Basis Warsaw mass (EFT SMEFT)

Variant of the Warsaw basis where all fermion fields are rotated such as to make their mass matrices diagonal. This rotation breaks $SU(2)_L$ invariance and is ambiguous for some operators. We adhere to the choice of arXiv:1704.03888 by Dedes, Materkowska, Paraskevas, Rosiek, and Suxho, which coincides with the "tilded" basis in arXiv:1512.02830 by Aebischer, Crivellin, Fael, and Greub.

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	$f^{ABC}G^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ u}$	R
Gtilde	$f^{ABC}\widetilde{G}^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ u}$	${ m R}$
W	$\epsilon^{IJK}W_{\mu}^{I u}W_{ u}^{J ho}W_{ u}^{K\mu}$	${ m R}$
Wtilde	$\epsilon^{IJK}\widetilde{W}_{\mu}^{I u}W_{ u}^{J ho}W_{ ho}^{K\mu}$	R
phi	$\left(arphi^\daggerarphi ight)^{3'}$	R
phiBox	$\left(arphi^\daggerarphi ight)\square\left(arphi^\daggerarphi ight)$	${ m R}$
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	$arphi^\dagger arphi B_{\mu u}^{} B^{\mu u}$	R
phiW	$arphi^\dagger arphi W^I_{\mu u} W^{I\mu u}$	R
phiWB	$arphi^\dagger au^I arphi W^I_{\mu u} B^{\mu u}$	R
phiGtilde	$arphi^\dagger arphi \widetilde{G}^A_{\mu u} \widetilde{G}^{A \mu u}$	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	$\left(arphi^\daggerarphi ight)\left(\dot{ar{q}_1}u_1\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_12	$\left(arphi^\daggerarphi ight)\left(ar{q}_1u_2\widetilde{arphi} ight)$	\mathbf{C}
uphi_13	$\left(arphi^\daggerarphi ight)\left(ar{q}_1u_3\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_21	$\left(arphi_{.}^{\dagger}arphi ight)\left(ar{q}_{2}u_{1}\widetilde{arphi} ight)$	${ m C} \\ { m C}$
uphi_22	$\left(arphi^\daggerarphi ight)\left(ar{q}_2u_2\widetilde{arphi} ight)$	С
uphi_23	$\left(arphi^\daggerarphi ight)\left(ar{q}_2u_3\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_31	$\left(arphi^\daggerarphi ight)\left(ar{q}_3u_1\widetilde{arphi} ight)$	C C
uphi_32	$\left(arphi^\daggerarphi ight)\left(ar{q}_3u_2\widetilde{arphi} ight)$	$^{\mathrm{C}}$
uphi_33	$\left(arphi^\daggerarphi ight)\left(ar{q}_3u_3\widetilde{arphi} ight)$	\mathbf{C}

WC name	Operator	Type
dphi_11	$\left(arphi^{\dagger}arphi ight)\left(ar{q}_{1}d_{1}arphi ight)$	С
dphi_12	$\left(arphi^{\dagger}arphi ight) \left(ar{q}_{1}d_{2}arphi ight)$	\mathbf{C}
dphi_13	$\left(arphi^{\dagger}arphi ight) \left(ar{q}_{1}d_{3}arphi ight)$	\mathbf{C}
dphi_21	$\left(arphi^{\dagger}arphi\right)\left(ar{q}_{2}d_{1}arphi ight)$	\mathbf{C}
dphi_22	$\left(arphi^{\dagger} arphi \right) \left(ar{q}_2 d_2 arphi \right)$	\mathbf{C}
dphi_23	$\left(arphi^{\dagger}arphi\right)\left(ar{q}_{2}d_{3}arphi ight)$	\mathbf{C}
dphi_31	$\left(arphi^\daggerarphi ight)\left(ar{q}_3d_1arphi ight)$	\mathbf{C}
dphi_32	$\left(arphi^\daggerarphi ight)\left(ar{q}_3d_2arphi ight)$	\mathbf{C}
dphi_33	$\left(arphi^\daggerarphi ight)\left(ar{q}_3d_3arphi ight)$	\mathbf{C}
ephi_11	$\left(arphi^\daggerarphi ight)\left(ar\ell_1e_1arphi ight)$	\mathbf{C}
ephi_12	$\left(arphi^\daggerarphi ight)\left(ar\ell_1e_2arphi ight)$	\mathbf{C}
ephi_13	$\left(arphi^{\dagger}arphi ight)\left(ar{\ell}_{1}e_{3}arphi ight)$	\mathbf{C}
ephi_21	$\left(arphi^{\dagger}arphi ight)\left(ar{\ell}_{2}e_{1}arphi ight)$	\mathbf{C}
ephi_22	$(arphi^\daggerarphi)(ar\ell_2 e_2arphi)$	\mathbf{C}
ephi_23	$(arphi^\daggerarphi)(ar\ell_2 e_3arphi)$	\mathbf{C}
ephi_31	$(\varphi^{\dagger}\varphi)(ar{\ell}_3e_1\varphi)$	\mathbf{C}
ephi_32	$(arphi^\daggerarphi)(ar\ell_3e_2arphi)$	\mathbf{C}
ephi_33	$(\varphi^\dagger \varphi) (ar{\ell}_3 e_3 \varphi)$	\mathbf{C}
eW_11	$(\bar{\ell}_1\sigma^{\mu\nu}e_1) au^Iarphi W^I_{\mu u}$	\mathbf{C}
eW_12	$(\bar{\ell}_1 \sigma^{\mu \nu} e_2) \tau^I \varphi W^I_{\mu \nu}$	\mathbf{C}
eW_13	$(\bar{\ell}_1 \sigma^{\mu \nu} e_3) \tau^I \varphi W^I_{\mu \nu}$	\mathbf{C}
eW_21	$(\bar{\ell}_2 \sigma^{\mu \nu} e_1) \tau^I \varphi W^I_{\mu \nu}$	\mathbf{C}
eW_22	$(\bar{\ell}_2 \sigma^{\mu\nu} e_2) \tau^I \varphi W^I_{\mu\nu}$	\mathbf{C}
eW_23	$(\bar{\ell}_2 \sigma^{\mu\nu} e_3) \tau^I \varphi W^I_{\mu\nu}$	\mathbf{C}
eW_31	$(\bar{\ell}_3 \sigma^{\mu\nu} e_1) \tau^I \varphi W_{\mu\nu}^I$	\mathbf{C}
eW_32	$(\bar{\ell}_3 \sigma^{\mu\nu} e_2) \tau^I \varphi W^I_{\mu\nu}$	\mathbf{C}
eW_33	$(\bar{\ell}_3\sigma^{\mu\nu}e_3) au^Iarphi W^{II}_{\mu u}$	\mathbf{C}
eB_11	$(\bar{\ell}_1 \sigma^{\mu \nu} e_1) \varphi B_{\mu \nu}$	\mathbf{C}
eB_12	$(\bar{\ell}_1 \sigma^{\mu u} e_2) \varphi B_{\mu u}$	\mathbf{C}
eB_13	$(\bar{\ell}_1 \sigma^{\mu \nu} e_3) \varphi B_{\mu \nu}$	\mathbf{C}
eB_21	$(\bar{\ell}_2 \sigma^{\mu\nu} e_1) \varphi B_{\mu\nu}$	\mathbf{C}
eB_22	$\left(\bar{\ell}_2\sigma^{\mu u}e_2\right)arphi B_{\mu u}$	\mathbf{C}
eB_23	$(\bar{\ell}_2 \sigma^{\mu \nu} e_3) \varphi B_{\mu \nu}$	\mathbf{C}
eB_31	$(\bar{\ell}_3 \sigma^{\mu\nu} e_1) \varphi B_{\mu\nu}$	\mathbf{C}
eB_32	$\left(ar{\ell}_3\sigma^{\mu u}e_2 ight)arphi B_{\mu u}$	\mathbf{C}
eB_33	$(\ell_3 \sigma^{\mu \nu} e_3) \varphi B_{\mu \nu}$	\mathbf{C}
uG_11	$(\bar{q}_1\sigma^{\mu\nu}T^Au_1)\widetilde{\varphi}G^A_{\mu u}$	\mathbf{C}
uG_12	$\left(\bar{q}_1\sigma^{\mu\nu}T^Au_2\right)\widetilde{\varphi}G^A_{\mu\nu}$	\mathbf{C}
uG_13	$(\bar{q}_1\sigma^{\mu\nu}T^Au_3)\widetilde{\varphi}G^A_{\mu\nu}$	$^{\mathrm{C}}$
uG_21	$(\bar{q}_2\sigma^{\mu\nu}T^Au_1)\widetilde{\varphi}G^A_{\mu\nu}$	С
uG_22	$(\bar{q}_2\sigma^{\mu\nu}T^Au_2)\widetilde{\phi}G^A$	\mathbf{C}
uG_23	$(\bar{q}_2\sigma^{\mu\nu}T^Au_3)\widetilde{\varphi}G^A_{\mu\nu}$	$^{\mathrm{C}}$

WC name	Operator	Type
uG_31	$\left(ar{q}_3\sigma^{\mu u}T^Au_1 ight)\widetilde{arphi}G^A_{\mu u}$	\mathbf{C}
uG_32	$\left(ar{q}_3\sigma^{\mu u}T^Au_2 ight)\widetilde{arphi}G^{\widetilde{A}}_{\mu u}$	\mathbf{C}
uG_33	$(\bar{q}_3\sigma^{\mu u}T^Au_3)\widetilde{arphi}G^A_{\mu u}$	\mathbf{C}
uW_11	$(\bar{q}_1\sigma^{\mu u}u_1) au^I\widetilde{\widetilde{arphi}}W^{I'}_{\mu u}$	$^{\mathrm{C}}$
uW_12	$(ar{q}_1\sigma^{\mu u}u_2) au^I\widetilde{arphi}W^{\widetilde{I}}_{\mu u}$	\mathbf{C}
uW_13	$(ar{q}_1\sigma^{\mu u}u_3) au^I\widetilde{arphi}W^I_{\mu u}$	$^{\mathrm{C}}$
uW_21	$(ar{q}_2\sigma^{\mu u}u_1) au^I\widetilde{arphi}W^{\widetilde{I}}_{\mu u}$	\mathbf{C}
uW_22	$(ar{q}_2\sigma^{\mu u}u_2) au^I\widetilde{arphi}W^I_{\mu u}$	\mathbf{C}
uW_23	$(ar{q}_2\sigma^{\mu u}u_3) au^I\widetilde{arphi}W^{'I}_{\mu u}$	$^{\mathrm{C}}$
uW_31	$(ar{q}_3\sigma^{\mu u}u_1) au^I\widetilde{arphi}W^I_{\mu u}$	\mathbf{C}
uW_32	$(ar{q}_3\sigma^{\mu u}u_2) au^I\widetilde{arphi}W^I_{\mu u}$	$^{\mathrm{C}}$
uW_33	$(ar{q}_3\sigma^{\mu u}u_3) au^I\widetilde{arphi}W^I_{\mu u}$	\mathbf{C}
uB_11	$(ar{q}_1\sigma^{\mu u}u_1)\widetilde{arphi}B_{\mu u}$	$^{\mathrm{C}}$
uB_12	$(ar{q}_1\sigma^{\mu u}u_2)\widetilde{arphi}B_{\mu u}$	\mathbf{C}
uB_13	$(\bar{q}_1\sigma^{\mu u}u_3)\widetilde{\varphi}B_{\mu u}$	\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	$(ar{q}_3\sigma^{\mu u}u_1)\widetilde{arphi}B_{\mu u}$	$^{\mathrm{C}}$
uB_32	$(ar{q}_3\sigma^{\mu u}u_2)\widetilde{arphi}B_{\mu u}$	$^{\mathrm{C}}$
uB_33	$(ar{q}_3\sigma^{\mu u}u_3)\widetilde{arphi}B_{\mu u}$	$^{\mathrm{C}}$
dG_11	$\left(ar{q}_1\sigma^{\mu u}T^Ad_1 ight)arphi G^A_{\mu u}$	$^{\mathrm{C}}$
dG_12	$\left(ar{q}_1\sigma^{\mu u}T^Ad_2 ight)arphi G^A_{\mu u}$	$^{\mathrm{C}}$
dG_13	$\left(ar{q}_1\sigma^{\mu u}T^Ad_3 ight)arphi G_{\mu u}^A$	$^{\mathrm{C}}$
dG_21	$\left(ar{q}_2\sigma^{\mu u}T^Ad_1 ight)arphi G_{\mu u}^A$	$^{\mathrm{C}}$
dG_22	$\left(ar{q}_2\sigma^{\mu u}T^Ad_2 ight)arphi G_{\mu u}^A$	$^{\mathrm{C}}$
dG_23	$\left(ar{q}_2\sigma^{\mu u}T^Ad_3 ight)arphi G^A_{\mu u}$	$^{\mathrm{C}}$
dG_31	$\left(ar{q}_3\sigma^{\mu u}T^Ad_1 ight)arphi G^A_{\mu u}$	\mathbf{C}
dG_32	$\left(ar{q}_3\sigma^{\mu u}T^Ad_2 ight)arphi G_{\mu u}^A$	\mathbf{C}
dG_33	$\left(\bar{q}_3\sigma^{\mu u}T^Ad_3\right)arphi G^A_{\mu u}$	\mathbf{C}
dW_11	$(\bar{q}_1\sigma^{\mu u}d_1) au^Iarphi W^I_{\mu u}$	\mathbf{C}
dW_12	$(ar{q}_1\sigma^{\mu u}d_2) au^Iarphi W^I_{\mu u}$	\mathbf{C}
dW_13	$(\bar{q}_1\sigma^{\mu u}d_3) au^Iarphi W^I_{\mu u}$	\mathbf{C}
dW_21	$(ar{q}_2\sigma^{\mu u}d_1) au^Iarphi W^I_{\mu u}$	\mathbf{C}
dW_22	$(ar{q}_2\sigma^{\mu u}d_2) au^Tarphi W^T_{\mu u}$	\mathbf{C}
dW_23	$(\bar{q}_2\sigma^{\mu\nu}d_3) au^I\varphi W^I_{\mu u}$	\mathbf{C}
dW_31	$(ar{q}_3\sigma^{\mu u}d_1) au^Iarphi W^I_{\mu u}$	\mathbf{C}
dW_32	$(ar{q}_3\sigma^{\mu u}d_2) au^Iarphi W^I_{\mu u}$	\mathbf{C}
dW_33	$(ar{q}_3\sigma^{\mu u}d_3) au^Iarphi W^I_{\mu u}$	\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	$(\bar{q}_1 \sigma^{\mu\nu} d_3) \varphi B_{\mu\nu}$	\mathbf{C}
dB_21	$(\bar{q}_2 \sigma^{\mu\nu} d_1) \varphi B_{\mu\nu}$	$^{\mathrm{C}}$

WC name	Operator	Type
dB_22 dB_23	$\begin{array}{l} (\bar{q}_2 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu} \\ (\bar{q}_2 \sigma^{\mu\nu} d_3) \varphi B_{\mu\nu} \end{array}$	C C
dB_31 dB_32	$ \begin{array}{l} (\bar{q}_3 \sigma^{\mu\nu} d_1) \varphi B_{\mu\nu} \\ (\bar{q}_3 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu} \end{array} $	C C
dB_33	$(\bar{q}_3\sigma^{\mu\nu}d_3)\varphi B_{\mu\nu}$	$\overset{\circ}{ ext{C}}$
phil1_11	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{\ell}_1 \gamma^\mu \ell_1 ight)$	R
phil1_12	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{\ell}_{1}\gamma^{\mu}\ell_{2} ight)$	С
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	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle \left(ar{\ell}_2 \gamma^\mu \ell_2 ight)$	R
phil1_23	$\left\langle arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight angle \left(ar{\ell}_{2}\gamma^{\mu}\ell_{3} ight)$	С
phil1_33	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{\ell}_3 \gamma^\mu \ell_3 ight)$	R
phil3_11	$\left\langle arphi^\dagger i \overset{ ightarrow}{D} I m u arphi ight angle \left(ar{\ell}_1 au^I \gamma^\mu \ell_1 ight)$	R
phi13_12	$\left\langle arphi^\dagger i D I m u arphi ight angle \left(ar{\ell}_1 au^I \gamma^\mu \ell_2 ight)$	С
phil3_13	$\left\langle arphi^\dagger i \tilde{D} I m u arphi ight angle \left(ar{\ell}_1 au^I \gamma^\mu \ell_3 ight)$	С
phi13_22	$\left\langle arphi^\dagger i D I m u arphi \right angle \left(ar{\ell}_2 au^I \gamma^\mu \ell_2 ight)$	R
phi13_23	$\left\langle \begin{array}{c} \varphi^{\dagger}iDImu\varphi \\ \rightarrow \end{array} \right\rangle \left(ar{\ell}_{2} au^{I}\gamma^{\mu}\ell_{3} ight)$	С
phi13_33	$\left(egin{array}{c} arphi^\dagger i DIm u arphi ight) \left(ar{\ell}_3 au^I \gamma^\mu \ell_3 ight) \ ightarrow ight.$	R
phie_11	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle \left(ar{e}_1 \gamma^\mu e_1 ight)$	R
phie_12	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle \left(ar{e}_1 \gamma^\mu e_2 ight)$	С
phie_13	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight angle \left(ar{e}_1 \gamma^\mu e_3 ight)$	\mathbf{C}
phie_22	$egin{aligned} \left(arphi^\dagger i \overset{ ightarrow}{D}_\mu arphi ight) (ar{e}_2 \gamma^\mu e_2) \ \left(arphi^\dagger i \overset{ ightarrow}{D}_\mu arphi ight) (ar{e}_2 \gamma^\mu e_3) \ \left(arphi^\dagger i \overset{ ightarrow}{D}_\mu arphi ight) (ar{e}_3 \gamma^\mu e_3) \ \left(arphi^\dagger i \overset{ ightarrow}{D}_\mu arphi ight) (ar{q}_1 \gamma^\mu q_1) \end{aligned}$	R
phie_23	$\left\langle \begin{array}{c} \varphi^{\dagger}iD_{\mu}\varphi \\ \rightarrow \end{array} \right\rangle \left(\overline{e}_{2}\gamma^{\mu}e_{3} \right)$	С
phie_33	$\left\langle \begin{array}{c} \varphi^{\dagger}iD_{\mu}\varphi \\ \end{array} \right\rangle \left(\overline{e}_{3}\gamma^{\mu}e_{3}\right)$	R
phiq1_11	$\left(arphi^\dagger i \overleftrightarrow{D}_\mu arphi ight) (ar{q}_1 \gamma^\mu q_1)$	${ m R}$

WC name	Operator	Type
phiq1_12	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{q}_{1}\gamma^{\mu}q_{2} ight)$	С
phiq1_13	$\left(\varphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} \varphi \right) (\bar{q}_{1} \gamma^{\mu} q_{3})$	\mathbf{C}
phiq1_22	$\left(arphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} arphi \right) (ar{q}_2 \gamma^{\mu} q_2)$	R
phiq1_23	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)(ar{q}_{2}\gamma^{\mu}q_{3})$	\mathbf{C}
phiq1_33	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)(ar{q}_{3}\gamma^{\mu}q_{3})$	R
phiq3_11	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{1} au^{I}\gamma^{\mu}q_{1} ight)$	R
phiq3_12	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{1} au^{I}\gamma^{\mu}q_{2} ight)$	\mathbf{C}
phiq3_13	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{1} au^{I}\gamma^{\mu}q_{3} ight)$	\mathbf{C}
phiq3_22	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{2} au^{I}\gamma^{\mu}q_{2} ight)$	R
phiq3_23	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{2} au^{I}\gamma^{\mu}q_{3} ight)$	\mathbf{C}
phiq3_33	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{3} au^{I}\gamma^{\mu}q_{3} ight)$	\mathbf{R}
phiu_11	$\left(arphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} arphi ight) \left(ar{u}_{1} \gamma^{\mu} u_{1} ight)$	R
phiu_12	$\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{u}_{1}\gamma^{\mu}u_{2})$	\mathbf{C}
phiu_13	$\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{u}_{1}\gamma^{\mu}u_{3})$	\mathbf{C}
phiu_22	$\left(arphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} arphi ight) (\bar{u}_2 \gamma^{\mu} u_2)$	R
phiu_23	$\left(arphi^{\dagger} i \overset{\leftrightarrow}{D}_{\mu} arphi ight) (\bar{u}_2 \gamma^{\mu} u_3)$	\mathbf{C}
phiu_33	$\left(\varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi\right)(\bar{u}_{3}\gamma^{\mu}u_{3})$	R
phid_11	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{1}\gamma^{\mu}d_{1} ight)$	\mathbf{R}
phid_12	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{1}\gamma^{\mu}d_{2} ight)$	\mathbf{C}
phid_13	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{1}\gamma^{\mu}d_{3} ight)$	\mathbf{C}
phid_22	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{2}\gamma^{\mu}d_{2} ight)$	\mathbf{R}
phid_23	$\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{d}_{1}\gamma^{\mu}d_{2})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{d}_{1}\gamma^{\mu}d_{3})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{d}_{2}\gamma^{\mu}d_{2})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{d}_{2}\gamma^{\mu}d_{3})$	C

