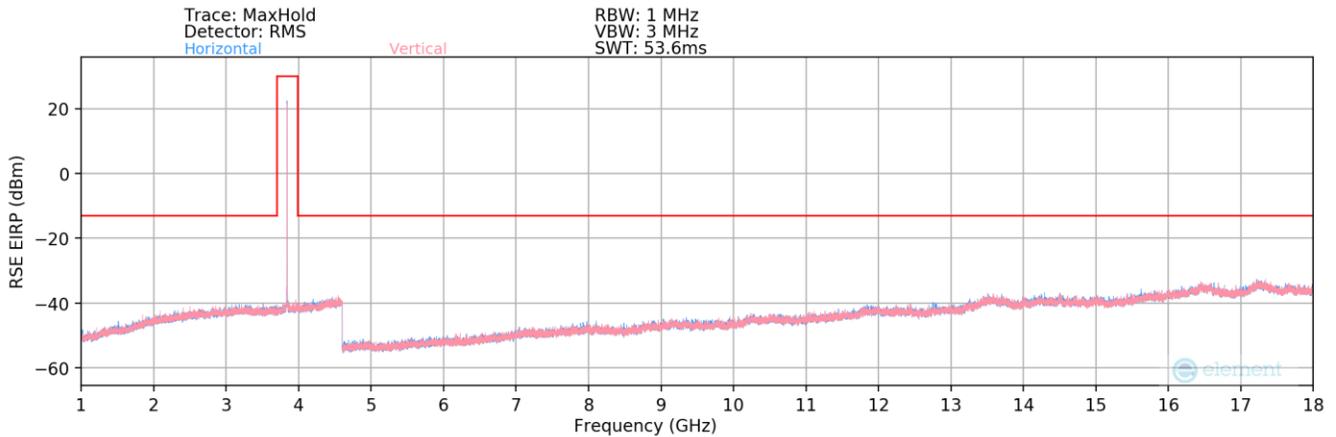
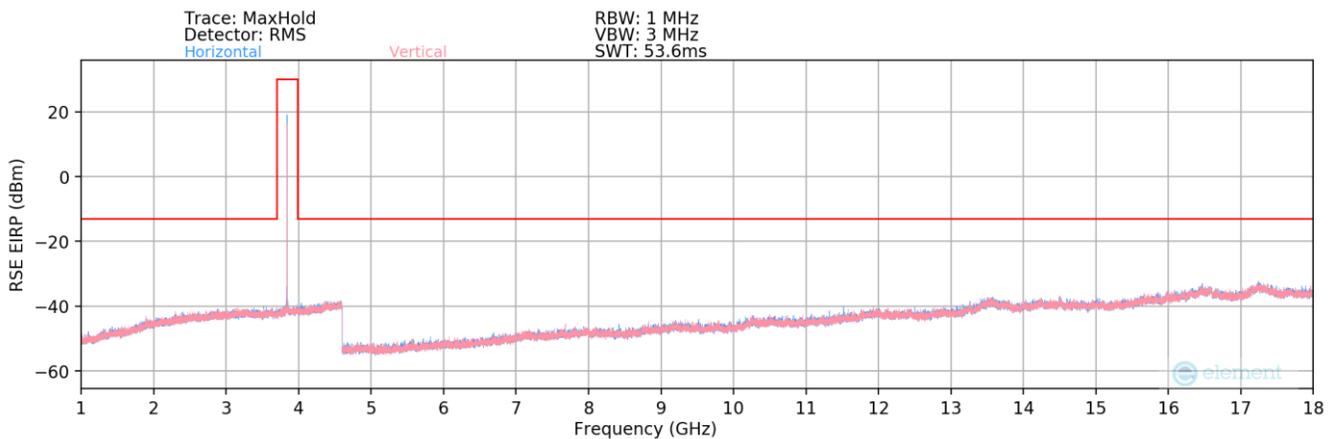


