7 Emissions in Restricted Frequency Bands

7.1 *Test Result*

Test Description	Test Specification		Test Result
Emissions in Restricted Frequency Bands	15.247(d) 15.205, 15.209	RSS-247 S5.5 RSS-GEN S8.9, S8.10	Compliant

7.2 *Test Method*

Radiated emissions in restricted frequency bands were measured using methods defined in ANSI C63.10 clause 11.12. These procedures are referenced in KDB 558074 D01 15.247 Meas Guidance v05r02.

Lowest, middle and highest channels were investigated – the device was commanded to continuously transmit on channels 0, 19 and 39.

Test distances for radiated tests:

30 to 1000 MHz - The EUT to measurement antenna distance was 3 meters
1 to 18 GHz - The EUT to measurement antenna distance was 3 meters
18 to 26 GHz - The EUT to measurement antenna distance was 1 meter

Limits within restricted bands of operation:

Frequency	Limits(1)		Peak Limits dBuV/m
	Microvolts/m	dBuV/m	
30 - 88 MHz	100	40 (2)	--
88 - 216 MHz	150	43.5 (2)	--
216 - 960 MHz	200	46 (2)	--
960 - 1000 MHz	500	54 (2)	--
1 - 40 GHz	500	54 (3)	74

(1) These limits are applicable to emissions outside of the intentional transmit frequency band.
(2) Quasi-peak limit
(3) Average limit

7.3 *Test Site*

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

Left Insole

Environmental Conditions	30-1000MHz	1-18GHz	18-26GHz
Temperature:	21.99 °C	23 °C	22.76 °C
Relative Humidity:	28.7 %	33.88 %	54.3 %
Atmospheric Pressure:	97.45 kPa	97.47 kPa	97.46 kPa

Right Insole

Environmental Conditions	30-1000MHz	1-18GHz	18-26GHz
Temperature:	22.53 °C	23.58 °C	22.53 °C
Relative Humidity:	60.5 %	56.2 %	60.5 %
Atmospheric Pressure:	97.56 kPa	97.54 kPa	97.56 kPa

7.4 *Test Equipment*

Left Insole

30-1000MHz

Test End Date: 26-Dec-2024 Tester: SGM

Equipment	Model	Manufacturer	Asset Number	Cal Date	Cal Due Date
ANTENNA, BILOG	JB6	SUNOL	B079689	16-May-2024	16-May-2026
N to N RF Cable	EM-B810NM-276	ECHELON	24022	15-Nov-2024	15-Nov-2025
N-FEMALE TO N-MALE RF CABLE	EM-B810NMNF-118	ECHELON	23010	17-Apr-2024	17-Apr-2025
RF CABLE, NM TO NM.	90-195-157	TELEDYNE STORM MICROWAVE	21019	20-Mar-2024	20-Mar-2025
RF CABLE	SF106	HUBER & SUHNER	B085888	7-Aug-2024	7-Aug-2025
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	15003	8-Oct-2024	8-Oct-2025
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	14-Nov-2024	14-Nov-2025

1-18GHz

Test End Date: 24-Dec-2024 Tester: SGM

Equipment	Model	Manufacturer	Asset Number	Cal Date	Cal Due Date
ANTENNA, BILOG	JB6	SUNOL	B079689	16-May-2024	16-May-2026
N to N RF Cable	EM-B810NM-276	ECHELON	24022	15-Nov-2024	15-Nov-2025
N-FEMALE TO N-MALE RF CABLE	EM-B810NMNF-118	ECHELON	23010	17-Apr-2024	17-Apr-2025
RF CABLE, NM TO NM.	90-195-157	TELEDYNE STORM MICROWAVE	21019	20-Mar-2024	20-Mar-2025
RF CABLE	SF106	HUBER & SUHNER	B085888	7-Aug-2024	7-Aug-2025
LOW NOISE AMPLIFIER	ZKL-2+	MINI-CIRCUITS	B079817	7-Aug-2024	7-Aug-2025
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	14-Nov-2024	14-Nov-2025

18-26GHz

Test End Date: 24-Dec-2024 Tester: LM

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, DRG HORN (SMALL)	3116B	ETS LINDGREN	B079695	2-Aug-2024	2-Aug-2026
SMA to SMA RF Cable	NC12-K1K1-138	MEGAPHASE	22002	6-Feb-2024	6-Feb-2025
2.92MM MALE TO2.92MM MALE RF CABLE	HULL140A-29P-29P-60	HASCO COMPONENTS	18033	20-Mar-2024	20-Mar-2025
LOW NOISE AMPLIFIER	NSP1840-HG	MITEQ	B087572	21-Oct-2024	21-Oct-2025
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	14-Nov-2024	14-Nov-2025

Software: “RSE 30-1000 MHz T7 220318” TILE 7 profile dated 18 Mar 2022
“RSE 1-18 GHz T7 210212” TILE 7 profile dated 12 Feb 2021
“RSE 18-26 GHz T7 240607” TILE 7 profile dated 07 June 2024

Right Insole

30-1000MHz

Test End Date: 10-Jun-2025 Tester: ZH

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, BILOG	JB6	SUNOL	B079689	16-May-2024	16-May-2026
N to N RF Cable	EM-B810NM-276	ECHELON	24022	15-Nov-2024	15-Nov-2025
N-FEMALE TO N-MALE RF CABLE	EM-B810NMNF-118	ECHELON	23010	4-Apr-2025	4-Apr-2026
N to N RF Cable	RF280-06SP-06SP-2000	SAMTEC	23012	5-May-2025	5-May-2026
RF CABLE	SF106	HUBER & SUHNER	B085888	7-Aug-2024	7-Aug-2025
LOW NOISE AMPLIFIER	ZKL-2+	MINI-CIRCUITS	B079817	7-Aug-2024	7-Aug-2025
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	14-Nov-2024	14-Nov-2025

1-18GHz

Test End Date: 5-Jun-2025 Tester: ZH

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, DRG HORN (MEDIUM)	3117	ETS LINDGREN	B079691	2-Aug-2024	2-Aug-2026
N to N RF Cable	EM-B810NM-276	ECHELON	24022	15-Nov-2024	15-Nov-2025
RF CABLE	SF106	HUBER & SUHNER	B085888	7-Aug-2024	7-Aug-2025
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	B094463	5-Jul-2024	5-Jul-2025
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	14-Nov-2024	14-Nov-2025
FILTER, HIGH PASS, >2800MHZ	HPM50111	MICRO-TRONICS	22017	14-Jun-2024	14-Jun-2025

18-26GHz

Test End Date: 10-Jun-2025 Tester: ZH

Equipment	Model	Manufacturer	Asset	Cal Date	Cal Due Date
ANTENNA, DRG HORN (SMALL)	3116B	ETS LINDGREN	B079695	2-Aug-2024	2-Aug-2026
SMA to SMA RF Cable	NC12-K1K1-138	MEGAPHASE	22002	3-Apr-2025	3-Apr-2026
RF CABLE SMA	HULL150A-29P-29P-36	HASCO COMPONENTS	19101	3-Apr-2025	3-Apr-2026
LOW NOISE AMPLIFIER	NSP1840-HG	MITEQ	B087572	21-Oct-2024	21-Oct-2025
EMI TEST RECEIVER	ESW44	ROHDE & SCHWARZ	22027	14-Nov-2024	14-Nov-2025

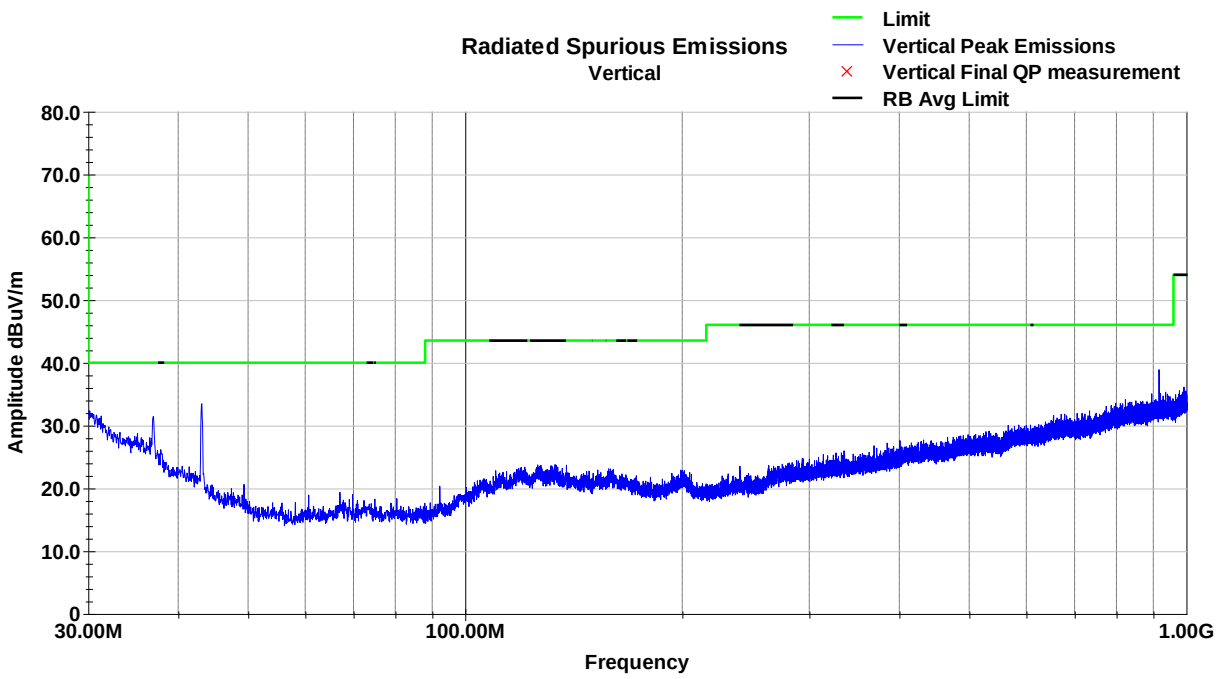
Software: “RSE 30-1000 MHz T7 240701” TILE 7 profile dated 01 July 2024
“RSE 1-18 GHz T7 210212” TILE 7 profile dated 12 Feb 2021
“RSE 18-26 GHz T7 210212” TILE 7 profile dated 12 Feb 2021

7.5 *Test Data – Left Insole*

7.5.1 30-1000 MHz

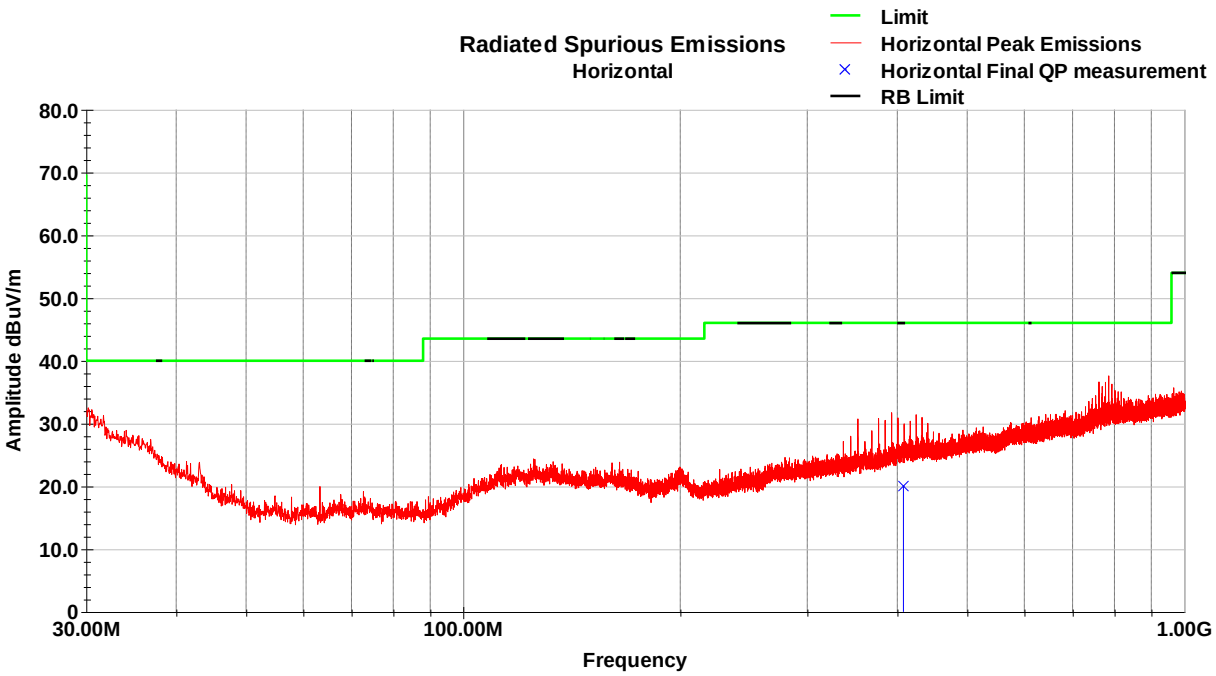
No significant deviation based on axis or channel in the 30-1000MHz range – worst case shown.

30-1000 MHz Vertical Mid Channel - Plot



Emissions do not fall in restricted bands.