WC name	Operator	Type
phid_33	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{d}_3 \gamma^\mu d_3 ight)$	R
phiud_11	$(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi)'(\bar{u}_{1}\gamma^{\mu}d_{1})$	$^{\mathrm{C}}$
phiud_12	$(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi)(\overline{u}_{1}\gamma^{\mu}d_{2})$	\mathbf{C}
phiud_13	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{1}\gamma^{\mu}d_{3} ight)$	$^{\mathrm{C}}$
phiud_21	$\left(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi\right)\left(\bar{u}_{2}\gamma^{\mu}d_{1}\right)$	$^{\mathrm{C}}$
phiud_22	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}d_{2} ight)$	$^{\mathrm{C}}$
phiud_23	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}d_{3} ight)$	$^{\mathrm{C}}$
phiud_31	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{3}\gamma^{\mu}d_{1} ight)$	$^{\mathrm{C}}$
phiud_32	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{3}\gamma^{\mu}d_{2} ight)$	$^{\mathrm{C}}$
phiud_33	$\left(\widetilde{arphi}^\dagger i D_\mu arphi ight) \left(ar{u}_3 \gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
11_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_1 ight)$	R
11_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_2 ight)$	$^{\mathrm{C}}$
11_1113	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_3 ight)$	$^{\mathrm{C}}$
11_1122	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_2\gamma^\mu\ell_2 ight)$	R
11_1123	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_2\gamma^\mu\ell_3 ight)$	\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	$\left(ar{\ell}_{1} \gamma_{\mu} \ell_{2} ight) \left(ar{\ell}_{1} \gamma^{\mu} \ell_{2} ight)$	$^{\mathrm{C}}$
11_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_1\gamma^\mu\ell_3 ight)$	\mathbf{C}
11_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_1 ight)$	R
11_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_2 ight)$	C
11_1223	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_3 ight)$	C
11_1231	$\left(ar{\ell}_{1}\gamma_{\mu}\ell_{2} ight)\left(ar{\ell}_{3}\gamma^{\mu}\ell_{1} ight)$	C
11_1232	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_3\gamma^\mu\ell_2 ight)$	C
11_1233	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	C
11_1313	$\left(\ell_{1}\gamma_{\mu}\ell_{3} ight)\left(\ell_{1}\gamma^{\mu}\ell_{3} ight)$	C
11_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_2\gamma^\mu\ell_2 ight)$	C
11_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_2\gamma^\mu\ell_3 ight)$	C
11_1331	$\left(\ell_{1}\gamma_{\mu}\ell_{3}\right)\left(\ell_{3}\gamma^{\mu}\ell_{1}\right)$	R
11_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_2 ight)$	C
11_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	C
11_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_2 ight)$	R
11_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_3 ight)$	C
11_2233	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	R
11_2323	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{\ell}_2\gamma^\mu\ell_3 ight)$	C
11_2332	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_2 ight)$	R
11_2333	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{\ell}_3\gamma^\mu\ell_3)$	С
11_3333	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{\ell}_3\gamma^\mu\ell_3)$	R
qq1_1111	$\left(\bar{q}_1\gamma_{\mu}q_1\right)\left(\bar{q}_1\gamma^{\mu}q_1\right)$	R
qq1_1112	$(\bar{q}_1\gamma_\mu q_1)(\bar{q}_1\gamma^\mu q_2)$	C
qq1_1113	$(\bar{q}_1\gamma_\mu q_1)(\bar{q}_1\gamma^\mu q_3)$	C R
qq1_1122	$(\bar{q}_1\gamma_\mu q_1)(\bar{q}_2\gamma^\mu q_2)$ $(\bar{q}_2\gamma_\mu q_1)(\bar{q}_2\gamma_\mu q_2)$	R C
qq1_1123	$(\bar{q}_1\gamma_\mu q_1)(\bar{q}_2\gamma^\mu q_3)$	C

WC name	Operator	Type
qq1_1133	$\left(\bar{q}_1\gamma_{\mu}q_1\right)\left(\bar{q}_3\gamma^{\mu}q_3\right)$	R
qq1_1212	$\left(\bar{q}_1\gamma_{\mu}q_2\right)\left(\bar{q}_1\gamma^{\mu}q_2\right)$	$^{\mathrm{C}}$
qq1_1213	$\left(\bar{q}_1\gamma_{\mu}q_2\right)\left(\bar{q}_1\gamma^{\mu}q_3\right)$	\mathbf{C}
qq1_1221	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_2\gamma^{\mu}q_1 ight)$	R
qq1_1222	$\left(ar{q}_1\gamma_\mu q_2 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	$^{\mathrm{C}}$
qq1_1223	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_2\gamma^{\mu}q_3 ight)$	$^{\mathrm{C}}$
qq1_1231	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_3\gamma^{\mu}q_1 ight)$	С
qq1_1232	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_3\gamma^{\mu}q_2 ight)$	С
qq1_1233	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_3\gamma^{\mu}q_3 ight)$	С
qq1_1313	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{q}_1\gamma^{\mu}q_3 ight)$	С
qq1_1322	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{q}_2\gamma^{\mu}q_2 ight)$	С
qq1_1323	$\left(\bar{q}_1\gamma_{\mu}q_3\right)\left(\bar{q}_2\gamma^{\mu}q_3\right)$	\mathbf{C}
qq1_1331	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{q}_3\gamma^{\mu}q_1 ight)$	R
qq1_1332	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{q}_3\gamma^{\mu}q_2 ight)$	\mathbf{C}
qq1_1333	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{q}_3\gamma^{\mu}q_3 ight)$	\mathbf{C}
qq1_2222	$\left(\bar{q}_2\gamma_{\mu}q_2\right)\left(\bar{q}_2\gamma^{\mu}q_2\right)$	R
qq1_2223	$\left(\bar{q}_2\gamma_{\mu}q_2\right)\left(\bar{q}_2\gamma^{\mu}q_3\right)$	\mathbf{C}
qq1_2233	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{q}_3\gamma^{\mu}q_3 ight)$	R
qq1_2323	$\left(\bar{q}_2\gamma_{\mu}q_3\right)\left(\bar{q}_2\gamma^{\mu}q_3\right)$	\mathbf{C}
qq1_2332	$\left(\bar{q}_2\gamma_{\mu}q_3\right)\left(\bar{q}_3\gamma^{\mu}q_2\right)$	R
qq1_2333	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{q}_3\gamma^{\mu}q_3 ight)$	\mathbf{C}
qq1_3333	$(ar{q}_3\gamma_\mu q_3)(ar{q}_3\gamma^\mu q_3)$	\mathbf{R}
qq3_1111	$\left(ar{q}_1\gamma_{\mu} au^I_{_1}q_1 ight)\left(ar{q}_1\gamma^{\mu} au^I_{_1}q_1 ight)$	\mathbf{R}
qq3_1112	$\left(ar{q}_1\gamma_\mu au^I_{}q_1 ight)\left(ar{q}_1\gamma^\mu au^I_{}q_2 ight)$	C
qq3_1113	$\left(ar{q}_1\dot{\gamma_\mu} au^I_{_{_{m{I}}}}q_1 ight)\left(ar{q}_1\gamma^\mu au^I_{_{_{m{I}}}}q_3 ight)$	\mathbf{C}
qq3_1122	$\left(ar{q}_{1}\gamma_{\mu} au^{I}_{q_{1}} ight)\left(ar{q}_{2}\gamma^{\mu} au^{I}_{q_{2}} ight)$	R
qq3_1123	$\left(ar{q}_1\gamma_\mu au^I_{}q_1 ight)\left(ar{q}_2\gamma^\mu au^I_{}q_3 ight)$	C
qq3_1133	$\left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	R
qq3_1212	$\left(ar{q}_1\gamma_\mu au^I_{}q_2 ight)\left(ar{q}_1\gamma^\mu au^I_{}q_2 ight)$	C
qq3_1213	$\left(ar{q}_1\gamma_\mu au^I_{_{_{m{I}}}}q_2 ight)\left(ar{q}_1\gamma^\mu au^I_{_{_{m{I}}}}q_3 ight)$	\mathbf{C}
qq3_1221	$\left(ar{q}_1\gamma_{\mu} au^I_{q}q_2 ight)\left(ar{q}_2\gamma^{\mu} au^I_{q}q_1 ight)$	R
qq3_1222	$\left(ar{q}_1\gamma_\mu au^I_{}q_2 ight)\left(ar{q}_2\gamma^\mu au^I_{}q_2 ight)$	C
qq3_1223	$\left(ar{q}_1\gamma_\mu au^Iq_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	C
qq3_1231	$\left(ar{q}_1\gamma_\mu au^I_{}q_2 ight)\left(ar{q}_3\gamma^\mu au^I_{}q_1 ight)$	C
qq3_1232	$\left(ar{q}_1 \gamma_\mu au^I_{} q_2 ight) \left(ar{q}_3 \gamma^\mu au^I_{} q_2 ight)$	C
qq3_1233	$\left(ar{q}_1\gamma_\mu au^Iq_2 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	C
qq3_1313	$\left(ar{q}_1 \gamma_\mu au^I_{} q_3 ight) \left(ar{q}_1 \gamma^\mu au^I_{} q_3 ight)$	C
qq3_1322	$\left\langle ar{q}_{1}\gamma_{\mu} au^{I}q_{3} ight angle \left\langle ar{q}_{2}\gamma^{\mu} au^{I}q_{2} ight angle$	C
qq3_1323	$\left(ar{q}_1\gamma_\mu au^Iq_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	С
qq3_1331	$\left\langle \bar{q}_{1}\gamma_{\mu} au^{I}q_{3} ight angle \left\langle \bar{q}_{3}\gamma^{\mu} au^{I}q_{1} ight angle $	R
qq3_1332	$\left\langle ar{q}_{1}\gamma_{\mu} au^{I}q_{3} ight angle \left\langle ar{q}_{3}\gamma^{\mu} au^{I}q_{2} ight angle $	С
qq3_1333	$\left\langle ar{q}_{1}\gamma_{\mu} au^{I}q_{3} ight angle \left\langle ar{q}_{3}\gamma^{\mu} au^{I}q_{3} ight angle \\ -q_{1}q_{3} ight angle$	С
qq3_2222	$\left\langle ar{q}_2 \gamma_\mu au^I q_2 \right angle \left\langle ar{q}_2 \gamma^\mu au^I q_2 \right angle \left\langle ar{q}_2 \gamma^\mu au^I q_2 ight angle$	R
qq3_2223	$\left\langle ar{q}_{2}\gamma_{\mu} au^{I}q_{2} ight angle \left\langle ar{q}_{2}\gamma^{\mu} au^{I}q_{3} ight angle$	С

WC name	Operator	Type
qq3_2233	$\left(\bar{q}_2\gamma_\mu au^Iq_2 ight)\left(\bar{q}_3\gamma^\mu au^Iq_3 ight)$	R
qq3_2323	$\left(ar{q}_2\gamma_\mu au^Iq_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
qq3_2332	$\left\langle ar{q}_{2}\gamma_{\mu} au^{I}q_{3} ight angle \left\langle ar{q}_{3}\gamma^{\mu} au^{I}q_{2} ight angle$	R
qq3_2333	$\left\langle ar{q}_{2}\gamma_{\mu} au^{I}q_{3} ight angle \left\langle ar{q}_{3}\gamma^{\mu} au^{I}q_{3} ight angle$	\mathbf{C}
qq3_3333	$\left(ar{q}_3\gamma_{\mu} au^Iq_3 ight)\left(ar{q}_3\gamma^{\mu} au^Iq_3 ight)$	R
lq1_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	R
lq1_1112	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{q}_1\gamma^\mu q_2)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	C
lq1_1133	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	R
lq1_1211	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	C
lq1_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	C
lq1_1213	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{q}_1\gamma^\mu q_3)$	C
lq1_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_1 ight)$	C
lq1_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	C
lq1_1223	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	C
lq1_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_3\gamma^\mu q_1 ight)$	C
lq1_1232	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_3\gamma^\mu q_2 ight)$	C
lq1_1233	$\left(ar{\ell}_1\gamma_{\mu}\ell_2 ight)\left(ar{q}_3\gamma^{\mu}q_3 ight)$	$^{\mathrm{C}}$
lq1_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	C
lq1_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	$^{\mathrm{C}}$
lq1_1313	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_1321	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_1 ight)$	$^{\mathrm{C}}$
lq1_1322	$\left(ar{\ell}_1\gamma_{\mu}\ell_3 ight)\left(ar{q}_2\gamma^{\mu}q_2 ight)$	$^{\mathrm{C}}$
lq1_1323	$\left(ar{\ell}_1\gamma_{\mu}\ell_3 ight)\left(ar{q}_2\gamma^{\mu}q_3 ight)$	$^{\mathrm{C}}$
lq1_1331	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_1 ight)$	$^{\mathrm{C}}$
lq1_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_2 ight)$	$^{\mathrm{C}}$
lq1_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_2211	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	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	$\left(ar{\ell}_2\gamma_{\mu}\ell_2 ight)\left(ar{q}_1\gamma^{\mu}q_3 ight)$	$^{\mathrm{C}}$
lq1_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	R
lq1_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	C
lq1_2233	$\left(ar{\ell}_2\gamma_{\mu}\ell_2 ight)\left(ar{q}_3\gamma^{\mu}q_3 ight)$	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	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	C
lq1_2313	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_3 ight)$	C
lq1_2321	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_1 ight)$	\mathbf{C}
lq1_2322	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	$^{\mathrm{C}}$
lq1_2323	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_2331	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_1 ight)$	$^{\mathrm{C}}$

WC name	Operator	Type
1q1_2332	$\left(ar{\ell}_2\gamma_\mu\ell_3\right)\left(ar{q}_3\gamma^\mu q_2 ight)$	С
lq1_2333	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	$^{\mathrm{C}}$
lq1_3311	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	R
lq1_3312	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	\mathbf{C}
lq1_3313	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{q}_1\gamma^\mu q_3)$	\mathbf{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	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
lq3_1122	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	R
lq3_1123	$\left(ar{\ell}_1\gamma_{\mu} au^I\ell_1 ight)\left(ar{q}_2\gamma^{\mu} au^Iq_3 ight)$	\mathbf{C}
lq3_1133	$\left(ar{\ell}_1\gamma_\mu au^I\ell_1 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	R
lq3_1211	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	\mathbf{C}
lq3_1212	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
lq3_1213	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
lq3_1223	$\left(ar{\ell}_1\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	\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	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	\mathbf{C}
lq3_1312	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	\mathbf{C}
lq3_1313	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
lq3_1321	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_1 ight)$	С
1q3_1322	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	\mathbf{C}
lq3_1323	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
lq3_1331	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_1 ight)$	С
lq3_1332	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	С
lq3_1333	$\left(ar{\ell}_1\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
lq3_2211	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	R
1q3_2212	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
1q3_2213	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
1q3_2222	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	R
1q3_2223	$\left(ar{\ell}_2\gamma_\mu au^I\ell_2 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	C
1q3_2233	$\left(ar{\ell}_2\gamma_{\mu} au^I\ell_2 ight)\left(ar{q}_3\gamma^{\mu} au^Iq_3 ight)$	R
lq3_2311	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	$^{\mathrm{C}}$
1q3_2312	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
1q3_2313	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
lq3_2321	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_1 ight)$	$^{\mathrm{C}}$

WC name	Operator	Type
1q3_2322	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	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	$(\bar{\ell}_2\gamma_\mu au^I\ell_3)(\bar{q}_3\gamma^\mu au^Iq_1)$	\mathbf{C}
1q3_2332	$(\bar{\ell}_2\gamma_\mu au^I\ell_3)(\bar{q}_3\gamma^\mu au^Iq_2)$	\mathbf{C}
1q3_2333	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	\mathbf{C}
1q3_3311	$\left(ar{\ell}_3\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	\mathbf{R}
lq3_3312	$(\bar{\ell}_3\gamma_\mu au^I\ell_3)(\bar{q}_1\gamma^\mu au^Iq_2)$	\mathbf{C}
lq3_3313	$(\bar{\ell}_3\gamma_\mu au^I\ell_3)(\bar{q}_1\gamma^\mu au^Iq_3)$	\mathbf{C}
1q3_3322	$(\bar{\ell}_3\gamma_\mu au^I\ell_3)(\bar{q}_2\gamma^\mu au^Iq_2)$	R
1q3_3323	$(ar{\ell}_3\gamma_\mu au^I\ell_3)(ar{q}_2\gamma^\mu au^Iq_3)$	\mathbf{C}
1q3_3333	$\left(ar{\ell}_3\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	R
ee_1111	$(ar{e}_1\gamma_\mu e_1)(ar{e}_1\gamma^\mu e_1)$	\mathbf{R}
ee_1112	$(ar{e}_1\gamma_\mu e_1)(ar{e}_1\gamma^\mu e_2)$	\mathbf{C}
ee_1113	$(ar{e}_1\gamma_\mu e_1)(ar{e}_1\gamma^\mu e_3)$	\mathbf{C}
ee_1122	$(ar{e}_1\gamma_\mu e_1)(ar{e}_2\gamma^\mu e_2)$	\mathbf{R}
ee_1123	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	\mathbf{C}
ee_1133	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_3\gamma^{\mu}e_3 ight)$	R
ee_1212	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	\mathbf{C}
ee_1213	$(\bar{e}_1\gamma_\mu e_2)(\bar{e}_1\gamma^\mu e_3)$	\mathbf{C}
ee_1222	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	\mathbf{C}
ee_1223	$(ar{e}_1\gamma_\mu e_2)(ar{e}_2\gamma^\mu e_3)$	C
ee_1232	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_3\gamma^{\mu}e_2 ight)$	C
ee_1233	$(\bar{e}_1\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3)$	C
ee_1313	$(ar{e}_1\gamma_\mu e_3)(ar{e}_1\gamma^\mu e_3)$	$\stackrel{ ext{C}}{\sim}$
ee_1323	$(\bar{e}_1\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3)$	$\stackrel{ ext{C}}{\sim}$
ee_1333	$(\bar{e}_1\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3)$	С
ee_2222	$(\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_2)$	R
ee_2223	$(\bar{e}_2\gamma_\mu e_2)(\bar{e}_2\gamma^\mu e_3)$	С
ee_2233	$(\bar{e}_2\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3)$	R
ee_2323	$(\bar{e}_2\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3)$	С
ee_2333	$(\bar{e}_2\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3)$	С
ee_3333	$(\bar{e}_3\gamma_\mu e_3)(\bar{e}_3\gamma^\mu e_3)$	R
uu_1111	$(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_1)$	R C
uu_1112 uu_1113	$(\bar{u}_1\gamma_\mu u_1)(\bar{u}_1\gamma^\mu u_2)$	C
uu_1113 uu_1122	$egin{aligned} \left(ar{u}_1\gamma_\mu u_1 ight)\left(ar{u}_1\gamma^\mu u_3 ight) \ \left(ar{u}_1\gamma_\mu u_1 ight)\left(ar{u}_2\gamma^\mu u_2 ight) \end{aligned}$	R
uu_1122 uu_1123	$(\overline{u_1}\gamma_\mu u_1)(\overline{u_2}\gamma^\mu u_2) \ (\overline{u_1}\gamma_\mu u_1)(\overline{u_2}\gamma^\mu u_3)$	C
uu_1123 uu_1133	$(\overline{u}_1\gamma_\mu u_1)(\overline{u}_2\gamma^\mu u_3) \ (\overline{u}_1\gamma_\mu u_1)(\overline{u}_3\gamma^\mu u_3)$	R
uu_1133 uu_1212	$egin{array}{l} (u_1\gamma_\mu u_1)(u_3\gamma^\mu u_3) \ (ar u_1\gamma_\mu u_2)(ar u_1\gamma^\mu u_2) \end{array}$	r C
uu_1212 uu_1213	$(\overline{u_1}\gamma_\mu u_2) (\overline{u_1}\gamma^\mu u_2) \ (\overline{u_1}\gamma_\mu u_2) (\overline{u_1}\gamma^\mu u_3)$	C
uu_1213 uu_1221	$(\overline{u_1}\gamma_\mu u_2) (\overline{u_1}\gamma^\mu u_3) \ (\overline{u_1}\gamma_\mu u_2) (\overline{u_2}\gamma^\mu u_1)$	R
uu_1221 uu_1222	$egin{array}{l} (u_1\gamma_\mu u_2)(u_2\gamma^\mu u_1) \ (ar u_1\gamma_\mu u_2)(ar u_2\gamma^\mu u_2) \end{array}$	r C
uu_1222 uu_1223	$egin{array}{l} (u_1\gamma_\mu u_2)(u_2\gamma^\mu u_2) \ (ar u_1\gamma_\mu u_2)(ar u_2\gamma^\mu u_3) \end{array}$	C
uu_1223	$(u_1, \eta_\mu u_2) (u_2, \eta, u_3)$	C

