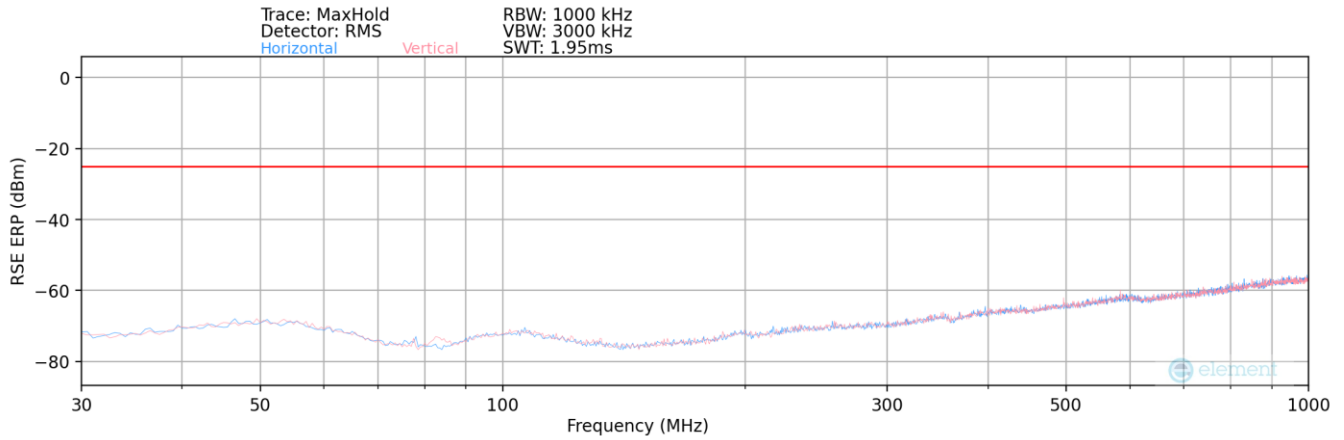
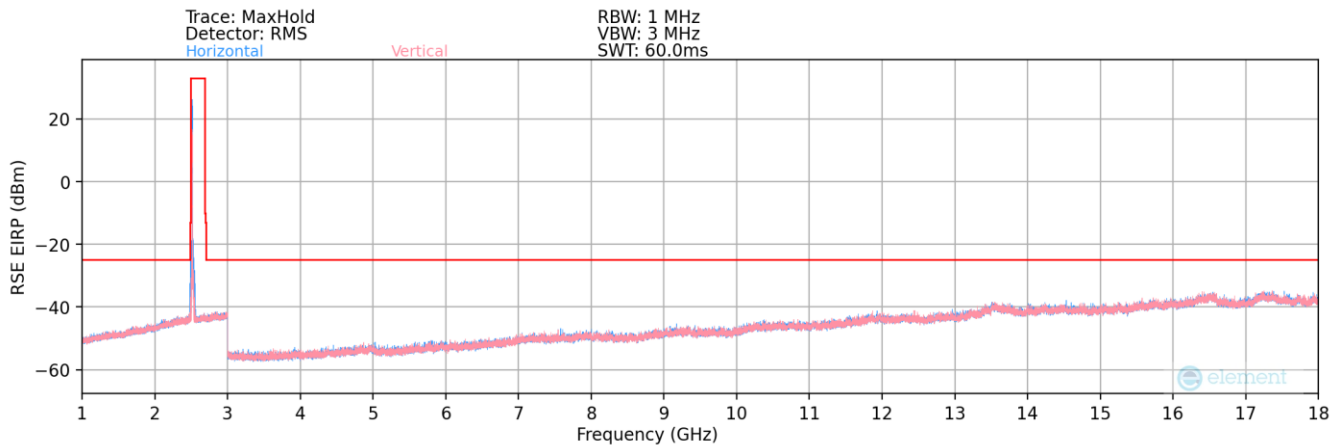


