



Plot 7-185. PAR Plot (NR Band n77 (DoD) - 60MHz CP-OFDM 256-QAM - Full RB - ANT F)



Plot 7-186. PAR Plot (NR Band n77 (DoD) - 50MHz DFT-s-OFDM BPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 120 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 120 of 161





Plot 7-187. PAR Plot (NR Band n77 (DoD) - 50MHz CP-OFDM QPSK - Full RB - ANT F)



Plot 7-188. PAR Plot (NR Band n77 (DoD) - 50MHz CP-OFDM 256-QAM - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 121 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Faye 121 01 101





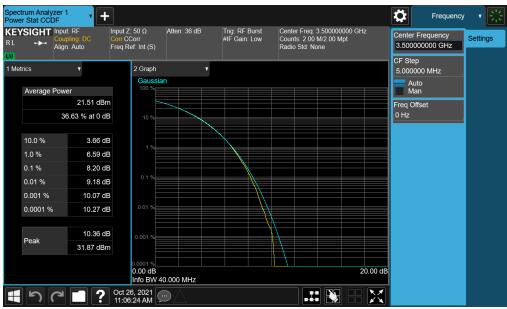
Plot 7-189. PAR Plot (NR Band n77 (DoD) - 40MHz DFT-s-OFDM BPSK - Full RB - ANT F)



Plot 7-190. PAR Plot (NR Band n77 (DoD) - 40MHz CP-OFDM QPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 122 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 122 01 101





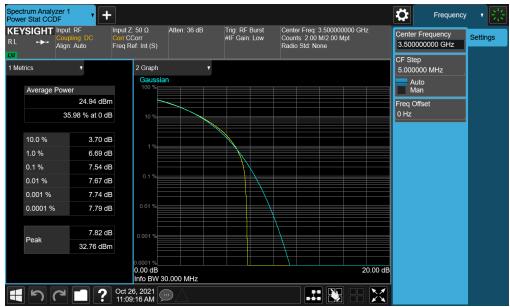
Plot 7-191. PAR Plot (NR Band n77 (DoD) - 40MHz CP-OFDM 256-QAM - Full RB - ANT F)



Plot 7-192. PAR Plot (NR Band n77 (DoD) - 30MHz DFT-s-OFDM BPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 123 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 123 01 101





Plot 7-193. PAR Plot (NR Band n77 (DoD) - 30MHz CP-OFDM QPSK - Full RB - ANT F)



Plot 7-194. PAR Plot (NR Band n77 (DoD) - 30MHz CP-OFDM 256-QAM - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 124 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 124 01 101





Plot 7-195. PAR Plot (NR Band n77 (DoD) - 20MHz DFT-s-OFDM BPSK - Full RB - ANT F)



Plot 7-196. PAR Plot (NR Band n77 (DoD) - 20MHz CP-OFDM QPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 125 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 123 01 101





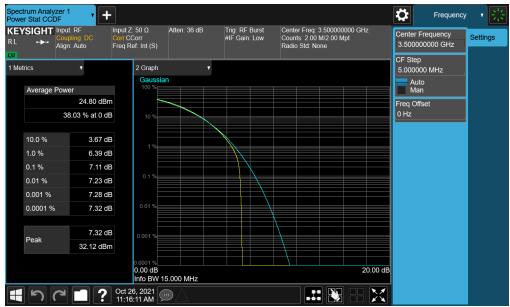
Plot 7-197. PAR Plot (NR Band n77 (DoD) - 20MHz CP-OFDM 256-QAM - Full RB - ANT F)



Plot 7-198. PAR Plot (NR Band n77 (DoD) - 15MHz DFT-s-OFDM BPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 126 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 120 01 101





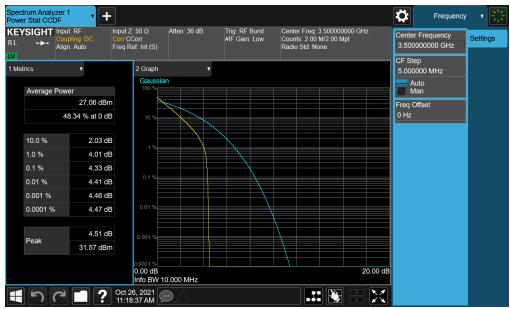
Plot 7-199. PAR Plot (NR Band n77 (DoD) - 15MHz CP-OFDM QPSK - Full RB - ANT F)



Plot 7-200. PAR Plot (NR Band n77 (DoD) - 15MHz CP-OFDM 256-QAM - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 127 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 127 01 101





Plot 7-201. PAR Plot (NR Band n77 (DoD) - 10MHz DFT-s-OFDM BPSK - Full RB - ANT F)



Plot 7-202. PAR Plot (NR Band n77 (DoD) - 10MHz CP-OFDM QPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 128 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 120 01 101





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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 129 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 129 01 101

© 2021 PCTEST



# NR Band n77 (C-Band) - SRS-1 - Ant F



Plot 7-204. PAR Plot (NR Band n77 - 100MHz DFT-s-OFDM BPSK - Full RB - ANT F)



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 130 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 130 of 161

© 2021 PCTEST





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



Plot 7-207. PAR Plot (NR Band n77 - 90MHz DFT-s-OFDM BPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 131 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 131 01 101





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



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 132 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 132 01 101





Plot 7-210. PAR Plot (NR Band n77 - 80MHz DFT-s-OFDM BPSK - Full RB - ANT F)