WC name	Operator	Type
uu_1231	$(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_1)$	С
uu_1232	$(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_2)$	С
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_1322	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	С
uu_1323	$(ar{u}_1\gamma_\mu u_3)(ar{u}_2\gamma^\mu u_3)$	\mathbf{C}
uu_1331	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_1 ight)$	R
uu_1332	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	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	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	С
uu_2233	$\left(ar{u}_2\gamma_{\mu}u_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
uu_2323	$(ar{u}_2\gamma_\mu u_3)(ar{u}_2\gamma^\mu u_3)$	\mathbf{C}
uu_2332	$(ar{u}_2\gamma_\mu u_3)(ar{u}_3\gamma^\mu u_2)$	R
uu_2333	$(ar{u}_2\gamma_\mu u_3)(ar{u}_3\gamma^\mu u_3)$	\mathbf{C}
uu_3333	$(ar{u}_3\gamma_\mu u_3)(ar{u}_3\gamma^\mu u_3)$	R
dd_1111	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
dd_1112	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	С
dd_1113	$\left(ar{d}_{1}\gamma_{\mu}d_{1} ight) \left(ar{d}_{1}\gamma^{\mu}d_{3} ight)$	С
dd_1122	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
dd_1123	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	\mathbf{C}
dd_1133	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
dd_1212	$\left(ar{d}_1\gamma_{\mu}d_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	\mathbf{C}
dd_1213	$\left(ar{d}_1\gamma_{\mu}d_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	\mathbf{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	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	C
dd_1223	$\left(ar{d}_1\gamma_{\mu}d_2 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	\mathbf{C}
dd_1231	$\left(ar{d}_1\gamma_{\mu}d_2 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
dd_1232	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_3\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
_ dd_1233	$(ar{d}_1\gamma_\mu d_2)(ar{d}_3\gamma^\mu d_3)$	$^{\mathrm{C}}$
_ dd_1313	$ig(ar{d}_1\gamma_\mu d_3ig)ig(ar{d}_1\gamma^\mu d_3ig)$	$^{\mathrm{C}}$
dd_1322	$(ar{d}_1\gamma_\mu d_3) (ar{d}_2\gamma^\mu d_2)$	C
dd_1323	$egin{pmatrix} (ar{d}_1\gamma_\mu d_3) & (ar{d}_2\gamma^\mu d_3) \ (ar{d}_2\gamma^\mu d_3) & \end{pmatrix}$	Č
dd_1331	$(ar{d}_1\gamma_\mu d_3) (ar{d}_3\gamma^\mu d_1)$	$^{ m R}$
dd_1332	$egin{pmatrix} (a_1^{\alpha_1}\mu^{\alpha_3}) & (a_3^{\alpha_3}\mu^{\alpha_1}) \ (ar{d}_1\gamma_{\mu}d_3) & (ar{d}_3\gamma^{\mu}d_2) \end{pmatrix}$	C
dd_1333	$\left(ar{d}_1\gamma_\mu a_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight) \ \left(ar{d}_1\gamma_\mu d_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	C
dd_2222	$(ar{d}_1\gamma_\mu a_3) (ar{d}_3\gamma^\mu a_3) \ (ar{d}_2\gamma_\mu d_2) (ar{d}_2\gamma^\mu d_2)$	$^{\circ}_{ m R}$
dd_2222 dd_2223	$egin{array}{l} (a_2 \gamma_\mu a_2) \ (ar{d}_2 \gamma_\mu d_2) \ (ar{d}_2 \gamma^\mu d_3) \end{array}$	$\overset{\mathbf{R}}{\mathrm{C}}$
dd_2223 dd_2233	$egin{array}{l} (a_2\gamma_\mu a_2) \ (a_2\gamma^\mu a_3) \ (ar{d}_2\gamma_\mu d_2) \ (ar{d}_3\gamma^\mu d_3) \end{array}$	R
dd_2233 dd_2323		$\overset{\mathbf{R}}{\mathrm{C}}$
	$egin{pmatrix} (ar{d}_2\gamma_\mu d_3) & (ar{d}_2\gamma^\mu d_3) \ (ar{d}_1\gamma_\mu d_2) & (ar{d}_2\gamma^\mu d_3) \end{pmatrix}$	
dd_2332	$egin{pmatrix} (ar{d}_2\gamma_\mu d_3) & (ar{d}_3\gamma^\mu d_2) \\ (ar{d}_3\gamma_\mu d_3) & (ar{d}_3\gamma_\mu^\mu d_3) \end{pmatrix}$	R
dd_2333	$\left(ar{d}_2\gamma_\mu d_3\right)\left(ar{d}_3\gamma^\mu d_3\right)$	С
dd_3333	$\left(d_3\gamma_\mu d_3 ight)\left(d_3\gamma^\mu d_3 ight)$	R

WC name	Operator	Type
eu_1111	$(\bar{e}_1\gamma_\mu e_1)(\bar{u}_1\gamma^\mu u_1)$	R
eu_1112	$(ar{e}_1\gamma_\mu e_1)(ar{u}_1\gamma^\mu u_2)$	\mathbf{C}
eu_1113	$(ar{e}_1\gamma_\mu e_1)(ar{u}_1\gamma^\mu u_3)$	\mathbf{C}
eu_1122	$(ar{e}_1\gamma_\mu e_1)(ar{u}_2\gamma^\mu u_2)$	\mathbf{R}
eu_1123	$(ar{e}_1\gamma_\mu e_1)(ar{u}_2\gamma^\mu u_3)$	\mathbf{C}
eu_1133	$(ar{e}_1\gamma_\mu e_1)(ar{u}_3\gamma^\mu u_3)$	\mathbf{R}
eu_1211	$(ar{e}_1\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_1)$	\mathbf{C}
eu_1212	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
eu_1213	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
eu_1221	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	$^{\mathrm{C}}$
eu_1222	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
eu_1223	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
eu_1231	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_3\gamma^{\mu}u_1 ight)$	\mathbf{C}
eu_1232	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	\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	$(ar{e}_1\gamma_\mu e_3)(ar{u}_1\gamma^\mu u_1)$	\mathbf{C}
eu_1312	$(ar{e}_1\gamma_\mu e_3)(ar{u}_1\gamma^\mu u_2)$	\mathbf{C}
eu_1313	$(\bar{e}_1\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_3)$	\mathbf{C}
eu_1321	$(ar{e}_1\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_1)$	\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	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	\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	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	\mathbf{C}
eu_1333	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	\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	$\left(\bar{e}_2\gamma_{\mu}e_2\right)\left(\bar{u}_1\gamma^{\mu}u_2\right)$	\mathbf{C}
eu_2213	$\left(\bar{e}_2\gamma_{\mu}e_2\right)\left(\bar{u}_1\gamma^{\mu}u_3\right)$	\mathbf{C}
eu_2222	$(\bar{e}_2\gamma_\mu e_2)(\bar{u}_2\gamma^\mu u_2)$	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	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	\mathbf{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	$(\bar{e}_2\gamma_\mu e_3)(\bar{u}_2\gamma^\mu u_1)$	C
eu_2322	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	\mathbf{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	$(\bar{e}_2\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_2)$	C
eu_2333	$(\bar{e}_2\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_3)$	\mathbf{C}
eu_3311	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_1)$	R
eu_3312	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_2)$	$\stackrel{ ext{C}}{\sim}$
eu_3313	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_3)$	С
eu_3322	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_2\gamma^\mu u_2)$	R
eu_3323	$(ar{e}_3\gamma_\mu e_3)(ar{u}_2\gamma^\mu u_3)$	С

$\begin{array}{llllllllllllllllllllllllllllllllllll$	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	eu_3333	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_3\gamma^\mu u_3)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1111	$(ar{e}_1\gamma_\mu e_1)ig(ar{d}_1\gamma^\mu d_1ig)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1112		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1113		C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1122		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1123		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1133	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1211	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1212		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1213	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1221	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1222	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1223	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	
$\begin{array}{c} \operatorname{ed}_{-1233} & (\bar{e}_{1}\gamma_{\mu}e_{2}) (\bar{d}_{3}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-1311} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{1}\gamma^{\mu}d_{1}) \\ \operatorname{ed}_{-1312} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{1}\gamma^{\mu}d_{2}) \\ \operatorname{ed}_{-1313} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{1}\gamma^{\mu}d_{2}) \\ \operatorname{ed}_{-1321} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{2}\gamma^{\mu}d_{1}) \\ \operatorname{ed}_{-1322} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{2}\gamma^{\mu}d_{2}) \\ \operatorname{ed}_{-1323} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{2}\gamma^{\mu}d_{2}) \\ \operatorname{ed}_{-1331} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{3}\gamma^{\mu}d_{1}) \\ \operatorname{ed}_{-1332} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{3}\gamma^{\mu}d_{2}) \\ \operatorname{ed}_{-1333} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{3}\gamma^{\mu}d_{2}) \\ \operatorname{ed}_{-1333} & (\bar{e}_{1}\gamma_{\mu}e_{3}) (\bar{d}_{3}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-2211} & (\bar{e}_{2}\gamma_{\mu}e_{2}) (\bar{d}_{1}\gamma^{\mu}d_{1}) \\ \operatorname{ed}_{-2212} & (\bar{e}_{2}\gamma_{\mu}e_{2}) (\bar{d}_{1}\gamma^{\mu}d_{2}) \\ \operatorname{ed}_{-2213} & (\bar{e}_{2}\gamma_{\mu}e_{2}) (\bar{d}_{1}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-2222} & (\bar{e}_{2}\gamma_{\mu}e_{2}) (\bar{d}_{2}\gamma^{\mu}d_{2}) \\ \operatorname{ed}_{-2233} & (\bar{e}_{2}\gamma_{\mu}e_{2}) (\bar{d}_{2}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-2311} & (\bar{e}_{2}\gamma_{\mu}e_{3}) (\bar{d}_{1}\gamma^{\mu}d_{1}) \\ \operatorname{ed}_{-2312} & (\bar{e}_{2}\gamma_{\mu}e_{3}) (\bar{d}_{1}\gamma^{\mu}d_{1}) \\ \operatorname{ed}_{-2312} & (\bar{e}_{2}\gamma_{\mu}e_{3}) (\bar{d}_{1}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-2313} & (\bar{e}_{2}\gamma_{\mu}e_{3}) (\bar{d}_{1}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-2321} & (\bar{e}_{2}\gamma_{\mu}e_{3}) (\bar{d}_{1}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-2322} & (\bar{e}_{2}\gamma_{\mu}e_{3}) (\bar{d}_{2}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-2323} & (\bar{e}_{2}\gamma_{\mu}e_{3}) (\bar{d}_{2}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-2323} & (\bar{e}_{2}\gamma_{\mu}e_{3}) (\bar{d}_{2}\gamma^{\mu}d_{3}) \\ \operatorname{ed}_{-2333} & (\bar{e}_{2}\gamma_{\mu}e_{3}) (\bar{d}_{3}\gamma^{\mu}d_{3}) \\$	ed_1231	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1232	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1233	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1311	$\left(ar{e}_{1}\gamma_{\mu}e_{3} ight)\left(ar{d}_{1}\gamma^{\mu}d_{1} ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1312	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1313	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1321		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1322		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1331		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1332		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_1333		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ed_2211		
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	
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ed_2332 $(\bar{e}_2\gamma_{\mu}e_3)(\bar{d}_3\gamma^{\mu}d_2)$ C ed_2333 $(\bar{e}_2\gamma_{\mu}e_3)(\bar{d}_3\gamma^{\mu}d_3)$ C ed_3311 $(\bar{e}_3\gamma_{\mu}e_3)(\bar{d}_1\gamma^{\mu}d_1)$ R	_		
ed_2333 $(\bar{e}_2\gamma_{\mu}e_3)(\bar{d}_3\gamma^{\mu}d_3)$ C ed_3311 $(\bar{e}_3\gamma_{\mu}e_3)(\bar{d}_1\gamma^{\mu}d_1)$ R	_		
ed_3311 $(\bar{e}_3\gamma_\mu e_3)(\bar{d}_1\gamma^\mu d_1)$ R			
ed_3311 $(\bar{e}_3\gamma_{\mu}e_3)(\bar{d}_1\gamma^{\mu}d_1)$ R ed_3312 $(\bar{e}_3\gamma_{\mu}e_3)(\bar{d}_1\gamma^{\mu}d_2)$ C		$(ar{e}_2\gamma_{\mu}e_3)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	
ed_3312 $ (\bar{e}_3\gamma_\mu e_3) \left(d_1\gamma^\mu d_2\right) $ C	_	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	
	ed_3312	$(ar{e}_3\gamma_\mu e_3)\left(d_1\gamma^\mu d_2 ight)$	С

WC name	Operator	Type
ed_3313	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	C
ed_3322	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	${ m R}$
ed_3323	$(ar{e}_3\gamma_{\mu}e_3)ig(ar{d}_2\gamma^{\mu}d_3ig)$	\mathbf{C}
ed_3333	$(ar{e}_3\gamma_{\mu}e_3)ig(ar{d}_3\gamma^{\mu}d_3ig)$	R
ud1_1111	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_1\gamma^\mu d_1 ight)$	R
ud1_1112	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_1\gamma^\mu d_2 ight)$	\mathbf{C}
ud1_1113	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_1\gamma^\mu d_3 ight)$	\mathbf{C}
ud1_1122	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_2\gamma^\mu d_2 ight)$	${ m R}$
ud1_1123	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_2\gamma^\mu d_3 ight)$	\mathbf{C}
ud1_1133	$(ar{u}_1\gamma_\mu u_1)ig(ar{d}_3\gamma^\mu d_3ig)$	R
ud1_1211	$(ar{u}_1\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
ud1_1212	$(ar{u}_1\gamma_\mu u_2)ig(ar{d}_1\gamma^\mu d_2ig)$	$^{\mathrm{C}}$
ud1_1213	$(ar{u}_1\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ud1_1221	$(ar{u}_1\gamma_\mu u_2)ig(ar{d}_2\gamma^\mu d_1ig)$	$^{\mathrm{C}}$
ud1_1222	$(ar{u}_1\gamma_{\mu}u_2)ig(ar{d}_2\gamma^{\mu}d_2ig)$	$^{\mathrm{C}}$
ud1_1223	$(ar{u}_1\gamma_\mu u_2)\left(ar{d}_2\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ud1_1231	$(ar{u}_1\gamma_\mu u_2)ig(ar{d}_3\gamma^\mu d_1ig)$	$^{\mathrm{C}}$
ud1_1232	$(ar{u}_1\gamma_\mu u_2)ig(ar{d}_3\gamma^\mu d_2ig)$	\mathbf{C}
ud1_1233	$(ar{u}_1\gamma_{\mu}u_2)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_1311	$(ar{u}_1\gamma_\mu u_3)ig(ar{d}_1\gamma^\mu d_1ig)$	$^{\mathrm{C}}$
ud1_1312	$(ar{u}_1\gamma_{\mu}u_3)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1313	$(ar{u}_1\gamma_\mu u_3) \left(ar{d}_1\gamma^\mu d_3 ight)$	\mathbf{C}
ud1_1321	$(ar{u}_1\gamma_\mu u_3)ig(ar{d}_2\gamma^\mu d_1ig)$	$^{\mathrm{C}}$
ud1_1322	$(ar{u}_1\gamma_{\mu}u_3)ig(ar{d}_2\gamma^{\mu}d_2ig)$	$^{\mathrm{C}}$
ud1_1323	$(ar{u}_1\gamma_\mu u_3) \left(ar{d}_2\gamma^\mu d_3 ight)$	\mathbf{C}
ud1_1331	$(ar{u}_1\gamma_\mu u_3)ig(ar{d}_3\gamma^\mu d_1ig)$	\mathbf{C}
ud1_1332	$(ar{u}_1\gamma_\mu u_3)ig(ar{d}_3\gamma^\mu d_2ig)$	$^{\mathrm{C}}$
ud1_1333	$(ar{u}_1\gamma_\mu u_3) \left(ar{d}_3\gamma^\mu d_3\right)$	\mathbf{C}
ud1_2211	$(ar{u}_2\gamma_\mu u_2) \left(ar{d}_1\gamma^\mu d_1 ight)$	${ m R}$
ud1_2212	$(ar{u}_2\gamma_\mu u_2)ig(ar{d}_1\gamma^\mu d_2ig)$	$^{\mathrm{C}}$
ud1_2213	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ud1_2222	$(ar{u}_2\gamma_\mu u_2) \left(ar{d}_2\gamma^\mu d_2 ight)$	R
ud1_2223	$(ar{u}_2\gamma_\mu u_2)ig(ar{d}_2\gamma^\mu d_3ig)$	$^{\mathrm{C}}$
ud1_2233	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_3\gamma^\mu d_3 ight)$	R
ud1_2311	$(ar{u}_2\gamma_\mu u_3) \left(ar{d}_1\gamma^\mu d_1 ight)$	\mathbf{C}
ud1_2312	$(ar{u}_2\gamma_\mu u_3) \left(ar{d}_1\gamma^\mu d_2 ight)$	\mathbf{C}
ud1_2313	$(ar{u}_2\gamma_\mu u_3)ig(ar{d}_1\gamma^\mu d_3ig)$	$^{\mathrm{C}}$
ud1_2321	$(ar{u}_2\gamma_\mu u_3) \left(ar{d}_2\gamma^\mu d_1 ight)$	\mathbf{C}
ud1_2322	$(ar{u}_2\gamma_\mu u_3) \left(ar{d}_2\gamma^\mu d_2 ight)$	\mathbf{C}
ud1_2323	$(ar{u}_2\gamma_\mu u_3) \left(ar{d}_2\gamma^\mu d_3 ight)$	\mathbf{C}
ud1_2331	$(ar{u}_2\gamma_\mu u_3) \left(ar{d}_3\gamma^\mu d_1 ight)$	\mathbf{C}
ud1_2332	$(ar{u}_2\gamma_\mu u_3) \left(ar{d}_3\gamma^\mu d_2 ight)$	\mathbf{C}

