```
C_{\mathsf{u}\mathsf{u}}^{\mathsf{i} \mathsf{1}_{\mathsf{-}} \mathsf{i} \mathsf{2}_{\mathsf{-}} \mathsf{i} \mathsf{3}_{\mathsf{-}} \mathsf{i} \mathsf{4}_{\mathsf{-}}} 	o
                                                                                  \left(\frac{1}{324}\ \frac{1}{m_{e}^{2}}\ c_{\gamma}^{2}\ \overline{y_{u}}^{pi3}\ \left(y_{u}^{pi4}\ \left(-81\ s_{\gamma}^{2}\ \overline{y_{u}}^{ri1}\ y_{u}^{ri2}+2\ \left(-7\ g_{1}^{2}+6\ g_{3}^{2}\right)\ \delta_{i1i2}\right)-36\ g_{3}^{2}\ y_{u}^{pi2}\ \delta_{i1i4}\right)+\left(-81\ s_{\gamma}^{2}\ \overline{y_{u}}^{ri1}\ y_{u}^{ri2}+2\ \left(-7\ g_{1}^{2}+6\ g_{3}^{2}\right)\ \delta_{i1i2}\right)-36\ g_{3}^{2}\ y_{u}^{pi2}\ \delta_{i1i4}\right)+\left(-81\ s_{\gamma}^{2}\ \overline{y_{u}}^{ri2}\right)+\left(-81\ s_{\gamma}^{2}\ \overline{y_{u}}^{ri
                                                                                                                                         \frac{1}{18} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i2} \ \delta_{\ 13i4}) \ \mathsf{LF}_{3,0} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i2} \ \delta_{\ 13i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i2} \ \delta_{\ 13i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i2} \ \delta_{\ 13i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i2} \ \delta_{\ 13i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i2} \ \delta_{\ 13i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i2} \ \delta_{\ 13i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i2} \ \delta_{\ 13i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i2} \ \delta_{\ 13i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 12i3} - \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}_{4,-1} \ [\mathsf{m}_3] \ + \\ \frac{1}{12} \ g_3^{\ 4} \ (3 \ \delta_{\ 11i4} \ \delta_{\ 11i4} \ \delta_{\ 11i4}) \ \mathsf{LF}
                                                                                                                                         \frac{4}{45} g_3^4 (-3 \delta_{i1i4} \delta_{i2i3} + \delta_{i1i2} \delta_{i3i4}) LF_{5,-2}[m_3] +
                                                                                                                                         \frac{1}{486} \, \sum_{p} \, \left( 27 \, {g_{3}}^{4} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right) \, \mathsf{LF}_{3,0} \left[ m_{\dot{d}}^{-p} \right] \, - \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right) \, \mathsf{LF}_{3,0} \left[ m_{\dot{d}}^{-p} \right] \, - \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right) \, \mathsf{LF}_{3,0} \left[ m_{\dot{d}}^{-p} \right] \, - \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right] \, + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}\dot{3}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{
                                                                                                                                         \frac{5}{1296} \, \sum_{p} \, \left( 27 \, {g_{3}}^{4} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right) \, \mathsf{LF_{4,-1}} \left[ \, \mathsf{m}_{\dot{d}}^{\,\,\,p} \, \right] \, + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right) \, \mathsf{LF_{4,-1}} \left[ \, \mathsf{m}_{\dot{d}}^{\,\,\,p} \, \right] \, + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}\dot{3}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \, + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \, + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{2}\dot{1}\dot{3}} \, + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{1}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}
                                                                                                                                         \frac{2}{1215} \, \sum_{p} \, \left( 27 \, {g_{3}}^{4} \, \delta_{\text{ili4}} \, \delta_{\text{i2i3}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} \right) \, \text{LF}_{\text{5,-2}} \left[ \, m_{\tilde{d}}^{-p} \, \right] \, + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{ili2}} + \, \left( 16 \, {g_{1}
                                                                                                                                         \frac{8}{81}\,\sum_{p}\,{g_{1}}^{4}\,\mathsf{LF_{3,0}}\!\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,-\,\frac{5}{27}\,\sum_{p}\,{g_{1}}^{4}\,\,\mathsf{LF_{4,-1}}\!\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1112}}\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1114}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{\mathsf{1314}}\,\,+\,\frac{5}{27}\,\,\left[\,\mathsf{m_{\tilde{e}}}^{\,p}\,\right]\,\,\delta_{