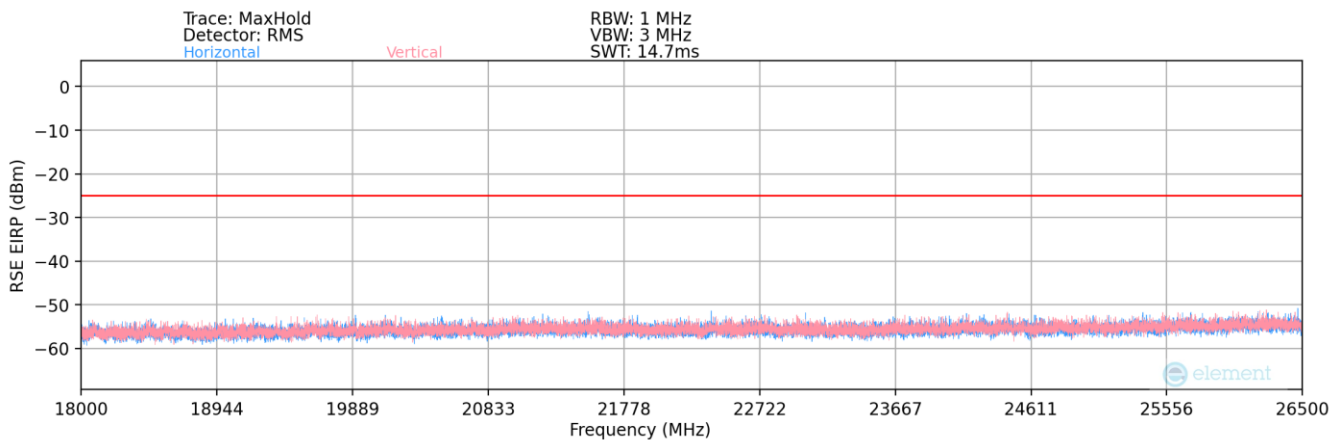
ULCA - LTE B41(PC2) – Ant F



Plot 7-631. Radiated Spurious Plot (ULCA LTE B41(PC2) – Low Channel – Ant F)

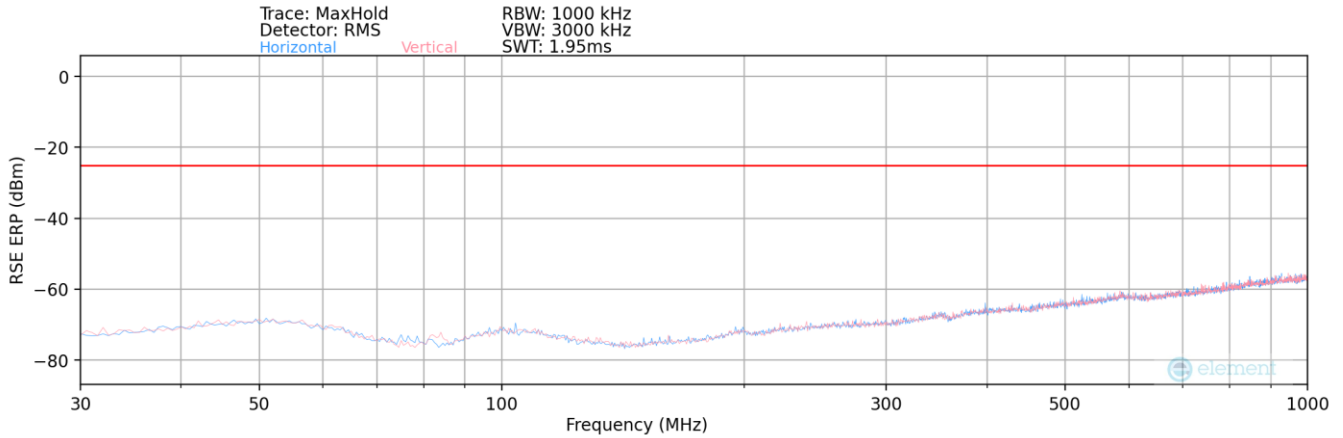


Plot 7-632. Radiated Spurious Plot (ULCA LTE B41(PC2) – Low Channel – Ant F)

