## Basis Warsaw (EFT SMEFT)

Basis suggested by Grzadkowski, Iskrzyński, Misiak, and Rosiek (arXiv:1008.4884v3). At variance with their definition, the Wilson coefficients are defined to be dimensionful, such that  $\mathcal{L} = \sum_i C_i O_i$ . The set of redundant operators coincides with the choice of DSixTools (arXiv:1704.04504). The weak basis for the fermion fields is chosen such that the running dimension-6 mass matrices of charged leptons and down-type quarks are diagonal at the scale where the coefficient values are specified, while up-type quark singlet field is rotated to diagonalise the running dimension-6 up-type quark mass matrix "from the right".

## Sectors

The effective Lagrangian is defined as

$$\mathcal{L}_{\text{eff}} = -\mathcal{H}_{\text{eff}} = \sum_{O_i = O_i^{\dagger}} C_i O_i + \sum_{O_i \neq O_i^{\dagger}} \left( C_i O_i + C_i^* O_i^{\dagger} \right).$$

dB=dL=0

WC name	Operator	Type
G	$f^{ABC}G^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ ho}$	R
Gtilde	$f^{ABC}\widetilde{G}^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ u}$	R
W	$\epsilon^{IJK}W_{\mu}^{I u}W_{ u}^{J ho}W_{ ho}^{K\mu}$	R
Wtilde	$\epsilon^{IJK}\widetilde{W}_{\mu}^{I u}W_{ u}^{J ho}W_{ ho}^{'K\mu}$	R
phi	$\left(arphi^\daggerarphi ight)^3$	R
phiBox	$\left(arphi^\daggerarphi ight)\square\left(arphi^\daggerarphi ight)$	R
phiD	$\left(arphi^\dagger D^\mu arphi ight)^* \left(arphi^\dagger D_\mu arphi ight)$	R
phiG	$arphi^\dagger arphi G^A_{\mu u} G^{A\mu u} \ arphi^\dagger arphi B_{\mu u} B^{\mu u}$	R
phiB	$arphi^\dagger arphi B_{\mu u}^{} B^{\mu u}$	R
phiW	$arphi^\dagger arphi W^I_{\mu u} W^{I\mu u}$	R
phiWB	$arphi^\dagger  au^I arphi W^I_{\mu u} B^{\mu u}$	R
phiGtilde	$arphi^\dagger arphi \widetilde{G}^A_{\mu u} G^{A\mu u}$	R
phiBtilde	$arphi^\dagger arphi \widetilde{B}_{\mu u} B^{\mu u}$	R
phiWtilde	$arphi^\dagger arphi \widetilde{W}^I_{\mu u} W^{I\mu u}$	R
phiWtildeB	$arphi^\dagger  au^I arphi \widetilde{W}^I_{\mu u} B^{\mu u}$	R
uphi_11	$\left(arphi^\daggerarphi ight)\left(ec{q}_1u_1\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_12	$\left(arphi^\daggerarphi ight)\left(ar{q}_1u_2\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_13	$\left(arphi^\daggerarphi ight)\left(ar{q}_1u_3\widetilde{arphi} ight)$	$\mathbf{C}$
uphi_21	$\left(arphi^\daggerarphi ight)\left(ar{q}_2u_1\widetilde{arphi} ight)$	$\mathbf{C}$
uphi_22	$\left(arphi^\daggerarphi ight)\left(ar{q}_2u_2\widetilde{arphi} ight)$	$\mathbf{C}$
uphi_23	$\left(arphi^\daggerarphi ight)\left(ar{q}_2u_3\widetilde{arphi} ight)$	$\mathbf{C}$

WC name	Operator	Type
uphi_31	$\left(arphi^\daggerarphi ight)\left(ar{q}_3u_1\widetilde{arphi} ight)$	С
uphi_32	$\left(\varphi^{\dagger}\varphi\right)\left(\bar{q}_{3}u_{2}\widetilde{\varphi}\right)$	$\mathbf{C}$
uphi_33	$\left(\varphi^{\dagger}\varphi\right)\left(\bar{q}_{3}u_{3}\widetilde{\varphi}\right)$	$\mathbf{C}$
dphi_11	$\left( arphi^{\dagger} arphi \right) \left( ar{q}_1 d_1 arphi \right)$	$\mathbf{C}$
dphi_12	$\left( arphi^{\dagger}arphi  ight) \left( ar{q}_{1}d_{2}arphi  ight)$	$\mathbf{C}$
dphi_13	$\left(\varphi^{\dagger}\varphi\right)\left(\bar{q}_{1}d_{3}\varphi\right)$	$\mathbf{C}$
dphi_21	$\left(arphi^\daggerarphi ight)\left(ar{q}_2d_1arphi ight)$	$\mathbf{C}$
dphi_22	$(arphi^\daggerarphi)(ar{q}_2d_2arphi)$	$\mathbf{C}$
dphi_23	$\left(arphi^{\dagger}arphi ight)\left(ar{q}_{2}d_{3}arphi ight)$	$\mathbf{C}$
dphi_31	$\left(arphi^{\dagger}arphi ight)\left(ar{q}_{3}d_{1}arphi ight)$	$\mathbf{C}$
dphi_32	$\left(arphi^{\dagger}arphi ight)\left(ar{q}_{3}d_{2}arphi ight)$	$\mathbf{C}$
dphi_33	$\left(arphi^\daggerarphi ight)\left(ar{q}_3d_3arphi ight)$	$\mathbf{C}$
ephi_11	$\left(arphi^\daggerarphi ight)\left(ar{\ell}_1e_1arphi ight)$	$\mathbf{C}$
ephi_12	$\left(arphi^{\dagger}arphi ight)\left(ar{\ell}_{1}e_{2}arphi ight)$	$\mathbf{C}$
ephi_13	$(arphi^\daggerarphi)\left(ar\ell_1e_3arphi ight)$	$\mathbf{C}$
ephi_21	$(arphi^\daggerarphi)(ar\ell_2e_1arphi)$	$\mathbf{C}$
ephi_22	$(arphi^\daggerarphi)(ar\ell_2 e_2arphi)$	$\mathbf{C}$
ephi_23	$(arphi^\daggerarphi)$ $(ar\ell_2 e_3 arphi)$	$\mathbf{C}$
ephi_31	$(arphi^\daggerarphi)$ $(ar\ell_3^\dagger e_1arphi)$	$\mathbf{C}$
ephi_32	$\left(arphi^{\dagger}arphi ight)\left(ar{\ell}_{3}e_{2}arphi ight)$	$\mathbf{C}$
ephi_33	$(arphi^\daggerarphi)(ar\ell_3e_3arphi)$	$\mathbf{C}$
eW_11	$(\bar{\ell}_1\sigma^{\mu\nu}e_1) au^Iarphi W^I_{\mu u}$	$\mathbf{C}$
eW_12	$(\bar{\ell}_1 \sigma^{\mu\nu} e_2) \tau^I \varphi W^I_{\mu\nu}$	$\mathbf{C}$
eW_13	$(\bar{\ell}_1 \sigma^{\mu\nu} e_3) \tau^I \varphi W_{\mu\nu}^I$	$\mathbf{C}$
eW_21	$(\bar{\ell}_2 \sigma^{\mu\nu} e_1) \tau^I \varphi W^I_{\mu\nu}$	$\mathbf{C}$
eW_22	$(\bar{\ell}_2 \sigma^{\mu\nu} e_2) \tau^I \varphi W^I_{\mu\nu}$	$\mathbf{C}$
eW_23	$(\bar{\ell}_2 \sigma^{\mu\nu} e_3) \tau^I \varphi W^I_{\mu\nu}$	$\mathbf{C}$
eW_31	$(\bar{\ell}_3 \sigma^{\mu\nu} e_1) \tau^I \varphi W^I_{\mu\nu}$	$\mathbf{C}$
eW_32	$(\bar{\ell}_3 \sigma^{\mu\nu} e_2) \tau^I \varphi W^I_{\mu\nu}$	$\mathbf{C}$
eW_33	$(\bar{\ell}_3 \sigma^{\mu\nu} e_3) \tau^I \varphi W^I_{\mu\nu}$	$\mathbf{C}$
eB_11	$(\bar{\ell}_1\sigma^{\mu u}e_1)\varphi B_{\mu u}$	$\mathbf{C}$
eB_12	$(ar{\ell}_1\sigma^{\mu u}e_2)\varphi B_{\mu u}$	$\mathbf{C}$
eB_13	$(\bar{\ell}_1\sigma^{\mu u}e_3)arphi B_{\mu u}$	$\mathbf{C}$
eB_21	$\left(ar{\ell}_2\sigma^{\mu u}e_1\right)arphi B_{\mu u}$	$\mathbf{C}$
eB_22	$\left\langle ar{\ell}_2 \sigma^{\mu  u} e_2 \right angle \varphi B_{\mu  u}$	$\mathbf{C}$
eB_23	$(ar{\ell}_2\sigma^{\mu u}e_3)arphi B_{\mu u}$	$\mathbf{C}$
eB_31	$\left(ar{\ell}_3\sigma^{\mu u}e_1 ight)arphi B_{\mu u}$	$\mathbf{C}$
eB_32	$\left(ar{\ell}_3\sigma^{\mu u}e_2 ight)arphi B_{\mu u}$	$\mathbf{C}$
eB_33	$(\bar{\ell}_3 \sigma^{\mu \nu} e_3) \varphi B_{\mu \nu}$	$\mathbf{C}$
uG_11	$(\bar{q}_1 \sigma^{\mu\nu} T^A u_1) \widetilde{\varphi} G^A_{\mu\nu}$	$\mathbf{C}$
uG_12	$(\bar{q}_1 \sigma^{\mu\nu} T^A u_2) \widetilde{\varphi} G^A$	$\mathbf{C}$
uG_13	$(\bar{q}_1\sigma^{\mu\nu}T^Au_3)\widetilde{\varphi}G^A_{\mu\nu}$	$\mathbf{C}$
	·	

WC name	Operator	Type
uG_21	$\left(\bar{q}_2\sigma^{\mu\nu}T^Au_1\right)\widetilde{\varphi}G^A_{\mu\nu}$	C
uG_22	$\left( ar{q}_2 \sigma^{\mu  u} T^A u_2 \right) \widetilde{arphi} G^A_{\mu  u}$	$^{\mathrm{C}}$
uG_23	$\left( ar{q}_2 \sigma^{\mu  u} T^A u_3 \right) \widetilde{arphi} G^A_{\mu  u}$	$^{\mathrm{C}}$
uG_31	$(\bar{q}_3\sigma^{\mu\nu}T^Au_1)\widetilde{\varphi}G^A_{\mu\nu}$	$^{\mathrm{C}}$
uG_32	$\left(\bar{q}_3\sigma^{\mu u}T^Au_2\right)\widetilde{arphi}G^A_{\mu u}$	$^{\mathrm{C}}$
uG_33	$\left( ar{q}_{3}\sigma^{\mu u}T^{A}u_{3} ight) \widetilde{arphi}G_{\mu u}^{A}$	C
uW_11	$(\bar{q}_1 \sigma^{\mu  u} u_1)   au^I \widetilde{\varphi} W^I_{\mu  u}$	C
uW_12	$(\bar{q}_1 \sigma^{\mu  u} u_2)   au^I \widetilde{\varphi} W^I_{\mu  u}$	$\mathbf{C}$
uW_13	$(ar{q}_1\sigma^{\mu u}u_3) au^I_{}\widetilde{arphi}W^I_{\mu u}$	$\mathbf{C}$
uW_21	$(ar{q}_2\sigma^{\mu u}u_1) au^I_{}\widetilde{arphi}W^I_{\mu u}$	$\mathbf{C}$
uW_22	$(\bar{q}_2 \sigma^{\mu  u} u_2)   au^I \widetilde{\varphi} W^I_{\mu  u}$	$\mathbf{C}$
uW_23	$(ar{q}_2\sigma^{\mu u}u_3) au^I_{}\widetilde{arphi}W^I_{\mu u}$	$\mathbf{C}$
uW_31	$(ar{q}_3\sigma^{\mu u}u_1) au^I_{}\widetilde{arphi}W^I_{\mu u}$	$\mathbf{C}$
uW_32	$(ar{q}_3\sigma^{\mu u}u_2) au^I_{ec{arphi}}\widetilde{arphi}W^I_{\mu u}$	$\mathbf{C}$
uW_33	$(\bar{q}_3\sigma^{\mu u}u_3) au^I\widetilde{arphi}W^I_{\mu u}$	$\mathbf{C}$
uB_11	$(\bar{q}_1 \sigma^{\mu\nu} u_1)  \widetilde{\varphi} B_{\mu\nu}$	C
uB_12	$(\bar{q}_1\sigma^{\mu\nu}u_2)\widetilde{\varphi}B_{\mu\nu}$	C
uB_13	$(\bar{q}_1\sigma^{\mu\nu}u_3)\widetilde{\varphi}B_{\mu\nu}$	C
uB_21	$(\bar{q}_2\sigma^{\mu\nu}u_1)\widetilde{\varphi}B_{\mu\nu}$	C
uB_22	$(\bar{q}_2\sigma^{\mu\nu}u_2)\widetilde{\varphi}B_{\mu\nu}$	C
uB_23	$(\bar{q}_2\sigma^{\mu\nu}u_3)\widetilde{\varphi}B_{\mu\nu}$	C
uB_31	$(\bar{q}_3\sigma^{\mu\nu}u_1)\widetilde{\varphi}B_{\mu\nu}$	C
uB_32	$(\bar{q}_3\sigma^{\mu\nu}u_2)\widetilde{\varphi}B_{\mu\nu}$	C
uB_33	$(\bar{q}_3\sigma^{\mu\nu}u_3)\widetilde{\varphi}B_{\mu\nu}$	C C
dG_11	$\left(\bar{q}_1\sigma^{\mu\nu}T^Ad_1\right)\varphi G^A_{\mu\nu}$	C
dG_12	$(\bar{q}_1\sigma^{\mu\nu}T^Ad_2)\varphi G^A_{\mu\nu}$	C
dG_13	$(\bar{q}_1 \sigma^{\mu\nu} T^A d_3) \varphi G^A_{\mu\nu}$	C
dG_21	$(\bar{q}_2 \sigma^{\mu \nu} T^A d_1) \varphi G^A_{\mu \nu}$	
dG_22	$(\bar{q}_2\sigma^{\mu\nu}T^Ad_2)\varphi G^A_{\mu u}$	C C
dG_23	$(\bar{q}_2\sigma^{\mu\nu}T^Ad_3)\varphi G^A_{\mu\nu}$	C
dG_31	$(\bar{q}_3\sigma^{\mu\nu}T^Ad_1)\varphi G^{\overline{A}}_{\mu\nu}$	C
dG_32	$\left(\bar{q}_{3}\sigma^{\mu\nu}T^{A}d_{2}\right)arphi G_{\mu u}^{A}$	C
dG_33	$ \begin{array}{l} \left(\bar{q}_3 \sigma^{\mu\nu} T^A d_3\right) \varphi G^{A}_{\mu\nu} \\ \left(\bar{q}_1 \sigma^{\mu\nu} d_1\right) \tau^I \varphi W^I_{\mu\nu} \end{array} $	C
dW_11		C
dW_12	$(\bar{q}_1\sigma^{\mu\nu}d_2)\tau^I\varphi W^I_{\mu\nu}$	C
dW_13 dW_21	$(\bar{q}_1\sigma^{\mu\nu}d_3)\tau^I\varphi W^I_{\mu\nu}$	C
dW_21 dW_22	$egin{aligned} \left(ar{q}_2\sigma^{\mu u}d_1 ight) au^Iarphi W^I_{\mu u} \ \left(ar{q}_2\sigma^{\mu u}d_2 ight) au^Iarphi W^I_{\mu u} \end{aligned}$	$^{\mathrm{C}}$
	$(q_2\sigma^{\mu}  q_2) \vdash \varphi W_{\mu\nu}$ $(\bar{q}_1 \sigma^{\mu\nu} d_2) \sigma^I \circ W^I$	C
dW_23 dW_31	$\begin{array}{l} (\bar{q}_2 \sigma^{\mu\nu} d_3)  \tau^I \varphi W^I_{\mu\nu} \\ (\bar{q}_3 \sigma^{\mu\nu} d_1)  \tau^I \varphi W^I_{\mu\nu} \end{array}$	C
dw_31 dW_32	$(q_3\sigma^{\mu\nu}d_2) \tau^I (qW^I)$	C
dW_32	$(\bar{q}_3\sigma^{\mu\nu}d_2)\tau^I\varphi W^I_{\mu\nu}$ $(\bar{q}_2\sigma^{\mu\nu}d_2)\tau^I\varphi W^I$	C
	$(\bar{q}_3\sigma^{\mu\nu}d_3)\tau^I\varphi W^I_{\mu\nu}$	C
dB_11	$(ar{q}_1\sigma^{\mu u}d_1)arphi B_{\mu u}$	C

12 $ (\bar{q}_1 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu} $	
	$^{\mathrm{C}}$
13 $(\bar{q}_1 \sigma^{\mu\nu} d_3) \varphi B_{\mu\nu}$	$\stackrel{ ext{C}}{\sim}$
21 $ (\bar{q}_2 \sigma^{\mu\nu} d_1) \varphi B_{\mu\nu} $	C
22 $(\bar{q}_2 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu}$	$^{ m C}_{ m C}$
23 $(\bar{q}_2\sigma^{\mu\nu}d_3)\varphi B_{\mu\nu}$ 31 $(\bar{q}_3\sigma^{\mu\nu}d_1)\varphi B_{\mu\nu}$	C
32 $(q_3\sigma^{\mu\nu}d_1)\varphi B_{\mu\nu}$	C
$(\bar{q}_2\sigma^{\mu\nu}d_2) \varphi B$	$\overset{\circ}{ ext{C}}$
11_11 $\left( arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight) \left( ar{\ell}_1 \gamma^\mu \ell_1  ight)$	R
$\begin{array}{ll} \mathbf{11\_11} & \begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{\ell}_{1}\gamma^{\mu}\ell_{1}) \\ \mathbf{11\_12} & \begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{\ell}_{1}\gamma^{\mu}\ell_{2}) \\ \mathbf{11\_13} & \begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{\ell}_{1}\gamma^{\mu}\ell_{3}) \\ \mathbf{11\_22} & \begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{\ell}_{2}\gamma^{\mu}\ell_{2}) \\ \overset{\leftrightarrow}{\Box} & \begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{\ell}_{2}\gamma^{\mu}\ell_{2}) \end{array}$	$\mathbf{C}$
11_13 $\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{\ell}_{1}\gamma^{\mu}\ell_{3} ight)$	$^{\mathrm{C}}$
11_22 $\left(arphi^\dagger_D i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{\ell}_2 \gamma^\mu \ell_2 ight)$	R
11_23 $\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)\left(\bar{\ell}_{2}\gamma^{\mu}\ell_{3}\right)$	$^{\mathrm{C}}$
11_33 $\left(arphi^\dagger_D i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{\ell}_3 \gamma^\mu \ell_3 ight)$	R
13_11 $\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}Imu\varphi\right)\left(\bar{\ell}_{1}\tau^{I}\gamma^{\mu}\ell_{1}\right)$	) R
13_12 $\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}Imu\varphi\right)\left(\bar{\ell}_{1}\tau^{I}\gamma^{\mu}\ell_{2}\right)$	) C
13_13 $\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}Imu\varphi\right)\left(\bar{\ell}_1\tau^I\gamma^{\mu}\ell_3\right)$	) C
13_22 $\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}Imu\varphi\right)\left(\bar{\ell}_{2}\tau^{I}\gamma^{\mu}\ell_{2}\right)$	) R
13_23 $\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}Imu\varphi\right)\left(\bar{\ell}_{2}\tau^{I}\gamma^{\mu}\ell_{3}\right)$	) C
13_33 $ \left( \varphi^{\dagger} i \overset{\leftrightarrow}{D} I m u \varphi \right) \left( \bar{\ell}_3 \tau^I \gamma^{\mu} \ell_3 \right) $	) R
e_11 $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right) \stackrel{'}{(\bar{e}_1 \gamma^\mu e_1)}$	R
e_12 $\left(\varphi^\dagger i \overset{\leftrightarrow}{D}_\mu \varphi\right) (\bar{e}_1 \gamma^\mu e_2)$	С
e_13 $\left(\varphi^{\dagger}i\overrightarrow{D}_{\mu}\varphi\right)(\overline{e}_{1}\gamma^{\mu}e_{3})$	С
e_22 $\left(\varphi^{\dagger}i\overrightarrow{D}_{\mu}\varphi\right)(\overline{e}_{2}\gamma^{\mu}e_{2})$	R
$\begin{array}{ll} \mathbf{e}\_{12} & \left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{e}_{1}\gamma^{\mu}e_{2}) \\ \\ \mathbf{e}\_{13} & \left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{e}_{1}\gamma^{\mu}e_{3}) \\ \\ \mathbf{e}\_{22} & \left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{e}_{2}\gamma^{\mu}e_{2}) \\ \\ \mathbf{e}\_{23} & \left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{e}_{2}\gamma^{\mu}e_{3}) \\ \\ \mathbf{e}\_{33} & \left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{e}_{3}\gamma^{\mu}e_{3}) \end{array}$	С
e_33 $\left( arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight) (ar{e}_3 \gamma^\mu e_3)$	R

WC name	Operator	Type
phiq1_11	$\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{q}_{1}\gamma^{\mu}q_{1})$	R
phiq1_12	$\left\langle \varphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} \varphi \right\rangle (\bar{q}_{1} \gamma^{\mu} q_{2})$	$\mathbf{C}$
phiq1_13	$\left\langle \varphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} \varphi \right\rangle (\bar{q}_{1} \gamma^{\mu} q_{3})$	C
phiq1_22	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi \right angle (ar{q}_2 \gamma^\mu q_2)$	R
phiq1_23	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi \right\rangle (ar{q}_2 \gamma^\mu q_3)$	$\mathbf{C}$
phiq1_33	$\left\langle \varphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} \varphi \right\rangle (\bar{q}_{3} \gamma^{\mu} q_{3})$	R
phiq3_11	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} I m u arphi ight) \left(ar{q}_1  au^I \gamma^\mu q_1 ight)$	R
phiq3_12	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D} I m u arphi  ight angle \left( ar{q}_1  au^I \gamma^\mu q_2  ight)$	$\mathbf{C}$
phiq3_13	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D} I m u arphi \right\rangle \left( ar{q}_1  au^I \gamma^\mu q_3 \right)$	C
phiq3_22	$\left\langle arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight angle \left(ar{q}_{2} au^{I}\gamma^{\mu}q_{2} ight)$	R
phiq3_23	$\left\langle arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight angle \left(ar{q}_{2} au^{I}\gamma^{\mu}q_{3} ight)$	C
phiq3_33	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D} I m u arphi \right\rangle \left( ar{q}_3  au^I \gamma^\mu q_3 \right)$	R
phiu_11	$\left( arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight) (ar{u}_1 \gamma^\mu u_1)$	R
phiu_12	$\left\langle \varphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} \varphi \right\rangle (\bar{u}_1 \gamma^{\mu} u_2)$	$\mathbf{C}$
phiu_13	$\left\langle \varphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} \varphi \right\rangle (\bar{u}_1 \gamma^{\mu} u_3)$	$\mathbf{C}$
phiu_22	$\left( arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight) (ar{u}_2 \gamma^\mu u_2)$	R
phiu_23	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight angle (ar{u}_2 \gamma^\mu u_3)$	$\mathbf{C}$
phiu_33	$\left\langle \varphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} \varphi \right\rangle (\bar{u}_3 \gamma^{\mu} u_3)$	R
phid_11	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight angle \left( ar{d}_1 \gamma^\mu d_1  ight)$	R
phid_12	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight angle \left( ar{d}_1 \gamma^\mu d_2  ight)$	$\mathbf{C}$
phid_13	$\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix}(\bar{d}_{1}\gamma^{\mu}d_{1}) \\ \begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix}(\bar{d}_{1}\gamma^{\mu}d_{2}) \\ \begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix}(\bar{d}_{1}\gamma^{\mu}d_{3}) \\ \begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix}(\bar{d}_{2}\gamma^{\mu}d_{2}) \end{pmatrix}$	$\mathbf{C}$
phid_22	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight angle \left( ar{d}_2 \gamma^\mu d_2  ight)$	R
	· /	