                                                                                                                                         \frac{32}{405} \sum_{p} g_{1}{}^{4} \; \mathsf{LF}_{5,-2} \left[ \mathsf{m}_{\check{\mathsf{e}}}{}^{p} \right] \; \delta_{\mathsf{11i2}} \; \delta_{\mathsf{13i4}} + \frac{4}{81} \sum_{p} g_{1}{}^{4} \; \mathsf{LF}_{\mathsf{3,0}} \left[ \mathsf{m}_{\check{\mathsf{i}}}{}^{p} \right] \; \delta_{\mathsf{11i2}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \sum_{p} \left[ \mathsf{m}_{\mathsf{1}}{}^{p} \right] \; \delta_{\mathsf{11i2}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \sum_{p} \left[ \mathsf{m}_{\mathsf{1}}{}^{p} \right] \; \delta_{\mathsf{11i2}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \sum_{p} \left[ \mathsf{m}_{\mathsf{1}}{}^{p} \right] \; \delta_{\mathsf{11i2}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \sum_{p} \left[ \mathsf{m}_{\mathsf{1}}{}^{p} \right] \; \delta_{\mathsf{11i2}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \sum_{p} \left[ \mathsf{m}_{\mathsf{1}}{}^{p} \right] \; \delta_{\mathsf{11i2}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \sum_{p} \left[ \mathsf{m}_{\mathsf{1}}{}^{p} \right] \; \delta_{\mathsf{11i2}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \sum_{p} \left[ \mathsf{m}_{\mathsf{1}}{}^{p} \right] \; \delta_{\mathsf{11i4}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \sum_{p} \left[ \mathsf{m}_{\mathsf{1}}{}^{p} \right] \; \delta_{\mathsf{11i4}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \delta_{\mathsf{11i4}} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \delta_{\mathsf{13i4}} + \frac{1}{81} \; \delta_{\mathsf{13i4}} + \frac{1}{81} \; \delta_{\mathsf{13i4}} - \frac{1}{81} \; \delta_{\mathsf{13i4}} + \frac{1}{81} \;
                                                                                                                                         \frac{5}{54} \, \sum_{p} \, {g_{1}}^{4} \, \, \mathsf{LF}_{4,-1} \big[ \, \mathsf{m}_{\tilde{l}}^{\, p} \big] \, \, \delta_{\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, + \, \frac{16}{405} \, \sum_{p} \, {g_{1}}^{4} \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{\tilde{l}}^{\, p} \big] \, \, \delta_{\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, + \, \frac{16}{405} \, \sum_{p} \, {g_{1}}^{4} \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{\tilde{l}}^{\, p} \big] \, \, \delta_{\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, + \, \frac{16}{405} \, \sum_{p} \, {g_{1}}^{4} \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{\tilde{l}}^{\, p} \big] \, \, \delta_{\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, + \, \frac{16}{405} \, \sum_{p} \, {g_{1}}^{4} \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{\tilde{l}}^{\, p} \big] \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, + \, \frac{16}{405} \, \sum_{p} \, {g_{1}}^{4} \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{\tilde{l}}^{\, p} \big] \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, + \, \frac{16}{405} \, \sum_{p} \, {g_{1}}^{4} \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{\tilde{l}}^{\, p} \big] \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, + \, \frac{16}{405} \, \sum_{p} \, {g_{1}}^{4} \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{\tilde{l}}^{\, p} \big] \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, + \, \frac{16}{405} \, \sum_{p} \, {g_{1}}^{4} \, \, \, \mathsf{LF}_{5,-2} \big[ \, \mathsf{m}_{\tilde{l}}^{\, p} \big] \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, + \, \frac{16}{405} \, \sum_{p} \, {g_{1}}^{\, p} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}\dot{2}} \, \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1
                                                                                                                                         \frac{1}{243} \, \sum_{p} \, \left( 27 \, {g_{3}}^4 \, \delta_{\text{ili4}} \, \delta_{\text{i2i3}} + \, \left( 4 \, {g_{1}}^4 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} \right) \, \text{LF}_{3,0} \left[ m_{\tilde{q}}^{-p} \right] \, - \, \left( 4 \, {g_{1}}^4 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{3}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{i3i4}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{ili2}} \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iiii}} + \, \left( 4 \, {g_{1}}^2 - 9 \, {g_{2}}^4 \right) \, \delta_{\text{iiii}} + 
