# 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	$f^{ABC}G^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ ho}$	R
Gtilde	$f^{ABC}\widetilde{G}^{A u}_{\mu}G^{B ho}_{ u}G^{C\mu}_{ u}$	R
W	$\epsilon^{IJK}W_{\mu}^{I u}W_{ u}^{J ho}W_{ ho}^{K\mu}$	R
Wtilde	$\epsilon^{IJK}\widetilde{W}_{\mu}^{I u}W_{ u}^{J ho}W_{ ho}^{K\mu}$	${ m R}$
phi	$\left(arphi^\daggerarphi ight)^3$	R
phiBox	$\left(arphi^\daggerarphi ight)\square\left(arphi^\daggerarphi ight)$	R
phiD	$\left(arphi^\dagger D^\mu arphi ight)^* \left(arphi^\dagger D_\mu arphi ight)$	R
phiG	$\hat{arphi}^\dagger arphi G^A_{\mu u} G^{A\hat{\mu} u}$	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	$arphi^\dagger arphi \widetilde{\widetilde{G}}_{\mu u}^A G^{A\mu u}$	R
phiBtilde	$arphi^\dagger arphi \widetilde{B}_{\mu  u} B^{\mu  u}$	R
phiWtilde	$arphi^\dagger arphi \widetilde{W}^I_{\mu  u} W^{I \mu  u}$	R
phiWtildeB	$arphi^\dagger  au^I arphi \widetilde{W}^I_{\mu u} B^{\mu u}$	R
uphi_11	$\left(arphi^\daggerarphi ight)\left(ar{q}_1^{'}u_1\widetilde{arphi} ight)$	$\mathbf{C}$
uphi_12	$\left(arphi_{.}^{\dagger}arphi ight)\left(ar{q}_{1}u_{2}\widetilde{arphi} ight)$	С
uphi_13	$\left(arphi^\dagger_{,}arphi ight)\left(ar{q}_1u_3\widetilde{arphi} ight)$	С
uphi_21	$\left(arphi_{_{\perp}}^{\dagger}arphi ight)\left(ar{q}_{2}u_{1}\widetilde{arphi} ight)$	C
uphi_22	$\left\langle arphi_{1}^{\dagger}arphi ight angle \left(\overline{q}_{2}u_{2}\widetilde{\widetilde{arphi}} ight)$	C
uphi_23	$\left(arphi_{_{\pm}}^{\dagger}arphi ight)\left(ar{q}_{2}u_{3}\widetilde{arphi} ight)$	C
uphi_31	$\left(arphi_{_{\pm}}^{\dagger}arphi ight)\left(ar{q}_{3}u_{1}\widetilde{arphi} ight)$	C
uphi_32	$\left( \varphi^{\dagger} \varphi \right) \left( \bar{q}_3 u_2 \widetilde{\varphi} \right)$	C
uphi_33	$\left\langle arphi^{\dagger}arphi ight angle \left(ar{q}_{3}u_{3}\widetilde{arphi} ight)$	C
dphi_11	$\left(arphi^\daggerarphi ight)\left(ar{q}_1d_1arphi ight)$	C
dphi_12	$\left(arphi^\daggerarphi ight)\left(ar{q}_1d_2arphi ight)$	$^{\mathrm{C}}$

WC name	Operator	Type
dphi_13	$\left(arphi^{\dagger}arphi ight)\left(ar{q}_{1}d_{3}arphi ight)$	С
dphi_21	$\left(arphi^\daggerarphi ight)\left(ar{q}_2d_1arphi ight)$	$\mathbf{C}$
dphi_22	$\left(arphi^{\dagger}arphi\right)\left(ar{q}_{2}d_{2}arphi ight)$	$\mathbf{C}$
dphi_23	$\left(arphi^{\dagger}arphi ight)\left(ar{q}_{2}d_{3}arphi ight)$	$\mathbf{C}$
dphi_31	$\left( arphi^{\dagger}arphi  ight) \left( ar{q}_{3}d_{1}arphi  ight)$	$\mathbf{C}$
dphi_32	$\left(arphi^\daggerarphi ight)\left(ar{q}_3d_2arphi ight)$	$\mathbf{C}$
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	$\left(arphi^\daggerarphi ight)\left(ar\ell_1e_3arphi ight)$	$\mathbf{C}$
ephi_21	$\left(arphi^{\dagger}arphi ight)\left(ar{\ell}_{2}e_{1}arphi ight)$	$\mathbf{C}$
ephi_22	$\left(arphi^\daggerarphi ight)\left(ar\ell_2e_2arphi ight)$	$\mathbf{C}$
ephi_23	$\left(arphi^\daggerarphi ight)\left(ar\ell_2e_3arphi ight)$	$\mathbf{C}$
ephi_31	$\left(arphi^\daggerarphi ight)\left(ar\ell_3e_1arphi ight)$	$\mathbf{C}$
ephi_32	$\left(arphi^\daggerarphi ight)\left(ar\ell_3e_2arphi ight)$	$\mathbf{C}$
ephi_33	$\left(arphi^\daggerarphi ight)\left(ar{\ell}_3e_3arphi ight)$	$\mathbf{C}$
eW_11	$\left(\bar{\ell}_1\sigma^{\mu u}\hat{e}_1 ight) au^I\hat{arphi}W^I_{\mu u}$	$\mathbf{C}$
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	$(\bar{\ell}_2 \sigma^{\mu\nu} e_1) \tau^I \varphi W_{\mu\nu}^{I}$	$\mathbf{C}$
eW_22	$(\bar{\ell}_2 \sigma^{\mu\nu} e_2) \tau^I \varphi W^I_{\mu\nu}$	$\mathbf{C}$
eW_23	$(\bar{\ell}_2 \sigma^{\mu\nu} e_3) \tau^I \varphi W_{\mu\nu}^I$	$\mathbf{C}$
eW_31	$(\bar{\ell}_3 \sigma^{\mu\nu} e_1) \tau^I \varphi W^I_{\mu\nu}$	$\mathbf{C}$
eW_32	$(\bar{\ell}_3\sigma^{\mu\nu}e_2) au^I\dot{arphi}W^I_{\mu u}$	$\mathbf{C}$
eW_33	$(\bar{\ell}_3\sigma^{\mu\nu}e_3) au^Iarphi W^I_{\mu u}$	$\mathbf{C}$
eB_11	$\left(\bar{\ell}_1\sigma^{\mu u}e_1\right)arphi^{\mu u}$	$\mathbf{C}$
eB_12	$\left(\bar{\ell}_1\sigma^{\mu\nu}e_2\right)arphi B_{\mu u}$	$\mathbf{C}$
eB_13	$\left(\bar{\ell}_1\sigma^{\mu\nu}e_3\right)arphi B_{\mu u}$	$\mathbf{C}$
eB_21	$\left(ar{\ell}_2\sigma^{\mu u}e_1 ight)arphi B_{\mu u}$	$\mathbf{C}$
eB_22	$\left(ar{\ell}_2\sigma^{\mu u}e_2\right)arphi B_{\mu u}$	$\mathbf{C}$
eB_23	$\left(\bar{\ell}_2\sigma^{\mu\nu}e_3\right)arphi B_{\mu u}$	$\mathbf{C}$
eB_31	$\left(\bar{\ell}_3\sigma^{\mu\nu}e_1\right)arphi B_{\mu u}$	$\mathbf{C}$
eB_32	$(\bar{\ell}_3\sigma^{\mu u}e_2)\varphi B_{\mu u}$	$\mathbf{C}$
eB_33	$\left(ar{\ell}_3\sigma^{\mu u}e_3 ight)arphi B_{\mu u}$	$\mathbf{C}$
uG_11	$\left(\bar{q}_1\sigma^{\mu\nu}T^Au_1\right)\widetilde{\varphi}G^A_{\mu\nu}$	$\mathbf{C}$
uG_12	$(\bar{q}_1\sigma^{\mu u}T^Au_2)\widetilde{arphi}G^A_{\mu u}$	$\mathbf{C}$
uG_13	$(\bar{q}_1\sigma^{\mu\nu}T^Au_3)\widetilde{\varphi}G^A_{\mu\nu}$	$\mathbf{C}$
uG_21	$\left(\bar{q}_2\sigma^{\mu u}T^Au_1\right)\widetilde{\varphi}G^A_{\mu u}$	$\mathbf{C}$
uG_22	$(\bar{q}_2\sigma^{\mu u}T^Au_2)\widetilde{\varphi}G^A_{\mu u}$	$\mathbf{C}$
uG_23	$(\bar{q}_2\sigma^{\mu\nu}T^Au_3)\widetilde{\varphi}G^A_{\mu\nu}$	$\mathbf{C}$
uG_31	$(\bar{q}_3 \sigma^{\mu\nu} T^A u_1) \widetilde{\varphi} G^A_{\cdots}$	$\mathbf{C}$
uG_32	$(\bar{q}_3\sigma^{\mu\nu}T^Au_2)\widetilde{\varphi}G^A_{\mu\nu}$	$\mathbf{C}$

WC name	Operator	Type
uG_33	$(\bar{q}_3\sigma^{\mu\nu}T^Au_3)\widetilde{\varphi}G^A_{\mu\nu}$	С
_ uW_11	$(\bar{q}_1\sigma^{\mu\nu}u_1) \tau^I \widetilde{\varphi} W^I_{\mu\nu}$	$\mathbf{C}$
uW_12	$(\bar{q}_1 \sigma^{\mu\nu} u_2) \tau^I \widetilde{c} W^I$	$\mathbf{C}$
uW_13	$(q_1\sigma^{\mu\nu}u_3)^{T}\widetilde{\varphi}W^{I}_{\mu u}$	$\mathbf{C}$
uW_21	$(\bar{q}_{0}\sigma^{\mu\nu}u_{1})\tau^{I}\widetilde{co}W^{I}$	$\mathbf{C}$
uW_22	$(ar{q}_2\sigma^{\mu u}u_2) au^I\widetilde{arphi}W^I_{\mu u}$	$\mathbf{C}$
uW_23	$(\bar{q}_2\sigma^{\mu\nu}u_3) au^I\widetilde{arphi}W^{\mu\nu}_{\mu u}$	$\mathbf{C}$
_ uW_31	$(\bar{q}_3\sigma^{\mu\nu}u_1) au^I\widetilde{arphi}W^{\mu\nu}_{\mu u}$	$\mathbf{C}$
uW_32	$(\bar{q}_2\sigma^{\mu\nu}u_2)\tau^I\widetilde{co}W^I$	$\mathbf{C}$
_ uW_33	$(\bar{q}_{0}\sigma^{\mu\nu}_{10}) \tau^{I} \tilde{q}_{0} W^{I}$	$\mathbf{C}$
uB_11	$(q_3\sigma^{\mu\nu}u_1)\widetilde{\varphi}B_{\mu u}$	C
uB_12	$(\bar{q}_1\sigma^{\mu\nu}u_2)\widetilde{\varphi}B_{\mu\nu}$	$\mathbf{C}$
uB_13	$(ar{q}_1\sigma^{\mu u}u_3)\widetilde{arphi}B_{\mu u}$	$\mathbf{C}$
uB_21	$(\bar{q}_2\sigma^{\mu u}u_1)\widetilde{arphi}B_{\mu u}$	$\mathbf{C}$
uB_22	$(\bar{q}_2\sigma^{\mu u}u_2)\widetilde{\varphi}B_{\mu u}$	$\mathbf{C}$
uB_23	$(\bar{q}_2\sigma^{\mu u}u_3)\widetilde{\varphi}B_{\mu u}$	$\mathbf{C}$
uB_31	$(\bar{q}_3\sigma^{\mu u}u_1)\widetilde{arphi}B_{\mu u}$	$\mathbf{C}$
uB_32	$(\bar{q}_3\sigma^{\mu u}u_2)\widetilde{arphi}B_{\mu u}$	$\mathbf{C}$
uB_33	$(\bar{q}_3\sigma^{\mu u}u_3)\widetilde{arphi}B_{\mu u}$	$\mathbf{C}$
dG_11	$\left( ar{q}_1 \sigma^{\mu  u} T^A d_1 \right) arphi G^A_{\mu  u}$	$\mathbf{C}$
dG_12	$\left(ar{q}_1\sigma^{\mu u}T^Ad_2 ight)arphi G^A_{\mu u}$	$\mathbf{C}$
dG_13	$\left(ar{q}_1\sigma^{\mu u}T^Ad_3\right)arphi G_{\mu u}^A$	$\mathbf{C}$
dG_21	$\left(ar{q}_2\sigma^{\mu u}T^Ad_1 ight)arphi G_{\mu u}^{'A}$	$\mathbf{C}$
dG_22	$\left(ar{q}_2\sigma^{\mu u}T^Ad_2 ight)arphi G_{\mu u}^{'A}$	$\mathbf{C}$
dG_23	$\left(ar{q}_2\sigma^{\mu u}T^Ad_3\right)arphi G_{\mu u}^A$	$\mathbf{C}$
dG_31	$\left( ar{q}_3 \sigma^{\mu  u} T^A d_1 \right) arphi G^A_{\mu  u}$	$\mathbf{C}$
dG_32	$\left\langle ar{q}_{3}\sigma^{\mu u}T^{A}d_{2} ight angle arphi G_{\mu u}^{A}$	$\mathbf{C}$
dG_33	$\left(ar{q}_3\sigma^{\mu u}T^Ad_3 ight)arphi G_{\mu u}^A$	$\mathbf{C}$
dW_11	$(\bar{q}_1\sigma^{\mu\nu}d_1) au^Iarphi W^{I'}_{\mu u}$	$\mathbf{C}$
dW_12	$(\bar{q}_1\sigma^{\mu u}d_2) au^Iarphi W^I_{\mu u}$	$\mathbf{C}$
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	$(ar{q}_2\sigma^{\mu u}d_2) au^Iarphi W^I_{\mu u}$	$\mathbf{C}$
dW_23	$(ar{q}_2\sigma^{\mu u}d_3) au^Iarphi W^I_{\mu u}$	$\mathbf{C}$
dW_31	$(\bar{q}_3\sigma^{\mu u}d_1) au^Iarphi W^I_{\mu u}$	$\mathbf{C}$
dW_32	$(ar{q}_3\sigma^{\mu u}d_2) au^Iarphi W^I_{\mu u}$	$\mathbf{C}$
dW_33	$(\bar{q}_3\sigma^{\mu u}d_3) au^Iarphi W^I_{\mu u}$	$\mathbf{C}$
dB_11	$(\bar{q}_1 \sigma^{\mu \nu} d_1) \varphi B_{\mu \nu}$	$\mathbf{C}$
dB_12	$(\bar{q}_1 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu}$	$\mathbf{C}$
dB_13	$(\bar{q}_1 \sigma^{\mu\nu} d_3) \varphi B_{\mu\nu}$	$\mathbf{C}$
dB_21	$(\bar{q}_2 \sigma^{\mu\nu} d_1) \varphi B_{\mu\nu}$	$\mathbf{C}$
dB_22	$(\bar{q}_2 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu}$	$^{\mathrm{C}}$
dB_23	$(\bar{q}_2\sigma^{\mu u}d_3)\varphi B_{\mu u}$	$\mathbf{C}$

WC name	Operator	Type
dB_31	$(\bar{q}_3\sigma^{\mu\nu}d_1)\varphi B_{\mu\nu}$	С
dB_32 dB_33	$egin{aligned} (ar{q}_3 \sigma^{\mu u} d_2)  \varphi B_{\mu u} \ (ar{q}_3 \sigma^{\mu u} d_3)  \varphi B_{\mu u} \end{aligned}$	$^{ m C}_{ m C}$
phil1_11	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{\ell}_1 \gamma^\mu \ell_1 ight)$	R
phil1_12	$\left\langle arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight angle \left(ar{\ell}_1 \gamma^\mu \ell_2  ight)$	$\mathbf{C}$
phil1_13	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{\ell}_1 \gamma^\mu \ell_3 ight)$	$\mathbf{C}$
phil1_22	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{\ell}_{2}\gamma^{\mu}\ell_{2} ight)$	R
phil1_23	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{\ell}_{2}\gamma^{\mu}\ell_{3} ight)$	$\mathbf{C}$
phil1_33	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{\ell}_{3}\gamma^{\mu}\ell_{3} ight)$	R
phil3_11	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{\ell}_{1} au^{I}\gamma^{\mu}\ell_{1} ight)$	R
phil3_12	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} I m u arphi ight) \left(ar{\ell}_1  au^I \gamma^\mu \ell_2 ight)$	$\mathbf{C}$
phi13_13	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} I m u arphi ight) \left(ar{\ell}_1  au^I \gamma^\mu \ell_3 ight)$	$\mathbf{C}$
phi13_22	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} I m u arphi ight) \left(ar{\ell}_2  au^I \gamma^\mu \ell_2 ight)$	R
phi13_23	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} I m u arphi ight) \left(ar{\ell}_2  au^I \gamma^\mu \ell_3 ight)$	$\mathbf{C}$
phi13_33	$\left(arphi^\dagger i \overset{\leftrightarrow}{D} I m u arphi ight) \left(ar{\ell}_3  au^I \gamma^\mu \ell_3 ight)$	R
phie_11	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{e}_{1}\gamma^{\mu}e_{1} ight)$	R
phie_12	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{e}_{1}\gamma^{\mu}e_{2} ight)$	$\mathbf{C}$
phie_13	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)(ar{e}_{1}\gamma^{\mu}e_{3})$	$\mathbf{C}$
phie_22	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)(ar{e}_{2}\gamma^{\mu}e_{2})$	R
phie_23	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)(ar{e}_{2}\gamma^{\mu}e_{3})$	$\mathbf{C}$
phie_33	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)(ar{e}_{3}\gamma^{\mu}e_{3})$	R
phiq1_11	$\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{e}_{2}\gamma^{\mu}e_{3})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{e}_{3}\gamma^{\mu}e_{3})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{q}_{1}\gamma^{\mu}q_{1})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{q}_{1}\gamma^{\mu}q_{2})$	R
phiq1_12	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{q}_1 \gamma^\mu q_2)$	С
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VC name	Operator	Type
hiq1_13	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight) (ar{q}_1 \gamma^\mu q_3)$	$\mathbf{C}$
hiq1_22	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi  ight) (ar{q}_2 \gamma^\mu q_2)$	${ m R}$
hiq1_23	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{q}_2 \gamma^\mu q_3)$	$\mathbf{C}$
hiq1_33	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{q}_{3}\gamma^{\mu}q_{3} ight)$	R
hiq3_11	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{1} au^{I}\gamma^{\mu}q_{1} ight)$	R
hiq3_12	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{1} au^{I}\gamma^{\mu}q_{2} ight)$	$\mathbf{C}$
hiq3_13	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{1} au^{I}\gamma^{\mu}q_{3} ight)$	$^{\mathrm{C}}$
hiq3_22	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{2} au^{I}\gamma^{\mu}q_{2} ight)$	R
hiq3_23	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{2} au^{I}\gamma^{\mu}q_{3} ight)$	$^{\mathrm{C}}$
hiq3_33	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}Imuarphi ight)\left(ar{q}_{3} au^{I}\gamma^{\mu}q_{3} ight)$	R
hiu_11	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)(ar{u}_{1}\gamma^{\mu}u_{1})$	R
hiu_12	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{u}_{1}\gamma^{\mu}u_{2} ight)$	$^{\mathrm{C}}$
hiu_13	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{u}_1 \gamma^\mu u_3)$	C
hiu_22	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) (ar{u}_2 \gamma^\mu u_2)$	R
hiu_23	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}u_{3} ight)$	$^{\mathrm{C}}$
hiu_33	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{u}_{3}\gamma^{\mu}u_{3} ight)$	R
hid_11	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{d}_1 \gamma^\mu d_1 ight)$	R
hid_12	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{d}_1 \gamma^\mu d_2 ight)$	C
hid_13	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{1}\gamma^{\mu}d_{3} ight)$	$^{\mathrm{C}}$
hid_22	$\left(arphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}arphi ight)\left(ar{d}_{2}\gamma^{\mu}d_{2} ight)$	R
hid_23	$\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (d_{1}\gamma^{\mu}d_{1})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{d}_{1}\gamma^{\mu}d_{2})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{d}_{1}\gamma^{\mu}d_{3})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{d}_{2}\gamma^{\mu}d_{2})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{d}_{2}\gamma^{\mu}d_{3})$ $\begin{pmatrix} \varphi^{\dagger}i\overset{\leftrightarrow}{D}_{\mu}\varphi \end{pmatrix} (\bar{d}_{3}\gamma^{\mu}d_{3})$	C
hid_33	$\left(arphi^\dagger i \overset{\leftrightarrow}{D}_\mu arphi ight) \left(ar{d}_3 \gamma^\mu d_3 ight)$	R