WC name	Operator	Type
phid_23	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{d}_2 \gamma^\mu d_3 ight)$	$\mathbf{C}$
phid_33	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{d}_3 \gamma^\mu d_3 ight)$	R
phiud_11	$\left(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi\right)'(\bar{u}_{1}\gamma^{\mu}d_{1})$	$\mathbf{C}$
phiud_12	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{1}\gamma^{\mu}d_{2} ight)$	$\mathbf{C}$
phiud_13	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{1}\gamma^{\mu}d_{3} ight)$	$^{\mathrm{C}}$
phiud_21	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}d_{1} ight)$	$^{\mathrm{C}}$
phiud_22	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}d_{2} ight)$	$^{\mathrm{C}}$
phiud_23	$\left(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi\right)\left(\bar{u}_{2}\gamma^{\mu}d_{3}\right)$	$^{\mathrm{C}}$
phiud_31	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{3}\gamma^{\mu}d_{1} ight)$	$^{\mathrm{C}}$
phiud_32	$\left(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi\right)\left(\bar{u}_{3}\gamma^{\mu}d_{2}\right)$	$^{\mathrm{C}}$
phiud_33	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left[ar{u}_{3}\gamma^{\mu}d_{3} ight)$	$^{\mathrm{C}}$
11_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_1 ight)$	R
11_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_2 ight)$	$^{\mathrm{C}}$
11_1113	$\left(ar{\ell}_1\gamma_{\mu}\ell_1 ight)\left(ar{\ell}_1\gamma^{\mu}\ell_3 ight)$	$^{\mathrm{C}}$
11_1122	$\left(ar{\ell}_1\gamma_{\mu}\ell_1 ight)\left(ar{\ell}_2\gamma^{\mu}\ell_2 ight)$	R
11_1123	$\left(ar{\ell}_1\gamma_{\mu}\ell_1 ight)\left(ar{\ell}_2\gamma^{\mu}\ell_3 ight)$	$^{\mathrm{C}}$
11_1133	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	R
11_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_1\gamma^\mu\ell_2 ight)$	$^{\mathrm{C}}$
11_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_1\gamma^\mu\ell_3 ight)$	$^{\mathrm{C}}$
11_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_1 ight)$	R
11_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_2 ight)$	$^{\mathrm{C}}$
11_1223	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_3 ight)$	$^{\mathrm{C}}$
11_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_3\gamma^\mu\ell_1 ight)$	$\mathbf{C}$
11_1232	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{\ell}_3\gamma^\mu\ell_2)$	$\mathbf{C}$
11_1233	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{\ell}_3\gamma^\mu\ell_3)$	$\mathbf{C}$
11_1313	$(ar{\ell}_1\gamma_\mu\ell_3)(ar{\ell}_1\gamma^\mu\ell_3)$	$\mathbf{C}$
11_1322	$(ar{\ell}_1\gamma_\mu\ell_3)(ar{\ell}_2\gamma^\mu\ell_2)$	$\mathbf{C}$
11_1323	$(ar{\ell}_1\gamma_\mu\ell_3)(ar{\ell}_2\gamma^\mu\ell_3)$	$\mathbf{C}$
11_1331	$(ar{\ell}_1\gamma_\mu\ell_3)(ar{\ell}_3\gamma^\mu\ell_1)$	R
11_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_2 ight)$	$\mathbf{C}$
11_1333	$(ar{\ell}_1\gamma_\mu\ell_3)(ar{\ell}_3\gamma^\mu\ell_3)$	$\mathbf{C}$
11_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_2 ight)$	R
11_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_3 ight)$	$\mathbf{C}$
11_2233	$(ar{\ell}_2\gamma_\mu\ell_2)(ar{\ell}_3\gamma^\mu\ell_3)$	R
11_2323	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{\ell}_2\gamma^\mu\ell_3)$	$^{\mathrm{C}}$
11_2332	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{\ell}_3\gamma^\mu\ell_2)$	R
11_2333	$(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{\ell}_3\gamma^\mu\ell_3)$	$\mathbf{C}$
11_3333	$(ar{\ell_3}\gamma_\mu\ell_3)(ar{\ell_3}\gamma^\mu\ell_3)$	R
qq1_1111	$(ar{q}_1\gamma_\mu q_1)(ar{q}_1\gamma^\mu q_1)$	R
qq1_1112	$(ar q_1\gamma_\mu q_1)(ar q_1\gamma^\mu q_2)$	$^{\mathrm{C}}$
qq1_1113	$(ar{q}_1\gamma_\mu q_1)(ar{q}_1\gamma^\mu q_3)$	$^{\mathrm{C}}$

WC name	Operator	Type
qq1_1122	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{q}_2\gamma^{\mu}q_2 ight)$	R
qq1_1123	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{q}_2\gamma^{\mu}q_3 ight)$	$\mathbf{C}$
qq1_1133	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{q}_3\gamma^{\mu}q_3 ight)$	R
qq1_1212	$\left(\bar{q}_1\gamma_{\mu}q_2\right)\left(\bar{q}_1\gamma^{\mu}q_2\right)$	$^{\mathrm{C}}$
qq1_1213	$(ar{q}_1\gamma_\mu q_2)(ar{q}_1\gamma^\mu q_3)$	C
qq1_1221	$(ar{q}_1\gamma_\mu q_2)(ar{q}_2\gamma^\mu q_1)$	R
qq1_1222	$(ar{q}_1\gamma_\mu q_2)(ar{q}_2\gamma^\mu q_2)$	C
qq1_1223	$(ar{q}_1\gamma_\mu q_2)(ar{q}_2\gamma^\mu q_3)$	C
qq1_1231	$\left(ar{q}_1\gamma_\mu q_2 ight)\left(ar{q}_3\gamma^\mu q_1 ight)$	C
qq1_1232	$(ar{q}_1\gamma_\mu q_2)(ar{q}_3\gamma^\mu q_2)$	C
qq1_1233	$(ar{q}_1\gamma_\mu q_2)(ar{q}_3\gamma^\mu q_3)$	$\mathbf{C}$
qq1_1313	$(ar{q}_1\gamma_\mu q_3)(ar{q}_1\gamma^\mu q_3)$	$\mathbf{C}$
qq1_1322	$(ar{q}_1\gamma_\mu q_3)(ar{q}_2\gamma^\mu q_2)$	C
qq1_1323	$(ar{q}_1\gamma_\mu q_3)(ar{q}_2\gamma^\mu q_3)$	C
qq1_1331	$(ar{q}_1\gamma_\mu q_3)(ar{q}_3\gamma^\mu q_1)$	R
qq1_1332	$(ar{q}_1\gamma_\mu q_3)(ar{q}_3\gamma^\mu q_2)$	C
qq1_1333	$(ar{q}_1\gamma_\mu q_3)(ar{q}_3\gamma^\mu q_3)$	$\mathbf{C}$
qq1_2222	$(ar{q}_2\gamma_\mu q_2)(ar{q}_2\gamma^\mu q_2)$	R
qq1_2223	$(ar{q}_2\gamma_\mu q_2)(ar{q}_2\gamma^\mu q_3)$	$\mathbf{C}$
qq1_2233	$(ar{q}_2\gamma_\mu q_2)(ar{q}_3\gamma^\mu q_3)$	${ m R}$
qq1_2323	$(ar{q}_2\gamma_\mu q_3)(ar{q}_2\gamma^\mu q_3)$	$\mathbf{C}$
qq1_2332	$(ar{q}_2\gamma_\mu q_3)(ar{q}_3\gamma^\mu q_2)$	R
qq1_2333	$(ar{q}_2\gamma_\mu q_3)(ar{q}_3\gamma^\mu q_3)$	C
qq1_3333	$\left(ar{q}_3\gamma_\mu q_3 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	R
qq3_1111	$\left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	R
qq3_1112	$\left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
qq3_1113	$\left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
qq3_1122	$\left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	R
qq3_1123	$\left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
qq3_1133	$\left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	R
qq3_1212	$\left(ar{q}_1\gamma_\mu au^Iq_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
qq3_1213	$\left(ar{q}_1\gamma_\mu au^Iq_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
qq3_1221	$\left(ar{q}_1\gamma_\mu au^Iq_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_1 ight)$	R
qq3_1222	$\left(ar{q}_1\gamma_\mu au^Iq_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
qq3_1223	$\left(ar{q}_1\gamma_\mu au^Iq_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
qq3_1231	$\left(ar{q}_{1}\gamma_{\mu} au^{I}q_{2} ight)\left(ar{q}_{3}\gamma^{\mu} au^{I}q_{1} ight)$	$\mathbf{C}$
qq3_1232	$\left(ar{q}_1\gamma_\mu au^Iq_2 ight)\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
qq3_1233	$\left(ar{q}_1\gamma_\mu au^Iq_2 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
qq3_1313	$\left\langle ar{q}_{1}\gamma_{\mu} au^{I}q_{3} ight angle \left\langle ar{q}_{1}\gamma^{\mu} au^{I}q_{3} ight angle$	$\mathbf{C}$
qq3_1322	$\left\langle ar{q}_{1}\gamma_{\mu} au^{I}q_{3} ight angle \left\langle ar{q}_{2}\gamma^{\mu} au^{I}q_{2} ight angle$	$^{\mathrm{C}}$
qq3_1323	$\left(ar{q}_1\gamma_\mu au^Iq_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
qq3_1331	$\left(ar{q}_1\gamma_{\mu} au^Iq_3 ight)\left(ar{q}_3\gamma^{\mu} au^Iq_1 ight)$	R
qq3_1332	$\left(ar{q}_{1}\gamma_{\mu} au^{I}q_{3} ight)\left(ar{q}_{3}\gamma^{\mu} au^{I}q_{2} ight)$	$\mathbf{C}$
qq3_1333	$\left\langle ar{q}_{1}\gamma_{\mu} au^{I}q_{3} ight angle \left\langle ar{q}_{3}\gamma^{\mu} au^{I}q_{3} ight angle$	$^{\mathrm{C}}$

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	WC name	Operator	Type
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$\left(ar{q}_2\gamma_\mu au^Iq_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{q}_2\gamma_\mu au^Iq_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{q}_{2}\gamma_{\mu} au^{I}_{q}q_{2} ight)\left(ar{q}_{3}\gamma^{\mu} au^{I}_{q}q_{3} ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{q}_2\gamma_\mu au^I_{\ \ \ }q_3 ight)\left(ar{q}_2\gamma^\mu au^I_{\ \ \ \ }q_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	<del>-</del>		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1233		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1312	$\left( \ell_1 \gamma_\mu \ell_3 \right) \left( ar{q}_1 \gamma^\mu q_2  ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1323		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1333		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_2211		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_2212		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1q1_2213	$\left(\underline{\ell}_{2}\gamma_{\mu}\ell_{2}\right)\left(ar{q}_{1}\gamma^{\mu}q_{3} ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_2311		
1q1_2321 $(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_2 \gamma^\mu q_1)$ C			
lq1_2322 $ \left(\bar{\ell}_2 \gamma_\mu \ell_3\right) \left(\bar{q}_2 \gamma^\mu q_2\right) $ C	lq1_2321	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_1 ight)$	
	lq1_2322	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	$\mathbf{C}$

WC name	Operator	Type
1q1_2323	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	C
lq1_2331	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_1 ight)$	$^{\mathrm{C}}$
lq1_2332	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_2 ight)$	C
lq1_2333	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	C
lq1_3311	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{q}_1\gamma^\mu q_1)$	R
lq1_3312	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	C
lq1_3313	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_3322	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	R
lq1_3323	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_3333	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	R
lq3_1111	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	R
lq3_1112	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
lq3_1113	$\left(ar{\ell}_1\gamma_{\mu} au^I\ell_1 ight)\left(ar{q}_1\gamma^{\mu} au^Iq_3 ight)$	C
lq3_1122	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	R
lq3_1123	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
lq3_1133	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	R
lq3_1211	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	$^{\mathrm{C}}$
lq3_1212	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	C
lq3_1213	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
lq3_1221	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_1 ight)$	C
lq3_1222	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
lq3_1223	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
lq3_1231	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_3\gamma^\mu au^Iq_1 ight)$	$^{\mathrm{C}}$
lq3_1232	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
lq3_1233	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
lq3_1311	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	$\mathbf{C}$
lq3_1312	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
lq3_1313	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
lq3_1321	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_1 ight)$	$\mathbf{C}$
lq3_1322	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
lq3_1323	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
lq3_1331	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_1 ight)$	$\mathbf{C}$
1q3_1332	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
lq3_1333	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
lq3_2211	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	R
1q3_2212	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
1q3_2213	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
1q3_2222	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	R
1q3_2223	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
1q3_2233	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	R
lq3_2311	$\begin{array}{c} (\bar{\ell}_{2}\gamma_{\mu}\tau^{I}\ell_{2}) & (\bar{q}_{2}\gamma^{\mu}\tau^{I}q_{2}) \\ (\bar{\ell}_{2}\gamma_{\mu}\tau^{I}\ell_{2}) & (\bar{q}_{2}\gamma^{\mu}\tau^{I}q_{3}) \\ (\bar{\ell}_{2}\gamma_{\mu}\tau^{I}\ell_{2}) & (\bar{q}_{3}\gamma^{\mu}\tau^{I}q_{3}) \\ (\bar{\ell}_{2}\gamma_{\mu}\tau^{I}\ell_{3}) & (\bar{q}_{1}\gamma^{\mu}\tau^{I}q_{1}) \\ (\bar{\ell}_{2}\gamma_{\mu}\tau^{I}\ell_{3}) & (\bar{\ell}_{2}\gamma^{\mu}\tau^{I}q_{1}) \end{array}$	$\mathbf{C}$
lq3_2312	$(ar{\ell}_2\gamma_\mu au^I\ell_3) \ (ar{q}_1\gamma^\mu au^Iq_2)$	$\mathbf{C}$

WC name	Operator	Type
1q3_2313	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	С
lq3_2321	$\left\langle ar{\ell}_{2}\gamma_{\mu} au^{I}\ell_{3} ight angle \left\langle ar{q}_{2}\gamma^{\mu} au^{I}q_{1} ight angle$	$\mathbf{C}$
1q3_2322	$(ar{\ell}_2\gamma_\mu au^I\ell_3)(ar{q}_2\gamma^\mu au^Iq_2)$	$\mathbf{C}$
1q3_2323	$(ar{\ell}_2\gamma_\mu au^I\ell_3)(ar{q}_2\gamma^\mu au^Iq_3)$	$\mathbf{C}$
lq3_2331	$\langle ar{\ell}_2 \gamma_\mu  au^I \ell_3 \rangle \langle ar{q}_3 \gamma^\mu  au^I q_1 \rangle$	$\mathbf{C}$
1q3_2332	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
1q3_2333	$(ar{\ell}_2\gamma_\mu au^I\ell_3)(ar{q}_3\gamma^\mu au^Iq_3)$	$\mathbf{C}$
lq3_3311	$\left(ar{\ell}_3\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	$\mathbf{R}$
lq3_3312	$(ar{\ell}_3\gamma_\mu au^I\ell_3)(ar{q}_1\gamma^\mu au^Iq_2)$	$\mathbf{C}$
lq3_3313	$(ar{\ell}_3\gamma_\mu au^I\ell_3)(ar{q}_1\gamma^\mu au^Iq_3)$	$\mathbf{C}$
1q3_3322	$(ar{\ell}_3\gamma_\mu au^I\ell_3)(ar{q}_2\gamma^\mu au^Iq_2)$	$\mathbf{R}$
1q3_3323	$(ar{\ell}_3\gamma_\mu au^I\ell_3)(ar{q}_2\gamma^\mu au^Iq_3)$	$\mathbf{C}$
1q3_3333	$(ar{\ell}_3\gamma_\mu au^I\ell_3)(ar{q}_3\gamma^\mu au^Iq_3)$	$\mathbf{R}$
ee_1111	$(\bar{e}_1\gamma_\mu e_1)(\bar{e}_1\gamma^\mu e_1)$	$\mathbf{R}$
ee_1112	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	$\mathbf{C}$
ee_1113	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	$\mathbf{C}$
ee_1122	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	$\mathbf{R}$
ee_1123	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$\mathbf{C}$
ee_1133	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_3\gamma^{\mu}e_3 ight)$	$\mathbf{R}$
ee_1212	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
ee_1213	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	$\mathbf{C}$
ee_1222	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	$\mathbf{C}$
ee_1223	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$\mathbf{C}$
ee_1232	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_3\gamma^{\mu}e_2 ight)$	C
ee_1233	$(ar{e}_1\gamma_{\mu}e_2)(ar{e}_3\gamma^{\mu}e_3)$	$\stackrel{ ext{C}}{\sim}$
ee_1313	$(ar{e}_1\gamma_\mu e_3)(ar{e}_1\gamma^\mu e_3)$	$\stackrel{ ext{C}}{\sim}$
ee_1323	$(ar{e}_1\gamma_\mu e_3)(ar{e}_2\gamma^\mu e_3)$	$\stackrel{ ext{C}}{\sim}$
ee_1333	$(\bar{e}_1\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3)$	С
ee_2222	$(ar{e}_2\gamma_\mu e_2)(ar{e}_2\gamma^\mu e_2)$	R
ee_2223	$(\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_3)$	С
ee_2233	$(\bar{e}_2\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3)$	R
ee_2323	$(\bar{e}_2\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3)$	С
ee_2333	$(\bar{e}_2\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3)$	С
ee_3333	$(\bar{e}_3\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3)$	R
uu_1111	$(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_1)$	R
uu_1112	$(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2)$	C C
uu_1113	$(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_3)$	
uu_1122	$(\bar{u}_1\gamma_\mu u_1)(\bar{u}_2\gamma^\mu u_2)$	R C
uu_1123	$(\bar{u}_1\gamma_\mu u_1)(\bar{u}_2\gamma^\mu u_3)$	R
uu_1133	$(\bar{u}_1\gamma_\mu u_1)(\bar{u}_3\gamma^\mu u_3)$	R C
uu_1212	$(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2)$	C
uu_1213 uu_1221	$(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_3)$	R
uu_1221	$\left(\bar{u}_1\gamma_{\mu}u_2\right)\left(\bar{u}_2\gamma^{\mu}u_1\right)$	ri,

WC name	Operator	Type
uu_1222	$\left(\bar{u}_1\gamma_{\mu}u_2\right)\left(\bar{u}_2\gamma^{\mu}u_2\right)$	C
uu_1223	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
uu_1231	$\left(\bar{u}_1\gamma_{\mu}u_2\right)\left(\bar{u}_3\gamma^{\mu}u_1\right)$	$\mathbf{C}$
uu_1232	$\left(\bar{u}_1\gamma_{\mu}u_2\right)\left(\bar{u}_3\gamma^{\mu}u_2\right)$	$\mathbf{C}$
uu_1233	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
uu_1313	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
uu_1322	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
uu_1323	$\left(\bar{u}_1\gamma_{\mu}u_3\right)\left(\bar{u}_2\gamma^{\mu}u_3\right)$	$\mathbf{C}$
uu_1331	$\left(\bar{u}_1\gamma_{\mu}u_3\right)\left(\bar{u}_3\gamma^{\mu}u_1\right)$	R
uu_1332	$\left(\bar{u}_1\gamma_{\mu}u_3\right)\left(\bar{u}_3\gamma^{\mu}u_2\right)$	$\mathbf{C}$
uu_1333	$\left(\bar{u}_1\gamma_{\mu}u_3\right)\left(\bar{u}_3\gamma^{\mu}u_3\right)$	$\mathbf{C}$
uu_2222	$\left(\bar{u}_2\gamma_{\mu}u_2\right)\left(\bar{u}_2\gamma^{\mu}u_2\right)$	R
uu_2223	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
uu_2233	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
uu_2323	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
uu_2332	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	R
uu_2333	$(\bar{u}_2\gamma_\mu u_3)(\bar{u}_3\gamma^\mu u_3)$	$\mathbf{C}$
uu_3333	$\left(ar{u}_3\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
dd_1111	$\left( ar{d}_1 \gamma_\mu d_1  ight) \left( ar{d}_1 \gamma^\mu d_1  ight)$	R
dd_1112	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
dd_1113	$\left( d_1 \gamma_\mu d_1  ight) \left( d_1 \gamma^\mu d_3  ight)$	$\mathbf{C}$
dd_1122	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
dd_1123	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
dd_1133	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
dd_1212	$\left(ar{d}_1\gamma_{\mu}d_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
dd_1213	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
dd_1221	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_2\gamma^\mu d_1 ight)$	R
dd_1222	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	$\mathbf{C}$
dd_1223	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	$\mathbf{C}$
dd_1231	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_3\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
dd_1232	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_3\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
_ dd_1233	$(ar{d_1}\gamma_{\mu}d_2)(ar{d_3}\gamma^{\mu}d_3)$	$^{\mathrm{C}}$
_ dd_1313	$(ar{d_1}\gamma_{\mu}d_3)(ar{d_1}\gamma^{\mu}d_3)$	$^{\mathrm{C}}$
_ dd_1322	$\left(ar{d}_1\gamma_\mu d_3 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
dd_1323	$egin{pmatrix} (ar{d}_1\gamma_\mu d_3) & (ar{d}_2\gamma^\mu d_3) \ \end{pmatrix}$	$^{\mathrm{C}}$
dd_1331	$\left(ar{d}_1\gamma_\mu d_3 ight)\left(ar{d}_3\gamma^\mu d_1 ight)$	R
dd_1332	$(ar{d}_1\gamma_\mu d_3) (ar{d}_3\gamma^\mu d_2)$	C
dd_1333	$\left(ar{d}_1\gamma_\mu d_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	$\overset{\circ}{\mathrm{C}}$
dd_2222	$(ar{d}_2\gamma_\mu d_2)  (ar{d}_2\gamma^\mu d_2)$	R
dd_2223	$egin{pmatrix} (a_2  eg \mu a_2) & (a_2  eg a_2) \ (ar{d}_2 \gamma_\mu d_2) & (ar{d}_2 \gamma^\mu d_3) \end{pmatrix}$	C
dd_2233	$egin{array}{l} (ar{d}_2 \gamma_\mu a_2) \ (ar{d}_2 \gamma_\mu d_2) \ (ar{d}_3 \gamma^\mu d_3) \end{array}$	R
dd_2323		C
	$egin{aligned} \left(ar{d}_2\gamma_\mu d_3 ight)\left(ar{d}_2\gamma^\mu d_3 ight) \ \left(ar{d}_2\gamma_\mu d_3 ight)\left(ar{d}_3\gamma^\mu d_2 ight) \end{aligned}$	R
dd_2332	$(u_2, \lambda_\mu u_3)$ $(u_3, \lambda_\mu u_2)$	$\mathbf{u}$

WC name	Operator	Type
dd_2333	$\left(ar{d}_{2}\gamma_{\mu}d_{3} ight)\left(ar{d}_{3}\gamma^{\mu}d_{3} ight)$	С
dd_3333	$\left(ar{d}_3\gamma_\mu d_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	R
eu_1111	$(\bar{e}_1\gamma_\mu e_1)(\dot{\bar{u}}_1\gamma^\mu u_1)$	R
eu_1112	$(ar{e}_1\gamma_\mu e_1)(ar{u}_1\gamma^\mu u_2)$	C
eu_1113	$(ar{e}_1\gamma_\mu e_1)(ar{u}_1\gamma^\mu u_3)$	C
eu_1122	$(ar{e}_1\gamma_\mu e_1)(ar{u}_2\gamma^\mu u_2)$	R
eu_1123	$(ar{e}_1\gamma_\mu e_1)(ar{u}_2\gamma^\mu u_3)$	$^{\mathrm{C}}$
eu_1133	$(ar{e}_1\gamma_\mu e_1)(ar{u}_3\gamma^\mu u_3)$	R
eu_1211	$(ar{e}_1\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_1)$	$^{\mathrm{C}}$
eu_1212	$(ar{e}_1\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_2)$	$^{\mathrm{C}}$
eu_1213	$(ar{e}_1\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_3)$	$^{\mathrm{C}}$
eu_1221	$(ar{e}_1\gamma_{\mu}e_2)(ar{u}_2\gamma^{\mu}u_1)$	$^{\mathrm{C}}$
eu_1222	$(ar{e}_1\gamma_\mu e_2)(ar{u}_2\gamma^\mu u_2)$	$^{\mathrm{C}}$
eu_1223	$(ar{e}_1\gamma_\mu e_2)(ar{u}_2\gamma^\mu u_3)$	$^{\mathrm{C}}$
eu_1231	$(ar{e}_1\gamma_\mu e_2)(ar{u}_3\gamma^\mu u_1)$	$^{\mathrm{C}}$
eu_1232	$(ar{e}_1\gamma_\mu e_2)(ar{u}_3\gamma^\mu u_2)$	$^{\mathrm{C}}$
eu_1233	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
eu_1311	$(ar{e}_1\gamma_\mu e_3)(ar{u}_1\gamma^\mu u_1)$	$^{\mathrm{C}}$
eu_1312	$(ar{e}_1\gamma_\mu e_3)(ar{u}_1\gamma^\mu u_2)$	$^{\mathrm{C}}$
eu_1313	$(ar{e}_1\gamma_\mu e_3)(ar{u}_1\gamma^\mu u_3)$	$^{\mathrm{C}}$
eu_1321	$(ar{e}_1\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_1)$	C
eu_1322	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
eu_1323	$(ar{e}_1\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_3)$	$^{\mathrm{C}}$
eu_1331	$(ar{e}_1\gamma_\mu e_3)(ar{u}_3\gamma^\mu u_1)$	$^{\mathrm{C}}$
eu_1332	$(ar{e}_1\gamma_{\mu}e_3)(ar{u}_3\gamma^{\mu}u_2)$	$\mathbf{C}$
eu_1333	$(ar{e}_1\gamma_{\mu}e_3)(ar{u}_3\gamma^{\mu}u_3)$	$\mathbf{C}$
eu_2211	$(ar{e}_2\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_1)$	${ m R}$
eu_2212	$(ar{e}_2\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_2)$	$\mathbf{C}$
eu_2213	$(ar{e}_2\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_3)$	$^{\mathrm{C}}$
eu_2222	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	${ m R}$
eu_2223	$(ar{e}_2\gamma_\mu e_2)(ar{u}_2\gamma^\mu u_3)$	$\mathbf{C}$
eu_2233	$(ar{e}_2\gamma_\mu e_2)(ar{u}_3\gamma^\mu u_3)$	${ m R}$
eu_2311	$(ar{e}_2\gamma_\mu e_3)(ar{u}_1\gamma^\mu u_1)$	$\mathbf{C}$
eu_2312	$(ar{e}_2\gamma_\mu e_3)(ar{u}_1\gamma^\mu u_2)$	$\mathbf{C}$
eu_2313	$(ar{e}_2\gamma_\mu e_3)(ar{u}_1\gamma^\mu u_3)$	$\mathbf{C}$
eu_2321	$(ar{e}_2\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_1)$	$\mathbf{C}$
eu_2322	$(ar{e}_2\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_2)$	$\mathbf{C}$
eu_2323	$(ar{e}_2\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_3)$	$\mathbf{C}$
eu_2331	$(ar{e}_2\gamma_\mu e_3)(ar{u}_3\gamma^\mu u_1)$	$\mathbf{C}$
eu_2332	$(ar{e}_2\gamma_\mu e_3)(ar{u}_3\gamma^\mu u_2)$	$\mathbf{C}$
eu_2333	$(\bar{e}_2\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_3)$	$\mathbf{C}$
eu_3311	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_1)$	R
eu_3312	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_2)$	$\mathbf{C}$
eu_3313	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_3)$	C

