

Test Setup

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

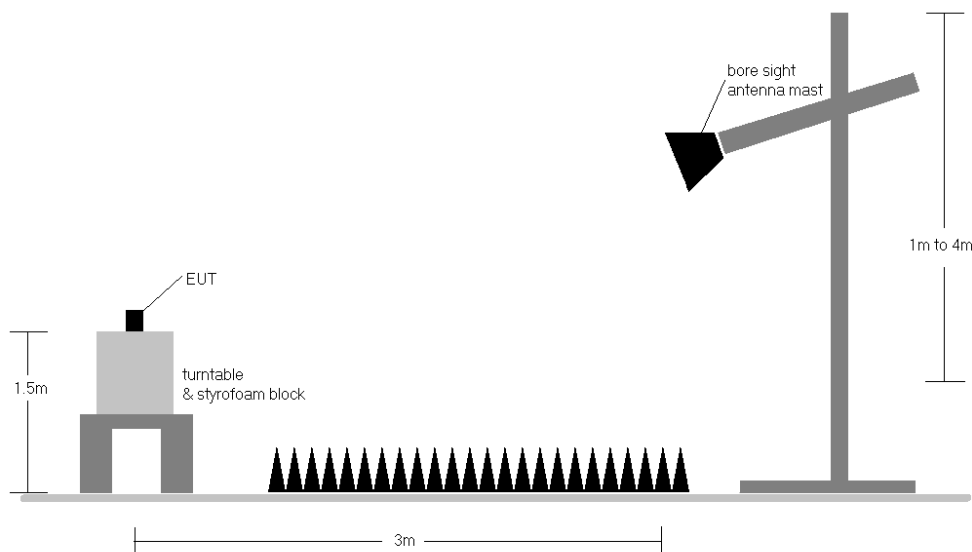


Figure 7-6. Radiated Test Setup >1GHz

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.

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-11.A3L	Test Dates: 01/06/2025 - 02/26/2025	EUT Type: Portable Handset	Page 123 of 152



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	π/2 BPSK	3500.01	V	189	28	9.71	1 / 1	16.44	26.15	0.412	30.00	-3.85
	QPSK	3500.01	V	189	28	9.71	1 / 1	16.37	26.08	0.406	30.00	-3.92
	16-QAM	3500.01	V	189	28	9.71	1 / 1	15.56	25.27	0.337	30.00	-4.73
90 MHz	π/2 BPSK	3495.00	V	189	28	9.71	1 / 122	16.50	26.21	0.418	30.00	-3.79
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 122	16.48	26.19	0.416	30.00	-3.81
	π/2 BPSK	3504.99	V	189	28	9.71	1 / 122	16.49	26.20	0.417	30.00	-3.80
	QPSK	3495.00	V	189	28	9.71	1 / 243	16.22	25.93	0.392	30.00	-4.07
	QPSK	3500.01	V	189	28	9.71	1 / 243	16.12	25.83	0.382	30.00	-4.17
	QPSK	3504.99	V	189	28	9.71	1 / 122	16.05	25.76	0.377	30.00	-4.24
	16-QAM	3500.01	V	189	28	9.71	1 / 243	15.38	25.09	0.323	30.00	-4.91
80 MHz	π/2 BPSK	3490.02	V	189	28	9.71	1 / 215	16.60	26.32	0.428	30.00	-3.68
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 108	16.56	26.27	0.423	30.00	-3.73
	π/2 BPSK	3510.00	V	189	28	9.71	1 / 108	16.50	26.21	0.418	30.00	-3.79
	QPSK	3490.02	V	189	28	9.71	1 / 215	16.18	25.89	0.388	30.00	-4.11
	QPSK	3500.01	V	189	28	9.71	1 / 1	16.20	25.91	0.390	30.00	-4.09
	QPSK	3510.00	V	189	28	9.71	1 / 108	16.08	25.79	0.379	30.00	-4.21
	16-QAM	3500.01	V	189	28	9.71	1 / 1	15.83	25.54	0.358	30.00	-4.46
70 MHz	π/2 BPSK	3485.01	V	189	28	9.72	1 / 94	16.68	26.39	0.436	30.00	-3.61
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 187	16.56	26.27	0.423	30.00	-3.73
	π/2 BPSK	3514.98	V	189	28	9.71	189 / 0	16.55	26.26	0.422	30.00	-3.74
	QPSK	3485.01	V	189	28	9.72	1 / 94	16.24	25.96	0.394	30.00	-4.04
	QPSK	3500.01	V	189	28	9.71	1 / 94	16.33	26.04	0.402	30.00	-3.96
	QPSK	3514.98	V	189	28	9.71	1 / 187	16.16	25.87	0.386	30.00	-4.13
	16-QAM	3485.01	V	189	28	9.72	1 / 94	15.41	25.13	0.326	30.00	-4.87
60 MHz	π/2 BPSK	3480.00	V	189	28	9.72	1 / 81	16.80	26.52	0.449	30.00	-3.48
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 81	16.82	26.53	0.450	30.00	-3.47
	π/2 BPSK	3519.99	V	189	28	9.70	1 / 81	16.79	26.50	0.446	30.00	-3.50
	QPSK	3480.00	V	189	28	9.72	1 / 81	16.43	26.14	0.412	30.00	-3.86
	QPSK	3500.01	V	189	28	9.71	1 / 81	16.41	26.12	0.409	30.00	-3.88
	QPSK	3519.99	V	189	28	9.70	1 / 81	16.48	26.19	0.415	30.00	-3.81
	16-QAM	3480.00	V	189	28	9.72	1 / 81	16.16	25.87	0.387	30.00	-4.13
50 MHz	π/2 BPSK	3475.02	V	189	28	9.72	1 / 1	16.75	26.47	0.443	30.00	-3.53
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 1	16.92	26.63	0.460	30.00	-3.37
	π/2 BPSK	3525.00	V	189	28	9.70	1 / 1	16.89	26.59	0.456	30.00	-3.41
	QPSK	3475.02	V	189	28	9.72	1 / 1	16.52	26.24	0.420	30.00	-3.76
	QPSK	3500.01	V	189	28	9.71	1 / 1	16.51	26.22	0.419	30.00	-3.78
	QPSK	3525.00	V	189	28	9.70	1 / 1	16.49	26.19	0.416	30.00	-3.81
	16-QAM	3500.01	V	189	28	9.71	1 / 1	15.50	25.21	0.332	30.00	-4.79
40 MHz	π/2 BPSK	3470.01	V	189	28	9.72	1 / 1	17.24	26.96	0.496	30.00	-3.04
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 104	17.18	26.89	0.489	30.00	-3.11
	π/2 BPSK	3529.98	V	189	28	9.70	1 / 104	17.16	26.86	0.485	30.00	-3.14
	QPSK	3470.01	V	189	28	9.72	1 / 104	16.85	26.57	0.454	30.00	-3.43
	QPSK	3500.01	V	189	28	9.71	1 / 104	16.77	26.48	0.445	30.00	-3.52
	QPSK	3529.98	V	189	28	9.70	1 / 104	16.76	26.46	0.443	30.00	-3.54
	16-QAM	3500.01	V	189	28	9.71	1 / 104	16.56	26.27	0.424	30.00	-3.73
30 MHz	π/2 BPSK	3465.00	V	189	28	9.72	1 / 1	17.15	26.87	0.487	30.00	-3.13
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 39	17.05	26.76	0.474	30.00	-3.24
	π/2 BPSK	3534.99	V	189	28	9.70	1 / 76	17.16	26.86	0.485	30.00	-3.14
	QPSK	3465.00	V	189	28	9.72	1 / 1	16.79	26.51	0.448	30.00	-3.49
	QPSK	3500.01	V	189	28	9.71	1 / 39	16.81	26.52	0.449	30.00	-3.48
	QPSK	3534.99	V	189	28	9.70	1 / 1	16.72	26.42	0.439	30.00	-3.58
	16-QAM	3465.00	V	189	28	9.72	1 / 1	16.13	25.85	0.385	30.00	-4.15
25 MHz	π/2 BPSK	3462.51	V	189	28	9.72	1 / 1	17.08	26.81	0.479	30.00	-3.19
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 63	16.84	26.55	0.452	30.00	-3.45
	π/2 BPSK	3537.48	V	189	28	9.70	1 / 1	17.01	26.71	0.468	30.00	-3.29
	QPSK	3462.51	V	189	28	9.72	1 / 63	16.61	26.33	0.430	30.00	-3.67
	QPSK	3500.01	V	189	28	9.71	1 / 1	16.57	26.28	0.425	30.00	-3.72
	QPSK	3537.48	V	189	28	9.70	1 / 1	16.60	26.30	0.426	30.00	-3.70
	16-QAM	3537.48	V	189	28	9.70	1 / 1	16.49	26.19	0.416	30.00	-3.81
20 MHz	π/2 BPSK	3460.02	V	189	28	9.72	1 / 1	17.13	26.85	0.485	30.00	-3.15
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 1	17.12	26.83	0.481	30.00	-3.17
	π/2 BPSK	3540.00	V	189	28	9.70	1 / 49	17.04	26.74	0.472	30.00	-3.26
	QPSK	3460.02	V	189	28	9.72	1 / 1	16.75	26.47	0.444	30.00	-3.53
	QPSK	3500.01	V	189	28	9.71	1 / 1	16.71	26.42	0.439	30.00	-3.58
	QPSK	3540.00	V	189	28	9.70	1 / 25	16.63	26.33	0.429	30.00	-3.67
	16-QAM	3540.00	V	189	28	9.70	1 / 49	16.30	26.00	0.398	30.00	-4.00
15 MHz	π/2 BPSK	3457.50	V	189	28	9.72	1 / 36	17.11	26.84	0.483	30.00	-3.16
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 1	17.07	26.78	0.476	30.00	-3.22
	π/2 BPSK	3542.49	V	189	28	9.70	1 / 36	17.17	26.87	0.486	30.00	-3.13
	QPSK	3457.50	V	189	28	9.72	1 / 1	16.69	26.41	0.438	30.00	-3.59
	QPSK	3500.01	V	189	28	9.71	1 / 19	16.73	26.44	0.440	30.00	-3.56
	QPSK	3542.49	V	189	28	9.70	1 / 19	16.79	26.49	0.446	30.00	-3.51
	16-QAM	3542.49	V	189	28	9.70	1 / 36	16.37	26.07	0.404	30.00	-3.93
10 MHz	π/2 BPSK	3455.01	V	189	28	9.72	1 / 22	17.03	26.75	0.474	30.00	-3.25
	π/2 BPSK	3500.01	V	189	28	9.71	1 / 1	16.79	26.50	0.447	30.00	-3.50
	π/2 BPSK	3544.98	V	189	28	9.70	1 / 22	16.76	26.46	0.443	30.00	-3.54
	QPSK	3455.01	V	189	28	9.72	1 / 12	16.47	26.19	0.416	30.00	-3.81
	QPSK	3500.01	V	189	28	9.71	1 / 22	16.50	26.21	0.418	30.00	-3.79
	QPSK	3544.98	V	189	28	9.70	1 / 22	16.64	26.34	0.431	30.00	-3.66
	16-QAM	3544.98	V	189	28	9.70	1 / 22	15.89	25.59	0.362	30.00	-4.41
100 MHz	QPSK (CP-OFDM)	3500.0	V	189	28	9.71	1 / 1	14.40	24.11	0.258	30.00	-5.89
	QPSK (Opposite Pol.)	3500.0	H	143	78	9.71	1 / 1	15.43	25.14	0.327	30.00	-4.86

Table 7-20. EIRP Data (NR Band n77 DoD – Main)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-11-A3L	Test Dates: 01/06/2025 - 02/26/2025	EUT Type: Portable Handset	Page 124 of 152

