Basis Warsaw up (EFT SMEFT)

Variant of the Warsaw basis where the up-type quark mass matrix (rather than the down-type quark) is diagonal.

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	$\epsilon^{IJK}W_{\mu}^{I u}W_{ u}^{J ho}W_{ u}^{K\mu}$	R
Wtilde	$\epsilon^{IJK}\widetilde{W}_{\mu}^{I u}W_{ u}^{J ho}W_{ ho}^{K\mu}$	${ m R}$
phi	$\left(arphi^\daggerarphi ight)^3$	R
phiBox	$\left(arphi^\daggerarphi ight)\square\left(arphi^\daggerarphi ight)$	R
phiD	$\left(arphi^\dagger D^\mu arphi ight)^st \left(arphi^\dagger D_\mu arphi ight)$	R
phiG	$arphi^\dagger arphi G^A_{\mu u} G^{A\mu u}$	R
phiB	$arphi^\dagger arphi B^{\mu u}_{\mu u} B^{\mu u}$	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	$arphi^\dagger arphi ilde{G}^A_{\mu u} G^{A\mu u}$	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	$\left(arphi^\daggerarphi ight)\left(ar{q}_1u_1\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_12	$\left(arphi^\daggerarphi ight)\left(ar{q}_1u_2\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_13	$\left(arphi_{.}^{\dagger}arphi ight)\left(ar{q}_{1}u_{3}\widetilde{arphi} ight)$	\mathbf{C}
uphi_21	$\left(arphi^\daggerarphi ight)\left(ar{q}_2u_1\widetilde{arphi} ight)$	\mathbf{C}
uphi_22	$\left(arphi^\daggerarphi ight)\left(ar{q}_2u_2\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_23	$\left(arphi_{+}^{\dagger}arphi ight)\left(ar{q}_{2}u_{3}\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_31	$\left(arphi_{+}^{\dagger}arphi ight)\left(ar{q}_{3}u_{1}\widetilde{arphi} ight)$	\mathbf{C}
uphi_32	$\left(arphi^\daggerarphi ight)\left(ar{q}_3u_2\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_33	$\left(arphi^\daggerarphi ight)\left(ar{q}_3u_3\widetilde{arphi} ight)$	C
dphi_11	$\left(arphi_{_{\perp}}^{\dagger}arphi ight)\left(ar{q}_{1}d_{1}arphi ight)$	C
dphi_12	$\left(arphi_{_{\perp}}^{\dagger}arphi ight)\left(ar{q}_{1}d_{2}arphi ight)$	C
dphi_13	$\left(arphi^\daggerarphi ight)\left(ar{q}_1d_3arphi ight)$	$^{\mathrm{C}}$

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
ephi_12 $(\varphi^{\dagger}\varphi)(\bar{\ell}_1e_2\varphi)$ C ephi_13 $(\varphi^{\dagger}\varphi)(\bar{\ell}_1e_3\varphi)$ C
ephi_13 $\left(\varphi^{\dagger}\varphi\right)\left(\bar{\ell}_{1}e_{3}\varphi\right)$ C
1 = \(\(\tau_1, \) \(\) = \(\sigma_1\)
ephi_21 $(\varphi^{\dagger}\varphi) (\ell_2 e_1 \varphi)$ C
ephi_22 $\left(\varphi^{\dagger}\varphi\right)\left(\bar{\ell}_{2}e_{2}\varphi\right)$ C
ephi_23 $\left(\varphi^{\dagger}\varphi\right)\left(\bar{\ell}_{2}e_{3}\varphi\right)$ C
ephi_31 $(\varphi^{\dagger}\varphi)(\bar{\ell}_3e_1\varphi)$ C
ephi_32 $\left(\varphi^{\dagger}\varphi\right)\left(\bar{\ell}_{3}e_{2}\varphi\right)$ C
ephi_33 $\left(\varphi^{\dagger}\varphi\right)\left(\bar{\ell}_{3}e_{3}\varphi\right)$ C
eW_11 $ (\bar{\ell}_1 \sigma^{\mu\nu} e_1) \tau^I \varphi W^I_{\mu\nu} $ C
eW_12 $ (\bar{\ell}_1 \sigma^{\mu\nu} e_2) \tau^I \varphi W^I_{\mu\nu} $ C
eW_13 $(\bar{\ell}_1 \sigma^{\mu\nu} e_3) \tau^I \varphi W^I_{\mu\nu}$ C
eW_21 $(\bar{\ell}_2 \sigma^{\mu\nu} e_1) \tau^I \varphi W^I_{\mu\nu}$ C
eW_22 $(\bar{\ell}_2 \sigma^{\mu\nu} e_2) \tau^I \varphi W^I_{\mu\nu}$ C
eW_23 $(\bar{\ell}_2 \sigma^{\mu\nu} e_3) \tau^I \varphi W^I_{\mu\nu}$ C
eW_31 $(\bar{\ell}_3 \sigma^{\mu\nu} e_1) \tau^I \varphi W_{\mu\nu}^{I}$ C
eW_32 $(\bar{\ell}_3 \sigma^{\mu\nu} e_2) \tau^I \varphi W_{\mu\nu}^I$ C
eW_33 $(\bar{\ell}_3 \sigma^{\mu\nu} e_3) \tau^I \varphi W_{\mu\nu}^I$ C
eB_11 $(\bar{\ell}_1 \sigma^{\mu\nu} e_1) \varphi B_{\mu\nu}$ C
eB_12 $(\bar{\ell}_1 \sigma^{\mu\nu} e_2) \varphi B_{\mu\nu}$ C
eB_13 $(\bar{\ell}_1 \sigma^{\mu\nu} e_3) \varphi B_{\mu\nu}$ C
eB_21 $(\bar{\ell}_2 \sigma^{\mu\nu} e_1) \varphi B_{\mu\nu}$ C
eB_22 $(\bar{\ell}_2 \sigma^{\mu\nu} e_2) \varphi B_{\mu\nu}$ C
eB_23 $\left(\bar{\ell}_2 \sigma^{\mu\nu} e_3\right) \varphi B_{\mu\nu}$ C
eB_31 $(\bar{\ell}_3 \sigma^{\mu\nu} e_1) \varphi B_{\mu\nu}$ C
eB_32 $(\bar{\ell}_3 \sigma^{\mu\nu} e_2) \varphi B_{\mu\nu}$ C
eB_33 $(\bar{\ell}_3 \sigma^{\mu\nu} e_3) \varphi B_{\mu\nu}$ C
uG_11 $(\bar{q}_1\sigma^{\mu\nu}T^Au_1)\widetilde{\varphi}G^A_{\mu\nu}$ C
uG_12 $\left(\bar{q}_1\sigma^{\mu\nu}T^Au_2\right)\widetilde{\varphi}G^{\widetilde{A}}_{\mu\nu}$ C
$(\bar{q}_1 \sigma^{\mu\nu} T^A u_3) \varphi G^A_{\mu\nu}$ C
uG_21 $(\bar{q}_2\sigma^{\mu\nu}T^Au_1)\widetilde{\varphi}G^A_{\mu\nu}$ C
uG_22 $(\bar{q}_2\sigma^{\mu\nu}T^Au_2)\widetilde{\varphi}G^A_{\mu\nu}$ C
uG_23 $(\bar{q}_2\sigma^{\mu\nu}T^Au_3)\widetilde{\varphi}G^A_{\mu\nu}$ C
uG_31 $(\bar{q}_3 \sigma^{\mu\nu} T^A u_1) \widetilde{\varphi} G^A_{\mu\nu}$ C
uG_32 $(\bar{q}_3\sigma^{\mu\nu}T^Au_2)\widetilde{\varphi}G^A_{\mu\nu}$ C
uG_33 $\left(\bar{q}_3\sigma^{\mu\nu}T^Au_3\right)\widetilde{\varphi}G_{\mu\nu}^{A}$ C

WC name	Operator	Type
uW_11	$(\bar{q}_1 \sigma^{\mu\nu} u_1) \tau^I \widetilde{\varphi} W^I_{\mu\nu}$	С
uW_12	$(ar{q}_1\sigma^{\mu u}u_2) au^I\widetilde{arphi}W^I_{\mu u}$	$^{\mathrm{C}}$
uW_13	$(ar{q}_1\sigma^{\mu u}u_3) au^I\widetilde{arphi}W^{\widetilde{I}}_{\mu u}$	$^{\mathrm{C}}$
uW_21	$(ar{q}_2\sigma^{\mu u}u_1) au^I\widetilde{arphi}W^{\widetilde{I}}_{\mu u}$	\mathbf{C}
uW_22	$(\bar{q}_2\sigma^{\mu u}u_2) au^I\widetilde{arphi}W^I_{\mu u}$	\mathbf{C}
uW_23	$(ar{q}_2\sigma^{\mu u}u_3) au^I\widetilde{arphi}W^{II}_{\mu u}$	\mathbf{C}
uW_31	$(\bar{q}_3\sigma^{\mu\nu}u_1) au^I\widetilde{\varphi}W^I_{\mu u}$	\mathbf{C}
uW_32	$(\bar{q}_3\sigma^{\mu\nu}u_2) au^I\widetilde{\varphi}W^{II}_{\mu u}$	\mathbf{C}
uW_33	$(\bar{q}_3\sigma^{\mu\nu}u_3) au^I\widetilde{arphi}W^I_{\mu u}$	\mathbf{C}
uB_11	$(ar{q}_1\sigma^{\mu u}u_1)\widetilde{arphi}\dot{B}_{\mu u}$	\mathbf{C}
uB_12	$(ar{q}_1\sigma^{\mu u}u_2)\widetilde{arphi}B_{\mu u}$	\mathbf{C}
uB_13	$(ar{q}_1\sigma^{\mu u}u_3)\widetilde{arphi}B_{\mu u}$	\mathbf{C}
uB_21	$(ar{q}_2\sigma^{\mu u}u_1)\widetilde{arphi}B_{\mu u}$	\mathbf{C}
uB_22	$(ar{q}_2\sigma^{\mu u}u_2)\widetilde{arphi}B_{\mu u}$	\mathbf{C}
uB_23	$(ar{q}_2\sigma^{\mu u}u_3)\widetilde{arphi}B_{\mu u}$	\mathbf{C}
uB_31	$(ar{q}_3\sigma^{\mu u}u_1)\widetilde{arphi}B_{\mu u}$	\mathbf{C}
uB_32	$(ar{q}_3\sigma^{\mu u}u_2)\widetilde{arphi}B_{\mu u}$	\mathbf{C}
uB_33	$(ar{q}_3\sigma^{\mu u}u_3)\widetilde{arphi}B_{\mu u}$	$^{\mathrm{C}}$
dG_11	$\left(ar{q}_1\sigma^{\mu u}T^Ad_1 ight)arphi G^A_{\mu u}$	\mathbf{C}
dG_12	$\left(ar{q}_1\sigma^{\mu u}T^Ad_2 ight)arphi G_{\mu u}^A$	\mathbf{C}
dG_13	$\left(ar{q}_1 \sigma^{\mu u} T^A d_3 \right) arphi G^A_{\mu u}$	$^{\mathrm{C}}$
dG_21	$\left\langle ar{q}_2 \sigma^{\mu u} T^A d_1 \right angle arphi G^{A}_{\mu u}$	\mathbf{C}
dG_22	$\left(ar{q}_2 \sigma^{\mu u} T^A d_2 \right) arphi G^A_{\mu u}$	\mathbf{C}
dG_23	$\left(\bar{q}_2\sigma^{\mu u}T^Ad_3\right)arphi G_{\mu u}^A$	\mathbf{C}
dG_31	$\left(ar{q}_{3}\sigma^{\mu u}T^{A}d_{1} ight) arphi G_{\mu u}^{A}$	\mathbf{C}
dG_32	$\left(\bar{q}_3\sigma^{\mu u}T^Ad_2\right)arphi G^A_{\mu u}$	\mathbf{C}
dG_33	$\left(\bar{q}_3\sigma^{\mu u}T^Ad_3\right)arphi G^A_{\mu u}$	\mathbf{C}
dW_11	$(ar{q}_1\sigma^{\mu u}d_1) au^Iarphi W^{F^{ab}}_{\mu u}$	\mathbf{C}
dW_12	$(ar{q}_1\sigma^{\mu u}d_2) au^Iarphi W^I_{\mu u}$	\mathbf{C}
dW_13	$(ar{q}_1\sigma^{\mu u}d_3) au^Iarphi W^{II}_{\mu u}$	\mathbf{C}
dW_21	$(ar{q}_2\sigma^{\mu u}d_1) au^Iarphi W^I_{\mu u}$	\mathbf{C}
dW_22	$(ar{q}_2\sigma^{\mu u}d_2) au^I \dot{arphi}W^{II}_{\mu u}$	\mathbf{C}
dW_23	$(ar{q}_2\sigma^{\mu u}d_3) au^Iarphi W^I_{\mu u}$	\mathbf{C}
dW_31	$(ar{q}_3\sigma^{\mu u}d_1) au^Iarphi W^{II}_{\mu u}$	\mathbf{C}
dW_32	$(\bar{q}_3\sigma^{\mu u}d_2) au^Iarphi W^{II}_{\mu u}$	\mathbf{C}
dW_33	$(ar{q}_3\sigma^{\mu u}d_3) au^Iarphi W^{II}_{\mu u}$	\mathbf{C}
dB_11	$(ar{q}_1\sigma^{\mu u}d_1)arphi B_{\mu u}$	\mathbf{C}
dB_12	$(ar{q}_1\sigma^{\mu u}d_2)arphi B_{\mu u}$	\mathbf{C}
dB_13	$(\bar{q}_1\sigma^{\mu u}d_3)arphi B_{\mu u}$	$^{\mathrm{C}}$
dB_21	$(ar{q}_2\sigma^{\mu u}d_1)arphi B_{\mu u}$	$^{\mathrm{C}}$
dB_22	$(ar{q}_2\sigma^{\mu u}d_2)arphi B_{\mu u}$	$^{\mathrm{C}}$
dB_23	$(ar{q}_2\sigma^{\mu u}d_3)arphi B_{\mu u}$	$^{\mathrm{C}}$
dB_31	$(ar{q}_3\sigma^{\mu u}d_1)arphi B_{\mu u}$	$^{\mathrm{C}}$
	•	

WC name	Operator	Type
dB_32 dB_33	$\begin{array}{c} (\bar{q}_3 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu} \\ (\bar{q}_3 \sigma^{\mu\nu} d_3) \varphi B_{\mu\nu} \end{array}$	C C
phil1_11	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight) \left(ar{\ell}_{1}\gamma^{\mu}\ell_{1} ight)$	R
phil1_12	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle \left(ar{\ell}_1 \gamma^\mu \ell_2 ight)$	C
phil1_13	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle \left(ar{\ell}_1 \gamma^\mu \ell_3 ight)$	С
phil1_22	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{\ell}_2 \gamma^\mu \ell_2 ight)$	R
phil1_23	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{\ell}_2 \gamma^\mu \ell_3 ight)$	\mathbf{C}
phil1_33	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{\ell}_3 \gamma^\mu \ell_3 ight)$	R
phi13_11	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} Im u arphi ight) \left(ar{\ell}_1 au^I \gamma^\mu \ell_1 ight)$	R
phi13_12	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} Imu arphi ight) \left(ar{\ell}_1 au^I \gamma^\mu \ell_2 ight)$	\mathbf{C}
phi13_13	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} Imu arphi ight) \left(ar{\ell}_1 au^I \gamma^\mu \ell_3 ight)$	\mathbf{C}
phi13_22	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} Imu arphi ight) \left(ar{\ell}_2 au^I \gamma^\mu \ell_2 ight)$	R
phi13_23	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} Imu arphi ight) \left(ar{\ell}_2 au^I \gamma^\mu \ell_3 ight)$	\mathbf{C}
phi13_33	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} Imu arphi ight) \left(ar{\ell}_3 au^I \gamma^\mu \ell_3 ight)$	R
phie_11	$\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{e}_{1}\gamma^{\mu}e_{1})$	R
phie_12	$\left(\varphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} \varphi \right) (\bar{e}_{1} \gamma^{\mu} e_{2})$	\mathbf{C}
phie_13	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{e}_1 \gamma^\mu e_3)$	\mathbf{C}
phie_22	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle (ar{e}_2 \gamma^\mu e_2)$	R
phie_23	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle (ar{e}_2 \gamma^\mu e_3)$	\mathbf{C}
phie_33	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{e}_3 \gamma^\mu e_3)$	R
phiq1_11	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{q}_1 \gamma^\mu q_1)$	R
phiq1_12	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{q}_1 \gamma^\mu q_2)$	\mathbf{C}
phiq1_13	$ \begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \\ (\bar{q}_{1}\gamma^{\mu}q_{2}) $	С
	4	
	4	

WC name	Operator	Т
phiq1_22	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{q}_2 \gamma^\mu q_2 ight)$	R
phiq1_23	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle (ar{q}_2 \gamma^\mu q_3)$	C
phiq1_33	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle (ar{q}_3 \gamma^\mu q_3)$	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	$\left\langle arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight angle \left(ar{q}_{1} au^{I}\gamma^{\mu}q_{2} ight)$	C
phiq3_13	$\left\langle arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight angle \left(ar{q}_{1} au^{I}\gamma^{\mu}q_{3} ight)$	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	$\left\langle arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight angle \left(ar{q}_{3} au^{I}\gamma^{\mu}q_{3} ight)$	R
phiu_11	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{u}_1 \gamma^\mu u_1)$	R
phiu_12	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{u}_1 \gamma^\mu u_2)$	C
phiu_13	$\left\langle arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight angle \left(ar{u}_{1}\gamma^{\mu}u_{3} ight)$	C
phiu_22	$\left\langle arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight angle \left(ar{u}_{2}\gamma^{\mu}u_{2} ight)$	R
phiu_23	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight) (ar{u}_{2}\gamma^{\mu}u_{3})$	C
phiu_33	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight) \left(ar{u}_{3}\gamma^{\mu}u_{3} ight)$	R
phid_11	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{1}\gamma^{\mu}d_{1} ight)$	R
phid_12	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{d}_1 \gamma^\mu d_2 ight)$	C
phid_13	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{d}_1 \gamma^\mu d_3 ight)$	C
phid_22	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{2}\gamma^{\mu}d_{2} ight) \\ \left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{2}\gamma^{\mu}d_{3} ight) \\ \left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{3}\gamma^{\mu}d_{3} ight) \\ \left(\overset{\leftrightarrow}{\Box}^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(\ddot{c}_{3}\gamma^{\mu}d_{3} ight) $	R
phid_23	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{d}_2 \gamma^\mu d_3 ight)$	C
phid_33	$\left\langle arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight angle \left(ar{d}_{3}\gamma^{\mu}d_{3} ight)$	R
phiud_11 phiud_12	$(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi)'(\bar{u}_{1}\gamma^{\mu}d_{1})$	C

WC name	Operator	Type
phiud_13	$\left(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi\right)\left(\bar{u}_{1}\gamma^{\mu}d_{3}\right)$	C
phiud_21	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}d_{1} ight)$	\mathbf{C}
phiud_22	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}d_{2} ight)$	\mathbf{C}
phiud_23	$\left(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi\right)\left(\bar{u}_{2}\gamma^{\mu}d_{3}\right)$	\mathbf{C}
phiud_31	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{3}\gamma^{\mu}d_{1} ight)$	$^{\mathrm{C}}$
phiud_32	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{3}\gamma^{\mu}d_{2} ight)$	C
phiud_33	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight) \left(ar{a}_{3}\gamma^{\mu}d_{3} ight)$	C
11_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_1 ight)$	R
11_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_2 ight)$	C
11_1113	$\left(\ell_{1}\gamma_{\mu}\ell_{1} ight) \left(\ell_{1}\gamma^{\mu}\ell_{3} ight)$	C
11_1122	$\left(\ell_1\gamma_\mu\ell_1 ight)\left(\ell_2\gamma^\mu\ell_2 ight)$	R
11_1123	$\left(\ell_1\gamma_\mu\ell_1 ight)\left(\ell_2\gamma^\mu\ell_3 ight)$	\mathbf{C}
11_1133	$\left(ar{\ell}_1 \gamma_\mu \ell_1 ight) \left(ar{\ell}_3 \gamma^\mu \ell_3 ight)$	R
11_1212	$\left(\ell_{1}\gamma_{\mu}\ell_{2} ight) \left(\ell_{1}\gamma^{\mu}\ell_{2} ight)$	C
11_1213	$\left(\ell_{1}\gamma_{\mu}\ell_{2} ight)\left(\ell_{1}\gamma^{\mu}\ell_{3} ight)$	\mathbf{C}
11_1221	$\left(\ell_{1}\gamma_{\mu}\ell_{2} ight)\left(\ell_{2}\gamma^{\mu}\ell_{1} ight)$	R
11_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_2 ight)$	C
11_1223	$\left(\ell_1 \gamma_\mu \ell_2 \right) \left(\ell_2 \gamma^\mu \ell_3 \right) \left(\bar{\ell}_2 \gamma^\mu \ell_3 \right)$	C
11_1231	$\left(\ell_{1}\gamma_{\mu}\ell_{2} ight)\left(\ell_{3}\gamma^{\mu}\ell_{1} ight)$	C
11_1232	$\left(\ell_{1}\gamma_{\mu}\ell_{2} ight)\left(\ell_{3}\gamma^{\mu}\ell_{2} ight)$	C
11_1233	$\left(\ell_1\gamma_\mu\ell_2 ight)\left(\ell_3\gamma^\mu\ell_3 ight)$	C
11_1313	$\left(\ell_{1}\gamma_{\mu}\ell_{3} ight)\left(\ell_{1}\gamma^{\mu}\ell_{3} ight)$	C
11_1322	$\left(\ell_{1}\gamma_{\mu}\ell_{3} ight) \left(\ell_{2}\gamma^{\mu}\ell_{2} ight)$	C
11_1323	$\left(\ell_{1}\gamma_{\mu}\ell_{3} ight)\left(\ell_{2}\gamma^{\mu}\ell_{3} ight)$	\mathbf{C}
11_1331	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_1 ight)$	R
11_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_2 ight)$	C
11_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	\mathbf{C}
11_2222	$\left(\ell_{2}\gamma_{\mu}\ell_{2} ight)\left(\ell_{2}\gamma^{\mu}\ell_{2} ight)$	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	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	R
11_2323	$\left(\ell_2 \gamma_\mu \ell_3 \right) \left(\ell_2 \gamma^\mu \ell_3 \right)$	C
11_2332	$\left(\ell_{2}\gamma_{\mu}\ell_{3} ight)\left(\ell_{3}\gamma^{\mu}\ell_{2} ight)$	R
11_2333	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	C
11_3333	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	R
qq1_1111	$(ar{q}_1\gamma_\mu q_1)(ar{q}_1\gamma^\mu q_1)$	R
qq1_1112	$(ar{q}_1\gamma_\mu q_1)(ar{q}_1\gamma^\mu q_2)$	C
qq1_1113	$(\bar{q}_1\gamma_\mu q_1)(\bar{q}_1\gamma^\mu q_3)$	С
qq1_1122	$(ar{q}_1\gamma_\mu q_1)(ar{q}_2\gamma^\mu q_2)$	R
qq1_1123	$(ar{q}_1\gamma_\mu q_1)(ar{q}_2\gamma^\mu q_3)$	C R
qq1_1133	$(\bar{q}_1\gamma_\mu q_1)(\bar{q}_3\gamma^\mu q_3)$	R C
qq1_1212	$(ar{q}_1\gamma_\mu q_2) (ar{q}_1\gamma^\mu q_2) \ (ar{q}_1\gamma_\mu q_2) (ar{q}_1\gamma_\mu q_2)$	C
qq1_1213 qq1_1221	$(\bar{q}_1\gamma_\mu q_2)(\bar{q}_1\gamma^\mu q_3)$ $(\bar{q}_1\gamma_\mu q_2)(\bar{q}_2\gamma^\mu q_2)$	R
441-1221	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_2\gamma^{\mu}q_1 ight)$	\mathbf{n}

