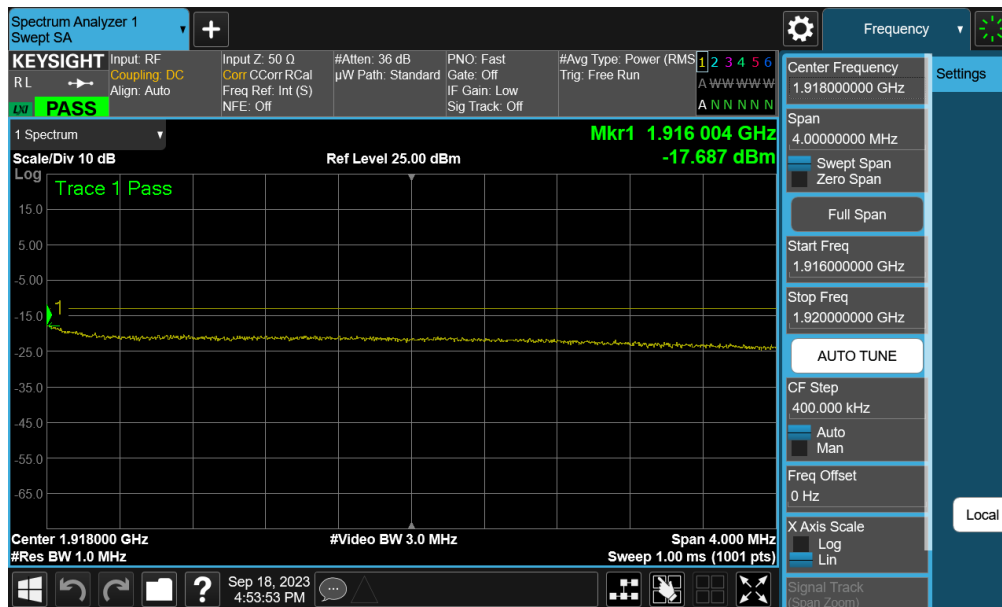




FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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7.6 Peak-Average Ratio

Test Overview

A peak to average ratio measurement is performed at the conducted port of the EUT. The spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level.

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB.

Test Procedure Used

ANSI C63.26-2015 – Section 5.2.3.4

Test Settings

1. The signal analyzer's CCDF measurement profile is enabled
2. Frequency = carrier center frequency
3. Measurement BW $\geq$ OBW or specified reference bandwidth
4. The signal analyzer was set to collect one million samples to generate the CCDF curve
5. The measurement interval was set depending on the type of signal analyzed. For continuous signals (>98% duty cycle), the measurement interval was set to 1ms. For burst transmissions, the spectrum analyzer is set to use an internal "RF Burst" trigger that is synced with an incoming pulse and the measurement interval is set to less than the duration of the "on time" of one burst to ensure that energy is only captured during a time in which the transmitter is operating at maximum power

Test Setup

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

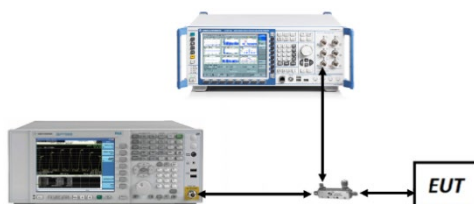


Figure 7-5. Test Instrument & Measurement Setup

Test Notes

For the QAM modulations, 256QAM was found to have the worst-case peak-to-average ratio so it is the only QAM measurement included in this section.

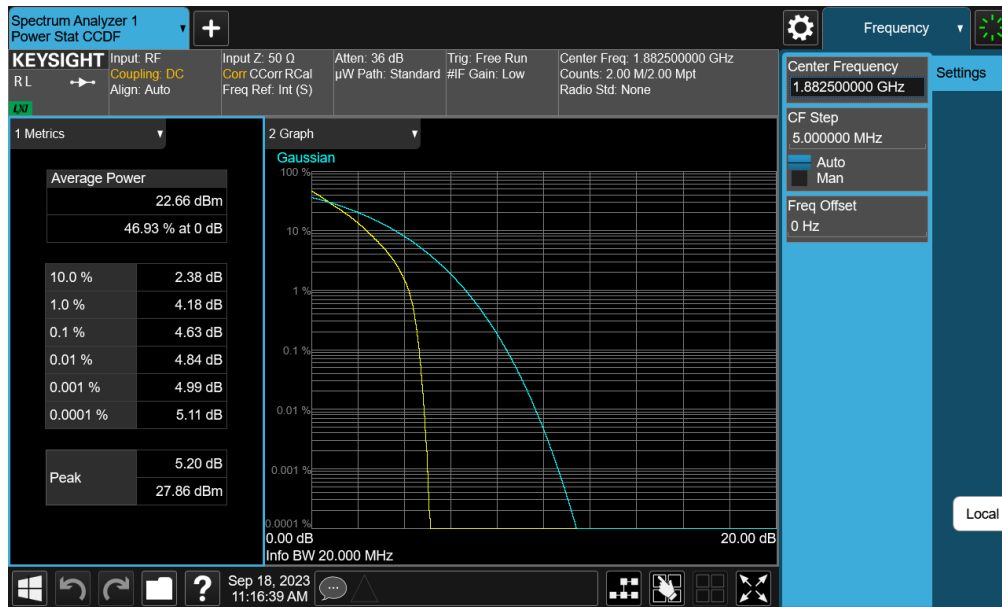
FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Modulation	Average Power [dBm]	PAR at 0.1% [dB]	PAR Limit [dB]	Margin [dB]
GSM-PCS	N/A	GMSK	25.64	2.70	13	-10.30
GSM-PCS Edge		8-PSK	22.41	5.99	13	-7.01
WCDMA		Spread Spectrum	22.65	2.83	13	-10.17
LTE-B25-2	20 MHz	QPSK	22.66	4.63	13	-8.37
		256QAM	18.65	6.85	13	-6.15
	15 MHz	QPSK	22.61	4.61	13	-8.39
		256QAM	18.65	6.88	13	-6.12
	10 MHz	QPSK	22.62	4.57	13	-8.43
		256QAM	18.65	6.84	13	-6.16
	5 MHz	QPSK	22.64	4.50	13	-8.50
		256QAM	18.65	6.87	13	-6.13
	3 MHz	QPSK	22.62	4.44	13	-8.56
		256QAM	18.66	6.89	13	-6.11
	1.4 MHz	QPSK	22.65	4.49	13	-8.51
		256QAM	18.71	6.87	13	-6.13
NR-n25-2	40 MHz	$\pi/2$ BPSK	22.50	3.91	13	-9.09
		QPSK	20.02	6.72	13	-6.28
		256QAM	16.67	8.40	13	-4.60
	35 MHz	$\pi/2$ BPSK	22.64	4.12	13	-8.88
		QPSK	20.11	6.71	13	-6.29
		256QAM	16.60	8.44	13	-4.56
	30 MHz	$\pi/2$ BPSK	22.57	4.13	13	-8.87
		QPSK	19.96	6.73	13	-6.27
		256QAM	16.62	8.45	13	-4.55
	25 MHz	$\pi/2$ BPSK	23.05	4.19	13	-8.81
		QPSK	20.40	6.85	13	-6.15
		256QAM	17.04	8.44	13	-4.56
	20 MHz	$\pi/2$ BPSK	22.98	4.05	13	-8.95
		QPSK	20.47	6.63	13	-6.37
		256QAM	16.93	8.40	13	-4.60
	15MHz	$\pi/2$ BPSK	22.94	4.10	13	-8.90
		QPSK	20.34	6.64	13	-6.36
		256QAM	16.95	8.42	13	-4.58
	10MHz	$\pi/2$ BPSK	22.94	3.90	13	-9.10
		QPSK	20.37	6.71	13	-6.29
		256QAM	16.93	8.46	13	-4.54
	5MHz	$\pi/2$ BPSK	22.93	4.04	13	-8.96
		QPSK	20.48	6.65	13	-6.35
		256QAM	16.92	8.44	13	-4.56

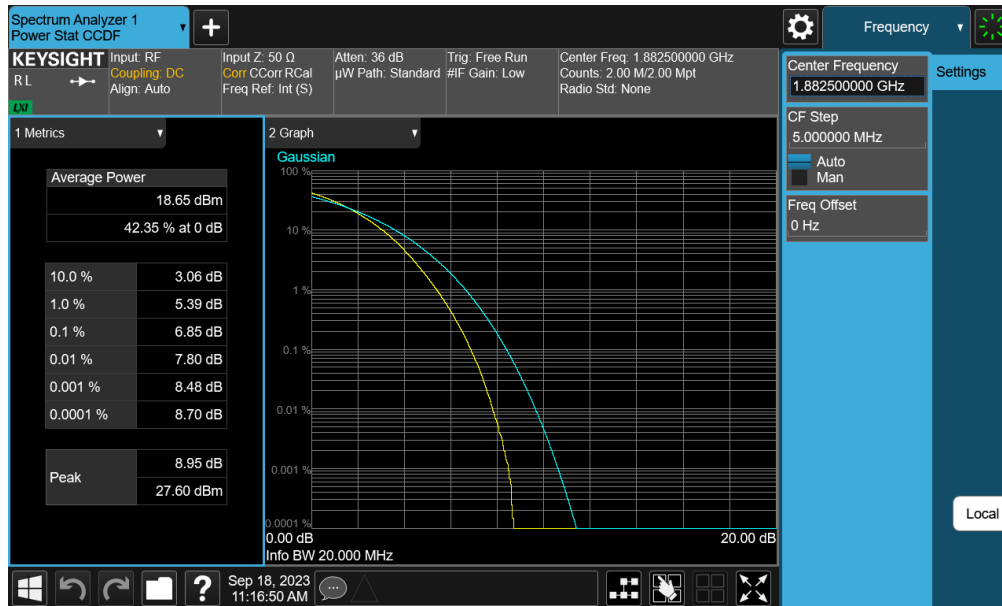
Table 7-14. PAR Test Results – Ant A

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 25/2 – Ant A



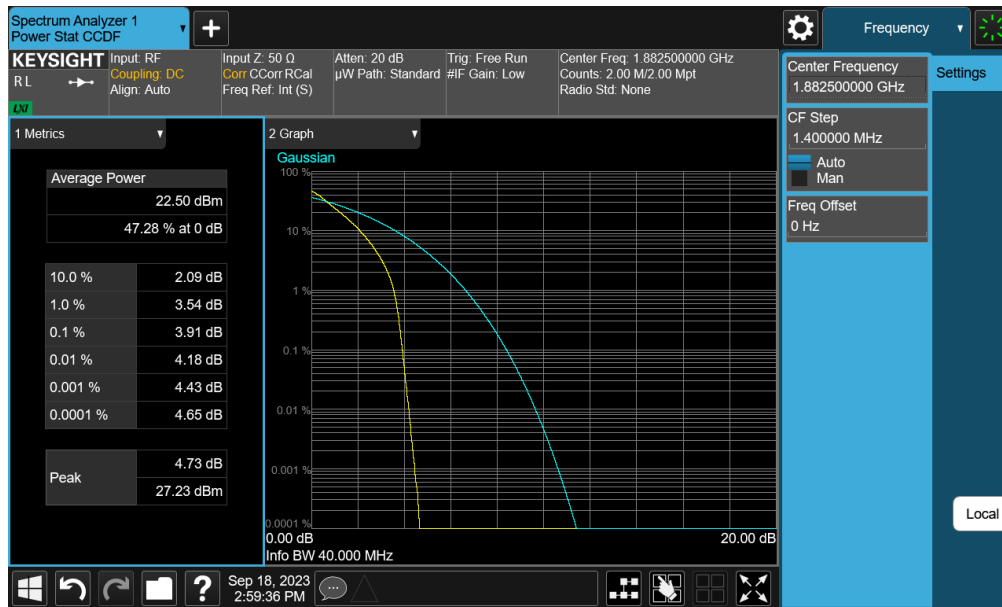
Plot 7-126. PAR Plot (LTE Band 25/2 - 20MHz QPSK - Full RB - Ant A)