30-1000 MHz Horizontal Mid Channel - Plot

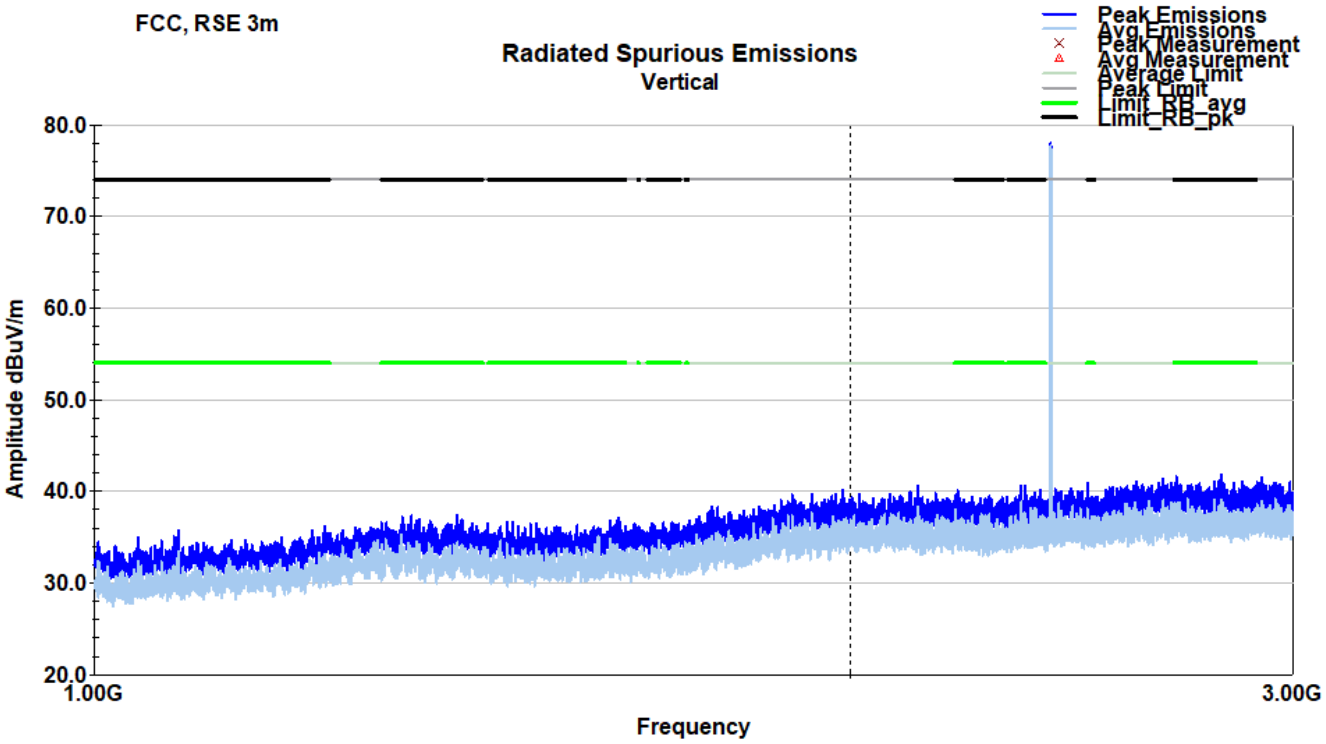


30-1000 MHz Horizontal Mid Channel – Tabular Data

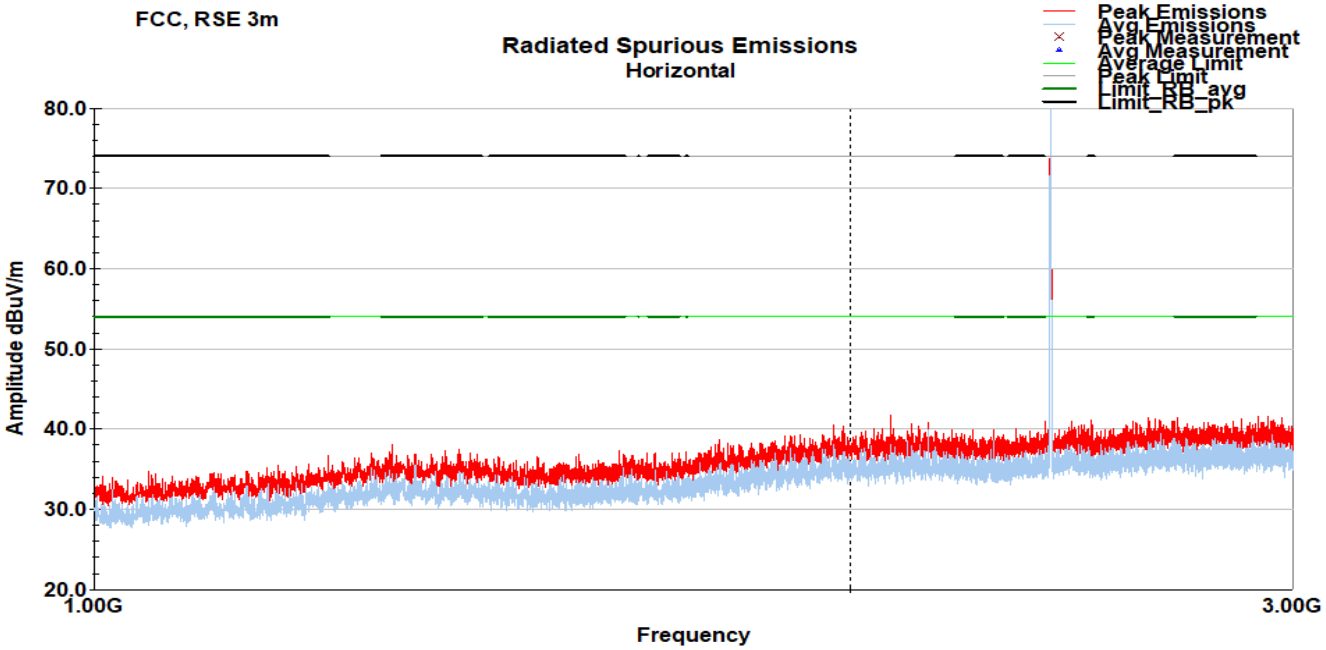
Frequency MHz	Raw QP (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	QP Value (dBuV/m)	Limit (dBuV/m)	Margin (dB)
407.90	27.7	H	83.0	111.0	20.5	1.8	30.0	20.1	46.0	-25.9
QP Value = Raw QP + AF + Loss - Amp										
Margin = QP Value - Limit										

