

RF Test Report

Project Number: 5315129**Offer No.:** SUW-2024100007210**Report Number:** SUW5315129EMC03**Revision:** 2**Client:** Track Group, Inc.**Equipment Under Test:** Electronic Monitoring Ankle Bracelet**Model Name:** ReliAlert XC5**Model Number:** OTD 5.0**FCC ID:** TPO-OTD50**IC:** 6512A-OTD50**Test Standard:** ANSI C63.26:2015**FCC Rule Parts:** Part 22(H), Part 24(E), Part 27 & Part 90**ISED Specifications:** RSS-130, Issue 2; RSS-132, Issue 4; RSS-133, Issue 7
RSS-139, Issue 4; RSS-140, Issue 1; RSS-199, Issue 4
RSS-GEN, Issue 5**Report issued on:** 5 June 2026**Test Result:** Compliant

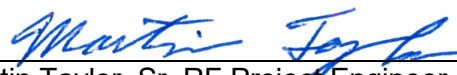
FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01

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1 Summary of Test Results

Reference Sections		Test Description	Test Condition	Test Result
FCC	IC			
2.1046	RSS-GEN (6.12)	Conducted Output Power	Conducted	NS ¹
24.232(d) 27.50(d)(5)	RSS-130 (4.6.1) RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.5)	Peak-to-Average Ratio		NS ¹
22.917(b) 24.238(b) 27.53(h)(3)	RSS-GEN (6.7) RSS-133 (2.3)	Occupied Bandwidth Emission Bandwidth		NS ¹
22.917 24.238 27.53(c) 27.53(g) 27.53(h)	RSS-130 (4.7) RSS-132 (5.5) RSS-133 (6.5) RSS-139 (6.6)	Band Edge / Conducted Spurious Emissions		NS ¹
22.913(a)(5) 27.50(b)(9) 27.50(c)(9)	RSS-130 (4.6.3)	Effective Radiated Power	Radiated	NS ¹
24.232(c) 27.50(d)(4)	RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.5)	Effective Isotropic Radiated Power		NS ¹
22.917 24.238 27.53(c) 27.53(g) 27.53(h) 27.53 (c, f) 27.53 (m)	RSS-GEN (6.13) RSS-130 (4.7) RSS-132 (5.5) RSS-133 (6.5) RSS-139 (6.6) RSS-140 (4.4) RSS-199 (4.5)	Radiated Spurious Emissions		Compliant
22.355 24.235 27.54	RSS-GEN (6.11) RSS-130 (4.5) RSS-132 (5.3) RSS-133 (6.3) RSS-139 (6.4)	Frequency Stability	Conducted	NS ¹

1) Not under the scope of this evaluation. Testing was limited to radiated spurious emissions to show continued compliance of a certified module when integrated into the host device per KDB 996369 D04 Module Integration v02.

1.1 Modifications Required to Compliance

During simultaneous transmissions with 2.4GHz WLAN we detected an intermodulation with LTE Band 7 that was exceeding the Average Limit. Below modification was added to be compliant.

- Added an EMI absorption foam pad to the WLAN PCBA.

2 General Information

2.1 Client Information

Name: Track Group, Inc.
Address: 200 East 5th Ave, Suite 100
City, State, Zip, Country: Naperville, Ill 60563, USA

2.2 Test Laboratory

Name: SGS North America, Inc.
Address: 620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country: Suwanee, GA 30024, USA

Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 3212.01
CAB ID: US0186

2.3 General Information of EUT

Equipment Under Test: Electronic Monitoring Ankle Bracelet

Model Name: ReliAlert XC5

Model Number: OTD 5.0

Serial Number: P5020013, Retest P5020020

Hardware Version: 5.0.0

Software Version: 5.0.12.1

IMEI: 350936963095832

FCC ID: TPO-OTD50

IC: 6512A-OTD50

Tx Frequency Range: 1850 – 1910 MHz (LTE Band 2); up to 1915 MHz (LTE Band 25)
1710 – 1755 MHz (LTE Band 4)
824 – 849 MHz (LTE Band 5); starts at 814 MHz (LTE Band 26)
2500 – 2570 MHz (LTE Band 7)
699 – 716 MHz (LTE Band 12)
777 – 787 MHz (LTE Band 13)
788 – 798 MHz (LTE Band 14)

Antenna Type/Gain*: Internal Patch, CZ0034-5L01-040-02
(Peak Gain 698-960MHz = 0.84dBi, 1710-2200MHz = 1.87dBi & 2500-2690MHz = 3.94dBi)

Radio Technology: LTE Cat 1

Channel Bandwidth tested: 1.4 MHz (LTE Band 12) 5.0 MHz (LTE Band 7)

RB allocation: 1 RB allocated, RB start = 0

FCC Classification: PCS Licensed Transmitter (PCB)

Rated Voltage: 3.6Vdc (Rechargeable Li-ion battery)

Test Voltage: 3.6Vdc

Sample Received Date: 27 May 2025

Dates of testing: 27-29 May 2025; 27 May 2026 and 1-2 June 2026 (TCB retest)

*Data was not measured by SGS laboratory and therefore SGS is not responsible for accuracy. Data obtained via customer, specification sheet, previous filing or other.

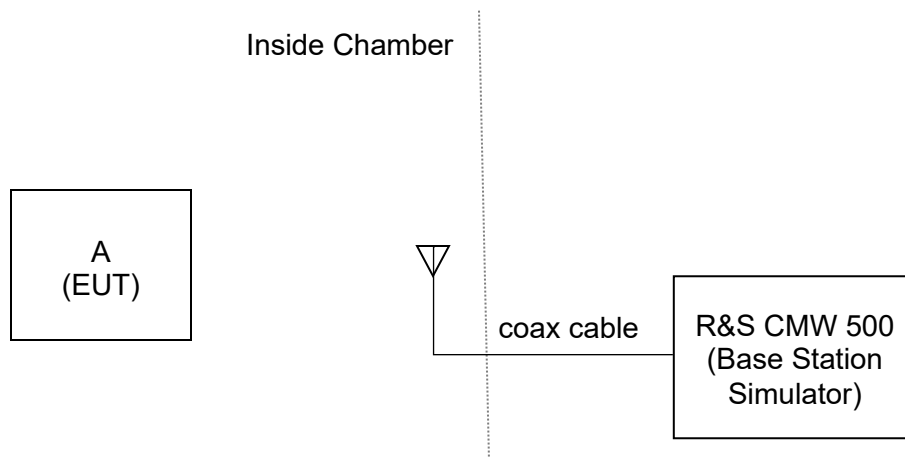
2.4 Operating Modes and Conditions

A Rohde & Schwarz test SIM was installed in the EUT which was powered by a fully charged battery pack. A cellular connection was made with a Rohde & Schwarz CMW 500 Wideband Radio Communication Tester. The CMW 500 was used to control the cellular radio to operate with maximum transmit (uplink) power in the lowest and highest frequency LTE Bands supported by the modem. Low and high channels were evaluated using a cell bandwidth of 1.4MHz and 1 Resource Block, except for Band 7 which is 5MHz BW, with a start position of 0.

LTE Band 7 was tested simultaneously with 2.4GHz and 5GHz WLAN. 15.209 limits were used on any harmonics or inter-modulation of 2.4Ghz or 5Ghz.

Note: 2G (GSM), 3G (WCDMA) & LTE Band 8 are deactivated on this cellular module per manufacturer.

2.5 EUT Connection Block Diagram



2.6 System Configurations

Device Reference	Manufacturer	Description	Model	Serial Number
A	Track Group Inc.	Electronic Monitoring Ankle Bracelet	OTD 5.0	P5020013 P5020020 (TCB)

3 Radiated Spurious Emissions

3.1 Test Result

Test Description	Specifications		Test Result
Radiated Spurious Emissions	FCC 22.917	RSS-GEN (6.13)	Compliant
	FCC 24.238	RSS-130 (4.7)	
	FCC 27.53(c)	RSS-132 (5.5)	
	FCC 27.53(g)	RSS-133 (6.5)	
	FCC 27.53(h)	RSS-139 (6.6)	
	FCC 27.53 (m)	RSS-140 (4.4)	
	FCC 27.53 (c, f)	RSS-199 (4.5)	

3.2 Test Method

The radiated power emanating from the EUT of the band edge (out-of-band) and spurious band emissions are measured by means of a calibrated spectrum analyzer. The spectrum is investigated from the lowest radio frequency signal generated in the equipment, without going below 9 kHz, up to at least the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower. The power of any emissions outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) measured in watts by at least $43 + 10 \log (P)$ dB. Except for LTE Bands 7 and 41 limit is $55 + 10 \log (P)$ dB based on FCC Part 27.53(m)(4).

The EUT was tested in all 3 orthogonal axes and the worst-case data is reported.

The measurement antenna was oriented in both vertical and horizontal polarizations.

A radio link was established between the EUT and a Radio Communications Tester. The output power of the EUT was set to maximum value by using the maximum power setting on the CMW-500.

