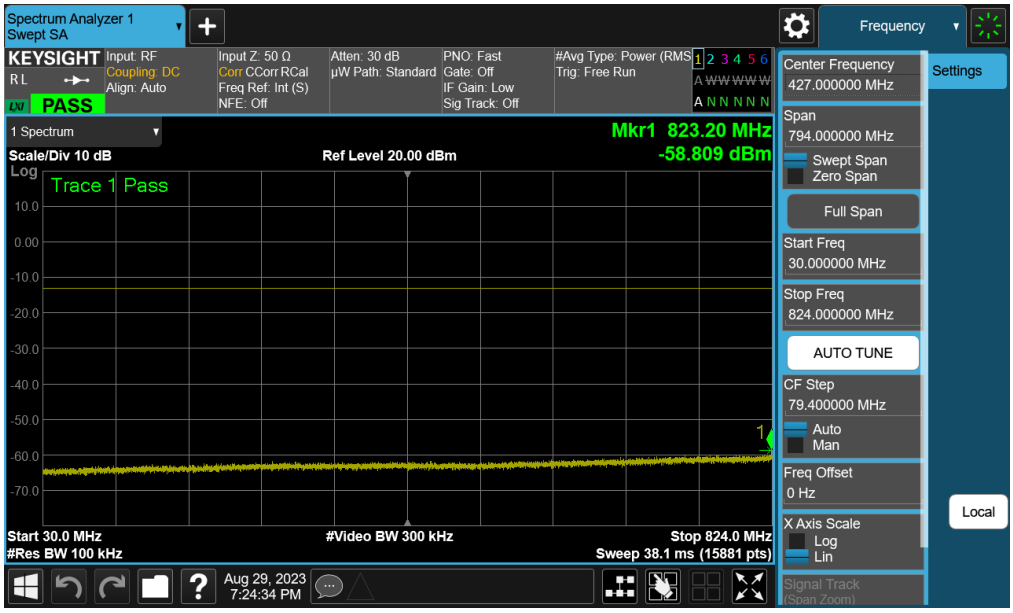
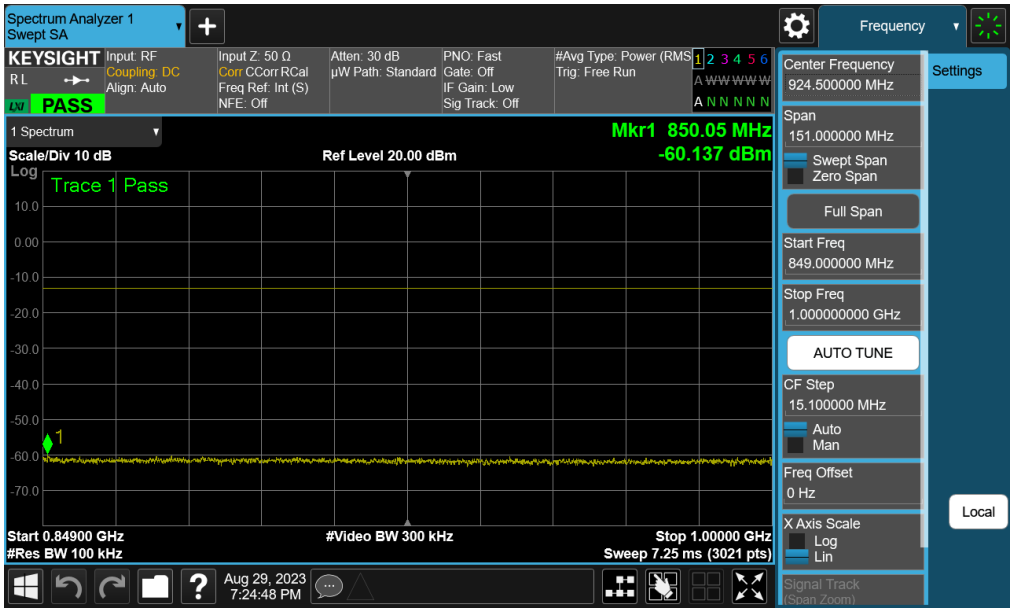
NR Band n5 – Ant 0



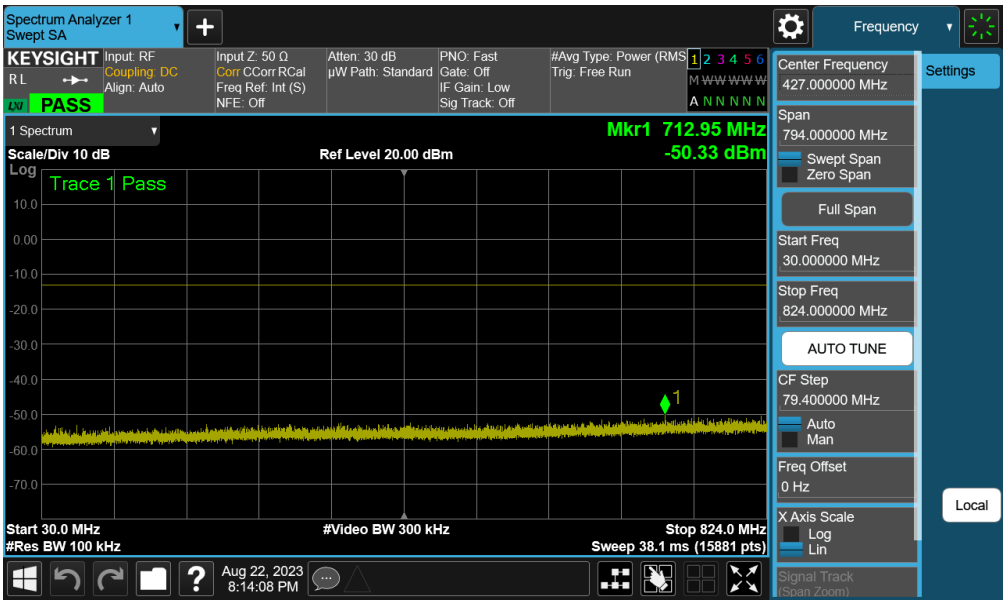
Plot 7-54. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel - Ant 0)



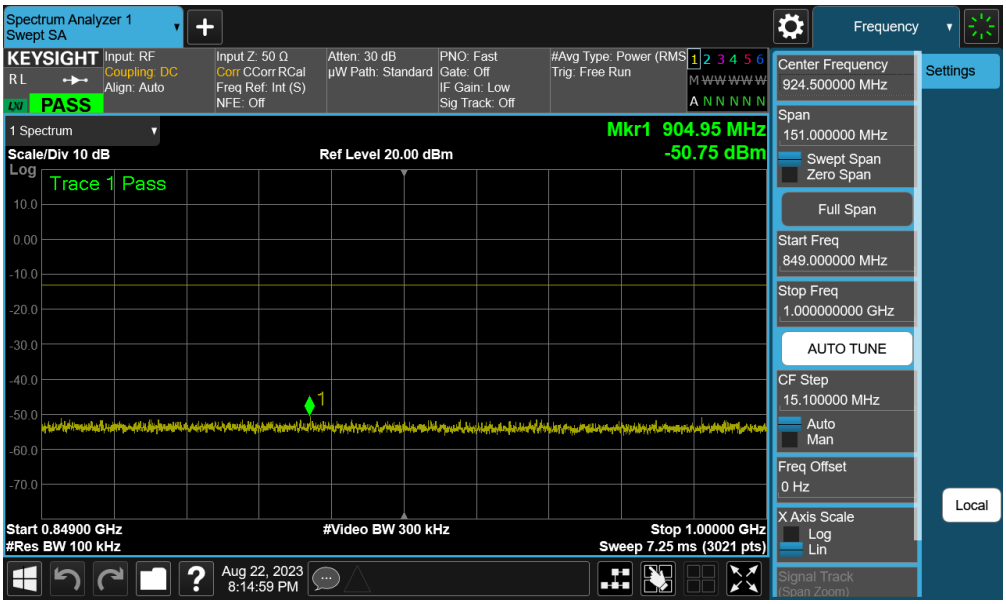
Plot 7-55. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel - Ant 0)

Plot 7-56. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel - Ant 0)

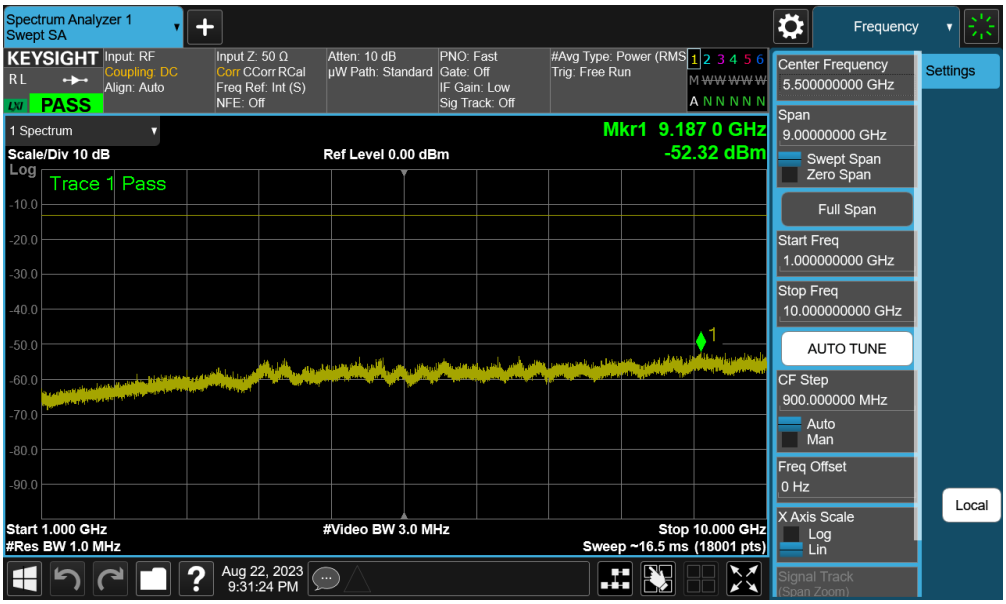
GSM/GPRS Cell – Ant 0



Plot 7-57. Conducted Spurious Plot (GPRS Ch. 190 – Ant 0)

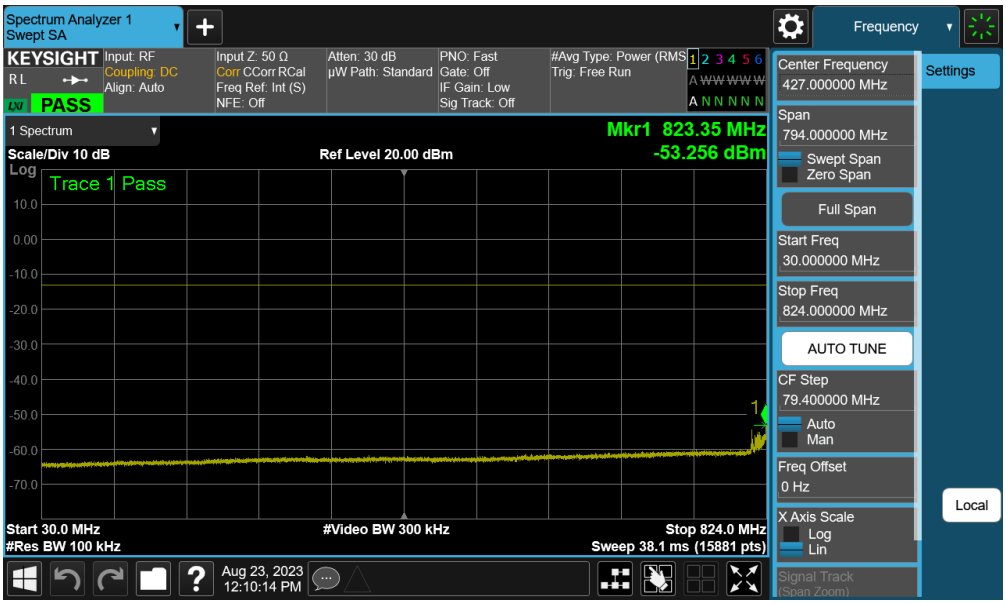


Plot 7-58. Conducted Spurious Plot (GPRS Ch. 190 – Ant 0)

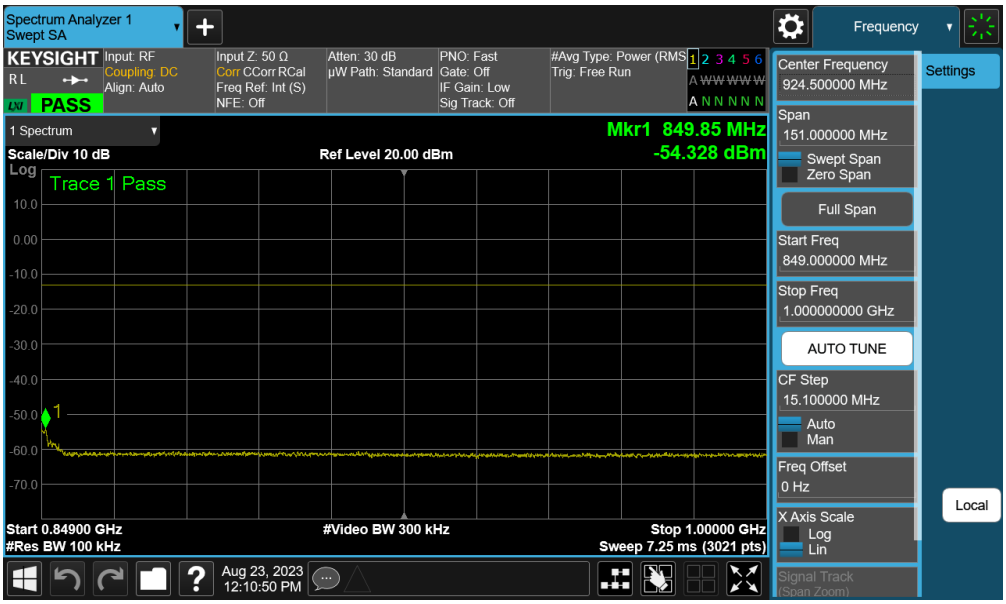


Plot 7-59. Conducted Spurious Plot (GPRS Ch. 190 – Ant 0)

