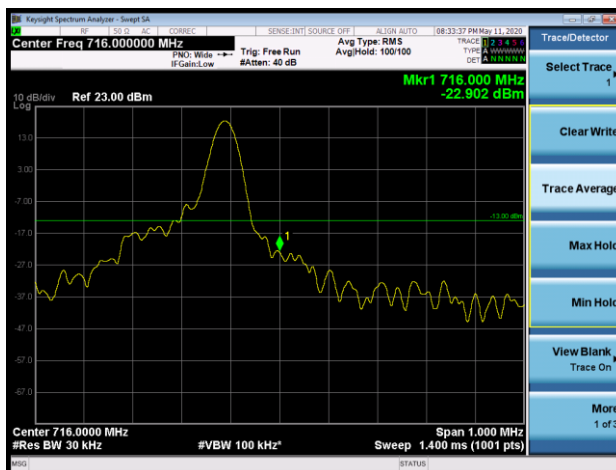




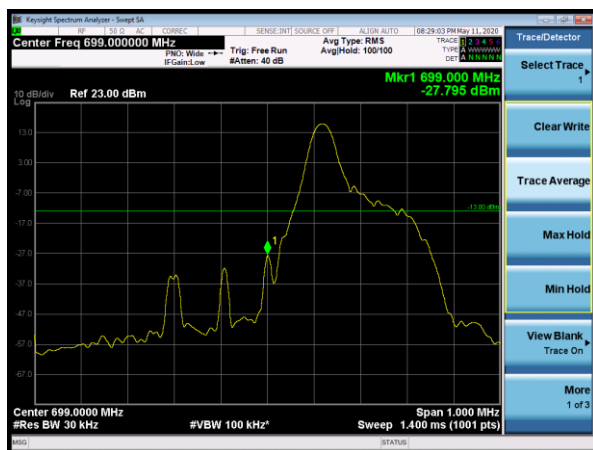
NB-IOT Band 12 BPSK 3.75kHz 1@0 CH-Low



NB-IOT Band 12 BPSK 3.75kHz 1@47 CH-High



NB-IOT Band 12 BPSK 15kHz 1@0 CH-Low



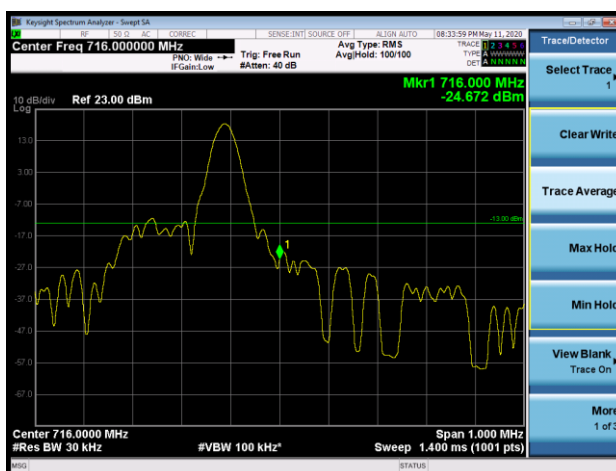
NB-IOT Band 12 BPSK 15kHz 1@11 CH-High



NB-IOT Band 12 QPSK 3.75kHz 1@0 CH-Low



NB-IOT Band 12 QPSK 3.75kHz 1@47 CH-High

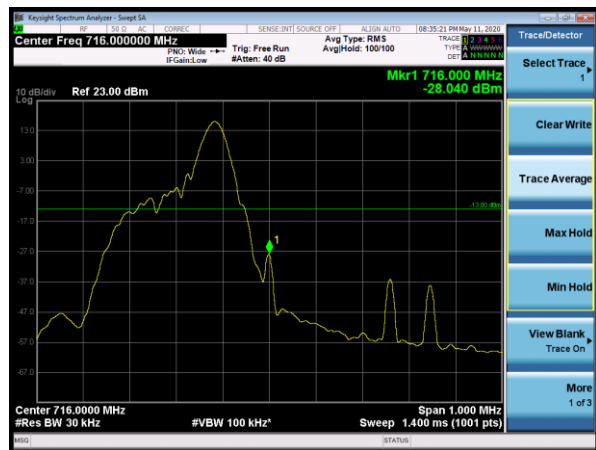




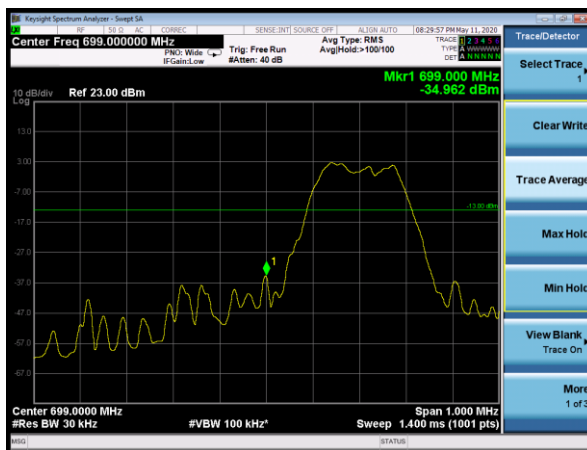
NB-IOT Band 12 QPSK 15kHz 1@0 CH-Low



