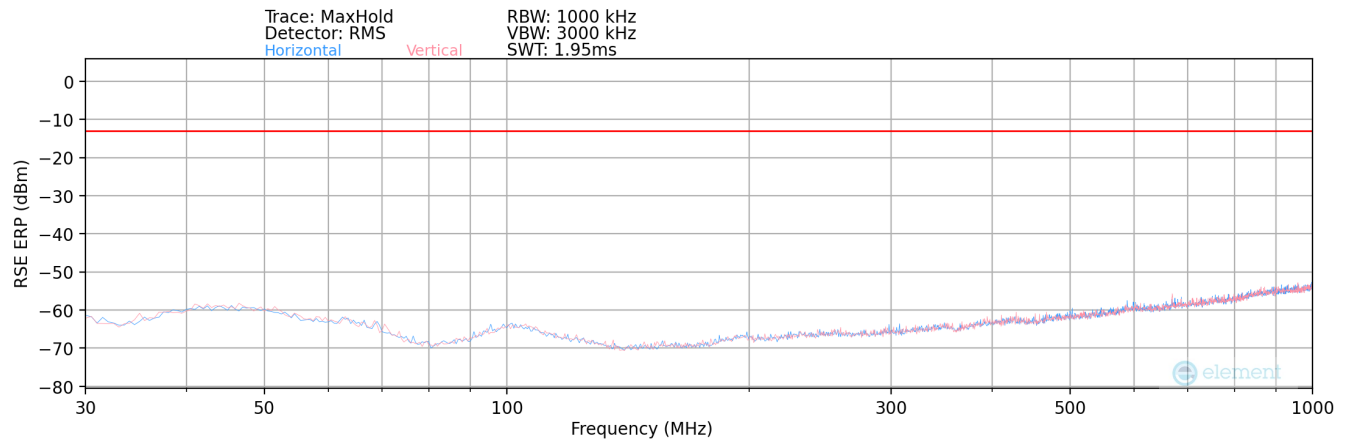


LTE Band 66/4 – Ant4

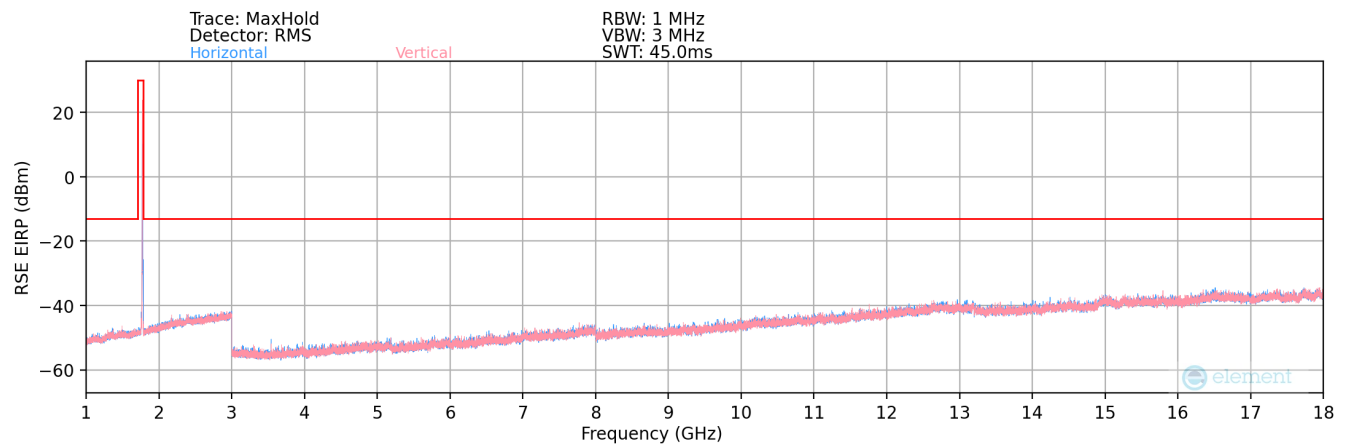


Plot 7-232. Radiated Spurious Plot (LTE Band 66/4 – Ant4)

Bandwidth (MHz):	20
Frequency (MHz):	1720
RB / Offset:	1 / 50

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]
581.00	H	-	-	-114.31	-5.20	-12.51	-109.92	-13.00	-96.92

Table 7-57. Radiated Spurious Data (LTE Band 66/4 – Low Channel – Ant4)



Plot 7-233. Radiated Spurious Plot (LTE Band 66/4 – Ant4)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset		Page 181 of 196

Bandwidth (MHz):	20
Frequency (MHz):	1720
RB / Offset:	1 / 50

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]
3440.00	H	137	212	-69.82	7.22	44.40	-50.85	-13.00	-37.85
5160.00	H	-	-	-80.62	10.65	37.03	-58.23	-13.00	-45.23
6880.00	H	-	-	-81.55	13.86	39.31	-55.94	-13.00	-42.94
8600.00	H	-	-	-82.73	16.34	40.61	-54.65	-13.00	-41.65

Table 7-58. Radiated Spurious Data (LTE Band 66/4 – Low Channel – Ant4)

Bandwidth (MHz):	20
Frequency (MHz):	1745
RB / Offset:	1 / 50

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]
3490.00	H	158	199	-67.77	7.16	46.39	-48.87	-13.00	-35.87
5235.00	H	-	-	-80.26	10.29	37.03	-58.23	-13.00	-45.23
6980.00	H	-	-	-81.64	13.87	39.23	-56.03	-13.00	-43.03
8725.00	H	-	-	-82.47	16.38	40.91	-54.35	-13.00	-41.35

Table 7-59. Radiated Spurious Data (LTE Band 66/4 – Mid Channel – Ant4)