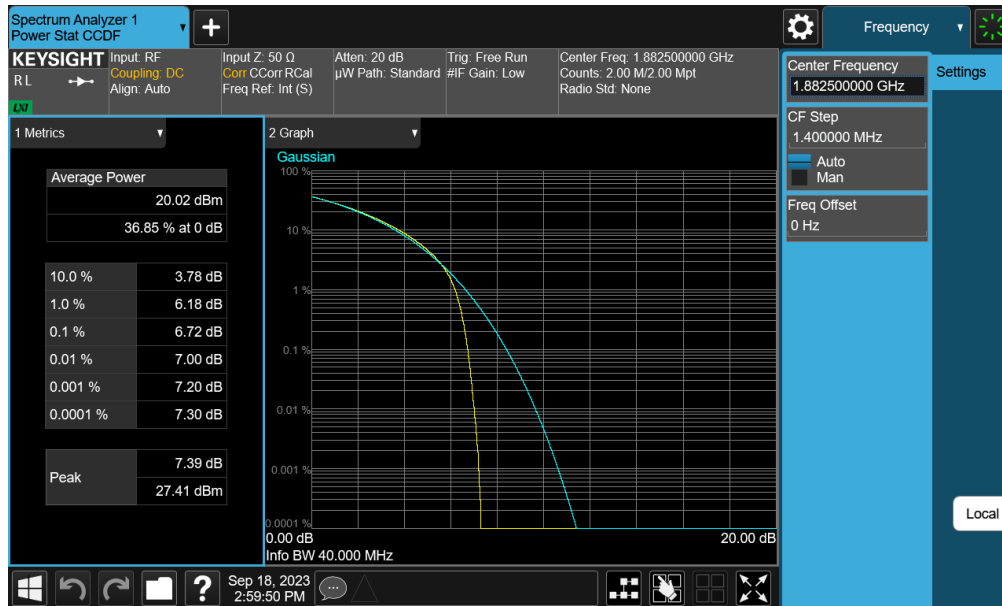
Plot 7-127. PAR Plot (LTE Band 25/2 - 20MHz 256-QAM - Full RB - Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n25/2 – Ant A

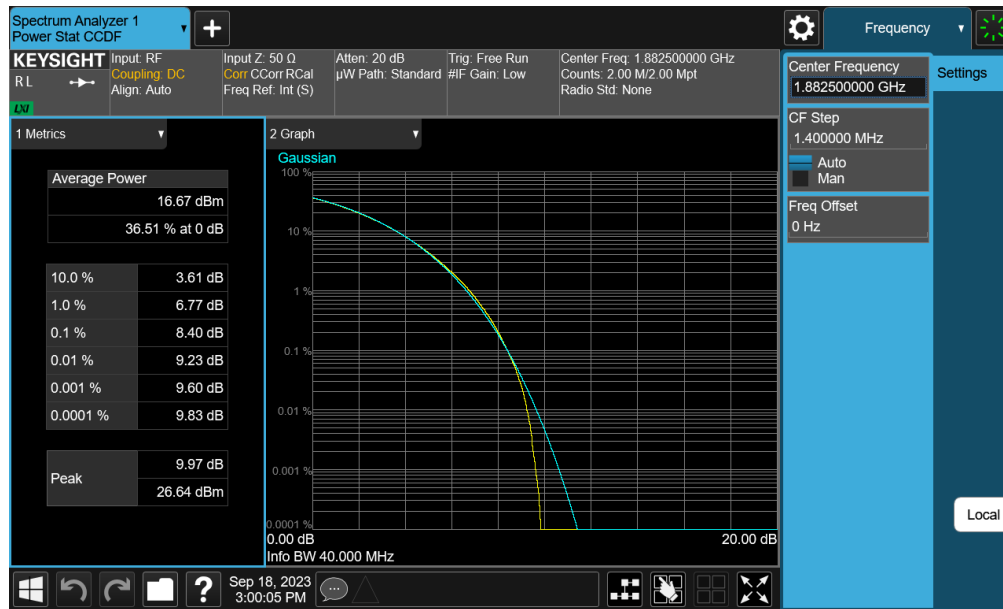


Plot 7-128. PAR Plot (NR Band n25/2 - 40.0MHz DFT-s-OFDM BPSK - Full RB - ANT A)



Plot 7-129. PAR Plot (NR Band n25/2 - 40.0MHz CP-OFDM QPSK - Full RB - ANT A)

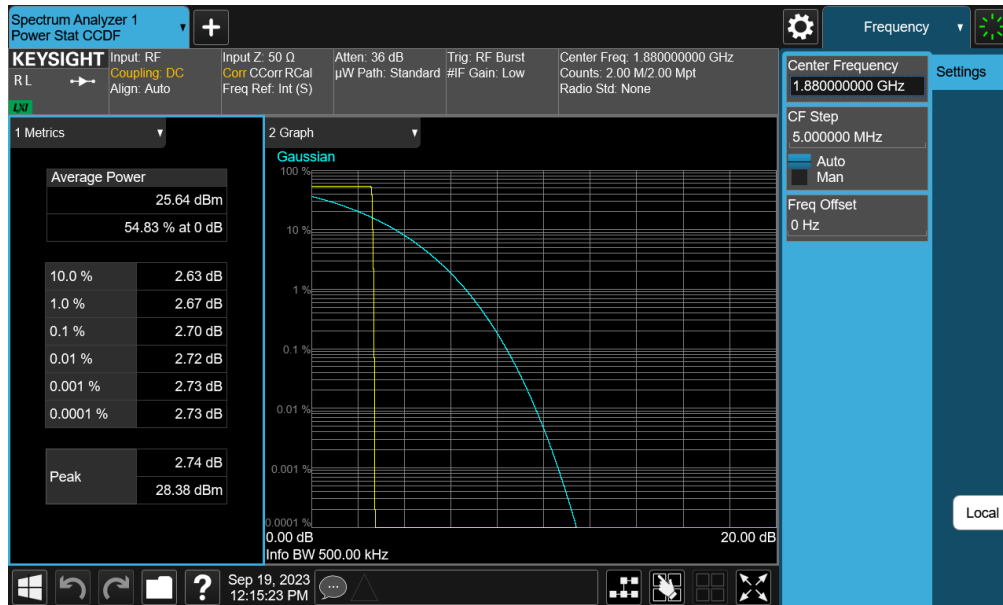
FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-03.A3L	Test Dates: 9/11/2023 - 10/11/2023	EUT Type: Portable Handset	Page 96 of 130



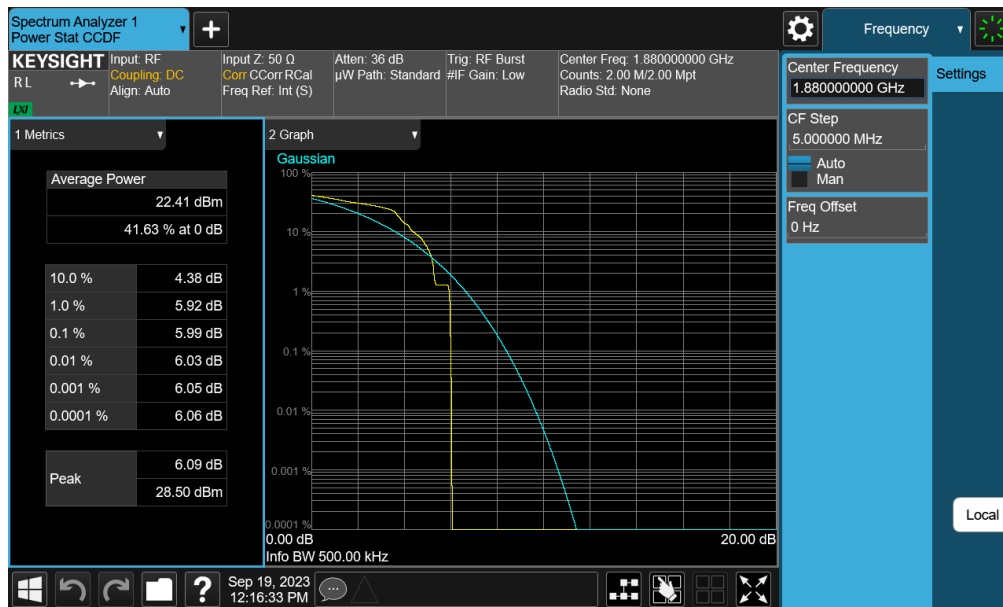
Plot 7-130. PAR Plot (NR Band n25/2 - 40.0MHz CP-OFDM 256-QAM - Full RB - ANT A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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GSM/GPRS PCS – Ant A



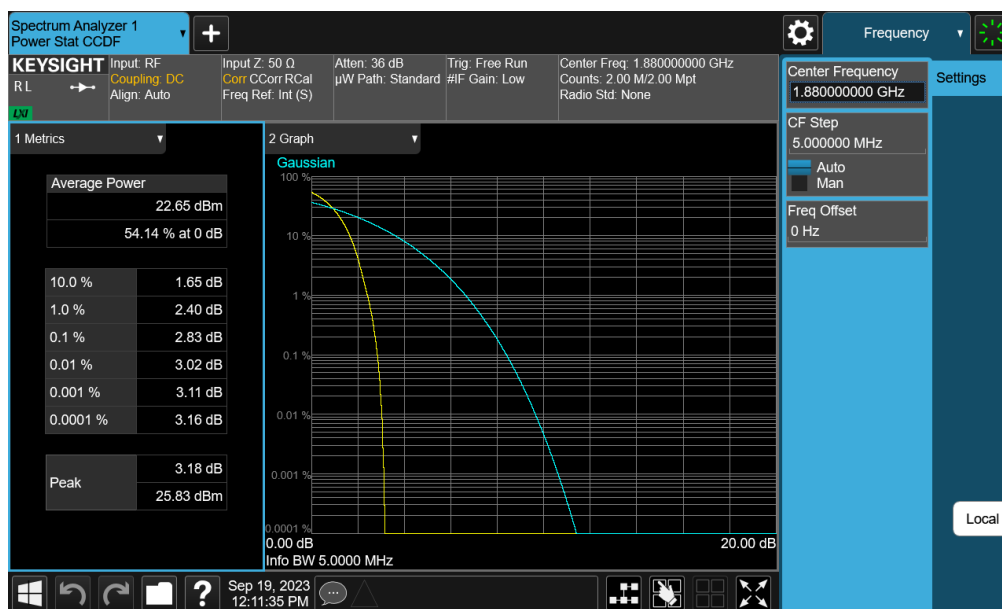
Plot 7-131. PAR Plot (GPRS, Ch. 661 - Ant A)



Plot 7-132. PAR Plot (EDGE, Ch. 661 - Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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WCDMA PCS – Ant A



Plot 7-133. PAR Plot (WCDMA, Ch. 9400 - Ant A)

