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Alcohol Monitoring Systems, Inc. TEST REPORT

SCOPE OF WORK

EMC TESTING – GPS BRACELET 900/910

REPORT NUMBER

105373087LEX-028

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EMC TEST REPORT
(FULL COMPLIANCE)

Report Number: 105373087LEX-028

Project Number: G105373087

Report Issue Date: 8/13/2024

Model(s) Tested: GPS Bracelet 900/910

Standards: FCC Part 22, 24, 27, 90
(Limited to Radiated Spurious Emissions)

Tested by:

Intertek Testing Services NA, Inc.
731 Enterprise Dr.
Lexington, KY 40510
USA

Client:

Alcohol Monitoring Systems, Inc.
1241 W Mineral Ave
Suite 200
Littleton, CO 80120
USA

Report prepared by



Jeremiah Andrade,
EMC Technician

Report reviewed by



Michael Carlson,
EMC Team Lead

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1 Introduction and Conclusion

The tests indicated in section 2.0 were performed on the product constructed as described in section 4.0. The remaining test sections are the verbatim text from the actual data sheets used during the investigation. These test sections include the test name, the specified test Method, a list of the actual Test Equipment Used, documentation Photos, Results and raw Data. No additions, deviations, or exclusions have been made from the standard(s) unless specifically noted.

Based on the results of our investigation, we have concluded the product tested **complies** with the requirements of the standard(s) indicated. The results obtained in this test report pertain only to the item(s) tested. Intertek does not make any claims of compliance for samples or variants which were not tested.

2 Test Summary

Section	Test full name	Result
6	Radiated Spurious Emissions (Transmitters Active) (ANSI C63.26:2015)	Pass



3 Client Information

This product was tested at the request of the following:

Client Information	
Client Name:	Alcohol Monitoring Systems, Inc.
Address:	1241 W Mineral Ave Suite 200 Littleton, CO 80120 USA
Contact:	Kyle Glavan
Telephone:	(303) 785-7788
Email:	kglavan@scramsystems.com
Manufacturer Information	
Manufacturer Name:	Alcohol Monitoring Systems, Inc.
Manufacturer Address:	1241 W Mineral Ave Suite 200 Littleton, CO 80120 USA



4 Description of Equipment under Test and Variant Models

Equipment Under Test	
Product Name	GPS Bracelet 900/910
Model Number	GPS Bracelet 900/910
Serial Number	359929611180768
Supported Transmit Bands	LTE Bands: 2, 4, 5, 12, 13, 14, 25, 26, 66
Embedded Module	Telit ME310G1-W3
Embedded Module hardware Version	1.0
Embedded Module Software Version	MOC.300002
Embedded Module FCCID	RI7ME310G1W3
Receive Date	6/2/2024
Test Start Date	7/9/2024
Test End Date	7/10/2024
Device Received Condition	Good
Test Sample Type	Production
Rated Voltage	3.6VDC
Description of Equipment Under Test (provided by client)	
The Alcohol Monitoring Systems, Inc. GPS Bracelet 900/910 is a GPS bracelet with LTE capabilities.	

4.1 Variant Models:

There were no variant models covered by this evaluation.



5 System Setup and Method

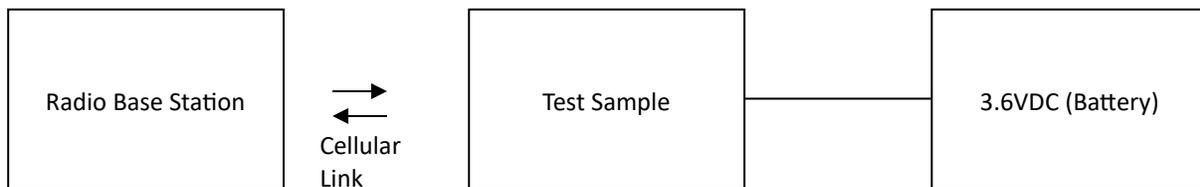
5.1 Method:

Configuration as required by ANSI C63.26:2015.

No.	Descriptions of EUT Exercising
1	EUT Powered on with cellular modem transmitting to a CMW500 Base Station Simulator

Cables					
ID	Description	Length (m)	Shielding	Ferrites	Termination
	None				

5.2 EUT Block Diagram:



**6 Radiated Emissions****6.1 Method**

Tests are performed in accordance with ANSI C63.26:2015.

TEST SITE: 10m ALSE

Site Designation: 10m Chamber

Measurement Uncertainty

Measurement	Frequency Range	Expanded Uncertainty (k=2)	Ucispr
Radiated Emissions, 10m	30-1000 MHz	3.9dB	6.3 dB
Radiated Emissions, 3m	30-1000 MHz	4.0dB	6.3 dB
Radiated Emissions, 3m	1-6 GHz	4.7dB	5.2 dB
Radiated Emissions, 3m	6-15 GHz	4.7dB	5.5 dB
Radiated Emissions, 3m	15-18 GHz	4.7dB	5.5 dB
Radiated Emissions, 3m	18-40 GHz	4.7dB	5.5 dB

As shown in the table above our radiated emissions U_{lab} is less than the corresponding U_{CISPR} reference value in CISPR 16-4-2 Table 1, hence the compliance of the product is only based on the measured value, and no measurement uncertainty correction is required.



6.2 Sample Calculation

The field strength is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation with a sample calculation is as follows:

$$FS = RA + AF + CF - AG$$

Where

- FS = Field Strength in dB μ V/m
- RA = Receiver Amplitude (including preamplifier) in dB μ V
- CF = Cable Attenuation Factor in dB
- AF = Antenna Factor in dB
- AG = Amplifier Gain in dB

In the following table(s), the reading shown on the data table reflects the preamplifier gain. An example for the calculations in the following table is as follows.

Assume a receiver reading of 52.0 dB μ V is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted, giving a field strength of 32 dB μ V/m. This value in dB μ V/m was converted to its corresponding level in μ V/m.

RA = 52.0 dB μ V
AF = 7.4 dB/m
CF = 1.6 dB
AG = 29.0 dB
FS = 32 dB μ V/m

To convert from dB μ V to μ V or mV the following was used:

$$UF = 10^{(NF / 20)} \text{ where } UF = \text{Net Reading in } \mu\text{V}$$
$$NF = \text{Net Reading in dB}\mu\text{V}$$

Example:

$$FS = RA + AF + CF - AG = 52.0 + 7.4 + 1.6 - 29.0 = 32.0$$
$$UF = 10^{(32 \text{ dB}\mu\text{V} / 20)} = 39.8 \mu\text{V/m}$$

6.3 Field Strength to Power Calculation

As allowable by ANSI C63.26: 2015 section 5.2.7, the output power of unwanted emissions can be calculated from a field strength measurement. The transmitter measurements that follow in this report have applied the following calculation to the -13dBm limit to arrive an equivalent field strength limit at 3 meters as follows:

$E \text{ (dB}\mu\text{V/m)} = \text{EIRP (dBm)} - 20\log(D) + 104.8$; where D is the measurement distance (in the far field region) in m.

Example:

$$\text{Limit (dB}\mu\text{V/m)} = -13 - 20\log(3) + 104.8 = 82.25\text{dB}\mu\text{V/m}$$

**6.4 Test Equipment Used:**

Description	Asset	Manufacturer	Model	Cal Date	Cal Due
EMI Test Receiver	8258	Rohde & Schwarz	ESW44	9/19/2023	9/19/2024
Bilog Antenna	7085	SunAR	JB6	3/18/2024	3/18/2025
Horn Antenna	3780	ETS Lindgren	3117	8/8/2023	8/8/2024
System Controller	4096	ETS Lindgren	2090	Verify at Time of Use	Verify at Time of Use
System Controller	3957	Sunol Sciences	SC99V	Verify at Time of Use	Verify at Time of Use
Preamplifier	3918	TS-PR18	122005	3/1/2024	3/1/2025
Coaxial Cable	3074			3/1/2024	3/1/2025
Coaxial Cable	2588			3/1/2024	3/1/2025
Coaxial Cable	2593			3/1/2024	3/1/2025
Coaxial Cable	2592			3/1/2024	3/1/2025
Coaxial Cable	8188			3/1/2024	3/1/2025
Coaxial Cable	8185			3/1/2024	3/1/2025

6.5 Software Utilized:

Name	Manufacturer	Version
EMC32	Rohde & Schwarz	Version 10.60.20

6.6 Results:

The sample tested was found to Comply.

