

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

dB=dL=0

WC name	Operator	Type
G	$f^{ABC} G_{\mu}^{A\nu} G_{\nu}^{B\rho} G_{\rho}^{C\mu}$	R
Gtilde	$f^{ABC} \tilde{G}_{\mu}^{A\nu} G_{\nu}^{B\rho} G_{\rho}^{C\mu}$	R
W	$\epsilon^{IJK} W_{\mu}^{I\nu} W_{\nu}^{J\rho} W_{\rho}^{K\mu}$	R
Wtilde	$\epsilon^{IJK} \tilde{W}_{\mu}^{I\nu} W_{\nu}^{J\rho} W_{\rho}^{K\mu}$	R
phi	$(\varphi^{\dagger} \varphi)^3$	R
phiBox	$(\varphi^{\dagger} \varphi) \square (\varphi^{\dagger} \varphi)$	R
phiD	$(\varphi^{\dagger} D^{\mu} \varphi)^* (\varphi^{\dagger} D_{\mu} \varphi)$	R
phiG	$\varphi^{\dagger} \varphi G_{\mu\nu}^A G^{A\mu\nu}$	R
phiB	$\varphi^{\dagger} \varphi B_{\mu\nu} B^{\mu\nu}$	R
phiW	$\varphi^{\dagger} \varphi W_{\mu\nu}^I W^{I\mu\nu}$	R
phiWB	$\varphi^{\dagger} \tau^I \varphi W_{\mu\nu}^I B^{\mu\nu}$	R
phiGtilde	$\varphi^{\dagger} \varphi \tilde{G}_{\mu\nu}^A G^{A\mu\nu}$	R
phiBtilde	$\varphi^{\dagger} \varphi \tilde{B}_{\mu\nu} B^{\mu\nu}$	R
phiWtilde	$\varphi^{\dagger} \varphi \tilde{W}_{\mu\nu}^I W^{I\mu\nu}$	R
phiWtildeB	$\varphi^{\dagger} \tau^I \varphi \tilde{W}_{\mu\nu}^I B^{\mu\nu}$	R
uphi_11	$(\varphi^{\dagger} \varphi) (\bar{q}_1 u_1 \tilde{\varphi})$	C
uphi_12	$(\varphi^{\dagger} \varphi) (\bar{q}_1 u_2 \tilde{\varphi})$	C
uphi_13	$(\varphi^{\dagger} \varphi) (\bar{q}_1 u_3 \tilde{\varphi})$	C
uphi_21	$(\varphi^{\dagger} \varphi) (\bar{q}_2 u_1 \tilde{\varphi})$	C
uphi_22	$(\varphi^{\dagger} \varphi) (\bar{q}_2 u_2 \tilde{\varphi})$	C
uphi_23	$(\varphi^{\dagger} \varphi) (\bar{q}_2 u_3 \tilde{\varphi})$	C
uphi_31	$(\varphi^{\dagger} \varphi) (\bar{q}_3 u_1 \tilde{\varphi})$	C
uphi_32	$(\varphi^{\dagger} \varphi) (\bar{q}_3 u_2 \tilde{\varphi})$	C
uphi_33	$(\varphi^{\dagger} \varphi) (\bar{q}_3 u_3 \tilde{\varphi})$	C
dphi_11	$(\varphi^{\dagger} \varphi) (\bar{q}_1 d_1 \varphi)$	C
dphi_12	$(\varphi^{\dagger} \varphi) (\bar{q}_1 d_2 \varphi)$	C
dphi_13	$(\varphi^{\dagger} \varphi) (\bar{q}_1 d_3 \varphi)$	C
dphi_21	$(\varphi^{\dagger} \varphi) (\bar{q}_2 d_1 \varphi)$	C
dphi_22	$(\varphi^{\dagger} \varphi) (\bar{q}_2 d_2 \varphi)$	C

WC name	Operator	Type
dphi_23	$(\varphi^\dagger \varphi) (\bar{q}_2 d_3 \varphi)$	C
dphi_31	$(\varphi^\dagger \varphi) (\bar{q}_3 d_1 \varphi)$	C
dphi_32	$(\varphi^\dagger \varphi) (\bar{q}_3 d_2 \varphi)$	C
dphi_33	$(\varphi^\dagger \varphi) (\bar{q}_3 d_3 \varphi)$	C
ephi_11	$(\varphi^\dagger \varphi) (\bar{\ell}_1 e_1 \varphi)$	C
ephi_12	$(\varphi^\dagger \varphi) (\bar{\ell}_1 e_2 \varphi)$	C
ephi_13	$(\varphi^\dagger \varphi) (\bar{\ell}_1 e_3 \varphi)$	C
ephi_21	$(\varphi^\dagger \varphi) (\bar{\ell}_2 e_1 \varphi)$	C
ephi_22	$(\varphi^\dagger \varphi) (\bar{\ell}_2 e_2 \varphi)$	C
ephi_23	$(\varphi^\dagger \varphi) (\bar{\ell}_2 e_3 \varphi)$	C
ephi_31	$(\varphi^\dagger \varphi) (\bar{\ell}_3 e_1 \varphi)$	C
ephi_32	$(\varphi^\dagger \varphi) (\bar{\ell}_3 e_2 \varphi)$	C
ephi_33	$(\varphi^\dagger \varphi) (\bar{\ell}_3 e_3 \varphi)$	C
eW_11	$(\bar{\ell}_1 \sigma^{\mu\nu} e_1) \tau^I \varphi W_{\mu\nu}^I$	C
eW_12	$(\bar{\ell}_1 \sigma^{\mu\nu} e_2) \tau^I \varphi W_{\mu\nu}^I$	C
eW_13	$(\bar{\ell}_1 \sigma^{\mu\nu} e_3) \tau^I \varphi W_{\mu\nu}^I$	C
eW_21	$(\bar{\ell}_2 \sigma^{\mu\nu} e_1) \tau^I \varphi W_{\mu\nu}^I$	C
eW_22	$(\bar{\ell}_2 \sigma^{\mu\nu} e_2) \tau^I \varphi W_{\mu\nu}^I$	C
eW_23	$(\bar{\ell}_2 \sigma^{\mu\nu} e_3) \tau^I \varphi W_{\mu\nu}^I$	C
eW_31	$(\bar{\ell}_3 \sigma^{\mu\nu} e_1) \tau^I \varphi W_{\mu\nu}^I$	C
eW_32	$(\bar{\ell}_3 \sigma^{\mu\nu} e_2) \tau^I \varphi W_{\mu\nu}^I$	C
eW_33	$(\bar{\ell}_3 \sigma^{\mu\nu} e_3) \tau^I \varphi W_{\mu\nu}^I$	C
eB_11	$(\bar{\ell}_1 \sigma^{\mu\nu} e_1) \varphi B_{\mu\nu}$	C
eB_12	$(\bar{\ell}_1 \sigma^{\mu\nu} e_2) \varphi B_{\mu\nu}$	C
eB_13	$(\bar{\ell}_1 \sigma^{\mu\nu} e_3) \varphi B_{\mu\nu}$	C
eB_21	$(\bar{\ell}_2 \sigma^{\mu\nu} e_1) \varphi B_{\mu\nu}$	C
eB_22	$(\bar{\ell}_2 \sigma^{\mu\nu} e_2) \varphi B_{\mu\nu}$	C
eB_23	$(\bar{\ell}_2 \sigma^{\mu\nu} e_3) \varphi B_{\mu\nu}$	C
eB_31	$(\bar{\ell}_3 \sigma^{\mu\nu} e_1) \varphi B_{\mu\nu}$	C
eB_32	$(\bar{\ell}_3 \sigma^{\mu\nu} e_2) \varphi B_{\mu\nu}$	C
eB_33	$(\bar{\ell}_3 \sigma^{\mu\nu} e_3) \varphi B_{\mu\nu}$	C
uG_11	$(\bar{q}_1 \sigma^{\mu\nu} T^A u_1) \tilde{\varphi} G_{\mu\nu}^A$	C
uG_12	$(\bar{q}_1 \sigma^{\mu\nu} T^A u_2) \tilde{\varphi} G_{\mu\nu}^A$	C
uG_13	$(\bar{q}_1 \sigma^{\mu\nu} T^A u_3) \tilde{\varphi} G_{\mu\nu}^A$	C
uG_21	$(\bar{q}_2 \sigma^{\mu\nu} T^A u_1) \tilde{\varphi} G_{\mu\nu}^A$	C
uG_22	$(\bar{q}_2 \sigma^{\mu\nu} T^A u_2) \tilde{\varphi} G_{\mu\nu}^A$	C
uG_23	$(\bar{q}_2 \sigma^{\mu\nu} T^A u_3) \tilde{\varphi} G_{\mu\nu}^A$	C
uG_31	$(\bar{q}_3 \sigma^{\mu\nu} T^A u_1) \tilde{\varphi} G_{\mu\nu}^A$	C
uG_32	$(\bar{q}_3 \sigma^{\mu\nu} T^A u_2) \tilde{\varphi} G_{\mu\nu}^A$	C
uG_33	$(\bar{q}_3 \sigma^{\mu\nu} T^A u_3) \tilde{\varphi} G_{\mu\nu}^A$	C
uW_11	$(\bar{q}_1 \sigma^{\mu\nu} u_1) \tau^I \tilde{\varphi} W_{\mu\nu}^I$	C
uW_12	$(\bar{q}_1 \sigma^{\mu\nu} u_2) \tau^I \tilde{\varphi} W_{\mu\nu}^I$	C

WC name	Operator	Type
uW_13	$(\bar{q}_1 \sigma^{\mu\nu} u_3) \tau^I \tilde{\varphi} W_{\mu\nu}^I$	C
uW_21	$(\bar{q}_2 \sigma^{\mu\nu} u_1) \tau^I \tilde{\varphi} W_{\mu\nu}^I$	C
uW_22	$(\bar{q}_2 \sigma^{\mu\nu} u_2) \tau^I \tilde{\varphi} W_{\mu\nu}^I$	C
uW_23	$(\bar{q}_2 \sigma^{\mu\nu} u_3) \tau^I \tilde{\varphi} W_{\mu\nu}^I$	C
uW_31	$(\bar{q}_3 \sigma^{\mu\nu} u_1) \tau^I \tilde{\varphi} W_{\mu\nu}^I$	C
uW_32	$(\bar{q}_3 \sigma^{\mu\nu} u_2) \tau^I \tilde{\varphi} W_{\mu\nu}^I$	C
uW_33	$(\bar{q}_3 \sigma^{\mu\nu} u_3) \tau^I \tilde{\varphi} W_{\mu\nu}^I$	C
uB_11	$(\bar{q}_1 \sigma^{\mu\nu} u_1) \tilde{\varphi} B_{\mu\nu}$	C
uB_12	$(\bar{q}_1 \sigma^{\mu\nu} u_2) \tilde{\varphi} B_{\mu\nu}$	C
uB_13	$(\bar{q}_1 \sigma^{\mu\nu} u_3) \tilde{\varphi} B_{\mu\nu}$	C
uB_21	$(\bar{q}_2 \sigma^{\mu\nu} u_1) \tilde{\varphi} B_{\mu\nu}$	C
uB_22	$(\bar{q}_2 \sigma^{\mu\nu} u_2) \tilde{\varphi} B_{\mu\nu}$	C
uB_23	$(\bar{q}_2 \sigma^{\mu\nu} u_3) \tilde{\varphi} B_{\mu\nu}$	C
uB_31	$(\bar{q}_3 \sigma^{\mu\nu} u_1) \tilde{\varphi} B_{\mu\nu}$	C
uB_32	$(\bar{q}_3 \sigma^{\mu\nu} u_2) \tilde{\varphi} B_{\mu\nu}$	C
uB_33	$(\bar{q}_3 \sigma^{\mu\nu} u_3) \tilde{\varphi} B_{\mu\nu}$	C
dG_11	$(\bar{q}_1 \sigma^{\mu\nu} T^A d_1) \varphi G_{\mu\nu}^A$	C
dG_12	$(\bar{q}_1 \sigma^{\mu\nu} T^A d_2) \varphi G_{\mu\nu}^A$	C
dG_13	$(\bar{q}_1 \sigma^{\mu\nu} T^A d_3) \varphi G_{\mu\nu}^A$	C
dG_21	$(\bar{q}_2 \sigma^{\mu\nu} T^A d_1) \varphi G_{\mu\nu}^A$	C
dG_22	$(\bar{q}_2 \sigma^{\mu\nu} T^A d_2) \varphi G_{\mu\nu}^A$	C
dG_23	$(\bar{q}_2 \sigma^{\mu\nu} T^A d_3) \varphi G_{\mu\nu}^A$	C
dG_31	$(\bar{q}_3 \sigma^{\mu\nu} T^A d_1) \varphi G_{\mu\nu}^A$	C
dG_32	$(\bar{q}_3 \sigma^{\mu\nu} T^A d_2) \varphi G_{\mu\nu}^A$	C
dG_33	$(\bar{q}_3 \sigma^{\mu\nu} T^A d_3) \varphi G_{\mu\nu}^A$	C
dW_11	$(\bar{q}_1 \sigma^{\mu\nu} d_1) \tau^I \varphi W_{\mu\nu}^I$	C
dW_12	$(\bar{q}_1 \sigma^{\mu\nu} d_2) \tau^I \varphi W_{\mu\nu}^I$	C
dW_13	$(\bar{q}_1 \sigma^{\mu\nu} d_3) \tau^I \varphi W_{\mu\nu}^I$	C
dW_21	$(\bar{q}_2 \sigma^{\mu\nu} d_1) \tau^I \varphi W_{\mu\nu}^I$	C
dW_22	$(\bar{q}_2 \sigma^{\mu\nu} d_2) \tau^I \varphi W_{\mu\nu}^I$	C
dW_23	$(\bar{q}_2 \sigma^{\mu\nu} d_3) \tau^I \varphi W_{\mu\nu}^I$	C
dW_31	$(\bar{q}_3 \sigma^{\mu\nu} d_1) \tau^I \varphi W_{\mu\nu}^I$	C
dW_32	$(\bar{q}_3 \sigma^{\mu\nu} d_2) \tau^I \varphi W_{\mu\nu}^I$	C
dW_33	$(\bar{q}_3 \sigma^{\mu\nu} d_3) \tau^I \varphi W_{\mu\nu}^I$	C
dB_11	$(\bar{q}_1 \sigma^{\mu\nu} d_1) \varphi B_{\mu\nu}$	C
dB_12	$(\bar{q}_1 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu}$	C
dB_13	$(\bar{q}_1 \sigma^{\mu\nu} d_3) \varphi B_{\mu\nu}$	C
dB_21	$(\bar{q}_2 \sigma^{\mu\nu} d_1) \varphi B_{\mu\nu}$	C
dB_22	$(\bar{q}_2 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu}$	C
dB_23	$(\bar{q}_2 \sigma^{\mu\nu} d_3) \varphi B_{\mu\nu}$	C
dB_31	$(\bar{q}_3 \sigma^{\mu\nu} d_1) \varphi B_{\mu\nu}$	C
dB_32	$(\bar{q}_3 \sigma^{\mu\nu} d_2) \varphi B_{\mu\nu}$	C
dB_33	$(\bar{q}_3 \sigma^{\mu\nu} d_3) \varphi B_{\mu\nu}$	C

WC name	Operator	Type
phil1_11	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{\ell}_1 \gamma^\mu \ell_1)$	R
phil1_12	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{\ell}_1 \gamma^\mu \ell_2)$	C
phil1_13	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{\ell}_1 \gamma^\mu \ell_3)$	C
phil1_22	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{\ell}_2 \gamma^\mu \ell_2)$	R
phil1_23	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{\ell}_2 \gamma^\mu \ell_3)$	C
phil1_33	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{\ell}_3 \gamma^\mu \ell_3)$	R
phil3_11	$\left(\varphi^\dagger i \overleftrightarrow{D} I \mu \varphi \right) (\bar{\ell}_1 \tau^I \gamma^\mu \ell_1)$	R
phil3_12	$\left(\varphi^\dagger i \overleftrightarrow{D} I \mu \varphi \right) (\bar{\ell}_1 \tau^I \gamma^\mu \ell_2)$	C
phil3_13	$\left(\varphi^\dagger i \overleftrightarrow{D} I \mu \varphi \right) (\bar{\ell}_1 \tau^I \gamma^\mu \ell_3)$	C
phil3_22	$\left(\varphi^\dagger i \overleftrightarrow{D} I \mu \varphi \right) (\bar{\ell}_2 \tau^I \gamma^\mu \ell_2)$	R
phil3_23	$\left(\varphi^\dagger i \overleftrightarrow{D} I \mu \varphi \right) (\bar{\ell}_2 \tau^I \gamma^\mu \ell_3)$	C
phil3_33	$\left(\varphi^\dagger i \overleftrightarrow{D} I \mu \varphi \right) (\bar{\ell}_3 \tau^I \gamma^\mu \ell_3)$	R
phie_11	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{e}_1 \gamma^\mu e_1)$	R
phie_12	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{e}_1 \gamma^\mu e_2)$	C
phie_13	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{e}_1 \gamma^\mu e_3)$	C
phie_22	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{e}_2 \gamma^\mu e_2)$	R
phie_23	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{e}_2 \gamma^\mu e_3)$	C
phie_33	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{e}_3 \gamma^\mu e_3)$	R
phiq1_11	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{q}_1 \gamma^\mu q_1)$	R
phiq1_12	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{q}_1 \gamma^\mu q_2)$	C
phiq1_13	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{q}_1 \gamma^\mu q_3)$	C
phiq1_22	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{q}_2 \gamma^\mu q_2)$	R

