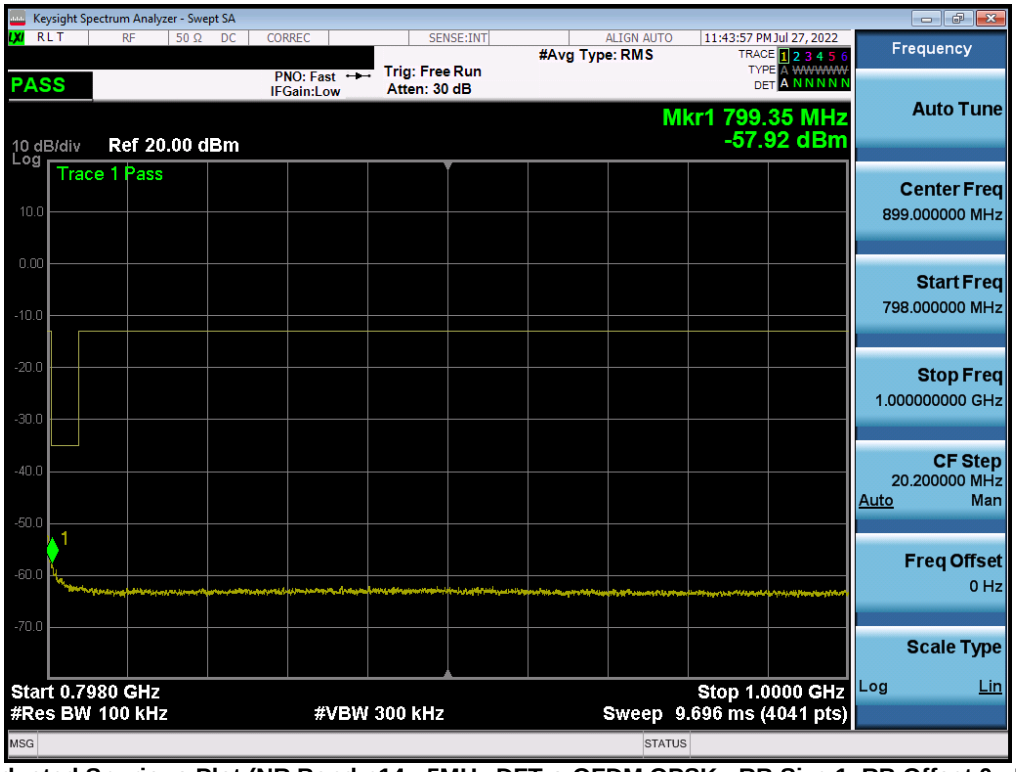
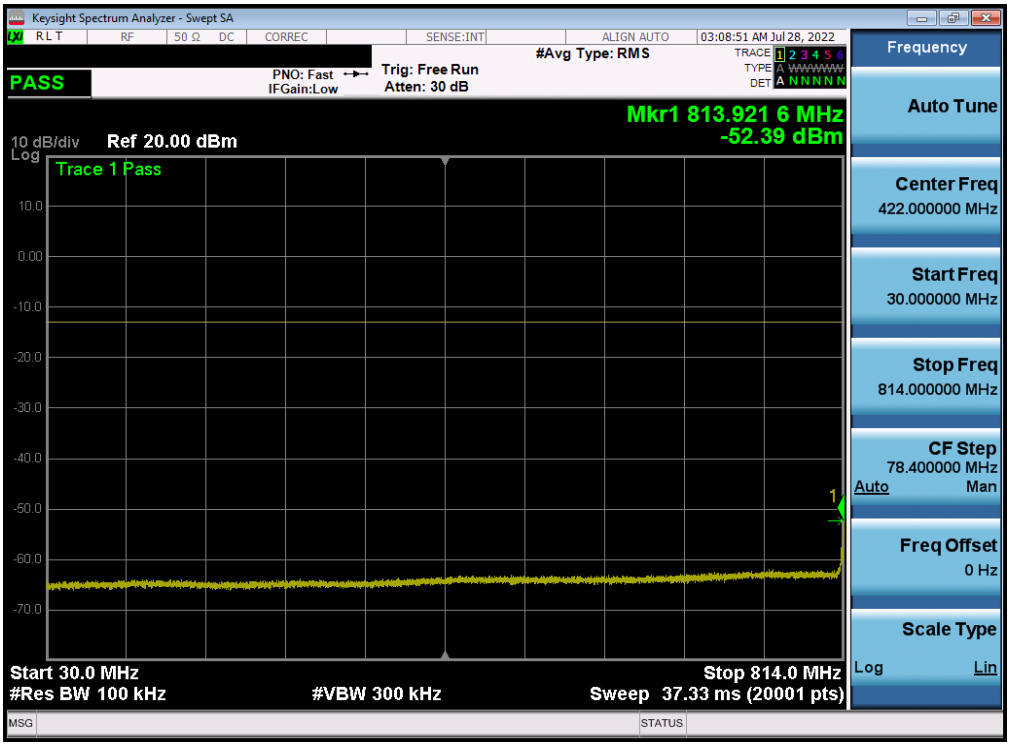
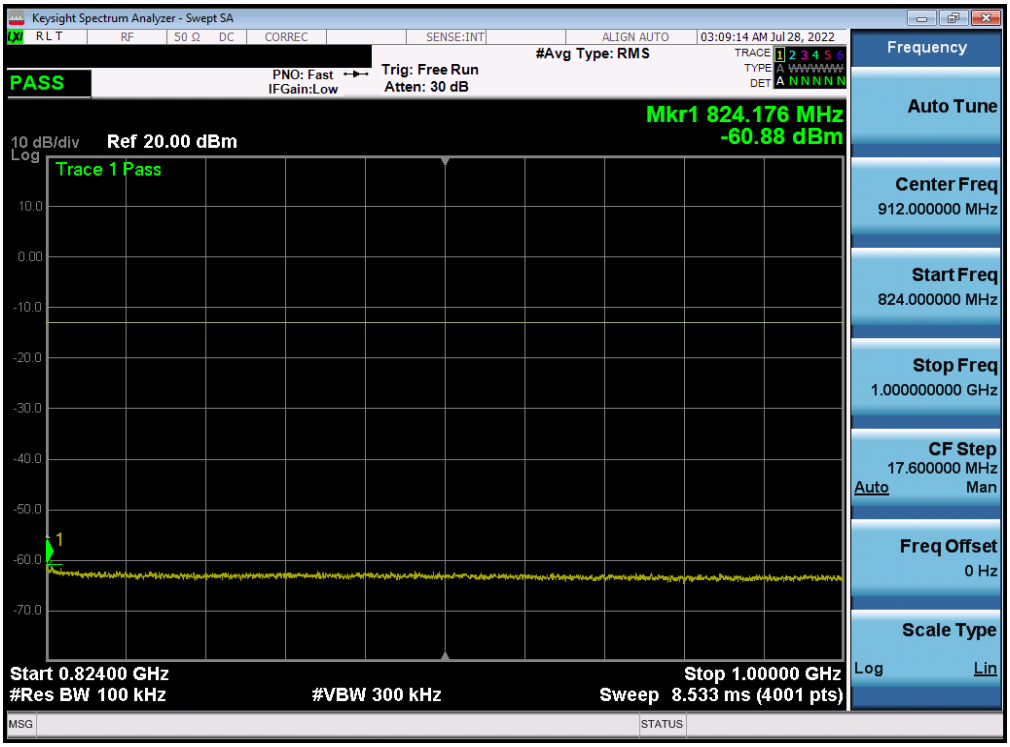


Plot 7-71. Conducted Spurious Plot (NR Band n14 - 5MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 - High Channel)

NR Band n26

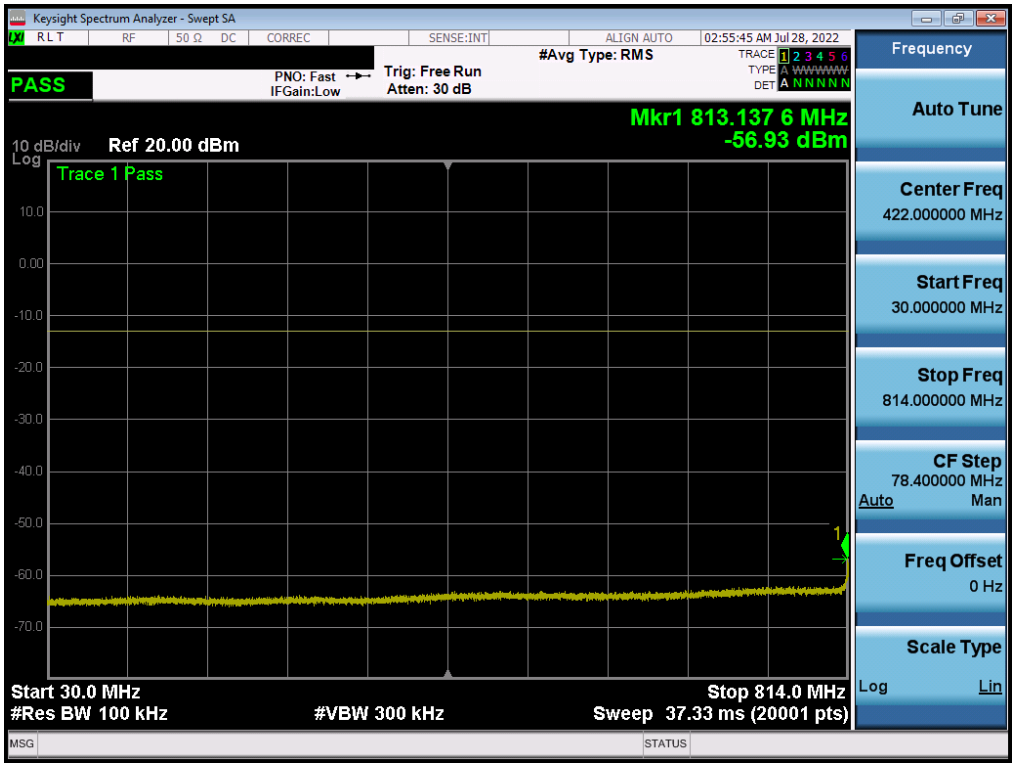


Plot 7-72. Conducted Spurious Plot (NR Band n26 - 5MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 - Low Channel)

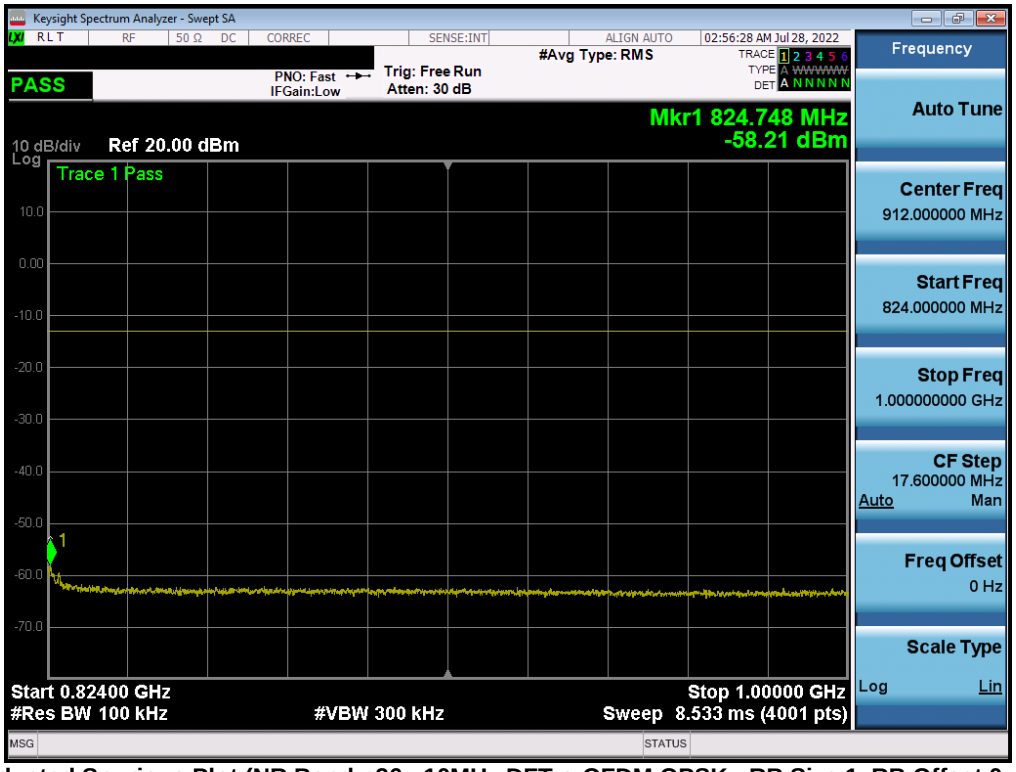


Plot 7-73. Conducted Spurious Plot (NR Band n26 - 5MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 - Low Channel)

Plot 7-74. Conducted Spurious Plot (NR Band n26 - 5MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 - Low Channel)



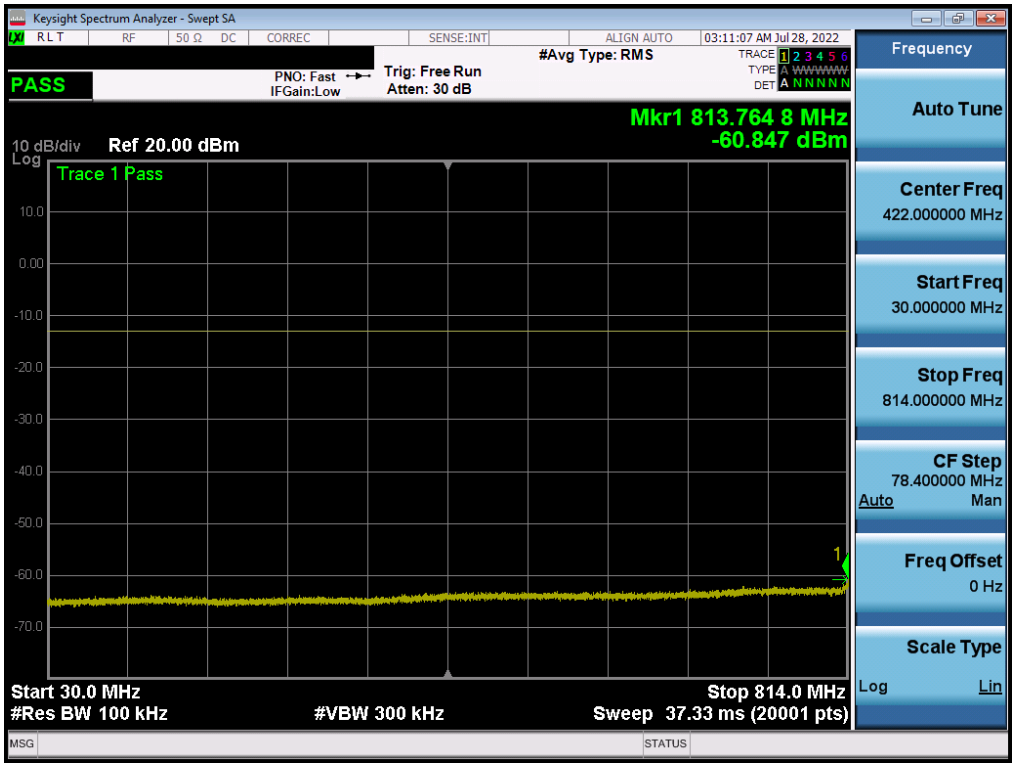
Plot 7-75. Conducted Spurious Plot (NR Band n26 - 10MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 - Mid Channel)