WC name	Operator	Type
qq1_1222	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_2\gamma^{\mu}q_2 ight)$	С
qq1_1223	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_2\gamma^{\mu}q_3 ight)$	C
qq1_1231	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_3\gamma^{\mu}q_1 ight)$	\mathbf{C}
qq1_1232	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_3\gamma^{\mu}q_2 ight)$	C
qq1_1233	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_3\gamma^{\mu}q_3 ight)$	C
qq1_1313	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{q}_1\gamma^{\mu}q_3 ight)$	C
qq1_1322	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{q}_2\gamma^{\mu}q_2 ight)$	$\stackrel{ ext{C}}{\sim}$
qq1_1323	$(\bar{q}_1\gamma_\mu q_3)(\bar{q}_2\gamma^\mu q_3)$	С
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	$(ar{q}_1\gamma_\mu q_3)(ar{q}_3\gamma^\mu q_3)$	С
qq1_2222	$(ar{q}_2\gamma_\mu q_2)(ar{q}_2\gamma^\mu q_2)$	R
qq1_2223	$(ar{q}_2\gamma_\mu q_2)(ar{q}_2\gamma^\mu q_3)$	С
qq1_2233	$(ar{q}_2\gamma_\mu q_2)(ar{q}_3\gamma^\mu q_3)$	R
qq1_2323	$(ar{q}_2\gamma_\mu q_3)(ar{q}_2\gamma^\mu q_3)$	С
qq1_2332	$(\bar{q}_2\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_2)$	R
qq1_2333	$(\bar{q}_2\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_3)$	C R
qq1_3333	$(\bar{q}_3\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_3)$	R R
qq3_1111	$egin{array}{l} \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight) \ \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight) \end{array}$	C
qq3_1112		C
qq3_1113 qq3_1122	$egin{pmatrix} \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight) \ \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight) \end{pmatrix}$	R
		C
qq3_1123 qq3_1133	$egin{pmatrix} \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight) \ \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight) \end{pmatrix}$	R
qq3_1133 qq3_1212	$(ar{q}_1\gamma_\mu r q_1) (ar{q}_3\gamma^\mu r q_3) \ (ar{q}_1\gamma_\mu au^I q_2) (ar{q}_1\gamma^\mu au^I q_2)$	C
qq3_1212 qq3_1213	$(q_1\gamma_\mu, q_2) (q_1\gamma^\mu, q_2) \ (ar q_1\gamma_\mu au^Iq_2) (ar q_1\gamma^\mu au^Iq_3)$	$^{ m C}$
qq3_1213 qq3_1221	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_1)_\mu & q_3 \end{pmatrix} \ (ar q_1 \gamma_\mu au^I q_2) & (ar q_2 \gamma^\mu au^I q_1) \end{pmatrix}$	$^{\circ}_{ m R}$
qq3_1221 qq3_1222	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_2)^\mu & q_1 \end{pmatrix} \ (ar q_1\gamma_\mu au^Iq_2) & (ar q_2\gamma^\mu au^Iq_2) \end{pmatrix}$	C
qq3_1223	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_2)^\mu & q_2 \end{pmatrix} \ (ar q_1 \gamma_\mu au^I q_2) & (ar q_2 \gamma^\mu au^I q_3) \end{pmatrix}$	C
qq3_1231	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_2)_\mu & q_3 \end{pmatrix} \ ig(ar{q}_1\gamma_\mu au^Iq_2ig) \left(ar{q}_3\gamma^\mu au^Iq_1ig) \end{pmatrix}$	C
qq3_1231 qq3_1232	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_3)_\mu & q_1 \end{pmatrix} \ (ar q_1 \gamma_\mu au^I q_2) & (ar q_3 \gamma^\mu au^I q_2) \end{pmatrix}$	C
qq3_1233	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_3)_\mu & q_2 \end{pmatrix} \ \left(ar{q}_1\gamma_\mu au^Iq_2 ight) \left(ar{q}_3\gamma^\mu au^Iq_3 ight) \end{pmatrix}$	Č
qq3_1313	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_3)_\mu & q_3 \end{pmatrix} \ \left(ar{q}_1\gamma_\mu au^Iq_3 ight) \left(ar{q}_1\gamma^\mu au^Iq_3 ight) \end{pmatrix}$	Č
qq3_1322	$egin{pmatrix} (q_1)^\mu & q_3 \end{pmatrix} (q_1)^\mu & q_3 \end{pmatrix} \ \left(ar{q}_1\gamma_\mu au^Iq_3 ight) \left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	Č
qq3_1323	$egin{pmatrix} (q_1)^\mu & q_3 \end{pmatrix} (q_2)^\mu & q_2 \end{pmatrix} \ \left(ar{q}_1 \gamma_\mu au^I q_3 ight) \left(ar{q}_2 \gamma^\mu au^I q_3 ight) \end{pmatrix}$	Č
qq3_1331	$egin{pmatrix} (q_1)^\mu & q_3 \end{pmatrix} (q_2)^\mu & q_3 \end{pmatrix} \ \left(ar{q}_1\gamma_\mu au^Iq_3 ight) \left(ar{q}_3\gamma^\mu au^Iq_1 ight)$	R
qq3_1332	$egin{pmatrix} (q_1)^\mu (q_3)^\mu (q_3)^\mu (q_4)^\mu (q_4)$	C
qq3_1333	$egin{pmatrix} (q_1)_\mu & q_3 \end{pmatrix} (q_3)_\mu & q_2 \end{pmatrix} \ (ar q_1 \gamma_\mu au^I q_3) & (ar q_3 \gamma^\mu au^I q_3) \end{pmatrix}$	Č
qq3_2222	$\left(ar{q}_2\gamma_\mu au^Iq_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	$\overset{\circ}{\mathrm{R}}$
qq3_2223	$egin{pmatrix} (q_2)_\mu & q_2 \end{pmatrix} (q_2)_\mu & q_2 \end{pmatrix} \ ig(ar{q}_2 \gamma_\mu au^I q_2ig) & ig(ar{q}_2 \gamma^\mu au^I q_3ig) \end{pmatrix}$	C
qq3_2233	$egin{pmatrix} (q_2)\mu^{\mu} & q_2 \end{pmatrix} (q_2)\mu^{\mu} & q_3 \end{pmatrix} \ ig(ar{q}_2\gamma_{\mu} au^Iq_2ig) & ig(ar{q}_3\gamma^{\mu} au^Iq_3ig) \end{pmatrix}$	$\overset{\circ}{\mathrm{R}}$
qq3_2323	$\left(ar{q}_2\gamma_\mu au^{q_2}\right) \left(ar{q}_3\gamma^{} au^{q_3}\right) \\ \left(ar{q}_2\gamma_\mu au^{I}q_3\right) \left(ar{q}_2\gamma^\mu au^{I}q_3\right)$	C
qq3_2332	$(ar{q}_2\gamma_\mu au^{q}_3) (ar{q}_2\gamma^\mu au^{q}_3) \ (ar{q}_3\gamma^\mu au^{I}q_2)$	R
qq3_2333	$(q_2\gamma_\mu r^4q_3) (q_3\gamma^2 q_2) \ (\bar{q}_2\gamma_\mu \tau^I q_3) (\bar{q}_3\gamma^\mu \tau^I q_3)$	C

WC name	Operator	Type
qq3_3333	$\left(\bar{q}_3\gamma_\mu au^Iq_3\right)\left(\bar{q}_3\gamma^\mu au^Iq_3\right)$	R
lq1_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	R
lq1_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	\mathbf{C}
lq1_1113	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_1\gamma^\mu q_3 ight)$	\mathbf{C}
lq1_1122	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	R
lq1_1123	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	\mathbf{C}
lq1_1133	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	R
lq1_1211	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	\mathbf{C}
lq1_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	\mathbf{C}
lq1_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_1221	$\left(\ell_1\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_1 ight)$	\mathbf{C}
lq1_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	$^{\mathrm{C}}$
lq1_1223	$\left(ar{\ell}_1 \gamma_\mu \ell_2 ight) \left(ar{q}_2 \gamma^\mu q_3 ight)$	\mathbf{C}
lq1_1231	$\left(\ell_1 \gamma_\mu \ell_2 ight) \left(ar{q}_3 \gamma^\mu q_1 ight)$	\mathbf{C}
lq1_1232	$\left(\ell_1\gamma_\mu\ell_2 ight)\left(ar{q}_3\gamma^\mu q_2 ight)$	\mathbf{C}
lq1_1233	$\left(ar{\ell}_1 \gamma_\mu \ell_2 ight) \left(ar{q}_3 \gamma^\mu q_3 ight)$	\mathbf{C}
lq1_1311	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{q}_1 \gamma^\mu q_1 ight)$	\mathbf{C}
lq1_1312	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{q}_1 \gamma^\mu q_2 ight)$	\mathbf{C}
lq1_1313	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{q}_1 \gamma^\mu q_3 ight)$	\mathbf{C}
lq1_1321	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{q}_2 \gamma^\mu q_1 ight)$	$^{\mathrm{C}}$
lq1_1322	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{q}_2 \gamma^\mu q_2 ight)$	\mathbf{C}
lq1_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_1331	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{q}_3 \gamma^\mu q_1 ight)$	\mathbf{C}
lq1_1332	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{q}_3 \gamma^\mu q_2 ight)$	\mathbf{C}
lq1_1333	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{q}_3 \gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_2211	$\left(\ell_2 \gamma_\mu \ell_2 \right) \left(ar{q}_1 \gamma^\mu q_1 \right)$	R
lq1_2212	$\left(ar{\ell}_2 \gamma_\mu \ell_2 ight) \left(ar{q}_1 \gamma^\mu q_2 ight)$	$^{\mathrm{C}}$
lq1_2213	$\left(\ell_2 \gamma_\mu \ell_2 \right) \left(ar{q}_1 \gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_2222	$\left(\ell_2 \gamma_\mu \ell_2 \right) \left(ar{q}_2 \gamma^\mu q_2 ight)$	R
lq1_2223	$\left(ar{\ell}_2 \gamma_\mu \ell_2 ight) \left(ar{q}_2 \gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_2233	$\left(\ell_2 \gamma_\mu \ell_2 \right) \left(ar{q}_3 \gamma^\mu q_3 \right)$	R
lq1_2311	$\left(ar{\ell}_2 \gamma_\mu \ell_3 ight) \left(ar{q}_1 \gamma^\mu q_1 ight)$	$^{\mathrm{C}}$
lq1_2312	$\left(ar{\ell}_2 \gamma_\mu \ell_3 ight) \left(ar{q}_1 \gamma^\mu q_2 ight)$	$^{\mathrm{C}}$
lq1_2313	$\left(ar{\ell}_2 \gamma_\mu \ell_3 ight) \left(ar{q}_1 \gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_2321	$\left(\ell_2 \gamma_\mu \ell_3 \right) \left(ar{q}_2 \gamma^\mu q_1 \right)$	C
lq1_2322	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	C
lq1_2323	$\left(\ell_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	C
lq1_2331	$\left(\ell_2\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_1 ight)$	C
lq1_2332	$\left(\ell_2\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_2 ight)$	C
lq1_2333	$\left(\ell_2 \gamma_\mu \ell_3 ight) \left(ar{q}_3 \gamma^\mu q_3 ight)$	C
lq1_3311	$\left(\ell_3\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	R
lq1_3312	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	\mathbf{C}

WC name	Operator	Type
1q1_3313	$\left(ar{\ell}_3\gamma_\mu\ell_3\right)\left(ar{q}_1\gamma^\mu q_3\right)$	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	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	\mathbf{C}
lq3_1212	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	\mathbf{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	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_1 ight)$	\mathbf{C}
lq3_1222	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	\mathbf{C}
lq3_1223	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
lq3_1231	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_3\gamma^\mu au^Iq_1 ight)$	\mathbf{C}
lq3_1232	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	\mathbf{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	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	$^{\mathrm{C}}$
lq3_1312	$\left(ar{\ell}_1\gamma_{\mu} au^I\ell_3 ight)\left(ar{q}_1\gamma^{\mu} au^Iq_2 ight)$	$^{\mathrm{C}}$
lq3_1313	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	\mathbf{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	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
lq3_1323	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
lq3_1331	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_1 ight)$	$^{\mathrm{C}}$
lq3_1332	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
lq3_1333	$\left(ar{\ell}_{1}\gamma_{\mu} au^{I}\ell_{3} ight)\left(ar{q}_{3}\gamma^{\mu} au^{I}q_{3} ight)$	$^{\mathrm{C}}$
lq3_2211	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^I_{}q_1 ight)$	${ m R}$
lq3_2212	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	С
lq3_2213	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^I_{}q_3 ight)$	С
1q3_2222	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	${ m R}$
1q3_2223	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^I_{}q_3 ight)$	С
1q3_2233	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_3\gamma^\mu au^I_{}q_3 ight)$	${ m R}$
lq3_2311	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	$^{\mathrm{C}}$
lq3_2312	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	С
lq3_2313	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
lq3_2321	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_1 ight)$	\mathbf{C}
1q3_2322	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	\mathbf{C}
1q3_2323	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
lq3_2331	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_1 ight)$	\mathbf{C}
1q3_2332	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	С