WC name	Operator	Type
phiq1_23	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{q}_2 \gamma^\mu q_3)$	C
phiq1_33	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{q}_3 \gamma^\mu q_3)$	R
phiq3_11	$\left(\varphi^\dagger i \overleftrightarrow{D} I m u \varphi \right) (\bar{q}_1 \tau^I \gamma^\mu q_1)$	R
phiq3_12	$\left(\varphi^\dagger i \overleftrightarrow{D} I m u \varphi \right) (\bar{q}_1 \tau^I \gamma^\mu q_2)$	C
phiq3_13	$\left(\varphi^\dagger i \overleftrightarrow{D} I m u \varphi \right) (\bar{q}_1 \tau^I \gamma^\mu q_3)$	C
phiq3_22	$\left(\varphi^\dagger i \overleftrightarrow{D} I m u \varphi \right) (\bar{q}_2 \tau^I \gamma^\mu q_2)$	R
phiq3_23	$\left(\varphi^\dagger i \overleftrightarrow{D} I m u \varphi \right) (\bar{q}_2 \tau^I \gamma^\mu q_3)$	C
phiq3_33	$\left(\varphi^\dagger i \overleftrightarrow{D} I m u \varphi \right) (\bar{q}_3 \tau^I \gamma^\mu q_3)$	R
phiu_11	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{u}_1 \gamma^\mu u_1)$	R
phiu_12	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{u}_1 \gamma^\mu u_2)$	C
phiu_13	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{u}_1 \gamma^\mu u_3)$	C
phiu_22	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{u}_2 \gamma^\mu u_2)$	R
phiu_23	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{u}_2 \gamma^\mu u_3)$	C
phiu_33	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{u}_3 \gamma^\mu u_3)$	R
phid_11	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{d}_1 \gamma^\mu d_1)$	R
phid_12	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{d}_1 \gamma^\mu d_2)$	C
phid_13	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{d}_1 \gamma^\mu d_3)$	C
phid_22	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{d}_2 \gamma^\mu d_2)$	R
phid_23	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{d}_2 \gamma^\mu d_3)$	C
phid_33	$\left(\varphi^\dagger i \overleftrightarrow{D}_\mu \varphi \right) (\bar{d}_3 \gamma^\mu d_3)$	R
phiud_11	$\left(\tilde{\varphi}^\dagger i D_\mu \varphi \right) (\bar{u}_1 \gamma^\mu d_1)$	C
phiud_12	$\left(\tilde{\varphi}^\dagger i D_\mu \varphi \right) (\bar{u}_1 \gamma^\mu d_2)$	C
phiud_13	$\left(\tilde{\varphi}^\dagger i D_\mu \varphi \right) (\bar{u}_1 \gamma^\mu d_3)$	C
phiud_21	$\left(\tilde{\varphi}^\dagger i D_\mu \varphi \right) (\bar{u}_2 \gamma^\mu d_1)$	C

WC name	Operator	Type
phiud_22	$(\bar{\varphi}^\dagger i D_\mu \varphi) (\bar{u}_2 \gamma^\mu d_2)$	C
phiud_23	$(\bar{\varphi}^\dagger i D_\mu \varphi) (\bar{u}_2 \gamma^\mu d_3)$	C
phiud_31	$(\bar{\varphi}^\dagger i D_\mu \varphi) (\bar{u}_3 \gamma^\mu d_1)$	C
phiud_32	$(\bar{\varphi}^\dagger i D_\mu \varphi) (\bar{u}_3 \gamma^\mu d_2)$	C
phiud_33	$(\bar{\varphi}^\dagger i D_\mu \varphi) (\bar{u}_3 \gamma^\mu d_3)$	C
ll_1111	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{\ell}_1 \gamma^\mu \ell_1)$	R
ll_1112	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{\ell}_1 \gamma^\mu \ell_2)$	C
ll_1113	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{\ell}_1 \gamma^\mu \ell_3)$	C
ll_1122	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{\ell}_2 \gamma^\mu \ell_2)$	R
ll_1123	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{\ell}_2 \gamma^\mu \ell_3)$	C
ll_1133	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{\ell}_3 \gamma^\mu \ell_3)$	R
ll_1212	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\ell}_1 \gamma^\mu \ell_2)$	C
ll_1213	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\ell}_1 \gamma^\mu \ell_3)$	C
ll_1221	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\ell}_2 \gamma^\mu \ell_1)$	R
ll_1222	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\ell}_2 \gamma^\mu \ell_2)$	C
ll_1223	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\ell}_2 \gamma^\mu \ell_3)$	C
ll_1231	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\ell}_3 \gamma^\mu \ell_1)$	C
ll_1232	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\ell}_3 \gamma^\mu \ell_2)$	C
ll_1233	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{\ell}_3 \gamma^\mu \ell_3)$	C
ll_1313	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_1 \gamma^\mu \ell_3)$	C
ll_1322	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_2 \gamma^\mu \ell_2)$	C
ll_1323	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_2 \gamma^\mu \ell_3)$	C
ll_1331	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu \ell_1)$	R
ll_1332	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu \ell_2)$	C
ll_1333	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu \ell_3)$	C
ll_2222	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{\ell}_2 \gamma^\mu \ell_2)$	R
ll_2223	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{\ell}_2 \gamma^\mu \ell_3)$	C
ll_2233	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{\ell}_3 \gamma^\mu \ell_3)$	R
ll_2323	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\ell}_2 \gamma^\mu \ell_3)$	C
ll_2332	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu \ell_2)$	R
ll_2333	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu \ell_3)$	C
ll_3333	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{\ell}_3 \gamma^\mu \ell_3)$	R
qq1_1111	$(\bar{q}_1 \gamma_\mu q_1) (\bar{q}_1 \gamma^\mu q_1)$	R
qq1_1112	$(\bar{q}_1 \gamma_\mu q_1) (\bar{q}_1 \gamma^\mu q_2)$	C
qq1_1113	$(\bar{q}_1 \gamma_\mu q_1) (\bar{q}_1 \gamma^\mu q_3)$	C
qq1_1122	$(\bar{q}_1 \gamma_\mu q_1) (\bar{q}_2 \gamma^\mu q_2)$	R
qq1_1123	$(\bar{q}_1 \gamma_\mu q_1) (\bar{q}_2 \gamma^\mu q_3)$	C
qq1_1133	$(\bar{q}_1 \gamma_\mu q_1) (\bar{q}_3 \gamma^\mu q_3)$	R
qq1_1212	$(\bar{q}_1 \gamma_\mu q_2) (\bar{q}_1 \gamma^\mu q_2)$	C
qq1_1213	$(\bar{q}_1 \gamma_\mu q_2) (\bar{q}_1 \gamma^\mu q_3)$	C
qq1_1221	$(\bar{q}_1 \gamma_\mu q_2) (\bar{q}_2 \gamma^\mu q_1)$	R
qq1_1222	$(\bar{q}_1 \gamma_\mu q_2) (\bar{q}_2 \gamma^\mu q_2)$	C
qq1_1223	$(\bar{q}_1 \gamma_\mu q_2) (\bar{q}_2 \gamma^\mu q_3)$	C

WC name	Operator	Type
qq1_1231	$(\bar{q}_1 \gamma_\mu q_2) (\bar{q}_3 \gamma^\mu q_1)$	C
qq1_1232	$(\bar{q}_1 \gamma_\mu q_2) (\bar{q}_3 \gamma^\mu q_2)$	C
qq1_1233	$(\bar{q}_1 \gamma_\mu q_2) (\bar{q}_3 \gamma^\mu q_3)$	C
qq1_1313	$(\bar{q}_1 \gamma_\mu q_3) (\bar{q}_1 \gamma^\mu q_3)$	C
qq1_1322	$(\bar{q}_1 \gamma_\mu q_3) (\bar{q}_2 \gamma^\mu q_2)$	C
qq1_1323	$(\bar{q}_1 \gamma_\mu q_3) (\bar{q}_2 \gamma^\mu q_3)$	C
qq1_1331	$(\bar{q}_1 \gamma_\mu q_3) (\bar{q}_3 \gamma^\mu q_1)$	R
qq1_1332	$(\bar{q}_1 \gamma_\mu q_3) (\bar{q}_3 \gamma^\mu q_2)$	C
qq1_1333	$(\bar{q}_1 \gamma_\mu q_3) (\bar{q}_3 \gamma^\mu q_3)$	C
qq1_2222	$(\bar{q}_2 \gamma_\mu q_2) (\bar{q}_2 \gamma^\mu q_2)$	R
qq1_2223	$(\bar{q}_2 \gamma_\mu q_2) (\bar{q}_2 \gamma^\mu q_3)$	C
qq1_2233	$(\bar{q}_2 \gamma_\mu q_2) (\bar{q}_3 \gamma^\mu q_3)$	R
qq1_2323	$(\bar{q}_2 \gamma_\mu q_3) (\bar{q}_2 \gamma^\mu q_3)$	C
qq1_2332	$(\bar{q}_2 \gamma_\mu q_3) (\bar{q}_3 \gamma^\mu q_2)$	R
qq1_2333	$(\bar{q}_2 \gamma_\mu q_3) (\bar{q}_3 \gamma^\mu q_3)$	C
qq1_3333	$(\bar{q}_3 \gamma_\mu q_3) (\bar{q}_3 \gamma^\mu q_3)$	R
qq3_1111	$(\bar{q}_1 \gamma_\mu \tau^I q_1) (\bar{q}_1 \gamma^\mu \tau^I q_1)$	R
qq3_1112	$(\bar{q}_1 \gamma_\mu \tau^I q_1) (\bar{q}_1 \gamma^\mu \tau^I q_2)$	C
qq3_1113	$(\bar{q}_1 \gamma_\mu \tau^I q_1) (\bar{q}_1 \gamma^\mu \tau^I q_3)$	C
qq3_1122	$(\bar{q}_1 \gamma_\mu \tau^I q_1) (\bar{q}_2 \gamma^\mu \tau^I q_2)$	R
qq3_1123	$(\bar{q}_1 \gamma_\mu \tau^I q_1) (\bar{q}_2 \gamma^\mu \tau^I q_3)$	C
qq3_1133	$(\bar{q}_1 \gamma_\mu \tau^I q_1) (\bar{q}_3 \gamma^\mu \tau^I q_3)$	R
qq3_1212	$(\bar{q}_1 \gamma_\mu \tau^I q_2) (\bar{q}_1 \gamma^\mu \tau^I q_2)$	C
qq3_1213	$(\bar{q}_1 \gamma_\mu \tau^I q_2) (\bar{q}_1 \gamma^\mu \tau^I q_3)$	C
qq3_1221	$(\bar{q}_1 \gamma_\mu \tau^I q_2) (\bar{q}_2 \gamma^\mu \tau^I q_1)$	R
qq3_1222	$(\bar{q}_1 \gamma_\mu \tau^I q_2) (\bar{q}_2 \gamma^\mu \tau^I q_2)$	C
qq3_1223	$(\bar{q}_1 \gamma_\mu \tau^I q_2) (\bar{q}_2 \gamma^\mu \tau^I q_3)$	C
qq3_1231	$(\bar{q}_1 \gamma_\mu \tau^I q_2) (\bar{q}_3 \gamma^\mu \tau^I q_1)$	C
qq3_1232	$(\bar{q}_1 \gamma_\mu \tau^I q_2) (\bar{q}_3 \gamma^\mu \tau^I q_2)$	C
qq3_1233	$(\bar{q}_1 \gamma_\mu \tau^I q_2) (\bar{q}_3 \gamma^\mu \tau^I q_3)$	C
qq3_1313	$(\bar{q}_1 \gamma_\mu \tau^I q_3) (\bar{q}_1 \gamma^\mu \tau^I q_3)$	C
qq3_1322	$(\bar{q}_1 \gamma_\mu \tau^I q_3) (\bar{q}_2 \gamma^\mu \tau^I q_2)$	C
qq3_1323	$(\bar{q}_1 \gamma_\mu \tau^I q_3) (\bar{q}_2 \gamma^\mu \tau^I q_3)$	C
qq3_1331	$(\bar{q}_1 \gamma_\mu \tau^I q_3) (\bar{q}_3 \gamma^\mu \tau^I q_1)$	R
qq3_1332	$(\bar{q}_1 \gamma_\mu \tau^I q_3) (\bar{q}_3 \gamma^\mu \tau^I q_2)$	C
qq3_1333	$(\bar{q}_1 \gamma_\mu \tau^I q_3) (\bar{q}_3 \gamma^\mu \tau^I q_3)$	C
qq3_2222	$(\bar{q}_2 \gamma_\mu \tau^I q_2) (\bar{q}_2 \gamma^\mu \tau^I q_2)$	R
qq3_2223	$(\bar{q}_2 \gamma_\mu \tau^I q_2) (\bar{q}_2 \gamma^\mu \tau^I q_3)$	C
qq3_2233	$(\bar{q}_2 \gamma_\mu \tau^I q_2) (\bar{q}_3 \gamma^\mu \tau^I q_3)$	R
qq3_2323	$(\bar{q}_2 \gamma_\mu \tau^I q_3) (\bar{q}_2 \gamma^\mu \tau^I q_3)$	C
qq3_2332	$(\bar{q}_2 \gamma_\mu \tau^I q_3) (\bar{q}_3 \gamma^\mu \tau^I q_2)$	R
qq3_2333	$(\bar{q}_2 \gamma_\mu \tau^I q_3) (\bar{q}_3 \gamma^\mu \tau^I q_3)$	C
qq3_3333	$(\bar{q}_3 \gamma_\mu \tau^I q_3) (\bar{q}_3 \gamma^\mu \tau^I q_3)$	R
lq1_1111	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{q}_1 \gamma^\mu q_1)$	R

WC name	Operator	Type
1q1_1112	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{q}_1 \gamma^\mu q_2)$	C
1q1_1113	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{q}_1 \gamma^\mu q_3)$	C
1q1_1122	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{q}_2 \gamma^\mu q_2)$	R
1q1_1123	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{q}_2 \gamma^\mu q_3)$	C
1q1_1133	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{q}_3 \gamma^\mu q_3)$	R
1q1_1211	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{q}_1 \gamma^\mu q_1)$	C
1q1_1212	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{q}_1 \gamma^\mu q_2)$	C
1q1_1213	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{q}_1 \gamma^\mu q_3)$	C
1q1_1221	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{q}_2 \gamma^\mu q_1)$	C
1q1_1222	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{q}_2 \gamma^\mu q_2)$	C
1q1_1223	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{q}_2 \gamma^\mu q_3)$	C
1q1_1231	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{q}_3 \gamma^\mu q_1)$	C
1q1_1232	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{q}_3 \gamma^\mu q_2)$	C
1q1_1233	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{q}_3 \gamma^\mu q_3)$	C
1q1_1311	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_1)$	C
1q1_1312	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_2)$	C
1q1_1313	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_3)$	C
1q1_1321	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{q}_2 \gamma^\mu q_1)$	C
1q1_1322	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{q}_2 \gamma^\mu q_2)$	C
1q1_1323	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{q}_2 \gamma^\mu q_3)$	C
1q1_1331	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_1)$	C
1q1_1332	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_2)$	C
1q1_1333	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_3)$	C
1q1_2211	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{q}_1 \gamma^\mu q_1)$	R
1q1_2212	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{q}_1 \gamma^\mu q_2)$	C
1q1_2213	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{q}_1 \gamma^\mu q_3)$	C
1q1_2222	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{q}_2 \gamma^\mu q_2)$	R
1q1_2223	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{q}_2 \gamma^\mu q_3)$	C
1q1_2233	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{q}_3 \gamma^\mu q_3)$	R
1q1_2311	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_1)$	C
1q1_2312	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_2)$	C
1q1_2313	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_3)$	C
1q1_2321	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_2 \gamma^\mu q_1)$	C
1q1_2322	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_2 \gamma^\mu q_2)$	C
1q1_2323	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_2 \gamma^\mu q_3)$	C
1q1_2331	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_1)$	C
1q1_2332	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_2)$	C
1q1_2333	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{q}_3 \gamma^\mu q_3)$	C
1q1_3311	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_1)$	R
1q1_3312	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_2)$	C
1q1_3313	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{q}_1 \gamma^\mu q_3)$	C
1q1_3322	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{q}_2 \gamma^\mu q_2)$	R

