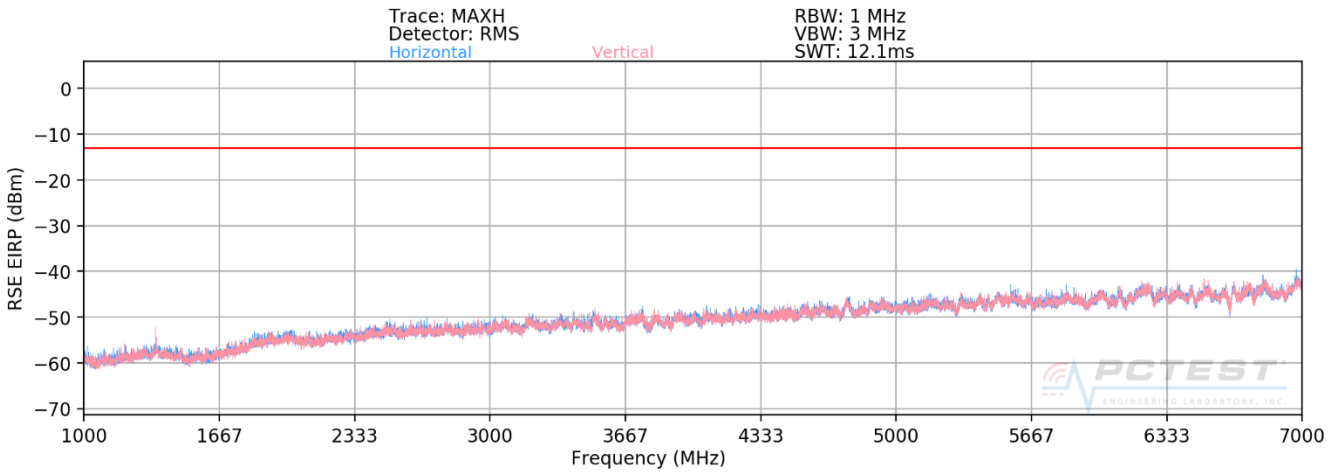
Band 71



Plot 7-317. Radiated Spurious Plot above 1GHz (Band 71)

OPERATING FREQUENCY:	668.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1336.00	H	114	117	-68.37	7.41	-60.96	-48.0
2004.00	H	-	-	-77.38	8.63	-68.74	-55.7

Table 7-13. Radiated Spurious Data (Band 71 – Low Channel)

OPERATING FREQUENCY:	680.50	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1361.00	H	135	122	-69.28	7.48	-61.79	-48.8
2041.50	H	-	-	-77.32	8.76	-68.56	-55.6

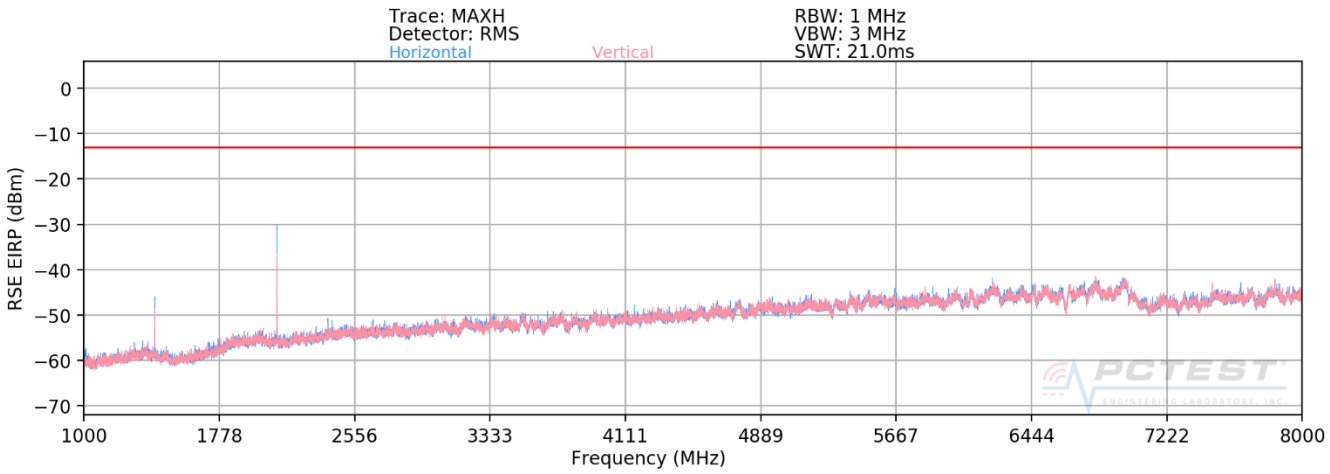
Table 7-14. Radiated Spurious Data (Band 71 – Mid Channel)

OPERATING FREQUENCY:	693.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1386.00	H	215	135	-70.12	7.45	-62.67	-49.7
2079.00	H	200	145	-69.62	8.82	-60.80	-47.8
2772.00	H	-	-	-77.34	10.16	-67.19	-54.2

Table 7-15. Radiated Spurious Data (Band 71 – High Channel)

Band 12/17



Plot 7-318. Radiated Spurious Plot above 1GHz (Band 12/17)

OPERATING FREQUENCY:	704.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1408.00	V	122	324	-70.64	7.54	-63.10	-50.1
2112.00	V	212	327	-76.37	8.85	-67.52	-54.5
2816.00	V	-	-	-76.70	10.12	-66.58	-53.6

Table 7-16. Radiated Spurious Data (Band 12/17 – Low Channel)

OPERATING FREQUENCY:	707.50	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1415.00	V	181	109	-73.11	7.63	-65.47	-52.5
2122.50	V	135	245	-76.21	8.86	-67.35	-54.3
2830.00	V	-	-	-76.73	10.10	-66.64	-53.6