3.3 Test Site

3m Absorber Lined Shielded Enclosure (ALSE), Suwanee, GA

Environmental Conditions	29-May-2025	27-May-2026	1-Jun-2026	2-Jun-2026
Temperature:	23.9 °C	23.1°C	22.07 °C	22.04°C
Relative Humidity:	50.1 %	63.2%	62.9%	61.3%
Atmospheric Pressure:	97.47 kPa	98.3kPa	98.1kPa	98.7kPa

3.4 Test Equipment

30-1000 MHz

Test End Date: 2-Jun-2026

Tester: PL

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, BILOG	JB6	SUNOL	B079689	20-Jun-2026	19-Jun-2028
ROTARY NM TO NF CONNECTOR	18-2120-0	DIAMOND ANTENNA AND MICROWAVE CORP	22008	23-Mar-2026	22-Mar-2027
RF CABLE NM TO NM, 0.01-18GHz	EM-B810NM-354	Echelon	26004	7-Apr-2026	6-Apr-2027
Nfemale to Nmale RF Cable	EM-B810NMNF-118	Echelon	23010	7-Apr-2026	6-Apr-2027
RF CABLE RIGHT ANGLE NM TO NM, 0.01-18GHz	90-076-020	TELEDYNE STORM MICROWAVE	22037	19-Dec-2025	18-Dec-2026
RF CABLE, NM TO NM.	90-195-157	TELEDYNE STORM MICROWAVE	21019	22-Mar-2026	21-Mar-2027
LOW NOISE AMPLIFIER	ZKL-2+	MINI-CIRCUITS	B079800	26-Sep-2025	25-Sep-2026
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	19-Mar-2026	18-Mar-2027

1-18GHz (w. Modifications for compliance)

Test End Date: 29-May-2025

Tester: PL

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, DRG HORN (MEDIUM)	3117	ETS LINDGREN	B079691	2-Aug-2024	1-Aug-2026
RF CABLE NM TO NM, 0.01-18GHz	EM-B810NM-276	Echelon	24022	15-Nov-2024	15-Nov-2025
RF CABLE RIGHT ANGLE NM TO NM, 0.01-18GHz	90-076-020	TELEDYNE STORM MICROWAVE	22037	11-Dec-2024	11-Dec-2025
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	15003	8-Oct-2024	8-Oct-2025
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22032	2-Jan-2025	2-Jan-2026
FILTER, HIGH PASS, >1000MHZ	HPM50108	MICRO-TRONICS	B079802	5-Jul-2024	5-Jul-2025

1-18GHz

Test End Date: 1-Jun-2026

Tester: PL

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, DRG HORN (MEDIUM)	3117	ETS LINDGREN	B079691	2-Aug-2024	1-Aug-2026
RF CABLE NM TO NM, 0.01-18GHz	EM-B810NM-354	Echelon	26004	7-Apr-2026	6-Apr-2027
RF CABLE RIGHT ANGLE NM TO NM, 0.01-18GHz	90-076-020	TELEDYNE STORM MICROWAVE	22037	19-Dec-2025	18-Dec-2026
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	15003	2-Jun-2025	2-Jun-2026
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	19-Mar-2026	18-Mar-2027
FILTER, HIGH PASS, >6250MHZ	HPM50112	MICRO-TRONICS	B093647	7-Jul-2025	6-Jul-2026
FILTER, HIGH PASS, >2800MHZ	HPM50111	MICRO-TRONICS	22017	2-Jun-2025	2-Jun-2026
TUNABLE NOTCH FILTER	3TNF-00051 3TNF-1500/3000-N/N	K&L MICROWAVE	21040	CNR	CNR

Above 18GHz

Test End Date: 27-May-2026

Tester: PL

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, DRG HORN (SMALL)	3116B	ETS LINDGREN	B079695	2-Aug-2024	1-Aug-2026
RF CABLE SMA, 0.01-40GHz	HULL150A-29P-29P-36	HASCO COMPONENTS	19101	20-Apr-2026	19-Apr-2027
SMA to SMA RF Cable	NC12-K1K1-138	MEGAPHASE	22002	20-Apr-2026	19-Apr-2027
ANTENNA, LOOP, ACTIVE	6502	ETS LINDGREN	B085752	30-Mar-2026	29-Mar-2028
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	19-Mar-2026	18-Mar-2027
LOW NOISE AMPLIFIER	NSP1840-HG	MITEQ	B087572	10-Oct-2025	9-Oct-2026

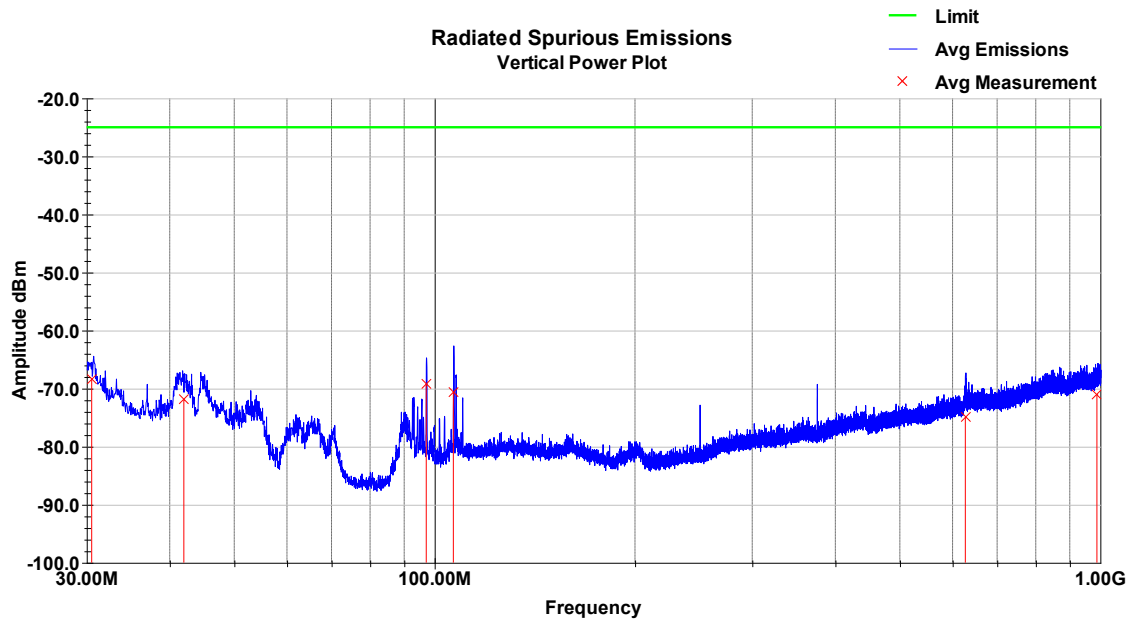
Software: TILE! Profile: RSE 30-1000 MHz 260302

TILE! Profile: RSE 1-40GHz 260302

3.5 Test Data

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b Ch 6

Vertical Plot (30-1000MHz)

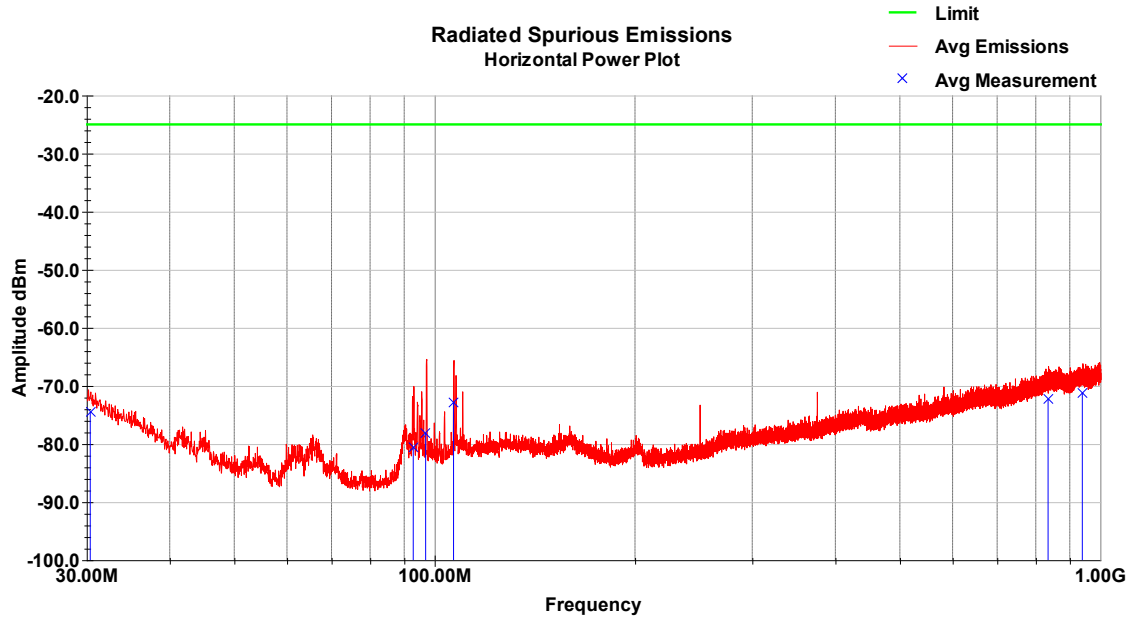


Vertical Data (30-1000MHz)