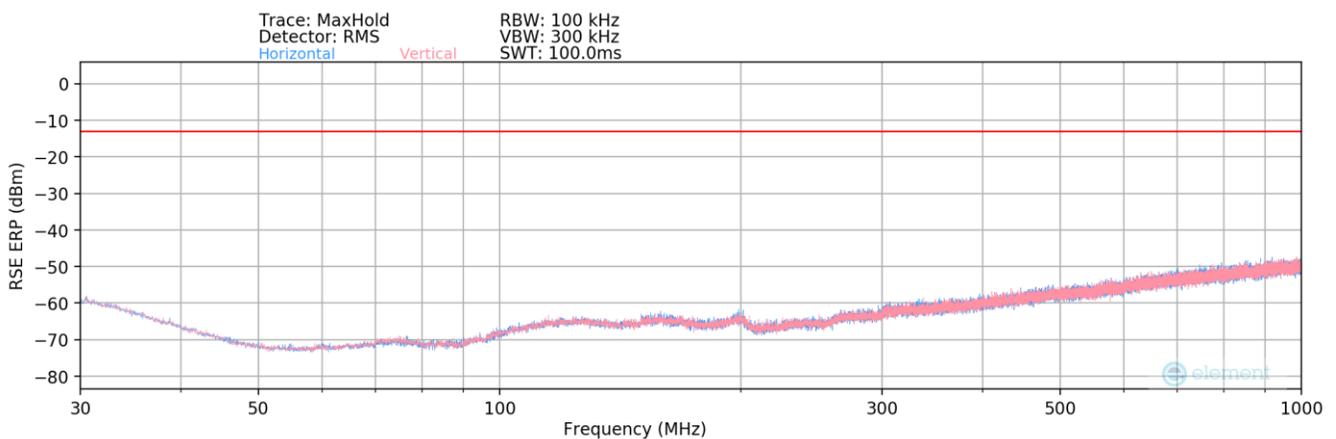
## NR Band n77 (C-Band) – Antenna G



Plot 7-466. Radiated Spurious Plot (NR Band n77 (C-Band) – Antenna G) – Open

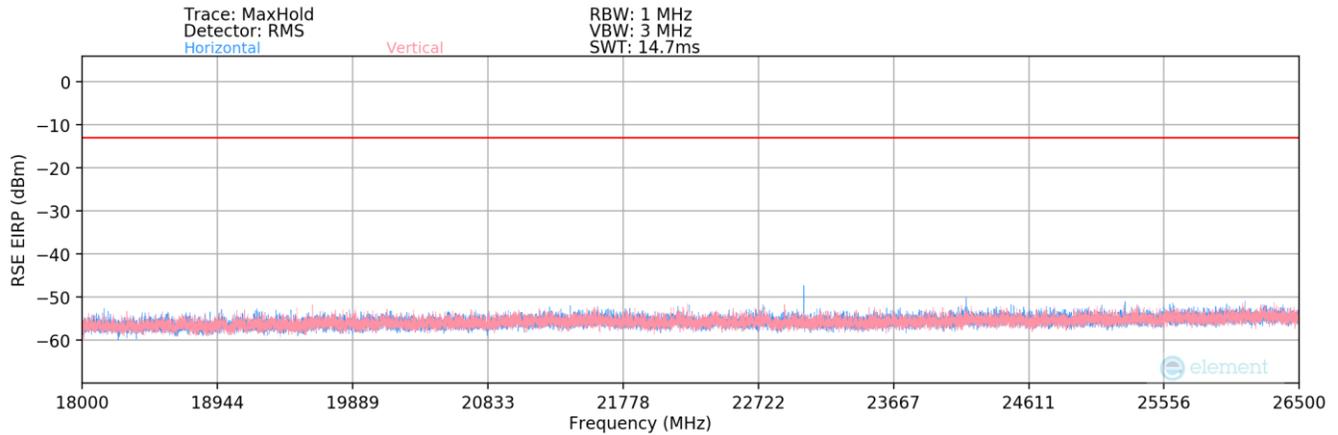


Plot 7-467. Radiated Spurious Plot (NR Band n77 (C-Band) – Antenna G) – Closed

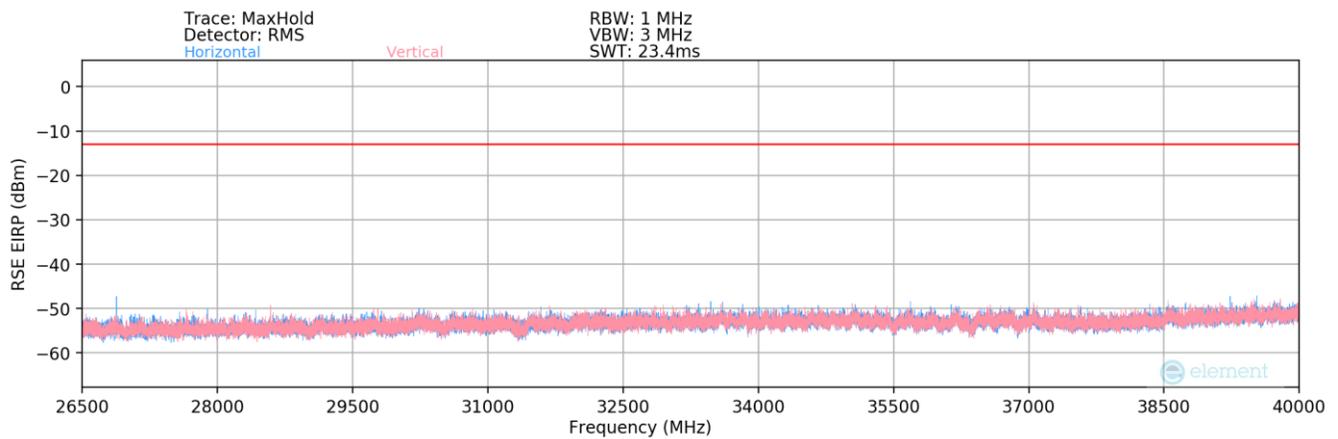


Plot 7-468. Radiated Spurious Plot <1GHz (NR Band n77 (C-Band) – Antenna G) - Closed

