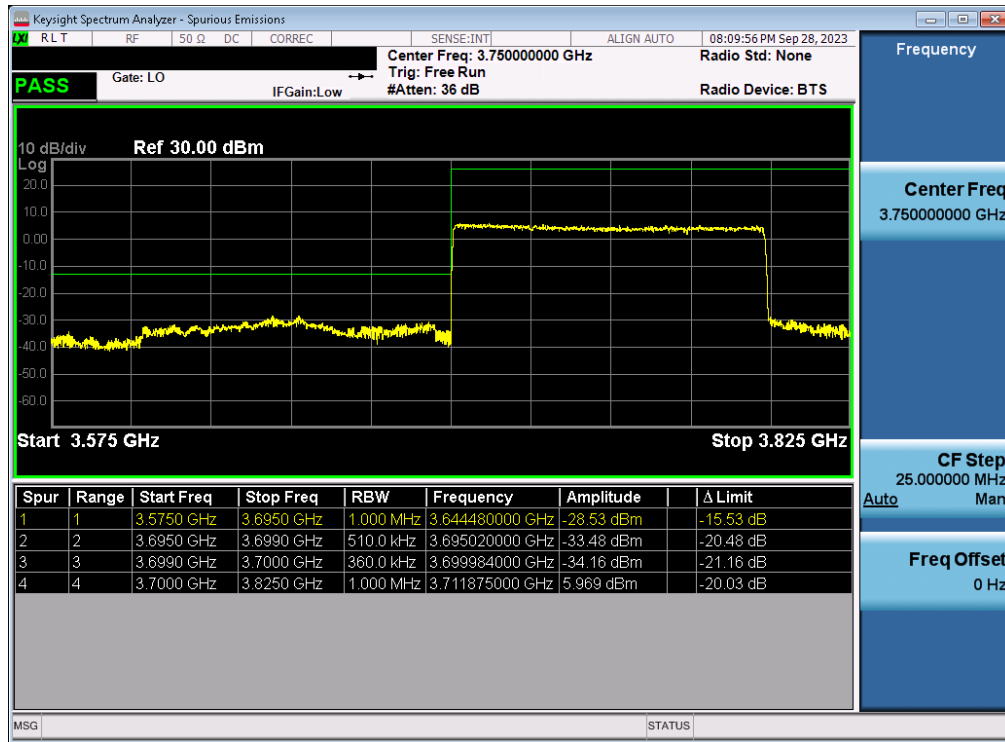
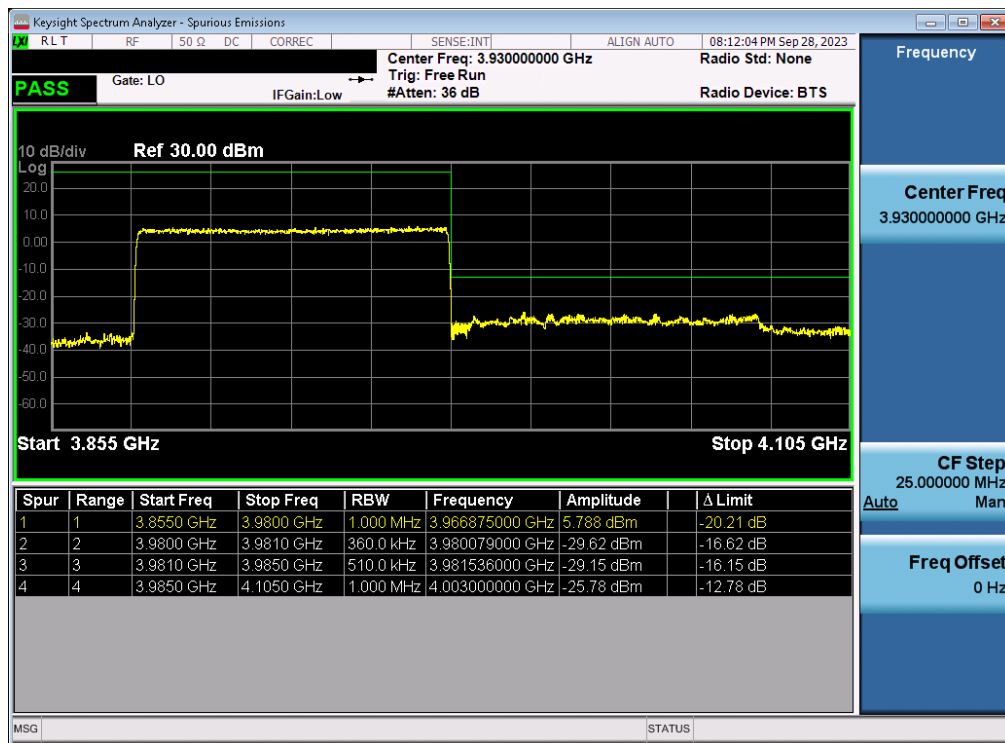


NR Band n77 – Ant I



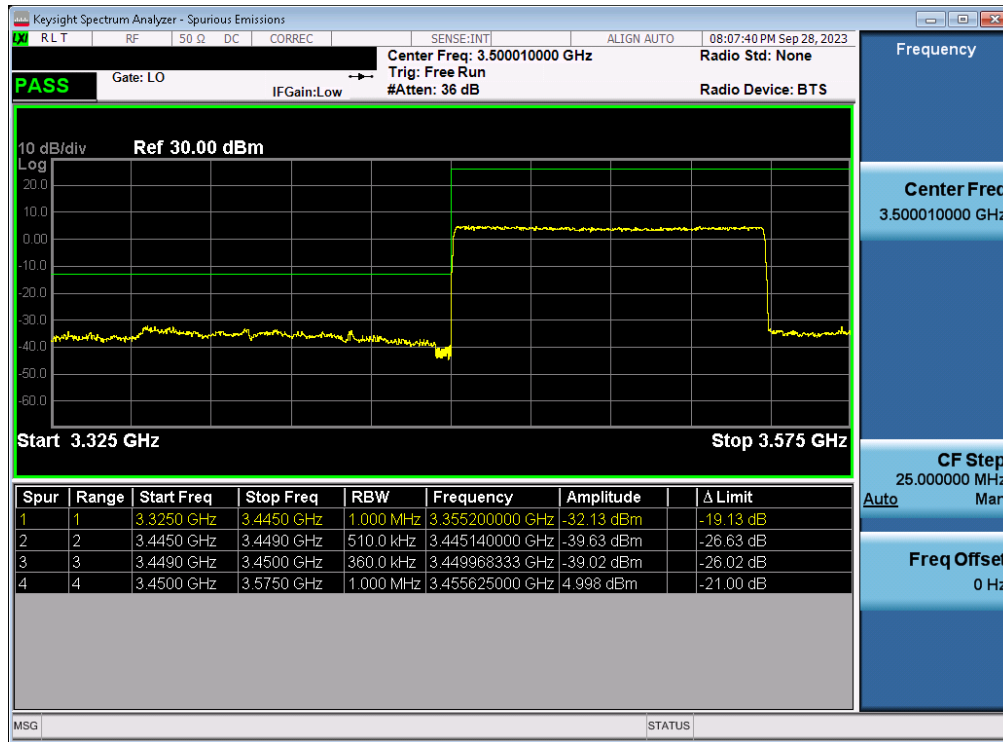
Plot 7-105. Lower ACP Plot (NR Band n77 - 100MHz CP-OFDM-QPSK – Full RB - Ant I)



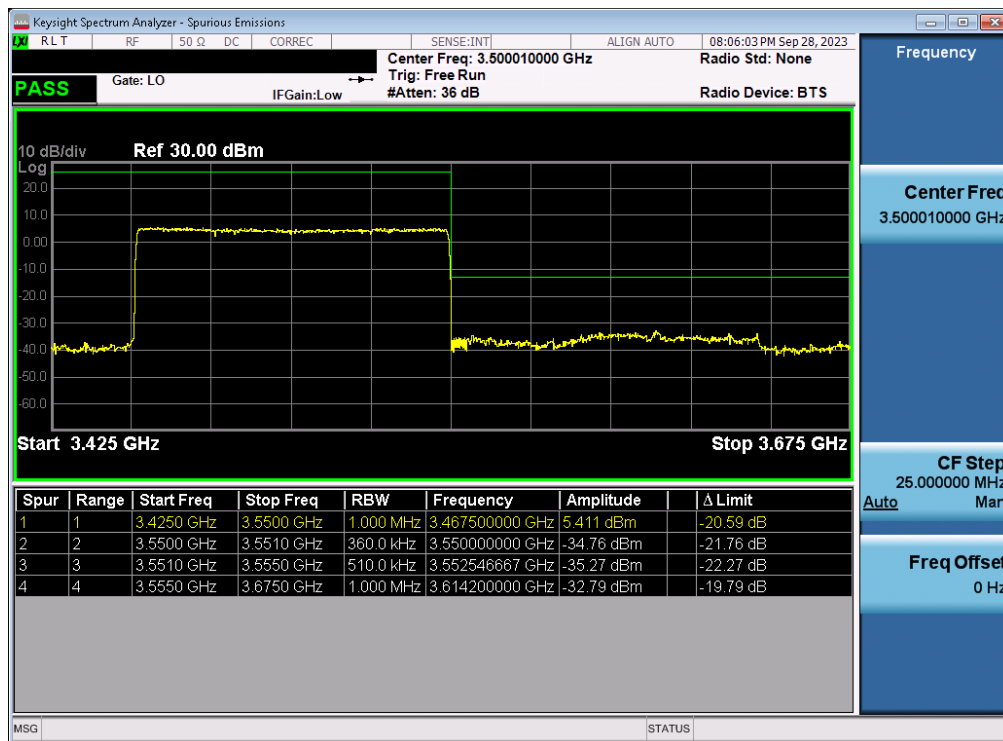
Plot 7-106. Upper ACP Plot (NR Band n77 - 100MHz CP-OFDM-QPSK – Full RB - Ant I)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77/78 (DoD Band) – Ant I



Plot 7-107. Lower ACP Plot (NR Band n77/78 (DoD) - 100MHz CP-OFDM-QPSK – Full RB - Ant I)



Plot 7-108. Upper ACP Plot (NR Band n77/78 (DoD) - 100MHz CP-OFDM-QPSK – Full RB - Ant I)

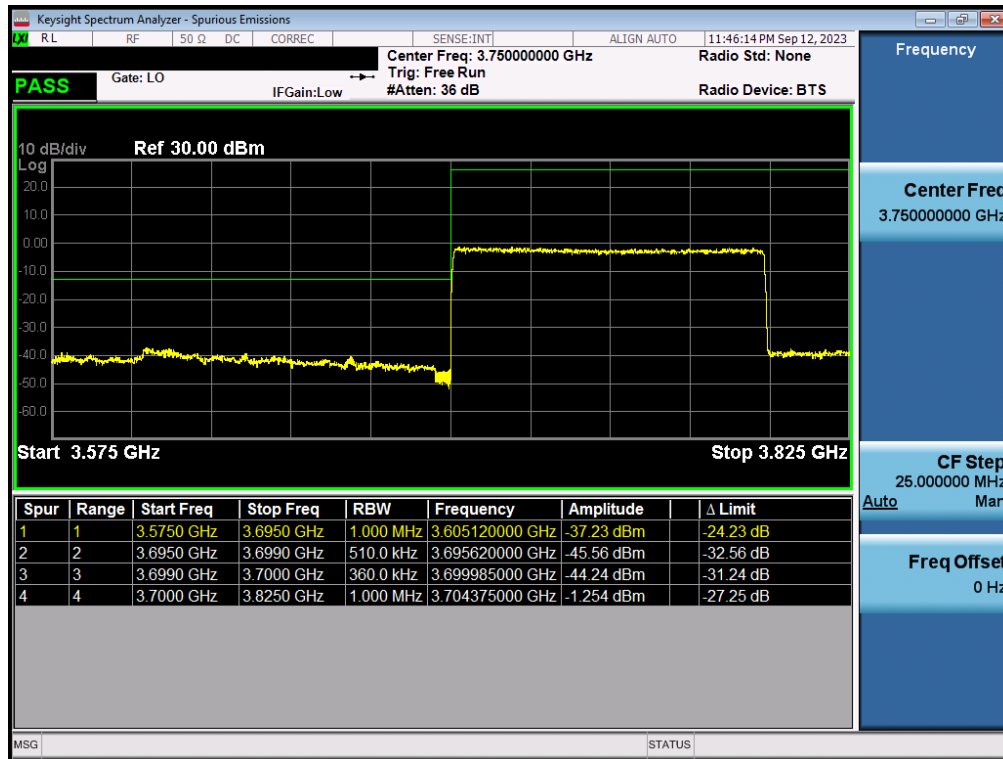
FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 89 of 131

Mode	Bandwidth	Channel	Test Case	Level [dBm]	Limit [dBm]	Margin [dB]
NR-n77 PC2 C Band	100MHz	Low	Band Edge	-37.23	-13	-24.23
		High	Band Edge	-39.91	-13	-26.91
NR-n77/78 PC2 DoD Band	100MHz	Low	Band Edge	-35.51	-13	-22.51
		High	Band Edge	-37.67	-13	-24.67

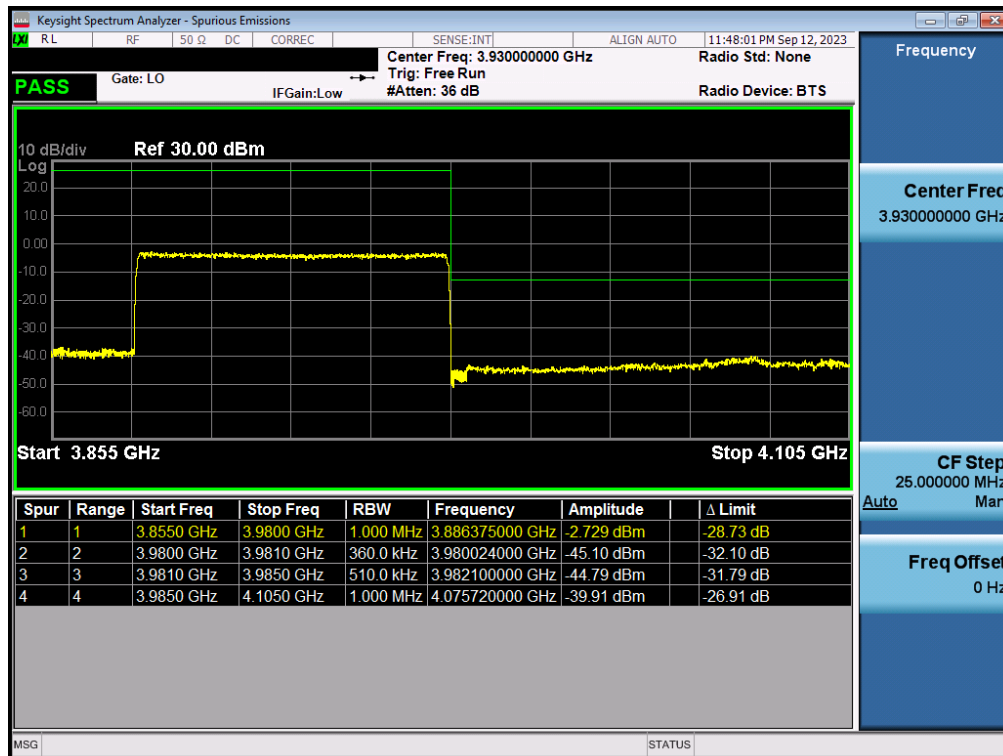
Table 7-20. Conducted Band Edge Test Results – DoD Band – Ant D

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 90 of 131

NR Band n77 – Ant D



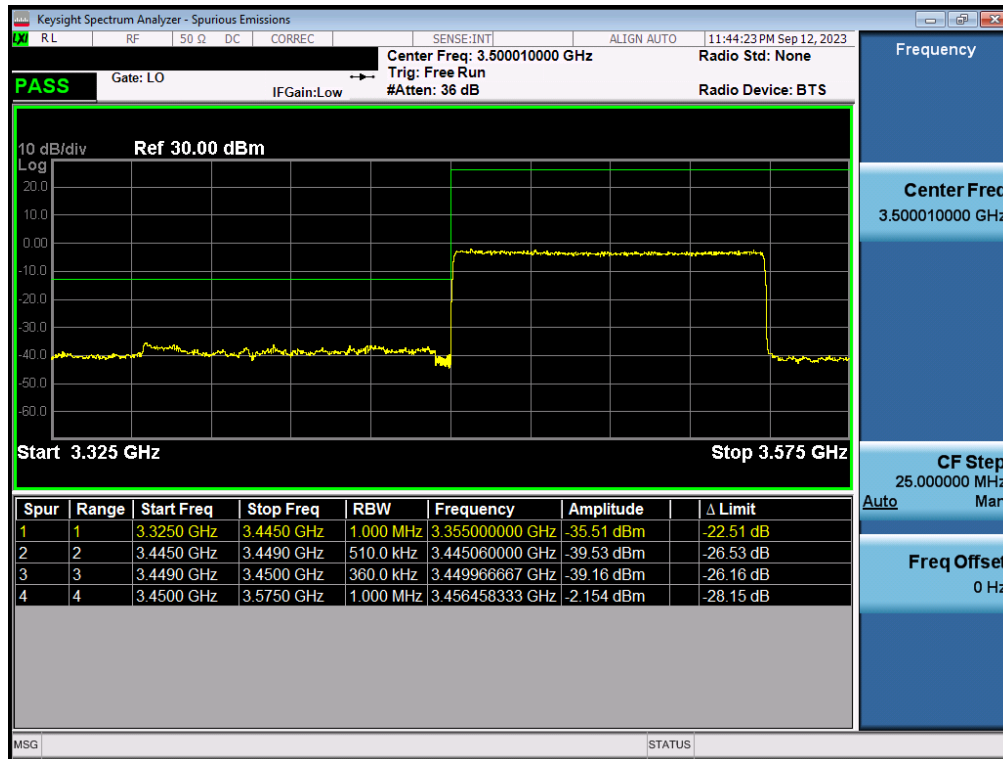
Plot 7-109. Lower ACP Plot (NR Band n77 - 100MHz CP-OFDM-QPSK – Full RB - Ant D)



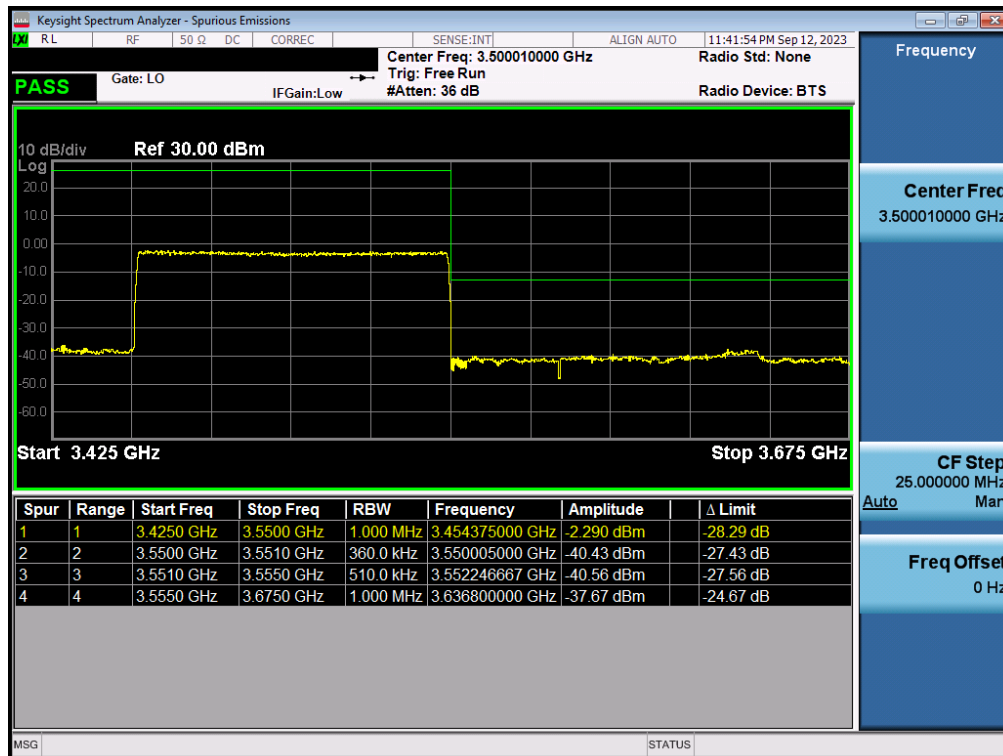
Plot 7-110. Upper ACP Plot (NR Band n77 - 100MHz CP-OFDM-QPSK – Full RB - Ant D)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 91 of 131

NR Band n77/78 (DoD Band) – Ant D



Plot 7-111. Lower ACP Plot (NR Band n77/78 (DoD) - 100MHz CP-OFDM-QPSK – Full RB - Ant D)



Plot 7-112. Upper ACP Plot (NR Band n77/78 (DoD) - 100MHz CP-OFDM-QPSK – Full RB - Ant D)

FCC ID: A3LSMS928U	PART 27 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.