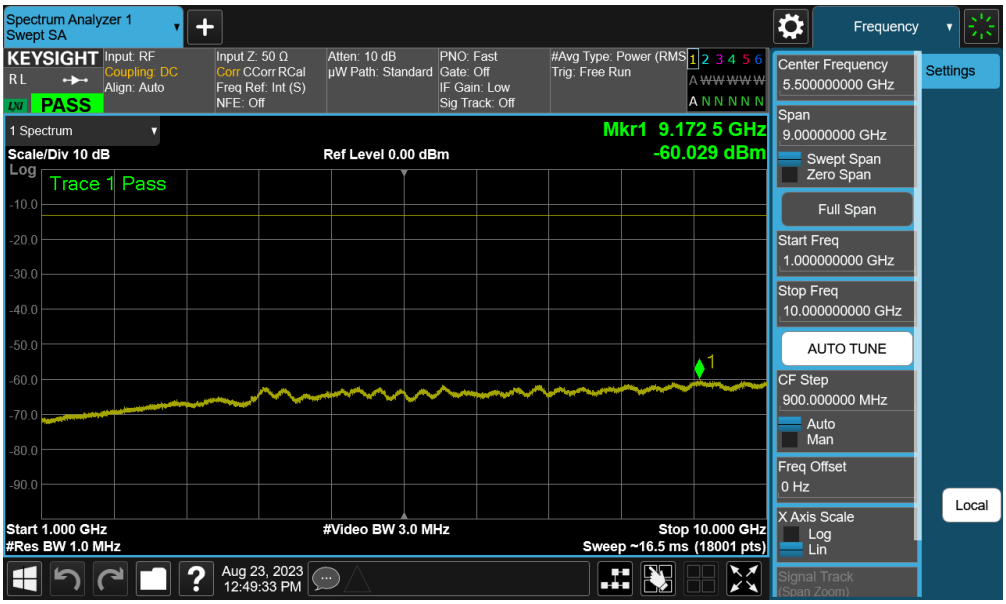
WCDMA Cell – Ant 0



Plot 7-60. Conducted Spurious Plot (WCDMA Ch. 4183 – Ant 0)



Plot 7-61. Conducted Spurious Plot (WCDMA Ch. 4183 – Ant 0)

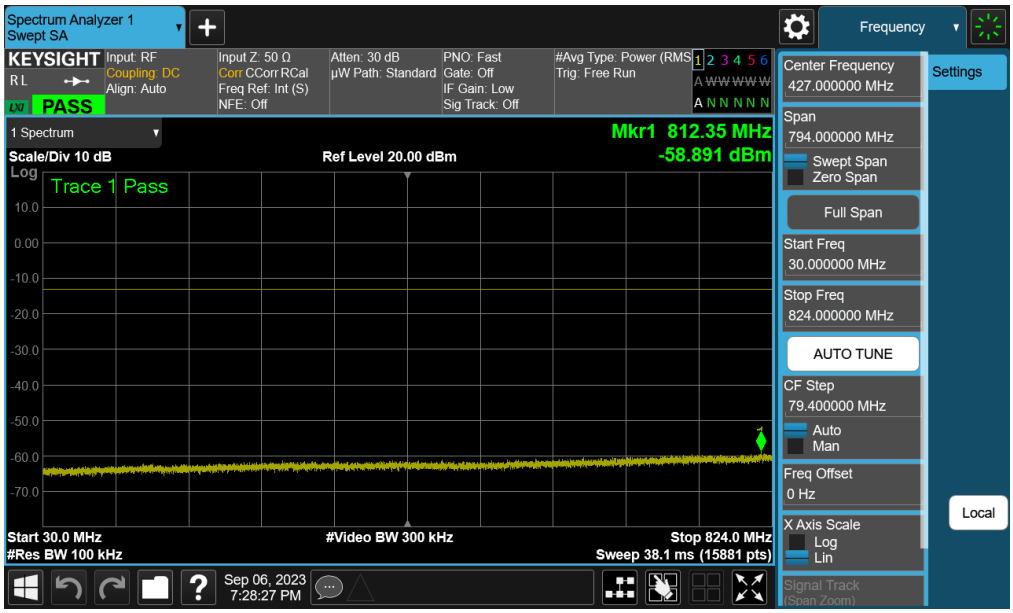


Plot 7-62. Conducted Spurious Plot (WCDMA Ch. 4183 – Ant 0)

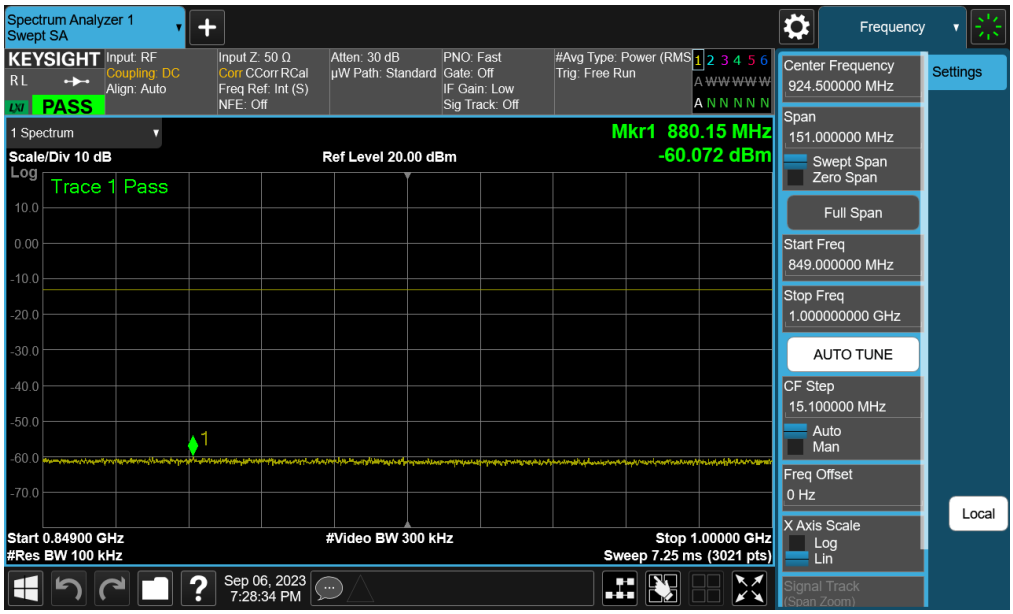
Mode	Bandwidth	Channel	Range [MHz]	Level [dBm]	Limit [dBm]	Margin [dB]
GSM-Cell	250kHz	Low	30.0 - 823.0	-34.06	-13.0	-21.06
		Low	849.0 - 1000.0	-51.52	-13.0	-38.52
		Low	1000.0 - 10000.0	-30.55	-13.0	-17.55
		Mid	30.0 - 824.0	-51.03	-13.0	-38.03
		Mid	849.0 - 1000.0	-51.01	-13.0	-38.01
		Mid	1000.0 - 10000.0	-31.23	-13.0	-18.23
		High	30.0 - 824.0	-50.83	-13.0	-37.83
		High	850.0 - 1000.0	-35.52	-13.0	-22.52
		High	1000.0 - 10000.0	-31.15	-13.0	-18.15
WCDMA-Cell	5MHz	Low	30.0 - 823.0	-31.15	-13.0	-18.15
		Low	849.0 - 1000.0	-56.50	-13.0	-43.50
		Low	1000.0 - 10000.0	-38.71	-13.0	-25.71
		Mid	30.0 - 824.0	-51.14	-13.0	-38.14
		Mid	849.0 - 1000.0	-52.61	-13.0	-39.61
		Mid	1000.0 - 10000.0	-38.85	-13.0	-25.85
		High	30.0 - 824.0	-53.25	-13.0	-40.25
		High	850.0 - 1000.0	-33.51	-13.0	-20.51
		High	1000.0 - 10000.0	-38.88	-13.0	-25.88
LTE-B26-5	10MHz	Low	30.0 - 823.0	-59.34	-13.0	-46.34
		Low	849.0 - 1000.0	-60.13	-13.0	-47.13
		Low	1000.0 - 10000.0	-38.78	-13.0	-25.78
		Mid	30.0 - 824.0	-58.89	-13.0	-45.89
		Mid	849.0 - 1000.0	-60.07	-13.0	-47.07
		Mid	1000.0 - 10000.0	-38.39	-13.0	-25.39
		High	30.0 - 824.0	-58.18	-13.0	-45.18
		High	850.0 - 1000.0	-59.94	-13.0	-46.94
		High	1000.0 - 10000.0	-38.37	-13.0	-25.37
NR-n5	20MHz	Low	30.0 - 824.0	-58.44	-13.0	-45.44
		Low	849.0 - 1000.0	-60.02	-13.0	-47.02
		Low	1000.0 - 10000.0	-38.59	-13.0	-25.59
		Mid	30.0 - 824.0	-59.06	-13.0	-46.06
		Mid	849.0 - 1000.0	-59.77	-13.0	-46.77
		Mid	1000.0 - 10000.0	-38.42	-13.0	-25.42
		High	30.0 - 824.0	-58.91	-13.0	-45.91
		High	849.0 - 1000.0	-59.20	-13.0	-46.20
		High	1000.0 - 10000.0	-38.37	-13.0	-25.37

Table 7-5. Conducted Spurious Emission Results – Ant 6

LTE Band 26/5 – Ant 6



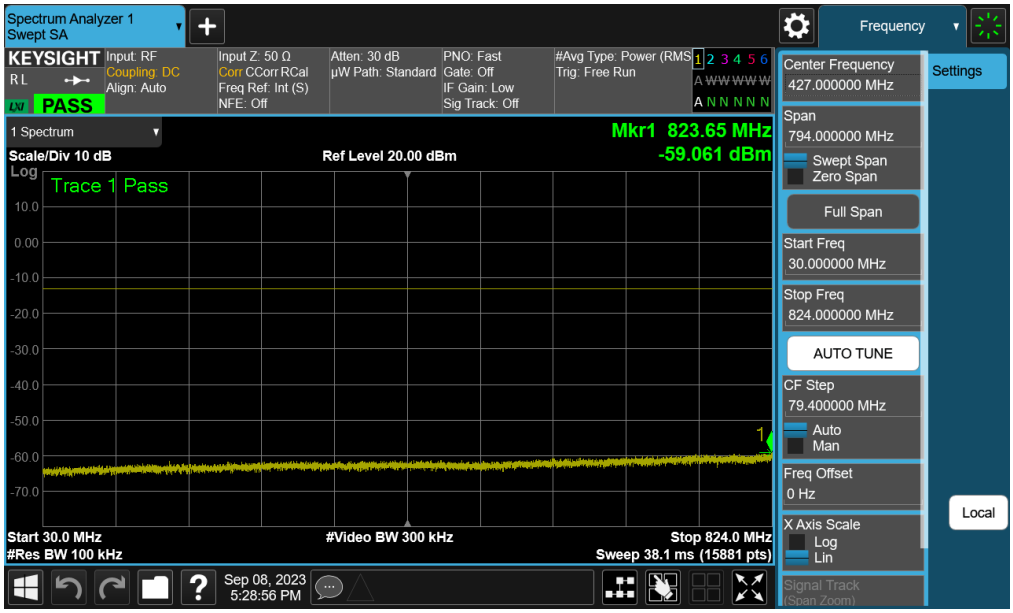
Plot 7-63. Conducted Spurious Plot (LTE Band 26/5 - 10MHz QPSK - 1 RB - Mid Channel – Ant 6)



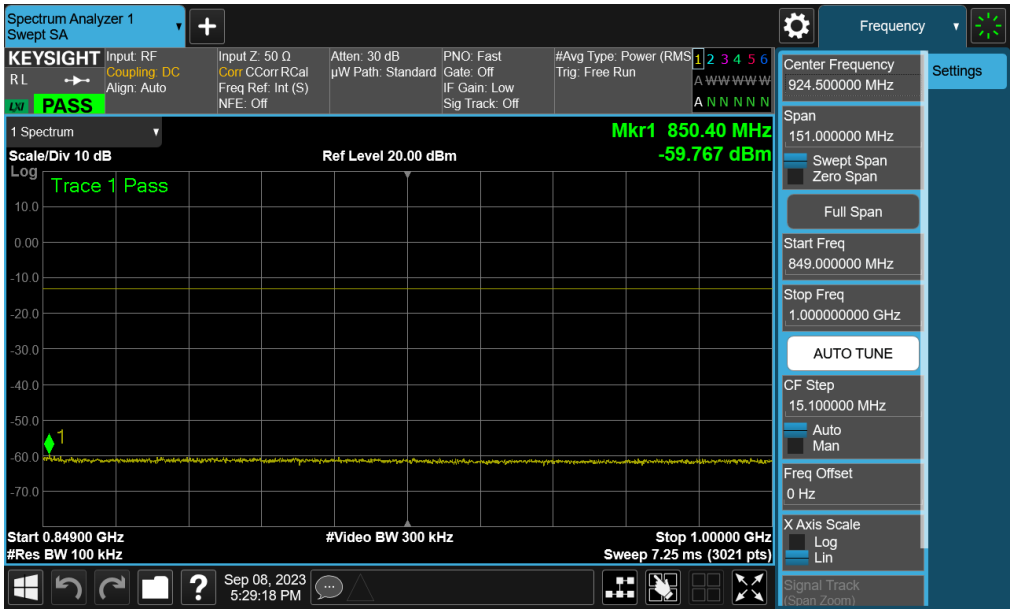
Plot 7-64. Conducted Spurious Plot (LTE Band 26/5 - 10MHz QPSK - 1 RB - Mid Channel – Ant 6)

Plot 7-65. Conducted Spurious Plot (LTE Band 26/5 - 10MHz QPSK - 1 RB - Mid Channel – Ant 6)