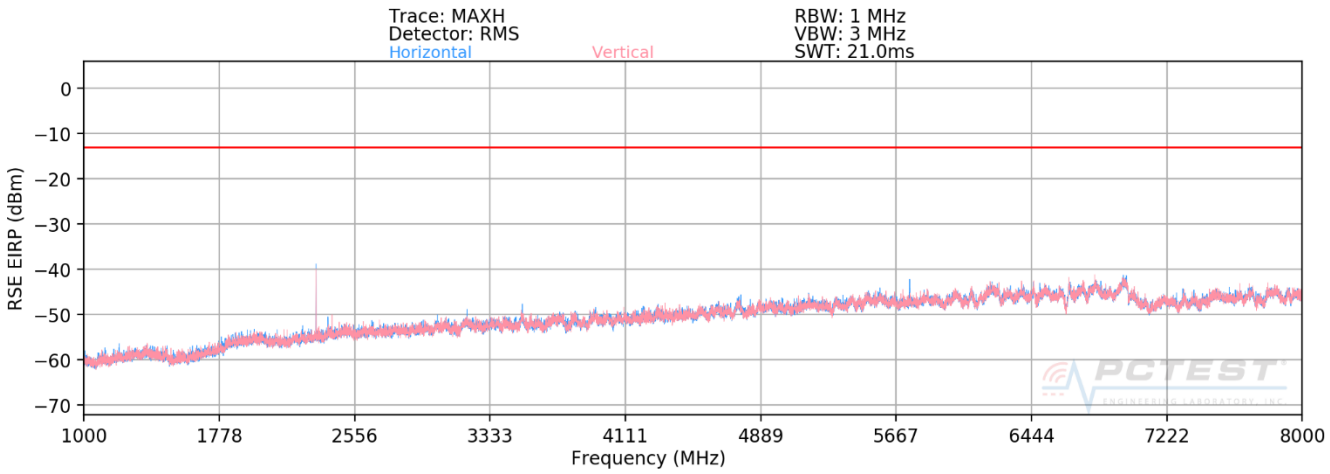
Table 7-17. Radiated Spurious Data (Band 12/17 – Mid Channel)

OPERATING FREQUENCY:	711.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1422.00	V	112	275	-70.00	7.72	-62.28	-49.3
2133.00	V	-	-	-76.60	8.87	-67.73	-54.7

Table 7-18. Radiated Spurious Data (Band 12/17 – High Channel)

Band 13



Plot 7-319. Radiated Spurious Plot above 1GHz (Band 13)

OPERATING FREQUENCY:	782.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
2346.00	V	135	375	-76.45	9.43	-67.01	-54.0
3128.00	V	-	-	-74.67	9.34	-65.33	-52.3

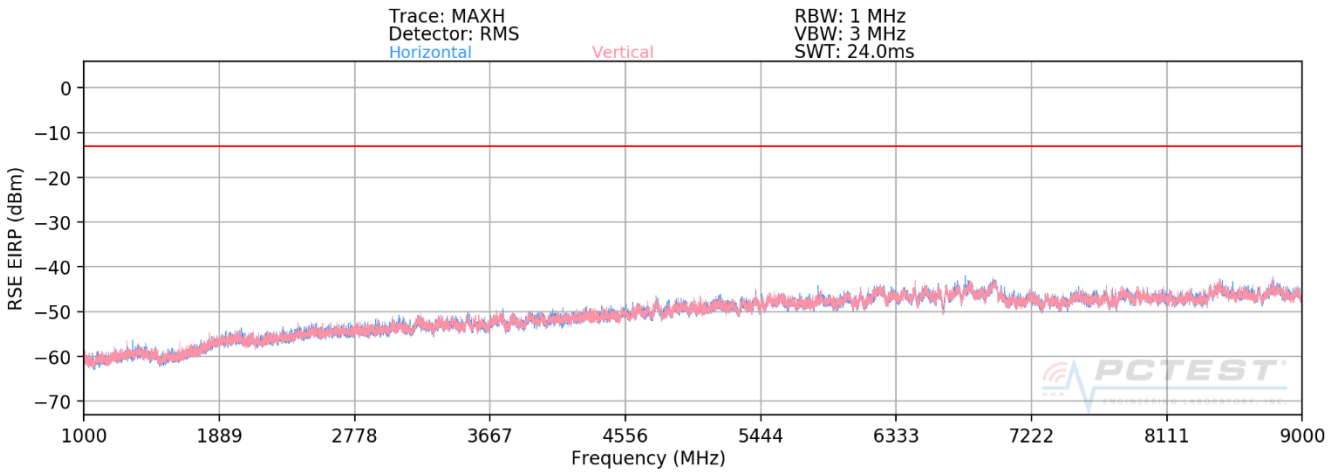
Table 7-19. Radiated Spurious Data (Band 13 – Mid Channel)

MODULATION SIGNAL:	QPSK	
BANDWIDTH:	10.00	MHz
DISTANCE:	3	meters
NARROWBAND EMISSION LIMIT:	-50	dBm
WIDEBAND EMISSION LIMIT:	-40	dBm/MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1564.00	V	149	357	-77.87	8.53	-69.34	-29.3

Table 7-20. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

Band 26/5



Plot 7-320. Radiated Spurious Plot above 1GHz (Band 26/5)

OPERATING FREQUENCY:	831.50	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	15.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1663.00	H	135	315	-79.87	8.95	-70.92	-57.9
2494.50	H	122	312	-72.90	9.73	-63.17	-50.2
3326.00	H	-	-	-73.99	9.59	-64.40	-51.4

Table 7-21. Radiated Spurious Data (Band 26/5 – Low Channel)

OPERATING FREQUENCY:	836.50	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	15.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1673.00	H	140	338	-78.76	8.95	-69.81	-56.8
2509.50	H	145	335	-76.12	9.75	-66.37	-53.4
3346.00	H	-	-	-74.08	9.60	-64.47	-51.5

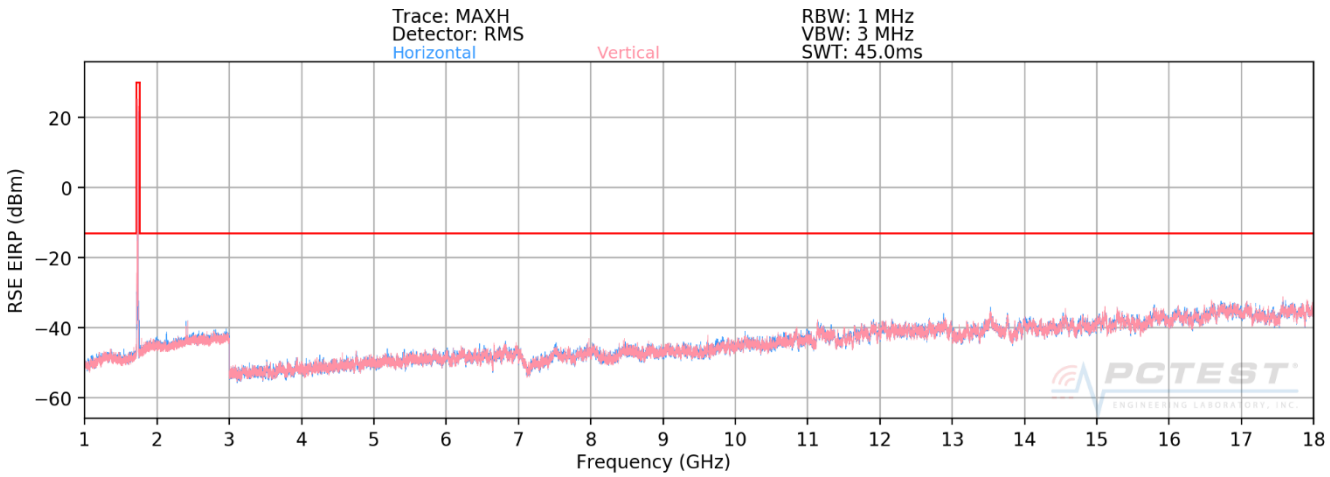
Table 7-22. Radiated Spurious Data (Band 26/5 – Mid Channel)