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	168	28	9.64	1 / 1	16.02	25.66	0.368	30.00	-4.34
	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 271	16.46	26.07	0.405	30.00	-3.93
	$\pi/2$ BPSK	3930.00	H	161	23	9.59	1 / 1	16.39	25.98	0.396	30.00	-4.02
	QPSK	3750.00	H	168	28	9.64	1 / 1	16.06	25.70	0.371	30.00	-4.30
	QPSK	3840.00	H	176	22	9.61	1 / 271	16.38	25.99	0.397	30.00	-4.01
	QPSK	3930.00	H	161	23	9.59	1 / 1	16.29	25.89	0.387	30.00	-4.12
90 MHz	16-QAM	3840.00	H	176	22	9.61	1 / 271	15.66	25.27	0.337	30.00	-4.73
	$\pi/2$ BPSK	3745.02	H	168	28	9.64	1 / 122	15.96	25.60	0.363	30.00	-4.40
	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 1	16.35	25.96	0.395	30.00	-4.04
	$\pi/2$ BPSK	3934.98	H	161	23	9.59	1 / 243	16.16	25.74	0.375	30.00	-4.26
	QPSK	3745.02	H	168	28	9.64	1 / 122	15.99	25.63	0.366	30.00	-4.37
	QPSK	3840.00	H	176	22	9.61	1 / 122	15.16	24.78	0.300	30.00	-5.22
80 MHz	QPSK	3934.98	H	161	23	9.59	1 / 243	16.26	25.85	0.384	30.00	-4.15
	16-QAM	3745.02	H	168	28	9.64	1 / 122	14.72	24.36	0.273	30.00	-5.64
	$\pi/2$ BPSK	3740.01	H	168	28	9.64	1 / 108	16.12	25.76	0.377	30.00	-4.24
	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 108	16.46	26.07	0.404	30.00	-3.93
	$\pi/2$ BPSK	3939.99	H	161	23	9.59	1 / 108	16.16	25.75	0.376	30.00	-4.25
	QPSK	3740.01	H	168	28	9.64	1 / 108	16.26	25.90	0.389	30.00	-4.10
70 MHz	QPSK	3840.00	H	176	22	9.61	1 / 108	16.40	26.01	0.399	30.00	-3.99
	QPSK	3939.99	H	161	23	9.59	1 / 108	16.44	26.02	0.400	30.00	-3.98
	16-QAM	3939.99	H	161	23	9.59	1 / 108	15.05	24.63	0.291	30.00	-5.37
	$\pi/2$ BPSK	3735.00	H	168	28	9.64	1 / 94	16.38	26.02	0.400	30.00	-3.98
	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 94	16.39	26.00	0.398	30.00	-4.00
	$\pi/2$ BPSK	3945.00	H	161	23	9.59	1 / 94	16.25	25.83	0.383	30.00	-4.17
60 MHz	QPSK	3735.00	H	168	28	9.64	1 / 1	16.25	25.89	0.388	30.00	-4.11
	QPSK	3840.00	H	176	22	9.61	1 / 94	16.36	25.97	0.396	30.00	-4.03
	QPSK	3945.00	H	161	23	9.59	1 / 94	16.51	26.09	0.407	30.00	-3.91
	16-QAM	3735.00	H	168	28	9.64	1 / 94	15.01	24.65	0.292	30.00	-5.35
	$\pi/2$ BPSK	3730.02	H	168	28	9.64	1 / 81	16.54	26.19	0.416	30.00	-3.81
	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 160	16.56	26.17	0.414	30.00	-3.83
50 MHz	$\pi/2$ BPSK	3949.98	H	161	23	9.58	1 / 81	16.39	25.97	0.396	30.00	-4.03
	QPSK	3730.02	H	168	28	9.64	1 / 81	16.56	26.21	0.418	30.00	-3.79
	QPSK	3840.00	H	176	22	9.61	1 / 160	16.57	26.18	0.415	30.00	-3.82
	QPSK	3949.98	H	161	23	9.58	1 / 1	16.77	26.35	0.432	30.00	-3.65
	16-QAM	3730.02	H	168	28	9.64	1 / 81	15.22	24.87	0.307	30.00	-5.13
	$\pi/2$ BPSK	3725.01	H	168	28	9.65	1 / 66	16.72	26.37	0.433	30.00	-3.63
40 MHz	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 131	16.75	26.37	0.433	30.00	-3.63
	$\pi/2$ BPSK	3954.99	H	161	23	9.58	1 / 1	16.78	26.36	0.432	30.00	-3.64
	QPSK	3725.01	H	168	28	9.65	1 / 66	16.72	26.37	0.433	30.00	-3.63
	QPSK	3840.00	H	176	22	9.61	1 / 131	16.62	26.23	0.420	30.00	-3.77
	QPSK	3954.99	H	161	23	9.58	1 / 1	17.01	26.60	0.457	30.00	-3.40
	16-QAM	3954.99	H	161	23	9.58	1 / 1	15.40	24.99	0.315	30.00	-5.01
30 MHz	$\pi/2$ BPSK	3720.00	H	168	28	9.65	1 / 104	16.89	26.53	0.450	30.00	-3.47
	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 104	17.05	26.67	0.464	30.00	-3.33
	$\pi/2$ BPSK	3960.00	H	161	23	9.58	1 / 53	17.03	26.61	0.458	30.00	-3.39
	QPSK	3720.00	H	168	28	9.65	1 / 53	16.90	26.54	0.451	30.00	-3.46
	QPSK	3840.00	H	176	22	9.61	1 / 104	17.02	26.64	0.461	30.00	-3.36
	QPSK	3960.00	H	161	23	9.58	1 / 53	17.31	26.89	0.489	30.00	-3.11
25 MHz	16-QAM	3960.00	H	161	23	9.58	1 / 53	15.93	25.51	0.266	30.00	-4.49
	$\pi/2$ BPSK	3715.02	H	168	28	9.65	1 / 76	16.72	26.36	0.433	30.00	-3.64
	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 39	16.92	26.53	0.450	30.00	-3.47
	$\pi/2$ BPSK	3964.98	H	161	23	9.58	1 / 1	17.12	26.70	0.468	30.00	-3.30
	QPSK	3715.02	H	168	28	9.65	1 / 76	16.92	26.57	0.454	30.00	-3.43
	QPSK	3840.00	H	176	22	9.61	1 / 76	16.95	26.56	0.453	30.00	-3.44
20 MHz	QPSK	3964.98	H	161	23	9.58	1 / 1	17.17	26.75	0.473	30.00	-3.25
	16-QAM	3964.98	H	161	23	9.58	1 / 1	16.43	26.01	0.399	30.00	-3.99
	$\pi/2$ BPSK	3712.50	H	189	28	9.65	1 / 104	16.96	26.61	0.458	30.00	-3.39
	$\pi/2$ BPSK	3840.00	H	189	28	9.61	1 / 104	17.56	27.18	0.522	30.00	-2.62
	$\pi/2$ BPSK	3967.50	H	189	28	9.58	1 / 1	17.28	26.85	0.485	30.00	-3.15
	QPSK	3712.50	H	189	28	9.65	1 / 104	17.10	26.75	0.473	30.00	-3.25
15 MHz	QPSK	3840.00	H	189	28	9.61	1 / 104	17.40	27.01	0.503	30.00	-2.99
	QPSK	3967.50	H	189	28	9.58	1 / 1	17.23	26.81	0.480	30.00	-3.19
	16-QAM	3967.50	H	189	28	9.58	1 / 1	16.63	26.21	0.417	30.00	-3.79
	$\pi/2$ BPSK	3710.01	H	168	28	9.65	1 / 1	16.60	26.25	0.422	30.00	-3.75
	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 49	16.66	26.27	0.424	30.00	-3.73
	$\pi/2$ BPSK	3969.99	H	161	23	9.58	1 / 1	17.25	26.83	0.481	30.00	-3.17
10 MHz	QPSK	3710.01	H	168	28	9.65	1 / 1	16.59	26.24	0.421	30.00	-3.76
	QPSK	3840.00	H	176	22	9.61	1 / 49	16.81	26.42	0.439	30.00	-3.58
	QPSK	3969.99	H	161	23	9.58	1 / 1	17.46	27.04	0.506	30.00	-2.96
	16-QAM	3969.99	H	161	23	9.58	1 / 1	16.55	26.13	0.410	30.00	-3.87
	$\pi/2$ BPSK	3707.52	H	168	28	9.65	1 / 1	16.64	26.29	0.426	30.00	-3.71
	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 36	16.70	26.31	0.428	30.00	-3.69
5 MHz	$\pi/2$ BPSK	3972.48	H	161	23	9.58	1 / 1	17.23	26.81	0.479	30.00	-3.19
	QPSK	3707.52	H	168	28	9.65	1 / 36	16.70	26.35	0.432	30.00	-3.65
	QPSK	3840.00	H	176	22	9.61	1 / 36	16.50	26.12	0.409	30.00	-3.88
	QPSK	3972.48	H	161	23	9.58	1 / 1	17.46	27.04	0.506	30.00	-2.96
	16-QAM	3972.48	H	161	23	9.58	1 / 1	16.14	25.72	0.373	30.00	-4.28
	$\pi/2$ BPSK	3705.00	H	168	28	9.65	1 / 12	16.64	26.29	0.426	30.00	-3.71
100 MHz	$\pi/2$ BPSK	3840.00	H	176	22	9.61	1 / 22	16.18	25.80	0.380	30.00	-4.20
	$\pi/2$ BPSK	3975.00	H	161	23	9.58	1 / 1	17.09	26.66	0.464	30.00	-3.34
	QPSK	3705.00	H	168	28	9.65	1 / 12	16.69	26.34	0.431	30.00	-3.66
	QPSK	3840.00	H	176	22	9.61	1 / 22	16.20	25.81	0.381	30.00	-4.19
	QPSK	3975.00	H	161	23	9.58	1 / 1	17.23	26.80	0.479	30.00	-3.20
	16-QAM	3975.00	H	161	23	9.58	1 / 22	16.18	25.74	0.375	30.00	-4.25
100 MHz	QPSK (CP-OFDM)	3840.00	H	176	22	9.59	1 / 1	14.66	24.25	0.266	30.00	-5.75
	QPSK (Opposite Pol.)	3840.00	V	163	71	9.59	1 / 1	15.98	25.57	0.361	30.00	-4.43

Table 7-21. EIRP Data (NR Band n77 C-band – Main)

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	V	256	13	9.71	1 / 204	14.81	24.52	0.283	30.00	-5.48
	QPSK	3500.01	V	256	13	9.71	1 / 204	14.77	24.48	0.281	30.00	-5.52
	16-QAM	3500.01	V	256	13	9.71	1 / 204	13.84	23.55	0.226	30.00	-6.45
100 MHz	QPSK (CP-OFDM)	3500.0	V	140	42	9.71	1 / 204	13.48	23.19	0.208	30.00	-6.81
	QPSK (Opposite Pol.)	3500.0	H	140	41	9.71	1 / 204	12.83	22.54	0.179	30.00	-7.46

Table 7-22. EIRP Data (NR Band n77 DoD – 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]
100 MHz	$\pi/2$ BPSK	3750.00	H	117	210	9.64	1 / 204	13.00	22.64	0.184	30.00	-7.36
	$\pi/2$ BPSK	3840.00	H	108	211	9.61	1 / 204	14.63	24.24	0.266	30.00	-5.76
	$\pi/2$ BPSK	3930.00	H	121	212	9.59	1 / 68	14.60	24.19	0.262	30.00	-5.81
	QPSK	3750.00	H	117	210	9.64	1 / 204	12.53	22.17	0.165	30.00	-7.83
	QPSK	3840.00	H	108	211	9.61	1 / 204	14.36	23.97	0.250	30.00	-6.03
	QPSK	3930.00	H	121	212	9.59	1 / 68	14.44	24.03	0.253	30.00	-5.97
100 MHz	16-QAM	3930.00	H	121	212	9.59	1 / 68	13.97	23.56	0.227	30.00	-6.44
	QPSK (CP-OFDM)	3840.0	H	108	211	9.61	1 / 204	13.16	22.77	0.189	30.00	-7.23
	QPSK (Opposite Pol.)	3840.0	V	325	286	9.61	1 / 204	13.96	23.57	0.228	30.00	-6.43

Table 7-23. EIRP Data (NR Band n77 C-band – 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]
100 MHz	$\pi/2$ BPSK	3500.01	H	119	123	9.71	1 / 68	13.04	22.75	0.188	30.00	-7.25
	QPSK	3500.01	H	119	123	9.71	1 / 68	12.93	22.64	0.184	30.00	-7.36
	16-QAM	3500.01	H	119	123	9.71	1 / 68	12.29	22.00	0.159	30.00	-8.00
100 MHz	QPSK (CP-OFDM)	3500.0	H	119	123	9.71	1 / 68	12.01	21.72	0.149	30.00	-8.28
	QPSK (Opposite Pol.)	3500.0	V	102	341	9.71	1 / 68	12.51	22.22	0.167	30.00	-7.78

Table 7-24. EIRP Data (NR Band n77 DoD – 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]
100 MHz	$\pi/2$ BPSK	3750.00	H	101	323	9.64	1 / 68	12.59	22.23	0.167	30.00	-7.77
	$\pi/2$ BPSK	3840.00	H	115	317	9.61	1 / 204	12.41	22.02	0.159	30.00	-7.98
	$\pi/2$ BPSK	3930.00	H	253	344	9.59	1 / 204	10.01	19.60	0.091	30.00	-10.40
	QPSK	3750.00	H	101	323	9.64	1 / 68	12.57	22.21	0.166	30.00	-7.79
	QPSK	3840.00	H	115	317	9.61	1 / 204	12.32	21.93	0.156	30.00	-8.07
	QPSK	3930.00	H	253	344	9.59	1 / 204	10.00	19.59	0.091	30.00	-10.41
	16-QAM	3750.00	H	101	323	9.64	1 / 68	11.87	21.51	0.142	30.00	-8.49
100 MHz	QPSK (CP-OFDM)	3750.0	H	101	323	9.64	1 / 68	9.54	19.18	0.083	30.00	-10.82
	QPSK (Opposite Pol.)	3750.0	V	100	342	9.64	1 / 68	12.03	21.67	0.147	30.00	-8.33

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]
100 MHz	$\pi/2$ BPSK	3500.01	H	101	318	9.71	1 / 204	6.34	16.05	0.040	30.00	-13.95
	QPSK	3500.01	H	101	318	9.71	1 / 204	6.20	15.91	0.039	30.00	-14.09
	16-QAM	3500.01	H	101	318	9.71	1 / 204	5.51	15.22	0.033	30.00	-14.78
100 MHz	QPSK (CP-OFDM)	3500.0	H	101	318	9.71	1 / 204	4.67	14.38	0.027	30.00	-15.62
	QPSK (Opposite Pol.)	3500.0	V	193	359	9.71	1 / 68	3.55	13.26	0.021	30.00	-16.74

Table 7-26. EIRP Data (NR Band n77 DoD – 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]
100 MHz	$\pi/2$ BPSK	3750.00	H	100	313	9.64	1 / 68	8.52	18.16	0.065	30.00	-11.84
	$\pi/2$ BPSK	3840.00	H	100	311	9.61	1 / 68	8.84	18.45	0.070	30.00	-11.55
	$\pi/2$ BPSK	3930.00	H	100	309	9.59	1 / 68	7.70	17.29	0.054	30.00	-12.71
	QPSK	3750.00	H	100	313	9.64	1 / 68	8.47	18.11	0.065	30.00	-11.89
	QPSK	3840.00	H	100	311	9.61	1 / 68	8.83	18.44	0.070	30.00	-11.56
	QPSK	3930.00	H	100	309	9.59	1 / 68	7.68	17.27	0.053	30.00	-12.73
	16-QAM	3840.00	H	100	311	9.61	1 / 68	7.97	17.58	0.057	30.00	-12.42
100 MHz	QPSK (CP-OFDM)	3840.0	H	100	311	9.61	1 / 68	7.14	16.75	0.047	30.00	-13.25
	QPSK (Opposite Pol.)	3840.0	V	108	61	9.61	1 / 68	8.08	17.69	0.059	30.00	-12.31

Table 7-27. EIRP Data (NR Band n77 C-band – SRS 3)

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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.