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 133 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 133 01 101





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



Plot 7-213. PAR Plot (NR Band n77 - 70MHz DFT-s-OFDM BPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 134 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 134 01 101





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



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 135 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 133 01 101





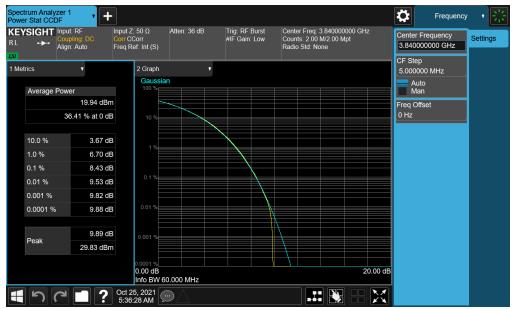
Plot 7-216. PAR Plot (NR Band n77 - 60MHz DFT-s-OFDM BPSK - Full RB - ANT F)



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 136 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 130 01 101





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



Plot 7-219. PAR Plot (NR Band n77 - 50MHz DFT-s-OFDM BPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 137 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 137 Of 161





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



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 138 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 130 01 101





Plot 7-222. PAR Plot (NR Band n77 - 40MHz DFT-s-OFDM BPSK - Full RB - ANT F)



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 139 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 139 01 101





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



Plot 7-225. PAR Plot (NR Band n77 - 30MHz DFT-s-OFDM BPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 140 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 140 of 161





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



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 141 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 141 01 101





Plot 7-228. PAR Plot (NR Band n77 - 20MHz DFT-s-OFDM BPSK - Full RB - ANT F)



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 142 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 142 01 101





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



Plot 7-231. PAR Plot (NR Band n77 - 15MHz DFT-s-OFDM BPSK - Full RB - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 143 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 143 01 101





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



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 144 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 144 01 101

© 2021 PCTEST





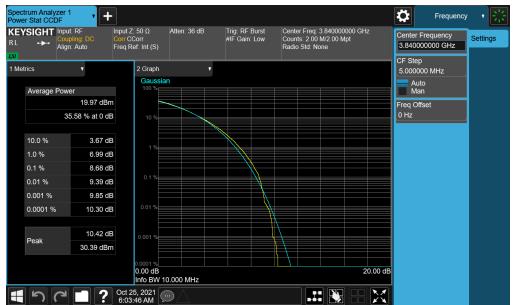
Plot 7-234. PAR Plot (NR Band n77 - 10MHz DFT-s-OFDM BPSK - Full RB - ANT F)



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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 145 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 145 01 101





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

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 146 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 140 01 101

© 2021 PCTEST



# 7.7 Radiated Power (EIRP)

#### **Test Overview**

Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI/TIA-603-E-2016 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz 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**

KDB 971168 D01 v03r01 - Section 5.2.1

ANSI/TIA-603-E-2016 - Section 2.2.17

# **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

FCC ID: A3LSMS906U	Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 147 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 147 of 161



#### Test Setup

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

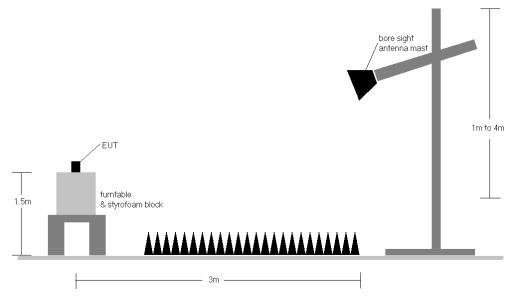


Figure 7-6. Radiated Test Setup >1GHz

#### **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) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case setup is reported in the tables below.
- 4) 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: A3LSMS906U	Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 148 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 140 01 101