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1q3_2333	$(ar{\ell}_2\gamma_\mu au^I\ell_3)(ar{q}_3\gamma^\mu au^Iq_3)$	C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			${ m R}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=		R
$\begin{array}{c} 1 \\ 1 \\ 3 \\ 3333 \\ \text{ee}_1111 \\ \text{($\bar{e}_1 \gamma_\mu e_1$)} \\ \text{($\bar{e}_1 \gamma_\mu e_2$)} \\ \text{($\bar{e}_1 \gamma_\mu e_1$)} \\ \text{($\bar{e}_1 \gamma_\mu e_2$)} \\ \text{($\bar{e}_1 \gamma_\mu e_1$)} \\ \text{($\bar{e}_1 \gamma_\mu e_2$)} \\ \text{($\bar{e}_2 \gamma^\mu e_3$)} \\ \text{($\bar{e}_1 \gamma_\mu e_2$)} \\ \text{($\bar{e}_1 \gamma_\mu e_2$)} \\ \text{($\bar{e}_2 \gamma^\mu e_3$)} \\ \text{($\bar{e}_1 \gamma_\mu e_2$)} \\ \text{($\bar{e}_1 \gamma_\mu e_2$)} \\ \text{($\bar{e}_2 \gamma^\mu e_3$)} \\ \text{($\bar{e}_1 \gamma_\mu e_2$)} \\ \text{($\bar{e}_1 \gamma_\mu e_2$)} \\ \text{($\bar{e}_2 \gamma^\mu e_3$)} \\ \text{($\bar{e}_2 \gamma^\mu e_2$)} \\ \text{($\bar{e}_2 \gamma^\mu e_3$)} \\ \text{($\bar{e}_2 \gamma^\mu $			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{c} \text{ee}_1112 & (\overline{e}_1\gamma_{\mu}e_1) (\overline{e}_1\gamma^{\mu}e_2) & \text{C} \\ \text{ee}_1113 & (\overline{e}_1\gamma_{\mu}e_1) (\overline{e}_1\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_1112 & (\overline{e}_1\gamma_{\mu}e_1) (\overline{e}_2\gamma^{\mu}e_2) & \text{R} \\ \text{ee}_1123 & (\overline{e}_1\gamma_{\mu}e_1) (\overline{e}_2\gamma^{\mu}e_2) & \text{R} \\ \text{ee}_1123 & (\overline{e}_1\gamma_{\mu}e_1) (\overline{e}_2\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_1133 & (\overline{e}_1\gamma_{\mu}e_1) (\overline{e}_2\gamma^{\mu}e_2) & \text{C} \\ \text{ee}_1212 & (\overline{e}_1\gamma_{\mu}e_2) (\overline{e}_1\gamma^{\mu}e_2) & \text{C} \\ \text{ee}_1213 & (\overline{e}_1\gamma_{\mu}e_2) (\overline{e}_1\gamma^{\mu}e_2) & \text{C} \\ \text{ee}_1213 & (\overline{e}_1\gamma_{\mu}e_2) (\overline{e}_2\gamma^{\mu}e_2) & \text{C} \\ \text{ee}_1222 & (\overline{e}_1\gamma_{\mu}e_2) (\overline{e}_2\gamma^{\mu}e_2) & \text{C} \\ \text{ee}_1223 & (\overline{e}_1\gamma_{\mu}e_2) (\overline{e}_3\gamma^{\mu}e_2) & \text{C} \\ \text{ee}_1232 & (\overline{e}_1\gamma_{\mu}e_2) (\overline{e}_3\gamma^{\mu}e_2) & \text{C} \\ \text{ee}_1233 & (\overline{e}_1\gamma_{\mu}e_2) (\overline{e}_3\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_1313 & (\overline{e}_1\gamma_{\mu}e_3) (\overline{e}_1\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_1323 & (\overline{e}_1\gamma_{\mu}e_3) (\overline{e}_2\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_1323 & (\overline{e}_1\gamma_{\mu}e_3) (\overline{e}_2\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_2222 & (\overline{e}_2\gamma_{\mu}e_2) (\overline{e}_2\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_2223 & (\overline{e}_2\gamma_{\mu}e_2) (\overline{e}_2\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_2223 & (\overline{e}_2\gamma_{\mu}e_2) (\overline{e}_2\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_2233 & (\overline{e}_2\gamma_{\mu}e_2) (\overline{e}_2\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_2333 & (\overline{e}_2\gamma_{\mu}e_3) (\overline{e}_3\gamma^{\mu}e_3) & \text{R} \\ \text{ee}_2333 & (\overline{e}_2\gamma_{\mu}e_3) (\overline{e}_3\gamma^{\mu}e_3) & \text{R} \\ \text{ee}_2333 & (\overline{e}_2\gamma_{\mu}e_3) (\overline{e}_3\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_2333 & (\overline{e}_2\gamma_{\mu}e_3) (\overline{e}_3\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_2333 & (\overline{e}_2\gamma_{\mu}e_3) (\overline{e}_3\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_2333 & (\overline{e}_3\gamma_{\mu}e_3) (\overline{e}_3\gamma^{\mu}e_3) & \text{C} \\ \text{ee}_2333 & (\overline{e}_3\gamma_{$			
$\begin{array}{c} \text{ee}_1113 & (\bar{e}_1\gamma_\mu e_1) (\bar{e}_1\gamma^\mu e_3) & \text{C} \\ \text{ee}_1122 & (\bar{e}_1\gamma_\mu e_1) (\bar{e}_2\gamma^\mu e_2) & \text{R} \\ \text{ee}_1123 & (\bar{e}_1\gamma_\mu e_1) (\bar{e}_2\gamma^\mu e_2) & \text{R} \\ \text{ee}_1133 & (\bar{e}_1\gamma_\mu e_1) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_1133 & (\bar{e}_1\gamma_\mu e_1) (\bar{e}_3\gamma^\mu e_3) & \text{R} \\ \text{ee}_1212 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_1\gamma^\mu e_2) & \text{C} \\ \text{ee}_1213 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_1\gamma^\mu e_2) & \text{C} \\ \text{ee}_1213 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_1\gamma^\mu e_3) & \text{C} \\ \text{ee}_1222 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_1223 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_2) & \text{C} \\ \text{ee}_1232 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_2) & \text{C} \\ \text{ee}_1233 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_1313 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_1\gamma^\mu e_3) & \text{C} \\ \text{ee}_1323 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_1333 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_2222 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_2223 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_2223 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_3\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{eu}_1111 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu}_1112 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu}_1113 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu}_1113 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_2\gamma^\mu u_2) & \text{R} \\ \text{uu}_1122 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_2\gamma^\mu u_2) & \text{C} \\ \text{uu}_1213 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu}_1213 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_2) & \text{C} \\ \text{uu}_1223 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_2) & \text{C} \\ \text{uu}_1231 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_1) & \text{C} \\ \text{uu}_1232 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1313 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u$	_		
$\begin{array}{c} \text{ee}_1122 & (\overline{e}_1\gamma_\mu e_1) (\overline{e}_2\gamma^\mu e_2) \\ \text{ee}_1123 & (\overline{e}_1\gamma_\mu e_1) (\overline{e}_2\gamma^\mu e_3) \\ \text{ee}_1133 & (\overline{e}_1\gamma_\mu e_1) (\overline{e}_3\gamma^\mu e_3) \\ \text{ee}_1212 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_1\gamma^\mu e_2) \\ \text{ee}_1213 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_1\gamma^\mu e_2) \\ \text{ee}_1213 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_1\gamma^\mu e_2) \\ \text{ee}_1222 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_2) \\ \text{ee}_1223 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_2) \\ \text{ee}_1232 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_3\gamma^\mu e_3) \\ \text{ee}_1333 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_1\gamma^\mu e_3) \\ \text{ee}_1323 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_1\gamma^\mu e_3) \\ \text{ee}_1323 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_1\gamma^\mu e_3) \\ \text{ee}_1323 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_2\gamma^\mu e_3) \\ \text{ee}_1323 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_2\gamma^\mu e_3) \\ \text{ee}_1323 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_2\gamma^\mu e_3) \\ \text{ee}_2222 & (\overline{e}_2\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_2) \\ \text{ee}_2223 & (\overline{e}_2\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_2) \\ \text{ee}_2223 & (\overline{e}_2\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_3) \\ \text{ee}_2323 & (\overline{e}_2\gamma_\mu e_2) (\overline{e}_3\gamma^\mu e_3) \\ \text{ee}_2333 & (\overline{e}_2\gamma_\mu e_3) (\overline{e}_3\gamma^\mu e_3) \\ \text{ee}_2333 & (\overline{e}_2\gamma_\mu e_3) (\overline{e}_3\gamma^\mu e_3) \\ \text{ee}_2333 & (\overline{e}_3\gamma_\mu e_3) (\overline{e}_3\gamma^\mu e_3) \\ \text{ee}_3333 & (\overline{e}_3\gamma_\mu e_3) (\overline{e}_3\gamma^\mu e_3) \\ \text{ee}_1111 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_1\gamma^\mu u_1) \\ \text{uu}_1112 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_1\gamma^\mu u_2) \\ \text{uu}_1113 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_1\gamma^\mu u_3) \\ \text{uu}_1122 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_1\gamma^\mu u_2) \\ \text{uu}_1133 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_2\gamma^\mu u_2) \\ \text{uu}_1133 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_1\gamma^\mu u_2) \\ \text{uu}_1213 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_1\gamma^\mu u_2) \\ \text{uu}_1213 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_2\gamma^\mu u_1) \\ \text{uu}_1223 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_2\gamma^\mu u_2) \\ \text{uu}_1231 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_2\gamma^\mu u_2) \\ \text{uu}_1232 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_2\gamma^\mu u_2) \\ \text{uu}_1233 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_3\gamma^\mu u_3) \\ \text{uu}_133 & (\overline{u}_1\gamma_\mu$	_		
$\begin{array}{c} \text{ee}_1123 & (\bar{e}_1\gamma_\mu e_1)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_1133 & (\bar{e}_1\gamma_\mu e_1)(\bar{e}_3\gamma^\mu e_3) & \text{R} \\ \text{ee}_1212 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_1\gamma^\mu e_2) & \text{C} \\ \text{ee}_1213 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_1\gamma^\mu e_2) & \text{C} \\ \text{ee}_1222 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_1223 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_1232 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_2) & \text{C} \\ \text{ee}_1232 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_2) & \text{C} \\ \text{ee}_1233 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_1313 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_1\gamma^\mu e_3) & \text{C} \\ \text{ee}_1323 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_1323 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_1323 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2222 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_2) & \text{R} \\ \text{ee}_2222 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_2223 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_3\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_3333 & (\bar{e}_3\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) & \text{R} \\ \text{uu}_1111 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_1) & \text{R} \\ \text{uu}_1112 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu}_1113 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu}_1113 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_2\gamma^\mu u_2) & \text{R} \\ \text{uu}_1123 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1213 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu}_1213 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1223 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1231 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1232 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1313 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1313 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \end{array}$			
$\begin{array}{c} \text{ee}_1133 & (\overline{e}_1\gamma_\mu e_1) (\overline{e}_3\gamma^\mu e_3) \\ \text{ee}_1212 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_1\gamma^\mu e_2) \\ \text{ce}_1213 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_1\gamma^\mu e_2) \\ \text{ce}_1213 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_2) \\ \text{ce}_1222 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_2) \\ \text{ce}_1223 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_2) \\ \text{ce}_1232 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_3\gamma^\mu e_3) \\ \text{ce}_1233 & (\overline{e}_1\gamma_\mu e_2) (\overline{e}_3\gamma^\mu e_3) \\ \text{ce}_1313 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_1\gamma^\mu e_3) \\ \text{ce}_1313 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_2\gamma^\mu e_3) \\ \text{ce}_1323 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_2\gamma^\mu e_3) \\ \text{ce}_1323 & (\overline{e}_1\gamma_\mu e_3) (\overline{e}_2\gamma^\mu e_3) \\ \text{ce}_2222 & (\overline{e}_2\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_2) \\ \text{ce}_2223 & (\overline{e}_2\gamma_\mu e_2) (\overline{e}_2\gamma^\mu e_3) \\ \text{ce}_2223 & (\overline{e}_2\gamma_\mu e_2) (\overline{e}_3\gamma^\mu e_3) \\ \text{ce}_2323 & (\overline{e}_2\gamma_\mu e_2) (\overline{e}_3\gamma^\mu e_3) \\ \text{ce}_2323 & (\overline{e}_2\gamma_\mu e_3) (\overline{e}_3\gamma^\mu e_3) \\ \text{ce}_2333 & (\overline{e}_2\gamma_\mu e_3) (\overline{e}_3\gamma^\mu e_3) \\ \text{ce}_2333 & (\overline{e}_3\gamma_\mu e_3) (\overline{e}_3\gamma^\mu e_3) \\ \text{ce}_3333 & (\overline{e}_3\gamma_\mu e_3) (\overline{e}_3\gamma^\mu e_3) \\ \text{ce}_3333 & (\overline{e}_3\gamma_\mu e_3) (\overline{e}_3\gamma^\mu e_3) \\ \text{ce}_1111 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_1\gamma^\mu u_1) \\ \text{uu}_1112 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_1\gamma^\mu u_2) \\ \text{uu}_1113 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_1\gamma^\mu u_2) \\ \text{uu}_1113 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_1\gamma^\mu u_2) \\ \text{uu}_1123 & (\overline{u}_1\gamma_\mu u_1) (\overline{u}_2\gamma^\mu u_3) \\ \text{uu}_1123 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_1\gamma^\mu u_3) \\ \text{uu}_1212 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_1\gamma^\mu u_3) \\ \text{uu}_1221 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_1\gamma^\mu u_3) \\ \text{uu}_1222 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_2\gamma^\mu u_3) \\ \text{uu}_1223 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_2\gamma^\mu u_3) \\ \text{uu}_1231 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_2\gamma^\mu u_3) \\ \text{uu}_1232 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_2\gamma^\mu u_3) \\ \text{uu}_1233 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_3\gamma^\mu u_3) \\ \text{uu}_1233 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_3\gamma^\mu u_3) \\ \text{uu}_1313 & (\overline{u}_1\gamma_\mu u_2) (\overline{u}_3\gamma^\mu u_3) \\ \text{cu}_1313 & (\overline{u}$			
$\begin{array}{c} \text{ee}_1212 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_1\gamma^\mu e_2) \\ \text{ee}_1213 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_1\gamma^\mu e_3) \\ \text{ce}_1222 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_2) \\ \text{ce}_1223 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_2) \\ \text{ce}_1223 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_3) \\ \text{ce}_1232 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_3) \\ \text{ce}_1233 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{ce}_1313 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_1\gamma^\mu e_3) \\ \text{ce}_1313 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_1\gamma^\mu e_3) \\ \text{ce}_1323 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) \\ \text{ce}_1333 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) \\ \text{ce}_2222 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_2) \\ \text{ee}_2222 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) \\ \text{ce}_2223 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) \\ \text{ce}_2333 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_3) \\ \text{ce}_2333 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{ce}_2333 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{ce}_3333 & (\bar{e}_3\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{ce}_3333 & (\bar{e}_3\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{cu}_1111 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_1) \\ \text{uu}_1112 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1113 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1113 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1122 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_2\gamma^\mu u_2) \\ \text{uu}_1123 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_2\gamma^\mu u_3) \\ \text{uu}_1212 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1213 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) \\ \text{uu}_1222 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_2) \\ \text{uu}_1223 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) \\ \text{uu}_1231 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_1) \\ \text{uu}_1231 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_2) \\ \text{uu}_1313 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) \\ \text{uu}_1313 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) \\ \text{uu}_1313 & (\bar{u}$	_		
$\begin{array}{c} \text{ee}_1213 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_1\gamma^\mu e_3) \\ \text{ee}_1222 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_2) \\ \text{ee}_1223 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) \\ \text{ee}_1232 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_2) \\ \text{ee}_1233 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_2) \\ \text{ee}_1313 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_1\gamma^\mu e_3) \\ \text{ee}_1323 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_1\gamma^\mu e_3) \\ \text{ee}_1323 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_1\gamma^\mu e_3) \\ \text{ee}_1323 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) \\ \text{ee}_1333 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) \\ \text{ee}_1333 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_2) \\ \text{ee}_2222 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_2) \\ \text{ee}_2223 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) \\ \text{ee}_2223 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_3) \\ \text{ee}_2323 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{ee}_3333 & (\bar{e}_3\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{ee}_3333 & (\bar{e}_3\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{ee}_3333 & (\bar{e}_3\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) \\ \text{ev}_1111 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_1) \\ \text{uu}_1112 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1113 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1113 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_2\gamma^\mu u_2) \\ \text{uu}_1122 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_2\gamma^\mu u_3) \\ \text{uu}_1123 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_2\gamma^\mu u_3) \\ \text{uu}_1212 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1213 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) \\ \text{uu}_1222 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_2) \\ \text{uu}_1223 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) \\ \text{uu}_1231 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) \\ \text{uu}_1231 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) \\ \text{uu}_1231 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_1) \\ \text{uu}_1232 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_2) \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) \\ \text{uu}_1313 & (\bar{u}$	_		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		
$\begin{array}{c} \text{ee}_1223 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_1232 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_2) & \text{C} \\ \text{ee}_1233 & (\bar{e}_1\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_1313 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_1\gamma^\mu e_3) & \text{C} \\ \text{ee}_1323 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_1333 & (\bar{e}_1\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_2222 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_2) & \text{R} \\ \text{ee}_2223 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_2) (\bar{e}_3\gamma^\mu e_3) & \text{R} \\ \text{ee}_2323 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee}_2333 & (\bar{e}_2\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee}_3333 & (\bar{e}_3\gamma_\mu e_3) (\bar{e}_3\gamma^\mu e_3) & \text{R} \\ \text{uu}_1111 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_1) & \text{R} \\ \text{uu}_1112 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu}_1113 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu}_1122 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_2\gamma^\mu u_2) & \text{R} \\ \text{uu}_1123 & (\bar{u}_1\gamma_\mu u_1) (\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1213 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu}_1213 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1221 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu}_1222 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_2\gamma^\mu u_2) & \text{C} \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_2) & \text{C} \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1233 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1313 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu}_1313 & (\bar{u}_1\gamma_\mu u_2) (\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \end{array}$			
$\begin{array}{c} \text{ee} = 1232 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_2) \\ \text{ee} = 1233 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3) \\ \text{ee} = 1313 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_1\gamma^\mu e_3) \\ \text{ee} = 1323 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3) \\ \text{ee} = 1333 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3) \\ \text{ee} = 1333 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3) \\ \text{ee} = 2222 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_2) \\ \text{ee} = 2223 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_3) \\ \text{ee} = 2223 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3) \\ \text{ee} = 2323 & (\bar{e}_2\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3) \\ \text{ee} = 2333 & (\bar{e}_2\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) \\ \text{ee} = 2333 & (\bar{e}_3\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) \\ \text{ee} = 3333 & (\bar{e}_3\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) \\ \text{ee} = 3333 & (\bar{e}_3\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) \\ \text{ev} = 1111 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_1) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_1)(\bar{u}_2\gamma^\mu u_2) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_1)(\bar{u}_2\gamma^\mu u_2) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_1) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_2) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2) \\ \text{uu}_1 = (\bar{u}_1\gamma_\mu u_2)(u$			
$\begin{array}{c} \text{ee} = 1233 & (\bar{e}_1\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee} = 1313 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_1\gamma^\mu e_3) & \text{C} \\ \text{ee} = 1323 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee} = 1333 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee} = 1333 & (\bar{e}_1\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee} = 2222 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_2) & \text{R} \\ \text{ee} = 2223 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee} = 2233 & (\bar{e}_2\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee} = 2323 & (\bar{e}_2\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3) & \text{C} \\ \text{ee} = 2333 & (\bar{e}_2\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) & \text{C} \\ \text{ee} = 2333 & (\bar{e}_3\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3) & \text{R} \\ \text{eu} = 1111 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_1) & \text{R} \\ \text{uu} = 1112 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu} = 1113 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu} = 1113 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_2\gamma^\mu u_2) & \text{R} \\ \text{uu} = 1122 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_2\gamma^\mu u_2) & \text{R} \\ \text{uu} = 1123 & (\bar{u}_1\gamma_\mu u_1)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1213 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2) & \text{C} \\ \text{uu} = 1213 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1221 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_2) & \text{C} \\ \text{uu} = 1223 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_2) & \text{C} \\ \text{uu} = 1231 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1232 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1233 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1233 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1233 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1233 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1233 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1313 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1313 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1313 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1313 & (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1313 & (\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1313 & (\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1313 & (\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \text{uu} = 1313 & (\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3) & \text{C} \\ \end{array}$			
$\begin{array}{c} \text{ee} = 1313 & (\bar{e}_1 \gamma \mu e_3) (\bar{e}_1 \gamma^\mu e_3) \\ \text{ee} = 1323 & (\bar{e}_1 \gamma \mu e_3) (\bar{e}_2 \gamma^\mu e_3) \\ \text{ee} = 1333 & (\bar{e}_1 \gamma \mu e_3) (\bar{e}_2 \gamma^\mu e_3) \\ \text{ee} = 2222 & (\bar{e}_2 \gamma \mu e_2) (\bar{e}_2 \gamma^\mu e_2) \\ \text{ee} = 2223 & (\bar{e}_2 \gamma \mu e_2) (\bar{e}_2 \gamma^\mu e_3) \\ \text{ee} = 2223 & (\bar{e}_2 \gamma \mu e_2) (\bar{e}_2 \gamma^\mu e_3) \\ \text{ee} = 2323 & (\bar{e}_2 \gamma \mu e_3) (\bar{e}_2 \gamma^\mu e_3) \\ \text{ee} = 2323 & (\bar{e}_2 \gamma \mu e_3) (\bar{e}_2 \gamma^\mu e_3) \\ \text{ee} = 2333 & (\bar{e}_2 \gamma \mu e_3) (\bar{e}_3 \gamma^\mu e_3) \\ \text{ee} = 3333 & (\bar{e}_3 \gamma \mu e_3) (\bar{e}_3 \gamma^\mu e_3) \\ \text{ee} = 3333 & (\bar{e}_3 \gamma \mu e_3) (\bar{e}_3 \gamma^\mu e_3) \\ \text{eu} = 1111 & (\bar{u}_1 \gamma_\mu u_1) (\bar{u}_1 \gamma^\mu u_1) \\ \text{uu} = 1112 & (\bar{u}_1 \gamma_\mu u_1) (\bar{u}_1 \gamma^\mu u_2) \\ \text{uu} = 1113 & (\bar{u}_1 \gamma_\mu u_1) (\bar{u}_1 \gamma^\mu u_2) \\ \text{uu} = 1113 & (\bar{u}_1 \gamma_\mu u_1) (\bar{u}_2 \gamma^\mu u_2) \\ \text{uu} = 1123 & (\bar{u}_1 \gamma_\mu u_1) (\bar{u}_2 \gamma^\mu u_3) \\ \text{uu} = 1212 & (\bar{u}_1 \gamma_\mu u_1) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1212 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_1 \gamma^\mu u_2) \\ \text{uu} = 1213 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_1 \gamma^\mu u_2) \\ \text{uu} = 1221 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_1 \gamma^\mu u_2) \\ \text{uu} = 1222 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_2 \gamma^\mu u_1) \\ \text{uu} = 1222 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_2 \gamma^\mu u_2) \\ \text{uu} = 1231 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_2 \gamma^\mu u_2) \\ \text{uu} = 1231 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_2 \gamma^\mu u_3) \\ \text{uu} = 1232 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_1) \\ \text{uu} = 1232 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_2) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1231 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3) \\ \text{uu} = 1233 & (\bar{u}_1 \gamma_\mu u_3) (\bar{u}_1 \gamma^\mu u_3) \\$	_		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ee_2222		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ee_2223		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ee_2233		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ee_2323		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ee_2333		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ee_3333		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	uu_1111		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	uu_1112		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	uu_1113		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	uu_1122		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	uu_1123	$\left(ar{u}_1\gamma_{\mu}u_1 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	uu_1133	$\left(ar{u}_1\gamma_{\mu}u_1 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	uu_1212	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	uu_1213		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	
uu_1231 $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_1)$ C uu_1232 $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_2)$ C uu_1233 $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3)$ C uu_1313 $(\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3)$ C	uu_1222	$(ar{u}_1\gamma_\mu u_2)(ar{u}_2\gamma^\mu u_2)$	
uu_1232 $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_2)$ C uu_1233 $(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_3)$ C uu_1313 $(\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3)$ C	_		
uu_1233 $(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_3\gamma^{\mu}u_3)$ C uu_1313 $(\bar{u}_1\gamma_{\mu}u_3)(\bar{u}_1\gamma^{\mu}u_3)$ C			
uu_1313 $(\bar{u}_1\gamma_{\mu}u_3)(\bar{u}_1\gamma^{\mu}u_3)$ C			
uu_1313 $(\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3)$ C uu_1322 $(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_2)$ C	uu_1233		
uu_1322 $(\bar{u}_1 \gamma_{\mu} u_3) (\bar{u}_2 \gamma^{\mu} u_2)$ C		$\left(\bar{u}_1\gamma_{\mu}u_3\right)\left(\bar{u}_1\gamma^{\mu}u_3\right)$	
	uu_1322	$\left(\bar{u}_1\gamma_{\mu}u_3\right)\left(\bar{u}_2\gamma^{\mu}u_2\right)$	С