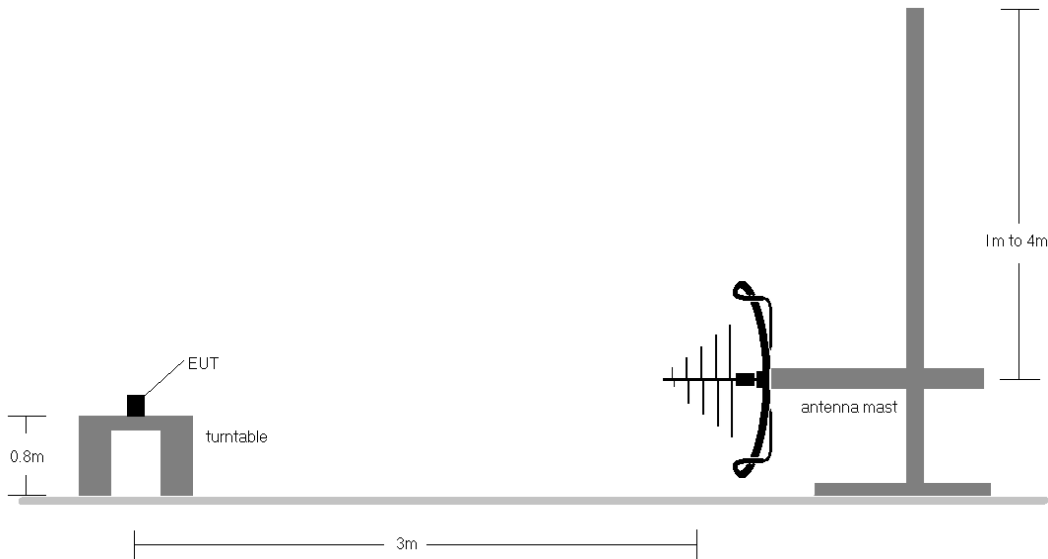


Figure 7-7. Test Instrument & Measurement Setup < 1GHz

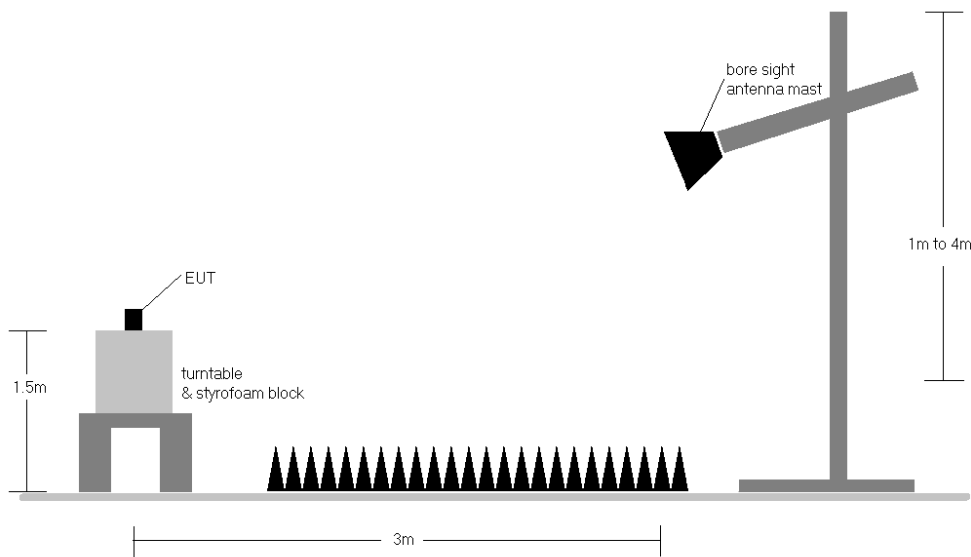


Figure 7-8. Test Instrument & Measurement Setup >1 GHz

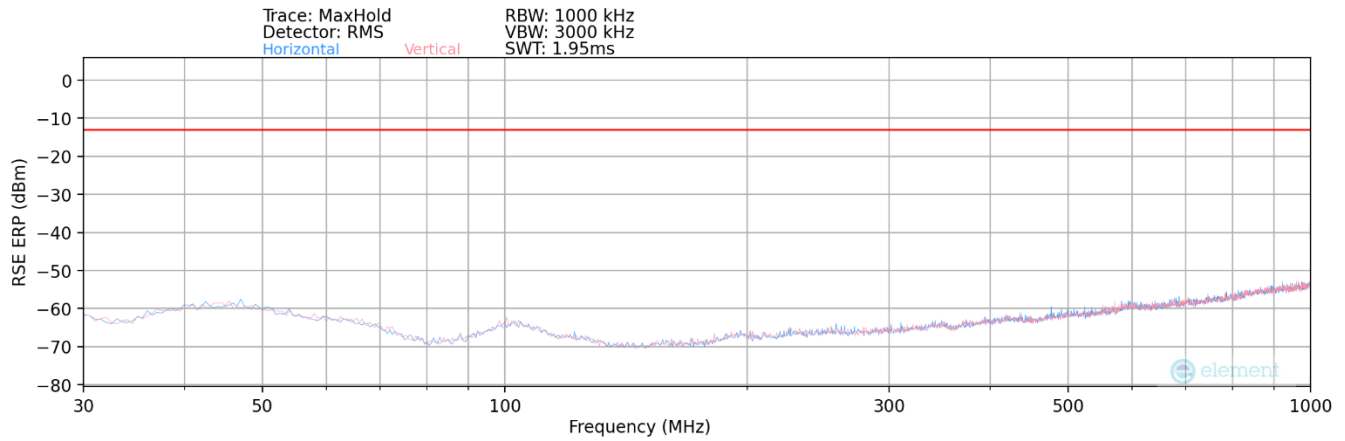
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Test Notes

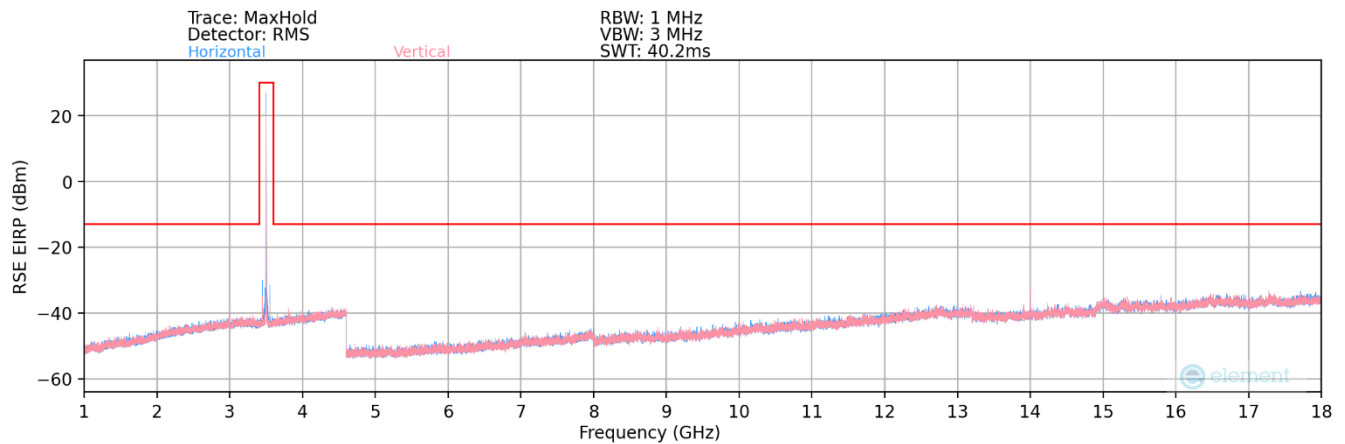
- 1) Field strengths are calculated using the Measurement quantity conversions in ANSI C63.26-2015 Section 5.2.7:
 - b) $E(\text{dB}\mu\text{V/m}) = \text{Measured amplitude level (dBm)} + 107 + \text{Cable Loss (dB)} + \text{Antenna Factor (dB/m)}$
 - d) $\text{EIRP (dBm)} = E(\text{dB}\mu\text{V/m}) + 20\log D - 104.8$; 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 emission in EN-DC Operating mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor) has been checked and was found to not to be the worst case. Spurious emissions from the NR carrier device are subject to the rules under which the NR carrier operates. Spurious emissions caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.

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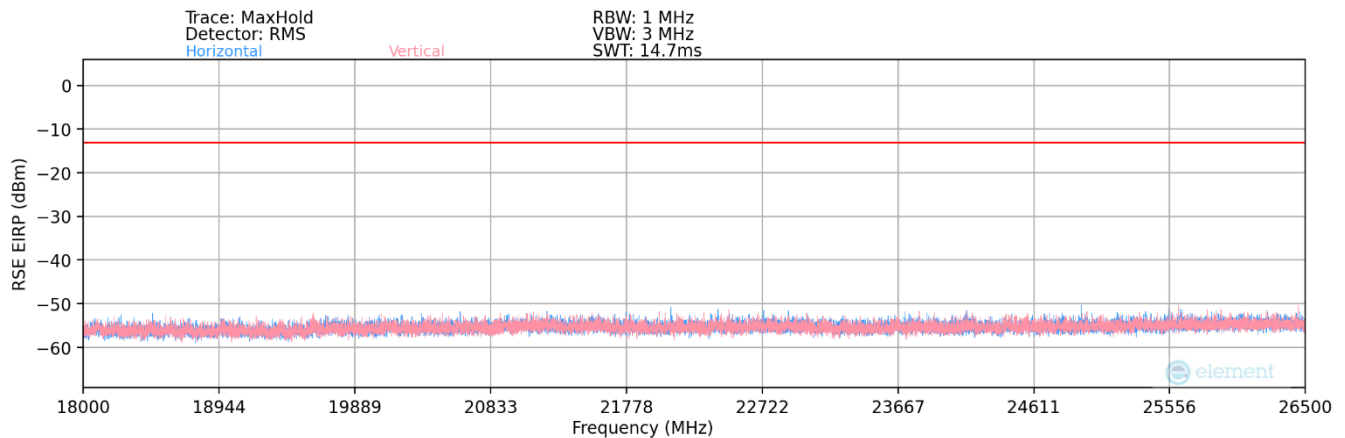
NR Band n77 DoD – Main



Plot 7-163. Radiated Spurious Plot (NR Band n77 – Main)

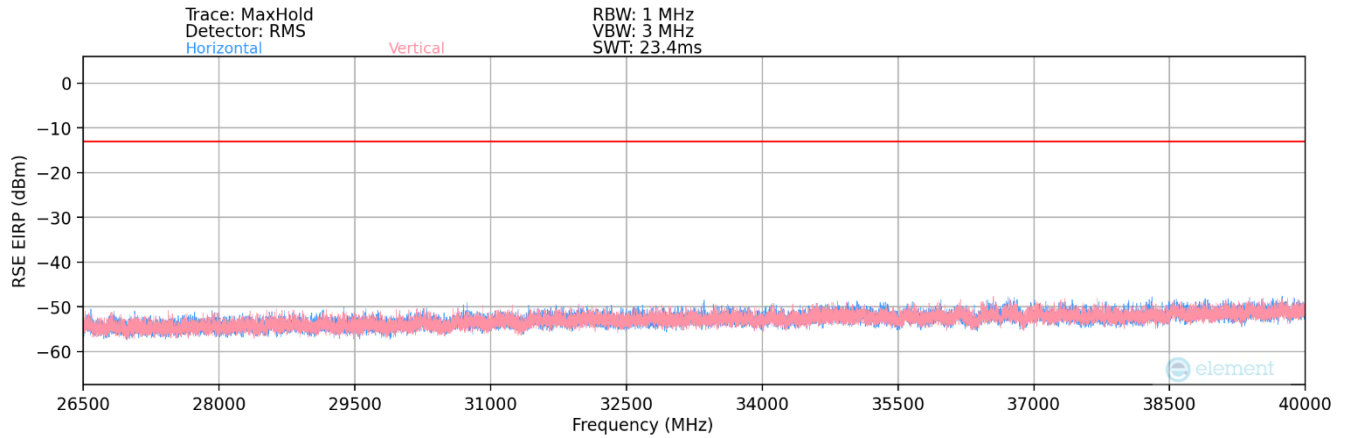


Plot 7-164. Radiated Spurious Plot (NR Band n77 – Main)