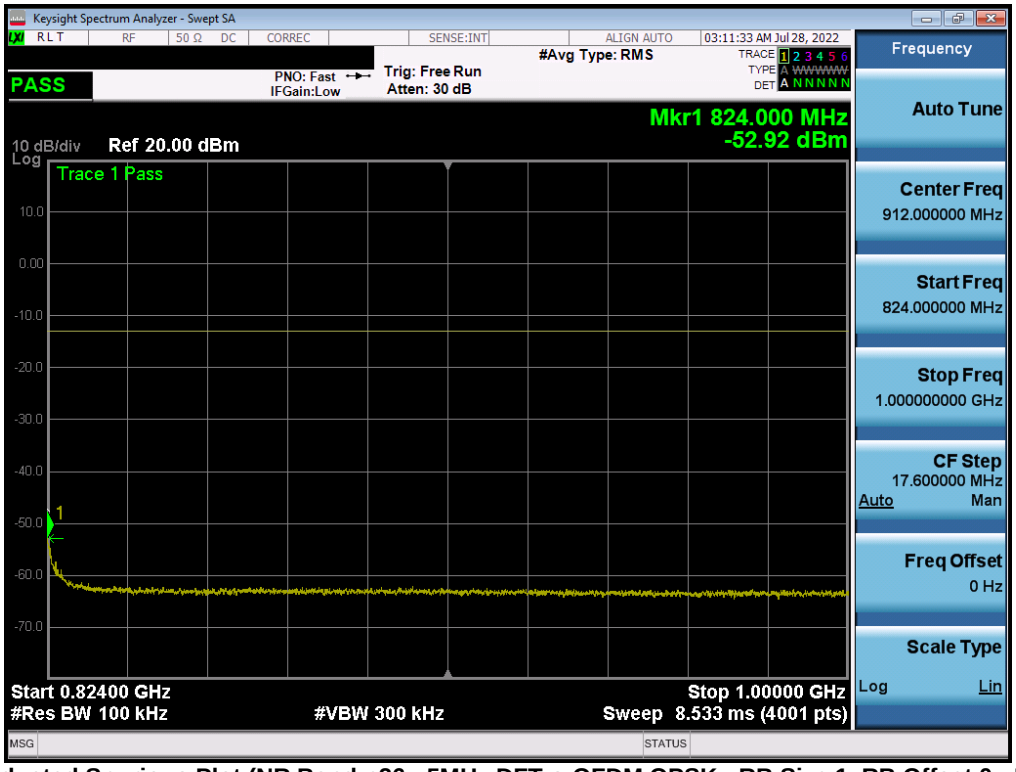
Plot 7-76. Conducted Spurious Plot (NR Band n26 - 10MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 – Mid Channel)

Plot 7-77. Conducted Spurious Plot (NR Band n26 - 10MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 – Mid Channel)

Plot 7-78. Conducted Spurious Plot (NR Band n26 - 5MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-79. Conducted Spurious Plot (NR Band n26 - 5MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 - High Channel)



Plot 7-80. Conducted Spurious Plot (NR Band n26 - 5MHz DFT-s-OFDM QPSK - RB Size 1, RB Offset 0 - High Channel)

7.4 Band Edge Emissions at Antenna Terminal

§2.1051 §90(S).691(a) §90(R).543(e)

Test Overview

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section. All ports were tested and only the worst case data were reported.

For LTE B26 operation under Part 90.691, the minimum permissible attenuation level of any spurious emission removed from the EA licensee's frequency block by greater than 37.5 kHz is 43 + 10log$_{10}$(P$_{[Watts]}$), where P is the transmitter power in Watts. The minimum permissible attenuation level of any spurious emission removed from the EA licensee's frequency block by up to and including 37.5 kHz is 50 + 10log$_{10}$(P$_{[Watts]}$), where P is the transmitter power in Watts.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Span was set large enough so as to capture all out of band emissions near the band edge
2. RBW = 100 kHz
3. VBW = 300 kHz
4. Detector = RMS
5. Trace mode = trace average
6. Sweep time = auto couple
7. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

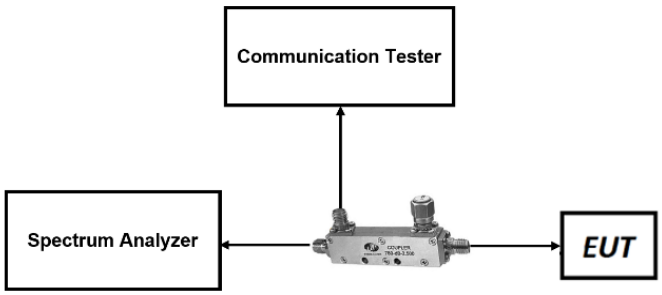


Figure 7-3. Test Instrument & Measurement Setup

Test Notes

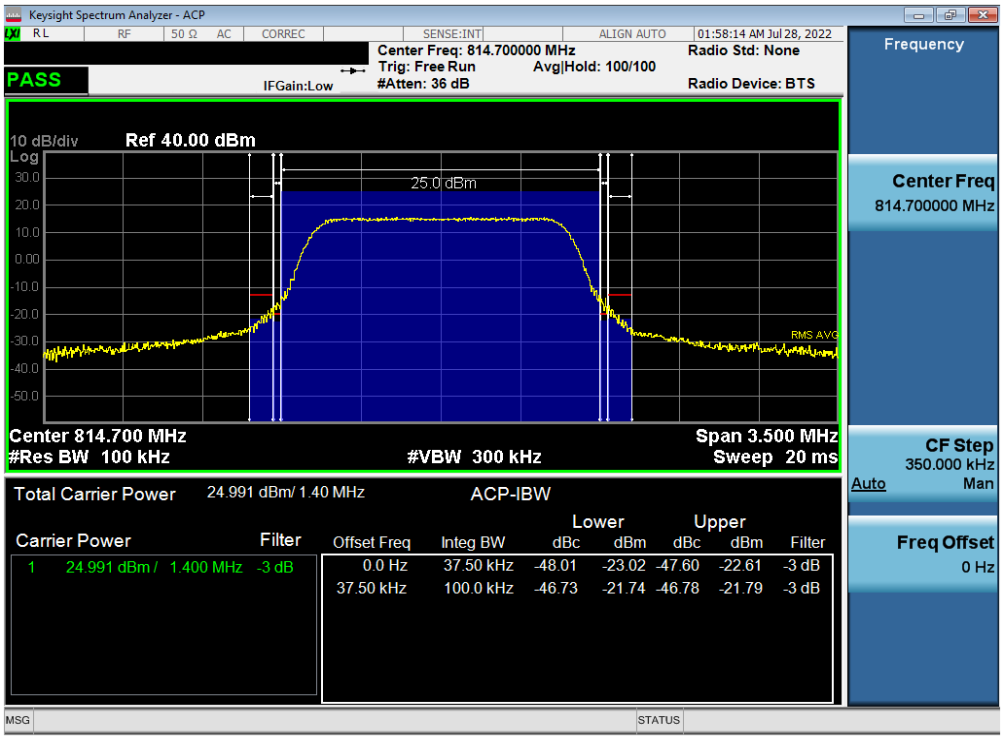
1. For channel edge emission, the signal analyzer's "ACP" measurement capability is used.

2. Per Part 90, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed to demonstrate compliance with the out-of-band emissions limit. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center.

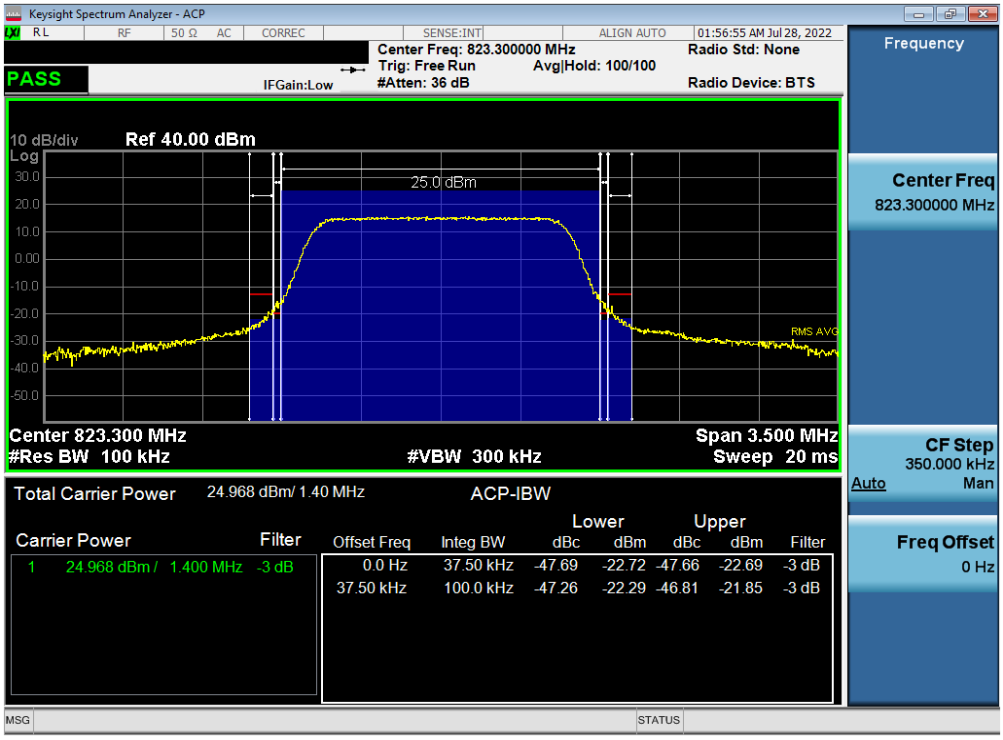
3. For LTE Band 14 and NR Band n14 operations under Part 90.543, the power of any emission must be reduced below the mean output power (P) by at least 43 + 10log (P) dB measured in a 100 kHz bandwidth for frequencies less than 1 GHz, and in a 1 MHz bandwidth for frequencies greater than 1 GHz.

4. Additionally, for LTE Band 14 and NR Band n14 operations, on all frequencies between 769-775 MHz and 799-805 MHz, the power of any emission shall be attenuated by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

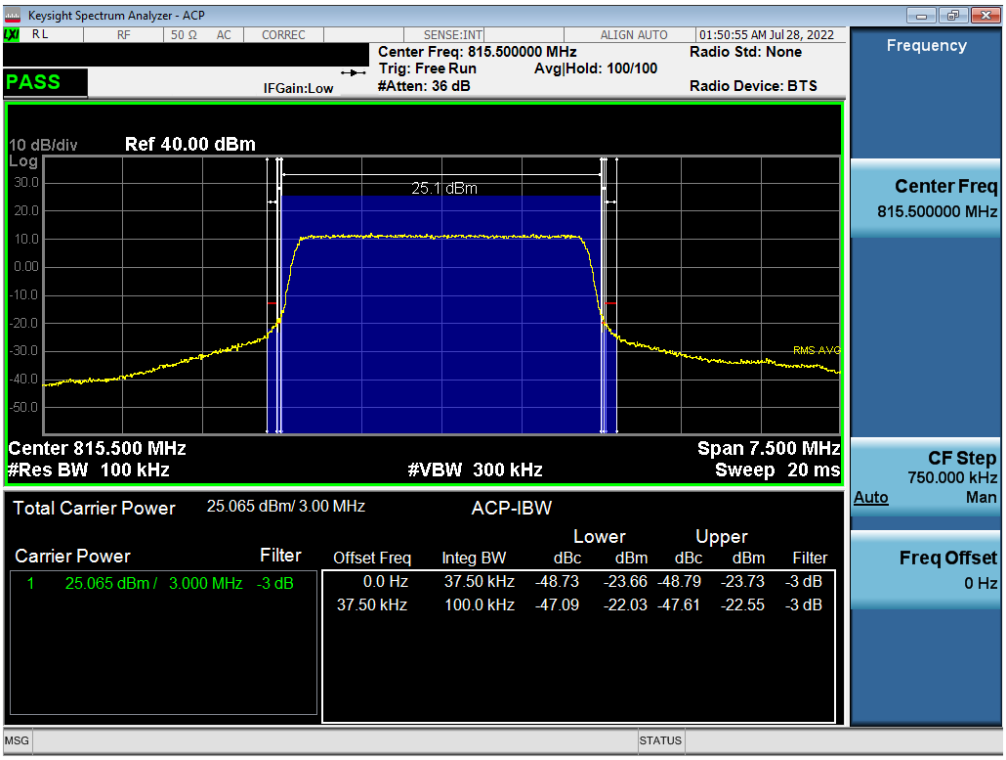
LTE Band 26



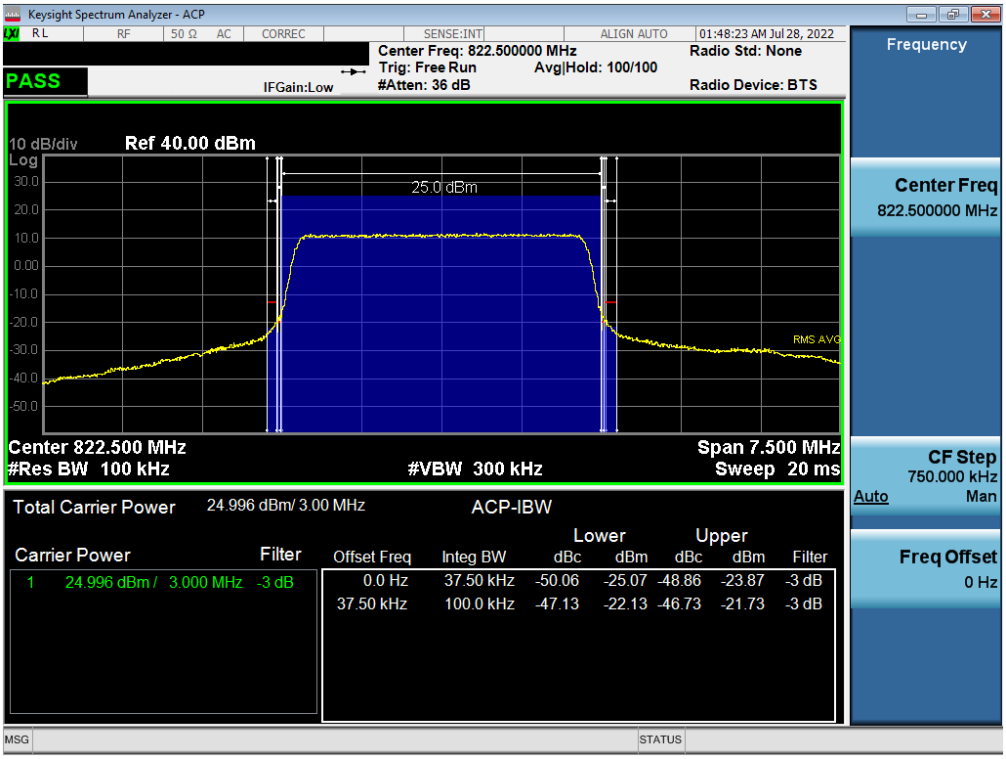
Plot 7-81. Channel Edge Plot (LTE Band 26 - 1.4MHz QPSK - Low Channel)



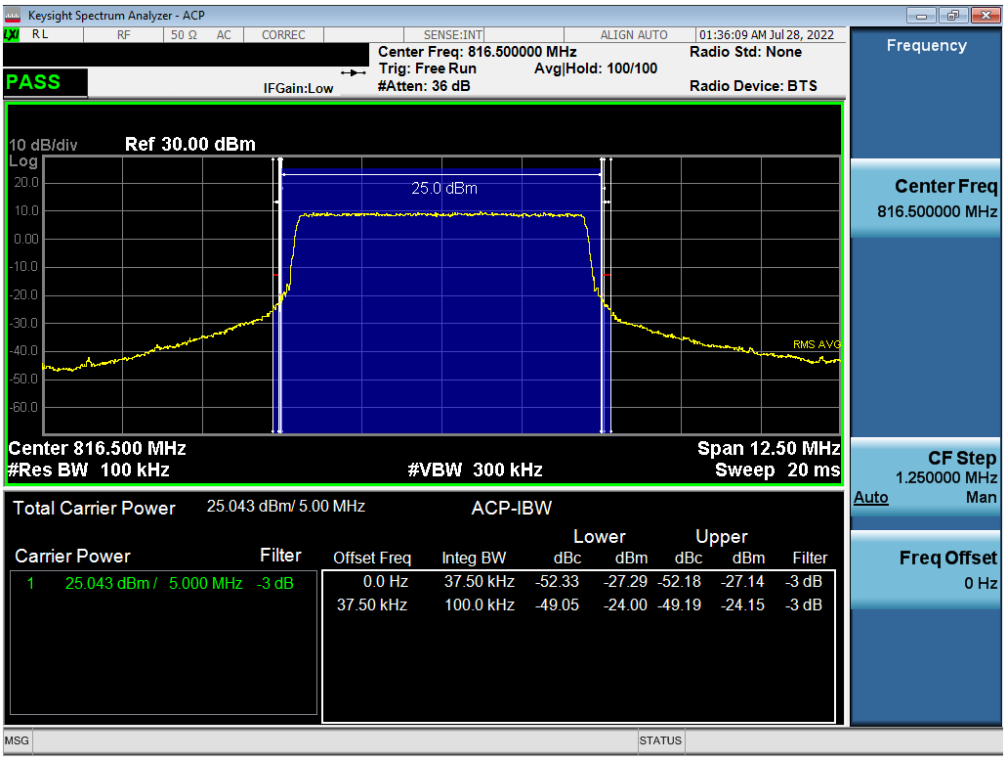
Plot 7-82. Channel Edge Plot (LTE Band 26 - 1.4MHz QPSK - High Channel)