7.5.2 1-18 GHz

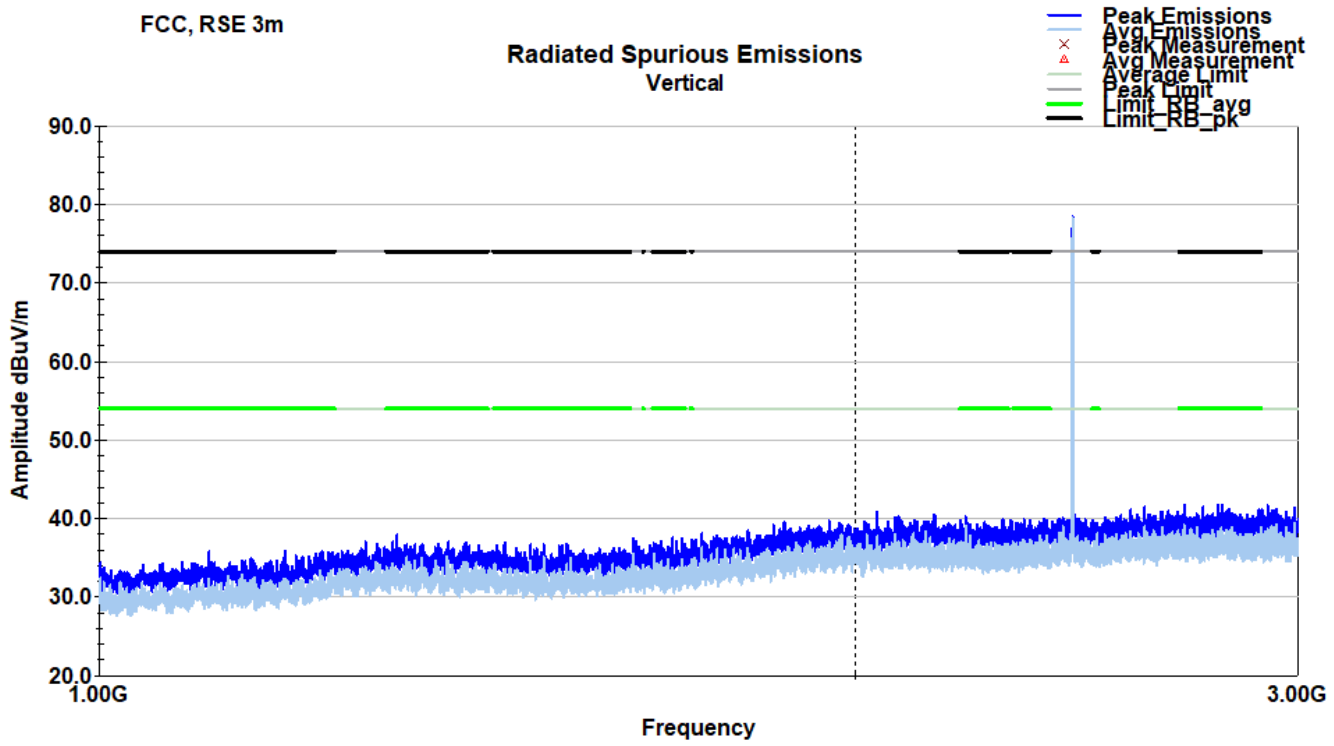
1-3GHz Vertical Low Channel - Plot



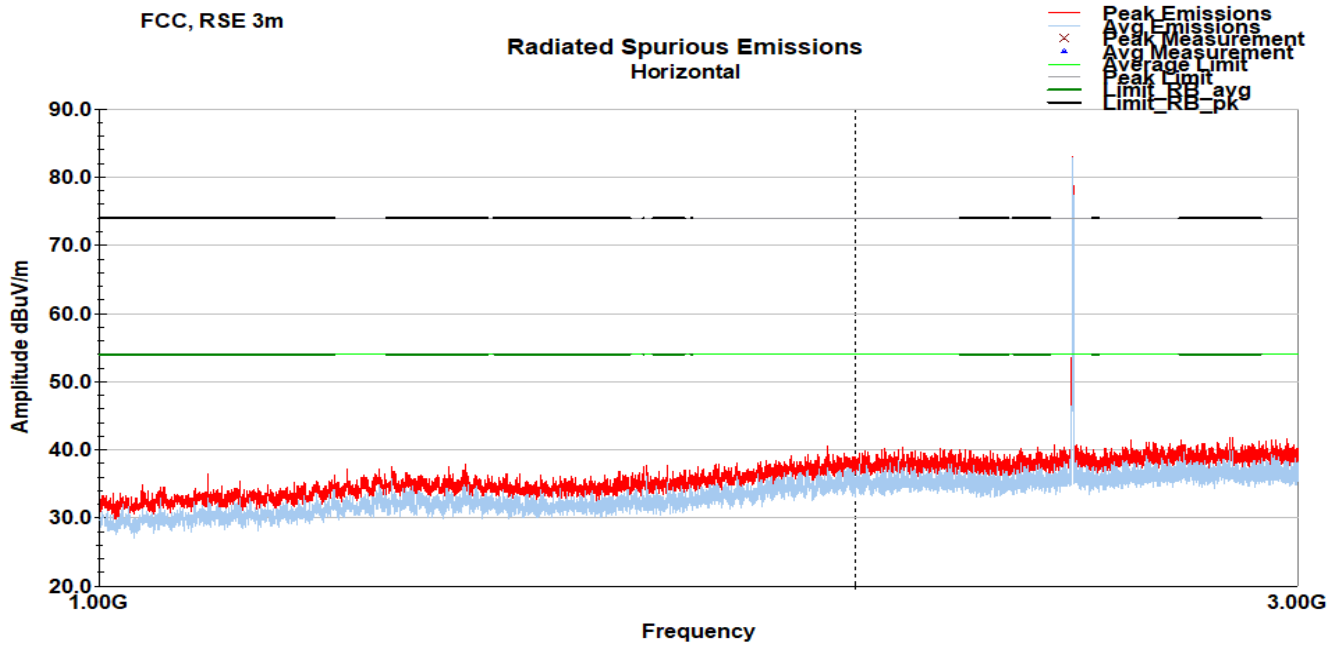
1- 3GHz Horizontal Low Channel – Plot



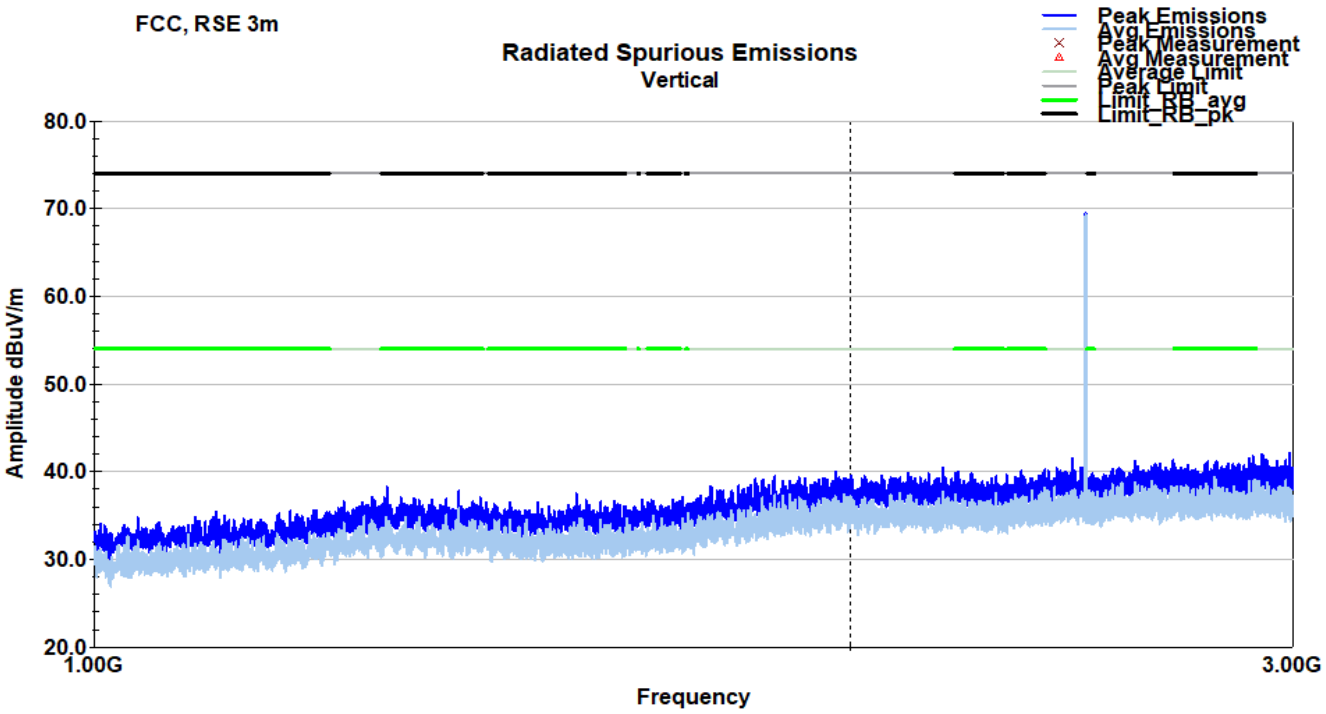
1-3GHz Vertical Mid Channel - Plot



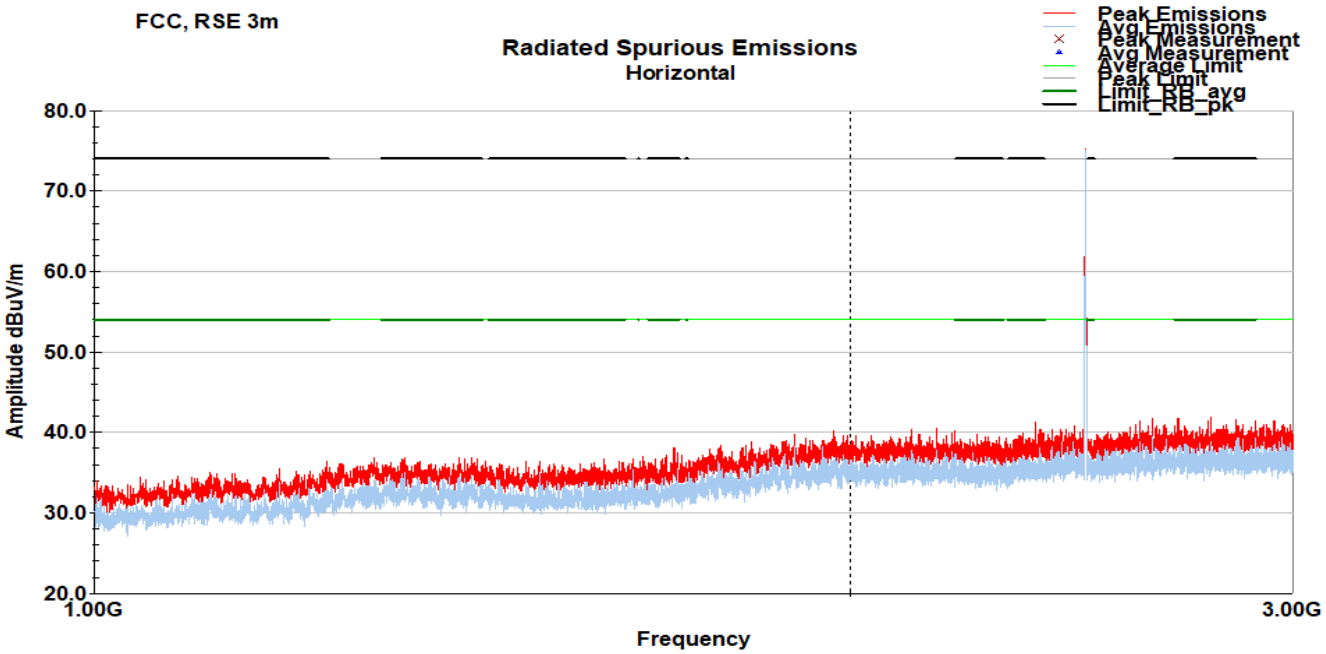
1-3GHz Horizontal Mid Channel - Plot



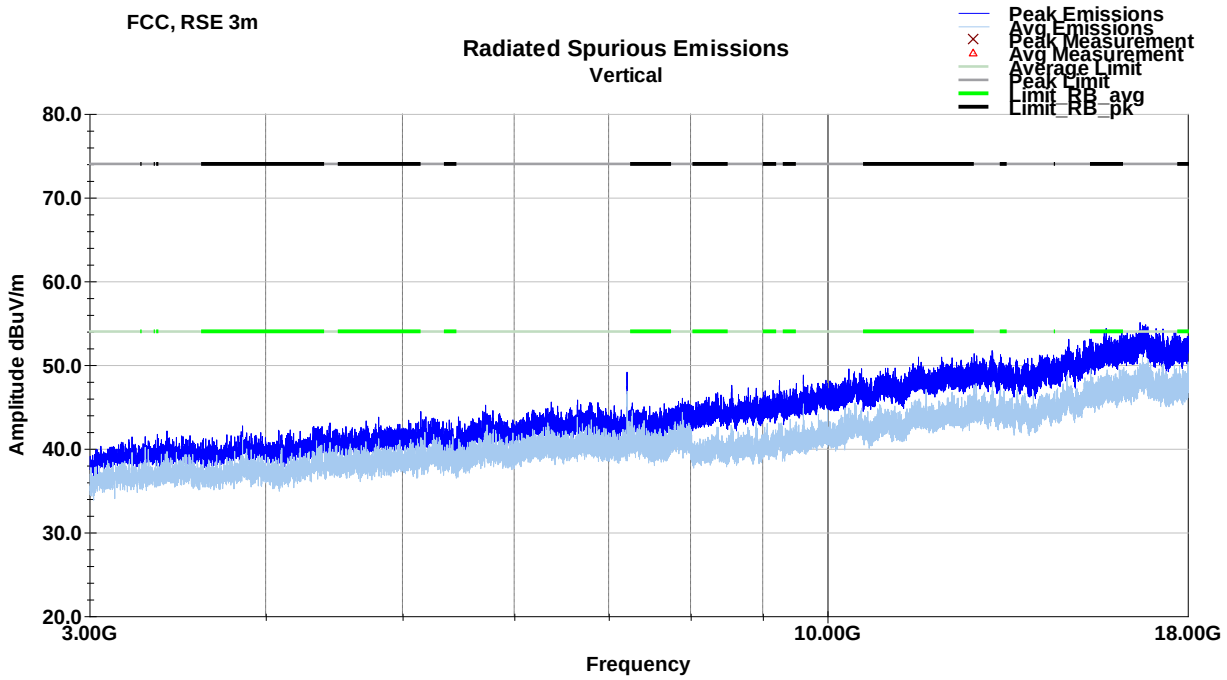
1-3GHz Vertical High Channel - Plot



1-3GHz Horizontal High Channel – Plot

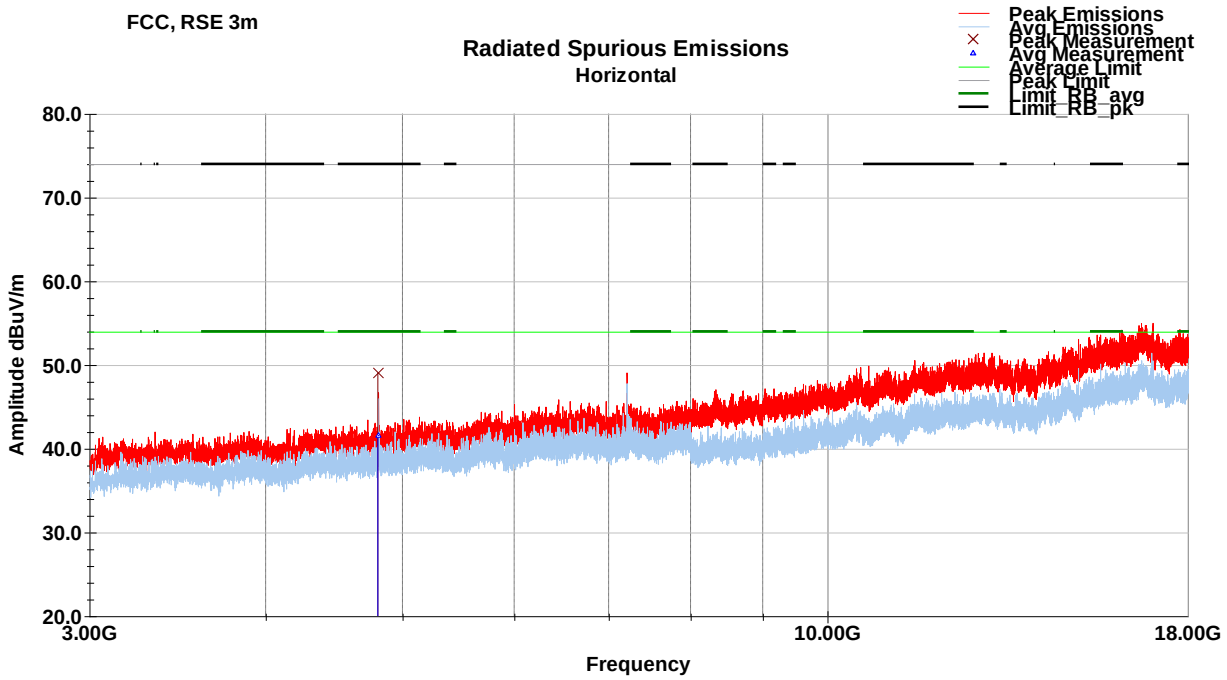


3-18GHz Vertical Low Channel - Plot



Emissions do not fall in restricted bands.

3-18GHz Horizontal Low Channel - Plot



3-18GHz Horizontal Low Channel – Tabular Data

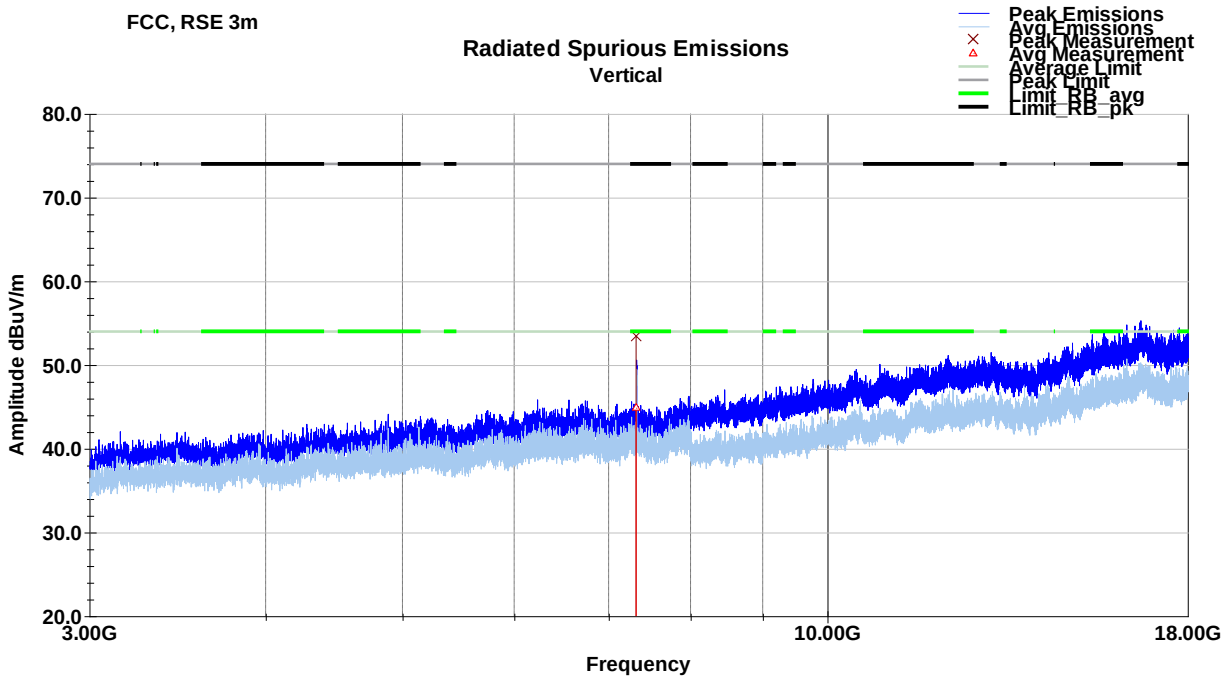
Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4803.78	54.0	H	357.0	168.0	34.0	3.1	42.0	49.1	74.0	-24.9
Final Pk = Raw Pk + AF + Loss - Amp										
Margin = Final Pk - Limit										

Avg

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
4803.78	46.6	H	357.0	168.0	34.0	3.1	42.0	41.6	54.0	-12.3
Final Avg = Raw Avg + AF + Loss - Amp										
Margin = Final Avg - Limit										

3-18GHz Vertical Mid Channel - Plot



3-18GHz Vertical Mid Channel – Tabular Data

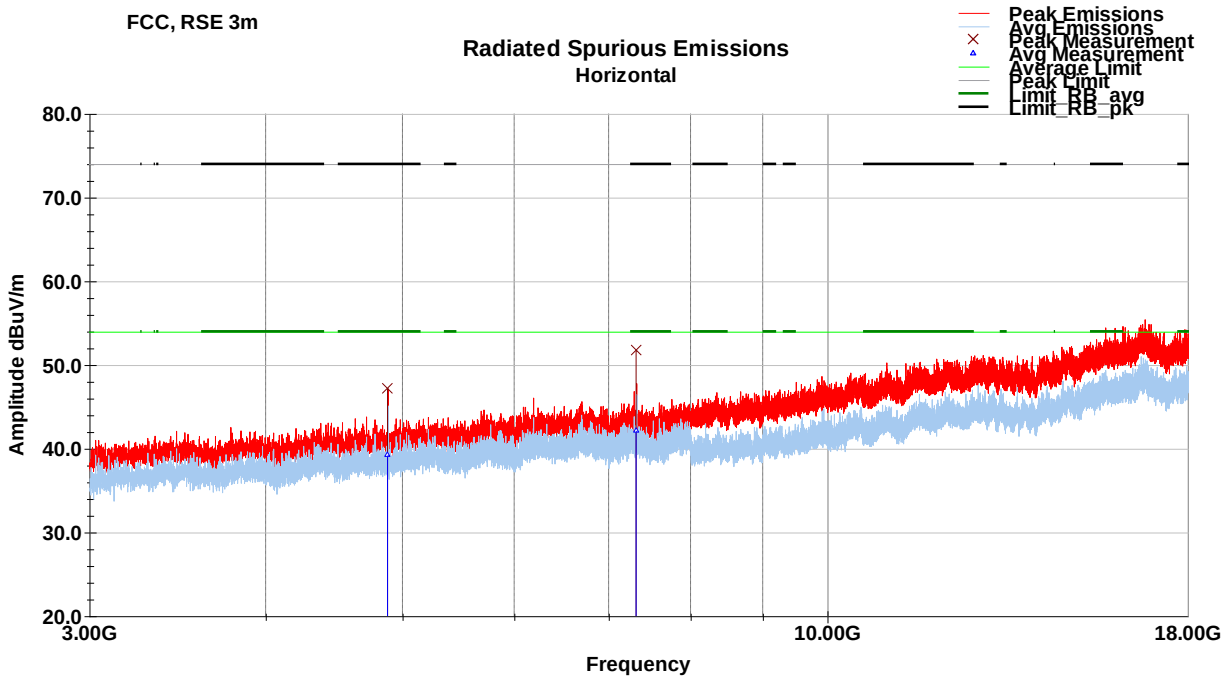
Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
7320.50	56.1	V	356.0	103.0	35.7	3.6	41.9	53.4	74.0	-20.6
Final Pk = Raw Pk + AF + Loss - Amp										
Margin = Final Pk - Limit										

Avg

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Avg dBuV/m	Limit (dBuV/m)	Margin (dB)
7320.50	47.6	V	356.0	103.0	35.7	3.6	41.9	44.9	54.0	-9.1
Final Avg = Raw Avg + AF + Loss - Amp										
Margin = Final Avg - Limit										

3-18GHz Horizontal Mid Channel - Plot



3-18GHz Horizontal Mid Channel – Tabular Data

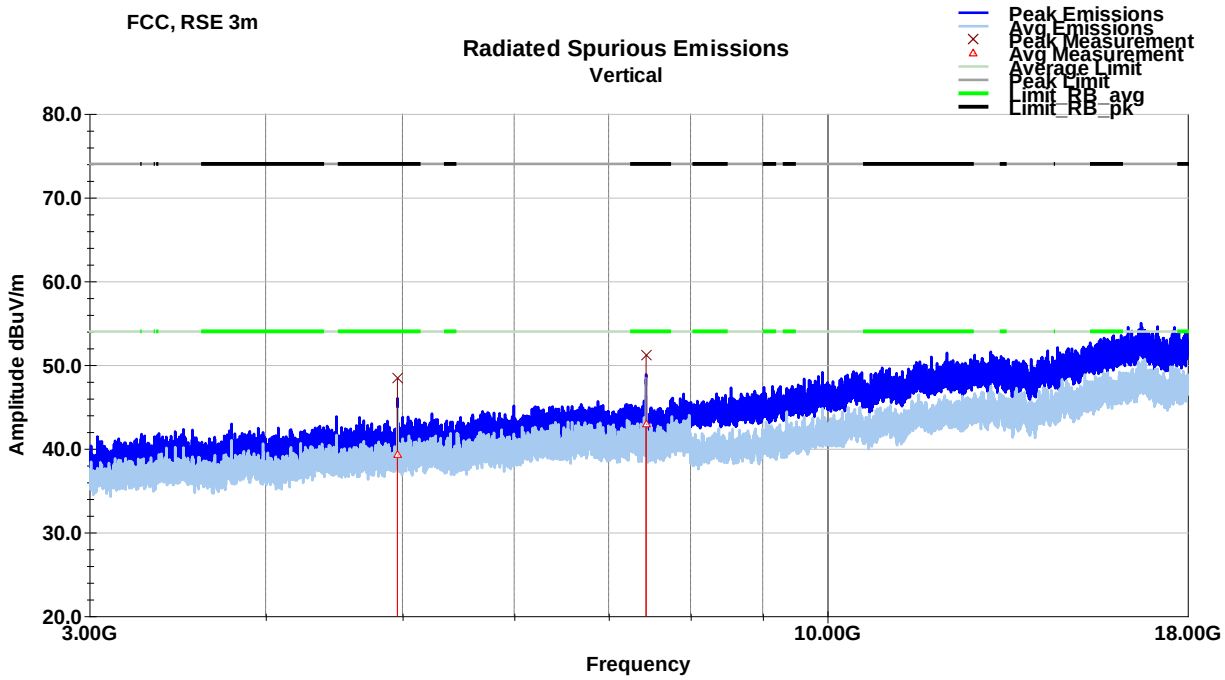
Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4880.04	52.4	H	12.0	171.0	34.1	2.8	42.1	47.2	74.0	-26.8
7320.76	54.4	H	346.0	144.0	35.7	3.6	41.9	51.7	74.0	-22.3
Final Pk = Raw Pk + AF + Loss - Amp										
Margin = Final Pk - Limit										

Avg

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
4880.04	44.4	H	12.0	171.0	34.1	2.8	42.1	39.3	54.0	-14.7
7320.76	44.8	H	346.0	144.0	35.7	3.6	41.9	42.1	54.0	-11.9
Final Avg = Raw Avg + AF + Loss - Amp										
Margin = Final Avg - Limit										

Vertical High Channel - Plot



3-18GHz Vertical High Channel – Tabular Data

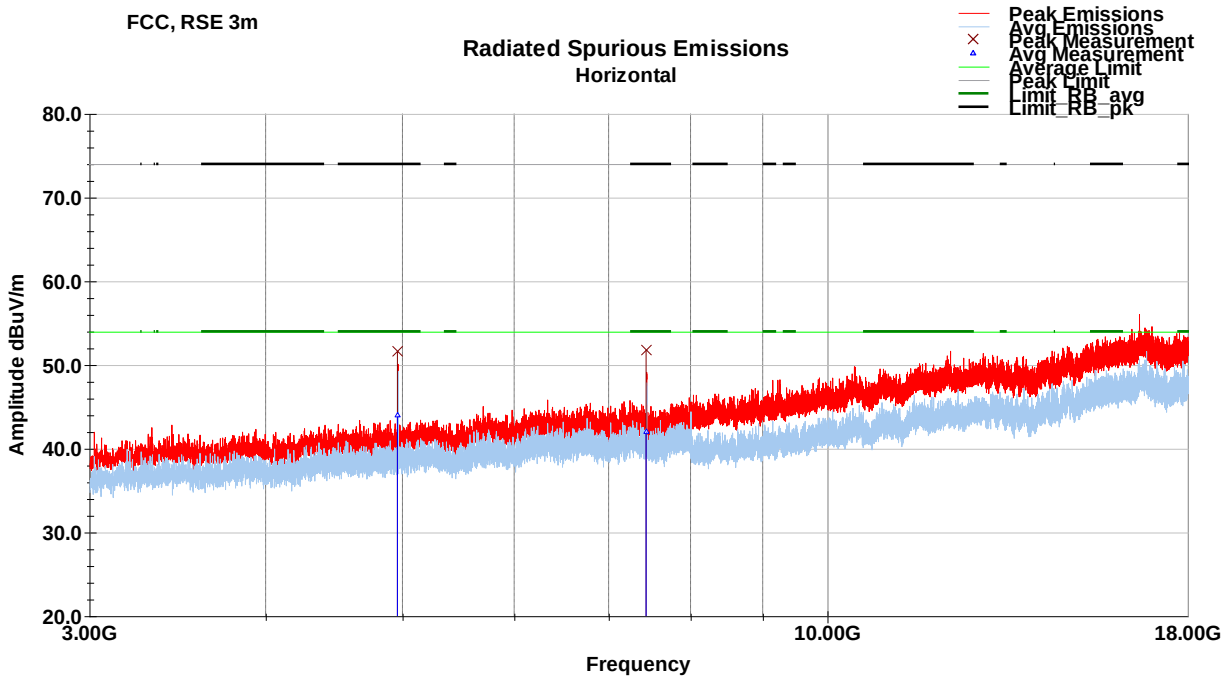
Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4959.44	56.5	H	176.0	110.0	34.1	3.0	41.9	51.6	74.0	-22.4
7440.92	54.8	H	351.0	159.0	35.7	3.5	42.2	51.8	74.0	-22.2
Final Pk = Raw Pk + AF + Loss - Amp										
Margin = Final Pk - Limit										

Avg

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
4959.44	48.9	H	176.0	110.0	34.1	3.0	41.9	43.9	54.0	-10.0
7440.92	45.0	H	351.0	159.0	35.7	3.5	42.2	42.0	54.0	-11.9
Final Avg = Raw Avg + AF + Loss - Amp										
Margin = Final Avg - Limit										

