RF Test Report

Project Number:	**5315129**	**Proposal:**	**SUW-202410007210**
Report Number:	**SUW5315129EMC06**	**Revision:**	**3**
Client:	**Track Group, Inc.**		
Equipment Under Test:	**Electronic Monitoring Ankle Bracelet**		
Product Name:	**ReliAlert XC5**		
Model:	**OTD 5.0**		
FCC ID:	**TPO-OTD50**		
IC:	**6512A-OTD50**		
Applicable Standards:	**FCC Part 15 Subpart E, § 15.407**		
Report issued on:	**30 June 2026**		
Test Result:	**Compliant**		

FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01
This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the Federal Government.

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Brandon Osborn, Sr. EMC/RF Engineer

Reviewed by: Sean Vick
Sean Vick, Advanced Project Engineer

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1 Summary of Test Results

Test Description	Test Specification	Test Result
Occupied Bandwidth	15.407	N/A
Spectral Density	15.407(1)(2)(5)	N/A
Peak Power Output	15.407(1)(2)(4)	N/A
Peak Excursion	15.407(6)	N/A
Radiated Spurious Emissions	15.407(b)	Compliant[1]
AC Powerline Conducted Emissions	15.207	NT[2]
Antenna Requirement	15.203	Compliant[3]

(1) 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 v1.01.
(2) Device does not operate when connected to AC mains.
(3) The device uses a SMD chip antenna which cannot be easily replaced.

1.1 *Modifications Required for Compliance*

None

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*

Description of EUT:	Electronic Monitoring Ankle Bracelet
Marketing Name:	ReliAlert XC5
Model:	OTD 5.0
Serial Number:	P5020013
Hardware Version:	5.0.0
Firmware Version:	5.0.12.1
FCC ID:	TPO-OTD50
IC:	6512A-OTD50
Frequency Range:	5150 to 5725 MHz
Modulation type:	OFDM
Channel spacing:	20 MHz
Antenna/Gain*:	PCB Chip SMD, SZP-C-1W11 (5150-5850MHz = 2.48dBi)
Rated Voltage:	3.6Vdc (Internal Rechargeable Li-ion Battery)
Tested Voltage:	3.6Vdc
Sample Received Date:	27 May 2025
Dates of testing:	3-4 June 2025; Retest 27-29 May and 1-3 June 2026

*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.

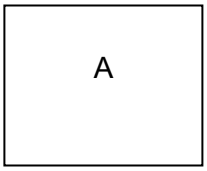
Operating Modes and Conditions

Modulations used: For fundamental and spurious measurements, the EUT was configured to operate continuously with Wi-Fi modulation enabled.

As specified in Section 5.10.5 of ANSI C63.10-2020:

- The software allowed configuration and operation on all available unlicensed wireless device channels.
- The software allowed configuration and operation using all available modulations and data rates
- The software allowed configuration and operation on all available power out levels

2.4 *EUT Connection Block Diagram*



2.5 *System Configurations*

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

3 Emissions in Restricted Frequency Bands

3.1 *Test Result*

Test Description	Test Specification	Test Result
Spurious Emissions	15.407(b)	Compliant

3.2 *Test Method*

The test data was measured using a spectrum analyzer with

- Peak detector, max hold
- Resolution bandwidth of at least 100 kHz
- Video bandwidth at least 3x RBW
- Frequency range: 1 GHz to 40 GHz

3.3 *Test Site*

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

Environmental Conditions	27-May-2026 – 29-May-2026	1Jun-2026 – 3-Jun-2026
Temperature:	22.17°C – 23.1°C	21.88°C – 23.1°C
Relative Humidity:	59.9% – 63.2%	57.8% – 63.2%
Atmospheric Pressure:	98.1kPa – 98.3kPa	98.3kPa – 98.9kPa

3.4 *Test Equipment*

9kHz-30 MHz

Test End Date: 3-Jun-2026 Tester: PL

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, LOOP, ACTIVE	6502	ETS LINDGREN	B085752	30-Mar-2026	29-Mar-2028
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, NM TO NM.	90-195-157	TELEDYNE STORM MICROWAVE	21019	22-Mar-2026	21-Mar-2027
EMI TEST RECEIVER	ESU8	ROHDE & SCHWARZ	B085759	14-Nov-2025	13-Nov-2026

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

Test Dates: 28-May-2026, 29-May-2026, 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-2026	1-Jun-2027
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	19-Mar-2026	18-Mar-2027
FILTER, HIGH PASS, >2800MHZ	HPM50111	MICRO-TRONICS	22017	2-Jun-2026	1-Jun-2027
FILTER, HIGH PASS, >6250MHZ	HPM50112	MICRO-TRONICS	B093647	7-Jul-2025	6-Jul-2026

18-40GHz

Test End Date: 27-May-2026 Tester: PL

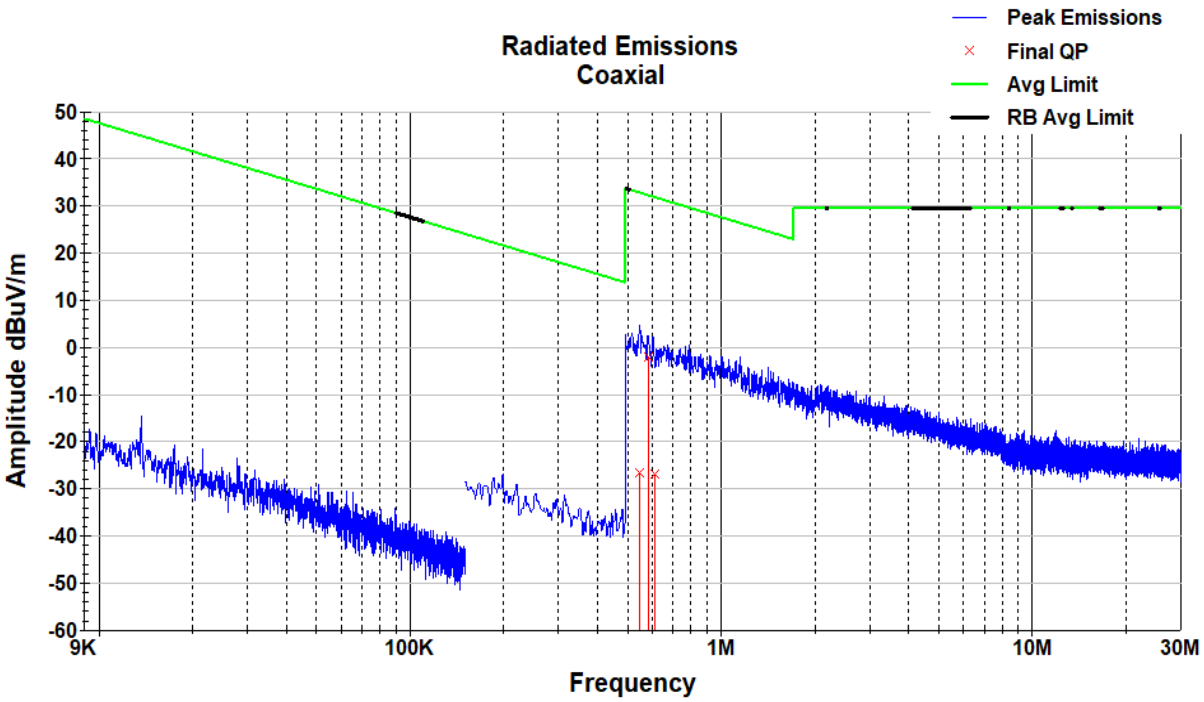
Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, DRG HORN (SMALL)	3116B	ETS LINDGREN	B079695	2-Aug-2024	1-Aug-2026
RF CABLE SMA, 0.01-40GHZ	HULL150A-29P-29P-36	HASCO COMPONENTS	19101	20-Apr-2026	19-Apr-2027
SMA to SMA RF Cable	NC12-K1K1-138	MEGAPHASE	22002	20-Apr-2026	19-Apr-2027
ANTENNA, 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 9k-30M Active Red Loop 260416
TILE! Profile: RSE 30-1000 MHz 260302
TILE! Profile: RSE 1-40GHz 260302

