



Plot 7-203. PAR Plot (NR Band n77 - DoD Band - 10MHz CP-OFDM 256-QAM - Full RB)

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NR Band n77 (PC2) - C-Band



Plot 7-204. PAR Plot (NR Band n77 - C-Band – 100MHz DFT-s-OFDM π/2 BPSK - Full RB)



Plot 7-205. PAR Plot (NR Band n77 - C-Band - 100MHz CP-OFDM QPSK - Full RB)

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Plot 7-206. PAR Plot (NR Band n77 - C-Band - 100MHz CP-OFDM 256-QAM - Full RB)



Plot 7-207. PAR Plot (NR Band n77 - C-Band – 90MHz DFT-s-OFDM $\pi/2$ BPSK - Full RB)

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Plot 7-208. PAR Plot (NR Band n77 - C-Band - 90MHz CP-OFDM QPSK - Full RB)



Plot 7-209. PAR Plot (NR Band n77 - C-Band - 90MHz CP-OFDM 256-QAM - Full RB)

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Plot 7-210. PAR Plot (NR Band n77 - C-Band – 80MHz DFT-s-OFDM $\pi/2$ BPSK - Full RB)



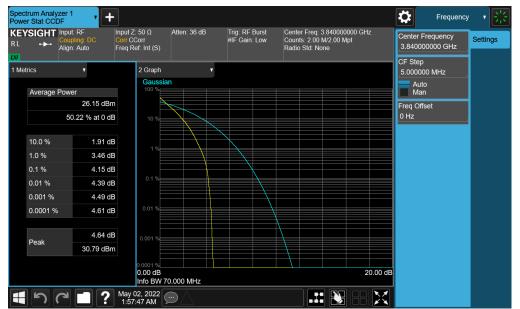
Plot 7-211. PAR Plot (NR Band n77 - C-Band - 80MHz CP-OFDM QPSK - Full RB)

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Plot 7-212. PAR Plot (NR Band n77 - C-Band - 80MHz CP-OFDM 256-QAM - Full RB)



Plot 7-213. PAR Plot (NR Band n77 - C-Band – 70MHz DFT-s-OFDM π/2 BPSK - Full RB)

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Plot 7-214. PAR Plot (NR Band n77 - C-Band - 70MHz CP-OFDM QPSK - Full RB)



Plot 7-215. PAR Plot (NR Band n77 - C-Band - 70MHz CP-OFDM 256-QAM - Full RB)

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Plot 7-216. PAR Plot (NR Band n77 - C-Band – 60MHz DFT-s-OFDM π /2 BPSK - Full RB)



Plot 7-217. PAR Plot (NR Band n77 - C-Band - 60MHz CP-OFDM QPSK - Full RB)

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Plot 7-218. PAR Plot (NR Band n77 - C-Band - 60MHz CP-OFDM 256-QAM - Full RB)



Plot 7-219. PAR Plot (NR Band n77 - C-Band – 50MHz DFT-s-OFDM $\pi/2$ BPSK - Full RB)

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Plot 7-220. PAR Plot (NR Band n77 - C-Band - 50MHz CP-OFDM QPSK - Full RB)



Plot 7-221. PAR Plot (NR Band n77 - C-Band - 50MHz CP-OFDM 256-QAM - Full RB)

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Plot 7-222. PAR Plot (NR Band n77 - C-Band – 40MHz DFT-s-OFDM π /2 BPSK - Full RB)



Plot 7-223. PAR Plot (NR Band n77 - C-Band - 40MHz CP-OFDM QPSK - Full RB)

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Plot 7-224. PAR Plot (NR Band n77 - C-Band - 40MHz CP-OFDM 256-QAM - Full RB)



Plot 7-225. PAR Plot (NR Band n77 - C-Band – 30MHz DFT-s-OFDM $\pi/2$ BPSK - Full RB)

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Plot 7-226. PAR Plot (NR Band n77 - C-Band - 30MHz CP-OFDM QPSK - Full RB)



Plot 7-227. PAR Plot (NR Band n77 - C-Band - 30MHz CP-OFDM 256-QAM - Full RB)

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Plot 7-228. PAR Plot (NR Band n77 - C-Band – 20MHz DFT-s-OFDM π /2 BPSK - Full RB)



Plot 7-229. PAR Plot (NR Band n77 - C-Band - 20MHz CP-OFDM QPSK - Full RB)

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Plot 7-230. PAR Plot (NR Band n77 - C-Band - 20MHz CP-OFDM 256-QAM - Full RB)



Plot 7-231. PAR Plot (NR Band n77 - C-Band – 15MHz DFT-s-OFDM π/2 BPSK - Full RB)

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Plot 7-232. PAR Plot (NR Band n77 - C-Band - 15MHz CP-OFDM QPSK - Full RB)



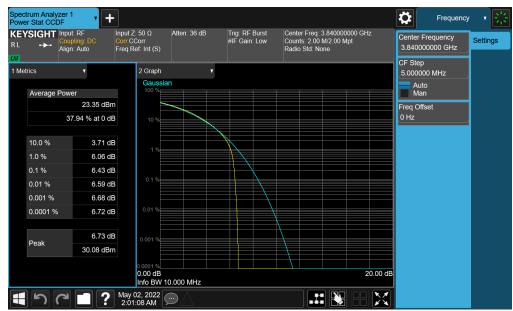
Plot 7-233. PAR Plot (NR Band n77 - C-Band - 15MHz CP-OFDM 256-QAM - Full RB)

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Plot 7-234. PAR Plot (NR Band n77 - C-Band – 10MHz DFT-s-OFDM $\pi/2$ BPSK - Full RB)



Plot 7-235. PAR Plot (NR Band n77 - C-Band - 10MHz CP-OFDM QPSK - Full RB)

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Plot 7-236. PAR Plot (NR Band n77 - C-Band - 10MHz CP-OFDM 256-QAM - Full RB)

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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 ≥ 3 x RBW
- 4. Span = 1.5 times the OBW
- 5. No. of sweep points $\geq 2 \times \text{span} / \text{RBW}$
- 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.

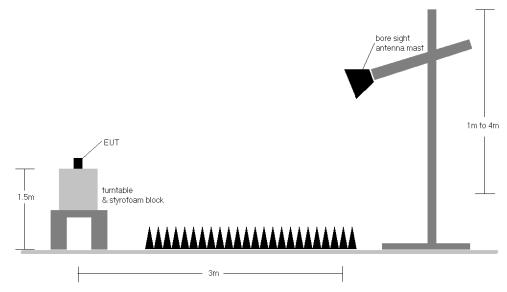


Figure 7-6. Radiated Test Setup >1GHz

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 regard to 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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NR Band n77 (PC2) - DoD Band

