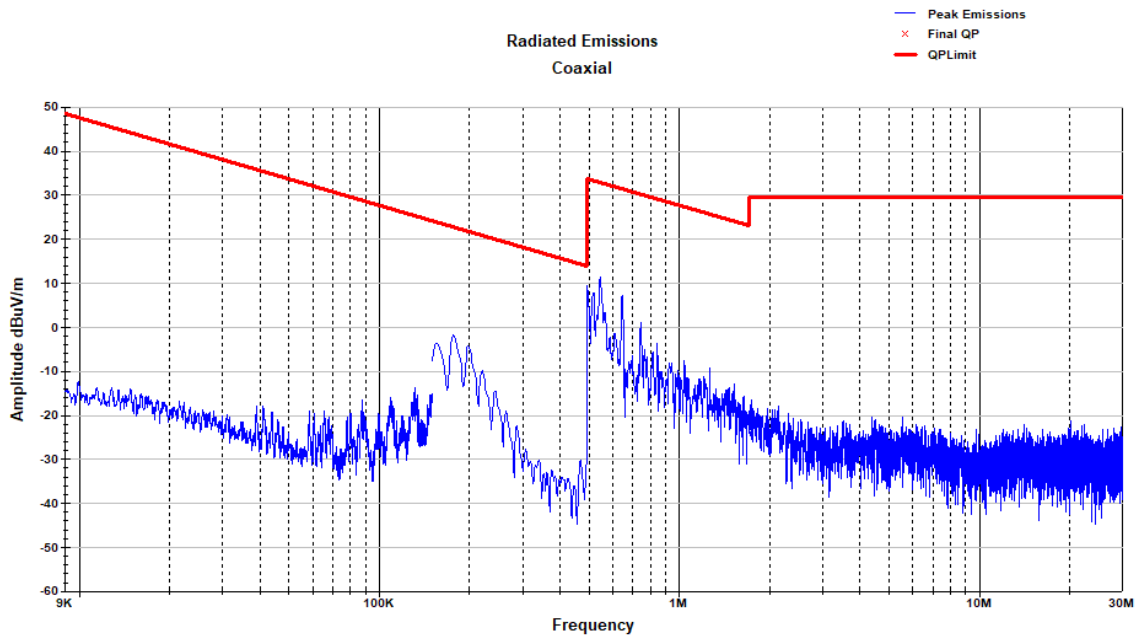


3.11 Test Data – U-NII Band 2C – 802.11a

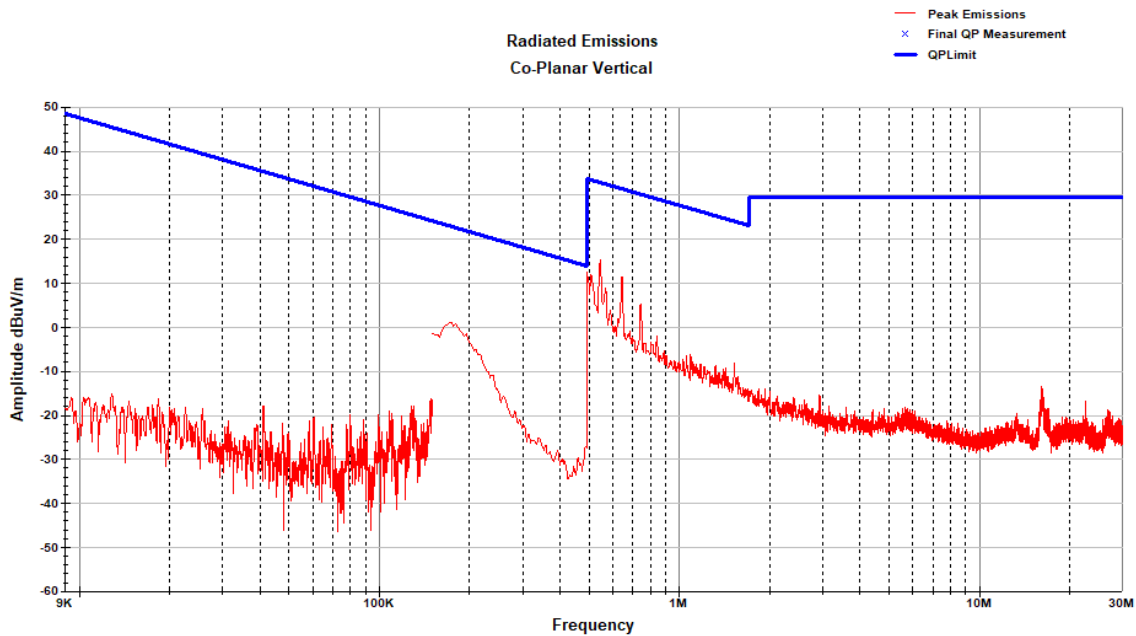
3.11.1 9kHz – 30MHz

All channels had similar plots in the 9kHz to 30MHz frequency range.

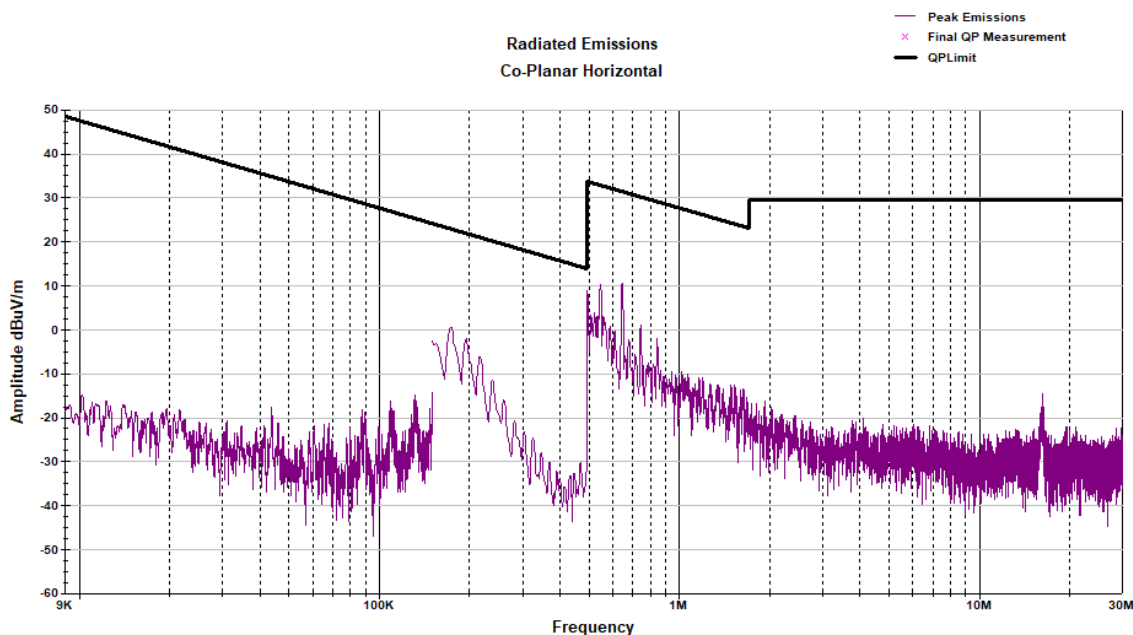
Coaxial Plot – 9 kHz-30MHz – Mid Channel



Co-Planar Vertical Plot – 9 kHz-30MHz – Mid Channel



Co-Planar Horizontal Plot – 9 kHz-30MHz – Mid Channel

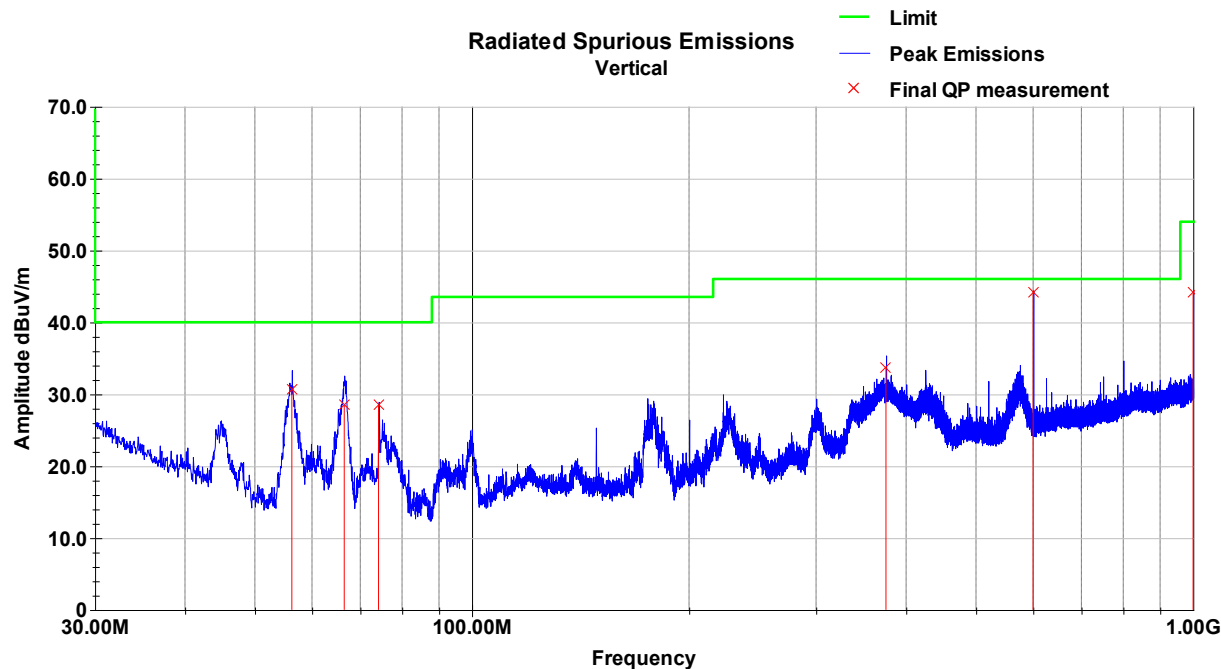


No emissions within 20dB of the limit

3.11.2 30-1000 MHz

All channels were measured and had similar plots – the worst-case plots are shown below.

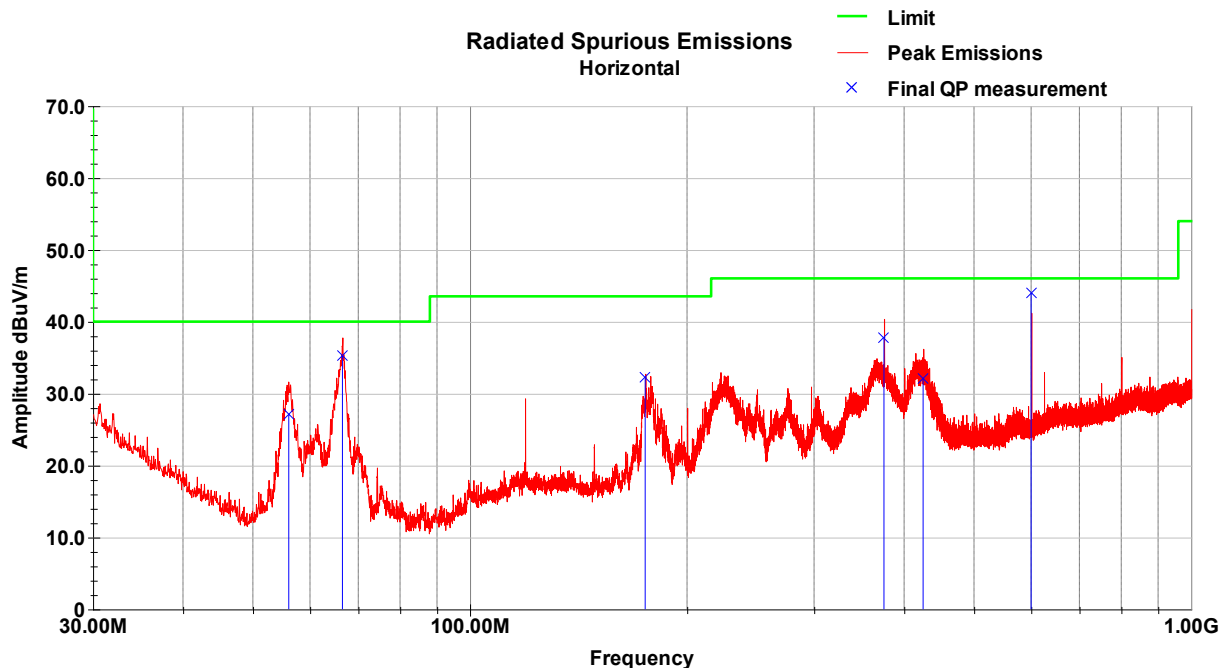
Vertical Plot – 30-1000MHz – High Channel



Vertical Data – 30-1000MHz – High Channel

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
56.27	50.2	V	124.0	100.0	11.5	0.9	32.0	30.7	100.0	-9.3
66.50	47.5	V	258.0	342.0	12.0	1.0	32.0	28.5	100.0	-11.5
74.21	47.2	V	159.0	100.0	12.2	1.0	31.9	28.5	40.0	-11.5
375.01	42.9	V	174.0	117.0	19.6	2.6	31.5	33.7	100.0	-12.3
600.00	48.6	V	333.0	100.0	23.6	3.3	31.4	44.2	100.0	-1.8
1000.00	43.3	V	212.0	100.0	27.9	4.0	31.0	44.1	54.0	-9.8
QP Value = Raw QP + AF + Loss - Amp										
Margin = QP Value - Limit										

Horizontal Plot – 30-1000MHz – High Channel

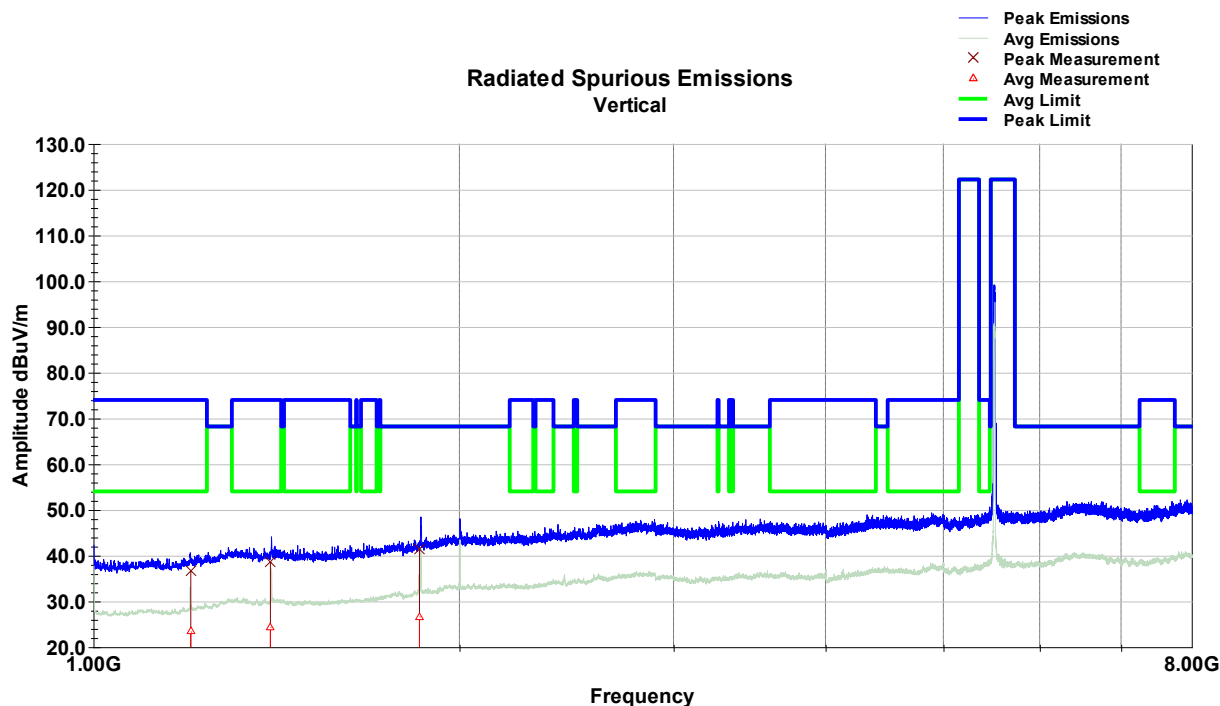


Horizontal Data – 30-1000MHz – High Channel

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
56.07	46.7	H	357.0	325.0	11.5	0.9	32.0	27.1	100.0	-12.9
66.55	54.2	H	173.0	286.0	12.0	1.0	32.0	35.2	100.0	-4.8
175.02	46.9	H	107.0	207.0	15.5	1.6	31.8	32.3	100.0	-11.2
375.02	47.0	H	0.0	100.0	19.6	2.6	31.5	37.9	100.0	-8.2
425.07	39.9	H	2.0	226.0	20.7	2.8	31.4	32.1	100.0	-13.9
600.01	48.4	H	203.0	118.0	23.6	3.3	31.4	44.0	100.0	-2.0
QP Value = Raw QP + AF + Loss - Amp										
Margin = QP Value - Limit										