$\begin{array}{c} \mathrm{ud1}_2333 & (\bar{u}_2\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) & C \\ \mathrm{ud1}_3311 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_1) & R \\ \mathrm{ud1}_3312 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) & C \\ \mathrm{ud1}_3313 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) & C \\ \mathrm{ud1}_3322 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_2) & R \\ \mathrm{ud1}_3323 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_2) & R \\ \mathrm{ud1}_3333 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_3) & C \\ \mathrm{ud1}_3333 & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) & R \\ \mathrm{ud8}_1111 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_1) & R \\ \mathrm{ud8}_1112 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) & C \\ \mathrm{ud8}_1113 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) & R \\ \mathrm{ud8}_1123 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_2) & R \\ \mathrm{ud8}_1123 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1133 & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1211 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1212 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1213 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1222 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1222 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1223 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1223 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1223 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1223 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1233 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1231 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1322 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1331 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1312 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1312 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1313 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1321 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1332 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1332 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_1332 & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ \mathrm{ud8}_2313 & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) & C \\ u$	WC name	Operator	Type
$\begin{array}{c} \mathrm{ud1}_{3311} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_1) \\ \mathrm{ud1}_{3312} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) \\ \mathrm{ud1}_{3313} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) \\ \mathrm{ud1}_{3322} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_2) \\ \mathrm{ud1}_{3322} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_3) \\ \mathrm{ud1}_{3323} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_3) \\ \mathrm{ud1}_{3333} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) \\ \mathrm{ud8}_{1111} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_1) \\ \mathrm{ud8}_{1112} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1113} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1113} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1122} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1211} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_1) \\ \mathrm{ud8}_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1213} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1213} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1222} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1332} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1331} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1331} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1332} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1333} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1331} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1332} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1332} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2331} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2232} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2233} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2233} & (\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_$	ud1_2333	$(ar{u}_2\gamma_\mu u_3)ig(ar{d}_3\gamma^\mu d_3ig)$	C
$\begin{array}{c} \mathrm{ud1}_{3312} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) \\ \mathrm{ud1}_{3313} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_1\gamma^\mu d_2) \\ \mathrm{ud1}_{3322} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_2) \\ \mathrm{ud1}_{3323} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_2) \\ \mathrm{ud1}_{3323} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_2\gamma^\mu d_3) \\ \mathrm{ud1}_{3333} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) \\ \mathrm{ud8}_{1111} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_1) \\ \mathrm{ud8}_{1112} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1113} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1122} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1211} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1213} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ \mathrm{ud8}_{1222} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1331} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1332} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1333} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1332} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{1333} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2321} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2212} & (\bar{u}_2\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2213} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2222} & (\bar{u}_2\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2233} & (\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) \\ \mathrm{ud8}_{2331} & (\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_1\gamma^$	ud1_3311		${ m R}$
$\begin{array}{c} \mathrm{ud1}_{3313} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_1\gamma^\mu d_3\right) & C \\ \mathrm{ud1}_{3322} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_2\right) & R \\ \mathrm{ud1}_{3323} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_3\right) & C \\ \mathrm{ud1}_{3333} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_3\right) & R \\ \mathrm{ud8}_{1111} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & R \\ \mathrm{ud8}_{1112} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8}_{1113} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8}_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & R \\ \mathrm{ud8}_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8}_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8}_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & C \\ \mathrm{ud8}_{1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8}_{1222} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8}_{1222} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & C \\ \mathrm{ud8}_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1231} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1311} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1311} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1312} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1313} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1322} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1323} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1323} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1323} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1323} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{1323} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{2313} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{2213} & (\bar{u}_2\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & C \\ \mathrm{ud8}_{2223} & (\bar{u}_2$	ud1_3312		\mathbf{C}
$\begin{array}{c} {\rm ud1_3322} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_2\right) & {\rm R} \\ {\rm ud1_3333} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_3\right) & {\rm C} \\ {\rm ud1_3333} & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_3\gamma^\mu d_3\right) & {\rm R} \\ {\rm ud8_1111} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & {\rm R} \\ {\rm ud8_1112} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8_1113} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1113} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1122} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1123} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1133} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm R} \\ {\rm ud8_1211} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm R} \\ {\rm ud8_1212} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1221} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1222} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & {\rm C} \\ {\rm ud8_1222} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & {\rm C} \\ {\rm ud8_1232} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & {\rm C} \\ {\rm ud8_1232} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & {\rm C} \\ {\rm ud8_1331} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & {\rm C} \\ {\rm ud8_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & {\rm C} \\ {\rm ud8_1331} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & {\rm C} \\ {\rm ud8_1332} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_2211} & (\bar{u}_2\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8_2213} & (\bar{u}_2\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_$	ud1_3313		$^{\mathrm{C}}$
$\begin{array}{c} \mathrm{ud1}_3323 & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_2\gamma^\mu d_3\right) & \mathrm{C} \\ \mathrm{ud1}_3333 & (\bar{u}_3\gamma_\mu u_3) \left(\bar{d}_3\gamma^\mu d_3\right) & \mathrm{R} \\ \mathrm{ud8}_1111 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & \mathrm{R} \\ \mathrm{ud8}_1112 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}_1113 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}_1113 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \mathrm{R} \\ \mathrm{ud8}_1122 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \mathrm{R} \\ \mathrm{ud8}_1123 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1133 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{R} \\ \mathrm{ud8}_1211 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & \mathrm{C} \\ \mathrm{ud8}_1212 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}_1213 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1221 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1222 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1222 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1231 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1231 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1232 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1232 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1331 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1311 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1312 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1312 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1322 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1322 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}_1322 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}_1332 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}_1332 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}_1333 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}_2311 & (\bar{u}_2\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}_2212 & (\bar{u}_2\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}_2223 & (\bar{u}_2\gamma_\mu T^A u_2) \left(\bar{d}$	ud1_3322		${ m R}$
$\begin{array}{c} {\rm ud1_3333} & (\bar{u}_3\gamma_\mu u_3) (\bar{d}_3\gamma^\mu d_3) \\ {\rm ud8_1111} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_1) \\ {\rm ud8_1112} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_1113} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_3) \\ {\rm ud8_1122} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_1\gamma^\mu T^A d_3) \\ {\rm ud8_1123} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ {\rm ud8_1123} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_2\gamma^\mu T^A d_3) \\ {\rm ud8_1133} & (\bar{u}_1\gamma_\mu T^A u_1) (\bar{d}_3\gamma^\mu T^A d_3) \\ {\rm ud8_1133} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_3) \\ {\rm ud8_1211} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_1212} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_1213} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_1213} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_1221} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_1222} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ {\rm ud8_1223} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3) \\ {\rm ud8_1233} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_4) \\ {\rm ud8_1232} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_2) \\ {\rm ud8_1233} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_2) \\ {\rm ud8_1311} & (\bar{u}_1\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_2) \\ {\rm ud8_1312} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_1312} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_1312} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_1322} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_2) \\ {\rm ud8_1322} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_3) \\ {\rm ud8_1323} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_3) \\ {\rm ud8_1322} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_2) \\ {\rm ud8_1322} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_2) \\ {\rm ud8_1333} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_2) \\ {\rm ud8_1332} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_2) \\ {\rm ud8_1332} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_2) \\ {\rm ud8_1333} & (\bar{u}_1\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_2) \\ {\rm ud8_2313} & (\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_2223} & (\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2) \\ {\rm ud8_2231} & (\bar{u}_2\gamma_\mu T^A u_3) (d$	ud1_3323		$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8_1111} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{R} \\ \text{ud8_1112} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1113} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1122} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{R} \\ \text{ud8_1123} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{R} \\ \text{ud8_1123} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{R} \\ \text{ud8_1213} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1211} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1212} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1213} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1221} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1222} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1223} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1231} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1232} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1311} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1312} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & $	ud1_3333		R
$\begin{array}{c} \text{ud8_1113} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1122} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{R} \\ \text{ud8_1123} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{R} \\ \text{ud8_1133} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1133} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1211} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1212} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1213} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1221} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1222} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1231} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1232} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1311} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1312} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1332} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1332} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2311} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2312} & \left(\bar{u}_2\gamma_\mu T^A$	ud8_1111	$(ar{u}_1\gamma_\mu T^A u_1) \ (ar{d}_1\gamma^\mu T^A d_1)$	R
$\begin{array}{c} \text{ud8_1113} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1122} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{R} \\ \text{ud8_1123} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{R} \\ \text{ud8_1133} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1133} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1211} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1212} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1213} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1221} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1222} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1231} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1232} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1311} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1312} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1332} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1332} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2311} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2312} & \left(\bar{u}_2\gamma_\mu T^A$	ud8_1112	$(\bar{u}_1\gamma_\mu T^Au_1)(\bar{d}_1\gamma^\mu T^Ad_2)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8_1123} & \left(\bar{u}_1 \gamma_\mu T^A u_1 \right) \left(\bar{d}_2 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1133} & \left(\bar{u}_1 \gamma_\mu T^A u_1 \right) \left(\bar{d}_3 \gamma^\mu T^A d_3 \right) & \text{R} \\ \text{ud8_1211} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_1 \gamma^\mu T^A d_1 \right) & \text{C} \\ \text{ud8_1212} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_1 \gamma^\mu T^A d_2 \right) & \text{C} \\ \text{ud8_1213} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1221} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_2 \gamma^\mu T^A d_1 \right) & \text{C} \\ \text{ud8_1222} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_2 \gamma^\mu T^A d_2 \right) & \text{C} \\ \text{ud8_1223} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_2 \gamma^\mu T^A d_2 \right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_3 \gamma^\mu T^A d_1 \right) & \text{C} \\ \text{ud8_1232} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_3 \gamma^\mu T^A d_2 \right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_3 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1 \gamma_\mu T^A u_2 \right) \left(\bar{d}_3 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1311} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1312} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_1 \gamma^\mu T^A d_2 \right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_2 \gamma^\mu T^A d_4 \right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_2 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_2 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_3 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_3 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1 \gamma_\mu T^A u_3 \right) \left(\bar{d}_3 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_2 \gamma_\mu T^A u_2 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_2212} & \left(\bar{u}_2 \gamma_\mu T^A u_2 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2 \gamma_\mu T^A u_2 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_2233} & \left(\bar{u}_2 \gamma_\mu T^A u_2 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_2233} & \left(\bar{u}_2 \gamma_\mu T^A u_3 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8_2311} & \left(\bar{u}_2 \gamma_\mu T^A u_3 \right) \left(\bar{d}_1 \gamma^\mu T^A d_3 \right) & $	ud8_1113	$(\bar{u}_1\gamma_\mu T^Au_1)(\bar{d}_1\gamma^\mu T^Ad_3)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8_1133} & \left(\bar{u}_1\gamma_\mu T^A u_1\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{R} \\ \text{ud8_1211} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1212} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1213} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1221} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1222} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1232} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1311} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1312} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1331} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1332} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2212} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2233} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2311} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_\mu T^A$	ud8_1122	$(\bar{u}_1\gamma_\mu T^Au_1)(\bar{d}_2\gamma^\mu T^Ad_2)$	R
$\begin{array}{c} \text{ud8_1211} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1212} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1213} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1221} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1222} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1231} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1232} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1311} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1312} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_1331} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) & \text{C} \\ \text{ud8_1332} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \text{C} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2233} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2311} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_\mu T^A$	ud8_1123	$\left(ar{u}_1\gamma_\mu T^A u_1\right)\left(ar{d}_2\gamma^\mu T^A d_3\right)$	$^{\mathrm{C}}$
$\begin{array}{c} {\rm ud8_1212} \qquad \qquad (\bar{u}_1\gamma_{\mu}T^Au_2) \; (\bar{d}_1\gamma^{\mu}T^Ad_2) \qquad \qquad$	ud8_1133		R
$\begin{array}{c} \text{ud8_1213} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1221} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1222} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1223} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1231} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1232} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1311} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1312} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1321} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1332} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2311} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2321} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & $	ud8_1211	$(\bar{u}_1\gamma_\mu T^Au_2)(\bar{d}_1\gamma^\mu T^Ad_1)$	C
$\begin{array}{c} \text{ud8_1221} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1222} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1223} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1231} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1232} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1311} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1312} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1321} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1332} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{R} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2333} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2321} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \end{array}$	ud8_1212	$\left(ar{u}_1\gamma_\mu T^A u_2 ight)\left(ar{d}_1\gamma^\mu T^A d_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8_1222} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{ud8_1223} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{Ud8_1231} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) \\ \text{Ud8_1232} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) \\ \text{Ud8_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_1311} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) \\ \text{Ud8_1312} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_1313} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_1313} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) \\ \text{Ud8_1321} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) \\ \text{Ud8_1322} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{Ud8_1332} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) \\ \text{Ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_211} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) \\ \text{Ud8_2212} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{Ud8_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) \\ \text{Ud8_2311} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) \\ \text{Ud8_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_2313} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_2313} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) \\ \text{Ud8_2321} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) \\ \text{Ud8_2321} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) \\ \text{Ud8_2321} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) \\ \text{Ud8_2321} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) \\ $	ud8_1213		C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1221		C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1222	$\left(ar{u}_1\gamma_\mu T^A u_2 ight)\left(ar{d}_2\gamma^\mu T^A d_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1223		$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8_1233} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1311} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1312} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1313} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1321} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1322} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_1332} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{R} \\ \text{ud8_2212} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{R} \\ \text{ud8_2223} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2331} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8_2321} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8_2321} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \end{array}$	ud8_1231	$(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_3\gamma^\mu T^A d_1)$	C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1232		C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1233		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1311	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1312		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1313	$\left(ar{u}_1\gamma_\mu T^A u_3 ight)\left(ar{d}_1\gamma^\mu T^A d_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1321	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1322	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1323	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_2\gamma^\mu T^Ad_3)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8_1332} & \left(\bar{u}_{1}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{3}\gamma^{\mu}T^{A}d_{2}\right) & \text{C} \\ \text{ud8_1333} & \left(\bar{u}_{1}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{3}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{1}\right) & \text{R} \\ \text{ud8_2212} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{2}\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \text{ud8_2222} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{2}\gamma^{\mu}T^{A}d_{2}\right) & \text{R} \\ \text{ud8_2223} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{2}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \text{ud8_2233} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{3}\gamma^{\mu}T^{A}d_{3}\right) & \text{R} \\ \text{ud8_2311} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{1}\right) & \text{C} \\ \text{ud8_2312} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{2}\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \text{ud8_2321} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \text{ud8_2321} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \end{array}$	ud8_1331	$\left(ar{u}_1\gamma_\mu T^A u_3 ight)\left(ar{d}_3\gamma^\mu T^A d_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8_1333} & \left(\bar{u}_{1}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{3}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \text{ud8_2211} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{1}\right) & \text{R} \\ \text{ud8_2212} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{2}\right) & \text{C} \\ \text{ud8_2213} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \text{ud8_2222} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{2}\gamma^{\mu}T^{A}d_{2}\right) & \text{R} \\ \text{ud8_2223} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{2}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \text{ud8_2233} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{2}\right)\left(\bar{d}_{3}\gamma^{\mu}T^{A}d_{3}\right) & \text{R} \\ \text{ud8_2311} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{1}\right) & \text{C} \\ \text{ud8_2312} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{2}\right) & \text{C} \\ \text{ud8_2313} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{1}\gamma^{\mu}T^{A}d_{3}\right) & \text{C} \\ \text{ud8_2321} & \left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{2}\gamma^{\mu}T^{A}d_{1}\right) & \text{C} \\ \end{array}$	ud8_1332	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1333	$(\bar{u}_1\gamma_\mu T^Au_3)(\bar{d}_3\gamma^\mu T^Ad_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2211		${ m R}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2212	$(\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_1\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2213	$(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			${ m R}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2223	$\left(ar{u}_2\gamma_\mu T^A u_2 ight)\left(ar{d}_2\gamma^\mu T^A d_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2233	$(\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_3\gamma^\mu T^A d_3)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2311	$(\bar{u}_2\gamma_\mu T^Au_3)(\bar{d}_1\gamma^\mu T^Ad_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_1\gamma^\mu T^A d_2 ight)$	$^{\mathrm{C}}$
ud8_2321 $\left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{2}\gamma^{\mu}T^{A}d_{1}\right)$ C ud8_2322 $\left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{2}\gamma^{\mu}T^{A}d_{2}\right)$ C	ud8_2313	$\left(ar{u}_2\gamma_{\mu}T^Au_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	$^{\mathrm{C}}$
ud8_2322 $\left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right)$ C	ud8_2321	$\left(ar{u}_2\gamma_{\mu}T^Au_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_1 ight)$	\mathbf{C}
	ud8_2322	$\left(ar{u}_2\gamma_{\mu}T^Au_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	\mathbf{C}

WC name	Operator	Type
ud8_2323	$(\bar{u}_2\gamma_\mu T^A u_3) (\bar{d}_2\gamma^\mu T^A d_3)$	С
ud8_2331	$\left\langle ar{u}_2\gamma_\mu T^A u_3 ight angle \left\langle ar{d}_3\gamma^\mu T^A d_1 ight angle$	$^{\mathrm{C}}$
ud8_2332	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_3\gamma^\mu T^A d_2 ight)$	\mathbf{C}
ud8_2333	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_3\gamma^\mu T^A d_3 ight)$	\mathbf{C}
ud8_3311	$\left\langle ar{u}_{3}\gamma_{\mu}T^{A}u_{3} ight angle \left\langle ar{d}_{1}\gamma^{\mu}T^{A}d_{1} ight angle$	${ m R}$
ud8_3312	$\left\langle ar{u}_3 \gamma_\mu T^A u_3 \right\rangle \left\langle ar{d}_1 \gamma^\mu T^A d_2 \right\rangle$	\mathbf{C}
ud8_3313	$(\bar{u}_3\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_3)$	\mathbf{C}
ud8_3322	$\left(ar{u}_3\gamma_{\mu}T^Au_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	R
ud8_3323	$\left(\bar{u}_3\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right)$	\mathbf{C}
ud8_3333	$\left(ar{u}_3 \gamma_\mu T^A u_3 \right) \left(ar{d}_3 \gamma^\mu T^A d_3 \right)$	R
le_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	R
le_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
le_1113	$\left(ar{\ell}_1\gamma_{\mu}\ell_1 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
le_1122	$\left(ar{\ell}_1\gamma_{\mu}\ell_1 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	R
le_1123	$\left(ar{\ell}_1\gamma_{\mu}\ell_1 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	\mathbf{C}
le_1133	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	${ m R}$
le_1211	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
le_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	\mathbf{C}
le_1213	$\left(ar{\ell}_1\gamma_{\mu}\ell_2 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	\mathbf{C}
le_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_2\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
le_1222	$\left(ar{\ell}_1\gamma_{\mu}\ell_2 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
le_1223	$\left(ar{\ell}_1\gamma_{\mu}\ell_2 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
le_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_3\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
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	$\left(\ell_{1}\gamma_{\mu}\ell_{3} ight) \left(ar{e}_{1}\gamma^{\mu}e_{1} ight)$	$^{\mathrm{C}}$
le_1312	$\left(ar{\ell}_1 \gamma_\mu \ell_3 ight) \left(ar{e}_1 \gamma^\mu e_2 ight)$	С
le_1313	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
le_1321	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
le_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	С
le_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	С
le_1331	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_1 ight)$	С
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	$\left(ar{\ell}_2 \gamma_\mu \ell_2 ight) \left(ar{e}_1 \gamma^\mu e_2 ight)$	С
le_2213	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	С
le_2222	$\left(ar{\ell}_2 \gamma_\mu \ell_2 ight) \left(ar{e}_2 \gamma^\mu e_2 ight)$	R
le_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
le_2233	$\left(\ell_2\gamma_\mu\ell_2\right)\left(ar{e}_3\gamma^\mu e_3\right)$	R
le_2311	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	C
le_2312	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$

$\begin{array}{llllllllllllllllllllllllllllllllllll$	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_2313	$(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{e}_1\gamma^\mu e_3)$	C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_2321		\mathbf{C}
$\begin{array}{llllllllllllllllllllllllllllllllllll$	le_2322		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_2323		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_2331		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_2332		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_2333		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_3311		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_3312	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{e}_1\gamma^\mu e_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_3313	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{e}_1\gamma^\mu e_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_3322	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{e}_2\gamma^\mu e_2)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_3323	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{e}_2\gamma^\mu e_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_3333	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{e}_3\gamma^\mu e_3)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1111	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{u}_1\gamma^\mu u_1)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1112	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{u}_1\gamma^\mu u_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1113	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{u}_1\gamma^\mu u_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1122	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{u}_2\gamma^\mu u_2)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1123		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1133	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{u}_3\gamma^\mu u_3)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1211		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1212		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1213		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1221	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{u}_2\gamma^\mu u_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1222	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{u}_2\gamma^\mu u_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1223	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{u}_2\gamma^\mu u_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1231	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{u}_3\gamma^\mu u_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1232	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1233	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{u}_3\gamma^\mu u_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1313	$(ar{\ell}_1\gamma_\mu\ell_3)(ar{u}_1\gamma^\mu u_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1321	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1331		$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	lu_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
lu_2212 $(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_1 \gamma^\mu u_2)$ C lu_2213 $(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_1 \gamma^\mu u_3)$ C lu_2222 $(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_2 \gamma^\mu u_2)$ R	lu_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
lu_2213 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_1\gamma^\mu u_3)$ Clu_2222 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_2)$ R	lu_2211		R
lu_2222 $ \left(\bar{\ell}_2 \gamma_\mu \ell_2 \right) \left(\bar{u}_2 \gamma^\mu u_2 \right) $ 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_2223 $ (\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_2 \gamma^\mu u_3) $ C	lu_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	R
	lu_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	C

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_2233	$(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_3)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_2312		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_2313		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_2321		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_2322		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_2323		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_2332		C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_2333		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_3311		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_3312		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_3313		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_3322		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_3323		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_3333		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1111		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1112	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{d}_1\gamma^\mu d_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1113		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1122		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1123		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1133		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1211		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1212		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1213		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1221		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1222		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1223		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_3\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1232	$\left(\ell_1\gamma_\mu\ell_2 ight)\left(d_3\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1233	$\left(\ell_1\gamma_\mu\ell_2 ight)\left(d_3\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1312		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1313	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1321	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
1d_1332 $(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_2)$ C 1d_1333 $(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_3)$ C 1d_2211 $(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_1)$ R	ld_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
1d_1332 $(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_2)$ C 1d_1333 $(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_3)$ C 1d_2211 $(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_1)$ R	ld_1331	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
ld_1333 $(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_3)$ Cld_2211 $(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_1)$ R	ld_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_2 ight)$	\mathbf{C}
ld_2211 $(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_1)$ R	ld_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	\mathbf{C}
	ld_2211		R
	ld_2212	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	\mathbf{C}

WC name	Operator	Type
ld_2213	$\left(ar{\ell}_2\gamma_{\mu}\ell_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	\overline{C}
ld_2222	$\left\langle ar{\ell}_2 \gamma_\mu \ell_2 ight angle \left\langle ar{d}_2 \gamma^\mu d_2 ight angle$	R
ld_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	\mathbf{C}
ld_2233	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	R
ld_2311	$(ar{\ell}_2\gamma_\mu\ell_3)ig(ar{d}_1\gamma^\mu d_1ig)$	\mathbf{C}
ld_2312	$raket{ar{(ar{\ell}_2\gamma_\mu\ell_3)}ar{(ar{d}_1\gamma^\mu d_2)}}$	\mathbf{C}
ld_2313	$(ar{\ell}_2\gamma_\mu\ell_3)ig(ar{d}_1\gamma^\mu d_3ig)$	\mathbf{C}
ld_2321	$(ar{\ell}_2\gamma_\mu\ell_3)ig(ar{d}_2\gamma^\mu d_1ig)$	\mathbf{C}
ld_2322	$(ar{\ell}_2\gamma_\mu\ell_3)~(ar{d}_2\gamma^\mu d_2)$	\mathbf{C}
ld_2323	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{d}_2\gamma^\mu d_3)$	\mathbf{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	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{d}_3\gamma^\mu d_3)$	\mathbf{C}
ld_3311	$(ar{\ell}_3\gamma_\mu\ell_3)ig(ar{d}_1\gamma^\mu d_1ig)$	R
ld_3312	$(ar{\ell}_3\gamma_\mu\ell_3)ig(ar{d}_1\gamma^\mu d_2ig)$	\mathbf{C}
ld_3313	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	\mathbf{C}
ld_3322	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{d}_2\gamma^\mu d_2)$	R
ld_3323	$ig(ar{\ell}_3\gamma_\mu\ell_3ig)ig(ar{d}_2\gamma^\mu d_3ig)$	\mathbf{C}
ld_3333	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	R
qe_1111	$(ar{q}_1\gamma_\mu q_1)(ar{e}_1\gamma^\mu e_1)$	R
qe_1112	$(ar{q}_1\gamma_\mu q_1)(ar{e}_1\gamma^\mu e_2)$	\mathbf{C}
qe_1113	$(ar{q}_1\gamma_{\mu}q_1)(ar{e}_1\gamma^{\mu}e_3)$	$^{\mathrm{C}}$
qe_1122	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	R
qe_1123	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	\mathbf{C}
qe_1133	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{e}_3\gamma^{\mu}e_3 ight)$	R
qe_1211	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{e}_1\gamma^{\mu}e_1 ight)$	$^{\mathrm{C}}$
qe_1212	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
qe_1213	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	\mathbf{C}
qe_1221	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{e}_2\gamma^{\mu}e_1 ight)$	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	$(ar{q}_1\gamma_\mu q_2)(ar{e}_3\gamma^\mu e_1)$	C
qe_1232	$(ar{q}_1\gamma_\mu q_2)(ar{e}_3\gamma^\mu e_2)$	C
qe_1233	$(\bar{q}_1\gamma_\mu q_2)(\bar{e}_3\gamma^\mu e_3)$	C
qe_1311	$(ar{q}_1\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_1)$	C
qe_1312	$(ar{q}_1\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_2)$	C
qe_1313	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_1\gamma^\mu e_3)$	C
qe_1321	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_2\gamma^\mu e_1)$	C
qe_1322	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_2\gamma^\mu e_2)$	C
qe_1323	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_2\gamma^\mu e_3)$	C
qe_1331	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_3\gamma^\mu e_1)$	C
qe_1332	$\left(ar{q}_1\gamma_\mu q_3\right)\left(ar{e}_3\gamma^\mu e_2\right)$	C C
qe_1333	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_3\gamma^\mu e_3)$	C