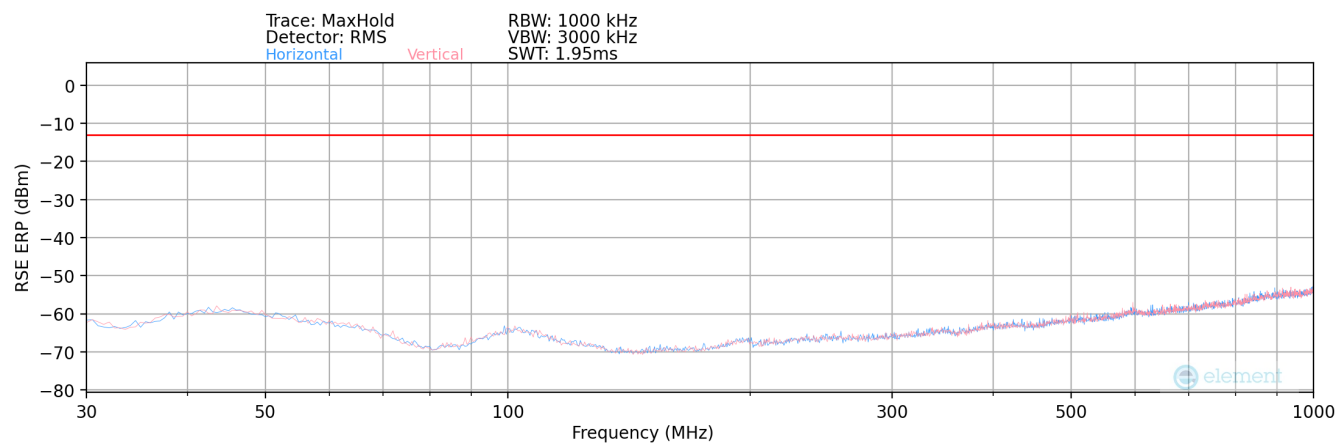
Bandwidth (MHz):	20
Frequency (MHz):	1770
RB / Offset:	1 / 50

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]
3540.00	H	134	201	-74.95	7.31	39.36	-55.90	-13.00	-42.90
5310.00	H	-	-	-81.15	10.65	36.50	-58.75	-13.00	-45.75
7080.00	H	-	-	-81.86	14.20	39.34	-55.92	-13.00	-42.92
8850.00	H	-	-	-82.55	16.69	41.14	-54.12	-13.00	-41.12

Table 7-60. Radiated Spurious Data (LTE Band 66/4 – High Channel – Ant4)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 182 of 196

NR Band n70 – Ant4



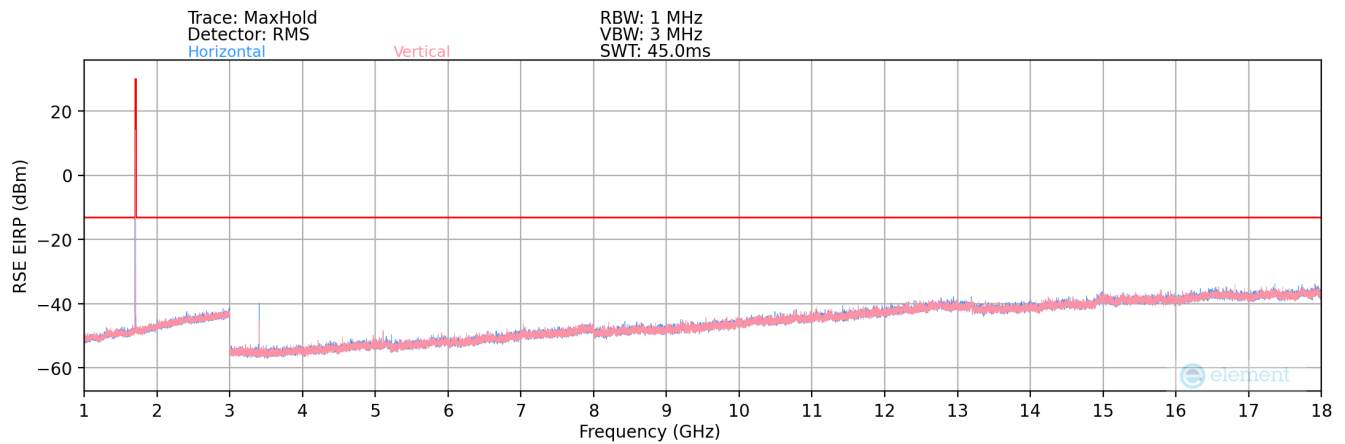
Plot 7-234. Radiated Spurious Plot (NR Band n70 – Ant4)

Bandwidth (MHz):	15
Frequency (MHz):	1702.5
RB / Offset:	1 / 39

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]
437.00	H	-	-	-85.51	-7.92	13.57	-83.84	-13.00	-70.84

Table 7-61. Radiated Spurious Data (NR Band n70 – Mid Channel – Ant4)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset		Page 183 of 196



Plot 7-235. Radiated Spurious Plot (NR Band n70 – Ant4)

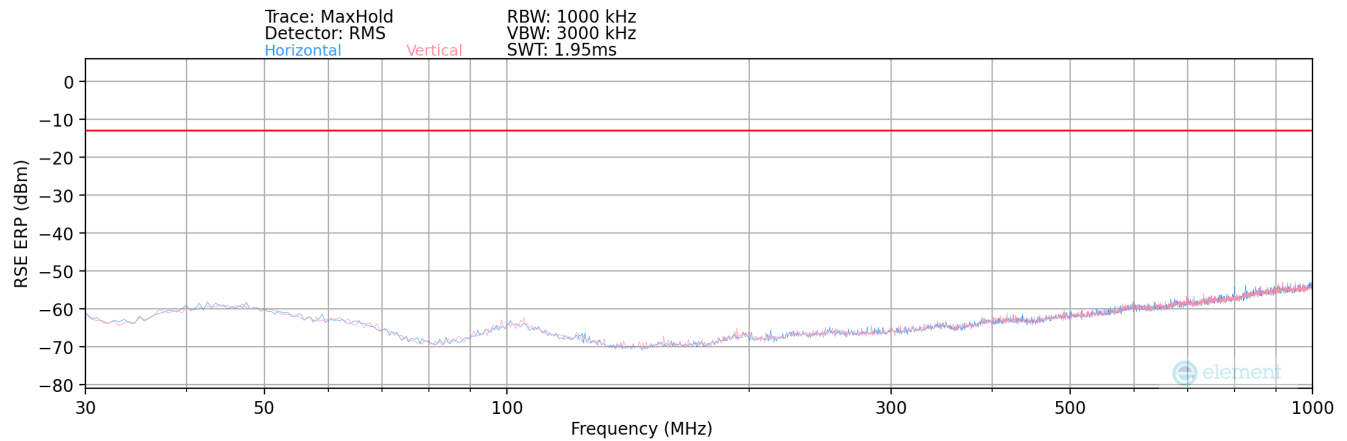
Bandwidth (MHz):	15
Frequency (MHz):	1702.5
RB / Offset:	1 / 39