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
30.54	V	24.0	169.0	35.1	-97.3	25.8	0.3	32.2	-68.3	-25.0	-43.3
42.00	V	3.0	181.0	40.1	-97.3	17.1	0.4	32.2	-71.9	-25.0	-46.9
97.16	V	118.0	136.0	45.4	-97.3	13.8	0.8	32.1	-69.3	-25.0	-44.3
106.72	V	179.0	190.0	41.7	-97.3	16.2	0.9	32.1	-70.6	-25.0	-45.6
627.02	V	102.0	138.0	27.6	-97.3	24.0	2.4	31.7	-74.9	-25.0	-49.9
988.49	V	152.0	208.0	27.2	-97.3	27.9	2.6	31.3	-71.0	-25.0	-46.0
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b Ch 6

Horizontal Plot (30-1000MHz)

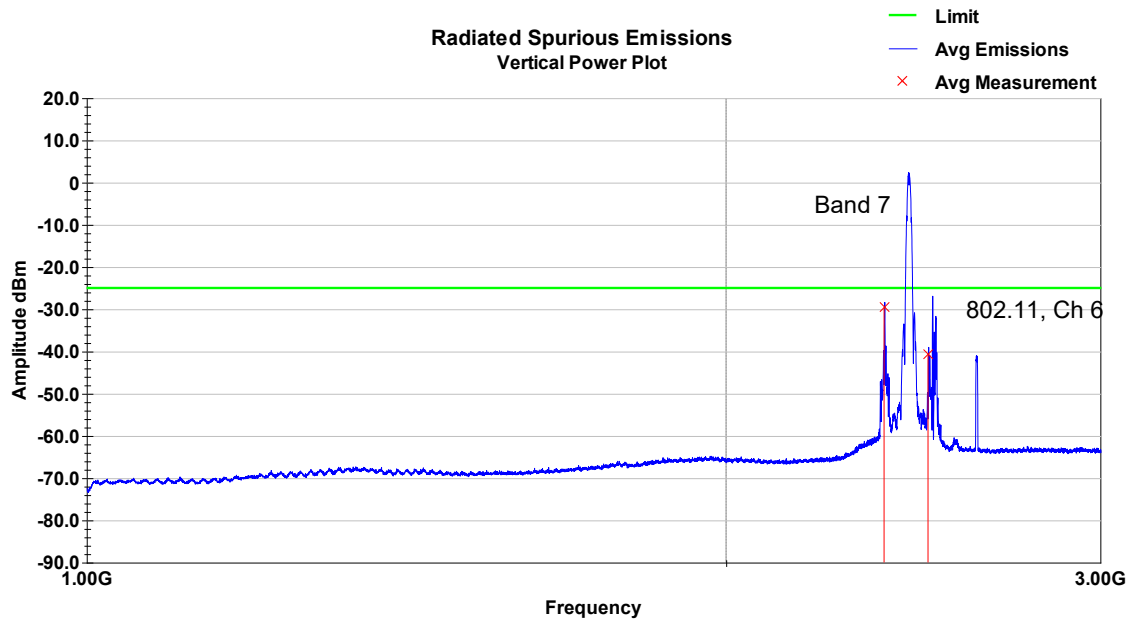


Horizontal Data (30-1000MHz)

Frequency MHz	Polarity V/H	Azimuth degress	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
30.38	H	281.0	267.0	28.8	-97.3	25.9	0.3	32.2	-74.5	-25.0	-49.5
92.85	H	-1.0	230.0	35.3	-97.3	12.7	0.8	32.1	-80.6	-25.0	-55.6
96.93	H	216.0	103.0	36.6	-97.3	13.8	0.8	32.1	-78.2	-25.0	-53.2
106.75	H	111.0	114.0	39.5	-97.3	16.3	0.9	32.1	-72.8	-25.0	-47.8
834.87	H	40.0	172.0	27.2	-97.3	26.5	2.6	31.3	-72.3	-25.0	-47.3
939.84	H	65.0	252.0	27.2	-97.3	27.4	2.6	31.1	-71.2	-25.0	-46.2
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b CH 6

Vertical Plot (1-3GHz)



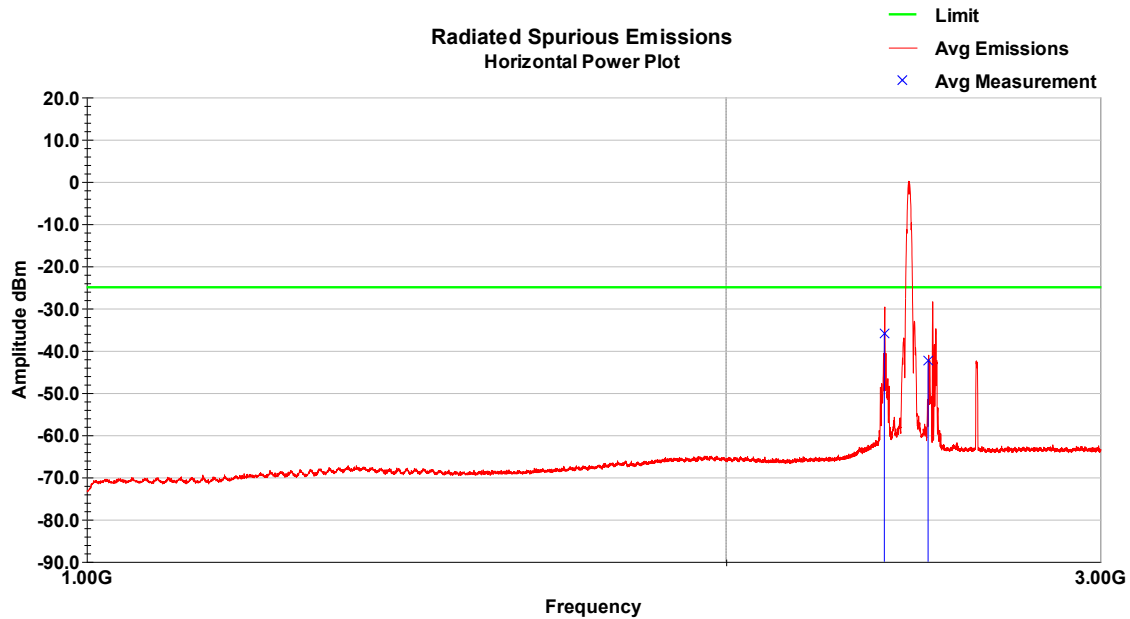
Vertical Data (1-3GHz)

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
2373.46	V	19.0	150.0	73.9	-95.2	31.7	2.4	42.4	-29.6	-25.0	-4.6
2489.34	V	23.0	102.0	62.5	-95.2	31.9	2.5	42.4	-40.6	-25.0	-15.6
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

2373.46MHz was found non-compliant for 15.209 limits.
Please refer to modifications for compliant test results.

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b CH 6

Horizontal Plot (1-3GHz)



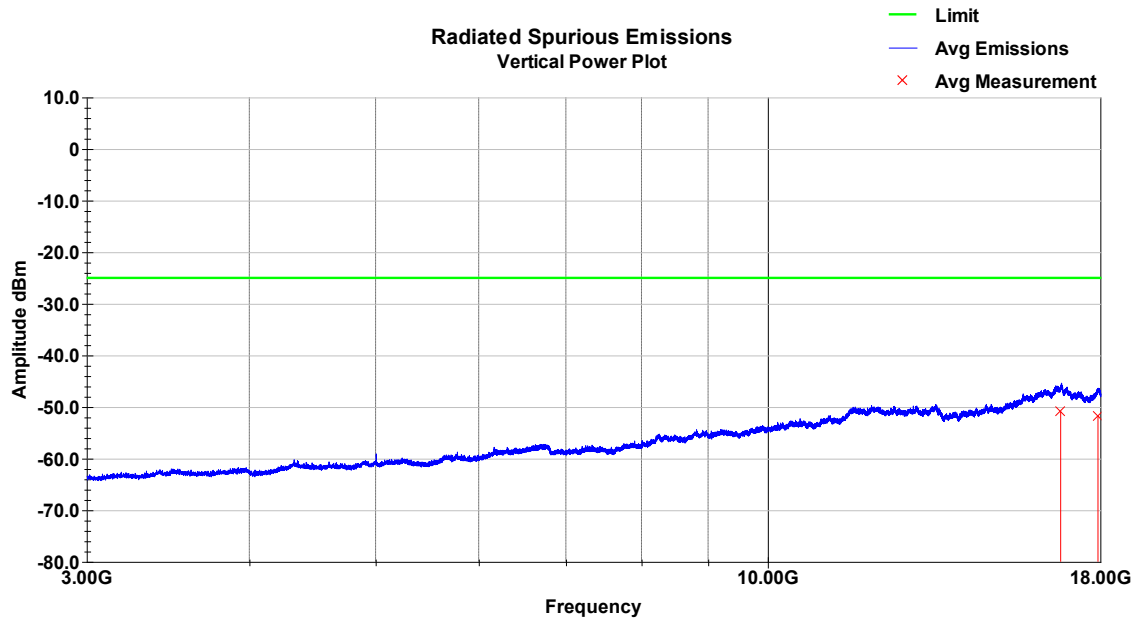
Horizontal Data (1-3GHz)

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
2373.46	V	19.0	150.0	73.9	-95.2	31.7	2.4	42.4	-29.6	-25.0	-4.6
2489.34	V	23.0	102.0	62.5	-95.2	31.9	2.5	42.4	-40.6	-25.0	-15.6
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

2373.46MHz was found non-compliant for 15.209 limits.
Please refer to modifications for compliant test results.