WC name	Operator	Type
qe_2211	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{e}_1\gamma^{\mu}e_1 ight)$	${ m R}$
qe_2212	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
qe_2213	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	\mathbf{C}
qe_2222	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	R
qe_2223	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	\mathbf{C}
qe_2233	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{e}_3\gamma^{\mu}e_3 ight)$	R
qe_2311	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_1 ight)$	\mathbf{C}
qe_2312	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
qe_2313	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
qe_2321	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_1 ight)$	$^{\mathrm{C}}$
qe_2322	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
qe_2323	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
qe_2331	$(ar{q}_2\gamma_\mu q_3)(ar{e}_3\gamma^\mu e_1)$	$^{\mathrm{C}}$
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	$(ar{q}_3\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_2)$	$^{\mathrm{C}}$
qe_3313	$(ar{q}_3\gamma_\mu q_3)(ar{e}_1\gamma^\mu e_3)$	$^{\mathrm{C}}$
qe_3322	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	R
qe_3323	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
qe_3333	$(ar{q}_3\gamma_\mu q_3)(ar{e}_3\gamma^\mu e_3)$	R
qu1_1111	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	R
qu1_1112	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
qu1_1113	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	\mathbf{C}
qu1_1122	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	R
qu1_1123	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
qu1_1133	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
qu1_1211	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	$^{\mathrm{C}}$
qu1_1212	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
qu1_1213	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
qu1_1221	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	$^{\mathrm{C}}$
qu1_1222	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
qu1_1223	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
qu1_1231	$\left(\bar{q}_1\gamma_{\mu}q_2\right)\left(\bar{u}_3\gamma^{\mu}u_1\right)$	$^{\mathrm{C}}$
qu1_1232	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
qu1_1233	$(ar{q}_1\gamma_\mu q_2)(ar{u}_3\gamma^\mu u_3)$	$^{\mathrm{C}}$
qu1_1311	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	$^{\mathrm{C}}$
qu1_1312	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
qu1_1313	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	C
qu1_1321	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	C
qu1_1322	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	C
qu1_1323	$(ar{q}_1\gamma_\mu q_3)(ar{u}_2\gamma^\mu u_3)$	\mathbf{C}
qu1_1331	$(ar{q}_1\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_1)$	\mathbf{C}
qu1_1332	$(ar{q}_1\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_2)$	\mathbf{C}
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WC name	Operator	Type
qu1_1333	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	C
qu1_2211	$\left(\bar{q}_2\gamma_{\mu}q_2\right)\left(\bar{u}_1\gamma^{\mu}u_1\right)$	R
qu1_2212	$\left(ar{q}_2\gamma_\mu q_2 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
qu1_2213	$(ar{q}_2\gamma_\mu q_2)(ar{u}_1\gamma^\mu u_3)$	\mathbf{C}
qu1_2222	$(ar{q}_2\gamma_\mu q_2)(ar{u}_2\gamma^\mu u_2)$	${ m R}$
qu1_2223	$(ar q_2\gamma_\mu q_2)(ar u_2\gamma^\mu u_3)$	\mathbf{C}
qu1_2233	$(ar q_2\gamma_\mu q_2)(ar u_3\gamma^\mu u_3)$	${ m R}$
qu1_2311	$(ar q_2\gamma_\mu q_3)(ar u_1\gamma^\mu u_1)$	\mathbf{C}
qu1_2312	$(ar q_2\gamma_\mu q_3)(ar u_1\gamma^\mu u_2)$	\mathbf{C}
qu1_2313	$(ar q_2\gamma_\mu q_3)(ar u_1\gamma^\mu u_3)$	\mathbf{C}
qu1_2321	$(ar q_2\gamma_\mu q_3)(ar u_2\gamma^\mu u_1)$	\mathbf{C}
qu1_2322	$(ar{q}_2\gamma_\mu q_3)(ar{u}_2\gamma^\mu u_2)$	\mathbf{C}
qu1_2323	$(ar q_2\gamma_\mu q_3)(ar u_2\gamma^\mu u_3)$	\mathbf{C}
qu1_2331	$(ar{q}_2\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_1)$	\mathbf{C}
qu1_2332	$(ar q_2\gamma_\mu q_3)(ar u_3\gamma^\mu u_2)$	\mathbf{C}
qu1_2333	$(ar{q}_2\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_3)$	\mathbf{C}
qu1_3311	$(ar{q}_3\gamma_\mu q_3)(ar{u}_1\gamma^\mu u_1)$	${ m R}$
qu1_3312	$(ar{q}_3\gamma_\mu q_3)(ar{u}_1\gamma^\mu u_2)$	\mathbf{C}
qu1_3313	$(ar q_3\gamma_\mu q_3)(ar u_1\gamma^\mu u_3)$	\mathbf{C}
qu1_3322	$(ar{q}_3\gamma_\mu q_3)(ar{u}_2\gamma^\mu u_2)$	${ m R}$
qu1_3323	$(ar{q}_3\gamma_\mu q_3)(ar{u}_2\gamma^\mu u_3)$	\mathbf{C}
qu1_3333	$(ar{q}_3\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_3)$	R
qd1_1111	$(ar{q}_1\gamma_\mu q_1)\left(ar{d}_1\gamma^\mu d_1 ight)$	${ m R}$
qd1_1112	$(ar{q}_1\gamma_{\mu}q_1)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	\mathbf{C}
qd1_1113	$(ar{q}_1\gamma_\mu q_1) \left(ar{d}_1\gamma^\mu d_3 ight)$	\mathbf{C}
qd1_1122	$(ar{q}_1\gamma_\mu q_1) \left(ar{d}_2\gamma^\mu d_2 ight)$	R
qd1_1123	$(ar{q}_1\gamma_\mu q_1)\left(ar{d}_2\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
qd1_1133	$(ar{q}_1\gamma_\mu q_1)ig(ar{d}_3\gamma^\mu d_3ig)$	${ m R}$
qd1_1211	$(ar{q}_1\gamma_{\mu}q_2)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	\mathbf{C}
qd1_1212	$(ar{q}_1\gamma_\mu q_2) \left(ar{d}_1\gamma^\mu d_2 ight)$	\mathbf{C}
qd1_1213	$(ar{q}_1\gamma_\mu q_2)ig(ar{d}_1\gamma^\mu d_3ig)$	\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	$(ar{q}_1\gamma_\mu q_2)ig(ar{d}_2\gamma^\mu d_3ig)$	\mathbf{C}
qd1_1231	$(ar{q}_1\gamma_\mu q_2) \left(ar{d}_3\gamma^\mu d_1 ight)$	\mathbf{C}
qd1_1232	$(ar{q}_1\gamma_{\mu}q_2)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	\mathbf{C}
qd1_1233	$(ar{q}_1\gamma_\mu q_2) \left(ar{d}_3\gamma^\mu d_3 ight)$	\mathbf{C}
qd1_1311	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_1\gamma^\mu d_1 ight)$	\mathbf{C}
qd1_1312	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_1\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
qd1_1313	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_1\gamma^\mu d_3 ight)$	C
qd1_1321	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_2\gamma^\mu d_1 ight)$	C
qd1_1322	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_2\gamma^\mu d_2 ight)$	C
qd1_1323	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_2\gamma^\mu d_3 ight)$	C
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WC name	Operator	Type
qd1_1331	$\left(ar{q}_1\gamma_{\mu}q_3 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	C
qd1_1332	$(ar{q}_1\gamma_\mu q_3)\left(ar{d}_3\gamma^\mu d_2 ight)$	C
qd1_1333	$(ar{q}_1\gamma_\mu q_3)\left(ar{d}_3\gamma^\mu d_3 ight)$	\mathbf{C}
qd1_2211	$(ar{q}_2\gamma_\mu q_2)\left(ar{d}_1\gamma^\mu d_1 ight)$	R
qd1_2212	$(ar{q}_2\gamma_\mu q_2)\left(ar{d}_1\gamma^\mu d_2 ight)$	\mathbf{C}
qd1_2213	$(ar{q}_2\gamma_\mu q_2)\left(ar{d}_1\gamma^\mu d_3 ight)$	\mathbf{C}
qd1_2222	$(ar{q}_2\gamma_\mu q_2) \left(ar{d}_2\gamma^\mu d_2 ight)$	R
qd1_2223	$(ar{q}_2\gamma_\mu q_2)\left(ar{d}_2\gamma^\mu d_3 ight)$	C
qd1_2233	$(ar{q}_2\gamma_\mu q_2)\left(ar{d}_3\gamma^\mu d_3 ight)$	R
qd1_2311	$(ar{q}_2\gamma_\mu q_3) \left(ar{d}_1\gamma^\mu d_1 ight)$	\mathbf{C}
qd1_2312	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_1\gamma^\mu d_2 ight)$	C
qd1_2313	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_1\gamma^\mu d_3 ight)$	\mathbf{C}
qd1_2321	$(ar{q}_2\gamma_\mu q_3) \left(ar{d}_2\gamma^\mu d_1 ight)$	\mathbf{C}
qd1_2322	$(ar{q}_2\gamma_\mu q_3)ig(ar{d}_2\gamma^\mu d_2ig)$	C
qd1_2323	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_2\gamma^\mu d_3 ight)$	\mathbf{C}
qd1_2331	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_3\gamma^\mu d_1 ight)$	C
qd1_2332	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_3\gamma^\mu d_2 ight)$	C
qd1_2333	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	\mathbf{C}
qd1_3311	$(ar{q}_3\gamma_\mu q_3)\left(ar{d}_1\gamma^\mu d_1 ight)$	R
qd1_3312	$(ar{q}_3\gamma_{\mu}q_3)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	С
qd1_3313	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(d_1\gamma^{\mu}d_3 ight)$	\mathbf{C}
qd1_3322	$(ar{q}_3\gamma_{\mu}q_3)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
qd1_3323	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	\mathbf{C}
qd1_3333	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(d_3\gamma^{\mu}d_3 ight)$	R
qu8_1111	$(ar{q}_1\gamma_\mu T^Aq_1)~(ar{u}_1\gamma^\mu T^Au_1)$	R
qu8_1112	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{u}_1\gamma^{\mu}T^Au_2 ight)$	\mathbf{C}
qu8_1113	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{u}_1\gamma^\mu T^Au_3 ight)$	\mathbf{C}
qu8_1122	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{u}_2\gamma^\mu T^Au_2 ight)$	R
qu8_1123	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{u}_2\gamma^\mu T^Au_3 ight)$	\mathbf{C}
qu8_1133	$\left(ar{q}_1 \gamma_\mu T^A q_1 \right) \left(ar{u}_3 \gamma^\mu T^A u_3 \right)$	R
qu8_1211	$\left(ar{q}_1\gamma_\mu T^A_{q_2}\right)\left(ar{u}_1\gamma^\mu T^A_{u_1}\right)$	C
qu8_1212	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_1\gamma^\mu T^Au_2 ight)$	C
qu8_1213	$\left(ar{q}_1 \gamma_\mu T^A q_2 \right) \left(ar{u}_1 \gamma^\mu T^A u_3 \right)$	C
qu8_1221	$\left(ar{q}_1 \gamma_\mu T^A q_2 \right) \left(ar{u}_2 \gamma^\mu T^A u_1 \right)$	С
qu8_1222	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_2\gamma^\mu T^Au_2 ight)$	С
qu8_1223	$\left(ar{q}_1\gamma_\mu T^Aq_2\right)\left(ar{u}_2\gamma^\mu T^Au_3\right)$	C C
qu8_1231	$egin{pmatrix} \left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_3\gamma^{\mu}T^Au_1 ight) \ \left(ar{z}_2\gamma^{\mu}T^Ax_1 ight) \ \left(ar{z}_2\gamma^{\mu}T^Ax_1 ight) \end{pmatrix}$	C
qu8_1232	$\left\langle ar{q}_{1}\gamma_{\mu}T^{A}q_{2} ight angle \left\langle ar{u}_{3}\gamma^{\mu}T^{A}u_{2} ight angle \left\langle ar{u}_{3}\gamma^{\mu}T^{A}u_{2} ight angle$	C
qu8_1233	$ \begin{array}{c} \left(\bar{q}_1\gamma_{\mu}T^Aq_2\right)\left(\bar{u}_3\gamma^{\mu}T^Au_3\right) \\ \left(\bar{q}_1\gamma_{\mu}T^Aq_3\right)\left(\bar{u}_1\gamma^{\mu}T^Au_1\right) \end{array} $	C
qu8_1311	$egin{array}{l} (q_1\gamma_\mu I & q_3) & (u_1\gamma^\mu I & u_1) \ (ar q_1\gamma_\mu T^A q_3) & (ar u_1\gamma^\mu T^A u_2) \end{array}$	C
qu8_1312 qu8_1313	$egin{pmatrix} (q_1\gamma_\mu I & q_3) & (u_1\gamma^\mu I & u_2) \ (ar q_1\gamma_\mu T^A q_3) & (ar u_1\gamma^\mu T^A u_3) \end{pmatrix}$	C
quo_1313 qu8_1321	$egin{array}{l} (q_1\gamma_\mu I & q_3) & (u_1\gamma^\mu I & u_3) \ (ar q_1\gamma_\mu T^A q_3) & (ar u_2\gamma^\mu T^A u_1) \end{array}$	C
quo_1321	(q_1, q_1, q_3) (u_2, q_1, q_1, q_1)	C

WC name	Operator	Type
qu8_1322	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_2 ight)$	\mathbf{C}
qu8_1323	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_1331	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_1 ight)$	C
qu8_1332	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_2 ight)$	C
qu8_1333	$\left(ar{q}_1\gamma_{\mu}T^Aq_3\right)\left(ar{u}_3\gamma^{\mu}T^Au_3\right)$	C
qu8_2211	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_1\gamma^{\mu}T^Au_1 ight)$	\mathbf{R}
qu8_2212	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_1\gamma^{\mu}T^Au_2 ight)$	$^{\mathrm{C}}$
qu8_2213	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_1\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_2222	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{u}_2\gamma^\mu T^Au_2 ight)$	\mathbf{R}
qu8_2223	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_2\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_2233	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_3\gamma^{\mu}T^Au_3 ight)$	\mathbf{R}
qu8_2311	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_1\gamma^\mu T^Au_1 ight)$	C
qu8_2312	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_2 ight)$	C
qu8_2313	$\left(ar{q}_2 \gamma_\mu T^A q_3 \right) \left(ar{u}_1 \gamma^\mu T^A u_3 \right)$	$^{\mathrm{C}}$
qu8_2321	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_2\gamma^\mu T^Au_1 ight)$	$^{\mathrm{C}}$
qu8_2322	$\left(ar{q}_2 \gamma_\mu T^A q_3 \right) \left(ar{u}_2 \gamma^\mu T^A u_2 \right)$	$^{\mathrm{C}}$
qu8_2323	$\left(ar{q}_2\gamma_\mu T^Aq_3\right)\left(ar{u}_2\gamma^\mu T^Au_3\right)$	\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	$\left(ar{q}_3 \gamma_\mu T^A q_3 \right) \left(ar{u}_1 \gamma^\mu T^A u_2 \right)$	\mathbf{C}
qu8_3313	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{d}_1\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_1\gamma_\mu T^Aq_1 ight)\left(ar{d}_2\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{d}_1\gamma^\mu T^Ad_1 ight)$	$^{\mathrm{C}}$
qd8_1212	$egin{pmatrix} (ar{q}_1\gamma_\mu T^Aq_2) & (ar{d}_1\gamma^\mu T^Ad_2) \end{pmatrix}$	C
qd8_1213	$egin{pmatrix} (ar{q}_1\gamma_\mu T^Aq_2) & (ar{d}_1\gamma^\mu T^Ad_3) \end{pmatrix}$	$^{\mathrm{C}}$
qd8_1221	$egin{array}{l} (ar{q}_1\gamma_\mu T^Aq_2) & (ar{d}_2\gamma^\mu T^Ad_1) \ \end{array}$	Č
qd8_1222	$egin{array}{l} (ar{q}_1\gamma_\mu T^Aq_2) & (ar{d}_2\gamma^\mu T^Ad_2) \ & (ar{q}_1\gamma_\mu T^Aq_2) & (ar{d}_2\gamma^\mu T^Ad_2) \end{array}$	$\overset{\circ}{\mathrm{C}}$
qd8_1223	$egin{array}{l} (q_1/\mu T^4q_2) & (a_2/T^4a_2) \ (ar{q}_1\gamma_\mu T^Aq_2) & (ar{d}_2\gamma^\mu T^Ad_3) \end{array}$	$\overset{\circ}{\mathrm{C}}$
qd8_1231	$egin{array}{l} (q_1\gamma_\mu T^Aq_2) & (a_2\gamma^\mu T^Ad_1) \ (ar q_1\gamma_\mu T^Aq_2) & (ar d_3\gamma^\mu T^Ad_1) \end{array}$	$^{\rm C}$
qd8_1232	$egin{array}{l} (q_1\gamma_\mu I & q_2) & (a_3\gamma^* I & a_1) \ ig(ar{q}_1\gamma_\mu T^Aq_2) & ig(ar{d}_3\gamma^\mu T^Ad_2) \end{array}$	C
_	$egin{array}{l} (q_1\gamma_\mu I & q_2) & (a_3\gamma^\mu I & a_2) \ ig(ar{q}_1\gamma_\mu T^A q_2) & ig(ar{d}_3\gamma^\mu T^A d_3) \end{array}$	C
qd8_1233	$\begin{pmatrix} q_1 \gamma_{\mu} & q_2 \end{pmatrix} \begin{pmatrix} u_3 \gamma^{\mu} & u_3 \end{pmatrix}$ $\begin{pmatrix} \bar{z} & TA_{\alpha} \end{pmatrix} \begin{pmatrix} \bar{J} & u_TA_{\beta} \end{pmatrix}$	
qd8_1311	$\left(\bar{q}_1\gamma_{\mu}T^Aq_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_1\right)$	C
qd8_1312	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_2 ight)$	$^{\mathrm{C}}$

WC name	Operator	Type
qd8_1313	$\left(ar{q}_1\gamma_{\mu}T^Aq_3\right)\left(ar{d}_1\gamma^{\mu}T^Ad_3\right)$	\overline{C}
qd8_1321	$\left(ar{q}_1\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_1 ight)$	$^{\mathrm{C}}$
qd8_1322	$\left\langle ar{q}_1\gamma_{\mu}T^Aq_3 ight angle \left\langle ar{d}_2\gamma^{\mu}T^Ad_2 ight angle$	C
qd8_1323	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	C
qd8_1331	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_1 ight)$	C
qd8_1332	$\left(ar{q}_1\gamma_\mu T^Aq_3 ight)\left(ar{d}_3\gamma^\mu T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_1333	$\left(ar{q}_1\gamma_\mu T^Aq_3 ight)\left(ar{d}_3\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_2211	$\left\langle ar{q}_{2}\gamma_{\mu}T^{A}q_{2} ight angle \left\langle ar{d}_{1}\gamma^{\mu}T^{A}d_{1} ight angle$	R
qd8_2212	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{d}_1\gamma^\mu T^Ad_2 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{d}_2\gamma^\mu T^Ad_2 ight)$	R
qd8_2223	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	C
qd8_2233	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_3 ight)$	R
qd8_2311	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_1 ight)$	$^{\mathrm{C}}$
qd8_2312	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_2313	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_2321	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_1 ight)$	$^{\mathrm{C}}$
qd8_2322	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_2 ight)$	C
qd8_2323	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_3 ight)$	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	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_3313	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_3322	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	R
qd8_3323	$\left(ar{q}_3\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_3333	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_3 ight)$	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	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_1q_3 ight)$	$^{\mathrm{C}}$
ledq_1121	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_2q_1 ight)$	$^{\mathrm{C}}$
ledq_1122	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_2q_2 ight)$	$^{\mathrm{C}}$
ledq_1123	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_2q_3 ight)$	$^{\mathrm{C}}$
ledq_1131	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_1 ight)$	$^{\mathrm{C}}$
ledq_1132	$\left(\ell_1e_1 ight)\left(d_3q_2 ight)$	$^{\mathrm{C}}$
ledq_1133	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_3 ight)$	$^{\mathrm{C}}$
ledq_1211	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_1q_1 ight)$	$^{\mathrm{C}}$
ledq_1212	$\left(ar{\ell}_1 e_2 ight)\left(ar{d}_1 q_2 ight)$	\mathbf{C}
ledq_1213	$\left(\ell_1e_2 ight)\left(d_1q_3 ight)$	$^{\mathrm{C}}$
ledq_1221	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_2q_1 ight)$	$^{\mathrm{C}}$
ledq_1222	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_2q_2 ight)$	\mathbf{C}