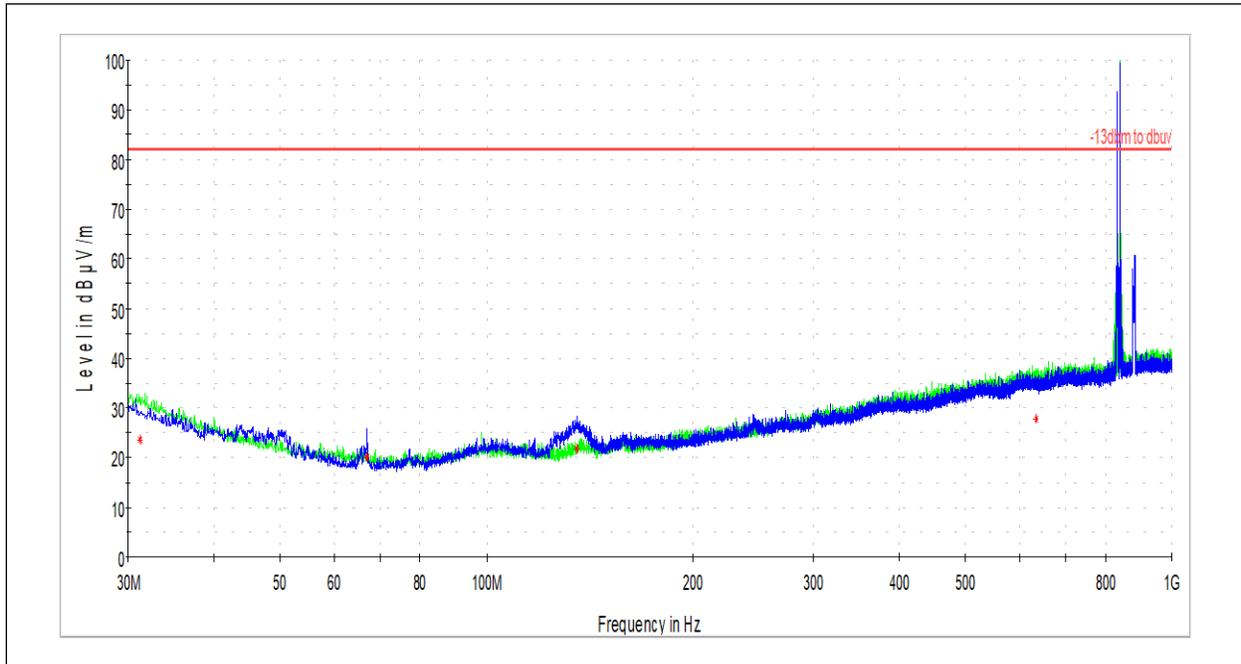


EMC Test Report

6.7 FCC Part 22 Radiated Spurious Emissions (LTE B5)

6.7.1 Radiated Spurious Emissions, 30 MHz – 1 GHz

LTE Band 5



*The large peak shown is the fundamental frequency of the operating band.

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.185556	23.64	82.25	58.61	221.0	H	84.0	24.2
66.913889	20.20	82.25	62.05	100.0	V	0.0	12.6
135.406667	21.92	82.25	60.33	100.0	V	184.0	15.8
634.902778	27.85	82.25	54.40	231.0	H	170.0	29.5

Test Personnel: Seth Parker
 Supervising/Reviewing Engineer: _____
 (Where Applicable) N/A
 Product Standard: FCC Part 22
 Input Voltage: 3.6VDC
 Pretest Verification w / Ambient Signals or BB Source: Yes

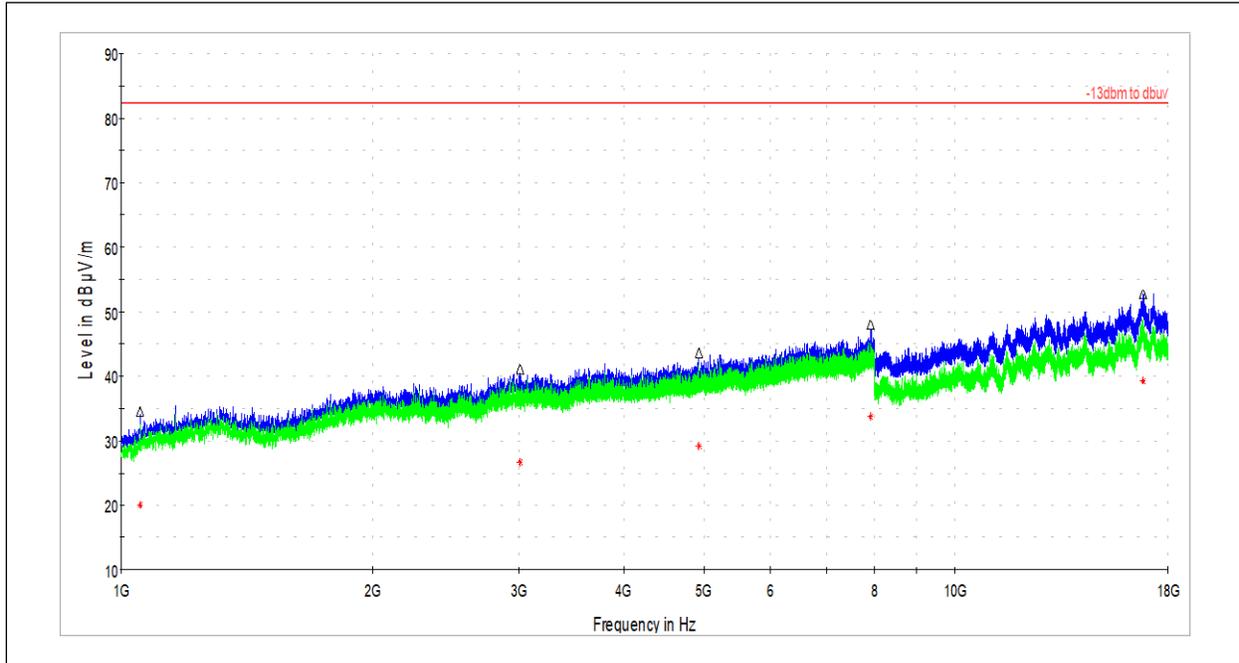
Test Date: 7/9/2024
 Limit Applied: -13dBm converted to field strength
 Ambient Temperature: 25.9°C
 Relative Humidity: 45.7%
 Atmospheric Pressure: 982.0mbar

Deviations, Additions, or Exclusions: None



6.7.2 Radiated Spurious Emissions, 1 GHz – 18 GHz

LTE Band 5



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1051.722	34.52	82.25	47.73	151.0	H	314.0	-1.9
3003.167	41.07	82.25	41.18	392.0	V	242.0	6.6
4928.944	43.69	82.25	38.56	410.0	V	56.0	9.8
7915.222	47.96	82.25	34.29	410.0	V	65.0	14.2
16797.500	52.76	82.25	29.49	410.0	V	0.0	26.4

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1051.722	20.08	82.25	62.17	151.0	H	314.0	-1.9
3003.167	26.71	82.25	55.54	392.0	V	242.0	6.6
4928.944	29.21	82.25	53.04	410.0	V	56.0	9.8
7915.222	33.73	82.25	48.52	410.0	V	65.0	14.2
16797.500	39.21	82.25	43.04	410.0	V	0.0	26.4