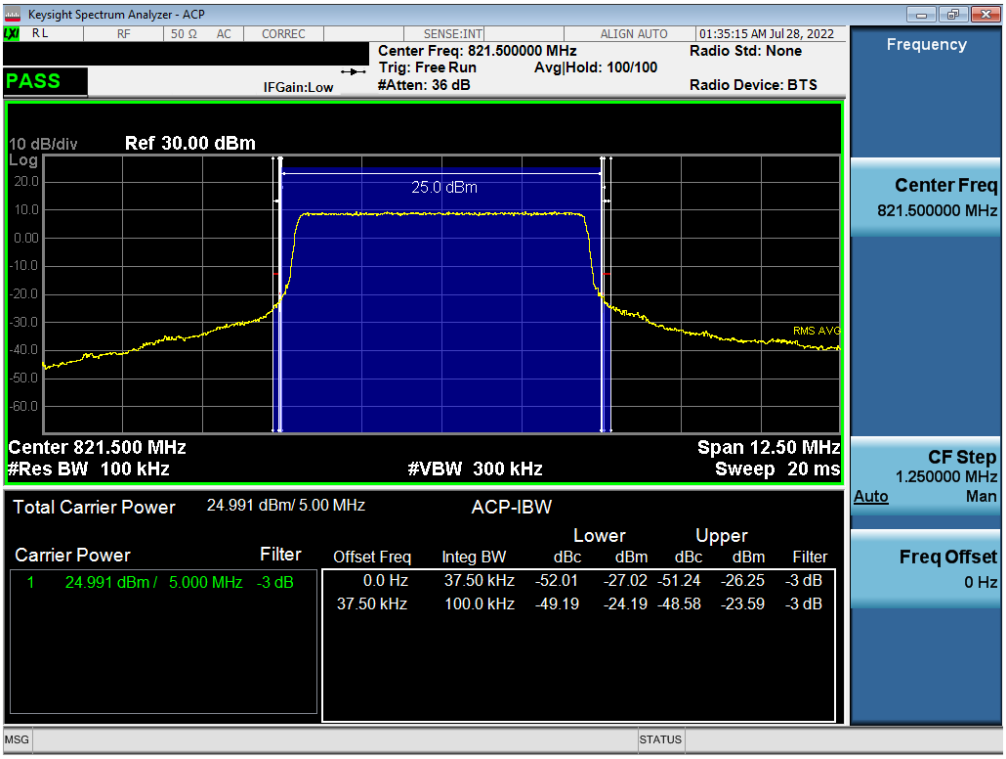
Plot 7-83. Channel Edge Plot (LTE Band 26 - 3MHz QPSK - Low Channel)



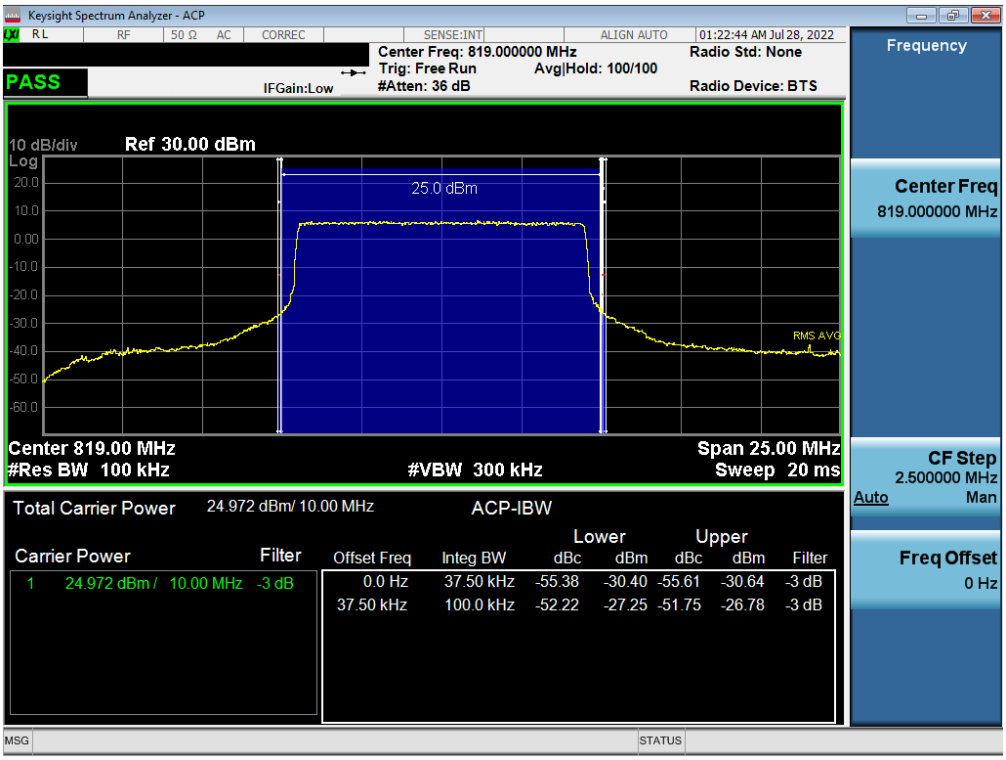
Plot 7-84. Channel Edge Plot (LTE Band 26 - 3MHz QPSK - High Channel)



Plot 7-85. Channel Edge Plot (LTE Band 26 - 5MHz QPSK - Low Channel)

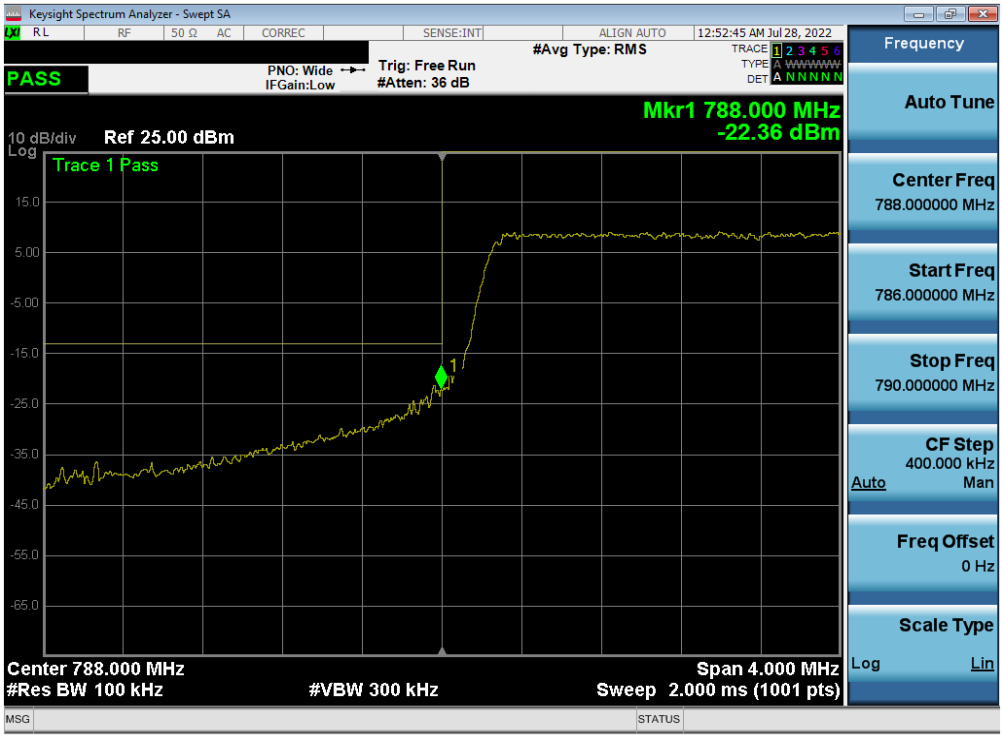


Plot 7-86. Channel Edge Plot (LTE Band 26 - 5MHz QPSK - High Channel)

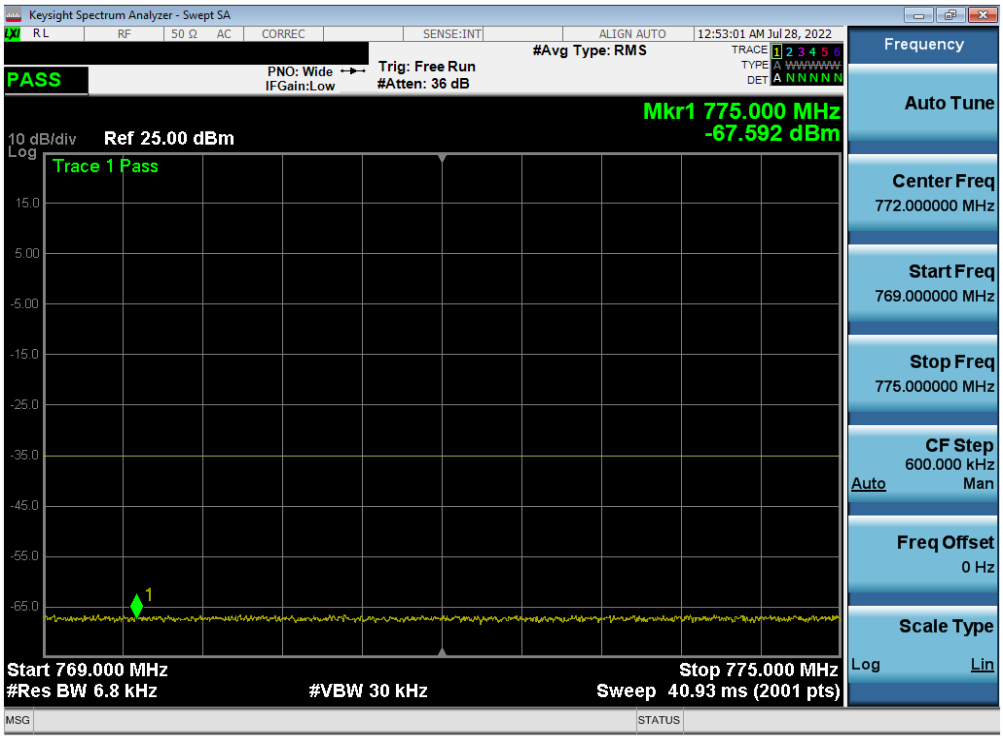


Plot 7-87. Channel Edge Plot (LTE Band 26 - 10MHz QPSK - Mid Channel)

LTE Band 14

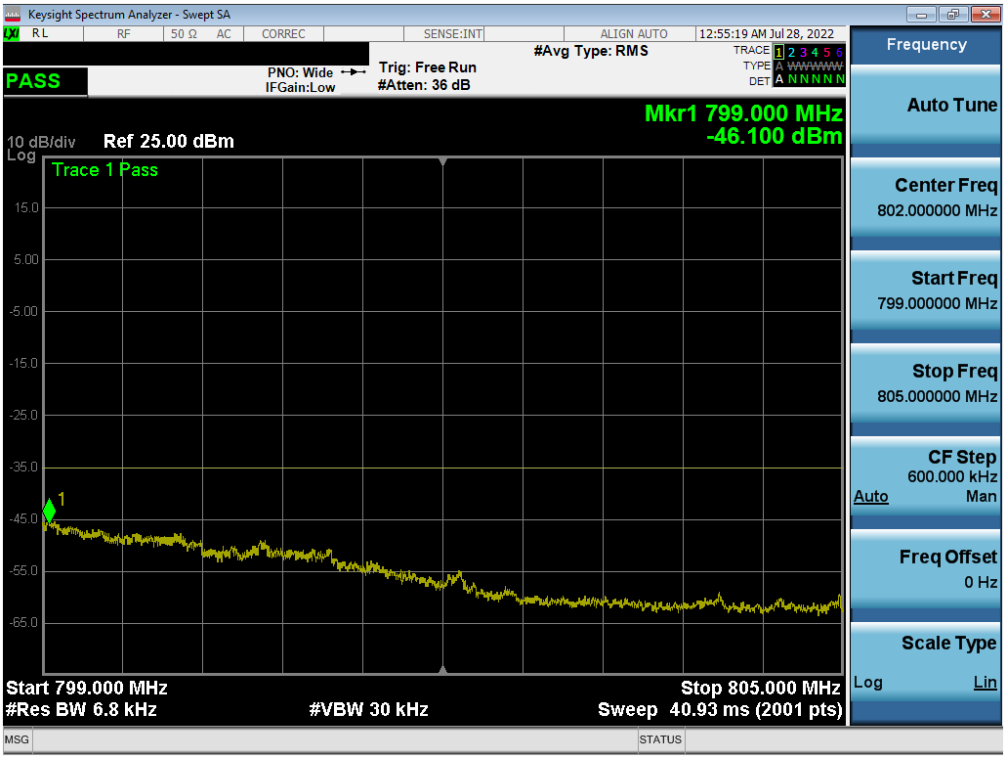


Plot 7-88. Lower Band Edge Plot (LTE Band 14, 5MHz QPSK - RB Size 25)

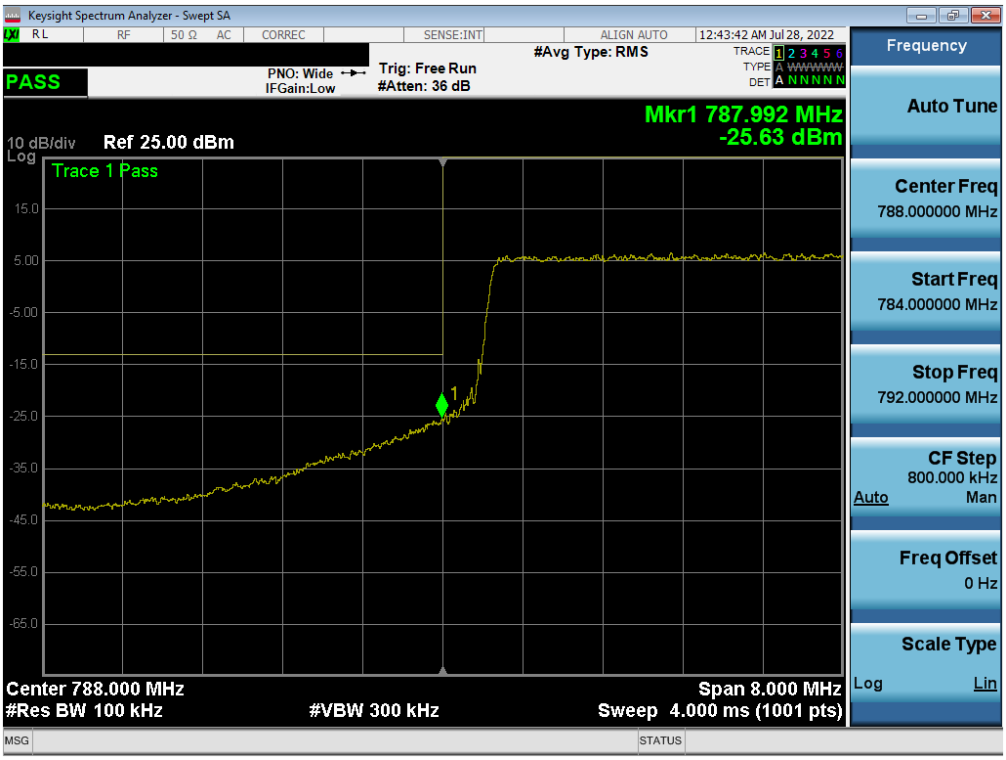


Plot 7-89. Lower Emission Mask Plot (LTE Band 14, 5MHz QPSK - RB Size 25)

