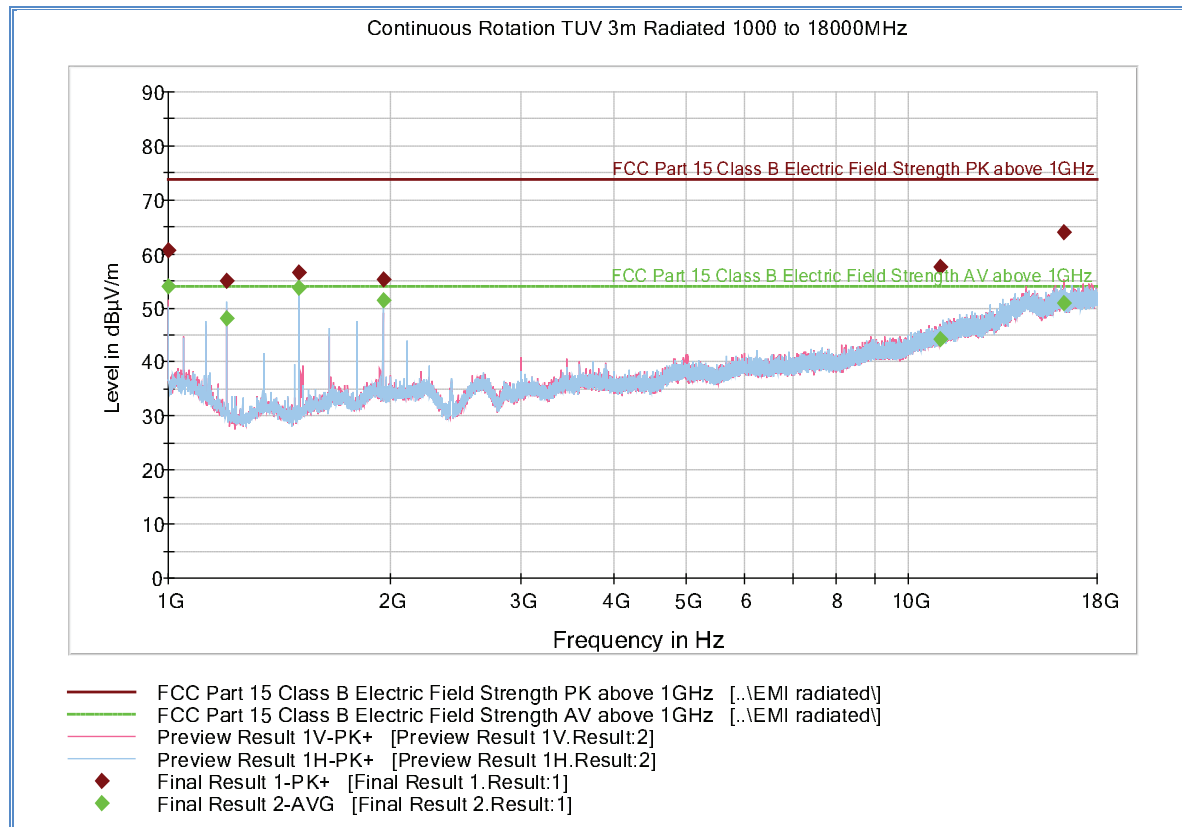


2.7.26 Test Results Above 1GHz (802.11n HT20 2.4GHz Low Channel)



Peak Data

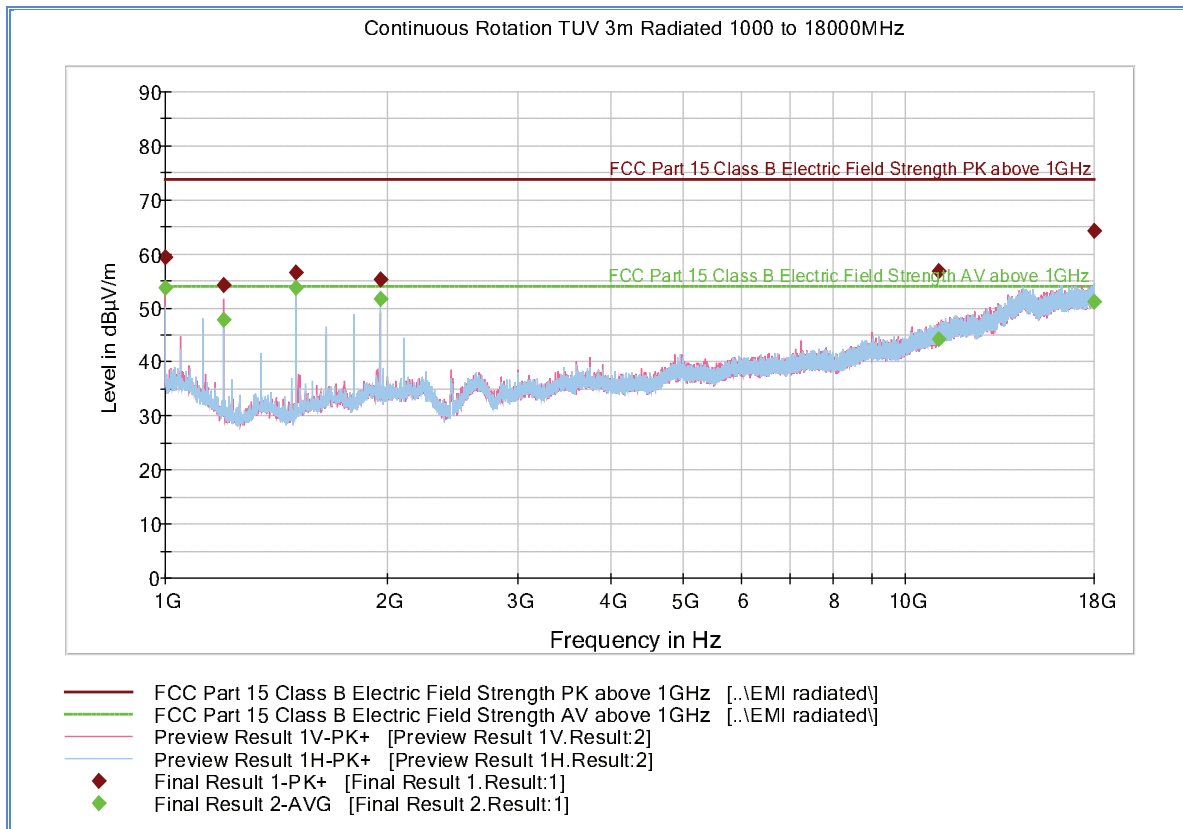
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	60.7	1000.0	1000.000	169.5	V	327.0	-1.0	13.2	73.9
1200.233333	55.0	1000.0	1000.000	99.6	H	157.0	-1.5	18.9	73.9
1500.000000	56.5	1000.0	1000.000	100.6	H	201.0	-1.9	17.4	73.9
1949.933333	55.2	1000.0	1000.000	101.6	H	236.0	1.9	18.7	73.9
11032.066667	57.5	1000.0	1000.000	305.1	V	245.0	16.4	16.4	73.9
16244.866667	63.9	1000.0	1000.000	202.4	V	304.0	23.0	10.0	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	53.9	1000.0	1000.000	169.5	V	327.0	-1.0	0.0	53.9
1200.233333	48.0	1000.0	1000.000	99.6	H	157.0	-1.5	5.9	53.9
1500.000000	53.7	1000.0	1000.000	100.6	H	201.0	-1.9	0.2	53.9
1949.933333	51.5	1000.0	1000.000	101.6	H	236.0	1.9	2.4	53.9
11032.066667	44.1	1000.0	1000.000	305.1	V	245.0	16.4	9.8	53.9
16244.866667	51.0	1000.0	1000.000	202.4	V	304.0	23.0	2.9	53.9

Test Notes: Measurement was performed with a 2.4GHz notch filter. No significant emissions observed above 6GHz. Measurements above 6GHz are noise floor figures.

