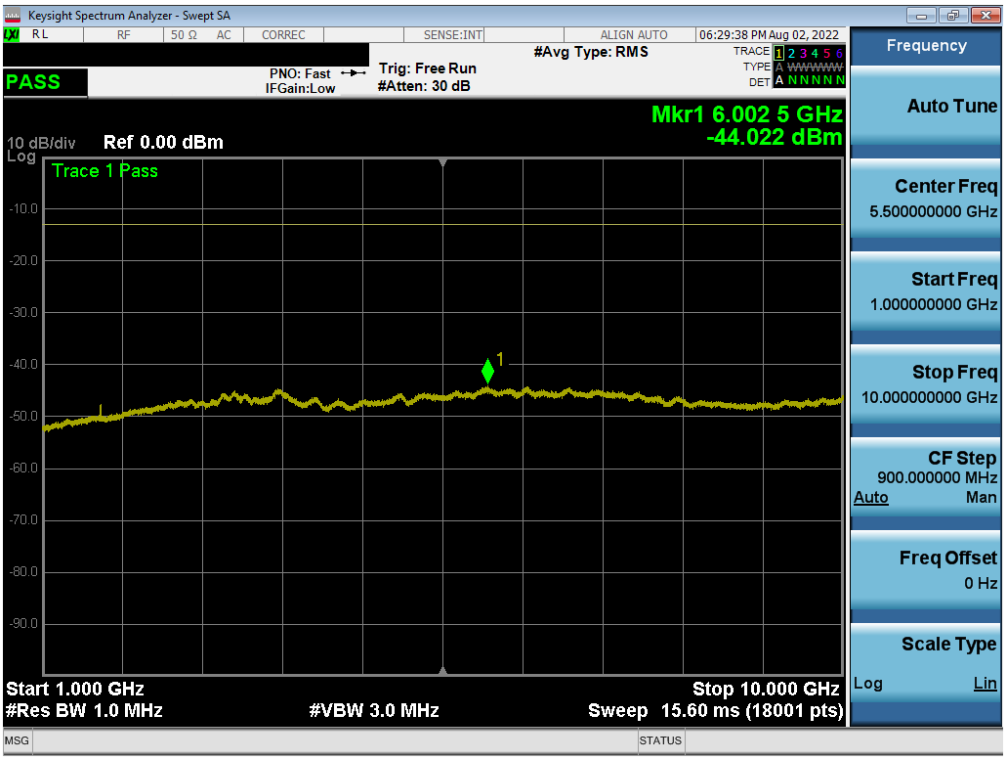
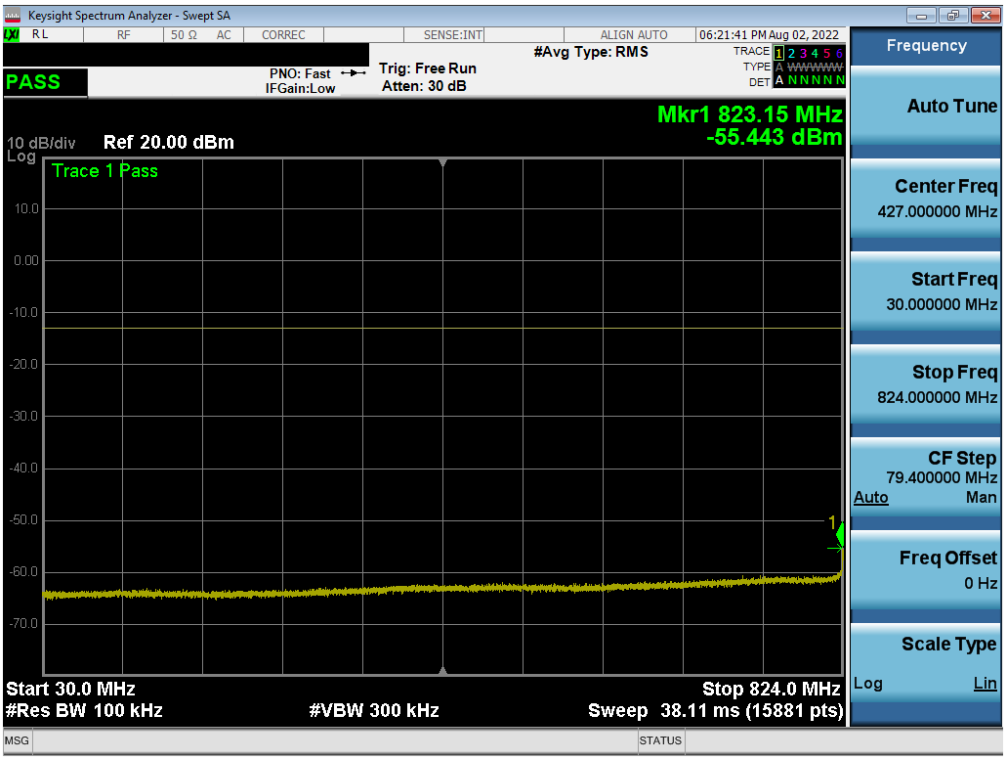
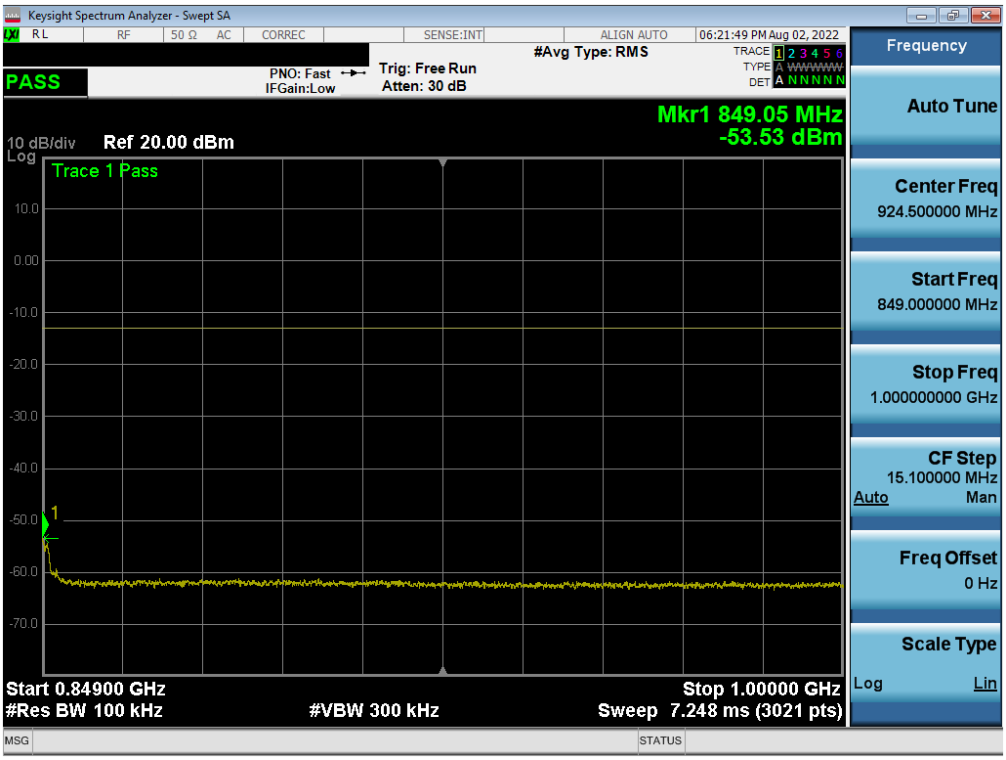


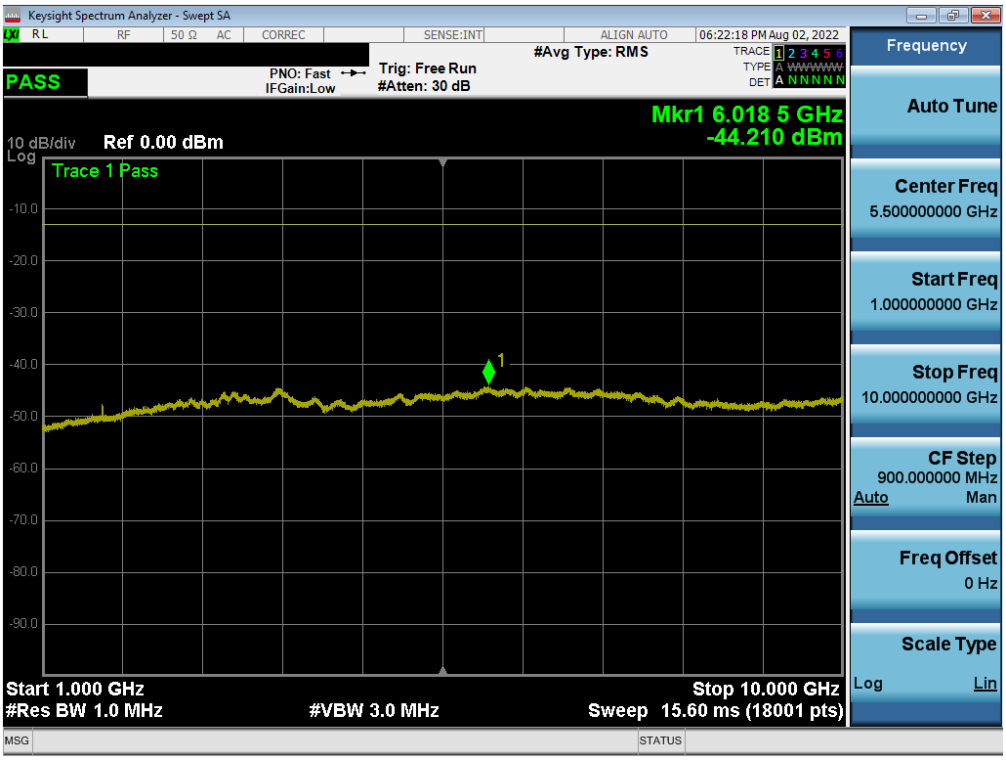
Plot 7-77. Conducted Spurious Plot (WCDMA Ch. 4132)



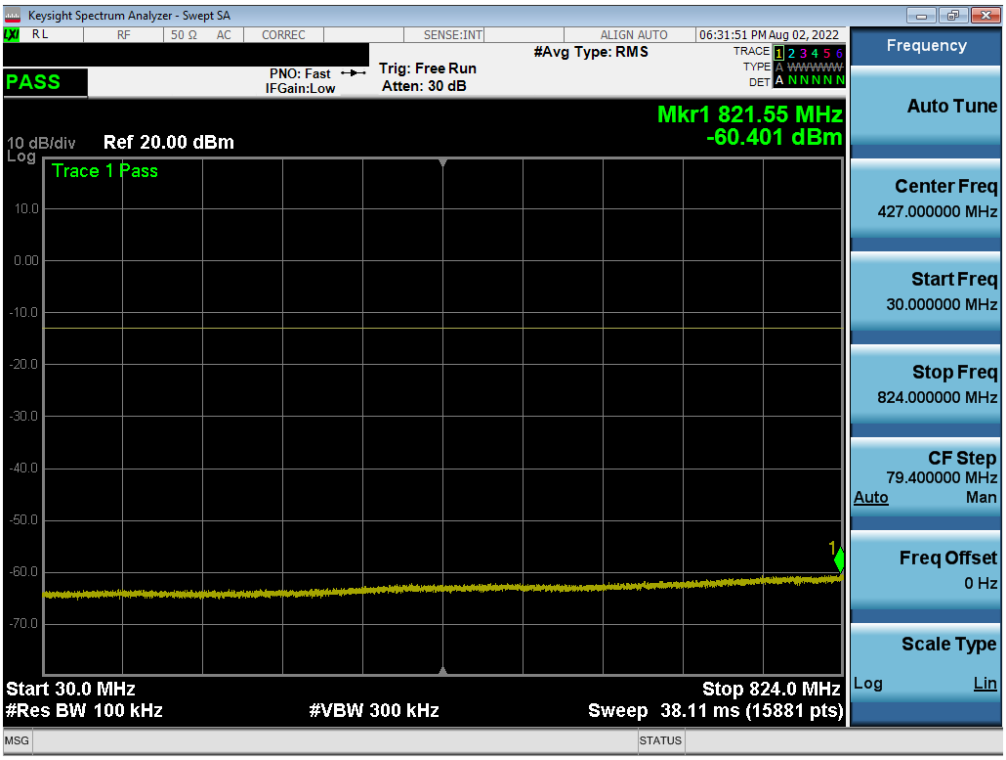
Plot 7-78. Conducted Spurious Plot (WCDMA Ch. 4183)



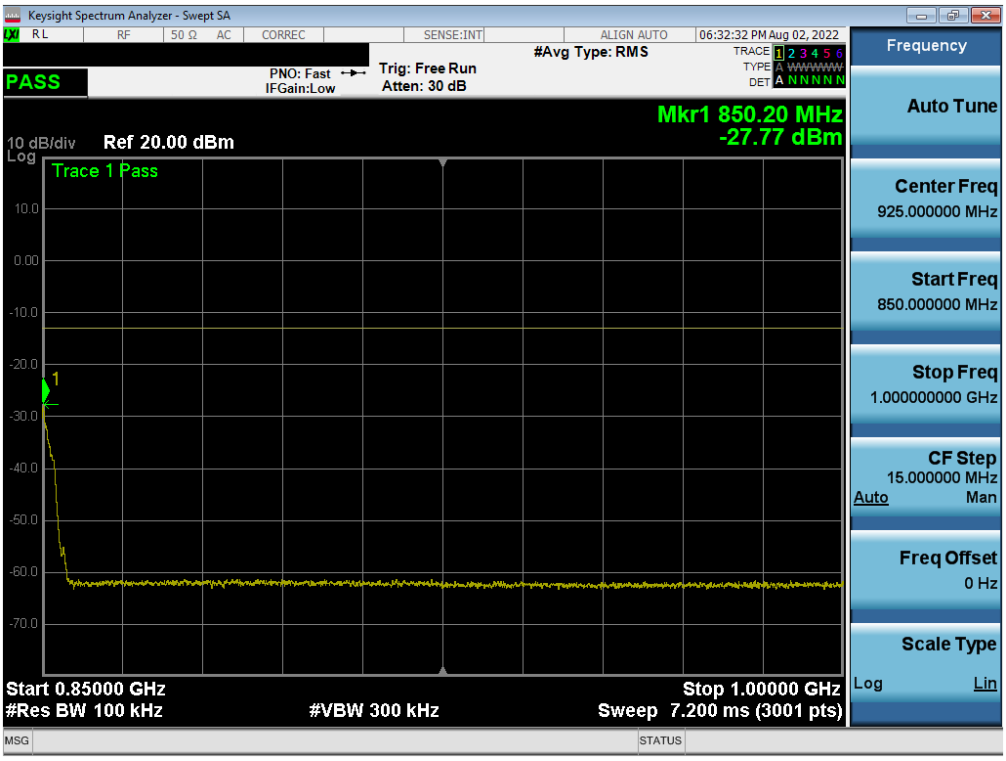
Plot 7-79. Conducted Spurious Plot (WCDMA Ch. 4183)



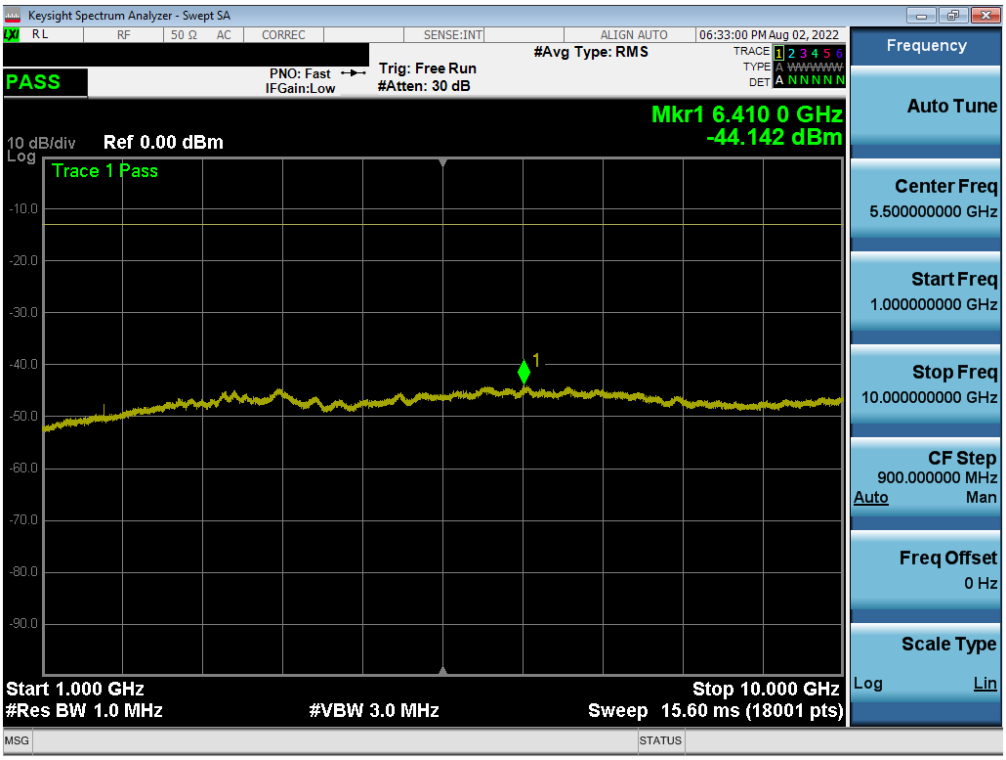
Plot 7-80. Conducted Spurious Plot (WCDMA Ch. 4183)



Plot 7-81. Conducted Spurious Plot (WCDMA Ch. 4233)



Plot 7-82. Conducted Spurious Plot (WCDMA Ch. 4233)



Plot 7-83. Conducted Spurious Plot (WCDMA Ch. 4233)

7.4 Band Edge Emissions at Antenna Terminal

§2.1051, 22.917(a)

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 was reported.

The minimum permissible attenuation level of any spurious emission is 43 + 10 $log_{10}(P_{[Watts]})$, where P is the transmitter power in Watts.