WC name	Operator	Type
eu_3322	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_2\gamma^\mu u_2)$	R
eu_3323	$(ar{e}_3\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_3)$	$^{\mathrm{C}}$
eu_3333	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
ed_1111	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
ed_1112	$(ar{e}_1\gamma_{\mu}e_1)ig(ar{d}_1\gamma^{\mu}d_2ig)$	$^{\mathrm{C}}$
ed_1113	$(ar{e}_1\gamma_{\mu}e_1)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_1122	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ed_1123	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_1133	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
ed_1211	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_1212	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_1213	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_1221	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_1222	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_1223	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_1231	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_1232	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_1233	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_1311	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_1312	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_1313	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_1321	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_1322	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_1323	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_1331	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_1332	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_1333	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_2211	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
ed_2212	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_2213	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(d_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_2222	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ed_2223	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_2233	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
ed_2311	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_2312	$\left(ar{e}_{2}\gamma_{\mu}e_{3} ight)\left(d_{1}\gamma^{\mu}d_{2} ight)$	$^{\mathrm{C}}$
ed_2313	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_2321	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_2322	$(ar{e}_2\gamma_{\mu}e_3)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_2323	$(ar{e}_2\gamma_{\mu}e_3)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_2331	$(ar{e}_2\gamma_{\mu}e_3)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_2332	$(ar{e}_2\gamma_{\mu}e_3)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_2333	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$\mathbf{C}$

WC name	Operator	Type
ed_3311	$(\bar{e}_3\gamma_\mu e_3) \left(\bar{d}_1\gamma^\mu d_1\right)$	R
ed_3312	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_3313	$(ar{e}_3\gamma_\mu e_3)(ar{d}_1\gamma^\mu d_3)$	$^{\mathrm{C}}$
ed_3322	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ed_3323	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_3333	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	${ m R}$
ud1_1111	$(ar{u}_1\gamma_\mu u_1)ig(ar{d}_1\gamma^\mu d_1ig)$	R
ud1_1112	$(ar{u}_1\gamma_\mu u_1)\left(ar{d}_1\gamma^\mu d_2 ight)$	$\mathbf{C}$
ud1_1113	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
ud1_1122	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_2\gamma^\mu d_2 ight)$	R
ud1_1123	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_2\gamma^\mu d_3 ight)$	$\mathbf{C}$
ud1_1133	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_3\gamma^\mu d_3\right)$	R
ud1_1211	$(ar{u}_1\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
ud1_1212	$(ar{u}_1\gamma_\mu u_2) \left(ar{d}_1\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
ud1_1213	$(ar{u}_1\gamma_{\mu}u_2)ig(ar{d}_1\gamma^{\mu}d_3ig)$	$^{\mathrm{C}}$
ud1_1221	$(ar{u}_1\gamma_\mu u_2)\left(ar{d}_2\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
ud1_1222	$(ar{u}_1\gamma_\mu u_2)ig(ar{d}_2\gamma^\mu d_2ig)$	$^{\mathrm{C}}$
ud1_1223	$(ar{u}_1\gamma_\mu u_2)\left(ar{d}_2\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ud1_1231	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ud1_1232	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1233	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ud1_1311	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ud1_1312	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ud1_1313	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ud1_1321	$(ar{u}_1\gamma_{\mu}u_3)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ud1_1322	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ud1_1323	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_1331	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ud1_1332	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ud1_1333	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_2211	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
ud1_2212	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_2 ight)$	C
ud1_2213	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_2222	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ud1_2223	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_2\gamma^\mu d_3 ight)$	C
ud1_2233	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_3\gamma^\mu d_3 ight)$	R
ud1_2311	$(ar{u}_2\gamma_\mu u_3)\left(ar{d}_1\gamma^\mu d_1 ight)$	C
ud1_2312	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_2313	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ud1_2321	$(ar{u}_2\gamma_\mu u_3)\left(ar{d}_2\gamma^\mu d_1 ight)$	C
ud1_2322	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	C
ud1_2323	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	С

$\begin{array}{c} \mathrm{ud1}\_2331 & (\bar{u}_2\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_1) & C \\ \mathrm{ud1}\_2332 & (\bar{u}_2\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_2) & C \\ \mathrm{ud1}\_2333 & (\bar{u}_2\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) & C \\ \mathrm{ud1}\_2331 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_1) & R \\ \mathrm{ud1}\_3312 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) & C \\ \mathrm{ud1}\_3313 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) & C \\ \mathrm{ud1}\_3313 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_3) & C \\ \mathrm{ud1}\_3323 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_3) & C \\ \mathrm{ud1}\_3333 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_3) & C \\ \mathrm{ud1}\_3333 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_3) & C \\ \mathrm{ud8}\_1111 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_1) & R \\ \mathrm{ud8}\_1112 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) & C \\ \mathrm{ud8}\_1113 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) & C \\ \mathrm{ud8}\_1113 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1123 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1123 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1123 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1211 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1212 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) & C \\ \mathrm{ud8}\_1213 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) & C \\ \mathrm{ud8}\_1222 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_2) & C \\ \mathrm{ud8}\_1222 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_2) & C \\ \mathrm{ud8}\_1223 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1221 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1221 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1222 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1231 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}\_1321 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_4) & C \\ \mathrm{ud8}\_1321 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_4) & C \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_4) & C \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_4) & C \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_4) & C \\ \mathrm{ud8}\_1322 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_4) & C \\ \mathrm{ud8}\_1323 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_4) & C \\ \mathrm{ud8}\_1332 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_2) & C \\ \mathrm{ud8}\_2331 & (\bar{u}$	WC name	Operator	Type
$\begin{array}{c} \mathrm{ud1}\_2332 & (\bar{u}_2\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_2) \\ \mathrm{ud1}\_2333 & (\bar{u}_2\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) \\ \mathrm{ud1}\_3311 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_1) \\ \mathrm{ud1}\_3312 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) \\ \mathrm{ud1}\_3313 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) \\ \mathrm{ud1}\_3313 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_2) \\ \mathrm{ud1}\_3323 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_2) \\ \mathrm{ud1}\_3323 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_3) \\ \mathrm{ud1}\_3333 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) \\ \mathrm{ud1}\_111 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_1) \\ \mathrm{ud8}\_1112 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_1112 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_1112 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1122 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1123 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1213 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1211 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_1) \\ \mathrm{ud8}\_1212 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_1213 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_1221 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1222 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1223 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1223 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1223 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1321 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_2211 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_2211 & (\bar{u}_2\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_2212 & (\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_2$	ud1_2331	$(ar{u}_2\gamma_\mu u_3)(ar{d}_3\gamma^\mu d_1)$	C
$\begin{array}{c} \mathrm{ud1}\_{2333} & (\bar{u}_2\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) \\ \mathrm{ud1}\_{3311} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_1) \\ \mathrm{ud1}\_{3312} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) \\ \mathrm{ud1}\_{3313} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) \\ \mathrm{ud1}\_{3313} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) \\ \mathrm{ud1}\_{3322} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_2) \\ \mathrm{ud1}\_{3323} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_3) \\ \mathrm{ud1}\_{3333} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) \\ \mathrm{ud8}\_{1111} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_1) \\ \mathrm{ud8}\_{1112} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_{1113} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1122} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_{1133} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1211} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_{1222} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}\_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1221} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1222} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1231} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1312} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1313} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1313} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{1313} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{2312} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{2313} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{2212} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{2213} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{2213} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_{2222} &$			$\mathbf{C}$
$\begin{array}{c} {\rm ud1\_3311} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_1\gamma^\mu d_1\right) & {\rm R} \\ {\rm ud1\_3312} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_1\gamma^\mu d_2\right) & {\rm C} \\ {\rm ud1\_3313} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_1\gamma^\mu d_3\right) & {\rm C} \\ {\rm ud1\_3322} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_2\right) & {\rm R} \\ {\rm ud1\_3323} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_2\right) & {\rm R} \\ {\rm ud1\_3333} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_3\right) & {\rm C} \\ {\rm ud1\_3333} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_3\gamma^\mu d_3\right) & {\rm R} \\ {\rm ud8\_1111} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8\_1112} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8\_1113} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8\_1113} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1122} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1123} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm R} \\ {\rm ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8\_1212} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8\_1212} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8\_1222} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8\_1222} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1231} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1232} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_4\right) & {\rm C} \\ {\rm ud8\_1332} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_4\right) & {\rm C} \\ {\rm ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_4\right) & {\rm C} \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_4\right) & {\rm C} \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_4\right) & {\rm C} \\ {\rm ud8\_2213} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8\_2213} & ($	ud1_2333		$\mathbf{C}$
$\begin{array}{c} \mathrm{ud1\_3312} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_1\gamma^\mu d_2\right) & C \\ \mathrm{ud1\_3313} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_1\gamma^\mu d_3\right) & C \\ \mathrm{ud1\_3322} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_2\right) & R \\ \mathrm{ud1\_3323} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_3\right) & C \\ \mathrm{ud1\_3323} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_3\right) & C \\ \mathrm{ud1\_3333} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_3\right) & R \\ \mathrm{ud8\_1111} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & R \\ \mathrm{ud8\_1112} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1113} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1122} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1123} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1133} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & R \\ \mathrm{ud8\_1212} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & R \\ \mathrm{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1232} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1311} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1312} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1313} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1313} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1322} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8\_1332} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8\_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_2211} & (\bar{u}_2\gamma_\mu T^A u_2) \left(\bar{d}_$	ud1_3311		${ m R}$
$\begin{array}{c} \mathrm{ud1\_3313} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_1\gamma^\mu d_3\right) & C \\ \mathrm{ud1\_3322} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_2\right) & R \\ \mathrm{ud1\_3333} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_3\right) & C \\ \mathrm{ud1\_3333} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_3\gamma^\mu d_3\right) & R \\ \mathrm{ud8\_1111} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & R \\ \mathrm{ud8\_1112} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1113} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1122} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1133} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1133} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & R \\ \mathrm{ud8\_1212} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & R \\ \mathrm{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1222} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1313} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1313} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1313} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1323} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_2213} & (\bar{u}_2\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8\_2213} & (\bar{u}_2\gamma_\mu $	ud1_3312		$\mathbf{C}$
$\begin{array}{c} {\rm ud1\_3322} & (\bar{u}_3\gamma_{\mu}u_3)  (\bar{d}_2\gamma^{\mu}d_2) \\ {\rm ud1\_3323} & (\bar{u}_3\gamma_{\mu}u_3)  (\bar{d}_2\gamma^{\mu}d_3) \\ {\rm ud1\_3333} & (\bar{u}_3\gamma_{\mu}u_3)  (\bar{d}_3\gamma^{\mu}d_3) \\ {\rm ud8\_1111} & (\bar{u}_1\gamma_{\mu}T^Au_1)  (\bar{d}_1\gamma^{\mu}T^Ad_1) \\ {\rm ud8\_1112} & (\bar{u}_1\gamma_{\mu}T^Au_1)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1113} & (\bar{u}_1\gamma_{\mu}T^Au_1)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1122} & (\bar{u}_1\gamma_{\mu}T^Au_1)  (\bar{d}_2\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1122} & (\bar{u}_1\gamma_{\mu}T^Au_1)  (\bar{d}_2\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1133} & (\bar{u}_1\gamma_{\mu}T^Au_1)  (\bar{d}_2\gamma^{\mu}T^Ad_3) \\ {\rm ud8\_1123} & (\bar{u}_1\gamma_{\mu}T^Au_1)  (\bar{d}_3\gamma^{\mu}T^Ad_3) \\ {\rm ud8\_1211} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1212} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1213} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1221} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1221} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_2\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1222} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_2\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1223} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_2\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1223} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_2\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1233} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_3\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1233} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_3\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_3\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1311} & (\bar{u}_1\gamma_{\mu}T^Au_2)  (\bar{d}_3\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1312} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1313} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1313} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1313} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_2\gamma^{\mu}T^Ad_3) \\ {\rm ud8\_1321} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_2\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1323} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_2\gamma^{\mu}T^Ad_3) \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_2\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1332} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_2\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_1333} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_2\gamma^{\mu}T^Ad_3) \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_2\gamma^{\mu}T^Ad_3) \\ {\rm ud8\_1332} & (\bar{u}_1\gamma_{\mu}T^Au_3)  (\bar{d}_2\gamma^{\mu}T^Ad_3) \\ {\rm ud8\_2213} & (\bar{u}_2\gamma_{\mu}T^Au_2)  (\bar{d}_1\gamma^{\mu}T^Ad_2) \\ {\rm ud8\_2213} & (\bar{u}_2\gamma_{\mu}T^Au_2)  (\bar{d}_1\gamma^{\mu}T^$	ud1_3313		$\mathbf{C}$
$\begin{array}{c} {\rm ud1\_3323} & (\bar{u}_3\gamma_{\mu}u_3)  (\bar{d}_2\gamma^{\mu}d_3) \\ {\rm ud1\_3333} & (\bar{u}_3\gamma_{\mu}u_3)  (\bar{d}_3\gamma^{\mu}d_3) \\ {\rm ud8\_1111} & (\bar{u}_1\gamma_{\mu}T^{A}u_1)  (\bar{d}_1\gamma^{\mu}T^{A}d_1) \\ {\rm ud8\_1112} & (\bar{u}_1\gamma_{\mu}T^{A}u_1)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1113} & (\bar{u}_1\gamma_{\mu}T^{A}u_1)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1112} & (\bar{u}_1\gamma_{\mu}T^{A}u_1)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1122} & (\bar{u}_1\gamma_{\mu}T^{A}u_1)  (\bar{d}_2\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1123} & (\bar{u}_1\gamma_{\mu}T^{A}u_1)  (\bar{d}_2\gamma^{\mu}T^{A}d_3) \\ {\rm ud8\_1123} & (\bar{u}_1\gamma_{\mu}T^{A}u_1)  (\bar{d}_3\gamma^{\mu}T^{A}d_3) \\ {\rm ud8\_1213} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_1\gamma^{\mu}T^{A}d_1) \\ {\rm ud8\_1212} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1213} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1213} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1221} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_2\gamma^{\mu}T^{A}d_1) \\ {\rm ud8\_1222} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_2\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1223} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_2\gamma^{\mu}T^{A}d_1) \\ {\rm ud8\_1233} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_3\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1233} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_3\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1233} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_3\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_{\mu}T^{A}u_2)  (\bar{d}_3\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_1\gamma^{\mu}T^{A}d_1) \\ {\rm ud8\_1322} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1331} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_2\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1332} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_2\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1332} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_2\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1332} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_3\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1332} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_3\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_1332} & (\bar{u}_1\gamma_{\mu}T^{A}u_3)  (\bar{d}_3\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_2212} & (\bar{u}_2\gamma_{\mu}T^{A}u_2)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_2213} & (\bar{u}_2\gamma_{\mu}T^{A}u_2)  (\bar{d}_1\gamma^{\mu}T^{A}d_2) \\ {\rm ud8\_2223} & (\bar{u}_2\gamma_{\mu}T^{A}u_2)  (d$	ud1_3322		R
$\begin{array}{c} \mathrm{ud1}\_3333 & (\bar{u}_3\gamma_\mu u_3)  (\bar{d}_3\gamma^\mu d_3) & \mathrm{R} \\ \mathrm{ud8}\_1111 & (\bar{u}_1\gamma_\mu T^A u_1)  (\bar{d}_1\gamma^\mu T^A d_1) & \mathrm{R} \\ \mathrm{ud8}\_1112 & (\bar{u}_1\gamma_\mu T^A u_1)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1113 & (\bar{u}_1\gamma_\mu T^A u_1)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1112 & (\bar{u}_1\gamma_\mu T^A u_1)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{R} \\ \mathrm{ud8}\_11122 & (\bar{u}_1\gamma_\mu T^A u_1)  (\bar{d}_2\gamma^\mu T^A d_2) & \mathrm{R} \\ \mathrm{ud8}\_11123 & (\bar{u}_1\gamma_\mu T^A u_1)  (\bar{d}_2\gamma^\mu T^A d_2) & \mathrm{R} \\ \mathrm{ud8}\_11123 & (\bar{u}_1\gamma_\mu T^A u_1)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{R} \\ \mathrm{ud8}\_1211 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_1\gamma^\mu T^A d_1) & \mathrm{C} \\ \mathrm{ud8}\_1212 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1213 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1221 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1222 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1222 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_2\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1223 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1231 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_3\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1232 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_3\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1232 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_3\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1311 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_3\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1322 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1322 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_1\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1322 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1323 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1322 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1323 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_1323 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_1333 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8}\_2211 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_2212 & (\bar{u}_2\gamma_\mu T^A u_2)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8}\_2222 & (\bar{u}_2\gamma_\mu T^A $	ud1_3323		$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8\_1112} & (\bar{u}_1\gamma_\mu T^A u_1) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1113} & (\bar{u}_1\gamma_\mu T^A u_1) \ (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1122} & (\bar{u}_1\gamma_\mu T^A u_1) \ (\bar{d}_2\gamma^\mu T^A d_2) \\ \text{ud8\_1123} & (\bar{u}_1\gamma_\mu T^A u_1) \ (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1133} & (\bar{u}_1\gamma_\mu T^A u_1) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_1211} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_1\gamma^\mu T^A d_1) \\ \text{ud8\_1212} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1221} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1222} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_2\gamma^\mu T^A d_2) \\ \text{ud8\_1223} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1231} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1232} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_2\gamma^\mu T^A d_2) \\ \text{ud8\_1233} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_3\gamma^\mu T^A d_2) \\ \text{ud8\_1234} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_3\gamma^\mu T^A d_2) \\ \text{ud8\_1235} & (\bar{u}_1\gamma_\mu T^A u_2) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_1311} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_1312} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1313} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1312} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1321} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1322} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1323} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_2211} & (\bar{u}_2\gamma_\mu T^A u_2) \ (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_2212} & (\bar{u}_2\gamma_\mu T^A u_2) \ (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_2213} & (\bar{u}_2\gamma_\mu T^A u_2) \ (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_2223} & (\bar{u}_2\gamma_\mu T^A u_2) \ (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_2233} & (\bar{u}_2\gamma_\mu T^A u_2) \ (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_2331} & (\bar{u}_2\gamma_\mu T^A u_2) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_2312} & (\bar{u}_2\gamma_\mu T^A u_2) \ (\bar{d}_3\gamma^\mu T^A d_2) \\ \text{ud8\_2332} & (\bar{u}_2\gamma_\mu T^A u_2) \ (\bar{d}_3\gamma^\mu T^A d_2) \\ ud8\_231$	ud1_3333		R
$\begin{array}{c} \text{ud8\_1113} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1122} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{R} \\ \text{ud8\_1123} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1133} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{R} \\ \text{ud8\_1211} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8\_1212} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1213} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1221} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1222} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8\_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1231} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8\_1232} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1331} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1331} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1312} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1321} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2211} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2223} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_\mu T^A$	ud8_1111	$\left(ar{u}_1\gamma_\mu T^Au_1 ight)\left(ar{d}_1\gamma^\mu T^Ad_1 ight)$	R
$\begin{array}{c} \text{ud8\_1122} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) \\ \text{ud8\_1123} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\ \text{ud8\_1133} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) \\ \text{ud8\_1211} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_1\right) \\ \text{ud8\_1212} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) \\ \text{ud8\_1213} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) \\ \text{ud8\_1221} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_1222} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) \\ \text{ud8\_1222} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) \\ \text{ud8\_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\ \text{ud8\_1231} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\ \text{ud8\_1232} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) \\ \text{ud8\_1311} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) \\ \text{ud8\_1312} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) \\ \text{ud8\_2211} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) \\ \text{ud8\_2222} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\ \text{ud8\_2212} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\ \text{ud8\_2212} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\ \text{ud8\_2222} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\$	ud8_1112		$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8\_1123} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1133} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{R} \\ \text{ud8\_1211} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8\_1212} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1213} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1221} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1222} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8\_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1231} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1232} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1311} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1312} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1321} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2211} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_2212} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_2223} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2231} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \end{array}$	ud8_1113	$\left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8\_1133} & \left( \bar{u}_1 \gamma_\mu T^A u_1 \right) \left( \bar{d}_3 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_1211} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_1 \gamma^\mu T^A d_1 \right) \\ \text{ud8\_1212} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_1 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1213} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_1 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_1221} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_2 \gamma^\mu T^A d_1 \right) \\ \text{ud8\_1222} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_2 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1223} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_2 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1223} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_2 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_1231} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_3 \gamma^\mu T^A d_1 \right) \\ \text{ud8\_1232} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_3 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1233} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_3 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_1311} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_3 \gamma^\mu T^A d_1 \right) \\ \text{ud8\_1312} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_1 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_1313} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_1 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1313} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_1 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_1321} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_2 \gamma^\mu T^A d_1 \right) \\ \text{ud8\_1322} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_2 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1333} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_2 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1331} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_3 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_1332} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_3 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1333} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_3 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1333} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_3 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1333} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_3 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_1333} & \left( \bar{u}_1 \gamma_\mu T^A u_3 \right) \left( \bar{d}_3 \gamma^\mu T^A d_2 \right) \\ \text{ud8\_2211} & \left( \bar{u}_2 \gamma_\mu T^A u_2 \right) \left( \bar{d}_1 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_2222} & \left( \bar{u}_2 \gamma_\mu T^A u_2 \right) \left( \bar{d}_1 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_2223} & \left( \bar{u}_2 \gamma_\mu T^A u_2 \right) \left( \bar{d}_1 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_2233} & \left( \bar{u}_2 \gamma_\mu T^A u_2 \right) \left( \bar{d}_3 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_2331} & \left( \bar{u}_2 \gamma_\mu T^A u_3 \right) \left( \bar{d}_1 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_2312} & \left( \bar{u}_2 \gamma_\mu T^A u_3 \right) \left( \bar{d}_1 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_2312} & \left( \bar{u}_2 \gamma_\mu T^A u_3 \right) \left( \bar{d}_1 \gamma^\mu T^A d_$	ud8_1122		R
$\begin{array}{c} \text{ud8\_1211} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_1212} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1213} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1221} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_1222} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1223} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1232} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1311} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1312} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1313} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1321} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1322} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1332} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1332} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2211} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2212} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2311} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \end{array}$	ud8_1123		$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8\_1212} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_1213} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_1221} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) \\ \text{ud8\_1222} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_1223} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_1231} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_1232} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_1311} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) \\ \text{ud8\_1312} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_1313} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_1321} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) \\ \text{ud8\_1322} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_1332} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_2211} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_2212} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_2311} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \end{array}$	ud8_1133	$\left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right)$	R
$\begin{array}{c} \text{ud8\_1213} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1221} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_1222} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1223} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1231} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_1232} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1311} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1312} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1313} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1321} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_1322} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1332} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2211} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{R} \\ \text{ud8\_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{R} \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{R} \\ \text{ud8\_2231} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{R} \\ \text{ud8\_2311} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \end{array}$	ud8_1211	$\left(\bar{u}_1\gamma_\mu T^A u_2\right)\left(\bar{d}_1\gamma^\mu T^A d_1\right)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1212	$(\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1213	$(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1221	$\left(ar{u}_1\gamma_\mu T^A u_2 ight)\left(ar{d}_2\gamma^\mu T^A d_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1222	$(\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1223		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1231		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1232	$(\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1233		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1311	$\left(ar{u}_1\gamma_{\mu}T^Au_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1312	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1313	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1321	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1322	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1323	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1331	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1332		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1333	$(\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2211	$(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_1)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2213		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2222	$(\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_2)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2223	$(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
ud8_2311 $(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_1)$ C ud8_2312 $(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_1\gamma^{\mu}T^Ad_2)$ C		$(\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3)$	R
ud8_2312 $\left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{2}\right)$ C ud8_2313 $\left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{3}\right)$ C	ud8_2311	$\left(ar{u}_2\gamma_{\mu}T^Au_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	$^{\mathrm{C}}$
ud8_2313 $\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$ C	ud8_2312	$\left(ar{u}_2\gamma_{\mu}T^Au_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_2 ight)$	$\mathbf{C}$
	ud8_2313	$\left(ar{u}_2\gamma_{\mu}T^Au_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	$^{\mathrm{C}}$