3.11.3 1-18 GHz

Vertical Plot – 1-8GHz – Low Channel

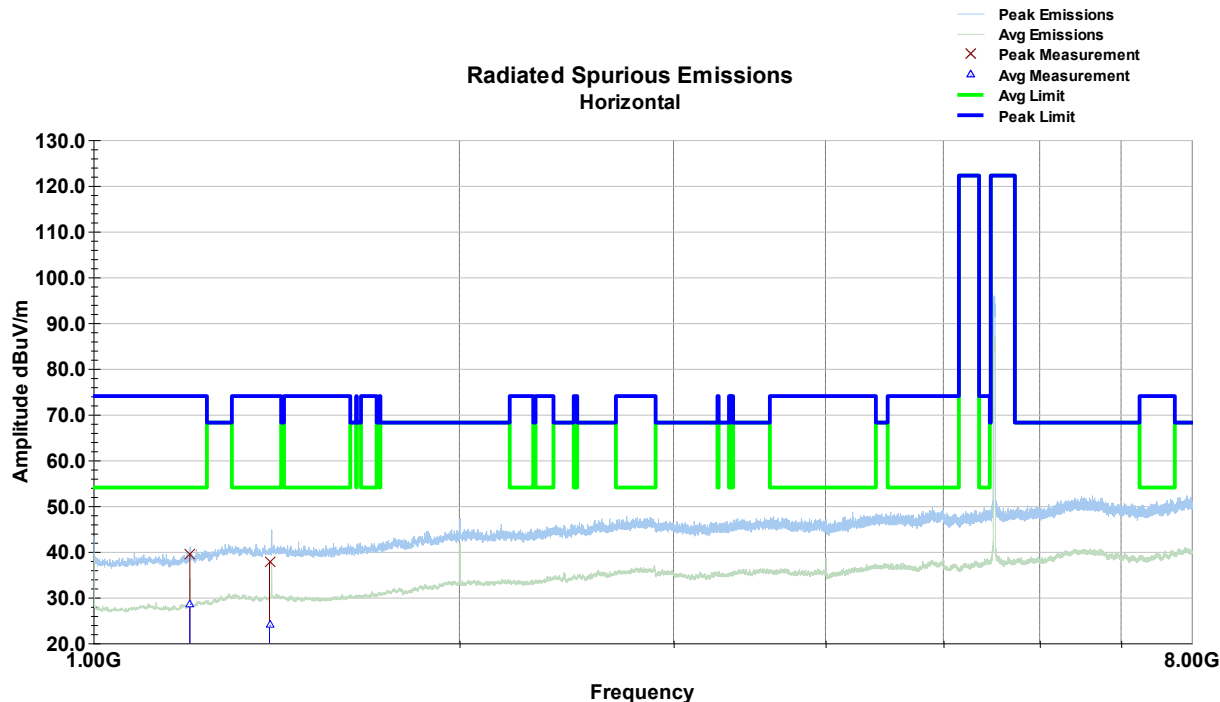


Vertical Data – 1-8GHz – Low Channel

Frequency MHz	Raw Avg dBuV	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
1202.65	28.5	V	359.0	149.0	28.1	1.3	0.0	34.4	23.4	54.0	-30.6
1398.24	28.2	V	89.0	113.0	29.0	1.5	0.0	34.3	24.5	54.0	-29.5
1854.31	28.5	V	98.0	127.0	30.6	1.8	0.0	34.3	26.7	68.2	-41.5
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1202.65	41.7	V	359.0	149.0	28.1	1.3	0.0	34.4	36.6	74.0	-37.4
1398.24	42.4	V	89.0	113.0	29.0	1.5	0.0	34.3	38.6	74.0	-35.4
1854.31	43.2	V	98.0	127.0	30.6	1.8	0.0	34.3	41.4	68.2	-26.8
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 1-8GHz – Low Channel

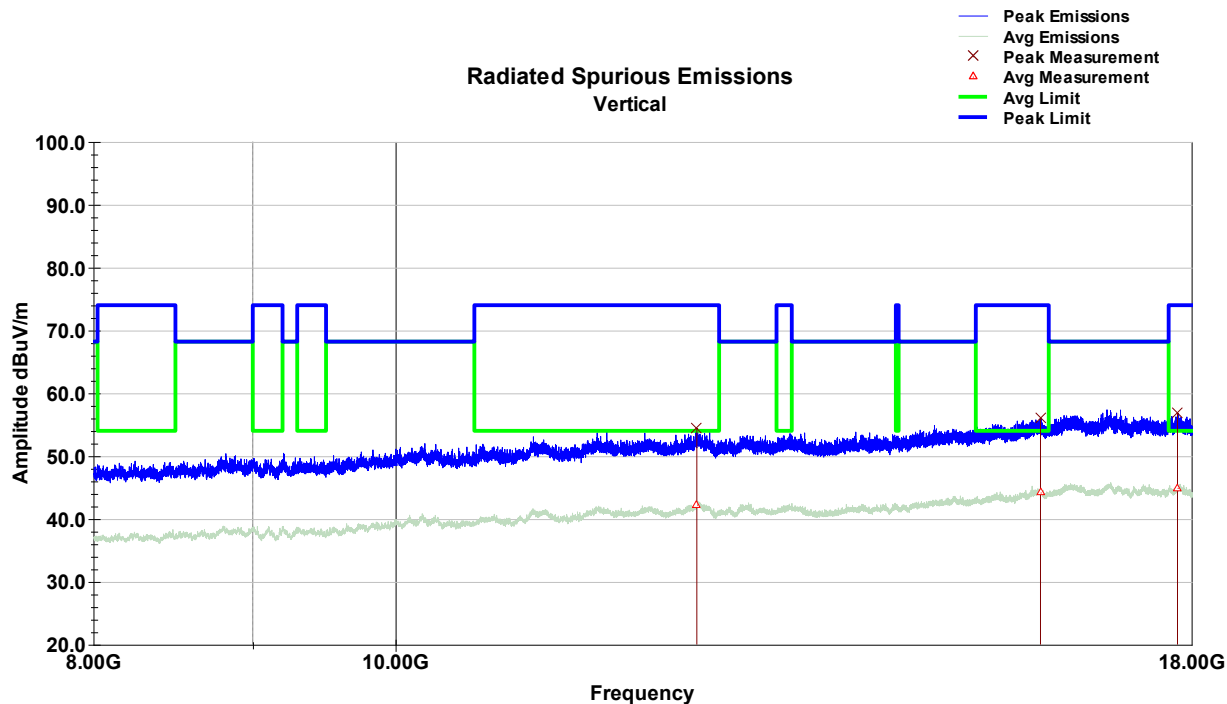


Horizontal Data – 1-8GHz – Low Channel

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
1200.61	33.7	H	151.0	102.0	28.0	1.3	0.0	34.4	28.6	54.0	-25.4
1396.15	27.8	H	277.0	138.0	29.0	1.5	0.0	34.3	24.0	54.0	-30.0
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
1200.61	44.5	H	151.0	102.0	28.0	1.3	0.0	34.4	39.4	74.0	-34.6
1396.15	41.4	H	277.0	138.0	29.0	1.5	0.0	34.3	37.7	74.0	-36.3
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 8-18GHz – Low Channel

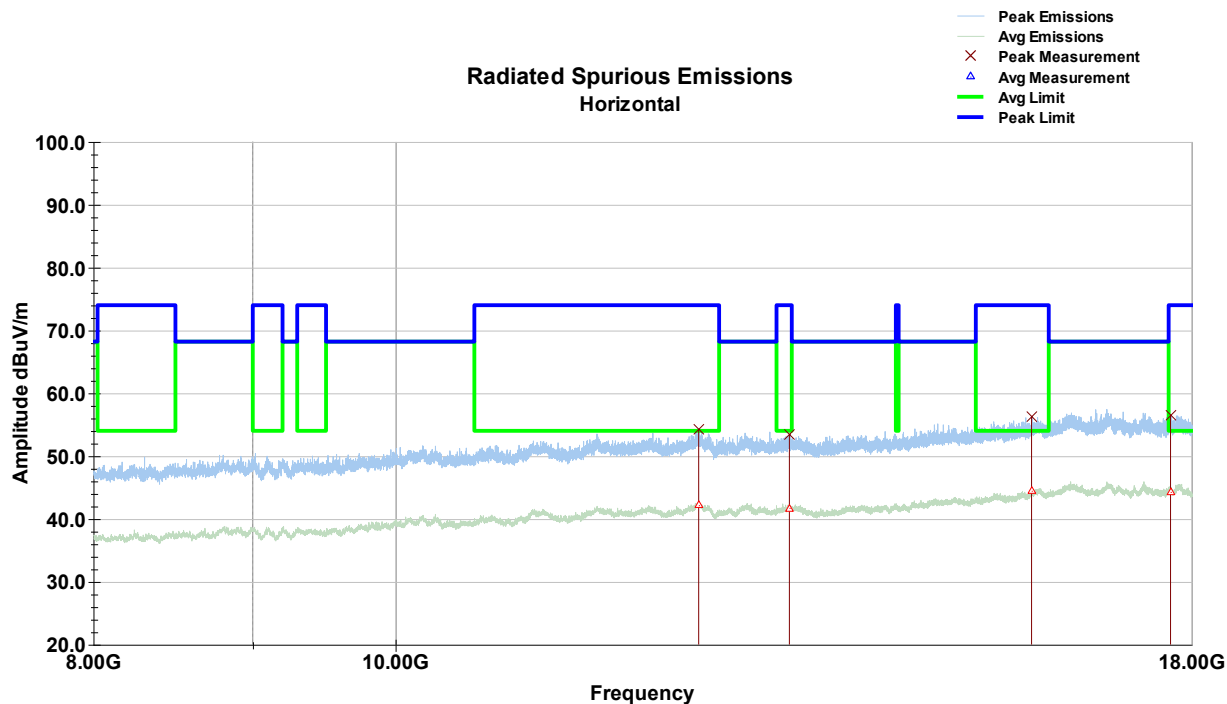


Vertical Data – 8-18GHz – Low Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12492.50	33.8	V	360.0	150.0	39.2	4.9	0.0	35.6	42.3	54.0	-11.7
16101.00	33.9	V	70.0	250.0	40.9	5.4	0.0	35.9	44.2	54.0	-9.8
17815.00	34.9	V	139.0	200.0	41.0	5.7	0.0	36.6	45.0	54.0	-9.1
Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12492.50	46.0	V	360.0	150.0	39.2	4.9	0.0	35.6	54.5	74.0	-19.5
16101.00	45.7	V	70.0	250.0	40.9	5.4	0.0	35.9	56.0	74.0	-18.0
17815.00	46.8	V	139.0	200.0	41.0	5.7	0.0	36.6	56.9	74.0	-17.1
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 8-18GHz – Low Channel

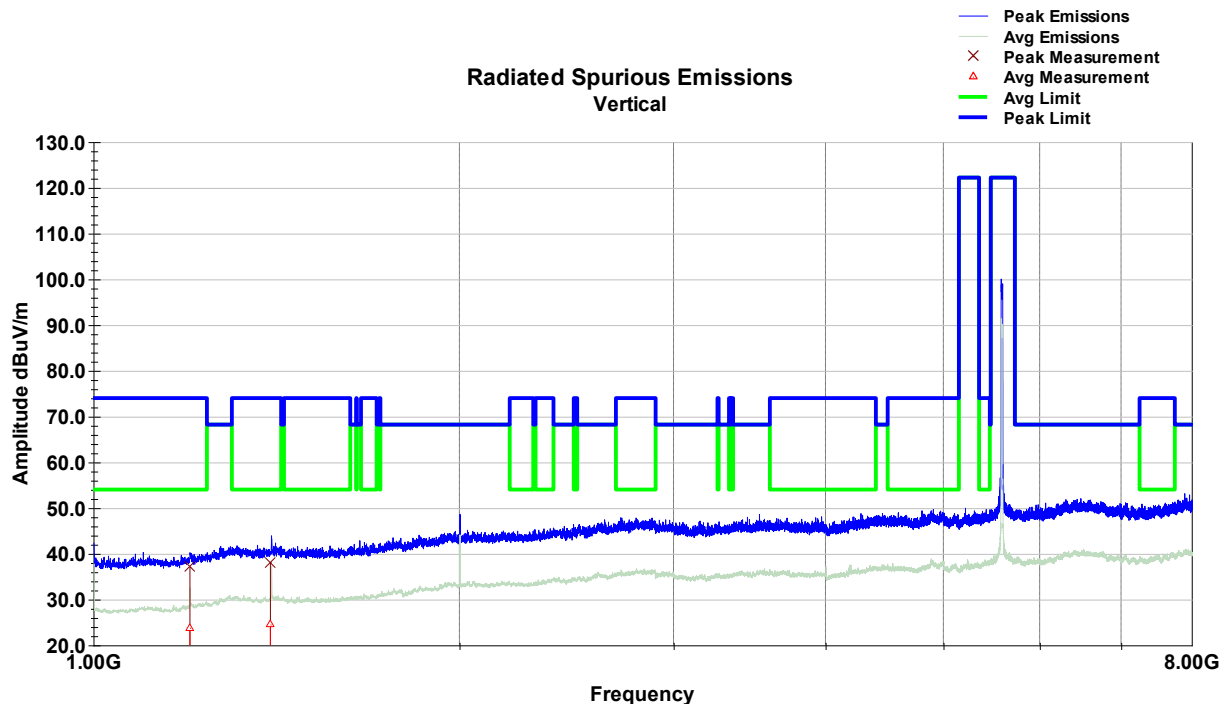


Horizontal Data – 8-18GHz – Low Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12509.50	33.7	H	261.0	200.0	39.2	4.9	0.0	35.6	42.2	54.0	-11.8
13376.50	33.6	H	35.0	150.0	39.3	5.0	0.0	36.0	41.8	54.0	-12.2
15995.50	34.2	H	327.0	150.0	40.9	5.3	0.0	35.9	44.5	54.0	-9.5
17725.00	34.3	H	259.0	250.0	40.9	5.7	0.0	36.6	44.3	54.0	-9.7
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12509.50	45.9	H	261.0	200.0	39.2	4.9	0.0	35.6	54.3	74.0	-19.7
13376.50	45.3	H	35.0	150.0	39.3	5.0	0.0	36.0	53.5	74.0	-20.5
15995.50	46.0	H	327.0	150.0	40.9	5.3	0.0	35.9	56.3	74.0	-17.7
17725.00	46.5	H	259.0	250.0	40.9	5.7	0.0	36.6	56.6	74.0	-17.5
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 1-8GHz – Mid Channel