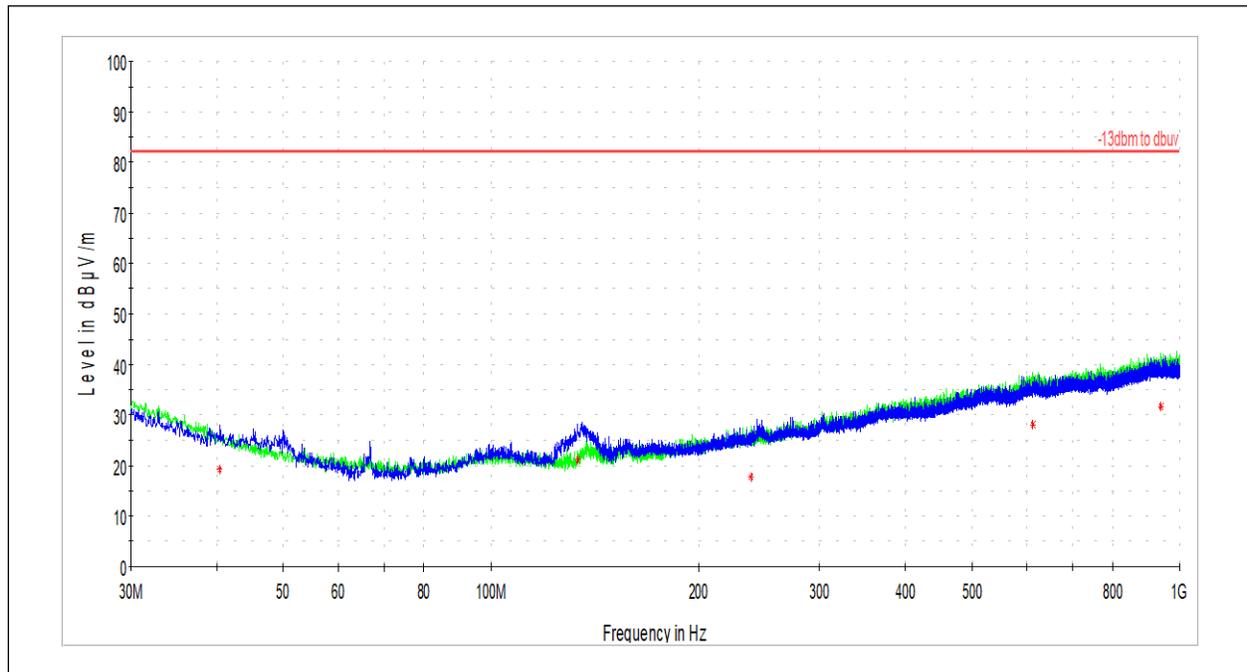
Test Personnel: Jeremiah Andrade
 Supervising/Reviewing Engineer: N/A
 (Where Applicable)
 Product Standard: FCC Part 22
 Input Voltage: 3.6VDC
 Pretest Verification w / Ambient Signals or BB Source: Yes

Test Date: 7/10/2024
 Limit Applied: -13dBm converted to field strength
 Ambient Temperature: 25.9°C
 Relative Humidity: 45.7%
 Atmospheric Pressure: 982.0mbar

Deviations, Additions, or Exclusions: None

**6.8 FCC Part 24 Radiated Spurious Emissions (LTE B2/B25)****6.8.1 Radiated Spurious Emissions, 30 MHz – 1 GHz**

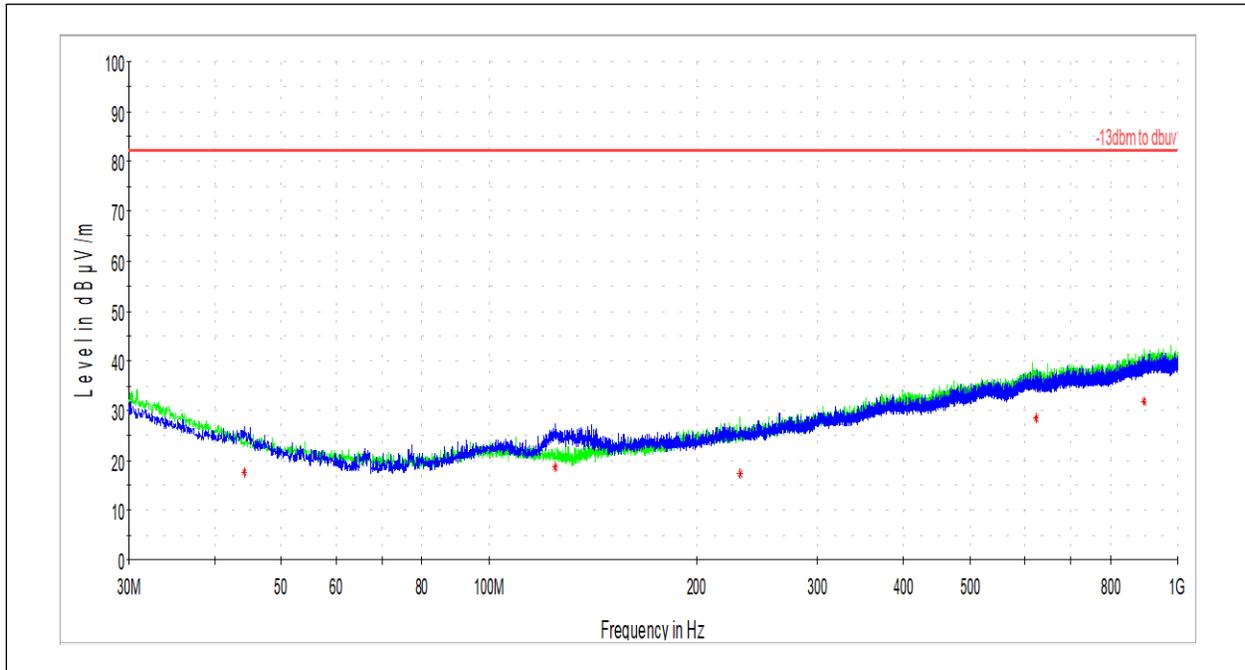
LTE Band 2



Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.400556	19.31	82.25	62.94	100.0	V	0.0	17.4
133.628333	21.20	82.25	61.05	100.0	V	211.0	15.3
238.657778	17.68	82.25	64.57	335.0	H	254.0	19.7
612.431111	28.11	82.25	54.14	347.0	H	267.0	29.8
940.237222	31.67	82.25	50.58	200.0	H	242.0	33.0



LTE Band 25



Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
44.172778	17.53	82.25	64.72	100.0	V	217.0	16.1
124.844444	18.68	82.25	63.57	100.0	V	149.0	15.5
231.436667	17.26	82.25	64.99	245.0	H	359.0	19.4
622.831667	28.51	82.25	53.74	227.0	H	154.0	29.8
893.569444	31.66	82.25	50.59	303.0	H	184.0	32.6

Test Personnel: Seth Parker
 Supervising/Reviewing Engineer: _____
 (Where Applicable) N/A
 Product Standard: FCC Part 24
 Input Voltage: 3.6VDC
 Pretest Verification w / Ambient Signals or BB Source: Yes

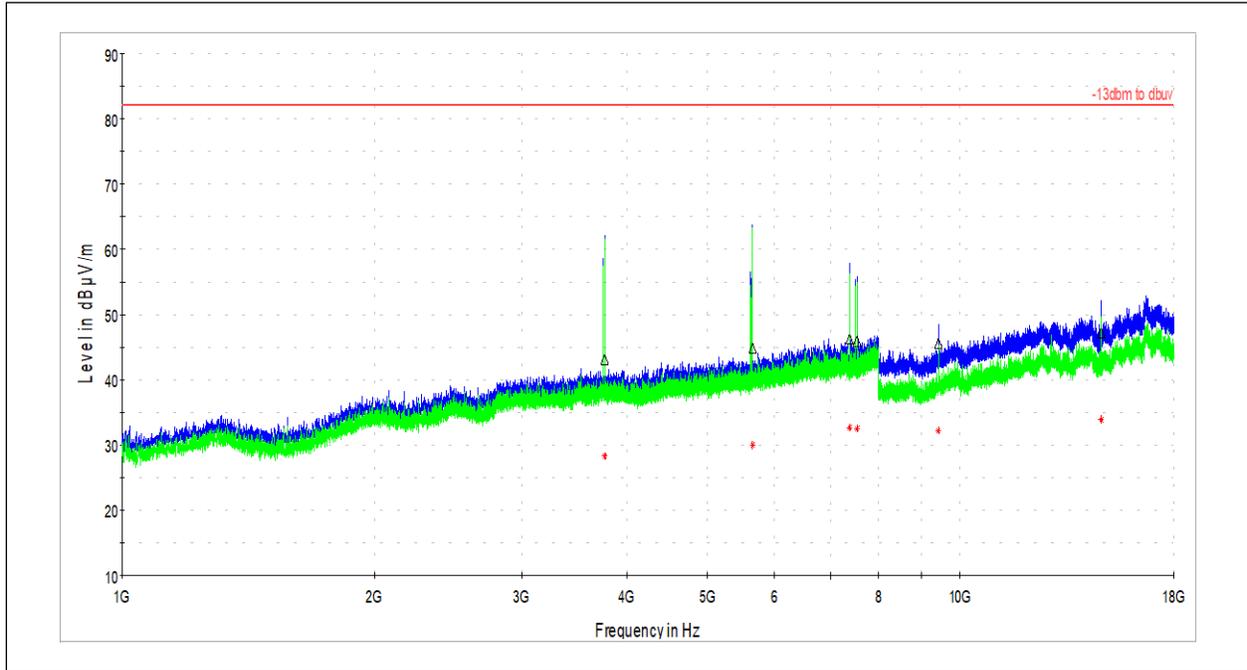
Test Date: 7/9/2024
 Limit Applied: -13dBm converted to field strength
 Ambient Temperature: 25.9°C
 Relative Humidity: 45.7%
 Atmospheric Pressure: 982.0mbar