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	WC name	Operator	Type
$\begin{array}{c} \operatorname{ledq}_{1231} & \left(\ell_{1} e_{2} \right) \left(d_{3} q_{1} \right) & \operatorname{C} \\ \operatorname{ledq}_{1232} & \left(\ell_{1} e_{2} \right) \left(d_{3} q_{2} \right) & \operatorname{C} \\ \operatorname{ledq}_{1233} & \left(\ell_{1} e_{2} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{1311} & \left(\ell_{1} e_{3} \right) \left(d_{1} q_{1} \right) & \operatorname{C} \\ \operatorname{ledq}_{1312} & \left(\ell_{1} e_{3} \right) \left(d_{1} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{1313} & \left(\ell_{1} e_{3} \right) \left(d_{1} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{1421} & \left(\ell_{1} e_{3} \right) \left(d_{2} q_{2} \right) & \operatorname{C} \\ \operatorname{ledq}_{1422} & \left(\ell_{1} e_{3} \right) \left(d_{2} q_{2} \right) & \operatorname{C} \\ \operatorname{ledq}_{1322} & \left(\ell_{1} e_{3} \right) \left(d_{2} q_{2} \right) & \operatorname{C} \\ \operatorname{ledq}_{1323} & \left(\ell_{1} e_{3} \right) \left(d_{2} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{1332} & \left(\ell_{1} e_{3} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{1333} & \left(\ell_{1} e_{3} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{1333} & \left(\ell_{1} e_{3} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{1333} & \left(\ell_{1} e_{3} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12133} & \left(\ell_{2} e_{1} \right) \left(d_{1} q_{1} \right) & \operatorname{C} \\ \operatorname{ledq}_{1212} & \left(\ell_{2} e_{1} \right) \left(d_{1} q_{1} \right) & \operatorname{C} \\ \operatorname{ledq}_{1212} & \left(\ell_{2} e_{1} \right) \left(d_{1} q_{2} \right) & \operatorname{C} \\ \operatorname{ledq}_{1212} & \left(\ell_{2} e_{1} \right) \left(d_{2} q_{2} \right) & \operatorname{C} \\ \operatorname{ledq}_{1212} & \left(\ell_{2} e_{1} \right) \left(d_{2} q_{2} \right) & \operatorname{C} \\ \operatorname{ledq}_{12123} & \left(\ell_{2} e_{1} \right) \left(d_{2} q_{2} \right) & \operatorname{C} \\ \operatorname{ledq}_{12133} & \left(\ell_{2} e_{1} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12132} & \left(\ell_{2} e_{1} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12132} & \left(\ell_{2} e_{1} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12133} & \left(\ell_{2} e_{1} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12133} & \left(\ell_{2} e_{2} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12133} & \left(\ell_{2} e_{2} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12212} & \left(\ell_{2} e_{2} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12212} & \left(\ell_{2} e_{2} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12222} & \left(\ell_{2} e_{2} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12223} & \left(\ell_{2} e_{2} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12223} & \left(\ell_{2} e_{2} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12233} & \left(\ell_{2} e_{2} \right) \left(d_{3} q_{3} \right) & \operatorname{C} \\ \operatorname{ledq}_{12332} & \left(\ell_{2} e_{3} \right) \left(d_$	ledq_1223	$(ar{\ell}_1 e_2) (ar{d}_2 q_3)$	C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_1 e_2) \ (ar{d}_3 q_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=	$(ar{\ell}_1 e_2) (ar{d}_3 q_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_1233	$(ar{\ell}_1 e_2) (ar{d}_3 q_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_1 e_3) (ar{d}_1 q_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_1322		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_1323	$(ar{\ell}_1 e_3) (ar{d}_2 q_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_1331		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_2 e_1) (ar{d}_1 q_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2113	$(ar{\ell}_2 e_1) \ (ar{d}_1 q_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2121	$(ar{\ell}_2 e_1) \ (ar{d}_2 q_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2122		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2131		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2132	$(ar{\ell}_2 e_1) \ (ar{d}_3 q_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2133	$(ar{\ell}_2 e_1) \ (ar{d}_3 q_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2211	$(ar{\ell}_2 e_2) \ (ar{d}_1 q_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2212		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2213		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_2 e_2) \ (ar{d}_2 q_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2222		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2223	$(ar{\ell}_2 e_2) \ (ar{d}_2 q_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2231		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2232		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2233		\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2313	$(ar{\ell}_2 e_3) \ (ar{d}_1 q_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_2 e_3) \ (ar{d}_2 q_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_2 e_3) \ (ar{d}_2 q_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2323	$(ar{\ell}_2 e_3) \ (ar{d}_2 q_3)$	\mathbf{C}
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2331		\mathbf{C}
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			\mathbf{C}
ledq_3111 $(ar{\ell}_3 e_1)(ar{d}_1 q_1)$ C			\mathbf{C}
ledq_3112 $\left(ar{\ell}_3e_1 ight)\left(ar{d}_1q_2 ight)$ C		$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_1 q_1 ight)$	\mathbf{C}
	ledq_3112	$\left(ar{\ell}_3e_1 ight)\left(ar{d}_1q_2 ight)$	\mathbf{C}

WC name	Operator	Type
ledq_3113	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_1 q_3 ight)$	C
ledq_3121	$ig(ar{\ell}_3 e_1ig) ig(ar{d}_2 q_1ig)$	\mathbf{C}
ledq_3122	$ig(ar{\ell}_3 e_1ig)ig(ar{d}_2 q_2ig)$	\mathbf{C}
ledq_3123	$ig(ar{\ell}_3 e_1ig)ig(ar{d}_2 q_3ig)$	C
ledq_3131	$ig(ar{\ell}_3 e_1ig)ig(ar{d}_3 q_1ig)$	C
ledq_3132	$\left(ar{\ell}_3e_1 ight)\left(ar{d}_3q_2 ight)$	$^{\mathrm{C}}$
ledq_3133	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_3 q_3 ight)$	$^{\mathrm{C}}$
ledq_3211	$\left(ar{\ell}_3e_2 ight)\left(ar{d}_1q_1 ight)$	\mathbf{C}
ledq_3212	$\left(ar{\ell}_3e_2 ight)\left(ar{d}_1q_2 ight)$	\mathbf{C}
ledq_3213	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_1 q_3 ight)$	\mathbf{C}
ledq_3221	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_2 q_1 ight)$	\mathbf{C}
ledq_3222	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_2 q_2 ight)$	\mathbf{C}
ledq_3223	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_2 q_3 ight)$	\mathbf{C}
ledq_3231	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_3 q_1 ight)$	\mathbf{C}
ledq_3232	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_3 q_2 ight)$	\mathbf{C}
ledq_3233	$\left(ar{\ell}_3 e_2 ight)\left(ar{d}_3 q_3 ight)$	\mathbf{C}
ledq_3311	$\left(ar{\ell}_3 e_3 ight)\left(ar{d}_1 q_1 ight)$	\mathbf{C}
ledq_3312	$\left(ar{\ell}_3 e_3 ight)\left(ar{d}_1 q_2 ight)$	\mathbf{C}
ledq_3313	$\left(ar{\ell}_3 e_3 ight)\left(ar{d}_1 q_3 ight)$	\mathbf{C}
ledq_3321	$\left(ar{\ell}_3e_3 ight)\left(ar{d}_2q_1 ight)$	\mathbf{C}
ledq_3322	$\left(ar{\ell}_3 e_3 ight)\left(ar{d}_2 q_2 ight)$	\mathbf{C}
ledq_3323	$\left(ar{\ell}_3 e_3 ight)\left(ar{d_2} q_3 ight)$	\mathbf{C}
ledq_3331	$\left(ar{\ell}_3e_3 ight)\left(ar{d}_3q_1 ight)$	\mathbf{C}
ledq_3332	$\left(\ell_3e_3 ight)\left(d_3q_2 ight)$	\mathbf{C}
ledq_3333	$\left(ar{\ell}_3e_3 ight)\left(ar{d}_3q_3 ight)$	\mathbf{C}
quqd1_1111	$\left(\bar{q}_{1}u_{1}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{1}\right)$	\mathbf{C}
quqd1_1112	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_1d_2)$	C
quqd1_1113	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_1d_3)$	C
quqd1_1121	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_2d_1)$	C
quqd1_1122	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_2d_2)$	C
quqd1_1123	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_2d_3)$	C C
quqd1_1131	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_3d_1)$	C
quqd1_1132 quqd1_1133	$(\bar{q}_1u_1)\epsilon_{jk}(\bar{q}_3d_2)$	C
quqd1_1133 quqd1_1211	$egin{aligned} \left(ar{q}_1u_1 ight)\epsilon_{jk}\left(ar{q}_3d_3 ight) \ \left(ar{q}_1u_2 ight)\epsilon_{jk}\left(ar{q}_1d_1 ight) \end{aligned}$	C
quqd1_1211 quqd1_1212	$(q_1u_2)\epsilon_{jk}(q_1u_1) \ (ar q_1u_2)\epsilon_{jk}(ar q_1d_2)$	C
quqd1_1213	$(q_1u_2) \epsilon_{jk} (q_1u_2) $ $(\bar{q}_1u_2) \epsilon_{jk} (\bar{q}_1d_3)$	$\overset{\circ}{\mathrm{C}}$
quqd1_1221	(\bar{q}_1u_2) eyk (\bar{q}_1u_3) (\bar{q}_1u_2) ϵ_{jk} (\bar{q}_2d_1)	$\overset{\circ}{\mathrm{C}}$
quqd1_1222	$(\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_2d_2)$	Č
quqd1_1223	$(\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_2d_3)$	Č
quqd1_1231	$(\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_3d_1)$	$^{ m C}$
quqd1_1232	$(\bar{q}_1u_2)\epsilon_{jk}(\bar{q}_3d_2)$	\mathbf{C}
quqd1_1233	$(ar{q}_1u_2)\epsilon_{jk}(ar{q}_3d_3)$	\mathbf{C}

WC name	Operator	Type
quqd1_1311	$\left(\bar{q}_{1}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{1}\right)$	C
quqd1_1312	$\left(ar{q}_{1}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{2} ight)$	$^{\mathrm{C}}$
quqd1_1313	$\left(ar{q}_{1}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{3} ight)$	$^{\mathrm{C}}$
quqd1_1321	$\left(ar{q}_{1}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	$^{\mathrm{C}}$
quqd1_1322	$\left(ar{q}_{1}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	$^{\mathrm{C}}$
quqd1_1323	$\left(ar{q}_{1}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{3} ight)$	$^{\mathrm{C}}$
quqd1_1331	$\left(ar{q}_{1}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	$^{\mathrm{C}}$
quqd1_1332	$\left(ar{q}_{1}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	\mathbf{C}
quqd1_1333	$\left(ar{q}_{1}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{3} ight)$	\mathbf{C}
quqd1_2111	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{1}d_{1} ight)$	\mathbf{C}
quqd1_2112	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{1}d_{2} ight)$	\mathbf{C}
quqd1_2113	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{1}d_{3} ight)$	\mathbf{C}
quqd1_2121	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	\mathbf{C}
quqd1_2122	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	\mathbf{C}
quqd1_2123	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}d_{3} ight)$	\mathbf{C}
quqd1_2131	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	\mathbf{C}
quqd1_2132	$\left(ar{q}_{2}u_{1} ight)\epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	\mathbf{C}
quqd1_2133	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_3 d_3)$	\mathbf{C}
quqd1_2211	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{1}d_{1} ight)$	\mathbf{C}
quqd1_2212	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{1}d_{2} ight)$	\mathbf{C}
quqd1_2213	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{1}d_{3} ight)$	\mathbf{C}
quqd1_2221	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	\mathbf{C}
quqd1_2222	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	\mathbf{C}
quqd1_2223	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{3} ight)$	\mathbf{C}
quqd1_2231	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	\mathbf{C}
quqd1_2232	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	\mathbf{C}
quqd1_2233	$\left(ar{q}_{2}u_{2} ight)\epsilon_{jk}\left(ar{q}_{3}d_{3} ight)$	\mathbf{C}
quqd1_2311	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{1} ight)$	\mathbf{C}
quqd1_2312	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{2} ight)$	\mathbf{C}
quqd1_2313	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{3} ight)$	\mathbf{C}
quqd1_2321	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	\mathbf{C}
quqd1_2322	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	\mathbf{C}
quqd1_2323	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{3} ight)$	\mathbf{C}
quqd1_2331	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	\mathbf{C}
quqd1_2332	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	\mathbf{C}
quqd1_2333	$\left(ar{q}_{2}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{3} ight)$	\mathbf{C}
quqd1_3111	$\left(ar{q}_3 u_1 ight) \epsilon_{jk} \left(ar{q}_1 d_1 ight)$	\mathbf{C}
quqd1_3112	$\left(ar{q}_3 u_1 ight) \epsilon_{jk} \left(ar{q}_1 d_2 ight)$	\mathbf{C}
quqd1_3113	$\left(ar{q}_3 u_1 ight) \epsilon_{jk} \left(ar{q}_1 d_3 ight)$	\mathbf{C}
quqd1_3121	$\left(ar{q}_{3}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	\mathbf{C}
quqd1_3122	$\left(ar{q}_{3}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	\mathbf{C}
quqd1_3123	$(\bar{q}_3u_1)\epsilon_{jk}(\bar{q}_2d_3)$	\mathbf{C}
quqd1_3131	$\left(ar{q}_{3}u_{1} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	\mathbf{C}
quqd1_3132	$\left(ar{q}_{3}u_{1} ight)\epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	\mathbf{C}

WC name	Operator	Type
quqd1_3133	$\left(ar{q}_{3}u_{1} ight)\epsilon_{jk}\left(ar{q}_{3}d_{3} ight)$	C
quqd1_3211	$\left(ar{q}_{3}u_{2} ight)\epsilon_{jk}\left(ar{q}_{1}d_{1} ight)$	\mathbf{C}
quqd1_3212	$\left(ar{q}_{3}u_{2} ight)\epsilon_{jk}\left(ar{q}_{1}d_{2} ight)$	C
quqd1_3213	$\left(ar{q}_{3}u_{2} ight)\epsilon_{jk}\left(ar{q}_{1}d_{3} ight)$	\mathbf{C}
quqd1_3221	$\left(ar{q}_{3}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	\mathbf{C}
quqd1_3222	$\left(ar{q}_{3}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	\mathbf{C}
quqd1_3223	$\left(ar{q}_{3}u_{2} ight)\epsilon_{jk}\left(ar{q}_{2}d_{3} ight)$	\mathbf{C}
quqd1_3231	$\left(ar{q}_3 u_2 ight) \epsilon_{jk} \left(ar{q}_3 d_1 ight)$	\mathbf{C}
quqd1_3232	$\left(ar{q}_3 u_2 ight) \epsilon_{jk} \left(ar{q}_3 d_2 ight)$	\mathbf{C}
quqd1_3233	$\left(ar{q}_{3}u_{2} ight)\epsilon_{jk}\left(ar{q}_{3}d_{3} ight)$	\mathbf{C}
quqd1_3311	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{1} ight)$	\mathbf{C}
quqd1_3312	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{2} ight)$	\mathbf{C}
quqd1_3313	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{1}d_{3} ight)$	\mathbf{C}
quqd1_3321	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	\mathbf{C}
quqd1_3322	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{2} ight)$	\mathbf{C}
quqd1_3323	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{3} ight)$	\mathbf{C}
quqd1_3331	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	\mathbf{C}
quqd1_3332	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	\mathbf{C}
quqd1_3333	$(\bar{q}_3u_3)\epsilon_{jk}(\bar{q}_3d_3)$	\mathbf{C}
quqd8_1111	$\left(ar{q}_1 T^A u_1\right) \epsilon_{jk} \left(ar{q}_1 T^A d_1\right)$	\mathbf{C}
quqd8_1112	$\left(ar{q}_1 T^A u_1 \right) \epsilon_{jk} \left(ar{q}_1 T^A d_2 \right)$	\mathbf{C}
quqd8_1113	$\left\langle ar{q}_{1}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{3} ight angle$	\mathbf{C}
quqd8_1121	$\left\langle ar{q}_{1}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{1} ight angle$	\mathbf{C}
quqd8_1122	$\left\langle ar{q}_{1}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{2} ight angle$	\mathbf{C}
quqd8_1123	$\left\langle ar{q}_{1}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{3} ight angle$	\mathbf{C}
quqd8_1131	$\left(ar{q}_1T^Au_1 ight)\epsilon_{jk}\left(ar{q}_3T^Ad_1 ight)$	\mathbf{C}
quqd8_1132	$\left(ar{q}_1T^Au_1 ight)\epsilon_{jk}\left(ar{q}_3T^Ad_2 ight)$	\mathbf{C}
quqd8_1133	$\left\langle ar{q}_1 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_3 T^A d_3 \right angle$	\mathbf{C}
quqd8_1211	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{1} ight angle$	\mathbf{C}
quqd8_1212	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{2} ight angle$	\mathbf{C}
quqd8_1213	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{3} ight angle$	\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	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{2} ight angle$	\mathbf{C}
quqd8_1223	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{3} ight angle$	\mathbf{C}
quqd8_1231	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{1} ight angle$	\mathbf{C}
quqd8_1232	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{2} ight angle$	\mathbf{C}
quqd8_1233	$\left\langle ar{q}_{1}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{3} ight angle$	\mathbf{C}
quqd8_1311	$\left(ar{q}_1 T^A u_3 \right) \epsilon_{jk} \left(ar{q}_1 T^A d_1 \right)$	\mathbf{C}
quqd8_1312	$\left\langle ar{q}_{1}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{2} ight angle$	\mathbf{C}
quqd8_1313	$\left(ar{q}_1 T^A u_3 \right) \epsilon_{jk} \left(ar{q}_1 T^A d_3 \right)$	\mathbf{C}
quqd8_1321	$\left(ar{q}_1 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_1 ight)$	\mathbf{C}
quqd8_1322	$\left(ar{q}_1 T^A u_3 \right) \epsilon_{jk} \left(ar{q}_2 T^A d_2 \right)$	\mathbf{C}
quqd8_1323	$\left(ar{q}_1 T^A u_3 \right) \epsilon_{jk} \left(ar{q}_2 T^A d_3 \right)$	\mathbf{C}
quqd8_1331	$\left\langle ar{q}_1 T^A u_3 ight angle \epsilon_{jk} \left\langle ar{q}_3 T^A d_1 ight angle$	$^{\mathrm{C}}$

WC name	Operator	Type
quqd8_1332	$\left(\bar{q}_1 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$	С
quqd8_1333	$\left\langle \bar{q}_1 T^A u_3 \right\rangle \epsilon_{jk} \left\langle \bar{q}_3 T^A d_3 \right\rangle$	$^{\mathrm{C}}$
quqd8_2111	$\left\langle ar{q}_2 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_1 T^A d_1 \right angle$	$^{\mathrm{C}}$
quqd8_2112	$\left\langle ar{q}_2 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_1 T^A d_2 \right angle$	$^{\mathrm{C}}$
quqd8_2113	$(\bar{q}_2 T^A u_1) \epsilon_{ik} (\bar{q}_1 T^A d_3)$	$^{\mathrm{C}}$
quqd8_2121	$(\bar{q}_2 T^A u_1) \epsilon_{ik} (\bar{q}_2 T^A d_1)$	$^{\mathrm{C}}$
quqd8_2122	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	$^{\mathrm{C}}$
quqd8_2123	$\left\langle ar{q}_2 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_3 \right angle$	\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	$\left\langle ar{q}_{2}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{2} ight angle$	\mathbf{C}
quqd8_2133	$\left\langle ar{q}_{2}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{3} ight angle$	\mathbf{C}
quqd8_2211	$\left\langle ar{q}_2 T^A u_2 \right angle \epsilon_{jk} \left\langle ar{q}_1 T^A d_1 \right angle$	\mathbf{C}
quqd8_2212	$\left\langle \bar{q}_2 T^A u_2 \right\rangle \epsilon_{jk} \left\langle \bar{q}_1 T^A d_2 \right\rangle$	\mathbf{C}
quqd8_2213	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	\mathbf{C}
quqd8_2221	$\left\langle ar{q}_2 T^A u_2 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_1 ight angle$	\mathbf{C}
quqd8_2222	$\left\langle ar{q}_2 T^A u_2 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_2 ight angle$	\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	$\left\langle ar{q}_{2}T^{A}u_{2} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{1} ight angle$	\mathbf{C}
quqd8_2232	$\left(ar{q}_2 T^A u_2\right) \epsilon_{jk} \left(ar{q}_3 T^A d_2\right)$	\mathbf{C}
quqd8_2233	$\left(ar{q}_{2}T^{A}u_{2} ight) \epsilon_{jk}\left(ar{q}_{3}T^{A}d_{3} ight)$	\mathbf{C}
quqd8_2311	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_1 T^A d_1\right)$	С
quqd8_2312	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_1 T^A d_2\right)$	С
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	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_2 T^A d_1\right)$	С
quqd8_2322	$\left(ar{q}_2 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_2 ight)$	\mathbf{C}
quqd8_2323	$\left(ar{q}_2T^Au_3 ight)\epsilon_{jk}\left(ar{q}_2T^Ad_3 ight)$	\mathbf{C}
quqd8_2331	$\left(ar{q}_2 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_1 ight)$	\mathbf{C}
quqd8_2332	$\left\langle ar{q}_{2}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{3}T^{A}d_{2} ight angle$	С
quqd8_2333	$\left(ar{q}_{2}T^{A}u_{3} ight) \epsilon_{jk}\left(ar{q}_{3}T^{A}d_{3} ight)$	С
quqd8_3111	$\left(ar{q}_{3}T^{A}u_{1} ight)\epsilon_{jk}\left(ar{q}_{1}T^{A}d_{1} ight)$	С
quqd8_3112	$\left(ar{q}_{3}T^{A}u_{1} ight) \epsilon_{jk}\left(ar{q}_{1}T^{A}d_{2} ight)$	С
quqd8_3113	$\left(ar{q}_{3}T^{A}u_{1} ight)\epsilon_{jk}\left(ar{q}_{1}T^{A}d_{3} ight)$	С
quqd8_3121	$\left(ar{q}_{3}T^{A}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}T^{A}d_{1} ight)$	С
quqd8_3122	$\left(ar{q}_{3}T^{A}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}T^{A}d_{2} ight)$	С
quqd8_3123	$\left\langle ar{q}_{3}T^{A}u_{1} ight angle \epsilon_{jk}\left\langle ar{q}_{2}T^{A}d_{3} ight angle$	С
quqd8_3131	$\left(\bar{q}_3 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$	С
quqd8_3132	$\left(ar{q}_{3}T^{A}u_{1} ight) \epsilon_{jk}\left(ar{q}_{3}T^{A}d_{2} ight)$	С
quqd8_3133	$\left(ar{q}_{3}T^{A}u_{1} ight)\epsilon_{jk}\left(ar{q}_{3}T^{A}d_{3} ight)$	С
quqd8_3211	$\left(ar{q}_{3}T^{A}u_{2} ight)\epsilon_{jk}\left(ar{q}_{1}T^{A}d_{1} ight)$	С
quqd8_3212	$\left(\bar{q}_{3}T^{A}u_{2}\right) \epsilon_{jk}\left(\bar{q}_{1}T^{A}d_{2}\right)$	C
quqd8_3213	$\left(ar{q}_{3}T^{A}u_{2} ight) \epsilon_{jk}\left(ar{q}_{1}T^{A}d_{3} ight)$	C
quqd8_3221	$\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_1\right)$	C
quqd8_3222	$\left(ar{q}_{3}T^{A}u_{2} ight) \epsilon_{jk}\left(ar{q}_{2}T^{A}d_{2} ight)$	C
quqd8_3223	$\left(ar{q}_3 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_3 ight)$	$^{\mathrm{C}}$