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]
3405.00	H	112	200	-64.20	7.14	49.94	-45.32	-13.00	-32.32
5107.50	H	108	191	-75.90	10.35	41.45	-53.81	-13.00	-40.81
6810.00	H	105	187	-81.02	13.62	39.60	-55.65	-13.00	-42.65
8512.50	H	-	-	-82.38	16.10	40.72	-54.54	-13.00	-41.54
10215.00	H	-	-	-84.63	19.60	41.97	-53.29	-13.00	-40.29
11917.50	H	-	-	-84.30	21.64	44.34	-50.92	-13.00	-37.92

Table 7-62. Radiated Spurious Data (NR Band n70 – Mid Channel – Ant4)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT			Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset		Page 184 of 196

NR Band n66 – Ant4

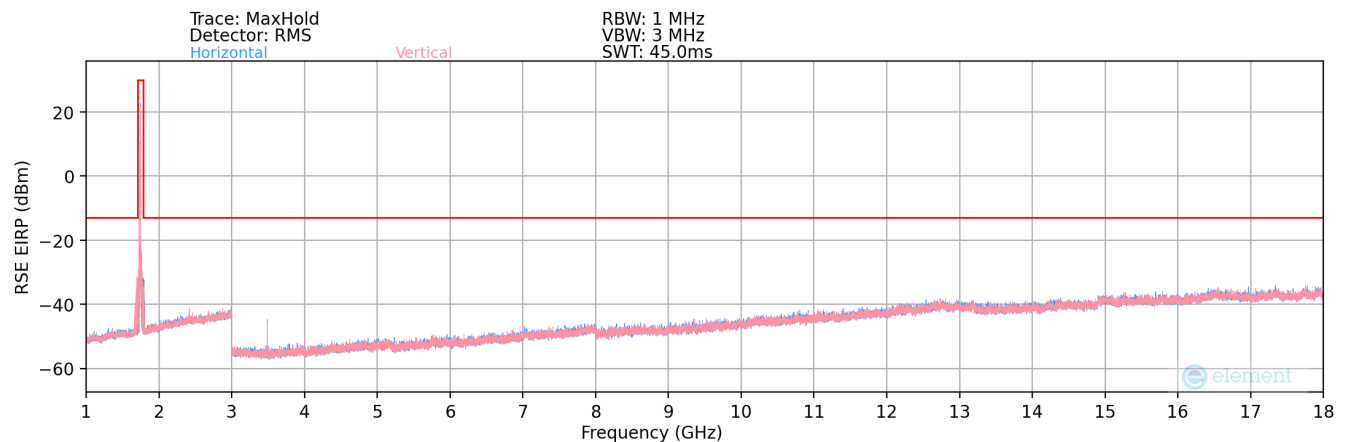


Plot 7-236. Radiated Spurious Plot (NR Band n66 – Ant4)

Bandwidth (MHz):	40
Frequency (MHz):	1730
RB / Offset:	1 / 108

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]
804.00	H	-	-	-87.37	-2.16	17.47	-79.94	-13.00	-66.94

Table 7-63. Radiated Spurious Data (NR Band n66 – Low Channel – Ant4)



Plot 7-237. Radiated Spurious Plot (NR Band n66 – Ant4)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 185 of 196

Bandwidth (MHz):	40
Frequency (MHz):	1730
RB / Offset:	1 / 108

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]
3460.00	H	116	206	-68.63	7.09	45.46	-49.80	-13.00	-36.80
5190.00	H	131	210	-80.24	10.36	37.12	-58.13	-13.00	-45.13
6920.00	H	-	-	-81.82	13.69	38.87	-56.39	-13.00	-43.39
8650.00	H	-	-	-82.83	16.92	41.09	-54.17	-13.00	-41.17
10380.00	H	-	-	-82.99	19.71	43.72	-51.54	-13.00	-38.54

Table 7-64. Radiated Spurious Data (NR Band n66 – Low Channel – Ant4)

Bandwidth (MHz):	40
Frequency (MHz):	1745
RB / Offset:	1 / 108

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]
3490.00	H	104	196	-70.02	7.16	44.14	-51.12	-13.00	-38.12
5235.00	H	110	211	-80.26	10.29	37.03	-58.23	-13.00	-45.23
6980.00	H	-	-	-81.75	13.87	39.12	-56.14	-13.00	-43.14
8725.00	H	-	-	-82.40	16.38	40.98	-54.28	-13.00	-41.28
10470.00	H	-	-	-83.07	19.31	43.24	-52.02	-13.00	-39.02

Table 7-65. Radiated Spurious Data (NR Band n66 – Mid Channel – Ant4)

Bandwidth (MHz):	40
Frequency (MHz):	1760
RB / Offset:	1 / 108

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]
3520.00	H	105	194	-67.54	7.16	46.62	-48.63	-13.00	-35.63
5280.00	H	114	208	-80.29	10.33	37.04	-58.22	-13.00	-45.22
7040.00	H	-	-	-82.21	15.11	39.90	-55.35	-13.00	-42.35
8800.00	H	-	-	-84.61	16.90	39.29	-55.97	-13.00	-42.97
10560.00	H	-	-	-83.36	19.74	43.38	-51.88	-13.00	-38.88