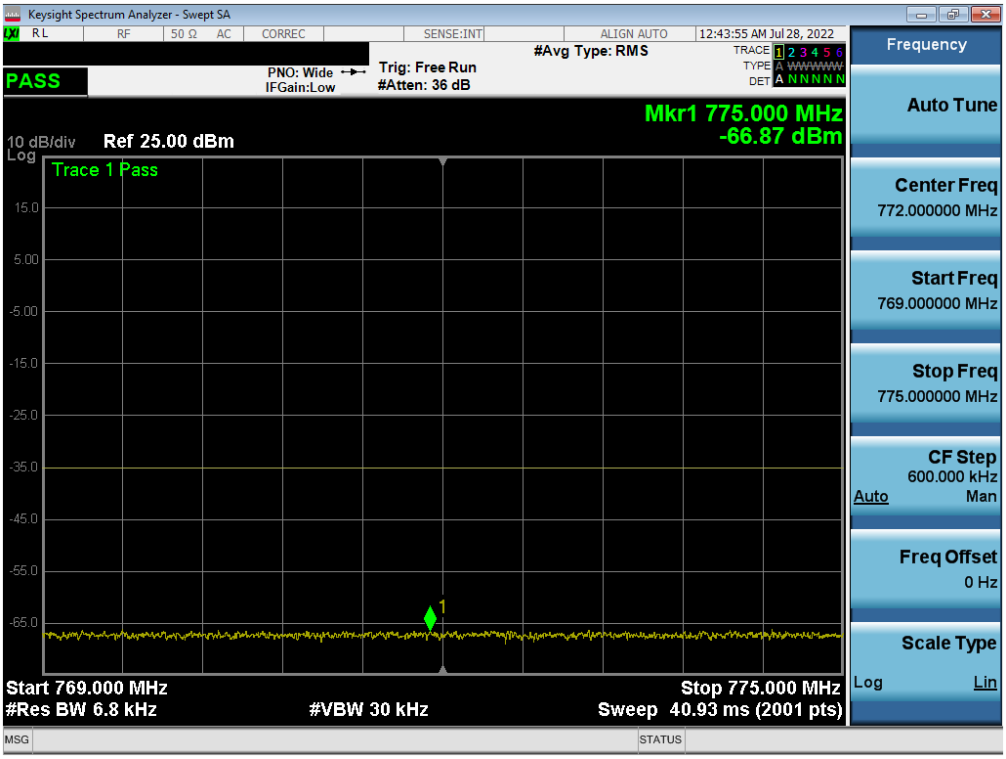
Plot 7-90. Upper Band Edge Plot (LTE Band 14, 5MHz QPSK - RB Size 25)



Plot 7-91. Upper Emission Mask Plot (LTE Band 14, 5MHz QPSK - RB Size 25)

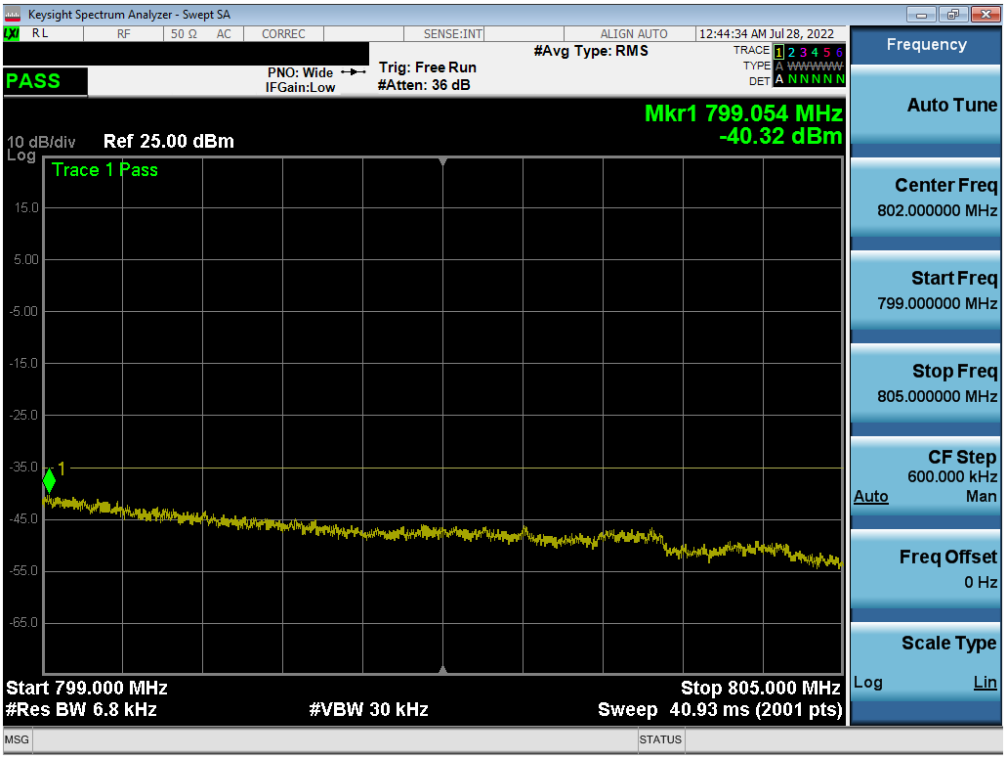


Plot 7-92. Lower Band Edge Plot (LTE Band 14, 10MHz QPSK - RB Size 50)



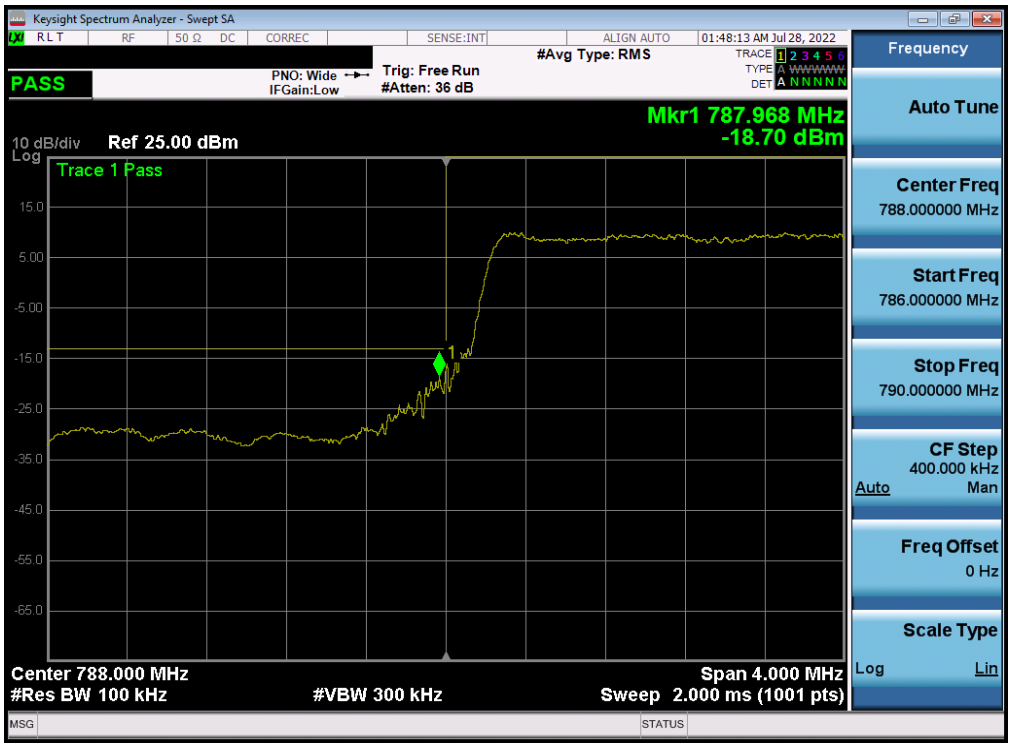
Plot 7-93. Lower Emission Mask Plot (LTE Band 14, 10MHz QPSK - RB Size 50)

Plot 7-94. Upper Band Edge Plot (LTE Band 14, 10MHz QPSK - RB Size 50)

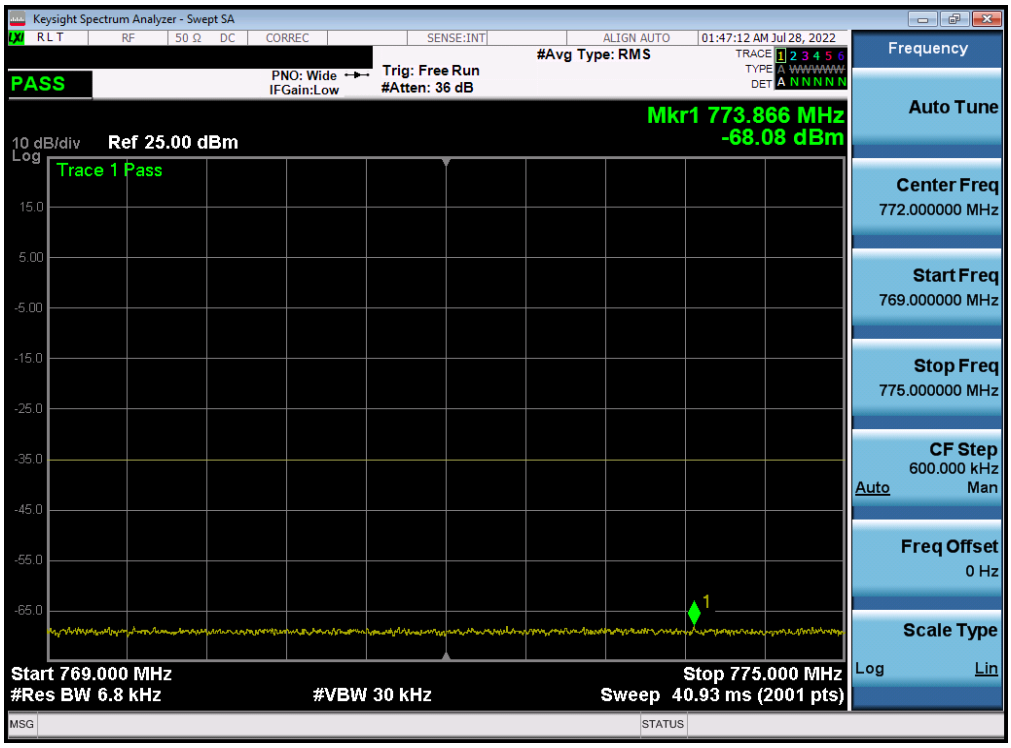


Plot 7-95. Upper Emission Mask Plot (LTE Band 14, 10MHz QPSK - RB Size 50)

NR Band n14

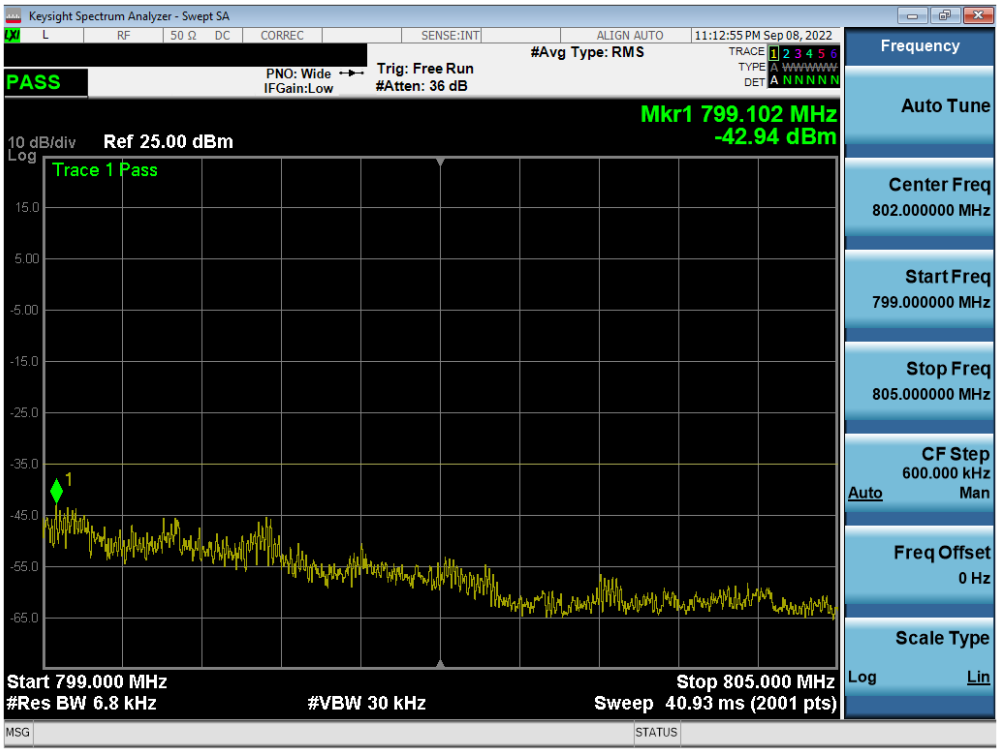


Plot 7-96. Lower Band Edge Plot (NR Band n14, 5MHz DFT-s-OFDM π/2 BPSK - RB Size 25)

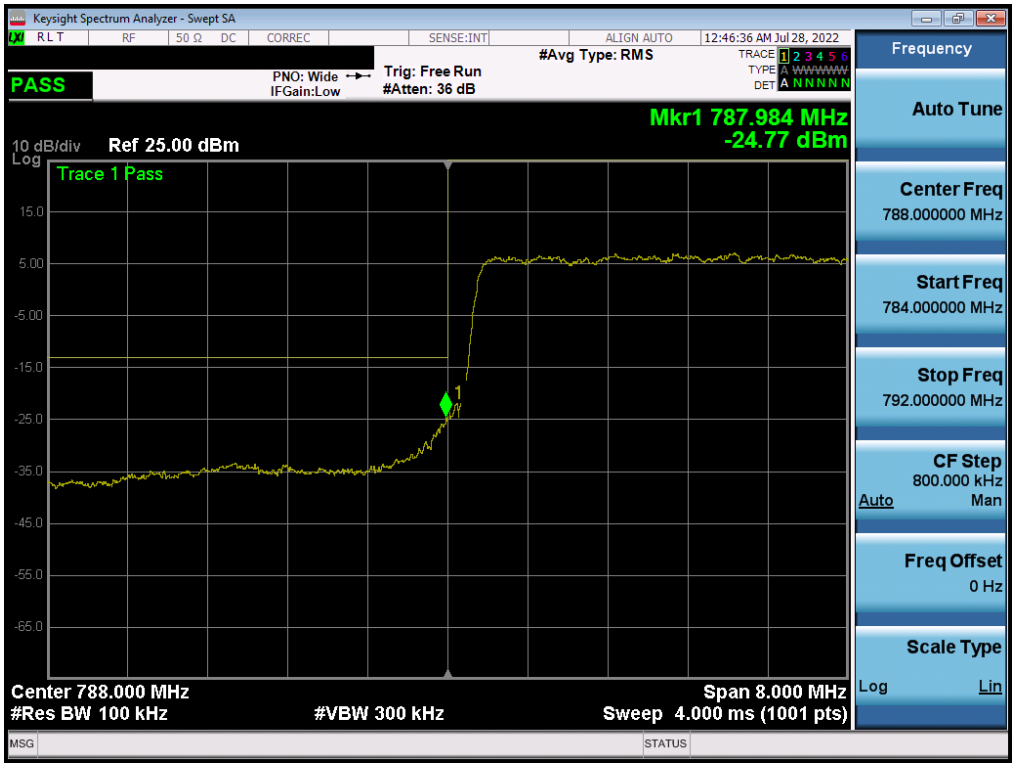


Plot 7-97. Lower Emission Mask Plot (NR Band n14, 5MHz CP-OFDM QPSK - RB Size 25)