WC name	Operator	Type
1q3_3312	$(\bar{\ell}_3 \gamma_\mu \tau^I \ell_3) (\bar{q}_1 \gamma^\mu \tau^I q_2)$	C
1q3_3313	$(\bar{\ell}_3 \gamma_\mu \tau^I \ell_3) (\bar{q}_1 \gamma^\mu \tau^I q_3)$	C
1q3_3322	$(\bar{\ell}_3 \gamma_\mu \tau^I \ell_3) (\bar{q}_2 \gamma^\mu \tau^I q_2)$	R
1q3_3323	$(\bar{\ell}_3 \gamma_\mu \tau^I \ell_3) (\bar{q}_2 \gamma^\mu \tau^I q_3)$	C
1q3_3333	$(\bar{\ell}_3 \gamma_\mu \tau^I \ell_3) (\bar{q}_3 \gamma^\mu \tau^I q_3)$	R
ee_1111	$(\bar{e}_1 \gamma_\mu e_1) (\bar{e}_1 \gamma^\mu e_1)$	R
ee_1112	$(\bar{e}_1 \gamma_\mu e_1) (\bar{e}_1 \gamma^\mu e_2)$	C
ee_1113	$(\bar{e}_1 \gamma_\mu e_1) (\bar{e}_1 \gamma^\mu e_3)$	C
ee_1122	$(\bar{e}_1 \gamma_\mu e_1) (\bar{e}_2 \gamma^\mu e_2)$	R
ee_1123	$(\bar{e}_1 \gamma_\mu e_1) (\bar{e}_2 \gamma^\mu e_3)$	C
ee_1133	$(\bar{e}_1 \gamma_\mu e_1) (\bar{e}_3 \gamma^\mu e_3)$	R
ee_1212	$(\bar{e}_1 \gamma_\mu e_2) (\bar{e}_1 \gamma^\mu e_2)$	C
ee_1213	$(\bar{e}_1 \gamma_\mu e_2) (\bar{e}_1 \gamma^\mu e_3)$	C
ee_1222	$(\bar{e}_1 \gamma_\mu e_2) (\bar{e}_2 \gamma^\mu e_2)$	C
ee_1223	$(\bar{e}_1 \gamma_\mu e_2) (\bar{e}_2 \gamma^\mu e_3)$	C
ee_1232	$(\bar{e}_1 \gamma_\mu e_2) (\bar{e}_3 \gamma^\mu e_2)$	C
ee_1233	$(\bar{e}_1 \gamma_\mu e_2) (\bar{e}_3 \gamma^\mu e_3)$	C
ee_1313	$(\bar{e}_1 \gamma_\mu e_3) (\bar{e}_1 \gamma^\mu e_3)$	C
ee_1323	$(\bar{e}_1 \gamma_\mu e_3) (\bar{e}_2 \gamma^\mu e_3)$	C
ee_1333	$(\bar{e}_1 \gamma_\mu e_3) (\bar{e}_3 \gamma^\mu e_3)$	C
ee_2222	$(\bar{e}_2 \gamma_\mu e_2) (\bar{e}_2 \gamma^\mu e_2)$	R
ee_2223	$(\bar{e}_2 \gamma_\mu e_2) (\bar{e}_2 \gamma^\mu e_3)$	C
ee_2233	$(\bar{e}_2 \gamma_\mu e_2) (\bar{e}_3 \gamma^\mu e_3)$	R
ee_2323	$(\bar{e}_2 \gamma_\mu e_3) (\bar{e}_2 \gamma^\mu e_3)$	C
ee_2333	$(\bar{e}_2 \gamma_\mu e_3) (\bar{e}_3 \gamma^\mu e_3)$	C
ee_3333	$(\bar{e}_3 \gamma_\mu e_3) (\bar{e}_3 \gamma^\mu e_3)$	R
uu_1111	$(\bar{u}_1 \gamma_\mu u_1) (\bar{u}_1 \gamma^\mu u_1)$	R
uu_1112	$(\bar{u}_1 \gamma_\mu u_1) (\bar{u}_1 \gamma^\mu u_2)$	C
uu_1113	$(\bar{u}_1 \gamma_\mu u_1) (\bar{u}_1 \gamma^\mu u_3)$	C
uu_1122	$(\bar{u}_1 \gamma_\mu u_1) (\bar{u}_2 \gamma^\mu u_2)$	R
uu_1123	$(\bar{u}_1 \gamma_\mu u_1) (\bar{u}_2 \gamma^\mu u_3)$	C
uu_1133	$(\bar{u}_1 \gamma_\mu u_1) (\bar{u}_3 \gamma^\mu u_3)$	R
uu_1212	$(\bar{u}_1 \gamma_\mu u_2) (\bar{u}_1 \gamma^\mu u_2)$	C
uu_1213	$(\bar{u}_1 \gamma_\mu u_2) (\bar{u}_1 \gamma^\mu u_3)$	C
uu_1221	$(\bar{u}_1 \gamma_\mu u_2) (\bar{u}_2 \gamma^\mu u_1)$	R
uu_1222	$(\bar{u}_1 \gamma_\mu u_2) (\bar{u}_2 \gamma^\mu u_2)$	C
uu_1223	$(\bar{u}_1 \gamma_\mu u_2) (\bar{u}_2 \gamma^\mu u_3)$	C
uu_1231	$(\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_1)$	C
uu_1232	$(\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_2)$	C
uu_1233	$(\bar{u}_1 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3)$	C
uu_1313	$(\bar{u}_1 \gamma_\mu u_3) (\bar{u}_1 \gamma^\mu u_3)$	C
uu_1322	$(\bar{u}_1 \gamma_\mu u_3) (\bar{u}_2 \gamma^\mu u_2)$	C
uu_1323	$(\bar{u}_1 \gamma_\mu u_3) (\bar{u}_2 \gamma^\mu u_3)$	C
uu_1331	$(\bar{u}_1 \gamma_\mu u_3) (\bar{u}_3 \gamma^\mu u_1)$	R

WC name	Operator	Type
uu_1332	$(\bar{u}_1 \gamma_\mu u_3) (\bar{u}_3 \gamma^\mu u_2)$	C
uu_1333	$(\bar{u}_1 \gamma_\mu u_3) (\bar{u}_3 \gamma^\mu u_3)$	C
uu_2222	$(\bar{u}_2 \gamma_\mu u_2) (\bar{u}_2 \gamma^\mu u_2)$	R
uu_2223	$(\bar{u}_2 \gamma_\mu u_2) (\bar{u}_2 \gamma^\mu u_3)$	C
uu_2233	$(\bar{u}_2 \gamma_\mu u_2) (\bar{u}_3 \gamma^\mu u_3)$	R
uu_2323	$(\bar{u}_2 \gamma_\mu u_3) (\bar{u}_2 \gamma^\mu u_3)$	C
uu_2332	$(\bar{u}_2 \gamma_\mu u_3) (\bar{u}_3 \gamma^\mu u_2)$	R
uu_2333	$(\bar{u}_2 \gamma_\mu u_3) (\bar{u}_3 \gamma^\mu u_3)$	C
uu_3333	$(\bar{u}_3 \gamma_\mu u_3) (\bar{u}_3 \gamma^\mu u_3)$	R
dd_1111	$(\bar{d}_1 \gamma_\mu d_1) (\bar{d}_1 \gamma^\mu d_1)$	R
dd_1112	$(\bar{d}_1 \gamma_\mu d_1) (\bar{d}_1 \gamma^\mu d_2)$	C
dd_1113	$(\bar{d}_1 \gamma_\mu d_1) (\bar{d}_1 \gamma^\mu d_3)$	C
dd_1122	$(\bar{d}_1 \gamma_\mu d_1) (\bar{d}_2 \gamma^\mu d_2)$	R
dd_1123	$(\bar{d}_1 \gamma_\mu d_1) (\bar{d}_2 \gamma^\mu d_3)$	C
dd_1133	$(\bar{d}_1 \gamma_\mu d_1) (\bar{d}_3 \gamma^\mu d_3)$	R
dd_1212	$(\bar{d}_1 \gamma_\mu d_2) (\bar{d}_1 \gamma^\mu d_2)$	C
dd_1213	$(\bar{d}_1 \gamma_\mu d_2) (\bar{d}_1 \gamma^\mu d_3)$	C
dd_1221	$(\bar{d}_1 \gamma_\mu d_2) (\bar{d}_2 \gamma^\mu d_1)$	R
dd_1222	$(\bar{d}_1 \gamma_\mu d_2) (\bar{d}_2 \gamma^\mu d_2)$	C
dd_1223	$(\bar{d}_1 \gamma_\mu d_2) (\bar{d}_2 \gamma^\mu d_3)$	C
dd_1231	$(\bar{d}_1 \gamma_\mu d_2) (\bar{d}_3 \gamma^\mu d_1)$	C
dd_1232	$(\bar{d}_1 \gamma_\mu d_2) (\bar{d}_3 \gamma^\mu d_2)$	C
dd_1233	$(\bar{d}_1 \gamma_\mu d_2) (\bar{d}_3 \gamma^\mu d_3)$	C
dd_1313	$(\bar{d}_1 \gamma_\mu d_3) (\bar{d}_1 \gamma^\mu d_3)$	C
dd_1322	$(\bar{d}_1 \gamma_\mu d_3) (\bar{d}_2 \gamma^\mu d_2)$	C
dd_1323	$(\bar{d}_1 \gamma_\mu d_3) (\bar{d}_2 \gamma^\mu d_3)$	C
dd_1331	$(\bar{d}_1 \gamma_\mu d_3) (\bar{d}_3 \gamma^\mu d_1)$	R
dd_1332	$(\bar{d}_1 \gamma_\mu d_3) (\bar{d}_3 \gamma^\mu d_2)$	C
dd_1333	$(\bar{d}_1 \gamma_\mu d_3) (\bar{d}_3 \gamma^\mu d_3)$	C
dd_2222	$(\bar{d}_2 \gamma_\mu d_2) (\bar{d}_2 \gamma^\mu d_2)$	R
dd_2223	$(\bar{d}_2 \gamma_\mu d_2) (\bar{d}_2 \gamma^\mu d_3)$	C
dd_2233	$(\bar{d}_2 \gamma_\mu d_2) (\bar{d}_3 \gamma^\mu d_3)$	R
dd_2323	$(\bar{d}_2 \gamma_\mu d_3) (\bar{d}_2 \gamma^\mu d_3)$	C
dd_2332	$(\bar{d}_2 \gamma_\mu d_3) (\bar{d}_3 \gamma^\mu d_2)$	R
dd_2333	$(\bar{d}_2 \gamma_\mu d_3) (\bar{d}_3 \gamma^\mu d_3)$	C
dd_3333	$(\bar{d}_3 \gamma_\mu d_3) (\bar{d}_3 \gamma^\mu d_3)$	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
eu_1113	$(\bar{e}_1 \gamma_\mu e_1) (\bar{u}_1 \gamma^\mu u_3)$	C
eu_1122	$(\bar{e}_1 \gamma_\mu e_1) (\bar{u}_2 \gamma^\mu u_2)$	R
eu_1123	$(\bar{e}_1 \gamma_\mu e_1) (\bar{u}_2 \gamma^\mu u_3)$	C
eu_1133	$(\bar{e}_1 \gamma_\mu e_1) (\bar{u}_3 \gamma^\mu u_3)$	R
eu_1211	$(\bar{e}_1 \gamma_\mu e_2) (\bar{u}_1 \gamma^\mu u_1)$	C

WC name	Operator	Type
eu_1212	$(\bar{e}_1 \gamma_\mu e_2) (\bar{u}_1 \gamma^\mu u_2)$	C
eu_1213	$(\bar{e}_1 \gamma_\mu e_2) (\bar{u}_1 \gamma^\mu u_3)$	C
eu_1221	$(\bar{e}_1 \gamma_\mu e_2) (\bar{u}_2 \gamma^\mu u_1)$	C
eu_1222	$(\bar{e}_1 \gamma_\mu e_2) (\bar{u}_2 \gamma^\mu u_2)$	C
eu_1223	$(\bar{e}_1 \gamma_\mu e_2) (\bar{u}_2 \gamma^\mu u_3)$	C
eu_1231	$(\bar{e}_1 \gamma_\mu e_2) (\bar{u}_3 \gamma^\mu u_1)$	C
eu_1232	$(\bar{e}_1 \gamma_\mu e_2) (\bar{u}_3 \gamma^\mu u_2)$	C
eu_1233	$(\bar{e}_1 \gamma_\mu e_2) (\bar{u}_3 \gamma^\mu u_3)$	C
eu_1311	$(\bar{e}_1 \gamma_\mu e_3) (\bar{u}_1 \gamma^\mu u_1)$	C
eu_1312	$(\bar{e}_1 \gamma_\mu e_3) (\bar{u}_1 \gamma^\mu u_2)$	C
eu_1313	$(\bar{e}_1 \gamma_\mu e_3) (\bar{u}_1 \gamma^\mu u_3)$	C
eu_1321	$(\bar{e}_1 \gamma_\mu e_3) (\bar{u}_2 \gamma^\mu u_1)$	C
eu_1322	$(\bar{e}_1 \gamma_\mu e_3) (\bar{u}_2 \gamma^\mu u_2)$	C
eu_1323	$(\bar{e}_1 \gamma_\mu e_3) (\bar{u}_2 \gamma^\mu u_3)$	C
eu_1331	$(\bar{e}_1 \gamma_\mu e_3) (\bar{u}_3 \gamma^\mu u_1)$	C
eu_1332	$(\bar{e}_1 \gamma_\mu e_3) (\bar{u}_3 \gamma^\mu u_2)$	C
eu_1333	$(\bar{e}_1 \gamma_\mu e_3) (\bar{u}_3 \gamma^\mu u_3)$	C
eu_2211	$(\bar{e}_2 \gamma_\mu e_2) (\bar{u}_1 \gamma^\mu u_1)$	R
eu_2212	$(\bar{e}_2 \gamma_\mu e_2) (\bar{u}_1 \gamma^\mu u_2)$	C
eu_2213	$(\bar{e}_2 \gamma_\mu e_2) (\bar{u}_1 \gamma^\mu u_3)$	C
eu_2222	$(\bar{e}_2 \gamma_\mu e_2) (\bar{u}_2 \gamma^\mu u_2)$	R
eu_2223	$(\bar{e}_2 \gamma_\mu e_2) (\bar{u}_2 \gamma^\mu u_3)$	C
eu_2233	$(\bar{e}_2 \gamma_\mu e_2) (\bar{u}_3 \gamma^\mu u_3)$	R
eu_2311	$(\bar{e}_2 \gamma_\mu e_3) (\bar{u}_1 \gamma^\mu u_1)$	C
eu_2312	$(\bar{e}_2 \gamma_\mu e_3) (\bar{u}_1 \gamma^\mu u_2)$	C
eu_2313	$(\bar{e}_2 \gamma_\mu e_3) (\bar{u}_1 \gamma^\mu u_3)$	C
eu_2321	$(\bar{e}_2 \gamma_\mu e_3) (\bar{u}_2 \gamma^\mu u_1)$	C
eu_2322	$(\bar{e}_2 \gamma_\mu e_3) (\bar{u}_2 \gamma^\mu u_2)$	C
eu_2323	$(\bar{e}_2 \gamma_\mu e_3) (\bar{u}_2 \gamma^\mu u_3)$	C
eu_2331	$(\bar{e}_2 \gamma_\mu e_3) (\bar{u}_3 \gamma^\mu u_1)$	C
eu_2332	$(\bar{e}_2 \gamma_\mu e_3) (\bar{u}_3 \gamma^\mu u_2)$	C
eu_2333	$(\bar{e}_2 \gamma_\mu e_3) (\bar{u}_3 \gamma^\mu u_3)$	C
eu_3311	$(\bar{e}_3 \gamma_\mu e_3) (\bar{u}_1 \gamma^\mu u_1)$	R
eu_3312	$(\bar{e}_3 \gamma_\mu e_3) (\bar{u}_1 \gamma^\mu u_2)$	C
eu_3313	$(\bar{e}_3 \gamma_\mu e_3) (\bar{u}_1 \gamma^\mu u_3)$	C
eu_3322	$(\bar{e}_3 \gamma_\mu e_3) (\bar{u}_2 \gamma^\mu u_2)$	R
eu_3323	$(\bar{e}_3 \gamma_\mu e_3) (\bar{u}_2 \gamma^\mu u_3)$	C
eu_3333	$(\bar{e}_3 \gamma_\mu e_3) (\bar{u}_3 \gamma^\mu u_3)$	R
ed_1111	$(\bar{e}_1 \gamma_\mu e_1) (\bar{d}_1 \gamma^\mu d_1)$	R
ed_1112	$(\bar{e}_1 \gamma_\mu e_1) (\bar{d}_1 \gamma^\mu d_2)$	C
ed_1113	$(\bar{e}_1 \gamma_\mu e_1) (\bar{d}_1 \gamma^\mu d_3)$	C
ed_1122	$(\bar{e}_1 \gamma_\mu e_1) (\bar{d}_2 \gamma^\mu d_2)$	R
ed_1123	$(\bar{e}_1 \gamma_\mu e_1) (\bar{d}_2 \gamma^\mu d_3)$	C
ed_1133	$(\bar{e}_1 \gamma_\mu e_1) (\bar{d}_3 \gamma^\mu d_3)$	R

WC name	Operator	Type
ed_1211	$(\bar{e}_1 \gamma_\mu e_2) (\bar{d}_1 \gamma^\mu d_1)$	C
ed_1212	$(\bar{e}_1 \gamma_\mu e_2) (\bar{d}_1 \gamma^\mu d_2)$	C
ed_1213	$(\bar{e}_1 \gamma_\mu e_2) (\bar{d}_1 \gamma^\mu d_3)$	C
ed_1221	$(\bar{e}_1 \gamma_\mu e_2) (\bar{d}_2 \gamma^\mu d_1)$	C
ed_1222	$(\bar{e}_1 \gamma_\mu e_2) (\bar{d}_2 \gamma^\mu d_2)$	C
ed_1223	$(\bar{e}_1 \gamma_\mu e_2) (\bar{d}_2 \gamma^\mu d_3)$	C
ed_1231	$(\bar{e}_1 \gamma_\mu e_2) (\bar{d}_3 \gamma^\mu d_1)$	C
ed_1232	$(\bar{e}_1 \gamma_\mu e_2) (\bar{d}_3 \gamma^\mu d_2)$	C
ed_1233	$(\bar{e}_1 \gamma_\mu e_2) (\bar{d}_3 \gamma^\mu d_3)$	C
ed_1311	$(\bar{e}_1 \gamma_\mu e_3) (\bar{d}_1 \gamma^\mu d_1)$	C
ed_1312	$(\bar{e}_1 \gamma_\mu e_3) (\bar{d}_1 \gamma^\mu d_2)$	C
ed_1313	$(\bar{e}_1 \gamma_\mu e_3) (\bar{d}_1 \gamma^\mu d_3)$	C
ed_1321	$(\bar{e}_1 \gamma_\mu e_3) (\bar{d}_2 \gamma^\mu d_1)$	C
ed_1322	$(\bar{e}_1 \gamma_\mu e_3) (\bar{d}_2 \gamma^\mu d_2)$	C
ed_1323	$(\bar{e}_1 \gamma_\mu e_3) (\bar{d}_2 \gamma^\mu d_3)$	C
ed_1331	$(\bar{e}_1 \gamma_\mu e_3) (\bar{d}_3 \gamma^\mu d_1)$	C
ed_1332	$(\bar{e}_1 \gamma_\mu e_3) (\bar{d}_3 \gamma^\mu d_2)$	C
ed_1333	$(\bar{e}_1 \gamma_\mu e_3) (\bar{d}_3 \gamma^\mu d_3)$	C
ed_2211	$(\bar{e}_2 \gamma_\mu e_2) (\bar{d}_1 \gamma^\mu d_1)$	R
ed_2212	$(\bar{e}_2 \gamma_\mu e_2) (\bar{d}_1 \gamma^\mu d_2)$	C
ed_2213	$(\bar{e}_2 \gamma_\mu e_2) (\bar{d}_1 \gamma^\mu d_3)$	C
ed_2222	$(\bar{e}_2 \gamma_\mu e_2) (\bar{d}_2 \gamma^\mu d_2)$	R
ed_2223	$(\bar{e}_2 \gamma_\mu e_2) (\bar{d}_2 \gamma^\mu d_3)$	C
ed_2233	$(\bar{e}_2 \gamma_\mu e_2) (\bar{d}_3 \gamma^\mu d_3)$	R
ed_2311	$(\bar{e}_2 \gamma_\mu e_3) (\bar{d}_1 \gamma^\mu d_1)$	C
ed_2312	$(\bar{e}_2 \gamma_\mu e_3) (\bar{d}_1 \gamma^\mu d_2)$	C
ed_2313	$(\bar{e}_2 \gamma_\mu e_3) (\bar{d}_1 \gamma^\mu d_3)$	C
ed_2321	$(\bar{e}_2 \gamma_\mu e_3) (\bar{d}_2 \gamma^\mu d_1)$	C
ed_2322	$(\bar{e}_2 \gamma_\mu e_3) (\bar{d}_2 \gamma^\mu d_2)$	C
ed_2323	$(\bar{e}_2 \gamma_\mu e_3) (\bar{d}_2 \gamma^\mu d_3)$	C
ed_2331	$(\bar{e}_2 \gamma_\mu e_3) (\bar{d}_3 \gamma^\mu d_1)$	C
ed_2332	$(\bar{e}_2 \gamma_\mu e_3) (\bar{d}_3 \gamma^\mu d_2)$	C
ed_2333	$(\bar{e}_2 \gamma_\mu e_3) (\bar{d}_3 \gamma^\mu d_3)$	C
ed_3311	$(\bar{e}_3 \gamma_\mu e_3) (\bar{d}_1 \gamma^\mu d_1)$	R
ed_3312	$(\bar{e}_3 \gamma_\mu e_3) (\bar{d}_1 \gamma^\mu d_2)$	C
ed_3313	$(\bar{e}_3 \gamma_\mu e_3) (\bar{d}_1 \gamma^\mu d_3)$	C
ed_3322	$(\bar{e}_3 \gamma_\mu e_3) (\bar{d}_2 \gamma^\mu d_2)$	R
ed_3323	$(\bar{e}_3 \gamma_\mu e_3) (\bar{d}_2 \gamma^\mu d_3)$	C
ed_3333	$(\bar{e}_3 \gamma_\mu e_3) (\bar{d}_3 \gamma^\mu d_3)$	R
ud1_1111	$(\bar{u}_1 \gamma_\mu u_1) (\bar{d}_1 \gamma^\mu d_1)$	R
ud1_1112	$(\bar{u}_1 \gamma_\mu u_1) (\bar{d}_1 \gamma^\mu d_2)$	C
ud1_1113	$(\bar{u}_1 \gamma_\mu u_1) (\bar{d}_1 \gamma^\mu d_3)$	C