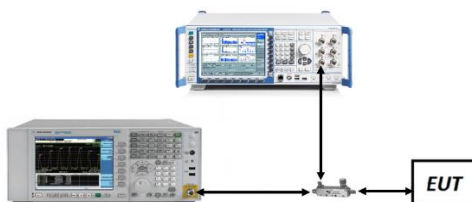


Figure 7-5. Test Instrument & Measurement Setup

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.

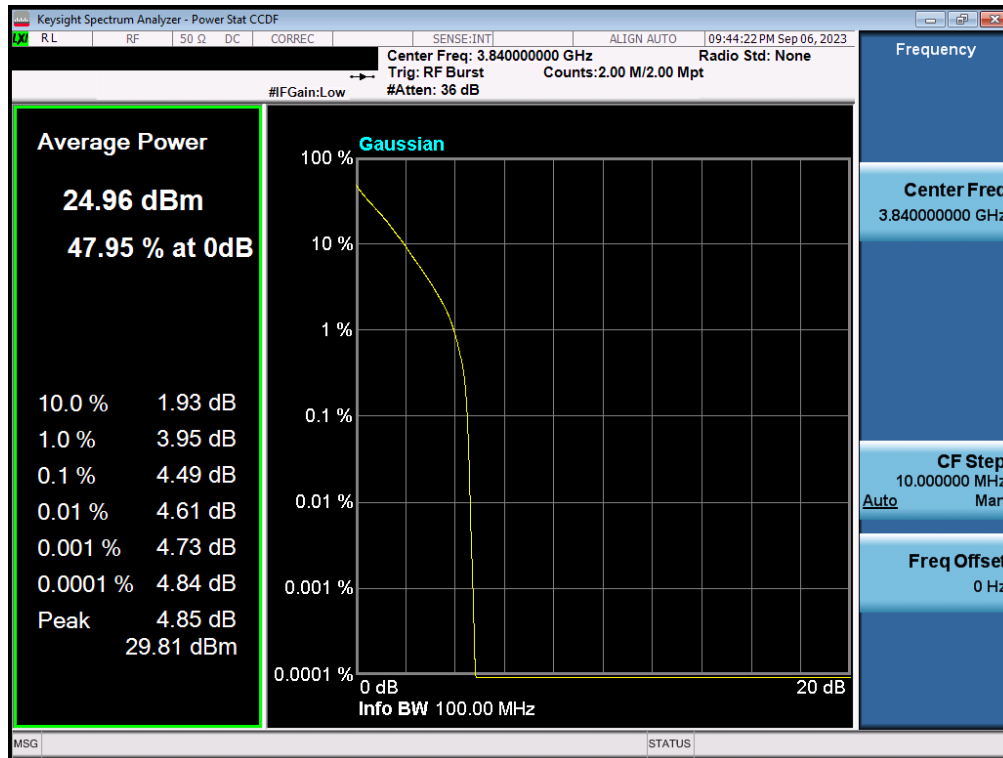
FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 93 of 131

Mode	Bandwidth	Modulation	Average Power [dBm]	PAR at 0.1% [dB]	PAR Limit [dB]	Margin [dB]
NR-n77PC2	100MHz	$\pi/2$ BPSK	24.96	4.49	13.0	-8.51
		QPSK	22.40	6.93	13.0	-6.07
		256QAM	19.08	8.47	13.0	-4.53
	90MHz	$\pi/2$ BPSK	24.89	3.97	13.0	-9.03
		QPSK	22.30	6.72	13.0	-6.28
		256QAM	19.02	8.43	13.0	-4.57
	80MHz	$\pi/2$ BPSK	25.08	4.12	13.0	-8.88
		QPSK	22.40	6.78	13.0	-6.22
		256QAM	19.06	8.42	13.0	-4.58
	70MHz	$\pi/2$ BPSK	24.98	3.97	13.0	-9.03
		QPSK	22.29	6.72	13.0	-6.28
		256QAM	19.08	8.49	13.0	-4.51
	60MHz	$\pi/2$ BPSK	24.88	3.91	13.0	-9.09
		QPSK	22.29	6.74	13.0	-6.26
		256QAM	18.94	8.32	13.0	-4.68
	50MHz	$\pi/2$ BPSK	25.01	3.99	13.0	-9.01
		QPSK	22.22	6.64	13.0	-6.36
		256QAM	19.15	8.54	13.0	-4.46
	40MHz	$\pi/2$ BPSK	24.68	3.80	13.0	-9.20
		QPSK	22.01	6.51	13.0	-6.49
		256QAM	18.97	8.35	13.0	-4.65
	30MHz	$\pi/2$ BPSK	24.66	3.80	13.0	-9.20
		QPSK	21.96	6.55	13.0	-6.45
		256QAM	18.97	8.45	13.0	-4.55
	25MHz	$\pi/2$ BPSK	24.73	3.91	13.0	-9.09
		QPSK	22.06	6.68	13.0	-6.32
		256QAM	18.96	8.58	13.0	-4.42
	20MHz	$\pi/2$ BPSK	24.71	3.73	13.0	-9.27
		QPSK	21.95	6.49	13.0	-6.51
		256QAM	18.79	8.53	13.0	-4.47
	15MHz	$\pi/2$ BPSK	24.63	3.80	13.0	-9.20
		QPSK	22.02	6.52	13.0	-6.48
		256QAM	18.83	8.26	13.0	-4.74
	10MHz	$\pi/2$ BPSK	24.61	3.79	13.0	-9.21
		QPSK	21.93	6.66	13.0	-6.34
		256QAM	18.86	8.01	13.0	-5.00

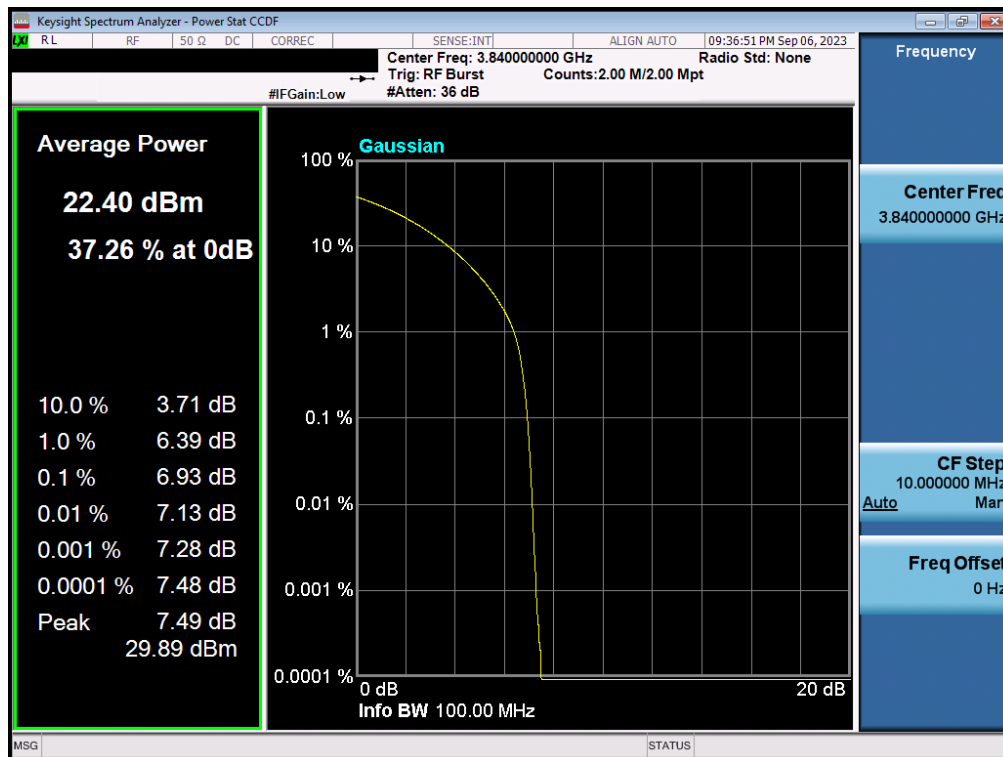
Table 7-21. Conducted Band Edge Test Results – C Band – Ant F

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77 – Ant F

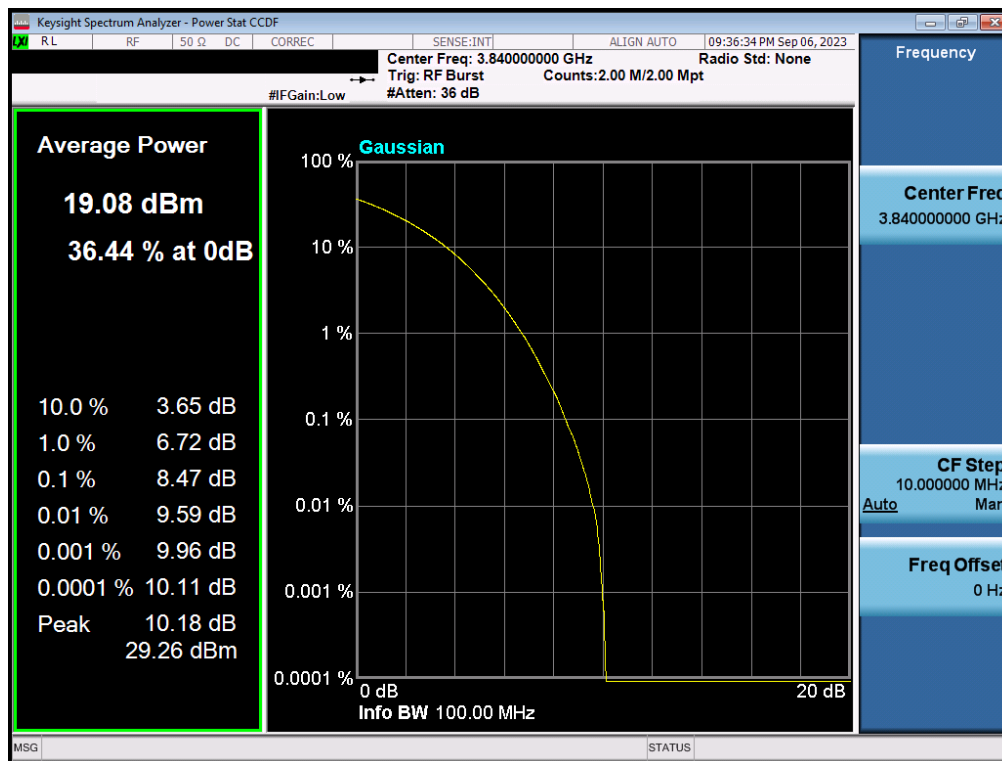


Plot 7-113. PAR Plot (NR Band n77 - 100MHz DFT-s-OFDM BPSK - Full RB - Ant F)



Plot 7-114. PAR Plot (NR Band n77 - 100MHz CP-OFDM QPSK - Full RB - Ant F)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 95 of 131



Plot 7-115. PAR Plot (NR Band n77 - 100MHz CP-OFDM 256-QAM - Full RB - Ant F)

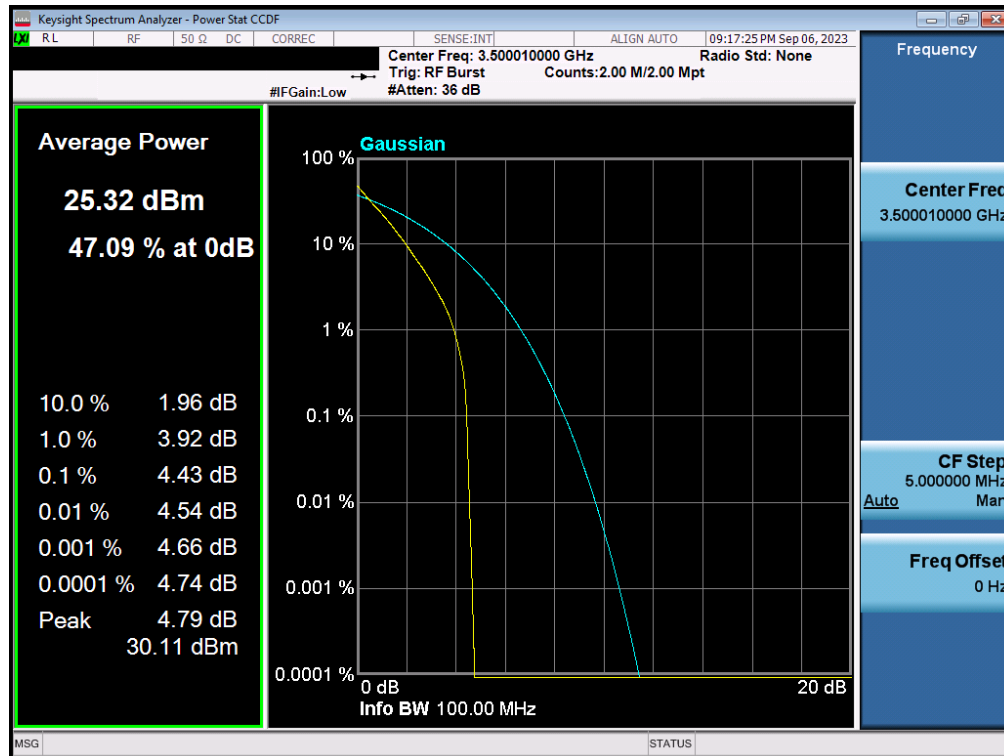
FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 96 of 131

Mode	Bandwidth	Modulation	Average Power [dBm]	PAR at 0.1% [dB]	PAR Limit [dB]	Margin [dB]
NR-n77/78 PC2 DoD Band	100MHz	$\pi/2$ BPSK	25.32	4.43	13.0	-8.57
		QPSK	22.76	6.91	13.0	-6.09
		256QAM	19.25	8.45	13.0	-4.55
	90MHz	$\pi/2$ BPSK	25.28	3.94	13.0	-9.06
		QPSK	22.73	6.71	13.0	-6.29
		256QAM	19.22	8.40	13.0	-4.60
	80MHz	$\pi/2$ BPSK	25.30	4.13	13.0	-8.87
		QPSK	22.73	6.78	13.0	-6.22
		256QAM	19.20	8.32	13.0	-4.68
	70MHz	$\pi/2$ BPSK	25.29	4.01	13.0	-8.99
		QPSK	22.69	6.71	13.0	-6.29
		256QAM	19.14	8.49	13.0	-4.51
	60MHz	$\pi/2$ BPSK	25.17	3.98	13.0	-9.02
		QPSK	22.54	6.76	13.0	-6.24
		256QAM	19.01	8.34	13.0	-4.66
	50MHz	$\pi/2$ BPSK	25.33	3.98	13.0	-9.02
		QPSK	22.87	6.64	13.0	-6.36
		256QAM	19.33	8.62	13.0	-4.38
	40MHz	$\pi/2$ BPSK	25.20	3.86	13.0	-9.14
		QPSK	22.79	6.51	13.0	-6.49
		256QAM	19.23	8.37	13.0	-4.63
	30MHz	$\pi/2$ BPSK	25.24	3.79	13.0	-9.21
		QPSK	22.68	6.55	13.0	-6.45
		256QAM	19.19	8.55	13.0	-4.45
	25MHz	$\pi/2$ BPSK	25.23	3.94	13.0	-9.06
		QPSK	22.74	6.68	13.0	-6.32
		256QAM	19.23	8.51	13.0	-4.49
	20MHz	$\pi/2$ BPSK	25.14	3.70	13.0	-9.30
		QPSK	22.59	6.46	13.0	-6.54
		256QAM	19.03	8.54	13.0	-4.46
	15MHz	$\pi/2$ BPSK	25.14	3.80	13.0	-9.20
		QPSK	22.49	6.55	13.0	-6.45
		256QAM	19.04	8.22	13.0	-4.78
	10MHz	$\pi/2$ BPSK	25.13	3.75	13.0	-9.25
		QPSK	22.48	6.63	13.0	-6.37
		256QAM	18.98	8.01	13.0	-4.99

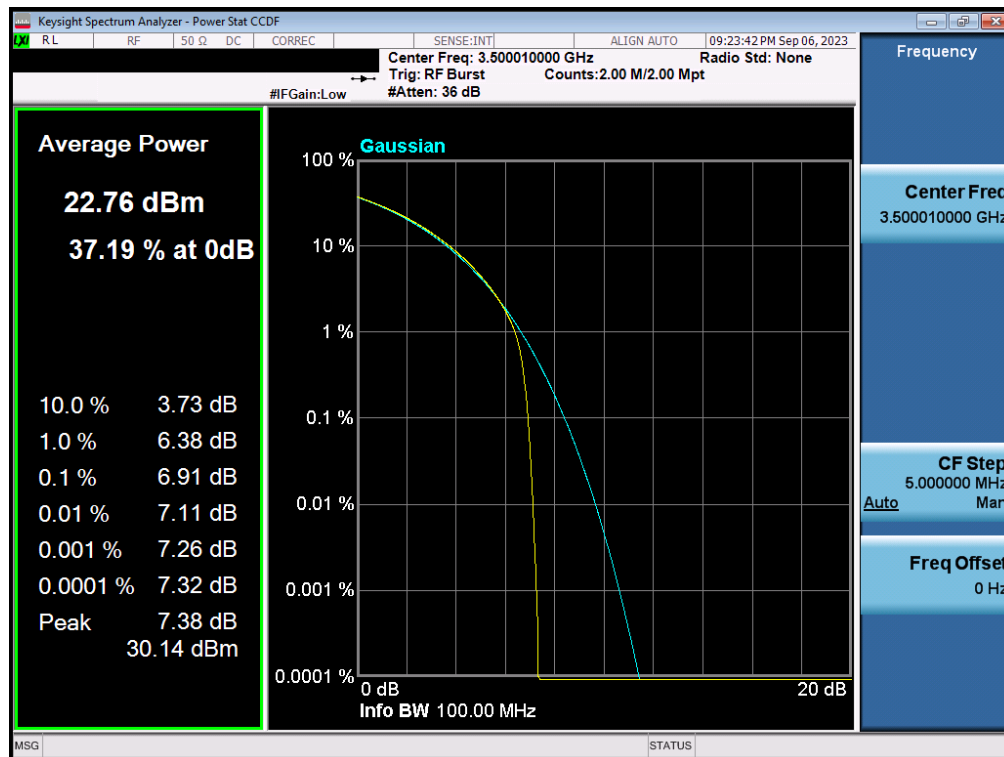
Table 7-22. Conducted Band Edge Test Results – DoD Band – Ant F

