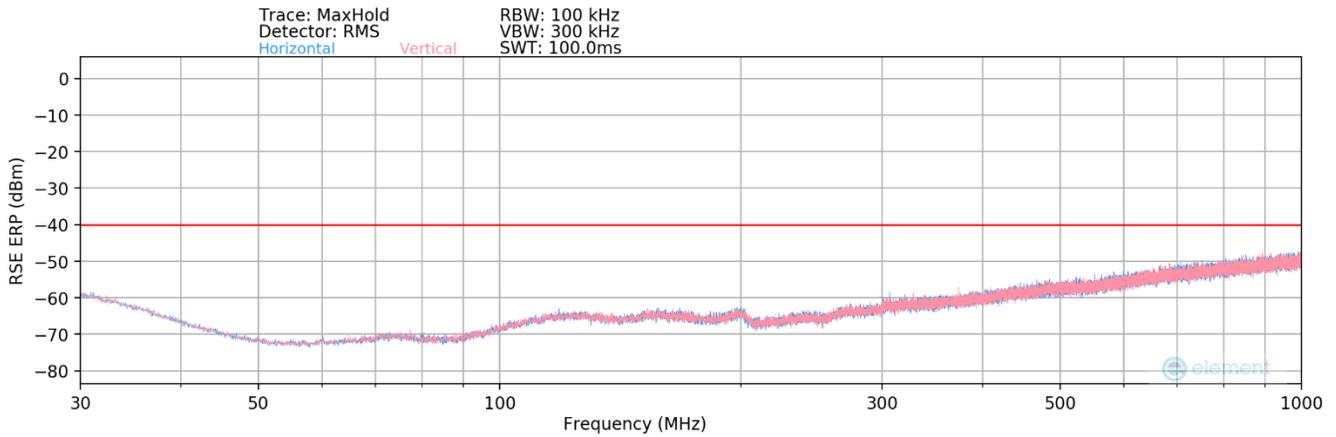
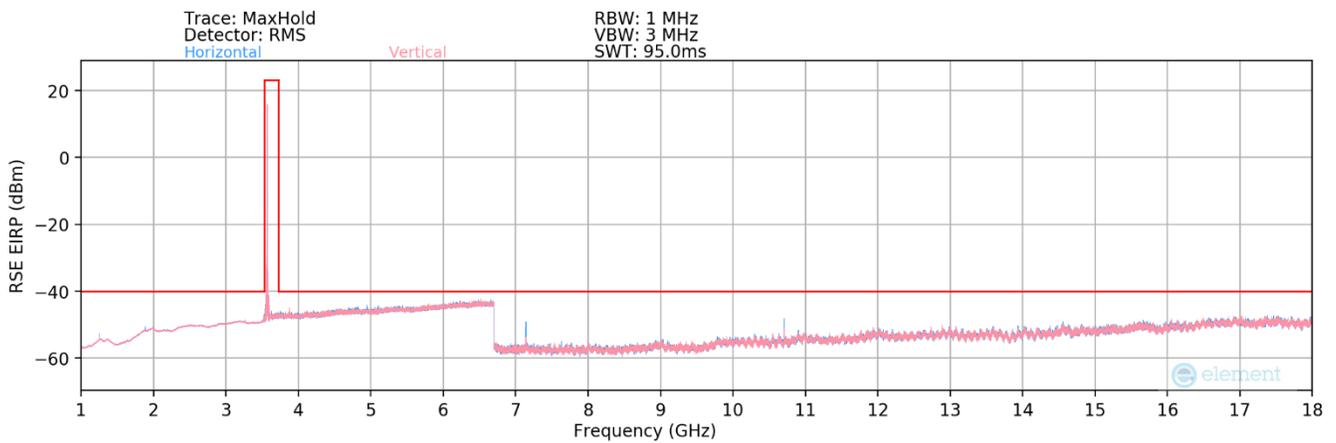


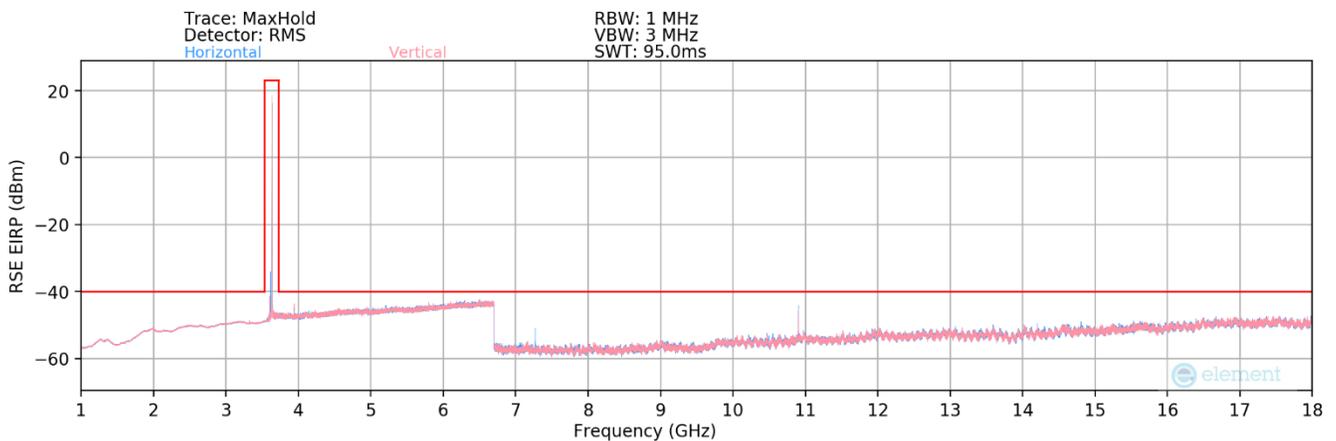
ULCA LB48



Plot 7-143. Radiated Spurious Plot (ULCA LB48 – Mid Channel - Open)

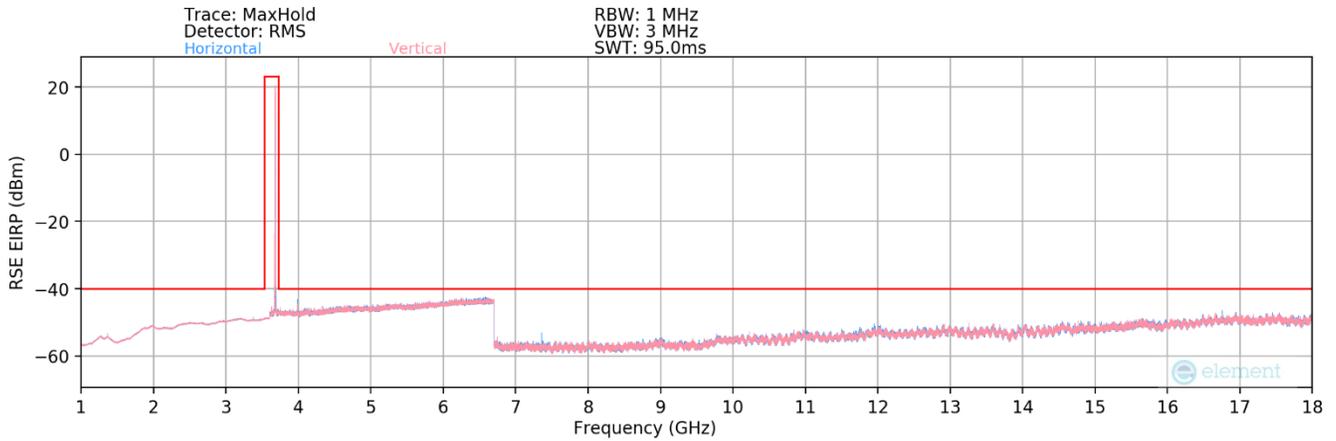


Plot 7-144. Radiated Spurious Plot (ULCA LB48 – Low - Open)

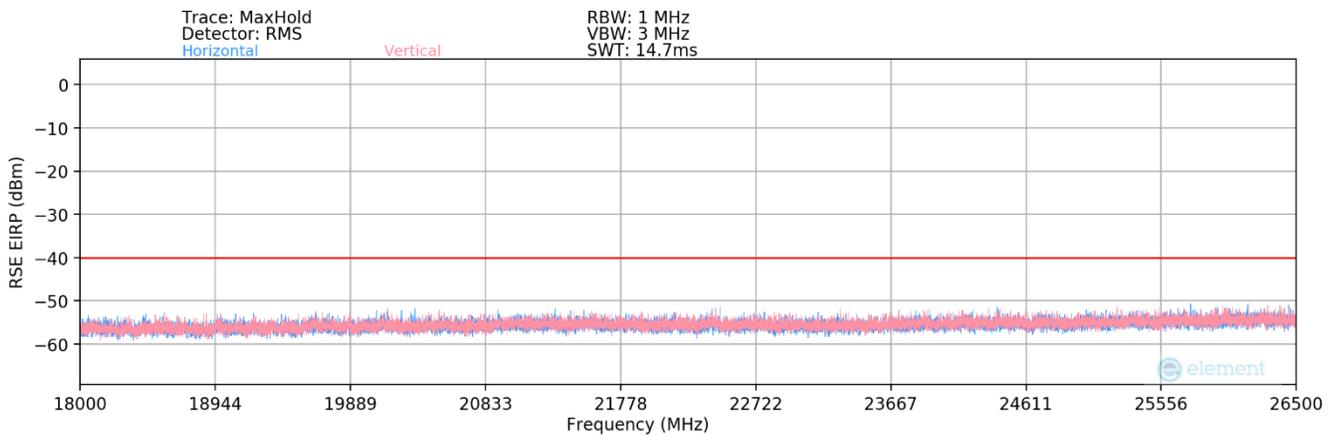


Plot 7-145. Radiated Spurious Plot (ULCA LB48 – Mid - Open)

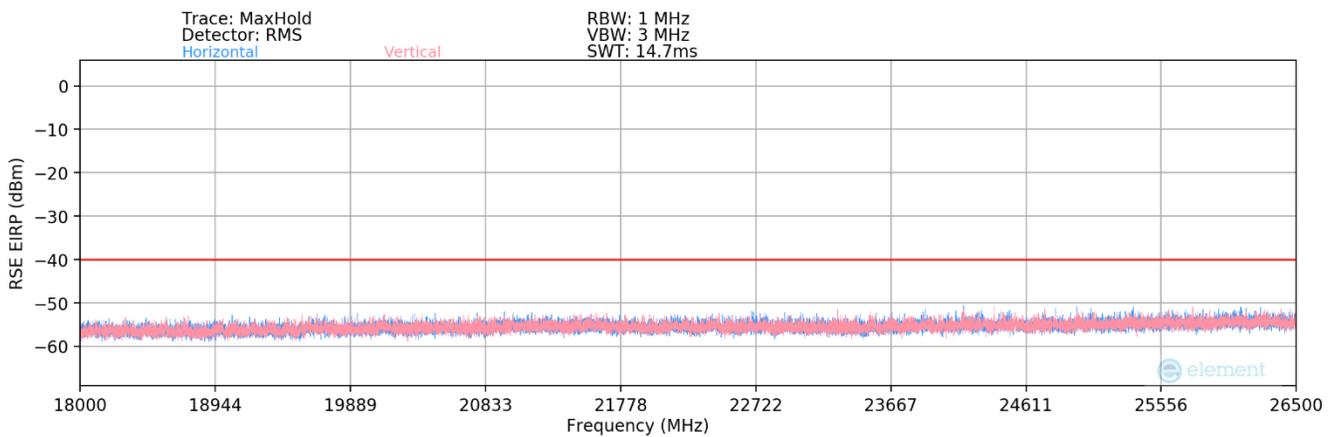
FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-146. Radiated Spurious Plot (ULCA LB48 – High - Open)

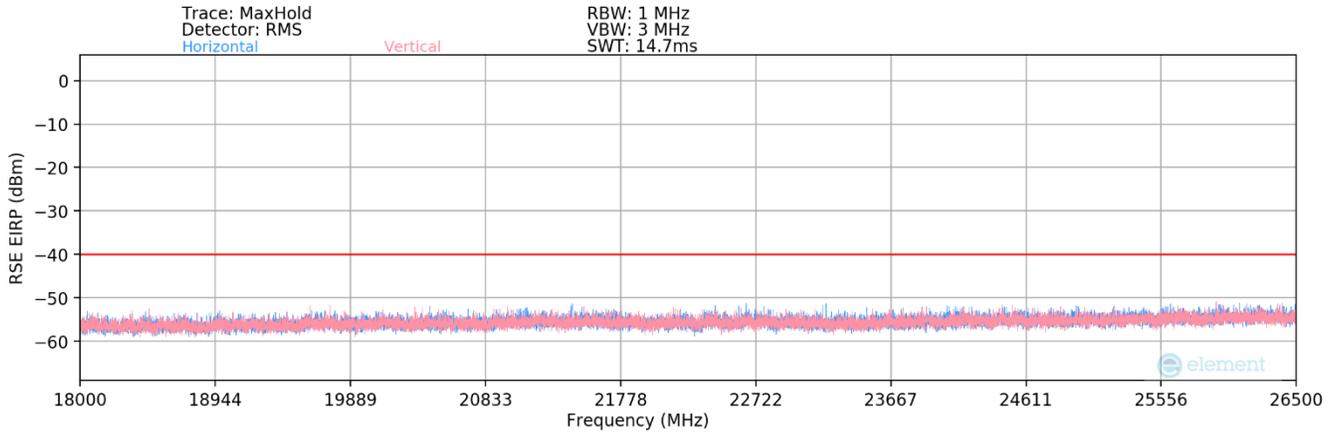


Plot 7-147. Radiated Spurious Plot (ULCA LB48 – Low - Open)