NR Band n5 – Ant 6



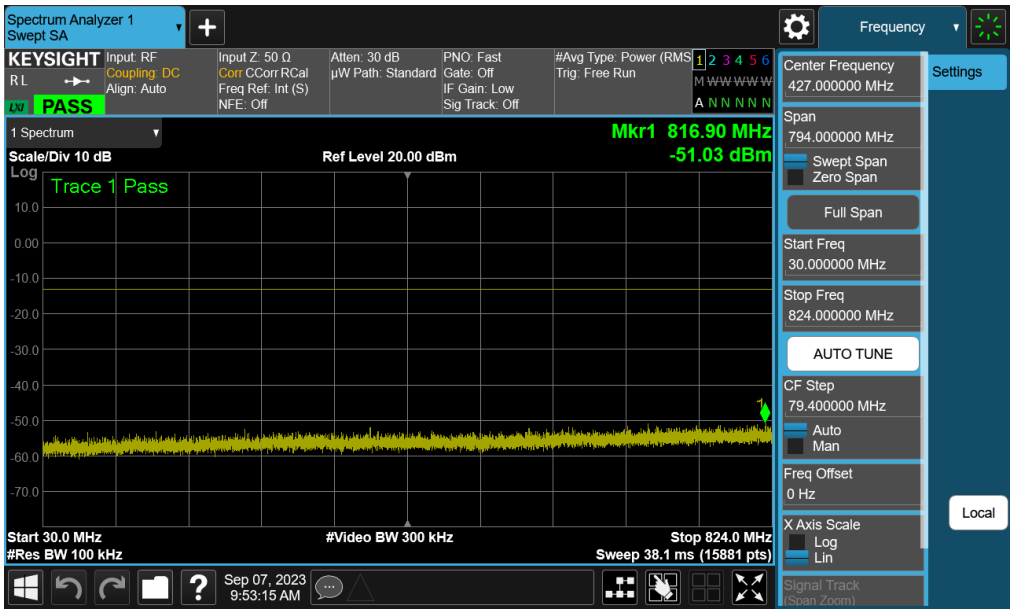
Plot 7-66. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel - Ant 6)



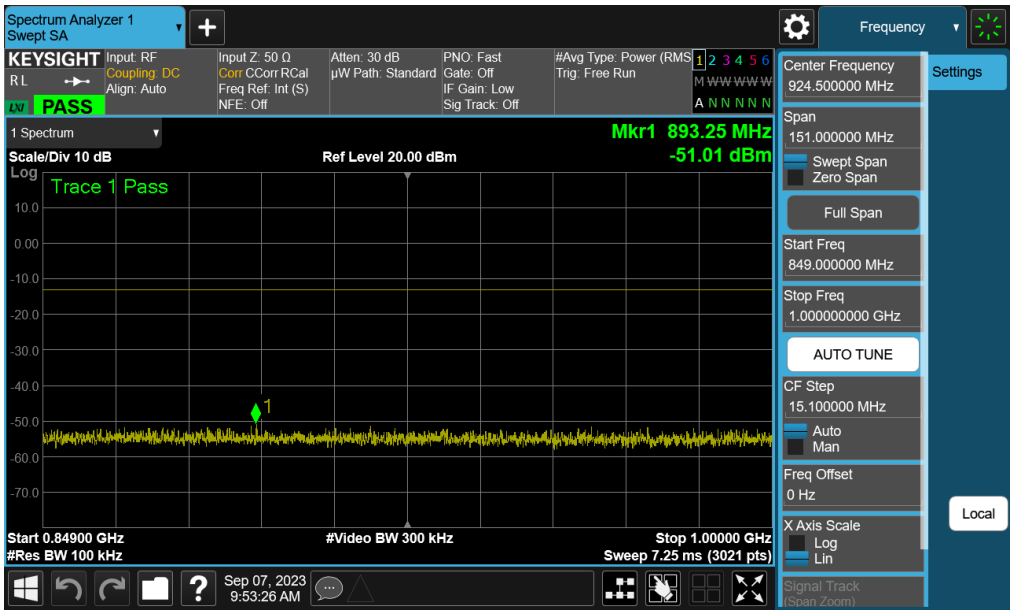
Plot 7-67. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel - Ant 6)

Plot 7-68. Conducted Spurious Plot (NR Band n5 - 20.0MHz - 1 RB - Mid Channel - Ant 6)

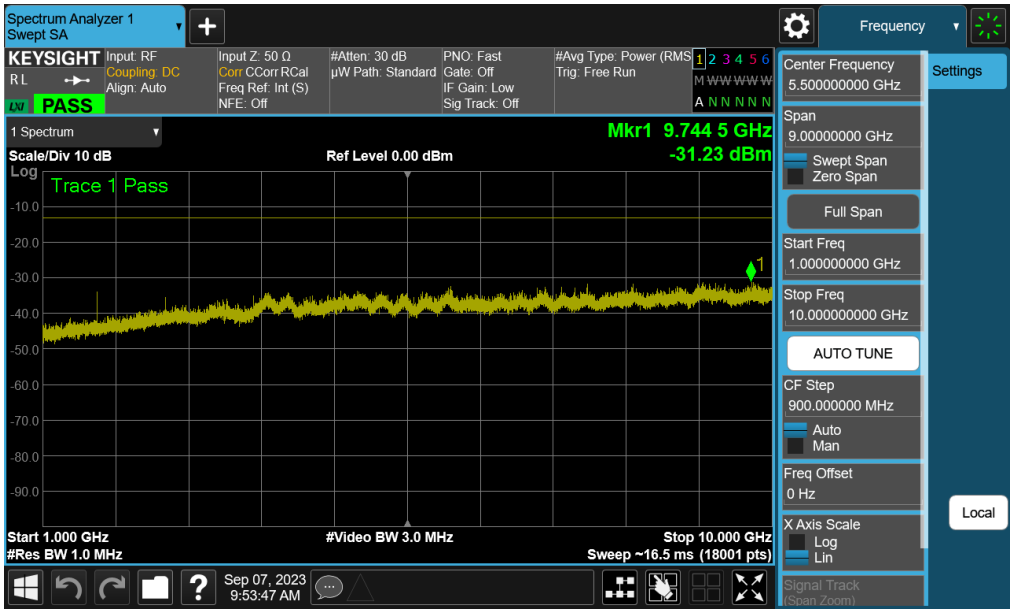
GSM/GPRS Cell – Ant 6



Plot 7-69. Conducted Spurious Plot (GPRS Ch. 190 – Ant 6)

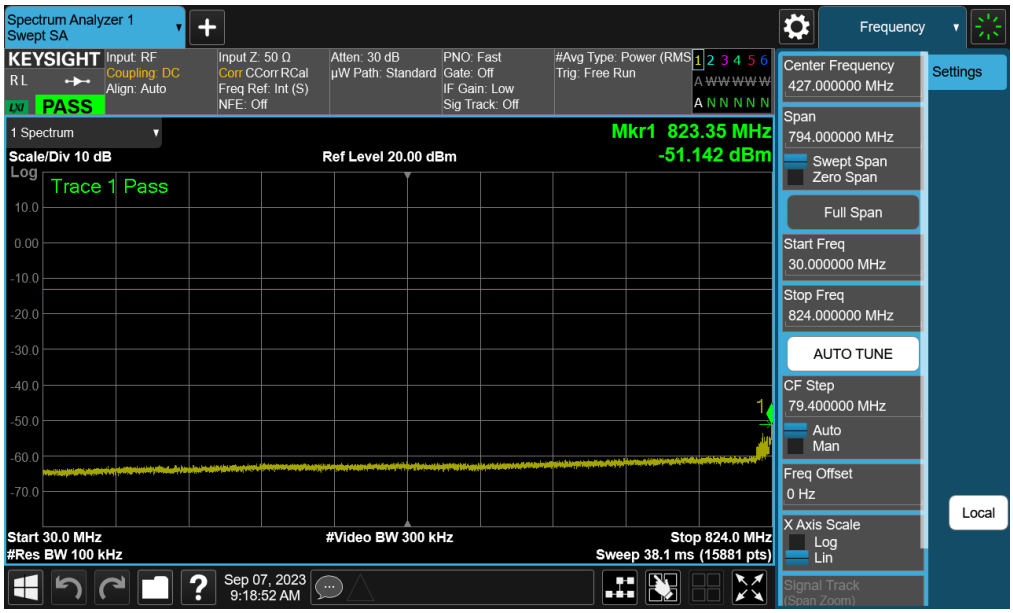


Plot 7-70. Conducted Spurious Plot (GPRS Ch. 190 – Ant 6)

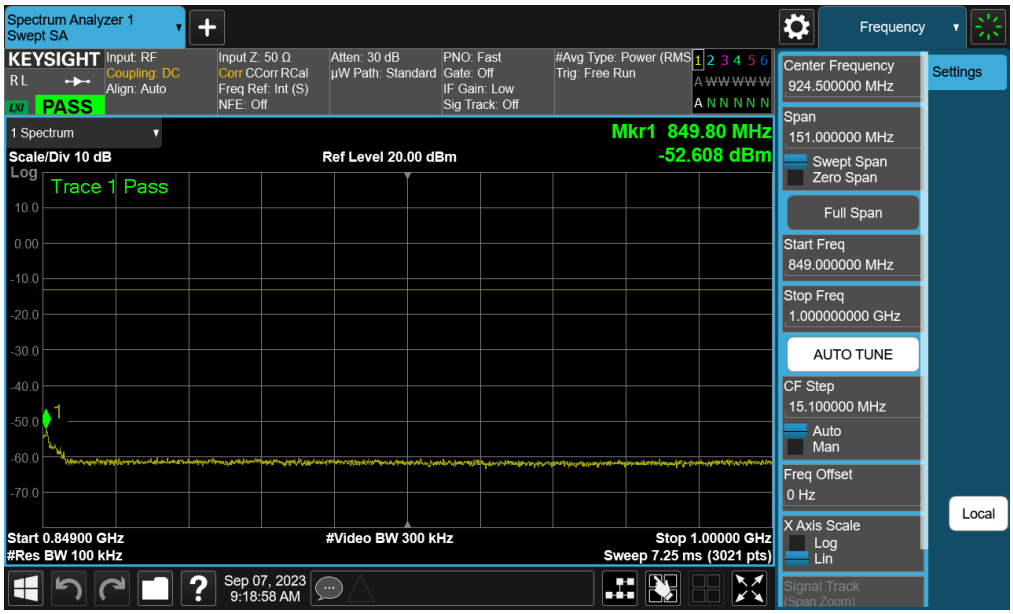


Plot 7-71. Conducted Spurious Plot (GPRS Ch. 190 – Ant 6)

WCDMA Cell – Ant 6



Plot 7-72. Conducted Spurious Plot (WCDMA Ch. 4183 – Ant 6)



Plot 7-73. Conducted Spurious Plot (WCDMA Ch. 4183 – Ant 6)

Plot 7-74. Conducted Spurious Plot (WCDMA Ch. 4183 – Ant 6)

7.4 Band Edge Emissions at Antenna Terminal

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.

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

ANSI C63.26-2015 – Section 5.7.3

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 ≥ 1% of the emission bandwidth
4. VBW ≥ 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.

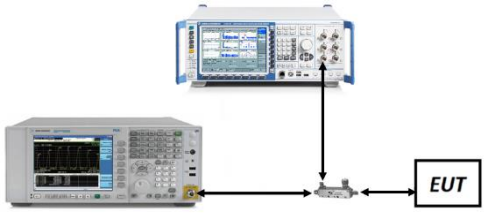


Figure 7-3. Test Instrument & Measurement Setup

Test Notes

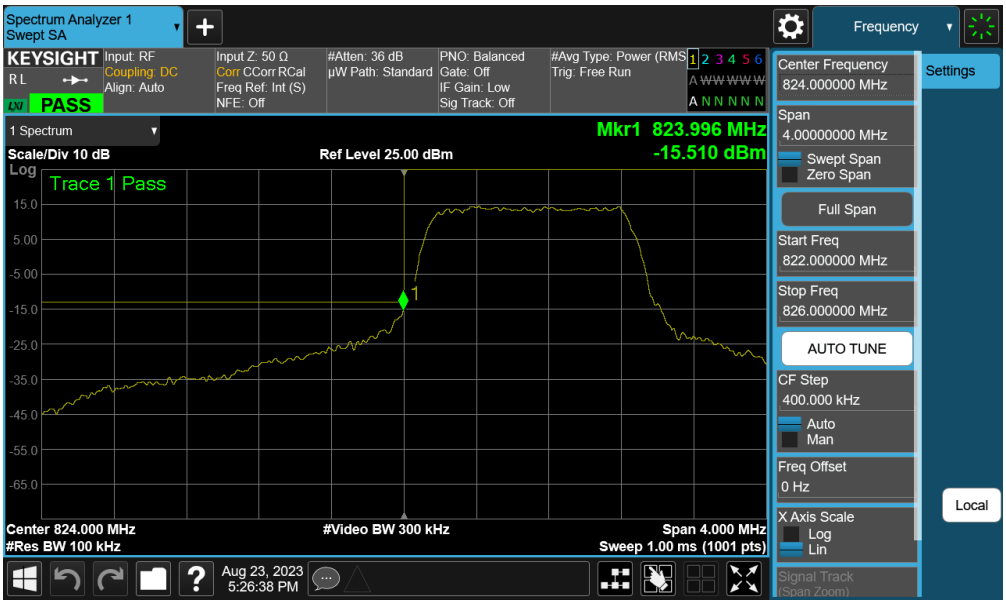
1. Per 22.917(b), in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to demonstrate compliance with the out-of-band emissions limit. The emission 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.

Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
GSM-Cell	250kHz	Low	Band Edge	-16.17	-13	-3.17
		High	Band Edge	-14.68	-13	-1.68
WCDMA-Cell	5MHz	Low	Band Edge	-20.21	-13	-7.21
		High	Band Edge	-20.96	-13	-7.96
LTE-B26-5	15 MHz (B26 Only)	Low	Band Edge	-29.72	-13	-16.72
		High	Band Edge	-29.80	-13	-16.80
	10 MHz	Low	Band Edge	-28.18	-13	-15.18
		High	Band Edge	-29.28	-13	-16.28
	5 MHz	Low	Band Edge	-21.74	-13	-8.74
		High	Band Edge	-23.08	-13	-10.08
	3 MHz	Low	Band Edge	-16.94	-13	-3.94
		High	Band Edge	-18.60	-13	-5.60
	1.4 MHz	Low	Band Edge	-15.51	-13	-2.51
		High	Band Edge	-19.57	-13	-6.57
NR-n5	20 MHz	Low	Band Edge	-30.43	-13	-17.43
		High	Band Edge	-30.26	-13	-17.26
	15 MHz	Low	Band Edge	-29.44	-13	-16.44
		High	Band Edge	-28.36	-13	-15.36
	10 MHz	Low	Band Edge	-28.04	-13	-15.04
		High	Band Edge	-30.98	-13	-17.98
	5 MHz	Low	Band Edge	-22.02	-13	-9.02
		High	Band Edge	-22.96	-13	-9.96

Table 7-6. Band Edge Test Results – Ant 0

LTE Band 26/5 – Ant 0



Plot 7-75. Lower Band Edge Plot (LTE Band 26/5 – 1.4MHz QPSK – Full RB - Ant 0)

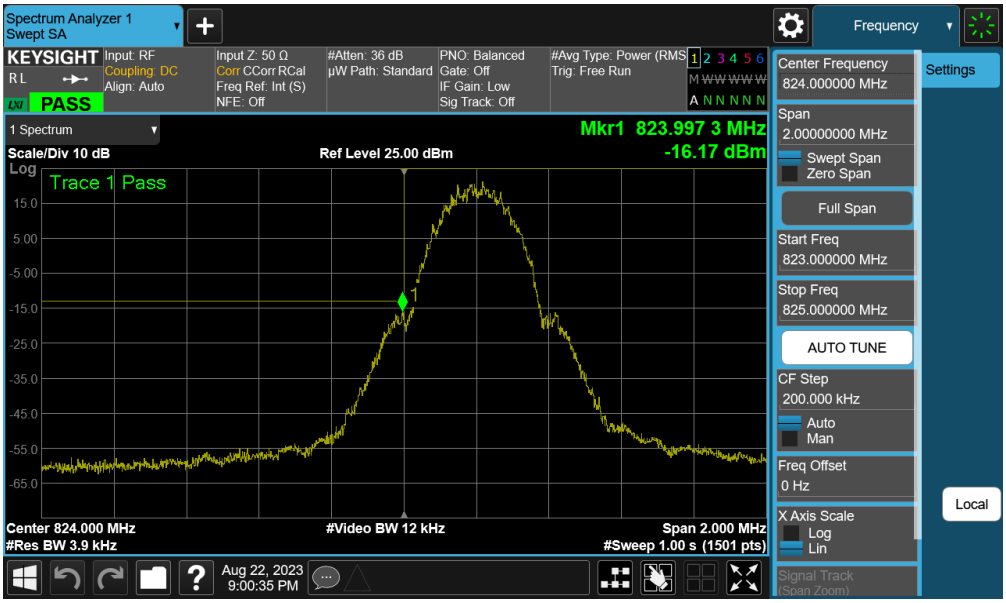
Plot 7-76. Upper Band Edge Plot (LTE Band 26/5 – 1.4MHz QPSK – Full RB - Ant 0)

NR Band n5 – Ant 0

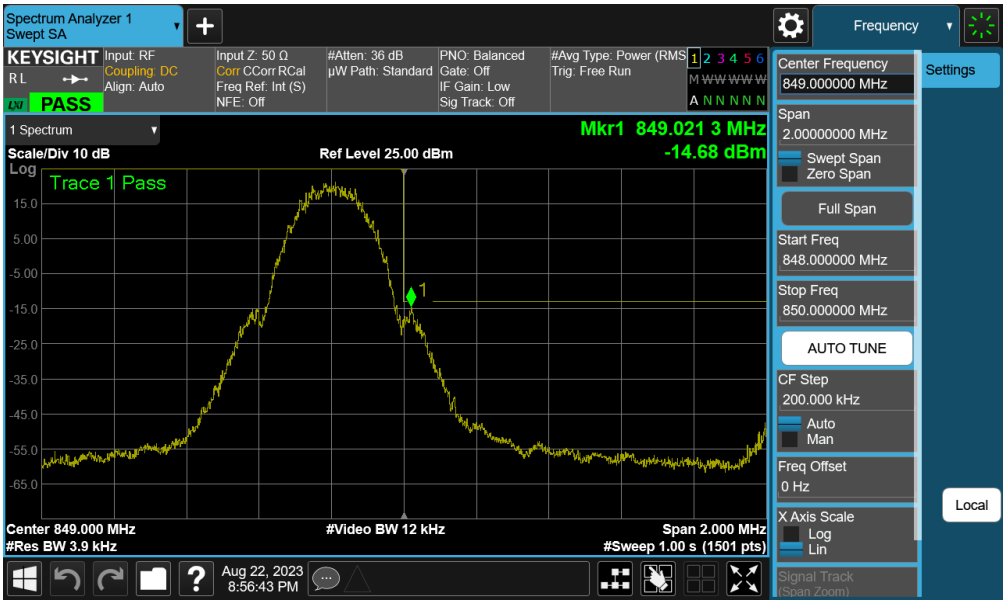
Plot 7-77. Lower Band Edge Plot (NR Band n5 – 5.0MHz QPSK - Full RB - Ant 0)

Plot 7-78. Upper Band Edge Plot (NR Band n5 – 5.0MHz CP - Full RB - Ant 0)

GSM/GPRS Cell – Ant 0

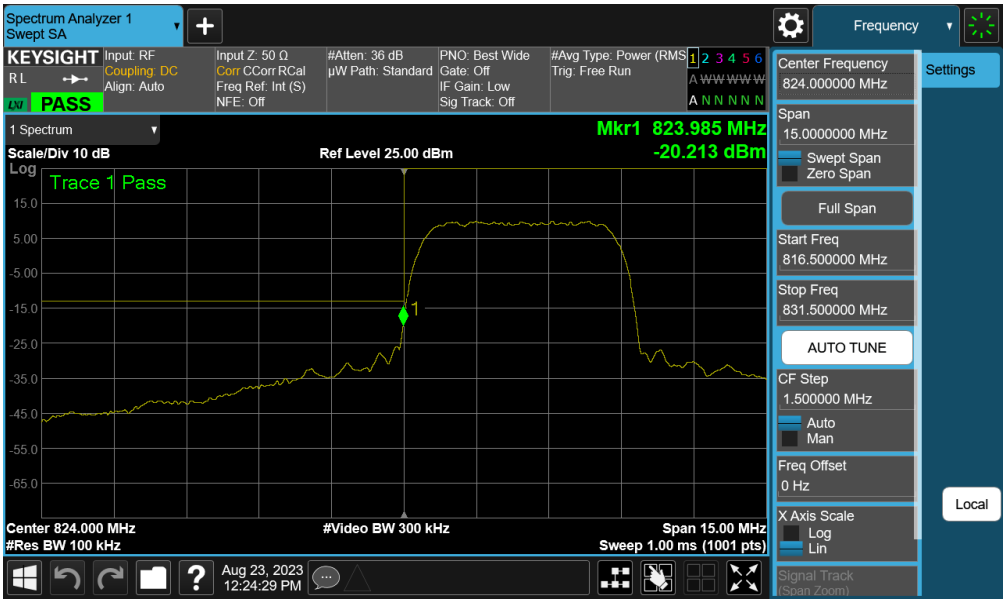


Plot 7-79. Lower Band Edge Plot (GPRS Cell – Ch. 128 – Ant 0)



Plot 7-80. Upper Band Edge Plot (GPRS Cell – Ch. 251 – Ant 0)

WCDMA Cell – Ant 0



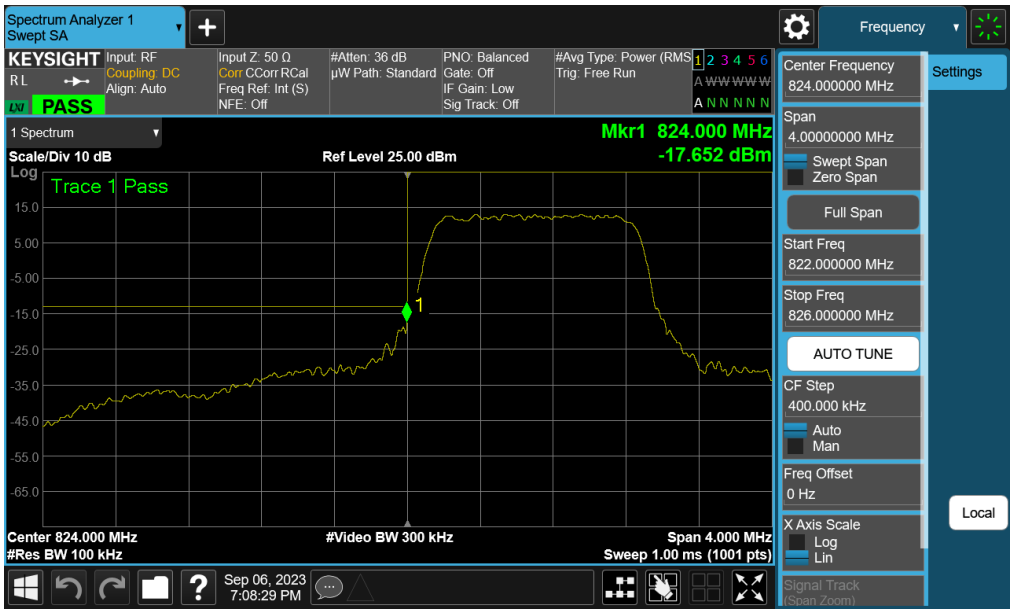
Plot 7-81. Lower Band Edge Plot (WCDMA Cell – Ch. 4132 – Ant 0)

Plot 7-82. Upper Band Edge Plot (WCDMA Cell – Ch. 4233 – Ant 0)

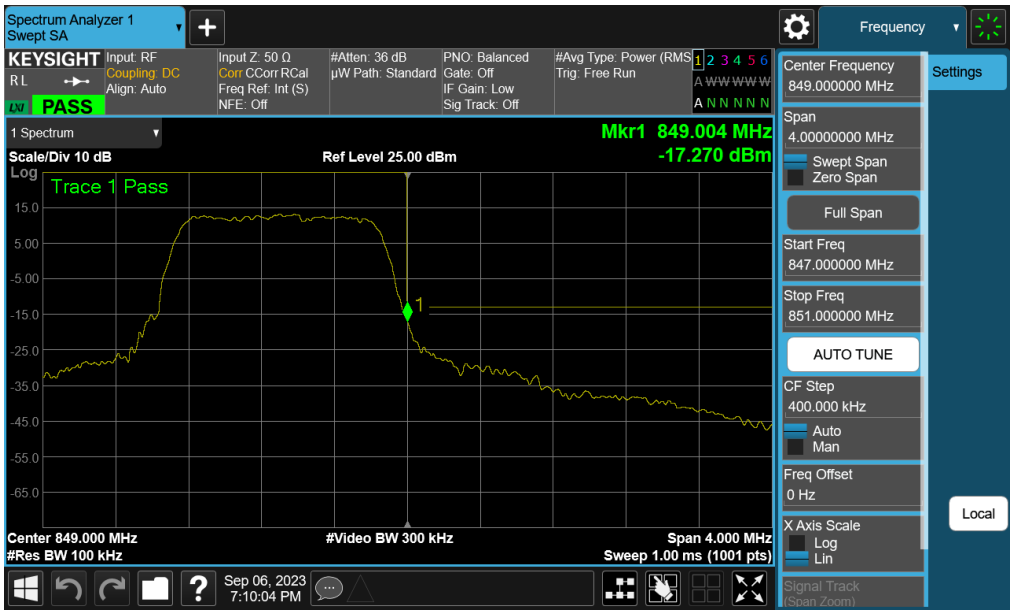
Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
GSM-Cell	250kHz	Low	Band Edge	-15.92	-13	-2.92
		High	Band Edge	-16.37	-13	-3.37
WCDMA-Cell	5MHz	Low	Band Edge	-20.00	-13	-7.00
		High	Band Edge	-21.43	-13	-8.43
LTE-B26-5	15 MHz (B26 Only)	Low	Band Edge	-28.82	-13	-15.82
		High	Band Edge	-28.48	-13	-15.48
	10 MHz	Low	Band Edge	-28.99	-13	-15.99
		High	Band Edge	-30.10	-13	-17.10
	5 MHz	Low	Band Edge	-22.41	-13	-9.41
		High	Band Edge	-26.04	-13	-13.04
	3 MHz	Low	Band Edge	-18.50	-13	-5.50
		High	Band Edge	-21.05	-13	-8.05
	1.4 MHz	Low	Band Edge	-17.65	-13	-4.65
		High	Band Edge	-17.27	-13	-4.27
NR-n5	20 MHz	Low	Band Edge	-29.81	-13	-16.81
		High	Band Edge	-29.46	-13	-16.46
	15 MHz	Low	Band Edge	-28.50	-13	-15.50
		High	Band Edge	-29.97	-13	-16.97
	10 MHz	Low	Band Edge	-25.74	-13	-12.74
		High	Band Edge	-26.63	-13	-13.63
	5 MHz	Low	Band Edge	-22.12	-13	-9.12
		High	Band Edge	-21.61	-13	-8.61

Table 7-7. Band Edge Test Results – Ant 6

LTE Band 26/5 – Ant 6



Plot 7-83. Lower Band Edge Plot (LTE Band 26/5 – 1.4MHz QPSK – Full RB - Ant 6)