FCC ID: A3LSMF936U	<b>PART 27 MEASUREMENT REPORT</b>		Approved by: Technical Manager
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Plot 7-469. Radiated Spurious Plot >18GHz (NR Band n77 (C-Band) – Antenna G) – Closed



Plot 7-470. Radiated Spurious Plot >18GHz (NR Band n77 (C-Band) – Antenna G) – Closed

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]
7500.0	H	117	305	-80.79	16.95	43.16	-52.10	-13.00	-39.10
11250.0	H	106	339	-80.84	22.34	48.50	-46.76	-13.00	-33.76
15000.0	H	-	-	-85.17	28.68	50.51	-44.75	-13.00	-31.75
18750.0	H	150	322	-50.61	2.01	58.40	-46.40	-13.00	-33.40
22500.0	H	150	12	-47.34	3.72	63.39	-41.41	-13.00	-28.41
26250.0	H	150	34	-45.89	5.06	66.17	-38.63	-13.00	-25.63
30000.0	H	-	-	-60.29	6.56	53.28	-51.52	-13.00	-38.52
33750.0	H	-	-	-59.76	7.62	54.86	-49.94	-13.00	-36.94

Table 7-38. Radiated Spurious Data (NR Band n77 (C-Band) – Low Channel – Antenna G) - Closed

FCC ID: A3LSMF936U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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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]
7680.0	H	125	297	-80.63	17.13	43.50	-51.76	-13.00	-38.76
11520.0	H	118	325	-82.02	23.11	48.09	-47.17	-13.00	-34.17
15360.0	H	-	-	-85.41	28.52	50.11	-45.15	-13.00	-32.15
19200.0	H	150	329	-60.88	2.53	48.65	-56.15	-13.00	-43.15
23040.0	H	150	312	-50.45	3.73	60.28	-44.52	-13.00	-31.52
26880.0	H	150	0	-45.90	5.05	66.15	-38.65	-13.00	-25.65
30720.0	H	-	-	-60.60	6.83	53.23	-51.57	-13.00	-38.57
34560.0	H	-	-	-58.96	7.64	55.68	-49.12	-13.00	-36.12

Table 7-39. Radiated Spurious Data (NR Band n77 (C-Band) – Mid Channel – Antenna G) - Closed

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]
7860.0	H	124	312	-80.48	16.73	43.25	-52.01	-13.00	-39.01
11790.0	H	120	321	-78.89	22.44	50.55	-44.71	-13.00	-31.71
15720.0	H	-	-	-85.20	29.50	51.30	-43.95	-13.00	-30.95
19650.0	H	150	337	-54.62	2.89	55.27	-49.53	-13.00	-36.53
23580.0	H	150	300	-51.06	3.80	59.74	-45.06	-13.00	-32.06
27510.0	H	-	-	-59.49	5.06	52.57	-52.23	-13.00	-39.23
31440.0	H	-	-	-60.22	6.85	53.63	-51.17	-13.00	-38.17
35370.0	H	-	-	-60.02	8.23	55.21	-49.59	-13.00	-36.59

Table 7-40. Radiated Spurious Data (NR Band n77 (C-Band) – High Channel – Antenna G) - Closed

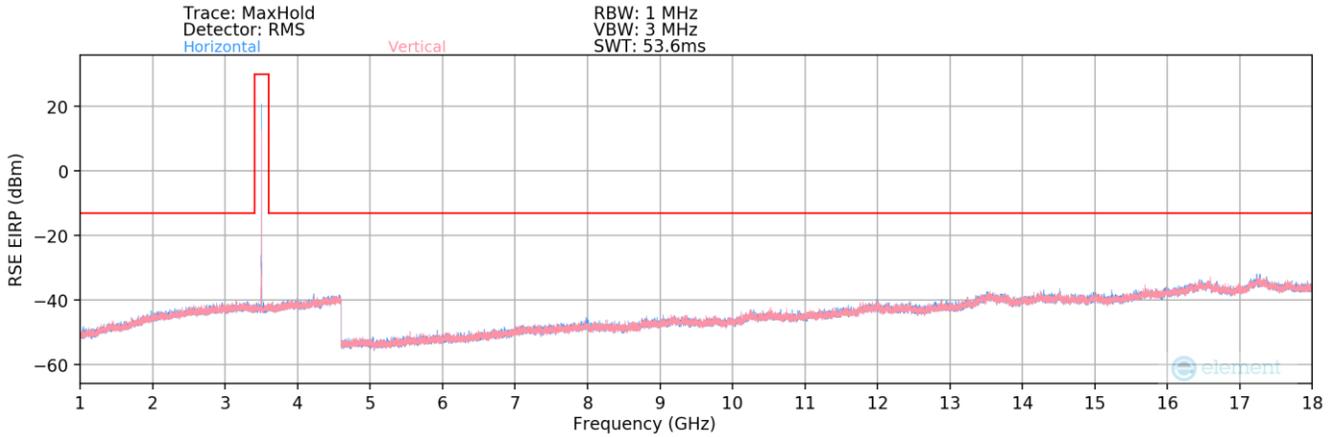
Bandwidth (MHz):	100
Frequency (MHz):	3840.00
RB / Offset:	1 / 136