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	3750.0	Н	121	303	5.98	1 / 136	12.41	18.39	0.069	30.00	-11.61
7	π/2 BPSK	3840.0	H	113	306	6.02	1 / 68	13.82	19.84	0.096	30.00	-10.16
₹	π/2 BPSK QPSK	3930.0 3750.0	H	110 121	306 303	5.99 5.98	1 / 204 1 / 136	16.16 12.20	22.15 18.18	0.164	30.00 30.00	-7.85 -11.82
100 MHz	QPSK	3840.0	Н	113	306	6.02	1 / 68	13.06	19.08	0.081	30.00	-10.92
_	QPSK	3930.0	Н	110	306	5.99	1 / 204	16.23	22.22	0.167	30.00	-7.78
	16-QAM	3930.0	Н	110	306	5.99	1 / 204	14.81	20.80	0.120	30.00	-9.20
	π/2 BPSK	3745.0	Н	121	303	5.99	1 / 122	12.38	18.37	0.069	30.00	-11.63
2	π/2 BPSK	3840.0	H	113	306	6.02	1 / 122	13.76	19.78	0.095	30.00	-10.22
Ë	π/2 BPSK QPSK	3935.0 3745.0	H	110 121	306 303	6.02 5.99	1 / 122 1 / 122	16.33 11.78	<b>22.35</b> 17.77	0.172 0.060	30.00 30.00	-7.65 -12.23
90 MHz	QPSK	3840.0	H	113	306	6.02	1 / 122	12.79	18.81	0.076	30.00	-11.19
	QPSK	3935.0	Н	110	306	6.02	1 / 122	16.07	22.09	0.162	30.00	-7.91
	16-QAM	3935.0	Н	110	306	6.02	1 / 122	14.94	20.96	0.125	30.00	-9.04
	π/2 BPSK	3740.0	Н	121	303	5.99	1 / 108	12.42	18.42	0.069	30.00	-11.58
2	π/2 BPSK	3840.0	H	113	306	6.02	1 / 108	13.41	19.43	0.088	30.00	-10.57
Ë	π/2 BPSK QPSK	3940.0 3740.0	H	110 121	306 303	6.04 5.99	1 / 108 1 / 108	16.43 11.72	<b>22.47</b> 17.71	0.177	30.00 30.00	-7.53 -12.29
80 MHz	QPSK	3840.0	Н	113	306	6.02	1 / 108	12.74	18.76	0.039	30.00	-12.29
w	QPSK	3940.0	Н.	110	306	6.04	1 / 108	15.73	21.78	0.151	30.00	-8.22
	16-QAM	3940.0	Н	110	306	6.04	1 / 108	14.75	20.79	0.120	30.00	-9.21
	π/2 BPSK	3735.0	Н	121	303	6.00	1 / 141	11.99	17.99	0.063	30.00	-12.01
NI.	π/2 BPSK	3840.0	Н	113	306	6.02	1 / 47	13.46	19.48	0.089	30.00	-10.52
70 MHz	π/2 BPSK	3945.0	H	110	306	6.07	1 / 94	16.48	22.55	0.180	30.00	-7.45
0	QPSK QPSK	3735.0 3840.0	H	121 113	303 306	6.00	1 / 141	11.59 12.96	17.59 18.98	0.057	30.00 30.00	-12.41 -11.02
7	QPSK	3945.0	Н	110	306	6.02	1 / 4/	15.37	21.45	0.079	30.00	-8.55
	16-QAM	3945.0	H	110	306	6.07	1 / 94	14.59	20.67	0.140	30.00	-9.33
	π/2 BPSK	3730.0	Н	121	303	6.00	1 / 81	12.32	18.32	0.068	30.00	-11.68
	π/2 BPSK	3840.0	Н	113	306	6.02	1 / 121	13.83	19.85	0.097	30.00	-10.15
물	π/2 BPSK	3950.0	Н	110	306	6.10	1 / 81	16.12	22.23	0.167	30.00	-7.77
60 MHz	QPSK	3730.0	H	121	303	6.00	1 / 81	11.56	17.56	0.057	30.00	-12.44
9	QPSK QPSK	3840.0 3950.0	H	113 110	306 306	6.02 6.10	1 / 121	13.06 15.48	19.08 21.58	0.081	30.00 30.00	-10.92 -8.42
	16-QAM	3950.0	H	110	306	6.10	1 / 81	14.65	20.75	0.144	30.00	-9.25
	π/2 BPSK	3725.0	Н	121	303	6.01	1 / 33	12.18	18.19	0.066	30.00	-11.81
	π/2 BPSK	3840.0	Н	113	306	6.02	1 / 66	13.45	19.47	0.088	30.00	-10.53
꿒	π/2 BPSK	3955.0	Н	110	306	6.13	1 / 33	16.01	22.14	0.164	30.00	-7.86
50 MHz	QPSK	3725.0	H	121	303	6.01	1 / 33	11.58	17.59	0.057	30.00	-12.41