NB-IOT Band 12 QPSK 15kHz 1@11 CH-High



NB-IOT Band 12 QPSK 15kHz 12@0 CH-Low



NB-IOT Band 12 QPSK 15kHz 12@0 CH-High

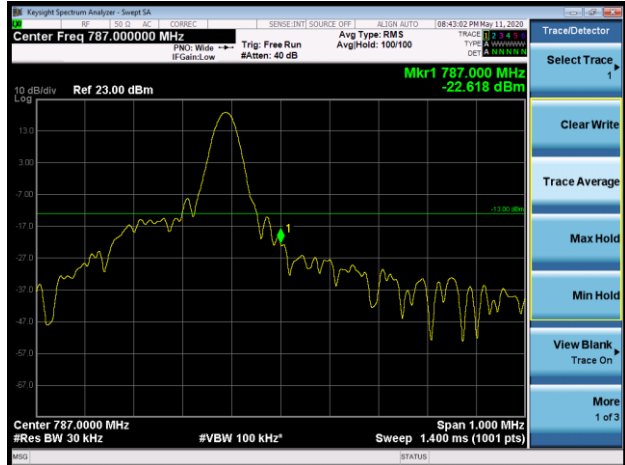




NB-IOT Band 13 BPSK 3.75kHz 1@0 CH-Low



NB-IOT Band 13 BPSK 3.75kHz 1@47 CH-High



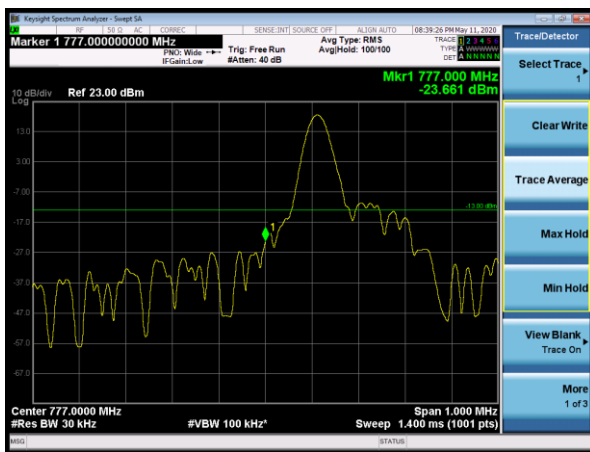
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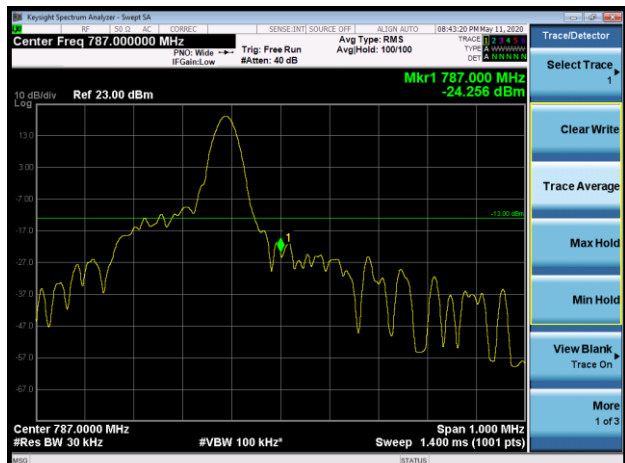
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NB-IOT Band 13 QPSK 3.75kHz 1@0 CH-Low