Test Procedure Used

KDB 971168 D01 v03r01 – Section 6.0

Test Settings

1. Start and stop frequency were set such that the band edge would be placed in the center of the plot
2. Span was set large enough so as to capture all out of band emissions near the band edge
3. RBW $\geq$ 1% of the emission bandwidth
4. VBW $\geq$ 3 x RBW
5. Detector = RMS
6. Number of sweep points ≥ 2 x Span/RBW
7. Trace mode = trace average for continuous emissions, max hold for pulse emissions
8. Sweep time = auto couple
9. The trace was allowed to stabilize

Test Setup

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

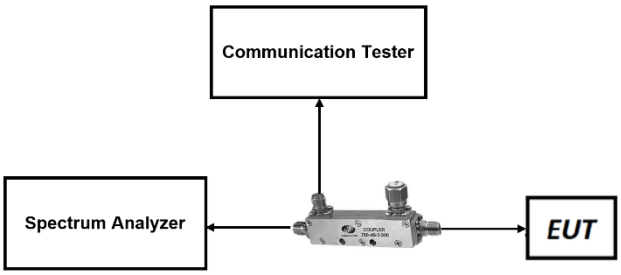


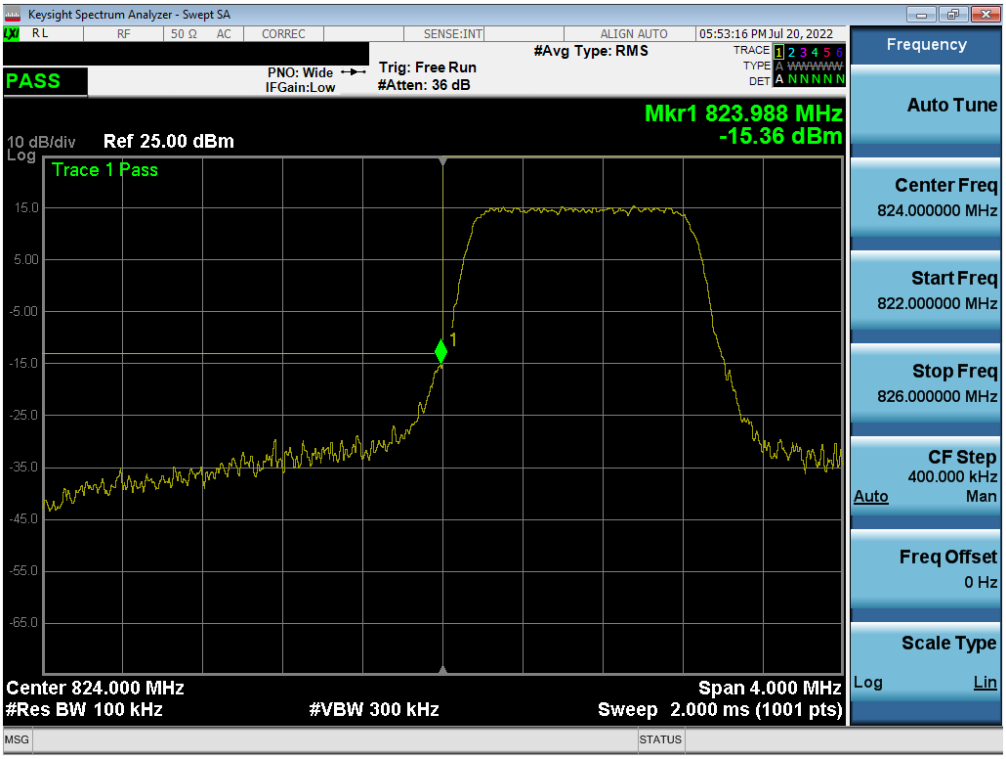
Figure 7-3. Test Instrument & Measurement Setup

Test Notes

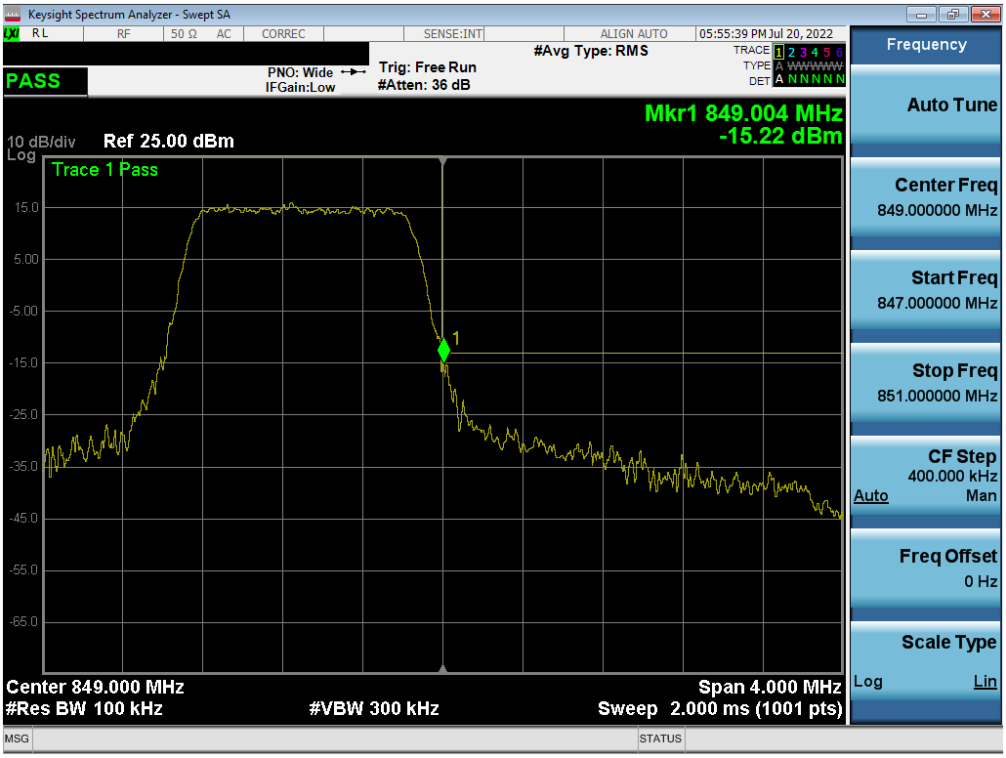
1. Per 22.917(b), in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to demonstrate compliance with the out-of-band emissions limit. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

2. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) 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.

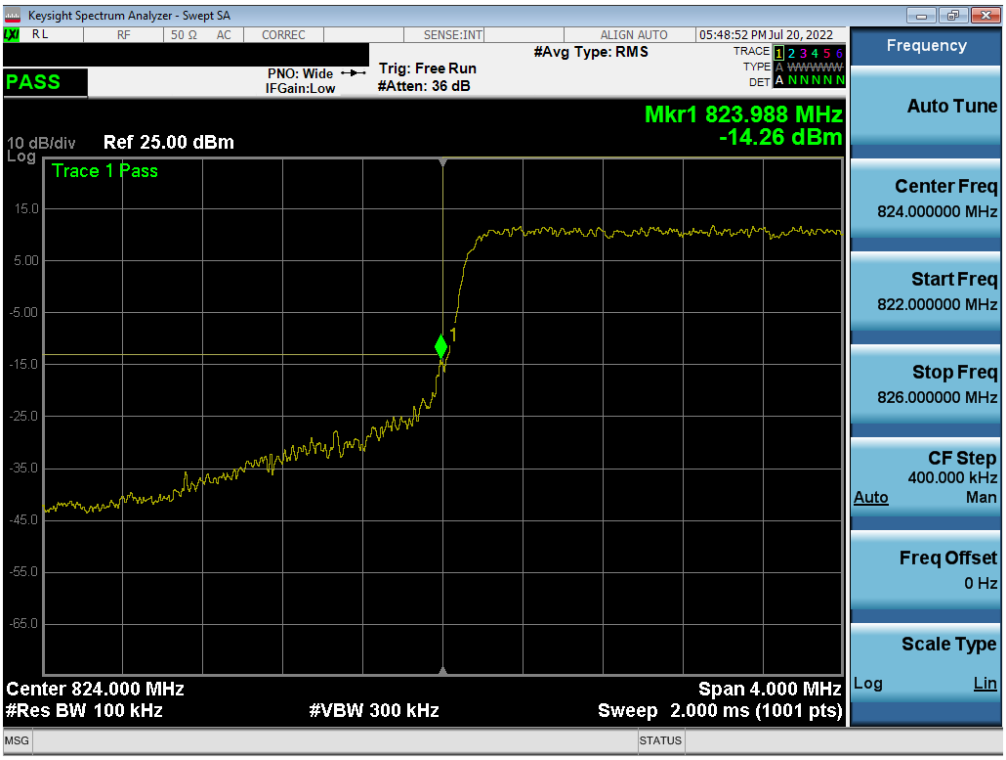
LTE Band 26



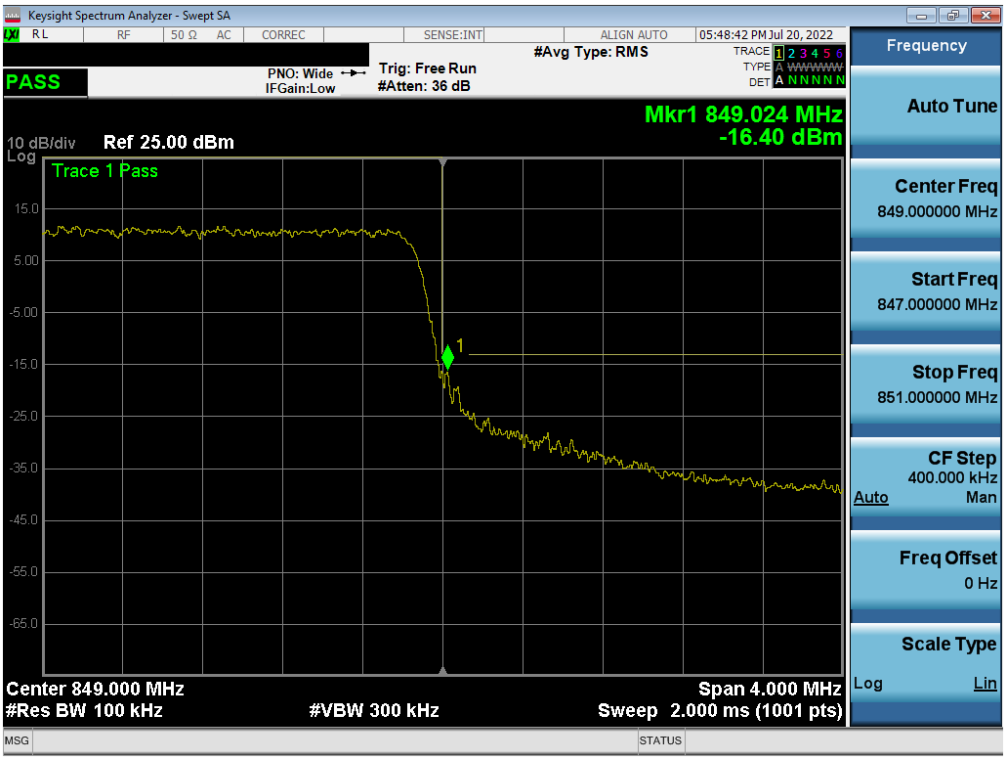
Plot 7-84. Lower BE Plot (LTE Band 26 – 1.4MHz QPSK – Full RB Configuration)



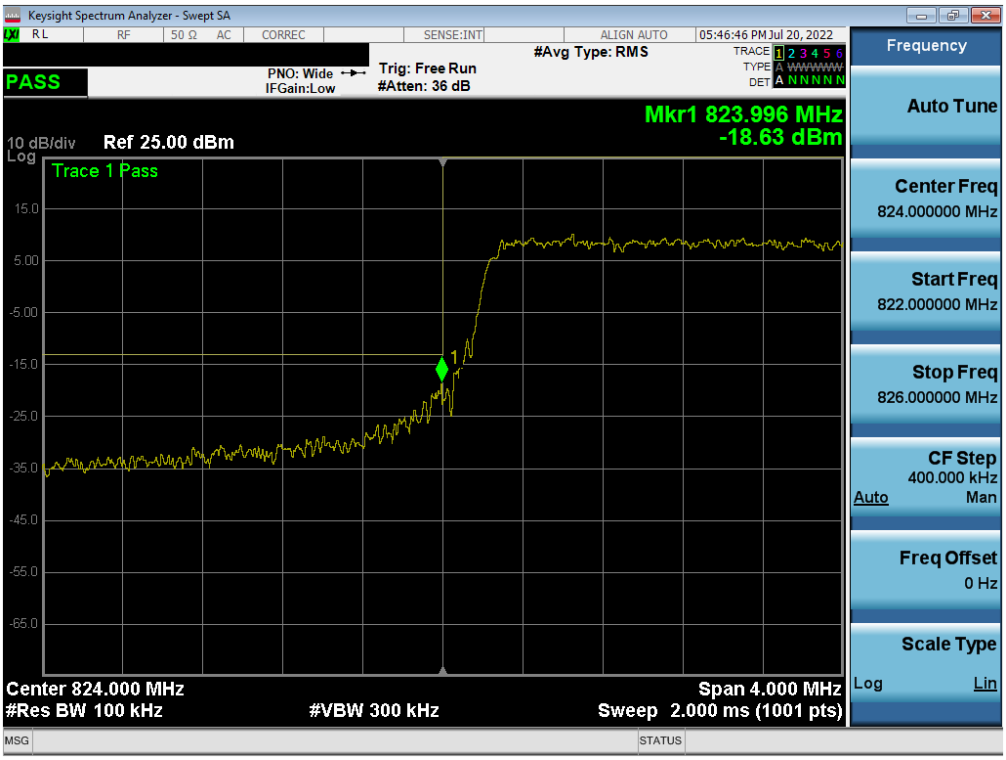
Plot 7-85. Upper BE Plot (LTE Band 26 – 1.4MHz QPSK – Full RB Configuration)



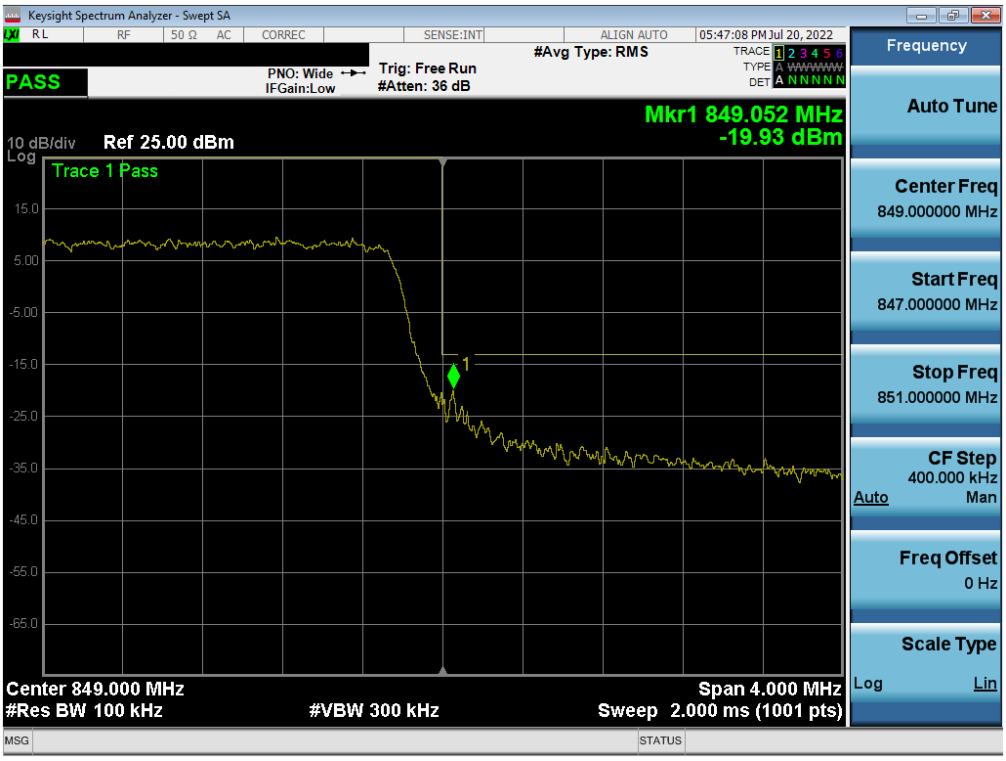
Plot 7-86. Lower BE Plot (LTE Band 26 - 3MHz QPSK – Full RB Configuration)



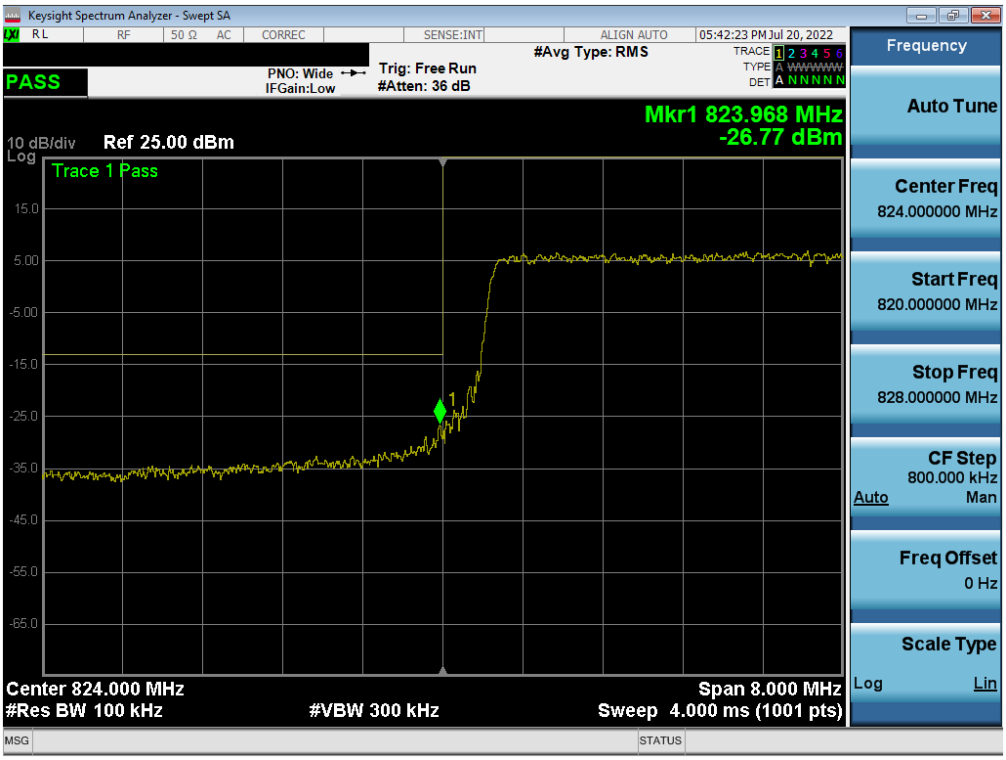
Plot 7-87. Upper BE Plot (LTE Band 26 - 3MHz QPSK – Full RB Configuration)



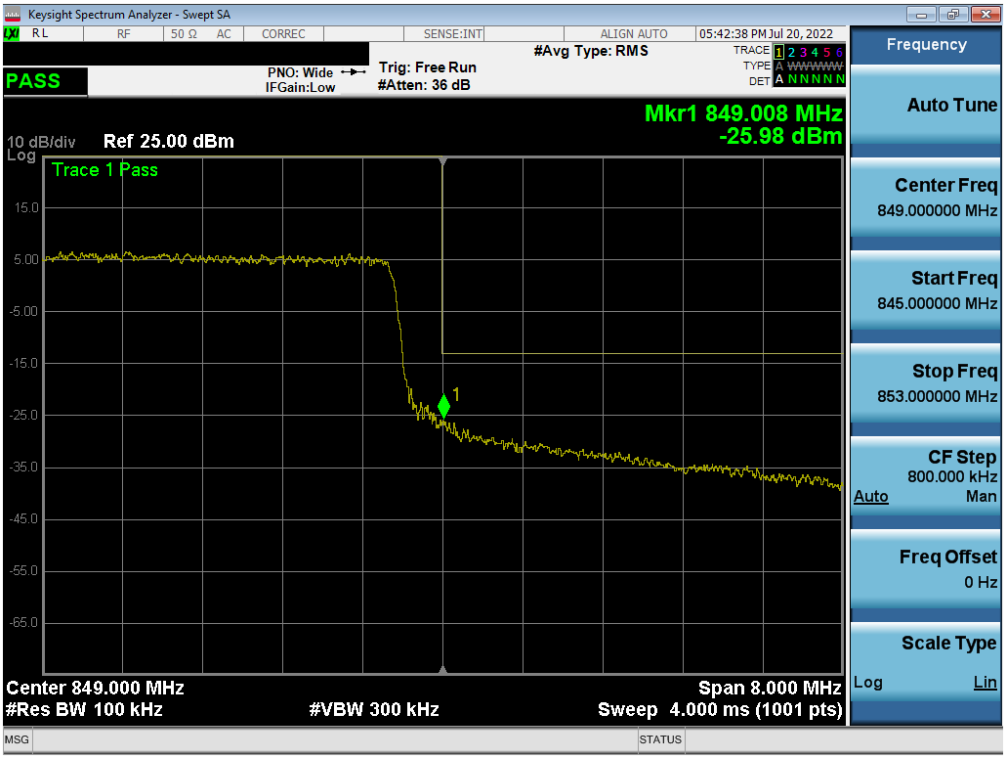
Plot 7-88. Lower BE Plot (LTE Band 26 - 5MHz QPSK – Full RB Configuration)



Plot 7-89. Upper BE Plot (LTE Band 26 - 5MHz QPSK – Full RB Configuration)