Table 7-66. Radiated Spurious Data (NR Band n66 – High Channel – Ant4)

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 186 of 196

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

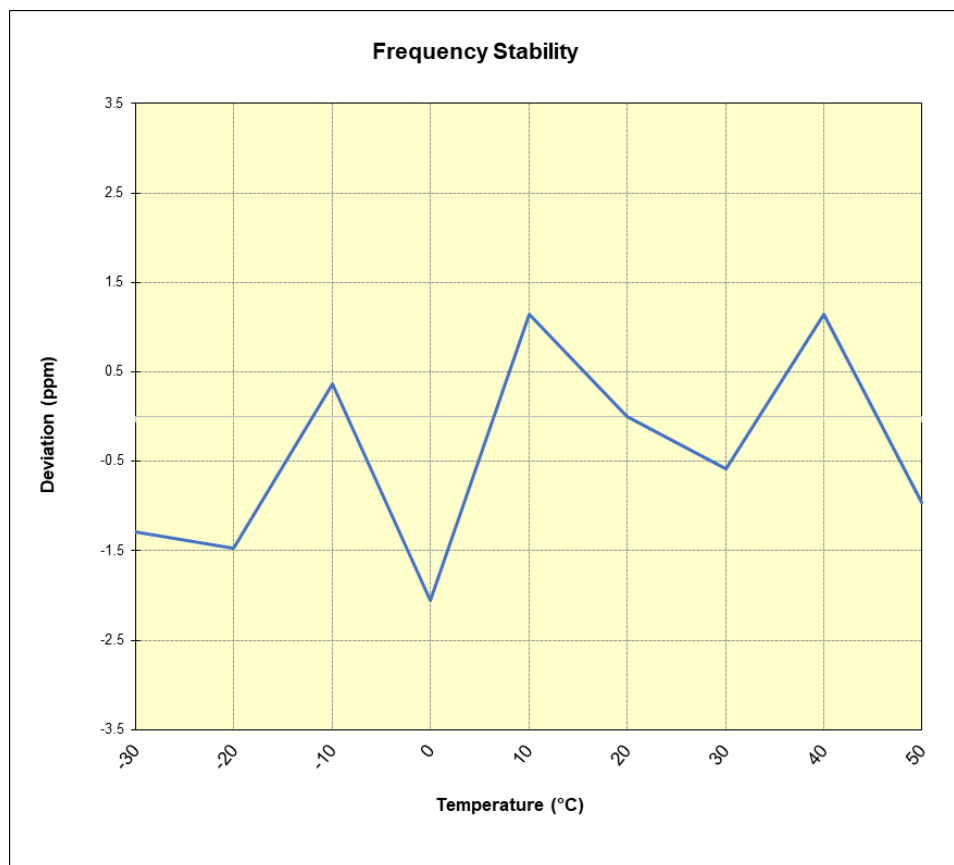
None

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 187 of 196

Frequency Stability / Temperature Variation

LTE Band 71					
		Operating Frequency (Hz):		680,500,000	
		Ref. Voltage (VDC):		4.19	
		Deviation Limit:		± 0.00025% or 2.5 ppm	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	680,511,569	-875	-0.0001286
		- 20	680,511,443	-1,001	-0.0001471
		- 10	680,512,695	251	0.0000369
		0	680,511,047	-1,397	-0.0002053
		+ 10	680,513,222	778	0.0001143
		+ 20 (Ref)	680,512,444	0	0.0000000
		+ 30	680,512,049	-395	-0.0000580
		+ 40	680,513,224	780	0.0001146
		+ 50	680,511,788	-656	-0.0000964
Battery Endpoint	3.34	+ 20	680,513,447	1,003	0.0001474

Table 7-67. LTE Band 71 Frequency Stability Data



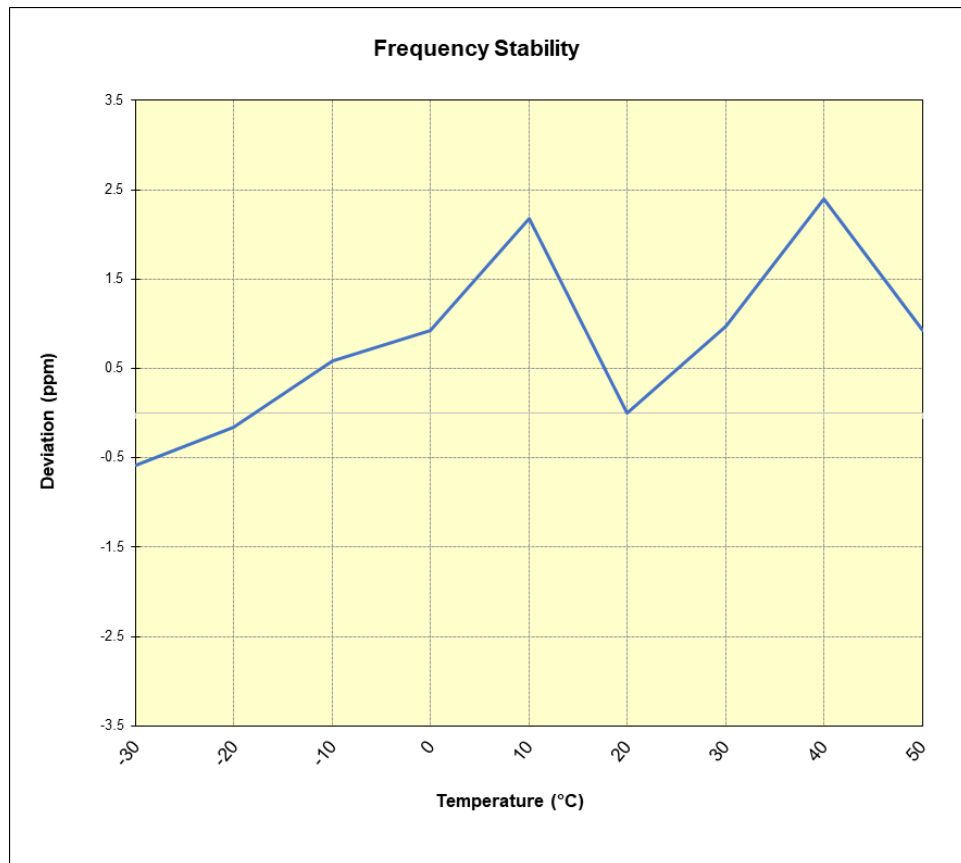
Plot 7-238. LTE Band 71 Frequency Stability Chart