NB-IOT Band 13 QPSK 3.75kHz 1@47 CH-High





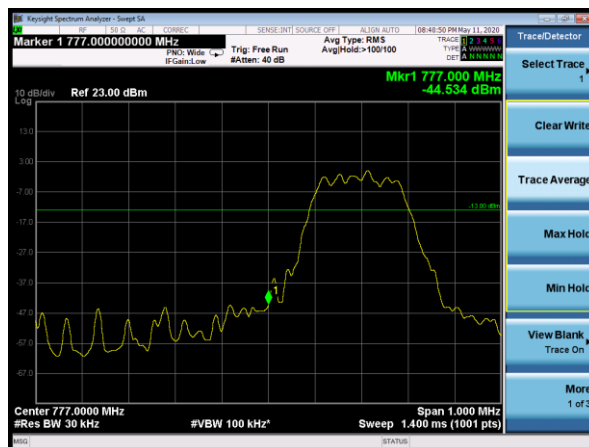
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NB-IOT Band 13 QPSK 15kHz 1@11 CH-High

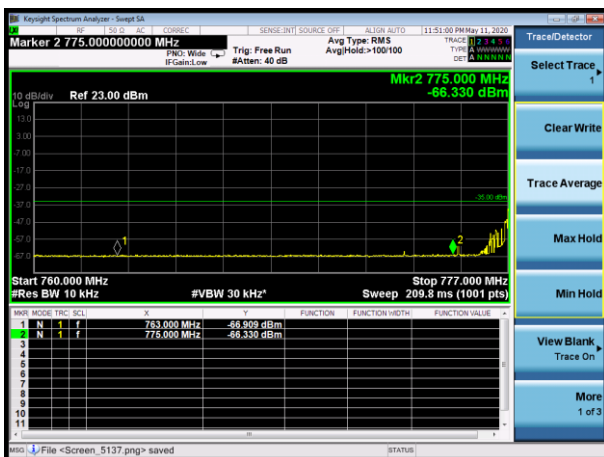
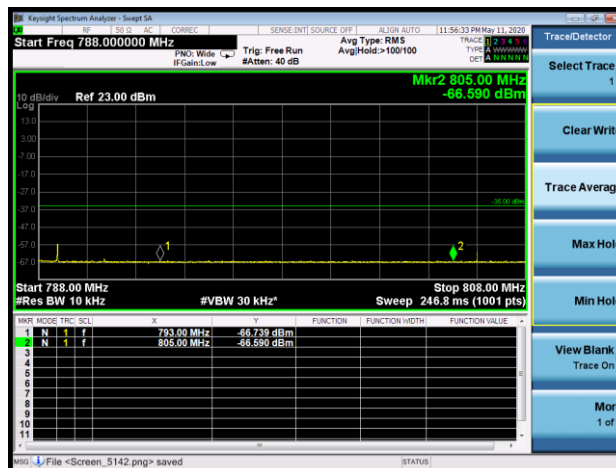


NB-IOT Band 13 QPSK 15kHz 12@0 CH-Low



NB-IOT Band 13 QPSK 15kHz 12@0 CH-High

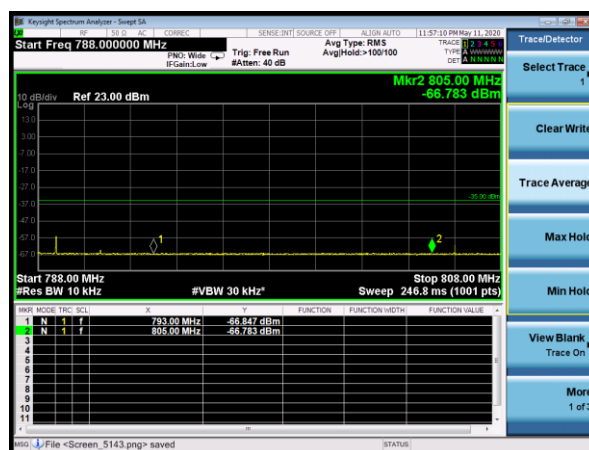


NB-IOT Band 13 BPSK 3.75kHz 1@0
763MHz-775MHzNB-IOT Band 13 BPSK 3.75kHz 1@47
793MHz -805MHzNB-IOT Band 13 BPSK 15kHz 1@0
763MHz-775MHzNB-IOT Band 13 BPSK 15kHz 1@11
793MHz -805MHzNB-IOT Band 13 QPSK 3.75kHz 1@0
763MHz-775MHzNB-IOT Band 13 QPSK 3.75kHz 1@47
793MHz -805MHz