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dBμV/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
198.0	H	-	-	-84.45	20.06	42.61	-52.64	-13.00	-39.64

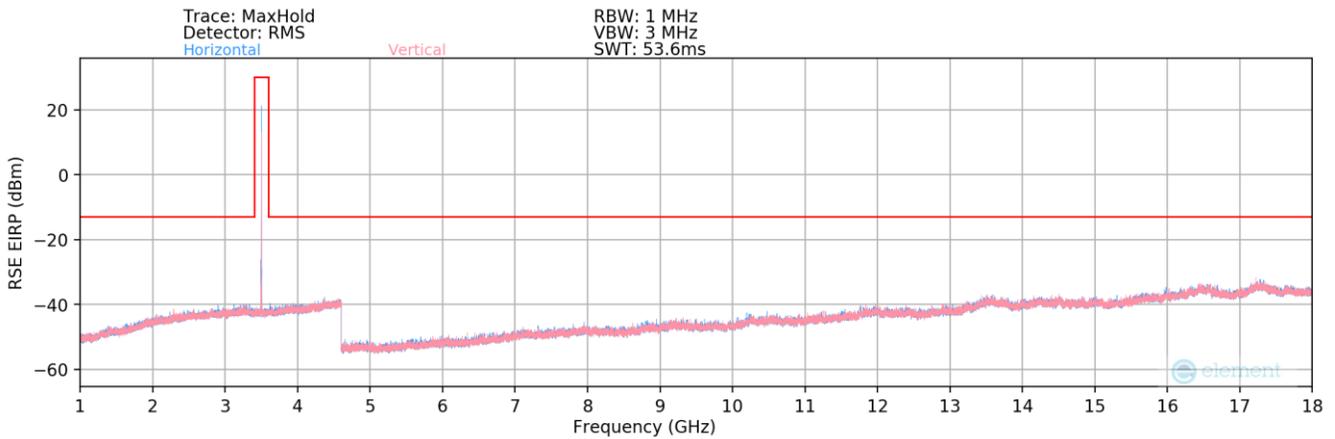
Table 7-41. Radiated Spurious Data (NR Band n77 (C-Band) <1GHz – Antenna G) - Closed

FCC ID: A3LSMF936U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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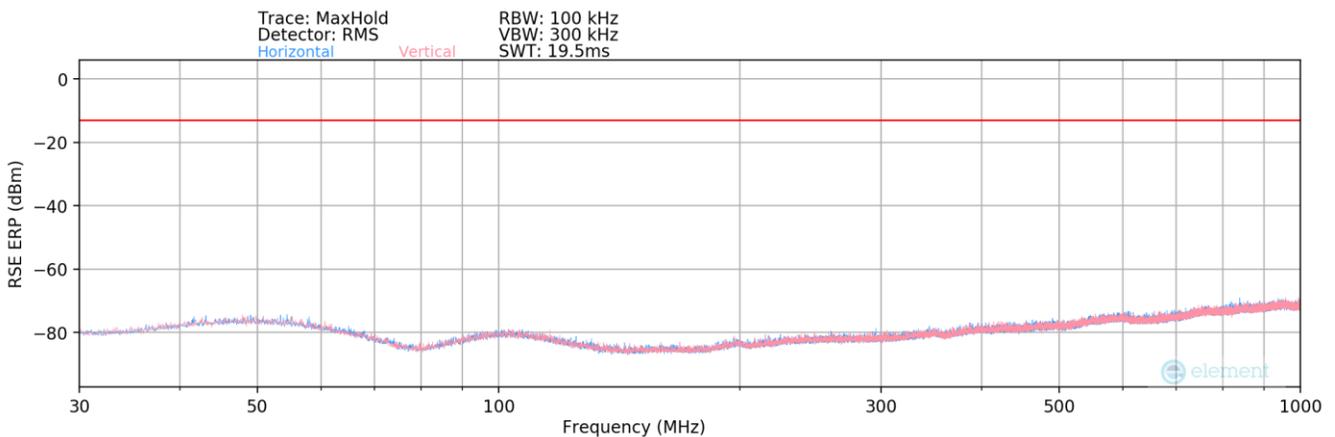
## NR Band n77 (DoD Band) – Antenna D