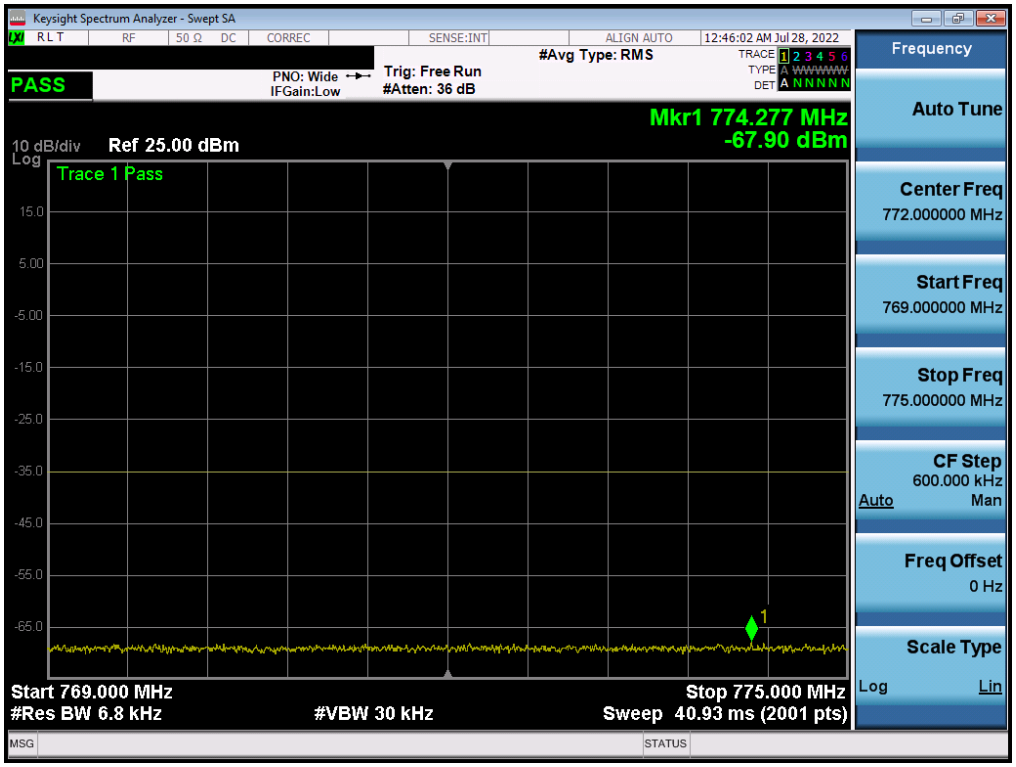
Plot 7-98. Upper Band Edge Plot (NR Band n14, 5MHz DFT-s-OFDM π/2 BPSK - RB Size 25)



Plot 7-99. Upper Emission Mask Plot (NR Band n14, 5MHz DFT-s-OFDM π/2 BPSK - RB Size 25)

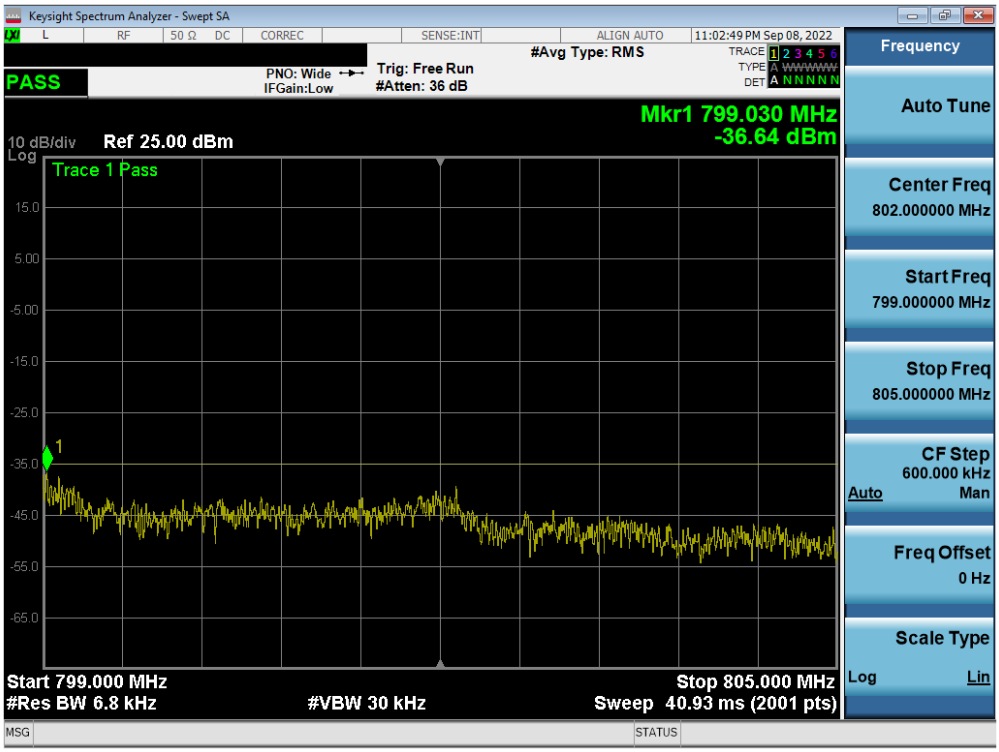


Plot 7-100. Lower Band Edge Plot (NR Band n14, 10MHz DFT-s-OFDM π/2 BPSK - RB Size 50)



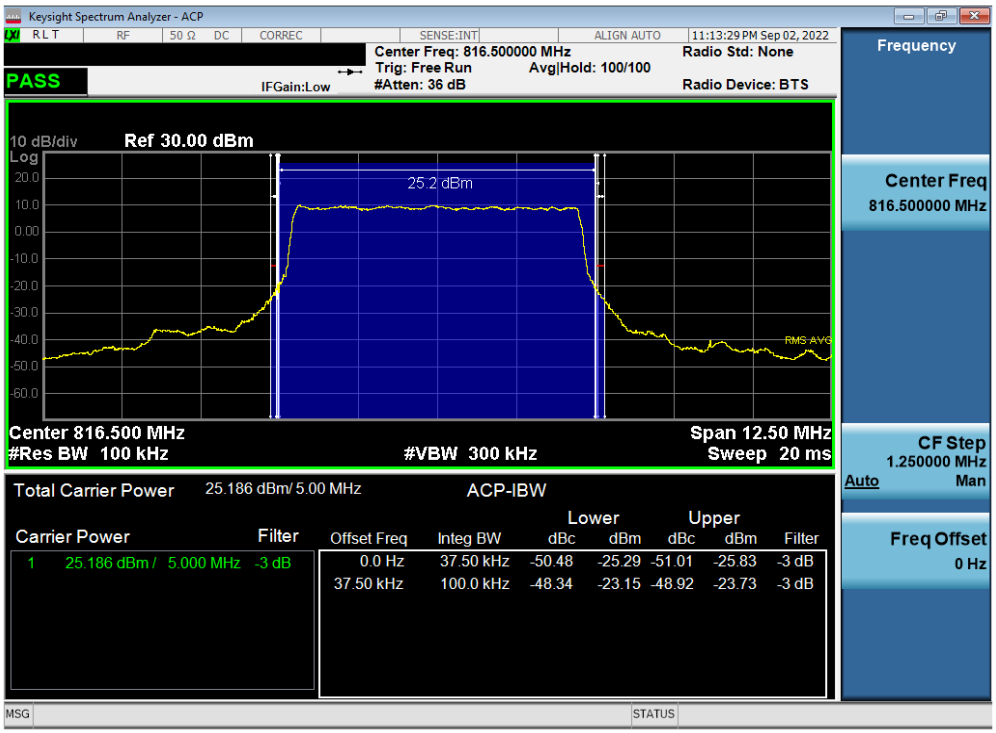
Plot 7-101. Lower Emission Mask Plot (NR Band n14, 10MHz CP-OFDM QPSK - RB Size 50)

Plot 7-102. Upper Band Edge Plot (NR Band n14, 10MHz DFT-s-OFDM π/2 BPSK - RB Size 50)

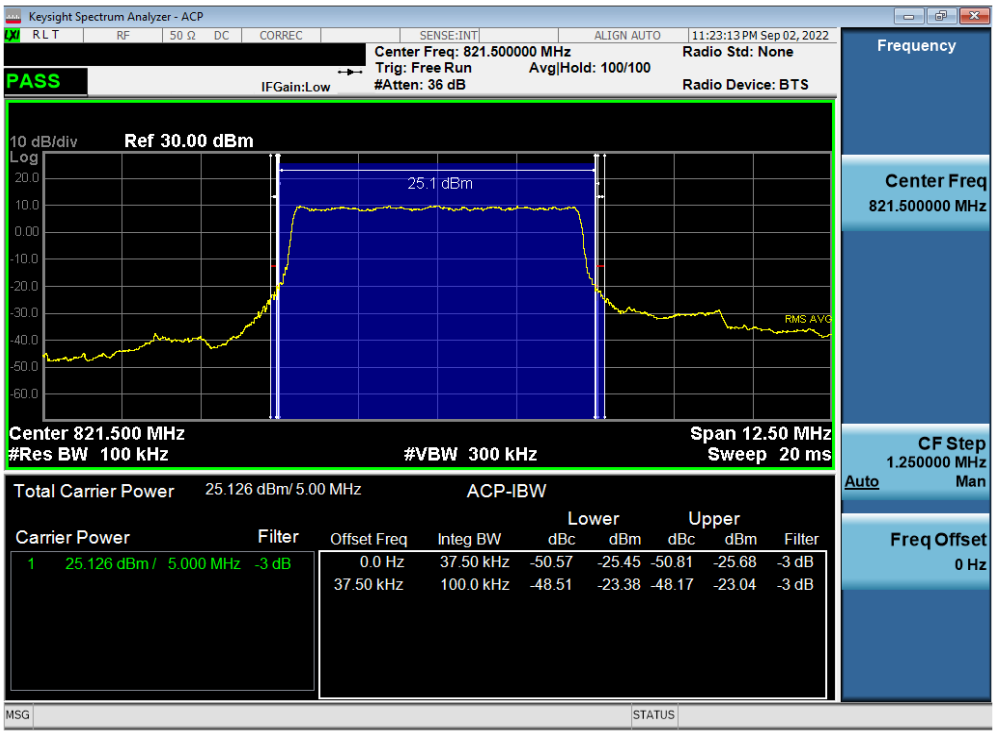


Plot 7-103. Upper Emission Mask Plot (NR Band n14, 10MHz DFT-s-OFDM π/2 BPSK - RB Size 50)

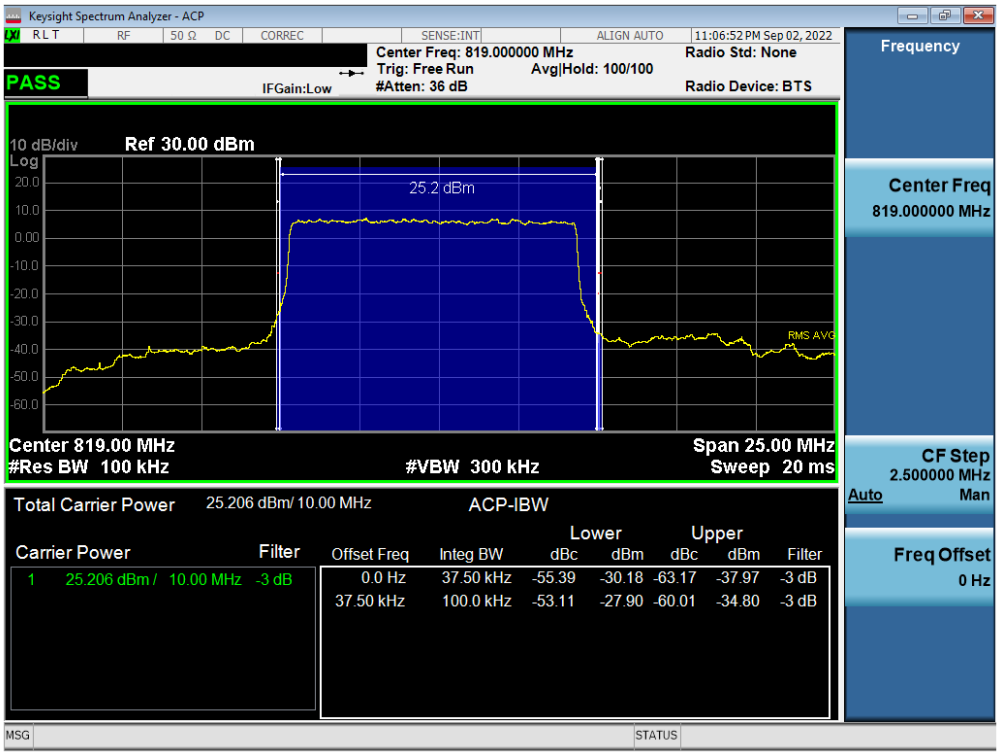
NR Band n26



Plot 7-104. Channel Edge Plot (NR Band n26, 5MHz DFT-s-OFDM π/2 BPSK - Low Channel)



Plot 7-105. Channel Edge Plot (NR Band n26, 5MHz DFT-s-OFDM π/2 BPSK - High Channel)



Plot 7-106. Channel Edge Plot (NR Band n26, 10MHz DFT-s-OFDM π/2 BPSK - Mid Channel)

7.5 Conducted Power Output Data

§2.1046 §90.635

Test Overview

Conducted power measurements are performed to measure the average output power of the EUT. The averaging is to be performed only over duration of active transmissions at maximum output power level. The average measurements do not include averaging over periods when the transmitter is quiescent or when operating at reduced power level.

Test Procedures Used

KDB 971168 D01 v03r01

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

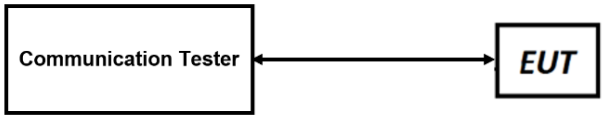


Figure 7-4. Conducted Power Measurement Setup

Test Notes

1. The EUT was tested in all possible test configurations. The worst case emissions are reported with the EUT modulations and channel bandwidth configurations shown in the tables below.