$\begin{array}{c} \mathrm{ud8} \ 2321 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{u}_2\gamma^\mu T^A d_1) & \mathrm{C} \\ \mathrm{ud8} \ 2322 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8} \ 2323 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8} \ 2331 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8} \ 2332 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_1) & \mathrm{C} \\ \mathrm{ud8} \ 2333 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8} \ 2333 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8} \ 2333 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8} \ 2331 & (\bar{u}_3\gamma_\mu T^A u_3)  (\bar{d}_1\gamma^\mu T^A d_1) & \mathrm{R} \\ \mathrm{ud8} \ 3312 & (\bar{u}_3\gamma_\mu T^A u_3)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8} \ 3313 & (\bar{u}_3\gamma_\mu T^A u_3)  (\bar{d}_1\gamma^\mu T^A d_2) & \mathrm{C} \\ \mathrm{ud8} \ 3322 & (\bar{u}_3\gamma_\mu T^A u_3)  (\bar{d}_2\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8} \ 3333 & (\bar{u}_3\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_3) & \mathrm{C} \\ \mathrm{ud8} \ 3333 & (\bar{u}_3\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_3) & \mathrm{R} \\ \mathrm{le} \ 1111 & (\bar{\ell}_1\gamma_\mu \ell_1)  (\bar{\epsilon}_1\gamma^\mu \epsilon_1) & \mathrm{c}_1\gamma^\mu \epsilon_2) & \mathrm{C} \\ \mathrm{le} \ 1112 & (\bar{\ell}_1\gamma_\mu \ell_1)  (\bar{\epsilon}_1\gamma^\mu \epsilon_2) & \mathrm{C} \\ \mathrm{le} \ 1113 & (\bar{\ell}_1\gamma_\mu \ell_1)  (\bar{\epsilon}_2\gamma^\mu \epsilon_2) & \mathrm{R} \\ \mathrm{le} \ 1122 & (\bar{\ell}_1\gamma_\mu \ell_1)  (\bar{\epsilon}_2\gamma^\mu \epsilon_2) & \mathrm{R} \\ \mathrm{le} \ 1122 & (\bar{\ell}_1\gamma_\mu \ell_1)  (\bar{\epsilon}_2\gamma^\mu \epsilon_2) & \mathrm{R} \\ \mathrm{le} \ 1212 & (\bar{\ell}_1\gamma_\mu \ell_1)  (\bar{\epsilon}_2\gamma^\mu \epsilon_2) & \mathrm{C} \\ \mathrm{le} \ 1213 & (\bar{\ell}_1\gamma_\mu \ell_1)  (\bar{\epsilon}_2\gamma^\mu \epsilon_2) & \mathrm{C} \\ \mathrm{le} \ 1213 & (\bar{\ell}_1\gamma_\mu \ell_2)  (\bar{\epsilon}_1\gamma^\mu \epsilon_2) & \mathrm{C} \\ \mathrm{le} \ 1221 & (\bar{\ell}_1\gamma_\mu \ell_2)  (\bar{\epsilon}_1\gamma^\mu \epsilon_2) & \mathrm{C} \\ \mathrm{le} \ 1222 & (\bar{\ell}_1\gamma_\mu \ell_2)  (\bar{\epsilon}_1\gamma^\mu \epsilon_2) & \mathrm{C} \\ \mathrm{le} \ 1223 & (\bar{\ell}_1\gamma_\mu \ell_2)  (\bar{\epsilon}_2\gamma^\mu \epsilon_3) & \mathrm{C} \\ \mathrm{le} \ 1223 & (\bar{\ell}_1\gamma_\mu \ell_2)  (\bar{\epsilon}_2\gamma^\mu \epsilon_3) & \mathrm{C} \\ \mathrm{le} \ 1223 & (\bar{\ell}_1\gamma_\mu \ell_2)  (\bar{\epsilon}_2\gamma^\mu \epsilon_3) & \mathrm{C} \\ \mathrm{le} \ 1231 & (\bar{\ell}_1\gamma_\mu \ell_2)  (\bar{\epsilon}_2\gamma^\mu \epsilon_3) & \mathrm{C} \\ \mathrm{le} \ 1232 & (\bar{\ell}_1\gamma_\mu \ell_2)  (\bar{\epsilon}_3\gamma^\mu \epsilon_3) & \mathrm{C} \\ \mathrm{le} \ 1233 & (\bar{\ell}_1\gamma_\mu \ell_2)  (\bar{\epsilon}_3\gamma^\mu \epsilon_3) & \mathrm{C} \\ \mathrm{le} \ 1331 & (\bar{\ell}_1\gamma_\mu \ell_3)  (\bar{\epsilon}_1\gamma^\mu \epsilon_2) & \mathrm{C} \\ \mathrm{le} \ 1332 & (\bar{\ell}_1\gamma_\mu \ell_3)  (\bar{\epsilon}_2\gamma^\mu \epsilon_2) & \mathrm{C} \\ \mathrm{le} \ 1333 & (\bar{\ell}_1\gamma_\mu \ell_3)  (\bar{\epsilon}_2$	WC name	Operator	Type
$\begin{array}{c} \mathrm{ud8}\_2322 & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}\_2323 & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_2331 & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \mathrm{C} \\ \mathrm{ud8}\_2332 & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \mathrm{C} \\ \mathrm{ud8}\_2332 & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_2333 & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_3311 & \left(\bar{u}_3\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & \mathrm{R} \\ \mathrm{ud8}\_3312 & \left(\bar{u}_3\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}\_3313 & \left(\bar{u}_3\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_3322 & \left(\bar{u}_3\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_3333 & \left(\bar{u}_3\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{R} \\ \mathrm{le}\_1111 & \left(\bar{\ell}_1\gamma_\mu \ell_1\right) \left(\bar{\ell}_1\gamma^\mu e_1\right) & \mathrm{R} \\ \mathrm{le}\_1112 & \left(\bar{\ell}_1\gamma_\mu \ell_1\right) \left(\bar{\ell}_1\gamma^\mu e_2\right) & \mathrm{C} \\ \mathrm{le}\_1113 & \left(\bar{\ell}_1\gamma_\mu \ell_1\right) \left(\bar{\ell}_1\gamma^\mu e_2\right) & \mathrm{R} \\ \mathrm{le}\_1122 & \left(\bar{\ell}_1\gamma_\mu \ell_1\right) \left(\bar{\ell}_2\gamma^\mu e_2\right) & \mathrm{R} \\ \mathrm{le}\_1123 & \left(\bar{\ell}_1\gamma_\mu \ell_1\right) \left(\bar{\ell}_2\gamma^\mu e_3\right) & \mathrm{C} \\ \mathrm{le}\_1123 & \left(\bar{\ell}_1\gamma_\mu \ell_1\right) \left(\bar{\ell}_2\gamma^\mu e_3\right) & \mathrm{R} \\ \mathrm{le}\_1211 & \left(\bar{\ell}_1\gamma_\mu \ell_2\right) \left(\bar{\ell}_1\gamma^\mu e_1\right) & \mathrm{C} \\ \mathrm{le}\_1212 & \left(\bar{\ell}_1\gamma_\mu \ell_2\right) \left(\bar{\ell}_1\gamma^\mu e_3\right) & \mathrm{C} \\ \mathrm{le}\_1221 & \left(\bar{\ell}_1\gamma_\mu \ell_2\right) \left(\bar{\ell}_1\gamma^\mu e_3\right) & \mathrm{C} \\ \mathrm{le}\_1222 & \left(\bar{\ell}_1\gamma_\mu \ell_2\right) \left(\bar{\ell}_2\gamma^\mu e_3\right) & \mathrm{C} \\ \mathrm{le}\_1223 & \left(\bar{\ell}_1\gamma_\mu \ell_2\right) \left(\bar{\ell}_2\gamma^\mu e_3\right) & \mathrm{C} \\ \mathrm{le}\_1223 & \left(\bar{\ell}_1\gamma_\mu \ell_2\right) \left(\bar{\ell}_2\gamma^\mu e_3\right) & \mathrm{C} \\ \mathrm{le}\_1231 & \left(\bar{\ell}_1\gamma_\mu \ell_2\right) \left(\bar{\ell}_2\gamma^\mu e_3\right) & \mathrm{C} \\ \mathrm{le}\_1322 & \left(\bar{\ell}_1\gamma_\mu \ell_2\right) \left(\bar{\ell}_3\gamma^\mu e_2\right) & \mathrm{C} \\ \mathrm{le}\_1323 & \left(\bar{\ell}_1\gamma_\mu \ell_2\right) \left(\bar{\ell}_3\gamma^\mu e_3\right) & \mathrm{C} \\ \mathrm{le}\_1321 & \left(\bar{\ell}_1\gamma_\mu \ell_3\right) \left(\bar{\ell}_3\gamma^\mu e_2\right) & \mathrm{C} \\ \mathrm{le}\_1322 & \left(\bar{\ell}_1\gamma_\mu \ell_3\right) \left(\bar{\ell}_3\gamma^\mu e_2\right) & \mathrm{C} \\ \mathrm{le}\_1321 & \left(\bar{\ell}_1\gamma_\mu \ell_3\right) \left(\bar{\ell}_3\gamma^\mu e_2\right) & \mathrm{C} \\ \mathrm{le}\_1322 & \left(\bar{\ell}_1\gamma_\mu \ell_3\right) \left(\bar{\ell}_1\gamma^\mu e_2\right) & \mathrm{C} \\ \mathrm{le}\_1323 & \left(\bar{\ell}_1\gamma_\mu \ell_3\right) \left(\bar{\ell}_1\gamma^\mu e_2\right) & \mathrm{C} \\ \mathrm{le}\_1321 & \left(\bar{\ell}_1\gamma_\mu \ell_3\right) \left(\bar{\ell}_2\gamma^\mu e_2\right) & \mathrm{C} \\ \mathrm{le}\_1331 & \left(\bar{\ell}_1\gamma_\mu \ell_3\right) \left(\bar{\ell}_3\gamma^\mu e_2\right) & \mathrm{C} \\ \mathrm{le}\_1332 & \left(\bar{\ell}_1\gamma_\mu \ell$	ud8_2321	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_2\gamma^\mu T^A d_1 ight)$	$\overline{C}$
$\begin{array}{c} \text{ud8}\_{2331} & (\bar{u}_2\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_1) \\ \text{ud8}\_{2332} & (\bar{u}_2\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_2) \\ \text{ud8}\_{2333} & (\bar{u}_2\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8}\_{3311} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_1) \\ \text{ud8}\_{3312} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8}\_{3313} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8}\_{3313} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8}\_{3322} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_2\gamma^\mu T^A d_2) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{le}\_{1111} & (\bar{\ell}_1\gamma^\mu \ell_1) \ (\bar{\epsilon}_1\gamma^\mu e_1) \\ \text{le}\_{1112} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_1\gamma^\mu e_2) \\ \text{le}\_{1113} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_1\gamma^\mu e_2) \\ \text{le}\_{1122} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1123} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1123} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1211} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_1\gamma^\mu e_1) \\ \text{le}\_{1212} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_1\gamma^\mu e_2) \\ \text{le}\_{1213} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_1\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1221} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1222} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ \text{le}\_{1231} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_3) \\ \text{le}\_{1312} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_3) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1322} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1332} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ $	ud8_2322	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_2\gamma^\mu T^A d_2 ight)$	$\mathbf{C}$
$\begin{array}{c} \text{ud8}\_{2331} & (\bar{u}_2\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_1) \\ \text{ud8}\_{2332} & (\bar{u}_2\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_2) \\ \text{ud8}\_{2333} & (\bar{u}_2\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8}\_{3311} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_1) \\ \text{ud8}\_{3312} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8}\_{3313} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8}\_{3313} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8}\_{3322} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_2\gamma^\mu T^A d_2) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \ (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{le}\_{1111} & (\bar{\ell}_1\gamma^\mu \ell_1) \ (\bar{\epsilon}_1\gamma^\mu e_1) \\ \text{le}\_{1112} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_1\gamma^\mu e_2) \\ \text{le}\_{1113} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_1\gamma^\mu e_2) \\ \text{le}\_{1122} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1123} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1123} & (\bar{\ell}_1\gamma_\mu \ell_1) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1211} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_1\gamma^\mu e_1) \\ \text{le}\_{1212} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_1\gamma^\mu e_2) \\ \text{le}\_{1213} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_1\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1221} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_3) \\ \text{le}\_{1222} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ \text{le}\_{1231} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_3) \\ \text{le}\_{1312} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_3) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_2) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1322} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_2\gamma^\mu e_2) \\ \text{le}\_{1332} & (\bar{\ell}_1\gamma_\mu \ell_3) \ (\bar{\epsilon}_3\gamma^\mu e_2) \\ $	ud8_2323	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_2\gamma^\mu T^A d_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8}\_{2333} & (\bar{u}_2\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8}\_{3311} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8}\_{3313} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8}\_{3313} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8}\_{3322} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8}\_{3323} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{le}\_{1111} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_1\gamma^\mu e_1) \\ \text{le}\_{1112} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_1\gamma^\mu e_2) \\ \text{le}\_{1113} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1113} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1112} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1123} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1123} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1211} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_1\gamma^\mu e_1) \\ \text{le}\_{1212} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_1\gamma^\mu e_2) \\ \text{le}\_{1213} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1221} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1222} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1233} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1311} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1312} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_3\gamma^\mu e_1) \\ \text{le}\_{1323} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_3\gamma^\mu e_3) \\ \text{le}\_{1311} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_3\gamma^\mu e_3) \\ \text{le}\_{1312} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_3\gamma^\mu e_3) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_1\gamma^\mu e_3) \\ \text{le}\_{1322} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1331} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_3\gamma^\mu e_2) \\ \text{le}\_{12222} & (\bar{\ell}_1\gamma_\mu \ell_$	ud8_2331	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_3\gamma^\mu T^A d_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8}\_{2333} & (\bar{u}_2\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8}\_{3311} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8}\_{3313} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8}\_{3313} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8}\_{3322} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8}\_{3323} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8}\_{3333} & (\bar{u}_3\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{le}\_{1111} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_1\gamma^\mu e_1) \\ \text{le}\_{1112} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_1\gamma^\mu e_2) \\ \text{le}\_{1113} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1113} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1112} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1123} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1123} & (\bar{\ell}_1\gamma_\mu \ell_1) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1211} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_1\gamma^\mu e_1) \\ \text{le}\_{1212} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_1\gamma^\mu e_2) \\ \text{le}\_{1213} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1221} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1222} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1223} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1233} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1311} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1312} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_3\gamma^\mu e_1) \\ \text{le}\_{1323} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_3\gamma^\mu e_3) \\ \text{le}\_{1311} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_3\gamma^\mu e_3) \\ \text{le}\_{1312} & (\bar{\ell}_1\gamma_\mu \ell_2) \; (\bar{\ell}_3\gamma^\mu e_3) \\ \text{le}\_{1313} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_1\gamma^\mu e_3) \\ \text{le}\_{1322} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_2\gamma^\mu e_3) \\ \text{le}\_{1331} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_2\gamma^\mu e_2) \\ \text{le}\_{1333} & (\bar{\ell}_1\gamma_\mu \ell_3) \; (\bar{\ell}_3\gamma^\mu e_2) \\ \text{le}\_{12222} & (\bar{\ell}_1\gamma_\mu \ell_$	ud8_2332	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_3\gamma^\mu T^A d_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8\_3312} & \left(\bar{u}_3\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_3313} & \left(\bar{u}_3\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_3322} & \left(\bar{u}_3\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_3333} & \left(\bar{u}_3\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_3333} & \left(\bar{u}_3\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_3333} & \left(\bar{u}_3\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) \\ \text{R} \\ \text{le\_1111} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right) \left(\bar{\epsilon}_1\gamma^{\mu}\epsilon_1\right) \\ & R \\ \text{le\_1112} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right) \left(\bar{\epsilon}_1\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1113} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right) \left(\bar{\epsilon}_1\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1122} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right) \left(\bar{\epsilon}_2\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1133} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right) \left(\bar{\epsilon}_2\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1133} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right) \left(\bar{\epsilon}_3\gamma^{\mu}\epsilon_3\right) \\ \text{le\_1211} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_1\gamma^{\mu}\epsilon_2\right) \\ & \left(\bar{\epsilon}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_1\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1212} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_1\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1213} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_1\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1221} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_2\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1221} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_2\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1222} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_2\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1223} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_3\gamma^{\mu}\epsilon_3\right) \\ \text{le\_1231} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_3\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1232} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_3\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1233} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_3\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1311} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_3\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1312} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right) \left(\bar{\epsilon}_3\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1313} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right) \left(\bar{\epsilon}_1\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1313} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right) \left(\bar{\epsilon}_1\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1322} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right) \left(\bar{\epsilon}_2\gamma^{\mu}\epsilon_2\right) \\ \text{le\_1323} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right) \left($	ud8_2333	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_3\gamma^\mu T^A d_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8}\_3313 & \overline{\left(\bar{u}_3\gamma_{\mu}T^Au_3\right)} \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & C \\ \text{ud8}\_3322 & \overline{\left(\bar{u}_3\gamma_{\mu}T^Au_3\right)} \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & R \\ \text{ud8}\_3323 & \overline{\left(\bar{u}_3\gamma_{\mu}T^Au_3\right)} \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & C \\ \text{ud8}\_3333 & \overline{\left(\bar{u}_3\gamma_{\mu}T^Au_3\right)} \left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & R \\ \text{le}\_1111 & \overline{\left(\bar{t}_1\gamma_{\mu}t_1\right)} \left(\bar{e}_1\gamma^{\mu}e_1\right) & R \\ \text{le}\_1112 & \overline{\left(\bar{t}_1\gamma_{\mu}t_1\right)} \left(\bar{e}_1\gamma^{\mu}e_2\right) & C \\ \text{le}\_1113 & \overline{\left(\bar{t}_1\gamma_{\mu}t_1\right)} \left(\bar{e}_1\gamma^{\mu}e_3\right) & C \\ \text{le}\_1122 & \overline{\left(\bar{t}_1\gamma_{\mu}t_1\right)} \left(\bar{e}_2\gamma^{\mu}e_2\right) & R \\ \text{le}\_1123 & \overline{\left(\bar{t}_1\gamma_{\mu}t_1\right)} \left(\bar{e}_2\gamma^{\mu}e_3\right) & C \\ \text{le}\_1123 & \overline{\left(\bar{t}_1\gamma_{\mu}t_1\right)} \left(\bar{e}_3\gamma^{\mu}e_3\right) & R \\ \text{le}\_1211 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_1\gamma^{\mu}e_1\right) & C \\ \text{le}\_1212 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_1\gamma^{\mu}e_3\right) & C \\ \text{le}\_1213 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_1\gamma^{\mu}e_3\right) & C \\ \text{le}\_1221 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_1\gamma^{\mu}e_3\right) & C \\ \text{le}\_1221 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_2\gamma^{\mu}e_4\right) & C \\ \text{le}\_1222 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_2\gamma^{\mu}e_3\right) & C \\ \text{le}\_1223 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_2\gamma^{\mu}e_3\right) & C \\ \text{le}\_1231 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_2\gamma^{\mu}e_3\right) & C \\ \text{le}\_1232 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_3\gamma^{\mu}e_3\right) & C \\ \text{le}\_1331 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_3\gamma^{\mu}e_3\right) & C \\ \text{le}\_1312 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_3\gamma^{\mu}e_3\right) & C \\ \text{le}\_1313 & \overline{\left(\bar{t}_1\gamma_{\mu}t_2\right)} \left(\bar{e}_3\gamma^{\mu}e_3\right) & C \\ \text{le}\_1313 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_1\gamma^{\mu}e_2\right)} & C \\ \text{le}\_1322 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_1\gamma^{\mu}e_3\right) & C \\ \text{le}\_1332 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_1\gamma^{\mu}e_3\right) & C \\ \text{le}\_1332 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_2\gamma^{\mu}e_2\right)} & C \\ \text{le}\_1331 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_2\gamma^{\mu}e_3\right)} & C \\ \text{le}\_1331 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_2\gamma^{\mu}e_2\right)} & C \\ \text{le}\_1332 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_2\gamma^{\mu}e_2\right)} & C \\ \text{le}\_1332 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_2\gamma^{\mu}e_2\right)} & C \\ \text{le}\_1331 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_3\gamma^{\mu}e_3\right)} & C \\ \text{le}\_2111 & \overline{\left(\bar{t}_2\gamma_{\mu}t_2\right)} \left(\bar{t}_1\gamma^{\mu}e_3\right)} & C \\ \text{le}\_2212 & \overline{\left(\bar{t}_1\gamma_{\mu}t_3\right)} \left(\bar{e}_1\gamma^{\mu}e_2\right)} & C \\ \text{le}\_2213 & \overline{\left(\bar{t}_$	ud8_3311	$\left(ar{u}_3\gamma_\mu T^Au_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_1 ight)$	$\mathbf{R}$
$\begin{array}{c} \text{ud8\_3322} & \left(\bar{u}_3\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{ud8\_3323} & \left(\bar{u}_3\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{ud8\_3333} & \left(\bar{u}_3\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) \\ \text{R} \\ \text{le\_1111} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right)\left(\bar{\epsilon}_1\gamma^{\mu}e_1\right) \\ & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right)\left(\bar{\epsilon}_1\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1112} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right)\left(\bar{\epsilon}_1\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1113} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right)\left(\bar{\epsilon}_1\gamma^{\mu}e_3\right) \\ \text{C} \\ \text{le\_1122} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{R} \\ \text{le\_1123} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{R} \\ \text{le\_1123} & \left(\bar{\ell}_1\gamma_{\mu}\ell_1\right)\left(\bar{\epsilon}_3\gamma^{\mu}e_3\right) \\ \text{C} \\ \text{le\_1211} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_1\gamma^{\mu}e_1\right) \\ \text{C} \\ \text{le\_1212} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_1\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1213} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_3\right) \\ \text{C} \\ \text{le\_1221} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_1\right) \\ \text{C} \\ \text{le\_1222} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1223} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1231} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_3\right) \\ \text{C} \\ \text{le\_1231} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_3\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1332} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_3\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1311} & \left(\bar{\ell}_1\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_3\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1312} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_1\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1313} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_1\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1322} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1331} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1322} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1331} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1332} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1333} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1331} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1332} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1333} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1333} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_1333} & \left(\bar{\ell}_1\gamma_{\mu}\ell_3\right)\left(\bar{\epsilon}_2\gamma^{\mu}e_2\right) \\ \text{C} \\ \text{le\_2211} & \left(\bar{\ell}_2\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}_1\gamma^{\mu}e_3\right) \\ \text{C} \\ \text{C} \\ \text{le\_2212} & \left(\bar{\ell}_2\gamma_{\mu}\ell_2\right)\left(\bar{\epsilon}$	ud8_3312	$\left(ar{u}_3\gamma_\mu T^A u_3 ight)\left(ar{d}_1\gamma^\mu T^A d_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8\_3323} & \left( \bar{u}_3 \gamma_\mu T^A u_3 \right) \left( \bar{d}_2 \gamma^\mu T^A d_3 \right) \\ \text{ud8\_3333} & \left( \bar{u}_3 \gamma_\mu T^A u_3 \right) \left( \bar{d}_3 \gamma^\mu T^A d_3 \right) \\ \text{R} \\ \text{le\_1111} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_1 \gamma^\mu e_1 \right) \\ \text{R} \\ \text{le\_1112} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{C} \\ \text{le\_1113} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_1122} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_2 \gamma^\mu e_3 \right) \\ \text{le\_1123} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_2 \gamma^\mu e_3 \right) \\ \text{le\_1123} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_2 \gamma^\mu e_3 \right) \\ \text{le\_1211} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_3 \gamma^\mu e_3 \right) \\ \text{le\_1211} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_1 \right) \\ \text{le\_1212} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{le\_1213} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_1221} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_1 \right) \\ \text{le\_1222} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1223} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1223} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_3 \gamma^\mu e_1 \right) \\ \text{le\_1232} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_3 \gamma^\mu e_3 \right) \\ \text{le\_1233} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_3 \gamma^\mu e_3 \right) \\ \text{le\_1311} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{le\_1312} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{le\_1313} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_1321} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_1322} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_1323} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1323} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_3 \right) \\ \text{le\_1321} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_3 \right) \\ \text{le\_1322} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1323} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1323} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1323} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1323} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1323} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_3 \gamma^\mu e_2 \right) \\ \text{le\_1333} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_3 \gamma^\mu e_2 \right) \\ \text{le\_1333} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_3 \gamma^\mu e_2 \right) \\ \text{le\_2211} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ le\_$	ud8_3313	$\left(ar{u}_3\gamma_{\mu}T^Au_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8\_3333} & \left( \bar{u}_3 \gamma_\mu T^A u_3 \right) \left( \bar{d}_3 \gamma^\mu T^A d_3 \right) \\ \text{le\_1111} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_1 \gamma^\mu e_1 \right) \\ \text{le\_1112} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{le\_1113} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{le\_1113} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1122} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_2 \gamma^\mu e_3 \right) \\ \text{le\_1123} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_2 \gamma^\mu e_3 \right) \\ \text{le\_1133} & \left( \bar{\ell}_1 \gamma_\mu \ell_1 \right) \left( \bar{e}_3 \gamma^\mu e_3 \right) \\ \text{le\_1211} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_1 \right) \\ \text{le\_1212} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_1213} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_1221} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_1222} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_1 \right) \\ \text{le\_1223} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1223} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_3 \gamma^\mu e_1 \right) \\ \text{le\_1231} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_3 \gamma^\mu e_3 \right) \\ \text{le\_1231} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_3 \gamma^\mu e_3 \right) \\ \text{le\_1331} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_3 \gamma^\mu e_3 \right) \\ \text{le\_1311} & \left( \bar{\ell}_1 \gamma_\mu \ell_2 \right) \left( \bar{e}_3 \gamma^\mu e_3 \right) \\ \text{le\_1312} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{le\_1313} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{le\_1313} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_1321} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_1 \right) \\ \text{le\_1322} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1333} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1333} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_1333} & \left( \bar{\ell}_1 \gamma_\mu \ell_3 \right) \left( \bar{e}_3 \gamma^\mu e_3 \right) \\ \text{le\_2211} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{le\_2212} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_2212} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_2 \right) \\ \text{le\_2223} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right) \\ \text{le\_2223} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_2223} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_2223} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_2223} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_2 \right) \\ \text{le\_2223} & \left( \bar{\ell}_2 \gamma_\mu \ell_2 \right) \left$	ud8_3322	$\left(ar{u}_3\gamma_{\mu}T^Au_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_3323	$\left(ar{u}_3\gamma_{\mu}T^Au_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_3333	$\left(ar{u}_3\gamma_{\mu}T^Au_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_3 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1113	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1122	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1123	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1133	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1211	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_2\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1223	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_3\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1232	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_3\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1233	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	le_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1313	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	le_1321		$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	le_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_1331		$^{\mathrm{C}}$
$\begin{array}{lll} \text{le}\_2211 & & & & \left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{e}_1\gamma^\mu e_1\right) & & \text{R} \\ \text{le}\_2212 & & & & \left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{e}_1\gamma^\mu e_2\right) & & \text{C} \\ \text{le}\_2213 & & & & \left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{e}_1\gamma^\mu e_3\right) & & \text{C} \\ \text{le}\_2222 & & & & \left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{e}_2\gamma^\mu e_2\right) & & \text{R} \\ \text{le}\_2223 & & & & \left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{e}_2\gamma^\mu e_3\right) & & \text{C} \end{array}$	le_1332	$(ar{\ell}_1\gamma_\mu\ell_3)(ar{e}_3\gamma^\mu e_2)$	$^{\mathrm{C}}$
$\begin{array}{lll} \text{le}\_2212 & & & & & (\bar{\ell}_2\gamma_\mu\ell_2) \ (\bar{e}_1\gamma^\mu e_2) & & & & \text{C} \\ \text{le}\_2213 & & & & & (\bar{\ell}_2\gamma_\mu\ell_2) \ (\bar{e}_1\gamma^\mu e_3) & & & \text{C} \\ \text{le}\_2222 & & & & & (\bar{\ell}_2\gamma_\mu\ell_2) \ (\bar{e}_2\gamma^\mu e_2) & & & \text{R} \\ \text{le}\_2223 & & & & & (\bar{\ell}_2\gamma_\mu\ell_2) \ (\bar{e}_2\gamma^\mu e_3) & & & \text{C} \end{array}$	le_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{lll} \text{le\_2213} & (\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_1\gamma^\mu e_3) & \text{C} \\ \text{le\_2222} & (\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_2) & \text{R} \\ \text{le\_2223} & (\bar{\ell}_2\gamma_\mu\ell_2)(\bar{e}_2\gamma^\mu e_3) & \text{C} \end{array}$	le_2211	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	R
le_2222 $(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{e}_2 \gamma^\mu e_2)$ R le_2223 $(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{e}_2 \gamma^\mu e_3)$ C	le_2212	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
le_2223 $\left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{e}_2\gamma^\mu e_3\right)$ C	le_2213	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
	le_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	R
le_2233 $ \left(\bar{\ell}_2\gamma_\mu\ell_2\right)\left(\bar{e}_3\gamma^\mu e_3\right) \qquad \qquad \mathrm{R} $	le_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
	le_2233	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	R