3.5 *Test Data*

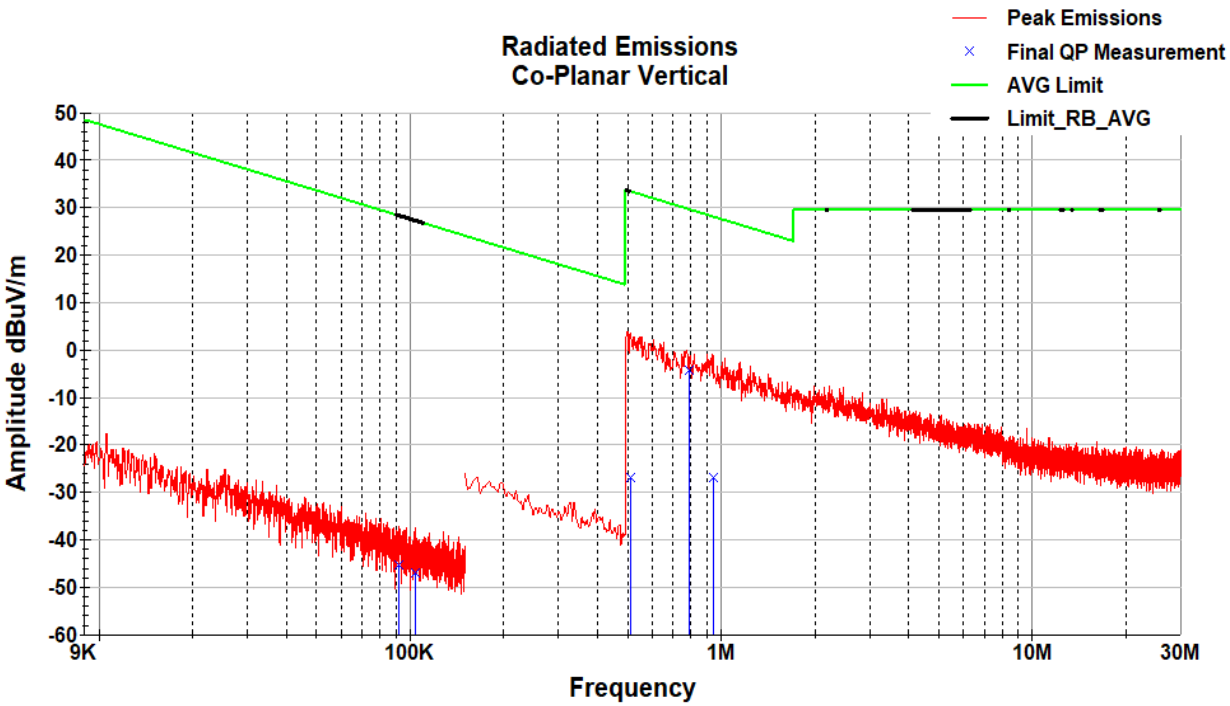
3.5.1 9 kHz-30 MHz

3.5.1.1 UNII 1 (Channel 44)



Coaxial 9kHz to 30MHz Tabulated Data

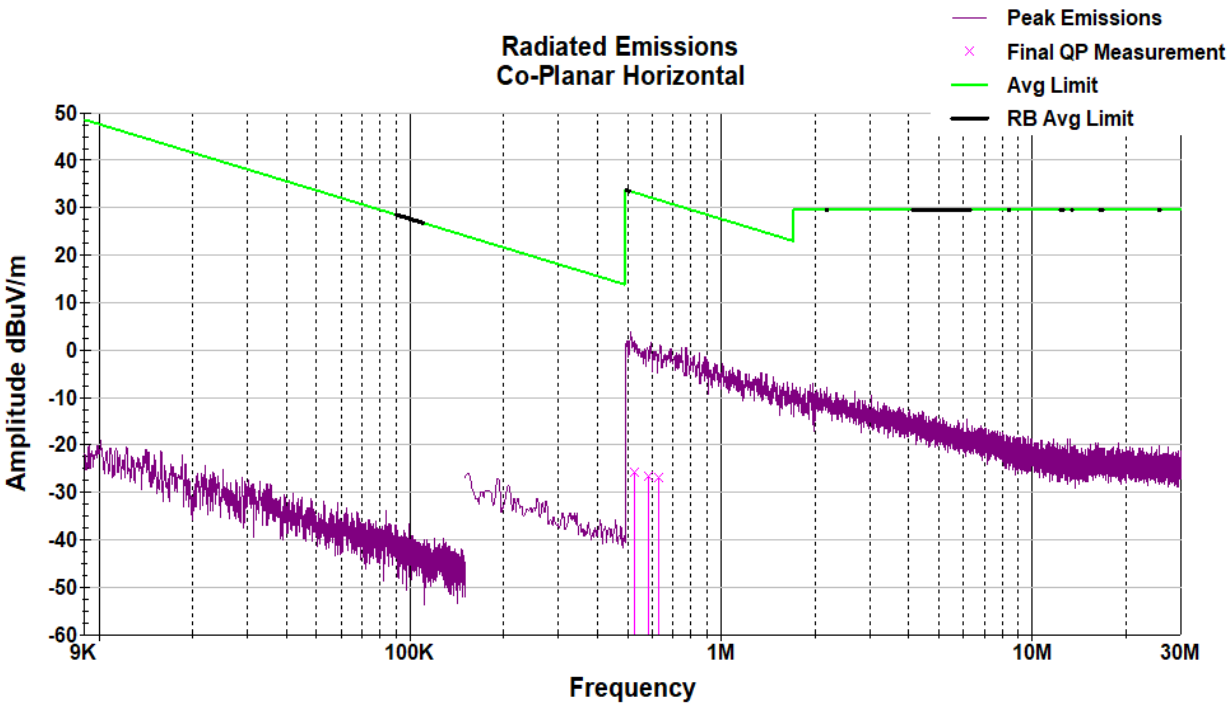
Frequency MHz	Raw QP dBuV	Azimuth degrees	Tower cm	AF dB	CL dB	DCF dB	Final QP dBuV	Limit dBuV	Margin dB
0.54	2.1	178.7	329.0	11.3	0.1	-40.0	-26.6	32.9	-59.4
0.58	26.6	195.7	100.0	11.3	0.1	-40.0	-2.0	32.3	-34.3
0.61	1.6	155.3	282.0	11.3	0.1	-40.0	-26.9	31.8	-58.8
QP Value = Level + AF + CL +DCF - Amp									
Margin = QP Value - Limit									



Vertical Co-Planar 9kHz to 30MHz Tabulated Data

Frequency MHz	Raw QP dBuV	Azimuth degrees	ower Heig cm	AF dB	CL dB	DCF dB	Final QP QP_cpV_Lc	Limit dBuV	Margin dB
0.09	22.9	142.3	141.0	11.8	0.0	-80.0	-45.3	28.3	-73.6
0.10	21.5	230.7	374.0	11.5	0.0	-80.0	-47.0	27.3	-74.3
0.13	-16.0	146.2	258.0	11.4	0.0	-80.0	-84.5	25.5	-110.0
QP Value = Level + AF + CL +DCF - Amp									
Margin = QP Value - Limit									

Frequency MHz	Raw QP dB	Azimuth degrees	Tower cm	AF dB	CL dB	DCF db	Final QP dBuV	Limit dBuV	Margin dB
0.51	1.9	305.9	100.0	11.2	0.1	-40.0	-26.8	33.4	-60.3
0.79	24.4	145.2	186.0	11.3	0.1	-40.0	-4.2	29.7	-33.9
0.94	1.5	92.7	365.0	11.4	0.1	-40.0	-27.0	28.1	-55.1
QP Value = Level + AF + CL +DCF - Amp									
Margin = QP Value - Limit									

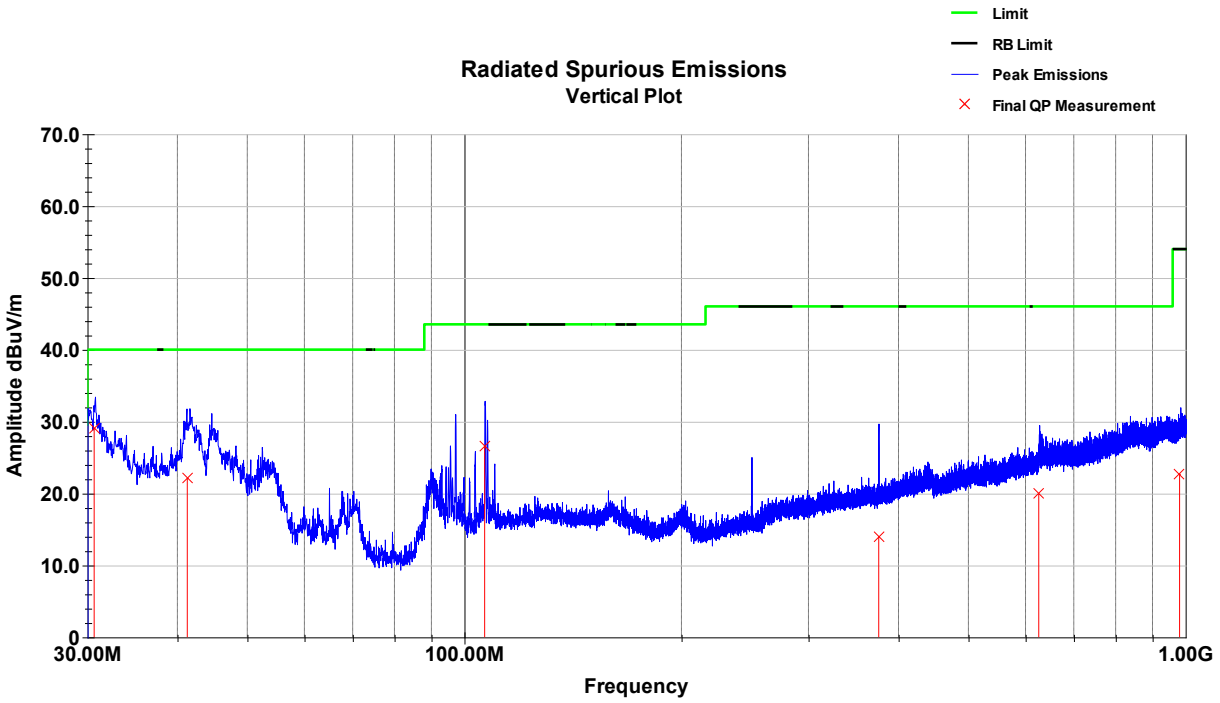


Horizontal Co-Planar 9kHz to 30MHz Tabulated Data

Frequency MHz	Raw QP dBuV	Azimuth degrees	Tower cm	AF dB	CL dB	DCF dB	Limit dBuV	Final QP dBuV	Margin dB
0.53	2.8	72.7	173.0	11.2	0.1	-40.0	33.2	-25.9	-59.1
0.58	2.0	52.7	374.0	11.3	0.1	-40.0	32.3	-26.7	-59.0
0.63	1.9	25.6	256.0	11.3	0.1	-40.0	31.7	-26.7	-58.4
QP Value = Level + AF + CL +DCF - Amp									
Margin = QP Value - Limit									