3-18GHz Horizontal High Channel - Plot



3-18GHz Horizontal High Channel – Tabular Data

Peak

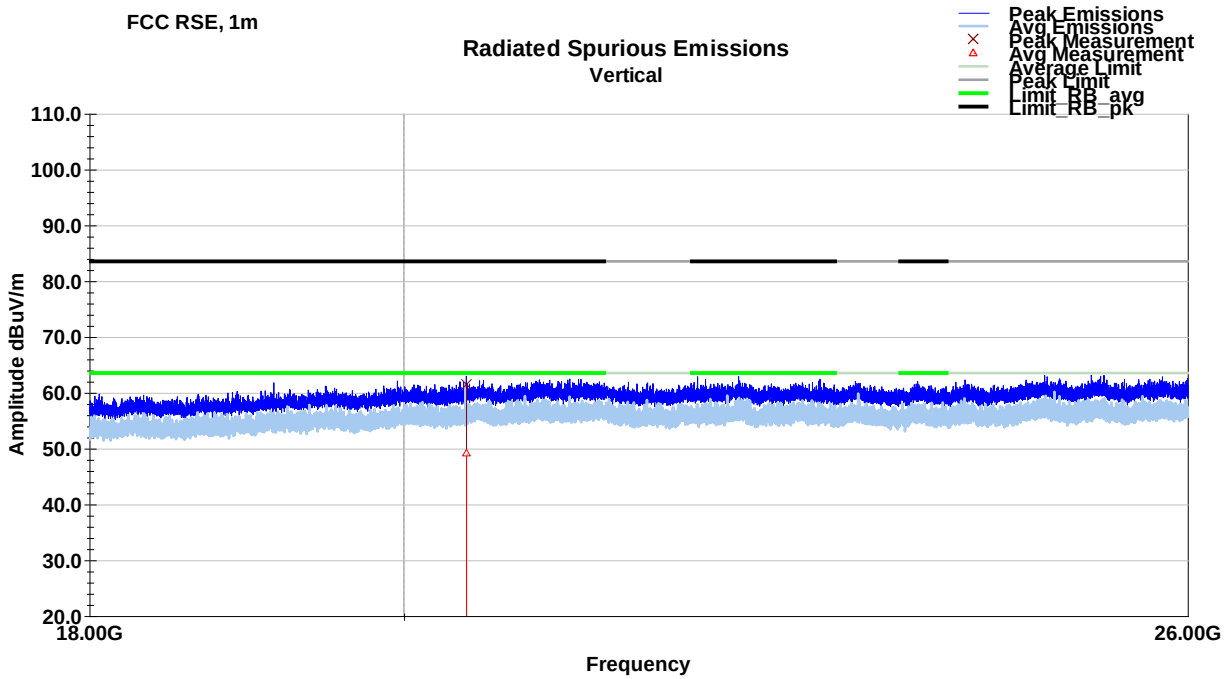
Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4959.44	56.5	H	176.0	110.0	34.1	3.0	41.9	51.6	74.0	-22.4
7440.92	54.8	H	351.0	159.0	35.7	3.5	42.2	51.8	74.0	-22.2
Final Pk = Raw Pk + AF + Loss - Amp										
Margin = Final Pk - Limit										

Avg

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
4959.44	48.9	H	176.0	110.0	34.1	3.0	41.9	43.9	54.0	-10.0
7440.92	45.0	H	351.0	159.0	35.7	3.5	42.2	42.0	54.0	-11.9
Final Avg = Raw Avg + AF + Loss - Amp										
Margin = Final Avg - Limit										

7.5.3 18-26 GHz

18-26 GHz Vertical Low Channel - Plot



3-18GHz Horizontal High Channel – Tabular Data

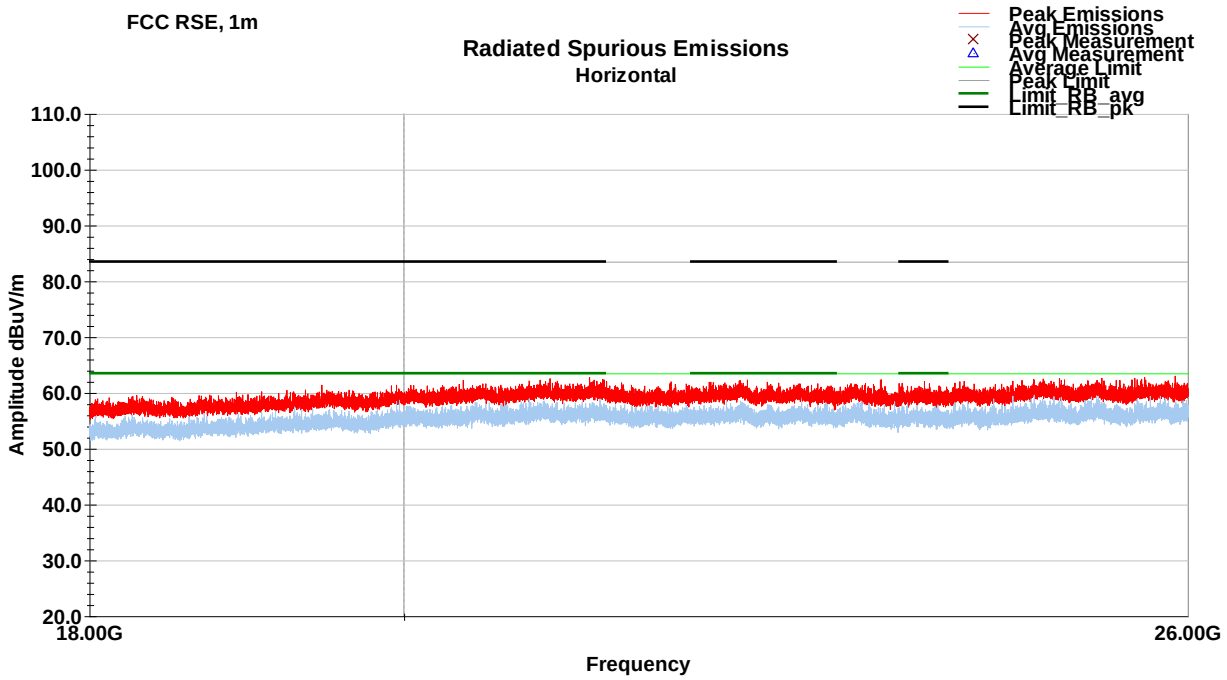
Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
20423.24	54.9	V	58.0	239.0	46.6	9.8	49.8	61.5	83.5	-22.0
Final Pk = Raw Pk + AF + Loss - Amp										
Margin = Final Pk - Limit										

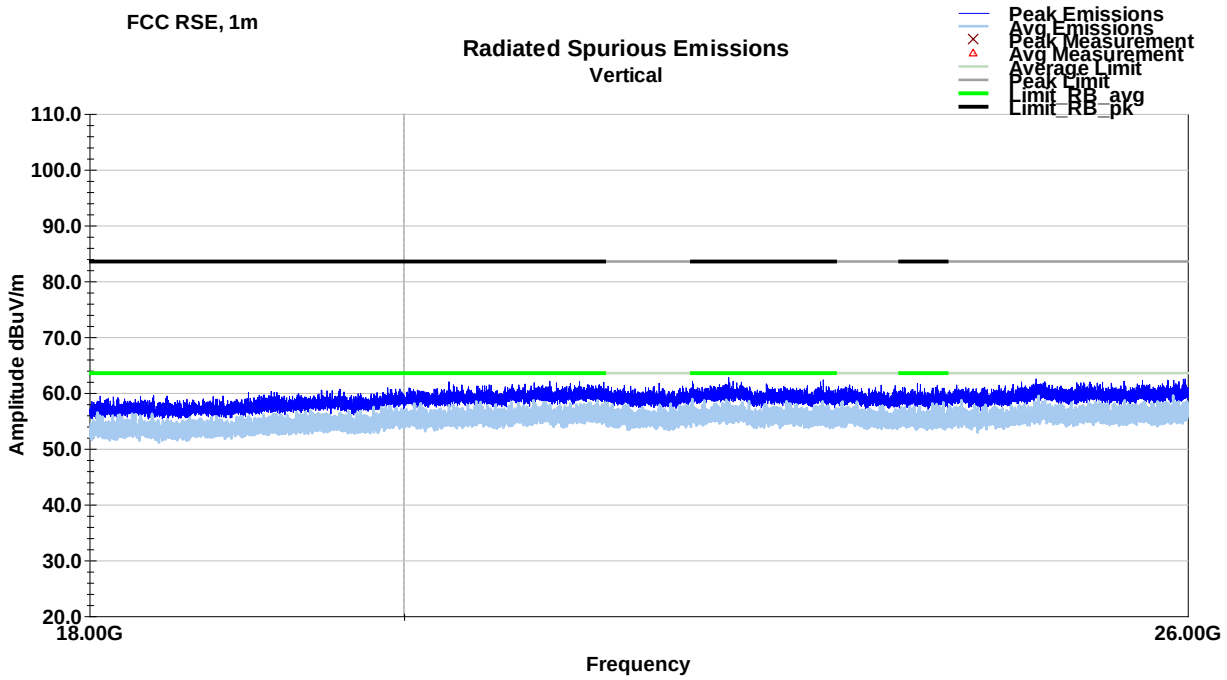
Avg

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Avg dBuV/m	Limit (dBuV/m)	Margin (dB)
20423.24	42.5	V	58.0	239.0	46.6	9.8	49.8	49.1	63.5	-14.4
Final Avg = Raw Avg + AF + Loss - Amp										
Margin = Final Avg - Limit										