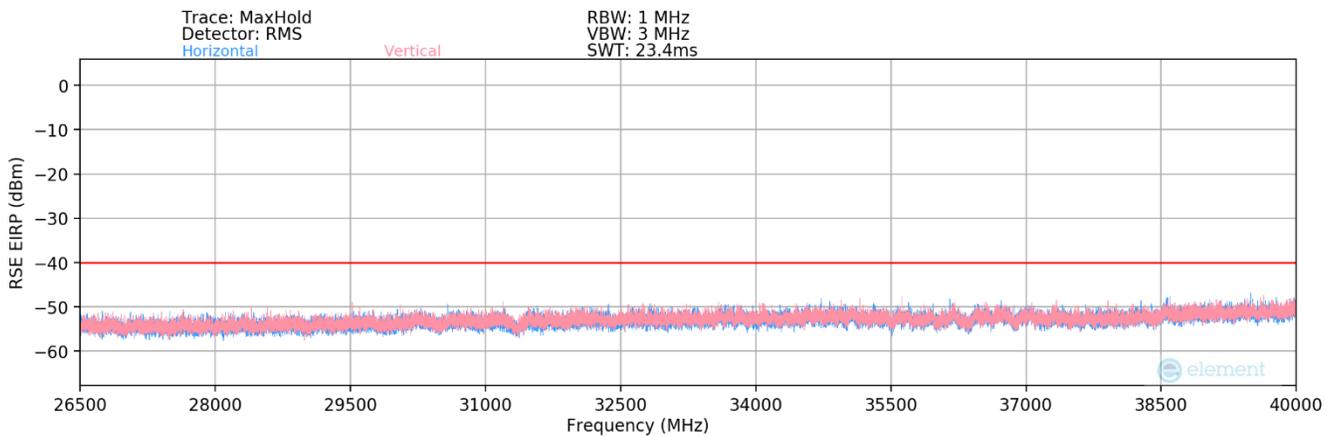


Plot 7-148. Radiated Spurious Plot (ULCA LB48 – Mid - Open)

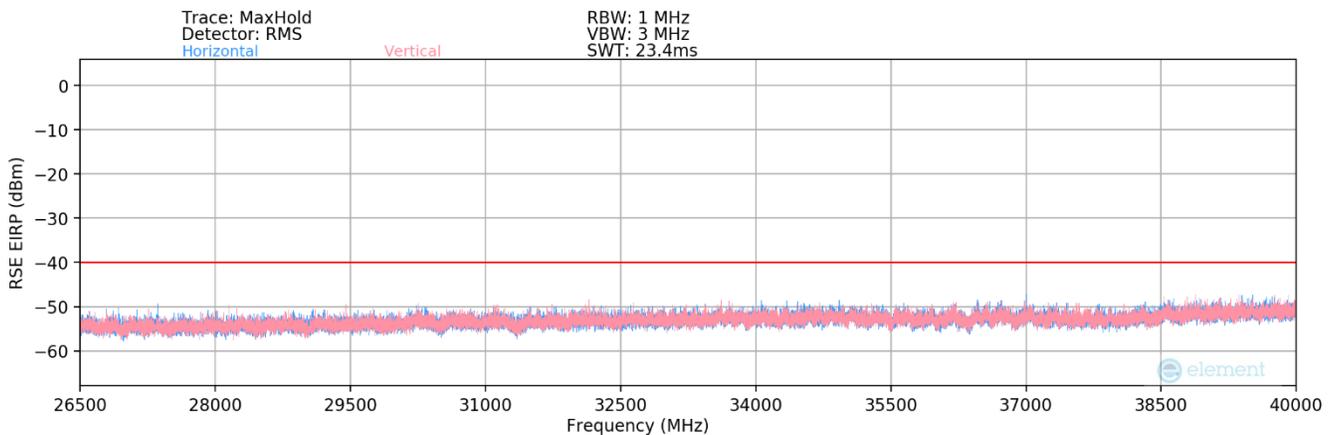
FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204010046-08.A3L	Test Dates: 4/1/2022 - 6/20/2022	EUT Type: Portable Handset	Page 106 of 133



Plot 7-149. Radiated Spurious Plot (ULCA LB48 – High - Open)

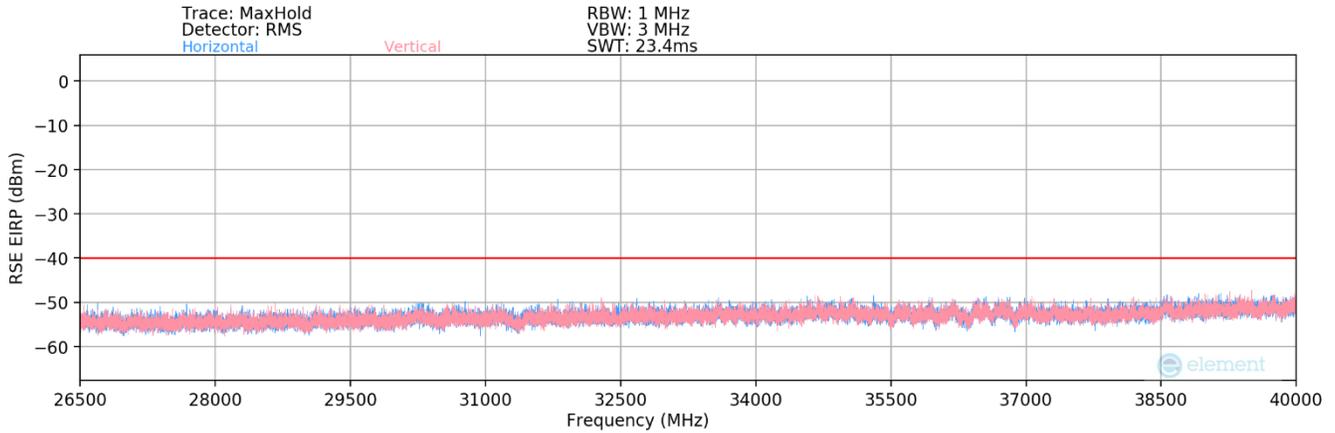


Plot 7-150. Radiated Spurious Plot (ULCA LB48 – Low - Open)



Plot 7-151. Radiated Spurious Plot (ULCA LB48 – Mid - Open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-152. Radiated Spurious Plot (ULCA LB48 – High - Open)

PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	3625.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	3644.8
SCC RB / Offset:	1 / 0
Modulation Signal:	QPSK

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]
125.0	H	-	-	-85.42	20.39	41.97	-55.44	-40.00	-15.44
307.5	H	-	-	-85.45	21.31	42.86	-54.55	-40.00	-14.55

Table 7-21. Radiated Spurious Data <1GHz (ULCA LB48 – Mid Channel - Open)

PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	3560.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	3579.8
SCC RB / Offset:	1 / 0
Modulation Signal:	QPSK

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]
7139.8	H	365	315	-65.71	8.52	49.81	-45.44	-40.00	-5.44
10709.7	H	242	2	-71.39	12.29	47.90	-47.35	-40.00	-7.35
14279.6	H	-	-	-78.26	14.66	43.40	-51.86	-40.00	-11.86
17849.5	H	-	-	-78.94	18.18	46.24	-49.02	-40.00	-9.02

Table 7-22. Radiated Spurious Data (ULCA LB48 – Low Channel - Open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	3625.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	3644.8
SCC RB / Offset:	1 / 0
Modulation Signal:	QPSK

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]
3941.1	H	339	0	-69.08	12.27	50.19	-45.07	-40.00	-5.07
7269.8	H	233	53	-71.73	7.43	42.70	-52.56	-40.00	-12.56
10904.7	H	196	320	-67.59	12.56	51.97	-43.29	-40.00	-3.29
14539.6	H	-	-	-77.97	15.39	44.42	-50.84	-40.00	-10.84

Table 7-23. Radiated Spurious Data (ULCA LB48 – Mid Channel - Open)

PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	3690.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	3670.2
SCC RB / Offset:	1 / 0
Modulation Signal:	QPSK

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]
3986.3	H	388	5	-68.94	12.45	50.51	-44.75	-40.00	-4.75
7360.2	H	216	68	-70.21	8.16	44.95	-50.31	-40.00	-10.31
11040.3	H	177	298	-75.14	12.33	44.19	-51.06	-40.00	-11.06
14720.4	H	136	31	-78.18	16.14	44.96	-50.30	-40.00	-10.30

Table 7-24. Radiated Spurious Data (ULCA LB48 – High Channel - Open)

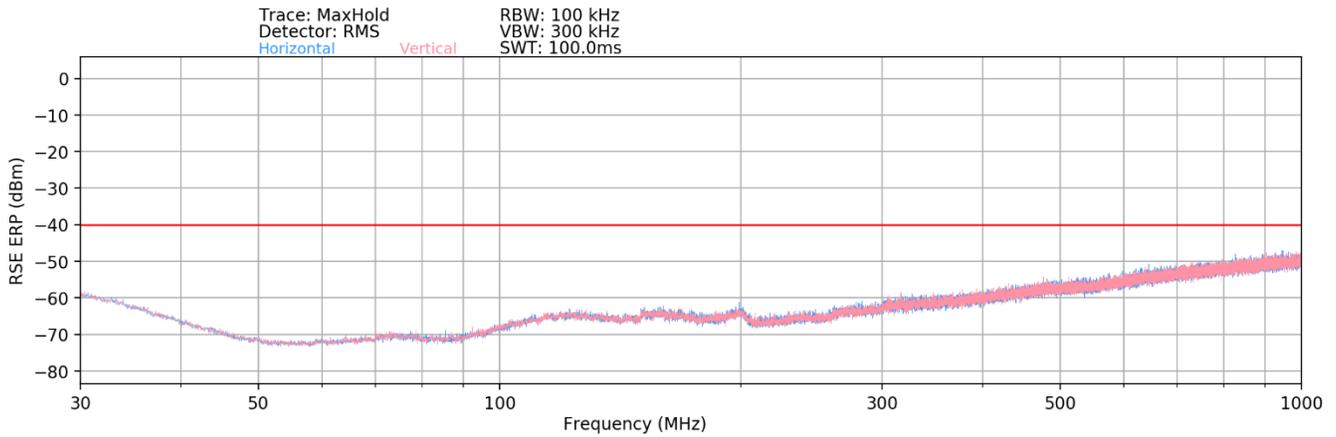
PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	3625.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	3644.8
SCC RB / Offset:	1 / 0
Modulation Signal:	QPSK

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]
3941.1	H	341	300	-70.96	12.27	48.31	-46.95	-40.00	-6.95
7269.8	H	381	48	-74.82	7.43	39.61	-55.65	-40.00	-15.65
10904.7	H	-	-	-77.50	12.56	42.06	-53.20	-40.00	-13.20
14539.6	H	-	-	-78.18	15.39	44.21	-51.05	-40.00	-11.05

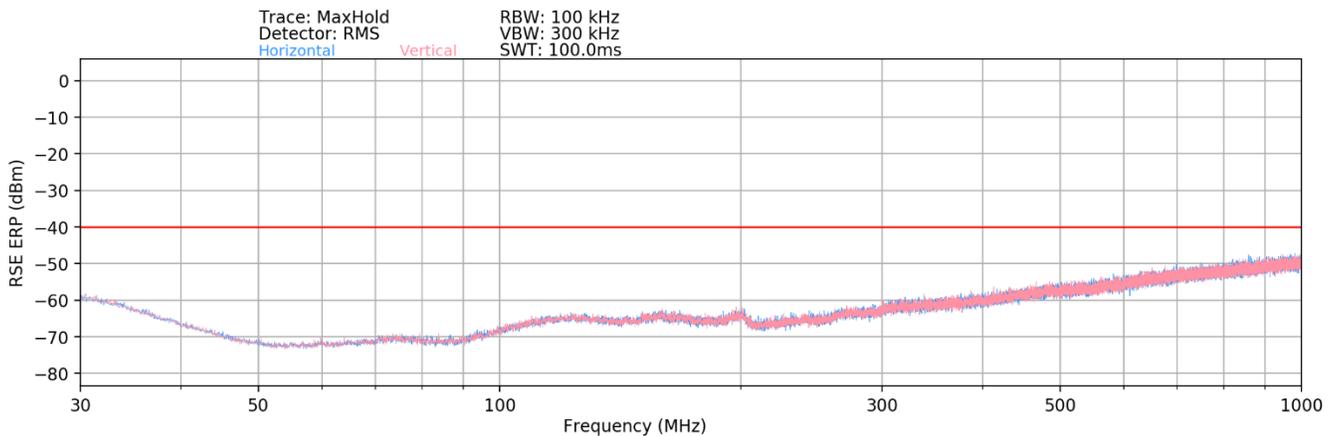
Table 7-25. Radiated Spurious Data with WCP (ULCA LB48 – Open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204010046-08.A3L	Test Dates: 4/1/2022 - 6/20/2022	EUT Type: Portable Handset	Page 109 of 133