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]
	π/2 BPSK	3500.01	Н	112	136	7.74	1 / 68	12.58	20.32	0.108	30.00	-9.68
100 MHz	QPSK	3500.01	Н	112	136	7.74	1 / 68	13.06	20.80	0.120	30.00	-9.20
	16-QAM	3500.01	Н	112	136	7.74	1 / 68	11.72	19.46	0.088	30.00	-10.54
	π/2 BPSK	3495.00	Н	112	136	7.72	1 / 61	11.36	19.08	0.081	30.00	-10.92
	π/2 BPSK	3500.01	Н	112	136	7.74	1 / 183	11.06	18.80	0.076	30.00	-11.20
보	π/2 BPSK	3504.99	Н	112	136	7.71	1 / 61	11.34	19.05	0.080	30.00	-10.95
90 MHz	QPSK	3495.00	H	112	136	7.72	1 / 61	11.94	19.66	0.093	30.00	-10.34
06	QPSK	3500.01	H	112	136	7.74	1 / 183	11.55	19.29	0.085	30.00	-10.71
	QPSK	3504.99	Н	112	136	7.71	1 / 61	11.91	19.62	0.092	30.00	-10.38
	16-QAM	3504.99	Н	112	136	7.71	1 / 61	10.61	18.32	0.068	30.00	-11.68
	π/2 BPSK	3490.02	Н	112	136	7.71	1 / 54	11.68	19.40	0.087	30.00	-10.60
	π/2 BPSK	3500.01	Н	112	136	7.74	1 / 54	11.71	19.45	0.088	30.00	-10.55
보	π/2 BPSK	3510.00	Н	112	136	7.68	1 / 54	11.34	19.03	0.080	30.00	-10.97
80 MHz	QPSK	3490.02	Н	112	136	7.71	1 / 54	12.28	19.99	0.100	30.00	-10.01
80	QPSK	3500.01	Н	112	136	7.74	1 / 54	12.12	19.86	0.097	30.00	-10.14
	QPSK	3510.00	Н	112	136	7.68	1 / 54	11.95	19.63	0.092	30.00	-10.37
	16-QAM	3490.02	Н	112	136	7.71	1 / 54	10.94	18.66	0.073	30.00	-11.34
	π/2 BPSK	3485.01	Н	112	136	7.70	1 / 47	11.88	19.58	0.091	30.00	-10.42
	π/2 BPSK	3500.01	Н	112	136	7.74	1 / 47	11.90	19.64	0.092	30.00	-10.36
보	π/2 BPSK	3514.98	Н	112	136	7.66	1 / 47	11.83	19.49	0.089	30.00	-10.51
70 MHz	QPSK	3485.01	H	112	136	7.70	1 / 47	12.33	20.03	0.101	30.00	-9.97
02	QPSK	3500.01	Ι	112	136	7.74	1 / 47	12.15	19.89	0.097	30.00	-10.11
	QPSK	3514.98	Ι	112	136	7.66	1 / 47	12.27	19.93	0.098	30.00	-10.07
	16-QAM	3485.01	Н	112	136	7.70	1 / 47	11.11	18.81	0.076	30.00	-11.19
	π/2 BPSK	3480.00	Н	112	136	7.69	1 / 81	11.89	19.57	0.091	30.00	-10.43
	π/2 BPSK	3500.01	H	112	136	7.74	1 / 121	11.65	19.39	0.087	30.00	-10.61
60 MHz	π/2 BPSK	3519.99	H	112	136	7.63	1 / 40	11.54	19.17	0.083	30.00	-10.83
Σ	QPSK	3480.00	Н	112	136	7.69	1 / 81	12.12	19.81	0.096	30.00	-10.19
09	QPSK	3500.01	Τ	112	136	7.74	1 / 121	11.99	19.73	0.094	30.00	-10.27
	QPSK	3519.99	Ξ	112	136	7.63	1 / 40	11.94	19.57	0.091	30.00	-10.43
	16-QAM	3500.01	Н	112	136	7.74	1 / 121	10.93	18.67	0.074	30.00	-11.33
	π/2 BPSK	3475.02	Н	112	136	7.68	1 / 33	12.25	19.92	0.098	30.00	-10.08
	π/2 BPSK	3500.01	Н	112	136	7.74	1 / 33	11.91	19.65	0.092	30.00	-10.35
50 MHz	π/2 BPSK	3525.00	Н	112	136	7.61	1 / 33	11.52	19.13	0.082	30.00	-10.87
Σ	QPSK	3475.02	Н	112	136	7.68	1 / 33	12.82	20.50	0.112	30.00	-9.50
20	QPSK	3500.01	Н	112	136	7.74	1 / 33	12.35	20.08	0.102	30.00	-9.92
	QPSK	3525.00	Н	112	136	7.61	1 / 33	11.97	19.57	0.091	30.00	-10.43
	16-QAM	3475.02	Н	112	136	7.68	1 / 33	11.32	18.99	0.079	30.00	-11.01

Table 7-18. EIRP Data (NR Band n77 - DoD Band – 50MHz-100MHz Bandwidths – SRS-1)

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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]
	π/2 BPSK	3470.01	Н	112	136	7.66	1 / 53	11.71	19.37	0.087	30.00	-10.63
	π/2 BPSK	3500.01	Н	112	136	7.74	1 / 79	11.56	19.29	0.085	30.00	-10.71
붓	π/2 BPSK	3529.98	Н	112	136	7.58	1 / 53	12.20	19.79	0.095	30.00	-10.21
40 MHz	QPSK	3470.01	Н	112	136	7.66	1 / 53	12.32	19.98	0.100	30.00	-10.02
40	QPSK	3500.01	Н	112	136	7.74	1 / 79	12.07	19.81	0.096	30.00	-10.19
	QPSK	3529.98	Н	112	136	7.58	1 / 53	12.18	19.76	0.095	30.00	-10.24
	16-QAM	3529.98	Н	112	136	7.58	1 / 53	11.27	18.85	0.077	30.00	-11.15
	π/2 BPSK	3465.00	Н	112	136	7.65	1 / 19	12.07	19.72	0.094	30.00	-10.28
	π/2 BPSK	3500.01	Н	112	136	7.74	1 / 19	12.34	20.08	0.102	30.00	-9.92
¥	π/2 BPSK	3534.99	Н	112	136	7.56	1 / 19	12.41	19.96	0.099	30.00	-10.04
30 MHz	QPSK	3465.00	Н	112	136	7.65	1 / 19	12.41	20.06	0.101	30.00	-9.94
30	QPSK	3500.01	Н	112	136	7.74	1 / 19	12.87	20.61	0.115	30.00	-9.39
	QPSK	3534.99	Н	112	136	7.56	1 / 19	13.05	20.61	0.115	30.00	-9.39
	16-QAM	3500.01	Н	112	136	7.74	1 / 19	11.38	19.12	0.082	30.00	-10.88
	π/2 BPSK	3460.02	Н	112	136	7.64	1 / 13	12.09	19.73	0.094	30.00	-10.27
	π/2 BPSK	3500.01	Н	112	136	7.74	1 / 37	11.93	19.67	0.093	30.00	-10.33
4	π/2 BPSK	3540.00	Н	112	136	7.53	1 / 25	12.10	19.63	0.092	30.00	-10.37
20 MHz	QPSK	3460.02	Н	112	136	7.64	1 / 13	12.66	20.30	0.107	30.00	-9.70
20	QPSK	3500.01	Н	112	136	7.74	1 / 37	12.18	19.92	0.098	30.00	-10.08
	QPSK	3540.00	Н	112	136	7.53	1 / 25	12.33	19.86	0.097	30.00	-10.14
	16-QAM	3540.00	Н	112	136	7.53	1 / 25	11.33	18.86	0.077	30.00	-11.14
	π/2 BPSK	3457.50	Н	112	136	7.63	1/9	12.02	19.65	0.092	30.00	-10.35
	π/2 BPSK	3500.01	Н	112	136	7.74	1/9	12.05	19.79	0.095	30.00	-10.21
보	π/2 BPSK	3542.49	Н	112	136	7.52	1 / 28	12.22	19.74	0.094	30.00	-10.26
15 MHz	QPSK	3457.50	Н	112	136	7.63	1/9	12.50	20.13	0.103	30.00	-9.87
15	QPSK	3500.01	Н	112	136	7.74	1/9	12.52	20.26	0.106	30.00	-9.74
	QPSK	3542.49	Н	112	136	7.52	1 / 28	12.63	20.15	0.104	30.00	-9.85
	16-QAM	3457.50	Н	112	136	7.63	1/9	11.34	18.97	0.079	30.00	-11.03
	π/2 BPSK	3455.01	Н	112	136	7.63	1/6	11.87	19.49	0.089	30.00	-10.51
	π/2 BPSK	3500.01	Н	112	136	7.74	1 / 12	11.29	19.03	0.080	30.00	-10.97
¥	π/2 BPSK	3544.98	Н	112	136	7.50	1/6	12.06	19.56	0.090	30.00	-10.44
10 MHz	QPSK	3455.01	Н	112	136	7.63	1/6	11.88	19.51	0.089	30.00	-10.49
10	QPSK	3500.01	Н	112	136	7.74	1 / 12	11.89	19.62	0.092	30.00	-10.38
	QPSK	3544.98	Н	112	136	7.50	1/6	12.61	20.11	0.103	30.00	-9.89
	16-QAM	3544.98	Н	112	136	7.50	1/6	11.21	18.71	0.074	30.00	-11.29
	QPSK (CP-OFDM)	3500.0	Н	112	136	7.74	1/136	12.22	19.96	0.099	30.00	-10.04
100 MU	QPSK (Half-Open)	3500.0	Н	117	41	7.74	1/68	12.23	19.97	0.099	30.00	-10.03
100 MHz	QPSK (Opposite Pol.)	3500.0	V	394	182	7.16	1/204	10.14	17.30	0.054	30.00	-12.70
	QPSK (WCP)	3500.0	Н	112	136	7.74	1/68	12.61	20.35	0.108	30.00	-9.65