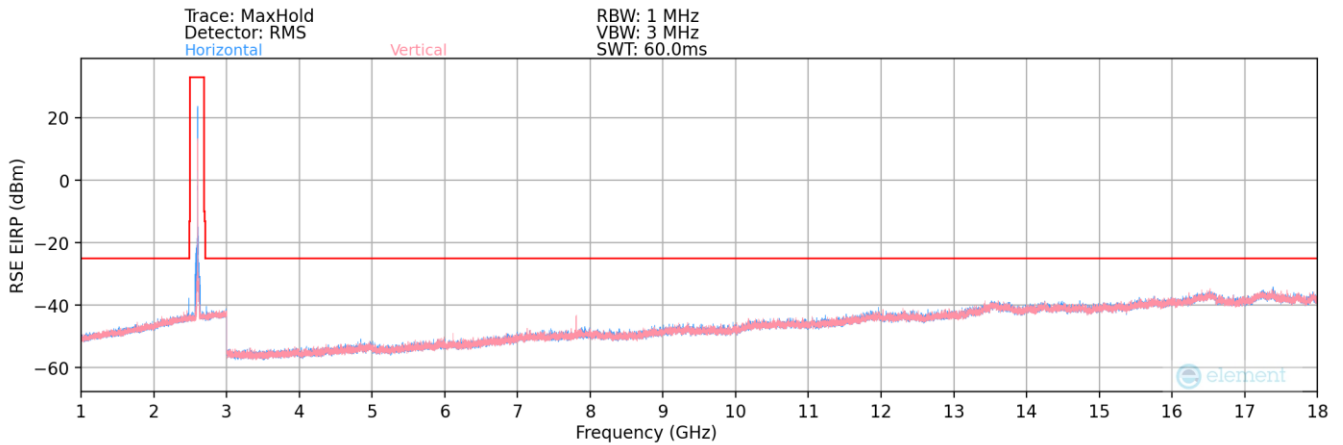


Plot 7-633. Radiated Spurious Plot (ULCA LTE B41(PC2) – Low Channel – Ant F)

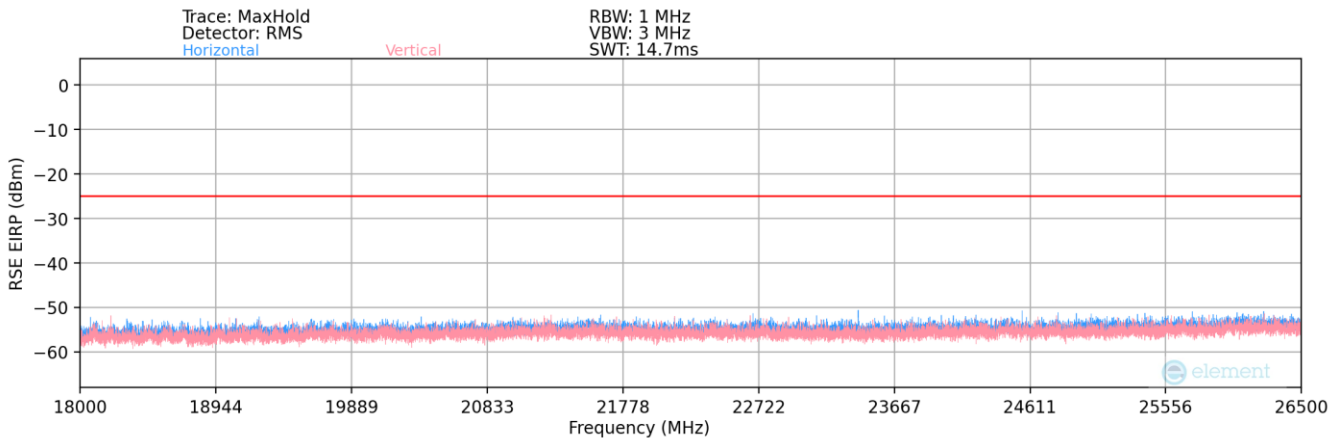
FCC ID: A3LSMS911U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-634. Radiated Spurious Plot (ULCA LTE B41(PC2) – Mid Channel – Ant F)