$\begin{array}{llllllllllllllllllllllllllllllllllll$	WC name	Operator	Type
$\begin{array}{llllllllllllllllllllllllllllllllllll$	quqd8_3231	$\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	quqd8_3232	$\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$	
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$\left(ar{q}_{3}T^{A}u_{2} ight) \epsilon_{jk}\left(ar{q}_{3}T^{A}d_{3} ight)$	
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$	
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$\left(\bar{q}_{3}T^{A}u_{3}\right)\epsilon_{jk}\left(\bar{q}_{1}T^{A}d_{2}\right)$	
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(q_3T^Au_3)\epsilon_{jk}(q_3T^Ad_2)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(q_3T^Au_3\right)\epsilon_{jk}\left(q_3T^Au_3\right)$	
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lequ1_1333 $(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_3)$ C lequ1_2111 $(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_1)$ C lequ1_2112 $(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_2)$ C	_) = (-	
lequ1_2111 $(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_1)$ C lequ1_2112 $(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_2)$ C			
lequ1_2112 $(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_2)$ C			
		\ = \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
lequ1_2113 $(\ell_2 e_1) \epsilon_{jk} (\bar{q}_1 u_3)$ C	_		
	lequ1_2113	$(\ell_2 e_1) \epsilon_{jk} (\bar{q}_1 u_3)$	$^{\mathrm{C}}$

WC name	Operator	Type
lequ1_2121	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_2122	$(ar{\ell}_2 e_1) \epsilon_{jk} (ar{q}_2 u_2)$	\mathbf{C}
lequ1_2123	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_3)$	$^{\mathrm{C}}$
lequ1_2131	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_1)$	\mathbf{C}
lequ1_2132	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_2)$	$^{\mathrm{C}}$
lequ1_2133	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_3)$	\mathbf{C}
lequ1_2211	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_1 u_1)$	\mathbf{C}
lequ1_2212	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_1 u_2)$	\mathbf{C}
lequ1_2213	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_1 u_3)$	\mathbf{C}
lequ1_2221	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_2 u_1)$	\mathbf{C}
lequ1_2222	$(ar{\ell}_2 e_2) \epsilon_{jk} (ar{q}_2 u_2)$	\mathbf{C}
lequ1_2223	$(ar{\ell}_2 e_2) \epsilon_{jk} (ar{q}_2 u_3)$	\mathbf{C}
lequ1_2231	$(ar{\ell}_2 e_2) \epsilon_{jk} (ar{q}_3 u_1)$	\mathbf{C}
lequ1_2232	$(ar{\ell}_2 e_2)\epsilon_{jk}(ar{q}_3 u_2)$	\mathbf{C}
lequ1_2233	$(ar{\ell}_2 e_2) \epsilon_{jk} (ar{q}_3 u_3)$	\mathbf{C}
lequ1_2311	$(ar{\ell}_2 e_3) \epsilon_{jk} (ar{q}_1 u_1)$	\mathbf{C}
lequ1_2312	$(ar{\ell}_2 e_3)\epsilon_{jk}(ar{q}_1 u_2)$	\mathbf{C}
lequ1_2313	$(ar{\ell}_2 e_3) \epsilon_{jk} (ar{q}_1 u_3)$	\mathbf{C}
lequ1_2321	$(ar{\ell}_2 e_3) \epsilon_{jk} (ar{q}_2 u_1)$	\mathbf{C}
lequ1_2322	$(ar{\ell}_2 e_3)\epsilon_{jk}(ar{q}_2 u_2)$	\mathbf{C}
lequ1_2323	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_2 u_3 ight)$	\mathbf{C}
lequ1_2331	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_3 u_1)$	\mathbf{C}
lequ1_2332	$(ar{\ell}_2 e_3) \epsilon_{jk} (ar{q}_3 u_2)$	\mathbf{C}
lequ1_2333	$(ar{\ell}_2 e_3) \epsilon_{jk} (ar{q}_3 u_3)$	\mathbf{C}
lequ1_3111	$(ar{\ell}_3 e_1) \epsilon_{jk} (ar{q}_1 u_1)$	\mathbf{C}
lequ1_3112	$(ar{\ell}_3 e_1) \epsilon_{jk} (ar{q}_1 u_2)$	\mathbf{C}
lequ1_3113	$(ar{\ell}_3 e_1) \epsilon_{jk} (ar{q}_1 u_3)$	\mathbf{C}
lequ1_3121	$(ar{\ell}_3 e_1) \epsilon_{jk} (ar{q}_2 u_1)$	\mathbf{C}
lequ1_3122	$(ar{\ell}_3 e_1) \epsilon_{jk} (ar{q}_2 u_2)$	\mathbf{C}
lequ1_3123	$(ar{\ell}_3 e_1) \epsilon_{jk} (ar{q}_2 u_3)$	$^{\mathrm{C}}$
lequ1_3131	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_3 u_1)$	$^{\mathrm{C}}$
lequ1_3132	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_3 u_2)$	$^{\mathrm{C}}$
lequ1_3133	$(ar{\ell}_3 e_1) \epsilon_{jk} (ar{q}_3 u_3)$	$^{\mathrm{C}}$
lequ1_3211	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_1 u_1)$	$^{\mathrm{C}}$
lequ1_3212	$\left(ar{\ell}_3 e_2 ight)\epsilon_{jk}\left(ar{q}_1 u_2 ight)$	$^{\mathrm{C}}$
lequ1_3213	$(ar{\ell}_3 e_2)\epsilon_{jk}(ar{q}_1 u_3)$	$^{\mathrm{C}}$
lequ1_3221	$(ar{\ell}_3 e_2) \epsilon_{jk} (ar{q}_2 u_1)$	$^{\mathrm{C}}$
lequ1_3222	$(ar{\ell}_3 e_2) \epsilon_{jk} (ar{q}_2 u_2)$	\mathbf{C}
lequ1_3223	$(ar{\ell}_3 e_2) \epsilon_{jk} (ar{q}_2 u_3)$	\mathbf{C}
lequ1_3231	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_3 u_1)$	\mathbf{C}
lequ1_3232	$(ar{\ell}_3 e_2) \epsilon_{jk} (ar{q}_3 u_2)$	\mathbf{C}
lequ1_3233	$\left(ar{\ell}_3 e_2 ight)\epsilon_{jk}\left(ar{q}_3 u_3 ight)$	$^{\mathrm{C}}$

WC name	Operator	Type
lequ1_3311	$(\bar{\ell}_3 e_3) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_3312	$\left(ar{\ell}_3 e_3\right) \epsilon_{jk} \left(ar{q}_1 u_2\right)$	\mathbf{C}
lequ1_3313	$(ar{\ell}_3 e_3) \epsilon_{jk} (ar{q}_1 u_3)$	\mathbf{C}
lequ1_3321	$(ar{\ell}_3 e_3) \epsilon_{jk} (ar{q}_2 u_1)$	\mathbf{C}
lequ1_3322	$\left(ar{\ell}_3 e_3\right) \epsilon_{jk} \left(ar{q}_2 u_2\right)$	\mathbf{C}
lequ1_3323	$(ar{\ell}_3 e_3) \epsilon_{jk} (ar{q}_2 u_3)$	\mathbf{C}
lequ1_3331	$(ar{\ell}_3 e_3) \epsilon_{jk} (ar{q}_3 u_1)$	\mathbf{C}
lequ1_3332	$\left(ar{\ell}_3e_3 ight)\epsilon_{jk}\left(ar{q}_3u_2 ight)$	\mathbf{C}
lequ1_3333	$\left(ar{\ell}_3 e_3\right) \epsilon_{jk} \left(ar{q}_3 u_3 ight)$	\mathbf{C}
lequ3_1111	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1112	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	\mathbf{C}
lequ3_1113	$\left(ar{\ell}_{1}\sigma_{\mu u}e_{1} ight)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu u}u_{3} ight)$	\mathbf{C}
lequ3_1121	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1122	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	\mathbf{C}
lequ3_1123	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_1131	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1132	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	\mathbf{C}
lequ3_1133	$\left(ar{\ell}_{1}\sigma_{\mu u}e_{1} ight)\epsilon_{jk}\left(ar{q}_{3}\sigma^{\mu u}u_{3} ight)$	\mathbf{C}
lequ3_1211	$\left(ar{\ell}_{1}\sigma_{\mu u}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu u}u_{1} ight)$	\mathbf{C}
lequ3_1212	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	\mathbf{C}
lequ3_1213	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_1221	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1222	$\left(ar{\ell}_{1}\sigma_{\mu u}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}\sigma^{\mu u}u_{2} ight)$	\mathbf{C}
lequ3_1223	$\left(ar{\ell}_{1}\sigma_{\mu u}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}\sigma^{\mu u}u_{3} ight)$	\mathbf{C}
lequ3_1231	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1232	$\left(ar{\ell}_{1}\sigma_{\mu u}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}\sigma^{\mu u}u_{2} ight)$	\mathbf{C}
lequ3_1233	$\left(ar{\ell}_{1}\sigma_{\mu u}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}\sigma^{\mu u}u_{3} ight)$	\mathbf{C}
lequ3_1311	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1312	$\left(ar{\ell}_{1}\sigma_{\mu u}e_{3} ight)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu u}u_{2} ight)$	\mathbf{C}
lequ3_1313	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_1321	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1322	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	\mathbf{C}
lequ3_1323	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_1331	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_1332	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	\mathbf{C}
lequ3_1333	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_2111	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	\mathbf{C}
lequ3_2112	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	\mathbf{C}
lequ3_2113	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	\mathbf{C}
lequ3_2121	$(ar{\ell}_2\sigma_{\mu u}e_1)\epsilon_{jk}(ar{q}_2\sigma^{\mu u}u_1)$	\mathbf{C}
lequ3_2122	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	\mathbf{C}
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}
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	WC name	Operator	Type
$\begin{array}{llllllllllllllllllllllllllllllllllll$	lequ3_2131	$(\bar{\ell}_2 \sigma_{\mu\nu} e_1) \epsilon_{ik} (\bar{q}_3 \sigma^{\mu\nu} u_1)$	C
$\begin{array}{c} \operatorname{lequ3} 2133 & \left(\ell_2 \sigma_{\mu\nu} e_1 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1 \right) & C \\ \operatorname{lequ3} 2211 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1 \right) & C \\ \operatorname{lequ3} 2212 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2213 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2221 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2222 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2222 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2223 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2233 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2233 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2231 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2321 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3 \right) & C \\ \operatorname{lequ3} 2311 & \left(\ell_2 \sigma_{\mu\nu} e_2 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1 \right) & C \\ \operatorname{lequ3} 2312 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1 \right) & C \\ \operatorname{lequ3} 2321 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3 \right) & C \\ \operatorname{lequ3} 2322 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2323 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2323 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2 \right) & C \\ \operatorname{lequ3} 2333 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1 \right) & C \\ \operatorname{lequ3} 2333 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1 \right) & C \\ \operatorname{lequ3} 2333 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3 \right) & C \\ \operatorname{lequ3} 2333 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3 \right) & C \\ \operatorname{lequ3} 2333 & \left(\ell_2 \sigma_{\mu\nu} e_3 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3 \right) & C \\ \operatorname{lequ3} 3111 & \left(\ell_3 \sigma_{\mu\nu} e_1 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3 \right) & C \\ \operatorname{lequ3} 3121 & \left(\ell_3 \sigma_{\mu\nu} e_1 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3 \right) & C \\ \operatorname{lequ3} 3122 & \left(\ell_3 \sigma_{\mu\nu} e_1 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3 \right) & C \\ \operatorname{lequ3} 3123 & \left(\ell_3 \sigma_{\mu\nu} e_1 \right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3 \right) & C \\ \operatorname{lequ3} 3221 & \left(\ell_3 \sigma_{\mu\nu} e_2 \right) \epsilon_{j$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_1) \epsilon_{ik} (\bar{q}_3 \sigma^{\mu\nu} u_2)$	$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_1) \epsilon_{ik} (\bar{q}_3 \sigma^{\mu\nu} u_3)$	$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$(\bar{\ell}_2\sigma_{\mu\nu}e_2)\epsilon_{ik}(\bar{q}_1\sigma^{\mu\nu}u_1)$	\mathbf{C}
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$(\bar{\ell}_2\sigma_{\mu\nu}e_2)\epsilon_{ik}(\bar{q}_1\sigma^{\mu\nu}u_2)$	$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$(\bar{\ell}_2\sigma_{\mu\nu}e_2)\epsilon_{ik}(\bar{q}_1\sigma^{\mu\nu}u_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_2) \epsilon_{ik} (\bar{q}_2 \sigma^{\mu\nu} u_1)$	\mathbf{C}
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$(\bar{\ell}_2\sigma_{\mu u}e_2)\epsilon_{jk}(\bar{q}_2\sigma^{\mu u}u_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_2) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_2) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_2\sigma_{\mu u}e_2)\epsilon_{jk}(\bar{q}_3\sigma^{\mu u}u_2)$	\mathbf{C}
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_2) \epsilon_{ik} (\bar{q}_3 \sigma^{\mu\nu} u_3)$	\mathbf{C}
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_3)$	\mathbf{C}
lequ3_2322 $(\ell_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_2)$ C lequ3_2333 $(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_3)$ C lequ3_2331 $(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_1)$ C lequ3_2332 $(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_2333 $(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_2333 $(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_23311 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_1)$ C lequ3_3112 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$ C lequ3_3123 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_3)$ C lequ3_3122 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_2)$ C lequ3_3123 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_3131 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_3132 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_3213 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_3211 $(\bar{\ell}_3 \sigma_{\mu\nu} e_2) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$ C lequ3_3221 $(\bar{\ell}_3 \sigma_{\mu\nu} e_2) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$ C <td< td=""><td>lequ3_2321</td><td>$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_1)$</td><td>$\mathbf{C}$</td></td<>	lequ3_2321	$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_1)$	\mathbf{C}
lequ3_2323 $(\ell_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_3)$ C lequ3_2331 $(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_1)$ C lequ3_2332 $(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_2333 $(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_2333 $(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_3)$ C lequ3_3111 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$ C lequ3_3112 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$ C lequ3_3113 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_3)$ C lequ3_3121 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_1)$ C lequ3_3122 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_2)$ C lequ3_3123 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_3)$ C lequ3_3131 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$ C lequ3_3132 $(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_3)$ C lequ3_3211 $(\bar{\ell}_3 \sigma_{\mu\nu} e_2) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_3)$ C lequ3_3212 $(\bar{\ell}_3 \sigma_{\mu\nu} e_2) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$ C lequ3_3221 $(\bar{\ell}_3 \sigma_{\mu\nu} e_2) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$ C	lequ3_2322	$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_2323	$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_2332	$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_2 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_3111	$(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_3112	$(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_3113	$(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_3121	$(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_2)$	\mathbf{C}
$\begin{array}{llllllllllllllllllllllllllllllllllll$	lequ3_3123	$(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_2 \sigma^{\mu\nu} u_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_3131	$(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_1)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_2)$	\mathbf{C}
$\begin{array}{llllllllllllllllllllllllllllllllllll$	lequ3_3133	$(\bar{\ell}_3 \sigma_{\mu\nu} e_1) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_3)$	\mathbf{C}
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_3211	$\left(ar{\ell}_3\sigma_{\mu u}e_2\right)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	lequ3_3212	$\left(\ell_3\sigma_{\mu\nu}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	lequ3_3213	$\left(ar{\ell}_3\sigma_{\mu u}e_2\right)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_3221	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lequ3_3222	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	lequ3_3223	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	lequ3_3231	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	C
lequ3_3233 $(\ell_3 \sigma_{\mu\nu} e_2) \epsilon_{jk} (\bar{q}_3 \sigma^{\mu\nu} u_3)$ C lequ3_3311 $(\bar{\ell}_3 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_1)$ C lequ3_3312 $(\bar{\ell}_3 \sigma_{\mu\nu} e_3) \epsilon_{jk} (\bar{q}_1 \sigma^{\mu\nu} u_2)$ C	lequ3_3232	$\left(ar{\ell}_3\sigma_{\mu u}e_2\right)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	\mathbf{C}
lequ3_3311 $ \begin{array}{cc} \left(\ell_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_1\right) & \mathrm{C} \\ \mathrm{lequ3_3312} & \left(\bar{\ell}_3\sigma_{\mu\nu}e_3\right)\epsilon_{jk}\left(\bar{q}_1\sigma^{\mu\nu}u_2\right) & \mathrm{C} \end{array} $		$\left(\underline{\ell}_{3}\sigma_{\mu\nu}e_{2}\right)\epsilon_{jk}\left(\bar{q}_{3}\sigma^{\mu\nu}u_{3}\right)$	
lequ3_3312 $\left(ar{\ell}_3\sigma_{\mu\nu}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu\nu}u_2 ight)$ C		$\left(ar{\ell}_3\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	\mathbf{C}
		$\left(ar{\ell}_3\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	
	lequ3_3313	$\left(\ell_3 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$	\mathbf{C}

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

dB=dL=1

WC name	Operator	Type
duql_1111	$(d_1 C u_1) (q_1 C \ell_1)$	C
duql_1112	$(d_1Cu_1)(q_1C\ell_2)$	\mathbf{C}
duql_1113	$\left(d_{1}Cu_{1}\right)\left(q_{1}C\ell_{3}\right)$	$^{\mathrm{C}}$
duql_1121	$\left(d_{1}Cu_{1}\right)\left(q_{2}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_1122	$(d_1Cu_1)(q_2C\ell_2)$	$^{\mathrm{C}}$
duql_1123	$\left(d_{1}Cu_{1}\right)\left(q_{2}C\ell_{3}\right)$	$^{\mathrm{C}}$
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	$\left(d_{1}Cu_{1}\right)\left(q_{3}C\ell_{3}\right)$	$^{\mathrm{C}}$
duql_1211	$\left(d_{1}Cu_{2}\right)\left(q_{1}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_1212	$\left(d_{1}Cu_{2}\right)\left(q_{1}C\ell_{2}\right)$	$^{\mathrm{C}}$
duq1_1213	$\left(d_{1}Cu_{2}\right)\left(q_{1}C\ell_{3}\right)$	$^{\mathrm{C}}$
duql_1221	$\left(d_{1}Cu_{2}\right)\left(q_{2}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_1222	$\left(d_1Cu_2\right)\left(q_2C\ell_2\right)$	\mathbf{C}
duql_1223	$\left(d_{1}Cu_{2}\right)\left(q_{2}C\ell_{3}\right)$	\mathbf{C}
duql_1231	$\left(d_{1}Cu_{2}\right)\left(q_{3}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_1232	$\left(d_{1}Cu_{2}\right)\left(q_{3}C\ell_{2}\right)$	$^{\mathrm{C}}$
duql_1233	$\left(d_{1}Cu_{2}\right)\left(q_{3}C\ell_{3}\right)$	$^{\mathrm{C}}$
duq1_1311	$\left(d_{1}Cu_{3}\right)\left(q_{1}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_1312	$\left(d_{1}Cu_{3}\right)\left(q_{1}C\ell_{2}\right)$	$^{\mathrm{C}}$
duq1_1313	$\left(d_{1}Cu_{3}\right)\left(q_{1}C\ell_{3}\right)$	$^{\mathrm{C}}$
duq1_1321	$\left(d_{1}Cu_{3}\right)\left(q_{2}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_1322	$\left(d_{1}Cu_{3}\right)\left(q_{2}C\ell_{2}\right)$	\mathbf{C}
duq1_1323	$\left(d_{1}Cu_{3}\right)\left(q_{2}C\ell_{3}\right)$	\mathbf{C}
duq1_1331	$\left(d_{1}Cu_{3}\right)\left(q_{3}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_1332	$\left(d_{1}Cu_{3}\right)\left(q_{3}C\ell_{2}\right)$	$^{\mathrm{C}}$
duq1_1333	$\left(d_{1}Cu_{3}\right)\left(q_{3}C\ell_{3}\right)$	$^{\mathrm{C}}$
duq1_2111	$\left(d_{2}Cu_{1}\right)\left(q_{1}C\ell_{1}\right)$	$^{\mathrm{C}}$
duql_2112	$\left(d_{2}Cu_{1}\right)\left(q_{1}C\ell_{2}\right)$	$^{\mathrm{C}}$
duql_2113	$\left(d_{2}Cu_{1}\right)\left(q_{1}C\ell_{3}\right)$	\mathbf{C}
duql_2121	$\left(d_{2}Cu_{1}\right)\left(q_{2}C\ell_{1}\right)$	$^{\mathrm{C}}$
duq1_2122	$\left(d_2Cu_1\right)\left(q_2C\ell_2\right)$	$^{\mathrm{C}}$