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 188 of 196

Frequency Stability / Temperature Variation

LTE Band 12					
		Operating Frequency (Hz):		707,500,000	
		Ref. Voltage (VDC):		4.19	
		Deviation Limit:		± 0.00025% or 2.5 ppm	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	707,742,160	-409	-0.0000578
		- 20	707,742,458	-111	-0.0000157
		- 10	707,742,987	418	0.0000591
		0	707,743,222	653	0.0000923
		+ 10	707,744,114	1,545	0.0002183
		+ 20 (Ref)	707,742,569	0	0.0000000
		+ 30	707,743,259	690	0.0000975
		+ 40	707,744,269	1,700	0.0002402
		+ 50	707,743,225	656	0.0000927
Battery Endpoint	3.34	+ 20	707,743,687	1,118	0.0001580

Table 7-68. LTE Band 12 Frequency Stability Data



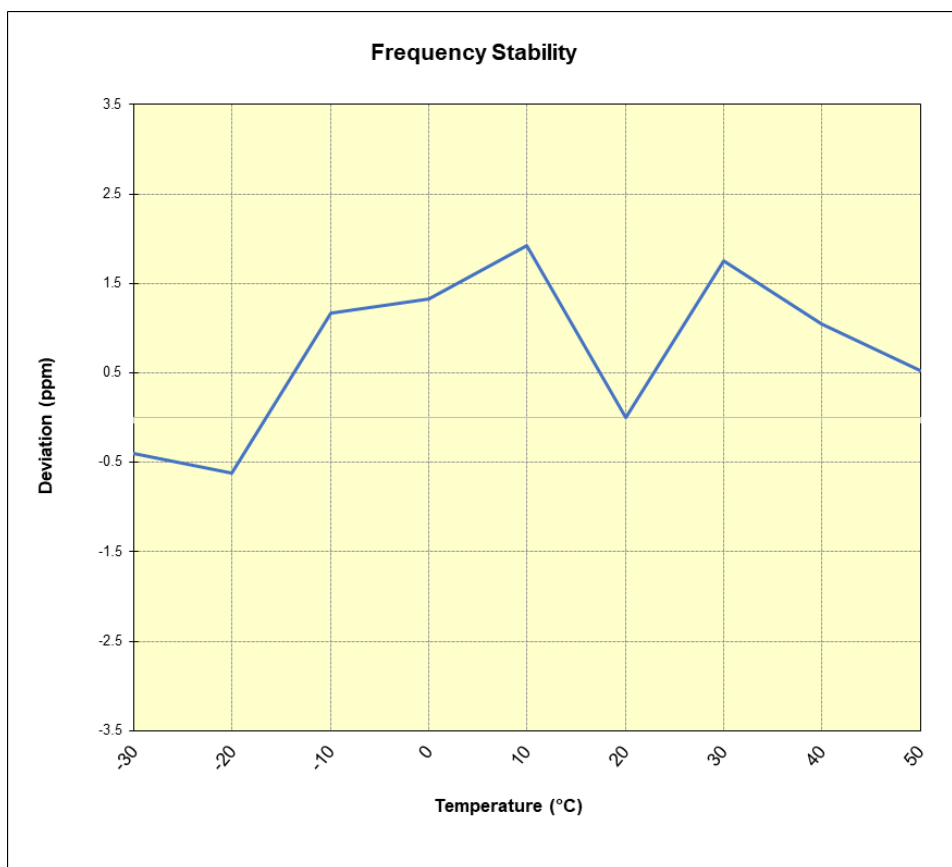
Plot 7-239. LTE Band 12 Frequency Stability Chart

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 189 of 196

Frequency Stability / Temperature Variation

LTE Band 13					
		Operating Frequency (Hz):		782,000,000	
		Ref. Voltage (VDC):		4.19	
		Deviation Limit:		± 0.00025% or 2.5 ppm	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	782,242,429	-310	-0.0000396
		- 20	782,242,257	-482	-0.0000616
		- 10	782,243,655	916	0.0001171
		0	782,243,777	1,038	0.0001327
		+ 10	782,244,246	1,507	0.0001927
		+ 20 (Ref)	782,242,739	0	0.0000000
		+ 30	782,244,114	1,375	0.0001758
		+ 40	782,243,557	818	0.0001046
		+ 50	782,243,147	408	0.0000522
Battery Endpoint	3.34	+ 20	782,242,711	-28	-0.0000036