WC name	Operator	Type
uu_1323	$(\bar{u}_1\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)$	С
uu_1331	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_1 ight)$	R
uu_1332	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
uu_1333	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	\mathbf{C}
uu_2222	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	R
uu_2223	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
uu_2233	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
uu_2323	$(\bar{u}_2\gamma_\mu u_3)(\bar{u}_2\gamma^\mu u_3)$	$^{\mathrm{C}}$
uu_2332	$\left(\bar{u}_2\gamma_{\mu}u_3\right)\left(\bar{u}_3\gamma^{\mu}u_2\right)$	${ m R}$
uu_2333	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	\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	$(ar{d}_1\gamma_\mu d_1)~(ar{d}_1\gamma^\mu d_2)$	\mathbf{C}
dd_1113	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
dd_1122	$\left(ar{d}_1\gamma_\mu d_1 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	${ m R}$
dd_1123	$\left(ar{d}_1\gamma_\mu d_1 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	\mathbf{C}
dd_1133	$\left(ar{d}_1\gamma_\mu d_1 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	${ m R}$
dd_1212	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
dd_1213	$\left(ar{d}_1\gamma_{\mu}d_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
_ dd_1221	$\left(ar{d_1}\gamma_{\mu}d_2 ight)\left(ar{d_2}\gamma^{\mu}d_1 ight)$	${ m R}$
_ dd_1222	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
_ dd_1223	$ig(ar{d}_1\gamma_\mu d_2ig)ig(ar{d}_2\gamma^\mu d_3ig)$	$^{\mathrm{C}}$
_ dd_1231	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_3\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
dd_1232	$(ar{d}_1\gamma_\mu d_2) \ (ar{d}_3\gamma^\mu d_2)$	C
dd_1233	$egin{pmatrix} (ar{d}_1\gamma_\mu d_2) & (ar{d}_3\gamma^\mu d_3) \ \end{pmatrix}$	C
dd_1313	$egin{pmatrix} (ar{d}_1\gamma_\mu d_3) & (ar{d}_1\gamma^\mu d_3) \ \end{pmatrix}$	C
dd_1322	$(ar{d}_1\gamma_\mu d_3) (ar{d}_2\gamma^\mu d_2)$	C
dd_1323	$(ar{d}_1\gamma_\mu d_3) (ar{d}_2\gamma^\mu d_3) (ar{d}_2\gamma^\mu d_3)$	Č
dd_1331	$\left(ar{d}_1\gamma_\mu d_3 ight)\left(ar{d}_2\gamma^\mu d_1 ight)$	R
dd_1332	$(ar{d}_1\gamma_\mu d_3) (ar{d}_3\gamma^\mu d_2) $	C
dd_1333	$(ar{d}_1\gamma_\mu a_3) \left(ar{d}_3\gamma^\mu a_2 ight) \ \left(ar{d}_1\gamma_\mu d_3 ight) \left(ar{d}_3\gamma^\mu d_3 ight)$	C
dd_2222	$egin{pmatrix} (ar{d}_1 \gamma_\mu a_3) & (ar{d}_3 \gamma^\mu a_3) \ (ar{d}_2 \gamma_\mu d_2) & (ar{d}_2 \gamma^\mu d_2) \end{pmatrix}$	$\overset{\circ}{\mathrm{R}}$
dd_2222 dd_2223	$egin{array}{l} (ar{d}_2\gamma_\mu a_2) & (ar{d}_2\gamma_\mu a_2) \ (ar{d}_2\gamma_\mu d_2) & (ar{d}_2\gamma^\mu d_3) \end{array}$	C
dd_2233		$^{\circ}_{ m R}$
_	$egin{aligned} \left(d_2\gamma_\mu d_2 ight)\left(d_3\gamma^\mu d_3 ight) \ \left(ar{d}_2\gamma_\mu d_3 ight)\left(ar{d}_2\gamma^\mu d_3 ight) \end{aligned}$	C
dd_2323		R
dd_2332	$(ar{d}_2\gamma_\mu d_3) (ar{d}_3\gamma^\mu d_2)$	C
dd_2333	$(ar{d}_2\gamma_\mu d_3) \ (ar{d}_3\gamma^\mu d_3) \ (ar{d}_3\gamma^\mu d_3)$	
dd_3333	$\left(ar{d}_3\gamma_\mu d_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	R
eu_1111	$(\bar{e}_1\gamma_\mu e_1)(\bar{u}_1\gamma^\mu u_1)$	$ m ^R$ $ m _C$
eu_1112	$(ar{e}_1\gamma_\mu e_1)(ar{u}_1\gamma^\mu u_2)$	C
eu_1113	$(\bar{e}_1\gamma_\mu e_1)(\bar{u}_1\gamma^\mu u_3)$	R
eu_1122	$(ar{e}_1\gamma_\mu e_1)(ar{u}_2\gamma^\mu u_2)$	C
eu_1123	$(\bar{e}_1\gamma_\mu e_1)(\bar{u}_2\gamma^\mu u_3)$	C

WC name	Operator	Type
eu_1133	$(\bar{e}_1\gamma_\mu e_1)(\bar{u}_3\gamma^\mu u_3)$	R
eu_1211	$\left(\bar{e}_1\gamma_{\mu}e_2\right)\left(\bar{u}_1\gamma^{\mu}u_1\right)$	С
eu_1212	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	С
eu_1213	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	C
eu_1221	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	C
eu_1222	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	\mathbf{C}
eu_1223	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	\mathbf{C}
eu_1231	$\left(\bar{e}_1\gamma_{\mu}e_2\right)\left(\bar{u}_3\gamma^{\mu}u_1\right)$	\mathbf{C}
eu_1232	$\left(\bar{e}_1\gamma_{\mu}e_2\right)\left(\bar{u}_3\gamma^{\mu}u_2\right)$	\mathbf{C}
eu_1233	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	\mathbf{C}
eu_1311	$\left(\bar{e}_1\gamma_{\mu}e_3\right)\left(\bar{u}_1\gamma^{\mu}u_1\right)$	\mathbf{C}
eu_1312	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	\mathbf{C}
eu_1313	$(\bar{e}_1\gamma_{\mu}e_3)(\bar{u}_1\gamma^{\mu}u_3)$	\mathbf{C}
eu_1321	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	\mathbf{C}
eu_1322	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	\mathbf{C}
eu_1323	$(\bar{e}_1\gamma_\mu e_3)(\bar{u}_2\gamma^\mu u_3)$	\mathbf{C}
eu_1331	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_1 ight)$	\mathbf{C}
eu_1332	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	C
eu_1333	$(\bar{e}_1\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_3)$	\mathbf{C}
eu_2211	$\left(\bar{e}_2\gamma_{\mu}e_2\right)\left(\bar{u}_1\gamma^{\mu}u_1\right)$	R
eu_2212	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	C
eu_2213	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	С
eu_2222	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	R
eu_2223	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	\mathbf{C}
eu_2233	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
eu_2311	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	\mathbf{C}
eu_2312	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	C
eu_2313	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	\mathbf{C}
eu_2321	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	C
eu_2322	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	C
eu_2323	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	C
eu_2331	$(\bar{e}_2\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_1)$	C
eu_2332	$(ar{e}_2\gamma_\mu e_3)(ar{u}_3\gamma^\mu u_2)$	C
eu_2333	$(ar{e}_2\gamma_\mu e_3)(ar{u}_3\gamma^\mu u_3)$	\mathbf{C}
eu_3311	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	R
eu_3312	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	C
eu_3313	$(ar{e}_3\gamma_{\mu}e_3)(ar{u}_1\gamma^{\mu}u_3)$	$\stackrel{ ext{C}}{=}$
eu_3322	$(ar{e}_3\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_2)$	R
eu_3323	$(ar{e}_3\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_3)$	С
eu_3333	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_3)$	R
ed_1111	$(ar{e}_1\gamma_{\mu}e_1)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
ed_1112	$(ar{e}_1\gamma_{\mu}e_1)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	С
ed_1113	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	С
ed_1122	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	\mathbf{R}

WC name	Operator	Type
ed_1123	$(ar{e}_1\gamma_\mu e_1)\left(ar{d}_2\gamma^\mu d_3 ight)$	С
ed_1133	$(ar{e}_1\gamma_{\mu}e_1)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
ed_1211	$(ar{e}_1\gamma_{\mu}e_2)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_1212	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	C
ed_1213	$(ar{e}_1\gamma_{\mu}e_2)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	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	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_1231	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_1232	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_1233	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_1322	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	\mathbf{C}
ed_1323	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_1331	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_1332	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	\mathbf{C}
ed_1333	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_2211	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
ed_2212	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_2213	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_2222	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ed_2223	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_2233	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
ed_2311	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_2312	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_2313	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_2321	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_2322	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_2323	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_2331	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_2332	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_2333	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_3311	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
ed_3312	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	\mathbf{C}
ed_3313	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_3322	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ed_3323	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	C
ed_3333	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
ud1_1111	$(ar{u}_1\gamma_\mu u_1)\left(ar{d}_1\gamma^\mu d_1 ight)$	R
	, , , ,	

WC name	Operator	Type
ud1_1112	$\left(ar{u}_1\gamma_{\mu}u_1 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1113	$(ar{u}_1\gamma_{\mu}u_1)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_1122	$\left(ar{u}_1\gamma_{\mu}u_1 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ud1_1123	$\left(ar{u}_1\gamma_{\mu}u_1 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	\mathbf{C}
ud1_1133	$\left(ar{u}_1\gamma_{\mu}u_1 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
ud1_1211	$(ar{u}_1\gamma_{\mu}u_2)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	\mathbf{C}
ud1_1212	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	\mathbf{C}
ud1_1213	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	\mathbf{C}
ud1_1221	$(ar{u}_1\gamma_{\mu}u_2)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	\mathbf{C}
ud1_1222	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1223	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_1231	$(ar{u}_1\gamma_{\mu}u_2)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ud1_1232	$(ar{u}_1\gamma_{\mu}u_2)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1233	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_1311	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ud1_1312	$(ar{u}_1\gamma_{\mu}u_3)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1313	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_1321	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	\mathbf{C}
ud1_1322	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1323	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_1331	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ud1_1332	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1333	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_2211	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	${ m R}$
ud1_2212	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
ud1_2213	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ud1_2222	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	${ m R}$
ud1_2223	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_2\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ud1_2233	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_3\gamma^\mu d_3 ight)$	${ m R}$
ud1_2311	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ud1_2312	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_2313	$(ar{u}_2\gamma_\mu u_3)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ud1_2321	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ud1_2322	$(ar{u}_2\gamma_\mu u_3)\left(ar{d}_2\gamma^\mu d_2 ight)$	\mathbf{C}
ud1_2323	$(ar{u}_2\gamma_\mu u_3)\left(ar{d}_2\gamma^\mu d_3 ight)$	С
ud1_2331	$(ar{u}_2\gamma_{\mu}u_3)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ud1_2332	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	\mathbf{C}
ud1_2333	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_3311	$(ar{u}_3\gamma_{\mu}u_3)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	${ m R}$
ud1_3312	$\left(ar{u}_3\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_3313	$\left(ar{u}_3\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_3322	$\left(ar{u}_3\gamma_{\mu}u_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R

WC name	Operator	Type
ud1_3323	$(ar{u}_3\gamma_\mu u_3)\left(ar{d}_2\gamma^\mu d_3 ight)$	C
ud1_3333	$(ar{u}_3\gamma_\mu u_3)ig(ar{d}_3\gamma^\mu d_3ig)$	\mathbf{R}
ud8_1111	$\left(ar{u}_1\gamma_{\mu}T^Au_1 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	R
ud8_1112	$\left(ar{u}_1\gamma_\mu T^A u_1 ight)\left(ar{d}_1\gamma^\mu T^A d_2 ight)$	$^{\mathrm{C}}$
ud8_1113	$\left(ar{u}_1\gamma_{\mu}T^Au_1 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	$^{\mathrm{C}}$
ud8_1122	$\left(ar{u}_1\gamma_\mu T^A u_1 ight)\left(ar{d}_2\gamma^\mu T^A d_2 ight)$	R
ud8_1123	$\left(ar{u}_1\gamma_\mu T^A u_1 ight)\left(ar{d}_2\gamma^\mu T^A d_3 ight)$	$^{\mathrm{C}}$
ud8_1133	$\left(ar{u}_1\gamma_\mu T^A u_1 ight)\left(ar{d}_3\gamma^\mu T^A d_3 ight)$	R
ud8_1211	$\left(ar{u}_1\gamma_\mu T^A u_2 ight)\left(ar{d}_1\gamma^\mu T^A d_1 ight)$	$^{\mathrm{C}}$
ud8_1212	$(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
ud8_1213	$\left\langle ar{u}_1 \gamma_\mu T^A u_2 \right\rangle \left\langle ar{d}_1 \gamma^\mu T^A d_3 \right\rangle$	\mathbf{C}
ud8_1221	$\left(ar{u}_1\gamma_\mu T^A u_2 ight)\left(ar{d}_2\gamma^\mu T^A d_1 ight)$	$^{\mathrm{C}}$
ud8_1222	$\left(ar{u}_1\gamma_\mu T^A u_2 ight)\left(ar{d}_2\gamma^\mu T^A d_2 ight)$	$^{\mathrm{C}}$
ud8_1223	$(ar{u}_1\gamma_\mu T^A u_2)(ar{d}_2\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
ud8_1231	$(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_3\gamma^\mu T^A d_1)$	$^{\mathrm{C}}$
ud8_1232	$\left\langle ar{u}_1 \gamma_\mu T^A u_2 \right\rangle \left\langle ar{d}_3 \gamma^\mu T^A d_2 \right\rangle$	$^{\mathrm{C}}$
ud8_1233	$(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_3\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
ud8_1311	$\left\langle ar{u}_1 \gamma_\mu T^A u_3 \right\rangle \left\langle ar{d}_1 \gamma^\mu T^A d_1 \right\rangle$	$^{\mathrm{C}}$
ud8_1312	$(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
ud8_1313	$(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
ud8_1321	$\left\langle ar{u}_1 \gamma_\mu T^A u_3 \right\rangle \left\langle ar{d}_2 \gamma^\mu T^A d_1 \right\rangle$	$^{\mathrm{C}}$
ud8_1322	$\left\langle \bar{u}_1 \gamma_\mu T^A u_3 \right\rangle \left\langle \bar{d}_2 \gamma^\mu T^A d_2 \right\rangle$	$^{\mathrm{C}}$
ud8_1323	$(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
ud8_1331	$\left\langle ar{u}_1 \gamma_\mu T^A u_3 \right\rangle \left\langle ar{d}_3 \gamma^\mu T^A d_1 \right\rangle$	$^{\mathrm{C}}$
ud8_1332	$(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
ud8_1333	$\left(ar{u}_1 \gamma_\mu T^A u_3 \right) \left(ar{d}_3 \gamma^\mu T^A d_3 \right)$	$^{\mathrm{C}}$
ud8_2211	$(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_1)$	R
ud8_2212	$(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
ud8_2213	$\left(ar{u}_2\gamma_\mu T^A u_2 ight)\left(ar{d}_1\gamma^\mu T^A d_3 ight)$	$^{\mathrm{C}}$
ud8_2222	$\left(ar{u}_2\gamma_\mu T^A u_2 ight)\left(ar{d}_2\gamma^\mu T^A d_2 ight)$	R
ud8_2223	$\left\langle ar{u}_2 \gamma_\mu T^A u_2 ight angle \left\langle ar{d}_2 \gamma^\mu T^A d_3 ight angle$	$^{\mathrm{C}}$
ud8_2233	$\left(ar{u}_2\gamma_\mu T^A u_2 ight)\left(ar{d}_3\gamma^\mu T^A d_3 ight)$	R
ud8_2311	$(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_1)$	$^{\mathrm{C}}$
ud8_2312	$\left\langle ar{u}_{2}\gamma_{\mu}T^{A}u_{3} ight angle \left\langle ar{d}_{1}\gamma^{\mu}T^{A}d_{2} ight angle$	$^{\mathrm{C}}$
ud8_2313	$(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
ud8_2321	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_2\gamma^\mu T^A d_1 ight)$	$^{\mathrm{C}}$
ud8_2322	$ig(ar{u}_2\gamma_\mu T^A u_3ig)ig(ar{d}_2\gamma^\mu T^A d_2ig)$	$^{\mathrm{C}}$
ud8_2323	$\left(ar{u}_2\gamma_\mu T^A u_3\right) \left(ar{d}_2\gamma^\mu T^A d_3\right)$	$^{\mathrm{C}}$
ud8_2331	$\left(ar{u}_2\gamma_{\mu}T^Au_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_1 ight)$	$^{\mathrm{C}}$
ud8_2332	$ig(ar{u}_2\gamma_\mu T^A u_3ig)ig(ar{d}_3\gamma^\mu T^A d_2ig)$	$^{\mathrm{C}}$
ud8_2333	$ig(ar{u}_2\gamma_\mu T^A u_3ig)ig(ar{d}_3\gamma^\mu T^A d_3ig)$	$^{\mathrm{C}}$
ud8_3311	$(\bar{u}_3\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_1)$	R

WC name	Operator	Type
ud8_3312	$(\bar{u}_3\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_2)$	C
ud8_3313	$ar{(ar{u}_3\gamma_\mu T^A u_3)} ar{(ar{d}_1\gamma^\mu T^A d_3)}$	$^{ m C}$
ud8_3322	$ig(ar{u}_3\gamma_\mu T^A u_3ig) ig(ar{d}_2\gamma^\mu T^A d_2ig)$	R
ud8_3323	$ig(ar{u}_3\gamma_\mu T^A u_3ig) ig(ar{d}_2\gamma^\mu T^A d_3ig)$	$^{\mathrm{C}}$
ud8_3333	$ig(ar{u}_3\gamma_\mu T^A u_3ig) ig(ar{d}_3\gamma^\mu T^A d_3ig)$	R
le_1111	$(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{e}_1\gamma^\mu e_1)$	R
_ le_1112	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_1\gamma^\mu e_2)$	C
_ le_1113	$(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{e}_1\gamma^\mu e_3)$	$^{\mathrm{C}}$
le_1122	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_2\gamma^\mu e_2)$	${ m R}$
le_1123	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_2\gamma^\mu e_3)$	$^{\mathrm{C}}$
le_1133	$(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{e}_3\gamma^\mu e_3)$	R
le_1211	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	\mathbf{C}
le_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	\mathbf{C}
le_1213	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{e}_1\gamma^\mu e_3)$	\mathbf{C}
le_1221	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{e}_2\gamma^\mu e_1)$	\mathbf{C}
le_1222	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{e}_2\gamma^\mu e_2)$	\mathbf{C}
le_1223	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{e}_2\gamma^\mu e_3)$	$^{\mathrm{C}}$
le_1231	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{e}_3\gamma^\mu e_1)$	\mathbf{C}
le_1232	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_3\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
le_1233	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
le_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	\mathbf{C}
le_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
le_1313	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	\mathbf{C}
le_1321	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_1 ight)$	\mathbf{C}
le_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
le_1323	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{e}_2 \gamma^\mu e_3 ight)$	\mathbf{C}
le_1331	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{e}_3 \gamma^\mu e_1 ight)$	\mathbf{C}
le_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_2 ight)$	\mathbf{C}
le_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	\mathbf{C}
le_2211	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	R
le_2212	$\left(ar{\ell}_2 \gamma_\mu \ell_2 ight) \left(ar{e}_1 \gamma^\mu e_2 ight)$	\mathbf{C}
le_2213	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	\mathbf{C}
le_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	R
le_2223	$\left(ar{\ell}_2 \gamma_\mu \ell_2 ight) \left(ar{e}_2 \gamma^\mu e_3 ight)$	\mathbf{C}
le_2233	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	R
le_2311	$\left(ar{\ell}_2 \gamma_\mu \ell_3 ight) \left(ar{e}_1 \gamma^\mu e_1 ight)$	\mathbf{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	$\left(ar{\ell}_2 \gamma_\mu \ell_3 ight) \left(ar{e}_2 \gamma^\mu e_1 ight)$	\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	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$

WC name	Operator	Type
le_2332	$\left(\bar{\ell}_2\gamma_\mu\ell_3\right)\left(\bar{e}_3\gamma^\mu e_2\right)$	C
le_2333	$(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_3\gamma^\mu e_3)$	$^{\mathrm{C}}$
le_3311	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{e}_1\gamma^\mu e_1)$	${ m R}$
le_3312	$(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_2)$	$^{\mathrm{C}}$
le_3313	$(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_3)$	$^{\mathrm{C}}$
le_3322	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	R
le_3323	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{e}_2\gamma^\mu e_3)$	$^{\mathrm{C}}$
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	$(\bar{\ell}_1\gamma_\mu\ell_1)(\bar{u}_1\gamma^\mu u_2)$	$^{\mathrm{C}}$
lu_1113	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
lu_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
lu_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_1223	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
lu_1232	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_1233	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
lu_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_1313	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_1321	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_1 ight)$	\mathbf{C}
lu_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	\mathbf{C}
lu_1331	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_1 ight)$	\mathbf{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	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	${ m R}$
lu_2212	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_2213	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	${ m R}$
lu_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_2233	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	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	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_2313	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_2321	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_1 ight)$	С

1u_2322 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)$	
_ \ _ 'E' ~' \ _ ' = ' = '	\mathbf{C}
	С
	С
	\mathbf{C}
	С
	R
	\mathbf{C}
	\mathbf{C}
	R
lu_3323 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_3)$	\mathbf{C}
lu_3333 $(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_3\gamma^\mu u_3)$	R
	R
ld_1112 $\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	\mathbf{C}
	\mathbf{C}
	R
	\mathbf{C}
	R
ld_1211 $(ar{\ell}_1\gamma_\mu\ell_2)(ar{d}_1\gamma^\mu d_1)$	\mathbf{C}
	\mathbf{C}
ld_1213 $(\bar{\ell}_1\gamma_\mu\ell_2)(\bar{d}_1\gamma^\mu d_3)$	\mathbf{C}
	\mathbf{C}
ld_1233 $\left(\bar{\ell}_1\gamma_\mu\ell_2\right)\left(\bar{d}_3\gamma^\mu d_3\right)$	\mathbf{C}
ld_1311 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_1)$	\mathbf{C}
	\mathbf{C}
	\mathbf{C}
ld_1321 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)$	\mathbf{C}
ld_1322 $\left(ar{\ell}_1\gamma_\mu\ell_3\right)\left(ar{d}_2\gamma^\mu d_2\right)$	\mathbf{C}
	\mathbf{C}
	\mathbf{C}
ld_1332 $(\bar{\ell}_1\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_2)$	\mathbf{C}
	С
	R
ld_2212 $(ar{\ell}_2\gamma_\mu\ell_2)(ar{d}_1\gamma^\mu d_2)$	\mathbf{C}
	\mathbf{C}
	R
	\mathbf{C}
) = () = (R
	\mathbf{C}