WC name	Operator	Type
duq1_2123	$\left(d_2Cu_1\right)\left(q_2C\ell_3\right)$	С
duq1_2131	$\left(d_2Cu_1\right)\left(q_3C\ell_1\right)$	$^{\mathrm{C}}$
duq1_2132	$(d_2Cu_1)(q_3C\ell_2)$	$^{\mathrm{C}}$
duq1_2133	$(d_2Cu_1)(q_3C\ell_3)$	$^{\mathrm{C}}$
duq1_2211	$(d_2Cu_2)(q_1C\ell_1)$	\mathbf{C}
duq1_2212	$(d_2Cu_2)(q_1C\ell_2)$	$^{\mathrm{C}}$
duq1_2213	$(d_2Cu_2)(q_1C\ell_3)$	\mathbf{C}
duq1_2221	$\left(d_{2}Cu_{2}\right)\left(q_{2}C\ell_{1}\right)$	\mathbf{C}
duq1_2222	$\left(d_{2}Cu_{2}\right)\left(q_{2}C\ell_{2}\right)$	\mathbf{C}
duq1_2223	$\left(d_{2}Cu_{2}\right)\left(q_{2}C\ell_{3}\right)$	\mathbf{C}
duq1_2231	$\left(d_{2}Cu_{2}\right)\left(q_{3}C\ell_{1}\right)$	\mathbf{C}
duq1_2232	$\left(d_{2}Cu_{2}\right)\left(q_{3}C\ell_{2}\right)$	\mathbf{C}
duq1_2233	$\left(d_{2}Cu_{2}\right)\left(q_{3}C\ell_{3}\right)$	\mathbf{C}
duq1_2311	$(d_2Cu_3)(q_1C\ell_1)$	\mathbf{C}
duq1_2312	$\left(d_{2}Cu_{3}\right)\left(q_{1}C\ell_{2}\right)$	\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	$\left(d_{2}Cu_{3}\right)\left(q_{3}C\ell_{2}\right)$	\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}
duq1_3112	$\left(d_3Cu_1\right)\left(q_1C\ell_2\right)$	\mathbf{C}
duq1_3113	$\left(d_3Cu_1\right)\left(q_1C\ell_3\right)$	\mathbf{C}
duq1_3121	$\left(d_3Cu_1\right)\left(q_2C\ell_1\right)$	\mathbf{C}
duq1_3122	$\left(d_3Cu_1\right)\left(q_2C\ell_2\right)$	\mathbf{C}
duq1_3123	$\left(d_3Cu_1\right)\left(q_2C\ell_3\right)$	\mathbf{C}
duq1_3131	$(d_3Cu_1)(q_3C\ell_1)$	C
duq1_3132	$(d_3Cu_1)(q_3C\ell_2)$	C
duq1_3133	$(d_3Cu_1)(q_3C\ell_3)$	C
duq1_3211	$(d_3Cu_2)(q_1C\ell_1)$	C
duq1_3212	$(d_3Cu_2)(q_1C\ell_2)$	C
duq1_3213	$(d_3Cu_2)(q_1C\ell_3)$	C
duq1_3221	$(d_3Cu_2)(q_2C\ell_1)$	\mathbf{C}
duq1_3222	$(d_3Cu_2)(q_2C\ell_2)$	C
duq1_3223	$(d_3Cu_2)(q_2C\ell_3)$	$\stackrel{ ext{C}}{ ilde{\sim}}$
duq1_3231	$(d_3Cu_2)(q_3C\ell_1)$	$\stackrel{ ext{C}}{\sim}$
duq1_3232	$(d_3Cu_2)(q_3C\ell_2)$	C
duq1_3233	$(d_3Cu_2)(q_3C\ell_3)$	С
duql_3311	$(d_3Cu_3)(q_1C\ell_1)$	С
duq1_3312	$(d_3Cu_3)(q_1C\ell_2)$	C
duq1_3313	$(d_3Cu_3)(q_1C\ell_3)$	C
duq1_3321	$(d_3Cu_3)(q_2C\ell_1)$	С

WC name	Operator	Type
duq1_3322	$(d_3Cu_3)(q_2C\ell_2)$	С
duq1_3323	$(d_3Cu_3)(q_2C\ell_3)$	\mathbf{C}
duq1_3331	$\left(d_3Cu_3\right)\left(q_3C\ell_1\right)$	\mathbf{C}
duq1_3332	$(d_3Cu_3)(q_3C\ell_2)$	\mathbf{C}
duq1_3333	$(d_3Cu_3)(q_3C\ell_3)$	$^{\mathrm{C}}$
qque_1111	$\left(q_{1}Cq_{1}\right)\left(u_{1}Ce_{1}\right)$	\mathbf{C}
qque_1112	$\left(q_{1}Cq_{1}\right)\left(u_{1}Ce_{2}\right)$	$^{\mathrm{C}}$
qque_1113	$\left(q_{1}Cq_{1}\right)\left(u_{1}Ce_{3}\right)$	$^{\mathrm{C}}$
qque_1121	$\left(q_{1}Cq_{1}\right)\left(u_{2}Ce_{1}\right)$	$^{\mathrm{C}}$
qque_1122	$\left(q_{1}Cq_{1}\right)\left(u_{2}Ce_{2}\right)$	$^{\mathrm{C}}$
qque_1123	$\left(q_{1}Cq_{1}\right)\left(u_{2}Ce_{3}\right)$	$^{\mathrm{C}}$
qque_1131	$\left(q_{1}Cq_{1}\right)\left(u_{3}Ce_{1}\right)$	$^{\mathrm{C}}$
qque_1132	$(q_1Cq_1)(u_3Ce_2)$	\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	$(q_1Cq_2)(u_3Ce_1)$	$^{\mathrm{C}}$
qque_1232	$(q_1Cq_2)(u_3Ce_2)$	\mathbf{C}
qque_1233	$(q_1Cq_2)(u_3Ce_3)$	\mathbf{C}
qque_1311	$\left(q_{1}Cq_{3}\right)\left(u_{1}Ce_{1}\right)$	\mathbf{C}
qque_1312	$(q_1Cq_3)(u_1Ce_2)$	\mathbf{C}
qque_1313	$(q_1Cq_3)(u_1Ce_3)$	\mathbf{C}
qque_1321	$(q_1Cq_3)(u_2Ce_1)$	$^{\mathrm{C}}$
qque_1322	$(q_1Cq_3)(u_2Ce_2)$	$^{\mathrm{C}}$
qque_1323	$(q_1Cq_3)(u_2Ce_3)$	$^{\mathrm{C}}$
qque_1331	$(q_1Cq_3)(u_3Ce_1)$	$^{\mathrm{C}}$
qque_1332	$(q_1Cq_3)(u_3Ce_2)$	\mathbf{C}
qque_1333	$\left(q_{1}Cq_{3}\right)\left(u_{3}Ce_{3}\right)$	$^{\mathrm{C}}$
qque_2211	$(q_2Cq_2)(u_1Ce_1)$	$^{\mathrm{C}}$
qque_2212	$(q_2Cq_2)(u_1Ce_2)$	$^{\mathrm{C}}$
qque_2213	$(q_2Cq_2)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_2221	$\left(q_{2}Cq_{2}\right)\left(u_{2}Ce_{1}\right)$	C
qque_2222	$(q_2Cq_2)(u_2Ce_2)$	\mathbf{C}
qque_2223	$(q_2Cq_2)(u_2Ce_3)$	C
qque_2231	$(q_2Cq_2)(u_3Ce_1)$	C
qque_2232	$(q_2Cq_2)(u_3Ce_2)$	C
qque_2233	$(q_2Cq_2)(u_3Ce_3)$	C
qque_2311	$(q_2Cq_3)(u_1Ce_1)$	C
qque_2312	$(q_2Cq_3)(u_1Ce_2)$	C
qque_2313	$(q_2Cq_3)(u_1Ce_3)$	$^{\mathrm{C}}$

WC name	Operator	Type
qque_2321	$(q_2Cq_3)(u_2Ce_1)$	$^{\mathrm{C}}$
qque_2322	$(q_2Cq_3)(u_2Ce_2)$	\mathbf{C}
qque_2323	$(q_2Cq_3)(u_2Ce_3)$	\mathbf{C}
qque_2331	$(q_2Cq_3)(u_3Ce_1)$	\mathbf{C}
qque_2332	$(q_2Cq_3)(u_3Ce_2)$	\mathbf{C}
qque_2333	$(q_2Cq_3)(u_3Ce_3)$	\mathbf{C}
qque_3311	$(q_3Cq_3)(u_1Ce_1)$	$^{\mathrm{C}}$
qque_3312	$(q_3Cq_3)(u_1Ce_2)$	\mathbf{C}
qque_3313	$(q_3Cq_3)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_3321	$\left(q_3Cq_3\right)\left(u_2Ce_1\right)$	$^{\mathrm{C}}$
qque_3322	$(q_3Cq_3)(u_2Ce_2)$	$^{\mathrm{C}}$
qque_3323	$\left(q_3Cq_3\right)\left(u_2Ce_3\right)$	$^{\mathrm{C}}$
qque_3331	$(q_3Cq_3)(u_3Ce_1)$	\mathbf{C}
qque_3332	$(q_3Cq_3)(u_3Ce_2)$	\mathbf{C}
qque_3333	$\left(q_3Cq_3\right)\left(u_3Ce_3\right)$	\mathbf{C}
qqql_1111	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{1}C\ell_{1} ight)$	\mathbf{C}
qqql_1112	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{1}C\ell_{2} ight)$	\mathbf{C}
qqql_1113	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{1}C\ell_{3} ight)$	\mathbf{C}
qqql_1121	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{2}C\ell_{1} ight)$	\mathbf{C}
qqql_1122	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{2}C\ell_{2} ight)$	\mathbf{C}
qqql_1123	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1} ight)\left(q_{2}C\ell_{3} ight)$	C
qqql_1131	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{3}C\ell_{1}\right)$	C
qqq1_1132	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{3}C\ell_{2}\right)$	C
qqq1_1133	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{3}C\ell_{3}\right)$	C
qqql_1211	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{1}C\ell_{1}\right)$	C
qqql_1212	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{1}C\ell_{2}\right)$	C
qqq1_1213	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{1}C\ell_{3}\right)$	C
qqql_1221	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{2}C\ell_{1}\right)$	C
qqq1_1222	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{2}C\ell_{2}\right)$	C
qqq1_1223	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{2}C\ell_{3}\right)$	C
qqql_1231	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{3}C\ell_{1}\right)$	C
qqq1_1232	$\epsilon_{il}\epsilon_{jk} (q_1Cq_2) (q_3C\ell_2)$	C C
qqql_1233	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{3}C\ell_{3}\right)$	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 qqql_1321	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{1}C\ell_{3}\right) \\ \epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{1}\right)$	C
qqq1_1321 qqq1_1322	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\epsilon_{1}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{2}\right)$	C
qqq1_1323	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\epsilon_{2}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{3}\right)$	C
qqq1_1331	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\epsilon_{3}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\ell_{1}\right)$	C
qqq1_1331 qqq1_1332	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\epsilon_{1}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\epsilon_{2}\right)$	C
qqq1_1332 qqq1_1333	$\epsilon_{il}\epsilon_{jk}\left(q_{1}\bigcirc q_{3}\right)\left(q_{3}\bigcirc \epsilon_{2}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{1}\bigcirc q_{3}\right)\left(q_{3}\bigcirc \epsilon_{2}\right)$	C
qqq1_1333 qqq1_2121	$\epsilon_{il}\epsilon_{jk}\left(q_{1}\bigcirc q_{3}\right)\left(q_{3}\bigcirc \epsilon_{3}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{1}\right)$	C
qqq1_2121 qqq1_2122	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\epsilon_{1}\right)$ $\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{2}\right)$	C
777	~u~jκ (42~41) (42~~2)	C

WC name	Operator	Type
qqq1_2123	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{3}\right)$	C
qqql_2131	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1} ight)\left(q_{3}C\ell_{1} ight)$	\mathbf{C}
qqql_2132	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1} ight)\left(q_{3}C\ell_{2} ight)$	\mathbf{C}
qqql_2133	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1} ight)\left(q_{3}C\ell_{3} ight)$	\mathbf{C}
qqq1_2221	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{2}C\ell_{1} ight)$	\mathbf{C}
qqq1_2222	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{2}C\ell_{2} ight)$	\mathbf{C}
qqq1_2223	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{2}C\ell_{3} ight)$	\mathbf{C}
qqql_2231	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{3}C\ell_{1} ight)$	\mathbf{C}
qqq1_2232	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{3}C\ell_{2} ight)$	\mathbf{C}
qqq1_2233	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{3}C\ell_{3} ight)$	\mathbf{C}
qqql_2311	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{1}C\ell_{1} ight)$	\mathbf{C}
qqql_2312	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{1}C\ell_{2} ight)$	\mathbf{C}
qqql_2313	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{1}C\ell_{3} ight)$	C
qqql_2321	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{1} ight)$	\mathbf{C}
qqq1_2322	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{2} ight)$	\mathbf{C}
qqq1_2323	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{3} ight)$	C
qqq1_2331	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{3}C\ell_{1} ight)$	C
qqq1_2332	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{3}C\ell_{2} ight)$	C
qqq1_2333	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{3}C\ell_{3} ight)$	С
qqql_3131	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1} ight)\left(q_{3}C\ell_{1} ight)$	С
qqql_3132	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1} ight)\left(q_{3}C\ell_{2} ight)$	С
qqql_3133	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1} ight)\left(q_{3}C\ell_{3} ight)$	C
qqq1_3231	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{1} ight)$	\mathbf{C}
qqq1_3232	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{2} ight)$	\mathbf{C}
qqq1_3233	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{3} ight)$	\mathbf{C}
qqq1_3331	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3} ight)\left(q_{3}C\ell_{1} ight)$	\mathbf{C}
qqq1_3332	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3} ight)\left(q_{3}C\ell_{2} ight)$	\mathbf{C}
qqq1_3333	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3} ight)\left(q_{3}C\ell_{3} ight)$	\mathbf{C}
duue_1111	$\left(d_{1}Cu_{1}\right)\left(u_{1}Ce_{1}\right)$	\mathbf{C}
duue_1112	$\left(d_{1}Cu_{1}\right)\left(u_{1}Ce_{2}\right)$	\mathbf{C}
duue_1113	$\left(d_{1}Cu_{1}\right)\left(u_{1}Ce_{3}\right)$	\mathbf{C}
duue_1121	$\left(d_{1}Cu_{1}\right)\left(u_{2}Ce_{1}\right)$	\mathbf{C}
duue_1122	$\left(d_{1}Cu_{1}\right)\left(u_{2}Ce_{2}\right)$	\mathbf{C}
duue_1123	$\left(d_{1}Cu_{1}\right)\left(u_{2}Ce_{3}\right)$	\mathbf{C}
duue_1131	$\left(d_{1}Cu_{1}\right)\left(u_{3}Ce_{1}\right)$	\mathbf{C}
duue_1132	$\left(d_{1}Cu_{1}\right)\left(u_{3}Ce_{2}\right)$	С
duue_1133	$\left(d_{1}Cu_{1}\right)\left(u_{3}Ce_{3}\right)$	С
duue_1211	$(d_1Cu_2)\left(u_1Ce_1\right)$	C
duue_1212	$\left(d_{1}Cu_{2}\right)\left(u_{1}Ce_{2}\right)$	C
duue_1213	$(d_1Cu_2)(u_1Ce_3)$	$^{\mathrm{C}}$
duue_1221	$(d_1Cu_2)(u_2Ce_1)$	$^{\mathrm{C}}$
duue_1222	$(d_1Cu_2)(u_2Ce_2)$	\mathbf{C}
duue_1223	$\left(d_{1}Cu_{2}\right)\left(u_{2}Ce_{3}\right)$	С
duue_1231	$(d_1Cu_2)(u_3Ce_1)$	С

WC name	Operator	Type
duue_1232	$(d_1Cu_2)(u_3Ce_2)$	C
duue_1233	$(d_1Cu_2)(u_3Ce_3)$	\mathbf{C}
duue_1311	$\left(d_{1}Cu_{3}\right)\left(u_{1}Ce_{1}\right)$	\mathbf{C}
duue_1312	$(d_1Cu_3)(u_1Ce_2)$	\mathbf{C}
duue_1313	$(d_1Cu_3)\left(u_1Ce_3\right)$	\mathbf{C}
duue_1321	$(d_1Cu_3)\left(u_2Ce_1\right)$	\mathbf{C}
duue_1322	$(d_1Cu_3)(u_2Ce_2)$	\mathbf{C}
duue_1323	$(d_1Cu_3)(u_2Ce_3)$	\mathbf{C}
duue_1331	$(d_1Cu_3)\left(u_3Ce_1\right)$	\mathbf{C}
duue_1332	$(d_1Cu_3)\left(u_3Ce_2\right)$	\mathbf{C}
duue_1333	$(d_1Cu_3)\left(u_3Ce_3\right)$	\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	$(d_2Cu_1)(u_1Ce_3)$	\mathbf{C}
duue_2121	$\left(d_{2}Cu_{1}\right)\left(u_{2}Ce_{1}\right)$	\mathbf{C}
duue_2122	$\left(d_{2}Cu_{1}\right)\left(u_{2}Ce_{2}\right)$	\mathbf{C}
duue_2123	$\left(d_{2}Cu_{1}\right)\left(u_{2}Ce_{3}\right)$	\mathbf{C}
duue_2131	$\left(d_{2}Cu_{1}\right)\left(u_{3}Ce_{1}\right)$	\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	$\left(d_{2}Cu_{2}\right)\left(u_{1}Ce_{1}\right)$	\mathbf{C}
duue_2212	$(d_2Cu_2)(u_1Ce_2)$	\mathbf{C}
duue_2213	$(d_2Cu_2)(u_1Ce_3)$	\mathbf{C}
duue_2221	$\left(d_{2}Cu_{2}\right)\left(u_{2}Ce_{1}\right)$	\mathbf{C}
duue_2222	$(d_2Cu_2)(u_2Ce_2)$	\mathbf{C}
duue_2223	$(d_2Cu_2)(u_2Ce_3)$	\mathbf{C}
duue_2231	$\left(d_{2}Cu_{2}\right)\left(u_{3}Ce_{1}\right)$	\mathbf{C}
duue_2232	$\left(d_{2}Cu_{2}\right)\left(u_{3}Ce_{2}\right)$	\mathbf{C}
duue_2233	$\left(d_{2}Cu_{2}\right)\left(u_{3}Ce_{3}\right)$	\mathbf{C}
duue_2311	$(d_2Cu_3)(u_1Ce_1)$	\mathbf{C}
duue_2312	$(d_2Cu_3)\left(u_1Ce_2\right)$	\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	$\left(d_{2}Cu_{3}\right)\left(u_{3}Ce_{1}\right)$	\mathbf{C}
duue_2332	$(d_2Cu_3)(u_3Ce_2)$	\mathbf{C}
duue_2333	$(d_2Cu_3)(u_3Ce_3)$	\mathbf{C}
duue_3111	$\left(d_3Cu_1\right)\left(u_1Ce_1\right)$	\mathbf{C}
duue_3112	$(d_3Cu_1)(u_1Ce_2)$	\mathbf{C}
duue_3113	$(d_3Cu_1)(u_1Ce_3)$	\mathbf{C}
duue_3121	$(d_3Cu_1)(u_2Ce_1)$	$^{\mathrm{C}}$
duue_3122	$(d_3Cu_1)(u_2Ce_2)$	$^{\mathrm{C}}$
duue_3123	$(d_3Cu_1)(u_2Ce_3)$	\mathbf{C}

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

dL=2

WC name	Operator	Type
llphiphi_11	$\left(\widetilde{arphi}^{\dagger}\ell_{1} ight)^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{1} ight)$	C
llphiphi_22	$\left(\widetilde{arphi}^\dagger\ell_2 ight)^TC\left(\widetilde{arphi}^\dagger\ell_2 ight)$	\mathbf{C}
llphiphi_33	$\left(\widetilde{arphi}^{\dagger}\ell_{3} ight)^{T}C\left(\widetilde{arphi}^{\dagger}\ell_{3} ight)$	\mathbf{C}