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n77/78 (DoD Band) – Ant F

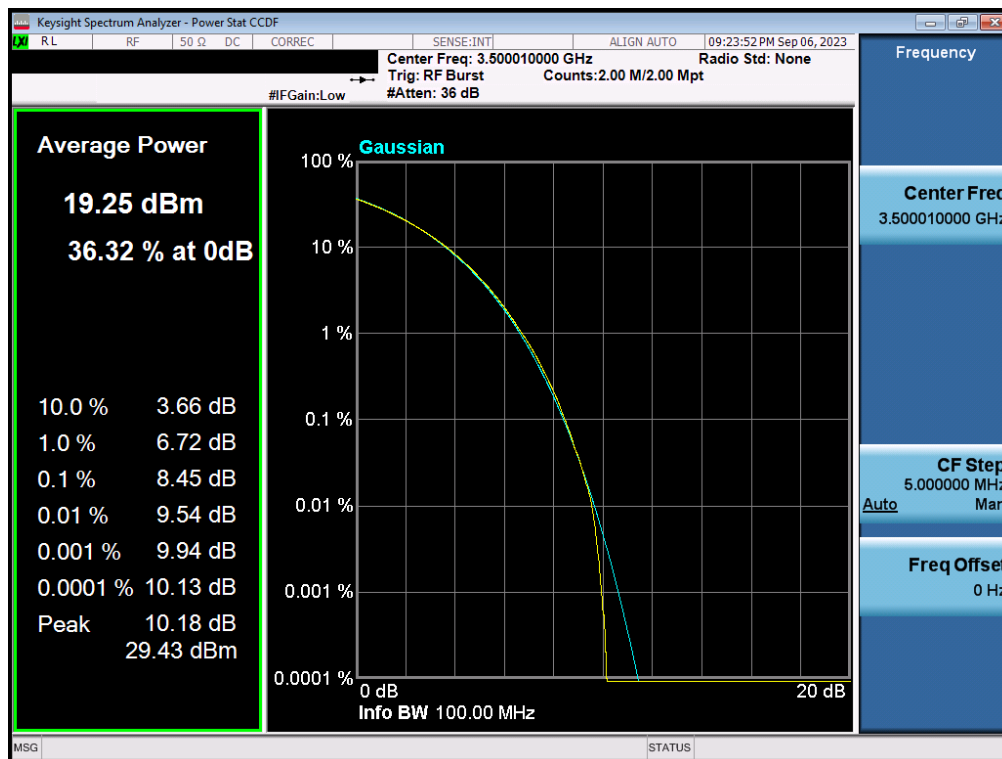


Plot 7-116. PAR Plot (NR Band n77/78 (DoD) - 100MHz DFT-s-OFDM BPSK - Full RB - Ant F)



Plot 7-117. PAR Plot (NR Band n77/78 (DoD) - 100MHz CP-OFDM QPSK - Full RB - Ant F)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-118. PAR Plot (NR Band n77/78 (DoD) - 100MHz CP-OFDM 256-QAM - Full RB - Ant F)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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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.

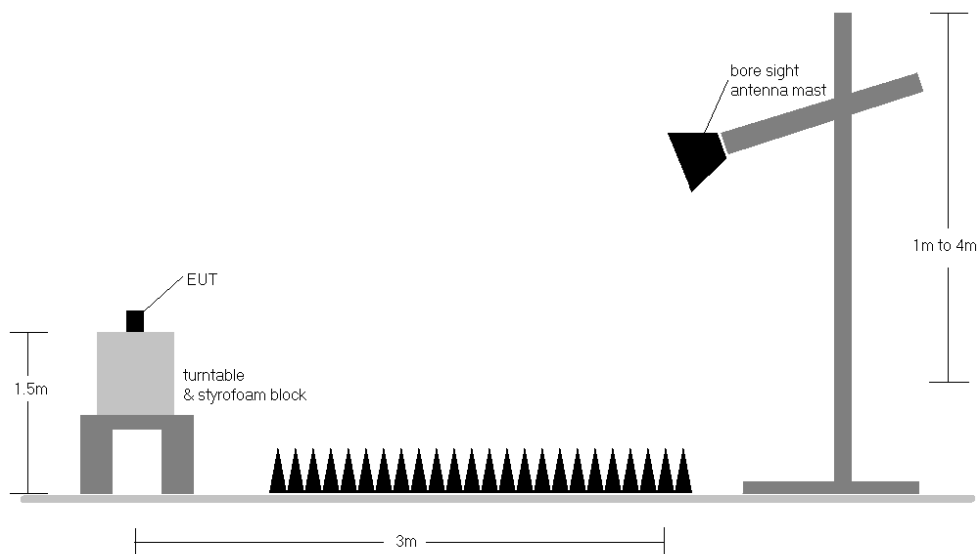


Figure 7-6. Radiated Test Setup >1GHz

Test Notes

- 1) 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.
- 2) This unit was tested with its standard battery.
- 3) 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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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]
100 MHz	11/2 BPSK	3750.00	H	116	342	7.01	1 / 1	17.28	24.29	0.269	30.00	-5.71
	11/2 BPSK	3840.00	H	105	347	7.15	1 / 1	16.62	23.77	0.238	30.00	-6.23
	11/2 BPSK	3930.00	H	115	346	7.39	1 / 1	17.00	24.39	0.275	30.00	-5.61
	QPSK	3750.00	H	116	342	7.01	1 / 1	17.03	24.04	0.254	30.00	-5.96
	QPSK	3840.00	H	105	347	7.15	1 / 1	16.58	23.73	0.236	30.00	-6.27
	QPSK	3930.00	H	115	346	7.39	1 / 1	17.07	24.46	0.279	30.00	-5.54
90 MHz	16-QAM	3930.00	H	115	346	7.39	1 / 1	15.87	23.26	0.212	30.00	-6.74
	11/2 BPSK	3745.02	H	116	342	7.00	1 / 243	17.22	24.22	0.265	30.00	-5.78
	11/2 BPSK	3840.00	H	105	347	7.15	1 / 243	16.58	23.73	0.236	30.00	-6.27
	11/2 BPSK	3934.98	H	115	346	7.40	1 / 122	17.00	24.40	0.276	30.00	-5.60
	16-QAM	3934.98	H	115	346	7.40	1 / 122	15.81	23.21	0.209	30.00	-6.79
	QPSK	3745.02	H	116	342	7.00	1 / 243	16.94	23.94	0.248	30.00	-6.06
80 MHz	QPSK	3840.00	H	105	347	7.15	1 / 243	16.45	23.60	0.229	30.00	-6.40
	QPSK	3934.98	H	115	346	7.40	1 / 122	17.00	24.40	0.276	30.00	-5.60
	16-QAM	3934.98	H	115	346	7.40	1 / 122	15.81	23.21	0.209	30.00	-6.79
	11/2 BPSK	3740.01	H	116	342	6.99	1 / 1	17.14	24.12	0.259	30.00	-5.88
	11/2 BPSK	3840.00	H	105	347	7.15	1 / 215	16.48	23.63	0.231	30.00	-6.37
	11/2 BPSK	3939.99	H	115	346	7.41	1 / 215	16.92	24.33	0.271	30.00	-5.67
70 MHz	QPSK	3740.01	H	116	342	6.99	1 / 1	16.93	23.91	0.246	30.00	-6.09
	QPSK	3840.00	H	105	347	7.15	1 / 215	16.34	23.49	0.224	30.00	-6.51
	QPSK	3939.99	H	115	346	7.41	1 / 215	16.89	24.30	0.269	30.00	-5.70
	16-QAM	3939.99	H	115	346	7.41	1 / 215	15.73	23.14	0.206	30.00	-6.86
	11/2 BPSK	3735.00	H	116	342	6.97	1 / 187	17.07	24.04	0.254	30.00	-5.96
	11/2 BPSK	3840.00	H	105	347	7.15	1 / 1	16.23	23.38	0.218	30.00	-6.62
60 MHz	11/2 BPSK	3945.00	H	115	346	7.42	1 / 1	17.06	24.48	0.281	30.00	-5.52
	QPSK	3735.00	H	116	342	6.97	1 / 187	16.83	23.80	0.240	30.00	-6.20
	QPSK	3840.00	H	105	347	7.15	1 / 1	16.21	23.36	0.217	30.00	-6.64
	QPSK	3945.00	H	115	346	7.42	1 / 187	16.95	24.37	0.274	30.00	-5.63
	16-QAM	3945.00	H	115	346	7.42	1 / 1	15.84	23.26	0.212	30.00	-6.74
	11/2 BPSK	3730.02	H	116	342	6.96	1 / 1	17.05	24.00	0.251	30.00	-6.00
50 MHz	11/2 BPSK	3840.00	H	105	347	7.15	1 / 160	16.38	23.53	0.226	30.00	-6.47
	11/2 BPSK	3949.98	H	115	346	7.43	1 / 81	16.92	24.34	0.272	30.00	-5.66
	QPSK	3730.02	H	116	342	6.96	1 / 1	16.76	23.71	0.235	30.00	-6.29
	QPSK	3840.00	H	105	347	7.15	1 / 160	16.28	23.43	0.220	30.00	-6.57
	QPSK	3949.98	H	115	346	7.43	1 / 81	16.84	24.26	0.267	30.00	-5.74
	16-QAM	3949.98	H	115	346	7.43	1 / 81	15.63	23.05	0.202	30.00	-6.95
40 MHz	11/2 BPSK	3725.01	H	116	342	6.94	1 / 131	17.18	24.12	0.259	30.00	-5.88
	11/2 BPSK	3840.00	H	105	347	7.15	1 / 131	16.28	23.43	0.220	30.00	-6.57
	11/2 BPSK	3954.99	H	115	346	7.43	1 / 66	17.23	24.66	0.293	30.00	-5.34
	QPSK	3725.01	H	116	342	6.94	1 / 131	16.88	23.82	0.241	30.00	-6.18
	QPSK	3840.00	H	105	347	7.15	1 / 131	16.15	23.30	0.214	30.00	-6.70
	QPSK	3954.99	H	115	346	7.43	1 / 66	17.12	24.55	0.285	30.00	-5.45
30 MHz	16-QAM	3954.99	H	115	346	7.43	1 / 66	15.94	23.37	0.217	30.00	-6.63
	11/2 BPSK	3720.00	H	116	342	6.93	1 / 1	17.15	24.07	0.256	30.00	-5.93
	11/2 BPSK	3840.00	H	105	347	7.15	1 / 1	16.14	23.29	0.213	30.00	-6.71
	11/2 BPSK	3960.00	H	115	346	7.44	1 / 104	16.94	24.38	0.274	30.00	-5.62
	QPSK	3720.00	H	116	342	6.93	1 / 1	16.84	23.76	0.238	30.00	-6.24
	QPSK	3840.00	H	105	347	7.15	1 / 1	16.02	23.17	0.208	30.00	-6.83
25 MHz	QPSK	3960.00	H	115	346	7.44	1 / 104	16.85	24.29	0.269	30.00	-5.71
	16-QAM	3960.00	H	115	346	7.44	1 / 104	15.64	23.08	0.203	30.00	-6.92
	11/2 BPSK	3715.02	H	116	342	6.91	1 / 76	17.00	23.91	0.246	30.00	-6.09
	11/2 BPSK	3840.00	H	105	347	7.15	1 / 1	16.00	23.15	0.207	30.00	-6.85
	11/2 BPSK	3964.98	H	115	346	7.45	1 / 1	17.13	24.58	0.287	30.00	-5.42
	QPSK	3715.02	H	116	342	6.91	1 / 76	16.83	23.74	0.237	30.00	-6.26
20 MHz	QPSK	3840.00	H	105	347	7.15	1 / 1	15.90	23.05	0.202	30.00	-6.95
	QPSK	3964.98	H	115	346	7.45	1 / 1	17.02	24.47	0.280	30.00	-5.53
	16-QAM	3964.98	H	115	346	7.45	1 / 1	15.86	23.31	0.214	30.00	-6.69
	11/2 BPSK	3712.50	H	131	342	6.91	1 / 32	17.20	24.10	0.257	30.00	-5.90
	11/2 BPSK	3840.00	H	131	342	7.15	1 / 63	16.06	23.21	0.210	30.00	-6.79
	11/2 BPSK	3967.50	H	131	342	7.46	1 / 32	17.07	24.52	0.283	30.00	-5.48
15 MHz	QPSK	3712.50	H	131	342	6.91	1 / 32	16.89	23.79	0.240	30.00	-6.21
	QPSK	3840.00	H	131	342	7.15	1 / 63	15.95	23.10	0.204	30.00	-6.90
	QPSK	3967.50	H	131	342	7.46	1 / 32	16.98	24.43	0.277	30.00	-5.57
	16-QAM	3967.50	H	131	342	7.46	1 / 32	15.61	23.06	0.202	30.00	-6.94
	11/2 BPSK	3710.01	H	116	342	6.90	1 / 1	16.98	23.88	0.245	30.00	-6.12
	11/2 BPSK	3840.00	H	105	347	7.15	1 / 1	15.86	23.01	0.200	30.00	-6.99
10 MHz	11/2 BPSK	3969.99	H	115	346	7.46	1 / 25	16.93	24.39	0.275	30.00	-5.61
	QPSK	3710.01	H	116	342	6.90	1 / 1	16.68	23.58	0.228	30.00	-6.42
	QPSK	3840.00	H	105	347	7.15	1 / 1	15.80	22.95	0.197	30.00	-7.05
	QPSK	3969.99	H	115	346	7.46	1 / 25	16.83	24.29	0.269	30.00	-5.71
	16-QAM	3969.99	H	115	346	7.46	1 / 25	15.73	23.19	0.209	30.00	-6.81
	11/2 BPSK	3707.52	H	116	342	6.89	1 / 36	17.01	23.90	0.246	30.00	-6.10
100 MHz	11/2 BPSK	3840.00	H	105	347	7.15	1 / 36	15.78	22.93	0.196	30.00	-7.07
	11/2 BPSK	3972.48	H	115	346	7.46	1 / 1	16.96	24.42	0.277	30.00	-5.58
	QPSK	3707.52	H	116	342	6.89	1 / 36	16.71	23.60	0.229	30.00	-6.40
	QPSK	3840.00	H	105	347	7.15	1 / 36	15.83	22.98	0.199	30.00	-7.02
	QPSK	3972.48	H	115	346	7.46	1 / 1	16.90	24.36	0.273	30.00	-5.64
	16-QAM	3972.48	H	115	346	7.46	1 / 1	15.71	23.17	0.208	30.00	-6.83
10 MHz	11/2 BPSK	3705.00	H	116	342	6.89	1 / 22	17.01	23.89	0.245	30.00	-6.11
	11/2 BPSK	3840.00	H	105	347	7.15	1 / 12	15.82	22.97	0.198	30.00	-7.03
	11/2 BPSK	3975.00	H	115	346	7.47	1 / 22	16.93	24.40	0.276	30.00	-5.60
	QPSK	3705.00	H	116	342	6.89	1 / 22	16.72	23.60	0.229	30.00	-6.40
	QPSK	3840.00	H	105	347	7.15	1 / 12	15.73	22.88	0.194	30.00	-7.12
	QPSK	3975.00	H	115	346	7.47	1 / 22	16.83	24.30	0.269	30.00	-5.70
100 MHz	16-QAM	3975.00	H	115	346	7.47	1 / 22	15.73	23.20	0.209	30.00	-6.80
	QPSK (CP-OFDM)	3930.00	H	116	342	7.39	1 / 1	14.94	22.33	0.171	30.00	-7.67
100 MHz	QPSK (WCP)	3930.00	H	154	338	7.39	1 / 1	16.75	24.14	0.259	30.00	-5.86

Table 7-23. EIRP Data (NR Band n77 – Ant F)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 102 of 131

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]
100 MHz	$\pi/2$ BPSK	3750.00	H	103	322	7.01	1 / 1	14.36	21.37	0.137	30.00	-8.63
	$\pi/2$ BPSK	3840.00	H	100	323	7.15	1 / 1	14.69	21.84	0.153	30.00	-8.16
	$\pi/2$ BPSK	3930.00	H	101	327	7.39	1 / 1	15.53	22.92	0.196	30.00	-7.08
	QPSK	3750.00	H	103	322	7.01	1 / 1	14.43	21.44	0.139	30.00	-8.56
	QPSK	3840.00	H	100	323	7.15	1 / 1	14.81	21.96	0.157	30.00	-8.04
	QPSK	3930.00	H	101	327	7.39	1 / 1	15.46	22.85	0.193	30.00	-7.15
	16-QAM	3930.00	H	101	327	7.39	1 / 1	14.55	21.94	0.156	30.00	-8.06
100 MHz	QPSK (CP-OFDM)	3930.0	H	103	323	7.39	1 / 1	13.95	21.34	0.136	30.00	-8.66

Table 7-24. EIRP Data (NR Band n77 – Ant C)

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]
100 MHz	$\pi/2$ BPSK	3750.00	H	211	311	7.01	1 / 271	16.28	23.29	0.214	30.00	-6.71
	$\pi/2$ BPSK	3840.00	H	222	310	7.15	1 / 271	17.05	24.20	0.263	30.00	-5.80
	$\pi/2$ BPSK	3930.00	H	215	315	7.39	1 / 136	16.59	23.98	0.250	30.00	-6.02
	QPSK	3750.00	H	211	311	7.01	1 / 271	16.24	23.25	0.212	30.00	-6.75
	QPSK	3840.00	H	222	310	7.15	1 / 271	17.08	24.23	0.265	30.00	-5.77
	QPSK	3930.00	H	215	315	7.39	1 / 136	16.62	24.01	0.252	30.00	-5.99
	16-QAM	3840.00	H	222	310	7.15	1 / 271	16.15	23.30	0.214	30.00	-6.70
100 MHz	QPSK (CP-OFDM)	3840.0	H	222	310	7.15	1 / 271	15.63	22.78	0.190	30.00	-7.22

Table 7-25. EIRP Data (NR Band n77 – Ant I)

