e^{26}$	$(\frac{182}{1513}, -\frac{14}{1513}, -\frac{210}{1513}, -\frac{406}{1513}, \frac{546}{1513}, \frac{168}{1513}, -\frac{28}{1513}, \frac{154}{1513})$ $+ \frac{112}{1513}\sqrt{34}e^2 \otimes e_4 + \frac{56}{1513}\sqrt{102}e^5 \otimes e_8 + \frac{84}{1513}\sqrt{47}e^1 \otimes e_3$	{128, 1468, 2356, 345}
831:35	$0, 0, 0, 0, 0, \frac{1}{529}\sqrt{68182}e^{12}, \frac{4}{529}\sqrt{8873}e^{13},$ $\frac{2}{529}\sqrt{36893}e^{17} + \frac{6}{529}\sqrt{467}e^{26}$	$(\frac{146}{529}, \frac{49}{529}, -\frac{48}{529}, -\frac{321}{529}, \frac{104}{529}, \frac{195}{529}, \frac{98}{529}, \frac{244}{529})$ $+ \frac{5}{529}\sqrt{15878}e^1 \otimes e_4$	{1257, 127, 1567, 167, 2345678, 234678, 34578, 3478}
831:35	$0, 0, 0, 0, 0, \frac{28}{1627}\sqrt{89}e^{12}, \frac{4}{1627}\sqrt{46814}e^{13},$ $\frac{4}{1627}\sqrt{29815}e^{17} + \frac{4}{1627}\sqrt{4094}e^{26}$	$(\frac{98}{1627}, \frac{194}{1627}, \frac{290}{1627}, -\frac{614}{1627}, -\frac{422}{1627}, \frac{292}{1627}, \frac{388}{1627}, \frac{486}{1627})$ $+ \frac{4}{1627}\sqrt{55091}e^3 \otimes e_5 + \frac{4}{1627}\sqrt{72179}e^1 \otimes e_4$	{1257, 1567, 234678, 3478}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:36	$0, 0, 0, 0, 0, -\frac{1}{38}\sqrt{779}e^{12}, \frac{1}{38}\sqrt{779}e^{13}, \frac{1}{19}\sqrt{41}e^{26} + \frac{1}{19}\sqrt{41}e^{37}$	$(\frac{1}{2}, -\frac{7}{76}, -\frac{7}{76}, -\frac{11}{19}, \frac{4}{19}, \frac{31}{76}, \frac{31}{76}, \frac{6}{19})$ $+ \frac{1}{19}\sqrt{615}e^1 \otimes e_4$	{12358, 1238, 12578, 1278, 15678, 1678, 234567, 23467, 2456, 246, 4, 45, 12358, 1238, 12578, 1278, 15678, 1678, 234567, 23467, 2456, 246, 4, 45}
831:36	$0, 0, 0, 0, 0, \frac{1}{38}\sqrt{779}e^{12}, \frac{1}{38}\sqrt{779}e^{13}, \frac{1}{19}\sqrt{41}e^{26} + \frac{1}{19}\sqrt{41}e^{37}$	$(\frac{1}{2}, -\frac{7}{76}, -\frac{7}{76}, -\frac{11}{19}, \frac{4}{19}, \frac{31}{76}, \frac{31}{76}, \frac{6}{19})$ $+ \frac{1}{19}\sqrt{615}e^1 \otimes e_4$	{12358, 1238, 12578, 1278, 15678, 1678, 234567, 23467, 2456, 246, 4, 45, 12358, 1238, 12578, 1278, 15678, 1678, 234567, 23467, 2456, 246, 4, 45}
831:36	$0, 0, 0, 0, 0, -\frac{2}{7}\sqrt{2}e^{12}, \frac{2}{7}\sqrt{2}e^{13}, \frac{2}{7}\sqrt{2}e^{26} + \frac{2}{7}\sqrt{2}e^{37}$	$(-\frac{1}{7}, \frac{2}{7}, \frac{2}{7}, -\frac{2}{7}, -\frac{2}{7}, \frac{1}{7}, \frac{1}{7}, \frac{3}{7})$ $+ \frac{2}{7}\sqrt{6}e^2 \otimes e_4 + \frac{2}{7}\sqrt{6}e^3 \otimes e_5$	{1238, 12578, 145678, 2367, 256, 45, 1238, 12578, 145678, 2367, 256, 45}
831:36	$0, 0, 0, 0, 0, \frac{2}{7}\sqrt{2}e^{12}, \frac{2}{7}\sqrt{2}e^{13}, \frac{2}{7}\sqrt{2}e^{26} + \frac{2}{7}\sqrt{2}e^{37}$	$(-\frac{1}{7}, \frac{2}{7}, \frac{2}{7}, -\frac{2}{7}, -\frac{2}{7}, \frac{1}{7}, \frac{1}{7}, \frac{3}{7})$ $+ \frac{2}{7}\sqrt{6}e^2 \otimes e_4 + \frac{2}{7}\sqrt{6}e^3 \otimes e_5$	{1238, 12578, 145678, 2367, 256, 45, 1238, 12578, 145678, 2367, 256, 45}
831:36	$0, 0, 0, 0, 0, -\frac{1}{19}\sqrt{41}e^{12}, \frac{1}{19}\sqrt{41}e^{13}, \frac{1}{38}\sqrt{779}e^{26} + \frac{1}{38}\sqrt{779}e^{37}$	$(\frac{2}{19}, -\frac{7}{76}, -\frac{7}{76}, \frac{1}{19}, \frac{4}{19}, \frac{1}{76}, \frac{1}{76}, -\frac{3}{38})$ $+ \frac{1}{19}\sqrt{615}e^4 \otimes e_8$	{12358, 1238, 12578, 1278, 15678, 1678, 234567, 23467, 2456, 246, 4, 45, 12358, 1238, 12578, 1278, 15678, 1678, 234567, 23467, 2456, 246, 4, 45}
831:36	$0, 0, 0, 0, 0, \frac{1}{19}\sqrt{41}e^{12}, \frac{1}{19}\sqrt{41}e^{13}, \frac{1}{38}\sqrt{779}e^{26} + \frac{1}{38}\sqrt{779}e^{37}$	$(\frac{2}{19}, -\frac{7}{76}, -\frac{7}{76}, \frac{1}{19}, \frac{4}{19}, \frac{1}{76}, \frac{1}{76}, -\frac{3}{38})$ $+ \frac{1}{19}\sqrt{615}e^4 \otimes e_8$	{12358, 1238, 12578, 1278, 15678, 1678, 234567, 23467, 2456, 246, 4, 45, 12358, 1238, 12578, 1278, 15678, 1678, 234567, 23467, 2456, 246, 4, 45}
831:36	$0, 0, 0, 0, 0, -\frac{2}{37}\sqrt{221}e^{12}, \frac{2}{37}\sqrt{34}e^{13}, \frac{2}{37}\sqrt{221}e^{26} + \frac{2}{37}\sqrt{34}e^{37}$	$(-\frac{4}{37}, \frac{11}{37}, \frac{11}{37}, -\frac{23}{37}, \frac{7}{37}, \frac{7}{37}, \frac{7}{37}, \frac{18}{37})$ $+ \frac{2}{37}\sqrt{510}e^2 \otimes e_4$	{123578, 12378, 1258, 128, 1345678, 134678, 14568, 1468, 2356, 236, 2567, 267, 34, 345, 457, 47, 123578, 12378, 1258, 128, 1345678, 134678, 14568, 1468, 2356, 236, 2567, 267, 34, 345, 457, 47}
831:36	$0, 0, 0, 0, 0, \frac{2}{37}\sqrt{221}e^{12}, \frac{2}{37}\sqrt{34}e^{13}, \frac{2}{37}\sqrt{221}e^{26} + \frac{2}{37}\sqrt{34}e^{37}$	$(-\frac{4}{37}, \frac{11}{37}, \frac{11}{37}, -\frac{23}{37}, \frac{7}{37}, \frac{7}{37}, \frac{7}{37}, \frac{18}{37})$ $+ \frac{2}{37}\sqrt{510}e^2 \otimes e_4$	{123578, 12378, 1258, 128, 1345678, 134678, 14568, 1468, 2356, 236, 2567, 267, 34, 345, 457, 47, 123578, 12378, 1258, 128, 1345678, 134678, 14568, 1468, 2356, 236, 2567, 267, 34, 345, 457, 47}
831:36	$0, 0, 0, 0, 0, -\frac{2}{7}\sqrt{2}e^{12}, \frac{2}{7}\sqrt{2}e^{13}, \frac{2}{7}\sqrt{2}e^{26} + \frac{2}{7}\sqrt{2}e^{37}$	$(\frac{2}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{4}{7}, -\frac{2}{7}, \frac{1}{7}, \frac{1}{7}, 0)$ $+ \frac{2}{7}\sqrt{6}e^1 \otimes e_5 + \frac{2}{7}\sqrt{6}e^4 \otimes e_8$	{1238, 1278, 1678, 234567, 2456, 45, 1238, 1278, 1678, 234567, 2456, 45}
831:36	$0, 0, 0, 0, 0, \frac{2}{7}\sqrt{2}e^{12}, \frac{2}{7}\sqrt{2}e^{13}, \frac{2}{7}\sqrt{2}e^{26} + \frac{2}{7}\sqrt{2}e^{37}$	$(\frac{2}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{4}{7}, -\frac{2}{7}, \frac{1}{7}, \frac{1}{7}, 0)$ $+ \frac{2}{7}\sqrt{6}e^1 \otimes e_5 + \frac{2}{7}\sqrt{6}e^4 \otimes e_8$	{1238, 1278, 1678, 234567, 2456, 45, 1238, 1278, 1678, 234567, 2456, 45}
831:36	$0, 0, 0, 0, 0, -\frac{1}{9}\sqrt{14}e^{12}, \frac{1}{9}\sqrt{14}e^{13}, \frac{1}{9}\sqrt{14}e^{26} + \frac{1}{9}\sqrt{14}e^{37}$	$(\frac{1}{9}, \frac{1}{9}, \frac{1}{9}, 1, -\frac{5}{9}, \frac{2}{9}, \frac{2}{9}, \frac{1}{3})$ $+ \frac{14}{9}e^4 \otimes e_5$	{12348, 12358, 12478, 12578, 14678, 15678, 23467, 23567, 246, 256, 4, 5, 12348, 12358, 12478, 12578, 14678, 15678, 23467, 23567, 246, 256, 4, 5}
831:36	$0, 0, 0, 0, 0, \frac{1}{9}\sqrt{14}e^{12}, \frac{1}{9}\sqrt{14}e^{13}, \frac{1}{9}\sqrt{14}e^{26} + \frac{1}{9}\sqrt{14}e^{37}$	$(\frac{1}{9}, \frac{1}{9}, \frac{1}{9}, 1, -\frac{5}{9}, \frac{2}{9}, \frac{2}{9}, \frac{1}{3})$ $+ \frac{14}{9}e^4 \otimes e_5$	{12348, 12358, 12478, 12578, 14678, 15678, 23467, 23567, 246, 256, 4, 5, 12348, 12358, 12478, 12578, 14678, 15678, 23467, 23567, 246, 256, 4, 5}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:38	$0, 0, 0, 0, 0, -\frac{17}{877}\sqrt{641}e^{12}, \frac{17}{877}\sqrt{221}e^{13},$ $\frac{17}{877}\sqrt{390}e^{14} + \frac{17}{877}\sqrt{461}e^{26} + \frac{17}{877}\sqrt{41}e^{37}$	$(\frac{221}{877}, -\frac{34}{877}, -\frac{34}{877}, -\frac{68}{877}, -\frac{323}{877}, \frac{187}{877}, \frac{187}{877}, \frac{153}{877})$ $+ \frac{204}{877}\sqrt{5}e^1 \otimes e_4 + \frac{34}{877}\sqrt{210}e^2 \otimes e_5$	{23467, 246, 3457, 45, 23467, 246, 3457, 45}
831:38	$0, 0, 0, 0, 0, \frac{17}{877}\sqrt{641}e^{12}, \frac{17}{877}\sqrt{221}e^{13},$ $\frac{17}{877}\sqrt{390}e^{14} + \frac{17}{877}\sqrt{461}e^{26} + \frac{17}{877}\sqrt{41}e^{37}$	$(\frac{221}{877}, -\frac{34}{877}, -\frac{34}{877}, -\frac{68}{877}, -\frac{323}{877}, \frac{187}{877}, \frac{187}{877}, \frac{153}{877})$ $+ \frac{204}{877}\sqrt{5}e^1 \otimes e_4 + \frac{34}{877}\sqrt{210}e^2 \otimes e_5$	{23467, 246, 3457, 45, 23467, 246, 3457, 45}
831:38	$0, 0, 0, 0, 0, -\frac{1}{17}\sqrt{42}e^{12}, \frac{1}{17}\sqrt{42}e^{13},$ $\frac{7}{17}\sqrt{6}e^{14} + \frac{1}{17}\sqrt{42}e^{26} + \frac{1}{17}\sqrt{42}e^{37}$	$(-\frac{2}{17}, \frac{5}{17}, \frac{5}{17}, \frac{10}{17}, -\frac{11}{17}, \frac{3}{17}, \frac{3}{17}, \frac{8}{17})$ $+ \frac{14}{17}\sqrt{3}e^4 \otimes e_5$	{1235678, 12568, 158, 235, 257, 567, 1235678, 12568, 158, 235, 257, 567}
831:38	$0, 0, 0, 0, 0, \frac{1}{17}\sqrt{42}e^{12}, \frac{1}{17}\sqrt{42}e^{13},$ $\frac{7}{17}\sqrt{6}e^{14} + \frac{1}{17}\sqrt{42}e^{26} + \frac{1}{17}\sqrt{42}e^{37}$	$(-\frac{2}{17}, \frac{5}{17}, \frac{5}{17}, \frac{10}{17}, -\frac{11}{17}, \frac{3}{17}, \frac{3}{17}, \frac{8}{17})$ $+ \frac{14}{17}\sqrt{3}e^4 \otimes e_5$	{1235678, 12568, 158, 235, 257, 567, 1235678, 12568, 158, 235, 257, 567}
831:38	$0, 0, 0, 0, 0, -\frac{1}{73}\sqrt{3599}e^{12}, \frac{1}{73}\sqrt{61}e^{13},$ $\frac{1}{73}\sqrt{1830}e^{14} + \frac{1}{73}\sqrt{3599}e^{26} + \frac{1}{73}\sqrt{61}e^{37}$	$(-\frac{1}{73}, \frac{14}{73}, \frac{14}{73}, \frac{28}{73}, -\frac{47}{73}, \frac{13}{73}, \frac{13}{73}, \frac{27}{73})$ $+ \frac{2}{73}\sqrt{1830}e^2 \otimes e_5$	{123478, 1248, 1345678, 14568, 2346, 2467, 345, 457, 123478, 1248, 1345678, 14568, 2346, 2467, 345, 457}
831:38	$0, 0, 0, 0, 0, \frac{1}{73}\sqrt{3599}e^{12}, \frac{1}{73}\sqrt{61}e^{13},$ $\frac{1}{73}\sqrt{1830}e^{14} + \frac{1}{73}\sqrt{3599}e^{26} + \frac{1}{73}\sqrt{61}e^{37}$	$(-\frac{1}{73}, \frac{14}{73}, \frac{14}{73}, \frac{28}{73}, -\frac{47}{73}, \frac{13}{73}, \frac{13}{73}, \frac{27}{73})$ $+ \frac{2}{73}\sqrt{1830}e^2 \otimes e_5$	{123478, 1248, 1345678, 14568, 2346, 2467, 345, 457, 123478, 1248, 1345678, 14568, 2346, 2467, 345, 457}
831:38	$0, 0, 0, 0, 0, -\frac{1}{5}\sqrt{15}e^{12}, \frac{1}{5}\sqrt{15}e^{13},$ $\frac{1}{5}\sqrt{10}e^{14} + \frac{1}{5}\sqrt{5}e^{26} + \frac{1}{5}\sqrt{5}e^{37}$	$(\frac{3}{5}, -\frac{1}{5}, -\frac{1}{5}, -\frac{2}{5}, \frac{1}{5}, \frac{2}{5}, \frac{2}{5}, \frac{1}{5})$ $+ \frac{2}{5}\sqrt{10}e^1 \otimes e_4$	{234567, 23467, 2456, 246, 4, 45, 234567, 23467, 2456, 246, 4, 45}
831:38	$0, 0, 0, 0, 0, \frac{1}{5}\sqrt{15}e^{12}, \frac{1}{5}\sqrt{15}e^{13},$ $\frac{1}{5}\sqrt{10}e^{14} + \frac{1}{5}\sqrt{5}e^{26} + \frac{1}{5}\sqrt{5}e^{37}$	$(\frac{3}{5}, -\frac{1}{5}, -\frac{1}{5}, -\frac{2}{5}, \frac{1}{5}, \frac{2}{5}, \frac{2}{5}, \frac{1}{5})$ $+ \frac{2}{5}\sqrt{10}e^1 \otimes e_4$	{234567, 23467, 2456, 246, 4, 45, 234567, 23467, 2456, 246, 4, 45}
831:39	$0, 0, 0, 0, 0, \frac{3}{35}\sqrt{42}e^{12}, \frac{2}{35}\sqrt{105}e^{13},$ $\frac{4}{35}\sqrt{21}e^{16} + \frac{6}{35}\sqrt{35}e^{24} + \frac{3}{35}\sqrt{14}e^{37}$	$(\frac{2}{7}, -\frac{4}{35}, \frac{3}{35}, \frac{4}{7}, -\frac{22}{35}, \frac{6}{35}, \frac{13}{35}, \frac{16}{35})$ $+ \frac{3}{35}\sqrt{266}e^4 \otimes e_5$	{135, 157, 23578, 258}
831:39	$0, 0, 0, 0, 0, \frac{8}{53}\sqrt{10}e^{12}, \frac{16}{53}e^{13}, \frac{24}{53}e^{16} + \frac{8}{53}\sqrt{2}e^{24} + \frac{8}{53}\sqrt{7}e^{37}$	$(-\frac{8}{53}, \frac{16}{53}, \frac{4}{53}, -\frac{16}{53}, \frac{32}{53}, \frac{8}{53}, -\frac{4}{53}, 0)$ $+ \frac{40}{53}e^5 \otimes e_8 + \frac{8}{53}\sqrt{21}e^2 \otimes e_4$	{2368, 2678}
831:39	$0, 0, 0, 0, 0, \frac{12}{1001}\sqrt{6965}e^{12}, \frac{2}{1001}\sqrt{70446}e^{13},$ $\frac{16}{1001}\sqrt{1194}e^{16} + \frac{6}{1001}\sqrt{9353}e^{24} + \frac{1}{1001}\sqrt{4577}e^{37}$	$(-\frac{236}{1001}, \frac{722}{1001}, \frac{243}{1001}, -\frac{472}{1001}, \frac{194}{1001}, \frac{486}{1001}, \frac{1}{1001}, \frac{250}{1001})$ $+ \frac{6}{1001}\sqrt{53531}e^2 \otimes e_4$	{134567, 13467, 1456, 146}
831:39	$0, 0, 0, 0, 0, \frac{7}{425}\sqrt{390}e^{12}, \frac{7}{425}\sqrt{970}e^{13},$ $\frac{7}{425}\sqrt{470}e^{16} + \frac{42}{425}\sqrt{5}e^{24} + \frac{14}{425}\sqrt{290}e^{37}$	$(-\frac{7}{85}, \frac{7}{17}, \frac{14}{85}, -\frac{14}{85}, -\frac{7}{17}, \frac{28}{85}, \frac{7}{85}, \frac{21}{85})$ $+ \frac{14}{425}\sqrt{355}e^2 \otimes e_4 + \frac{7}{425}\sqrt{2290}e^3 \otimes e_5$	{2367, 256}
831:39	$0, 0, 0, 0, 0, \frac{2}{251}\sqrt{2703}e^{12}, \frac{30}{251}\sqrt{51}e^{13},$ $\frac{12}{251}\sqrt{170}e^{16} + \frac{2}{251}\sqrt{969}e^{24} + \frac{6}{251}\sqrt{1139}e^{37}$	$(\frac{33}{502}, \frac{119}{502}, \frac{38}{251}, \frac{33}{251}, -\frac{166}{251}, \frac{76}{251}, \frac{109}{502}, \frac{185}{502})$ $+ \frac{6}{251}\sqrt{2363}e^3 \otimes e_5$	{12368, 125678, 367, 56}
831:39	$0, 0, 0, 0, 0, \frac{3}{511}\sqrt{16082}e^{12}, \frac{4}{511}\sqrt{561}e^{13},$ $\frac{1}{511}\sqrt{5610}e^{16} + \frac{66}{511}\sqrt{34}e^{24} + \frac{3}{511}\sqrt{1122}e^{37}$	$(-\frac{16}{511}, \frac{250}{511}, \frac{117}{511}, -\frac{32}{511}, -\frac{311}{511}, \frac{234}{511}, \frac{101}{511}, \frac{218}{511})$ $+ \frac{3}{511}\sqrt{51238}e^2 \otimes e_5$	{1345678, 14568, 2346, 2467}
831:39	$0, 0, 0, 0, 0, \frac{68}{1589}\sqrt{161}e^{12}, \frac{34}{1589}\sqrt{34}e^{13},$ $\frac{68}{1589}\sqrt{109}e^{16} + \frac{34}{1589}\sqrt{309}e^{24} + \frac{34}{1589}\sqrt{13}e^{37}$	$(-\frac{68}{1589}, \frac{442}{1589}, \frac{187}{1589}, -\frac{136}{1589}, -\frac{646}{1589}, \frac{374}{1589}, \frac{17}{1589}, \frac{306}{1589})$ $+ \frac{34}{1589}\sqrt{611}e^2 \otimes e_4 + \frac{68}{1589}\sqrt{203}e^1 \otimes e_5$	{13467, 146}
831:41	$0, 0, 0, 0, 0, \frac{2}{305}\sqrt{3318}e^{12}, \frac{6}{305}\sqrt{474}e^{13},$ $\frac{4}{305}\sqrt{474}e^{17} + \frac{6}{305}\sqrt{395}e^{26} + \frac{6}{305}\sqrt{395}e^{45}$	$(\frac{28}{305}, \frac{39}{305}, \frac{10}{61}, \frac{58}{61}, -\frac{184}{305}, \frac{67}{305}, \frac{78}{305}, \frac{106}{305})$ $+ \frac{474}{305}e^4 \otimes e_5$	{12348, 12358, 13468, 13568}
831:42	$0, 0, 0, 0, 0, -\frac{2}{89}\sqrt{345}e^{12}, \frac{2}{89}\sqrt{345}e^{13},$ $\frac{4}{89}\sqrt{69}e^{26} + \frac{4}{89}\sqrt{69}e^{37} + \frac{4}{89}\sqrt{69}e^{45}$	$(\frac{10}{89}, \frac{11}{89}, \frac{11}{89}, \frac{85}{89}, -\frac{53}{89}, \frac{21}{89}, \frac{21}{89}, \frac{32}{89})$ $+ \frac{138}{89}e^4 \otimes e_5$	{12348, 12358, 12478, 12578, 14678, 15678, 12348, 12358, 12478, 12578, 14678, 15678}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
831:42	$0, 0, 0, 0, 0, \frac{2}{89}\sqrt{345}e^{12}, \frac{2}{89}\sqrt{345}e^{13},$ $\frac{4}{89}\sqrt{69}e^{26} + \frac{4}{89}\sqrt{69}e^{37} + \frac{4}{89}\sqrt{69}e^{45}$	$(\frac{10}{89}, \frac{11}{89}, \frac{11}{89}, \frac{85}{89}, -\frac{53}{89}, \frac{21}{89}, \frac{21}{89}, \frac{32}{89})$ $+ \frac{138}{89}e^4 \otimes e_5$	{12348, 12358, 12478, 12578, 14678, 15678, 12348, 12358, 12478, 12578, 14678, 15678}
831:44	$0, 0, 0, 0, 0, \frac{1}{165}\sqrt{22330}e^{12}, \frac{2}{165}\sqrt{1218}e^{34}, \frac{1}{55}\sqrt{406}e^{16} + \frac{1}{55}\sqrt{406}e^{37}$	$(-\frac{28}{165}, \frac{2}{11}, \frac{1}{11}, \frac{8}{55}, -\frac{31}{55}, \frac{82}{165}, \frac{13}{55}, \frac{18}{55})$ $+ \frac{1}{165}\sqrt{52374}e^2 \otimes e_5$	{12348, 12478, 13567, 156, 23468, 24678, 357, 5}
831:44	$0, 0, 0, 0, 0, \frac{1}{122}\sqrt{902}e^{12}, \frac{1}{61}\sqrt{943}e^{34}, \frac{2}{61}\sqrt{246}e^{16} + \frac{1}{122}\sqrt{410}e^{37}$	$(\frac{20}{61}, -\frac{21}{61}, -\frac{2}{61}, \frac{23}{61}, -\frac{18}{61}, -\frac{1}{61}, \frac{21}{61}, \frac{19}{61})$ $+ \frac{1}{122}\sqrt{8610}e^4 \otimes e_5 + \frac{1}{61}\sqrt{2173}e^1 \otimes e_2$	{1346, 1467, 235678, 2568}
831:44	$0, 0, 0, 0, 0, \frac{1}{669}\sqrt{272506}e^{12}, \frac{1}{223}\sqrt{6110}e^{34},$ $\frac{26}{223}\sqrt{47}e^{16} + \frac{1}{669}\sqrt{40326}e^{37}$	$(\frac{212}{669}, -\frac{88}{669}, \frac{41}{223}, \frac{30}{223}, -\frac{133}{223}, \frac{124}{669}, \frac{71}{223}, \frac{112}{223})$ $+ \frac{2}{669}\sqrt{163137}e^1 \otimes e_5$	{12378, 128, 1346, 1467, 235678, 2568, 345, 457}
831:44	$0, 0, 0, 0, 0, \frac{1}{179}\sqrt{1410}e^{12}, \frac{1}{179}\sqrt{1410}e^{34}, \frac{6}{179}\sqrt{282}e^{16} + \frac{2}{179}\sqrt{799}e^{37}$	$(\frac{35}{179}, -\frac{59}{179}, -\frac{2}{179}, \frac{15}{179}, \frac{105}{179}, -\frac{24}{179}, \frac{13}{179}, \frac{11}{179})$ $+ \frac{1}{179}\sqrt{15510}e^5 \otimes e_8 + \frac{2}{179}\sqrt{3478}e^1 \otimes e_2$	{13567, 156, 23468, 24678}
831:44	$0, 0, 0, 0, 0, \frac{6}{197}\sqrt{71}e^{12}, \frac{6}{197}\sqrt{71}e^{34}, \frac{4}{197}\sqrt{497}e^{16} + \frac{4}{197}\sqrt{497}e^{37}$	$(\frac{75}{197}, -\frac{67}{197}, \frac{75}{197}, -\frac{67}{197}, \frac{27}{197}, \frac{8}{197}, \frac{8}{197}, \frac{83}{197})$ $+ \frac{2}{197}\sqrt{6035}e^1 \otimes e_2 + \frac{2}{197}\sqrt{6035}e^3 \otimes e_4$	{13567, 1367, 245678, 24678}
831:44	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{30}e^{12}, \frac{1}{14}\sqrt{30}e^{34}, \frac{1}{14}\sqrt{105}e^{16} + \frac{1}{14}\sqrt{105}e^{37}$	$(-\frac{3}{28}, \frac{1}{7}, -\frac{3}{28}, \frac{1}{7}, 1, \frac{1}{28}, \frac{1}{28}, -\frac{1}{14})$ $+ \frac{1}{14}\sqrt{330}e^5 \otimes e_8$	{12348, 12478, 13567, 156, 24678, 5}
831:44	$0, 0, 0, 0, 0, \frac{21}{137}e^{12}, \frac{21}{137}e^{34}, \frac{35}{137}\sqrt{2}e^{16} + \frac{35}{137}\sqrt{2}e^{37}$	$(\frac{21}{137}, -\frac{28}{137}, \frac{21}{137}, -\frac{28}{137}, \frac{63}{137}, -\frac{7}{137}, -\frac{7}{137}, \frac{14}{137})$ $+ \frac{21}{137}\sqrt{11}e^5 \otimes e_8 + \frac{7}{137}\sqrt{74}e^1 \otimes e_2 + \frac{7}{137}\sqrt{74}e^3 \otimes e_4$	{13567, 24678}
831:44	$0, 0, 0, 0, 0, \frac{1}{811}\sqrt{38298}e^{12}, \frac{2}{811}\sqrt{42717}e^{34},$ $\frac{1}{811}\sqrt{85434}e^{16} + \frac{1}{811}\sqrt{142390}e^{37}$	$(\frac{280}{811}, -\frac{211}{811}, \frac{203}{811}, -\frac{57}{811}, \frac{288}{811}, \frac{69}{811}, \frac{146}{811}, \frac{349}{811})$ $+ \frac{17}{811}\sqrt{982}e^1 \otimes e_2 + \frac{9}{811}\sqrt{4910}e^3 \otimes e_5$	{1367, 156, 23468, 245678}
831:44	$0, 0, 0, 0, 0, \frac{1}{43}\sqrt{318}e^{12}, \frac{1}{43}\sqrt{318}e^{34}, \frac{1}{43}\sqrt{1590}e^{16} + \frac{2}{43}\sqrt{53}e^{37}$	$(\frac{25}{43}, -\frac{28}{43}, \frac{8}{43}, \frac{6}{43}, \frac{9}{43}, -\frac{3}{43}, \frac{14}{43}, \frac{22}{43})$ $+ \frac{2}{43}\sqrt{901}e^1 \otimes e_2$	{13456, 1346, 14567, 1467, 235678, 23678, 2568, 268}
831:46	$0, 0, 0, 0, 0, \frac{6}{607}\sqrt{6751}e^{12}, \frac{2}{607}\sqrt{22137}e^{34},$ $\frac{1}{607}\sqrt{157314}e^{13} + \frac{3}{607}\sqrt{26690}e^{26} + \frac{3}{607}\sqrt{942}e^{47}$	$(\frac{24}{607}, \frac{94}{607}, \frac{188}{607}, \frac{12}{607}, -\frac{377}{607}, \frac{118}{607}, \frac{200}{607}, \frac{212}{607})$ $+ \frac{6}{607}\sqrt{12874}e^2 \otimes e_5$	{12348, 12378, 134568, 135678}
831:46	$0, 0, 0, 0, 0, \frac{1}{145}\sqrt{11130}e^{12}, \frac{2}{145}\sqrt{318}e^{34},$ $\frac{4}{145}\sqrt{795}e^{13} + \frac{3}{145}\sqrt{106}e^{26} + \frac{3}{145}\sqrt{106}e^{47}$	$(\frac{14}{29}, -\frac{4}{145}, -\frac{8}{145}, \frac{7}{29}, -\frac{89}{145}, \frac{66}{145}, \frac{27}{145}, \frac{62}{145})$ $+ \frac{3}{145}\sqrt{4134}e^1 \otimes e_5$	{2345678, 23568, 34578, 358}
831:47	$0, 0, 0, 0, 0, \frac{2}{353}\sqrt{27690}e^{12}, \frac{10}{353}\sqrt{213}e^{34},$ $\frac{2}{353}\sqrt{7881}e^{15} + \frac{4}{353}\sqrt{1491}e^{26} + \frac{4}{353}\sqrt{1491}e^{37}$	$(\frac{260}{353}, -\frac{83}{353}, \frac{22}{353}, \frac{50}{353}, -\frac{166}{353}, \frac{177}{353}, \frac{72}{353}, \frac{94}{353})$ $+ \frac{2}{353}\sqrt{59214}e^1 \otimes e_5$	{23567, 256, 357, 5}
831:47	$0, 0, 0, 0, 0, \frac{13}{261}\sqrt{14}e^{15} + \frac{13}{522}\sqrt{10}e^{26} + \frac{13}{261}\sqrt{10}e^{34},$ $\frac{26}{261}\sqrt{14}e^{15} + \frac{13}{522}\sqrt{10}e^{26} + \frac{26}{261}\sqrt{29}e^{37}$	$(\frac{13}{29}, -\frac{26}{261}, \frac{26}{87}, -\frac{91}{261}, -\frac{52}{261}, \frac{91}{261}, -\frac{13}{261}, \frac{65}{261})$ $+ \frac{13}{261}\sqrt{227}e^3 \otimes e_4 + \frac{13}{522}\sqrt{910}e^1 \otimes e_5$	{23567, 357}
831:47	$0, 0, 0, 0, 0, \frac{26}{277}\sqrt{26}e^{12}, \frac{26}{277}\sqrt{19}e^{34},$ $\frac{26}{277}\sqrt{21}e^{15} + \frac{52}{277}\sqrt{2}e^{26} + \frac{26}{277}\sqrt{102}e^{37}$	$(\frac{52}{277}, \frac{39}{277}, \frac{156}{277}, -\frac{182}{277}, \frac{78}{277}, \frac{91}{277}, -\frac{26}{277}, \frac{130}{277})$ $+ \frac{52}{277}\sqrt{55}e^3 \otimes e_4$	{1237, 1367, 24678, 478}
83:1	$0, 0, 0, 0, 0, \frac{6}{103}\sqrt{26}e^{12}, \frac{6}{103}\sqrt{26}e^{13}, \frac{6}{103}\sqrt{26}e^{23}$	$(\frac{14}{103}, \frac{14}{103}, -\frac{26}{103}, -\frac{3}{103}, \frac{23}{103}, \frac{28}{103}, -\frac{12}{103}, -\frac{12}{103})$ $+ \frac{26}{103}e^5 \otimes e_4 + \frac{4}{103}\sqrt{130}e^1 \otimes e_8 - \frac{4}{103}\sqrt{130}e^2 \otimes e_7$	{1234, 1235, 1467, 1567, 3478, 3578}
83:1	$0, 0, 0, 0, 0, \frac{6}{103}\sqrt{26}e^{12}, \frac{6}{103}\sqrt{26}e^{13}, \frac{6}{103}\sqrt{26}e^{23}$	$(\frac{14}{103}, \frac{14}{103}, -\frac{26}{103}, -\frac{3}{103}, \frac{23}{103}, \frac{28}{103}, -\frac{12}{103}, -\frac{12}{103})$ $+ \frac{26}{103}e^5 \otimes e_4 + \frac{4}{103}\sqrt{130}e^1 \otimes e_8 + \frac{4}{103}\sqrt{130}e^2 \otimes e_7$	{1234, 1235, 1467, 1567, 3478, 3578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:1	$0, 0, 0, 0, 0, \frac{15}{173}\sqrt{30}e^{12}, \frac{15}{173}\sqrt{30}e^{13}, \frac{5}{173}\sqrt{110}e^{23}$	$(-\frac{33}{173}, \frac{5}{173}, \frac{5}{173}, \frac{97}{173}, \frac{97}{173}, -\frac{28}{173}, -\frac{28}{173}, \frac{10}{173})$ $+\frac{10}{173}\sqrt{190}e^4 \otimes e_6 + \frac{10}{173}\sqrt{190}e^5 \otimes e_7$	{123458, 1247, 1678, 23678, 256, 458}
83:1	$0, 0, 0, 0, 0, \frac{3}{16}\sqrt{17}e^{12}, \frac{3}{16}\sqrt{17}e^{13}, \frac{1}{8}\sqrt{17}e^{23}$	$(\frac{7}{16}, \frac{1}{32}, \frac{1}{32}, -\frac{5}{8}, \frac{3}{16}, \frac{15}{32}, \frac{15}{32}, \frac{1}{16})$ $+\frac{1}{16}\sqrt{442}e^1 \otimes e_4$	{12358, 1238, 1257, 127, 15678, 1678, 2345678, 234678, 2456, 246, 458, 48}
83:1	$0, 0, 0, 0, 0, \frac{1}{59}\sqrt{1054}e^{12}, \frac{2}{59}\sqrt{62}e^{13}, \frac{2}{59}\sqrt{62}e^{23}$	$(\frac{12}{59}, \frac{12}{59}, -\frac{1}{59}, -\frac{19}{59}, -\frac{19}{59}, \frac{24}{59}, \frac{11}{59}, \frac{11}{59})$ $+\frac{2}{59}\sqrt{403}e^1 \otimes e_4 + \frac{2}{59}\sqrt{403}e^2 \otimes e_5$	{123, 1278, 13568, 1567, 34578, 45}
83:1	$0, 0, 0, 0, 0, \frac{1}{80}\sqrt{1209}e^{12}, \frac{1}{80}\sqrt{1209}e^{13}, \frac{1}{40}\sqrt{31}e^{23}$	$(\frac{1}{16}, \frac{47}{160}, -\frac{5}{32}, -\frac{13}{40}, \frac{9}{80}, \frac{57}{160}, -\frac{3}{32}, \frac{11}{80})$ $+\frac{1}{80}\sqrt{2170}e^1 \otimes e_4 + \frac{3}{40}\sqrt{62}e^2 \otimes e_7$	{123, 1235, 1567, 167, 24568, 2468, 34578, 3478}
83:1	$0, 0, 0, 0, 0, \frac{15}{791}\sqrt{358}e^{12}, \frac{2}{791}\sqrt{11098}e^{13}, \frac{4}{791}\sqrt{179}e^{23}$	$(-\frac{20}{791}, \frac{108}{791}, -\frac{51}{791}, -\frac{199}{791}, \frac{267}{791}, \frac{88}{791}, -\frac{71}{791}, \frac{57}{791})$ $+\frac{2}{791}\sqrt{18079}e^5 \otimes e_6 + \frac{2}{791}\sqrt{23270}e^2 \otimes e_7 + \frac{4}{791}\sqrt{5907}e^1 \otimes e_4$	{12358, 1678, 246, 3457}
83:1	$0, 0, 0, 0, 0, \frac{2}{15}\sqrt{10}e^{12}, \frac{2}{15}\sqrt{10}e^{13}, \frac{2}{15}\sqrt{10}e^{23}$	$(\frac{2}{5}, -\frac{2}{15}, \frac{2}{15}, \frac{7}{15}, -\frac{1}{5}, \frac{4}{15}, \frac{4}{15}, -\frac{4}{15})$ $+\frac{2}{3}e^4 \otimes e_5 + \frac{4}{15}\sqrt{10}e^1 \otimes e_8$	{1234, 1235, 1467, 1567, 2468, 2568}
83:1	$0, 0, 0, 0, 0, \frac{2}{47}\sqrt{74}e^{12}, \frac{2}{47}\sqrt{74}e^{13}, \frac{2}{47}\sqrt{74}e^{23}$	$(\frac{6}{47}, \frac{6}{47}, \frac{6}{47}, 1, -\frac{27}{47}, \frac{12}{47}, \frac{12}{47}, \frac{12}{47})$ $+\frac{74}{47}e^4 \otimes e_5$	{1234, 1235, 12478, 12578, 1467, 1567, 4, 5}
83:1	$0, 0, 0, 0, 0, \frac{5}{103}\sqrt{38}e^{12}, \frac{2}{103}\sqrt{133}e^{13}, \frac{2}{103}\sqrt{133}e^{23}$	$(\frac{6}{103}, \frac{6}{103}, -\frac{19}{103}, \frac{9}{103}, \frac{31}{103}, \frac{12}{103}, -\frac{13}{103}, -\frac{13}{103})$ $+\frac{2}{103}\sqrt{209}e^5 \otimes e_6 + \frac{6}{103}\sqrt{38}e^1 \otimes e_8 + \frac{6}{103}\sqrt{38}e^2 \otimes e_7$	{12345, 1235, 1467, 167, 34578, 3578}
83:1	$0, 0, 0, 0, 0, \frac{5}{103}\sqrt{38}e^{12}, \frac{2}{103}\sqrt{133}e^{13}, \frac{2}{103}\sqrt{133}e^{23}$	$(\frac{6}{103}, \frac{6}{103}, -\frac{19}{103}, \frac{9}{103}, \frac{31}{103}, \frac{12}{103}, -\frac{13}{103}, -\frac{13}{103})$ $+\frac{2}{103}\sqrt{209}e^5 \otimes e_6 + \frac{6}{103}\sqrt{38}e^1 \otimes e_8 - \frac{6}{103}\sqrt{38}e^2 \otimes e_7$	{12345, 1235, 1467, 167, 34578, 3578}
83:1	$0, 0, 0, 0, 0, \frac{1}{5}\sqrt{10}e^{12}, \frac{1}{5}\sqrt{10}e^{13}, \frac{1}{5}\sqrt{10}e^{23}$	$(\frac{3}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{2}{5}, \frac{2}{5}, -\frac{2}{5})$ $+\frac{2}{5}\sqrt{10}e^1 \otimes e_8$	{123, 1234, 12345, 14567, 1467, 167, 24568, 2468, 268}
83:1	$0, 0, 0, 0, 0, \frac{12}{53}\sqrt{2}e^{12}, \frac{12}{53}\sqrt{2}e^{13}, \frac{8}{53}\sqrt{3}e^{23}$	$(\frac{4}{53}, \frac{10}{53}, -\frac{10}{53}, -\frac{12}{53}, \frac{16}{53}, \frac{14}{53}, -\frac{6}{53}, 0)$ $+\frac{4}{53}\sqrt{22}e^5 \otimes e_8 + \frac{4}{53}\sqrt{34}e^1 \otimes e_4 + \frac{8}{53}\sqrt{10}e^2 \otimes e_7$	{1235, 1567, 2468, 3478}
83:1	$0, 0, 0, 0, 0, \frac{1}{25}\sqrt{182}e^{12}, \frac{2}{25}\sqrt{13}e^{13}, \frac{2}{25}\sqrt{13}e^{23}$	$(\frac{6}{25}, -\frac{6}{25}, -\frac{1}{25}, \frac{13}{25}, \frac{3}{25}, 0, \frac{1}{5}, -\frac{7}{25})$ $+\frac{2}{25}\sqrt{65}e^4 \otimes e_6 + \frac{2}{25}\sqrt{78}e^1 \otimes e_8$	{1234, 12345, 1567, 167, 2568, 268, 34578, 3478}
83:1	$0, 0, 0, 0, 0, \frac{1}{619}\sqrt{127510}e^{12}, \frac{2}{619}\sqrt{11818}e^{13}, \frac{12}{619}\sqrt{311}e^{23}$	$(\frac{80}{619}, -\frac{68}{619}, \frac{61}{619}, \frac{323}{619}, -\frac{231}{619}, \frac{12}{619}, \frac{141}{619}, -\frac{7}{619})$ $+\frac{2}{619}\sqrt{40119}e^4 \otimes e_6 + \frac{4}{619}\sqrt{11507}e^1 \otimes e_5$	{12348, 1247, 136, 1678, 235678, 256, 3457, 458}
83:1	$0, 0, 0, 0, 0, \frac{1}{47}\sqrt{2006}e^{12}, \frac{2}{47}\sqrt{59}e^{13}, \frac{2}{47}\sqrt{59}e^{23}$	$(-\frac{6}{47}, -\frac{6}{47}, \frac{13}{47}, 1, \frac{9}{47}, -\frac{12}{47}, \frac{7}{47}, \frac{7}{47})$ $+\frac{2}{47}\sqrt{1121}e^4 \otimes e_6$	{1234578, 123478, 124, 1245, 13567, 1367, 1568, 168, 34, 345, 4578, 478}
83:1	$0, 0, 0, 0, 0, \frac{1}{15}\sqrt{26}e^{12}, \frac{1}{15}\sqrt{26}e^{13}, \frac{1}{15}\sqrt{26}e^{23}$	$(\frac{7}{45}, \frac{7}{45}, -\frac{13}{45}, \frac{1}{9}, \frac{1}{9}, \frac{14}{45}, -\frac{2}{15}, -\frac{2}{15})$ $+\frac{2}{45}\sqrt{130}e^1 \otimes e_8 - \frac{2}{45}\sqrt{130}e^2 \otimes e_7$	{123, 1234, 12345, 14567, 1467, 167, 34578, 3478, 378}
83:1	$0, 0, 0, 0, 0, \frac{1}{15}\sqrt{26}e^{12}, \frac{1}{15}\sqrt{26}e^{13}, \frac{1}{15}\sqrt{26}e^{23}$	$(\frac{7}{45}, \frac{7}{45}, -\frac{13}{45}, \frac{1}{9}, \frac{1}{9}, \frac{14}{45}, -\frac{2}{15}, -\frac{2}{15})$ $+\frac{2}{45}\sqrt{130}e^1 \otimes e_8 + \frac{2}{45}\sqrt{130}e^2 \otimes e_7$	{123, 1234, 12345, 14567, 1467, 167, 34578, 3478, 378}
83:1	$0, 0, 0, 0, 0, \frac{4}{23}\sqrt{6}e^{12}, \frac{4}{23}\sqrt{6}e^{13}, \frac{8}{23}e^{23}$	$(\frac{8}{23}, -\frac{2}{23}, -\frac{2}{23}, \frac{12}{23}, -\frac{8}{23}, \frac{6}{23}, \frac{6}{23}, -\frac{4}{23})$ $+\frac{12}{23}\sqrt{2}e^4 \otimes e_8 + \frac{4}{23}\sqrt{22}e^1 \otimes e_5$	{1234, 1278, 1467, 234567, 2568, 45}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:1	$0, 0, 0, 0, 0, \frac{1}{25}\sqrt{78}e^{12}, \frac{1}{25}\sqrt{78}e^{13}, \frac{3}{25}\sqrt{2}e^{23}$	$(\frac{3}{25}, -\frac{3}{25}, -\frac{3}{25}, \frac{9}{25}, \frac{9}{25}, 0, 0, -\frac{6}{25})$ $+ \frac{2}{25}\sqrt{30}e^4 \otimes e_6 + \frac{2}{25}\sqrt{30}e^5 \otimes e_7 + \frac{2}{25}\sqrt{42}e^1 \otimes e_8$	{12345, 167, 2568}
83:2	$0, 0, 0, 0, 0, \frac{1}{59}\sqrt{1054}e^{12}, \frac{2}{59}\sqrt{62}e^{13}, \frac{2}{59}\sqrt{62}e^{14}$	$(\frac{8}{59}, \frac{16}{59}, -\frac{23}{59}, \frac{3}{59}, \frac{7}{59}, \frac{24}{59}, -\frac{15}{59}, \frac{11}{59})$ $+ \frac{2}{59}\sqrt{403}e^1 \otimes e_3 + \frac{2}{59}\sqrt{403}e^2 \otimes e_7$	{14567, 1467, 15678, 1678, 34578, 3478, 357, 37}
83:2	$0, 0, 0, 0, 0, \frac{1}{47}\sqrt{2006}e^{12}, \frac{2}{47}\sqrt{59}e^{13}, \frac{2}{47}\sqrt{59}e^{14}$	$(-\frac{4}{47}, \frac{30}{47}, \frac{11}{47}, \frac{11}{47}, -\frac{29}{47}, \frac{26}{47}, \frac{7}{47}, \frac{7}{47})$ $+ \frac{2}{47}\sqrt{1121}e^2 \otimes e_5$	{12, 123478, 1237, 1345678, 13567, 156, 2346, 2368, 2678, 345, 358, 578}
83:2	$0, 0, 0, 0, 0, \frac{1}{68}\sqrt{714}e^{12}, \frac{7}{68}\sqrt{6}e^{13}, \frac{1}{68}\sqrt{714}e^{14}$	$(\frac{13}{136}, \frac{33}{136}, -\frac{29}{136}, -\frac{11}{68}, \frac{13}{68}, \frac{23}{68}, -\frac{2}{17}, -\frac{9}{136})$ $+ \frac{1}{68}\sqrt{1155}e^1 \otimes e_3 + \frac{1}{68}\sqrt{1155}e^2 \otimes e_8 + \frac{7}{68}\sqrt{6}e^5 \otimes e_7$	{1245, 1568, 2356, 3458}
83:2	$0, 0, 0, 0, 0, \frac{1}{619}\sqrt{127510}e^{12}, \frac{2}{619}\sqrt{11818}e^{13}, \frac{12}{619}\sqrt{311}e^{14}$	$(-\frac{144}{619}, \frac{118}{619}, \frac{285}{619}, \frac{137}{619}, -\frac{193}{619}, -\frac{26}{619}, \frac{141}{619}, -\frac{7}{619})$ $+ \frac{2}{619}\sqrt{40119}e^2 \otimes e_5 + \frac{4}{619}\sqrt{11507}e^3 \otimes e_6$	{123, 12348, 145678, 1567, 246, 268, 3457, 3578}
83:2	$0, 0, 0, 0, 0, \frac{4}{23}\sqrt{6}e^{12}, \frac{4}{23}\sqrt{6}e^{13}, \frac{8}{23}e^{14}$	$(-\frac{5}{23}, \frac{11}{23}, 0, \frac{1}{23}, \frac{12}{23}, \frac{6}{23}, -\frac{5}{23}, -\frac{4}{23})$ $+ \frac{12}{23}\sqrt{2}e^5 \otimes e_8 + \frac{4}{23}\sqrt{22}e^2 \otimes e_7$	{12345, 1238, 14567, 1678, 2468, 256, 3478, 357}
83:2	$0, 0, 0, 0, 0, \frac{12}{619}\sqrt{311}e^{12}, \frac{1}{619}\sqrt{127510}e^{13}, \frac{2}{619}\sqrt{11818}e^{14}$	$(\frac{152}{619}, -\frac{159}{619}, -\frac{140}{619}, -\frac{11}{619}, \frac{323}{619}, -\frac{7}{619}, \frac{12}{619}, \frac{141}{619})$ $+ \frac{2}{619}\sqrt{40119}e^5 \otimes e_7 + \frac{4}{619}\sqrt{11507}e^1 \otimes e_2$	{1345, 1358, 147, 178, 23478, 237, 2458, 25}
83:2	$0, 0, 0, 0, 0, \frac{2}{59}\sqrt{62}e^{12}, \frac{1}{59}\sqrt{1054}e^{13}, \frac{2}{59}\sqrt{62}e^{14}$	$(-\frac{18}{59}, \frac{29}{59}, \frac{16}{59}, \frac{3}{59}, \frac{7}{59}, \frac{11}{59}, -\frac{2}{59}, -\frac{15}{59})$ $+ \frac{2}{59}\sqrt{403}e^2 \otimes e_7 + \frac{2}{59}\sqrt{403}e^3 \otimes e_8$	{1234, 12345, 15678, 1678, 24568, 2468, 357, 37}
83:2	$0, 0, 0, 0, 0, \frac{5}{43}\sqrt{14}e^{12}, \frac{14}{43}e^{13}, \frac{5}{43}\sqrt{14}e^{14}$	$(\frac{11}{86}, \frac{11}{43}, -\frac{17}{86}, -\frac{17}{86}, \frac{4}{43}, \frac{33}{86}, -\frac{3}{43}, -\frac{3}{43})$ $+ \frac{1}{43}\sqrt{546}e^1 \otimes e_3 + \frac{1}{43}\sqrt{546}e^2 \otimes e_8$	{124, 1245, 1568, 168, 2356, 236, 3458, 348}
83:2	$0, 0, 0, 0, 0, \frac{8}{23}e^{12}, \frac{4}{23}\sqrt{6}e^{13}, \frac{4}{23}\sqrt{6}e^{14}$	$(\frac{6}{23}, -\frac{10}{23}, 0, 0, \frac{12}{23}, -\frac{4}{23}, \frac{6}{23}, \frac{6}{23})$ $+ \frac{12}{23}\sqrt{2}e^5 \otimes e_6 + \frac{4}{23}\sqrt{22}e^1 \otimes e_2$	{1346, 1368, 1678, 234678, 2367, 26}
83:2	$0, 0, 0, 0, 0, \frac{1}{68}\sqrt{714}e^{12}, \frac{1}{68}\sqrt{714}e^{13}, \frac{7}{68}\sqrt{6}e^{14}$	$(-\frac{21}{68}, \frac{33}{136}, \frac{33}{136}, \frac{13}{68}, \frac{13}{68}, -\frac{9}{136}, -\frac{9}{136}, -\frac{2}{17})$ $+ \frac{1}{68}\sqrt{1155}e^2 \otimes e_7 - \frac{1}{68}\sqrt{1155}e^3 \otimes e_6 + \frac{7}{68}\sqrt{6}e^5 \otimes e_8$	{12348, 1235, 14678, 1567, 2456, 268}
83:2	$0, 0, 0, 0, 0, \frac{1}{68}\sqrt{714}e^{12}, \frac{1}{68}\sqrt{714}e^{13}, \frac{7}{68}\sqrt{6}e^{14}$	$(-\frac{21}{68}, \frac{33}{136}, \frac{33}{136}, \frac{13}{68}, \frac{13}{68}, -\frac{9}{136}, -\frac{9}{136}, -\frac{2}{17})$ $+ \frac{1}{68}\sqrt{1155}e^2 \otimes e_7 + \frac{1}{68}\sqrt{1155}e^3 \otimes e_6 + \frac{7}{68}\sqrt{6}e^5 \otimes e_8$	{12348, 1235, 14678, 1567, 2456, 268}
83:2	$0, 0, 0, 0, 0, \frac{1}{80}\sqrt{1209}e^{12}, \frac{1}{80}\sqrt{1209}e^{13}, \frac{1}{40}\sqrt{31}e^{14}$	$(\frac{1}{20}, \frac{49}{160}, -\frac{21}{160}, \frac{7}{80}, -\frac{27}{80}, \frac{57}{160}, -\frac{13}{160}, \frac{11}{80})$ $+ \frac{1}{80}\sqrt{2170}e^2 \otimes e_7 + \frac{3}{40}\sqrt{62}e^1 \otimes e_5$	{1234, 1238, 1467, 1678, 24568, 256, 34578, 357}
83:2	$0, 0, 0, 0, 0, \frac{3}{16}\sqrt{17}e^{12}, \frac{3}{16}\sqrt{17}e^{13}, \frac{1}{8}\sqrt{17}e^{14}$	$(-\frac{1}{4}, \frac{23}{32}, -\frac{3}{32}, \frac{5}{16}, \frac{3}{16}, \frac{15}{32}, -\frac{11}{32}, \frac{1}{16})$ $+ \frac{1}{16}\sqrt{442}e^2 \otimes e_7$	{123, 123458, 12348, 1235, 145678, 14678, 1567, 167, 2456, 246, 2568, 268, 3457, 347, 3578, 378}
83:2	$0, 0, 0, 0, 0, \frac{1}{5}\sqrt{10}e^{12}, \frac{1}{5}\sqrt{10}e^{13}, \frac{1}{5}\sqrt{10}e^{14}$	$(\frac{2}{5}, 0, 0, 0, -\frac{3}{5}, \frac{2}{5}, \frac{2}{5}, \frac{2}{5})$ $+ \frac{2}{5}\sqrt{10}e^1 \otimes e_5$	{1234, 1238, 1278, 1678, 2345678, 23567, 256, 5}
83:2	$0, 0, 0, 0, 0, \frac{5}{43}\sqrt{14}e^{12}, \frac{5}{43}\sqrt{14}e^{13}, \frac{14}{43}e^{14}$	$(-\frac{14}{43}, \frac{11}{43}, \frac{11}{43}, \frac{11}{43}, \frac{4}{43}, -\frac{3}{43}, -\frac{3}{43}, -\frac{3}{43})$ $+ \frac{1}{43}\sqrt{546}e^2 \otimes e_7 - \frac{1}{43}\sqrt{546}e^3 \otimes e_6$	{123, 123458, 12348, 1235, 145678, 14678, 1567, 167, 2456, 246, 2568, 268}
83:2	$0, 0, 0, 0, 0, \frac{5}{43}\sqrt{14}e^{12}, \frac{5}{43}\sqrt{14}e^{13}, \frac{14}{43}e^{14}$	$(-\frac{14}{43}, \frac{11}{43}, \frac{11}{43}, \frac{11}{43}, \frac{4}{43}, -\frac{3}{43}, -\frac{3}{43}, -\frac{3}{43})$ $+ \frac{1}{43}\sqrt{546}e^2 \otimes e_7 + \frac{1}{43}\sqrt{546}e^3 \otimes e_6$	{123, 123458, 12348, 1235, 145678, 14678, 1567, 167, 2456, 246, 2568, 268}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:2	$0, 0, 0, 0, 0, \frac{5}{431}\sqrt{822}e^{12}, \frac{40}{431}\sqrt{6}e^{13}, \frac{30}{431}\sqrt{14}e^{14}$	$(\frac{20}{431}, \frac{40}{431}, -\frac{55}{431}, -\frac{55}{431}, \frac{135}{431}, \frac{60}{431}, -\frac{35}{431}, -\frac{35}{431})$ $+ \frac{10}{431}\sqrt{159}e^5 \otimes e_6 + \frac{10}{431}\sqrt{222}e^1 \otimes e_3 + \frac{10}{431}\sqrt{222}e^2 \otimes e_8$	{1245, 168, 236, 3458}
83:2	$0, 0, 0, 0, 0, \frac{1}{239}\sqrt{10318}e^{12}, \frac{2}{239}\sqrt{134}e^{13}, \frac{2}{239}\sqrt{134}e^{14}$	$(\frac{8}{239}, \frac{16}{239}, -\frac{59}{239}, \frac{15}{239}, \frac{91}{239}, \frac{24}{239}, -\frac{51}{239}, \frac{23}{239})$ $+ \frac{12}{239}\sqrt{67}e^5 \otimes e_6 + \frac{2}{239}\sqrt{2479}e^1 \otimes e_3 + \frac{2}{239}\sqrt{2479}e^2 \otimes e_7$	{1467, 1678, 34578, 357}
83:2	$0, 0, 0, 0, 0, \frac{1}{47}\sqrt{2006}e^{12}, \frac{2}{47}\sqrt{59}e^{13}, \frac{2}{47}\sqrt{59}e^{14}$	$(-\frac{4}{47}, -\frac{8}{47}, \frac{11}{47}, \frac{11}{47}, 1, -\frac{12}{47}, \frac{7}{47}, \frac{7}{47})$ $+ \frac{2}{47}\sqrt{1121}e^5 \otimes e_6$	{1234578, 12357, 125, 134678, 1367, 16, 2346, 2368, 2678, 345, 358, 578}
83:2	$0, 0, 0, 0, 0, \frac{8}{23}e^{12}, \frac{4}{23}\sqrt{6}e^{13}, \frac{4}{23}\sqrt{6}e^{14}$	$(-\frac{5}{23}, \frac{10}{23}, \frac{11}{23}, 0, -\frac{6}{23}, \frac{5}{23}, \frac{6}{23}, -\frac{5}{23})$ $+ \frac{12}{23}\sqrt{2}e^2 \otimes e_5 + \frac{4}{23}\sqrt{22}e^3 \otimes e_8$	{1234, 1278, 13456, 15678, 2367, 2468, 357, 458}
83:2	$0, 0, 0, 0, 0, \frac{1}{619}\sqrt{127510}e^{12}, \frac{12}{619}\sqrt{311}e^{13}, \frac{2}{619}\sqrt{11818}e^{14}$	$(\frac{152}{619}, \frac{118}{619}, -\frac{159}{619}, -\frac{11}{619}, -\frac{193}{619}, \frac{270}{619}, -\frac{7}{619}, \frac{141}{619})$ $+ \frac{2}{619}\sqrt{40119}e^2 \otimes e_5 + \frac{4}{619}\sqrt{11507}e^1 \otimes e_3$	{124, 128, 1456, 1568, 23468, 236, 3458, 35}
83:2	$0, 0, 0, 0, 0, \frac{1}{8}\sqrt{17}e^{12}, \frac{3}{16}\sqrt{17}e^{13}, \frac{3}{16}\sqrt{17}e^{14}$	$(\frac{9}{16}, -\frac{1}{2}, -\frac{3}{32}, -\frac{3}{32}, \frac{3}{16}, \frac{1}{16}, \frac{15}{32}, \frac{15}{32})$ $+ \frac{1}{16}\sqrt{442}e^1 \otimes e_2$	{134, 1345, 1358, 138, 1578, 178, 2, 234578, 23478, 2357, 237, 25}
83:2	$0, 0, 0, 0, 0, \frac{1}{619}\sqrt{127510}e^{12}, \frac{2}{619}\sqrt{11818}e^{13}, \frac{12}{619}\sqrt{311}e^{14}$	$(-\frac{144}{619}, \frac{156}{619}, -\frac{11}{619}, \frac{137}{619}, \frac{323}{619}, \frac{12}{619}, -\frac{155}{619}, -\frac{7}{619})$ $+ \frac{2}{619}\sqrt{40119}e^5 \otimes e_6 + \frac{4}{619}\sqrt{11507}e^2 \otimes e_7$	{123458, 1235, 14678, 167, 246, 268, 3457, 3578}
83:3	$0, 0, 0, 0, 0, \frac{4}{541}\sqrt{239}e^{12}, \frac{1}{541}\sqrt{87474}e^{13}, \frac{2}{541}\sqrt{13623}e^{24}$	$(-\frac{109}{541}, -\frac{40}{541}, \frac{90}{541}, \frac{220}{541}, \frac{66}{541}, -\frac{149}{541}, -\frac{19}{541}, \frac{180}{541})$ $+ \frac{2}{541}\sqrt{32026}e^4 \otimes e_7 + \frac{3}{541}\sqrt{10994}e^3 \otimes e_6$	{125678, 12678, 13458, 1348, 23578, 2378, 4568, 468}
83:3	$0, 0, 0, 0, 0, \frac{2}{101}\sqrt{1443}e^{12}, \frac{5}{101}\sqrt{222}e^{13}, \frac{2}{101}\sqrt{111}e^{24}$	$(\frac{50}{101}, -\frac{4}{101}, -\frac{5}{101}, \frac{22}{101}, -\frac{61}{101}, \frac{46}{101}, \frac{45}{101}, \frac{18}{101})$ $+ \frac{9}{101}\sqrt{222}e^1 \otimes e_5$	{123, 12348, 12478, 127, 1346, 1368, 1467, 1678, 2345678, 23567, 24568, 256, 3457, 3578, 45, 58}
83:3	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{15}e^{12}, \frac{1}{8}\sqrt{10}e^{13}, \frac{1}{8}\sqrt{10}e^{24}$	$(\frac{11}{16}, -\frac{1}{8}, -\frac{9}{16}, \frac{1}{4}, \frac{3}{16}, \frac{9}{16}, \frac{1}{8}, \frac{1}{8})$ $+ \frac{1}{8}\sqrt{130}e^1 \otimes e_3$	{12, 12458, 1248, 125, 1456, 146, 1568, 168, 234568, 23468, 2356, 236, 34, 345, 358, 38}
83:3	$0, 0, 0, 0, 0, \frac{2}{199}\sqrt{2091}e^{12}, \frac{12}{199}\sqrt{246}e^{13}, \frac{2}{199}\sqrt{2337}e^{24}$	$(-\frac{15}{199}, \frac{38}{199}, -\frac{32}{199}, \frac{21}{199}, 1, \frac{23}{199}, -\frac{47}{199}, \frac{59}{199})$ $+ \frac{6}{199}\sqrt{2173}e^5 \otimes e_7$	{123456, 123568, 12467, 12678, 13458, 135, 1478, 17, 2347, 2378, 245, 258, 34678, 367, 4568, 56}
83:3	$0, 0, 0, 0, 0, \frac{5}{523}\sqrt{2298}e^{12}, \frac{1}{523}\sqrt{2298}e^{13}, \frac{1}{523}\sqrt{55918}e^{24}$	$(\frac{223}{523}, -\frac{82}{523}, -\frac{160}{523}, -\frac{7}{523}, \frac{294}{523}, \frac{141}{523}, \frac{63}{523}, -\frac{89}{523})$ $+ \frac{1}{523}\sqrt{175414}e^1 \otimes e_3 + \frac{2}{523}\sqrt{43662}e^5 \otimes e_8$	{1245, 128, 1468, 156, 23456, 2368, 348, 35}
83:3	$0, 0, 0, 0, 0, \frac{7}{181}\sqrt{138}e^{12}, \frac{2}{181}\sqrt{1518}e^{13}, \frac{2}{181}\sqrt{345}e^{24}$	$(\frac{7}{181}, -\frac{20}{181}, \frac{56}{181}, \frac{29}{181}, -\frac{62}{181}, -\frac{13}{181}, \frac{63}{181}, \frac{9}{181})$ $+ \frac{9}{181}\sqrt{138}e^1 \otimes e_5 + \frac{9}{181}\sqrt{138}e^3 \otimes e_6$	{123, 12348, 1467, 1678, 24568, 256, 3457, 3578}
83:3	$0, 0, 0, 0, 0, \frac{2}{17}\sqrt{3}e^{12}, \frac{1}{17}\sqrt{17}e^{13}, \frac{1}{17}\sqrt{17}e^{24}$	$(-\frac{1}{17}, -\frac{1}{17}, \frac{2}{17}, \frac{2}{17}, -\frac{1}{17}, -\frac{2}{17}, \frac{1}{17}, \frac{1}{17})$ $+ \frac{1}{17}\sqrt{5}e^5 \otimes e_6 + \frac{3}{17}\sqrt{2}e^3 \otimes e_8 + \frac{3}{17}\sqrt{2}e^4 \otimes e_7$	{123456, 125678, 3567}
83:3	$0, 0, 0, 0, 0, \frac{1}{35}\sqrt{310}e^{12}, \frac{2}{35}\sqrt{155}e^{13}, \frac{2}{35}\sqrt{155}e^{24}$	$(\frac{4}{7}, -\frac{8}{35}, -\frac{3}{35}, -\frac{3}{35}, \frac{1}{5}, \frac{12}{35}, \frac{17}{35}, -\frac{11}{35})$ $+ \frac{2}{35}\sqrt{434}e^1 \otimes e_8$	{1234, 12345, 12457, 1247, 1356, 136, 1567, 167, 235678, 23678, 2568, 268, 34578, 3478, 458, 48}
83:3	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{15}e^{12}, \frac{1}{8}\sqrt{10}e^{13}, \frac{1}{8}\sqrt{10}e^{24}$	$(-\frac{1}{8}, -\frac{1}{8}, \frac{1}{4}, \frac{1}{4}, 1, -\frac{1}{4}, \frac{1}{8}, \frac{1}{8})$ $+ \frac{1}{8}\sqrt{130}e^5 \otimes e_6$	{1234578, 12357, 125, 13467, 13678, 146, 168, 345, 358, 578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:3	$0, 0, 0, 0, 0, \frac{8}{181}\sqrt{95}e^{12}, \frac{4}{181}\sqrt{57}e^{13}, \frac{4}{181}\sqrt{133}e^{24}$	$\left(\frac{29}{181}, -\frac{37}{181}, -\frac{47}{181}, \frac{68}{181}, \frac{58}{181}, -\frac{8}{181}, -\frac{18}{181}, \frac{31}{181}\right) + \frac{2}{181}\sqrt{1558}e^5 \otimes e_7 + \frac{2}{181}\sqrt{2470}e^4 \otimes e_6 + \frac{4}{181}\sqrt{551}e^1 \otimes e_3$	{1247, 167, 23678, 3478}
83:3	$0, 0, 0, 0, 0, \frac{2}{199}\sqrt{2091}e^{12}, \frac{12}{199}\sqrt{246}e^{13}, \frac{2}{199}\sqrt{2337}e^{24}$	$\left(-\frac{15}{199}, \frac{38}{199}, \frac{127}{199}, \frac{21}{199}, -\frac{119}{199}, \frac{23}{199}, \frac{112}{199}, \frac{59}{199}\right) + \frac{6}{199}\sqrt{2173}e^3 \otimes e_5$	{12346, 12368, 124567, 125678, 13, 1348, 14578, 157, 2347, 2378, 245, 258, 34678, 367, 4568, 56}
83:3	$0, 0, 0, 0, 0, \frac{1}{8}\sqrt{3}e^{12}, \frac{1}{16}\sqrt{14}e^{13}, \frac{1}{16}\sqrt{14}e^{24}$	$\left(\frac{1}{16}, \frac{1}{16}, -\frac{1}{8}, -\frac{1}{8}, \frac{1}{4}, \frac{1}{8}, -\frac{1}{16}, -\frac{1}{16}\right) + \frac{1}{16}\sqrt{10}e^5 \otimes e_6 + \frac{1}{8}\sqrt{6}e^1 \otimes e_8 + \frac{1}{8}\sqrt{6}e^2 \otimes e_7$	{12345, 167, 34578}
83:3	$0, 0, 0, 0, 0, \frac{28}{67}\sqrt{2}e^{12}, \frac{12}{67}\sqrt{21}e^{13}, \frac{12}{67}\sqrt{21}e^{24}$	$\left(-\frac{1}{67}, -\frac{1}{67}, \frac{40}{67}, -\frac{15}{67}, \frac{12}{67}, -\frac{2}{67}, \frac{39}{67}, -\frac{16}{67}\right) + \frac{4}{67}\sqrt{385}e^3 \otimes e_8$	{123456, 12346, 125678, 12678, 13, 135, 14578, 1478, 23457, 2347, 258, 28, 3567, 367, 4568, 468}
83:3	$0, 0, 0, 0, 0, \frac{5}{523}\sqrt{2298}e^{12}, \frac{1}{523}\sqrt{2298}e^{13}, \frac{1}{523}\sqrt{55918}e^{24}$	$\left(\frac{223}{523}, -\frac{82}{523}, -\frac{160}{523}, \frac{221}{523}, -\frac{162}{523}, \frac{141}{523}, \frac{63}{523}, \frac{139}{523}\right) + \frac{1}{523}\sqrt{175414}e^1 \otimes e_3 + \frac{2}{523}\sqrt{43662}e^4 \otimes e_5$	{124, 1258, 1468, 156, 2346, 23568, 348, 35}
83:3	$0, 0, 0, 0, 0, \frac{1}{643}\sqrt{142710}e^{12}, \frac{4}{643}\sqrt{2010}e^{13}, \frac{2}{643}\sqrt{8710}e^{24}$	$\left(\frac{178}{643}, \frac{104}{643}, -\frac{157}{643}, \frac{17}{643}, -\frac{231}{643}, \frac{282}{643}, \frac{21}{643}, \frac{121}{643}\right) + \frac{10}{643}\sqrt{2010}e^2 \otimes e_5 + \frac{2}{643}\sqrt{45895}e^1 \otimes e_3$	{124, 128, 14568, 156, 2346, 2368, 3458, 35}
83:3	$0, 0, 0, 0, 0, \frac{2}{101}\sqrt{1443}e^{12}, \frac{5}{101}\sqrt{222}e^{13}, \frac{2}{101}\sqrt{111}e^{24}$	$\left(-\frac{31}{101}, -\frac{4}{101}, \frac{76}{101}, \frac{22}{101}, \frac{20}{101}, -\frac{35}{101}, \frac{45}{101}, \frac{18}{101}\right) + \frac{9}{101}\sqrt{222}e^3 \otimes e_6$	{123, 123458, 12348, 1235, 14567, 1467, 15678, 1678, 24568, 2468, 256, 26, 3457, 347, 3578, 378}
83:3	$0, 0, 0, 0, 0, \frac{1}{21}\sqrt{22}e^{12}, \frac{2}{21}\sqrt{11}e^{13}, \frac{2}{21}\sqrt{11}e^{24}$	$\left(\frac{8}{63}, \frac{8}{63}, -\frac{11}{63}, -\frac{11}{63}, \frac{1}{9}, \frac{16}{63}, -\frac{1}{21}, -\frac{1}{21}\right) + \frac{2}{63}\sqrt{154}e^1 \otimes e_8 + \frac{2}{63}\sqrt{154}e^2 \otimes e_7$	{1234, 12345, 1567, 167, 34578, 3478}
83:3	$0, 0, 0, 0, 0, \frac{14}{845}\sqrt{167}e^{12}, \frac{1}{845}\sqrt{83166}e^{13}, \frac{2}{845}\sqrt{7849}e^{24}$	$\left(\frac{33}{845}, -\frac{116}{845}, \frac{84}{845}, -\frac{18}{845}, \frac{284}{845}, -\frac{83}{845}, \frac{9}{65}, -\frac{134}{845}\right) + \frac{1}{845}\sqrt{85838}e^3 \otimes e_6 + \frac{4}{845}\sqrt{4342}e^5 \otimes e_7 + \frac{4}{845}\sqrt{6346}e^1 \otimes e_8$	{12345, 167, 2568, 3478}
83:3	$0, 0, 0, 0, 0, \frac{2}{169}\sqrt{1003}e^{12}, \frac{3}{169}\sqrt{590}e^{13}, \frac{2}{169}\sqrt{649}e^{24}$	$\left(\frac{21}{169}, -\frac{36}{169}, \frac{44}{169}, -\frac{2}{169}, \frac{20}{169}, -\frac{15}{169}, \frac{5}{13}, -\frac{38}{169}\right) + \frac{1}{169}\sqrt{8142}e^3 \otimes e_6 + \frac{4}{169}\sqrt{590}e^1 \otimes e_8$	{1234, 12345, 1567, 167, 2568, 268, 34578, 3478}
