## No. 24 $D_6$ 622 [hexagonal] (polar)

表 1 rank 0

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
1	$A_1$	A1	_	_	$\mathbb{Q}_0^{(h,A_1)}$	$\mathtt{Qh}(\mathtt{0},\mathtt{A1},,)$	$C_0$

表 2 rank 1

	No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
	2	$A_2$	A2	_	-	$\mathbb{Q}_1^{(h,A_2)}$	$\mathtt{Qh}(\mathtt{1},\mathtt{A2},,)$	$C_0$
	3	$E_1$	E1	_	0	$\mathbb{Q}_{1,0}^{(h,E_1)}$	$\mathtt{Qh}(\mathtt{1},\mathtt{E1},,\mathtt{0})$	$C_1$
_	4	$E_1$	E1	_	1	$\mathbb{Q}_{1,1}^{(h,E_1)}$	$\mathtt{Qh}(\mathtt{1},\mathtt{E1},,\mathtt{1})$	$S_1$

表 3 rank 2

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
5	$A_1$	A1	_	_	$\mathbb{Q}_2^{(h,A_1)}$	$\mathtt{Qh}(\mathtt{2},\mathtt{A1},,)$	$C_0$
6	$E_1$	E1	_	0	$\mathbb{Q}_{2,0}^{(h,E_1)}$	$\mathtt{Qh}(\mathtt{2},\mathtt{E1},,\mathtt{0})$	$S_1$
7	$E_1$	E1	_	1	$\mathbb{Q}_{2,1}^{(h,E_1)}$	$\mathtt{Qh}(\mathtt{2},\mathtt{E1},,\mathtt{1})$	$-C_1$
8	$E_2$	E2	_	0	$\mathbb{Q}_{2,0}^{(h,E_2)}$	$\mathtt{Qh}(\mathtt{2},\mathtt{E2},,\mathtt{0})$	$C_2$
9	$E_2$	E2	_	1	$\mathbb{Q}_{2,1}^{(h,E_2)}$	$\mathtt{Qh}(\mathtt{2},\mathtt{E2},,\mathtt{1})$	$-S_2$

表 4 rank 3

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
10	$A_2$	A2	_	-	$\mathbb{Q}_3^{(h,A_2)}$	$\mathtt{Qh}(\mathtt{3},\mathtt{A2},,)$	$C_0$
11	$B_1$	B1	_	_	$\mathbb{Q}_3^{(h,B_1)}$	$\mathtt{Qh}(\mathtt{3},\mathtt{B1},,)$	$S_3$
12	$B_2$	B2	_	_	$\mathbb{Q}_3^{(h,B_2)}$	$\mathtt{Qh}(\mathtt{3},\mathtt{B2},,)$	$C_3$
13	$E_1$	E1	_	0	$\mathbb{Q}_{3,0}^{(h,E_1)}$	$\mathtt{Qh}(\mathtt{3},\mathtt{E1},,\mathtt{0})$	$C_1$
14	$E_1$	E1	_	1	$\mathbb{Q}_{3,1}^{(h,E_1)}$	$\mathtt{Qh}(\mathtt{3},\mathtt{E1},,\mathtt{1})$	$S_1$
15	$E_2$	E2	_	0	$\mathbb{Q}_{3,0}^{(h,E_2)}$	$\mathtt{Qh}(\mathtt{3},\mathtt{E2},,\mathtt{0})$	$-S_2$
16	$E_2$	E2	_	1	$\mathbb{Q}_{3,1}^{(h,E_2)}$	$\mathtt{Qh}(3,\mathtt{E2},,1)$	$-C_2$