WC name	Operator	Type
ld_2312	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	С
ld_2313	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	\mathbf{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	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	\mathbf{C}
qe_1122	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	R
qe_1123	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	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	$(ar{q}_1\gamma_\mu q_2)(ar{e}_2\gamma^\mu e_3)$	C
qe_1231	$(\bar{q}_1\gamma_\mu q_2)(\bar{e}_3\gamma^\mu e_1)$	C
qe_1232	$(\bar{q}_1\gamma_\mu q_2)(\bar{e}_3\gamma^\mu e_2)$	C C
qe_1233	$(\bar{q}_1\gamma_\mu q_2)(\bar{e}_3\gamma^\mu e_3)$	C
qe_1311 qe_1312	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_1\gamma^\mu e_1)$	C
qe_1312 qe_1313	$egin{aligned} \left(ar{q}_1\gamma_\mu q_3 ight)\left(ar{e}_1\gamma^\mu e_2 ight) \ \left(ar{q}_1\gamma_\mu q_3 ight)\left(ar{e}_1\gamma^\mu e_3 ight) \end{aligned}$	C
qe_1313 qe_1321	$(ar{q}_1\gamma_\mu q_3)(ar{e}_1\gamma_{-e}_3) \ (ar{q}_1\gamma_\mu q_3)(ar{e}_2\gamma^\mu e_1)$	C
qe_1322	$(q_1/\mu q_3)$ (e_2/e_1) $(\bar{q}_1\gamma_\mu q_3)$ $(\bar{e}_2\gamma^\mu e_2)$	C
qe_1323	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_2\gamma^\mu e_3)$	Č
qe_1331	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_2\gamma^\mu e_3)$ $(\bar{q}_1\gamma_\mu q_3)(\bar{e}_3\gamma^\mu e_1)$	Č
qe_1332	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_3\gamma^\mu e_2)$	Č
qe_1333	$(ar{q}_1\gamma_\mu q_3) (ar{e}_3\gamma^\mu e_3) $	Č
qe_2211	$(ar{q}_2\gamma_\mu q_2)(ar{e}_1\gamma^\mu e_1)$	R
qe_2212	$(ar{q}_2\gamma_\mu q_2)(ar{e}_1\gamma^\mu e_2)$	C
qe_2213	$(ar{q}_2\gamma_\mu q_2)(ar{e}_1\gamma^\mu e_3)$	\mathbf{C}
qe_2222	$(ar{q}_2\gamma_\mu q_2)(ar{e}_2\gamma^\mu e_2)$	R
qe_2223	$(ar{q}_2\gamma_\mu q_2)(ar{e}_2\gamma^\mu e_3)$	$^{\mathrm{C}}$

WC name	Operator	Type
qe_2233	$(ar{q}_2\gamma_\mu q_2)(ar{e}_3\gamma^\mu e_3)$	R
qe_2311	$(ar{q}_2\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_1)$	$^{\mathrm{C}}$
qe_2312	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	\mathbf{C}
qe_2313	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	\mathbf{C}
qe_2321	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_1 ight)$	\mathbf{C}
qe_2322	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	\mathbf{C}
qe_2323	$(ar{q}_2\gamma_\mu q_3)(ar{e}_2\gamma^\mu e_3)$	\mathbf{C}
qe_2331	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_3\gamma^{\mu}e_1 ight)$	\mathbf{C}
qe_2332	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_3\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
qe_2333	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_3\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
qe_3311	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_1 ight)$	R
qe_3312	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	\mathbf{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	$\left(\bar{q}_1\gamma_{\mu}q_1\right)\left(\bar{u}_1\gamma^{\mu}u_3\right)$	$^{\mathrm{C}}$
qu1_1122	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	R
qu1_1123	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	\mathbf{C}
qu1_1133	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
qu1_1211	$\left(\bar{q}_1\gamma_{\mu}q_2\right)\left(\bar{u}_1\gamma^{\mu}u_1\right)$	\mathbf{C}
qu1_1212	$\left(\bar{q}_1\gamma_{\mu}q_2\right)\left(\bar{u}_1\gamma^{\mu}u_2\right)$	\mathbf{C}
qu1_1213	$\left(\bar{q}_1\gamma_{\mu}q_2\right)\left(\bar{u}_1\gamma^{\mu}u_3\right)$	\mathbf{C}
qu1_1221	$\left(\bar{q}_1\gamma_{\mu}q_2\right)\left(\bar{u}_2\gamma^{\mu}u_1\right)$	\mathbf{C}
qu1_1222	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	\mathbf{C}
qu1_1223	$\left(\bar{q}_1\gamma_{\mu}q_2\right)\left(\bar{u}_2\gamma^{\mu}u_3\right)$	\mathbf{C}
qu1_1231	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_3\gamma^{\mu}u_1 ight)$	\mathbf{C}
qu1_1232	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	\mathbf{C}
qu1_1233	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	\mathbf{C}
qu1_1311	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	\mathbf{C}
qu1_1312	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	\mathbf{C}
qu1_1313	$\left(\bar{q}_1\gamma_{\mu}q_3\right)\left(\bar{u}_1\gamma^{\mu}u_3\right)$	\mathbf{C}
qu1_1321	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	\mathbf{C}
qu1_1322	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	\mathbf{C}
qu1_1323	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	\mathbf{C}
qu1_1331	$(\bar{q}_1\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_1)$	С
qu1_1332	$(\bar{q}_1\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_2)$	С
qu1_1333	$(\bar{q}_1\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_3)$	\mathbf{C}
qu1_2211	$(\bar{q}_2\gamma_\mu q_2)(\bar{u}_1\gamma^\mu u_1)$	R
qu1_2212	$(\bar{q}_2\gamma_\mu q_2)(\bar{u}_1\gamma^\mu u_2)$	С
qu1_2213	$(\bar{q}_2\gamma_\mu q_2)(\bar{u}_1\gamma^\mu u_3)$	\mathbf{C}
qu1_2222	$(\bar{q}_2\gamma_\mu q_2)(\bar{u}_2\gamma^\mu u_2)$	R

WC name	Operator	Type
qu1_2223	$(\bar{q}_2\gamma_\mu q_2)(\bar{u}_2\gamma^\mu u_3)$	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	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_3\gamma^{\mu}u_1 ight)$	\mathbf{C}
qu1_2332	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	\mathbf{C}
qu1_2333	$(\bar{q}_2\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_3)$	\mathbf{C}
qu1_3311	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	R
qu1_3312	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	\mathbf{C}
qu1_3313	$(\bar{q}_3\gamma_\mu q_3)(\bar{u}_1\gamma^\mu u_3)$	\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	$(\bar{q}_3\gamma_\mu q_3)(\bar{u}_2\gamma^\mu u_3)$	\mathbf{C}
qu1_3333	$(ar{q}_3\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_3)$	\mathbf{R}
qd1_1111	$(ar{q}_1\gamma_{\mu}q_1)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
qd1_1112	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	\mathbf{C}
qd1_1113	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	\mathbf{C}
qd1_1122	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
qd1_1123	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	\mathbf{C}
qd1_1133	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	\mathbf{R}
qd1_1211	$(ar{q}_1\gamma_\mu q_2)ig(ar{d}_1\gamma^\mu d_1ig)$	\mathbf{C}
qd1_1212	$(ar{q}_1\gamma_\mu q_2)ig(ar{d}_1\gamma^\mu d_2ig)$	\mathbf{C}
qd1_1213	$(ar{q}_1\gamma_\mu q_2)ig(ar{d}_1\gamma^\mu d_3ig)$	\mathbf{C}
qd1_1221	$(ar{q}_1\gamma_\mu q_2) \left(ar{d}_2\gamma^\mu d_1 ight)$	\mathbf{C}
qd1_1222	$(ar{q}_1\gamma_{\mu}q_2)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	\mathbf{C}
qd1_1223	$(ar{q}_1\gamma_\mu q_2) \left(ar{d}_2\gamma^\mu d_3 ight)$	\mathbf{C}
qd1_1231	$(ar{q}_1\gamma_\mu q_2)(ar{d}_3\gamma^\mu d_1)$	\mathbf{C}
qd1_1232	$(\bar{q}_1\gamma_\mu q_2)(\bar{d}_3\gamma^\mu d_2)$	\mathbf{C}
qd1_1233	$(\bar{q}_1\gamma_\mu q_2)(\bar{d}_3\gamma^\mu d_3)$	\mathbf{C}
qd1_1311	$(\bar{q}_1\gamma_\mu q_3)(\bar{d}_1\gamma^\mu d_1)$	\mathbf{C}
qd1_1312	$(ar{q}_1\gamma_\mu q_3)(ar{d}_1\gamma^\mu d_2)$	\mathbf{C}
qd1_1313	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_1\gamma^\mu d_3 ight)$	\mathbf{C}
qd1_1321	$(ar{q}_1\gamma_{\mu}q_3) \left(ar{d}_2\gamma^{\mu}d_1 ight)$	\mathbf{C}
qd1_1322	$egin{array}{l} (ar{q}_1\gamma_{\mu}q_3) & (ar{d}_2\gamma^{\mu}d_2) \ \end{array}$	C
qd1_1323	$egin{array}{l} (ar{q}_1\gamma_\mu q_3) & (ar{d}_2\gamma^\mu d_3) \ \end{array} \ .$	C
qd1_1331	$egin{array}{l} (ar{q}_1\gamma_\mu q_3) & (ar{d}_3\gamma^\mu d_1) \ \end{array}$	C
qd1_1332	$egin{array}{l} (q_1/\mu q_3) \left(a_3/\mu a_1 ight) \ \left(ar q_1 \gamma_\mu q_3 ight) \left(ar d_3 \gamma^\mu d_2 ight) \end{array}$	$^{\rm C}$
qd1_1333	$(q_1\gamma_\mu q_3)(d_3\gamma^\mu d_2) \ (ar q_1\gamma_\mu q_3)(ar d_3\gamma^\mu d_3)$	$^{\rm C}$
qd1_1333 qd1_2211	$(q_1\gamma_\mu q_3) \left(a_3\gamma^\mu a_3 ight) \ \left(ar q_2\gamma_\mu q_2 ight) \left(ar d_1\gamma^\mu d_1 ight)$	R
qd1_2211 qd1_2212	$(q_2 / \mu q_2) (a_1 / a_1)$ $(\bar{a}_2 c_1 a_2) (\bar{d}_2 c_1 \mu d_2)$	r C
qu1_2212	$(ar{q}_2\gamma_\mu q_2)\left(ar{d}_1\gamma^\mu d_2 ight)$	C

$\begin{array}{c} \operatorname{qdl} = 2213 & (\bar{q}_2\gamma_{\mu}q_2) \left(\bar{d}_1\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 2222 & (\bar{q}_2\gamma_{\mu}q_2) \left(\bar{d}_2\gamma^{\mu}d_2\right) & R \\ \operatorname{qdl} = 2223 & (\bar{q}_2\gamma_{\mu}q_2) \left(\bar{d}_2\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 2233 & (\bar{q}_2\gamma_{\mu}q_2) \left(\bar{d}_2\gamma^{\mu}d_3\right) & R \\ \operatorname{qdl} = 2233 & (\bar{q}_2\gamma_{\mu}q_2) \left(\bar{d}_3\gamma^{\mu}d_3\right) & R \\ \operatorname{qdl} = 2311 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_1\right) & C \\ \operatorname{qdl} = 2312 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_2\right) & C \\ \operatorname{qdl} = 2313 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_2\right) & C \\ \operatorname{qdl} = 2322 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_2\gamma^{\mu}d_2\right) & C \\ \operatorname{qdl} = 2322 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_2\gamma^{\mu}d_2\right) & C \\ \operatorname{qdl} = 2323 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_2\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 2333 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_3\gamma^{\mu}d_1\right) & C \\ \operatorname{qdl} = 2333 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_3\gamma^{\mu}d_1\right) & C \\ \operatorname{qdl} = 2333 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_3\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 2333 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_3\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 2333 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_3\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 2333 & (\bar{q}_2\gamma_{\mu}q_3) \left(\bar{d}_3\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 3311 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_1\right) & R \\ \operatorname{qdl} = 3312 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 3313 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 3322 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 3322 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 3322 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 3323 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 3333 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 3333 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}d_3\right) & C \\ \operatorname{qdl} = 3333 & (\bar{q}_3\gamma_{\mu}q_3) \left(\bar{d}_1\gamma^{\mu}T^{\mu}d_1\right) & R \\ \operatorname{qus} = 1111 & (\bar{q}_1\gamma_{\mu}T^{\mu}q_1) \left(\bar{u}_1\gamma^{\mu}T^{\mu}u_1\right) & R \\ \operatorname{qus} = 1121 & (\bar{q}_1\gamma_{\mu}T^{\mu}q_1) \left(\bar{u}_1\gamma^{\mu}T^{\mu}u_1\right) & C \\ \operatorname{qus} = 1122 & (\bar{q}_1\gamma_{\mu}T^{\mu}q_1) \left(\bar{u}_1\gamma^{\mu}T^{\mu}u_1\right) & C \\ \operatorname{qus} = 1122 & (\bar{q}_1\gamma_{\mu}T^{\mu}q_2) \left(\bar{u}_1\gamma^{\mu}T^{\mu}u_1\right) & C \\ \operatorname{qus} = 1221 & (\bar{q}_1\gamma_{\mu}T^{\mu}q_2) \left(\bar{u}_1\gamma^{\mu}T^{\mu}u_1\right) & C \\ \operatorname{qus} = 1221 & (\bar{q}_1\gamma_{\mu}T^{\mu}q_2) \left(\bar{u}_1\gamma^{\mu}T^{\mu}u_1\right) & C \\ \operatorname{qus} = 1221 & (\bar{q}_1\gamma_{\mu}T^{\mu}q_2) \left(\bar{u}_1\gamma^{\mu}T^{\mu}u_1\right$	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2213	$(\bar{q}_2\gamma_\mu q_2) \left(\bar{d}_1\gamma^\mu d_3\right)$	C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2222		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{q}_2\gamma_\mu q_2) (ar{d}_2\gamma^\mu d_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2233		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2312		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2313	· · · · · · · · · · · · · · · · · · ·	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2321		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2322		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2323	$(ar{q}_2\gamma_\mu q_3)ig(ar{d}_2\gamma^\mu d_3ig)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2331	$(ar{q}_2\gamma_\mu q_3)ig(ar{d}_3\gamma^\mu d_1ig)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_3\gamma^\mu d_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_2333		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_3311		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_3312	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_3322		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qd1_3323		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	$(\bar{q}_3\gamma_\mu q_3)(d_3\gamma^\mu d_3)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	$\left(\bar{q}_1\gamma_{\mu}T^A_{}q_1\right)\left(\bar{u}_1\gamma^{\mu}T^A_{}u_1\right)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=	$(\bar{q}_1\gamma_\mu T^A q_1)(\bar{u}_1\gamma^\mu T^A u_2)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	$(\bar{q}_1\gamma_\mu T^A q_1)(\bar{u}_2\gamma^\mu T^A u_3)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	$(q_1\gamma_\mu T^A q_1) (u_3\gamma^\mu T^A u_3)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
qu8_1232 $(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{u}_3\gamma^{\mu}T^Au_2)$ C qu8_1233 $(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{u}_3\gamma^{\mu}T^Au_3)$ C	_	$(q_1\gamma_{\mu}^{1} q_2) (u_2\gamma^{1} u_3)$ $(\bar{q}_1\gamma_{\mu}^{1} T^Aq_2) (\bar{u}_2\gamma^{\mu}T^Au_1)$	
qu8_1233 $\left(\bar{q}_1\gamma_{\mu}T^Aq_2\right)\left(\bar{u}_3\gamma^{\mu}T^Au_3\right)$ C	=	$(q_1/\mu^1 - q_2)(u_3/1 - u_1) (\bar{q}_1\gamma_{}T^Aq_2)(\bar{q}_2\gamma^{\mu}T^Aq_2)$	
	-	$(\bar{q}_1\gamma_{\mu}T^Aq_2)(\bar{u}_3\gamma^TT^Aq_2)$ $(\bar{q}_1\gamma_{\nu}T^Aq_2)(\bar{q}_2\gamma^{\mu}T^Aq_2)$	
		$(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{u}_1\gamma^\mu T^Au_1)$	
qu8_1312 $\left(\bar{q}_1\gamma_{\mu}T^Aq_3\right)\left(\bar{u}_1\gamma^{\mu}T^Au_2\right)$ C		$(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{u}_1\gamma^\mu T^Au_2)$	
qu8_1313 $\left\langle \bar{q}_1 \gamma_\mu T^A q_3 \right\rangle \left\langle \bar{u}_1 \gamma^\mu T^A u_3 \right\rangle$ C		$(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{u}_1\gamma^\mu T^Au_3)$	
qu8_1321 $\left\langle \bar{q}_1 \gamma_\mu T^A q_3 \right\rangle \left\langle \bar{u}_2 \gamma^\mu T^A u_1 \right\rangle$ C		$(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{u}_2\gamma^\mu T^Au_1)$	
qu8_1322 $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_2 \gamma^{\mu} T^A u_2)$ C		$(\bar{q}_1\gamma_\mu T^Aq_3) (\bar{u}_2\gamma^\mu T^Au_2)$	\mathbf{C}
qu8_1323 $(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_3)$ C		$(\bar{q}_1\gamma_\mu T^Aq_3)(\bar{u}_2\gamma^\mu T^Au_3)$	
qu8_1331 $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_3 \gamma^{\mu} T^A u_1)$ C		$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_1 ight)$	
qu8_1332 $(\bar{q}_1 \gamma_{\mu} T^A q_3) (\bar{u}_3 \gamma^{\mu} T^A u_2)$ C	qu8_1332	$(\bar{q}_1\gamma_\mu T^Aq_3) (\bar{u}_3\gamma^\mu T^Au_2)$	
qu8_1333 $ \left(\bar{q}_1 \gamma_\mu T^A q_3 \right) \left(\bar{u}_3 \gamma^\mu T^A u_3 \right) $ C	qu8_1333	$\left(ar{q}_1\gamma_{\mu}T^Aq_3\right)\left(ar{u}_3\gamma^{\mu}T^Au_3\right)$	\mathbf{C}

WC name	Operator	Type
qu8_2211	$\left(ar{q}_2 \gamma_\mu T^A q_2 \right) \left(ar{u}_1 \gamma^\mu T^A u_1 \right)$	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	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{u}_1\gamma^\mu T^Au_3 ight)$	\mathbf{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	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_2\gamma^{\mu}T^Au_3 ight)$	\mathbf{C}
qu8_2233	$(ar{q}_2\gamma_\mu T^Aq_2)~(ar{u}_3\gamma^\mu T^Au_3)$	R
qu8_2311	$(\bar{q}_2\gamma_\mu T^Aq_3) (\bar{u}_1\gamma^\mu T^Au_1)$	\mathbf{C}
qu8_2312	$\left\langle ar{q}_2\gamma_\mu T^Aq_3 ight angle \left\langle ar{u}_1\gamma^\mu T^Au_2 ight angle$	\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	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_2\gamma^\mu T^Au_1 ight)$	\mathbf{C}
qu8_2322	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_2\gamma^\mu T^Au_2 ight)$	\mathbf{C}
qu8_2323	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_2\gamma^\mu T^Au_3 ight)$	\mathbf{C}
qu8_2331	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_3\gamma^\mu T^Au_1 ight)$	\mathbf{C}
qu8_2332	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_3\gamma^\mu T^Au_2 ight)$	\mathbf{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	$\left(ar{q}_3\gamma_\mu T^Aq_3 ight)\left(ar{u}_1\gamma^\mu T^Au_2 ight)$	\mathbf{C}
qu8_3313	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_3 ight)$	\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	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_3 ight)$	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	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{d}_1\gamma^\mu T^Ad_2 ight)$	\mathbf{C}
qd8_1113	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{d}_1\gamma^\mu T^Ad_3 ight)$	\mathbf{C}
qd8_1122	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	R
qd8_1123	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	\mathbf{C}
qd8_1133	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{d}_3\gamma^\mu T^Ad_3 ight)$	R
qd8_1211	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	\mathbf{C}
qd8_1212	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_2 ight)$	\mathbf{C}
qd8_1213	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	\mathbf{C}
qd8_1221	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{d}_2\gamma^\mu T^Ad_1 ight)$	\mathbf{C}
qd8_1222	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(d_2\gamma^{\mu}T^Ad_2 ight)$	\mathbf{C}
qd8_1223	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_1231	$(ar{q}_1\gamma_\mu T^Aq_2)~(ar{d}_3\gamma^\mu T^Ad_1)$	$^{\mathrm{C}}$
qd8_1232	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_1233	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{d}_3\gamma^\mu T^Ad_3 ight)$	\mathbf{C}
qd8_1311	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	\mathbf{C}
qd8_1312	$\left(ar{q}_1\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_2 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_1\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_1 ight)$	\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}
	· · · · · · · · /	

WC name	Operator	Type
qd8_1332	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_2 ight)$	C
qd8_1333	$(\bar{q}_1\gamma_\mu T^A q_3) (\bar{d}_3\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
qd8_2211	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{d}_1\gamma^\mu T^Ad_1 ight)$	${ m R}$
qd8_2212	$(ar{q}_2\gamma_\mu T^Aq_2)(ar{d}_1\gamma^\mu T^Ad_2)$	$^{\mathrm{C}}$
qd8_2213	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{d}_1\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_2222	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{d}_2\gamma^\mu T^Ad_2 ight)$	${ m R}$
qd8_2223	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{d}_2\gamma^\mu T^Ad_3 ight)$	\mathbf{C}
qd8_2233	$(ar{q}_2\gamma_\mu T^Aq_2)(ar{d}_3\gamma^\mu T^Ad_3)$	${ m R}$
qd8_2311	$\left\langle ar{q}_{2}\gamma_{\mu}T^{A}q_{3} ight angle \left\langle ar{d}_{1}\gamma^{\mu}T^{A}d_{1} ight angle$	\mathbf{C}
qd8_2312	$(ar{q}_2\gamma_\mu T^Aq_3)(ar{d}_1\gamma^\mu T^Ad_2)$	\mathbf{C}
qd8_2313	$(\bar{q}_2\gamma_\mu T^Aq_3)(\bar{d}_1\gamma^\mu T^Ad_3)$	\mathbf{C}
qd8_2321	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_1 ight)$	\mathbf{C}
qd8_2322	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_2323	$\left(ar{q}_2\gamma_\mu T^Aq_3\right)\left(ar{d}_2\gamma^\mu T^Ad_3\right)$	$^{\mathrm{C}}$
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	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_3\gamma^\mu T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_2333	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_3\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_2 ight)$	\mathbf{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	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	${ m R}$
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	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_1q_1 ight)$	$^{\mathrm{C}}$
ledq_1112	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_1q_2 ight)$	$^{\mathrm{C}}$
ledq_1113	$\left(\ell_{1}e_{1} ight)\left(d_{1}q_{3} ight)$	\mathbf{C}
ledq_1121	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_2q_1 ight)$	$^{\mathrm{C}}$
ledq_1122	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_2q_2 ight)$	\mathbf{C}
ledq_1123	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_2q_3 ight)$	\mathbf{C}
ledq_1131	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_1 ight)$	$^{\mathrm{C}}$
ledq_1132	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_2 ight)$	$^{\mathrm{C}}$
ledq_1133	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_3 ight)$	\mathbf{C}
ledq_1211	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_1q_1 ight)$	\mathbf{C}
ledq_1212	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_1q_2 ight)$	$^{\mathrm{C}}$
ledq_1213	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_1q_3 ight)$	$^{\mathrm{C}}$
ledq_1221	$\left(\ell_1e_2 ight)\left(d_2q_1 ight)$	\mathbf{C}
ledq_1222	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_2q_2 ight)$	$^{\mathrm{C}}$
ledq_1223	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_2q_3 ight)$	$^{\mathrm{C}}$
ledq_1231	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_3q_1 ight)$	$^{\mathrm{C}}$
ledq_1232	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_3q_2 ight)$	$^{\mathrm{C}}$
ledq_1233	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_3q_3 ight)$	$^{\mathrm{C}}$
ledq_1311	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_1q_1 ight)$	$^{\mathrm{C}}$