83:3	$0, 0, 0, 0, 0, \frac{28}{65}e^{12}, \frac{2}{65}\sqrt{42}e^{13}, \frac{2}{65}\sqrt{42}e^{24}$	$\left(\frac{2}{13}, -\frac{11}{65}, -\frac{18}{65}, \frac{4}{13}, \frac{27}{65}, -\frac{1}{65}, -\frac{8}{65}, \frac{9}{65}\right) + \frac{14}{65}\sqrt{6}e^1 \otimes e_3 + \frac{14}{65}\sqrt{6}e^5 \otimes e_6 + \frac{2}{65}\sqrt{238}e^4 \otimes e_7$	{12578, 167, 23678, 357}
83:3	$0, 0, 0, 0, 0, \frac{2}{323}\sqrt{781}e^{12}, \frac{4}{323}\sqrt{1846}e^{13}, \frac{6}{323}\sqrt{497}e^{24}$	$\left(\frac{5}{19}, -\frac{2}{19}, -\frac{64}{323}, -\frac{23}{323}, \frac{163}{323}, \frac{3}{19}, \frac{21}{323}, -\frac{3}{17}\right) + \frac{2}{323}\sqrt{8733}e^5 \otimes e_7 + \frac{8}{323}\sqrt{710}e^1 \otimes e_8$	{12345, 1247, 1356, 167, 23678, 2568, 3478, 458}
83:3	$0, 0, 0, 0, 0, \frac{20}{1291}\sqrt{170}e^{12}, \frac{4}{1291}\sqrt{14705}e^{13}, \frac{4}{1291}\sqrt{15555}e^{24}$	$\left(-\frac{127}{1291}, -\frac{147}{1291}, \frac{66}{1291}, \frac{279}{1291}, \frac{472}{1291}, -\frac{274}{1291}, -\frac{61}{1291}, \frac{132}{1291}\right) + \frac{2}{1291}\sqrt{49810}e^3 \otimes e_6 + \frac{2}{1291}\sqrt{60010}e^5 \otimes e_8 + \frac{4}{1291}\sqrt{22355}e^4 \otimes e_7$	{12678, 1348, 2378, 468}
83:3	$0, 0, 0, 0, 0, \frac{2}{655}\sqrt{14579}e^{12}, \frac{1}{655}\sqrt{123802}e^{13}, \frac{4}{655}\sqrt{5258}e^{24}$	$\left(-\frac{68}{655}, \frac{3}{131}, \frac{59}{655}, \frac{46}{131}, -\frac{36}{131}, -\frac{53}{655}, -\frac{9}{655}, \frac{49}{131}\right) + \frac{1}{655}\sqrt{119022}e^3 \otimes e_5 + \frac{1}{655}\sqrt{161086}e^4 \otimes e_7$	{12346, 125678, 1348, 157, 2378, 245, 367, 4568}
83:3	$0, 0, 0, 0, 0, \frac{2}{169}\sqrt{1003}e^{12}, \frac{3}{169}\sqrt{590}e^{13}, \frac{2}{169}\sqrt{649}e^{24}$	$\left(\frac{10}{169}, \frac{44}{169}, -\frac{25}{169}, -\frac{2}{169}, -\frac{49}{169}, \frac{54}{169}, -\frac{15}{169}, \frac{42}{169}\right) + \frac{1}{169}\sqrt{8142}e^1 \otimes e_5 + \frac{4}{169}\sqrt{590}e^2 \otimes e_7$	{1234, 1238, 14678, 167, 2456, 2568, 34578, 357}
83:3	$0, 0, 0, 0, 0, \frac{2}{649}\sqrt{10063}e^{12}, \frac{1}{649}\sqrt{136718}e^{13}, \frac{2}{649}\sqrt{1041}e^{24}$	$\left(-\frac{179}{649}, \frac{12}{649}, \frac{180}{649}, \frac{70}{649}, \frac{348}{649}, -\frac{167}{649}, \frac{1}{649}, \frac{82}{649}\right) + \frac{1}{649}\sqrt{208894}e^3 \otimes e_6 + \frac{4}{649}\sqrt{11798}e^5 \otimes e_7$	{12345, 12358, 14678, 167, 2456, 2568, 3478, 37}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:3	$0, 0, 0, 0, 0, \frac{4}{337}\sqrt{551}e^{12}, \frac{4}{337}\sqrt{1073}e^{13}, \frac{8}{337}\sqrt{406}e^{24}$	$\left(\frac{36}{337}, -\frac{41}{337}, -\frac{80}{337}, \frac{72}{337}, \frac{147}{337}, -\frac{5}{337}, -\frac{44}{337}, \frac{31}{337}\right) + \frac{2}{337}\sqrt{2262}e^1 \otimes e_3 + \frac{2}{337}\sqrt{8758}e^4 \otimes e_7 + \frac{4}{337}\sqrt{1653}e^5 \otimes e_8$	{12678, 157, 2378, 3567}
83:3	$0, 0, 0, 0, 0, \frac{1}{61}\sqrt{646}e^{12}, \frac{2}{61}\sqrt{17}e^{13}, \frac{2}{61}\sqrt{17}e^{24}$	$\left(\frac{2}{61}, \frac{4}{61}, -\frac{15}{61}, \frac{3}{61}, \frac{23}{61}, \frac{6}{61}, -\frac{13}{61}, \frac{7}{61}\right) + \frac{2}{61}\sqrt{170}e^2 \otimes e_7 + \frac{6}{61}\sqrt{17}e^1 \otimes e_3 + \frac{6}{61}\sqrt{17}e^5 \otimes e_6$	{14678, 167, 34578, 357}
83:3	$0, 0, 0, 0, 0, \frac{1}{57}\sqrt{1334}e^{12}, \frac{2}{57}\sqrt{87}e^{13}, \frac{2}{57}\sqrt{87}e^{24}$	$\left(\frac{14}{57}, \frac{14}{57}, -\frac{5}{19}, -\frac{5}{19}, \frac{5}{57}, \frac{28}{57}, -\frac{1}{57}, -\frac{1}{57}\right) + \frac{2}{57}\sqrt{377}e^1 \otimes e_3 + \frac{2}{57}\sqrt{377}e^2 \otimes e_4$	{12, 125, 1456, 146, 34, 345}
83:3	$0, 0, 0, 0, 0, \frac{8}{161}\sqrt{58}e^{12}, \frac{2}{161}\sqrt{174}e^{13}, \frac{4}{161}\sqrt{203}e^{24}$	$\left(\frac{33}{161}, -\frac{2}{7}, -\frac{25}{161}, \frac{45}{161}, \frac{57}{161}, -\frac{13}{161}, \frac{8}{161}, -\frac{1}{161}\right) + \frac{2}{161}\sqrt{1247}e^5 \otimes e_8 + \frac{2}{161}\sqrt{1711}e^4 \otimes e_6 + \frac{6}{161}\sqrt{145}e^1 \otimes e_3$	{1245, 156, 2368, 348}
83:3	$0, 0, 0, 0, 0, \frac{1}{162}\sqrt{6302}e^{12}, \frac{1}{324}\sqrt{274}e^{13}, \frac{1}{162}\sqrt{1507}e^{24}$	$\left(\frac{95}{648}, \frac{47}{216}, -\frac{179}{648}, -\frac{133}{648}, \frac{95}{324}, \frac{59}{162}, -\frac{7}{54}, \frac{1}{81}\right) + \frac{1}{324}\sqrt{18906}e^5 \otimes e_7 + \frac{1}{324}\sqrt{31373}e^1 \otimes e_3 + \frac{1}{324}\sqrt{31373}e^2 \otimes e_4$	{127, 1467, 2367, 347}
83:3	$0, 0, 0, 0, 0, \frac{2}{169}\sqrt{1003}e^{12}, \frac{2}{169}\sqrt{649}e^{13}, \frac{3}{169}\sqrt{590}e^{24}$	$\left(\frac{44}{169}, -\frac{59}{169}, -\frac{2}{169}, \frac{44}{169}, \frac{20}{169}, -\frac{15}{169}, \frac{42}{169}, -\frac{15}{169}\right) + \frac{1}{169}\sqrt{8142}e^4 \otimes e_6 + \frac{4}{169}\sqrt{590}e^1 \otimes e_8$	{1234, 12345, 12457, 1247, 1356, 136, 1567, 167, 235678, 23678, 2568, 268, 34578, 3478, 458, 48}
83:3	$0, 0, 0, 0, 0, \frac{2}{169}\sqrt{1003}e^{12}, \frac{2}{169}\sqrt{649}e^{13}, \frac{3}{169}\sqrt{590}e^{24}$	$\left(\frac{44}{169}, -\frac{59}{169}, -\frac{2}{169}, \frac{44}{169}, \frac{20}{169}, -\frac{15}{169}, \frac{42}{169}, -\frac{15}{169}\right) - \frac{1}{169}\sqrt{8142}e^4 \otimes e_6 + \frac{4}{169}\sqrt{590}e^1 \otimes e_8$	{1234, 12345, 12457, 1247, 1356, 136, 1567, 167, 235678, 23678, 2568, 268, 34578, 3478, 458, 48}
83:3	$0, 0, 0, 0, 0, \frac{1}{57}\sqrt{1334}e^{12}, \frac{2}{57}\sqrt{87}e^{13}, \frac{2}{57}\sqrt{87}e^{24}$	$\left(\frac{14}{57}, -\frac{4}{19}, -\frac{5}{19}, \frac{11}{57}, \frac{31}{57}, \frac{2}{57}, -\frac{1}{57}, -\frac{1}{57}\right) + \frac{2}{57}\sqrt{377}e^1 \otimes e_3 + \frac{2}{57}\sqrt{377}e^5 \otimes e_6$	{12458, 125, 146, 168, 23468, 236, 345, 358}
83:3	$0, 0, 0, 0, 0, \frac{4}{541}\sqrt{239}e^{12}, \frac{1}{541}\sqrt{87474}e^{13}, \frac{2}{541}\sqrt{13623}e^{24}$	$\left(\frac{98}{541}, -\frac{40}{541}, -\frac{117}{541}, \frac{220}{541}, -\frac{141}{541}, \frac{58}{541}, -\frac{19}{541}, \frac{180}{541}\right) + \frac{2}{541}\sqrt{32026}e^4 \otimes e_7 + \frac{3}{541}\sqrt{10994}e^1 \otimes e_5$	{12346, 12678, 1348, 17, 23578, 245, 3567, 4568}
83:3	$0, 0, 0, 0, 0, \frac{10}{269}\sqrt{89}e^{12}, \frac{6}{269}\sqrt{445}e^{13}, \frac{4}{269}\sqrt{890}e^{24}$	$\left(-\frac{34}{269}, -\frac{29}{269}, \frac{115}{269}, -\frac{4}{269}, \frac{145}{269}, -\frac{63}{269}, \frac{81}{269}, -\frac{33}{269}\right) + \frac{2}{269}\sqrt{9701}e^5 \otimes e_8 + \frac{4}{269}\sqrt{2759}e^3 \otimes e_6$	{12345, 1238, 14678, 1567, 2456, 268, 3478, 357}
83:3	$0, 0, 0, 0, 0, \frac{1}{12}\sqrt{6}e^{12}, \frac{1}{12}\sqrt{10}e^{13}, \frac{1}{12}\sqrt{10}e^{24}$	$\left(-\frac{1}{12}, -\frac{1}{12}, \frac{1}{8}, \frac{1}{8}, \frac{1}{12}, -\frac{1}{6}, \frac{1}{24}, \frac{1}{24}\right) + \frac{1}{12}\sqrt{11}e^3 \otimes e_8 + \frac{1}{12}\sqrt{11}e^4 \otimes e_7$	{123456, 12346, 125678, 12678, 3567, 367}
83:3	$0, 0, 0, 0, 0, \frac{2}{655}\sqrt{14579}e^{12}, \frac{1}{655}\sqrt{123802}e^{13}, \frac{4}{655}\sqrt{5258}e^{24}$	$\left(-\frac{68}{655}, \frac{3}{131}, \frac{147}{655}, -\frac{107}{655}, \frac{318}{655}, -\frac{53}{655}, \frac{79}{655}, -\frac{92}{655}\right) + \frac{1}{655}\sqrt{119022}e^5 \otimes e_7 + \frac{1}{655}\sqrt{161086}e^3 \otimes e_8$	{123456, 12678, 135, 1478, 2347, 258, 367, 4568}
83:3	$0, 0, 0, 0, 0, \frac{2}{323}\sqrt{781}e^{12}, \frac{4}{323}\sqrt{1846}e^{13}, \frac{6}{323}\sqrt{497}e^{24}$	$\left(\frac{5}{19}, -\frac{2}{19}, \frac{59}{323}, -\frac{23}{323}, -\frac{83}{323}, \frac{3}{19}, \frac{144}{323}, -\frac{3}{17}\right) + \frac{2}{323}\sqrt{8733}e^3 \otimes e_5 + \frac{8}{323}\sqrt{710}e^1 \otimes e_8$	{1234, 12457, 136, 1567, 23678, 2568, 3478, 458}
83:3	$0, 0, 0, 0, 0, \frac{5}{523}\sqrt{2298}e^{12}, \frac{1}{523}\sqrt{55918}e^{13}, \frac{1}{523}\sqrt{2298}e^{24}$	$\left(\frac{147}{523}, -\frac{6}{523}, -\frac{236}{523}, \frac{69}{523}, \frac{294}{523}, \frac{141}{523}, -\frac{89}{523}, \frac{63}{523}\right) + \frac{1}{523}\sqrt{175414}e^1 \otimes e_3 + \frac{2}{523}\sqrt{43662}e^5 \otimes e_7$	{12478, 127, 1467, 1678, 234678, 2367, 347, 378}
83:3	$0, 0, 0, 0, 0, \frac{1}{2}e^{12}, \frac{1}{4}\sqrt{2}e^{13}, \frac{1}{4}\sqrt{2}e^{24}$	$\left(\frac{1}{4}, -\frac{1}{4}, 0, 0, \frac{1}{2}, 0, \frac{1}{4}, -\frac{1}{4}\right) + \frac{1}{2}\sqrt{2}e^1 \otimes e_8 + \frac{1}{4}\sqrt{6}e^5 \otimes e_6$	{12345, 12457, 136, 167, 23678, 268, 34578, 458}
83:3	$0, 0, 0, 0, 0, \frac{10}{269}\sqrt{89}e^{12}, \frac{4}{269}\sqrt{890}e^{13}, \frac{6}{269}\sqrt{445}e^{24}$	$\left(-\frac{29}{269}, -\frac{34}{269}, \frac{105}{269}, \frac{115}{269}, -\frac{73}{269}, -\frac{63}{269}, \frac{76}{269}, \frac{81}{269}\right) + \frac{2}{269}\sqrt{9701}e^3 \otimes e_5 + \frac{4}{269}\sqrt{2759}e^4 \otimes e_6$	{1234, 12457, 136, 1567, 23678, 2568, 3478, 458}
83:3	$0, 0, 0, 0, 0, \frac{1}{643}\sqrt{142710}e^{12}, \frac{4}{643}\sqrt{2010}e^{13}, \frac{2}{643}\sqrt{8710}e^{24}$	$\left(\frac{178}{643}, -\frac{196}{643}, -\frac{157}{643}, \frac{317}{643}, \frac{69}{643}, -\frac{18}{643}, \frac{21}{643}, \frac{121}{643}\right) + \frac{10}{643}\sqrt{2010}e^4 \otimes e_6 + \frac{2}{643}\sqrt{45895}e^1 \otimes e_3$	{124, 1245, 156, 16, 23568, 2368, 3458, 348}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:3	$0, 0, 0, 0, 0, \frac{10}{41}e^{12}, \frac{4}{41}\sqrt{10}e^{13}, \frac{6}{41}\sqrt{5}e^{24}$	$(\frac{7}{41}, -\frac{10}{41}, -\frac{4}{41}, \frac{7}{41}, \frac{13}{41}, -\frac{3}{41}, \frac{3}{41}, -\frac{3}{41})$ $-\frac{4}{41}\sqrt{15}e^4 \otimes e_6 + \frac{6}{41}\sqrt{5}e^5 \otimes e_7 + \frac{8}{41}\sqrt{5}e^1 \otimes e_8$	{12345, 1247, 1356, 167, 23678, 2568, 3478, 458}
83:3	$0, 0, 0, 0, 0, \frac{10}{41}e^{12}, \frac{4}{41}\sqrt{10}e^{13}, \frac{6}{41}\sqrt{5}e^{24}$	$(\frac{7}{41}, -\frac{10}{41}, -\frac{4}{41}, \frac{7}{41}, \frac{13}{41}, -\frac{3}{41}, \frac{3}{41}, -\frac{3}{41})$ $+\frac{4}{41}\sqrt{15}e^4 \otimes e_6 + \frac{6}{41}\sqrt{5}e^5 \otimes e_7 + \frac{8}{41}\sqrt{5}e^1 \otimes e_8$	{12345, 1247, 1356, 167, 23678, 2568, 3478, 458}
83:3	$0, 0, 0, 0, 0, \frac{1}{2}e^{12}, \frac{1}{4}\sqrt{2}e^{13}, \frac{1}{4}\sqrt{2}e^{24}$	$(\frac{1}{8}, \frac{1}{4}, -\frac{3}{8}, 0, \frac{1}{8}, \frac{3}{8}, -\frac{1}{4}, \frac{1}{4})$ $+\frac{1}{2}\sqrt{2}e^2 \otimes e_7 + \frac{1}{4}\sqrt{6}e^1 \otimes e_3$	{145678, 14678, 1567, 167, 34578, 3478, 357, 37}
83:3	$0, 0, 0, 0, 0, \frac{1}{221}\sqrt{4234}e^{12}, \frac{3}{221}\sqrt{438}e^{13}, \frac{1}{221}\sqrt{6862}e^{24}$	$(\frac{1}{13}, \frac{2}{13}, -\frac{56}{221}, -\frac{25}{221}, \frac{82}{221}, \frac{3}{13}, -\frac{3}{17}, \frac{9}{221})$ $+\frac{1}{221}\sqrt{7446}e^1 \otimes e_3 + \frac{2}{221}\sqrt{2190}e^5 \otimes e_8 + \frac{4}{221}\sqrt{803}e^2 \otimes e_7$	{14678, 1567, 3478, 357}
83:3	$0, 0, 0, 0, 0, \frac{4}{541}\sqrt{239}e^{12}, \frac{1}{541}\sqrt{87474}e^{13}, \frac{2}{541}\sqrt{13623}e^{24}$	$(\frac{98}{541}, -\frac{40}{541}, \frac{151}{541}, -\frac{48}{541}, -\frac{141}{541}, \frac{58}{541}, \frac{249}{541}, -\frac{88}{541})$ $+\frac{2}{541}\sqrt{32026}e^3 \otimes e_8 + \frac{3}{541}\sqrt{10994}e^1 \otimes e_5$	{12346, 12678, 13, 1478, 23457, 258, 3567, 4568}
83:3	$0, 0, 0, 0, 0, \frac{2}{323}\sqrt{781}e^{12}, \frac{6}{323}\sqrt{497}e^{13}, \frac{4}{323}\sqrt{1846}e^{24}$	$(\frac{126}{323}, -\frac{75}{323}, -\frac{23}{323}, \frac{59}{323}, \frac{83}{323}, \frac{3}{19}, \frac{103}{323}, -\frac{16}{323})$ $+\frac{2}{323}\sqrt{8733}e^4 \otimes e_5 + \frac{8}{323}\sqrt{710}e^1 \otimes e_8$	{1234, 1247, 1356, 1567, 235678, 2568, 3478, 48}
83:3	$0, 0, 0, 0, 0, \frac{3}{41}\sqrt{34}e^{12}, \frac{3}{41}\sqrt{10}e^{13}, \frac{3}{41}\sqrt{10}e^{24}$	$(\frac{3}{41}, \frac{3}{41}, -\frac{6}{41}, -\frac{6}{41}, \frac{15}{41}, \frac{6}{41}, -\frac{3}{41}, -\frac{3}{41})$ $+\frac{3}{41}\sqrt{26}e^1 \otimes e_3 + \frac{3}{41}\sqrt{26}e^2 \otimes e_4 + \frac{3}{41}\sqrt{26}e^5 \otimes e_6$	{125, 146, 345}
83:3	$0, 0, 0, 0, 0, \frac{4}{37}\sqrt{2}e^{12}, \frac{4}{37}\sqrt{13}e^{13}, \frac{4}{37}\sqrt{13}e^{24}$	$(\frac{9}{37}, -\frac{7}{37}, -\frac{9}{37}, \frac{8}{37}, \frac{4}{37}, \frac{2}{37}, 0, \frac{1}{37})$ $+\frac{16}{37}e^1 \otimes e_8 + \frac{4}{37}\sqrt{17}e^4 \otimes e_7$	{123456, 12346, 157, 17, 23578, 2378, 4568, 468}
83:3	$0, 0, 0, 0, 0, \frac{1}{41}\sqrt{462}e^{12}, \frac{2}{41}\sqrt{42}e^{13}, \frac{2}{41}\sqrt{42}e^{24}$	$(\frac{8}{41}, -\frac{10}{41}, \frac{1}{41}, \frac{19}{41}, \frac{13}{41}, -\frac{2}{41}, \frac{9}{41}, \frac{9}{41})$ $+\frac{6}{41}\sqrt{21}e^1 \otimes e_5 + \frac{6}{41}\sqrt{21}e^4 \otimes e_6$	{1234, 1247, 136, 167, 235678, 2568, 34578, 458}
83:4	$0, 0, 0, 0, 0, \frac{5}{103}\sqrt{130}e^{12}, \frac{5}{103}\sqrt{38}e^{13}, \frac{15}{103}\sqrt{6}e^{14} + \frac{5}{103}\sqrt{38}e^{23}$	$(\frac{57}{206}, \frac{15}{103}, -\frac{8}{103}, -\frac{43}{206}, -\frac{35}{103}, \frac{87}{206}, \frac{41}{206}, \frac{7}{103})$ $+\frac{10}{103}\sqrt{46}e^1 \otimes e_4 + \frac{10}{103}\sqrt{46}e^2 \otimes e_5$	{123, 1567, 23467, 45}
83:4	$0, 0, 0, 0, 0, \frac{2}{91}\sqrt{141}e^{12}, \frac{2}{91}\sqrt{141}e^{13}, \frac{2}{91}\sqrt{94}e^{14} + \frac{5}{91}\sqrt{94}e^{23}$	$(-\frac{5}{91}, \frac{22}{91}, -\frac{20}{91}, \frac{1}{13}, \frac{7}{13}, \frac{17}{91}, -\frac{25}{91}, \frac{2}{91})$ $+\frac{2}{91}\sqrt{893}e^5 \otimes e_8 + \frac{2}{91}\sqrt{987}e^2 \otimes e_7$	{12345, 14567, 2468, 3478}
83:4	$0, 0, 0, 0, 0, \frac{9}{268}\sqrt{181}e^{12}, \frac{3}{268}\sqrt{1086}e^{13}, \frac{9}{268}\sqrt{181}e^{14} + \frac{5}{268}\sqrt{362}e^{23}$	$(-\frac{75}{268}, \frac{35}{536}, \frac{31}{268}, \frac{247}{536}, \frac{137}{268}, -\frac{115}{536}, -\frac{11}{67}, \frac{97}{536})$ $+\frac{1}{268}\sqrt{47422}e^4 \otimes e_6 + \frac{1}{67}\sqrt{2353}e^5 \otimes e_7$	{1247, 1678, 256, 458}
83:4	$0, 0, 0, 0, 0, \frac{6}{53}\sqrt{10}e^{12}, \frac{6}{53}\sqrt{10}e^{13}, \frac{6}{53}\sqrt{10}e^{14} + \frac{6}{53}\sqrt{10}e^{23}$	$(\frac{15}{53}, -\frac{3}{53}, -\frac{3}{53}, -\frac{21}{53}, \frac{30}{53}, \frac{12}{53}, \frac{12}{53}, -\frac{6}{53})$ $+\frac{6}{53}\sqrt{46}e^1 \otimes e_4 + \frac{6}{53}\sqrt{46}e^5 \otimes e_8$	{1278, 2468}
83:4	$0, 0, 0, 0, 0, \frac{25}{3613}\sqrt{2262}e^{12}, \frac{50}{3613}\sqrt{346}e^{13}, \frac{100}{3613}\sqrt{69}e^{14} + \frac{100}{3613}\sqrt{10}e^{23}$	$(\frac{200}{3613}, \frac{300}{3613}, -\frac{525}{3613}, -\frac{425}{3613}, \frac{1125}{3613}, \frac{500}{3613}, -\frac{325}{3613}, -\frac{225}{3613})$ $+\frac{100}{3613}\sqrt{158}e^2 \otimes e_7 + \frac{300}{3613}\sqrt{17}e^1 \otimes e_4 + \frac{50}{3613}\sqrt{439}e^5 \otimes e_6$	{1235, 167}
83:4	$0, 0, 0, 0, 0, \frac{5}{103}\sqrt{38}e^{12}, \frac{15}{103}\sqrt{6}e^{13}, \frac{5}{103}\sqrt{130}e^{14} + \frac{5}{103}\sqrt{38}e^{23}$	$(-\frac{35}{206}, -\frac{8}{103}, \frac{15}{103}, \frac{49}{206}, \frac{57}{103}, -\frac{51}{206}, -\frac{5}{206}, \frac{7}{103})$ $+\frac{10}{103}\sqrt{46}e^4 \otimes e_6 + \frac{10}{103}\sqrt{46}e^5 \otimes e_8$	{123457, 13678, 2356, 348}
83:4	$0, 0, 0, 0, 0, \frac{3}{83}\sqrt{70}e^{12}, \frac{3}{83}\sqrt{6}e^{13}, \frac{18}{83}\sqrt{2}e^{14} + \frac{3}{83}\sqrt{70}e^{23}$	$(-\frac{15}{83}, \frac{9}{83}, -\frac{3}{83}, \frac{21}{83}, \frac{33}{83}, -\frac{6}{83}, -\frac{18}{83}, \frac{6}{83})$ $+\frac{6}{83}\sqrt{37}e^2 \otimes e_7 + \frac{6}{83}\sqrt{38}e^4 \otimes e_6 + \frac{6}{83}\sqrt{38}e^5 \otimes e_8$	{13678, 2356}
83:4	$0, 0, 0, 0, 0, \frac{5}{103}\sqrt{38}e^{12}, \frac{5}{103}\sqrt{38}e^{13}, \frac{2}{103}\sqrt{209}e^{14} + \frac{5}{103}\sqrt{38}e^{23}$	$(-\frac{19}{103}, \frac{6}{103}, \frac{6}{103}, \frac{31}{103}, \frac{9}{103}, -\frac{13}{103}, -\frac{13}{103}, \frac{12}{103})$ $+\frac{1}{103}\sqrt{1786}e^2 \otimes e_7 - \frac{1}{103}\sqrt{1786}e^3 \otimes e_6$	{123, 1235, 1567, 167, 2568, 268}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:4	$0, 0, 0, 0, 0, \frac{5}{103}\sqrt{38}e^{12}, \frac{5}{103}\sqrt{38}e^{13}, \frac{2}{103}\sqrt{209}e^{14} + \frac{5}{103}\sqrt{38}e^{23}$	$(-\frac{19}{103}, \frac{6}{103}, \frac{6}{103}, \frac{31}{103}, \frac{9}{103}, -\frac{13}{103}, -\frac{13}{103}, \frac{12}{103})$ $+ \frac{1}{103}\sqrt{1786}e^2 \otimes e_7 + \frac{1}{103}\sqrt{1786}e^3 \otimes e_6$	{123, 1235, 1567, 167, 2568, 268}
83:4	$0, 0, 0, 0, 0, \frac{3}{368}\sqrt{2665}e^{12}, \frac{3}{368}\sqrt{2665}e^{13}, \frac{3}{46}\sqrt{26}e^{14} + \frac{3}{184}\sqrt{143}e^{23}$	$(\frac{55}{368}, \frac{165}{736}, -\frac{179}{736}, -\frac{31}{184}, \frac{35}{368}, \frac{275}{736}, -\frac{3}{32}, -\frac{7}{368})$ $+ \frac{3}{184}\sqrt{1118}e^2 \otimes e_7 + \frac{3}{368}\sqrt{4186}e^1 \otimes e_4$	{123, 1235, 1567, 167}
83:4	$0, 0, 0, 0, 0, \frac{5}{91}\sqrt{94}e^{12}, \frac{2}{91}\sqrt{141}e^{13}, \frac{2}{91}\sqrt{94}e^{14} + \frac{2}{91}\sqrt{141}e^{23}$	$(-\frac{24}{91}, \frac{22}{91}, -\frac{1}{91}, \frac{45}{91}, \frac{11}{91}, -\frac{2}{91}, -\frac{25}{91}, \frac{3}{13})$ $+ \frac{2}{91}\sqrt{893}e^4 \otimes e_6 + \frac{2}{91}\sqrt{987}e^2 \otimes e_7$	{1234, 12345, 34578, 3478}
83:4	$0, 0, 0, 0, 0, \frac{5}{103}\sqrt{130}e^{12}, \frac{15}{103}\sqrt{6}e^{13}, \frac{5}{103}\sqrt{38}e^{14} + \frac{5}{103}\sqrt{38}e^{23}$	$(-\frac{35}{206}, \frac{15}{103}, \frac{15}{103}, \frac{95}{206}, -\frac{35}{103}, -\frac{5}{206}, -\frac{5}{206}, \frac{30}{103})$ $+ \frac{10}{103}\sqrt{46}e^2 \otimes e_5 + \frac{10}{103}\sqrt{46}e^4 \otimes e_6$	{12347, 135678, 236, 3458}
83:4	$0, 0, 0, 0, 0, \frac{6}{53}\sqrt{10}e^{12}, \frac{6}{53}\sqrt{10}e^{13}, \frac{6}{53}\sqrt{10}e^{14} + \frac{6}{53}\sqrt{10}e^{23}$	$(-\frac{8}{53}, \frac{20}{53}, -\frac{3}{53}, \frac{25}{53}, -\frac{16}{53}, \frac{12}{53}, -\frac{11}{53}, \frac{17}{53})$ $+ \frac{6}{53}\sqrt{46}e^2 \otimes e_5 + \frac{6}{53}\sqrt{46}e^4 \otimes e_7$	{1234, 1278, 2367, 2468}
83:4	$0, 0, 0, 0, 0, \frac{1}{343}\sqrt{34230}e^{12}, \frac{2}{343}\sqrt{3097}e^{13}, \frac{4}{343}\sqrt{978}e^{14} + \frac{2}{343}\sqrt{3097}e^{23}$	$(-\frac{58}{343}, \frac{66}{343}, -\frac{39}{343}, \frac{85}{343}, \frac{171}{343}, \frac{8}{343}, -\frac{97}{343}, \frac{27}{343})$ $+ \frac{2}{343}\sqrt{10921}e^5 \otimes e_6 + \frac{2}{343}\sqrt{14018}e^2 \otimes e_7$	{1235, 167, 268, 3578}
83:4	$0, 0, 0, 0, 0, \frac{3}{115}\sqrt{642}e^{12}, \frac{3}{115}\sqrt{642}e^{13}, \frac{3}{115}\sqrt{642}e^{14} + \frac{2}{115}\sqrt{1070}e^{23}$	$(\frac{34}{115}, \frac{14}{115}, \frac{14}{115}, -\frac{6}{115}, -\frac{73}{115}, \frac{48}{115}, \frac{48}{115}, \frac{28}{115})$ $+ \frac{2}{115}\sqrt{5029}e^1 \otimes e_5$	{1238, 1247, 1678, 2345678, 256, 458}
83:4	$0, 0, 0, 0, 0, \frac{3}{115}\sqrt{642}e^{12}, \frac{3}{115}\sqrt{642}e^{13}, \frac{2}{115}\sqrt{1070}e^{14} + \frac{3}{115}\sqrt{642}e^{23}$	$(-\frac{13}{115}, \frac{61}{115}, -\frac{33}{115}, \frac{41}{115}, \frac{21}{115}, \frac{48}{115}, -\frac{2}{5}, \frac{28}{115})$ $+ \frac{2}{115}\sqrt{5029}e^2 \otimes e_7$	{123, 1235, 1567, 167, 2568, 268, 3578, 378}
83:4	$0, 0, 0, 0, 0, \frac{1}{361}\sqrt{43942}e^{12}, \frac{2}{361}\sqrt{4498}e^{13}, \frac{6}{361}\sqrt{346}e^{14} + \frac{6}{361}\sqrt{346}e^{23}$	$(\frac{68}{361}, -\frac{56}{361}, \frac{1}{19}, -\frac{105}{361}, \frac{185}{361}, \frac{12}{361}, \frac{87}{361}, -\frac{37}{361})$ $+ \frac{10}{361}\sqrt{519}e^5 \otimes e_6 + \frac{4}{361}\sqrt{3806}e^1 \otimes e_4$	{1257, 136, 246, 3457}
83:4	$0, 0, 0, 0, 0, \frac{1}{106}\sqrt{2091}e^{12}, \frac{1}{106}\sqrt{2091}e^{13}, \frac{1}{53}\sqrt{41}e^{14} + \frac{1}{53}\sqrt{41}e^{23}$	$(\frac{3}{53}, \frac{63}{212}, -\frac{31}{212}, \frac{5}{53}, -\frac{35}{106}, \frac{75}{212}, -\frac{19}{212}, \frac{8}{53})$ $+ \frac{1}{106}\sqrt{3854}e^1 \otimes e_5 + \frac{1}{106}\sqrt{3854}e^2 \otimes e_7$	{1234, 1467, 24568, 34578}
83:4	$0, 0, 0, 0, 0, \frac{1}{28}\sqrt{493}e^{12}, \frac{1}{28}\sqrt{493}e^{13}, \frac{1}{28}\sqrt{174}e^{14} + \frac{1}{28}\sqrt{174}e^{23}$	$(\frac{1}{2}, -\frac{1}{56}, -\frac{1}{56}, -\frac{15}{28}, \frac{5}{28}, \frac{27}{56}, \frac{27}{56}, -\frac{1}{28})$ $+ \frac{1}{28}\sqrt{1334}e^1 \otimes e_4$	{1257, 127, 2456, 246}
83:4	$0, 0, 0, 0, 0, \frac{1}{111}\sqrt{11398}e^{12}, \frac{2}{111}\sqrt{278}e^{13}, \frac{2}{111}\sqrt{278}e^{14} + \frac{2}{111}\sqrt{278}e^{23}$	$(-\frac{4}{37}, -\frac{16}{111}, \frac{29}{111}, \frac{25}{111}, 1, -\frac{28}{111}, \frac{17}{111}, \frac{13}{111})$ $+ \frac{2}{37}\sqrt{695}e^5 \otimes e_6$	{1234578, 125, 1367, 1468, 2368, 2467, 345, 578}
83:4	$0, 0, 0, 0, 0, \frac{2}{111}\sqrt{278}e^{12}, \frac{2}{111}\sqrt{278}e^{13}, \frac{1}{111}\sqrt{11398}e^{14} + \frac{2}{111}\sqrt{278}e^{23}$	$(-\frac{4}{37}, \frac{29}{111}, \frac{29}{111}, \frac{70}{111}, -\frac{23}{37}, \frac{17}{111}, \frac{17}{111}, \frac{58}{111})$ $+ \frac{2}{37}\sqrt{695}e^4 \otimes e_5$	{1235678, 1246, 158, 2348, 257, 4678}
83:4	$0, 0, 0, 0, 0, \frac{4}{247}\sqrt{615}e^{12}, \frac{4}{247}\sqrt{615}e^{13}, \frac{4}{247}\sqrt{205}e^{14} + \frac{4}{247}\sqrt{615}e^{23}$	$(-\frac{37}{247}, \frac{100}{247}, -\frac{27}{247}, \frac{110}{247}, -\frac{54}{247}, \frac{63}{247}, -\frac{64}{247}, \frac{73}{247})$ $+ \frac{2}{247}\sqrt{10414}e^2 \otimes e_7 + \frac{2}{247}\sqrt{7134}e^4 \otimes e_5$	{1234, 1467, 2468, 3478}
83:4	$0, 0, 0, 0, 0, \frac{1}{28}\sqrt{493}e^{12}, \frac{1}{28}\sqrt{174}e^{13}, \frac{1}{28}\sqrt{174}e^{14} + \frac{1}{28}\sqrt{493}e^{23}$	$(\frac{5}{56}, \frac{11}{28}, -\frac{1}{56}, \frac{2}{7}, -\frac{9}{14}, \frac{27}{56}, \frac{1}{14}, \frac{3}{8})$ $+ \frac{1}{28}\sqrt{1334}e^2 \otimes e_5$	{1237, 1248, 1345678, 156, 2346, 2678, 358, 457}
83:4	$0, 0, 0, 0, 0, \frac{4}{167}\sqrt{210}e^{12}, \frac{4}{167}\sqrt{210}e^{13}, \frac{16}{167}\sqrt{6}e^{14} + \frac{24}{167}\sqrt{3}e^{23}$	$(\frac{20}{167}, \frac{30}{167}, -\frac{38}{167}, -\frac{28}{167}, \frac{40}{167}, \frac{50}{167}, -\frac{18}{167}, -\frac{8}{167})$ $+ \frac{20}{167}\sqrt{6}e^5 \otimes e_8 + \frac{4}{167}\sqrt{354}e^1 \otimes e_4 + \frac{8}{167}\sqrt{102}e^2 \otimes e_7$	{1235, 1567}
83:4	$0, 0, 0, 0, 0, \frac{1}{28}\sqrt{174}e^{12}, \frac{1}{28}\sqrt{174}e^{13}, \frac{1}{28}\sqrt{493}e^{14} + \frac{1}{28}\sqrt{493}e^{23}$	$(\frac{5}{56}, -\frac{1}{56}, -\frac{1}{56}, -\frac{1}{8}, 1, \frac{1}{14}, \frac{1}{14}, -\frac{1}{28})$ $+ \frac{1}{28}\sqrt{1334}e^5 \otimes e_8$	{1234567, 1268, 145, 235, 2478, 567}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:4	$0, 0, 0, 0, 0, \frac{10}{161}\sqrt{15}e^{12}, \frac{10}{161}\sqrt{15}e^{13}, \frac{10}{161}\sqrt{11}e^{14} + \frac{5}{161}\sqrt{82}e^{23}$	$(-\frac{25}{161}, \frac{5}{161}, \frac{5}{161}, \frac{5}{23}, \frac{5}{23}, -\frac{20}{161}, -\frac{20}{161}, \frac{10}{161})$ $+ \frac{10}{161}\sqrt{11}e^5 \otimes e_8 + \frac{15}{161}\sqrt{14}e^2 \otimes e_7 - \frac{15}{161}\sqrt{14}e^3 \otimes e_6$	{1235, 1567, 268}
83:4	$0, 0, 0, 0, 0, \frac{10}{161}\sqrt{15}e^{12}, \frac{10}{161}\sqrt{15}e^{13}, \frac{10}{161}\sqrt{11}e^{14} + \frac{5}{161}\sqrt{82}e^{23}$	$(-\frac{25}{161}, \frac{5}{161}, \frac{5}{161}, \frac{5}{23}, \frac{5}{23}, -\frac{20}{161}, -\frac{20}{161}, \frac{10}{161})$ $+ \frac{10}{161}\sqrt{11}e^5 \otimes e_8 + \frac{15}{161}\sqrt{14}e^2 \otimes e_7 + \frac{15}{161}\sqrt{14}e^3 \otimes e_6$	{1235, 1567, 268}
83:4	$0, 0, 0, 0, 0, \frac{3}{368}\sqrt{2665}e^{12}, \frac{3}{184}\sqrt{143}e^{13}, \frac{3}{46}\sqrt{26}e^{14} + \frac{3}{368}\sqrt{2665}e^{23}$	$(-\frac{51}{736}, -\frac{9}{368}, \frac{165}{736}, \frac{99}{368}, -\frac{63}{184}, -\frac{3}{32}, \frac{57}{368}, \frac{147}{736})$ $+ \frac{3}{184}\sqrt{1118}e^3 \otimes e_6 + \frac{3}{368}\sqrt{4186}e^2 \otimes e_5$	{123, 1567, 268, 3578}
83:4	$0, 0, 0, 0, 0, \frac{3}{368}\sqrt{2665}e^{12}, \frac{3}{184}\sqrt{143}e^{13}, \frac{3}{368}\sqrt{2665}e^{14} + \frac{3}{46}\sqrt{26}e^{23}$	$(-\frac{5}{92}, -\frac{7}{736}, \frac{77}{368}, \frac{187}{736}, -\frac{137}{368}, -\frac{47}{736}, \frac{57}{368}, \frac{147}{736})$ $+ \frac{3}{184}\sqrt{1118}e^1 \otimes e_5 + \frac{3}{368}\sqrt{4186}e^4 \otimes e_6$	{1247, 1678, 256, 458}
83:4	$0, 0, 0, 0, 0, \frac{1}{28}\sqrt{493}e^{12}, \frac{1}{28}\sqrt{174}e^{13}, \frac{1}{28}\sqrt{493}e^{14} + \frac{1}{28}\sqrt{174}e^{23}$	$(-\frac{9}{28}, -\frac{1}{56}, \frac{11}{28}, \frac{39}{56}, \frac{5}{28}, -\frac{19}{56}, \frac{1}{14}, \frac{3}{8})$ $+ \frac{1}{28}\sqrt{1334}e^4 \otimes e_6$	{124, 1245, 1568, 168, 2567, 267, 4578, 478}
83:5	$0, 0, 0, 0, 0, \frac{2}{47}\sqrt{85}e^{12}, \frac{2}{47}\sqrt{85}e^{34}, \frac{2}{47}\sqrt{10}e^{13} + \frac{2}{47}\sqrt{10}e^{24}$	$(\frac{11}{47}, -\frac{10}{47}, -\frac{10}{47}, \frac{11}{47}, \frac{5}{47}, \frac{1}{47}, \frac{1}{47}, \frac{1}{47})$ $+ \frac{2}{47}\sqrt{105}e^1 \otimes e_7 + \frac{2}{47}\sqrt{105}e^4 \otimes e_6$	{123458, 12348, 23567, 2367}
83:5	$0, 0, 0, 0, 0, \frac{2}{17}\sqrt{39}e^{12}, \frac{2}{17}\sqrt{39}e^{34}, \frac{1}{17}\sqrt{78}e^{13} + \frac{2}{17}\sqrt{26}e^{24}$	$(\frac{8}{17}, \frac{1}{17}, -\frac{6}{17}, \frac{1}{17}, \frac{3}{17}, \frac{9}{17}, -\frac{5}{17}, \frac{2}{17})$ $+ \frac{2}{17}\sqrt{91}e^1 \otimes e_7$	{13456, 1346, 1568, 168, 3578, 378, 457, 47}
83:5	$0, 0, 0, 0, 0, \frac{10}{137}e^{12}, \frac{10}{137}e^{34}, \frac{5}{137}\sqrt{2}e^{13} + \frac{2}{137}\sqrt{19}e^{24}$	$(-\frac{1}{137}, -\frac{1}{137}, -\frac{1}{137}, -\frac{1}{137}, \frac{11}{137}, -\frac{2}{137}, -\frac{2}{137}, -\frac{2}{137})$ $+ \frac{3}{137}\sqrt{14}e^1 \otimes e_7 + \frac{3}{137}\sqrt{14}e^3 \otimes e_6$	{1568, 168}
83:5	$0, 0, 0, 0, 0, \frac{16}{73}\sqrt{6}e^{12}, \frac{8}{73}\sqrt{15}e^{34}, \frac{8}{73}\sqrt{2}e^{13} + \frac{8}{73}\sqrt{3}e^{24}$	$(\frac{14}{73}, -\frac{18}{73}, -\frac{4}{73}, \frac{28}{73}, -\frac{18}{73}, -\frac{4}{73}, \frac{24}{73}, \frac{10}{73})$ $+ \frac{24}{73}\sqrt{3}e^1 \otimes e_5 + \frac{8}{73}\sqrt{37}e^4 \otimes e_6$	{1247, 16, 2568, 4578}
83:5	$0, 0, 0, 0, 0, \frac{3}{41}\sqrt{30}e^{12}, \frac{4}{41}\sqrt{10}e^{34}, \frac{1}{41}\sqrt{190}e^{13} + \frac{6}{41}\sqrt{5}e^{24}$	$(-\frac{5}{82}, -\frac{1}{82}, \frac{7}{41}, \frac{5}{41}, -\frac{25}{82}, -\frac{3}{41}, \frac{12}{41}, \frac{9}{82})$ $+ \frac{1}{41}\sqrt{330}e^1 \otimes e_5 + \frac{1}{41}\sqrt{410}e^3 \otimes e_6$	{1237, 168, 256, 3578}
83:5	$0, 0, 0, 0, 0, \frac{16}{73}\sqrt{6}e^{12}, \frac{8}{73}\sqrt{15}e^{34}, \frac{8}{73}\sqrt{2}e^{13} + \frac{8}{73}\sqrt{3}e^{24}$	$(\frac{14}{73}, \frac{19}{73}, -\frac{4}{73}, -\frac{9}{73}, -\frac{18}{73}, \frac{33}{73}, -\frac{13}{73}, \frac{10}{73})$ $+ \frac{24}{73}\sqrt{3}e^1 \otimes e_5 + \frac{8}{73}\sqrt{37}e^2 \otimes e_7$	{23456, 2568, 357, 4578}
83:5	$0, 0, 0, 0, 0, \frac{1}{112}\sqrt{11782}e^{12}, \frac{1}{112}\sqrt{3562}e^{34},$ $\frac{1}{112}\sqrt{2329}e^{13} + \frac{1}{112}\sqrt{2329}e^{24}$	$(-\frac{25}{224}, -\frac{25}{224}, \frac{5}{32}, \frac{5}{32}, 1, -\frac{25}{112}, \frac{5}{16}, \frac{5}{112})$ $+ \frac{3}{56}\sqrt{685}e^5 \otimes e_6$	{123458, 125, 13678, 1467, 345, 58}
83:5	$0, 0, 0, 0, 0, \frac{1}{3}\sqrt{3}e^{12}, \frac{1}{3}\sqrt{3}e^{34}, \frac{1}{3}\sqrt{6}e^{13} + \frac{1}{3}\sqrt{6}e^{24}$	$(0, 0, 0, 0, 1, 0, 0, 0)$ $+ \frac{1}{3}\sqrt{15}e^5 \otimes e_8$	{1234567, 12678, 135, 148, 567}
83:5	$0, 0, 0, 0, 0, \frac{8}{467}\sqrt{913}e^{12}, \frac{2}{467}\sqrt{9877}e^{34}, \frac{2}{467}\sqrt{2573}e^{13} + \frac{4}{467}\sqrt{1909}e^{24}$	$(\frac{89}{467}, -\frac{34}{467}, -\frac{100}{467}, \frac{23}{467}, \frac{221}{467}, \frac{55}{467}, -\frac{77}{467}, -\frac{11}{467})$ $+ \frac{2}{467}\sqrt{20418}e^1 \otimes e_7 + \frac{6}{467}\sqrt{1577}e^5 \otimes e_6$	{1346, 168, 3578, 457}
83:5	$0, 0, 0, 0, 0, \frac{16}{451}\sqrt{479}e^{12}, \frac{2}{451}\sqrt{1437}e^{34},$ $\frac{5}{451}\sqrt{4790}e^{13} + \frac{2}{451}\sqrt{1389}e^{24}$	$(\frac{18}{41}, \frac{15}{451}, -\frac{46}{451}, \frac{137}{451}, -\frac{281}{451}, \frac{213}{451}, \frac{91}{451}, \frac{152}{451})$ $+ \frac{2}{451}\sqrt{87657}e^1 \otimes e_5$	{1237, 12478, 1346, 168, 234568, 256, 3578, 457}
83:6	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{15}e^{12}, \frac{1}{8}\sqrt{5}e^{14} - \frac{1}{8}\sqrt{5}e^{23},$ $\frac{1}{8}\sqrt{5}e^{13} + \frac{1}{8}\sqrt{5}e^{24}$	$(-\frac{1}{8}, -\frac{1}{8}, \frac{1}{4}, \frac{1}{4}, 1, -\frac{1}{4}, \frac{1}{8}, \frac{1}{8})$ $+ \frac{1}{8}\sqrt{130}e^5 \otimes e_6$	{1234578, 125, 1368, 345, 578, 1234578, 125, 1368, 345, 578}
83:6	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{15}e^{12}, \frac{1}{8}\sqrt{5}e^{14} + \frac{1}{8}\sqrt{5}e^{23},$ $\frac{1}{8}\sqrt{5}e^{13} + \frac{1}{8}\sqrt{5}e^{24}$	$(-\frac{1}{8}, -\frac{1}{8}, \frac{1}{4}, \frac{1}{4}, 1, -\frac{1}{4}, \frac{1}{8}, \frac{1}{8})$ $+ \frac{1}{8}\sqrt{130}e^5 \otimes e_6$	{1234578, 125, 1368, 345, 578, 1234578, 125, 1368, 345, 578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:6	$0, 0, 0, 0, 0, \frac{1}{65}\sqrt{1938}e^{12}, \frac{1}{65}\sqrt{1938}e^{14} - \frac{2}{65}\sqrt{285}e^{23},$ $\frac{1}{65}\sqrt{1938}e^{13} + \frac{2}{65}\sqrt{285}e^{24}$	$(\frac{14}{65}, \frac{14}{65}, \frac{4}{65}, \frac{4}{65}, -\frac{43}{65}, \frac{28}{65}, \frac{18}{65}, \frac{18}{65})$ $+ \frac{18}{65}\sqrt{19}e^1 \otimes e_5$	{1237, 1346, 1678, 2345678, 256, 358, 1237, 1346, 1678, 2345678, 256, 358}
83:6	$0, 0, 0, 0, 0, \frac{1}{65}\sqrt{1938}e^{12}, \frac{1}{65}\sqrt{1938}e^{14} + \frac{2}{65}\sqrt{285}e^{23},$ $\frac{1}{65}\sqrt{1938}e^{13} + \frac{2}{65}\sqrt{285}e^{24}$	$(\frac{14}{65}, \frac{14}{65}, \frac{4}{65}, \frac{4}{65}, -\frac{43}{65}, \frac{28}{65}, \frac{18}{65}, \frac{18}{65})$ $+ \frac{18}{65}\sqrt{19}e^1 \otimes e_5$	{1237, 1346, 1678, 2345678, 256, 358, 1237, 1346, 1678, 2345678, 256, 358}
83:6	$0, 0, 0, 0, 0, \frac{16}{97}\sqrt{5}e^{12}, \frac{16}{97}\sqrt{5}e^{14} - \frac{8}{97}\sqrt{10}e^{23},$ $\frac{8}{97}\sqrt{10}e^{13} + \frac{16}{97}\sqrt{5}e^{24}$	$(-\frac{12}{97}, -\frac{12}{97}, \frac{40}{97}, \frac{40}{97}, -\frac{24}{97}, -\frac{24}{97}, \frac{28}{97}, \frac{28}{97})$ $+ \frac{8}{97}\sqrt{74}e^3 \otimes e_5 + \frac{8}{97}\sqrt{94}e^4 \otimes e_6$	{1234, 1367, 3478, 1234, 1367, 3478}
83:6	$0, 0, 0, 0, 0, \frac{16}{97}\sqrt{5}e^{12}, \frac{16}{97}\sqrt{5}e^{14} + \frac{8}{97}\sqrt{10}e^{23},$ $\frac{8}{97}\sqrt{10}e^{13} + \frac{16}{97}\sqrt{5}e^{24}$	$(-\frac{12}{97}, -\frac{12}{97}, \frac{40}{97}, \frac{40}{97}, -\frac{24}{97}, -\frac{24}{97}, \frac{28}{97}, \frac{28}{97})$ $+ \frac{8}{97}\sqrt{74}e^3 \otimes e_5 + \frac{8}{97}\sqrt{94}e^4 \otimes e_6$	{1234, 1367, 3478, 1234, 1367, 3478}
83:6	$0, 0, 0, 0, 0, \frac{1}{65}\sqrt{1938}e^{12}, \frac{2}{65}\sqrt{285}e^{14} - \frac{1}{65}\sqrt{1938}e^{23},$ $\frac{1}{65}\sqrt{1938}e^{13} + \frac{2}{65}\sqrt{285}e^{24}$	$(-\frac{1}{5}, -\frac{1}{5}, \frac{31}{65}, \frac{31}{65}, \frac{11}{65}, -\frac{2}{5}, \frac{18}{65}, \frac{18}{65})$ $+ \frac{18}{65}\sqrt{19}e^3 \otimes e_6$	{123, 1235, 1568, 168, 3578, 378, 123, 1235, 1568, 168, 3578, 378}
83:6	$0, 0, 0, 0, 0, \frac{1}{65}\sqrt{1938}e^{12}, \frac{2}{65}\sqrt{285}e^{14} + \frac{1}{65}\sqrt{1938}e^{23},$ $\frac{1}{65}\sqrt{1938}e^{13} + \frac{2}{65}\sqrt{285}e^{24}$	$(-\frac{1}{5}, -\frac{1}{5}, \frac{31}{65}, \frac{31}{65}, \frac{11}{65}, -\frac{2}{5}, \frac{18}{65}, \frac{18}{65})$ $+ \frac{18}{65}\sqrt{19}e^3 \otimes e_6$	{123, 1235, 1568, 168, 3578, 378, 123, 1235, 1568, 168, 3578, 378}
83:6	$0, 0, 0, 0, 0, \frac{1}{32}\sqrt{195}e^{12}, \frac{1}{32}\sqrt{195}e^{14} - \frac{1}{64}\sqrt{2665}e^{23},$ $\frac{1}{64}\sqrt{2665}e^{13} + \frac{1}{32}\sqrt{195}e^{24}$	$(\frac{5}{128}, \frac{5}{128}, \frac{23}{64}, \frac{23}{64}, -\frac{21}{32}, \frac{5}{64}, \frac{51}{128}, \frac{51}{128})$ $+ \frac{1}{64}\sqrt{6890}e^3 \otimes e_5$	{1236, 1245678, 1347, 158, 3678, 456, 1236, 1245678, 1347, 158, 3678, 456}
83:6	$0, 0, 0, 0, 0, \frac{1}{32}\sqrt{195}e^{12}, \frac{1}{32}\sqrt{195}e^{14} + \frac{1}{64}\sqrt{2665}e^{23},$ $\frac{1}{64}\sqrt{2665}e^{13} + \frac{1}{32}\sqrt{195}e^{24}$	$(\frac{5}{128}, \frac{5}{128}, \frac{23}{64}, \frac{23}{64}, -\frac{21}{32}, \frac{5}{64}, \frac{51}{128}, \frac{51}{128})$ $+ \frac{1}{64}\sqrt{6890}e^3 \otimes e_5$	{1236, 1245678, 1347, 158, 3678, 456, 1236, 1245678, 1347, 158, 3678, 456}
83:6	$0, 0, 0, 0, 0, \frac{1}{32}\sqrt{195}e^{12}, \frac{1}{64}\sqrt{2665}e^{14} - \frac{1}{64}\sqrt{2665}e^{23},$ $\frac{1}{32}\sqrt{195}e^{13} + \frac{1}{32}\sqrt{195}e^{24}$	$(\frac{5}{128}, \frac{5}{128}, -\frac{7}{128}, -\frac{7}{128}, 1, \frac{5}{64}, -\frac{1}{64}, -\frac{1}{64})$ $+ \frac{1}{64}\sqrt{6890}e^5 \otimes e_7$	{1234568, 1267, 1378, 145, 3467, 568, 1234568, 1267, 1378, 145, 3467, 568}
83:6	$0, 0, 0, 0, 0, \frac{1}{32}\sqrt{195}e^{12}, \frac{1}{64}\sqrt{2665}e^{14} + \frac{1}{64}\sqrt{2665}e^{23},$ $\frac{1}{32}\sqrt{195}e^{13} + \frac{1}{32}\sqrt{195}e^{24}$	$(\frac{5}{128}, \frac{5}{128}, -\frac{7}{128}, -\frac{7}{128}, 1, \frac{5}{64}, -\frac{1}{64}, -\frac{1}{64})$ $+ \frac{1}{64}\sqrt{6890}e^5 \otimes e_7$	{1234568, 1267, 1378, 145, 3467, 568, 1234568, 1267, 1378, 145, 3467, 568}
83:7	$0, 0, 0, 0, 0, \frac{1}{3}\sqrt{6}e^{14} - \frac{1}{3}\sqrt{6}e^{23}, \frac{1}{6}\sqrt{6}e^{13} + \frac{1}{6}\sqrt{6}e^{24},$ $-\frac{1}{6}\sqrt{6}e^{12} + \frac{1}{6}\sqrt{6}e^{34}$	$(0, 0, 0, 0, 1, 0, 0, 0)$ $+ \frac{1}{3}\sqrt{15}e^5 \otimes e_6$	{1234578, 1268, 145, 578, 1234578, 1268, 145, 578}
83:7	$0, 0, 0, 0, 0, \frac{1}{3}\sqrt{6}e^{14} + \frac{1}{3}\sqrt{6}e^{23}, \frac{1}{6}\sqrt{6}e^{13} + \frac{1}{6}\sqrt{6}e^{24},$ $\frac{1}{6}\sqrt{6}e^{12} + \frac{1}{6}\sqrt{6}e^{34}$	$(0, 0, 0, 0, 1, 0, 0, 0)$ $+ \frac{1}{3}\sqrt{15}e^5 \otimes e_6$	{1234578, 1268, 1367, 145, 578, 1234578, 1268, 1367, 145, 578}
83:7	$0, 0, 0, 0, 0, \frac{11}{145}\sqrt{82}e^{14} - \frac{22}{145}\sqrt{10}e^{23}, \frac{11}{145}\sqrt{82}e^{13} + \frac{22}{145}\sqrt{10}e^{24},$ $-\frac{11}{145}\sqrt{82}e^{12} + \frac{22}{145}\sqrt{10}e^{34}$	$(\frac{22}{145}, \frac{22}{145}, \frac{22}{145}, \frac{22}{145}, -\frac{99}{145}, \frac{44}{145}, \frac{44}{145}, \frac{44}{145})$ $+ \frac{22}{145}\sqrt{61}e^1 \otimes e_5$	{1236, 1678, 2345678, 258, 1236, 1678, 2345678, 258}
83:7	$0, 0, 0, 0, 0, \frac{11}{145}\sqrt{82}e^{14} + \frac{22}{145}\sqrt{10}e^{23}, \frac{11}{145}\sqrt{82}e^{13} + \frac{22}{145}\sqrt{10}e^{24},$ $\frac{11}{145}\sqrt{82}e^{12} + \frac{22}{145}\sqrt{10}e^{34}$	$(\frac{22}{145}, \frac{22}{145}, \frac{22}{145}, \frac{22}{145}, -\frac{99}{145}, \frac{44}{145}, \frac{44}{145}, \frac{44}{145})$ $+ \frac{22}{145}\sqrt{61}e^1 \otimes e_5$	{1236, 1247, 1678, 2345678, 258, 357, 1236, 1247, 1678, 2345678, 258, 357}
83:8	$0, 0, 0, 0, 0, \frac{1}{929}\sqrt{127490}e^{12}, \frac{2}{929}\sqrt{1463}e^{13}, \frac{4}{929}\sqrt{3553}e^{45}$	$(\frac{21}{929}, \frac{42}{929}, -\frac{188}{929}, -\frac{53}{929}, \frac{272}{929}, \frac{63}{929}, -\frac{167}{929}, \frac{219}{929})$ $+ \frac{1}{929}\sqrt{107426}e^1 \otimes e_3 + \frac{44}{929}\sqrt{57}e^2 \otimes e_7 + \frac{5}{929}\sqrt{5434}e^5 \otimes e_6$	{14678, 167, 3457, 3578}
83:8	$0, 0, 0, 0, 0, \frac{2}{1821}\sqrt{172898}e^{12}, \frac{4}{1821}\sqrt{9889}e^{13}, \frac{8}{1821}\sqrt{6061}e^{45}$	$(\frac{114}{607}, \frac{370}{1821}, -\frac{296}{1821}, -\frac{151}{607}, \frac{185}{1821}, \frac{712}{1821}, \frac{46}{1821}, -\frac{268}{1821})$ $+ \frac{2}{1821}\sqrt{188210}e^1 \otimes e_3 + \frac{2}{1821}\sqrt{236698}e^2 \otimes e_8 + \frac{638}{1821}e^5 \otimes e_4$	{1468, 1568, 348, 358}
83:8	$0, 0, 0, 0, 0, \frac{6}{377}\sqrt{790}e^{12}, \frac{4}{377}\sqrt{553}e^{13}, \frac{4}{377}\sqrt{237}e^{45}$	$(\frac{42}{377}, \frac{84}{377}, -\frac{4}{13}, -\frac{55}{377}, \frac{103}{377}, \frac{126}{377}, -\frac{74}{377}, \frac{48}{377})$ $+ \frac{158}{377}e^5 \otimes e_4 + \frac{2}{377}\sqrt{10902}e^2 \otimes e_7 + \frac{4}{377}\sqrt{2449}e^1 \otimes e_3$	{14678, 15678, 3478, 3578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:8	$0, 0, 0, 0, 0, \frac{6}{77}\sqrt{107}e^{12}, \frac{4}{231}\sqrt{321}e^{13}, \frac{2}{231}\sqrt{8239}e^{45}$	$(-\frac{8}{77}, -\frac{12}{77}, \frac{19}{77}, \frac{2}{3}, -\frac{32}{231}, -\frac{20}{77}, \frac{1}{7}, \frac{122}{231})$ $+\frac{2}{231}\sqrt{19902}e^4 \otimes e_6$	{123457, 123478, 1245, 1248, 135678, 1367, 1568, 16, 23568, 236, 25678, 267, 345, 348, 457, 478}
83:8	$0, 0, 0, 0, 0, \frac{1}{181}\sqrt{1529}e^{12}, \frac{1}{181}\sqrt{10842}e^{13}, \frac{1}{181}\sqrt{2085}e^{45}$	$(\frac{78}{181}, -\frac{61}{181}, -\frac{33}{362}, \frac{169}{362}, -\frac{109}{362}, \frac{17}{181}, \frac{123}{362}, \frac{30}{181})$ $+\frac{139}{181}e^4 \otimes e_5 + \frac{1}{181}\sqrt{24742}e^1 \otimes e_2$	{1348, 1358, 1478, 1578, 23478, 23578, 248, 258}
83:8	$0, 0, 0, 0, 0, \frac{26}{129}\sqrt{3}e^{12}, \frac{4}{129}\sqrt{39}e^{13}, \frac{2}{129}\sqrt{559}e^{45}$	$(\frac{8}{43}, -\frac{8}{43}, \frac{1}{43}, \frac{26}{129}, -\frac{28}{129}, 0, \frac{9}{43}, -\frac{2}{129})$ $+\frac{2}{43}\sqrt{78}e^4 \otimes e_6 + \frac{4}{129}\sqrt{195}e^1 \otimes e_8$	{12345, 12457, 136, 167, 235678, 2568, 3478, 48}
83:8	$0, 0, 0, 0, 0, \frac{1}{528}\sqrt{15826}e^{12}, \frac{1}{528}\sqrt{4182}e^{13}, \frac{1}{528}\sqrt{11234}e^{45}$	$(\frac{5}{176}, \frac{65}{1056}, -\frac{13}{264}, -\frac{97}{528}, \frac{59}{352}, \frac{95}{1056}, -\frac{1}{48}, -\frac{17}{1056})$ $+\frac{1}{176}\sqrt{1066}e^1 \otimes e_3 + \frac{1}{528}\sqrt{15211}e^2 \otimes e_8 + \frac{1}{528}\sqrt{15211}e^5 \otimes e_6$	{1245, 1468, 236, 358}
83:8	$0, 0, 0, 0, 0, \frac{1}{26}\sqrt{130}e^{12}, \frac{1}{26}\sqrt{130}e^{13}, \frac{1}{13}\sqrt{5}e^{45}$	$(-\frac{5}{13}, \frac{4}{13}, \frac{4}{13}, \frac{1}{13}, \frac{1}{13}, -\frac{1}{13}, -\frac{1}{13}, \frac{2}{13})$ $+\frac{1}{26}\sqrt{230}e^2 \otimes e_7 - \frac{1}{26}\sqrt{230}e^3 \otimes e_6$	{123, 12345, 12348, 14567, 14678, 167, 2456, 2468, 26}
83:8	$0, 0, 0, 0, 0, \frac{1}{26}\sqrt{130}e^{12}, \frac{1}{26}\sqrt{130}e^{13}, \frac{1}{13}\sqrt{5}e^{45}$	$(-\frac{5}{13}, \frac{4}{13}, \frac{4}{13}, \frac{1}{13}, \frac{1}{13}, -\frac{1}{13}, -\frac{1}{13}, \frac{2}{13})$ $+\frac{1}{26}\sqrt{230}e^2 \otimes e_7 + \frac{1}{26}\sqrt{230}e^3 \otimes e_6$	{123, 12345, 12348, 14567, 14678, 167, 2456, 2468, 26}
83:8	$0, 0, 0, 0, 0, \frac{9}{169}\sqrt{107}e^{12}, \frac{2}{169}\sqrt{321}e^{13}, \frac{1}{169}\sqrt{8239}e^{45}$	$(-\frac{12}{169}, \frac{75}{169}, \frac{57}{338}, \frac{75}{338}, -\frac{139}{338}, \frac{63}{169}, \frac{33}{338}, -\frac{32}{169})$ $+\frac{107}{169}e^4 \otimes e_5 + \frac{1}{169}\sqrt{19902}e^2 \otimes e_8$	{134678, 135678, 1468, 1568, 348, 358, 478, 578}
83:8	$0, 0, 0, 0, 0, \frac{2}{223}\sqrt{1529}e^{12}, \frac{2}{223}\sqrt{10842}e^{13}, \frac{2}{223}\sqrt{2085}e^{45}$	$(\frac{156}{223}, -\frac{122}{223}, -\frac{33}{223}, \frac{30}{223}, \frac{30}{223}, \frac{34}{223}, \frac{123}{223}, \frac{60}{223})$ $+\frac{2}{223}\sqrt{24742}e^1 \otimes e_2$	{13, 1345, 1348, 1457, 1478, 17, 2, 23457, 23478, 237, 245, 248}
83:8	$0, 0, 0, 0, 0, \frac{10}{213}\sqrt{51}e^{12}, \frac{10}{213}\sqrt{51}e^{13}, \frac{1}{213}\sqrt{12070}e^{45}$	$(-\frac{11}{71}, \frac{30}{71}, -\frac{1}{71}, \frac{49}{213}, -\frac{44}{213}, \frac{19}{71}, -\frac{12}{71}, \frac{5}{213})$ $+\frac{1}{213}\sqrt{15810}e^2 \otimes e_8 + \frac{1}{213}\sqrt{15810}e^4 \otimes e_7$	{12345, 127, 13468, 15678, 2367, 2456, 3578, 48}
83:8	$0, 0, 0, 0, 0, \frac{3}{149}\sqrt{790}e^{12}, \frac{2}{149}\sqrt{553}e^{13}, \frac{2}{149}\sqrt{237}e^{45}$	$(\frac{21}{149}, \frac{42}{149}, -\frac{58}{149}, \frac{12}{149}, \frac{12}{149}, \frac{63}{149}, -\frac{37}{149}, \frac{24}{149})$ $+\frac{1}{149}\sqrt{10902}e^2 \otimes e_7 + \frac{2}{149}\sqrt{2449}e^1 \otimes e_3$	{14567, 14678, 167, 3457, 3478, 37}
83:8	$0, 0, 0, 0, 0, \frac{6}{77}\sqrt{107}e^{12}, \frac{4}{231}\sqrt{321}e^{13}, \frac{2}{231}\sqrt{8239}e^{45}$	$(-\frac{8}{77}, \frac{50}{77}, \frac{19}{77}, -\frac{32}{231}, -\frac{32}{231}, \frac{6}{11}, \frac{1}{7}, -\frac{64}{231})$ $+\frac{2}{231}\sqrt{19902}e^2 \otimes e_8$	{12, 123457, 1237, 1245, 134678, 1468, 23456, 236, 24567, 267, 348, 478}
83:8	$0, 0, 0, 0, 0, \frac{20}{281}\sqrt{43}e^{12}, \frac{4}{281}\sqrt{645}e^{13}, \frac{4}{281}\sqrt{1290}e^{45}$	$(\frac{60}{281}, -\frac{112}{281}, \frac{9}{281}, \frac{120}{281}, -\frac{21}{281}, -\frac{52}{281}, \frac{69}{281}, \frac{99}{281})$ $+\frac{2}{281}\sqrt{12126}e^4 \otimes e_6 + \frac{2}{281}\sqrt{8686}e^1 \otimes e_2$	{13568, 136, 15678, 167, 235678, 2367, 2568, 26}
83:8	$0, 0, 0, 0, 0, \frac{26}{697}\sqrt{46}e^{12}, \frac{1}{697}\sqrt{128570}e^{13}, \frac{46}{697}\sqrt{39}e^{45}$	$(-\frac{179}{697}, \frac{319}{697}, \frac{199}{697}, -\frac{50}{697}, -\frac{50}{697}, \frac{140}{697}, \frac{20}{697}, -\frac{100}{697})$ $+\frac{1}{697}\sqrt{169234}e^2 \otimes e_7 + \frac{2}{697}\sqrt{48737}e^3 \otimes e_8$	{123, 12345, 14678, 2468, 3457, 37}
83:8	$0, 0, 0, 0, 0, \frac{30}{523}\sqrt{22}e^{12}, \frac{30}{523}\sqrt{22}e^{13}, \frac{6}{523}\sqrt{770}e^{45}$	$(-\frac{128}{523}, \frac{107}{523}, \frac{125}{523}, -\frac{74}{523}, \frac{89}{523}, -\frac{21}{523}, -\frac{3}{523}, \frac{15}{523})$ $+\frac{10}{523}\sqrt{319}e^2 \otimes e_7 + \frac{2}{523}\sqrt{8965}e^3 \otimes e_8 + \frac{2}{523}\sqrt{8965}e^5 \otimes e_6$	{12345, 14678, 2468, 3457}
83:8	$0, 0, 0, 0, 0, \frac{10}{213}\sqrt{51}e^{12}, \frac{10}{213}\sqrt{51}e^{13}, \frac{1}{213}\sqrt{12070}e^{45}$	$(-\frac{11}{71}, -\frac{1}{71}, -\frac{1}{71}, \frac{49}{213}, \frac{49}{213}, -\frac{12}{71}, -\frac{12}{71}, \frac{98}{213})$ $+\frac{1}{213}\sqrt{15810}e^4 \otimes e_6 + \frac{1}{213}\sqrt{15810}e^5 \otimes e_7$	{12345, 12478, 167, 2367, 2568, 45}
83:8	$0, 0, 0, 0, 0, \frac{20}{1419}\sqrt{589}e^{12}, \frac{40}{1419}\sqrt{38}e^{13}, \frac{4}{1419}\sqrt{17005}e^{45}$	$(\frac{32}{473}, \frac{355}{1419}, -\frac{284}{1419}, -\frac{217}{1419}, \frac{64}{473}, \frac{41}{129}, -\frac{188}{1419}, -\frac{25}{1419})$ $+\frac{10}{1419}\sqrt{2622}e^1 \otimes e_3 + \frac{2}{1419}\sqrt{77710}e^5 \otimes e_7 + \frac{4}{1419}\sqrt{24890}e^2 \otimes e_8$	{127, 14678, 2367, 3478}
83:8	$0, 0, 0, 0, 0, \frac{6}{179}\sqrt{203}e^{12}, \frac{6}{179}\sqrt{203}e^{13}, \frac{12}{179}\sqrt{14}e^{45}$	$(-\frac{34}{179}, \frac{87}{179}, -\frac{5}{179}, \frac{79}{179}, -\frac{47}{179}, \frac{53}{179}, -\frac{39}{179}, \frac{32}{179})$ $+\frac{126}{179}e^4 \otimes e_5 + \frac{12}{179}\sqrt{161}e^2 \otimes e_7$	{12348, 12358, 14678, 15678, 2468, 2568, 3478, 3578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:8	$0, 0, 0, 0, 0, \frac{1}{204}\sqrt{2091}e^{12}, \frac{1}{136}\sqrt{82}e^{13}, \frac{1}{102}\sqrt{697}e^{45}$	$(-\frac{25}{136}, \frac{49}{272}, \frac{9}{136}, \frac{79}{816}, -\frac{7}{408}, -\frac{1}{272}, -\frac{2}{17}, \frac{65}{816})$ $+ \frac{1}{136}\sqrt{1271}e^2 \otimes e_8 + \frac{1}{136}\sqrt{1271}e^4 \otimes e_6 + \frac{1}{408}\sqrt{7626}e^5 \otimes e_7$	{12345, 13568, 2367, 3478}