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]
100 MHz	$\pi/2$ BPSK	3750.00	V	112	2	7.03	1 / 1	10.49	17.52	0.057	30.00	-12.48
	$\pi/2$ BPSK	3840.00	V	106	360	7.13	1 / 1	10.09	17.22	0.053	30.00	-12.78
	$\pi/2$ BPSK	3930.00	V	119	358	7.39	1 / 1	9.61	17.00	0.050	30.00	-13.00
	QPSK	3750.00	V	112	2	7.03	1 / 1	10.58	17.61	0.058	30.00	-12.39
	QPSK	3840.00	V	106	360	7.13	1 / 1	9.96	17.09	0.051	30.00	-12.91
	QPSK	3930.00	V	119	358	7.39	1 / 1	9.50	16.89	0.049	30.00	-13.11
	16-QAM	3750.00	V	112	2	7.03	1 / 1	9.52	16.55	0.045	30.00	-13.45
100 MHz	QPSK (CP-OFDM)	3750.0	V	112	2	7.03	1 / 1	9.03	16.06	0.040	30.00	-13.94

Table 7-26. EIRP Data (NR Band n77 – Ant D)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 103 of 131

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]
100 MHz	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 271	17.00	23.46	0.222	30.00	-6.54
	QPSK	3500.01	H	131	342	6.46	1 / 271	17.57	24.03	0.253	30.00	-5.97
	16-QAM	3500.01	H	131	342	6.46	1 / 271	16.02	22.48	0.177	30.00	-7.52
90 MHz	$\pi/2$ BPSK	3495.00	H	131	342	6.46	1 / 1	16.91	23.36	0.217	30.00	-6.64
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.91	23.37	0.218	30.00	-6.63
	$\pi/2$ BPSK	3504.99	H	131	342	6.47	1 / 1	16.92	23.38	0.218	30.00	-6.62
	QPSK	3495.00	H	131	342	6.46	1 / 1	17.44	23.89	0.245	30.00	-6.11
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.45	23.91	0.246	30.00	-6.09
	QPSK	3504.99	H	131	342	6.47	1 / 1	17.47	23.93	0.247	30.00	-6.07
	16-QAM	3504.99	H	131	342	6.47	1 / 1	15.83	22.29	0.170	30.00	-7.71
80 MHz	$\pi/2$ BPSK	3490.02	H	131	342	6.45	1 / 1	16.91	23.36	0.217	30.00	-6.64
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.81	23.27	0.213	30.00	-6.73
	$\pi/2$ BPSK	3510.00	H	131	342	6.47	1 / 1	16.81	23.28	0.213	30.00	-6.72
	QPSK	3490.02	H	131	342	6.45	1 / 1	17.47	23.92	0.247	30.00	-6.08
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.31	23.77	0.238	30.00	-6.23
	QPSK	3510.00	H	131	342	6.47	1 / 1	17.33	23.80	0.240	30.00	-6.20
	16-QAM	3490.02	H	131	342	6.45	1 / 1	15.90	22.35	0.172	30.00	-7.65
70 MHz	$\pi/2$ BPSK	3485.01	H	131	342	6.45	1 / 1	16.83	23.27	0.213	30.00	-6.73
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.77	23.23	0.211	30.00	-6.77
	$\pi/2$ BPSK	3514.98	H	131	342	6.47	1 / 1	16.83	23.30	0.214	30.00	-6.70
	QPSK	3485.01	H	131	342	6.45	1 / 1	17.40	23.84	0.242	30.00	-6.16
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.40	23.86	0.243	30.00	-6.14
	QPSK	3514.98	H	131	342	6.47	1 / 1	17.37	23.84	0.242	30.00	-6.16
	16-QAM	3500.01	H	131	342	6.46	1 / 1	15.75	22.21	0.167	30.00	-7.79
60 MHz	$\pi/2$ BPSK	3480.00	H	131	342	6.44	1 / 1	16.79	23.23	0.211	30.00	-6.77
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.74	23.20	0.209	30.00	-6.80
	$\pi/2$ BPSK	3519.99	H	131	342	6.48	1 / 1	16.59	23.06	0.203	30.00	-6.94
	QPSK	3480.00	H	131	342	6.44	1 / 1	17.33	23.77	0.238	30.00	-6.23
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.30	23.76	0.238	30.00	-6.24
	QPSK	3519.99	H	131	342	6.48	1 / 1	17.11	23.58	0.228	30.00	-6.42
	16-QAM	3480.00	H	131	342	6.44	1 / 1	15.77	22.21	0.167	30.00	-7.79
50 MHz	$\pi/2$ BPSK	3475.02	H	131	342	6.43	1 / 1	17.00	23.43	0.221	30.00	-6.57
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.88	23.34	0.216	30.00	-6.66
	$\pi/2$ BPSK	3525.00	H	131	342	6.48	1 / 1	16.71	23.18	0.208	30.00	-6.82
	QPSK	3475.02	H	131	342	6.43	1 / 1	17.49	23.92	0.247	30.00	-6.08
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.44	23.90	0.246	30.00	-6.10
	QPSK	3525.00	H	131	342	6.48	1 / 1	17.16	23.63	0.231	30.00	-6.37
	16-QAM	3475.02	H	131	342	6.43	1 / 1	15.89	22.32	0.171	30.00	-7.68
40 MHz	$\pi/2$ BPSK	3470.01	H	131	342	6.43	1 / 1	16.94	23.36	0.217	30.00	-6.64
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.80	23.26	0.212	30.00	-6.74
	$\pi/2$ BPSK	3529.98	H	131	342	6.48	1 / 1	16.59	23.07	0.203	30.00	-6.93
	QPSK	3470.01	H	131	342	6.43	1 / 1	17.48	23.90	0.246	30.00	-6.10
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.38	23.84	0.242	30.00	-6.16
	QPSK	3529.98	H	131	342	6.48	1 / 1	17.13	23.61	0.230	30.00	-6.39
	16-QAM	3470.01	H	131	342	6.43	1 / 1	15.89	22.31	0.170	30.00	-7.69
30 MHz	$\pi/2$ BPSK	3465.00	H	131	342	6.42	1 / 1	16.78	23.20	0.209	30.00	-6.80
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.79	23.25	0.212	30.00	-6.75
	$\pi/2$ BPSK	3534.99	H	131	342	6.48	1 / 1	16.63	23.11	0.205	30.00	-6.89
	QPSK	3465.00	H	131	342	6.42	1 / 1	17.38	23.80	0.240	30.00	-6.20
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.36	23.82	0.241	30.00	-6.18
	QPSK	3534.99	H	131	342	6.48	1 / 1	17.17	23.65	0.232	30.00	-6.35
	16-QAM	3500.01	H	131	342	6.46	1 / 1	15.71	22.17	0.165	30.00	-7.83
25 MHz	$\pi/2$ BPSK	3462.51	H	131	342	6.42	1 / 32	16.61	23.02	0.201	30.00	-6.98
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.78	23.24	0.211	30.00	-6.76
	$\pi/2$ BPSK	3537.48	H	131	342	6.48	1 / 1	16.56	23.04	0.202	30.00	-6.96
	QPSK	3462.51	H	131	342	6.42	1 / 32	17.21	23.62	0.230	30.00	-6.38
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.35	23.81	0.241	30.00	-6.19
	QPSK	3537.48	H	131	342	6.48	1 / 1	17.05	23.53	0.226	30.00	-6.47
	16-QAM	3500.01	H	131	342	6.46	1 / 1	15.66	22.12	0.163	30.00	-7.88
20 MHz	$\pi/2$ BPSK	3460.02	H	131	342	6.42	1 / 1	16.79	23.20	0.209	30.00	-6.80
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.63	23.09	0.204	30.00	-6.91
	$\pi/2$ BPSK	3540.00	H	131	342	6.49	1 / 1	16.41	22.89	0.195	30.00	-7.11
	QPSK	3460.02	H	131	342	6.42	1 / 1	17.29	23.70	0.235	30.00	-6.30
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.15	23.61	0.230	30.00	-6.39
	QPSK	3540.00	H	131	342	6.49	1 / 1	17.00	23.48	0.223	30.00	-6.52
	16-QAM	3460.02	H	131	342	6.42	1 / 1	15.73	22.14	0.164	30.00	-7.86
15 MHz	$\pi/2$ BPSK	3457.50	H	131	342	6.41	1 / 1	16.68	23.09	0.204	30.00	-6.91
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.51	22.97	0.198	30.00	-7.03
	$\pi/2$ BPSK	3542.49	H	131	342	6.49	1 / 1	16.43	22.91	0.196	30.00	-7.09
	QPSK	3457.50	H	131	342	6.41	1 / 1	17.20	23.61	0.230	30.00	-6.39
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.04	23.50	0.224	30.00	-6.50
	QPSK	3542.49	H	131	342	6.49	1 / 1	16.95	23.43	0.221	30.00	-6.57
	16-QAM	3457.50	H	131	342	6.41	1 / 1	15.56	21.97	0.158	30.00	-8.03
10 MHz	$\pi/2$ BPSK	3455.01	H	131	342	6.41	1 / 1	16.66	23.06	0.203	30.00	-6.94
	$\pi/2$ BPSK	3500.01	H	131	342	6.46	1 / 1	16.51	22.97	0.198	30.00	-7.03
	$\pi/2$ BPSK	3544.98	H	131	342	6.49	1 / 1	16.38	22.86	0.193	30.00	-7.14
	QPSK	3455.01	H	131	342	6.41	1 / 1	17.22	23.62	0.230	30.00	-6.38
	QPSK	3500.01	H	131	342	6.46	1 / 1	17.09	23.55	0.227	30.00	-6.45
	QPSK	3544.98	H	131	342	6.49	1 / 1	16.94	23.42	0.220	30.00	-6.58
	16-QAM	3455.01	H	131	342	6.41	1 / 1	15.67	22.07	0.161	30.00	-7.93
100 MHz	QPSK (CP-OFDM)	3500.0	H	131	342	6.46	1 / 271	15.92	22.38	0.173	30.00	-7.62
	QPSK (WCP)	3500.0	H	154	338	6.46	1 / 271	16.49	22.95	0.197	30.00	-7.05

Table 7-27. EIRP Data (NR Band n77/78 (DoD) – Ant F)

FCC ID: A3LSMS928U	PART 27 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]
100 MHz	$\pi/2$ BPSK	3500.01	H	101	321	6.46	1 / 271	14.76	21.22	0.133	30.00	-8.78
	QPSK	3500.01	H	101	321	6.46	1 / 271	14.74	21.20	0.132	30.00	-8.80
	16-QAM	3500.01	H	101	321	6.46	1 / 271	13.77	20.23	0.106	30.00	-9.77
100 MHz	QPSK (CP-OFDM)	3500.0	H	101	321	6.46	1 / 271	13.41	19.87	0.097	30.00	-10.13

Table 7-28. EIRP Data (NR Band n77/78 (DoD) – Ant C)

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]
100 MHz	$\pi/2$ BPSK	3500.01	H	215	315	6.46	1 / 1	13.50	19.96	0.099	30.00	-10.04
	QPSK	3500.01	H	215	315	6.46	1 / 1	13.47	19.93	0.099	30.00	-10.07
	16-QAM	3500.01	H	215	315	6.46	1 / 1	12.10	18.56	0.072	30.00	-11.44
100 MHz	QPSK (CP-OFDM)	3500.0	H	215	306	6.46	1 / 1	11.97	18.43	0.070	30.00	-11.57

Table 7-29. EIRP Data (NR Band n77/78 (DoD) – Ant I)

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]
100 MHz	$\pi/2$ BPSK	3750.00	V	112	2	7.03	1 / 1	10.49	17.52	0.057	30.00	-12.48
	$\pi/2$ BPSK	3840.00	V	106	360	7.13	1 / 1	10.09	17.22	0.053	30.00	-12.78
	$\pi/2$ BPSK	3930.00	V	119	358	7.39	1 / 1	9.61	17.00	0.050	30.00	-13.00
	QPSK	3750.00	V	112	2	7.03	1 / 1	10.58	17.61	0.058	30.00	-12.39
	QPSK	3840.00	V	106	360	7.13	1 / 1	9.96	17.09	0.051	30.00	-12.91
	QPSK	3930.00	V	119	358	7.39	1 / 1	9.50	16.89	0.049	30.00	-13.11
	16-QAM	3750.00	V	112	2	7.03	1 / 1	9.52	16.55	0.045	30.00	-13.45
100 MHz	QPSK (CP-OFDM)	3750.0	V	112	2	7.03	1 / 1	9.03	16.06	0.040	30.00	-13.94

Table 7-30. EIRP Data (NR Band n77/78 (DoD) – Ant D)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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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

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Test Setup

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

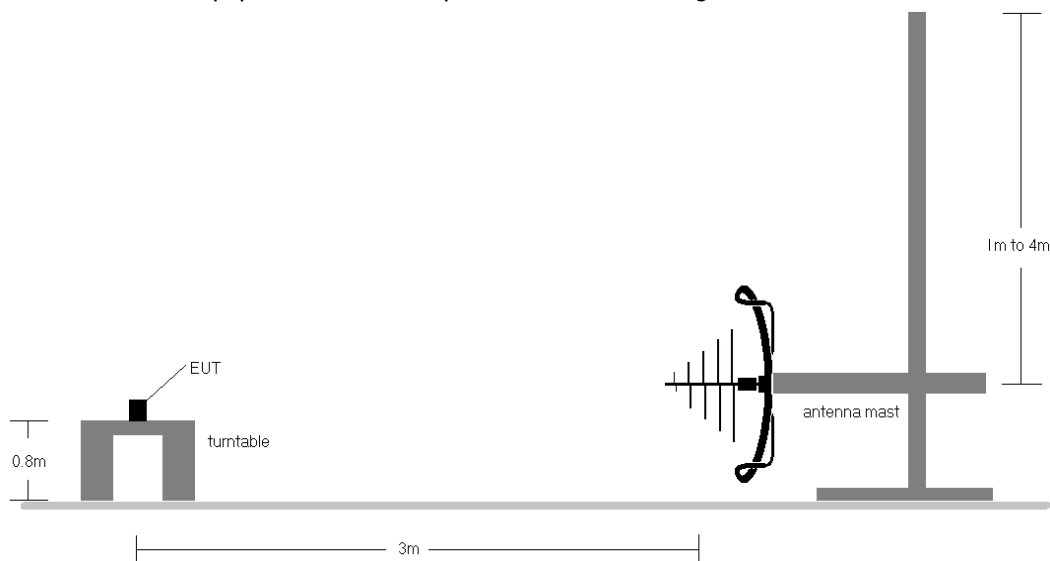


Figure 7-7. Test Instrument & Measurement Setup < 1GHz

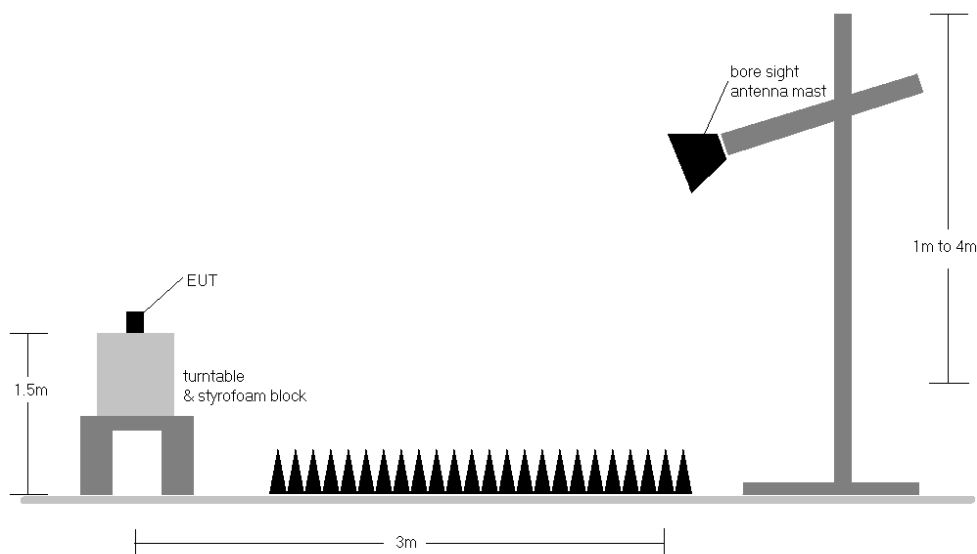


Figure 7-8. Test Instrument & Measurement Setup >1 GHz

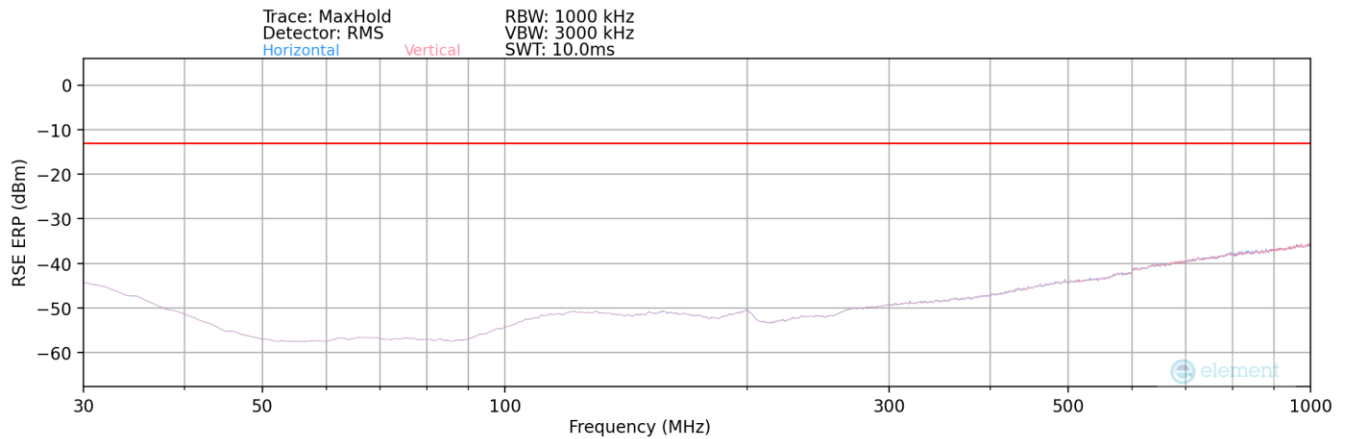
FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Test Notes