表 5 rank 4

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
17	$A_1$	A1	_	_	$\mathbb{Q}_4^{(h,A_1)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{A1},,)$	$C_0$
18	$B_1$	B1	_	_	$\mathbb{Q}_4^{(h,B_1)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{B1},,)$	$C_3$
19	$B_2$	B2	_	_	$\mathbb{Q}_4^{(h,B_2)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{B2},,)$	$S_3$
20	$E_1$	E1	_	0	$\mathbb{Q}_{4,0}^{(h,E_1)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{E1},,\mathtt{0})$	$S_1$
21	$E_1$	E1	_	1	$\mathbb{Q}_{4,1}^{(h,E_1)}$	$\mathtt{Qh}(\mathtt{4},\mathtt{E1},,\mathtt{1})$	$-C_1$
22	$E_2$	E2	1	0	$\mathbb{Q}_{4,0}^{(h,E_2,1)}$	$\mathtt{Qh}(4,\mathtt{E2},1,\mathtt{0})$	$C_4$
23	$E_2$	E2	1	1	$\mathbb{Q}_{4,1}^{(h,E_2,1)}$	$\mathtt{Qh}(4,\mathtt{E2},1,1)$	$S_4$
24	$E_2$	E2	2	0	$\mathbb{Q}_{4,0}^{(h,E_2,2)}$	$\mathtt{Qh}(4,\mathtt{E2},2,0)$	$C_2$
25	$E_2$	E2	2	1	$\mathbb{Q}_{4,1}^{(h,E_2,2)}$	$\mathtt{Qh}(4,\mathtt{E2},2,1)$	$-S_2$

表 6 rank 5

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
26	$A_2$	A2	_	_	$\mathbb{Q}_5^{(h,A_2)}$	Qh(5, A2,,)	$C_0$
27	$B_1$	B1	_	_	$\mathbb{Q}_5^{(h,B_1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{B1},,)$	$S_3$
28	$B_2$	B2	_	_	$\mathbb{Q}_5^{(h,B_2)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{B2},,)$	$C_3$
29	$E_1$	E1	1	0	$\mathbb{Q}_{5,0}^{(h,E_1,1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E1},\mathtt{1},\mathtt{0})$	$C_5$
30	$E_1$	E1	1	1	$\mathbb{Q}_{5,1}^{(h,E_1,1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E1},\mathtt{1},\mathtt{1})$	$-S_5$
31	$E_1$	E1	2	0	$\mathbb{Q}_{5,0}^{(h,E_1,2)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E1},\mathtt{2},\mathtt{0})$	$C_1$
32	$E_1$	E1	2	1	$\mathbb{Q}_{5,1}^{(h,E_1,2)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E1},\mathtt{2},\mathtt{1})$	$S_1$
33	$E_2$	E2	1	0	$\mathbb{Q}_{5,0}^{(h,E_2,1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E2},\mathtt{1},\mathtt{0})$	$S_4$
34	$E_2$	E2	1	1	$\mathbb{Q}_{5,1}^{(h,E_2,1)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E2},\mathtt{1},\mathtt{1})$	$-C_4$
35	$E_2$	E2	2	0	$\mathbb{Q}_{5,0}^{(h,E_2,2)}$	$\mathtt{Qh}(\mathtt{5},\mathtt{E2},\mathtt{2},\mathtt{0})$	$-S_2$
36	$E_2$	E2	2	1	$\mathbb{Q}_{5,1}^{(h,E_2,2)}$	$\mathtt{Qh}(5,\mathtt{E2},2,1)$	$-C_2$