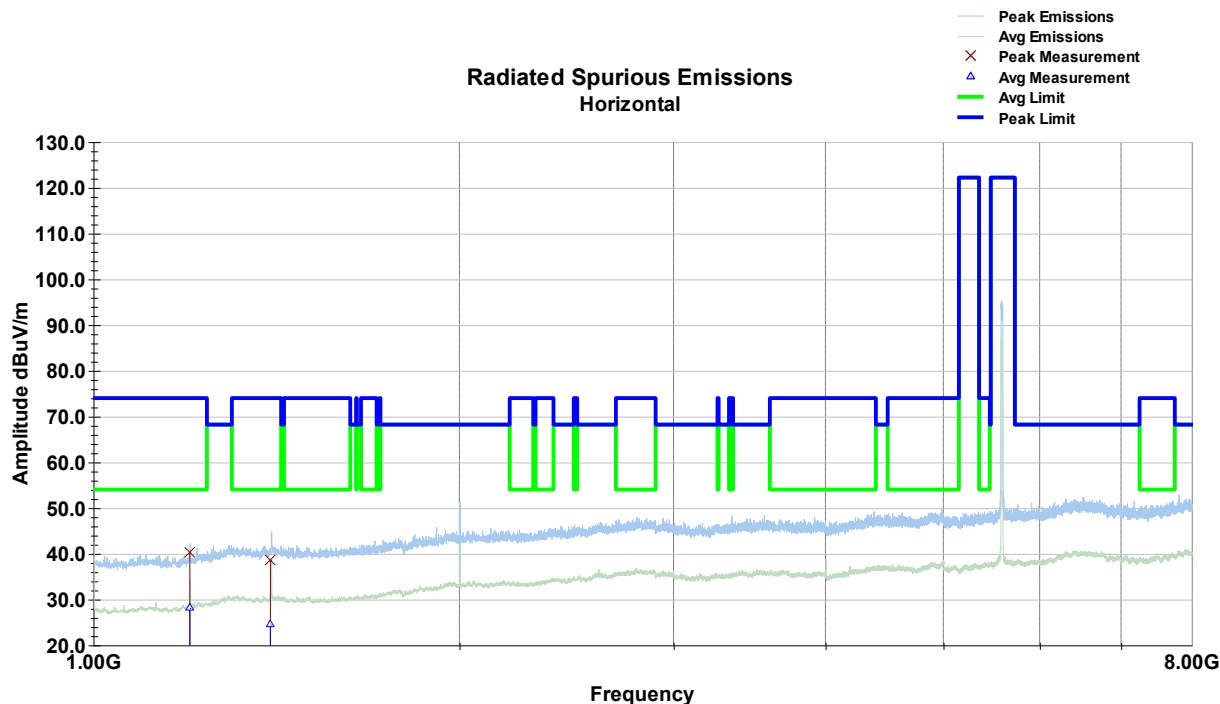


Vertical Data – 1-8GHz – Mid Channel

Frequency MHz	Raw Avg dBuV	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
1200.72	28.9	V	166.0	158.0	28.0	1.3	0.0	34.4	23.8	54.0	-30.2
1398.24	28.3	V	292.0	130.0	29.0	1.5	0.0	34.3	24.5	54.0	-29.5
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1200.72	42.2	V	166.0	158.0	28.0	1.3	0.0	34.4	37.1	74.0	-36.9
1398.24	41.9	V	292.0	130.0	29.0	1.5	0.0	34.3	38.2	74.0	-35.8
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 1-8GHz – Mid Channel

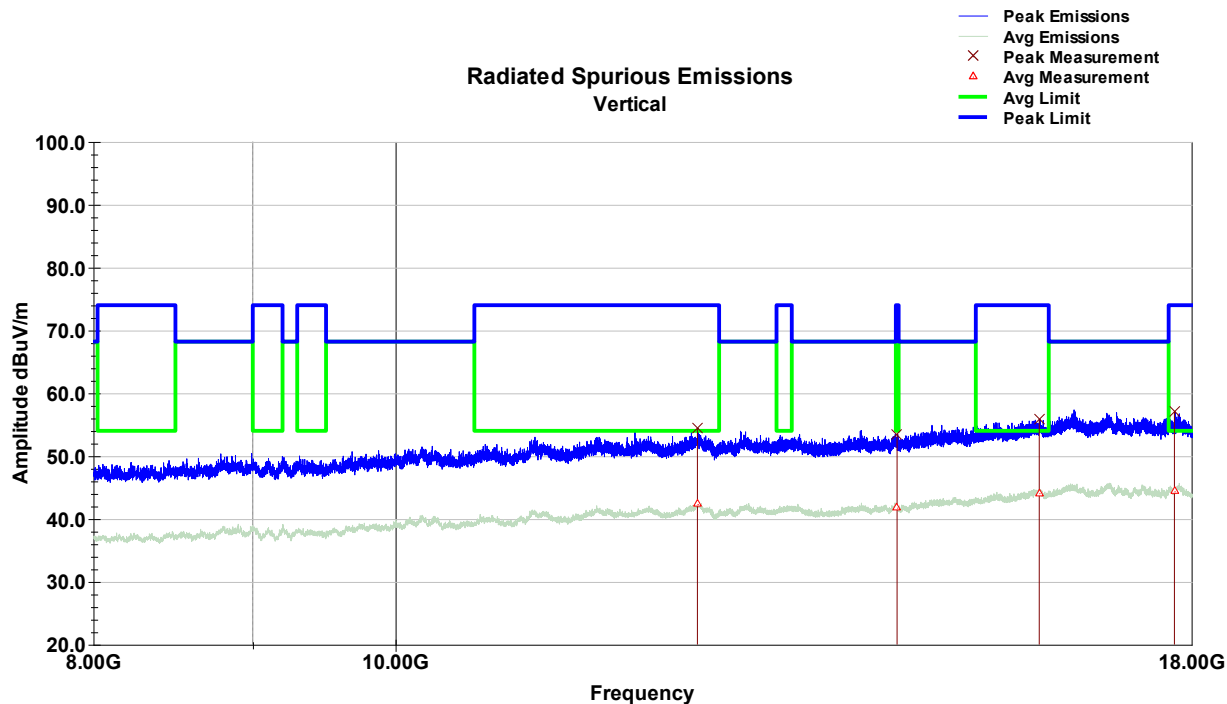


Horizontal Data – 1-8GHz – Mid Channel

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
1200.61	33.3	H	136.0	102.0	28.0	1.3	0.0	34.4	28.2	54.0	-25.8
1398.25	28.3	H	293.0	107.0	29.0	1.5	0.0	34.3	24.6	54.0	-29.4
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
1200.61	45.4	H	136.0	102.0	28.0	1.3	0.0	34.4	40.3	74.0	-33.7
1398.25	42.4	H	293.0	107.0	29.0	1.5	0.0	34.3	38.6	74.0	-35.4
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 8-18GHz – Mid Channel

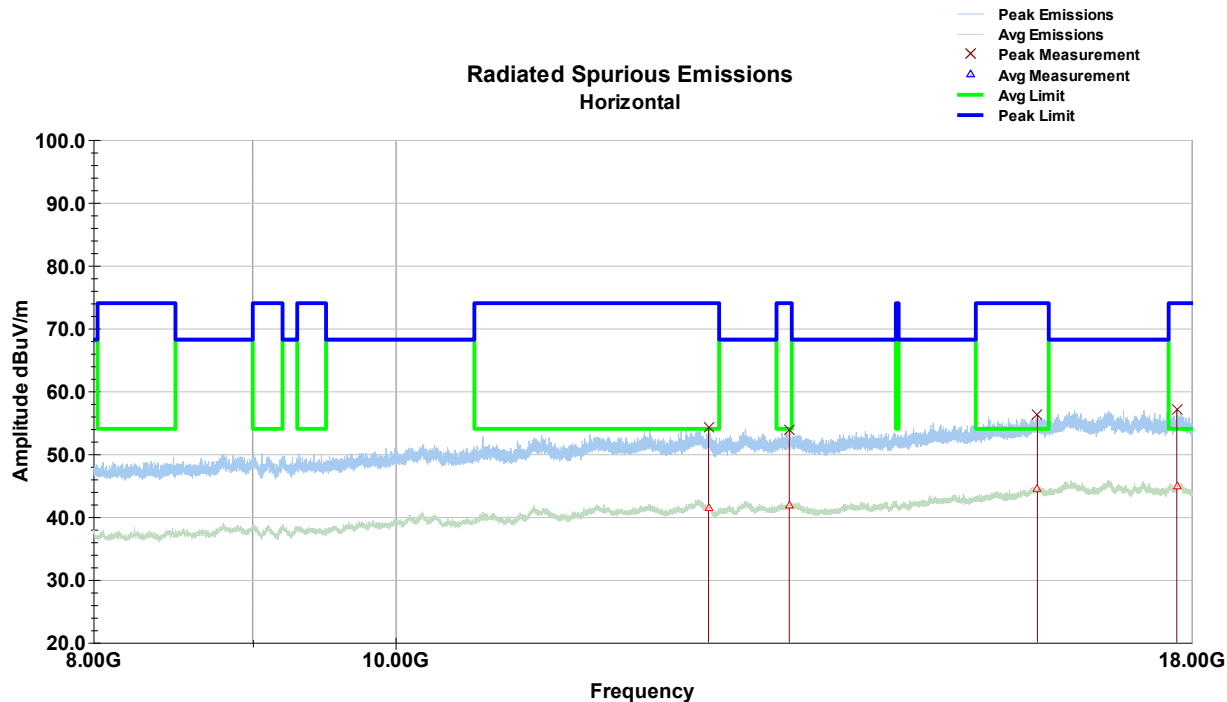


Vertical Data – 8-18GHz – Mid Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12497.50	33.8	V	28.0	200.0	39.2	4.9	0.0	35.6	42.4	54.0	-11.6
14483.50	33.5	V	360.0	200.0	39.7	5.0	0.0	36.4	41.8	54.0	-12.2
16087.00	33.8	V	35.0	250.0	40.9	5.4	0.0	35.9	44.1	54.0	-9.9
17775.00	34.4	V	352.0	250.0	41.0	5.7	0.0	36.7	44.4	54.0	-9.6
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12497.50	45.9	V	28.0	200.0	39.2	4.9	0.0	35.6	54.5	74.0	-19.5
14483.50	45.1	V	360.0	200.0	39.7	5.0	0.0	36.4	53.5	74.0	-20.5
16087.00	45.5	V	35.0	250.0	40.9	5.4	0.0	35.9	55.9	74.0	-18.1
17775.00	47.1	V	352.0	250.0	41.0	5.7	0.0	36.7	57.1	74.0	-16.9
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 8-18GHz – Mid Channel

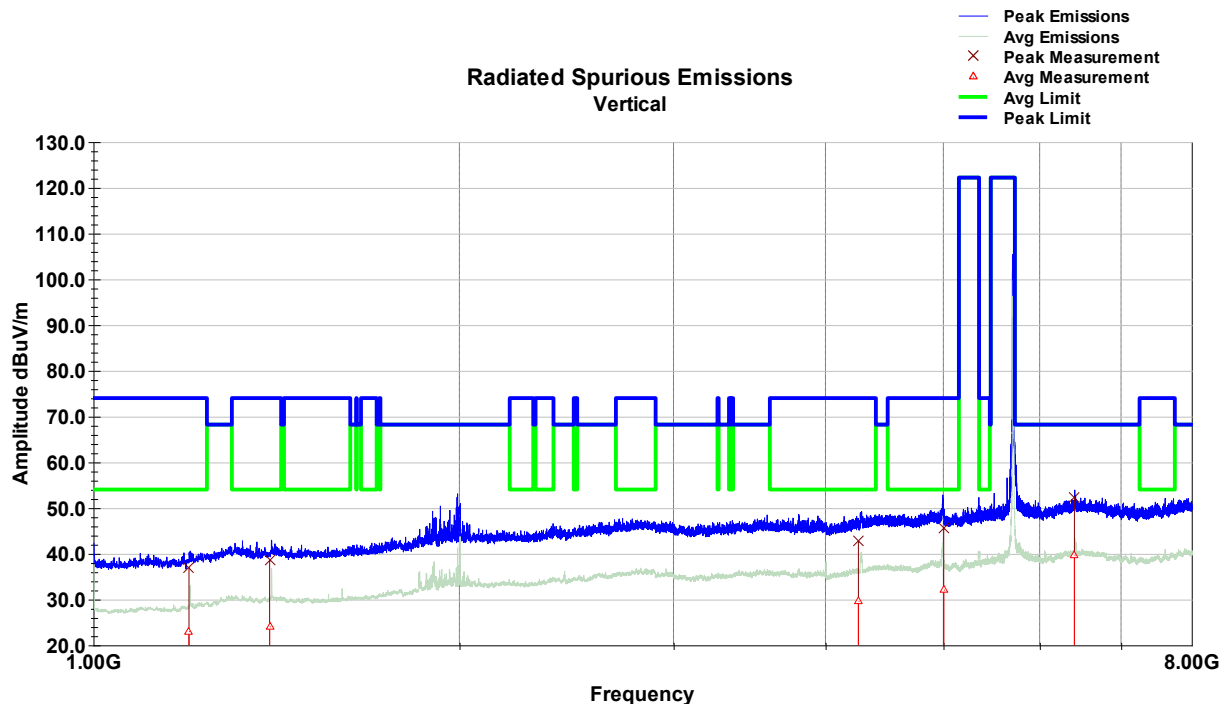


Horizontal Data – 8-18GHz – Mid Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12601.50	33.0	H	268.0	250.0	39.3	4.7	0.0	35.5	41.5	54.0	-12.5
13375.50	33.7	H	283.0	150.0	39.3	5.0	0.0	36.0	41.9	54.0	-12.1
16065.00	34.1	H	66.0	200.0	40.9	5.4	0.0	35.9	44.5	54.0	-9.5
17806.00	34.9	H	112.0	250.0	41.0	5.7	0.0	36.6	45.0	54.0	-9.0
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12601.50	45.7	H	268.0	250.0	39.3	4.7	0.0	35.5	54.2	74.0	-19.8
13375.50	45.6	H	283.0	150.0	39.3	5.0	0.0	36.0	53.8	74.0	-20.2
16065.00	45.8	H	66.0	200.0	40.9	5.4	0.0	35.9	56.2	74.0	-17.8
17806.00	47.0	H	112.0	250.0	41.0	5.7	0.0	36.6	57.1	74.0	-17.0
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 1-8GHz – High Channel