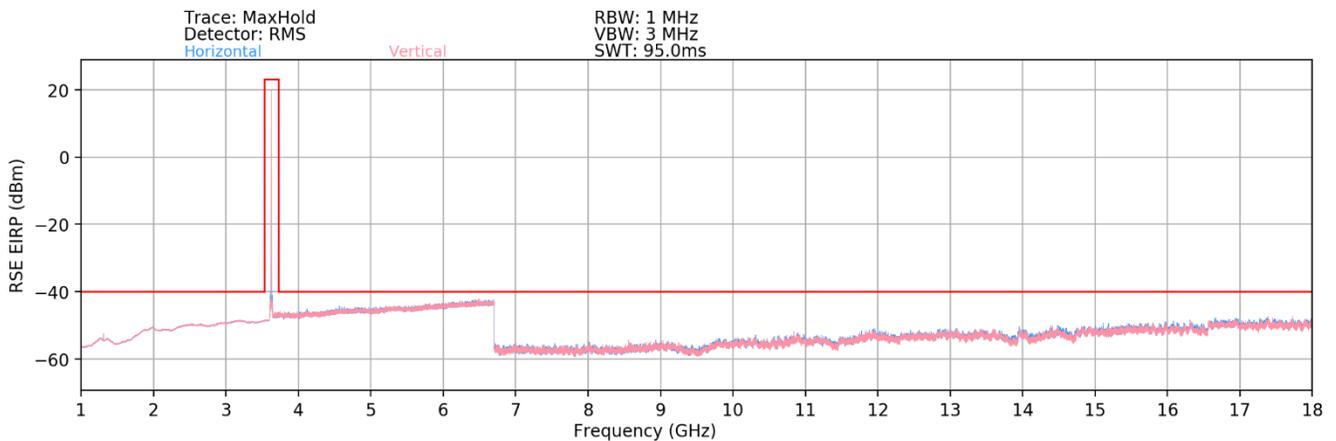
NR Band n48 – Ant F



Plot 7-153. Radiated Spurious Plot (NR Band n48 – Ant F – Open)

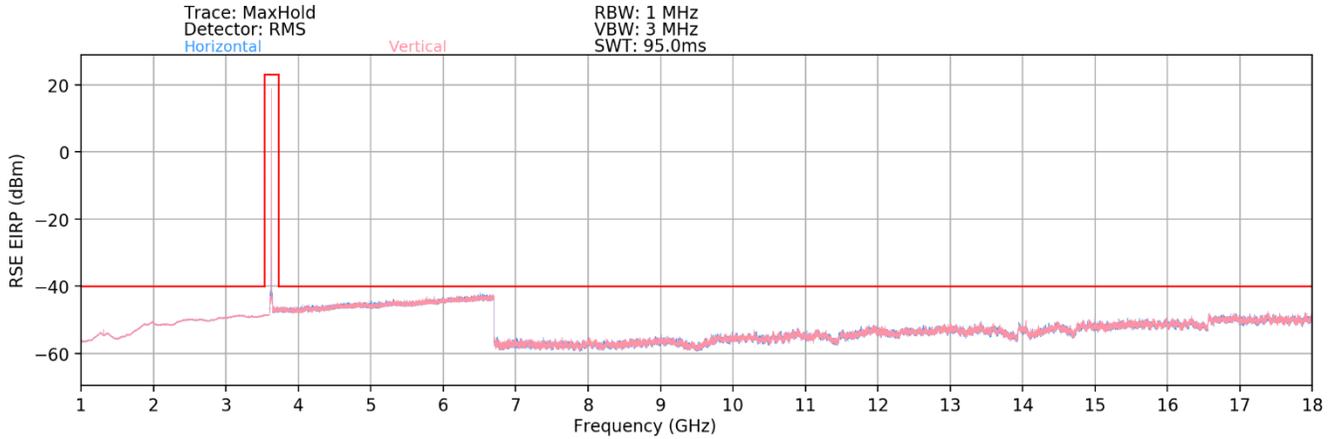


Plot 7-154. Radiated Spurious Plot (NR Band n48 – Ant F – Half-open)

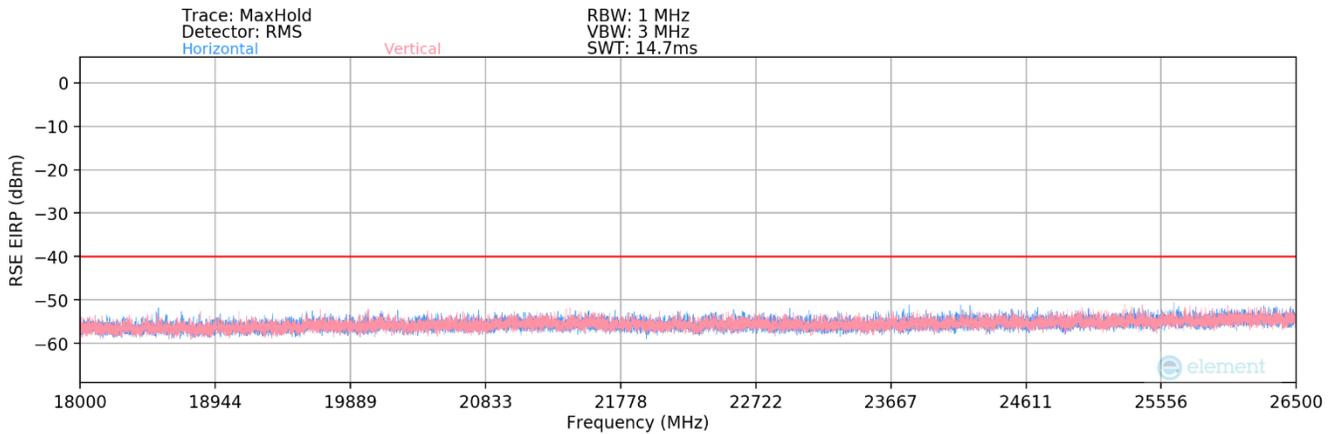


Plot 7-155. Radiated Spurious Plot (NR Band n48 – Ant F – Open)

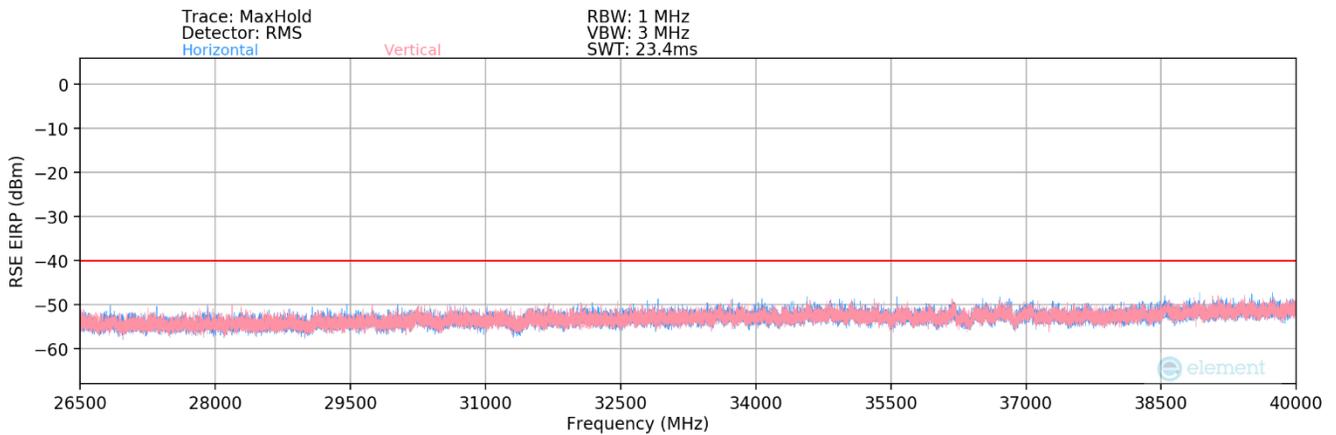
FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2204010046-08.A3L	Test Dates: 4/1/2022 - 6/20/2022	EUT Type: Portable Handset	Page 110 of 133



Plot 7-156. Radiated Spurious Plot (NR Band n48 – Ant F – Half-open)



Plot 7-157. Radiated Spurious Plot (NR Band n48 – Ant F – Open)



Plot 7-158. Radiated Spurious Plot (NR Band n48 – Ant F – Open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth (MHz):	40
Frequency (MHz):	3570.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
194.4	H	-	-	-85.31	19.56	41.25	-56.16	-40.00	-16.16

Table 7-26. Radiated Spurious Data <1GHz (NR Band n48 – Low Channel – Ant F – Open)

Bandwidth (MHz):	40
Frequency (MHz):	3570.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7140.0	H	189	28	-73.77	8.23	41.46	-53.80	-40.00	-13.80
10710.0	H	125	85	-73.28	12.63	46.35	-48.91	-40.00	-8.91
14280.0	H	-	-	-78.30	15.38	44.08	-51.18	-40.00	-11.18
17850.0	H	-	-	-78.85	18.10	46.25	-49.01	-40.00	-9.01

Table 7-27. Radiated Spurious Data (NR Band n48 – Low Channel – Ant F – Open)

Bandwidth (MHz):	40
Frequency (MHz):	3625.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7250.0	H	175	23	-72.95	7.61	41.66	-53.60	-40.00	-13.60
10875.0	H	289	10	-75.08	12.18	44.10	-51.15	-40.00	-11.15
14500.0	H	-	-	-77.74	15.49	44.75	-50.51	-40.00	-10.51

Table 7-28. Radiated Spurious Data (NR Band n48 – Mid Channel – Ant F – Open)

Bandwidth (MHz):	40
Frequency (MHz):	3680.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7360.0	H	182	31	-73.95	8.30	41.35	-53.90	-40.00	-13.90
11040.0	H	127	49	-74.05	12.57	45.52	-49.74	-40.00	-9.74
14720.0	H	-	-	-78.53	16.23	44.70	-50.56	-40.00	-10.56

Table 7-29. Radiated Spurious Data (NR Band n48 – High Channel – Ant F – Open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth (MHz):	40
Frequency (MHz):	3570.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7140.0	H	270	55	-75.26	8.23	39.97	-55.29	-40.00	-15.29
10710.0	H	133	82	-74.32	12.63	45.31	-49.95	-40.00	-9.95
14280.0	H	-	-	-78.40	15.38	43.98	-51.28	-40.00	-11.28
17850.0	H	-	-	-78.96	18.10	46.14	-49.12	-40.00	-9.12

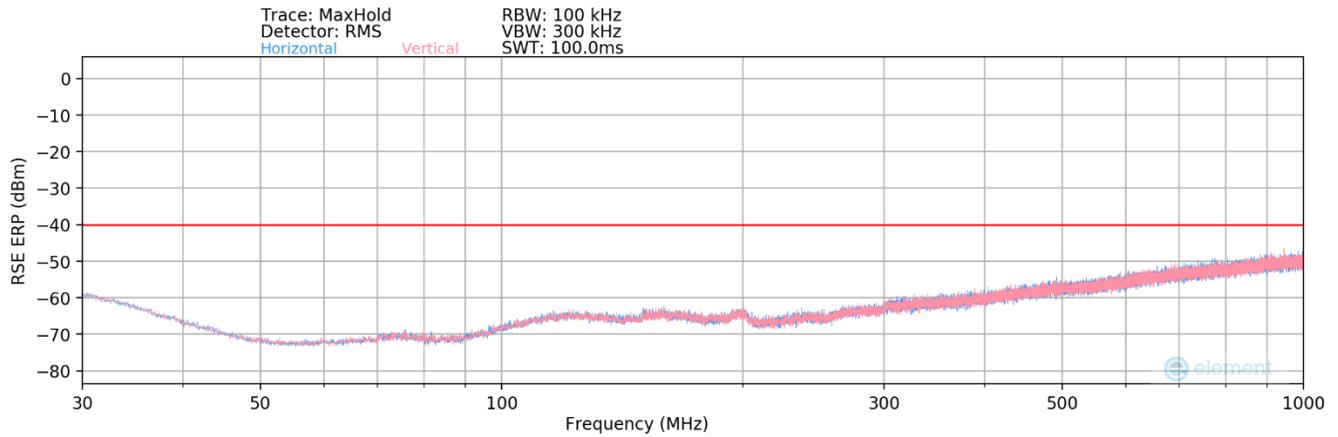
Table 7-30. Radiated Spurious Data with WCP (NR Band n48 – Ant F – Open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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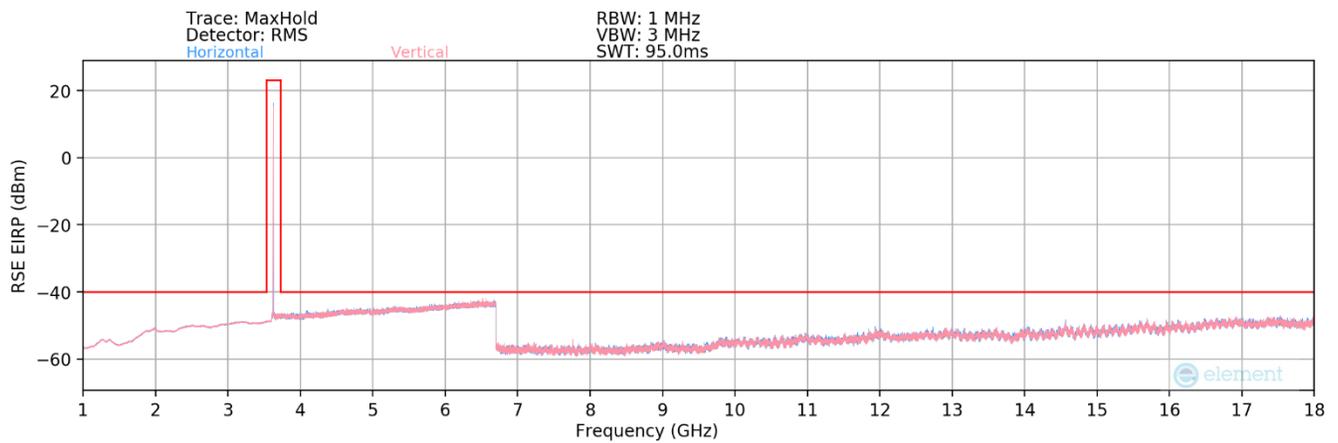
V3.0 1/6/2022