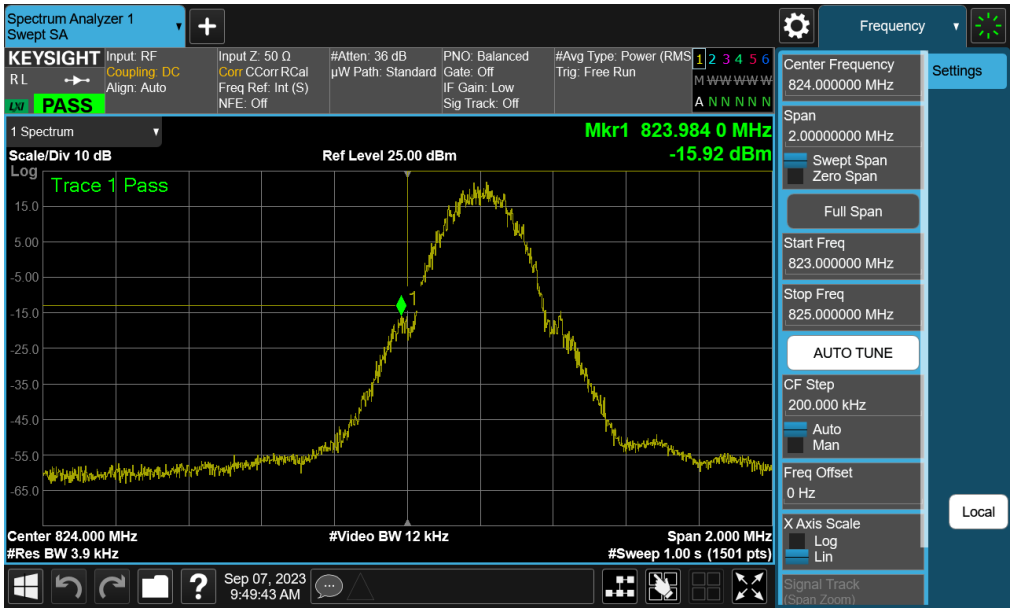
Plot 7-84. Upper Band Edge Plot (LTE Band 26/5 – 1.4MHz QPSK – Full RB - Ant 6)

NR Band n5 – Ant 6

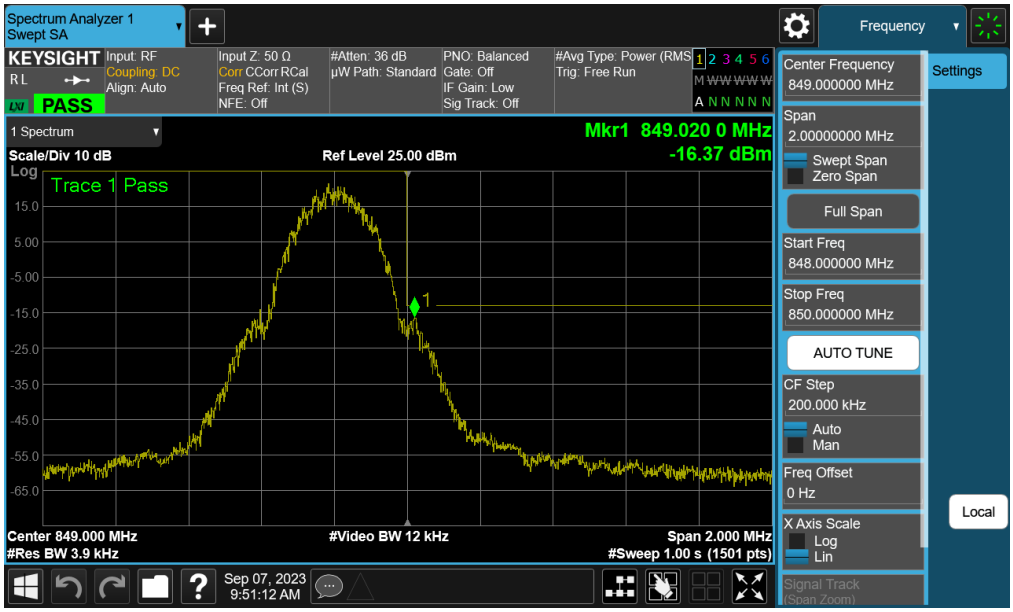
Plot 7-85. Lower Band Edge Plot (NR Band n5 – 5.0MHz BPSK - Full RB - Ant 6)

Plot 7-86. Upper Band Edge Plot (NR Band n5 – 5.0MHz BPSK - Full RB - Ant 6)

GSM/GPRS Cell – Ant 6

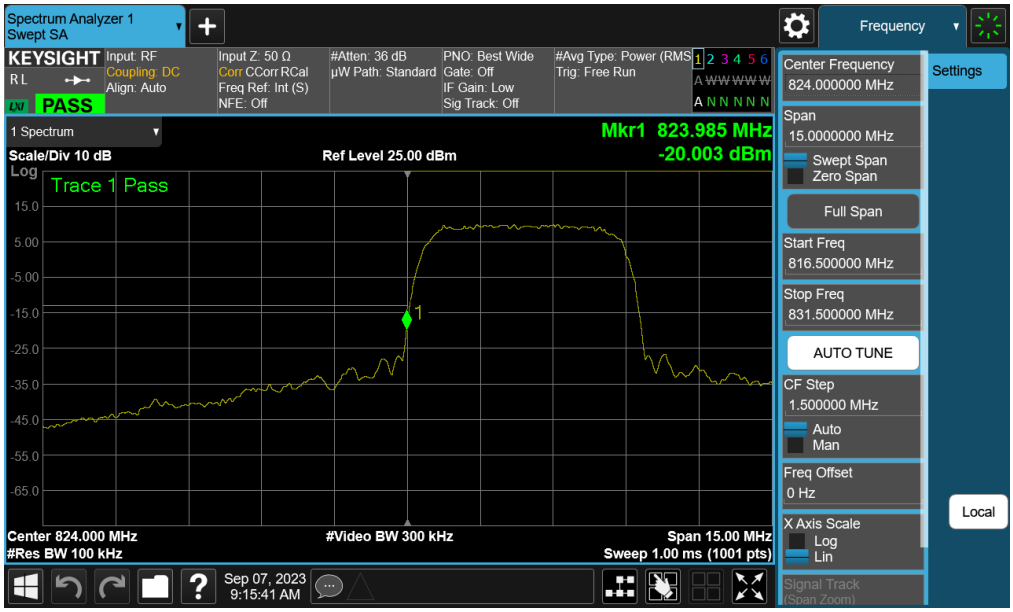


Plot 7-87. Lower Band Edge Plot (GPRS Cell – Ch. 128 – Ant 6)



Plot 7-88. Upper Band Edge Plot (GPRS Cell – Ch. 251 – Ant 6)

WCDMA Cell – Ant 6



Plot 7-89. Lower Band Edge Plot (WCDMA Cell – Ch. 4132 – Ant 6)

Plot 7-90. Upper Band Edge Plot (WCDMA Cell – Ch. 4233 – Ant 6)

7.5 Radiated Power (ERP)

Test Overview

Effective Radiated Power (ERP) measurements are performed using the substitution method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.2.4.4

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation. For signals with burst transmission, the signal analyzer's "time domain power" measurement capability is used.
2. RBW = 1 – 5% of the expected OBW, not to exceed 1MHz
3. VBW ≥ 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points ≥ 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto". Trigger is set to enable triggering only on full power bursts with the sweep time set less than or equal to the transmission burst duration.
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation. For signals with burst transmission, the "gating" function was enabled to ensure that measurements are performed during times in which the transmitter is operating at its maximum power.
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize.

Test Setup

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

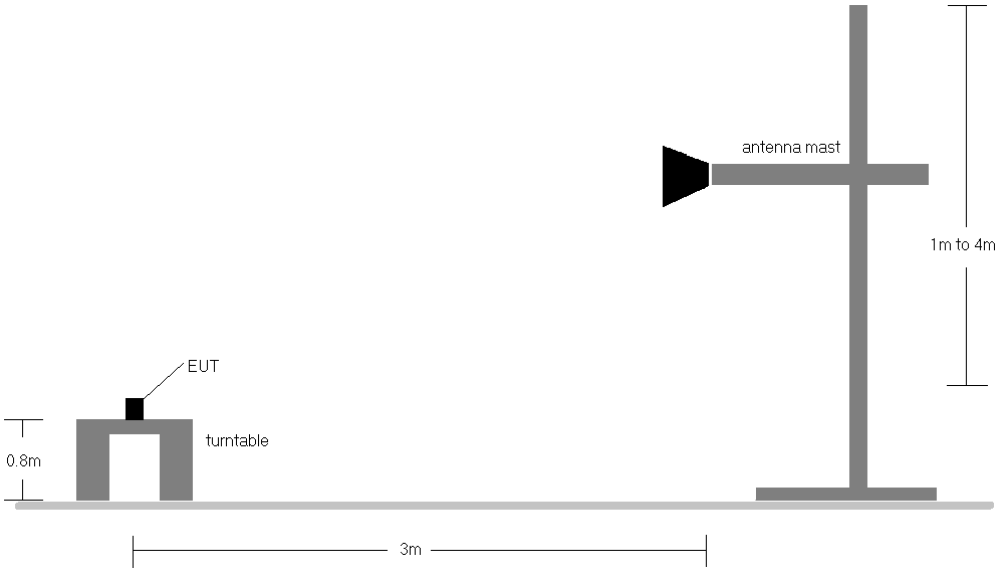


Figure 7-4. Radiated Test Setup < 1GHz

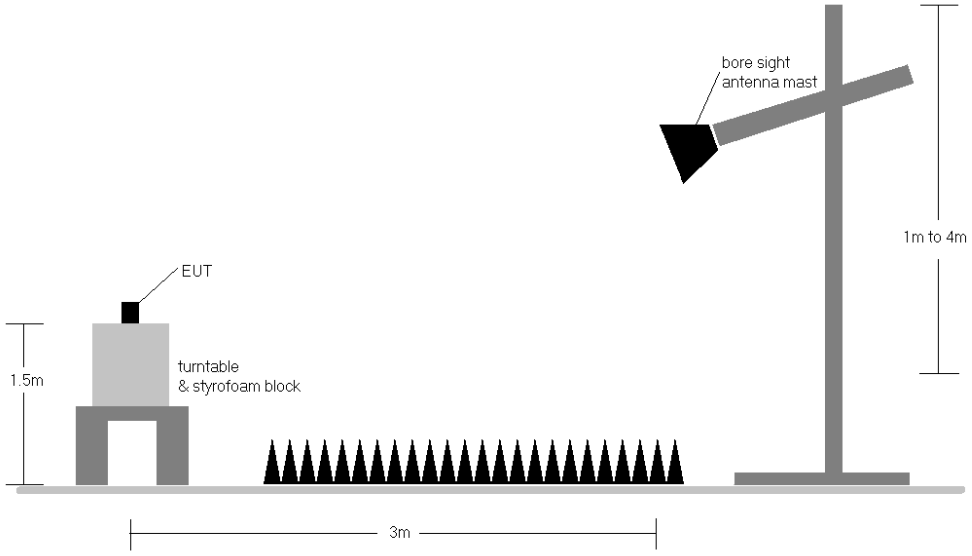


Figure 7-5. Radiated Test Setup > 1GHz

Test Notes

1) This device employs GSM, GPRS, and EDGE capabilities. The EUT was tested under all configurations and the highest powers are reported in GPRS mode while transmitting with one slot active.

2) This device employs UMTS technology with WCDMA (AMR/RMC) and HSDPA capabilities. The EUT was tested under all configurations and the highest powers are 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) 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.

Frequency [MHz]	Mode	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
824.20	GSM850	V	145	119	27.19	1.25	**26.29**	**0.426**	38.45	-12.16	**28.44**	**0.698**	40.61	-12.17
836.60	GSM850	V	136	131	26.71	1.31	25.87	0.386	38.45	-12.58	28.02	0.634	40.61	-12.59
848.80	GSM850	V	140	122	25.60	1.37	24.82	0.303	38.45	-13.63	26.97	0.498	40.61	-13.64
824.20	GSM850 (Opp. Pol.)	H	117	93	26.39	1.25	25.49	0.354	38.45	-12.96	27.64	0.581	40.61	-12.97
824.20	EDGE850	V	145	119	20.22	1.25	**19.32**	0.086	38.45	-19.13	**21.47**	**0.140**	40.61	-19.14
824.20	GSM850 (WCP)	V	151	112	24.48	1.25	23.58	0.228	38.45	-14.87	25.73	0.374	40.61	-14.88

Table 7-8. ERP Data (GPRS Cell – Ant 0)

Frequency [MHz]	Mode	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Substitute Level [dBm]	Ant. Gain [dBi]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
824.20	GSM850	V	138	236	33.14	1.25	32.24	1.675	38.45	-6.21	34.39	2.748	40.61	-6.22
836.60	GSM850	V	138	236	33.10	1.31	32.26	1.683	38.45	-6.19	34.41	2.761	40.61	-6.20
848.80	GSM850	V	138	236	33.24	1.37	**32.46**	**1.762**	38.45	-5.99	**34.61**	**2.890**	40.61	-6.00
848.80	GSM850 (Opp. Pol.)	H	220	116	25.02	1.37	24.24	0.265	38.45	-14.21	26.39	0.435	40.61	-14.22
848.80	EDGE850	V	137	235	25.60	1.37	**24.82**	0.303	38.45	-13.63	**26.97**	**0.498**	40.61	-13.64
848.80	GSM850 (WCP)	V	129	223	31.12	1.37	30.34	1.081	38.45	-8.11	32.49	1.774	40.61	-8.12

Table 7-9. ERP Data (GPRS Cell – Ant 6)

Frequency [MHz]	Mode	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Substitute Level [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	V	142	118	19.63	1.26	**18.74**	**0.075**	38.45	-19.71	**20.89**	**0.123**	40.61	-19.72
836.60	WCDMA850	V	142	111	18.87	1.31	18.03	0.064	38.45	-20.42	20.18	0.104	40.61	-20.43
846.60	WCDMA850	V	140	115	17.72	1.36	16.93	0.049	38.45	-21.52	19.08	0.081	40.61	-21.53
826.40	WCDMA850 (Opp. Pol.	H	126	62	17.86	1.31	17.02	0.050	38.45	-21.43	19.17	0.083	40.61	-21.44
826.40	WCDMA850 (WCP)	V	141	111	16.36	1.31	15.52	0.036	38.45	-22.93	17.67	0.058	40.61	-22.94

Table 7-10. ERP Data (WCDMA Cell – Ant 0)