Plot 7-165. Radiated Spurious Plot (NR Band n77 – Main)

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Plot 7-166. Radiated Spurious Plot (NR Band n77 – Main)

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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
400.00	V	-	-	-74.89	-8.47	23.64	-73.77	-13.00	-60.77

Table 7-28. Radiated Spurious Data (NR Band n77 – Mid Channel – Main)

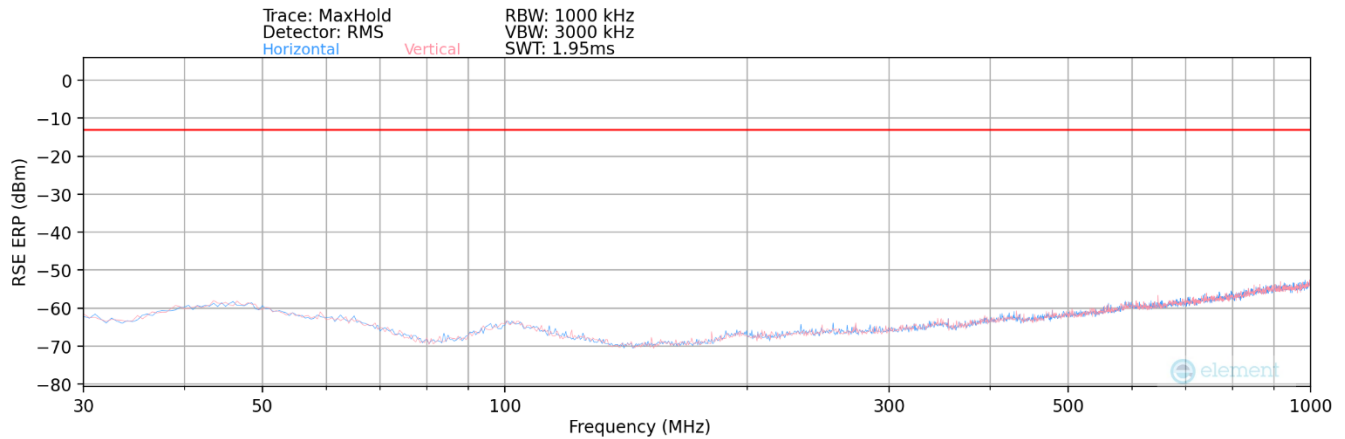
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1 / 136
Mode:	Stand Alone

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	-	-	-81.43	14.91	40.48	-54.78	-13.00	-41.78
10500.03	V	-	-	-83.38	20.87	44.49	-50.77	-13.00	-37.77
14000.04	V	212	335	-80.09	26.31	53.22	-42.04	-13.00	-29.04
17500.05	V	-	-	-84.38	30.12	52.74	-42.52	-13.00	-29.52
21000.06	V	-	-	-62.73	3.25	47.51	-57.29	-13.00	-44.29
24500.07	V	-	-	-62.62	3.71	48.09	-56.71	-13.00	-43.71

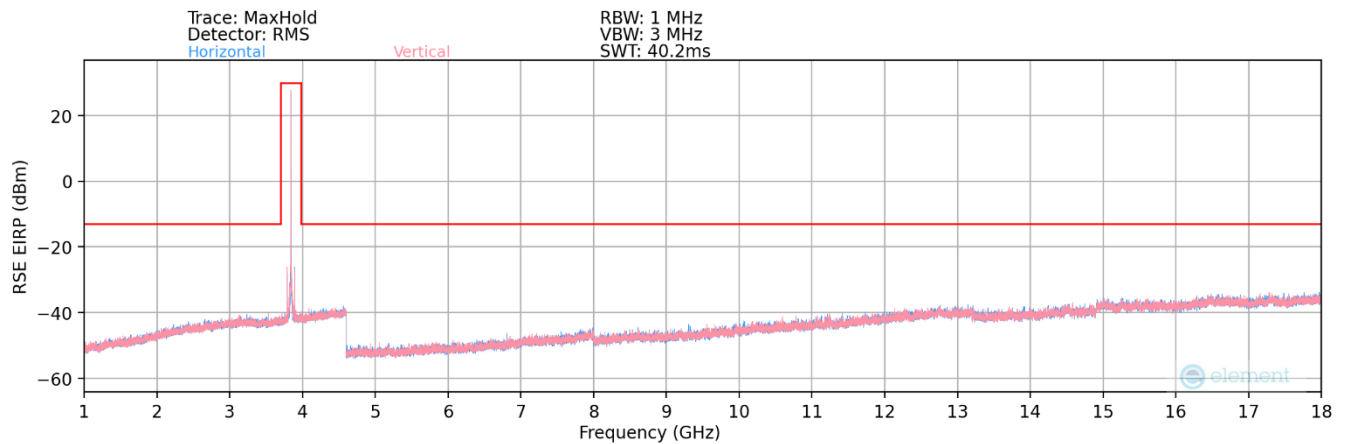
Table 7-29. Radiated Spurious Data (NR Band n77 – Mid Channel – Main)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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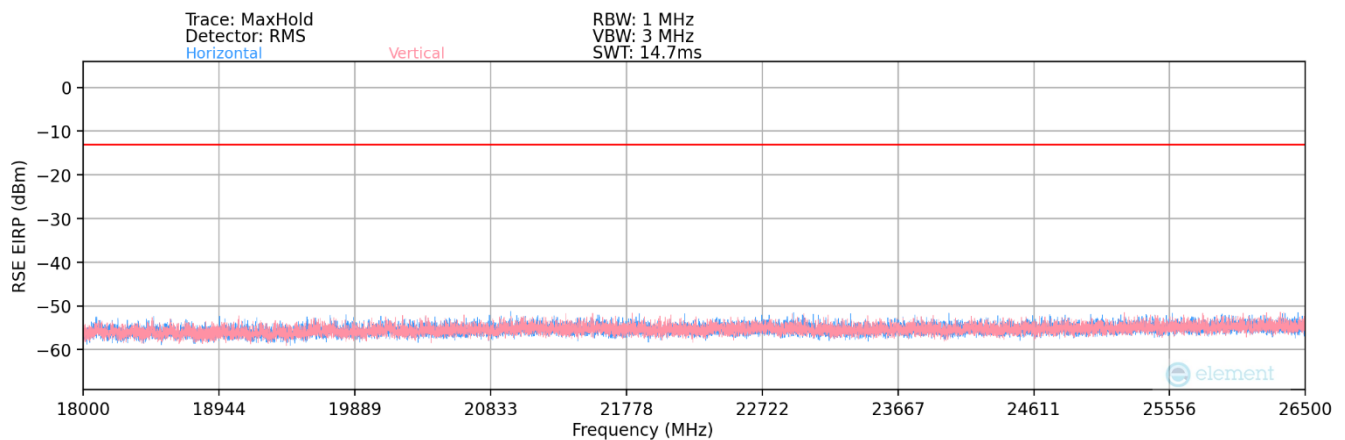
NR Band n77 C-band – Main



Plot 7-167. Radiated Spurious Plot (NR Band n77 – Main)

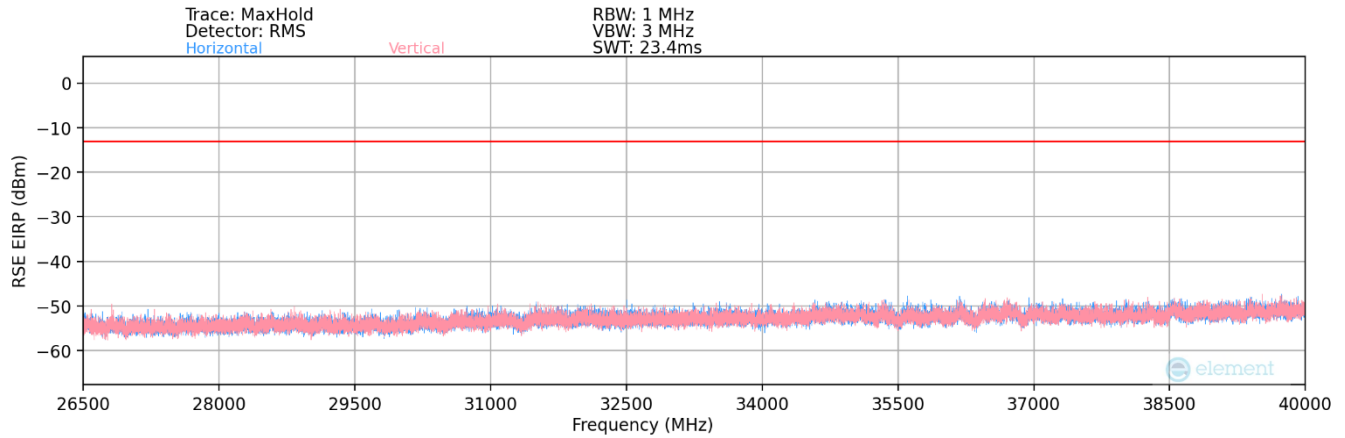


Plot 7-168. Radiated Spurious Plot (NR Band n77 – Main)



Plot 7-169. Radiated Spurious Plot (NR Band n77 – Main)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-170. Radiated Spurious Plot (NR Band n77 – Main)

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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
400.00	V	-	-	-75.77	-8.47	22.76	-74.65	-13.00	-61.65

Table 7-30. Radiated Spurious Data (NR Band n77 – Mid Channel – Main)

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	-	-	-82.24	16.29	41.05	-54.20	-13.00	-41.20
11250.00	V	-	-	-83.01	21.79	45.78	-49.48	-13.00	-36.48
15000.00	V	-	-	-82.00	27.28	52.28	-42.98	-13.00	-29.98

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

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	-	-	-81.46	16.35	41.89	-53.37	-13.00	-40.37
11520.00	V	-	-	-83.10	22.11	46.01	-49.24	-13.00	-36.24
15360.00	V	-	-	-82.98	27.71	51.73	-43.52	-13.00	-30.52

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

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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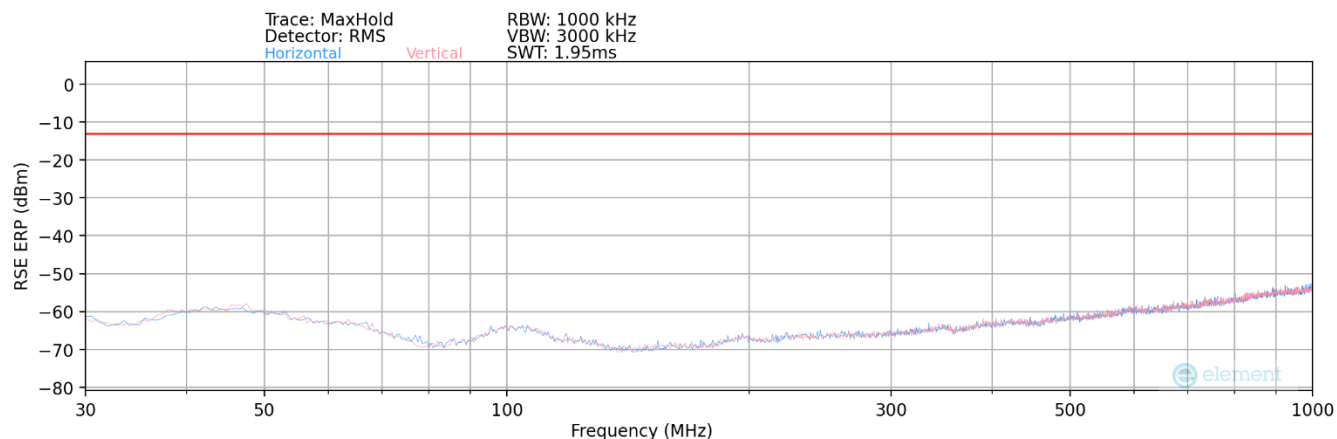
Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1/136
Mode:	Stand Alone

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	-	-	-81.74	16.07	41.33	-53.93	-13.00	-40.93
11790.00	V	-	-	-82.92	22.05	46.13	-49.12	-13.00	-36.12
15720.00	V	-	-	-84.14	28.46	51.32	-43.94	-13.00	-30.94