WC name	Operator	Type
ud1_1122	$(\bar{u}_1 \gamma_\mu u_1) (\bar{d}_2 \gamma^\mu d_2)$	R
ud1_1123	$(\bar{u}_1 \gamma_\mu u_1) (\bar{d}_2 \gamma^\mu d_3)$	C
ud1_1133	$(\bar{u}_1 \gamma_\mu u_1) (\bar{d}_3 \gamma^\mu d_3)$	R
ud1_1211	$(\bar{u}_1 \gamma_\mu u_2) (\bar{d}_1 \gamma^\mu d_1)$	C
ud1_1212	$(\bar{u}_1 \gamma_\mu u_2) (\bar{d}_1 \gamma^\mu d_2)$	C
ud1_1213	$(\bar{u}_1 \gamma_\mu u_2) (\bar{d}_1 \gamma^\mu d_3)$	C
ud1_1221	$(\bar{u}_1 \gamma_\mu u_2) (\bar{d}_2 \gamma^\mu d_1)$	C
ud1_1222	$(\bar{u}_1 \gamma_\mu u_2) (\bar{d}_2 \gamma^\mu d_2)$	C
ud1_1223	$(\bar{u}_1 \gamma_\mu u_2) (\bar{d}_2 \gamma^\mu d_3)$	C
ud1_1231	$(\bar{u}_1 \gamma_\mu u_2) (\bar{d}_3 \gamma^\mu d_1)$	C
ud1_1232	$(\bar{u}_1 \gamma_\mu u_2) (\bar{d}_3 \gamma^\mu d_2)$	C
ud1_1233	$(\bar{u}_1 \gamma_\mu u_2) (\bar{d}_3 \gamma^\mu d_3)$	C
ud1_1311	$(\bar{u}_1 \gamma_\mu u_3) (\bar{d}_1 \gamma^\mu d_1)$	C
ud1_1312	$(\bar{u}_1 \gamma_\mu u_3) (\bar{d}_1 \gamma^\mu d_2)$	C
ud1_1313	$(\bar{u}_1 \gamma_\mu u_3) (\bar{d}_1 \gamma^\mu d_3)$	C
ud1_1321	$(\bar{u}_1 \gamma_\mu u_3) (\bar{d}_2 \gamma^\mu d_1)$	C
ud1_1322	$(\bar{u}_1 \gamma_\mu u_3) (\bar{d}_2 \gamma^\mu d_2)$	C
ud1_1323	$(\bar{u}_1 \gamma_\mu u_3) (\bar{d}_2 \gamma^\mu d_3)$	C
ud1_1331	$(\bar{u}_1 \gamma_\mu u_3) (\bar{d}_3 \gamma^\mu d_1)$	C
ud1_1332	$(\bar{u}_1 \gamma_\mu u_3) (\bar{d}_3 \gamma^\mu d_2)$	C
ud1_1333	$(\bar{u}_1 \gamma_\mu u_3) (\bar{d}_3 \gamma^\mu d_3)$	C
ud1_2211	$(\bar{u}_2 \gamma_\mu u_2) (\bar{d}_1 \gamma^\mu d_1)$	R
ud1_2212	$(\bar{u}_2 \gamma_\mu u_2) (\bar{d}_1 \gamma^\mu d_2)$	C
ud1_2213	$(\bar{u}_2 \gamma_\mu u_2) (\bar{d}_1 \gamma^\mu d_3)$	C
ud1_2222	$(\bar{u}_2 \gamma_\mu u_2) (\bar{d}_2 \gamma^\mu d_2)$	R
ud1_2223	$(\bar{u}_2 \gamma_\mu u_2) (\bar{d}_2 \gamma^\mu d_3)$	C
ud1_2233	$(\bar{u}_2 \gamma_\mu u_2) (\bar{d}_3 \gamma^\mu d_3)$	R
ud1_2311	$(\bar{u}_2 \gamma_\mu u_3) (\bar{d}_1 \gamma^\mu d_1)$	C
ud1_2312	$(\bar{u}_2 \gamma_\mu u_3) (\bar{d}_1 \gamma^\mu d_2)$	C
ud1_2313	$(\bar{u}_2 \gamma_\mu u_3) (\bar{d}_1 \gamma^\mu d_3)$	C
ud1_2321	$(\bar{u}_2 \gamma_\mu u_3) (\bar{d}_2 \gamma^\mu d_1)$	C
ud1_2322	$(\bar{u}_2 \gamma_\mu u_3) (\bar{d}_2 \gamma^\mu d_2)$	C
ud1_2323	$(\bar{u}_2 \gamma_\mu u_3) (\bar{d}_2 \gamma^\mu d_3)$	C
ud1_2331	$(\bar{u}_2 \gamma_\mu u_3) (\bar{d}_3 \gamma^\mu d_1)$	C
ud1_2332	$(\bar{u}_2 \gamma_\mu u_3) (\bar{d}_3 \gamma^\mu d_2)$	C
ud1_2333	$(\bar{u}_2 \gamma_\mu u_3) (\bar{d}_3 \gamma^\mu d_3)$	C
ud1_3311	$(\bar{u}_3 \gamma_\mu u_3) (\bar{d}_1 \gamma^\mu d_1)$	R
ud1_3312	$(\bar{u}_3 \gamma_\mu u_3) (\bar{d}_1 \gamma^\mu d_2)$	C
ud1_3313	$(\bar{u}_3 \gamma_\mu u_3) (\bar{d}_1 \gamma^\mu d_3)$	C
ud1_3322	$(\bar{u}_3 \gamma_\mu u_3) (\bar{d}_2 \gamma^\mu d_2)$	R
ud1_3323	$(\bar{u}_3 \gamma_\mu u_3) (\bar{d}_2 \gamma^\mu d_3)$	C
ud1_3333	$(\bar{u}_3 \gamma_\mu u_3) (\bar{d}_3 \gamma^\mu d_3)$	R

WC name	Operator	Type
ud8_1111	$(\bar{u}_1 \gamma_\mu T^A u_1) (\bar{d}_1 \gamma^\mu T^A d_1)$	R
ud8_1112	$(\bar{u}_1 \gamma_\mu T^A u_1) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
ud8_1113	$(\bar{u}_1 \gamma_\mu T^A u_1) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
ud8_1122	$(\bar{u}_1 \gamma_\mu T^A u_1) (\bar{d}_2 \gamma^\mu T^A d_2)$	R
ud8_1123	$(\bar{u}_1 \gamma_\mu T^A u_1) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
ud8_1133	$(\bar{u}_1 \gamma_\mu T^A u_1) (\bar{d}_3 \gamma^\mu T^A d_3)$	R
ud8_1211	$(\bar{u}_1 \gamma_\mu T^A u_2) (\bar{d}_1 \gamma^\mu T^A d_1)$	C
ud8_1212	$(\bar{u}_1 \gamma_\mu T^A u_2) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
ud8_1213	$(\bar{u}_1 \gamma_\mu T^A u_2) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
ud8_1221	$(\bar{u}_1 \gamma_\mu T^A u_2) (\bar{d}_2 \gamma^\mu T^A d_1)$	C
ud8_1222	$(\bar{u}_1 \gamma_\mu T^A u_2) (\bar{d}_2 \gamma^\mu T^A d_2)$	C
ud8_1223	$(\bar{u}_1 \gamma_\mu T^A u_2) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
ud8_1231	$(\bar{u}_1 \gamma_\mu T^A u_2) (\bar{d}_3 \gamma^\mu T^A d_1)$	C
ud8_1232	$(\bar{u}_1 \gamma_\mu T^A u_2) (\bar{d}_3 \gamma^\mu T^A d_2)$	C
ud8_1233	$(\bar{u}_1 \gamma_\mu T^A u_2) (\bar{d}_3 \gamma^\mu T^A d_3)$	C
ud8_1311	$(\bar{u}_1 \gamma_\mu T^A u_3) (\bar{d}_1 \gamma^\mu T^A d_1)$	C
ud8_1312	$(\bar{u}_1 \gamma_\mu T^A u_3) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
ud8_1313	$(\bar{u}_1 \gamma_\mu T^A u_3) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
ud8_1321	$(\bar{u}_1 \gamma_\mu T^A u_3) (\bar{d}_2 \gamma^\mu T^A d_1)$	C
ud8_1322	$(\bar{u}_1 \gamma_\mu T^A u_3) (\bar{d}_2 \gamma^\mu T^A d_2)$	C
ud8_1323	$(\bar{u}_1 \gamma_\mu T^A u_3) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
ud8_1331	$(\bar{u}_1 \gamma_\mu T^A u_3) (\bar{d}_3 \gamma^\mu T^A d_1)$	C
ud8_1332	$(\bar{u}_1 \gamma_\mu T^A u_3) (\bar{d}_3 \gamma^\mu T^A d_2)$	C
ud8_1333	$(\bar{u}_1 \gamma_\mu T^A u_3) (\bar{d}_3 \gamma^\mu T^A d_3)$	C
ud8_2211	$(\bar{u}_2 \gamma_\mu T^A u_2) (\bar{d}_1 \gamma^\mu T^A d_1)$	R
ud8_2212	$(\bar{u}_2 \gamma_\mu T^A u_2) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
ud8_2213	$(\bar{u}_2 \gamma_\mu T^A u_2) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
ud8_2222	$(\bar{u}_2 \gamma_\mu T^A u_2) (\bar{d}_2 \gamma^\mu T^A d_2)$	R
ud8_2223	$(\bar{u}_2 \gamma_\mu T^A u_2) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
ud8_2233	$(\bar{u}_2 \gamma_\mu T^A u_2) (\bar{d}_3 \gamma^\mu T^A d_3)$	R
ud8_2311	$(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_1 \gamma^\mu T^A d_1)$	C
ud8_2312	$(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
ud8_2313	$(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
ud8_2321	$(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_2 \gamma^\mu T^A d_1)$	C
ud8_2322	$(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_2 \gamma^\mu T^A d_2)$	C
ud8_2323	$(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
ud8_2331	$(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_3 \gamma^\mu T^A d_1)$	C
ud8_2332	$(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_3 \gamma^\mu T^A d_2)$	C
ud8_2333	$(\bar{u}_2 \gamma_\mu T^A u_3) (\bar{d}_3 \gamma^\mu T^A d_3)$	C
ud8_3311	$(\bar{u}_3 \gamma_\mu T^A u_3) (\bar{d}_1 \gamma^\mu T^A d_1)$	R
ud8_3312	$(\bar{u}_3 \gamma_\mu T^A u_3) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
ud8_3313	$(\bar{u}_3 \gamma_\mu T^A u_3) (\bar{d}_1 \gamma^\mu T^A d_3)$	C

WC name	Operator	Type
ud8_3322	$(\bar{u}_3 \gamma_\mu T^A u_3) (\bar{d}_2 \gamma^\mu T^A d_2)$	R
ud8_3323	$(\bar{u}_3 \gamma_\mu T^A u_3) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
ud8_3333	$(\bar{u}_3 \gamma_\mu T^A u_3) (\bar{d}_3 \gamma^\mu T^A d_3)$	R
1e_1111	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{e}_1 \gamma^\mu e_1)$	R
1e_1112	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{e}_1 \gamma^\mu e_2)$	C
1e_1113	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{e}_1 \gamma^\mu e_3)$	C
1e_1122	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{e}_2 \gamma^\mu e_2)$	R
1e_1123	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{e}_2 \gamma^\mu e_3)$	C
1e_1133	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{e}_3 \gamma^\mu e_3)$	R
1e_1211	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{e}_1 \gamma^\mu e_1)$	C
1e_1212	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{e}_1 \gamma^\mu e_2)$	C
1e_1213	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{e}_1 \gamma^\mu e_3)$	C
1e_1221	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{e}_2 \gamma^\mu e_1)$	C
1e_1222	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{e}_2 \gamma^\mu e_2)$	C
1e_1223	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{e}_2 \gamma^\mu e_3)$	C
1e_1231	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{e}_3 \gamma^\mu e_1)$	C
1e_1232	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{e}_3 \gamma^\mu e_2)$	C
1e_1233	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{e}_3 \gamma^\mu e_3)$	C
1e_1311	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_1)$	C
1e_1312	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_2)$	C
1e_1313	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_3)$	C
1e_1321	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{e}_2 \gamma^\mu e_1)$	C
1e_1322	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{e}_2 \gamma^\mu e_2)$	C
1e_1323	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{e}_2 \gamma^\mu e_3)$	C
1e_1331	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{e}_3 \gamma^\mu e_1)$	C
1e_1332	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{e}_3 \gamma^\mu e_2)$	C
1e_1333	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{e}_3 \gamma^\mu e_3)$	C
1e_2211	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{e}_1 \gamma^\mu e_1)$	R
1e_2212	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{e}_1 \gamma^\mu e_2)$	C
1e_2213	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{e}_1 \gamma^\mu e_3)$	C
1e_2222	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{e}_2 \gamma^\mu e_2)$	R
1e_2223	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{e}_2 \gamma^\mu e_3)$	C
1e_2233	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{e}_3 \gamma^\mu e_3)$	R
1e_2311	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_1)$	C
1e_2312	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_2)$	C
1e_2313	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_3)$	C
1e_2321	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_2 \gamma^\mu e_1)$	C
1e_2322	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_2 \gamma^\mu e_2)$	C
1e_2323	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_2 \gamma^\mu e_3)$	C
1e_2331	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_3 \gamma^\mu e_1)$	C
1e_2332	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_3 \gamma^\mu e_2)$	C
1e_2333	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{e}_3 \gamma^\mu e_3)$	C

WC name	Operator	Type
1e_3311	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_1)$	R
1e_3312	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_2)$	C
1e_3313	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{e}_1 \gamma^\mu e_3)$	C
1e_3322	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{e}_2 \gamma^\mu e_2)$	R
1e_3323	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{e}_2 \gamma^\mu e_3)$	C
1e_3333	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{e}_3 \gamma^\mu e_3)$	R
1u_1111	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{u}_1 \gamma^\mu u_1)$	R
1u_1112	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{u}_1 \gamma^\mu u_2)$	C
1u_1113	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{u}_1 \gamma^\mu u_3)$	C
1u_1122	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{u}_2 \gamma^\mu u_2)$	R
1u_1123	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{u}_2 \gamma^\mu u_3)$	C
1u_1133	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{u}_3 \gamma^\mu u_3)$	R
1u_1211	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_1 \gamma^\mu u_1)$	C
1u_1212	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_1 \gamma^\mu u_2)$	C
1u_1213	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_1 \gamma^\mu u_3)$	C
1u_1221	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_2 \gamma^\mu u_1)$	C
1u_1222	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_2 \gamma^\mu u_2)$	C
1u_1223	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_2 \gamma^\mu u_3)$	C
1u_1231	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_3 \gamma^\mu u_1)$	C
1u_1232	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_3 \gamma^\mu u_2)$	C
1u_1233	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{u}_3 \gamma^\mu u_3)$	C
1u_1311	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_1)$	C
1u_1312	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_2)$	C
1u_1313	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3)$	C
1u_1321	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_1)$	C
1u_1322	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_2)$	C
1u_1323	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_3)$	C
1u_1331	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_1)$	C
1u_1332	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_2)$	C
1u_1333	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_3)$	C
1u_2211	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_1 \gamma^\mu u_1)$	R
1u_2212	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_1 \gamma^\mu u_2)$	C
1u_2213	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_1 \gamma^\mu u_3)$	C
1u_2222	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_2 \gamma^\mu u_2)$	R
1u_2223	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_2 \gamma^\mu u_3)$	C
1u_2233	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{u}_3 \gamma^\mu u_3)$	R
1u_2311	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_1)$	C
1u_2312	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_2)$	C
1u_2313	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3)$	C
1u_2321	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_1)$	C
1u_2322	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_2)$	C
1u_2323	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_3)$	C