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b Ch 6

Vertical Plot (3-18GHz)

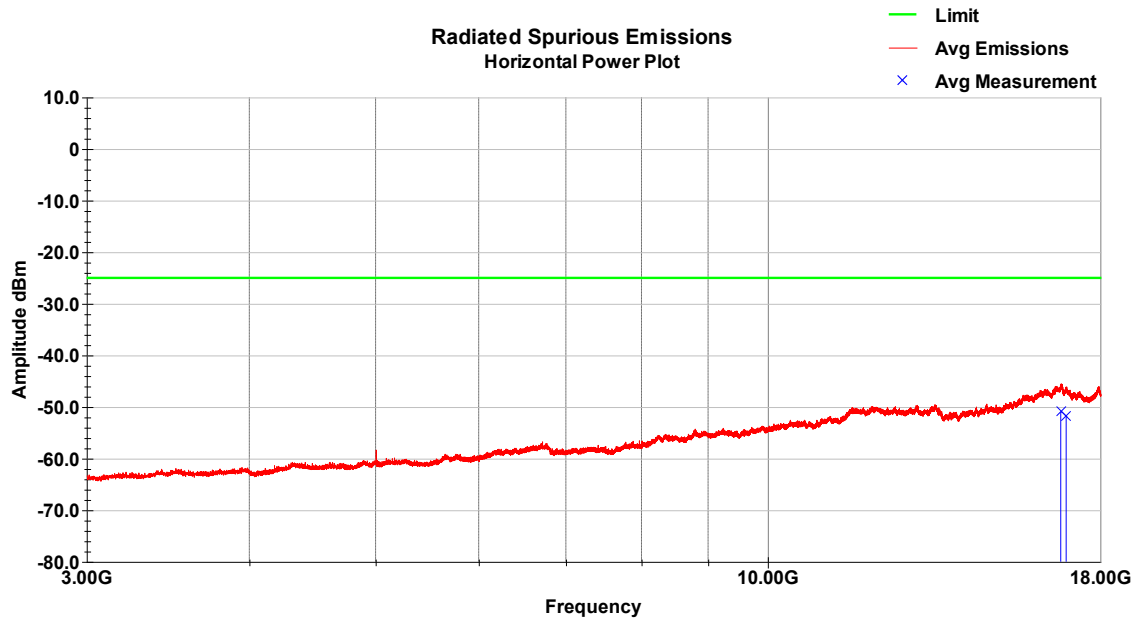


Vertical Data (3-18GHz)

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
16784.57	V	350.0	124.0	36.0	-95.2	41.5	6.8	40.0	-50.9	-25.0	-25.9
17927.80	V	251.0	150.0	35.7	-95.2	41.0	7.4	40.7	-51.7	-25.0	-26.7
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b Ch 6

Horizontal Plot (3-18GHz)

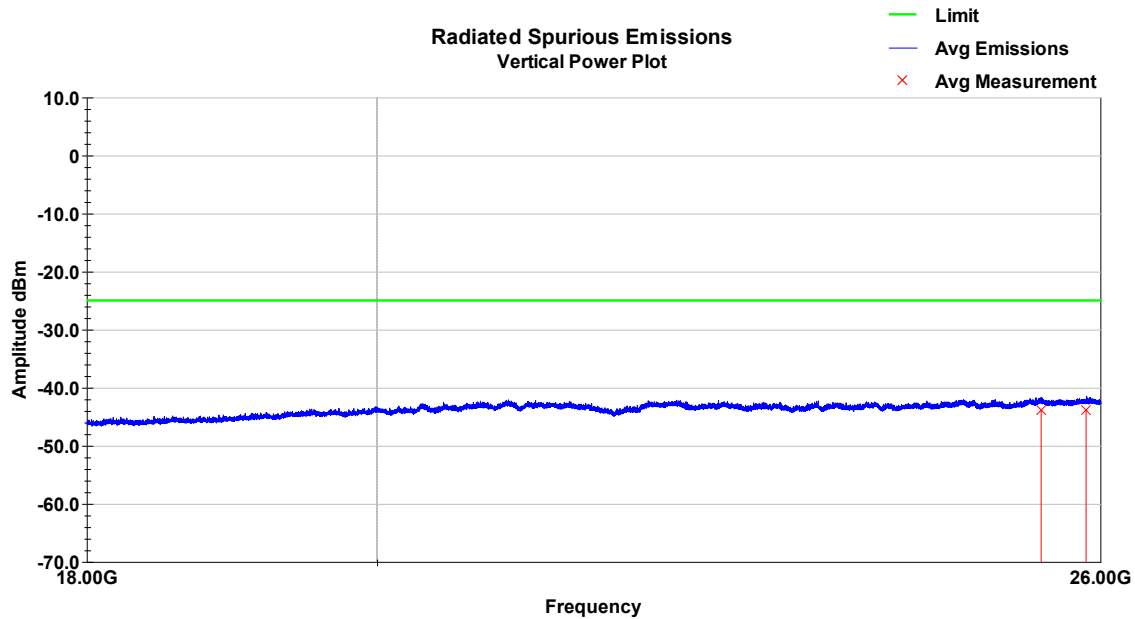


Horizontal Data (3-18GHz)

Frequency MHz	Polarity V/H	Azimuth degress	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
16785.94	H	40.0	104.0	36.0	-95.2	41.5	6.8	40.0	-50.9	-25.0	-25.9
16948.59	H	211.0	151.0	35.5	-95.2	41.3	6.8	40.2	-51.8	-25.0	-26.8
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b Ch 6

Vertical Plot (18-26GHz)

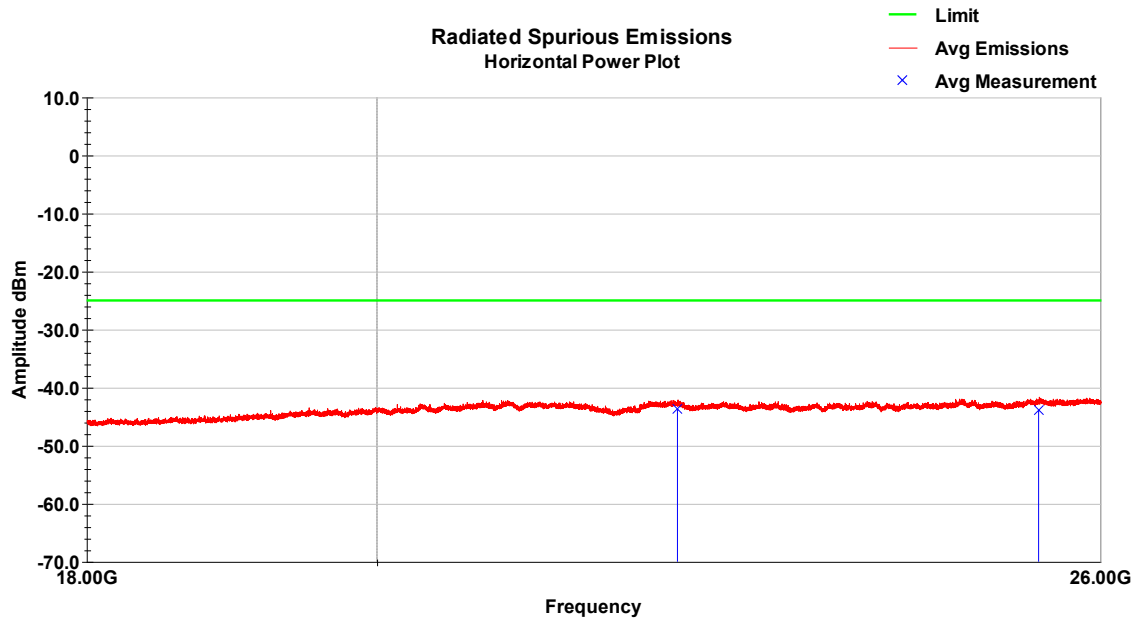


Vertical Data (18-26GHz)

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
25449.11	V	351.0	194.0	43.0	-95.2	46.2	11.1	49.1	-43.9	-25.0	-18.9
25867.15	V	28.0	108.0	43.3	-95.2	46.4	11.1	49.3	-43.8	-25.0	-18.8
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b Ch 6

Horizontal Plot (18-26GHz)