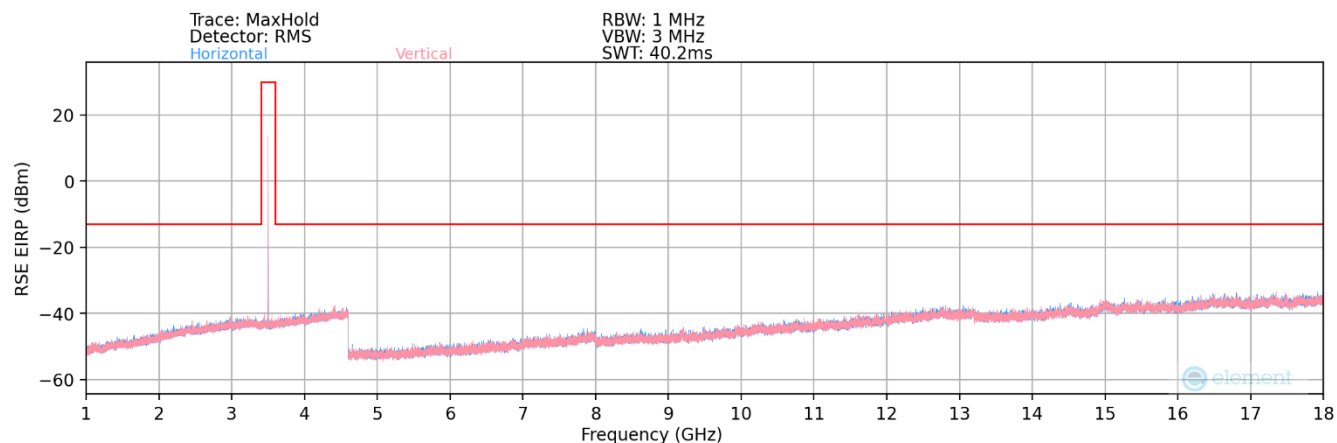
Table 7-33. Radiated Spurious Data (NR Band n77 – High Channel – Main)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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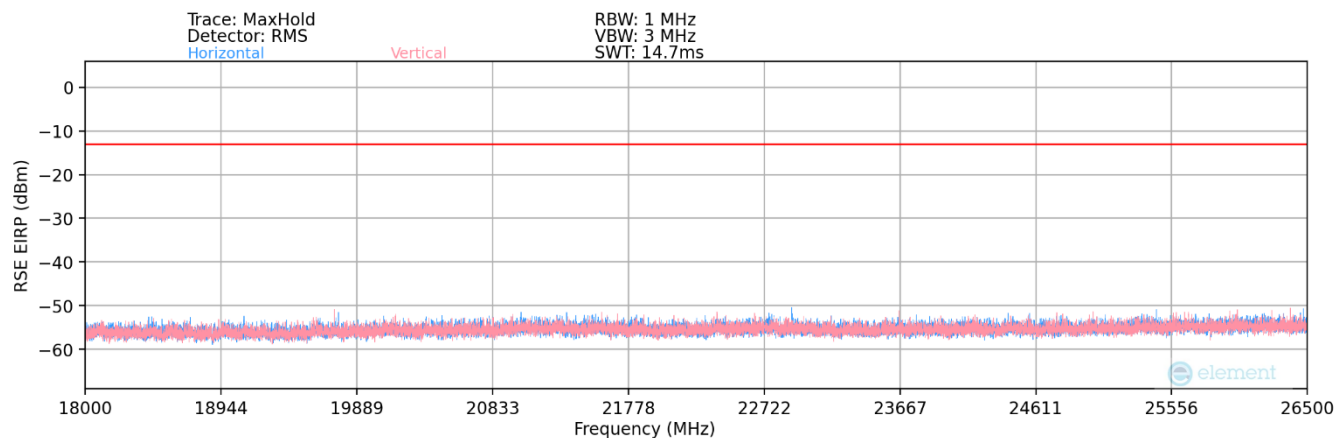
NR Band n77 DoD – SRS 1



Plot 7-171. Radiated Spurious Plot (NR Band n77 – SRS 1)

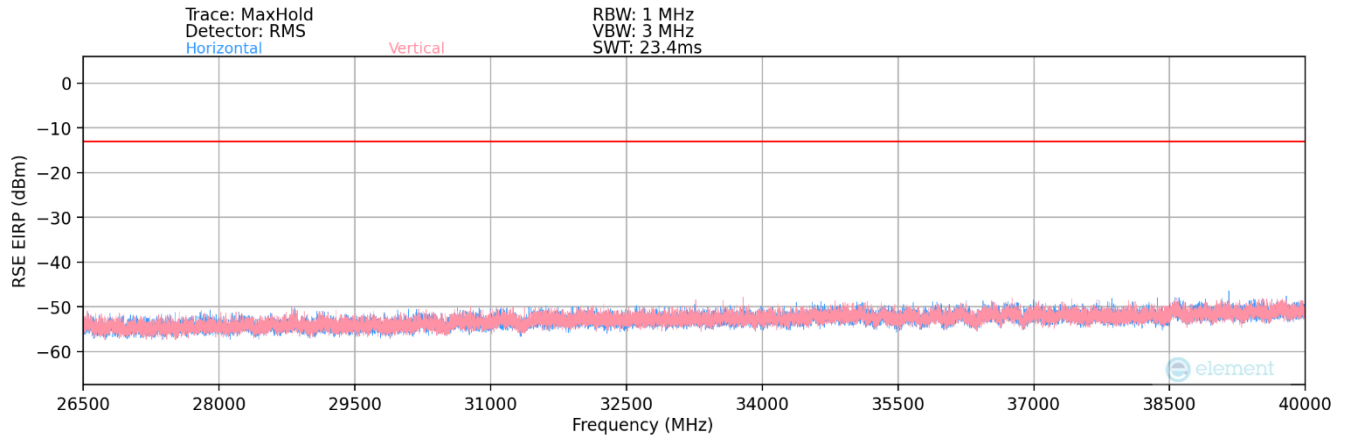


Plot 7-172. Radiated Spurious Plot (NR Band n77 – SRS 1)



Plot 7-173. Radiated Spurious Plot (NR Band n77 – SRS 1)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-174. Radiated Spurious Plot (NR Band n77 – SRS 1)

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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
200.00	H	-	-	-72.17	-13.60	21.23	-76.18	-13.00	-63.18

Table 7-34. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 1)

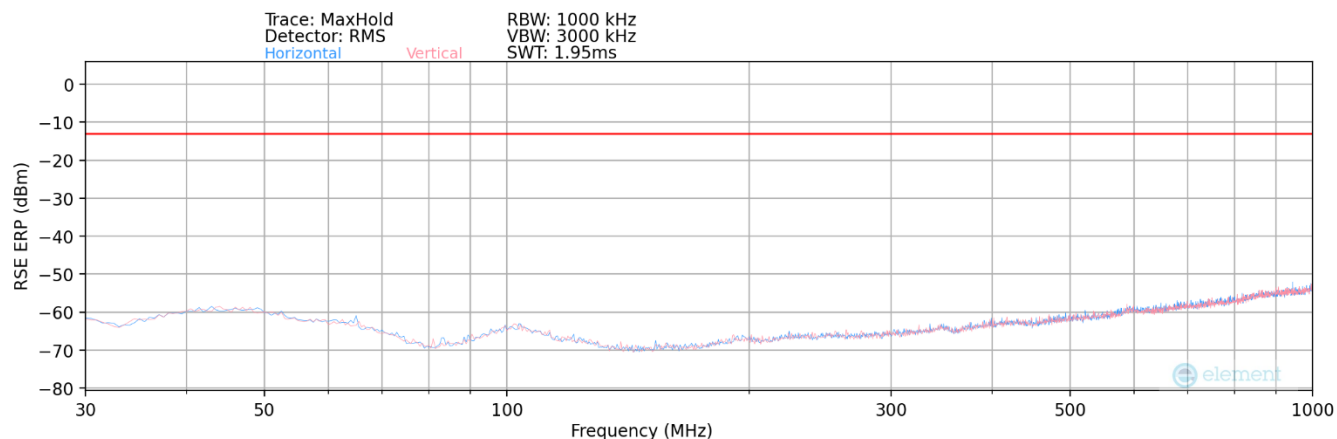
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1/136
Mode:	Stand Alone

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	-	-	-81.18	11.79	37.61	-57.65	-13.00	-44.65
10500.03	H	-	-	-83.39	16.99	40.60	-54.66	-13.00	-41.66
14000.04	H	-	-	-83.48	21.48	45.00	-50.26	-13.00	-37.26

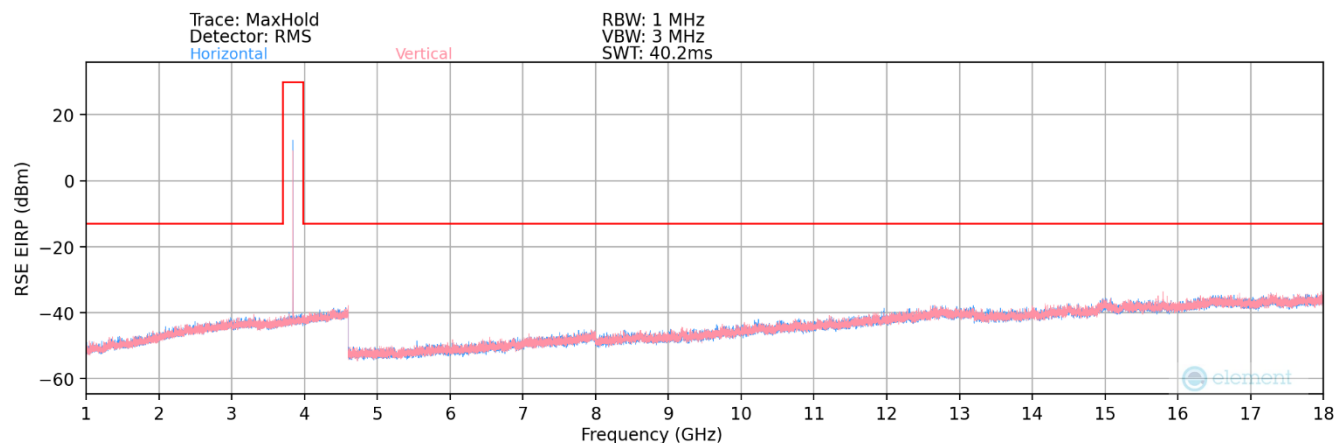
Table 7-35. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 1)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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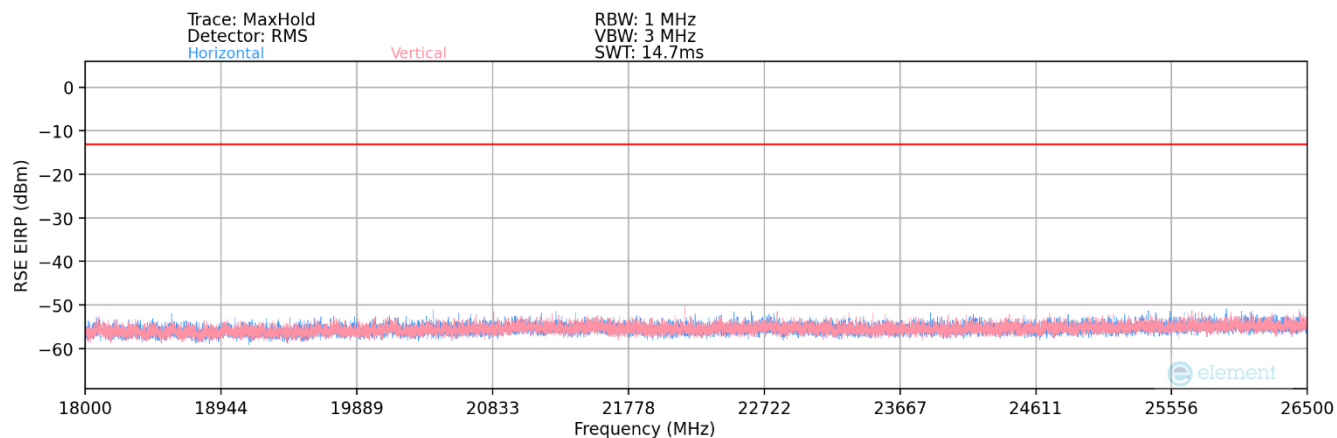
NR Band n77 C-band – SRS 1



Plot 7-175. Radiated Spurious Plot (NR Band n77 – SRS 1)

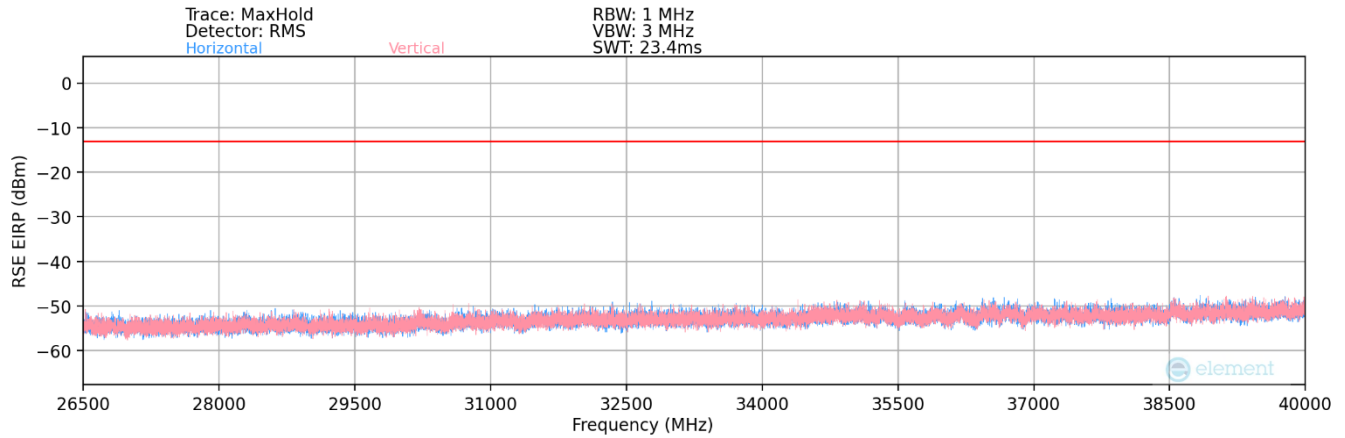


Plot 7-176. Radiated Spurious Plot (NR Band n77 – SRS 1)



Plot 7-177. Radiated Spurious Plot (NR Band n77 – SRS 1)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-178. Radiated Spurious Plot (NR Band n77 – SRS 1)

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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
350.00	H	-	-	-74.29	-9.40	23.31	-74.10	-13.00	-61.10