WC name	Operator	Type
le_2311	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_1)$	$\overline{C}$
le_2312	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$\mathbf{C}$
le_2313	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	$\mathbf{C}$
le_2321	$\left(ar{\ell}_2\gamma_\mu\ell_3\right)\left(ar{e}_2\gamma^\mu e_1 ight)$	$\mathbf{C}$
le_2322	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	$\mathbf{C}$
le_2323	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	$\mathbf{C}$
le_2331	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_1 ight)$	$\mathbf{C}$
le_2332	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_2 ight)$	$\mathbf{C}$
le_2333	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	$\mathbf{C}$
le_3311	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	R
le_3312	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$\mathbf{C}$
le_3313	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	$\mathbf{C}$
le_3322	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	R
le_3323	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	$\mathbf{C}$
le_3333	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	R
lu_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	R
lu_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_1113	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_1122	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	R
lu_1123	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_1133	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	R
lu_1211	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$\mathbf{C}$
lu_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_1 ight)$	$\mathbf{C}$
lu_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_1223	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
lu_1232	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_1233	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$\mathbf{C}$
lu_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_1313	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_1321	$\left(\ell_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
lu_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_1331	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
lu_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_2211	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	R
lu_2212	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_2213	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$\mathbf{C}$

WC name	Operator	Type
lu_2222	$(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_2)$	R
lu_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_2233	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$\mathbf{R}$
lu_2311	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$\mathbf{C}$
lu_2312	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_2313	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_2321	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_1 ight)$	$\mathbf{C}$
lu_2322	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_2323	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_2331	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_1 ight)$	$\mathbf{C}$
lu_2332	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_2333	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_3311	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$\mathbf{R}$
lu_3312	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_3313	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_3322	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	R
lu_3323	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$\mathbf{C}$
lu_3333	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$\mathbf{R}$
ld_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{d}_1\gamma^\mu d_1 ight)$	$\mathbf{R}$
ld_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1113	$\left(\ell_1\gamma_\mu\ell_1 ight)\left(d_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1122	$\left(\ell_1\gamma_\mu\ell_1 ight)\left(d_2\gamma^\mu d_2 ight)$	$\mathbf{R}$
ld_1123	$\left(\ell_1\gamma_\mu\ell_1 ight)\left(d_2\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1133	$\left(\ell_1\gamma_\mu\ell_1 ight)\left(d_3\gamma^\mu d_3 ight)$	$\mathbf{R}$
ld_1211	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_1\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_2\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1223	$\left(\ell_1\gamma_\mu\ell_2 ight)\left(d_2\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_3\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_1232	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_3\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1233	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1313	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1321	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1323	$\left(\ell_1\gamma_\mu\ell_3 ight)\left(d_2\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1331	$\left(\ell_1\gamma_\mu\ell_3\right)\left(d_3\gamma^\mu d_1\right)$	$^{\mathrm{C}}$
ld_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$

WC name	Operator	Type
ld_2211	$\left(ar{\ell}_2\gamma_{\mu}\ell_2 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
ld_2212	$\left\langle ar{\ell}_2 \gamma_\mu \ell_2  ight angle \left\langle ar{d}_1 \gamma^\mu d_2  ight angle$	$^{\mathrm{C}}$
_ ld_2213	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	C
ld_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	R
	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
_ 1d_2233	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	${ m R}$
ld_2311	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
ld_2312	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_2313	$\left\langle ar{\ell}_2 \gamma_\mu \ell_3  ight angle \left\langle ar{d}_1 \gamma^\mu d_3  ight angle$	$^{\mathrm{C}}$
ld_2321	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
ld_2322	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
ld_2323	$\left\langle ar{\ell}_2 \gamma_\mu \ell_3  ight angle \left\langle ar{d}_2 \gamma^\mu d_3  ight angle$	$^{\mathrm{C}}$
ld_2331	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_2332	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_2333	$\left\langle ar{\ell}_2 \gamma_\mu \ell_3  ight angle \left\langle ar{d}_3 \gamma^\mu d_3  ight angle$	$\mathbf{C}$
ld_3311	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_1 ight)$	R
ld_3312	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_3313	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_3322	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	R
ld_3323	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_3333	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{d}_3\gamma^\mu d_3)$	${ m R}$
qe_1111	$(ar{q}_1\gamma_\mu q_1)(ar{e}_1\gamma^\mu e_1)^{'}$	R
qe_1112	$(ar{q}_1\gamma_\mu q_1)(ar{e}_1\gamma^\mu e_2)$	$^{\mathrm{C}}$
qe_1113	$(ar{q}_1\gamma_\mu q_1)(ar{e}_1\gamma^\mu e_3)$	$^{\mathrm{C}}$
qe_1122	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	R
qe_1123	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$\mathbf{C}$
qe_1133	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{e}_3\gamma^{\mu}e_3 ight)$	R
qe_1211	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{e}_1\gamma^{\mu}e_1 ight)$	C
qe_1212	$(ar{q}_1\gamma_\mu q_2)(ar{e}_1\gamma^\mu e_2)$	C
qe_1213	$(ar{q}_1\gamma_\mu q_2)(ar{e}_1\gamma^\mu e_3)$	C
qe_1221	$(ar{q}_1\gamma_\mu q_2)(ar{e}_2\gamma^\mu e_1)$	C
qe_1222	$(ar{q}_1\gamma_\mu q_2)(ar{e}_2\gamma^\mu e_2)$	C
qe_1223	$(\bar{q}_1\gamma_\mu q_2)(\bar{e}_2\gamma^\mu e_3)$	C
qe_1231	$(\bar{q}_1\gamma_\mu q_2)(\bar{e}_3\gamma^\mu e_1)$	C
qe_1232	$(ar{q}_1\gamma_\mu q_2)(ar{e}_3\gamma^\mu e_2)$	C C
qe_1233 qe_1311	$egin{aligned} (ar{q}_{1}\gamma_{\mu}q_{2})(ar{e}_{3}\gamma^{\mu}e_{3}) \ (ar{q}_{1}\gamma_{\mu}q_{3})(ar{e}_{1}\gamma^{\mu}e_{1}) \end{aligned}$	C
qe_1311 qe_1312	$(q_1\gamma_\mu q_3) \left(ar{e}_1\gamma^\mu e_1 ight) \ \left(ar{q}_1\gamma_\mu q_3 ight) \left(ar{e}_1\gamma^\mu e_2 ight)$	C
qe_1313	$(ar{q}_1\gamma_\mu q_3) (ar{e}_1\gamma^\mu e_2) \ (ar{q}_1\gamma_\mu q_3) (ar{e}_1\gamma^\mu e_3)$	$\overset{\circ}{\mathrm{C}}$
qe_1313 qe_1321	$(ar{q}_1\gamma_\mu q_3) (ar{e}_1\gamma^\mu e_3) \ (ar{q}_1\gamma_\mu q_3) (ar{e}_2\gamma^\mu e_1)$	C
qe_1322	$(ar{q}_1\gamma_\mu q_3) (ar{e}_2\gamma^\mu e_1) \ (ar{q}_1\gamma_\mu q_3) (ar{e}_2\gamma^\mu e_2)$	$\overset{\circ}{\mathrm{C}}$
qe_1323	$(ar{q}_1\gamma_\mu q_3)(ar{e}_2\gamma^\mu e_3) \ (ar{q}_1\gamma_\mu q_3)(ar{e}_2\gamma^\mu e_3)$	$\overset{\circ}{\mathrm{C}}$
qe_1331	$(\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_3\gamma^{\mu}e_1)$	$\dot{ ext{C}}$
	(11 1/2 10) ( 0 1 1)	

WC name	Operator	Type
qe_1332	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{e}_3\gamma^{\mu}e_2 ight)$	C
qe_1333	$(ar{q}_1\gamma_\mu q_3)(ar{e}_3\gamma^\mu e_3)$	$^{\mathrm{C}}$
qe_2211	$(ar{q}_2\gamma_\mu q_2)(ar{e}_1\gamma^\mu e_1)$	R
qe_2212	$(ar{q}_2\gamma_\mu q_2)(ar{e}_1\gamma^\mu e_2)$	$^{\mathrm{C}}$
qe_2213	$(ar{q}_2\gamma_\mu q_2)(ar{e}_1\gamma^\mu e_3)$	$^{\mathrm{C}}$
qe_2222	$(ar{q}_2\gamma_\mu q_2)(ar{e}_2\gamma^\mu e_2)$	R
qe_2223	$(ar{q}_2\gamma_\mu q_2)(ar{e}_2\gamma^\mu e_3)$	$\mathbf{C}$
qe_2233	$(ar{q}_2\gamma_\mu q_2)(ar{e}_3\gamma^\mu e_3)$	R
qe_2311	$(ar{q}_2\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_1)$	$\mathbf{C}$
qe_2312	$(ar{q}_2\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_2)$	$\mathbf{C}$
qe_2313	$(ar q_2\gamma_\mu q_3)(ar e_1\gamma^\mu e_3)$	$\mathbf{C}$
qe_2321	$(ar q_2\gamma_\mu q_3)(ar e_2\gamma^\mu e_1)$	$\mathbf{C}$
qe_2322	$(ar{q}_2\gamma_\mu q_3)(ar{e}_2\gamma^\mu e_2)$	$\mathbf{C}$
qe_2323	$(ar{q}_2\gamma_\mu q_3)(ar{e}_2\gamma^\mu e_3)$	$\mathbf{C}$
qe_2331	$(ar{q}_2\gamma_\mu q_3)(ar{e}_3\gamma^\mu e_1)$	$\mathbf{C}$
qe_2332	$(ar{q}_2\gamma_\mu q_3)(ar{e}_3\gamma^\mu e_2)$	$\mathbf{C}$
qe_2333	$(ar{q}_2\gamma_\mu q_3)(ar{e}_3\gamma^\mu e_3)$	$\mathbf{C}$
qe_3311	$(ar{q}_3\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_1)$	R
qe_3312	$(ar{q}_3\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_2)$	$^{\mathrm{C}}$
qe_3313	$(ar{q}_3\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_3)$	$^{\mathrm{C}}$
qe_3322	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	R
qe_3323	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
qe_3333	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_3\gamma^{\mu}e_3 ight)$	R
qu1_1111	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	R
qu1_1112	$\left(\bar{q}_1\gamma_{\mu}q_1\right)\left(\bar{u}_1\gamma^{\mu}u_2\right)$	$\mathbf{C}$
qu1_1113	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_1122	$\left(\bar{q}_1\gamma_{\mu}q_1\right)\left(\bar{u}_2\gamma^{\mu}u_2\right)$	R
qu1_1123	$\left(\bar{q}_1\gamma_{\mu}q_1\right)\left(\bar{u}_2\gamma^{\mu}u_3\right)$	$\mathbf{C}$
qu1_1133	$\left(\bar{q}_1\gamma_{\mu}q_1\right)\left(\bar{u}_3\gamma^{\mu}u_3\right)$	R
qu1_1211	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	$\mathbf{C}$
qu1_1212	$(\bar{q}_1\gamma_\mu q_2)(\bar{u}_1\gamma^\mu u_2)$	$^{\mathrm{C}}$
qu1_1213	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_1221	$(\bar{q}_1\gamma_\mu q_2)(\bar{u}_2\gamma^\mu u_1)$	$^{\mathrm{C}}$
qu1_1222	$(\bar{q}_1\gamma_\mu q_2)(\bar{u}_2\gamma^\mu u_2)$	$^{\mathrm{C}}$
qu1_1223	$(\bar{q}_1\gamma_\mu q_2)(\bar{u}_2\gamma^\mu u_3)$	$^{\mathrm{C}}$
qu1_1231	$(ar{q}_1\gamma_\mu q_2)(ar{u}_3\gamma^\mu u_1)$	$^{\mathrm{C}}$
qu1_1232	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
qu1_1233	$(\bar{q}_1\gamma_\mu q_2)(\bar{u}_3\gamma^\mu u_3)$	$^{\mathrm{C}}$
qu1_1311	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	C
qu1_1312	$(ar{q}_1\gamma_\mu q_3)(ar{u}_1\gamma^\mu u_2)$	$^{\mathrm{C}}$
qu1_1313	$(\bar{q}_1\gamma_\mu q_3)(\bar{u}_1\gamma^\mu u_3)$	C
qu1_1321	$(\bar{q}_1\gamma_\mu q_3)(\bar{u}_2\gamma^\mu u_1)$	C
qu1_1322	$(ar{q}_1\gamma_\mu q_3)(ar{u}_2\gamma^\mu u_2)$	$\stackrel{ ext{C}}{ ilde{\sim}}$
qu1_1323	$(\bar{q}_1\gamma_\mu q_3)(\bar{u}_2\gamma^\mu u_3)$	$^{\mathrm{C}}$

WC name	Operator	Type
qu1_1331	$(\bar{q}_1\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_1)$	С
qu1_1332	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	$\mathbf{C}$
qu1_1333	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_2211	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	$\mathbf{R}$
qu1_2212	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	$\mathbf{C}$
qu1_2213	$\left(ar{q}_2\gamma_\mu q_2 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$\mathbf{C}$
qu1_2222	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$\mathbf{R}$
qu1_2223	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_2233	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$\mathbf{R}$
qu1_2311	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	$\mathbf{C}$
qu1_2312	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	$\mathbf{C}$
qu1_2313	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_2321	$\left(ar{q}_2\gamma_\mu q_3 ight)\left(ar{u}_2\gamma^\mu u_1 ight)$	$\mathbf{C}$
qu1_2322	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$\mathbf{C}$
qu1_2323	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_2331	$(ar{q}_2\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_1)$	$\mathbf{C}$
qu1_2332	$(ar{q}_2\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_2)$	$\mathbf{C}$
qu1_2333	$(ar{q}_2\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_3)$	$\mathbf{C}$
qu1_3311	$(ar{q}_3\gamma_\mu q_3)(ar{u}_1\gamma^\mu u_1)$	R
qu1_3312	$(ar{q}_3\gamma_\mu q_3)(ar{u}_1\gamma^\mu u_2)$	$\mathbf{C}$
qu1_3313	$(ar{q}_3\gamma_\mu q_3)(ar{u}_1\gamma^\mu u_3)$	$\mathbf{C}$
qu1_3322	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$\mathbf{R}$
qu1_3323	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_3333	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$\mathbf{R}$
qd1_1111	$(ar{q}_1\gamma_\mu q_1)\left(ar{d}_1\gamma^\mu d_1 ight)$	$\mathbf{R}$
qd1_1112	$(ar{q}_1\gamma_{\mu}q_1)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
qd1_1113	$(ar{q}_1\gamma_\mu q_1) \left(ar{d}_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
qd1_1122	$(ar{q}_1\gamma_{\mu}q_1)ig(ar{d}_2\gamma^{\mu}d_2ig)$	$\mathbf{R}$
qd1_1123	$(ar{q}_1\gamma_\mu q_1)(ar{d}_2\gamma^\mu d_3)$	$\mathbf{C}$
qd1_1133	$(ar{q}_1\gamma_\mu q_1) (ar{d}_3\gamma^\mu d_3)$	R
qd1_1211	$(ar{q}_1\gamma_\mu q_2) \left(ar{d}_1\gamma^\mu d_1 ight)$	$\mathbf{C}$
qd1_1212	$(ar{q}_1\gamma_{\mu}q_2) \left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
qd1_1213	$(ar{q}_1\gamma_{\mu}q_2) \left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\dot{\mathbf{C}}$
qd1_1221	$(ar{q}_1\gamma_{\mu}q_2)$ $(ar{d}_2\gamma^{\mu}d_1)$	Č
qd1_1222	$egin{array}{l} (ar{q}_1\gamma_\mu q_2) \left(ar{d}_2\gamma^\mu d_2 ight) \ \end{array}$	C
qd1_1223	$egin{array}{l} (q_1)^{\mu}q_2) & (\overline{q}_1\gamma_{\mu}q_2) & (\overline{d}_2\gamma^{\mu}d_3) \end{array}$	C
qd1_1231	$egin{array}{l} (q_1)_{\mu q_2} (u_2) & u_3 \ (ar{q}_1 \gamma_{\mu} q_2) & (ar{d}_3 \gamma^{\mu} d_1) \end{array}$	C
qd1_1231 qd1_1232	$egin{array}{c} (q_1\gamma_\mu q_2) & (a_3\gamma^- a_1) \ (ar q_1\gamma_\mu q_2) & (ar d_3\gamma^\mu d_2) \end{array}$	C
	$(q_1\gamma_\mu q_2)(a_3\gamma^\mu a_2)$	C
qd1_1233	$(\bar{q}_1\gamma_\mu q_2)(\bar{d}_3\gamma^\mu d_3)$	
qd1_1311	$(\bar{q}_1\gamma_\mu q_3) (\bar{d}_1\gamma^\mu d_1)$	С
qd1_1312	$(\bar{q}_1\gamma_\mu q_3) \left(\bar{d}_1\gamma^\mu d_2\right)$	С
qd1_1313	$(\bar{q}_1\gamma_\mu q_3) \left(\bar{d}_1\gamma^\mu d_3\right)$	С
qd1_1321	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	С

WC name	Operator	Type
qd1_1322	$(ar{q}_1\gamma_\mu q_3)\left(ar{d}_2\gamma^\mu d_2 ight)$	C
qd1_1323	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
qd1_1331	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	С
qd1_1332	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	С
qd1_1333	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	С
qd1_2211	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(d_1\gamma^{\mu}d_1 ight)$	R
qd1_2212	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	С
qd1_2213	$(ar{q}_2\gamma_{\mu}q_2)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	С
qd1_2222	$(ar{q}_2\gamma_{\mu}q_2)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
qd1_2223	$(ar{q}_2\gamma_{\mu}q_2)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	С
qd1_2233	$(ar{q}_2\gamma_\mu q_2)ig(ar{d}_3\gamma^\mu d_3ig)$	R
qd1_2311	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_1\gamma^\mu d_1 ight)$	С
qd1_2312	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	С
qd1_2313	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
qd1_2321	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
qd1_2322	$(ar{q}_2\gamma_{\mu}q_3)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
qd1_2323	$(ar{q}_2\gamma_{\mu}q_3)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
qd1_2331	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
qd1_2332	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
qd1_2333	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
qd1_3311	$(ar{q}_3\gamma_{\mu}q_3)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
qd1_3312	$(ar{q}_3\gamma_{\mu}q_3)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
qd1_3313	$(ar{q}_3\gamma_{\mu}q_3)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
qd1_3322	$(ar{q}_3\gamma_{\mu}q_3)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	${ m R}$
qd1_3323	$(ar{q}_3\gamma_{\mu}q_3)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
qd1_3333	$(ar{q}_3\gamma_\mu q_3)(ar{d}_3\gamma^\mu d_3)$	R
qu8_1111	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{u}_1\gamma^{\mu}T^Au_1 ight)$	R
qu8_1112	$\left( ar{q}_1 \gamma_\mu T^A q_1 \right) \left( ar{u}_1 \gamma^\mu T^A u_2 \right)$	C
qu8_1113	$\left(\bar{q}_1\gamma_{\mu}T^Aq_1\right)\left(\bar{u}_1\gamma^{\mu}T^Au_3\right)$	C
qu8_1122	$\left( ar{q}_1 \gamma_\mu T^A q_1 \right) \left( ar{u}_2 \gamma^\mu T^A u_2 \right)$	R
qu8_1123	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{u}_2\gamma^\mu T^Au_3 ight)$	С
qu8_1133	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{u}_3\gamma^\mu T^Au_3 ight)$	R
qu8_1211	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_1\gamma^{\mu}T^Au_1 ight)$	C C
qu8_1212	$egin{aligned} \left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_1\gamma^\mu T^Au_2 ight) \ \left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_1\gamma^\mu T^Au_3 ight) \end{aligned}$	C
qu8_1213 qu8_1221	$egin{pmatrix} \left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_1\gamma^\mu T^Au_3 ight) \ \left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_2\gamma^\mu T^Au_1 ight) \end{pmatrix}$	C
qu8_1221 qu8_1222	$egin{pmatrix} (q_1\gamma_\mu 1 & q_2) & (u_2\gamma^\mu 1 & u_1) \ (ar q_1\gamma_\mu T^A q_2) & (ar u_2\gamma^\mu T^A u_2) \end{pmatrix}$	C
qu8_1222 qu8_1223	$egin{pmatrix} (q_1\gamma_\mu _1 & q_2) & (u_2\gamma_1 & u_2) \ (ar q_1\gamma_\mu _1^Aq_2) & (ar u_2\gamma_\mu _1^Au_3) \end{pmatrix}$	C
qu8_1231	$egin{pmatrix} (q_1/\mu^1 & q_2) & (u_2/1 & u_3) \ (ar{q}_1\gamma_\mu T^A q_2) & (ar{u}_3\gamma^\mu T^A u_1) \end{pmatrix}$	C
qu8_1232	$egin{pmatrix} (q_1/\mu^1 & q_2) & (u_3/\mu^1 & u_1) \ (ar q_1\gamma_\mu T^A q_2) & (ar u_3\gamma^\mu T^A u_2) \end{pmatrix}$	$\overset{\circ}{\mathrm{C}}$
qu8_1233	$egin{pmatrix} (q_1/\mu^1 & q_2) & (u_3/\mu^1 & u_2) \ (ar q_1\gamma_\mu T^A q_2) & (ar u_3\gamma^\mu T^A u_3) \end{pmatrix}$	Č
qu8_1311	$egin{pmatrix} (q_1)_\mu \Gamma^A q_2 \end{pmatrix} ig(ar{a}_1 \gamma_\mu \Gamma^A q_3 ig) ig(ar{u}_1 \gamma^\mu \Gamma^A u_1 ig)$	$\overset{\circ}{\mathrm{C}}$
qu8_1312	$egin{pmatrix} (ar{q}_1\gamma_\mu T^Aq_3) & (ar{u}_1\gamma^\mu T^Au_2) \ \end{pmatrix}$	$\overset{\circ}{\mathrm{C}}$
	(11 1 10) ("11 "2)	=

WC name	Operator	Type
qu8_1313	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_3 ight)$	С
qu8_1321	$(\bar{q}_1\gamma_\mu T^Aq_3)~(\bar{u}_2\gamma^\mu T^Au_1)$	$\mathbf{C}$
qu8_1322	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_2 ight)$	$\mathbf{C}$
qu8_1323	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_1331	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_1 ight)$	$^{\mathrm{C}}$
qu8_1332	$(ar{q}_1\gamma_\mu T^Aq_3)~(ar{u}_3\gamma^\mu T^Au_2)$	$\mathbf{C}$
qu8_1333	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_3 ight)$	$\mathbf{C}$
qu8_2211	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_1\gamma^{\mu}T^Au_1 ight)$	R
qu8_2212	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_1\gamma^{\mu}T^Au_2 ight)$	$\mathbf{C}$
qu8_2213	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_1\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_2222	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_2\gamma^{\mu}T^Au_2 ight)$	R
qu8_2223	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_2\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_2233	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_3\gamma^{\mu}T^Au_3 ight)$	R
qu8_2311	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_1\gamma^\mu T^Au_1 ight)$	$^{\mathrm{C}}$
qu8_2312	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_2 ight)$	$\mathbf{C}$
qu8_2313	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_3 ight)$	$\mathbf{C}$
qu8_2321	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_2\gamma^\mu T^Au_1 ight)$	$^{\mathrm{C}}$
qu8_2322	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_2 ight)$	$^{\mathrm{C}}$
qu8_2323	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_2331	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_1 ight)$	$^{\mathrm{C}}$
qu8_2332	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_2 ight)$	$^{\mathrm{C}}$
qu8_2333	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_3 ight)$	$\mathbf{C}$
qu8_3311	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_1 ight)$	R
qu8_3312	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_2 ight)$	$^{\mathrm{C}}$
qu8_3313	$\left( ar{q}_3 \gamma_\mu T^A q_3 \right) \left( ar{u}_1 \gamma^\mu T^A u_3 \right)$	$\mathbf{C}$
qu8_3322	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_2 ight)$	R
qu8_3323	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_3 ight)$	$\mathbf{C}$
qu8_3333	$\left( ar{q}_{3}\gamma_{\mu}T^{A}q_{3} ight) \left( ar{u}_{3}\gamma^{\mu}T^{A}u_{3} ight)$	R
qd8_1111	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	R
qd8_1112	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(d_1\gamma^{\mu}T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_1113	$(ar{q}_1\gamma_\mu T^Aq_1)~(ar{d}_1\gamma^\mu T^Ad_3)$	$^{\mathrm{C}}$
qd8_1122	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	$\mathbf{R}$
qd8_1123	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{d}_2\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_1133	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_3 ight)$	${ m R}$
qd8_1211	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	$^{\mathrm{C}}$
qd8_1212	$\left\langle ar{q}_{1}\gamma_{\mu}T^{A}q_{2} ight angle \left\langle ar{d}_{1}\gamma^{\mu}T^{A}d_{2} ight angle$	$\mathbf{C}$
qd8_1213	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{d}_1\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_1221	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{d}_2\gamma^\mu T^Ad_1 ight)$	$^{\mathrm{C}}$
qd8_1222	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	$\mathbf{C}$
qd8_1223	$ig(ar{q}_1\gamma_\mu T^Aq_2ig)ig(ar{d}_2\gamma^\mu T^Ad_3ig)$	$^{\mathrm{C}}$
qd8_1231	$egin{array}{l} (q_1)_{\mu 1}^{\mu 1} q_2 \end{pmatrix} (q_2)_{\mu 2}^{\mu 2} & = 0 \ (ar{q}_1 \gamma_{\mu} T^A q_2) & (ar{d}_3 \gamma^{\mu} T^A d_1) \end{array}$	$\overset{\circ}{\mathrm{C}}$
qd8_1232	$egin{array}{l} (ar{q}_1)_\mu T^\mu q_2 \end{pmatrix} (ar{d}_3 \gamma^\mu T^A d_2) \ (ar{d}_3 \gamma^\mu T^A d_2) \end{array}$	$\overset{\circ}{\mathrm{C}}$
qd8_1233	$egin{array}{l} (q_1)_{\mu 1} & q_2) & (a_3)_1 & a_2) \ (ar{q}_1 \gamma_{\mu} T^A q_2) & (ar{d}_3 \gamma^{\mu} T^A d_3) \end{array}$	$\overset{\circ}{\mathrm{C}}$
400_1200	$(41)^{\mu}$ $(42)$ $(43)^{\mu}$ $(43)^{\mu}$	C