OPERATING FREQUENCY:	841.50	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	15.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
1683.00	H	112	135	-79.38	8.95	-70.43	-57.4
2524.50	H	146	316	-75.56	9.75	-65.81	-52.8
3366.00	H	-	-	-74.22	9.67	-64.56	-51.6

Table 7-23. Radiated Spurious Data (Band 26/5 – High Channel)

Band 66/4



Plot 7-321. Radiated Spurious Plot above 1GHz (Band 66/4)

OPERATING FREQUENCY:	1720.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3440.00	V	390	20	-66.72	9.84	-56.88	-43.9
5160.00	V	-	-	-71.72	10.71	-61.01	-48.0

Table 7-24. Radiated Spurious Data (Band 66/4 – Low Channel)

OPERATING FREQUENCY:	1745.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3490.00	V	119	15	-67.08	9.91	-57.17	-44.2
5235.00	V	-	-	-72.20	10.73	-61.46	-48.5

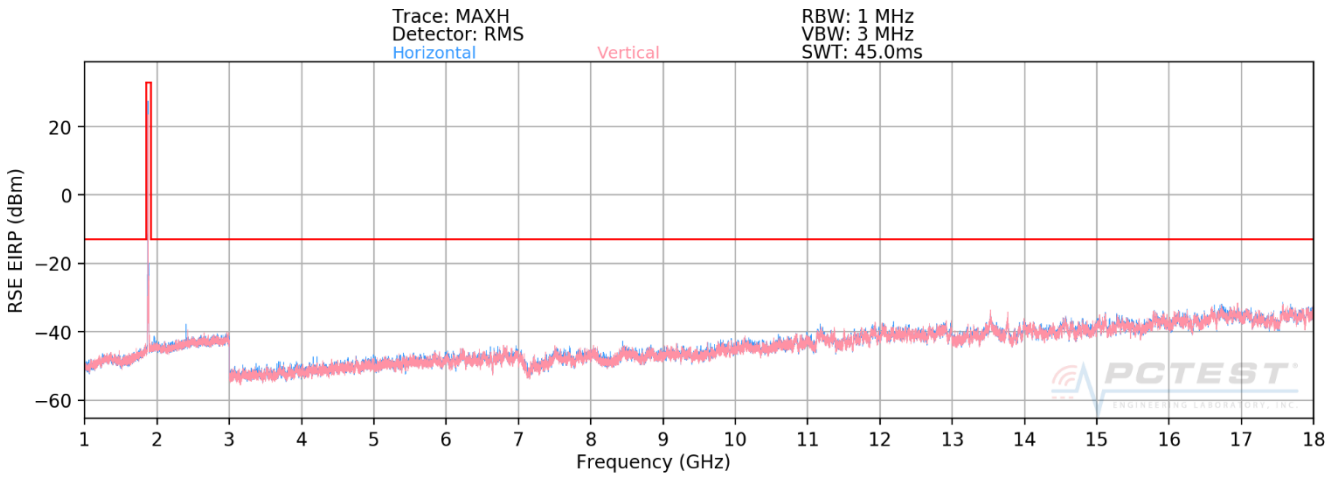
Table 7-25. Radiated Spurious Data (Band 66/4 – Mid Channel)

OPERATING FREQUENCY:	1770.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3540.00	V	124	14	-68.08	9.89	-58.19	-45.2
5310.00	V	400	14	-71.38	10.69	-60.69	-47.7
7080.00	V	320	12	-69.27	11.79	-57.49	-44.5
8850.00	V	-	-	-66.89	11.00	-55.89	-42.9

Table 7-26. Radiated Spurious Data (Band 66/4 – High Channel)

Band 25/2



Plot 7-322. Radiated Spurious Plot above 1GHz (Band 25/2)

OPERATING FREQUENCY:	1860.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3720.00	H	145	315	-71.71	9.51	-62.20	-49.2
5580.00	H	-	-	-72.36	10.99	-61.38	-48.4

Table 7-27. Radiated Spurious Data (Band 25/2 – Low Channel)

OPERATING FREQUENCY:	1882.50	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3765.00	H	117	123	-67.73	9.36	-58.37	-45.4
5647.50	H	-	-	-72.39	11.19	-61.19	-48.2

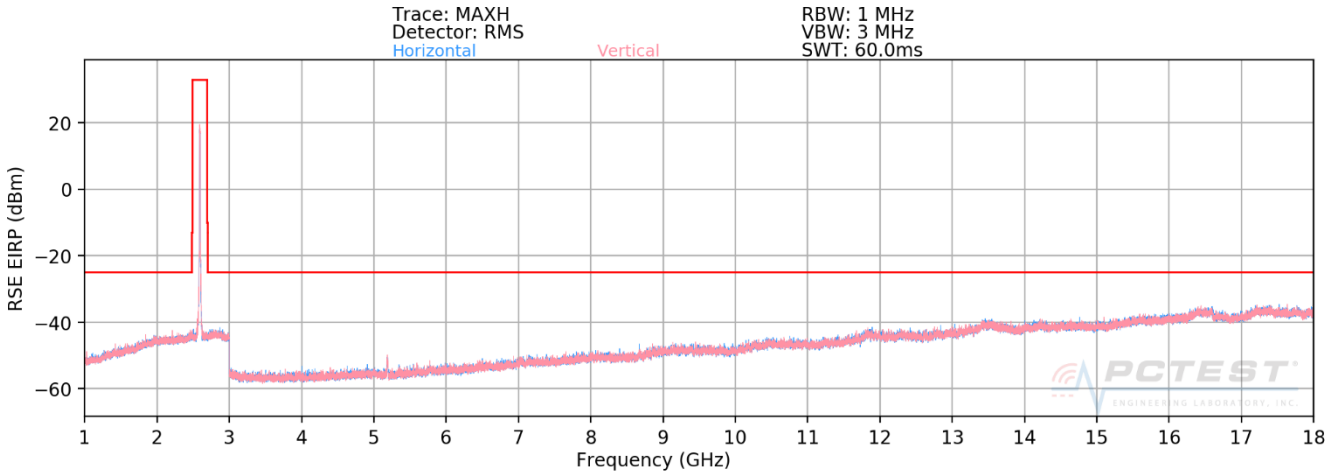
Table 7-28. Radiated Spurious Data (Band 25/2 – Mid Channel)

OPERATING FREQUENCY:	1905.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-13	dBm