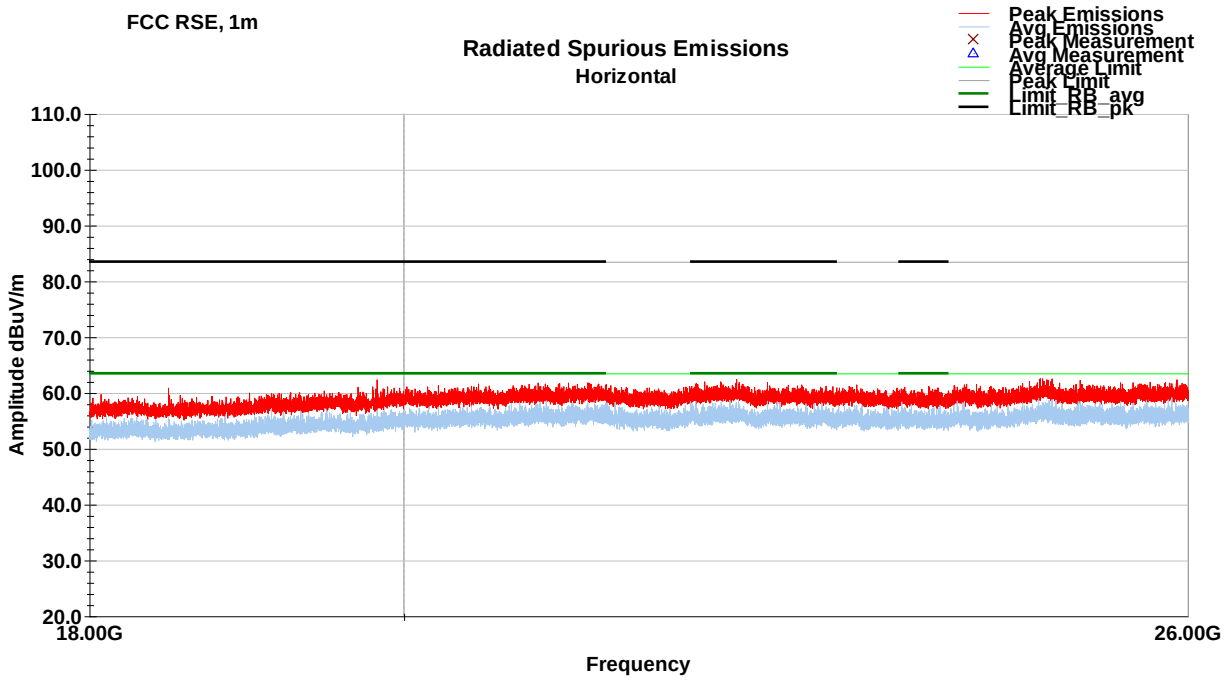
18-26 GHz Horizontal Low Channel - Plot



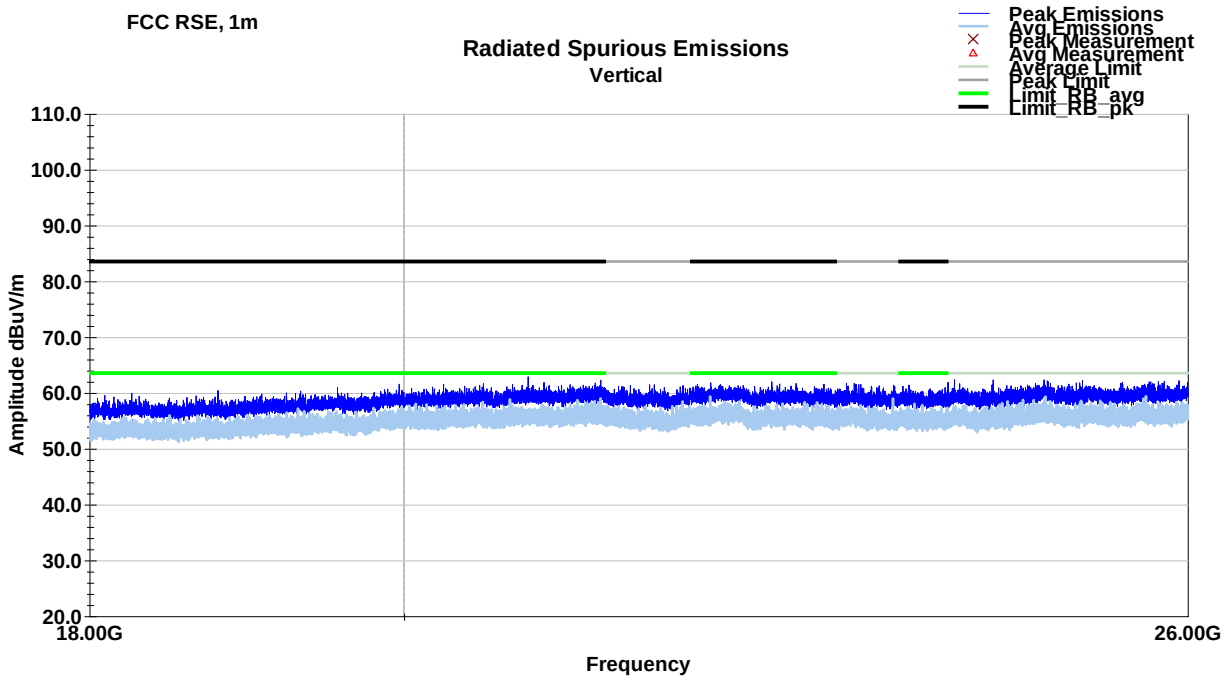
18-26 GHz Vertical Mid Channel - Plot



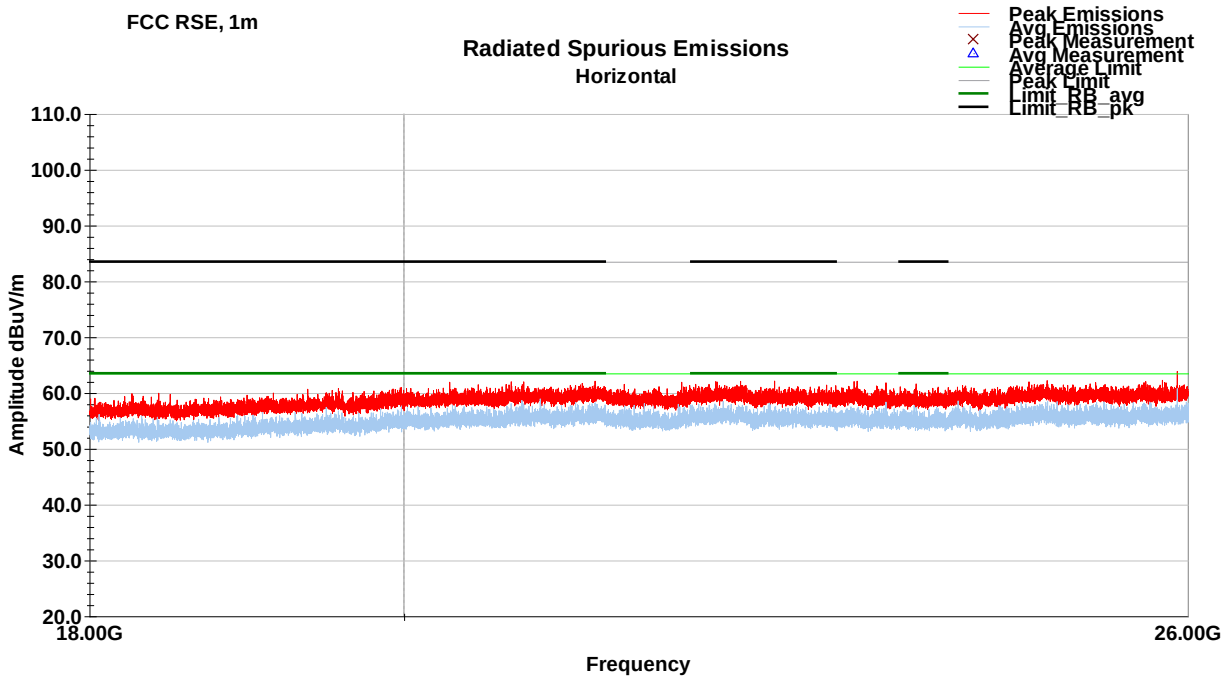
18-26 GHz Horizontal Mid Channel - Plot



18-26 GHz Vertical High Channel - Plot



18-26 GHz Horizontal High Channel - Plot

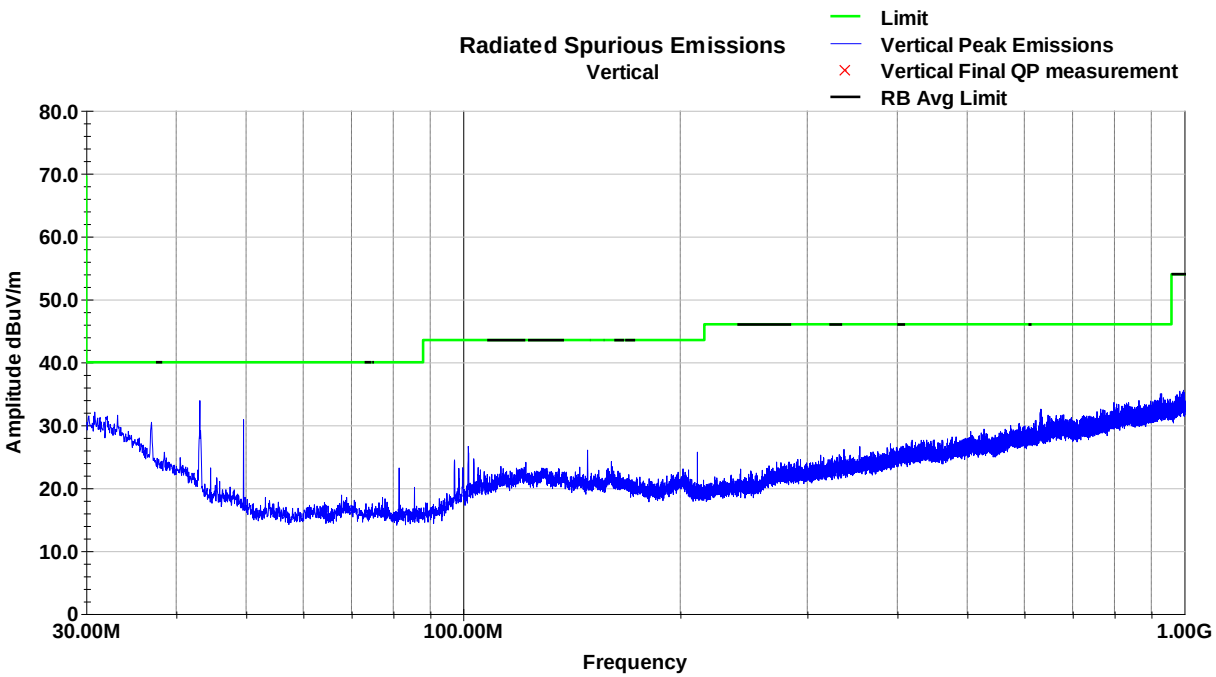


7.6 *Test Data – Right Insole*

7.6.1 30-1000 MHz

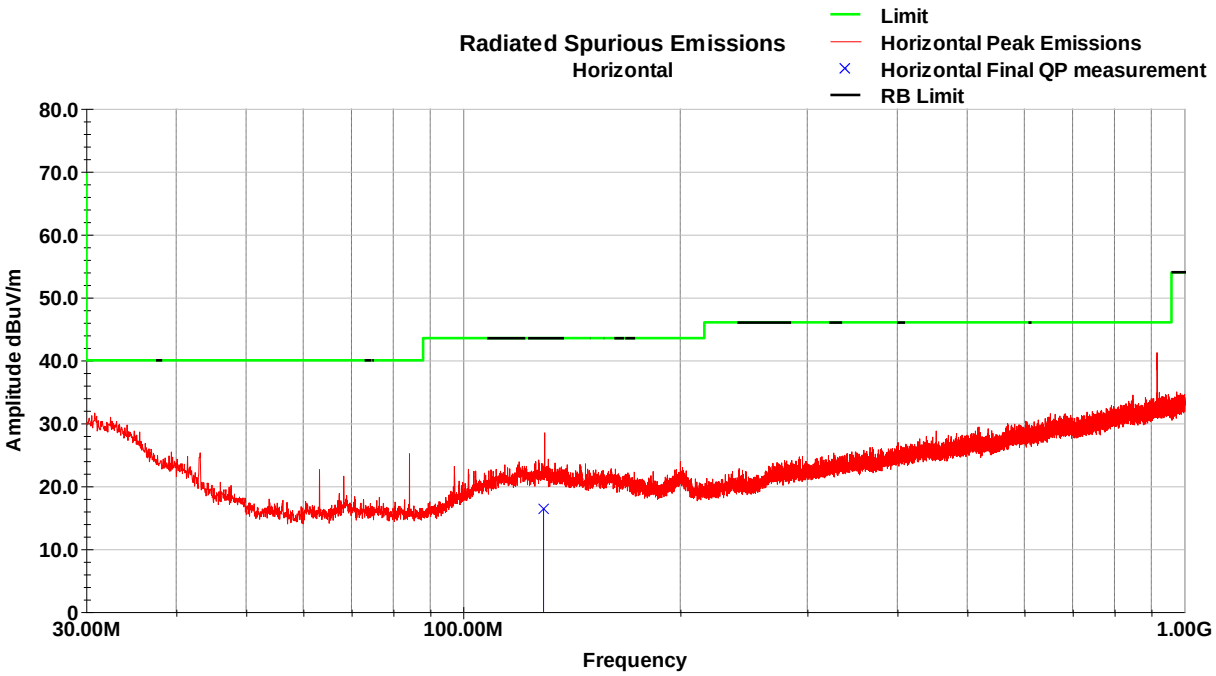
No significant deviation based on axis or channel in the 30-1000MHz range – worst case shown.

30-1000 MHz Vertical Mid Channel - Plot



No emissions were detected in the restricted band.

30-1000 MHz Horizontal Mid Channel - Plot

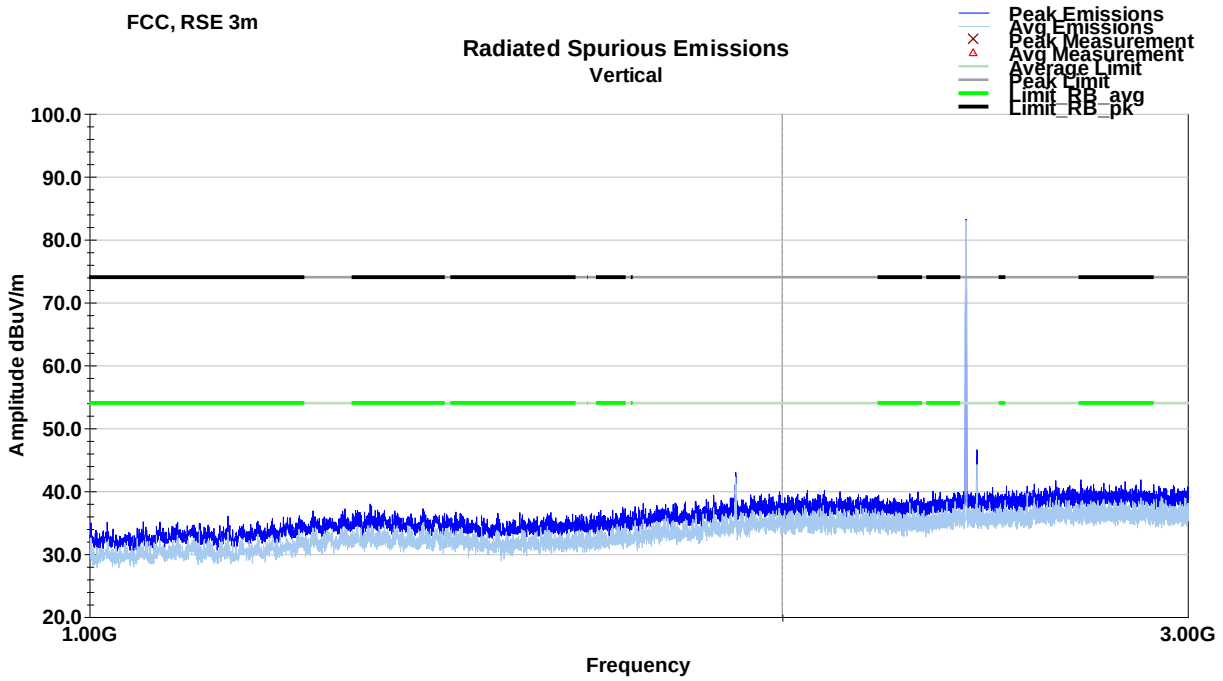


30-1000 MHz Horizontal Mid Channel – Tabular Data

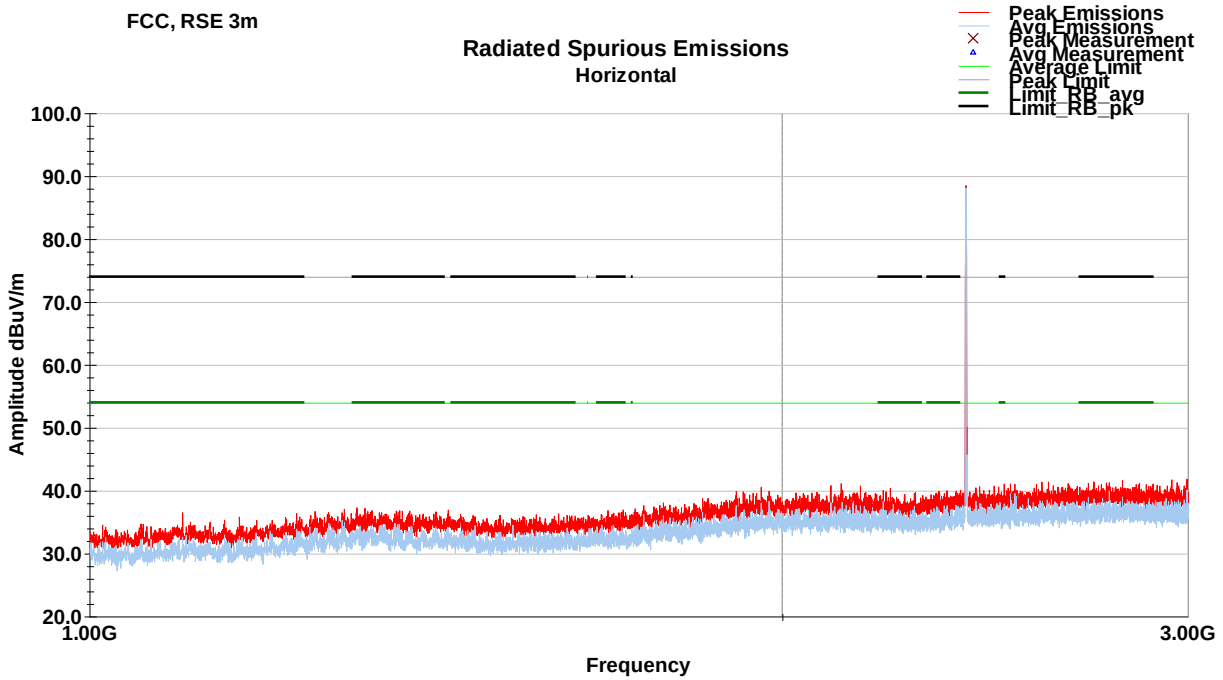
Frequency MHz	Raw QP (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	QP Value (dBuV/m)	Limit (dBuV/m)	Margin (dB)
129.29	28.5	H	168.0	398.0	17.9	0.6	30.6	16.4	43.5	-27.1
QP Value = Raw QP + AF + Loss - Amp										
Margin = QP Value - Limit										

7.6.2 1-18 GHz

1-3GHz Vertical Low Channel - Plot

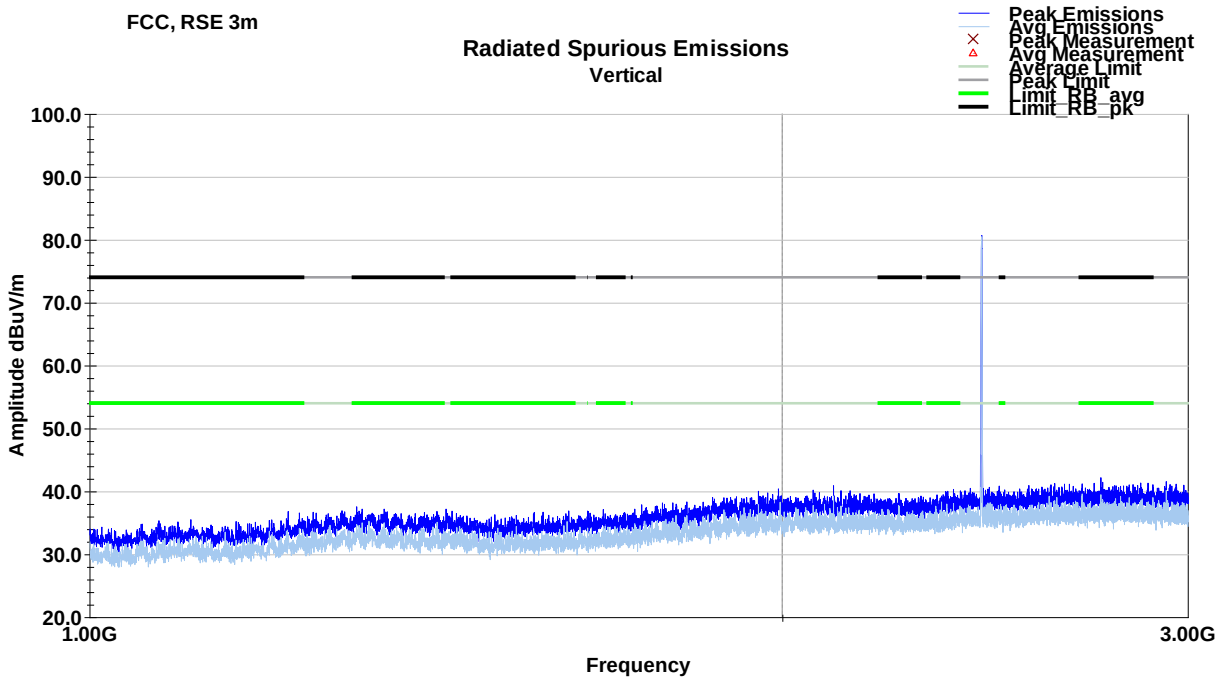


1- 3GHz Horizontal Low Channel – Plot

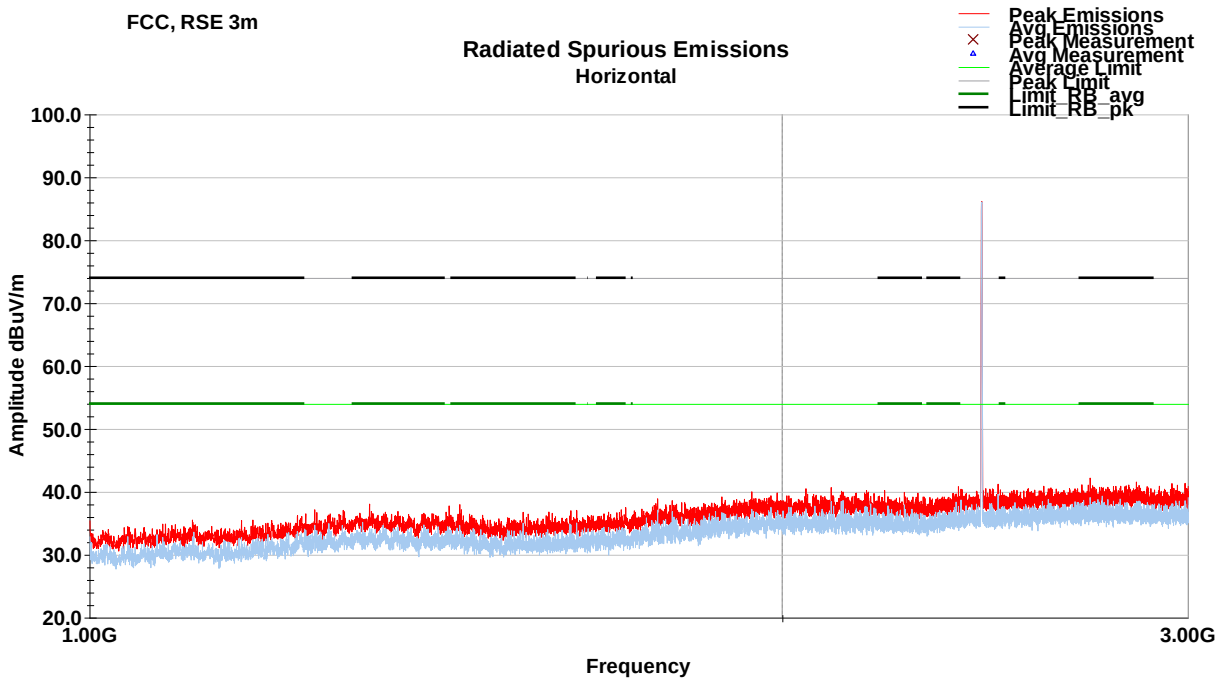


Note: No emissions detected in restricted bands.