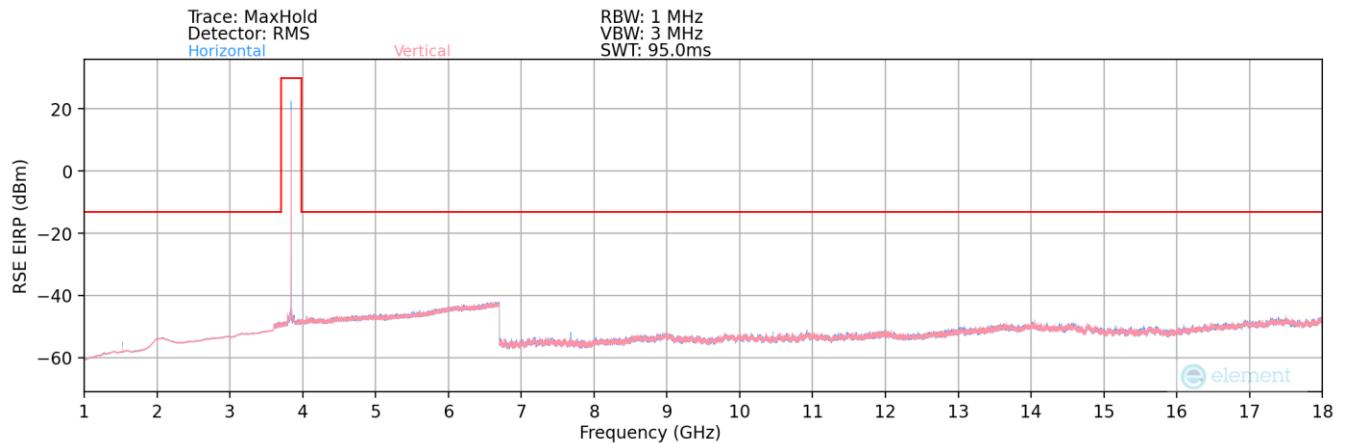
- 1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
 - b) $E(\text{dB}\mu\text{V/m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$
 - d) $\text{EIRP (dBm)} = E(\text{dB}\mu\text{V/m}) + 20\log D - 104.8$; where D is the measurement distance in meters.
- 2) 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.
- 3) This unit was tested with its standard battery.
- 4) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 5) 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.
- 6) The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 7) 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.
- 8) 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, is 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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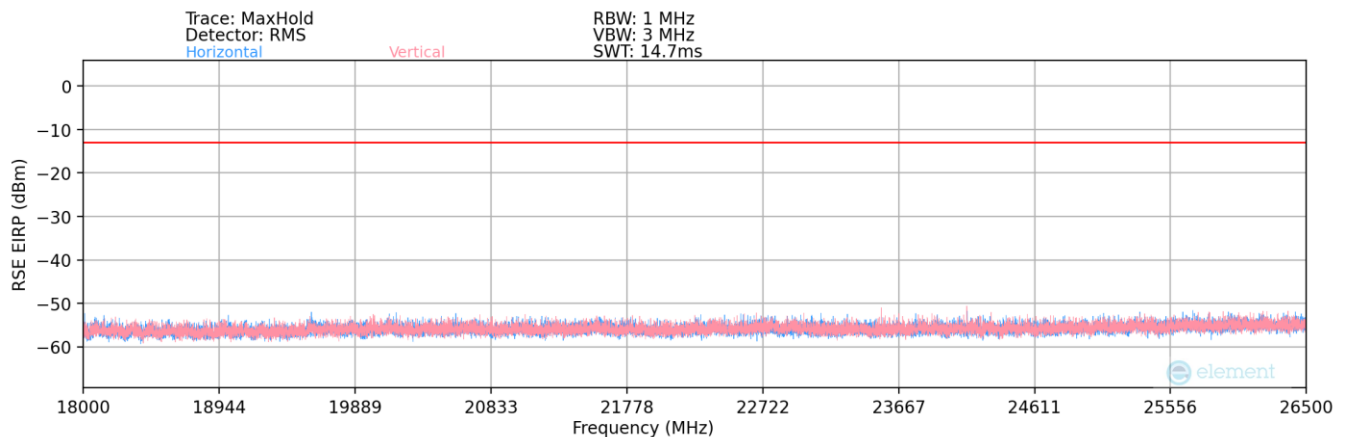
NR Band n77 – Ant F



Plot 7-119. Radiated Spurious Plot – Below 1GHz (NR Band n77 – Ant F)

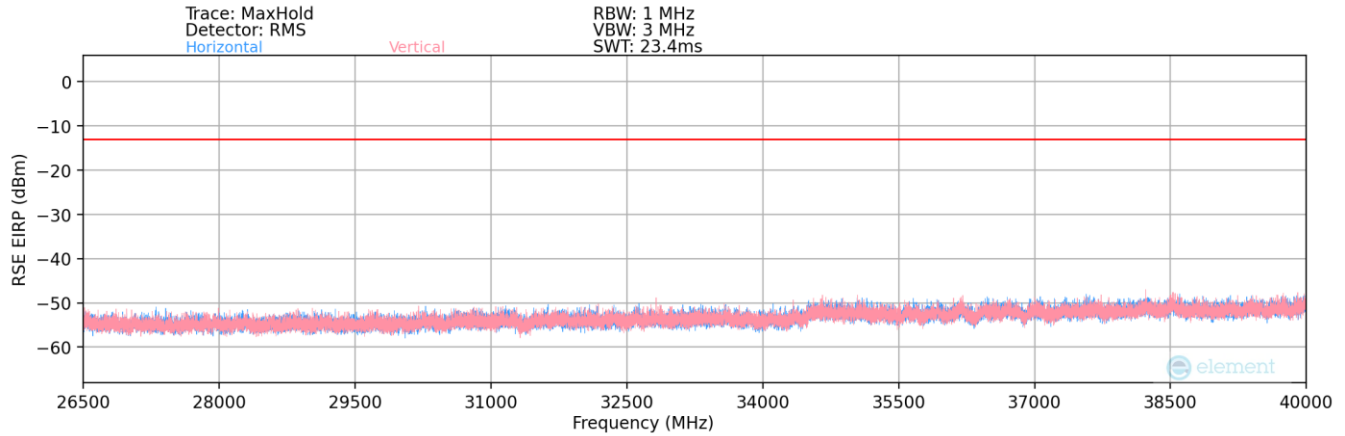


Plot 7-120. Radiated Spurious Plot – 1GHz – 18GHz (NR Band n77 – Ant F)



Plot 7-121. Radiated Spurious Plot – 18GHz – 26.5GHz (NR Band n77 – Ant F)

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Plot 7-122. Radiated Spurious Plot – 26.5GHz – 40GHz (NR Band n77 – Ant F)

Bandwidth (MHz):	100
Frequency (MHz):	3750.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7500.00	H	126	332	-71.87	9.72	44.85	-50.41	-13.00	-37.41
11250.00	H	158	5	-74.22	12.07	44.85	-50.41	-13.00	-37.41
15000.00	H	-	-	-78.55	14.86	43.31	-51.94	-13.00	-38.94
18750.00	H	-	-	-57.63	1.87	51.24	-53.56	-13.00	-40.56
22500.00	H	-	-	-57.22	3.97	53.75	-51.05	-13.00	-38.05

Table 7-31. Radiated Spurious Data (NR Band n77 – Low Channel – Ant F)

Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7680.00	H	183	8	-70.35	8.49	45.14	-50.12	-13.00	-37.12
11520.00	H	150	63	-76.06	12.59	43.53	-51.73	-13.00	-38.73
15360.00	H	-	-	-78.19	14.87	43.68	-51.58	-13.00	-38.58
19200.00	H	-	-	-57.46	2.25	51.79	-53.01	-13.00	-40.01
23040.00	H	-	-	-57.85	3.99	53.13	-51.67	-13.00	-38.67

Table 7-32. Radiated Spurious Data (NR Band n77 – Mid Channel – Ant F)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7860.00	H	109	5	-68.35	8.96	47.61	-47.65	-13.00	-34.65
11790.00	H	109	40	-70.83	13.13	49.30	-45.96	-13.00	-32.96
15720.00	H	-	-	-78.61	15.19	43.58	-51.68	-13.00	-38.68
19650.00	H	-	-	-57.43	2.78	52.35	-52.45	-13.00	-39.45
23580.00	H	-	-	-57.86	4.00	53.14	-51.66	-13.00	-38.66

Table 7-33. Radiated Spurious Data (NR Band n77 – High Channel – Ant F)

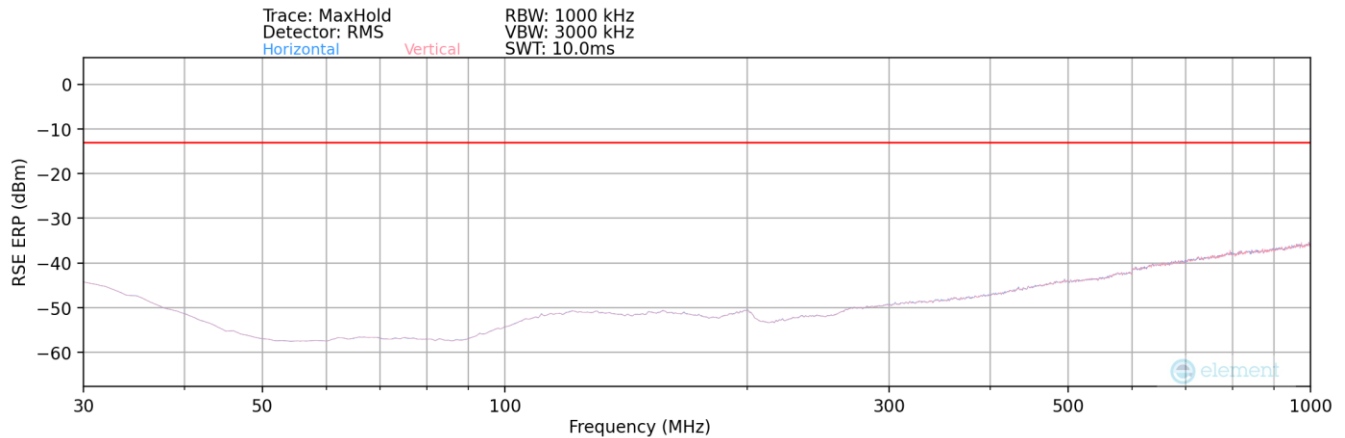
Case:	w/ Wireless Charging Pad
Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7860.00	H	149	299	-71.88	8.96	44.08	-51.18	-13.00	-38.18
11790.00	H	240	3	-73.99	13.13	46.14	-49.12	-13.00	-36.12
15720.00	H	-	-	-78.49	15.19	43.70	-51.56	-13.00	-38.56
19650.00	H	-	-	-57.61	2.78	52.18	-52.62	-13.00	-39.62
23580.00	H	-	-	-58.01	4.00	52.99	-51.81	-13.00	-38.81

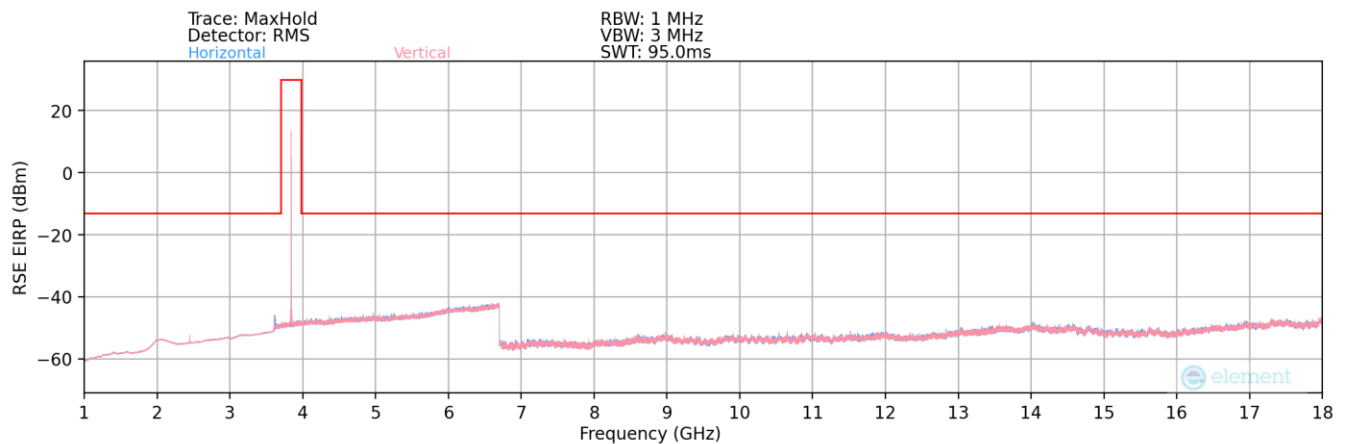
Table 7-34. Radiated Spurious Data with WCP (NR Band n77 – Ant F)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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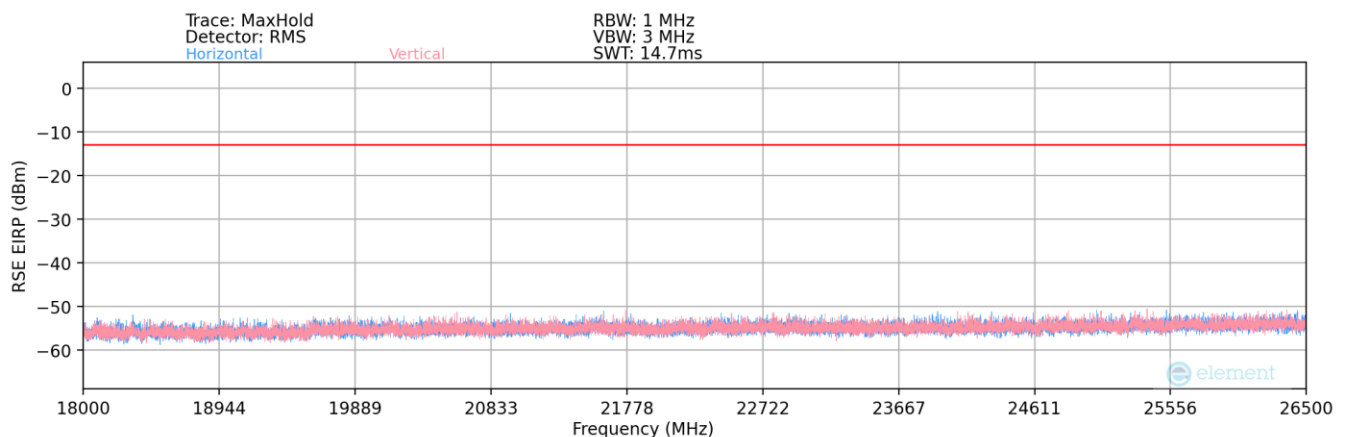
NR Band n77 – Ant C



Plot 7-123. Radiated Spurious Plot – Below 1GHz (NR Band n77 – Ant C)

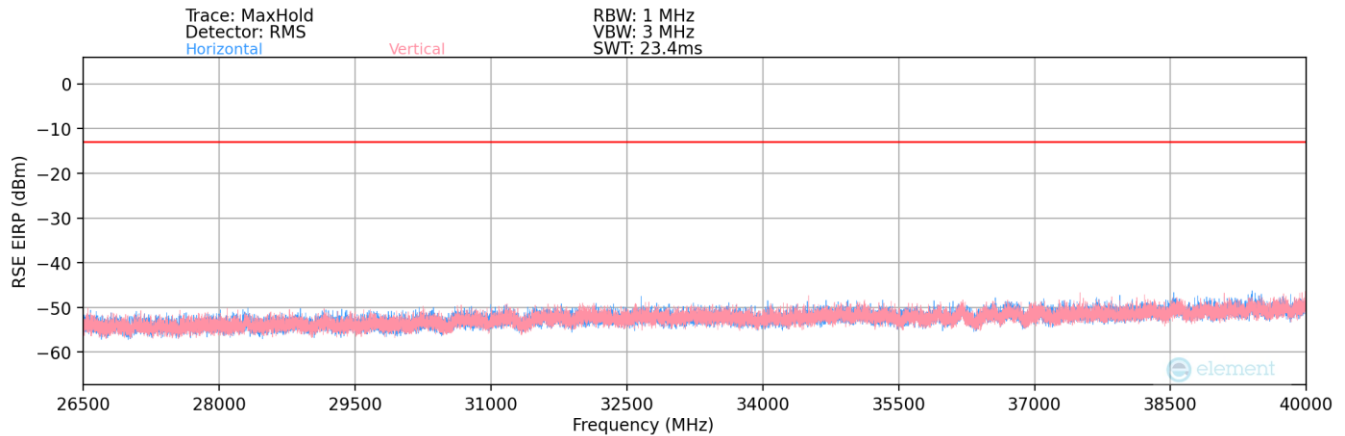


Plot 7-124. Radiated Spurious Plot – 1GHz – 18GHz (NR Band n77 – Ant C)



Plot 7-125. Radiated Spurious Plot – 18GHz – 26.5GHz (NR Band n77 – Ant C)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-126. Radiated Spurious Plot – 26.5GHz – 40GHz (NR Band n77 – Ant C)

Bandwidth (MHz):	100
Frequency (MHz):	3750.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7500.00	H	111	21	-74.70	9.72	42.02	-53.24	-13.00	-40.24
11250.00	H	257	319	-73.99	12.07	45.08	-50.18	-13.00	-37.18
15000.00	H	-	-	-78.92	14.86	42.94	-52.31	-13.00	-39.31
18750.00	H	-	-	-57.78	1.87	51.09	-53.71	-13.00	-40.71
22500.00	H	-	-	-57.54	3.97	53.43	-51.37	-13.00	-38.37

Table 7-35. Radiated Spurious Data (NR Band n77 – Low Channel – Ant C)

Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7680.00	H	377	44	-75.32	8.49	40.17	-55.09	-13.00	-42.09
11520.00	H	218	63	-72.38	12.59	47.21	-48.05	-13.00	-35.05
15360.00	H	166	302	-77.83	14.87	44.04	-51.22	-13.00	-38.22
19200.00	H	-	-	-57.31	2.25	51.94	-52.86	-13.00	-39.86
23040.00	H	-	-	-57.92	3.99	53.07	-51.73	-13.00	-38.73
26880.00	H	-	-	-57.13	4.75	54.62	-50.18	-13.00	-37.18

Table 7-36. Radiated Spurious Data (NR Band n77 – Mid Channel – Ant C)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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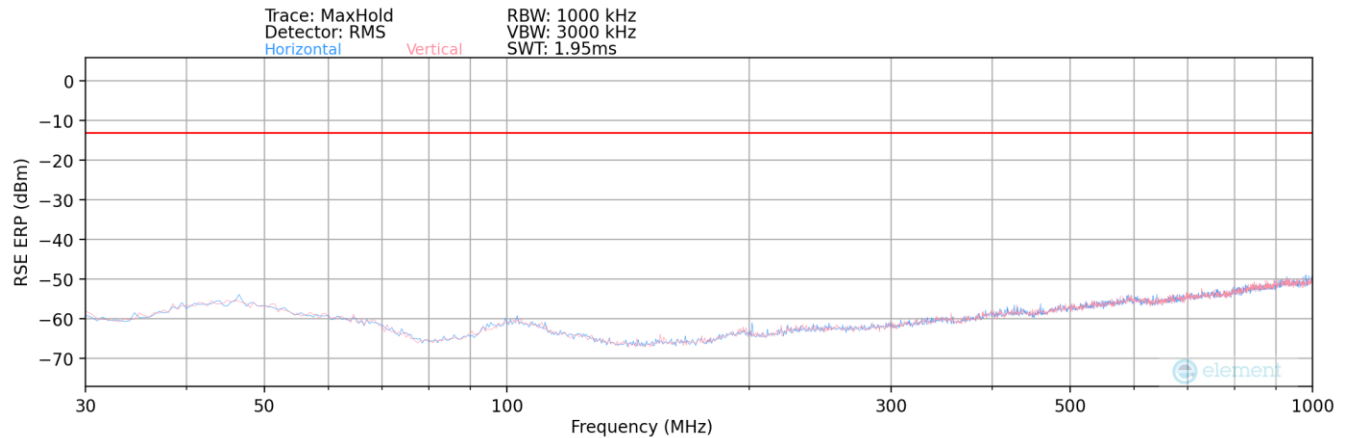
Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7860.00	H	-	-	-76.11	8.96	39.85	-55.41	-13.00	-42.41
11790.00	H	110	55	-67.97	13.13	52.16	-43.10	-13.00	-30.10
15720.00	H	163	16	-77.80	15.19	44.39	-50.87	-13.00	-37.87
19650.00	H	-	-	-57.38	2.78	52.40	-52.40	-13.00	-39.40
23580.00	H	-	-	-57.05	4.00	53.96	-50.84	-13.00	-37.84
27510.00	H	-	-	-57.87	4.62	53.75	-51.05	-13.00	-38.05