Plot 7-471. Radiated Spurious Plot (NR Band n77 (DoD) – Antenna D) – Open

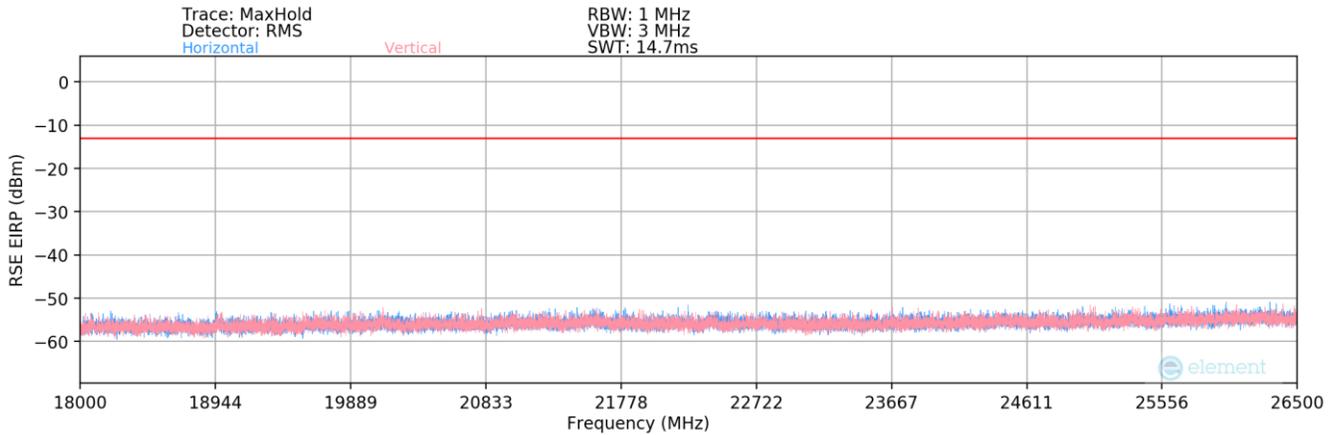


Plot 7-472. Radiated Spurious Plot (NR Band n77 (DoD) – Antenna D) – Closed

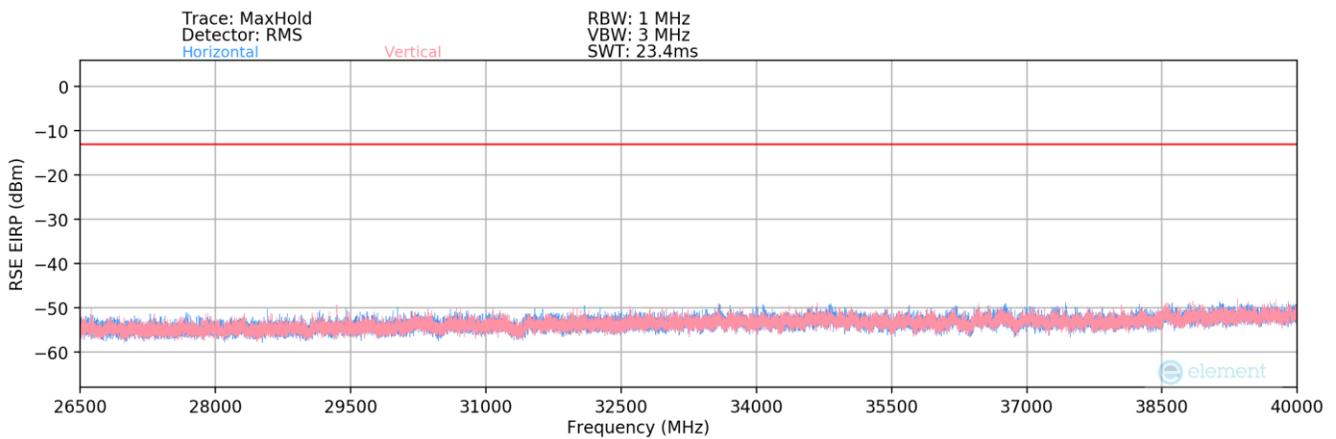


Plot 7-473. Radiated Spurious Plot <1GHz (NR Band n77 (DoD) – Antenna D) - Closed

FCC ID: A3LSMF936U	<b>PART 27 MEASUREMENT REPORT</b>		Approved by: Technical Manager
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Plot 7-474. Radiated Spurious Plot >18GHz (NR Band n77 (DoD) – Antenna D) – Closed



Plot 7-475. Radiated Spurious Plot >18GHz (NR Band n77 (DoD) – Antenna D) – Closed

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	H	-	-	-75.10	15.75	47.65	-47.61	-13.00	-34.61
10500.0	H	-	-	-76.15	20.95	51.80	-43.46	-13.00	-30.46
14000.0	H	-	-	-76.42	26.67	57.25	-38.01	-13.00	-25.01
17500.1	H	-	-	-77.13	30.91	60.78	-34.47	-13.00	-21.47

Table 7-42. Radiated Spurious Data (NR Band n77 (DoD) – Antenna D) - Closed

FCC ID: A3LSMF936U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Bandwidth (MHz):	100
Frequency (MHz):	3500.01
RB / Offset:	1 / 136
Mode:	Standalone

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]
52.61	H	-	-	-63.32	-14.08	29.60	-65.66	-13.00	-52.66
838.70	H	-	-	-72.76	-4.20	30.04	-65.22	-13.00	-52.22