Table 7-19. EIRP Data (NR Band n77 - DoD Band - 10MHz-40MHz Bandwidths - SRS-1)

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]
	π/2 BPSK	3500.01	Н	144	241	7.74	1 / 204	7.87	15.61	0.036	30.00	-14.39
100 MHz	QPSK	3500.01	Н	144	241	7.74	1 / 204	8.60	16.34	0.043	30.00	-13.66
	QPSK (CP-OFDM)	3500.0	Н	144	241	7 74	1/204	7.21	14 95	0.031	30.00	-15.05

Table 7-20. EIRP Data (NR Band n77 - DoD Band - SRS-2)

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]
	π/2 BPSK	3500.01	Н	120	317	7.74	1 / 204	9.40	17.14	0.052	30.00	-12.86
100 MHz	QPSK	3500.01	Н	120	317	7.74	1 / 204	10.02	17.76	0.060	30.00	-12.24
	QPSK (CP-OFDM)	3500.0	Н	120	317	7.74	1/204	9.27	17.01	0.050	30.00	-12.99

Table 7-21. EIRP Data (NR Band n77 - DoD Band - SRS-3)

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]
	π/2 BPSK	3500.01	Н	104	48	7.74	1 / 68	6.00	13.74	0.024	30.00	-16.26
100 MHz	QPSK	3500.01	Н	104	48	7.74	1 / 68	5.59	13.33	0.022	30.00	-16.67
	QPSK (CP-OFDM)	3500.0	Н	104	48	7.74	1/68	4.75	12.49	0.018	30.00	-17.51

Table 7-22. EIRP Data (NR Band n77 - DoD Band - SRS-4)

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NR Band n77 (PC2) - C-Band

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]
	π/2 BPSK	3750.00	Н	137	130	5.98	1 / 204	15.96	21.94	0.156	30.00	-8.06
	π/2 BPSK	3840.00	Н	140	137	6.02	1 / 204	17.50	23.52	0.225	30.00	-6.48
100 MHz	π/2 BPSK	3930.00	Н	140	134	5.99	1 / 204	18.00	23.99	0.250	30.00	-6.01
2	QPSK	3750.00	Н	137	130	5.98	1 / 136	15.18	21.16	0.131	30.00	-8.84
10(QPSK	3840.00	Н	140	137	6.02	1 / 68	16.99	23.01	0.200	30.00	-6.99
	QPSK	3930.00	Н	140	134	5.99	1 / 68	16.84	22.83	0.192	30.00	-7.17
	16-QAM	3930.00	Н	140	134	5.99	1 / 204	15.84	21.83	0.152	30.00	-8.17
	π/2 BPSK	3745.02	Н	137	130	5.99	1 / 61	16.47	22.46	0.176	30.00	-7.54
	π/2 BPSK	3840.00	Н	140	137	6.02	1 / 61	18.56	24.58	0.287	30.00	-5.42
꿒	π/2 BPSK	3934.98	Н	140	134	6.02	1 / 61	18.56	24.58	0.287	30.00	-5.42
90 MHz	QPSK	3745.02	Н	137	130	5.99	1 / 122	14.96	20.95	0.124	30.00	-9.05
	QPSK	3840.00	Н	140	137	6.02	1 / 61	17.48	23.50	0.224	30.00	-6.50
	QPSK	3934.98	Н	140	134	6.02	1 / 61	16.63	22.65	0.184	30.00	-7.35
	16-QAM	3934.98	Н	140	134	6.02	1 / 61	16.18	22.20	0.166	30.00	-7.80
	π/2 BPSK	3740.01	Н	137	130	5.99	1 / 54	16.50	22.49	0.177	30.00	-7.51
	π/2 BPSK	3840.00	Н	140	137	6.02	1 / 54	18.54	24.56	0.286	30.00	-5.44
80 MHz	π/2 BPSK	3939.99	Н	140	134	6.04	1 / 162	19.06	25.11	0.324	30.00	-4.89
Σ	QPSK	3740.01	Н	137	130	5.99	1 / 162	15.09	21.09	0.128	30.00	-8.91
80	QPSK	3840.00	Н	140	137	6.02	1 / 54	17.49	23.51	0.225	30.00	-6.49
	QPSK	3939.99	Н	140	134	6.04	1 / 162	17.16	23.21	0.209	30.00	-6.79
	16-QAM	3939.99	Н	140	134	6.04	1 / 162	16.71	22.76	0.189	30.00	-7.24
	π/2 BPSK	3735.00	Н	137	130	6.00	1 / 47	16.51	22.51	0.178	30.00	-7.49
	π/2 BPSK	3840.00	Н	140	137	6.02	1 / 141	18.19	24.21	0.264	30.00	-5.79
70 MHz	π/2 BPSK	3945.00	Н	140	134	6.07	1 / 141	18.91	24.98	0.315	30.00	-5.02
Σ	QPSK	3735.00	Н	137	130	6.00	1 / 47	15.00	21.00	0.126	30.00	-9.00
70	QPSK	3840.00	Н	140	137	6.02	1 / 141	17.11	23.13	0.206	30.00	-6.87
	QPSK	3945.00	Н	140	134	6.07	1 / 141	17.03	23.11	0.205	30.00	-6.89
	16-QAM	3945.00	Н	140	134	6.07	1 / 141	16.55	22.62	0.183	30.00	-7.38
	π/2 BPSK	3730.02	Н	137	130	6.00	1 / 40	16.48	22.48	0.177	30.00	-7.52
	π/2 BPSK	3840.00	Н	140	137	6.02	1 / 40	18.57	24.59	0.288	30.00	-5.41
60 MHz	π/2 BPSK	3949.98	Н	140	134	6.10	1 / 121	19.03	25.13	0.326	30.00	-4.87
Σ	QPSK	3730.02	Н	137	130	6.00	1 / 40	14.95	20.96	0.125	30.00	-9.04
90	QPSK	3840.00	Н	140	137	6.02	1 / 40	17.49	23.51	0.225	30.00	-6.49
	QPSK	3949.98	Н	140	134	6.10	1 / 121	17.14	23.24	0.211	30.00	-6.76
	16-QAM	3949.98	Н	140	134	6.10	1 / 121	16.68	22.78	0.190	30.00	-7.22
	π/2 BPSK	3725.01	Н	137	130	6.01	1 / 99	16.61	22.62	0.183	30.00	-7.38
	π/2 BPSK	3840.00	Н	140	137	6.02	1 / 99	18.49	24.51	0.283	30.00	-5.49
50 MHz	π/2 BPSK	3954.99	Н	140	134	6.13	1 / 33	18.99	25.12	0.325	30.00	-4.88
≥	QPSK	3725.01	Н	137	130	6.01	1 / 99	15.09	21.10	0.129	30.00	-8.90
50	QPSK	3840.00	Н	140	137	6.02	1 / 99	17.42	23.44	0.221	30.00	-6.56
	QPSK	3954.99	Н	140	134	6.13	1 / 33	17.12	23.25	0.211	30.00	-6.75
	16-QAM	3954.99	H	140	134	6.13	1 / 33	16.69	22.82	0.191	30.00	-7.18

Table 7-23. EIRP Data (NR Band n77 - C-Band - 50MHz-100MHz Bandwidths - SRS-1)