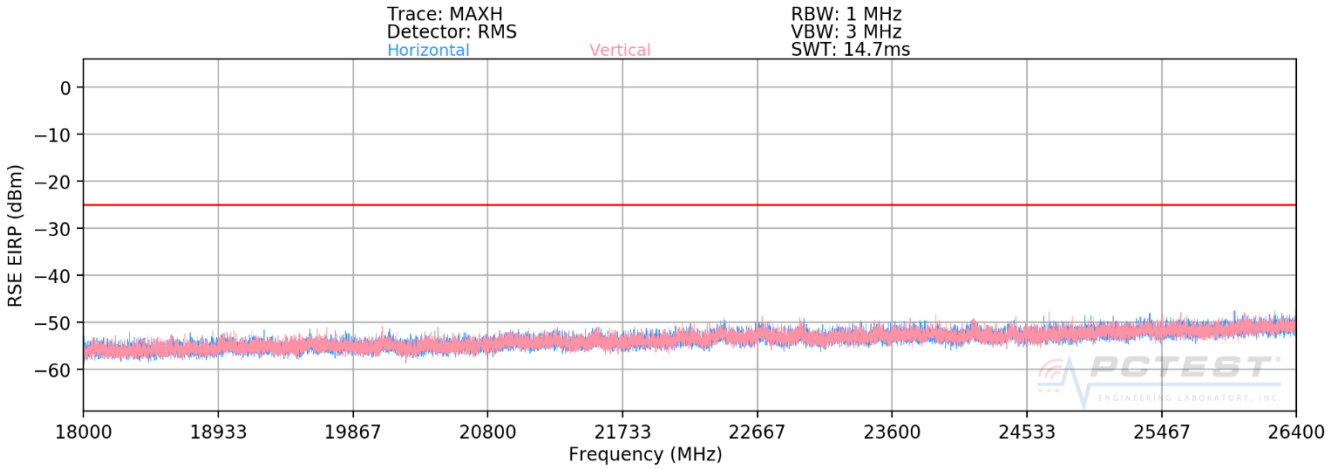
Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
3810.00	H	117	123	-63.62	9.29	-54.33	-41.3
5715.00	H	-	-	-72.43	11.35	-61.08	-48.1

Table 7-29. Radiated Spurious Data (Band 25/2 – High Channel)

Band 41



Plot 7-323. Radiated Spurious Plot 1GHz - 18GHz (Band 41)



Plot 7-324. Radiated Spurious Plot 18GHz – 26.5GHz (Band 41)

OPERATING FREQUENCY:	2510.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-25	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5020.00	H	306	9	-57.60	10.88	-46.72	-21.7
7530.00	H	-	-	-68.02	11.13	-56.89	-31.9

Table 7-30. Radiated Spurious Data (Band 41 – Low Channel)

OPERATING FREQUENCY:	2593.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-25	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5186.00	H	196	327	-55.13	10.74	-44.38	-19.4
7779.00	H	145	317	-68.40	11.44	-56.96	-32.0
10372.00	H	140	300	-67.42	12.42	-54.99	-30.0
12965.00	H	-	-	-66.40	13.29	-53.11	-28.1

Table 7-31. Radiated Spurious Data (Band 41 – Mid Channel)

OPERATING FREQUENCY:	2680.00	MHz
MODULATION SIGNAL:	QPSK	
BANDWIDTH:	20.0	MHz
DISTANCE:	3	meters
LIMIT:	-25	dBm

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	Margin [dB]
5360.00	H	115	323	-53.45	10.70	-42.75	-17.7
8040.00	H	125	320	-65.84	11.16	-54.68	-29.7
10720.00	H	-	-	-65.75	12.59	-53.16	-28.2

Table 7-32. Radiated Spurious Data (Band 41 – High Channel)

7.9 Frequency Stability / Temperature Variation

Test Overview and Limit

Frequency stability testing is performed in accordance with the guidelines of ANSI/TIA-603-E-2016. 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 22, the frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5 ppm) of the center frequency. For Part 24, Part 27, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test Procedure Used

ANSI/TIA-603-E-2016

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

Band 71 Frequency Stability Measurements

OPERATING FREQUENCY:	680,500,000	Hz
CHANNEL:	133297	
REFERENCE VOLTAGE:	3.87	VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.87	- 30	680,500,361	361	0.0000530
100 %		- 20	680,500,131	131	0.0000193
100 %		- 10	680,500,178	178	0.0000262
100 %		0	680,499,888	-112	-0.0000165
100 %		+ 10	680,499,908	-92	-0.0000135
100 %		+ 20	680,499,801	-199	-0.0000292
100 %		+ 30	680,499,960	-40	-0.0000059
100 %		+ 40	680,499,934	-66	-0.0000097
100 %		+ 50	680,499,853	-147	-0.0000216
85 %		+ 20	680,500,337	337	0.0000495
BATT. ENDPOINT	3.40	+ 20	680,500,028	28	0.0000041

Table 7-33. Frequency Stability Data (Band 71)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Band 71 Frequency Stability Measurements