Deviations, Additions, or Exclusions: None



6.8.2 Radiated Spurious Emissions, 1 GHz – 18 GHz

LTE Band 2



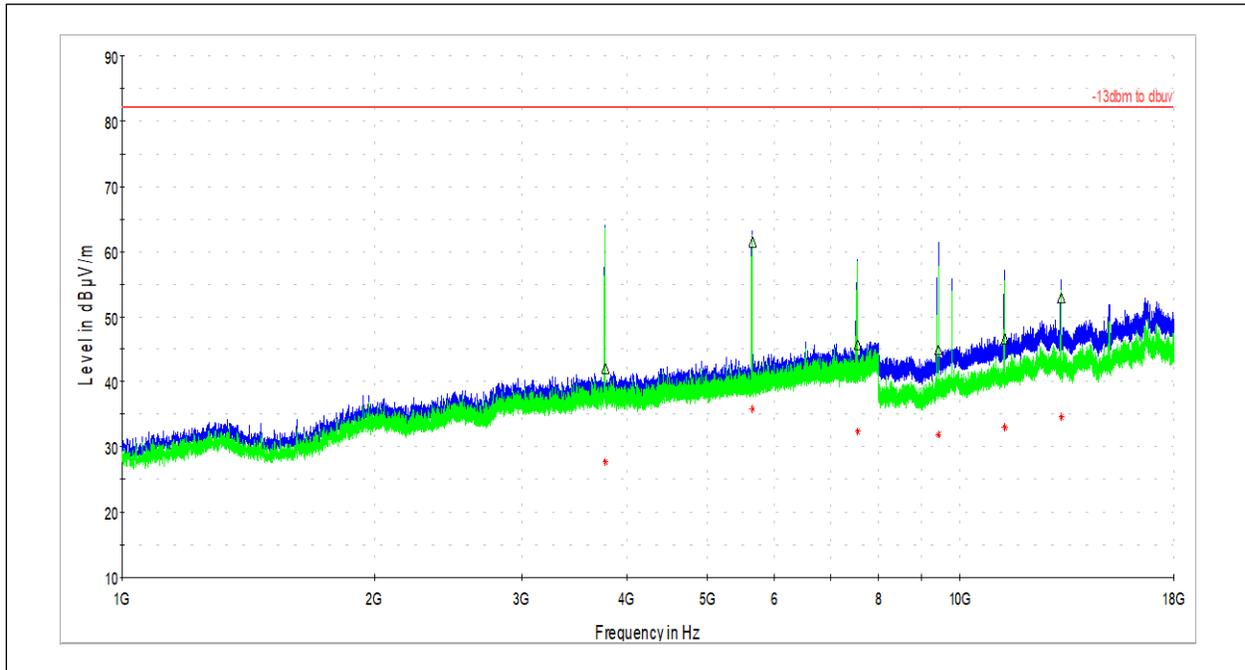
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3768.88889	43.06	82.25	39.19	410.0	V	314.0	8.2
5653.44444	44.77	82.25	37.48	410.0	V	232.0	11.0
7385.94444	46.26	82.25	35.99	410.0	V	22.0	13.5
7537.61111	45.96	82.25	36.29	410.0	V	323.0	13.6
9421.87500	45.64	82.25	36.61	410.0	V	0.0	16.7
14741.87500	47.15	82.25	35.10	100.0	H	0.0	22.1

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3768.88889	28.26	82.25	53.99	410.0	V	314.0	8.2
5653.44444	30.06	82.25	52.19	410.0	V	232.0	11.0
7385.94444	32.59	82.25	49.66	410.0	V	22.0	13.5
7537.61111	32.52	82.25	49.73	410.0	V	323.0	13.6
9421.87500	32.15	82.25	50.10	410.0	V	0.0	16.7
14741.87500	33.90	82.25	48.35	100.0	H	0.0	22.1



EMC Test Report

LTE Band 25



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3773.94444	42.16	82.25	40.09	152.0	V	260.0	8.2
5660.83333	61.45	82.25	20.80	322.0	H	200.0	11.0
7547.72222	45.71	82.25	36.54	410.0	V	160.0	13.7
9434.37500	44.88	82.25	37.37	410.0	V	278.0	16.7
11321.25000	46.58	82.25	35.67	410.0	V	330.0	19.1
13208.75000	52.90	82.25	29.35	410.0	V	160.0	21.3

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3773.94444	27.75	82.25	54.50	152.0	V	260.0	8.2
5660.83333	35.89	82.25	46.36	322.0	H	200.0	11.0
7547.72222	32.39	82.25	49.86	410.0	V	160.0	13.7
9434.37500	31.89	82.25	50.36	410.0	V	278.0	16.7
11321.25000	32.98	82.25	49.27	410.0	V	330.0	19.1
13208.75000	34.65	82.25	47.60	410.0	V	160.0	21.3

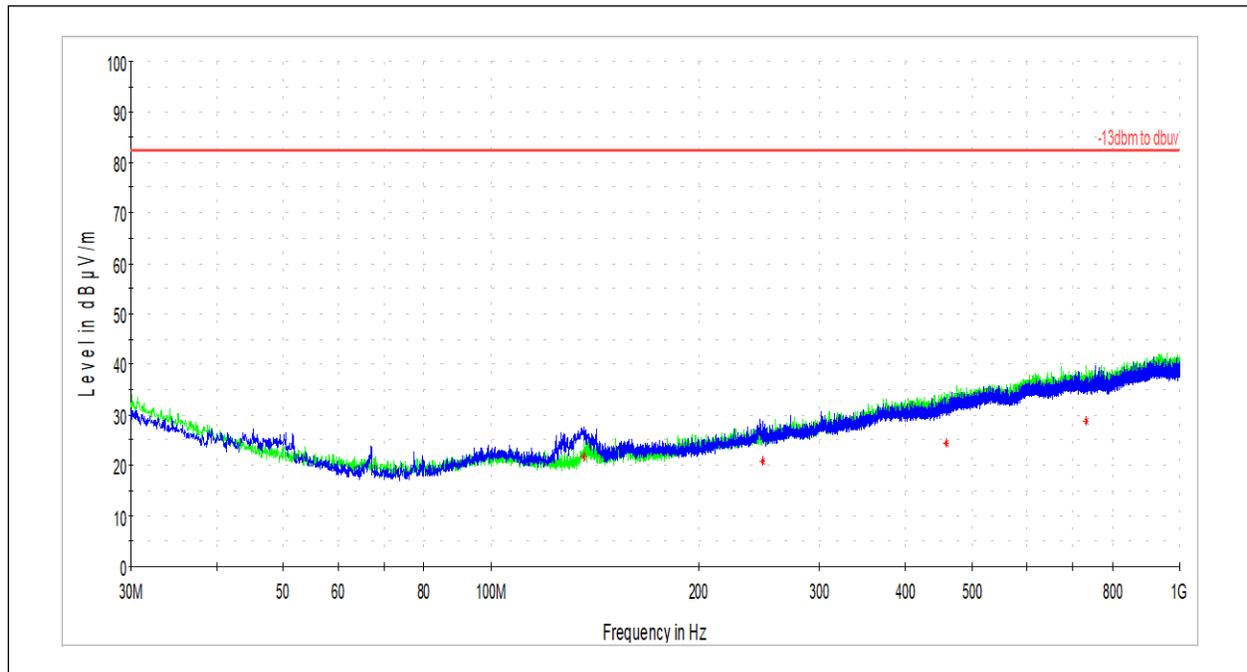
Test Personnel: Jeremiah Andrade
 Supervising/Reviewing Engineer: _____
 (Where Applicable) N/A
 Product Standard: FCC Part 24
 Input Voltage: 3.6VDC
 Pretest Verification w / Ambient Signals or BB Source: Yes

Test Date: 7/10/2024
 Limit Applied: -13dBm converted to field strength
 Ambient Temperature: 25.9°C
 Relative Humidity: 45.7%
 Atmospheric Pressure: 982.0mbar