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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]
	π/2 BPSK	3720.00	Н	137	130	6.01	1 / 79	16.46	22.48	0.177	30.00	-7.52
	π/2 BPSK	3840.00	Н	140	137	6.02	1 / 26	18.59	24.61	0.289	30.00	-5.39
걒	π/2 BPSK	3960.00	Н	140	134	6.15	1 / 26	18.99	25.14	0.327	30.00	-4.86
40 MHz	QPSK	3720.00	Н	137	130	6.01	1 / 79	14.93	20.95	0.124	30.00	-9.05
40	QPSK	3840.00	Н	140	137	6.02	1 / 26	17.57	23.59	0.229	30.00	-6.41
	QPSK	3960.00	Н	140	134	6.15	1 / 26	17.15	23.30	0.214	30.00	-6.70
	16-QAM	3960.00	Н	140	134	6.15	1 / 26	16.72	22.87	0.194	30.00	-7.13
	π/2 BPSK	3715.02	Н	137	130	6.02	1 / 58	16.51	22.53	0.179	30.00	-7.47
	π/2 BPSK	3840.00	Н	140	137	6.02	1 / 19	18.59	24.61	0.289	30.00	-5.39
30 MHz	π/2 BPSK	3964.98	Н	140	134	6.18	1 / 58	18.94	25.12	0.325	30.00	-4.88
Σ	QPSK	3715.02	Н	137	130	6.02	1 / 58	14.98	21.00	0.126	30.00	-9.00
30	QPSK	3840.00	Н	140	137	6.02	1 / 19	17.56	23.58	0.228	30.00	-6.42
	QPSK	3964.98	Н	140	134	6.18	1 / 58	17.11	23.29	0.213	30.00	-6.71
	16-QAM	3964.98	Н	140	134	6.18	1 / 58	16.69	22.87	0.194	30.00	-7.13
	π/2 BPSK	3710.01	Н	137	130	6.03	1 / 37	16.56	22.59	0.182	30.00	-7.41
	π/2 BPSK	3840.00	Н	140	137	6.02	1 / 37	18.58	24.60	0.289	30.00	-5.40
20 MHz	π/2 BPSK	3969.99	Н	140	134	6.20	1 / 13	18.92	25.12	0.325	30.00	-4.88
	QPSK	3710.01	Н	137	130	6.03	1 / 37	15.06	21.09	0.128	30.00	-8.91
20	QPSK	3840.00	Н	140	137	6.02	1 / 37	17.52	23.54	0.226	30.00	-6.46
	QPSK	3969.99	Н	140	134	6.20	1 / 13	17.00	23.20	0.209	30.00	-6.80
	16-QAM	3969.99	Н	140	134	6.20	1 / 13	16.59	22.79	0.190	30.00	-7.21
	π/2 BPSK	3707.52	Н	137	130	6.03	1 / 28	16.38	22.41	0.174	30.00	-7.59
	π/2 BPSK	3840.00	Н	140	137	6.02	1/9	18.54	24.56	0.286	30.00	-5.44
15 MHz	π/2 BPSK	3972.48	Н	140	134	6.21	1 / 28	18.76	24.97	0.314	30.00	-5.03
Σ	QPSK	3707.52	Н	137	130	6.03	1 / 28	14.82	20.85	0.122	30.00	-9.15
15	QPSK	3840.00	Н	140	137	6.02	1/9	17.47	23.49	0.224	30.00	-6.51
	QPSK	3972.48	Н	140	134	6.21	1 / 28	17.07	23.28	0.213	30.00	-6.72
	16-QAM	3972.48	Н	140	134	6.21	1 / 28	16.63	22.84	0.192	30.00	-7.16
	π/2 BPSK	3705.00	Н	137	130	6.03	1 / 17	16.25	22.28	0.169	30.00	-7.72
	π/2 BPSK	3840.00	Н	140	137	6.02	1/6	18.50	24.52	0.283	30.00	-5.48
Ŧ	π/2 BPSK	3975.00	Н	140	134	6.22	1 / 12	18.90	25.12	0.325	30.00	-4.88
10 MHz	QPSK	3705.00	Н	137	130	6.03	1 / 17	14.73	20.77	0.119	30.00	-9.23
10	QPSK	3840.00	Н	140	137	6.02	1/6	17.44	23.46	0.222	30.00	-6.54
	QPSK	3975.00	Н	140	134	6.22	1 / 12	17.04	23.27	0.212	30.00	-6.73
	16-QAM	3975.00	Н	140	134	6.22	1 / 12	16.61	22.84	0.192	30.00	-7.16
	QPSK (CP-OFDM)	3930.0	Н	140	134	5.99	1/204	15.03	21.02	0.126	30.00	-8.98
100 MHz	BPSK (Half-Open)	3930.0	Н	146	40	5.99	1/136	15.56	21.55	0.143	30.00	-8.45
100 MHz	BPSK (Opposite Pol.)	3930.0	V	397	320	6.49	1/136	10.62	17.11	0.051	30.00	-12.89
	BPSK (WCP)	3930.0	Н	140	134	5.99	1/136	15.47	21.46	0.140	30.00	-8.54

Table 7-24. EIRP Data (NR Band n77 - C-Band - 10MHz-40MHz Bandwidths - SRS-1)

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]
	π/2 BPSK	3750.00	Н	105	238	5.98	1 / 68	7.20	13.18	0.021	30.00	-16.82
	π/2 BPSK	3840.00	Н	105	225	6.02	1 / 68	8.64	14.66	0.029	30.00	-15.34
불	π/2 BPSK	3930.00	Н	105	235	5.99	1 / 68	7.88	13.87	0.024	30.00	-16.13
Ž	QPSK	3750.00	Н	105	238	5.98	1 / 68	7.58	13.56	0.023	30.00	-16.44
100	QPSK	3840.00	Н	105	225	6.02	1 / 68	9.31	15.33	0.034	30.00	-14.67
	QPSK	3930.00	Н	105	235	5.99	1 / 68	7.98	13.97	0.025	30.00	-16.03
	QPSK (CP-OFDM)	3840.0	Н	105	225	6.02	1 / 136	7.78	13.80	0.024	30.00	-16.20

Table 7-25. EIRP Data (NR Band n77 - C-Band - SRS-2)

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]
	π/2 BPSK	3750.00	Н	104	317	5.98	1 / 68	9.37	15.35	0.034	30.00	-14.65
	π/2 BPSK	3840.00	Н	106	317	6.02	1 / 68	9.48	15.50	0.035	30.00	-14.50
불	π/2 BPSK	3930.00	Н	118	324	5.99	1 / 68	9.87	15.86	0.039	30.00	-14.14
N C	QPSK	3750.00	Н	104	317	5.98	1 / 68	9.15	15.13	0.033	30.00	-14.87
100	QPSK	3840.00	Н	106	317	6.02	1 / 68	10.01	16.03	0.040	30.00	-13.97
	QPSK	3930.00	Н	118	324	5.99	1 / 68	9.59	15.58	0.036	30.00	-14.42
	QPSK (CP-OFDM)	3840.0	Н	106	317	6.02	1 / 68	9.87	15.89	0.039	30.00	-14.11

Table 7-26. EIRP Data (NR Band n77 - C-Band - SRS-3)

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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]
	π/2 BPSK	3750.00	Н	109	50	5.98	1 / 68	5.11	11.09	0.013	30.00	-18.91
	π/2 BPSK	3840.00	Н	103	45	6.02	1 / 204	7.99	14.01	0.025	30.00	-15.99
보	π/2 BPSK	3930.00	Н	111	42	5.99	1 / 68	10.10	16.09	0.041	30.00	-13.91
N C	QPSK	3750.00	Н	109	50	5.98	1 / 204	4.69	10.67	0.012	30.00	-19.33
100	QPSK	3840.00	Н	103	45	6.02	1 / 204	8.23	14.25	0.027	30.00	-15.75
	QPSK	3930.00	Н	111	42	5.99	1 / 68	9.94	15.93	0.039	30.00	-14.07
	QPSK (CP-OFDM)	3840.0	Н	111	42	5.99	1 / 136	8.32	14.31	0.027	30.00	-15.69