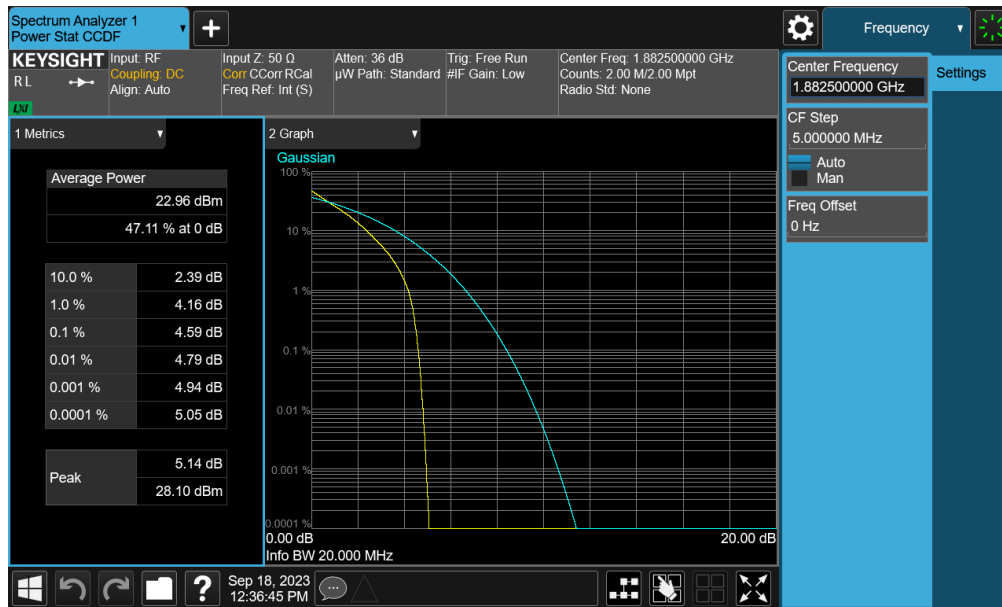
FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode	Bandwidth	Modulation	Average Power [dBm]	PAR at 0.1% [dB]	PAR Limit [dB]	Margin [dB]
LTE-B25-2	20 MHz	QPSK	22.96	4.59	13	-8.41
		256QAM	18.93	6.88	13	-6.12
	15 MHz	QPSK	22.94	5.21	13	-7.79
		256QAM	18.96	6.91	13	-6.09
	10 MHz	QPSK	22.99	4.54	13	-8.46
		256QAM	19.01	6.91	13	-6.09
	5 MHz	QPSK	22.95	4.50	13	-8.50
		256QAM	18.98	6.90	13	-6.10
	3 MHz	QPSK	22.95	4.41	13	-8.59
		256QAM	18.97	6.93	13	-6.07
	1.4 MHz	QPSK	22.98	4.50	13	-8.50
		256QAM	19.02	6.93	13	-6.07
NR-n25-2	40 MHz	$\pi/2$ BPSK	22.46	3.82	13	-9.18
		QPSK	20.02	6.68	13	-6.32
		256QAM	16.37	8.40	13	-4.60
	35 MHz	$\pi/2$ BPSK	22.62	4.13	13	-8.87
		QPSK	20.03	6.73	13	-6.27
		256QAM	16.53	8.46	13	-4.54
	30 MHz	$\pi/2$ BPSK	22.62	3.90	13	-9.10
		QPSK	19.92	6.70	13	-6.30
		256QAM	16.43	8.40	13	-4.60
	25 MHz	$\pi/2$ BPSK	23.01	4.11	13	-8.89
		QPSK	20.43	6.80	13	-6.20
		256QAM	16.88	8.42	13	-4.58
	20 MHz	$\pi/2$ BPSK	23.00	3.70	13	-9.30
		QPSK	20.37	6.41	13	-6.59
		256QAM	16.91	8.39	13	-4.61
	15MHz	$\pi/2$ BPSK	22.98	4.00	13	-9.00
		QPSK	20.37	6.60	13	-6.40
		256QAM	16.85	8.42	13	-4.58
	10MHz	$\pi/2$ BPSK	23.01	3.91	13	-9.09
		QPSK	20.43	6.70	13	-6.30
		256QAM	16.89	8.41	13	-4.59
	5MHz	$\pi/2$ BPSK	22.92	4.05	13	-8.95
		QPSK	20.49	6.67	13	-6.33
		256QAM	16.86	8.42	13	-4.58

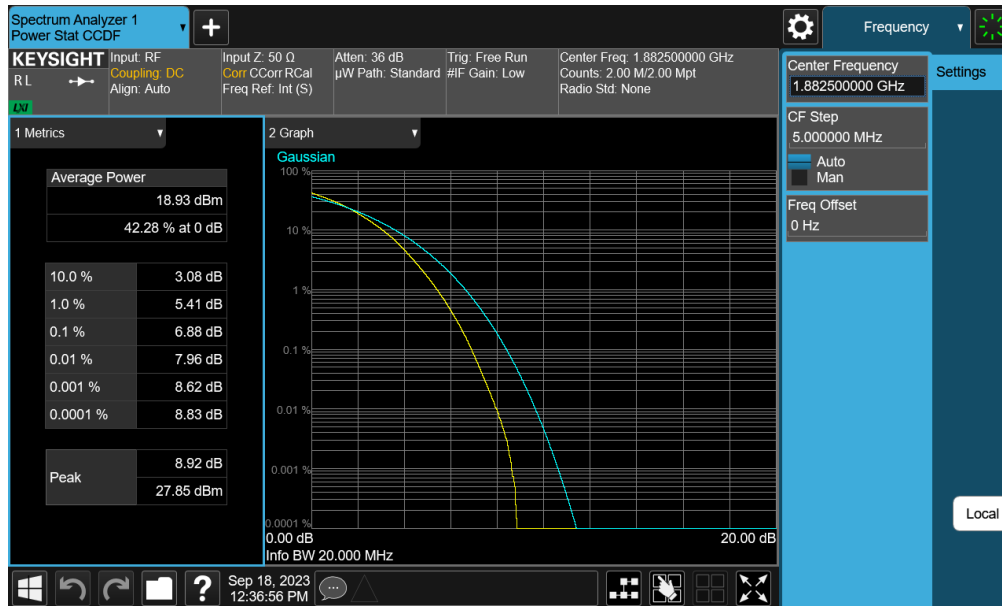
Table 7-15. PAR Test Results – Ant F

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 25/2 – Ant F



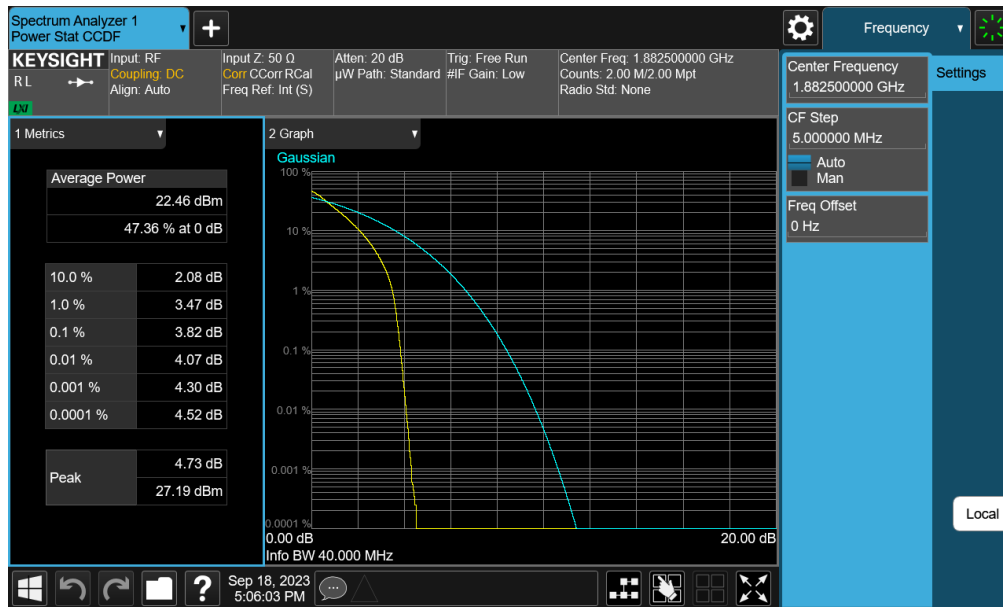
Plot 7-134. PAR Plot (LTE Band 25/2 - 20MHz QPSK - Full RB - Ant F)



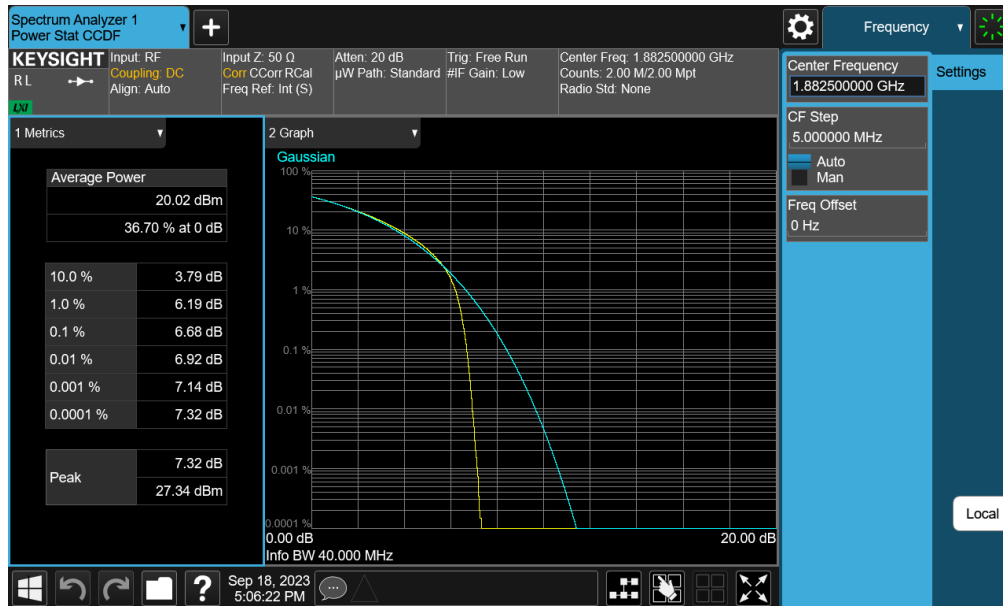
Plot 7-135. PAR Plot (LTE Band 25/2 - 20MHz 256-QAM - Full RB - Ant F)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n25/2 – Ant F

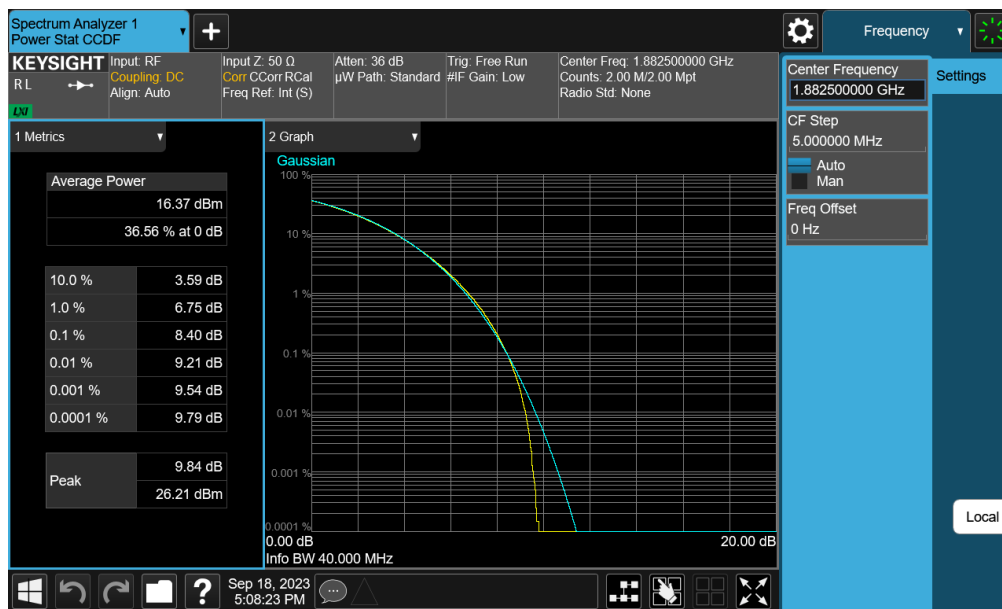


Plot 7-136. PAR Plot (NR Band n25/2 - 40.0MHz DFT-s-OFDM BPSK - Full RB - ANT F)



Plot 7-137. PAR Plot (NR Band n25/2 - 40.0MHz CP-OFDM QPSK - Full RB - ANT F)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-138. PAR Plot (NR Band n25/2 - 40.0MHz CP-OFDM 256-QAM - Full RB - ANT F)

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7.7 Radiated Power (EIRP)

Test Overview

Equivalent Isotropic Radiated Power (EIRP) 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 $\geq 3 \times$ RBW
4. Span = 1.5 times the OBW
5. No. of sweep points $\geq 2 \times$ 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.