                                                                                                                                         \frac{5}{648} \, \sum_{p} \, \left( 27 \, {g_{3}}^{4} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right) \, \mathsf{LF_{4,-1}} \left[ \mathfrak{m}_{\bar{q}}^{-p} \right] \, + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right] \, \mathsf{LF_{4,-1}} \left[ \mathfrak{m}_{\bar{q}}^{-p} \right] \, + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \, + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \, + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \, + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \, + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \, + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}} \, \delta_{\dot{1}\dot{1}} \, \delta
                                                                                                                                         \frac{\text{4}}{\text{1215}} \, \sum_{p} \, \left( 27 \, {g_{3}}^{4} \, \delta_{\text{1114}} \, \delta_{\text{1213}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} \right) \, \mathsf{LF}_{5,-2} \left[ \, \mathsf{m}_{\bar{q}}^{-p} \, \right] \, + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} \, \delta_{\text{1314}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \, {g_{2}}^{4} \right) \, \delta_{\text{1112}} + \, \left( 4 \, {g_{1}}^{4} - 9 \,
                                                                                                                                         \frac{5}{1296} \, \sum_{p} \, \left( 27 \, {g_{3}}^{4} \, \delta_{\mbox{\scriptsize ili4}} \, \delta_{\mbox{\scriptsize i2i3}} + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\mbox{\scriptsize ili2}} \, \delta_{\mbox{\scriptsize i3i4}} \right) \, LF_{\mbox{\scriptsize 4,-1}} \! \left[ m_{\mbox{\scriptsize u}}^{\mbox{\tiny p}} \right] \, + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\mbox{\scriptsize ili2}} \, \delta_{\mbox{\scriptsize i3i4}} \right) \, LF_{\mbox{\scriptsize 4,-1}} \! \left[ m_{\mbox{\scriptsize u}}^{\mbox{\tiny p}} \right] \, + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\mbox{\scriptsize i1i2}} \, \delta_{\mbox{\scriptsize i3i4}} \right) \, LF_{\mbox{\scriptsize 4,-1}} \! \left[ m_{\mbox{\scriptsize u}}^{\mbox{\tiny p}} \right] \, + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\mbox{\scriptsize i1i2}} \, \delta_{\mbox{\scriptsize i3i4}} \right] \, LF_{\mbox{\scriptsize 4,-1}} \! \left[ m_{\mbox{\scriptsize u}}^{\mbox{\tiny p}} \right] \, + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\mbox{\scriptsize i1i2}} \, \delta_{\mbox{\scriptsize i3i4}} \right] \, LF_{\mbox{\scriptsize 4,-1}} \! \left[ m_{\mbox{\scriptsize u}}^{\mbox{\tiny p}} \right] \, + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\mbox{\scriptsize i1i2}} \, \delta_{\mbox{\scriptsize i3i4}} \right] \, LF_{\mbox{\scriptsize 4,-1}} \! \left[ m_{\mbox{\scriptsize u}}^{\mbox{\tiny p}} \right] \, + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\mbox{\scriptsize 11i2}} \, \delta_{\mbox{\scriptsize 11i
                                                                                                                                         \frac{2}{1215} \, \sum_{p} \, \left( 27 \, {g_{3}}^{4} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right) \, \mathsf{LF}_{5,-2} \left[ m_{\tilde{u}}^{\;\;p} \right] \, + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \right] \, \mathsf{LF}_{5,-2} \left[ m_{\tilde{u}}^{\;\;p} \right] \, + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}\dot{3}} + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}\dot{3}} + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}\dot{3}} + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{2}\dot{1}\dot{3}\dot{3}} + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \, \delta_{\dot{1}\dot{1}\dot{2}\dot{3}\dot{3}} + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \, \delta_{\dot{1}\dot{3}\dot{1}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{1}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}\dot{3}} + \, \left( 64 \, {g_{1}}^{4} - 9 \, {g_{3}}^{4} \right) \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} + \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} + \, \delta_{\dot{1}\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{3}} \, \delta_{\dot{1}\dot{3}\dot{3}\dot{