表 7 rank 6

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
37	$A_1$	A1	1	_	$\mathbb{Q}_6^{(h,A_1,1)}$	Qh(6, A1, 1,)	$C_0$
38	$A_1$	A1	2	_	$\mathbb{Q}_6^{(h,A_1,2)}$	$\mathtt{Qh}(6,\mathtt{A1},2,)$	$C_6$
39	$A_2$	A2	_	_	$\mathbb{Q}_6^{(h,A_2)}$	$\mathtt{Qh}(6,\mathtt{A2},,)$	$S_6$
40	$B_1$	B1	_	_	$\mathbb{Q}_6^{(h,B_1)}$	$\mathtt{Qh}(6,\mathtt{B1},,)$	$C_3$
41	$B_2$	B2	_	_	$\mathbb{Q}_6^{(h,B_2)}$	$\mathtt{Qh}(6,\mathtt{B2},,)$	$S_3$
42	$E_1$	E1	1	0	$\mathbb{Q}_{6,0}^{(h,E_1,1)}$	$\mathtt{Qh}(6,\mathtt{E1},1,0)$	$-S_5$
43	$E_1$	E1	1	1	$\mathbb{Q}_{6,1}^{(h,E_1,1)}$	$\mathtt{Qh}(6,\mathtt{E1},1,1)$	$-C_5$
44	$E_1$	E1	2	0	$\mathbb{Q}_{6,0}^{(h,E_1,2)}$	$\mathtt{Qh}(6,\mathtt{E1},2,0)$	$S_1$
45	$E_1$	E1	2	1	$\mathbb{Q}_{6,1}^{(h,E_1,2)}$	$\mathtt{Qh}(6,\mathtt{E1},2,1)$	$-C_1$
46	$E_2$	E2	1	0	$\mathbb{Q}_{6,0}^{(h,E_2,1)}$	$\mathtt{Qh}(6,\mathtt{E2},\mathtt{1},\mathtt{0})$	$C_4$
47	$E_2$	E2	1	1	$\mathbb{Q}_{6,1}^{(h,E_2,1)}$	$\mathtt{Qh}(6,\mathtt{E2},1,1)$	$S_4$
48	$E_2$	E2	2	0	$\mathbb{Q}_{6,0}^{(h,E_2,2)}$	$\mathtt{Qh}(6,\mathtt{E2},2,0)$	$C_2$
49	$E_2$	E2	2	1	$\mathbb{Q}_{6,1}^{(h,E_2,2)}$	$\mathtt{Qh}(6,\mathtt{E2},2,1)$	$-S_2$

表 8 rank 7

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
50	$A_1$	A1	_	_	$\mathbb{Q}_7^{(h,A_1)}$	$\mathtt{Qh}(\mathtt{7},\mathtt{A1},,)$	$S_6$
51	$A_2$	A2	1	_	$\mathbb{Q}_7^{(h,A_2,1)}$	$\mathtt{Qh}(7,\mathtt{A2},1,)$	$C_0$
52	$A_2$	A2	2	-	$\mathbb{Q}_7^{(h,A_2,2)}$	$\mathtt{Qh}(7,\mathtt{A2},\mathtt{2},)$	$C_6$
53	$B_1$	B1		_	$\mathbb{Q}_7^{(h,B_1)}$	$\mathtt{Qh}(\mathtt{7},\mathtt{B1},,)$	$S_3$
54	$B_2$	B2		_	$\mathbb{Q}_7^{(h,B_2)}$	$\mathtt{Qh}(\mathtt{7},\mathtt{B2},,)$	$C_3$
55	$E_1$	E1	1	0	$\mathbb{Q}_{7,0}^{(h,E_1,1)}$	$\mathtt{Qh}(7,\mathtt{E1},1,0)$	$C_7$
56	$E_1$	E1	1	1	$\mathbb{Q}_{7,1}^{(h,E_1,1)}$	$\mathtt{Qh}(7,\mathtt{E1},1,1)$	$S_7$
57	$E_1$	E1	2	0	$\mathbb{Q}_{7,0}^{(h,E_1,2)}$	$\mathtt{Qh}(7,\mathtt{E1},2,0)$	$C_5$
58	$E_1$	E1	2	1	$\mathbb{Q}_{7,1}^{(h,E_1,2)}$	$\mathtt{Qh}(7,\mathtt{E1},2,1)$	$-S_5$
59	$E_1$	E1	3	0	$\mathbb{Q}_{7,0}^{(h,E_1,3)}$	$\mathtt{Qh}(7,\mathtt{E1},3,0)$	$C_1$
60	$E_1$	E1	3	1	$\mathbb{Q}_{7,1}^{(h,E_1,3)}$	$\mathtt{Qh}(7,\mathtt{E1},3,1)$	$S_1$
61	$E_2$	E2	1	0	$\mathbb{Q}_{7,0}^{(h,E_2,1)}$	$\mathtt{Qh}(7,\mathtt{E2},\mathtt{1},\mathtt{0})$	$S_4$
62	$E_2$	E2	1	1	$\mathbb{Q}_{7,1}^{(h,E_2,1)}$	$\mathtt{Qh}(7,\mathtt{E2},1,1)$	$-C_4$
63	$E_2$	E2	2	0	$\mathbb{Q}_{7,0}^{(h,E_2,2)}$	$\mathtt{Qh}(7,\mathtt{E2},2,0)$	$-S_2$
64	$E_2$	E2	2	1	$\mathbb{Q}_{7,1}^{(h,E_2,2)}$	$\mathtt{Qh}(7,\mathtt{E2},2,1)$	$-C_2$