83:8	$0, 0, 0, 0, 0, \frac{3}{14}\sqrt{3}e^{12}, \frac{3}{14}\sqrt{3}e^{13}, \frac{3}{49}\sqrt{30}e^{45}$	$(\frac{11}{98}, \frac{51}{196}, -\frac{25}{196}, -\frac{4}{49}, -\frac{4}{49}, \frac{73}{196}, -\frac{3}{196}, -\frac{8}{49})$ $+ \frac{18}{49}\sqrt{2}e^1 \otimes e_8 + \frac{3}{49}\sqrt{57}e^2 \otimes e_7$	{123, 12345, 14567, 167, 2468, 3478}
83:8	$0, 0, 0, 0, 0, \frac{42}{223}\sqrt{3}e^{12}, \frac{42}{223}\sqrt{3}e^{13}, \frac{12}{223}\sqrt{30}e^{45}$	$(\frac{22}{223}, \frac{51}{223}, -\frac{25}{223}, -\frac{43}{223}, \frac{11}{223}, \frac{73}{223}, -\frac{3}{223}, -\frac{32}{223})$ $+ \frac{12}{223}\sqrt{57}e^2 \otimes e_7 + \frac{54}{223}e^5 \otimes e_4 + \frac{72}{223}\sqrt{2}e^1 \otimes e_8$	{2468, 2568, 3478, 3578}
83:8	$0, 0, 0, 0, 0, \frac{5}{87}\sqrt{10}e^{12}, \frac{2}{87}\sqrt{30}e^{13}, \frac{2}{87}\sqrt{55}e^{45}$	$(\frac{1}{29}, \frac{4}{87}, -\frac{4}{87}, -\frac{14}{87}, \frac{4}{29}, \frac{7}{87}, -\frac{1}{87}, -\frac{2}{87})$ $+ \frac{1}{87}\sqrt{210}e^2 \otimes e_7 + \frac{2}{87}\sqrt{65}e^5 \otimes e_6 + \frac{8}{87}\sqrt{5}e^1 \otimes e_8$	{12345, 167, 2468, 3578}
83:8	$0, 0, 0, 0, 0, \frac{1}{30}\sqrt{345}e^{12}, \frac{1}{30}\sqrt{345}e^{13}, \frac{1}{15}\sqrt{115}e^{45}$	$(\frac{1}{2}, -\frac{1}{20}, -\frac{1}{20}, -\frac{2}{15}, -\frac{2}{15}, \frac{9}{20}, \frac{9}{20}, -\frac{4}{15})$ $+ \frac{2}{15}\sqrt{69}e^1 \otimes e_8$	{123, 12345, 12457, 127, 14567, 167, 234678, 2468, 48}
83:8	$0, 0, 0, 0, 0, \frac{2}{33}\sqrt{3}e^{12}, \frac{2}{33}\sqrt{3}e^{13}, \frac{1}{33}\sqrt{22}e^{45}$	$(\frac{1}{11}, -\frac{1}{11}, -\frac{1}{11}, \frac{1}{33}, \frac{1}{33}, 0, 0, \frac{2}{33})$ $+ \frac{1}{11}\sqrt{2}e^4 \otimes e_6 + \frac{1}{11}\sqrt{2}e^5 \otimes e_7 + \frac{2}{33}\sqrt{6}e^1 \otimes e_8$	{12345, 167, 2568}
83:8	$0, 0, 0, 0, 0, \frac{40}{1419}\sqrt{38}e^{12}, \frac{20}{1419}\sqrt{589}e^{13}, \frac{4}{1419}\sqrt{17005}e^{45}$	$(\frac{32}{473}, -\frac{284}{1419}, -\frac{169}{1419}, \frac{64}{473}, \frac{307}{1419}, -\frac{188}{1419}, -\frac{73}{1419}, \frac{499}{1419})$ $+ \frac{10}{1419}\sqrt{2622}e^1 \otimes e_2 + \frac{2}{1419}\sqrt{77710}e^4 \otimes e_6 + \frac{4}{1419}\sqrt{24890}e^5 \otimes e_7$	{13568, 167, 2367, 2568}
83:8	$0, 0, 0, 0, 0, \frac{1}{697}\sqrt{128570}e^{12}, \frac{26}{697}\sqrt{46}e^{13}, \frac{46}{697}\sqrt{39}e^{45}$	$(-\frac{179}{697}, \frac{156}{697}, \frac{36}{697}, \frac{276}{697}, -\frac{50}{697}, -\frac{23}{697}, -\frac{143}{697}, \frac{226}{697})$ $+ \frac{1}{697}\sqrt{169234}e^2 \otimes e_7 + \frac{2}{697}\sqrt{48737}e^4 \otimes e_6$	{12345, 12348, 15678, 167, 2568, 26, 3457, 3478}
83:8	$0, 0, 0, 0, 0, \frac{2}{55}\sqrt{129}e^{12}, \frac{2}{55}\sqrt{129}e^{13}, \frac{4}{55}\sqrt{43}e^{45}$	$(\frac{6}{55}, \frac{9}{55}, \frac{9}{55}, \frac{51}{55}, -\frac{7}{11}, \frac{3}{11}, \frac{3}{11}, \frac{16}{55})$ $+ \frac{86}{55}e^4 \otimes e_5$	{12348, 12358, 12478, 12578, 14678, 15678, 234678, 235678, 2468, 2568, 48, 58}
83:8	$0, 0, 0, 0, 0, \frac{10}{69}\sqrt{7}e^{12}, \frac{2}{69}\sqrt{42}e^{13}, \frac{2}{69}\sqrt{161}e^{45}$	$(-\frac{4}{23}, \frac{13}{69}, \frac{13}{69}, \frac{23}{23}, -\frac{16}{69}, \frac{1}{69}, \frac{1}{69}, -\frac{1}{69})$ $+ \frac{2}{69}\sqrt{217}e^2 \otimes e_8 + \frac{2}{69}\sqrt{217}e^4 \otimes e_6$	{123457, 1245, 135678, 1568, 236, 267, 348, 478}
83:8	$0, 0, 0, 0, 0, \frac{2}{83}\sqrt{345}e^{12}, \frac{2}{83}\sqrt{345}e^{13}, \frac{4}{83}\sqrt{115}e^{45}$	$(\frac{30}{83}, -\frac{3}{83}, -\frac{3}{83}, \frac{15}{83}, -\frac{31}{83}, \frac{27}{83}, \frac{27}{83}, -\frac{16}{83})$ $+ \frac{46}{83}e^4 \otimes e_5 + \frac{8}{83}\sqrt{69}e^1 \otimes e_8$	{234678, 235678, 2468, 2568, 48, 58}
83:8	$0, 0, 0, 0, 0, \frac{3}{58}\sqrt{203}e^{12}, \frac{3}{58}\sqrt{203}e^{13}, \frac{3}{29}\sqrt{14}e^{45}$	$(-\frac{17}{58}, \frac{3}{4}, -\frac{5}{116}, \frac{4}{29}, \frac{4}{29}, \frac{53}{116}, -\frac{39}{116}, \frac{8}{29})$ $+ \frac{3}{29}\sqrt{161}e^2 \otimes e_7$	{123, 12345, 12348, 14567, 14678, 167, 2456, 2468, 26, 3457, 3478, 37}
83:8	$0, 0, 0, 0, 0, \frac{52}{1693}\sqrt{46}e^{12}, \frac{2}{1693}\sqrt{128570}e^{13}, \frac{92}{1693}\sqrt{39}e^{45}$	$(-\frac{358}{1693}, \frac{638}{1693}, \frac{398}{1693}, -\frac{399}{1693}, \frac{199}{1693}, \frac{280}{1693}, \frac{40}{1693}, -\frac{200}{1693})$ $+ \frac{2}{1693}\sqrt{169234}e^2 \otimes e_7 + \frac{4}{1693}\sqrt{48737}e^3 \otimes e_8 + \frac{598}{1693}e^5 \otimes e_4$	{14678, 15678, 2468, 2568}
83:8	$0, 0, 0, 0, 0, \frac{1}{751}\sqrt{172898}e^{12}, \frac{2}{751}\sqrt{9889}e^{13}, \frac{4}{751}\sqrt{6061}e^{45}$	$(\frac{171}{751}, \frac{185}{751}, -\frac{148}{751}, -\frac{67}{751}, -\frac{67}{751}, \frac{356}{751}, \frac{23}{751}, -\frac{134}{751})$ $+ \frac{1}{751}\sqrt{188210}e^1 \otimes e_3 + \frac{1}{751}\sqrt{236698}e^2 \otimes e_8$	{12, 1245, 1468, 23456, 236, 348}
83:8	$0, 0, 0, 0, 0, \frac{2}{751}\sqrt{9889}e^{12}, \frac{1}{751}\sqrt{172898}e^{13}, \frac{4}{751}\sqrt{6061}e^{45}$	$(\frac{171}{751}, -\frac{148}{751}, -\frac{186}{751}, \frac{304}{751}, -\frac{67}{751}, \frac{23}{751}, -\frac{15}{751}, \frac{237}{751})$ $+ \frac{1}{751}\sqrt{188210}e^1 \otimes e_2 + \frac{1}{751}\sqrt{236698}e^4 \otimes e_7$	{1345, 1348, 1578, 17, 23578, 237, 245, 248}
83:8	$0, 0, 0, 0, 0, \frac{1}{31}\sqrt{130}e^{12}, \frac{1}{31}\sqrt{130}e^{13}, \frac{2}{31}\sqrt{5}e^{45}$	$(-\frac{10}{31}, \frac{8}{31}, \frac{8}{31}, -\frac{3}{31}, \frac{7}{31}, -\frac{2}{31}, -\frac{2}{31}, \frac{4}{31})$ $+ \frac{10}{31}e^5 \otimes e_4 + \frac{1}{31}\sqrt{230}e^2 \otimes e_7 + \frac{1}{31}\sqrt{230}e^3 \otimes e_6$	{12348, 12358, 14678, 15678, 2468, 2568}
83:8	$0, 0, 0, 0, 0, \frac{1}{31}\sqrt{130}e^{12}, \frac{1}{31}\sqrt{130}e^{13}, \frac{2}{31}\sqrt{5}e^{45}$	$(-\frac{10}{31}, \frac{8}{31}, \frac{8}{31}, -\frac{3}{31}, \frac{7}{31}, -\frac{2}{31}, -\frac{2}{31}, \frac{4}{31})$ $+ \frac{10}{31}e^5 \otimes e_4 + \frac{1}{31}\sqrt{230}e^2 \otimes e_7 - \frac{1}{31}\sqrt{230}e^3 \otimes e_6$	{12348, 12358, 14678, 15678, 2468, 2568}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:9	$0, 0, 0, 0, 0, \frac{5}{451}\sqrt{4790}e^{12}, \frac{16}{451}\sqrt{479}e^{13},$ $\frac{2}{451}\sqrt{13891}e^{14} + \frac{2}{451}\sqrt{1437}e^{25}$	$(\frac{256}{451}, -\frac{46}{451}, -\frac{43}{451}, -\frac{223}{451}, \frac{79}{451}, \frac{210}{451}, \frac{213}{451}, \frac{3}{41})$ $+ \frac{2}{451}\sqrt{87657}e^1 \otimes e_4$	{1235, 1257, 136, 167, 234567, 2456, 347, 4}
83:9	$0, 0, 0, 0, 0, \frac{1}{243}\sqrt{1830}e^{12}, \frac{4}{243}\sqrt{105}e^{13}, \frac{2}{243}\sqrt{390}e^{14} + \frac{4}{243}\sqrt{105}e^{25}$	$(\frac{2}{27}, -\frac{2}{81}, -\frac{13}{81}, \frac{1}{81}, \frac{1}{9}, \frac{4}{81}, -\frac{7}{81}, \frac{7}{81})$ $+ \frac{2}{243}\sqrt{705}e^2 \otimes e_7 + \frac{2}{81}\sqrt{55}e^1 \otimes e_4 + \frac{2}{81}\sqrt{55}e^5 \otimes e_6$	{1235, 167}
83:9	$0, 0, 0, 0, 0, \frac{1}{403}\sqrt{31178}e^{12}, \frac{2}{403}\sqrt{7598}e^{13}, \frac{8}{403}\sqrt{262}e^{14} + \frac{2}{403}\sqrt{393}e^{25}$	$(\frac{49}{403}, -\frac{76}{403}, \frac{8}{31}, -\frac{82}{403}, \frac{43}{403}, -\frac{27}{403}, \frac{153}{403}, -\frac{33}{403})$ $+ \frac{1}{403}\sqrt{47946}e^1 \otimes e_4 + \frac{1}{403}\sqrt{47946}e^3 \otimes e_6$	{123, 1567, 246, 3457}
83:9	$0, 0, 0, 0, 0, \frac{1}{145}\sqrt{19910}e^{12}, \frac{4}{145}\sqrt{181}e^{13}, \frac{2}{145}\sqrt{362}e^{14} + \frac{4}{145}\sqrt{181}e^{25}$	$(-\frac{16}{145}, \frac{98}{145}, \frac{7}{29}, \frac{31}{145}, -\frac{83}{145}, \frac{82}{145}, \frac{19}{145}, \frac{3}{29})$ $+ \frac{2}{145}\sqrt{10679}e^2 \otimes e_5$	{12, 1237, 13567, 156, 2346, 2467, 345, 457}
83:9	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{286}e^{12}, \frac{3}{29}\sqrt{13}e^{13}, \frac{1}{29}\sqrt{130}e^{14} + \frac{3}{29}\sqrt{13}e^{25}$	$(\frac{11}{58}, \frac{8}{29}, -\frac{15}{58}, -\frac{5}{58}, -\frac{5}{29}, \frac{27}{58}, -\frac{2}{29}, \frac{3}{29})$ $+ \frac{1}{29}\sqrt{377}e^1 \otimes e_3 + \frac{2}{29}\sqrt{78}e^2 \otimes e_5$	{124, 1456, 236, 35}
83:9	$0, 0, 0, 0, 0, \frac{22}{2639}\sqrt{219}e^{12}, \frac{11}{2639}\sqrt{2134}e^{13},$ $\frac{22}{2639}\sqrt{62}e^{14} + \frac{22}{2639}\sqrt{471}e^{25}$	$(\frac{66}{2639}, -\frac{44}{377}, \frac{132}{2639}, -\frac{55}{2639}, \frac{11}{91}, -\frac{242}{2639}, \frac{198}{2639}, \frac{11}{2639})$ $+ \frac{11}{2639}\sqrt{2006}e^3 \otimes e_8 + \frac{11}{2639}\sqrt{2130}e^5 \otimes e_7 + \frac{55}{2639}\sqrt{30}e^1 \otimes e_4$	{12356, 3467}
83:9	$0, 0, 0, 0, 0, \frac{2}{29}\sqrt{6}e^{12}, \frac{1}{29}\sqrt{35}e^{13}, \frac{2}{29}\sqrt{2}e^{14} + \frac{1}{29}\sqrt{35}e^{25}$	$(\frac{1}{29}, -\frac{3}{29}, \frac{1}{29}, -\frac{1}{29}, \frac{3}{29}, -\frac{2}{29}, \frac{2}{29}, 0)$ $+ \frac{1}{29}\sqrt{15}e^4 \otimes e_6 + \frac{4}{29}\sqrt{2}e^3 \otimes e_8 + \frac{6}{29}e^5 \otimes e_7$	{124678, 3467}
83:9	$0, 0, 0, 0, 0, \frac{2}{61}\sqrt{10}e^{12}, \frac{4}{61}\sqrt{10}e^{13}, \frac{2}{61}\sqrt{15}e^{14} + \frac{1}{61}\sqrt{210}e^{25}$	$(-\frac{9}{61}, \frac{3}{61}, \frac{7}{61}, \frac{11}{61}, -\frac{1}{61}, -\frac{6}{61}, -\frac{2}{61}, \frac{2}{61})$ $+ \frac{1}{61}\sqrt{230}e^2 \otimes e_7 + \frac{5}{61}\sqrt{6}e^5 \otimes e_6 + \frac{6}{61}\sqrt{5}e^3 \otimes e_8$	{1235, 268}
83:9	$0, 0, 0, 0, 0, \frac{1}{41}\sqrt{190}e^{12}, \frac{3}{41}\sqrt{30}e^{13}, \frac{6}{41}\sqrt{5}e^{14} + \frac{4}{41}\sqrt{10}e^{25}$	$(\frac{13}{82}, \frac{7}{41}, -\frac{19}{82}, -\frac{7}{82}, -\frac{4}{41}, \frac{27}{82}, -\frac{3}{41}, \frac{3}{41})$ $+ \frac{1}{41}\sqrt{330}e^1 \otimes e_4 + \frac{1}{41}\sqrt{410}e^2 \otimes e_7$	{1235, 167, 2456, 347}
83:9	$0, 0, 0, 0, 0, \frac{8}{73}\sqrt{2}e^{12}, \frac{16}{73}\sqrt{6}e^{13}, \frac{8}{73}\sqrt{3}e^{14} + \frac{8}{73}\sqrt{15}e^{25}$	$(\frac{11}{73}, -\frac{4}{73}, \frac{22}{73}, -\frac{21}{73}, -\frac{6}{73}, \frac{7}{73}, \frac{33}{73}, -\frac{10}{73})$ $+ \frac{24}{73}\sqrt{3}e^1 \otimes e_4 + \frac{8}{73}\sqrt{37}e^3 \otimes e_8$	{12678, 1578, 248, 4568}
83:9	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{21}e^{12}, \frac{1}{14}\sqrt{7}e^{13}, \frac{3}{14}\sqrt{7}e^{14} + \frac{1}{14}\sqrt{21}e^{25}$	$(\frac{3}{28}, \frac{3}{28}, -\frac{11}{28}, \frac{3}{14}, \frac{3}{14}, \frac{3}{14}, -\frac{2}{7}, \frac{9}{28})$ $+ \frac{1}{14}\sqrt{91}e^1 \otimes e_3 + \frac{1}{7}\sqrt{21}e^4 \otimes e_7$	{12578, 1678, 2367, 357}
83:9	$0, 0, 0, 0, 0, \frac{5}{451}\sqrt{4790}e^{12}, \frac{16}{451}\sqrt{479}e^{13},$ $\frac{2}{451}\sqrt{13891}e^{14} + \frac{2}{451}\sqrt{1437}e^{25}$	$(-\frac{10}{41}, -\frac{46}{451}, \frac{323}{451}, \frac{13}{41}, \frac{79}{451}, -\frac{156}{451}, \frac{213}{451}, \frac{3}{41})$ $+ \frac{2}{451}\sqrt{87657}e^3 \otimes e_6$	{12348, 1235, 145678, 167, 2456, 268, 347, 3578}
83:9	$0, 0, 0, 0, 0, \frac{4}{19}e^{12}, \frac{1}{19}\sqrt{42}e^{13}, \frac{1}{19}\sqrt{6}e^{14} + \frac{1}{19}\sqrt{42}e^{25}$	$(\frac{2}{19}, -\frac{4}{19}, \frac{4}{19}, -\frac{3}{19}, \frac{3}{19}, -\frac{2}{19}, \frac{6}{19}, -\frac{1}{19})$ $+ \frac{3}{19}\sqrt{6}e^1 \otimes e_4 + \frac{3}{19}\sqrt{6}e^5 \otimes e_6 + \frac{8}{19}e^3 \otimes e_8$	{1235, 136}
83:9	$0, 0, 0, 0, 0, \frac{1}{3}\sqrt{6}e^{12}, \frac{1}{3}\sqrt{3}e^{13}, \frac{1}{3}\sqrt{6}e^{14} + \frac{1}{3}\sqrt{3}e^{25}$	$(-\frac{1}{3}, 0, \frac{1}{3}, \frac{2}{3}, \frac{1}{3}, -\frac{1}{3}, 0, \frac{1}{3})$ $+ \frac{1}{3}\sqrt{15}e^4 \otimes e_6$	{12347, 124, 13678, 168, 236, 267, 348, 478}
83:9	$0, 0, 0, 0, 0, \frac{6}{41}\sqrt{5}e^{12}, \frac{3}{41}\sqrt{30}e^{13}, \frac{1}{41}\sqrt{190}e^{14} + \frac{4}{41}\sqrt{10}e^{25}$	$(-\frac{10}{41}, \frac{5}{41}, \frac{11}{41}, \frac{11}{41}, -\frac{4}{41}, -\frac{5}{41}, \frac{1}{41}, \frac{1}{41})$ $- \frac{1}{41}\sqrt{330}e^4 \otimes e_7 + \frac{1}{41}\sqrt{410}e^3 \otimes e_8$	{123456, 12678, 134, 1578, 2357, 248, 367, 4568}
83:9	$0, 0, 0, 0, 0, \frac{6}{41}\sqrt{5}e^{12}, \frac{3}{41}\sqrt{30}e^{13}, \frac{1}{41}\sqrt{190}e^{14} + \frac{4}{41}\sqrt{10}e^{25}$	$(-\frac{10}{41}, \frac{5}{41}, \frac{11}{41}, \frac{11}{41}, -\frac{4}{41}, -\frac{5}{41}, \frac{1}{41}, \frac{1}{41})$ $+ \frac{1}{41}\sqrt{330}e^4 \otimes e_7 + \frac{1}{41}\sqrt{410}e^3 \otimes e_8$	{123456, 12678, 134, 1578, 2357, 248, 367, 4568}
83:9	$0, 0, 0, 0, 0, \frac{1}{3}\sqrt{6}e^{12}, \frac{1}{3}\sqrt{3}e^{13}, \frac{1}{3}\sqrt{6}e^{14} + \frac{1}{3}\sqrt{3}e^{25}$	$(\frac{1}{2}, 0, -\frac{1}{2}, -\frac{1}{6}, \frac{1}{3}, \frac{1}{2}, 0, \frac{1}{3})$ $+ \frac{1}{3}\sqrt{15}e^1 \otimes e_3$	{124, 1258, 1456, 168, 234568, 236, 348, 35}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	\mathfrak{g}	D	S
83:9	$0, 0, 0, 0, 0, \frac{2}{17}\sqrt{26}e^{12}, \frac{2}{17}\sqrt{39}e^{13}, \frac{1}{17}\sqrt{78}e^{14} + \frac{2}{17}\sqrt{39}e^{25}$	$(-\frac{2}{17}, \frac{1}{17}, \frac{11}{17}, 0, -\frac{3}{17}, -\frac{1}{17}, \frac{9}{17}, -\frac{2}{17})$ $+ \frac{2}{17}\sqrt{91}e^3 \otimes e_8$	{123456, 12678, 134, 1578, 2357, 248, 367, 4568}
83:9	$0, 0, 0, 0, 0, \frac{2}{451}\sqrt{13891}e^{12}, \frac{16}{451}\sqrt{479}e^{13},$ $\frac{5}{451}\sqrt{4790}e^{14} + \frac{2}{451}\sqrt{1437}e^{25}$	$(-\frac{10}{41}, \frac{137}{451}, -\frac{43}{451}, \frac{326}{451}, \frac{79}{451}, \frac{27}{451}, -\frac{153}{451}, \frac{216}{451})$ $+ \frac{2}{451}\sqrt{87657}e^4 \otimes e_7$	{123456, 12678, 134, 1578, 2357, 248, 367, 4568}
83:9	$0, 0, 0, 0, 0, \frac{3}{14}\sqrt{7}e^{12}, \frac{1}{14}\sqrt{21}e^{13}, \frac{1}{14}\sqrt{21}e^{14} + \frac{1}{14}\sqrt{7}e^{25}$	$(\frac{1}{4}, -\frac{1}{4}, -\frac{1}{4}, 0, \frac{1}{2}, 0, 0, \frac{1}{4})$ $+ \frac{1}{14}\sqrt{91}e^1 \otimes e_3 + \frac{1}{7}\sqrt{21}e^5 \otimes e_6$	{1245, 146, 23468, 3458}
83:9	$0, 0, 0, 0, 0, \frac{12}{137}\sqrt{35}e^{12}, \frac{3}{137}\sqrt{266}e^{13}, \frac{21}{137}\sqrt{6}e^{14} + \frac{3}{137}\sqrt{266}e^{25}$	$(\frac{38}{137}, -\frac{44}{137}, -\frac{4}{137}, -\frac{25}{137}, \frac{57}{137}, -\frac{6}{137}, \frac{34}{137}, \frac{13}{137})$ $+ \frac{3}{137}\sqrt{854}e^1 \otimes e_4 + \frac{3}{137}\sqrt{854}e^5 \otimes e_6$	{1235, 1257, 136, 167}
83:9	$0, 0, 0, 0, 0, \frac{10}{751}\sqrt{178}e^{12}, \frac{10}{751}\sqrt{534}e^{13}, \frac{10}{751}\sqrt{278}e^{14} + \frac{10}{751}\sqrt{230}e^{25}$	$(\frac{65}{751}, -\frac{150}{751}, \frac{15}{751}, -\frac{35}{751}, \frac{180}{751}, -\frac{85}{751}, \frac{80}{751}, \frac{30}{751})$ $+ \frac{10}{751}\sqrt{482}e^5 \otimes e_7 + \frac{20}{751}\sqrt{114}e^1 \otimes e_4 + \frac{20}{751}\sqrt{114}e^3 \otimes e_6$	{1235, 167, 2456, 347}
83:9	$0, 0, 0, 0, 0, \frac{10}{751}\sqrt{178}e^{12}, \frac{10}{751}\sqrt{534}e^{13}, \frac{10}{751}\sqrt{278}e^{14} + \frac{10}{751}\sqrt{230}e^{25}$	$(\frac{65}{751}, -\frac{150}{751}, \frac{15}{751}, -\frac{35}{751}, \frac{180}{751}, -\frac{85}{751}, \frac{80}{751}, \frac{30}{751})$ $- \frac{10}{751}\sqrt{482}e^5 \otimes e_7 + \frac{20}{751}\sqrt{114}e^1 \otimes e_4 + \frac{20}{751}\sqrt{114}e^3 \otimes e_6$	{1235, 167, 2456, 347}
83:9	$0, 0, 0, 0, 0, \frac{2}{179}\sqrt{2759}e^{12}, \frac{2}{179}\sqrt{890}e^{13}, \frac{1}{179}\sqrt{3293}e^{14} + \frac{1}{179}\sqrt{1513}e^{25}$	$(-\frac{91}{358}, \frac{40}{179}, \frac{167}{358}, \frac{73}{358}, -\frac{49}{179}, -\frac{11}{358}, \frac{38}{179}, -\frac{9}{179})$ $+ \frac{1}{179}\sqrt{13439}e^2 \otimes e_5 + \frac{3}{179}\sqrt{1691}e^3 \otimes e_6$	{123, 1567, 246, 3457}
83:9	$0, 0, 0, 0, 0, \frac{5}{451}\sqrt{4790}e^{12}, \frac{2}{451}\sqrt{1437}e^{13},$ $\frac{2}{451}\sqrt{13891}e^{14} + \frac{16}{451}\sqrt{479}e^{25}$	$(\frac{12}{451}, -\frac{168}{451}, \frac{79}{451}, \frac{13}{41}, \frac{323}{451}, -\frac{156}{451}, \frac{91}{451}, \frac{155}{451})$ $+ \frac{2}{451}\sqrt{87657}e^5 \otimes e_6$	{1235, 1257, 136, 167, 23678, 268, 3578, 58}
83:9	$0, 0, 0, 0, 0, \frac{8}{73}\sqrt{2}e^{12}, \frac{8}{73}\sqrt{15}e^{13}, \frac{8}{73}\sqrt{3}e^{14} + \frac{16}{73}\sqrt{6}e^{25}$	$(-\frac{7}{73}, -\frac{13}{73}, \frac{31}{73}, \frac{6}{73}, \frac{12}{73}, -\frac{20}{73}, \frac{24}{73}, -\frac{1}{73})$ $+ \frac{24}{73}\sqrt{3}e^5 \otimes e_6 + \frac{8}{73}\sqrt{37}e^3 \otimes e_8$	{12678, 1578, 2357, 367}
83:9	$0, 0, 0, 0, 0, \frac{3}{35}\sqrt{14}e^{12}, \frac{2}{35}\sqrt{14}e^{13}, \frac{2}{35}\sqrt{14}e^{14} + \frac{4}{35}\sqrt{7}e^{25}$	$(0, 0, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, -\frac{1}{5}, \frac{1}{5})$ $+ \frac{2}{35}\sqrt{21}e^1 \otimes e_3 + \frac{2}{35}\sqrt{42}e^5 \otimes e_6 + \frac{2}{5}e^2 \otimes e_7$	{167, 3578}
83:9	$0, 0, 0, 0, 0, \frac{8}{1063}\sqrt{2438}e^{12}, \frac{8}{1063}\sqrt{2967}e^{13},$ $\frac{8}{1063}\sqrt{3427}e^{14} + \frac{16}{1063}\sqrt{230}e^{25}$	$(-\frac{249}{1063}, \frac{490}{1063}, \frac{6}{1063}, \frac{493}{1063}, -\frac{246}{1063}, \frac{241}{1063}, -\frac{243}{1063}, \frac{244}{1063})$ $+ \frac{104}{1063}\sqrt{69}e^4 \otimes e_7 + \frac{8}{1063}\sqrt{9683}e^2 \otimes e_5$	{1234, 13456, 2367, 357}
83:9	$0, 0, 0, 0, 0, \frac{4}{141}\sqrt{115}e^{12}, \frac{4}{141}\sqrt{230}e^{13}, \frac{4}{141}\sqrt{115}e^{14} + \frac{4}{141}\sqrt{230}e^{25}$	$(-\frac{7}{47}, -\frac{11}{141}, -\frac{1}{141}, \frac{70}{141}, \frac{20}{47}, -\frac{32}{141}, -\frac{22}{141}, \frac{49}{141})$ $+ \frac{2}{141}\sqrt{2806}e^4 \otimes e_7 + \frac{2}{141}\sqrt{2806}e^5 \otimes e_6$	{12345, 1346, 2468, 458}
83:9	$0, 0, 0, 0, 0, \frac{1}{32}\sqrt{161}e^{12}, \frac{7}{32}\sqrt{2}e^{13}, \frac{1}{32}\sqrt{161}e^{14} + \frac{7}{32}\sqrt{2}e^{25}$	$(\frac{1}{32}, -\frac{5}{64}, -\frac{3}{16}, \frac{11}{64}, \frac{9}{32}, -\frac{3}{64}, -\frac{5}{32}, \frac{13}{64})$ $+ \frac{1}{32}\sqrt{210}e^1 \otimes e_3 + \frac{1}{32}\sqrt{210}e^4 \otimes e_6$	{124, 168, 236, 348}
83:9	$0, 0, 0, 0, 0, \frac{2}{47}\sqrt{10}e^{12}, \frac{2}{47}\sqrt{85}e^{13}, \frac{2}{47}\sqrt{10}e^{14} + \frac{2}{47}\sqrt{85}e^{25}$	$(-\frac{8}{47}, \frac{11}{47}, \frac{9}{47}, \frac{7}{47}, -\frac{12}{47}, \frac{3}{47}, \frac{1}{47}, -\frac{1}{47})$ $+ \frac{2}{47}\sqrt{105}e^2 \otimes e_7 + \frac{2}{47}\sqrt{105}e^3 \otimes e_8$	{12356, 14578, 28, 3467}
83:9	$0, 0, 0, 0, 0, \frac{2}{179}\sqrt{2759}e^{12}, \frac{2}{179}\sqrt{890}e^{13}, \frac{1}{179}\sqrt{3293}e^{14} + \frac{1}{179}\sqrt{1513}e^{25}$	$(\frac{40}{179}, \frac{40}{179}, -\frac{2}{179}, -\frac{49}{179}, -\frac{49}{179}, \frac{80}{179}, \frac{38}{179}, -\frac{9}{179})$ $+ \frac{1}{179}\sqrt{13439}e^2 \otimes e_5 + \frac{3}{179}\sqrt{1691}e^1 \otimes e_4$	{123, 127, 1356, 1567, 23467, 246, 3457, 45}
83:9	$0, 0, 0, 0, 0, \frac{1}{17}\sqrt{78}e^{12}, \frac{2}{17}\sqrt{39}e^{13}, \frac{2}{17}\sqrt{26}e^{14} + \frac{2}{17}\sqrt{39}e^{25}$	$(-\frac{2}{17}, \frac{8}{17}, -\frac{3}{17}, \frac{7}{17}, -\frac{3}{17}, \frac{6}{17}, -\frac{5}{17}, \frac{5}{17})$ $+ \frac{2}{17}\sqrt{91}e^2 \otimes e_7$	{12348, 1235, 145678, 167, 2456, 268, 347, 3578}
83:9	$0, 0, 0, 0, 0, \frac{2}{415}\sqrt{3161}e^{12}, \frac{2}{415}\sqrt{12971}e^{13}, \frac{2}{415}\sqrt{3161}e^{14} + \frac{2}{415}\sqrt{327}e^{25}$	$(-\frac{128}{415}, \frac{23}{415}, \frac{113}{415}, \frac{203}{415}, \frac{52}{415}, -\frac{21}{83}, -\frac{3}{83}, \frac{15}{83})$ $+ \frac{2}{415}\sqrt{19947}e^3 \otimes e_6 + \frac{2}{415}\sqrt{19947}e^4 \otimes e_7$	{1234, 1678, 24568, 357}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:9	$0, 0, 0, 0, 0, \frac{4}{281}\sqrt{215}e^{12}, \frac{4}{281}\sqrt{1290}e^{13}, \frac{4}{281}\sqrt{645}e^{14} + \frac{4}{281}\sqrt{1290}e^{25}$	$(-\frac{41}{281}, \frac{70}{281}, \frac{140}{281}, \frac{9}{281}, -\frac{102}{281}, \frac{29}{281}, \frac{99}{281}, -\frac{32}{281})$ $+\frac{18}{281}\sqrt{86}e^2 \otimes e_5 + \frac{2}{281}\sqrt{13846}e^3 \otimes e_8$	{12678, 1578, 248, 4568}
83:9	$0, 0, 0, 0, 0, \frac{1}{41}\sqrt{190}e^{12}, \frac{4}{41}\sqrt{10}e^{13}, \frac{6}{41}\sqrt{5}e^{14} + \frac{3}{41}\sqrt{30}e^{25}$	$(-\frac{9}{82}, \frac{3}{82}, -\frac{4}{41}, \frac{13}{41}, \frac{7}{41}, -\frac{3}{41}, -\frac{17}{82}, \frac{17}{82})$ $+\frac{1}{41}\sqrt{330}e^5 \otimes e_6 + \frac{1}{41}\sqrt{410}e^2 \otimes e_7$	{1235, 167, 268, 3578}
83:9	$0, 0, 0, 0, 0, \frac{2}{1195}\sqrt{1090}e^{12}, \frac{2}{1195}\sqrt{102678}e^{13},$ $\frac{2}{1195}\sqrt{48614}e^{14} + \frac{2}{1195}\sqrt{69542}e^{25}$	$(\frac{329}{1195}, -\frac{198}{1195}, -\frac{69}{239}, -\frac{107}{1195}, \frac{84}{239}, \frac{131}{1195}, -\frac{16}{1195}, \frac{222}{1195})$ $+\frac{2}{1195}\sqrt{133634}e^5 \otimes e_7 + \frac{8}{1195}\sqrt{6213}e^1 \otimes e_4$	{1235, 167, 2456, 347}
83:9	$0, 0, 0, 0, 0, \frac{8}{97}\sqrt{6}e^{12}, \frac{4}{97}\sqrt{41}e^{13}, \frac{4}{97}\sqrt{2}e^{14} + \frac{4}{97}\sqrt{41}e^{25}$	$(-\frac{7}{97}, -\frac{9}{97}, \frac{11}{97}, \frac{10}{97}, \frac{12}{97}, -\frac{16}{97}, \frac{4}{97}, \frac{3}{97})$ $+\frac{12}{97}\sqrt{5}e^5 \otimes e_7 + \frac{8}{97}\sqrt{11}e^3 \otimes e_8$	{12356, 124678, 3467, 568}
83:9	$0, 0, 0, 0, 0, \frac{2}{1195}\sqrt{1090}e^{12}, \frac{2}{1195}\sqrt{102678}e^{13},$ $\frac{2}{1195}\sqrt{48614}e^{14} + \frac{2}{1195}\sqrt{69542}e^{25}$	$(-\frac{127}{1195}, -\frac{198}{1195}, \frac{111}{1195}, \frac{349}{1195}, \frac{84}{239}, -\frac{65}{239}, -\frac{16}{1195}, \frac{222}{1195})$ $+\frac{2}{1195}\sqrt{133634}e^5 \otimes e_7 + \frac{8}{1195}\sqrt{6213}e^3 \otimes e_6$	{1235, 167, 2456, 347}
83:9	$0, 0, 0, 0, 0, \frac{99}{569}\sqrt{2}e^{12}, \frac{33}{569}\sqrt{35}e^{13}, \frac{11}{569}\sqrt{193}e^{14} + \frac{22}{569}\sqrt{61}e^{25}$	$(-\frac{121}{569}, \frac{11}{569}, \frac{143}{569}, \frac{143}{569}, \frac{11}{569}, -\frac{110}{569}, \frac{22}{569}, \frac{22}{569})$ $+\frac{11}{569}\sqrt{497}e^3 \otimes e_8 - \frac{55}{569}\sqrt{15}e^4 \otimes e_7 + \frac{99}{569}\sqrt{2}e^5 \otimes e_6$	{12678, 1578, 2357, 367}
83:9	$0, 0, 0, 0, 0, \frac{99}{569}\sqrt{2}e^{12}, \frac{33}{569}\sqrt{35}e^{13}, \frac{11}{569}\sqrt{193}e^{14} + \frac{22}{569}\sqrt{61}e^{25}$	$(-\frac{121}{569}, \frac{11}{569}, \frac{143}{569}, \frac{143}{569}, \frac{11}{569}, -\frac{110}{569}, \frac{22}{569}, \frac{22}{569})$ $+\frac{11}{569}\sqrt{497}e^3 \otimes e_8 + \frac{55}{569}\sqrt{15}e^4 \otimes e_7 + \frac{99}{569}\sqrt{2}e^5 \otimes e_6$	{12678, 1578, 2357, 367}
83:9	$0, 0, 0, 0, 0, \frac{2}{179}\sqrt{2759}e^{12}, \frac{2}{179}\sqrt{890}e^{13}, \frac{1}{179}\sqrt{3293}e^{14} + \frac{1}{179}\sqrt{1513}e^{25}$	$(\frac{40}{179}, \frac{40}{179}, -\frac{2}{179}, -\frac{49}{179}, -\frac{49}{179}, \frac{80}{179}, \frac{38}{179}, -\frac{9}{179})$ $-\frac{1}{179}\sqrt{13439}e^2 \otimes e_5 + \frac{3}{179}\sqrt{1691}e^1 \otimes e_4$	{123, 127, 1356, 1567, 23467, 246, 3457, 45}
83:9	$0, 0, 0, 0, 0, \frac{1}{41}\sqrt{190}e^{12}, \frac{3}{41}\sqrt{30}e^{13}, \frac{6}{41}\sqrt{5}e^{14} + \frac{4}{41}\sqrt{10}e^{25}$	$(-\frac{10}{41}, \frac{7}{41}, \frac{7}{41}, \frac{13}{41}, -\frac{4}{41}, -\frac{3}{41}, -\frac{3}{41}, \frac{3}{41})$ $+\frac{1}{41}\sqrt{330}e^3 \otimes e_6 + \frac{1}{41}\sqrt{410}e^2 \otimes e_7$	{12348, 1235, 145678, 167, 2456, 268, 347, 3578}
83:9	$0, 0, 0, 0, 0, \frac{1}{41}\sqrt{190}e^{12}, \frac{3}{41}\sqrt{30}e^{13}, \frac{6}{41}\sqrt{5}e^{14} + \frac{4}{41}\sqrt{10}e^{25}$	$(-\frac{10}{41}, \frac{7}{41}, \frac{7}{41}, \frac{13}{41}, -\frac{4}{41}, -\frac{3}{41}, -\frac{3}{41}, \frac{3}{41})$ $-\frac{1}{41}\sqrt{330}e^3 \otimes e_6 + \frac{1}{41}\sqrt{410}e^2 \otimes e_7$	{12348, 1235, 145678, 167, 2456, 268, 347, 3578}
83:9	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{286}e^{12}, \frac{3}{29}\sqrt{13}e^{13}, \frac{1}{29}\sqrt{130}e^{14} + \frac{3}{29}\sqrt{13}e^{25}$	$(-\frac{9}{29}, \frac{8}{29}, \frac{7}{29}, \frac{12}{29}, -\frac{5}{29}, -\frac{1}{29}, -\frac{2}{29}, \frac{3}{29})$ $+\frac{1}{29}\sqrt{377}e^4 \otimes e_6 + \frac{2}{29}\sqrt{78}e^2 \otimes e_5$	{12347, 124, 236, 267}
83:9	$0, 0, 0, 0, 0, \frac{14}{37}\sqrt{2}e^{12}, \frac{2}{37}\sqrt{238}e^{13}, \frac{14}{37}\sqrt{2}e^{14} + \frac{2}{37}\sqrt{238}e^{25}$	$(\frac{3}{37}, -\frac{4}{37}, -\frac{11}{37}, \frac{13}{37}, \frac{20}{37}, -\frac{1}{37}, -\frac{8}{37}, \frac{16}{37})$ $+\frac{2}{37}\sqrt{434}e^5 \otimes e_7$	{12356, 124678, 13458, 17, 2378, 245, 3467, 568}
83:10	$0, 0, 0, 0, 0, \frac{63}{857}\sqrt{6}e^{12}, \frac{21}{857}\sqrt{26}e^{13}, \frac{7}{857}\sqrt{22}e^{23} + \frac{14}{857}\sqrt{106}e^{45}$	$(\frac{35}{857}, \frac{35}{857}, -\frac{49}{857}, -\frac{133}{857}, \frac{119}{857}, \frac{70}{857}, -\frac{14}{857}, -\frac{14}{857})$ $-\frac{14}{857}\sqrt{105}e^2 \otimes e_7 + \frac{14}{857}\sqrt{158}e^1 \otimes e_8 + \frac{42}{857}\sqrt{14}e^5 \otimes e_6$	{12345, 167, 2468, 3578}
83:10	$0, 0, 0, 0, 0, \frac{63}{857}\sqrt{6}e^{12}, \frac{21}{857}\sqrt{26}e^{13}, \frac{7}{857}\sqrt{22}e^{23} + \frac{14}{857}\sqrt{106}e^{45}$	$(\frac{35}{857}, \frac{35}{857}, -\frac{49}{857}, -\frac{133}{857}, \frac{119}{857}, \frac{70}{857}, -\frac{14}{857}, -\frac{14}{857})$ $+\frac{14}{857}\sqrt{105}e^2 \otimes e_7 + \frac{14}{857}\sqrt{158}e^1 \otimes e_8 + \frac{42}{857}\sqrt{14}e^5 \otimes e_6$	{12345, 167, 2468, 3578}
83:10	$0, 0, 0, 0, 0, \frac{42}{467}\sqrt{10}e^{12}, \frac{42}{467}\sqrt{10}e^{13}, \frac{14}{467}\sqrt{58}e^{23} + \frac{112}{467}e^{45}$	$(\frac{70}{467}, \frac{70}{467}, -\frac{98}{467}, -\frac{63}{467}, \frac{35}{467}, \frac{140}{467}, -\frac{28}{467}, -\frac{28}{467})$ $+\frac{140}{467}\sqrt{2}e^1 \otimes e_8 + \frac{28}{467}\sqrt{42}e^2 \otimes e_7 + \frac{98}{467}e^5 \otimes e_4$	{2468, 2568, 3478, 3578}
83:10	$0, 0, 0, 0, 0, \frac{42}{467}\sqrt{10}e^{12}, \frac{42}{467}\sqrt{10}e^{13}, \frac{14}{467}\sqrt{58}e^{23} + \frac{112}{467}e^{45}$	$(\frac{70}{467}, \frac{70}{467}, -\frac{98}{467}, -\frac{63}{467}, \frac{35}{467}, \frac{140}{467}, -\frac{28}{467}, -\frac{28}{467})$ $+\frac{140}{467}\sqrt{2}e^1 \otimes e_8 - \frac{28}{467}\sqrt{42}e^2 \otimes e_7 + \frac{98}{467}e^5 \otimes e_4$	{2468, 2568, 3478, 3578}
83:10	$0, 0, 0, 0, 0, \frac{6}{119}\sqrt{62}e^{12}, \frac{6}{119}\sqrt{62}e^{13}, \frac{2}{119}\sqrt{186}e^{23} + \frac{4}{119}\sqrt{186}e^{45}$	$(\frac{2}{17}, \frac{18}{119}, \frac{18}{119}, \frac{111}{119}, -\frac{75}{119}, \frac{32}{119}, \frac{32}{119}, \frac{36}{119})$ $+\frac{186}{119}e^4 \otimes e_5$	{12478, 12578, 2468, 2568}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:10	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{22}e^{12}, \frac{1}{14}\sqrt{22}e^{13}, \frac{1}{7}\sqrt{6}e^{23} + \frac{1}{7}e^{45}$	$(-\frac{2}{7}, \frac{1}{7}, \frac{1}{7}, \frac{1}{7}, \frac{1}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{2}{7})$ $+ \frac{5}{14}\sqrt{2}e^2 \otimes e_7 - \frac{5}{14}\sqrt{2}e^3 \otimes e_6$	{1234, 1467, 24568, 268}
83:10	$0, 0, 0, 0, 0, \frac{1}{14}\sqrt{22}e^{12}, \frac{1}{14}\sqrt{22}e^{13}, \frac{1}{7}\sqrt{6}e^{23} + \frac{1}{7}e^{45}$	$(-\frac{2}{7}, \frac{1}{7}, \frac{1}{7}, \frac{1}{7}, \frac{1}{7}, -\frac{1}{7}, -\frac{1}{7}, \frac{2}{7})$ $+ \frac{5}{14}\sqrt{2}e^2 \otimes e_7 + \frac{5}{14}\sqrt{2}e^3 \otimes e_6$	{1234, 1467, 24568, 268}
83:10	$0, 0, 0, 0, 0, \frac{1}{16}\sqrt{22}e^{12}, \frac{1}{16}\sqrt{22}e^{13}, \frac{1}{8}\sqrt{6}e^{23} + \frac{1}{8}e^{45}$	$(-\frac{1}{4}, \frac{1}{8}, \frac{1}{8}, 0, \frac{1}{4}, -\frac{1}{8}, -\frac{1}{8}, \frac{1}{4})$ $+ \frac{1}{4}e^5 \otimes e_4 + \frac{5}{16}\sqrt{2}e^2 \otimes e_7 + \frac{5}{16}\sqrt{2}e^3 \otimes e_6$	{1234, 1235, 1467, 1567}
83:10	$0, 0, 0, 0, 0, \frac{1}{16}\sqrt{22}e^{12}, \frac{1}{16}\sqrt{22}e^{13}, \frac{1}{8}\sqrt{6}e^{23} + \frac{1}{8}e^{45}$	$(-\frac{1}{4}, \frac{1}{8}, \frac{1}{8}, 0, \frac{1}{4}, -\frac{1}{8}, -\frac{1}{8}, \frac{1}{4})$ $+ \frac{1}{4}e^5 \otimes e_4 + \frac{5}{16}\sqrt{2}e^2 \otimes e_7 - \frac{5}{16}\sqrt{2}e^3 \otimes e_6$	{1234, 1235, 1467, 1567}
83:10	$0, 0, 0, 0, 0, \frac{1}{487}\sqrt{160358}e^{12}, \frac{1}{487}\sqrt{2442}e^{13},$ $\frac{1}{487}\sqrt{82214}e^{23} + \frac{14}{487}\sqrt{814}e^{45}$	$(-\frac{107}{487}, -\frac{9}{487}, \frac{191}{487}, \frac{291}{487}, -\frac{109}{487}, -\frac{116}{487}, \frac{84}{487}, \frac{182}{487})$ $+ \frac{20}{487}\sqrt{814}e^4 \otimes e_6$	{123478, 1245, 1367, 1568, 23568, 267, 345, 478}
83:10	$0, 0, 0, 0, 0, \frac{7}{65}\sqrt{30}e^{12}, \frac{7}{65}\sqrt{30}e^{13}, \frac{7}{65}\sqrt{10}e^{23} + \frac{14}{65}\sqrt{10}e^{45}$	$(\frac{7}{13}, -\frac{7}{65}, -\frac{7}{65}, -\frac{7}{65}, -\frac{7}{65}, \frac{28}{65}, \frac{28}{65}, -\frac{14}{65})$ $+ \frac{14}{65}\sqrt{26}e^1 \otimes e_8$	{123, 12345, 14567, 167, 2468}
83:10	$0, 0, 0, 0, 0, \frac{21}{209}\sqrt{10}e^{12}, \frac{21}{209}\sqrt{10}e^{13}, \frac{7}{209}\sqrt{58}e^{23} + \frac{56}{209}e^{45}$	$(\frac{35}{209}, \frac{35}{209}, -\frac{49}{209}, -\frac{7}{209}, -\frac{7}{209}, \frac{70}{209}, -\frac{14}{209}, -\frac{14}{209})$ $+ \frac{14}{209}\sqrt{42}e^2 \otimes e_7 + \frac{70}{209}\sqrt{2}e^1 \otimes e_8$	{123, 12345, 14567, 167, 2468, 3478}
83:10	$0, 0, 0, 0, 0, \frac{21}{209}\sqrt{10}e^{12}, \frac{21}{209}\sqrt{10}e^{13}, \frac{7}{209}\sqrt{58}e^{23} + \frac{56}{209}e^{45}$	$(\frac{35}{209}, \frac{35}{209}, -\frac{49}{209}, -\frac{7}{209}, -\frac{7}{209}, \frac{70}{209}, -\frac{14}{209}, -\frac{14}{209})$ $- \frac{14}{209}\sqrt{42}e^2 \otimes e_7 + \frac{70}{209}\sqrt{2}e^1 \otimes e_8$	{123, 12345, 14567, 167, 2468, 3478}
83:10	$0, 0, 0, 0, 0, \frac{7}{257}\sqrt{166}e^{12}, \frac{21}{257}\sqrt{6}e^{13}, \frac{7}{257}\sqrt{38}e^{23} + \frac{14}{257}\sqrt{46}e^{45}$	$(\frac{35}{257}, -\frac{35}{257}, \frac{21}{257}, \frac{49}{257}, -\frac{63}{257}, 0, \frac{56}{257}, -\frac{14}{257})$ $+ \frac{14}{257}\sqrt{58}e^1 \otimes e_8 + \frac{28}{257}\sqrt{14}e^4 \otimes e_6$	{12457, 136, 235678, 48}
83:10	$0, 0, 0, 0, 0, \frac{1}{629}\sqrt{107062}e^{12}, \frac{7}{629}\sqrt{538}e^{13},$ $\frac{1}{629}\sqrt{9146}e^{23} + \frac{2}{629}\sqrt{17754}e^{45}$	$(-\frac{169}{629}, \frac{147}{629}, \frac{47}{629}, \frac{247}{629}, -\frac{53}{629}, -\frac{22}{629}, -\frac{122}{629}, \frac{194}{629})$ $+ \frac{10}{629}\sqrt{1345}e^2 \otimes e_7 + \frac{10}{629}\sqrt{1614}e^4 \otimes e_6$	{12348, 15678, 26, 3457}
83:10	$0, 0, 0, 0, 0, \frac{14}{179}\sqrt{30}e^{12}, \frac{14}{179}\sqrt{30}e^{13}, \frac{14}{179}\sqrt{10}e^{23} + \frac{28}{179}\sqrt{10}e^{45}$	$(\frac{70}{179}, -\frac{14}{179}, -\frac{14}{179}, \frac{35}{179}, -\frac{63}{179}, \frac{56}{179}, \frac{56}{179}, -\frac{28}{179})$ $+ \frac{28}{179}\sqrt{26}e^1 \otimes e_8 + \frac{98}{179}e^4 \otimes e_5$	{2468, 2568}
83:11	$0, 0, 0, 0, 0, \frac{30}{881}\sqrt{10}e^{12}, \frac{50}{881}\sqrt{3}e^{13}, \frac{10}{881}\sqrt{11}e^{24} + \frac{5}{881}\sqrt{502}e^{35}$	$(\frac{35}{881}, -\frac{85}{881}, -\frac{25}{881}, \frac{95}{881}, \frac{35}{881}, -\frac{50}{881}, \frac{10}{881}, \frac{10}{881})$ $+ \frac{10}{881}\sqrt{146}e^1 \otimes e_8 + \frac{5}{881}\sqrt{426}e^5 \otimes e_7 + \frac{5}{881}\sqrt{606}e^3 \otimes e_6$	{1235, 1467, 24568, 378}
83:11	$0, 0, 0, 0, 0, \frac{30}{881}\sqrt{10}e^{12}, \frac{50}{881}\sqrt{3}e^{13}, \frac{10}{881}\sqrt{11}e^{24} + \frac{5}{881}\sqrt{502}e^{35}$	$(\frac{35}{881}, -\frac{85}{881}, -\frac{25}{881}, \frac{95}{881}, \frac{35}{881}, -\frac{50}{881}, \frac{10}{881}, \frac{10}{881})$ $+ \frac{10}{881}\sqrt{146}e^1 \otimes e_8 - \frac{5}{881}\sqrt{426}e^5 \otimes e_7 + \frac{5}{881}\sqrt{606}e^3 \otimes e_6$	{1235, 1467, 24568, 378}
83:11	$0, 0, 0, 0, 0, \frac{2}{5}\sqrt{2}e^{12}, \frac{2}{5}\sqrt{2}e^{13}, \frac{2}{5}\sqrt{2}e^{24} + \frac{2}{5}\sqrt{2}e^{35}$	$(\frac{3}{5}, -\frac{1}{5}, -\frac{1}{5}, 0, 0, \frac{2}{5}, \frac{2}{5}, -\frac{1}{5})$ $+ \frac{4}{5}\sqrt{2}e^1 \otimes e_8$	{12345, 1247, 167, 23678, 2568, 458}
83:11	$0, 0, 0, 0, 0, \frac{8}{37}e^{12}, \frac{1}{37}\sqrt{22}e^{13}, \frac{1}{37}\sqrt{22}e^{24} + \frac{2}{37}\sqrt{13}e^{35}$	$(\frac{2}{37}, \frac{1}{37}, -\frac{5}{37}, -\frac{1}{37}, \frac{5}{37}, \frac{3}{37}, -\frac{3}{37}, 0)$ $+ \frac{1}{37}\sqrt{62}e^5 \otimes e_6 + \frac{2}{37}\sqrt{10}e^1 \otimes e_8 + \frac{6}{37}e^2 \otimes e_4$	{12357, 146}
83:11	$0, 0, 0, 0, 0, \frac{65}{701}\sqrt{10}e^{12}, \frac{13}{701}\sqrt{190}e^{13}, \frac{39}{701}\sqrt{6}e^{24} + \frac{156}{701}\sqrt{2}e^{35}$	$(\frac{130}{701}, \frac{65}{701}, -\frac{169}{701}, -\frac{104}{701}, \frac{130}{701}, \frac{195}{701}, -\frac{39}{701}, -\frac{39}{701})$ $- \frac{26}{701}\sqrt{102}e^5 \otimes e_7 + \frac{52}{701}\sqrt{35}e^1 \otimes e_8 + \frac{91}{701}\sqrt{6}e^2 \otimes e_4$	{23678, 2568, 3478, 458}
83:11	$0, 0, 0, 0, 0, \frac{65}{701}\sqrt{10}e^{12}, \frac{13}{701}\sqrt{190}e^{13}, \frac{39}{701}\sqrt{6}e^{24} + \frac{156}{701}\sqrt{2}e^{35}$	$(\frac{130}{701}, \frac{65}{701}, -\frac{169}{701}, -\frac{104}{701}, \frac{130}{701}, \frac{195}{701}, -\frac{39}{701}, -\frac{39}{701})$ $+ \frac{26}{701}\sqrt{102}e^5 \otimes e_7 + \frac{52}{701}\sqrt{35}e^1 \otimes e_8 + \frac{91}{701}\sqrt{6}e^2 \otimes e_4$	{23678, 2568, 3478, 458}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:11	$0, 0, 0, 0, 0, \frac{6}{71}\sqrt{78}e^{12}, \frac{2}{71}\sqrt{39}e^{13}, \frac{6}{71}\sqrt{78}e^{24} + \frac{2}{71}\sqrt{39}e^{35}$	$(-\frac{3}{71}, -\frac{22}{71}, \frac{16}{71}, \frac{53}{71}, \frac{15}{71}, -\frac{25}{71}, \frac{13}{71}, \frac{31}{71})$ $+ \frac{6}{71}\sqrt{247}e^4 \otimes e_6$	{12347, 1245, 1367, 156, 23568, 2678, 3458, 478}
83:11	$0, 0, 0, 0, 0, \frac{3}{79}\sqrt{170}e^{12}, \frac{1}{79}\sqrt{510}e^{13}, \frac{1}{79}\sqrt{714}e^{24} + \frac{4}{79}\sqrt{102}e^{35}$	$(-\frac{10}{79}, \frac{35}{79}, -\frac{11}{79}, -\frac{16}{79}, \frac{30}{79}, \frac{25}{79}, -\frac{21}{79}, \frac{19}{79})$ $+ \frac{3}{79}\sqrt{374}e^2 \otimes e_4 + \frac{6}{79}\sqrt{102}e^5 \otimes e_7$	{1235, 127, 13456, 1467}
83:11	$0, 0, 0, 0, 0, \frac{8}{495}\sqrt{402}e^{12}, \frac{8}{495}\sqrt{105}e^{13}, \frac{8}{165}\sqrt{26}e^{24} + \frac{8}{165}\sqrt{47}e^{35}$	$(-\frac{128}{495}, \frac{20}{99}, \frac{68}{495}, \frac{4}{495}, \frac{4}{55}, -\frac{28}{495}, -\frac{4}{33}, \frac{104}{495})$ $+ \frac{16}{495}\sqrt{102}e^5 \otimes e_7 + \frac{8}{495}\sqrt{345}e^2 \otimes e_4 + \frac{8}{495}\sqrt{609}e^3 \otimes e_6$	{1235, 1467}
83:11	$0, 0, 0, 0, 0, \frac{3}{25}\sqrt{22}e^{12}, \frac{1}{25}\sqrt{22}e^{13}, \frac{1}{25}\sqrt{22}e^{24} + \frac{2}{25}\sqrt{33}e^{35}$	$(-\frac{1}{5}, \frac{4}{25}, -\frac{2}{25}, \frac{4}{25}, \frac{2}{5}, -\frac{1}{25}, -\frac{7}{25}, \frac{8}{25})$ $+ \frac{1}{25}\sqrt{286}e^5 \otimes e_6 + \frac{3}{25}\sqrt{22}e^2 \otimes e_7$	{12458, 13678, 23468, 578}
83:11	$0, 0, 0, 0, 0, \frac{1}{11}\sqrt{6}e^{12}, \frac{1}{11}\sqrt{2}e^{13}, \frac{1}{11}\sqrt{2}e^{24} + \frac{2}{11}e^{35}$	$(\frac{1}{11}, 0, -\frac{2}{11}, 0, \frac{2}{11}, \frac{1}{11}, -\frac{1}{11}, 0)$ $+ \frac{1}{11}\sqrt{6}e^2 \otimes e_7 + \frac{1}{11}\sqrt{6}e^5 \otimes e_6 + \frac{2}{11}\sqrt{2}e^1 \otimes e_8$	{12345, 167}
83:11	$0, 0, 0, 0, 0, \frac{1}{205}\sqrt{10858}e^{12}, \frac{1}{205}\sqrt{1958}e^{13}, \frac{1}{205}\sqrt{1958}e^{24} + \frac{6}{205}\sqrt{178}e^{35}$	$(\frac{58}{205}, \frac{29}{205}, -\frac{21}{205}, -\frac{12}{41}, -\frac{2}{41}, \frac{87}{205}, \frac{37}{205}, -\frac{31}{205})$ $+ \frac{1}{41}\sqrt{534}e^2 \otimes e_4 + \frac{4}{205}\sqrt{1157}e^1 \otimes e_8$	{23678, 2568, 3478, 458}
83:11	$0, 0, 0, 0, 0, \frac{6}{127}\sqrt{93}e^{12}, \frac{6}{127}\sqrt{93}e^{13}, \frac{1}{127}\sqrt{93}e^{24} + \frac{1}{127}\sqrt{93}e^{35}$	$(-\frac{20}{127}, \frac{54}{127}, \frac{54}{127}, -\frac{39}{127}, -\frac{39}{127}, \frac{34}{127}, \frac{34}{127}, \frac{15}{127})$ $+ \frac{3}{127}\sqrt{1147}e^2 \otimes e_4 - \frac{1}{127}\sqrt{1147}e^3 \otimes e_5$	{123, 1257, 14567, 2367, 256, 45}
83:11	$0, 0, 0, 0, 0, \frac{1}{235}\sqrt{2706}e^{12}, \frac{2}{235}\sqrt{1394}e^{13}, \frac{2}{235}\sqrt{1394}e^{24} + \frac{2}{235}\sqrt{41}e^{35}$	$(\frac{29}{235}, \frac{6}{47}, -\frac{8}{47}, -\frac{42}{235}, \frac{28}{235}, \frac{59}{235}, -\frac{11}{235}, -\frac{12}{235})$ $+ \frac{1}{235}\sqrt{8610}e^2 \otimes e_7 + \frac{4}{235}\sqrt{533}e^1 \otimes e_8$	{1234, 1567, 268, 34578}
83:11	$0, 0, 0, 0, 0, \frac{6}{127}\sqrt{93}e^{12}, \frac{6}{127}\sqrt{93}e^{13}, \frac{1}{127}\sqrt{93}e^{24} + \frac{1}{127}\sqrt{93}e^{35}$	$(-\frac{20}{127}, \frac{54}{127}, \frac{54}{127}, -\frac{39}{127}, -\frac{39}{127}, \frac{34}{127}, \frac{34}{127}, \frac{15}{127})$ $+ \frac{3}{127}\sqrt{1147}e^2 \otimes e_4 + \frac{3}{127}\sqrt{1147}e^3 \otimes e_5$	{123, 1257, 14567, 2367, 256, 45}
83:11	$0, 0, 0, 0, 0, \frac{2}{115}\sqrt{494}e^{12}, \frac{2}{115}\sqrt{209}e^{13}, \frac{2}{115}\sqrt{494}e^{24} + \frac{2}{115}\sqrt{209}e^{35}$	$(\frac{33}{115}, -\frac{38}{115}, -\frac{8}{115}, \frac{33}{115}, \frac{3}{115}, -\frac{1}{23}, \frac{5}{23}, -\frac{1}{23})$ $+ \frac{4}{115}\sqrt{266}e^1 \otimes e_8 - \frac{6}{115}\sqrt{95}e^4 \otimes e_6$	{12345, 1247, 1356, 167, 23678, 2568, 3478, 458}
83:11	$0, 0, 0, 0, 0, \frac{2}{115}\sqrt{494}e^{12}, \frac{2}{115}\sqrt{209}e^{13}, \frac{2}{115}\sqrt{494}e^{24} + \frac{2}{115}\sqrt{209}e^{35}$	$(\frac{33}{115}, -\frac{38}{115}, -\frac{8}{115}, \frac{33}{115}, \frac{3}{115}, -\frac{1}{23}, \frac{5}{23}, -\frac{1}{23})$ $+ \frac{4}{115}\sqrt{266}e^1 \otimes e_8 + \frac{6}{115}\sqrt{95}e^4 \otimes e_6$	{12345, 1247, 1356, 167, 23678, 2568, 3478, 458}
83:11	$0, 0, 0, 0, 0, \frac{7}{11}e^{12}, \frac{2}{11}\sqrt{21}e^{13}, \frac{2}{11}\sqrt{21}e^{24} + \frac{7}{11}e^{35}$	$(-\frac{1}{11}, -\frac{1}{11}, -\frac{1}{11}, \frac{5}{11}, \frac{5}{11}, -\frac{2}{11}, -\frac{2}{11}, \frac{4}{11})$ $+ \frac{1}{11}\sqrt{133}e^4 \otimes e_7$	{12346, 12678, 13458, 157, 23578, 245, 367, 468}
83:11	$0, 0, 0, 0, 0, \frac{4}{107}\sqrt{154}e^{12}, \frac{1}{107}\sqrt{1342}e^{13}, \frac{1}{107}\sqrt{1342}e^{24} + \frac{2}{107}\sqrt{473}e^{35}$	$(-\frac{18}{107}, \frac{21}{107}, -\frac{5}{107}, -\frac{1}{107}, \frac{25}{107}, \frac{3}{107}, -\frac{23}{107}, \frac{20}{107})$ $+ \frac{11}{107}\sqrt{22}e^5 \otimes e_6 + \frac{2}{107}\sqrt{429}e^2 \otimes e_4$	{12357, 146, 267, 345}
83:11	$0, 0, 0, 0, 0, \frac{2}{685}\sqrt{11715}e^{12}, \frac{6}{685}\sqrt{1562}e^{13}, \frac{1}{685}\sqrt{94998}e^{24} + \frac{2}{685}\sqrt{10011}e^{35}$	$(-\frac{169}{685}, \frac{79}{685}, \frac{7}{137}, \frac{123}{685}, \frac{167}{685}, -\frac{18}{137}, -\frac{134}{685}, \frac{202}{685})$ $+ \frac{3}{685}\sqrt{12922}e^4 \otimes e_6 + \frac{3}{685}\sqrt{16046}e^2 \otimes e_7$	{1234, 1567, 268, 34578}
83:11	$0, 0, 0, 0, 0, \frac{1}{5}e^{12}, \frac{2}{5}e^{13}, \frac{2}{5}e^{24} + \frac{1}{5}e^{35}$	$(\frac{1}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $+ \frac{1}{5}\sqrt{5}e^4 \otimes e_7 + \frac{2}{5}e^1 \otimes e_8$	{12346, 157, 23578, 468}
83:11	$0, 0, 0, 0, 0, \frac{24}{1319}\sqrt{890}e^{12}, \frac{8}{1319}\sqrt{435}e^{13}, \frac{8}{1319}\sqrt{3810}e^{24} + \frac{40}{1319}\sqrt{219}e^{35}$	$(-\frac{368}{1319}, \frac{364}{1319}, \frac{476}{1319}, -\frac{116}{1319}, -\frac{228}{1319}, -\frac{4}{1319}, \frac{108}{1319}, \frac{248}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^2 \otimes e_4 + \frac{360}{1319}\sqrt{5}e^3 \otimes e_6$	{12357, 146, 267, 345}
83:11	$0, 0, 0, 0, 0, \frac{1}{22}\sqrt{70}e^{12}, \frac{1}{22}\sqrt{70}e^{13}, \frac{1}{22}\sqrt{70}e^{24} + \frac{1}{22}\sqrt{70}e^{35}$	$(-\frac{1}{11}, -\frac{1}{11}, -\frac{1}{11}, \frac{5}{11}, \frac{5}{11}, -\frac{2}{11}, -\frac{2}{11}, \frac{4}{11})$ $+ \frac{1}{22}\sqrt{266}e^4 \otimes e_6 + \frac{1}{22}\sqrt{266}e^5 \otimes e_7$	{12345, 1247, 167, 23678, 2568, 458}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:11	$0, 0, 0, 0, 0, \frac{1}{22}\sqrt{70}e^{12}, \frac{1}{22}\sqrt{70}e^{13}, \frac{1}{22}\sqrt{70}e^{24} + \frac{1}{22}\sqrt{70}e^{35}$	$(-\frac{1}{11}, -\frac{1}{11}, -\frac{1}{11}, \frac{5}{11}, \frac{5}{11}, -\frac{2}{11}, -\frac{2}{11}, \frac{4}{11})$ $+ \frac{1}{22}\sqrt{266}e^4 \otimes e_6 - \frac{1}{22}\sqrt{266}e^5 \otimes e_7$	{12345, 1247, 167, 23678, 2568, 458}
83:11	$0, 0, 0, 0, 0, \frac{3}{133}\sqrt{305}e^{12}, \frac{3}{133}\sqrt{305}e^{13}, \frac{3}{133}\sqrt{110}e^{24} + \frac{3}{133}\sqrt{110}e^{35}$	$(-\frac{45}{133}, \frac{33}{133}, \frac{33}{133}, \frac{5}{133}, \frac{5}{133}, -\frac{12}{133}, -\frac{12}{133}, \frac{2}{7})$ $+ \frac{9}{133}\sqrt{65}e^2 \otimes e_7 - \frac{9}{133}\sqrt{65}e^3 \otimes e_6$	{12345, 1238, 145678, 167, 246, 2568}
83:11	$0, 0, 0, 0, 0, \frac{3}{133}\sqrt{305}e^{12}, \frac{3}{133}\sqrt{305}e^{13}, \frac{3}{133}\sqrt{110}e^{24} + \frac{3}{133}\sqrt{110}e^{35}$	$(-\frac{45}{133}, \frac{33}{133}, \frac{33}{133}, \frac{5}{133}, \frac{5}{133}, -\frac{12}{133}, -\frac{12}{133}, \frac{2}{7})$ $+ \frac{9}{133}\sqrt{65}e^2 \otimes e_7 + \frac{9}{133}\sqrt{65}e^3 \otimes e_6$	{12345, 1238, 145678, 167, 246, 2568}
83:11	$0, 0, 0, 0, 0, \frac{3}{137}\sqrt{2090}e^{12}, \frac{1}{137}\sqrt{5610}e^{13}, \frac{1}{137}\sqrt{5610}e^{24} + \frac{10}{137}\sqrt{66}e^{35}$	$(-\frac{14}{137}, \frac{97}{137}, \frac{23}{137}, -\frac{68}{137}, \frac{6}{137}, \frac{83}{137}, \frac{9}{137}, \frac{29}{137})$ $+ \frac{3}{137}\sqrt{4070}e^2 \otimes e_4$	{12, 12357, 134567, 146, 2356, 267, 345, 47}
83:11	$0, 0, 0, 0, 0, \frac{1}{10}\sqrt{6}e^{12}, \frac{1}{10}\sqrt{6}e^{13}, \frac{1}{10}\sqrt{6}e^{24} + \frac{1}{10}\sqrt{6}e^{35}$	$(\frac{1}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $+ \frac{1}{10}\sqrt{10}e^4 \otimes e_6 - \frac{1}{10}\sqrt{10}e^5 \otimes e_7 + \frac{2}{5}e^1 \otimes e_8$	{12345, 1247, 1356, 167, 23678, 2568, 3478, 458}
83:11	$0, 0, 0, 0, 0, \frac{1}{10}\sqrt{6}e^{12}, \frac{1}{10}\sqrt{6}e^{13}, \frac{1}{10}\sqrt{6}e^{24} + \frac{1}{10}\sqrt{6}e^{35}$	$(\frac{1}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $+ \frac{1}{10}\sqrt{10}e^4 \otimes e_6 + \frac{1}{10}\sqrt{10}e^5 \otimes e_7 + \frac{2}{5}e^1 \otimes e_8$	{12345, 1247, 167, 23678, 2568, 458}
83:11	$0, 0, 0, 0, 0, \frac{1}{10}\sqrt{6}e^{12}, \frac{1}{10}\sqrt{6}e^{13}, \frac{1}{10}\sqrt{6}e^{24} + \frac{1}{10}\sqrt{6}e^{35}$	$(\frac{1}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $- \frac{1}{10}\sqrt{10}e^4 \otimes e_6 - \frac{1}{10}\sqrt{10}e^5 \otimes e_7 + \frac{2}{5}e^1 \otimes e_8$	{12345, 1247, 167, 23678, 2568, 458}
83:11	$0, 0, 0, 0, 0, \frac{3}{11}\sqrt{2}e^{12}, \frac{6}{11}\sqrt{2}e^{13}, \frac{6}{11}\sqrt{2}e^{24} + \frac{6}{11}e^{35}$	$(-\frac{3}{11}, \frac{6}{11}, 0, -\frac{2}{11}, \frac{4}{11}, \frac{1}{11}, -\frac{3}{11}, \frac{4}{11})$ $+ \frac{9}{11}\sqrt{2}e^2 \otimes e_7$	{1234, 12358, 14678, 1567, 2456, 268, 34578, 37}
83:12	$0, 0, 0, 0, 0, \frac{2}{115}\sqrt{209}e^{12}, \frac{3}{115}\sqrt{266}e^{34}, \frac{1}{115}\sqrt{1558}e^{13} + \frac{2}{115}\sqrt{209}e^{25}$	$(\frac{33}{115}, -\frac{8}{115}, -\frac{38}{115}, \frac{33}{115}, \frac{3}{115}, \frac{5}{23}, -\frac{1}{23}, -\frac{1}{23})$ $+ \frac{1}{115}\sqrt{3838}e^1 \otimes e_7 + \frac{1}{115}\sqrt{3838}e^4 \otimes e_8$	{12345, 128, 1346, 1568, 23678, 24567, 3578, 47}
83:12	$0, 0, 0, 0, 0, \frac{2}{115}\sqrt{209}e^{12}, \frac{3}{115}\sqrt{266}e^{34}, \frac{1}{115}\sqrt{1558}e^{13} + \frac{2}{115}\sqrt{209}e^{25}$	$(\frac{33}{115}, -\frac{8}{115}, -\frac{38}{115}, \frac{33}{115}, \frac{3}{115}, \frac{5}{23}, -\frac{1}{23}, -\frac{1}{23})$ $+ \frac{1}{115}\sqrt{3838}e^1 \otimes e_7 - \frac{1}{115}\sqrt{3838}e^4 \otimes e_8$	{12345, 128, 1346, 1568, 23678, 24567, 3578, 47}