                                                                                                                                         \frac{1}{54} \; c_{\gamma}^{\; 2} \; \overline{y_u}^{\text{pi3}} \; \left( y_u^{\, \text{pi4}} \; \left( 27 \; s_{\gamma}^{\; 2} \; \overline{y_u}^{\text{ri1}} \; y_u^{\, \text{ri2}} \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \right) \; - \; 18 \; g_3^{\; 2} \; y_u^{\, \text{pi2}} \; \delta_{\text{i1i4}} \right) \; \text{LF}_{1,2} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \right) \; - \; 18 \; g_3^{\; 2} \; y_u^{\, \text{pi3}} \; \delta_{\text{i1i4}} \right) \; \text{LF}_{1,2} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \right) \; - \; 18 \; g_3^{\; 2} \; y_u^{\, \text{pi3}} \; \delta_{\text{i1i4}} \right) \; \text{LF}_{1,2} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \right) \; - \; 18 \; g_3^{\; 2} \; y_u^{\, \text{pi3}} \; \delta_{\text{i1i4}} \right) \; \text{LF}_{1,2} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \right) \; - \; 18 \; g_3^{\; 2} \; y_u^{\, \text{pi3}} \; \delta_{\text{i1i4}} \right) \; \text{LF}_{1,2} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; + \; 2 \; \left( -2 \; g_1^{\; 2} \; + \; 3 \; g_3^{\; 2} \right) \; \delta_{\text{i1i2}} \left[ \, m_{\scriptscriptstyle \oplus} \, \right] \; \delta_{\text{
                                                                                                                                         \frac{1}{36} \ c_{\gamma}^{\ 2} \ \overline{y_{u}}^{\text{pi3}} \ y_{u}^{\text{pi4}} \ \left(9 \ c_{\gamma}^{\ 2} \ \overline{y_{u}}^{\text{ri1}} \ y_{u}^{\text{ri2}} - 4 \ g_{1}^{\ 2} \ \delta_{\text{ili2}}\right) \ \mathsf{LF}_{2,\text{1}}[\,\mathsf{m}_{\scriptscriptstyle{\oplus}}\,] \ +
                                                                                                                                             \frac{1}{81} g_1^2 \left(9 c_{\gamma}^2 \overline{y_u}^{\text{pi3}} y_u^{\text{pi4}} + 4 g_1^2 \delta_{\text{i3i4}}\right) \text{LF}_{3,\theta}[\text{M}_{\oplus}] \delta_{\text{i1i2}} - \frac{5}{54} g_1^4 \text{LF}_{4,-1}[\text{M}_{\oplus}] \delta_{\text{i1i2}} \delta_{\text{i3i4}} + \frac{1}{2} \left(\frac{1}{2} \right)\right)\right)\right)}{1\right)}\right)\right)\right)}\right)}\right)} \right) \right) \right] \right) \right) \right) \right) \right) \right) 
                                                                                                                                         \frac{\textbf{16}}{\textbf{405}} \; \textbf{g_1}^{\textbf{4}} \; \textbf{LF_{5,-2}} [\, \textbf{m}_{\tiny{\oplus}} \,] \; \delta_{\textbf{1112}} \; \delta_{\textbf{1314}} \; + \; \frac{\textbf{4}}{\textbf{81}} \; \textbf{g_1}^{\textbf{4}} \; \textbf{LF_{3,0}} [\, \widetilde{\mu} \,] \; \delta_{\textbf{1112}} \; \delta_{\textbf{1314}} \; + \;
                                                                                                                                         \frac{2}{27} \; {\rm g_1}^4 \; {\rm LF_{4,-1}} \left[ \tilde{\mu} \right] \; \delta_{\rm ili2} \; \delta_{\rm i3i4} - \frac{32}{405} \; {\rm g_1}^4 \; {\rm LF_{5,-2}} \left[ \tilde{\mu} \right] \; \delta_{\rm ili2} \; \delta_{\rm i3i4} + \frac{32}{405} \; {\rm g_1}^4 \; {\rm LF_{5,-2}} \left[ \tilde{\mu} \right] \; \delta_{\rm ili2} \; \delta_{\rm i3i4} + \frac{32}{405} \; {\rm g_1}^4 \; {\rm LF_{5,-2}} \left[ \tilde{\mu} \right] \; \delta_{\rm ili2} \; \delta_{\rm i3i4} + \frac{32}{405} \; {\rm g_1}^4 \; {\rm LF_{5,-2}} \left[ \tilde{\mu} \right] \; \delta_{\rm ili2} \; \delta_{\rm ili3} \; \delta_{\rm 
                                                                                                                                         \frac{2}{243}~g_{1}^{2}~\left(9~g_{3}^{2}~\delta_{\text{ili4}}~\delta_{\text{i2i3}}+~\left(8~g_{1}^{2}-3~g_{3}^{2}\right)~\delta_{\text{ili2}}~\delta_{\text{i3i4}}\right)~\mathsf{LF}_{2,1,0}\!\left[m_{1},~m_{\tilde{u}}^{\;i4}\right]+
                                                                                                                                         \frac{2}{243} \; g_{1}^{\; 2} \; \left(9 \; g_{3}^{\; 2} \; \delta_{\dot{1}\dot{1}\dot{4}} \; \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \; + \; \left(8 \; g_{1}^{\; 2} \; - \; 3 \; g_{3}^{\; 2}\right) \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}}\right) \; \mathsf{LF}_{2,2,-1} \left[\mathsf{m}_{1} \, , \; \mathsf{m}_{\tilde{\mathsf{u}}}^{\; \dot{1}\dot{4}}\right] \; + \; \left(8 \; g_{1}^{\; 2} \; - \; 3 \; g_{3}^{\; 2}\right) \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}}\right) \; \mathsf{LF}_{2,2,-1} \left[\mathsf{m}_{1} \, , \; \mathsf{m}_{\tilde{\mathsf{u}}}^{\; \dot{1}\dot{4}}\right] \; + \; \left(8 \; g_{1}^{\; 2} \; - \; 3 \; g_{3}^{\; 2}\right) \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \; \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \; + \; \left(8 \; g_{1}^{\; 2} \; - \; 3 \; g_{3}^{\; 2}\right) \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \; \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \; + \; \left(8 \; g_{1}^{\; 2} \; - \; 3 \; g_{3}^{\; 2}\right) \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \; \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \; + \; \left(8 \; g_{1}^{\; 2} \; - \; 3 \; g_{3}^{\; 2}\right) \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \; \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \; + \; \left(8 \; g_{1}^{\; 2} \; - \; 3 \; g_{3}^{\; 2}\right) \; \delta_{\dot{1}\dot{1}\dot{1}\dot{2}} \; \delta_{\dot{1}\dot{3}\dot{1}\dot{4}} \; \delta_{\dot{1}\dot{2}\dot{1}\dot{3}} \; + \; \left(8 \; g_{1}^{\; 2} \; - \; 3 \; g_{3}^{\; 2}\right) \; \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \; \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \; \delta_{\dot{1}\dot{1}\dot{1}\dot{1}} \; \delta_{\dot{1}\dot{1}\dot{1}\dot{1}\dot{1}} \; \delta_{\dot{1}\dot{1}\dot{1}\dot{1}} \; \delta_{\dot{1}\dot{1}\dot{1}} \; \delta_{\dot{1}\dot{1}\dot{1}} \; \delta_{\dot{1}\dot{1}\dot{1}\dot{1}} \; \delta_{\dot{1}\dot{1}\dot{1}} \; \delta_{\dot{1}\dot{1}} \; \delta_{\dot{1
                                                                                                                                         \frac{4}{243}~g_{1}^{2}~\left(-9~g_{3}^{2}~\delta_{\text{ili4}}~\delta_{\text{i2i3}}+~\left(-8~g_{1}^{2}+3~g_{3}^{2}\right)~\delta_{\text{ili2}}~\delta_{\text{i3i4}}\right)~\mathsf{LF_{3,1,-1}}\!\left[\mathsf{m_{1}},~\mathsf{m_{\tilde{u}}}^{\text{i4}}\right]+
                                                                                                                                         \frac{2}{243} \ g_1{}^2 \ \left(9 \ g_3{}^2 \ \delta_{\textbf{i} \textbf{1} \textbf{i} \textbf{4}} \ \delta_{\textbf{i} \textbf{2} \textbf{i} \textbf{3}} + \ \left(8 \ g_1{}^2 - 3 \ g_3{}^2\right) \ \delta_{\textbf{i} \textbf{1} \textbf{i} \textbf{2}} \ \delta_{\textbf{i} \textbf{3} \textbf{i} \textbf{4}}\right) \ \mathsf{LF_{4,1,-2}} \left[\mathsf{m_1, m_{\tilde{u}}}^{\textbf{i} \textbf{4}}\right] + \\
                                                                                                                                         \left(-9\,g_{3}{}^{4}\,\delta_{i1i4}\,\delta_{i2i3}+g_{3}{}^{2}\,\left(64\,g_{1}{}^{2}+3\,g_{3}{}^{2}\right)\,\delta_{i1i2}\,\delta_{i3i4}\right)\,\mathsf{LF}_{2,2,-1}\!\left[\mathsf{m}_{3}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{i4}\right]+
                                                                                                                                         \frac{2}{81} \; g_{3}^{2} \; \left(9 \; g_{3}^{\; 2} \; \delta_{\textbf{i} \textbf{1} \textbf{i} \textbf{4}} \; \delta_{\textbf{i} \textbf{2} \textbf{i} \textbf{3}} \; + \; \left(8 \; g_{1}^{\; 2} - 3 \; g_{3}^{\; 2}\right) \; \delta_{\textbf{i} \textbf{1} \textbf{i} \textbf{2}} \; \delta_{\textbf{i} \textbf{3} \textbf{i} \textbf{4}}\right) \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \left(8 \; g_{1}^{\; 2} - 3 \; g_{3}^{\; 2}\right) \; \delta_{\textbf{i} \textbf{1} \textbf{i} \textbf{2}} \; \delta_{\textbf{i} \textbf{3} \textbf{i} \textbf{4}}\right) \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \left(8 \; g_{1}^{\; 2} - 3 \; g_{3}^{\; 2}\right) \; \delta_{\textbf{i} \textbf{1} \textbf{i} \textbf{2}} \; \delta_{\textbf{i} \textbf{3} \textbf{3} \textbf{4}}\right) \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \left(8 \; g_{1}^{\; 2} - 3 \; g_{3}^{\; 2}\right) \; \delta_{\textbf{i} \textbf{1} \textbf{1} \textbf{2}} \; \delta_{\textbf{i} \textbf{3} \textbf{3} \textbf{4}}\right) \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{3}} \; , \; \mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1,-2}} \left[\mathsf{m_{\tilde{u}}}^{\; \textbf{i} \textbf{4}}\right] \; + \; \mathsf{LF_{4,1