表 9 rank 8

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
65	$A_1$	A1	1	-	$\mathbb{Q}_8^{(h,A_1,1)}$	$\mathtt{Qh}(\mathtt{8},\mathtt{A1},\mathtt{1},)$	$C_0$
66	$A_1$	A1	2	_	$\mathbb{Q}_8^{(h,A_1,2)}$	$\mathtt{Qh}(8,\mathtt{A1},\mathtt{2},)$	$C_6$
67	$A_2$	A2		_	$\mathbb{Q}_8^{(h,A_2)}$	$\mathtt{Qh}(\mathtt{8},\mathtt{A2},,)$	$S_6$
68	$B_1$	B1	_	_	$\mathbb{Q}_8^{(h,B_1)}$	$\mathtt{Qh}(\mathtt{8},\mathtt{B1},,)$	$C_3$
69	$B_2$	B2	_	_	$\mathbb{Q}_8^{(h,B_2)}$	$\mathtt{Qh}(\mathtt{8},\mathtt{B2},,)$	$S_3$
70	$E_1$	E1	1	0	$\mathbb{Q}_{8,0}^{(h,E_1,1)}$	$\mathtt{Qh}(8,\mathtt{E1},1,0)$	$S_7$
71	$E_1$	E1	1	1	$\mathbb{Q}_{8,1}^{(h,E_1,1)}$	$\mathtt{Qh}(8,\mathtt{E1},1,1)$	$-C_7$
72	$E_1$	E1	2	0	$\mathbb{Q}_{8,0}^{(h,E_1,2)}$	$\mathtt{Qh}(8,\mathtt{E1},2,0)$	$-S_5$
73	$E_1$	E1	2	1	$\mathbb{Q}_{8,1}^{(h,E_1,2)}$	$\mathtt{Qh}(8,\mathtt{E1},2,1)$	$-C_5$
74	$E_1$	E1	3	0	$\mathbb{Q}_{8,0}^{(h,E_1,3)}$	$\mathtt{Qh}(8,\mathtt{E1},3,0)$	$S_1$
75	$E_1$	E1	3	1	$\mathbb{Q}_{8,1}^{(h,E_1,3)}$	$\mathtt{Qh}(8,\mathtt{E1},3,1)$	$-C_1$
76	$E_2$	E2	1	0	$\mathbb{Q}_{8,0}^{(h,E_2,1)}$	$\mathtt{Qh}(8,\mathtt{E2},1,0)$	$C_8$
77	$E_2$	E2	1	1	$\mathbb{Q}_{8,1}^{(h,E_2,1)}$	$\mathtt{Qh}(8,\mathtt{E2},1,1)$	$-S_8$
78	$E_2$	E2	2	0	$\mathbb{Q}_{8,0}^{(h,E_2,2)}$	$\mathtt{Qh}(8,\mathtt{E2},2,0)$	$C_4$
79	$E_2$	E2	2	1	$\mathbb{Q}_{8,1}^{(h,E_2,2)}$	$\mathtt{Qh}(8,\mathtt{E2},2,1)$	$S_4$
80	$E_2$	E2	3	0	$\mathbb{Q}_{8,0}^{(h,E_2,3)}$	$\mathtt{Qh}(8,\mathtt{E2},3,0)$	$C_2$
81	$E_2$	E2	3	1	$\mathbb{Q}_{8,1}^{(h,E_2,3)}$	Qh(8, E2, 3, 1)	$-S_2$