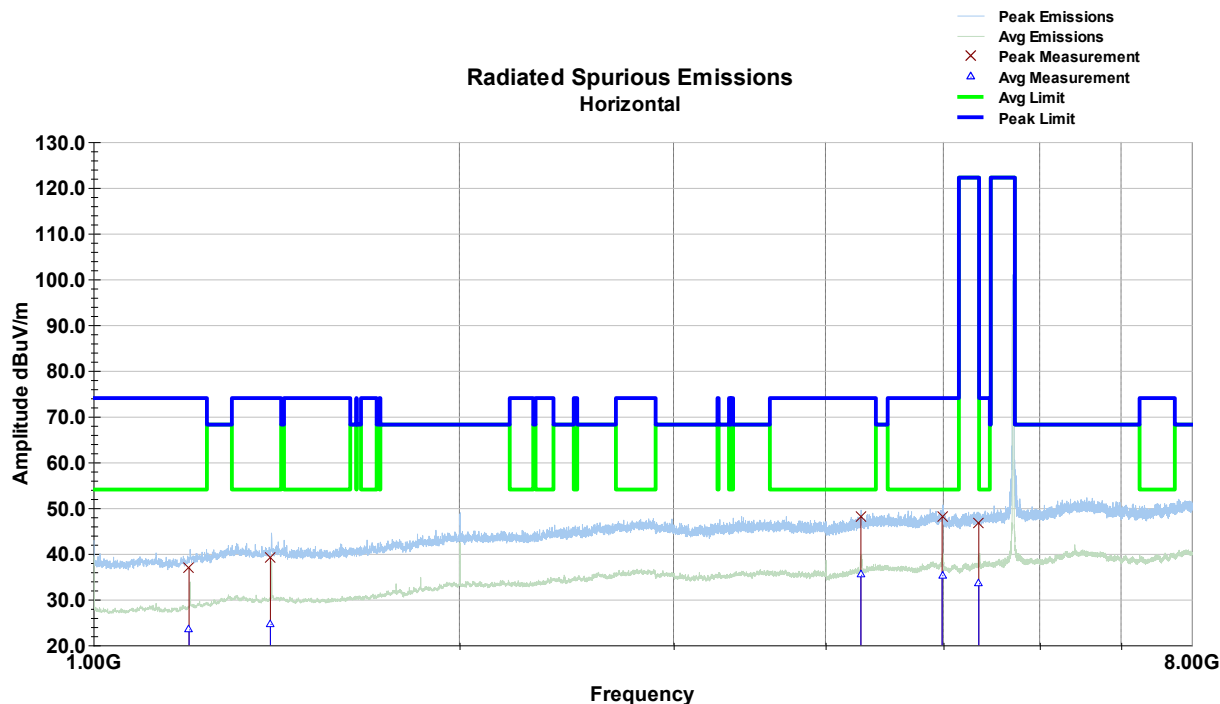


Vertical Data – 1-8GHz – High Channel

Frequency MHz	Raw Avg dBuV	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
1198.67	28.3	V	256.0	145.0	28.0	1.3	0.0	34.4	23.1	54.0	-30.9
1396.40	27.9	V	111.0	156.0	29.0	1.5	0.0	34.3	24.2	54.0	-29.8
4257.53	27.7	V	14.0	138.0	33.5	2.7	0.0	34.1	29.7	54.0	-24.3
5003.53	28.8	V	22.0	181.0	34.1	3.2	0.0	33.9	32.2	54.0	-21.8
6408.60	34.6	V	58.0	113.0	35.8	3.5	0.0	34.1	39.8	68.2	-28.4
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1198.67	42.2	V	256.0	145.0	28.0	1.3	0.0	34.4	37.0	74.0	-37.0
1396.40	42.3	V	111.0	156.0	29.0	1.5	0.0	34.3	38.6	74.0	-35.4
4257.53	40.6	V	14.0	138.0	33.5	2.7	0.0	34.1	42.7	74.0	-31.3
5003.53	42.1	V	22.0	181.0	34.1	3.2	0.0	33.9	45.5	74.0	-28.5
6408.60	47.1	V	58.0	113.0	35.8	3.5	0.0	34.1	52.3	68.2	-15.9
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 1-8GHz – High Channel

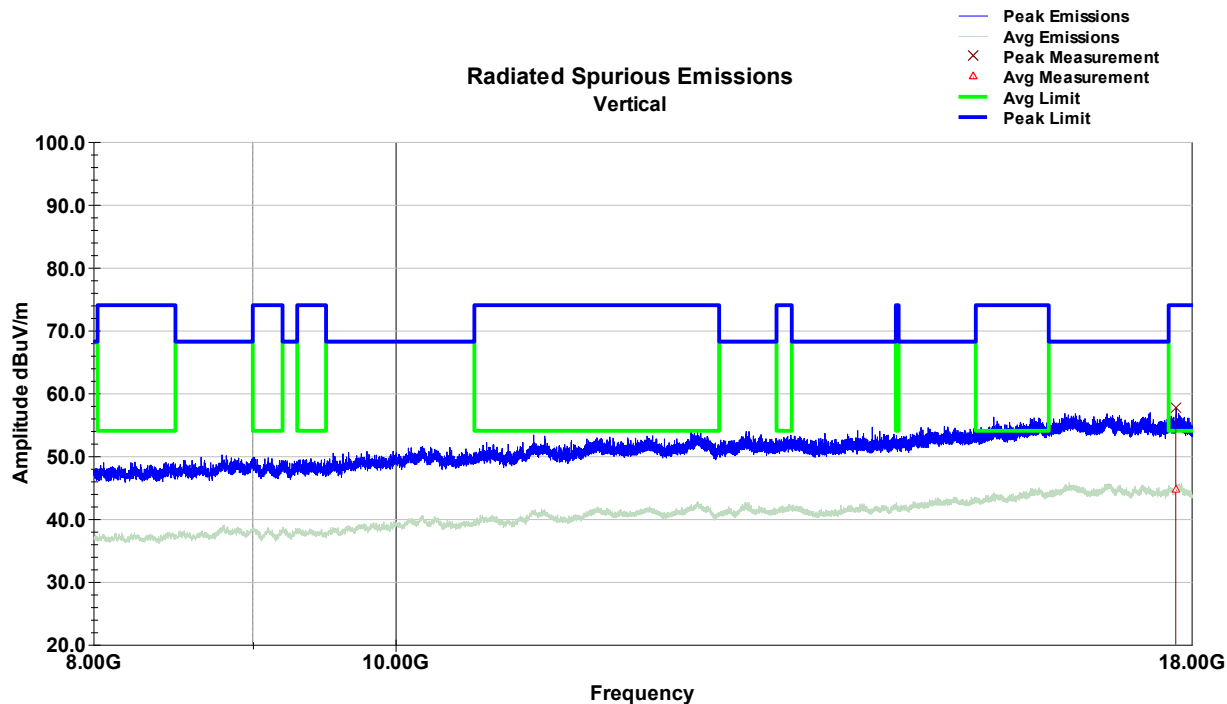


Horizontal Data – 1-8GHz – High Channel

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
1198.80	28.6	H	166.0	103.0	28.0	1.3	0.0	34.4	23.5	54.0	-30.5
1398.25	28.4	H	312.0	203.0	29.0	1.5	0.0	34.3	24.7	54.0	-29.3
4277.09	33.4	H	250.0	168.0	33.5	2.7	0.0	34.2	35.4	54.0	-18.6
4988.70	32.1	H	151.0	155.0	34.1	3.1	0.0	34.0	35.3	54.0	-18.7
5347.25	30.5	H	149.0	112.0	34.4	3.1	0.0	34.4	33.6	122.2	-88.6
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
1198.80	42.1	H	166.0	103.0	28.0	1.3	0.0	34.4	37.0	74.0	-37.0
1398.25	42.9	H	312.0	203.0	29.0	1.5	0.0	34.3	39.1	74.0	-34.9
4277.09	46.0	H	250.0	168.0	33.5	2.7	0.0	34.2	48.1	74.0	-25.9
4988.70	44.8	H	151.0	155.0	34.1	3.1	0.0	34.0	48.1	74.0	-25.9
5347.25	43.7	H	149.0	112.0	34.4	3.1	0.0	34.4	46.8	122.2	-75.4
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 8-18GHz – High Channel

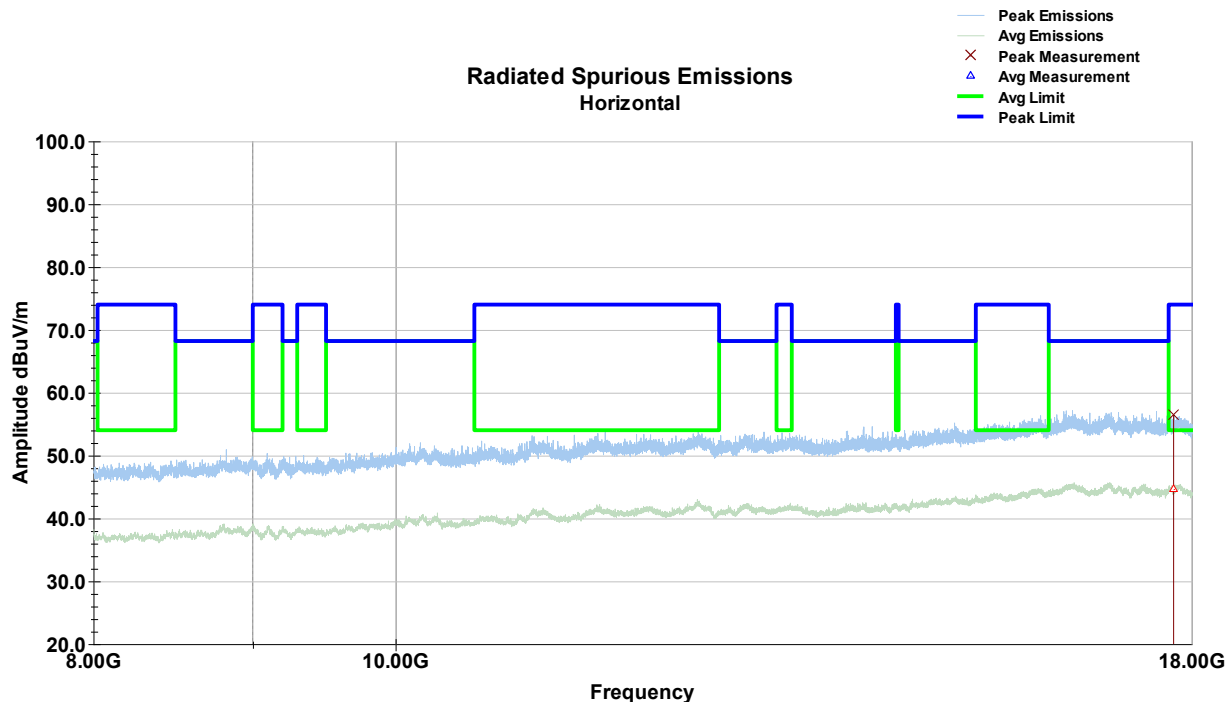


Vertical Data – 8-18GHz – High Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
17793.00	34.6	V	225.0	250.0	41.0	5.7	0.0	36.6	44.7	54.0	-9.3
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
17793.00	47.7	V	225.0	250.0	41.0	5.7	0.0	36.6	57.7	74.0	-16.3
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 8-18GHz – High Channel



Horizontal Data – 8-18GHz – High Channel

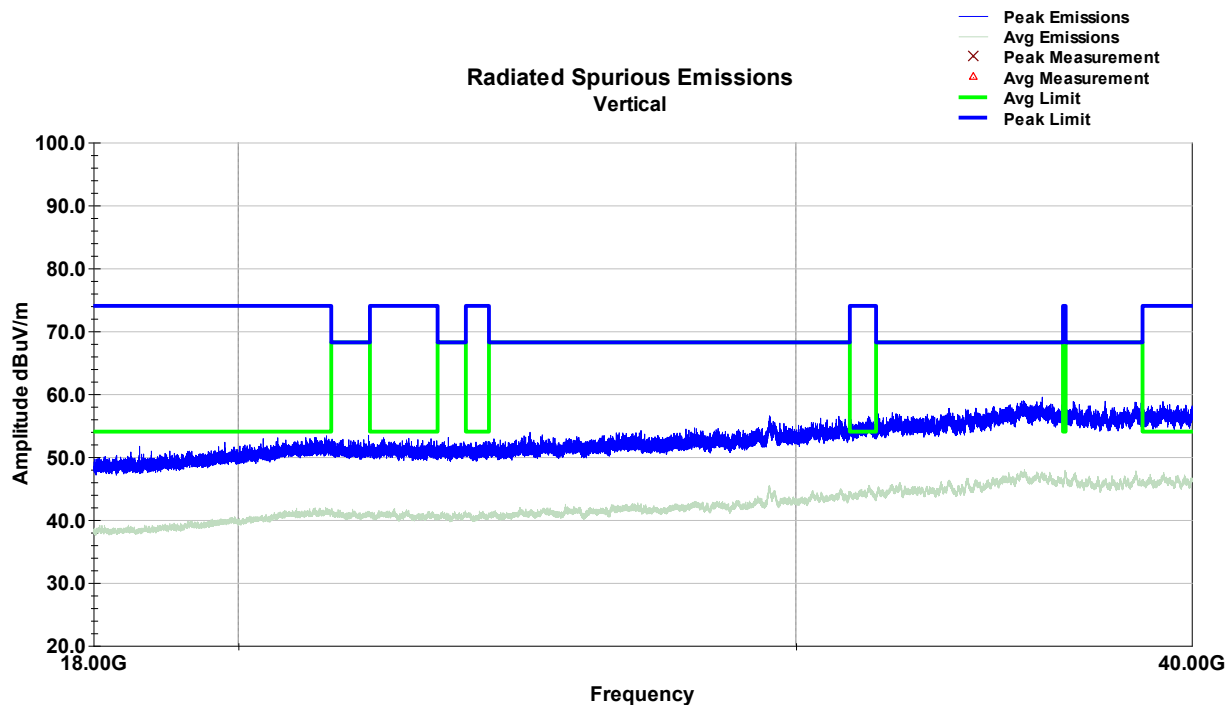
Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
17765.00	34.7	H	352.0	100.0	40.9	5.7	0.0	36.7	44.7	54.0	-9.3
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
17765.00	46.5	H	352.0	100.0	41.0	5.7	0.0	36.7	56.5	74.0	-17.6
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

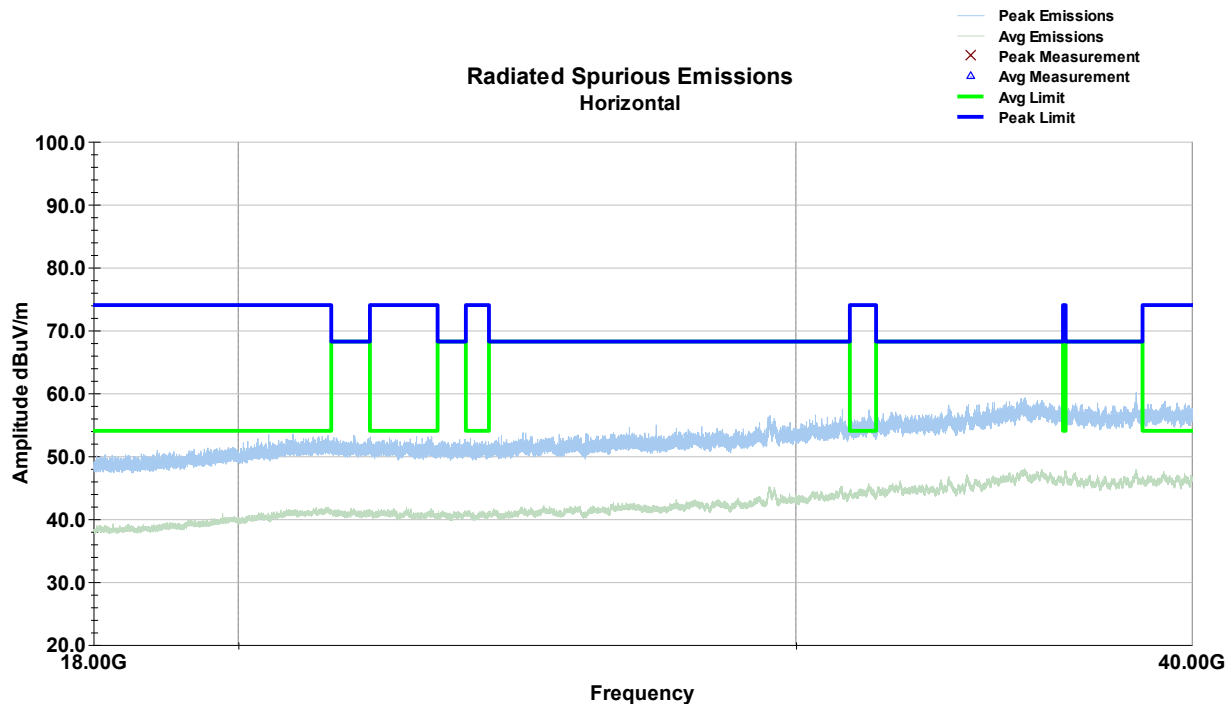
3.11.4 18-40 GHz

All channels had similar plots in the 18-40GHz frequency range.