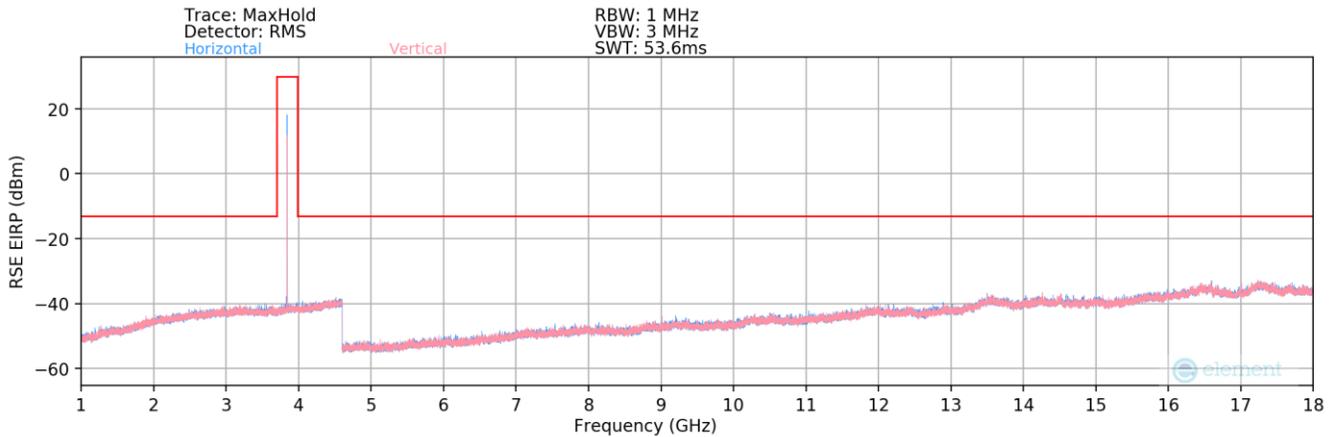
Table 7-43. Radiated Spurious Data (NR Band n77 (DoD) <1GHz – Antenna D) - Closed

FCC ID: A3LSMF936U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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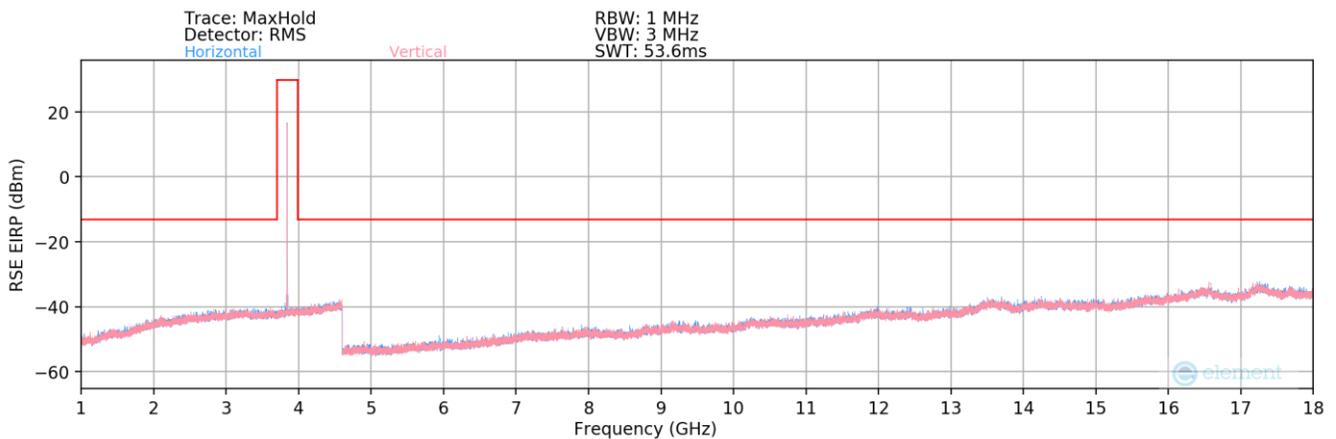
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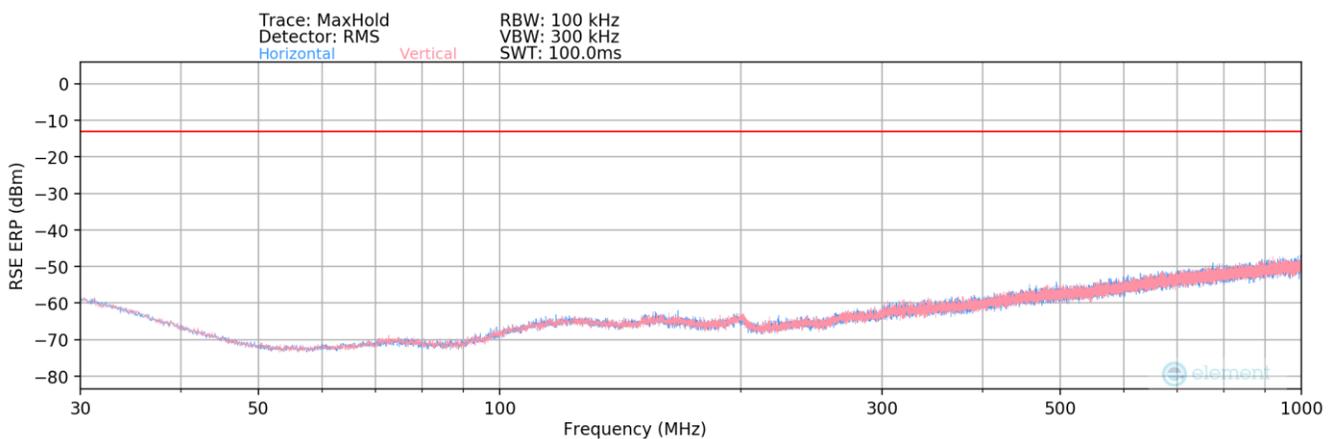
## NR Band n77 (C-Band) – Antenna D