表 10 rank 9

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
82	$A_1$	A1	-	_	$\mathbb{Q}_9^{(h,A_1)}$	Qh(9, A1,,)	$S_6$
83	$A_2$	A2	1	_	$\mathbb{Q}_9^{(h,A_2,1)}$	$\mathtt{Qh}(9,\mathtt{A2},\mathtt{1},)$	$C_0$
84	$A_2$	A2	2	_	$\mathbb{Q}_9^{(h,A_2,2)}$	$\mathtt{Qh}(9,\mathtt{A2},2,)$	$C_6$
85	$B_1$	B1	1	-	$\mathbb{Q}_9^{(h,B_1,1)}$	$\mathtt{Qh}(9,\mathtt{B1},\mathtt{1},)$	$S_9$
86	$B_1$	B1	2	_	$\mathbb{Q}_9^{(h,B_1,2)}$	$\mathtt{Qh}(9,\mathtt{B1},2,)$	$S_3$
87	$B_2$	B2	1	_	$\mathbb{Q}_9^{(h,B_2,1)}$	$\mathtt{Qh}(9,\mathtt{B2},1,)$	$C_9$
88	$B_2$	B2	2	_	$\mathbb{Q}_9^{(h,B_2,2)}$	$\mathtt{Qh}(9,\mathtt{B2},\mathtt{2},)$	$C_3$
89	$E_1$	E1	1	0	$\mathbb{Q}_{9,0}^{(h,E_1,1)}$	$\mathtt{Qh}(9,\mathtt{E1},1,0)$	$C_7$
90	$E_1$	E1	1	1	$\mathbb{Q}_{9,1}^{(h,E_1,1)}$	$\mathtt{Qh}(9,\mathtt{E1},1,1)$	$S_7$
91	$E_1$	E1	2	0	$\mathbb{Q}_{9,0}^{(h,E_1,2)}$	$\mathtt{Qh}(9,\mathtt{E1},2,0)$	$C_5$
92	$E_1$	E1	2	1	$\mathbb{Q}_{9,1}^{(h,E_1,2)}$	$\mathtt{Qh}(9,\mathtt{E1},2,1)$	$-S_5$
93	$E_1$	E1	3	0	$\mathbb{Q}_{9,0}^{(h,E_1,3)}$	$\mathtt{Qh}(9,\mathtt{E1},3,0)$	$C_1$
94	$E_1$	E1	3	1	$\mathbb{Q}_{9,1}^{(h,E_1,3)}$	$\mathtt{Qh}(9,\mathtt{E1},3,1)$	$S_1$
95	$E_2$	E2	1	0	$\mathbb{Q}_{9,0}^{(h,E_2,1)}$	$\mathtt{Qh}(9,\mathtt{E2},\mathtt{1},\mathtt{0})$	$-S_8$
96	$E_2$	E2	1	1	$\mathbb{Q}_{9,1}^{(h,E_2,1)}$	$\mathtt{Qh}(9,\mathtt{E2},1,1)$	$-C_8$
97	$E_2$	E2	2	0	$\mathbb{Q}_{9,0}^{(h,E_2,2)}$	$\mathtt{Qh}(9,\mathtt{E2},2,0)$	$S_4$
98	$E_2$	E2	2	1	$\mathbb{Q}_{9,1}^{(h,E_2,2)}$	$\mathtt{Qh}(9,\mathtt{E2},2,1)$	$-C_4$
99	$E_2$	E2	3	0	$\mathbb{Q}_{9,0}^{(h,E_2,3)}$	$\mathtt{Qh}(9,\mathtt{E2},3,0)$	$-S_2$
100	$E_2$	E2	3	1	$\mathbb{Q}_{9,1}^{(h,E_2,3)}$	Qh(9, E2, 3, 1)	$-C_2$