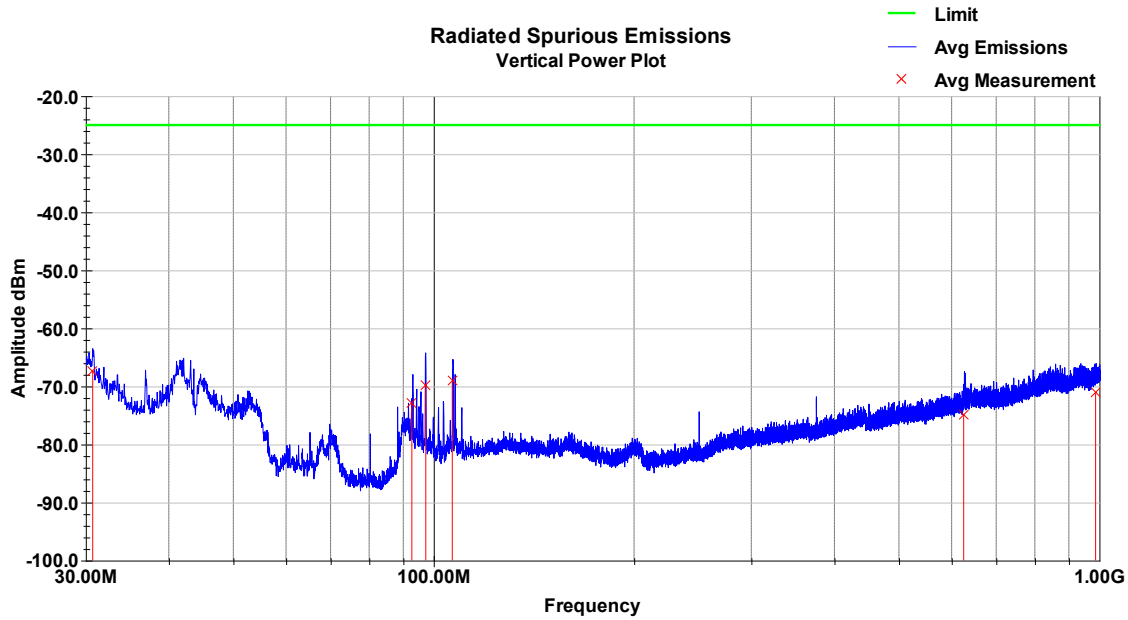


Horizontal Data (18-26GHz)

Frequency MHz	Polarity V/H	Azimuth degress	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
22303.28	H	309.0	108.0	44.1	-95.2	46.4	10.2	49.2	-43.7	-25.0	-18.7
25424.85	H	143.0	139.0	43.2	-95.2	46.2	11.1	49.2	-43.9	-25.0	-18.9
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, High Channel (2567.5MHz) w. 802.11n CH 44

Vertical Plot (30-1000MHz)

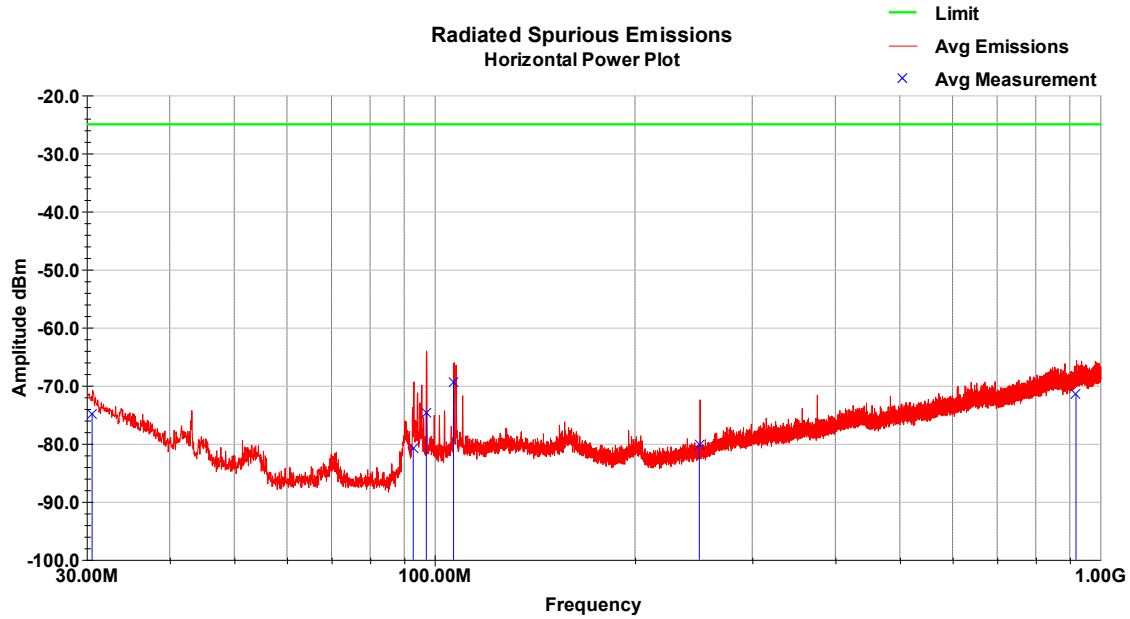


Vertical Data (30-1000MHz)

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
30.74	V	115.0	134.0	36.3	-97.3	25.6	0.3	32.2	-67.3	-25.0	-42.3
92.72	V	206.0	102.0	43.0	-97.3	12.6	0.8	32.1	-72.9	-25.0	-47.9
97.30	V	193.0	208.0	44.9	-97.3	13.9	0.8	32.1	-69.7	-25.0	-44.7
106.62	V	221.0	207.0	43.3	-97.3	16.2	0.9	32.1	-69.0	-25.0	-44.0
625.46	V	284.0	171.0	27.7	-97.3	23.9	2.4	31.7	-74.9	-25.0	-49.9
987.32	V	148.0	120.0	27.2	-97.3	27.9	2.6	31.3	-71.0	-25.0	-46.0
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, High Channel (2567.5MHz) w. 802.11n CH 44

Horizontal Plot (30-1000MHz)

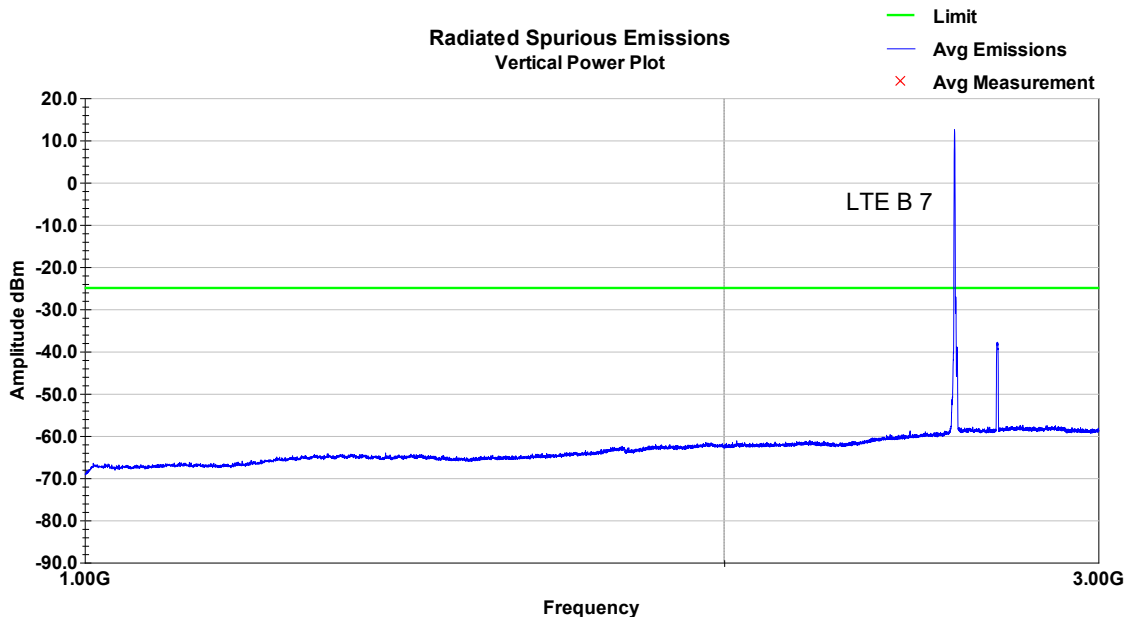


Horizontal Data (30-1000MHz)