WC name	Operator	Type
phiud_11	$\left(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi\right)\left(\bar{u}_{1}\gamma^{\mu}d_{1}\right)$	C
phiud_12	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{1}\gamma^{\mu}d_{2} ight)$	$\mathbf{C}$
phiud_13	$\left(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi\right)\left(\bar{u}_{1}\gamma^{\mu}d_{3}\right)$	$^{\mathrm{C}}$
phiud_21	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}d_{1} ight)$	$^{\mathrm{C}}$
phiud_22	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}d_{2} ight)$	$\mathbf{C}$
phiud_23	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{2}\gamma^{\mu}d_{3} ight)$	C
phiud_31	$\left(\widetilde{arphi}^{\dagger}iD_{\mu}arphi ight)\left(ar{u}_{3}\gamma^{\mu}d_{1} ight)$	C
phiud_32	$\left(\widetilde{\varphi}^{\dagger}iD_{\mu}\varphi\right)\left(\bar{u}_{3}\gamma^{\mu}d_{2}\right)$	C
phiud_33	$(\widetilde{arphi}^{\dagger}iD_{\mu}arphi)(ar{u}_{3}\gamma^{\mu}d_{3})$	С
11_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_1 ight)$	R
11_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_2 ight)$	C
11_1113	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_1\gamma^\mu\ell_3 ight)$	С
11_1122	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{\ell}_2\gamma^\mu\ell_2 ight)$	R
11_1123	$\left(\ell_1\gamma_\mu\ell_1 ight)\left(\ell_2\gamma^\mu\ell_3 ight)$	С
11_1133	$\left( \ell_1 \gamma_\mu \ell_1 \right) \left( \ell_3 \gamma^\mu \ell_3 \right)$	R
11_1212	$\left( \ell_1 \gamma_\mu \ell_2 \right) \left( \ell_1 \gamma^\mu \ell_2 \right) \left( \bar{\ell}_1 \gamma^\mu \ell_2 \right)$	C
11_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_1\gamma^\mu\ell_3 ight)$	С
11_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_2\gamma^\mu\ell_1 ight)$	R
11_1222	$\left(\ell_{1}\gamma_{\mu}\ell_{2} ight)\left(\ell_{2}\gamma^{\mu}\ell_{2} ight)$	C
11_1223	$ig(ar{\ell}_1\gamma_\mu\ell_2ig)ig(ar{\ell}_2\gamma^\mu\ell_3ig)$	C
11_1231	$\left(\ell_1\gamma_\mu\ell_2\right)\left(\ell_3\gamma^\mu\ell_1\right)$	C
11_1232	$\left(\ell_1\gamma_\mu\ell_2 ight)\left(\ell_3\gamma^\mu\ell_2 ight)$	C
11_1233	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	C
11_1313	$\left(\ell_{1}\gamma_{\mu}\ell_{3}\right)\left(\ell_{1}\gamma^{\mu}\ell_{3}\right)$	C
11_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_2\gamma^\mu\ell_2 ight)$	C
11_1323	$(ar{\ell}_1\gamma_\mu\ell_3)(ar{\ell}_2\gamma^\mu\ell_3)$	С
11_1331	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu \ell_1)$	R
11_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_2 ight)$	C
11_1333	$(ar{\ell}_1\gamma_\mu\ell_3)(ar{\ell}_3\gamma^\mu\ell_3)$	С
11_2222	$(ar{\ell}_2\gamma_\mu\ell_2)(ar{\ell}_2\gamma^\mu\ell_2)$	R
11_2223	$(ar{\ell}_2\gamma_\mu\ell_2)(ar{\ell}_2\gamma^\mu\ell_3)$	С
11_2233	$(ar{\ell}_2\gamma_\mu\ell_2)(ar{\ell}_3\gamma^\mu\ell_3)$	R
11_2323	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{\ell}_2\gamma^\mu\ell_3)$	С
11_2332	$\left(ar{\ell}_2\gamma_\mu\ell_3\right)\left(ar{\ell}_3\gamma^\mu\ell_2\right)$	R
11_2333	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{\ell}_3\gamma^\mu\ell_3 ight)$	С
11_3333	$(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{\ell}_3\gamma^\mu\ell_3)$	R R
qq1_1111 qq1_1112	$(ar{q}_1\gamma_\mu q_1) (ar{q}_1\gamma^\mu q_1) \ (ar{q}_1\gamma^\mu q_1) \ (ar{q}_1\gamma^\mu q_1)$	C
qq1_1112 qq1_1113	$egin{aligned} \left(ar{q}_1\gamma_\mu q_1 ight)\left(ar{q}_1\gamma^\mu q_2 ight) \ \left(ar{q}_1\gamma_\mu q_1 ight)\left(ar{q}_1\gamma^\mu q_3 ight) \end{aligned}$	C
qq1_1113 qq1_1122	$egin{array}{l} (q_1\gamma_\mu q_1)(q_1\gamma^\mu q_3) \ (ar q_1\gamma_\mu q_1)(ar q_2\gamma^\mu q_2) \end{array}$	R
qq1_1123	$(q_1\gamma_\mu q_1)(q_2\gamma^\mu q_2) \ (ar q_1\gamma_\mu q_1)(ar q_2\gamma^\mu q_3)$	C
qq1_1133	$(q_1/\mu q_1)(q_2/q_3) \ (\bar{q}_1\gamma_\mu q_1)(\bar{q}_3\gamma^\mu q_3)$	R
qq1_11212	$(q_1\gamma_\mu q_1)(q_3\gamma_4q_3) \ (\bar{q}_1\gamma_\mu q_2)(\bar{q}_1\gamma^\mu q_2)$	C
11	$(11/\mu 14/(11/14))$	ě

WC name	Operator	Туре
qq1_1213	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_1\gamma^{\mu}q_3 ight)$	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	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_2\gamma^{\mu}q_3 ight)$	C
qq1_1231	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_3\gamma^{\mu}q_1 ight)$	C
qq1_1232	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{q}_3\gamma^{\mu}q_2 ight)$	C
qq1_1233	$(ar{q}_1\gamma_\mu q_2)(ar{q}_3\gamma^\mu q_3)$	C
qq1_1313	$(ar{q}_1\gamma_\mu q_3)(ar{q}_1\gamma^\mu q_3)$	C
qq1_1322	$(ar{q}_1\gamma_\mu q_3)(ar{q}_2\gamma^\mu q_2)$	C
qq1_1323	$(ar{q}_1\gamma_\mu q_3)(ar{q}_2\gamma^\mu q_3)$	$^{\mathrm{C}}$
qq1_1331	$(ar{q}_1\gamma_\mu q_3)(ar{q}_3\gamma^\mu q_1)$	R
qq1_1332	$(\bar{q}_1\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_2)$	C
qq1_1333	$(\bar{q}_1\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_3)$	С
qq1_2222	$(ar{q}_2\gamma_\mu q_2)(ar{q}_2\gamma^\mu q_2)$	R
qq1_2223	$(\bar{q}_2\gamma_\mu q_2)(\bar{q}_2\gamma^\mu q_3)$	С
qq1_2233	$(\bar{q}_2\gamma_\mu q_2)(\bar{q}_3\gamma^\mu q_3)$	R
qq1_2323	$(\bar{q}_2\gamma_\mu q_3)(\bar{q}_2\gamma^\mu q_3)$	С
qq1_2332	$(\bar{q}_2\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_2)$	$egin{array}{c} R \\ C \end{array}$
qq1_2333	$(\bar{q}_2\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_3)$	
qq1_3333	$(\bar{q}_3\gamma_\mu q_3)(\bar{q}_3\gamma^\mu q_3)$	R R
qq3_1111	$egin{pmatrix} \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight) \ \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight) \end{pmatrix}$	C C
qq3_1112	$egin{array}{l} \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight) \ \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight) \end{array}$	C
qq3_1113		R
qq3_1122 qq3_1123	$egin{pmatrix} \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight) \ \left(ar{q}_1\gamma_\mu au^Iq_1 ight)\left(ar{q}_2\gamma^\mu au^Iq_3 ight) \end{pmatrix}$	C
qq3_1123 qq3_1133	$egin{pmatrix} (q_1)_\mu & q_1 \end{pmatrix} (q_2)^\mu & q_3 \end{pmatrix} \ ig(ar{q}_1\gamma_\mu au^Iq_1ig) ig(ar{q}_3\gamma^\mu au^Iq_3ig)$	R
qq3_1133 qq3_1212	$egin{pmatrix} (q_1\gamma_\mu r, q_1) & (q_3\gamma^\gamma r, q_3) \ (ar q_1\gamma_\mu  au^I q_2) & (ar q_1\gamma^\mu  au^I q_2) \end{pmatrix}$	C
qq3_1212 qq3_1213	$egin{pmatrix} (q_1\gamma_\mu & q_2) & (q_1\gamma^\mu & q_2) \ (ar q_1\gamma_\mu  au^I q_2) & (ar q_1\gamma^\mu  au^I q_3) \end{pmatrix}$	C
qq3_1213 qq3_1221	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_1)^\mu & q_3 \end{pmatrix} \ ig(ar{q}_1\gamma_\mu au^Iq_2ig) \left(ar{q}_2\gamma^\mu au^Iq_1ig) \end{pmatrix}$	R
qq3_1221 qq3_1222	$egin{array}{l} (q_1)_{\mu I} & q_2) & (q_2)_{I} & q_1 \ (ar{q}_1 \gamma_{\mu}  au^I q_2) & (ar{q}_2 \gamma^{\mu}  au^I q_2) \end{array}$	C
qq3_1223	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_2)_\mu & q_2 \end{pmatrix} \ ig(ar{q}_1\gamma_\mu au^Iq_2ig) & ig(ar{q}_2\gamma^\mu au^Iq_3ig) \end{pmatrix}$	C
qq3_1231	$egin{pmatrix} (q_1)_\mu & q_2 \end{pmatrix} (q_2)^\mu & q_3 \end{pmatrix} \ ig(ar{q}_1\gamma_\mu au^Iq_2ig) \left(ar{q}_3\gamma^\mu au^Iq_1ig) \end{pmatrix}$	C
qq3_1232	$egin{pmatrix} (q_1)_\mu , & q_2 \end{pmatrix} (q_3)_\mu , & q_1 \end{pmatrix} \ ig(ar q_1 \gamma_\mu  au^I q_2ig) ig(ar q_3 \gamma^\mu  au^I q_2ig)$	$\overset{\circ}{\mathrm{C}}$
qq3_1232 qq3_1233	$(q_1)_{\mu}, q_2) (q_3)_{\mu}, q_2) \ (ar{q}_1\gamma_{\mu} au^Iq_2) (ar{q}_3\gamma^{\mu} au^Iq_3)$	C
qq3_1313	$egin{pmatrix} (q_1)_{\mu\nu} & q_2 \end{pmatrix} (q_3)_{\nu} & q_3 \end{pmatrix} \ ig(ar{q}_1\gamma_{\mu} au^Iq_3ig) & ig(ar{q}_1\gamma^{\mu} au^Iq_3ig) \end{pmatrix}$	C
qq3_1322	$egin{pmatrix} (q_1/\mu, q_3) & (q_1/\mu, q_3) \ (ar{q}_1\gamma_\mu au^Iq_3) & (ar{q}_2\gamma^\mu au^Iq_2) \end{pmatrix}$	$\overset{\circ}{\mathrm{C}}$
qq3_1323	$egin{pmatrix} (q_1)_\mu & q_3 \end{pmatrix} \begin{pmatrix} q_2 & q_4 \end{pmatrix} \ \left(ar{q}_1 \gamma_\mu  au^I q_3  ight) \left(ar{q}_2 \gamma^\mu  au^I q_3  ight)$	$\overset{\circ}{\mathrm{C}}$
qq3_1331	$\begin{pmatrix} q_1/\mu, & q_3/(q_2), & q_3/(q_3) \\ (ar q_1\gamma_\mu au^Iq_3) & (ar q_3\gamma^\mu au^Iq_1) \end{pmatrix}$	R
qq3_1332	$egin{pmatrix} (q_1)_{\mu}, & q_3 \end{pmatrix} (q_3)_{\mu}, & q_1 \end{pmatrix} \ ig(ar{q}_1\gamma_{\mu} au^Iq_3ig) & ig(ar{q}_3\gamma^{\mu} au^Iq_2ig) \end{pmatrix}$	C
qq3_1333	$egin{pmatrix} (q_1)_{\mu\nu} & q_3 \end{pmatrix} (q_3)_{\nu} & q_2 \end{pmatrix} \ \left(ar{q}_1\gamma_{\mu} au^Iq_3 ight) \left(ar{q}_3\gamma^{\mu} au^Iq_3 ight)$	$\overset{\circ}{\mathrm{C}}$
qq3_1333 qq3_2222	$egin{pmatrix} (q_1)_{\mu}, & q_3 \end{pmatrix} (q_3)_{\tau}, & q_3 \end{pmatrix} \ ig(ar{q}_2\gamma_{\mu} au^Iq_2ig) & ig(ar{q}_2\gamma^{\mu} au^Iq_2ig) \end{pmatrix}$	R
qq3_2222 qq3_2223	$egin{pmatrix} (q_2)_\mu & q_2 \end{pmatrix} (q_2)_\mu & q_2 \end{pmatrix} \ ig(ar{q}_2\gamma_\mu au^Iq_2ig) & ig(ar{q}_2\gamma^\mu au^Iq_3ig) \end{pmatrix}$	C
qq3_2233	$\begin{pmatrix} q_2 / \mu^{\dagger} & q_2 \end{pmatrix} \begin{pmatrix} q_2 / \mu^{\dagger} & q_3 \end{pmatrix} \\ \left( ar{q}_2 \gamma_{\mu}  au^I q_2 \right) \left( ar{q}_3 \gamma^{\mu}  au^I q_3 \right) \end{pmatrix}$	R
qq3_2323	$egin{pmatrix} (q_2)\mu^{\mu} & q_2 \end{pmatrix} (q_3)^{\mu} & q_3 \end{pmatrix} \ ig(ar{q}_2\gamma^{\mu} au^Iq_3ig) & (ar{q}_2\gamma^{\mu} au^Iq_3ig) \end{pmatrix}$	C

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	WC name	Operator	Type
$\begin{array}{llllllllllllllllllllllllllllllllllll$	qq3_2332	$(\bar{q}_2\gamma_\mu\tau^Iq_3)(\bar{q}_3\gamma^\mu\tau^Iq_2)$	R
$\begin{array}{llllllllllllllllllllllllllllllllllll$	qq3_2333		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qq3_3333		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1111		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1112		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1113		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1122		R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1123		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1133	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1211	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{q}_1\gamma^\mu q_1)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_3 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_1 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1223	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_3\gamma^\mu q_1 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1232	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_3\gamma^\mu q_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1233	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1321	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_1 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1322		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_1332		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_2211	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_2213	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_1\gamma^\mu q_3 ight)$	С
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_1 ight)$	С
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lq1_2313	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_1\gamma^\mu q_3 ight)$	
lq1_2323 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_2\gamma^\mu q_3)$ C         lq1_2331 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_1)$ C         lq1_2332 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{q}_3\gamma^\mu q_2)$ C	lq1_2321	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_1 ight)$	
lq1_2331 $(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_1)$ C         lq1_2332 $(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_2)$ C	lq1_2322	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_2\gamma^\mu q_2 ight)$	
1q1_2332 $(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_2)$ C	lq1_2323		
		$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_1 ight)$	
lq1_2333 $ \left(\ell_2 \gamma_\mu \ell_3\right) \left(\bar{q}_3 \gamma^\mu q_3\right) $ C			
	1q1_2333	$\left(\ell_2\gamma_\mu\ell_3 ight)\left(ar{q}_3\gamma^\mu q_3 ight)$	$^{\mathrm{C}}$

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{align*} &(ar{q}_1 \gamma^{\mu} q_2) \ &(ar{q}_1 \gamma^{\mu} q_3) \ &(ar{q}_2 \gamma^{\mu} q_2) \ &(ar{q}_2 \gamma^{\mu} q_3) \ &(ar{q}_3 \gamma^{\mu} q_3) \ &(ar{q}_1 \gamma^{\mu} \tau^I q_1) \ &(\brace{q}_1 \gamma^{\mu} \tau^I q_2) \ \end{pmatrix}$	R C C R C R C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{align*} &(ar{q}_1 \gamma^{\mu} q_3) \ &(ar{q}_2 \gamma^{\mu} q_2) \ &(ar{q}_2 \gamma^{\mu} q_3) \ &(ar{q}_3 \gamma^{\mu} q_3) \ &) &(ar{q}_1 \gamma^{\mu}  au^I q_1) \ &) &(ar{q}_1 \gamma^{\mu}  au^I q_2) \ \end{pmatrix}$	C R C R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{aligned} &\langle ar{q}_2 \gamma^\mu q_2 \rangle \ &\langle ar{q}_2 \gamma^\mu q_3 \rangle \ &\langle ar{q}_3 \gamma^\mu q_3 \rangle \ &\langle ar{q}_1 \gamma^\mu  au^I q_1 \rangle \ &\langle ar{q}_1 \gamma^\mu  au^I q_2 \rangle \end{aligned}$	R C R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{aligned} &(ar{q}_2\gamma^\mu q_3) \ &(ar{q}_3\gamma^\mu q_3) \ &) &(ar{q}_1\gamma^\mu  au^I q_1) \ &) &(ar{q}_1\gamma^\mu  au^I q_2) \end{aligned}$	C R R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{aligned} &(ar{q}_3\gamma^\mu q_3) \ ) &(ar{q}_1\gamma^\mu  au^I q_1) \ ) &(ar{q}_1\gamma^\mu  au^I q_2) \end{aligned}$	R R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$egin{aligned} \left(ar{q}_1\gamma^\mu au^Iq_1 ight)\ \left(ar{q}_1\gamma^\mu au^Iq_2 ight) \end{aligned}$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	
$\begin{array}{lll} & & & & & & & & \\ 1 q 3\_1113 & & & & & & & \\ 1 q 3\_1122 & & & & & & \\ 1 q 3\_1123 & & & & & & \\ 1 q 3\_1133 & & & & & & \\ \end{array}  \begin{array}{lll} & & & & & \\ \bar{\ell}_1 \gamma_\mu \tau^I \ell_1 \\ & & & & \\ \bar{\ell}_1 \gamma_\mu \tau^I \ell_1 \end{array}$		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	
$\begin{array}{ccc} \text{lq3\_1123} & & & & & \\ \hline{\ell}_1 \gamma_\mu \tau^I \ell_1 \\ \text{lq3\_1133} & & & & & \\ \hline{\ell}_1 \gamma_\mu \tau^I \ell_1 \end{array}$		$\mathbf{C}$
lq3_1133 $(\bar{\ell}_1 \gamma_\mu  au^I \ell_1$		R
	$\left( ar{q}_2 \gamma^\mu  au^I q_3  ight)$	$\mathbf{C}$
$\overline{a}$	$\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	R
	$\left( ar{q}_{1}\gamma^{\mu} au^{I}q_{1} ight)$	$\mathbf{C}$
	$(\bar{q}_1 \gamma^\mu  au^I q_2)$	$\mathbf{C}$
lq3_1213 $(ar{\ell}_1\gamma_\mu au^I\ell_2$	$(\bar{q}_1 \gamma^\mu  au^I q_3)$	$\mathbf{C}$
	$\left(ar{q}_{2}\gamma^{\mu} au^{I}q_{1} ight)$	$\mathbf{C}$
lq3_1222 $(ar{\ell}_1\gamma_\mu au^I\ell_2$	$\left( ar{q}_{2}\gamma^{\mu} au^{I}q_{2} ight)$	$\mathbf{C}$
	$\left( ar{q}_{2}\gamma^{\mu} au^{I}q_{3} ight)$	$\mathbf{C}$
	$\left( ar{q}_{3}\gamma^{\mu} au^{I}q_{1} ight)$	$\mathbf{C}$
	$\left( ar{q}_{3}\gamma^{\mu} au^{I}q_{2} ight)$	$\mathbf{C}$
lq3_1233 $(ar{\ell}_1\gamma_\mu au^I\ell_2$		$\mathbf{C}$
lq3_1311 $(ar{\ell}_1\gamma_\mu au^I\ell_3$		$\mathbf{C}$
lq3_1312 $(ar{\ell}_1\gamma_\mu au^I\ell_3$	$\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
lq3_1313 $(ar{\ell}_1\gamma_\mu au^I\ell_3$	$\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
	$\left(ar{q}_2\gamma^\mu au^Iq_1 ight)$	$\mathbf{C}$
lq3_1322 $(ar{\ell}_1\gamma_\mu au^I\ell_3$	$\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
lq3_1323 $(ar{\ell}_1\gamma_\mu au^I\ell_3$	$\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
lq3_1331 $(ar{\ell}_1\gamma_\mu au^I\ell_3$	$\left(ar{q}_3\gamma^\mu au^Iq_1 ight)$	$\mathbf{C}$
lq3_1332 $(ar{\ell}_1\gamma_\mu au^I\ell_3$	$\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
	$\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	$\mathbf{C}$
	$\left( ar{q}_{1}\gamma^{\mu} au^{I}q_{1} ight)$	R
	$\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$\mathbf{C}$
	$\left( ar{q}_1 \gamma^\mu  au^I q_3 \right)$	$\mathbf{C}$
	$\left( ar{q}_{2}\gamma^{\mu} au^{I}q_{2} ight)$	R
1q3_2223 $(ar{\ell}_2\gamma_\mu au^I\ell_2$	$\left( ar{q}_{2}\gamma^{\mu} au^{I}q_{3} ight)$	$\mathbf{C}$
	$\left( ar{q}_{3}\gamma^{\mu} au^{I}q_{3} ight)$	R
	$\left(ar{q}_1\gamma^{\mu} au^Iq_1 ight)$	$\mathbf{C}$
	$\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	C
	$\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	C
	$\left( ar{q}_{2}\gamma^{\mu} au^{I}q_{1} ight)$	C
1q3_2322 $\left(\bar{\ell}_2\gamma_\mu au^I\ell_3 ight)$	$\left( ar{q}_{2}\gamma^{\mu} au^{I}q_{2} ight)$	C
1q3_2323 $(ar{\ell}_2\gamma_\mu au^I\ell_3$	$\left(ar{q}_2\gamma^\mu au^Iq_3 ight)$	C