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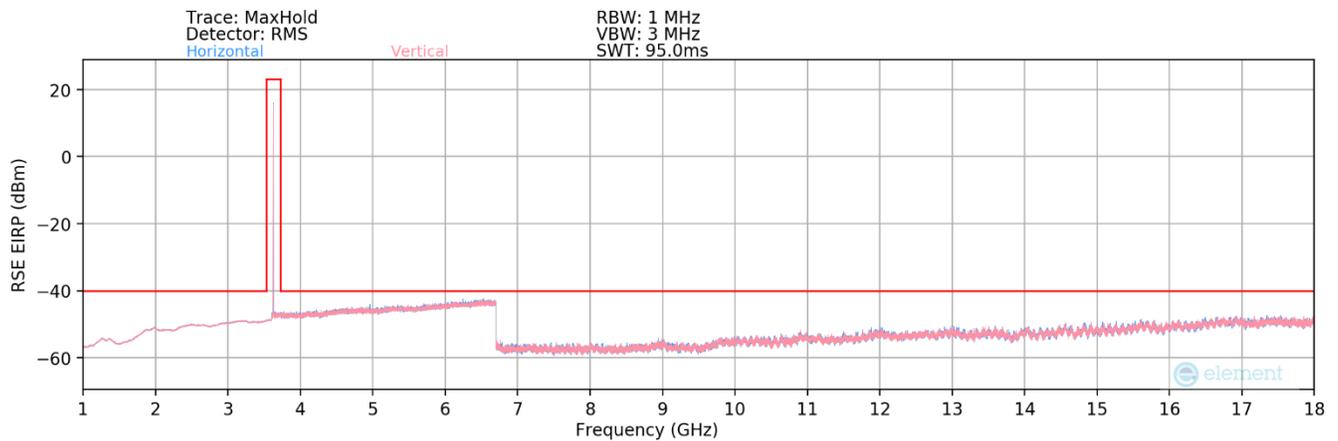
NR Band n48 – Ant E



Plot 7-159. Radiated Spurious Plot (NR Band n48 – Ant E – Half-open)

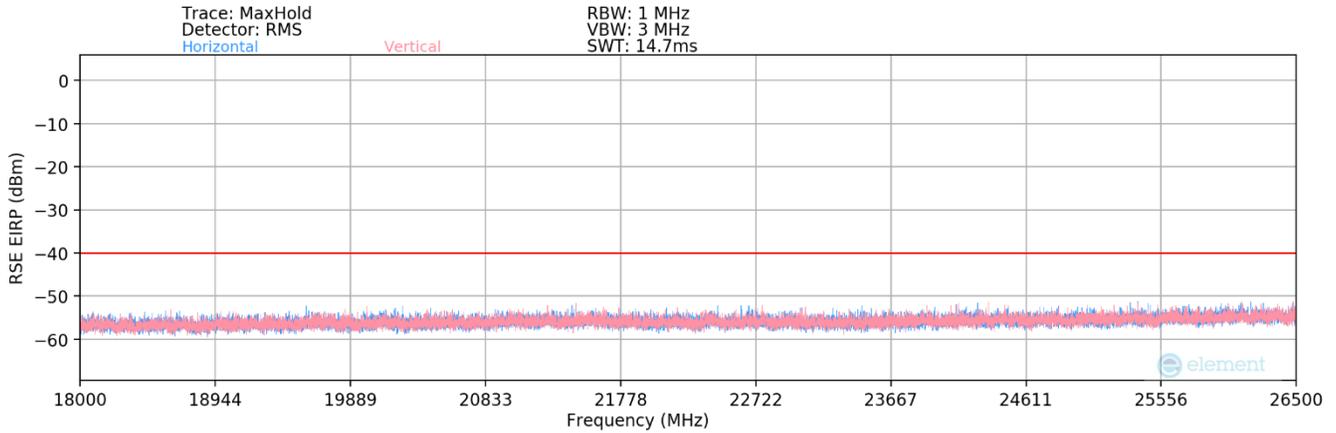


Plot 7-160. Radiated Spurious Plot (NR Band n48 – Ant E – Half-open)

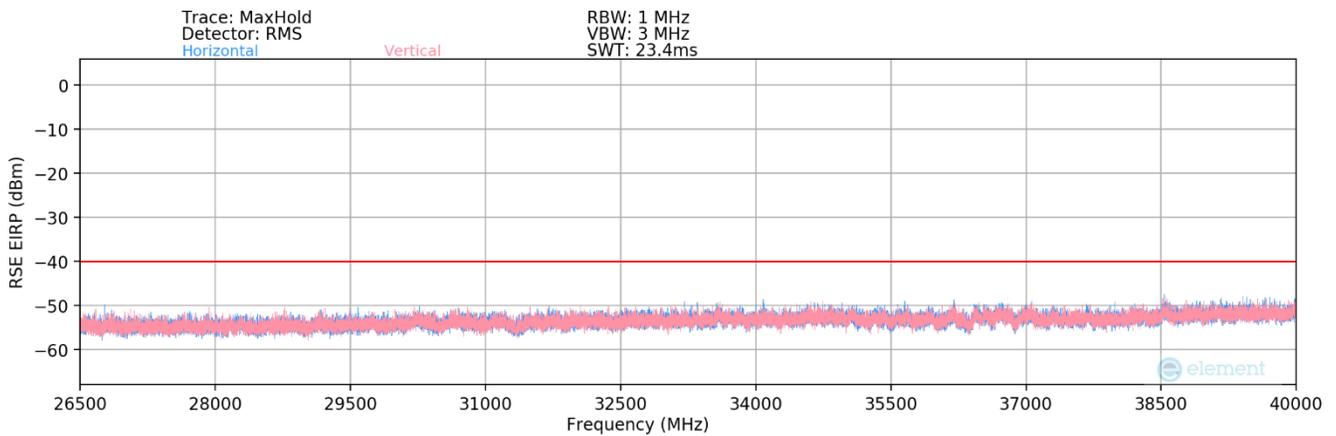


Plot 7-161. Radiated Spurious Plot (NR Band n48 – Ant E – Open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-162. Radiated Spurious Plot (NR Band n48 – Ant E – Half-open)



Plot 7-163. Radiated Spurious Plot (NR Band n48 – Ant E – Half-open)

Bandwidth (MHz):	40
Frequency (MHz):	3680.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
204.1	V	-	-	-84.09	18.35	41.26	-56.15	-40.00	-16.15
385.0	V	-	-	-84.10	23.00	45.90	-51.51	-40.00	-11.51

Table 7-31. Radiated Spurious Data <1GHz (NR Band n48 – High Channel - Ant E – Half-open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth (MHz):	40
Frequency (MHz):	3570.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7140.0	H	157	65	-75.53	8.53	40.00	-55.26	-40.00	-15.26
10710.0	H	357	33	-79.68	12.30	39.62	-55.64	-40.00	-15.64
14280.0	H	-	-	-80.53	14.66	41.13	-54.13	-40.00	-14.13
17850.0	H	-	-	-80.96	18.17	44.21	-51.04	-40.00	-11.04

Table 7-32. Radiated Spurious Data (NR Band n48 – Low Channel – Ant E – Half-open)

Bandwidth (MHz):	40
Frequency (MHz):	3625.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7250.0	H	160	60	-75.34	7.61	39.27	-55.99	-40.00	-15.99
10875.0	H	163	46	-79.56	12.18	39.62	-55.63	-40.00	-15.63
14500.0	H	-	-	-80.48	15.49	42.01	-53.25	-40.00	-13.25

Table 7-33. Radiated Spurious Data (NR Band n48 – Mid Channel - Ant E – Half-open)

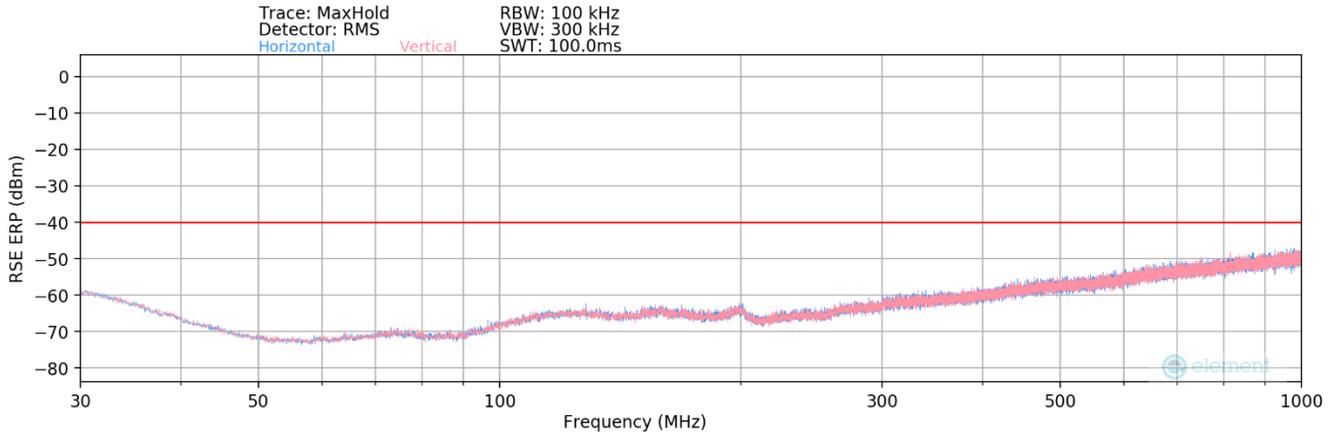
Bandwidth (MHz):	40
Frequency (MHz):	3680.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7360.0	H	172	65	-74.31	8.16	40.85	-54.41	-40.00	-14.41
11040.0	H	-	-	-79.91	12.33	39.42	-55.83	-40.00	-15.83
14720.0	H	-	-	-80.57	16.13	42.56	-52.70	-40.00	-12.70