Frequency [MHz]	Mode	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Substitute Level [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	V	138	235	25.91	1.26	25.02	0.318	38.45	-13.43	27.17	0.521	40.61	-13.44
836.60	WCDMA850	V	138	235	26.02	1.31	**25.18**	**0.330**	38.45	-13.27	**27.33**	**0.541**	40.61	-13.28
846.60	WCDMA850	V	138	235	25.51	1.36	24.72	0.296	38.45	-13.73	26.87	0.486	40.61	-13.74
836.60	WCDMA850 (Opp. Pol.	H	224	125	17.02	1.31	16.18	0.042	38.45	-22.27	18.33	0.068	40.61	-22.28
836.60	WCDMA850 (WCP)	V	129	224	24.10	1.31	23.26	0.212	38.45	-15.19	25.41	0.348	40.61	-15.20

Table 7-11. ERP Data (WCDMA Cell – Ant 6)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
15MHz (Band 26 only)	QPSK	831.50	V	153	125	1.29	1 / 0	19.93	**19.07**	0.081	38.45	-19.38	**21.22**	0.132	40.61	-19.39
	QPSK	836.50	V	138	110	1.31	1 / 0	19.44	18.60	0.072	38.45	-19.85	20.75	0.119	40.61	-19.86
	QPSK	841.50	V	143	103	1.33	1 / 0	18.74	17.92	0.062	38.45	-20.53	20.07	0.102	40.61	-20.53
	16-QAM	831.50	V	153	125	1.29	1 / 0	19.10	18.24	0.067	38.45	-20.21	20.39	0.109	40.61	-20.22
	16-QAM	836.50	V	138	110	1.31	1 / 0	18.56	17.72	0.059	38.45	-20.73	19.87	0.097	40.61	-20.74
	16-QAM	841.50	V	143	103	1.33	1 / 0	17.87	17.05	0.051	38.45	-21.40	19.20	0.083	40.61	-21.40
10 MHz	QPSK	829.00	V	153	125	1.27	1 / 25	20.46	**19.58**	0.091	38.45	-18.87	**21.73**	0.149	40.61	-18.87
	QPSK	836.50	V	138	110	1.31	1 / 25	20.17	19.33	0.086	38.45	-19.12	21.48	0.141	40.61	-19.13
	QPSK	844.00	V	143	103	1.35	1 / 0	19.11	18.30	0.068	38.45	-20.15	20.45	0.111	40.61	-20.16
	16-QAM	829.00	V	153	125	1.27	1 / 0	19.81	18.94	0.078	38.45	-19.51	21.09	0.128	40.61	-19.52
	16-QAM	836.50	V	138	110	1.31	1 / 0	19.35	18.51	0.071	38.45	-19.94	20.66	0.116	40.61	-19.94
	16-QAM	844.00	V	143	103	1.35	1 / 0	18.58	17.77	0.060	38.45	-20.68	19.92	0.098	40.61	-20.69
5 MHz	QPSK	826.50	V	153	125	1.26	1 / 24	20.72	**19.83**	0.096	38.45	-18.62	**21.98**	0.158	40.61	-18.62
	QPSK	836.50	V	138	110	1.31	1 / 0	20.10	19.26	0.084	38.45	-19.20	21.41	0.138	40.61	-19.20
	QPSK	846.50	V	143	103	1.36	1 / 12	19.23	18.44	0.070	38.45	-20.01	20.59	0.115	40.61	-20.01
	16-QAM	826.50	V	153	125	1.26	1 / 24	19.86	18.97	0.079	38.45	-19.48	21.12	0.130	40.61	-19.48
	16-QAM	836.50	V	138	110	1.31	1 / 0	19.22	18.38	0.069	38.45	-20.07	20.53	0.113	40.61	-20.07
	16-QAM	846.50	V	143	103	1.36	1 / 12	18.54	17.75	0.060	38.45	-20.70	19.90	0.098	40.61	-20.71
3 MHz	QPSK	825.50	V	153	125	1.26	1 / 0	20.42	**19.52**	0.090	38.45	-18.93	**21.67**	0.147	40.61	-18.93
	QPSK	836.50	V	138	110	1.31	1 / 7	19.91	19.07	0.081	38.45	-19.38	21.22	0.133	40.61	-19.38
	QPSK	847.50	V	143	103	1.36	1 / 7	19.13	18.34	0.068	38.45	-20.11	20.49	0.112	40.61	-20.12
	16-QAM	825.50	V	153	125	1.26	1 / 14	19.69	18.80	0.076	38.45	-19.65	20.95	0.125	40.61	-19.66
	16-QAM	836.50	V	138	110	1.31	1 / 7	19.15	18.31	0.068	38.45	-20.14	20.46	0.111	40.61	-20.15
	16-QAM	847.50	V	143	103	1.36	1 / 7	18.44	17.65	0.058	38.45	-20.80	19.80	0.095	40.61	-20.81
1.4 MHz	QPSK	824.70	V	153	125	1.25	1 / 3	20.40	**19.51**	0.089	38.45	-18.94	**21.66**	0.146	40.61	-18.95
	QPSK	836.50	V	138	110	1.31	1 / 0	20.13	19.29	0.085	38.45	-19.16	21.44	0.139	40.61	-19.17
	QPSK	848.30	V	143	103	1.37	1 / 0	19.27	18.49	0.071	38.45	-19.96	20.64	0.116	40.61	-19.97
	16-QAM	824.70	V	153	125	1.25	1 / 5	19.80	18.90	0.078	38.45	-19.55	21.05	0.127	40.61	-19.56
	16-QAM	836.50	V	138	110	1.31	1 / 3	19.20	18.36	0.069	38.45	-20.09	20.51	0.112	40.61	-20.10
	16-QAM	848.30	V	143	103	1.37	1 / 5	18.59	17.80	0.060	38.45	-20.65	19.95	0.099	40.61	-20.65
10 MHz	QPSK (Opposite Pol.)	829.00	H	113	60	1.27	1 / 0	18.17	17.29	0.054	38.45	-21.16	19.44	0.088	40.61	-21.17
	QPSK (WCP)	829.00	V	153	123	1.27	1 / 0	16.59	15.71	0.037	38.45	-22.74	17.86	0.061	40.61	-22.75

Table 7-12. ERP Data (LTE Band 26/5 – Ant 0)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
15MHz (Band 26 only)	QPSK	831.50	V	138	236	1.29	1 / 37	25.41	24.55	0.285	38.45	-13.90	26.70	0.467	40.61	-13.91
	QPSK	836.50	V	138	236	1.31	1 / 0	25.43	**24.59**	0.288	38.45	-13.86	**26.74**	0.472	40.61	-13.87
	QPSK	841.50	V	138	236	1.33	1 / 0	25.39	24.57	0.287	38.45	-13.88	26.72	0.470	40.61	-13.88
	16-QAM	831.50	V	138	236	1.29	1 / 37	24.39	23.53	0.225	38.45	-14.92	25.68	0.370	40.61	-14.93
	16-QAM	836.50	V	138	236	1.31	1 / 0	24.46	23.62	0.230	38.45	-14.83	25.77	0.378	40.61	-14.84
	16-QAM	841.50	V	138	236	1.33	1 / 0	24.41	23.59	0.229	38.45	-14.86	25.74	0.375	40.61	-14.86
10 MHz	QPSK	829.00	V	138	236	1.27	1 / 0	25.43	24.55	0.285	38.45	-13.90	26.70	0.468	40.61	-13.91
	QPSK	836.50	V	138	236	1.31	1 / 0	25.70	**24.86**	0.306	38.45	-13.59	**27.01**	0.503	40.61	-13.59
	QPSK	844.00	V	138	236	1.35	1 / 0	25.30	24.49	0.281	38.45	-13.96	26.64	0.462	40.61	-13.96
	16-QAM	829.00	V	138	236	1.27	1 / 0	24.68	23.81	0.240	38.45	-14.64	25.96	0.394	40.61	-14.65
	16-QAM	836.50	V	138	236	1.31	1 / 0	24.35	23.51	0.224	38.45	-14.95	25.66	0.368	40.61	-14.95
	16-QAM	844.00	V	138	236	1.35	1 / 0	24.49	23.69	0.234	38.45	-14.76	25.84	0.384	40.61	-14.77
5 MHz	QPSK	826.50	V	138	236	1.26	1 / 12	25.40	24.51	0.283	38.45	-13.94	26.66	0.464	40.61	-13.94
	QPSK	836.50	V	138	236	1.31	1 / 12	25.59	**24.75**	0.298	38.45	-13.70	**26.90**	0.489	40.61	-13.71
	QPSK	846.50	V	138	236	1.36	1 / 0	25.11	24.32	0.271	38.45	-14.13	26.47	0.444	40.61	-14.14
	16-QAM	826.50	V	138	236	1.26	1 / 12	24.49	23.61	0.229	38.45	-14.85	25.76	0.376	40.61	-14.85
	16-QAM	836.50	V	138	236	1.31	1 / 12	24.35	23.51	0.224	38.45	-14.95	25.66	0.368	40.61	-14.95
	16-QAM	846.50	V	138	236	1.36	1 / 0	24.40	23.61	0.230	38.45	-14.84	25.76	0.377	40.61	-14.85
3 MHz	QPSK	825.50	V	138	236	1.26	1 / 14	25.34	24.44	0.278	38.45	-14.01	26.59	0.456	40.61	-14.01
	QPSK	836.50	V	138	236	1.31	1 / 14	25.46	**24.62**	0.290	38.45	-13.83	**26.77**	0.475	40.61	-13.84
	QPSK	847.50	V	138	236	1.36	1 / 0	25.07	24.28	0.268	38.45	-14.17	26.43	0.440	40.61	-14.17
	16-QAM	825.50	V	138	236	1.26	1 / 14	24.38	23.48	0.223	38.45	-14.97	25.63	0.366	40.61	-14.97
	16-QAM	836.50	V	138	236	1.31	1 / 14	24.24	23.40	0.219	38.45	-15.05	25.55	0.359	40.61	-15.06
	16-QAM	847.50	V	138	236	1.36	1 / 0	24.21	23.42	0.220	38.45	-15.03	25.57	0.361	40.61	-15.03
1.4 MHz	QPSK	824.70	V	138	236	1.25	1 / 3	25.27	24.37	0.274	38.45	-14.08	26.52	0.449	40.61	-14.08
	QPSK	836.50	V	138	236	1.31	1 / 0	25.32	**24.48**	0.280	38.45	-13.97	**26.63**	0.460	40.61	-13.98
	QPSK	848.30	V	138	236	1.37	1 / 0	25.03	24.25	0.266	38.45	-14.20	26.40	0.436	40.61	-14.21
	16-QAM	824.70	V	138	236	1.25	1 / 3	24.49	23.59	0.229	38.45	-14.86	25.74	0.375	40.61	-14.87
	16-QAM	836.50	V	138	236	1.31	1 / 0	24.22	23.38	0.218	38.45	-15.07	25.53	0.357	40.61	-15.08
	16-QAM	848.30	V	138	236	1.37	1 / 0	24.15	23.36	0.217	38.45	-15.09	25.51	0.356	40.61	-15.09
10 MHz	QPSK (Opposite Pol.)	836.50	H	220	55	1.31	1 / 0	15.32	14.48	0.028	38.45	-23.97	16.63	0.046	40.61	-23.98
	QPSK (WCP)	836.50	V	137	239	1.31	1 / 0	21.60	20.76	0.119	38.45	-17.69	22.91	0.195	40.61	-17.70

Table 7-13. ERP Data (LTE Band 26/5 – Ant 6)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	π/2 BPSK	834.00	V	145	136	1.29	1 / 1	19.87	19.01	0.080	38.45	-19.44	21.16	0.131	40.61	-19.45
	π/2 BPSK	836.50	V	145	128	1.31	1 / 1	20.11	19.27	0.085	38.45	-19.18	21.42	0.139	40.61	-19.19
	π/2 BPSK	839.00	V	140	125	1.33	1 / 1	19.58	18.76	0.075	38.45	-19.69	20.91	0.123	40.61	-19.69
	QPSK	834.00	V	145	136	1.29	1 / 1	20.11	19.25	0.084	38.45	-19.20	21.40	0.138	40.61	-19.21
	QPSK	836.50	V	145	128	1.31	1 / 1	20.19	**19.35**	0.086	38.45	-19.10	**21.50**	0.141	40.61	-19.11
	QPSK	839.00	V	140	125	1.33	1 / 1	19.99	19.17	0.083	38.45	-19.28	21.32	0.136	40.61	-19.28
	16-QAM	836.50	V	145	128	1.31	1 / 1	19.13	18.29	0.067	38.45	-20.16	20.44	0.111	40.61	-20.17
15 MHz	π/2 BPSK	831.50	V	145	136	1.29	1 / 1	19.96	19.10	0.081	38.45	-19.35	21.25	0.133	40.61	-19.35
	π/2 BPSK	836.50	V	145	128	1.31	1 / 1	20.03	19.19	0.083	38.45	-19.26	21.34	0.136	40.61	-19.26
	π/2 BPSK	841.50	V	140	125	1.33	1 / 1	19.44	18.62	0.073	38.45	-19.83	20.77	0.119	40.61	-19.84
	QPSK	831.50	V	145	136	1.29	1 / 1	20.16	19.30	0.085	38.45	-19.15	21.45	0.140	40.61	-19.16
	QPSK	836.50	V	145	128	1.31	1 / 1	20.24	**19.40**	0.087	38.45	-19.05	**21.55**	0.143	40.61	-19.05
	QPSK	841.50	V	140	125	1.33	1 / 77	19.74	18.92	0.078	38.45	-19.53	21.07	0.128	40.61	-19.53
	16-QAM	836.50	V	145	128	1.31	1 / 1	19.26	18.42	0.069	38.45	-20.04	20.57	0.114	40.61	-20.04
10 MHz	π/2 BPSK	829.00	V	145	136	1.27	1 / 26	19.93	19.05	0.080	38.45	-19.40	21.20	0.132	40.61	-19.41
	π/2 BPSK	836.50	V	145	128	1.31	1 / 26	19.99	19.15	0.082	38.45	-19.30	21.30	0.135	40.61	-19.30
	π/2 BPSK	844.00	V	140	125	1.35	1 / 1	19.35	18.55	0.072	38.45	-19.90	20.70	0.118	40.61	-19.90
	QPSK	829.00	V	145	136	1.27	1 / 1	20.07	19.19	0.083	38.45	-19.26	21.34	0.136	40.61	-19.27
	QPSK	836.50	V	145	128	1.31	1 / 1	20.15	**19.31**	0.085	38.45	-19.14	**21.46**	0.140	40.61	-19.15
	QPSK	844.00	V	140	125	1.35	1 / 1	19.74	18.94	0.078	38.45	-19.51	21.09	0.129	40.61	-19.52
	16-QAM	836.50	V	145	128	1.31	1 / 1	18.99	18.15	0.065	38.45	-20.30	20.30	0.107	40.61	-20.31
5 MHz	π/2 BPSK	829.00	V	145	136	1.27	1 / 1	19.99	19.11	0.081	38.45	-19.34	21.26	0.134	40.61	-19.35
	π/2 BPSK	836.50	V	145	128	1.31	1 / 23	19.90	19.06	0.081	38.45	-19.39	21.21	0.132	40.61	-19.40
	π/2 BPSK	844.00	V	140	125	1.35	1 / 23	19.38	18.58	0.072	38.45	-19.87	20.73	0.118	40.61	-19.88
	QPSK	829.00	V	145	136	1.27	1 / 1	19.96	19.08	0.081	38.45	-19.37	21.23	0.133	40.61	-19.37
	QPSK	836.50	V	145	128	1.31	1 / 23	20.06	**19.22**	0.084	38.45	-19.23	**21.37**	0.137	40.61	-19.23
	QPSK	844.00	V	140	125	1.35	1 / 1	19.54	18.74	0.075	38.45	-19.71	20.89	0.123	40.61	-19.71
	16-QAM	836.50	V	145	128	1.31	1 / 23	19.37	18.53	0.071	38.45	-19.92	20.68	0.117	40.61	-19.93
20 MHz	QPSK (CP-OFDM)	836.50	V	144	126	1.31	1 / 1	18.62	**17.78**	0.060	38.45	-20.67	19.93	0.098	40.61	-20.68
	QPSK (Opposite Pol.)	836.50	H	119	71	1.31	1 / 1	19.20	18.36	0.069	38.45	-20.09	20.51	0.112	40.61	-20.10
	QPSK (WCP)	836.50	V	145	128	1.31	1 / 1	16.04	15.20	0.033	38.45	-23.25	17.35	0.054	40.61	-23.26