WC name	Operator	Type
1q3_2331	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_1 ight)$	C
1q3_2332	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
1q3_2333	$\left(ar{\ell}_2\gamma_\mu au^I\ell_3 ight)\left(ar{q}_3\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
lq3_3311	$\left(ar{\ell}_3\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_1 ight)$	R
lq3_3312	$\left(ar{\ell}_3\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_2 ight)$	$^{\mathrm{C}}$
lq3_3313	$\left(ar{\ell}_3\gamma_\mu au^I\ell_3 ight)\left(ar{q}_1\gamma^\mu au^Iq_3 ight)$	$^{\mathrm{C}}$
1q3_3322	$\left(ar{\ell}_3\gamma_\mu au^I\ell_3 ight)\left(ar{q}_2\gamma^\mu au^Iq_2 ight)$	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	$(ar{e}_1\gamma_\mu e_1)(ar{e}_1\gamma^\mu e_1)$	R
ee_1112	$(ar{e}_1\gamma_\mu e_1)(ar{e}_1\gamma^\mu e_2)$	$^{\mathrm{C}}$
ee_1113	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	$\mathbf{C}$
ee_1122	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	R
ee_1123	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
ee_1133	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{e}_3\gamma^{\mu}e_3 ight)$	R
ee_1212	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
ee_1213	$(ar{e}_1\gamma_\mu e_2)(ar{e}_1\gamma^\mu e_3)$	$^{\mathrm{C}}$
ee_1222	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
ee_1223	$(ar{e}_1\gamma_{\mu}e_2)(ar{e}_2\gamma^{\mu}e_3)$	C
ee_1232	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{e}_3\gamma^{\mu}e_2 ight)$	$\stackrel{ ext{C}}{ ilde{\sim}}$
ee_1233	$(\bar{e}_1\gamma_\mu e_2)(\bar{e}_3\gamma^\mu e_3)$	$\stackrel{ ext{C}}{ ilde{\sim}}$
ee_1313	$(ar{e}_1\gamma_\mu e_3)(ar{e}_1\gamma^\mu e_3)$	C
ee_1323	$(ar{e}_1\gamma_\mu e_3)(ar{e}_2\gamma^\mu e_3)$	C
ee_1333	$(ar{e}_1\gamma_\mu e_3)(ar{e}_3\gamma^\mu e_3)$	С
ee_2222	$(ar{e}_2\gamma_\mu e_2)(ar{e}_2\gamma^\mu e_2)$	R
ee_2223	$(ar{e}_2\gamma_\mu e_2)(ar{e}_2\gamma^\mu e_3)$	С
ee_2233	$(ar{e}_2\gamma_\mu e_2)(ar{e}_3\gamma^\mu e_3)$	R
ee_2323	$(\bar{e}_2\gamma_\mu e_3)(\bar{e}_2\gamma^\mu e_3)$	C C
ee_2333	$(ar{e}_2\gamma_{\mu}e_3)(ar{e}_3\gamma^{\mu}e_3)$	
ee_3333 uu_1111	$(ar{e}_3\gamma_\mu e_3)(ar{e}_3\gamma^\mu e_3)$	R R
_	$egin{array}{l} (ar{u}_1\gamma_\mu u_1) \ (ar{u}_1\gamma^\mu u_1) \ (ar{u}_1\gamma^\mu u_1) \end{array}$	C
uu_1112 uu_1113	$egin{array}{c} (ar{u}_1\gamma_\mu u_1) \ (ar{u}_1\gamma^\mu u_2) \ (ar{u}_1\gamma^\mu u_2) \end{array}$	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	$egin{array}{c} (u_1\gamma_\mu u_1)(u_2\gamma^\mu u_2) \ (ar u_1\gamma_\mu u_1)(ar u_2\gamma^\mu u_3) \end{array}$	C
uu_1123 uu_1133	$(ar{u}_1\gamma_\mu u_1)(ar{u}_2\gamma^\mu u_3) \ (ar{u}_1\gamma_\mu u_1)(ar{u}_3\gamma^\mu u_3)$	R
uu_1212	$egin{array}{c} (u_1\gamma_\mu u_1)  (u_3\gamma^- u_3) \ (ar u_1\gamma_\mu u_2)  (ar u_1\gamma^\mu u_2) \end{array}$	C
uu_1213	$(\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_2)  (\bar{u}_1\gamma_\mu u_2)(\bar{u}_1\gamma^\mu u_3)$	$\overset{\circ}{\mathrm{C}}$
uu_1221	$egin{array}{c} (u_1  et \mu u_2) (u_1  et u_3) \ (ar u_1  et \mu u_2) (ar u_2  et \mu u_1) \end{array}$	R
uu_1222	$egin{array}{c} (u_1\gamma_\mu u_2) \ (u_2\gamma^\mu u_2) \end{array} \ (ar u_1\gamma_\mu u_2) \ (ar u_2\gamma^\mu u_2) \end{array}$	C
uu_1223	$(\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_2)  (\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3)$	$\overset{\circ}{\mathrm{C}}$
uu_1231	$(\bar{u}_1\gamma_\mu u_2)(\bar{u}_2\gamma^\mu u_3) = (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_1)$	$\overset{\circ}{\mathrm{C}}$
uu_1232	$(\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_1) = (\bar{u}_1\gamma_\mu u_2)(\bar{u}_3\gamma^\mu u_2)$	$\overset{\circ}{\mathrm{C}}$
uu_1233	$(\bar{u}_1\gamma_{\mu}u_2)(\bar{u}_3\gamma^{\mu}u_3)$	Ċ

WC name	Operator	Type
uu_1313	$(\bar{u}_1\gamma_\mu u_3)(\bar{u}_1\gamma^\mu u_3)$	C
uu_1322	$\left(\bar{u}_1\gamma_{\mu}u_3\right)\left(\bar{u}_2\gamma^{\mu}u_2\right)$	$\mathbf{C}$
uu_1323	$\left(\bar{u}_1\gamma_{\mu}u_3\right)\left(\bar{u}_2\gamma^{\mu}u_3\right)$	$\mathbf{C}$
uu_1331	$\left(\bar{u}_1\gamma_{\mu}u_3\right)\left(\bar{u}_3\gamma^{\mu}u_1\right)$	R
uu_1332	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	$\mathbf{C}$
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	$\left(\bar{u}_2\gamma_{\mu}u_2\right)\left(\bar{u}_2\gamma^{\mu}u_3\right)$	$\mathbf{C}$
uu_2233	$\left(\bar{u}_2\gamma_{\mu}u_2\right)\left(\bar{u}_3\gamma^{\mu}u_3\right)$	R
uu_2323	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
uu_2332	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	R
uu_2333	$\left(ar{u}_2\gamma_{\mu}u_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
uu_3333	$\left(ar{u}_{\underline{3}}\gamma_{\mu}u_{3} ight)\left(ar{u}_{\underline{3}}\gamma^{\mu}u_{3} ight)$	R
dd_1111	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
dd_1112	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
dd_1113	$\left(ar{d}_1\gamma_{\mu}d_1 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
dd_1122	$\left(ar{d}_1\gamma_\mu d_1 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	R
dd_1123	$\left(ar{d}_1\gamma_\mu d_1 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	$\mathbf{C}$
dd_1133	$\left(ar{d}_1\gamma_\mu d_1 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	${ m R}$
dd_1212	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
_ dd_1213	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
_ dd_1221	$\left(ar{d}_1\gamma_\mu d_2 ight)\left(ar{d}_2\gamma^\mu d_1 ight)$	${ m R}$
_ dd_1222	$ig(ar{d}_1\gamma_\mu d_2ig)ig(ar{d}_2\gamma^\mu d_2ig)$	$^{\mathrm{C}}$
dd_1223	$ig(ar{d}_1\gamma_\mu d_2ig)ig(ar{d}_2\gamma^\mu d_3ig)$	$^{\mathrm{C}}$
dd_1231	$egin{pmatrix} (ar{d}_1\gamma_\mu d_2) & (ar{d}_3\gamma^\mu d_1) \ \end{pmatrix}$	$^{\mathrm{C}}$
dd_1232	$(ar{d}_1\gamma_\mu d_2)  (ar{d}_3\gamma^\mu d_2)$	$^{\mathrm{C}}$
dd_1233	$(ar{d}_1\gamma_\mu d_2)  (ar{d}_3\gamma^\mu d_3)$	Č
dd_1313	$(ar{d}_1\gamma_\mu d_3)  (ar{d}_1\gamma^\mu d_3) $	Č
dd_1322	$(ar{d}_1\gamma_\mu d_3)  (ar{d}_1\gamma^\mu d_2)  (ar{d}_2\gamma^\mu d_2)$	$\overset{\circ}{\mathrm{C}}$
dd_1323	$(ar{d}_1\gamma_\mu d_3)  (ar{d}_2\gamma^\mu d_3)  (ar{d}_2\gamma^\mu d_3)$	$\overset{\circ}{\mathrm{C}}$
dd_1331	$egin{pmatrix} (ar{d}_1\gamma_\mu a_3) & (ar{d}_2\gamma^\mu a_3) \ (ar{d}_3\gamma^\mu d_1) & \end{pmatrix}$	R
dd_1332	$egin{pmatrix} (a_1\gamma_\mu a_3) & (a_3\gamma^\mu a_1) \ (ar{d}_1\gamma_\mu d_3) & (ar{d}_3\gamma^\mu d_2) \end{pmatrix}$	C
dd_1333		C
dd_1333 dd_2222		R
dd_2222 dd_2223		C
dd_2233	$egin{aligned} \left(d_2\gamma_\mu d_2 ight)\left(d_2\gamma^\mu d_3 ight) \ \left(ar{d}_2\gamma_\mu d_2 ight)\left(ar{d}_3\gamma^\mu d_3 ight) \end{aligned}$	$^{ m C}_{ m R}$
		C
dd_2323	$\left(ar{d}_2\gamma_\mu d_3\right)\left(ar{d}_2\gamma^\mu d_3\right)$	
dd_2332	$\left(ar{d}_2\gamma_\mu d_3 ight)\left(ar{d}_3\gamma^\mu d_2 ight)$	R
dd_2333	$(ar{d}_2\gamma_\mu d_3) \ (ar{d}_3\gamma^\mu d_3)$	С
dd_3333	$\left(\bar{d}_3\gamma_\mu d_3\right)\left(\bar{d}_3\gamma^\mu d_3\right)$	R
eu_1111	$(\bar{e}_1\gamma_{\mu}e_1)(\bar{u}_1\gamma^{\mu}u_1)$	R
eu_1112	$(\bar{e}_1\gamma_{\mu}e_1)(\bar{u}_1\gamma^{\mu}u_2)$	C C
eu_1113	$(\bar{e}_1\gamma_\mu e_1)(\bar{u}_1\gamma^\mu u_3)$	C

WC name	Operator	Type
eu_1122	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	R
eu_1123	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
eu_1133	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$\mathbf{R}$
eu_1211	$(ar{e}_1\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_1)$	$^{\mathrm{C}}$
eu_1212	$(ar{e}_1\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_2)$	$^{\mathrm{C}}$
eu_1213	$(ar{e}_1\gamma_\mu e_2)(ar{u}_1\gamma^\mu u_3)$	$\mathbf{C}$
eu_1221	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	$\mathbf{C}$
eu_1222	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$\mathbf{C}$
eu_1223	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
eu_1311	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	$^{\mathrm{C}}$
eu_1312	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
eu_1313	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
eu_1321	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	$^{\mathrm{C}}$
eu_1322	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
eu_1323	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
eu_1331	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_1 ight)$	$^{\mathrm{C}}$
eu_1332	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	$^{\mathrm{C}}$
eu_1333	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
eu_2211	$(\bar{e}_2\gamma_\mu e_2)(\bar{u}_1\gamma^\mu u_1)$	R
eu_2212	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	$\mathbf{C}$
eu_2213	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
eu_2222	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	R
eu_2223	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
eu_2233	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
eu_2311	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	$\mathbf{C}$
eu_2312	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	C
eu_2313	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	С
eu_2321	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	C
eu_2322	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	C
eu_2323	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	C
eu_2331	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_1 ight)$	C
eu_2332	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_2 ight)$	C
eu_2333	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
eu_3311	$(ar{e}_3\gamma_\mu e_3)(ar{u}_1\gamma^\mu u_1)$	R
eu_3312	$(\bar{e}_3\gamma_\mu e_3)(\bar{u}_1\gamma^\mu u_2)$	С
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
eu_3333	$(\bar{e}_3\gamma_{\mu}e_3)(\bar{u}_3\gamma^{\mu}u_3)$	R
ed_1111	$(ar{e}_1\gamma_{\mu}e_1)(ar{d}_1\gamma^{\mu}d_1)$	R
ed_1112	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$

WC name	Operator	Type
ed_1113	$\left(ar{e}_1\gamma_{\mu}e_1 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	C
ed_1122	$(ar{e}_1\gamma_{\mu}e_1)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ed_1123	$(ar{e}_1\gamma_{\mu}e_1)ig(ar{d}_2\gamma^{\mu}d_3ig)$	$\mathbf{C}$
ed_1133	$(ar{e}_1\gamma_{\mu}e_1)ig(ar{d}_3\gamma^{\mu}d_3ig)$	R
ed_1211	$(ar{e}_1\gamma_{\mu}e_2)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_1212	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_1213	$(ar{e}_1\gamma_{\mu}e_2)ig(ar{d}_1\gamma^{\mu}d_3ig)$	$\mathbf{C}$
ed_1221	$(ar{e}_1\gamma_{\mu}e_2)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_1222	$(ar{e}_1\gamma_{\mu}e_2)ig(ar{d}_2\gamma^{\mu}d_2ig)$	$\mathbf{C}$
ed_1223	$(ar{e}_1\gamma_{\mu}e_2)ig(ar{d}_2\gamma^{\mu}d_3ig)$	$^{\mathrm{C}}$
ed_1231	$(ar{e}_1\gamma_{\mu}e_2)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_1232	$(ar{e}_1\gamma_{\mu}e_2)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_1233	$\left(ar{e}_1\gamma_{\mu}e_2 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_1311	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_1312	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_1313	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_1321	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_1322	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_1323	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_1331	$\left(ar{e}_1\gamma_{\mu}e_3 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ed_1332	$\left(ar{e}_{1}\gamma_{\mu}e_{3} ight)\left(ar{d}_{3}\gamma^{\mu}d_{2} ight)$	$\mathbf{C}$
ed_1333	$(ar{e}_1\gamma_{\mu}e_3)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_2211	$(ar{e}_2\gamma_{\mu}e_2)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
ed_2212	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_2213	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_2222	$(ar{e}_2\gamma_{\mu}e_2)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ed_2223	$\left(ar{e}_2\gamma_{\mu}e_2 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ed_2233	$(ar{e}_2\gamma_{\mu}e_2)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
ed_2311	$\left(ar{e}_{2}\gamma_{\mu}e_{3} ight)\left(ar{d}_{1}\gamma^{\mu}d_{1} ight)$	$\mathbf{C}$
ed_2312	$(ar{e}_2\gamma_{\mu}e_3)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ed_2313	$(ar{e}_2\gamma_\mu e_3)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ed_2321	$(ar{e}_2\gamma_{\mu}e_3)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ed_2322	$(ar{e}_2\gamma_\mu e_3)\left(ar{d}_2\gamma^\mu d_2 ight)$	$^{\mathrm{C}}$
ed_2323	$\left(ar{e}_2\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_2331	$(ar{e}_2\gamma_{\mu}e_3)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	С
ed_2332	$(ar{e}_2\gamma_{\mu}e_3)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_2333	$(ar{e}_2\gamma_\mu e_3)\left(ar{d}_3\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ed_3311	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
ed_3312	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ed_3313	$(ar{e}_3\gamma_{\mu}e_3)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ed_3322	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ed_3323	$\left(ar{e}_3\gamma_{\mu}e_3 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	С

WC name	Operator	Type
ed_3333	$(\bar{e}_3\gamma_\mu e_3)(\bar{d}_3\gamma^\mu d_3)$	R
ud1_1111	$(ar{u}_1\gamma_\mu u_1)(ar{d}_1\gamma^\mu d_1)$	R
ud1_1112	$(ar{u}_1\gamma_\mu u_1)(ar{d}_1\gamma^\mu d_2)$	$\mathbf{C}$
ud1_1113	$(\bar{u}_1\gamma_\mu u_1)(\bar{d}_1\gamma^\mu d_3)$	$\mathbf{C}$
ud1_1122	$(ar{u}_1\gamma_\mu u_1)(ar{d}_2\gamma^\mu d_2)$	R
ud1_1123	$(ar{u}_1\gamma_\mu u_1)(ar{d}_2\gamma^\mu d_3)$	$\mathbf{C}$
ud1_1133	$(ar{u}_1\gamma_\mu u_1) \left(ar{d}_3\gamma^\mu d_3 ight)$	R
ud1_1211	$(ar{u}_1\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_1 ight)$	$\mathbf{C}$
ud1_1212	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ud1_1213	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_1221	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ud1_1222	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1223	$(ar{u}_1\gamma_{\mu}u_2)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ud1_1231	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ud1_1232	$\left(ar{u}_1\gamma_{\mu}u_2 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ud1_1233	$(ar{u}_1\gamma_\mu u_2)\left(ar{d}_3\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ud1_1311	$(ar{u}_1\gamma_\mu u_3)\left(ar{d}_1\gamma^\mu d_1 ight)$	$\mathbf{C}$
ud1_1312	$\left(ar{u}_1\gamma_{\mu}u_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ud1_1313	$(ar{u}_1\gamma_\mu u_3)\left(ar{d}_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
ud1_1321	$(ar{u}_1\gamma_\mu u_3)\left(ar{d}_2\gamma^\mu d_1 ight)$	$\mathbf{C}$
ud1_1322	$(ar{u}_1\gamma_\mu u_3)\left(ar{d}_2\gamma^\mu d_2 ight)$	$\mathbf{C}$
ud1_1323	$(\bar{u}_1\gamma_\mu u_3)\left(\underline{d}_2\gamma^\mu d_3\right)$	$\mathbf{C}$
ud1_1331	$(\bar{u}_1\gamma_\mu u_3) \left( \bar{d}_3\gamma^\mu d_1 \right)$	C
ud1_1332	$(ar{u}_1\gamma_\mu u_3)\left(ar{d}_3\gamma^\mu d_2 ight)$	$\mathbf{C}$
ud1_1333	$(ar{u}_1\gamma_\mu u_3)\left(ar{d}_3\gamma^\mu d_3 ight)$	$\mathbf{C}$
ud1_2211	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_1 ight)$	R
ud1_2212	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_2 ight)$	C
ud1_2213	$(ar{u}_2\gamma_\mu u_2)\left(ar{d}_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
ud1_2222	$(ar{u}_2\gamma_\mu u_2) \left(ar{d}_2\gamma^\mu d_2\right)$	R
ud1_2223	$(\bar{u}_2\gamma_\mu u_2) \left( d_2\gamma^\mu d_3 \right)$	$^{\rm C}$
ud1_2233	$(\bar{u}_2\gamma_\mu u_2) \left( d_3\gamma^\mu d_3 \right)$	R
ud1_2311	$(\bar{u}_2\gamma_\mu u_3) \left(d_1\gamma^\mu d_1\right)$	$\stackrel{ ext{C}}{\sim}$
ud1_2312	$(\bar{u}_2\gamma_\mu u_3) \left(d_1\gamma^\mu d_2\right)$	$\stackrel{ ext{C}}{\sim}$
ud1_2313	$(\bar{u}_2\gamma_\mu u_3) \left(d_1\gamma^\mu d_3\right)$	$\stackrel{ ext{C}}{\sim}$
ud1_2321	$(\bar{u}_2\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_1)$	С
ud1_2322	$(\bar{u}_2\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_2)$	С
ud1_2323	$(\bar{u}_2\gamma_\mu u_3)(\bar{d}_2\gamma^\mu d_3)$	С
ud1_2331	$(\bar{u}_2\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_1)$	С
ud1_2332	$(\bar{u}_2\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_2)$	С
ud1_2333	$(\bar{u}_2\gamma_\mu u_3)(\bar{d}_3\gamma^\mu d_3)$	С
ud1_3311	$(\bar{u}_3\gamma_\mu u_3) \begin{pmatrix} d_1\gamma^\mu d_1 \end{pmatrix}$	R
ud1_3312	$\left(ar{u}_3\gamma_{\mu}u_3 ight)\left(d_1\gamma^{\mu}d_2 ight)$	С