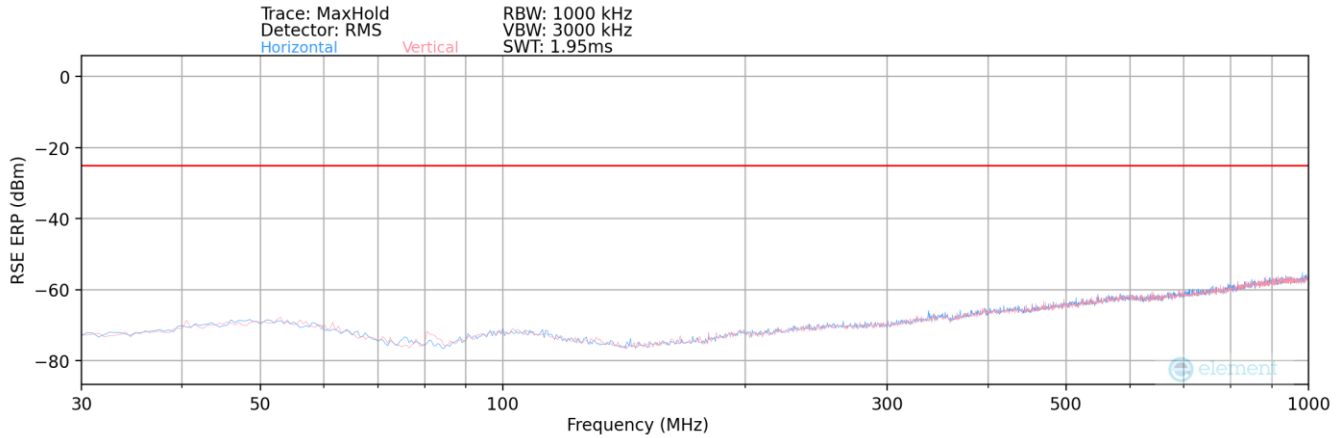


Plot 7-635. Radiated Spurious Plot (ULCA LTE B41(PC2) – Mid Channel – Ant F)

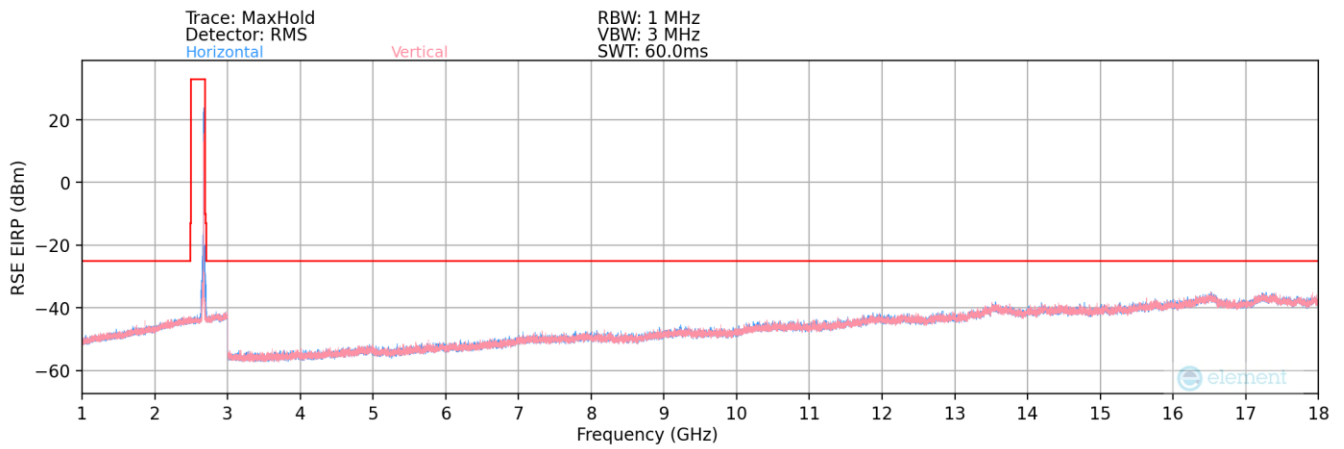


Plot 7-636. Radiated Spurious Plot (ULCA LTE B41(PC2) – Mid Channel – Ant F)

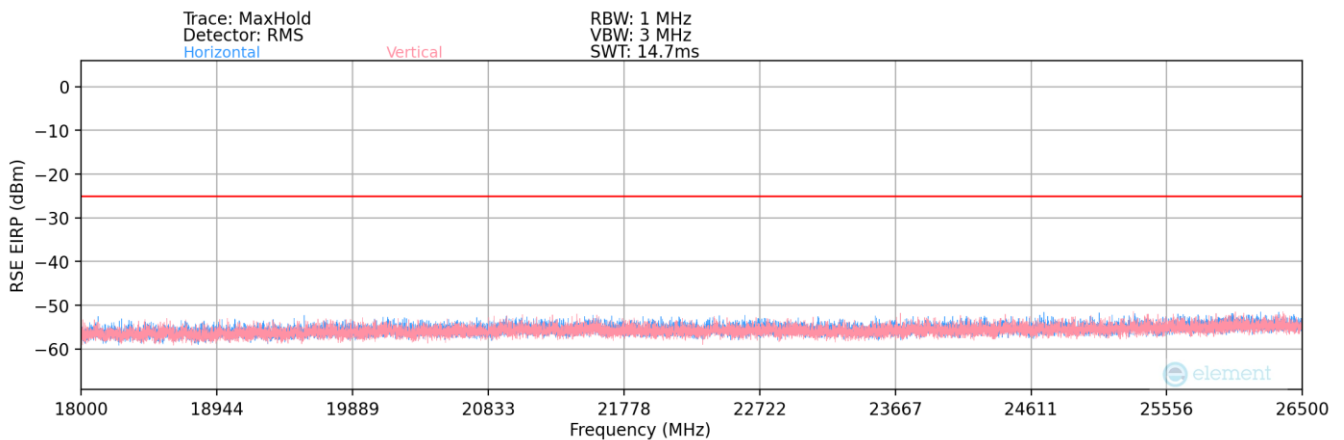
FCC ID: A3LSMS911U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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Plot 7-637. Radiated Spurious Plot (ULCA LTE B41(PC2) – High Channel – Ant F)