ζ.	QPSK QPSK	3840.0 3955.0	H	113 110	306 306	6.02 6.13	1 / 66	12.58 15.21	18.60 21.34	0.072 0.136	30.00 30.00	-11.40 -8.66
	16-QAM	3955.0	Н	110	306	6.13	1 / 33	14.22	20.35	0.108	30.00	-9.65
	π/2 BPSK	3720.0	Н	121	303	6.01	1 / 53	12.12	18.13	0.065	30.00	-11.87
	π/2 BPSK	3840.0	Н	113	306	6.02	1 / 26	13.49	19.51	0.089	30.00	-10.49
물	π/2 BPSK	3960.0	Н	110	306	6.15	1 / 26	15.83	21.98	0.158	30.00	-8.02
40 MHz	QPSK	3720.0	H	121	303	6.01	1 / 53	11.43	17.44	0.056	30.00	-12.56
4	QPSK QPSK	3840.0 3960.0	H	113 110	306 306	6.02 6.15	1 / 26 1 / 26	13.00 15.66	19.02 21.81	0.080 0.152	30.00 30.00	-10.98 -8.19
	16-QAM	3960.0	Н	110	306	6.15	1 / 26	14.98	21.13	0.130	30.00	-8.87
	π/2 BPSK	3715.0	Н	121	303	6.02	1 / 39	11.97	17.99	0.063	30.00	-12.01
	π/2 BPSK	3840.0	Н	113	306	6.02	1 / 39	13.34	19.36	0.086	30.00	-10.64
포	π/2 BPSK	3965.0	Н	110	306	6.18	1 / 19	15.93	22.10	0.162	30.00	-7.90
30 MHz	QPSK	3715.0	H	121	303	6.02	1 / 39	11.34	17.36	0.054	30.00	-12.64
ñ	QPSK QPSK	3840.0 3965.0	H	113 110	306 306	6.02 6.18	1 / 39	12.78 15.56	18.80 21.74	0.076 0.149	30.00 30.00	-11.20 -8.26
	16-QAM	3965.0	Н	110	306	6.18	1 / 58	15.56	21.74	0.149	30.00	-8.26
	π/2 BPSK	3710.0	Н	121	303	6.03	1 / 13	12.35	18.37	0.069	30.00	-11.63
	π/2 BPSK	3840.0	Н	113	306	6.02	1 / 13	13.34	19.36	0.086	30.00	-10.64
王	π/2 BPSK	3970.0	Н	110	306	6.20	1 / 25	16.30	22.50	0.178	30.00	-7.50
20 MHz	QPSK	3710.0	H	121	303	6.03	1 / 13	11.40	17.43	0.055	30.00	-12.57
Ñ	QPSK	3840.0 3970.0	Н	113 110	306	6.02	1 / 13 1 / 25	12.77	18.79	0.076	30.00 30.00	-11.21 -8.14
	QPSK 16-QAM	3970.0	H	110	306 306	6.20	1 / 25	15.66 14.38	21.86 20.58	0.154 0.114	30.00	-8.14 -9.42
	π/2 BPSK	3707.5	Н	121	303	6.03	1 / 19	12.25	18.28	0.067	30.00	-11.72
	π/2 BPSK	3840.0	Н	113	306	6.02	1/9	13.46	19.48	0.089	30.00	-10.52
£	π/2 BPSK	3972.5	Н	110	306	6.21	1 / 19	16.13	22.34	0.171	30.00	-7.66
15 MHz	QPSK	3707.5	Н	121	303	6.03	1 / 19	11.77	17.80	0.060	30.00	-12.20
4.	QPSK	3840.0	H	113	306	6.02	1/9	13.06	19.08	0.081	30.00	-10.92
	QPSK 16-QAM	3972.5 3972.5	H	110 110	306 306	6.21 6.21	1 / 19	15.96 14.80	22.17 21.01	0.165 0.126	30.00 30.00	-7.83 -8.99
	π/2 BPSK	3972.5	Н	110	308	6.03	1/19	12.26	18.29	0.126	30.00	-8.99 -11.71
	π/2 BPSK	3840.0	Н	113	306	6.02	1 / 12	13.41	19.42	0.007	30.00	-10.58
보	π/2 BPSK	3975.0	Н	110	306	6.22	1/6	16.46	22.68	0.185	30.00	-7.32
10 MHz	QPSK	3705.0	Н	121	303	6.03	1/6	12.02	18.05	0.064	30.00	-11.95
5	QPSK	3840.0	Н	113	306	6.02	1 / 12	13.02	19.04	0.080	30.00	-10.96
	QPSK	3975.0	H	110	306	6.22	1/6	16.05	22.27	0.169	30.00	-7.73
	16-QAM QPSK (CP-OFDM)	3975.0 3930.0	Н	110 106	306 312	6.22 5.99	1 / 6 1 / 204	15.00 14.13	21.23	0.133 0.103	30.00	-8.77 -9.88
100 MHz	QPSK (CP-0FDM)  QPSK (Opposite Pol.)	3930.0	H V	298	210	6.49	1 / 204	14.13	17.84	0.103	30.00	-9.88 -12.16
100 MILIZ	QPSK (WCP)	3930.0	Н	160	22	5.99	1 / 204	12.08	18.07	0.064	30.00	-12.10
	(/						C-Band) -					