Table 7-69. LTE Band 13 Frequency Stability Data



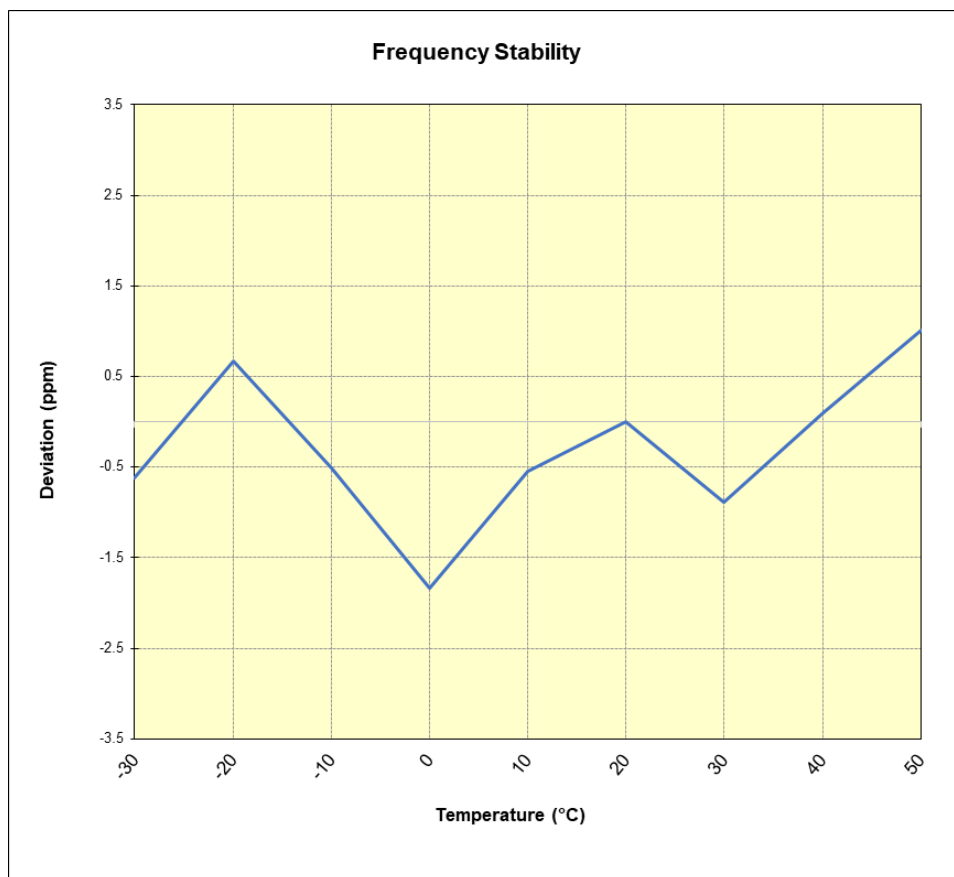
Plot 7-240. LTE Band 13 Frequency Stability Chart

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 190 of 196

Frequency Stability / Temperature Variation

NR Band n71					
		Operating Frequency (Hz):		680,500,000	
		Ref. Voltage (VDC):		4.19	
		Deviation Limit:		± 0.00025% or 2.5 ppm	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	680,585,034	-424	-0.0000623
		- 20	680,585,912	454	0.0000667
		- 10	680,585,107	-351	-0.0000516
		0	680,584,206	-1,252	-0.0001840
		+ 10	680,585,088	-370	-0.0000544
		+ 20 (Ref)	680,585,458	0	0.0000000
		+ 30	680,584,854	-604	-0.0000887
		+ 40	680,585,525	67	0.0000098
Battery Endpoint	3.34	+ 50	680,586,144	686	0.0001008
		+ 20	680,585,333	-125	-0.0000184

Table 7-70. NR Band n71 Frequency Stability Data



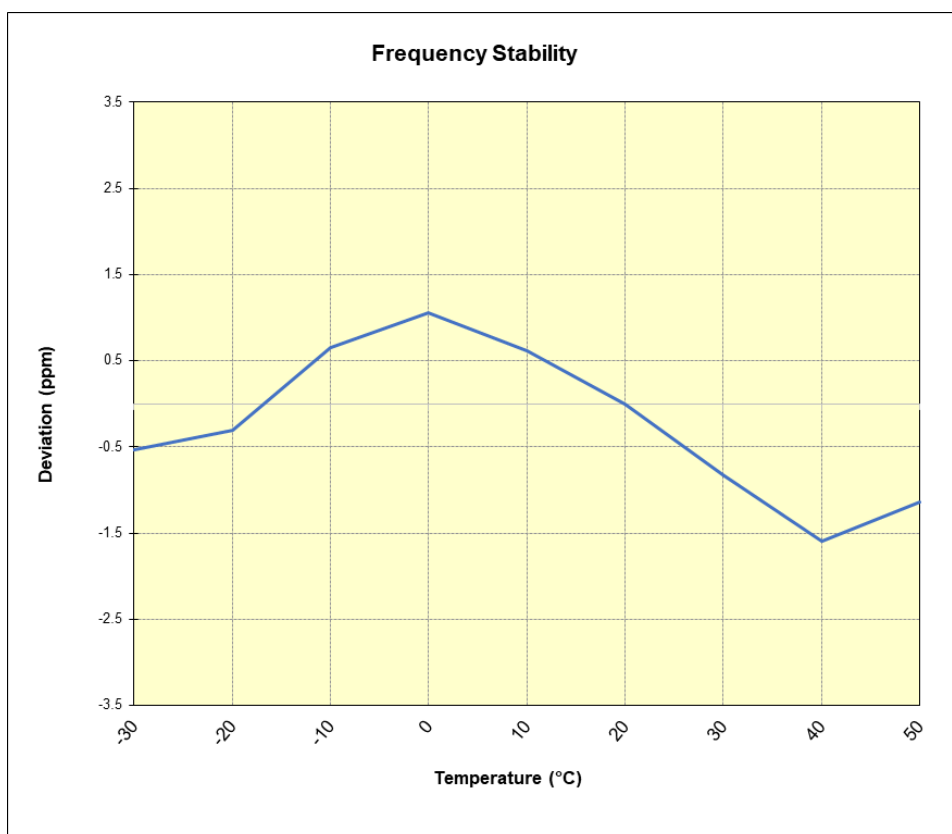
Plot 7-241. NR Band n71 Frequency Stability Chart

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 191 of 196

Frequency Stability / Temperature Variation

WCDMA AWS					
		Operating Frequency (Hz):		1,732,600,000	
		Ref. Voltage (VDC):		4.19	
		Deviation Limit:		± 0.00025% or 2.5 ppm	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	1,732,610,489	-931	-0.0000537
		- 20	1,732,610,886	-534	-0.0000308
		- 10	1,732,612,556	1,136	0.0000656
		0	1,732,613,244	1,824	0.0001053
		+ 10	1,732,612,475	1,055	0.0000609
		+ 20 (Ref)	1,732,611,420	0	0.0000000
		+ 30	1,732,609,999	-1,421	-0.0000820
		+ 40	1,732,608,666	-2,754	-0.0001590
		+ 50	1,732,609,447	-1,973	-0.0001139
Battery Endpoint	3.34	+ 20	1,732,608,988	-2,432	-0.0001404