83:12	$0, 0, 0, 0, 0, \frac{203}{2549}\sqrt{22}e^{12}, \frac{87}{2549}\sqrt{70}e^{34}, \frac{29}{2549}\sqrt{634}e^{13} + \frac{174}{2549}\sqrt{2}e^{25}$	$(\frac{406}{2549}, -\frac{319}{2549}, \frac{203}{2549}, -\frac{638}{2549}, \frac{928}{2549}, \frac{87}{2549}, -\frac{435}{2549}, \frac{609}{2549})$ $+ \frac{29}{2549}\sqrt{1158}e^3 \otimes e_4 + \frac{58}{2549}\sqrt{354}e^5 \otimes e_6 + \frac{58}{2549}\sqrt{503}e^1 \otimes e_7$	{23678, 3578}
83:12	$0, 0, 0, 0, 0, \frac{9}{124}\sqrt{71}e^{12}, \frac{3}{62}\sqrt{213}e^{34}, \frac{1}{62}\sqrt{1349}e^{13} + \frac{9}{124}\sqrt{71}e^{25}$	$(\frac{37}{248}, \frac{43}{124}, \frac{5}{124}, -\frac{33}{124}, -\frac{39}{248}, \frac{123}{248}, -\frac{7}{31}, \frac{47}{248})$ $+ \frac{1}{124}\sqrt{14626}e^2 \otimes e_7$	{12348, 125, 135678, 1467, 23456, 268, 37, 4578}
83:12	$0, 0, 0, 0, 0, \frac{8}{61}\sqrt{15}e^{12}, \frac{16}{61}\sqrt{5}e^{34}, \frac{8}{61}\sqrt{10}e^{13} + \frac{8}{61}\sqrt{15}e^{25}$	$(\frac{4}{61}, \frac{20}{61}, \frac{10}{61}, -\frac{22}{61}, -\frac{6}{61}, \frac{24}{61}, -\frac{12}{61}, \frac{14}{61})$ $+ \frac{8}{61}\sqrt{11}e^3 \otimes e_4 + \frac{8}{61}\sqrt{41}e^2 \otimes e_7$	{135678, 1467, 37, 4578}
83:12	$0, 0, 0, 0, 0, \frac{16}{307}\sqrt{106}e^{12}, \frac{16}{307}\sqrt{57}e^{34}, \frac{16}{307}\sqrt{19}e^{13} + \frac{16}{307}\sqrt{30}e^{25}$	$(\frac{65}{307}, \frac{76}{307}, -\frac{41}{307}, -\frac{22}{307}, -\frac{52}{307}, \frac{141}{307}, -\frac{63}{307}, \frac{24}{307})$ $+ \frac{16}{307}\sqrt{155}e^1 \otimes e_7 + \frac{48}{307}\sqrt{13}e^2 \otimes e_5$	{1234, 13456, 2467, 457}
83:12	$0, 0, 0, 0, 0, \frac{8}{1599}\sqrt{601}e^{12}, \frac{8}{1599}\sqrt{691}e^{34}, \frac{8}{1599}\sqrt{474}e^{13} + \frac{8}{533}\sqrt{30}e^{25}$	$(\frac{1}{123}, \frac{22}{533}, -\frac{77}{1599}, \frac{37}{533}, -\frac{10}{123}, \frac{79}{1599}, \frac{34}{1599}, -\frac{64}{1599})$ $+ \frac{8}{1599}\sqrt{662}e^4 \otimes e_6 + \frac{8}{1599}\sqrt{797}e^2 \otimes e_7$	{12348, 135678, 268, 4578}
83:12	$0, 0, 0, 0, 0, \frac{4}{443}\sqrt{3230}e^{12}, \frac{2}{443}\sqrt{8265}e^{34}, \frac{2}{443}\sqrt{285}e^{13} + \frac{8}{443}\sqrt{190}e^{25}$	$(\frac{125}{443}, -\frac{112}{443}, -\frac{34}{443}, -\frac{31}{443}, \frac{203}{443}, \frac{13}{443}, -\frac{65}{443}, \frac{91}{443})$ $+ \frac{2}{443}\sqrt{17005}e^5 \otimes e_6 + \frac{8}{443}\sqrt{1235}e^1 \otimes e_7$	{12345, 1346, 23678, 3578}
83:12	$0, 0, 0, 0, 0, \frac{8}{443}\sqrt{190}e^{12}, \frac{2}{443}\sqrt{8265}e^{34}, \frac{2}{443}\sqrt{285}e^{13} + \frac{4}{443}\sqrt{3230}e^{25}$	$(\frac{21}{443}, -\frac{112}{443}, -\frac{34}{443}, \frac{177}{443}, \frac{99}{443}, -\frac{91}{443}, \frac{143}{443}, -\frac{13}{443})$ $+ \frac{2}{443}\sqrt{17005}e^5 \otimes e_6 + \frac{8}{443}\sqrt{1235}e^4 \otimes e_8$	{12345, 1346, 23678, 3578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:12	$0, 0, 0, 0, 0, \frac{2}{527}\sqrt{10335}e^{12}, \frac{2}{527}\sqrt{9593}e^{34}, \frac{8}{527}\sqrt{53}e^{13} + \frac{2}{527}\sqrt{2226}e^{25}$	$(\frac{107}{527}, -\frac{100}{527}, -\frac{112}{527}, \frac{113}{527}, \frac{95}{527}, \frac{7}{527}, \frac{1}{527}, -\frac{5}{527})$ $+ \frac{2}{527}\sqrt{12349}e^1 \otimes e_7 + \frac{2}{527}\sqrt{12773}e^4 \otimes e_6$	{123458, 156, 2367, 478}
83:12	$0, 0, 0, 0, 0, \frac{156}{1123}\sqrt{5}e^{12}, \frac{52}{1123}\sqrt{110}e^{34},$ $\frac{104}{1123}\sqrt{10}e^{13} + \frac{52}{1123}\sqrt{95}e^{25}$	$(-\frac{13}{1123}, \frac{260}{1123}, -\frac{143}{1123}, \frac{520}{1123}, -\frac{416}{1123}, \frac{247}{1123}, \frac{377}{1123}, -\frac{156}{1123})$ $+ \frac{26}{1123}\sqrt{1166}e^4 \otimes e_8 + \frac{26}{1123}\sqrt{766}e^2 \otimes e_5$	{128, 1568, 23678, 3578}
83:12	$0, 0, 0, 0, 0, \frac{3}{404}\sqrt{1295}e^{12}, \frac{3}{202}\sqrt{305}e^{34}, \frac{3}{202}\sqrt{285}e^{13} + \frac{3}{404}\sqrt{1295}e^{25}$	$(\frac{47}{808}, -\frac{7}{404}, \frac{31}{404}, -\frac{83}{404}, \frac{123}{808}, \frac{33}{808}, -\frac{13}{101}, \frac{109}{808})$ $+ \frac{3}{101}\sqrt{95}e^5 \otimes e_6 + \frac{3}{404}\sqrt{2130}e^2 \otimes e_7$	{125, 1467, 268, 4578}
83:12	$0, 0, 0, 0, 0, \frac{3}{479}\sqrt{23246}e^{12}, \frac{2}{479}\sqrt{13002}e^{34},$ $\frac{1}{479}\sqrt{43734}e^{13} + \frac{3}{479}\sqrt{1970}e^{25}$	$(-\frac{45}{479}, \frac{317}{479}, \frac{88}{479}, \frac{51}{479}, -\frac{274}{479}, \frac{272}{479}, \frac{139}{479}, \frac{43}{479})$ $+ \frac{48}{479}\sqrt{197}e^2 \otimes e_5$	{12, 1247, 14567, 156, 2346, 2367, 345, 357}
83:12	$0, 0, 0, 0, 0, \frac{4}{499}\sqrt{2586}e^{12}, \frac{2}{499}\sqrt{29739}e^{34},$ $\frac{1}{499}\sqrt{73270}e^{13} + \frac{2}{499}\sqrt{33187}e^{25}$	$(\frac{58}{499}, -\frac{11}{499}, -\frac{128}{499}, \frac{361}{499}, -\frac{59}{499}, \frac{47}{499}, \frac{233}{499}, -\frac{70}{499})$ $+ \frac{2}{499}\sqrt{87062}e^4 \otimes e_8$	{123456, 1268, 134, 158, 2378, 2457, 35678, 467}
83:12	$0, 0, 0, 0, 0, \frac{8}{313}\sqrt{339}e^{12}, \frac{3}{313}\sqrt{226}e^{34}, \frac{2}{313}\sqrt{5763}e^{13} + \frac{1}{313}\sqrt{9266}e^{25}$	$(-\frac{123}{626}, \frac{147}{313}, \frac{259}{626}, -\frac{193}{626}, -\frac{79}{313}, \frac{171}{626}, \frac{33}{313}, \frac{68}{313})$ $+ \frac{1}{313}\sqrt{62602}e^3 \otimes e_4 + \frac{2}{313}\sqrt{15481}e^2 \otimes e_5$	{123, 1356, 246, 45}
83:12	$0, 0, 0, 0, 0, \frac{4}{89}\sqrt{58}e^{12}, \frac{4}{89}\sqrt{66}e^{34}, \frac{8}{89}\sqrt{5}e^{13} + \frac{8}{89}\sqrt{6}e^{25}$	$(-\frac{9}{89}, \frac{14}{89}, \frac{21}{89}, -\frac{23}{89}, -\frac{2}{89}, \frac{5}{89}, -\frac{2}{89}, \frac{12}{89})$ $+ \frac{12}{89}\sqrt{10}e^2 \otimes e_7 + \frac{8}{89}\sqrt{17}e^3 \otimes e_6$	{12348, 1467, 268, 37}
83:12	$0, 0, 0, 0, 0, \frac{2}{115}\sqrt{209}e^{12}, \frac{3}{115}\sqrt{266}e^{34}, \frac{1}{115}\sqrt{1558}e^{13} + \frac{2}{115}\sqrt{209}e^{25}$	$(-\frac{7}{46}, -\frac{8}{115}, \frac{5}{46}, \frac{33}{115}, \frac{3}{115}, -\frac{51}{230}, \frac{91}{230}, -\frac{1}{23})$ $+ \frac{1}{115}\sqrt{3838}e^3 \otimes e_6 + \frac{1}{115}\sqrt{3838}e^4 \otimes e_8$	{12345, 1568, 24567, 3578}
83:12	$0, 0, 0, 0, 0, \frac{2}{637}\sqrt{330}e^{12}, \frac{8}{637}\sqrt{30}e^{34}, \frac{10}{637}\sqrt{11}e^{13} + \frac{5}{637}\sqrt{82}e^{25}$	$(\frac{31}{637}, -\frac{17}{637}, -\frac{29}{637}, \frac{1}{91}, \frac{19}{637}, \frac{2}{91}, -\frac{22}{637}, \frac{2}{637})$ $+ \frac{1}{637}\sqrt{2670}e^2 \otimes e_7 + \frac{2}{637}\sqrt{365}e^4 \otimes e_8 + \frac{3}{637}\sqrt{190}e^5 \otimes e_6$	{1467, 268}
83:12	$0, 0, 0, 0, 0, \frac{2}{499}\sqrt{33187}e^{12}, \frac{2}{499}\sqrt{29739}e^{34},$ $\frac{1}{499}\sqrt{73270}e^{13} + \frac{2}{499}\sqrt{2586}e^{25}$	$(-\frac{144}{499}, -\frac{11}{499}, \frac{276}{499}, -\frac{43}{499}, \frac{143}{499}, -\frac{155}{499}, \frac{233}{499}, \frac{132}{499})$ $+ \frac{2}{499}\sqrt{87062}e^3 \otimes e_6$	{1234, 1237, 14678, 168, 2467, 26, 348, 378}
83:12	$0, 0, 0, 0, 0, \frac{102}{2921}\sqrt{3}e^{12}, \frac{51}{2921}\sqrt{210}e^{34},$ $\frac{34}{2921}\sqrt{43}e^{13} + \frac{34}{2921}\sqrt{349}e^{25}$	$(\frac{119}{2921}, -\frac{493}{2921}, -\frac{85}{2921}, \frac{323}{2921}, \frac{527}{2921}, -\frac{374}{2921}, \frac{238}{2921}, \frac{34}{2921})$ $+ \frac{17}{2921}\sqrt{1374}e^3 \otimes e_6 + \frac{17}{2921}\sqrt{2018}e^4 \otimes e_8 + \frac{34}{2921}\sqrt{483}e^5 \otimes e_7$	{12345, 1568}
83:12	$0, 0, 0, 0, 0, \frac{2}{115}\sqrt{429}e^{12}, \frac{4}{115}\sqrt{143}e^{34}, \frac{3}{115}\sqrt{1430}e^{13} + \frac{2}{115}\sqrt{429}e^{25}$	$(-\frac{18}{115}, \frac{33}{115}, \frac{78}{115}, -\frac{13}{23}, \frac{27}{115}, \frac{3}{23}, \frac{13}{115}, \frac{12}{23})$ $+ \frac{2}{115}\sqrt{6721}e^3 \otimes e_4$	{1236, 124568, 135, 148, 2358, 24, 368, 456}
83:12	$0, 0, 0, 0, 0, \frac{1}{487}\sqrt{2442}e^{12}, \frac{14}{487}\sqrt{814}e^{34},$ $\frac{1}{487}\sqrt{82214}e^{13} + \frac{1}{487}\sqrt{160358}e^{25}$	$(\frac{191}{487}, -\frac{107}{487}, -\frac{8}{487}, -\frac{109}{487}, \frac{290}{487}, \frac{84}{487}, -\frac{117}{487}, \frac{183}{487})$ $+ \frac{20}{487}\sqrt{814}e^5 \otimes e_7$	{123678, 1256, 13458, 147, 2345, 2478, 367, 568}
83:12	$0, 0, 0, 0, 0, \frac{4}{197}\sqrt{710}e^{12}, \frac{2}{197}\sqrt{1846}e^{34}, \frac{1}{197}\sqrt{4899}e^{13} + \frac{1}{197}\sqrt{1207}e^{25}$	$(-\frac{51}{394}, \frac{24}{197}, \frac{5}{394}, \frac{139}{394}, -\frac{47}{197}, -\frac{3}{394}, \frac{72}{197}, -\frac{23}{197})$ $+ \frac{1}{197}\sqrt{10721}e^2 \otimes e_5 + \frac{1}{197}\sqrt{14413}e^4 \otimes e_6$	{1247, 156, 2367, 345}
83:12	$0, 0, 0, 0, 0, \frac{16}{307}\sqrt{106}e^{12}, \frac{16}{307}\sqrt{57}e^{34}, \frac{16}{307}\sqrt{19}e^{13} + \frac{16}{307}\sqrt{30}e^{25}$	$(-\frac{90}{307}, \frac{76}{307}, \frac{114}{307}, -\frac{22}{307}, -\frac{52}{307}, -\frac{14}{307}, \frac{92}{307}, \frac{24}{307})$ $+ \frac{16}{307}\sqrt{155}e^3 \otimes e_6 + \frac{48}{307}\sqrt{13}e^2 \otimes e_5$	{1234, 1237, 2467, 26}
83:12	$0, 0, 0, 0, 0, \frac{10}{79}\sqrt{3}e^{12}, \frac{5}{79}\sqrt{70}e^{34}, \frac{10}{79}e^{13} + \frac{5}{79}\sqrt{74}e^{25}$	$(\frac{25}{158}, -\frac{5}{79}, \frac{35}{158}, -\frac{65}{158}, \frac{35}{79}, \frac{15}{158}, -\frac{15}{79}, \frac{30}{79})$ $+ \frac{10}{79}\sqrt{43}e^5 \otimes e_7 + \frac{5}{79}\sqrt{102}e^3 \otimes e_4$	{124678, 137, 2378, 467}
83:12	$0, 0, 0, 0, 0, \frac{8}{143}\sqrt{21}e^{12}, \frac{36}{143}e^{34}, \frac{4}{143}\sqrt{87}e^{13} + \frac{8}{143}\sqrt{21}e^{25}$	$(\frac{17}{143}, -\frac{8}{143}, -\frac{4}{143}, -\frac{16}{143}, \frac{21}{143}, \frac{9}{143}, -\frac{20}{143}, \frac{1}{11})$ $+ \frac{2}{143}\sqrt{138}e^3 \otimes e_4 + \frac{2}{143}\sqrt{534}e^2 \otimes e_7 + \frac{4}{143}\sqrt{93}e^5 \otimes e_6$	{125, 268}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:12	$0, 0, 0, 0, 0, \frac{12}{41}\sqrt{7}e^{12}, \frac{2}{41}\sqrt{105}e^{34}, \frac{14}{41}\sqrt{3}e^{13} + \frac{12}{41}\sqrt{7}e^{25}$	$(\frac{3}{41}, -\frac{16}{41}, \frac{10}{41}, \frac{3}{41}, \frac{29}{41}, -\frac{13}{41}, \frac{13}{41}, \frac{13}{41})$ $+ \frac{6}{41}\sqrt{77}e^5 \otimes e_6$	{12457, 125, 1467, 16, 24678, 268, 4578, 58}
83:12	$0, 0, 0, 0, 0, \frac{2}{527}\sqrt{2226}e^{12}, \frac{2}{527}\sqrt{9593}e^{34}, \frac{8}{527}\sqrt{53}e^{13} + \frac{2}{527}\sqrt{10335}e^{25}$	$(\frac{111}{527}, -\frac{100}{527}, -\frac{112}{527}, \frac{105}{527}, \frac{99}{527}, \frac{11}{527}, -\frac{7}{527}, -\frac{1}{527})$ $+ \frac{2}{527}\sqrt{12349}e^4 \otimes e_8 + \frac{2}{527}\sqrt{12773}e^5 \otimes e_7$	{123678, 147, 2345, 568}
83:12	$0, 0, 0, 0, 0, \frac{2}{499}\sqrt{33187}e^{12}, \frac{2}{499}\sqrt{29739}e^{34},$ $\frac{1}{499}\sqrt{73270}e^{13} + \frac{4}{499}\sqrt{2586}e^{25}$	$(\frac{260}{499}, -\frac{11}{499}, -\frac{128}{499}, -\frac{43}{499}, \frac{143}{499}, \frac{249}{499}, -\frac{171}{499}, \frac{132}{499})$ $+ \frac{2}{499}\sqrt{87062}e^1 \otimes e_7$	{1234, 1258, 13456, 168, 235678, 2467, 378, 457}
83:12	$0, 0, 0, 0, 0, \frac{3}{272}\sqrt{1533}e^{12}, \frac{3}{272}\sqrt{210}e^{34}, \frac{63}{272}\sqrt{2}e^{13} + \frac{3}{272}\sqrt{1533}e^{25}$	$(-\frac{43}{544}, -\frac{37}{272}, \frac{115}{272}, -\frac{37}{136}, \frac{261}{544}, -\frac{117}{544}, \frac{41}{272}, \frac{11}{32})$ $+ \frac{3}{272}\sqrt{5502}e^5 \otimes e_6 + \frac{63}{272}\sqrt{10}e^3 \otimes e_4$	{12357, 1367, 23678, 3578}
83:12	$0, 0, 0, 0, 0, \frac{1}{19}\sqrt{51}e^{12}, \frac{1}{19}\sqrt{39}e^{34}, \frac{4}{19}\sqrt{6}e^{13} + \frac{6}{19}e^{25}$	$(\frac{11}{57}, \frac{4}{57}, \frac{11}{114}, -\frac{43}{114}, \frac{25}{114}, \frac{5}{19}, -\frac{16}{57}, \frac{11}{38})$ $+ \frac{1}{19}\sqrt{129}e^3 \otimes e_4 + \frac{1}{19}\sqrt{174}e^1 \otimes e_7$	{235678, 2467, 378, 457}
83:12	$0, 0, 0, 0, 0, \frac{8}{89}\sqrt{6}e^{12}, \frac{4}{89}\sqrt{66}e^{34}, \frac{8}{89}\sqrt{5}e^{13} + \frac{4}{89}\sqrt{58}e^{25}$	$(\frac{8}{89}, \frac{14}{89}, -\frac{13}{89}, \frac{11}{89}, -\frac{19}{89}, \frac{22}{89}, -\frac{2}{89}, -\frac{5}{89})$ $+ \frac{12}{89}\sqrt{10}e^2 \otimes e_7 + \frac{8}{89}\sqrt{17}e^4 \otimes e_8$	{135678, 1467, 23456, 268}
83:12	$0, 0, 0, 0, 0, \frac{1}{487}\sqrt{160358}e^{12}, \frac{14}{487}\sqrt{814}e^{34},$ $\frac{1}{487}\sqrt{82214}e^{13} + \frac{1}{487}\sqrt{2442}e^{25}$	$(-\frac{9}{487}, -\frac{107}{487}, -\frac{8}{487}, \frac{291}{487}, \frac{90}{487}, -\frac{116}{487}, \frac{283}{487}, -\frac{17}{487})$ $+ \frac{20}{487}\sqrt{814}e^4 \otimes e_6$	{123458, 1247, 13678, 156, 2367, 2568, 345, 478}
83:12	$0, 0, 0, 0, 0, \frac{4}{1167}\sqrt{9686}e^{12}, \frac{80}{1167}\sqrt{58}e^{34},$ $\frac{4}{1167}\sqrt{1914}e^{13} + \frac{8}{1167}\sqrt{2581}e^{25}$	$(\frac{13}{1167}, -\frac{66}{389}, \frac{93}{389}, -\frac{253}{1167}, \frac{490}{1167}, -\frac{185}{1167}, \frac{26}{1167}, \frac{292}{1167})$ $+ \frac{4}{1167}\sqrt{28942}e^3 \otimes e_6 + \frac{4}{1167}\sqrt{30218}e^5 \otimes e_7$	{12378, 1467, 24678, 37}
83:12	$0, 0, 0, 0, 0, \frac{2}{447}\sqrt{4189}e^{12}, \frac{2}{447}\sqrt{3599}e^{34}, \frac{3}{149}\sqrt{118}e^{13} + \frac{2}{447}\sqrt{1770}e^{25}$	$(\frac{22}{447}, -\frac{13}{149}, \frac{14}{149}, -\frac{79}{447}, \frac{103}{447}, -\frac{17}{447}, -\frac{37}{447}, \frac{64}{447})$ $+ \frac{2}{447}\sqrt{5959}e^1 \otimes e_7 + \frac{2}{447}\sqrt{5959}e^3 \otimes e_6$	{1234, 168, 2467, 378}
83:12	$0, 0, 0, 0, 0, \frac{1}{10}\sqrt{6}e^{12}, \frac{3}{10}e^{34}, \frac{1}{10}\sqrt{3}e^{13} + \frac{1}{10}\sqrt{6}e^{25}$	$(\frac{1}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $+ \frac{1}{10}\sqrt{10}e^5 \otimes e_6 + \frac{1}{10}\sqrt{13}e^1 \otimes e_7 - \frac{1}{10}\sqrt{13}e^4 \otimes e_8$	{12345, 1346, 23678, 3578}
83:12	$0, 0, 0, 0, 0, \frac{1}{10}\sqrt{6}e^{12}, \frac{3}{10}e^{34}, \frac{1}{10}\sqrt{3}e^{13} + \frac{1}{10}\sqrt{6}e^{25}$	$(\frac{1}{5}, -\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $+ \frac{1}{10}\sqrt{10}e^5 \otimes e_6 + \frac{1}{10}\sqrt{13}e^1 \otimes e_7 + \frac{1}{10}\sqrt{13}e^4 \otimes e_8$	{12345, 1346, 23678, 3578}
83:13	$0, 0, 0, 0, 0, \frac{1}{80}\sqrt{4345}e^{12}, \frac{1}{40}\sqrt{474}e^{14} + \frac{1}{40}\sqrt{237}e^{23},$ $\frac{1}{80}\sqrt{4345}e^{13} + \frac{1}{40}\sqrt{474}e^{25}$	$(\frac{37}{80}, \frac{7}{160}, -\frac{17}{160}, -\frac{21}{40}, \frac{5}{16}, \frac{81}{160}, -\frac{1}{16}, \frac{57}{160})$ $+ \frac{1}{80}\sqrt{10586}e^1 \otimes e_4$	{1258, 1356, 246, 348}
83:13	$0, 0, 0, 0, 0, \frac{11}{293}\sqrt{214}e^{12}, \frac{66}{293}\sqrt{3}e^{14} + \frac{44}{293}\sqrt{5}e^{23},$ $\frac{44}{293}\sqrt{5}e^{13} + \frac{66}{293}\sqrt{3}e^{25}$	$(\frac{66}{293}, \frac{66}{293}, -\frac{55}{293}, -\frac{55}{293}, -\frac{55}{293}, \frac{132}{293}, \frac{11}{293}, \frac{11}{293})$ $+ \frac{22}{293}\sqrt{67}e^1 \otimes e_4 + \frac{22}{293}\sqrt{67}e^2 \otimes e_5$	{123, 45}
83:13	$0, 0, 0, 0, 0, \frac{5}{61}\sqrt{6}e^{12}, \frac{2}{61}\sqrt{65}e^{14} + \frac{1}{61}\sqrt{10}e^{23},$ $\frac{1}{61}\sqrt{10}e^{13} + \frac{2}{61}\sqrt{65}e^{25}$	$(-\frac{5}{61}, -\frac{5}{61}, \frac{7}{61}, \frac{7}{61}, \frac{7}{61}, -\frac{10}{61}, \frac{2}{61}, \frac{2}{61})$ $+ \frac{2}{61}\sqrt{70}e^4 \otimes e_8 + \frac{2}{61}\sqrt{70}e^5 \otimes e_7$	{123678, 12456}
83:13	$0, 0, 0, 0, 0, \frac{1}{16}\sqrt{33}e^{12}, \frac{1}{8}\sqrt{6}e^{14} + \frac{1}{8}\sqrt{3}e^{23},$ $\frac{1}{16}\sqrt{33}e^{13} + \frac{1}{8}\sqrt{6}e^{25}$	$(\frac{1}{16}, -\frac{5}{32}, \frac{3}{32}, -\frac{1}{8}, \frac{5}{16}, -\frac{3}{32}, -\frac{1}{16}, \frac{5}{32})$ $+ \frac{1}{16}\sqrt{42}e^1 \otimes e_4 + \frac{1}{4}\sqrt{3}e^3 \otimes e_6$	{123, 168}
83:13	$0, 0, 0, 0, 0, \frac{6}{83}\sqrt{55}e^{12}, \frac{2}{83}\sqrt{935}e^{14} + \frac{6}{83}\sqrt{55}e^{23},$ $\frac{1}{83}\sqrt{1870}e^{13} + \frac{2}{83}\sqrt{935}e^{25}$	$(-\frac{20}{83}, \frac{15}{83}, \frac{14}{83}, \frac{49}{83}, -\frac{21}{83}, -\frac{5}{83}, \frac{29}{83}, -\frac{6}{83})$ $+ \frac{10}{83}\sqrt{77}e^4 \otimes e_8$	{134, 1578, 3568, 467}
83:13	$0, 0, 0, 0, 0, \frac{2}{5}\sqrt{3}e^{12}, \frac{1}{5}\sqrt{10}e^{14} + \frac{2}{5}\sqrt{3}e^{23},$ $\frac{2}{5}\sqrt{3}e^{13} + \frac{1}{5}\sqrt{10}e^{25}$	$(-\frac{1}{5}, -\frac{1}{5}, \frac{2}{5}, \frac{2}{5}, \frac{2}{5}, -\frac{2}{5}, \frac{1}{5}, \frac{1}{5})$ $+ \frac{1}{5}\sqrt{34}e^3 \otimes e_6$	{123, 168, 378}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:13	$0, 0, 0, 0, 0, \frac{29}{2369}\sqrt{78}e^{12}, \frac{58}{2369}\sqrt{451}e^{14} + \frac{29}{2369}\sqrt{334}e^{23},$ $\frac{29}{2369}\sqrt{930}e^{13} + \frac{58}{2369}\sqrt{309}e^{25}$	$(-\frac{145}{2369}, -\frac{493}{2369}, \frac{551}{2369}, \frac{203}{2369}, \frac{899}{2369}, -\frac{638}{2369}, \frac{58}{2369}, \frac{406}{2369})$ $+ \frac{116}{2369}\sqrt{158}e^5 \otimes e_7 + \frac{58}{2369}\sqrt{426}e^4 \otimes e_6$	{2478, 568}
83:13	$0, 0, 0, 0, 0, \frac{1}{249}\sqrt{37522}e^{12}, \frac{2}{249}\sqrt{10023}e^{14} + \frac{1}{249}\sqrt{14906}e^{23},$ $\frac{1}{249}\sqrt{14906}e^{13} + \frac{2}{249}\sqrt{1285}e^{25}$	$(-\frac{77}{249}, -\frac{3}{83}, \frac{103}{249}, \frac{57}{83}, \frac{35}{249}, -\frac{86}{249}, \frac{94}{249}, \frac{26}{249})$ $+ \frac{2}{249}\sqrt{26214}e^4 \otimes e_6$	{1245, 167, 268, 4578}
83:13	$0, 0, 0, 0, 0, \frac{4}{79}\sqrt{30}e^{12}, \frac{8}{79}\sqrt{30}e^{14} + \frac{8}{79}\sqrt{15}e^{23},$ $\frac{4}{79}\sqrt{30}e^{13} + \frac{8}{79}\sqrt{30}e^{25}$	$(\frac{20}{79}, -\frac{14}{79}, \frac{6}{79}, -\frac{28}{79}, \frac{40}{79}, \frac{6}{79}, -\frac{8}{79}, \frac{26}{79})$ $+ \frac{28}{79}\sqrt{6}e^5 \otimes e_7 + \frac{4}{79}\sqrt{114}e^1 \otimes e_4$	{2478, 3467}
83:13	$0, 0, 0, 0, 0, \frac{25}{371}\sqrt{70}e^{12}, \frac{10}{371}\sqrt{105}e^{14} + \frac{10}{53}\sqrt{3}e^{23},$ $\frac{10}{371}\sqrt{154}e^{13} + \frac{20}{371}\sqrt{21}e^{25}$	$(\frac{10}{53}, -\frac{10}{53}, \frac{5}{53}, -\frac{15}{53}, \frac{25}{53}, 0, -\frac{5}{53}, \frac{15}{53})$ $+ \frac{10}{371}\sqrt{602}e^1 \otimes e_4 + \frac{90}{371}\sqrt{7}e^5 \otimes e_6$	{136, 3458}
83:14	$0, 0, 0, 0, 0, \frac{84}{383}\sqrt{5}e^{12}, \frac{28}{383}\sqrt{35}e^{14} + \frac{84}{383}\sqrt{5}e^{23},$ $\frac{28}{383}\sqrt{15}e^{13} + \frac{56}{383}\sqrt{15}e^{45}$	$(\frac{7}{383}, \frac{140}{383}, -\frac{63}{383}, \frac{70}{383}, -\frac{126}{383}, \frac{147}{383}, \frac{77}{383}, -\frac{56}{383})$ $+ \frac{14}{383}\sqrt{526}e^2 \otimes e_8 + \frac{42}{383}\sqrt{14}e^4 \otimes e_5$	{1568, 3578}
83:14	$0, 0, 0, 0, 0, \frac{2}{247}\sqrt{1842}e^{12}, \frac{1}{247}\sqrt{59558}e^{14} + \frac{2}{247}\sqrt{1842}e^{23},$ $\frac{2}{247}\sqrt{614}e^{13} + \frac{4}{247}\sqrt{614}e^{45}$	$(-\frac{36}{247}, \frac{69}{247}, \frac{61}{247}, \frac{166}{247}, -\frac{141}{247}, \frac{33}{247}, \frac{10}{19}, \frac{25}{247})$ $+ \frac{2}{247}\sqrt{31007}e^4 \otimes e_5$	{1246, 157, 2347, 356}
83:14	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{66}e^{12}, \frac{11}{29}\sqrt{2}e^{14} + \frac{1}{29}\sqrt{462}e^{23},$ $\frac{1}{29}\sqrt{286}e^{13} + \frac{2}{29}\sqrt{110}e^{45}$	$(\frac{15}{58}, -\frac{4}{29}, \frac{1}{29}, -\frac{21}{58}, \frac{19}{29}, \frac{7}{58}, -\frac{3}{29}, \frac{17}{58})$ $+ \frac{4}{29}\sqrt{66}e^5 \otimes e_7$	{1267, 145, 2478, 568}
83:14	$0, 0, 0, 0, 0, \frac{72}{263}\sqrt{6}e^{12}, \frac{90}{263}\sqrt{3}e^{14} + \frac{72}{263}\sqrt{6}e^{23},$ $\frac{27}{263}\sqrt{38}e^{13} + \frac{18}{263}\sqrt{21}e^{45}$	$(-\frac{22}{263}, -\frac{79}{263}, \frac{142}{263}, \frac{85}{263}, \frac{35}{263}, -\frac{101}{263}, \frac{63}{263}, \frac{120}{263})$ $+ \frac{18}{263}\sqrt{321}e^3 \otimes e_6$	{123, 1568, 267, 3578}
83:14	$0, 0, 0, 0, 0, \frac{7}{281}\sqrt{190}e^{12}, \frac{14}{281}\sqrt{14}e^{14} + \frac{7}{281}\sqrt{78}e^{23},$ $\frac{7}{281}\sqrt{30}e^{13} + \frac{42}{281}\sqrt{6}e^{45}$	$(-\frac{21}{281}, \frac{35}{281}, \frac{7}{281}, \frac{63}{281}, -\frac{77}{281}, \frac{14}{281}, \frac{42}{281}, -\frac{14}{281})$ $+ \frac{14}{281}\sqrt{69}e^2 \otimes e_8 + \frac{28}{281}\sqrt{14}e^4 \otimes e_6$	{12457, 48}
83:14	$0, 0, 0, 0, 0, \frac{21}{89}\sqrt{6}e^{12}, \frac{14}{89}\sqrt{14}e^{14} + \frac{21}{89}\sqrt{6}e^{23},$ $\frac{21}{89}\sqrt{2}e^{13} + \frac{42}{89}\sqrt{2}e^{45}$	$(\frac{7}{89}, \frac{35}{89}, -\frac{21}{89}, \frac{7}{89}, -\frac{21}{89}, \frac{42}{89}, \frac{14}{89}, -\frac{14}{89})$ $+ \frac{14}{89}\sqrt{37}e^2 \otimes e_8$	{123, 1568, 267, 3578}
83:14	$0, 0, 0, 0, 0, \frac{31}{2249}\sqrt{330}e^{12}, \frac{248}{2249}e^{14} + \frac{31}{2249}\sqrt{1414}e^{23},$ $\frac{31}{2249}\sqrt{138}e^{13} + \frac{186}{2249}\sqrt{26}e^{45}$	$(\frac{155}{2249}, -\frac{589}{2249}, \frac{527}{2249}, -\frac{217}{2249}, \frac{899}{2249}, -\frac{434}{2249}, -\frac{62}{2249}, \frac{682}{2249})$ $+ \frac{1302}{2249}e^3 \otimes e_6 + \frac{62}{2249}\sqrt{542}e^5 \otimes e_7$	{1456, 24678}
83:14	$0, 0, 0, 0, 0, \frac{63}{857}\sqrt{6}e^{12}, \frac{42}{857}\sqrt{14}e^{14} + \frac{63}{857}\sqrt{6}e^{23},$ $\frac{7}{857}\sqrt{274}e^{13} + \frac{14}{857}\sqrt{106}e^{45}$	$(-\frac{49}{857}, \frac{35}{857}, \frac{35}{857}, \frac{119}{857}, -\frac{133}{857}, -\frac{14}{857}, \frac{70}{857}, -\frac{14}{857})$ $+ \frac{14}{857}\sqrt{221}e^2 \otimes e_8 - \frac{28}{857}\sqrt{42}e^3 \otimes e_6$	{123, 1568, 267, 3578}
83:14	$0, 0, 0, 0, 0, \frac{63}{857}\sqrt{6}e^{12}, \frac{42}{857}\sqrt{14}e^{14} + \frac{63}{857}\sqrt{6}e^{23},$ $\frac{7}{857}\sqrt{274}e^{13} + \frac{14}{857}\sqrt{106}e^{45}$	$(-\frac{49}{857}, \frac{35}{857}, \frac{35}{857}, \frac{119}{857}, -\frac{133}{857}, -\frac{14}{857}, \frac{70}{857}, -\frac{14}{857})$ $+ \frac{14}{857}\sqrt{221}e^2 \otimes e_8 + \frac{28}{857}\sqrt{42}e^3 \otimes e_6$	{123, 1568, 267, 3578}
83:14	$0, 0, 0, 0, 0, \frac{7}{3161}\sqrt{2454}e^{12}, \frac{14}{3161}\sqrt{462}e^{14} + \frac{7}{3161}\sqrt{1110}e^{23},$ $\frac{7}{3161}\sqrt{302}e^{13} + \frac{14}{3161}\sqrt{706}e^{45}$	$(\frac{119}{3161}, \frac{35}{3161}, -\frac{133}{3161}, -\frac{217}{3161}, \frac{7}{3161}, \frac{154}{3161}, -\frac{98}{3161}, -\frac{14}{3161})$ $+ \frac{14}{3161}\sqrt{773}e^2 \otimes e_8 + \frac{56}{3161}\sqrt{42}e^5 \otimes e_6$	{12457, 134678}
83:14	$0, 0, 0, 0, 0, \frac{1}{128}\sqrt{11194}e^{12}, \frac{1}{256}\sqrt{19493}e^{14} + \frac{3}{256}\sqrt{386}e^{23},$ $\frac{1}{256}\sqrt{19493}e^{13} + \frac{1}{256}\sqrt{45934}e^{45}$	$(\frac{27}{256}, -\frac{83}{256}, \frac{167}{512}, -\frac{53}{512}, \frac{137}{256}, -\frac{7}{32}, \frac{1}{512}, \frac{221}{512})$ $+ \frac{1}{128}\sqrt{20651}e^5 \otimes e_6$	{12358, 12457, 134678, 16}
83:14	$0, 0, 0, 0, 0, \frac{7}{281}\sqrt{78}e^{12}, \frac{14}{281}\sqrt{14}e^{14} + \frac{7}{281}\sqrt{190}e^{23},$ $\frac{7}{281}\sqrt{30}e^{13} + \frac{42}{281}\sqrt{6}e^{45}$	$(\frac{35}{281}, \frac{35}{281}, -\frac{49}{281}, -\frac{49}{281}, \frac{35}{281}, \frac{70}{281}, -\frac{14}{281}, -\frac{14}{281})$ $+ \frac{14}{281}\sqrt{69}e^2 \otimes e_8 + \frac{28}{281}\sqrt{14}e^5 \otimes e_7$	{134678, 23456}
83:14	$0, 0, 0, 0, 0, \frac{19}{544}\sqrt{129}e^{12}, \frac{95}{544}\sqrt{2}e^{14} + \frac{19}{544}\sqrt{129}e^{23},$ $\frac{19}{272}\sqrt{34}e^{13} + \frac{19}{544}\sqrt{14}e^{45}$	$(-\frac{171}{1088}, -\frac{57}{544}, \frac{437}{1088}, \frac{247}{544}, -\frac{57}{272}, -\frac{285}{1088}, \frac{19}{64}, \frac{133}{544})$ $+ \frac{19}{544}\sqrt{386}e^4 \otimes e_5 + \frac{57}{544}\sqrt{62}e^3 \otimes e_6$	{1234, 2467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:14	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{462}e^{12}, \frac{11}{29}\sqrt{2}e^{14} + \frac{1}{29}\sqrt{66}e^{23},$ $\frac{1}{29}\sqrt{286}e^{13} + \frac{2}{29}\sqrt{110}e^{45}$	$(-\frac{9}{58}, -\frac{4}{29}, \frac{13}{29}, \frac{27}{58}, -\frac{5}{29}, -\frac{17}{58}, \frac{9}{29}, \frac{17}{58})$ $+ \frac{4}{29}\sqrt{66}e^4 \otimes e_6$	{1245, 167, 2568, 478}
83:15	$0, 0, 0, 0, 0, \frac{1}{4}\sqrt{6}e^{12}, \frac{1}{2}e^{13} + \frac{1}{2}\sqrt{2}e^{24}, \frac{1}{2}\sqrt{2}e^{15} + \frac{1}{4}\sqrt{6}e^{34}$	$(-\frac{1}{4}, 0, \frac{1}{4}, 0, \frac{1}{2}, -\frac{1}{4}, 0, \frac{1}{4})$ $+ \frac{1}{4}\sqrt{14}e^5 \otimes e_7$	{12678, 135, 237, 568}
83:15	$0, 0, 0, 0, 0, \frac{6}{35}\sqrt{11}e^{12}, \frac{2}{35}\sqrt{110}e^{13} + \frac{6}{35}\sqrt{11}e^{24},$ $\frac{6}{35}\sqrt{11}e^{15} + \frac{6}{35}\sqrt{11}e^{34}$	$(-\frac{2}{35}, \frac{17}{35}, \frac{1}{5}, -\frac{12}{35}, -\frac{3}{35}, \frac{3}{7}, \frac{1}{7}, -\frac{1}{7})$ $+ \frac{2}{35}\sqrt{319}e^2 \otimes e_8$	{2346, 267, 358, 4578}
83:15	$0, 0, 0, 0, 0, \frac{1}{10}\sqrt{11}e^{12}, \frac{1}{10}\sqrt{10}e^{13} + \frac{1}{10}\sqrt{6}e^{24},$ $\frac{1}{10}\sqrt{11}e^{15} + \frac{1}{10}\sqrt{6}e^{34}$	$(-\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $- \frac{1}{10}\sqrt{15}e^5 \otimes e_6 + \frac{1}{10}\sqrt{21}e^2 \otimes e_8$	{2346, 267, 358, 4578}
83:15	$0, 0, 0, 0, 0, \frac{1}{10}\sqrt{11}e^{12}, \frac{1}{10}\sqrt{10}e^{13} + \frac{1}{10}\sqrt{6}e^{24},$ $\frac{1}{10}\sqrt{11}e^{15} + \frac{1}{10}\sqrt{6}e^{34}$	$(-\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $+ \frac{1}{10}\sqrt{15}e^5 \otimes e_6 + \frac{1}{10}\sqrt{21}e^2 \otimes e_8$	{2346, 267, 358, 4578}
83:15	$0, 0, 0, 0, 0, \frac{1}{74}\sqrt{3869}e^{12}, \frac{1}{74}\sqrt{3431}e^{13} + \frac{1}{74}\sqrt{2117}e^{24},$ $\frac{1}{74}\sqrt{2117}e^{15} + \frac{1}{37}\sqrt{219}e^{34}$	$(\frac{77}{148}, \frac{1}{148}, -\frac{17}{74}, \frac{21}{74}, -\frac{69}{148}, \frac{39}{74}, \frac{43}{148}, \frac{2}{37})$ $+ \frac{1}{74}\sqrt{8979}e^1 \otimes e_5$	{1346, 167, 234567, 256}
83:15	$0, 0, 0, 0, 0, \frac{1}{2}\sqrt{2}e^{12}, \frac{1}{2}e^{13} + \frac{1}{4}\sqrt{6}e^{24}, \frac{1}{4}\sqrt{6}e^{15} + \frac{1}{2}\sqrt{2}e^{34}$	$(-\frac{1}{4}, 0, \frac{1}{4}, 0, \frac{1}{2}, -\frac{1}{4}, 0, \frac{1}{4})$ $+ \frac{1}{4}\sqrt{14}e^3 \otimes e_6$	{12358, 167, 256, 378}
83:15	$0, 0, 0, 0, 0, \frac{2}{329}\sqrt{57}e^{12}, \frac{2}{329}\sqrt{47}e^{13} + \frac{1}{329}\sqrt{130}e^{24},$ $\frac{4}{329}\sqrt{2}e^{15} + \frac{2}{329}\sqrt{57}e^{34}$	$(-\frac{9}{329}, \frac{3}{329}, \frac{1}{47}, -\frac{5}{329}, \frac{11}{329}, -\frac{6}{329}, -\frac{2}{329}, \frac{2}{329})$ $+ \frac{1}{329}\sqrt{310}e^2 \otimes e_8 + \frac{1}{47}\sqrt{6}e^4 \otimes e_6$	{267, 4578}
83:15	$0, 0, 0, 0, 0, \frac{6}{77}\sqrt{2}e^{12}, \frac{1}{77}\sqrt{46}e^{13} + \frac{3}{77}\sqrt{6}e^{24},$ $\frac{3}{77}\sqrt{6}e^{15} + \frac{2}{77}\sqrt{13}e^{34}$	$(\frac{2}{77}, -\frac{5}{77}, -\frac{2}{77}, \frac{5}{77}, \frac{1}{77}, -\frac{3}{77}, 0, \frac{3}{77})$ $+ \frac{1}{77}\sqrt{86}e^3 \otimes e_6 + \frac{2}{77}\sqrt{15}e^1 \otimes e_5$	{167, 256}
83:15	$0, 0, 0, 0, 0, \frac{10}{61}\sqrt{22}e^{12}, \frac{2}{61}\sqrt{286}e^{13} + \frac{8}{61}\sqrt{11}e^{24},$ $\frac{6}{61}\sqrt{22}e^{15} + \frac{10}{61}\sqrt{22}e^{34}$	$(\frac{7}{61}, -\frac{23}{61}, -\frac{2}{61}, \frac{28}{61}, \frac{19}{61}, -\frac{16}{61}, \frac{5}{61}, \frac{26}{61})$ $+ \frac{2}{61}\sqrt{1122}e^4 \otimes e_6$	{12458, 16, 2567, 478}
83:15	$0, 0, 0, 0, 0, \frac{1}{7}\sqrt{5}e^{12}, \frac{2}{7}e^{13} + \frac{4}{7}e^{24}, \frac{2}{7}\sqrt{3}e^{15} + \frac{1}{7}\sqrt{5}e^{34}$	$(-\frac{1}{7}, -\frac{1}{7}, \frac{1}{7}, \frac{1}{7}, \frac{3}{7}, -\frac{2}{7}, 0, \frac{2}{7})$ $+ \frac{2}{7}\sqrt{3}e^4 \otimes e_6 + \frac{5}{7}e^5 \otimes e_7$	{12678, 568}
83:15	$0, 0, 0, 0, 0, \frac{2}{77}\sqrt{434}e^{12}, \frac{2}{77}\sqrt{14}e^{13} + \frac{4}{77}\sqrt{7}e^{24},$ $\frac{2}{77}\sqrt{210}e^{15} + \frac{2}{11}\sqrt{6}e^{34}$	$(\frac{3}{11}, -\frac{3}{11}, -\frac{2}{11}, \frac{4}{11}, -\frac{1}{11}, 0, \frac{1}{11}, \frac{2}{11})$ $+ \frac{2}{77}\sqrt{546}e^4 \otimes e_6 + \frac{4}{77}\sqrt{105}e^1 \otimes e_5$	{167, 256}
83:15	$0, 0, 0, 0, 0, \frac{2}{307}\sqrt{14018}e^{12}, \frac{4}{307}\sqrt{1630}e^{13} + \frac{2}{307}\sqrt{489}e^{24},$ $\frac{2}{307}\sqrt{14018}e^{15} + \frac{2}{307}\sqrt{489}e^{34}$	$(-\frac{74}{307}, -\frac{31}{307}, \frac{95}{307}, \frac{52}{307}, \frac{221}{307}, -\frac{105}{307}, \frac{21}{307}, \frac{147}{307})$ $+ \frac{2}{307}\sqrt{40587}e^5 \otimes e_6$	{2346, 267, 358, 4578}
83:15	$0, 0, 0, 0, 0, \frac{1}{21}\sqrt{114}e^{12}, \frac{2}{21}\sqrt{6}e^{13} + \frac{1}{21}\sqrt{30}e^{24},$ $\frac{1}{21}\sqrt{30}e^{15} + \frac{2}{7}\sqrt{2}e^{34}$	$(\frac{1}{7}, \frac{2}{7}, 0, -\frac{1}{7}, -\frac{2}{7}, \frac{3}{7}, \frac{1}{7}, -\frac{1}{7})$ $+ \frac{1}{7}\sqrt{14}e^1 \otimes e_5 + \frac{2}{21}\sqrt{51}e^2 \otimes e_8$	{358, 4578}
83:16	$0, 0, 0, 0, 0, \frac{5}{64}\sqrt{38}e^{13} + \frac{5}{64}\sqrt{51}e^{24}, -\frac{5}{64}\sqrt{38}e^{12} + \frac{5}{64}\sqrt{51}e^{34},$ $\frac{5}{32}\sqrt{17}e^{15}$	$(\frac{13}{64}, \frac{5}{128}, \frac{5}{128}, \frac{13}{64}, -\frac{25}{64}, \frac{31}{128}, \frac{31}{128}, -\frac{3}{16})$ $+ \frac{5}{64}\sqrt{110}e^4 \otimes e_8$	{123678, 12457, 18, 234, 2568, 467, 123678, 12457, 18, 234, 2568, 467}
83:16	$0, 0, 0, 0, 0, \frac{5}{64}\sqrt{38}e^{13} + \frac{5}{64}\sqrt{51}e^{24}, \frac{5}{64}\sqrt{38}e^{12} + \frac{5}{64}\sqrt{51}e^{34},$ $\frac{5}{32}\sqrt{17}e^{15}$	$(\frac{13}{64}, \frac{5}{128}, \frac{5}{128}, \frac{13}{64}, -\frac{25}{64}, \frac{31}{128}, \frac{31}{128}, -\frac{3}{16})$ $+ \frac{5}{64}\sqrt{110}e^4 \otimes e_8$	{123678, 12457, 18, 234, 2568, 467, 123678, 12457, 18, 234, 2568, 467}
83:16	$0, 0, 0, 0, 0, \frac{1}{689}\sqrt{143}e^{13} + \frac{1}{689}\sqrt{547}e^{24}, -\frac{9}{689}\sqrt{5}e^{12} + \frac{1}{689}\sqrt{285}e^{34},$ $\frac{1}{689}\sqrt{642}e^{15}$	$(\frac{11}{689}, -\frac{1}{53}, -\frac{1}{53}, \frac{11}{689}, -\frac{2}{689}, -\frac{2}{689}, -\frac{2}{689}, \frac{10}{689})$ $+ \frac{2}{689}\sqrt{131}e^5 \otimes e_6 + \frac{3}{689}\sqrt{82}e^4 \otimes e_8$	{123678, 12457, 3578, 467, 123678, 12457, 3578, 467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:16	$0, 0, 0, 0, 0, \frac{1}{689}\sqrt{143}e^{13} + \frac{1}{689}\sqrt{547}e^{24}, \frac{9}{689}\sqrt{5}e^{12} + \frac{1}{689}\sqrt{285}e^{34},$ $\frac{2}{689}\sqrt{642}e^{15}$	$(\frac{11}{689}, -\frac{1}{53}, -\frac{1}{53}, \frac{11}{689}, -\frac{1}{689}, -\frac{2}{689}, -\frac{2}{689}, \frac{10}{689})$ $+ \frac{2}{689}\sqrt{131}e^5 \otimes e_6 + \frac{3}{689}\sqrt{82}e^4 \otimes e_8$	{123678, 12457, 3578, 467, 123678, 12457, 3578, 467}
83:16	$0, 0, 0, 0, 0, \frac{11}{29}\sqrt{2}e^{13} + \frac{1}{29}\sqrt{462}e^{24}, -\frac{1}{29}\sqrt{286}e^{12} + \frac{1}{29}\sqrt{66}e^{34},$ $\frac{2}{29}\sqrt{110}e^{15}$	$(-\frac{4}{29}, \frac{1}{29}, \frac{1}{29}, -\frac{4}{29}, \frac{19}{29}, -\frac{3}{29}, -\frac{3}{29}, \frac{15}{29})$ $+ \frac{4}{29}\sqrt{66}e^5 \otimes e_6$	{123457, 12678, 135, 1468, 236, 2458, 3467, 578, 123457, 12678, 135, 1468, 236, 2458, 3467, 578}
83:16	$0, 0, 0, 0, 0, \frac{11}{29}\sqrt{2}e^{13} + \frac{1}{29}\sqrt{462}e^{24}, \frac{1}{29}\sqrt{286}e^{12} + \frac{1}{29}\sqrt{66}e^{34},$ $\frac{2}{29}\sqrt{110}e^{15}$	$(-\frac{4}{29}, \frac{1}{29}, \frac{1}{29}, -\frac{4}{29}, \frac{19}{29}, -\frac{3}{29}, -\frac{3}{29}, \frac{15}{29})$ $+ \frac{4}{29}\sqrt{66}e^5 \otimes e_6$	{123457, 12678, 135, 1468, 236, 2458, 3467, 578, 123457, 12678, 135, 1468, 236, 2458, 3467, 578}
83:16	$0, 0, 0, 0, 0, \frac{1}{20}\sqrt{285}e^{13} + \frac{1}{20}\sqrt{114}e^{24}, -\frac{1}{20}\sqrt{285}e^{12} + \frac{1}{20}\sqrt{114}e^{34},$ $\frac{1}{10}\sqrt{38}e^{15}$	$(\frac{9}{20}, -\frac{3}{40}, -\frac{3}{40}, \frac{9}{20}, -\frac{1}{2}, \frac{3}{8}, \frac{3}{8}, -\frac{1}{20})$ $+ \frac{1}{20}\sqrt{646}e^1 \otimes e_5$	{123, 1246, 167, 234567, 257, 45, 123, 1246, 167, 234567, 257, 45}
83:16	$0, 0, 0, 0, 0, \frac{1}{20}\sqrt{285}e^{13} + \frac{1}{20}\sqrt{114}e^{24}, \frac{1}{20}\sqrt{285}e^{12} + \frac{1}{20}\sqrt{114}e^{34},$ $\frac{1}{10}\sqrt{38}e^{15}$	$(\frac{9}{20}, -\frac{3}{40}, -\frac{3}{40}, \frac{9}{20}, -\frac{1}{2}, \frac{3}{8}, \frac{3}{8}, -\frac{1}{20})$ $+ \frac{1}{20}\sqrt{646}e^1 \otimes e_5$	{123, 1246, 167, 234567, 257, 45, 123, 1246, 167, 234567, 257, 45}
83:16	$0, 0, 0, 0, 0, \frac{2}{17}\sqrt{30}e^{13} + \frac{2}{17}\sqrt{30}e^{24}, -\frac{2}{17}\sqrt{30}e^{12} + \frac{2}{17}\sqrt{30}e^{34},$ $\frac{4}{17}\sqrt{10}e^{15}$	$(0, \frac{3}{17}, \frac{3}{17}, 0, -\frac{4}{17}, \frac{3}{17}, \frac{3}{17}, -\frac{4}{17})$ $+ \frac{2}{17}\sqrt{26}e^1 \otimes e_5 + \frac{6}{17}\sqrt{6}e^4 \otimes e_8$	{12457, 234, 467, 12457, 234, 467}
83:16	$0, 0, 0, 0, 0, \frac{2}{17}\sqrt{30}e^{13} + \frac{2}{17}\sqrt{30}e^{24}, \frac{2}{17}\sqrt{30}e^{12} + \frac{2}{17}\sqrt{30}e^{34},$ $\frac{4}{17}\sqrt{10}e^{15}$	$(0, \frac{3}{17}, \frac{3}{17}, 0, -\frac{4}{17}, \frac{3}{17}, \frac{3}{17}, -\frac{4}{17})$ $+ \frac{2}{17}\sqrt{26}e^1 \otimes e_5 + \frac{6}{17}\sqrt{6}e^4 \otimes e_8$	{12457, 234, 467, 12457, 234, 467}
83:16	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{286}e^{13} + \frac{1}{29}\sqrt{462}e^{24}, -\frac{11}{29}\sqrt{2}e^{12} + \frac{1}{29}\sqrt{66}e^{34},$ $\frac{2}{29}\sqrt{110}e^{15}$	$(-\frac{4}{29}, \frac{13}{29}, \frac{13}{29}, -\frac{4}{29}, -\frac{5}{29}, \frac{9}{29}, \frac{9}{29}, -\frac{9}{29})$ $+ \frac{4}{29}\sqrt{66}e^2 \otimes e_8$	{12356, 1245, 134678, 178, 2347, 267, 358, 4568, 12356, 1245, 134678, 178, 2347, 267, 358, 4568}
83:16	$0, 0, 0, 0, 0, \frac{1}{29}\sqrt{286}e^{13} + \frac{1}{29}\sqrt{462}e^{24}, \frac{11}{29}\sqrt{2}e^{12} + \frac{1}{29}\sqrt{66}e^{34},$ $\frac{2}{29}\sqrt{110}e^{15}$	$(-\frac{4}{29}, \frac{13}{29}, \frac{13}{29}, -\frac{4}{29}, -\frac{5}{29}, \frac{9}{29}, \frac{9}{29}, -\frac{9}{29})$ $+ \frac{4}{29}\sqrt{66}e^2 \otimes e_8$	{12356, 1245, 134678, 178, 2347, 267, 358, 4568, 12356, 1245, 134678, 178, 2347, 267, 358, 4568}
83:17	$0, 0, 0, 0, 0, \frac{2}{17}\sqrt{6}e^{12}, \frac{1}{17}\sqrt{19}e^{14} + \frac{3}{17}\sqrt{2}e^{35},$ $\frac{1}{17}\sqrt{19}e^{23} + \frac{3}{17}\sqrt{2}e^{45}$	$(-\frac{1}{17}, -\frac{1}{17}, \frac{2}{17}, \frac{2}{17}, -\frac{1}{17}, -\frac{2}{17}, \frac{1}{17}, \frac{1}{17})$ $+ \frac{1}{17}\sqrt{31}e^5 \otimes e_6$	{12358, 345, 578}
83:17	$0, 0, 0, 0, 0, \frac{6}{61}\sqrt{22}e^{12}, \frac{2}{61}\sqrt{374}e^{14} + \frac{4}{61}\sqrt{66}e^{35},$ $\frac{2}{61}\sqrt{374}e^{23} + \frac{2}{61}\sqrt{286}e^{45}$	$(\frac{35}{61}, -\frac{15}{61}, \frac{6}{61}, -\frac{19}{61}, \frac{10}{61}, \frac{20}{61}, \frac{16}{61}, -\frac{9}{61})$ $+ \frac{20}{61}\sqrt{11}e^1 \otimes e_8$	{1456, 167, 24678, 2568}
83:17	$0, 0, 0, 0, 0, \frac{7}{281}\sqrt{78}e^{12}, \frac{14}{281}\sqrt{41}e^{14} + \frac{14}{281}e^{35},$ $\frac{14}{281}\sqrt{41}e^{23} + \frac{14}{281}e^{45}$	$(\frac{35}{281}, \frac{35}{281}, -\frac{49}{281}, -\frac{49}{281}, \frac{35}{281}, \frac{70}{281}, -\frac{14}{281}, -\frac{14}{281})$ $+ \frac{35}{281}\sqrt{10}e^1 \otimes e_8 + \frac{35}{281}\sqrt{10}e^2 \otimes e_7$	{1234, 34578}
83:17	$0, 0, 0, 0, 0, \frac{114}{2849}\sqrt{39}e^{12}, \frac{19}{2849}\sqrt{1158}e^{14} + \frac{38}{2849}\sqrt{219}e^{35},$ $\frac{38}{2849}\sqrt{82}e^{23} + \frac{76}{2849}\sqrt{106}e^{45}$	$(\frac{323}{2849}, -\frac{589}{2849}, \frac{551}{2849}, \frac{95}{2849}, -\frac{19}{407}, -\frac{38}{407}, \frac{38}{259}, -\frac{38}{2849})$ $+ \frac{19}{2849}\sqrt{2490}e^4 \otimes e_6 + \frac{19}{2849}\sqrt{2654}e^1 \otimes e_8$	{167, 2568}
83:17	$0, 0, 0, 0, 0, \frac{6}{29}e^{12}, \frac{5}{29}e^{14} + \frac{2}{29}\sqrt{6}e^{35}, \frac{5}{29}e^{23} + \frac{2}{29}\sqrt{7}e^{45}$	$(\frac{1}{29}, -\frac{3}{29}, \frac{3}{29}, \frac{1}{29}, -\frac{1}{29}, -\frac{2}{29}, \frac{2}{29}, 0)$ $+ \frac{2}{29}\sqrt{2}e^1 \otimes e_8 + \frac{3}{29}\sqrt{5}e^3 \otimes e_6$	{12457, 578}
83:17	$0, 0, 0, 0, 0, \frac{13}{521}\sqrt{255}e^{12}, \frac{13}{521}\sqrt{66}e^{14} + \frac{13}{521}\sqrt{66}e^{35},$ $\frac{13}{521}\sqrt{211}e^{23} + \frac{26}{521}\sqrt{22}e^{45}$	$(\frac{143}{521}, -\frac{169}{521}, \frac{143}{521}, -\frac{13}{521}, -\frac{13}{521}, -\frac{26}{521}, \frac{130}{521}, -\frac{26}{521})$ $- \frac{13}{521}\sqrt{435}e^3 \otimes e_6 + \frac{13}{521}\sqrt{479}e^1 \otimes e_8$	{12345, 1237, 3478, 358}
83:17	$0, 0, 0, 0, 0, \frac{13}{521}\sqrt{255}e^{12}, \frac{13}{521}\sqrt{66}e^{14} + \frac{13}{521}\sqrt{66}e^{35},$ $\frac{13}{521}\sqrt{211}e^{23} + \frac{26}{521}\sqrt{22}e^{45}$	$(\frac{143}{521}, -\frac{169}{521}, \frac{143}{521}, -\frac{13}{521}, -\frac{13}{521}, -\frac{26}{521}, \frac{130}{521}, -\frac{26}{521})$ $+ \frac{13}{521}\sqrt{435}e^3 \otimes e_6 + \frac{13}{521}\sqrt{479}e^1 \otimes e_8$	{12345, 1237, 3478, 358}
83:17	$0, 0, 0, 0, 0, \frac{2}{899}\sqrt{116022}e^{12}, \frac{2}{899}\sqrt{54534}e^{14} + \frac{12}{899}\sqrt{3355}e^{35},$ $\frac{2}{899}\sqrt{35502}e^{23} + \frac{6}{899}\sqrt{1586}e^{45}$	$(-\frac{7}{899}, -\frac{253}{899}, \frac{472}{899}, \frac{349}{899}, -\frac{130}{899}, -\frac{260}{899}, \frac{342}{899}, \frac{219}{899})$ $+ \frac{12}{899}\sqrt{7503}e^3 \otimes e_6$	{12347, 1235, 3458, 378}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
83:18	$0, 0, 0, 0, 0, \frac{152}{545}\sqrt{7}e^{14} - \frac{19}{545}\sqrt{226}e^{23}, \frac{57}{545}\sqrt{26}e^{13} + \frac{38}{545}\sqrt{3}e^{24},$ $\frac{57}{545}\sqrt{26}e^{12} + \frac{38}{545}\sqrt{111}e^{35}$	$(\frac{19}{109}, \frac{19}{109}, -\frac{133}{545}, -\frac{133}{545}, \frac{323}{545}, -\frac{38}{545}, -\frac{38}{545}, \frac{38}{109})$ $+ \frac{38}{545}\sqrt{230}e^5 \otimes e_6$	{235, 2467, 3468, 578, 235, 2467, 3468, 578}
83:18	$0, 0, 0, 0, 0, \frac{152}{545}\sqrt{7}e^{14} + \frac{19}{545}\sqrt{226}e^{23}, \frac{57}{545}\sqrt{26}e^{13} + \frac{38}{545}\sqrt{3}e^{24},$ $\frac{57}{545}\sqrt{26}e^{12} + \frac{38}{545}\sqrt{111}e^{35}$	$(\frac{19}{109}, \frac{19}{109}, -\frac{133}{545}, -\frac{133}{545}, \frac{323}{545}, -\frac{38}{545}, -\frac{38}{545}, \frac{38}{109})$ $+ \frac{38}{545}\sqrt{230}e^5 \otimes e_6$	{235, 2467, 3468, 578, 235, 2467, 3468, 578}
83:18	$0, 0, 0, 0, 0, \frac{33}{64}e^{14} - \frac{11}{128}\sqrt{97}e^{23}, \frac{11}{128}\sqrt{97}e^{13} + \frac{33}{64}e^{24},$ $\frac{11}{64}\sqrt{3}e^{12} + \frac{11}{32}\sqrt{3}e^{35}$	$(-\frac{11}{256}, -\frac{11}{256}, \frac{55}{128}, \frac{55}{128}, -\frac{33}{64}, \frac{99}{256}, \frac{99}{256}, -\frac{11}{128})$ $+ \frac{11}{128}\sqrt{218}e^3 \otimes e_5$	{1346, 157, 1346, 157}
83:18	$0, 0, 0, 0, 0, \frac{33}{64}e^{14} + \frac{11}{128}\sqrt{97}e^{23}, \frac{11}{128}\sqrt{97}e^{13} + \frac{33}{64}e^{24},$ $\frac{11}{64}\sqrt{3}e^{12} + \frac{11}{32}\sqrt{3}e^{35}$	$(-\frac{11}{256}, -\frac{11}{256}, \frac{55}{128}, \frac{55}{128}, -\frac{33}{64}, \frac{99}{256}, \frac{99}{256}, -\frac{11}{128})$ $+ \frac{11}{128}\sqrt{218}e^3 \otimes e_5$	{1346, 157, 1346, 157}
83:18	$0, 0, 0, 0, 0, \frac{7}{137}\sqrt{102}e^{14} - \frac{14}{137}\sqrt{21}e^{23}, \frac{14}{137}\sqrt{21}e^{13} + \frac{7}{137}\sqrt{102}e^{24},$ $\frac{7}{137}\sqrt{34}e^{12} + \frac{14}{137}\sqrt{34}e^{35}$	$(-\frac{7}{137}, -\frac{7}{137}, \frac{35}{137}, \frac{35}{137}, -\frac{49}{137}, \frac{28}{137}, \frac{28}{137}, -\frac{14}{137})$ $+ \frac{14}{137}\sqrt{59}e^4 \otimes e_8$	{124, 1568, 467, 124, 1568, 467}
83:18	$0, 0, 0, 0, 0, \frac{7}{137}\sqrt{102}e^{14} + \frac{14}{137}\sqrt{21}e^{23}, \frac{14}{137}\sqrt{21}e^{13} + \frac{7}{137}\sqrt{102}e^{24},$ $\frac{7}{137}\sqrt{34}e^{12} + \frac{14}{137}\sqrt{34}e^{35}$	$(-\frac{7}{137}, -\frac{7}{137}, \frac{35}{137}, \frac{35}{137}, -\frac{49}{137}, \frac{28}{137}, \frac{28}{137}, -\frac{14}{137})$ $+ \frac{14}{137}\sqrt{59}e^4 \otimes e_8$	{124, 1568, 467, 124, 1568, 467}
83:19	$0, 0, 0, 0, 0, \frac{2}{19}\sqrt{33}e^{14} + \frac{1}{19}\sqrt{66}e^{23}, \frac{1}{19}\sqrt{110}e^{13} + \frac{2}{19}\sqrt{33}e^{25},$ $\frac{1}{19}\sqrt{110}e^{12} + \frac{2}{19}\sqrt{22}e^{45}$	$(-\frac{3}{19}, \frac{5}{19}, \frac{1}{19}, \frac{9}{19}, -\frac{7}{19}, \frac{6}{19}, -\frac{2}{19}, \frac{2}{19})$ $+ \frac{4}{19}\sqrt{22}e^4 \otimes e_7$	{3578, 468}
83:20	$0, 0, 0, 0, 0, \frac{2}{5}e^{13} + \frac{1}{5}\sqrt{5}e^{24}, \frac{1}{5}\sqrt{5}e^{15} + \frac{2}{5}e^{23}, \frac{2}{5}e^{14} + \frac{2}{5}e^{25}$	$(-\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $+ \frac{2}{5}e^3 \otimes e_8$	{367, 458}
821:1	$0, 0, 0, 0, 0, 0, \frac{1}{11}\sqrt{35}e^{12}, \frac{1}{11}\sqrt{35}e^{17}$	$(\frac{5}{22}, -\frac{1}{11}, \frac{5}{11}, -\frac{9}{22}, -\frac{2}{11}, \frac{3}{22}, \frac{3}{22}, \frac{4}{11})$ $+ \frac{2}{11}\sqrt{21}e^1 \otimes e_4 + \frac{7}{11}e^3 \otimes e_5$	{12368, 1238, 12568, 1258, 1367, 137, 1567, 157, 234678, 23478, 245678, 24578, 34, 346, 45, 456}
821:1	$0, 0, 0, 0, 0, 0, \frac{12}{73}\sqrt{5}e^{12}, \frac{12}{73}\sqrt{5}e^{17}$	$(-\frac{1}{73}, \frac{8}{73}, -\frac{21}{73}, -\frac{12}{73}, \frac{26}{73}, \frac{7}{73}, \frac{7}{73}, \frac{6}{73})$ $+ \frac{2}{73}\sqrt{190}e^2 \otimes e_4 + \frac{2}{73}\sqrt{190}e^5 \otimes e_8 + \frac{4}{73}\sqrt{70}e^1 \otimes e_3$	{1268, 128, 14567, 1457, 23678, 2378, 345, 3456}
821:1	$0, 0, 0, 0, 0, 0, \frac{2}{87}\sqrt{327}e^{12}, \frac{1}{87}\sqrt{6322}e^{17}$	$(-\frac{17}{87}, \frac{4}{29}, \frac{1}{29}, \frac{6}{29}, \frac{6}{29}, \frac{6}{29}, -\frac{5}{87}, -\frac{22}{87})$ $+ \frac{1}{87}\sqrt{15042}e^3 \otimes e_8$	{124568, 12458, 1248, 128, 134567, 13457, 1347, 137, 245678, 24578, 2478, 278, 3, 34, 345, 3456}
821:1	$0, 0, 0, 0, 0, 0, \frac{14}{359}\sqrt{130}e^{12}, \frac{20}{359}\sqrt{39}e^{17}$	$(\frac{22}{359}, \frac{52}{359}, -\frac{108}{359}, -\frac{78}{359}, \frac{101}{359}, -\frac{29}{359}, \frac{74}{359}, \frac{96}{359})$ $+ \frac{130}{359}e^5 \otimes e_6 + \frac{24}{359}\sqrt{65}e^1 \otimes e_3 + \frac{2}{359}\sqrt{7410}e^2 \otimes e_4$	{1258, 1268, 1457, 1467, 23578, 23678, 345, 346}
821:1	$0, 0, 0, 0, 0, 0, \frac{20}{359}\sqrt{39}e^{12}, \frac{14}{359}\sqrt{130}e^{17}$	$(\frac{22}{359}, -\frac{24}{359}, \frac{101}{359}, -\frac{108}{359}, \frac{150}{359}, -\frac{29}{359}, -\frac{2}{359}, \frac{20}{359})$ $+ \frac{130}{359}e^3 \otimes e_6 + \frac{24}{359}\sqrt{65}e^1 \otimes e_4 + \frac{2}{359}\sqrt{7410}e^5 \otimes e_8$	{1238, 1268, 1357, 1567, 23478, 24678, 345, 456}
821:1	$0, 0, 0, 0, 0, 0, \frac{4}{283}\sqrt{327}e^{12}, \frac{2}{283}\sqrt{6322}e^{17}$	$(\frac{104}{283}, -\frac{114}{283}, \frac{145}{283}, -\frac{73}{283}, \frac{36}{283}, \frac{36}{283}, -\frac{10}{283}, \frac{94}{283})$ $+ \frac{218}{283}e^3 \otimes e_4 + \frac{2}{283}\sqrt{15042}e^1 \otimes e_2$	{13567, 1357, 137, 14567, 1457, 147, 235678, 23578, 2378, 245678, 24578, 2478}
821:1	$0, 0, 0, 0, 0, 0, \frac{2}{199}\sqrt{258}e^{12}, \frac{4}{199}\sqrt{559}e^{17}$	$(\frac{29}{199}, -\frac{57}{199}, \frac{61}{199}, -\frac{25}{199}, \frac{87}{199}, \frac{18}{199}, -\frac{28}{199}, \frac{1}{199})$ $+ \frac{2}{199}\sqrt{2967}e^1 \otimes e_2 + \frac{2}{199}\sqrt{2967}e^5 \otimes e_8 + \frac{86}{199}e^3 \otimes e_4$	{13567, 1357, 14567, 1457, 23678, 2378, 24678, 2478}