$\begin{array}{c} \mathrm{ud1}\_3313 & (\bar{u}_3\gamma_\mu u_3)  (\bar{d}_1\gamma^\mu d_3) \\ \mathrm{ud1}\_3322 & (\bar{u}_3\gamma_\mu u_3)  (\bar{d}_2\gamma^\mu d_2) \\ \mathrm{ud1}\_3323 & (\bar{u}_3\gamma_\mu u_3)  (\bar{d}_2\gamma^\mu d_3) \\ \mathrm{ud1}\_3333 & (\bar{u}_3\gamma_\mu u_3)  (\bar{d}_2\gamma^\mu d_3) \\ \mathrm{ud3}\_1333 & (\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}\_1112 & (\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_2) \\ \mathrm{ud8}\_1123 & (\bar{u}_1\gamma_\mu T^A u_1)  (\bar{d}_3\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_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_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_3) \\ \mathrm{ud8}\_1212 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_2\gamma^\mu T^A d_1) \\ \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}\_1233 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1231 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1232 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1333 & (\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_2)  (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1331 & (\bar{u}_1\gamma_\mu T^A u_2)  (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1312 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_1\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1313 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1313 & (\bar{u}_1\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_1322 & (\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}\_1332 & (\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}\_222 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_2211 & (\bar{u}_2\gamma_\mu T^A u_3)  (\bar{d}_3\gamma^\mu T^A d_3) \\ \mathrm{ud8}\_2211 & (\bar{u}_2\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_2)  (\bar{d}_1\gamma^\mu T^A$	WC name	Operator	Type
$\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}\_{3323} & (\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_2\right) & {\rm C} \\ {\rm ud8}\_{1113} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_2\right) & {\rm R} \\ {\rm ud8}\_{1122} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm R} \\ {\rm ud8}\_{1123} & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm R} \\ {\rm ud8}\_{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_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}\_{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}\_{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}\_{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}\_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1223} & (\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}\_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1313} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1314} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1312} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1312} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1313} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1322} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1323} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1323} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & {\rm C} \\ {\rm ud8}\_{1333} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_3\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) & {$	ud1_3313	$(\bar{u}_3\gamma_\mu u_3)(\bar{d}_1\gamma^\mu d_3)$	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) & (\bar{u}_1\gamma^\mu T^A d_1) \\ \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_3\right) & \mathrm{C} \\ \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_1) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \mathrm{R} \\ \mathrm{ud8}\_{1212} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_3\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}\_{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}\_{1222} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_1\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}\_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_{1223} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_{1233} & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\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_2\right) & \mathrm{C} \\ \mathrm{ud8}\_{1312} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}\_{1312} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_2\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}\_{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}\_{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}\_{1322} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \mathrm{C} \\ \mathrm{ud8}\_{1323} & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_1\right) & \mathrm{C} \\ \mathrm{ud8}\_{2211} & (\bar{u}_2\gamma_\mu T^A u_2) \left(\bar{d}_1\gamma^\mu T^A d_2\right) & \mathrm{C} \\ \mathrm{ud8}\_{2222} & (\bar{u}_2\gamma_\mu T^A$	_		R
$\begin{array}{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_3\right) & \mathrm{C} \\ \mathrm{ud8}\_1122 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_1123 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{R} \\ \mathrm{ud8}\_1123 & (\bar{u}_1\gamma_\mu T^A u_1) \left(\bar{d}_3\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_2\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_2\right) & \mathrm{C} \\ \mathrm{ud8}\_1213 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\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}\_1223 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_1223 & (\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}_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}\_1233 & (\bar{u}_1\gamma_\mu T^A u_2) \left(\bar{d}_3\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_2\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}\_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}\_1333 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_1332 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_1332 & (\bar{u}_1\gamma_\mu T^A u_3) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_2211 & (\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_2) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \mathrm{C} \\ \mathrm{ud8}\_2213 & (\bar{u}_2\gamma_\mu T^A u_2$			$\mathbf{C}$
$\begin{array}{c} \text{ud8\_1111} & (\bar{u}_1\gamma_\mu T^A u_1) \; (\bar{d}_1\gamma^\mu T^A d_1) \\ \text{ud8\_1112} & (\bar{u}_1\gamma_\mu T^A u_1) \; (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1113} & (\bar{u}_1\gamma_\mu T^A u_1) \; (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1122} & (\bar{u}_1\gamma_\mu T^A u_1) \; (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1123} & (\bar{u}_1\gamma_\mu T^A u_1) \; (\bar{d}_2\gamma^\mu T^A d_2) \\ \text{ud8\_1123} & (\bar{u}_1\gamma_\mu T^A u_1) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_1) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1211} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_1\gamma^\mu T^A d_1) \\ \text{ud8\_1212} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1213} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1221} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_1\gamma^\mu T^A d_2) \\ \text{ud8\_1222} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_2\gamma^\mu T^A d_2) \\ \text{ud8\_1223} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_2\gamma^\mu T^A d_2) \\ \text{ud8\_1223} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1231} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_3\gamma^\mu T^A d_4) \\ \text{ud8\_1232} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_3\gamma^\mu T^A d_2) \\ \text{ud8\_1233} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_1311} & (\bar{u}_1\gamma_\mu T^A u_2) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_1311} & (\bar{u}_1\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1312} & (\bar{u}_1\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1313} & (\bar{u}_1\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1313} & (\bar{u}_1\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1322} & (\bar{u}_1\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1332} & (\bar{u}_1\gamma_\mu T^A u_3) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_1333} & (\bar{u}_1\gamma_\mu T^A u_3) \; (\bar{d}_2\gamma^\mu T^A d_3) \\ \text{ud8\_2313} & (\bar{u}_1\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_2211} & (\bar{u}_2\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_2222} & (\bar{u}_2\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_2223} & (\bar{u}_2\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_2223} & (\bar{u}_2\gamma_\mu T^A u_2) \; (\bar{d}_1\gamma^\mu T^A d_3) \\ \text{ud8\_2223} & (\bar{u}_2\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_2331} & (\bar{u}_2\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_2331} & (\bar{u}_2\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_3) \\ \text{ud8\_2322} & (\bar{u}_2\gamma_\mu T^A u_3) \; (\bar{d}_3\gamma^\mu T^A d_2) \\ ud8\_232$	ud1_3333		${ m R}$
$\begin{array}{c} \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}_1\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\_1133} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_1133} & \left(\bar{u}_1\gamma_{\mu}T^Au_1\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{R} \\ \text{ud8\_1211} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\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_3\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\_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_1311} & \left(\bar{u}_1\gamma_{\mu}T^Au_2\right) \left(\bar{d}_3\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_2\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_1\right) & \text{C} \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_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_2\right) & \text{C} \\ \text{ud8\_1332} & \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\_2213} & \left(\bar{u}_2\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_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2212} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\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\_2233} & \left(\bar{u}_2\gamma_{\mu}T^$	ud8_1111		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\_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_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}_2 \gamma^\mu T^A d_2 \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_2 \right) & \text{C} \\ \text{ud8\_1233} & \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\_1311} & \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\_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\_1321} & \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}_1 \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}_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_2 \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_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_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\_2223} & \left( \bar{u}_2 \gamma_\mu T^A u_3 \right) \left( \bar{d}_1 \gamma^\mu T^A d_2 \right) & $	ud8_1112		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1113		$\mathbf{C}$
$\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{R} \\ \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}_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\_1231} & \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\_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_1\right) & \text{C} \\ \text{ud8\_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1331} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1332} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2211} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) & \text{C} \\ \text{ud8\_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\_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\_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\_2322} & \left(\bar{u}_2\gamma_\mu T^A$	ud8_1122		${ m R}$
$\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\_1223} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_2 \gamma^\mu T^A d_2 \right) & \text{C} \\ \text{ud8\_1231} & \left( \bar{u}_1 \gamma_\mu T^A u_2 \right) \left( \bar{d}_3 \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_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_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\_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_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_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 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) & $	ud8_1123		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1133		R
$\begin{array}{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{ud8\_1213} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_1221} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) \\ \text{ud8\_1222} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) \\ \text{ud8\_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) \\ \text{ud8\_1223} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) \\ \text{ud8\_1231} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_1\right) \\ \text{ud8\_1232} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) \\ \text{ud8\_1233} & \left(\bar{u}_1\gamma_\mu T^A u_2\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) \\ \text{ud8\_1311} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_1\right) \\ \text{ud8\_1312} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) \\ \text{ud8\_1313} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) \\ \text{ud8\_1321} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_1\right) \\ \text{ud8\_1322} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_2\right) \\ \text{ud8\_1323} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_2\gamma^\mu T^A d_3\right) \\ \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{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{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_2\right) \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_\mu T^A u_3\right) \left(\bar{d}_3\gamma^\mu T^A d_3\right) \\ \text{ud8\_2211} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \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{ud8\_2222} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_2223} & \left(\bar{u}_2\gamma_\mu T^A u_2\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \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{ud8\_2312} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_2313} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \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{ud8\_2322} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_2\right) \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_\mu T^A u_3\right) \left(\bar{d}_1\gamma^\mu T^A d_3\right) \\$	ud8_1211		$^{\mathrm{C}}$
$\begin{array}{c} \text{ud8\_1213} & (\bar{u}_1\gamma_{\mu}T^Au_2) (\bar{d}_1\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_1221} & (\bar{u}_1\gamma_{\mu}T^Au_2) (\bar{d}_2\gamma^{\mu}T^Ad_1) & \text{C} \\ \text{ud8\_1222} & (\bar{u}_1\gamma_{\mu}T^Au_2) (\bar{d}_2\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_1223} & (\bar{u}_1\gamma_{\mu}T^Au_2) (\bar{d}_2\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_1231} & (\bar{u}_1\gamma_{\mu}T^Au_2) (\bar{d}_3\gamma^{\mu}T^Ad_1) & \text{C} \\ \text{ud8\_1232} & (\bar{u}_1\gamma_{\mu}T^Au_2) (\bar{d}_3\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_1233} & (\bar{u}_1\gamma_{\mu}T^Au_2) (\bar{d}_3\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_1233} & (\bar{u}_1\gamma_{\mu}T^Au_2) (\bar{d}_3\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_1311} & (\bar{u}_1\gamma_{\mu}T^Au_2) (\bar{d}_3\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_1312} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_1\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_1313} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_1\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_1313} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_2\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_1321} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_2\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_1322} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_2\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_1333} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_2\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_1331} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_3\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_1332} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_3\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_1333} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_3\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_1333} & (\bar{u}_1\gamma_{\mu}T^Au_3) (\bar{d}_3\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_2211} & (\bar{u}_2\gamma_{\mu}T^Au_2) (\bar{d}_1\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_2213} & (\bar{u}_2\gamma_{\mu}T^Au_2) (\bar{d}_1\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_2213} & (\bar{u}_2\gamma_{\mu}T^Au_2) (\bar{d}_1\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_2223} & (\bar{u}_2\gamma_{\mu}T^Au_2) (\bar{d}_1\gamma^{\mu}T^Ad_2) & \text{C} \\ \text{ud8\_2233} & (\bar{u}_2\gamma_{\mu}T^Au_2) (\bar{d}_3\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_2311} & (\bar{u}_2\gamma_{\mu}T^Au_3) (\bar{d}_1\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_2312} & (\bar{u}_2\gamma_{\mu}T^Au_3) (\bar{d}_1\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_2313} & (\bar{u}_2\gamma_{\mu}T^Au_3) (\bar{d}_1\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_2313} & (\bar{u}_2\gamma_{\mu}T^Au_3) (\bar{d}_1\gamma^{\mu}T^Ad_3) & \text{C} \\ \text{ud8\_2322} & (\bar{u}_2\gamma_{\mu}T^Au_3) (\bar{d}_1\gamma^{\mu}T^Ad_2) & \text{C} \\ \end{array}$	ud8_1212		$\mathbf{C}$
$\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}_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_3\right) & \text{C} \\ \text{ud8\_1331} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1332} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_1333} & \left(\bar{u}_1\gamma_{\mu}T^Au_3\right) \left(\bar{d}_3\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2211} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2212} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\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\_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right) \left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{R} \\ \text{ud8\_2311} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_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\_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\_2322} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right) \left(\bar{d}_1\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_2322} & \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_1213		$^{\mathrm{C}}$
$\begin{array}{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_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\_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_2\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\_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}_3\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_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\_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_2\right) & \text{C} \\ \text{ud8\_2212} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{R} \\ \text{ud8\_2222} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2311} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_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}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \end{array}$	ud8_1221	$(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_1)$	$^{\mathrm{C}}$
$\begin{array}{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_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\_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_2\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\_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}_3\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_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\_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_2\right) & \text{C} \\ \text{ud8\_2212} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2213} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_2\right) & \text{R} \\ \text{ud8\_2222} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2233} & \left(\bar{u}_2\gamma_{\mu}T^Au_2\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2311} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_3\right) & \text{C} \\ \text{ud8\_2312} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_1\gamma^{\mu}T^Ad_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}_2\gamma^{\mu}T^Ad_1\right) & \text{C} \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \text{ud8\_2322} & \left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_2\gamma^{\mu}T^Ad_2\right) & \text{C} \\ \end{array}$	ud8_1222	$(\bar{u}_1\gamma_\mu T^A u_2)(\bar{d}_2\gamma^\mu T^A d_2)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1223		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1231		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1232		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1233		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1311		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1312		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1313		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1321		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1322		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1323		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1331	$(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1332	$(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_1333	$(\bar{u}_1\gamma_\mu T^A u_3)(\bar{d}_3\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2211	$(\bar{u}_2\gamma_\mu T^A u_2)(\bar{d}_1\gamma^\mu T^A d_1)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2212	$\left(ar{u}_2\gamma_\mu T^A u_2 ight)\left(ar{d}_1\gamma^\mu T^A d_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2213	$\left(ar{u}_2\gamma_\mu T^A u_2 ight)\left(ar{d}_1\gamma^\mu T^A d_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2222		${ m R}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2223	$(\bar{u}_2\gamma_\mu T^A u_2) (\bar{d}_2\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ud8_2233	$\left(\bar{u}_2\gamma_\mu T^A u_2\right)\left(\bar{d}_3\gamma^\mu T^A d_3\right)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_1)$	$\mathbf{C}$
$\begin{array}{cccc} \text{ud8\_2313} & \left( \bar{u}_2 \gamma_\mu T^A u_3 \right) \left( \bar{d}_1 \gamma^\mu T^A d_3 \right) & \text{C} \\ \text{ud8\_2321} & \left( \bar{u}_2 \gamma_\mu T^A u_3 \right) \left( \bar{d}_2 \gamma^\mu T^A d_1 \right) & \text{C} \\ \text{ud8\_2322} & \left( \bar{u}_2 \gamma_\mu T^A u_3 \right) \left( \bar{d}_2 \gamma^\mu T^A d_2 \right) & \text{C} \end{array}$	ud8_2312	$(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_1\gamma^\mu T^A d_2)$	$^{\mathrm{C}}$
ud8_2321 $(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_1)$ C ud8_2322 $(\bar{u}_2\gamma_{\mu}T^Au_3)(\bar{d}_2\gamma^{\mu}T^Ad_2)$ C	ud8_2313	$\left(\bar{u}_2\gamma_\mu T^A u_3\right)\left(\bar{d}_1\gamma^\mu T^A d_3\right)$	$^{\mathrm{C}}$
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	$(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_1)$	$^{\mathrm{C}}$
$\hat{i} = mA + \hat{i} \hat{i} = mA + \hat{i}$		$\left(ar{u}_2\gamma_\mu T^A u_3\right)\left(ar{d}_2\gamma^\mu T^A d_2\right)$	$^{\mathrm{C}}$
ud8_2323 $(\bar{u}_2 \gamma_\mu T^A u_3) (d_2 \gamma^\mu T^A d_3)$ C	ud8_2323	$(\bar{u}_2\gamma_\mu T^A u_3)(\bar{d}_2\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
ud8_2323 $\left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{2}\gamma^{\mu}T^{A}d_{3}\right)$ C ud8_2331 $\left(\bar{u}_{2}\gamma_{\mu}T^{A}u_{3}\right)\left(\bar{d}_{3}\gamma^{\mu}T^{A}d_{1}\right)$ C	ud8_2331	$(\bar{u}_2\gamma_\mu T^A u_3) (\bar{d}_3\gamma^\mu T^A d_1)$	$\mathbf{C}$
ud8_2332 $\left(\bar{u}_2\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_2\right)$ C	ud8_2332	$\left(ar{u}_2\gamma_\mu T^A u_3 ight)\left(ar{d}_3\gamma^\mu T^A d_2 ight)$	$\mathbf{C}$

WC name	Operator	Type
ud8_2333	$\left(ar{u}_2\gamma_\mu T^A u_3\right) \left(ar{d}_3\gamma^\mu T^A d_3\right)$	C
_ ud8_3311	$egin{pmatrix} ar{(ar{u}_3\gamma_\mu T^A u_3)} ar{(ar{d}_1\gamma^\mu T^A d_1)} \end{pmatrix}$	${ m R}$
ud8_3312	$egin{pmatrix} ar{\langle u_3 \gamma_\mu T^A u_3 \rangle} ar{\langle d_1 \gamma^\mu T^A d_2 \rangle} \end{pmatrix}$	$^{\mathrm{C}}$
ud8_3313	$(ar{u}_3\gamma_\mu T^A u_3) (ar{d}_1\gamma^\mu T^A d_3)$	$^{\mathrm{C}}$
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	$\left\langle ar{u}_3\gamma_\mu T^A u_3 \right\rangle \left\langle ar{d}_2\gamma^\mu T^A d_3 \right\rangle$	$\mathbf{C}$
ud8_3333	$\left(\bar{u}_3\gamma_{\mu}T^Au_3\right)\left(\bar{d}_3\gamma^{\mu}T^Ad_3\right)$	R
le_1111	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_1\gamma^\mu e_1)$	R
le_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$\mathbf{C}$
le_1113	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_1\gamma^\mu e_3)$	$\mathbf{C}$
le_1122	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_2\gamma^\mu e_2)$	R
le_1123	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_2\gamma^\mu e_3)$	$\mathbf{C}$
le_1133	$(ar{\ell}_1\gamma_\mu\ell_1)(ar{e}_3\gamma^\mu e_3)$	R
le_1211	$(ar{\ell}_1\gamma_\mu\ell_2)(ar{e}_1\gamma^\mu e_1)$	$^{\mathrm{C}}$
le_1212	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
le_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
le_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
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	$\left( \ell_1 \gamma_\mu \ell_3  ight) \left( ar{e}_2 \gamma^\mu e_2  ight)$	$\mathbf{C}$
le_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
le_1331	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_1 ight)$	$^{\mathrm{C}}$
le_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_2 ight)$	$\mathbf{C}$
le_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	$^{\mathrm{C}}$
le_2211	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_1 ight)$	R
le_2212	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_1\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$
le_2213	$\left( \ell_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_1 \gamma^\mu e_3 \right)$	$\mathbf{C}$
le_2222	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	R
le_2223	$\left( \ell_2 \gamma_\mu \ell_2 \right) \left( \bar{e}_2 \gamma^\mu e_3 \right)$	$^{\mathrm{C}}$
le_2233	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	R
le_2311	$\left(\underline{\ell}_{2}\gamma_{\mu}\ell_{3}\right)\left(ar{e}_{1}\gamma^{\mu}e_{1}\right)$	$\mathbf{C}$
le_2312	$\left( ar{\ell}_2 \gamma_\mu \ell_3  ight) \left( ar{e}_1 \gamma^\mu e_2  ight)$	$^{\mathrm{C}}$
le_2313	$\left( ar{\ell}_2 \gamma_\mu \ell_3  ight) \left( ar{e}_1 \gamma^\mu e_3  ight)$	$^{\mathrm{C}}$
le_2321	$\left( ar{\ell}_2 \gamma_\mu \ell_3  ight) \left( ar{e}_2 \gamma^\mu e_1  ight)$	$^{\mathrm{C}}$
le_2322	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	$^{\mathrm{C}}$

$\begin{array}{llllllllllllllllllllllllllllllllllll$	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_2323	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_3 ight)$	C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_2331		$\mathbf{C}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	le_2332		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_2333		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_3311	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{e}_1\gamma^\mu e_1)$	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		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	le_3322	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{e}_2\gamma^\mu e_2 ight)$	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	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{e}_3\gamma^\mu e_3 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1112	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1113	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1122	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1123		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1133	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1211	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1212		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1223	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	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	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1313		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1321		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1331		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lu_2211		R
lu_2222 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_2)$ R         lu_2223 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_3)$ C         lu_2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_3)$ R         lu_2311 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)$ C	_	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	
lu_2223 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_2\gamma^\mu u_3)$ C         lu_2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_3)$ R         lu_2311 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)$ C	lu_2213		$\mathbf{C}$
lu_2233 $(\bar{\ell}_2\gamma_\mu\ell_2)(\bar{u}_3\gamma^\mu u_3)$ R         lu_2311 $(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)$ C	lu_2222		
lu_2311 $(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_1)$ C	lu_2223		$\mathbf{C}$
	lu_2233		R
lu_2312 $ (\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_2) $ C	lu_2311		
	lu_2312	$\left(\ell_2\gamma_\mu\ell_3\right)(\bar{u}_1\gamma^\mu u_2)$	$^{\mathrm{C}}$

WC name	Operator	Type
lu_2313	$(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_3)$	С
lu_2321	$(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_1)$	$\mathbf{C}$
lu_2322	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{u}_2\gamma^\mu u_2)$	$\mathbf{C}$
lu_2323	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{u}_2\gamma^\mu u_3)$	$\mathbf{C}$
lu_2331	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{u}_3\gamma^\mu u_1)$	$\mathbf{C}$
lu_2332	$\left(ar{\ell}_2\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_2 ight)$	$\mathbf{C}$
lu_2333	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{u}_3\gamma^\mu u_3)$	$\mathbf{C}$
lu_3311	$(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_1)$	R
lu_3312	$(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_2)$	$\mathbf{C}$
lu_3313	$(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_1\gamma^\mu u_3)$	$^{\mathrm{C}}$
lu_3322	$(\bar{\ell}_3\gamma_\mu\ell_3)(\bar{u}_2\gamma^\mu u_2)$	R
lu_3323	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{u}_2\gamma^\mu u_3)$	$^{\mathrm{C}}$
lu_3333	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	R
ld_1111	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{d}_1\gamma^\mu d_1 ight)$	R
ld_1112	$\left(ar{\ell}_1\gamma_{\mu}\ell_1 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
ld_1113	$\left(ar{\ell}_1\gamma_{\mu}\ell_1 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
ld_1122	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	R
ld_1123	$\left(ar{\ell}_1\gamma_\mu\ell_1 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ld_1133	$\left(\ell_1\gamma_\mu\ell_1 ight)\left(d_3\gamma^\mu d_3 ight)$	R
ld_1211	$\left(ar{\ell}_1\gamma_{\mu}\ell_2 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
ld_1212	$\left(ar{\ell}_1\gamma_{\mu}\ell_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ld_1213	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ld_1221	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_2\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_1222	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1223	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1231	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_3\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_1232	$\left(ar{\ell}_1\gamma_{\mu}\ell_2 ight)\left(ar{d}_3\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
ld_1233	$\left(ar{\ell}_1\gamma_\mu\ell_2 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1311	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_1312	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1313	$\left(ar{\ell}_1\gamma_{\mu}\ell_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ld_1321	$\left(ar{\ell}_1\gamma_{\mu}\ell_3 ight)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
ld_1322	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1323	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	$\mathbf{C}$
ld_1331	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_1 ight)$	$\mathbf{C}$
ld_1332	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_1333	$\left(ar{\ell}_1\gamma_\mu\ell_3 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
ld_2211	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_1\gamma^\mu d_1 ight)$	R
ld_2212	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_1\gamma^\mu d_2 ight)$	$\mathbf{C}$
ld_2213	$\left(ar{\ell}_2\gamma_{\mu}\ell_2 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
ld_2222	$\left(ar{\ell}_2\gamma_{\mu}\ell_2 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
ld_2223	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_2\gamma^\mu d_3 ight)$	С

$\begin{array}{cccccccccccccccccccccccccccccccccccc$	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2233	$\left(ar{\ell}_2\gamma_\mu\ell_2 ight)\left(ar{d}_3\gamma^\mu d_3 ight)$	R
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2311	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{d}_1\gamma^\mu d_1)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2312	$(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_1\gamma^\mu d_2)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2313	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{d}_1\gamma^\mu d_3)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2321	$(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_1)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2322	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{d}_2\gamma^\mu d_2)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2323	$(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_2\gamma^\mu d_3)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2331	$(\bar{\ell}_2\gamma_\mu\ell_3)(\bar{d}_3\gamma^\mu d_1)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2332	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{d}_3\gamma^\mu d_2)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_2333	$(ar{\ell}_2\gamma_\mu\ell_3)(ar{d}_3\gamma^\mu d_3)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_3311	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{d}_1\gamma^\mu d_1)$	$\mathbf{R}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_3312		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_3313	$\left(ar{\ell}_3\gamma_\mu\ell_3 ight)\left(ar{d}_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_3322	$(ar{\ell}_3\gamma_\mu\ell_3)(ar{d}_2\gamma^\mu d_2)$	$\mathbf{R}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ld_3323		$\mathbf{C}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	ld_3333		$\mathbf{R}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qe_1111	$(ar{q}_1\gamma_\mu q_1)(ar{e}_1\gamma^\mu e_1)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qe_1112		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		
$\begin{array}{llll} & & & & & & & & & & & & & & & & & $			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{llll} \text{qe\_1323} & (\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_2\gamma^{\mu}e_3) & \text{C} \\ \text{qe\_1331} & (\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_3\gamma^{\mu}e_1) & \text{C} \\ \text{qe\_1332} & (\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_3\gamma^{\mu}e_2) & \text{C} \\ \text{qe\_1333} & (\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_3\gamma^{\mu}e_3) & \text{C} \\ \text{qe\_2211} & (\bar{q}_2\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_1) & \text{R} \\ \text{qe\_2212} & (\bar{q}_2\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_2) & \text{C} \end{array}$		$(\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_2\gamma^{\mu}e_2)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qe 1323	$(\bar{q}_1\gamma_\mu q_3)(\bar{e}_2\gamma^\mu e_3)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	qe_1331		
$\begin{array}{lll} \text{qe\_1333} & (\bar{q}_1\gamma_{\mu}q_3)(\bar{e}_3\gamma^{\mu}e_3) & \text{C} \\ \text{qe\_2211} & (\bar{q}_2\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_1) & \text{R} \\ \text{qe\_2212} & (\bar{q}_2\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_2) & \text{C} \end{array}$	qe_1332		
qe_2211 $(\bar{q}_2\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_1)$ R qe_2212 $(\bar{q}_2\gamma_{\mu}q_2)(\bar{e}_1\gamma^{\mu}e_2)$ C	qe_1333		
qe_2212 $ (\bar{q}_2\gamma_\mu q_2)(\bar{e}_1\gamma^\mu e_2) $ C	qe_2211		R
	qe_2212		
			$\mathbf{C}$