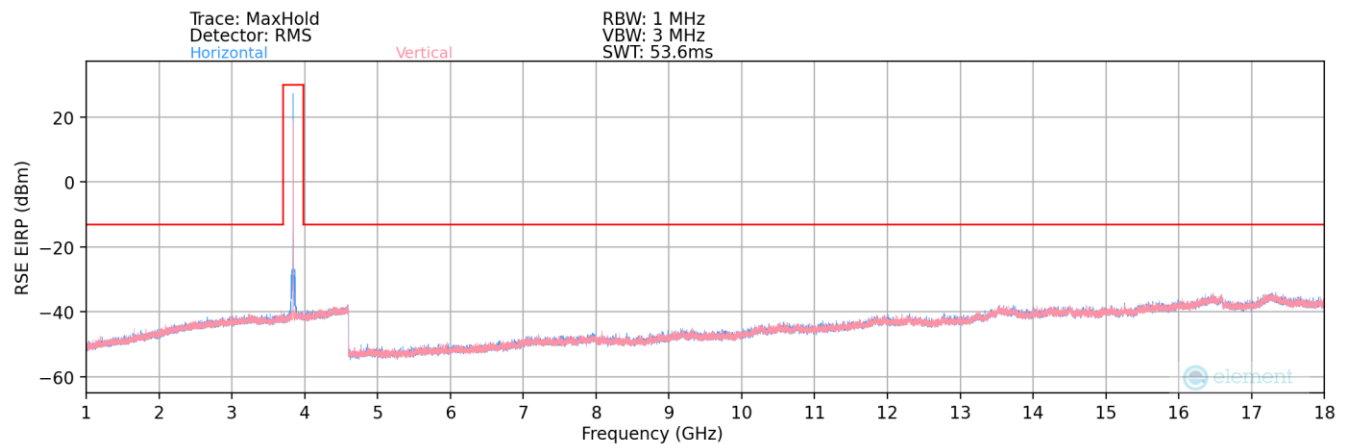
Table 7-37. Radiated Spurious Data (NR Band n77 – High Channel – Ant C)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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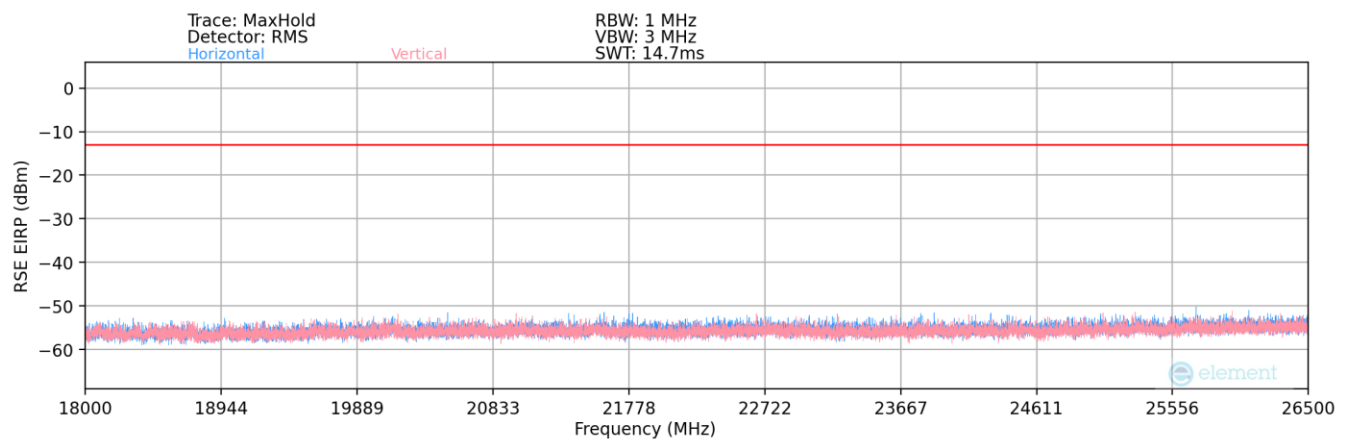
NR Band n77 – Ant I



Plot 7-127. Radiated Spurious Plot – Below 1GHz (NR Band n77 – Ant I)

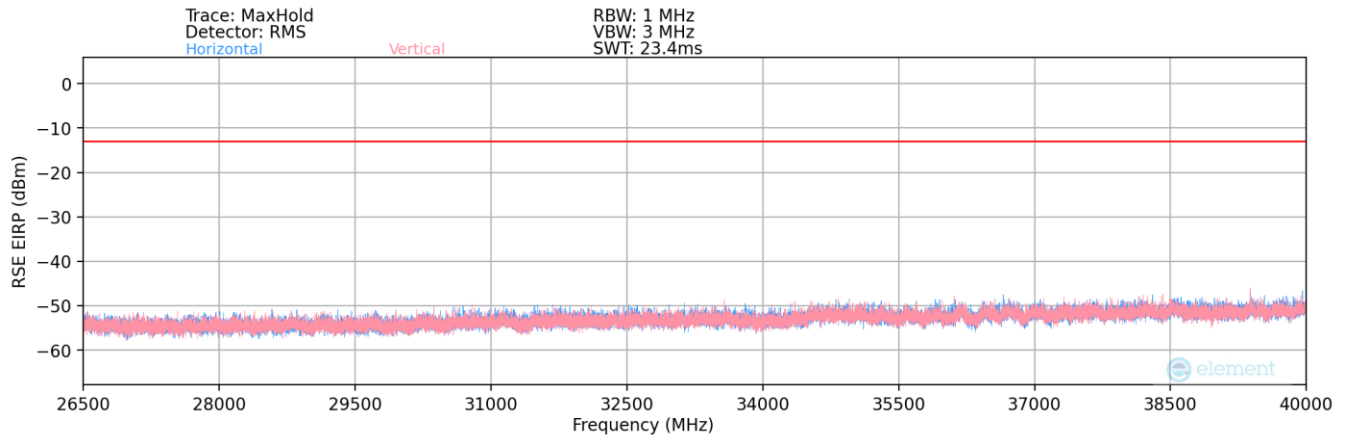


Plot 7-128. Radiated Spurious Plot – 1GHz – 18GHz (NR Band n77 – Ant I)



Plot 7-129. Radiated Spurious Plot – 18GHz – 26.5GHz (NR Band n77 – Ant I)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-130. Radiated Spurious Plot – 26.5GHz – 40GHz (NR Band n77 – Ant I)

Bandwidth (MHz):	100
Frequency (MHz):	3750.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7500.00	H	-	-	-73.64	15.93	49.29	-45.97	-13.00	-32.97
11250.00	H	182	7	-74.15	21.35	54.20	-41.05	-13.00	-28.05
15000.00	H	-	-	-75.93	26.20	57.27	-37.99	-13.00	-24.99
18750.00	H	-	-	-57.71	1.87	51.16	-53.64	-13.00	-40.64
22500.00	H	-	-	-57.60	3.97	53.38	-51.42	-13.00	-38.42

Table 7-38. Radiated Spurious Data (NR Band n77 – Low Channel – Ant I)

Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7680.00	H	218	315	-73.13	15.91	49.78	-45.48	-13.00	-32.48
11520.00	H	138	23	-73.08	22.28	56.20	-39.06	-13.00	-26.06
15360.00	H	-	-	-75.89	27.28	58.39	-36.86	-13.00	-23.86
19200.00	H	-	-	-57.13	2.25	52.12	-52.68	-13.00	-39.68
23040.00	H	-	-	-57.94	3.99	53.05	-51.75	-13.00	-38.75

Table 7-39. Radiated Spurious Data (NR Band n77 – Mid Channel – Ant I)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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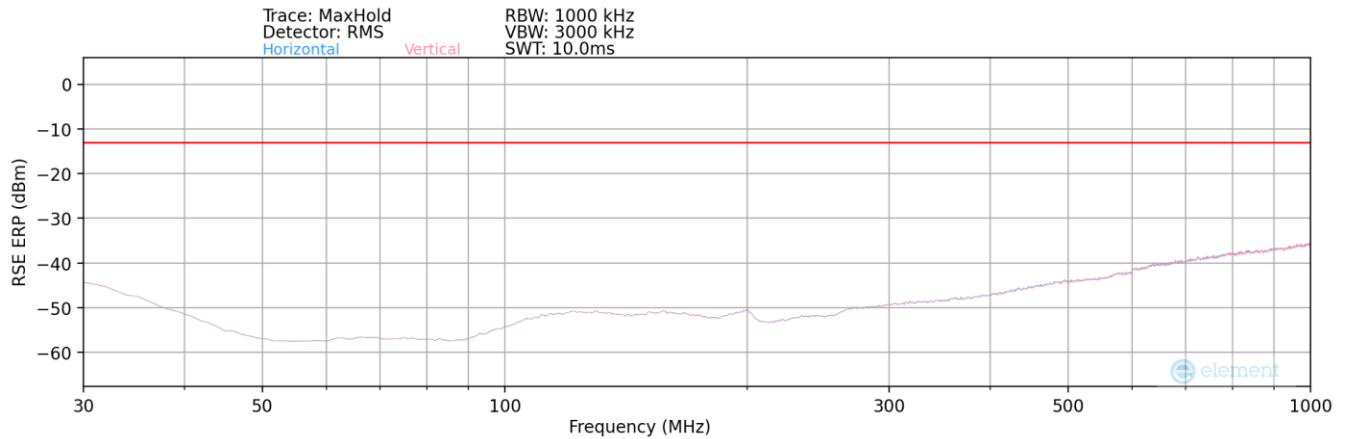
Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7860.00	H	-	-	-73.61	15.90	49.29	-45.97	-13.00	-32.97
11790.00	H	130	60	-70.92	21.45	57.53	-37.73	-13.00	-24.73
15720.00	H	-	-	-75.22	28.22	60.00	-35.25	-13.00	-22.25
19650.00	H	-	-	-56.70	2.78	53.09	-51.71	-13.00	-38.71
23580.00	H	-	-	-57.83	4.00	53.17	-51.63	-13.00	-38.63

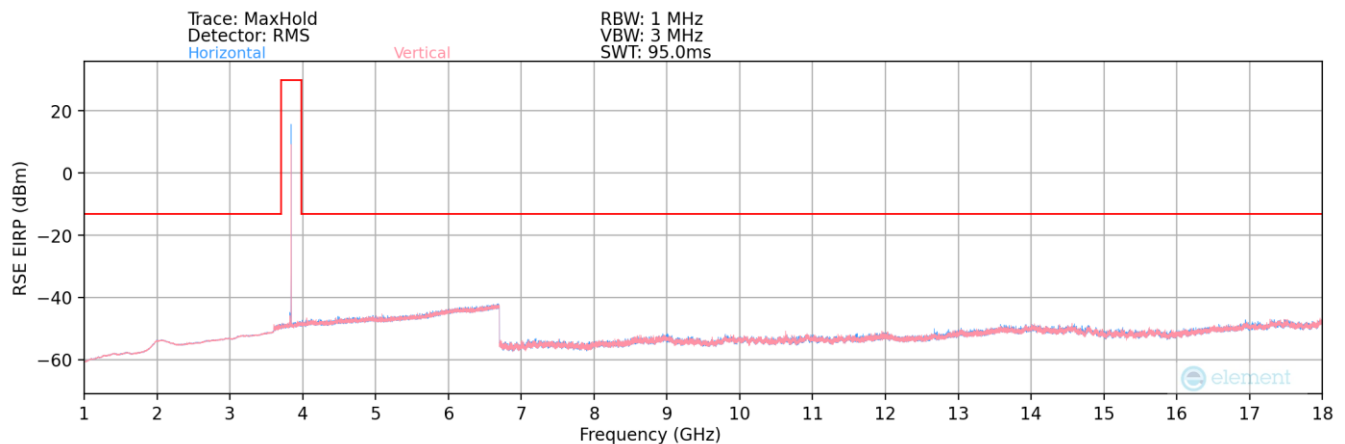
Table 7-40. Radiated Spurious Data (NR Band n77 – High Channel – Ant I)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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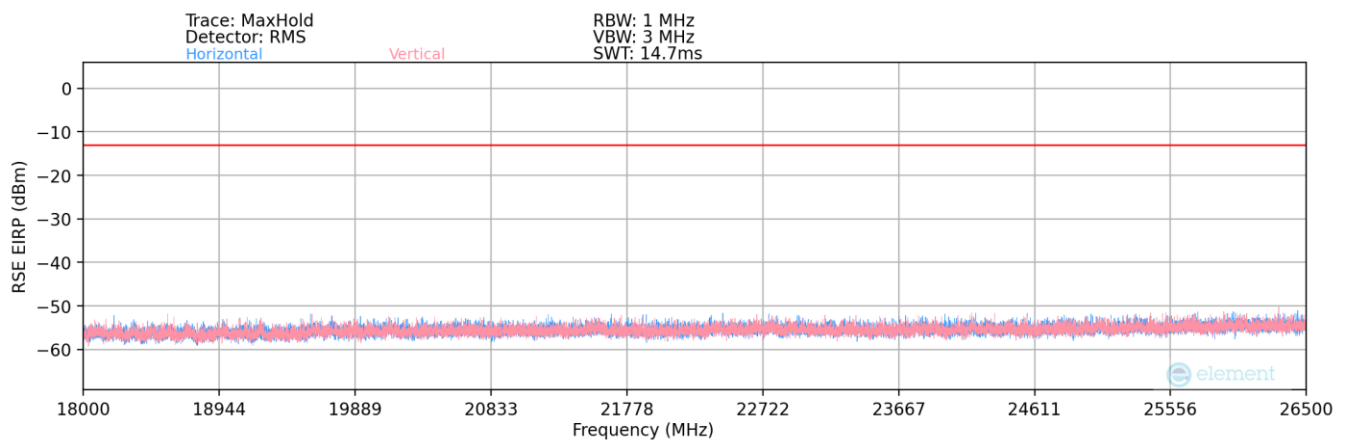
NR Band n77 – Ant D



Plot 7-131. Radiated Spurious Plot – Below 1GHz (NR Band n77 – Ant D)

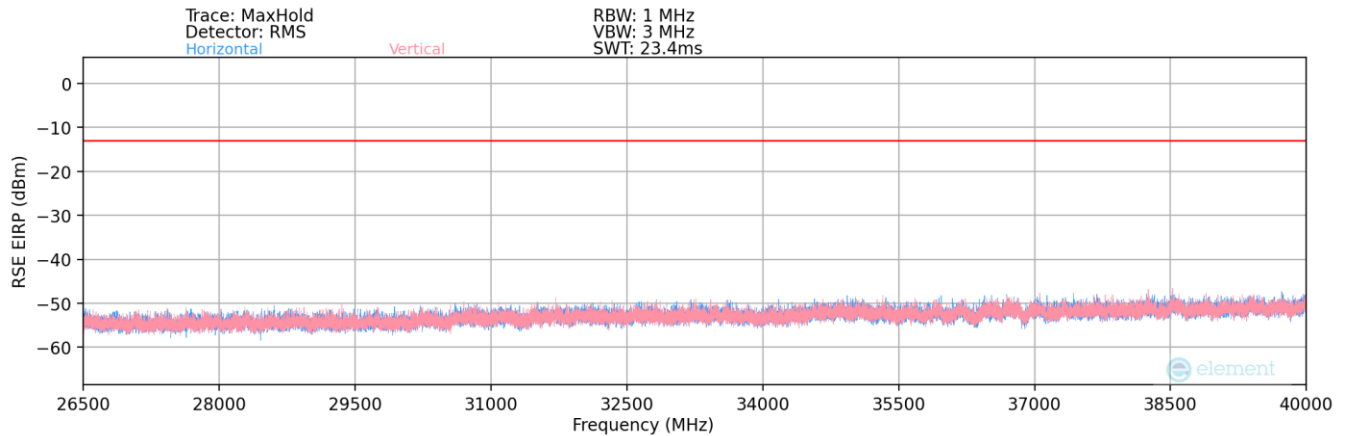


Plot 7-132. Radiated Spurious Plot – 1GHz – 18GHz (NR Band n77 – Ant D)



Plot 7-133. Radiated Spurious Plot – 18GHz – 26.5GHz (NR Band n77 – Ant D)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 118 of 131



Plot 7-134. Radiated Spurious Plot – 26.5GHz – 40GHz (NR Band n77 – Ant D)

Bandwidth (MHz):	100
Frequency (MHz):	3750.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7500.00	V	-	-	-76.78	9.72	39.94	-55.32	-13.00	-42.32
11250.00	V	263	19	-74.06	12.07	45.01	-50.25	-13.00	-37.25
15000.00	V	-	-	-78.78	14.86	43.08	-52.17	-13.00	-39.17
18750.00	V	-	-	-57.10	1.87	51.77	-53.03	-13.00	-40.03
22500.00	V	-	-	-56.78	3.97	54.19	-50.61	-13.00	-37.61

Table 7-41. Radiated Spurious Data (NR Band n77 – Low Channel – Ant D)

Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7680.00	V	-	-	-75.97	8.49	39.52	-55.74	-13.00	-42.74
11520.00	V	264	22	-72.01	12.59	47.58	-47.68	-13.00	-34.68
15360.00	V	241	37	-76.30	14.87	45.57	-49.69	-13.00	-36.69
19200.00	V	-	-	-57.80	2.25	51.45	-53.35	-13.00	-40.35
23040.00	V	-	-	-58.00	3.99	52.99	-51.81	-13.00	-38.81
26880.00	V	-	-	-57.37	4.75	54.38	-50.42	-13.00	-37.42

Table 7-42. Radiated Spurious Data (NR Band n77 – Mid Channel – Ant D)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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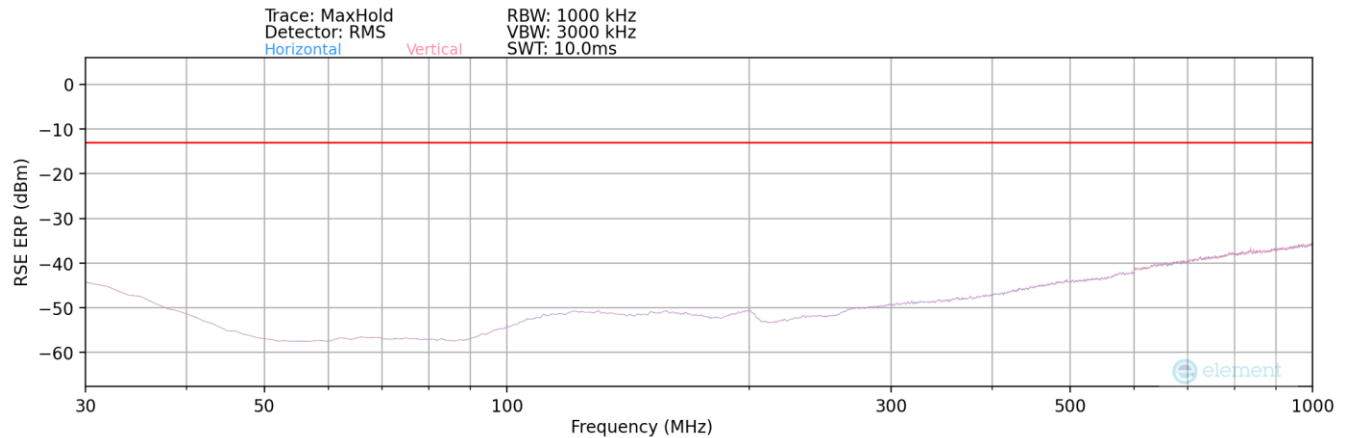
Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7860.00	V	-	-	-76.31	8.96	39.65	-55.61	-13.00	-42.61
11790.00	V	267	12	-71.42	13.13	48.71	-46.55	-13.00	-33.55
15720.00	V	252	341	-78.20	15.19	43.99	-51.27	-13.00	-38.27
19650.00	V	-	-	-57.75	2.78	52.03	-52.77	-13.00	-39.77
23580.00	V	-	-	-58.34	4.00	52.66	-52.14	-13.00	-39.14
27510.00	V	-	-	-58.03	4.62	53.59	-51.21	-13.00	-38.21

