

Appendix J: MSS Tx Power Time-Averaging Verification

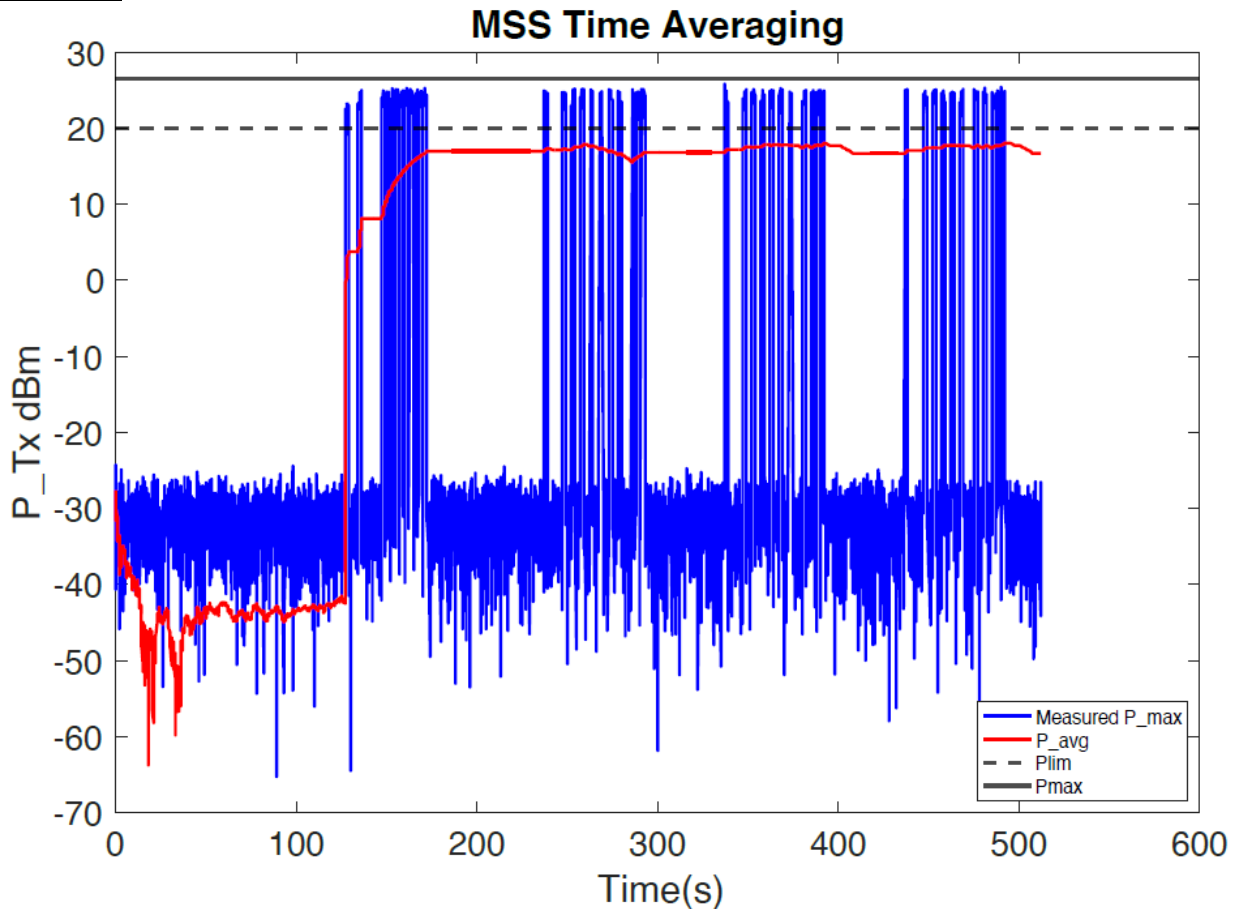
1. Introduction

The DUT supports time-averaged SAR (TAS) technology for the MSS transmitters. The TAS algorithm regulates MSS power transmission to ensure SAR compliance by calculating and tracking a rolling average power value.

Stored data for from past transmissions is referenced to forecast the average power value assuming transmission at P_{max} in the upcoming MSS transmission periods. Transmissions are moderated by the algorithm based on this forecast to always ensure the P_{avg} value remains compliant. More details can be found in the technical description.

Testing was performed by connecting the DUT to a callbox and configuring it to continuously attempt to send text messages. The instantaneous output power was monitored over time. A rolling average of the transmit power is calculated. The averaging period is 100s. This output is used to validate conformity with the average transmit power limit.

Test Result



$P_{lim} = 20.5 \text{ dBm}$, $P_{max} = 25.8 \text{ dBm}$

The 100s average power never exceeds P_{lim} .