821:1	$0, 0, 0, 0, 0, 0, \frac{1}{7}\sqrt{11}e^{12}, \frac{1}{7}\sqrt{11}e^{17}$	$(\frac{1}{14}, \frac{1}{7}, 1, -\frac{4}{7}, \frac{3}{14}, \frac{3}{14}, \frac{3}{14}, \frac{2}{7})$ $+ \frac{11}{7}e^3 \otimes e_4$	{123568, 12358, 1238, 124568, 12458, 1248, 13567, 1357, 137, 14567, 1457, 147, 235678, 23578, 2378, 245678, 24578, 2478, 3, 35, 356, 4, 45, 456}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
821:1	$0, 0, 0, 0, 0, 0, \frac{12}{53}\sqrt{5}e^{12}, \frac{12}{53}\sqrt{5}e^{17}$	$(-\frac{13}{53}, \frac{20}{53}, \frac{30}{53}, -\frac{16}{53}, \frac{7}{53}, \frac{7}{53}, \frac{7}{53}, -\frac{6}{53})$ $+\frac{6}{53}\sqrt{46}e^2 \otimes e_4 + \frac{6}{53}\sqrt{46}e^3 \otimes e_8$	{12568, 1258, 128, 134567, 13457, 1347, 25678, 2578, 278, 34, 345, 3456}
821:1	$0, 0, 0, 0, 0, 0, \frac{1}{78}\sqrt{258}e^{12}, \frac{1}{39}\sqrt{559}e^{17}$	$(\frac{29}{156}, -\frac{19}{52}, \frac{29}{52}, \frac{3}{26}, \frac{3}{26}, \frac{3}{26}, -\frac{7}{39}, \frac{1}{156})$ $+\frac{1}{78}\sqrt{2967}e^1 \otimes e_2 + \frac{1}{78}\sqrt{2967}e^3 \otimes e_8$	{134567, 13457, 1347, 137, 245678, 24578, 2478, 278}
821:1	$0, 0, 0, 0, 0, 0, \frac{1}{21}\sqrt{130}e^{12}, \frac{10}{147}\sqrt{39}e^{17}$	$(\frac{11}{147}, \frac{26}{147}, -\frac{18}{49}, -\frac{13}{49}, \frac{6}{49}, \frac{6}{49}, \frac{37}{147}, \frac{16}{49})$ $+\frac{1}{147}\sqrt{7410}e^2 \otimes e_4 + \frac{4}{49}\sqrt{65}e^1 \otimes e_3$	{12568, 1258, 128, 14567, 1457, 147, 235678, 23578, 2378, 34, 345, 3456}
821:1	$0, 0, 0, 0, 0, 0, \frac{2}{15}\sqrt{35}e^{12}, \frac{2}{15}\sqrt{35}e^{17}$	$(\frac{1}{3}, -\frac{2}{15}, -\frac{3}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{8}{15})$ $+\frac{4}{15}\sqrt{21}e^1 \otimes e_3$	{124568, 12458, 1248, 128, 14567, 1457, 147, 17, 2345678, 234578, 23478, 2378, 3, 34, 345, 3456}
821:1	$0, 0, 0, 0, 0, 0, \frac{2}{283}\sqrt{6322}e^{12}, \frac{4}{283}\sqrt{327}e^{17}$	$(-\frac{34}{283}, \frac{116}{283}, \frac{145}{283}, -\frac{102}{283}, -\frac{73}{283}, \frac{36}{283}, \frac{82}{283}, \frac{48}{283})$ $+\frac{218}{283}e^3 \otimes e_5 + \frac{2}{283}\sqrt{15042}e^2 \otimes e_4$	{12368, 1238, 12568, 1258, 13467, 1347, 14567, 1457, 23678, 2378, 25678, 2578, 34, 346, 45, 456}
821:1	$0, 0, 0, 0, 0, 0, \frac{10}{147}\sqrt{39}e^{12}, \frac{1}{21}\sqrt{130}e^{17}$	$(\frac{11}{147}, -\frac{4}{49}, \frac{25}{49}, -\frac{18}{49}, \frac{6}{49}, \frac{6}{49}, -\frac{1}{147}, \frac{10}{147})$ $+\frac{1}{147}\sqrt{7410}e^3 \otimes e_8 + \frac{4}{49}\sqrt{65}e^1 \otimes e_4$	{12568, 1258, 128, 13567, 1357, 137, 245678, 24578, 2478, 34, 345, 3456}
821:1	$0, 0, 0, 0, 0, 0, \frac{2}{25}\sqrt{11}e^{12}, \frac{2}{25}\sqrt{11}e^{17}$	$(\frac{1}{25}, \frac{2}{25}, \frac{14}{25}, \frac{14}{25}, -\frac{8}{25}, -\frac{8}{25}, \frac{3}{25}, \frac{4}{25})$ $+\frac{22}{25}e^3 \otimes e_5 + \frac{22}{25}e^4 \otimes e_6$	{12348, 12368, 12568, 1347, 1367, 1567, 23478, 23678, 25678, 34, 36, 56}
821:1	$0, 0, 0, 0, 0, 0, \frac{1}{87}\sqrt{6322}e^{12}, \frac{2}{87}\sqrt{327}e^{17}$	$(-\frac{17}{87}, \frac{2}{3}, -\frac{17}{29}, \frac{6}{29}, \frac{6}{29}, \frac{6}{29}, \frac{41}{87}, \frac{8}{29})$ $+\frac{1}{87}\sqrt{15042}e^2 \otimes e_3$	{124568, 12458, 1248, 128, 134567, 13457, 1347, 137, 245678, 24578, 2478, 278, 3, 34, 345, 3456}
821:1	$0, 0, 0, 0, 0, 0, \frac{1}{98}\sqrt{327}e^{12}, \frac{1}{196}\sqrt{6322}e^{17}$	$(\frac{13}{49}, -\frac{57}{196}, \frac{145}{392}, -\frac{73}{392}, \frac{145}{392}, -\frac{73}{392}, -\frac{5}{196}, \frac{47}{196})$ $+\frac{109}{196}e^3 \otimes e_4 + \frac{109}{196}e^5 \otimes e_6 + \frac{1}{196}\sqrt{15042}e^1 \otimes e_2$	{1357, 1367, 1467, 23578, 23678, 24678}
821:1	$0, 0, 0, 0, 0, 0, \frac{12}{71}\sqrt{5}e^{12}, \frac{12}{71}\sqrt{5}e^{17}$	$(-\frac{13}{71}, \frac{20}{71}, \frac{25}{71}, -\frac{16}{71}, \frac{30}{71}, -\frac{11}{71}, \frac{7}{71}, -\frac{6}{71})$ $+\frac{36}{71}e^3 \otimes e_6 + \frac{6}{71}\sqrt{46}e^2 \otimes e_4 + \frac{6}{71}\sqrt{46}e^5 \otimes e_8$	{1238, 1268, 13457, 14567, 2378, 2678, 345, 456}
821:1	$0, 0, 0, 0, 0, 0, \frac{4}{283}\sqrt{327}e^{12}, \frac{2}{283}\sqrt{6322}e^{17}$	$(-\frac{34}{283}, \frac{24}{283}, \frac{145}{283}, \frac{174}{283}, -\frac{73}{283}, \frac{36}{283}, -\frac{10}{283}, -\frac{44}{283})$ $+\frac{218}{283}e^3 \otimes e_5 + \frac{2}{283}\sqrt{15042}e^4 \otimes e_8$	{12368, 1238, 12568, 1258, 13467, 1347, 14567, 1457, 23678, 2378, 25678, 2578, 34, 346, 45, 456}
821:1	$0, 0, 0, 0, 0, 0, \frac{2}{87}\sqrt{327}e^{12}, \frac{1}{87}\sqrt{6322}e^{17}$	$(\frac{52}{87}, -\frac{19}{29}, \frac{6}{29}, \frac{6}{29}, \frac{6}{29}, \frac{6}{29}, -\frac{5}{87}, \frac{47}{87})$ $+\frac{1}{87}\sqrt{15042}e^1 \otimes e_2$	{134567, 13457, 1347, 137, 17, 2345678, 234578, 23478, 2378, 278}
821:2	$0, 0, 0, 0, 0, 0, \frac{2}{1549}\sqrt{123802}e^{12}, \frac{4}{1549}\sqrt{14579}e^{13} + \frac{8}{1549}\sqrt{5258}e^{27}$	$(\frac{362}{1549}, -\frac{58}{1549}, -\frac{116}{1549}, -\frac{536}{1549}, \frac{377}{1549}, -\frac{101}{1549}, \frac{304}{1549}, \frac{246}{1549})$ $+\frac{2}{1549}\sqrt{119022}e^1 \otimes e_3 + \frac{2}{1549}\sqrt{161086}e^2 \otimes e_4 + \frac{478}{1549}e^5 \otimes e_6$	{2357, 2367, 345, 346}
821:2	$0, 0, 0, 0, 0, 0, \frac{10}{313}\sqrt{222}e^{12}, \frac{4}{313}\sqrt{1443}e^{13} + \frac{4}{313}\sqrt{111}e^{27}$	$(\frac{100}{313}, -\frac{6}{313}, -\frac{12}{313}, \frac{151}{313}, -\frac{122}{313}, -\frac{71}{313}, \frac{94}{313}, \frac{88}{313})$ $+\frac{18}{313}\sqrt{222}e^1 \otimes e_5 + \frac{222}{313}e^4 \otimes e_6$	{1234, 1236, 1347, 1367, 234578, 235678, 3458, 3568}
821:2	$0, 0, 0, 0, 0, 0, \frac{2}{643}\sqrt{8710}e^{12}, \frac{1}{643}\sqrt{142710}e^{13} + \frac{4}{643}\sqrt{2010}e^{27}$	$(\frac{104}{643}, \frac{65}{643}, \frac{130}{643}, -\frac{231}{643}, -\frac{205}{643}, \frac{69}{643}, \frac{169}{643}, \frac{234}{643})$ $+\frac{10}{643}\sqrt{2010}e^1 \otimes e_4 + \frac{2}{643}\sqrt{45895}e^3 \otimes e_5$	{123, 1236, 1367, 137, 234678, 23478, 3468, 348}
821:2	$0, 0, 0, 0, 0, 0, \frac{2}{179}\sqrt{890}e^{12}, \frac{5}{179}\sqrt{89}e^{13} + \frac{3}{179}\sqrt{445}e^{27}$	$(\frac{40}{179}, -\frac{49}{358}, -\frac{49}{179}, \frac{125}{358}, \frac{80}{179}, -\frac{53}{358}, \frac{31}{358}, -\frac{9}{179})$ $+\frac{1}{179}\sqrt{9701}e^1 \otimes e_3 + \frac{2}{179}\sqrt{2759}e^5 \otimes e_8 + \frac{89}{179}e^4 \otimes e_6$	{1248, 1268, 1478, 1678}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
821:2	$0, 0, 0, 0, 0, 0, \frac{12}{199}\sqrt{246}e^{12}, \frac{2}{199}\sqrt{2091}e^{13} + \frac{2}{199}\sqrt{2337}e^{27}$	$(\frac{144}{199}, -\frac{51}{199}, -\frac{102}{199}, \frac{40}{199}, \frac{40}{199}, \frac{40}{199}, \frac{93}{199}, \frac{42}{199})$ $+ \frac{6}{199}\sqrt{2173}e^1 \otimes e_3$	{234567, 23457, 2347, 237, 3, 34, 345, 3456}
821:2	$0, 0, 0, 0, 0, 0, \frac{6}{161}\sqrt{10}e^{12}, \frac{3}{161}\sqrt{510}e^{13} + \frac{6}{161}\sqrt{10}e^{27}$	$(\frac{8}{161}, \frac{5}{161}, \frac{10}{161}, -\frac{37}{161}, \frac{9}{23}, -\frac{5}{23}, \frac{13}{161}, \frac{18}{161})$ $+ \frac{12}{161}\sqrt{30}e^3 \otimes e_6 + \frac{30}{161}\sqrt{5}e^1 \otimes e_4 + \frac{30}{161}\sqrt{5}e^5 \otimes e_8$	{1268, 1678, 24567, 456}
821:2	$0, 0, 0, 0, 0, 0, \frac{4}{1291}\sqrt{15555}e^{12}, \frac{20}{1291}\sqrt{170}e^{13} + \frac{4}{1291}\sqrt{14705}e^{27}$	$(\frac{206}{1291}, -\frac{67}{1291}, -\frac{134}{1291}, -\frac{407}{1291}, \frac{412}{1291}, \frac{119}{1291}, \frac{139}{1291}, \frac{72}{1291})$ $+ \frac{2}{1291}\sqrt{49810}e^5 \otimes e_8 + \frac{2}{1291}\sqrt{60010}e^1 \otimes e_3 + \frac{4}{1291}\sqrt{22355}e^2 \otimes e_4$	{23567, 2357, 345, 3456}
821:2	$0, 0, 0, 0, 0, 0, \frac{6}{161}\sqrt{246}e^{12}, \frac{1}{161}\sqrt{2091}e^{13} + \frac{1}{161}\sqrt{2337}e^{27}$	$(\frac{72}{161}, -\frac{51}{322}, -\frac{51}{161}, \frac{163}{322}, -\frac{83}{322}, \frac{20}{161}, \frac{93}{322}, \frac{3}{23})$ $+ \frac{123}{161}e^4 \otimes e_5 + \frac{3}{161}\sqrt{2173}e^1 \otimes e_3$	{23467, 2347, 23567, 2357, 34, 346, 35, 356}
821:2	$0, 0, 0, 0, 0, 0, \frac{4}{269}\sqrt{890}e^{12}, \frac{10}{269}\sqrt{89}e^{13} + \frac{6}{269}\sqrt{445}e^{27}$	$(\frac{80}{269}, -\frac{49}{269}, -\frac{98}{269}, \frac{160}{269}, \frac{36}{269}, \frac{36}{269}, \frac{31}{269}, -\frac{18}{269})$ $+ \frac{2}{269}\sqrt{9701}e^1 \otimes e_3 + \frac{4}{269}\sqrt{2759}e^4 \otimes e_8$	{12568, 1258, 128, 15678, 1578, 178}
821:2	$0, 0, 0, 0, 0, 0, \frac{2}{541}\sqrt{13623}e^{12}, \frac{4}{541}\sqrt{239}e^{13} + \frac{1}{541}\sqrt{87474}e^{27}$	$(-\frac{40}{541}, \frac{37}{541}, \frac{74}{541}, \frac{273}{541}, -\frac{202}{541}, \frac{66}{541}, -\frac{3}{541}, \frac{34}{541})$ $+ \frac{2}{541}\sqrt{32026}e^2 \otimes e_5 + \frac{3}{541}\sqrt{10994}e^4 \otimes e_8$	{12368, 1238, 135678, 13578, 23467, 2347, 345, 3456}
821:2	$0, 0, 0, 0, 0, 0, \frac{12}{337}\sqrt{58}e^{12}, \frac{4}{337}\sqrt{551}e^{13} + \frac{4}{337}\sqrt{1073}e^{27}$	$(-\frac{41}{337}, \frac{36}{337}, \frac{72}{337}, -\frac{80}{337}, \frac{147}{337}, -\frac{44}{337}, -\frac{5}{337}, \frac{31}{337})$ $+ \frac{2}{337}\sqrt{4466}e^3 \otimes e_6 + \frac{2}{337}\sqrt{6554}e^2 \otimes e_4 + \frac{2}{337}\sqrt{1653}e^5 \otimes e_8$	{1268, 14678, 2567, 456}
821:2	$0, 0, 0, 0, 0, 0, \frac{6}{83}\sqrt{22}e^{12}, \frac{2}{83}\sqrt{66}e^{13} + \frac{6}{83}\sqrt{22}e^{27}$	$(\frac{7}{83}, \frac{1}{83}, \frac{2}{83}, -\frac{15}{83}, \frac{31}{83}, -\frac{21}{83}, \frac{8}{83}, \frac{9}{83})$ $+ \frac{2}{83}\sqrt{253}e^1 \otimes e_4 + \frac{2}{83}\sqrt{253}e^5 \otimes e_8 + \frac{2}{83}\sqrt{319}e^2 \otimes e_6$	{128, 1678, 2457, 456}
821:2	$0, 0, 0, 0, 0, 0, \frac{12}{67}\sqrt{21}e^{12}, \frac{28}{67}\sqrt{2}e^{13} + \frac{12}{67}\sqrt{21}e^{27}$	$(-\frac{1}{67}, \frac{13}{67}, \frac{26}{67}, -\frac{43}{67}, \frac{12}{67}, \frac{12}{67}, \frac{67}{67}, \frac{25}{67})$ $+ \frac{4}{67}\sqrt{385}e^2 \otimes e_4$	{123568, 12358, 1238, 1345678, 134578, 13478, 23567, 2357, 237, 34, 345, 3456}
821:2	$0, 0, 0, 0, 0, 0, \frac{2}{101}\sqrt{111}e^{12}, \frac{2}{101}\sqrt{1443}e^{13} + \frac{5}{101}\sqrt{222}e^{27}$	$(-\frac{4}{101}, -\frac{3}{101}, -\frac{6}{101}, 1, \frac{20}{101}, \frac{20}{101}, -\frac{7}{101}, -\frac{10}{101})$ $+ \frac{9}{101}\sqrt{222}e^4 \otimes e_8$	{1234567, 123457, 12347, 134, 1345, 13456, 23568, 2358, 238, 35678, 3578, 378}
821:2	$0, 0, 0, 0, 0, 0, \frac{12}{95}\sqrt{21}e^{12}, \frac{28}{95}\sqrt{2}e^{13} + \frac{12}{95}\sqrt{21}e^{27}$	$(-\frac{1}{95}, \frac{13}{95}, \frac{26}{95}, \frac{8}{19}, -\frac{43}{95}, -\frac{16}{95}, \frac{12}{95}, \frac{5}{19})$ $+ \frac{4}{95}\sqrt{385}e^2 \otimes e_5 + \frac{56}{95}e^4 \otimes e_6$	{12348, 12368, 134578, 135678, 2347, 2367, 345, 356}
821:2	$0, 0, 0, 0, 0, 0, \frac{4}{65}\sqrt{51}e^{12}, \frac{2}{65}\sqrt{102}e^{13} + \frac{4}{65}\sqrt{51}e^{27}$	$(\frac{8}{65}, \frac{6}{65}, \frac{12}{65}, 1, -\frac{37}{65}, \frac{14}{65}, \frac{14}{65}, \frac{4}{13})$ $+ \frac{102}{65}e^4 \otimes e_5$	{12468, 1248, 12568, 1258, 14678, 1478, 15678, 1578, 2467, 247, 2567, 257, 4, 46, 5, 56}
821:2	$0, 0, 0, 0, 0, 0, \frac{4}{643}\sqrt{2010}e^{12}, \frac{1}{643}\sqrt{142710}e^{13} + \frac{2}{643}\sqrt{8710}e^{27}$	$(-\frac{96}{643}, \frac{65}{643}, \frac{130}{643}, \frac{369}{643}, -\frac{205}{643}, \frac{69}{643}, -\frac{31}{643}, \frac{34}{643})$ $+ \frac{10}{643}\sqrt{2010}e^4 \otimes e_8 + \frac{2}{643}\sqrt{45895}e^3 \otimes e_5$	{123467, 12347, 134, 1346, 2368, 238, 3678, 378}
821:2	$0, 0, 0, 0, 0, 0, \frac{2}{41}\sqrt{42}e^{12}, \frac{1}{41}\sqrt{462}e^{13} + \frac{2}{41}\sqrt{42}e^{27}$	$(\frac{8}{41}, -\frac{3}{41}, -\frac{6}{41}, \frac{23}{41}, -\frac{13}{41}, \frac{5}{41}, \frac{5}{41}, \frac{2}{41})$ $+ \frac{6}{41}\sqrt{21}e^1 \otimes e_5 + \frac{6}{41}\sqrt{21}e^4 \otimes e_8$	{1268, 128, 1678, 178, 24567, 2457, 45, 456}
821:2	$0, 0, 0, 0, 0, 0, \frac{5}{101}\sqrt{222}e^{12}, \frac{2}{101}\sqrt{1443}e^{13} + \frac{2}{101}\sqrt{111}e^{27}$	$(\frac{50}{101}, -\frac{3}{101}, -\frac{6}{101}, -\frac{61}{101}, \frac{20}{101}, \frac{20}{101}, \frac{47}{101}, \frac{44}{101})$ $+ \frac{9}{101}\sqrt{222}e^1 \otimes e_4$	{123, 1235, 12356, 13567, 1357, 137, 2345678, 234578, 23478, 34568, 3458, 348}
821:2	$0, 0, 0, 0, 0, 0, \frac{4}{313}\sqrt{111}e^{12}, \frac{4}{313}\sqrt{1443}e^{13} + \frac{10}{313}\sqrt{222}e^{27}$	$(-\frac{8}{313}, -\frac{6}{313}, -\frac{12}{313}, \frac{151}{313}, \frac{202}{313}, -\frac{71}{313}, -\frac{14}{313}, -\frac{20}{313})$ $+ \frac{18}{313}\sqrt{222}e^5 \otimes e_8 + \frac{222}{313}e^4 \otimes e_6$	{123457, 123567, 1345, 1356, 2348, 2368, 3478, 3678}
821:2	$0, 0, 0, 0, 0, 0, \frac{1}{655}\sqrt{123802}e^{12}, \frac{2}{655}\sqrt{14579}e^{13} + \frac{4}{655}\sqrt{5258}e^{27}$	$(\frac{181}{655}, -\frac{29}{655}, -\frac{58}{655}, -\frac{268}{655}, \frac{69}{655}, \frac{69}{655}, \frac{152}{655}, \frac{123}{655})$ $+ \frac{1}{655}\sqrt{119022}e^1 \otimes e_3 + \frac{1}{655}\sqrt{161086}e^2 \otimes e_4$	{23567, 2357, 237, 34, 345, 3456}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
821:2	$0, 0, 0, 0, 0, 0, \frac{1}{541}\sqrt{87474}e^{12}, \frac{4}{541}\sqrt{239}e^{13} + \frac{2}{541}\sqrt{13623}e^{27}$	$(\frac{98}{541}, \frac{37}{541}, \frac{74}{541}, -\frac{141}{541}, -\frac{202}{541}, \frac{66}{541}, \frac{135}{541}, \frac{172}{541})$ $+ \frac{2}{541}\sqrt{32026}e^2 \otimes e_5 + \frac{3}{541}\sqrt{10994}e^1 \otimes e_4$	{12368, 1238, 135678, 13578, 23467, 2347, 345, 3456}
821:2	$0, 0, 0, 0, 0, 0, \frac{1}{8}\sqrt{10}e^{12}, \frac{1}{4}\sqrt{15}e^{13} + \frac{1}{8}\sqrt{10}e^{27}$	$(-\frac{1}{8}, \frac{5}{16}, \frac{5}{8}, -\frac{5}{8}, \frac{3}{16}, \frac{3}{16}, \frac{3}{16}, \frac{1}{2})$ $+ \frac{1}{8}\sqrt{130}e^3 \otimes e_4$	{1245678, 124578, 12478, 14568, 1458, 148, 24, 245, 2456, 4567, 457, 47}
821:2	$0, 0, 0, 0, 0, 0, \frac{1}{13}\sqrt{10}e^{12}, \frac{2}{13}\sqrt{15}e^{13} + \frac{1}{13}\sqrt{10}e^{27}$	$(-\frac{1}{13}, \frac{5}{26}, \frac{5}{13}, \frac{1}{2}, -\frac{5}{13}, -\frac{7}{26}, \frac{3}{26}, \frac{4}{13})$ $+ \frac{10}{13}e^4 \otimes e_6 + \frac{1}{13}\sqrt{130}e^3 \otimes e_5$	{124578, 125678, 1458, 1568, 245, 256, 457, 567}
821:3	$0, 0, 0, 0, 0, 0, \frac{2}{199}\sqrt{371}e^{12}, \frac{2}{199}\sqrt{901}e^{17} + \frac{12}{199}\sqrt{106}e^{34}$	$(\frac{31}{199}, \frac{14}{199}, \frac{38}{199}, \frac{38}{199}, -\frac{68}{199}, -\frac{68}{199}, \frac{45}{199}, \frac{76}{199})$ $+ \frac{2}{199}\sqrt{4717}e^3 \otimes e_5 + \frac{2}{199}\sqrt{4717}e^4 \otimes e_6$	{1234, 1256, 13678, 2347, 2567, 368}
821:3	$0, 0, 0, 0, 0, 0, \frac{3}{677}\sqrt{12954}e^{12}, \frac{9}{677}\sqrt{170}e^{17} + \frac{3}{677}\sqrt{13566}e^{34}$	$(-\frac{24}{677}, \frac{254}{677}, \frac{251}{677}, -\frac{45}{677}, -\frac{205}{677}, -\frac{208}{677}, \frac{230}{677}, \frac{206}{677})$ $+ \frac{12}{677}\sqrt{1887}e^3 \otimes e_6 + \frac{3}{677}\sqrt{29886}e^2 \otimes e_5$	{1234, 126, 13578, 145678, 2347, 267, 358, 4568}
821:3	$0, 0, 0, 0, 0, 0, \frac{1}{753}\sqrt{166162}e^{12}, \frac{6}{251}\sqrt{331}e^{17} + \frac{4}{753}\sqrt{993}e^{34}$	$(\frac{49}{753}, \frac{130}{753}, \frac{38}{251}, \frac{38}{251}, -\frac{94}{251}, -\frac{67}{251}, \frac{179}{753}, \frac{76}{251})$ $+ \frac{1}{753}\sqrt{192642}e^2 \otimes e_6 + \frac{2}{753}\sqrt{61566}e^1 \otimes e_5$	{12348, 128, 1367, 234578, 2578, 356}
821:3	$0, 0, 0, 0, 0, 0, \frac{46}{697}\sqrt{39}e^{12}, \frac{1}{697}\sqrt{128570}e^{17} + \frac{26}{697}\sqrt{46}e^{34}$	$(\frac{61}{697}, -\frac{50}{697}, \frac{36}{697}, \frac{36}{697}, \frac{371}{697}, -\frac{14}{41}, \frac{11}{697}, \frac{72}{697})$ $+ \frac{1}{697}\sqrt{169234}e^5 \otimes e_8 + \frac{2}{697}\sqrt{48737}e^1 \otimes e_6$	{1238, 13457, 157, 23678, 3456, 56}
821:3	$0, 0, 0, 0, 0, 0, \frac{2}{49}\sqrt{43}e^{12}, \frac{1}{49}\sqrt{129}e^{17} + \frac{1}{49}\sqrt{129}e^{34}$	$(\frac{5}{98}, \frac{4}{49}, \frac{26}{49}, -\frac{17}{98}, \frac{55}{98}, -\frac{31}{98}, \frac{13}{98}, \frac{9}{49})$ $+ \frac{43}{49}e^3 \otimes e_4 + \frac{43}{49}e^5 \otimes e_6$	{12358, 12368, 12458, 12468, 23578, 23678, 24578, 24678}
821:3	$0, 0, 0, 0, 0, 0, \frac{2}{223}\sqrt{2085}e^{12}, \frac{2}{223}\sqrt{10842}e^{17} + \frac{2}{223}\sqrt{1529}e^{34}$	$(\frac{130}{223}, -\frac{148}{223}, \frac{56}{223}, \frac{56}{223}, \frac{45}{223}, \frac{45}{223}, -\frac{18}{223}, \frac{112}{223})$ $+ \frac{2}{223}\sqrt{24742}e^1 \otimes e_2$	{13567, 1357, 137, 2345678, 234578, 23478, 25678, 2578, 278}
821:3	$0, 0, 0, 0, 0, 0, \frac{1}{57}\sqrt{2698}e^{12}, \frac{1}{57}\sqrt{426}e^{17} + \frac{1}{57}\sqrt{426}e^{34}$	$(-\frac{10}{57}, \frac{2}{3}, \frac{3}{19}, \frac{3}{19}, -\frac{11}{19}, \frac{4}{19}, \frac{28}{57}, \frac{6}{19})$ $+ \frac{1}{19}\sqrt{710}e^2 \otimes e_5$	{12368, 1238, 134567, 13457, 1567, 157, 23678, 2378, 345, 3456, 5, 56}
821:3	$0, 0, 0, 0, 0, 0, \frac{1}{169}\sqrt{8239}e^{12}, \frac{9}{169}\sqrt{107}e^{17} + \frac{2}{169}\sqrt{321}e^{34}$	$(\frac{73}{338}, -\frac{16}{169}, \frac{82}{169}, -\frac{25}{169}, -\frac{141}{338}, \frac{45}{338}, \frac{41}{338}, \frac{57}{169})$ $+ \frac{107}{169}e^3 \otimes e_4 + \frac{1}{169}\sqrt{19902}e^1 \otimes e_5$	{1367, 137, 1467, 147, 35, 356, 45, 456}
821:3	$0, 0, 0, 0, 0, 0, \frac{4}{55}\sqrt{43}e^{12}, \frac{2}{55}\sqrt{129}e^{17} + \frac{2}{55}\sqrt{129}e^{34}$	$(\frac{1}{11}, \frac{8}{55}, \frac{52}{55}, -\frac{34}{55}, \frac{12}{55}, \frac{12}{55}, \frac{13}{55}, \frac{18}{55})$ $+ \frac{86}{55}e^3 \otimes e_4$	{123568, 12358, 1238, 124568, 12458, 1248, 235678, 23578, 2378, 245678, 24578, 2478}
821:3	$0, 0, 0, 0, 0, 0, \frac{6}{571}\sqrt{206}e^{12}, \frac{4}{571}\sqrt{2678}e^{17} + \frac{4}{571}\sqrt{2678}e^{34}$	$(\frac{87}{571}, -\frac{119}{571}, \frac{105}{571}, -\frac{50}{571}, \frac{261}{571}, -\frac{101}{571}, -\frac{32}{571}, \frac{55}{571})$ $+ \frac{2}{571}\sqrt{15965}e^1 \otimes e_2 + \frac{2}{571}\sqrt{15965}e^3 \otimes e_6 + \frac{6}{571}\sqrt{2369}e^5 \otimes e_8$	{13457, 1567, 2378, 24678}
821:3	$0, 0, 0, 0, 0, 0, \frac{2}{501}\sqrt{2085}e^{12}, \frac{2}{501}\sqrt{10842}e^{17} + \frac{2}{501}\sqrt{1529}e^{34}$	$(\frac{130}{501}, -\frac{148}{501}, \frac{65}{167}, -\frac{83}{501}, \frac{184}{501}, -\frac{94}{501}, -\frac{6}{167}, \frac{112}{501})$ $+ \frac{278}{501}e^3 \otimes e_4 + \frac{278}{501}e^5 \otimes e_6 + \frac{2}{501}\sqrt{24742}e^1 \otimes e_2$	{1357, 1367, 1457, 1467}
821:3	$0, 0, 0, 0, 0, 0, \frac{3}{29}\sqrt{14}e^{12}, \frac{3}{58}\sqrt{203}e^{17} + \frac{3}{58}\sqrt{203}e^{34}$	$(-\frac{13}{116}, \frac{4}{29}, -\frac{5}{116}, -\frac{5}{116}, 1, \frac{6}{29}, \frac{3}{116}, -\frac{5}{58})$ $+ \frac{3}{29}\sqrt{161}e^5 \otimes e_8$	{12368, 1238, 134567, 13457, 1567, 157, 23678, 2378, 345, 3456, 5, 56}
821:3	$0, 0, 0, 0, 0, 0, \frac{1}{181}\sqrt{2085}e^{12}, \frac{1}{181}\sqrt{10842}e^{17} + \frac{1}{181}\sqrt{1529}e^{34}$	$(\frac{65}{181}, -\frac{74}{181}, \frac{195}{362}, -\frac{83}{362}, \frac{45}{362}, \frac{45}{362}, -\frac{9}{181}, \frac{56}{181})$ $+ \frac{139}{181}e^3 \otimes e_4 + \frac{1}{181}\sqrt{24742}e^1 \otimes e_2$	{13567, 1357, 137, 14567, 1457, 147}
821:3	$0, 0, 0, 0, 0, 0, \frac{4}{219}\sqrt{390}e^{12}, \frac{20}{219}\sqrt{13}e^{17} + \frac{20}{219}\sqrt{13}e^{34}$	$(-\frac{32}{219}, \frac{20}{73}, \frac{50}{219}, -\frac{18}{73}, \frac{100}{219}, -\frac{44}{219}, \frac{28}{219}, -\frac{4}{219})$ $+ \frac{104}{219}e^3 \otimes e_4 + \frac{4}{219}\sqrt{1001}e^5 \otimes e_8 + \frac{4}{219}\sqrt{871}e^2 \otimes e_6$	{1238, 1248, 2378, 2478}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
821:3	$0, 0, 0, 0, 0, 0, \frac{4}{377}\sqrt{237}e^{12}, \frac{6}{377}\sqrt{790}e^{17} + \frac{4}{377}\sqrt{553}e^{34}$	$\left(\frac{2}{13}, -\frac{100}{377}, \frac{3}{13}, -\frac{71}{377}, \frac{6}{13}, \frac{36}{377}, -\frac{42}{377}, \frac{16}{377}\right) + \frac{158}{377}e^3 \otimes e_4 + \frac{2}{377}\sqrt{10902}e^5 \otimes e_8 + \frac{4}{377}\sqrt{2449}e^1 \otimes e_2$	{23678, 2378, 24678, 2478}
821:3	$0, 0, 0, 0, 0, 0, \frac{3}{205}\sqrt{298}e^{12}, \frac{1}{205}\sqrt{8642}e^{17} + \frac{1}{205}\sqrt{8642}e^{34}$	$\left(\frac{78}{205}, -\frac{71}{205}, \frac{87}{205}, -\frac{2}{205}, -\frac{62}{205}, \frac{27}{205}, \frac{7}{205}, \frac{17}{41}\right) + \frac{1}{205}\sqrt{26522}e^1 \otimes e_2 + \frac{1}{205}\sqrt{26522}e^3 \otimes e_5$	{13467, 1347, 1567, 157, 23678, 2378, 245678, 24578}
821:3	$0, 0, 0, 0, 0, 0, \frac{92}{1693}\sqrt{39}e^{12}, \frac{2}{1693}\sqrt{128570}e^{17} + \frac{52}{1693}\sqrt{46}e^{34}$	$\left(\frac{122}{1693}, -\frac{100}{1693}, \frac{371}{1693}, -\frac{227}{1693}, \frac{742}{1693}, -\frac{476}{1693}, \frac{22}{1693}, \frac{144}{1693}\right) + \frac{2}{1693}\sqrt{169234}e^5 \otimes e_8 + \frac{4}{1693}\sqrt{48737}e^1 \otimes e_6 + \frac{598}{1693}e^3 \otimes e_4$	{1238, 1248, 23678, 24678}
821:3	$0, 0, 0, 0, 0, 0, \frac{4}{167}\sqrt{390}e^{12}, \frac{20}{167}\sqrt{13}e^{17} + \frac{20}{167}\sqrt{13}e^{34}$	$\left(-\frac{32}{167}, \frac{60}{167}, -\frac{2}{167}, -\frac{2}{167}, \frac{100}{167}, \frac{44}{167}, \frac{28}{167}, -\frac{4}{167}\right) + \frac{4}{167}\sqrt{1001}e^5 \otimes e_8 + \frac{4}{167}\sqrt{871}e^2 \otimes e_6$	{1238, 134567, 1567, 2378, 3456, 56}
821:3	$0, 0, 0, 0, 0, 0, \frac{1}{181}\sqrt{2085}e^{12}, \frac{1}{181}\sqrt{10842}e^{17} + \frac{1}{181}\sqrt{1529}e^{34}$	$\left(\frac{65}{181}, -\frac{74}{181}, \frac{28}{181}, \frac{28}{181}, \frac{92}{181}, -\frac{47}{181}, -\frac{9}{181}, \frac{56}{181}\right) + \frac{139}{181}e^5 \otimes e_6 + \frac{1}{181}\sqrt{24742}e^1 \otimes e_2$	{1357, 1367, 234578, 234678, 2578, 2678}
821:3	$0, 0, 0, 0, 0, 0, \frac{4}{281}\sqrt{1290}e^{12}, \frac{20}{281}\sqrt{43}e^{17} + \frac{4}{281}\sqrt{645}e^{34}$	$\left(\frac{70}{281}, -\frac{21}{281}, \frac{110}{281}, \frac{9}{281}, -\frac{102}{281}, \frac{62}{281}, \frac{49}{281}, \frac{119}{281}\right) + \frac{2}{281}\sqrt{12126}e^1 \otimes e_5 + \frac{2}{281}\sqrt{8686}e^3 \otimes e_6$	{1238, 12468, 1347, 167, 23578, 245678, 345, 56}
821:3	$0, 0, 0, 0, 0, 0, \frac{2}{149}\sqrt{237}e^{12}, \frac{2}{149}\sqrt{553}e^{17} + \frac{3}{149}\sqrt{790}e^{34}$	$\left(-\frac{2}{149}, \frac{12}{149}, \frac{35}{149}, -\frac{27}{149}, \frac{87}{149}, -\frac{44}{149}, \frac{10}{149}, \frac{8}{149}\right) + \frac{1}{149}\sqrt{10902}e^5 \otimes e_8 + \frac{2}{149}\sqrt{2449}e^3 \otimes e_6$	{1238, 12468, 13457, 1567, 2378, 24678, 345, 56}
821:3	$0, 0, 0, 0, 0, 0, \frac{12}{179}\sqrt{14}e^{12}, \frac{6}{179}\sqrt{203}e^{17} + \frac{6}{179}\sqrt{203}e^{34}$	$\left(-\frac{13}{179}, \frac{16}{179}, \frac{58}{179}, -\frac{68}{179}, \frac{116}{179}, \frac{24}{179}, \frac{3}{179}, -\frac{10}{179}\right) + \frac{126}{179}e^3 \otimes e_4 + \frac{12}{179}\sqrt{161}e^5 \otimes e_8$	{12368, 1238, 12468, 1248, 23678, 2378, 24678, 2478}
821:3	$0, 0, 0, 0, 0, 0, \frac{2}{185}\sqrt{2698}e^{12}, \frac{2}{185}\sqrt{426}e^{17} + \frac{2}{185}\sqrt{426}e^{34}$	$\left(-\frac{4}{37}, \frac{76}{185}, \frac{89}{185}, -\frac{53}{185}, -\frac{66}{185}, \frac{24}{185}, \frac{56}{185}, \frac{36}{185}\right) + \frac{142}{185}e^3 \otimes e_4 + \frac{6}{185}\sqrt{710}e^2 \otimes e_5$	{12368, 1238, 12468, 1248, 23678, 2378, 24678, 2478}
821:3	$0, 0, 0, 0, 0, 0, \frac{4}{55}\sqrt{43}e^{12}, \frac{2}{55}\sqrt{129}e^{17} + \frac{2}{55}\sqrt{129}e^{34}$	$\left(\frac{1}{11}, \frac{8}{55}, \frac{9}{55}, \frac{9}{55}, 1, -\frac{31}{55}, \frac{13}{55}, \frac{18}{55}\right) + \frac{86}{55}e^5 \otimes e_6$	{12358, 12368, 13457, 13467, 157, 167, 23578, 23678, 345, 346, 5, 6}
821:3	$0, 0, 0, 0, 0, 0, \frac{2}{223}\sqrt{2085}e^{12}, \frac{2}{223}\sqrt{1529}e^{17} + \frac{2}{223}\sqrt{10842}e^{34}$	$\left(\frac{41}{223}, \frac{30}{223}, \frac{145}{223}, -\frac{33}{223}, -\frac{133}{223}, \frac{45}{223}, \frac{71}{223}, \frac{112}{223}\right) + \frac{2}{223}\sqrt{24742}e^3 \otimes e_5$	{1234, 12346, 125, 1256, 13678, 1378, 145678, 14578, 23467, 2347, 2567, 257, 368, 38, 4568, 458}
821:3	$0, 0, 0, 0, 0, 0, \frac{2}{149}\sqrt{237}e^{12}, \frac{3}{149}\sqrt{790}e^{17} + \frac{2}{149}\sqrt{553}e^{34}$	$\left(\frac{29}{149}, -\frac{50}{149}, \frac{4}{149}, \frac{4}{149}, \frac{87}{149}, \frac{18}{149}, -\frac{21}{149}, \frac{8}{149}\right) + \frac{1}{149}\sqrt{10902}e^5 \otimes e_8 + \frac{2}{149}\sqrt{2449}e^1 \otimes e_2$	{134567, 13457, 1567, 157, 23678, 2378}
821:3	$0, 0, 0, 0, 0, 0, \frac{2}{231}\sqrt{8239}e^{12}, \frac{6}{77}\sqrt{107}e^{17} + \frac{4}{231}\sqrt{321}e^{34}$	$\left(\frac{73}{231}, -\frac{32}{231}, \frac{19}{77}, \frac{19}{77}, -\frac{47}{77}, \frac{15}{77}, \frac{41}{231}, \frac{38}{77}\right) + \frac{2}{231}\sqrt{19902}e^1 \otimes e_5$	{123468, 12348, 1268, 128, 1367, 137, 2345678, 234578, 25678, 2578, 35, 356}
821:4	$0, 0, 0, 0, 0, 0, \frac{3}{122}\sqrt{1490}e^{12}, \frac{1}{122}\sqrt{3874}e^{13} + \frac{1}{122}\sqrt{2831}e^{27} + \frac{1}{122}\sqrt{2831}e^{45}$	$\left(\frac{45}{61}, -\frac{59}{244}, -\frac{59}{122}, \frac{31}{244}, \frac{31}{244}, \frac{25}{122}, \frac{121}{244}, \frac{31}{122}\right) + \frac{1}{122}\sqrt{28906}e^1 \otimes e_3$	{234567, 23457, 2367, 237, 3, 345, 3456, 36}
821:4	$0, 0, 0, 0, 0, 0, \frac{14}{487}\sqrt{814}e^{12}, \frac{1}{487}\sqrt{82214}e^{13} + \frac{1}{487}\sqrt{160358}e^{27} + \frac{1}{487}\sqrt{2442}e^{45}$	$\left(-\frac{8}{487}, \frac{94}{487}, \frac{188}{487}, \frac{90}{487}, \frac{90}{487}, -\frac{313}{487}, \frac{86}{487}, \frac{180}{487}\right) + \frac{20}{487}\sqrt{814}e^2 \otimes e_6$	{123458, 1238, 1345678, 13678, 2347, 346}
821:4	$0, 0, 0, 0, 0, 0, \frac{2}{479}\sqrt{13002}e^{12}, \frac{1}{479}\sqrt{43734}e^{13} + \frac{3}{479}\sqrt{1970}e^{27} + \frac{3}{479}\sqrt{23246}e^{45}$	$\left(\frac{88}{479}, \frac{66}{479}, \frac{132}{479}, \frac{302}{479}, -\frac{82}{479}, -\frac{289}{479}, \frac{154}{479}, \frac{220}{479}\right) + \frac{48}{479}\sqrt{197}e^4 \otimes e_6$	{1245, 126, 1457, 167, 2478, 25678, 48, 568}
821:4	$0, 0, 0, 0, 0, 0, \frac{68}{1585}\sqrt{157}e^{12}, \frac{34}{1585}\sqrt{299}e^{13} + \frac{34}{1585}\sqrt{422}e^{27} + \frac{34}{1585}\sqrt{15}e^{45}$	$\left(\frac{442}{1585}, -\frac{68}{1585}, -\frac{136}{1585}, \frac{153}{1585}, \frac{153}{1585}, -\frac{646}{1585}, \frac{374}{1585}, \frac{306}{1585}\right) + \frac{102}{1585}\sqrt{67}e^1 \otimes e_3 + \frac{34}{1585}\sqrt{814}e^2 \otimes e_6$	{23457, 237, 3456, 36}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
821:4	$0, 0, 0, 0, 0, 0, \frac{4}{119}\sqrt{186}e^{12}, \frac{2}{119}\sqrt{186}e^{13} + \frac{6}{119}\sqrt{62}e^{27} + \frac{6}{119}\sqrt{62}e^{45}$	$(\frac{16}{119}, \frac{12}{119}, \frac{24}{119}, \frac{113}{119}, -\frac{73}{119}, \frac{26}{119}, \frac{4}{17}, \frac{40}{119})$ $+ \frac{186}{119}e^4 \otimes e_5$	{12468, 1248, 12568, 1258, 14678, 1478, 15678, 1578}
821:4	$0, 0, 0, 0, 0, 0, \frac{4}{115}\sqrt{143}e^{12}, \frac{3}{115}\sqrt{1430}e^{13} + \frac{2}{115}\sqrt{429}e^{27} + \frac{2}{115}\sqrt{429}e^{45}$	$(-\frac{16}{115}, \frac{7}{23}, \frac{14}{23}, \frac{27}{115}, \frac{27}{115}, -\frac{73}{115}, \frac{19}{115}, \frac{54}{115})$ $+ \frac{2}{115}\sqrt{6721}e^3 \otimes e_6$	{1245678, 12678, 14568, 168, 246, 467}
821:4	$0, 0, 0, 0, 0, 0, \frac{4}{1449}\sqrt{473}e^{12}, \frac{2}{1449}\sqrt{74261}e^{13} + \frac{2}{1449}\sqrt{2365}e^{27} + \frac{2}{1449}\sqrt{152306}e^{45}$	$(\frac{72}{161}, -\frac{149}{1449}, -\frac{298}{1449}, \frac{164}{483}, -\frac{142}{1449}, -\frac{454}{1449}, \frac{499}{1449}, \frac{50}{207})$ $+ \frac{2}{1449}\sqrt{299882}e^4 \otimes e_6 + \frac{2}{1449}\sqrt{300355}e^1 \otimes e_3$	{23457, 2367, 345, 36}
821:4	$0, 0, 0, 0, 0, 0, \frac{2}{189}\sqrt{2010}e^{12}, \frac{8}{189}\sqrt{134}e^{13} + \frac{2}{189}\sqrt{134}e^{27} + \frac{2}{189}\sqrt{134}e^{45}$	$(\frac{20}{63}, -\frac{4}{189}, -\frac{8}{189}, \frac{31}{63}, -\frac{41}{189}, -\frac{74}{189}, \frac{8}{27}, \frac{52}{189})$ $+ \frac{134}{189}e^4 \otimes e_5 + \frac{2}{27}\sqrt{134}e^1 \otimes e_6$	{1234, 1235, 1347, 1357}
821:4	$0, 0, 0, 0, 0, 0, \frac{8}{373}\sqrt{143}e^{12}, \frac{6}{373}\sqrt{1430}e^{13} + \frac{4}{373}\sqrt{429}e^{27} + \frac{4}{373}\sqrt{429}e^{45}$	$(-\frac{32}{373}, \frac{70}{373}, \frac{140}{373}, \frac{197}{373}, -\frac{89}{373}, -\frac{146}{373}, \frac{38}{373}, \frac{108}{373})$ $+ \frac{286}{373}e^4 \otimes e_5 + \frac{4}{373}\sqrt{6721}e^3 \otimes e_6$	{246, 256, 467, 567}
821:4	$0, 0, 0, 0, 0, 0, \frac{28}{1381}\sqrt{814}e^{12}, \frac{2}{1381}\sqrt{82214}e^{13} + \frac{2}{1381}\sqrt{160358}e^{27} + \frac{2}{1381}\sqrt{2442}e^{45}$	$(-\frac{16}{1381}, \frac{188}{1381}, \frac{376}{1381}, \frac{587}{1381}, -\frac{227}{1381}, -\frac{626}{1381}, \frac{172}{1381}, \frac{360}{1381})$ $+ \frac{40}{1381}\sqrt{814}e^2 \otimes e_6 + \frac{814}{1381}e^4 \otimes e_5$	{2347, 2357, 346, 356}
821:4	$0, 0, 0, 0, 0, 0, \frac{4}{13}\sqrt{2}e^{12}, \frac{8}{65}\sqrt{5}e^{13} + \frac{12}{65}\sqrt{5}e^{27} + \frac{12}{65}\sqrt{5}e^{45}$	$(\frac{4}{13}, -\frac{2}{13}, -\frac{4}{13}, 0, 0, \frac{8}{13}, \frac{2}{13}, 0)$ $+ \frac{4}{13}\sqrt{5}e^1 \otimes e_3 + \frac{4}{65}\sqrt{155}e^6 \otimes e_8$	{1248, 1478}
821:4	$0, 0, 0, 0, 0, 0, \frac{1}{61}\sqrt{2010}e^{12}, \frac{4}{61}\sqrt{134}e^{13} + \frac{1}{61}\sqrt{134}e^{27} + \frac{1}{61}\sqrt{134}e^{45}$	$(\frac{30}{61}, -\frac{2}{61}, -\frac{4}{61}, \frac{13}{61}, \frac{13}{61}, -\frac{37}{61}, \frac{28}{61}, \frac{26}{61})$ $+ \frac{7}{61}\sqrt{134}e^1 \otimes e_6$	{1234, 1347, 2345678, 23678, 34568, 368}
821:4	$0, 0, 0, 0, 0, 0, \frac{4}{17}\sqrt{2}e^{12}, \frac{8}{85}\sqrt{5}e^{13} + \frac{12}{85}\sqrt{5}e^{27} + \frac{12}{85}\sqrt{5}e^{45}$	$(\frac{4}{17}, -\frac{2}{17}, \frac{4}{17}, \frac{4}{17}, -\frac{4}{17}, \frac{8}{17}, \frac{2}{17}, 0)$ $+ \frac{4}{17}\sqrt{5}e^1 \otimes e_3 + \frac{4}{85}\sqrt{155}e^6 \otimes e_8 - \frac{8}{17}e^4 \otimes e_5$	{1248, 1258, 1478, 1578}
821:4	$0, 0, 0, 0, 0, 0, \frac{4}{17}\sqrt{2}e^{12}, \frac{8}{85}\sqrt{5}e^{13} + \frac{12}{85}\sqrt{5}e^{27} + \frac{12}{85}\sqrt{5}e^{45}$	$(\frac{4}{17}, -\frac{2}{17}, -\frac{4}{17}, \frac{4}{17}, -\frac{4}{17}, \frac{8}{17}, \frac{2}{17}, 0)$ $+ \frac{4}{17}\sqrt{5}e^1 \otimes e_3 + \frac{4}{85}\sqrt{155}e^6 \otimes e_8 + \frac{8}{17}e^4 \otimes e_5$	{1248, 1258, 1478, 1578}
821:5	$0, 0, 0, 0, 0, 0, \frac{1}{34}\sqrt{265}e^{12}, \frac{1}{34}\sqrt{159}e^{17} + \frac{1}{34}\sqrt{159}e^{34} + \frac{1}{34}\sqrt{159}e^{56}$	$(\frac{7}{68}, \frac{5}{34}, \frac{65}{68}, -\frac{41}{68}, \frac{3}{17}, \frac{3}{17}, \frac{1}{4}, \frac{6}{17})$ $+ \frac{53}{34}e^3 \otimes e_4$	{12358, 12458, 23578, 24578}
821:5	$0, 0, 0, 0, 0, 0, \frac{2}{121}\sqrt{265}e^{12}, \frac{2}{121}\sqrt{159}e^{17} + \frac{2}{121}\sqrt{159}e^{34} + \frac{2}{121}\sqrt{159}e^{56}$	$(\frac{7}{121}, \frac{10}{121}, \frac{65}{121}, -\frac{41}{121}, \frac{65}{121}, -\frac{41}{121}, \frac{17}{121}, \frac{24}{121})$ $+ \frac{106}{121}e^3 \otimes e_4 + \frac{106}{121}e^5 \otimes e_6$	{12358, 12368, 12468, 23578, 23678, 24678}
821:5	$0, 0, 0, 0, 0, 0, \frac{2}{121}\sqrt{265}e^{12}, \frac{2}{121}\sqrt{159}e^{17} + \frac{2}{121}\sqrt{159}e^{34} + \frac{2}{121}\sqrt{159}e^{56}$	$(\frac{7}{121}, \frac{10}{121}, \frac{65}{121}, -\frac{41}{121}, \frac{65}{121}, -\frac{41}{121}, \frac{17}{121}, \frac{24}{121})$ $+ \frac{106}{121}e^3 \otimes e_4 - \frac{106}{121}e^5 \otimes e_6$	{12358, 12368, 12468, 23578, 23678, 24678}
821:5	$0, 0, 0, 0, 0, 0, \frac{26}{147}\sqrt{2}e^{12}, \frac{26}{63}\sqrt{2}e^{17} + \frac{26}{441}\sqrt{11}e^{34} + \frac{26}{441}\sqrt{11}e^{56}$	$(\frac{52}{147}, -\frac{26}{63}, \frac{26}{49}, -\frac{104}{441}, \frac{65}{441}, \frac{65}{441}, -\frac{26}{441}, \frac{130}{441})$ $+ \frac{26}{441}\sqrt{218}e^1 \otimes e_2 + \frac{338}{441}e^3 \otimes e_4$	{1357, 1457}
821:5	$0, 0, 0, 0, 0, 0, \frac{39}{136}\sqrt{2}e^{12}, \frac{91}{136}\sqrt{2}e^{17} + \frac{13}{136}\sqrt{11}e^{34} + \frac{13}{136}\sqrt{11}e^{56}$	$(\frac{39}{68}, -\frac{91}{136}, \frac{65}{272}, \frac{65}{272}, \frac{65}{272}, \frac{65}{272}, -\frac{13}{136}, \frac{65}{136})$ $+ \frac{13}{136}\sqrt{218}e^1 \otimes e_2$	{1357, 2345678, 23478, 278}
821:5	$0, 0, 0, 0, 0, 0, \frac{39}{305}\sqrt{2}e^{12}, \frac{91}{305}\sqrt{2}e^{17} + \frac{13}{305}\sqrt{11}e^{34} + \frac{13}{305}\sqrt{11}e^{56}$	$(\frac{78}{305}, -\frac{91}{305}, \frac{117}{305}, -\frac{52}{305}, \frac{117}{305}, -\frac{52}{305}, -\frac{13}{305}, \frac{13}{61})$ $+ \frac{13}{305}\sqrt{218}e^1 \otimes e_2 + \frac{169}{305}e^3 \otimes e_4 + \frac{169}{305}e^5 \otimes e_6$	{1357, 1367, 1467}
821:5	$0, 0, 0, 0, 0, 0, \frac{39}{305}\sqrt{2}e^{12}, \frac{91}{305}\sqrt{2}e^{17} + \frac{13}{305}\sqrt{11}e^{34} + \frac{13}{305}\sqrt{11}e^{56}$	$(\frac{78}{305}, -\frac{91}{305}, \frac{117}{305}, -\frac{52}{305}, \frac{117}{305}, -\frac{52}{305}, -\frac{13}{305}, \frac{13}{61})$ $+ \frac{13}{305}\sqrt{218}e^1 \otimes e_2 + \frac{169}{305}e^3 \otimes e_4 - \frac{169}{305}e^5 \otimes e_6$	{1357, 1367, 1467}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:1	$0, 0, 0, 0, 0, \frac{1}{6}\sqrt{7}e^{12}, \frac{1}{6}\sqrt{7}e^{13}$	$(\frac{1}{18}, \frac{11}{36}, -\frac{5}{36}, -\frac{1}{3}, \frac{1}{9}, \frac{1}{9}, \frac{13}{36}, -\frac{1}{12})$ $+ \frac{2}{9}\sqrt{7}e^1 \otimes e_4 + \frac{2}{9}\sqrt{7}e^2 \otimes e_8$	{123, 1235, 12356, 15678, 1578, 178, 24567, 2457, 247, 34568, 3458, 348}
82:1	$0, 0, 0, 0, 0, \frac{1}{43}\sqrt{598}e^{12}, \frac{2}{43}\sqrt{46}e^{13}$	$(-\frac{12}{43}, \frac{12}{43}, \frac{1}{43}, \frac{23}{43}, \frac{5}{43}, \frac{5}{43}, 0, -\frac{11}{43})$ $+ \frac{2}{43}\sqrt{230}e^2 \otimes e_8 + \frac{6}{43}\sqrt{23}e^4 \otimes e_7$	{1234, 12345, 123456, 15678, 1578, 178, 2567, 257, 27, 34568, 3458, 348}
82:1	$0, 0, 0, 0, 0, \frac{2}{109}\sqrt{598}e^{12}, \frac{4}{109}\sqrt{46}e^{13}$	$(\frac{12}{109}, \frac{24}{109}, -\frac{34}{109}, -\frac{13}{109}, \frac{33}{109}, \frac{10}{109}, \frac{36}{109}, -\frac{22}{109})$ $+ \frac{12}{109}\sqrt{23}e^1 \otimes e_3 + \frac{46}{109}e^5 \otimes e_4 + \frac{4}{109}\sqrt{230}e^2 \otimes e_8$	{14678, 1478, 15678, 1578, 3468, 348, 3568, 358}
82:1	$0, 0, 0, 0, 0, \frac{1}{43}\sqrt{598}e^{12}, \frac{2}{43}\sqrt{46}e^{13}$	$(-\frac{12}{43}, \frac{10}{43}, \frac{21}{43}, -\frac{13}{43}, \frac{5}{43}, \frac{5}{43}, -\frac{2}{43}, \frac{9}{43})$ $+ \frac{2}{43}\sqrt{230}e^3 \otimes e_7 + \frac{6}{43}\sqrt{23}e^2 \otimes e_4$	{123, 1235, 12356, 145678, 14578, 1478, 2567, 257, 27, 34568, 3458, 348}
82:1	$0, 0, 0, 0, 0, \frac{2}{31}\sqrt{55}e^{12}, \frac{2}{31}\sqrt{55}e^{13}$	$(\frac{10}{31}, -\frac{1}{31}, -\frac{1}{31}, \frac{15}{31}, -\frac{12}{31}, -\frac{7}{31}, \frac{9}{31}, \frac{9}{31})$ $+ \frac{22}{31}e^4 \otimes e_6 + \frac{8}{31}\sqrt{11}e^1 \otimes e_5$	{1234, 1236, 1248, 1268, 1478, 1678, 234578, 235678, 2457, 2567, 45, 56}
82:1	$0, 0, 0, 0, 0, \frac{1}{68}\sqrt{1003}e^{12}, \frac{1}{136}\sqrt{354}e^{13}$	$(-\frac{25}{136}, \frac{49}{272}, \frac{9}{136}, \frac{117}{272}, \frac{43}{136}, -\frac{69}{272}, -\frac{1}{272}, -\frac{2}{17})$ $+ \frac{1}{136}\sqrt{3658}e^5 \otimes e_8 + \frac{1}{136}\sqrt{5487}e^2 \otimes e_6 + \frac{1}{136}\sqrt{5487}e^4 \otimes e_7$	{12345, 1248, 13567, 1678, 2378, 257, 3468, 456}
82:1	$0, 0, 0, 0, 0, \frac{4}{11}e^{12}, \frac{4}{11}e^{13}$	$(-\frac{3}{11}, \frac{2}{11}, \frac{3}{11}, -\frac{2}{11}, \frac{4}{11}, \frac{1}{11}, -\frac{1}{11}, 0)$ $+ \frac{2}{11}\sqrt{6}e^2 \otimes e_4 + \frac{2}{11}\sqrt{6}e^5 \otimes e_8 + \frac{4}{11}\sqrt{2}e^3 \otimes e_7$	{1235, 12356, 14678, 1478, 2567, 257, 3468, 348}
82:1	$0, 0, 0, 0, 0, \frac{4}{11}e^{12}, \frac{4}{11}e^{13}$	$(\frac{1}{11}, \frac{2}{11}, -\frac{1}{11}, -\frac{3}{11}, \frac{4}{11}, -\frac{2}{11}, \frac{3}{11}, 0)$ $+ \frac{2}{11}\sqrt{6}e^2 \otimes e_6 + \frac{2}{11}\sqrt{6}e^5 \otimes e_8 + \frac{4}{11}\sqrt{2}e^1 \otimes e_4$	{1235, 128, 13567, 1678, 23478, 2457, 3468, 456}
82:1	$0, 0, 0, 0, 0, \frac{1}{6}\sqrt{7}e^{12}, \frac{1}{6}\sqrt{7}e^{13}$	$(-\frac{7}{18}, \frac{11}{36}, \frac{11}{36}, \frac{1}{9}, \frac{1}{9}, \frac{1}{9}, -\frac{1}{12}, -\frac{1}{12})$ $+ \frac{2}{9}\sqrt{7}e^2 \otimes e_8 - \frac{2}{9}\sqrt{7}e^3 \otimes e_7$	{123, 1234, 12345, 123456, 145678, 14578, 1478, 178, 24567, 2457, 247, 27}
82:1	$0, 0, 0, 0, 0, \frac{1}{6}\sqrt{7}e^{12}, \frac{1}{6}\sqrt{7}e^{13}$	$(-\frac{7}{18}, \frac{11}{36}, \frac{11}{36}, \frac{1}{9}, \frac{1}{9}, \frac{1}{9}, -\frac{1}{12}, -\frac{1}{12})$ $+ \frac{2}{9}\sqrt{7}e^2 \otimes e_8 + \frac{2}{9}\sqrt{7}e^3 \otimes e_7$	{123, 1234, 12345, 123456, 145678, 14578, 1478, 178, 24567, 2457, 247, 27}
82:1	$0, 0, 0, 0, 0, \frac{2}{31}\sqrt{55}e^{12}, \frac{2}{31}\sqrt{55}e^{13}$	$(-\frac{6}{31}, \frac{15}{31}, -\frac{1}{31}, \frac{15}{31}, -\frac{7}{31}, \frac{4}{31}, \frac{9}{31}, -\frac{7}{31})$ $+ \frac{22}{31}e^4 \otimes e_5 + \frac{8}{31}\sqrt{11}e^2 \otimes e_8$	{1234, 12346, 1235, 12356, 14678, 1478, 15678, 1578, 2467, 247, 2567, 257, 3468, 348, 3568, 358}
82:1	$0, 0, 0, 0, 0, \frac{2}{77}\sqrt{194}e^{12}, \frac{3}{77}\sqrt{582}e^{13}$	$(\frac{54}{77}, -\frac{43}{77}, -\frac{12}{77}, \frac{15}{77}, \frac{15}{77}, \frac{15}{77}, \frac{1}{7}, \frac{6}{11})$ $+ \frac{2}{77}\sqrt{3007}e^1 \otimes e_2$	{13, 134, 1345, 13456, 14568, 1458, 148, 18, 2, 234568, 23458, 2348, 238, 24, 245, 2456}
82:1	$0, 0, 0, 0, 0, \frac{5}{69}\sqrt{74}e^{12}, \frac{2}{69}\sqrt{111}e^{13}$	$(\frac{19}{69}, \frac{13}{69}, -\frac{6}{23}, -\frac{8}{23}, \frac{7}{69}, \frac{7}{69}, \frac{32}{69}, \frac{1}{69})$ $+ \frac{1}{69}\sqrt{2294}e^1 \otimes e_3 + \frac{1}{69}\sqrt{2294}e^2 \otimes e_4$	{12, 125, 1256, 14567, 1457, 147, 23567, 2357, 237, 34, 345, 3456}
82:1	$0, 0, 0, 0, 0, \frac{5}{89}\sqrt{58}e^{12}, \frac{10}{89}e^{13}$	$(\frac{4}{89}, \frac{5}{89}, \frac{5}{89}, -\frac{21}{89}, \frac{34}{89}, -\frac{20}{89}, \frac{9}{89}, \frac{9}{89})$ $+ \frac{10}{89}\sqrt{14}e^1 \otimes e_4 + \frac{15}{89}\sqrt{6}e^2 \otimes e_6 + \frac{15}{89}\sqrt{6}e^5 \otimes e_7$	{1235, 1258, 1367, 1678, 23478, 247, 34568, 456}
82:1	$0, 0, 0, 0, 0, \frac{1}{181}\sqrt{4182}e^{12}, \frac{2}{181}\sqrt{574}e^{13}$	$(-\frac{4}{181}, \frac{24}{181}, -\frac{13}{181}, -\frac{45}{181}, \frac{61}{181}, \frac{15}{181}, \frac{20}{181}, -\frac{17}{181})$ $+ \frac{2}{181}\sqrt{1230}e^1 \otimes e_4 + \frac{2}{181}\sqrt{1230}e^2 \otimes e_8 + \frac{2}{181}\sqrt{943}e^5 \otimes e_7$	{1235, 12356, 1678, 178, 2467, 247, 34568, 3458}
82:1	$0, 0, 0, 0, 0, \frac{2}{69}\sqrt{111}e^{12}, \frac{5}{69}\sqrt{74}e^{13}$	$(\frac{19}{69}, -\frac{6}{23}, -\frac{6}{23}, \frac{38}{69}, \frac{7}{69}, \frac{7}{69}, \frac{1}{69}, \frac{1}{69})$ $+ \frac{1}{69}\sqrt{2294}e^1 \otimes e_2 + \frac{1}{69}\sqrt{2294}e^4 \otimes e_8$	{134, 1345, 13456, 1568, 158, 18, 23568, 2358, 238, 24, 245, 2456}
82:1	$0, 0, 0, 0, 0, \frac{2}{109}\sqrt{598}e^{12}, \frac{4}{109}\sqrt{46}e^{13}$	$(-\frac{24}{109}, \frac{24}{109}, \frac{2}{109}, \frac{33}{109}, \frac{46}{109}, -\frac{13}{109}, 0, -\frac{22}{109})$ $+ \frac{12}{109}\sqrt{23}e^5 \otimes e_7 + \frac{46}{109}e^4 \otimes e_6 + \frac{4}{109}\sqrt{230}e^2 \otimes e_8$	{12345, 12356, 1478, 1678, 247, 267, 3458, 3568}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:1	$0, 0, 0, 0, 0, 0, \frac{5}{89}\sqrt{58}e^{12}, \frac{10}{89}e^{13}$	$\left(\frac{3}{89}, \frac{6}{89}, -\frac{22}{89}, \frac{7}{89}, \frac{34}{89}, \frac{7}{89}, \frac{9}{89}, -\frac{19}{89}\right)$ $+ \frac{10}{89}\sqrt{14}e^2 \otimes e_8 + \frac{15}{89}\sqrt{6}e^1 \otimes e_3 + \frac{15}{89}\sqrt{6}e^5 \otimes e_7$	{14678, 1478, 178, 34568, 3458, 358}
82:1	$0, 0, 0, 0, 0, 0, \frac{6}{43}\sqrt{7}e^{12}, \frac{6}{43}\sqrt{7}e^{13}$	$\left(-\frac{14}{43}, \frac{11}{43}, \frac{11}{43}, -\frac{3}{43}, \frac{11}{43}, \frac{4}{43}, -\frac{3}{43}, -\frac{3}{43}\right)$ $+ \frac{14}{43}e^5 \otimes e_4 + \frac{8}{43}\sqrt{7}e^2 \otimes e_8 - \frac{8}{43}\sqrt{7}e^3 \otimes e_7$	{1234, 12346, 1235, 12356, 14678, 1478, 15678, 1578, 2467, 247, 2567, 257}
82:1	$0, 0, 0, 0, 0, 0, \frac{6}{43}\sqrt{7}e^{12}, \frac{6}{43}\sqrt{7}e^{13}$	$\left(-\frac{14}{43}, \frac{11}{43}, \frac{11}{43}, -\frac{3}{43}, \frac{11}{43}, \frac{4}{43}, -\frac{3}{43}, -\frac{3}{43}\right)$ $+ \frac{14}{43}e^5 \otimes e_4 + \frac{8}{43}\sqrt{7}e^2 \otimes e_8 + \frac{8}{43}\sqrt{7}e^3 \otimes e_7$	{1234, 12346, 1235, 12356, 14678, 1478, 15678, 1578, 2467, 247, 2567, 257}
82:1	$0, 0, 0, 0, 0, 0, \frac{1}{43}\sqrt{598}e^{12}, \frac{2}{43}\sqrt{46}e^{13}$	$\left(\frac{8}{43}, -\frac{8}{43}, \frac{1}{43}, \frac{23}{43}, -\frac{15}{43}, \frac{5}{43}, 0, \frac{9}{43}\right)$ $+ \frac{2}{43}\sqrt{230}e^1 \otimes e_5 + \frac{6}{43}\sqrt{23}e^4 \otimes e_7$	{1234, 12346, 12468, 1248, 1367, 137, 1678, 178, 235678, 23578, 2567, 257, 34568, 3458, 45, 456}
82:1	$0, 0, 0, 0, 0, 0, \frac{1}{43}\sqrt{598}e^{12}, \frac{2}{43}\sqrt{46}e^{13}$	$\left(\frac{8}{43}, \frac{10}{43}, \frac{1}{43}, -\frac{15}{43}, -\frac{13}{43}, \frac{5}{43}, \frac{18}{43}, \frac{9}{43}\right)$ $+ \frac{2}{43}\sqrt{230}e^1 \otimes e_4 + \frac{6}{43}\sqrt{23}e^2 \otimes e_5$	{123, 1236, 1268, 128, 13567, 1357, 15678, 1578, 234678, 23478, 2467, 247, 34568, 3458, 45, 456}
82:1	$0, 0, 0, 0, 0, 0, \frac{1}{136}\sqrt{354}e^{12}, \frac{1}{68}\sqrt{1003}e^{13}$	$\left(\frac{43}{272}, -\frac{75}{272}, -\frac{11}{68}, \frac{43}{136}, \frac{117}{272}, \frac{3}{34}, -\frac{2}{17}, -\frac{1}{272}\right)$ $+ \frac{1}{136}\sqrt{3658}e^4 \otimes e_7 + \frac{1}{136}\sqrt{5487}e^1 \otimes e_2 + \frac{1}{136}\sqrt{5487}e^5 \otimes e_8$	{13567, 1357, 1678, 178, 23678, 2378, 2567, 257}
82:1	$0, 0, 0, 0, 0, 0, \frac{2}{35}\sqrt{74}e^{12}, \frac{4}{175}\sqrt{111}e^{13}$	$\left(\frac{38}{175}, \frac{26}{175}, -\frac{36}{175}, -\frac{48}{175}, \frac{51}{175}, -\frac{23}{175}, \frac{64}{175}, \frac{2}{175}\right)$ $+ \frac{2}{175}\sqrt{2294}e^1 \otimes e_3 + \frac{2}{175}\sqrt{2294}e^2 \otimes e_4 + \frac{74}{175}e^5 \otimes e_6$	{125, 126, 1457, 1467, 2357, 2367, 345, 346}
82:1	$0, 0, 0, 0, 0, 0, \frac{4}{11}e^{12}, \frac{4}{11}e^{13}$	$\left(\frac{1}{11}, -\frac{1}{11}, -\frac{1}{11}, \frac{4}{11}, \frac{4}{11}, -\frac{3}{11}, 0, 0\right)$ $+ \frac{2}{11}\sqrt{6}e^4 \otimes e_7 + \frac{2}{11}\sqrt{6}e^5 \otimes e_8 + \frac{4}{11}\sqrt{2}e^1 \otimes e_6$	{12345, 1248, 178, 23678, 2567, 456}
82:1	$0, 0, 0, 0, 0, 0, \frac{2}{109}\sqrt{598}e^{12}, \frac{4}{109}\sqrt{46}e^{13}$	$\left(-\frac{24}{109}, \frac{20}{109}, \frac{42}{109}, -\frac{26}{109}, \frac{33}{109}, -\frac{13}{109}, -\frac{4}{109}, \frac{18}{109}\right)$ $+ \frac{12}{109}\sqrt{23}e^2 \otimes e_4 + \frac{46}{109}e^5 \otimes e_6 + \frac{4}{109}\sqrt{230}e^3 \otimes e_7$	{1235, 1236, 14578, 14678, 257, 267, 3458, 3468}
82:1	$0, 0, 0, 0, 0, 0, \frac{4}{71}\sqrt{65}e^{12}, \frac{4}{71}\sqrt{65}e^{13}$	$\left(-\frac{11}{71}, -\frac{1}{71}, -\frac{1}{71}, \frac{40}{71}, \frac{40}{71}, \frac{9}{71}, -\frac{12}{71}, -\frac{12}{71}\right)$ $+ \frac{2}{71}\sqrt{806}e^4 \otimes e_7 + \frac{2}{71}\sqrt{806}e^5 \otimes e_8$	{12345, 123456, 12468, 1248, 1678, 178, 23678, 2378, 2567, 257, 45, 456}