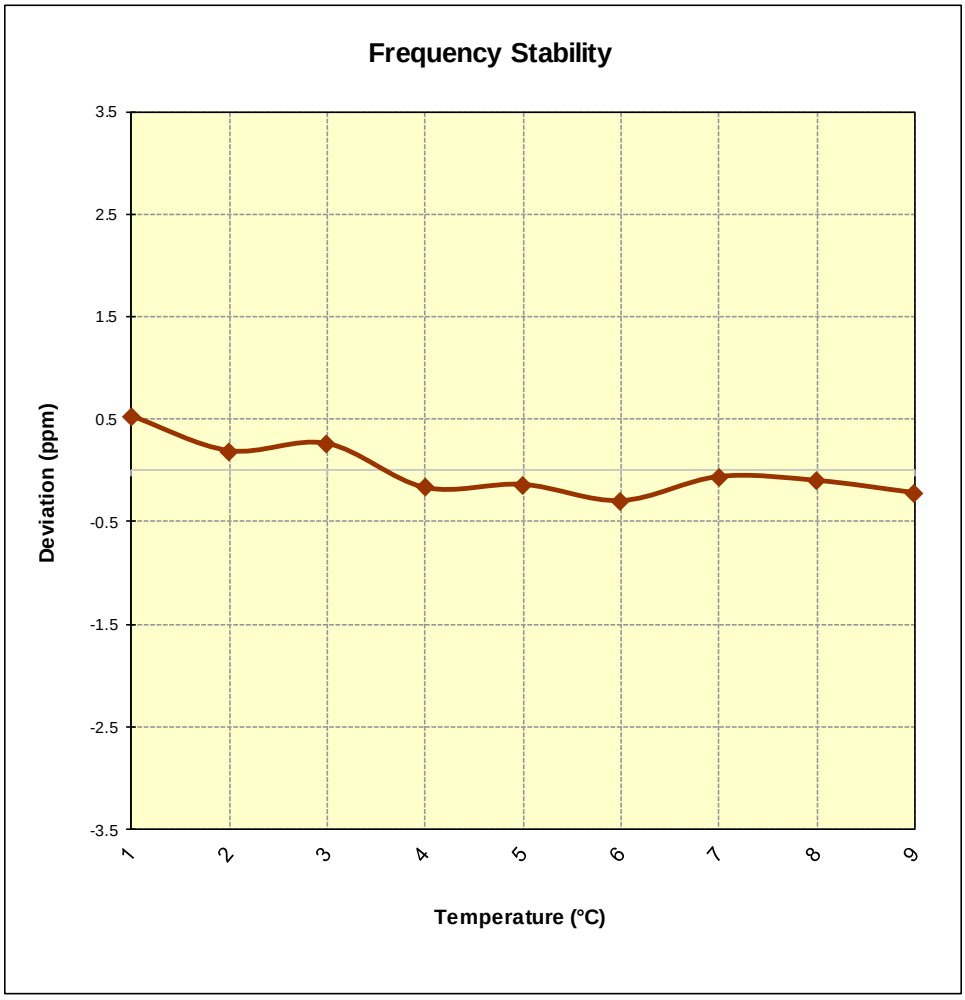


Figure 7-9. Frequency Stability Graph (Band 71)

Band 12/17 Frequency Stability Measurements

OPERATING FREQUENCY:	707,500,000	Hz
CHANNEL:	23790	
REFERENCE VOLTAGE:	3.87	VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.87	- 30	707,500,001	1	0.0000001
100 %		- 20	707,499,829	-171	-0.0000242
100 %		- 10	707,500,089	89	0.0000126
100 %		0	707,499,671	-329	-0.0000465
100 %		+ 10	707,500,047	47	0.0000066
100 %		+ 20	707,499,894	-106	-0.0000150
100 %		+ 30	707,500,205	205	0.0000290
100 %		+ 40	707,499,943	-57	-0.0000081
100 %		+ 50	707,499,999	-1	-0.0000001
85 %		+ 20	707,500,002	2	0.0000003
BATT. ENDPOINT	3.40	+ 20	707,500,391	391	0.0000553

Table 7-34. Frequency Stability Data (Band 12)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Band 12/17 Frequency Stability Measurements

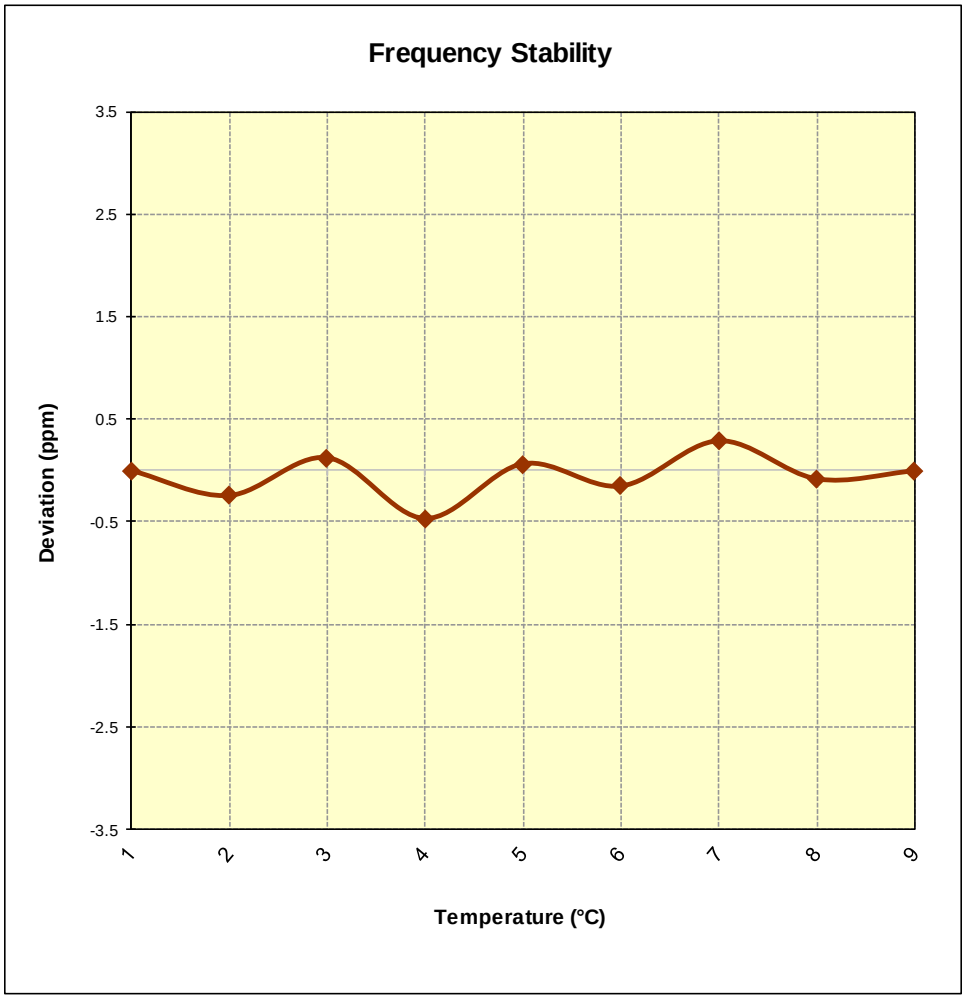


Figure 7-10. Frequency Stability Graph (Band 12)

Band 13 Frequency Stability Measurements

OPERATING FREQUENCY:	782,000,000	Hz
CHANNEL:	23230	
REFERENCE VOLTAGE:	3.87	VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.87	- 30	782,000,224	224	0.0000286
100 %		- 20	782,000,158	158	0.0000202
100 %		- 10	782,000,241	241	0.0000308
100 %		0	782,000,011	11	0.0000014
100 %		+ 10	781,999,912	-88	-0.0000113
100 %		+ 20	782,000,094	94	0.0000120
100 %		+ 30	781,999,911	-89	-0.0000114
100 %		+ 40	782,000,213	213	0.0000272
100 %		+ 50	782,000,152	152	0.0000194
85 %		+ 20	782,000,100	100	0.0000128
BATT. ENDPOINT	3.40	+ 20	782,000,045	45	0.0000058

Table 7-35. Frequency Stability Data (Band 13)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Band 13 Frequency Stability Measurements