WC name	Operator	Type
qe_2222	$(ar{q}_2\gamma_\mu q_2)(ar{e}_2\gamma^\mu e_2)$	R
qe_2223	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
qe_2233	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{e}_3\gamma^{\mu}e_3 ight)$	$\mathbf{R}$
qe_2311	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_1 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{e}_3\gamma^{\mu}e_1 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_2 ight)$	$^{\mathrm{C}}$
qe_3313	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_1\gamma^{\mu}e_3 ight)$	$^{\mathrm{C}}$
qe_3322	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_2 ight)$	$\mathbf{R}$
qe_3323	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{e}_2\gamma^{\mu}e_3 ight)$	$\mathbf{C}$
qe_3333	$(ar{q}_3\gamma_\mu q_3)(ar{e}_3\gamma^\mu e_3)$	$\mathbf{R}$
qu1_1111	$\left(ar{q}_1\gamma_\mu q_1 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$\mathbf{R}$
qu1_1112	$\left(ar{q}_1\gamma_\mu q_1 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$\mathbf{C}$
qu1_1113	$\left(ar{q}_1\gamma_\mu q_1 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$\mathbf{C}$
qu1_1122	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	$\mathbf{R}$
qu1_1123	$\left(ar{q}_1\gamma_\mu q_1 ight)\left(ar{u}_2\gamma^\mu u_3 ight)$	$\mathbf{C}$
qu1_1133	$\left(ar{q}_1\gamma_\mu q_1 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$\mathbf{R}$
qu1_1211	$\left(ar{q}_1\gamma_\mu q_2 ight)\left(ar{u}_1\gamma^\mu u_1 ight)$	$\mathbf{C}$
qu1_1212	$\left(ar{q}_1\gamma_\mu q_2 ight)\left(ar{u}_1\gamma^\mu u_2 ight)$	$\mathbf{C}$
qu1_1213	$\left(ar{q}_1\gamma_\mu q_2 ight)\left(ar{u}_1\gamma^\mu u_3 ight)$	$\mathbf{C}$
qu1_1221	$(ar{q}_1\gamma_\mu q_2)(ar{u}_2\gamma^\mu u_1)$	$\mathbf{C}$
qu1_1222	$(ar{q}_1\gamma_\mu q_2)(ar{u}_2\gamma^\mu u_2)$	$\mathbf{C}$
qu1_1223	$(ar{q}_1\gamma_\mu q_2)(ar{u}_2\gamma^\mu u_3)$	$\mathbf{C}$
qu1_1231	$(ar{q}_1\gamma_\mu q_2)(ar{u}_3\gamma^\mu u_1)$	$\mathbf{C}$
qu1_1232	$\left(ar{q}_1\gamma_\mu q_2 ight)\left(ar{u}_3\gamma^\mu u_2 ight)$	$\mathbf{C}$
qu1_1233	$\left(ar{q}_1\gamma_\mu q_2 ight)\left(ar{u}_3\gamma^\mu u_3 ight)$	$\mathbf{C}$
qu1_1311	$(ar{q}_1\gamma_\mu q_3)(ar{u}_1\gamma^\mu u_1)$	$\mathbf{C}$
qu1_1312	$(ar{q}_1\gamma_\mu q_3)(ar{u}_1\gamma^\mu u_2)$	$\mathbf{C}$
qu1_1313	$(ar{q}_1\gamma_\mu q_3)(ar{u}_1\gamma^\mu u_3)$	$\mathbf{C}$
qu1_1321	$(ar{q}_1\gamma_\mu q_3)(ar{u}_2\gamma^\mu u_1)$	$\mathbf{C}$
qu1_1322	$(ar{q}_1\gamma_\mu q_3)(ar{u}_2\gamma^\mu u_2)$	$\mathbf{C}$
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	$(\bar{q}_1\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_2)$	$\mathbf{C}$
qu1_1333	$(ar{q}_1\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_3)$	$\mathbf{C}$
qu1_2211	$(ar{q}_2\gamma_\mu q_2)(ar{u}_1\gamma^\mu u_1)$	R
qu1_2212	$(ar{q}_2\gamma_\mu q_2)(ar{u}_1\gamma^\mu u_2)$	$\mathbf{C}$

WC name	Operator	Type
qu1_2213	$(\bar{q}_2\gamma_\mu q_2)(\bar{u}_1\gamma^\mu u_3)$	C
qu1_2222	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	R
qu1_2223	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_2233	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	R
qu1_2311	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	$\mathbf{C}$
qu1_2312	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	$\mathbf{C}$
qu1_2313	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_2321	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_1 ight)$	$\mathbf{C}$
qu1_2322	$\left(\bar{q}_2\gamma_{\mu}q_3\right)\left(\bar{u}_2\gamma^{\mu}u_2\right)$	$\mathbf{C}$
qu1_2323	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_2331	$(\bar{q}_2\gamma_\mu q_3)(\bar{u}_3\gamma^\mu u_1)$	$\mathbf{C}$
qu1_2332	$\left(\bar{q}_2\gamma_{\mu}q_3\right)\left(\bar{u}_3\gamma^{\mu}u_2\right)$	$\mathbf{C}$
qu1_2333	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{u}_3\gamma^{\mu}u_3 ight)$	$^{\mathrm{C}}$
qu1_3311	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_1 ight)$	R
qu1_3312	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_2 ight)$	C
qu1_3313	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_1\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_3322	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_2 ight)$	R
qu1_3323	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{u}_2\gamma^{\mu}u_3 ight)$	$\mathbf{C}$
qu1_3333	$(ar{q}_3\gamma_\mu q_3)(ar{u}_3\gamma^\mu u_3)$	R
qd1_1111	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
qd1_1112	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
qd1_1113	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
qd1_1122	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
qd1_1123	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
qd1_1133	$\left(ar{q}_1\gamma_{\mu}q_1 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	R
qd1_1211	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
qd1_1212	$\left(ar{q}_1\gamma_{\mu}q_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
qd1_1213	$(ar{q}_1\gamma_{\mu}q_2)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
qd1_1221	$(ar{q}_1\gamma_{\mu}q_2)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
qd1_1222	$(ar{q}_1\gamma_\mu q_2)\left(ar{d}_2\gamma^\mu d_2 ight)$	$\mathbf{C}$
qd1_1223	$(ar{q}_1\gamma_{\mu}q_2)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
qd1_1231	$(ar{q}_1\gamma_{\mu}q_2)\left(ar{d}_3\gamma^{\mu}d_1 ight)$	$\mathbf{C}$
qd1_1232	$(ar{q}_1\gamma_\mu q_2)(ar{d}_3\gamma^\mu d_2)$	$^{\mathrm{C}}$
qd1_1233	$(\bar{q}_1\gamma_{\mu}q_2)(\bar{d}_3\gamma^{\mu}d_3)$	$^{\mathrm{C}}$
qd1_1311	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_1\gamma^\mu d_1 ight)$	C
qd1_1312	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_1\gamma^\mu d_2 ight)$	$\mathbf{C}$
qd1_1313	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_1\gamma^\mu d_3 ight)$	$\mathbf{C}$
qd1_1321	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_2\gamma^\mu d_1 ight)$	$\mathbf{C}$
qd1_1322	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_2\gamma^\mu d_2 ight)$	$\dot{ ext{C}}$
qd1_1323	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_2\gamma^\mu d_3 ight) \ \left(ar{q}_1\gamma_\mu q_3 ight) \left(ar{d}_2\gamma^\mu d_3 ight)$	$\overset{\circ}{\mathrm{C}}$
qd1_1331	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_3\gamma^\mu d_1 ight)$	$\overset{\circ}{\mathrm{C}}$
qd1_1332	$(ar{q}_1/\mu q_3) \left(ar{d}_3/\mu d_1 ight) \ \left(ar{q}_1\gamma_\mu q_3 ight) \left(ar{d}_3\gamma^\mu d_2 ight)$	$\overset{\circ}{\mathrm{C}}$
qd1_1333	$(ar{q}_1\gamma_\mu q_3) \left(ar{d}_3\gamma^\mu d_3 ight) \ \left(ar{q}_1\gamma_\mu q_3 ight) \left(ar{d}_3\gamma^\mu d_3 ight)$	C
401_1000	$(41/\mu 43)(\alpha 3/\alpha 3)$	C

WC name	Operator	Type
qd1_2211	$(ar{q}_2\gamma_{\mu}q_2)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
qd1_2212	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
qd1_2213	$(ar{q}_2\gamma_{\mu}q_2)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
qd1_2222	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(d_2\gamma^{\mu}d_2 ight)$	R
qd1_2223	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
qd1_2233	$\left(ar{q}_2\gamma_{\mu}q_2 ight)\left(d_3\gamma^{\mu}d_3 ight)$	R
qd1_2311	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(d_1\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
qd1_2312	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
qd1_2313	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_1\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
qd1_2321	$(ar{q}_2\gamma_{\mu}q_3)\left(ar{d}_2\gamma^{\mu}d_1 ight)$	$^{\mathrm{C}}$
qd1_2322	$(ar{q}_2\gamma_{\mu}q_3)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	$^{\mathrm{C}}$
qd1_2323	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_2\gamma^\mu d_3 ight)$	$^{\mathrm{C}}$
qd1_2331	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_3\gamma^\mu d_1 ight)$	$^{\mathrm{C}}$
qd1_2332	$(ar{q}_2\gamma_\mu q_3)\left(ar{d}_3\gamma^\mu d_2 ight)$	$\mathbf{C}$
qd1_2333	$\left(ar{q}_2\gamma_{\mu}q_3 ight)\left(ar{d}_3\gamma^{\mu}d_3 ight)$	$^{\mathrm{C}}$
qd1_3311	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{d}_1\gamma^{\mu}d_1 ight)$	R
qd1_3312	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{d}_1\gamma^{\mu}d_2 ight)$	$\mathbf{C}$
qd1_3313	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(ar{d}_1\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
qd1_3322	$(ar{q}_3\gamma_{\mu}q_3)\left(ar{d}_2\gamma^{\mu}d_2 ight)$	R
qd1_3323	$(ar{q}_3\gamma_{\mu}q_3)\left(ar{d}_2\gamma^{\mu}d_3 ight)$	$\mathbf{C}$
qd1_3333	$\left(ar{q}_3\gamma_{\mu}q_3 ight)\left(d_3\gamma^{\mu}d_3 ight)$	R
qu8_1111	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{u}_1\gamma^{\mu}T^Au_1 ight)$	R
qu8_1112	$\left(ar{q}_1\gamma_{\mu}T^A_{}q_1 ight)\left(ar{u}_1\gamma^{\mu}T^A_{}u_2 ight)$	$^{\mathrm{C}}$
qu8_1113	$\left(ar{q}_1\gamma_{\mu}T^A_{}q_1 ight)\left(ar{u}_1\gamma^{\mu}T^A_{}u_3 ight)$	$^{\mathrm{C}}$
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	$\left( ar{q}_1 \gamma_\mu T^A q_1 \right) \left( ar{u}_2 \gamma^\mu T^A u_3 \right)$	$^{\mathrm{C}}$
qu8_1133	$\left(\bar{q}_1\gamma_\mu T^Aq_1\right)\left(\bar{u}_3\gamma^\mu T^Au_3\right)$	$\mathbf{R}$
qu8_1211	$\left( \bar{q}_1 \gamma_\mu T^A q_2 \right) \left( \bar{u}_1 \gamma^\mu T^A u_1 \right)$	$\stackrel{ ext{C}}{ ilde{\sim}}$
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	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_1\gamma^\mu T^Au_3 ight)$	C
qu8_1221	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_2\gamma^\mu T^Au_1 ight)$	C
qu8_1222	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_2\gamma^\mu T^Au_2 ight)$	C
qu8_1223	$\left(\bar{q}_1\gamma_{\mu}T^Aq_2\right)\left(\bar{u}_2\gamma^{\mu}T^Au_3\right)$	$^{ m C}_{ m C}$
qu8_1231	$\left(\bar{q}_1\gamma_{\mu}T^Aq_2\right)\left(\bar{u}_3\gamma^{\mu}T^Au_1\right)$	C
qu8_1232	$egin{aligned} \left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_3\gamma^\mu T^Au_2 ight) \ \left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{u}_3\gamma^\mu T^Au_3 ight) \end{aligned}$	C
qu8_1233 qu8_1311	$egin{array}{c} (q_1\gamma_\mu T_1q_2) & (u_3\gamma_1 T_2u_3) \ (ar q_1\gamma_\mu T_2^Aq_3) & (ar u_1\gamma^\mu T_2^Au_1) \end{array}$	$\stackrel{ m C}{ m C}$
qu8_1312	$egin{pmatrix} (q_1/\mu^1 & q_3) & (u_1/1 & u_1) \ (ar q_1\gamma_\mu T^A q_3) & (ar u_1\gamma^\mu T^A u_2) \end{pmatrix}$	C
qu8_1313	$egin{pmatrix} (q_1/\mu_1 & q_3) & (u_1/1 & u_2) \ (ar q_1\gamma_\mu T^A q_3) & (ar u_1\gamma^\mu T^A u_3) \end{pmatrix}$	C
qu8_1321	$egin{pmatrix} (q_1/\mu^2 & q_3) & (a_1/1 & a_3) \ (ar q_1\gamma_\mu T^A q_3) & (ar u_2\gamma^\mu T^A u_1) \end{pmatrix}$	$\overset{\circ}{\mathrm{C}}$
qu8_1322	$\begin{pmatrix} q_1/\mu_1 & q_3 \end{pmatrix} \begin{pmatrix} u_2/1 & w_1 \end{pmatrix} \begin{pmatrix} ar{q}_1 \gamma_\mu T^A q_3 \end{pmatrix} \begin{pmatrix} ar{u}_2 \gamma^\mu T^A u_2 \end{pmatrix}$	$\overset{\circ}{\mathrm{C}}$
	$\langle \bar{q}_1 \gamma_\mu T^A q_3 \rangle \langle \bar{u}_2 \gamma^\mu T^A u_3 \rangle$	
	$\langle \bar{q}_1 \gamma_\mu T^A q_3 \rangle \langle \bar{u}_3 \gamma^\mu T^A u_1 \rangle$	Č
qu8_1323 qu8_1331	$ \begin{array}{l} \left\langle \bar{q}_1 \gamma_{\mu} T^A q_3 \right\rangle \left\langle \bar{u}_2 \gamma^{\mu} T^A u_3 \right\rangle \\ \left\langle \bar{q}_1 \gamma_{\mu} T^A q_3 \right\rangle \left\langle \bar{u}_3 \gamma^{\mu} T^A u_1 \right\rangle \end{array} $	C C

WC name	Operator	Type
qu8_1332	$\left(ar{q}_1\gamma_{\mu}T^Aq_3\right)\left(ar{u}_3\gamma^{\mu}T^Au_2\right)$	C
qu8_1333	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_2211	$\left(ar{q}_2\gamma_{\mu}T^Aq_2 ight)\left(ar{u}_1\gamma^{\mu}T^Au_1 ight)$	R
qu8_2212	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{u}_1\gamma^\mu T^Au_2 ight)$	$^{\mathrm{C}}$
qu8_2213	$(ar{q}_2\gamma_\mu T^Aq_2)~(ar{u}_1\gamma^\mu T^Au_3)$	$^{\mathrm{C}}$
qu8_2222	$(ar{q}_2\gamma_\mu T^Aq_2)~(ar{u}_2\gamma^\mu T^Au_2)$	$\mathbf{R}$
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	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_1\gamma^\mu T^Au_1 ight)$	$^{\mathrm{C}}$
qu8_2312	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_2 ight)$	$\mathbf{C}$
qu8_2313	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_1\gamma^\mu T^Au_3 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_2\gamma^\mu T^Au_2 ight)$	$^{\mathrm{C}}$
qu8_2323	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_2\gamma^\mu T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_2331	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_1 ight)$	$^{\mathrm{C}}$
qu8_2332	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_3\gamma^\mu T^Au_2 ight)$	$^{\mathrm{C}}$
qu8_2333	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{u}_3\gamma^\mu T^Au_3 ight)$	$^{\mathrm{C}}$
qu8_3311	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_1 ight)$	R
qu8_3312	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_2 ight)$	$\mathbf{C}$
qu8_3313	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_1\gamma^{\mu}T^Au_3 ight)$	$\mathbf{C}$
qu8_3322	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_2 ight)$	R
qu8_3323	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_2\gamma^{\mu}T^Au_3 ight)$	$\mathbf{C}$
qu8_3333	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{u}_3\gamma^{\mu}T^Au_3 ight)$	R
qd8_1111	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	R
qd8_1112	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_2 ight)$	$\mathbf{C}$
qd8_1113	$\left(ar{q}_1\gamma_{\mu}T^Aq_1 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_1122	$\left\langle ar{q}_{1}\gamma_{\mu}T^{A}q_{1} ight angle \left\langle ar{d}_{2}\gamma^{\mu}T^{A}d_{2} ight angle $	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	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	$\mathbf{C}$
qd8_1212	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{d}_1\gamma^\mu T^Ad_2 ight)$	$\mathbf{C}$
qd8_1213	$(ar{q}_1\gamma_\mu T^Aq_2)~(ar{d}_1\gamma^\mu T^Ad_3)$	$\mathbf{C}$
qd8_1221	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_1 ight)$	$\mathbf{C}$
qd8_1222	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_1223	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{d}_2\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_1231	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{d}_3\gamma^\mu T^Ad_1 ight)$	$^{\mathrm{C}}$
qd8_1232	$\left(ar{q}_1\gamma_\mu T^Aq_2 ight)\left(ar{d}_3\gamma^\mu T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_1233	$\left(ar{q}_1\gamma_{\mu}T^Aq_2 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_1311	$egin{pmatrix} (ar{q}_1\gamma_{\mu}T^Aq_3) & (ar{d}_1\gamma^{\mu}T^Ad_1) \end{pmatrix}$	$^{\mathrm{C}}$
qd8_1312	$egin{array}{l} (ar{q}_1\gamma_\mu T^Aq_3) \left(ar{d}_1\gamma^\mu T^Ad_2 ight) \end{array}$	C
qd8_1313	$egin{array}{l} (ar{q}_1\gamma_\mu T^Aq_3) & (ar{d}_1\gamma^\mu T^Ad_3) \ (ar{q}_1\gamma_\mu T^Aq_3) & (ar{d}_1\gamma^\mu T^Ad_3) \end{array}$	$\overset{\circ}{\mathrm{C}}$
qd8_1321	$egin{array}{l} (ar{q}_1\gamma_\mu T^Aq_3) & (ar{d}_1\gamma^\mu T^Ad_1) \ (ar{q}_1\gamma_\mu T^Aq_3) & (ar{d}_2\gamma^\mu T^Ad_1) \end{array}$	$\overset{\circ}{\mathrm{C}}$
qd8_1322	$egin{pmatrix} (q_1/\mu^2 & q_3) & (a_2/1 & a_1) \ (ar{q}_1\gamma_\mu T^A q_3) & (ar{d}_2\gamma^\mu T^A d_2) \end{pmatrix}$	$\overset{\circ}{\mathrm{C}}$
1-0022	$(41/\mu - 43)(\sim 2/ - \sim 2)$	$\sim$

WC name	Operator	Type
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	$\left(ar{q}_1\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_1 ight)$	$^{\mathrm{C}}$
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	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{d}_1\gamma^\mu T^Ad_1 ight)$	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	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{d}_2\gamma^\mu T^Ad_3 ight)$	$^{\mathrm{C}}$
qd8_2233	$\left(ar{q}_2\gamma_\mu T^Aq_2 ight)\left(ar{d}_3\gamma^\mu T^Ad_3 ight)$	$\mathbf{R}$
qd8_2311	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_1 ight)$	$\mathbf{C}$
qd8_2312	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_2 ight)$	$^{\mathrm{C}}$
qd8_2313	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_1\gamma^\mu T^Ad_3 ight)$	$\mathbf{C}$
qd8_2321	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_1 ight)$	$\mathbf{C}$
qd8_2322	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_2 ight)$	$\mathbf{C}$
qd8_2323	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_2\gamma^\mu T^Ad_3 ight)$	$\mathbf{C}$
qd8_2331	$\left(ar{q}_2\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_3\gamma^{\mu}T^Ad_1 ight)$	$\mathbf{C}$
qd8_2332	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_3\gamma^\mu T^Ad_2 ight)$	$\mathbf{C}$
qd8_2333	$\left(ar{q}_2\gamma_\mu T^Aq_3 ight)\left(ar{d}_3\gamma^\mu T^Ad_3 ight)$	$\mathbf{C}$
qd8_3311	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_1 ight)$	R
qd8_3312	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_2 ight)$	$\mathbf{C}$
qd8_3313	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_1\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{C}$
qd8_3322	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_2 ight)$	R
qd8_3323	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(ar{d}_2\gamma^{\mu}T^Ad_3 ight)$	$\mathbf{C}$
qd8_3333	$\left(ar{q}_3\gamma_{\mu}T^Aq_3 ight)\left(d_3\gamma^{\mu}T^Ad_3 ight)$	R
ledq_1111	$\left( ar{\ell}_1 e_1  ight) \left( ar{d}_1 q_1  ight)$	$\mathbf{C}$
ledq_1112	$\left(\ell_1 e_1 ight)\left(d_1 q_2 ight)$	$\mathbf{C}$
ledq_1113	$\left( ar{\ell}_1 e_1  ight) \left( ar{d}_1 q_3  ight)$	$\mathbf{C}$
ledq_1121	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_2q_1 ight)$	$^{\mathrm{C}}$
ledq_1122	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_2q_2 ight)$	$\mathbf{C}$
ledq_1123	$\left( ar{\ell}_1 e_1  ight) \left( ar{d}_2 q_3  ight)$	$\mathbf{C}$
ledq_1131	$\left(ar{\ell}_1 e_1 ight)\left(ar{d}_3 q_1 ight)$	$^{\mathrm{C}}$
ledq_1132	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_2 ight)$	$\mathbf{C}$
ledq_1133	$\left(ar{\ell}_1e_1 ight)\left(ar{d}_3q_3 ight)$	$\mathbf{C}$
ledq_1211	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_1q_1 ight)$	С
ledq_1212	$(\ell_1e_2)\ (d_1q_2)$	$\mathbf{C}$
ledq_1213	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_1q_3 ight)$	$\mathbf{C}$
ledq_1221	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_2q_1 ight)$	$^{\mathrm{C}}$
ledq_1222	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_2q_2 ight)$	$^{\mathrm{C}}$
ledq_1223	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_2q_3 ight)$	$\mathbf{C}$
ledq_1231	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_3q_1 ight)$	$^{\mathrm{C}}$
ledq_1232	$\left(ar{\ell}_1e_2 ight)\left(ar{d}_3q_2 ight)$	$^{\mathrm{C}}$