Plot 7-638. Radiated Spurious Plot (ULCA LTE B41(PC2) – High Channel – Ant F)



Plot 7-639. Radiated Spurious Plot (ULCA LTE B41(PC2) – High Channel – Ant F)

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PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	2506.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	2525.8
SCC RB / Offset:	1 / 0

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]
91.58	H	-	-	-80.73	15.04	41.31	-56.10	-25.00	-31.10
189.50	H	-	-	-80.48	18.76	45.28	-52.13	-25.00	-27.13
514.10	H	-	-	-81.07	26.20	52.13	-45.28	-25.00	-20.28

Table 7-137. Radiated Spurious Data Below 1GHz (ULCA LTE B41(PC2) – Low Channel – Ant F)

PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	2506.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	2525.8
SCC RB / Offset:	1 / 0

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]
5012.00	V	-	-	-68.90	10.21	48.31	-46.95	-25.00	-21.95
7518.00	V	116	225	-69.33	15.54	53.21	-42.04	-25.00	-17.04
10024.00	V	-	-	-72.44	18.74	53.30	-41.96	-25.00	-16.96
12530.00	V	-	-	-73.32	23.33	57.01	-38.25	-25.00	-13.25
15036.00	V	-	-	-74.82	26.40	58.58	-36.68	-25.00	-11.68

Table 7-138. Radiated Spurious Data (ULCA LTE B41(PC2) – Low Channel – Ant F)

PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	2593.0
PCC RB / Offset:	1 / 99
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	2612.8
SCC RB / Offset:	1 / 0

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]
5186.00	V	-	-	-69.88	10.42	47.54	-47.72	-25.00	-22.72
7779.00	V	112	211	-64.38	15.58	58.20	-37.05	-25.00	-12.05
10372.00	V	-	-	-72.83	19.64	53.81	-41.45	-25.00	-16.45
12965.00	V	-	-	-73.04	24.22	58.18	-37.07	-25.00	-12.07
15558.00	V	-	-	-73.72	28.40	61.68	-33.58	-25.00	-8.58

Table 7-139. Radiated Spurious Data (ULCA LTE B41(PC2) – Mid Channel – Ant F)

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PCC Bandwidth (MHz):	20
PCC Frequency (MHz):	2680.0
PCC RB / Offset:	1 / 0
SCC Bandwidth (MHz):	20
SCC Frequency (MHz):	2660.2
SCC RB / Offset:	1 / 99

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]
5360.00	V	-	-	-69.94	10.69	47.75	-47.51	-25.00	-22.51
8040.00	V	103	198	-65.54	16.05	57.51	-37.74	-25.00	-12.74
10720.00	V	-	-	-72.76	20.31	54.55	-40.71	-25.00	-15.71
13400.00	V	-	-	-73.82	24.50	57.68	-37.58	-25.00	-12.58
16080.00	V	-	-	-74.37	28.21	60.84	-34.42	-25.00	-9.42

Table 7-140. Radiated Spurious Data (ULCA LTE B41(PC2) – High Channel – Ant F)

FCC ID: A3LSMS911U	PART 27 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 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