Plot 7-476. Radiated Spurious Plot (NR Band n77 (C-Band) – Antenna D) – Open

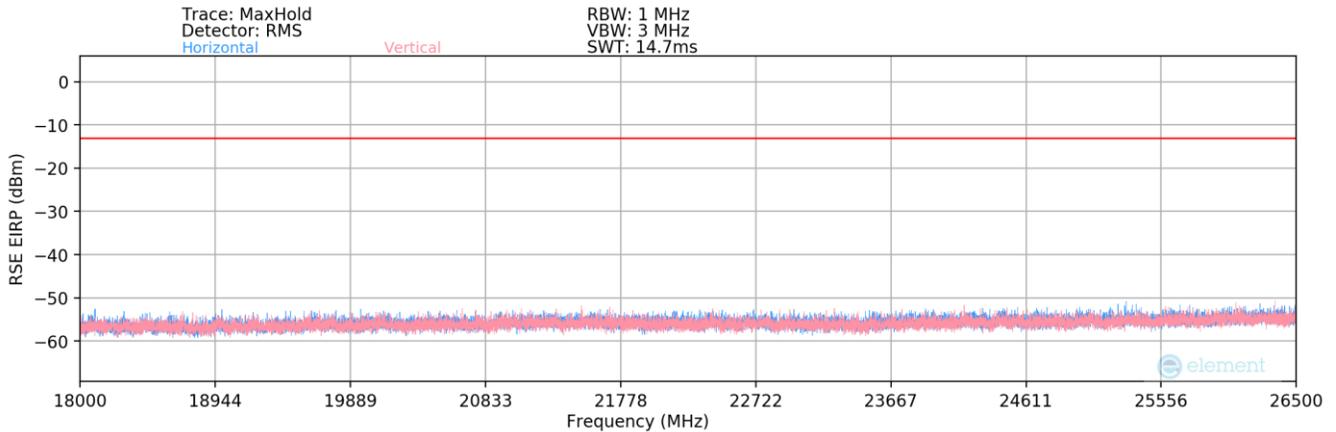


Plot 7-477. Radiated Spurious Plot (NR Band n77 (C-Band) – Antenna D) – Closed

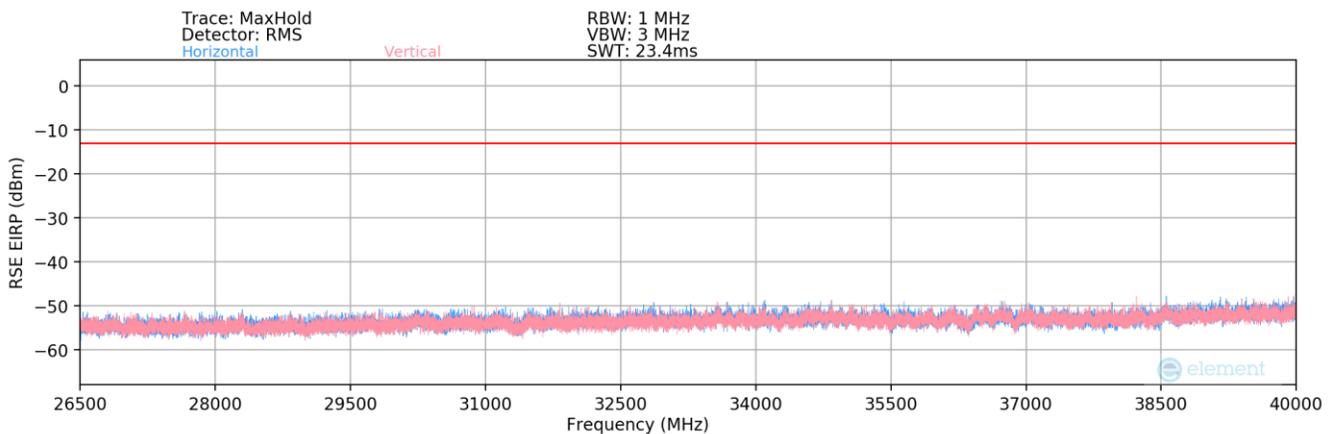


Plot 7-478. Radiated Spurious Plot <1GHz (NR Band n77 (C-Band) – Antenna D) - Closed

FCC ID: A3LSMF936U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-479. Radiated Spurious Plot >18GHz (NR Band n77 (C-Band) – Antenna D) – Closed



Plot 7-480. Radiated Spurious Plot >18GHz (NR Band n77 (C-Band) – Antenna D) – Closed