82:1	$0, 0, 0, 0, 0, 0, \frac{5}{69}\sqrt{74}e^{12}, \frac{2}{69}\sqrt{111}e^{13}$	$\left(-\frac{4}{23}, \frac{13}{69}, \frac{13}{69}, \frac{38}{69}, -\frac{8}{23}, \frac{7}{69}, \frac{1}{69}, \frac{1}{69}\right)$ $+ \frac{1}{69}\sqrt{2294}e^2 \otimes e_5 + \frac{1}{69}\sqrt{2294}e^4 \otimes e_7$	{123468, 12348, 124, 1246, 135678, 13578, 1567, 157, 2367, 237, 2678, 278, 345, 3456, 4568, 458}
82:1	$0, 0, 0, 0, 0, 0, \frac{6}{251}\sqrt{582}e^{12}, \frac{4}{251}\sqrt{194}e^{13}$	$\left(-\frac{16}{251}, -\frac{24}{251}, \frac{38}{251}, \frac{127}{251}, \frac{154}{251}, -\frac{67}{251}, -\frac{40}{251}, \frac{22}{251}\right)$ $+ \frac{194}{251}e^4 \otimes e_6 + \frac{4}{251}\sqrt{3007}e^5 \otimes e_7$	{123458, 123568, 1245, 1256, 13478, 13678, 147, 167, 2347, 2367, 2478, 2678, 345, 356, 458, 568}
82:1	$0, 0, 0, 0, 0, 0, \frac{1}{10}\sqrt{55}e^{12}, \frac{1}{10}\sqrt{55}e^{13}$	$\left(-\frac{3}{10}, \frac{3}{4}, -\frac{1}{20}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{9}{20}, -\frac{7}{20}\right)$ $+ \frac{2}{5}\sqrt{11}e^2 \otimes e_8$	{123, 1234, 12345, 123456, 145678, 14578, 1478, 178, 24567, 2457, 247, 27, 34568, 3458, 348, 38}
82:1	$0, 0, 0, 0, 0, 0, \frac{6}{251}\sqrt{582}e^{12}, \frac{4}{251}\sqrt{194}e^{13}$	$\left(-\frac{16}{251}, \frac{100}{251}, \frac{38}{251}, \frac{127}{251}, -\frac{94}{251}, -\frac{67}{251}, \frac{84}{251}, \frac{22}{251}\right)$ $+ \frac{194}{251}e^4 \otimes e_6 + \frac{4}{251}\sqrt{3007}e^2 \otimes e_5$	{12348, 12368, 124, 126, 134578, 135678, 1457, 1567, 2347, 2367, 2478, 2678, 345, 356, 458, 568}
82:1	$0, 0, 0, 0, 0, 0, \frac{1}{68}\sqrt{1003}e^{12}, \frac{1}{136}\sqrt{354}e^{13}$	$\left(-\frac{25}{136}, \frac{49}{272}, \frac{5}{17}, -\frac{69}{272}, \frac{117}{272}, -\frac{19}{136}, -\frac{1}{272}, \frac{15}{136}\right)$ $+ \frac{1}{136}\sqrt{3658}e^3 \otimes e_6 + \frac{1}{136}\sqrt{5487}e^2 \otimes e_4 + \frac{1}{136}\sqrt{5487}e^5 \otimes e_7$	{1235, 12568, 1347, 14678, 2378, 267, 3458, 456}
82:1	$0, 0, 0, 0, 0, 0, \frac{4}{97}\sqrt{65}e^{12}, \frac{4}{97}\sqrt{65}e^{13}$	$\left(\frac{20}{97}, -\frac{32}{97}, -\frac{1}{97}, \frac{35}{97}, \frac{40}{97}, -\frac{17}{97}, -\frac{12}{97}, \frac{19}{97}\right)$ $+ \frac{2}{97}\sqrt{806}e^1 \otimes e_2 + \frac{2}{97}\sqrt{806}e^5 \otimes e_7 + \frac{52}{97}e^4 \otimes e_6$	{1347, 1367, 1478, 1678, 23478, 23678, 247, 267}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:1	$0, 0, 0, 0, 0, 0, \frac{2}{19}\sqrt{15}e^{12}, \frac{2}{19}\sqrt{15}e^{13}$	$(\frac{2}{19}, \frac{3}{19}, \frac{3}{19}, 1, -\frac{11}{19}, \frac{4}{19}, \frac{5}{19}, \frac{5}{19})$ $+\frac{30}{19}e^4 \otimes e_5$	{1234, 12346, 1235, 12356, 12468, 1248, 12568, 1258, 14678, 1478, 15678, 1578, 234678, 23478, 235678, 23578, 2467, 247, 2567, 257, 4, 46, 5, 56}
82:1	$0, 0, 0, 0, 0, 0, \frac{4}{71}\sqrt{65}e^{12}, \frac{4}{71}\sqrt{65}e^{13}$	$(-\frac{11}{71}, \frac{30}{71}, \frac{30}{71}, -\frac{22}{71}, -\frac{22}{71}, \frac{9}{71}, \frac{19}{71}, \frac{19}{71})$ $+\frac{2}{71}\sqrt{806}e^2 \otimes e_4 + \frac{2}{71}\sqrt{806}e^3 \otimes e_5$	{123, 1236, 12568, 1258, 145678, 14578, 23678, 2378, 2567, 257, 45, 456}
82:1	$0, 0, 0, 0, 0, 0, \frac{4}{175}\sqrt{111}e^{12}, \frac{2}{35}\sqrt{74}e^{13}$	$(\frac{38}{175}, -\frac{36}{175}, -\frac{36}{175}, \frac{51}{175}, \frac{76}{175}, -\frac{23}{175}, \frac{2}{175}, \frac{2}{175})$ $+\frac{2}{175}\sqrt{2294}e^1 \otimes e_2 + \frac{2}{175}\sqrt{2294}e^5 \otimes e_8 + \frac{74}{175}e^4 \otimes e_6$	{1345, 1356, 148, 168, 2348, 2368, 245, 256}
82:1	$0, 0, 0, 0, 0, 0, \frac{4}{71}\sqrt{65}e^{12}, \frac{4}{71}\sqrt{65}e^{13}$	$(\frac{20}{71}, -\frac{32}{71}, -\frac{1}{71}, \frac{40}{71}, \frac{9}{71}, \frac{9}{71}, -\frac{12}{71}, \frac{19}{71})$ $+\frac{2}{71}\sqrt{806}e^1 \otimes e_2 + \frac{2}{71}\sqrt{806}e^4 \otimes e_7$	{13567, 1357, 137, 15678, 1578, 178, 235678, 23578, 2378, 2567, 257, 27}
82:1	$0, 0, 0, 0, 0, 0, \frac{1}{43}\sqrt{598}e^{12}, \frac{2}{43}\sqrt{46}e^{13}$	$(\frac{6}{43}, \frac{12}{43}, -\frac{17}{43}, \frac{5}{43}, \frac{5}{43}, \frac{5}{43}, \frac{18}{43}, -\frac{11}{43})$ $+\frac{2}{43}\sqrt{230}e^2 \otimes e_8 + \frac{6}{43}\sqrt{23}e^1 \otimes e_3$	{145678, 14578, 1478, 178, 34568, 3458, 348, 38}
82:1	$0, 0, 0, 0, 0, 0, \frac{1}{10}\sqrt{55}e^{12}, \frac{1}{10}\sqrt{55}e^{13}$	$(\frac{1}{2}, -\frac{1}{20}, -\frac{1}{20}, -\frac{3}{5}, \frac{1}{5}, \frac{1}{5}, \frac{9}{20}, \frac{9}{20})$ $+\frac{2}{5}\sqrt{11}e^1 \otimes e_4$	{123, 1235, 12356, 12568, 1258, 128, 15678, 1578, 178, 2345678, 234578, 23478, 24567, 2457, 247, 4, 45, 456}
82:1	$0, 0, 0, 0, 0, 0, \frac{4}{71}\sqrt{65}e^{12}, \frac{4}{71}\sqrt{65}e^{13}$	$(-\frac{11}{71}, \frac{30}{71}, -\frac{1}{71}, \frac{40}{71}, -\frac{22}{71}, \frac{9}{71}, \frac{19}{71}, -\frac{12}{71})$ $+\frac{2}{71}\sqrt{806}e^2 \otimes e_5 + \frac{2}{71}\sqrt{806}e^4 \otimes e_8$	{1234, 12346, 1268, 128, 134567, 13457, 15678, 1578, 23678, 2378, 2467, 247, 3568, 358, 45, 456}
82:1	$0, 0, 0, 0, 0, 0, \frac{3}{77}\sqrt{582}e^{12}, \frac{2}{77}\sqrt{194}e^{13}$	$(-\frac{8}{77}, -\frac{12}{77}, \frac{19}{77}, 1, \frac{15}{77}, \frac{15}{77}, -\frac{20}{77}, \frac{1}{7})$ $+\frac{2}{77}\sqrt{3007}e^4 \otimes e_7$	{1234568, 123458, 12348, 124, 1245, 12456, 135678, 13578, 1378, 1567, 157, 17, 23567, 2357, 237, 25678, 2578, 278, 34, 345, 3456, 4568, 458, 48}
82:1	$0, 0, 0, 0, 0, 0, \frac{3}{77}\sqrt{582}e^{12}, \frac{2}{77}\sqrt{194}e^{13}$	$(-\frac{8}{77}, \frac{50}{77}, \frac{19}{77}, -\frac{47}{77}, \frac{15}{77}, \frac{15}{77}, \frac{6}{11}, \frac{1}{7})$ $+\frac{2}{77}\sqrt{3007}e^2 \otimes e_4$	{12, 123568, 12358, 1238, 125, 1256, 1345678, 134578, 13478, 14567, 1457, 147, 23567, 2357, 237, 25678, 2578, 278, 34, 345, 3456, 4568, 458, 48}
82:1	$0, 0, 0, 0, 0, 0, \frac{1}{199}\sqrt{7446}e^{12}, \frac{2}{199}\sqrt{510}e^{13}$	$(\frac{22}{199}, \frac{2}{199}, -\frac{29}{199}, -\frac{49}{199}, \frac{75}{199}, \frac{13}{199}, \frac{24}{199}, -\frac{7}{199})$ $+\frac{2}{199}\sqrt{1581}e^1 \otimes e_3 + \frac{2}{199}\sqrt{1581}e^2 \otimes e_4 + \frac{2}{199}\sqrt{1581}e^5 \otimes e_7$	{125, 1256, 1467, 147, 2367, 237, 345, 3456}
82:1	$0, 0, 0, 0, 0, 0, \frac{1}{68}\sqrt{1003}e^{12}, \frac{1}{136}\sqrt{354}e^{13}$	$(\frac{43}{272}, \frac{49}{272}, -\frac{75}{272}, -\frac{69}{272}, \frac{43}{136}, \frac{3}{34}, \frac{23}{68}, -\frac{2}{17})$ $+\frac{1}{136}\sqrt{3658}e^5 \otimes e_8 + \frac{1}{136}\sqrt{5487}e^1 \otimes e_3 + \frac{1}{136}\sqrt{5487}e^2 \otimes e_4$	{1268, 128, 14678, 1478, 23678, 2378, 3468, 348}
82:1	$0, 0, 0, 0, 0, 0, \frac{6}{43}\sqrt{7}e^{12}, \frac{6}{43}\sqrt{7}e^{13}$	$(\frac{2}{43}, \frac{11}{43}, -\frac{5}{43}, -\frac{12}{43}, \frac{11}{43}, -\frac{3}{43}, \frac{13}{43}, -\frac{3}{43})$ $+\frac{14}{43}e^5 \otimes e_6 + \frac{8}{43}\sqrt{7}e^1 \otimes e_4 + \frac{8}{43}\sqrt{7}e^2 \otimes e_8$	{1235, 1236, 1578, 1678, 2457, 2467, 3458, 3468}
82:1	$0, 0, 0, 0, 0, 0, \frac{4}{251}\sqrt{194}e^{12}, \frac{6}{251}\sqrt{582}e^{13}$	$(\frac{108}{251}, -\frac{86}{251}, -\frac{24}{251}, \frac{127}{251}, -\frac{67}{251}, \frac{30}{251}, \frac{22}{251}, \frac{84}{251})$ $+\frac{194}{251}e^4 \otimes e_5 + \frac{4}{251}\sqrt{3007}e^1 \otimes e_2$	{134, 1346, 135, 1356, 1468, 148, 1568, 158, 23468, 2348, 23568, 2358, 24, 246, 25, 256}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{39}\sqrt{559}e^{12}, \frac{1}{78}\sqrt{258}e^{34}$	$(\frac{35}{156}, -\frac{17}{78}, \frac{1}{13}, \frac{1}{13}, \frac{29}{52}, -\frac{17}{52}, \frac{1}{156}, \frac{2}{13})$ $+\frac{1}{78}\sqrt{2967}e^1 \otimes e_6 + \frac{1}{78}\sqrt{2967}e^5 \otimes e_7$	{12345, 12358, 125, 1347, 1378, 17, 23467, 23678, 267, 3456, 3568, 56}
82:2	$0, 0, 0, 0, 0, 0, \frac{12}{53}\sqrt{5}e^{12}, \frac{12}{53}\sqrt{5}e^{34}$	$(\frac{20}{53}, -\frac{3}{53}, -\frac{3}{53}, -\frac{3}{53}, \frac{30}{53}, -\frac{16}{53}, \frac{17}{53}, -\frac{6}{53})$ $+\frac{6}{53}\sqrt{46}e^1 \otimes e_6 + \frac{6}{53}\sqrt{46}e^5 \otimes e_8$	{12345, 1238, 125, 13457, 1378, 157, 234567, 23678, 2567, 3456, 368, 56}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{18}\sqrt{11}e^{12}, \frac{1}{18}\sqrt{11}e^{34}$	$(\frac{13}{36}, -\frac{1}{4}, \frac{13}{36}, -\frac{1}{4}, \frac{7}{18}, -\frac{2}{9}, \frac{1}{9}, \frac{1}{9})$ $+ \frac{11}{18}e^1 \otimes e_2 + \frac{11}{18}e^3 \otimes e_4 + \frac{11}{18}e^5 \otimes e_6$	{13578, 13678, 14578, 14678, 24578, 24678}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{39}\sqrt{559}e^{12}, \frac{1}{78}\sqrt{258}e^{34}$	$(\frac{35}{156}, \frac{35}{156}, \frac{1}{13}, \frac{1}{13}, -\frac{17}{52}, -\frac{17}{52}, \frac{35}{78}, \frac{2}{13})$ $+ \frac{1}{78}\sqrt{2967}e^1 \otimes e_5 + \frac{1}{78}\sqrt{2967}e^2 \otimes e_6$	{12, 1234, 1238, 13467, 13678, 167, 3456, 3568, 56}
82:2	$0, 0, 0, 0, 0, 0, \frac{2}{25}\sqrt{11}e^{12}, \frac{2}{25}\sqrt{11}e^{34}$	$(\frac{13}{25}, -\frac{9}{25}, \frac{2}{25}, \frac{2}{25}, \frac{14}{25}, -\frac{8}{25}, \frac{4}{25}, \frac{4}{25})$ $+ \frac{22}{25}e^1 \otimes e_2 + \frac{22}{25}e^5 \otimes e_6$	{13457, 13467, 13578, 13678, 157, 167, 23457, 23467, 23578, 23678, 257, 267}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{87}\sqrt{6322}e^{12}, \frac{2}{87}\sqrt{327}e^{34}$	$(\frac{2}{3}, -\frac{11}{87}, \frac{4}{29}, \frac{4}{29}, -\frac{17}{29}, \frac{6}{29}, \frac{47}{87}, \frac{8}{29})$ $+ \frac{1}{87}\sqrt{15042}e^1 \otimes e_5$	{12, 1234, 12346, 12368, 1238, 126, 13467, 1347, 13678, 1378, 167, 17, 234567, 23457, 235678, 23578, 2567, 257, 345, 3456, 3568, 358, 5, 56}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{21}\sqrt{130}e^{12}, \frac{10}{147}\sqrt{39}e^{34}$	$(\frac{26}{147}, -\frac{31}{147}, \frac{20}{49}, -\frac{4}{49}, -\frac{13}{49}, \frac{6}{49}, -\frac{5}{147}, \frac{16}{49})$ $+ \frac{1}{147}\sqrt{7410}e^1 \otimes e_5 + \frac{4}{49}\sqrt{65}e^3 \otimes e_7$	{1234, 12346, 12368, 1238, 14678, 1478, 167, 17, 245678, 24578, 2567, 257, 345, 3456, 3568, 358}
82:2	$0, 0, 0, 0, 0, 0, \frac{2}{29}\sqrt{35}e^{12}, \frac{2}{29}\sqrt{35}e^{34}$	$(\frac{5}{29}, -\frac{9}{29}, \frac{10}{29}, -\frac{2}{29}, \frac{10}{29}, -\frac{4}{29}, -\frac{4}{29}, \frac{8}{29})$ $+ \frac{14}{29}e^1 \otimes e_2 + \frac{14}{29}e^5 \otimes e_6 + \frac{4}{29}\sqrt{21}e^3 \otimes e_7$	{14578, 14678, 157, 167, 24578, 24678, 257, 267}
82:2	$0, 0, 0, 0, 0, 0, \frac{2}{9}\sqrt{3}e^{12}, \frac{2}{9}\sqrt{3}e^{34}$	$(\frac{2}{9}, -\frac{2}{9}, \frac{2}{9}, -\frac{2}{9}, \frac{1}{9}, \frac{1}{9}, 0, 0)$ $+ \frac{4}{9}e^1 \otimes e_8 + \frac{4}{9}e^3 \otimes e_7$	{1234, 12345, 123456, 1567, 157, 17, 245678, 24578, 2478}
82:2	$0, 0, 0, 0, 0, 0, \frac{12}{73}\sqrt{5}e^{12}, \frac{12}{73}\sqrt{5}e^{34}$	$(\frac{8}{73}, -\frac{11}{73}, \frac{17}{73}, -\frac{11}{73}, \frac{26}{73}, -\frac{12}{73}, -\frac{3}{73}, \frac{6}{73})$ $+ \frac{2}{73}\sqrt{190}e^1 \otimes e_6 + \frac{2}{73}\sqrt{190}e^5 \otimes e_8 + \frac{4}{73}\sqrt{70}e^3 \otimes e_7$	{12345, 1238, 1478, 157, 24678, 2567, 3456, 368}
82:2	$0, 0, 0, 0, 0, 0, \frac{2}{199}\sqrt{258}e^{12}, \frac{4}{199}\sqrt{559}e^{34}$	$(\frac{55}{199}, -\frac{31}{199}, \frac{35}{199}, -\frac{34}{199}, \frac{87}{199}, -\frac{51}{199}, \frac{24}{199}, \frac{1}{199})$ $+ \frac{2}{199}\sqrt{2967}e^3 \otimes e_6 + \frac{2}{199}\sqrt{2967}e^5 \otimes e_8 + \frac{86}{199}e^1 \otimes e_2$	{13457, 1378, 14678, 1567, 23457, 2378, 24678, 2567}
82:2	$0, 0, 0, 0, 0, 0, \frac{12}{71}\sqrt{5}e^{12}, \frac{12}{71}\sqrt{5}e^{34}$	$(\frac{15}{71}, -\frac{21}{71}, \frac{20}{71}, -\frac{3}{71}, \frac{30}{71}, -\frac{16}{71}, -\frac{6}{71}, \frac{17}{71})$ $+ \frac{36}{71}e^1 \otimes e_2 + \frac{6}{71}\sqrt{46}e^3 \otimes e_6 + \frac{6}{71}\sqrt{46}e^5 \otimes e_7$	{1347, 1378, 14678, 167, 2347, 2378, 24678, 267}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{196}\sqrt{6322}e^{12}, \frac{1}{98}\sqrt{327}e^{34}$	$(\frac{87}{392}, -\frac{131}{392}, \frac{19}{56}, -\frac{85}{392}, \frac{87}{196}, \frac{9}{98}, -\frac{11}{98}, \frac{6}{49})$ $+ \frac{109}{196}e^1 \otimes e_2 + \frac{109}{196}e^3 \otimes e_4 + \frac{1}{196}\sqrt{15042}e^5 \otimes e_7$	{13678, 1378, 14678, 1478, 23678, 2378, 24678, 2478}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{11}\sqrt{35}e^{12}, \frac{1}{11}\sqrt{35}e^{34}$	$(\frac{5}{11}, -\frac{1}{11}, -\frac{1}{11}, -\frac{1}{11}, \frac{5}{11}, -\frac{2}{11}, \frac{4}{11}, -\frac{2}{11})$ $+ \frac{2}{11}\sqrt{21}e^1 \otimes e_8 + \frac{7}{11}e^5 \otimes e_6$	{12345, 12346, 125, 126, 13457, 13467, 157, 167, 23578, 23678, 358, 368}
82:2	$0, 0, 0, 0, 0, 0, \frac{12}{53}\sqrt{5}e^{12}, \frac{12}{53}\sqrt{5}e^{34}$	$(-\frac{3}{53}, -\frac{3}{53}, -\frac{3}{53}, -\frac{3}{53}, \frac{30}{53}, \frac{30}{53}, -\frac{6}{53}, -\frac{6}{53})$ $+ \frac{6}{53}\sqrt{46}e^5 \otimes e_7 + \frac{6}{53}\sqrt{46}e^6 \otimes e_8$	{123456, 12358, 1256, 1378, 167, 56}
82:2	$0, 0, 0, 0, 0, 0, \frac{2}{283}\sqrt{6322}e^{12}, \frac{4}{283}\sqrt{327}e^{34}$	$(\frac{87}{283}, -\frac{131}{283}, \frac{24}{283}, \frac{24}{283}, \frac{174}{283}, \frac{36}{283}, -\frac{44}{283}, \frac{48}{283})$ $+ \frac{218}{283}e^1 \otimes e_2 + \frac{2}{283}\sqrt{15042}e^5 \otimes e_7$	{13467, 1347, 13678, 1378, 167, 17, 23467, 2347, 23678, 2378, 267, 27}
82:2	$0, 0, 0, 0, 0, 0, \frac{2}{25}\sqrt{11}e^{12}, \frac{2}{25}\sqrt{11}e^{34}$	$(\frac{13}{25}, -\frac{9}{25}, \frac{13}{25}, -\frac{9}{25}, \frac{3}{25}, \frac{3}{25}, \frac{4}{25}, \frac{4}{25})$ $+ \frac{22}{25}e^1 \otimes e_2 + \frac{22}{25}e^3 \otimes e_4$	{135678, 13578, 1378, 145678, 14578, 1478, 245678, 24578, 2478}
82:2	$0, 0, 0, 0, 0, 0, \frac{12}{53}\sqrt{5}e^{12}, \frac{12}{53}\sqrt{5}e^{34}$	$(\frac{20}{53}, -\frac{3}{53}, \frac{20}{53}, -\frac{3}{53}, -\frac{16}{53}, -\frac{16}{53}, \frac{17}{53}, \frac{17}{53})$ $+ \frac{6}{53}\sqrt{46}e^1 \otimes e_5 + \frac{6}{53}\sqrt{46}e^3 \otimes e_6$	{1234, 1238, 12468, 126, 1378, 14678, 167, 245678, 2567, 56}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{21}\sqrt{130}e^{12}, \frac{10}{147}\sqrt{39}e^{34}$	$(\frac{26}{147}, \frac{41}{147}, -\frac{4}{49}, -\frac{4}{49}, -\frac{13}{49}, \frac{6}{49}, \frac{67}{147}, -\frac{8}{49})$ $+ \frac{1}{147}\sqrt{7410}e^1 \otimes e_5 + \frac{4}{49}\sqrt{65}e^2 \otimes e_8$	{12, 1234, 12346, 126, 13678, 1378, 234567, 23457, 2567, 257, 3568, 358}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{87}\sqrt{6322}e^{12}, \frac{2}{87}\sqrt{327}e^{34}$	$(-\frac{11}{87}, -\frac{11}{87}, \frac{4}{29}, \frac{4}{29}, 1, \frac{6}{29}, -\frac{22}{87}, \frac{8}{29})$ $+ \frac{1}{87}\sqrt{15042}e^5 \otimes e_7$	{12345, 123456, 123568, 12358, 125, 1256, 13467, 1347, 13678, 1378, 167, 17, 345, 3456, 3568, 358, 5, 56}
82:2	$0, 0, 0, 0, 0, 0, \frac{2}{15}\sqrt{35}e^{12}, \frac{2}{15}\sqrt{35}e^{34}$	$(\frac{2}{3}, -\frac{2}{15}, -\frac{2}{15}, -\frac{2}{15}, \frac{1}{5}, \frac{1}{5}, \frac{8}{15}, -\frac{4}{15})$ $+ \frac{4}{15}\sqrt{21}e^1 \otimes e_8$	{12, 1234, 12345, 123456, 125, 1256, 134567, 13457, 1347, 1567, 157, 17, 235678, 23578, 2378, 3568, 358, 38}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{11}\sqrt{35}e^{12}, \frac{1}{11}\sqrt{35}e^{34}$	$(\frac{5}{22}, -\frac{9}{22}, \frac{5}{11}, -\frac{1}{11}, \frac{3}{22}, \frac{3}{22}, -\frac{2}{11}, \frac{4}{11})$ $+ \frac{2}{11}\sqrt{21}e^3 \otimes e_7 + \frac{7}{11}e^1 \otimes e_2$	{145678, 14578, 1478, 1567, 157, 17, 245678, 24578, 2478, 2567, 257, 27}
82:2	$0, 0, 0, 0, 0, 0, \frac{20}{359}\sqrt{39}e^{12}, \frac{14}{359}\sqrt{130}e^{34}$	$(\frac{41}{359}, -\frac{89}{359}, \frac{82}{359}, -\frac{62}{359}, \frac{150}{359}, \frac{36}{359}, -\frac{48}{359}, \frac{20}{359})$ $+ \frac{130}{359}e^1 \otimes e_2 + \frac{24}{359}\sqrt{65}e^3 \otimes e_7 + \frac{2}{359}\sqrt{7410}e^5 \otimes e_8$	{14678, 1478, 1567, 157, 24678, 2478, 2567, 257}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{7}\sqrt{11}e^{12}, \frac{1}{7}\sqrt{11}e^{34}$	$(\frac{13}{14}, -\frac{9}{14}, \frac{1}{7}, \frac{1}{7}, \frac{3}{14}, \frac{3}{14}, \frac{2}{7}, \frac{2}{7})$ $+ \frac{11}{7}e^1 \otimes e_2$	{134567, 13457, 1347, 135678, 13578, 1378, 1567, 157, 17, 234567, 23457, 2347, 235678, 23578, 2378, 2567, 257, 27}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{5}\sqrt{3}e^{12}, \frac{1}{5}\sqrt{3}e^{34}$	$(\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, 0, 0, 0)$ $+ \frac{1}{5}e^5 \otimes e_6 + \frac{2}{5}e^1 \otimes e_8 + \frac{2}{5}e^3 \otimes e_7$	{12345, 12346, 157, 167, 24578, 24678}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{51}\sqrt{391}e^{12}, \frac{1}{102}\sqrt{690}e^{34}$	$(\frac{7}{204}, \frac{11}{102}, -\frac{1}{17}, -\frac{1}{17}, \frac{25}{68}, -\frac{13}{68}, \frac{29}{204}, -\frac{2}{17})$ $+ \frac{1}{102}\sqrt{1311}e^1 \otimes e_6 + \frac{1}{102}\sqrt{1311}e^5 \otimes e_7 + \frac{1}{17}\sqrt{46}e^2 \otimes e_8$	{12345, 125, 1378, 23467, 267, 3568}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{7}\sqrt{11}e^{12}, \frac{1}{7}\sqrt{11}e^{34}$	$(\frac{1}{7}, \frac{1}{7}, \frac{1}{7}, \frac{1}{7}, 1, -\frac{4}{7}, \frac{2}{7}, \frac{2}{7})$ $+ \frac{11}{7}e^5 \otimes e_6$	{12345, 12346, 12358, 12368, 125, 126, 13578, 13678, 157, 167, 5, 6}
82:2	$0, 0, 0, 0, 0, 0, \frac{12}{71}\sqrt{5}e^{12}, \frac{12}{71}\sqrt{5}e^{34}$	$(\frac{15}{71}, -\frac{21}{71}, -\frac{3}{71}, -\frac{3}{71}, \frac{30}{71}, \frac{30}{71}, -\frac{6}{71}, -\frac{6}{71})$ $+ \frac{36}{71}e^1 \otimes e_2 + \frac{6}{71}\sqrt{46}e^5 \otimes e_7 + \frac{6}{71}\sqrt{46}e^6 \otimes e_8$	{13467, 1378, 167, 23467, 2378, 267}
82:2	$0, 0, 0, 0, 0, 0, \frac{4}{283}\sqrt{327}e^{12}, \frac{2}{283}\sqrt{6322}e^{34}$	$(\frac{133}{283}, -\frac{85}{283}, \frac{116}{283}, -\frac{22}{283}, -\frac{102}{283}, \frac{36}{283}, \frac{48}{283}, \frac{94}{283})$ $+ \frac{218}{283}e^1 \otimes e_2 + \frac{2}{283}\sqrt{15042}e^3 \otimes e_5$	{13467, 1347, 13678, 1378, 145678, 14578, 1567, 157, 23467, 2347, 23678, 2378, 245678, 24578, 2567, 257}
82:2	$0, 0, 0, 0, 0, 0, \frac{4}{283}\sqrt{327}e^{12}, \frac{2}{283}\sqrt{6322}e^{34}$	$(\frac{133}{283}, -\frac{85}{283}, -\frac{22}{283}, -\frac{22}{283}, \frac{174}{283}, \frac{36}{283}, \frac{48}{283}, -\frac{44}{283})$ $+ \frac{218}{283}e^1 \otimes e_2 + \frac{2}{283}\sqrt{15042}e^5 \otimes e_8$	{134567, 13457, 13678, 1378, 1567, 157, 234567, 23457, 23678, 2378, 2567, 257}
82:2	$0, 0, 0, 0, 0, 0, \frac{1}{21}\sqrt{130}e^{12}, \frac{10}{147}\sqrt{39}e^{34}$	$(\frac{41}{147}, -\frac{31}{147}, -\frac{4}{49}, -\frac{4}{49}, \frac{25}{49}, \frac{6}{49}, \frac{10}{147}, -\frac{8}{49})$ $+ \frac{1}{147}\sqrt{7410}e^5 \otimes e_7 + \frac{4}{49}\sqrt{65}e^1 \otimes e_8$	{12345, 123456, 125, 1256, 13467, 1347, 167, 17, 23678, 2378, 3568, 358}
82:3	$0, 0, 0, 0, 0, 0, \frac{6}{49}\sqrt{17}e^{12}, \frac{6}{49}\sqrt{17}e^{13} + \frac{4}{49}\sqrt{17}e^{24}$	$(-\frac{12}{49}, \frac{1}{49}, \frac{23}{49}, \frac{10}{49}, \frac{23}{49}, -\frac{11}{49}, -\frac{11}{49}, \frac{11}{49})$ $+ \frac{2}{49}\sqrt{442}e^3 \otimes e_7 + \frac{34}{49}e^5 \otimes e_6$	{1235, 1236, 1578, 1678, 257, 267, 358, 368}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{427}\sqrt{32314}e^{12}, \frac{4}{427}\sqrt{642}e^{13} + \frac{2}{427}\sqrt{1177}e^{24}$	$(\frac{55}{427}, -\frac{4}{427}, -\frac{52}{427}, \frac{1}{61}, \frac{158}{427}, -\frac{111}{427}, \frac{51}{427}, \frac{3}{427})$ $+ \frac{1}{427}\sqrt{27606}e^1 \otimes e_3 + \frac{1}{427}\sqrt{27606}e^5 \otimes e_7 + \frac{2}{427}\sqrt{7490}e^2 \otimes e_6$	{1245, 167, 2347, 356}
82:3	$0, 0, 0, 0, 0, 0, \frac{3}{16}\sqrt{17}e^{12}, \frac{3}{16}\sqrt{17}e^{13} + \frac{1}{8}\sqrt{17}e^{24}$	$(-\frac{3}{8}, \frac{1}{32}, \frac{23}{32}, \frac{5}{16}, \frac{3}{16}, \frac{3}{16}, -\frac{11}{32}, \frac{11}{32})$ $+ \frac{1}{16}\sqrt{442}e^3 \otimes e_7$	{123, 1235, 12356, 15678, 1578, 178, 2567, 257, 27, 3568, 358, 38}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{121}\sqrt{2726}e^{12}, \frac{2}{121}\sqrt{145}e^{13} + \frac{2}{121}\sqrt{145}e^{24}$	$(\frac{8}{121}, \frac{8}{121}, -\frac{21}{121}, -\frac{21}{121}, \frac{45}{121}, \frac{7}{121}, \frac{16}{121}, -\frac{13}{121})$ $+ \frac{2}{121}\sqrt{551}e^1 \otimes e_3 - \frac{2}{121}\sqrt{551}e^2 \otimes e_4 + \frac{2}{121}\sqrt{551}e^5 \otimes e_7$	{125, 1256, 1467, 147, 345, 3456}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{121}\sqrt{2726}e^{12}, \frac{2}{121}\sqrt{145}e^{13} + \frac{2}{121}\sqrt{145}e^{24}$	$(\frac{8}{121}, \frac{8}{121}, -\frac{21}{121}, -\frac{21}{121}, \frac{45}{121}, \frac{7}{121}, \frac{16}{121}, -\frac{13}{121})$ $+ \frac{2}{121}\sqrt{551}e^1 \otimes e_3 + \frac{2}{121}\sqrt{551}e^2 \otimes e_4 + \frac{2}{121}\sqrt{551}e^5 \otimes e_7$	{125, 1256, 1467, 147, 345, 3456}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{8}\sqrt{17}e^{12}, \frac{3}{16}\sqrt{17}e^{13} + \frac{3}{16}\sqrt{17}e^{24}$	$(\frac{1}{32}, \frac{1}{32}, -\frac{3}{32}, -\frac{3}{32}, 1, \frac{3}{16}, \frac{1}{16}, -\frac{1}{16})$ $+ \frac{1}{16}\sqrt{442}e^5 \otimes e_8$	{1234567, 123457, 12678, 1278, 135, 1356, 1468, 148, 34678, 3478, 567, 57}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{619}\sqrt{127510}e^{12}, \frac{12}{619}\sqrt{311}e^{13} + \frac{2}{619}\sqrt{11818}e^{24}$	$(\frac{190}{619}, \frac{80}{619}, -\frac{121}{619}, -\frac{11}{619}, -\frac{231}{619}, \frac{65}{619}, \frac{270}{619}, \frac{69}{619})$ $+ \frac{2}{619}\sqrt{40119}e^1 \otimes e_3 + \frac{2}{619}\sqrt{11507}e^2 \otimes e_5$	{124, 1246, 1567, 157, 23467, 2347, 35, 356}
82:3	$0, 0, 0, 0, 0, 0, \frac{4}{23}\sqrt{6}e^{12}, \frac{4}{23}\sqrt{6}e^{13} + \frac{8}{23}e^{24}$	$(\frac{8}{23}, -\frac{2}{23}, 0, \frac{10}{23}, -\frac{8}{23}, -\frac{6}{23}, \frac{6}{23}, \frac{8}{23})$ $+ \frac{12}{23}\sqrt{2}e^4 \otimes e_6 + \frac{4}{23}\sqrt{22}e^1 \otimes e_5$	{1234, 1268, 1367, 1478, 235678, 2457, 3458, 56}
82:3	$0, 0, 0, 0, 0, 0, \frac{5}{43}\sqrt{14}e^{12}, \frac{5}{43}\sqrt{14}e^{13} + \frac{14}{43}e^{24}$	$(-\frac{3}{86}, -\frac{3}{86}, \frac{11}{43}, \frac{11}{43}, -\frac{31}{86}, \frac{4}{43}, -\frac{3}{43}, \frac{19}{86})$ $+ \frac{1}{43}\sqrt{546}e^1 \otimes e_5 + \frac{1}{43}\sqrt{546}e^3 \otimes e_7$	{123, 1236, 1678, 178, 2567, 257, 3568, 358}
82:3	$0, 0, 0, 0, 0, 0, \frac{2}{59}\sqrt{62}e^{12}, \frac{1}{59}\sqrt{1054}e^{13} + \frac{2}{59}\sqrt{62}e^{24}$	$(\frac{12}{59}, -\frac{1}{59}, -\frac{10}{59}, \frac{3}{59}, \frac{33}{59}, -\frac{19}{59}, \frac{11}{59}, \frac{2}{59})$ $+ \frac{2}{59}\sqrt{403}e^1 \otimes e_6 + \frac{2}{59}\sqrt{403}e^5 \otimes e_8$	{12345, 128, 1357, 1478, 23678, 24567, 3468, 56}
82:3	$0, 0, 0, 0, 0, 0, \frac{4}{67}\sqrt{58}e^{12}, \frac{1}{67}\sqrt{87}e^{13} + \frac{1}{67}\sqrt{87}e^{24}$	$(\frac{11}{67}, \frac{11}{67}, -\frac{18}{67}, -\frac{18}{67}, \frac{22}{67}, \frac{6}{67}, \frac{22}{67}, -\frac{7}{67})$ $+ \frac{3}{67}\sqrt{145}e^1 \otimes e_3 - \frac{3}{67}\sqrt{145}e^2 \otimes e_4 + \frac{4}{67}\sqrt{58}e^5 \otimes e_8$	{1268, 128, 14678, 1478, 3468, 348}
82:3	$0, 0, 0, 0, 0, 0, \frac{4}{67}\sqrt{58}e^{12}, \frac{1}{67}\sqrt{87}e^{13} + \frac{1}{67}\sqrt{87}e^{24}$	$(\frac{11}{67}, \frac{11}{67}, -\frac{18}{67}, -\frac{18}{67}, \frac{22}{67}, \frac{6}{67}, \frac{22}{67}, -\frac{7}{67})$ $+ \frac{3}{67}\sqrt{145}e^1 \otimes e_3 + \frac{3}{67}\sqrt{145}e^2 \otimes e_4 + \frac{4}{67}\sqrt{58}e^5 \otimes e_8$	{1268, 128, 14678, 1478, 3468, 348}
82:3	$0, 0, 0, 0, 0, 0, \frac{2}{59}\sqrt{62}e^{12}, \frac{1}{59}\sqrt{1054}e^{13} + \frac{2}{59}\sqrt{62}e^{24}$	$(-\frac{14}{59}, -\frac{1}{59}, \frac{16}{59}, \frac{3}{59}, \frac{33}{59}, \frac{7}{59}, -\frac{15}{59}, \frac{2}{59})$ $+ \frac{2}{59}\sqrt{403}e^3 \otimes e_7 + \frac{2}{59}\sqrt{403}e^5 \otimes e_8$	{12345, 123456, 14678, 1478, 24567, 2457, 3468, 348}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{331}\sqrt{24742}e^{12}, \frac{5}{331}\sqrt{278}e^{13} + \frac{1}{331}\sqrt{3614}e^{24}$	$(\frac{77}{331}, -\frac{75}{331}, -\frac{62}{331}, \frac{90}{331}, \frac{141}{331}, -\frac{49}{331}, \frac{2}{331}, \frac{15}{331})$ $+ \frac{2}{331}\sqrt{5282}e^4 \otimes e_6 + \frac{2}{331}\sqrt{7923}e^1 \otimes e_3 + \frac{2}{331}\sqrt{7923}e^5 \otimes e_7$	{1245, 167, 2347, 356}
82:3	$0, 0, 0, 0, 0, 0, \frac{4}{21}\sqrt{11}e^{12}, \frac{1}{21}\sqrt{33}e^{13} + \frac{1}{21}\sqrt{33}e^{24}$	$(\frac{5}{21}, -\frac{3}{14}, -\frac{2}{7}, \frac{1}{6}, \frac{23}{42}, \frac{2}{21}, \frac{1}{42}, -\frac{1}{21})$ $+ \frac{1}{21}\sqrt{209}e^1 \otimes e_3 + \frac{1}{21}\sqrt{209}e^5 \otimes e_7$	{125, 1256, 1467, 147, 2367, 237, 345, 3456}
82:3	$0, 0, 0, 0, 0, 0, \frac{12}{619}\sqrt{311}e^{12}, \frac{1}{619}\sqrt{127510}e^{13} + \frac{2}{619}\sqrt{11818}e^{24}$	$(-\frac{68}{619}, \frac{61}{619}, \frac{118}{619}, -\frac{11}{619}, \frac{361}{619}, -\frac{193}{619}, -\frac{7}{619}, \frac{50}{619})$ $+ \frac{2}{619}\sqrt{40119}e^3 \otimes e_6 + \frac{4}{619}\sqrt{11507}e^5 \otimes e_8$	{123457, 12678, 135, 1468, 238, 2456, 3478, 567}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{619}\sqrt{127510}e^{12}, \frac{2}{619}\sqrt{11818}e^{13} + \frac{12}{619}\sqrt{311}e^{24}$	$(\frac{80}{619}, -\frac{68}{619}, -\frac{11}{619}, \frac{137}{619}, \frac{323}{619}, -\frac{231}{619}, \frac{12}{619}, \frac{69}{619})$ $+ \frac{2}{619}\sqrt{40119}e^5 \otimes e_7 + \frac{4}{619}\sqrt{11507}e^1 \otimes e_6$	{1235, 12458, 1347, 178, 234678, 267, 3568, 456}
82:3	$0, 0, 0, 0, 0, 0, \frac{8}{23}e^{12}, \frac{4}{23}\sqrt{6}e^{13} + \frac{4}{23}\sqrt{6}e^{24}$	$(\frac{7}{23}, -\frac{2}{23}, -\frac{9}{23}, 0, \frac{14}{23}, \frac{3}{23}, \frac{5}{23}, -\frac{2}{23})$ $+ \frac{12}{23}\sqrt{2}e^1 \otimes e_3 + \frac{4}{23}\sqrt{22}e^5 \otimes e_8$	{1268, 128, 14678, 1478, 23678, 2378, 3468, 348}
82:3	$0, 0, 0, 0, 0, 0, \frac{2}{153}\sqrt{2006}e^{12}, \frac{4}{153}\sqrt{59}e^{13} + \frac{4}{153}\sqrt{59}e^{24}$	$(\frac{64}{153}, -\frac{4}{51}, -\frac{6}{17}, \frac{22}{153}, \frac{77}{153}, -\frac{41}{153}, \frac{52}{153}, \frac{10}{153})$ $+ \frac{118}{153}e^5 \otimes e_6 + \frac{4}{153}\sqrt{1121}e^1 \otimes e_3$	{125, 126, 1457, 1467, 2357, 2367, 345, 346}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{47}\sqrt{2006}e^{12}, \frac{2}{47}\sqrt{59}e^{13} + \frac{2}{47}\sqrt{59}e^{24}$	$(\frac{32}{47}, -\frac{6}{47}, -\frac{27}{47}, \frac{11}{47}, \frac{9}{47}, \frac{47}{47}, \frac{26}{47}, \frac{5}{47})$ $+ \frac{2}{47}\sqrt{1121}e^1 \otimes e_3$	{12, 125, 1256, 14567, 1457, 147, 23567, 2357, 237, 34, 345, 3456}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{59}\sqrt{1054}e^{12}, \frac{2}{59}\sqrt{62}e^{13} + \frac{2}{59}\sqrt{62}e^{24}$	$(\frac{12}{59}, \frac{12}{59}, \frac{3}{59}, \frac{3}{59}, -\frac{19}{59}, -\frac{19}{59}, \frac{24}{59}, \frac{15}{59})$ $+ \frac{2}{59}\sqrt{403}e^1 \otimes e_5 + \frac{2}{59}\sqrt{403}e^2 \otimes e_6$	{1234, 128, 1367, 14678, 34568, 56}
82:3	$0, 0, 0, 0, 0, 0, \frac{15}{173}\sqrt{30}e^{12}, \frac{15}{173}\sqrt{30}e^{13} + \frac{5}{173}\sqrt{110}e^{24}$	$(-\frac{33}{173}, \frac{5}{173}, \frac{70}{173}, \frac{32}{173}, \frac{97}{173}, -\frac{55}{173}, -\frac{28}{173}, \frac{37}{173})$ $+ \frac{10}{173}\sqrt{190}e^3 \otimes e_6 + \frac{10}{173}\sqrt{190}e^5 \otimes e_7$	{1235, 124568, 1347, 1678, 23478, 267, 358, 456}
82:3	$0, 0, 0, 0, 0, 0, \frac{10}{113}\sqrt{10}e^{12}, \frac{5}{113}\sqrt{66}e^{13} + \frac{10}{113}\sqrt{3}e^{24}$	$(-\frac{5}{113}, -\frac{5}{113}, \frac{15}{113}, \frac{15}{113}, \frac{35}{113}, -\frac{30}{113}, -\frac{10}{113}, \frac{10}{113})$ $+ \frac{10}{113}\sqrt{13}e^5 \otimes e_8 + \frac{5}{113}\sqrt{78}e^1 \otimes e_6 + \frac{5}{113}\sqrt{78}e^3 \otimes e_7$	{1235, 178, 2567, 368}
82:3	$0, 0, 0, 0, 0, 0, \frac{4}{67}\sqrt{58}e^{12}, \frac{1}{67}\sqrt{87}e^{13} + \frac{1}{67}\sqrt{87}e^{24}$	$(\frac{11}{67}, -\frac{23}{134}, -\frac{18}{67}, \frac{9}{134}, \frac{57}{134}, \frac{22}{67}, -\frac{1}{134}, -\frac{7}{67})$ $+ \frac{3}{67}\sqrt{145}e^1 \otimes e_3 + \frac{3}{67}\sqrt{145}e^5 \otimes e_7 + \frac{4}{67}\sqrt{58}e^6 \otimes e_8$	{1258, 1478, 2378, 3458}
82:3	$0, 0, 0, 0, 0, 0, \frac{4}{21}\sqrt{11}e^{12}, \frac{1}{21}\sqrt{33}e^{13} + \frac{1}{21}\sqrt{33}e^{24}$	$(\frac{5}{21}, \frac{5}{21}, -\frac{2}{7}, -\frac{2}{7}, \frac{2}{21}, \frac{2}{21}, \frac{10}{21}, -\frac{1}{21})$ $+ \frac{1}{21}\sqrt{209}e^1 \otimes e_3 - \frac{1}{21}\sqrt{209}e^2 \otimes e_4$	{12, 125, 1256, 14567, 1457, 147, 34, 345, 3456}
82:3	$0, 0, 0, 0, 0, 0, \frac{4}{21}\sqrt{11}e^{12}, \frac{1}{21}\sqrt{33}e^{13} + \frac{1}{21}\sqrt{33}e^{24}$	$(\frac{5}{21}, \frac{5}{21}, -\frac{2}{7}, -\frac{2}{7}, \frac{2}{21}, \frac{2}{21}, \frac{10}{21}, -\frac{1}{21})$ $+ \frac{1}{21}\sqrt{209}e^1 \otimes e_3 + \frac{1}{21}\sqrt{209}e^2 \otimes e_4$	{12, 125, 1256, 14567, 1457, 147, 34, 345, 3456}
82:3	$0, 0, 0, 0, 0, 0, \frac{8}{53}\sqrt{11}e^{12}, \frac{2}{53}\sqrt{33}e^{13} + \frac{2}{53}\sqrt{33}e^{24}$	$(\frac{10}{53}, \frac{10}{53}, -\frac{12}{53}, -\frac{12}{53}, \frac{15}{53}, -\frac{7}{53}, \frac{20}{53}, -\frac{2}{53})$ $+ \frac{22}{53}e^5 \otimes e_6 + \frac{2}{53}\sqrt{209}e^1 \otimes e_3 - \frac{2}{53}\sqrt{209}e^2 \otimes e_4$	{125, 126, 1457, 1467, 345, 346}
82:3	$0, 0, 0, 0, 0, 0, \frac{8}{53}\sqrt{11}e^{12}, \frac{2}{53}\sqrt{33}e^{13} + \frac{2}{53}\sqrt{33}e^{24}$	$(\frac{10}{53}, \frac{10}{53}, -\frac{12}{53}, -\frac{12}{53}, \frac{15}{53}, -\frac{7}{53}, \frac{20}{53}, -\frac{2}{53})$ $+ \frac{22}{53}e^5 \otimes e_6 + \frac{2}{53}\sqrt{209}e^1 \otimes e_3 + \frac{2}{53}\sqrt{209}e^2 \otimes e_4$	{125, 126, 1457, 1467, 345, 346}
82:3	$0, 0, 0, 0, 0, 0, \frac{8}{23}e^{12}, \frac{4}{23}\sqrt{6}e^{13} + \frac{4}{23}\sqrt{6}e^{24}$	$(-\frac{2}{23}, -\frac{2}{23}, 0, 0, \frac{12}{23}, \frac{14}{23}, -\frac{4}{23}, -\frac{2}{23})$ $+ \frac{12}{23}\sqrt{2}e^5 \otimes e_7 + \frac{4}{23}\sqrt{22}e^6 \otimes e_8$	{123456, 1258, 1367, 1478, 3458, 56}
82:3	$0, 0, 0, 0, 0, 0, \frac{2}{43}\sqrt{42}e^{12}, \frac{2}{43}\sqrt{42}e^{13} + \frac{2}{43}\sqrt{42}e^{24}$	$(\frac{5}{43}, -\frac{8}{43}, -\frac{2}{43}, \frac{11}{43}, \frac{17}{43}, -\frac{9}{43}, -\frac{3}{43}, \frac{3}{43})$ $+ \frac{2}{43}\sqrt{91}e^1 \otimes e_6 + \frac{2}{43}\sqrt{91}e^4 \otimes e_7 + \frac{2}{43}\sqrt{91}e^5 \otimes e_8$	{12345, 1357, 23678, 3468}
82:3	$0, 0, 0, 0, 0, 0, \frac{44}{1147}\sqrt{3}e^{12}, \frac{44}{1147}\sqrt{43}e^{13} + \frac{44}{1147}\sqrt{138}e^{24}$	$(\frac{264}{1147}, -\frac{165}{1147}, -\frac{220}{1147}, \frac{209}{1147}, \frac{528}{1147}, -\frac{275}{1147}, \frac{99}{1147}, \frac{44}{1147})$ $+ \frac{22}{1147}\sqrt{478}e^1 \otimes e_3 + \frac{44}{1147}\sqrt{190}e^4 \otimes e_6 + \frac{66}{1147}\sqrt{94}e^5 \otimes e_8$	{12678, 148, 2368, 3478}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{47}\sqrt{2006}e^{12}, \frac{2}{47}\sqrt{59}e^{13} + \frac{2}{47}\sqrt{59}e^{24}$	$(-\frac{6}{47}, -\frac{6}{47}, \frac{11}{47}, \frac{11}{47}, 1, \frac{9}{47}, -\frac{12}{47}, \frac{5}{47})$ $+ \frac{2}{47}\sqrt{1121}e^5 \otimes e_7$	{1234568, 123458, 125, 1256, 13678, 1378, 1467, 147, 345, 3456, 568, 58}
82:3	$0, 0, 0, 0, 0, 0, \frac{5}{173}\sqrt{110}e^{12}, \frac{15}{173}\sqrt{30}e^{13} + \frac{15}{173}\sqrt{30}e^{24}$	$(\frac{5}{173}, \frac{5}{173}, \frac{70}{173}, \frac{70}{173}, -\frac{55}{173}, -\frac{55}{173}, \frac{10}{173}, \frac{75}{173})$ $+ \frac{10}{173}\sqrt{190}e^3 \otimes e_5 + \frac{10}{173}\sqrt{190}e^4 \otimes e_6$	{12347, 125678, 136, 1458, 3478, 567}
82:3	$0, 0, 0, 0, 0, 0, \frac{2}{47}\sqrt{59}e^{12}, \frac{1}{47}\sqrt{2006}e^{13} + \frac{2}{47}\sqrt{59}e^{24}$	$(-\frac{6}{47}, \frac{13}{47}, \frac{30}{47}, \frac{11}{47}, -\frac{29}{47}, \frac{9}{47}, \frac{7}{47}, \frac{24}{47})$ $+ \frac{2}{47}\sqrt{1121}e^3 \otimes e_5$	{12367, 1237, 1245678, 124578, 134, 1346, 1568, 158, 23468, 2348, 25, 256, 3678, 378, 4567, 457}
82:3	$0, 0, 0, 0, 0, 0, \frac{2}{619}\sqrt{11818}e^{12}, \frac{1}{619}\sqrt{127510}e^{13} + \frac{12}{619}\sqrt{311}e^{24}$	$(\frac{80}{619}, \frac{61}{619}, \frac{118}{619}, \frac{137}{619}, -\frac{231}{619}, -\frac{193}{619}, \frac{141}{619}, \frac{198}{619})$ $+ \frac{2}{619}\sqrt{40119}e^3 \otimes e_6 + \frac{4}{619}\sqrt{11507}e^1 \otimes e_5$	{123, 12468, 1347, 1678, 234578, 2567, 358, 456}
82:3	$0, 0, 0, 0, 0, 0, \frac{4}{23}\sqrt{6}e^{12}, \frac{8}{23}e^{13} + \frac{4}{23}\sqrt{6}e^{24}$	$(-\frac{2}{23}, -\frac{3}{23}, \frac{10}{23}, \frac{11}{23}, -\frac{6}{23}, \frac{3}{23}, -\frac{5}{23}, \frac{8}{23})$ $+ \frac{12}{23}\sqrt{2}e^3 \otimes e_5 + \frac{4}{23}\sqrt{22}e^4 \otimes e_7$	{1234, 12346, 1367, 137, 23678, 2378, 3468, 348}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{619}\sqrt{127510}e^{12}, \frac{12}{619}\sqrt{311}e^{13} + \frac{2}{619}\sqrt{11818}e^{24}$	$(\frac{190}{619}, -\frac{216}{619}, -\frac{121}{619}, \frac{285}{619}, \frac{65}{619}, \frac{65}{619}, -\frac{26}{619}, \frac{69}{619})$ $+ \frac{2}{619}\sqrt{40119}e^1 \otimes e_3 + \frac{4}{619}\sqrt{11507}e^4 \otimes e_7$	{124, 1245, 12456, 1567, 157, 17}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:3	$0, 0, 0, 0, 0, 0, \frac{2}{1549}\sqrt{127510}e^{12}, \frac{24}{1549}\sqrt{311}e^{13} + \frac{4}{1549}\sqrt{11818}e^{24}$	$(\frac{380}{1549}, -\frac{432}{1549}, -\frac{242}{1549}, \frac{570}{1549}, \frac{441}{1549}, -\frac{181}{1549}, -\frac{52}{1549}, \frac{138}{1549})$ $+ \frac{4}{1549}\sqrt{40119}e^1 \otimes e_3 + \frac{622}{1549}e^5 \otimes e_6 + \frac{8}{1549}\sqrt{11507}e^4 \otimes e_7$	{1245, 1246, 157, 167}
82:3	$0, 0, 0, 0, 0, 0, \frac{3}{16}\sqrt{17}e^{12}, \frac{3}{16}\sqrt{17}e^{13} + \frac{1}{8}\sqrt{17}e^{24}$	$(\frac{7}{16}, \frac{1}{32}, -\frac{3}{32}, \frac{5}{16}, -\frac{5}{8}, \frac{3}{16}, \frac{15}{32}, \frac{11}{32})$ $+ \frac{1}{16}\sqrt{442}e^1 \otimes e_5$	{123, 1236, 12468, 1248, 13467, 1347, 1678, 178, 2345678, 234578, 2567, 257, 3568, 358, 45, 456}
82:3	$0, 0, 0, 0, 0, 0, \frac{2}{47}\sqrt{74}e^{12}, \frac{2}{47}\sqrt{74}e^{13} + \frac{2}{47}\sqrt{74}e^{24}$	$(\frac{6}{47}, \frac{6}{47}, \frac{8}{47}, \frac{8}{47}, 1, -\frac{27}{47}, \frac{12}{47}, \frac{14}{47})$ $+ \frac{74}{47}e^5 \otimes e_6$	{12345, 12346, 1258, 1268, 1357, 1367, 14578, 14678, 3458, 3468, 5, 6}
82:3	$0, 0, 0, 0, 0, 0, \frac{1}{59}\sqrt{1054}e^{12}, \frac{2}{59}\sqrt{62}e^{13} + \frac{2}{59}\sqrt{62}e^{24}$	$(\frac{12}{59}, -\frac{14}{59}, \frac{3}{59}, \frac{29}{59}, -\frac{19}{59}, \frac{7}{59}, -\frac{2}{59}, \frac{15}{59})$ $+ \frac{2}{59}\sqrt{403}e^1 \otimes e_5 + \frac{2}{59}\sqrt{403}e^4 \otimes e_7$	{1234, 12346, 1367, 137, 235678, 23578, 34568, 3458}
82:3	$0, 0, 0, 0, 0, 0, \frac{15}{173}\sqrt{30}e^{12}, \frac{5}{173}\sqrt{110}e^{13} + \frac{15}{173}\sqrt{30}e^{24}$	$(\frac{81}{173}, -\frac{33}{173}, -\frac{44}{173}, \frac{70}{173}, -\frac{55}{173}, \frac{21}{173}, \frac{48}{173}, \frac{37}{173})$ $+ \frac{10}{173}\sqrt{190}e^1 \otimes e_3 + \frac{10}{173}\sqrt{190}e^4 \otimes e_5$	{124, 1246, 1567, 157, 23467, 2347, 35, 356}
82:4	$0, 0, 0, 0, 0, 0, \frac{1}{28}\sqrt{493}e^{13} + \frac{1}{28}\sqrt{174}e^{24}, -\frac{1}{28}\sqrt{493}e^{12} + \frac{1}{28}\sqrt{174}e^{34}$	$(\frac{11}{28}, -\frac{1}{56}, -\frac{1}{56}, \frac{11}{28}, -\frac{9}{14}, \frac{5}{28}, \frac{3}{8}, \frac{3}{8})$ $+ \frac{1}{28}\sqrt{1334}e^1 \otimes e_5$	{123, 1236, 12467, 1247, 1678, 178, 2345678, 234578, 2568, 258, 45, 456, 123, 1236, 12467, 1247, 1678, 178, 2345678, 234578, 2568, 258, 45, 456}
82:4	$0, 0, 0, 0, 0, 0, \frac{1}{28}\sqrt{493}e^{13} + \frac{1}{28}\sqrt{174}e^{24}, \frac{1}{28}\sqrt{493}e^{12} + \frac{1}{28}\sqrt{174}e^{34}$	$(\frac{11}{28}, -\frac{1}{56}, -\frac{1}{56}, \frac{11}{28}, -\frac{9}{14}, \frac{5}{28}, \frac{3}{8}, \frac{3}{8})$ $+ \frac{1}{28}\sqrt{1334}e^1 \otimes e_5$	{123, 1236, 12467, 1247, 1678, 178, 2345678, 234578, 2568, 258, 45, 456, 123, 1236, 12467, 1247, 1678, 178, 2345678, 234578, 2568, 258, 45, 456}
82:4	$0, 0, 0, 0, 0, 0, \frac{6}{53}\sqrt{10}e^{13} + \frac{6}{53}\sqrt{10}e^{24}, -\frac{6}{53}\sqrt{10}e^{12} + \frac{6}{53}\sqrt{10}e^{34}$	$(-\frac{3}{53}, -\frac{3}{53}, -\frac{3}{53}, -\frac{3}{53}, \frac{30}{53}, \frac{30}{53}, -\frac{6}{53}, -\frac{6}{53})$ $+ \frac{6}{53}\sqrt{46}e^5 \otimes e_7 + \frac{6}{53}\sqrt{46}e^6 \otimes e_8$	{123456, 1267, 1478, 56, 123456, 1267, 1478, 56}
82:4	$0, 0, 0, 0, 0, 0, \frac{6}{53}\sqrt{10}e^{13} + \frac{6}{53}\sqrt{10}e^{24}, \frac{6}{53}\sqrt{10}e^{12} + \frac{6}{53}\sqrt{10}e^{34}$	$(-\frac{3}{53}, -\frac{3}{53}, -\frac{3}{53}, -\frac{3}{53}, \frac{30}{53}, \frac{30}{53}, -\frac{6}{53}, -\frac{6}{53})$ $+ \frac{6}{53}\sqrt{46}e^5 \otimes e_7 + \frac{6}{53}\sqrt{46}e^6 \otimes e_8$	{123456, 1267, 1478, 56, 123456, 1267, 1478, 56}
82:4	$0, 0, 0, 0, 0, 0, \frac{1}{28}\sqrt{493}e^{13} + \frac{1}{28}\sqrt{493}e^{24}, -\frac{1}{28}\sqrt{174}e^{12} + \frac{1}{28}\sqrt{174}e^{34}$	$(-\frac{1}{56}, -\frac{1}{56}, -\frac{1}{56}, -\frac{1}{56}, 1, \frac{5}{28}, -\frac{1}{28}, -\frac{1}{28})$ $+ \frac{1}{28}\sqrt{1334}e^5 \otimes e_7$	{1234568, 123458, 12678, 1278, 135, 1356, 1467, 147, 568, 58, 1234568, 123458, 12678, 1278, 135, 1356, 1467, 147, 568, 58}
82:4	$0, 0, 0, 0, 0, 0, \frac{1}{28}\sqrt{493}e^{13} + \frac{1}{28}\sqrt{493}e^{24}, \frac{1}{28}\sqrt{174}e^{12} + \frac{1}{28}\sqrt{174}e^{34}$	$(-\frac{1}{56}, -\frac{1}{56}, -\frac{1}{56}, -\frac{1}{56}, 1, \frac{5}{28}, -\frac{1}{28}, -\frac{1}{28})$ $+ \frac{1}{28}\sqrt{1334}e^5 \otimes e_7$	{1234568, 123458, 12678, 1278, 135, 1356, 1467, 147, 568, 58, 1234568, 123458, 12678, 1278, 135, 1356, 1467, 147, 568, 58}
82:4	$0, 0, 0, 0, 0, 0, \frac{1}{14}\sqrt{22}e^{13} + \frac{1}{14}\sqrt{22}e^{24}, -\frac{1}{14}\sqrt{22}e^{12} + \frac{1}{14}\sqrt{22}e^{34}$	$(\frac{1}{7}, \frac{1}{7}, \frac{1}{7}, \frac{1}{7}, 1, -\frac{4}{7}, \frac{2}{7}, \frac{2}{7})$ $+ \frac{11}{7}e^5 \otimes e_6$	{12345, 12346, 1257, 1267, 14578, 14678, 5, 6, 12345, 12346, 1257, 1267, 14578, 14678, 5, 6}
82:4	$0, 0, 0, 0, 0, 0, \frac{1}{14}\sqrt{22}e^{13} + \frac{1}{14}\sqrt{22}e^{24}, \frac{1}{14}\sqrt{22}e^{12} + \frac{1}{14}\sqrt{22}e^{34}$	$(\frac{1}{7}, \frac{1}{7}, \frac{1}{7}, \frac{1}{7}, 1, -\frac{4}{7}, \frac{2}{7}, \frac{2}{7})$ $+ \frac{11}{7}e^5 \otimes e_6$	{12345, 12346, 1257, 1267, 14578, 14678, 5, 6, 12345, 12346, 1257, 1267, 14578, 14678, 5, 6}
82:4	$0, 0, 0, 0, 0, 0, \frac{6}{53}\sqrt{10}e^{13} + \frac{6}{53}\sqrt{10}e^{24}, -\frac{6}{53}\sqrt{10}e^{12} + \frac{6}{53}\sqrt{10}e^{34}$	$(\frac{20}{53}, -\frac{3}{53}, -\frac{3}{53}, \frac{20}{53}, -\frac{16}{53}, -\frac{16}{53}, \frac{17}{53}, \frac{17}{53})$ $+ \frac{6}{53}\sqrt{46}e^1 \otimes e_5 + \frac{6}{53}\sqrt{46}e^4 \otimes e_6$	{1234, 1267, 1478, 235678, 56, 1234, 1267, 1478, 235678, 56}
82:4	$0, 0, 0, 0, 0, 0, \frac{6}{53}\sqrt{10}e^{13} + \frac{6}{53}\sqrt{10}e^{24}, \frac{6}{53}\sqrt{10}e^{12} + \frac{6}{53}\sqrt{10}e^{34}$	$(\frac{20}{53}, -\frac{3}{53}, -\frac{3}{53}, \frac{20}{53}, -\frac{16}{53}, -\frac{16}{53}, \frac{17}{53}, \frac{17}{53})$ $+ \frac{6}{53}\sqrt{46}e^1 \otimes e_5 + \frac{6}{53}\sqrt{46}e^4 \otimes e_6$	{1234, 1267, 1478, 235678, 56, 1234, 1267, 1478, 235678, 56}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:5	$0, 0, 0, 0, 0, 0, \frac{3}{89}\sqrt{341}e^{12}, \frac{1}{89}\sqrt{930}e^{13} + \frac{1}{178}\sqrt{2418}e^{45}$	$(\frac{105}{356}, -\frac{47}{178}, -\frac{81}{356}, \frac{3}{89}, \frac{3}{89}, \frac{197}{356}, \frac{11}{356}, \frac{6}{89})$ $+ \frac{3}{178}\sqrt{1643}e^1 \otimes e_3 + \frac{3}{178}\sqrt{1643}e^6 \otimes e_7$	{12456, 126, 1457, 17, 23457, 237, 3456, 36}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{199}\sqrt{2337}e^{12}, \frac{2}{199}\sqrt{2091}e^{13} + \frac{12}{199}\sqrt{246}e^{45}$	$(\frac{38}{199}, \frac{21}{199}, \frac{57}{199}, \frac{127}{199}, -\frac{32}{199}, -\frac{119}{199}, \frac{59}{199}, \frac{95}{199})$ $+ \frac{6}{199}\sqrt{2173}e^4 \otimes e_6$	{12348, 123568, 1245, 126, 13478, 135678, 1457, 167, 23457, 2367, 2478, 25678, 345, 36, 48, 568}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{337}\sqrt{1073}e^{12}, \frac{4}{337}\sqrt{551}e^{13} + \frac{8}{337}\sqrt{406}e^{45}$	$(\frac{36}{337}, -\frac{80}{337}, \frac{71}{337}, \frac{35}{337}, \frac{72}{337}, -\frac{81}{337}, -\frac{44}{337}, \frac{107}{337})$ $+ \frac{2}{337}\sqrt{2262}e^1 \otimes e_2 + \frac{2}{337}\sqrt{8758}e^5 \otimes e_7 + \frac{4}{337}\sqrt{1653}e^4 \otimes e_6$	{13478, 167, 2367, 2478}
82:5	$0, 0, 0, 0, 0, 0, \frac{5}{101}\sqrt{222}e^{12}, \frac{2}{101}\sqrt{1443}e^{13} + \frac{2}{101}\sqrt{111}e^{45}$	$(\frac{50}{101}, -\frac{5}{101}, -\frac{6}{101}, \frac{22}{101}, \frac{22}{101}, -\frac{61}{101}, \frac{45}{101}, \frac{44}{101})$ $+ \frac{9}{101}\sqrt{222}e^1 \otimes e_6$	{1234, 12458, 128, 1347, 14578, 178, 2345678, 23678, 2467, 34568, 368, 46}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{1621}\sqrt{8710}e^{12}, \frac{2}{1621}\sqrt{142710}e^{13} + \frac{8}{1621}\sqrt{2010}e^{45}$	$(\frac{156}{1621}, -\frac{514}{1621}, \frac{312}{1621}, -\frac{101}{1621}, \frac{569}{1621}, \frac{138}{1621}, -\frac{358}{1621}, \frac{468}{1621})$ $+ \frac{20}{1621}\sqrt{2010}e^3 \otimes e_7 + \frac{4}{1621}\sqrt{45895}e^1 \otimes e_2 + \frac{670}{1621}e^5 \otimes e_4$	{2467, 247, 2567, 257}
82:5	$0, 0, 0, 0, 0, 0, \frac{7}{109}\sqrt{37}e^{12}, \frac{7}{109}\sqrt{2}e^{13} + \frac{7}{218}\sqrt{66}e^{45}$	$(\frac{21}{436}, \frac{21}{218}, -\frac{77}{436}, -\frac{7}{109}, -\frac{7}{109}, \frac{161}{436}, \frac{63}{436}, -\frac{14}{109})$ $+ \frac{7}{109}\sqrt{38}e^2 \otimes e_8 + \frac{7}{218}\sqrt{123}e^1 \otimes e_3 + \frac{7}{218}\sqrt{123}e^6 \otimes e_7$	{12456, 126, 23457, 237}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{655}\sqrt{5258}e^{12}, \frac{2}{655}\sqrt{14579}e^{13} + \frac{1}{655}\sqrt{123802}e^{45}$	$(\frac{3}{131}, -\frac{107}{655}, \frac{191}{655}, \frac{59}{655}, \frac{147}{655}, -\frac{36}{131}, -\frac{92}{655}, \frac{206}{655})$ $+ \frac{1}{655}\sqrt{119022}e^4 \otimes e_6 + \frac{1}{655}\sqrt{161086}e^5 \otimes e_7$	{123568, 1245, 13478, 167, 2367, 2478, 345, 568}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{103}\sqrt{42}e^{12}, \frac{2}{103}\sqrt{462}e^{13} + \frac{4}{103}\sqrt{42}e^{45}$	$(-\frac{20}{103}, \frac{2}{103}, \frac{24}{103}, \frac{23}{103}, -\frac{19}{103}, \frac{46}{103}, -\frac{18}{103}, \frac{4}{103})$ $+ \frac{12}{103}\sqrt{21}e^3 \otimes e_7 + \frac{12}{103}\sqrt{21}e^6 \otimes e_8 + \frac{42}{103}e^4 \otimes e_5$	{1478, 1578, 348, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{41}\sqrt{42}e^{12}, \frac{1}{41}\sqrt{462}e^{13} + \frac{2}{41}\sqrt{42}e^{45}$	$(-\frac{10}{41}, \frac{1}{41}, \frac{12}{41}, \frac{1}{41}, \frac{1}{41}, \frac{23}{41}, -\frac{9}{41}, \frac{2}{41})$ $+ \frac{6}{41}\sqrt{21}e^3 \otimes e_7 + \frac{6}{41}\sqrt{21}e^6 \otimes e_8$	{123456, 1236, 1478, 24567, 267, 348}
