

$$\frac{NRMSE = \frac{RMSE}{y_{max} - y_{min}}}{RMSE = \sqrt{\frac{\sum_{i=0}^{n} (y_i - y_i^*)^2}{n}}$$

Normalized Root Mean Square Error (NRMSE): $\frac{NRMSE = \frac{RMSE}{y_{max} - y_{min}}}{RMSE = \sqrt{\frac{\sum_{i=0}^{n}(y_i - y_i^*)^2}{n}}}$ where y_i is your full-precision Matlab result and y_i^* is the quantized result from your RTL simulation.