WC name	Operator	Type
1u_2331	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_1)$	C
1u_2332	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_2)$	C
1u_2333	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_3)$	C
1u_3311	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_1)$	R
1u_3312	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_2)$	C
1u_3313	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_1 \gamma^\mu u_3)$	C
1u_3322	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_2)$	R
1u_3323	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_2 \gamma^\mu u_3)$	C
1u_3333	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{u}_3 \gamma^\mu u_3)$	R
1d_1111	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{d}_1 \gamma^\mu d_1)$	R
1d_1112	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{d}_1 \gamma^\mu d_2)$	C
1d_1113	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{d}_1 \gamma^\mu d_3)$	C
1d_1122	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{d}_2 \gamma^\mu d_2)$	R
1d_1123	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{d}_2 \gamma^\mu d_3)$	C
1d_1133	$(\bar{\ell}_1 \gamma_\mu \ell_1) (\bar{d}_3 \gamma^\mu d_3)$	R
1d_1211	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_1)$	C
1d_1212	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_2)$	C
1d_1213	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_3)$	C
1d_1221	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{d}_2 \gamma^\mu d_1)$	C
1d_1222	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{d}_2 \gamma^\mu d_2)$	C
1d_1223	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{d}_2 \gamma^\mu d_3)$	C
1d_1231	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{d}_3 \gamma^\mu d_1)$	C
1d_1232	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{d}_3 \gamma^\mu d_2)$	C
1d_1233	$(\bar{\ell}_1 \gamma_\mu \ell_2) (\bar{d}_3 \gamma^\mu d_3)$	C
1d_1311	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_1 \gamma^\mu d_1)$	C
1d_1312	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_1 \gamma^\mu d_2)$	C
1d_1313	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_1 \gamma^\mu d_3)$	C
1d_1321	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_2 \gamma^\mu d_1)$	C
1d_1322	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_2 \gamma^\mu d_2)$	C
1d_1323	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_2 \gamma^\mu d_3)$	C
1d_1331	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_1)$	C
1d_1332	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_2)$	C
1d_1333	$(\bar{\ell}_1 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_3)$	C
1d_2211	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_1)$	R
1d_2212	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_2)$	C
1d_2213	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_1 \gamma^\mu d_3)$	C
1d_2222	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_2 \gamma^\mu d_2)$	R
1d_2223	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_2 \gamma^\mu d_3)$	C
1d_2233	$(\bar{\ell}_2 \gamma_\mu \ell_2) (\bar{d}_3 \gamma^\mu d_3)$	R
1d_2311	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{d}_1 \gamma^\mu d_1)$	C
1d_2312	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{d}_1 \gamma^\mu d_2)$	C
1d_2313	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{d}_1 \gamma^\mu d_3)$	C

WC name	Operator	Type
ld_2321	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{d}_2 \gamma^\mu d_1)$	C
ld_2322	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{d}_2 \gamma^\mu d_2)$	C
ld_2323	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{d}_2 \gamma^\mu d_3)$	C
ld_2331	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_1)$	C
ld_2332	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_2)$	C
ld_2333	$(\bar{\ell}_2 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_3)$	C
ld_3311	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{d}_1 \gamma^\mu d_1)$	R
ld_3312	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{d}_1 \gamma^\mu d_2)$	C
ld_3313	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{d}_1 \gamma^\mu d_3)$	C
ld_3322	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{d}_2 \gamma^\mu d_2)$	R
ld_3323	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{d}_2 \gamma^\mu d_3)$	C
ld_3333	$(\bar{\ell}_3 \gamma_\mu \ell_3) (\bar{d}_3 \gamma^\mu d_3)$	R
qe_1111	$(\bar{q}_1 \gamma_\mu q_1) (\bar{e}_1 \gamma^\mu e_1)$	R
qe_1112	$(\bar{q}_1 \gamma_\mu q_1) (\bar{e}_1 \gamma^\mu e_2)$	C
qe_1113	$(\bar{q}_1 \gamma_\mu q_1) (\bar{e}_1 \gamma^\mu e_3)$	C
qe_1122	$(\bar{q}_1 \gamma_\mu q_1) (\bar{e}_2 \gamma^\mu e_2)$	R
qe_1123	$(\bar{q}_1 \gamma_\mu q_1) (\bar{e}_2 \gamma^\mu e_3)$	C
qe_1133	$(\bar{q}_1 \gamma_\mu q_1) (\bar{e}_3 \gamma^\mu e_3)$	R
qe_1211	$(\bar{q}_1 \gamma_\mu q_2) (\bar{e}_1 \gamma^\mu e_1)$	C
qe_1212	$(\bar{q}_1 \gamma_\mu q_2) (\bar{e}_1 \gamma^\mu e_2)$	C
qe_1213	$(\bar{q}_1 \gamma_\mu q_2) (\bar{e}_1 \gamma^\mu e_3)$	C
qe_1221	$(\bar{q}_1 \gamma_\mu q_2) (\bar{e}_2 \gamma^\mu e_1)$	C
qe_1222	$(\bar{q}_1 \gamma_\mu q_2) (\bar{e}_2 \gamma^\mu e_2)$	C
qe_1223	$(\bar{q}_1 \gamma_\mu q_2) (\bar{e}_2 \gamma^\mu e_3)$	C
qe_1231	$(\bar{q}_1 \gamma_\mu q_2) (\bar{e}_3 \gamma^\mu e_1)$	C
qe_1232	$(\bar{q}_1 \gamma_\mu q_2) (\bar{e}_3 \gamma^\mu e_2)$	C
qe_1233	$(\bar{q}_1 \gamma_\mu q_2) (\bar{e}_3 \gamma^\mu e_3)$	C
qe_1311	$(\bar{q}_1 \gamma_\mu q_3) (\bar{e}_1 \gamma^\mu e_1)$	C
qe_1312	$(\bar{q}_1 \gamma_\mu q_3) (\bar{e}_1 \gamma^\mu e_2)$	C
qe_1313	$(\bar{q}_1 \gamma_\mu q_3) (\bar{e}_1 \gamma^\mu e_3)$	C
qe_1321	$(\bar{q}_1 \gamma_\mu q_3) (\bar{e}_2 \gamma^\mu e_1)$	C
qe_1322	$(\bar{q}_1 \gamma_\mu q_3) (\bar{e}_2 \gamma^\mu e_2)$	C
qe_1323	$(\bar{q}_1 \gamma_\mu q_3) (\bar{e}_2 \gamma^\mu e_3)$	C
qe_1331	$(\bar{q}_1 \gamma_\mu q_3) (\bar{e}_3 \gamma^\mu e_1)$	C
qe_1332	$(\bar{q}_1 \gamma_\mu q_3) (\bar{e}_3 \gamma^\mu e_2)$	C
qe_1333	$(\bar{q}_1 \gamma_\mu q_3) (\bar{e}_3 \gamma^\mu e_3)$	C
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_2213	$(\bar{q}_2 \gamma_\mu q_2) (\bar{e}_1 \gamma^\mu e_3)$	C
qe_2222	$(\bar{q}_2 \gamma_\mu q_2) (\bar{e}_2 \gamma^\mu e_2)$	R
qe_2223	$(\bar{q}_2 \gamma_\mu q_2) (\bar{e}_2 \gamma^\mu e_3)$	C
qe_2233	$(\bar{q}_2 \gamma_\mu q_2) (\bar{e}_3 \gamma^\mu e_3)$	R
qe_2311	$(\bar{q}_2 \gamma_\mu q_3) (\bar{e}_1 \gamma^\mu e_1)$	C

WC name	Operator	Type
qe_2312	$(\bar{q}_2 \gamma_\mu q_3) (\bar{e}_1 \gamma^\mu e_2)$	C
qe_2313	$(\bar{q}_2 \gamma_\mu q_3) (\bar{e}_1 \gamma^\mu e_3)$	C
qe_2321	$(\bar{q}_2 \gamma_\mu q_3) (\bar{e}_2 \gamma^\mu e_1)$	C
qe_2322	$(\bar{q}_2 \gamma_\mu q_3) (\bar{e}_2 \gamma^\mu e_2)$	C
qe_2323	$(\bar{q}_2 \gamma_\mu q_3) (\bar{e}_2 \gamma^\mu e_3)$	C
qe_2331	$(\bar{q}_2 \gamma_\mu q_3) (\bar{e}_3 \gamma^\mu e_1)$	C
qe_2332	$(\bar{q}_2 \gamma_\mu q_3) (\bar{e}_3 \gamma^\mu e_2)$	C
qe_2333	$(\bar{q}_2 \gamma_\mu q_3) (\bar{e}_3 \gamma^\mu e_3)$	C
qe_3311	$(\bar{q}_3 \gamma_\mu q_3) (\bar{e}_1 \gamma^\mu e_1)$	R
qe_3312	$(\bar{q}_3 \gamma_\mu q_3) (\bar{e}_1 \gamma^\mu e_2)$	C
qe_3313	$(\bar{q}_3 \gamma_\mu q_3) (\bar{e}_1 \gamma^\mu e_3)$	C
qe_3322	$(\bar{q}_3 \gamma_\mu q_3) (\bar{e}_2 \gamma^\mu e_2)$	R
qe_3323	$(\bar{q}_3 \gamma_\mu q_3) (\bar{e}_2 \gamma^\mu e_3)$	C
qe_3333	$(\bar{q}_3 \gamma_\mu q_3) (\bar{e}_3 \gamma^\mu e_3)$	R
qu1_1111	$(\bar{q}_1 \gamma_\mu q_1) (\bar{u}_1 \gamma^\mu u_1)$	R
qu1_1112	$(\bar{q}_1 \gamma_\mu q_1) (\bar{u}_1 \gamma^\mu u_2)$	C
qu1_1113	$(\bar{q}_1 \gamma_\mu q_1) (\bar{u}_1 \gamma^\mu u_3)$	C
qu1_1122	$(\bar{q}_1 \gamma_\mu q_1) (\bar{u}_2 \gamma^\mu u_2)$	R
qu1_1123	$(\bar{q}_1 \gamma_\mu q_1) (\bar{u}_2 \gamma^\mu u_3)$	C
qu1_1133	$(\bar{q}_1 \gamma_\mu q_1) (\bar{u}_3 \gamma^\mu u_3)$	R
qu1_1211	$(\bar{q}_1 \gamma_\mu q_2) (\bar{u}_1 \gamma^\mu u_1)$	C
qu1_1212	$(\bar{q}_1 \gamma_\mu q_2) (\bar{u}_1 \gamma^\mu u_2)$	C
qu1_1213	$(\bar{q}_1 \gamma_\mu q_2) (\bar{u}_1 \gamma^\mu u_3)$	C
qu1_1221	$(\bar{q}_1 \gamma_\mu q_2) (\bar{u}_2 \gamma^\mu u_1)$	C
qu1_1222	$(\bar{q}_1 \gamma_\mu q_2) (\bar{u}_2 \gamma^\mu u_2)$	C
qu1_1223	$(\bar{q}_1 \gamma_\mu q_2) (\bar{u}_2 \gamma^\mu u_3)$	C
qu1_1231	$(\bar{q}_1 \gamma_\mu q_2) (\bar{u}_3 \gamma^\mu u_1)$	C
qu1_1232	$(\bar{q}_1 \gamma_\mu q_2) (\bar{u}_3 \gamma^\mu u_2)$	C
qu1_1233	$(\bar{q}_1 \gamma_\mu q_2) (\bar{u}_3 \gamma^\mu u_3)$	C
qu1_1311	$(\bar{q}_1 \gamma_\mu q_3) (\bar{u}_1 \gamma^\mu u_1)$	C
qu1_1312	$(\bar{q}_1 \gamma_\mu q_3) (\bar{u}_1 \gamma^\mu u_2)$	C
qu1_1313	$(\bar{q}_1 \gamma_\mu q_3) (\bar{u}_1 \gamma^\mu u_3)$	C
qu1_1321	$(\bar{q}_1 \gamma_\mu q_3) (\bar{u}_2 \gamma^\mu u_1)$	C
qu1_1322	$(\bar{q}_1 \gamma_\mu q_3) (\bar{u}_2 \gamma^\mu u_2)$	C
qu1_1323	$(\bar{q}_1 \gamma_\mu q_3) (\bar{u}_2 \gamma^\mu u_3)$	C
qu1_1331	$(\bar{q}_1 \gamma_\mu q_3) (\bar{u}_3 \gamma^\mu u_1)$	C
qu1_1332	$(\bar{q}_1 \gamma_\mu q_3) (\bar{u}_3 \gamma^\mu u_2)$	C
qu1_1333	$(\bar{q}_1 \gamma_\mu q_3) (\bar{u}_3 \gamma^\mu u_3)$	C
qu1_2211	$(\bar{q}_2 \gamma_\mu q_2) (\bar{u}_1 \gamma^\mu u_1)$	R
qu1_2212	$(\bar{q}_2 \gamma_\mu q_2) (\bar{u}_1 \gamma^\mu u_2)$	C
qu1_2213	$(\bar{q}_2 \gamma_\mu q_2) (\bar{u}_1 \gamma^\mu u_3)$	C
qu1_2222	$(\bar{q}_2 \gamma_\mu q_2) (\bar{u}_2 \gamma^\mu u_2)$	R
qu1_2223	$(\bar{q}_2 \gamma_\mu q_2) (\bar{u}_2 \gamma^\mu u_3)$	C
qu1_2233	$(\bar{q}_2 \gamma_\mu q_2) (\bar{u}_3 \gamma^\mu u_3)$	R

WC name	Operator	Type
qu1_2311	$(\bar{q}_2 \gamma_\mu q_3) (\bar{u}_1 \gamma^\mu u_1)$	C
qu1_2312	$(\bar{q}_2 \gamma_\mu q_3) (\bar{u}_1 \gamma^\mu u_2)$	C
qu1_2313	$(\bar{q}_2 \gamma_\mu q_3) (\bar{u}_1 \gamma^\mu u_3)$	C
qu1_2321	$(\bar{q}_2 \gamma_\mu q_3) (\bar{u}_2 \gamma^\mu u_1)$	C
qu1_2322	$(\bar{q}_2 \gamma_\mu q_3) (\bar{u}_2 \gamma^\mu u_2)$	C
qu1_2323	$(\bar{q}_2 \gamma_\mu q_3) (\bar{u}_2 \gamma^\mu u_3)$	C
qu1_2331	$(\bar{q}_2 \gamma_\mu q_3) (\bar{u}_3 \gamma^\mu u_1)$	C
qu1_2332	$(\bar{q}_2 \gamma_\mu q_3) (\bar{u}_3 \gamma^\mu u_2)$	C
qu1_2333	$(\bar{q}_2 \gamma_\mu q_3) (\bar{u}_3 \gamma^\mu u_3)$	C
qu1_3311	$(\bar{q}_3 \gamma_\mu q_3) (\bar{u}_1 \gamma^\mu u_1)$	R
qu1_3312	$(\bar{q}_3 \gamma_\mu q_3) (\bar{u}_1 \gamma^\mu u_2)$	C
qu1_3313	$(\bar{q}_3 \gamma_\mu q_3) (\bar{u}_1 \gamma^\mu u_3)$	C
qu1_3322	$(\bar{q}_3 \gamma_\mu q_3) (\bar{u}_2 \gamma^\mu u_2)$	R
qu1_3323	$(\bar{q}_3 \gamma_\mu q_3) (\bar{u}_2 \gamma^\mu u_3)$	C
qu1_3333	$(\bar{q}_3 \gamma_\mu q_3) (\bar{u}_3 \gamma^\mu u_3)$	R
qd1_1111	$(\bar{q}_1 \gamma_\mu q_1) (\bar{d}_1 \gamma^\mu d_1)$	R
qd1_1112	$(\bar{q}_1 \gamma_\mu q_1) (\bar{d}_1 \gamma^\mu d_2)$	C
qd1_1113	$(\bar{q}_1 \gamma_\mu q_1) (\bar{d}_1 \gamma^\mu d_3)$	C
qd1_1122	$(\bar{q}_1 \gamma_\mu q_1) (\bar{d}_2 \gamma^\mu d_2)$	R
qd1_1123	$(\bar{q}_1 \gamma_\mu q_1) (\bar{d}_2 \gamma^\mu d_3)$	C
qd1_1133	$(\bar{q}_1 \gamma_\mu q_1) (\bar{d}_3 \gamma^\mu d_3)$	R
qd1_1211	$(\bar{q}_1 \gamma_\mu q_2) (\bar{d}_1 \gamma^\mu d_1)$	C
qd1_1212	$(\bar{q}_1 \gamma_\mu q_2) (\bar{d}_1 \gamma^\mu d_2)$	C
qd1_1213	$(\bar{q}_1 \gamma_\mu q_2) (\bar{d}_1 \gamma^\mu d_3)$	C
qd1_1221	$(\bar{q}_1 \gamma_\mu q_2) (\bar{d}_2 \gamma^\mu d_1)$	C
qd1_1222	$(\bar{q}_1 \gamma_\mu q_2) (\bar{d}_2 \gamma^\mu d_2)$	C
qd1_1223	$(\bar{q}_1 \gamma_\mu q_2) (\bar{d}_2 \gamma^\mu d_3)$	C
qd1_1231	$(\bar{q}_1 \gamma_\mu q_2) (\bar{d}_3 \gamma^\mu d_1)$	C
qd1_1232	$(\bar{q}_1 \gamma_\mu q_2) (\bar{d}_3 \gamma^\mu d_2)$	C
qd1_1233	$(\bar{q}_1 \gamma_\mu q_2) (\bar{d}_3 \gamma^\mu d_3)$	C
qd1_1311	$(\bar{q}_1 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_1)$	C
qd1_1312	$(\bar{q}_1 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_2)$	C
qd1_1313	$(\bar{q}_1 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_3)$	C
qd1_1321	$(\bar{q}_1 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_1)$	C
qd1_1322	$(\bar{q}_1 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_2)$	C
qd1_1323	$(\bar{q}_1 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_3)$	C
qd1_1331	$(\bar{q}_1 \gamma_\mu q_3) (\bar{d}_3 \gamma^\mu d_1)$	C
qd1_1332	$(\bar{q}_1 \gamma_\mu q_3) (\bar{d}_3 \gamma^\mu d_2)$	C
qd1_1333	$(\bar{q}_1 \gamma_\mu q_3) (\bar{d}_3 \gamma^\mu d_3)$	C
qd1_2211	$(\bar{q}_2 \gamma_\mu q_2) (\bar{d}_1 \gamma^\mu d_1)$	R
qd1_2212	$(\bar{q}_2 \gamma_\mu q_2) (\bar{d}_1 \gamma^\mu d_2)$	C
qd1_2213	$(\bar{q}_2 \gamma_\mu q_2) (\bar{d}_1 \gamma^\mu d_3)$	C
qd1_2222	$(\bar{q}_2 \gamma_\mu q_2) (\bar{d}_2 \gamma^\mu d_2)$	R