Vertical Plot – 18-40GHz – Mid Channel



Horizontal Plot – 18-40GHz – Mid Channel

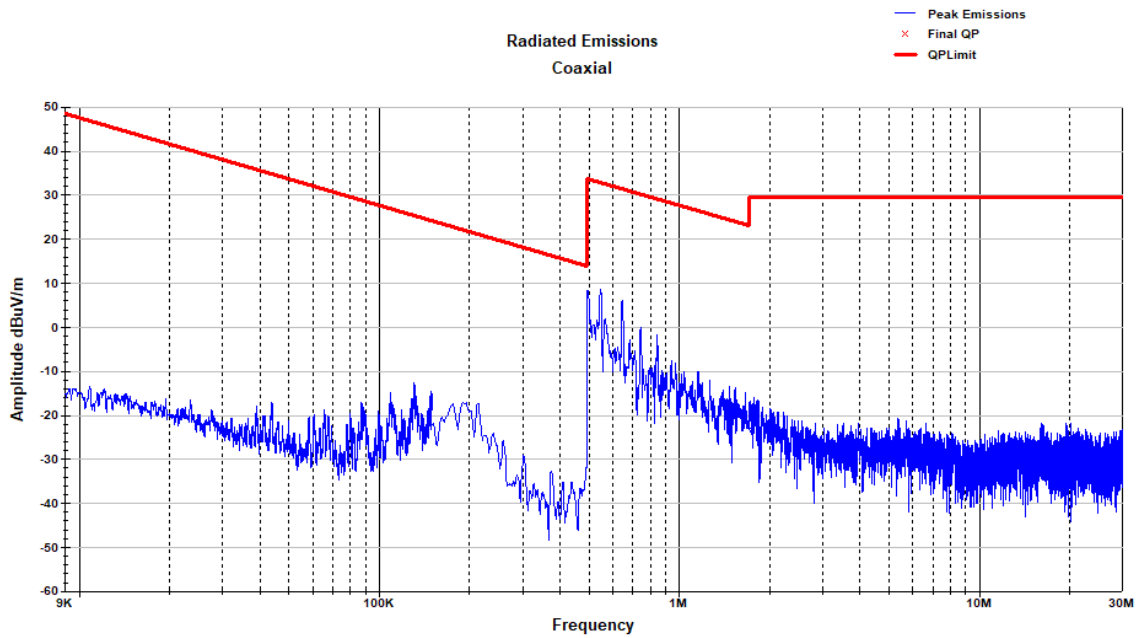


3.12 Test Data – U-NII Band 2C – 802.11n

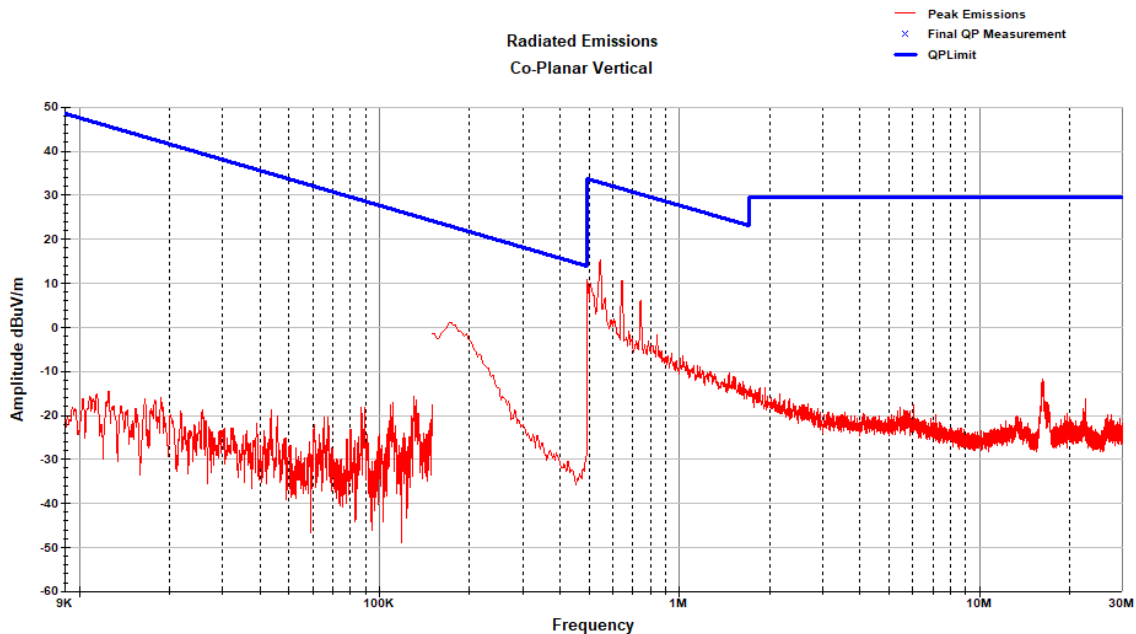
3.12.1 9kHz – 30MHz

All channels had similar plots in the 9kHz to 30MHz frequency range.

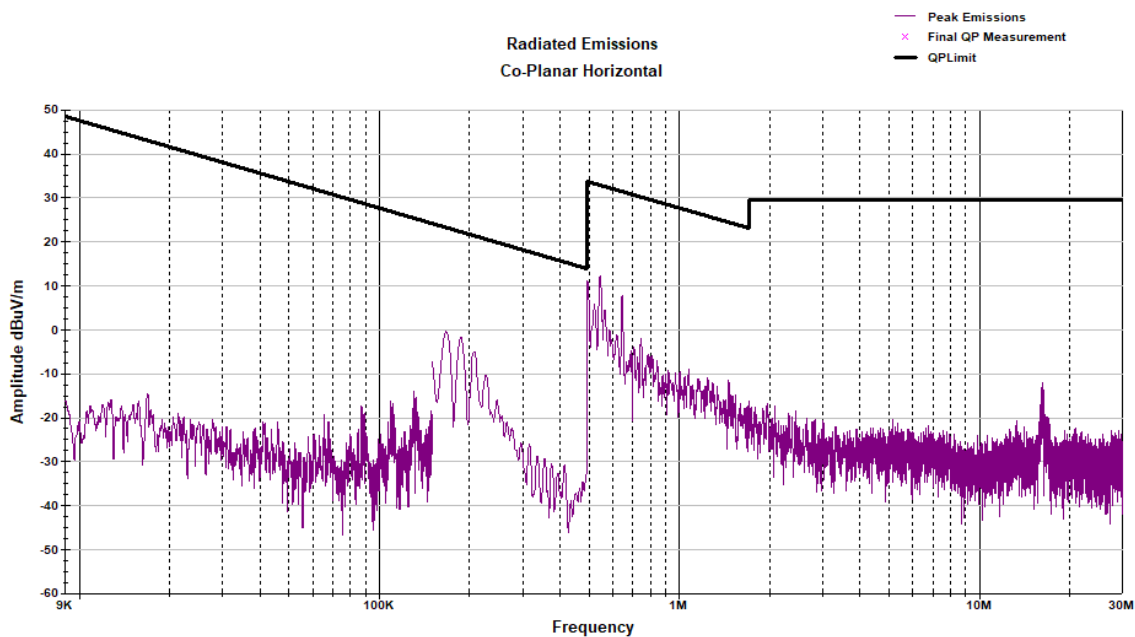
Coaxial Plot – 9 kHz-30MHz – Mid Channel



Co-Planar Vertical Plot – 9 kHz-30MHz – Mid Channel



Co-Planar Horizontal Plot – 9 kHz-30MHz – Mid Channel

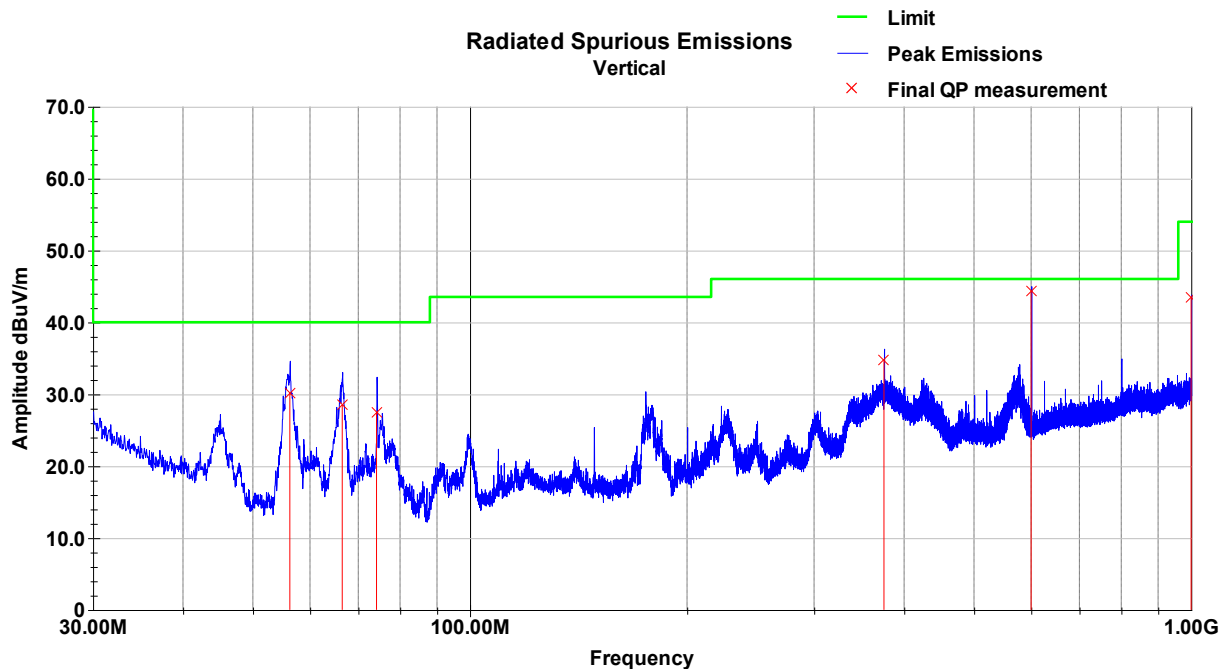


No emissions within 20dB of the limit

3.12.2 30-1000 MHz

All channels were measured and had similar plots – the worst-case plots are shown below.

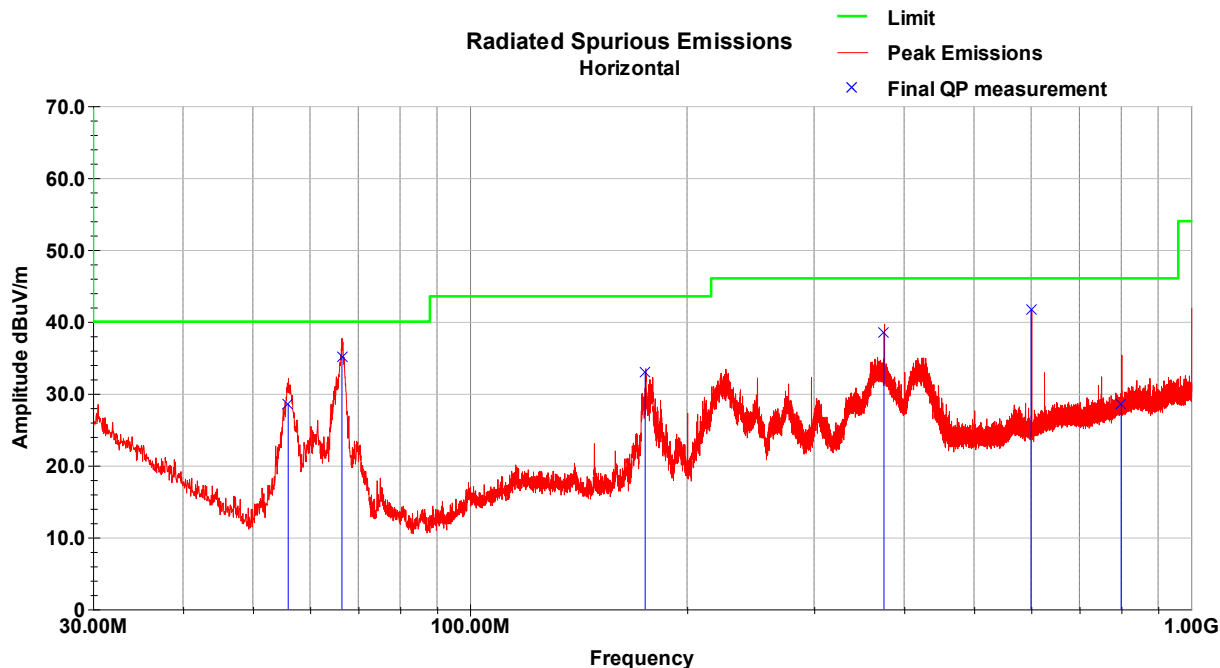
Vertical Plot – 30-1000MHz – High Channel



Vertical Data – 30-1000MHz – High Channel

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
56.27	49.7	V	148.0	138.0	11.5	0.9	32.0	30.1	100.0	-9.9
66.50	47.5	V	270.0	341.0	12.0	1.0	32.0	28.5	100.0	-11.5
74.21	46.2	V	95.0	158.0	12.2	1.0	31.9	27.5	40.0	-12.5
375.01	44.0	V	59.0	226.0	19.6	2.6	31.5	34.8	100.0	-11.2
600.00	48.8	V	336.0	100.0	23.6	3.3	31.4	44.4	100.0	-1.6
1000.00	42.7	V	206.0	100.0	27.9	4.0	31.0	43.5	54.0	-10.5
QP Value = Raw QP + AF + Loss - Amp										
Margin = QP Value - Limit										