WC name	Operator	Type
ledq_1312	$\left(ar{\ell}_1e_3 ight)\left(ar{d}_1q_2 ight)$	C
ledq_1313	$ig(ar{\ell}_1 e_3ig) ig(ar{d}_1 q_3ig)$	\mathbf{C}
ledq_1321	$ig(ar{\ell}_1 e_3ig) ig(ar{d}_2 q_1ig)$	\mathbf{C}
ledq_1322	$ig(ar{\ell}_1 e_3ig) ig(ar{d}_2 q_2ig)$	\mathbf{C}
ledq_1323	$ig(ar{\ell}_1 e_3ig)ig(ar{d}_2 q_3ig)$	\mathbf{C}
ledq_1331	$ig(ar{\ell}_1 e_3ig) ig(ar{d}_3 q_1ig)$	\mathbf{C}
ledq_1332	$(ar{\ell}_1 e_3) \ (ar{d}_3 q_2)$	\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	$\left(ar{\ell}_2 e_1 ight)\left(ar{d}_1 q_3 ight)$	\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	$\left(\ell_{2}e_{1} ight)\left(d_{2}q_{3} ight)$	\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	$\left(ar{\ell}_2 e_1 ight)\left(ar{d}_3 q_3 ight)$	\mathbf{C}
ledq_2211	$\left(\ell_{2}e_{2} ight)\left(d_{1}q_{1} ight)$	\mathbf{C}
ledq_2212	$\left(ar{\ell}_{2}e_{2} ight)\left(ar{d}_{1}q_{2} ight)$	\mathbf{C}
ledq_2213	$\left(ar{\ell}_2 e_2 ight)\left(ar{d}_1 q_3 ight)$	\mathbf{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	$\left(ar{\ell}_2 e_2 ight)\left(ar{d}_2 q_3 ight)$	\mathbf{C}
ledq_2231	$\left(\ell_{2}e_{2} ight)\left(d_{3}q_{1} ight)$	\mathbf{C}
ledq_2232	$\left(ar{\ell}_2 e_2 ight)\left(ar{d}_3 q_2 ight)$	\mathbf{C}
ledq_2233	$\left(ar{\ell}_2 e_2 ight)\left(ar{d}_3 q_3 ight)$	\mathbf{C}
ledq_2311	$\left(ar{\ell}_{2}e_{3} ight) \left(ar{d}_{1}q_{1} ight)$	\mathbf{C}
ledq_2312	$\left(ar{\ell}_2 e_3 ight)\left(ar{d}_1 q_2 ight)$	\mathbf{C}
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	$\left(\overline{\ell}_{2}e_{3} ight) \left(\overline{d}_{2}q_{2} ight)$	\mathbf{C}
ledq_2323	$\left(\overline{\ell}_{2}e_{3} ight) \left(\overline{d}_{2}q_{3} ight)$	\mathbf{C}
ledq_2331	$\left(\overline{\ell}_{2}e_{3} ight) \left(\overline{d}_{3}q_{1} ight)$	\mathbf{C}
ledq_2332	$\left(ar{\ell}_2 e_3 ight)\left(ar{d}_3 q_2 ight)$	\mathbf{C}
ledq_2333	$\left(ar{\ell}_2 e_3 ight)\left(ar{d}_3 q_3 ight)$	С
ledq_3111	$\left(ar{\ell}_{3}e_{1} ight)\left(ar{d}_{1}q_{1} ight)$	\mathbf{C}
ledq_3112	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_1 q_2 ight)$	\mathbf{C}
ledq_3113	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_1 q_3 ight)$	C
ledq_3121	$ig(ar{\ell}_3 e_1ig) ig(ar{d}_2 q_1ig)$	C
ledq_3122	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_2 q_2 ight)$	\mathbf{C}
ledq_3123	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_2 q_3 ight)$	C
ledq_3131	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_3 q_1 ight)$	\mathbf{C}

WC name	Operator	Type
ledq_3132	$\left(ar{\ell}_3e_1 ight)\left(ar{d}_3q_2 ight)$	C
ledq_3133	$(ar{\ell}_3 e_1) (ar{d}_3 q_3)$	C
ledq_3211	$(\bar{\ell}_3 e_2) (\bar{d}_1 q_1)$	Ċ
ledq_3212	$egin{pmatrix} (ar{\ell}_3e_2) & (ar{d}_1q_2) \ \end{pmatrix}$	Ċ
ledq_3213	$(ar{\ell}_3 e_2) (ar{d}_1 q_3) $	$\overset{\circ}{\mathrm{C}}$
ledq_3221	$egin{pmatrix} (ar{s}_3e_2) & (ar{a}_1q_3) \\ (ar{\ell}_3e_2) & (ar{d}_2q_1) \end{pmatrix}$	$\overset{\circ}{\mathrm{C}}$
ledq_3222	$egin{array}{c} (ar{s}_3e_2) & (ar{d}_2q_1) \\ (ar{\ell}_3e_2) & (ar{d}_2q_2) \end{array}$	$\overset{\circ}{\mathrm{C}}$
ledq_3223	$egin{pmatrix} (\overline{q}_3 e_2) & (\overline{q}_2 q_3) \\ (\overline{\ell}_3 e_2) & (\overline{d}_2 q_3) \end{pmatrix}$	$\stackrel{\circ}{\mathrm{C}}$
ledq_3231	$egin{pmatrix} (\overline{s}_3 e_2) & (\overline{a}_3 q_1) \\ (\overline{\ell}_3 e_2) & (\overline{d}_3 q_1) \end{pmatrix}$	$\stackrel{\circ}{\mathrm{C}}$
ledq_3232	$egin{array}{l} (\overline{d_3}e_2) & (\overline{d_3}q_2) \\ (\overline{\ell_3}e_2) & (\overline{d_3}q_2) \end{array}$	C
ledq_3233	$egin{pmatrix} (\overline{a_3}e_2) & (\overline{a_3}q_2) \\ (\overline{\ell_3}e_2) & (\overline{d_3}q_3) \end{pmatrix}$	C
ledq_3311	$egin{pmatrix} (\overline{a_3}e_3) & (\overline{d_1}q_1) \end{pmatrix}$	C
ledq_3312	$egin{pmatrix} (\overline{d_3}e_3) & (\overline{d_1}q_2) \\ (\overline{\ell_3}e_3) & (\overline{d_1}q_2) \end{pmatrix}$	C
ledq_3313	$(ar{\ell}_3e_3)$ $(ar{d}_1q_2)$ $(ar{\ell}_3e_3)$ $(ar{d}_1q_3)$	C
ledq_3321	$egin{pmatrix} (ar{s}3c3) & (ar{a}1q3) \\ (ar{\ell}_3e_3) & (ar{d}_2q_1) \end{pmatrix}$	C
ledq_3322	$egin{pmatrix} (ar{e}_3e_3) & (ar{d}_2q_1) \ & (ar{\ell}_3e_3) & (ar{d}_2q_2) \end{pmatrix}$	C
ledq_3323	$egin{pmatrix} (\overline{d}_3e_3) & (\overline{d}_2q_2) \\ (\overline{\ell}_3e_3) & (\overline{d}_2q_3) \end{pmatrix}$	C
ledq_3331	$egin{pmatrix} (ar{e}_3e_3) & (ar{d}_3q_1) \\ (ar{\ell}_3e_3) & (ar{d}_3q_1) \end{pmatrix}$	C
ledq_3332	$egin{array}{l} (ar{d}_3e_3) & (ar{d}_3q_2) \\ (ar{\ell}_3e_3) & (ar{d}_3q_2) \\ \end{pmatrix}$	C
ledq_3333	$(ar{\ell}_3e_3) \ (ar{d}_3q_2) \ (ar{\ell}_3e_3) \ (ar{d}_3q_3)$	C
quqd1_1111	$egin{array}{c} (a_3a_3) & (a_3a_3) \ (ar q_1u_1) & \epsilon_{jk} & (ar q_1d_1) \end{array}$	$\stackrel{\circ}{\mathrm{C}}$
quqd1_1112	$(ar{q}_1u_1)\epsilon_{jk}(ar{q}_1d_2)$	$\stackrel{\circ}{\mathrm{C}}$
quqd1_1113	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_1d_3)$	Č
quqd1_1121	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_2d_1)$	$\dot{\mathrm{C}}$
quqd1_1122	$(ar{q}_1u_1)\epsilon_{jk}(ar{q}_2d_2)$	\mathbf{C}
quqd1_1123	$(ar{q}_1u_1)\epsilon_{jk}(ar{q}_2d_3)$	\mathbf{C}
quqd1_1131	$(ar{q}_1u_1)\epsilon_{jk}(ar{q}_3d_1)$	\mathbf{C}
quqd1_1132	$(ar{q}_1u_1)\epsilon_{jk}(ar{q}_3d_2)$	\mathbf{C}
quqd1_1133	$\left(ar{q}_{1}u_{1} ight)\epsilon_{jk}\left(ar{q}_{3}d_{3} ight)$	\mathbf{C}
quqd1_1211	$\left(ar{q}_{1}u_{2} ight)\epsilon_{jk}\left(ar{q}_{1}d_{1} ight)$	\mathbf{C}
quqd1_1212	$(ar{q}_1 u_2) \epsilon_{jk} (ar{q}_1 d_2)$	\mathbf{C}
quqd1_1213	$\left(ar{q}_{1}u_{2} ight)\epsilon_{jk}\left(ar{q}_{1}d_{3} ight)$	\mathbf{C}
quqd1_1221	$\left(ar{q}_{1}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	\mathbf{C}
quqd1_1222	$\left(ar{q}_{1}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	\mathbf{C}
quqd1_1223	$(\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_2d_3)$	C
quqd1_1231	$(\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_3d_1)$	С
quqd1_1232	$(\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_3d_2)$	$\stackrel{ ext{C}}{\sim}$
quqd1_1233	$(ar{q}_1u_2)\epsilon_{jk}(ar{q}_3d_3)$	С
quqd1_1311	$(ar{q}_1u_3)\epsilon_{jk}(ar{q}_1d_1)$	С
quqd1_1312	$(ar{q}_1u_3)\epsilon_{jk}(ar{q}_1d_2)$	С
quqd1_1313	$(ar{q}_1u_3)\epsilon_{jk}(ar{q}_1d_3)$	С
quqd1_1321	$(ar{q}_1 u_3) \epsilon_{jk} (ar{q}_2 d_1)$	C C
quqd1_1322	$\left(ar{q}_1 u_3 ight) \epsilon_{jk} \left(ar{q}_2 d_2 ight)$	C

WC name	Operator	Type
quqd1_1323	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_2 d_3)$	C
quqd1_1331	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_3d_1)$	$^{\mathrm{C}}$
quqd1_1332	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_3d_2)$	$^{\mathrm{C}}$
quqd1_1333	$(\bar{q}_1u_3)\epsilon_{jk}(\bar{q}_3d_3)$	$^{\mathrm{C}}$
quqd1_2111	$\left(\bar{q}_{2}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_2112	$\left(\bar{q}_{2}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{2}\right)$	$^{\mathrm{C}}$
quqd1_2113	$\left(\bar{q}_{2}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_2121	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	$^{\mathrm{C}}$
quqd1_2122	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	$^{\mathrm{C}}$
quqd1_2123	$\left(\bar{q}_{2}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{2}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_2131	$\left(\bar{q}_{2}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{3}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_2132	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	$^{\mathrm{C}}$
quqd1_2133	$\left(\bar{q}_{2}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{3}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_2211	$\left(\bar{q}_{2}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_2212	$\left(\bar{q}_{2}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{2}\right)$	$^{\mathrm{C}}$
quqd1_2213	$\left(\bar{q}_{2}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_2221	$\left(\bar{q}_{2}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{2}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_2222	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	$^{\mathrm{C}}$
quqd1_2223	$\left(\bar{q}_{2}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{2}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_2231	$\left(\bar{q}_{2}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{3}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_2232	$\left(ar{q}_{2}u_{2} ight) \epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	$^{\mathrm{C}}$
quqd1_2233	$\left(\bar{q}_{2}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{3}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_2311	$\left(\bar{q}_{2}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_2312	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{2} ight)$	\mathbf{C}
quqd1_2313	$\left(\bar{q}_{2}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_2321	$\left(\bar{q}_{2}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{2}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_2322	$\left(\bar{q}_{2}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{2}d_{2}\right)$	$^{\mathrm{C}}$
quqd1_2323	$\left(\bar{q}_{2}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{2}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_2331	$\left(\bar{q}_{2}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{3}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_2332	$\left(\bar{q}_{2}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{3}d_{2}\right)$	$^{\mathrm{C}}$
quqd1_2333	$\left(\bar{q}_{2}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{3}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_3111	$\left(\bar{q}_{3}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_3112	$\left(\bar{q}_{3}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{2}\right)$	$^{\mathrm{C}}$
quqd1_3113	$\left(\bar{q}_{3}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_3121	$\left(ar{q}_{3}u_{1} ight) \epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	$^{\mathrm{C}}$
quqd1_3122	$\left(ar{q}_{3}u_{1} ight) \epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	$^{\mathrm{C}}$
quqd1_3123	$\left(ar{q}_{3}u_{1} ight) \epsilon_{jk}\left(ar{q}_{2}d_{3} ight)$	$^{\mathrm{C}}$
quqd1_3131	$\left(ar{q}_{3}u_{1} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	$^{\mathrm{C}}$
quqd1_3132	$\left(\bar{q}_{3}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{3}d_{2}\right)$	$^{\mathrm{C}}$
quqd1_3133	$\left(\bar{q}_{3}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{3}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_3211	$\left(\bar{q}_{3}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{1}\right)$	$^{\mathrm{C}}$
quqd1_3212	$\left(\bar{q}_{3}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{2}\right)$	$^{\mathrm{C}}$
quqd1_3213	$\left(\bar{q}_{3}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{3}\right)$	$^{\mathrm{C}}$
quqd1_3221	$\left(ar{q}_{3}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	C

WC name	Operator	Type
quqd1_3222	$\left(\bar{q}_{3}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{2}d_{2}\right)$	C
quqd1_3223	$(\bar{q}_3u_2)\epsilon_{jk}(\bar{q}_2d_3)$	$^{\mathrm{C}}$
quqd1_3231	$\left(ar{q}_{3}u_{2} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	$^{\mathrm{C}}$
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	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_1d_1)$	$^{\mathrm{C}}$
quqd1_3312	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_1d_2)$	$^{\mathrm{C}}$
quqd1_3313	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_1d_3)$	$^{\mathrm{C}}$
quqd1_3321	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_2d_1)$	$^{\mathrm{C}}$
quqd1_3322	$\left(ar{q}_3 u_3 ight) \epsilon_{jk} \left(ar{q}_2 d_2 ight)$	$^{\mathrm{C}}$
quqd1_3323	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_2d_3)$	$^{\mathrm{C}}$
quqd1_3331	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_3d_1)$	$^{\mathrm{C}}$
quqd1_3332	$\left(ar{q}_3u_3 ight)\epsilon_{jk}\left(ar{q}_3d_2 ight)$	$^{\mathrm{C}}$
quqd1_3333	$(\bar{q}_3u_3)\epsilon_{jk}(\bar{q}_3d_3)$	$^{\mathrm{C}}$
quqd8_1111	$\left(ar{q}_1 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_1 ight)$	$^{\mathrm{C}}$
quqd8_1112	$\left(ar{q}_1 T^A u_1 \right) \epsilon_{jk} \left(ar{q}_1 T^A d_2 \right)$	$^{\mathrm{C}}$
quqd8_1113	$(\bar{q}_1 T^A u_1) \epsilon_{ik} (\bar{q}_1 T^A d_3)$	$^{\mathrm{C}}$
quqd8_1121	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	$^{\mathrm{C}}$
quqd8_1122	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	$^{\mathrm{C}}$
quqd8_1123	$(\bar{q}_1 T^A u_1) \epsilon_{ik} (\bar{q}_2 T^A d_3)$	$^{\mathrm{C}}$
quqd8_1131	$(\bar{q}_1 T^A u_1) \epsilon_{ik} (\bar{q}_3 T^A d_1)$	$^{\mathrm{C}}$
quqd8_1132	$\left(ar{q}_1 T^A u_1\right) \epsilon_{jk} \left(ar{q}_3 T^A d_2\right)$	\mathbf{C}
quqd8_1133	$\left(\bar{q}_1 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$	\mathbf{C}
quqd8_1211	$\left(\bar{q}_1 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$	\mathbf{C}
quqd8_1212	$\left(ar{q}_1 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_2 ight)$	\mathbf{C}
quqd8_1213	$(\bar{q}_1 T^A u_2) \epsilon_{ik} (\bar{q}_1 T^A d_3)$	\mathbf{C}
quqd8_1221	$\left(ar{q}_1 T^A u_2\right) \epsilon_{jk} \left(ar{q}_2 T^A d_1\right)$	\mathbf{C}
quqd8_1222	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	\mathbf{C}
quqd8_1223	$\left(ar{q}_1 T^A u_2 \right) \epsilon_{jk} \left(ar{q}_2 T^A d_3 \right)$	\mathbf{C}
quqd8_1231	$\left\langle ar{q}_1 T^A u_2 \right\rangle \epsilon_{jk} \left\langle ar{q}_3 T^A d_1 \right\rangle$	\mathbf{C}
quqd8_1232	$\left\langle ar{q}_1 T^A u_2 \right angle \epsilon_{jk} \left\langle ar{q}_3 T^A d_2 \right angle$	\mathbf{C}
quqd8_1233	$\left\langle ar{q}_1 T^A u_2 \right\rangle \epsilon_{jk} \left\langle ar{q}_3 T^A d_3 \right\rangle$	\mathbf{C}
quqd8_1311	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	\mathbf{C}
quqd8_1312	$\left(ar{q}_1 T^A u_3\right) \epsilon_{jk} \left(ar{q}_1 T^A d_2\right)$	\mathbf{C}
quqd8_1313	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	\mathbf{C}
quqd8_1321	$\left\langle ar{q}_{1}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{1} ight angle$	\mathbf{C}
quqd8_1322	$\left\langle ar{q}_{1}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{2} ight angle$	\mathbf{C}
quqd8_1323	$\langle \bar{q}_1 T^A u_3 \rangle \epsilon_{jk} \langle \bar{q}_2 T^A d_3 \rangle$	\mathbf{C}
quqd8_1331	$\left\langle ar{q}_{1}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{1} ight angle$	\mathbf{C}
quqd8_1332	$\left(ar{q}_1T^Au_3 ight)\epsilon_{jk}\left(ar{q}_3T^Ad_2 ight)$	\mathbf{C}
quqd8_1333	$\left\langle ar{q}_1 T^A u_3 \right angle \epsilon_{jk} \left\langle ar{q}_3 T^A d_3 \right\rangle$	\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	$(\bar{q}_2 T^A u_1) \epsilon_{ik} (\bar{q}_1 T^A d_2)$	$^{\mathrm{C}}$
quqd8_2113	$\left\langle ar{q}_2 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_1 T^A d_3 \right angle$	$^{\mathrm{C}}$
	\- / J ·· \ ~/	