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

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	-	-	-81.33	12.47	38.14	-57.12	-13.00	-44.12
11250.00	H	-	-	-82.99	18.25	42.26	-53.00	-13.00	-40.00
15000.00	H	-	-	-84.06	22.71	45.65	-49.60	-13.00	-36.60

Table 7-37. Radiated Spurious Data (NR Band n77 – Low Channel – SRS 1)

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	-	-	-81.08	12.92	38.84	-56.41	-13.00	-43.41
11520.00	H	-	-	-83.44	18.27	41.83	-53.43	-13.00	-40.43
15360.00	H	-	-	-83.39	22.70	46.31	-48.94	-13.00	-35.94

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

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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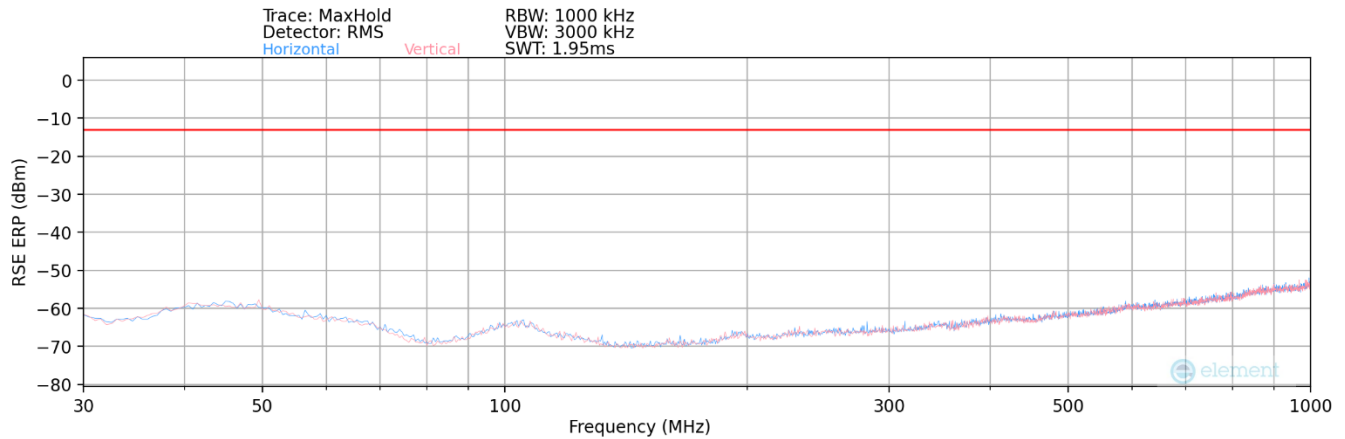
Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1/136
Mode:	Stand Alone

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	-	-	-81.15	13.16	39.01	-56.24	-13.00	-43.24
11790.00	H	-	-	-82.95	18.49	42.54	-52.72	-13.00	-39.72
15720.00	H	-	-	-84.00	24.06	47.06	-48.20	-13.00	-35.20

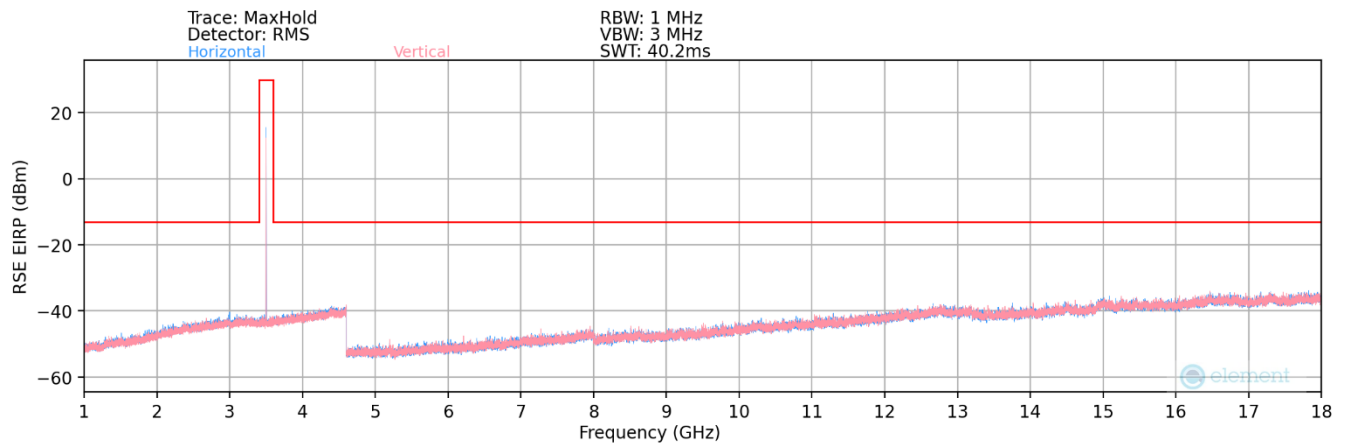
Table 7-39. Radiated Spurious Data (NR Band n77 – High Channel – SRS 1)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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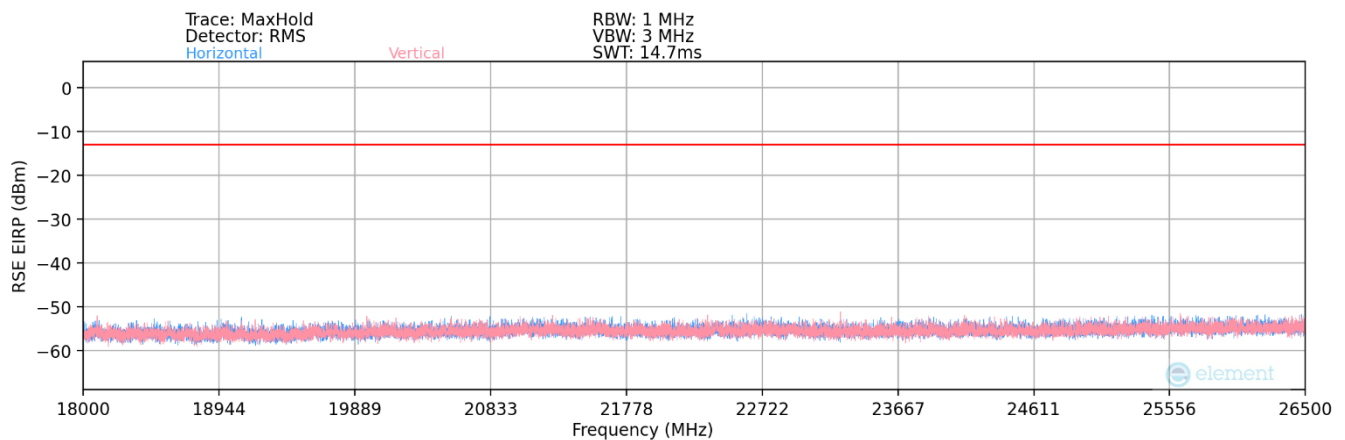
NR Band n77 DoD – SRS 2



Plot 7-179. Radiated Spurious Plot (NR Band n77 – SRS 2)

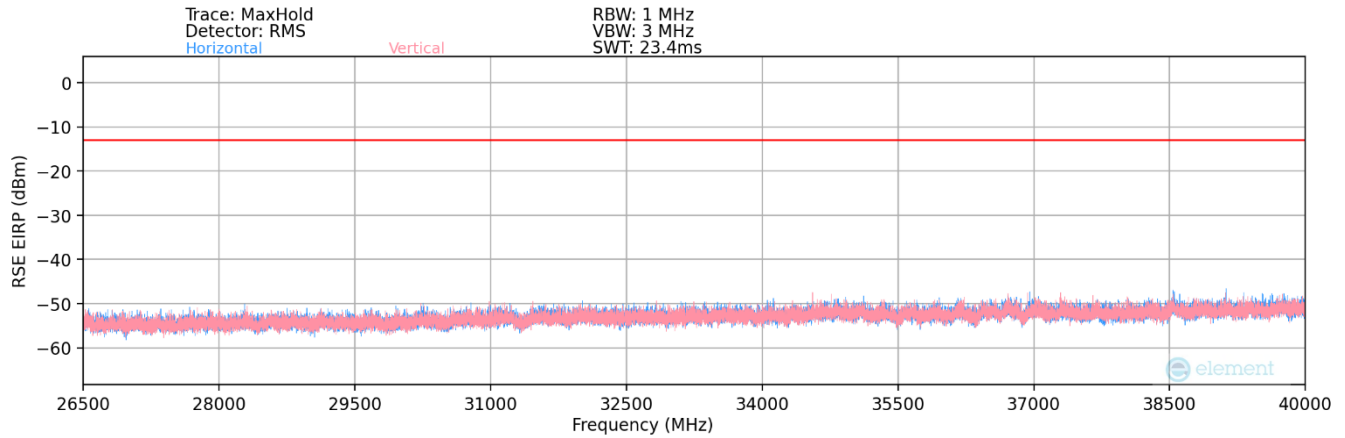


Plot 7-180. Radiated Spurious Plot (NR Band n77 – SRS 2)



Plot 7-181. Radiated Spurious Plot (NR Band n77 – SRS 2)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-182. Radiated Spurious Plot (NR Band n77 – SRS 2)

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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
200.00	H	-	-	-72.20	-13.60	21.20	-76.21	-13.00	-63.21

Table 7-40. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 2)

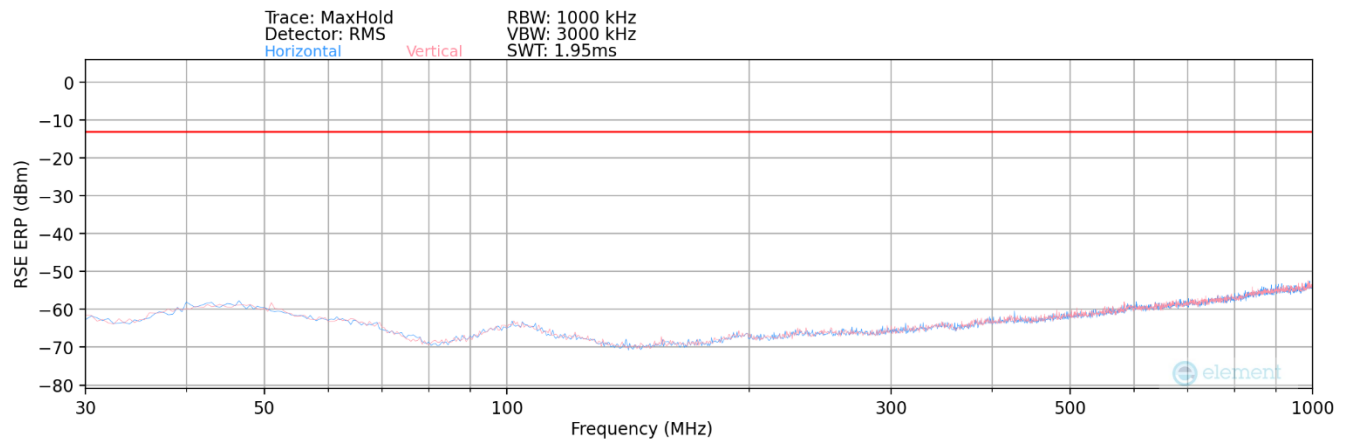
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1/136
Mode:	Stand Alone

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	-	-	-81.37	11.79	37.42	-57.84	-13.00	-44.84
10500.03	H	-	-	-83.50	16.99	40.49	-54.77	-13.00	-41.77
14000.04	H	-	-	-83.38	21.48	45.10	-50.16	-13.00	-37.16

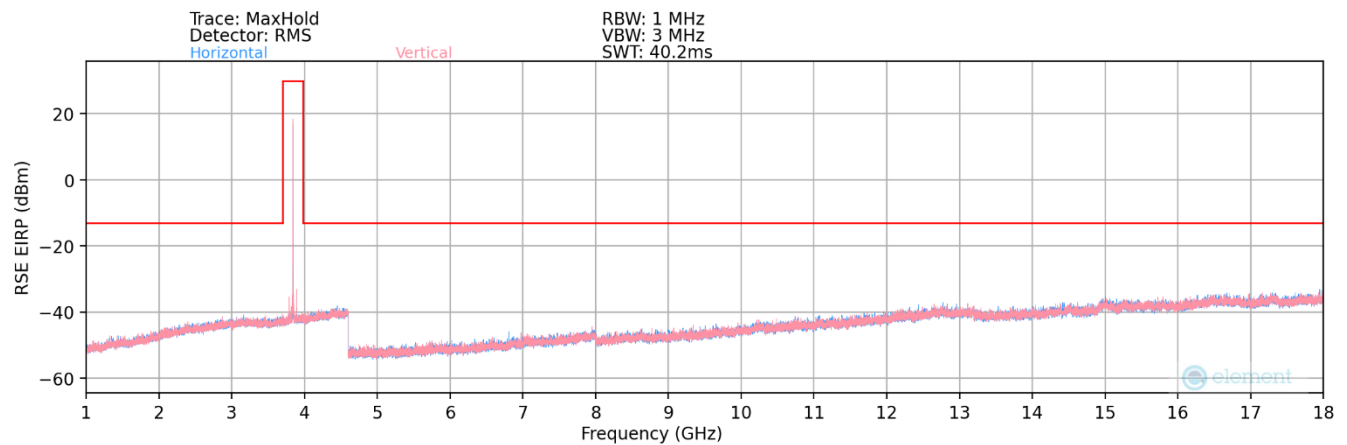
Table 7-41. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 2)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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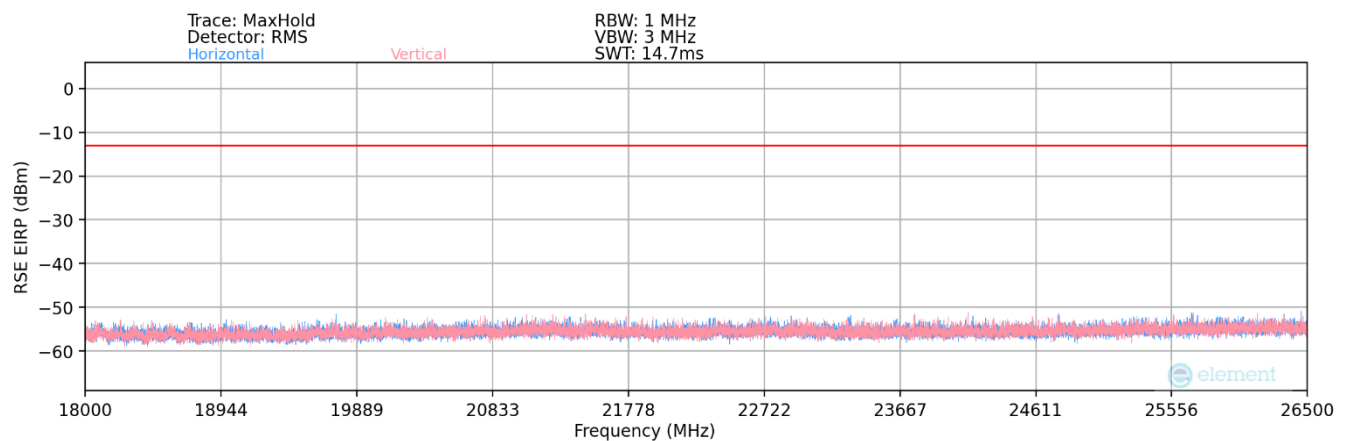
NR Band n77 C-band – SRS 2