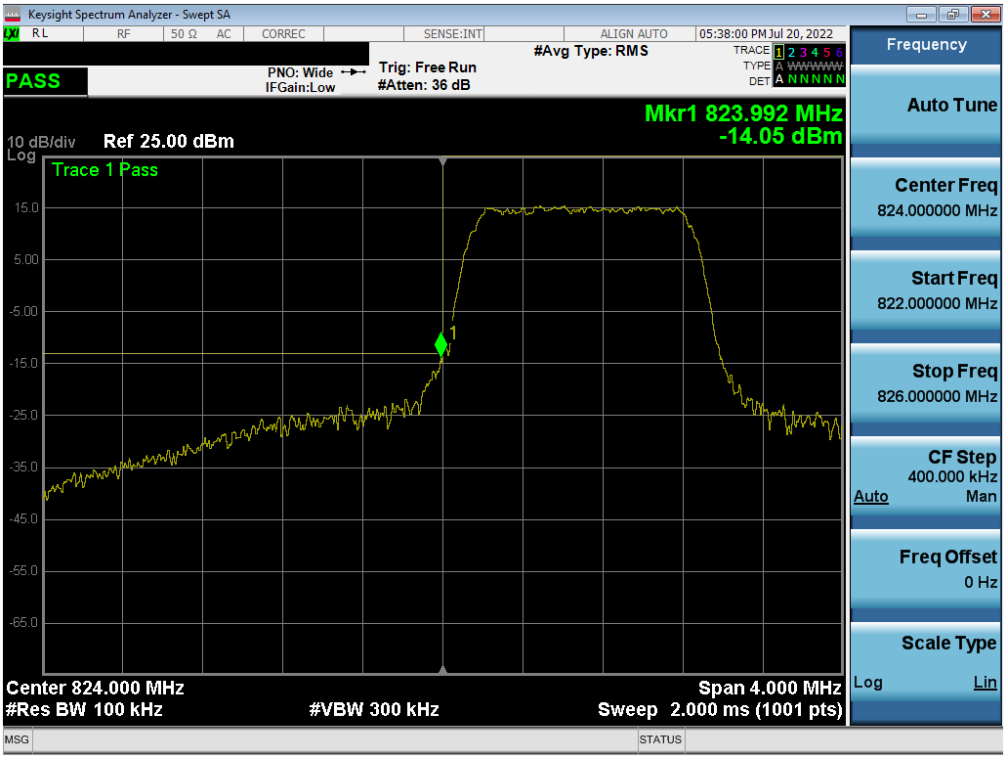


Plot 7-90. Lower BE Plot (LTE Band 26 - 10MHz QPSK – Full RB Configuration)

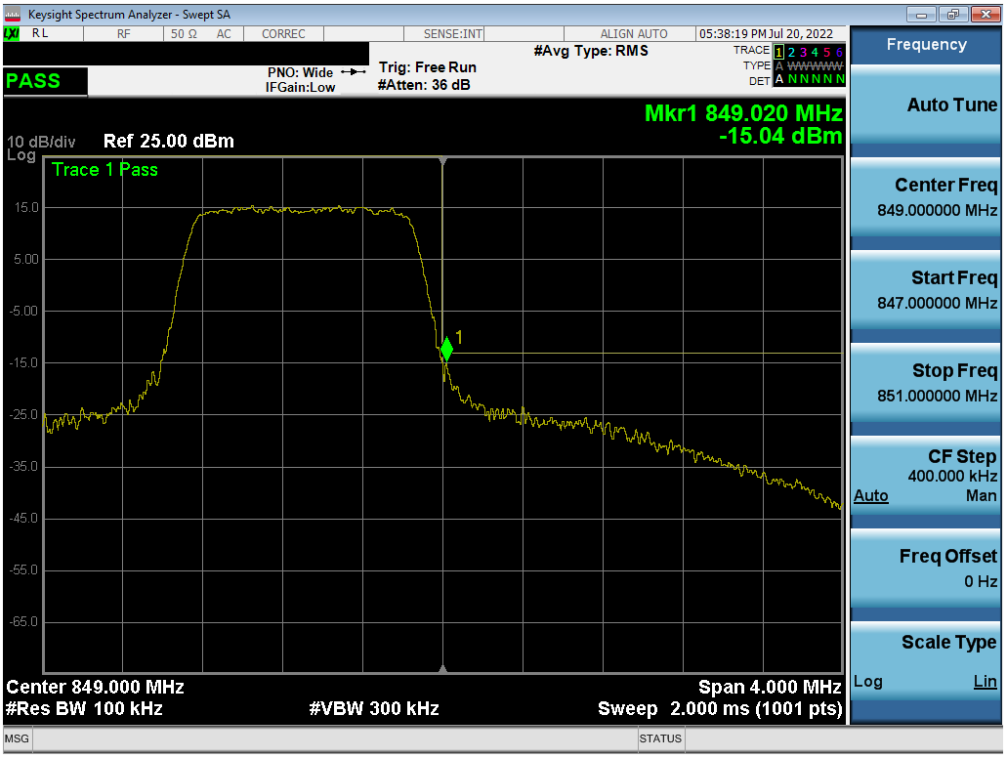


Plot 7-91. Upper BE Plot (LTE Band 26 - 10MHz QPSK – Full RB Configuration)

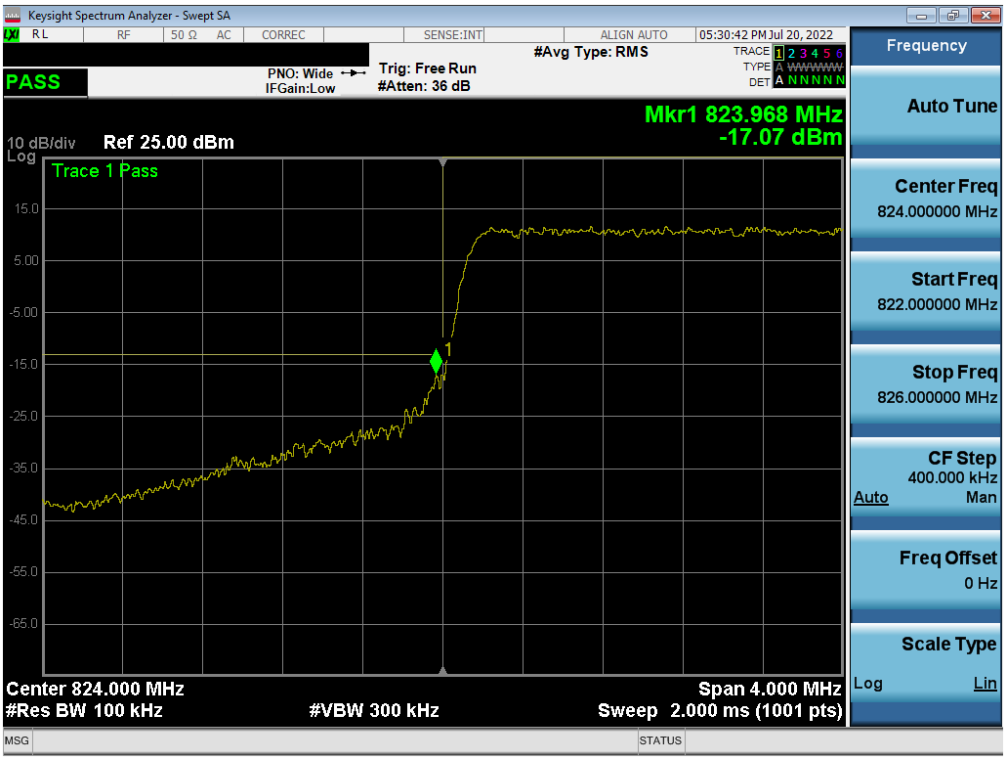
LTE Band 5



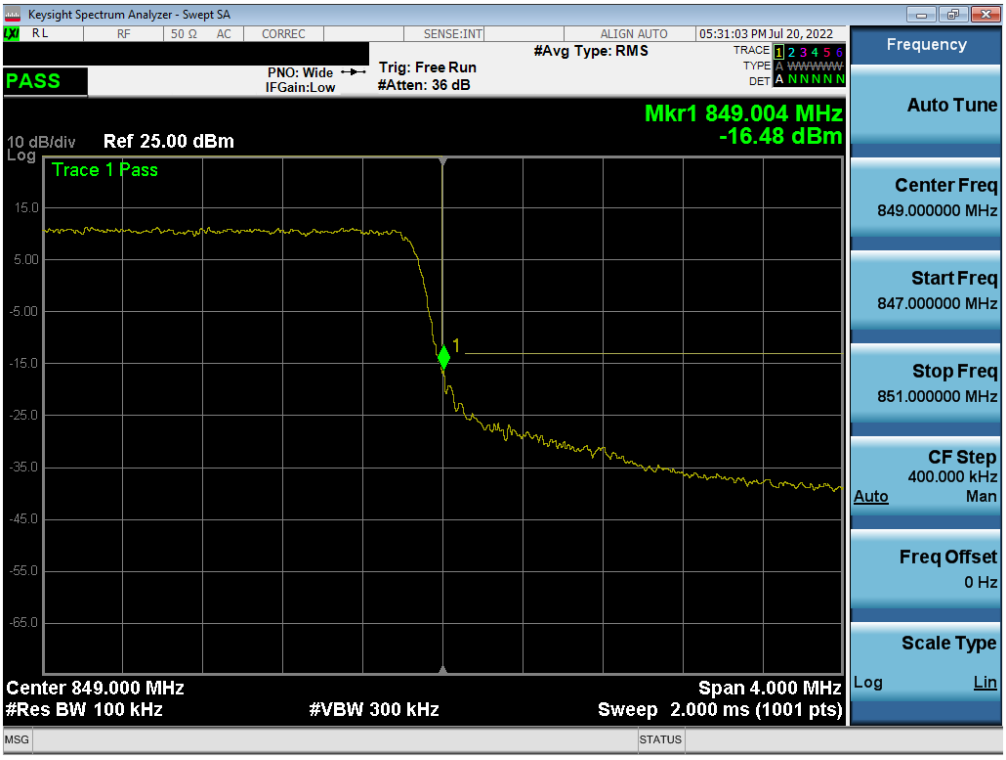
Plot 7-92. Lower BE Plot (LTE Band 5 – 1.4MHz QPSK – Full RB Configuration)



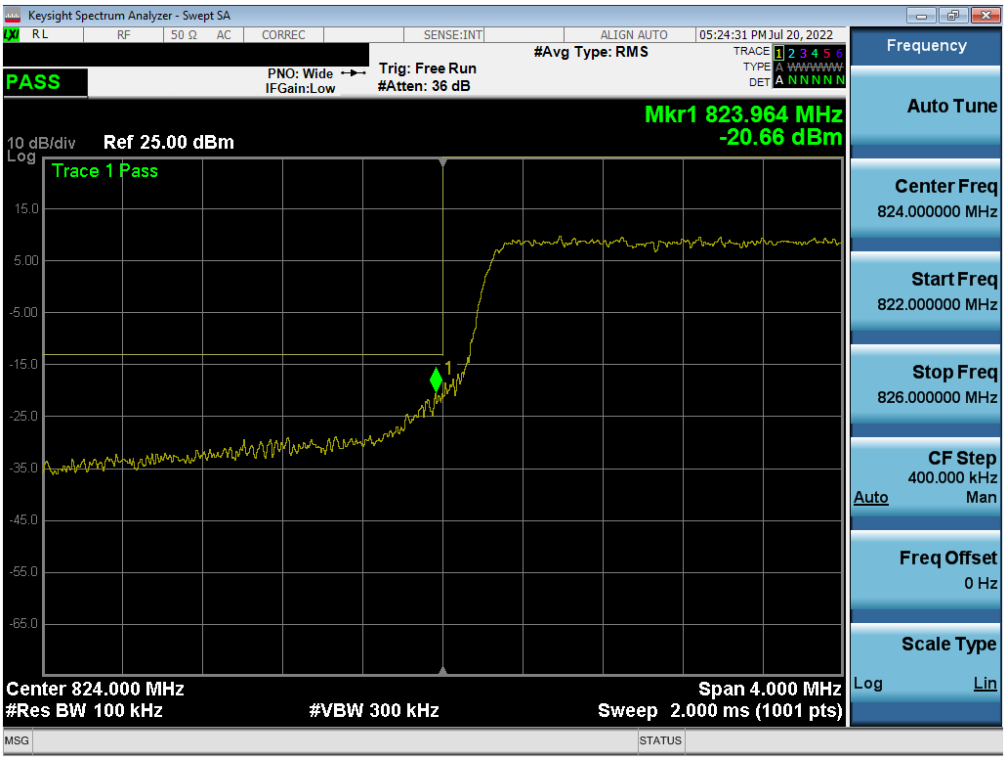
Plot 7-93. Upper BE Plot (LTE Band 5 – 1.4MHz QPSK – Full RB Configuration)



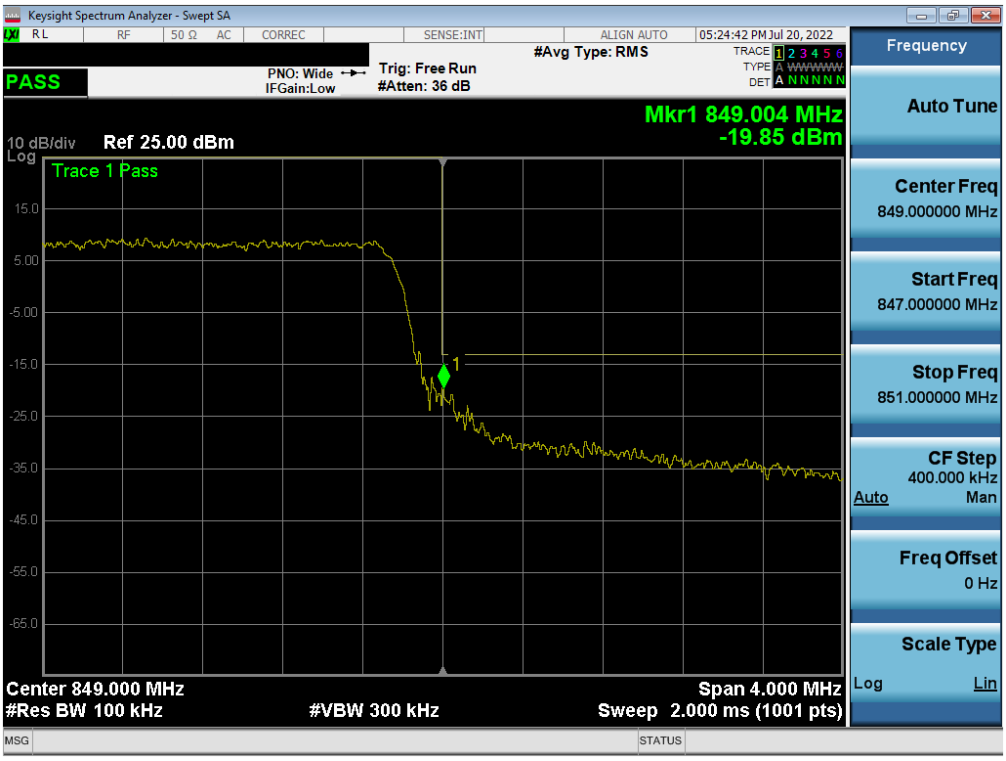
Plot 7-94. Lower BE Plot (LTE Band 5 - 3MHz QPSK – Full RB Configuration)



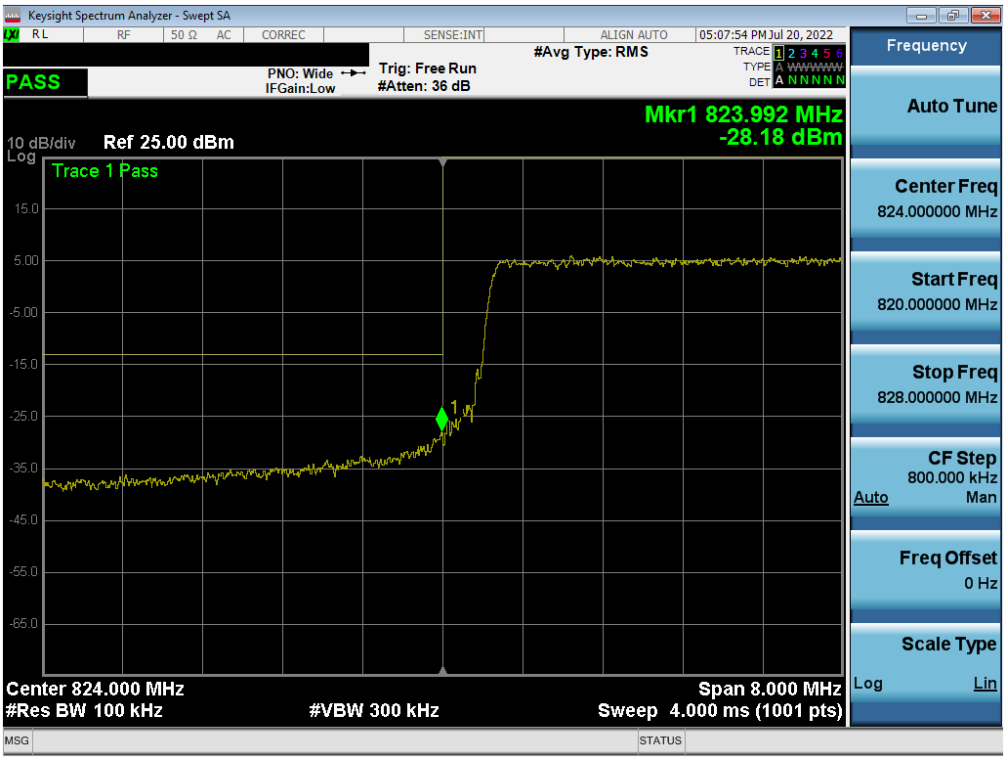
Plot 7-95. Upper BE Plot (LTE Band 5 - 3MHz QPSK – Full RB Configuration)



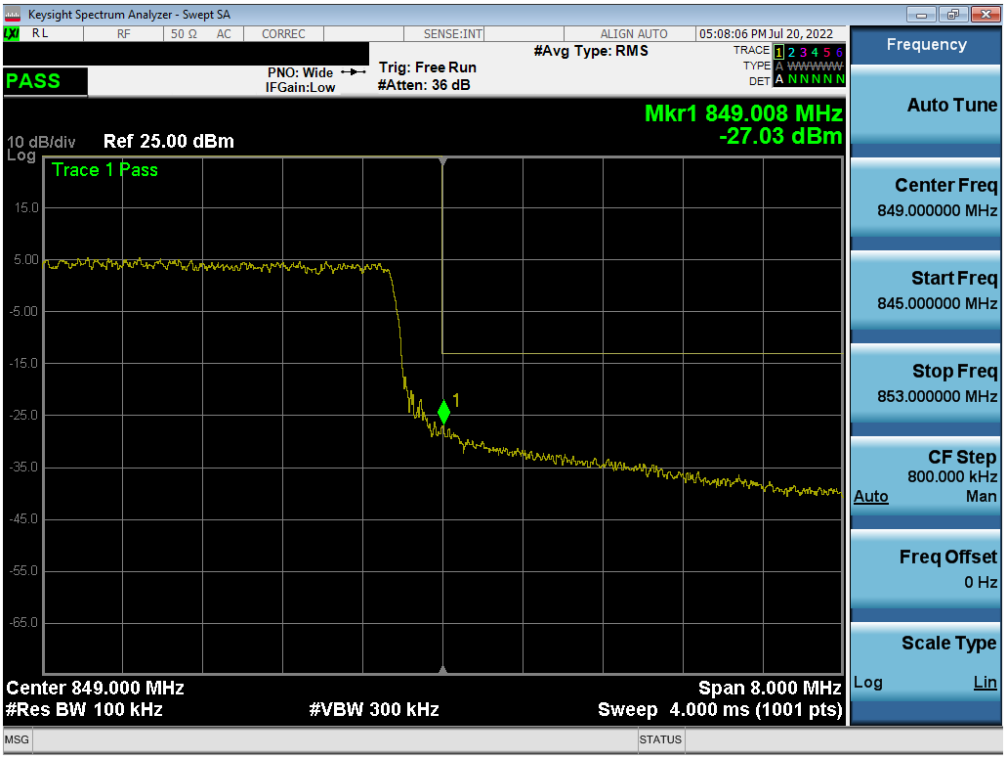
Plot 7-96. Lower BE Plot (LTE Band 5 - 5MHz QPSK – Full RB Configuration)



Plot 7-97. Upper BE Plot (LTE Band 5 - 5MHz QPSK – Full RB Configuration)