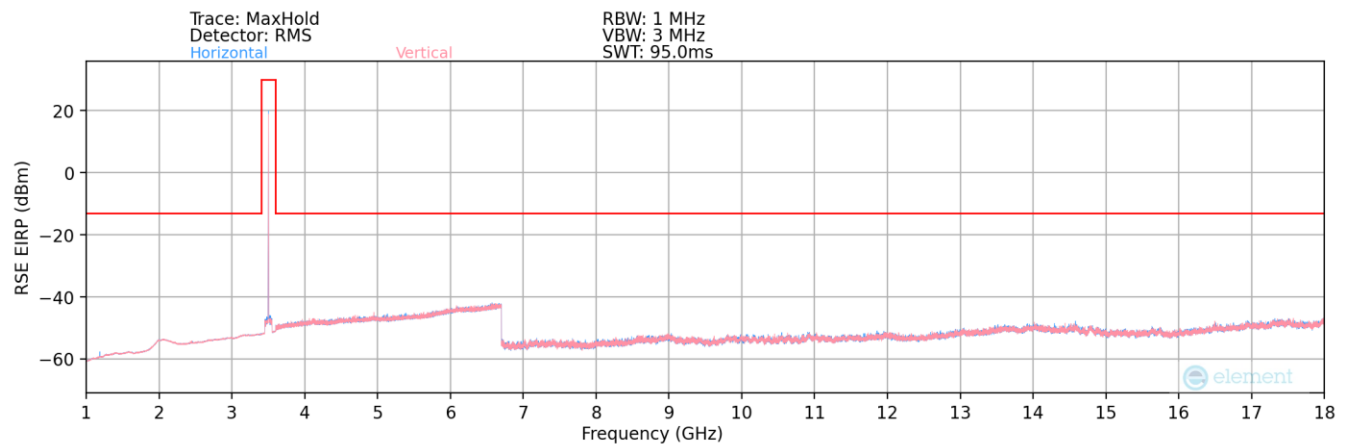
Table 7-43. Radiated Spurious Data (NR Band n77 – High Channel – Ant D)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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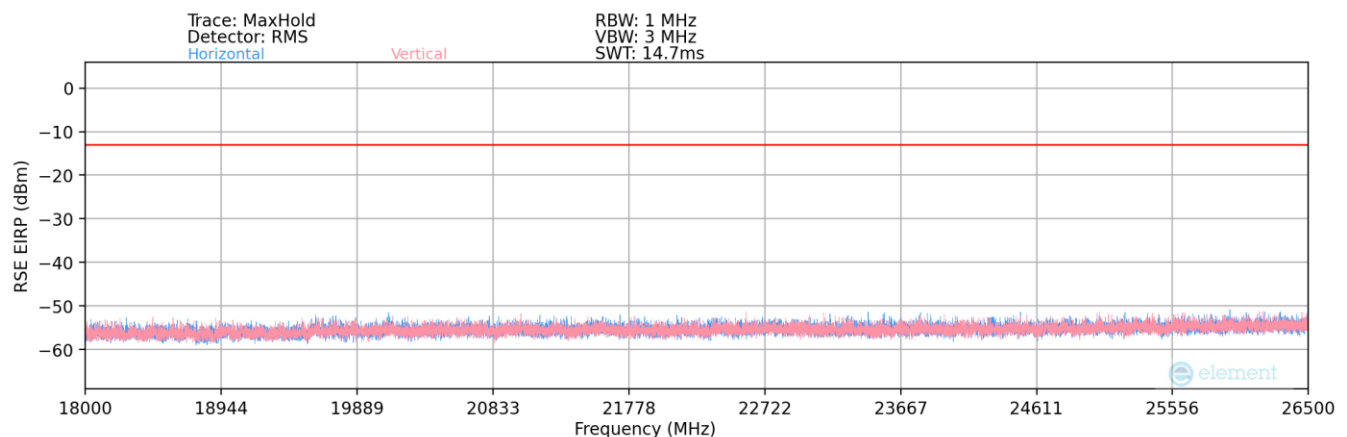
NR Band n77/78 (DoD Band) – Ant F



Plot 7-135. Radiated Spurious Plot – Below 1GHz (NR Band n77/78 (DoD) – Ant F)

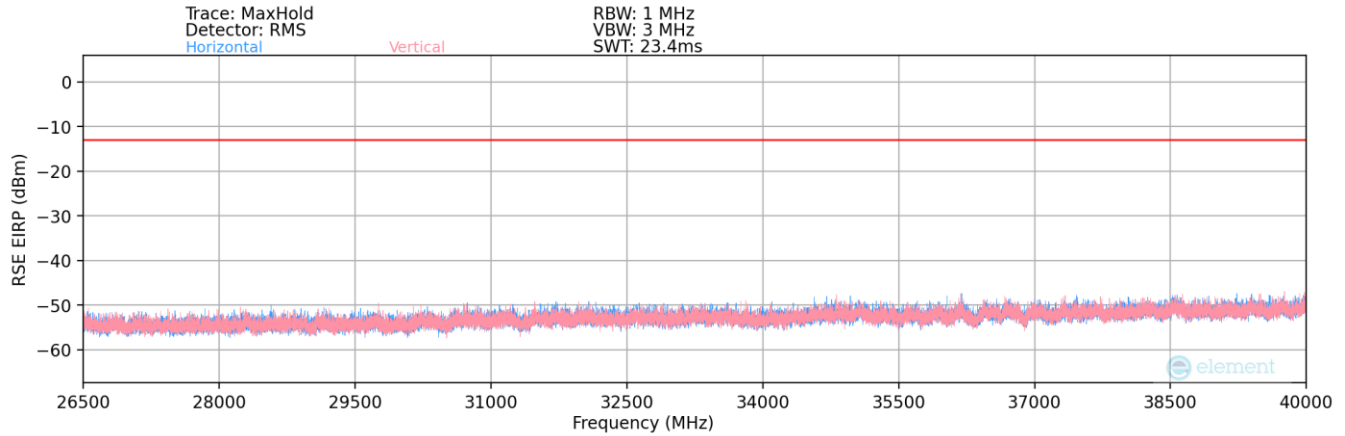


Plot 7-136. Radiated Spurious Plot – 1GHz – 18GHz (NR Band n77 (DoD) – Ant F)



Plot 7-137. Radiated Spurious Plot – 18GHz – 26.5GHz (NR Band n77 (DoD) – Ant F)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-138. Radiated Spurious Plot – 26.5GHz – 40GHz (NR Band n77 (DoD – Ant F)

Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7000.02	H	144	324	-71.05	8.71	44.66	-50.60	-13.00	-37.60
10500.03	H	253	16	-75.44	11.97	43.53	-51.73	-13.00	-38.73
14000.04	H	-	-	-78.46	15.96	44.50	-50.76	-13.00	-37.76
17500.05	H	-	-	-78.50	17.31	45.81	-49.45	-13.00	-36.45
21000.06	H	-	-	-57.33	3.66	53.33	-51.47	-13.00	-38.47

Table 7-44. Radiated Spurious Data (NR Band n77/78 (DoD) – Mid Channel – Ant F)

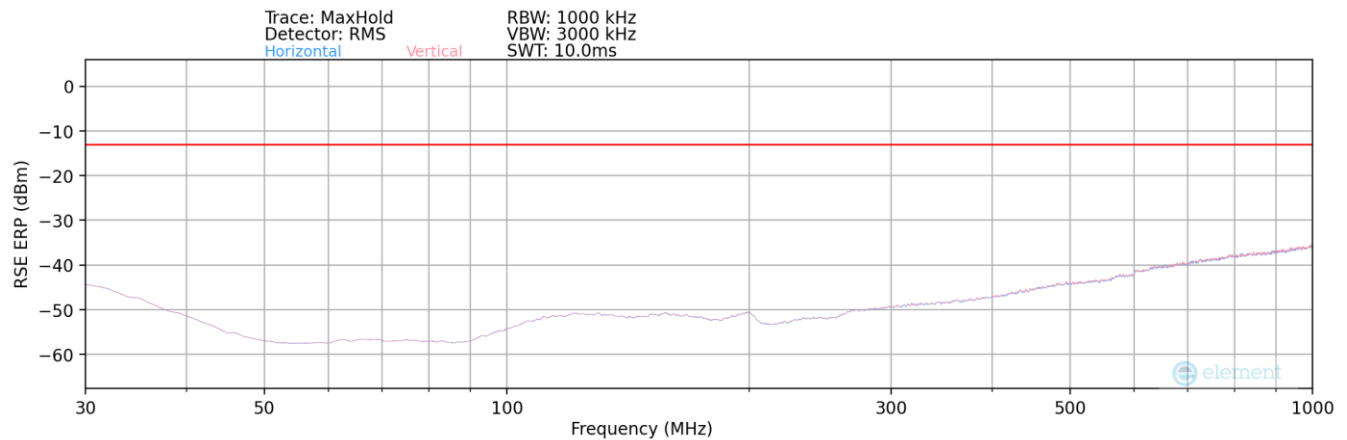
Case:	w/ Wireless Charging Pad
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7000.02	H	129	334	-72.92	8.71	42.79	-52.47	-13.00	-39.47
10500.03	H	120	308	-76.40	11.97	42.57	-52.69	-13.00	-39.69
14000.04	H	-	-	-78.45	15.96	44.51	-50.75	-13.00	-37.75
17500.05	H	-	-	-78.42	17.31	45.89	-49.37	-13.00	-36.37
21000.06	H	-	-	-56.62	3.66	54.04	-50.76	-13.00	-37.76

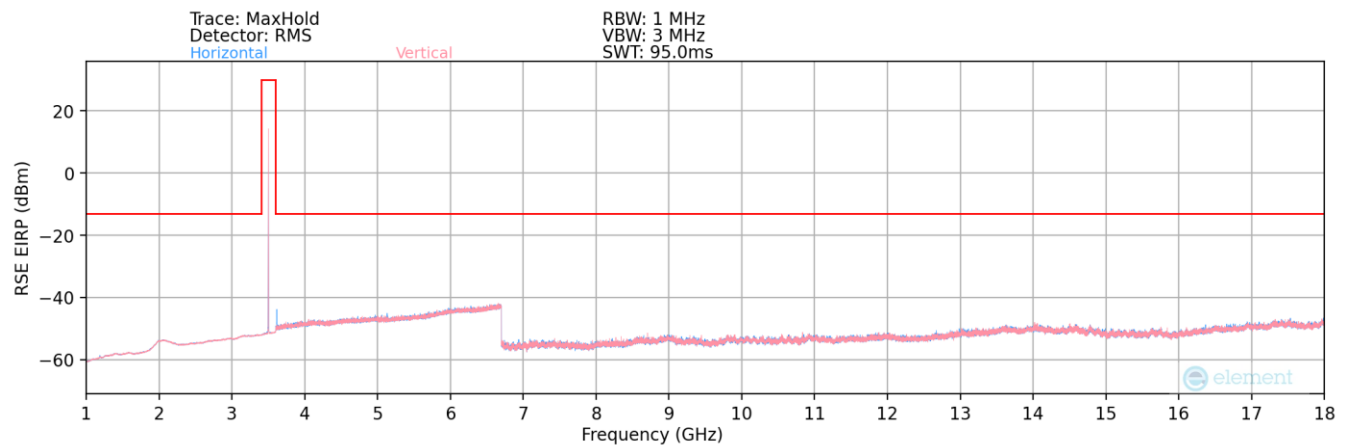
Table 7-45. Radiated Spurious Data with WCP (NR Band n77/78 (DoD) – Ant F)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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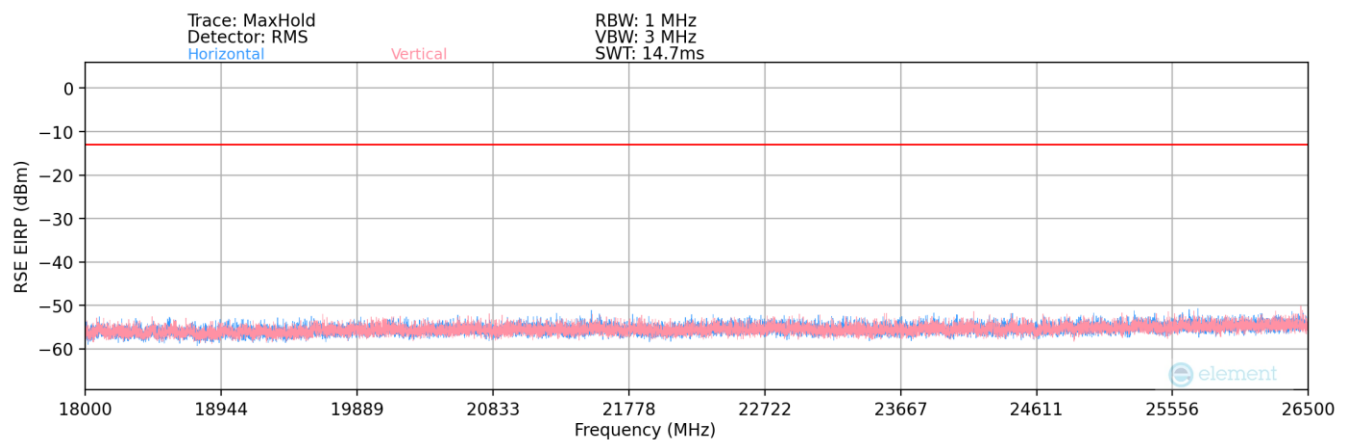
NR Band n77/78 (DoD Band) – Ant C



Plot 7-139. Radiated Spurious Plot – Below 1GHz (NR Band n77/78 (DoD) – Ant C)

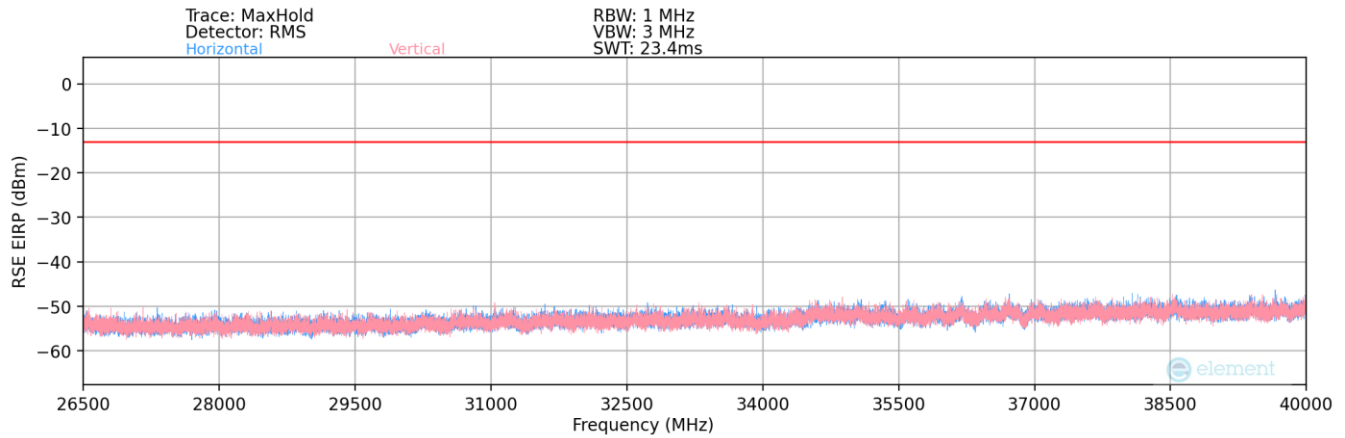


Plot 7-140. Radiated Spurious Plot – 1GHz – 18GHz (NR Band n77 (DoD) – Ant C)



Plot 7-141. Radiated Spurious Plot – 18GHz – 26.5GHz (NR Band n77 (DoD) – Ant C)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 123 of 131



Plot 7-142. Radiated Spurious Plot – 26.5GHz – 40GHz (NR Band n77 (DoD – Ant C)

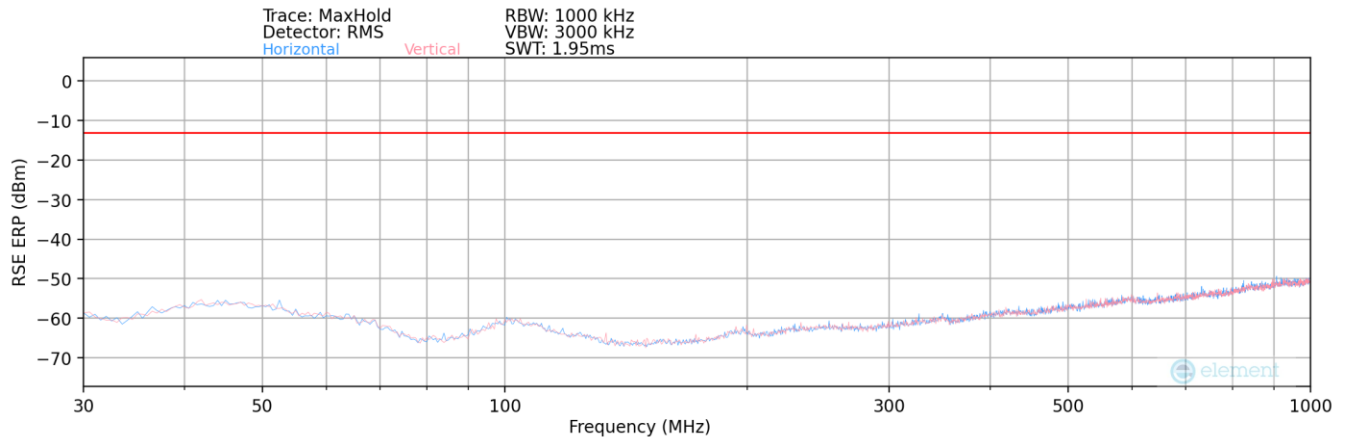
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7000.02	H	114	345	-74.17	8.71	41.54	-53.72	-13.00	-40.72
10500.03	H	155	19	-75.76	11.97	43.21	-52.05	-13.00	-39.05
14000.04	H	255	45	-77.59	15.96	45.37	-49.89	-13.00	-36.89
17500.05	H	129	349	-76.60	17.31	47.71	-47.55	-13.00	-34.55
21000.06	H	150	125	-54.07	3.66	56.59	-48.21	-13.00	-35.21
24500.07	H	-	-	-56.62	4.10	54.48	-50.32	-13.00	-37.32
28000.08	H	-	-	-57.76	4.90	54.15	-50.65	-13.00	-37.65
31500.09	H	-	-	-57.61	7.41	56.80	-48.00	-13.00	-35.00