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]
7500.0	V	-	-	-74.81	16.72	48.91	-46.35	-13.00	-33.35
11250.0	V	-	-	-75.97	21.84	52.87	-42.39	-13.00	-29.39
15000.0	V	-	-	-77.33	27.58	57.25	-38.00	-13.00	-25.00

Table 7-44. Radiated Spurious Data (NR Band n77 (C-Band) – Low Channel – Antenna D) - Closed

FCC ID: A3LSMF936U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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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 [dB $\mu$ V/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7680.0	V	-	-	-75.00	16.78	48.78	-46.48	-13.00	-33.48
11520.0	V	-	-	-76.54	23.14	53.60	-41.66	-13.00	-28.66
15360.0	V	-	-	-77.57	28.02	57.45	-37.81	-13.00	-24.81

Table 7-45. Radiated Spurious Data (NR Band n77 (C-Band) – Mid Channel – Antenna D) - Closed

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 [dB $\mu$ V/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
7860.0	V	-	-	-73.60	16.73	50.13	-45.13	-13.00	-32.13
11790.0	V	-	-	-74.81	22.44	54.63	-40.63	-13.00	-27.63
15720.0	V	-	-	-76.42	29.50	60.08	-35.17	-13.00	-22.17

Table 7-46. Radiated Spurious Data (NR Band n77 (C-Band) – High Channel – Antenna D) - Closed

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

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Analyzer Level [dBm]	AFCL [dB/m]	Field Strength [dB $\mu$ V/m]	EIRP Spurious Emission Level [dBm]	Limit [dBm]	Margin [dB]
164.0	V	-	-	-85.13	19.64	41.51	-53.75	-13.00	-40.75

Table 7-47. Radiated Spurious Data (NR Band n77 (C-Band) <1GHz – Antenna D) - Closed

FCC ID: A3LSMF936U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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## 7.9 Frequency Stability / Temperature Variation

### Test Overview and Limit

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

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

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

### Test Procedure Used

ANSI C63.26-2015 – Section 5.6

### Test Settings

1. The carrier frequency of the transmitter is measured at room temperature (20°C to provide a reference).
2. The equipment is turned on in a “standby” condition for fifteen minutes before applying power to the transmitter. Measurement of the carrier frequency of the transmitter is made within one minute after applying power to the transmitter.
3. Frequency measurements are made at 10°C intervals ranging from -30°C to +50°C. A period of at least one half-hour is provided to allow stabilization of the equipment at each temperature level.

### Test Setup

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

### Test Notes

None

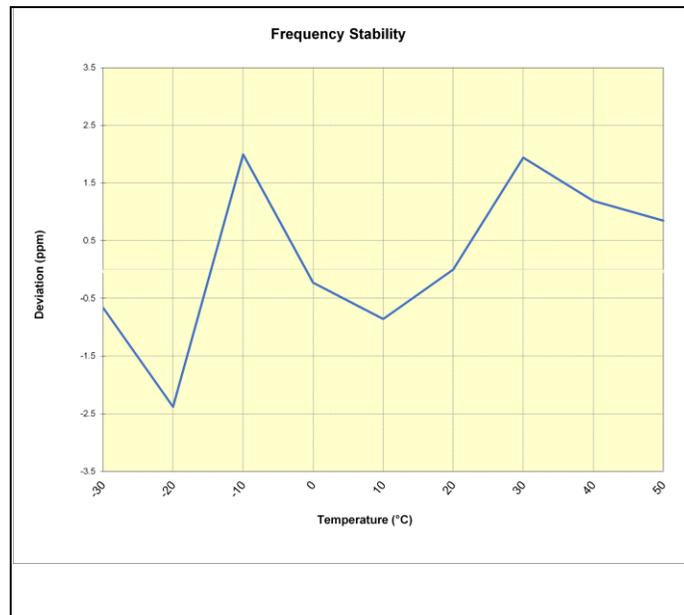
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NR Band n77

NR Band n77 - C-band					
Operating Frequency (Hz):		3,840,000,000			
Ref. Voltage (VDC):		4.38			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.38	- 30	3,839,925,079	-2,538	-0.0000661
		- 20	3,839,918,475	-9,142	-0.0002381
		- 10	3,839,935,282	7,665	0.0001996
		0	3,839,926,743	-874	-0.0000228
		+ 10	3,839,924,320	-3,297	-0.0000859
		+ 20 (Ref)	3,839,927,617	0	0.0000000
		+ 30	3,839,935,070	7,453	0.0001941
		+ 40	3,839,932,189	4,572	0.0001191
Battery Endpoint	3.35	+ 20	3,839,926,471	-1,146	-0.0000298

Table 7-48. NR Band n77 Frequency Stability Data



Plot 7-481. NR Band n77 Frequency Stability Chart

FCC ID: A3LSMF936U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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## 8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung Portable Handset FCC ID: A3LSMF936U** complies with all the requirements of Part 27 of the FCC rules.

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<b>Test Report S/N:</b> 1M2204010046-06.A3L	<b>Test Dates:</b> 04/01 - 06/23/2022	<b>EUT Type:</b> Portable Handset	Page 294 of 294

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