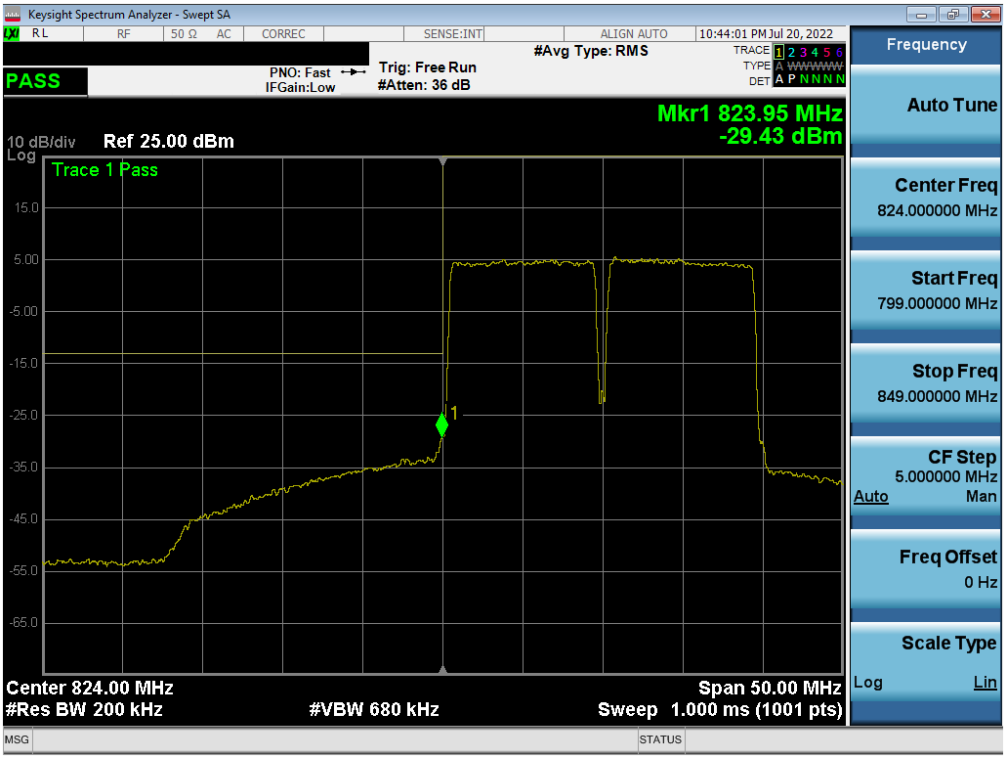


Plot 7-98. Lower BE Plot (LTE Band 5 - 10MHz QPSK – Full RB Configuration)

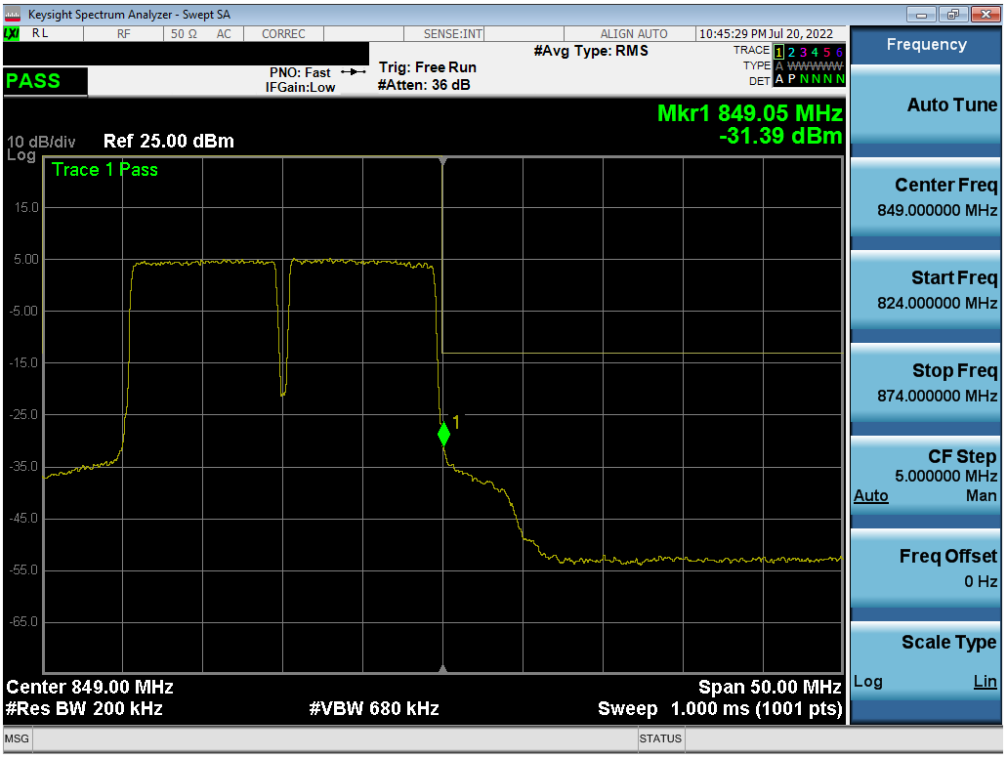


Plot 7-99. Upper BE Plot (LTE Band 5 - 10MHz QPSK – Full RB Configuration)

ULCA - LTE Band 5

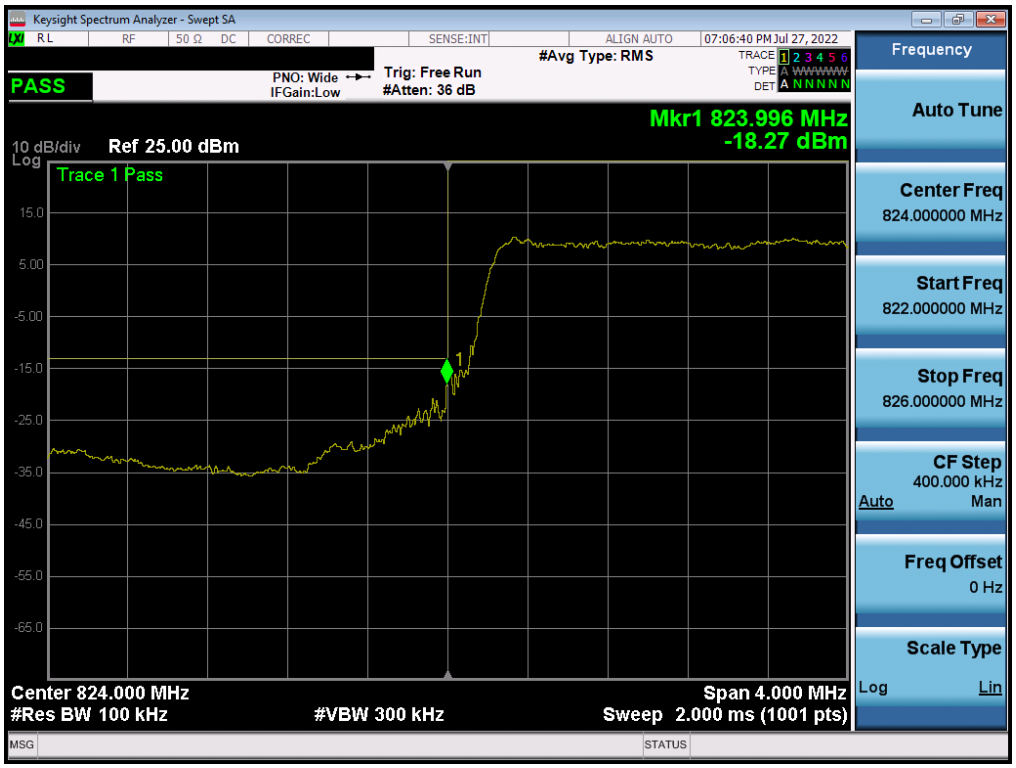


Plot 7-100. Lower BE Plot (ULCA – LTE Band 5 – (10 + 10)MHz QPSK – Full RB Configuration)



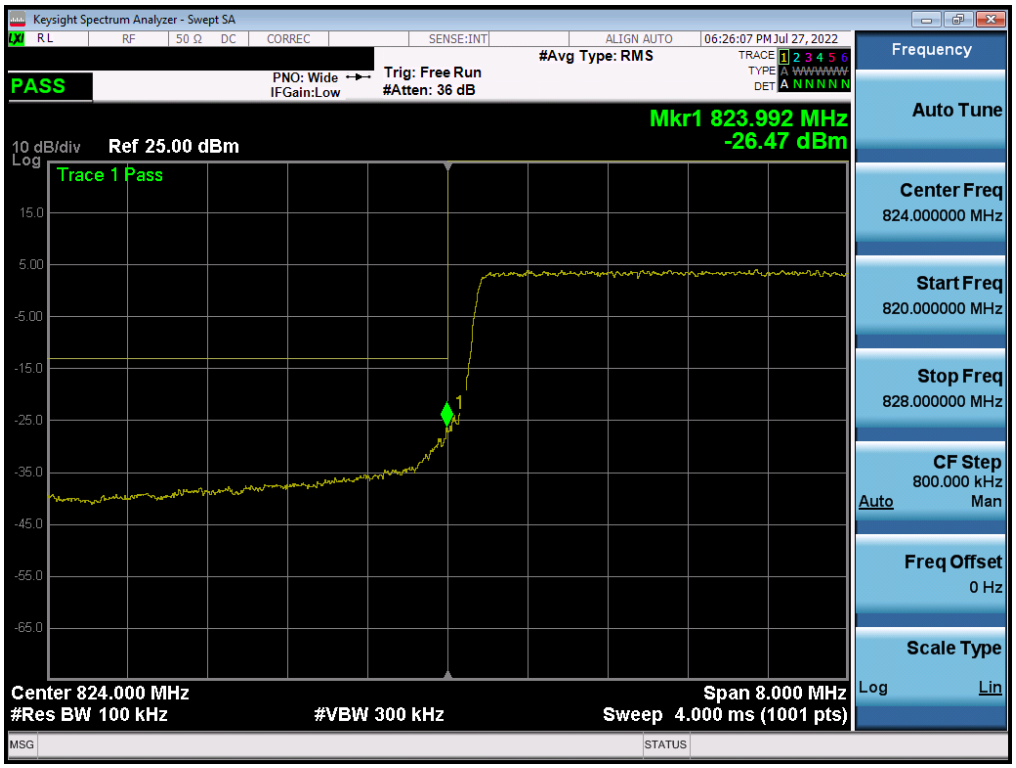
Plot 7-101. Upper BE Plot (ULCA – LTE Band 5 - (10 + 10)MHz QPSK – Full RB Configuration)

NR Band n26

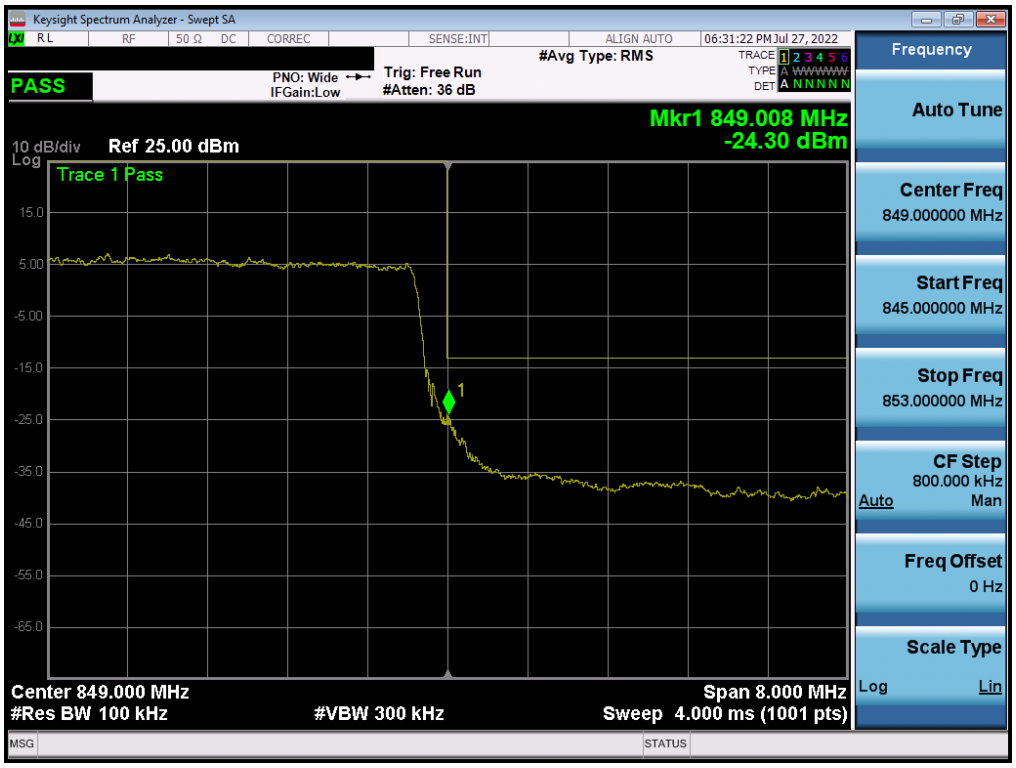


Plot 7-102. Lower BE Plot (NR Band n26 DFT-s-OFDM – 5.0MHz - Full RB)

Plot 7-103. Upper BE Plot (NR Band n26 DFT-s-OFDM – 5.0MHz - Full RB)



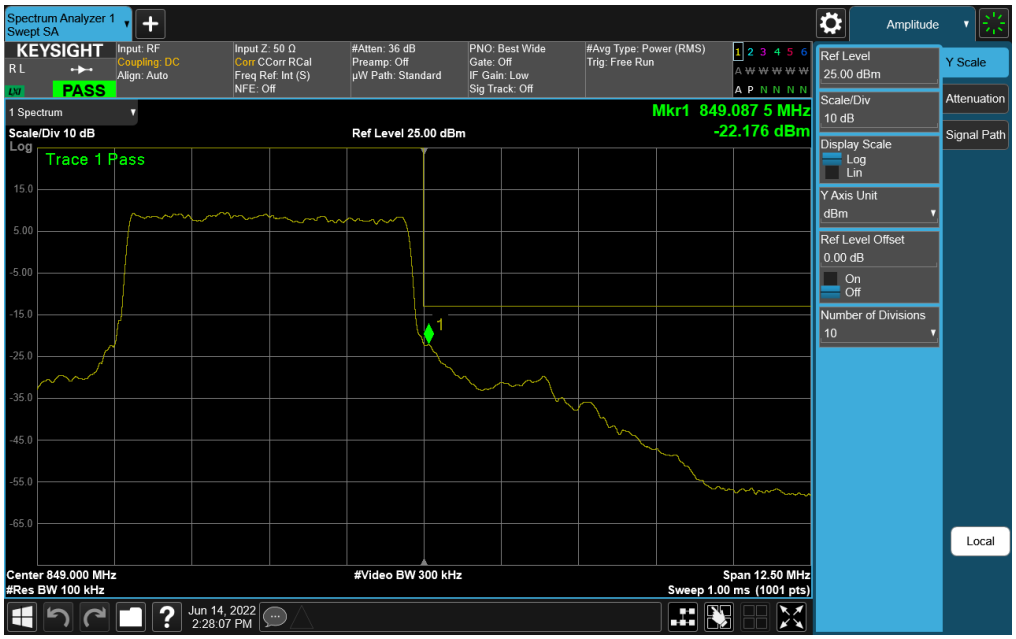
Plot 7-104. Lower BE Plot (NR Band n26 DFT-s-OFDM – 10.0MHz - Full RB)



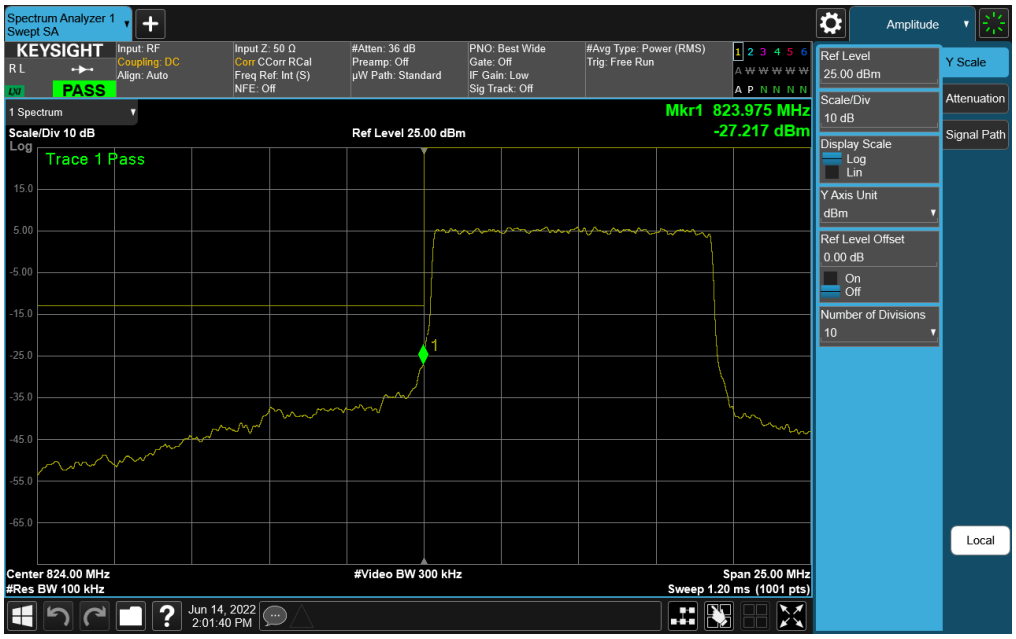
Plot 7-105. Upper BE Plot (NR Band n26 DFT-s-OFDM – 10.0MHz - Full RB)

NR Band n5

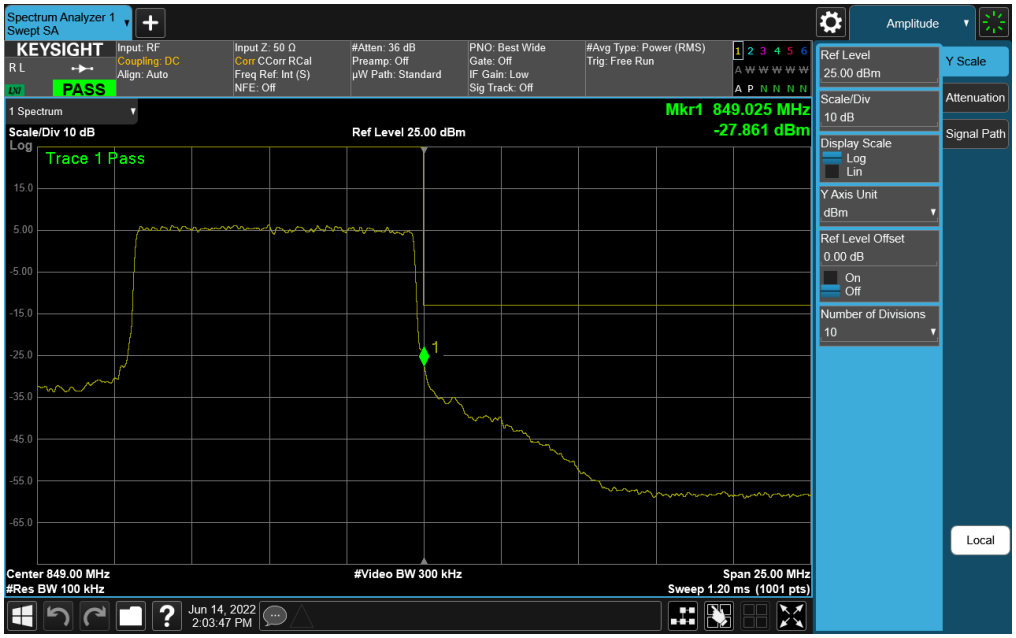
Plot 7-106. Lower BE Plot (NR Band n5 – 5.0MHz - Full RB)



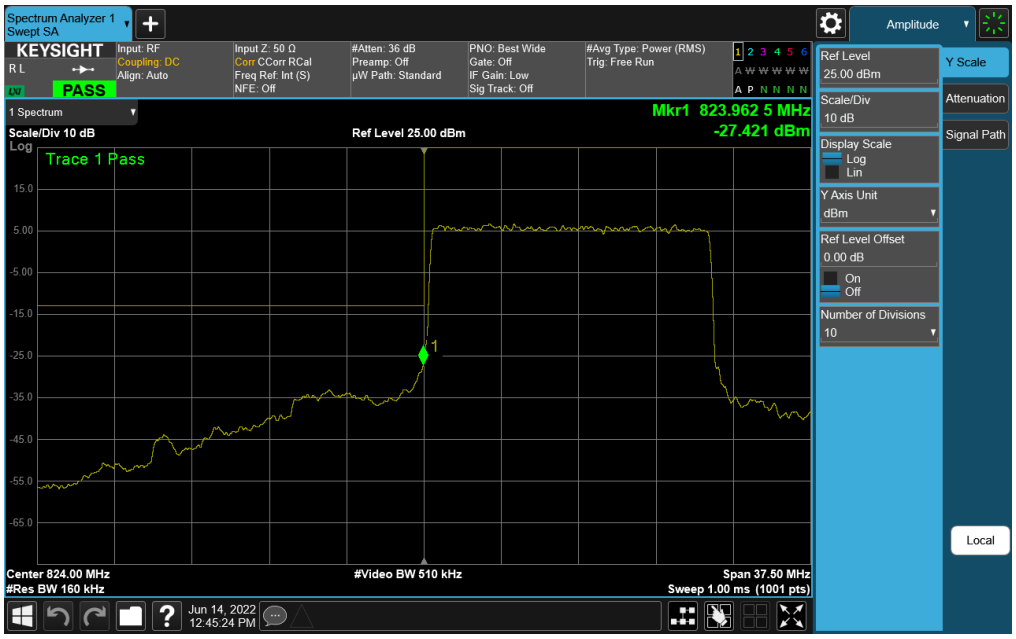
Plot 7-107. Upper BE Plot (NR Band n5 – 5.0MHz - Full RB)