2. This unit was tested with its standard battery.

Antenna 3

Bandwidth	Modulation	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Conducted Power [Watts]	Conducted Power Limit [dBm]	Margin [dB]
1.4 MHz	QPSK	814.7	1 / 3	25.42	0.348	50.00	-24.58
		823.3	1 / 5	25.48	0.353	50.00	-24.52
	16-QAM	814.7	1 / 0	24.34	0.272	50.00	-25.66
	64-QAM	823.3	1 / 3	23.57	0.228	50.00	-26.43
	256-QAM	823.3	1 / 0	21.66	0.147	50.00	-28.34
3 MHz	QPSK	815.5	1 / 0	25.33	0.341	50.00	-24.67
		822.5	1 / 0	25.53	0.357	50.00	-24.47
	16-QAM	815.5	1 / 14	24.27	0.268	50.00	-25.73
	64-QAM	815.5	1 / 14	23.30	0.214	50.00	-26.70
	256-QAM	815.5	1 / 7	21.76	0.150	50.00	-28.24
5 MHz	QPSK	816.5	1 / 12	25.41	0.348	50.00	-24.59
		821.5	1 / 12	25.49	0.354	50.00	-24.51
	16-QAM	821.5	1 / 0	24.37	0.274	50.00	-25.63
	64-QAM	816.5	1 / 24	23.56	0.227	50.00	-26.44
	256-QAM	816.5	1 / 24	21.59	0.144	50.00	-28.41
10 MHz	QPSK	819.0	1 / 25	25.42	0.348	50.00	-24.58
	16-QAM	819.0	1 / 49	24.38	0.274	50.00	-25.62
	64-QAM	819.0	1 / 0	23.51	0.224	50.00	-26.49
	256-QAM	819.0	1 / 25	21.63	0.146	50.00	-28.37

Table 7-2. Conducted Power Output Data (LTE Band 26)

Bandwidth	Modulation	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Conducted Power [Watts]	Conducted Power Limit [dBm]	Margin [dB]
5 MHz	π/2 BPSK	816.5	1 / 1	25.27	0.337	50.00	-24.73
		819.0	1 / 1	25.11	0.324	50.00	-24.89
		821.5	1 / 12	24.91	0.310	50.00	-25.09
	QPSK	816.5	1 / 1	25.29	0.338	50.00	-24.71
		819.0	1 / 12	25.27	0.336	50.00	-24.73
		821.5	1 / 1	25.30	0.339	50.00	-24.70
	16-QAM	819.0	1 / 23	24.70	0.295	50.00	-25.30
	64-QAM	819.0	1 / 23	23.03	0.201	50.00	-26.97
	256-QAM	819.0	1 / 12	20.91	0.123	50.00	-29.09
10 MHz	π/2 BPSK	819.0	1 / 25	25.35	0.342	50.00	-24.65
	QPSK	819.0	1 / 1	25.30	0.339	50.00	-24.70
	16-QAM	819.0	1 / 48	24.64	0.291	50.00	-25.36
	64-QAM	819.0	1 / 1	22.91	0.195	50.00	-27.09
	256-QAM	819.0	1 / 25	21.03	0.127	50.00	-28.97

Table 7-3. Conducted Power Output Data (NR Band n26)

Antenna 1

Bandwidth	Modulation	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Conducted Power [Watts]	Conducted Power Limit [dBm]	Margin [dB]
1.4 MHz	QPSK	814.7	1 / 3	23.56	0.227	50.00	-26.44
		823.3	1 / 0	23.60	0.229	50.00	-26.40
	16-QAM	823.3	1 / 3	22.87	0.194	50.00	-27.13
	64-QAM	823.3	1 / 5	21.99	0.158	50.00	-28.01
	256-QAM	823.3	1 / 3	20.92	0.124	50.00	-29.08
3 MHz	QPSK	815.5	1 / 14	23.64	0.231	50.00	-26.36
		822.5	1 / 7	23.55	0.226	50.00	-26.45
	16-QAM	815.5	1 / 0	22.81	0.191	50.00	-27.19
	64-QAM	822.5	1 / 7	22.03	0.160	50.00	-27.97
	256-QAM	822.5	1 / 7	20.78	0.120	50.00	-29.22
5 MHz	QPSK	816.5	1 / 12	23.60	0.229	50.00	-26.40
		821.5	1 / 12	23.62	0.230	50.00	-26.38
	16-QAM	816.5	1 / 24	22.90	0.195	50.00	-27.10
	64-QAM	816.5	1 / 24	21.93	0.156	50.00	-28.07
	256-QAM	816.5	1 / 24	20.96	0.125	50.00	-29.04
10 MHz	QPSK	819.0	1 / 49	23.54	0.226	50.00	-26.46
	16-QAM	819.0	1 / 25	23.06	0.202	50.00	-26.94
	64-QAM	819.0	1 / 0	21.39	0.138	50.00	-28.61
	256-QAM	819.0	1 / 25	20.82	0.121	50.00	-29.18

Table 7-4. Conducted Power Output Data (LTE Band 26)

Bandwidth	Modulation	Frequency [MHz]	RB Size/Offset	Conducted Power [dBm]	Conducted Power [Watts]	Conducted Power Limit [dBm]	Margin [dB]
5 MHz	π/2 BPSK	816.5	1 / 12	23.11	0.205	50.00	-26.89
		819.0	1 / 1	23.05	0.202	50.00	-26.95
		821.5	1 / 23	23.33	0.215	50.00	-26.67
	QPSK	816.5	1 / 23	23.19	0.208	50.00	-26.81
		819.0	1 / 1	23.76	0.238	50.00	-26.24
		821.5	1 / 1	23.44	0.221	50.00	-26.56
	16-QAM	816.5	1 / 1	22.59	0.182	50.00	-27.41
	64-QAM	821.5	1 / 23	21.37	0.137	50.00	-28.63
	256-QAM	819.0	1 / 23	18.95	0.078	50.00	-31.05
10 MHz	π/2 BPSK	819.0	1 / 1	23.32	0.215	50.00	-26.68
	QPSK	819.0	1 / 1	23.47	0.222	50.00	-26.53
	16-QAM	819.0	1 / 25	22.44	0.175	50.00	-27.56
	64-QAM	819.0	1 / 48	21.02	0.126	50.00	-28.98
	256-QAM	819.0	1 / 25	18.93	0.078	50.00	-31.07

Table 7-5. Conducted Power Output Data (NR Band n26)

7.6 Radiated Power (ERP)

§90.542(a)(7)

Test Overview

Effective Radiated Power (ERP) measurements are calculated by adding highest antenna gain to maximum measured conducted output power. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.2.1
ANSI C63.26-2015
TIA-603-E-2016 – Section 2.2.17

Test Settings

The relevant equation for determining the ERP from the conducted RF output power measured is:

ERP = PMeas – LC + GT

Where:

ERP = Effective Radiated Power (expressed in the same units as PMeas, typically dBW or dBm)

PMeas = measured transmitter output power or PSD, in dBW or dBm

LC = signal attenuation in the connecting cable between the transmitter and antenna in dB

GT = gain of the transmitting antenna, in dBd (ERP)

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

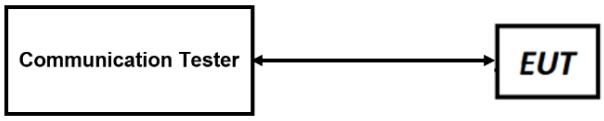


Figure 7-5. ERP Measurement Setup

Test Notes

1) The worst case emissions are reported with the modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.

2) This unit was tested with its standard battery.

3) The Level (dBm) readings in the table were taken with a correction table loaded into the base station simulator. The correction table was used to account for the signal attenuation in the connecting cable between the transmitter and antenna.

4) The Ant. Gains (GT) are listed in dBi.

Antenna 3 – ERP

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
5 MHz	QPSK	790.5	-2.70	1 / 0	25.54	**20.69**	0.117	34.77	-14.08
		793.0	-2.70	1 / 12	25.49	20.64	0.116	34.77	-14.13
		795.5	-2.70	1 / 0	25.45	20.60	0.115	34.77	-14.17
	16-QAM	793.0	-2.70	1 / 0	24.62	19.77	0.095	34.77	-15.00
	64-QAM	793.0	-2.70	1 / 12	23.51	18.66	0.073	34.77	-16.11
	256-QAM	793.0	-2.70	1 / 0	21.50	16.65	0.046	34.77	-18.12
10 MHz	QPSK	793.0	-2.70	1 / 0	25.64	**20.79**	0.120	34.77	-13.98
	16-QAM	793.0	-2.70	1 / 0	24.55	19.70	0.093	34.77	-15.07
	64-QAM	793.0	-2.70	1 / 49	23.63	18.78	0.076	34.77	-15.99
	256-QAM	793.0	-2.70	1 / 25	21.62	16.77	0.048	34.77	-18.00

Table 7-6. ERP Data (LTE Band 14)

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
5 MHz	π/2 BPSK	790.5	-2.70	1 / 23	25.27	20.42	0.110	34.77	-14.35
		793.0	-2.70	1 / 12	25.44	**20.59**	0.115	34.77	-14.18
		795.5	-2.70	1 / 23	25.26	20.41	0.110	34.77	-14.36
	QPSK	790.5	-2.70	1 / 1	25.42	20.57	0.114	34.77	-14.20
		793.0	-2.70	1 / 12	25.35	20.50	0.112	34.77	-14.28
		795.5	-2.70	1 / 1	25.43	**20.58**	0.114	34.77	-14.20
	16-QAM	793.0	-2.70	1 / 23	24.48	19.63	0.092	34.77	-15.14
	64-QAM	790.5	-2.70	1 / 12	23.46	18.61	0.073	34.77	-16.17
	256-QAM	793.0	-2.70	1 / 1	21.16	16.31	0.043	34.77	-18.46
10 MHz	π/2 BPSK	793.0	-2.70	1 / 1	25.26	**20.41**	0.110	34.77	-14.36
	QPSK	793.0	-2.70	1 / 48	25.38	**20.53**	0.113	34.77	-14.24
	16-QAM	793.0	-2.70	1 / 1	24.41	19.56	0.090	34.77	-15.21
	64-QAM	793.0	-2.70	1 / 48	22.82	17.97	0.063	34.77	-16.80
	256-QAM	793.0	-2.70	1 / 25	20.70	15.85	0.038	34.77	-18.92

Table 7-7. ERP Data (NR Band n14)

Antenna 1 – ERP

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
5 MHz	QPSK	790.5	-1.50	1 / 24	23.79	20.14	0.103	34.77	-14.63
		793.0	-1.50	1 / 0	23.90	**20.25**	0.106	34.77	-14.52
		795.5	-1.50	1 / 0	23.84	20.19	0.104	34.77	-14.58
	16-QAM	790.5	-1.50	1 / 12	23.39	19.74	0.094	34.77	-15.03
	64-QAM	793.0	-1.50	1 / 12	22.61	18.96	0.079	34.77	-15.81
	256-QAM	793.0	-1.50	1 / 12	19.88	16.23	0.042	34.77	-18.54
10 MHz	QPSK	793.0	-1.50	1 / 0	23.90	**20.25**	0.106	34.77	-14.52
	16-QAM	793.0	-1.50	1 / 49	22.88	19.23	0.084	34.77	-15.54
	64-QAM	793.0	-1.50	1 / 25	21.94	18.29	0.067	34.77	-16.48
	256-QAM	793.0	-1.50	1 / 49	19.88	16.23	0.042	34.77	-18.54

Table 7-8. ERP Data (LTE Band 14)

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]
5 MHz	π/2 BPSK	790.5	-1.50	1 / 12	23.44	19.79	0.095	34.77	-14.98
		793.0	-1.50	1 / 12	23.60	**19.95**	0.099	34.77	-14.82
		795.5	-1.50	1 / 1	23.37	19.72	0.094	34.77	-15.05
	QPSK	790.5	-1.50	1 / 12	23.55	19.90	0.098	34.77	-14.87
		793.0	-1.50	1 / 12	23.60	**19.95**	0.099	34.77	-14.82
		795.5	-1.50	1 / 12	23.52	19.87	0.097	34.77	-14.90
	16-QAM	795.5	-1.50	1 / 12	22.89	19.24	0.084	34.77	-15.53
	64-QAM	790.5	-1.50	1 / 23	21.92	18.27	0.067	34.77	-16.50
	256-QAM	793.0	-1.50	1 / 12	19.11	15.46	0.035	34.77	-19.31
10 MHz	π/2 BPSK	793.0	-1.50	1 / 25	23.57	**19.92**	0.098	34.77	-14.85
	QPSK	793.0	-1.50	1 / 48	23.60	**19.95**	0.099	34.77	-14.82
	16-QAM	793.0	-1.50	1 / 1	22.79	19.14	0.082	34.77	-15.63
	64-QAM	793.0	-1.50	1 / 25	21.05	17.40	0.055	34.77	-17.37
	256-QAM	793.0	-1.50	1 / 25	18.96	15.31	0.034	34.77	-19.47

Table 7-9. ERP Data (NR Band n14)

7.7 Radiated Spurious Emissions

§2.1053 §90(S).691(a) §90(R).543(e)

Test Overview

Radiated spurious emissions measurements are performed using the field strength conversion method described in KDB 971168 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using horizontally and vertically polarized broadband hybrid antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed while the EUT is operating at maximum power and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.8

ANSI C63.26-2015

TIA-603-E-2016 – Section 2.2.12

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW ≥ 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points ≥ 2 x span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

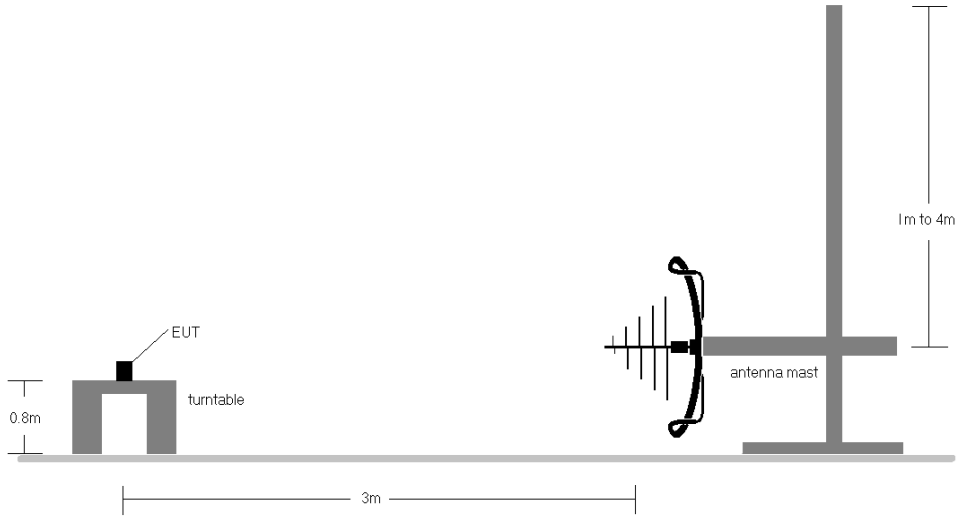


Figure 7-6. Test Instrument & Measurement Setup < 1GHz

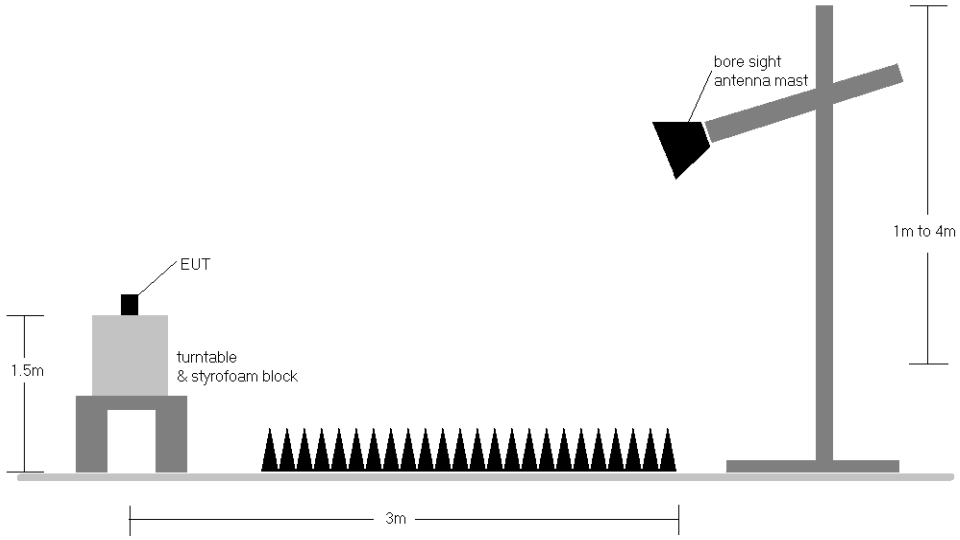


Figure 7-7. Test Instrument & Measurement Setup >1 GHz

Test Notes

1. Field strengths are calculated using the Measurement quantity conversions in KDB 971168 Section 5.8.4.
    a. E(dBµV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m)
    b. EIRP (dBm) = E(dBµV/m) + 20logD – 104.8; where D is the measurement distance in meters.