Table 7-71. WCDMA AWS Frequency Stability Data



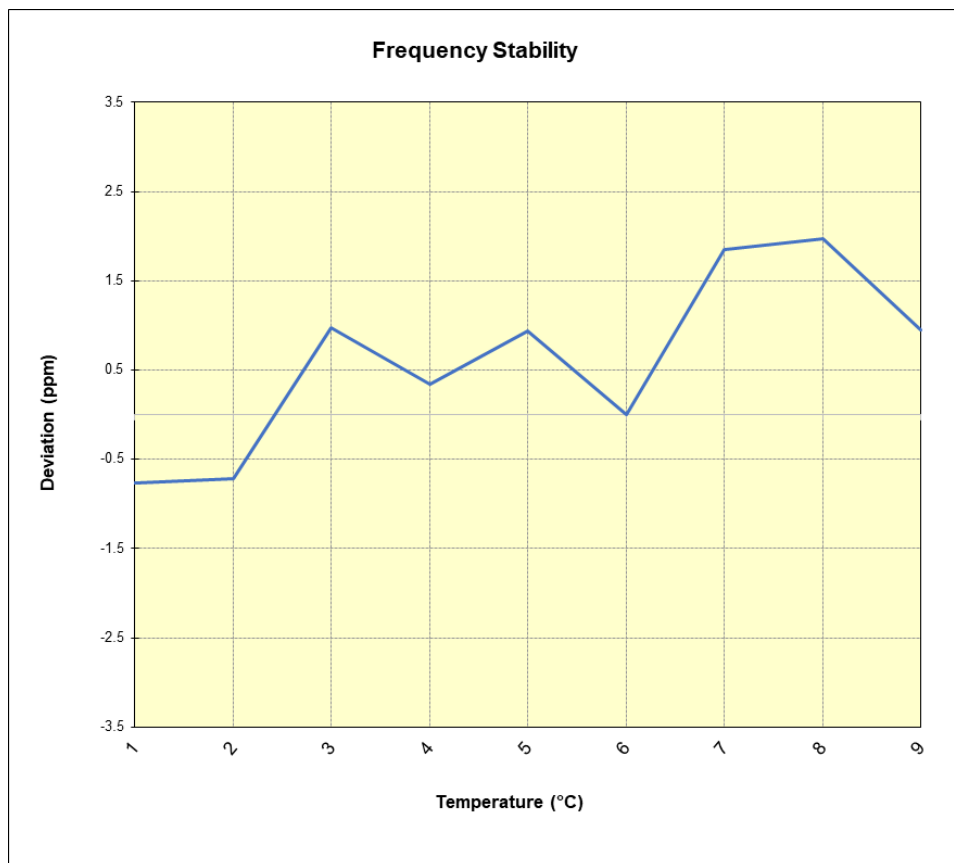
Plot 7-242. WCDMA AWS Frequency Stability Chart

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 192 of 196

Frequency Stability / Temperature Variation

LTE Band 66/4					
		Operating Frequency (Hz):		1,745,000,000	
		Ref. Voltage (VDC):		4.19	
		Deviation Limit:		± 0.00025% or 2.5 ppm	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	1,745,226,658	-1,344	-0.0000770
		- 20	1,745,226,745	-1,257	-0.0000720
		- 10	1,745,229,697	1,695	0.0000971
		0	1,745,228,599	597	0.0000342
		+ 10	1,745,229,634	1,632	0.0000935
		+ 20 (Ref)	1,745,228,002	0	0.0000000
		+ 30	1,745,231,222	3,220	0.0001845
		+ 40	1,745,231,444	3,442	0.0001972
		+ 50	1,745,229,666	1,664	0.0000953
Battery Endpoint	3.34	+ 20	1,745,228,446	444	0.0000254

Table 7-72. LTE Band 66/4 Frequency Stability Data



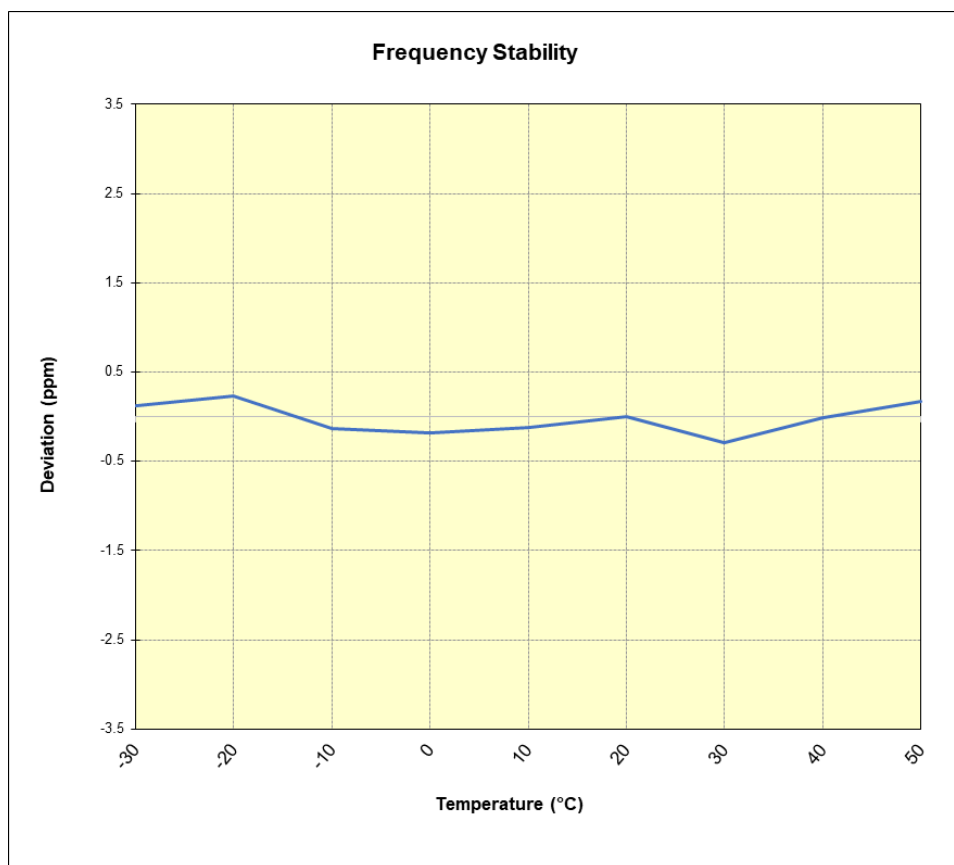
Plot 7-243. LTE Band 66/4 Frequency Stability Chart