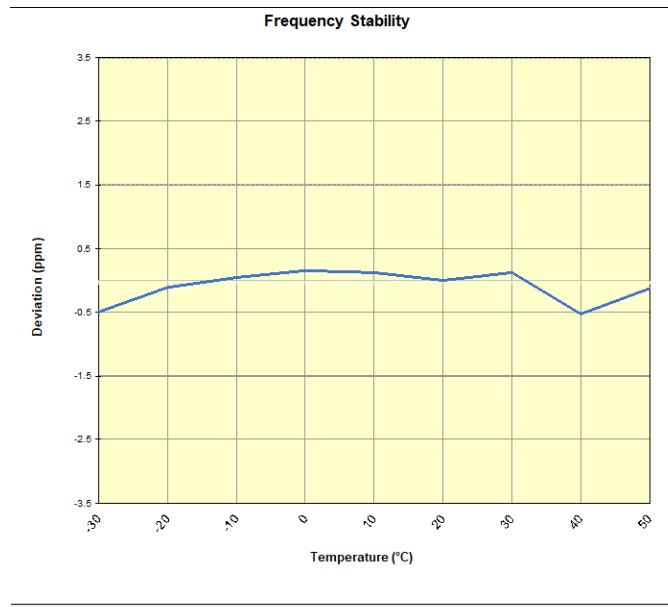
None

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LTE Band 30

LTE Band 30					
		Operating Frequency (Hz):		2,310,000,000	
		Ref. Voltage (VDC):		4.34	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.34	- 30	2,310,090,381	-1,151	-0.0000498
		- 20	2,310,091,290	-242	-0.0000105
		- 10	2,310,091,642	110	0.0000048
		0	2,310,091,880	348	0.0000151
		+ 10	2,310,091,811	279	0.0000121
		+ 20 (Ref)	2,310,091,532	0	0.0000000
		+ 30	2,310,091,819	287	0.0000124
		+ 40	2,310,090,320	-1,213	-0.0000525
Battery Endpoint	3.71	+ 20	2,310,092,220	688	0.0000298

Table 7-141. LTE Band 30 Frequency Stability Data



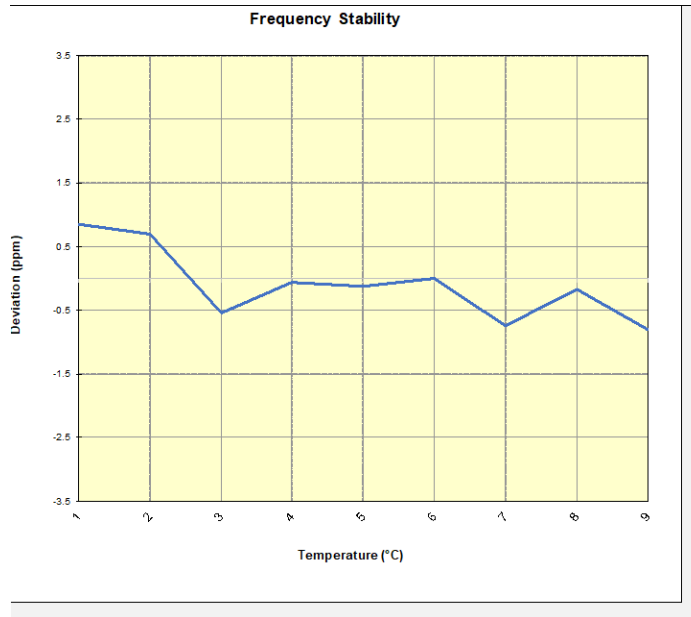
Plot 7-640. LTE Band 30 Frequency Stability Chart

FCC ID: A3LSMS911U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 7

LTE Band 7					
		Operating Frequency (Hz):		2,535,000,000	
		Ref. Voltage (VDC):		4.34	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.34	- 30	2,535,099,961	2,144	0.0000846
		- 20	2,535,099,590	1,774	0.0000700
		- 10	2,535,096,450	-1,366	-0.0000539
		0	2,535,097,678	-139	-0.0000055
		+ 10	2,535,097,489	-328	-0.0000129
		+ 20 (Ref)	2,535,097,817	0	0.0000000
		+ 30	2,535,095,947	-1,870	-0.0000738
		+ 40	2,535,097,399	-418	-0.0000165
Battery Endpoint	3.71	+ 20	2,535,096,326	-1,491	-0.0000588