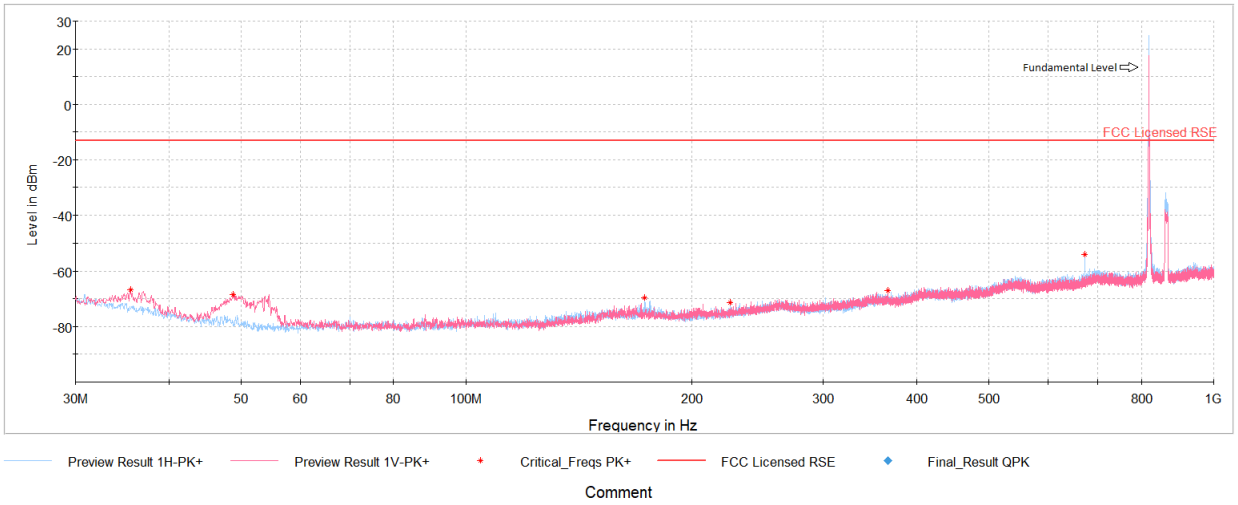
2. For LTE mode, the device was tested under all modulations, RB sizes and offsets, and channel bandwidth configurations and the worst case emissions are reported with 1 RB.

3. This unit was tested with its standard battery.

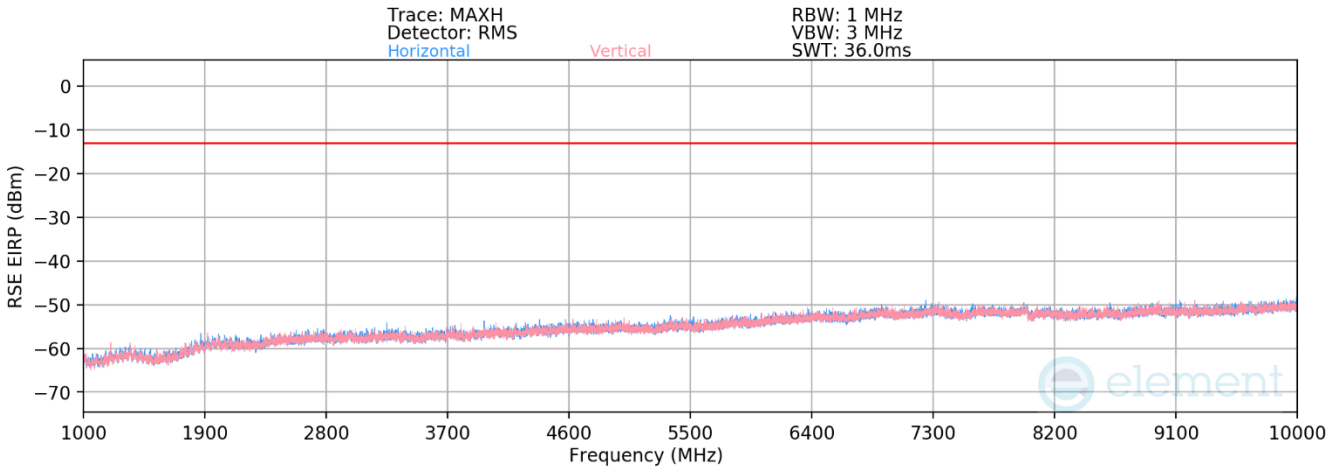
4. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case setup is reported in the tables below.

5. The "-" shown in the following RSE tables are used to denote a noise floor measurement.

7.7.1 Antenna 3 – Radiated Spurious Emission Measurements
LTE Band 26



Plot 7-107. Antenna 3 Radiated Spurious Plot below 1GHz (LTE Band 26)



Plot 7-108. Antenna 3 Radiated Spurious Plot above 1GHz (LTE Band 26)

Bandwidth (MHz):	5
Frequency (MHz):	816.5
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1633.0	H	-	-	-77.76	-1.86	27.38	-67.88	-13.00	-54.88
2449.5	H	-	-	-78.53	3.03	31.50	-63.76	-13.00	-50.76
3266.0	H	-	-	-79.31	4.74	32.43	-62.83	-13.00	-49.83

Table 7-10. Antenna 3 Radiated Spurious Data (LTE Band 26 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	819.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1638.0	H	-	-	-77.75	-1.86	27.39	-67.87	-13.00	-54.87
2457.0	H	-	-	-78.69	3.03	31.34	-63.92	-13.00	-50.92
3276.0	H	-	-	-79.40	4.74	32.34	-62.92	-13.00	-49.92

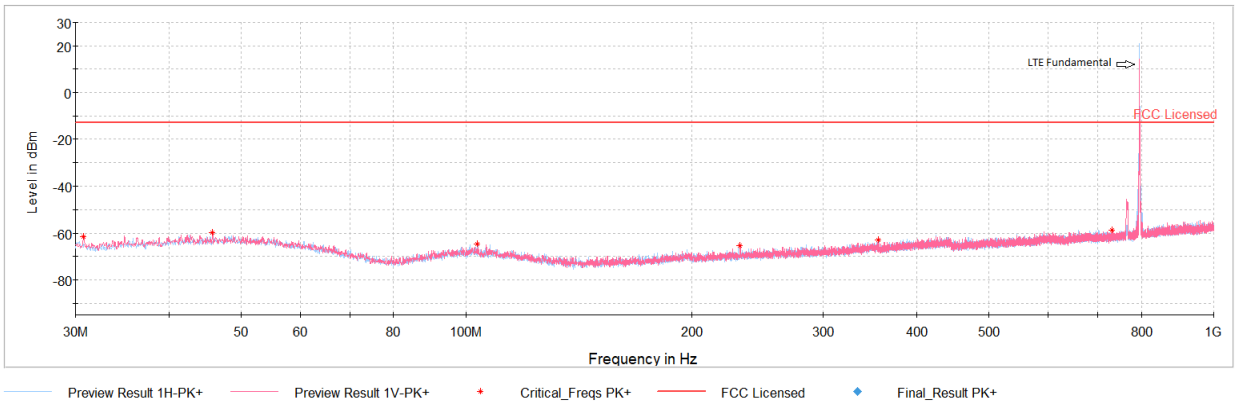
Table 7-11. Antenna 3 Radiated Spurious Data (LTE Band 26 – Mid Channel)

Bandwidth (MHz):	5
Frequency (MHz):	821.5
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 12

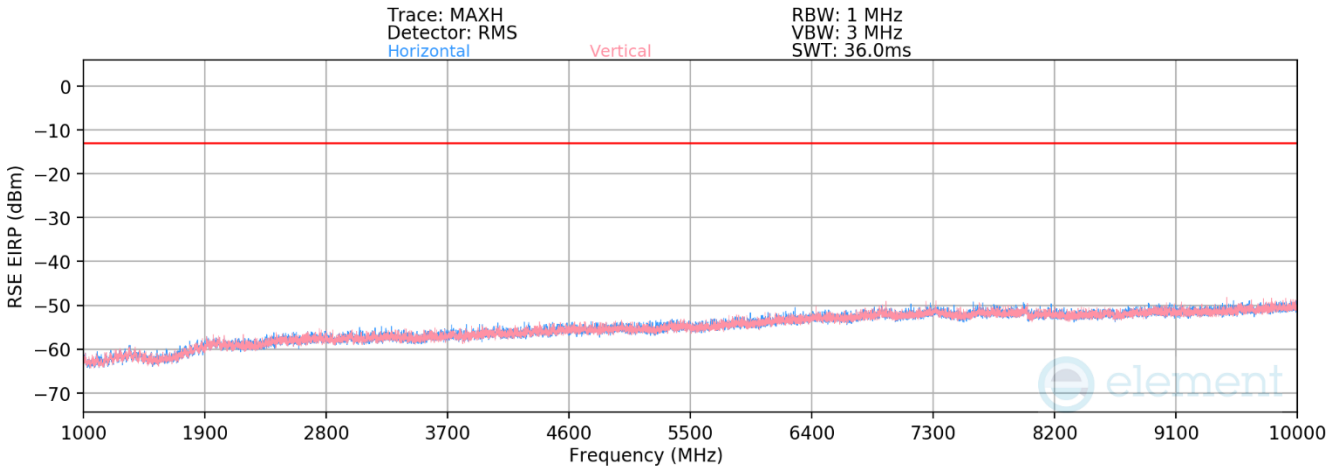
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1643.0	H	-	-	-77.66	-1.86	27.48	-67.78	-13.00	-54.78
2464.5	H	-	-	-78.69	3.03	31.34	-63.92	-13.00	-50.92
3286.0	H	-	-	-79.34	4.74	32.40	-62.86	-13.00	-49.86

Table 7-12. Antenna 3 Radiated Spurious Data (LTE Band 26 – High Channel)

LTE Band 14



Plot 7-109. Antenna 3 Radiated Spurious Plot below 1GHz (LTE Band 14)



Plot 7-110. Antenna 3 Radiated Spurious Plot above 1GHz (LTE Band 14)

Bandwidth (MHz):	5
Frequency (MHz):	790.5
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1581.0	H	-	-	-77.62	-1.92	27.46	-67.79	-40.00	-27.79
2371.5	H	-	-	-78.43	2.54	31.11	-64.15	-13.00	-51.15
3162.0	H	-	-	-78.83	4.40	32.57	-62.69	-13.00	-49.69

Table 7-13. Antenna 3 Radiated Spurious Data (LTE Band 14 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	793.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1586.0	H	-	-	-77.96	-1.96	27.08	-68.18	-40.00	-28.18
2379.0	H	-	-	-78.44	2.66	31.22	-64.03	-13.00	-51.03
3172.0	H	-	-	-78.85	4.17	32.32	-62.94	-13.00	-49.94

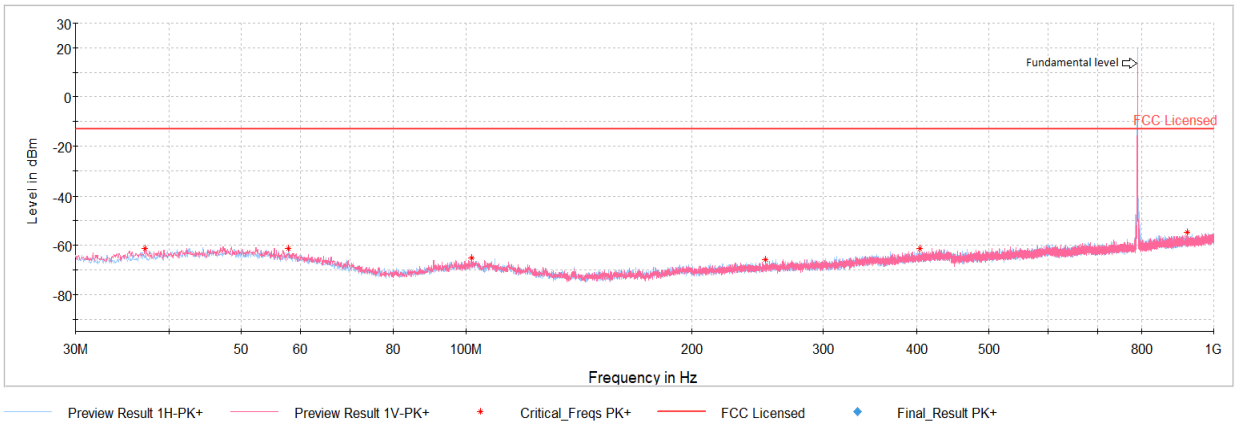
Table 7-14. Antenna 3 Radiated Spurious Data (LTE Band 14 – Mid Channel)

Bandwidth (MHz):	5
Frequency (MHz):	795.5
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 12

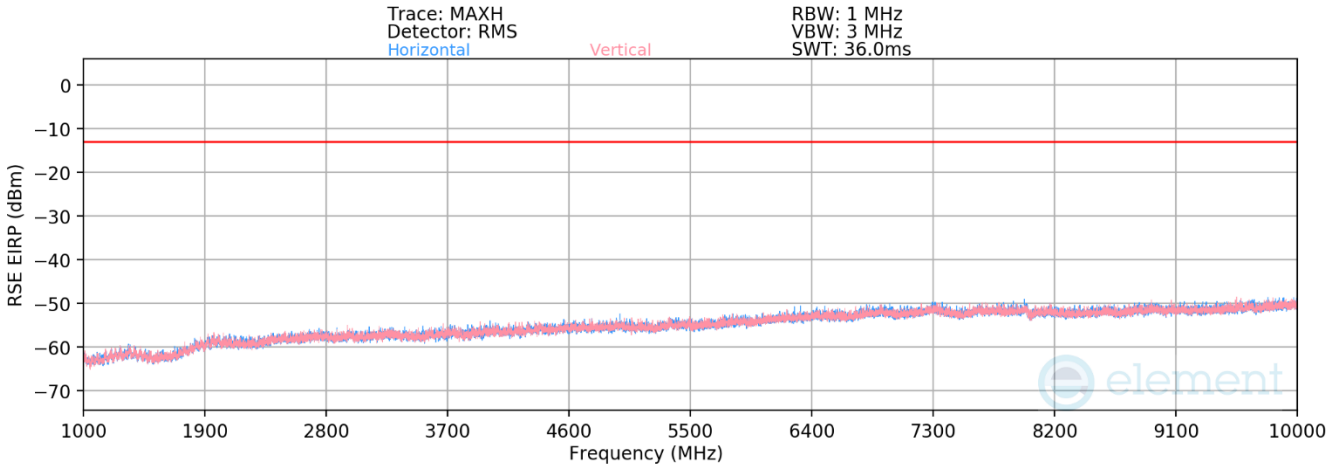
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1591.0	H	-	-	-77.79	-2.01	27.20	-68.06	-40.00	-28.06
2386.5	H	-	-	-78.60	2.81	31.21	-64.05	-13.00	-51.05
3182.0	H	-	-	-78.79	4.14	32.35	-62.91	-13.00	-49.91

Table 7-15. Antenna 3 Radiated Spurious Data (LTE Band 14 – High Channel)

NR Band n14



Plot 7-111. Antenna 3 Radiated Spurious Plot below 1GHz (NR Band n14)



Plot 7-112. Antenna 3 Radiated Spurious Plot above 1GHz (NR Band n14)

Bandwidth (MHz):	5
Frequency (MHz):	790.5
Modulation Signal:	QPSK
RB / Offset:	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1581.0	H	-	-	-77.52	-1.89	27.59	-67.67	-13.00	-54.67
2371.5	H	-	-	-78.37	2.40	31.03	-64.22	-13.00	-51.22
3162.0	H	-	-	-78.68	4.22	32.54	-62.71	-13.00	-49.71

Table 7-16. Antenna 3 Radiated Spurious Data (NR Band n14 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	793.0
Modulation Signal:	QPSK
RB / Offset:	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1586.0	H	-	-	-77.69	-1.90	27.41	-67.84	-13.00	-54.84
2379.0	H	-	-	-78.54	2.54	31.00	-64.26	-13.00	-51.26
3172.0	H	-	-	-78.90	4.00	32.10	-63.16	-13.00	-50.16