Table 7-10. EIRP Data (NR Band n77 (C-Band) - SRS-1 - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 149 of 181	
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 149 01 101	

© 2021 PCTEST



Sandwidth	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]	Margi [dB]
	π/2 BPSK	3500.0	Н	125	307	7.74	1 / 204	11.71	19.45	0.088	30.00	-10.5
00 MHz	QPSK	3500.0	H	125	307	7.74	1 / 204	11.45	19.19	0.083	30.00	-10.8
	16-QAM π/2 BPSK	3500.0 3495.0	H	125 125	307 307	7.74 7.72	1 / 204 1 / 122	9.37 11.62	17.11 19.34	0.051	30.00	-12.89 -10.60
-	π/2 BPSK	3500.0	H	125	307	7.74	1 / 122	11.49	19.23	0.084	30.00	-10.7
7	π/2 BPSK	3505.0	Н	125	307	7.71	1 / 122	11.52	19.23	0.084	30.00	-10.7
90 MHz	QPSK	3495.0	Н	125	307	7.72	1 / 122	11.16	18.89	0.077	30.00	-11.1
06	QPSK	3500.0	Н	125	307	7.74	1 / 122	11.00	18.73	0.075	30.00	-11.2
	QPSK	3505.0	Н	125	307	7.71	1 / 122	11.06	18.77	0.075	30.00	-11.2
	16-QAM	3500.0	Н	125	307	7.74	1 / 122	9.46	17.20	0.052	30.00	-12.8
-	π/2 BPSK π/2 BPSK	3490.0 3500.0	H	125 125	307 307	7.71 7.74	1 / 162 1 / 162	11.86 11.79	<b>19.57</b> 19.53	0.091	30.00 30.00	-10.4 -10.4
<u>z</u>	π/2 BPSK	3510.0	Н	125	307	7.68	1 / 102	11.29	18.97	0.030	30.00	-11.0
80 MHz	QPSK	3490.0	Н	125	307	7.71	1 / 162	11.32	19.04	0.080	30.00	-10.9
80	QPSK	3500.0	Н	125	307	7.74	1 / 162	11.44	19.18	0.083	30.00	-10.8
	QPSK	3510.0	Н	125	307	7.68	1 / 54	11.03	18.71	0.074	30.00	-11.2
	16-QAM	3500.0	Н	125	307	7.74	1 / 162	8.95	16.68	0.047	30.00	-13.3
	π/2 BPSK	3485.0	Н	125	307	7.70	1 / 47	11.72	19.42	0.087	30.00	-10.5
2	π/2 BPSK	3500.0	H	125	307	7.74	1 / 141	11.84	19.58	0.091	30.00	-10.4
70 MHz	π/2 BPSK QPSK	3515.0 3485.0	H	125 125	307 307	7.66 7.70	1 / 47	12.09 10.93	<b>19.75</b> 18.63	0.094	30.00	-10.2 -11.3
2	QPSK	3500.0	Н	125	307	7.74	1 / 141	11.32	19.05	0.073	30.00	-10.9
	QPSK	3515.0	H	125	307	7.66	1 / 47	11.59	19.05	0.084	30.00	-10.3
	16-QAM	3515.0	Н	125	307	7.66	1 / 47	9.63	17.29	0.054	30.00	-12.7
	π/2 BPSK	3480.0	Н	125	307	7.69	1 / 81	12.01	19.70	0.093	30.00	-10.3
	π/2 BPSK	3500.0	Н	125	307	7.74	1 / 81	11.57	19.31	0.085	30.00	-10.6
뀰	π/2 BPSK	3520.0	Н	125	307	7.63	1 / 121	12.11	19.74	0.094	30.00	-10.2
60 MHz	QPSK	3480.0	H	125	307	7.69	1 / 81	11.68	19.37	0.086	30.00	-10.6
9	QPSK	3500.0	H	125 125	307 307	7.74 7.63	1 / 81	11.25	18.98	0.079	30.00	-11.0 -10.6
	QPSK 16-QAM	3520.0 3480.0	Н	125	307	7.69	1 / 121 1 / 81	11.67 10.26	19.31 17.95	0.085	30.00 33.01	-15.0
	π/2 BPSK	3475.0	Н	125	307	7.68	1 / 66	11.86	19.54	0.002	30.00	-10.4
	π/2 BPSK	3500.0	Н	125	307	7.74	1 / 66	11.98	19.71	0.094	30.00	-10.2
4	π/2 BPSK	3525.0	Н	125	307	7.61	1 / 66	11.98	19.59	0.091	30.00	-10.4
50 MHz	QPSK	3475.0	Н	125	307	7.68	1 / 66	11.57	19.24	0.084	30.00	-10.7
20	QPSK	3500.0	Н	125	307	7.74	1 / 66	11.39	19.13	0.082	30.00	-10.8
	QPSK	3525.0	Н	125	307	7.61	1 / 66	11.58	19.19	0.083	30.00	-10.8
	16-QAM	3475.0	Н	125	307	7.68 7.66	1 / 66	9.68	17.36	0.054	33.01	-15.6
-	π/2 BPSK π/2 BPSK	3470.0 3500.0	H	125 125	307	7.74	1 / 26	12.02 12.03	19.68 19.77	0.095	30.00 30.00	-10.3 -10.2
z	π/2 BPSK	3530.0	H	125	307	7.58	1 / 26	11.63	19.21	0.083	30.00	-10.2
40 MHz	QPSK	3470.0	Н	125	307	7.66	1 / 79	11.73	19.40	0.087	30.00	-10.6
40	QPSK	3500.0	Н	125	307	7.74	1 / 26	11.25	18.99	0.079	30.00	-11.0
	QPSK	3530.0	Н	125	307	7.58	1 / 26	11.45	19.03	0.080	30.00	-10.9
	16-QAM	3470.0	Н	125	307	7.66	1 / 79	9.65	17.31	0.054	30.00	-12.6
-	π/2 BPSK	3465.0	Н	125	307	7.65	1 / 19	11.79	19.44	0.088	30.00	-10.5
N	π/2 BPSK	3500.0	H	125	307	7.74	1 / 39	12.00	19.73	0.094	30.00	-10.2
30 MHz	π/2 BPSK	3535.0 3465.0	H	125 125	307 307	7.56 7.65	1 / 19 1 / 19	12.10 11.67	19.65 19.32	0.092	30.00	-10.3 -10.6
0	QPSK QPSK	3500.0	Н	125	307	7.74	1 / 19	11.07	18.89	0.000	30.00	-10.0
.,	QPSK	3535.0	Н	125	307	7.56	1 / 19	11.52	19.07	0.081	30.00	-10.9
	16-QAM	3500.0	H	125	307	7.74	1 / 39	9.63	17.36	0.054	30.00	-12.6
	π/2 BPSK	3460.0	Н	125	307	7.64	1 / 13	11.60	19.24	0.084	30.00	-10.7
	π/2 BPSK	3500.0	Н	125	307	7.74	1 / 13	11.86	19.60	0.091	30.00	-10.4
귚	π/2 BPSK	3540.0	Н	125	307	7.53	1 / 13	12.18	19.71	0.093	30.00	-10.2
20 MH	QPSK	3460.0	H	125	307	7.64	1 / 13	11.45	19.09	0.081	30.00	-10.9
2	QPSK	3500.0	Н	125 125	307	7.74	1 / 13	11.51	19.25	0.084	30.00	-10.7 -10.6
	QPSK 16-QAM	3540.0 3540.0	H	125 125	307 307	7.53 7.53	1 / 13 1 / 13	11.83 9.90	19.36 17.43	0.086	30.00	-10.6 -12.5
	π/2 BPSK	3457.5	Н	125	307	7.63	1 / 13	11.96	19.59	0.055	30.00	-12.3
	π/2 BPSK	3500.0	H	125	307	7.74	1/9	11.86	19.59	0.091	30.00	-10.4
보	π/2 BPSK	3542.5	Н	125	307	7.52	1 / 28	12.15	19.67	0.093	30.00	-10.3
15 MHz	QPSK	3457.5	Н	125	307	7.63	1 / 19	11.50	19.13	0.082	30.00	-10.8
15	QPSK	3500.0	Н	125	307	7.74	1/9	11.19	18.93	0.078	30.00	-11.0
	QPSK	3542.5	H	125	307	7.52	1 / 28	11.72	19.24	0.084	30.00	-10.7
	16-QAM	3457.5	Н	125	307	7.63	1 / 19	9.86	17.49	0.056	30.00	-12.5
	π/2 BPSK π/2 BPSK	3455.0 3500.0	H	125 125	307 307	7.63 7.74	1 / 17 1 / 12	11.93 11.54	<b>19.56</b> 19.28	0.090	30.00	-10.4 -10.7
N	π/2 BPSK	3500.0	Н	125	307	7.74	1 / 12	11.54	19.28	0.085	30.00	-10.4
10 MHz	QPSK	3455.0	Н	125	307	7.63	1 / 17	11.45	19.08	0.081	30.00	-10.9
10	QPSK	3500.0	Н	125	307	7.74	1 / 12	11.07	18.81	0.076	30.00	-11.1
	QPSK	3545.0	Н	125	307	7.50	1 / 12	11.64	19.14	0.082	30.00	-10.8
	16-QAM	3500.0	Н	125	307	7.74	1 / 12	9.53	17.26	0.053	30.00	-12.7
	QPSK (CP-0FDM)	3500.0	Н	125	307	7.74	1 / 204	9.65	17.39	0.055	30.00	-12.6
00 MHz	QPSK (Opposite Pol.)	3500.0	V	389	223	7.16	1 / 136	9.20	16.36	0.043	30.00	-13.6