表 11 rank 10

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
101	$A_1$	A1	1	-	$\mathbb{Q}_{10}^{(h,A_1,1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{A1},\mathtt{1},)$	$C_0$
102	$A_1$	A1	2	_	$\mathbb{Q}_{10}^{(h,A_1,2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{A1},\mathtt{2},)$	$C_6$
103	$A_2$	A2	_	_	$\mathbb{Q}_{10}^{(h,A_2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{A2},,)$	$S_6$
104	$B_1$	B1	1	-	$\mathbb{Q}_{10}^{(h,B_1,1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{B1},\mathtt{1},)$	$C_9$
105	$B_1$	B1	2	_	$\mathbb{Q}_{10}^{(h,B_1,2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{B1},\mathtt{2},)$	$C_3$
106	$B_2$	B2	1	_	$\mathbb{Q}_{10}^{(h,B_2,1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{B2},\mathtt{1},)$	$S_9$
107	$B_2$	B2	2	_	$\mathbb{Q}_{10}^{(h,B_2,2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{B2},\mathtt{2},)$	$S_3$
108	$E_1$	E1	1	0	$\mathbb{Q}_{10,0}^{(h,E_1,1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1},\mathtt{1},\mathtt{0})$	$S_7$
109	$E_1$	E1	1	1	$\mathbb{Q}_{10,1}^{(h,E_1,1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1},\mathtt{1},\mathtt{1})$	$-C_7$
110	$E_1$	E1	2	0	$\mathbb{Q}_{10,0}^{(h,E_1,2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1},\mathtt{2},\mathtt{0})$	$-S_5$
111	$E_1$	E1	2	1	$\mathbb{Q}_{10,1}^{(h,E_1,2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1},\mathtt{2},\mathtt{1})$	$-C_5$
112	$E_1$	E1	3	0	$\mathbb{Q}_{10,0}^{(h,E_1,3)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1},\mathtt{3},\mathtt{0})$	$S_1$
113	$E_1$	E1	3	1	$\mathbb{Q}_{10,1}^{(h,E_1,3)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E1},\mathtt{3},\mathtt{1})$	$-C_1$
114	$E_2$	E2	1	0	$\mathbb{Q}_{10,0}^{(h,E_2,1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2},\mathtt{1},\mathtt{0})$	$C_{10}$
115	$E_2$	E2	1	1	$\mathbb{Q}_{10,1}^{(h,E_2,1)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2},\mathtt{1},\mathtt{1})$	$S_{10}$
116	$E_2$	E2	2	0	$\mathbb{Q}_{10,0}^{(h,E_2,2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2},\mathtt{2},\mathtt{0})$	$C_8$
117	$E_2$	E2	2	1	$\mathbb{Q}_{10,1}^{(h,E_2,2)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2},\mathtt{2},\mathtt{1})$	$-S_8$
118	$E_2$	E2	3	0	$\mathbb{Q}_{10,0}^{(h,E_2,3)}$	Qh(10, E2, 3, 0)	$C_4$
119	$E_2$	E2	3	1	$\mathbb{Q}_{10,1}^{(h,E_2,3)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2},\mathtt{3},\mathtt{1})$	$S_4$
120	$E_2$	E2	4	0	$\mathbb{Q}_{10,0}^{(h,E_2,4)}$	$\mathtt{Qh}(\mathtt{10},\mathtt{E2},\mathtt{4},\mathtt{0})$	$C_2$
121	$E_2$	E2	4	1	$\mathbb{Q}_{10,1}^{(h,E_2,4)}$	Qh(10, E2, 4, 1)	$-S_2$