Table 7-142. LTE Band 7 Frequency Stability Data



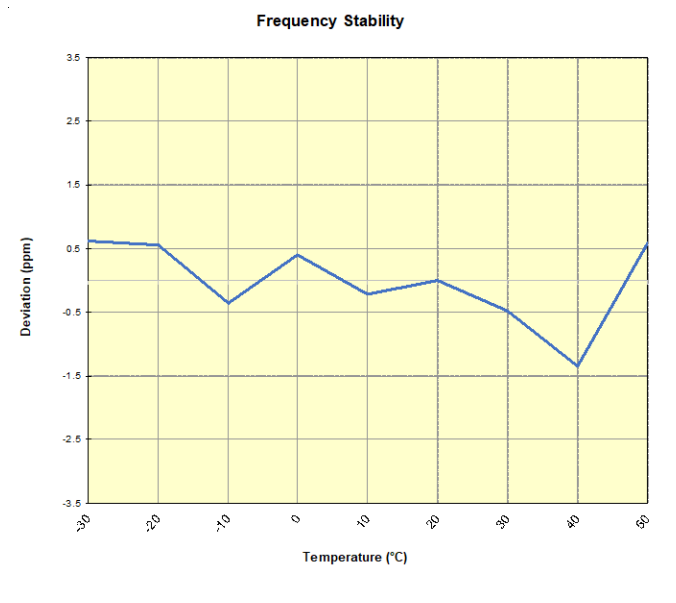
Plot 7-641. LTE Band 7 Frequency Stability Chart

FCC ID: A3LSMS911U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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LTE Band 41/38

LTE Band 41/38					
		Operating Frequency (Hz):		2,593,000,000	
		Ref. Voltage (VDC):		4.34	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.34	- 30	2,593,090,866	1,614	0.0000622
		- 20	2,593,090,684	1,432	0.0000552
		- 10	2,593,088,314	-938	-0.0000362
		0	2,593,090,315	1,062	0.0000410
		+ 10	2,593,088,695	-558	-0.0000215
		+ 20 (Ref)	2,593,089,252	0	0.0000000
		+ 30	2,593,087,988	-1,264	-0.0000487
		+ 40	2,593,085,752	-3,501	-0.0001350
		+ 50	2,593,090,781	1,529	0.0000590
Battery Endpoint	3.71	+ 20	2,593,088,825	-427	-0.0000165

Table 7-143. LTE Band 41/38 Frequency Stability Data



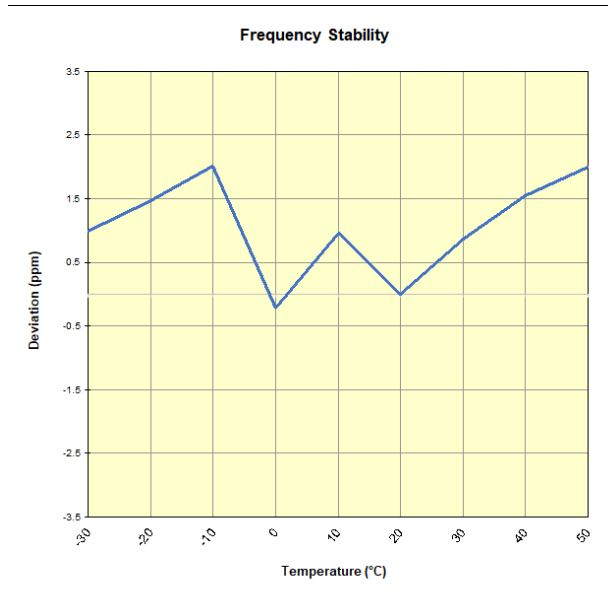
Plot 7-642. LTE Band 41/38 Frequency Stability Chart

FCC ID: A3LSMS911U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n30

NR Band n30					
Operating Frequency (Hz):		2,310,000,000			
Ref. Voltage (VDC):		4.34			
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.34	- 30	2,309,993,390	2,274	0.0000984
		- 20	2,309,994,526	3,410	0.0001476
		- 10	2,309,995,754	4,638	0.0002008
		0	2,309,990,625	-491	-0.0000212
		+ 10	2,309,993,335	2,219	0.0000961
		+ 20 (Ref)	2,309,991,116	0	0.0000000
		+ 30	2,309,993,111	1,995	0.0000864
		+ 40	2,309,994,691	3,575	0.0001548
		+ 50	2,309,995,715	4,599	0.0001991
Battery Endpoint	3.71	+ 20	2,309,995,615	4,499	0.0001948