                                                                                                                                         \frac{1}{27} \; \overline{y_u}^{\text{pi3}} \; \left( y_u^{\text{pi4}} \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} - 9 \; g_3^{\; 2} \; y_u^{\text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} - 9 \; g_3^{\; 2} \; y_u^{\text{pi3}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} - 9 \; g_3^{\; 2} \; y_u^{\; pi3} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} - 9 \; g_3^{\; 2} \; y_u^{\; pi3} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} - 9 \; g_3^{\; 2} \; y_u^{\; pi3} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} - 9 \; g_3^{\; 2} \; y_u^{\; pi3} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili4}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili4}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili4}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; 2} + 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili4}} \left[ \, m_{\tilde{q}}^{\; p} \, , \; \widetilde{\mu} \, \right] \; + \; \left( -2 \; g_1^{\; p} \, , \; \widetilde{\mu} \, , \; \widetilde{\mu} \, \right) \; + \; \left( -2 \; g_1^{\; p} \, , \; \widetilde{\mu} \, , \; \widetilde{\mu} \, \right) \; + \; \left( -2 \; g_1^{\; p} \, , \; \widetilde{\mu} \, , \; \widetilde{\mu} \, , \; \widetilde{\mu} \, \right) \; + \; \left( -2 \; g_1^{\; p} \, , \; \widetilde{\mu} \, ,
                                                                                                                                         \frac{1}{54} \; \overline{y_u}^{\text{pi3}} \; \left( y_u^{\text{pi4}} \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + 9 \; g_3^{\; 2} \; y_u^{\text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,2,-1} \! \left[ m_{\tilde{q}}^{\; p} \text{, } \; \widetilde{\mu} \right] + \frac{1}{54} \; \overline{y_u}^{\text{pi3}} \; \left( y_u^{\text{pi4}} \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + 9 \; g_3^{\; 2} \; y_u^{\text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,2,-1} \! \left[ m_{\tilde{q}}^{\; p} \text{, } \; \widetilde{\mu} \right] + \frac{1}{54} \; \overline{y_u^{\; 2}} 
                                                                                                                                             \frac{4}{243}~g_{1}^{2}~\left(-9~g_{3}^{2}~\delta_{\text{ili4}}~\delta_{\text{i2i3}}+\right. \\ \left.\left(-8~g_{1}^{2}+3~g_{3}^{2}\right)~\delta_{\text{ili2}}~\delta_{\text{i3i4}}\right)~LF_{2,1,0}\left[m_{\tilde{u}}^{~i4},~m_{1}\right]+\frac{1}{2}\left(-8~g_{1}^{2}+3~g_{3}^{2}\right)~\delta_{\text{ili2}}~\delta_{\text{i3i4}}\right)
                                                                                                                                         \frac{2}{243}~g_{1}^{2}~\left(9~g_{3}^{2}~\delta_{\text{ili4}}~\delta_{\text{i2i3}}+~\left(8~g_{1}^{2}-3~g_{3}^{2}\right)~\delta_{\text{ili2}}~\delta_{\text{i3i4}}\right)~\mathsf{LF}_{3,1,-1}\!\left[m_{\bar{u}}^{-\mathrm{i4}},~m_{1}\right]+\frac{1}{2}\left(m_{\bar{u}}^{2}+m_{1}^{2}\right)^{2}
                                                                                                                                                                                                                               (9 g_3^4 \delta_{i1i4} \delta_{i2i3} - g_3^2 (64 g_1^2 + 3 g_3^2) \delta_{i1i2} \delta_{i3i4}) LF_{2,1,0}[m_{\tilde{u}}^{i4}, m_3] +
                                                                                                                                                                                                                          \left(-9\;g_{3}{}^{4}\;\delta_{\dot{1}\dot{1}\dot{1}\dot{4}}\;\delta_{\dot{1}\dot{2}\dot{1}\dot{3}}+g_{3}{}^{2}\;\left(64\;g_{1}{}^{2}+3\;g_{3}{}^{2}\right)\;\delta_{\dot{1}\dot{1}\dot{2}}\;\delta_{\dot{1}\dot{3}\dot{1}\dot{4}}\right)\;\mathsf{LF_{3,1,-1}}\!\left[\mathsf{m_{\tilde{u}}}^{\dot{1}\dot{4}},\;\mathsf{m_{3}}\right]\;\mathsf{+}\;
                                                                                                                                         324
                                                                                                                                         \frac{1}{54} \; \overline{y_u}^{\text{pi3}} \; \left( y_u^{\text{pi4}} \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + 9 \; g_3^{\; 2} \; y_u^{\text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \widetilde{\mu} \; , \; \textbf{m}_{\widetilde{q}}^{\; \text{-}P} \right] \; + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; 9 \; g_3^{\; 2} \; y_u^{\; \text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \widetilde{\mu} \; , \; \textbf{m}_{\widetilde{q}}^{\; \text{-}P} \right] \; + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; 9 \; g_3^{\; 2} \; y_u^{\; \text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \widetilde{\mu} \; , \; \textbf{m}_{\widetilde{q}}^{\; \text{-}P} \right] \; + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; 9 \; g_3^{\; 2} \; y_u^{\; \text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \widetilde{\mu} \; , \; \textbf{m}_{\widetilde{q}}^{\; \text{-}P} \right] \; + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; 9 \; g_3^{\; 2} \; y_u^{\; \text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{2,\text{1,0}} \left[ \widetilde{\mu} \; , \; \textbf{m}_{\widetilde{q}}^{\; \text{-}P} \right] \; + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 2 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \;