Table 7-14. ERP Data (NR Band n5 – Ant 0)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	ERP [dBm]	ERP [Watts]	ERP Limit [dBm]	Margin [dB]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	π/2 BPSK	834.00	V	138	236	1.29	1 / 1	25.37	**24.51**	0.282	38.45	-13.94	**26.66**	0.463	40.61	-13.95
	π/2 BPSK	836.50	V	138	236	1.31	1 / 1	25.08	24.24	0.265	38.45	-14.21	26.39	0.436	40.61	-14.22
	π/2 BPSK	839.00	V	138	236	1.33	1 / 1	25.04	24.22	0.264	38.45	-14.23	26.37	0.434	40.61	-14.23
	QPSK	834.00	V	138	236	1.29	1 / 1	25.22	24.36	0.273	38.45	-14.09	26.51	0.447	40.61	-14.10
	QPSK	836.50	V	138	236	1.31	1 / 1	24.97	24.13	0.259	38.45	-14.32	26.28	0.425	40.61	-14.33
	QPSK	839.00	V	138	236	1.33	1 / 1	24.89	24.07	0.256	38.45	-14.38	26.22	0.419	40.61	-14.38
	16-QAM	834.00	V	138	236	1.29	1 / 1	24.01	23.15	0.206	38.45	-15.30	25.30	0.339	40.61	-15.31
15 MHz	π/2 BPSK	831.50	V	138	236	1.29	1 / 1	25.30	**24.44**	0.278	38.45	-14.01	**26.59**	0.456	40.61	-14.02
	π/2 BPSK	836.50	V	138	236	1.31	1 / 1	25.06	24.22	0.264	38.45	-14.24	26.37	0.433	40.61	-14.24
	π/2 BPSK	841.50	V	138	236	1.33	1 / 1	24.81	23.99	0.251	38.45	-14.46	26.14	0.411	40.61	-14.47
	QPSK	831.50	V	138	236	1.29	1 / 1	25.24	24.38	0.274	38.45	-14.07	26.53	0.450	40.61	-14.08
	QPSK	836.50	V	138	236	1.31	1 / 1	25.02	24.18	0.262	38.45	-14.27	26.33	0.429	40.61	-14.28
	QPSK	841.50	V	138	236	1.33	1 / 1	24.86	24.04	0.253	38.45	-14.42	26.19	0.415	40.61	-14.42
	16-QAM	831.50	V	138	236	1.29	1 / 1	24.41	23.55	0.226	38.45	-14.90	25.70	0.371	40.61	-14.91
10 MHz	π/2 BPSK	829.00	V	138	236	1.27	1 / 1	25.32	**24.44**	0.278	38.45	-14.01	**26.59**	0.456	40.61	-14.02
	π/2 BPSK	836.50	V	138	236	1.31	1 / 1	25.14	24.30	0.269	38.45	-14.15	26.45	0.442	40.61	-14.15
	π/2 BPSK	844.00	V	138	236	1.35	1 / 50	24.72	23.92	0.247	38.45	-14.53	26.07	0.405	40.61	-14.54
	QPSK	829.00	V	138	236	1.27	1 / 1	25.25	24.37	0.273	38.45	-14.08	26.52	0.449	40.61	-14.09
	QPSK	836.50	V	138	236	1.31	1 / 26	24.93	24.09	0.257	38.45	-14.36	26.24	0.421	40.61	-14.36
	QPSK	844.00	V	138	236	1.35	1 / 26	24.80	24.00	0.251	38.45	-14.45	26.15	0.412	40.61	-14.46
	16-QAM	829.00	V	138	236	1.27	1 / 1	24.56	23.68	0.233	38.45	-14.77	25.83	0.383	40.61	-14.77
5 MHz	π/2 BPSK	829.00	V	138	236	1.27	1 / 12	25.41	**24.53**	0.284	38.45	-13.92	**26.68**	0.466	40.61	-13.92
	π/2 BPSK	836.50	V	138	236	1.31	1 / 1	25.11	24.27	0.267	38.45	-14.18	26.42	0.438	40.61	-14.19
	π/2 BPSK	844.00	V	138	236	1.35	1 / 23	24.85	24.05	0.254	38.45	-14.40	26.20	0.417	40.61	-14.41
	QPSK	829.00	V	138	236	1.27	1 / 1	25.10	24.22	0.264	38.45	-14.23	26.37	0.433	40.61	-14.24
	QPSK	836.50	V	138	236	1.31	1 / 1	24.92	24.08	0.256	38.45	-14.37	26.23	0.419	40.61	-14.38
	QPSK	844.00	V	138	236	1.35	1 / 1	24.75	23.95	0.248	38.45	-14.51	26.10	0.407	40.61	-14.51
	16-QAM	829.00	V	138	236	1.27	1 / 12	24.19	23.31	0.214	38.45	-15.14	25.46	0.351	40.61	-15.15
20 MHz	QPSK (CP-OFDM)	834.00	V	138	246	1.33	1 / 1	22.71	**21.89**	0.155	38.45	-16.56	24.04	0.254	40.61	-16.57
	QPSK (Opposite Pol.)	834.00	H	220	118	1.33	1 / 1	17.05	16.23	0.042	38.45	-22.22	18.38	0.069	40.61	-22.23
	QPSK (WCP)	834.00	V	136	248	1.33	1 / 1	21.37	20.55	0.114	38.45	-17.90	22.70	0.186	40.61	-17.91

Table 7-15. ERP Data (NR Band n5 – Ant 6)

7.6 Radiated Spurious Emissions Measurements

Test Overview

Radiated spurious emissions measurements are performed using the field strength conversion method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using hybrid (biconical/log) antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

Test Procedures Used

ANSI C63.26-2015 – Section 5.5.4

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.

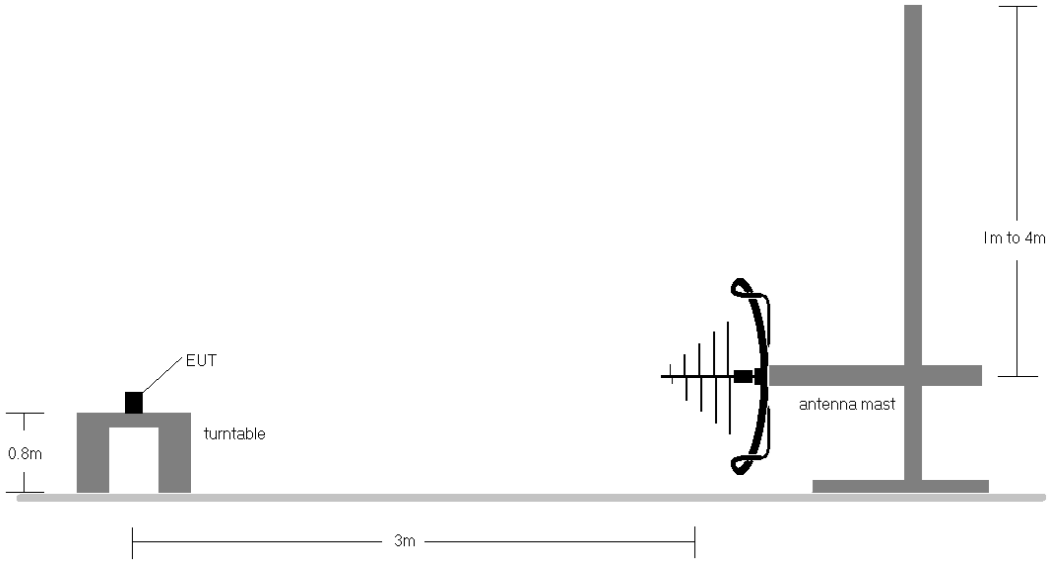


Figure 7-6. Test Instrument & Measurement Setup < 1GHz

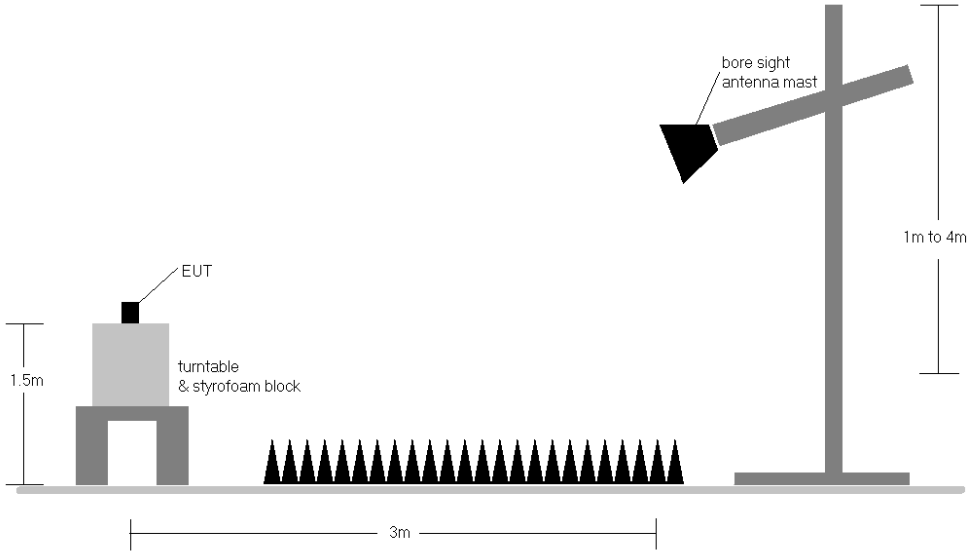


Figure 7-7. Test Instrument & Measurement Setup > 1GHz

Test Notes

1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
   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 GSM, GPRS, and EDGE capabilities. The EUT was tested under all configurations and the highest powers are reported in GPRS mode while transmitting with one slot active.

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

4) 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.

5) This unit was tested with its standard battery.

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

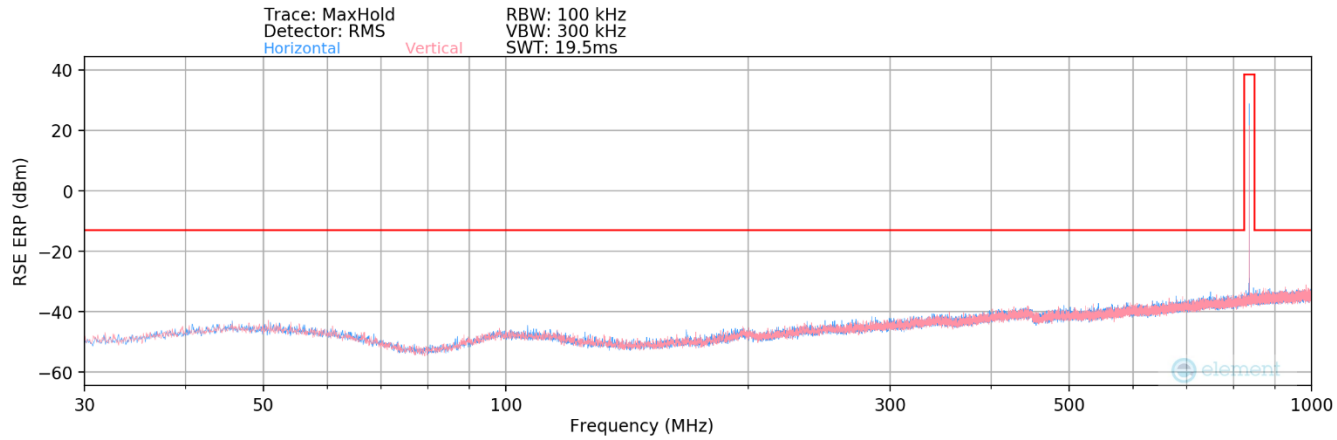
7) Emissions below 18GHz were measured at a 3-meter test distance while emissions above 18GHz were measured at a 1-meter test distance with the application of a distance correction factor.

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

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 emissions shown in this section are measured while operating in EN-DC mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor). Spurious emissions from the NR carrier device are subject to the rules under which the NR carrier operates. Spurious emissions caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.