Table 7-144. NR Band n30 Frequency Stability Data



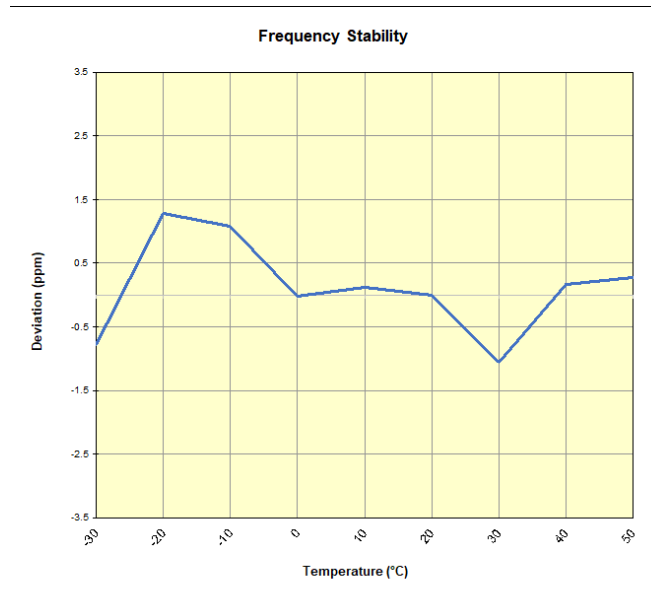
Plot 7-643. NR Band n30 Frequency Stability Chart

FCC ID: A3LSMS911U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n7

NR Band n7					
		Operating Frequency (Hz):		2,535,000,000	
		Ref. Voltage (VDC):		4.34	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.34	- 30	2,534,991,182	-1,981	-0.0000781
		- 20	2,534,996,429	3,266	0.0001288
		- 10	2,534,995,905	2,742	0.0001082
		0	2,534,993,117	-45	-0.0000018
		+ 10	2,534,993,449	286	0.0000113
		+ 20 (Ref)	2,534,993,163	0	0.0000000
		+ 30	2,534,990,489	-2,674	-0.0001055
		+ 40	2,534,993,592	429	0.0000169
Battery Endpoint	3.71	+ 20	2,534,992,766	-397	-0.0000157

Table 7-145. NR Band n7 Frequency Stability Data



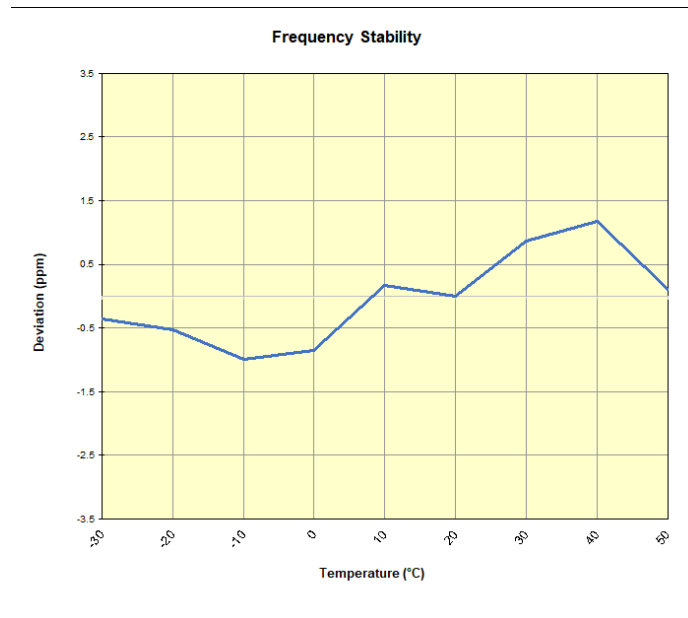
Plot 7-644. NR Band n7 Frequency Stability Chart

FCC ID: A3LSMS911U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
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NR Band n41/38

NR Band n41/38					
		Operating Frequency (Hz):		2,593,000,000	
		Ref. Voltage (VDC):		4.34	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.34	- 30	2,592,975,115	-930	-0.0000359
		- 20	2,592,974,669	-1,377	-0.0000531
		- 10	2,592,973,479	-2,566	-0.0000990
		0	2,592,973,850	-2,196	-0.0000847
		+ 10	2,592,976,479	434	0.0000167
		+ 20 (Ref)	2,592,976,046	0	0.0000000
		+ 30	2,592,978,277	2,231	0.0000860
		+ 40	2,592,979,079	3,034	0.0001170
		+ 50	2,592,976,322	277	0.0000107
Battery Endpoint	3.71	+ 20	2,592,974,564	-1,481	-0.0000571

Table 7-146. NR Band n41/38 Frequency Stability Data



Plot 7-645. NR Band n41/38 Frequency Stability Chart

FCC ID: A3LSMS911U	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 Tablet FCC ID: A3LSMS911U** complies with all the requirements of Part 27 of the FCC rules.

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