表 12 rank 11

No.	irrep.	(tag)	mul.	comp.	harmonics	(tag)	definition
122	$A_1$	A1	_	_	$\mathbb{Q}_{11}^{(h,A_1)}$	Qh(11, A1,,)	$S_6$
123	$A_2$	A2	1	_	$\mathbb{Q}_{11}^{(h,A_2,1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{A2},\mathtt{1},)$	$C_0$
124	$A_2$	A2	2	_	$\mathbb{Q}_{11}^{(h,A_2,2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{A2},\mathtt{2},)$	$C_6$
125	$B_1$	B1	1	_	$\mathbb{Q}_{11}^{(h,B_1,1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{B1},\mathtt{1},)$	$S_9$
126	$B_1$	B1	2	_	$\mathbb{Q}_{11}^{(h,B_1,2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{B1},\mathtt{2},)$	$S_3$
127	$B_2$	B2	1	_	$\mathbb{Q}_{11}^{(h,B_2,1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{B2},\mathtt{1},)$	$C_9$
128	$B_2$	B2	2	_	$\mathbb{Q}_{11}^{(h,B_2,2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{B2},\mathtt{2},)$	$C_3$
129	$E_1$	E1	1	0	$\mathbb{Q}_{11,0}^{(h,E_1,1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1},\mathtt{1},\mathtt{0})$	$C_{11}$
130	$E_1$	E1	1	1	$\mathbb{Q}_{11,1}^{(h,E_1,1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1},\mathtt{1},\mathtt{1})$	$-S_{11}$
131	$E_1$	E1	2	0	$\mathbb{Q}_{11,0}^{(h,E_1,2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1},\mathtt{2},\mathtt{0})$	$C_7$
132	$E_1$	E1	2	1	$\mathbb{Q}_{11,1}^{(h,E_1,2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1},\mathtt{2},\mathtt{1})$	$S_7$
133	$E_1$	E1	3	0	$\mathbb{Q}_{11,0}^{(h,E_1,3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1},\mathtt{3},\mathtt{0})$	$C_5$
134	$E_1$	E1	3	1	$\mathbb{Q}_{11,1}^{(h,E_1,3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1},\mathtt{3},\mathtt{1})$	$-S_5$
135	$E_1$	E1	4	0	$\mathbb{Q}_{11,0}^{(h,E_1,4)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1},\mathtt{4},\mathtt{0})$	$C_1$
136	$E_1$	E1	4	1	$\mathbb{Q}_{11,1}^{(h,E_1,4)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E1},\mathtt{4},\mathtt{1})$	$S_1$
137	$E_2$	E2	1	0	$\mathbb{Q}_{11,0}^{(h,E_2,1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2},\mathtt{1},\mathtt{0})$	$S_{10}$
138	$E_2$	E2	1	1	$\mathbb{Q}_{11,1}^{(h,E_2,1)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2},\mathtt{1},\mathtt{1})$	$-C_{10}$
139	$E_2$	E2	2	0	$\mathbb{Q}_{11,0}^{(h,E_2,2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2},\mathtt{2},\mathtt{0})$	$-S_8$
140	$E_2$	E2	2	1	$\mathbb{Q}_{11,1}^{(h,E_2,2)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2},\mathtt{2},\mathtt{1})$	$-C_8$
141	$E_2$	E2	3	0	$\mathbb{Q}_{11,0}^{(h,E_2,3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2},\mathtt{3},\mathtt{0})$	$S_4$
142	$E_2$	E2	3	1	$\mathbb{Q}_{11,1}^{(h,E_2,3)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2},\mathtt{3},\mathtt{1})$	$-C_4$
143	$E_2$	E2	4	0	$\mathbb{Q}_{11,0}^{(h,E_2,4)}$	$\mathtt{Qh}(\mathtt{11},\mathtt{E2},\mathtt{4},\mathtt{0})$	$-S_2$
144	$E_2$	E2	4	1	$\mathbb{Q}_{11,1}^{(h,E_2,4)}$	${\tt Qh(11,E2,4,1)}$	$-C_2$