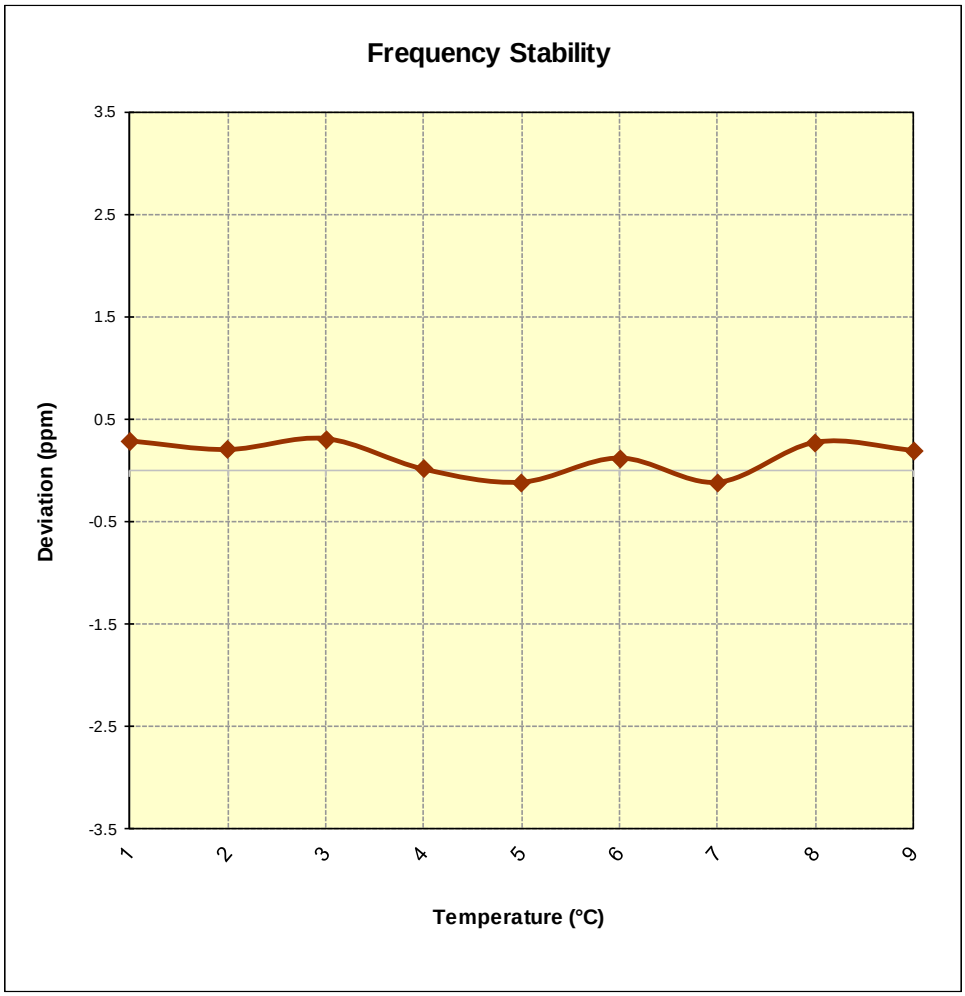


Figure 7-11. Frequency Stability Graph (Band 13)

Band 26/5 Frequency Stability Measurements

OPERATING FREQUENCY:	836,500,000	Hz
CHANNEL:	20525	
REFERENCE VOLTAGE:	3.87	VDC
DEVIATION LIMIT:	± 0.00025 % or 2.5 ppm	

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.87	- 30	836,500,259	259	0.0000310
100 %		- 20	836,500,107	107	0.0000128
100 %		- 10	836,500,000	0	0.0000000
100 %		0	836,499,976	-24	-0.0000029
100 %		+ 10	836,499,707	-293	-0.0000350
100 %		+ 20	836,499,955	-45	-0.0000054
100 %		+ 30	836,499,741	-259	-0.0000310
100 %		+ 40	836,500,077	77	0.0000092
100 %		+ 50	836,499,935	-65	-0.0000078
85 %		+ 20	836,499,877	-123	-0.0000147
BATT. ENDPOINT	3.40	+ 20	836,499,986	-14	-0.0000017

Table 7-36. Frequency Stability Data (Band 26/5)

Band 26/5 Frequency Stability Measurements

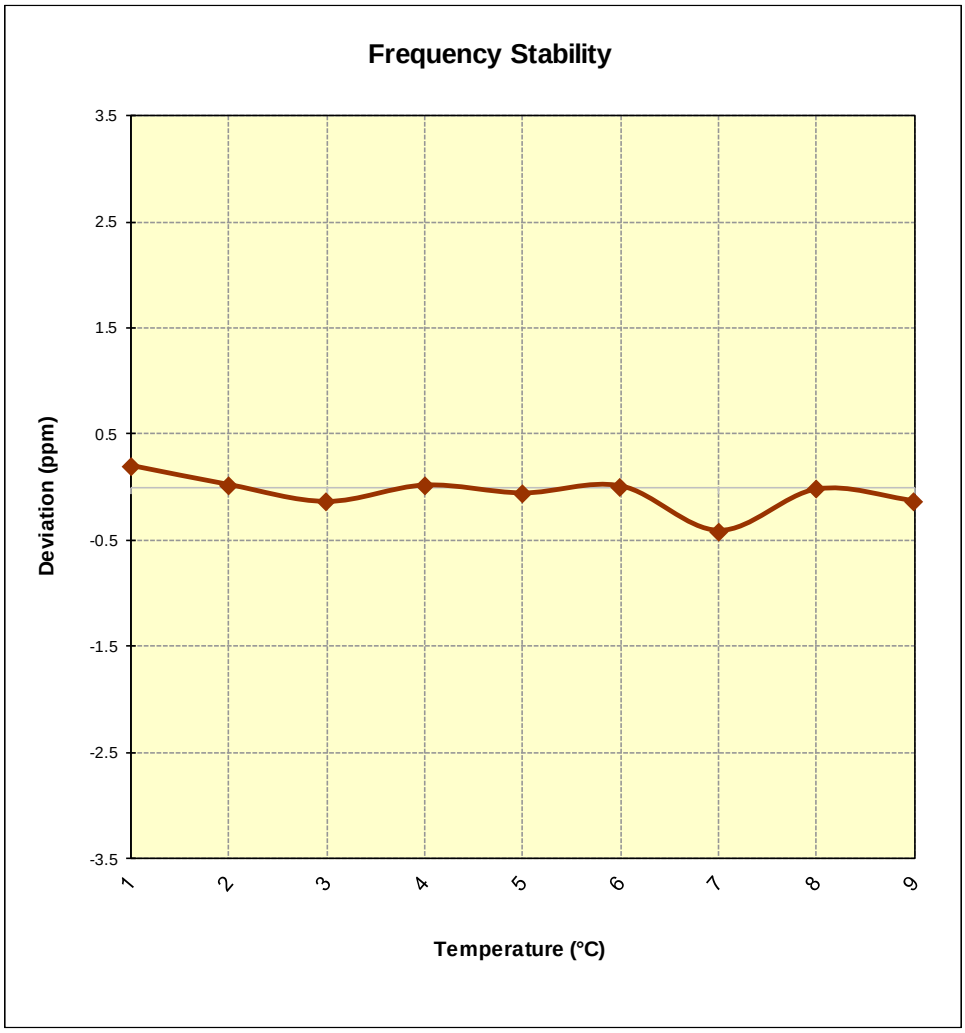


Figure 7-12. Frequency Stability Graph (Band 26/5)