                                                                                                                                    \frac{1}{27}\;\overline{y_{u}}^{\text{pi3}}\;\left(y_{u}^{\text{pi4}}\;\left(-\,11\;g_{1}^{\;2}\,+\,3\;g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\,-\,9\;g_{3}^{\;2}\;y_{u}^{\text{pi2}}\;\delta_{\text{ili4}}\right)\;\text{LF}_{3,\text{l,-1}}\!\left[\widetilde{\mu}\,,\;\mathfrak{m}_{\widetilde{q}}^{-\,p}\right]\,+\,2\,\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,+\,3\,g_{3}^{\;2}\right)\;\delta_{\text{ili2}}\left(-\,11\,g_{1}^{\;2}\,
                                                                                                                                         \frac{1}{54} \; \overline{y_u}^{\text{pi3}} \; \left( y_u^{\text{pi4}} \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + 9 \; g_3^{\; 2} \; y_u^{\text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{4,1,-2} \left[ \widetilde{\mu} \; , \; \textbf{m}_{\tilde{q}}^{\; \tilde{p}} \right] \; + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + 9 \; g_3^{\; 2} \; y_u^{\; \text{pi2}} \; \delta_{\text{ili4}} \right) \; \text{LF}_{4,1,-2} \left[ \widetilde{\mu} \; , \; \textbf{m}_{\tilde{q}}^{\; \tilde{p}} \right] \; + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 8 \; g_1^{\; 2} - 3 \; g_3^{\; 2} \right) \; \delta_{\text{ili2}} + \; \left( 
                                                                                                                                         \frac{8}{81}\;g_{1}{}^{4}\;\mathsf{LF}_{2,1,1,-1}\big[\mathsf{m}_{1}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,4}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,\mathsf{1}\,\mathsf{i}\,2}\;\;\delta_{\mathsf{i}\,\mathsf{3}\,\mathsf{i}\,4}\;+\;\frac{16}{81}\;\;g_{1}{}^{4}\;\mathsf{m}_{1}{}^{2}\;\mathsf{LF}_{2,1,1,0}\big[\mathsf{m}_{1}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,4}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,\mathsf{1}\,\mathsf{i}\,2}\;\;\delta_{\mathsf{i}\,\mathsf{3}\,\mathsf{i}\,4}\;+\;\frac{16}{81}\;\;g_{1}{}^{4}\;\mathsf{m}_{1}{}^{2}\;\;\mathsf{LF}_{2,1,1,0}\big[\mathsf{m}_{1}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,4}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,\mathsf{1}\,\mathsf{i}\,2}\;\;\delta_{\mathsf{i}\,\mathsf{3}\,\mathsf{i}\,4}\;+\;\frac{16}{81}\;\;g_{1}{}^{4}\;\mathsf{m}_{1}{}^{2}\;\;\mathsf{LF}_{2,1,1,0}\big[\mathsf{m}_{1}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,4}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,\mathsf{1}\,\mathsf{i}\,2}\;\;\delta_{\mathsf{i}\,\mathsf{3}\,\mathsf{i}\,4}\;+\;\frac{16}{81}\;\;g_{1}{}^{4}\;\mathsf{m}_{1}{}^{2}\;\;\mathsf{LF}_{2,1,1,0}\big[\mathsf{m}_{1}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,4}\;,\;\mathsf{m}_{\bar{\mathsf{u}}}{}^{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,\mathsf{1}\,\mathsf{i}\,2}\;\;\delta_{\mathsf{i}\,\mathsf{3}\,\mathsf{i}\,4}\;+\;\frac{16}{81}\;\;\mathsf{m}_{\mathsf{i}\,2}\,\;\mathsf{m}_{\mathsf{i}\,2}\,\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\;,\;\mathsf{m}_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,\mathsf{1}\,\mathsf{i}\,2}\;\;\delta_{\mathsf{i}\,\mathsf{3}\,\mathsf{i}\,4}\;+\;\frac{16}{81}\;\;\mathsf{m}_{\mathsf{i}\,2}\,\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\;,\;\mathsf{m}_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,\mathsf{1}\,\mathsf{i}\,2}\;\;\delta_{\mathsf{i}\,\mathsf{3}\,\mathsf{i}\,3}\;+\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\;,\;\mathsf{m}_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,\mathsf{i}\,2}\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\;,\;\mathsf{m}_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,\mathsf{i}\,2}\,\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\;,\;\mathsf{m}_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,2}\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\;,\;\mathsf{m}_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\;,\;\mathsf{m}_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\delta_{\mathsf{i}\,2}\,\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\;,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\;,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{m}_{\mathsf{i}\,2}\big[\mathsf{m}_{\mathsf{i}\,2}\,,\;\mathsf{m}_{\mathsf{i}\,2}\big]\;\;\mathsf{