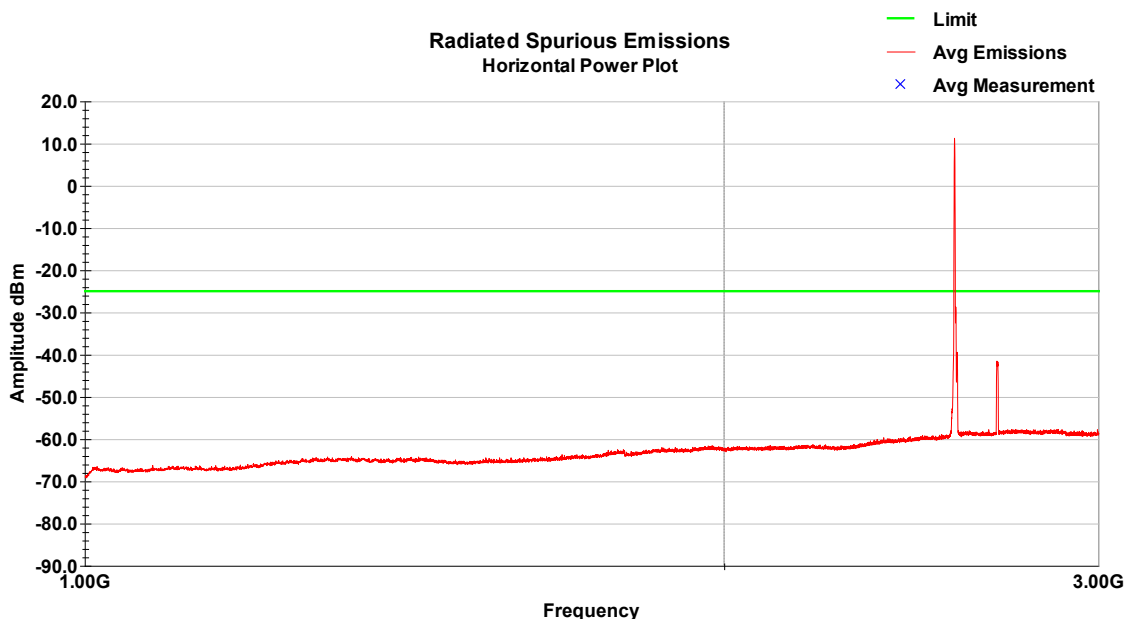
Frequency MHz	Polarity V/H	Azimuth degress	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
30.58	H	12.0	236.0	28.6	-97.3	25.7	0.3	32.2	-74.8	-25.0	-49.8
92.85	H	216.0	148.0	35.0	-97.3	12.7	0.8	32.1	-80.9	-25.0	-55.9
97.19	H	233.0	102.0	40.0	-97.3	13.9	0.8	32.1	-74.7	-25.0	-49.7
106.75	H	265.0	122.0	42.9	-97.3	16.3	0.9	32.1	-69.4	-25.0	-44.4
249.85	H	30.0	102.0	31.4	-97.3	16.3	1.4	32.0	-80.1	-25.0	-55.1
919.57	H	95.0	226.0	27.2	-97.3	27.2	2.6	31.2	-71.5	-25.0	-46.5
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, High Channel (2567.5MHz) w. 802.11n CH 44

Vertical Plot (1-3GHz)



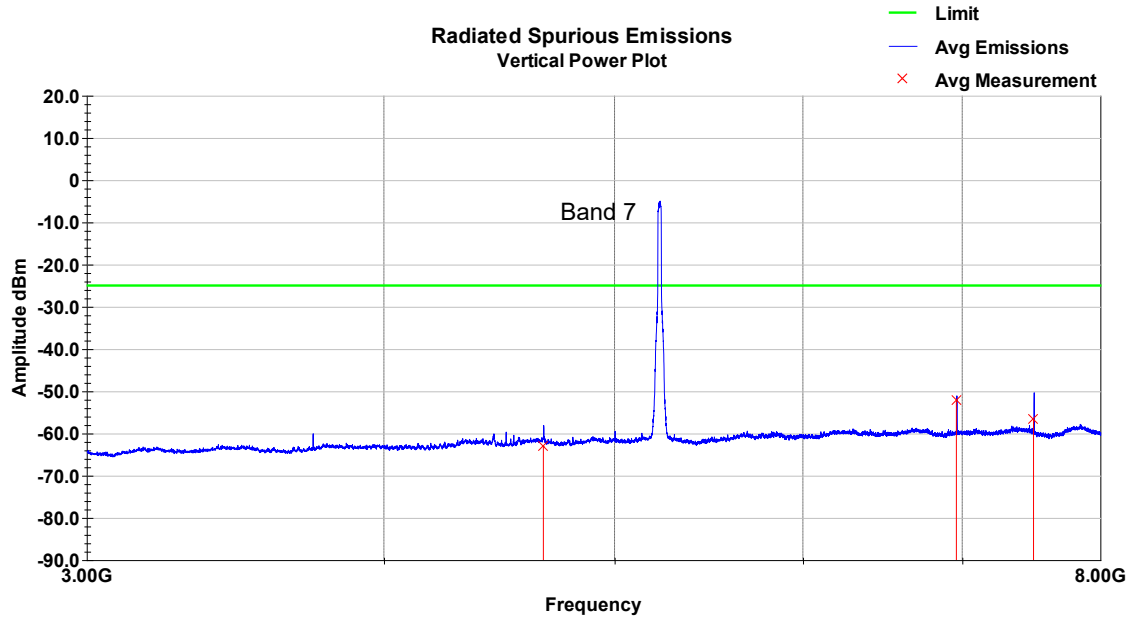
Horizontal Plot (1-3GHz)



Other than intentional, no detected emissions were within 20dB of limit.

LTE Band 7, QPSK modulation, High Channel (2567.5MHz) w. 802.11n CH 44

Vertical Plot (3-8GHz)

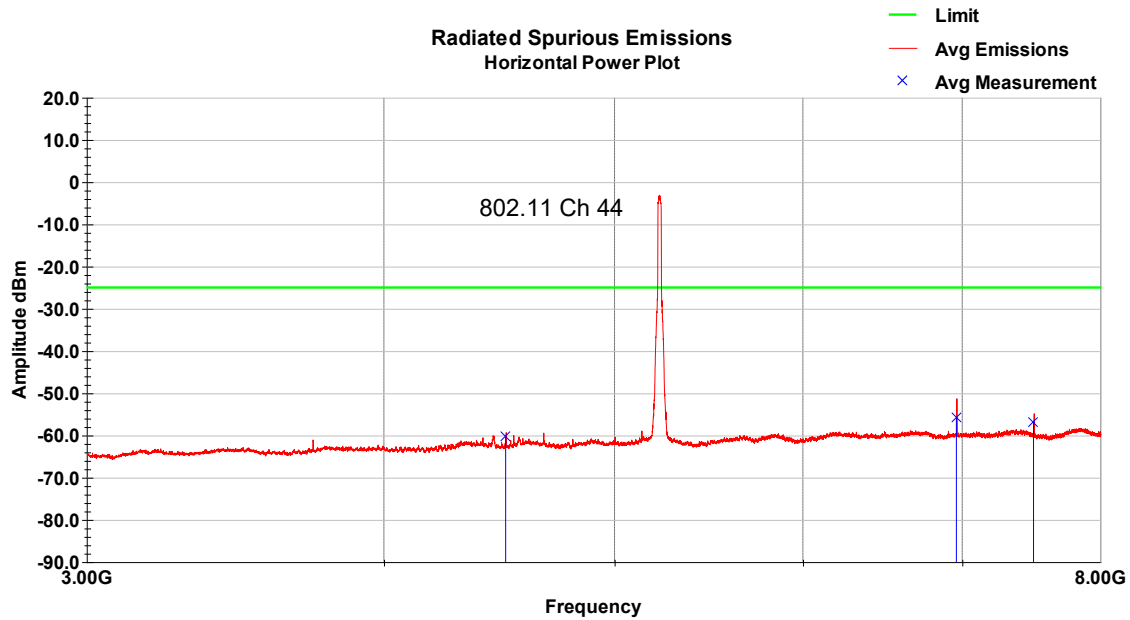


Vertical Data (3-8GHz)

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
4667.59	V	143.0	102.0	36.8	-95.2	33.9	3.7	42.2	-63.0	-25.0	-38.0
6960.41	V	114.0	121.0	45.0	-95.2	35.7	4.5	42.1	-52.1	-25.0	-27.1
7500.34	V	300.0	227.0	40.0	-95.2	35.8	4.6	41.9	-56.7	-25.0	-31.7
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, High Channel (2567.5MHz) w. 802.11n CH 44

Horizontal Plot (3-8GHz)