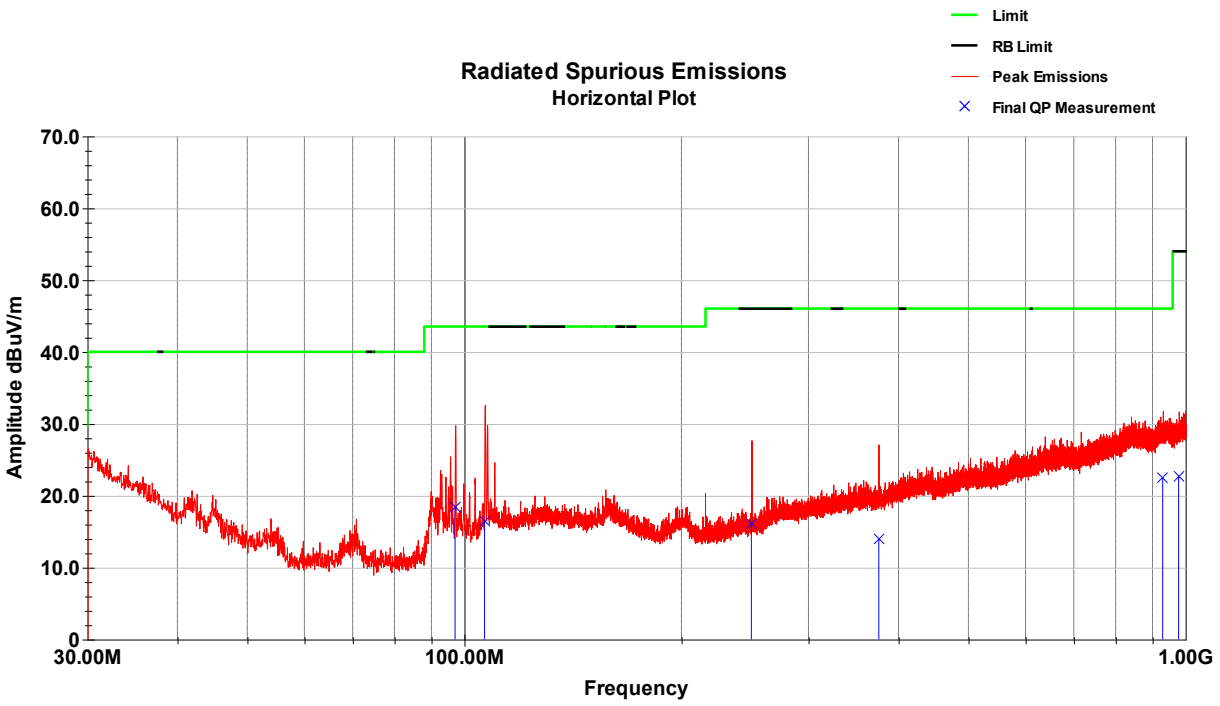
3.5.2 30-1000 MHz

3.5.2.1 UNII 1 (Channel 44)



Vertical Emissions 30-1000MHz Tabulated Data

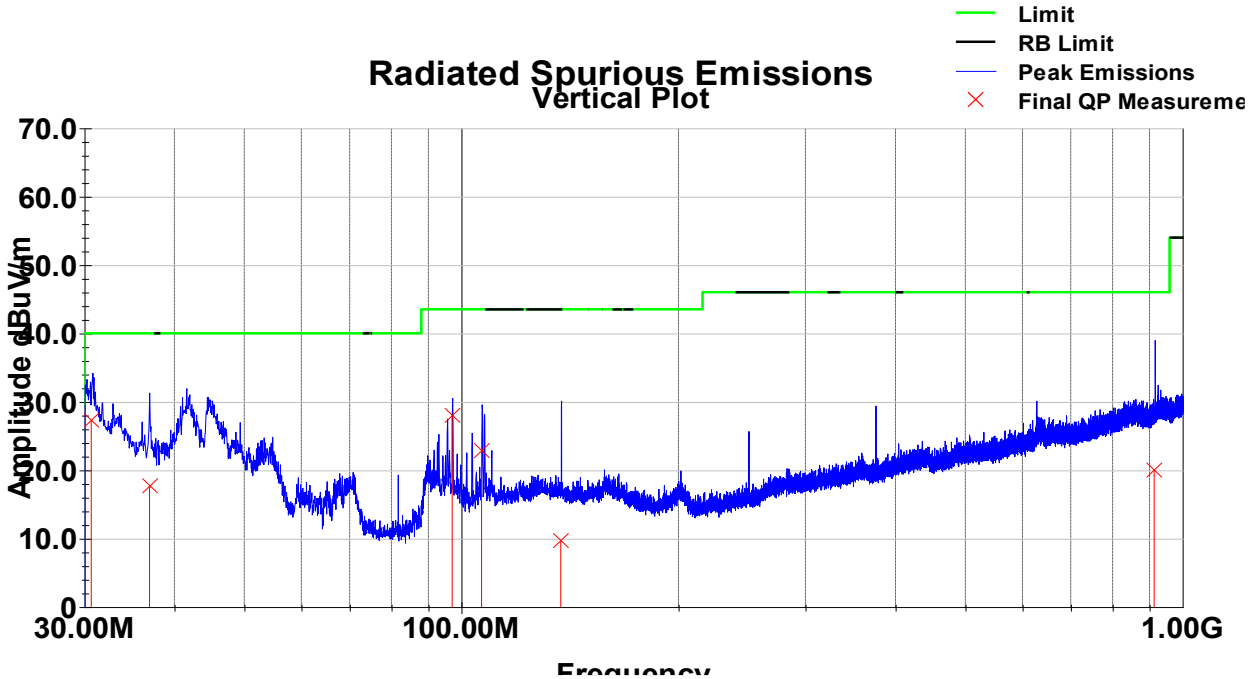
Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw QP dBuV/m	AF dB/m	Loss dB	DCF dB	Amp dB	Final QP dBuV/m	Limit dBuV/m	Margin dB
30.66	V	155.0	100.0	35.3	25.7	0.3	0.0	32.2	29.1	40.0	-10.9
41.28	V	252.0	131.0	36.4	17.6	0.4	0.0	32.2	22.2	40.0	-17.8
106.70	V	305.0	129.0	41.5	16.2	0.9	0.0	32.1	26.5	43.5	-17.0
375.50	V	175.0	130.0	24.1	19.7	1.9	0.0	31.8	14.0	46.0	-32.0
625.94	V	310.0	224.0	25.2	24.0	2.4	0.0	31.7	19.9	46.0	-26.1
981.44	V	304.0	114.0	23.8	27.7	2.6	0.0	31.4	22.7	54.0	-31.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											



Horizontal Emissions 30-1000MHz Tabulated Data

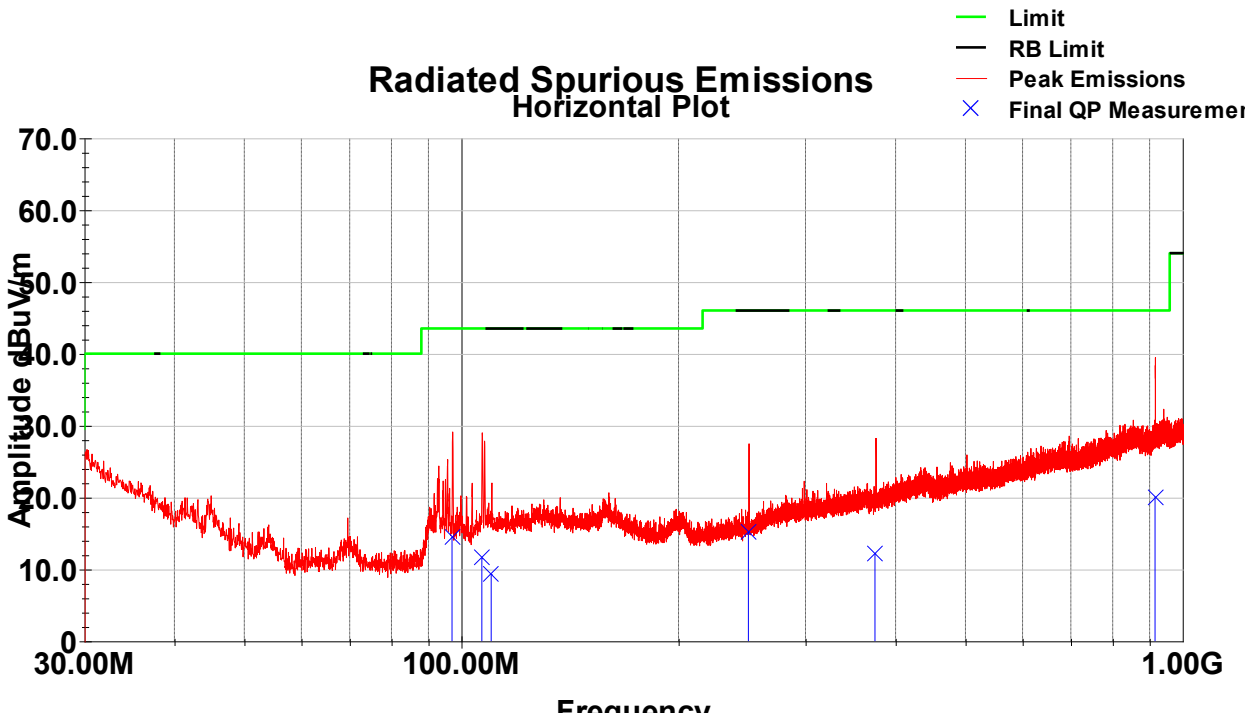
Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw QP dBuV/m	AF dB/m	Loss dB	DCF dB	Amp dB	Final QP dBuV/m	Limit dBuV/m	Margin dB
97.09	H	359.0	131.0	35.8	13.8	0.8	0.0	32.1	18.3	43.5	-25.2
106.68	H	359.0	115.0	31.4	16.2	0.9	0.0	32.1	16.4	43.5	-27.1
250.03	H	359.0	130.0	30.3	16.3	1.4	0.0	32.0	16.1	46.0	-29.9
375.65	H	359.0	163.0	24.0	19.8	1.9	0.0	31.8	14.0	46.0	-32.1
929.87	H	359.0	147.0	23.7	27.3	2.6	0.0	31.0	22.5	46.0	-23.5
978.46	H	359.0	161.0	23.7	27.7	2.6	0.0	31.4	22.6	54.0	-31.4
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

3.5.2.2 UNII 2C (Channel 100)



Vertical Emissions 30-1000MHz Tabulated Data

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw QP dBuV/m	AF dB/m	Loss dB	DCF dB	Amp dB	Final QP dBuV/m	Limit dBuV/m	Margin dB
30.68	V	13.0	123.0	33.5	25.7	0.3	0.0	32.2	27.2	40.0	-12.8
36.94	V	140.0	195.0	28.6	20.8	0.4	0.0	32.2	17.6	40.0	-22.4
97.11	V	175.0	114.0	45.5	13.8	0.8	0.0	32.1	28.1	43.5	-15.4
106.67	V	210.0	213.0	37.9	16.2	0.9	0.0	32.1	22.9	43.5	-20.6
137.34	V	222.0	164.0	23.3	17.5	0.9	0.0	32.0	9.6	43.5	-33.9
913.62	V	207.0	114.0	21.6	27.2	2.6	0.0	31.3	20.0	46.0	-26.0
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

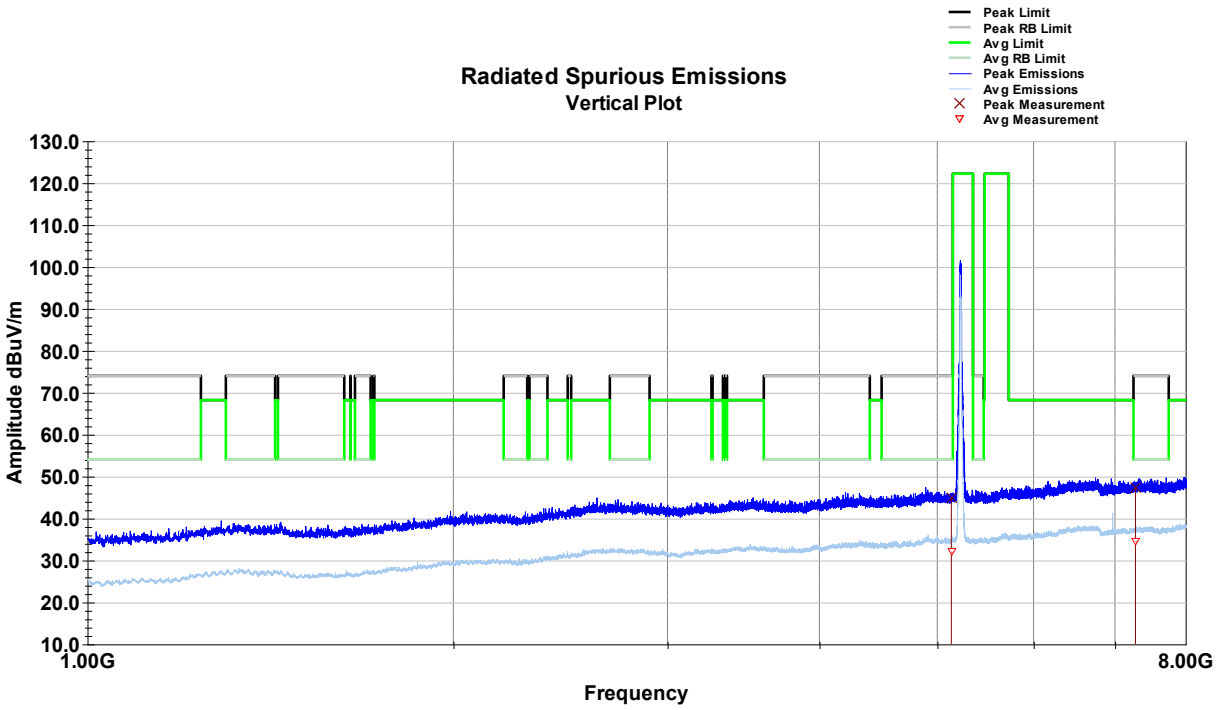


Horizontal Emissions 30-1000MHz Tabulated Data

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw QP dBuV/m	AF dB/m	Loss dB	DCF dB	Amp dB	Final QP dBuV/m	Limit dBuV/m	Margin dB
97.07	H	359.0	100.0	32.0	13.8	0.8	0.0	32.1	14.6	43.5	-29.0
106.73	H	359.0	100.0	26.6	16.2	0.9	0.0	32.1	11.6	43.5	-31.9
109.99	H	359.0	180.0	23.8	16.8	0.9	0.0	32.1	9.4	43.5	-34.2
250.03	H	359.0	131.0	29.5	16.3	1.4	0.0	32.0	15.3	46.0	-30.7
374.50	H	359.0	213.0	22.4	19.7	1.9	0.0	31.8	12.2	46.0	-33.8
915.97	H	359.0	164.0	21.6	27.2	2.6	0.0	31.2	20.1	46.0	-25.9
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

3.5.3 1-18GHz

3.5.3.1 UNII 1 (Channel 44)



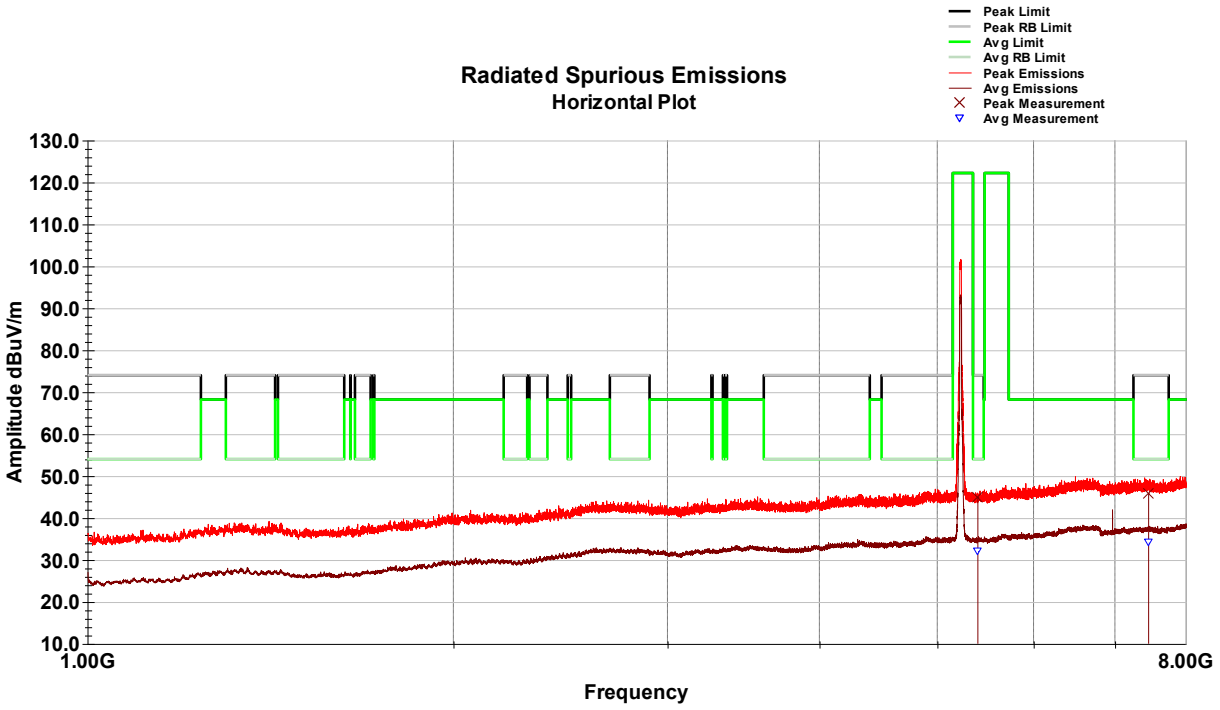
Vertical Emissions 1-8GHz Tabulated Data

Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
5134.61	V	141.0	184.0	48.9	34.2	4.1	0.0	42.3	45.0	74.0	-29.0
7275.84	V	53.0	142.0	48.9	35.7	4.6	0.0	42.0	47.2	74.0	-26.8
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
5134.61	V	141.0	184.0	36.0	34.2	4.1	0.0	42.3	32.1	54.0	-21.9
7275.84	V	53.0	142.0	36.3	35.7	4.6	0.0	42.0	34.6	54.0	-19.4
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



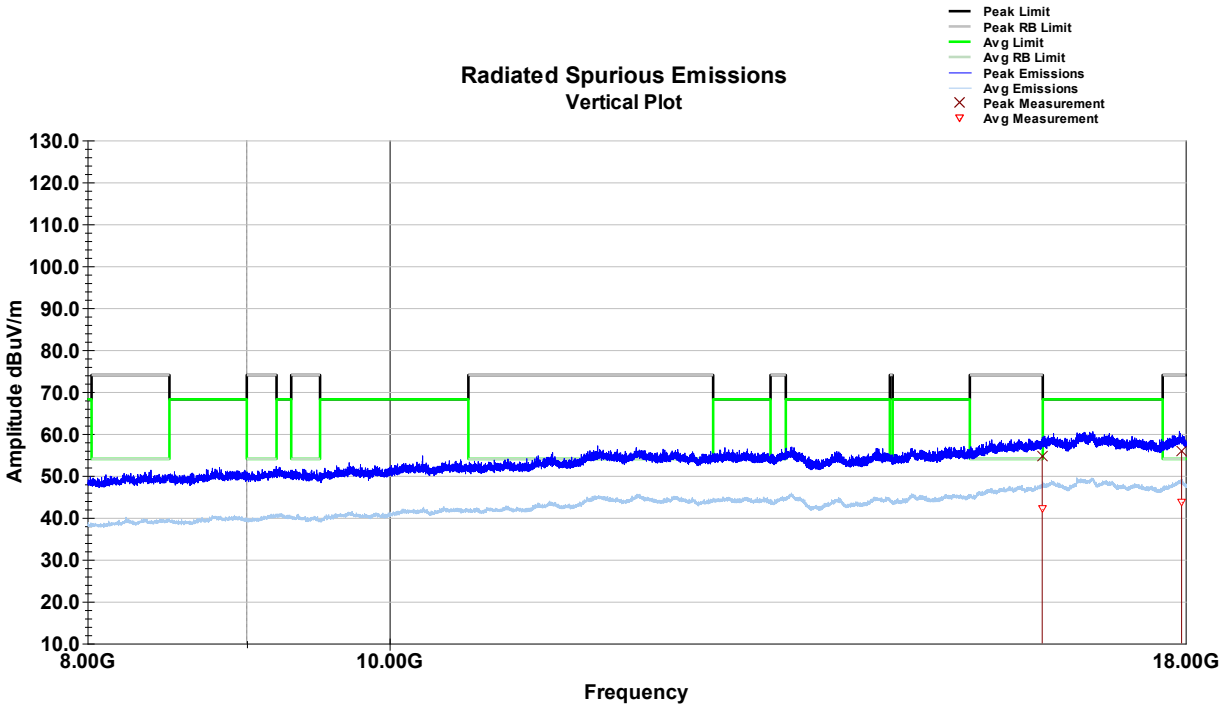
Horizontal Emissions 1-8GHz Tabulated Data

Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
5399.33	H	283.0	103.0	48.9	34.5	3.9	0.0	42.3	45.0	74.0	-29.0
7461.71	H	284.0	155.0	47.3	35.8	4.8	0.0	42.0	45.9	74.0	-28.1
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
5399.33	H	283.0	103.0	36.0	34.5	3.9	0.0	42.3	32.1	54.0	-21.9
7461.71	H	284.0	155.0	35.6	35.8	4.8	0.0	42.0	34.1	54.0	-19.9
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



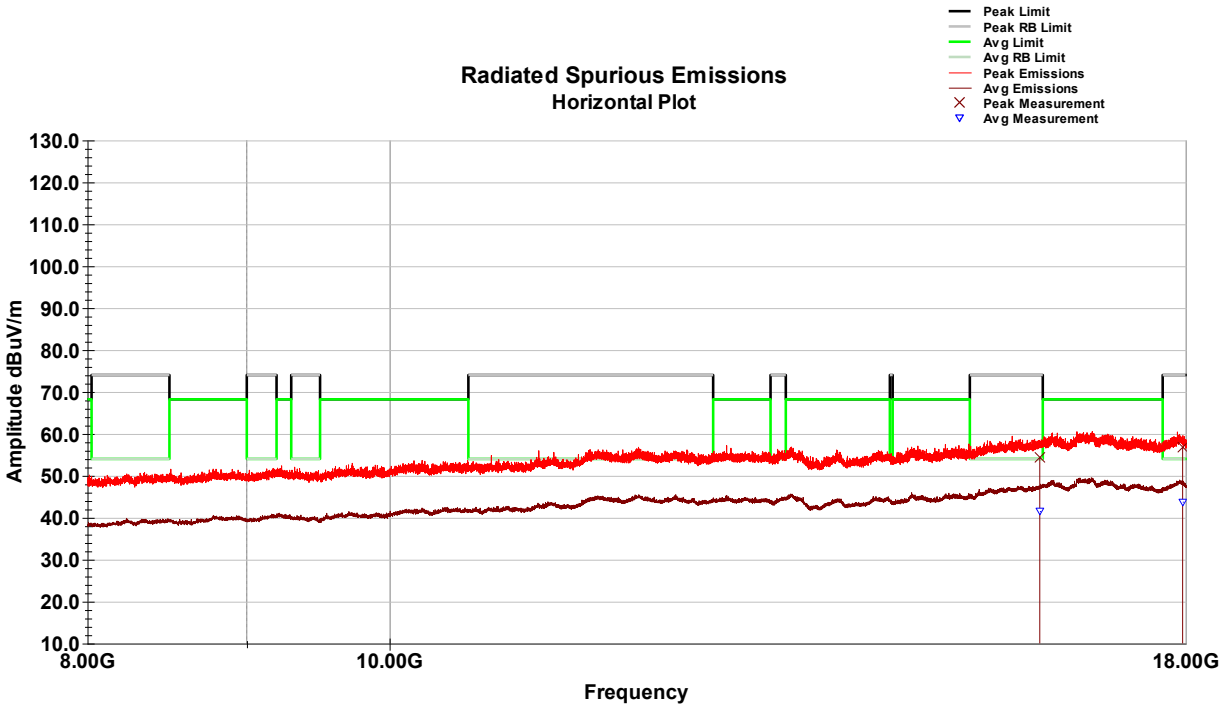
Vertical Emissions 8-18GHz Tabulated Data

Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
16192.91	V	38.0	104.0	48.0	40.8	6.6	0.0	40.7	54.7	74.0	-19.3
17947.96	V	296.0	100.0	48.1	41.0	7.4	0.0	40.7	55.8	74.0	-18.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
16192.91	V	38.0	104.0	35.4	40.8	6.6	0.0	40.7	42.1	54.0	-11.9
17947.96	V	296.0	100.0	36.0	41.0	7.4	0.0	40.7	43.8	54.0	-10.2
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



Vertical Emissions 8-18GHz Tabulated Data

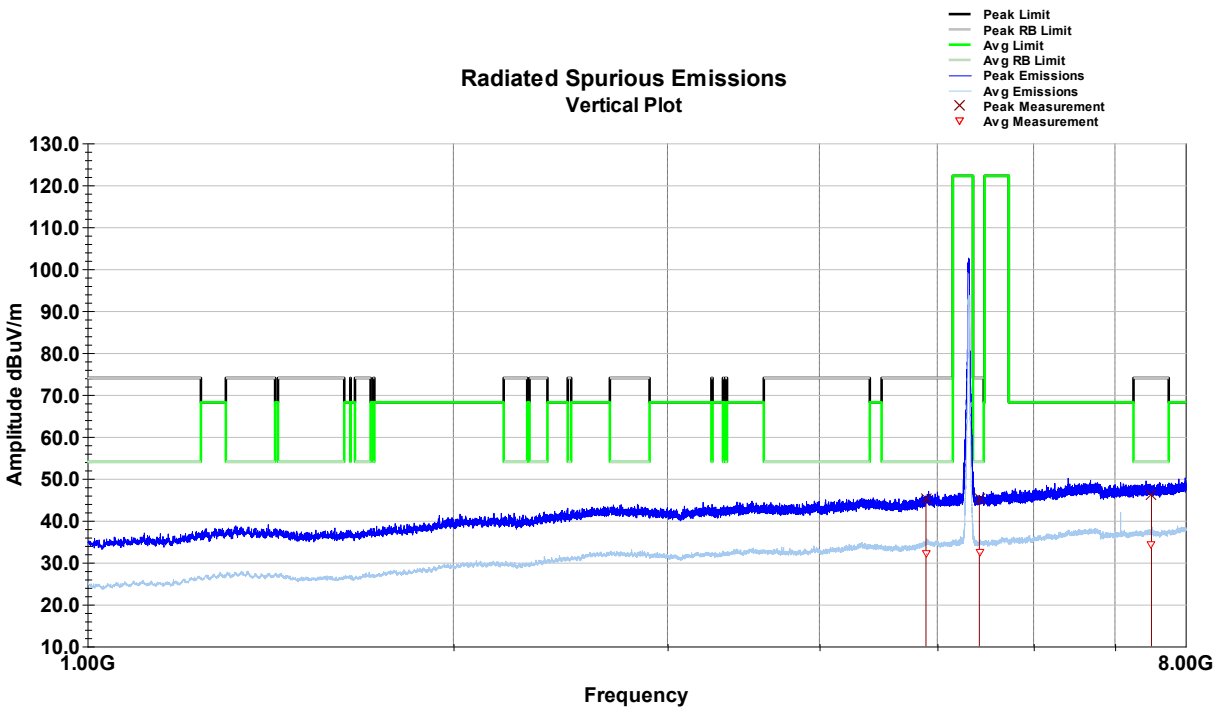
Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
16164.02	H	335.0	238.0	47.8	40.8	6.2	0.0	40.4	54.3	74.0	-19.7
17962.07	H	331.0	213.0	49.1	41.1	7.3	0.0	40.7	56.8	74.0	-17.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
16164.02	H	335.0	238.0	35.0	40.8	6.2	0.0	40.4	41.6	54.0	-12.4
17962.07	H	331.0	213.0	36.1	41.1	7.3	0.0	40.7	43.8	54.0	-10.2
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