                                                                                                                                         \frac{7}{24}\;g_{3}{}^{4}\;\mathsf{LF}_{2,1,1,-1}\big[\,\mathsf{m}_{3}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,4}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,3}\big]\;\,\delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}}\,\delta_{\dot{\mathsf{1}}\dot{\mathsf{2}}\dot{\mathsf{1}}3}\,-\,\frac{1}{6}\;g_{3}{}^{4}\;\mathsf{m}_{3}{}^{2}\;\mathsf{LF}_{2,1,1,0}\big[\,\mathsf{m}_{3}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,4}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,3}\big]\;\,\delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}4}\;\delta_{\dot{\mathsf{1}}\dot{\mathsf{2}}\dot{\mathsf{1}}3}\,+\,\frac{1}{6}\;g_{3}{}^{4}\;\mathsf{m}_{3}{}^{2}\;\mathsf{LF}_{2,1,1,0}\big[\,\mathsf{m}_{3}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,4}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,3}\big]\;\,\delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}4}\;\delta_{\dot{\mathsf{1}}\dot{\mathsf{2}}\dot{\mathsf{1}}3}\,+\,\frac{1}{6}\;g_{3}{}^{4}\;\mathsf{m}_{3}{}^{2}\;\mathsf{LF}_{2,1,1,0}\big[\,\mathsf{m}_{3}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,4}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,3}\big]\;\,\delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}4}\;\delta_{\dot{\mathsf{1}}\dot{\mathsf{2}}\dot{\mathsf{1}}3}\,+\,\frac{1}{6}\;g_{3}{}^{4}\;\mathsf{m}_{3}{}^{2}\;\mathsf{LF}_{2,1,1,0}\big[\,\mathsf{m}_{3}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,4}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,3}\big]\;\,\delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}4}\;\delta_{\dot{\mathsf{1}}\dot{\mathsf{2}}\dot{\mathsf{1}}3}\,+\,\frac{1}{6}\;g_{3}{}^{4}\;\mathsf{m}_{3}{}^{2}\;\mathsf{LF}_{2,1,1,0}\big[\,\mathsf{m}_{3}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,4}\,,\,\mathsf{m}_{\tilde{\mathsf{u}}}{}^{\dot{\mathsf{i}}\,3}\big]\;\,\delta_{\dot{\mathsf{1}}\dot{\mathsf{1}}\dot{\mathsf{1}}4}\;\delta_{\dot{\mathsf{1}}\dot{\mathsf{2}}\dot{\mathsf{1}}3}\,+\,\frac{1}{6}\;g_{3}{}^{4}\;\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}_{3}\,\mathsf{m}
                                                                                                                                         \frac{1}{4} \; \overline{y_u}^{\text{pi3}} \; \overline{y_u}^{\text{ri1}} \; y_u^{\text{pi4}} \; y_u^{\text{ri2}} \; \mathsf{LF}_{2,1,1,-1} \big[ \tilde{\mu} \text{, } \mathsf{m}_{\tilde{q}}^{\text{p}} \text{, } \mathsf{m}_{\tilde{q}}^{\text{r}} \big] \; - \; \frac{2}{27} \; g_1^2 \; g_3^2 \; \mathsf{LF}_{1,1,1,1,-1} \big[ \, \mathsf{m}_1 \text{, } \mathsf{m}_3 \text{, } \mathsf{m}_{\tilde{u}}^{\text{ i}4} \text{, } \mathsf{m}_{\tilde{u}}^{\text{ i}2} \, \big] \; + \; \mathsf{m}_{\tilde{q}}^{\text{r}} \big[ \, \mathsf{m}_1 \text{, } \mathsf{m}_2 \text
                                                                                                                                                               \delta_{\texttt{i1i2}}\,\delta_{\texttt{i3i4}}\,-\,\tfrac{4}{27}\,\,\mathsf{m_1}\,\,\mathsf{m_3}\,\,\mathsf{g_1}^2\,\,\mathsf{g_3}^2\,\,\mathsf{LF_{1,1,1,1,0}}\big[\,\mathsf{m_1},\,\mathsf{m_3},\,\mathsf{m_{\tilde{u}}}^{\,\mathsf{i4}},\,\mathsf{m_{\tilde{u}}}^{\,\mathsf{i2}}\big]\,\,\delta_{\texttt{i1i2}}\,\delta_{\texttt{i3i4}}\,+\,
                                                                                                                                         \frac{2}{9} \; {\rm g_1}^2 \; {\rm g_3}^2 \; {\rm LF_{1,1,1,1,-1}} \big[ {\rm m_1, \, m_3, \, m_{\tilde{u}}}^{i4}, \, {\rm m_{\tilde{u}}}^{i3} \big] \; \delta_{i1i4} \; \delta_{i2i3} \; + \, \delta_{i1i4} \; \delta_{i2i3} \; + \, \delta_{i1i4} \; \delta_{i2i3} \; + \, \delta_{i1i4} \; \delta_{
                                                                                                                                         \frac{4}{9} \; \mathsf{m_1} \; \mathsf{m_3} \; \mathsf{g_1}^2 \; \mathsf{g_3}^2 \; \mathsf{LF_{1,1,1,1,0}} \big[ \; \mathsf{m_1} , \; \mathsf{m_3} , \; \mathsf{m_{\tilde{u}}}^{i4} , \; \mathsf{m_{\tilde{u}}}^{i3} \big] \; \delta_{i1i4} \; \delta_{i2i3} \big)
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