WC name	Operator	Type
quqd8_2121	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	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	$\left\langle ar{q}_{2}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{3} ight angle$	\mathbf{C}
quqd8_2131	$\left\langle ar{q}_{2}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{1} ight angle$	\mathbf{C}
quqd8_2132	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	\mathbf{C}
quqd8_2133	$\left(ar{q}_2 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_3 ight)$	\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	$\left\langle ar{q}_{2}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{2} ight angle$	\mathbf{C}
quqd8_2213	$\left\langle ar{q}_{2}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{3} ight angle$	\mathbf{C}
quqd8_2221	$\left\langle ar{q}_2 T^A u_2 ight angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_1 ight angle$	\mathbf{C}
quqd8_2222	$\left\langle ar{q}_2 T^A u_2 ight angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_2 ight angle$	\mathbf{C}
quqd8_2223	$\left\langle ar{q}_{2}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{3} ight angle$	\mathbf{C}
quqd8_2231	$\left(ar{q}_2 T^A u_2\right) \epsilon_{jk} \left(ar{q}_3 T^A d_1 ight)$	\mathbf{C}
quqd8_2232	$\left\langle ar{q}_2 T^A u_2 \right angle \epsilon_{jk} \left\langle ar{q}_3 T^A d_2 ight angle$	\mathbf{C}
quqd8_2233	$\left\langle ar{q}_{2}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{3} ight angle$	\mathbf{C}
quqd8_2311	$\left(ar{q}_2 T^A u_3 \right) \epsilon_{jk} \left(ar{q}_1 T^A d_1 \right)$	\mathbf{C}
quqd8_2312	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_1 T^A d_2\right)$	\mathbf{C}
quqd8_2313	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_1 T^A d_3\right)$	\mathbf{C}
quqd8_2321	$\left(ar{q}_2 T^A u_3 \right) \epsilon_{jk} \left(ar{q}_2 T^A d_1 \right)$	\mathbf{C}
quqd8_2322	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_2 T^A d_2\right)$	\mathbf{C}
quqd8_2323	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_2 T^A d_3\right)$	\mathbf{C}
quqd8_2331	$\left(ar{q}_2 T^A u_3 \right) \epsilon_{jk} \left(ar{q}_3 T^A d_1 \right)$	\mathbf{C}
quqd8_2332	$\left(ar{q}_2 T^A u_3 \right) \epsilon_{jk} \left(ar{q}_3 T^A d_2 \right)$	\mathbf{C}
quqd8_2333	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_3 T^A d_3\right)$	\mathbf{C}
quqd8_3111	$\left(ar{q}_{3}T^{A}u_{1} ight)\epsilon_{jk}\left(ar{q}_{1}T^{A}d_{1} ight)$	\mathbf{C}
quqd8_3112	$\left(ar{q}_3 T^A u_1\right) \epsilon_{jk} \left(ar{q}_1 T^A d_2\right)$	\mathbf{C}
quqd8_3113	$\left(ar{q}_3T^Au_1 ight)\epsilon_{jk}\left(ar{q}_1T^Ad_3 ight)$	\mathbf{C}
quqd8_3121	$\left(ar{q}_{3}T^{A}u_{1} ight) \epsilon_{jk}\left(ar{q}_{2}T^{A}d_{1} ight)$	\mathbf{C}
quqd8_3122	$\left(ar{q}_3 T^A u_1 \right) \epsilon_{jk} \left(ar{q}_2 T^A d_2 \right)$	\mathbf{C}
quqd8_3123	$\left(ar{q}_3 T^A u_1 \right) \epsilon_{jk} \left(ar{q}_2 T^A d_3 \right)$	\mathbf{C}
quqd8_3131	$\left(ar{q}_{3}T^{A}u_{1} ight) \epsilon_{jk}\left(ar{q}_{3}T^{A}d_{1} ight)$	\mathbf{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	$\left(ar{q}_{3}T^{A}u_{1} ight) \epsilon_{jk}\left(ar{q}_{3}T^{A}d_{3} ight)$	\mathbf{C}
quqd8_3211	$\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$	\mathbf{C}
quqd8_3212	$\left(ar{q}_{3}T^{A}u_{2} ight) \epsilon_{jk}\left(ar{q}_{1}T^{A}d_{2} ight)$	\mathbf{C}
quqd8_3213	$\left(ar{q}_3T^A_{}u_2 ight)\epsilon_{jk}\left(ar{q}_1T^A_{}d_3 ight)$	С
quqd8_3221	$\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$	\mathbf{C}
quqd8_3222	$\left(\bar{q}_{3}T^{A}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{2}T^{A}d_{2}\right)$	\mathbf{C}
quqd8_3223	$\left(ar{q}_3T^Au_2 ight)\epsilon_{jk}\left(ar{q}_2T^Ad_3 ight)$	\mathbf{C}
quqd8_3231	$\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$	C
quqd8_3232	$\left(\bar{q}_{3}T^{A}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{3}T^{A}d_{2}\right)$	C
quqd8_3233	$\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$	C
quqd8_3311	$\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$	C
quqd8_3312	$\left(ar{q}_{3}T^{A}u_{3} ight) \epsilon_{jk}\left(ar{q}_{1}T^{A}d_{2} ight)$	\mathbf{C}

WC name	Operator	Type
quqd8_3313	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	С
quqd8_3321	$\left\langle ar{q}_{3}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{1} ight angle$	$^{\mathrm{C}}$
quqd8_3322	$\left\langle ar{q}_3 T^A u_3 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_2 \right angle$	$^{\mathrm{C}}$
quqd8_3323	$\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$	$^{\mathrm{C}}$
quqd8_3331	$\left(ar{q}_3 T^A u_3\right) \epsilon_{jk} \left(ar{q}_3 T^A d_1\right)$	$^{\mathrm{C}}$
quqd8_3332	$\left(ar{q}_{3}T^{A}u_{3} ight) \epsilon_{jk}\left(ar{q}_{3}T^{A}d_{2} ight)$	$^{\mathrm{C}}$
quqd8_3333	$\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$	$^{\mathrm{C}}$
lequ1_1111	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_1 u_1\right)$	$^{\mathrm{C}}$
lequ1_1112	$\left(ar{\ell}_1 e_1 ight) \epsilon_{jk} \left(ar{q}_1 u_2 ight)$	$^{\mathrm{C}}$
lequ1_1113	$\left(ar{\ell}_1 e_1 ight) \epsilon_{jk} \left(ar{q}_1 u_3 ight)$	$^{\mathrm{C}}$
lequ1_1121	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_2 u_1\right)$	$^{\mathrm{C}}$
lequ1_1122	$\left(ar{\ell}_{1}e_{1} ight) \epsilon_{jk}\left(ar{q}_{2}u_{2} ight)$	$^{\mathrm{C}}$
lequ1_1123	$\left(ar{\ell}_{1}e_{1} ight) \epsilon_{jk}\left(ar{q}_{2}u_{3} ight)$	$^{\mathrm{C}}$
lequ1_1131	$\left(\ell_{1}e_{1} ight) \epsilon_{jk}\left(ar{q}_{3}u_{1} ight)$	$^{\mathrm{C}}$
lequ1_1132	$\left(\ell_{1}e_{1} ight) \epsilon_{jk}\left(ar{q}_{3}u_{2} ight)$	$^{\mathrm{C}}$
lequ1_1133	$\left(ar{\ell}_{1}e_{1} ight)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	$^{\mathrm{C}}$
lequ1_1211	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}u_{1} ight)$	$^{\mathrm{C}}$
lequ1_1212	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}u_{2} ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}u_{2} ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	$^{\mathrm{C}}$
lequ1_1311	$\left(ar{\ell}_{1}e_{3} ight)\epsilon_{jk}\left(ar{q}_{1}u_{1} ight)$	$^{\mathrm{C}}$
lequ1_1312	$\left(ar{\ell}_{1}e_{3} ight)\epsilon_{jk}\left(ar{q}_{1}u_{2} ight)$	$^{\mathrm{C}}$
lequ1_1313	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_1 u_3)$	$^{\mathrm{C}}$
lequ1_1321	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_1322	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_1323	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_1331	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_1)$	\mathbf{C}
lequ1_1332	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_2)$	\mathbf{C}
lequ1_1333	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_3)$	\mathbf{C}
lequ1_2111	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_1)$	\mathbf{C}
lequ1_2112	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_2)$	\mathbf{C}
lequ1_2113	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_3)$	\mathbf{C}
lequ1_2121	$(ar{\ell}_2 e_1) \epsilon_{jk} (ar{q}_2 u_1)$	\mathbf{C}
lequ1_2122	$(ar{\ell}_2 e_1) \epsilon_{jk} (ar{q}_2 u_2)$	\mathbf{C}
lequ1_2123	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_3)$	\mathbf{C}
lequ1_2131	$(ar{\ell}_2 e_1) \epsilon_{jk} (ar{q}_3 u_1)$	\mathbf{C}
lequ1_2132	$(ar{\ell}_2 e_1) \epsilon_{jk} (ar{q}_3 u_2)$	\mathbf{C}
	\ -/ J ·· \ \ -/	

WC name	Operator	Type
lequ1_2133	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_3)$	C
lequ1_2211	$(ar{\ell}_2 e_2) \epsilon_{jk} (ar{q}_1 u_1)$	\mathbf{C}
lequ1_2212	$(ar{\ell}_2 e_2) \epsilon_{jk} (ar{q}_1 u_2)$	\mathbf{C}
lequ1_2213	$\left(ar{\ell}_2 e_2 ight)\epsilon_{jk}\left(ar{q}_1 u_3 ight)$	\mathbf{C}
lequ1_2221	$\left(ar{\ell}_2 e_2 ight)\epsilon_{jk}\left(ar{q}_2 u_1 ight)$	\mathbf{C}
lequ1_2222	$(ar{\ell}_2 e_2) \epsilon_{jk} (ar{q}_2 u_2)$	\mathbf{C}
lequ1_2223	$\left(ar{\ell}_2 e_2 ight)\epsilon_{jk}\left(ar{q}_2 u_3 ight)$	\mathbf{C}
lequ1_2231	$\left(ar{\ell}_2 e_2\right) \epsilon_{jk} \left(ar{q}_3 u_1 ight)$	\mathbf{C}
lequ1_2232	$\left(ar{\ell}_{2}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}u_{2} ight)$	\mathbf{C}
lequ1_2233	$\left(ar{\ell}_{2}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	\mathbf{C}
lequ1_2311	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_1 u_1 ight)$	\mathbf{C}
lequ1_2312	$\left(ar{\ell}_{2}e_{3} ight)\epsilon_{jk}\left(ar{q}_{1}u_{2} ight)$	\mathbf{C}
lequ1_2313	$\left(ar{\ell}_{2}e_{3} ight)\epsilon_{jk}\left(ar{q}_{1}u_{3} ight)$	\mathbf{C}
lequ1_2321	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_2 u_1 ight)$	\mathbf{C}
lequ1_2322	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_2 u_2 ight)$	\mathbf{C}
lequ1_2323	$\left(ar{\ell}_{2}e_{3} ight)\epsilon_{jk}\left(ar{q}_{2}u_{3} ight)$	\mathbf{C}
lequ1_2331	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_3 u_1 ight)$	\mathbf{C}
lequ1_2332	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_3 u_2 ight)$	\mathbf{C}
lequ1_2333	$\left(ar{\ell}_{2}e_{3} ight)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	\mathbf{C}
lequ1_3111	$\left(ar{\ell}_{3}e_{1} ight)\epsilon_{jk}\left(ar{q}_{1}u_{1} ight)$	\mathbf{C}
lequ1_3112	$\left(ar{\ell}_{3}e_{1} ight)\epsilon_{jk}\left(ar{q}_{1}u_{2} ight)$	\mathbf{C}
lequ1_3113	$\left(ar{\ell}_3 e_1 ight)\epsilon_{jk}\left(ar{q}_1 u_3 ight)$	\mathbf{C}
lequ1_3121	$\left(ar{\ell}_3 e_1 ight)\epsilon_{jk}\left(ar{q}_2 u_1 ight)$	\mathbf{C}
lequ1_3122	$\left(ar{\ell}_{3}e_{1} ight)\epsilon_{jk}\left(ar{q}_{2}u_{2} ight)$	\mathbf{C}
lequ1_3123	$\left(ar{\ell}_3 e_1 ight)\epsilon_{jk}\left(ar{q}_2 u_3 ight)$	\mathbf{C}
lequ1_3131	$\left(ar{\ell}_3 e_1 ight)\epsilon_{jk}\left(ar{q}_3 u_1 ight)$	\mathbf{C}
lequ1_3132	$\left(ar{\ell}_3 e_1 ight)\epsilon_{jk}\left(ar{q}_3 u_2 ight)$	\mathbf{C}
lequ1_3133	$\left(ar{\ell}_3 e_1 ight)\epsilon_{jk}\left(ar{q}_3 u_3 ight)$	\mathbf{C}
lequ1_3211	$(ar{\ell}_3 e_2) \epsilon_{jk} (ar{q}_1 u_1)$	\mathbf{C}
lequ1_3212	$\left(ar{\ell}_3 e_2 ight)\epsilon_{jk}\left(ar{q}_1 u_2 ight)$	\mathbf{C}
lequ1_3213	$\left(ar{\ell}_3 e_2\right) \epsilon_{jk} \left(ar{q}_1 u_3 ight)$	\mathbf{C}
lequ1_3221	$\left(ar{\ell}_{3}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}u_{1} ight)$	\mathbf{C}
lequ1_3222	$\left(ar{\ell}_3 e_2 ight)\epsilon_{jk}\left(ar{q}_2 u_2 ight)$	\mathbf{C}
lequ1_3223	$\left(ar{\ell}_3 e_2 ight)\epsilon_{jk}\left(ar{q}_2 u_3 ight)$	\mathbf{C}
lequ1_3231	$\left(ar{\ell}_3 e_2\right) \epsilon_{jk} \left(ar{q}_3 u_1 ight)$	\mathbf{C}
lequ1_3232	$(ar{\ell}_3 e_2) \epsilon_{jk} (ar{q}_3 u_2)$	\mathbf{C}
lequ1_3233	$\left(ar{\ell}_3 e_2\right) \epsilon_{jk} \left(ar{q}_3 u_3 ight)$	\mathbf{C}
lequ1_3311	$\left(ar{\ell}_3 e_3 ight) \epsilon_{jk} \left(ar{q}_1 u_1 ight)$	\mathbf{C}
lequ1_3312	$\left(ar{\ell}_{3}e_{3} ight)\epsilon_{jk}\left(ar{q}_{1}u_{2} ight)$	\mathbf{C}
lequ1_3313	$(ar{\ell}_3 e_3) \epsilon_{jk} (ar{q}_1 u_3)$	\mathbf{C}
lequ1_3321	$\left(ar{\ell}_{3}e_{3} ight)\epsilon_{jk}\left(ar{q}_{2}u_{1} ight)$	\mathbf{C}
lequ1_3322	$(ar{\ell}_3 e_3) \epsilon_{jk} (ar{q}_2 u_2)$	\mathbf{C}

WC name	Operator	Type
lequ1_3323	$\left(ar{\ell}_{3}e_{3} ight) \epsilon_{jk}\left(ar{q}_{2}u_{3} ight)$	C
lequ1_3331	$(ar{\ell}_3 e_3) \epsilon_{jk} (ar{q}_3 u_1)$	$^{\mathrm{C}}$
lequ1_3332	$(\bar{\ell}_3 e_3) \epsilon_{jk} (\bar{q}_3 u_2)$	$^{\mathrm{C}}$
lequ1_3333	$(ar{\ell}_3 e_3) \epsilon_{jk} (ar{q}_3 u_3)$	$^{\mathrm{C}}$
lequ3_1111	$(\bar{\ell}_1 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_1)$	$^{\mathrm{C}}$
lequ3_1112	$(\bar{\ell}_1 \sigma_{\mu u} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu u} u_2)$	$^{\mathrm{C}}$
lequ3_1113	$(\bar{\ell}_1 \sigma_{\mu u} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu u} u_3)$	$^{\mathrm{C}}$
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	$\left\langle ar{\ell}_{1}\sigma_{\mu u}e_{1} ight angle \epsilon_{jk}\left(ar{q}_{3}\sigma^{\mu u}u_{2} ight)$	\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	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_1221	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_1231	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	C
lequ3_1232	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	C
lequ3_1233	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	C
lequ3_1311	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	C
lequ3_1312	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_1313	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_1321	$\left(\ell_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1322	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1332	$\left(\ell_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	\mathbf{C}
lequ3_1333	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_2111	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_2112	$\left(\ell_2\sigma_{\mu\nu}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_2113	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_2121	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	\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}
lequ3_2123	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_2131	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
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	$\left(\ell_2 \sigma_{\mu u} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu u} u_3\right)$	$^{\mathrm{C}}$
lequ3_2211	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_2212	$\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$	$^{\mathrm{C}}$

$\begin{array}{ c c c c c } \hline \\ \text{lequ3_2213} & (\bar{\ell}_2\sigma_{\mu\nu}e_2) \; \epsilon_{jk} \; (\bar{q}_1\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2221} & (\bar{\ell}_2\sigma_{\mu\nu}e_2) \; \epsilon_{jk} \; (\bar{q}_2\sigma^{\mu\nu}u_1) & \text{C} \\ \text{lequ3_2222} & (\bar{\ell}_2\sigma_{\mu\nu}e_2) \; \epsilon_{jk} \; (\bar{q}_2\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_2223} & (\bar{\ell}_2\sigma_{\mu\nu}e_2) \; \epsilon_{jk} \; (\bar{q}_2\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2231} & (\bar{\ell}_2\sigma_{\mu\nu}e_2) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_1) & \text{C} \\ \text{lequ3_2232} & (\bar{\ell}_2\sigma_{\mu\nu}e_2) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_2233} & (\bar{\ell}_2\sigma_{\mu\nu}e_2) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2233} & (\bar{\ell}_2\sigma_{\mu\nu}e_2) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2331} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_1\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2312} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_1\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_2313} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_1\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2321} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_2\sigma^{\mu\nu}u_1) & \text{C} \\ \text{lequ3_2322} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_2\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_2323} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_2\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2331} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_2\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2332} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_1) & \text{C} \\ \text{lequ3_2333} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2333} & (\bar{\ell}_2\sigma_{\mu\nu}e_3) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_3) & \text{C} \\ \text{lequ3_2331} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_1\sigma^{\mu\nu}u_1) & \text{C} \\ \text{lequ3_2312} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_1\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_3112} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_1\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_3112} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_1\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_3122} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_2\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_3123} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_2\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_3131} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_1) & \text{C} \\ \text{lequ3_3132} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_3133} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_2) & \text{C} \\ \text{lequ3_3133} & (\bar{\ell}_3\sigma_{\mu\nu}e_1) \; \epsilon_{jk} \; (\bar{q}_3\sigma^{\mu\nu}u_2) & \text{C} \\ lequ3_3$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{llllllllllllllllllllllllllllllllllll$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
$\begin{array}{llllllllllllllllllllllllllllllllllll$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$
lequ3_3123 $(\ell_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_3)$ C lequ3_3131 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_1)$ C lequ3_3132 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C
lequ3_3131 $ \begin{array}{ccc} (\ell_3\sigma_{\mu\nu}e_1)\epsilon_{jk}(\bar{q}_3\sigma^{\mu\nu}u_1) & \mathrm{C} \\ \mathrm{lequ3_3132} & (\bar{\ell}_3\sigma_{\mu\nu}e_1)\epsilon_{jk}(\bar{q}_3\sigma^{\mu\nu}u_2) & \mathrm{C} \end{array} $
lequ3_3132 $ \left(\underline{\ell}_{3}\sigma_{\mu\nu}e_{1}\right)\epsilon_{jk}\left(\bar{q}_{3}\sigma^{\mu\nu}u_{2}\right) $ C
legu3 3133 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{ik} (\bar{q}_3 \sigma^{\mu\nu} u_3)$ C
$\mathbf{L} = \begin{pmatrix} \mathbf{U} & \mu \mathbf{U} & \mathbf{L} \end{pmatrix} \int_{\mathbb{R}^{N}} \left(\mathbf{L} \mathbf{U} & \mathbf{U} \right) d\mathbf{U} d\mathbf$
lequ3_3211 $\left(\ell_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right)$ C
lequ3_3212 $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ C
lequ3_3213 $\left(\underline{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\overline{q}_1\sigma^{\mu\nu}u_3\right)$ C
lequ3_3221 $\left(\ell_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ C
lequ3_3222 $ \left(\ell_3 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right) $ C
lequ3_3223 $ \left(\ell_3 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right) $ C
lequ3_3231 $\left(\ell_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ C
lequ3_3232 $\left(\ell_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ C
lequ3_3233 $\left(\bar{\ell}_3\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$ C
lequ3_3311 $\left(\underline{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\overline{q}_1\sigma^{\mu\nu}u_1\right)$ C
lequ3_3312 $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right)$ C
lequ3_3313 $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_3\right)$ C
lequ3_3321 $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu\nu}u_1\right)$ C
lequ3_3322 $ \left(\underline{\ell}_3 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right) $ C
lequ3_3323 $ \left(\ell_3 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right) $ C
lequ3_3331 $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_1\right)$ C
lequ3_3332 $\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_2\right)$ C