1-3GHz Vertical Mid Channel - Plot

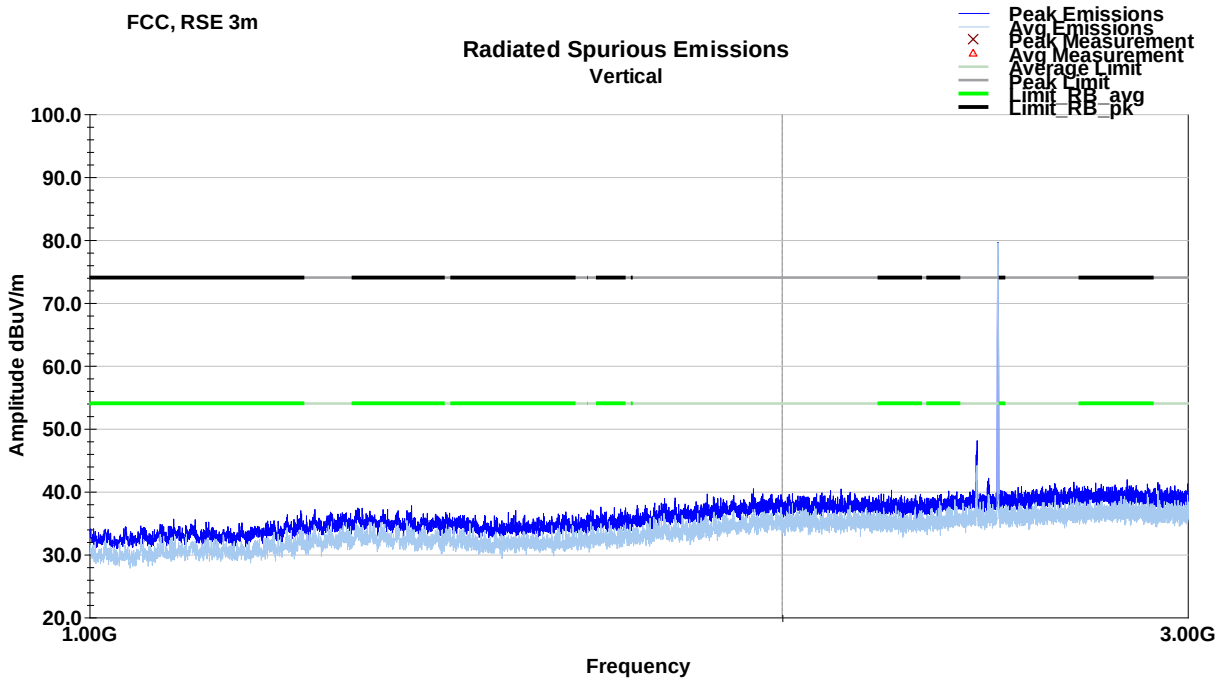


1-3GHz Horizontal Mid Channel - Plot

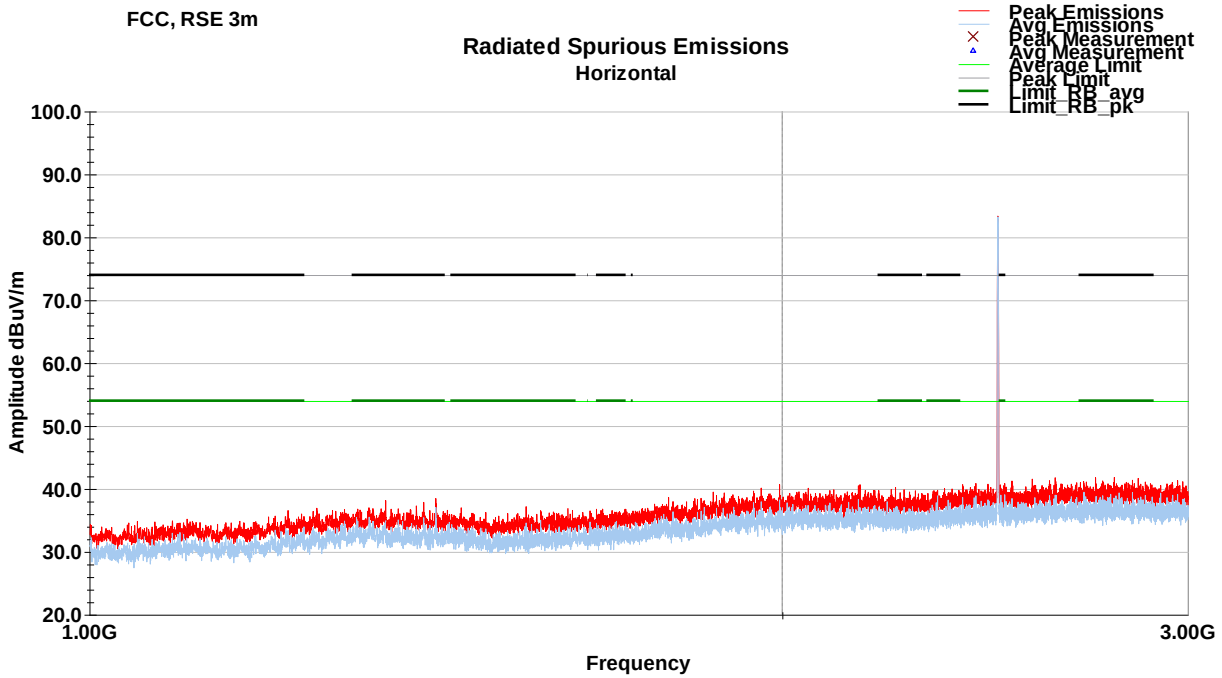


Note: No emissions detected in restricted bands.

1-3GHz Vertical High Channel - Plot

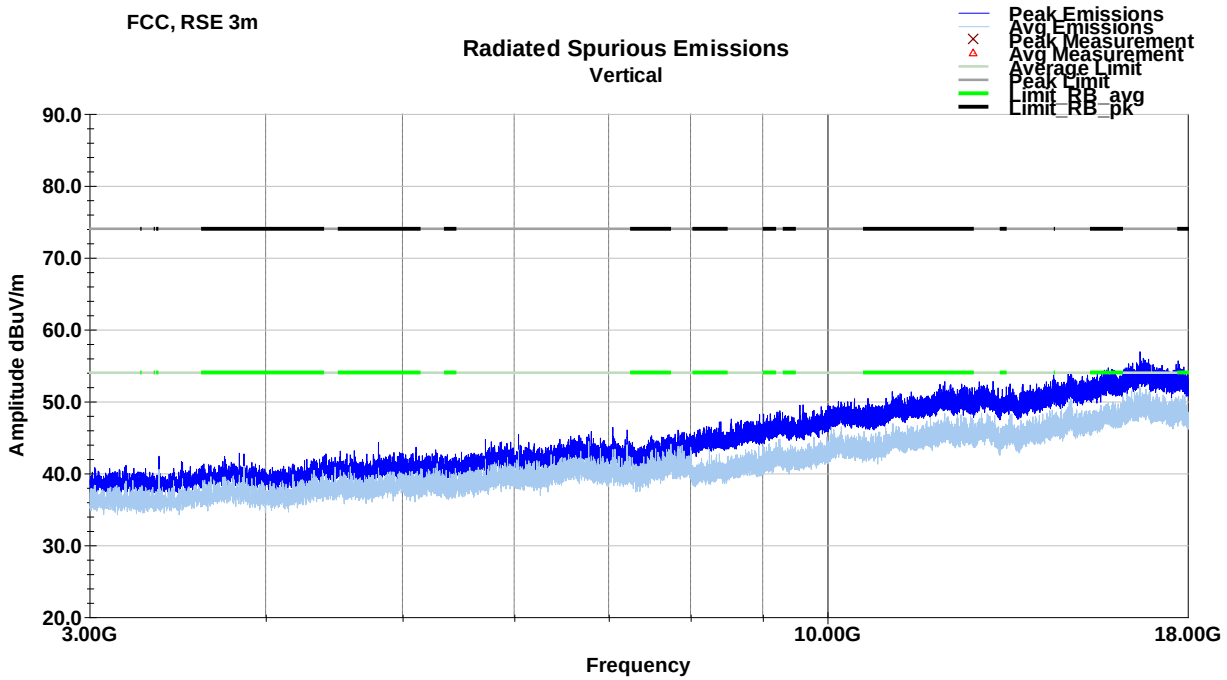


1-3GHz Horizontal High Channel – Plot

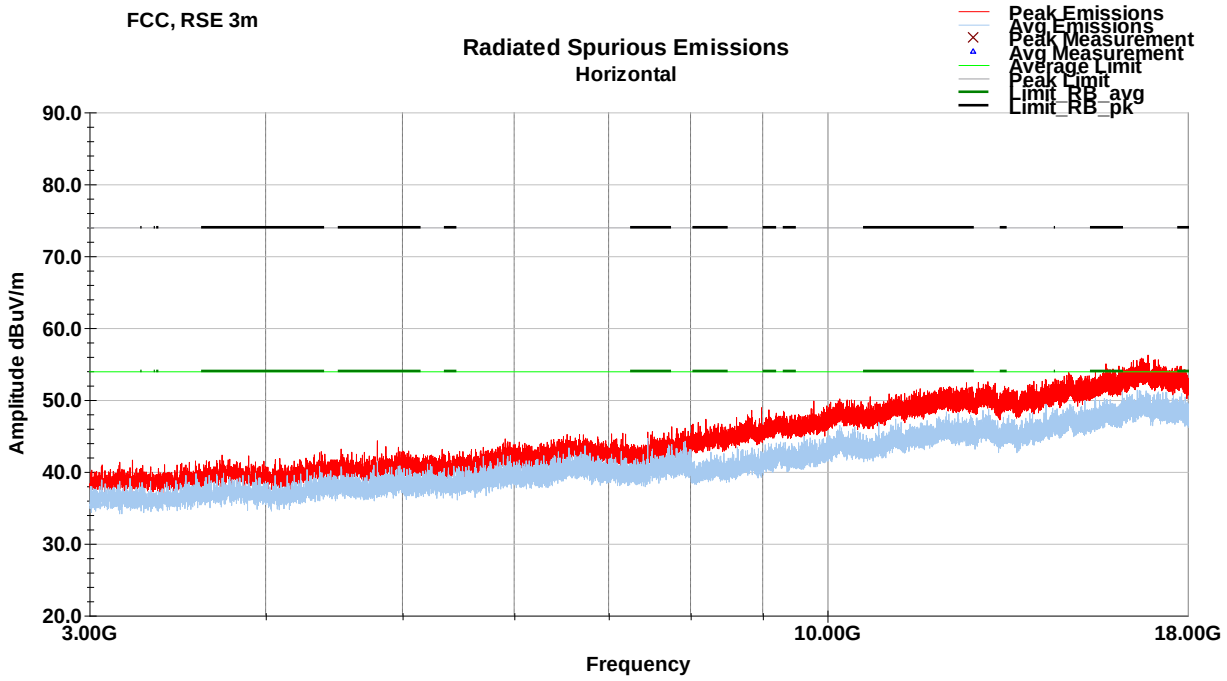


Note: No emissions detected in restricted bands.

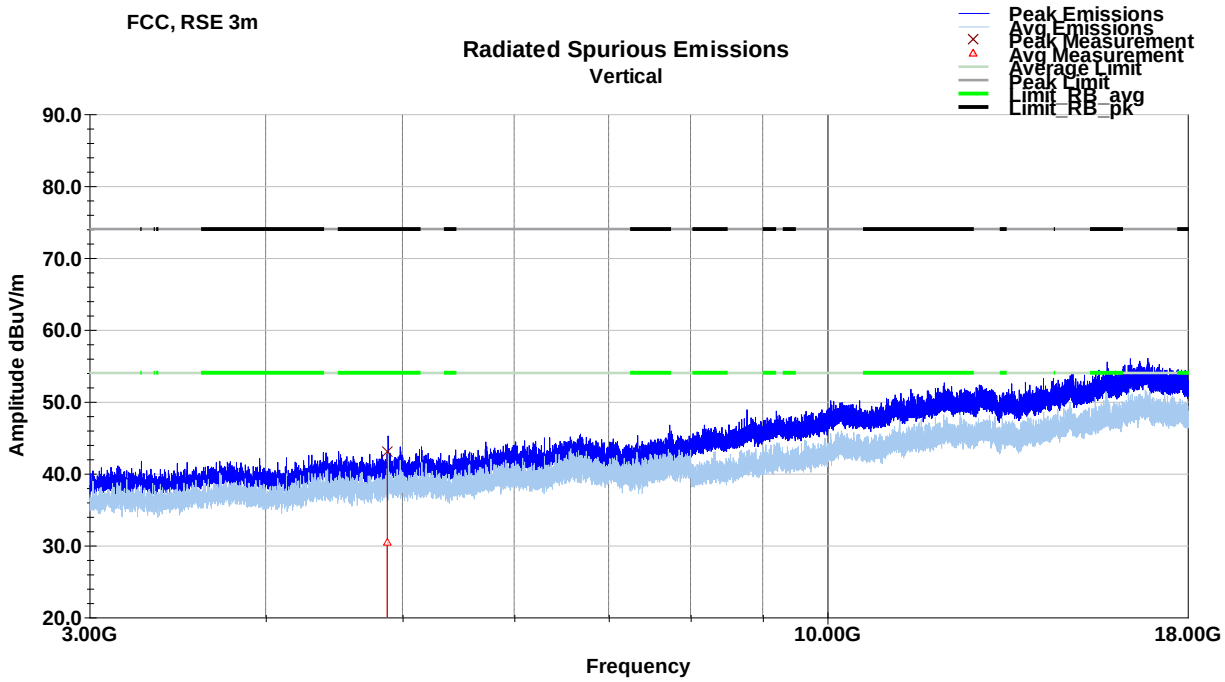
3-18GHz Vertical Low Channel - Plot



3-18GHz Horizontal Low Channel – Plot



3-18GHz Vertical Mid Channel - Plot



3-18GHz Vertical Mid Channel – Tabular Data

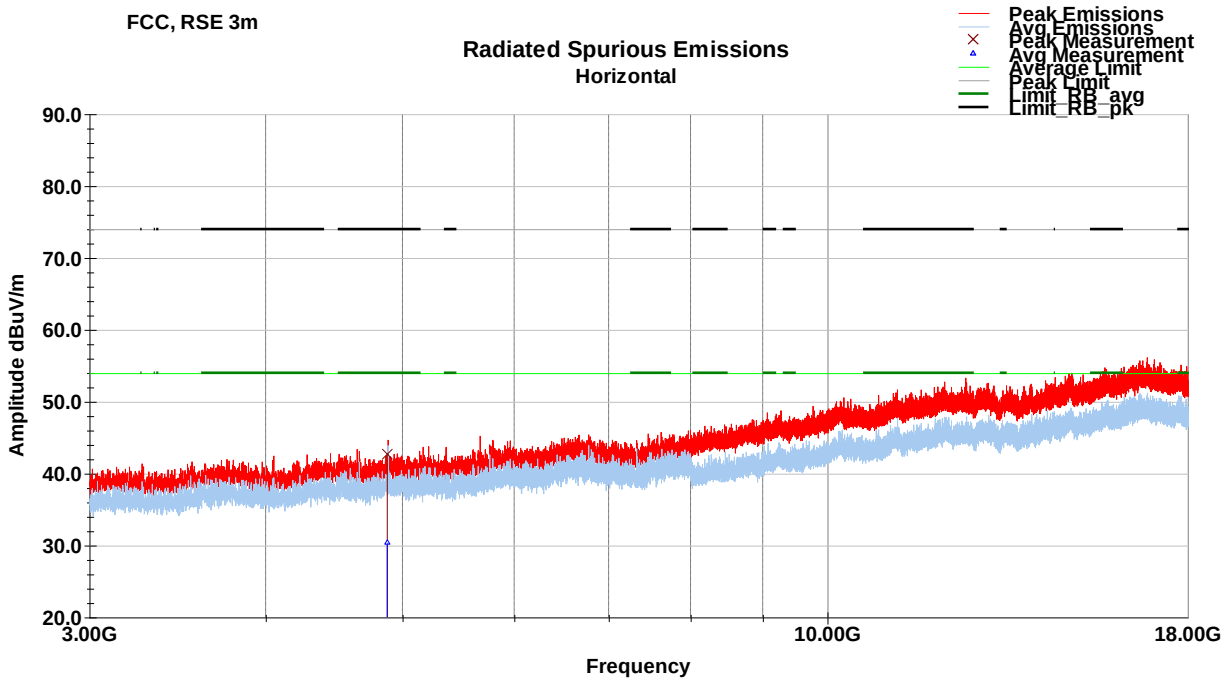
Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4877.76	41.4	V	263.0	189.0	34.1	2.8	35.4	43.0	74.0	-31.0
Final Pk = Raw Pk + AF + Loss - Amp										
Margin = Final Pk - Limit										