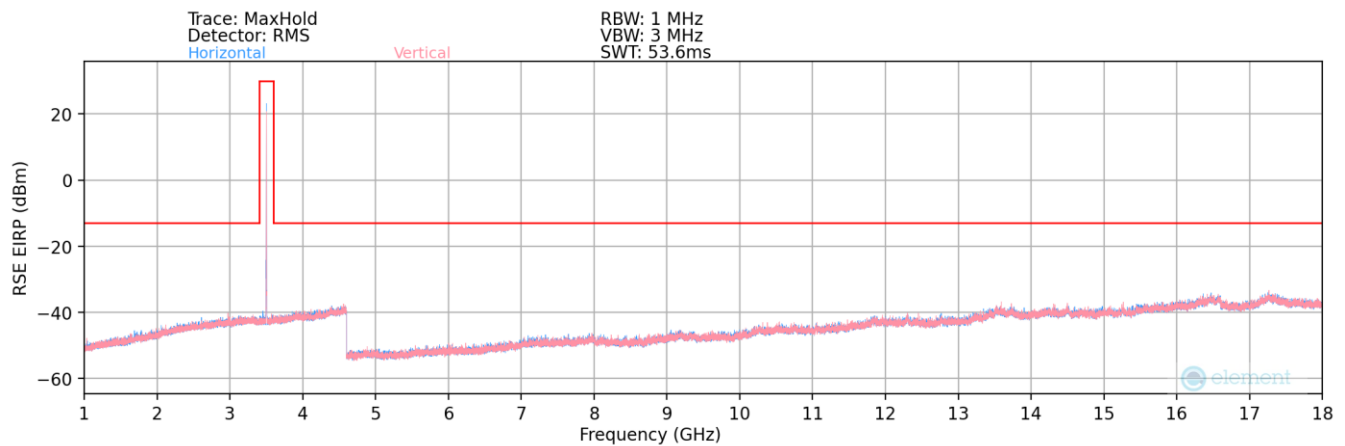
Table 7-46. Radiated Spurious Data (NR Band n77/78 (DoD) – Mid Channel – Ant C)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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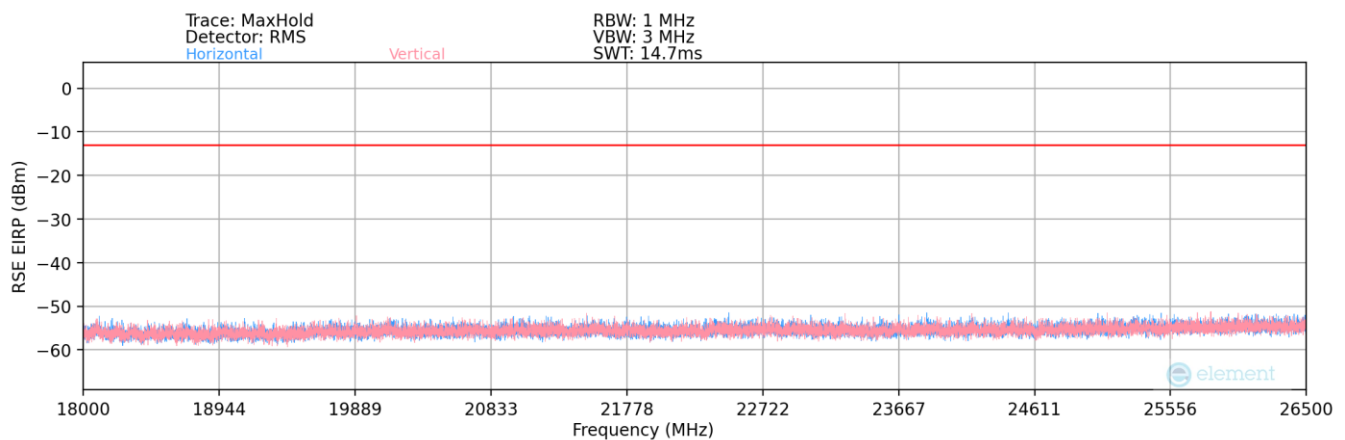
NR Band n77/78 (DoD Band) – Ant I



Plot 7-143. Radiated Spurious Plot – Below 1GHz (NR Band n77/78 (DoD) – Ant I)

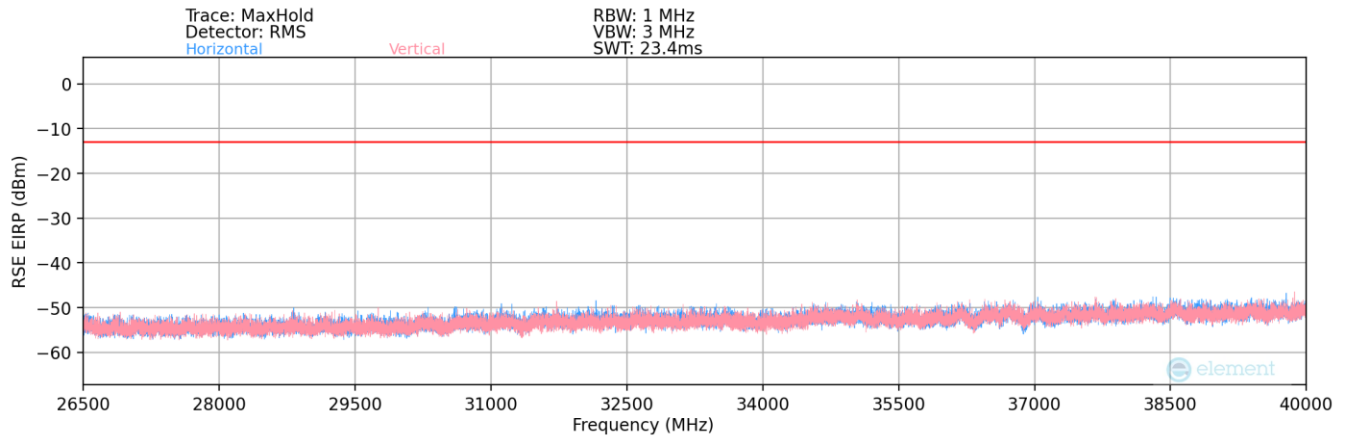


Plot 7-144. Radiated Spurious Plot – 1GHz – 18GHz (NR Band n77 (DoD) – Ant I)



Plot 7-145. Radiated Spurious Plot – 18GHz – 26.5GHz (NR Band n77/78 (DoD) – Ant I)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-146. Radiated Spurious Plot – 26.5GHz – 40GHz (NR Band n77/78 (DoD) – Ant I

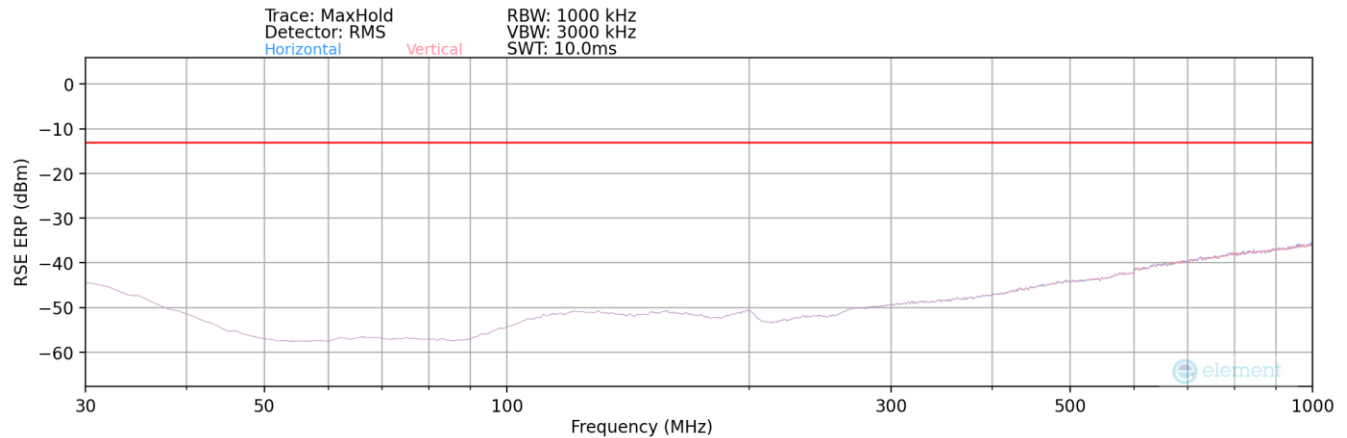
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7000.02	H	-	-	-72.39	14.78	49.39	-45.87	-13.00	-32.87
10500.03	H	152	320	-74.26	20.83	53.57	-41.69	-13.00	-28.69
14000.04	H	-	-	-74.99	26.19	58.20	-37.05	-13.00	-24.05
17500.05	H	-	-	-75.37	29.80	61.43	-33.83	-13.00	-20.83
21000.06	H	-	-	-57.85	3.66	52.81	-51.99	-13.00	-38.99

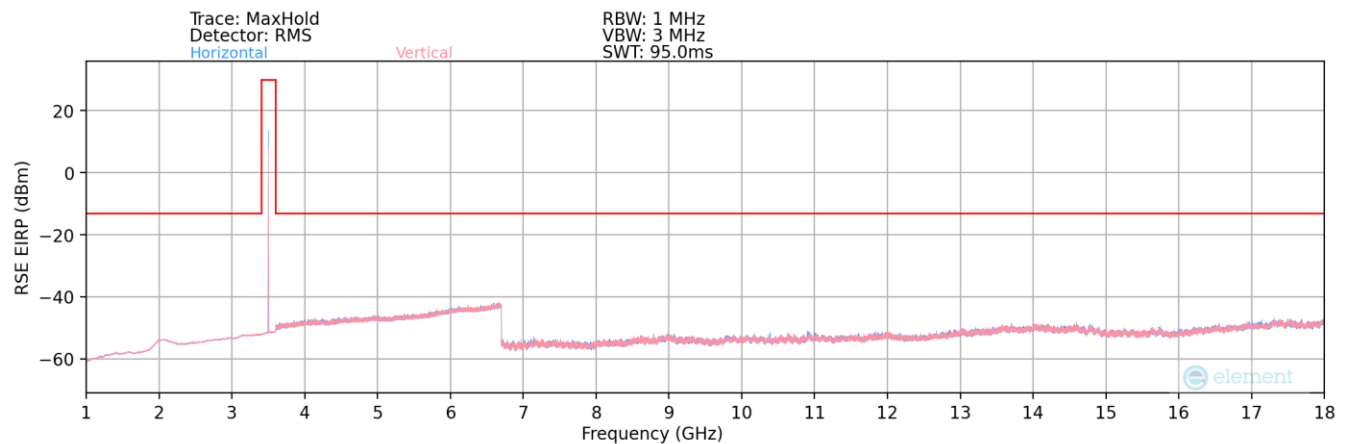
Table 7-47. Radiated Spurious Data (NR Band n77/78 (DoD) – Mid Channel – Ant I)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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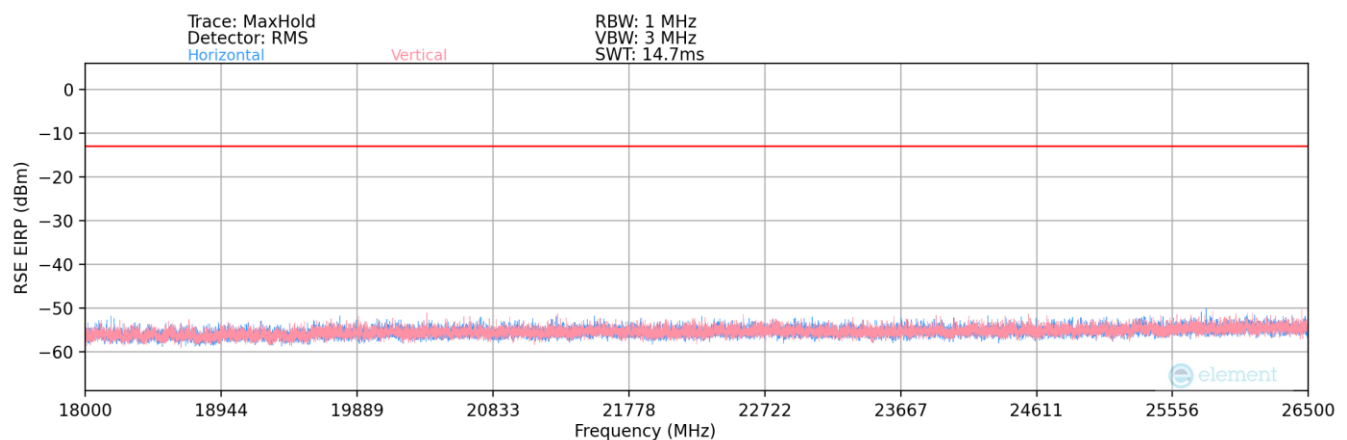
NR Band n77/78 (DoD Band) – Ant D



Plot 7-147. Radiated Spurious Plot – Below 1GHz (NR Band n77/78 (DoD) – Ant D

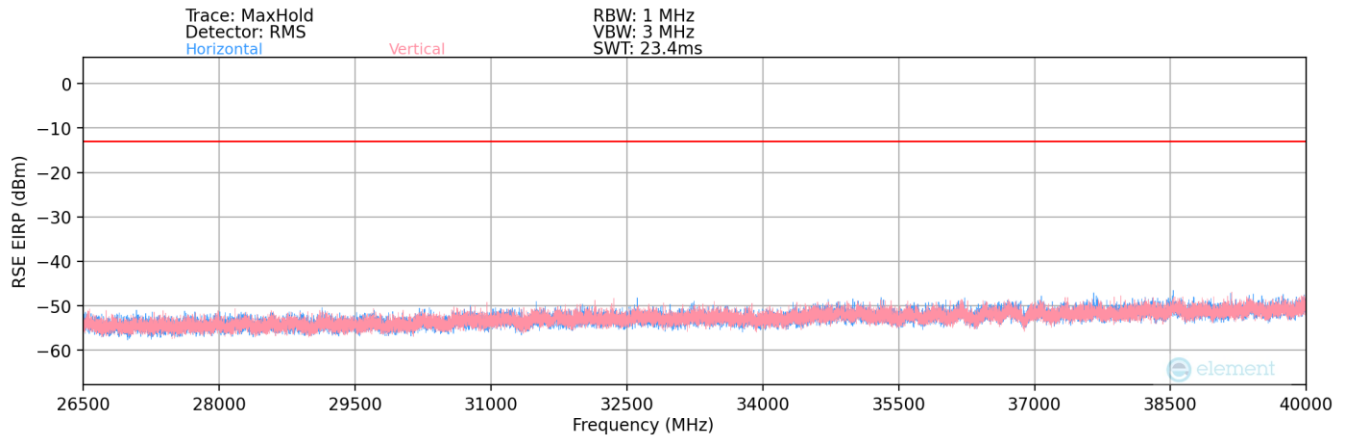


Plot 7-148. Radiated Spurious Plot – 1GHz – 18GHz (NR Band n77/78 (DoD) – Ant D



Plot 7-149. Radiated Spurious Plot – 18GHz – 26.5GHz (NR Band n77/78 (DoD) – Ant D

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 127 of 131



Plot 7-150. Radiated Spurious Plot – 26.5GHz – 40GHz (NR Band n77/78 (DoD) – Ant D

Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1 / 136
Mode:	Stand Alone

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]
7000.02	V	-	-	-76.34	8.71	39.37	-55.89	-13.00	-42.89
10500.03	V	275	358	-77.13	11.97	41.84	-53.42	-13.00	-40.42
14000.04	V	238	356	-76.61	15.96	46.35	-48.91	-13.00	-35.91
17500.05	V	252	355	-76.14	17.31	48.17	-47.09	-13.00	-34.09
21000.06	V	-	-	-58.44	3.66	52.22	-52.58	-13.00	-39.58
24500.07	V	-	-	-58.34	4.10	52.76	-52.04	-13.00	-39.04
28000.08	V	-	-	-58.38	4.90	53.52	-51.28	-13.00	-38.28

Table 7-48. Radiated Spurious Data (NR Band n77/78 (DoD) – Mid Channel – Ant D)

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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7.9 Frequency Stability / Temperature Variation

Test Overview and Limit

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

- a.) **Temperature:** The temperature is varied from -30°C to +50°C in 10°C increments using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

For Part 27, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Procedure Used

ANSI C63.26-2015 – Section 5.6

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

The EUT was connected via an RF cable to a spectrum analyzer with the EUT placed inside an environmental chamber.

Test Notes

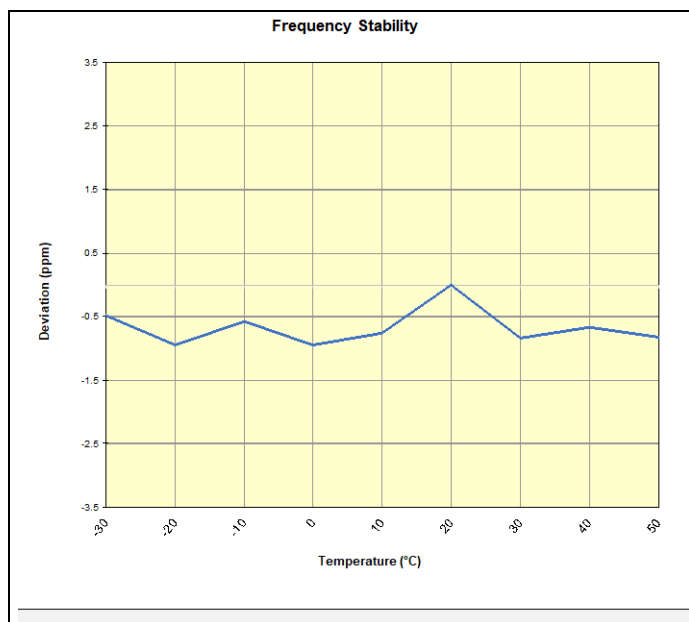
None

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NR Band n77

NR Band n77					
		Operating Frequency (Hz):		3,840,000,000	
		Ref. Voltage (VDC):		4.27	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.27	- 30	3,840,164,961	-1,852	-0.0000482
		- 20	3,840,163,202	-3,611	-0.0000940
		- 10	3,840,164,594	-2,219	-0.0000578
		0	3,840,163,176	-3,637	-0.0000947
		+ 10	3,840,163,916	-2,897	-0.0000754
		+ 20 (Ref)	3,840,166,813	0	0.0000000
		+ 30	3,840,163,620	-3,193	-0.0000832
		+ 40	3,840,164,248	-2,565	-0.0000668
		+ 50	3,840,163,669	-3,144	-0.0000819
Battery Endpoint	3.68	+ 20	3,840,163,452	-3,361	-0.0000875

Table 7-49. NR Band n77 Frequency Stability Data



Plot 7-151. NR Band n77 Frequency Stability Chart

FCC ID: A3LSMS928U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung Portable Handset** **FCC ID: A3LSMS928U** complies with all the requirements of Part 27 of the FCC rules.

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Test Report S/N: 1M2308210092-06.A3L	Test Dates: 9/6/2023 - 10/15/2023	EUT Type: Portable Handset	Page 131 of 131