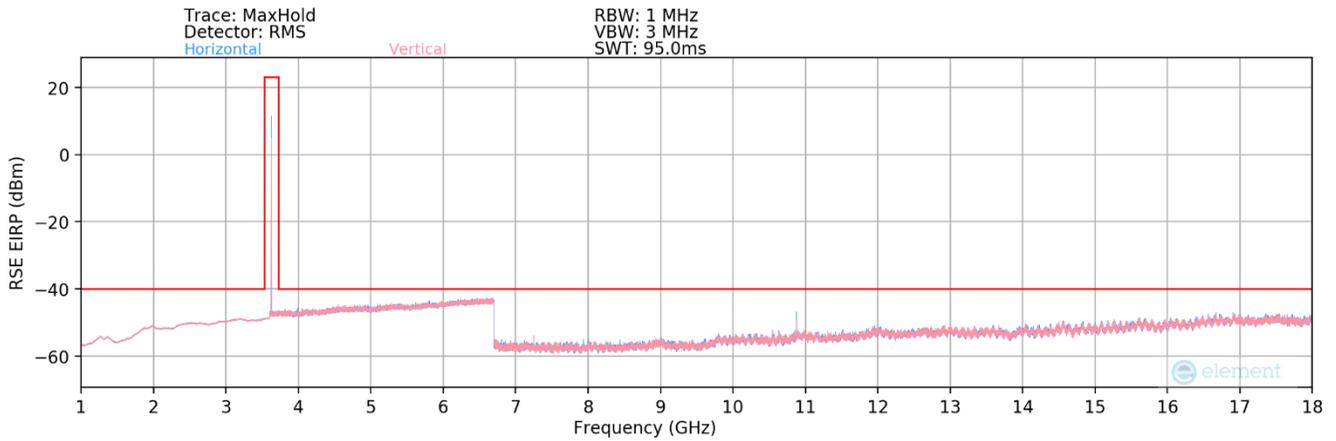
Table 7-34. Radiated Spurious Data (NR Band n48 – High Channel - Ant E – Half-open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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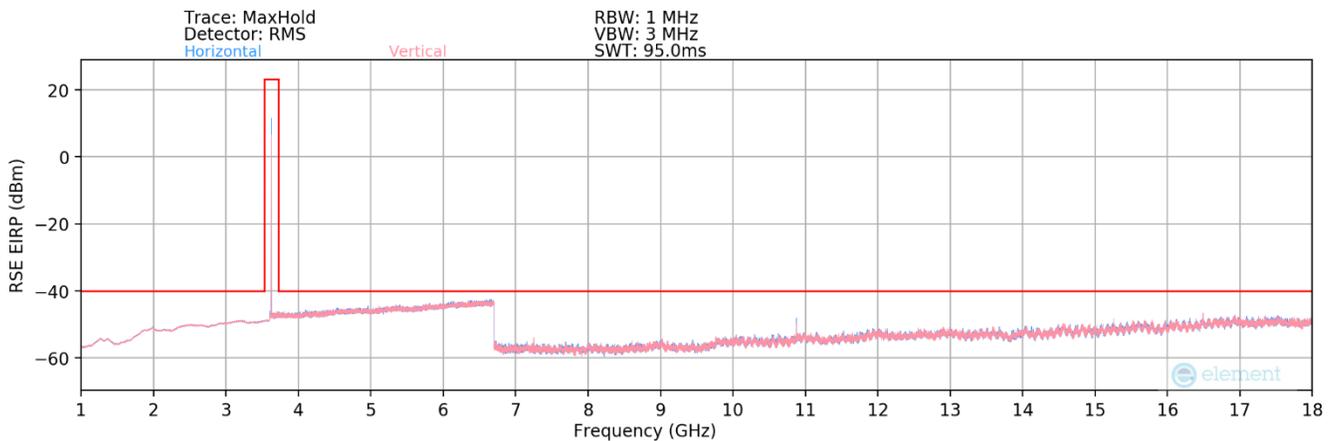
NR Band n48 – Ant G



Plot 7-164. Radiated Spurious Plot (NR Band n48 – Ant G – Half-open)

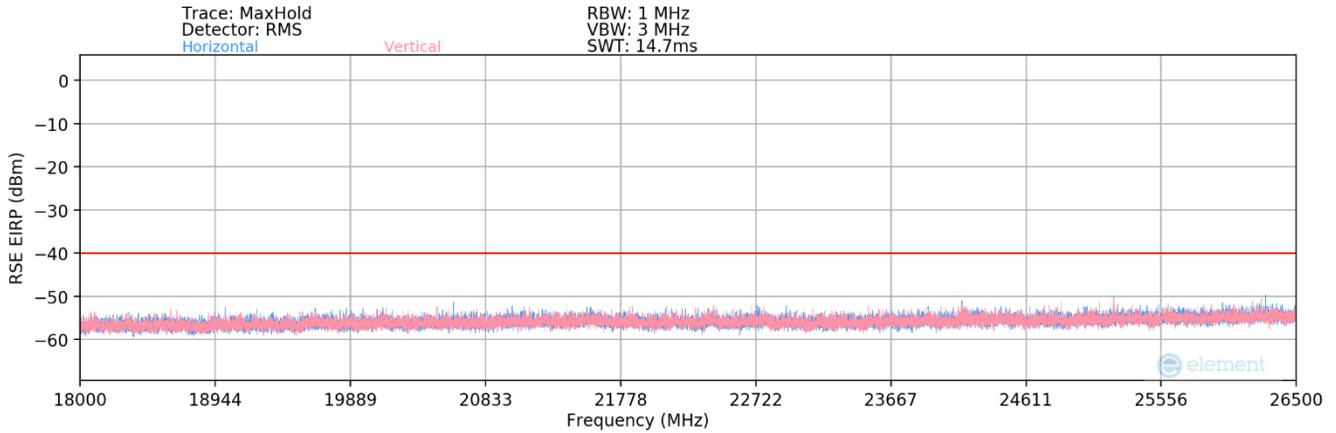


Plot 7-165. Radiated Spurious Plot (NR Band n48 – Ant G – Half-open)

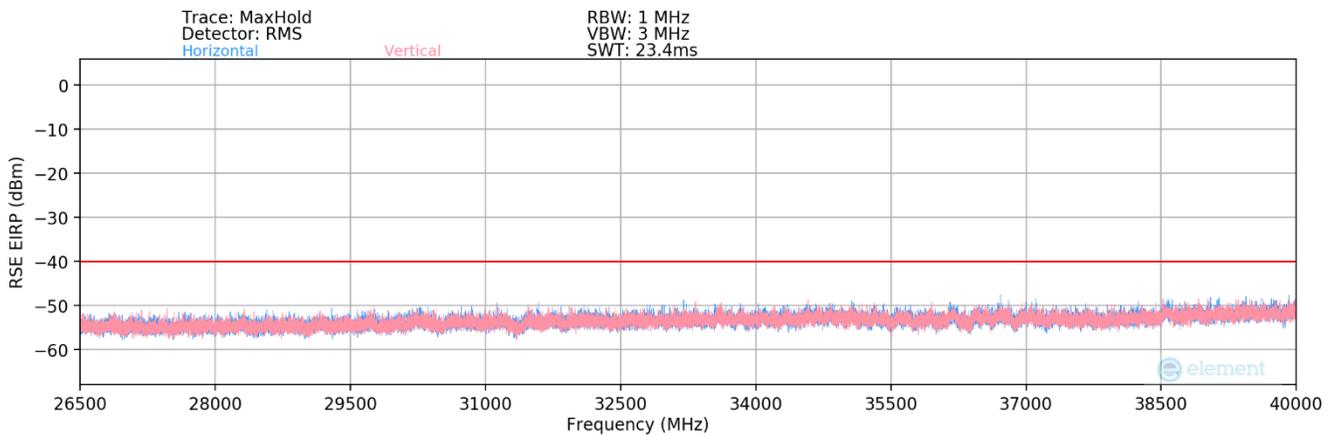


Plot 7-166. Radiated Spurious Plot (NR Band n48 – Ant G – Open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-167. Radiated Spurious Plot (NR Band n48 – Ant G – Half-open)



Plot 7-168. Radiated Spurious Plot (NR Band n48 – Ant G – Half-open)

Bandwidth (MHz):	40
Frequency (MHz):	3570.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
97.6	H	-	-	-91.00	16.68	32.68	-64.73	-40.00	-24.73
137.9	H	-	-	-91.02	20.02	36.00	-61.40	-40.00	-21.40

Table 7-35. Radiated Spurious Data <1GHz (NR Band n48 – Low Channel – Ant G – Half-open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth (MHz):	40
Frequency (MHz):	3570.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7140.0	V	327	21	-76.89	8.53	38.64	-56.62	-40.00	-16.62
10710.0	H	253	31	-70.61	12.30	48.69	-46.57	-40.00	-6.57
14280.0	H	201	52	-78.46	14.66	43.20	-52.06	-40.00	-12.06
17850.0	H	-	-	-80.98	18.17	44.19	-51.06	-40.00	-11.06

Table 7-36. Radiated Spurious Data (NR Band n48 – Low Channel – Ant G – Half-open)

Bandwidth (MHz):	40
Frequency (MHz):	3625.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7250.0	V	166	340	-74.45	7.61	40.16	-55.10	-40.00	-15.10
10875.0	H	261	41	-72.06	12.18	47.12	-48.13	-40.00	-8.13
14500.0	H	207	47	-78.49	15.49	44.00	-51.26	-40.00	-11.26

Table 7-37. Radiated Spurious Data (NR Band n48 – Mid Channel - Ant G – Half-open)

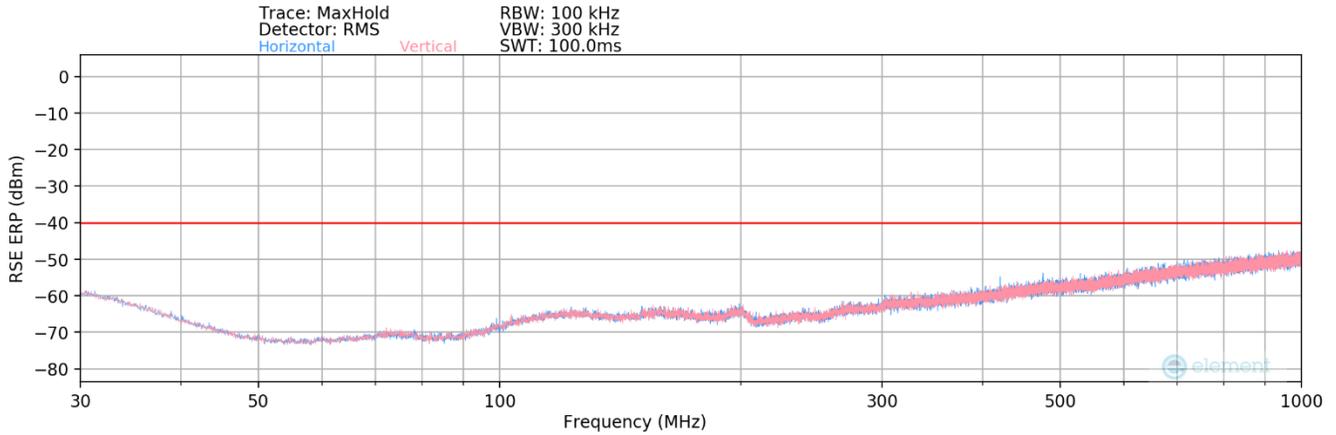
Bandwidth (MHz):	40
Frequency (MHz):	3680.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7360.0	V	142	339	-77.63	8.16	37.53	-57.73	-40.00	-17.73
11040.0	H	132	35	-74.55	12.33	44.78	-50.47	-40.00	-10.47
14720.0	H	219	60	-79.71	16.13	43.42	-51.84	-40.00	-11.84

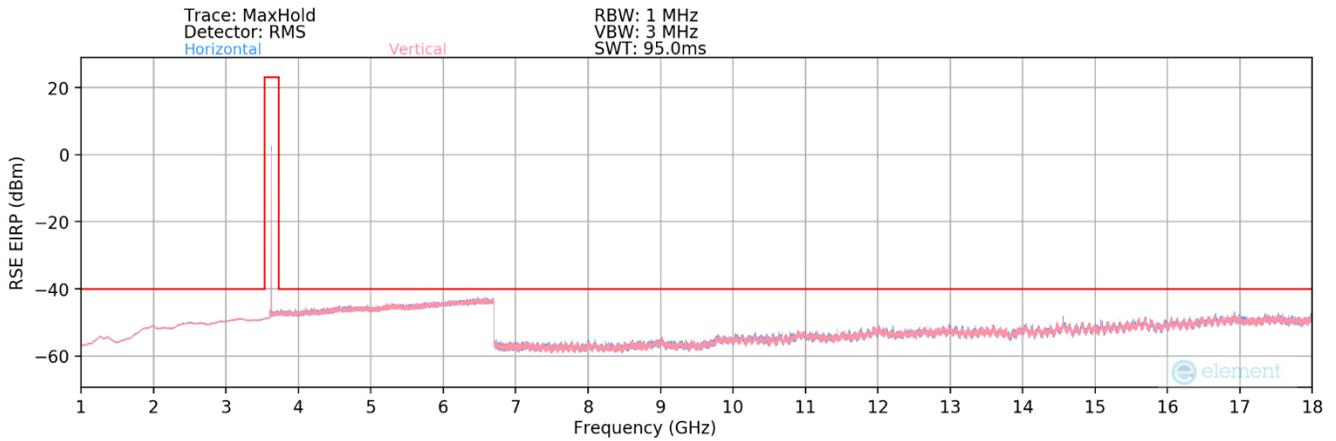
Table 7-38. Radiated Spurious Data (NR Band n48 – High Channel - Ant G – Half-open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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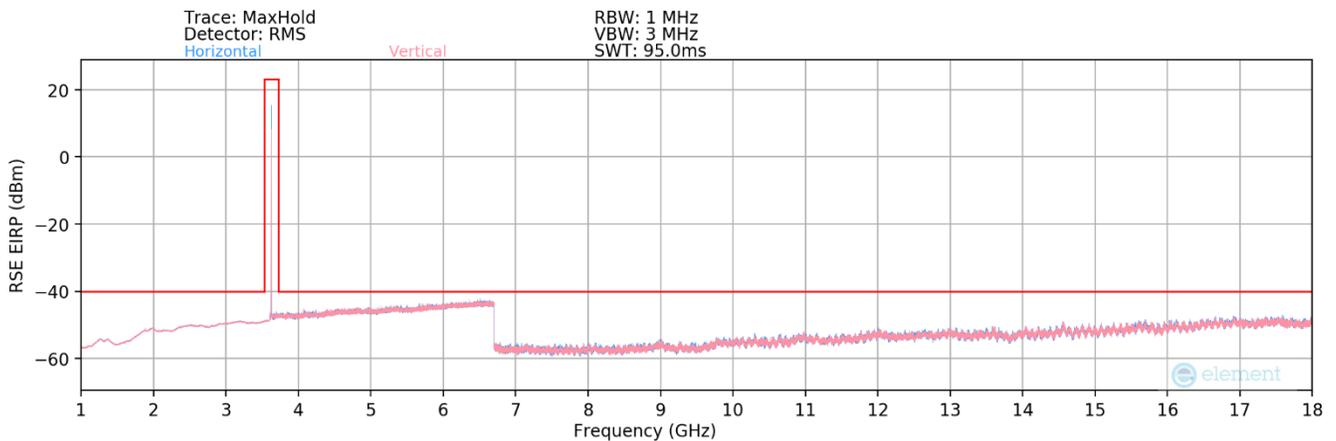
NR Band n48 – Ant D