WC name	Operator	Type
qd1_2223	$(\bar{q}_2 \gamma_\mu q_2) (\bar{d}_2 \gamma^\mu d_3)$	C
qd1_2233	$(\bar{q}_2 \gamma_\mu q_2) (\bar{d}_3 \gamma^\mu d_3)$	R
qd1_2311	$(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_1)$	C
qd1_2312	$(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_2)$	C
qd1_2313	$(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_3)$	C
qd1_2321	$(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_1)$	C
qd1_2322	$(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_2)$	C
qd1_2323	$(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_3)$	C
qd1_2331	$(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_3 \gamma^\mu d_1)$	C
qd1_2332	$(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_3 \gamma^\mu d_2)$	C
qd1_2333	$(\bar{q}_2 \gamma_\mu q_3) (\bar{d}_3 \gamma^\mu d_3)$	C
qd1_3311	$(\bar{q}_3 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_1)$	R
qd1_3312	$(\bar{q}_3 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_2)$	C
qd1_3313	$(\bar{q}_3 \gamma_\mu q_3) (\bar{d}_1 \gamma^\mu d_3)$	C
qd1_3322	$(\bar{q}_3 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_2)$	R
qd1_3323	$(\bar{q}_3 \gamma_\mu q_3) (\bar{d}_2 \gamma^\mu d_3)$	C
qd1_3333	$(\bar{q}_3 \gamma_\mu q_3) (\bar{d}_3 \gamma^\mu d_3)$	R
qu8_1111	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{u}_1 \gamma^\mu T^A u_1)$	R
qu8_1112	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{u}_1 \gamma^\mu T^A u_2)$	C
qu8_1113	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{u}_1 \gamma^\mu T^A u_3)$	C
qu8_1122	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{u}_2 \gamma^\mu T^A u_2)$	R
qu8_1123	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{u}_2 \gamma^\mu T^A u_3)$	C
qu8_1133	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{u}_3 \gamma^\mu T^A u_3)$	R
qu8_1211	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{u}_1 \gamma^\mu T^A u_1)$	C
qu8_1212	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{u}_1 \gamma^\mu T^A u_2)$	C
qu8_1213	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{u}_1 \gamma^\mu T^A u_3)$	C
qu8_1221	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{u}_2 \gamma^\mu T^A u_1)$	C
qu8_1222	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{u}_2 \gamma^\mu T^A u_2)$	C
qu8_1223	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{u}_2 \gamma^\mu T^A u_3)$	C
qu8_1231	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{u}_3 \gamma^\mu T^A u_1)$	C
qu8_1232	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{u}_3 \gamma^\mu T^A u_2)$	C
qu8_1233	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{u}_3 \gamma^\mu T^A u_3)$	C
qu8_1311	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_1)$	C
qu8_1312	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_2)$	C
qu8_1313	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_3)$	C
qu8_1321	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_1)$	C
qu8_1322	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_2)$	C
qu8_1323	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_3)$	C
qu8_1331	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_3 \gamma^\mu T^A u_1)$	C
qu8_1332	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_3 \gamma^\mu T^A u_2)$	C
qu8_1333	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{u}_3 \gamma^\mu T^A u_3)$	C
qu8_2211	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{u}_1 \gamma^\mu T^A u_1)$	R
qu8_2212	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{u}_1 \gamma^\mu T^A u_2)$	C

WC name	Operator	Type
qu8_2213	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{u}_1 \gamma^\mu T^A u_3)$	C
qu8_2222	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{u}_2 \gamma^\mu T^A u_2)$	R
qu8_2223	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{u}_2 \gamma^\mu T^A u_3)$	C
qu8_2233	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{u}_3 \gamma^\mu T^A u_3)$	R
qu8_2311	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_1)$	C
qu8_2312	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_2)$	C
qu8_2313	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_3)$	C
qu8_2321	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_1)$	C
qu8_2322	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_2)$	C
qu8_2323	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_3)$	C
qu8_2331	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_3 \gamma^\mu T^A u_1)$	C
qu8_2332	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_3 \gamma^\mu T^A u_2)$	C
qu8_2333	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{u}_3 \gamma^\mu T^A u_3)$	C
qu8_3311	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_1)$	R
qu8_3312	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_2)$	C
qu8_3313	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{u}_1 \gamma^\mu T^A u_3)$	C
qu8_3322	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_2)$	R
qu8_3323	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{u}_2 \gamma^\mu T^A u_3)$	C
qu8_3333	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{u}_3 \gamma^\mu T^A u_3)$	R
qd8_1111	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{d}_1 \gamma^\mu T^A d_1)$	R
qd8_1112	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
qd8_1113	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
qd8_1122	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{d}_2 \gamma^\mu T^A d_2)$	R
qd8_1123	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
qd8_1133	$(\bar{q}_1 \gamma_\mu T^A q_1) (\bar{d}_3 \gamma^\mu T^A d_3)$	R
qd8_1211	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{d}_1 \gamma^\mu T^A d_1)$	C
qd8_1212	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
qd8_1213	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
qd8_1221	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{d}_2 \gamma^\mu T^A d_1)$	C
qd8_1222	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{d}_2 \gamma^\mu T^A d_2)$	C
qd8_1223	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
qd8_1231	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{d}_3 \gamma^\mu T^A d_1)$	C
qd8_1232	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{d}_3 \gamma^\mu T^A d_2)$	C
qd8_1233	$(\bar{q}_1 \gamma_\mu T^A q_2) (\bar{d}_3 \gamma^\mu T^A d_3)$	C
qd8_1311	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_1)$	C
qd8_1312	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
qd8_1313	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
qd8_1321	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{d}_2 \gamma^\mu T^A d_1)$	C
qd8_1322	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{d}_2 \gamma^\mu T^A d_2)$	C
qd8_1323	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
qd8_1331	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{d}_3 \gamma^\mu T^A d_1)$	C
qd8_1332	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{d}_3 \gamma^\mu T^A d_2)$	C
qd8_1333	$(\bar{q}_1 \gamma_\mu T^A q_3) (\bar{d}_3 \gamma^\mu T^A d_3)$	C

WC name	Operator	Type
qd8_2211	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{d}_1 \gamma^\mu T^A d_1)$	R
qd8_2212	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
qd8_2213	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
qd8_2222	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{d}_2 \gamma^\mu T^A d_2)$	R
qd8_2223	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
qd8_2233	$(\bar{q}_2 \gamma_\mu T^A q_2) (\bar{d}_3 \gamma^\mu T^A d_3)$	R
qd8_2311	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_1)$	C
qd8_2312	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
qd8_2313	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
qd8_2321	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_2 \gamma^\mu T^A d_1)$	C
qd8_2322	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_2 \gamma^\mu T^A d_2)$	C
qd8_2323	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
qd8_2331	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_3 \gamma^\mu T^A d_1)$	C
qd8_2332	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_3 \gamma^\mu T^A d_2)$	C
qd8_2333	$(\bar{q}_2 \gamma_\mu T^A q_3) (\bar{d}_3 \gamma^\mu T^A d_3)$	C
qd8_3311	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_1)$	R
qd8_3312	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_2)$	C
qd8_3313	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{d}_1 \gamma^\mu T^A d_3)$	C
qd8_3322	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{d}_2 \gamma^\mu T^A d_2)$	R
qd8_3323	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{d}_2 \gamma^\mu T^A d_3)$	C
qd8_3333	$(\bar{q}_3 \gamma_\mu T^A q_3) (\bar{d}_3 \gamma^\mu T^A d_3)$	R
ledq_1111	$(\bar{\ell}_1 e_1) (\bar{d}_1 q_1)$	C
ledq_1112	$(\bar{\ell}_1 e_1) (\bar{d}_1 q_2)$	C
ledq_1113	$(\bar{\ell}_1 e_1) (\bar{d}_1 q_3)$	C
ledq_1121	$(\bar{\ell}_1 e_1) (\bar{d}_2 q_1)$	C
ledq_1122	$(\bar{\ell}_1 e_1) (\bar{d}_2 q_2)$	C
ledq_1123	$(\bar{\ell}_1 e_1) (\bar{d}_2 q_3)$	C
ledq_1131	$(\bar{\ell}_1 e_1) (\bar{d}_3 q_1)$	C
ledq_1132	$(\bar{\ell}_1 e_1) (\bar{d}_3 q_2)$	C
ledq_1133	$(\bar{\ell}_1 e_1) (\bar{d}_3 q_3)$	C
ledq_1211	$(\bar{\ell}_1 e_2) (\bar{d}_1 q_1)$	C
ledq_1212	$(\bar{\ell}_1 e_2) (\bar{d}_1 q_2)$	C
ledq_1213	$(\bar{\ell}_1 e_2) (\bar{d}_1 q_3)$	C
ledq_1221	$(\bar{\ell}_1 e_2) (\bar{d}_2 q_1)$	C
ledq_1222	$(\bar{\ell}_1 e_2) (\bar{d}_2 q_2)$	C
ledq_1223	$(\bar{\ell}_1 e_2) (\bar{d}_2 q_3)$	C
ledq_1231	$(\bar{\ell}_1 e_2) (\bar{d}_3 q_1)$	C
ledq_1232	$(\bar{\ell}_1 e_2) (\bar{d}_3 q_2)$	C
ledq_1233	$(\bar{\ell}_1 e_2) (\bar{d}_3 q_3)$	C
ledq_1311	$(\bar{\ell}_1 e_3) (\bar{d}_1 q_1)$	C
ledq_1312	$(\bar{\ell}_1 e_3) (\bar{d}_1 q_2)$	C
ledq_1313	$(\bar{\ell}_1 e_3) (\bar{d}_1 q_3)$	C

WC name	Operator	Type
ledq_1321	$(\bar{\ell}_1 e_3) (\bar{d}_2 q_1)$	C
ledq_1322	$(\bar{\ell}_1 e_3) (\bar{d}_2 q_2)$	C
ledq_1323	$(\bar{\ell}_1 e_3) (\bar{d}_2 q_3)$	C
ledq_1331	$(\bar{\ell}_1 e_3) (\bar{d}_3 q_1)$	C
ledq_1332	$(\bar{\ell}_1 e_3) (\bar{d}_3 q_2)$	C
ledq_1333	$(\bar{\ell}_1 e_3) (\bar{d}_3 q_3)$	C
ledq_2111	$(\bar{\ell}_2 e_1) (\bar{d}_1 q_1)$	C
ledq_2112	$(\bar{\ell}_2 e_1) (\bar{d}_1 q_2)$	C
ledq_2113	$(\bar{\ell}_2 e_1) (\bar{d}_1 q_3)$	C
ledq_2121	$(\bar{\ell}_2 e_1) (\bar{d}_2 q_1)$	C
ledq_2122	$(\bar{\ell}_2 e_1) (\bar{d}_2 q_2)$	C
ledq_2123	$(\bar{\ell}_2 e_1) (\bar{d}_2 q_3)$	C
ledq_2131	$(\bar{\ell}_2 e_1) (\bar{d}_3 q_1)$	C
ledq_2132	$(\bar{\ell}_2 e_1) (\bar{d}_3 q_2)$	C
ledq_2133	$(\bar{\ell}_2 e_1) (\bar{d}_3 q_3)$	C
ledq_2211	$(\bar{\ell}_2 e_2) (\bar{d}_1 q_1)$	C
ledq_2212	$(\bar{\ell}_2 e_2) (\bar{d}_1 q_2)$	C
ledq_2213	$(\bar{\ell}_2 e_2) (\bar{d}_1 q_3)$	C
ledq_2221	$(\bar{\ell}_2 e_2) (\bar{d}_2 q_1)$	C
ledq_2222	$(\bar{\ell}_2 e_2) (\bar{d}_2 q_2)$	C
ledq_2223	$(\bar{\ell}_2 e_2) (\bar{d}_2 q_3)$	C
ledq_2231	$(\bar{\ell}_2 e_2) (\bar{d}_3 q_1)$	C
ledq_2232	$(\bar{\ell}_2 e_2) (\bar{d}_3 q_2)$	C
ledq_2233	$(\bar{\ell}_2 e_2) (\bar{d}_3 q_3)$	C
ledq_2311	$(\bar{\ell}_2 e_3) (\bar{d}_1 q_1)$	C
ledq_2312	$(\bar{\ell}_2 e_3) (\bar{d}_1 q_2)$	C
ledq_2313	$(\bar{\ell}_2 e_3) (\bar{d}_1 q_3)$	C
ledq_2321	$(\bar{\ell}_2 e_3) (\bar{d}_2 q_1)$	C
ledq_2322	$(\bar{\ell}_2 e_3) (\bar{d}_2 q_2)$	C
ledq_2323	$(\bar{\ell}_2 e_3) (\bar{d}_2 q_3)$	C
ledq_2331	$(\bar{\ell}_2 e_3) (\bar{d}_3 q_1)$	C
ledq_2332	$(\bar{\ell}_2 e_3) (\bar{d}_3 q_2)$	C
ledq_2333	$(\bar{\ell}_2 e_3) (\bar{d}_3 q_3)$	C
ledq_3111	$(\bar{\ell}_3 e_1) (\bar{d}_1 q_1)$	C
ledq_3112	$(\bar{\ell}_3 e_1) (\bar{d}_1 q_2)$	C
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_3122	$(\bar{\ell}_3 e_1) (\bar{d}_2 q_2)$	C
ledq_3123	$(\bar{\ell}_3 e_1) (\bar{d}_2 q_3)$	C
ledq_3131	$(\bar{\ell}_3 e_1) (\bar{d}_3 q_1)$	C
ledq_3132	$(\bar{\ell}_3 e_1) (\bar{d}_3 q_2)$	C
ledq_3133	$(\bar{\ell}_3 e_1) (\bar{d}_3 q_3)$	C

WC name	Operator	Type
ledq_3211	$(\bar{\ell}_3 e_2) (\bar{d}_1 q_1)$	C
ledq_3212	$(\bar{\ell}_3 e_2) (\bar{d}_1 q_2)$	C
ledq_3213	$(\bar{\ell}_3 e_2) (\bar{d}_1 q_3)$	C
ledq_3221	$(\bar{\ell}_3 e_2) (\bar{d}_2 q_1)$	C
ledq_3222	$(\bar{\ell}_3 e_2) (\bar{d}_2 q_2)$	C
ledq_3223	$(\bar{\ell}_3 e_2) (\bar{d}_2 q_3)$	C
ledq_3231	$(\bar{\ell}_3 e_2) (\bar{d}_3 q_1)$	C
ledq_3232	$(\bar{\ell}_3 e_2) (\bar{d}_3 q_2)$	C
ledq_3233	$(\bar{\ell}_3 e_2) (\bar{d}_3 q_3)$	C
ledq_3311	$(\bar{\ell}_3 e_3) (\bar{d}_1 q_1)$	C
ledq_3312	$(\bar{\ell}_3 e_3) (\bar{d}_1 q_2)$	C
ledq_3313	$(\bar{\ell}_3 e_3) (\bar{d}_1 q_3)$	C
ledq_3321	$(\bar{\ell}_3 e_3) (\bar{d}_2 q_1)$	C
ledq_3322	$(\bar{\ell}_3 e_3) (\bar{d}_2 q_2)$	C
ledq_3323	$(\bar{\ell}_3 e_3) (\bar{d}_2 q_3)$	C
ledq_3331	$(\bar{\ell}_3 e_3) (\bar{d}_3 q_1)$	C
ledq_3332	$(\bar{\ell}_3 e_3) (\bar{d}_3 q_2)$	C
ledq_3333	$(\bar{\ell}_3 e_3) (\bar{d}_3 q_3)$	C
quqd1_1111	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_1 d_1)$	C
quqd1_1112	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_1 d_2)$	C
quqd1_1113	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_1 d_3)$	C
quqd1_1121	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_2 d_1)$	C
quqd1_1122	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_2 d_2)$	C
quqd1_1123	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_2 d_3)$	C
quqd1_1131	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_3 d_1)$	C
quqd1_1132	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_3 d_2)$	C
quqd1_1133	$(\bar{q}_1 u_1) \epsilon_{jk} (\bar{q}_3 d_3)$	C
quqd1_1211	$(\bar{q}_1 u_2) \epsilon_{jk} (\bar{q}_1 d_1)$	C
quqd1_1212	$(\bar{q}_1 u_2) \epsilon_{jk} (\bar{q}_1 d_2)$	C
quqd1_1213	$(\bar{q}_1 u_2) \epsilon_{jk} (\bar{q}_1 d_3)$	C
quqd1_1221	$(\bar{q}_1 u_2) \epsilon_{jk} (\bar{q}_2 d_1)$	C
quqd1_1222	$(\bar{q}_1 u_2) \epsilon_{jk} (\bar{q}_2 d_2)$	C
quqd1_1223	$(\bar{q}_1 u_2) \epsilon_{jk} (\bar{q}_2 d_3)$	C
quqd1_1231	$(\bar{q}_1 u_2) \epsilon_{jk} (\bar{q}_3 d_1)$	C
quqd1_1232	$(\bar{q}_1 u_2) \epsilon_{jk} (\bar{q}_3 d_2)$	C
quqd1_1233	$(\bar{q}_1 u_2) \epsilon_{jk} (\bar{q}_3 d_3)$	C
quqd1_1311	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_1 d_1)$	C
quqd1_1312	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_1 d_2)$	C
quqd1_1313	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_1 d_3)$	C
quqd1_1321	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_2 d_1)$	C
quqd1_1322	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_2 d_2)$	C
quqd1_1323	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_2 d_3)$	C
quqd1_1331	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_3 d_1)$	C