Horizontal Plot – 30-1000MHz – High Channel

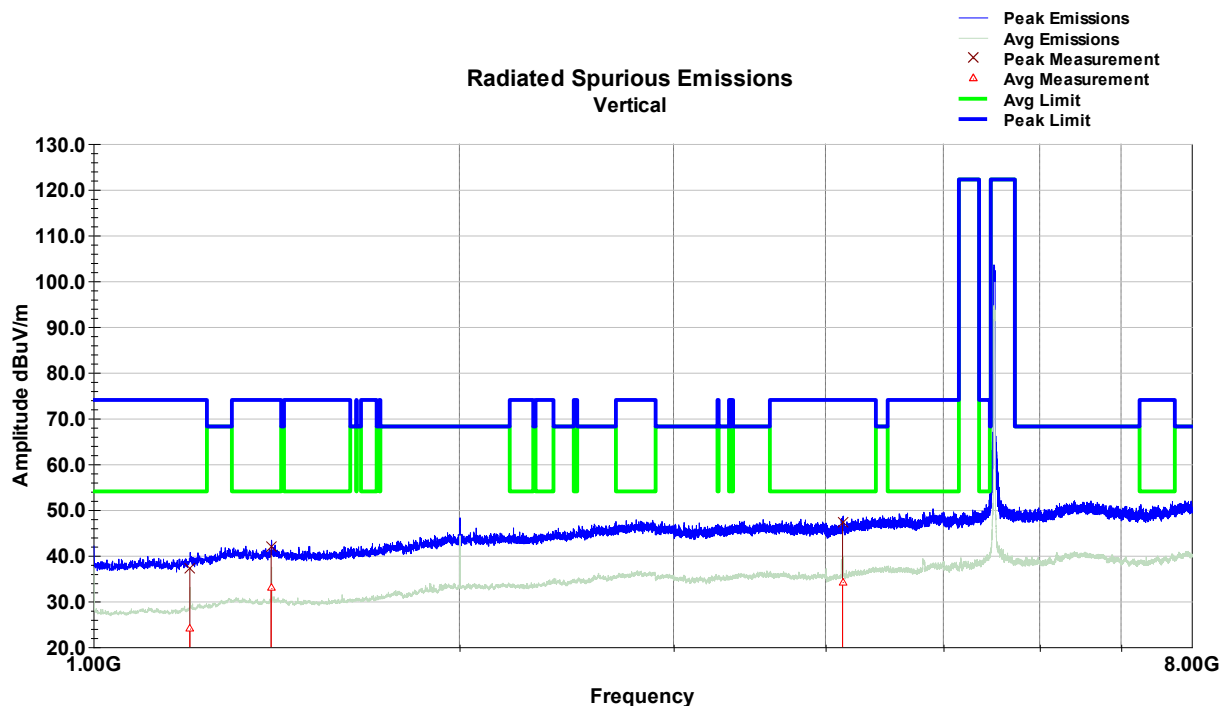


Horizontal Data – 30-1000MHz – High Channel

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
55.97	48.1	H	205.0	342.0	11.5	0.9	32.0	28.5	100.0	-11.5
66.45	54.2	H	187.0	287.0	11.9	1.0	32.0	35.2	100.0	-4.8
175.00	47.5	H	112.0	206.0	15.5	1.6	31.8	32.9	100.0	-10.6
375.01	47.6	H	0.0	100.0	19.6	2.6	31.5	38.4	100.0	-7.6
600.00	46.1	H	190.0	117.0	23.6	3.3	31.4	41.7	100.0	-4.3
800.00	30.0	H	123.0	158.0	26.1	3.7	31.4	28.5	100.0	-17.6
QP Value = Raw QP + AF + Loss - Amp										
Margin = QP Value - Limit										

3.12.3 1-18 GHz

Vertical Plot – 1-8GHz – Low Channel

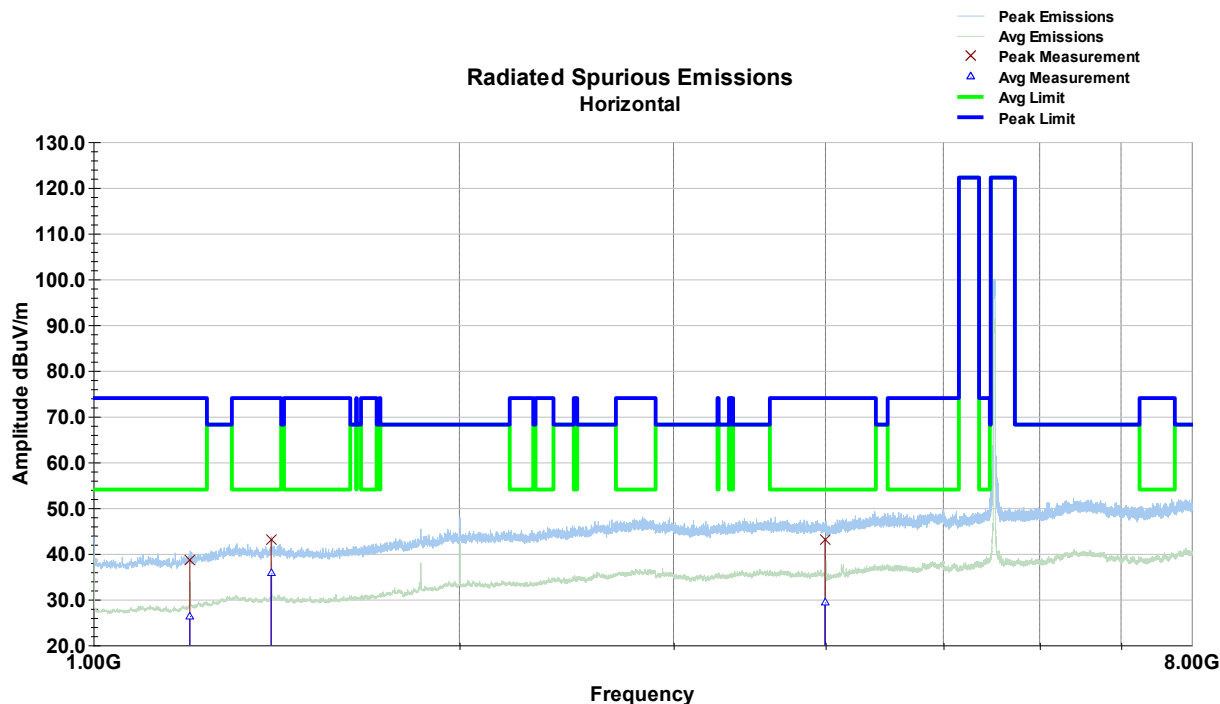


Vertical Data – 1-8GHz – Low Channel

Frequency MHz	Raw Avg dBuV	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
1200.60	29.2	V	171.0	159.0	28.0	1.3	0.0	34.4	24.0	54.0	-30.0
1400.23	36.6	V	32.0	102.0	29.0	1.5	0.0	34.2	32.9	54.0	-21.1
4131.46	32.3	V	300.0	250.0	33.4	2.8	0.0	34.3	34.2	54.0	-19.8
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1200.60	42.4	V	171.0	159.0	28.0	1.3	0.0	34.4	37.3	74.0	-36.7
1400.23	45.5	V	32.0	102.0	29.0	1.5	0.0	34.2	41.8	74.0	-32.2
4131.46	45.4	V	300.0	250.0	33.4	2.8	0.0	34.3	47.3	74.0	-26.7
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 1-8GHz – Low Channel

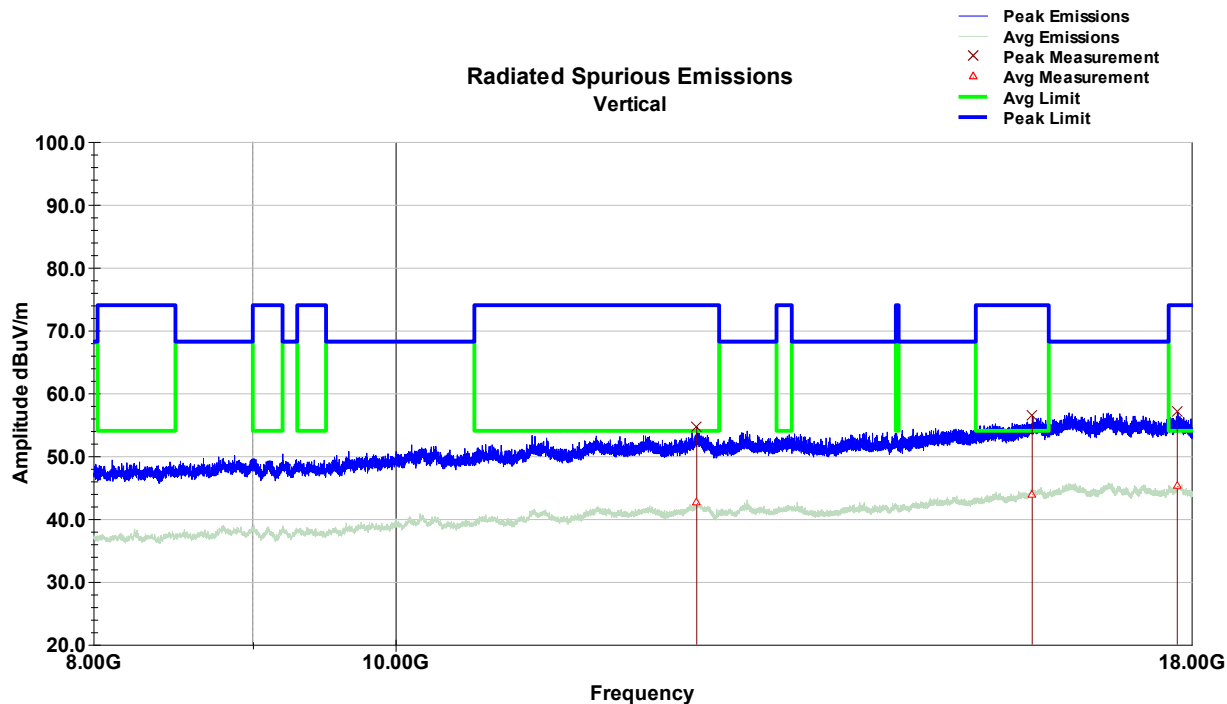


Horizontal Data – 1-8GHz – Low Channel

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
1200.61	31.5	H	115.0	135.0	28.0	1.3	0.0	34.4	26.4	54.0	-27.6
1400.36	39.4	H	128.0	129.0	29.0	1.5	0.0	34.2	35.7	54.0	-18.3
3996.33	27.9	H	255.0	114.0	33.3	2.7	0.0	34.4	29.4	54.0	-24.6
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
1200.61	43.8	H	115.0	135.0	28.0	1.3	0.0	34.4	38.7	74.0	-35.3
1400.36	46.9	H	128.0	129.0	29.0	1.5	0.0	34.2	43.2	74.0	-30.8
3996.33	41.7	H	255.0	114.0	33.3	2.7	0.0	34.4	43.2	74.0	-30.8
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 8-18GHz – Low Channel

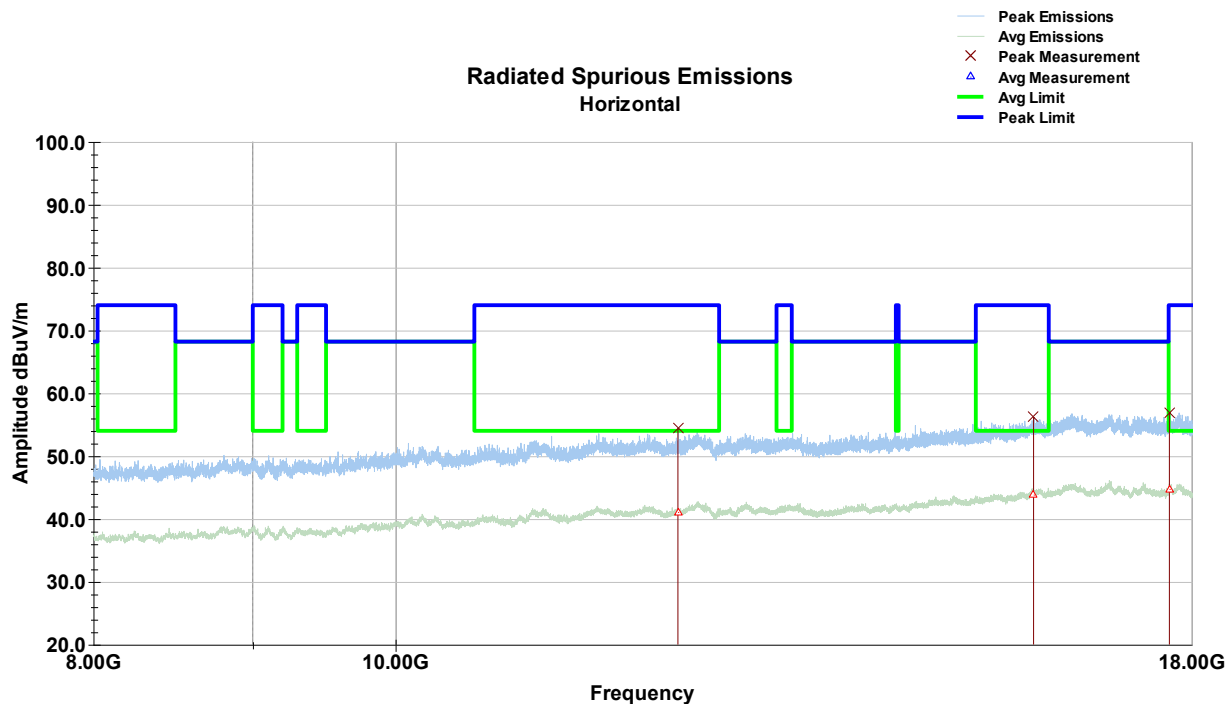


Vertical Data – 8-18GHz – Low Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12491.50	34.1	V	35.0	200.0	39.2	4.9	0.0	35.6	42.6	54.0	-11.4
16003.00	33.6	V	95.0	250.0	40.9	5.3	0.0	35.9	43.9	54.0	-10.1
17812.50	35.2	V	343.0	150.0	41.0	5.7	0.0	36.6	45.3	54.0	-8.8
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12491.50	46.2	V	35.0	200.0	39.2	4.9	0.0	35.6	54.7	74.0	-19.3
16003.00	46.1	V	95.0	250.0	40.9	5.3	0.0	35.9	56.4	74.0	-17.6
17812.50	46.9	V	343.0	150.0	41.0	5.7	0.0	36.6	57.0	74.0	-17.0
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 8-18GHz – Low Channel

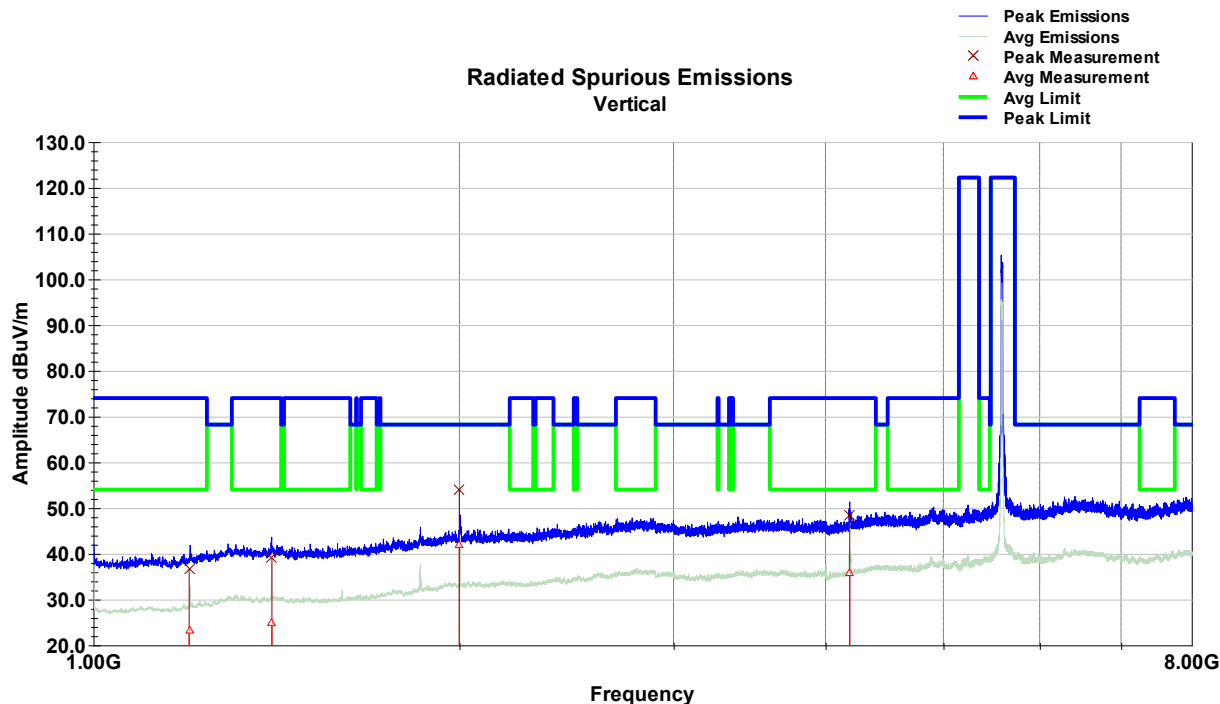


Horizontal Data – 8-18GHz – Low Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12319.00	33.1	H	27.0	150.0	39.1	4.7	0.0	35.8	41.1	54.0	-12.9
16019.00	33.5	H	233.0	200.0	40.9	5.4	0.0	35.9	43.9	54.0	-10.1
17709.00	34.7	H	208.0	250.0	40.9	5.7	0.0	36.5	44.8	54.0	-9.2
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
12319.00	46.4	H	27.0	150.0	39.1	4.7	0.0	35.9	54.4	74.0	-19.6
16019.00	45.8	H	233.0	200.0	40.9	5.4	0.0	35.9	56.2	74.0	-17.8
17709.00	46.9	H	208.0	250.0	40.9	5.7	0.0	36.5	57.0	74.0	-17.0
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 1-8GHz – Mid Channel