Plot 7-169. Radiated Spurious Plot (NR Band n48 – Ant D – Closed)

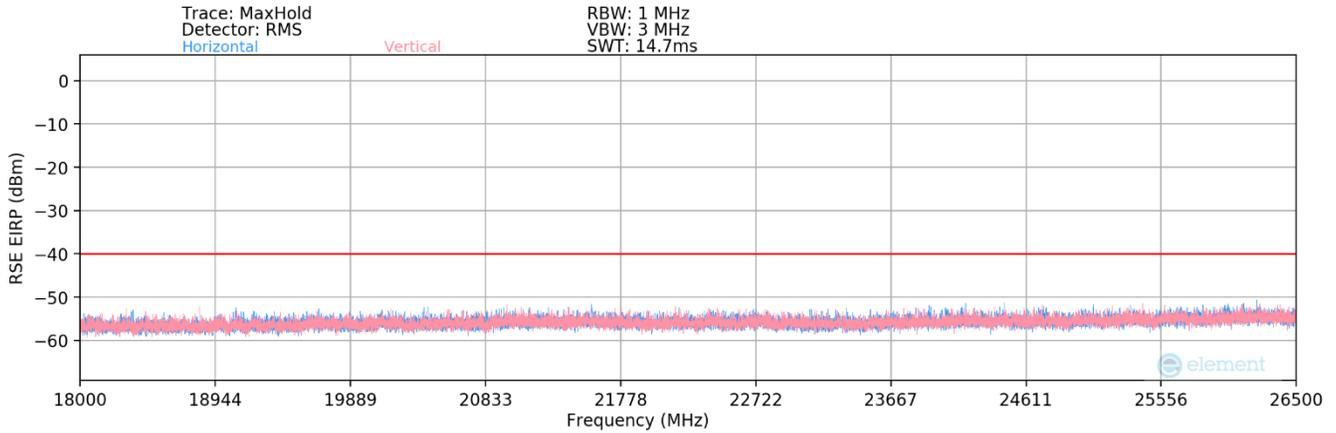


Plot 7-170. Radiated Spurious Plot (NR Band n48 – Ant D – Closed)

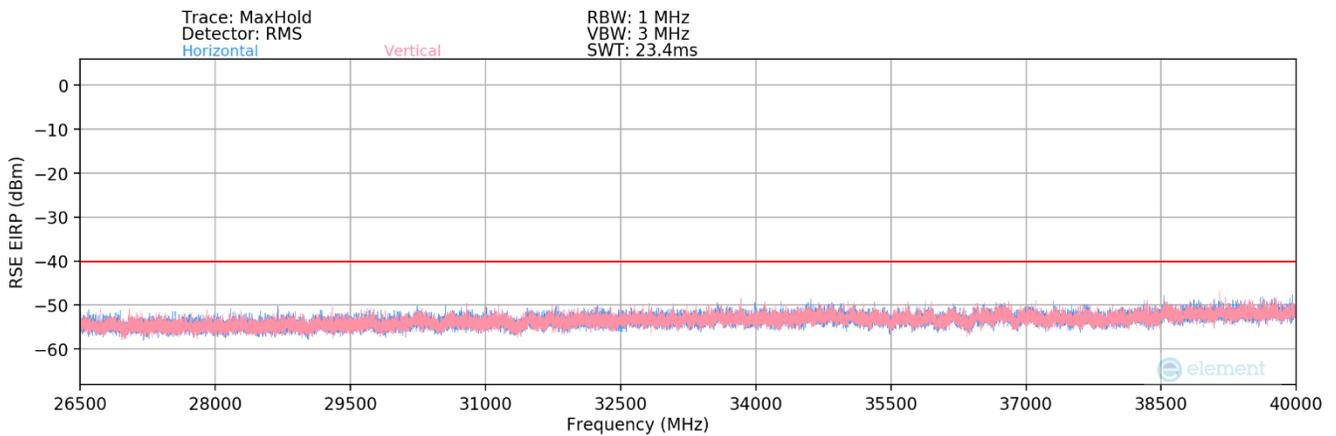


Plot 7-171. Radiated Spurious Plot (NR Band n48 – Ant D – Open)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-172. Radiated Spurious Plot (NR Band n48 – Ant D – Closed)



Plot 7-173. Radiated Spurious Plot (NR Band n48 – Ant D – Closed)

Bandwidth (MHz):	40
Frequency (MHz):	3680.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
98.1	H	-	-	-90.91	16.85	32.94	-64.46	-40.00	-24.46
425.0	H	-	-	-90.16	24.15	40.99	-56.42	-40.00	-16.42
474.6	H	-	-	-89.92	25.29	42.37	-55.04	-40.00	-15.04

Table 7-39. Radiated Spurious Data <1GHz (NR Band n48 – High Channel - Ant D – Closed)

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth (MHz):	40
Frequency (MHz):	3570.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7140.0	H	-	-	-78.90	8.53	36.63	-58.63	-40.00	-18.63
10710.0	H	-	-	-80.18	12.30	39.12	-56.14	-40.00	-16.14
14280.0	H	-	-	-80.60	14.66	41.06	-54.20	-40.00	-14.20
17850.0	H	-	-	-81.01	18.17	44.16	-51.09	-40.00	-11.09

Table 7-40. Radiated Spurious Data (NR Band n48 – Low Channel - Ant D – Closed)

Bandwidth (MHz):	40
Frequency (MHz):	3625.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7250.0	H	-	-	-78.59	7.61	36.02	-59.24	-40.00	-19.24
10875.0	H	-	-	-79.95	12.18	39.23	-56.02	-40.00	-16.02
14500.0	H	-	-	-80.71	15.49	41.78	-53.48	-40.00	-13.48

Table 7-41. Radiated Spurious Data (NR Band n48 – Mid Channel - Ant D – Closed)

Bandwidth (MHz):	40
Frequency (MHz):	3680.0
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53

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]
7360.0	H	320	55	-76.98	8.16	38.18	-57.08	-40.00	-17.08
11040.0	H	-	-	-79.97	12.33	39.36	-55.89	-40.00	-15.89
14720.0	H	-	-	-80.56	16.13	42.57	-52.69	-40.00	-12.69

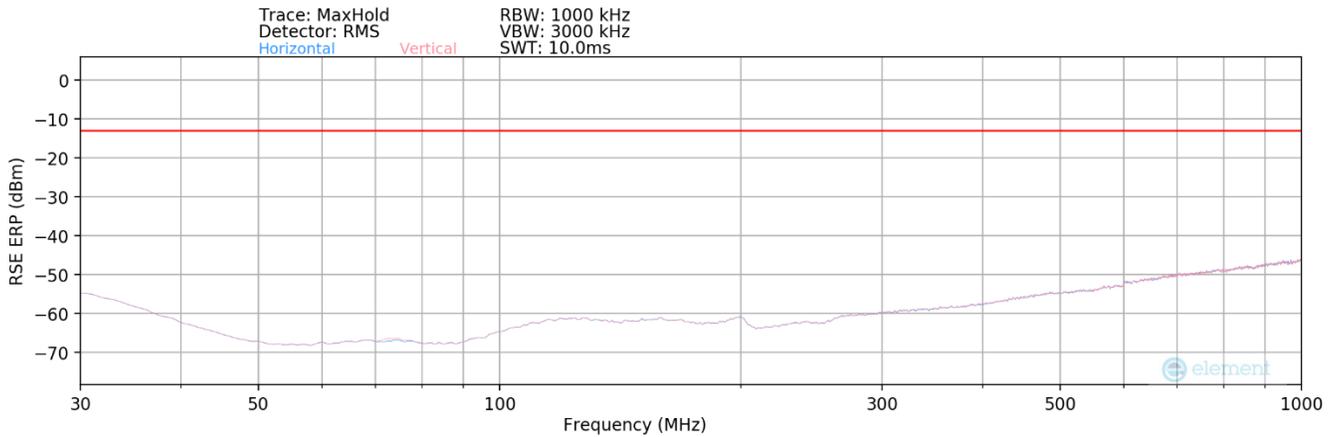
Table 7-42. Radiated Spurious Data (NR Band n48 – High Channel - Ant D – Closed)

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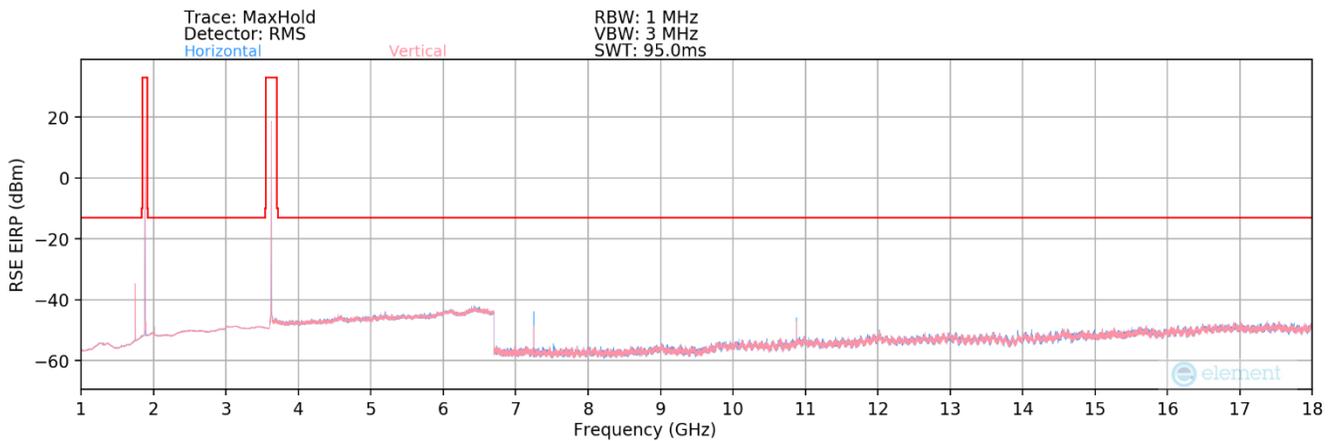
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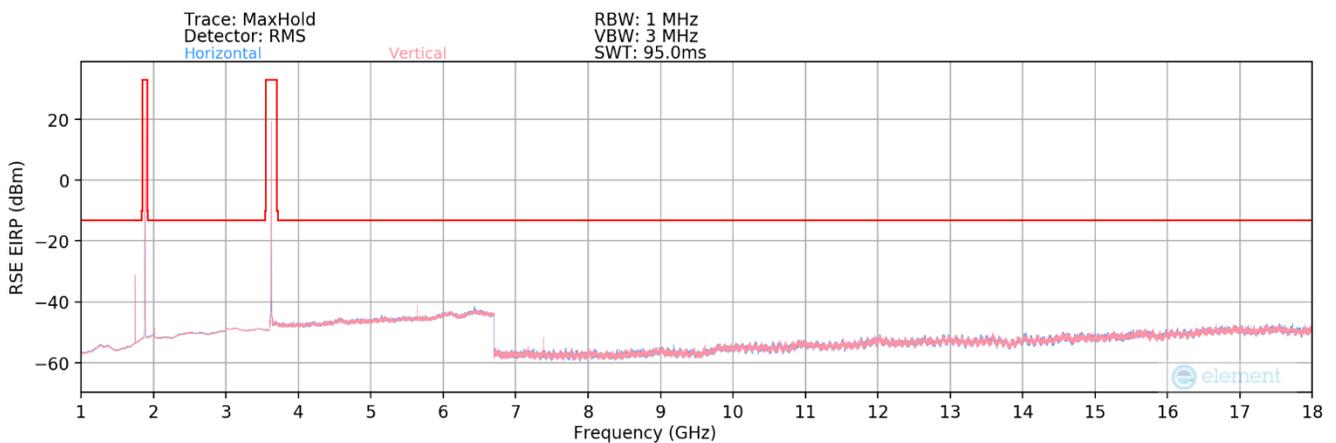
EN-DC n48 – B2