Table 7-11. EIRP Data (NR Band n77 (DoD) - SRS-1 - ANT F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of ® element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 150 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 130 of 161



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	3500.0	Н	186	10	7.74	1 / 68	4.59	12.33	0.017	30.00	-17.67
100 MHz	QPSK	3500.0	Н	186	10	7.74	1 / 68	4.38	12.12	0.016	30.00	-17.88
	16-QAM	3500.0	Н	186	10	7.74	1 / 68	3.57	11.31	0.014	30.00	-18.69

Table 7-12. EIRP Data (NR Band n77 (DoD) - SRS-2 - ANT C)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
	π/2 BPSK	3750.0	Н	164	15	5.98	1 / 68	5.41	11.39	0.014	30.00	-18.61
	π/2 BPSK	3840.0	Н	169	13	6.02	1 / 68	5.08	11.10	0.013	30.00	-18.90
MHZ	π/2 BPSK	3930.0	Н	141	367	5.99	1 / 68	3.76	9.75	0.009	30.00	-20.25
	QPSK	3750.0	Н	164	15	5.98	1 / 68	5.21	11.19	0.013	30.00	-18.81
100	QPSK	3840.0	Н	169	13	6.02	1 / 68	5.08	11.10	0.013	30.00	-18.90
	QPSK	3930.0	Н	141	367	5.99	1 / 68	3.44	9.43	0.009	30.00	-20.57
	16-QAM	3750.0	Н	164	15	5.98	1 / 68	3.99	9.97	0.010	30.00	-20.03

# Table 7-13. EIRP Data (NR Band n77 (C-Band) - SRS-2 - ANT C)

Bandwidth	Mod.	Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Ant. Gain [dBi]	RB Size/Offset	Substitute Level [dBm]	EIRP [dBm]	EIRP [Watts]	EIRP Limit [dBm]	Margin [dB]
	π/2 BPSK	3500.0	Н	131	39	7.74	1 / 136	6.83	14.57	0.029	30.00	-15.43
100 MHz	QPSK	3500.0	Н	131	39	7.74	1 / 136	6.84	14.58	0.029	30.00	-15.42
	16-QAM	3500.0	Н	131	39	7.74	1 / 136	6.09	13.83	0.024	30.00	-16.17

### Table 7-14. EIRP Data (NR Band n77 (DoD) - SRS-3 - ANT K)

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	3750.0	V	109	97	6.83	1 / 68	4.40	11.23	0.013	30.00	-18.77
	π/2 BPSK	3840.0	V	104	102	6.47	1 / 68	2.26	8.73	0.007	30.00	-21.27
불	π/2 BPSK	3930.0	V	121	100	6.49	1 / 136	-3.91	2.58	0.002	30.00	-27.42
<b>⊠</b>	QPSK	3750.0	V	109	97	6.83	1 / 68	4.39	11.22	0.013	30.00	-18.78
100	QPSK	3840.0	V	104	102	6.47	1 / 68	2.21	8.68	0.007	30.00	-21.32
·	QPSK	3930.0	V	121	100	6.49	1 / 136	-4.02	2.47	0.002	30.00	-27.53
	16-QAM	3750.0	V	109	97	6.83	1 / 68	3.39	10.22	0.011	30.00	-19.78