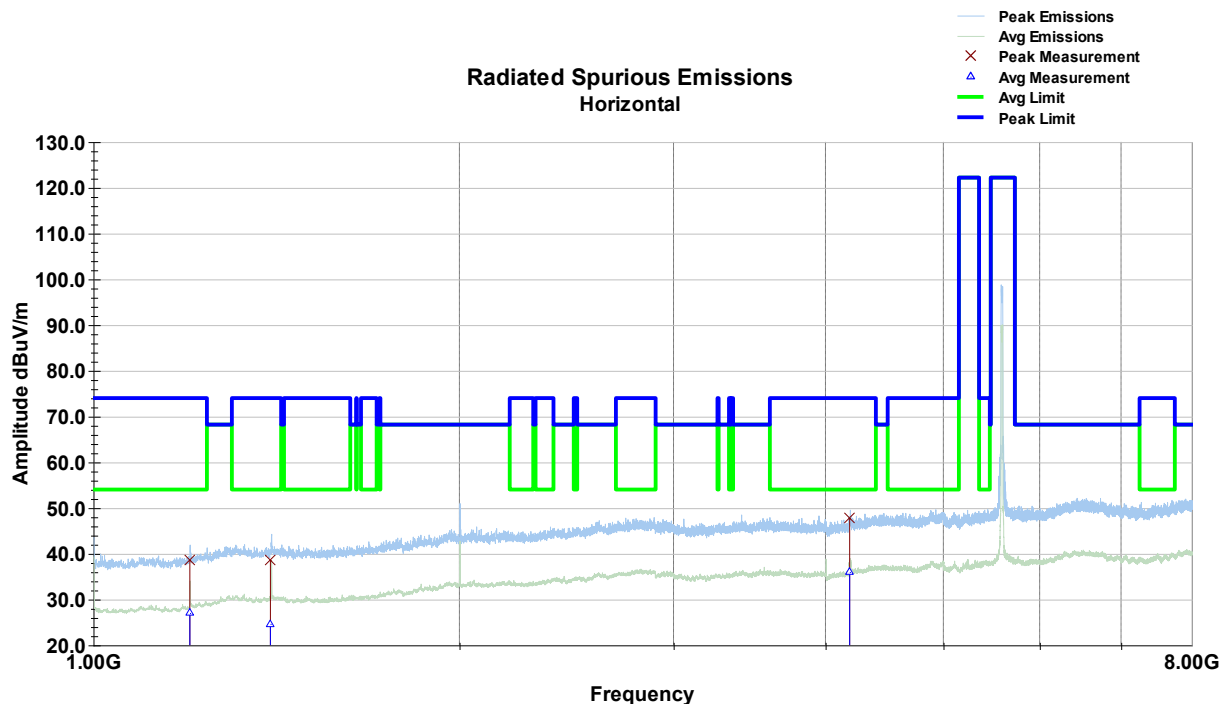


Vertical Data – 1-8GHz – Mid Channel

Frequency MHz	Raw Avg dBuV	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
1198.91	28.5	V	184.0	132.0	28.0	1.3	0.0	34.4	23.3	54.0	-30.7
1402.35	28.7	V	213.0	103.0	29.0	1.5	0.0	34.3	25.0	54.0	-29.0
1999.57	43.2	V	145.0	150.0	31.4	2.0	0.0	34.7	41.9	68.2	-26.3
4187.80	33.8	V	318.0	145.0	33.5	2.8	0.0	34.3	35.9	54.0	-18.1
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1198.91	41.8	V	184.0	132.0	28.0	1.3	0.0	34.4	36.7	74.0	-37.3
1402.35	42.8	V	213.0	103.0	29.0	1.5	0.0	34.3	39.1	74.0	-34.9
1999.57	55.3	V	145.0	150.0	31.4	2.0	0.0	34.7	54.0	68.2	-14.2
4187.80	46.4	V	318.0	145.0	33.5	2.8	0.0	34.3	48.4	74.0	-25.6
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 1-8GHz – Mid Channel

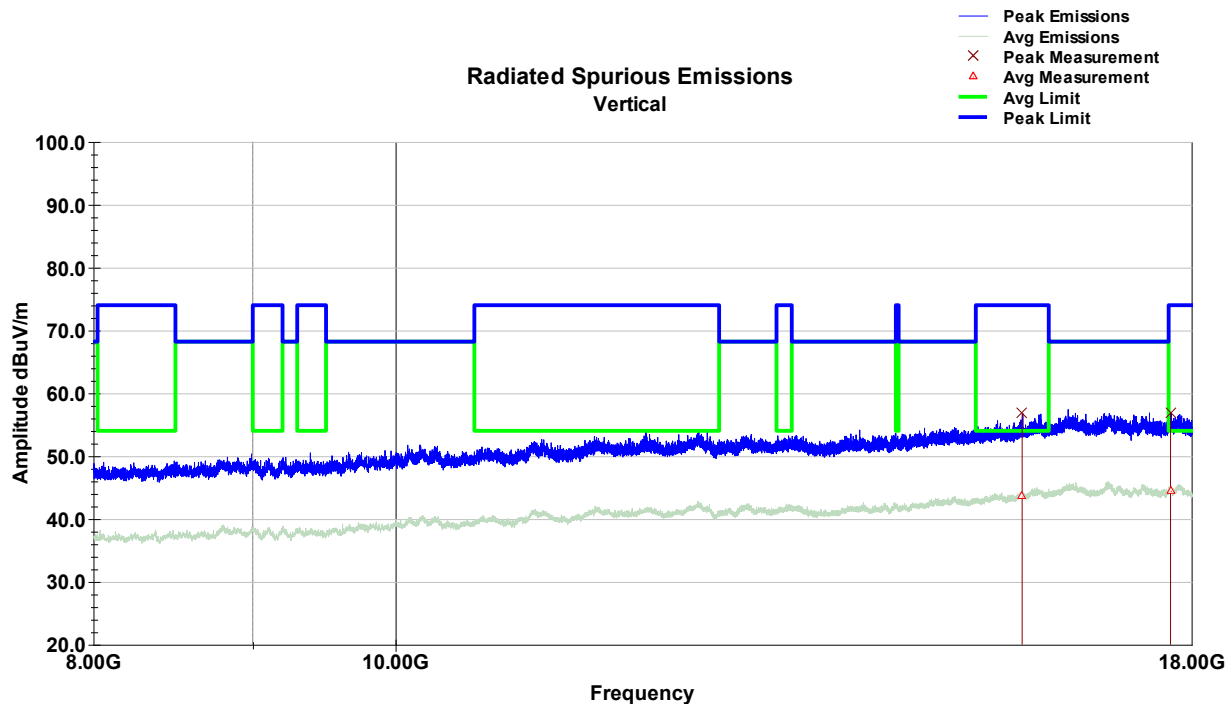


Horizontal Data – 1-8GHz – Mid Channel

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
1200.61	32.2	H	140.0	114.0	28.0	1.3	0.0	34.4	27.1	54.0	-26.9
1398.25	28.4	H	254.0	146.0	29.0	1.5	0.0	34.3	24.7	54.0	-29.3
4187.69	34.0	H	75.0	141.0	33.5	2.8	0.0	34.3	36.0	54.0	-18.0
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
1200.61	43.7	H	140.0	114.0	28.0	1.3	0.0	34.4	38.6	74.0	-35.4
1398.25	42.4	H	254.0	146.0	29.0	1.5	0.0	34.3	38.6	74.0	-35.4
4187.69	45.8	H	75.0	141.0	33.5	2.8	0.0	34.3	47.8	74.0	-26.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 8-18GHz – Mid Channel

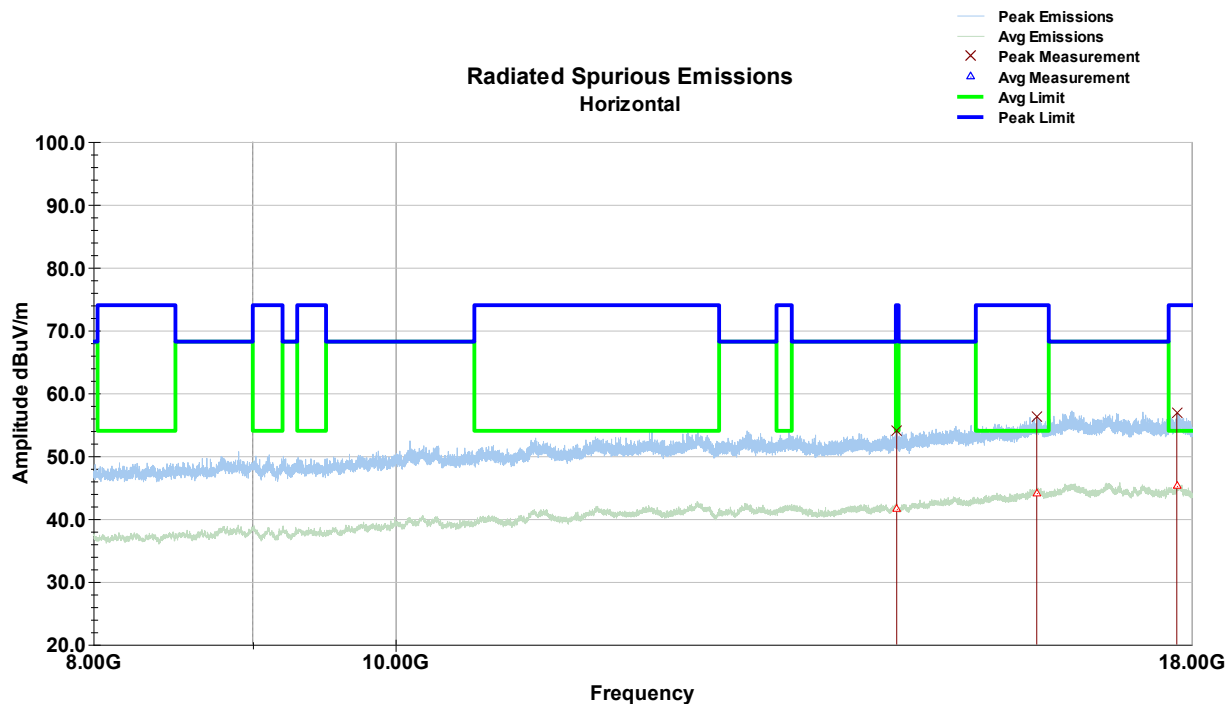


Vertical Data – 8-18GHz – Mid Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
15885.00	33.3	V	139.0	250.0	40.8	5.4	0.0	35.9	43.6	54.0	-10.4
17725.00	34.5	V	156.0	200.0	40.9	5.7	0.0	36.6	44.5	54.0	-9.5
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
15885.00	46.5	V	139.0	250.0	40.8	5.4	0.0	35.9	56.8	74.0	-17.2
17725.00	46.9	V	156.0	200.0	40.9	5.7	0.0	36.6	56.9	74.0	-17.1
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 8-18GHz – Mid Channel

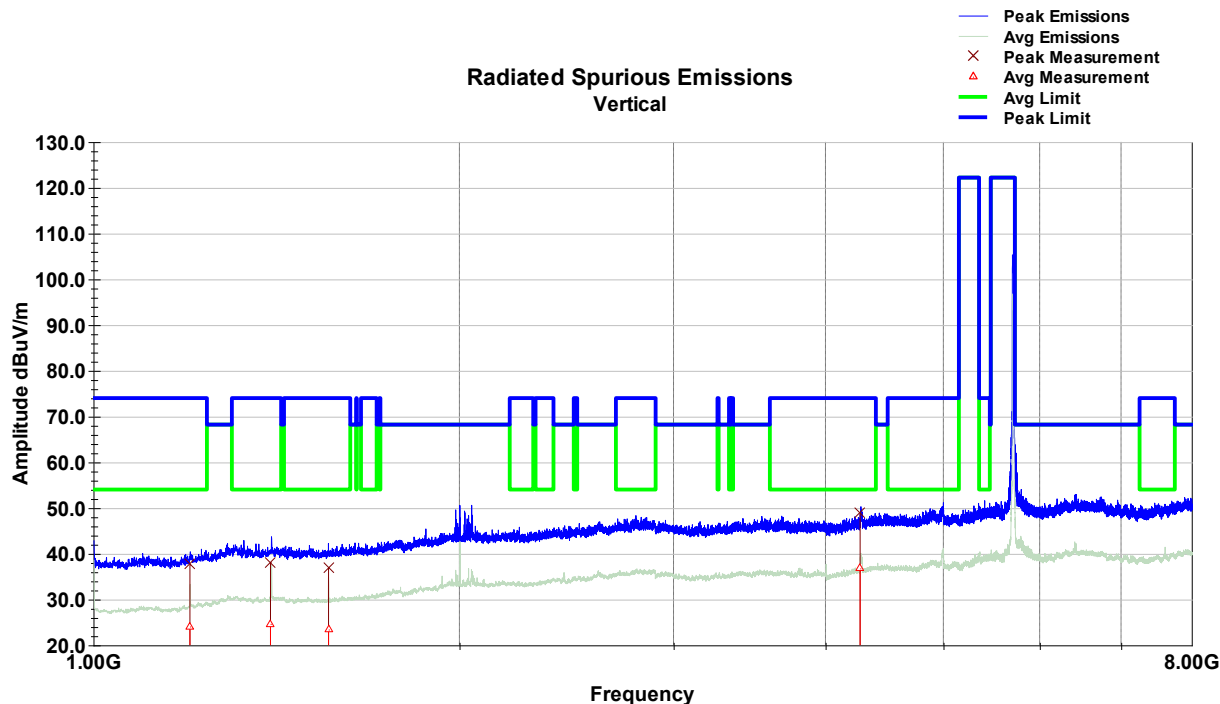


Horizontal Data – 8-18GHz – Mid Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
14479.00	33.2	H	251.0	150.0	39.7	5.0	0.0	36.4	41.6	54.0	-12.4
16057.00	33.7	H	303.0	150.0	40.9	5.4	0.0	35.9	44.1	54.0	-9.9
17807.00	35.2	H	147.0	250.0	41.0	5.7	0.0	36.6	45.2	54.0	-8.8
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
14479.00	45.7	H	251.0	150.0	39.7	5.0	0.0	36.4	54.0	74.0	-20.0
16057.00	45.9	H	303.0	150.0	40.9	5.4	0.0	35.9	56.3	74.0	-17.7
17807.00	46.8	H	147.0	250.0	41.0	5.7	0.0	36.6	56.8	74.0	-17.2
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 1-8GHz – High Channel