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	WC name	Operator	Type
$\begin{array}{c} \operatorname{ledq_1311} & (\ell_1e_3) \left( d_1q_1 \right) & C \\ \operatorname{ledq_1312} & (\bar{\ell}_1e_3) \left( \bar{d}_1q_2 \right) & C \\ \operatorname{ledq_1313} & (\ell_1e_3) \left( \bar{d}_1q_3 \right) & C \\ \operatorname{ledq_1321} & (\bar{\ell}_1e_3) \left( \bar{d}_2q_1 \right) & C \\ \operatorname{ledq_1322} & (\ell_1e_3) \left( \bar{d}_2q_2 \right) & C \\ \operatorname{ledq_1322} & (\ell_1e_3) \left( \bar{d}_2q_3 \right) & C \\ \operatorname{ledq_1332} & (\ell_1e_3) \left( \bar{d}_3q_2 \right) & C \\ \operatorname{ledq_1333} & (\ell_1e_3) \left( \bar{d}_3q_2 \right) & C \\ \operatorname{ledq_1333} & (\ell_1e_3) \left( \bar{d}_3q_2 \right) & C \\ \operatorname{ledq_1333} & (\ell_1e_3) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_21113} & (\ell_2e_1) \left( \bar{d}_1q_1 \right) & C \\ \operatorname{ledq_21112} & (\ell_2e_1) \left( \bar{d}_1q_2 \right) & C \\ \operatorname{ledq_21123} & (\ell_2e_1) \left( \bar{d}_2q_1 \right) & C \\ \operatorname{ledq_2122} & (\ell_2e_1) \left( \bar{d}_2q_3 \right) & C \\ \operatorname{ledq_2122} & (\ell_2e_1) \left( \bar{d}_2q_3 \right) & C \\ \operatorname{ledq_2123} & (\ell_2e_1) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2133} & (\ell_2e_1) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_22132} & (\ell_2e_1) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_22133} & (\ell_2e_1) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2213} & (\ell_2e_1) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2213} & (\ell_2e_1) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2213} & (\ell_2e_2) \left( \bar{d}_1q_1 \right) & C \\ \operatorname{ledq_2213} & (\ell_2e_2) \left( \bar{d}_1q_1 \right) & C \\ \operatorname{ledq_2222} & (\ell_2e_2) \left( \bar{d}_2q_1 \right) & C \\ \operatorname{ledq_2223} & (\ell_2e_2) \left( \bar{d}_2q_1 \right) & C \\ \operatorname{ledq_2223} & (\ell_2e_2) \left( \bar{d}_2q_1 \right) & C \\ \operatorname{ledq_2223} & (\ell_2e_2) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2233} & (\ell_2e_2) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2233} & (\ell_2e_2) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2233} & (\ell_2e_2) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2233} & (\ell_2e_2) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2233} & (\ell_2e_2) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2233} & (\ell_2e_2) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2233} & (\ell_2e_2) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2331} & (\ell_2e_3) \left( \bar{d}_1q_1 \right) & C \\ \operatorname{ledq_2332} & (\ell_2e_3) \left( \bar{d}_2q_1 \right) & C \\ \operatorname{ledq_2333} & (\ell_2e_3) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2333} & (\ell_2e_3) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2333} & (\ell_2e_3) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2333} & (\ell_2e_3) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2333} & (\ell_2e_3) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2333} & (\ell_2e_3) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2333} & (\ell_2e_3) \left( \bar{d}_3q_3 \right) & C \\ \operatorname{ledq_2333} & (\ell_2e_3) \left( \bar{d}_3q_3 \right) & C \\ ledq_$	ledq_1233	$(\bar{\ell}_1 e_2) (\bar{d}_3 q_3)$	C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_1 e_3) (ar{d}_1 q_1)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	$(\bar{\ell}_1 e_3) (\bar{d}_1 q_2)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_1313	$(\bar{\ell}_1 e_3) (\bar{d}_1 q_3)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_1321		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	=		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_1 e_3)(\bar{d}_2 q_3)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_1333		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2111		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2112		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2113	$(ar{\ell}_2 e_1) \ (ar{d}_1 q_3)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_2 e_1) \ (ar{d}_2 q_1)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2122	$(ar{\ell}_2 e_1) \ (ar{d}_2 q_2)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2123	$ig(ar{\ell}_2 e_1ig)ig(ar{d}_2 q_3ig)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2131	$(ar{\ell}_2 e_1) \ (ar{d}_3 q_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2132		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2133	$\left(ar{\ell}_2 e_1 ight)\left(ar{d}_3 q_3 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$ig(ar{\ell}_2 e_2ig)ig(ar{d}_1 q_2ig)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$ig(ar{\ell}_2 e_2ig)ig(ar{d}_1 q_3ig)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2221	$(ar{\ell}_2 e_2) \ (ar{d}_2 q_1)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2222		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2223		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2231		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2232		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2233	$ig(ar{\ell}_2 e_2ig)ig(ar{d}_3 q_3ig)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2311	$ig(ar{\ell}_2 e_3ig)ig(ar{d}_1 q_1ig)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2312	$(ar{\ell}_2 e_3) \ (ar{d}_1 q_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2313	$(ar{\ell}_2 e_3) \ (ar{d}_1 q_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2321		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{\ell}_2 e_3 ight)\left(ar{d}_2 q_2 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2323	$(ar{\ell}_2 e_3) \ (ar{d}_2 q_3)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{\ell}_2 e_3 ight)\left(ar{d}_3 q_1 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$ig(ar{\ell}_2 e_3ig)ig(ar{d}_3 q_2ig)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_2333	$(ar{\ell}_2 e_3) \ (ar{d}_3 q_3)$	$^{\mathrm{C}}$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_3111	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_1 q_1 ight)$	
ledq_3113 $(\bar{\ell}_3 e_1) (\bar{d}_1 q_3)$ C ledq_3121 $(\bar{\ell}_3 e_1) (\bar{d}_2 q_1)$ C	ledq_3112	$\left(\ell_3e_1 ight)\left(d_1q_2 ight)$	
ledq_3121 $(ar{\ell}_3 e_1) (ar{d}_2 q_1)$ C	ledq_3113	$\left(ar{\ell}_3e_1 ight)\left(ar{d}_1q_3 ight)$	$^{\mathrm{C}}$
ledq_3122 $\left(ar{\ell}_3e_1 ight)\left(ar{d}_2q_2 ight)$ C	ledq_3121	$(ar{\ell}_3 e_1) \ (ar{d}_2 q_1)$	
	ledq_3122	$\left(ar{\ell}_3 e_1 ight)\left(ar{d}_2 q_2 ight)$	C

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_3123	$(ar{\ell}_3 e_1) \ (ar{d}_2 q_3)$	C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_3 e_1)(\bar{d}_3 q_1)$	$\mathbf{C}$
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	_	$(\bar{\ell}_3 e_1) (\bar{d}_3 q_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	$(\bar{\ell}_3 e_1) (\bar{d}_3 q_3)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(\bar{\ell}_3 e_2) (\bar{d}_1 q_2)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_3 e_2) (ar{d}_2 q_1)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_3 e_2) (ar{d}_2 q_2)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_3 e_2) (ar{d}_2 q_3)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_3232		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_3311		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_3312	$(ar{\ell}_3 e_3) (ar{d}_1 q_2)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_3321	$(ar{\ell}_3 e_3) (ar{d}_2 q_1)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_3322		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_3323		$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{\ell}_3 e_3) (ar{d}_3 q_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ledq_3333	$(ar{\ell}_3 e_3) (ar{d}_3 q_3)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd1_1111		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd1_1112	$\left(ar{q}_1 u_1 ight) \epsilon_{jk} \left(ar{q}_1 d_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{q}_{1}u_{1} ight)\epsilon_{jk}\left(ar{q}_{1}d_{3} ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$\left(ar{q}_{1}u_{1} ight)\epsilon_{jk}\left(ar{q}_{2}d_{1} ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		i i vi i	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
quqd1_1311 $(\bar{q}_1u_3) \epsilon_{jk} (\bar{q}_1d_1)$ C quqd1_1312 $(\bar{q}_1u_3) \epsilon_{jk} (\bar{q}_1d_2)$ C			
quqd1_1312 $(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_1 d_2)$ C			
1 1 = (1- v) J. (1)			

$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} $	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{c} \operatorname{quqd1}_{1331} & (\overline{q}_{1}u_{3})  \epsilon_{jk}  (\overline{q}_{3}d_{1}) \\ \operatorname{quqd1}_{1332} & (\overline{q}_{1}u_{3})  \epsilon_{jk}  (\overline{q}_{3}d_{2}) \\ \operatorname{quqd1}_{1333} & (\overline{q}_{1}u_{3})  \epsilon_{jk}  (\overline{q}_{3}d_{2}) \\ \operatorname{quqd1}_{2111} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{1}d_{1}) \\ \operatorname{quqd1}_{2112} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{1}d_{2}) \\ \operatorname{quqd1}_{2113} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{1}d_{2}) \\ \operatorname{quqd1}_{2121} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{2}d_{2}) \\ \operatorname{quqd1}_{2122} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{2}d_{2}) \\ \operatorname{quqd1}_{2123} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{2}d_{2}) \\ \operatorname{quqd1}_{2123} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{2}d_{3}) \\ \operatorname{quqd1}_{2131} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2132} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2133} & (\overline{q}_{2}u_{1})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{21211} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{1}d_{2}) \\ \operatorname{quqd1}_{2212} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{1}d_{2}) \\ \operatorname{quqd1}_{2212} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{1}d_{3}) \\ \operatorname{quqd1}_{2212} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{2}d_{1}) \\ \operatorname{quqd1}_{2222} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{2}d_{3}) \\ \operatorname{quqd1}_{2222} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{2}d_{3}) \\ \operatorname{quqd1}_{2223} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2233} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2231} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2232} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2333} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2312} & (\overline{q}_{2}u_{3})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2323} & (\overline{q}_{2}u_{2})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2323} & (\overline{q}_{2}u_{3})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2333} & (\overline{q}_{2}u_{3})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2333} & (\overline{q}_{2}u_{3})  \epsilon_{jk}  (\overline{q}_{3}d_{3}) \\ \operatorname{quqd1}_{2333} & (q$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	= =		
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{q}_2u_3)\epsilon_{jk}(ar{q}_2d_3)$	
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$		$(ar{q}_2u_3)\epsilon_{jk}(ar{q}_3d_3)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd1_3113	$(ar{q}_3u_1)\epsilon_{jk}(ar{q}_1d_3)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd1_3121	$(\bar{q}_3 u_1)  \epsilon_{jk}  (\bar{q}_2 d_1)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd1_3122	$(\bar{q}_3 u_1)  \epsilon_{jk}  (\bar{q}_2 d_2)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd1_3123	$(\bar{q}_3u_1)\epsilon_{jk}(\bar{q}_2d_3)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd1_3131		
quqd1_3133 $(\bar{q}_3 u_1) \epsilon_{jk} (\bar{q}_3 d_3)$ C quqd1_3211 $(\bar{q}_3 u_2) \epsilon_{jk} (\bar{q}_1 d_1)$ C	quqd1_3132		
quqd1_3211 $(\bar{q}_3 u_2) \epsilon_{jk} (\bar{q}_1 d_1)$ C	quqd1_3133		
quqd1_3212 $(\bar{q}_3u_2)\epsilon_{jk}(\bar{q}_1d_2)$ C	quqd1_3212		$\mathbf{C}$

WC name	Operator	Type
quqd1_3213	$\left(\bar{q}_{3}u_{2}\right)\epsilon_{jk}\left(\bar{q}_{1}d_{3}\right)$	С
quqd1_3221	$(ar{q}_3 u_2)  \epsilon_{jk}  (ar{q}_2 d_1)$	$^{\mathrm{C}}$
quqd1_3222	$(\bar{q}_3 u_2)  \epsilon_{jk}  (\bar{q}_2 d_2)$	$\mathbf{C}$
quqd1_3223	$(\bar{q}_3u_2)\epsilon_{jk}(\bar{q}_2d_3)$	$\mathbf{C}$
quqd1_3231	$(\bar{q}_3u_2)\epsilon_{jk}(\bar{q}_3d_1)$	$^{\mathrm{C}}$
quqd1_3232	$(\bar{q}_3 u_2)  \epsilon_{jk}  (\bar{q}_3 d_2)$	C
quqd1_3233	$(\bar{q}_3 u_2)  \epsilon_{jk}  (\bar{q}_3 d_3)$	C
quqd1_3311	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_1d_1)$	C
quqd1_3312	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_1d_2)$	C
quqd1_3313	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_1d_3)$	$\mathbf{C}$
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	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{2}d_{3} ight)$	C
quqd1_3331	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{1} ight)$	C
quqd1_3332	$\left(ar{q}_{3}u_{3} ight)\epsilon_{jk}\left(ar{q}_{3}d_{2} ight)$	C
quqd1_3333	$(ar{q}_3u_3)\epsilon_{jk}(ar{q}_3d_3)$	C
quqd8_1111	$\left(\bar{q}_1 T^A u_1\right) \epsilon_{jk} \left(\bar{q}_1 T^A d_1\right)$	C
quqd8_1112	$\left(ar{q}_1 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_2 ight)$	C
quqd8_1113	$\left(ar{q}_1 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_3 ight)$	$^{\mathrm{C}}$
quqd8_1121	$\left(ar{q}_1 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_1 ight)$	$\mathbf{C}$
quqd8_1122	$\left(ar{q}_1 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_2 ight)$	$^{\mathrm{C}}$
quqd8_1123	$\left(ar{q}_1 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_3 ight)$	$\mathbf{C}$
quqd8_1131	$\left(ar{q}_1 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_1 ight)$	$\mathbf{C}$
quqd8_1132	$\left(ar{q}_1 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_2 ight)$	$\mathbf{C}$
quqd8_1133	$\left(ar{q}_1 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_3 ight)$	$\mathbf{C}$
quqd8_1211	$\left(ar{q}_1 T^A u_2\right) \epsilon_{jk} \left(ar{q}_1 T^A d_1\right)$	$\mathbf{C}$
quqd8_1212	$\left(ar{q}_1 T^A u_2\right) \epsilon_{jk} \left(ar{q}_1 T^A d_2\right)$	$\mathbf{C}$
quqd8_1213	$\left(ar{q}_1 T^A u_2\right) \epsilon_{jk} \left(ar{q}_1 T^A d_3\right)$	$\mathbf{C}$
quqd8_1221	$\left(ar{q}_1 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_1 ight)$	$\mathbf{C}$
quqd8_1222	$\left(ar{q}_1 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_2 ight)$	$\mathbf{C}$
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	$\left(ar{q}_1 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_3 ight)$	$\mathbf{C}$
quqd8_1311	$\left(ar{q}_1 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_1 ight)$	$^{\mathrm{C}}$
quqd8_1312	$\left\langle ar{q}_1 T^A u_3 \right angle \epsilon_{jk} \left\langle ar{q}_1 T^A d_2  ight angle$	$\mathbf{C}$
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	$\left(\bar{q}_1 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_2 T^A d_3\right)$	$\mathbf{C}$
quqd8_1331	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_1)$	$\mathbf{C}$
quqd8_1332	$\left(\bar{q}_1 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_2\right)$	$\mathbf{C}$
quqd8_1333	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	$\mathbf{C}$
quqd8_2111	$\left(ar{q}_2 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_1 ight)$	$\mathbf{C}$

$\begin{array}{c} \operatorname{quqd8\_2112} & (\bar{q}_2T^Au_1) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_2) \\ \operatorname{qud48\_2113} & (\bar{q}_2T^Au_1) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_3) \\ \operatorname{quqd8\_2122} & (\bar{q}_2T^Au_1) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_1) \\ \operatorname{quqd8\_2122} & (\bar{q}_2T^Au_1) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2123} & (\bar{q}_2T^Au_1) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2123} & (\bar{q}_2T^Au_1) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2133} & (\bar{q}_2T^Au_1) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2133} & (\bar{q}_2T^Au_1) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2133} & (\bar{q}_2T^Au_1) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2211} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_1) \\ \operatorname{quqd8\_2212} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_3) \\ \operatorname{quqd8\_2212} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_3) \\ \operatorname{quqd8\_2221} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2222} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2223} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2223} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2233} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_2T^Ad_2) \\ \operatorname{quqd8\_2233} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_3T^Ad_3) \\ \operatorname{quqd8\_2233} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_3T^Ad_3) \\ \operatorname{quqd8\_2331} & (\bar{q}_2T^Au_2) \ \epsilon_{jk} \ (\bar{q}_3T^Ad_3) \\ \operatorname{quqd8\_2331} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_2) \\ \operatorname{quqd8\_2331} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_3) \\ \operatorname{quqd8\_2331} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_3) \\ \operatorname{quqd8\_2331} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_3) \\ \operatorname{quqd8\_2331} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_2) \\ \operatorname{quqd8\_2332} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_1T^Ad_2) \\ \operatorname{quqd8\_2332} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_3T^Ad_1) \\ \operatorname{quqd8\_2332} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_3T^Ad_3) \\ \operatorname{quqd8\_2331} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_3T^Ad_3) \\ \operatorname{quqd8\_2332} & (\bar{q}_2T^Au_3) \ \epsilon_{jk} \ (\bar{q}_3T^Ad_3) \\ \operatorname{quqd8\_2333} & (\bar{q}_3T^Au_1) \ \epsilon_{jk} \ (\bar{q}_3T^Ad_3) \\ \operatorname{quqd8\_2332} & (\bar{q}_3T^Au_1) \ $	WC name	Operator	Type
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2112	$(\bar{q}_2 T^A u_1) \epsilon_{ik} (\bar{q}_1 T^A d_2)$	С
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		> _ 4 〈 * ` > _ 4 - 〈	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		> _ 4 〈 * ` > _ 4 - 〈	$\mathbf{C}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$		\( - \pi A \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	$\mathbf{C}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$\left\langle ar{q}_2 T^A u_1 \right angle \epsilon_{jk} \left\langle ar{q}_2 T^A d_3 \right angle$	$\mathbf{C}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$		$\left( ar{q}_{2}T^{A}u_{1} ight) \epsilon_{jk}\left( ar{q}_{3}T^{A}d_{1} ight)$	$\mathbf{C}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	quqd8_2132	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2133		C
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2211		$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	quqd8_2212		$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	quqd8_2213	$\left( ar{q}_{2}T^{A}u_{2} ight) \epsilon_{jk}\left( ar{q}_{1}T^{A}d_{3} ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2221	$\left(ar{q}_2 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_1 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2222	$\left(ar{q}_2 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2223		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2231	/- m/	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2232		$^{\mathrm{C}}$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	quqd8_2233	$\left( ar{q}_{2}T^{A}u_{2} ight) \epsilon_{jk}\left( ar{q}_{3}T^{A}d_{3} ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2311	$\left(ar{q}_2 T^A u_3\right) \epsilon_{jk} \left(ar{q}_1 T^A d_1\right)$	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	quqd8_2312	$\left(ar{q}_2 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2323		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2331	$\left(ar{q}_2 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_1 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2332	$\left(ar{q}_2 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_2333	$\left(ar{q}_2 T^A u_3 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3111	$\left(ar{q}_3 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_1 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3112	$\left(ar{q}_3 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_2 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3113	$\left(ar{q}_3 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3121		$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3122	$\left(ar{q}_3 T^A u_1 ight)\epsilon_{jk}\left(ar{q}_2 T^A d_2 ight)$	$^{\mathrm{C}}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3123	$\left(ar{q}_3 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_3 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3131	$\left(ar{q}_3 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_1 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3132		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3133	$\left(ar{q}_3 T^A u_1 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_3 ight)$	$\mathbf{C}$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3211	$\left(ar{q}_3 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_1 ight)$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	quqd8_3212	$\left(ar{q}_3 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_1 T^A d_2 ight)$	
$\begin{array}{llllllllllllllllllllllllllllllllllll$	quqd8_3213	$(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	$^{\mathrm{C}}$
quqd8_3223 $(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_3)$ C         quqd8_3231 $(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_1)$ C         quqd8_3232 $(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_2)$ C	quqd8_3221	$(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	
quqd8_3231 $\left(\bar{q}_3T^Au_2\right)\epsilon_{jk}\left(\bar{q}_3T^Ad_1\right)$ C quqd8_3232 $\left(\bar{q}_3T^Au_2\right)\epsilon_{jk}\left(\bar{q}_3T^Ad_2\right)$ C	quqd8_3222	$\left(ar{q}_3 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_2 ight)$	
quqd8_3231 $(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_1)$ C quqd8_3232 $(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_2)$ C		$\left(ar{q}_3 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_2 T^A d_3 ight)$	
quqd8_3232 $(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_2)$ C quqd8_3233 $(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_3)$ C			
quqd8_3233 $\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$ C		$\left(ar{q}_3 T^A u_2 ight) \epsilon_{jk} \left(ar{q}_3 T^A d_2 ight)$	
	quqd8_3233	$\left(\bar{q}_3 T^A u_2\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$	$^{\mathrm{C}}$