WC name	Operator	Type
qd8_1311	$(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_1)$	$\overline{C}$
qd8_1312	$\left( ar{q}_1 \gamma_\mu T^A q_3 \right) \left( ar{d}_1 \gamma^\mu T^A d_2 \right)$	$\mathbf{C}$
qd8_1313	$\left(ar{q}_1\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_3 ight)$	$\mathbf{C}$
qd8_1321	$\left(\bar{q}_1\gamma_\mu T^Aq_3\right)\left(\bar{d}_2\gamma^\mu T^Ad_1\right)$	$\mathbf{C}$
qd8_1322	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	$\mathbf{C}$
qd8_1323	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{C}$
qd8_1331	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_1 ight)$	$\mathbf{C}$
qd8_1332	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_2 ight)$	$\mathbf{C}$
qd8_1333	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{C}$
qd8_2211	$(\bar{q}_2 \gamma_{\mu} T^A q_2) (d_1 \gamma^{\mu} T^A d_1)$	R
qd8_2212	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(d_1\gamma^{\mu}T^Ad_2 ight)$	$\mathbf{C}$
qd8_2213	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{C}$
qd8_2222	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	R
qd8_2223	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_2233	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{R}$
qd8_2311	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	$\mathbf{C}$
qd8_2312	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_2313	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_3 ight)$	$\mathbf{C}$
qd8_2321	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_1 ight)$	$^{\mathrm{C}}$
qd8_2322	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	$\mathbf{C}$
qd8_2323	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{C}$
qd8_2331	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_1 ight)$	$^{\mathrm{C}}$
qd8_2332	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(d_3\gamma^{\mu}T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_2333	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_3\gamma^\mu T^Ad_3 ight)$	$\mathbf{C}$
qd8_3311	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	R
qd8_3312	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_3313	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{C}$
qd8_3322	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	R
qd8_3323	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{C}$
qd8_3333	$\left(ar{q}_{3}\gamma_{\mu}T^{A}q_{3} ight)\left(ar{d}_{3}\gamma^{\mu}T^{A}d_{3} ight)$	R
ledq_1111	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_1q_1 ight)$	$\mathbf{C}$
ledq_1112	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_1q_2 ight)$	$\mathbf{C}$
ledq_1113	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_1q_3 ight)$	$\mathbf{C}$
ledq_1121	$\left(ar{\ell}_1 e_1 ight)\left(ar{d}_2 q_1 ight)$	$\mathbf{C}$
ledq_1122	$\left(ar{\ell}_1 e_1 ight)\left(ar{d}_2 q_2 ight)$	$^{\mathrm{C}}$
ledq_1123	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_2q_3 ight)$	$^{\mathrm{C}}$
ledq_1131	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_1 ight)$	$\mathbf{C}$
ledq_1132	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_2 ight)$	$\mathbf{C}$
ledq_1133	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_3 ight)$	$\mathbf{C}$
ledq_1211	$ig(ar{\ell}_1 e_2ig)ig(ar{d}_1 q_1ig)$	$\mathbf{C}$
ledq_1212	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_1q_2 ight)$	$\mathbf{C}$
ledq_1213	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_1q_3 ight)$	$\mathbf{C}$

WC name	Operator	Type
ledq_1221	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_2q_1 ight)$	$\overline{C}$
ledq_1222	$ig(ar{\ell}_1 e_2ig) ig(ar{d}_2 q_2ig)$	$\mathbf{C}$
ledq_1223	$ig(ar{\ell}_1 e_2ig)ig(ar{d}_2 q_3ig)$	$\mathbf{C}$
ledq_1231	$ig(ar{\ell}_1 e_2ig)ig(ar{d}_3 q_1ig)$	$\mathbf{C}$
ledq_1232	$ig(ar{\ell}_1e_2ig)ig(ar{d}_3q_2ig)$	$\mathbf{C}$
ledq_1233	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_3q_3 ight)$	$\mathbf{C}$
ledq_1311	$ig(ar{\ell}_1e_3ig)ig(ar{d}_1q_1ig)$	$\mathbf{C}$
ledq_1312	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_1q_2 ight)$	$\mathbf{C}$
ledq_1313	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_1q_3 ight)$	$\mathbf{C}$
ledq_1321	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_2q_1 ight)$	$\mathbf{C}$
ledq_1322	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_2q_2 ight)$	$\mathbf{C}$
ledq_1323	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_2q_3 ight)$	$\mathbf{C}$
ledq_1331	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_3q_1 ight)$	$\mathbf{C}$
ledq_1332	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_3q_2 ight)$	$\mathbf{C}$
ledq_1333	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_3q_3 ight)$	$\mathbf{C}$
ledq_2111	$\left(ar{\ell}_2 e_1 ight)\left(ar{d}_1 q_1 ight)$	$\mathbf{C}$
ledq_2112	$\left(ar{\ell}_2 e_1 ight)\left(ar{d}_1 q_2 ight)$	$\mathbf{C}$
ledq_2113	$\left(\ell_{2}e_{1} ight)\left(d_{1}q_{3} ight)$	$\mathbf{C}$
ledq_2121	$\left(ar{\ell}_2 e_1 ight)\left(ar{d}_2 q_1 ight)$	$\mathbf{C}$
ledq_2122	$\left(ar{\ell}_{2}e_{1} ight)\left(ar{d}_{2}q_{2} ight)$	$\mathbf{C}$
ledq_2123	$\left(ar{\ell}_2 e_1 ight)\left(ar{d}_2 q_3 ight)$	$\mathbf{C}$
ledq_2131	$\left(ar{\ell}_{2}e_{1} ight)\left(ar{d}_{3}q_{1} ight)$	$\mathbf{C}$
ledq_2132	$\left(ar{\ell}_2 e_1 ight)\left(ar{d}_3 q_2 ight)$	$\mathbf{C}$
ledq_2133	$\left(\ell_{2}e_{1} ight)\left(d_{3}q_{3} ight)$	$\mathbf{C}$
ledq_2211	$\left(ar{\ell}_2 e_2 ight)\left(ar{d}_1 q_1 ight)$	$\mathbf{C}$
ledq_2212	$\left(ar{\ell}_2 e_2 ight)\left(ar{d}_1 q_2 ight)$	$\mathbf{C}$
ledq_2213	$\left( \underline{\ell}_{2}e_{2}\right) \left( \underline{d}_{1}q_{3} ight)$	$^{\mathrm{C}}$
ledq_2221	$\left(ar{\ell}_2 e_2 ight)\left(ar{d}_2 q_1 ight)$	$\mathbf{C}$
ledq_2222	$\left(ar{\ell}_2 e_2 ight)\left(ar{d}_2 q_2 ight)$	$\mathbf{C}$
ledq_2223	$\left(ar{\ell}_2 e_2 ight)\left(ar{d}_2 q_3 ight)$	$^{\mathrm{C}}$
ledq_2231	$\left( \underline{\ell}_{2}e_{2} ight) \left( \underline{d}_{3}q_{1} ight)$	$\mathbf{C}$
ledq_2232	$\left(ar{\ell}_{2}e_{2} ight)\left(ar{d}_{3}q_{2} ight)$	$^{\mathrm{C}}$
ledq_2233	$\left(ar{\ell}_{2}e_{2} ight)\left(ar{d}_{3}q_{3} ight)$	$^{\mathrm{C}}$
ledq_2311	$\left(ar{\ell}_2 e_3 ight) \left(ar{d}_1 q_1 ight)$	$\mathbf{C}$
ledq_2312	$\left(ar{\ell}_2 e_3 ight)\left(ar{d}_1 q_2 ight)$	С
ledq_2313	$\left(ar{\ell}_2 e_3 ight) \left(ar{d}_1 q_3 ight)$	$\mathbf{C}$
ledq_2321	$\left(ar{\ell}_2 e_3 ight) \left(ar{d}_2 q_1 ight)$	$\mathbf{C}$
ledq_2322	$\left(ar{\ell}_2 e_3 ight) \left(ar{d}_2 q_2 ight)$	$\mathbf{C}$
ledq_2323	$\left(ar{\ell}_2 e_3 ight) \left(ar{d}_2 q_3 ight)$	$^{\mathrm{C}}$
ledq_2331	$\left(ar{\ell}_2 e_3 ight) \left(ar{d}_3 q_1 ight)$	$^{\mathrm{C}}$
ledq_2332	$\left(ar{\ell}_{2}e_{3} ight)\left(ar{d}_{3}q_{2} ight)$	$^{\mathrm{C}}$
ledq_2333	$\left(ar{\ell}_2 e_3 ight)\left(ar{d}_3 q_3 ight)$	$^{\mathrm{C}}$

WC name	Operator	Type
ledq_3111	$\left(ar{\ell}_3e_1 ight)\left(ar{d}_1q_1 ight)$	$\mathbf{C}$
ledq_3112	$\left(\ell_3e_1 ight)\left(d_1q_2 ight)$	$^{\mathrm{C}}$
ledq_3113	$\left(\ell_{3}e_{1} ight)\left(d_{1}q_{3} ight)$	$\mathbf{C}$
ledq_3121	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_2 q_1 ight)$	$^{\mathrm{C}}$
ledq_3122	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_2 q_2 ight)$	$\mathbf{C}$
ledq_3123	$\left(ar{\ell}_3e_1 ight)\left(ar{d}_2q_3 ight)$	$\mathbf{C}$
ledq_3131	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_3 q_1 ight)$	C
ledq_3132	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_3 q_2 ight)$	$^{\mathrm{C}}$
ledq_3133	$\left(ar{\ell}_3e_1 ight)\left(ar{d}_3q_3 ight)$	C
ledq_3211	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_1 q_1 ight)$	$^{\mathrm{C}}$
ledq_3212	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_1 q_2 ight)$	$^{\mathrm{C}}$
ledq_3213	$\left(ar{\ell}_3e_2 ight)\left(ar{d}_1q_3 ight)$	$^{\mathrm{C}}$
ledq_3221	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_2 q_1 ight)$	$^{\mathrm{C}}$
ledq_3222	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_2 q_2 ight)$	$^{\mathrm{C}}$
ledq_3223	$\left(ar{\ell}_3e_2 ight)\left(ar{d}_2q_3 ight)$	$^{\mathrm{C}}$
ledq_3231	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_3 q_1 ight)$	С
ledq_3232	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_3 q_2 ight)$	С
ledq_3233	$\left( ar{\ell}_{3}e_{2} ight) \left( ar{d}_{3}q_{3} ight)$	$^{\mathrm{C}}$
ledq_3311	$\left(ar{\ell}_3e_3 ight)\left(ar{d}_1q_1 ight)$	$^{\mathrm{C}}$
ledq_3312	$\left(ar{\ell}_3 e_3 ight)\left(ar{d}_1 q_2 ight)$	$\mathbf{C}$
ledq_3313	$\left(ar{\ell}_3 e_3 ight)\left(ar{d}_1 q_3 ight)$	$\mathbf{C}$
ledq_3321	$\left(ar{\ell}_3e_3 ight)\left(ar{d}_2q_1 ight)$	$^{\mathrm{C}}$
ledq_3322	$\left(ar{\ell}_3e_3 ight)\left(ar{d}_2q_2 ight)$	$^{\mathrm{C}}$
ledq_3323	$\left(ar{\ell}_3 e_3 ight)\left(ar{d}_2 q_3 ight)$	$\mathbf{C}$
ledq_3331	$\left( ar{\ell}_{3}e_{3} ight) \left( ar{d}_{3}q_{1} ight)$	$^{\mathrm{C}}$
ledq_3332	$\left(ar{\ell}_3 e_3 ight)\left(ar{d}_3 q_2 ight)$	$\mathbf{C}$
ledq_3333	$\left(ar{\ell}_3e_3 ight)\left(ar{d}_3q_3 ight)$	C
quqd1_1111	$(ar{q}_1u_1)\epsilon_{jk}(ar{q}_1d_1)$	C
quqd1_1112	$(ar{q}_1u_1)\epsilon_{jk}(ar{q}_1d_2)$	C
quqd1_1113	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_1d_3)$	C
quqd1_1121	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_2d_1)$	C
quqd1_1122	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_2d_2)$	C
quqd1_1123	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_2d_3)$	C C
quqd1_1131 quqd1_1132	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_3 d_1)$	C
quqd1_1133	$ \begin{array}{l} (\bar{q}_1 u_1)  \epsilon_{jk}  (\bar{q}_3 d_2) \\ (\bar{q}_1 u_1)  \epsilon_{jk}  (\bar{q}_3 d_3) \end{array} $	C
quqd1_1211	$(q_1u_1)\epsilon_{jk}(q_3u_3) \ (\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_1d_1)$	$\stackrel{ ext{C}}{ ext{C}}$
quqd1_1211 quqd1_1212	$(q_1u_2)\epsilon_{jk}(q_1u_1) \ (\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_1d_2)$	$\stackrel{ ext{C}}{ ext{C}}$
quqd1_1212	$(q_1u_2)\epsilon_{jk}(q_1u_2)  (\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_1d_3)$	$\overset{\circ}{\mathrm{C}}$
quqd1_1221	$(q_1u_2)\epsilon_{jk}(q_1u_3) \ (\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_2d_1)$	Č
quqd1_1222	$(\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_2u_1) \ (\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_2d_2)$	$\overset{\circ}{\mathrm{C}}$
quqd1_1223	$(\bar{q}_1u_2)$ $\epsilon_{jk}$ $(\bar{q}_2d_3)$	Č
quqd1_1231	$(ar{q}_1u_2) \epsilon_{jk} (ar{q}_3d_1)$	$^{\mathrm{C}}$
	\= / J \ <del>*</del> ~ = /	

WC name	Operator	Type
quqd1_1232	$\left(ar{q}_1 u_2\right) \epsilon_{jk} \left(ar{q}_3 d_2\right)$	$\mathbf{C}$
quqd1_1233	$(\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_3d_3)$	$\mathbf{C}$
quqd1_1311	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_1d_1)$	$\mathbf{C}$
quqd1_1312	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_1d_2)$	$^{\mathrm{C}}$
quqd1_1313	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_1d_3)$	$^{\mathrm{C}}$
quqd1_1321	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_2d_1)$	$^{\mathrm{C}}$
quqd1_1322	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_2d_2)$	$^{\mathrm{C}}$
quqd1_1323	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_2d_3)$	$^{\mathrm{C}}$
quqd1_1331	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_3d_1)$	$^{\mathrm{C}}$
quqd1_1332	$\left( ar{q}_{1}u_{3} ight) \epsilon_{jk}\left( ar{q}_{3}d_{2} ight)$	$\mathbf{C}$
quqd1_1333	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_3d_3)$	$\mathbf{C}$
quqd1_2111	$(\bar{q}_2u_1)\epsilon_{jk}(\bar{q}_1d_1)$	$\mathbf{C}$
quqd1_2112	$(ar{q}_2 u_1) \epsilon_{jk} (ar{q}_1 d_2)$	$\mathbf{C}$
quqd1_2113	$(ar{q}_2 u_1)  \epsilon_{jk}  (ar{q}_1 d_3)$	$\mathbf{C}$
quqd1_2121	$(ar{q}_2 u_1)  \epsilon_{jk}  (ar{q}_2 d_1)$	$\mathbf{C}$
quqd1_2122	$(\bar{q}_2u_1)\epsilon_{jk}(\bar{q}_2d_2)$	$\mathbf{C}$
quqd1_2123	$(\bar{q}_2u_1)\epsilon_{jk}(\bar{q}_2d_3)$	$^{\mathrm{C}}$
quqd1_2131	$(\bar{q}_2u_1)\epsilon_{jk}(\bar{q}_3d_1)$	C
quqd1_2132	$(ar{q}_2u_1)\epsilon_{jk}(ar{q}_3d_2)$	C
quqd1_2133	$(\bar{q}_2u_1)$ $\epsilon_{jk}$ $(\bar{q}_3u_2)$ $(\bar{q}_2u_1)$ $\epsilon_{jk}$ $(\bar{q}_3d_3)$	$\dot{ ext{C}}$
quqd1_2211	$(\bar{q}_2u_2)\epsilon_{jk}(\bar{q}_1d_1)$	$\dot{ ext{C}}$
quqd1_2212	$(ar{q}_2u_2)\epsilon_{jk}(ar{q}_1u_1) \ (ar{q}_2u_2)\epsilon_{jk}(ar{q}_1d_2)$	$\overset{\circ}{\mathrm{C}}$
quqd1_2213	$(\bar{q}_2u_2)\epsilon_{jk}(\bar{q}_1u_2) \ (\bar{q}_2u_2)\epsilon_{jk}(\bar{q}_1d_3)$	$\overset{\circ}{\mathrm{C}}$
quqd1_2221	$(\bar{q}_2u_2)\epsilon_{jk}(\bar{q}_1u_3) \ (\bar{q}_2u_2)\epsilon_{jk}(\bar{q}_2d_1)$	$\overset{\circ}{\mathrm{C}}$
quqd1_2222	$(q_2u_2) \stackrel{c_{jk}}{\circ} (q_2u_1) $ $(\bar{q}_2u_2) \stackrel{c_{jk}}{\circ} (\bar{q}_2d_2)$	$\overset{\circ}{\mathrm{C}}$
quqd1_2223	$egin{array}{l} \left(q_2u_2 ight) e_{jk}\left(q_2u_2 ight) \\ \left(ar{q}_2u_2 ight) e_{jk}\left(ar{q}_2d_3 ight) \end{array}$	$\overset{\circ}{\mathrm{C}}$
quqd1_2231	$(q_2u_2)\epsilon_{jk}(q_2u_3) \ (ar q_2u_2)\epsilon_{jk}(ar q_3d_1)$	$\overset{\circ}{\mathrm{C}}$
quqd1_2232	$(q_2u_2)\epsilon_{jk}(q_3u_1) \ (ar q_2u_2)\epsilon_{jk}(ar q_3d_2)$	$\overset{\circ}{\mathrm{C}}$
quqd1_2233	$egin{array}{l} \left(q_2u_2 ight) \epsilon_{jk} \left(q_3u_2 ight) \ \left(ar{q}_2u_2 ight) \epsilon_{jk} \left(ar{q}_3d_3 ight) \end{array}$	$\overset{\circ}{\mathrm{C}}$
quqd1_2311	$egin{array}{l} \left(q_2u_3 ight)\epsilon_{jk}\left(q_3u_3 ight) \ \left(ar{q}_2u_3 ight)\epsilon_{jk}\left(ar{q}_1d_1 ight) \end{array}$	$\overset{\circ}{\mathrm{C}}$
quqd1_2312	$\left(ar{q}_2u_3 ight)\epsilon_{jk}\left(ar{q}_1u_1 ight) \ \left(ar{q}_2u_3 ight)\epsilon_{jk}\left(ar{q}_1d_2 ight)$	$\overset{\circ}{\mathrm{C}}$
quqd1_2313		$\overset{\circ}{\mathrm{C}}$
quqd1_2321	$(\bar{q}_2 u_3)  \epsilon_{jk}  (\bar{q}_1 d_3)$	$\stackrel{ ext{C}}{ ext{C}}$
quqd1_2321 quqd1_2322	$(\bar{q}_2 u_3)  \epsilon_{jk}  (\bar{q}_2 d_1)$	$\stackrel{ m C}{ m C}$
quqd1_2323	$(\bar{q}_2 u_3)  \epsilon_{jk}  (\bar{q}_2 d_2)$	$^{ m C}$
	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_2 d_3)$	
quqd1_2331	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_3 d_1)$	C C
quqd1_2332	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_3 d_2)$	C
quqd1_2333	$(\bar{q}_2u_3)\epsilon_{jk}(\bar{q}_3d_3)$	C
quqd1_3111	$(\bar{q}_3u_1)\epsilon_{jk}(\bar{q}_1d_1)$	
quqd1_3112	$(\bar{q}_3u_1)\epsilon_{jk}(\bar{q}_1d_2)$	C
quqd1_3113	$(\bar{q}_3u_1)\epsilon_{jk}(\bar{q}_1d_3)$	C
quqd1_3121	$(\bar{q}_3u_1)\epsilon_{jk}(\bar{q}_2d_1)$	C
quqd1_3122	$(\bar{q}_3u_1)\epsilon_{jk}(\bar{q}_2d_2)$	C
quqd1_3123	$\left(\bar{q}_{3}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{2}d_{3}\right)$	$^{\mathrm{C}}$

WC name	Operator	Type
quqd1_3131	$(\bar{q}_3 u_1)  \epsilon_{jk}  (\bar{q}_3 d_1)$	C
quqd1_3132	$(\bar{q}_3u_1)\epsilon_{jk}(\bar{q}_3d_2)$	$\mathbf{C}$
quqd1_3133	$(\bar{q}_3u_1)\epsilon_{jk}(\bar{q}_3d_3)$	C
quqd1_3211	$(ar{q}_3u_2)\epsilon_{jk}(ar{q}_1d_1)$	$^{\mathrm{C}}$
quqd1_3212	$\left(\bar{q}_{3}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{2}\right)$	C
quqd1_3213	$(\bar{q}_3 u_2)  \epsilon_{jk}  (\bar{q}_1 d_3)$	$^{\mathrm{C}}$
quqd1_3221	$(ar{q}_3u_2)\epsilon_{jk}(ar{q}_2d_1)$	$^{\mathrm{C}}$
quqd1_3222	$(\bar{q}_3 u_2)  \epsilon_{jk}  (\bar{q}_2 d_2)$	$^{\mathrm{C}}$
quqd1_3223	$(ar{q}_3u_2)\epsilon_{jk}(ar{q}_2d_3)$	$^{\mathrm{C}}$
quqd1_3231	$(ar{q}_3u_2)\epsilon_{jk}(ar{q}_3d_1)$	$^{\mathrm{C}}$
quqd1_3232	$(ar{q}_3u_2)\epsilon_{jk}(ar{q}_3d_2)$	$^{\mathrm{C}}$
quqd1_3233	$(\bar{q}_3u_2)\epsilon_{jk}(\bar{q}_3d_3)$	$^{\mathrm{C}}$
quqd1_3311	$(\bar{q}_3u_3)\epsilon_{jk}(\bar{q}_1d_1)$	$\mathbf{C}$
quqd1_3312	$(\bar{q}_3 u_3)  \epsilon_{jk}  (\bar{q}_1 d_2)$	$\mathbf{C}$
quqd1_3313	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{3} ight)$	С
quqd1_3321	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_2d_1)$	С
quqd1_3322	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	С
quqd1_3323	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{3} ight)$	С
quqd1_3331	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	С
quqd1_3332	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	C
quqd1_3333	$(\bar{q}_3u_3)\epsilon_{jk}(\bar{q}_3d_3)$	C
quqd8_1111	$\left(ar{q}_1 T^A u_1\right) \epsilon_{jk} \left(ar{q}_1 T^A d_1\right)$	C
quqd8_1112	$\left(ar{q}_1T^Au_1 ight)\epsilon_{jk}\left(ar{q}_1T^Ad_2 ight)$	C
quqd8_1113	$\left\langle ar{q}_1 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_1 T^A d_3 \right angle$	C
quqd8_1121	$\left\langle ar{q}_1 T^A u_1 \right\rangle \epsilon_{jk} \left\langle ar{q}_2 T^A d_1 \right\rangle$	C
quqd8_1122	$\left\langle ar{q}_1 T^A u_1 \right\rangle \epsilon_{jk} \left\langle ar{q}_2 T^A d_2 \right\rangle$	C
quqd8_1123	$\left\langle \bar{q}_{1}T^{A}u_{1}\right\rangle \epsilon_{jk}\left\langle \bar{q}_{2}T^{A}d_{3}\right\rangle$	C
quqd8_1131	$\left\langle ar{q}_1 T^A u_1 \right\rangle \epsilon_{jk} \left\langle ar{q}_3 T^A d_1 \right\rangle$	$\stackrel{ ext{C}}{\sim}$
quqd8_1132	$\left\langle ar{q}_1 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_3 T^A d_2 \right angle$	$\stackrel{ ext{C}}{\sim}$
quqd8_1133	$\left\langle ar{q}_{1}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{3} ight angle$	$\stackrel{ ext{C}}{\sim}$
quqd8_1211	$\left( ar{q}_1 T^A u_2 \right) \epsilon_{jk} \left( ar{q}_1 T^A d_1 \right)$	C
quqd8_1212	$\left(\bar{q}_1 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_2\right)$	C
quqd8_1213	$\left\langle ar{q}_1 T^A u_2 \right\rangle \epsilon_{jk} \left\langle ar{q}_1 T^A d_3 \right\rangle$	C
quqd8_1221	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{1} ight angle$	C
quqd8_1222	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{2} ight angle $	C
quqd8_1223	$\left\langle ar{q}_1 T^A u_2 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_3 \right angle$	C
quqd8_1231	$\left( ar{q}_1 T^A u_2 \right) \epsilon_{jk} \left( ar{q}_3 T^A d_1 \right)$	C
quqd8_1232	$\left( ar{q}_1 T^A u_2 \right) \epsilon_{jk} \left( ar{q}_3 T^A d_2 \right)$	C
quqd8_1233	$\left\langle ar{q}_{1}T^{A}u_{2}\right angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{3} ight angle $	C
quqd8_1311	$\left\langle ar{q}_1 T^A u_3 \right angle \epsilon_{jk} \left\langle ar{q}_1 T^A d_1 \right angle$	C
quqd8_1312	$\left\langle ar{q}_1 T^A u_3 \right angle \epsilon_{jk} \left\langle ar{q}_1 T^A d_2 \right angle$	C
quqd8_1313	$\left(ar{q}_1 T^A u_3\right) \epsilon_{jk} \left(ar{q}_1 T^A d_3\right) \left(ar{q}_1 T^A d_3\right)$	C
quqd8_1321	$egin{pmatrix} (ar{q}_1 T^A u_3)  \epsilon_{jk}  (ar{q}_2 T^A d_1) \ (ar{z}, T^A d_1) \end{pmatrix}$	C C
quqd8_1322	$\left\langle ar{q}_1 T^A u_3 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_2 \right angle$	C