82:5	$0, 0, 0, 0, 0, 0, \frac{3}{169}\sqrt{590}e^{12}, \frac{2}{169}\sqrt{1003}e^{13} + \frac{2}{169}\sqrt{649}e^{45}$	$(-\frac{59}{169}, \frac{55}{169}, \frac{55}{169}, -\frac{2}{169}, -\frac{2}{169}, \frac{20}{169}, -\frac{4}{169}, -\frac{4}{169})$ $+ \frac{1}{169}\sqrt{8142}e^3 \otimes e_7 + \frac{4}{169}\sqrt{590}e^2 \otimes e_8$	{123, 12345, 123456, 1236, 14678, 1478, 24567, 2457, 267, 27, 3468, 348}
82:5	$0, 0, 0, 0, 0, 0, \frac{3}{169}\sqrt{590}e^{12}, \frac{2}{169}\sqrt{1003}e^{13} + \frac{2}{169}\sqrt{649}e^{45}$	$(-\frac{59}{169}, \frac{55}{169}, \frac{55}{169}, -\frac{2}{169}, -\frac{2}{169}, \frac{20}{169}, -\frac{4}{169}, -\frac{4}{169})$ $- \frac{1}{169}\sqrt{8142}e^3 \otimes e_7 + \frac{4}{169}\sqrt{590}e^2 \otimes e_8$	{123, 12345, 123456, 1236, 14678, 1478, 24567, 2457, 267, 27, 3468, 348}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{643}\sqrt{8710}e^{12}, \frac{1}{643}\sqrt{142710}e^{13} + \frac{4}{643}\sqrt{2010}e^{45}$	$(\frac{78}{643}, -\frac{257}{643}, \frac{156}{643}, \frac{117}{643}, \frac{117}{643}, \frac{69}{643}, \frac{179}{643}, \frac{234}{643})$ $+ \frac{10}{643}\sqrt{2010}e^3 \otimes e_7 + \frac{2}{643}\sqrt{45895}e^1 \otimes e_2$	{145678, 14578, 1678, 178, 2467, 247}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{643}\sqrt{2010}e^{12}, \frac{1}{643}\sqrt{142710}e^{13} + \frac{2}{643}\sqrt{8710}e^{45}$	$(\frac{178}{643}, -\frac{157}{643}, -\frac{144}{643}, \frac{17}{643}, \frac{17}{643}, \frac{369}{643}, \frac{21}{643}, \frac{34}{643})$ $+ \frac{10}{643}\sqrt{2010}e^6 \otimes e_8 + \frac{2}{643}\sqrt{45895}e^1 \otimes e_2$	{13456, 136, 148, 2348, 2456, 26}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{323}\sqrt{1846}e^{12}, \frac{2}{323}\sqrt{781}e^{13} + \frac{6}{323}\sqrt{497}e^{45}$	$(\frac{48}{323}, \frac{96}{323}, -\frac{94}{323}, -\frac{23}{323}, -\frac{23}{323}, \frac{40}{323}, \frac{144}{323}, -\frac{46}{323})$ $+ \frac{2}{323}\sqrt{8733}e^1 \otimes e_3 + \frac{8}{323}\sqrt{710}e^2 \otimes e_8$	{14678, 1478, 3468, 348}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{65}\sqrt{42}e^{12}, \frac{28}{65}e^{13} + \frac{2}{65}\sqrt{42}e^{45}$	$(\frac{2}{13}, -\frac{18}{65}, \frac{1}{5}, \frac{3}{65}, \frac{4}{13}, -\frac{3}{13}, -\frac{8}{65}, \frac{23}{65})$ $+ \frac{14}{65}\sqrt{6}e^1 \otimes e_2 + \frac{14}{65}\sqrt{6}e^3 \otimes e_6 + \frac{2}{65}\sqrt{238}e^5 \otimes e_7$	{137, 14678, 23478, 267}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{313}\sqrt{111}e^{12}, \frac{4}{313}\sqrt{1443}e^{13} + \frac{10}{313}\sqrt{222}e^{45}$	$(-\frac{8}{313}, \frac{44}{313}, -\frac{12}{313}, \frac{101}{313}, -\frac{121}{313}, \frac{202}{313}, \frac{36}{313}, -\frac{20}{313})$ $+ \frac{18}{313}\sqrt{222}e^6 \otimes e_8 + \frac{222}{313}e^4 \otimes e_5$	{12478, 12578, 148, 158, 2348, 2358, 3478, 3578}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{197}\sqrt{1846}e^{12}, \frac{1}{197}\sqrt{781}e^{13} + \frac{3}{197}\sqrt{497}e^{45}$	$(-\frac{75}{394}, \frac{48}{197}, \frac{29}{394}, \frac{24}{197}, -\frac{47}{197}, \frac{163}{394}, \frac{21}{394}, -\frac{23}{197})$ $+ \frac{1}{197}\sqrt{8733}e^6 \otimes e_7 + \frac{4}{197}\sqrt{710}e^2 \otimes e_8 + \frac{71}{197}e^4 \otimes e_5$	{1478, 1578, 3468, 3568}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{1291}\sqrt{15555}e^{12}, \frac{20}{1291}\sqrt{170}e^{13} + \frac{4}{1291}\sqrt{14705}e^{45}$	$(\frac{206}{1291}, -\frac{247}{1291}, -\frac{134}{1291}, \frac{299}{1291}, -\frac{227}{1291}, \frac{412}{1291}, -\frac{41}{1291}, \frac{72}{1291})$ $+ \frac{2}{1291}\sqrt{49810}e^6 \otimes e_8 + \frac{2}{1291}\sqrt{60010}e^1 \otimes e_3 + \frac{4}{1291}\sqrt{22355}e^4 \otimes e_7$	{12456, 167, 2367, 3456}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{649}\sqrt{136718}e^{12}, \frac{2}{649}\sqrt{10063}e^{13} + \frac{2}{649}\sqrt{1041}e^{45}$	$(-\frac{179}{649}, \frac{151}{649}, \frac{29}{59}, \frac{70}{649}, \frac{70}{649}, -\frac{196}{649}, -\frac{28}{649}, \frac{140}{649})$ $+ \frac{1}{649}\sqrt{208894}e^3 \otimes e_7 + \frac{4}{649}\sqrt{11798}e^2 \otimes e_6$	{123, 12345, 14678, 2457, 27, 3468}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{161}\sqrt{246}e^{12}, \frac{1}{161}\sqrt{2091}e^{13} + \frac{1}{161}\sqrt{2337}e^{45}$	$(-\frac{15}{322}, \frac{127}{322}, \frac{57}{322}, \frac{72}{161}, -\frac{51}{161}, -\frac{17}{46}, \frac{8}{23}, \frac{3}{23})$ $+ \frac{123}{161}e^4 \otimes e_5 + \frac{3}{161}\sqrt{2173}e^2 \otimes e_6$	{12348, 12358, 134678, 135678, 2478, 2578, 468, 568}
82:5	$0, 0, 0, 0, 0, 0, \frac{8}{1621}\sqrt{2010}e^{12}, \frac{2}{1621}\sqrt{142710}e^{13} + \frac{4}{1621}\sqrt{8710}e^{45}$	$(\frac{356}{1621}, -\frac{314}{1621}, -\frac{288}{1621}, \frac{369}{1621}, -\frac{301}{1621}, \frac{738}{1621}, \frac{42}{1621}, \frac{68}{1621})$ $+ \frac{20}{1621}\sqrt{2010}e^6 \otimes e_8 + \frac{4}{1621}\sqrt{45895}e^1 \otimes e_2 + \frac{670}{1621}e^4 \otimes e_5$	{148, 158, 2348, 2358}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{323}\sqrt{497}e^{12}, \frac{2}{323}\sqrt{781}e^{13} + \frac{4}{323}\sqrt{1846}e^{45}$	$(-\frac{2}{19}, \frac{137}{323}, \frac{29}{323}, \frac{59}{323}, -\frac{64}{323}, -\frac{83}{323}, \frac{103}{323}, -\frac{5}{323})$ $+ \frac{2}{323}\sqrt{8733}e^4 \otimes e_6 + \frac{8}{323}\sqrt{710}e^2 \otimes e_8$	{12345, 1236, 1478, 15678, 2457, 267, 348, 3568}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{541}\sqrt{87474}e^{12}, \frac{4}{541}\sqrt{239}e^{13} + \frac{2}{541}\sqrt{13623}e^{45}$	$(\frac{98}{541}, -\frac{117}{541}, \frac{74}{541}, \frac{220}{541}, -\frac{48}{541}, -\frac{141}{541}, -\frac{19}{541}, \frac{172}{541})$ $+ \frac{2}{541}\sqrt{32026}e^4 \otimes e_7 + \frac{3}{541}\sqrt{10994}e^1 \otimes e_6$	{12348, 1245, 13578, 17, 2367, 25678, 3456, 468}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{1429}\sqrt{55918}e^{12}, \frac{10}{1429}\sqrt{2298}e^{13} + \frac{2}{1429}\sqrt{2298}e^{45}$	$(\frac{294}{1429}, -\frac{472}{1429}, -\frac{18}{1429}, \frac{521}{1429}, -\frac{245}{1429}, \frac{588}{1429}, -\frac{178}{1429}, \frac{276}{1429})$ $+ \frac{2}{1429}\sqrt{175414}e^1 \otimes e_2 + \frac{4}{1429}\sqrt{43662}e^6 \otimes e_7 + \frac{766}{1429}e^4 \otimes e_5$	{1347, 1357, 247, 257}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{65}\sqrt{33}e^{12}, \frac{2}{325}\sqrt{1914}e^{13} + \frac{4}{65}\sqrt{33}e^{45}$	$(\frac{67}{325}, -\frac{74}{325}, \frac{1}{325}, \frac{9}{325}, \frac{59}{325}, -\frac{57}{325}, -\frac{7}{325}, \frac{68}{325})$ $+ \frac{2}{325}\sqrt{2739}e^1 \otimes e_3 + \frac{2}{325}\sqrt{2739}e^4 \otimes e_6 + \frac{2}{325}\sqrt{4389}e^5 \otimes e_7$	{1245, 167, 2367, 345}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{541}\sqrt{13623}e^{12}, \frac{4}{541}\sqrt{239}e^{13} + \frac{1}{541}\sqrt{87474}e^{45}$	$(-\frac{40}{541}, -\frac{48}{541}, \frac{74}{541}, \frac{151}{541}, -\frac{117}{541}, \frac{273}{541}, -\frac{88}{541}, \frac{34}{541})$ $+ \frac{2}{541}\sqrt{32026}e^4 \otimes e_7 + \frac{3}{541}\sqrt{10994}e^6 \otimes e_8$	{12348, 12456, 13578, 167, 2367, 2578, 3456, 48}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{431}\sqrt{1518}e^{12}, \frac{14}{431}\sqrt{138}e^{13} + \frac{4}{431}\sqrt{345}e^{45}$	$(\frac{14}{431}, -\frac{50}{431}, \frac{102}{431}, -\frac{11}{431}, \frac{127}{431}, -\frac{124}{431}, -\frac{36}{431}, \frac{116}{431})$ $+ \frac{138}{431}e^5 \otimes e_4 + \frac{18}{431}\sqrt{138}e^1 \otimes e_6 + \frac{18}{431}\sqrt{138}e^3 \otimes e_7$	{1234, 1235, 2467, 2567}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{397}\sqrt{590}e^{12}, \frac{4}{397}\sqrt{1003}e^{13} + \frac{4}{397}\sqrt{649}e^{45}$	$(\frac{20}{397}, \frac{110}{397}, -\frac{28}{397}, -\frac{63}{397}, \frac{55}{397}, -\frac{98}{397}, \frac{130}{397}, -\frac{8}{397})$ $+ \frac{118}{397}e^5 \otimes e_4 + \frac{2}{397}\sqrt{8142}e^1 \otimes e_6 + \frac{8}{397}\sqrt{590}e^2 \otimes e_8$	{1478, 1578, 3468, 3568}
82:5	$0, 0, 0, 0, 0, 0, \frac{10}{313}\sqrt{222}e^{12}, \frac{4}{313}\sqrt{1443}e^{13} + \frac{4}{313}\sqrt{111}e^{45}$	$(\frac{100}{313}, -\frac{10}{313}, -\frac{12}{313}, \frac{155}{313}, -\frac{67}{313}, -\frac{122}{313}, \frac{90}{313}, \frac{88}{313})$ $+ \frac{18}{313}\sqrt{222}e^1 \otimes e_6 + \frac{222}{313}e^4 \otimes e_5$	{1234, 1235, 1347, 1357, 2467, 2567, 46, 56}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{13}\sqrt{10}e^{12}, \frac{2}{13}\sqrt{15}e^{13} + \frac{1}{13}\sqrt{10}e^{45}$	$(-\frac{1}{13}, \frac{2}{13}, \frac{5}{13}, \frac{7}{13}, -\frac{3}{13}, -\frac{5}{13}, \frac{1}{13}, \frac{4}{13})$ $+ \frac{10}{13}e^4 \otimes e_5 + \frac{1}{13}\sqrt{130}e^3 \otimes e_6$	{12347, 12357, 134, 135, 246, 256, 467, 567}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{655}\sqrt{123802}e^{12}, \frac{2}{655}\sqrt{14579}e^{13} + \frac{4}{655}\sqrt{5258}e^{45}$	$(-\frac{68}{655}, \frac{59}{655}, \frac{191}{655}, \frac{46}{131}, -\frac{107}{655}, -\frac{36}{131}, -\frac{9}{655}, \frac{123}{655})$ $+ \frac{1}{655}\sqrt{119022}e^2 \otimes e_6 + \frac{1}{655}\sqrt{161086}e^4 \otimes e_7$	{12348, 1245, 135678, 167, 237, 2578, 3456, 468}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{181}\sqrt{1518}e^{12}, \frac{7}{181}\sqrt{138}e^{13} + \frac{2}{181}\sqrt{345}e^{45}$	$(\frac{7}{181}, -\frac{25}{181}, \frac{51}{181}, \frac{29}{181}, \frac{29}{181}, -\frac{62}{181}, -\frac{18}{181}, \frac{58}{181})$ $+ \frac{9}{181}\sqrt{138}e^1 \otimes e_6 + \frac{9}{181}\sqrt{138}e^3 \otimes e_7$	{1234, 14578, 178, 2467, 34568, 368}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{5}\sqrt{2}e^{12}, \frac{2}{5}e^{13} + \frac{1}{5}\sqrt{2}e^{45}$	$(-\frac{1}{5}, \frac{2}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, 0)$ $+ \frac{1}{5}\sqrt{6}e^3 \otimes e_6 + \frac{2}{5}\sqrt{2}e^2 \otimes e_8 + \frac{2}{5}e^5 \otimes e_4$	{14678, 15678, 348, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{161}\sqrt{10}e^{12}, \frac{3}{161}\sqrt{510}e^{13} + \frac{6}{161}\sqrt{10}e^{45}$	$(\frac{6}{161}, -\frac{39}{161}, \frac{12}{161}, \frac{9}{161}, \frac{9}{161}, \frac{9}{23}, -\frac{33}{161}, \frac{18}{161})$ $+ \frac{12}{161}\sqrt{30}e^1 \otimes e_2 + \frac{30}{161}\sqrt{5}e^3 \otimes e_7 + \frac{30}{161}\sqrt{5}e^6 \otimes e_8$	{1478, 24567, 267}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{227}\sqrt{6319}e^{12}, \frac{2}{227}\sqrt{710}e^{13} + \frac{1}{454}\sqrt{13490}e^{45}$	$(\frac{119}{908}, -\frac{41}{908}, -\frac{23}{908}, -\frac{31}{227}, \frac{55}{227}, -\frac{183}{908}, \frac{39}{454}, \frac{24}{227})$ $+ \frac{1}{227}\sqrt{6106}e^5 \otimes e_7 + \frac{1}{454}\sqrt{17679}e^1 \otimes e_3 + \frac{1}{454}\sqrt{17679}e^2 \otimes e_6$	{1245, 167, 237, 3456}
82:5	$0, 0, 0, 0, 0, 0, \frac{12}{199}\sqrt{246}e^{12}, \frac{2}{199}\sqrt{2091}e^{13} + \frac{2}{199}\sqrt{2337}e^{45}$	$(\frac{144}{199}, -\frac{32}{199}, -\frac{102}{199}, \frac{21}{199}, \frac{21}{199}, \frac{40}{199}, \frac{112}{199}, \frac{42}{199})$ $+ \frac{6}{199}\sqrt{2173}e^1 \otimes e_3$	{12, 1245, 12456, 126, 14567, 1457, 167, 17, 234567, 23457, 2367, 237, 3, 345, 3456, 36}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{269}\sqrt{445}e^{12}, \frac{10}{269}\sqrt{89}e^{13} + \frac{4}{269}\sqrt{890}e^{45}$	$(-\frac{34}{269}, -\frac{9}{269}, \frac{135}{269}, \frac{105}{269}, -\frac{4}{269}, -\frac{73}{269}, -\frac{43}{269}, \frac{101}{269})$ $+ \frac{2}{269}\sqrt{9701}e^4 \otimes e_6 + \frac{4}{269}\sqrt{2759}e^3 \otimes e_7$	{12345, 1236, 1478, 15678, 2457, 267, 348, 3568}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{8}\sqrt{10}e^{12}, \frac{1}{4}\sqrt{15}e^{13} + \frac{1}{8}\sqrt{10}e^{45}$	$(-\frac{1}{8}, \frac{1}{4}, \frac{5}{8}, \frac{1}{4}, \frac{1}{4}, -\frac{5}{8}, \frac{1}{8}, \frac{1}{2})$ $+ \frac{1}{8}\sqrt{130}e^3 \otimes e_6$	{12347, 1245678, 12678, 134, 14568, 168, 23458, 238, 246, 34578, 378, 467}
82:5	$0, 0, 0, 0, 0, 0, \frac{10}{313}\sqrt{222}e^{12}, \frac{4}{313}\sqrt{1443}e^{13} + \frac{4}{313}\sqrt{111}e^{45}$	$(-\frac{62}{313}, -\frac{10}{313}, \frac{150}{313}, \frac{155}{313}, -\frac{67}{313}, \frac{40}{313}, -\frac{72}{313}, \frac{88}{313})$ $+ \frac{18}{313}\sqrt{222}e^3 \otimes e_7 + \frac{40}{313}e^4 \otimes e_5$	{1234, 12346, 1235, 12356, 2467, 247, 2567, 257}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{179}\sqrt{890}e^{12}, \frac{5}{179}\sqrt{89}e^{13} + \frac{3}{179}\sqrt{445}e^{45}$	$(\frac{40}{179}, -\frac{2}{179}, -\frac{49}{179}, \frac{40}{179}, -\frac{49}{179}, \frac{80}{179}, \frac{38}{179}, -\frac{9}{179})$ $+ \frac{1}{179}\sqrt{9701}e^1 \otimes e_3 + \frac{2}{179}\sqrt{2759}e^6 \otimes e_8 - \frac{89}{179}e^4 \otimes e_5$	{1248, 1258, 1478, 1578, 23478, 23578, 348, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{181}\sqrt{133}e^{12}, \frac{8}{181}\sqrt{95}e^{13} + \frac{4}{181}\sqrt{57}e^{45}$	$(\frac{21}{181}, -\frac{55}{181}, \frac{42}{181}, \frac{11}{181}, \frac{52}{181}, -\frac{24}{181}, -\frac{34}{181}, \frac{63}{181})$ $+ \frac{2}{181}\sqrt{1558}e^5 \otimes e_6 + \frac{2}{181}\sqrt{2470}e^3 \otimes e_7 + \frac{4}{181}\sqrt{551}e^1 \otimes e_2$	{14678, 1578, 2457, 267}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{37}\sqrt{13}e^{12}, \frac{4}{37}\sqrt{2}e^{13} + \frac{4}{37}\sqrt{13}e^{45}$	$(-\frac{7}{37}, \frac{7}{37}, \frac{6}{37}, \frac{8}{37}, -\frac{9}{37}, \frac{4}{37}, 0, -\frac{1}{37})$ $+ \frac{16}{37}e^2 \otimes e_8 + \frac{4}{37}\sqrt{17}e^4 \otimes e_7$	{1245, 12456, 135678, 13578, 2367, 237, 468, 48}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{8}\sqrt{10}e^{12}, \frac{1}{4}\sqrt{15}e^{13} + \frac{1}{8}\sqrt{10}e^{45}$	$(\frac{11}{16}, -\frac{9}{16}, -\frac{3}{16}, \frac{1}{4}, \frac{1}{4}, \frac{3}{16}, \frac{1}{8}, \frac{1}{2})$ $+ \frac{1}{8}\sqrt{130}e^1 \otimes e_2$	{134, 1346, 14568, 1458, 168, 18, 234568, 23458, 2368, 238, 24, 246}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{179}\sqrt{890}e^{12}, \frac{5}{179}\sqrt{89}e^{13} + \frac{3}{179}\sqrt{445}e^{45}$	$(\frac{40}{179}, -\frac{2}{179}, -\frac{49}{179}, \frac{40}{179}, -\frac{49}{179}, \frac{80}{179}, \frac{38}{179}, -\frac{9}{179})$ $+ \frac{1}{179}\sqrt{9701}e^1 \otimes e_3 + \frac{2}{179}\sqrt{2759}e^6 \otimes e_8 + \frac{89}{179}e^4 \otimes e_5$	{1248, 1258, 1478, 1578, 23478, 23578, 348, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{101}\sqrt{111}e^{12}, \frac{2}{101}\sqrt{1443}e^{13} + \frac{5}{101}\sqrt{222}e^{45}$	$(-\frac{4}{101}, \frac{22}{101}, -\frac{6}{101}, -\frac{5}{101}, -\frac{5}{101}, 1, \frac{18}{101}, -\frac{10}{101})$ $+ \frac{9}{101}\sqrt{222}e^6 \otimes e_8$	{1234567, 12367, 12478, 13456, 136, 148, 2348, 2456, 26, 3478, 4567, 67}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{13}\sqrt{10}e^{12}, \frac{2}{13}\sqrt{15}e^{13} + \frac{1}{13}\sqrt{10}e^{45}$	$(\frac{11}{26}, -\frac{9}{26}, -\frac{3}{26}, \frac{7}{13}, -\frac{3}{13}, \frac{3}{26}, \frac{1}{13}, \frac{4}{13})$ $+ \frac{10}{13}e^4 \otimes e_5 + \frac{1}{13}\sqrt{130}e^1 \otimes e_2$	{134, 1346, 135, 1356, 24, 246, 25, 256}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{101}\sqrt{155}e^{12}, \frac{2}{101}\sqrt{310}e^{13} + \frac{4}{101}\sqrt{155}e^{45}$	$(-\frac{16}{101}, \frac{50}{101}, \frac{4}{101}, \frac{25}{101}, -\frac{37}{101}, \frac{14}{101}, \frac{34}{101}, -\frac{12}{101})$ $+ \frac{4}{101}\sqrt{434}e^2 \otimes e_8 + \frac{62}{101}e^4 \otimes e_5$	{14678, 1478, 15678, 1578, 3468, 348, 3568, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{397}\sqrt{590}e^{12}, \frac{4}{397}\sqrt{1003}e^{13} + \frac{4}{397}\sqrt{649}e^{45}$	$(-\frac{118}{397}, \frac{110}{397}, \frac{110}{397}, -\frac{63}{397}, \frac{55}{397}, \frac{40}{397}, -\frac{8}{397}, -\frac{8}{397})$ $+ \frac{118}{397}e^5 \otimes e_4 - \frac{2}{397}\sqrt{8142}e^3 \otimes e_7 + \frac{8}{397}\sqrt{590}e^2 \otimes e_8$	{14678, 1478, 15678, 1578, 3468, 348, 3568, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{397}\sqrt{590}e^{12}, \frac{4}{397}\sqrt{1003}e^{13} + \frac{4}{397}\sqrt{649}e^{45}$	$(-\frac{118}{397}, \frac{110}{397}, \frac{110}{397}, -\frac{63}{397}, \frac{55}{397}, \frac{40}{397}, -\frac{8}{397}, -\frac{8}{397})$ $+ \frac{118}{397}e^5 \otimes e_4 + \frac{2}{397}\sqrt{8142}e^3 \otimes e_7 + \frac{8}{397}\sqrt{590}e^2 \otimes e_8$	{14678, 1478, 15678, 1578, 3468, 348, 3568, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{143}\sqrt{87}e^{12}, \frac{2}{143}\sqrt{1334}e^{13} + \frac{4}{143}\sqrt{87}e^{45}$	$(\frac{28}{143}, -\frac{30}{143}, \frac{16}{143}, -\frac{7}{143}, \frac{51}{143}, -\frac{42}{143}, -\frac{2}{143}, \frac{4}{13})$ $+ \frac{4}{143}\sqrt{377}e^1 \otimes e_2 + \frac{4}{143}\sqrt{377}e^3 \otimes e_6 + \frac{58}{143}e^5 \otimes e_4$	{134, 135, 246, 256}
82:5	$0, 0, 0, 0, 0, 0, \frac{45}{251}\sqrt{2}e^{12}, \frac{20}{251}e^{13} + \frac{10}{251}\sqrt{31}e^{45}$	$(-\frac{10}{251}, \frac{29}{251}, \frac{14}{251}, -\frac{40}{251}, \frac{44}{251}, -\frac{35}{251}, \frac{19}{251}, \frac{4}{251})$ $+ \frac{10}{251}\sqrt{42}e^5 \otimes e_7 + \frac{20}{251}\sqrt{11}e^2 \otimes e_8 + \frac{5}{251}\sqrt{114}e^1 \otimes e_6$	{12345, 1478, 267, 3568}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{4}\sqrt{2}e^{12}, \frac{1}{2}e^{13} + \frac{1}{4}\sqrt{2}e^{45}$	$(-\frac{1}{4}, \frac{1}{2}, \frac{1}{4}, 0, 0, -\frac{1}{4}, \frac{1}{4}, 0)$ $+ \frac{1}{2}\sqrt{2}e^2 \otimes e_8 + \frac{1}{4}\sqrt{6}e^3 \otimes e_6$	{123, 12345, 14678, 24567, 267, 348}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{57}\sqrt{87}e^{12}, \frac{1}{57}\sqrt{1334}e^{13} + \frac{2}{57}\sqrt{87}e^{45}$	$(\frac{14}{57}, -\frac{5}{19}, \frac{8}{57}, \frac{11}{57}, \frac{11}{57}, -\frac{7}{19}, -\frac{1}{57}, \frac{22}{57})$ $+ \frac{2}{57}\sqrt{377}e^1 \otimes e_2 + \frac{2}{57}\sqrt{377}e^3 \otimes e_6$	{134, 14568, 168, 23458, 238, 246}
82:5	$0, 0, 0, 0, 0, 0, \frac{5}{101}\sqrt{222}e^{12}, \frac{2}{101}\sqrt{1443}e^{13} + \frac{2}{101}\sqrt{111}e^{45}$	$(-\frac{31}{101}, -\frac{5}{101}, \frac{75}{101}, \frac{22}{101}, \frac{22}{101}, \frac{20}{101}, -\frac{36}{101}, \frac{44}{101})$ $+ \frac{9}{101}\sqrt{222}e^3 \otimes e_7$	{1234, 12346, 145678, 14578, 1678, 178, 2467, 247, 34568, 3458, 368, 38}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{157}\sqrt{3354}e^{12}, \frac{1}{157}\sqrt{86}e^{13} + \frac{1}{157}\sqrt{3354}e^{45}$	$(\frac{18}{157}, \frac{36}{157}, -\frac{25}{157}, -\frac{24}{157}, \frac{17}{157}, -\frac{26}{157}, \frac{54}{157}, -\frac{7}{157})$ $+ \frac{1}{157}\sqrt{3526}e^1 \otimes e_3 + \frac{1}{157}\sqrt{3526}e^5 \otimes e_6 + \frac{2}{157}\sqrt{1290}e^2 \otimes e_8$	{1245, 126, 23457, 2367}
82:5	$0, 0, 0, 0, 0, 0, \frac{3}{121}\sqrt{474}e^{12}, \frac{1}{121}\sqrt{2054}e^{13} + \frac{3}{121}\sqrt{474}e^{45}$	$(\frac{54}{121}, -\frac{12}{121}, -\frac{25}{121}, \frac{41}{121}, -\frac{12}{121}, -\frac{38}{121}, \frac{42}{121}, \frac{29}{121})$ $+ \frac{1}{121}\sqrt{8374}e^1 \otimes e_3 + \frac{1}{121}\sqrt{8374}e^4 \otimes e_6$	{1245, 126, 1457, 167, 23457, 2367, 345, 36}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{323}\sqrt{1846}e^{12}, \frac{2}{323}\sqrt{781}e^{13} + \frac{6}{323}\sqrt{497}e^{45}$	$(-\frac{75}{323}, \frac{96}{323}, \frac{29}{323}, -\frac{23}{323}, -\frac{23}{323}, \frac{163}{323}, \frac{21}{323}, -\frac{46}{323})$ $+ \frac{2}{323}\sqrt{8733}e^6 \otimes e_7 + \frac{8}{323}\sqrt{710}e^2 \otimes e_8$	{123456, 1236, 1478, 2457, 27, 3468}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{269}\sqrt{890}e^{12}, \frac{10}{269}\sqrt{89}e^{13} + \frac{6}{269}\sqrt{445}e^{45}$	$(\frac{80}{269}, -\frac{4}{269}, -\frac{98}{269}, -\frac{9}{269}, -\frac{9}{269}, \frac{160}{269}, \frac{76}{269}, -\frac{18}{269})$ $+ \frac{2}{269}\sqrt{9701}e^1 \otimes e_3 + \frac{4}{269}\sqrt{2759}e^6 \otimes e_8$	{1248, 1478, 23478, 348}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{161}\sqrt{246}e^{12}, \frac{1}{161}\sqrt{2091}e^{13} + \frac{1}{161}\sqrt{2337}e^{45}$	$(-\frac{15}{322}, -\frac{16}{161}, \frac{57}{322}, \frac{72}{161}, -\frac{51}{161}, \frac{199}{322}, -\frac{47}{322}, \frac{3}{23})$ $+ \frac{123}{161}e^4 \otimes e_5 + \frac{3}{161}\sqrt{2173}e^6 \otimes e_7$	{123468, 123568, 13478, 13578, 2478, 2578, 468, 568}
82:5	$0, 0, 0, 0, 0, 0, \frac{5}{281}\sqrt{202}e^{12}, \frac{10}{281}\sqrt{11}e^{13} + \frac{20}{281}\sqrt{10}e^{45}$	$(\frac{7}{281}, \frac{14}{281}, -\frac{18}{281}, -\frac{57}{281}, \frac{46}{281}, \frac{23}{281}, \frac{21}{281}, -\frac{11}{281})$ $+ \frac{10}{281}\sqrt{46}e^2 \otimes e_8 + \frac{15}{281}\sqrt{14}e^1 \otimes e_3 + \frac{5}{281}\sqrt{206}e^5 \otimes e_7$	{1245, 12456, 2367, 237}
82:5	$0, 0, 0, 0, 0, 0, \frac{12}{67}\sqrt{21}e^{12}, \frac{28}{67}\sqrt{2}e^{13} + \frac{12}{67}\sqrt{21}e^{45}$	$(-\frac{1}{67}, -\frac{15}{67}, \frac{26}{67}, \frac{40}{67}, -\frac{15}{67}, \frac{12}{67}, -\frac{16}{67}, \frac{25}{67})$ $+ \frac{4}{67}\sqrt{385}e^4 \otimes e_7$	{123468, 12348, 1245, 12456, 135678, 13578, 167, 17, 2367, 237, 25678, 2578, 345, 3456, 468, 48}
82:5	$0, 0, 0, 0, 0, 0, \frac{3}{169}\sqrt{590}e^{12}, \frac{2}{169}\sqrt{1003}e^{13} + \frac{2}{169}\sqrt{649}e^{45}$	$(\frac{10}{169}, \frac{55}{169}, -\frac{14}{169}, -\frac{2}{169}, -\frac{2}{169}, -\frac{49}{169}, \frac{5}{13}, -\frac{4}{169})$ $+ \frac{1}{169}\sqrt{8142}e^1 \otimes e_6 + \frac{4}{169}\sqrt{590}e^2 \otimes e_8$	{123, 12345, 1478, 24567, 267, 3468}
82:5	$0, 0, 0, 0, 0, 0, \frac{20}{281}\sqrt{10}e^{12}, \frac{10}{281}\sqrt{11}e^{13} + \frac{5}{281}\sqrt{202}e^{45}$	$(-\frac{35}{281}, \frac{35}{281}, \frac{45}{281}, -\frac{15}{281}, \frac{25}{281}, -\frac{40}{281}, 0, \frac{10}{281})$ $+ \frac{10}{281}\sqrt{46}e^2 \otimes e_8 + \frac{15}{281}\sqrt{14}e^4 \otimes e_6 + \frac{5}{281}\sqrt{206}e^5 \otimes e_7$	{1245, 13478, 2367, 568}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{41}\sqrt{5}e^{12}, \frac{10}{41}e^{13} + \frac{4}{41}\sqrt{10}e^{45}$	$(-\frac{10}{41}, \frac{11}{41}, \frac{11}{41}, -\frac{4}{41}, \frac{5}{41}, -\frac{5}{41}, \frac{1}{41}, \frac{1}{41})$ $- \frac{4}{41}\sqrt{15}e^3 \otimes e_7 + \frac{6}{41}\sqrt{5}e^5 \otimes e_6 + \frac{8}{41}\sqrt{5}e^2 \otimes e_8$	{12345, 1236, 14678, 1578, 2457, 267, 3468, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{6}{41}\sqrt{5}e^{12}, \frac{10}{41}e^{13} + \frac{4}{41}\sqrt{10}e^{45}$	$(-\frac{10}{41}, \frac{11}{41}, \frac{11}{41}, -\frac{4}{41}, \frac{5}{41}, -\frac{5}{41}, \frac{1}{41}, \frac{1}{41})$ $+ \frac{4}{41}\sqrt{15}e^3 \otimes e_7 + \frac{6}{41}\sqrt{5}e^5 \otimes e_6 + \frac{8}{41}\sqrt{5}e^2 \otimes e_8$	{12345, 1236, 14678, 1578, 2457, 267, 3468, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{1645}\sqrt{136718}e^{12}, \frac{4}{1645}\sqrt{10063}e^{13} + \frac{4}{1645}\sqrt{1041}e^{45}$	$(-\frac{358}{1645}, \frac{302}{1645}, \frac{638}{1645}, -\frac{207}{1645}, \frac{487}{1645}, -\frac{56}{235}, -\frac{8}{235}, \frac{8}{47})$ $+ \frac{2}{1645}\sqrt{208894}e^3 \otimes e_7 + \frac{694}{1645}e^5 \otimes e_4 + \frac{8}{1645}\sqrt{11798}e^2 \otimes e_6$	{14678, 15678, 3468, 3568}
82:5	$0, 0, 0, 0, 0, 0, \frac{3}{89}\sqrt{341}e^{12}, \frac{1}{89}\sqrt{930}e^{13} + \frac{1}{178}\sqrt{2418}e^{45}$	$(\frac{105}{356}, \frac{65}{356}, -\frac{81}{356}, \frac{3}{89}, \frac{89}{356}, -\frac{121}{356}, \frac{85}{178}, \frac{6}{89})$ $+ \frac{3}{178}\sqrt{1643}e^1 \otimes e_3 + \frac{3}{178}\sqrt{1643}e^2 \otimes e_6$	{12, 1245, 14567, 167, 23457, 237, 3456, 36}
82:5	$0, 0, 0, 0, 0, 0, \frac{12}{199}\sqrt{246}e^{12}, \frac{2}{199}\sqrt{2091}e^{13} + \frac{2}{199}\sqrt{2337}e^{45}$	$(-\frac{15}{199}, -\frac{32}{199}, \frac{57}{199}, \frac{21}{199}, \frac{21}{199}, 1, -\frac{47}{199}, \frac{42}{199})$ $+ \frac{6}{199}\sqrt{2173}e^6 \otimes e_7$	{123468, 12456, 126, 13478, 1457, 17, 23457, 237, 2478, 3456, 36, 468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{655}\sqrt{123802}e^{12}, \frac{2}{655}\sqrt{14579}e^{13} + \frac{4}{655}\sqrt{5258}e^{45}$	$(\frac{181}{655}, -\frac{38}{131}, -\frac{58}{655}, \frac{46}{131}, -\frac{107}{655}, \frac{69}{655}, -\frac{9}{655}, \frac{123}{655})$ $+ \frac{1}{655}\sqrt{119022}e^1 \otimes e_3 + \frac{1}{655}\sqrt{161086}e^4 \otimes e_7$	{1245, 12456, 167, 17, 2367, 237, 345, 3456}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{35}\sqrt{155}e^{12}, \frac{1}{35}\sqrt{310}e^{13} + \frac{2}{35}\sqrt{155}e^{45}$	$(-\frac{8}{35}, \frac{5}{7}, \frac{2}{35}, -\frac{3}{35}, -\frac{3}{35}, \frac{1}{5}, \frac{17}{35}, -\frac{6}{35})$ $+ \frac{2}{35}\sqrt{434}e^2 \otimes e_8$	{123, 12345, 123456, 1236, 14678, 1478, 24567, 2457, 267, 27, 3468, 348}
82:5	$0, 0, 0, 0, 0, 0, \frac{12}{199}\sqrt{246}e^{12}, \frac{2}{199}\sqrt{2091}e^{13} + \frac{2}{199}\sqrt{2337}e^{45}$	$(-\frac{15}{199}, \frac{127}{199}, \frac{57}{199}, \frac{21}{199}, \frac{21}{199}, -\frac{119}{199}, \frac{112}{199}, \frac{42}{199})$ $+ \frac{6}{199}\sqrt{2173}e^2 \otimes e_6$	{12, 12348, 1245, 134678, 14567, 167, 23457, 237, 2478, 3456, 36, 468}
82:5	$0, 0, 0, 0, 0, 0, \frac{12}{337}\sqrt{58}e^{12}, \frac{4}{337}\sqrt{551}e^{13} + \frac{4}{337}\sqrt{1073}e^{45}$	$(\frac{36}{337}, -\frac{80}{337}, -\frac{5}{337}, \frac{72}{337}, -\frac{41}{337}, \frac{147}{337}, -\frac{44}{337}, \frac{31}{337})$ $+ \frac{2}{337}\sqrt{4466}e^1 \otimes e_2 + \frac{2}{337}\sqrt{6554}e^4 \otimes e_7 + \frac{4}{337}\sqrt{1653}e^6 \otimes e_8$	{1367, 1578, 23578, 267}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{197}\sqrt{1846}e^{12}, \frac{1}{197}\sqrt{781}e^{13} + \frac{3}{197}\sqrt{497}e^{45}$	$(\frac{24}{197}, \frac{48}{197}, -\frac{47}{197}, -\frac{47}{197}, \frac{24}{197}, \frac{20}{197}, \frac{72}{197}, -\frac{23}{197})$ $+ \frac{1}{197}\sqrt{8733}e^1 \otimes e_3 + \frac{4}{197}\sqrt{710}e^2 \otimes e_8 - \frac{71}{197}e^5 \otimes e_4$	{14678, 1478, 15678, 1578, 3468, 348, 3568, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{2}{197}\sqrt{1846}e^{12}, \frac{1}{197}\sqrt{781}e^{13} + \frac{3}{197}\sqrt{497}e^{45}$	$(\frac{24}{197}, \frac{48}{197}, -\frac{47}{197}, -\frac{47}{197}, \frac{24}{197}, \frac{20}{197}, \frac{72}{197}, -\frac{23}{197})$ $+ \frac{1}{197}\sqrt{8733}e^1 \otimes e_3 + \frac{4}{197}\sqrt{710}e^2 \otimes e_8 + \frac{71}{197}e^5 \otimes e_4$	{14678, 1478, 15678, 1578, 3468, 348, 3568, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{523}\sqrt{55918}e^{12}, \frac{5}{523}\sqrt{2298}e^{13} + \frac{1}{523}\sqrt{2298}e^{45}$	$(\frac{147}{523}, -\frac{236}{523}, -\frac{9}{523}, \frac{69}{523}, \frac{69}{523}, \frac{294}{523}, -\frac{89}{523}, \frac{138}{523})$ $+ \frac{1}{523}\sqrt{175414}e^1 \otimes e_2 + \frac{2}{523}\sqrt{43662}e^6 \otimes e_7$	{1347, 14578, 178, 234578, 2378, 247}
82:5	$0, 0, 0, 0, 0, 0, \frac{4}{65}\sqrt{51}e^{12}, \frac{2}{65}\sqrt{102}e^{13} + \frac{4}{65}\sqrt{51}e^{45}$	$(\frac{8}{65}, \frac{2}{13}, \frac{12}{65}, \frac{61}{65}, -\frac{41}{65}, \frac{14}{65}, \frac{18}{65}, \frac{4}{13})$ $+ \frac{102}{65}e^4 \otimes e_5$	{12468, 1248, 12568, 1258, 14678, 1478, 15678, 1578, 234678, 23478, 235678, 23578, 3468, 348, 3568, 358}
82:5	$0, 0, 0, 0, 0, 0, \frac{1}{523}\sqrt{2298}e^{12}, \frac{5}{523}\sqrt{2298}e^{13} + \frac{1}{523}\sqrt{55918}e^{45}$	$(\frac{223}{523}, -\frac{160}{523}, -\frac{9}{523}, \frac{221}{523}, -\frac{7}{523}, -\frac{162}{523}, \frac{63}{523}, \frac{214}{523})$ $+ \frac{1}{523}\sqrt{175414}e^1 \otimes e_2 + \frac{2}{523}\sqrt{43662}e^4 \otimes e_6$	{1345, 136, 148, 1568, 2348, 23568, 245, 26}
82:6	$0, 0, 0, 0, 0, 0, \frac{10}{1177}\sqrt{1343}e^{13} + \frac{10}{1177}\sqrt{255}e^{24},$ $\frac{10}{1177}\sqrt{3026}e^{12} + \frac{20}{1177}\sqrt{799}e^{35}$	$(\frac{45}{1177}, \frac{465}{1177}, \frac{35}{1177}, -\frac{35}{107}, \frac{475}{1177}, -\frac{375}{1177}, \frac{80}{1177}, \frac{510}{1177})$ $+ \frac{10}{1177}\sqrt{8738}e^2 \otimes e_4 + \frac{10}{1177}\sqrt{8823}e^5 \otimes e_6$	{12357, 134678, 2578, 467}
82:6	$0, 0, 0, 0, 0, 0, \frac{4}{133}\sqrt{282}e^{13} + \frac{2}{133}\sqrt{517}e^{24}, \frac{4}{133}\sqrt{282}e^{12} + \frac{2}{133}\sqrt{517}e^{35}$	$(-\frac{33}{133}, \frac{61}{133}, \frac{61}{133}, -\frac{33}{133}, -\frac{33}{133}, \frac{15}{133}, \frac{4}{19}, \frac{4}{19})$ $+ \frac{2}{133}\sqrt{2773}e^2 \otimes e_4 + \frac{2}{133}\sqrt{2773}e^3 \otimes e_5$	{123, 1236, 45, 456}
82:6	$0, 0, 0, 0, 0, 0, \frac{2}{145}\sqrt{362}e^{13} + \frac{4}{145}\sqrt{181}e^{24}, \frac{1}{145}\sqrt{19910}e^{12} + \frac{4}{145}\sqrt{181}e^{35}$	$(-\frac{24}{145}, \frac{98}{145}, \frac{39}{145}, -\frac{83}{145}, \frac{7}{29}, \frac{27}{145}, \frac{3}{29}, \frac{74}{145})$ $+ \frac{2}{145}\sqrt{10679}e^2 \otimes e_4$	{125, 1256, 1468, 148, 23568, 2358, 34, 346}
82:6	$0, 0, 0, 0, 0, 0, \frac{2}{451}\sqrt{13891}e^{13} + \frac{16}{451}\sqrt{479}e^{24},$ $\frac{5}{451}\sqrt{4790}e^{12} + \frac{2}{451}\sqrt{1437}e^{35}$	$(\frac{18}{451}, \frac{18}{451}, \frac{137}{451}, -\frac{43}{451}, \frac{79}{451}, -\frac{281}{451}, \frac{155}{451}, \frac{216}{451})$ $+ \frac{2}{451}\sqrt{87657}e^2 \otimes e_6$	{12357, 124, 134678, 1568, 2348, 2578, 356, 467}
82:6	$0, 0, 0, 0, 0, 0, \frac{5}{451}\sqrt{4790}e^{13} + \frac{16}{451}\sqrt{479}e^{24},$ $\frac{2}{451}\sqrt{13891}e^{12} + \frac{2}{451}\sqrt{1437}e^{35}$	$(\frac{18}{451}, \frac{15}{451}, -\frac{46}{451}, -\frac{43}{451}, \frac{79}{451}, 1, -\frac{28}{451}, \frac{3}{41})$ $+ \frac{2}{451}\sqrt{87657}e^6 \otimes e_7$	{123468, 12578, 1356, 147, 2357, 246, 3478, 568}
82:6	$0, 0, 0, 0, 0, 0, \frac{6}{41}\sqrt{5}e^{13} + \frac{3}{41}\sqrt{30}e^{24}, \frac{1}{41}\sqrt{190}e^{12} + \frac{4}{41}\sqrt{10}e^{35}$	$(\frac{7}{82}, -\frac{5}{82}, \frac{5}{41}, \frac{11}{41}, -\frac{4}{41}, -\frac{25}{82}, \frac{17}{82}, \frac{1}{41})$ $+ \frac{1}{41}\sqrt{330}e^2 \otimes e_6 + \frac{1}{41}\sqrt{410}e^4 \otimes e_8$	{124, 1568, 2578, 467}
82:6	$0, 0, 0, 0, 0, 0, \frac{1}{179}\sqrt{3293}e^{13} + \frac{1}{179}\sqrt{1513}e^{24},$ $\frac{2}{179}\sqrt{2759}e^{12} + \frac{2}{179}\sqrt{890}e^{35}$	$(-\frac{51}{358}, \frac{40}{179}, \frac{33}{358}, -\frac{49}{179}, -\frac{2}{179}, \frac{207}{358}, -\frac{9}{179}, \frac{29}{358})$ $+ \frac{1}{179}\sqrt{13439}e^2 \otimes e_4 + \frac{3}{179}\sqrt{1691}e^6 \otimes e_8$	{126, 1458, 238, 3456}
82:6	$0, 0, 0, 0, 0, 0, \frac{1}{112}\sqrt{2329}e^{13} + \frac{1}{112}\sqrt{11782}e^{24},$ $\frac{1}{112}\sqrt{2329}e^{12} + \frac{1}{112}\sqrt{3562}e^{35}$	$(\frac{39}{112}, -\frac{25}{224}, \frac{5}{32}, \frac{69}{112}, \frac{9}{112}, -\frac{17}{28}, \frac{113}{224}, \frac{53}{224})$ $+ \frac{3}{56}\sqrt{685}e^4 \otimes e_6$	{123678, 12458, 13457, 16, 2345, 267, 368, 4578}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:6	$0, 0, 0, 0, 0, 0, \frac{11}{879}\sqrt{1362}e^{13} + \frac{22}{879}\sqrt{78}e^{24},$ $\frac{11}{879}\sqrt{78}e^{12} + \frac{11}{879}\sqrt{330}e^{35}$	$(-\frac{55}{293}, \frac{66}{293}, \frac{66}{293}, -\frac{55}{293}, -\frac{55}{293}, \frac{132}{293}, \frac{11}{293}, \frac{11}{293})$ $+ \frac{11}{293}\sqrt{214}e^6 \otimes e_7 + \frac{11}{879}\sqrt{1770}e^3 \otimes e_5 + \frac{22}{879}\sqrt{282}e^2 \otimes e_4$	{1257, 347}
82:6	$0, 0, 0, 0, 0, 0, \frac{8}{73}\sqrt{2}e^{13} + \frac{16}{73}\sqrt{6}e^{24}, \frac{8}{73}\sqrt{3}e^{12} + \frac{8}{73}\sqrt{15}e^{35}$	$(\frac{8}{73}, -\frac{18}{73}, -\frac{4}{73}, \frac{22}{73}, -\frac{6}{73}, \frac{36}{73}, \frac{4}{73}, -\frac{10}{73})$ $+ \frac{24}{73}\sqrt{3}e^6 \otimes e_7 + \frac{8}{73}\sqrt{37}e^4 \otimes e_8$	{1246, 1568, 2578, 47}
82:6	$0, 0, 0, 0, 0, 0, \frac{2}{467}\sqrt{2573}e^{13} + \frac{8}{467}\sqrt{913}e^{24},$ $\frac{4}{467}\sqrt{1909}e^{12} + \frac{2}{467}\sqrt{9877}e^{35}$	$(\frac{111}{467}, -\frac{34}{467}, -\frac{100}{467}, \frac{45}{467}, \frac{177}{467}, \frac{121}{467}, \frac{11}{467}, \frac{77}{467})$ $+ \frac{2}{467}\sqrt{20418}e^5 \otimes e_7 + \frac{6}{467}\sqrt{1577}e^4 \otimes e_6$	{1356, 147, 3478, 568}
82:6	$0, 0, 0, 0, 0, 0, \frac{1}{3}\sqrt{6}e^{13} + \frac{1}{3}\sqrt{3}e^{24}, \frac{1}{3}\sqrt{6}e^{12} + \frac{1}{3}\sqrt{3}e^{35}$	$(\frac{1}{3}, 0, 0, \frac{1}{3}, \frac{1}{3}, -\frac{2}{3}, \frac{1}{3}, \frac{1}{3})$ $+ \frac{1}{3}\sqrt{15}e^1 \otimes e_6$	{123, 12457, 178, 2345678, 268, 456}
82:6	$0, 0, 0, 0, 0, 0, \frac{1}{29}\sqrt{130}e^{13} + \frac{3}{29}\sqrt{13}e^{24}, \frac{1}{29}\sqrt{286}e^{12} + \frac{3}{29}\sqrt{13}e^{35}$	$(\frac{1}{29}, \frac{8}{29}, \frac{2}{29}, -\frac{5}{29}, \frac{7}{29}, -\frac{12}{29}, \frac{3}{29}, \frac{9}{29})$ $+ \frac{1}{29}\sqrt{377}e^1 \otimes e_6 + \frac{2}{29}\sqrt{78}e^2 \otimes e_4$	{123, 13458, 268, 456}
82:6	$0, 0, 0, 0, 0, 0, \frac{165}{497}e^{13} + \frac{22}{497}\sqrt{47}e^{24}, \frac{11}{497}\sqrt{206}e^{12} + \frac{11}{497}\sqrt{319}e^{35}$	$(\frac{11}{142}, \frac{66}{497}, -\frac{55}{994}, -\frac{55}{497}, \frac{132}{497}, \frac{297}{994}, \frac{11}{497}, \frac{209}{994})$ $+ \frac{11}{497}\sqrt{393}e^3 \otimes e_6 + \frac{11}{497}\sqrt{487}e^5 \otimes e_7 + \frac{33}{497}\sqrt{2}e^2 \otimes e_4$	{1467, 3478}
82:6	$0, 0, 0, 0, 0, 0, \frac{4}{281}\sqrt{645}e^{13} + \frac{4}{281}\sqrt{1290}e^{24}, \frac{4}{281}\sqrt{215}e^{12} + \frac{4}{281}\sqrt{1290}e^{35}$	$(\frac{19}{281}, \frac{70}{281}, -\frac{51}{281}, -\frac{102}{281}, \frac{140}{281}, \frac{39}{281}, -\frac{32}{281}, \frac{89}{281})$ $+ \frac{18}{281}\sqrt{86}e^2 \otimes e_4 + \frac{2}{281}\sqrt{13846}e^5 \otimes e_7$	{1467, 147, 34678, 3478}
82:6	$0, 0, 0, 0, 0, 0, \frac{2}{61}\sqrt{15}e^{13} + \frac{1}{61}\sqrt{210}e^{24}, \frac{2}{61}\sqrt{10}e^{12} + \frac{4}{61}\sqrt{10}e^{35}$	$(\frac{7}{61}, -\frac{5}{61}, -\frac{5}{61}, \frac{7}{61}, \frac{7}{61}, -\frac{10}{61}, \frac{2}{61}, \frac{2}{61})$ $+ \frac{1}{61}\sqrt{230}e^4 \otimes e_8 + \frac{5}{61}\sqrt{6}e^2 \otimes e_6 + \frac{6}{61}\sqrt{5}e^5 \otimes e_7$	{1568, 467}
82:6	$0, 0, 0, 0, 0, 0, \frac{8}{1063}\sqrt{3427}e^{13} + \frac{16}{1063}\sqrt{230}e^{24},$ $\frac{8}{1063}\sqrt{2438}e^{12} + \frac{8}{1063}\sqrt{2967}e^{35}$	$(-\frac{120}{1063}, \frac{490}{1063}, \frac{364}{1063}, -\frac{246}{1063}, \frac{6}{1063}, -\frac{372}{1063}, \frac{244}{1063}, \frac{370}{1063})$ $+ \frac{104}{1063}\sqrt{69}e^3 \otimes e_6 + \frac{8}{1063}\sqrt{9683}e^2 \otimes e_4$	{1235, 1348, 2568, 46}
82:6	$0, 0, 0, 0, 0, 0, \frac{2}{47}\sqrt{10}e^{13} + \frac{2}{47}\sqrt{85}e^{24}, \frac{2}{47}\sqrt{10}e^{12} + \frac{2}{47}\sqrt{85}e^{35}$	$(\frac{9}{47}, -\frac{10}{47}, -\frac{10}{47}, \frac{9}{47}, \frac{9}{47}, \frac{5}{47}, -\frac{1}{47}, -\frac{1}{47})$ $+ \frac{2}{47}\sqrt{105}e^4 \otimes e_8 + \frac{2}{47}\sqrt{105}e^5 \otimes e_7$	{123678, 12378, 2345, 23456}
82:6	$0, 0, 0, 0, 0, 0, \frac{8}{73}\sqrt{3}e^{13} + \frac{16}{73}\sqrt{6}e^{24}, \frac{8}{73}\sqrt{2}e^{12} + \frac{8}{73}\sqrt{15}e^{35}$	$(\frac{8}{73}, \frac{14}{73}, -\frac{9}{73}, -\frac{15}{73}, \frac{31}{73}, -\frac{18}{73}, -\frac{1}{73}, \frac{22}{73})$ $+ \frac{24}{73}\sqrt{3}e^2 \otimes e_6 + \frac{8}{73}\sqrt{37}e^5 \otimes e_7$	{1356, 1467, 34678, 568}
82:6	$0, 0, 0, 0, 0, 0, \frac{2}{17}\sqrt{26}e^{13} + \frac{2}{17}\sqrt{39}e^{24}, \frac{1}{17}\sqrt{78}e^{12} + \frac{2}{17}\sqrt{39}e^{35}$	$(\frac{4}{17}, -\frac{6}{17}, \frac{1}{17}, \frac{11}{17}, -\frac{3}{17}, \frac{3}{17}, \frac{5}{17}, -\frac{2}{17})$ $+ \frac{2}{17}\sqrt{91}e^4 \otimes e_8$	{124, 1246, 1568, 158, 25678, 2578, 467, 47}
82:6	$0, 0, 0, 0, 0, 0, \frac{8}{1063}\sqrt{3427}e^{13} + \frac{8}{1063}\sqrt{2967}e^{24},$ $\frac{8}{1063}\sqrt{2438}e^{12} + \frac{16}{1063}\sqrt{230}e^{35}$	$(-\frac{120}{1063}, \frac{321}{1063}, \frac{26}{1063}, -\frac{415}{1063}, \frac{175}{1063}, \frac{642}{1063}, -\frac{94}{1063}, \frac{201}{1063})$ $+ \frac{104}{1063}\sqrt{69}e^6 \otimes e_7 + \frac{8}{1063}\sqrt{9683}e^2 \otimes e_4$	{1257, 1478, 23578, 347}
82:6	$0, 0, 0, 0, 0, 0, \frac{13}{491}\sqrt{3}e^{13} + \frac{13}{491}\sqrt{105}e^{24}, \frac{52}{491}\sqrt{7}e^{12} + \frac{78}{491}\sqrt{6}e^{35}$	$(-\frac{13}{982}, \frac{52}{491}, -\frac{117}{982}, -\frac{117}{491}, \frac{104}{982}, \frac{429}{982}, -\frac{65}{491}, \frac{91}{982})$ $+ \frac{195}{491}e^2 \otimes e_4 + \frac{26}{491}\sqrt{82}e^5 \otimes e_7 + \frac{39}{491}\sqrt{37}e^6 \otimes e_8$	{13478, 467}
82:7	$0, 0, 0, 0, 0, 0, \frac{1}{71}\sqrt{559}e^{12}, \frac{2}{71}\sqrt{39}e^{34} + \frac{13}{71}\sqrt{3}e^{56}$	$(\frac{16}{71}, -\frac{14}{71}, \frac{8}{71}, -\frac{5}{71}, \frac{15}{71}, -\frac{12}{71}, \frac{2}{71}, \frac{3}{71})$ $+ \frac{13}{71}e^3 \otimes e_4 + \frac{2}{71}\sqrt{195}e^1 \otimes e_8 + \frac{3}{71}\sqrt{78}e^5 \otimes e_7$	{23678, 24678, 358, 458}
82:7	$0, 0, 0, 0, 0, 0, \frac{4}{141}\sqrt{43}e^{12}, \frac{2}{141}\sqrt{129}e^{34} + \frac{2}{141}\sqrt{129}e^{56}$	$(\frac{17}{47}, -\frac{35}{141}, \frac{52}{141}, -\frac{34}{141}, \frac{52}{141}, -\frac{34}{141}, \frac{16}{141}, \frac{6}{47})$ $+ \frac{86}{141}e^1 \otimes e_2 + \frac{86}{141}e^3 \otimes e_4 + \frac{86}{141}e^5 \otimes e_6$	{13578, 13678, 14678, 23578, 23678, 24678}
82:7	$0, 0, 0, 0, 0, 0, \frac{4}{141}\sqrt{43}e^{12}, \frac{2}{141}\sqrt{129}e^{34} + \frac{2}{141}\sqrt{129}e^{56}$	$(\frac{17}{47}, -\frac{35}{141}, \frac{52}{141}, -\frac{34}{141}, \frac{52}{141}, -\frac{34}{141}, \frac{16}{141}, \frac{6}{47})$ $+ \frac{86}{141}e^1 \otimes e_2 + \frac{86}{141}e^3 \otimes e_4 - \frac{86}{141}e^5 \otimes e_6$	{13578, 13678, 14678, 23578, 23678, 24678}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:7	$0, 0, 0, 0, 0, 0, \frac{4}{55}\sqrt{43}e^{12}, \frac{2}{55}\sqrt{129}e^{34} + \frac{2}{55}\sqrt{129}e^{56}$	$(\frac{51}{55}, -\frac{7}{11}, \frac{9}{55}, \frac{9}{55}, \frac{9}{55}, \frac{9}{55}, \frac{16}{55}, \frac{18}{55})$ $+ \frac{86}{55}e^1 \otimes e_2$	$\{134567, 1347, 13578, 17, 234567, 2347, 23578, 27\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{1}{169}\sqrt{8239}e^{12}, \frac{9}{169}\sqrt{107}e^{34} + \frac{2}{169}\sqrt{321}e^{56}$	$(\frac{75}{338}, -\frac{139}{338}, \frac{75}{169}, -\frac{18}{169}, \frac{57}{338}, \frac{57}{338}, -\frac{32}{169}, \frac{57}{169})$ $+ \frac{107}{169}e^1 \otimes e_2 + \frac{1}{169}\sqrt{19902}e^3 \otimes e_7$	$\{145678, 1478, 157, 245678, 2478, 257\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{2}{231}\sqrt{8239}e^{12}, \frac{6}{77}\sqrt{107}e^{34} + \frac{4}{231}\sqrt{321}e^{56}$	$(-\frac{32}{231}, -\frac{32}{231}, \frac{50}{77}, -\frac{12}{77}, \frac{19}{77}, \frac{19}{77}, -\frac{64}{231}, \frac{38}{77})$ $+ \frac{2}{231}\sqrt{19902}e^3 \otimes e_7$	$\{12345, 123568, 1238, 145678, 1478, 157, 345, 3568, 38\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{4}{55}\sqrt{43}e^{12}, \frac{2}{55}\sqrt{129}e^{34} + \frac{2}{55}\sqrt{129}e^{56}$	$(\frac{8}{55}, \frac{8}{55}, \frac{52}{55}, -\frac{34}{55}, \frac{9}{55}, \frac{9}{55}, \frac{16}{55}, \frac{18}{55})$ $+ \frac{86}{55}e^3 \otimes e_4$	$\{12358, 12458, 13578, 14578, 358, 458\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{4}{83}\sqrt{115}e^{12}, \frac{2}{83}\sqrt{345}e^{34} + \frac{2}{83}\sqrt{345}e^{56}$	$(\frac{40}{83}, -\frac{8}{83}, \frac{20}{83}, -\frac{26}{83}, -\frac{3}{83}, -\frac{3}{83}, \frac{32}{83}, -\frac{6}{83})$ $+ \frac{46}{83}e^3 \otimes e_4 + \frac{8}{83}\sqrt{69}e^1 \otimes e_8$	$\{23578, 24578, 358, 458\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{1}{169}\sqrt{8239}e^{12}, \frac{2}{169}\sqrt{321}e^{34} + \frac{9}{169}\sqrt{107}e^{56}$	$(-\frac{16}{169}, -\frac{16}{169}, \frac{82}{169}, -\frac{25}{169}, \frac{75}{169}, -\frac{18}{169}, -\frac{32}{169}, \frac{57}{169})$ $+ \frac{107}{169}e^3 \otimes e_4 + \frac{1}{169}\sqrt{19902}e^5 \otimes e_7$	$\{12356, 12456, 137, 147, 356, 456\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{2}{49}\sqrt{43}e^{12}, \frac{1}{49}\sqrt{129}e^{34} + \frac{1}{49}\sqrt{129}e^{56}$	$(\frac{4}{49}, \frac{4}{49}, \frac{26}{49}, -\frac{17}{49}, \frac{26}{49}, -\frac{17}{49}, \frac{8}{49}, \frac{9}{49})$ $+ \frac{43}{49}e^3 \otimes e_4 - \frac{43}{49}e^5 \otimes e_6$	$\{12358, 12368, 12468, 13578, 13678, 14678, 358, 368, 468\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{2}{49}\sqrt{43}e^{12}, \frac{1}{49}\sqrt{129}e^{34} + \frac{1}{49}\sqrt{129}e^{56}$	$(\frac{4}{49}, \frac{4}{49}, \frac{26}{49}, -\frac{17}{49}, \frac{26}{49}, -\frac{17}{49}, \frac{8}{49}, \frac{9}{49})$ $+ \frac{43}{49}e^3 \otimes e_4 + \frac{43}{49}e^5 \otimes e_6$	$\{12358, 12368, 12468, 13578, 13678, 14678, 358, 368, 468\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{1}{15}\sqrt{115}e^{12}, \frac{1}{30}\sqrt{345}e^{34} + \frac{1}{30}\sqrt{345}e^{56}$	$(\frac{2}{3}, -\frac{2}{15}, -\frac{1}{20}, -\frac{1}{20}, -\frac{1}{20}, -\frac{1}{20}, \frac{8}{15}, -\frac{1}{10})$ $+ \frac{2}{15}\sqrt{69}e^1 \otimes e_8$	$\{12, 1234, 123456, 134567, 1347, 17, 23578, 358\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{2}{49}\sqrt{43}e^{12}, \frac{1}{49}\sqrt{129}e^{34} + \frac{1}{49}\sqrt{129}e^{56}$	$(\frac{51}{98}, -\frac{5}{14}, \frac{26}{49}, -\frac{17}{49}, \frac{9}{98}, \frac{9}{98}, \frac{8}{49}, \frac{9}{49})$ $+ \frac{43}{49}e^1 \otimes e_2 + \frac{43}{49}e^3 \otimes e_4$	$\{13578, 14578, 23578, 24578\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{2}{129}\sqrt{559}e^{12}, \frac{26}{129}\sqrt{3}e^{34} + \frac{4}{129}\sqrt{39}e^{56}$	$(\frac{32}{129}, -\frac{28}{129}, \frac{10}{43}, -\frac{8}{43}, \frac{1}{43}, \frac{1}{43}, \frac{4}{129}, \frac{2}{43})$ $+ \frac{2}{43}\sqrt{78}e^3 \otimes e_7 + \frac{4}{129}\sqrt{195}e^1 \otimes e_8$	$\{1234, 123456, 1567, 17, 24578, 358\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{2}{53}\sqrt{115}e^{12}, \frac{1}{53}\sqrt{345}e^{34} + \frac{1}{53}\sqrt{345}e^{56}$	$(\frac{20}{53}, -\frac{4}{53}, \frac{10}{53}, -\frac{13}{53}, \frac{10}{53}, -\frac{13}{53}, \frac{16}{53}, -\frac{3}{53})$ $+ \frac{23}{53}e^3 \otimes e_4 + \frac{23}{53}e^5 \otimes e_6 + \frac{4}{53}\sqrt{69}e^1 \otimes e_8$	$\{23578, 23678, 24678, 358, 368, 468\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{2}{53}\sqrt{115}e^{12}, \frac{1}{53}\sqrt{345}e^{34} + \frac{1}{53}\sqrt{345}e^{56}$	$(\frac{20}{53}, -\frac{4}{53}, \frac{10}{53}, -\frac{13}{53}, \frac{10}{53}, -\frac{13}{53}, \frac{16}{53}, -\frac{3}{53})$ $+ \frac{23}{53}e^3 \otimes e_4 - \frac{23}{53}e^5 \otimes e_6 + \frac{4}{53}\sqrt{69}e^1 \otimes e_8$	$\{23578, 23678, 24678, 358, 368, 468\}$
82:7	$0, 0, 0, 0, 0, 0, \frac{2}{445}\sqrt{8239}e^{12}, \frac{4}{445}\sqrt{321}e^{34} + \frac{18}{445}\sqrt{107}e^{56}$	$(\frac{15}{89}, -\frac{139}{445}, \frac{164}{445}, -\frac{10}{89}, \frac{30}{89}, -\frac{36}{445}, -\frac{64}{445}, \frac{114}{445})$ $+ \frac{214}{445}e^1 \otimes e_2 + \frac{214}{445}e^3 \otimes e_4 + \frac{2}{445}\sqrt{19902}e^5 \otimes e_7$	$\{137, 147, 237, 247\}$
82:8	$0, 0, 0, 0, 0, 0, \frac{2}{37}\sqrt{58}e^{12}, \frac{2}{37}\sqrt{29}e^{13} + \frac{2}{37}\sqrt{29}e^{24} + \frac{2}{37}\sqrt{58}e^{56}$	$(\frac{5}{37}, \frac{5}{37}, \frac{7}{37}, \frac{7}{37}, \frac{35}{37}, -\frac{23}{37}, \frac{10}{37}, \frac{12}{37})$ $+ \frac{58}{37}e^5 \otimes e_6$	$\{1258, 1268, 14578, 14678, 3458, 3468\}$