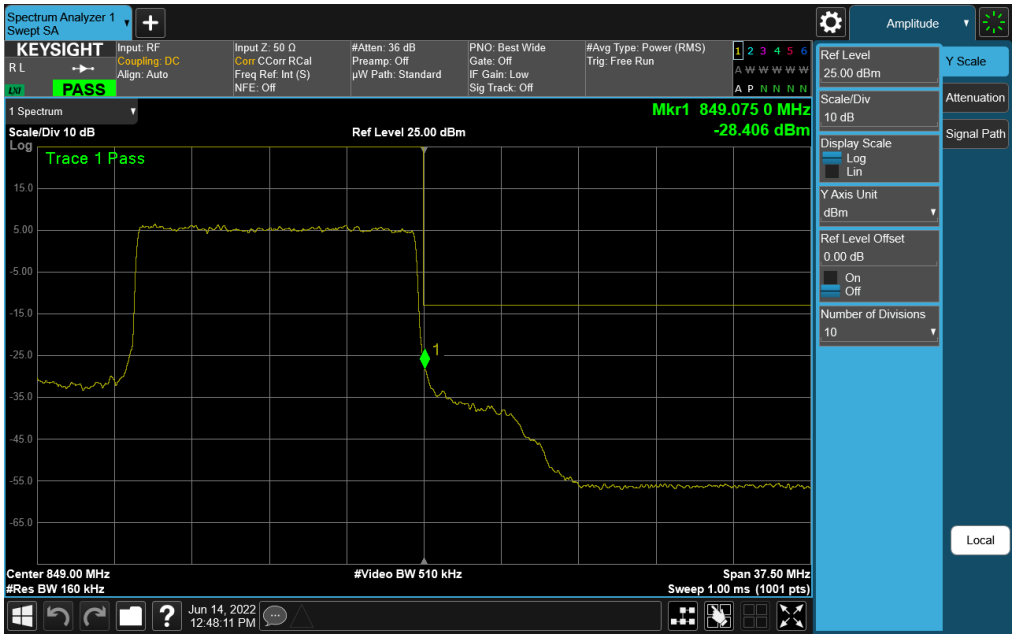
Plot 7-108. Lower BE Plot (NR Band n5 – 10.0MHz - Full RB)



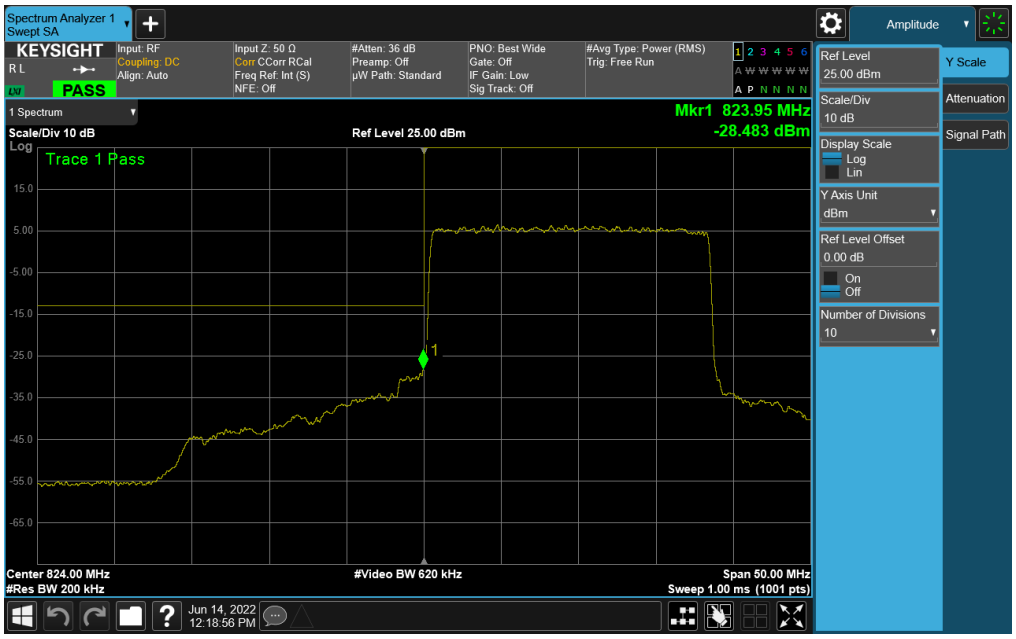
Plot 7-109. Upper BE Plot (NR Band n5 – 10.0MHz - Full RB)



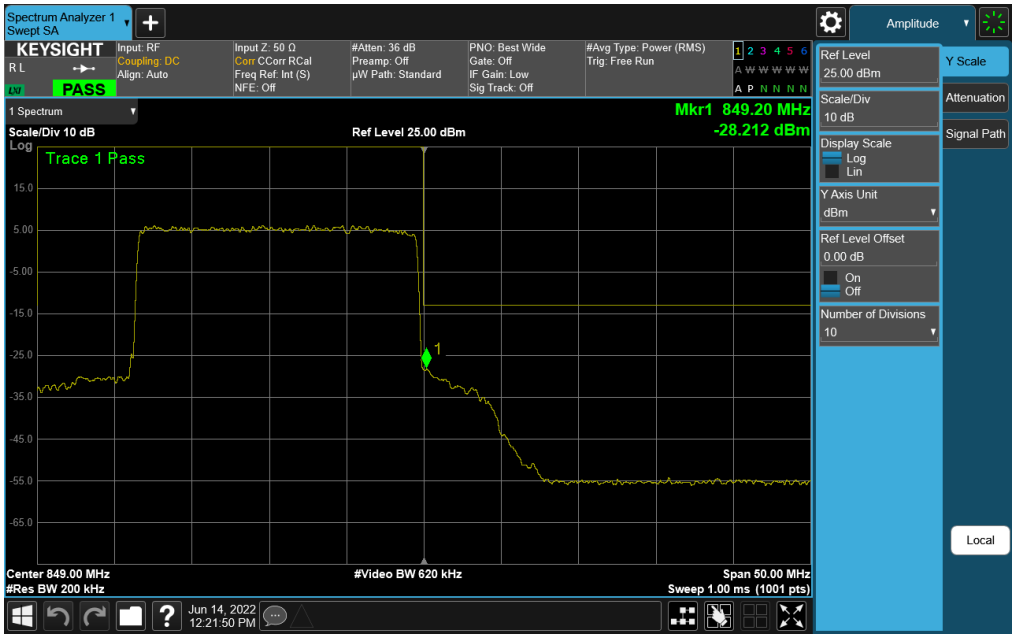
Plot 7-110. Lower BE Plot (NR Band n5 – 15.0MHz - Full RB)



Plot 7-111. Upper BE Plot (NR Band n5 – 15.0MHz - Full RB)



Plot 7-112. Lower BE Plot (NR Band n5 – 20.0MHz - Full RB)



Plot 7-113. Upper BE Plot (NR Band n5 – 20.0MHz - Full RB)

WCDMA Cell

Plot 7-114. Lower BE Plot (WCDMA Cell – Ch. 4132)

Plot 7-115. Upper BE Plot (WCDMA Cell – Ch. 4233)

7.5 Radiated Power (ERP/EIRP)

§22.913(a)(5)

Test Overview

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) 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 – Section 5.2.5.5

Test Settings

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

ERP/EIRP = PMeas – LC + GT

Where:

ERP/EIRP = Effective or Equivalent Isotropic Radiated Power, respectively (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) or dBi (EIRP)

Test Setup

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

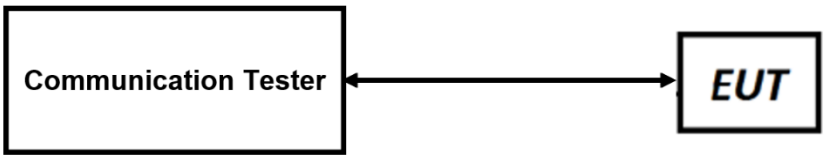


Figure 7-4. ERP/EIRP Measurement Setup

Test Notes:

1. The EUT was tested in all possible test configurations. The worst case emissions are reported with the EUT 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. Uplink carrier aggregation for LTE B5 is only supported in this EUT while operating in Power Class 3.

5. Conducted power measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device.

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

7.5.1 Antenna 3 – ERP/EIRP

LTE Band 26

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1.4 MHz	QPSK	824.7	-2.70	1 / 12	25.65	20.80	0.120	38.45	-17.65	22.95	0.197	40.61	-17.66
		836.5	-2.70	1 / 12	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		848.3	-2.70	1 / 0	25.67	20.82	0.121	38.45	-17.63	22.97	0.198	40.61	-17.64
	16-QAM	836.5	-2.70	1 / 12	24.90	**20.05**	0.101	38.45	-18.40	**22.20**	0.166	40.61	-18.41
	64-QAM	836.5	-2.70	1 / 12	23.96	**19.11**	0.081	38.45	-19.34	**21.26**	0.134	40.61	-19.35
	256-QAM	848.3	-2.70	1 / 0	21.89	**17.04**	0.051	38.45	-21.41	**19.19**	0.083	40.61	-21.42
3 MHz	QPSK	825.5	-2.70	1 / 12	25.53	20.68	0.117	38.45	-17.77	22.83	0.192	40.61	-17.78
		836.5	-2.70	1 / 12	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		847.5	-2.70	1 / 12	25.58	20.73	0.118	38.45	-17.72	22.88	0.194	40.61	-17.73
	16-QAM	825.5	-2.70	1 / 12	24.93	**20.08**	0.102	38.45	-18.37	**22.23**	0.167	40.61	-18.38
	64-QAM	825.5	-2.70	1 / 12	23.83	**18.98**	0.079	38.45	-19.47	**21.13**	0.130	40.61	-19.48
	256-QAM	847.5	-2.70	1 / 12	20.81	**15.96**	0.039	38.45	-22.49	**18.11**	0.065	40.61	-22.50
5 MHz	QPSK	826.5	-2.70	1 / 12	25.63	20.78	0.120	38.45	-17.67	22.93	0.196	40.61	-17.68
		836.5	-2.70	1 / 12	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		846.5	-2.70	1 / 12	25.40	20.55	0.114	38.45	-17.90	22.70	0.186	40.61	-17.91
	16-QAM	826.5	-2.70	1 / 12	24.80	**19.95**	0.099	38.45	-18.50	**22.10**	0.162	40.61	-18.51
	64-QAM	846.5	-2.70	1 / 0	24.12	**19.27**	0.085	38.45	-19.18	**21.42**	0.139	40.61	-19.19
	256-QAM	846.5	-2.70	1 / 0	20.68	**15.83**	0.038	38.45	-22.62	**17.98**	0.063	40.61	-22.63
10 MHz	QPSK	829.0	-2.70	1 / 12	25.60	20.75	0.119	38.45	-17.70	22.90	0.195	40.61	-17.71
		836.5	-2.70	1 / 0	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		844.0	-2.70	1 / 0	25.67	20.82	0.121	38.45	-17.63	22.97	0.198	40.61	-17.64
	16-QAM	829.0	-2.70	1 / 0	24.82	**19.97**	0.099	38.45	-18.48	**22.12**	0.163	40.61	-18.49
	64-QAM	836.5	-2.70	1 / 0	24.05	**19.20**	0.083	38.45	-19.25	**21.35**	0.136	40.61	-19.26
	256-QAM	844.0	-2.70	1 / 12	20.91	**16.06**	0.040	38.45	-22.39	**18.21**	0.066	40.61	-22.40

Table 7-2. Antenna 3 ERP/EIRP Data (LTE Band 26)

LTE Band 5

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1.4 MHz	QPSK	824.7	-2.70	1 / 0	25.65	20.80	0.120	38.45	-17.65	22.95	0.197	40.61	-17.66
		836.5	-2.70	1 / 3	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		848.3	-2.70	1 / 0	25.61	20.76	0.119	38.45	-17.69	22.91	0.195	40.61	-17.70
	16-QAM	824.7	-2.70	1 / 3	24.80	**19.95**	0.099	38.45	-18.50	**22.10**	0.162	40.61	-18.51
	64-QAM	824.7	-2.70	1 / 3	23.94	**19.09**	0.081	38.45	-19.36	**21.24**	0.133	40.61	-19.37
	256-QAM	824.7	-2.70	1 / 0	21.68	**16.83**	0.048	38.45	-21.62	**18.98**	0.079	40.61	-21.63
3 MHz	QPSK	825.5	-2.70	1 / 7	25.65	20.80	0.120	38.45	-17.65	22.95	0.197	40.61	-17.66
		836.5	-2.70	1 / 7	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		847.5	-2.70	1 / 7	25.67	20.82	0.121	38.45	-17.63	22.97	0.198	40.61	-17.64
	16-QAM	825.5	-2.70	1 / 0	24.89	**20.04**	0.101	38.45	-18.41	**22.19**	0.166	40.61	-18.42
	64-QAM	825.5	-2.70	1 / 7	24.33	**19.48**	0.089	38.45	-18.97	**21.63**	0.146	40.61	-18.98
	256-QAM	825.5	-2.70	1 / 0	21.64	**16.79**	0.048	38.45	-21.66	**18.94**	0.078	40.61	-21.67
5 MHz	QPSK	826.5	-2.70	1 / 12	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		836.5	-2.70	1 / 0	25.65	20.80	0.120	38.45	-17.65	22.95	0.197	40.61	-17.66
		846.5	-2.70	1 / 0	25.59	20.74	0.119	38.45	-17.71	22.89	0.195	40.61	-17.72
	16-QAM	826.5	-2.70	1 / 0	24.70	**19.85**	0.097	38.45	-18.60	**22.00**	0.158	40.61	-18.61
	64-QAM	836.5	-2.70	1 / 24	23.78	**18.93**	0.078	38.45	-19.52	**21.08**	0.128	40.61	-19.53
	256-QAM	836.5	-2.70	1 / 0	21.65	**16.80**	0.048	38.45	-21.65	**18.95**	0.079	40.61	-21.66
		846.5	-2.70	1 / 0	21.65	**16.80**	0.048	38.45	-21.65	**18.95**	0.079	40.61	-21.66
10 MHz	QPSK	829.0	-2.70	1 / 0	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		836.5	-2.70	1 / 0	25.64	20.79	0.120	38.45	-17.66	22.94	0.197	40.61	-17.67
		844.0	-2.70	1 / 0	25.60	20.75	0.119	38.45	-17.70	22.90	0.195	40.61	-17.71
	16-QAM	844.0	-2.70	1 / 0	24.72	**19.87**	0.097	38.45	-18.58	**22.02**	0.159	40.61	-18.59
	64-QAM	836.5	-2.70	1 / 49	23.91	**19.06**	0.081	38.45	-19.39	**21.21**	0.132	40.61	-19.40
	256-QAM	829.0	-2.70	1 / 0	21.71	**16.86**	0.049	38.45	-21.59	**19.01**	0.080	40.61	-21.60

Table 7-3. Antenna 3 ERP/EIRP Data (LTE Band 5)

NR Band n5

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
5 MHz	π/2 BPSK	826.5	-2.70	1 / 1	25.35	**20.50**	0.112	38.45	-17.95	**22.65**	0.184	40.61	-17.95
		836.5	-2.70	1 / 23	25.21	20.36	0.109	38.45	-18.09	22.51	0.178	40.61	-18.09
		846.5	-2.70	1 / 23	24.50	19.65	0.092	38.45	-18.80	21.80	0.152	40.61	-18.80
	QPSK	826.5	-2.70	1 / 23	25.40	**20.55**	0.113	38.45	-17.91	**22.70**	0.186	40.61	-17.91
		836.5	-2.70	1 / 12	25.05	20.20	0.105	38.45	-18.25	22.35	0.172	40.61	-18.26
		846.5	-2.70	1 / 12	24.74	19.89	0.097	38.45	-18.57	22.04	0.160	40.61	-18.57
	16-QAM	836.5	-2.70	1 / 12	24.27	**19.42**	0.087	38.45	-19.03	**21.57**	0.143	40.61	-19.04
	64-QAM	826.5	-2.70	1 / 23	22.84	**17.99**	0.063	38.45	-20.46	**20.14**	0.103	40.61	-20.46
	256-QAM	836.5	-2.70	1 / 75	20.67	**15.82**	0.038	38.45	-22.63	**17.97**	0.063	40.61	-22.64
10 MHz	π/2 BPSK	829.0	-2.70	1 / 25	25.09	20.24	0.106	38.45	-18.21	22.39	0.174	40.61	-18.21
		836.5	-2.70	1 / 25	25.24	**20.39**	0.109	38.45	-18.06	**22.54**	0.180	40.61	-18.06
		844.0	-2.70	1 / 1	25.08	20.23	0.105	38.45	-18.22	22.38	0.173	40.61	-18.23
	QPSK	829.0	-2.70	1 / 25	25.02	**20.17**	0.104	38.45	-18.28	**22.32**	0.171	40.61	-18.28
		836.5	-2.70	1 / 25	24.69	19.84	0.096	38.45	-18.62	21.99	0.158	40.61	-18.62
		844.0	-2.70	1 / 48	24.64	19.79	0.095	38.45	-18.66	21.94	0.156	40.61	-18.67
	16-QAM	829.0	-2.70	1 / 25	24.50	**19.65**	0.092	38.45	-18.80	**21.80**	0.151	40.61	-18.81
	64-QAM	836.5	-2.70	1 / 25	22.91	**18.06**	0.064	38.45	-20.39	**20.21**	0.105	40.61	-20.40
	256-QAM	829.0	-2.70	1 / 1	20.60	**15.75**	0.038	38.45	-22.70	**17.90**	0.062	40.61	-22.71
15 MHz	π/2 BPSK	831.5	-2.70	1 / 73	24.97	20.12	0.103	38.45	-18.33	22.27	0.169	40.61	-18.33
		836.5	-2.70	1 / 1	25.12	**20.27**	0.106	38.45	-18.18	**22.42**	0.174	40.61	-18.19
		841.5	-2.70	1 / 1	24.85	20.00	0.100	38.45	-18.45	22.15	0.164	40.61	-18.45
	QPSK	831.5	-2.70	1 / 75	25.32	**20.47**	0.111	38.45	-17.98	**22.62**	0.183	40.61	-17.99
		836.5	-2.70	1 / 1	25.01	20.16	0.104	38.45	-18.29	22.31	0.170	40.61	-18.29
		841.5	-2.70	1 / 75	25.07	20.22	0.105	38.45	-18.23	22.37	0.172	40.61	-18.24
	16-QAM	836.5	-2.70	1 / 1	24.49	**19.64**	0.092	38.45	-18.81	**21.79**	0.151	40.61	-18.82
	64-QAM	831.5	-2.70	1 / 1	22.89	**18.04**	0.064	38.45	-20.41	**20.19**	0.104	40.61	-20.42
	256-QAM	831.5	-2.70	1 / 1	20.99	**16.14**	0.041	38.45	-22.31	**18.29**	0.067	40.61	-22.32
20 MHz	π/2 BPSK	834.0	-2.70	1 / 1	25.03	**20.18**	0.104	38.45	-18.27	**22.33**	0.171	40.61	-18.27
		836.5	-2.70	1 / 1	25.01	20.16	0.104	38.45	-18.29	22.31	0.170	40.61	-18.30
		839.0	-2.70	1 / 50	24.70	19.85	0.097	38.45	-18.60	22.00	0.159	40.61	-18.61
	QPSK	834.0	-2.70	1 / 50	25.33	**20.48**	0.112	38.45	-17.97	**22.63**	0.183	40.61	-17.98
		836.5	-2.70	1 / 1	25.13	20.28	0.107	38.45	-18.17	22.43	0.175	40.61	-18.18
		839.0	-2.70	1 / 1	24.80	19.95	0.099	38.45	-18.50	22.10	0.162	40.61	-18.51
	16-QAM	836.5	-2.70	1 / 50	24.42	**19.57**	0.090	38.45	-18.89	**21.72**	0.148	40.61	-18.89
	64-QAM	834.0	-2.70	1 / 1	23.14	**18.29**	0.067	38.45	-20.17	**20.44**	0.111	40.61	-20.17
	256-QAM	836.5	-2.70	1 / 1	20.62	**15.77**	0.038	38.45	-22.68	**17.92**	0.062	40.61	-22.68