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Test Setup

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

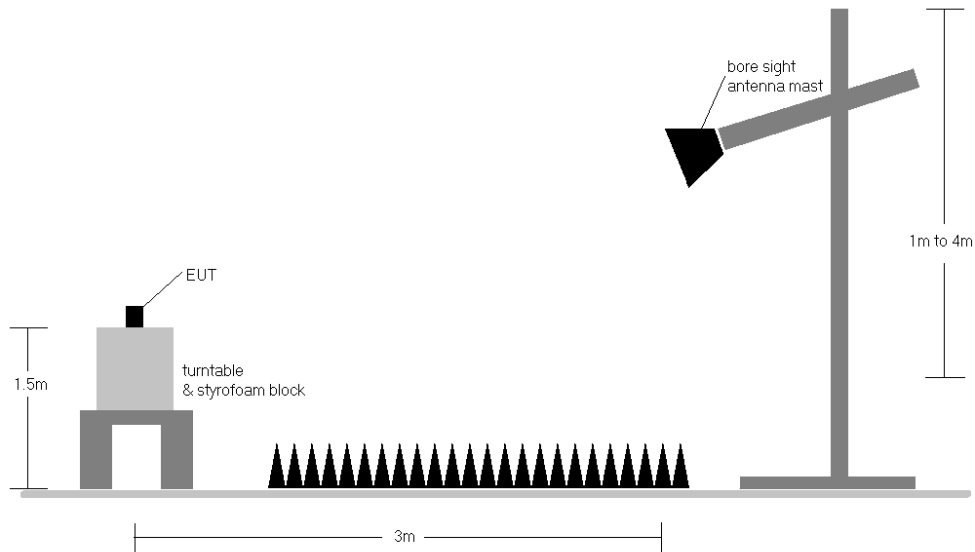


Figure 7-6. Radiated Test Setup >1GHz

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.

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Frequency [MHz]	Mode	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1850.20	GSM1900	V	149	283	19.02	8.72	27.74	0.595	33.01	-5.27
1880.00	GSM1900	V	150	283	19.35	8.73	28.08	0.642	33.01	-4.93
1909.80	GSM1900	V	142	276	19.82	8.73	28.55	0.717	33.01	-4.46
1909.80	GSM1900	H	112	171	18.40	8.73	27.13	0.517	33.01	-5.88
1909.80	EDGE1900	V	142	276	15.87	8.73	24.60	0.289	33.01	-8.41
1909.80	GSM1900 (WCP)	V	145	271	19.49	8.73	28.22	0.664	33.01	-4.79

Table 7-16. EIRP Data (GPRS PCS – Ant A)

Frequency [MHz]	Mode	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
1852.40	WCDMA1900	V	179	322	13.67	8.27	21.94	0.156	33.01	-11.07
1880.00	WCDMA1900	V	171	323	14.38	8.29	22.67	0.185	33.01	-10.34
1907.60	WCDMA1900	V	175	331	13.85	8.32	22.17	0.165	33.01	-10.84
1880.00	WCDMA1900	H	109	174	12.80	8.29	21.09	0.129	33.01	-11.92
1880.00	WCDMA1900 (WCP)	V	189	330	11.05	8.29	19.34	0.086	33.01	-13.67

Table 7-17. EIRP Data (WCDMA PCS – Ant A)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	1860.00	V	189	308	8.28	1 / 99	15.39	23.67	0.233	33.01	-9.34
	QPSK	1882.50	V	193	302	8.29	1 / 0	15.17	23.46	0.222	33.01	-9.55
	QPSK	1905.00	V	203	322	8.32	1 / 0	14.26	22.58	0.181	33.01	-10.43
	16-QAM	1860.00	V	189	308	8.28	1 / 99	14.57	22.85	0.193	33.01	-10.16
15 MHz	QPSK	1857.50	V	189	308	8.28	1 / 0	15.35	23.63	0.230	33.01	-9.39
	QPSK	1882.50	V	193	302	8.29	1 / 74	15.27	23.56	0.227	33.01	-9.45
	QPSK	1907.50	V	203	322	8.32	1 / 74	14.32	22.64	0.184	33.01	-10.37
	16-QAM	1857.50	V	189	308	8.28	1 / 0	14.68	22.96	0.198	33.01	-10.05
10 MHz	QPSK	1855.00	V	189	308	8.28	1 / 25	15.72	24.00	0.251	33.01	-9.01
	QPSK	1882.50	V	193	302	8.29	1 / 49	15.22	23.52	0.225	33.01	-9.50
	QPSK	1910.00	V	203	322	8.33	1 / 49	14.40	22.73	0.187	33.01	-10.29
	16-QAM	1855.00	V	189	308	8.28	1 / 25	14.93	23.21	0.209	33.01	-9.80
5 MHz	QPSK	1852.50	V	189	308	8.27	1 / 0	15.80	24.07	0.255	33.01	-8.94
	QPSK	1882.50	V	193	302	8.29	1 / 12	15.20	23.49	0.223	33.01	-9.52
	QPSK	1912.50	V	203	322	8.34	1 / 24	14.38	22.71	0.187	33.01	-10.30
	16-QAM	1852.50	V	189	308	8.27	1 / 0	15.01	23.29	0.213	33.01	-9.72
3 MHz	QPSK	1851.50	V	189	308	8.27	1 / 7	15.64	23.92	0.246	33.01	-9.09
	QPSK	1882.50	V	193	302	8.29	1 / 14	15.19	23.48	0.223	33.01	-9.53
	QPSK	1913.50	V	203	322	8.34	1 / 14	14.42	22.76	0.189	33.01	-10.25
	16-QAM	1851.50	V	189	308	8.27	1 / 7	14.89	23.16	0.207	33.01	-9.85
1.4 MHz	QPSK	1850.70	V	189	308	8.27	1 / 3	15.48	23.75	0.237	33.01	-9.26
	QPSK	1882.50	V	193	302	8.29	1 / 0	15.27	23.56	0.227	33.01	-9.45
	QPSK	1914.30	V	203	322	8.34	1 / 0	14.30	22.64	0.184	33.01	-10.37
	16-QAM	1850.70	V	189	308	8.27	1 / 3	14.91	23.18	0.208	33.01	-9.83
20 MHz	Opposite Pol.	1860.00	H	152	168	8.28	1 / 99	13.72	22.00	0.158	33.01	-11.01
	WCP	1860.00	V	189	306	8.28	1 / 99	13.46	21.74	0.149	33.01	-11.27

Table 7-18. EIRP Data (LTE Band 25/2 – Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
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Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
20 MHz	QPSK	1860.00	H	175	1	8.28	1 / 0	14.47	22.75	0.188	33.01	-10.26
	QPSK	1882.50	H	177	1	8.29	1 / 0	14.28	22.57	0.181	33.01	-10.44
	QPSK	1905.00	H	170	5	8.32	1 / 0	14.26	22.58	0.181	33.01	-10.43
	16-QAM	1860.00	H	175	1	8.28	1 / 0	13.65	21.93	0.156	33.01	-11.08
15 MHz	QPSK	1857.50	H	175	1	8.28	1 / 37	14.43	22.70	0.186	33.01	-10.31
	QPSK	1882.50	H	177	1	8.29	1 / 37	14.28	22.58	0.181	33.01	-10.43
	QPSK	1907.50	H	170	5	8.32	1 / 74	14.12	22.44	0.175	33.01	-10.57
	16-QAM	1857.50	H	175	1	8.28	1 / 37	13.76	22.03	0.160	33.01	-10.98
10 MHz	QPSK	1855.00	H	175	1	8.28	1 / 49	14.61	22.89	0.195	33.01	-10.12
	QPSK	1882.50	H	177	1	8.29	1 / 49	14.27	22.57	0.181	33.01	-10.44
	QPSK	1910.00	H	170	5	8.33	1 / 25	14.01	22.34	0.171	33.01	-10.67
	16-QAM	1855.00	H	175	1	8.28	1 / 49	13.82	22.10	0.162	33.01	-10.91
5 MHz	QPSK	1852.50	H	175	1	8.27	1 / 24	14.43	22.71	0.186	33.01	-10.30
	QPSK	1882.50	H	177	1	8.29	1 / 0	14.41	22.70	0.186	33.01	-10.31
	QPSK	1912.50	H	170	5	8.34	1 / 24	14.41	22.74	0.188	33.01	-10.27
	16-QAM	1912.50	H	170	5	8.34	1 / 24	13.36	21.70	0.148	33.01	-11.31
3 MHz	QPSK	1851.50	H	175	1	8.27	1 / 7	14.52	22.79	0.190	33.01	-10.22
	QPSK	1882.50	H	177	1	8.29	1 / 14	14.24	22.54	0.179	33.01	-10.47
	QPSK	1913.50	H	170	5	8.34	1 / 7	14.22	22.56	0.180	33.01	-10.45
	16-QAM	1851.50	H	175	1	8.27	1 / 7	13.87	22.14	0.164	33.01	-10.87
1.4 MHz	QPSK	1850.70	H	175	1	8.27	1 / 3	14.35	22.62	0.183	33.01	-10.39
	QPSK	1882.50	H	177	1	8.29	1 / 0	14.29	22.58	0.181	33.01	-10.43
	QPSK	1914.30	H	170	5	8.34	1 / 3	14.15	22.49	0.177	33.01	-10.52
	16-QAM	1850.70	H	175	1	8.27	1 / 3	13.68	21.95	0.157	33.01	-11.06
20 MHz	Opposite Pol.	1860.00	V	154	322	8.32	1 / 0	12.30	20.62	0.115	33.01	-12.39
	WCP	1860.00	H	177	2	8.32	1 / 0	13.56	21.88	0.154	33.01	-11.13

Table 7-19. EIRP Data (LTE Band 25/2 – Ant F)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-03.A3L	Test Dates: 9/11/2023 - 10/11/2023	EUT Type: Portable Handset	Page 107 of 130