Table 7-27. EIRP Data (NR Band n77 - C-Band - SRS-4)

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

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Test Setup

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

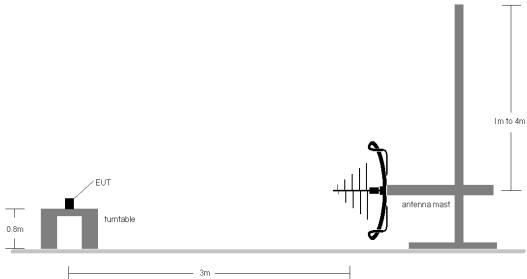


Figure 7-7. Test Instrument & Measurement Setup < 1GHz

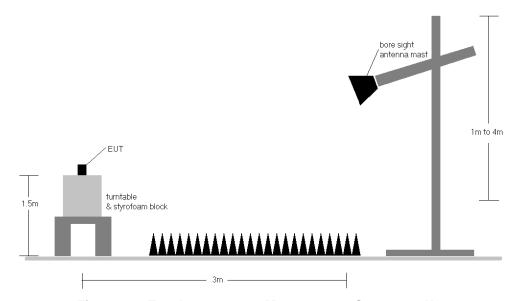


Figure 7-8. Test Instrument & Measurement Setup >1 GHz

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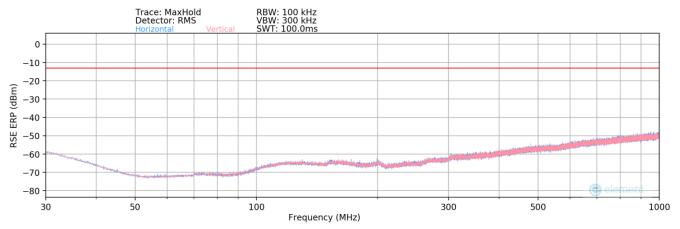
Test Notes

- 1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
 - b) E(dBµV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m)
 - d) EIRP (dBm) = $E(dB\mu V/m) + 20logD 104.8$; 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 regards the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations as shown in the tables in this section.
- 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 a sub-6GHz NR carrier as well as an LTE carrier (anchor). Spurious emissions from the NR carrier 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.
- 9) Spurious emissions with the device transmitting in EN-DC mode were investigated with the NR carrier set to transmit from the worst case antenna in standalone mode (SRS-1).
- 10) No significant emissions were found above 18 GHz.
- 11) For operation in the n77-DoD Band (3450-3550MHz), the maximum channel bandwidth (100 MHz) occupies the entirety of the band. Therefore, radiated spurious emission data for DoD Band operation is provided for only this single maximum-bandwidth channel. However, multiple RB configurations and offsets were investigated within this channel, and the worst case results are displayed.
- 12) Spurious emissions with a wireless charging pad were investigated with the EUT transmitting in the worst case standalone n77 sub-band and antenna combination (C-Band and SRS-1).

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NR Band n77 (PC2) - DoD Band - SRS-1



Plot 7-237. Radiated Spurious Plot - 30MHz-1GHz (NR Band n77 - DoD Band - SRS-1)

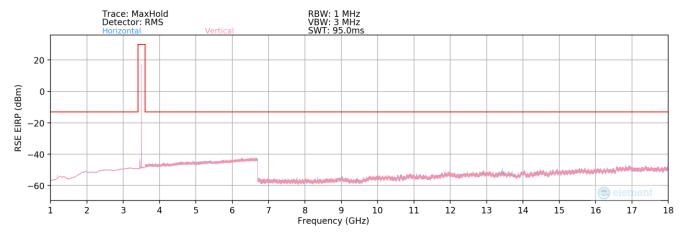
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1 / 137

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]
583.34	Н	-	-	-88.51	26.65	45.14	-52.27	-13.00	-39.27
700.00	Н	-	ı	-89.37	28.35	45.98	-51.43	-13.00	-38.43
875.00	Н	-	-	-85.99	30.42	51.43	-45.98	-13.00	-32.98

Table 7-28. Radiated Spurious Data - Below 1GHz (NR Band n77 - DoD Band - Mid Channel - SRS-1)

FCC ID: A3LSMF721U		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Page 161 of 202	
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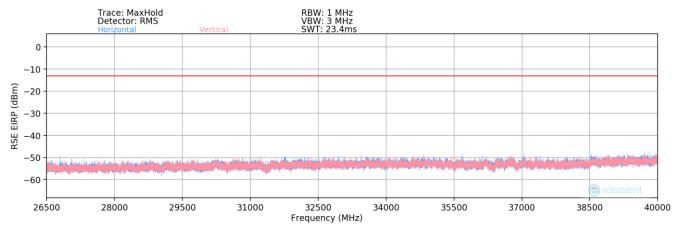




Plot 7-238. Radiated Spurious Plot - 1-18GHz (NR Band n77 - DoD Band - SRS-1)



Plot 7-239. Radiated Spurious Plot - 18-26.5GHz (NR Band n77 - DoD Band - SRS-1)



Plot 7-240. Radiated Spurious Plot - 26.5-40GHz (NR Band n77 - DoD Band - SRS-1)

FCC ID: A3LSMF721U		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Page 162 of 203	
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	raye 102 01 203	



Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1/137

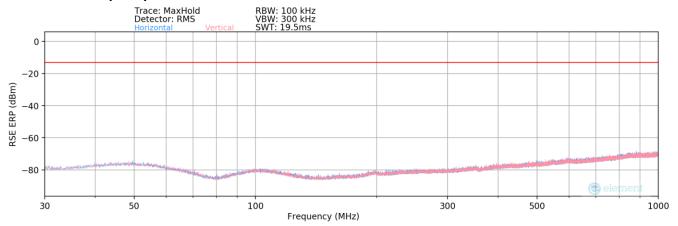
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7000.02	Н	-	-	-76.98	8.23	38.25	-57.01	-13.00	-44.01
10500.03	Н	-	-	-78.74	11.69	39.95	-55.31	-13.00	-42.31
14000.04	Н	1	1	-79.28	14.46	42.18	-53.08	-13.00	-40.08

Table 7-29. Radiated Spurious Data - Above 1GHz (NR Band n77 - DoD Band - Mid Channel - SRS-1)

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 163 of 203
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	Fage 103 01 203



NR Band n77 (PC2) - DoD Band - SRS-2



Plot 7-241. Radiated Spurious Plot - 30MHz-1GHz (NR Band n77 - DoD Band - SRS-2)

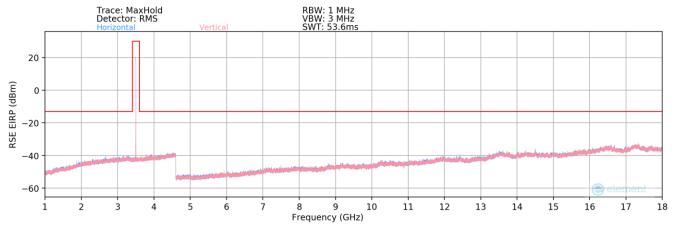
Bandwidth (MHz):	100
Bandwidth (Will2).	100
Frequency (MHz):	3500.01
RB / Offset:	1/136

	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]
Г	48.00	Н	-	-	-69.60	-13.99	23.41	-74.00	-13.00	-61.00

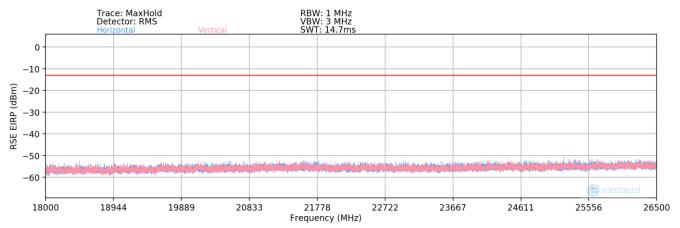
Table 7-30. Radiated Spurious Data - Below 1GHz (NR Band n77 - DoD Band - Mid Channel - SRS-2)

FCC ID: A3LSMF721U		Approved by: Technical Manager		
Test Report S/N:	Test Dates:	EUT Type:	Page 164 of 203	
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	raye 104 01 203	