82:8	$0, 0, 0, 0, 0, 0, \frac{32}{1381}\sqrt{479}e^{12}, \frac{10}{1381}\sqrt{4790}e^{13} + \frac{4}{1381}\sqrt{13891}e^{24} + \frac{4}{1381}\sqrt{1437}e^{56}$	$(-\frac{336}{1381}, \frac{30}{1381}, \frac{652}{1381}, \frac{286}{1381}, \frac{637}{1381}, -\frac{321}{1381}, -\frac{306}{1381}, \frac{316}{1381})$ $+ \frac{4}{1381}\sqrt{87657}e^3 \otimes e_7 + \frac{958}{1381}e^5 \otimes e_6$	$\{1578, 1678, 358, 368\}$
82:8	$0, 0, 0, 0, 0, 0, \frac{16}{451}\sqrt{479}e^{12}, \frac{5}{451}\sqrt{4790}e^{13} + \frac{2}{451}\sqrt{13891}e^{24} + \frac{2}{451}\sqrt{1437}e^{56}$	$(-\frac{168}{451}, \frac{15}{451}, \frac{326}{451}, \frac{13}{451}, \frac{79}{451}, \frac{79}{451}, -\frac{153}{451}, \frac{158}{451})$ $+ \frac{2}{451}\sqrt{87657}e^3 \otimes e_7$	$\{123, 12356, 1578, 2567, 27, 358\}$

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:8	$0, 0, 0, 0, 0, 0, \frac{1}{361}\sqrt{35098}e^{12},$ $\frac{1}{361}\sqrt{13298}e^{13} + \frac{1}{361}\sqrt{13298}e^{24} + \frac{2}{361}\sqrt{6322}e^{56}$	$(\frac{68}{361}, -\frac{67}{361}, -\frac{41}{361}, \frac{94}{361}, \frac{110}{361}, -\frac{83}{361}, \frac{1}{361}, \frac{27}{361})$ $+ \frac{1}{361}\sqrt{42074}e^5 \otimes e_7 + \frac{3}{361}\sqrt{3270}e^1 \otimes e_3$	{1256, 147, 237, 3456}
82:8	$0, 0, 0, 0, 0, 0, \frac{76}{1449}\sqrt{123}e^{12},$ $\frac{38}{1449}\sqrt{185}e^{13} + \frac{38}{1449}\sqrt{158}e^{24} + \frac{38}{1449}\sqrt{61}e^{56}$	$(\frac{152}{483}, -\frac{494}{1449}, -\frac{38}{207}, \frac{76}{161}, \frac{95}{1449}, \frac{95}{1449}, -\frac{38}{1449}, \frac{190}{1449})$ $+ \frac{38}{1449}\sqrt{607}e^1 \otimes e_3 + \frac{38}{207}\sqrt{14}e^4 \otimes e_7$	{124, 12456, 1567, 17}
82:8	$0, 0, 0, 0, 0, 0, \frac{1}{5}\sqrt{10}e^{12}, \frac{1}{10}\sqrt{10}e^{13} + \frac{1}{10}\sqrt{10}e^{24} + \frac{1}{10}\sqrt{10}e^{56}$	$(\frac{1}{4}, \frac{1}{4}, -\frac{1}{4}, -\frac{1}{4}, 0, 0, \frac{1}{2}, 0)$ $+ \frac{3}{10}\sqrt{5}e^1 \otimes e_3 - \frac{3}{10}\sqrt{5}e^2 \otimes e_4$	{12, 1256, 14567, 147, 34, 3456}
82:8	$0, 0, 0, 0, 0, 0, \frac{1}{5}\sqrt{10}e^{12}, \frac{1}{10}\sqrt{10}e^{13} + \frac{1}{10}\sqrt{10}e^{24} + \frac{1}{10}\sqrt{10}e^{56}$	$(\frac{1}{4}, \frac{1}{4}, -\frac{1}{4}, -\frac{1}{4}, 0, 0, \frac{1}{2}, 0)$ $+ \frac{3}{10}\sqrt{5}e^1 \otimes e_3 + \frac{3}{10}\sqrt{5}e^2 \otimes e_4$	{12, 1256, 14567, 147, 34, 3456}
82:8	$0, 0, 0, 0, 0, 0, \frac{1}{112}\sqrt{11782}e^{12},$ $\frac{1}{112}\sqrt{2329}e^{13} + \frac{1}{112}\sqrt{2329}e^{24} + \frac{1}{112}\sqrt{3562}e^{56}$	$(\frac{155}{224}, -\frac{25}{224}, -\frac{17}{32}, \frac{61}{224}, \frac{9}{112}, \frac{9}{112}, \frac{65}{112}, \frac{9}{56})$ $+ \frac{3}{56}\sqrt{685}e^1 \otimes e_3$	{12, 1256, 14567, 147, 23567, 237, 34, 3456}
82:8	$0, 0, 0, 0, 0, 0, \frac{1}{25}\sqrt{55}e^{12}, \frac{2}{25}\sqrt{5}e^{13} + \frac{2}{25}\sqrt{5}e^{24} + \frac{1}{50}\sqrt{130}e^{56}$	$(\frac{1}{20}, \frac{1}{20}, -\frac{1}{20}, -\frac{1}{20}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{10}, 0)$ $+ \frac{1}{5}\sqrt{2}e^5 \otimes e_7 + \frac{3}{50}\sqrt{15}e^1 \otimes e_3 + \frac{3}{50}\sqrt{15}e^2 \otimes e_4$	{1256, 147, 3456}
82:8	$0, 0, 0, 0, 0, 0, \frac{1}{25}\sqrt{55}e^{12}, \frac{2}{25}\sqrt{5}e^{13} + \frac{2}{25}\sqrt{5}e^{24} + \frac{1}{50}\sqrt{130}e^{56}$	$(\frac{1}{20}, \frac{1}{20}, -\frac{1}{20}, -\frac{1}{20}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{10}, 0)$ $+ \frac{1}{5}\sqrt{2}e^5 \otimes e_7 + \frac{3}{50}\sqrt{15}e^1 \otimes e_3 - \frac{3}{50}\sqrt{15}e^2 \otimes e_4$	{1256, 147, 3456}
82:8	$0, 0, 0, 0, 0, 0, \frac{2}{37}\sqrt{238}e^{12}, \frac{14}{37}\sqrt{2}e^{13} + \frac{14}{37}\sqrt{2}e^{24} + \frac{2}{37}\sqrt{238}e^{56}$	$(-\frac{4}{37}, -\frac{4}{37}, \frac{13}{37}, \frac{13}{37}, \frac{20}{37}, -\frac{11}{37}, -\frac{8}{37}, \frac{9}{37})$ $+ \frac{2}{37}\sqrt{434}e^5 \otimes e_7$	{123458, 1256, 13678, 147, 3456, 58}
82:9	$0, 0, 0, 0, 0, 0, \frac{2}{17}\sqrt{3}e^{13} + \frac{1}{17}\sqrt{31}e^{24}, \frac{2}{17}\sqrt{2}e^{12} + \frac{1}{17}\sqrt{35}e^{56}$	$(\frac{2}{17}, -\frac{2}{17}, -\frac{1}{17}, \frac{3}{17}, \frac{4}{17}, -\frac{4}{17}, \frac{1}{17}, 0)$ $+ \frac{1}{17}\sqrt{38}e^4 \otimes e_8 + \frac{1}{17}\sqrt{5}e^1 \otimes e_3 + \frac{4}{17}\sqrt{3}e^5 \otimes e_7$	{12678, 147}
82:9	$0, 0, 0, 0, 0, 0, \frac{4}{89}\sqrt{58}e^{13} + \frac{8}{89}\sqrt{6}e^{24}, \frac{8}{89}\sqrt{5}e^{12} + \frac{4}{89}\sqrt{66}e^{56}$	$(-\frac{9}{89}, \frac{8}{89}, \frac{15}{89}, -\frac{2}{89}, \frac{22}{89}, -\frac{23}{89}, \frac{6}{89}, -\frac{1}{89})$ $+ \frac{12}{89}\sqrt{10}e^5 \otimes e_7 + \frac{8}{89}\sqrt{17}e^3 \otimes e_8$	{12678, 1356, 237, 58}
82:9	$0, 0, 0, 0, 0, 0, \frac{15}{59}e^{13} + \frac{15}{59}e^{24}, \frac{20}{59}e^{12} + \frac{10}{59}\sqrt{3}e^{56}$	$(\frac{10}{59}, \frac{10}{59}, -\frac{15}{59}, -\frac{15}{59}, \frac{20}{59}, 0, -\frac{5}{59}, \frac{20}{59})$ $+ \frac{10}{59}\sqrt{10}e^5 \otimes e_7 + \frac{5}{59}\sqrt{33}e^1 \otimes e_3 - \frac{5}{59}\sqrt{33}e^2 \otimes e_4$	{127, 14678, 347}
82:9	$0, 0, 0, 0, 0, 0, \frac{15}{59}e^{13} + \frac{15}{59}e^{24}, \frac{20}{59}e^{12} + \frac{10}{59}\sqrt{3}e^{56}$	$(\frac{10}{59}, \frac{10}{59}, -\frac{15}{59}, -\frac{15}{59}, \frac{20}{59}, 0, -\frac{5}{59}, \frac{20}{59})$ $+ \frac{10}{59}\sqrt{10}e^5 \otimes e_7 + \frac{5}{59}\sqrt{33}e^1 \otimes e_3 + \frac{5}{59}\sqrt{33}e^2 \otimes e_4$	{127, 14678, 347}
82:9	$0, 0, 0, 0, 0, 0, \frac{9}{124}\sqrt{71}e^{13} + \frac{9}{124}\sqrt{71}e^{24}, \frac{1}{62}\sqrt{1349}e^{12} + \frac{3}{62}\sqrt{213}e^{56}$	$(\frac{37}{248}, \frac{37}{248}, -\frac{39}{248}, -\frac{39}{248}, \frac{35}{62}, -\frac{33}{124}, -\frac{1}{124}, \frac{37}{124})$ $+ \frac{1}{124}\sqrt{14626}e^5 \otimes e_7$	{123458, 12678, 1356, 147, 34678, 58}
82:9	$0, 0, 0, 0, 0, 0, \frac{5}{17}e^{13} + \frac{5}{17}e^{24}, \frac{10}{51}\sqrt{11}e^{12} + \frac{10}{51}\sqrt{3}e^{56}$	$(\frac{10}{51}, \frac{10}{51}, -\frac{5}{17}, -\frac{5}{17}, \frac{10}{51}, \frac{10}{51}, -\frac{5}{51}, \frac{20}{51})$ $+ \frac{5}{51}\sqrt{47}e^1 \otimes e_3 - \frac{5}{51}\sqrt{47}e^2 \otimes e_4$	{125, 14568, 148, 345}
82:9	$0, 0, 0, 0, 0, 0, \frac{5}{17}e^{13} + \frac{5}{17}e^{24}, \frac{10}{51}\sqrt{11}e^{12} + \frac{10}{51}\sqrt{3}e^{56}$	$(\frac{10}{51}, \frac{10}{51}, -\frac{5}{17}, -\frac{5}{17}, \frac{10}{51}, \frac{10}{51}, -\frac{5}{51}, \frac{20}{51})$ $+ \frac{5}{51}\sqrt{47}e^1 \otimes e_3 + \frac{5}{51}\sqrt{47}e^2 \otimes e_4$	{125, 14568, 148, 345}
82:9	$0, 0, 0, 0, 0, 0, \frac{12}{47}e^{13} + \frac{2}{47}\sqrt{51}e^{24}, \frac{8}{47}\sqrt{6}e^{12} + \frac{2}{47}\sqrt{39}e^{56}$	$(\frac{12}{47}, -\frac{12}{47}, -\frac{6}{47}, \frac{18}{47}, \frac{9}{47}, -\frac{9}{47}, \frac{6}{47}, 0)$ $+ \frac{18}{47}e^5 \otimes e_6 + \frac{2}{47}\sqrt{129}e^1 \otimes e_3 + \frac{2}{47}\sqrt{174}e^4 \otimes e_8$	{158, 168}
82:9	$0, 0, 0, 0, 0, 0, \frac{2}{115}\sqrt{429}e^{13} + \frac{2}{115}\sqrt{429}e^{24}, \frac{3}{115}\sqrt{1430}e^{12} + \frac{4}{115}\sqrt{143}e^{56}$	$(\frac{76}{115}, -\frac{18}{115}, -\frac{67}{115}, \frac{27}{115}, \frac{29}{115}, \frac{29}{115}, \frac{9}{115}, \frac{58}{115})$ $+ \frac{2}{115}\sqrt{6721}e^1 \otimes e_3$	{125, 14568, 148, 23568, 238, 345}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:9	$0, 0, 0, 0, 0, 0, \frac{6}{119}\sqrt{62}e^{13} + \frac{6}{119}\sqrt{62}e^{24}, \frac{2}{119}\sqrt{186}e^{12} + \frac{4}{119}\sqrt{186}e^{56}$	$(\frac{18}{119}, \frac{18}{119}, \frac{20}{119}, \frac{20}{119}, \frac{111}{119}, -\frac{75}{119}, \frac{38}{119}, \frac{36}{119})$ $+ \frac{186}{119}e^5 \otimes e_6$	{1358, 1368, 14578, 14678}
82:9	$0, 0, 0, 0, 0, 0, \frac{4}{1429}\sqrt{33187}e^{13} + \frac{8}{1429}\sqrt{2586}e^{24},$ $\frac{2}{1429}\sqrt{73270}e^{12} + \frac{4}{1429}\sqrt{29739}e^{56}$	$(-\frac{288}{1429}, \frac{116}{1429}, \frac{690}{1429}, \frac{286}{1429}, \frac{345}{1429}, -\frac{517}{1429}, \frac{402}{1429}, -\frac{172}{1429})$ $+ \frac{4}{1429}\sqrt{87062}e^3 \otimes e_8 + \frac{862}{1429}e^5 \otimes e_6$	{1578, 1678, 258, 268}
82:9	$0, 0, 0, 0, 0, 0, \frac{6}{19}e^{13} + \frac{1}{19}\sqrt{51}e^{24}, \frac{4}{19}\sqrt{6}e^{12} + \frac{1}{19}\sqrt{39}e^{56}$	$(\frac{6}{19}, -\frac{6}{19}, -\frac{3}{19}, \frac{9}{19}, 0, 0, \frac{3}{19}, 0)$ $+ \frac{1}{19}\sqrt{129}e^1 \otimes e_3 + \frac{1}{19}\sqrt{174}e^4 \otimes e_8$	{124, 12456, 158}
82:9	$0, 0, 0, 0, 0, 0, \frac{4}{373}\sqrt{429}e^{13} + \frac{4}{373}\sqrt{429}e^{24}, \frac{6}{373}\sqrt{1430}e^{12} + \frac{8}{373}\sqrt{143}e^{56}$	$(\frac{152}{373}, -\frac{36}{373}, -\frac{134}{373}, \frac{54}{373}, \frac{201}{373}, -\frac{85}{373}, \frac{18}{373}, \frac{116}{373})$ $+ \frac{286}{373}e^5 \otimes e_6 + \frac{4}{373}\sqrt{6721}e^1 \otimes e_3$	{125, 126, 345, 346}
82:9	$0, 0, 0, 0, 0, 0, \frac{2}{499}\sqrt{33187}e^{13} + \frac{4}{499}\sqrt{2586}e^{24},$ $\frac{1}{499}\sqrt{73270}e^{12} + \frac{2}{499}\sqrt{29739}e^{56}$	$(-\frac{144}{499}, \frac{58}{499}, \frac{345}{499}, \frac{143}{499}, -\frac{43}{499}, -\frac{43}{499}, \frac{201}{499}, -\frac{86}{499})$ $+ \frac{2}{499}\sqrt{87062}e^3 \otimes e_8$	{123, 12356, 1578, 258, 3567, 37}
82:9	$0, 0, 0, 0, 0, 0, \frac{8}{61}\sqrt{15}e^{13} + \frac{8}{61}\sqrt{15}e^{24}, \frac{8}{61}\sqrt{10}e^{12} + \frac{16}{61}\sqrt{5}e^{56}$	$(\frac{15}{61}, \frac{4}{61}, -\frac{17}{61}, -\frac{6}{61}, \frac{30}{61}, -\frac{11}{61}, -\frac{2}{61}, \frac{19}{61})$ $+ \frac{8}{61}\sqrt{11}e^1 \otimes e_3 + \frac{8}{61}\sqrt{41}e^5 \otimes e_7$	{12678, 147, 237, 34678}
82:9	$0, 0, 0, 0, 0, 0, \frac{30}{127}e^{13} + \frac{30}{127}e^{24}, \frac{20}{127}\sqrt{11}e^{12} + \frac{20}{127}\sqrt{3}e^{56}$	$(\frac{20}{127}, \frac{20}{127}, -\frac{30}{127}, -\frac{30}{127}, \frac{45}{127}, -\frac{5}{127}, -\frac{10}{127}, \frac{40}{127})$ $+ \frac{10}{127}\sqrt{47}e^1 \otimes e_3 - \frac{10}{127}\sqrt{47}e^2 \otimes e_4 + \frac{50}{127}e^5 \otimes e_6$	{125, 126, 345, 346}
82:9	$0, 0, 0, 0, 0, 0, \frac{30}{127}e^{13} + \frac{30}{127}e^{24}, \frac{20}{127}\sqrt{11}e^{12} + \frac{20}{127}\sqrt{3}e^{56}$	$(\frac{20}{127}, \frac{20}{127}, -\frac{30}{127}, -\frac{30}{127}, \frac{45}{127}, -\frac{5}{127}, -\frac{10}{127}, \frac{40}{127})$ $+ \frac{10}{127}\sqrt{47}e^1 \otimes e_3 + \frac{10}{127}\sqrt{47}e^2 \otimes e_4 + \frac{50}{127}e^5 \otimes e_6$	{125, 126, 345, 346}
82:10	$0, 0, 0, 0, 0, 0, \frac{2}{29}\sqrt{33}e^{13} + \frac{2}{29}\sqrt{6}e^{24}, \frac{2}{29}\sqrt{6}e^{15} + \frac{2}{29}\sqrt{33}e^{26}$	$(-\frac{6}{29}, -\frac{6}{29}, \frac{5}{29}, \frac{5}{29}, \frac{5}{29}, \frac{5}{29}, -\frac{1}{29}, -\frac{1}{29})$ $+ \frac{2}{29}\sqrt{39}e^3 \otimes e_8 + \frac{2}{29}\sqrt{39}e^6 \otimes e_7$	{1236, 124578, 357}
82:10	$0, 0, 0, 0, 0, 0, \frac{8}{1319}\sqrt{3810}e^{13} + \frac{40}{1319}\sqrt{219}e^{24},$ $\frac{24}{1319}\sqrt{890}e^{15} + \frac{8}{1319}\sqrt{435}e^{26}$	$(\frac{364}{1319}, -\frac{199}{1319}, -\frac{116}{1319}, \frac{447}{1319}, -\frac{397}{1319}, \frac{166}{1319}, \frac{248}{1319}, -\frac{33}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^1 \otimes e_3 + \frac{360}{1319}\sqrt{5}e^4 \otimes e_8$	{1245, 18, 234, 358}
82:10	$0, 0, 0, 0, 0, 0, \frac{24}{1319}\sqrt{890}e^{13} + \frac{8}{1319}\sqrt{3810}e^{24},$ $\frac{8}{1319}\sqrt{435}e^{15} + \frac{40}{1319}\sqrt{219}e^{26}$	$(\frac{139}{1319}, \frac{26}{1319}, \frac{278}{1319}, \frac{391}{1319}, -\frac{341}{1319}, -\frac{228}{1319}, \frac{417}{1319}, -\frac{202}{1319})$ $+ \frac{312}{1319}\sqrt{5}e^1 \otimes e_5 + \frac{360}{1319}\sqrt{5}e^3 \otimes e_8$	{1236, 134, 234567, 357}
82:10	$0, 0, 0, 0, 0, 0, \frac{33}{497}\sqrt{2}e^{13} + \frac{165}{497}e^{24}, \frac{11}{497}\sqrt{206}e^{15} + \frac{11}{497}\sqrt{113}e^{26}$	$(\frac{66}{497}, -\frac{121}{497}, -\frac{55}{497}, \frac{132}{497}, -\frac{55}{497}, \frac{132}{497}, \frac{11}{497}, \frac{11}{497})$ $- \frac{11}{497}\sqrt{281}e^6 \otimes e_7 + \frac{11}{497}\sqrt{393}e^4 \otimes e_8 + \frac{44}{497}\sqrt{14}e^1 \otimes e_3$	{12456, 168, 2346, 3568}
82:10	$0, 0, 0, 0, 0, 0, \frac{33}{497}\sqrt{2}e^{13} + \frac{165}{497}e^{24}, \frac{11}{497}\sqrt{206}e^{15} + \frac{11}{497}\sqrt{113}e^{26}$	$(\frac{66}{497}, -\frac{121}{497}, -\frac{55}{497}, \frac{132}{497}, -\frac{55}{497}, \frac{132}{497}, \frac{11}{497}, \frac{11}{497})$ $+ \frac{11}{497}\sqrt{281}e^6 \otimes e_7 + \frac{11}{497}\sqrt{393}e^4 \otimes e_8 + \frac{44}{497}\sqrt{14}e^1 \otimes e_3$	{12456, 168, 2346, 3568}
82:10	$0, 0, 0, 0, 0, 0, \frac{6}{11}\sqrt{2}e^{13} + \frac{6}{11}e^{24}, \frac{3}{11}\sqrt{2}e^{15} + \frac{6}{11}\sqrt{2}e^{26}$	$(-\frac{3}{11}, 0, \frac{7}{11}, \frac{4}{11}, \frac{1}{11}, -\frac{2}{11}, \frac{4}{11}, -\frac{2}{11})$ $+ \frac{9}{11}\sqrt{2}e^3 \otimes e_8$	{12356, 12478, 1345, 1678, 23467, 258, 37, 4568}
82:10	$0, 0, 0, 0, 0, 0, \frac{10}{83}\sqrt{13}e^{13} + \frac{20}{83}\sqrt{6}e^{24}, \frac{20}{83}\sqrt{6}e^{15} + \frac{10}{83}\sqrt{13}e^{26}$	$(\frac{35}{83}, \frac{35}{83}, -\frac{15}{83}, -\frac{15}{83}, -\frac{15}{83}, -\frac{15}{83}, \frac{20}{83}, \frac{20}{83})$ $+ \frac{10}{83}\sqrt{37}e^1 \otimes e_3 + \frac{10}{83}\sqrt{37}e^2 \otimes e_6$	{1245, 156, 36}
82:10	$0, 0, 0, 0, 0, 0, \frac{4}{281}\sqrt{215}e^{13} + \frac{20}{281}\sqrt{43}e^{24}, \frac{20}{281}\sqrt{43}e^{15} + \frac{4}{281}\sqrt{645}e^{26}$	$(\frac{70}{281}, -\frac{41}{281}, \frac{29}{281}, \frac{140}{281}, -\frac{102}{281}, \frac{9}{281}, \frac{99}{281}, -\frac{32}{281})$ $+ \frac{2}{281}\sqrt{12986}e^4 \otimes e_8 + \frac{2}{281}\sqrt{7826}e^1 \otimes e_5$	{1278, 1368, 23578, 568}
82:10	$0, 0, 0, 0, 0, 0, \frac{3}{133}\sqrt{305}e^{13} + \frac{3}{133}\sqrt{110}e^{24}, \frac{3}{133}\sqrt{305}e^{15} + \frac{3}{133}\sqrt{110}e^{26}$	$(-\frac{45}{133}, -\frac{6}{133}, \frac{44}{133}, \frac{5}{133}, \frac{44}{133}, \frac{5}{133}, -\frac{1}{133}, -\frac{1}{133})$ $+ \frac{9}{133}\sqrt{65}e^3 \otimes e_8 + \frac{9}{133}\sqrt{65}e^5 \otimes e_7$	{123456, 1278, 135, 14678, 2367, 347}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
82:10	$0, 0, 0, 0, 0, 0, \frac{3}{133}\sqrt{305}e^{13} + \frac{3}{133}\sqrt{110}e^{24}, \frac{3}{133}\sqrt{305}e^{15} + \frac{3}{133}\sqrt{110}e^{26}$	$(-\frac{45}{133}, -\frac{6}{133}, \frac{44}{133}, \frac{5}{133}, \frac{44}{133}, \frac{5}{133}, -\frac{1}{133}, -\frac{1}{133})$ $+\frac{9}{133}\sqrt{65}e^3 \otimes e_8 - \frac{9}{133}\sqrt{65}e^5 \otimes e_7$	{123456, 1278, 135, 14678, 2367, 347}
82:10	$0, 0, 0, 0, 0, 0, \frac{1}{137}\sqrt{5610}e^{13} + \frac{10}{137}\sqrt{66}e^{24}, \frac{3}{137}\sqrt{2090}e^{15} + \frac{1}{137}\sqrt{5610}e^{26}$	$(\frac{97}{137}, \frac{23}{137}, -\frac{68}{137}, \frac{6}{137}, -\frac{31}{137}, \frac{43}{137}, \frac{29}{137}, \frac{66}{137})$ $+\frac{3}{137}\sqrt{4070}e^1 \otimes e_3$	{1245, 12468, 156, 18, 234, 234568, 358, 36}
82:10	$0, 0, 0, 0, 0, 0, \frac{1}{127}\sqrt{93}e^{13} + \frac{1}{127}\sqrt{93}e^{24}, \frac{6}{127}\sqrt{93}e^{15} + \frac{6}{127}\sqrt{93}e^{26}$	$(\frac{54}{127}, \frac{54}{127}, -\frac{39}{127}, -\frac{39}{127}, -\frac{2}{127}, -\frac{2}{127}, \frac{15}{127}, \frac{52}{127})$ $+\frac{3}{127}\sqrt{1147}e^1 \otimes e_3 + \frac{3}{127}\sqrt{1147}e^2 \otimes e_4$	{1256, 128, 145, 1468, 34, 34568}
82:10	$0, 0, 0, 0, 0, 0, \frac{1}{127}\sqrt{93}e^{13} + \frac{1}{127}\sqrt{93}e^{24}, \frac{6}{127}\sqrt{93}e^{15} + \frac{6}{127}\sqrt{93}e^{26}$	$(\frac{54}{127}, \frac{54}{127}, -\frac{39}{127}, -\frac{39}{127}, -\frac{2}{127}, -\frac{2}{127}, \frac{15}{127}, \frac{52}{127})$ $+\frac{3}{127}\sqrt{1147}e^1 \otimes e_3 - \frac{3}{127}\sqrt{1147}e^2 \otimes e_4$	{1256, 128, 145, 1468, 34, 34568}
82:10	$0, 0, 0, 0, 0, 0, \frac{5}{641}\sqrt{410}e^{13} + \frac{5}{641}\sqrt{2130}e^{24}, \frac{5}{641}\sqrt{2130}e^{15} + \frac{30}{641}\sqrt{35}e^{26}$	$(\frac{45}{641}, \frac{130}{641}, -\frac{80}{641}, -\frac{165}{641}, \frac{90}{641}, \frac{5}{641}, -\frac{35}{641}, \frac{135}{641})$ $+\frac{25}{641}\sqrt{102}e^5 \otimes e_7 + \frac{65}{641}\sqrt{10}e^1 \otimes e_3 + \frac{65}{641}\sqrt{10}e^2 \otimes e_6$	{1245, 156}
82:10	$0, 0, 0, 0, 0, 0, \frac{3}{217}\sqrt{290}e^{13} + \frac{2}{217}\sqrt{165}e^{24}, \frac{2}{217}\sqrt{165}e^{15} + \frac{10}{217}\sqrt{21}e^{26}$	$(\frac{2}{217}, -\frac{32}{217}, \frac{4}{217}, \frac{38}{217}, -\frac{13}{217}, \frac{3}{217}, \frac{6}{217}, -\frac{11}{217})$ $+\frac{15}{217}\sqrt{10}e^3 \otimes e_8 + \frac{15}{217}\sqrt{10}e^6 \otimes e_7 + \frac{3}{217}\sqrt{170}e^1 \otimes e_5$	{1236, 357}
82:11	$0, 0, 0, 0, 0, 0, -\frac{5}{32}\sqrt{6}e^{12} + \frac{5}{32}\sqrt{6}e^{34}, \frac{5}{32}\sqrt{2}e^{13} + \frac{5}{32}\sqrt{2}e^{24} + \frac{5}{16}\sqrt{2}e^{56}$	$(\frac{5}{32}, \frac{5}{32}, \frac{5}{32}, \frac{5}{32}, \frac{15}{16}, -\frac{5}{8}, \frac{5}{16}, \frac{5}{16})$ $+\frac{25}{16}e^5 \otimes e_6$	{1258, 1268, 14578, 14678, 1258, 1268, 14578, 14678}
82:11	$0, 0, 0, 0, 0, 0, \frac{5}{32}\sqrt{6}e^{12} + \frac{5}{32}\sqrt{6}e^{34}, \frac{5}{32}\sqrt{2}e^{13} + \frac{5}{32}\sqrt{2}e^{24} + \frac{5}{16}\sqrt{2}e^{56}$	$(\frac{5}{32}, \frac{5}{32}, \frac{5}{32}, \frac{5}{32}, \frac{15}{16}, -\frac{5}{8}, \frac{5}{16}, \frac{5}{16})$ $+\frac{25}{16}e^5 \otimes e_6$	{1258, 1268, 14578, 14678, 1258, 1268, 14578, 14678}
82:11	$0, 0, 0, 0, 0, 0, -\frac{5}{64}\sqrt{51}e^{12} + \frac{5}{64}\sqrt{51}e^{34}, \frac{5}{64}\sqrt{38}e^{13} + \frac{5}{64}\sqrt{38}e^{24} + \frac{5}{32}\sqrt{17}e^{56}$	$(\frac{5}{128}, \frac{5}{128}, \frac{5}{128}, \frac{5}{128}, \frac{15}{32}, -\frac{25}{64}, \frac{5}{64}, \frac{5}{64})$ $+\frac{5}{64}\sqrt{110}e^5 \otimes e_7$	{123458, 1256, 13678, 147, 58, 123458, 1256, 13678, 147, 58}
82:11	$0, 0, 0, 0, 0, 0, \frac{5}{64}\sqrt{51}e^{12} + \frac{5}{64}\sqrt{51}e^{34}, \frac{5}{64}\sqrt{38}e^{13} + \frac{5}{64}\sqrt{38}e^{24} + \frac{5}{32}\sqrt{17}e^{56}$	$(\frac{5}{128}, \frac{5}{128}, \frac{5}{128}, \frac{5}{128}, \frac{15}{32}, -\frac{25}{64}, \frac{5}{64}, \frac{5}{64})$ $+\frac{5}{64}\sqrt{110}e^5 \otimes e_7$	{123458, 1256, 13678, 147, 58, 123458, 1256, 13678, 147, 58}
82:12	$0, 0, 0, 0, 0, 0, \frac{16}{299}\sqrt{358}e^{12} + \frac{2}{299}\sqrt{6086}e^{34}, \frac{2}{299}\sqrt{3043}e^{13} + \frac{2}{299}\sqrt{6086}e^{25} + \frac{2}{299}\sqrt{8413}e^{46}$	$(-\frac{55}{299}, \frac{205}{299}, \frac{107}{299}, \frac{43}{299}, -\frac{153}{299}, \frac{9}{299}, \frac{150}{299}, \frac{4}{23})$ $+\frac{18}{299}\sqrt{537}e^2 \otimes e_5$	{1246, 157, 23467, 35}
82:12	$0, 0, 0, 0, 0, 0, \frac{20}{277}\sqrt{43}e^{12} + \frac{20}{277}\sqrt{43}e^{34}, \frac{20}{277}\sqrt{19}e^{13} + \frac{10}{277}\sqrt{10}e^{25} + \frac{10}{277}\sqrt{10}e^{46}$	$(\frac{10}{277}, \frac{110}{277}, \frac{10}{277}, \frac{110}{277}, -\frac{90}{277}, -\frac{90}{277}, \frac{120}{277}, \frac{20}{277})$ $+\frac{90}{277}\sqrt{6}e^2 \otimes e_5 + \frac{90}{277}\sqrt{6}e^4 \otimes e_6$	{12348, 135678, 2478, 568}
82:12	$0, 0, 0, 0, 0, 0, \frac{20}{277}\sqrt{43}e^{12} + \frac{20}{277}\sqrt{43}e^{34}, \frac{20}{277}\sqrt{19}e^{13} + \frac{10}{277}\sqrt{10}e^{25} + \frac{10}{277}\sqrt{10}e^{46}$	$(\frac{10}{277}, \frac{110}{277}, \frac{10}{277}, \frac{110}{277}, -\frac{90}{277}, -\frac{90}{277}, \frac{120}{277}, \frac{20}{277})$ $+\frac{90}{277}\sqrt{6}e^2 \otimes e_5 - \frac{90}{277}\sqrt{6}e^4 \otimes e_6$	{12348, 135678, 2478, 568}
82:12	$0, 0, 0, 0, 0, 0, \frac{8}{61}\sqrt{11}e^{12} + \frac{10}{61}\sqrt{22}e^{34}, \frac{2}{61}\sqrt{286}e^{13} + \frac{10}{61}\sqrt{22}e^{25} + \frac{6}{61}\sqrt{22}e^{46}$	$(\frac{15}{61}, -\frac{23}{61}, -\frac{2}{61}, -\frac{6}{61}, \frac{36}{61}, \frac{19}{61}, -\frac{8}{61}, \frac{13}{61})$ $+\frac{2}{61}\sqrt{1122}e^5 \otimes e_7$	{1256, 147, 24678, 58}
82:12	$0, 0, 0, 0, 0, 0, \frac{29}{2789}\sqrt{2458}e^{12} + \frac{116}{2789}\sqrt{5}e^{34}, \frac{29}{2789}\sqrt{958}e^{13} + \frac{87}{2789}\sqrt{102}e^{25} + \frac{58}{2789}\sqrt{442}e^{46}$	$(-\frac{493}{2789}, \frac{522}{2789}, \frac{696}{2789}, -\frac{667}{2789}, -\frac{319}{2789}, \frac{870}{2789}, \frac{29}{2789}, \frac{203}{2789})$ $+\frac{29}{2789}\sqrt{2994}e^6 \otimes e_7 + \frac{87}{2789}\sqrt{230}e^2 \otimes e_5$	{237, 3456}
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{34}\sqrt{190}e^{12}$	$(\frac{15}{68}, -\frac{23}{68}, \frac{25}{68}, -\frac{13}{68}, \frac{15}{34}, \frac{3}{34}, \frac{3}{34}, -\frac{2}{17})$ $+\frac{19}{34}e^1 \otimes e_2 + \frac{19}{34}e^3 \otimes e_4 + \frac{1}{17}\sqrt{114}e^5 \otimes e_8$	{13678, 1368, 138, 14678, 1468, 148, 23678, 2368, 238, 24678, 2468, 248}
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{34}\sqrt{190}e^{12}$	$(-\frac{1}{17}, -\frac{1}{17}, \frac{25}{68}, \frac{25}{68}, \frac{15}{34}, -\frac{13}{68}, -\frac{13}{68}, -\frac{2}{17})$ $+\frac{19}{34}e^3 \otimes e_6 + \frac{19}{34}e^4 \otimes e_7 + \frac{1}{17}\sqrt{114}e^5 \otimes e_8$	{12345, 12357, 12567, 1348, 1378, 1678, 345, 357, 567}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	\mathfrak{g}	D	S
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{15}\sqrt{190}e^{12}$	$(\frac{2}{3}, -\frac{2}{15}, -\frac{3}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{8}{15})$ $+ \frac{2}{15}\sqrt{114}e^1 \otimes e_3$	{12, 124, 1245, 12456, 124567, 145678, 14568, 1458, 148, 18, 2345678, 234568, 23458, 2348, 238, 3, 34, 345, 3456, 34567}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{89}\sqrt{286}e^{12}$	$(\frac{4}{89}, \frac{4}{89}, -\frac{18}{89}, -\frac{18}{89}, \frac{17}{89}, -\frac{5}{89}, \frac{30}{89}, \frac{8}{89})$ $+ \frac{22}{89}e^5 \otimes e_6 + \frac{4}{89}\sqrt{66}e^1 \otimes e_3 + \frac{4}{89}\sqrt{66}e^2 \otimes e_4 + \frac{4}{89}\sqrt{66}e^7 \otimes e_8$	{1257, 1267, 1458, 1468, 3457, 3467}
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{34}\sqrt{190}e^{12}$	$(\frac{5}{17}, -\frac{1}{17}, \frac{25}{68}, -\frac{9}{34}, \frac{25}{68}, -\frac{13}{68}, -\frac{13}{68}, \frac{4}{17})$ $+ \frac{19}{34}e^3 \otimes e_6 + \frac{19}{34}e^5 \otimes e_7 + \frac{1}{17}\sqrt{114}e^1 \otimes e_4$	{1235, 1237, 1267, 1358, 1378, 1678, 23458, 23478, 24678, 345, 347, 467}
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{26}\sqrt{46}e^{12}$	$(\frac{1}{13}, \frac{1}{13}, \frac{29}{52}, \frac{29}{52}, -\frac{17}{52}, -\frac{17}{52}, \frac{3}{26}, \frac{2}{13})$ $+ \frac{23}{26}e^3 \otimes e_5 + \frac{23}{26}e^4 \otimes e_6$	{1234, 12347, 1236, 12367, 1256, 12567, 13478, 1348, 13678, 1368, 15678, 1568, 34, 347, 36, 367, 56, 567}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{49}\sqrt{190}e^{12}$	$(\frac{20}{49}, -\frac{4}{49}, \frac{25}{49}, -\frac{18}{49}, -\frac{13}{49}, \frac{6}{49}, \frac{6}{49}, \frac{16}{49})$ $+ \frac{38}{49}e^3 \otimes e_5 + \frac{4}{49}\sqrt{114}e^1 \otimes e_4$	{123, 1236, 12367, 125, 1256, 12567, 13678, 1368, 138, 15678, 1568, 158, 234678, 23468, 2348, 245678, 24568, 2458, 34, 346, 3467, 45, 456, 4567}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{23}\sqrt{30}e^{12}$	$(\frac{4}{23}, \frac{4}{23}, -\frac{6}{23}, -\frac{6}{23}, \frac{7}{23}, -\frac{3}{23}, \frac{2}{23}, \frac{8}{23})$ $+ \frac{10}{23}e^5 \otimes e_6 + \frac{4}{23}\sqrt{10}e^1 \otimes e_3 + \frac{4}{23}\sqrt{10}e^2 \otimes e_4$	{125, 1257, 126, 1267, 14578, 1458, 14678, 1468, 345, 3457, 346, 3467}
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{39}\sqrt{286}e^{12}$	$(\frac{2}{39}, \frac{2}{39}, -\frac{3}{13}, -\frac{3}{13}, \frac{5}{13}, \frac{1}{13}, \frac{1}{13}, \frac{4}{39})$ $+ \frac{2}{39}\sqrt{66}e^1 \otimes e_3 + \frac{2}{39}\sqrt{66}e^2 \otimes e_4 + \frac{2}{39}\sqrt{66}e^5 \otimes e_8$	{125, 1256, 12567, 14678, 1468, 148, 345, 3456, 34567}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{29}\sqrt{46}e^{12}$	$(\frac{4}{29}, \frac{4}{29}, 1, -\frac{17}{29}, \frac{6}{29}, \frac{6}{29}, \frac{6}{29}, \frac{8}{29})$ $+ \frac{46}{29}e^3 \otimes e_4$	{123, 1235, 12356, 123567, 124, 1245, 12456, 124567, 135678, 13568, 1358, 138, 145678, 14568, 1458, 148, 3, 35, 356, 3567, 4, 45, 456, 4567}
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{9}\sqrt{30}e^{12}$	$(\frac{2}{9}, -\frac{2}{9}, \frac{5}{9}, -\frac{1}{3}, \frac{1}{9}, \frac{1}{9}, \frac{1}{9}, 0)$ $+ \frac{2}{9}\sqrt{10}e^1 \otimes e_4 + \frac{2}{9}\sqrt{10}e^3 \otimes e_8$	{123, 1235, 12356, 123567, 15678, 1568, 158, 18, 245678, 24568, 2458, 248, 34, 345, 3456, 34567}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{49}\sqrt{190}e^{12}$	$(-\frac{4}{49}, -\frac{4}{49}, \frac{25}{49}, \frac{30}{49}, -\frac{13}{49}, \frac{6}{49}, \frac{6}{49}, -\frac{8}{49})$ $+ \frac{38}{49}e^3 \otimes e_5 + \frac{4}{49}\sqrt{114}e^4 \otimes e_8$	{1234, 12346, 123467, 1245, 12456, 124567, 13678, 1368, 138, 15678, 1568, 158, 34, 346, 3467, 45, 456, 4567}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{29}\sqrt{46}e^{12}$	$(\frac{27}{29}, -\frac{19}{29}, \frac{6}{29}, \frac{6}{29}, \frac{6}{29}, \frac{6}{29}, \frac{6}{29}, \frac{8}{29})$ $+ \frac{46}{29}e^1 \otimes e_2$	{1345678, 134568, 13458, 1348, 138, 18, 2345678, 234568, 23458, 2348, 238, 28}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{49}\sqrt{190}e^{12}$	$(\frac{15}{49}, -\frac{23}{49}, \frac{30}{49}, \frac{6}{49}, \frac{6}{49}, \frac{6}{49}, -\frac{8}{49})$ $+ \frac{38}{49}e^1 \otimes e_2 + \frac{4}{49}\sqrt{114}e^3 \otimes e_8$	{145678, 14568, 1458, 148, 18, 245678, 24568, 2458, 248, 28}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{87}\sqrt{190}e^{12}$	$(\frac{5}{29}, -\frac{23}{87}, \frac{25}{87}, -\frac{13}{87}, \frac{25}{87}, -\frac{13}{87}, \frac{10}{29}, -\frac{8}{87})$ $+ \frac{38}{87}e^1 \otimes e_2 + \frac{38}{87}e^3 \otimes e_4 + \frac{38}{87}e^5 \otimes e_6 + \frac{4}{87}\sqrt{114}e^7 \otimes e_8$	{1358, 1368, 1468, 2358, 2368, 2468}
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{26}\sqrt{46}e^{12}$	$(\frac{27}{52}, -\frac{19}{52}, \frac{29}{52}, -\frac{17}{52}, \frac{3}{26}, \frac{3}{26}, \frac{3}{26}, \frac{2}{13})$ $+ \frac{23}{26}e^1 \otimes e_2 + \frac{23}{26}e^3 \otimes e_4$	{135678, 13568, 1358, 138, 145678, 14568, 1458, 148, 235678, 23568, 2358, 238, 245678, 24568, 2458, 248}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{75}\sqrt{46}e^{12}$	$(\frac{9}{25}, -\frac{19}{75}, \frac{29}{75}, -\frac{17}{75}, \frac{29}{75}, -\frac{17}{75}, \frac{2}{25}, \frac{8}{75})$ $+ \frac{46}{75}e^1 \otimes e_2 + \frac{46}{75}e^3 \otimes e_4 + \frac{46}{75}e^5 \otimes e_6$	{13578, 1358, 13678, 1368, 14678, 1468, 23578, 2358, 23678, 2368, 24678, 2468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	\mathfrak{g}	D	S
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{15}\sqrt{190}e^{12}$	$(-\frac{2}{15}, -\frac{2}{15}, 1, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, -\frac{4}{15})$ $+\frac{2}{15}\sqrt{114}e^3 \otimes e_8$	{123, 1234, 12345, 123456, 1234567, 145678, 14568, 1458, 148, 18, 3, 34, 345, 3456, 34567}
81:1	$0, 0, 0, 0, 0, 0, \frac{2}{23}\sqrt{30}e^{12}$	$(\frac{4}{23}, -\frac{4}{23}, \frac{7}{23}, -\frac{6}{23}, \frac{10}{23}, -\frac{3}{23}, \frac{2}{23}, 0)$ $+\frac{10}{23}e^3 \otimes e_6 + \frac{4}{23}\sqrt{10}e^1 \otimes e_4 + \frac{4}{23}\sqrt{10}e^5 \otimes e_8$	{1235, 12357, 1256, 12567, 1378, 138, 1678, 168, 23478, 2348, 24678, 2468, 345, 3457, 456, 4567}
81:1	$0, 0, 0, 0, 0, 0, \frac{1}{9}\sqrt{30}e^{12}$	$(\frac{2}{9}, \frac{2}{9}, -\frac{1}{3}, -\frac{1}{3}, \frac{1}{9}, \frac{1}{9}, \frac{1}{9}, \frac{4}{9})$ $+\frac{2}{9}\sqrt{10}e^1 \otimes e_3 + \frac{2}{9}\sqrt{10}e^2 \otimes e_4$	{12, 125, 1256, 12567, 145678, 14568, 1458, 148, 34, 345, 3456, 34567}
81:2	$0, 0, 0, 0, 0, 0, \frac{1}{17}\sqrt{15}e^{12} + \frac{1}{17}\sqrt{15}e^{34}$	$(\frac{9}{17}, -\frac{6}{17}, \frac{3}{34}, \frac{3}{34}, \frac{19}{34}, -\frac{11}{34}, \frac{2}{17}, \frac{3}{17})$ $+\frac{15}{17}e^1 \otimes e_2 + \frac{15}{17}e^5 \otimes e_6$	{13578, 1358, 13678, 1368, 23578, 2358, 23678, 2368}
81:2	$0, 0, 0, 0, 0, 0, \frac{2}{31}\sqrt{55}e^{12} + \frac{2}{31}\sqrt{55}e^{34}$	$(-\frac{1}{31}, -\frac{1}{31}, -\frac{1}{31}, -\frac{1}{31}, \frac{15}{31}, \frac{20}{31}, -\frac{7}{31}, -\frac{2}{31})$ $+\frac{22}{31}e^5 \otimes e_7 + \frac{8}{31}\sqrt{11}e^6 \otimes e_8$	{123456, 123467, 1256, 1267, 1358, 1378, 56, 67}
81:2	$0, 0, 0, 0, 0, 0, \frac{4}{109}\sqrt{46}e^{12} + \frac{2}{109}\sqrt{598}e^{34}$	$(\frac{25}{109}, -\frac{21}{109}, \frac{20}{109}, -\frac{16}{109}, \frac{50}{109}, -\frac{26}{109}, \frac{10}{109}, \frac{4}{109})$ $+\frac{12}{109}\sqrt{23}e^3 \otimes e_6 + \frac{46}{109}e^1 \otimes e_2 + \frac{4}{109}\sqrt{230}e^5 \otimes e_8$	{1378, 138, 14678, 1468, 2378, 238, 24678, 2468}
81:2	$0, 0, 0, 0, 0, 0, \frac{2}{53}\sqrt{55}e^{12} + \frac{2}{53}\sqrt{55}e^{34}$	$(\frac{10}{53}, -\frac{12}{53}, \frac{10}{53}, -\frac{12}{53}, \frac{15}{53}, -\frac{7}{53}, \frac{20}{53}, -\frac{2}{53})$ $+\frac{22}{53}e^1 \otimes e_2 + \frac{22}{53}e^3 \otimes e_4 + \frac{22}{53}e^5 \otimes e_6 + \frac{8}{53}\sqrt{11}e^7 \otimes e_8$	{1358, 1368, 1458, 1468, 2458, 2468}
81:2	$0, 0, 0, 0, 0, 0, \frac{2}{53}\sqrt{55}e^{12} + \frac{2}{53}\sqrt{55}e^{34}$	$(\frac{10}{53}, -\frac{12}{53}, \frac{10}{53}, -\frac{12}{53}, \frac{15}{53}, -\frac{7}{53}, \frac{20}{53}, -\frac{2}{53})$ $+\frac{22}{53}e^1 \otimes e_2 - \frac{22}{53}e^3 \otimes e_4 + \frac{22}{53}e^5 \otimes e_6 + \frac{8}{53}\sqrt{11}e^7 \otimes e_8$	{1358, 1368, 1458, 1468, 2458, 2468}
81:2	$0, 0, 0, 0, 0, 0, \frac{1}{17}\sqrt{15}e^{12} + \frac{1}{17}\sqrt{15}e^{34}$	$(\frac{9}{17}, -\frac{6}{17}, \frac{9}{17}, -\frac{6}{17}, \frac{2}{17}, \frac{2}{17}, \frac{2}{17}, \frac{3}{17})$ $+\frac{15}{17}e^1 \otimes e_2 - \frac{15}{17}e^3 \otimes e_4$	{135678, 13568, 1358, 138, 145678, 14568, 1458, 148, 245678, 24568, 2458, 248}
81:2	$0, 0, 0, 0, 0, 0, \frac{1}{17}\sqrt{15}e^{12} + \frac{1}{17}\sqrt{15}e^{34}$	$(\frac{9}{17}, -\frac{6}{17}, \frac{9}{17}, -\frac{6}{17}, \frac{2}{17}, \frac{2}{17}, \frac{2}{17}, \frac{3}{17})$ $+\frac{15}{17}e^1 \otimes e_2 + \frac{15}{17}e^3 \otimes e_4$	{135678, 13568, 1358, 138, 145678, 14568, 1458, 148, 245678, 24568, 2458, 248}
81:2	$0, 0, 0, 0, 0, 0, \frac{1}{21}\sqrt{55}e^{12} + \frac{1}{21}\sqrt{55}e^{34}$	$(\frac{5}{21}, -\frac{2}{7}, \frac{5}{21}, -\frac{2}{7}, \frac{10}{21}, \frac{2}{21}, \frac{2}{21}, -\frac{1}{21})$ $+\frac{11}{21}e^1 \otimes e_2 - \frac{11}{21}e^3 \otimes e_4 + \frac{4}{21}\sqrt{11}e^5 \otimes e_8$	{13678, 1368, 138, 14678, 1468, 148, 24678, 2468, 248}
81:2	$0, 0, 0, 0, 0, 0, \frac{1}{21}\sqrt{55}e^{12} + \frac{1}{21}\sqrt{55}e^{34}$	$(\frac{5}{21}, -\frac{2}{7}, \frac{5}{21}, -\frac{2}{7}, \frac{10}{21}, \frac{2}{21}, \frac{2}{21}, -\frac{1}{21})$ $+\frac{11}{21}e^1 \otimes e_2 + \frac{11}{21}e^3 \otimes e_4 + \frac{4}{21}\sqrt{11}e^5 \otimes e_8$	{13678, 1368, 138, 14678, 1468, 148, 24678, 2468, 248}
81:2	$0, 0, 0, 0, 0, 0, \frac{1}{43}\sqrt{598}e^{12} + \frac{2}{43}\sqrt{46}e^{34}$	$(\frac{10}{43}, -\frac{8}{43}, \frac{1}{43}, \frac{1}{43}, \frac{25}{43}, -\frac{13}{43}, \frac{5}{43}, \frac{2}{43})$ $+\frac{2}{43}\sqrt{230}e^5 \otimes e_8 + \frac{6}{43}\sqrt{23}e^1 \otimes e_6$	{12345, 123457, 125, 1257, 1378, 138, 23678, 2368, 3456, 34567, 56, 567}
81:2	$0, 0, 0, 0, 0, 0, \frac{3}{77}\sqrt{582}e^{12} + \frac{2}{77}\sqrt{194}e^{34}$	$(\frac{50}{77}, -\frac{12}{77}, \frac{19}{77}, \frac{19}{77}, -\frac{47}{77}, \frac{15}{77}, \frac{15}{77}, \frac{38}{77})$ $+\frac{2}{77}\sqrt{3007}e^1 \otimes e_5$	{123, 1236, 12367, 134678, 13468, 1348, 1678, 168, 18, 2345678, 234568, 23458, 25678, 2568, 258, 35, 356, 3567}
81:2	$0, 0, 0, 0, 0, 0, \frac{2}{49}\sqrt{15}e^{12} + \frac{2}{49}\sqrt{15}e^{34}$	$(\frac{18}{49}, -\frac{12}{49}, \frac{18}{49}, -\frac{12}{49}, \frac{19}{49}, -\frac{11}{49}, \frac{4}{49}, \frac{6}{49})$ $+\frac{30}{49}e^1 \otimes e_2 + \frac{30}{49}e^3 \otimes e_4 + \frac{30}{49}e^5 \otimes e_6$	{13578, 1358, 13678, 1368, 14578, 1458, 14678, 1468, 24578, 2458, 24678, 2468}
81:2	$0, 0, 0, 0, 0, 0, \frac{2}{49}\sqrt{15}e^{12} + \frac{2}{49}\sqrt{15}e^{34}$	$(\frac{18}{49}, -\frac{12}{49}, \frac{18}{49}, -\frac{12}{49}, \frac{19}{49}, -\frac{11}{49}, \frac{4}{49}, \frac{6}{49})$ $+\frac{30}{49}e^1 \otimes e_2 - \frac{30}{49}e^3 \otimes e_4 + \frac{30}{49}e^5 \otimes e_6$	{13578, 1358, 13678, 1368, 14578, 1458, 14678, 1468, 24578, 2458, 24678, 2468}
81:2	$0, 0, 0, 0, 0, 0, \frac{1}{87}\sqrt{194}e^{12} + \frac{1}{58}\sqrt{582}e^{34}$	$(\frac{45}{116}, -\frac{59}{348}, \frac{25}{87}, -\frac{2}{29}, \frac{127}{348}, -\frac{47}{174}, -\frac{67}{348}, \frac{19}{87})$ $+\frac{1}{87}\sqrt{3007}e^3 \otimes e_6 + \frac{97}{174}e^1 \otimes e_2 + \frac{1}{174}e^5 \otimes e_7$	{1345, 1347, 156, 167, 2345, 2347, 256, 267}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{2}{19}\sqrt{15}e^{12} + \frac{2}{19}\sqrt{15}e^{34}$	$(\frac{18}{19}, -\frac{12}{19}, \frac{3}{19}, \frac{3}{19}, \frac{4}{19}, \frac{4}{19}, \frac{4}{19}, \frac{6}{19})$ $+ \frac{30}{19}e^1 \otimes e_2$	{135678, 13568, 1358, 138, 235678, 23568, 2358, 238}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{2}{19}\sqrt{15}e^{12} + \frac{2}{19}\sqrt{15}e^{34}$	$(\frac{3}{19}, \frac{3}{19}, \frac{3}{19}, \frac{3}{19}, 1, -\frac{11}{19}, \frac{4}{19}, \frac{6}{19})$ $+ \frac{30}{19}e^5 \otimes e_6$	{12345, 123457, 12346, 123467, 125, 1257, 126, 1267, 13578, 1358, 13678, 1368, 5, 57, 6, 67}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{4}{251}\sqrt{194}e^{12} + \frac{6}{251}\sqrt{582}e^{34}$	$(\frac{135}{251}, -\frac{59}{251}, \frac{100}{251}, -\frac{24}{251}, -\frac{94}{251}, \frac{30}{251}, \frac{30}{251}, \frac{76}{251})$ $+ \frac{194}{251}e^1 \otimes e_2 + \frac{4}{251}\sqrt{3007}e^3 \otimes e_5$	{134, 1346, 13467, 15, 156, 1567, 234, 2346, 23467, 25, 256, 2567}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{4}{11}e^{12} + \frac{4}{11}e^{34}$	$(\frac{2}{11}, -\frac{1}{11}, \frac{2}{11}, -\frac{1}{11}, \frac{5}{11}, -\frac{2}{11}, -\frac{2}{11}, \frac{1}{11})$ $+ \frac{2}{11}\sqrt{6}e^1 \otimes e_6 + \frac{2}{11}\sqrt{6}e^3 \otimes e_7 + \frac{4}{11}\sqrt{2}e^5 \otimes e_8$	{12345, 1257, 138, 1478, 24678, 567}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{4}{71}\sqrt{65}e^{12} + \frac{4}{71}\sqrt{65}e^{34}$	$(\frac{30}{71}, -\frac{1}{71}, \frac{30}{71}, -\frac{1}{71}, -\frac{22}{71}, -\frac{22}{71}, \frac{9}{71}, \frac{29}{71})$ $+ \frac{2}{71}\sqrt{806}e^1 \otimes e_5 + \frac{2}{71}\sqrt{806}e^3 \otimes e_6$	{1234, 12347, 126, 1267, 1378, 138, 14678, 1468, 245678, 24568, 56, 567}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{5}{69}\sqrt{74}e^{12} + \frac{2}{69}\sqrt{111}e^{34}$	$(\frac{13}{69}, \frac{13}{69}, \frac{13}{69}, \frac{13}{69}, -\frac{8}{23}, -\frac{8}{23}, \frac{7}{69}, \frac{26}{69})$ $+ \frac{1}{69}\sqrt{2294}e^1 \otimes e_5 + \frac{1}{69}\sqrt{2294}e^2 \otimes e_6$	{123, 1237, 134678, 13468, 1678, 168, 356, 3567}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{2}{31}\sqrt{55}e^{12} + \frac{2}{31}\sqrt{55}e^{34}$	$(\frac{10}{31}, -\frac{12}{31}, -\frac{1}{31}, -\frac{1}{31}, \frac{20}{31}, \frac{4}{31}, \frac{4}{31}, -\frac{2}{31})$ $+ \frac{22}{31}e^1 \otimes e_2 + \frac{8}{31}\sqrt{11}e^5 \otimes e_8$	{13678, 1368, 138, 23678, 2368, 238}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{6}{251}\sqrt{582}e^{12} + \frac{4}{251}\sqrt{194}e^{34}$	$(\frac{100}{251}, -\frac{24}{251}, \frac{38}{251}, \frac{38}{251}, \frac{127}{251}, -\frac{94}{251}, -\frac{67}{251}, \frac{76}{251})$ $+ \frac{194}{251}e^5 \otimes e_7 + \frac{4}{251}\sqrt{3007}e^1 \otimes e_6$	{1235, 1237, 13458, 13478, 158, 178, 234568, 234678, 2568, 2678, 356, 367}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{1}{21}\sqrt{55}e^{12} + \frac{1}{21}\sqrt{55}e^{34}$	$(\frac{5}{21}, -\frac{2}{7}, -\frac{1}{42}, -\frac{1}{42}, \frac{5}{14}, \frac{10}{21}, -\frac{1}{6}, -\frac{1}{21})$ $+ \frac{11}{21}e^1 \otimes e_2 + \frac{11}{21}e^5 \otimes e_7 + \frac{4}{21}\sqrt{11}e^6 \otimes e_8$	{1358, 1378, 2358, 2378}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{5}{89}\sqrt{58}e^{12} + \frac{10}{89}e^{34}$	$(\frac{5}{89}, \frac{5}{89}, \frac{5}{89}, \frac{5}{89}, \frac{35}{89}, -\frac{20}{89}, -\frac{20}{89}, \frac{10}{89})$ $+ \frac{10}{89}\sqrt{14}e^5 \otimes e_8 + \frac{15}{89}\sqrt{6}e^1 \otimes e_6 + \frac{15}{89}\sqrt{6}e^2 \otimes e_7$	{12345, 125, 1378, 34567, 567}
81:2	$0, 0, 0, 0, 0, 0, 0, \frac{1}{10}\sqrt{55}e^{12} + \frac{1}{10}\sqrt{55}e^{34}$	$(-\frac{1}{20}, -\frac{1}{20}, -\frac{1}{20}, -\frac{1}{20}, 1, \frac{1}{5}, \frac{1}{5}, -\frac{1}{10})$ $+ \frac{2}{5}\sqrt{11}e^5 \otimes e_8$	{12345, 123456, 1234567, 125, 1256, 12567, 13678, 1368, 138, 5, 56, 567}
81:3	$0, 0, 0, 0, 0, 0, 0, \frac{2}{15}\sqrt{10}e^{12} + \frac{2}{15}\sqrt{10}e^{34} + \frac{2}{15}\sqrt{10}e^{56}$	$(\frac{1}{3}, -\frac{1}{3}, 0, 0, 0, 0, \frac{2}{3}, 0)$ $+ \frac{2}{3}e^1 \otimes e_2 + \frac{4}{15}\sqrt{10}e^7 \otimes e_8$	{1358, 2358}
81:3	$0, 0, 0, 0, 0, 0, 0, \frac{2}{47}\sqrt{74}e^{12} + \frac{2}{47}\sqrt{74}e^{34} + \frac{2}{47}\sqrt{74}e^{56}$	$(\frac{45}{47}, -\frac{29}{47}, \frac{8}{47}, \frac{8}{47}, \frac{8}{47}, \frac{8}{47}, \frac{10}{47}, \frac{16}{47})$ $+ \frac{74}{47}e^1 \otimes e_2$	{13578, 1358, 23578, 2358}
81:3	$0, 0, 0, 0, 0, 0, 0, \frac{4}{153}\sqrt{59}e^{12} + \frac{2}{153}\sqrt{2006}e^{34} + \frac{4}{153}\sqrt{59}e^{56}$	$(\frac{9}{17}, -\frac{37}{153}, \frac{20}{51}, -\frac{16}{153}, \frac{22}{153}, \frac{22}{153}, -\frac{58}{153}, \frac{44}{153})$ $+ \frac{118}{153}e^1 \otimes e_2 + \frac{4}{153}\sqrt{1121}e^3 \otimes e_7$	{1345, 157, 2345, 257}
81:3	$0, 0, 0, 0, 0, 0, 0, \frac{1}{53}\sqrt{59}e^{12} + \frac{1}{53}\sqrt{59}e^{34} + \frac{1}{106}\sqrt{2006}e^{56}$	$(\frac{81}{212}, -\frac{37}{212}, \frac{81}{212}, -\frac{37}{212}, \frac{15}{53}, -\frac{4}{53}, -\frac{29}{106}, \frac{11}{53})$ $+ \frac{1}{53}\sqrt{1121}e^5 \otimes e_7 + \frac{59}{106}e^1 \otimes e_2 + \frac{59}{106}e^3 \otimes e_4$	{1356, 137, 1456, 147, 2456, 247}
81:3	$0, 0, 0, 0, 0, 0, 0, \frac{1}{53}\sqrt{59}e^{12} + \frac{1}{53}\sqrt{59}e^{34} + \frac{1}{106}\sqrt{2006}e^{56}$	$(\frac{81}{212}, -\frac{37}{212}, \frac{81}{212}, -\frac{37}{212}, \frac{15}{53}, -\frac{4}{53}, -\frac{29}{106}, \frac{11}{53})$ $+ \frac{1}{53}\sqrt{1121}e^5 \otimes e_7 + \frac{59}{106}e^1 \otimes e_2 - \frac{59}{106}e^3 \otimes e_4$	{1356, 137, 1456, 147, 2456, 247}
81:3	$0, 0, 0, 0, 0, 0, 0, \frac{2}{121}\sqrt{74}e^{12} + \frac{2}{121}\sqrt{74}e^{34} + \frac{2}{121}\sqrt{74}e^{56}$	$(\frac{45}{121}, -\frac{29}{121}, \frac{45}{121}, -\frac{29}{121}, \frac{45}{121}, -\frac{29}{121}, \frac{10}{121}, \frac{16}{121})$ $+ \frac{74}{121}e^1 \otimes e_2 + \frac{74}{121}e^3 \otimes e_4 - \frac{74}{121}e^5 \otimes e_6$	{13578, 1358, 13678, 1368, 14578, 1458, 14678, 1468, 24578, 2458, 24678, 2468}

Table C – Continued to next page

Table C – Continued from previous page

Name Δ	g	D	S
81:3	$0, 0, 0, 0, 0, 0, -\frac{2}{121}\sqrt{74}e^{12} + \frac{2}{121}\sqrt{74}e^{34} + \frac{2}{121}\sqrt{74}e^{56}$	$(\frac{45}{121}, -\frac{29}{121}, \frac{45}{121}, -\frac{29}{121}, \frac{45}{121}, -\frac{29}{121}, \frac{10}{121}, \frac{16}{121})$ $+ \frac{74}{121}e^1 \otimes e_2 + \frac{74}{121}e^3 \otimes e_4 + \frac{74}{121}e^5 \otimes e_6$	{13578, 1358, 13678, 1368, 14678, 1468, 24678, 2468}
81:3	$0, 0, 0, 0, 0, 0, \frac{1}{47}\sqrt{2006}e^{12} + \frac{2}{47}\sqrt{59}e^{34} + \frac{2}{47}\sqrt{59}e^{56}$	$(\frac{30}{47}, -\frac{8}{47}, \frac{11}{47}, \frac{11}{47}, \frac{11}{47}, \frac{11}{47}, -\frac{29}{47}, \frac{22}{47})$ $+ \frac{2}{47}\sqrt{1121}e^1 \otimes e_7$	{1235, 134568, 1348, 18, 2345678, 23478, 278, 357}
81:3	$0, 0, 0, 0, 0, 0, \frac{1}{42}\sqrt{74}e^{12} + \frac{1}{42}\sqrt{74}e^{34} + \frac{1}{42}\sqrt{74}e^{56}$	$(\frac{15}{28}, -\frac{29}{84}, \frac{15}{28}, -\frac{29}{84}, \frac{2}{21}, \frac{2}{21}, \frac{5}{42}, \frac{4}{21})$ $+ \frac{37}{42}e^1 \otimes e_2 - \frac{37}{42}e^3 \otimes e_4$	{13578, 1358, 14578, 1458, 24578, 2458}
81:3	$0, 0, 0, 0, 0, 0, \frac{1}{42}\sqrt{74}e^{12} + \frac{1}{42}\sqrt{74}e^{34} + \frac{1}{42}\sqrt{74}e^{56}$	$(\frac{15}{28}, -\frac{29}{84}, \frac{15}{28}, -\frac{29}{84}, \frac{2}{21}, \frac{2}{21}, \frac{5}{42}, \frac{4}{21})$ $+ \frac{37}{42}e^1 \otimes e_2 + \frac{37}{42}e^3 \otimes e_4$	{13578, 1358, 14578, 1458, 24578, 2458}
81:3	$0, 0, 0, 0, 0, 0, \frac{2}{25}\sqrt{10}e^{12} + \frac{2}{25}\sqrt{10}e^{34} + \frac{2}{25}\sqrt{10}e^{56}$	$(\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{2}{5}, 0)$ $+ \frac{2}{5}e^1 \otimes e_2 + \frac{2}{5}e^3 \otimes e_4 - \frac{2}{5}e^5 \otimes e_6 + \frac{4}{25}\sqrt{10}e^7 \otimes e_8$	{1358, 1368, 1458, 1468, 2458, 2468}
81:3	$0, 0, 0, 0, 0, 0, \frac{2}{25}\sqrt{10}e^{12} + \frac{2}{25}\sqrt{10}e^{34} + \frac{2}{25}\sqrt{10}e^{56}$	$(\frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{1}{5}, -\frac{1}{5}, \frac{2}{5}, 0)$ $+ \frac{2}{5}e^1 \otimes e_2 + \frac{2}{5}e^3 \otimes e_4 + \frac{2}{5}e^5 \otimes e_6 + \frac{4}{25}\sqrt{10}e^7 \otimes e_8$	{1358, 1368, 1468, 2468}
81:3	$0, 0, 0, 0, 0, 0, \frac{1}{5}\sqrt{10}e^{12} + \frac{1}{5}\sqrt{10}e^{34} + \frac{1}{5}\sqrt{10}e^{56}$	$(0, 0, 0, 0, 0, 0, 1, 0)$ $+ \frac{2}{5}\sqrt{10}e^7 \otimes e_8$	{1234567, 12347, 127, 1358, 7}
81:3	$0, 0, 0, 0, 0, 0, \frac{1}{10}\sqrt{10}e^{12} + \frac{1}{10}\sqrt{10}e^{34} + \frac{1}{10}\sqrt{10}e^{56}$	$(\frac{1}{4}, -\frac{1}{4}, \frac{1}{4}, -\frac{1}{4}, 0, 0, \frac{1}{2}, 0)$ $+ \frac{1}{2}e^1 \otimes e_2 + \frac{1}{2}e^3 \otimes e_4 + \frac{1}{5}\sqrt{10}e^7 \otimes e_8$	{1358, 1458, 2458}
81:3	$0, 0, 0, 0, 0, 0, \frac{1}{10}\sqrt{10}e^{12} + \frac{1}{10}\sqrt{10}e^{34} + \frac{1}{10}\sqrt{10}e^{56}$	$(\frac{1}{4}, -\frac{1}{4}, \frac{1}{4}, -\frac{1}{4}, 0, 0, \frac{1}{2}, 0)$ $+ \frac{1}{2}e^1 \otimes e_2 - \frac{1}{2}e^3 \otimes e_4 + \frac{1}{5}\sqrt{10}e^7 \otimes e_8$	{1358, 1458, 2458}
8:1	$0, 0, 0, 0, 0, 0, 0$	$(\frac{5}{9}, \frac{5}{9}, -\frac{1}{3}, -\frac{1}{3}, \frac{1}{9}, \frac{1}{9}, \frac{1}{9}, \frac{1}{9})$ $+ \frac{8}{9}e^1 \otimes e_3 + \frac{8}{9}e^2 \otimes e_4$	{12, 125, 1256, 12567, 125678, 14, 145, 1456, 14567, 145678, 34, 345, 3456, 34567, 345678}
8:1	$0, 0, 0, 0, 0, 0, 0$	$(\frac{5}{17}, \frac{5}{17}, -\frac{3}{17}, -\frac{3}{17}, \frac{5}{17}, -\frac{3}{17}, \frac{5}{17}, -\frac{3}{17})$ $+ \frac{8}{17}e^1 \otimes e_3 + \frac{8}{17}e^2 \otimes e_4 + \frac{8}{17}e^5 \otimes e_6 + \frac{8}{17}e^7 \otimes e_8$	{1257, 1258, 1268, 1468, 3468}
8:1	$0, 0, 0, 0, 0, 0, 0$	$(1, -\frac{3}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5}, \frac{1}{5})$ $+ \frac{8}{5}e^1 \otimes e_2$	{1, 13, 134, 1345, 13456, 134567, 1345678, 2, 23, 234, 2345, 23456, 234567, 2345678}
8:1	$0, 0, 0, 0, 0, 0, 0$	$(\frac{5}{13}, \frac{5}{13}, -\frac{3}{13}, -\frac{3}{13}, \frac{5}{13}, -\frac{3}{13}, \frac{1}{13}, \frac{1}{13})$ $+ \frac{8}{13}e^1 \otimes e_3 + \frac{8}{13}e^2 \otimes e_4 + \frac{8}{13}e^5 \otimes e_6$	{125, 1257, 12578, 126, 1267, 12678, 146, 1467, 14678, 346, 3467, 34678}

End of Table C