Plot 7-183. Radiated Spurious Plot (NR Band n77 – SRS 2)

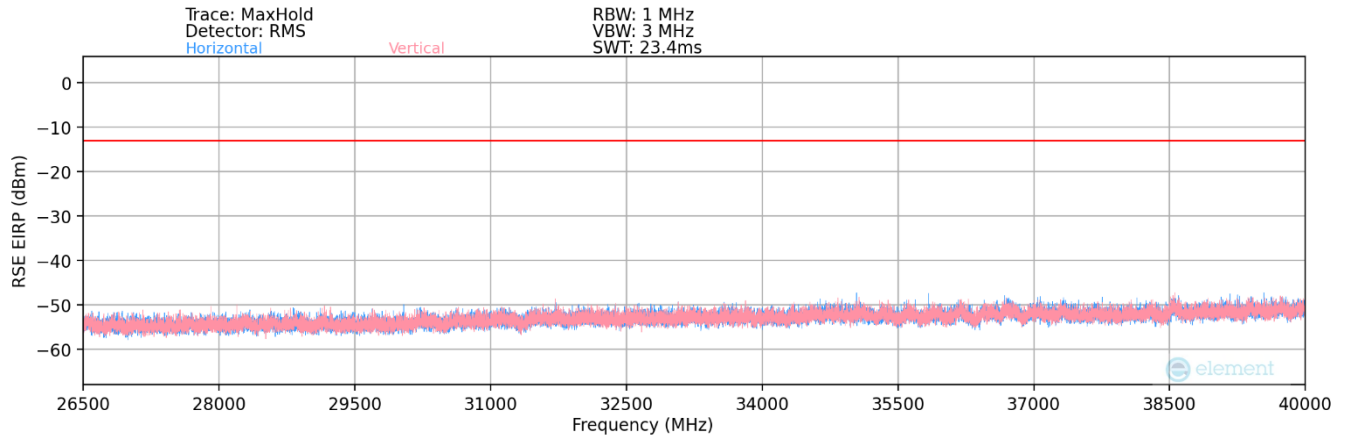


Plot 7-184. Radiated Spurious Plot (NR Band n77 – SRS 2)



Plot 7-185. Radiated Spurious Plot (NR Band n77 – SRS 2)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-186. Radiated Spurious Plot (NR Band n77 – SRS 2)

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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
200.00	H	-	-	-72.19	-13.60	21.21	-76.20	-13.00	-63.20

Table 7-42. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 2)

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	-	-	-81.31	12.47	38.16	-57.10	-13.00	-44.10
11250.00	H	-	-	-82.95	18.25	42.30	-52.96	-13.00	-39.96
15000.00	H	-	-	-84.12	22.71	45.59	-49.66	-13.00	-36.66

Table 7-43. Radiated Spurious Data (NR Band n77 – Low Channel – SRS 2)

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	-	-	-81.07	12.92	38.85	-56.40	-13.00	-43.40
11520.00	H	-	-	-83.44	18.27	41.83	-53.43	-13.00	-40.43
15360.00	H	-	-	-83.40	22.70	46.30	-48.95	-13.00	-35.95

Table 7-44. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 2)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
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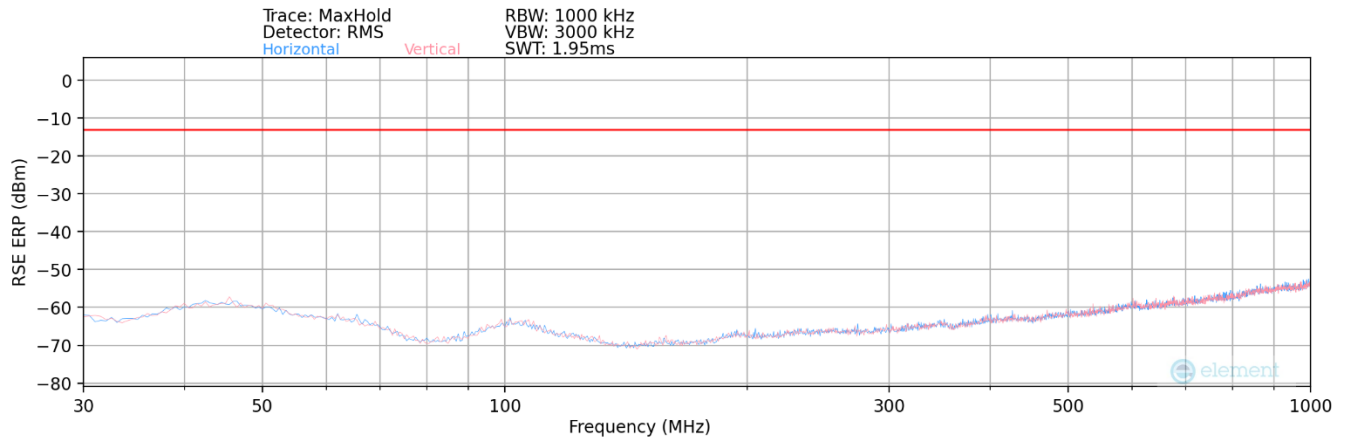
Bandwidth (MHz):	100
Frequency (MHz):	3930.00
RB / Offset:	1/136
Mode:	Stand Alone

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	-	-	-81.13	13.16	39.03	-56.22	-13.00	-43.22
11790.00	H	-	-	-82.99	18.49	42.50	-52.76	-13.00	-39.76
15720.00	H	-	-	-84.06	24.06	47.00	-48.26	-13.00	-35.26

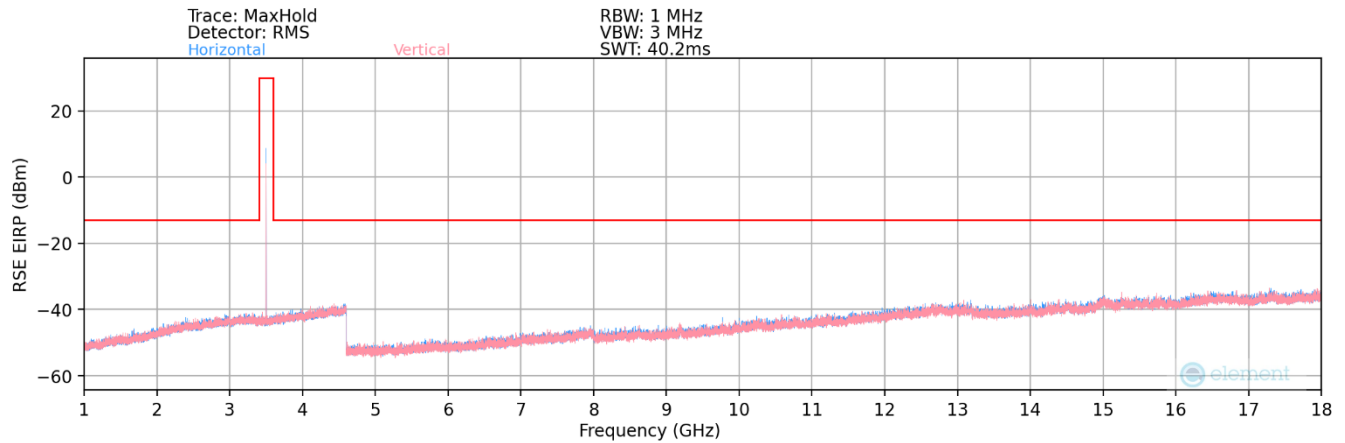
Table 7-45. Radiated Spurious Data (NR Band n77 – High Channel – SRS 2)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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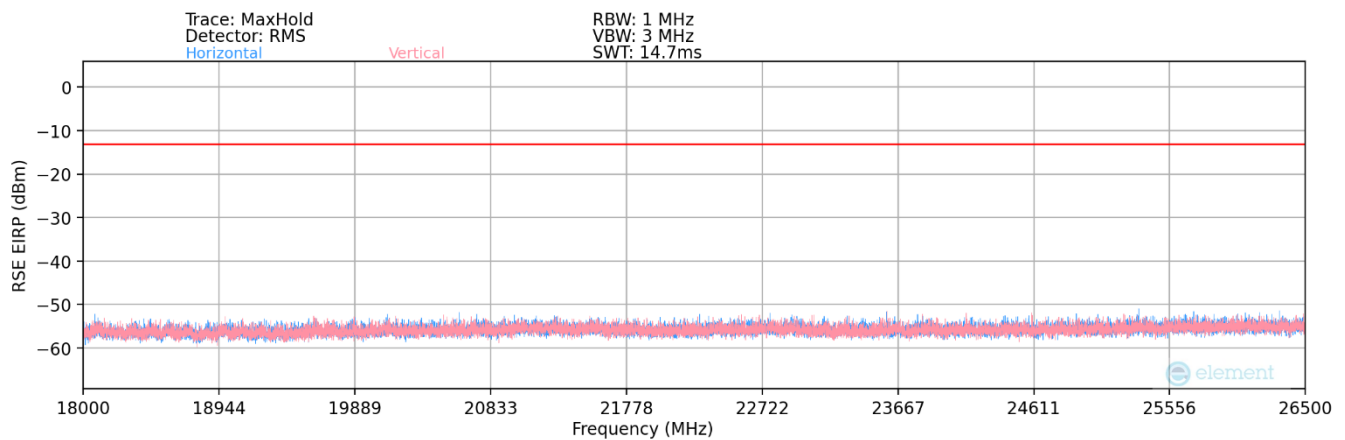
NR Band n77 DoD – SRS 3



Plot 7-187. Radiated Spurious Plot (NR Band n77 – SRS 3)

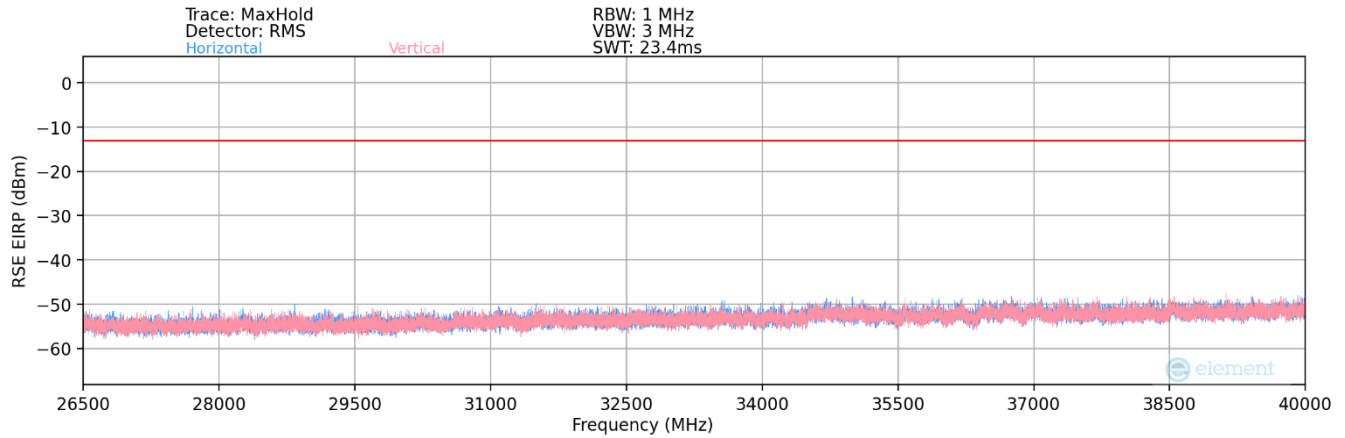


Plot 7-188. Radiated Spurious Plot (NR Band n77 – SRS 3)