WC name	Operator	Type
lequ3_3333	$\left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$	С

dB=dL=1

WC name	Operator	Type
duq1_1111	$\left(d_1Cu_1\right)\left(q_1C\ell_1\right)$	С
duql_1112	$(d_1Cu_1)(q_1C\ell_2)$	$^{\mathrm{C}}$
duql_1113	$(d_1Cu_1)(q_1C\ell_3)$	$^{\mathrm{C}}$
duql_1121	$(d_1Cu_1)(q_2C\ell_1)$	$^{\mathrm{C}}$
duql_1122	$(d_1Cu_1)(q_2C\ell_2)$	$^{\mathrm{C}}$
duql_1123	$(d_1Cu_1)(q_2C\ell_3)$	$^{\mathrm{C}}$
duql_1131	$\left(d_{1}Cu_{1}\right)\left(q_{3}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_1132	$\left(d_{1}Cu_{1}\right)\left(q_{3}C\ell_{2}\right)$	$^{\mathrm{C}}$
duql_1133	$(d_1Cu_1)(q_3C\ell_3)$	$^{\mathrm{C}}$
duql_1211	$\left(d_1 C u_2\right) \left(q_1 C \ell_1\right)$	$^{\mathrm{C}}$
duql_1212	$(d_1 C u_2) \left(q_1 C \ell_2 \right)$	\mathbf{C}
duql_1213	$(d_1 C u_2) (q_1 C \ell_3)$	$^{\mathrm{C}}$
duql_1221	$\left(d_{1}Cu_{2}\right)\left(q_{2}C\ell_{1}\right)$	\mathbf{C}
duql_1222	$\left(d_1 C u_2\right) \left(q_2 C \ell_2\right)$	$^{\mathrm{C}}$
duql_1223	$\left(d_1 C u_2\right) \left(q_2 C \ell_3\right)$	С
duql_1231	$\left(d_{1}Cu_{2}\right)\left(q_{3}C\ell_{1}\right)$	С
duql_1232	$(d_1Cu_2)(q_3C\ell_2)$	$^{\mathrm{C}}$
duql_1233	$(d_1Cu_2)(q_3C\ell_3)$	$^{\mathrm{C}}$
duql_1311	$\left(d_{1}Cu_{3}\right)\left(q_{1}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_1312	$(d_1Cu_3)(q_1C\ell_2)$	\mathbf{C}
duql_1313	$(d_1Cu_3)(q_1C\ell_3)$	$^{\mathrm{C}}$
duq1_1321	$(d_1Cu_3)(q_2C\ell_1)$	$^{\mathrm{C}}$
duql_1322	$(d_1Cu_3)(q_2C\ell_2)$	$^{\mathrm{C}}$
duql_1323	$(d_1Cu_3)(q_2C\ell_3)$	$^{\mathrm{C}}$
duq1_1331	$(d_1Cu_3)(q_3C\ell_1)$	\mathbf{C}
duql_1332	$(d_1Cu_3)(q_3C\ell_2)$	$^{\mathrm{C}}$
duql_1333	$(d_1Cu_3)(q_3C\ell_3)$	\mathbf{C}
duql_2111	$\left(d_2Cu_1\right)\left(q_1C\ell_1\right)$	$^{\mathrm{C}}$
duql_2112	$(d_2Cu_1)(q_1C\ell_2)$	C
duql_2113	$(d_2Cu_1)(q_1C\ell_3)$	C
duq1_2121	$(d_2Cu_1)(q_2C\ell_1)$	\mathbf{C}
duql_2122	$(d_2Cu_1)(q_2C\ell_2)$	$^{\mathrm{C}}$
duq1_2123	$(d_2Cu_1)(q_2C\ell_3)$	C
duq1_2131	$(d_2Cu_1)(q_3C\ell_1)$	C
duq1_2132	$(d_2Cu_1)(q_3C\ell_2)$	C
duq1_2133	$(d_2Cu_1)(q_3C\ell_3)$	$\overset{ ext{C}}{ ilde{\sim}}$
duq1_2211	$(d_2Cu_2)(q_1C\ell_1)$	С

WC name	Operator	Type
duq1_2212	$(d_2Cu_2)(q_1C\ell_2)$	C
duq1_2213	$(d_2Cu_2)(q_1C\ell_3)$	\mathbf{C}
duq1_2221	$(d_2Cu_2)(q_2C\ell_1)$	\mathbf{C}
duq1_2222	$(d_2Cu_2)(q_2C\ell_2)$	\mathbf{C}
duq1_2223	$(d_2Cu_2)(q_2C\ell_3)$	\mathbf{C}
duq1_2231	$(d_2Cu_2)(q_3C\ell_1)$	\mathbf{C}
duq1_2232	$(d_2Cu_2)(q_3C\ell_2)$	\mathbf{C}
duq1_2233	$(d_2Cu_2)(q_3C\ell_3)$	\mathbf{C}
duql_2311	$\left(d_{2}Cu_{3}\right)\left(q_{1}C\ell_{1}\right)$	\mathbf{C}
duql_2312	$(d_2Cu_3)(q_1C\ell_2)$	\mathbf{C}
duq1_2313	$(d_2Cu_3)(q_1C\ell_3)$	\mathbf{C}
duq1_2321	$(d_2Cu_3)(q_2C\ell_1)$	\mathbf{C}
duq1_2322	$(d_2Cu_3)(q_2C\ell_2)$	\mathbf{C}
duq1_2323	$(d_2Cu_3)(q_2C\ell_3)$	\mathbf{C}
duq1_2331	$(d_2Cu_3)(q_3C\ell_1)$	\mathbf{C}
duq1_2332	$(d_2Cu_3)(q_3C\ell_2)$	\mathbf{C}
duq1_2333	$(d_2Cu_3)(q_3C\ell_3)$	\mathbf{C}
duq1_3111	$\left(d_3Cu_1\right)\left(q_1C\ell_1\right)$	\mathbf{C}
duql_3112	$(d_3Cu_1)\left(q_1C\ell_2\right)$	\mathbf{C}
duq1_3113	$(d_3Cu_1)(q_1C\ell_3)$	\mathbf{C}
duq1_3121	$\left(d_3Cu_1\right)\left(q_2C\ell_1\right)$	\mathbf{C}
duql_3122	$(d_3Cu_1)(q_2C\ell_2)$	\mathbf{C}
duql_3123	$(d_3Cu_1)(q_2C\ell_3)$	\mathbf{C}
duq1_3131	$(d_3Cu_1)(q_3C\ell_1)$	\mathbf{C}
duql_3132	$(d_3Cu_1)(q_3C\ell_2)$	\mathbf{C}
duq1_3133	$(d_3Cu_1)(q_3C\ell_3)$	\mathbf{C}
duq1_3211	$(d_3Cu_2)(q_1C\ell_1)$	\mathbf{C}
duq1_3212	$(d_3Cu_2)(q_1C\ell_2)$	\mathbf{C}
duq1_3213	$(d_3Cu_2)(q_1C\ell_3)$	\mathbf{C}
duq1_3221	$(d_3Cu_2)(q_2C\ell_1)$	\mathbf{C}
duq1_3222	$(d_3Cu_2)(q_2C\ell_2)$	\mathbf{C}
duq1_3223	$(d_3Cu_2)(q_2C\ell_3)$	\mathbf{C}
duq1_3231	$(d_3Cu_2)(q_3C\ell_1)$	\mathbf{C}
duq1_3232	$(d_3Cu_2)(q_3C\ell_2)$	\mathbf{C}
duq1_3233	$(d_3Cu_2)(q_3C\ell_3)$	\mathbf{C}
duq1_3311	$(d_3Cu_3)(q_1C\ell_1)$	\mathbf{C}
duq1_3312	$(d_3Cu_3)(q_1C\ell_2)$	С
duq1_3313	$(d_3Cu_3)(q_1C\ell_3)$	C
duq1_3321	$(d_3Cu_3)(q_2C\ell_1)$	C
duq1_3322	$(d_3Cu_3)(q_2C\ell_2)$	C
duq1_3323	$(d_3Cu_3)(q_2C\ell_3)$	C
duq1_3331	$(d_3Cu_3)(q_3C\ell_1)$	C
duq1_3332	$(d_3Cu_3)(q_3C\ell_2)$	C
duq1_3333	$(d_3Cu_3)(q_3C\ell_3)$	\mathbf{C}

WC name	Operator	Type
qque_1111	$\frac{1}{\left(q_{1}Cq_{1}\right)\left(u_{1}Ce_{1}\right)}$	C
qque_1112	$(q_1Cq_1)(u_1Ce_2)$	C
qque_1113	$(q_1Cq_1)(u_1Ce_3)$	C
qque_1121	$(q_1Cq_1)(u_2Ce_1)$	\mathbf{C}
qque_1122	$(q_1Cq_1)(u_2Ce_2)$	\mathbf{C}
qque_1123	$(q_1Cq_1)(u_2Ce_3)$	\mathbf{C}
qque_1131	$(q_1Cq_1)(u_3Ce_1)$	\mathbf{C}
qque_1132	$(q_1Cq_1)(u_3Ce_2)$	\mathbf{C}
qque_1133	$(q_1Cq_1)(u_3Ce_3)$	\mathbf{C}
qque_1211	$(q_1Cq_2)(u_1Ce_1)$	\mathbf{C}
qque_1212	$(q_1Cq_2)(u_1Ce_2)$	\mathbf{C}
qque_1213	$(q_1Cq_2)(u_1Ce_3)$	\mathbf{C}
qque_1221	$(q_1Cq_2)(u_2Ce_1)$	\mathbf{C}
qque_1222	$(q_1Cq_2)(u_2Ce_2)$	\mathbf{C}
qque_1223	$(q_1Cq_2)(u_2Ce_3)$	\mathbf{C}
qque_1231	$(q_1Cq_2)(u_3Ce_1)$	\mathbf{C}
qque_1232	$(q_1Cq_2)(u_3Ce_2)$	\mathbf{C}
qque_1233	$(q_1Cq_2)(u_3Ce_3)$	\mathbf{C}
qque_1311	$(q_1Cq_3)(u_1Ce_1)$	\mathbf{C}
qque_1312	$(q_1Cq_3)(u_1Ce_2)$	\mathbf{C}
qque_1313	$(q_1Cq_3)(u_1Ce_3)$	\mathbf{C}
qque_1321	$(q_1Cq_3)(u_2Ce_1)$	\mathbf{C}
qque_1322	$(q_1Cq_3)(u_2Ce_2)$	\mathbf{C}
qque_1323	$(q_1Cq_3)(u_2Ce_3)$	\mathbf{C}
qque_1331	$(q_1Cq_3)(u_3Ce_1)$	\mathbf{C}
qque_1332	$(q_1Cq_3)(u_3Ce_2)$	\mathbf{C}
qque_1333	$(q_1Cq_3)(u_3Ce_3)$	\mathbf{C}
qque_2211	$\left(q_2 C q_2\right) \left(u_1 C e_1\right)$	С
qque_2212	$(q_2Cq_2)\left(u_1Ce_2\right)$	С
qque_2213	$(q_2Cq_2)(u_1Ce_3)$	С
qque_2221	$(q_2Cq_2)(u_2Ce_1)$	С
qque_2222	$(q_2Cq_2)(u_2Ce_2)$	С
qque_2223	$(q_2Cq_2)(u_2Ce_3)$	С
qque_2231	$(q_2Cq_2)(u_3Ce_1)$	С
qque_2232	$(q_2Cq_2)(u_3Ce_2)$	С
qque_2233	$(q_2Cq_2)(u_3Ce_3)$	С
qque_2311	$(q_2Cq_3)(u_1Ce_1)$	\mathbf{C}
qque_2312	$(q_2Cq_3)(u_1Ce_2)$	С
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}

WC name	Operator	Type
qque_2333	$(q_2Cq_3)(u_3Ce_3)$	С
qque_3311	$(q_3Cq_3)(u_1Ce_1)$	$^{\mathrm{C}}$
qque_3312	$\left(q_{3}Cq_{3}\right)\left(u_{1}Ce_{2}\right)$	\mathbf{C}
qque_3313	$(q_3Cq_3)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_3321	$(q_3Cq_3)(u_2Ce_1)$	\mathbf{C}
qque_3322	$\left(q_3Cq_3\right)\left(u_2Ce_2\right)$	$^{\mathrm{C}}$
qque_3323	$(q_3Cq_3)(u_2Ce_3)$	$^{\mathrm{C}}$
qque_3331	$\left(q_{3}Cq_{3}\right)\left(u_{3}Ce_{1}\right)$	$^{\mathrm{C}}$
qque_3332	$\left(q_{3}Cq_{3}\right)\left(u_{3}Ce_{2}\right)$	$^{\mathrm{C}}$
qque_3333	$\left(q_{3}Cq_{3}\right)\left(u_{3}Ce_{3}\right)$	$^{\mathrm{C}}$
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	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{2}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqql_1122	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{2}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqql_1123	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{2}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqql_1131	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{3}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqql_1132	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{3}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqql_1133	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{3}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqql_1211	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2} ight)\left(q_{1}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqql_1212	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2} ight)\left(q_{1}C\ell_{2} ight)$	$^{\mathrm{C}}$
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
qqql_1222	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{2}C\ell_{2}\right)$	$^{\mathrm{C}}$
qqql_1223	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{2}C\ell_{3}\right)$	$^{\mathrm{C}}$
qqql_1231	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{3}C\ell_{1}\right)$	$^{\mathrm{C}}$
qqql_1232	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{3}C\ell_{2}\right)$	$^{\mathrm{C}}$
qqql_1233	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2} ight)\left(q_{3}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqql_1311	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{1}C\ell_{1}\right)$	C
qqql_1312	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{1}C\ell_{2}\right)$	C
qqql_1313	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3} ight)\left(q_{1}C\ell_{3} ight)$	C
qqql_1321	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{1}\right)$	C
qqql_1322	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{2}\right)$	C
qqql_1323	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{3}\right)$	C
qqql_1331	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\ell_{1}\right)$	C
qqql_1332	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\ell_{2}\right)$	C
qqql_1333	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\ell_{3}\right)$	C
qqq1_2121	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{1}\right)$	C
qqq1_2122	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{2}\right)$	C
qqq1_2123	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{3}\right)$	C
qqq1_2131	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{3}C\ell_{1}\right)$	C
qqq1_2132	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{3}C\ell_{2}\right)$	C
qqq1_2133	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{3}C\ell_{3}\right)$	C
qqq1_2221	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2}\right)\left(q_{2}C\ell_{1}\right)$	С

WC name	Operator	Type
qqq1_2222	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2}\right)\left(q_{2}C\ell_{2}\right)$	С
qqq1_2223	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{2}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqq1_2231	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{3}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqq1_2232	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{3}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqq1_2233	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{3}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqql_2311	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{1}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqq1_2312	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{1}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqq1_2313	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{1}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqql_2321	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqq1_2322	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqq1_2323	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqq1_2331	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{3}C\ell_{1} ight)$	$^{\mathrm{C}}$
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	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1} ight)\left(q_{3}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqql_3133	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1} ight)\left(q_{3}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqq1_3231	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqq1_3232	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqq1_3233	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{3} ight)$	$^{\mathrm{C}}$
qqq1_3331	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3} ight)\left(q_{3}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqq1_3332	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3} ight)\left(q_{3}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqq1_3333	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3} ight)\left(q_{3}C\ell_{3} ight)$	C
duue_1111	$\left(d_{1}Cu_{1}\right)\left(u_{1}Ce_{1}\right)$	C
duue_1112	$\left(d_{1}Cu_{1}\right)\left(u_{1}Ce_{2}\right)$	C
duue_1113	$\left(d_{1}Cu_{1}\right)\left(u_{1}Ce_{3}\right)$	C
duue_1121	$\left(d_{1}Cu_{1}\right)\left(u_{2}Ce_{1}\right)$	C
duue_1122	$\left(d_{1}Cu_{1}\right)\left(u_{2}Ce_{2}\right)$	C
duue_1123	$\left(d_{1}Cu_{1}\right)\left(u_{2}Ce_{3}\right)$	C
duue_1131	$\left(d_{1}Cu_{1}\right)\left(u_{3}Ce_{1}\right)$	$^{\mathrm{C}}$
duue_1132	$\left(d_{1}Cu_{1}\right)\left(u_{3}Ce_{2}\right)$	$^{\mathrm{C}}$
duue_1133	$\left(d_{1}Cu_{1}\right)\left(u_{3}Ce_{3}\right)$	$^{\mathrm{C}}$
duue_1211	$\left(d_{1}Cu_{2}\right)\left(u_{1}Ce_{1}\right)$	$^{\mathrm{C}}$
duue_1212	$\left(d_{1}Cu_{2}\right)\left(u_{1}Ce_{2}\right)$	$^{\mathrm{C}}$
duue_1213	$\left(d_{1}Cu_{2}\right)\left(u_{1}Ce_{3}\right)$	C
duue_1221	$\left(d_{1}Cu_{2}\right)\left(u_{2}Ce_{1}\right)$	$^{\mathrm{C}}$
duue_1222	$\left(d_{1}Cu_{2}\right)\left(u_{2}Ce_{2}\right)$	\mathbf{C}
duue_1223	$\left(d_{1}Cu_{2}\right)\left(u_{2}Ce_{3}\right)$	\mathbf{C}
duue_1231	$\left(d_{1}Cu_{2}\right)\left(u_{3}Ce_{1}\right)$	\mathbf{C}
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	$\left(d_{1}Cu_{3}\right)\left(u_{1}Ce_{1}\right)$	$^{\mathrm{C}}$
duue_1312	$(d_1Cu_3)(u_1Ce_2)$	$^{\mathrm{C}}$
duue_1313	$(d_1Cu_3)(u_1Ce_3)$	\mathbf{C}

WC name	Operator	Type
duue_1321	$(d_1Cu_3)(u_2Ce_1)$	C
duue_1322	$(d_1Cu_3)(u_2Ce_2)$	\mathbf{C}
duue_1323	$(d_1Cu_3)(u_2Ce_3)$	\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	$\left(d_{2}Cu_{1}\right)\left(u_{1}Ce_{1}\right)$	\mathbf{C}
duue_2112	$\left(d_{2}Cu_{1}\right)\left(u_{1}Ce_{2}\right)$	\mathbf{C}
duue_2113	$\left(d_{2}Cu_{1}\right)\left(u_{1}Ce_{3}\right)$	\mathbf{C}
duue_2121	$\left(d_{2}Cu_{1}\right)\left(u_{2}Ce_{1}\right)$	\mathbf{C}
duue_2122	$\left(d_2Cu_1\right)\left(u_2Ce_2\right)$	\mathbf{C}
duue_2123	$\left(d_2Cu_1\right)\left(u_2Ce_3\right)$	\mathbf{C}
duue_2131	$(d_2Cu_1)(u_3Ce_1)$	\mathbf{C}
duue_2132	$\left(d_{2}Cu_{1}\right)\left(u_{3}Ce_{2}\right)$	\mathbf{C}
duue_2133	$\left(d_{2}Cu_{1}\right)\left(u_{3}Ce_{3}\right)$	\mathbf{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	$(d_2Cu_2)(u_2Ce_1)$	\mathbf{C}
duue_2222	$(d_2Cu_2)(u_2Ce_2)$	\mathbf{C}
duue_2223	$(d_2Cu_2)(u_2Ce_3)$	\mathbf{C}
duue_2231	$(d_2Cu_2)(u_3Ce_1)$	\mathbf{C}
duue_2232	$(d_2Cu_2)(u_3Ce_2)$	\mathbf{C}
duue_2233	$(d_2Cu_2)(u_3Ce_3)$	\mathbf{C}
duue_2311	$(d_2Cu_3)(u_1Ce_1)$	\mathbf{C}
duue_2312	$(d_2Cu_3)(u_1Ce_2)$	\mathbf{C}
duue_2313	$(d_2Cu_3)(u_1Ce_3)$	\mathbf{C}
duue_2321	$(d_2Cu_3)(u_2Ce_1)$	\mathbf{C}
duue_2322	$(d_2Cu_3)(u_2Ce_2)$	\mathbf{C}
duue_2323	$(d_2Cu_3)(u_2Ce_3)$	\mathbf{C}
duue_2331	$(d_2Cu_3)(u_3Ce_1)$	\mathbf{C}
duue_2332	$(d_2Cu_3)(u_3Ce_2)$	\mathbf{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	$\left(d_3Cu_1\right)\left(u_2Ce_1\right)$	С
duue_3122	$(d_3Cu_1)(u_2Ce_2)$	C
duue_3123	$\left(d_3Cu_1\right)\left(u_2Ce_3\right)$	C
duue_3131	$(d_3Cu_1)(u_3Ce_1)$	C
duue_3132	$(d_3Cu_1)(u_3Ce_2)$	C
duue_3133	$(d_3Cu_1)(u_3Ce_3)$	C
duue_3211	$\left(d_3Cu_2\right)\left(u_1Ce_1\right)$	C
duue_3212	$(d_3Cu_2)(u_1Ce_2)$	\mathbf{C}

WC name	Operator	Type
duue_3213	$(d_3Cu_2)(u_1Ce_3)$	C
duue_3221	$(d_3Cu_2)(u_2Ce_1)$	$^{\mathrm{C}}$
duue_3222	$(d_3Cu_2)(u_2Ce_2)$	$^{\mathrm{C}}$
duue_3223	$\left(d_3Cu_2\right)\left(u_2Ce_3\right)$	C
duue_3231	$\overline{(d_3Cu_2)(u_3Ce_1)}$	C
duue_3232	$\left(d_3Cu_2\right)\left(u_3Ce_2\right)$	C
duue_3233	$\left(d_{3}Cu_{2}\right)\left(u_{3}Ce_{3}\right)$	C
duue_3311	$\left(d_3Cu_3\right)\left(u_1Ce_1\right)$	$^{\mathrm{C}}$
duue_3312	$\left(d_3Cu_3\right)\left(u_1Ce_2\right)$	$^{\mathrm{C}}$
duue_3313	$\left(d_3Cu_3\right)\left(u_1Ce_3\right)$	C
duue_3321	$\left(d_3Cu_3\right)\left(u_2Ce_1\right)$	C
duue_3322	$\left(d_3Cu_3\right)\left(u_2Ce_2\right)$	C
duue_3323	$\left(d_3Cu_3\right)\left(u_2Ce_3\right)$	C
duue_3331	$(d_3Cu_3)(u_3Ce_1)$	$^{\mathrm{C}}$
duue_3332	$\overline{(d_3Cu_3)(u_3Ce_2)}$	$^{\mathrm{C}}$
duue_3333	$(d_3Cu_3)(u_3Ce_3)$	C

dL=2

WC name	Operator	Type
llphiphi_11	$\left(\widetilde{arphi}^{\dagger}\ell_{1} ight)_{T}^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{1} ight)$	C
llphiphi_22	$\left(\widetilde{arphi}^{\dagger}\ell_{2} ight)^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{2} ight)$	$^{\mathrm{C}}$
llphiphi_33	$\left(\widetilde{arphi}^{\dagger}\ell_{3} ight)^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{3} ight)$	\mathbf{C}