NB-IOT Band 13 QPSK 15kHz 1@0
763MHz-775MHz



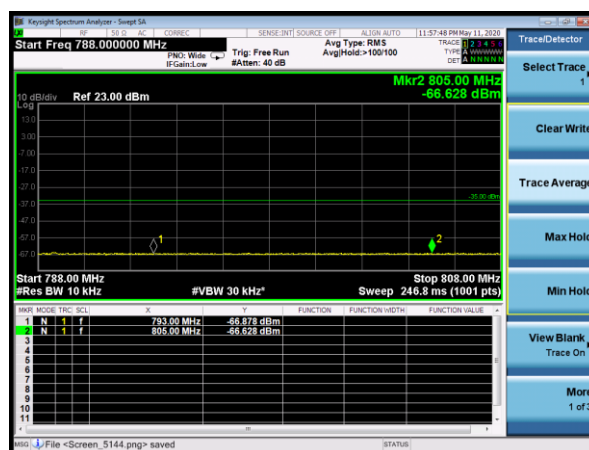
NB-IOT Band 13 QPSK 15kHz 1@11
793MHz -805MHz



NB-IOT Band 13 QPSK 15kHz 12@0
763MHz-775MHz

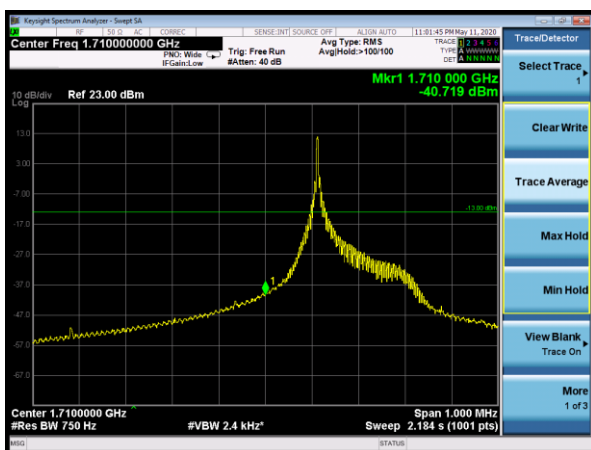


NB-IOT Band 13 QPSK 15kHz 12@0
793MHz -805MHz

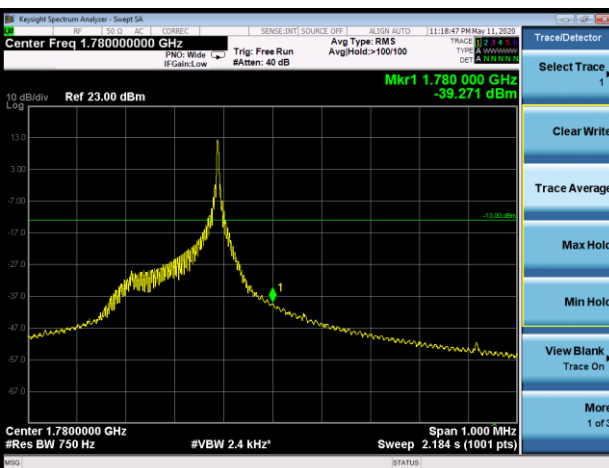