Band 66/4 Frequency Stability Measurements

OPERATING FREQUENCY:	1,745,000,000	Hz
CHANNEL:	132322	
REFERENCE VOLTAGE:	3.87	VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.87	- 30	1,745,000,005	5	0.0000003
100 %		- 20	1,745,000,104	104	0.0000060
100 %		- 10	1,745,000,435	435	0.0000249
100 %		0	1,745,000,179	179	0.0000103
100 %		+ 10	1,745,000,138	138	0.0000079
100 %		+ 20	1,745,000,127	127	0.0000073
100 %		+ 30	1,745,000,266	266	0.0000152
100 %		+ 40	1,745,000,288	288	0.0000165
100 %		+ 50	1,744,999,962	-38	-0.0000022
85 %		+ 20	1,745,000,046	46	0.0000026
BATT. ENDPOINT	3.40	+ 20	1,744,999,871	-129	-0.0000074

Table 7-37. Frequency Stability Data (Band 66/4)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Band 66/4 Frequency Stability Measurements

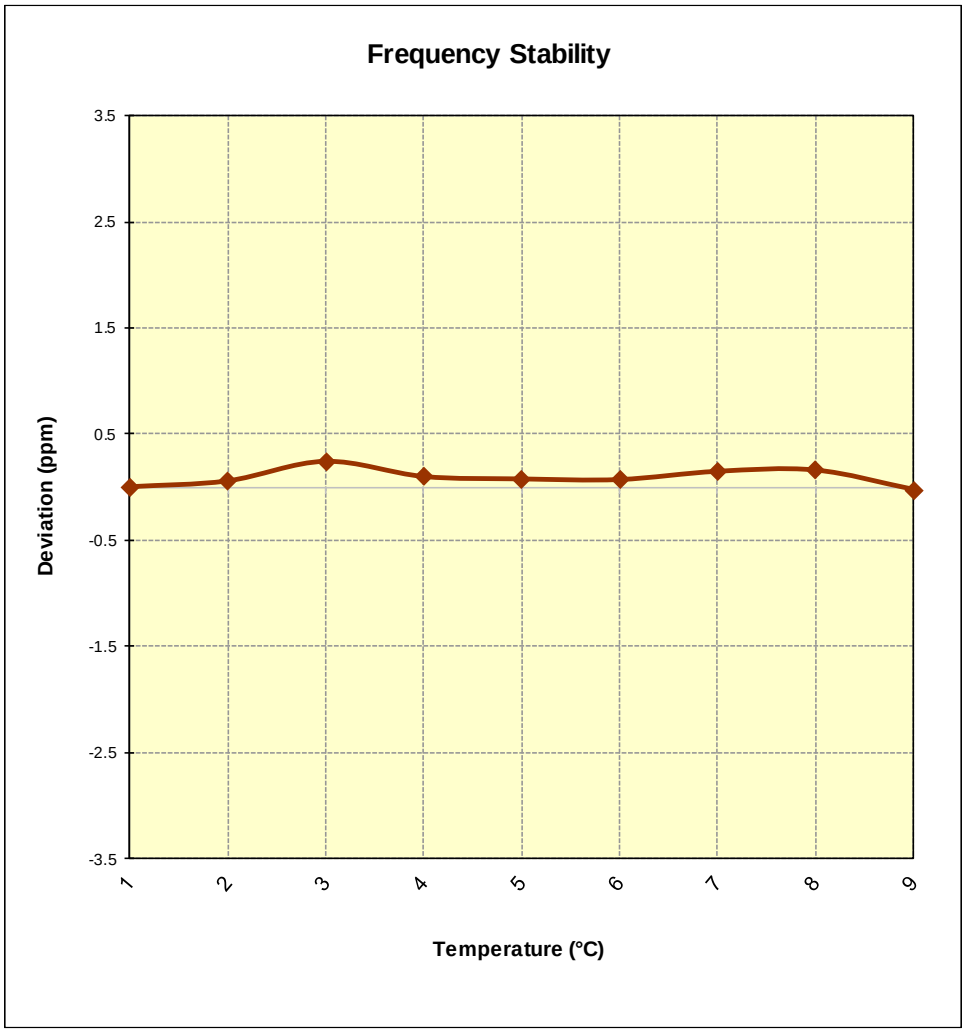


Figure 7-13. Frequency Stability Graph (Band 66/4)

Band 25/2 Frequency Stability Measurements

OPERATING FREQUENCY:	1,882,500,000	Hz
CHANNEL:	26365	
REFERENCE VOLTAGE:	3.87	VDC
DEVIATION LIMIT:	± 0.00025 % or 2.5 ppm	

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.87	- 30	1,882,499,994	-6	-0.0000003
100 %		- 20	1,882,499,954	-46	-0.0000024
100 %		- 10	1,882,500,213	213	0.0000113
100 %		0	1,882,500,144	144	0.0000076
100 %		+ 10	1,882,500,035	35	0.0000019
100 %		+ 20	1,882,500,101	101	0.0000054
100 %		+ 30	1,882,499,768	-232	-0.0000123
100 %		+ 40	1,882,499,871	-129	-0.0000069
100 %		+ 50	1,882,499,713	-287	-0.0000152
85 %		+ 20	1,882,500,072	72	0.0000038
BATT. ENDPOINT	3.40	+ 20	1,882,500,278	278	0.0000148

Table 7-38. Frequency Stability Data (Band 25/2)