WC name	Operator	Type
quqd8_1323	$\left(\bar{q}_1 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$	C
quqd8_1331	$\left(ar{q}_1 T^A u_3\right) \epsilon_{jk} \left(ar{q}_3 T^A d_1\right)$	$^{\mathrm{C}}$
quqd8_1332	$\left\langle ar{q}_{1}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{2} ight angle$	$\mathbf{C}$
quqd8_1333	$\left(ar{q}_1 T^A u_3\right) \epsilon_{jk} \left(ar{q}_3 T^A d_3\right)$	$\mathbf{C}$
quqd8_2111	$\left\langle ar{q}_{2}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{1} ight angle$	$\mathbf{C}$
quqd8_2112	$\left(ar{q}_2 T^A u_1 ight)\epsilon_{jk}\left(ar{q}_1 T^A d_2 ight)$	$\mathbf{C}$
quqd8_2113	$\left( ar{q}_2 T^A u_1 \right) \epsilon_{jk} \left( ar{q}_1 T^A d_3 \right)$	$\mathbf{C}$
quqd8_2121	$\left\langle ar{q}_{2}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{1} ight angle$	$\mathbf{C}$
quqd8_2122	$\left\langle ar{q}_{2}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{2} ight angle$	$\mathbf{C}$
quqd8_2123	$\left\langle ar{q}_2 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_3  ight angle$	$\mathbf{C}$
quqd8_2131	$\left\langle ar{q}_2 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_3 T^A d_1 \right angle$	$\mathbf{C}$
quqd8_2132	$\left(ar{q}_2 T^A u_1\right) \epsilon_{jk} \left(ar{q}_3 T^A d_2\right)$	$\mathbf{C}$
quqd8_2133	$\left(ar{q}_2 T^A u_1\right) \epsilon_{jk} \left(ar{q}_3 T^A d_3\right)$	$\mathbf{C}$
quqd8_2211	$\left( ar{q}_2 T^A u_2 \right) \epsilon_{jk} \left( ar{q}_1 T^A d_1 \right)$	$\mathbf{C}$
quqd8_2212	$\left(ar{q}_2 T^A u_2\right) \epsilon_{jk} \left(ar{q}_1 T^A d_2\right)$	$\mathbf{C}$
quqd8_2213	$\left(ar{q}_2 T^A u_2\right) \epsilon_{jk} \left(ar{q}_1 T^A d_3\right)$	$\mathbf{C}$
quqd8_2221	$\left\langle ar{q}_2 T^A u_2 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_1  ight angle$	$^{\mathrm{C}}$
quqd8_2222	$\left(ar{q}_2 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_2 ight)$	$^{\mathrm{C}}$
quqd8_2223	$\left(ar{q}_2 T^A u_2\right) \epsilon_{jk} \left(ar{q}_2 T^A d_3\right)$	$^{\mathrm{C}}$
quqd8_2231	$\left( ar{q}_2 T^A u_2 \right) \epsilon_{jk} \left( ar{q}_3 T^A d_1 \right)$	$^{\mathrm{C}}$
quqd8_2232	$\left(\bar{q}_2 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$	$^{\mathrm{C}}$
quqd8_2233	$\left( ar{q}_{2}T^{A}u_{2} ight) \epsilon_{jk}\left( ar{q}_{3}T^{A}d_{3} ight)$	$^{\mathrm{C}}$
quqd8_2311	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_1 T^A d_1\right)$	$^{\mathrm{C}}$
quqd8_2312	$\left(ar{q}_2 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_2 ight)$	$^{\mathrm{C}}$
quqd8_2313	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_1 T^A d_3\right)$	$^{\mathrm{C}}$
quqd8_2321	$\left(ar{q}_2 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_1 ight)$	$^{\mathrm{C}}$
quqd8_2322	$\left(ar{q}_2 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_2 ight)$	$^{\mathrm{C}}$
quqd8_2323	$\left( ar{q}_2 T^A u_3 \right) \epsilon_{jk} \left( ar{q}_2 T^A d_3 \right)$	$^{\mathrm{C}}$
quqd8_2331	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_3 T^A d_1\right)$	$^{\mathrm{C}}$
quqd8_2332	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_3 T^A d_2\right)$	$^{\mathrm{C}}$
quqd8_2333	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_3 T^A d_3\right)$	$^{\mathrm{C}}$
quqd8_3111	$\left(ar{q}_3 T^A u_1\right) \epsilon_{jk} \left(ar{q}_1 T^A d_1\right)$	$^{\mathrm{C}}$
quqd8_3112	$\left( ar{q}_{3}T^{A}u_{1} ight) \epsilon_{jk}\left( ar{q}_{1}T^{A}d_{2} ight)$	$\mathbf{C}$
quqd8_3113	$\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_3\right)$	$^{\mathrm{C}}$
quqd8_3121	$\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$	$^{\mathrm{C}}$
quqd8_3122	$\left( ar{q}_3 T^A u_1 \right) \epsilon_{jk} \left( ar{q}_2 T^A d_2 \right)$	$^{\mathrm{C}}$
quqd8_3123	$\left( ar{q}_{3}T^{A}u_{1} ight) \epsilon_{jk}\left( ar{q}_{2}T^{A}d_{3} ight)$	$\mathbf{C}$
quqd8_3131	$\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$	$^{\mathrm{C}}$
quqd8_3132	$\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$	$\mathbf{C}$
quqd8_3133	$\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$	$\mathbf{C}$
quqd8_3211	$\left( ar{q}_{3}T^{A}u_{2} ight) \epsilon_{jk}\left( ar{q}_{1}T^{A}d_{1} ight)$	$^{\mathrm{C}}$
quqd8_3212	$\left\langle ar{q}_3 T^A u_2 \right angle \epsilon_{jk} \left\langle ar{q}_1 T^A d_2  ight angle$	$\mathbf{C}$
quqd8_3213	$\left\langle ar{q}_{3}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{3} ight angle$	$\mathbf{C}$
quqd8_3221	$\left\langle ar{q}_{3}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{1} ight angle$	$\mathbf{C}$

WC name	Operator	Type
quqd8_3222	$\left( ar{q}_{3}T^{A}u_{2} ight) \epsilon_{jk}\left( ar{q}_{2}T^{A}d_{2} ight)$	C
quqd8_3223	$\left\langle ar{q}_3 T^A u_2 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_3 \right angle$	$^{\mathrm{C}}$
quqd8_3231	$\left(ar{q}_3 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_1 ight)$	$\mathbf{C}$
quqd8_3232	$\left(ar{q}_{3}T^{A}u_{2} ight)\epsilon_{jk}\left(ar{q}_{3}T^{A}d_{2} ight)$	$\mathbf{C}$
quqd8_3233	$\left(ar{q}_3 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_3 ight)$	$\mathbf{C}$
quqd8_3311	$\left(ar{q}_{3}T^{A}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}T^{A}d_{1} ight)$	$\mathbf{C}$
quqd8_3312	$\left(ar{q}_3 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_2 ight)$	С
quqd8_3313	$\left(ar{q}_3 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_3 ight)$	С
quqd8_3321	$\left(ar{q}_3T^Au_3 ight)\epsilon_{jk}\left(ar{q}_2T^Ad_1 ight)$	$\mathbf{C}$
quqd8_3322	$\left(ar{q}_3T^Au_3 ight)\epsilon_{jk}\left(ar{q}_2T^Ad_2 ight)$	$\mathbf{C}$
quqd8_3323	$\left(ar{q}_3T^A_{}u_3 ight)\epsilon_{jk}\left(ar{q}_2T^A_{}d_3 ight)$	C
quqd8_3331	$\left\langle ar{q}_{3}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{1} ight angle$	C
quqd8_3332	$\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$	C
quqd8_3333	$\left( ar{q}_3 T^A u_3 \right) \epsilon_{jk} \left( ar{q}_3 T^A d_3 \right)$	C
lequ1_1111	$(\ell_1 e_1) \epsilon_{jk} (\bar{q}_1 u_1)$	$^{\mathrm{C}}$
lequ1_1112	$\left( \ell_{1}e_{1}\right) \epsilon_{jk}\left( ar{q}_{1}u_{2} ight)$	$\mathbf{C}$
lequ1_1113	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_1 u_3\right)$	$\mathbf{C}$
lequ1_1121	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_2 u_1\right)$	$\mathbf{C}$
lequ1_1122	$\left( ar{\ell}_1 e_1 \right) \epsilon_{jk} \left( ar{q}_2 u_2  ight)$	С
lequ1_1123	$\left( ar{\ell}_1 e_1 \right) \epsilon_{jk} \left( ar{q}_2 u_3  ight)$	С
lequ1_1131	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_3 u_1\right)$	С
lequ1_1132	$\left( ar{\ell}_1 e_1 \right) \epsilon_{jk} \left( ar{q}_3 u_2  ight)$	$\mathbf{C}$
lequ1_1133	$\left(\underline{\ell}_1e_1 ight)\epsilon_{jk}\left(ar{q}_3u_3 ight)$	$\mathbf{C}$
lequ1_1211	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}u_{1} ight)$	$\mathbf{C}$
lequ1_1212	$\left( \ell_{1}e_{2} ight) \epsilon_{jk}\left( ar{q}_{1}u_{2} ight)$	$\mathbf{C}$
lequ1_1213	$\left(ar{\ell}_1 e_2 ight)\epsilon_{jk}\left(ar{q}_1 u_3 ight)$	$^{\mathrm{C}}$
lequ1_1221	$\left(ar{\ell}_1 e_2 ight)\epsilon_{jk}\left(ar{q}_2 u_1 ight)$	$^{\mathrm{C}}$
lequ1_1222	$\left(ar{\ell}_1 e_2 ight)\epsilon_{jk}\left(ar{q}_2 u_2 ight)$	$\mathbf{C}$
lequ1_1223	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}u_{3} ight)$	$^{\mathrm{C}}$
lequ1_1231	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}u_{1} ight)$	$^{\mathrm{C}}$
lequ1_1232	$\left(ar{\ell}_1 e_2 ight)\epsilon_{jk}\left(ar{q}_3 u_2 ight)$	$^{\mathrm{C}}$
lequ1_1233	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_3 u_3)$	$^{\mathrm{C}}$
lequ1_1311	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_1 u_1)$	$^{\mathrm{C}}$
lequ1_1312	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_1 u_2)$	$^{\mathrm{C}}$
lequ1_1313	$\left(ar{\ell}_1 e_3 ight)\epsilon_{jk}\left(ar{q}_1 u_3 ight)$	$^{\mathrm{C}}$
lequ1_1321	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_2 u_1)$	$\mathbf{C}$
lequ1_1322	$\left(ar{\ell}_1 e_3\right) \epsilon_{jk} \left(ar{q}_2 u_2 ight)$	$\mathbf{C}$
lequ1_1323	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_2 u_3)$	$\mathbf{C}$
lequ1_1331	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_1)$	$\mathbf{C}$
lequ1_1332	$(ar{\ell}_1 e_3)  \epsilon_{jk}  (ar{q}_3 u_2)$	$\mathbf{C}$
lequ1_1333	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_3)$	$\mathbf{C}$
lequ1_2111	$(ar{\ell}_2 e_1)  \epsilon_{jk}  (ar{q}_1 u_1)$	$\mathbf{C}$
lequ1_2112	$(ar{\ell}_2 e_1)  \epsilon_{jk}  (ar{q}_1 u_2)$	$\mathbf{C}$
	· · · · · · · · · · · · · · · · · · ·	

WC name	Operator	Type
lequ1_2113	$(\bar{\ell}_2 e_1)  \epsilon_{jk}  (\bar{q}_1 u_3)$	C
lequ1_2121	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_1)$	$^{\mathrm{C}}$
lequ1_2122	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_2)$	$^{\mathrm{C}}$
lequ1_2123	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_3)$	$^{\mathrm{C}}$
lequ1_2131	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_1)$	$^{\mathrm{C}}$
lequ1_2132	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_2)$	$\mathbf{C}$
lequ1_2133	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_3)$	$\mathbf{C}$
lequ1_2211	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_1 u_1)$	$\mathbf{C}$
lequ1_2212	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_1 u_2)$	$\mathbf{C}$
lequ1_2213	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_1 u_3)$	$\mathbf{C}$
lequ1_2221	$(ar{\ell}_2 e_2) \epsilon_{jk} (ar{q}_2 u_1)$	$\mathbf{C}$
lequ1_2222	$(ar{\ell}_2 e_2)  \epsilon_{jk}  (ar{q}_2 u_2)$	$\mathbf{C}$
lequ1_2223	$(ar{\ell}_2 e_2)  \epsilon_{jk}  (ar{q}_2 u_3)$	$\mathbf{C}$
lequ1_2231	$(ar{\ell}_2 e_2)  \epsilon_{jk}  (ar{q}_3 u_1)$	$\mathbf{C}$
lequ1_2232	$(ar{\ell}_2 e_2)  \epsilon_{jk}  (ar{q}_3 u_2)$	$\mathbf{C}$
lequ1_2233	$(ar{\ell}_2 e_2) \epsilon_{jk} (ar{q}_3 u_3)$	$\mathbf{C}$
lequ1_2311	$(ar{\ell}_2 e_3)\epsilon_{jk}(ar{q}_1 u_1)$	$\mathbf{C}$
lequ1_2312	$(ar{\ell}_2 e_3)  \epsilon_{jk}  (ar{q}_1 u_2)$	$\mathbf{C}$
lequ1_2313	$(ar{\ell}_2 e_3)  \epsilon_{jk}  (ar{q}_1 u_3)$	$\mathbf{C}$
lequ1_2321	$(ar{\ell}_2 e_3)\epsilon_{jk}(ar{q}_2 u_1)$	$\mathbf{C}$
lequ1_2322	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_2 u_2 ight)$	$\mathbf{C}$
lequ1_2323	$(ar{\ell}_2 e_3)\epsilon_{jk}(ar{q}_2 u_3)$	$\mathbf{C}$
lequ1_2331	$(ar{\ell}_2 e_3) \epsilon_{jk} (ar{q}_3 u_1)$	$\mathbf{C}$
lequ1_2332	$(ar{\ell}_2 e_3) \stackrel{\leftarrow}{\epsilon_{jk}} (ar{q}_3 u_2)$	$\mathbf{C}$
lequ1_2333	$(ar{\ell}_2 e_3)  \epsilon_{jk}  (ar{q}_3 u_3)$	$\mathbf{C}$
lequ1_3111	$(ar{\ell}_3 e_1)  \epsilon_{jk}  (ar{q}_1 u_1)$	$\mathbf{C}$
lequ1_3112	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_1 u_2)$	$\mathbf{C}$
lequ1_3113	$(ar{\ell}_3 e_1)  \epsilon_{jk}  (ar{q}_1 u_3)$	$\mathbf{C}$
lequ1_3121	$(ar{\ell}_3 e_1)  \epsilon_{jk}  (ar{q}_2 u_1)$	$\mathbf{C}$
lequ1_3122	$(ar{\ell}_3 e_1)  \epsilon_{jk}  (ar{q}_2 u_2)$	$^{\mathrm{C}}$
lequ1_3123	$(ar{\ell}_3 e_1)  \epsilon_{jk}  (ar{q}_2 u_3)$	$^{\mathrm{C}}$
lequ1_3131	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_3 u_1)$	$^{\mathrm{C}}$
lequ1_3132	$(ar{\ell}_3 e_1)  \epsilon_{jk}  (ar{q}_3 u_2)$	$^{\mathrm{C}}$
lequ1_3133	$(\bar{\ell}_3 e_1)  \epsilon_{jk}  (\bar{q}_3 u_3)$	$^{\mathrm{C}}$
lequ1_3211	$(ar{\ell}_3 e_2)  \epsilon_{jk}  (ar{q}_1 u_1)$	$^{\mathrm{C}}$
lequ1_3212	$(ar{\ell}_3 e_2)\epsilon_{jk}(ar{q}_1 u_2)$	$^{\mathrm{C}}$
lequ1_3213	$(ar{\ell}_3 e_2)  \epsilon_{jk}  (ar{q}_1 u_3)$	$^{\mathrm{C}}$
lequ1_3221	$(ar{\ell}_3 e_2)  \epsilon_{jk}  (ar{q}_2 u_1)$	$\mathbf{C}$
lequ1_3222	$\left(ar{\ell}_3 e_2 ight)\epsilon_{jk}\left(ar{q}_2 u_2 ight)$	$\mathbf{C}$
lequ1_3223	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_2 u_3)$	$\mathbf{C}$
lequ1_3231	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_3 u_1)$	$\mathbf{C}$
lequ1_3232	$\left(ar{\ell}_3 e_2 ight)\epsilon_{jk}\left(ar{q}_3 u_2 ight)$	$\mathbf{C}$

WC name	Operator	Type
lequ1_3233	$(\bar{\ell}_3 e_2)  \epsilon_{jk}  (\bar{q}_3 u_3)$	C
lequ1_3311	$(ar{\ell}_3 e_3)  \epsilon_{jk}  (ar{q}_1 u_1)$	$^{\mathrm{C}}$
lequ1_3312	$(ar{\ell}_3 e_3) \; \epsilon_{jk} \; (ar{q}_1 u_2)$	$^{\mathrm{C}}$
lequ1_3313	$(ar{\ell}_3 e_3) \; \epsilon_{jk} \; (ar{q}_1 u_3)$	$^{\mathrm{C}}$
lequ1_3321	$(ar{\ell}_3 e_3)  \epsilon_{jk}  (ar{q}_2 u_1)$	$^{\mathrm{C}}$
lequ1_3322	$(ar{\ell}_3 e_3)  \epsilon_{jk}  (ar{q}_2 u_2)$	$\mathbf{C}$
lequ1_3323	$(ar{\ell}_3 e_3) \; \epsilon_{jk} \; (ar{q}_2 u_3)$	$\mathbf{C}$
lequ1_3331	$(ar{\ell}_3 e_3)  \epsilon_{jk}  (ar{q}_3 u_1)$	$\mathbf{C}$
lequ1_3332	$(ar{\ell}_3 e_3)  \epsilon_{jk}  (ar{q}_3 u_2)$	$\mathbf{C}$
lequ1_3333	$\left(ar{\ell}_3e_3 ight)\epsilon_{jk}\left(ar{q}_3u_3 ight)$	$\mathbf{C}$
lequ3_1111	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	C
lequ3_1112	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_1113	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	C
lequ3_1121	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_1122	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_1123	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_1131	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_1132	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_1133	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_1211	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_1212	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_1213	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	C
lequ3_1221	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_1222	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_1223	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_1231	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_1232	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_1233	$\left(ar{\ell}_1\sigma_{\mu u}e_2\right)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_1311	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_1312	$\left(ar{\ell}_1\sigma_{\mu u}e_3\right)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_1313	$\left(ar{\ell}_1\sigma_{\mu u}e_3\right)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_1321	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_1322	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_1323	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_1331	$\left(ar{\ell}_1\sigma_{\mu u}e_3\right)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_1332	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_1333	$\left(ar{\ell}_1\sigma_{\mu u}e_3\right)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3\right)$	$\mathbf{C}$
lequ3_2111	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_2112	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_2113	$(ar{\ell}_2\sigma_{\mu u}e_1)\epsilon_{jk}(ar{q}_1\sigma^{\mu u}u_3)$	$\mathbf{C}$
lequ3_2121	$(ar{\ell}_2\sigma_{\mu u}e_1)\epsilon_{jk}(ar{q}_2\sigma^{\mu u}u_1)$	$\mathbf{C}$
lequ3_2122	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$

WC name	Operator	Type
lequ3_2123	$\left(\bar{\ell}_{2}\sigma_{\mu\nu}e_{1}\right)\epsilon_{jk}\left(\bar{q}_{2}\sigma^{\mu\nu}u_{3}\right)$	$^{\rm C}$
lequ3_2131	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_2132	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_2133	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_2211	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_2212	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_2213	$\left( \overline{\ell}_2 \sigma_{\mu  u} e_2 \right) \epsilon_{jk} \left( \overline{q}_1 \sigma^{\mu  u} u_3 \right)$	$\mathbf{C}$
lequ3_2221	$\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$	$\mathbf{C}$
lequ3_2222	$\left(\bar{\ell}_2 \sigma_{\mu  u} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu  u} u_2\right)$	$\mathbf{C}$
lequ3_2223	$\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$	$\mathbf{C}$
lequ3_2231	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_2232	$\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$	$\mathbf{C}$
lequ3_2233	$\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$	$\mathbf{C}$
lequ3_2311	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_2312	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_2313	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_2321	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_2322	$\left(\ell_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_2323	$\left(\ell_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_2331	$\left(\ell_2 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$	$\mathbf{C}$
lequ3_2332	$\left(\ell_2 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$	$\mathbf{C}$
lequ3_2333	$\left(\ell_2\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu\nu}u_3 ight)$	$\mathbf{C}$
lequ3_3111	$\left(\underline{\ell}_{3}\sigma_{\mu\nu}e_{1}\right)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu\nu}u_{1} ight)$	$\mathbf{C}$
lequ3_3112	$\left(\ell_3\sigma_{\mu\nu}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu\nu}u_2 ight)$	$\mathbf{C}$
lequ3_3113	$\left(\ell_3\sigma_{\mu\nu}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_3121	$\left(\underline{\ell}_{3}\sigma_{\mu\nu}e_{1}\right)\epsilon_{jk}\left(\bar{q}_{2}\sigma^{\mu\nu}u_{1}\right)$	$\mathbf{C}$
lequ3_3122	$\left(ar{\ell}_3\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_3123	$\left(ar{\ell}_3\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_3131	$\left(ar{\ell}_3\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_3132	$\left(\underline{\ell}_{3}\sigma_{\mu u}e_{1} ight)\epsilon_{jk}\left(ar{q}_{3}\sigma^{\mu u}u_{2} ight)$	$\mathbf{C}$
lequ3_3133	$\left(ar{\ell}_3\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_3211	$\left(\ell_3\sigma_{\mu\nu}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_3212	$\left(\underline{\ell}_{3}\sigma_{\mu u}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu u}u_{2} ight)$	$\mathbf{C}$
lequ3_3213	$\left(\underline{\ell}_{3}\sigma_{\mu\nu}e_{2}\right)\epsilon_{jk}\left(\bar{q}_{1}\sigma^{\mu\nu}u_{3}\right)$	$\mathbf{C}$
lequ3_3221	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_3222	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_3223	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_3231	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_3232	$\left(\underline{\ell}_{3}\sigma_{\mu\nu}e_{2}\right)\epsilon_{jk}\left(ar{q}_{3}\sigma^{\mu\nu}u_{2} ight)$	$\mathbf{C}$
lequ3_3233	$\left(\ell_3 \sigma_{\mu  u} e_2\right) \epsilon_{jk} \left( \bar{q}_3 \sigma^{\mu  u} u_3 \right)$	$\mathbf{C}$
lequ3_3311	$\left(ar{\ell}_3\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_3312	$\left(ar{\ell}_3 \sigma_{\mu  u} e_3\right) \epsilon_{jk} \left(ar{q}_1 \sigma^{\mu  u} u_2\right)$	$\mathbf{C}$

WC name	Operator	Type
lequ3_3313	$\left(ar{\ell}_3\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	C
lequ3_3321	$\left(ar{\ell}_3\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_3322	$\left(ar{\ell}_3\sigma_{\mu u}e_3\right)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_3323	$\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_3\right)$	$\mathbf{C}$
lequ3_3331	$(\bar{\ell}_3 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_1)$	$\mathbf{C}$
lequ3_3332	$\left(ar{\ell}_3\sigma_{\mu u}e_3\right)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_3333	$(\bar{\ell}_3 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_3)$	C

## dB=dL=1

WC name	Operator	Type
duql_1111	$(d_1Cu_1)(q_1C\ell_1)$	С
duql_1112	$(d_1Cu_1)(q_1C\ell_2)$	$\mathbf{C}$
duql_1113	$(d_1Cu_1)(q_1C\ell_3)$	$\mathbf{C}$
duql_1121	$(d_1Cu_1)(q_2C\ell_1)$	$\mathbf{C}$
duq1_1122	$\left(d_1Cu_1\right)\left(q_2C\ell_2\right)$	$\mathbf{C}$
duq1_1123	$(d_1Cu_1)(q_2C\ell_3)$	$\mathbf{C}$
duq1_1131	$(d_1Cu_1)(q_3C\ell_1)$	$\mathbf{C}$
duq1_1132	$(d_1Cu_1)(q_3C\ell_2)$	$\mathbf{C}$
duq1_1133	$(d_1Cu_1)(q_3C\ell_3)$	$\mathbf{C}$
duq1_1211	$(d_1 C u_2) \left( q_1 C \ell_1 \right)$	$\mathbf{C}$
duq1_1212	$(d_1 C u_2) \left( q_1 C \ell_2 \right)$	$\mathbf{C}$
duq1_1213	$(d_1Cu_2)(q_1C\ell_3)$	$\mathbf{C}$
duq1_1221	$(d_1 C u_2) (q_2 C \ell_1)$	$\mathbf{C}$
duql_1222	$(d_1 C u_2) (q_2 C \ell_2)$	$\mathbf{C}$
duq1_1223	$(d_1Cu_2)(q_2C\ell_3)$	$\mathbf{C}$
duql_1231	$(d_1 C u_2) (q_3 C \ell_1)$	$\mathbf{C}$
duql_1232	$\left(d_1 C u_2\right) \left(q_3 C \ell_2\right)$	$\mathbf{C}$
duql_1233	$\left(d_1 C u_2\right) \left(q_3 C \ell_3\right)$	$\mathbf{C}$
duq1_1311	$(d_1Cu_3)(q_1C\ell_1)$	$\mathbf{C}$
duql_1312	$(d_1Cu_3)(q_1C\ell_2)$	$\mathbf{C}$
duql_1313	$(d_1Cu_3)(q_1C\ell_3)$	$\mathbf{C}$
duq1_1321	$\left(d_1Cu_3\right)\left(q_2C\ell_1\right)$	$\mathbf{C}$
duq1_1322	$\left(d_1Cu_3\right)\left(q_2C\ell_2\right)$	$\mathbf{C}$
duq1_1323	$\left(d_1Cu_3\right)\left(q_2C\ell_3\right)$	$\mathbf{C}$
duq1_1331	$\left(d_1Cu_3\right)\left(q_3C\ell_1\right)$	$\mathbf{C}$
duq1_1332	$\left(d_1Cu_3\right)\left(q_3C\ell_2\right)$	$\mathbf{C}$
duq1_1333	$(d_1Cu_3)(q_3C\ell_3)$	$\mathbf{C}$
duq1_2111	$\left(d_2Cu_1\right)\left(q_1C\ell_1\right)$	$\mathbf{C}$
duq1_2112	$\left(d_2Cu_1\right)\left(q_1C\ell_2\right)$	$\mathbf{C}$
duq1_2113	$(d_2Cu_1)(q_1C\ell_3)$	$\mathbf{C}$
duq1_2121	$(d_2Cu_1)(q_2C\ell_1)$	С