Plot 7-174. Radiated Spurious Plot 30 MHz-1 GHz (EN-DC n48-B66) – Closed



Plot 7-175. Radiated Spurious Plot 3-7 GHz (EN-DC n48-B66) – Open



Plot 7-176. Radiated Spurious Plot 3-7 GHz (EN-DC n48-B66) – Closed

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Bandwidth (MHz):	40 & 20
Frequency (MHz):	3625 & 1880
Modulation Signal:	QPSK
RB Config (Size / Offset):	1 / 53 & 1 / 50
Anchor Band	LTE Band 2

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
135.0	V	-	-	-84.22	20.09	42.87	-52.38	-13.00	-39.38
270.0	V	-	-	-84.14	20.60	43.46	-51.80	-13.00	-38.80
1745.0	V	349	0	-52.33	7.17	61.84	-33.42	-13.00	-20.42
5640.0	V	249	314	-60.84	5.52	51.68	-43.58	-13.00	-30.58
7520.0	V	381	11	-74.36	8.43	41.07	-54.18	-13.00	-41.18
9130.0	V	-	-	-79.37	9.78	37.41	-57.85	-13.00	-44.85

Table 7-43. Radiated Spurious Data (EN-DC n48-B66) – Closed

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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7.8 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 96, 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

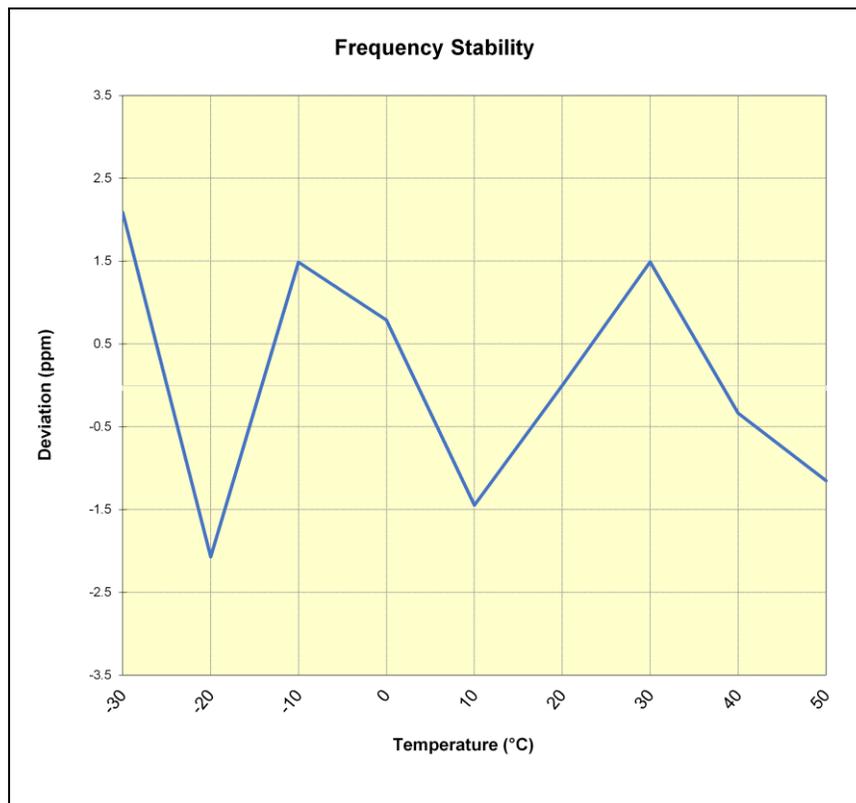
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Frequency Stability / Temperature Variation

LTE Band 48					
		Operating Frequency (Hz):		3,625,000,000	
		Ref. Voltage (VDC):		4.38	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.38	- 30	3,625,070,280	7,571	0.0002089
		- 20	3,625,055,205	-7,504	-0.0002070
		- 10	3,625,068,099	5,390	0.0001487
		0	3,625,065,564	2,855	0.0000788
		+ 10	3,625,057,454	-5,255	-0.0001450
		+ 20 (Ref)	3,625,062,709	0	0.0000000
		+ 30	3,625,068,111	5,402	0.0001490
		+ 40	3,625,061,493	-1,216	-0.0000335
Battery Endpoint	3.35	+ 20	3,625,060,449	-2,260	-0.0000623

Table 7-44. LTE Band 48 Frequency Stability Data



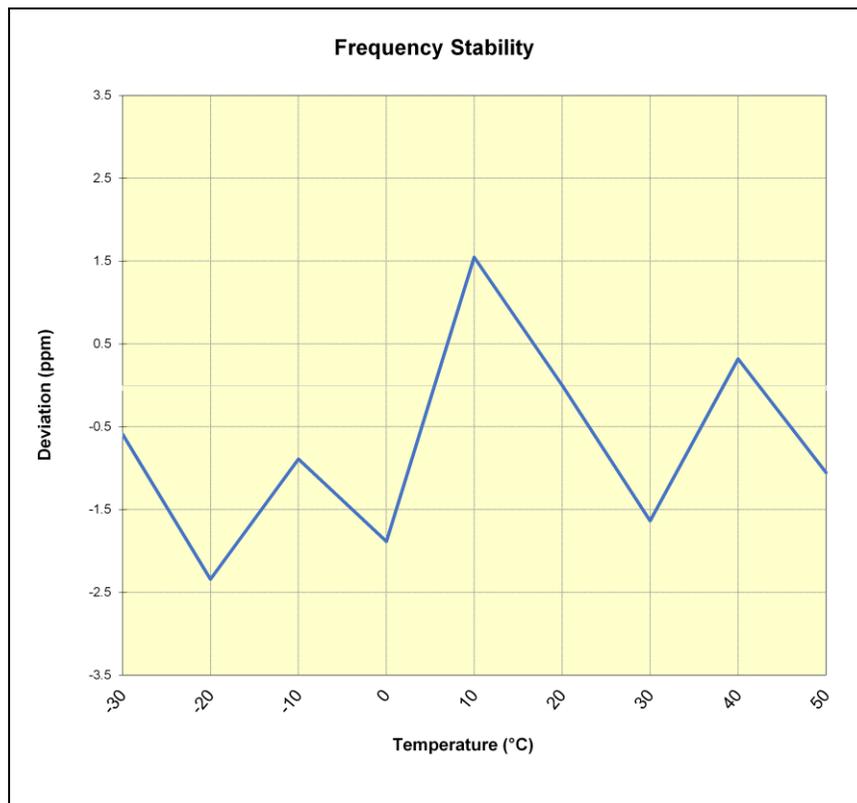
Plot 7-177. LTE Band 48 Frequency Stability Chart

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Frequency Stability / Temperature Variation

NR Band n48					
		Operating Frequency (Hz):		3,625,000,000	
		Ref. Voltage (VDC):		4.38	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.38	- 30	3,625,002,379	-2,136	-0.0000589
		- 20	3,624,996,022	-8,493	-0.0002343
		- 10	3,625,001,285	-3,230	-0.0000891
		0	3,624,997,681	-6,834	-0.0001885
		+ 10	3,625,010,119	5,604	0.0001546
		+ 20 (Ref)	3,625,004,515	0	0.0000000
		+ 30	3,624,998,581	-5,934	-0.0001637
		+ 40	3,625,005,666	1,151	0.0000318
Battery Endpoint	3.35	+ 20	3,625,010,475	5,960	0.0001644

Table 7-45. NR Band n48 Frequency Stability Data



Plot 7-178. NR Band n48 Frequency Stability Chart

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7.9 End User Device Additional Requirement (CBSD Protocol)

Test Overview and Limit

End user device additional requirements (CBSD Protocol) are tested per the test procedures listed below. During LTE testing, the EUT is connected to a certified LTE CBSD (Ruckus FCC ID: S9GQ910US00) as a companion device to show compliance with Part 96.47. During NR 5G testing, the EUT is connected to a certified 5G NR CBSD as a companion device to show compliance with Part 96.47.

End User Devices may operate only if they can positively receive and decode an authorization signal transmitted by a CBSD, including the frequencies and power limits for their operation.

An End User Device must discontinue operations, change frequencies, or change its operational power level within 10 seconds of receiving instructions from its associated CBSD.

Test Procedure Used

KDB 940660 D01 v03, WINNF-TS-0122 V1.0.2, WINNF-18-IN-00178 v1.0.0.00

Test Setup/Method

For LTE, the EUT was connected via an RF cable to a certified CBSD and spectrum analyzer. The following procedure is performed by applying WINNF-TS-0122 CBRS CBSD Test Specification

1. Run#1:
 - a. Setup WINNF.PT.C.HBT.1 with 3615MHz – 3635MHz.
 - b. Enable AP service from Ruckus Cloud management.
 - c. Check EUT Tx frequency.
 - d. Disable AP service from Ruckus Cloud management and check EUT stop transmission within 10s.
2. Run#2:
 - a. Setup WINNF.PT.C.HBT.1 with 3660MHz – 3680MHz.
 - b. Enable AP service from Ruckus Cloud management.
 - c. Check EUT Tx frequency.
 - d. Disable AP service from Ruckus Cloud management and check EUT stop transmission within 10s.

For NR, the EUT was connected via an RF cable to a certified 5G CBSD and spectrum analyzer. The following procedure is performed by applying WINNF-18-IN-00178 v1.0.0.00 CBRS End User Device as UUT Test Guidelines

1. Run#1:
 - a. Setup WINNF.PT.C.HBT.1 with 3615MHz – 3635MHz.
 - b. Enable 5G AP service from CBSD.
 - c. Check EUT Tx frequency.
 - d. Disable AP service and check EUT stop transmission within 10s.
2. Run#2:
 - a. Setup WINNF.PT.C.HBT.1 with 3660MHz – 3680MHz.
 - b. Enable 5G AP service from CBSD.
 - c. Check EUT Tx frequency.
 - d. Disable AP service and check EUT stop transmission within 10s.

Test Notes

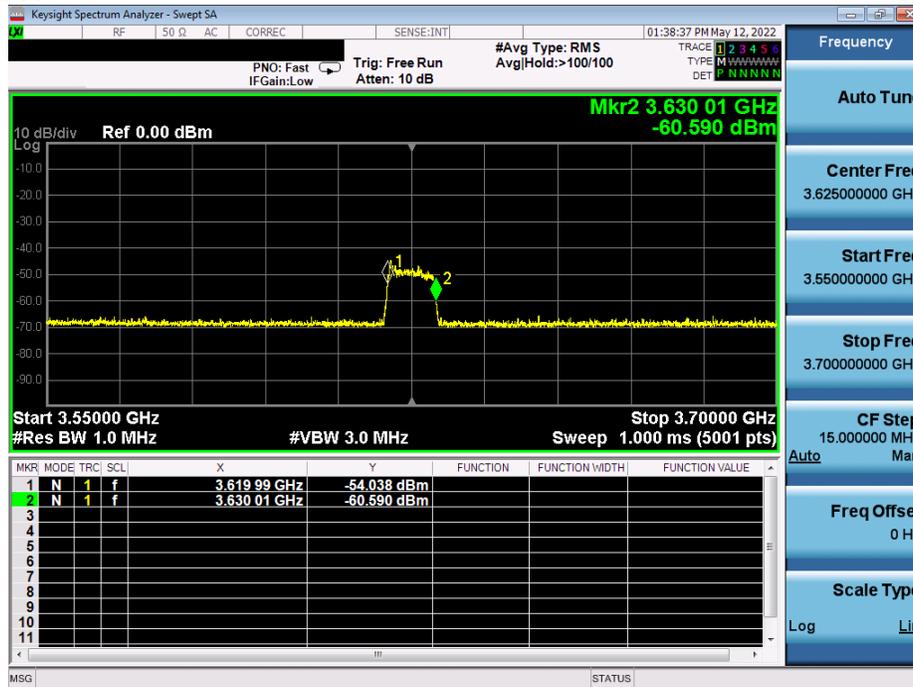
The EUT is an End User Device.