GSM/GPRS Cell – Ant 0

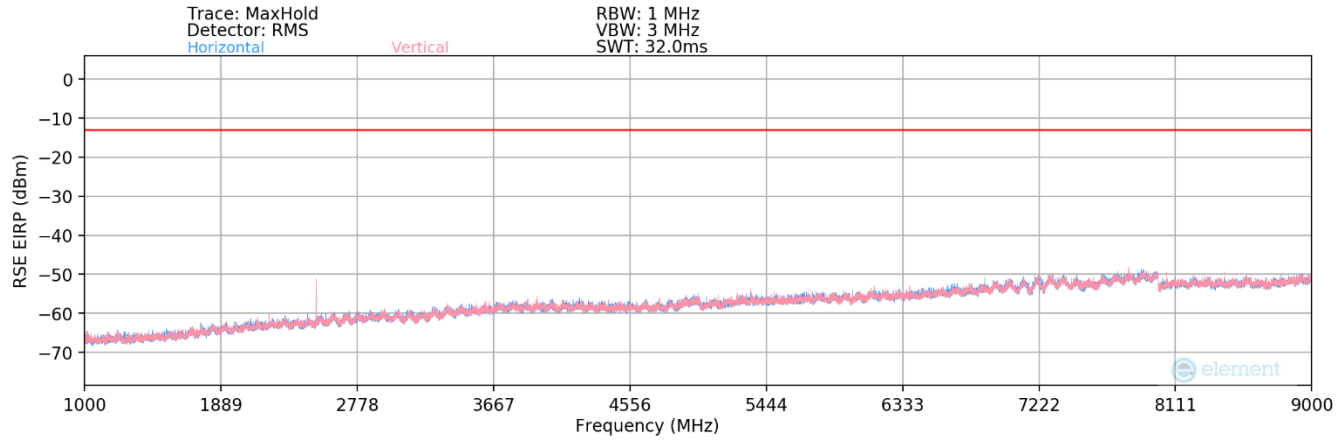


Plot 7-91. Radiated Spurious Plot Below 1GHz (GPRS Cell – Ant 0)

Mode:	GPRS 1 Tx Slot
Channel:	190
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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
911.42	H	-	-	-82.04	30.39	55.35	-42.05	-13.00	-29.05

Table 7-16. Radiated Spurious Data Below 1GHz (GPRS Cell – Ant 0)



Plot 7-92. Radiated Spurious Plot Above 1GHz (GPRS Cell – Ant 0)

Mode:	GPRS 1 Tx Slot
Channel:	128
Frequency (MHz):	824.2

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]
1648.40	H	-	-	-70.21	-9.05	27.74	-67.52	-13.00	-54.52
2472.60	H	366	228	-58.14	-5.69	43.17	-52.09	-13.00	-39.09
3296.80	H	-	-	-71.45	-2.58	32.97	-62.29	-13.00	-49.29
4121.00	H	-	-	-71.65	-0.18	35.17	-60.09	-13.00	-47.09
4945.20	H	-	-	-72.76	1.04	35.28	-59.97	-13.00	-46.97

Table 7-17. Radiated Spurious Data Above 1GHz (GPRS Cell – Low Channel – Ant 0)

Mode:	GPRS 1 Tx Slot
Channel:	190
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]
1673.20	H	-	-	-70.23	-8.81	27.96	-67.30	-13.00	-54.30
2509.80	H	356	222	-57.63	-5.28	44.09	-51.16	-13.00	-38.16
3346.40	H	-	-	-71.77	-1.96	33.27	-61.99	-13.00	-48.99
4183.00	H	-	-	-72.76	-0.03	34.21	-61.04	-13.00	-48.04
5019.60	H	-	-	-50.19	0.50	57.31	-37.95	-13.00	-24.95

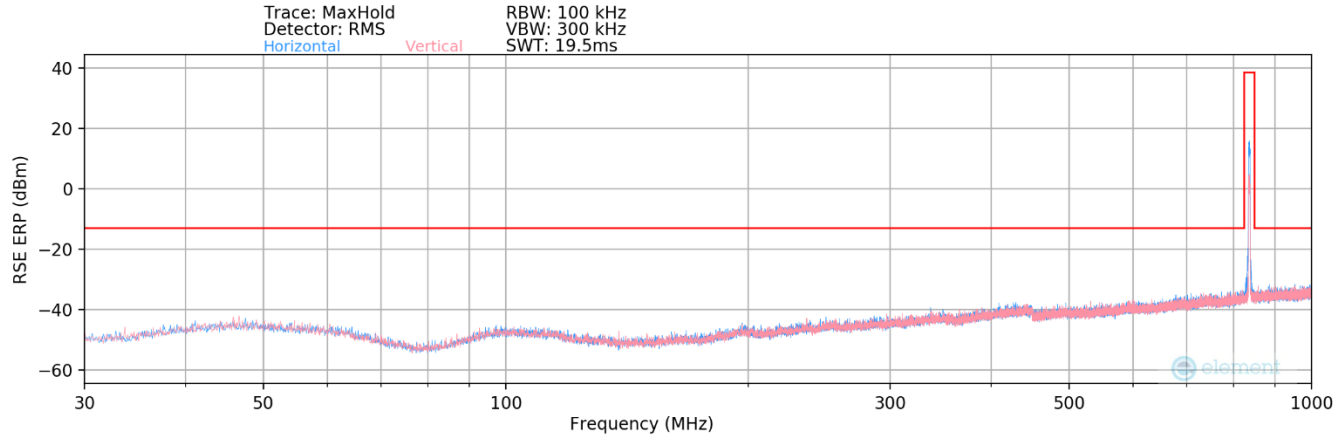
Table 7-18. Radiated Spurious Data Above 1GHz (GPRS Cell – Mid Channel – Ant 0)

Mode:	GPRS 1 Tx Slot
Channel:	251
Frequency (MHz):	848.8

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]
1697.60	H	-	-	-70.47	-8.50	28.03	-67.22	-13.00	-54.22
2546.40	H	380	226	-59.08	-4.96	42.96	-52.30	-13.00	-39.30
3395.20	H	-	-	-72.28	-1.65	33.07	-62.19	-13.00	-49.19
4244.00	H	-	-	-71.91	-0.60	34.49	-60.77	-13.00	-47.77
5092.80	H	-	-	-72.09	1.11	36.02	-59.23	-13.00	-46.23

Table 7-19. Radiated Spurious Data Above 1GHz (GPRS Cell – High Channel – Ant 0)

WCDMA Cell – Ant 0

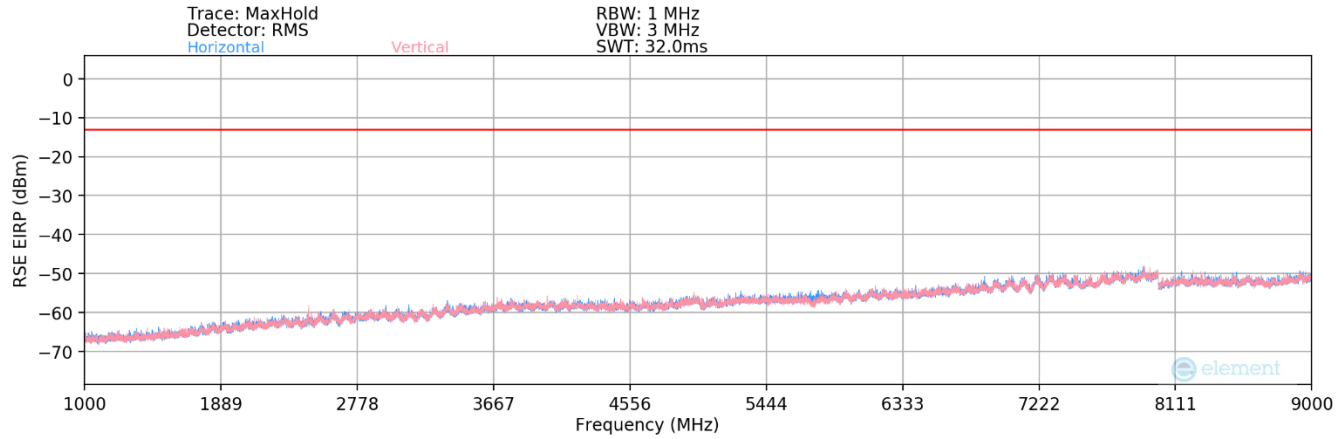


Plot 7-93. Radiated Spurious Plot Below 1GHz (WCDMA Cell – Ant 0)

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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
862.77	H	-	-	-81.37	30.15	55.78	-41.63	-13.00	-28.63

Table 7-20. Radiated Spurious Data Below 1GHz (WCDMA Cell – Ant 0)



Plot 7-94. Radiated Spurious Plot Above 1GHz (WCDMA Cell – Ant 0)

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]
1652.80	H	-	-	-75.11	-8.75	23.14	-72.11	-13.00	-59.11
2479.20	H	-	-	-75.25	-5.29	26.46	-68.80	-13.00	-55.80
3305.60	H	-	-	-76.30	-1.99	28.71	-66.55	-13.00	-53.55

Table 7-21. Radiated Spurious Data Above 1GHz (WCDMA Cell – Low Channel – Ant 0)

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]
1673.20	H	-	-	-75.01	-8.53	23.46	-71.80	-13.00	-58.80
2509.80	H	-	-	-76.01	-4.88	26.11	-69.15	-13.00	-56.15
3346.40	H	-	-	-76.04	-1.52	29.44	-65.81	-13.00	-52.81

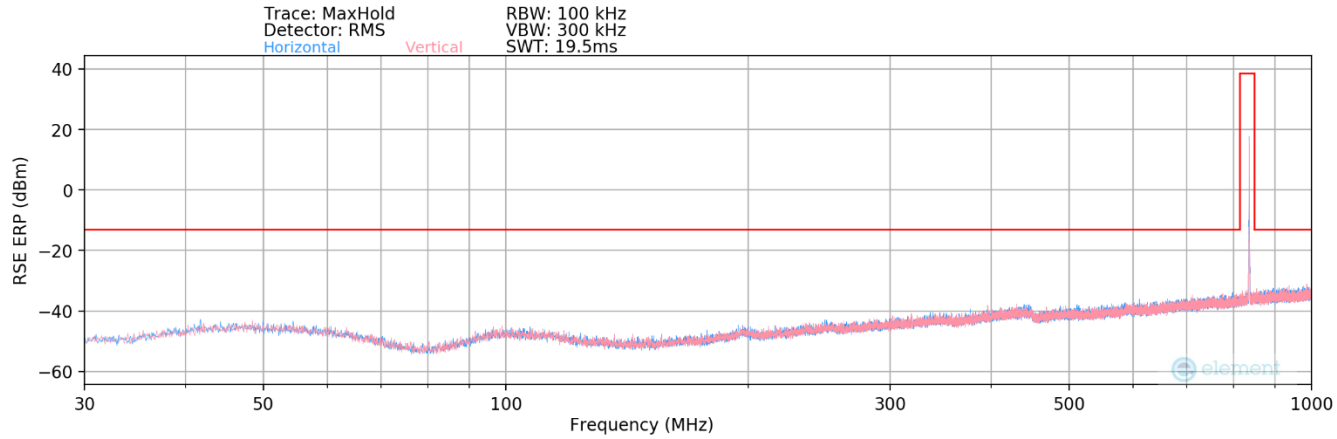
Table 7-22. Radiated Spurious Data Above 1GHz (WCDMA Cell – Mid Channel – Ant 0)

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]
1693.20	H	-	-	-74.58	-8.31	24.11	-71.15	-13.00	-58.15
2539.80	H	-	-	-75.03	-4.33	27.64	-67.62	-13.00	-54.62
3386.40	H	-	-	-76.44	-1.21	29.35	-65.91	-13.00	-52.91

Table 7-23. Radiated Spurious Data Above 1GHz (WCDMA Cell – High Channel – Ant 0)

LTE Band 26/5 – Ant 0

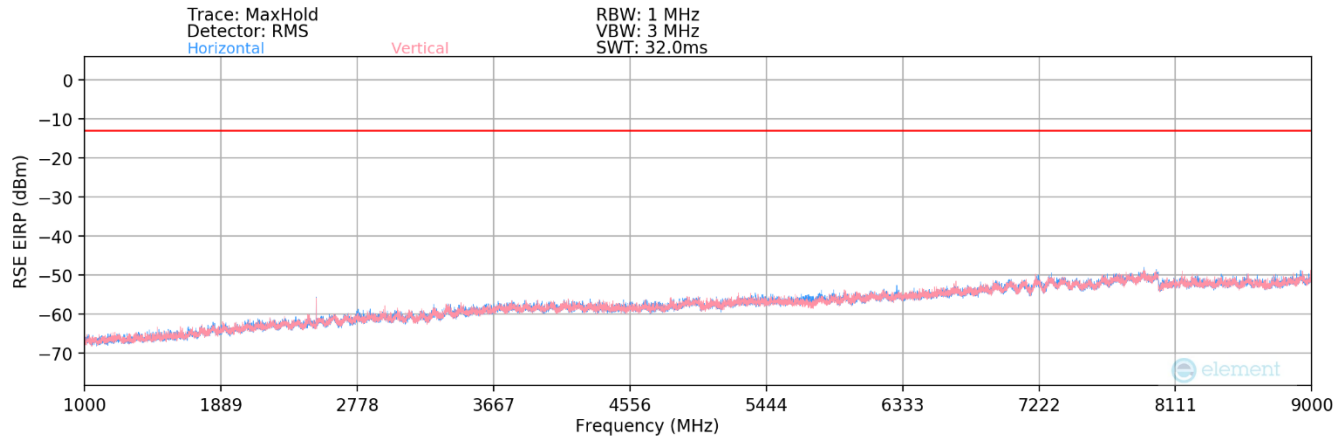


Plot 7-95. Radiated Spurious Plot Below 1GHz (LTE Band 26/5 – Ant 0)

Bandwidth (MHz):	10
Frequency (MHz):	836.5
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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
933.56	V	-	-	-81.83	30.58	55.75	-41.66	-13.00	-28.66

Table 7-24. Radiated Spurious Data Below 1GHz (LTE Band 26/5 – Ant 0)



Plot 7-96. Radiated Spurious Plot Above 1GHz (LTE Band 26/5 – Ant 0)