WC name	Operator	Type
duq1_2122	$\left(d_2Cu_1\right)\left(q_2C\ell_2\right)$	С
duq1_2123	$\left(d_2Cu_1\right)\left(q_2C\ell_3\right)$	$\mathbf{C}$
duq1_2131	$(d_2Cu_1)(q_3C\ell_1)$	$\mathbf{C}$
duq1_2132	$(d_2Cu_1)(q_3C\ell_2)$	$\mathbf{C}$
duq1_2133	$(d_2Cu_1)(q_3C\ell_3)$	$\mathbf{C}$
duql_2211	$(d_2Cu_2)(q_1C\ell_1)$	$\mathbf{C}$
duq1_2212	$(d_2Cu_2)(q_1C\ell_2)$	$\mathbf{C}$
duql_2213	$\left(d_2Cu_2\right)\left(q_1C\ell_3\right)$	$\mathbf{C}$
duq1_2221	$\left(d_2Cu_2\right)\left(q_2C\ell_1\right)$	$\mathbf{C}$
duq1_2222	$\left(d_2Cu_2\right)\left(q_2C\ell_2\right)$	$\mathbf{C}$
duq1_2223	$\left(d_2Cu_2\right)\left(q_2C\ell_3\right)$	$\mathbf{C}$
duq1_2231	$(d_2Cu_2)(q_3C\ell_1)$	C
duq1_2232	$(d_2Cu_2)(q_3C\ell_2)$	C
duq1_2233	$(d_2Cu_2)(q_3C\ell_3)$	C
duq1_2311	$(d_2Cu_3)(q_1C\ell_1)$	$\stackrel{ ext{C}}{\sim}$
duq1_2312	$(d_2Cu_3)(q_1C\ell_2)$	C
duq1_2313	$(d_2Cu_3)(q_1C\ell_3)$	$\stackrel{ ext{C}}{\sim}$
duq1_2321	$(d_2Cu_3)(q_2C\ell_1)$	$\stackrel{ ext{C}}{\sim}$
duq1_2322	$(d_2Cu_3)(q_2C\ell_2)$	$\stackrel{ ext{C}}{\sim}$
duq1_2323	$(d_2Cu_3)(q_2C\ell_3)$	$\stackrel{ ext{C}}{\sim}$
duq1_2331	$(d_2Cu_3)(q_3C\ell_1)$	$^{\mathrm{C}}$
duq1_2332	$(d_2Cu_3)(q_3C\ell_2)$	С
duq1_2333	$(d_2Cu_3)(q_3C\ell_3)$	С
duq1_3111	$(d_3Cu_1)(q_1C\ell_1)$	С
duql_3112	$(d_3Cu_1)(q_1C\ell_2)$	С
duq1_3113	$(d_3Cu_1)(q_1C\ell_3)$	С
duq1_3121	$(d_3Cu_1)(q_2C\ell_1)$	С
duq1_3122	$(d_3Cu_1)(q_2C\ell_2)$	С
duql_3123	$(d_3Cu_1)(q_2C\ell_3)$	С
duq1_3131	$(d_3Cu_1)(q_3C\ell_1)$	С
duq1_3132	$(d_3Cu_1)(q_3C\ell_2)$	C C
duq1_3133	$(d_3Cu_1)(q_3C\ell_3)$	C
duq1_3211	$(d_3Cu_2)(q_1C\ell_1)$	C
duql_3212	$(d_3Cu_2)(q_1C\ell_2)$	C
duq1_3213	$(d_3Cu_2)(q_1C\ell_3)$	C
duq1_3221	$(d_3Cu_2) (q_2C\ell_1)  (d_3Cu_2) (q_2C\ell_2)$	C
duq1_3222 duq1_3223	$(a_3Cu_2)(q_2C\ell_2)$ $(d_3Cu_2)(q_2C\ell_3)$	C
duq1_3231	$(a_3C a_2)(q_2C \ell_3)$ $(d_3C u_2)(q_3C \ell_1)$	C
duq1_3231 duq1_3232	$(a_3Ca_2)(q_3C\ell_1)$ $(d_3Cu_2)(q_3C\ell_2)$	$^{\rm C}$
duq1_3232 duq1_3233	$(a_3C a_2)(q_3C \ell_2)$ $(d_3C u_2)(q_3C \ell_3)$	C
duq1_3311	$(a_3C a_2)(q_3C \ell_3)$ $(d_3C u_3)(q_1C \ell_1)$	C
duq1_3311 duq1_3312	$(a_3C a_3)(q_1C\ell_1)$ $(d_3C a_3)(q_1C\ell_2)$	C
duq1_3312 duq1_3313	$(a_3C a_3)(q_1C \ell_2)$ $(d_3C a_3)(q_1C \ell_3)$	C
aad1_0010	(430 43) (410 t3)	O

WC name	Operator	Type
duq1_3321	$(d_3Cu_3)(q_2C\ell_1)$	С
duq1_3322	$\left(d_3Cu_3\right)\left(q_2C\ell_2\right)$	$\mathbf{C}$
duq1_3323	$\left(d_3Cu_3\right)\left(q_2C\ell_3\right)$	$\mathbf{C}$
duq1_3331	$\left(d_3Cu_3\right)\left(q_3C\ell_1\right)$	$^{\mathrm{C}}$
duq1_3332	$\left(d_3Cu_3\right)\left(q_3C\ell_2\right)$	$\mathbf{C}$
duq1_3333	$\left(d_3Cu_3\right)\left(q_3C\ell_3\right)$	$\mathbf{C}$
qque_1111	$(q_1Cq_1)\left(u_1Ce_1\right)$	$\mathbf{C}$
qque_1112	$(q_1Cq_1)\left(u_1Ce_2\right)$	$\mathbf{C}$
qque_1113	$(q_1Cq_1)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_1121	$(q_1Cq_1)(u_2Ce_1)$	$^{\mathrm{C}}$
qque_1122	$(q_1Cq_1)(u_2Ce_2)$	$^{\mathrm{C}}$
qque_1123	$(q_1Cq_1)(u_2Ce_3)$	$^{\mathrm{C}}$
qque_1131	$\left(q_{1}Cq_{1}\right)\left(u_{3}Ce_{1}\right)$	$^{\mathrm{C}}$
qque_1132	$(q_1Cq_1)(u_3Ce_2)$	$^{\mathrm{C}}$
qque_1133	$(q_1Cq_1)(u_3Ce_3)$	$^{\mathrm{C}}$
qque_1211	$(q_1Cq_2)(u_1Ce_1)$	$^{\mathrm{C}}$
qque_1212	$(q_1Cq_2)(u_1Ce_2)$	$^{\mathrm{C}}$
qque_1213	$(q_1Cq_2)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_1221	$(q_1Cq_2)\left(u_2Ce_1\right)$	$\mathbf{C}$
qque_1222	$(q_1Cq_2)(u_2Ce_2)$	$\mathbf{C}$
qque_1223	$(q_1Cq_2)(u_2Ce_3)$	$\mathbf{C}$
qque_1231	$(q_1Cq_2)\left(u_3Ce_1\right)$	$\mathbf{C}$
qque_1232	$(q_1Cq_2)\left(u_3Ce_2\right)$	$\mathbf{C}$
qque_1233	$(q_1Cq_2)(u_3Ce_3)$	$\mathbf{C}$
qque_1311	$(q_1Cq_3)\left(u_1Ce_1\right)$	$\mathbf{C}$
qque_1312	$(q_1Cq_3)(u_1Ce_2)$	$\mathbf{C}$
qque_1313	$(q_1Cq_3)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_1321	$(q_1Cq_3)(u_2Ce_1)$	$^{\mathrm{C}}$
qque_1322	$(q_1Cq_3)(u_2Ce_2)$	$^{\mathrm{C}}$
qque_1323	$(q_1Cq_3)(u_2Ce_3)$	$\mathbf{C}$
qque_1331	$(q_1Cq_3)(u_3Ce_1)$	$^{\mathrm{C}}$
qque_1332	$(q_1Cq_3)(u_3Ce_2)$	$\mathbf{C}$
qque_1333	$(q_1Cq_3)(u_3Ce_3)$	$^{\mathrm{C}}$
qque_2211	$(q_2Cq_2)\left(u_1Ce_1\right)$	$^{\mathrm{C}}$
qque_2212	$(q_2Cq_2)\left(u_1Ce_2\right)$	$^{\mathrm{C}}$
qque_2213	$(q_2Cq_2)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_2221	$(q_2Cq_2)(u_2Ce_1)$	$^{\mathrm{C}}$
qque_2222	$(q_2Cq_2)(u_2Ce_2)$	$\mathbf{C}$
qque_2223	$(q_2Cq_2)(u_2Ce_3)$	$^{\mathrm{C}}$
qque_2231	$(q_2Cq_2)(u_3Ce_1)$	$\mathbf{C}$
qque_2232	$(q_2Cq_2)(u_3Ce_2)$	$\mathbf{C}$
qque_2233	$(q_2Cq_2)(u_3Ce_3)$	С
qque_2311	$(q_2Cq_3)(u_1Ce_1)$	$^{\mathrm{C}}$
qque_2312	$(q_2Cq_3)(u_1Ce_2)$	$^{\mathrm{C}}$

WC name	Operator	Type
qque_2313	$(q_2Cq_3)(u_1Ce_3)$	С
qque_2321	$(q_2Cq_3)(u_2Ce_1)$	$\mathbf{C}$
qque_2322	$(q_2Cq_3)(u_2Ce_2)$	$\mathbf{C}$
qque_2323	$(q_2Cq_3)(u_2Ce_3)$	$\mathbf{C}$
qque_2331	$(q_2Cq_3)(u_3Ce_1)$	$\mathbf{C}$
qque_2332	$(q_2Cq_3)(u_3Ce_2)$	$\mathbf{C}$
qque_2333	$(q_2Cq_3)(u_3Ce_3)$	$\mathbf{C}$
qque_3311	$(q_3Cq_3)(u_1Ce_1)$	$\mathbf{C}$
qque_3312	$(q_3Cq_3)(u_1Ce_2)$	$\mathbf{C}$
qque_3313	$(q_3Cq_3)(u_1Ce_3)$	$\mathbf{C}$
qque_3321	$(q_3Cq_3)(u_2Ce_1)$	$\mathbf{C}$
qque_3322	$(q_3Cq_3)(u_2Ce_2)$	$\mathbf{C}$
qque_3323	$(q_3Cq_3)(u_2Ce_3)$	$\mathbf{C}$
qque_3331	$(q_3Cq_3)(u_3Ce_1)$	$\mathbf{C}$
qque_3332	$(q_3Cq_3)(u_3Ce_2)$	$\mathbf{C}$
qque_3333	$\left(q_3Cq_3\right)\left(u_3Ce_3\right)$	$\mathbf{C}$
qqql_1111	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{1}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqql_1112	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{1}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqql_1113	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{1}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqql_1121	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{2}C\ell_{1}\right)$	C
qqql_1122	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{2}C\ell_{2}\right)$	C
qqq1_1123	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{2}C\ell_{3}\right)$	C
qqq1_1131	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{3}C\ell_{1}\right)$	C
qqq1_1132	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{3}C\ell_{2}\right)$	C
qqql_1133	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{3}C\ell_{3}\right)$	C
qqql_1211	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{1}C\ell_{1}\right)$	C
qqql_1212	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{1}C\ell_{2}\right)$	C
qqql_1213	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{1}C\ell_{3}\right)$	C
qqql_1221	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{2}C\ell_{1}\right)$	C
qqq1_1222	$\epsilon_{il}\epsilon_{jk} (q_1Cq_2) (q_2C\ell_2)$	C C
qqql_1223	$\epsilon_{il}\epsilon_{jk} (q_1Cq_2) (q_2C\ell_3)$	C
qqql_1231	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{3}C\ell_{1}\right)$	C
qqql_1232	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{3}C\ell_{2}\right)$	C
qqql_1233	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{3}C\ell_{3}\right)$	C
qqql_1311 qqql_1312	$ \epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{1}C\ell_{1}\right) \\ \epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{1}C\ell_{2}\right) $	C
qqq1_1312 qqq1_1313	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{1}C\epsilon_{2}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{1}C\ell_{3}\right)$	C
qqq1_1313 qqq1_1321	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{1}C\epsilon_{3}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{1}\right)$	C
qqq1_1321 qqq1_1322	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\epsilon_{1}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{2}\right)$	C
qqq1_1323	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\epsilon_{2}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\epsilon_{3}\right)$	C
qqq1_1323 qqq1_1331	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\epsilon_{3}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\ell_{1}\right)$	C
qqq1_1331 qqq1_1332	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\epsilon_{1}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\epsilon_{2}\right)$	C
qqq1_1333	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\epsilon_{2}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\epsilon_{3}\right)$	C
qqq1_1333 qqq1_2121	$\epsilon_{il}\epsilon_{jk}\left(q_{1}\bigcirc q_{3}\right)\left(q_{3}\bigcirc \epsilon_{3}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{2}\bigcirc q_{1}\right)\left(q_{2}\bigcirc \ell_{1}\right)$	C
111	~u~jκ (42~41) (42~~1)	C

WC name	Operator	Type
qqq1_2122	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{2}\right)$	С
qqql_2123	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1} ight)\left(q_{2}C\ell_{3} ight)$	$\mathbf{C}$
qqq1_2131	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1} ight)\left(q_{3}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_2132	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1} ight)\left(q_{3}C\ell_{2} ight)$	$\mathbf{C}$
qqq1_2133	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1} ight)\left(q_{3}C\ell_{3} ight)$	$\mathbf{C}$
qqql_2221	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{2}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_2222	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{2}C\ell_{2} ight)$	$\mathbf{C}$
qqq1_2223	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{2}C\ell_{3} ight)$	$\mathbf{C}$
qqql_2231	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{3}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_2232	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{3}C\ell_{2} ight)$	$\mathbf{C}$
qqq1_2233	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{3}C\ell_{3} ight)$	$\mathbf{C}$
qqql_2311	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{1}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_2312	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{1}C\ell_{2} ight)$	$\mathbf{C}$
qqq1_2313	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{1}C\ell_{3} ight)$	$\mathbf{C}$
qqql_2321	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_2322	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{2} ight)$	$\mathbf{C}$
qqq1_2323	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{3} ight)$	$\mathbf{C}$
qqq1_2331	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{3}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_2332	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{3}C\ell_{2} ight)$	$\mathbf{C}$
qqq1_2333	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{3}C\ell_{3} ight)$	$\mathbf{C}$
qqql_3131	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1} ight)\left(q_{3}C\ell_{1} ight)$	$\mathbf{C}$
qqql_3132	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1} ight)\left(q_{3}C\ell_{2} ight)$	$\mathbf{C}$
qqql_3133	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1} ight)\left(q_{3}C\ell_{3} ight)$	$\mathbf{C}$
qqql_3231	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_3232	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{2} ight)$	$\mathbf{C}$
qqq1_3233	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{3} ight)$	$\mathbf{C}$
qqql_3331	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3} ight)\left(q_{3}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_3332	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3} ight)\left(q_{3}C\ell_{2} ight)$	$\mathbf{C}$
qqq1_3333	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3} ight)\left(q_{3}C\ell_{3} ight)$	$\mathbf{C}$
duue_1111	$\left(d_{1}Cu_{1}\right)\left(u_{1}Ce_{1}\right)$	$\mathbf{C}$
duue_1112	$\left(d_{1}Cu_{1}\right)\left(u_{1}Ce_{2}\right)$	$\mathbf{C}$
duue_1113	$\left(d_{1}Cu_{1}\right)\left(u_{1}Ce_{3}\right)$	$\mathbf{C}$
duue_1121	$\left(d_1Cu_1\right)\left(u_2Ce_1\right)$	$\mathbf{C}$
duue_1122	$\left(d_1Cu_1\right)\left(u_2Ce_2\right)$	$\mathbf{C}$
duue_1123	$(d_1Cu_1)(u_2Ce_3)$	C
duue_1131	$\left(d_{1}Cu_{1}\right)\left(u_{3}Ce_{1}\right)$	$\mathbf{C}$
duue_1132	$\left(d_{1}Cu_{1}\right)\left(u_{3}Ce_{2}\right)$	$\mathbf{C}$
duue_1133	$\left(d_{1}Cu_{1}\right)\left(u_{3}Ce_{3}\right)$	$\mathbf{C}$
duue_1211	$(d_1Cu_2)\left(u_1Ce_1\right)$	$\mathbf{C}$
duue_1212	$(d_1Cu_2)(u_1Ce_2)$	$^{\mathrm{C}}$
duue_1213	$(d_1Cu_2)(u_1Ce_3)$	$^{\mathrm{C}}$
duue_1221	$(d_1Cu_2)(u_2Ce_1)$	$^{\mathrm{C}}$
duue_1222	$(d_1Cu_2)(u_2Ce_2)$	$^{\mathrm{C}}$
duue_1223	$(d_1Cu_2)(u_2Ce_3)$	$^{\mathrm{C}}$

WC name	Operator	Type
duue_1231	$(d_1Cu_2)(u_3Ce_1)$	С
duue_1232	$(d_1Cu_2)(u_3Ce_2)$	$\mathbf{C}$
duue_1233	$\left(d_{1}Cu_{2}\right)\left(u_{3}Ce_{3}\right)$	$\mathbf{C}$
duue_1311	$(d_1Cu_3)(u_1Ce_1)$	$\mathbf{C}$
duue_1312	$\left(d_{1}Cu_{3}\right)\left(u_{1}Ce_{2}\right)$	$\mathbf{C}$
duue_1313	$\left(d_{1}Cu_{3}\right)\left(u_{1}Ce_{3}\right)$	$\mathbf{C}$
duue_1321	$\left(d_{1}Cu_{3}\right)\left(u_{2}Ce_{1}\right)$	$\mathbf{C}$
duue_1322	$\left(d_1Cu_3\right)\left(u_2Ce_2\right)$	$\mathbf{C}$
duue_1323	$\left(d_{1}Cu_{3}\right)\left(u_{2}Ce_{3}\right)$	$\mathbf{C}$
duue_1331	$(d_1Cu_3)(u_3Ce_1)$	$\mathbf{C}$
duue_1332	$(d_1Cu_3)(u_3Ce_2)$	$\mathbf{C}$
duue_1333	$(d_1Cu_3)(u_3Ce_3)$	$\mathbf{C}$
duue_2111	$(d_2Cu_1)(u_1Ce_1)$	$\mathbf{C}$
duue_2112	$(d_2Cu_1)(u_1Ce_2)$	$\mathbf{C}$
duue_2113	$(d_2Cu_1)(u_1Ce_3)$	$^{\mathrm{C}}$
duue_2121	$(d_2Cu_1)(u_2Ce_1)$	$\mathbf{C}$
duue_2122	$(d_2Cu_1)(u_2Ce_2)$	$\mathbf{C}$
duue_2123	$(d_2Cu_1)(u_2Ce_3)$	$\mathbf{C}$
duue_2131	$(d_2Cu_1)(u_3Ce_1)$	$^{\mathrm{C}}$
duue_2132	$(d_2Cu_1)(u_3Ce_2)$	$^{\mathrm{C}}$
duue_2133	$(d_2Cu_1)(u_3Ce_3)$	$^{\mathrm{C}}$
duue_2211	$(d_2Cu_2)(u_1Ce_1)$	$\mathbf{C}$
duue_2212	$(d_2Cu_2)(u_1Ce_2)$	$\mathbf{C}$
duue_2213	$(d_2Cu_2)(u_1Ce_3)$	$\mathbf{C}$
duue_2221	$(d_2Cu_2)(u_2Ce_1)$	$^{\mathrm{C}}$
duue_2222	$(d_2Cu_2)(u_2Ce_2)$	$^{\mathrm{C}}$
duue_2223	$(d_2Cu_2)(u_2Ce_3)$	$^{\mathrm{C}}$
duue_2231	$(d_2Cu_2)(u_3Ce_1)$	$^{\mathrm{C}}$
duue_2232	$(d_2Cu_2)(u_3Ce_2)$	$^{\mathrm{C}}$
duue_2233	$(d_2Cu_2)(u_3Ce_3)$	$^{\mathrm{C}}$
duue_2311	$(d_2Cu_3)(u_1Ce_1)$	$^{\mathrm{C}}$
duue_2312	$(d_2Cu_3)(u_1Ce_2)$	$^{\mathrm{C}}$
duue_2313	$(d_2Cu_3)(u_1Ce_3)$	$^{\mathrm{C}}$
duue_2321	$(d_2Cu_3)(u_2Ce_1)$	$^{\mathrm{C}}$
duue_2322	$(d_2Cu_3)(u_2Ce_2)$	$^{\mathrm{C}}$
duue_2323	$(d_2Cu_3)(u_2Ce_3)$	$^{\mathrm{C}}$
duue_2331	$(d_2Cu_3)(u_3Ce_1)$	$^{\mathrm{C}}$
duue_2332	$(d_2Cu_3)(u_3Ce_2)$	$^{\mathrm{C}}$
duue_2333	$(d_2Cu_3)(u_3Ce_3)$	$\mathbf{C}$
duue_3111	$(d_3Cu_1)(u_1Ce_1)$	$\mathbf{C}$
duue_3112	$(d_3Cu_1)(u_1Ce_2)$	$\mathbf{C}$
duue_3113	$(d_3Cu_1)(u_1Ce_3)$	$\mathbf{C}$
duue_3121	$(d_3Cu_1)(u_2Ce_1)$	$^{\mathrm{C}}$
duue_3122	$(d_3Cu_1)(u_2Ce_2)$	$\mathbf{C}$

WC name	Operator	Type
duue_3123	$(d_3Cu_1)(u_2Ce_3)$	
duue_3131	$\left(d_3Cu_1\right)\left(u_3Ce_1\right)$	$\mathbf{C}$
duue_3132	$\left(d_3Cu_1\right)\left(u_3Ce_2\right)$	C
duue_3133	$\left(d_3Cu_1\right)\left(u_3Ce_3\right)$	C
duue_3211	$\left(d_3Cu_2\right)\left(u_1Ce_1\right)$	$\mathbf{C}$
duue_3212	$(d_3Cu_2)\left(u_1Ce_2\right)$	$\mathbf{C}$
duue_3213	$(d_3Cu_2)\left(u_1Ce_3\right)$	$\mathbf{C}$
duue_3221	$\left(d_3Cu_2\right)\left(u_2Ce_1\right)$	$\mathbf{C}$
duue_3222	$(d_3Cu_2)(u_2Ce_2)$	$\mathbf{C}$
duue_3223	$(d_3Cu_2)(u_2Ce_3)$	$\mathbf{C}$
duue_3231	$\left(d_3Cu_2\right)\left(u_3Ce_1\right)$	$\mathbf{C}$
duue_3232	$\left(d_3Cu_2\right)\left(u_3Ce_2\right)$	$\mathbf{C}$
duue_3233	$(d_3Cu_2)(u_3Ce_3)$	$\mathbf{C}$
duue_3311	$(d_3Cu_3)(u_1Ce_1)$	$\mathbf{C}$
duue_3312	$(d_3Cu_3)(u_1Ce_2)$	$\mathbf{C}$
duue_3313	$(d_3Cu_3)(u_1Ce_3)$	$\mathbf{C}$
duue_3321	$(d_3Cu_3)(u_2Ce_1)$	$\mathbf{C}$
duue_3322	$(d_3Cu_3)(u_2Ce_2)$	$\mathbf{C}$
duue_3323	$(d_3Cu_3)(u_2Ce_3)$	$\mathbf{C}$
duue_3331	$(d_3Cu_3)(u_3Ce_1)$	С
duue_3332	$(d_3Cu_3)(u_3Ce_2)$	С
duue_3333	$(d_3Cu_3)(u_3Ce_3)$	C

## dL=2

WC name	Operator	Type
llphiphi_11	$\left(\widetilde{\varphi}^{\dagger}\ell_{1}\right)^{T}C\left(\widetilde{\varphi}^{\dagger}\ell_{1}\right)$	C
llphiphi_12	$\left(\widetilde{arphi}^{\dagger}\ell_{1} ight)^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{2} ight)$	$\mathbf{C}$
llphiphi_13	$\left(\widetilde{arphi}^{\dagger}\ell_{1} ight)^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{3} ight)$	$\mathbf{C}$
llphiphi_22	$\left(\widetilde{arphi}^{\dagger}\ell_{2} ight)^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{2} ight)$	$\mathbf{C}$
llphiphi_23	$\left(\widetilde{arphi}^{\dagger}\ell_{2} ight)^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{3} ight)$	$\mathbf{C}$
llphiphi_33	$\left(\widetilde{arphi}^{\dagger}\ell_{3}\right)^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{3}\right)$	$\mathbf{C}$