Table 7-4. Antenna 3 ERP/EIRP Data (NR Band n5)

NR Band n26

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
5 MHz	π/2 BPSK	826.5	-2.70	1 / 1	25.57	20.72	0.118	38.45	-17.73	22.87	0.194	40.61	-17.74
		836.5	-2.70	1 / 1	25.69	**20.84**	0.121	38.45	-17.61	**22.99**	0.199	40.61	-17.62
		846.5	-2.70	1 / 1	25.44	20.59	0.115	38.45	-17.86	22.74	0.188	40.61	-17.87
	QPSK	826.5	-2.70	1 / 12	25.62	20.77	0.119	38.45	-17.68	22.92	0.196	40.61	-17.69
		836.5	-2.70	1 / 1	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		846.5	-2.70	1 / 12	25.55	20.70	0.117	38.45	-17.75	22.85	0.193	40.61	-17.76
	16-QAM	826.5	-2.70	1 / 1	24.70	**19.85**	0.097	38.45	-18.60	**22.00**	0.158	40.61	-18.61
	64-QAM	846.5	-2.70	1 / 12	23.69	**18.84**	0.077	38.45	-19.61	**20.99**	0.126	40.61	-19.62
	256-QAM	846.5	-2.70	1 / 75	20.63	**15.78**	0.038	38.45	-22.67	**17.93**	0.062	40.61	-22.68
10 MHz	π/2 BPSK	829.0	-2.70	1 / 25	25.69	20.84	0.121	38.45	-17.61	22.99	0.199	40.61	-17.62
		836.5	-2.70	1 / 1	25.70	**20.85**	0.122	38.45	-17.60	**23.00**	0.200	40.61	-17.61
		844.0	-2.70	1 / 25	25.63	20.78	0.120	38.45	-17.67	22.93	0.196	40.61	-17.68
	QPSK	829.0	-2.70	1 / 1	25.65	**20.80**	0.120	38.45	-17.65	**22.95**	0.197	40.61	-17.66
		836.5	-2.70	1 / 25	25.61	20.76	0.119	38.45	-17.69	22.91	0.195	40.61	-17.70
		844.0	-2.70	1 / 48	25.64	20.79	0.120	38.45	-17.66	22.94	0.197	40.61	-17.67
	16-QAM	844.0	-2.70	1 / 48	24.70	**19.85**	0.097	38.45	-18.60	**22.00**	0.158	40.61	-18.61
	64-QAM	844.0	-2.70	1 / 25	23.73	**18.88**	0.077	38.45	-19.57	**21.03**	0.127	40.61	-19.58
	256-QAM	836.5	-2.70	1 / 25	20.71	**15.86**	0.039	38.45	-22.59	**18.01**	0.063	40.61	-22.60

Table 7-5. Antenna 3 ERP/EIRP Data (NR Band n26)

ULCA - LTE Band 5

Power State	Band	Bandwidth (PCC + SCC)	PCC					SCC					ULCA Tx. Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
			Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset										
Max	LTE B5	10MHz + 10MHz	QPSK	20450	829.0	1	49	QPSK	20549	838.9	1	0	25.61	-2.70	**20.76**	**0.119**	38.45	-17.69	**22.91**	**0.195**	40.61	-17.70
				20475	831.5	1	49		20574	841.4	1	0	25.41	-2.70	20.56	0.114	38.45	-17.89	22.71	0.187	40.61	-17.90
				20600	844.0	1	0		20501	834.1	1	49	25.61	-2.70	**20.76**	**0.119**	38.45	-17.69	**22.91**	**0.195**	40.61	-17.70
			QPSK	20450	829	50	0	QPSK	20549	838.9	50	0	23.75	-2.70	18.90	0.078	38.45	-19.55	21.05	0.127	40.61	-19.56
			16-QAM	20450	829	50	0	16-QAM	20549	838.9	50	0	22.9	-2.70	18.05	0.064	38.45	-20.40	20.20	0.105	40.61	-20.41
			64-QAM	20450	829	50	0	64-QAM	20549	838.9	50	0	22.82	-2.70	17.97	0.063	38.45	-20.48	20.12	0.103	40.61	-20.49
			256-QAM	20450	829	50	0	256-QAM	20549	838.9	50	0	20.72	-2.70	15.87	0.039	38.45	-22.58	18.02	0.063	40.61	-22.59

Table 7-6. Antenna 3 ERP/EIRP Data (ULCA LTE Band 5)

WCDMA Cell

Frequency [MHz]	Mode	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
826.40	WCDMA850	25.68	-2.70	20.83	0.121	38.45	-17.62	22.98	0.199	40.61	-17.63
836.60	WCDMA850	25.65	-2.70	20.80	0.120	38.45	-17.65	22.95	0.197	40.61	-17.66
846.60	WCDMA850	25.70	-2.70	**20.85**	**0.122**	38.45	-17.60	**23.00**	**0.200**	40.61	-17.61

Table 7-7. Antenna 3 ERP/EIRP Data (WCDMA Cell)

7.5.2 Antenna 1 – ERP/EIRP

LTE Band 26

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1.4 MHz	QPSK	824.7	-2.00	1 / 0	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
		836.5	-2.00	1 / 12	23.84	19.69	0.093	38.45	-18.76	21.84	0.153	40.61	-18.77
		848.3	-2.00	1 / 0	23.89	19.74	0.094	38.45	-18.71	21.89	0.155	40.61	-18.72
	16-QAM	836.5	-2.00	1 / 24	22.89	**18.74**	0.075	38.45	-19.71	**20.89**	0.123	40.61	-19.72
	64-QAM	824.7	-2.00	1 / 12	22.13	**17.98**	0.063	38.45	-20.47	**20.13**	0.103	40.61	-20.48
	256-QAM	836.5	-2.00	1 / 12	19.18	**15.03**	0.032	38.45	-23.42	**17.18**	0.052	40.61	-23.43
3 MHz	QPSK	825.5	-2.00	1 / 12	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
		836.5	-2.00	1 / 12	23.78	19.63	0.092	38.45	-18.82	21.78	0.151	40.61	-18.83
		847.5	-2.00	1 / 12	23.78	19.63	0.092	38.45	-18.82	21.78	0.151	40.61	-18.83
	16-QAM	847.5	-2.00	1 / 12	23.22	**19.07**	0.081	38.45	-19.38	**21.22**	0.132	40.61	-19.39
	64-QAM	836.5	-2.00	1 / 12	22.16	**18.01**	0.063	38.45	-20.44	**20.16**	0.104	40.61	-20.45
	256-QAM	825.5	-2.00	1 / 12	19.20	**15.05**	0.032	38.45	-23.40	**17.20**	0.052	40.61	-23.41
5 MHz	QPSK	826.5	-2.00	1 / 12	23.84	19.69	0.093	38.45	-18.76	21.84	0.153	40.61	-18.77
		836.5	-2.00	1 / 12	23.85	19.70	0.093	38.45	-18.75	21.85	0.153	40.61	-18.76
		846.5	-2.00	1 / 12	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
	16-QAM	846.5	-2.00	1 / 12	23.04	**18.89**	0.077	38.45	-19.56	**21.04**	0.127	40.61	-19.57
	64-QAM	836.5	-2.00	1 / 24	22.14	**17.99**	0.063	38.45	-20.46	**20.14**	0.103	40.61	-20.47
	256-QAM	846.5	-2.00	1 / 12	19.08	**14.93**	0.031	38.45	-23.52	**17.08**	0.051	40.61	-23.53
10 MHz	QPSK	829.0	-2.00	1 / 12	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
		836.5	-2.00	1 / 0	23.77	19.62	0.092	38.45	-18.83	21.77	0.150	40.61	-18.84
		844.0	-2.00	1 / 0	23.78	19.63	0.092	38.45	-18.82	21.78	0.151	40.61	-18.83
	16-QAM	844.0	-2.00	1 / 12	23.15	**19.00**	0.079	38.45	-19.45	**21.15**	0.130	40.61	-19.46
	64-QAM	829.0	-2.00	1 / 12	22.74	**18.59**	0.072	38.45	-19.86	**20.74**	0.119	40.61	-19.87
	256-QAM	836.5	-2.00	1 / 12	19.26	**15.11**	0.032	38.45	-23.34	**17.26**	0.053	40.61	-23.35

Table 7-8. Antenna 1 ERP/EIRP Data (LTE Band 26)

LTE Band 5

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1.4 MHz	QPSK	824.7	-2.00	1 / 0	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
		836.5	-2.00	1 / 3	23.87	19.72	0.094	38.45	-18.73	21.87	0.154	40.61	-18.74
		848.3	-2.00	1 / 3	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
	16-QAM	848.3	-2.00	1 / 3	22.93	**18.78**	0.076	38.45	-19.67	**20.93**	0.124	40.61	-19.68
	64-QAM	848.3	-2.00	1 / 3	22.02	**17.87**	0.061	38.45	-20.58	**20.02**	0.100	40.61	-20.59
	256-QAM	848.3	-2.00	1 / 3	18.99	**14.84**	0.030	38.45	-23.61	**16.99**	0.050	40.61	-23.62
3 MHz	QPSK	825.5	-2.00	1 / 7	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
		836.5	-2.00	1 / 7	23.79	19.64	0.092	38.45	-18.81	21.79	0.151	40.61	-18.82
		847.5	-2.00	1 / 7	23.67	19.52	0.090	38.45	-18.93	21.67	0.147	40.61	-18.94
	16-QAM	847.5	-2.00	1 / 7	23.13	**18.98**	0.079	38.45	-19.47	**21.13**	0.130	40.61	-19.48
	64-QAM	836.5	-2.00	1 / 7	22.23	**18.08**	0.064	38.45	-20.37	**20.23**	0.105	40.61	-20.38
	256-QAM	825.5	-2.00	1 / 7	19.26	**15.11**	0.032	38.45	-23.34	**17.26**	0.053	40.61	-23.35
5 MHz	QPSK	826.5	-2.00	1 / 12	23.70	19.55	0.090	38.45	-18.90	21.70	0.148	40.61	-18.91
		836.5	-2.00	1 / 12	23.63	19.48	0.089	38.45	-18.97	21.63	0.146	40.61	-18.98
		846.5	-2.00	1 / 12	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
	16-QAM	836.5	-2.00	1 / 12	22.98	**18.83**	0.076	38.45	-19.62	**20.98**	0.125	40.61	-19.63
	64-QAM	846.5	-2.00	1 / 12	21.80	**17.65**	0.058	38.45	-20.80	**19.80**	0.095	40.61	-20.81
	256-QAM	836.5	-2.00	1 / 24	18.97	**14.82**	0.030	38.45	-23.63	**16.97**	0.050	40.61	-23.64
10 MHz	QPSK	829.0	-2.00	1 / 0	23.68	19.53	0.090	38.45	-18.92	21.68	0.147	40.61	-18.93
		836.5	-2.00	1 / 0	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
		844.0	-2.00	1 / 0	23.77	19.62	0.092	38.45	-18.83	21.77	0.150	40.61	-18.84
	16-QAM	829.0	-2.00	1 / 0	23.12	**18.97**	0.079	38.45	-19.48	**21.12**	0.129	40.61	-19.49
	64-QAM	829.0	-2.00	1 / 0	22.49	**18.34**	0.068	38.45	-20.11	**20.49**	0.112	40.61	-20.12
	256-QAM	829.0	-2.00	1 / 0	19.26	**15.11**	0.032	38.45	-23.34	**17.26**	0.053	40.61	-23.35

Table 7-9. Antenna 1 ERP/EIRP Data (LTE Band 5)

NR Band n5

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
5 MHz	π/2 BPSK	826.5	-2.00	1 / 1	23.53	**19.38**	0.087	38.45	-19.07	**21.53**	0.142	40.61	-19.08
		836.5	-2.00	1 / 1	23.42	19.27	0.084	38.45	-19.18	21.42	0.139	40.61	-19.19
		846.5	-2.00	1 / 1	22.98	18.83	0.076	38.45	-19.63	20.98	0.125	40.61	-19.63
	QPSK	826.5	-2.00	1 / 1	23.32	19.17	0.083	38.45	-19.29	21.32	0.135	40.61	-19.29
		836.5	-2.00	1 / 1	23.37	**19.22**	0.084	38.45	-19.23	**21.37**	0.137	40.61	-19.24
		846.5	-2.00	1 / 12	23.14	18.99	0.079	38.45	-19.46	21.14	0.130	40.61	-19.46
	16-QAM	826.5	-2.00	1 / 23	22.83	**18.68**	0.074	38.45	-19.78	**20.83**	0.121	40.61	-19.78
	64-QAM	826.5	-2.00	1 / 12	21.15	**17.00**	0.050	38.45	-21.45	**19.15**	0.082	40.61	-21.45
	256-QAM	826.5	-2.00	1 / 1	19.12	**14.97**	0.031	38.45	-23.48	**17.12**	0.052	40.61	-23.49
10 MHz	π/2 BPSK	829.0	-2.00	1 / 1	23.24	19.09	0.081	38.45	-19.36	21.24	0.133	40.61	-19.37
		836.5	-2.00	1 / 1	23.48	**19.33**	0.086	38.45	-19.13	**21.48**	0.140	40.61	-19.13
		844.0	-2.00	1 / 25	23.01	18.86	0.077	38.45	-19.59	21.01	0.126	40.61	-19.59
	QPSK	829.0	-2.00	1 / 1	23.47	**19.32**	0.085	38.45	-19.13	**21.47**	0.140	40.61	-19.14
		836.5	-2.00	1 / 25	23.32	19.17	0.083	38.45	-19.28	21.32	0.135	40.61	-19.29
		844.0	-2.00	1 / 48	23.12	18.97	0.079	38.45	-19.48	21.12	0.129	40.61	-19.49
	16-QAM	829.0	-2.00	1 / 1	22.62	**18.47**	0.070	38.45	-19.98	**20.62**	0.115	40.61	-19.99
	64-QAM	836.5	-2.00	1 / 1	21.01	**16.86**	0.049	38.45	-21.59	**19.01**	0.080	40.61	-21.60
	256-QAM	829.0	-2.00	1 / 48	19.09	**14.94**	0.031	38.45	-23.51	**17.09**	0.051	40.61	-23.52
15 MHz	π/2 BPSK	831.5	-2.00	1 / 75	23.51	19.36	0.086	38.45	-19.09	21.51	0.142	40.61	-19.10
		836.5	-2.00	1 / 1	23.62	**19.47**	0.088	38.45	-18.98	**21.62**	0.145	40.61	-18.99
		841.5	-2.00	1 / 75	23.16	19.01	0.080	38.45	-19.44	21.16	0.131	40.61	-19.45
	QPSK	831.5	-2.00	1 / 1	23.53	**19.38**	0.087	38.45	-19.07	**21.53**	0.142	40.61	-19.07
		836.5	-2.00	1 / 1	23.48	19.33	0.086	38.45	-19.12	21.48	0.141	40.61	-19.13
		841.5	-2.00	1 / 1	23.43	19.28	0.085	38.45	-19.17	21.43	0.139	40.61	-19.18
	16-QAM	836.5	-2.00	1 / 75	22.88	**18.73**	0.075	38.45	-19.72	**20.88**	0.122	40.61	-19.73
	64-QAM	831.5	-2.00	1 / 75	21.17	**17.02**	0.050	38.45	-21.44	**19.17**	0.083	40.61	-21.44
	256-QAM	841.5	-2.00	1 / 1	19.12	**14.97**	0.031	38.45	-23.48	**17.12**	0.052	40.61	-23.48
20 MHz	π/2 BPSK	834.0	-2.00	1 / 50	23.81	**19.66**	0.093	38.45	-18.79	**21.81**	0.152	40.61	-18.79
		836.5	-2.00	1 / 1	23.41	19.26	0.084	38.45	-19.19	21.41	0.138	40.61	-19.19
		839.0	-2.00	1 / 1	22.95	18.80	0.076	38.45	-19.65	20.95	0.125	40.61	-19.65
	QPSK	834.0	-2.00	1 / 1	23.58	**19.43**	0.088	38.45	-19.03	**21.58**	0.144	40.61	-19.03
		836.5	-2.00	1 / 50	23.35	19.20	0.083	38.45	-19.25	21.35	0.136	40.61	-19.26
		839.0	-2.00	1 / 1	23.47	19.32	0.085	38.45	-19.13	21.47	0.140	40.61	-19.14
	16-QAM	834.0	-2.00	1 / 1	22.78	**18.63**	0.073	38.45	-19.82	**20.78**	0.120	40.61	-19.82
	64-QAM	834.0	-2.00	1 / 1	21.48	**17.33**	0.054	38.45	-21.12	**19.48**	0.089	40.61	-21.12
	256-QAM	834.0	-2.00	1 / 1	19.17	**15.02**	0.032	38.45	-23.43	**17.17**	0.052	40.61	-23.44

Table 7-10. Antenna 1 ERP/EIRP Data (NR Band n5)

NR Band n26

Bandwidth	Mod.	Frequency [MHz]	Ant. Gain [dBi]	RB Size/Offset	Conducted Power [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
5 MHz	π/2 BPSK	826.5	-2.00	1 / 1	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
		836.5	-2.00	1 / 12	23.70	19.55	0.090	38.45	-18.90	21.70	0.148	40.61	-18.91
		846.5	-2.00	1 / 12	23.81	19.66	0.092	38.45	-18.79	21.81	0.152	40.61	-18.80
	QPSK	826.5	-2.00	1 / 1	23.68	19.53	0.090	38.45	-18.92	21.68	0.147	40.61	-18.93
		836.5	-2.00	1 / 12	23.75	19.60	0.091	38.45	-18.85	21.75	0.150	40.61	-18.86
		846.5	-2.00	1 / 23	23.87	**19.72**	0.094	38.45	-18.73	**21.87**	0.154	40.61	-18.74
	16-QAM	836.5	-2.00	1 / 23	22.92	**18.77**	0.075	38.45	-19.68	**20.92**	0.124	40.61	-19.69
	64-QAM	826.5	-2.00	1 / 12	21.72	**17.57**	0.057	38.45	-20.88	**19.72**	0.094	40.61	-20.89
	256-QAM	846.5	-2.00	1 / 73	18.86	**14.71**	0.030	38.45	-23.74	**16.86**	0.049	40.61	-23.75
10 MHz	π/2 BPSK	829.0	-2.00	1 / 48	23.66	19.51	0.089	38.45	-18.94	21.66	0.147	40.61	-18.95
		836.5	-2.00	1 / 48	23.72	**19.57**	0.091	38.45	-18.88	**21.72**	0.149	40.61	-18.89
		844.0	-2.00	1 / 1	23.70	19.55	0.090	38.45	-18.90	21.70	0.148	40.61	-18.91
	QPSK	829.0	-2.00	1 / 1	23.89	19.74	0.094	38.45	-18.71	21.89	0.155	40.61	-18.72
		836.5	-2.00	1 / 1	23.80	19.65	0.092	38.45	-18.80	21.80	0.151	40.61	-18.81
		844.0	-2.00	1 / 1	23.90	**19.75**	0.094	38.45	-18.70	**21.90**	0.155	40.61	-18.71
	16-QAM	829.0	-2.00	1 / 48	22.75	**18.60**	0.072	38.45	-19.85	**20.75**	0.119	40.61	-19.86
	64-QAM	836.5	-2.00	1 / 25	21.89	**17.74**	0.059	38.45	-20.71	**19.89**	0.097	40.61	-20.72
	256-QAM	836.5	-2.00	1 / 25	18.87	**14.72**	0.030	38.45	-23.73	**16.87**	0.049	40.61	-23.74

Table 7-11. Antenna 1 ERP/EIRP Data (NR Band n26)

ULCA - LTE Band 5

Power State	Band	Bandwidth (PCC + SCC)	PCC					SCC					ULCA Tx. Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
			Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset	Modulation	UL Channel	UL Frequency	UL # RB	UL RB Offset										
Max	LTE B5	10MHz + 10MHz	QPSK	20450	829.0	1	49	QPSK	20549	838.9	1	0	23.72	-2.00	19.57	0.091	38.45	-18.88	21.72	0.149	40.61	-18.89
				20475	831.5	1	49		20574	841.4	1	0	23.75	-2.00	**19.60**	**0.091**	38.45	-18.85	**21.75**	**0.150**	40.61	-18.86
				20600	844.0	1	0		20501	834.1	1	49	23.73	-2.00	19.58	0.091	38.45	-18.87	21.73	0.149	40.61	-18.88
			QPSK	20475	831.5	50	0	QPSK	20574	841.4	50	0	22	-2.00	17.85	0.061	38.45	-20.60	20.00	0.100	40.61	-20.61
			16-QAM	20475	831.5	50	0	16-QAM	20574	841.4	50	0	21.01	-2.00	16.86	0.049	38.45	-21.59	19.01	0.080	40.61	-21.60
			64-QAM	20475	831.5	50	0	64-QAM	20574	841.4	50	0	21.09	-2.00	16.94	0.049	38.45	-21.51	19.09	0.081	40.61	-21.52
			256-QAM	20475	831.5	50	0	256-QAM	20574	841.4	50	0	19.09	-2.00	14.94	0.031	38.45	-23.51	17.09	0.051	40.61	-23.52

Table 7-12. Antenna 1 ERP/EIRP Data (ULCA LTE Band 5)

WCDMA Cell

Frequency [MHz]	Mode	Conducted Power [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
826.40	WCDMA850	23.90	-2.00	**19.75**	**0.094**	38.45	-18.70	**21.90**	**0.155**	40.61	-18.71
836.60	WCDMA850	23.86	-2.00	19.71	0.094	38.45	-18.74	21.86	0.153	40.61	-18.75
846.60	WCDMA850	23.89	-2.00	19.74	0.094	38.45	-18.71	21.89	0.155	40.61	-18.72

Table 7-13. Antenna 1 ERP/EIRP Data (WCDMA Cell)

7.6 Radiated Spurious Emissions

§2.1053, 22.917(a)

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 tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as peak measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v03r01 – Section 5.8

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.