Deviations, Additions, or Exclusions: None

**6.9 FCC Part 27 Radiated Spurious Emissions (LTE B4/B12/B13/B66)****6.9.1 Radiated Spurious Emissions, 30 MHz – 1 GHz**

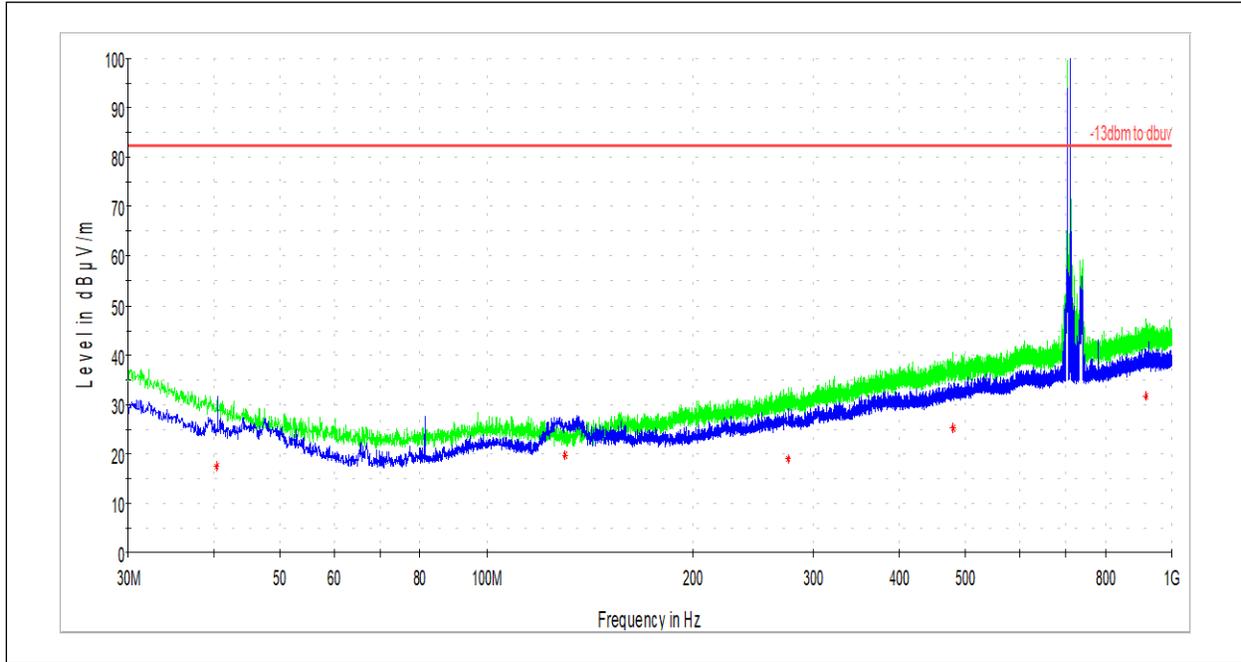
LTE Band 4



Frequency (MHz)	QuasiPeak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
136.376667	21.69	82.25	60.56	100.0	V	178.0	15.9
248.196111	20.69	82.25	61.56	100.0	V	0.0	19.9
458.578333	24.36	82.25	57.89	338.0	H	208.0	26.1
732.387778	28.78	82.25	53.47	275.0	H	-6.0	30.7



LTE Band 12

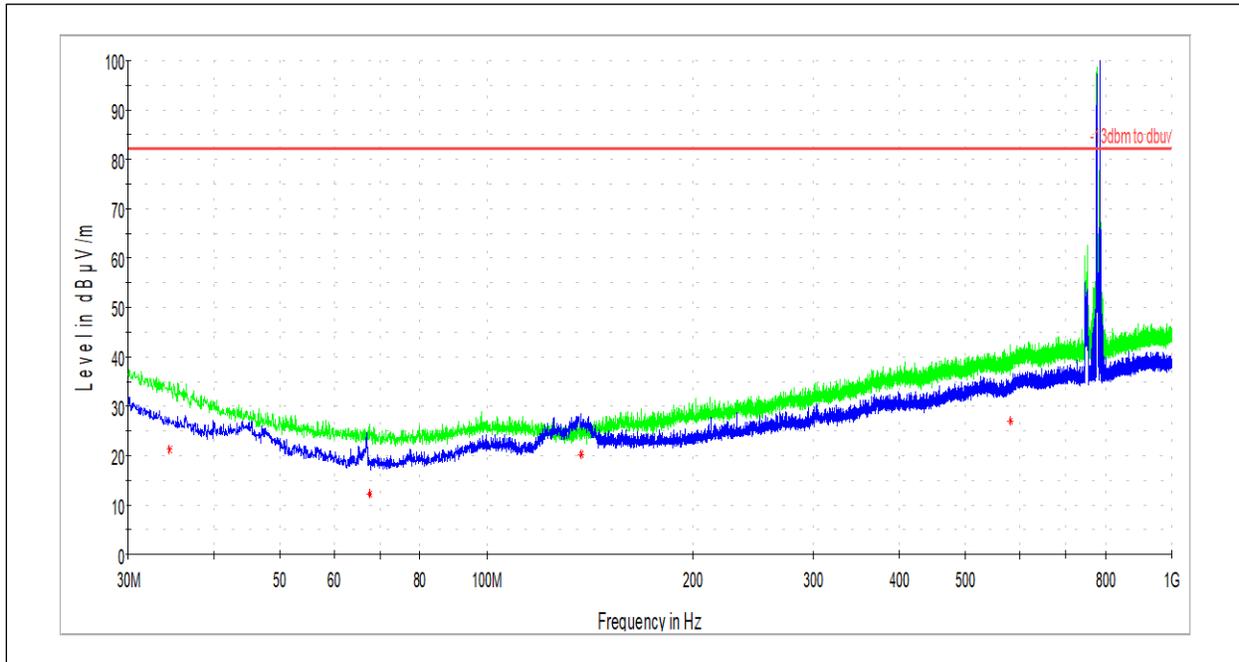


*The large peak shown is the fundamental frequency of the operating band.

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
40.400556	17.51	82.25	64.74	101.0	H	293.0	19.3
130.287222	19.73	82.25	62.52	100.0	V	94.0	15.2
275.787222	18.94	82.25	63.31	201.0	H	63.0	21.1
479.702778	25.23	82.25	57.02	250.0	H	69.0	26.9
916.741667	31.72	82.25	50.53	100.0	H	47.0	33.0



LTE Band 13

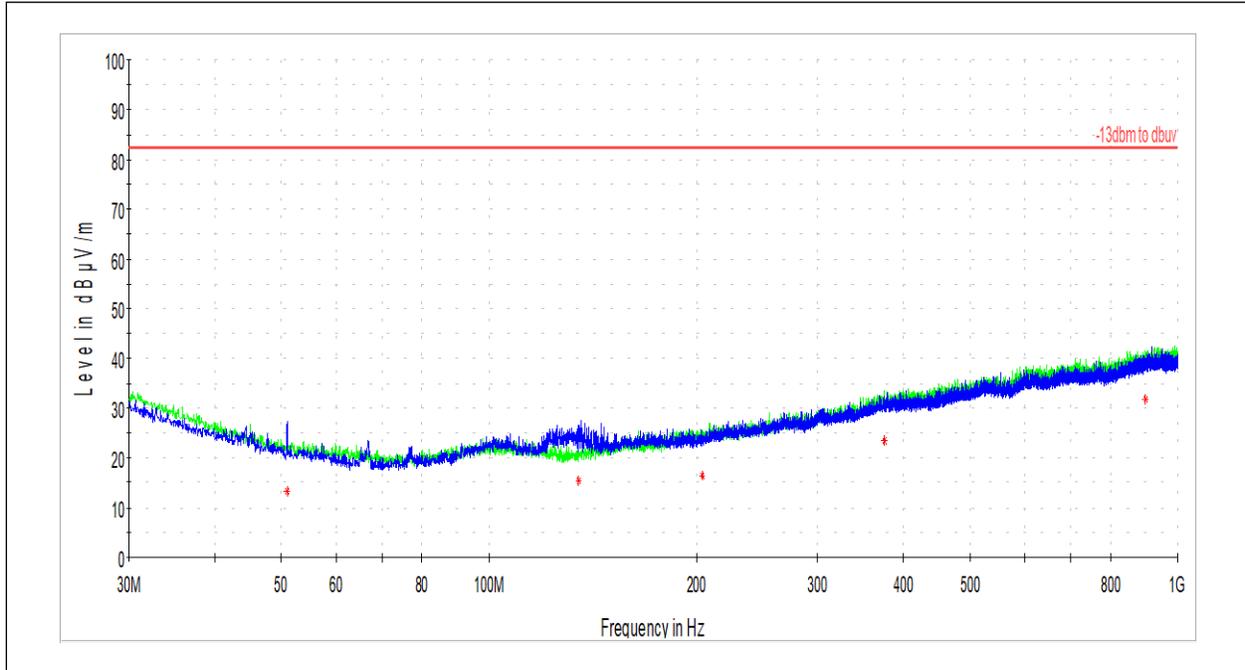


*The large peak shown is the fundamental frequency of the operating band.

