

# Appendix I: MSS Tx Power Time-Averaging Verification

Model Name: A3289

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## I. MSS Tx Power Time-Averaging Verification

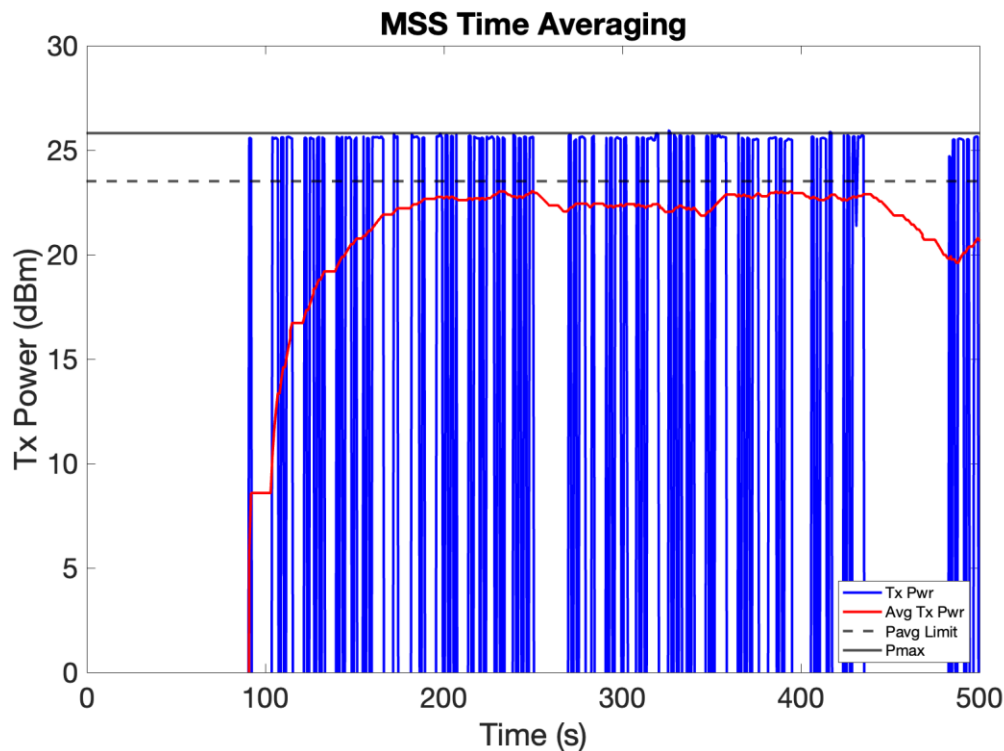
### I.1. Introduction

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.

### MSS Time-Averaging Test Results



#### Note(s):

- $P_{lim} = 24.5$  dBm.  $P_{max} = 25.8$  dBm
  - The 100s average power never exceeds  $P_{lim}$ .
- Both ANT 1 and ANT 4 were evaluated for RF Exposure. Per manufacturer, only ANT 4 will be enabled and used for MSS transmissions in production units. ANT 1 will be disabled in production units.