WC name	Operator	Type
quqd8_3311	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_3312	$\left\langle ar{q}_{3}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{2} ight angle$	$\mathbf{C}$
quqd8_3313	$\left\langle ar{q}_{3}T^{A}u_{3} ight angle \epsilon_{jk}\left\langle ar{q}_{1}T^{A}d_{3} ight angle$	С
quqd8_3321	$\left( ar{q}_{3}T^{A}u_{3} ight) \epsilon_{jk}\left( ar{q}_{2}T^{A}d_{1} ight)$	$\mathbf{C}$
quqd8_3322	$\left( ar{q}_{3}T^{A}u_{3} ight) \epsilon_{jk}\left( ar{q}_{2}T^{A}d_{2} ight)$	C
quqd8_3323	$\left( ar{q}_{3}T^{A}u_{3} ight) \epsilon_{jk}\left( ar{q}_{2}T^{A}d_{3} ight)$	$\mathbf{C}$
quqd8_3331	$\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_1\right)$	$\mathbf{C}$
quqd8_3332	$\left( ar{q}_{3}T^{A}u_{3} ight) \epsilon_{jk}\left( ar{q}_{3}T^{A}d_{2} ight)$	C
quqd8_3333	$\left(\bar{q}_3 T^A u_3\right) \epsilon_{jk} \left(\bar{q}_3 T^A d_3\right)$	$^{\mathrm{C}}$
lequ1_1111	$\left( \ell_{1}e_{1}\right) \epsilon_{jk}\left( ar{q}_{1}u_{1} ight)$	$^{\mathrm{C}}$
lequ1_1112	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_1 u_2\right)$	$\mathbf{C}$
lequ1_1113	$\left( \ell_{1}e_{1} ight) \epsilon_{jk}\left( ar{q}_{1}u_{3} ight)$	$\mathbf{C}$
lequ1_1121	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_2 u_1\right)$	$\mathbf{C}$
lequ1_1122	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_2 u_2\right)$	$\mathbf{C}$
lequ1_1123	$\left( \ell_{1}e_{1} ight) \epsilon_{jk}\left( ar{q}_{2}u_{3} ight)$	$\mathbf{C}$
lequ1_1131	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_3 u_1\right)$	$\mathbf{C}$
lequ1_1132	$\left(\underline{\ell}_1 e_1\right) \epsilon_{jk} \left(\overline{q}_3 u_2\right)$	C
lequ1_1133	$\left(ar{\ell}_{1}e_{1} ight)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	C
lequ1_1211	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}u_{1} ight)$	C
lequ1_1212	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}u_{2} ight)$	С
lequ1_1213	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}u_{3} ight)$	С
lequ1_1221	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}u_{1} ight)$	С
lequ1_1222	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}u_{2} ight)$	$\mathbf{C}$
lequ1_1223	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}u_{3} ight)$	$\mathbf{C}$
lequ1_1231	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}u_{1} ight)$	$\mathbf{C}$
lequ1_1232	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}u_{2} ight)$	С
lequ1_1233	$\left(ar{\ell}_{1}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	С
lequ1_1311	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_1312	$(ar{\ell}_1 e_3)  \epsilon_{jk}  (ar{q}_1 u_2)$	$\mathbf{C}$
lequ1_1313	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_1 u_3)$	$\mathbf{C}$
lequ1_1321	$(\bar{\ell}_1 e_3)  \epsilon_{jk}  (\bar{q}_2 u_1)$	$\mathbf{C}$
lequ1_1322	$\left(ar{\ell}_1 e_3\right) \epsilon_{jk} \left(ar{q}_2 u_2\right)$	$\mathbf{C}$
lequ1_1323	$(\bar{\ell}_1 e_3)  \epsilon_{jk}  (\bar{q}_2 u_3)$	C
lequ1_1331	$(ar{\ell}_1 e_3) \epsilon_{jk} (ar{q}_3 u_1)$	C
lequ1_1332	$\left(ar{\ell}_1 e_3 ight)\epsilon_{jk}\left(ar{q}_3 u_2 ight)$	C
lequ1_1333	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_3)$	$\mathbf{C}$
lequ1_2111	$(ar{\ell}_2 e_1) \epsilon_{jk} (ar{q}_1 u_1)$	$\mathbf{C}$
lequ1_2112	$(ar{\ell}_2 e_1)  \epsilon_{jk}  (ar{q}_1 u_2)$	$\mathbf{C}$
lequ1_2113	$(ar{\ell}_2 e_1)  \epsilon_{jk}  (ar{q}_1 u_3)$	$\mathbf{C}$
lequ1_2121	$(ar{\ell}_2 e_1)  \epsilon_{jk}  (ar{q}_2 u_1)$	$\mathbf{C}$
lequ1_2122	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_2)$	$\mathbf{C}$
lequ1_2123	$(ar{\ell}_2 e_1)  \epsilon_{jk}  (ar{q}_2 u_3)$	$\mathbf{C}$

WC name	Operator	Type
lequ1_2131	$\left(ar{\ell}_{2}e_{1}\right)\epsilon_{jk}\left(ar{q}_{3}u_{1} ight)$	С
lequ1_2132	$\left(ar{\ell}_{2}e_{1} ight)\epsilon_{jk}\left(ar{q}_{3}u_{2} ight)$	$\mathbf{C}$
lequ1_2133	$\left(ar{\ell}_{2}e_{1} ight)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	$\mathbf{C}$
lequ1_2211	$\left(ar{\ell}_{2}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}u_{1} ight)$	$\mathbf{C}$
lequ1_2212	$\left(ar{\ell}_{2}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}u_{2} ight)$	$\mathbf{C}$
lequ1_2213	$\left(ar{\ell}_{2}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}u_{3} ight)$	$\mathbf{C}$
lequ1_2221	$\left(ar{\ell}_{2}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}u_{1} ight)$	$^{\mathrm{C}}$
lequ1_2222	$\left(ar{\ell}_2 e_2\right) \epsilon_{jk} \left(ar{q}_2 u_2 ight)$	$^{\mathrm{C}}$
lequ1_2223	$\left(ar{\ell}_{2}e_{2} ight)\epsilon_{jk}\left(ar{q}_{2}u_{3} ight)$	$^{\mathrm{C}}$
lequ1_2231	$\left(ar{\ell}_2 e_2\right) \epsilon_{jk} \left(ar{q}_3 u_1 ight)$	$^{\mathrm{C}}$
lequ1_2232	$\left(ar{\ell}_{2}e_{2} ight)\epsilon_{jk}\left(ar{q}_{3}u_{2} ight)$	$^{\mathrm{C}}$
lequ1_2233	$\left(ar{\ell}_2 e_2\right) \epsilon_{jk} \left(ar{q}_3 u_3 ight)$	$^{\mathrm{C}}$
lequ1_2311	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_1 u_1 ight)$	$^{\mathrm{C}}$
lequ1_2312	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_1 u_2 ight)$	$\mathbf{C}$
lequ1_2313	$\left(ar{\ell}_{2}e_{3} ight)\epsilon_{jk}\left(ar{q}_{1}u_{3} ight)$	$^{\mathrm{C}}$
lequ1_2321	$\left(ar{\ell}_{2}e_{3} ight)\epsilon_{jk}\left(ar{q}_{2}u_{1} ight)$	$^{\mathrm{C}}$
lequ1_2322	$\left(ar{\ell}_{2}e_{3} ight)\epsilon_{jk}\left(ar{q}_{2}u_{2} ight)$	$\mathbf{C}$
lequ1_2323	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_2 u_3 ight)$	$\mathbf{C}$
lequ1_2331	$\left(ar{\ell}_{2}e_{3} ight)\epsilon_{jk}\left(ar{q}_{3}u_{1} ight)$	$\mathbf{C}$
lequ1_2332	$\left(ar{\ell}_2 e_3 ight)\epsilon_{jk}\left(ar{q}_3 u_2 ight)$	$\mathbf{C}$
lequ1_2333	$\left(ar{\ell}_{2}e_{3} ight)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	$\mathbf{C}$
lequ1_3111	$\left(ar{\ell}_3 e_1 ight)\epsilon_{jk}\left(ar{q}_1 u_1 ight)$	$\mathbf{C}$
lequ1_3112	$\left(\underline{\ell}_{3}e_{1}\right)\epsilon_{jk}\left(ar{q}_{1}u_{2} ight)$	$\mathbf{C}$
lequ1_3113	$\left(\underline{\ell}_{3}e_{1}\right)\epsilon_{jk}\left(ar{q}_{1}u_{3}\right)$	$\mathbf{C}$
lequ1_3121	$\left( ar{\ell}_{3}e_{1} ight) \epsilon_{jk}\left( ar{q}_{2}u_{1} ight)$	$\mathbf{C}$
lequ1_3122	$\left(ar{\ell}_{3}e_{1} ight)\epsilon_{jk}\left(ar{q}_{2}u_{2} ight)$	$\mathbf{C}$
lequ1_3123	$\left(\ell_3 e_1\right) \epsilon_{jk} \left(ar{q}_2 u_3\right)$	$\mathbf{C}$
lequ1_3131	$\left( ar{\ell}_{3}e_{1} ight) \epsilon_{jk}\left( ar{q}_{3}u_{1} ight)$	$\mathbf{C}$
lequ1_3132	$\left( \ell_{3}e_{1}\right) \epsilon_{jk}\left( ar{q}_{3}u_{2} ight)$	$\mathbf{C}$
lequ1_3133	$\left(\underline{\ell}_{3}e_{1}\right)\epsilon_{jk}\left(ar{q}_{3}u_{3}\right)$	$\mathbf{C}$
lequ1_3211	$\left(\underline{\ell}_{3}e_{2}\right)\epsilon_{jk}\left(ar{q}_{1}u_{1} ight)$	$\mathbf{C}$
lequ1_3212	$\left(\underline{\ell}_{3}e_{2}\right)\epsilon_{jk}\left(ar{q}_{1}u_{2}\right)$	$\mathbf{C}$
lequ1_3213	$\left(\underline{\ell}_{3}e_{2}\right)\epsilon_{jk}\left(ar{q}_{1}u_{3}\right)$	$\mathbf{C}$
lequ1_3221	$\left(\underline{\ell}_{3}e_{2}\right)\epsilon_{jk}\left(ar{q}_{2}u_{1} ight)$	$\mathbf{C}$
lequ1_3222	$\left( \ell_{3}e_{2} ight) \epsilon_{jk}\left( ar{q}_{2}u_{2} ight)$	$\mathbf{C}$
lequ1_3223	$\left(\underline{\ell}_{3}e_{2}\right)\epsilon_{jk}\left(ar{q}_{2}u_{3}\right)$	$\mathbf{C}$
lequ1_3231	$\left(\underline{\ell}_{3}e_{2}\right)\epsilon_{jk}\left(\bar{q}_{3}u_{1}\right)$	$\mathbf{C}$
lequ1_3232	$\left( \ell_{3}e_{2}\right) \epsilon_{jk}\left( ar{q}_{3}u_{2} ight)$	$\mathbf{C}$
lequ1_3233	$\left(\ell_{3}e_{2}\right)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	C
lequ1_3311	$\left( ar{\ell_{3}}e_{3} ight) \epsilon_{jk}\left( ar{q}_{1}u_{1} ight)$	$\mathbf{C}$
lequ1_3312	$\left(ar{\ell}_3 e_3 ight) \epsilon_{jk} \left(ar{q}_1 u_2 ight)$	$\mathbf{C}$
lequ1_3313	$\left(ar{\ell}_3 e_3\right) \epsilon_{jk} \left(ar{q}_1 u_3\right)$	С

WC name	Operator	Type
lequ1_3321	$\left(ar{\ell}_3 e_3\right) \epsilon_{jk} \left(ar{q}_2 u_1\right)$	C
lequ1_3322	$\left(ar{\ell}_{3}e_{3} ight)\epsilon_{jk}\left(ar{q}_{2}u_{2} ight)$	$\mathbf{C}$
lequ1_3323	$\left(ar{\ell}_{3}e_{3} ight)\epsilon_{jk}\left(ar{q}_{2}u_{3} ight)$	$\mathbf{C}$
lequ1_3331	$(ar{\ell}_3 e_3)  \epsilon_{jk}  (ar{q}_3 u_1)$	$\mathbf{C}$
lequ1_3332	$\left(ar{\ell}_{3}e_{3} ight)\epsilon_{jk}\left(ar{q}_{3}u_{2} ight)$	$\mathbf{C}$
lequ1_3333	$\left(ar{\ell}_{3}e_{3} ight)\epsilon_{jk}\left(ar{q}_{3}u_{3} ight)$	$\mathbf{C}$
lequ3_1111	$\left(\bar{\ell}_1 \sigma_{\mu  u} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu  u} u_1\right)$	$\mathbf{C}$
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	$\left(\bar{\ell}_1 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$	$\mathbf{C}$
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	$\left(\bar{\ell}_1\sigma_{\mu u}e_1\right)\epsilon_{jk}\left(\bar{q}_2\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_1131	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	С
lequ3_1132	$\left(\bar{\ell}_1\sigma_{\mu u}e_1\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu u}u_2\right)$	С
lequ3_1133	$\left(ar{\ell}_1\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	С
lequ3_1211	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	С
lequ3_1212	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	С
lequ3_1213	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	С
lequ3_1221	$\left(\ell_1 \sigma_{\mu  u} e_2\right) \epsilon_{jk} \left( \bar{q}_2 \sigma^{\mu  u} u_1 \right)$	С
lequ3_1222	$\left(\ell_1 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_2\right)$	С
lequ3_1223	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_1231	$\left(\ell_1 \sigma_{\mu  u} e_2\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu  u} u_1\right)$	С
lequ3_1232	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_1233	$\left(ar{\ell}_1\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_1311	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_1312	$\left(\ell_{1}\sigma_{\mu u}e_{3} ight)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu u}u_{2} ight)$	$^{\mathrm{C}}$
lequ3_1313	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_1321	$\left( ar{\ell}_1 \sigma_{\mu  u} e_3  ight) \epsilon_{jk} \left( ar{q}_2 \sigma^{\mu  u} u_1  ight)$	$^{\mathrm{C}}$
lequ3_1322	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_1323	$\left(\ell_{1}\sigma_{\mu u}e_{3} ight)\epsilon_{jk}\left(ar{q}_{2}\sigma^{\mu u}u_{3} ight)$	$^{\mathrm{C}}$
lequ3_1331	$\left( \overline{\ell}_1 \sigma_{\mu  u} e_3 \right) \epsilon_{jk} \left( \overline{q}_3 \sigma^{\mu  u} u_1 \right)$	$^{\mathrm{C}}$
lequ3_1332	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_1333	$\left(ar{\ell}_1\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_2111	$\left( \overline{\ell}_2 \sigma_{\mu  u} e_1 \right) \epsilon_{jk} \left( \overline{q}_1 \sigma^{\mu  u} u_1 \right)$	$\mathbf{C}$
lequ3_2112	$\left( \overline{\ell}_2 \sigma_{\mu  u} e_1 \right) \epsilon_{jk} \left( \overline{q}_1 \sigma^{\mu  u} u_2 \right)$	$^{\mathrm{C}}$
lequ3_2113	$\left( \overline{\ell}_{2} \sigma_{\mu  u} e_{1} \right) \epsilon_{jk} \left( \overline{q}_{1} \sigma^{\mu  u} u_{3} \right)$	$^{\mathrm{C}}$
lequ3_2121	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_2122	$\left(ar{\ell}_2\sigma_{\mu u}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_2123	$\left(\underline{\ell}_{2}\sigma_{\mu\nu}e_{1}\right)\epsilon_{jk}\left(\bar{q}_{2}\sigma^{\mu\nu}u_{3}\right)$	$^{\mathrm{C}}$
lequ3_2131	$\left(\underline{\ell}_{2}\sigma_{\mu u}e_{1} ight)\epsilon_{jk}\left(ar{q}_{3}\sigma^{\mu u}u_{1} ight)$	$\mathbf{C}$
lequ3_2132	$\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_2\right)$	$^{\mathrm{C}}$
lequ3_2133	$\left(\bar{\ell}_2 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_3\right)$	$\mathbf{C}$

WC name	Operator	Type
lequ3_2211	$\left(\bar{\ell}_2 \sigma_{\mu\nu} e_2\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$	С
lequ3_2212	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_2213	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_2221	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_2222	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_2223	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_2231	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$\mathbf{C}$
lequ3_2232	$\left(ar{\ell}_2\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_2233	$\left(\bar{\ell}_2\sigma_{\mu\nu}e_2\right)\epsilon_{jk}\left(\bar{q}_3\sigma^{\mu\nu}u_3\right)$	$^{\mathrm{C}}$
lequ3_2311	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_2312	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_2313	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_2321	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_2322	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_2323	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_2331	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_2332	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_2333	$\left(ar{\ell}_2\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_3111	$\left(\ell_3 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_1\right)$	$^{\mathrm{C}}$
lequ3_3112	$\left(\ell_3 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_2\right)$	$^{\mathrm{C}}$
lequ3_3113	$\left(\ell_3 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_1 \sigma^{\mu\nu} u_3\right)$	$^{\mathrm{C}}$
lequ3_3121	$\left(\ell_3 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_1\right)$	$^{\mathrm{C}}$
lequ3_3122	$\left(\ell_{3}\sigma_{\mu u}e_{1} ight)\epsilon_{jk}\left(ar{q}_{2}\sigma^{\mu u}u_{2} ight)$	$^{\mathrm{C}}$
lequ3_3123	$\left(\ell_3\sigma_{\mu\nu}e_1 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_3131	$\left(\ell_3 \sigma_{\mu\nu} e_1\right) \epsilon_{jk} \left(\bar{q}_3 \sigma^{\mu\nu} u_1\right)$	$^{\mathrm{C}}$
lequ3_3132	$\left(\underline{\ell}_{3}\sigma_{\mu\nu}e_{1}\right)\epsilon_{jk}\left(\bar{q}_{3}\sigma^{\mu\nu}u_{2}\right)$	$^{\mathrm{C}}$
lequ3_3133	$\left(\ell_{3}\sigma_{\mu\nu}e_{1}\right)\epsilon_{jk}\left(ar{q}_{3}\sigma^{\mu\nu}u_{3} ight)$	$^{\mathrm{C}}$
lequ3_3211	$\left(ar{\ell}_{3}\sigma_{\mu u}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu u}u_{1} ight)$	$^{\mathrm{C}}$
lequ3_3212	$\left(\ell_{3}\sigma_{\mu\nu}e_{2} ight)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu\nu}u_{2} ight)$	$^{\mathrm{C}}$
lequ3_3213	$\left(\underline{\ell}_{3}\sigma_{\mu u}e_{2}\right)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu u}u_{3} ight)$	$\mathbf{C}$
lequ3_3221	$\left( \overline{\ell}_{3} \sigma_{\mu  u} e_{2} \right) \epsilon_{jk} \left( \overline{q}_{2} \sigma^{\mu  u} u_{1} \right)$	$\mathbf{C}$
lequ3_3222	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$\mathbf{C}$
lequ3_3223	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_3231	$\left( \overline{\ell}_3 \sigma_{\mu  u} e_2 \right) \epsilon_{jk} \left( \overline{q}_3 \sigma^{\mu  u} u_1 \right)$	$\mathbf{C}$
lequ3_3232	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_2 ight)$	С
lequ3_3233	$\left(ar{\ell}_3\sigma_{\mu u}e_2 ight)\epsilon_{jk}\left(ar{q}_3\sigma^{\mu u}u_3 ight)$	$^{\mathrm{C}}$
lequ3_3311	$\left(ar{\ell}_3\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_1 ight)$	$^{\mathrm{C}}$
lequ3_3312	$\left(ar{\ell}_{3}\sigma_{\mu u}e_{3} ight)\epsilon_{jk}\left(ar{q}_{1}\sigma^{\mu u}u_{2} ight)$	$^{\mathrm{C}}$
lequ3_3313	$\left(ar{\ell}_3\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_1\sigma^{\mu u}u_3 ight)$	$\mathbf{C}$
lequ3_3321	$\left(\ell_{3}\sigma_{\mu\nu}e_{3}\right)\epsilon_{jk}\left(ar{q}_{2}\sigma^{\mu\nu}u_{1} ight)$	$\mathbf{C}$
lequ3_3322	$\left(ar{\ell}_3\sigma_{\mu u}e_3 ight)\epsilon_{jk}\left(ar{q}_2\sigma^{\mu u}u_2 ight)$	$^{\mathrm{C}}$
lequ3_3323	$\left(\bar{\ell}_3 \sigma_{\mu\nu} e_3\right) \epsilon_{jk} \left(\bar{q}_2 \sigma^{\mu\nu} u_3\right)$	$\mathbf{C}$

WC name	Operator	Type
lequ3_3331	$(\bar{\ell}_3 \sigma_{\mu\nu} e_3)  \epsilon_{jk}  (\bar{q}_3 \sigma^{\mu\nu} u_1)$	C
lequ3_3332	$ \begin{array}{l} \left(\bar{\ell}_{3}\sigma_{\mu\nu}e_{3}\right)\epsilon_{jk}\left(\bar{q}_{3}\sigma^{\mu\nu}u_{1}\right) \\ \left(\bar{\ell}_{3}\sigma_{\mu\nu}e_{3}\right)\epsilon_{jk}\left(\bar{q}_{3}\sigma^{\mu\nu}u_{2}\right) \end{array} $	$^{\mathrm{C}}$
lequ3_3333	$(ar{\ell}_3\sigma_{\mu u}e_3)\epsilon_{jk}(ar{q}_3\sigma^{\mu u}u_3)$	$\mathbf{C}$

### dB=dL=1

WC name	Operator	Type
duql_1111	$(d_1Cu_1)(q_1C\ell_1)$	$\overline{C}$
duql_1112	$(d_1Cu_1)(q_1C\ell_2)$	$\mathbf{C}$
duql_1113	$(d_1Cu_1)(q_1C\ell_3)$	$\mathbf{C}$
duq1_1121	$(d_1Cu_1)(q_2C\ell_1)$	$\mathbf{C}$
duql_1122	$(d_1Cu_1)(q_2C\ell_2)$	$\mathbf{C}$
duql_1123	$\left(d_{1}Cu_{1}\right)\left(q_{2}C\ell_{3}\right)$	$\mathbf{C}$
duql_1131	$\left(d_{1}Cu_{1}\right)\left(q_{3}C\ell_{1}\right)$	$\mathbf{C}$
duql_1132	$\left(d_{1}Cu_{1}\right)\left(q_{3}C\ell_{2}\right)$	$\mathbf{C}$
duql_1133	$\left(d_{1}Cu_{1}\right)\left(q_{3}C\ell_{3}\right)$	$\mathbf{C}$
duql_1211	$\left(d_{1}Cu_{2}\right)\left(q_{1}C\ell_{1}\right)$	$\mathbf{C}$
duql_1212	$\left(d_{1}Cu_{2}\right)\left(q_{1}C\ell_{2}\right)$	$\mathbf{C}$
duql_1213	$\left(d_{1}Cu_{2}\right)\left(q_{1}C\ell_{3}\right)$	$\mathbf{C}$
duql_1221	$\left(d_{1}Cu_{2}\right)\left(q_{2}C\ell_{1}\right)$	$\mathbf{C}$
duql_1222	$\left(d_{1}Cu_{2}\right)\left(q_{2}C\ell_{2}\right)$	$\mathbf{C}$
duq1_1223	$\left(d_1Cu_2\right)\left(q_2C\ell_3\right)$	$\mathbf{C}$
duq1_1231	$(d_1Cu_2)(q_3C\ell_1)$	$\mathbf{C}$
duq1_1232	$(d_1Cu_2)(q_3C\ell_2)$	$\mathbf{C}$
duq1_1233	$(d_1Cu_2)(q_3C\ell_3)$	$\mathbf{C}$
duql_1311	$\left(d_{1}Cu_{3}\right)\left(q_{1}C\ell_{1}\right)$	C
duq1_1312	$\left(d_{1}Cu_{3}\right)\left(q_{1}C\ell_{2}\right)$	C
duq1_1313	$(d_1Cu_3)(q_1C\ell_3)$	C
duq1_1321	$\left(d_{1}Cu_{3}\right)\left(q_{2}C\ell_{1}\right)$	$\mathbf{C}$
duq1_1322	$(d_1Cu_3)(q_2C\ell_2)$	C
duq1_1323	$(d_1Cu_3)(q_2C\ell_3)$	$\stackrel{ ext{C}}{\sim}$
duq1_1331	$(d_1Cu_3)(q_3C\ell_1)$	$\stackrel{ ext{C}}{\sim}$
duq1_1332	$(d_1Cu_3)(q_3C\ell_2)$	$\mathbf{C}$
duq1_1333	$(d_1Cu_3)(q_3C\ell_3)$	$\stackrel{ ext{C}}{\sim}$
duq1_2111	$(d_2Cu_1)(q_1C\ell_1)$	$\stackrel{ ext{C}}{\sim}$
duq1_2112	$(d_2Cu_1)(q_1C\ell_2)$	$\stackrel{ ext{C}}{\sim}$
duq1_2113	$(d_2Cu_1)(q_1C\ell_3)$	$\stackrel{ ext{C}}{\sim}$
duq1_2121	$(d_2Cu_1)(q_2C\ell_1)$	$\mathbf{C}$
duq1_2122	$(d_2Cu_1)(q_2C\ell_2)$	С
duq1_2123	$(d_2Cu_1)(q_2C\ell_3)$	С
duq1_2131	$(d_2Cu_1)(q_3C\ell_1)$	С
duq1_2132	$(d_2Cu_1)(q_3C\ell_2)$	$\mathbf{C}$
duq1_2133	$(d_2Cu_1)(q_3C\ell_3)$	$\mathbf{C}$