### Table 7-15. EIRP Data (NR Band n77 (C-Band) - SRS-3 - ANT K)

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	3500.0	Н	113	31	7.74	1 / 136	8.37	16.11	0.041	30.00	-13.89
100 MHz	QPSK	3500.0	Н	113	31	7.74	1 / 136	8.78	16.52	0.045	30.00	-13.48
	16-QAM	3500.0	Н	113	31	7.74	1 / 136	6.14	13.88	0.024	30.00	-16.12

#### Table 7-16. EIRP Data (NR Band n77 (DoD) - SRS-4 - ANT D)

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	3750.0	Н	104	27	5.98	1 / 68	9.25	15.23	0.033	30.00	-14.77
	π/2 BPSK	3840.0	Н	107	28	6.02	1 / 68	8.16	14.18	0.026	30.00	-15.82
五	π/2 BPSK	3930.0	Н	109	28	5.99	1 / 68	9.02	15.01	0.032	30.00	-14.99
M	QPSK	3750.0	Н	104	27	5.98	1 / 68	9.35	15.33	0.034	30.00	-14.67
100	QPSK	3840.0	Н	107	28	6.02	1 / 68	7.75	13.77	0.024	30.00	-16.23
	QPSK	3930.0	Н	109	28	5.99	1 / 68	9.01	15.00	0.032	30.00	-15.00
	16-QAM	3930.0	Н	109	28	5.99	1 / 68	7.81	13.80	0.024	30.00	-16.20

Table 7-17. EIRP Data (NR Band n77 (C-Band) - SRS-4 - ANT D)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 151 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 131 01 101



#### 7.8 **Radiated Spurious Emissions Measurements**

## **Test Overview**

Radiated spurious emissions measurements are performed using the field strength conversion method described in KDB 971168 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as peak measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

# **Test Procedures Used**

KDB 971168 D01 v03r01 - Section 5.8

### **Test Settings**

- 1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
- 2. VBW ≥ 3 x RBW
- Span = 1.5 times the OBW
- 4. No. of sweep points > 2 x span / RBW
- Detector = RMS
- Trace mode = Average (Max Hold for pulsed emissions)
- 7. The trace was allowed to stabilize

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 152 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 132 01 101



# **Test Setup**

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

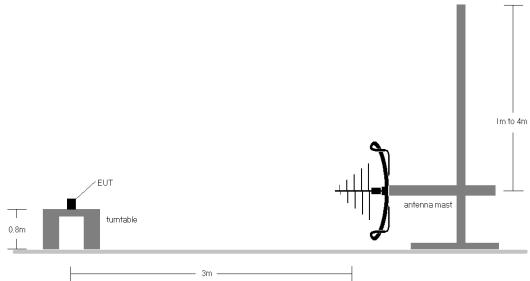


Figure 7-7. Test Instrument & Measurement Setup < 1GHz

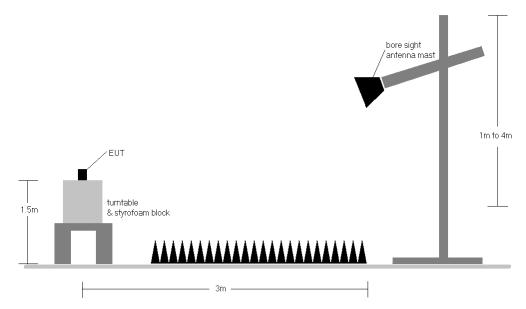


Figure 7-8. Test Instrument & Measurement Setup >1 GHz

FCC ID: A3LSMS906U	Proof to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 153 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Page 155 01 161

© 2021 PCTEST



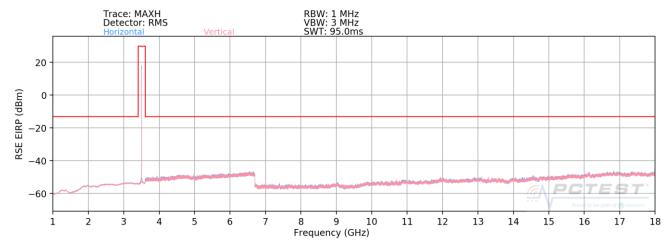
#### **Test Notes**

- 1) Field strengths are calculated using the Measurement quantity conversions in KDB 971168 Section 5.8.4.
  - a) E(dBµV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m)
  - b) EIRP (dBm) =  $E(dB\mu V/m) + 20loqD 104.8$ ; 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 EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case setup is reported in the tables below.
- 5) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.
- 6) 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.
- 7) The "-" shown in the following RSE tables are used to denote a noise floor measurement.
- 8) 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.
- 9) Spurious emissions shown in this section are measured while operating in EN-DC mode with Sub 6GHz NR carrier as well as an LTE carrier (anchor). Spurious emissions from the NR carrier device, is subject to the rules under which the NR carrier operates. Spurious emission caused by the LTE carrier must meet the requirements of the rules under which the LTE carrier operates.