Plot 7-189. Radiated Spurious Plot (NR Band n77 – SRS 3)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-190. Radiated Spurious Plot (NR Band n77 – SRS 3)

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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
300.00	V	-	-	-73.65	-11.20	22.15	-75.26	-13.00	-62.26

Table 7-46. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 3)

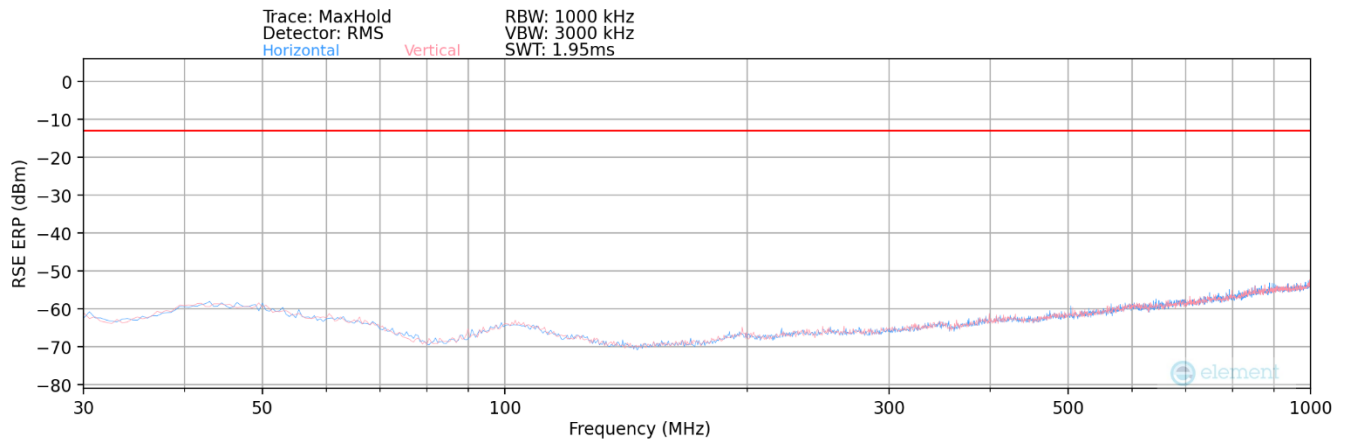
Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1/136
Mode:	Stand Alone

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	-	-	-81.72	14.91	40.19	-55.07	-13.00	-42.07
10500.03	V	-	-	-83.07	20.87	44.80	-50.46	-13.00	-37.46
14000.04	V	-	-	-83.60	26.31	49.71	-45.55	-13.00	-32.55

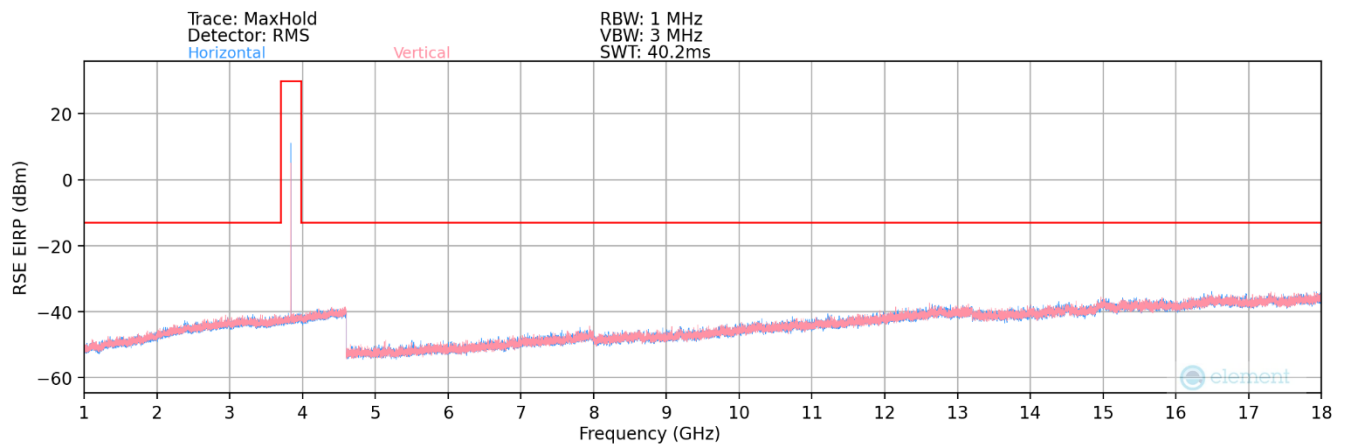
Table 7-47. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 3)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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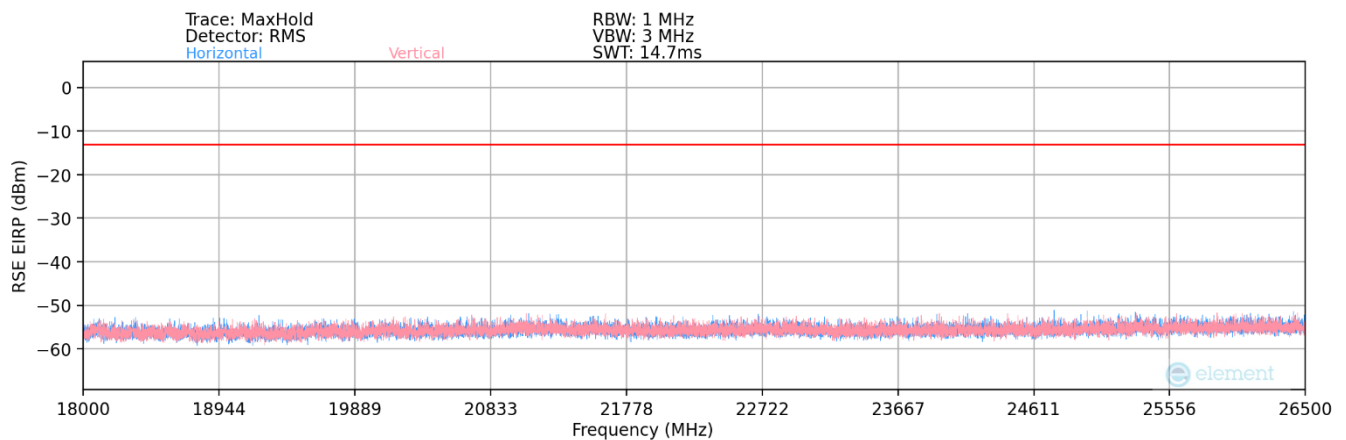
NR Band n77 C-band – SRS 3



Plot 7-191. Radiated Spurious Plot (NR Band n77 – SRS 3)

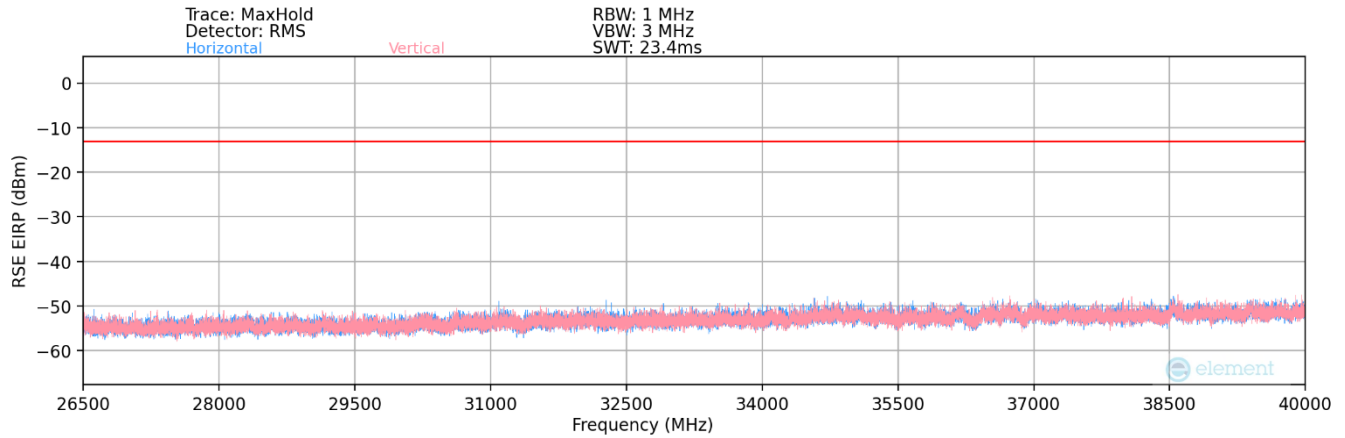


Plot 7-192. Radiated Spurious Plot (NR Band n77 – SRS 3)



Plot 7-193. Radiated Spurious Plot (NR Band n77 – SRS 3)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-194. Radiated Spurious Plot (NR Band n77 – SRS 3)

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]	ERP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
300.00	V	-	-	-73.80	-11.20	22.00	-75.41	-13.00	-62.41

Table 7-48. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 3)

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	-	-	-82.27	16.29	41.02	-54.23	-13.00	-41.23
11250.00	V	-	-	-82.91	21.79	45.88	-49.38	-13.00	-36.38
15000.00	V	-	-	-83.43	27.28	50.85	-44.41	-13.00	-31.41

Table 7-49. Radiated Spurious Data (NR Band n77 – Low Channel – SRS 3)

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	-	-	-82.11	16.35	41.24	-54.02	-13.00	-41.02
11520.00	V	-	-	-83.02	22.11	46.09	-49.16	-13.00	-36.16
15360.00	V	-	-	-83.69	27.71	51.02	-44.23	-13.00	-31.23

Table 7-50. Radiated Spurious Data (NR Band n77 – Mid Channel – SRS 3)

FCC ID: A3LSMG766U	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	-	-	-81.61	16.07	41.46	-53.80	-13.00	-40.80
11790.00	V	-	-	-83.38	22.05	45.67	-49.58	-13.00	-36.58
15720.00	V	-	-	-84.03	28.46	51.43	-43.83	-13.00	-30.83

Table 7-51. Radiated Spurious Data (NR Band n77 – High Channel – SRS 3)

FCC ID: A3LSMG766U	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

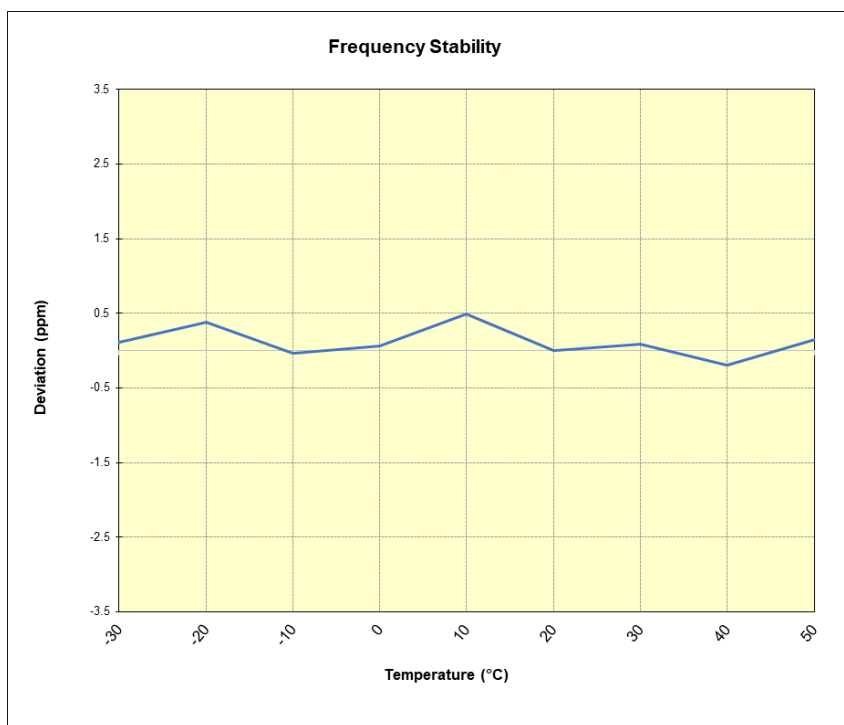
None

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NR Band n77

<table><tr><td>Operating Frequency (Hz):</td><td colspan="5">3,840,000,000</td></tr><tr><td>Ref. Voltage (VDC):</td><td colspan="5">4.43</td></tr></table>						Operating Frequency (Hz):	3,840,000,000					Ref. Voltage (VDC):	4.43				
Operating Frequency (Hz):	3,840,000,000																
Ref. Voltage (VDC):	4.43																
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)												
100 %	4.43	- 30	3,839,985,694	442	0.0000115												
		- 20	3,839,986,721	1,469	0.0000383												
		- 10	3,839,985,140	-112	-0.0000029												
		0	3,839,985,495	243	0.0000063												
		+ 10	3,839,987,163	1,911	0.0000498												
		+ 20 (Ref)	3,839,985,252	0	0.0000000												
		+ 30	3,839,985,593	341	0.0000089												
		+ 40	3,839,984,494	-758	-0.0000197												
		+ 50	3,839,985,804	552	0.0000144												
Battery Endpoint	3.40	+ 20	3,839,940,000	-45,252	-0.0011784												

Table 7-52. NR Band n77 Frequency Stability Data



Plot 7-195. NR Band n77 Frequency Stability Chart

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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: A3LSMG766U** complies with all the requirements of Part 27 of the FCC rules.

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-11.A3L	Test Dates: 01/06/2025 - 02/26/2025	EUT Type: Portable Handset	Page 152 of 152