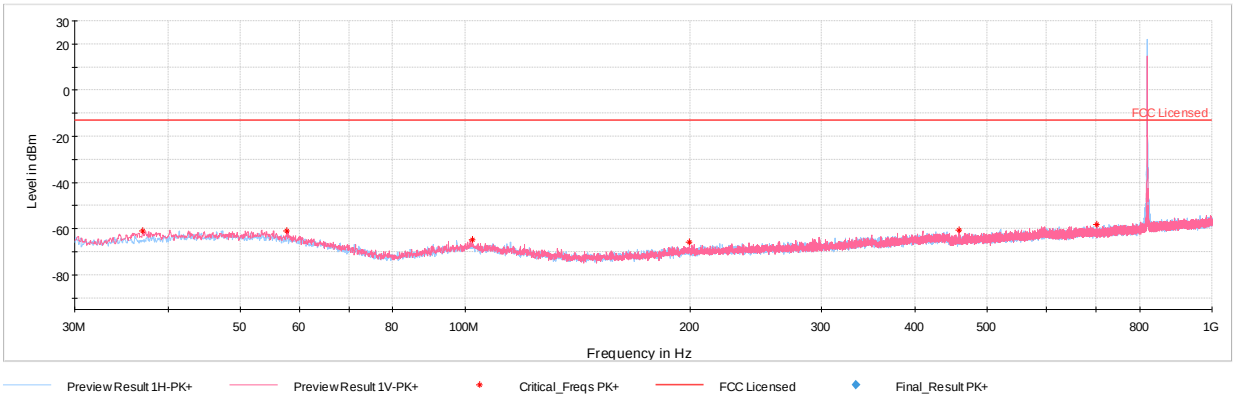
Table 7-17. Antenna 3 Radiated Spurious Data (NR Band n14 – Mid Channel)

Bandwidth (MHz):	5
Frequency (MHz):	795.5
Modulation Signal:	QPSK
RB / Offset:	1 / 12

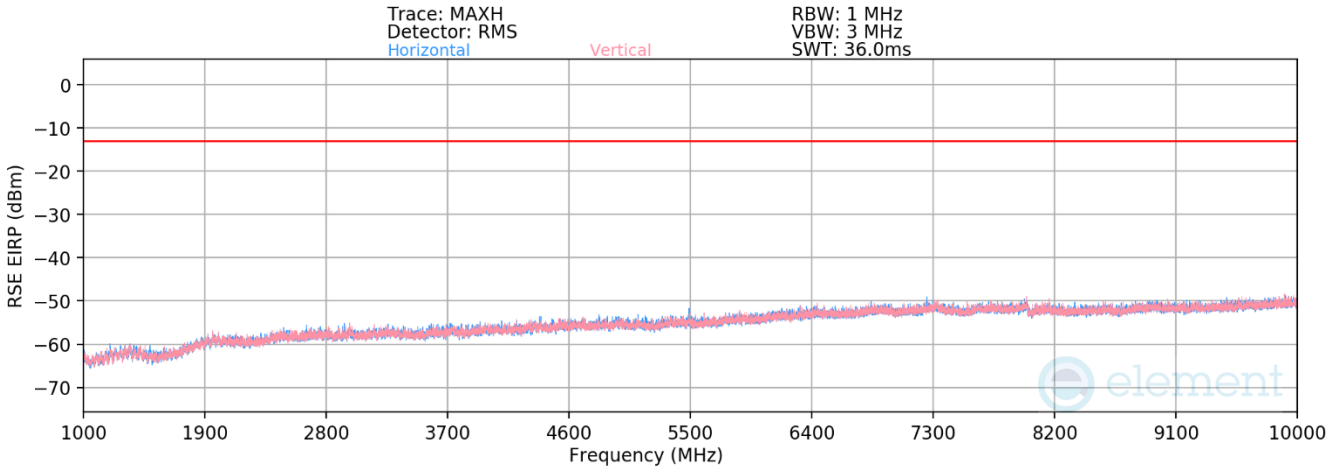
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1591.0	H	-	-	-77.80	-1.90	27.30	-67.96	-13.00	-54.96
2386.5	H	-	-	-78.37	2.68	31.31	-63.95	-13.00	-50.95
3182.0	H	-	-	-78.89	3.98	32.09	-63.17	-13.00	-50.17

Table 7-18. Antenna 3 Radiated Spurious Data (NR Band n14 – High Channel)

NR Band n26



Plot 7-113. Antenna 3 Radiated Spurious Plot below 1GHz (NR Band n26)



Plot 7-114. Antenna 3 Radiated Spurious Plot above 1GHz (NR Band n26)

Bandwidth (MHz):	5
Frequency (MHz):	816.5
Modulation Signal:	QPSK
RB / Offset:	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1633.0	H	-	-	-77.63	-1.88	27.49	-67.77	-13.00	-54.77
2449.5	H	-	-	-78.44	2.99	31.55	-63.71	-13.00	-50.71
3266.0	H	-	-	-79.48	4.70	32.22	-63.04	-13.00	-50.04

Table 7-19. Antenna 3 Radiated Spurious Data (NR Band n26 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	819.0
Modulation Signal:	QPSK
RB / Offset:	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1638.0	H	-	-	-77.69	-1.86	27.45	-67.81	-13.00	-54.81
2457.0	H	-	-	-78.39	3.03	31.64	-63.62	-13.00	-50.62
3276.0	H	-	-	-79.45	4.74	32.29	-62.97	-13.00	-49.97

Table 7-20. Antenna 3 Radiated Spurious Data (NR Band n26 – Mid Channel)

Bandwidth (MHz):	5
Frequency (MHz):	821.5
Modulation Signal:	QPSK
RB / Offset:	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1643.0	H	-	-	-77.73	-1.84	27.43	-67.83	-13.00	-54.83
2464.5	H	-	-	-78.60	3.06	31.46	-63.80	-13.00	-50.80
3286.0	H	-	-	-79.46	4.83	32.37	-62.89	-13.00	-49.89

Table 7-21. Antenna 3 Radiated Spurious Data (NR Band n26 – High Channel)

7.7.2 Antenna 1 – Radiated Spurious Emission Measurements

LTE Band 26

Bandwidth (MHz):	5
Frequency (MHz):	816.5
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1633.0	H	-	-	-83.13	-1.86	22.01	-73.25	-13.00	-60.25
2449.5	H	-	-	-78.73	3.03	31.30	-63.96	-13.00	-50.96
3266.0	H	-	-	-79.23	4.74	32.51	-62.75	-13.00	-49.75

Table 7-22. Antenna 1 Radiated Spurious Data (LTE Band 26 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	819.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1638.0	H	-	-	-77.55	-1.86	27.59	-67.67	-13.00	-54.67
2457.0	H	-	-	-78.56	3.03	31.47	-63.79	-13.00	-50.79
3276.0	H	-	-	-79.53	4.74	32.21	-63.05	-13.00	-50.05

Table 7-23. Antenna 1 Radiated Spurious Data (LTE Band 26 – Mid Channel)

Bandwidth (MHz):	5
Frequency (MHz):	821.5
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1643.0	H	-	-	-77.78	-1.86	27.36	-67.90	-13.00	-54.90
2464.5	H	-	-	-78.64	3.03	31.39	-63.87	-13.00	-50.87
3286.0	H	-	-	-79.46	4.74	32.28	-62.98	-13.00	-49.98

Table 7-24. Antenna 1 Radiated Spurious Data (LTE Band 26 – High Channel)

LTE Band 14

Bandwidth (MHz):	5
Frequency (MHz):	790.5
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1581.0	H	-	-	-77.78	-1.92	27.30	-67.95	-40.00	-27.95
2371.5	H	-	-	-78.25	2.54	31.29	-63.97	-13.00	-50.97
3162.0	H	-	-	-78.78	4.40	32.62	-62.64	-13.00	-49.64

Table 7-25. Antenna 1 Radiated Spurious Data (LTE Band 14 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	793.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1586.0	H	-	-	-77.64	-1.96	27.40	-67.86	-40.00	-27.86
2379.0	H	-	-	-78.48	2.66	31.18	-64.07	-13.00	-51.07
3172.0	H	-	-	-78.76	4.17	32.41	-62.85	-13.00	-49.85

Table 7-26. Antenna 1 Radiated Spurious Data (LTE Band 14 – Mid Channel)

Bandwidth (MHz):	5
Frequency (MHz):	795.5
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1591.0	H	-	-	-77.81	-2.01	27.18	-68.08	-40.00	-28.08
2386.5	H	-	-	-78.53	2.81	31.28	-63.98	-13.00	-50.98
3182.0	H	-	-	-79.06	4.14	32.08	-63.18	-13.00	-50.18

Table 7-27. Antenna 1 Radiated Spurious Data (LTE Band 14 – High Channel)

NR Band n14

Bandwidth (MHz):	5
Frequency (MHz):	790.5
Modulation Signal:	QPSK
RB / Offset:	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1581.0	H	-	-	-77.53	-1.89	27.58	-67.68	-13.00	-54.68
2371.5	H	-	-	-78.43	2.40	30.97	-64.28	-13.00	-51.28
3162.0	H	-	-	-78.73	4.22	32.49	-62.76	-13.00	-49.76

Table 7-28. Antenna 1 Radiated Spurious Data (NR Band n14 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	793.0
Modulation Signal:	QPSK
RB / Offset:	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1586.0	H	-	-	-77.50	-1.90	27.60	-67.65	-13.00	-54.65
2379.0	H	-	-	-78.35	2.54	31.19	-64.07	-13.00	-51.07
3172.0	H	-	-	-78.84	4.00	32.16	-63.10	-13.00	-50.10

Table 7-29. Antenna 1 Radiated Spurious Data (NR Band n14 – Mid Channel)

Bandwidth (MHz):	5
Frequency (MHz):	795.5
Modulation Signal:	QPSK
RB / Offset:	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1591.0	H	-	-	-77.79	-1.90	27.31	-67.95	-13.00	-54.95
2386.5	H	-	-	-78.36	2.68	31.32	-63.94	-13.00	-50.94
3182.0	H	-	-	-78.96	3.98	32.02	-63.24	-13.00	-50.24

Table 7-30. Antenna 1 Radiated Spurious Data (NR Band n14 – High Channel)

NR Band n26

Bandwidth (MHz):	5
Frequency (MHz):	816.5
Modulation Signal:	QPSK
RB / Offset:	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1633.0	H	-	-	-77.57	-1.88	27.55	-67.71	-13.00	-54.71
2449.5	H	-	-	-78.26	2.99	31.73	-63.53	-13.00	-50.53
3266.0	H	-	-	-79.48	4.70	32.22	-63.04	-13.00	-50.04

Table 7-31. Antenna 1 Radiated Spurious Data (NR Band n26 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	819.0
Modulation Signal:	QPSK
RB / Offset:	1 / 25

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1638.0	H	-	-	-77.69	-1.86	27.45	-67.81	-13.00	-54.81
2457.0	H	-	-	-78.39	3.03	31.64	-63.62	-13.00	-50.62
3276.0	H	-	-	-79.45	4.74	32.29	-62.97	-13.00	-49.97

Table 7-32. Antenna 1 Radiated Spurious Data (NR Band n26 – Mid Channel)

Bandwidth (MHz):	5
Frequency (MHz):	821.5
Modulation Signal:	QPSK
RB / Offset:	1 / 12

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1643.0	H	-	-	-77.76	-1.84	27.40	-67.86	-13.00	-54.86
2464.5	H	-	-	-78.56	3.06	31.50	-63.76	-13.00	-50.76
3286.0	H	-	-	-79.56	4.83	32.27	-62.99	-13.00	-49.99

Table 7-33. Antenna 1 Radiated Spurious Data (NR Band n26 – High Channel)

7.8 Frequency Stability / Temperature Variation

§2.1055 §90.213

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26-2015 and TIA-603-E-2016. The frequency stability of the transmitter is measured by:

a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.

b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

For Band 26, the frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5 ppm) of the center frequency. For Band 14 the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Procedure Used

ANSI C63.26-2015

TIA-603-E-2016

Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a "standby" condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

Test Setup

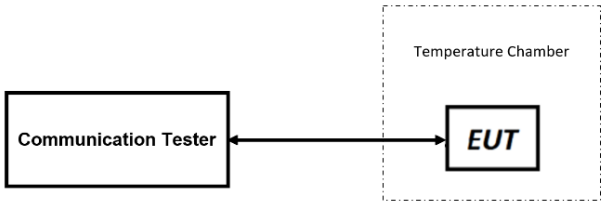


Figure 7-8. Test Instrument & Measurement Setup

Test Notes

All ports were tested and only the worst case data were reported.

Frequency Stability / Temperature Variation

LTE Band 26

Operating Frequency (Hz):	819,000,000
Ref. Voltage (VDC):	3.80
Deviation Limit:	± 0.00025% or 2.5 ppm

Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	818,999,996	-4	-0.0000005
		- 20	819,000,001	1	0.0000001
		- 10	819,000,001	1	0.0000001
		0	819,000,000	0	0.0000000
		+ 10	818,999,998	-2	-0.0000002
		+ 20 (Ref)	819,000,000	0	0.0000000
		+ 30	818,999,997	-3	-0.0000004
		+ 40	819,000,001	1	0.0000001
		+ 50	819,000,001	1	0.0000001
Battery Endpoint	3.23	+ 20	819,000,000	0	0.0000000

Table 7-34. LTE Band 26 Frequency Stability Data

LTE Band 14

Low Channel Frequency (Hz):	790,500,000
High Channel Frequency (Hz):	795,500,000
Ref. Voltage (VDC):	3.80

Voltage (%)	Power (VDC)	Temp (°C)	Low Freq. (Hz)	High Freq. (Hz)	Low Freq. Dev. (Hz)	High Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	790,500,000	795,500,001	0	1	0.0000001
		- 20	790,499,997	795,500,000	-3	0	-0.0000004
		- 10	790,500,001	795,500,001	1	1	0.0000001
		0	790,500,000	795,499,999	0	-1	-0.0000001
		+ 10	790,499,999	795,499,999	-1	-1	-0.0000001
		+ 20 (Ref)	790,500,000	795,500,000	0	0	0.0000000
		+ 30	790,500,001	795,500,002	1	2	0.0000003
		+ 40	790,500,002	795,500,000	2	0	0.0000003
		+ 50	790,499,999	795,499,997	-1	-3	-0.0000004
Battery Endpoint	3.23	+ 20	790,499,998	795,499,997	-2	-3	-0.0000004

Table 7-35. LTE Band 14 Frequency Stability Data

NR Band n14

Low Channel Frequency (Hz):	790,500,000
High Channel Frequency (Hz):	795,500,000
Ref. Voltage (VDC):	3.80

Voltage (%)	Power (VDC)	Temp (°C)	Low Freq. (Hz)	High Freq. (Hz)	Low Freq. Dev. (Hz)	High Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	790,499,790	795,499,709	-103	-127	-0.0000160
		- 20	790,499,793	795,499,735	-100	-101	-0.0000127
		- 10	790,499,708	795,499,706	-185	-130	-0.0000234
		0	790,499,759	795,499,719	-134	-117	-0.0000170
		+ 10	790,499,778	795,499,695	-115	-141	-0.0000177
		+ 20 (Ref)	790,499,893	795,499,836	0	0	0.0000000
		+ 30	790,499,793	795,499,667	-100	-169	-0.0000212
		+ 40	790,499,708	795,499,697	-185	-139	-0.0000234
		+ 50	790,499,795	795,499,717	-98	-119	-0.0000150
Battery Endpoint	3.23	+ 20	790,499,714	795,499,680	-179	-156	-0.0000226

Table 7-36. NR Band n14 Frequency Stability Data

NR Band n26

Operating Frequency (Hz):	819,000,000
Ref. Voltage (VDC):	3.80
Deviation Limit:	± 0.00025% or 2.5 ppm

Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.80	- 30	818,999,675	-151	-0.0000184
		- 20	818,999,715	-111	-0.0000136
		- 10	818,999,720	-106	-0.0000129
		0	818,999,657	-169	-0.0000206
		+ 10	818,999,671	-155	-0.0000189
		+ 20 (Ref)	818,999,826	0	0.0000000
		+ 30	818,999,707	-119	-0.0000145
		+ 40	818,999,677	-149	-0.0000182
		+ 50	818,999,661	-165	-0.0000201
Battery Endpoint	3.23	+ 20	818,999,727	-99	-0.0000121

Table 7-37. NR Band n26 Frequency Stability Data

8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Apple Tablet Device FCC ID: BCGA2435** complies with all the requirements of Part 90 of the FCC rules.