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
34.472778	21.17	82.25	61.08	95.0	H	139.0	22.3
67.506667	12.16	82.25	70.09	100.0	H	117.0	14.0
137.292778	20.15	82.25	62.10	100.0	V	154.0	15.3
581.768333	26.88	82.25	55.37	222.0	H	134.0	28.3



LTE Band 66



Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
50.908889	13.31	82.25	68.94	97.0	V	41.0	14.5
135.137222	15.42	82.25	66.83	100.0	V	248.0	15.6
203.953333	16.33	82.25	65.92	250.0	H	6.0	18.2
375.589444	23.54	82.25	58.71	235.0	H	170.0	24.1
898.203889	31.76	82.25	50.49	226.0	H	124.0	32.9

Test Personnel: Seth Parker
 Supervising/Reviewing Engineer: _____
 (Where Applicable) N/A
 Product Standard: FCC Part 27
 Input Voltage: 3.6VDC
 Pretest Verification w / Ambient Signals or BB Source: Yes

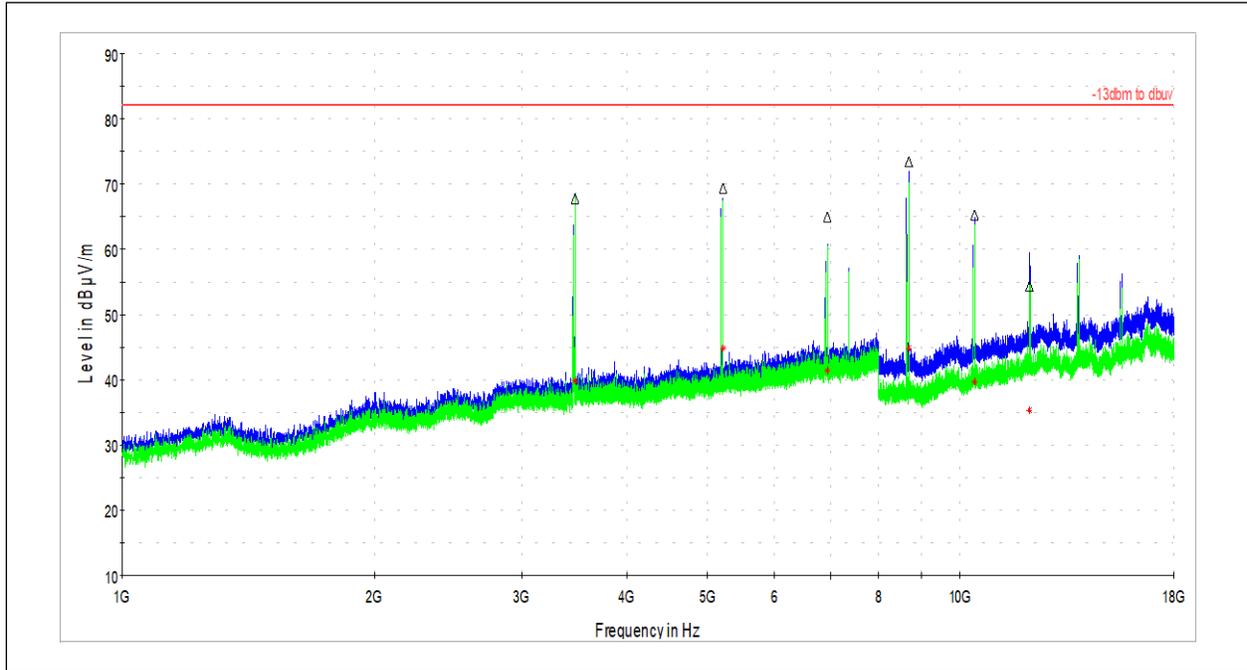
Test Date: 7/9/2024
 Limit Applied: -13dBm converted to field strength
 Ambient Temperature: 25.9°C
 Relative Humidity: 45.7%
 Atmospheric Pressure: 982.0mbar

Deviations, Additions, or Exclusions: None



6.9.2 Radiated Spurious Emissions, 1 GHz – 18 GHz

LTE Band 4



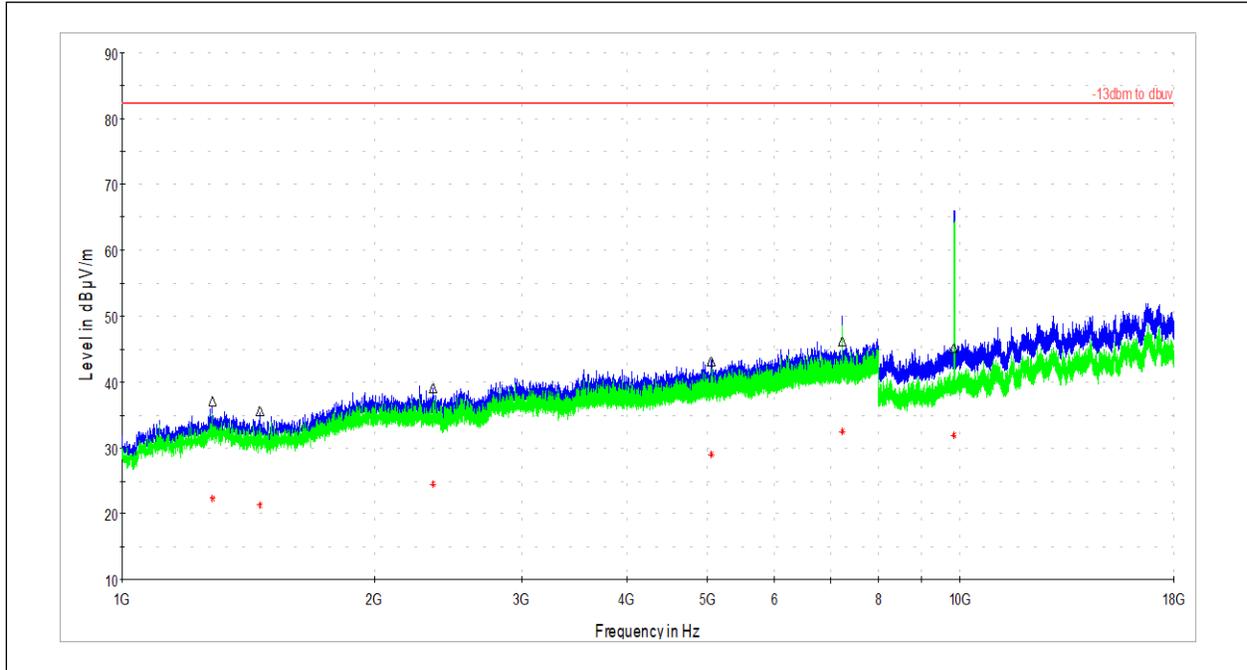
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3473.72222	67.77	82.25	14.48	187.0	V	256.0	7.4
5210.88889	69.39	82.25	12.86	160.0	V	160.0	10.4
6947.66667	65.01	82.25	17.24	170.0	V	162.0	13.1
8684.37500	73.42	82.25	8.83	132.0	V	212.0	15.5
10421.87500	65.27	82.25	16.98	302.0	V	128.0	18.2
12102.50000	54.44	82.25	27.81	179.0	V	11.0	20.2

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3473.72222	39.82	82.25	42.43	187.0	V	256.0	7.4
5210.88889	44.77	82.25	37.48	160.0	V	160.0	10.4
6947.66667	41.35	82.25	40.90	170.0	V	162.0	13.1
8684.37500	44.87	82.25	37.38	132.0	V	212.0	15.5
10421.87500	39.76	82.25	42.49	302.0	V	128.0	18.2
12102.50000	35.33	82.25	46.92	179.0	V	11.0	20.2