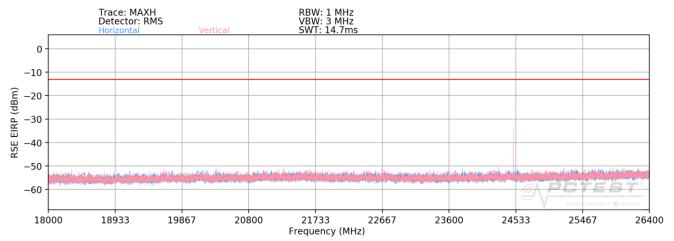
FCC ID: A3LSMS906U	Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 154 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 134 01 101



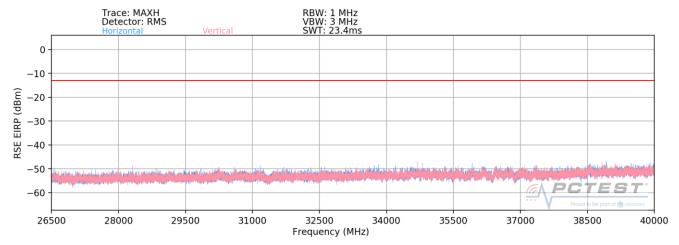
# NR Band n77 (DoD-Band) - SRS-1 - Ant F



Plot 7-237. Radiated Spurious Plot (NR Band n77 (DoD) - Ant F)



Plot 7-238. Radiated Spurious Plot (NR Band n77 (DoD) - Ant F)



Plot 7-239. Radiated Spurious Plot (NR Band n77 (DoD) - Ant F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager
Test Report S/N:	Test Dates:	EUT Type:	Page 155 of 181
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	rage 133 01 161



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

				L							
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]		
7000.0	Н	275	21	-64.77	9.07	51.30	-43.96	-13.00	-30.96		
10500.0	Н	268	285	-72.56	12.08	46.52	-48.74	-13.00	-35.74		
14000.0	Н	229	37	-78.11	14.29	43.18	-52.07	-13.00	-39.07		
17500.1	Н	218	325	-77.25	17.89	47.64	-47.61	-13.00	-34.61		
21000.1	Н	-	-	-59.95	4.69	51.74	-53.06	-13.00	-40.06		
24500.1	Н	150	42	-41.51	5.21	70.70	-34.10	-13.00	-21.10		
28000.1	Н	150	345	-48.12	6.12	65.00	-39.80	-13.00	-26.80		
31500.1	Н	-	-	-58.90	8.05	56.15	-48.65	-13.00	-35.65		

Table 7-18. Radiated Spurious Data (NR Band n77 (DoD) - Mid Channel - Ant F)

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBµV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7000.0	Н	139	278	-67.50	9.07	48.57	-46.69	-13.00	-33.69
10500.0	Н	133	4	-78.21	12.08	40.87	-54.39	-13.00	-41.39
14000.0	Н	248	323	-76.73	14.29	44.56	-50.69	-13.00	-37.69
17500.1	Н	175	8	-78.34	17.89	46.55	-48.70	-13.00	-35.70

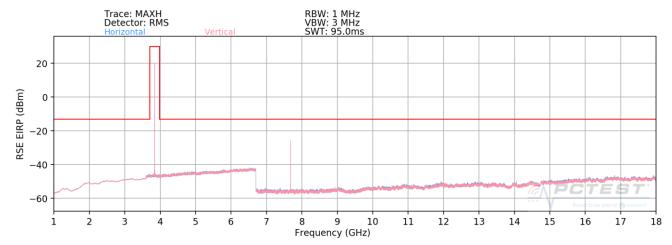
Table 7-19. Radiated Spurious Data with WCP (NR Band n77 (DoD) - Ant F)

FCC ID: A3LSMS906U	PCTEST* Proud to be part of @ element	PART 27 MEASUREMENT REPORT	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:	Page 156 of 181	
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset	Fage 130 01 161	

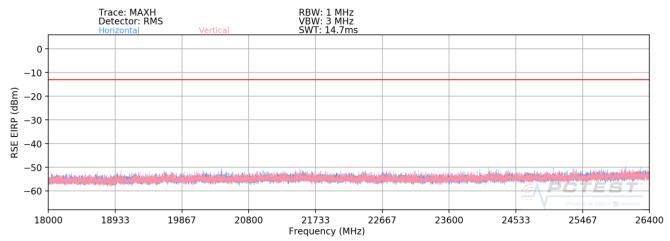
© 2021 PCTEST



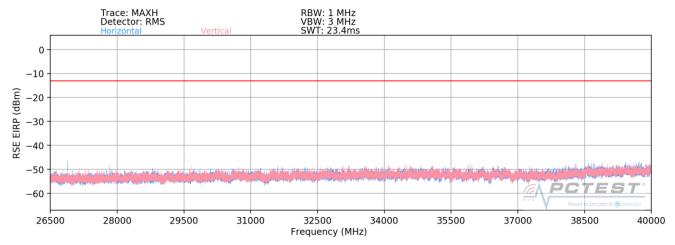
# NR Band n77 (C-Band) - SRS-1 - Ant F



Plot 7-240. Radiated Spurious Plot (NR Band n77 - Ant F)



Plot 7-241. Radiated Spurious Plot (NR Band n77 - Ant F)



Plot 7-242. Radiated Spurious Plot (NR Band n77 - Ant F)

FCC ID: A3LSMS906U	Proud to be part of ® element	PART 27 MEASUREMENT REPORT	SAMSUNG	Approved by: Technical Manager	
Test Report S/N:	Test Dates:	EUT Type:		Page 157 of 181	
1M2109090103-29.A3L	9/10/2021 - 11/10/2021	Portable Handset		rage 137 of 161	
© 2021 PCTEST				V2.1 6/2/2021	