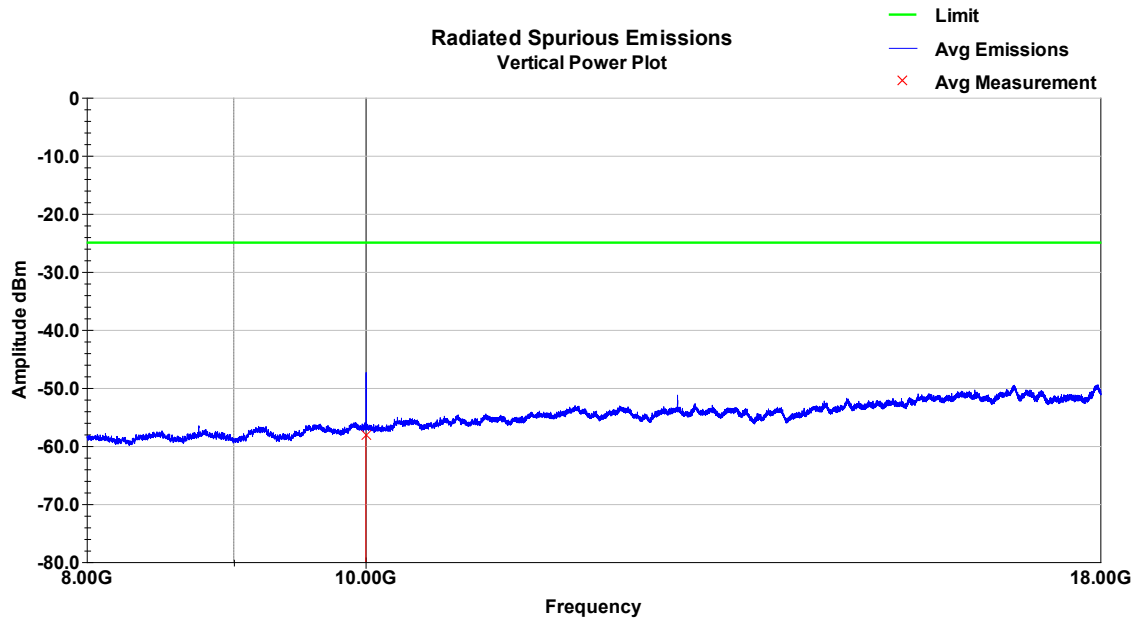


Horizontal Data (3-8GHz)

Frequency MHz	Polarity V/H	Azimuth degress	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
4500.13	H	148.0	190.0	39.7	-95.2	33.8	3.6	42.2	-60.3	-25.0	-35.3
6960.66	H	313.0	189.0	41.2	-95.2	35.7	4.5	42.1	-55.9	-25.0	-30.9
7500.35	H	347.0	241.0	39.9	-95.2	35.8	4.6	41.9	-56.8	-25.0	-31.8
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, High Channel (2567.5MHz) w. 802.11n CH 44

Vertical Plot (8-18GHz)

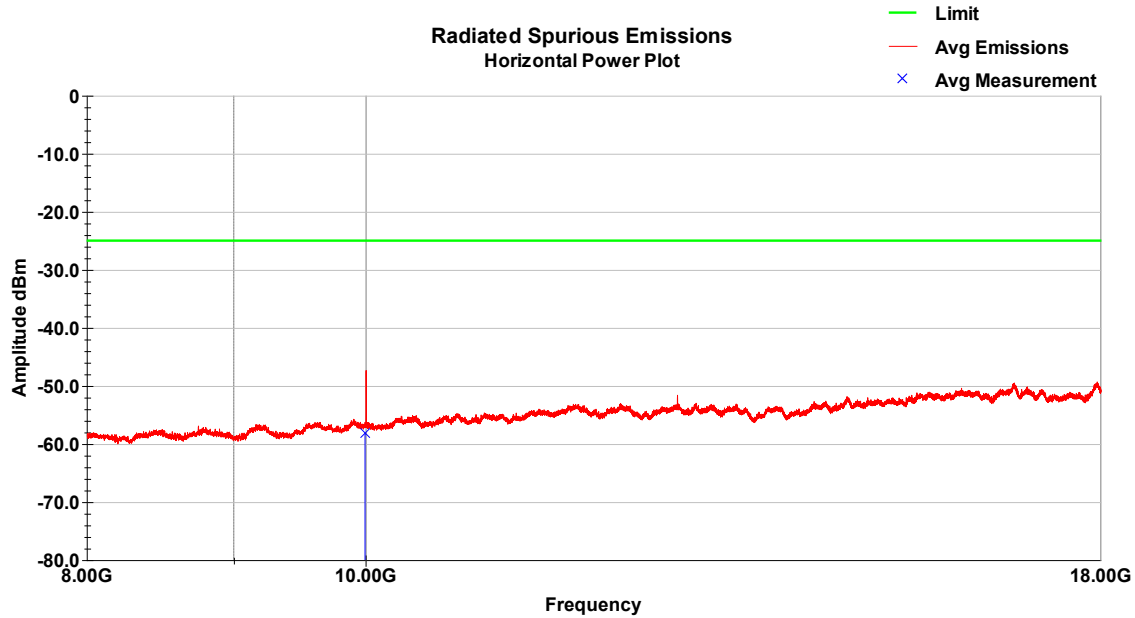


Vertical Data (8-18GHz)

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
10002.37	V	200.0	176.0	36.6	-95.2	37.6	5.2	42.3	-58.1	-25.0	-33.1
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, High Channel (2567.5MHz) w. 802.11n CH 44

Horizontal Plot (8-18GHz)

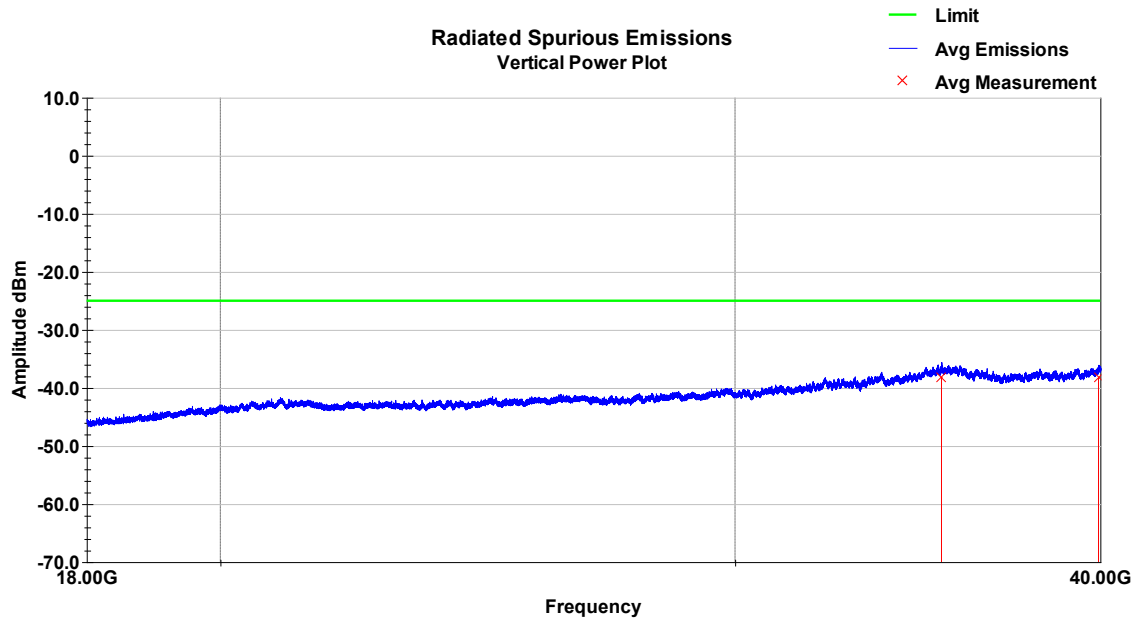


Horizontal Data (8-18GHz)

Frequency MHz	Polarity V/H	Azimuth degress	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
9995.84	H	40.0	194.0	36.5	-95.2	37.6	5.2	42.3	-58.2	-25.0	-33.2
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

LTE Band 7, QPSK modulation, High Channel (2567.5MHz) w. 802.11n CH 44

Vertical Plot (18-40GHz)



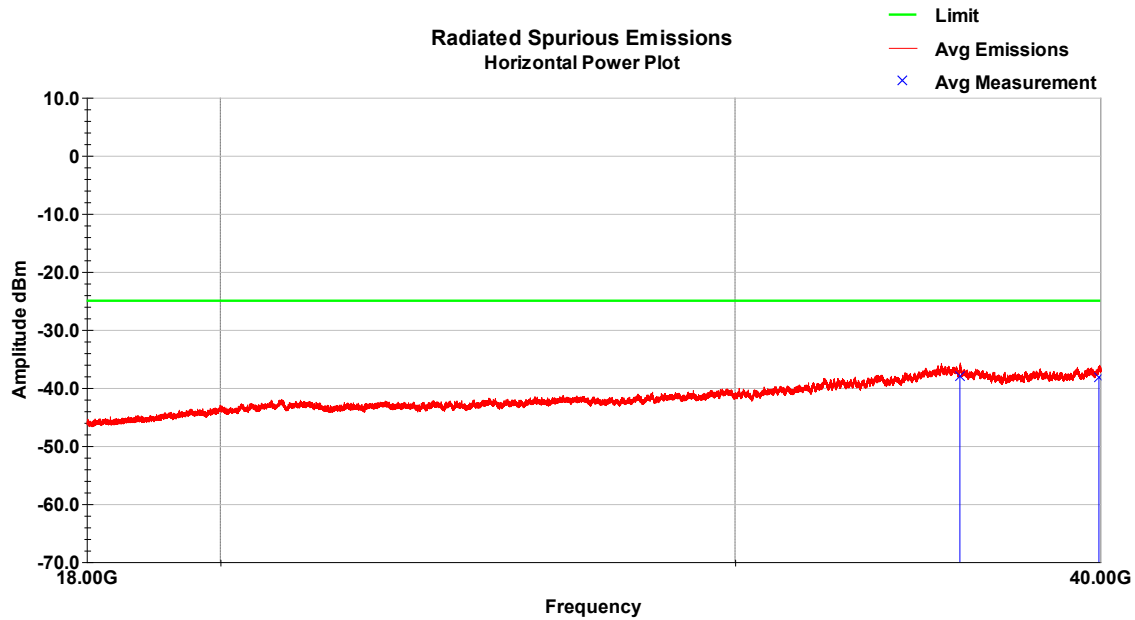
Vertical Data (18-40GHz)

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
35298.14	V	341.0	181.0	43.5	-95.2	48.9	13.6	48.8	-38.1	-25.0	-13.1
39944.21	V	10.0	224.0	42.5	-95.2	48.1	14.7	48.4	-38.2	-25.0	-13.2
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

Note: 5GHz WLAN was tested up to 40Ghz.