EMC Test Report

LTE Band 12

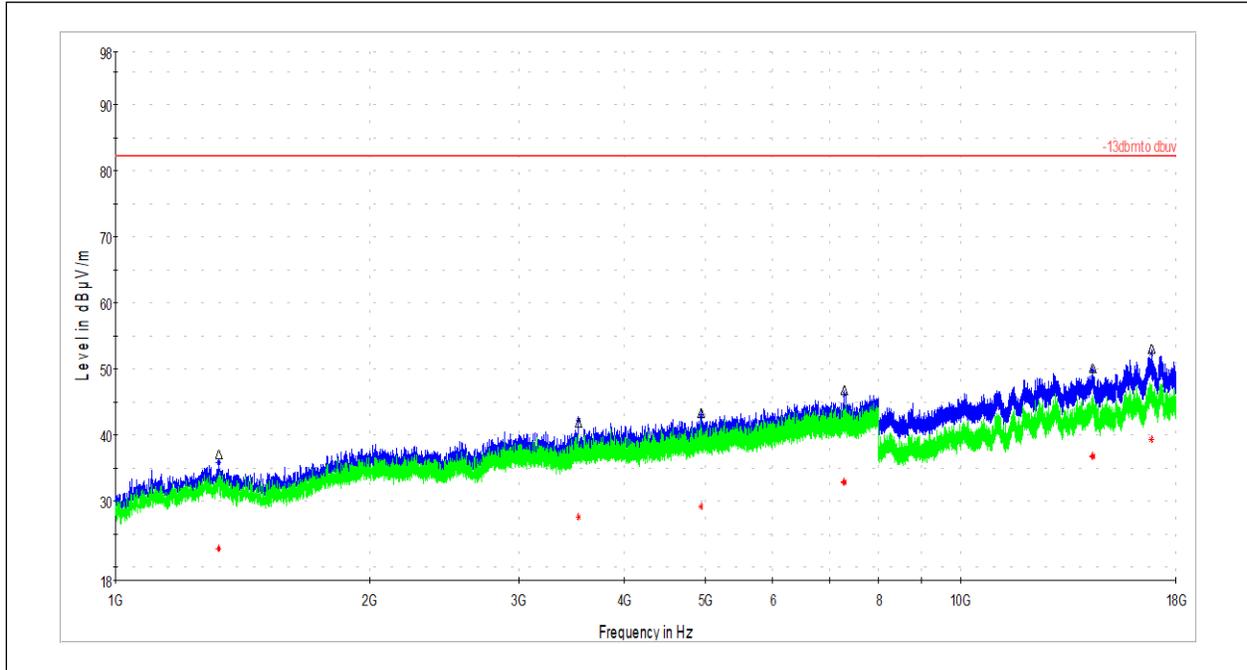


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1282.333333	37.06	82.25	45.19	410.0	V	44.0	0.8
1458.888889	35.64	82.25	46.61	410.0	H	104.0	0.0
2351.777778	39.12	82.25	43.13	410.0	H	174.0	4.8
5044.055556	43.25	82.25	39.00	410.0	V	286.0	10.0
7235.833333	46.24	82.25	36.01	410.0	V	200.0	13.4
9847.500000	45.15	82.25	37.10	410.0	H	279.0	17.8

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1282.333333	22.27	82.25	59.98	410.0	V	44.0	0.8
1458.888889	21.31	82.25	60.94	410.0	H	104.0	0.0
2351.777778	24.54	82.25	57.71	410.0	H	174.0	4.8
5044.055556	29.02	82.25	53.23	410.0	V	286.0	10.0
7235.833333	32.43	82.25	49.82	410.0	V	200.0	13.4
9847.500000	31.87	82.25	50.38	410.0	H	279.0	17.8



LTE Band 13

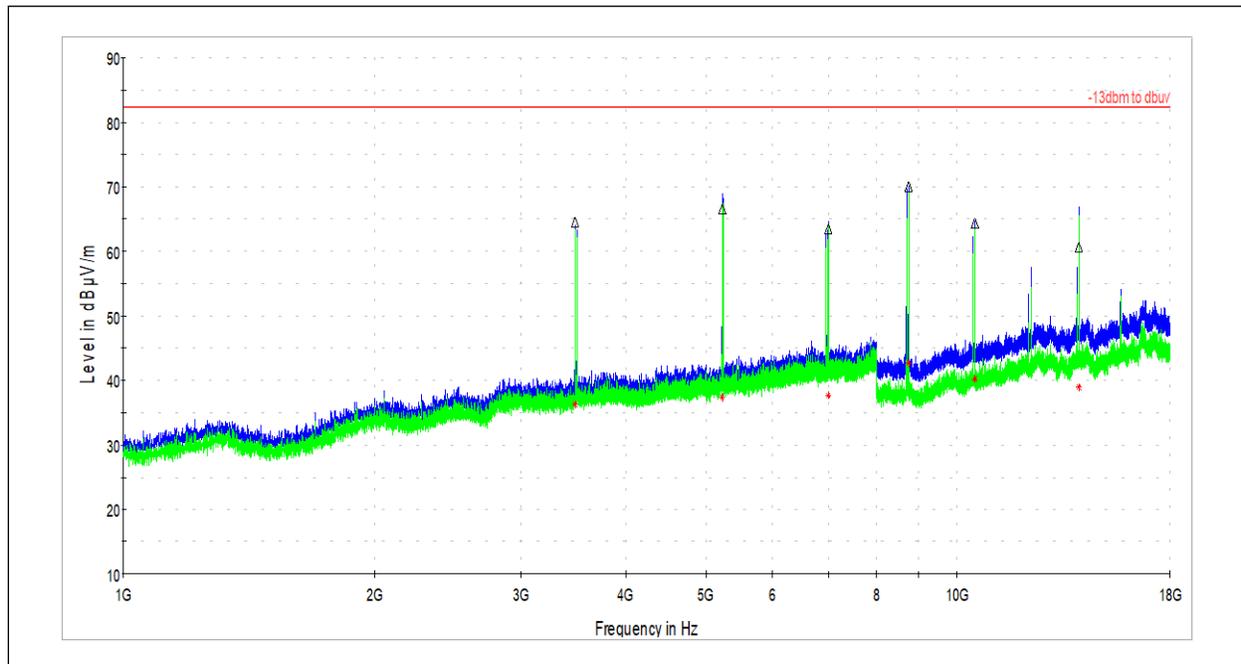


Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1324.33333	37.12	82.25	45.13	410.0	V	114.0	0.9
3534.00000	41.91	82.25	40.34	410.0	H	268.0	7.7
4930.11111	43.32	82.25	38.93	410.0	V	268.0	9.8
7288.72222	46.88	82.25	35.37	410.0	V	262.0	13.5
14340.00000	50.22	82.25	32.03	410.0	V	44.0	21.7
16841.87500	53.10	82.25	29.15	410.0	V	232.0	26.4

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1324.33333	22.72	82.25	59.53	410.0	V	114.0	0.9
3534.00000	27.58	82.25	54.67	410.0	H	268.0	7.7
4930.11111	29.17	82.25	53.08	410.0	V	268.0	9.8
7288.72222	32.84	82.25	49.41	410.0	V	262.0	13.5
14340.00000	36.77	82.25	45.48	410.0	V	44.0	21.7
16841.87500	39.25	82.25	43.00	410.0	V	232.0	26.4



LTE Band 66



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3482.66667	64.47	82.25	17.78	197.0	H	244.0	7.7
5222.94444	66.55	82.25	15.70	175.0	H	208.0	10.5
6998.22222	63.49	82.25	18.76	261.0	V	152.0	13.1
8746.87500	70.11	82.25	12.14	277.0	V	116.0	15.5
10496.25000	64.39	82.25	17.86	152.0	V	254.0	18.3
13995.62500	60.67	82.25	21.58	225.0	V	162.0	21.3

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3482.66667	36.30	82.25	45.95	197.0	H	244.0	7.7
5222.94444	37.42	82.25	44.83	175.0	H	208.0	10.5
6998.22222	37.72	82.25	44.53	261.0	V	152.0	13.1
8746.87500	42.77	82.25	39.48	277.0	V	116.0	15.5
10496.25000	40.24	82.25	42.01	152.0	V	254.0	18.3
13995.62500	38.89	82.25	43.36	225.0	V	162.0	21.3