3.5.3.2 UNII 2a (Channel 60)



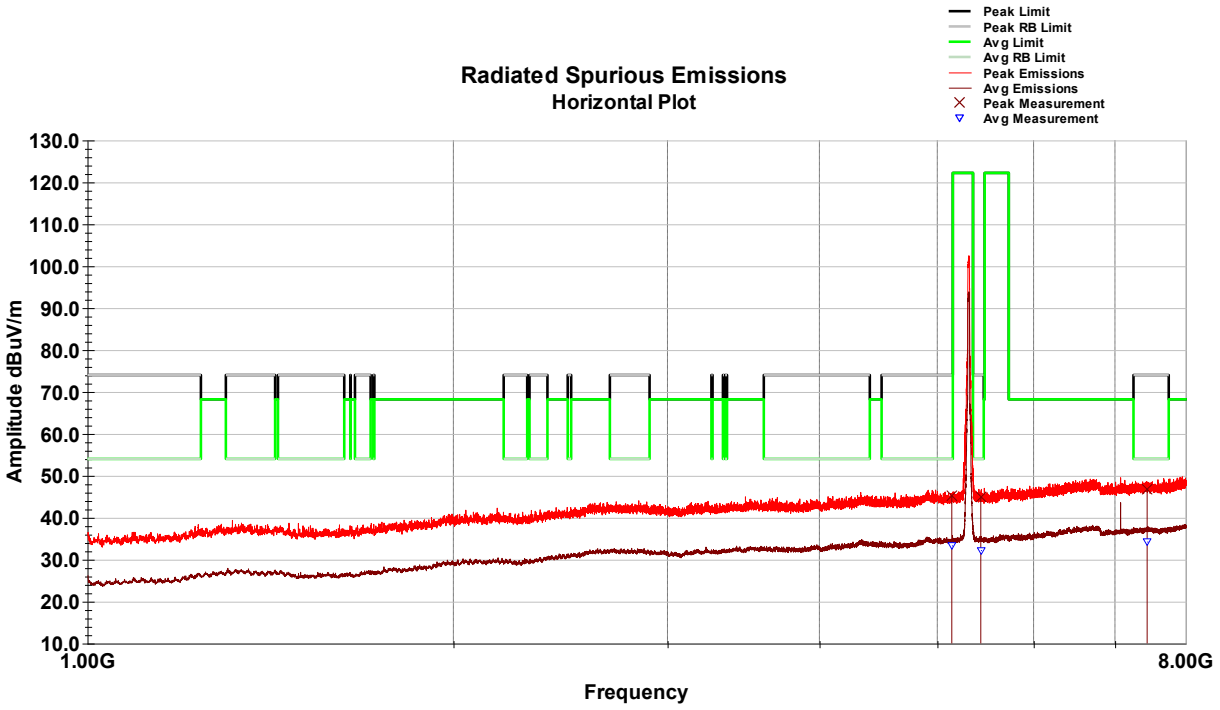
Vertical Emissions 1-8GHz Tabulated Data

Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4894.30	V	21.0	158.0	49.1	34.1	4.2	0.0	42.2	45.1	74.0	-28.9
5415.02	V	126.0	190.0	49.0	34.5	4.0	0.0	42.4	45.2	74.0	-28.8
7500.76	V	216.0	200.0	47.5	35.8	4.6	0.0	41.9	46.1	74.0	-27.9
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
4894.30	V	21.0	158.0	36.1	34.1	4.2	0.0	42.2	32.1	54.0	-21.9
5415.02	V	126.0	190.0	36.3	34.5	4.0	0.0	42.4	32.4	54.0	-21.6
7500.76	V	216.0	200.0	35.7	35.8	4.6	0.0	41.9	34.3	54.0	-19.7
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



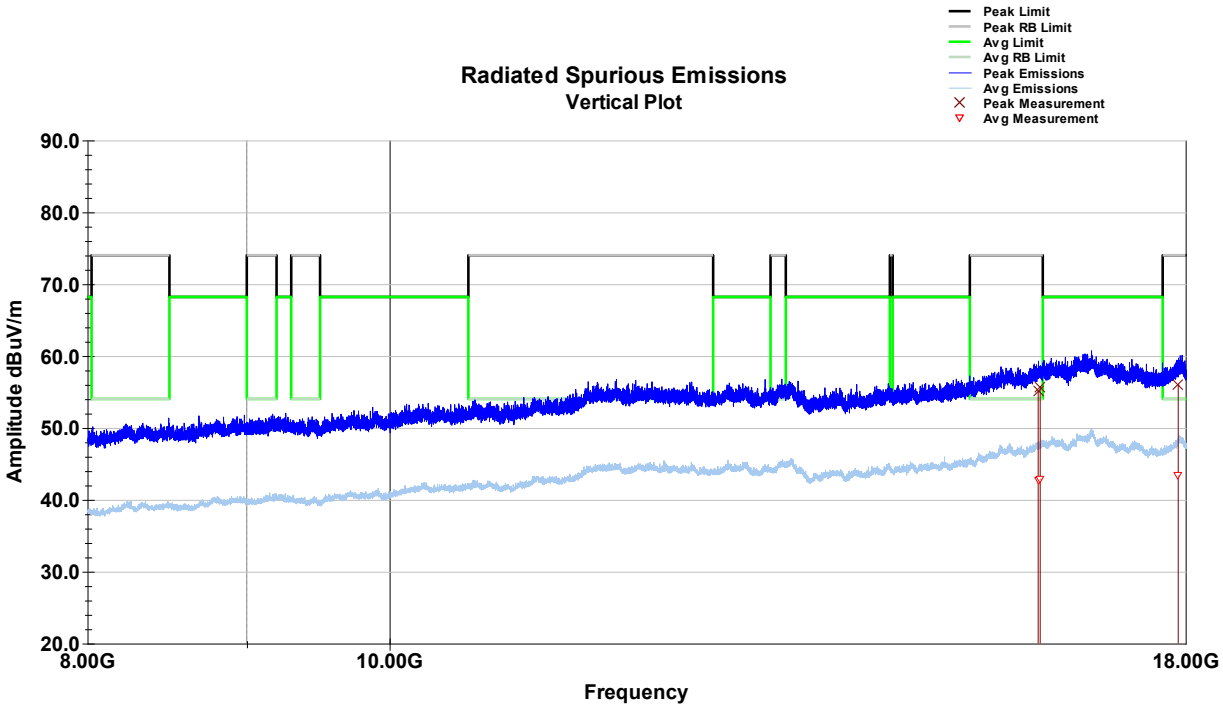
Horizontal Emissions 1-8GHz Tabulated Data

Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
5139.53	H	137.0	198.0	49.1	34.2	4.1	0.0	42.3	45.1	74.0	-28.9
5428.92	H	116.0	175.0	48.7	34.5	4.1	0.0	42.4	44.9	74.0	-29.1
7439.81	H	214.0	189.0	48.2	35.7	4.8	0.0	42.0	46.7	74.0	-27.3
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
5139.53	H	137.0	198.0	37.3	34.2	4.1	0.0	42.3	33.4	54.0	-20.6
5428.92	H	116.0	175.0	36.1	34.5	4.1	0.0	42.4	32.3	54.0	-21.7
7439.81	H	214.0	189.0	35.8	35.7	4.8	0.0	42.0	34.3	54.0	-19.7
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



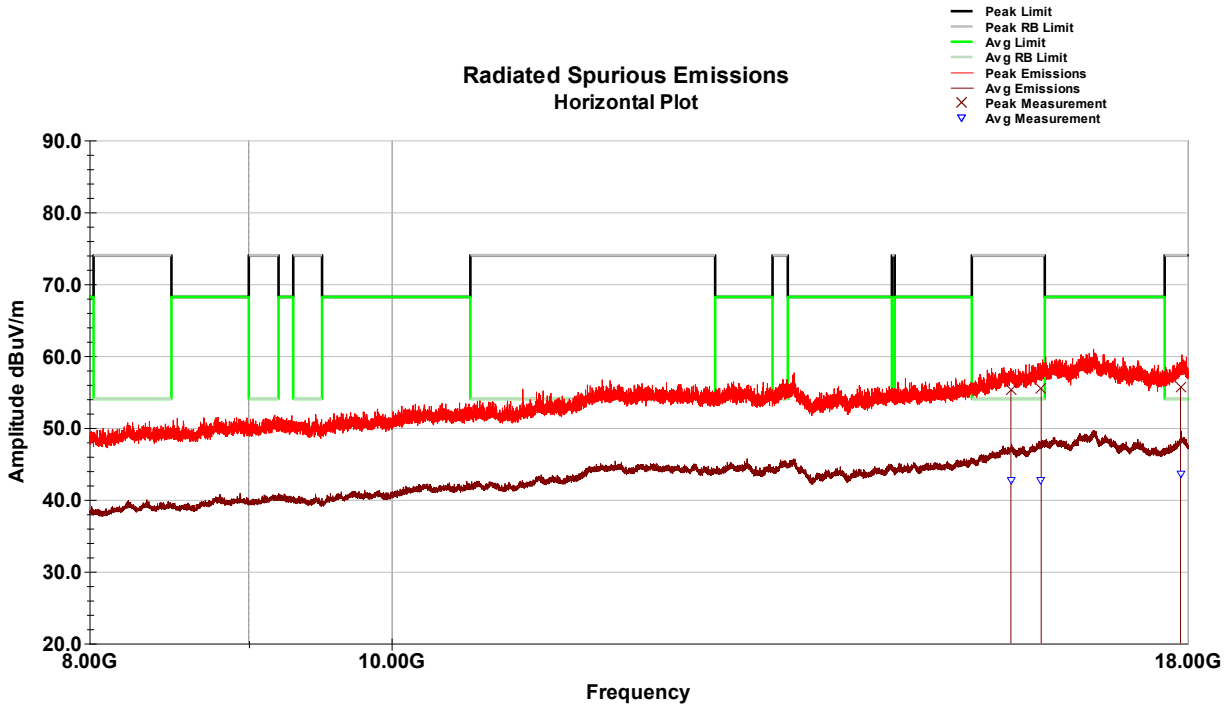
Vertical Emissions 8-18GHz Tabulated Data

Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
16144.79	V	223.0	136.0	48.5	40.8	6.2	0.0	40.3	55.2	74.0	-18.8
16168.78	V	249.0	247.0	49.1	40.8	6.3	0.0	40.5	55.7	74.0	-18.3
17904.55	V	208.0	173.0	48.4	41.0	7.3	0.0	40.7	56.0	74.0	-18.0
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
16144.79	V	223.0	136.0	36.0	40.8	6.2	0.0	40.3	42.7	54.0	-11.3
16168.78	V	249.0	247.0	36.3	40.8	6.3	0.0	40.5	42.9	54.0	-11.1
17904.55	V	208.0	173.0	35.8	41.0	7.3	0.0	40.7	43.4	54.0	-10.6
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