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
40 MHz	$\pi/2$ BPSK	1870.00	V	124	3	8.29	1 / 1	14.48	22.77	0.189	33.01	-10.24
	$\pi/2$ BPSK	1882.50	V	124	4	8.29	1 / 1	14.80	23.09	0.204	33.01	-9.92
	$\pi/2$ BPSK	1895.00	V	124	3	8.30	1 / 1	15.00	23.30	0.214	33.01	-9.71
	QPSK	1870.00	V	124	3	8.29	1 / 1	14.42	22.71	0.186	33.01	-10.30
	QPSK	1882.50	V	124	4	8.29	1 / 1	14.74	23.03	0.201	33.01	-9.98
	QPSK	1895.00	V	124	3	8.30	1 / 1	14.93	23.23	0.210	33.01	-9.78
35 MHz	16-QAM	1895.00	V	124	3	8.30	1 / 1	13.91	22.21	0.166	33.01	-10.80
	$\pi/2$ BPSK	1867.50	V	124	3	8.28	1 / 186	14.39	22.67	0.185	33.01	-10.34
	$\pi/2$ BPSK	1882.50	V	124	4	8.29	1 / 90	14.98	23.28	0.213	33.01	-9.73
	$\pi/2$ BPSK	1897.50	V	124	3	8.30	1 / 90	15.17	23.48	0.223	33.01	-9.53
	QPSK	1867.50	V	124	3	8.28	1 / 186	14.41	22.69	0.186	33.01	-10.32
	QPSK	1882.50	V	124	4	8.29	1 / 186	14.83	23.12	0.205	33.01	-9.89
30 MHz	QPSK	1897.50	V	124	3	8.30	1 / 90	15.20	23.51	0.224	33.01	-9.50
	16-QAM	1897.50	V	124	3	8.30	1 / 90	14.04	22.35	0.172	33.01	-10.66
	$\pi/2$ BPSK	1865.00	V	124	3	8.28	1 / 80	14.29	22.57	0.181	33.01	-10.44
	$\pi/2$ BPSK	1882.50	V	124	4	8.29	1 / 80	14.92	23.22	0.210	33.01	-9.79
	$\pi/2$ BPSK	1900.00	V	124	3	8.30	1 / 1	15.12	23.42	0.220	33.01	-9.59
	QPSK	1865.00	V	124	3	8.28	1 / 158	14.33	22.61	0.182	33.01	-10.40
25 MHz	QPSK	1882.50	V	124	4	8.29	1 / 158	14.79	23.08	0.203	33.01	-9.93
	QPSK	1900.00	V	124	3	8.30	1 / 1	15.16	23.46	0.222	33.01	-9.55
	16-QAM	1900.00	V	124	3	8.30	1 / 1	14.10	22.41	0.174	33.01	-10.60
	$\pi/2$ BPSK	1862.50	V	124	3	8.28	1 / 66	14.25	22.53	0.179	33.01	-10.48
	$\pi/2$ BPSK	1882.50	V	124	4	8.29	1 / 66	14.83	23.13	0.205	33.01	-9.88
	$\pi/2$ BPSK	1902.50	V	124	3	8.31	1 / 1	15.13	23.45	0.221	33.01	-9.56
20 MHz	QPSK	1862.50	V	124	3	8.28	1 / 66	14.27	22.55	0.180	33.01	-10.46
	QPSK	1882.50	V	124	4	8.29	1 / 66	14.88	23.18	0.208	33.01	-9.83
	QPSK	1902.50	V	124	3	8.31	1 / 1	15.12	23.43	0.220	33.01	-9.58
	16-QAM	1902.50	V	124	3	8.31	1 / 1	13.98	22.29	0.170	33.01	-10.72
	$\pi/2$ BPSK	1860.00	V	124	3	8.28	1 / 104	14.16	22.44	0.175	33.01	-10.57
	$\pi/2$ BPSK	1882.50	V	124	4	8.29	1 / 104	14.72	23.01	0.200	33.01	-10.00
15 MHz	$\pi/2$ BPSK	1905.00	V	124	3	8.32	1 / 1	14.87	23.19	0.208	33.01	-9.82
	QPSK	1860.00	V	124	3	8.28	1 / 53	14.05	22.33	0.171	33.01	-10.68
	QPSK	1882.50	V	124	4	8.29	1 / 104	14.65	22.94	0.197	33.01	-10.07
	QPSK	1905.00	V	124	3	8.32	1 / 1	14.87	23.18	0.208	33.01	-9.83
	16-QAM	1905.00	V	124	3	8.32	1 / 1	13.87	22.19	0.165	33.01	-10.82
	$\pi/2$ BPSK	1857.50	V	124	3	8.28	1 / 1	14.34	22.61	0.183	33.01	-10.40
10 MHz	$\pi/2$ BPSK	1882.50	V	124	4	8.29	1 / 1	14.73	23.02	0.200	33.01	-9.99
	$\pi/2$ BPSK	1907.50	V	124	3	8.32	1 / 77	14.97	23.29	0.213	33.01	-9.72
	QPSK	1857.50	V	124	3	8.28	1 / 1	14.17	22.45	0.176	33.01	-10.56
	QPSK	1882.50	V	124	4	8.29	1 / 77	14.62	22.91	0.196	33.01	-10.10
	QPSK	1907.50	V	124	3	8.32	1 / 39	14.89	23.21	0.210	33.01	-9.80
	16-QAM	1907.50	V	124	3	8.32	1 / 77	13.96	22.28	0.169	33.01	-10.73
5 MHz	$\pi/2$ BPSK	1855.00	V	124	3	8.28	1 / 26	14.16	22.44	0.175	33.01	-10.57
	$\pi/2$ BPSK	1882.50	V	124	4	8.29	1 / 50	14.74	23.03	0.201	33.01	-9.98
	$\pi/2$ BPSK	1910.00	V	124	3	8.33	1 / 26	14.96	23.29	0.213	33.01	-9.72
	QPSK	1855.00	V	124	3	8.28	1 / 26	14.27	22.54	0.180	33.01	-10.47
	QPSK	1882.50	V	124	4	8.29	1 / 1	14.71	23.00	0.200	33.01	-10.01
	QPSK	1910.00	V	124	3	8.33	1 / 26	14.84	23.17	0.208	33.01	-9.84
40 MHz	16-QAM	1910.00	V	124	3	8.33	1 / 26	13.68	22.01	0.159	33.01	-11.00
	$\pi/2$ BPSK	1852.50	V	124	3	8.27	1 / 23	14.27	22.55	0.180	33.01	-10.46
	$\pi/2$ BPSK	1882.50	V	124	4	8.29	1 / 23	14.85	23.15	0.206	33.01	-9.86
	$\pi/2$ BPSK	1912.50	V	124	3	8.34	1 / 1	15.02	23.36	0.217	33.01	-9.65
	QPSK	1852.50	V	124	3	8.27	1 / 1	14.25	22.52	0.179	33.01	-10.49
	QPSK	1882.50	V	124	4	8.29	1 / 12	14.91	23.21	0.209	33.01	-9.80
40 MHz	QPSK	1912.50	V	124	3	8.34	1 / 12	15.06	23.40	0.219	33.01	-9.61
	16-QAM	1912.50	V	124	3	8.34	1 / 12	14.14	22.47	0.177	33.01	-10.54
40 MHz	QPSK (CP-OFDM)	1895.00	V	122	4	8.30	1 / 1	14.25	22.55	0.180	33.01	-10.46
	QPSK (Opposite Pol.)	1895.00	H	155	177	8.30	1 / 1	12.00	20.30	0.107	33.01	-12.71
40 MHz	QPSK (WCP)	1895.00	V	128	15	8.30	1 / 1	13.67	21.97	0.157	33.01	-11.04

Table 7-20. EIRP Data (NR Band n25/2 – Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-03.A3L	Test Dates: 9/11/2023 - 10/11/2023	EUT Type: Portable Handset	Page 108 of 130

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
40 MHz	$\pi/2$ BPSK	1870.00	H	124	360	8.29	1 / 1	15.73	24.02	0.252	33.01	-8.99
	$\pi/2$ BPSK	1882.50	H	120	360	8.29	1 / 1	15.62	23.91	0.246	33.01	-9.10
	$\pi/2$ BPSK	1895.00	H	128	355	8.30	1 / 1	15.63	23.93	0.247	33.01	-9.08
	QPSK	1870.00	H	124	360	8.29	1 / 1	15.84	24.13	0.259	33.01	-8.88
	QPSK	1882.50	H	120	360	8.29	1 / 1	15.98	24.27	0.268	33.01	-8.74
	QPSK	1895.00	H	128	355	8.30	1 / 1	15.91	24.21	0.264	33.01	-8.80
35 MHz	16-QAM	1882.50	H	120	360	8.29	1 / 1	14.81	23.10	0.204	33.01	-9.91
	$\pi/2$ BPSK	1867.50	H	124	360	8.28	1 / 90	15.92	24.20	0.263	33.01	-8.81
	$\pi/2$ BPSK	1882.50	H	120	360	8.29	1 / 90	15.88	24.17	0.261	33.01	-8.84
	$\pi/2$ BPSK	1897.50	H	128	355	8.30	1 / 90	16.10	24.41	0.276	33.01	-8.60
	QPSK	1867.50	H	124	360	8.28	1 / 90	16.07	24.35	0.272	33.01	-8.66
	QPSK	1882.50	H	120	360	8.29	1 / 90	16.23	24.52	0.283	33.01	-8.49
30 MHz	QPSK	1897.50	H	128	355	8.30	1 / 90	16.22	24.52	0.283	33.01	-8.49
	16-QAM	1882.50	H	120	360	8.29	1 / 90	14.76	23.05	0.202	33.01	-9.96
	$\pi/2$ BPSK	1865.00	H	124	360	8.28	1 / 158	15.66	23.95	0.248	33.01	-9.06
	$\pi/2$ BPSK	1882.50	H	120	360	8.29	1 / 80	15.72	24.01	0.252	33.01	-9.00
	$\pi/2$ BPSK	1900.00	H	128	355	8.30	1 / 1	15.97	24.27	0.267	33.01	-8.74
	QPSK	1865.00	H	124	360	8.28	1 / 158	15.85	24.13	0.259	33.01	-8.88
25 MHz	QPSK	1882.50	H	120	360	8.29	1 / 80	16.10	24.39	0.275	33.01	-8.62
	QPSK	1900.00	H	128	355	8.30	1 / 1	15.97	24.28	0.268	33.01	-8.74
	16-QAM	1882.50	H	120	360	8.29	1 / 80	14.86	23.16	0.207	33.01	-9.85
	$\pi/2$ BPSK	1862.50	H	124	360	8.28	1 / 66	15.68	23.96	0.249	33.01	-9.05
	$\pi/2$ BPSK	1882.50	H	120	360	8.29	1 / 66	15.68	23.97	0.250	33.01	-9.04
	$\pi/2$ BPSK	1902.50	H	128	355	8.31	1 / 1	15.89	24.20	0.263	33.01	-8.81
20 MHz	QPSK	1862.50	H	124	360	8.28	1 / 131	15.91	24.19	0.263	33.01	-8.82
	QPSK	1882.50	H	120	360	8.29	1 / 66	16.07	24.36	0.273	33.01	-8.65
	QPSK	1902.50	H	128	355	8.31	1 / 1	16.03	24.34	0.271	33.01	-8.67
	16-QAM	1882.50	H	120	360	8.29	1 / 66	14.56	22.85	0.193	33.01	-10.16
	$\pi/2$ BPSK	1860.00	H	124	360	8.28	1 / 104	15.46	23.74	0.236	33.01	-9.27
	$\pi/2$ BPSK	1882.50	H	120	360	8.29	1 / 53	15.70	24.00	0.251	33.01	-9.02
15 MHz	$\pi/2$ BPSK	1905.00	H	128	355	8.32	1 / 104	15.71	24.03	0.253	33.01	-8.98
	QPSK	1860.00	H	124	360	8.28	1 / 104	15.74	24.02	0.252	33.01	-8.99
	QPSK	1882.50	H	120	360	8.29	1 / 104	16.13	24.43	0.277	33.01	-8.58
	QPSK	1905.00	H	128	355	8.32	1 / 1	15.90	24.21	0.264	33.01	-8.80
	16-QAM	1882.50	H	120	360	8.29	1 / 104	14.60	22.89	0.195	33.01	-10.12
	$\pi/2$ BPSK	1857.50	H	124	360	8.28	1 / 77	15.43	23.71	0.235	33.01	-9.30
10 MHz	$\pi/2$ BPSK	1882.50	H	120	360	8.29	1 / 77	15.67	23.96	0.249	33.01	-9.05
	$\pi/2$ BPSK	1907.50	H	128	355	8.32	1 / 77	15.51	23.83	0.242	33.01	-9.18
	QPSK	1857.50	H	124	360	8.28	1 / 77	15.55	23.82	0.241	33.01	-9.19
	QPSK	1882.50	H	120	360	8.29	1 / 39	16.04	24.34	0.272	33.01	-8.67
	QPSK	1907.50	H	128	355	8.32	1 / 1	15.65	23.98	0.250	33.01	-9.03
	16-QAM	1882.50	H	120	360	8.29	1 / 77	14.36	22.65	0.184	33.01	-10.36
5 MHz	$\pi/2$ BPSK	1855.00	H	124	360	8.28	1 / 1	15.33	23.60	0.229	33.01	-9.41
	$\pi/2$ BPSK	1882.50	H	120	360	8.29	1 / 1	15.64	23.93	0.247	33.01	-9.08
	$\pi/2$ BPSK	1910.00	H	128	355	8.33	1 / 1	15.70	24.03	0.253	33.01	-8.98
	QPSK	1855.00	H	124	360	8.28	1 / 50	15.60	23.88	0.244	33.01	-9.13
	QPSK	1882.50	H	120	360	8.29	1 / 26	16.14	24.43	0.278	33.01	-8.58
	QPSK	1910.00	H	128	355	8.33	1 / 50	15.83	24.16	0.260	33.01	-8.85
40 MHz	16-QAM	1882.50	H	120	360	8.29	1 / 26	14.74	23.03	0.201	33.01	-9.98
	$\pi/2$ BPSK	1852.50	H	124	360	8.27	1 / 1	15.44	23.72	0.235	33.01	-9.29
	$\pi/2$ BPSK	1882.50	H	120	360	8.29	1 / 23	15.73	24.02	0.253	33.01	-8.99
	$\pi/2$ BPSK	1912.50	H	128	355	8.34	1 / 12	15.75	24.09	0.257	33.01	-8.92
	QPSK	1852.50	H	124	360	8.27	1 / 1	15.73	24.01	0.252	33.01	-9.00
	QPSK	1882.50	H	120	360	8.29	1 / 12	16.35	24.64	0.291	33.01	-8.37
40 MHz	QPSK	1912.50	H	128	355	8.34	1 / 23	15.90	24.23	0.265	33.01	-8.78
	16-QAM	1882.50	H	120	360	8.29	1 / 12	14.71	23.01	0.200	33.01	-10.00
	QPSK (CP-OFDM)	1882.50	H	122	360	8.29	1 / 1	14.74	23.03	0.201	33.01	-9.98
40 MHz	QPSK (Opposite Pol.)	1882.50	V	114	334	8.29	1 / 1	15.38	23.67	0.233	33.01	-9.34
	QPSK (WCP)	1882.50	H	125	358	8.29	1 / 1	13.92	22.21	0.166	33.01	-10.80