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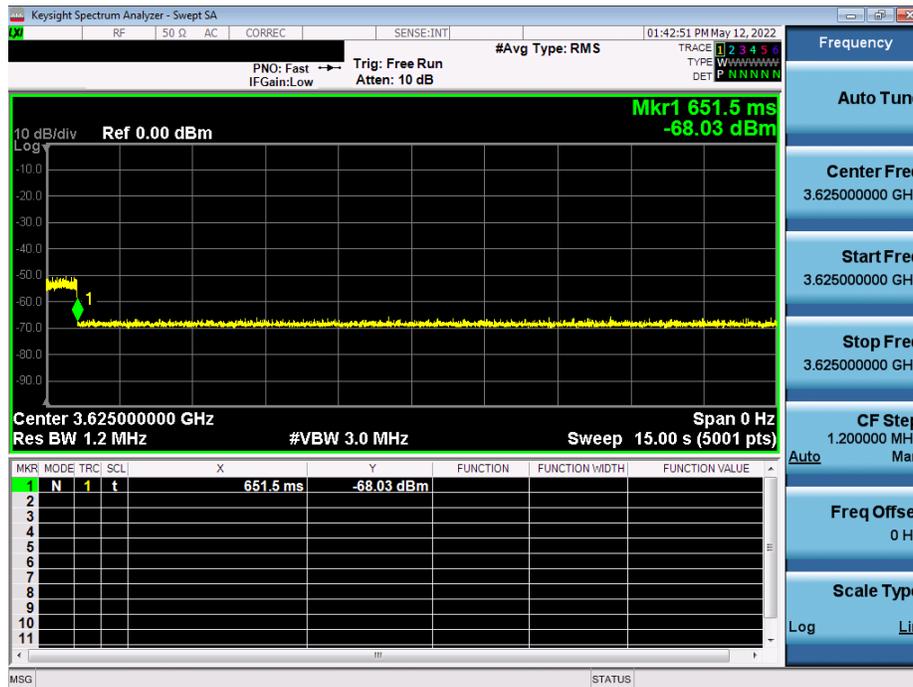
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LTE B48 Run#1:



Plot 7-179. Run#1 End User Device Frequency of Operations



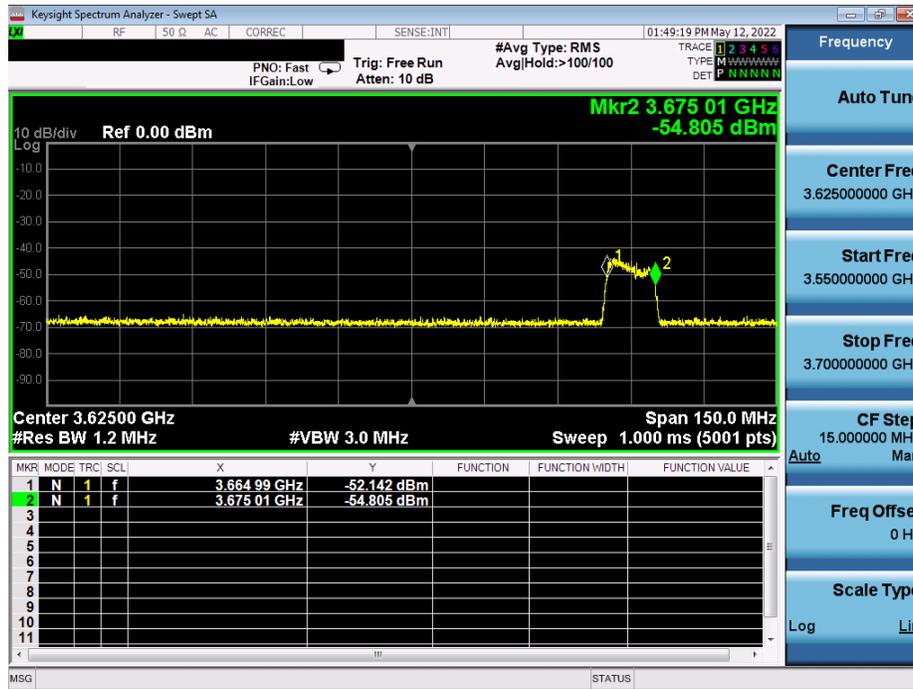
Plot 7-180. Run#1 End User Device Discontinues Operations within 10s

Note:

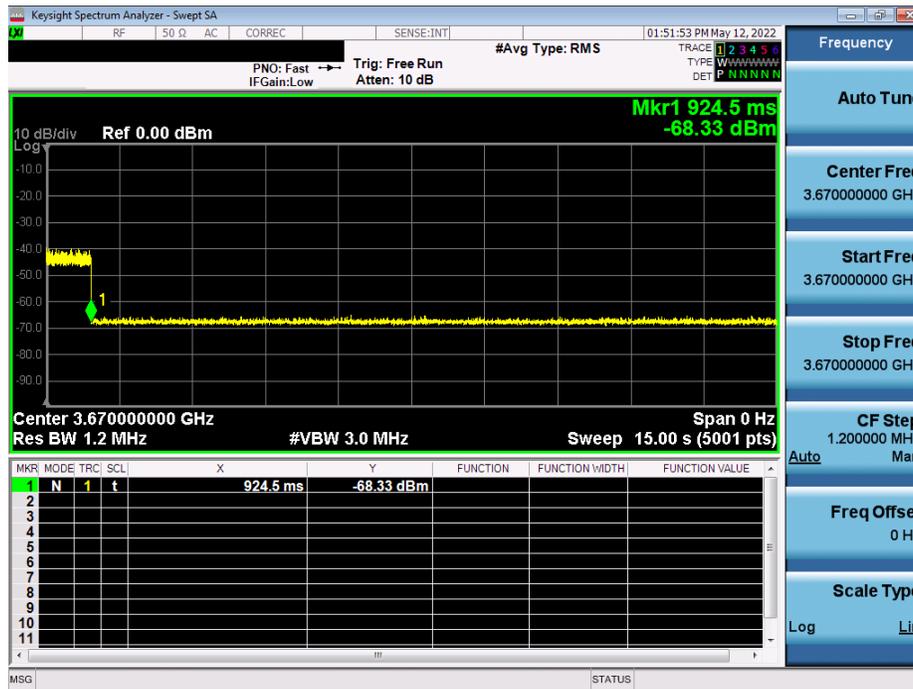
- Marker 1: CBSD sends instructions to discontinue LTE operations.
- Marker 2: EUT discontinues operation.
- Marker 3: 10 seconds elapsed time from CBSD sending instructions to EUT.

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LTE B48 Run#2:



Plot 7-181. Run#2 End User Device Frequency of Operations



Plot 7-182. Run#2 End User Device Discontinues Operations within 10s

Note:

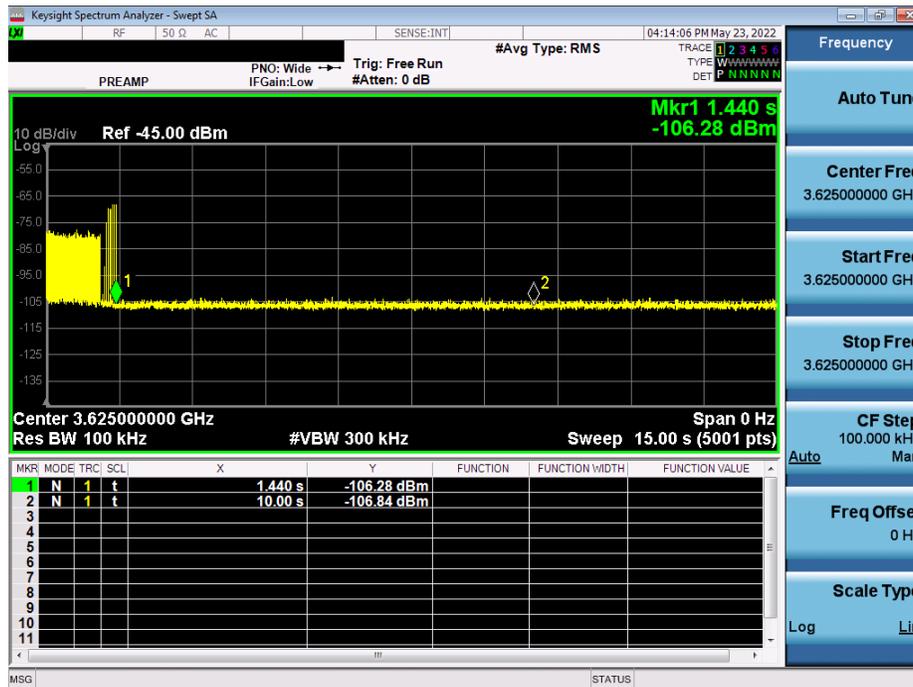
- Marker 1: CBSD sends instructions to discontinue LTE operations.
- Marker 2: EUT discontinues operation.
- Marker 3: 10 seconds elapsed time from CBSD sending instructions to EUT.

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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NR n48 Run#1:



Plot 7-183. Run#1 End User Device Frequency of Operations



Plot 7-184. Run#1 End User Device Discontinues Operations within 10s

Note:

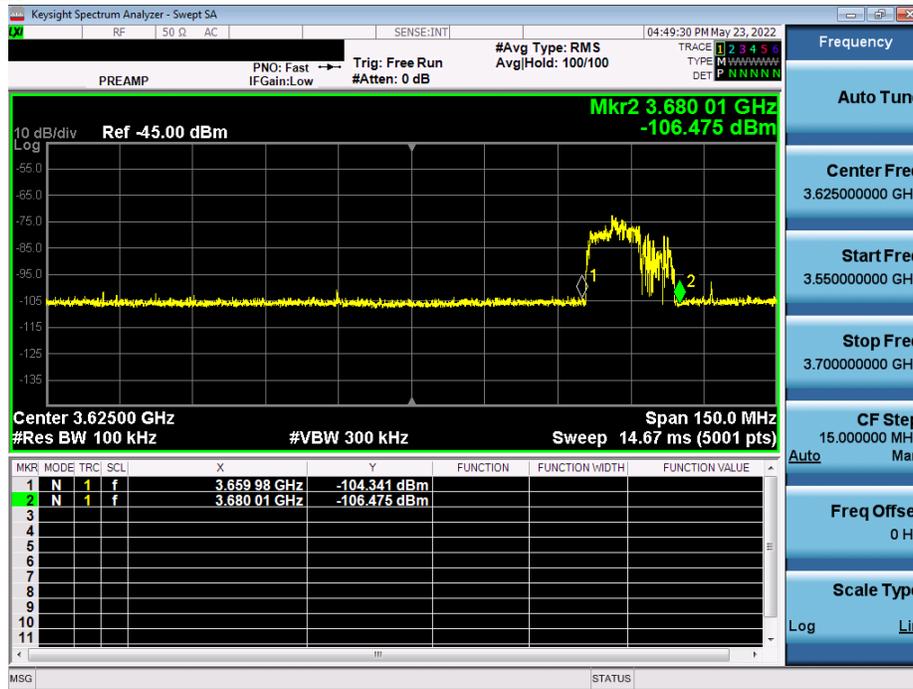
CBSD sends instructions to discontinue NR operations (beginning of plot at time = 0 seconds)

Marker 1: EUT discontinues operation.

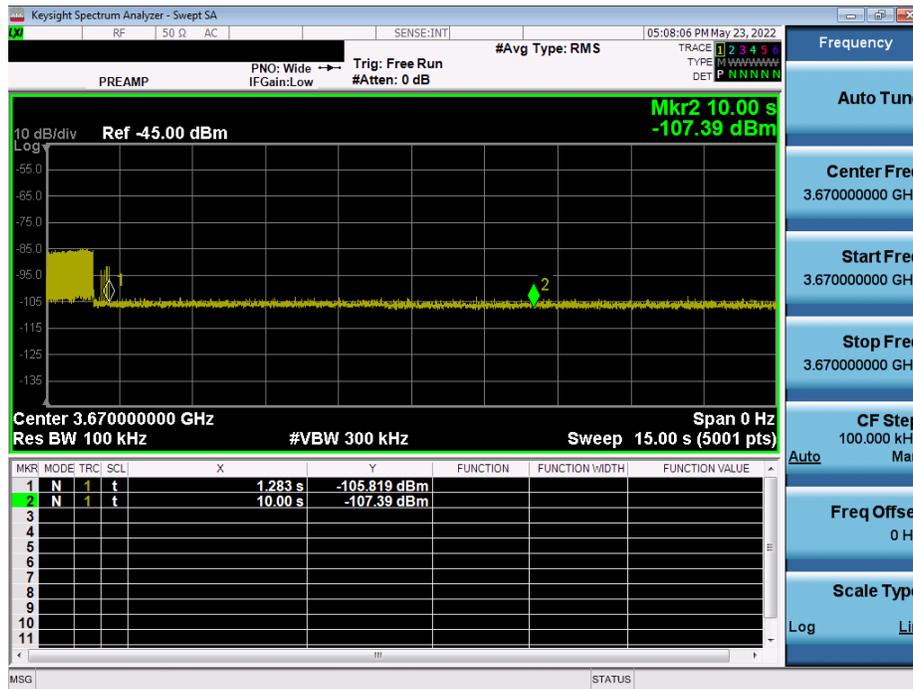
Marker 2: 10 seconds elapsed time from CBSD sending instructions to EUT.

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NR n48 Run#2:



Plot 7-185. Run#2 End User Device Frequency of Operations



Plot 7-186. Run#2 End User Device Discontinues Operations within 10s

Note:

CBSD sends instructions to discontinue NR operations (beginning of plot at time = 0 seconds)

Marker 1: EUT discontinues operation.

Marker 2: 10 seconds elapsed time from CBSD sending instructions to EUT.

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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: A3LSMF936U** complies with all of the End User Device requirements of Part 96 of the FCC Rules for LTE and NR operations only.

FCC ID: A3LSMF936U	PART 96 MEASUREMENT REPORT		Approved by: Technical Manager
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