Horizontal Emissions 8-18GHz Tabulated Data

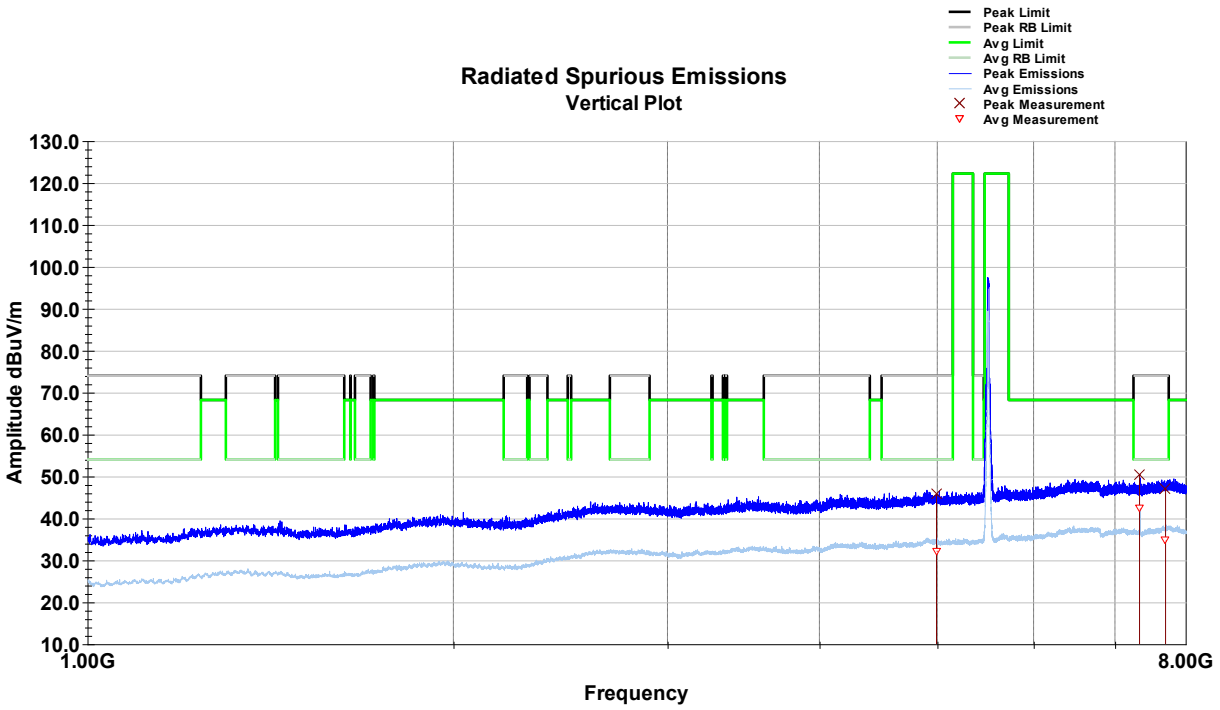
Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
15799.09	H	338.0	156.0	48.8	40.6	6.3	0.0	40.5	55.2	74.0	-18.8
16157.57	H	327.0	250.0	49.0	40.8	6.1	0.0	40.3	55.5	74.0	-18.5
17907.91	H	103.0	236.0	48.1	41.0	7.4	0.0	40.7	55.7	74.0	-18.3
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
15799.09	H	338.0	156.0	36.2	40.6	6.3	0.0	40.5	42.6	54.0	-11.4
16157.57	H	327.0	250.0	36.2	40.8	6.1	0.0	40.3	42.7	54.0	-11.3
17907.91	H	103.0	236.0	35.8	41.0	7.4	0.0	40.7	43.5	54.0	-10.5
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

3.5.3.3 UNII 2C (Channel 100)



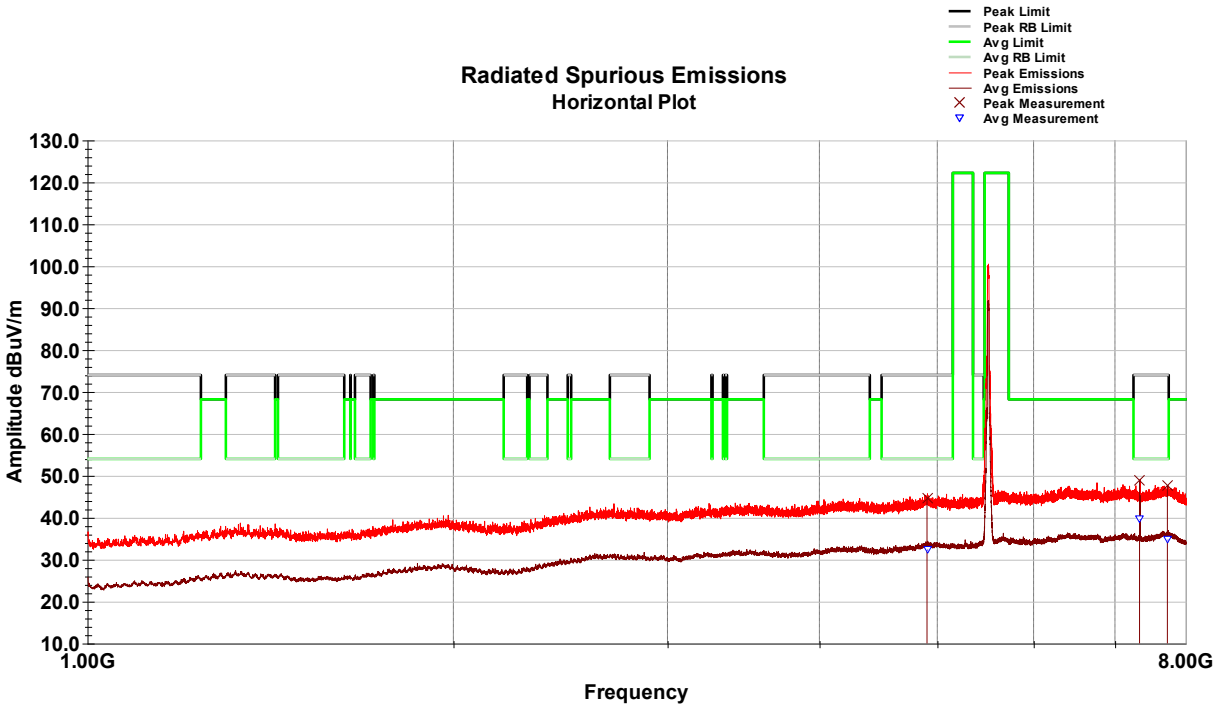
Vertical Emissions 1-8GHz Tabulated Data

Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4992.87	V	353.0	184.0	49.7	34.1	4.1	0.0	42.3	45.7	74.0	-28.3
7333.36	V	288.0	125.0	52.1	35.7	4.7	0.0	42.0	50.5	74.0	-23.5
7704.29	V	166.0	108.0	48.5	35.9	4.6	0.0	41.9	47.1	74.0	-26.9
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
4992.87	V	353.0	184.0	36.3	34.1	4.1	0.0	42.3	32.3	54.0	-21.7
7333.36	V	288.0	125.0	43.9	35.7	4.7	0.0	42.0	42.3	54.0	-11.7
7704.29	V	166.0	108.0	36.2	35.9	4.6	0.0	41.9	34.8	54.0	-19.2
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



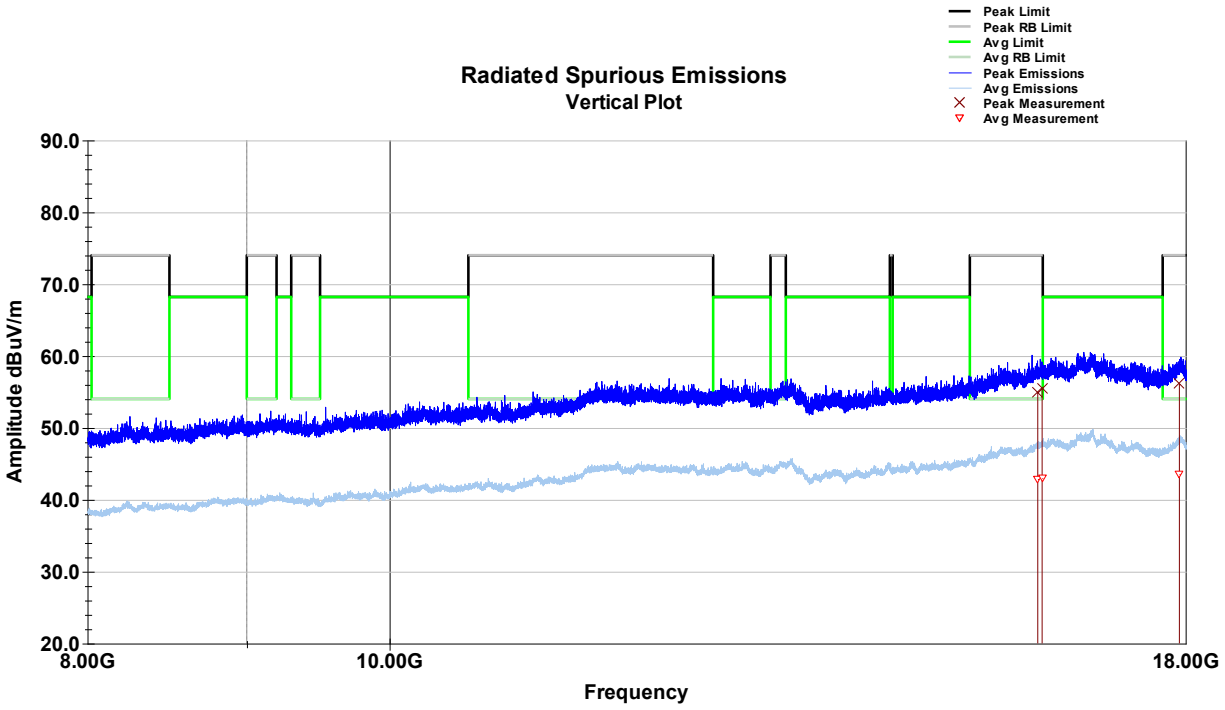
Horizontal Emissions 1-8GHz Tabulated Data

Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4903.73	H	221.0	136.0	48.4	34.1	4.3	0.0	42.2	44.6	74.0	-29.4
7333.98	H	-1.0	112.0	50.3	35.7	4.7	0.0	42.0	48.8	74.0	-25.2
7730.44	H	33.0	116.0	49.0	35.9	4.8	0.0	42.0	47.8	74.0	-26.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

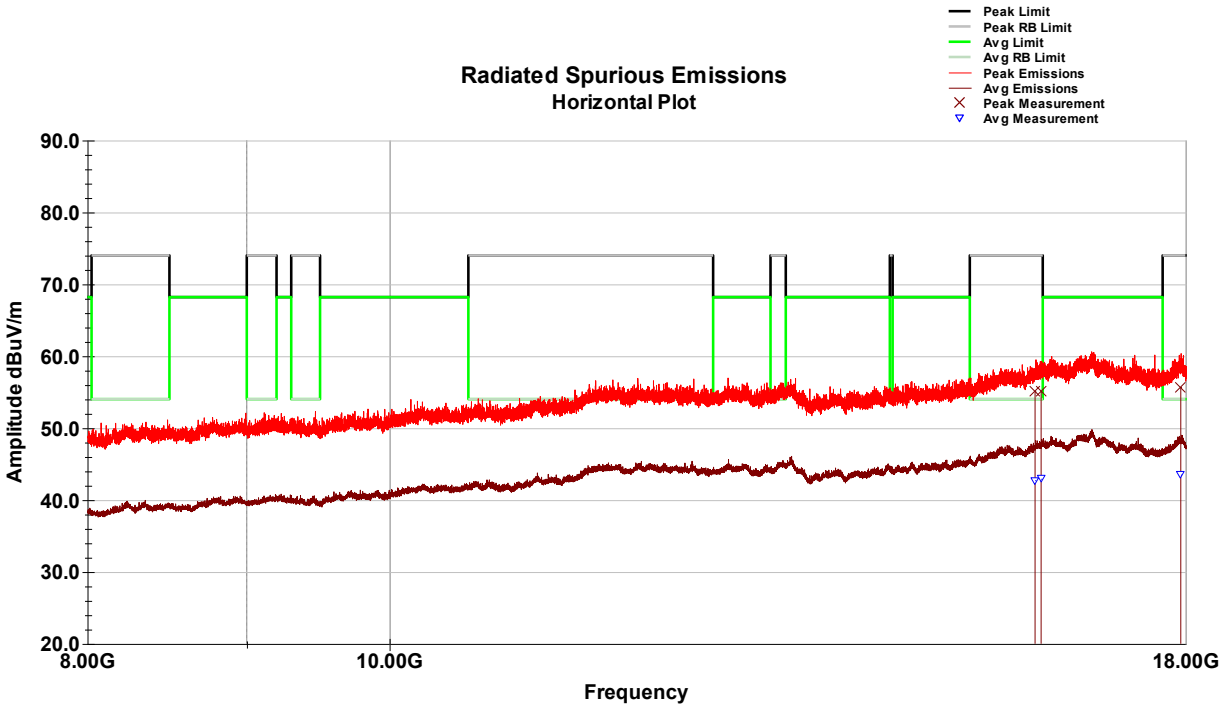
Avg

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
4903.73	H	221.0	136.0	36.2	34.1	4.3	0.0	42.2	32.4	54.0	-21.6
7333.98	H	-1.0	112.0	41.2	35.7	4.7	0.0	42.0	39.6	54.0	-14.4
7730.44	H	33.0	116.0	36.0	35.9	4.8	0.0	42.0	34.8	54.0	-19.2
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
16140.59	V	201.0	209.0	48.3	40.8	6.3	0.0	40.4	55.0	74.0	-19.0
16191.89	V	49.0	136.0	48.8	40.8	6.6	0.0	40.7	55.5	74.0	-18.5
17918.82	V	349.0	183.0	48.4	41.0	7.4	0.0	40.7	56.1	74.0	-17.9
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