Table 7-21. EIRP Data (NR Band n25/2 – Ant F)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-03.A3L	Test Dates: 9/11/2023 - 10/11/2023	EUT Type: Portable Handset	Page 109 of 130

7.8 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 $\geq 3 \times$ RBW
3. Span = 1.5 times the OBW
4. No. of sweep points $\geq 2 \times$ span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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Test Setup

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

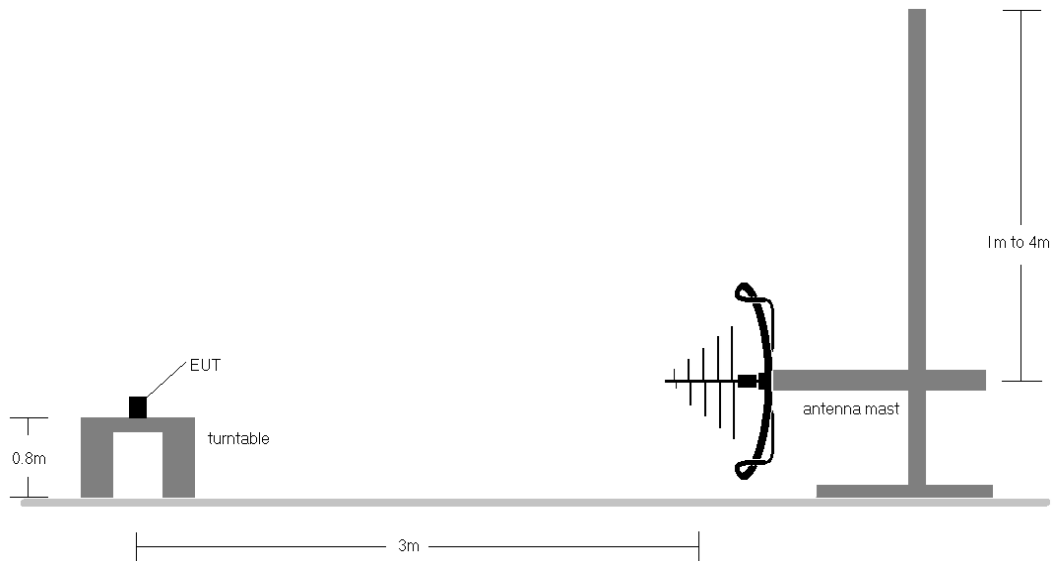


Figure 7-7. Test Instrument & Measurement Setup < 1GHz

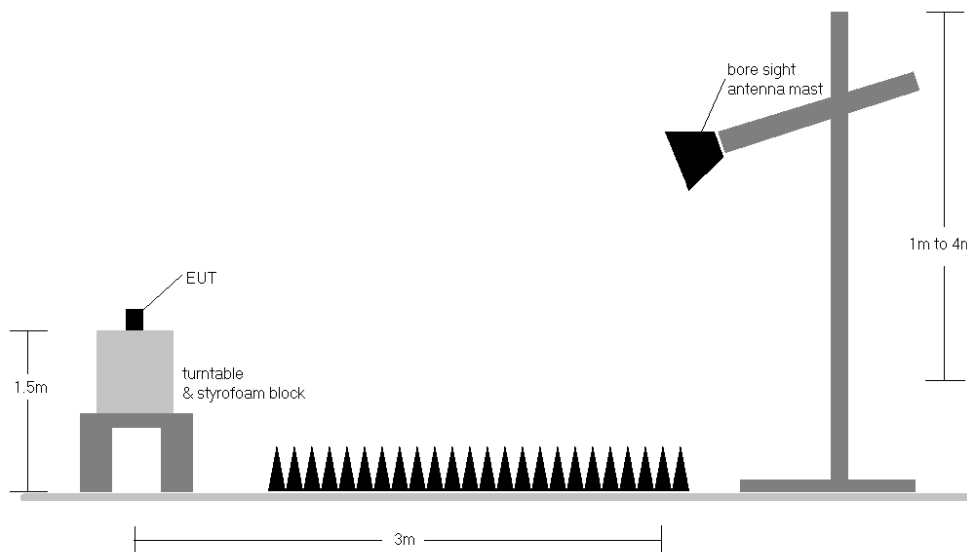


Figure 7-8. Test Instrument & Measurement Setup >1 GHz

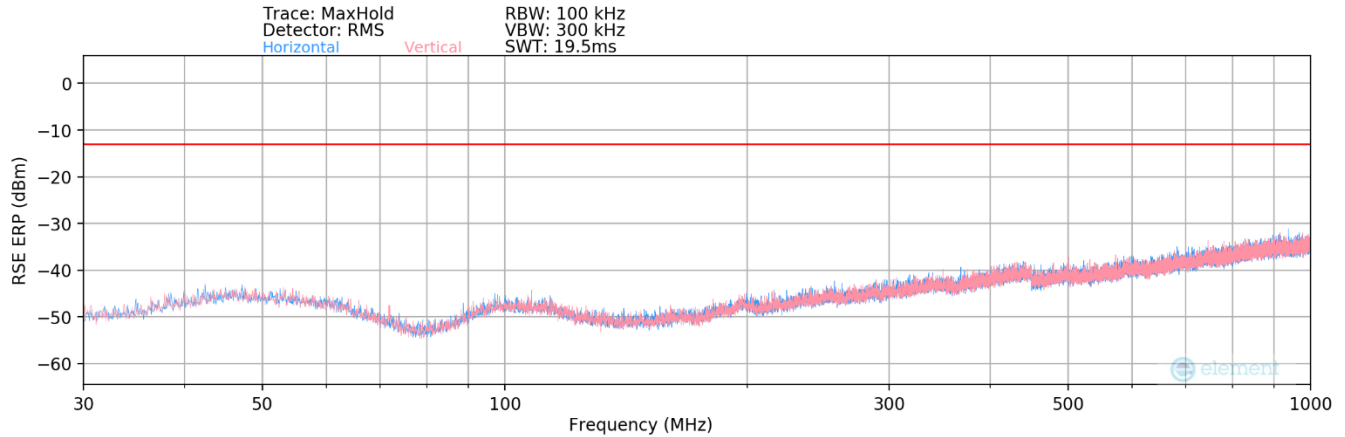
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Test Notes

- 1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
 - a) $E(\text{dB}\mu\text{V/m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$
 - b) $\text{EIRP (dBm)} = E(\text{dB}\mu\text{V/m}) + 20\log D - 104.8$; 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 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. 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.

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LTE Band 25/2 – Ant A

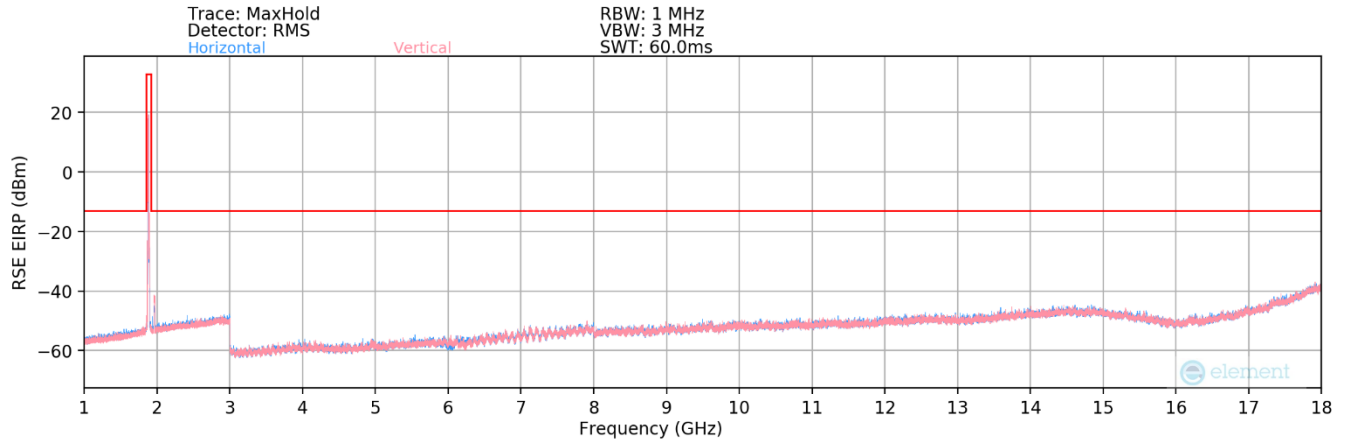


Plot 7-139. Radiated Spurious Plot Below 1GHz (LTE Band 25/2 – Ant A)

Bandwidth (MHz):	20
Frequency (MHz):	1882.5
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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
982.13	H	-	-	-81.85	30.99	56.14	-41.27	-13.00	-28.27

Table 7-22. Radiated Spurious Data Below 1GHz (LTE Band 25/2 – Ant A)



Plot 7-140. Radiated Spurious Plot Above 1GHz (LTE Band 25/2 –Ant A)

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Bandwidth (MHz):	20
Frequency (MHz):	1860
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]
3720.00	H	-	-	-76.87	-0.93	29.20	-66.05	-13.00	-53.05
5580.00	H	-	-	-77.70	2.02	31.32	-63.94	-13.00	-50.94
7440.00	H	-	-	-78.64	6.20	34.56	-60.70	-13.00	-47.70