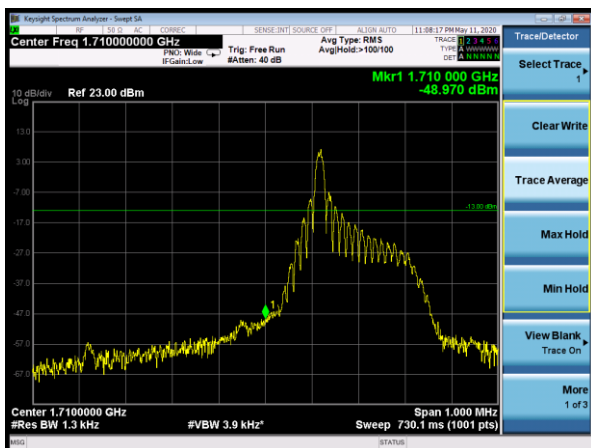
NB-IOT Band 66 BPSK 3.75kHz 1@0 CH-Low



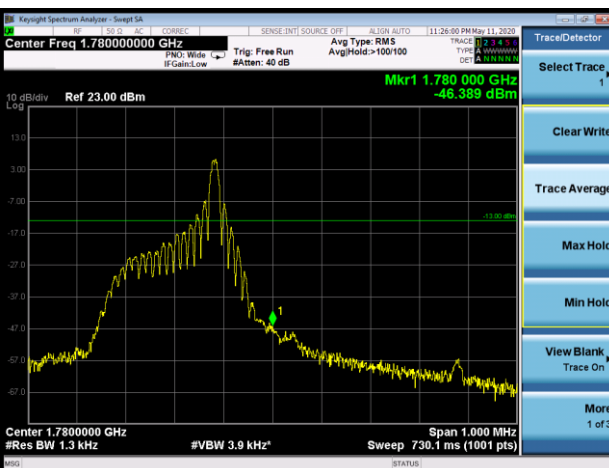
NB-IOT Band 66 BPSK 3.75kHz 1@47 CH-High



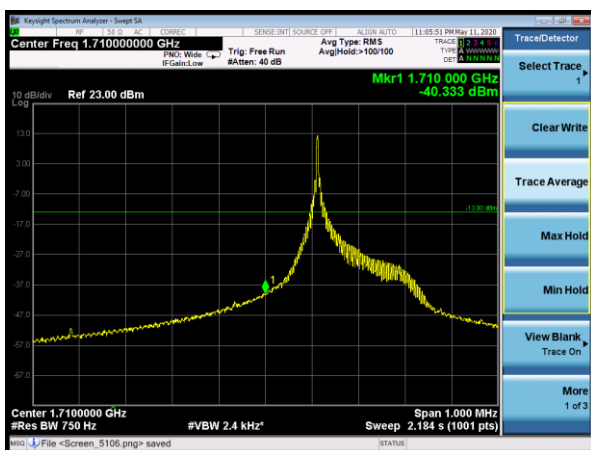
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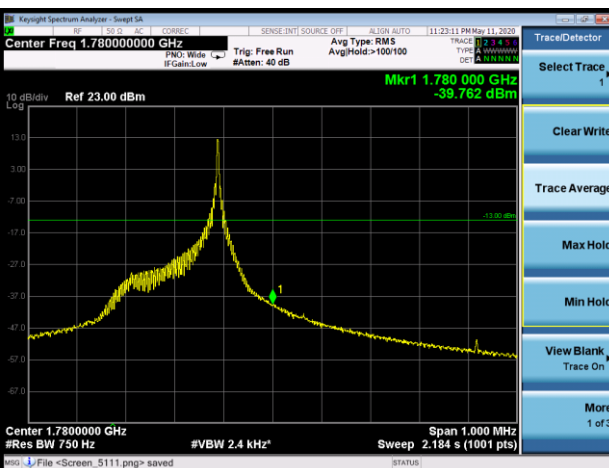
NB-IOT Band 66 BPSK 15kHz 1@11 CH-High