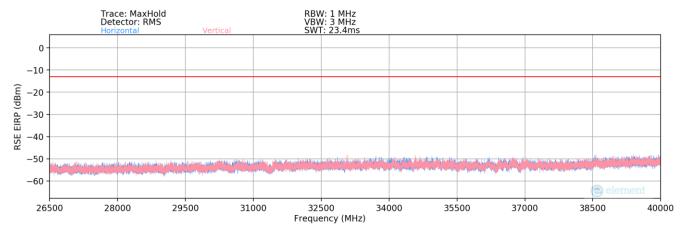




Plot 7-242. Radiated Spurious Plot - 1-18GHz (NR Band n77 - DoD Band - SRS-2)



Plot 7-243. Radiated Spurious Plot - 18-26.5GHz (NR Band n77 - DoD Band - SRS-2)



Plot 7-244. Radiated Spurious Plot - 26.5-40GHz (NR Band n77 - DoD Band - SRS-2)

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 165 of 203
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	rage 103 01 203



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

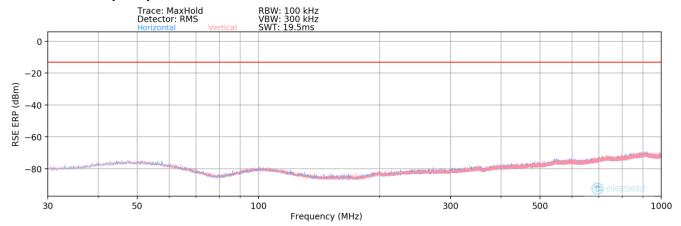
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7000.02	Н		-	-74.02	15.73	48.71	-46.55	-13.00	-33.55
10500.03	Н	ı	ı	-76.15	21.49	52.34	-42.92	-13.00	-29.92
14000.04	Н	-	-	-76.47	27.30	57.83	-37.43	-13.00	-24.43

Table 7-31. Radiated Spurious Data - Above 1GHz (NR Band n77 - DoD Band - Mid Channel - SRS-2)

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 166 of 203
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	Fage 100 01 203



NR Band n77 (PC2) - DoD Band - SRS-3



Plot 7-245. Radiated Spurious Plot - 30MHz-1GHz (NR Band n77 - DoD Band - SRS-3)

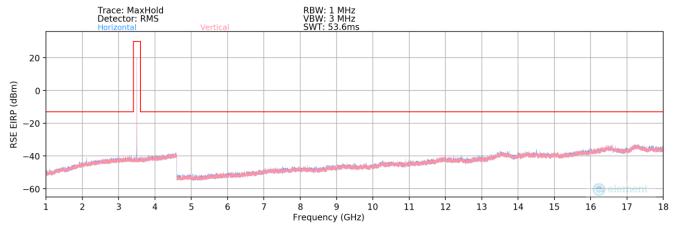
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1/136

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]
220.00	V	-	-	-71.49	-16.22	19.29	-78.12	-13.00	-65.12

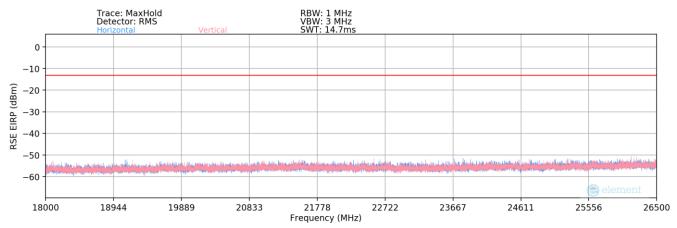
Table 7-32. Radiated Spurious Data - Below 1GHz (NR Band n77 - DoD Band - Mid Channel - SRS-3)

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 167 of 203
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	Fage 107 01 203

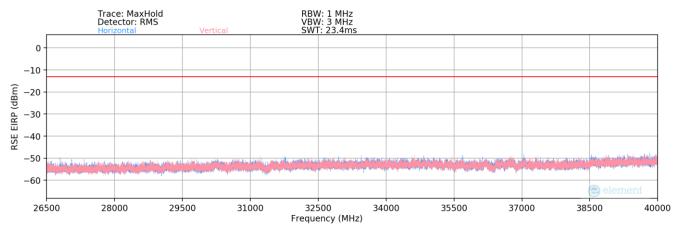




Plot 7-246. Radiated Spurious Plot - 1-18GHz (NR Band n77 - DoD Band - SRS-3)



Plot 7-247. Radiated Spurious Plot - 18-26.5GHz (NR Band n77 - DoD Band - SRS-3)



Plot 7-248. Radiated Spurious Plot - 26.5-40GHz (NR Band n77 - DoD Band - SRS-3)

FCC ID: A3LSMF721U		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 168 of 203
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	Faye 100 01 203



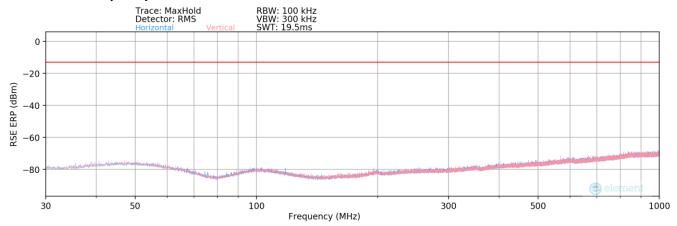
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1/136

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		-	-74.27	15.73	48.46	-46.80	-13.00	-33.80
10500.03	V		-	-76.36	21.49	52.13	-43.13	-13.00	-30.13
14000.04	٧	-	-	-76.28	27.30	58.02	-37.24	-13.00	-24.24

Table 7-33. Radiated Spurious Data - Above 1GHz (NR Band n77 - DoD Band - Mid Channel - SRS-3)

FCC ID: A3LSMF721U		PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 169 of 203
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	Fage 109 01 203





Plot 7-249. Radiated Spurious Plot - 30MHz-1GHz (NR Band n77 - DoD Band - SRS-4)

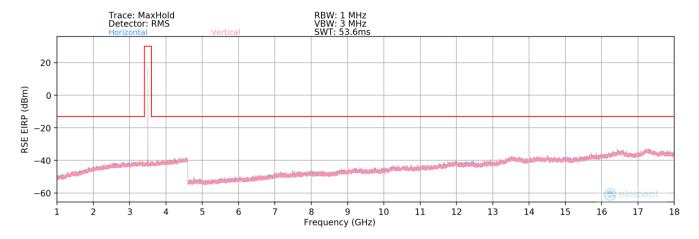
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1/136

Fr	requency [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]
	137.00	Н	-	-	-70.43	-20.00	16.57	-80.83	-13.00	-67.83

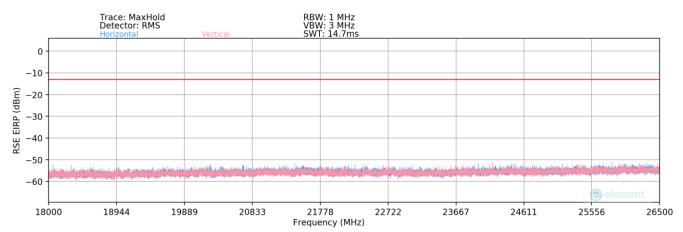
Table 7-34. Radiated Spurious Data - Below 1GHz (NR Band n77 - DoD Band - Mid Channel - SRS-4)

FCC ID: A3LSMF721U		PART 27 MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Page 170 of 203		
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	Fage 170 01 203		

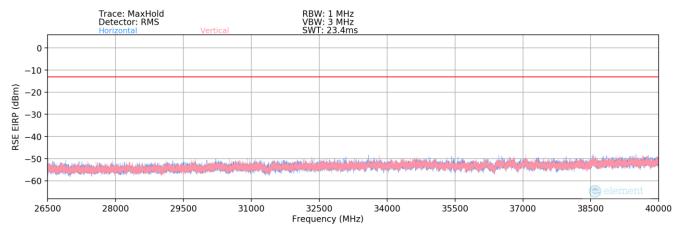




Plot 7-250. Radiated Spurious Plot - 1-18GHz (NR Band n77 - DoD Band - SRS-4)