Table 7-23. Radiated Spurious Data Above 1GHz (LTE Band 25/2 – Low Channel – Ant A)

Bandwidth (MHz):	20
Frequency (MHz):	1882.5
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]
3765.00	H	-	-	-77.30	-0.30	29.40	-65.86	-13.00	-52.86
5647.50	H	-	-	-78.07	2.40	31.33	-63.93	-13.00	-50.93
7530.00	H	-	-	-78.75	6.16	34.41	-60.84	-13.00	-47.84

Table 7-24. Radiated Spurious Data Above 1GHz (LTE Band 25/2 – Mid Channel – Ant A)

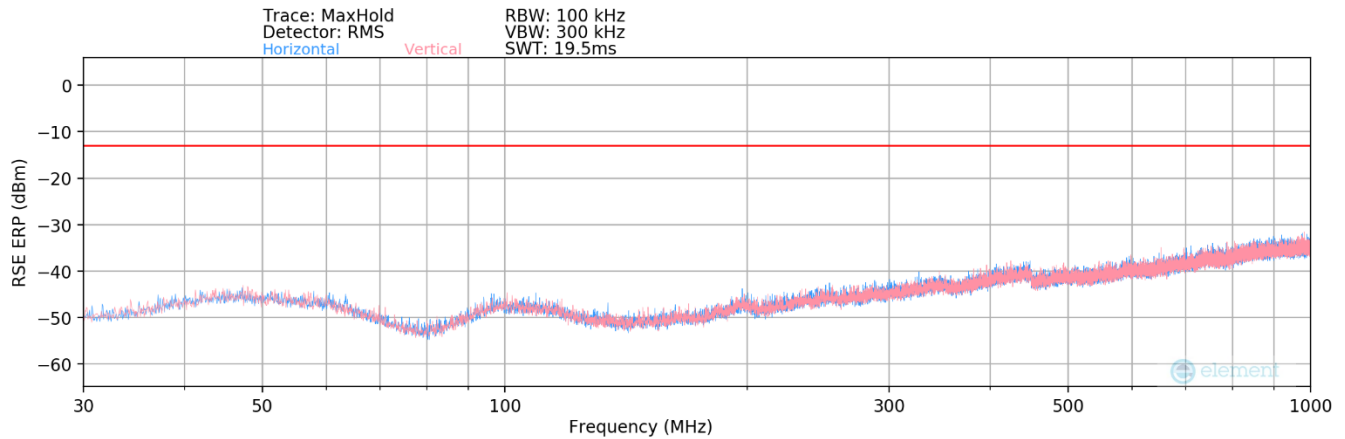
Bandwidth (MHz):	20
Frequency (MHz):	1905
RB / Offset:	1 / 50

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]
3810.00	H	-	-	-77.07	-0.42	29.51	-65.75	-13.00	-52.75
5715.00	H	-	-	-78.03	2.73	31.70	-63.56	-13.00	-50.56
7620.00	H	-	-	-78.55	6.47	34.92	-60.34	-13.00	-47.34

Table 7-25. Radiated Spurious Data Above 1GHz (LTE Band 25/2 – High Channel – Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n25/2 – Ant A

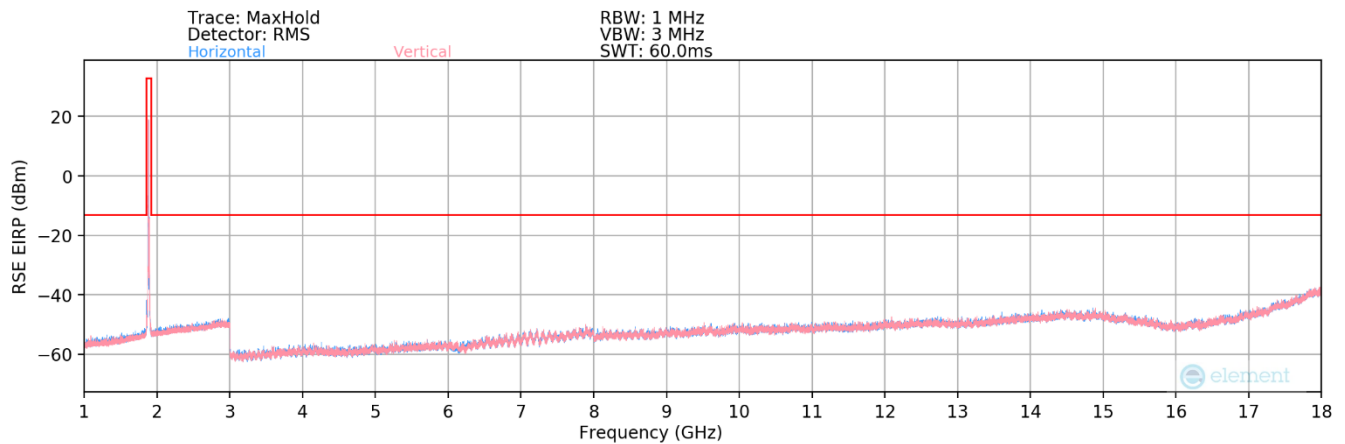


Plot 7-141. Radiated Spurious Plot Below 1GHz (NR Band n25/2 – Ant A)

Bandwidth (MHz):	40
Frequency (MHz):	1882.5
RB / Offset:	1/108

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]
987.35	H	-	-	-81.13	31.04	56.91	-40.50	-13.00	-27.50

Table 7-26. Radiated Spurious Data Below 1GHz (NR Band n25/2 – Ant A)



Plot 7-142. Radiated Spurious Plot Above 1GHz (NR Band n25/2 – Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth (MHz):	40
Frequency (MHz):	1870
RB / Offset:	1 / 108

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]
3740.00	H	-	-	-76.58	-0.68	29.74	-65.52	-13.00	-52.52
5610.00	H	-	-	-77.51	2.04	31.53	-63.73	-13.00	-50.73
7480.00	H	-	-	-78.15	6.59	35.44	-59.81	-13.00	-46.81

Table 7-27. Radiated Spurious Data Above 1GHz (NR Band n25/2 – Low Channel – Ant A)

Bandwidth (MHz):	40
Frequency (MHz):	1882.5
RB / Offset:	1 / 108

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]
3765.00	H	-	-	-78.40	-0.30	28.30	-66.96	-13.00	-53.96
5647.50	H	-	-	-78.00	2.40	31.40	-63.86	-13.00	-50.86
7530.00	H	-	-	-78.66	6.16	34.50	-60.75	-13.00	-47.75

Table 7-28. Radiated Spurious Data Above 1GHz (NR Band n25/2 – Mid Channel – Ant A)

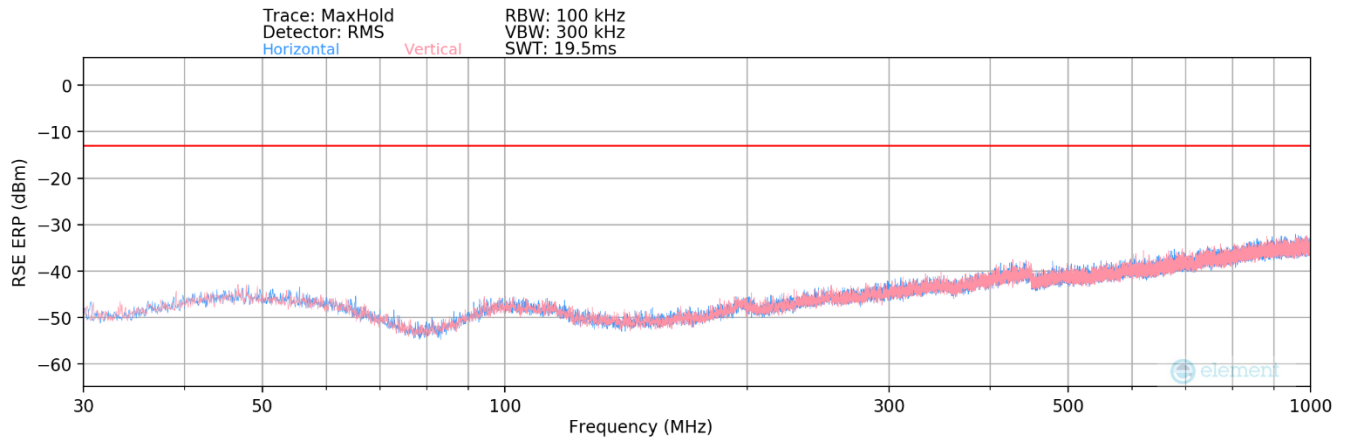
Bandwidth (MHz):	40
Frequency (MHz):	1895
RB / Offset:	1 / 108

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]
3790.00	H	-	-	-76.66	-0.50	29.84	-65.41	-13.00	-52.41
5685.00	H	-	-	-77.61	2.03	31.42	-63.84	-13.00	-50.84
7580.00	H	-	-	-78.57	6.52	34.95	-60.31	-13.00	-47.31

Table 7-29. Radiated Spurious Data Above 1GHz (NR Band n25/2 – High Channel – Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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GSM/GPRS PCS – Ant A

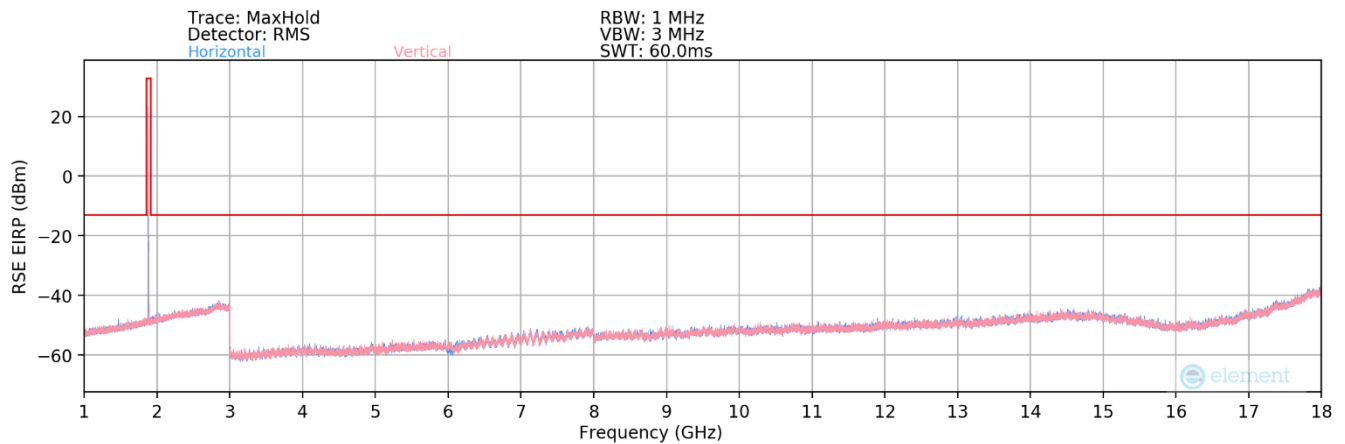


Plot 7-143. Radiated Spurious Plot Below 1GHz (GSM/GPRS PCS – Ant A)

Mode:	GPRS 1 Tx Slot
Channel:	661
Frequency (MHz):	1880

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]
953.84	H	-	-	-82.04	30.65	55.61	-41.80	-13.00	-28.80

Table 7-30. Radiated Spurious Data Below 1GHz (GSM/GPRS PCS – Ant A)



Plot 7-144. Radiated Spurious Plot Above 1GHz (GSM/GPRS PCS – Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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Mode:	GPRS 1 Tx Slot
Channel:	512
Frequency (MHz):	1850.2