NB-IOT Band 66 QPSK 3.75kHz 1@0 CH-Low

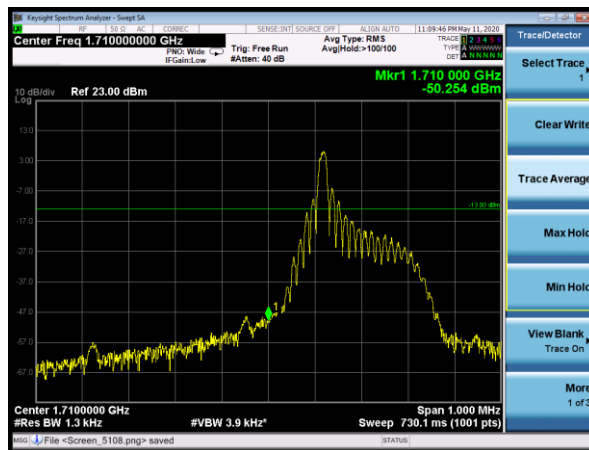


NB-IOT Band 66 QPSK 3.75kHz 1@47 CH-High

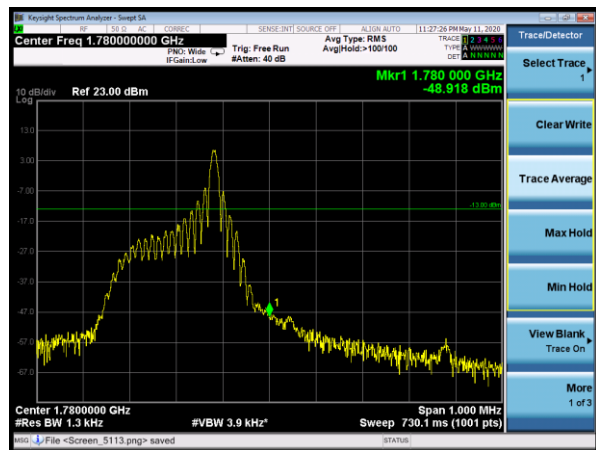




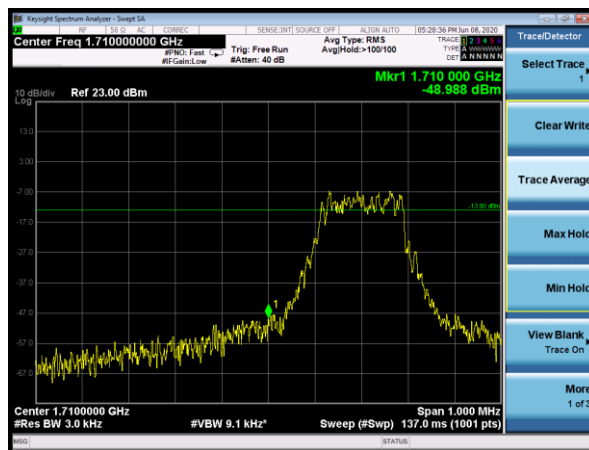
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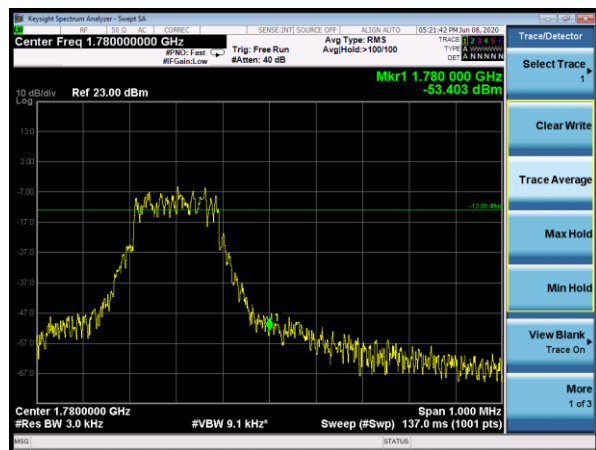
NB-IOT Band 66 QPSK 15kHz 1@11 CH-High