Test Personnel: Jeremiah Andrade
 Supervising/Reviewing Engineer: _____
 (Where Applicable) N/A
 Product Standard: FCC Part 27
 Input Voltage: 3.6VDC
 Pretest Verification w / Ambient Signals or BB Source: Yes

Test Date: 7/10/2024
 Limit Applied: -13dBm converted to field strength
 Ambient Temperature: 25.9°C
 Relative Humidity: 45.7%
 Atmospheric Pressure: 982.0mbar

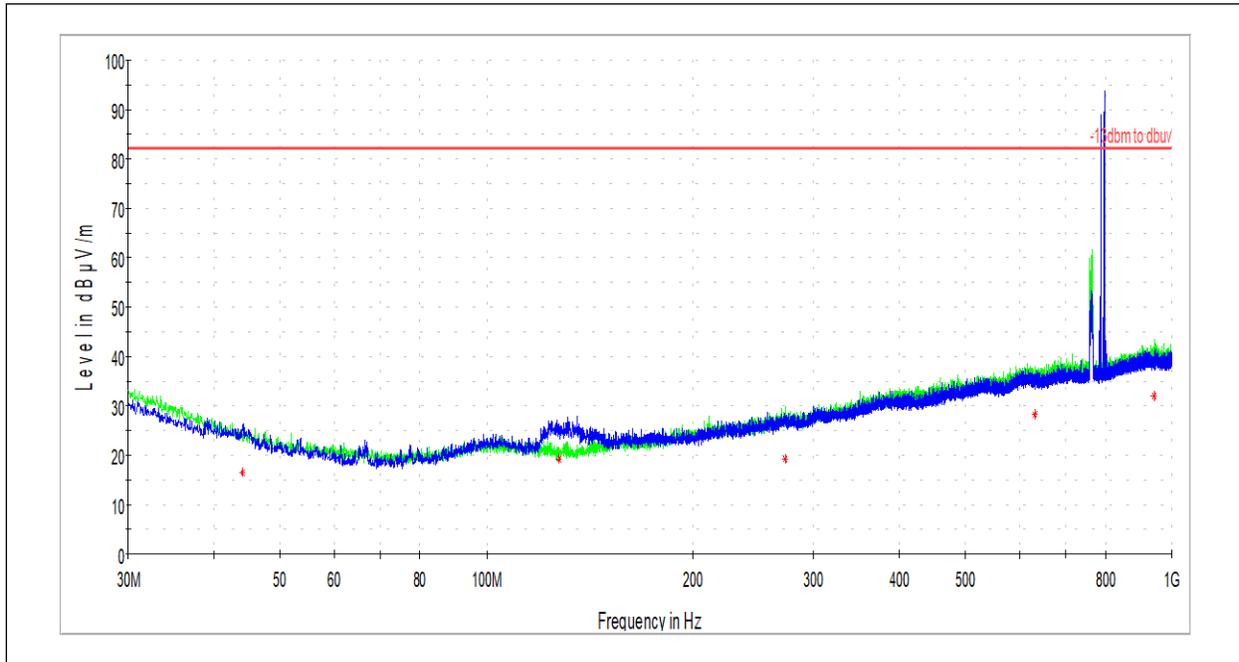
Deviations, Additions, or Exclusions: None



6.10 FCC Part 90 Radiated Spurious Emissions (LTE B14)

6.10.1 Radiated Spurious Emissions, 30 MHz – 1 GHz

Band 14



*The large peak shown is the fundamental frequency of the operating band.

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
44.065000	16.44	82.25	65.81	100.0	V	50.0	16.1
127.592778	19.23	82.25	63.02	100.0	V	145.0	15.6
272.769444	19.14	82.25	63.11	250.0	H	312.0	21.0
630.968889	28.33	82.25	53.92	130.0	H	173.0	29.6
941.315000	32.06	82.25	50.19	400.0	H	357.0	33.0

Test Personnel: Seth Parker
 Supervising/Reviewing Engineer: _____
 (Where Applicable) N/A
 Product Standard: FCC Part 90
 Input Voltage: 3.6VDC
 Pretest Verification w / Ambient Signals or BB Source: Yes

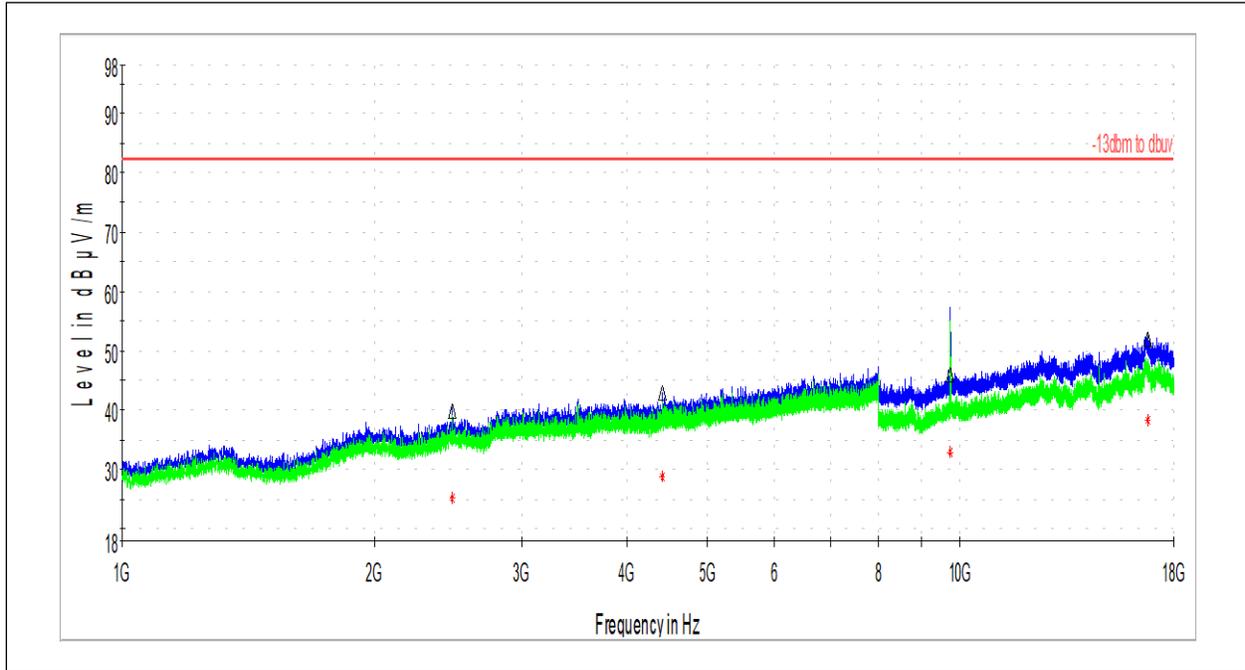
Test Date: 7/9/2024
 Limit Applied: -13dBm converted to field strength
 Ambient Temperature: 25.9°C
 Relative Humidity: 45.7%
 Atmospheric Pressure: 982.0mbar

Deviations, Additions, or Exclusions: None



6.10.2 Radiated Spurious Emissions, 1 GHz – 18 GHz

Band 14



Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2478.94444	39.94	82.25	42.31	161.0	H	11.0	5.6
4416.00000	42.97	82.25	39.28	410.0	V	60.0	9.2
9748.12500	46.13	82.25	36.12	100.0	H	347.0	17.6
16756.25000	51.90	82.25	30.35	410.0	H	166.0	26.3

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2478.94444	25.33	82.25	56.92	161.0	H	11.0	5.6
4416.00000	28.75	82.25	53.50	410.0	V	60.0	9.2
9748.12500	32.95	82.25	49.30	100.0	H	347.0	17.6
16756.25000	38.35	82.25	43.90	410.0	H	166.0	26.3

Test Personnel: Seth Parker
 Supervising/Reviewing Engineer: _____
 (Where Applicable) N/A
 Product Standard: FCC Part 27
 Input Voltage: 3.6VDC
 Pretest Verification w / Ambient Signals or BB Source: Yes

Test Date: 7/10/2024
 Limit Applied: -13dBm converted to field strength
 Ambient Temperature: 25.9°C
 Relative Humidity: 45.7%
 Atmospheric Pressure: 982.0mbar

Deviations, Additions, or Exclusions: None



7 Revision History

Revision Level	Date	Report Number	Prepared By	Reviewed By	Notes
0	8/13/2024	105373087LEX-028	JJA	MC	Original Issue