WC name	Operator	Type
quqd1_1332	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_3 d_2)$	C
quqd1_1333	$(\bar{q}_1 u_3) \epsilon_{jk} (\bar{q}_3 d_3)$	C
quqd1_2111	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_1 d_1)$	C
quqd1_2112	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_1 d_2)$	C
quqd1_2113	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_1 d_3)$	C
quqd1_2121	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_2 d_1)$	C
quqd1_2122	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_2 d_2)$	C
quqd1_2123	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_2 d_3)$	C
quqd1_2131	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_3 d_1)$	C
quqd1_2132	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_3 d_2)$	C
quqd1_2133	$(\bar{q}_2 u_1) \epsilon_{jk} (\bar{q}_3 d_3)$	C
quqd1_2211	$(\bar{q}_2 u_2) \epsilon_{jk} (\bar{q}_1 d_1)$	C
quqd1_2212	$(\bar{q}_2 u_2) \epsilon_{jk} (\bar{q}_1 d_2)$	C
quqd1_2213	$(\bar{q}_2 u_2) \epsilon_{jk} (\bar{q}_1 d_3)$	C
quqd1_2221	$(\bar{q}_2 u_2) \epsilon_{jk} (\bar{q}_2 d_1)$	C
quqd1_2222	$(\bar{q}_2 u_2) \epsilon_{jk} (\bar{q}_2 d_2)$	C
quqd1_2223	$(\bar{q}_2 u_2) \epsilon_{jk} (\bar{q}_2 d_3)$	C
quqd1_2231	$(\bar{q}_2 u_2) \epsilon_{jk} (\bar{q}_3 d_1)$	C
quqd1_2232	$(\bar{q}_2 u_2) \epsilon_{jk} (\bar{q}_3 d_2)$	C
quqd1_2233	$(\bar{q}_2 u_2) \epsilon_{jk} (\bar{q}_3 d_3)$	C
quqd1_2311	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_1 d_1)$	C
quqd1_2312	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_1 d_2)$	C
quqd1_2313	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_1 d_3)$	C
quqd1_2321	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_2 d_1)$	C
quqd1_2322	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_2 d_2)$	C
quqd1_2323	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_2 d_3)$	C
quqd1_2331	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_3 d_1)$	C
quqd1_2332	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_3 d_2)$	C
quqd1_2333	$(\bar{q}_2 u_3) \epsilon_{jk} (\bar{q}_3 d_3)$	C
quqd1_3111	$(\bar{q}_3 u_1) \epsilon_{jk} (\bar{q}_1 d_1)$	C
quqd1_3112	$(\bar{q}_3 u_1) \epsilon_{jk} (\bar{q}_1 d_2)$	C
quqd1_3113	$(\bar{q}_3 u_1) \epsilon_{jk} (\bar{q}_1 d_3)$	C
quqd1_3121	$(\bar{q}_3 u_1) \epsilon_{jk} (\bar{q}_2 d_1)$	C
quqd1_3122	$(\bar{q}_3 u_1) \epsilon_{jk} (\bar{q}_2 d_2)$	C
quqd1_3123	$(\bar{q}_3 u_1) \epsilon_{jk} (\bar{q}_2 d_3)$	C
quqd1_3131	$(\bar{q}_3 u_1) \epsilon_{jk} (\bar{q}_3 d_1)$	C
quqd1_3132	$(\bar{q}_3 u_1) \epsilon_{jk} (\bar{q}_3 d_2)$	C
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_3212	$(\bar{q}_3 u_2) \epsilon_{jk} (\bar{q}_1 d_2)$	C
quqd1_3213	$(\bar{q}_3 u_2) \epsilon_{jk} (\bar{q}_1 d_3)$	C
quqd1_3221	$(\bar{q}_3 u_2) \epsilon_{jk} (\bar{q}_2 d_1)$	C
quqd1_3222	$(\bar{q}_3 u_2) \epsilon_{jk} (\bar{q}_2 d_2)$	C
quqd1_3223	$(\bar{q}_3 u_2) \epsilon_{jk} (\bar{q}_2 d_3)$	C

WC name	Operator	Type
quqd1_3231	$(\bar{q}_3 u_2) \epsilon_{jk} (\bar{q}_3 d_1)$	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	$(\bar{q}_3 u_3) \epsilon_{jk} (\bar{q}_1 d_1)$	C
quqd1_3312	$(\bar{q}_3 u_3) \epsilon_{jk} (\bar{q}_1 d_2)$	C
quqd1_3313	$(\bar{q}_3 u_3) \epsilon_{jk} (\bar{q}_1 d_3)$	C
quqd1_3321	$(\bar{q}_3 u_3) \epsilon_{jk} (\bar{q}_2 d_1)$	C
quqd1_3322	$(\bar{q}_3 u_3) \epsilon_{jk} (\bar{q}_2 d_2)$	C
quqd1_3323	$(\bar{q}_3 u_3) \epsilon_{jk} (\bar{q}_2 d_3)$	C
quqd1_3331	$(\bar{q}_3 u_3) \epsilon_{jk} (\bar{q}_3 d_1)$	C
quqd1_3332	$(\bar{q}_3 u_3) \epsilon_{jk} (\bar{q}_3 d_2)$	C
quqd1_3333	$(\bar{q}_3 u_3) \epsilon_{jk} (\bar{q}_3 d_3)$	C
quqd8_1111	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_1112	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_1 T^A d_2)$	C
quqd8_1113	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	C
quqd8_1121	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	C
quqd8_1122	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	C
quqd8_1123	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_3)$	C
quqd8_1131	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_1)$	C
quqd8_1132	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	C
quqd8_1133	$(\bar{q}_1 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	C
quqd8_1211	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_1212	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_2)$	C
quqd8_1213	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	C
quqd8_1221	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	C
quqd8_1222	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	C
quqd8_1223	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_3)$	C
quqd8_1231	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_1)$	C
quqd8_1232	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	C
quqd8_1233	$(\bar{q}_1 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	C
quqd8_1311	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_1312	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_2)$	C
quqd8_1313	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	C
quqd8_1321	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	C
quqd8_1322	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	C
quqd8_1323	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_2 T^A d_3)$	C
quqd8_1331	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_1)$	C
quqd8_1332	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	C
quqd8_1333	$(\bar{q}_1 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	C
quqd8_2111	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_2112	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_1 T^A d_2)$	C
quqd8_2113	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	C
quqd8_2121	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	C
quqd8_2122	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	C

WC name	Operator	Type
quqd8_2123	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_3)$	C
quqd8_2131	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_1)$	C
quqd8_2132	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	C
quqd8_2133	$(\bar{q}_2 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	C
quqd8_2211	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_2212	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_2)$	C
quqd8_2213	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	C
quqd8_2221	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	C
quqd8_2222	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	C
quqd8_2223	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_3)$	C
quqd8_2231	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_1)$	C
quqd8_2232	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	C
quqd8_2233	$(\bar{q}_2 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	C
quqd8_2311	$(\bar{q}_2 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_2312	$(\bar{q}_2 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_2)$	C
quqd8_2313	$(\bar{q}_2 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	C
quqd8_2321	$(\bar{q}_2 T^A u_3) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	C
quqd8_2322	$(\bar{q}_2 T^A u_3) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	C
quqd8_2323	$(\bar{q}_2 T^A u_3) \epsilon_{jk} (\bar{q}_2 T^A d_3)$	C
quqd8_2331	$(\bar{q}_2 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_1)$	C
quqd8_2332	$(\bar{q}_2 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	C
quqd8_2333	$(\bar{q}_2 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	C
quqd8_3111	$(\bar{q}_3 T^A u_1) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_3112	$(\bar{q}_3 T^A u_1) \epsilon_{jk} (\bar{q}_1 T^A d_2)$	C
quqd8_3113	$(\bar{q}_3 T^A u_1) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	C
quqd8_3121	$(\bar{q}_3 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	C
quqd8_3122	$(\bar{q}_3 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	C
quqd8_3123	$(\bar{q}_3 T^A u_1) \epsilon_{jk} (\bar{q}_2 T^A d_3)$	C
quqd8_3131	$(\bar{q}_3 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_1)$	C
quqd8_3132	$(\bar{q}_3 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	C
quqd8_3133	$(\bar{q}_3 T^A u_1) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	C
quqd8_3211	$(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_3212	$(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_2)$	C
quqd8_3213	$(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	C
quqd8_3221	$(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	C
quqd8_3222	$(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	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_3233	$(\bar{q}_3 T^A u_2) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	C
quqd8_3311	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_1)$	C
quqd8_3312	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_2)$	C
quqd8_3313	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_1 T^A d_3)$	C
quqd8_3321	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_2 T^A d_1)$	C

WC name	Operator	Type
quqd8_3322	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_2 T^A d_2)$	C
quqd8_3323	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_2 T^A d_3)$	C
quqd8_3331	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_1)$	C
quqd8_3332	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_2)$	C
quqd8_3333	$(\bar{q}_3 T^A u_3) \epsilon_{jk} (\bar{q}_3 T^A d_3)$	C
lequ1_1111	$(\bar{\ell}_1 e_1) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_1112	$(\bar{\ell}_1 e_1) \epsilon_{jk} (\bar{q}_1 u_2)$	C
lequ1_1113	$(\bar{\ell}_1 e_1) \epsilon_{jk} (\bar{q}_1 u_3)$	C
lequ1_1121	$(\bar{\ell}_1 e_1) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_1122	$(\bar{\ell}_1 e_1) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_1123	$(\bar{\ell}_1 e_1) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_1131	$(\bar{\ell}_1 e_1) \epsilon_{jk} (\bar{q}_3 u_1)$	C
lequ1_1132	$(\bar{\ell}_1 e_1) \epsilon_{jk} (\bar{q}_3 u_2)$	C
lequ1_1133	$(\bar{\ell}_1 e_1) \epsilon_{jk} (\bar{q}_3 u_3)$	C
lequ1_1211	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_1212	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_1 u_2)$	C
lequ1_1213	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_1 u_3)$	C
lequ1_1221	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_1222	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_1223	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_1231	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_3 u_1)$	C
lequ1_1232	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_3 u_2)$	C
lequ1_1233	$(\bar{\ell}_1 e_2) \epsilon_{jk} (\bar{q}_3 u_3)$	C
lequ1_1311	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_1312	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_1 u_2)$	C
lequ1_1313	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_1 u_3)$	C
lequ1_1321	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_1322	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_1323	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_1331	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_1)$	C
lequ1_1332	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_2)$	C
lequ1_1333	$(\bar{\ell}_1 e_3) \epsilon_{jk} (\bar{q}_3 u_3)$	C
lequ1_2111	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_2112	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_2)$	C
lequ1_2113	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_1 u_3)$	C
lequ1_2121	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_2122	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_2123	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_2131	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_1)$	C
lequ1_2132	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_2)$	C
lequ1_2133	$(\bar{\ell}_2 e_1) \epsilon_{jk} (\bar{q}_3 u_3)$	C
lequ1_2211	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_1 u_1)$	C

WC name	Operator	Type
lequ1_2212	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_1 u_2)$	C
lequ1_2213	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_1 u_3)$	C
lequ1_2221	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_2222	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_2223	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_2231	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_3 u_1)$	C
lequ1_2232	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_3 u_2)$	C
lequ1_2233	$(\bar{\ell}_2 e_2) \epsilon_{jk} (\bar{q}_3 u_3)$	C
lequ1_2311	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_2312	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_1 u_2)$	C
lequ1_2313	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_1 u_3)$	C
lequ1_2321	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_2322	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_2323	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_2331	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_3 u_1)$	C
lequ1_2332	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_3 u_2)$	C
lequ1_2333	$(\bar{\ell}_2 e_3) \epsilon_{jk} (\bar{q}_3 u_3)$	C
lequ1_3111	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_3112	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_1 u_2)$	C
lequ1_3113	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_1 u_3)$	C
lequ1_3121	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_3122	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_3123	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_3131	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_3 u_1)$	C
lequ1_3132	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_3 u_2)$	C
lequ1_3133	$(\bar{\ell}_3 e_1) \epsilon_{jk} (\bar{q}_3 u_3)$	C
lequ1_3211	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_3212	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_1 u_2)$	C
lequ1_3213	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_1 u_3)$	C
lequ1_3221	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_3222	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_3223	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_3231	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_3 u_1)$	C
lequ1_3232	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_3 u_2)$	C
lequ1_3233	$(\bar{\ell}_3 e_2) \epsilon_{jk} (\bar{q}_3 u_3)$	C
lequ1_3311	$(\bar{\ell}_3 e_3) \epsilon_{jk} (\bar{q}_1 u_1)$	C
lequ1_3312	$(\bar{\ell}_3 e_3) \epsilon_{jk} (\bar{q}_1 u_2)$	C
lequ1_3313	$(\bar{\ell}_3 e_3) \epsilon_{jk} (\bar{q}_1 u_3)$	C
lequ1_3321	$(\bar{\ell}_3 e_3) \epsilon_{jk} (\bar{q}_2 u_1)$	C
lequ1_3322	$(\bar{\ell}_3 e_3) \epsilon_{jk} (\bar{q}_2 u_2)$	C
lequ1_3323	$(\bar{\ell}_3 e_3) \epsilon_{jk} (\bar{q}_2 u_3)$	C
lequ1_3331	$(\bar{\ell}_3 e_3) \epsilon_{jk} (\bar{q}_3 u_1)$	C

dB=dL=1

WC name	Operator	Type
duql_1111	$(d_1Cu_1)(q_1Cl_1)$	C
duql_1112	$(d_1Cu_1)(q_1Cl_2)$	C
duql_1113	$(d_1Cu_1)(q_1Cl_3)$	C
duql_1121	$(d_1Cu_1)(q_2Cl_1)$	C
duql_1122	$(d_1Cu_1)(q_2Cl_2)$	C
duql_1123	$(d_1Cu_1)(q_2Cl_3)$	C
duql_1131	$(d_1Cu_1)(q_3Cl_1)$	C
duql_1132	$(d_1Cu_1)(q_3Cl_2)$	C
duql_1133	$(d_1Cu_1)(q_3Cl_3)$	C
duql_1211	$(d_1Cu_2)(q_1Cl_1)$	C
duql_1212	$(d_1Cu_2)(q_1Cl_2)$	C
duql_1213	$(d_1Cu_2)(q_1Cl_3)$	C
duql_1221	$(d_1Cu_2)(q_2Cl_1)$	C
duql_1222	$(d_1Cu_2)(q_2Cl_2)$	C
duql_1223	$(d_1Cu_2)(q_2Cl_3)$	C
duql_1231	$(d_1Cu_2)(q_3Cl_1)$	C
duql_1232	$(d_1Cu_2)(q_3Cl_2)$	C
duql_1233	$(d_1Cu_2)(q_3Cl_3)$	C
duql_1311	$(d_1Cu_3)(q_1Cl_1)$	C
duql_1312	$(d_1Cu_3)(q_1Cl_2)$	C
duql_1313	$(d_1Cu_3)(q_1Cl_3)$	C
duql_1321	$(d_1Cu_3)(q_2Cl_1)$	C
duql_1322	$(d_1Cu_3)(q_2Cl_2)$	C
duql_1323	$(d_1Cu_3)(q_2Cl_3)$	C
duql_1331	$(d_1Cu_3)(q_3Cl_1)$	C
duql_1332	$(d_1Cu_3)(q_3Cl_2)$	C
duql_1333	$(d_1Cu_3)(q_3Cl_3)$	C
duql_2111	$(d_2Cu_1)(q_1Cl_1)$	C
duql_2112	$(d_2Cu_1)(q_1Cl_2)$	C
duql_2113	$(d_2Cu_1)(q_1Cl_3)$	C
duql_2121	$(d_2Cu_1)(q_2Cl_1)$	C
duql_2122	$(d_2Cu_1)(q_2Cl_2)$	C
duql_2123	$(d_2Cu_1)(q_2Cl_3)$	C
duql_2131	$(d_2Cu_1)(q_3Cl_1)$	C
duql_2132	$(d_2Cu_1)(q_3Cl_2)$	C
duql_2133	$(d_2Cu_1)(q_3Cl_3)$	C
duql_2211	$(d_2Cu_2)(q_1Cl_1)$	C
duql_2212	$(d_2Cu_2)(q_1Cl_2)$	C
duql_2213	$(d_2Cu_2)(q_1Cl_3)$	C
duql_2221	$(d_2Cu_2)(q_2Cl_1)$	C
duql_2222	$(d_2Cu_2)(q_2Cl_2)$	C
duql_2223	$(d_2Cu_2)(q_2Cl_3)$	C

WC name	Operator	Type
duql_2231	$(d_2Cu_2)(q_3C\ell_1)$	C
duql_2232	$(d_2Cu_2)(q_3C\ell_2)$	C
duql_2233	$(d_2Cu_2)(q_3C\ell_3)$	C
duql_2311	$(d_2Cu_3)(q_1C\ell_1)$	C
duql_2312	$(d_2Cu_3)(q_1C\ell_2)$	C
duql_2313	$(d_2Cu_3)(q_1C\ell_3)$	C
duql_2321	$(d_2Cu_3)(q_2C\ell_1)$	C
duql_2322	$(d_2Cu_3)(q_2C\ell_2)$	C
duql_2323	$(d_2Cu_3)(q_2C\ell_3)$	C
duql_2331	$(d_2Cu_3)(q_3C\ell_1)$	C
duql_2332	$(d_2Cu_3)(q_3C\ell_2)$	C
duql_2333	$(d_2Cu_3)(q_3C\ell_3)$	C
duql_3111	$(d_3Cu_1)(q_1C\ell_1)$	C
duql_3112	$(d_3Cu_1)(q_1C\ell_2)$	C
duql_3113	$(d_3Cu_1)(q_1C\ell_3)$	C
duql_3121	$(d_3Cu_1)(q_2C\ell_1)$	C
duql_3122	$(d_3Cu_1)(q_2C\ell_2)$	C
duql_3123	$(d_3Cu_1)(q_2C\ell_3)$	C
duql_3131	$(d_3Cu_1)(q_3C\ell_1)$	C
duql_3132	$(d_3Cu_1)(q_3C\ell_2)$	C
duql_3133	$(d_3Cu_1)(q_3C\ell_3)$	C
duql_3211	$(d_3Cu_2)(q_1C\ell_1)$	C
duql_3212	$(d_3Cu_2)(q_1C\ell_2)$	C
duql_3213	$(d_3Cu_2)(q_1C\ell_3)$	C
duql_3221	$(d_3Cu_2)(q_2C\ell_1)$	C
duql_3222	$(d_3Cu_2)(q_2C\ell_2)$	C
duql_3223	$(d_3Cu_2)(q_2C\ell_3)$	C
duql_3231	$(d_3Cu_2)(q_3C\ell_1)$	C
duql_3232	$(d_3Cu_2)(q_3C\ell_2)$	C
duql_3233	$(d_3Cu_2)(q_3C\ell_3)$	C
duql_3311	$(d_3Cu_3)(q_1C\ell_1)$	C
duql_3312	$(d_3Cu_3)(q_1C\ell_2)$	C
duql_3313	$(d_3Cu_3)(q_1C\ell_3)$	C
duql_3321	$(d_3Cu_3)(q_2C\ell_1)$	C
duql_3322	$(d_3Cu_3)(q_2C\ell_2)$	C
duql_3323	$(d_3Cu_3)(q_2C\ell_3)$	C
duql_3331	$(d_3Cu_3)(q_3C\ell_1)$	C
duql_3332	$(d_3Cu_3)(q_3C\ell_2)$	C
duql_3333	$(d_3Cu_3)(q_3C\ell_3)$	C
qque_1111	$(q_1Cq_1)(u_1Ce_1)$	C
qque_1112	$(q_1Cq_1)(u_1Ce_2)$	C
qque_1113	$(q_1Cq_1)(u_1Ce_3)$	C
qque_1121	$(q_1Cq_1)(u_2Ce_1)$	C
qque_1122	$(q_1Cq_1)(u_2Ce_2)$	C