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]
3700.40	H	-	-	-66.86	-1.02	39.12	-56.14	-13.00	-43.14
5550.60	H	-	-	-67.63	2.08	41.45	-53.81	-13.00	-40.81
7400.80	H	-	-	-67.96	6.99	46.03	-49.23	-13.00	-36.23

Table 7-31. Radiated Spurious Data Above 1GHz (GSM/GPRS PCS – Low Channel – Ant A)

Mode:	GPRS 1 Tx Slot
Channel:	661
Frequency (MHz):	1880

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]
3760.00	H	-	-	-66.73	-0.34	39.93	-55.32	-13.00	-42.32
5640.00	H	-	-	-67.13	2.45	42.32	-52.94	-13.00	-39.94
7520.00	H	-	-	-68.86	6.05	44.19	-51.07	-13.00	-38.07

Table 7-32. Radiated Spurious Data Above 1GHz (GSM/GPRS PCS – Mid Channel – Ant A)

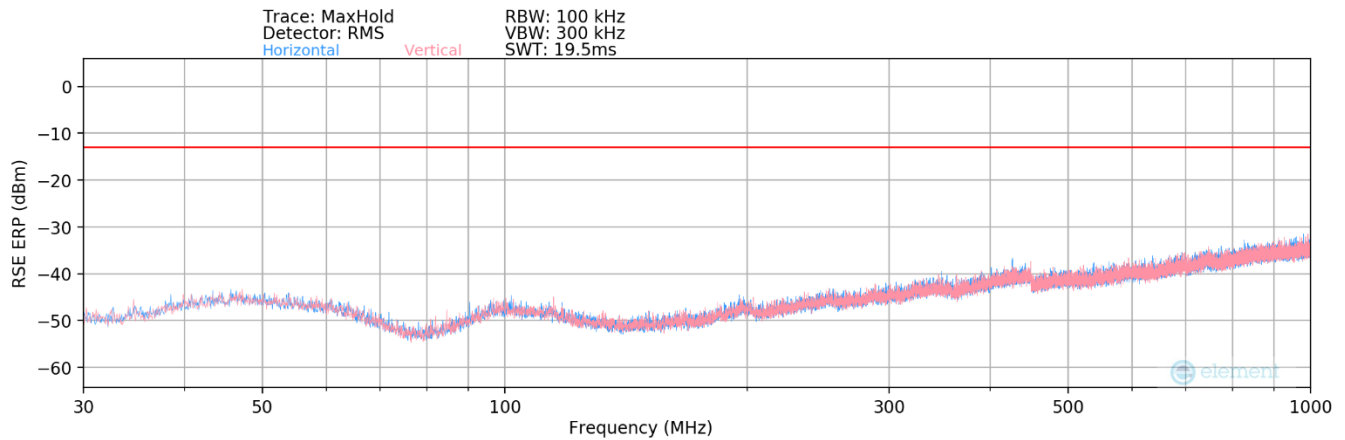
Mode:	GPRS 1 Tx Slot
Channel:	810
Frequency (MHz):	1909.8

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]
3819.60	H	-	-	-66.95	-0.31	39.74	-55.52	-13.00	-42.52
5729.40	H	-	-	-67.01	2.64	42.63	-52.63	-13.00	-39.63
7639.20	H	-	-	-67.80	6.92	46.12	-49.14	-13.00	-36.14

Table 7-33. Radiated Spurious Data Above 1GHz (GSM/GPRS PCS – High Channel – Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT		Approved by: Technical Manager
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WCDMA PCS – Ant A

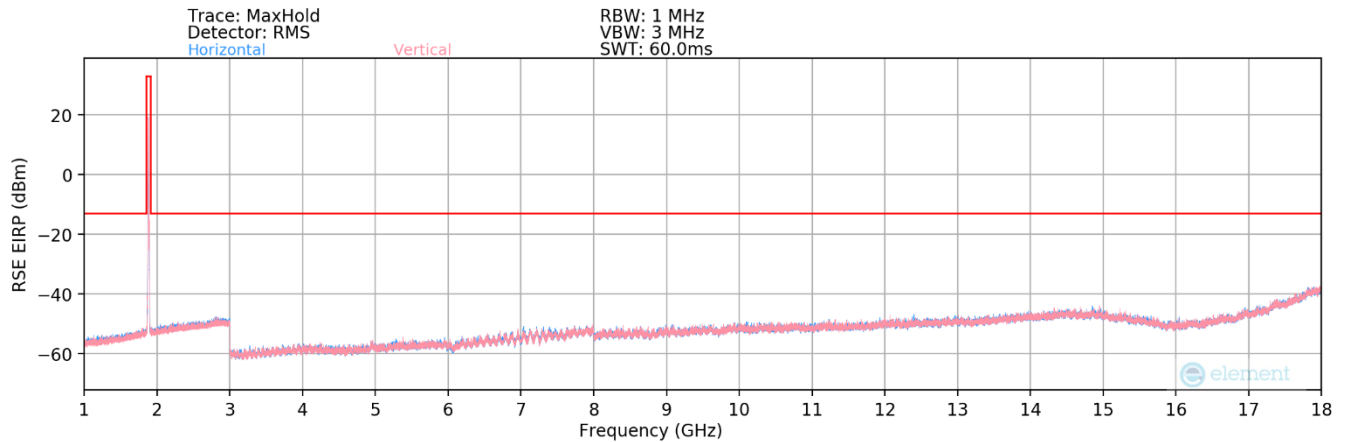


Plot 7-145. Radiated Spurious Plot Below 1GHz (WCDMA PCS – Ant A)

Mode:	WCDMA RMC
Channel:	9400
Frequency (MHz):	1880

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]
952.38	H	-	-	-81.99	30.61	55.62	-41.78	-13.00	-28.78

Table 7-34. Radiated Spurious Data Below 1GHz (WCDMA PCS – Ant A)



Plot 7-146. Radiated Spurious Plot Above 1GHz (WCDMA PCS – Ant A)

FCC ID: A3LSMS928U	PART 24 MEASUREMENT REPORT			Approved by: Technical Manager
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Mode:	WCDMA RMC
Channel:	9262
Frequency (MHz):	1852.4

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]
3704.80	H	-	-	-77.35	-0.95	28.70	-66.56	-13.00	-53.56
5557.20	H	-	-	-77.59	2.37	31.78	-63.47	-13.00	-50.47
7409.60	H	-	-	-77.88	7.41	36.53	-58.73	-13.00	-45.73

Table 7-35. Radiated Spurious Data Above 1GHz (WCDMA PCS – Low Channel – Ant A)

Mode:	WCDMA RMC
Channel:	9400
Frequency (MHz):	1880

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]
3760.00	H	-	-	-76.47	0.07	30.60	-64.66	-13.00	-51.66
5640.00	H	-	-	-76.86	2.53	32.67	-62.59	-13.00	-49.59
7520.00	H	-	-	-77.13	6.54	36.41	-58.85	-13.00	-45.85

Table 7-36. Radiated Spurious Data Above 1GHz (WCDMA PCS – Mid Channel – Ant A)

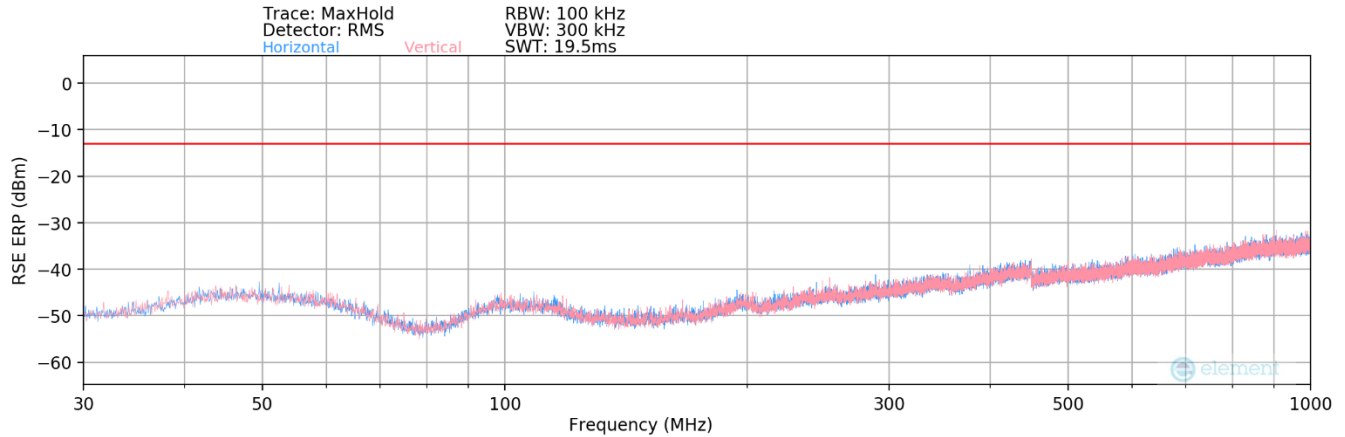
Mode:	WCDMA RMC
Channel:	9538
Frequency (MHz):	1907.6

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]
3815.20	H	-	-	-77.11	0.37	30.26	-65.00	-13.00	-52.00
5722.80	H	-	-	-77.59	2.69	32.10	-63.16	-13.00	-50.16
7630.40	H	-	-	-77.81	7.16	36.35	-58.91	-13.00	-45.91

Table 7-37. Radiated Spurious Data Above 1GHz (WCDMA PCS – High Channel – Ant A)

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LTE Band 25/2 – Ant F

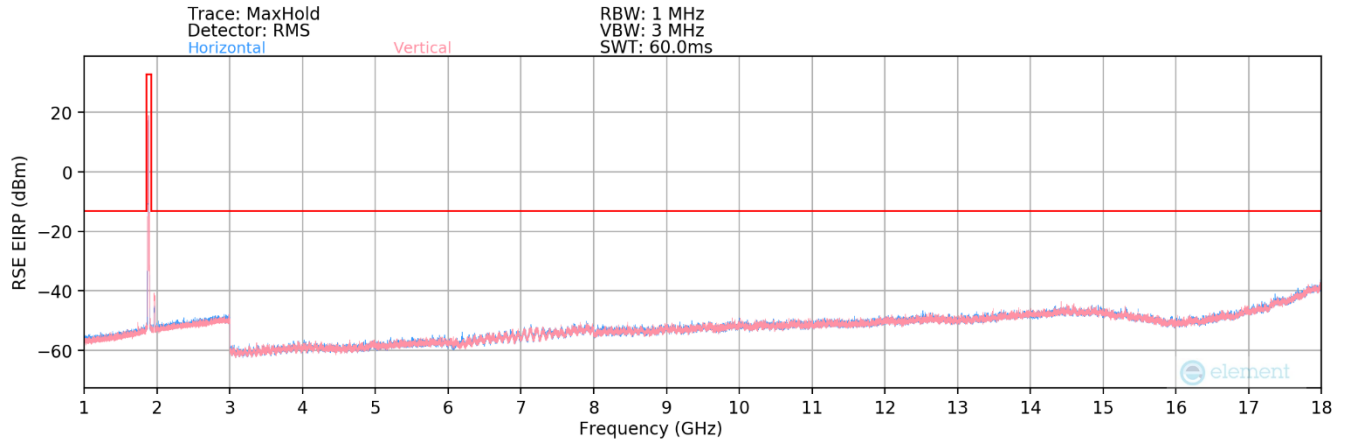


Plot 7-147. Radiated Spurious Plot Below 1GHz (LTE Band 25/2 – Ant F)

Bandwidth (MHz):	20
Frequency (MHz):	1882.5
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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
972.53	H	-	-	-80.93	30.93	57.00	-40.41	-13.00	-27.41

Table 7-38. Radiated Spurious Data Below 1GHz (LTE Band 25/2 – Ant F)



Plot 7-148. Radiated Spurious Plot Above 1GHz (LTE Band 25/2 –Ant F)

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