Plot 7-251. Radiated Spurious Plot - 18-26.5GHz (NR Band n77 - DoD Band - SRS-4)



Plot 7-252. Radiated Spurious Plot - 26.5-40GHz (NR Band n77 - DoD Band - SRS-4)

FCC ID: A3LSMF721U		PART 27 MEASUREMENT REPORT			
Test Report S/N:	Test Dates:	EUT Type:	Page 171 of 203		
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	Fage 171 01 203		



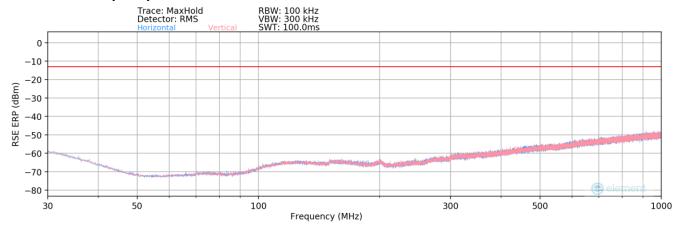
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1/136

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	Н	-	-	-73.89	15.79	48.90	-46.36	-13.00	-33.36
10500.03	Н	-	-	-76.20	21.71	52.51	-42.75	-13.00	-29.75
14000.04	Н	-	-	-76.55	27.35	57.80	-37.46	-13.00	-24.46
17500.05	Н	-	-	-76.97	31.61	61.64	-33.62	-13.00	-20.62

Table 7-35. Radiated Spurious Data - Above 1GHz (NR Band n77 - DoD Band - Mid Channel - SRS-4)

FCC ID: A3LSMF721U		PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
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Plot 7-253. Radiated Spurious Plot - 30MHz-1GHz (NR Band n77 - C-Band - SRS-1)

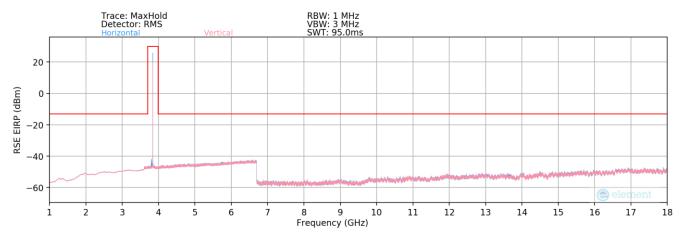
Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1 / 137

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]
640.00	Н	-	-	-87.63	27.65	47.02	-50.39	-13.00	-37.39
768.00	Н	-	-	-88.94	29.05	47.11	-50.29	-13.00	-37.29
960.00	Н	-	-	-86.21	31.05	51.84	-45.57	-13.00	-32.57

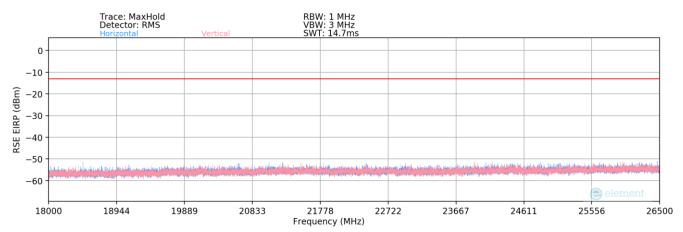
Table 7-36. Radiated Spurious Data - Below 1GHz (NR Band n77 - C-Band - Mid Channel - SRS-1)

FCC ID: A3LSMF721U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 173 of 203	
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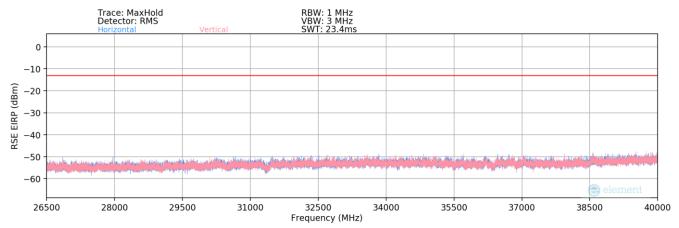




Plot 7-254. Radiated Spurious Plot - 1-18GHz (NR Band n77 - C-Band - SRS-1)



Plot 7-255. Radiated Spurious Plot - 18-26.5GHz (NR Band n77 - C-Band - SRS-1)



Plot 7-256. Radiated Spurious Plot - 26.5-40GHz (NR Band n77 - C-Band - SRS-1)

FCC ID: A3LSMF721U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager	
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Bandwidth (MHz):	100
Frequency (MHz):	3750.00
RB / Offset:	1 / 137

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	Н	279	246	-76.88	8.39	38.51	-56.75	-13.00	-43.75
11250.00	Н	-	-	-79.05	12.73	40.68	-54.58	-13.00	-41.58
15000.00	Н	-	-	-79.52	15.87	43.35	-51.91	-13.00	-38.91

Table 7-37 Radiated Spurious Data - Above 1GHz (NR Band n77 - C-Band - Low Channel - SRS-1)

Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1 / 137

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	Н	387	80	-73.63	7.60	40.97	-54.29	-13.00	-41.29
11520.00	Н	-	-	-79.04	13.33	41.29	-53.97	-13.00	-40.97
15360.00	Н	-	-	-79.67	16.42	43.75	-51.51	-13.00	-38.51

Table 7-38. Radiated Spurious Data - Above 1GHz (NR Band n77 - C-Band - Mid Channel - SRS-1)

Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1 / 137

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	Н	345	257	-76.72	8.39	38.67	-56.59	-13.00	-43.59
11790.00	Н	-	-	-79.22	13.64	41.42	-53.84	-13.00	-40.84
15720.00	Н	-	-	-79.77	17.52	44.75	-50.50	-13.00	-37.50

Table 7-39. Radiated Spurious Data - Above 1GHz (NR Band n77 - C-Band - High Channel - SRS-1)

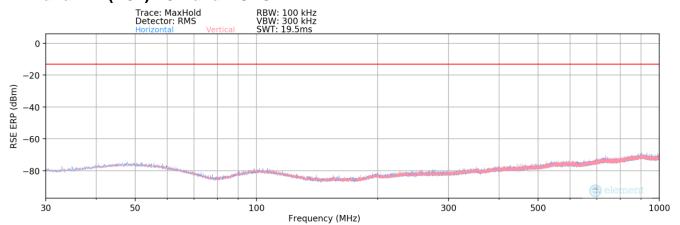
Case:	w/ Wireless Charging Pad
Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1 / 137

	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]
I	7680.00	Н	349	76	-74.33	7.60	40.27	-54.99	-13.00	-41.99
I	11520.00	Н		-	-79.54	13.33	40.79	-54.47	-13.00	-41.47
I	15360.00	Н	-	-	-79.25	16.42	44.17	-51.09	-13.00	-38.09

Table 7-40. Radiated Spurious Data with WCP (NR Band n77 - C-Band - SRS-1)

FCC ID: A3LSMF721U		PART 27 MEASUREMENT REPORT	
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Plot 7-257. Radiated Spurious Plot - 30MHz-1GHz (NR Band n77 - C-Band - SRS-2)

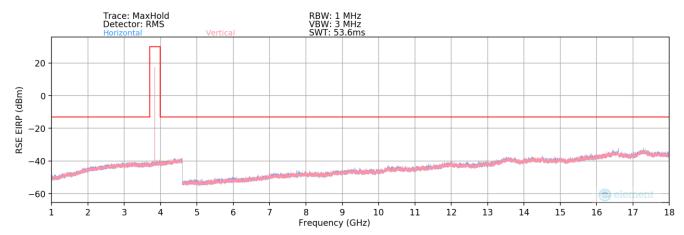
Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1/136

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]
726.00	Н	-	-	-72.12	-6.11	28.77	-68.64	-13.00	-55.64