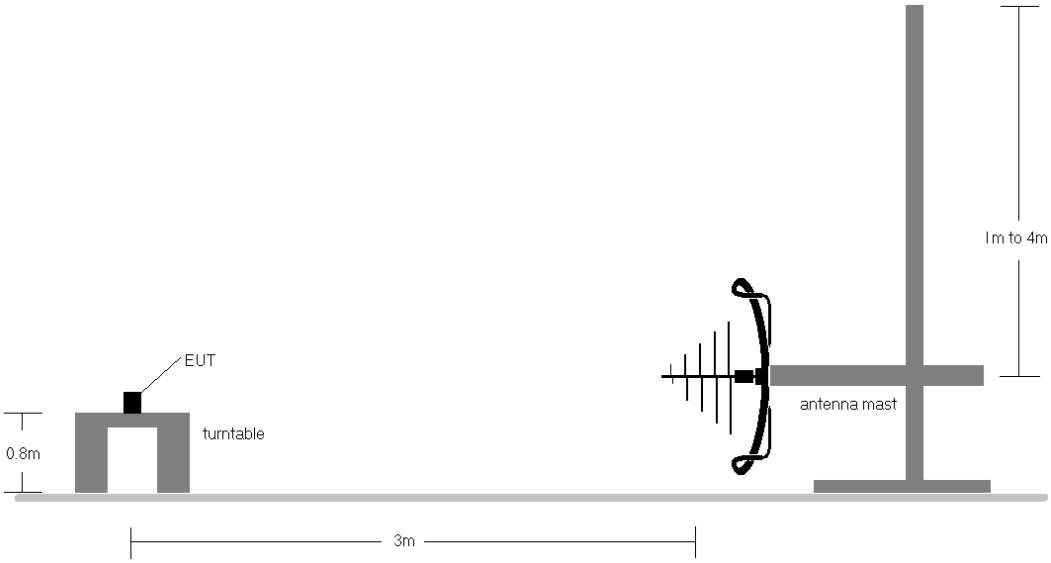


Figure 7-5. Test Instrument & Measurement Setup < 1GHz

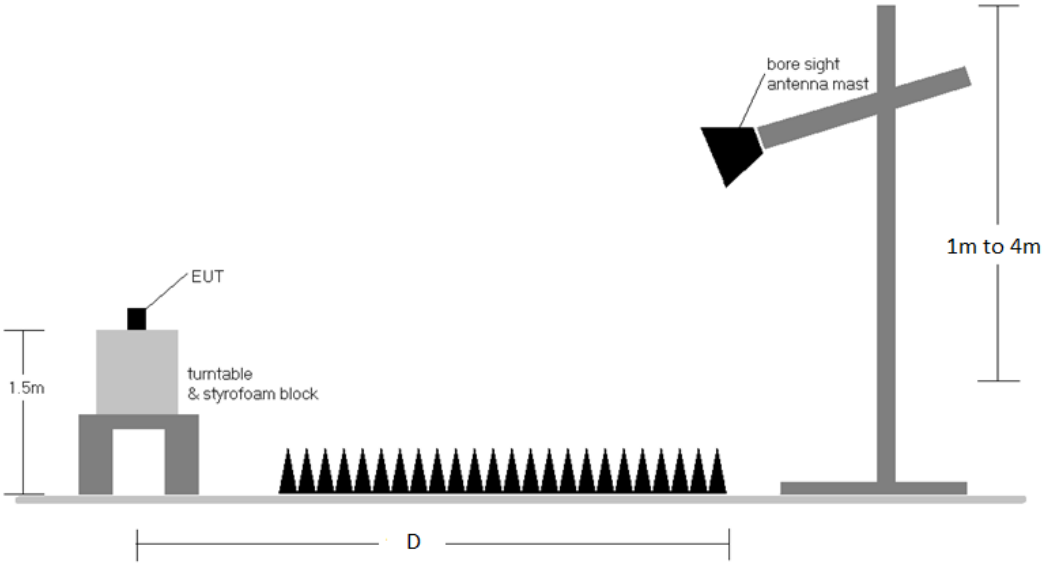


Figure 7-6. Test Instrument & Measurement Setup >1 GHz

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. This device employs UMTS technology with WCDMA (AMR/RMC) and HSDPA capabilities. The EUT was tested under all configurations and the highest power is reported in WCDMA mode with HSDPA Inactive at 12.2 kbps RMC and TPC bits all set to “1”.

3. The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.

4. This unit was tested with its standard battery.

5. The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.

6. D is the measurement test distance and emissions 1-18GHz were measured at a 3 meters test distance.

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

8. ULCA spurious emissions measurements were evaluated for the two contiguous channels using various combinations of RB size, RB offset, modulation, and channel bandwidth. Channel bandwidth data is shown in the tables below based only on the channel bandwidths that were supported in this device.

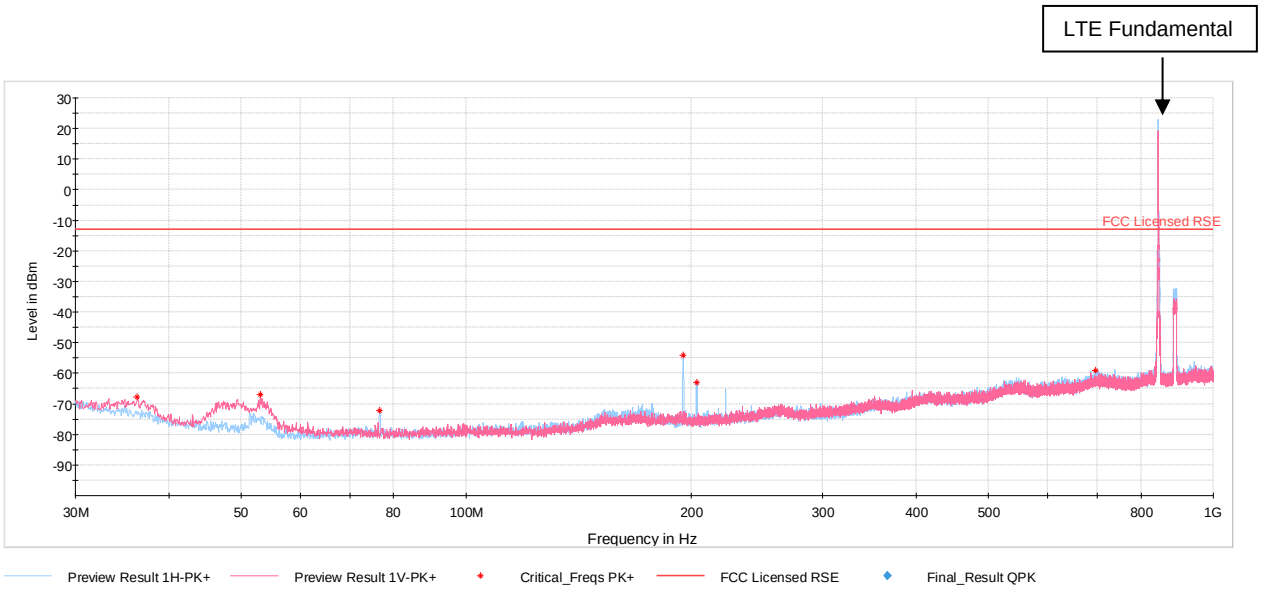
9. For NR operation, all subcarrier spacings (SCS) and transmission schemes (e.g. CP-OFDM and DFT-s-OFDM) were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

10. Spurious emission in EN-DC Operating mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor) has been checked and was found to not to be the worst case.

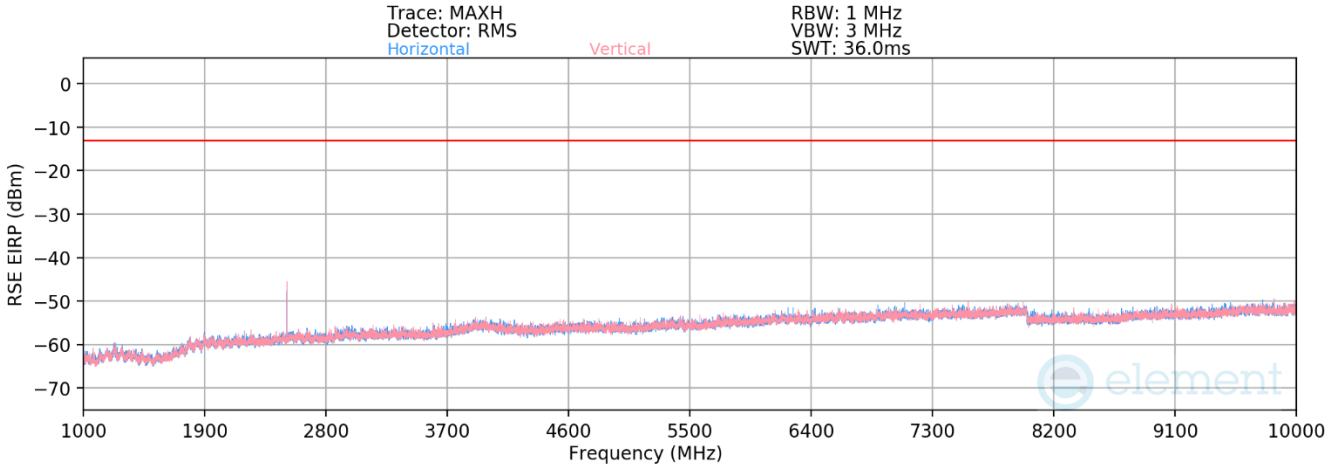
11. Uplink carrier aggregation inter-band emission was investigated and found to not be the worst case.

7.6.1 Antenna 3 – Radiated Spurious Emission Measurements

LTE Band 26/5



Plot 7-116. Antenna 3 Radiated Spurious Plot below 1GHz (LTE Band 26/5)



Plot 7-117. Antenna 3 Radiated Spurious Plot above 1GHz (LTE Band 26/5)

Bandwidth (MHz):	10
Frequency (MHz):	829.0
RB / Offset:	1/24

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]
1658.0	H	-	-	-75.10	-4.23	27.67	-67.58	-13.00	-54.58
2487.0	V	305	151	-61.34	0.23	45.89	-49.37	-13.00	-36.37
3316.0	H	-	-	-76.82	2.04	32.22	-63.04	-13.00	-50.04
4145.0	H	-	-	-77.25	3.28	33.03	-62.22	-13.00	-49.22
4974.0	H	-	-	-78.09	4.35	33.26	-62.00	-13.00	-49.00

Table 7-14. Antenna 3 Radiated Spurious Data (LTE Band 26/5 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	836.5
RB / Offset:	1/24

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]
1673.0	H	-	-	-75.31	-4.00	27.69	-67.56	-13.00	-54.56
2509.5	V	294	153	-61.11	0.40	46.29	-48.97	-13.00	-35.97
3346.0	H	-	-	-76.57	2.06	32.49	-62.77	-13.00	-49.77
4182.5	H	-	-	-77.26	3.66	33.40	-61.86	-13.00	-48.86
5019.0	H	-	-	-78.01	4.52	33.51	-61.75	-13.00	-48.75

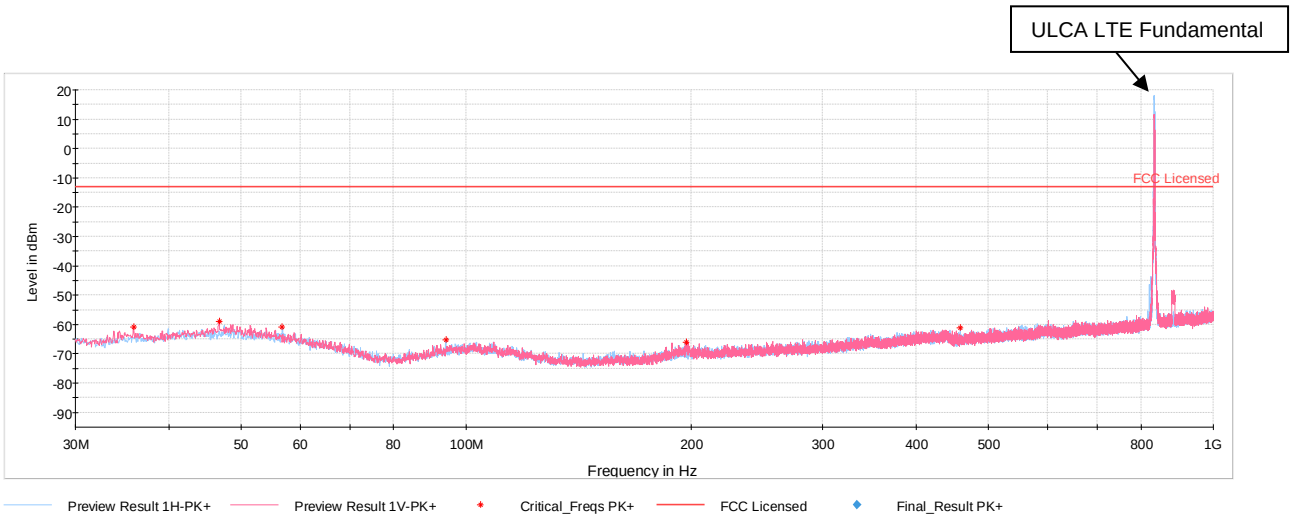
Table 7-15. Antenna 3 Radiated Spurious Data (LTE Band 26/5 – Mid Channel)

Bandwidth (MHz):	10
Frequency (MHz):	844.0
RB / Offset:	1/24

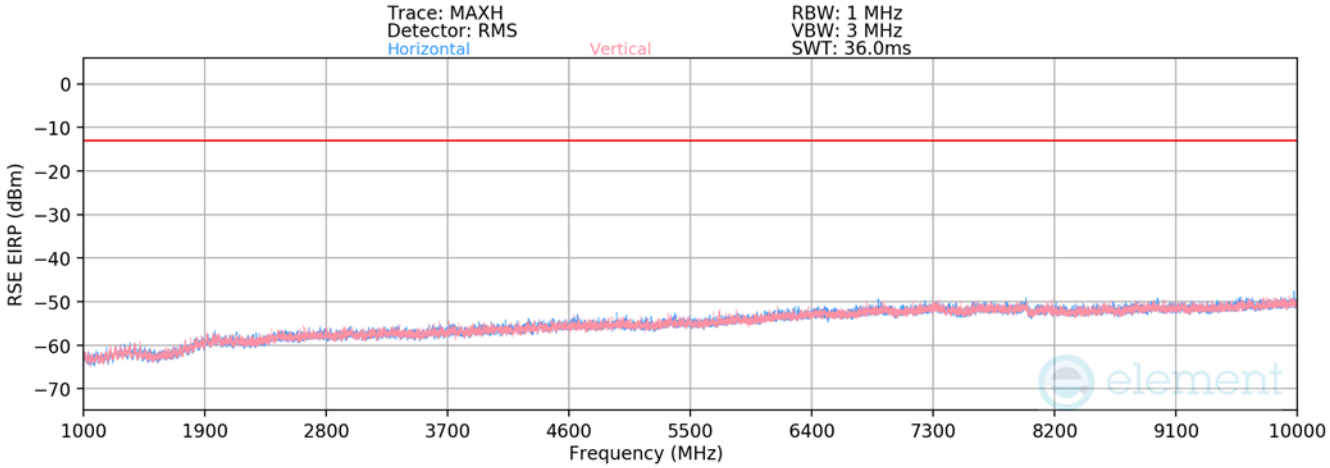
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1688.0	H	-	-	-75.29	-3.79	27.92	-67.34	-13.00	-54.34
2532.0	V	320	153	-59.65	0.73	48.08	-47.17	-13.00	-34.17
3376.0	H	-	-	-76.69	1.85	32.16	-63.09	-13.00	-50.09
4220.0	H	-	-	-77.36	3.19	32.83	-62.43	-13.00	-49.43
5064.0	H	-	-	-77.87	4.20	33.33	-61.93	-13.00	-48.93

Table 7-16. Antenna 3 Radiated Spurious Data (LTE Band 26/5 – High Channel)

ULCA LTE Band 5



Plot 7-118. Antenna 3 Radiated Spurious Plot below 1GHz (ULCA LTE Band 5)



Plot 7-119. Antenna 3 Radiated Spurious Plot above 1GHz (ULCA LTE Band 5)

PCC Bandwidth (MHz):	10
PCC Frequency (MHz):	829.0
PCC RB / Offset:	1 / 49
SCC Bandwidth (MHz):	10
SCC Frequency (MHz):	838.9
SCC RB / Offset:	1 / 0

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height	Turntable Azimuth	Analyzer Level	AFCL [dB/m]	Field Strength	EIRP Spurious Emission Level	Limit [dBm]	Margin [dB]
1658.0	H	-	-	-77.14	-1.75	28.11	-67.14	-13.00	-54.14
2487.0	H	-	-	-78.29	2.98	31.69	-63.57	-13.00	-50.57
3316.0	H	-	-	-79.36	4.88	32.52	-62.74	-13.00	-49.74

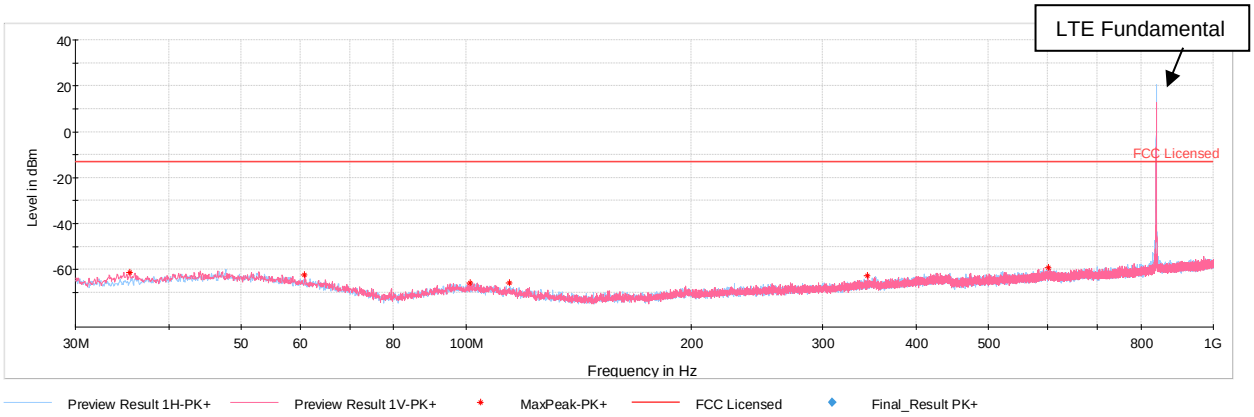
Table 7-17. Antenna 3 Radiated Spurious Data (ULCA LTE Band 5 – Low Channel)