Avg

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Avg dBuV/m	Limit (dBuV/m)	Margin (dB)
4877.76	28.9	V	263.0	189.0	34.1	2.8	35.4	30.4	54.0	-23.6
Final Avg = Raw Avg + AF + Loss - Amp										
Margin = Final Avg - Limit										

3-18GHz Horizontal Mid Channel - Plot



3-18GHz Horizontal Mid Channel – Tabular Data

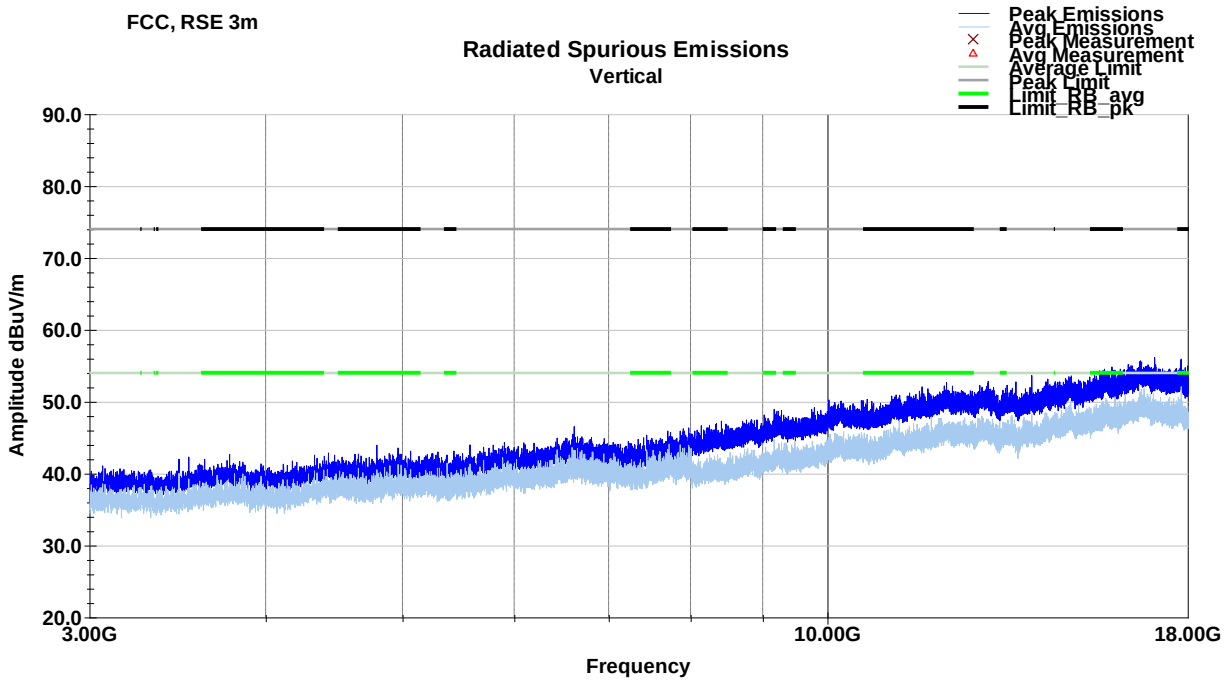
Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4877.52	41.2	H	106.0	103.0	34.1	2.8	35.4	42.7	74.0	-31.3
Final Pk = Raw Pk + AF + Loss - Amp										
Margin = Final Pk - Limit										

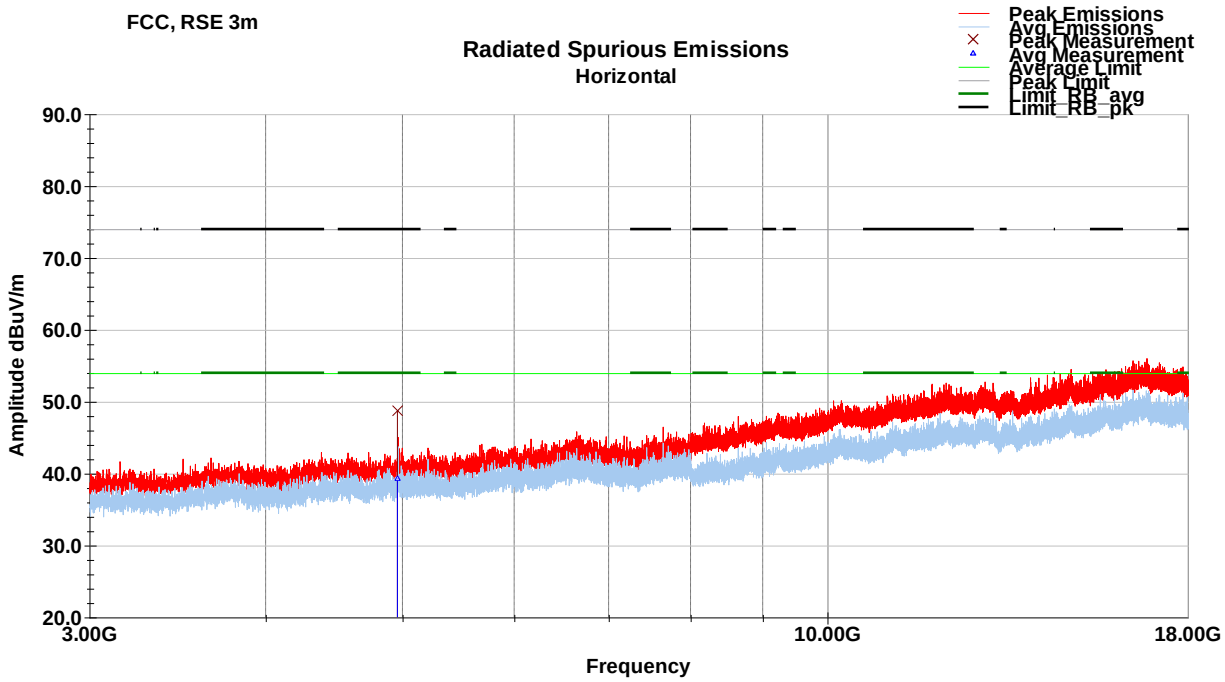
Avg

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
4877.52	28.8	H	106.0	103.0	34.1	2.8	35.4	30.4	54.0	-23.6
Final Avg = Raw Avg + AF + Loss - Amp										
Margin = Final Avg - Limit										

3-18GHz Vertical High Channel - Plot



3-18GHz Horizontal High Channel - Plot



3-18GHz Horizontal High Channel – Tabular Data

Peak

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
4959.68	47.2	H	75.0	100.0	34.1	3.0	35.4	48.8	74.0	-25.2
Final Pk = Raw Pk + AF + Loss - Amp										
Margin = Final Pk - Limit										

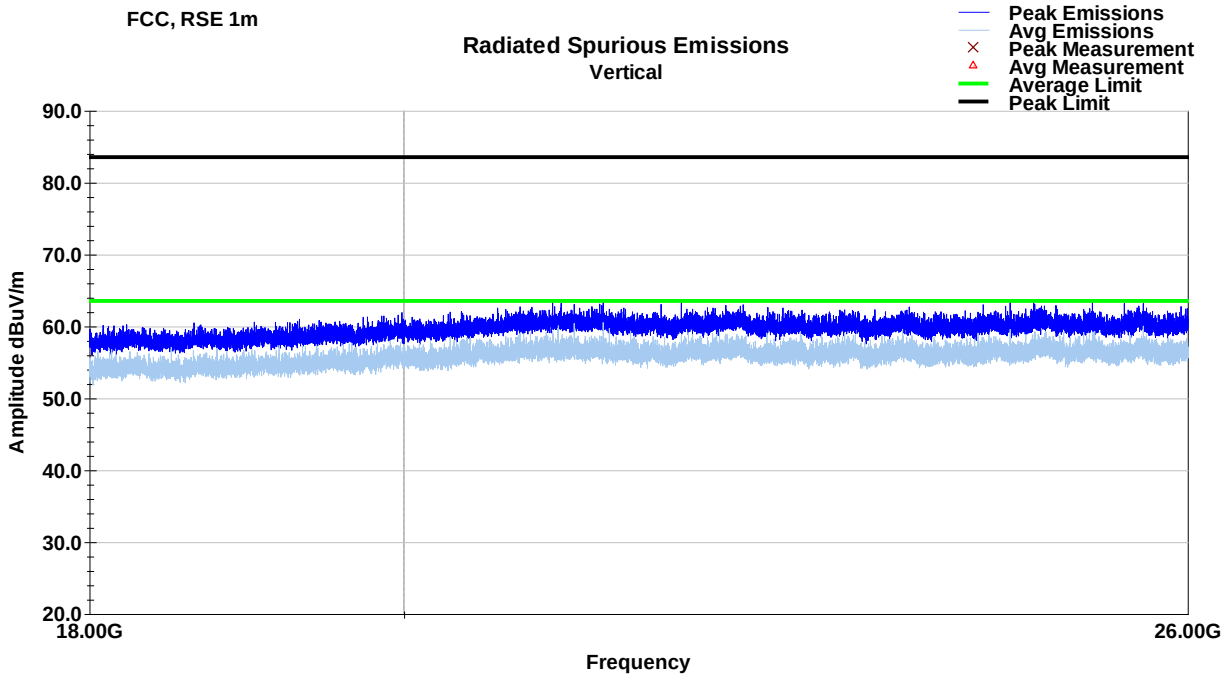
Avg

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
4959.68	37.7	H	75.0	100.0	34.1	3.0	35.4	39.4	54.0	-14.6
Final Avg = Raw Avg + AF + Loss - Amp										
Margin = Final Avg - Limit										

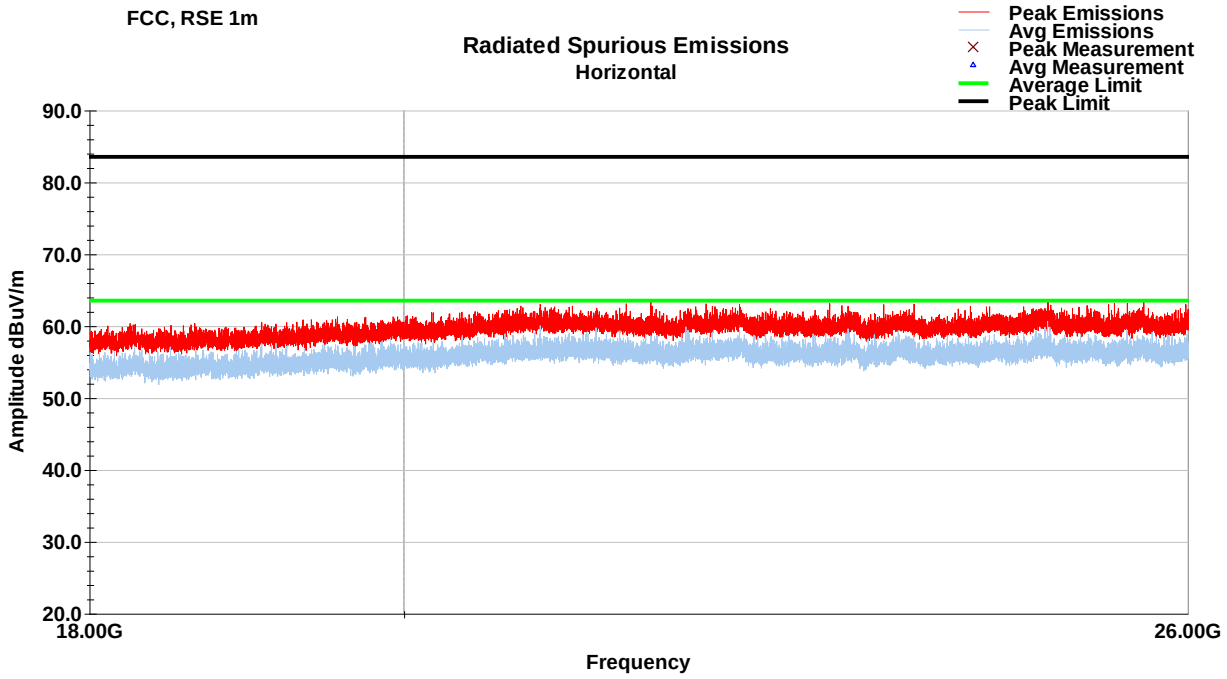
7.6.3 18-26 GHz

No significant deviation based on axis or channel in the 18-26 GHz range.

18-26 GHz Vertical Mid Channel - Plot



18-26 GHz Horizontal Mid Channel – Plot



8 Band Edge Emissions in Restricted Frequency Bands

8.1 *Test Result*

Test Description	Test Specification		Test Result
Band Edge Emissions in Restricted Frequency Bands	15.205, 15.209	RSS-GEN S8.9, 8.10	Compliant

8.2 *Test Method*

Field strength measurements were performed at the restricted band edges of 2390MHz and 2483.5MHz. Measurements were made using the conducted methods defined in ANSI C63.10: 2013 clause 11.12.2. The measurements were converted to a radiated field strength equivalent using the equations defined in that section. Both peak and average measurements were performed at the antenna port. These procedures are referenced in KDB 558074 D01 15.247 Meas Guidance v05r02.

A reference level offset was applied to the spectrum analyzer so that conducted measurements represent field strength measurements in dBµV/m.

8.3 *Test Site*

SGS EMC Laboratory, Suwanee, GA

Left Insole

Environmental Conditions

Temperature:	24.13 °C
Relative Humidity:	49.5 %
Atmospheric Pressure:	98.34 kPa

Right Insole

Environmental Conditions

Temperature:	23.39 °C
Relative Humidity:	19.8 %
Atmospheric Pressure:	99.35 kPa

8.4 *Test Equipment*

Left Insole

Test End Date: 6-Jun-2025 Tester: SGM

Equipment	Manufacturer	Model	Asset Number	Cal Date	Cal Due Date
RF CABLE SMA TO SMA, 0.01-40GHZ	TELEDYNE STORM MICROWAVE	084-0505-059	20108	3-Apr-2025	3-Apr-2026
TSTPASS SWITCHBOX	TSTPASS	SB2	23009	8-Apr-2024	8-Apr-2025
SIGNAL ANALYZER (TS8997)	ROHDE & SCHWARZ	FSV30	B085749	4-Mar-2025	4-Mar-2026

Right Insole

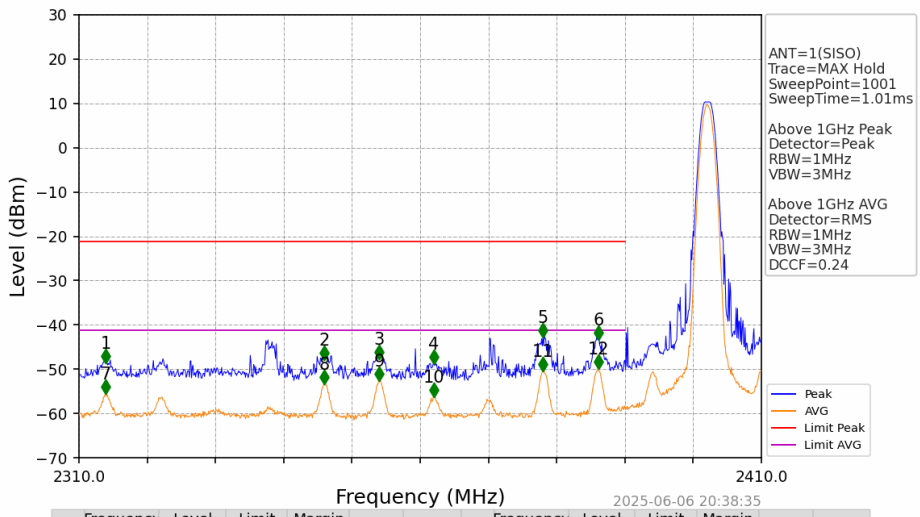
Test End Date: 24-Dec-2024 Tester: SGM

Equipment	Manufacturer	Model	Asset Number	Cal Date	Cal Due Date
RF CABLE SMA TO SMA, 0.01-40GHZ	TELEDYNE STORM MICROWAVE	084-0505-059	20108	20-Mar-2024	20-Mar-2025
TSTPASS SWITCHBOX	TSTPASS	SB2	23009	8-Apr-2024	8-Apr-2025
SIGNAL ANALYZER (TS8997)	ROHDE & SCHWARZ	FSV30	B085749	3-Jan-2024	3-Jan-2025