WC name	Operator	Type
duql_2211	$(d_2Cu_2)(q_1C\ell_1)$	$\mathbf{C}$
duq1_2212	$\left(d_{2}Cu_{2}\right)\left(q_{1}C\ell_{2}\right)$	$\mathbf{C}$
duq1_2213	$\left(d_{2}Cu_{2}\right)\left(q_{1}C\ell_{3}\right)$	$\mathbf{C}$
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	$(d_2Cu_2)(q_2C\ell_3)$	$\mathbf{C}$
duq1_2231	$(d_2Cu_2)(q_3C\ell_1)$	$\mathbf{C}$
duq1_2232	$(d_2Cu_2)(q_3C\ell_2)$	$\mathbf{C}$
duq1_2233	$(d_2Cu_2)(q_3C\ell_3)$	$\mathbf{C}$
duq1_2311	$\left(d_{2}Cu_{3}\right)\left(q_{1}C\ell_{1}\right)$	$\mathbf{C}$
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	$\left(d_{2}Cu_{3}\right)\left(q_{2}C\ell_{1}\right)$	С
duq1_2322	$(d_2Cu_3)(q_2C\ell_2)$	С
duq1_2323	$(d_2Cu_3)(q_2C\ell_3)$	С
duq1_2331	$(d_2Cu_3)(q_3C\ell_1)$	С
duq1_2332	$(d_2Cu_3)(q_3C\ell_2)$	С
duq1_2333	$(d_2Cu_3)(q_3C\ell_3)$	С
duq1_3111	$\left(d_3Cu_1\right)\left(q_1C\ell_1\right)$	С
duq1_3112	$\left(d_3Cu_1\right)\left(q_1C\ell_2\right)$	С
duq1_3113	$\left(d_3Cu_1\right)\left(q_1C\ell_3\right)$	С
duq1_3121	$(d_3Cu_1)\left(q_2C\ell_1\right)$	$\mathbf{C}$
duq1_3122	$(d_3Cu_1)(q_2C\ell_2)$	$\mathbf{C}$
duq1_3123	$(d_3Cu_1)(q_2C\ell_3)$	$\mathbf{C}$
duq1_3131	$(d_3Cu_1)(q_3C\ell_1)$	$\mathbf{C}$
duq1_3132	$(d_3Cu_1)(q_3C\ell_2)$	$\mathbf{C}$
duq1_3133	$(d_3Cu_1)(q_3C\ell_3)$	$\mathbf{C}$
duq1_3211	$(d_3Cu_2)(q_1C\ell_1)$	$\mathbf{C}$
duq1_3212	$(d_3Cu_2)(q_1C\ell_2)$	$\mathbf{C}$
duq1_3213	$(d_3Cu_2)(q_1C\ell_3)$	$\mathbf{C}$
duq1_3221	$(d_3Cu_2)(q_2C\ell_1)$	$\mathbf{C}$
duq1_3222	$(d_3Cu_2)(q_2C\ell_2)$	$\mathbf{C}$
duq1_3223	$(d_3Cu_2)(q_2C\ell_3)$	$\mathbf{C}$
duq1_3231	$(d_3Cu_2)(q_3C\ell_1)$	$\mathbf{C}$
duq1_3232	$(d_3Cu_2)(q_3C\ell_2)$	$\mathbf{C}$
duq1_3233	$(d_3Cu_2)(q_3C\ell_3)$	$\mathbf{C}$
duq1_3311	$(d_3Cu_3)(q_1C\ell_1)$	C
duq1_3312	$(d_3Cu_3)(q_1C\ell_2)$	C
duq1_3313	$(d_3Cu_3)(q_1C\ell_3)$	C
duq1_3321	$(d_3Cu_3)(q_2C\ell_1)$	C
duq1_3322	$(d_3Cu_3)(q_2C\ell_2)$	C
duq1_3323	$(d_3Cu_3)(q_2C\ell_3)$	C
duq1_3331	$(d_3Cu_3)(q_3C\ell_1)$	С
duq1_3332	$(d_3Cu_3)(q_3C\ell_2)$	С

WC name	Operator	Type
duq1_3333	$(d_3Cu_3)(q_3C\ell_3)$	С
qque_1111	$\left(q_{1}Cq_{1}\right)\left(u_{1}Ce_{1}\right)$	$^{\mathrm{C}}$
qque_1112	$(q_1Cq_1)(u_1Ce_2)$	$\mathbf{C}$
qque_1113	$\left(q_{1}Cq_{1}\right)\left(u_{1}Ce_{3}\right)$	$^{\mathrm{C}}$
qque_1121	$\left(q_{1}Cq_{1}\right)\left(u_{2}Ce_{1}\right)$	$\mathbf{C}$
qque_1122	$(q_1Cq_1)\left(u_2Ce_2\right)$	$\mathbf{C}$
qque_1123	$(q_1Cq_1)(u_2Ce_3)$	$\mathbf{C}$
qque_1131	$(q_1Cq_1)\left(u_3Ce_1\right)$	$\mathbf{C}$
qque_1132	$(q_1Cq_1)\left(u_3Ce_2\right)$	$\mathbf{C}$
qque_1133	$\left(q_{1}Cq_{1}\right)\left(u_{3}Ce_{3}\right)$	$\mathbf{C}$
qque_1211	$(q_1Cq_2)\left(u_1Ce_1\right)$	$\mathbf{C}$
qque_1212	$(q_1Cq_2)\left(u_1Ce_2\right)$	$\mathbf{C}$
qque_1213	$(q_1Cq_2)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_1221	$(q_1Cq_2)(u_2Ce_1)$	$^{\mathrm{C}}$
qque_1222	$(q_1Cq_2)(u_2Ce_2)$	$^{\mathrm{C}}$
qque_1223	$(q_1Cq_2)(u_2Ce_3)$	$^{\mathrm{C}}$
qque_1231	$(q_1Cq_2)(u_3Ce_1)$	$^{\mathrm{C}}$
qque_1232	$(q_1Cq_2)(u_3Ce_2)$	$^{\mathrm{C}}$
qque_1233	$(q_1Cq_2)(u_3Ce_3)$	$\mathbf{C}$
qque_1311	$(q_1Cq_3)\left(u_1Ce_1\right)$	$\mathbf{C}$
qque_1312	$(q_1Cq_3)(u_1Ce_2)$	$\mathbf{C}$
qque_1313	$(q_1Cq_3)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_1321	$(q_1Cq_3)(u_2Ce_1)$	$^{\mathrm{C}}$
qque_1322	$(q_1Cq_3)(u_2Ce_2)$	$^{\mathrm{C}}$
qque_1323	$(q_1Cq_3)(u_2Ce_3)$	$^{\mathrm{C}}$
qque_1331	$(q_1Cq_3)(u_3Ce_1)$	$^{\mathrm{C}}$
qque_1332	$(q_1Cq_3)(u_3Ce_2)$	$^{\mathrm{C}}$
qque_1333	$(q_1Cq_3)(u_3Ce_3)$	$^{\mathrm{C}}$
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	$(q_2Cq_2)(u_2Ce_1)$	$^{\mathrm{C}}$
qque_2222	$(q_2Cq_2)(u_2Ce_2)$	$^{\mathrm{C}}$
qque_2223	$(q_2Cq_2)(u_2Ce_3)$	$^{\mathrm{C}}$
qque_2231	$(q_2Cq_2)(u_3Ce_1)$	$\mathbf{C}$
qque_2232	$(q_2Cq_2)\left(u_3Ce_2\right)$	$^{\mathrm{C}}$
qque_2233	$(q_2Cq_2)(u_3Ce_3)$	$^{\mathrm{C}}$
qque_2311	$(q_2Cq_3)(u_1Ce_1)$	$^{\mathrm{C}}$
qque_2312	$(q_2Cq_3)(u_1Ce_2)$	$^{\mathrm{C}}$
qque_2313	$(q_2Cq_3)(u_1Ce_3)$	$^{\mathrm{C}}$
qque_2321	$(q_2Cq_3)(u_2Ce_1)$	$^{\mathrm{C}}$
qque_2322	$(q_2Cq_3)(u_2Ce_2)$	$^{\mathrm{C}}$
qque_2323	$(q_2Cq_3)(u_2Ce_3)$	$^{\mathrm{C}}$
qque_2331	$\left(q_{2}Cq_{3}\right)\left(u_{3}Ce_{1}\right)$	$^{\mathrm{C}}$

WC name	Operator	Type
qque_2332	$(q_2Cq_3)(u_3Ce_2)$	C
qque_2333	$(q_2Cq_3)(u_3Ce_3)$	$\mathbf{C}$
qque_3311	$\left(q_{3}Cq_{3}\right)\left(u_{1}Ce_{1}\right)$	$\mathbf{C}$
qque_3312	$(q_3Cq_3)(u_1Ce_2)$	$\mathbf{C}$
qque_3313	$(q_3Cq_3)(u_1Ce_3)$	$\mathbf{C}$
qque_3321	$(q_3Cq_3)(u_2Ce_1)$	$\mathbf{C}$
qque_3322	$(q_3Cq_3)(u_2Ce_2)$	$\mathbf{C}$
qque_3323	$(q_3Cq_3)(u_2Ce_3)$	$\mathbf{C}$
qque_3331	$(q_3Cq_3)(u_3Ce_1)$	$\mathbf{C}$
qque_3332	$(q_3Cq_3)(u_3Ce_2)$	C
qque_3333	$(q_3Cq_3)(u_3Ce_3)$	C
qqql_1111	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{1}C\ell_{1}\right)$	C
qqql_1112	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{1}C\ell_{2}\right)$	C
qqql_1113	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{1}C\ell_{3}\right)$	C
qqql_1121	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{2}C\ell_{1}\right)$	C
qqql_1122	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{2}C\ell_{2}\right)$	C
qqql_1123	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{2}C\ell_{3}\right)$	C
qqql_1131	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{3}C\ell_{1}\right)$	C
qqql_1132	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{3}C\ell_{2}\right)$	$\mathbf{C}$
qqql_1133	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{1}\right)\left(q_{3}C\ell_{3}\right)$	$\mathbf{C}$
qqql_1211	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{1}C\ell_{1}\right)$	C
qqql_1212	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{1}C\ell_{2}\right)$	C
qqql_1213	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{1}C\ell_{3}\right)$	C
qqql_1221	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{2}C\ell_{1}\right)$	C
qqql_1222	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{2}C\ell_{2}\right)$	C
qqql_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
qqql_1232	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{2}\right)\left(q_{3}C\ell_{2}\right)$	C
qqq1_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	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{1}C\ell_{3}\right)$	C
qqql_1321	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{1}\right)$	C
qqql_1322	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{2}\right)$	C
qqql_1323	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{2}C\ell_{3}\right)$	C
qqql_1331	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\ell_{1}\right)$	C
qqql_1332	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\ell_{2}\right)$	$\stackrel{ ext{C}}{\sim}$
qqql_1333	$\epsilon_{il}\epsilon_{jk}\left(q_{1}Cq_{3}\right)\left(q_{3}C\ell_{3}\right)$	C
qqq1_2121	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{1}\right)$	C
qqq1_2122	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{2}\right)$	C
qqq1_2123	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{2}C\ell_{3}\right)$	С
qqq1_2131	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{3}C\ell_{1}\right)$	C
qqq1_2132	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{3}C\ell_{2}\right)$	C
qqq1_2133	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{1}\right)\left(q_{3}C\ell_{3}\right)$	$\mathbf{C}$

WC name	Operator	Type
qqq1_2221	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2}\right)\left(q_{2}C\ell_{1}\right)$	$\overline{\mathbf{C}}$
qqq1_2222	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2} ight)\left(q_{2}C\ell_{2} ight)$	$^{\mathrm{C}}$
qqq1_2223	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2}\right)\left(q_{2}C\ell_{3}\right)$	$^{\mathrm{C}}$
qqql_2231	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2}\right)\left(q_{3}C\ell_{1}\right)$	$\mathbf{C}$
qqq1_2232	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2}\right)\left(q_{3}C\ell_{2}\right)$	$\mathbf{C}$
qqq1_2233	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{2}\right)\left(q_{3}C\ell_{3}\right)$	$\mathbf{C}$
qqql_2311	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3}\right)\left(q_{1}C\ell_{1}\right)$	$\mathbf{C}$
qqql_2312	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3}\right)\left(q_{1}C\ell_{2}\right)$	$\mathbf{C}$
qqql_2313	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3}\right)\left(q_{1}C\ell_{3}\right)$	$\mathbf{C}$
qqql_2321	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{2}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_2322	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3}\right)\left(q_{2}C\ell_{2}\right)$	$\mathbf{C}$
qqq1_2323	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3}\right)\left(q_{2}C\ell_{3}\right)$	$\mathbf{C}$
qqq1_2331	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3} ight)\left(q_{3}C\ell_{1} ight)$	$\mathbf{C}$
qqq1_2332	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3}\right)\left(q_{3}C\ell_{2}\right)$	$\mathbf{C}$
qqq1_2333	$\epsilon_{il}\epsilon_{jk}\left(q_{2}Cq_{3}\right)\left(q_{3}C\ell_{3}\right)$	$\mathbf{C}$
qqql_3131	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1}\right)\left(q_{3}C\ell_{1}\right)$	$\mathbf{C}$
qqql_3132	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1}\right)\left(q_{3}C\ell_{2}\right)$	$\mathbf{C}$
qqq1_3133	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{1}\right)\left(q_{3}C\ell_{3}\right)$	$^{\mathrm{C}}$
qqq1_3231	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{1} ight)$	$^{\mathrm{C}}$
qqq1_3232	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2}\right)\left(q_{3}C\ell_{2}\right)$	$^{\mathrm{C}}$
qqq1_3233	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{2} ight)\left(q_{3}C\ell_{3} ight)$	$\mathbf{C}$
qqq1_3331	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3}\right)\left(q_{3}C\ell_{1}\right)$	$\mathbf{C}$
qqq1_3332	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3}\right)\left(q_{3}C\ell_{2}\right)$	$\mathbf{C}$
qqq1_3333	$\epsilon_{il}\epsilon_{jk}\left(q_{3}Cq_{3}\right)\left(q_{3}C\ell_{3}\right)$	$\mathbf{C}$
duue_1111	$\left(d_1Cu_1\right)\left(u_1Ce_1\right)$	$\mathbf{C}$
duue_1112	$(d_1Cu_1)(u_1Ce_2)$	$\mathbf{C}$
duue_1113	$(d_1Cu_1)(u_1Ce_3)$	$\mathbf{C}$
duue_1121	$(d_1Cu_1)(u_2Ce_1)$	$\mathbf{C}$
duue_1122	$(d_1Cu_1)(u_2Ce_2)$	$\mathbf{C}$
duue_1123	$\left(d_{1}Cu_{1}\right)\left(u_{2}Ce_{3}\right)$	$\mathbf{C}$
duue_1131	$(d_1Cu_1)(u_3Ce_1)$	$\mathbf{C}$
duue_1132	$(d_1Cu_1)(u_3Ce_2)$	$\mathbf{C}$
duue_1133	$(d_1Cu_1)(u_3Ce_3)$	$\mathbf{C}$
duue_1211	$(d_1Cu_2)(u_1Ce_1)$	$\mathbf{C}$
duue_1212	$(d_1Cu_2)(u_1Ce_2)$	$\mathbf{C}$
duue_1213	$(d_1Cu_2)\left(u_1Ce_3\right)$	C
duue_1221	$(d_1Cu_2)(u_2Ce_1)$	$\stackrel{ ext{C}}{\sim}$
duue_1222	$(d_1Cu_2)(u_2Ce_2)$	$\stackrel{ ext{C}}{\sim}$
duue_1223	$(d_1Cu_2)(u_2Ce_3)$	$\mathbf{C}$
duue_1231	$(d_1Cu_2)(u_3Ce_1)$	С
duue_1232	$(d_1Cu_2)(u_3Ce_2)$	С
duue_1233	$(d_1Cu_2)(u_3Ce_3)$	С
duue_1311	$(d_1Cu_3)(u_1Ce_1)$	С
duue_1312	$(d_1Cu_3)(u_1Ce_2)$	С

WC name	Operator	Type
duue_1313	$(d_1Cu_3)(u_1Ce_3)$	С
duue_1321	$\left(d_{1}Cu_{3}\right)\left(u_{2}Ce_{1}\right)$	$\mathbf{C}$
duue_1322	$\left(d_1Cu_3\right)\left(u_2Ce_2\right)$	$\mathbf{C}$
duue_1323	$\left(d_1Cu_3\right)\left(u_2Ce_3\right)$	$\mathbf{C}$
duue_1331	$\left(d_{1}Cu_{3}\right)\left(u_{3}Ce_{1}\right)$	$\mathbf{C}$
duue_1332	$\left(d_{1}Cu_{3}\right)\left(u_{3}Ce_{2}\right)$	$\mathbf{C}$
duue_1333	$\left(d_{1}Cu_{3}\right)\left(u_{3}Ce_{3}\right)$	$\mathbf{C}$
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	$\left(d_{2}Cu_{1}\right)\left(u_{1}Ce_{3}\right)$	$\mathbf{C}$
duue_2121	$\left(d_{2}Cu_{1}\right)\left(u_{2}Ce_{1}\right)$	$\mathbf{C}$
duue_2122	$\left(d_{2}Cu_{1}\right)\left(u_{2}Ce_{2}\right)$	$^{\mathrm{C}}$
duue_2123	$\left(d_{2}Cu_{1}\right)\left(u_{2}Ce_{3}\right)$	$^{\mathrm{C}}$
duue_2131	$(d_2Cu_1)\left(u_3Ce_1\right)$	$^{\mathrm{C}}$
duue_2132	$\left(d_{2}Cu_{1}\right)\left(u_{3}Ce_{2}\right)$	$^{\mathrm{C}}$
duue_2133	$\left(d_{2}Cu_{1}\right)\left(u_{3}Ce_{3}\right)$	$^{\mathrm{C}}$
duue_2211	$\left(d_{2}Cu_{2}\right)\left(u_{1}Ce_{1}\right)$	$^{\mathrm{C}}$
duue_2212	$\left(d_{2}Cu_{2}\right)\left(u_{1}Ce_{2}\right)$	$^{\mathrm{C}}$
duue_2213	$\left(d_{2}Cu_{2}\right)\left(u_{1}Ce_{3}\right)$	$\mathbf{C}$
duue_2221	$\left(d_{2}Cu_{2}\right)\left(u_{2}Ce_{1}\right)$	$\mathbf{C}$
duue_2222	$\left(d_{2}Cu_{2}\right)\left(u_{2}Ce_{2}\right)$	$\mathbf{C}$
duue_2223	$\left(d_{2}Cu_{2}\right)\left(u_{2}Ce_{3}\right)$	$^{\mathrm{C}}$
duue_2231	$\left(d_{2}Cu_{2}\right)\left(u_{3}Ce_{1}\right)$	$^{\mathrm{C}}$
duue_2232	$\left(d_{2}Cu_{2}\right)\left(u_{3}Ce_{2}\right)$	$\mathbf{C}$
duue_2233	$\left(d_{2}Cu_{2}\right)\left(u_{3}Ce_{3}\right)$	$^{\mathrm{C}}$
duue_2311	$\left(d_{2}Cu_{3}\right)\left(u_{1}Ce_{1}\right)$	$^{\mathrm{C}}$
duue_2312	$\left(d_{2}Cu_{3}\right)\left(u_{1}Ce_{2}\right)$	$^{\mathrm{C}}$
duue_2313	$\left(d_{2}Cu_{3}\right)\left(u_{1}Ce_{3}\right)$	$^{\mathrm{C}}$
duue_2321	$\left(d_{2}Cu_{3}\right)\left(u_{2}Ce_{1}\right)$	$^{\mathrm{C}}$
duue_2322	$\left(d_{2}Cu_{3}\right)\left(u_{2}Ce_{2}\right)$	$^{\mathrm{C}}$
duue_2323	$\left(d_{2}Cu_{3}\right)\left(u_{2}Ce_{3}\right)$	$^{\mathrm{C}}$
duue_2331	$\left(d_{2}Cu_{3}\right)\left(u_{3}Ce_{1}\right)$	$^{\mathrm{C}}$
duue_2332	$\left(d_{2}Cu_{3}\right)\left(u_{3}Ce_{2}\right)$	$^{\mathrm{C}}$
duue_2333	$\left(d_{2}Cu_{3}\right)\left(u_{3}Ce_{3}\right)$	$^{\mathrm{C}}$
duue_3111	$\left(d_{3}Cu_{1}\right)\left(u_{1}Ce_{1}\right)$	$\mathbf{C}$
duue_3112	$\left(d_{3}Cu_{1}\right)\left(u_{1}Ce_{2}\right)$	$\mathbf{C}$
duue_3113	$\left(d_{3}Cu_{1}\right)\left(u_{1}Ce_{3}\right)$	$\mathbf{C}$
duue_3121	$\left(d_3Cu_1\right)\left(u_2Ce_1\right)$	$^{\mathrm{C}}$
duue_3122	$(d_3Cu_1)(u_2Ce_2)$	$\mathbf{C}$
duue_3123	$(d_3Cu_1)(u_2Ce_3)$	$\mathbf{C}$
duue_3131	$(d_3Cu_1)\left(u_3Ce_1\right)$	$\mathbf{C}$
duue_3132	$\left(d_{3}Cu_{1}\right)\left(u_{3}Ce_{2}\right)$	$\mathbf{C}$
duue_3133	$\left(d_{3}Cu_{1}\right)\left(u_{3}Ce_{3}\right)$	$^{\mathrm{C}}$
duue_3211	$(d_3Cu_2)\left(u_1Ce_1\right)$	$^{\mathrm{C}}$

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

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