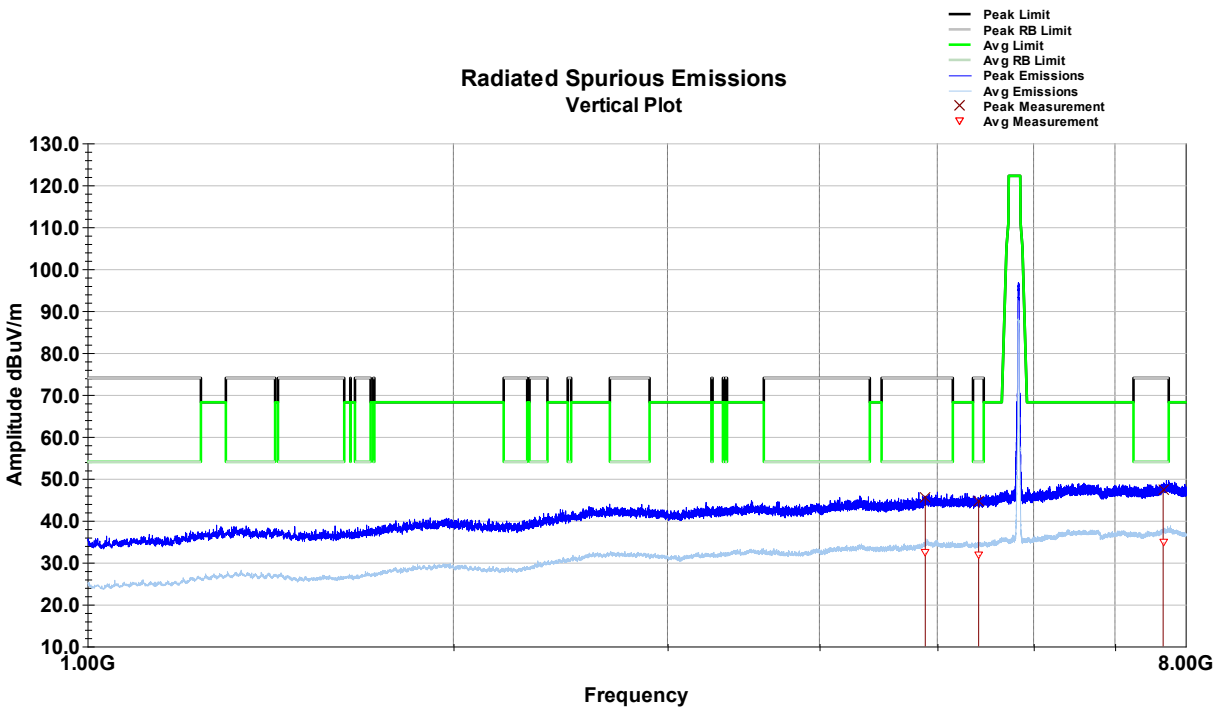
Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
16140.59	V	201.0	209.0	36.2	40.8	6.3	0.0	40.4	42.9	54.0	-11.1
16191.89	V	49.0	136.0	36.3	40.8	6.6	0.0	40.7	43.0	54.0	-11.0
17918.82	V	349.0	183.0	35.9	41.0	7.4	0.0	40.7	43.6	54.0	-10.4
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
16108.00	H	212.0	246.0	48.3	40.9	6.7	0.0	40.7	55.1	74.0	-18.9
16180.88	H	293.0	170.0	48.4	40.8	6.4	0.0	40.6	55.1	74.0	-18.9
17937.85	H	349.0	104.0	47.9	41.0	7.4	0.0	40.7	55.7	74.0	-18.3
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

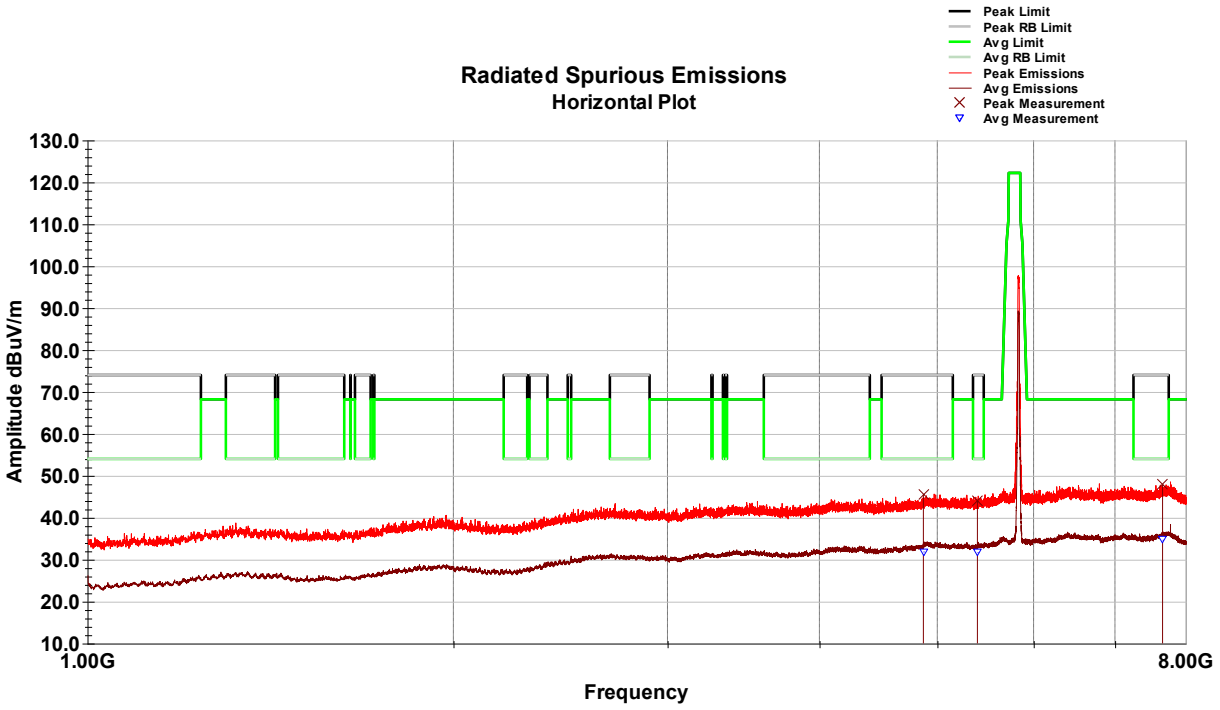
Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
16108.00	H	212.0	246.0	36.0	40.9	6.7	0.0	40.7	42.8	54.0	-11.2
16180.88	H	293.0	170.0	36.3	40.8	6.4	0.0	40.6	42.9	54.0	-11.1
17937.85	H	349.0	104.0	35.8	41.0	7.4	0.0	40.7	43.5	54.0	-10.5
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

3.5.3.4 UNII 3 (Channel 165)



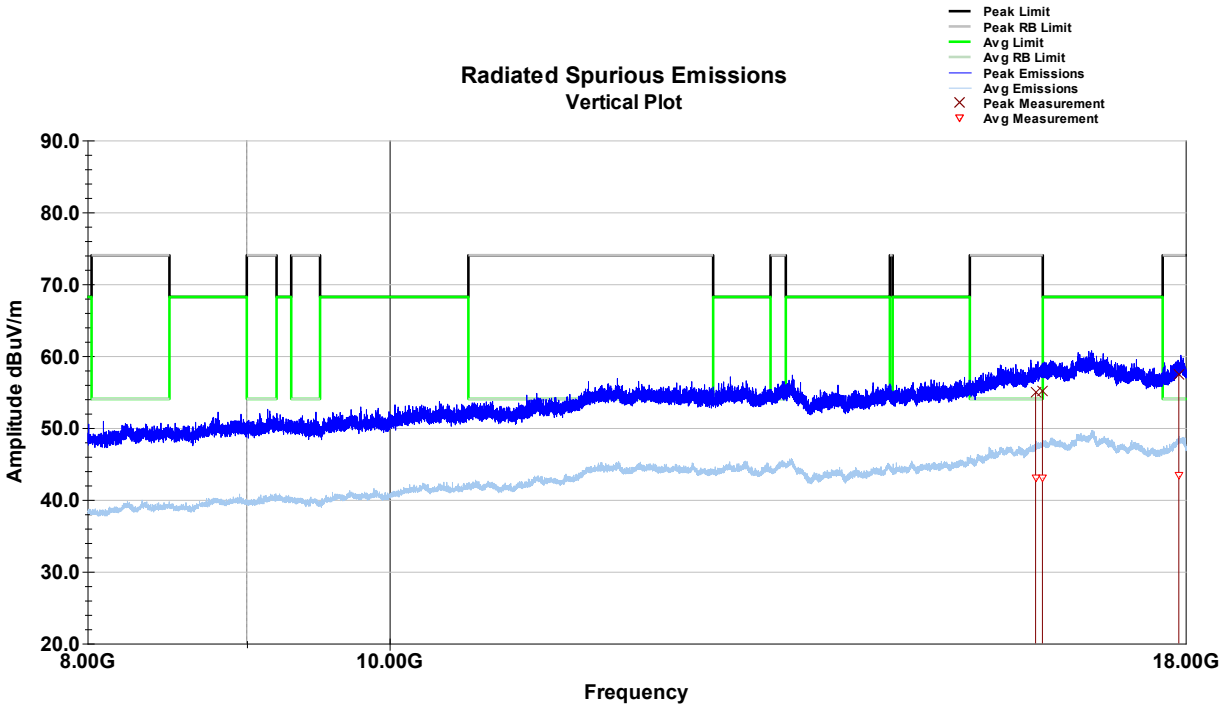
Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4887.55	V	303.0	183.0	49.5	34.1	4.1	0.0	42.2	45.5	74.0	-28.5
5407.81	V	199.0	117.0	48.6	34.5	3.9	0.0	42.3	44.7	74.0	-29.3
7668.58	V	193.0	117.0	48.7	35.8	4.9	0.0	42.1	47.3	74.0	-26.7
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
4887.55	V	303.0	183.0	36.3	34.1	4.1	0.0	42.2	32.3	54.0	-21.7
5407.81	V	199.0	117.0	35.8	34.5	3.9	0.0	42.3	31.8	54.0	-22.2
7668.58	V	193.0	117.0	36.1	35.8	4.9	0.0	42.1	34.8	54.0	-19.2
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