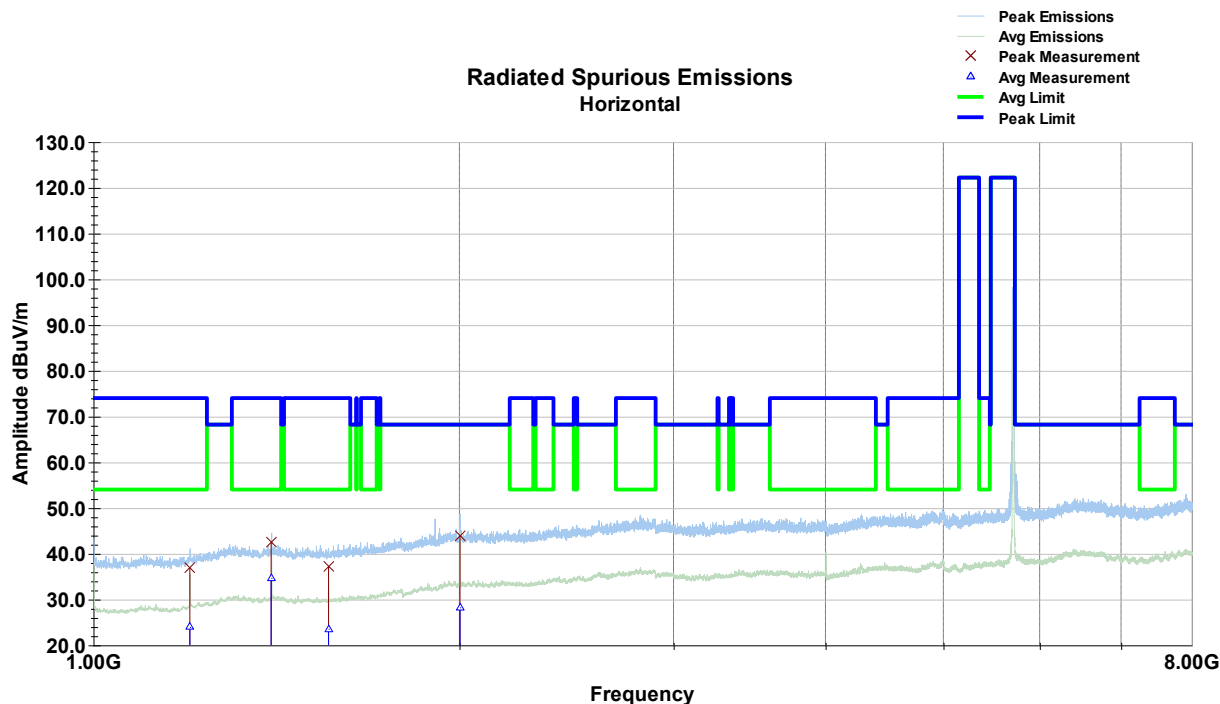


Vertical Data – 1-8GHz – High Channel

Frequency MHz	Raw Avg dBuV	Polarity V/H	Azimuth degrees	Height cm	AF dB/m	Loss dB	DCF dB	Amp dB	Final Avg dBuV/m	Limit dBuV/m	Margin dB
1200.84	29.2	V	256.0	121.0	28.0	1.3	0.0	34.4	24.1	54.0	-29.9
1398.48	28.4	V	14.0	128.0	29.0	1.5	0.0	34.3	24.7	54.0	-29.3
1561.06	28.0	V	37.0	158.0	28.4	1.6	0.0	34.6	23.5	54.0	-30.5
4270.89	34.8	V	53.0	244.0	33.5	2.7	0.0	34.2	36.8	54.0	-17.2
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1200.84	42.8	V	256.0	121.0	28.0	1.3	0.0	34.4	37.7	74.0	-36.3
1398.48	41.9	V	14.0	128.0	29.0	1.5	0.0	34.3	38.2	74.0	-35.8
1561.06	41.6	V	37.0	158.0	28.4	1.6	0.0	34.6	37.0	74.0	-37.0
4270.89	46.9	V	53.0	244.0	33.5	2.7	0.0	34.2	48.9	74.0	-25.1
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 1-8GHz – High Channel

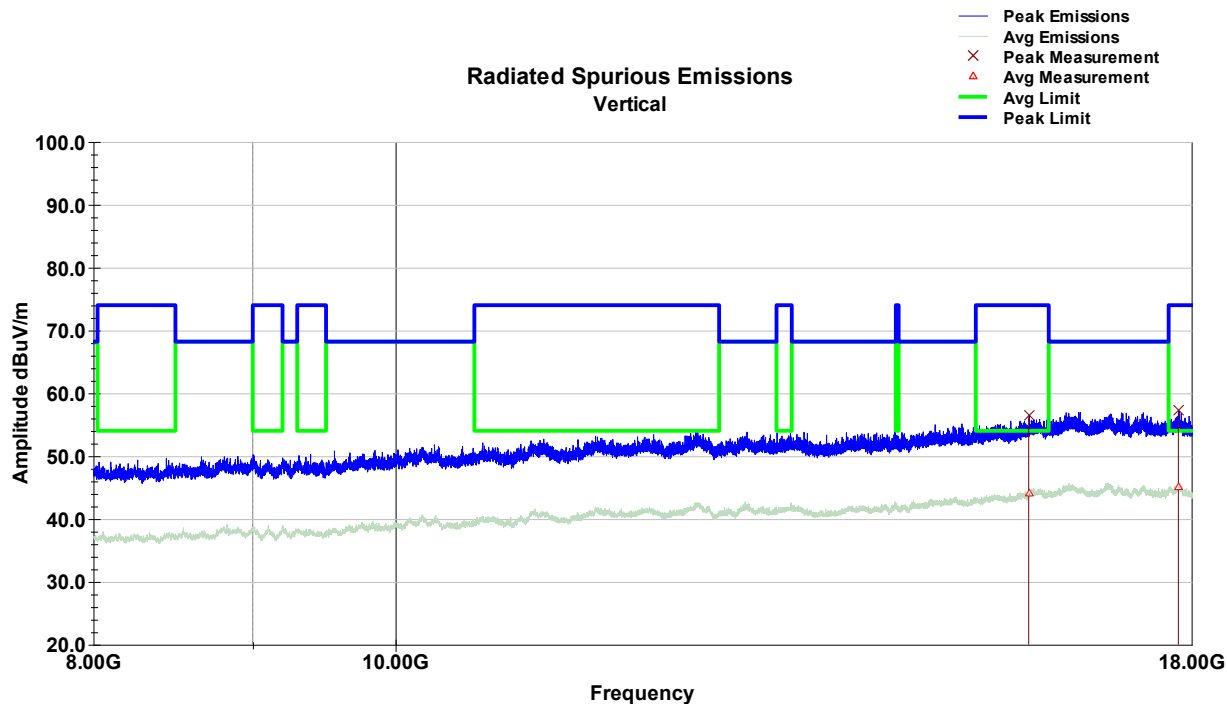


Horizontal Data – 1-8GHz – High Channel

Frequency MHz	Raw Avg dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Avg Value dBuV/m	Limit (dBuV/m)	Margin (dB)
1200.61	29.1	H	332.0	113.0	28.0	1.3	0.0	34.4	24.0	54.0	-30.0
1400.36	38.4	H	228.0	103.0	29.0	1.5	0.0	34.2	34.7	54.0	-19.3
1561.07	28.2	H	228.0	147.0	28.4	1.6	0.0	34.6	23.6	54.0	-30.4
2002.36	29.6	H	131.0	173.0	31.4	2.0	0.0	34.7	28.3	68.2	-39.9
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency MHz	Raw Pk dBuV	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF dB	Amp (dB)	Final Pk dBuV/m	Limit dBuV/m	Margin dB
1200.61	42.1	H	332.0	113.0	28.0	1.3	0.0	34.4	36.9	74.0	-37.1
1400.36	46.2	H	228.0	103.0	29.0	1.5	0.0	34.2	42.5	74.0	-31.5
1561.07	41.8	H	228.0	147.0	28.4	1.6	0.0	34.6	37.2	74.0	-36.8
2002.36	45.3	H	131.0	173.0	31.4	2.0	0.0	34.7	43.9	68.2	-24.3
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Vertical Plot – 8-18GHz – High Channel

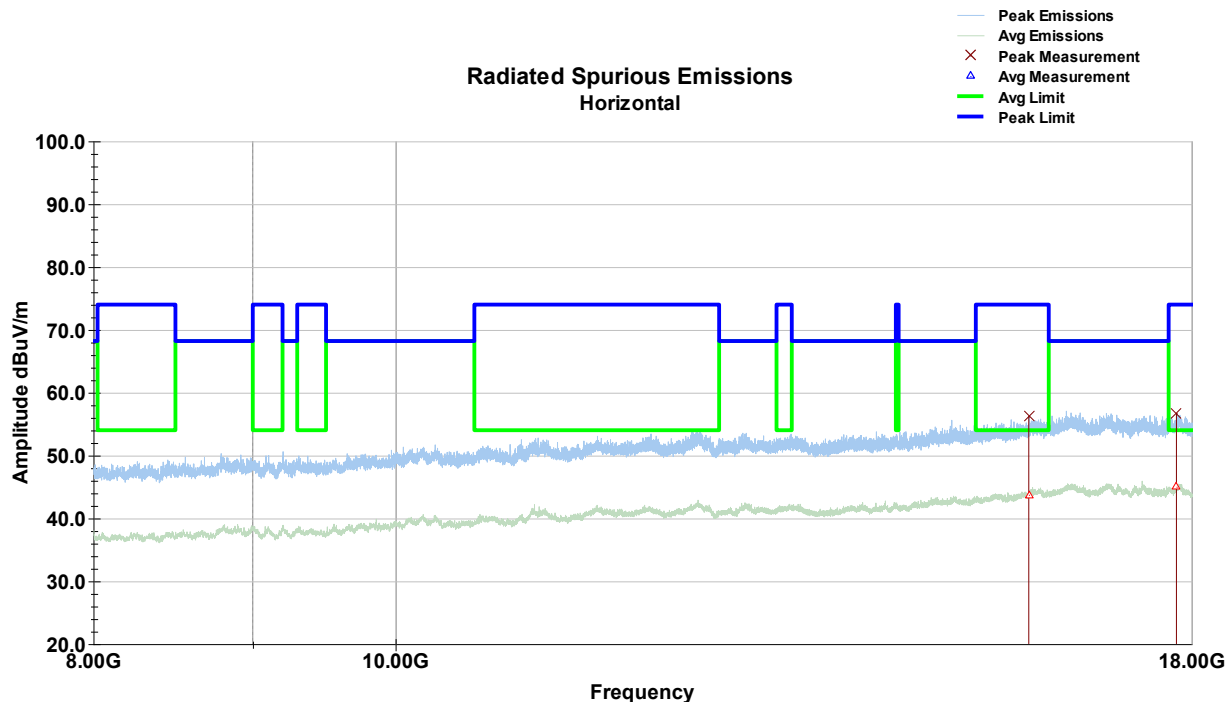


Vertical Data – 8-18GHz – High Channel

Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
15961.50	33.8	V	249.0	250.0	40.9	5.3	0.0	35.9	44.0	54.0	-10.0
17826.50	35.1	V	44.0	250.0	41.0	5.7	0.0	36.6	45.2	54.0	-8.9
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
15961.50	46.2	V	249.0	250.0	40.9	5.3	0.0	35.9	56.5	74.0	-17.5
17826.50	47.2	V	44.0	250.0	41.0	5.7	0.0	36.6	57.2	74.0	-16.8
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

Horizontal Plot – 8-18GHz – High Channel



Horizontal Data – 8-18GHz – High Channel

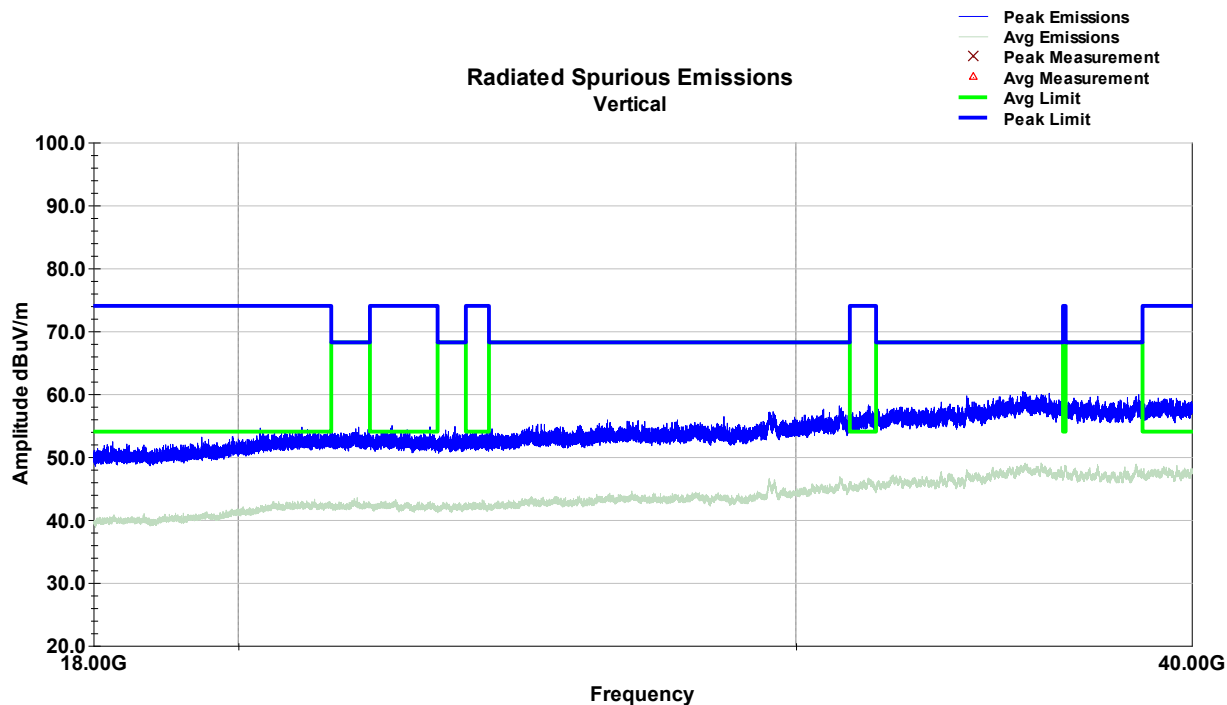
Frequency (MHz)	Raw Avg (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Avg (dBuV/m)	Limit (dBuV/m)	Margin (dB)
15962.50	33.5	H	182.0	150.0	40.9	5.3	0.0	35.9	43.8	54.0	-10.2
17801.00	35.0	H	172.0	100.0	41.0	5.7	0.0	36.6	45.0	54.0	-9.0
Final Avg = Raw Avg + AF + Loss + DCF - Amp											
Margin = Final Avg - Limit											

Frequency (MHz)	Raw Pk (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	DCF (dB)	Amp (dB)	Final Pk (dBuV/m)	Limit (dBuV/m)	Margin (dB)
15962.50	46.0	H	182.0	150.0	40.9	5.3	0.0	35.9	56.2	74.0	-17.8
17801.00	46.7	H	172.0	100.0	41.0	5.7	0.0	36.6	56.7	74.0	-17.3
Final Pk = Raw Pk + AF + Loss + DCF - Amp											
Margin = Final Pk - Limit											

3.12.4 18-40 GHz

All channels had similar plots in the 18-40GHz frequency range.

Vertical Plot – 18-40GHz – Mid Channel



Horizontal Plot – 18-40GHz – Mid Channel