NB-IOT Band 66 QPSK 15kHz 12@0 CH-Low



NB-IOT Band 66 QPSK 15kHz 12@0 CH-High

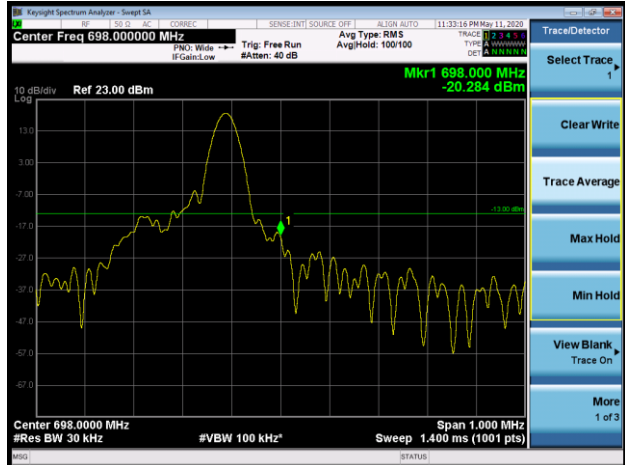




NB-IOT Band 71 BPSK 3.75kHz 1@0 CH-Low



NB-IOT Band 71 BPSK 3.75kHz 1@47 CH-High



NB-IOT Band 71 BPSK 15kHz 1@0 CH-Low



NB-IOT Band 71 BPSK 15kHz 1@11 CH-High



NB-IOT Band 71 QPSK 3.75kHz 1@0 CH-Low



NB-IOT Band 71 QPSK 3.75kHz 1@47 CH-High





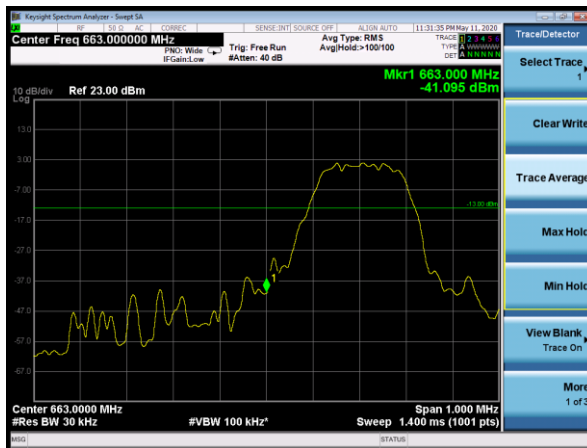
NB-IOT Band 71 QPSK 15kHz 1@0 CH-Low



NB-IOT Band 71 QPSK 15kHz 1@11 CH-High



NB-IOT Band 71 QPSK 15kHz 12@0 CH-Low



NB-IOT Band 71 QPSK 15kHz 12@0 CH-High





NB-IOT Band 85 BPSK 3.75kHz 1@0 CH-Low



NB-IOT Band 85 BPSK 3.75kHz 1@47 CH-High



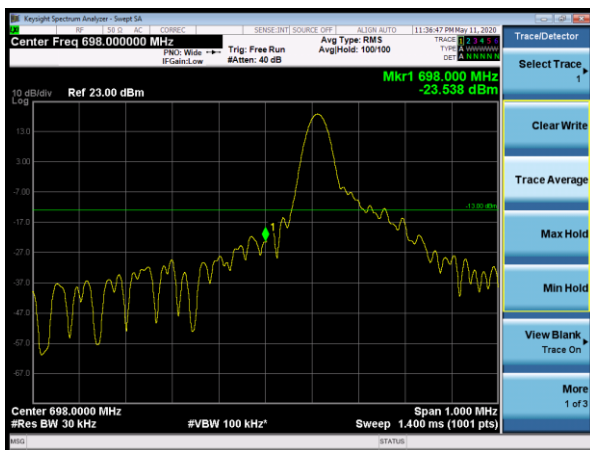
NB-IOT Band 85 BPSK 15kHz 1@0 CH-Low



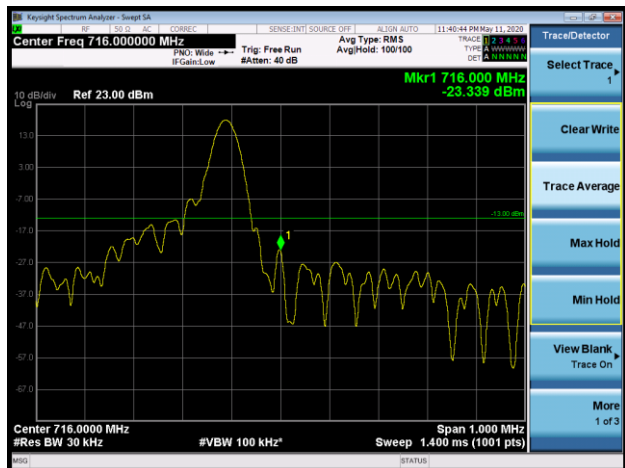
NB-IOT Band 85 BPSK 15kHz 1@11 CH-High



NB-IOT Band 85 QPSK 3.75kHz 1@0 CH-Low



NB-IOT Band 85 QPSK 3.75kHz 1@47 CH-High

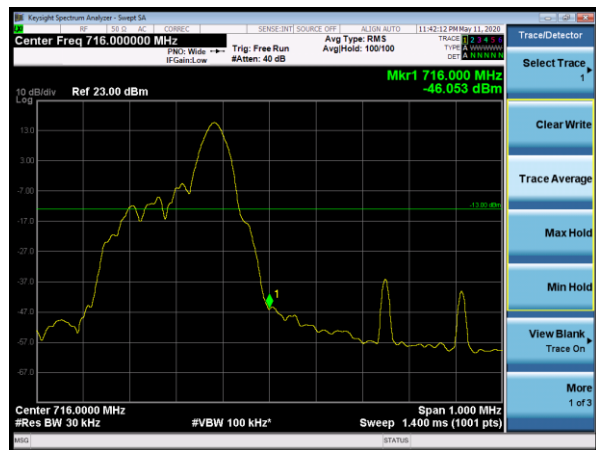




NB-IOT Band 85 QPSK 15kHz 1@0 CH-Low