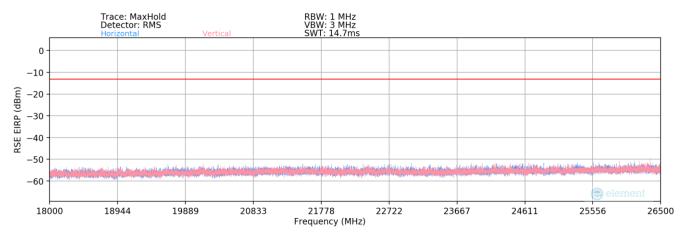
Table 7-41. Radiated Spurious Data - Below 1GHz (NR Band n77 - C-Band - Mid Channel - SRS-2)

FCC ID: A3LSMF721U		PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 176 of 203
1M2204080051-06.A3L	04/20/2022 - 06/23/2022	Portable Handset	Faye 170 01 203

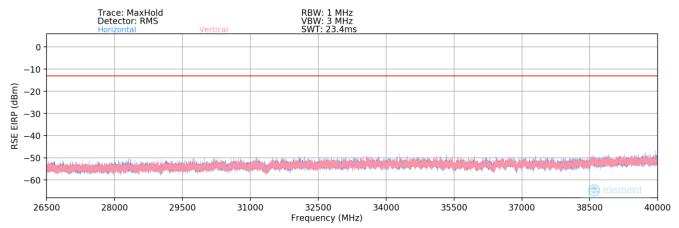




Plot 7-258. Radiated Spurious Plot - 1-18GHz (NR Band n77 - C-Band - SRS-2)



Plot 7-259. Radiated Spurious Plot - 18-26.5GHz (NR Band n77 - C-Band - SRS-2)



Plot 7-260. Radiated Spurious Plot - 26.5-40GHz (NR Band n77 - C-Band - SRS-2)

FCC ID: A3LSMF721U		PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
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Bandwidth (MHz):	100
Frequency (MHz):	3750.00
RB / Offset:	1/136

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	Н	363	313	-74.83	16.72	48.89	-46.37	-13.00	-33.37
11250.00	Н	-	-	-75.35	21.84	53.49	-41.77	-13.00	-28.77
15000.00	Н	-	-	-77.50	27.58	57.08	-38.17	-13.00	-25.17

Table 7-42 Radiated Spurious Data - Above 1GHz (NR Band n77 - C-Band - Low Channel - SRS-2)

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

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	Н	174	72	-74.56	16.78	49.22	-46.04	-13.00	-33.04
11520.00	Н	-	-	-75.80	23.14	54.34	-40.92	-13.00	-27.92
15360.00	Н	-	-	-77.68	28.02	57.34	-37.92	-13.00	-24.92

Table 7-43. Radiated Spurious Data - Above 1GHz (NR Band n77 - C-Band - Mid Channel - SRS-2)

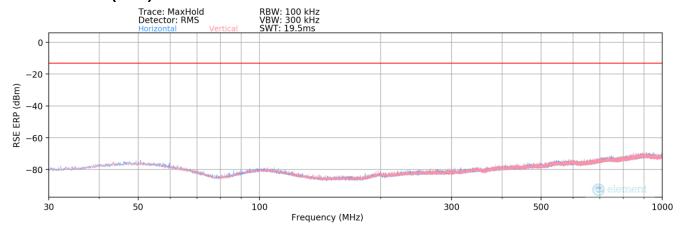
Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1/136

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	Н	-	-	-74.85	16.73	48.88	-46.38	-13.00	-33.38
11790.00	Н	-	-	-75.54	22.44	53.90	-41.36	-13.00	-28.36
15720.00	Н	-	-	-77.14	29.50	59.36	-35.89	-13.00	-22.89

Table 7-44. Radiated Spurious Data - Above 1GHz (NR Band n77 - C-Band - High Channel - SRS-2)

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Plot 7-261. Radiated Spurious Plot - 30MHz-1GHz (NR Band n77 - C-Band - SRS-3)

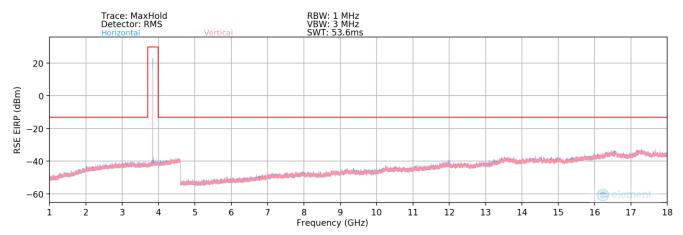
Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1/136

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]
390.00	V	-	-	-71.77	-11.50	23.73	-73.68	-13.00	-60.68

Table 7-45. Radiated Spurious Data - Below 1GHz (NR Band n77 - C-Band - Mid Channel - SRS-3)

FCC ID: A3LSMF721U		Approved by: Technical Manager		
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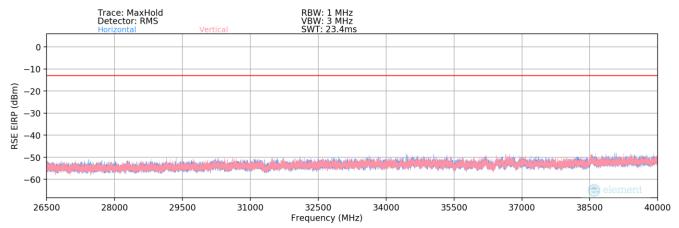




Plot 7-262. Radiated Spurious Plot - 1-18GHz (NR Band n77 - C-Band - SRS-3)



Plot 7-263. Radiated Spurious Plot - 18-26.5GHz (NR Band n77 - C-Band - SRS-3)



Plot 7-264. Radiated Spurious Plot - 26.5-40GHz (NR Band n77 - C-Band - SRS-3)

FCC ID: A3LSMF721U		Approved by: Technical Manager		
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Bandwidth (MHz):	100
Frequency (MHz):	3750.00
RB / Offset:	1/136

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	-	-	-74.79	16.54	48.75	-46.50	-13.00	-33.50
11250.00	V	-	-	-75.13	21.70	53.57	-41.69	-13.00	-28.69
15000.00	V	-	-	-76.84	27.57	57.73	-37.53	-13.00	-24.53

Table 7-46 Radiated Spurious Data - Above 1GHz (NR Band n77 - C-Band - Low Channel - SRS-3)

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

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	103	63	-74.06	16.62	49.56	-45.70	-13.00	-32.70
11520.00	V	-	-	-76.42	22.99	53.57	-41.69	-13.00	-28.69
15360.00	V	-	-	-77.63	28.11	57.48	-37.78	-13.00	-24.78

Table 7-47. Radiated Spurious Data - Above 1GHz (NR Band n77 - C-Band - Mid Channel - SRS-3)

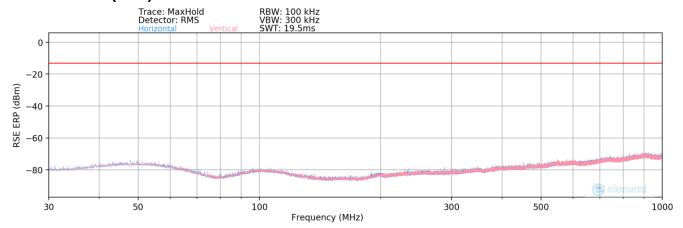
Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1/136

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	-	-	-74.12	16.65	49.53	-45.72	-13.00	-32.72
11790.00	V	-	-	-75.32	22.24	53.92	-41.33	-13.00	-28.33
15720.00	V	-	-	-77.02	29.47	59.45	-35.81	-13.00	-22.81

Table 7-48. Radiated Spurious Data - Above 1GHz (NR Band n77 - C-Band - High Channel - SRS-3)

FCC ID: A3LSMF721U		Approved by: Technical Manager		
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Plot 7-265. Radiated Spurious Plot - 30MHz-1GHz (NR Band n77 - C-Band - SRS-4)

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

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]
822.00	Н	-	-	-72.32	-4.77	29.91	-67.50	-13.00	-54.50

Table 7-49. Radiated Spurious Data - Below 1GHz (NR Band n77 - C-Band - Mid Channel - SRS-4)

FCC ID: A3LSMF721U		Approved by: Technical Manager		
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