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 193 of 196

Frequency Stability / Temperature Variation

NR Band n70					
		Operating Frequency (Hz):		1,702,500,000	
		Ref. Voltage (VDC):		4.19	
		Deviation Limit:		± 0.00025% or 2.5 ppm	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	1,702,495,272	205	0.0000120
		- 20	1,702,495,472	405	0.0000238
		- 10	1,702,494,837	-230	-0.0000135
		0	1,702,494,750	-317	-0.0000186
		+ 10	1,702,494,864	-203	-0.0000119
		+ 20 (Ref)	1,702,495,067	0	0.0000000
		+ 30	1,702,494,580	-487	-0.0000286
		+ 40	1,702,495,044	-23	-0.0000014
		+ 50	1,702,495,354	287	0.0000169
Battery Endpoint	3.34	+ 20	1,702,495,694	627	0.0000368

Table 7-73. NR Band n70 Frequency Stability Data



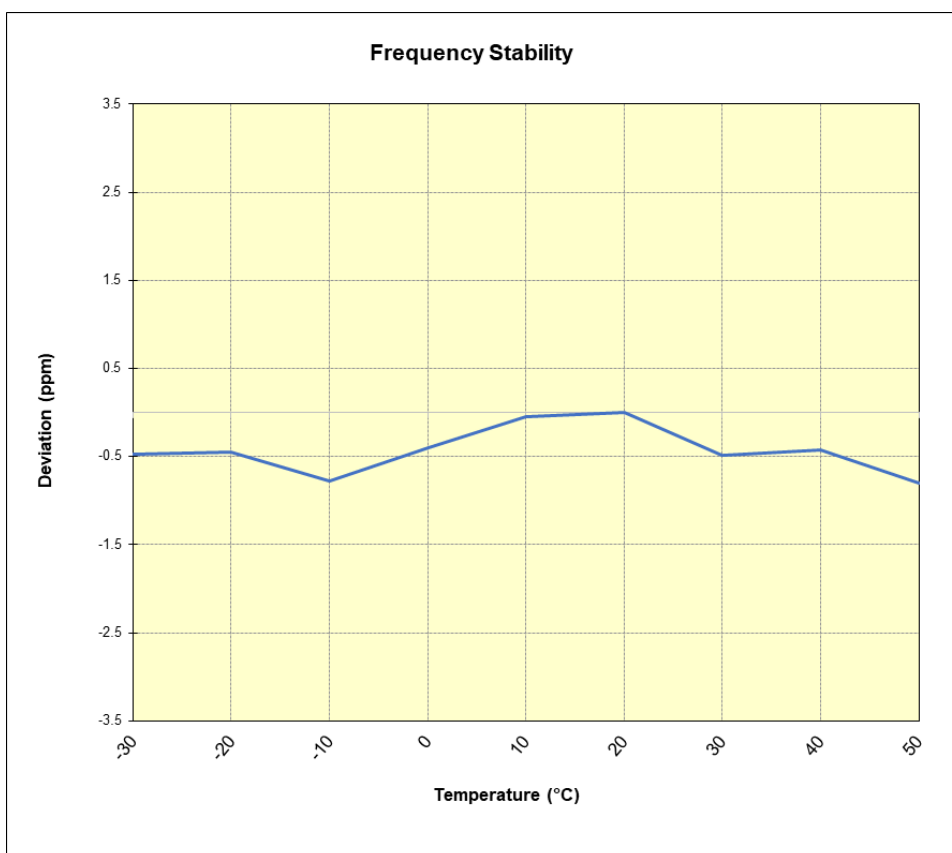
Plot 7-244. NR Band n70 Frequency Stability Chart

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 194 of 196

Frequency Stability / Temperature Variation

NR Band n66					
		Operating Frequency (Hz):		1,745,000,000	
		Ref. Voltage (VDC):		4.19	
		Deviation Limit:		± 0.00025% or 2.5 ppm	
Voltage (%)	Power (VDC)	Temp (°C)	Frequency (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	4.19	- 30	1,745,084,940	-834	-0.0000478
		- 20	1,745,084,987	-787	-0.0000451
		- 10	1,745,084,423	-1,351	-0.0000774
		0	1,745,085,081	-693	-0.0000397
		+ 10	1,745,085,685	-89	-0.0000051
		+ 20 (Ref)	1,745,085,774	0	0.0000000
		+ 30	1,745,084,919	-855	-0.0000490
		+ 40	1,745,085,028	-746	-0.0000427
		+ 50	1,745,084,375	-1,399	-0.0000802
Battery Endpoint	3.34	+ 20	1,745,086,211	437	0.0000250

Table 7-74. NR Band n66 Frequency Stability Data



Plot 7-245. NR Band n66 Frequency Stability Chart

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 195 of 196

8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **Samsung Portable Handset** **FCC ID: A3LSMG766U** complies with all the requirements of Part 27 of the FCC rules.

FCC ID: A3LSMG766U	PART 27 MEASUREMENT REPORT		Approved by: Technical Manager
Test Report S/N: 1M2501020001-09.A3L	Test Dates: 1/6/2025 – 3/5/2025	EUT Type: Portable Handset	Page 196 of 196