LTE Band 7, QPSK modulation, High Channel (2567.5MHz) w. 802.11n CH 44

Horizontal Plot (18-40GHz)

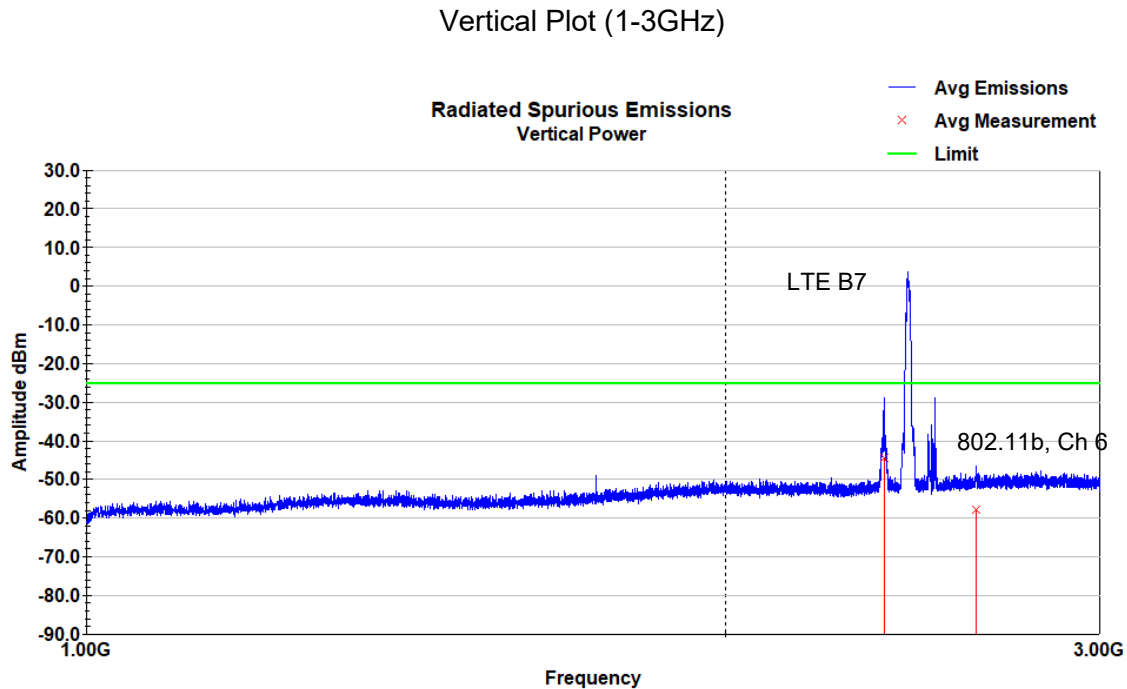


Horizontal Data (18-40GHz)

Frequency MHz	Polarity V/H	Azimuth degress	Height cm	Raw Avg dBm	FS to Pwr Conv. dB	AF dB/m	Loss dB	Amp dB	Final Avg dBm	Limit dBm	Margin dB
35814.22	H	249.0	158.0	43.7	-95.2	49.0	13.8	49.2	-38.0	-25.0	-13.0
39958.46	H	168.0	148.0	42.6	-95.2	48.1	14.7	48.4	-38.2	-25.0	-13.2
Avg Value = FS to Pwr Conv. + Raw Avg + AF + Loss - Amp											
Margin = Avg Value - Limit											

3.6 Test Data – w. Modifications for Compliance

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b CH 6

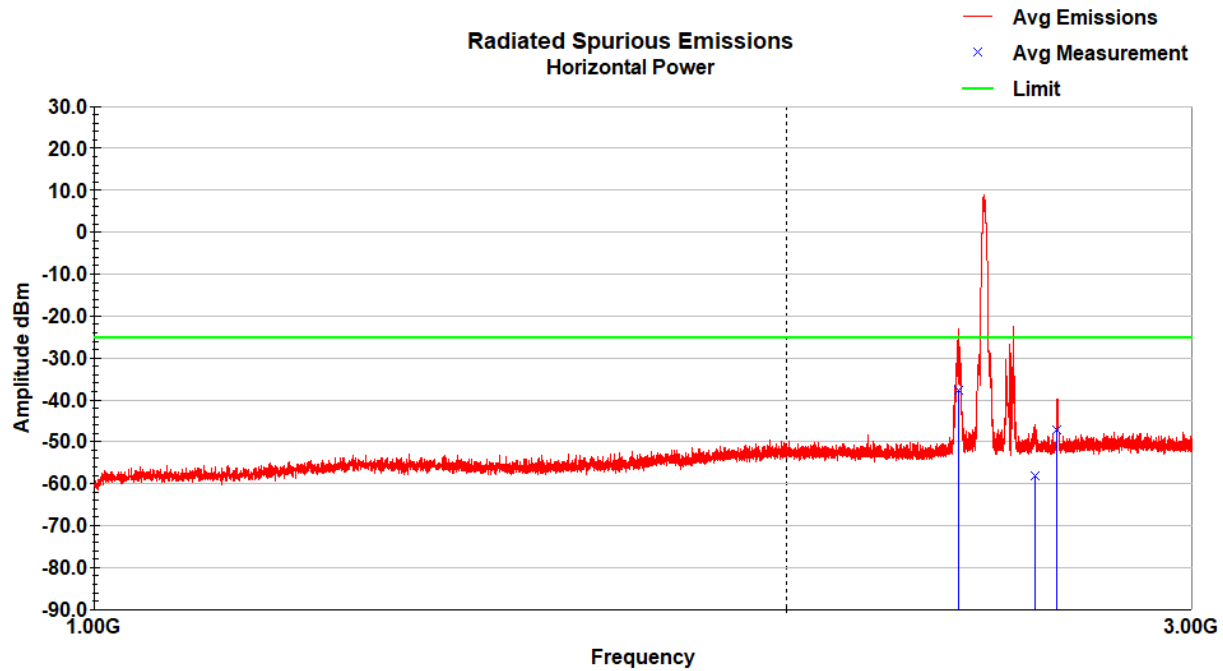


Vertical Data (1-3GHz)

Frequency MHz	Raw Avg dBm	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	Amp dB	Avg Value dBm	Limit dBm	Margin dB
2373.92	-41.7	V	223.0	218.0	31.7	8.0	42.5	-44.5	-25.0	-19.5
2622.84	-55.9	V	4.0	177.0	32.4	8.2	42.4	-57.7	-25.0	-32.7
Avg Value = Raw Avg + AF + Loss - Amp										
Margin = Avg Value - Limit										

LTE Band 7, QPSK modulation, Low Channel (2502.5MHz) w. 802.11b Ch 6

Horizontal Plot (1-3GHz)



Horizontal Data (1-3GHz)

Frequency MHz	Raw Avg dBm	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	Amp dB	Avg Value dBm	Limit dBm	Margin dB
2373.80	-34.9	H	125.0	238.0	31.7	8.0	42.5	-37.6	-25.0	-12.6
2563.24	-56.3	H	126.0	193.0	32.2	8.2	42.4	-58.3	-25.0	-33.3
2621.36	-45.3	H	66.0	208.0	32.4	8.2	42.4	-47.1	-25.0	-22.1
Avg Value = Raw Avg + AF + Loss - Amp										
Margin = Avg Value - Limit										

4 Measurement Uncertainty

Measurement uncertainty is not used to adjust the measurements to determine compliance.

Measurement uncertainty values in the table below comply with CISPR 16-4-2.

Measurement	Frequency Range	U_{CISPR} dB	Lab dB
Radiated disturbance (electric field strength in a SAC)	(30 MHz to 1000 MHz)	6.3	5.0
Radiated disturbance (electric field strength in a FAR)	(1 GHz to 6 GHz)	5.2	4.2
Radiated disturbance (electric field strength in a FAR)	(6 GHz to 18 GHz)	5.5	4.5

5 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	24 June 2025
1	Updated antenna info and peak gain	19 August 2025
2	Edited per TCB which includes FCC ID of product, RSS-199 & RSS-140, cellular limits on plots. Removed module IDs and setup photo. Also required test results above 18GHz.	5 June 2026