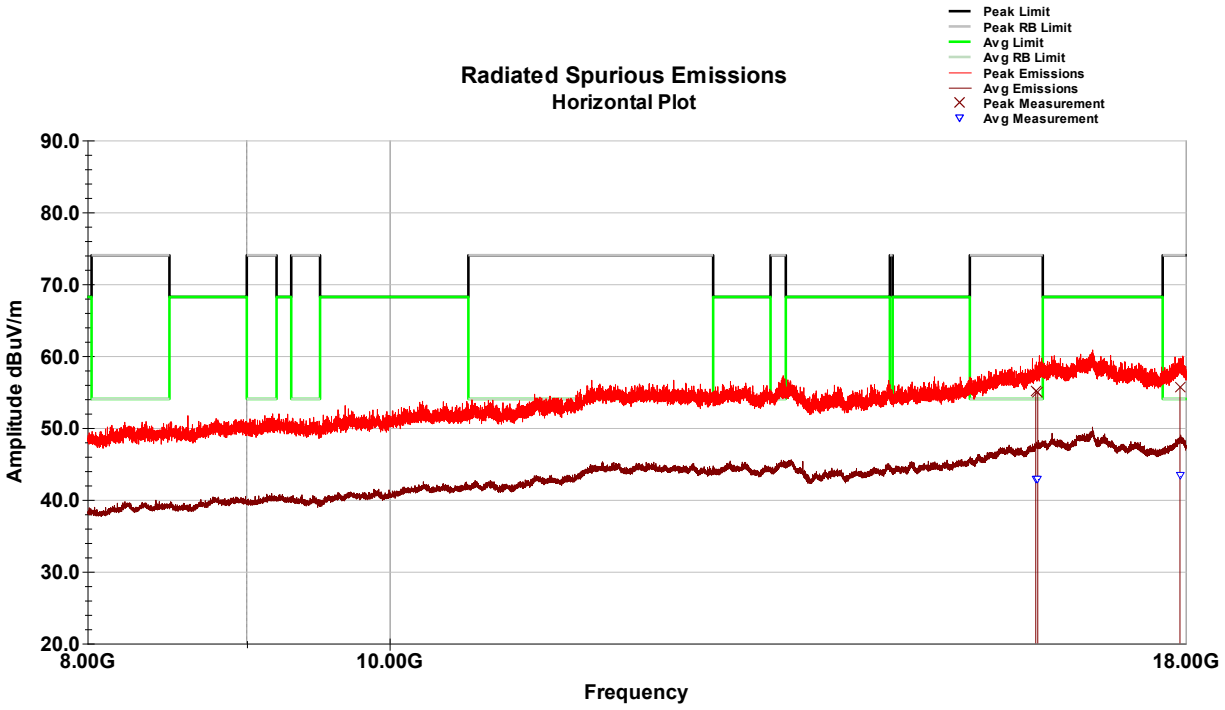
Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4869.98	H	82.0	113.0	49.9	34.1	3.9	0.0	42.3	45.6	74.0	-28.4
5394.75	H	333.0	112.0	47.9	34.5	3.9	0.0	42.3	44.0	74.0	-30.0
7660.46	H	70.0	117.0	49.2	35.8	5.0	0.0	42.1	47.9	74.0	-26.1
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
4869.98	H	82.0	113.0	36.2	34.1	3.9	0.0	42.3	32.0	54.0	-22.0
5394.75	H	333.0	112.0	35.7	34.5	3.9	0.0	42.3	31.8	54.0	-22.2
7660.46	H	70.0	117.0	36.0	35.8	5.0	0.0	42.1	34.7	54.0	-19.3
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
16114.25	V	328.0	155.0	48.1	40.9	6.6	0.0	40.7	54.9	74.0	-19.1
16194.87	V	38.0	234.0	48.5	40.8	6.6	0.0	40.7	55.2	74.0	-18.8
17910.98	V	181.0	211.0	49.7	41.0	7.4	0.0	40.7	57.4	74.0	-16.6
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
16114.25	V	328.0	155.0	36.2	40.9	6.6	0.0	40.7	43.0	54.0	-11.0
16194.87	V	38.0	234.0	36.4	40.8	6.6	0.0	40.7	43.1	54.0	-10.9
17910.98	V	181.0	211.0	35.6	41.0	7.4	0.0	40.7	43.3	54.0	-10.7
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

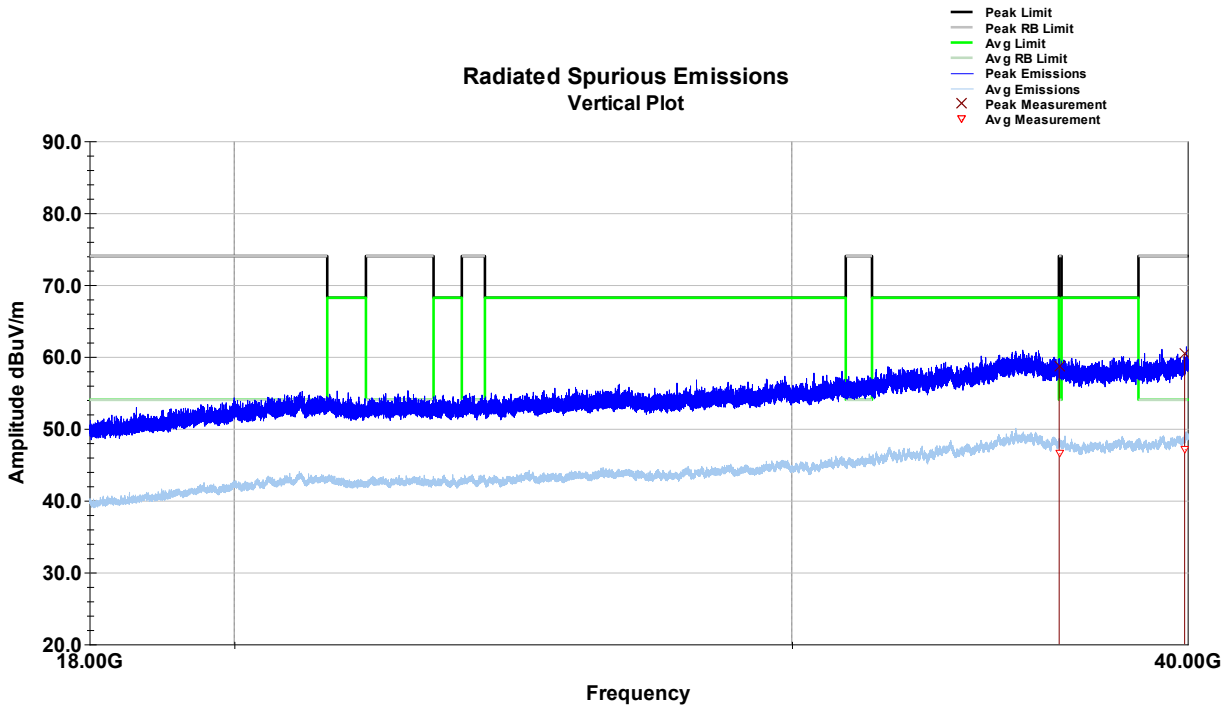


Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
16116.39	H	50.0	129.0	48.4	40.8	6.6	0.0	40.7	55.2	74.0	-18.8
16140.21	H	225.0	108.0	48.2	40.8	6.3	0.0	40.4	54.9	74.0	-19.1
17926.96	H	297.0	209.0	47.9	41.0	7.4	0.0	40.7	55.6	74.0	-18.4
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
16116.39	H	50.0	129.0	36.1	40.8	6.6	0.0	40.7	42.9	54.0	-11.1
16140.21	H	225.0	108.0	36.2	40.8	6.3	0.0	40.4	42.9	54.0	-11.1
17926.96	H	297.0	209.0	35.6	41.0	7.4	0.0	40.7	43.3	54.0	-10.7
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

3.5.5 18-40GHz

3.5.5.1 UNII 1 (Channel 44)

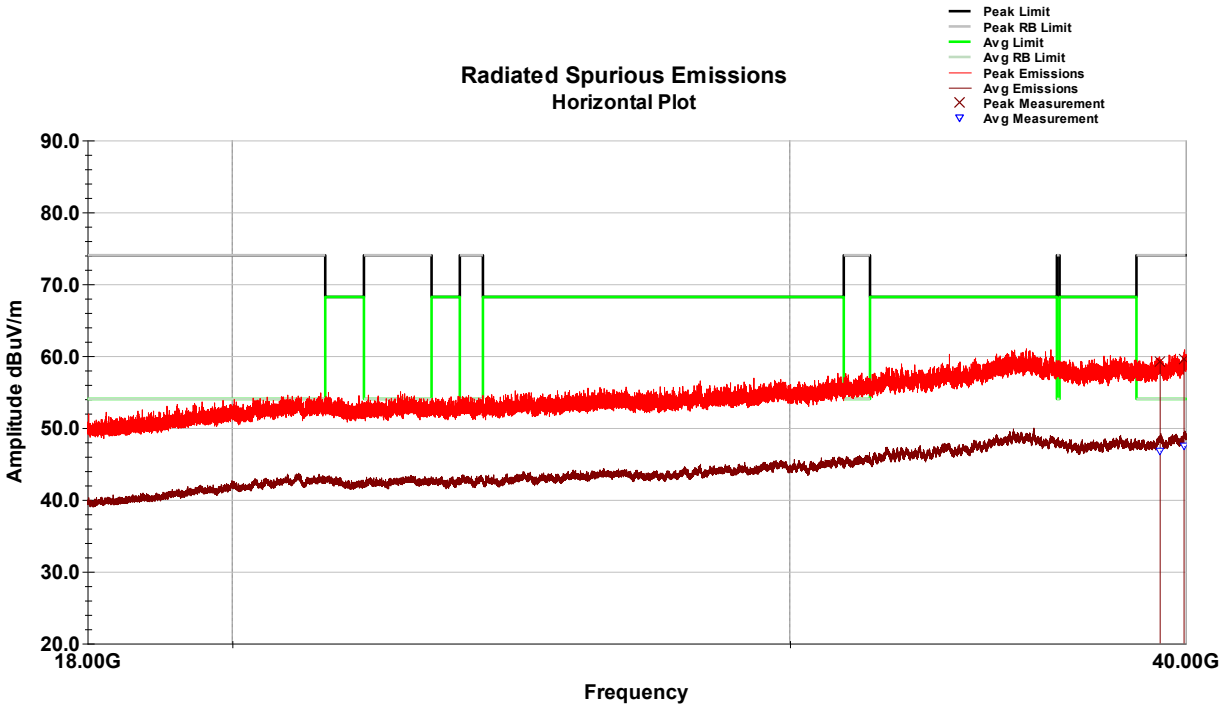


Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
36437.06	V	107.0	237.0	55.7	48.7	14.0	-9.5	50.2	58.7	74.0	-15.3
39917.46	V	64.0	178.0	55.6	48.1	14.7	-9.5	48.5	60.4	74.0	-13.6
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Average

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
36437.06	V	107.0	237.0	43.6	48.7	14.0	-9.5	50.2	46.6	54.0	-7.4
39917.46	V	64.0	178.0	42.4	48.1	14.7	-9.5	48.5	47.1	54.0	-6.9
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											



Peak

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Pk dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Pk dBuV/m	Limit dBuV/m	Margin dB
39270.91	H	311.0	224.0	55.7	47.7	14.6	-9.5	49.2	59.2	74.0	-14.8
39960.15	H	332.0	237.0	54.6	48.1	14.7	-9.5	48.4	59.5	74.0	-14.5
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Average

Frequency MHz	Polarity V/H	Azimuth degrees	Height cm	Raw Avg dBuV	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
39270.91	H	311.0	224.0	43.3	47.7	14.6	-9.5	49.2	46.8	54.0	-7.2
39960.15	H	332.0	237.0	42.6	48.1	14.7	-9.5	48.4	47.5	54.0	-6.5
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

4 Measurement Uncertainty

The measurement uncertainty figures are calculated in accordance with TR 100 028-1 [2] and correspond to an expansion factor (coverage factor) k = 2 (which provides confidence levels of 95.45 % in the case where the distributions characterizing the actual measurement uncertainties are normal (Gaussian)).

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

Parameter	Expanded Uncertainty for Normal k factor equal to 2	
	Required	Laboratory Actual
Radio Frequency	±1 x 10-5	±9.8 x 10-8
all emissions, radiated	±6 dB	±4.8 dB
temperature	±1°C	±0.5°C
humidity	±5 %	±3.5%

5 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	24 June 2025
1	Updated Description of EUT and Antenna info	19 August 2025
2	Per TCB comments, Removed AC conducted results and RSS-210, Issue 9 standard. Updated above 18Ghz results. And, updated test standards.	6 June 2026
3	Updated test standard versions on pg 1 & 5	30 June 2026