WC name	Operator	Type
qque_1123	$(q_1 C q_1) (u_2 C e_3)$	C
qque_1131	$(q_1 C q_1) (u_3 C e_1)$	C
qque_1132	$(q_1 C q_1) (u_3 C e_2)$	C
qque_1133	$(q_1 C q_1) (u_3 C e_3)$	C
qque_1211	$(q_1 C q_2) (u_1 C e_1)$	C
qque_1212	$(q_1 C q_2) (u_1 C e_2)$	C
qque_1213	$(q_1 C q_2) (u_1 C e_3)$	C
qque_1221	$(q_1 C q_2) (u_2 C e_1)$	C
qque_1222	$(q_1 C q_2) (u_2 C e_2)$	C
qque_1223	$(q_1 C q_2) (u_2 C e_3)$	C
qque_1231	$(q_1 C q_2) (u_3 C e_1)$	C
qque_1232	$(q_1 C q_2) (u_3 C e_2)$	C
qque_1233	$(q_1 C q_2) (u_3 C e_3)$	C
qque_1311	$(q_1 C q_3) (u_1 C e_1)$	C
qque_1312	$(q_1 C q_3) (u_1 C e_2)$	C
qque_1313	$(q_1 C q_3) (u_1 C e_3)$	C
qque_1321	$(q_1 C q_3) (u_2 C e_1)$	C
qque_1322	$(q_1 C q_3) (u_2 C e_2)$	C
qque_1323	$(q_1 C q_3) (u_2 C e_3)$	C
qque_1331	$(q_1 C q_3) (u_3 C e_1)$	C
qque_1332	$(q_1 C q_3) (u_3 C e_2)$	C
qque_1333	$(q_1 C q_3) (u_3 C e_3)$	C
qque_2211	$(q_2 C q_2) (u_1 C e_1)$	C
qque_2212	$(q_2 C q_2) (u_1 C e_2)$	C
qque_2213	$(q_2 C q_2) (u_1 C e_3)$	C
qque_2221	$(q_2 C q_2) (u_2 C e_1)$	C
qque_2222	$(q_2 C q_2) (u_2 C e_2)$	C
qque_2223	$(q_2 C q_2) (u_2 C e_3)$	C
qque_2231	$(q_2 C q_2) (u_3 C e_1)$	C
qque_2232	$(q_2 C q_2) (u_3 C e_2)$	C
qque_2233	$(q_2 C q_2) (u_3 C e_3)$	C
qque_2311	$(q_2 C q_3) (u_1 C e_1)$	C
qque_2312	$(q_2 C q_3) (u_1 C e_2)$	C
qque_2313	$(q_2 C q_3) (u_1 C e_3)$	C
qque_2321	$(q_2 C q_3) (u_2 C e_1)$	C
qque_2322	$(q_2 C q_3) (u_2 C e_2)$	C
qque_2323	$(q_2 C q_3) (u_2 C e_3)$	C
qque_2331	$(q_2 C q_3) (u_3 C e_1)$	C
qque_2332	$(q_2 C q_3) (u_3 C e_2)$	C
qque_2333	$(q_2 C q_3) (u_3 C e_3)$	C
qque_3311	$(q_3 C q_3) (u_1 C e_1)$	C
qque_3312	$(q_3 C q_3) (u_1 C e_2)$	C
qque_3313	$(q_3 C q_3) (u_1 C e_3)$	C
qque_3321	$(q_3 C q_3) (u_2 C e_1)$	C

WC name	Operator	Type
qqqe_3322	$(q_3 C q_3) (u_2 C e_2)$	C
qqqe_3323	$(q_3 C q_3) (u_2 C e_3)$	C
qqqe_3331	$(q_3 C q_3) (u_3 C e_1)$	C
qqqe_3332	$(q_3 C q_3) (u_3 C e_2)$	C
qqqe_3333	$(q_3 C q_3) (u_3 C e_3)$	C
qqql_1111	$\epsilon_{il} \epsilon_{jk} (q_1 C q_1) (q_1 C l_1)$	C
qqql_1112	$\epsilon_{il} \epsilon_{jk} (q_1 C q_1) (q_1 C l_2)$	C
qqql_1113	$\epsilon_{il} \epsilon_{jk} (q_1 C q_1) (q_1 C l_3)$	C
qqql_1121	$\epsilon_{il} \epsilon_{jk} (q_1 C q_1) (q_2 C l_1)$	C
qqql_1122	$\epsilon_{il} \epsilon_{jk} (q_1 C q_1) (q_2 C l_2)$	C
qqql_1123	$\epsilon_{il} \epsilon_{jk} (q_1 C q_1) (q_2 C l_3)$	C
qqql_1131	$\epsilon_{il} \epsilon_{jk} (q_1 C q_1) (q_3 C l_1)$	C
qqql_1132	$\epsilon_{il} \epsilon_{jk} (q_1 C q_1) (q_3 C l_2)$	C
qqql_1133	$\epsilon_{il} \epsilon_{jk} (q_1 C q_1) (q_3 C l_3)$	C
qqql_1211	$\epsilon_{il} \epsilon_{jk} (q_1 C q_2) (q_1 C l_1)$	C
qqql_1212	$\epsilon_{il} \epsilon_{jk} (q_1 C q_2) (q_1 C l_2)$	C
qqql_1213	$\epsilon_{il} \epsilon_{jk} (q_1 C q_2) (q_1 C l_3)$	C
qqql_1221	$\epsilon_{il} \epsilon_{jk} (q_1 C q_2) (q_2 C l_1)$	C
qqql_1222	$\epsilon_{il} \epsilon_{jk} (q_1 C q_2) (q_2 C l_2)$	C
qqql_1223	$\epsilon_{il} \epsilon_{jk} (q_1 C q_2) (q_2 C l_3)$	C
qqql_1231	$\epsilon_{il} \epsilon_{jk} (q_1 C q_2) (q_3 C l_1)$	C
qqql_1232	$\epsilon_{il} \epsilon_{jk} (q_1 C q_2) (q_3 C l_2)$	C
qqql_1233	$\epsilon_{il} \epsilon_{jk} (q_1 C q_2) (q_3 C l_3)$	C
qqql_1311	$\epsilon_{il} \epsilon_{jk} (q_1 C q_3) (q_1 C l_1)$	C
qqql_1312	$\epsilon_{il} \epsilon_{jk} (q_1 C q_3) (q_1 C l_2)$	C
qqql_1313	$\epsilon_{il} \epsilon_{jk} (q_1 C q_3) (q_1 C l_3)$	C
qqql_1321	$\epsilon_{il} \epsilon_{jk} (q_1 C q_3) (q_2 C l_1)$	C
qqql_1322	$\epsilon_{il} \epsilon_{jk} (q_1 C q_3) (q_2 C l_2)$	C
qqql_1323	$\epsilon_{il} \epsilon_{jk} (q_1 C q_3) (q_2 C l_3)$	C
qqql_1331	$\epsilon_{il} \epsilon_{jk} (q_1 C q_3) (q_3 C l_1)$	C
qqql_1332	$\epsilon_{il} \epsilon_{jk} (q_1 C q_3) (q_3 C l_2)$	C
qqql_1333	$\epsilon_{il} \epsilon_{jk} (q_1 C q_3) (q_3 C l_3)$	C
qqql_2121	$\epsilon_{il} \epsilon_{jk} (q_2 C q_1) (q_2 C l_1)$	C
qqql_2122	$\epsilon_{il} \epsilon_{jk} (q_2 C q_1) (q_2 C l_2)$	C
qqql_2123	$\epsilon_{il} \epsilon_{jk} (q_2 C q_1) (q_2 C l_3)$	C
qqql_2131	$\epsilon_{il} \epsilon_{jk} (q_2 C q_1) (q_3 C l_1)$	C
qqql_2132	$\epsilon_{il} \epsilon_{jk} (q_2 C q_1) (q_3 C l_2)$	C
qqql_2133	$\epsilon_{il} \epsilon_{jk} (q_2 C q_1) (q_3 C l_3)$	C
qqql_2221	$\epsilon_{il} \epsilon_{jk} (q_2 C q_2) (q_2 C l_1)$	C
qqql_2222	$\epsilon_{il} \epsilon_{jk} (q_2 C q_2) (q_2 C l_2)$	C
qqql_2223	$\epsilon_{il} \epsilon_{jk} (q_2 C q_2) (q_2 C l_3)$	C
qqql_2231	$\epsilon_{il} \epsilon_{jk} (q_2 C q_2) (q_3 C l_1)$	C
qqql_2232	$\epsilon_{il} \epsilon_{jk} (q_2 C q_2) (q_3 C l_2)$	C
qqql_2233	$\epsilon_{il} \epsilon_{jk} (q_2 C q_2) (q_3 C l_3)$	C

WC name	Operator	Type
qqql_2311	$\epsilon_{il}\epsilon_{jk} (q_2 C q_3) (q_1 C \ell_1)$	C
qqql_2312	$\epsilon_{il}\epsilon_{jk} (q_2 C q_3) (q_1 C \ell_2)$	C
qqql_2313	$\epsilon_{il}\epsilon_{jk} (q_2 C q_3) (q_1 C \ell_3)$	C
qqql_2321	$\epsilon_{il}\epsilon_{jk} (q_2 C q_3) (q_2 C \ell_1)$	C
qqql_2322	$\epsilon_{il}\epsilon_{jk} (q_2 C q_3) (q_2 C \ell_2)$	C
qqql_2323	$\epsilon_{il}\epsilon_{jk} (q_2 C q_3) (q_2 C \ell_3)$	C
qqql_2331	$\epsilon_{il}\epsilon_{jk} (q_2 C q_3) (q_3 C \ell_1)$	C
qqql_2332	$\epsilon_{il}\epsilon_{jk} (q_2 C q_3) (q_3 C \ell_2)$	C
qqql_2333	$\epsilon_{il}\epsilon_{jk} (q_2 C q_3) (q_3 C \ell_3)$	C
qqql_3131	$\epsilon_{il}\epsilon_{jk} (q_3 C q_1) (q_3 C \ell_1)$	C
qqql_3132	$\epsilon_{il}\epsilon_{jk} (q_3 C q_1) (q_3 C \ell_2)$	C
qqql_3133	$\epsilon_{il}\epsilon_{jk} (q_3 C q_1) (q_3 C \ell_3)$	C
qqql_3231	$\epsilon_{il}\epsilon_{jk} (q_3 C q_2) (q_3 C \ell_1)$	C
qqql_3232	$\epsilon_{il}\epsilon_{jk} (q_3 C q_2) (q_3 C \ell_2)$	C
qqql_3233	$\epsilon_{il}\epsilon_{jk} (q_3 C q_2) (q_3 C \ell_3)$	C
qqql_3331	$\epsilon_{il}\epsilon_{jk} (q_3 C q_3) (q_3 C \ell_1)$	C
qqql_3332	$\epsilon_{il}\epsilon_{jk} (q_3 C q_3) (q_3 C \ell_2)$	C
qqql_3333	$\epsilon_{il}\epsilon_{jk} (q_3 C q_3) (q_3 C \ell_3)$	C
duue_1111	$(d_1 C u_1) (u_1 C e_1)$	C
duue_1112	$(d_1 C u_1) (u_1 C e_2)$	C
duue_1113	$(d_1 C u_1) (u_1 C e_3)$	C
duue_1121	$(d_1 C u_1) (u_2 C e_1)$	C
duue_1122	$(d_1 C u_1) (u_2 C e_2)$	C
duue_1123	$(d_1 C u_1) (u_2 C e_3)$	C
duue_1131	$(d_1 C u_1) (u_3 C e_1)$	C
duue_1132	$(d_1 C u_1) (u_3 C e_2)$	C
duue_1133	$(d_1 C u_1) (u_3 C e_3)$	C
duue_1211	$(d_1 C u_2) (u_1 C e_1)$	C
duue_1212	$(d_1 C u_2) (u_1 C e_2)$	C
duue_1213	$(d_1 C u_2) (u_1 C e_3)$	C
duue_1221	$(d_1 C u_2) (u_2 C e_1)$	C
duue_1222	$(d_1 C u_2) (u_2 C e_2)$	C
duue_1223	$(d_1 C u_2) (u_2 C e_3)$	C
duue_1231	$(d_1 C u_2) (u_3 C e_1)$	C
duue_1232	$(d_1 C u_2) (u_3 C e_2)$	C
duue_1233	$(d_1 C u_2) (u_3 C e_3)$	C
duue_1311	$(d_1 C u_3) (u_1 C e_1)$	C
duue_1312	$(d_1 C u_3) (u_1 C e_2)$	C
duue_1313	$(d_1 C u_3) (u_1 C e_3)$	C
duue_1321	$(d_1 C u_3) (u_2 C e_1)$	C
duue_1322	$(d_1 C u_3) (u_2 C e_2)$	C
duue_1323	$(d_1 C u_3) (u_2 C e_3)$	C
duue_1331	$(d_1 C u_3) (u_3 C e_1)$	C
duue_1332	$(d_1 C u_3) (u_3 C e_2)$	C

WC name	Operator	Type
duue_1333	$(d_1Cu_3)(u_3Ce_3)$	C
duue_2111	$(d_2Cu_1)(u_1Ce_1)$	C
duue_2112	$(d_2Cu_1)(u_1Ce_2)$	C
duue_2113	$(d_2Cu_1)(u_1Ce_3)$	C
duue_2121	$(d_2Cu_1)(u_2Ce_1)$	C
duue_2122	$(d_2Cu_1)(u_2Ce_2)$	C
duue_2123	$(d_2Cu_1)(u_2Ce_3)$	C
duue_2131	$(d_2Cu_1)(u_3Ce_1)$	C
duue_2132	$(d_2Cu_1)(u_3Ce_2)$	C
duue_2133	$(d_2Cu_1)(u_3Ce_3)$	C
duue_2211	$(d_2Cu_2)(u_1Ce_1)$	C
duue_2212	$(d_2Cu_2)(u_1Ce_2)$	C
duue_2213	$(d_2Cu_2)(u_1Ce_3)$	C
duue_2221	$(d_2Cu_2)(u_2Ce_1)$	C
duue_2222	$(d_2Cu_2)(u_2Ce_2)$	C
duue_2223	$(d_2Cu_2)(u_2Ce_3)$	C
duue_2231	$(d_2Cu_2)(u_3Ce_1)$	C
duue_2232	$(d_2Cu_2)(u_3Ce_2)$	C
duue_2233	$(d_2Cu_2)(u_3Ce_3)$	C
duue_2311	$(d_2Cu_3)(u_1Ce_1)$	C
duue_2312	$(d_2Cu_3)(u_1Ce_2)$	C
duue_2313	$(d_2Cu_3)(u_1Ce_3)$	C
duue_2321	$(d_2Cu_3)(u_2Ce_1)$	C
duue_2322	$(d_2Cu_3)(u_2Ce_2)$	C
duue_2323	$(d_2Cu_3)(u_2Ce_3)$	C
duue_2331	$(d_2Cu_3)(u_3Ce_1)$	C
duue_2332	$(d_2Cu_3)(u_3Ce_2)$	C
duue_2333	$(d_2Cu_3)(u_3Ce_3)$	C
duue_3111	$(d_3Cu_1)(u_1Ce_1)$	C
duue_3112	$(d_3Cu_1)(u_1Ce_2)$	C
duue_3113	$(d_3Cu_1)(u_1Ce_3)$	C
duue_3121	$(d_3Cu_1)(u_2Ce_1)$	C
duue_3122	$(d_3Cu_1)(u_2Ce_2)$	C
duue_3123	$(d_3Cu_1)(u_2Ce_3)$	C
duue_3131	$(d_3Cu_1)(u_3Ce_1)$	C
duue_3132	$(d_3Cu_1)(u_3Ce_2)$	C
duue_3133	$(d_3Cu_1)(u_3Ce_3)$	C
duue_3211	$(d_3Cu_2)(u_1Ce_1)$	C
duue_3212	$(d_3Cu_2)(u_1Ce_2)$	C
duue_3213	$(d_3Cu_2)(u_1Ce_3)$	C
duue_3221	$(d_3Cu_2)(u_2Ce_1)$	C
duue_3222	$(d_3Cu_2)(u_2Ce_2)$	C
duue_3223	$(d_3Cu_2)(u_2Ce_3)$	C
duue_3231	$(d_3Cu_2)(u_3Ce_1)$	C

WC name	Operator	Type
duue_3232	$(d_3 C u_2) (u_3 C e_2)$	C
duue_3233	$(d_3 C u_2) (u_3 C e_3)$	C
duue_3311	$(d_3 C u_3) (u_1 C e_1)$	C
duue_3312	$(d_3 C u_3) (u_1 C e_2)$	C
duue_3313	$(d_3 C u_3) (u_1 C e_3)$	C
duue_3321	$(d_3 C u_3) (u_2 C e_1)$	C
duue_3322	$(d_3 C u_3) (u_2 C e_2)$	C
duue_3323	$(d_3 C u_3) (u_2 C e_3)$	C
duue_3331	$(d_3 C u_3) (u_3 C e_1)$	C
duue_3332	$(d_3 C u_3) (u_3 C e_2)$	C
duue_3333	$(d_3 C u_3) (u_3 C e_3)$	C

dL=2

WC name	Operator	Type
llphiphi_11	$(\tilde{\varphi}^\dagger \ell_1)^T C (\tilde{\varphi}^\dagger \ell_1)$	C
llphiphi_22	$(\tilde{\varphi}^\dagger \ell_2)^T C (\tilde{\varphi}^\dagger \ell_2)$	C
llphiphi_33	$(\tilde{\varphi}^\dagger \ell_3)^T C (\tilde{\varphi}^\dagger \ell_3)$	C