Band 25/2 Frequency Stability Measurements

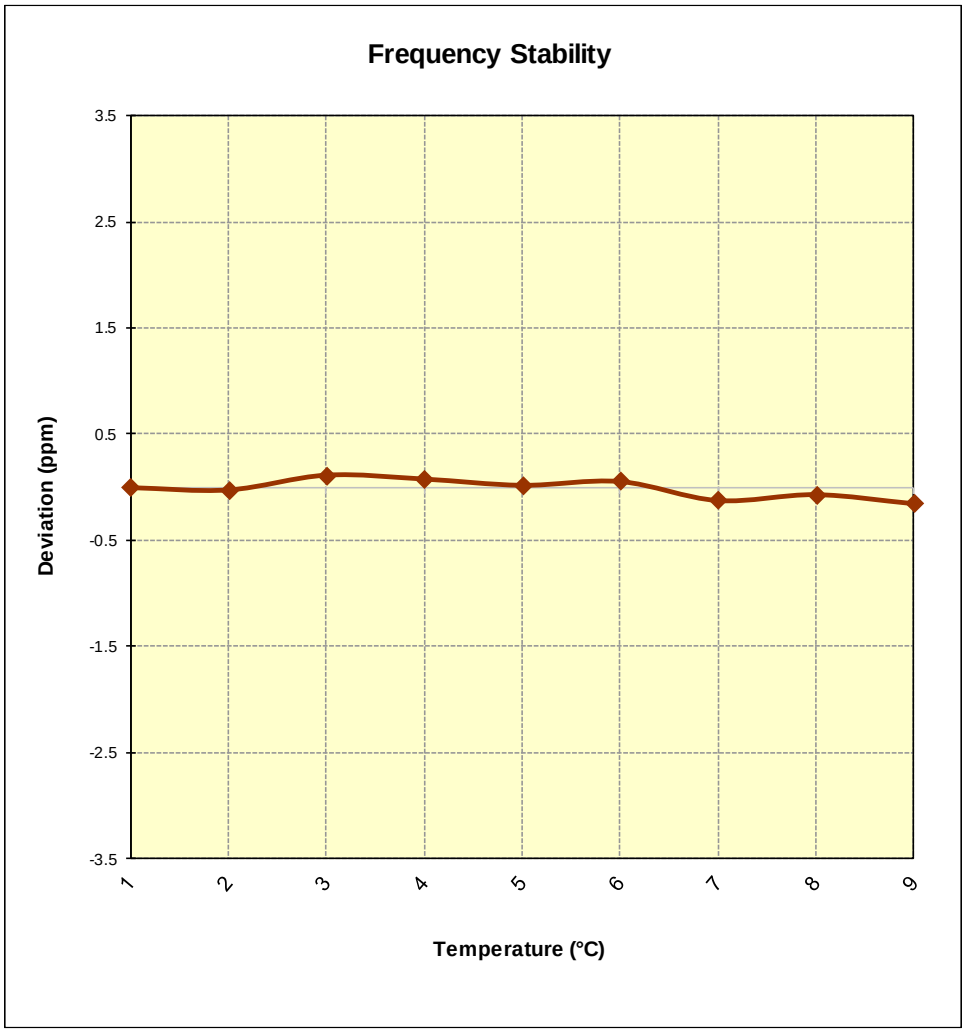


Figure 7-14. Frequency Stability Graph (Band 25/2)

Band 41 Frequency Stability Measurements

OPERATING FREQUENCY:	2,593,000,000	Hz
CHANNEL:	40620	
REFERENCE VOLTAGE:	3.87	VDC

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQUENCY (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.87	- 30	2,593,000,192	192	0.0000074
100 %		- 20	2,592,999,763	-237	-0.0000091
100 %		- 10	2,592,999,891	-109	-0.0000042
100 %		0	2,592,999,581	-419	-0.0000162
100 %		+ 10	2,592,999,997	-3	-0.0000001
100 %		+ 20	2,592,999,965	-35	-0.0000013
100 %		+ 30	2,592,999,906	-94	-0.0000036
100 %		+ 40	2,593,000,071	71	0.0000027
100 %		+ 50	2,592,999,873	-127	-0.0000049
85 %		+ 20	2,593,000,124	124	0.0000048
BATT. ENDPOINT	3.40	+ 20	2,592,999,943	-57	-0.0000022

Table 7-39. Frequency Stability Data (Band 41)

Note:

Based on the results of the frequency stability test at the center channel the frequency deviation results measured are very small. As such it is determined that the channels at the band edge would remain in-band when the maximum measured frequency deviation noted during the frequency stability tests is applied. Therefore the device is determined to remain operating in band over the temperature and voltage range as tested.

Band 41 Frequency Stability Measurements

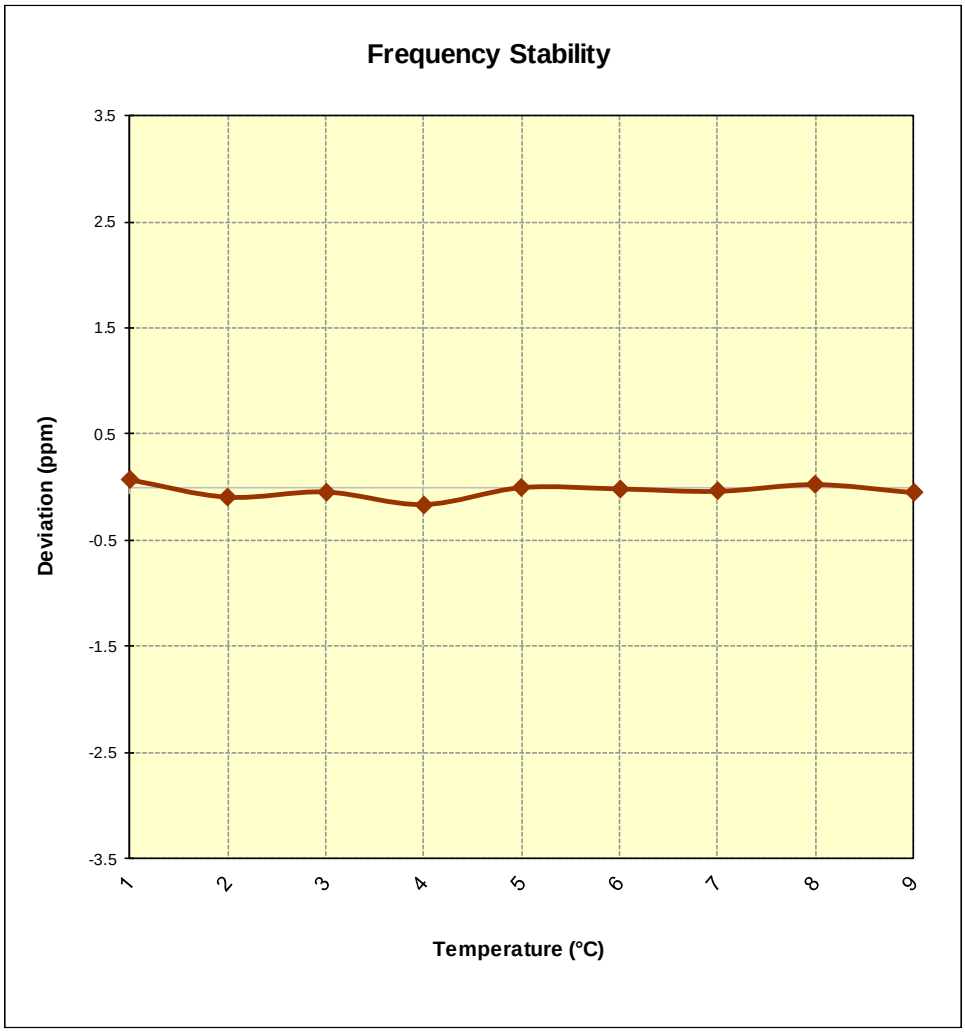


Figure 7-15. Frequency Stability Graph (Band 41)

8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **LG Portable Handset FCC ID: ZNFQ720TS** complies with all the requirements of Part 22, 24, & 27 of the FCC Rules for LTE operation only.