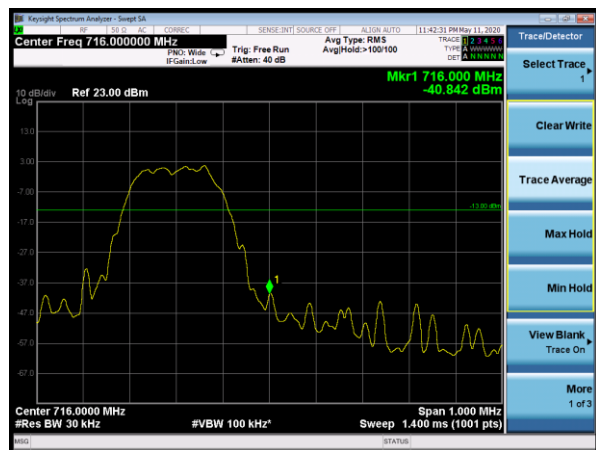
NB-IOT Band 85 QPSK 15kHz 1@11 CH-High



NB-IOT Band 85 QPSK 15kHz 12@0 CH-Low



NB-IOT Band 85 QPSK 15kHz 12@0 CH-High



5.4 Peak-to-Average Power Ratio (PAPR)

Ambient condition

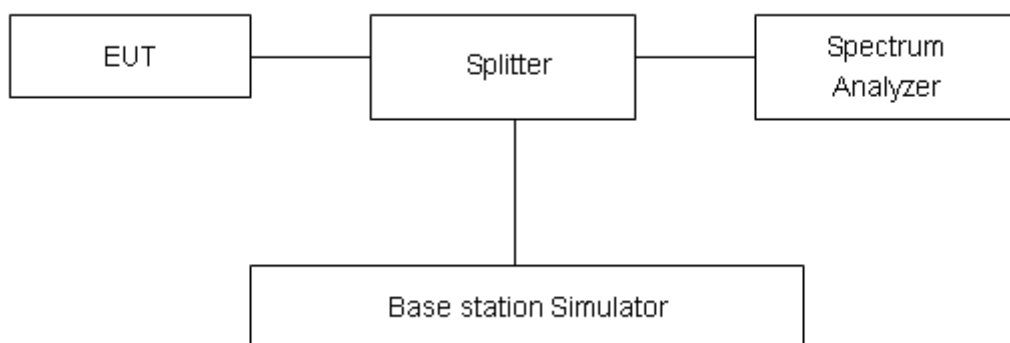
Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

Measure the total peak power and record as PPK. And measure the total average power and record as PAvg. Both the peak and average power levels must be expressed in the same logarithmic units (e.g., dBm). Determine the PAPR from:

$$\text{PAPR (dB)} = \text{PPk (dBm)} - \text{PAvg (dBm)}.$$

Test Setup



Limits

Rule Part 27.50(d)(5) Equipment employed must be authorized in accordance with the provisions of 24.51. Power measurements for transmissions by stations authorized under this section may be made either in accordance with a Commission-approved average power technique or in compliance with paragraph (d)(6) of this section. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 2$, $U = 0.4$ dB.