

$$\begin{aligned}
C_{quqd}^{(8) i1 i2 i3 i4 -} \rightarrow & \hbar \left(\frac{1}{18} s_\gamma c_\gamma \frac{1}{m_\oplus^2} \left(9 s_\gamma^2 \overline{y_d^{pr}} y_d^{i1 i4} y_d^{i3 r} y_u^{pi2} - \right. \right. \\
& 36 g_3^2 y_d^{i3 i4} y_u^{i1 i2} - y_u^{i3 i2} \left(y_d^{i1 i4} \left(5 g_1^2 + 27 g_2^2 + 24 g_3^2 \right) - 9 c_\gamma^2 y_d^{pi4} \overline{y_u^{pr}} y_u^{i1 r} \right) \left. \right) + \\
& \frac{1}{9} s_\gamma c_\gamma \left(-36 g_3^2 y_d^{i3 i4} y_u^{i1 i2} - y_d^{i1 i4} y_u^{i3 i2} \left(5 g_1^2 + 27 g_2^2 + 24 g_3^2 \right) \right) LF_{1,2}[m_\oplus] + \\
& \frac{2}{9} m_1 \tilde{\mu} g_1^2 y_d^{i1 i4} y_u^{i3 i2} LF_{1,1,1,1,0}[m_1, m_{\tilde{d}}^{i4}, m_{\tilde{q}}^{i3}, \tilde{\mu}] + \\
& \frac{8}{9} m_1 \tilde{\mu} g_1^2 y_d^{i1 i4} y_u^{i3 i2} LF_{1,1,1,1,0}[m_1, m_{\tilde{d}}^{i4}, m_{\tilde{u}}^{i2}, \tilde{\mu}] - \\
& \frac{1}{9} m_1 \tilde{\mu} g_1^2 y_d^{i1 i4} y_u^{i3 i2} LF_{1,1,1,1,0}[m_1, m_{\tilde{q}}^{i1}, m_{\tilde{q}}^{i3}, \tilde{\mu}] - \\
& \frac{4}{9} m_1 \tilde{\mu} g_1^2 y_d^{i1 i4} y_u^{i3 i2} LF_{1,1,1,1,0}[m_1, m_{\tilde{q}}^{i1}, m_{\tilde{u}}^{i2}, \tilde{\mu}] + \\
& 3 m_2 \tilde{\mu} g_2^2 y_d^{i1 i4} y_u^{i3 i2} LF_{1,1,1,1,0}[m_2, m_{\tilde{q}}^{i1}, m_{\tilde{q}}^{i3}, \tilde{\mu}] + \\
& \frac{2}{3} m_3 \tilde{\mu} g_3^2 y_d^{i1 i4} y_u^{i3 i2} LF_{1,1,1,1,0}[m_3, m_{\tilde{d}}^{i4}, m_{\tilde{q}}^{i3}, \tilde{\mu}] + \\
& \frac{2}{3} m_3 \tilde{\mu} g_3^2 \left(3 y_d^{i3 i4} y_u^{i1 i2} + y_d^{i1 i4} y_u^{i3 i2} \right) LF_{1,1,1,1,0}[m_3, m_{\tilde{d}}^{i4}, m_{\tilde{u}}^{i2}, \tilde{\mu}] + \\
& \frac{2}{3} m_3 \tilde{\mu} g_3^2 \left(3 y_d^{i3 i4} y_u^{i1 i2} + y_d^{i1 i4} y_u^{i3 i2} \right) LF_{1,1,1,1,0}[m_3, m_{\tilde{q}}^{i1}, m_{\tilde{q}}^{i3}, \tilde{\mu}] + \\
& \left. \frac{2}{3} m_3 \tilde{\mu} g_3^2 y_d^{i1 i4} y_u^{i3 i2} LF_{1,1,1,1,0}[m_3, m_{\tilde{q}}^{i1}, m_{\tilde{u}}^{i2}, \tilde{\mu}] \right)
\end{aligned}$$