Software Profile:
TSTPASS Version: 2.0 (2024.12.23_11.05.24)

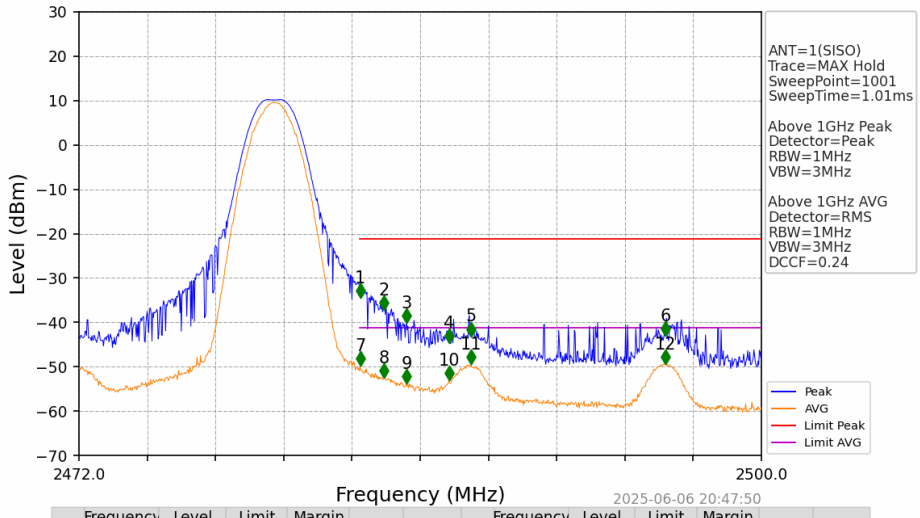
8.5 *Test Data – Left Insole*

BLE 1M – Low Channel – Plot



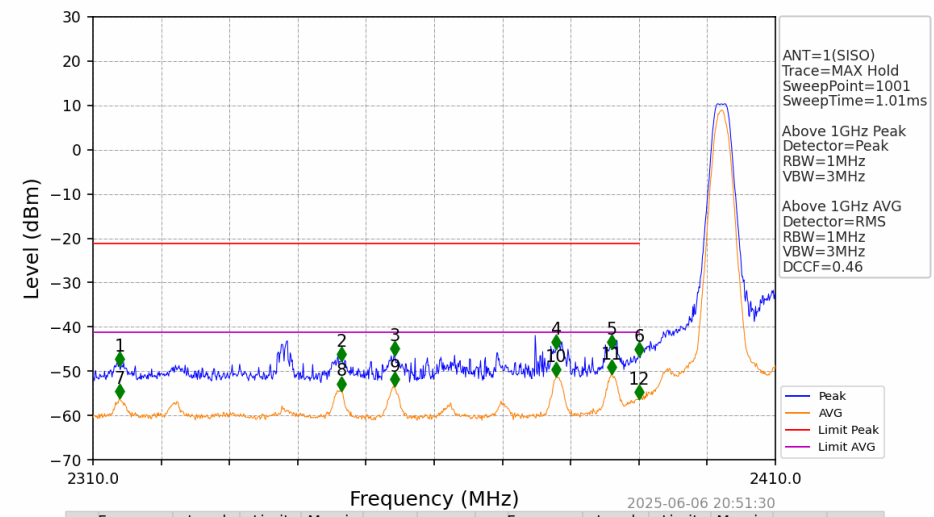
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2313.900	-48.59	-21.20	27.39	Pass	Peak	7	2313.900	-55.59	-41.20	14.39	Pass	AVG
2	2345.900	-47.88	-21.20	26.68	Pass	Peak	8	2345.900	-53.33	-41.20	12.13	Pass	AVG
3	2354.000	-47.80	-21.20	26.60	Pass	Peak	9	2354.000	-52.57	-41.20	11.37	Pass	AVG
4	2362.000	-48.81	-21.20	27.61	Pass	Peak	10	2362.000	-56.31	-41.20	15.11	Pass	AVG
5	2378.000	-42.88	-21.20	21.68	Pass	Peak	11	2378.000	-50.47	-41.20	9.27	Pass	AVG
6	2386.100	-43.29	-21.20	22.09	Pass	Peak	12	2386.100	-49.93	-41.20	8.73	Pass	AVG

BLE 1M – High Channel – Plot



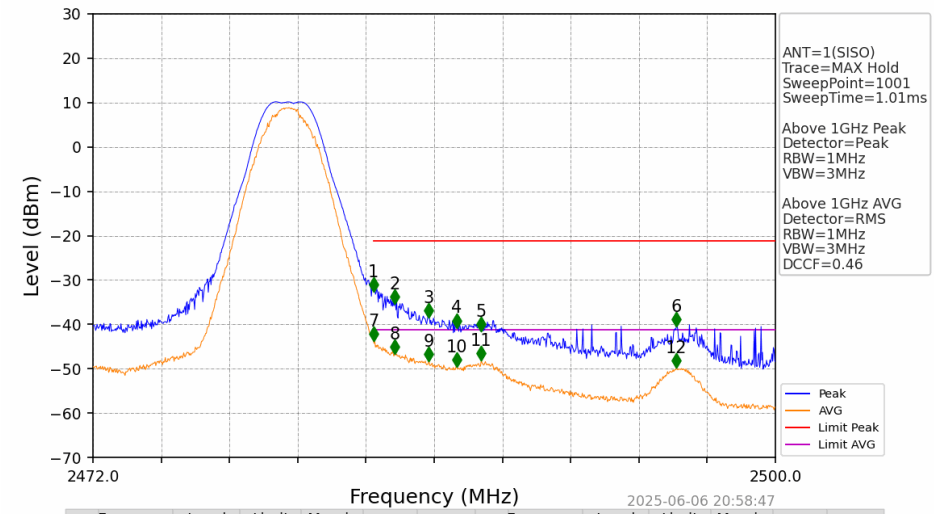
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2483.536	-34.47	-21.20	13.27	Pass	Peak	7	2483.536	-49.79	-41.20	8.59	Pass	AVG
2	2484.516	-37.17	-21.20	15.97	Pass	Peak	8	2484.516	-52.42	-41.20	11.22	Pass	AVG
3	2485.440	-40.10	-21.20	18.90	Pass	Peak	9	2485.440	-53.78	-41.20	12.58	Pass	AVG
4	2487.176	-44.55	-21.20	23.35	Pass	Peak	10	2487.176	-52.98	-41.20	11.78	Pass	AVG
5	2488.072	-43.08	-21.20	21.88	Pass	Peak	11	2488.072	-49.39	-41.20	8.19	Pass	AVG
6	2496.052	-43.04	-21.20	21.84	Pass	Peak	12	2496.052	-49.40	-41.20	8.20	Pass	AVG

BLE 2M – Low Channel – Plot



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2313.900	-48.90	-21.20	27.70	Pass	Peak	7	2313.900	-56.10	-41.20	14.90	Pass	AVG
2	2346.400	-47.77	-21.20	26.57	Pass	Peak	8	2346.400	-54.37	-41.20	13.17	Pass	AVG
3	2354.200	-46.46	-21.20	25.26	Pass	Peak	9	2354.200	-53.36	-41.20	12.16	Pass	AVG
4	2377.900	-45.05	-21.20	23.85	Pass	Peak	10	2377.900	-51.21	-41.20	10.01	Pass	AVG
5	2386.000	-45.02	-21.20	23.82	Pass	Peak	11	2386.000	-50.59	-41.20	9.39	Pass	AVG
6	2390.000	-46.54	-21.20	25.34	Pass	Peak	12	2390.000	-56.27	-41.20	15.07	Pass	AVG

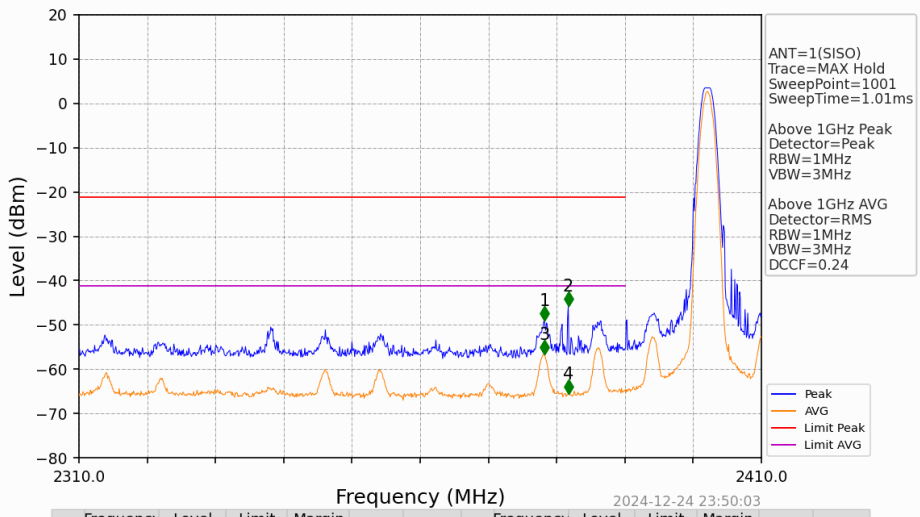
BLE 2M – High Channel – Plot



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2483.508	-32.53	-21.20	11.33	Pass	Peak	7	2483.508	-43.77	-41.20	2.57	Pass	AVG
2	2484.376	-35.35	-21.20	14.15	Pass	Peak	8	2484.376	-46.57	-41.20	5.37	Pass	AVG
3	2485.776	-38.44	-21.20	17.24	Pass	Peak	9	2485.776	-48.25	-41.20	7.05	Pass	AVG
4	2486.924	-40.71	-21.20	19.51	Pass	Peak	10	2486.924	-49.47	-41.20	8.27	Pass	AVG
5	2487.932	-41.56	-21.20	20.36	Pass	Peak	11	2487.932	-48.06	-41.20	6.86	Pass	AVG
6	2495.940	-40.37	-21.20	19.17	Pass	Peak	12	2495.940	-49.79	-41.20	8.59	Pass	AVG

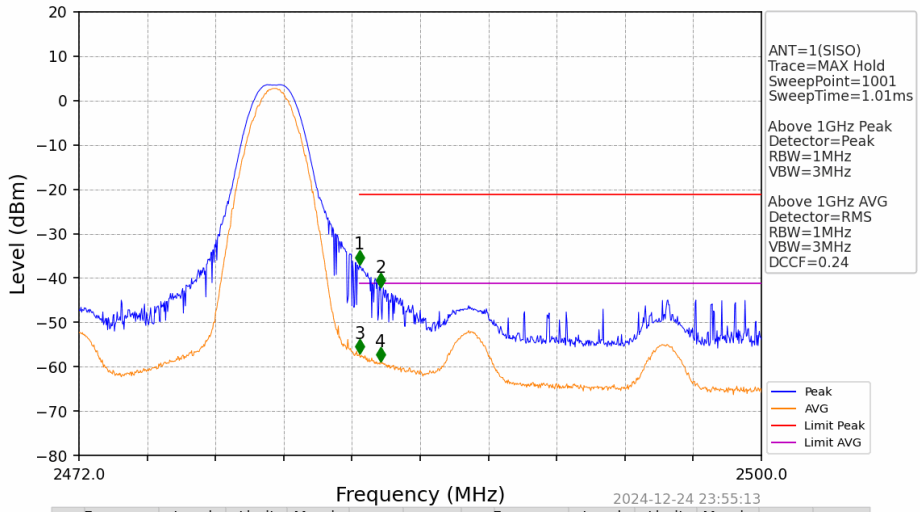
8.6 *Test Data – Right Insole*

BLE 1M – Low Channel – Plot



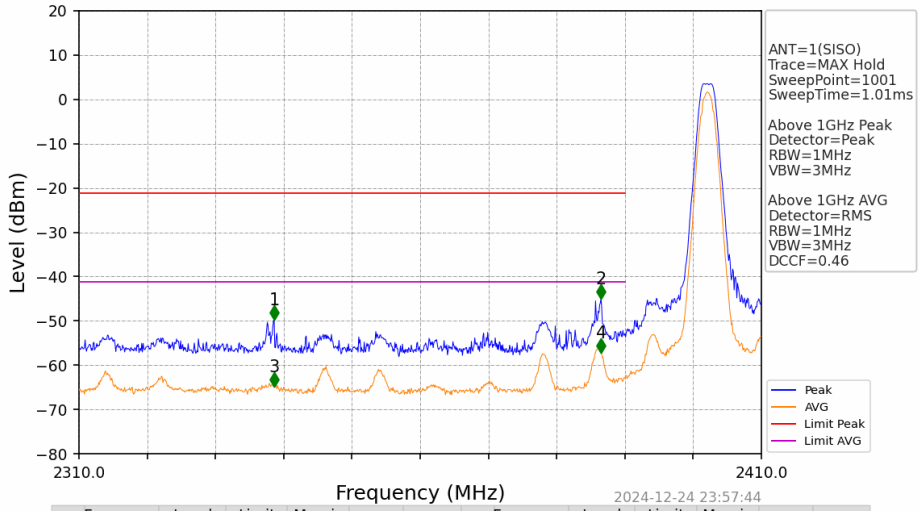
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2378.200	-49.06	-21.20	23.36	Pass	Peak	3	2378.200	-56.65	-41.20	10.95	Pass	AVG
2	2381.700	-45.68	-21.20	19.98	Pass	Peak	4	2381.700	-65.54	-41.20	19.84	Pass	AVG

BLE 1M – High Channel – Plot



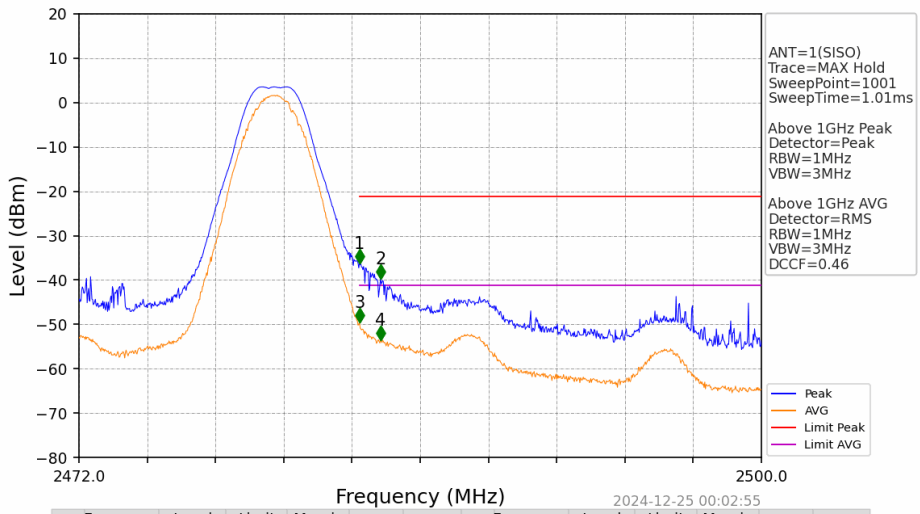
No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2483.508	-36.87	-21.20	11.17	Pass	Peak	3	2483.508	-57.05	-41.20	11.35	Pass	AVG
2	2484.376	-42.05	-21.20	16.35	Pass	Peak	4	2484.376	-58.89	-41.20	13.19	Pass	AVG

BLE 2M – Low Channel – Plot



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2338.600	-49.65	-21.20	23.95	Pass	Peak	3	2338.600	-64.89	-41.20	19.20	Pass	AVG
2	2386.500	-44.91	-21.20	19.21	Pass	Peak	4	2386.500	-57.17	-41.20	11.47	Pass	AVG

BLE 2M – High Channel – Plot



No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark	No	Frequency (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Status	Remark
1	2483.508	-36.29	-21.20	10.59	Pass	Peak	3	2483.508	-49.60	-41.20	3.90	Pass	AVG
2	2484.376	-39.68	-21.20	13.98	Pass	Peak	4	2484.376	-53.55	-41.20	7.85	Pass	AVG

9 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
total RF power, conducted	±1.5 dB	±1.2 dB
RF power density, conducted	±3 dB	±0.7 dB
spurious emissions, conducted	±3 dB	±2.1 dB
all emissions, radiated	±6 dB	±4.8 dB
temperature	±1°C	±0.5°C
humidity	±5 %	±3.5%
DC and low frequency voltages	±3 %	±0.4%
Conducted disturbance at mains port using AMN	± 3.4 dB	± 2.5 dB

10 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	28 May 2025
1	Added information and test results for second insole (throughout report)	11 June 2025