PCC Bandwidth (MHz):	10
PCC Frequency (MHz):	844.0
PCC RB / Offset:	1 / 0
SCC Bandwidth (MHz):	10
SCC Frequency (MHz):	834.1
SCC RB / Offset:	1 / 49

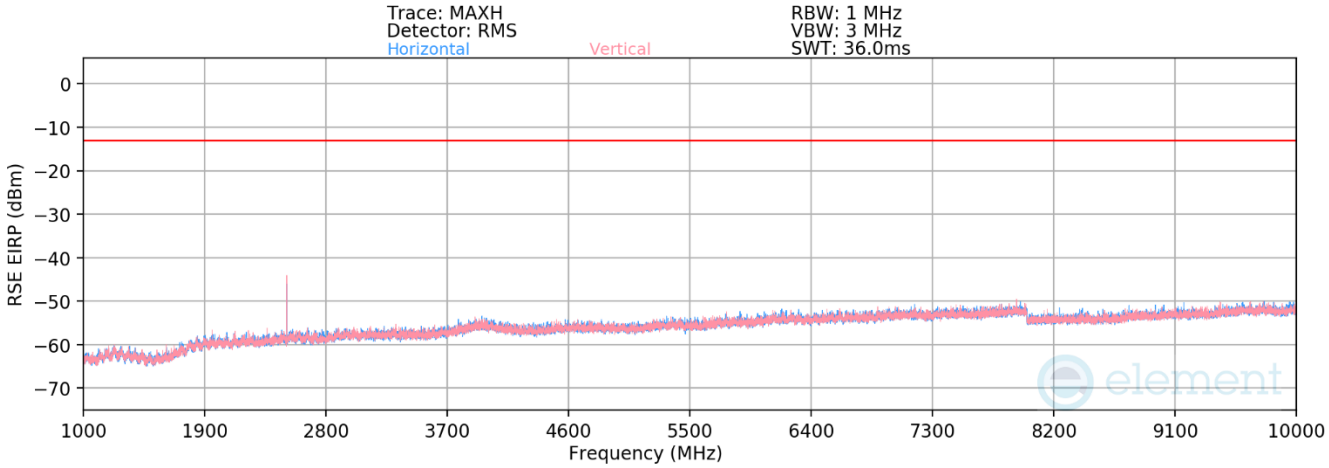
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1688.0	H	-	-	-77.87	-1.56	27.57	-67.69	-13.00	-54.69
2532.0	H	-	-	-78.04	2.70	31.66	-63.59	-13.00	-50.59
3376.0	H	-	-	-79.25	4.76	32.51	-62.75	-13.00	-49.75

Table 7-18. Antenna 3 Radiated Spurious Data (ULCA LTE Band 5 – High Channel)

NR Band n26/5



Plot 7-120. Antenna 3 Radiated Spurious Plot below 1GHz (NR Band n26/5)



Plot 7-121. Antenna 3 Radiated Spurious Plot above 1GHz (NR Band n26/5)

Bandwidth (MHz):	20
Frequency (MHz):	834.0
RB / Offset:	1 / 50

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]
1668.0	V	364	156	-73.53	-4.07	29.40	-65.85	-13.00	-52.85
2502.0	V	393	266	-62.66	0.31	44.65	-50.60	-13.00	-37.60
3336.0	H	-	-	-76.85	1.91	32.06	-63.20	-13.00	-50.20
4170.0	H	-	-	-76.93	3.54	33.61	-61.65	-13.00	-48.65
5004.0	H	-	-	-77.63	4.37	33.74	-61.52	-13.00	-48.52

Table 7-19. Antenna 3 Radiated Spurious Data (NR Band n26/5 – Low Channel)

Bandwidth (MHz):	20
Frequency (MHz):	836.5
RB / Offset:	1 / 50

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]
1673.0	V	275	150	-74.77	-4.00	28.23	-67.02	-13.00	-54.02
2509.5	V	360	154	-62.73	0.40	44.67	-50.59	-13.00	-37.59
3346.0	H	-	-	-76.50	2.06	32.56	-62.70	-13.00	-49.70
4182.5	H	-	-	-77.05	3.66	33.61	-61.65	-13.00	-48.65
5019.0	H	-	-	-77.64	4.52	33.88	-61.38	-13.00	-48.38

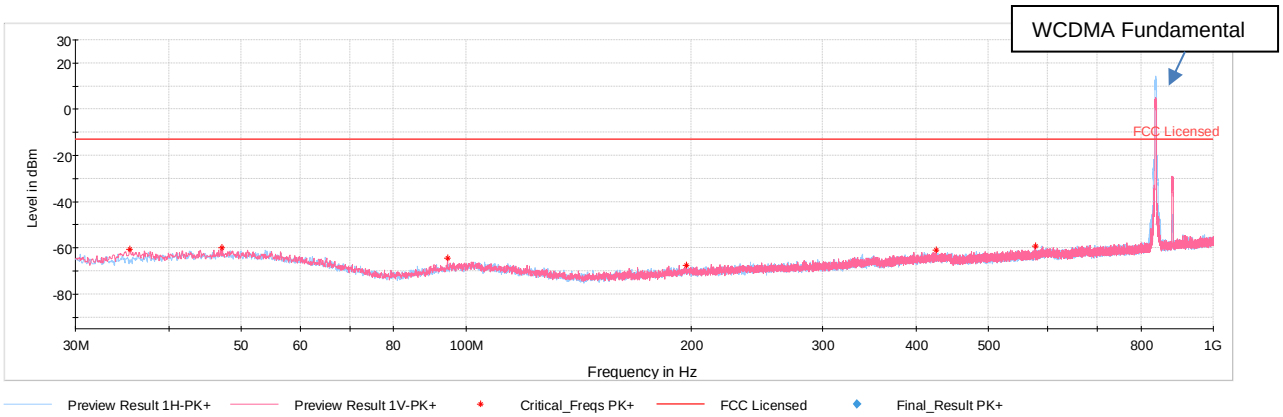
Table 7-20. Antenna 3 Radiated Spurious Data (NR Band n26/5 – Mid Channel)

Bandwidth (MHz):	20
Frequency (MHz):	839.0
RB / Offset:	1 / 50

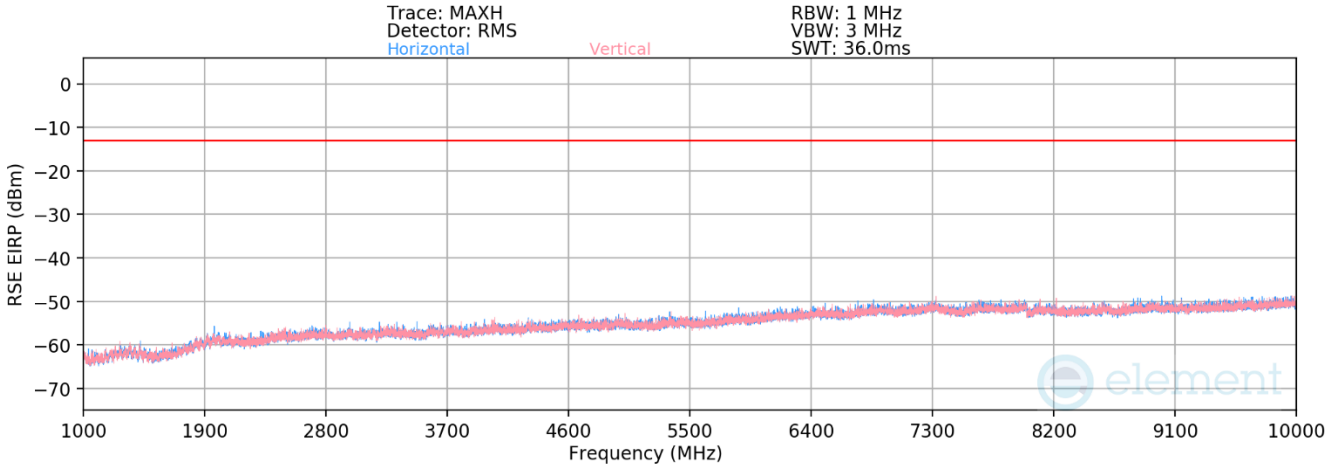
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
1678.0	V	347	158	-73.51	-3.93	29.56	-65.70	-13.00	-52.70
2517.0	V	326	149	-59.04	0.51	48.47	-46.79	-13.00	-33.79
3356.0	H	-	-	-76.60	1.99	32.39	-62.87	-13.00	-49.87
4195.0	H	-	-	-76.98	3.39	33.41	-61.85	-13.00	-48.85
5034.0	H	-	-	-77.94	4.47	33.53	-61.72	-13.00	-48.72

Table 7-21. Antenna 3 Radiated Spurious Data (NR Band n26/5 – High Channel)

WCDMA Cell



Plot 7-122. Antenna 3 Radiated Spurious Plot below 1GHz (WCDMA Cell)



Plot 7-123. Antenna 3 Radiated Spurious Plot above 1GHz (WCDMA Cell)

Mode:	WCDMA RMC
Channel:	4132
Frequency (MHz):	826.4

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]
1652.8	H	-	-	-75.56	-4.32	27.12	-68.14	-13.00	-55.14
2479.2	H	138	219	-74.10	0.19	33.09	-62.17	-13.00	-49.17
3305.6	H	-	-	-76.37	2.09	32.72	-62.54	-13.00	-49.54
4132.0	H	-	-	-76.58	3.45	33.87	-61.38	-13.00	-48.38
4958.4	H	-	-	-77.44	4.34	33.90	-61.36	-13.00	-48.36

Table 7-22. Antenna 3 Radiated Spurious Data (WCDMA Cell – Low Channel)

Mode:	WCDMA RMC
Channel:	4183
Frequency (MHz):	836.6

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]
1673.2	H	-	-	-76.06	-1.69	29.25	-66.00	-13.00	-53.00
2509.8	H	-	-	-76.12	2.79	33.67	-61.59	-13.00	-48.59
3346.4	H	-	-	-77.16	4.94	34.78	-60.48	-13.00	-47.48

Table 7-23. Antenna 3 Radiated Spurious Data (WCDMA Cell – Mid Channel)

Mode:	WCDMA RMC
Channel:	4233
Frequency (MHz):	846.6

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]
1693.2	H	-	-	-77.62	-1.49	27.89	-67.37	-13.00	-54.37
2539.8	H	-	-	-78.22	2.69	31.47	-63.79	-13.00	-50.79
3386.4	H	-	-	-79.45	4.74	32.29	-62.97	-13.00	-49.97

Table 7-24. Antenna 3 Radiated Spurious Data (WCDMA Cell – High Channel)

7.6.2 Antenna 1 – Radiated Spurious Emission Measurements

LTE Band 26/5

Bandwidth (MHz):	10
Frequency (MHz):	829.0
RB / Offset:	1/24

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]
1658.0	H	-	-	-77.76	-4.23	25.01	-70.24	-13.00	-57.24
2487.0	H	-	-	-78.12	0.23	29.11	-66.15	-13.00	-53.15
3316.0	H	-	-	-78.96	2.04	30.08	-65.18	-13.00	-52.18

Table 7-25. Antenna 1 Radiated Spurious Data (LTE Band 26/5 – Low Channel)

Bandwidth (MHz):	10
Frequency (MHz):	836.5
RB / Offset:	1/24

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]
1673.0	H	-	-	-77.56	-4.00	25.44	-69.81	-13.00	-56.81
2509.5	H	-	-	-78.14	0.40	29.26	-66.00	-13.00	-53.00
3346.0	H	-	-	-79.34	2.06	29.72	-65.54	-13.00	-52.54

Table 7-26. Antenna 1 Radiated Spurious Data (LTE Band 26/5 – Mid Channel)

Bandwidth (MHz):	10
Frequency (MHz):	844.0
RB / Offset:	1/24

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]
1688.0	H	-	-	-77.65	-3.79	25.56	-69.70	-13.00	-56.70
2532.0	H	-	-	-78.34	0.73	29.39	-65.86	-13.00	-52.86
3376.0	H	-	-	-79.24	1.85	29.61	-65.64	-13.00	-52.64

Table 7-27. Antenna 1 Radiated Spurious Data (LTE Band 26/5 – High Channel)

ULCA LTE Band 5

PCC Bandwidth (MHz):	10
PCC Frequency (MHz):	829.0
PCC RB / Offset:	1 / 49
SCC Bandwidth (MHz):	10
SCC Frequency (MHz):	838.9
SCC RB / Offset:	1 / 0

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]
1658.0	H	-	-	-77.51	-1.75	27.74	-67.51	-13.00	-54.51
2487.0	H	-	-	-78.42	2.98	31.56	-63.70	-13.00	-50.70
3316.0	H	-	-	-79.50	4.88	32.38	-62.88	-13.00	-49.88

Table 7-28. Antenna 1 Radiated Spurious Data (ULCA LTE Band 5 – Low Channel)

PCC Bandwidth (MHz):	10
PCC Frequency (MHz):	844.0
PCC RB / Offset:	1 / 0
SCC Bandwidth (MHz):	10
SCC Frequency (MHz):	834.1
SCC RB / Offset:	1 / 49

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]
1688.0	H	-	-	-77.38	-1.56	28.06	-67.20	-13.00	-54.20
2532.0	H	-	-	-77.90	2.70	31.80	-63.45	-13.00	-50.45
3376.0	H	-	-	-79.34	4.76	32.42	-62.84	-13.00	-49.84

Table 7-29. Antenna 1 Radiated Spurious Data (ULCA LTE Band 5 – High Channel)

NR Band n26/5

Bandwidth (MHz):	20
Frequency (MHz):	834.0
RB / Offset:	1 / 50

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]
1668.0	H	-	-	-75.35	-4.07	27.58	-67.67	-13.00	-54.67
2502.0	H	-	-	-75.90	0.31	31.41	-63.84	-13.00	-50.84
3336.0	H	-	-	-76.80	1.91	32.11	-63.15	-13.00	-50.15

Table 7-30. Antenna 1 Radiated Spurious Data (NR Band n26/5 – Low Channel)

Bandwidth (MHz):	20
Frequency (MHz):	836.5
RB / Offset:	1 / 50

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]
1673.0	H	-	-	-75.24	-4.00	27.76	-67.49	-13.00	-54.49
2509.5	H	-	-	-75.86	0.40	31.54	-63.72	-13.00	-50.72
3346.0	H	-	-	-76.48	2.06	32.58	-62.68	-13.00	-49.68

Table 7-31. Antenna 1 Radiated Spurious Data (NR Band n26/5 – Mid Channel)

Bandwidth (MHz):	20
Frequency (MHz):	839.0
RB / Offset:	1 / 50

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]
1678.0	H	-	-	-75.28	-3.93	27.79	-67.47	-13.00	-54.47
2517.0	H	-	-	-76.09	0.51	31.42	-63.84	-13.00	-50.84
3356.0	H	-	-	-76.76	1.99	32.23	-63.03	-13.00	-50.03

Table 7-32. Antenna 1 Radiated Spurious Data (NR Band n26/5 – High Channel)

WCDMA Cell

Mode:	WCDMA RMC
Channel:	4132
Frequency (MHz):	826.4

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]
1652.8	H	-	-	-77.32	-1.79	27.89	-67.37	-13.00	-54.37
2479.2	H	-	-	-78.36	3.07	31.71	-63.55	-13.00	-50.55
3305.6	H	-	-	-79.26	4.90	32.64	-62.62	-13.00	-49.62

Table 7-33. Antenna 1 Radiated Spurious Data (WCDMA Cell – Low Channel)

Mode:	WCDMA RMC
Channel:	4183
Frequency (MHz):	836.6

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]
1673.2	H	-	-	-77.48	-1.69	27.83	-67.42	-13.00	-54.42
2509.8	H	-	-	-78.07	2.79	31.72	-63.54	-13.00	-50.54
3346.4	H	-	-	-79.20	4.94	32.74	-62.52	-13.00	-49.52

Table 7-34. Antenna 1 Radiated Spurious Data (WCDMA Cell – Mid Channel)

Mode:	WCDMA RMC
Channel:	4233
Frequency (MHz):	846.6

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]
1693.2	H	-	-	-77.28	-1.49	28.23	-67.03	-13.00	-54.03
2539.8	H	-	-	-78.14	2.69	31.55	-63.71	-13.00	-50.71
3386.4	H	-	-	-79.29	4.74	32.45	-62.81	-13.00	-49.81

Table 7-35. Antenna 1 Radiated Spurious Data (WCDMA Cell – High Channel)

7.7 Frequency Stability / Temperature Variation

§2.1055, 22.355

Test Overview and Limit

Frequency Tolerance testing is performed in accordance with the guidelines of ANSI C63.26-2015 and TIA-603-E-2016. All port were tested and only the worst case data were reported. The Frequency Tolerance 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 Part 22, the Frequency Tolerance of the transmitter shall be maintained within ±0.00025% (±2.5 ppm) of the center frequency.

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

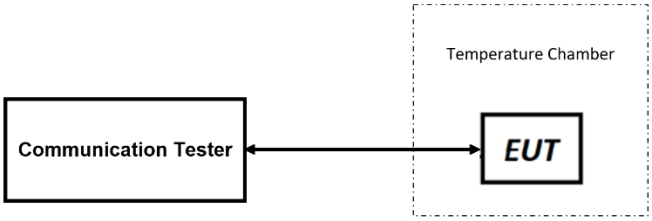


Figure 7-7. Test Instrument & Measurement Setup

Test Notes

1. All port were tested and only the worst case data were reported.

Frequency Stability / Temperature Variation

LTE Band 26/5	
Operating Frequency (Hz):	836,500,000
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	836,500,001	1	0.0000001
		- 20	836,500,002	2	0.0000002
		- 10	836,500,000	0	0.0000000
		0	836,500,000	0	0.0000000
		+ 10	836,499,999	-1	-0.0000001
		+ 20 (Ref)	836,499,997	0	-0.0000004
		+ 30	836,499,998	-2	-0.0000002
		+ 40	836,499,998	-2	-0.0000002
		+ 50	836,499,998	-2	-0.0000002
Battery Endpoint	3.23	+ 20	836,500,001	1	0.0000001

Table 7-36. LTE Band 26/5 Frequency Stability Data

Frequency Stability / Temperature Variation

NR Band n26/n5

Operating Frequency (Hz):	836,500,000
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	836,499,619	-381	-0.0000455
		- 20	836,499,642	-358	-0.0000428
		- 10	836,499,650	-350	-0.0000418
		0	836,499,604	-396	-0.0000473
		+ 10	836,499,645	-355	-0.0000424
		+ 20 (Ref)	836,499,591	-409	-0.0000489
		+ 30	836,499,620	-380	-0.0000454
		+ 40	836,499,613	-387	-0.0000463
		+ 50	836,499,569	-431	-0.0000515
Battery Endpoint	3.40	+ 20	836,499,600	-400	-0.0000478

Table 7-37. NR Band n26/5 Frequency Stability Data

Frequency Stability / Temperature Variation

WCDMA Cellular

Operating Frequency (Hz):	836,600,000
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	836,600,002	2	0.0000002
		- 20	836,600,000	0	0.0000000
		- 10	836,599,999	-1	-0.0000001
		0	836,600,001	1	0.0000001
		+ 10	836,599,998	-2	-0.0000002
		+ 20 (Ref)	836,599,997	-3	-0.0000004
		+ 30	836,599,997	-3	-0.0000004
		+ 40	836,600,001	1	0.0000001
		+ 50	836,600,002	2	0.0000002
Battery Endpoint	3.23	+ 20	836,599,997	-3	-0.0000004

Table 7-38. WCDMA Cellular 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: BCGA2764** complies with all the requirements of Part 22 of the FCC rules.