2.7.27 Test Results Above 1GHz (802.11n HT20 2.4GHz Mid Channel)



Peak Data

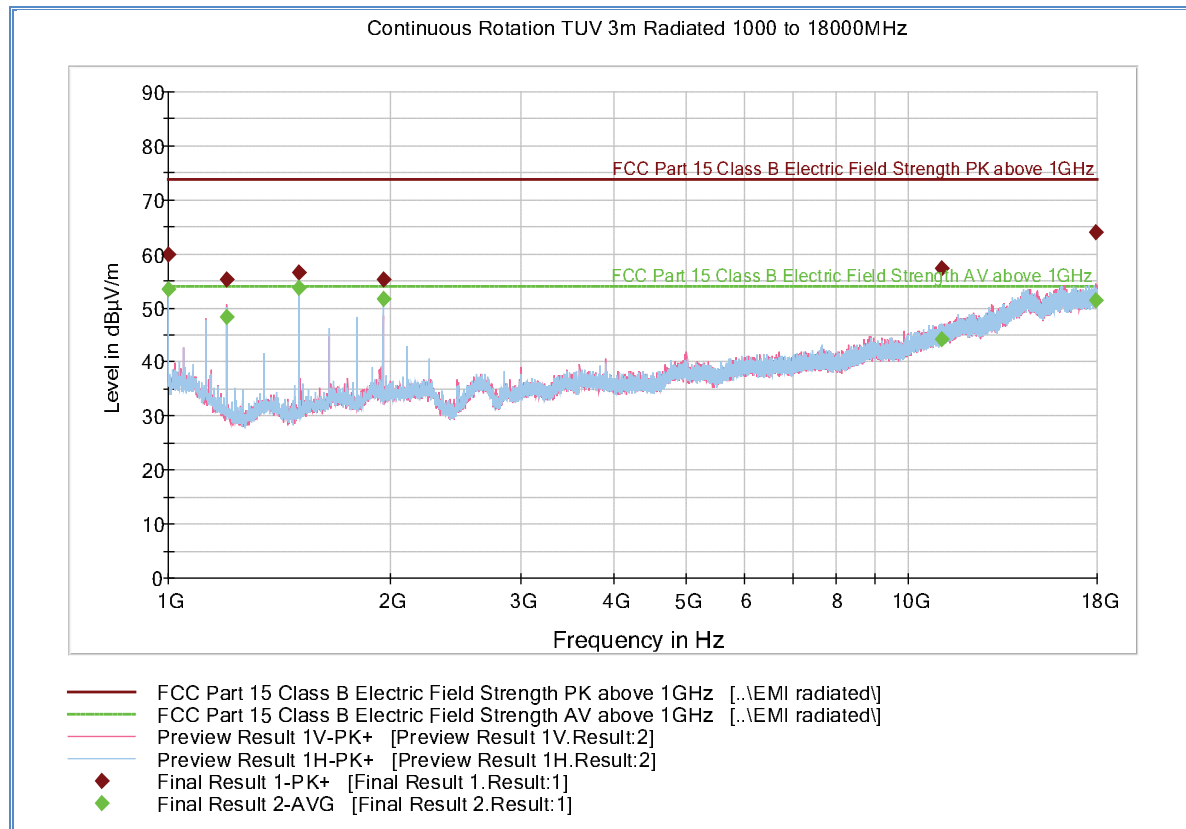
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	59.4	1000.0	1000.000	305.1	V	334.0	-1.0	14.5	73.9
1199.833333	54.4	1000.0	1000.000	218.4	V	158.0	-1.5	19.5	73.9
1500.000000	56.6	1000.0	1000.000	99.6	H	201.0	-1.9	17.3	73.9
1950.133333	55.3	1000.0	1000.000	100.6	H	241.0	1.9	18.6	73.9
11118.800000	56.8	1000.0	1000.000	123.6	V	261.0	16.6	17.1	73.9
17973.766667	64.3	1000.0	1000.000	401.7	H	229.0	23.9	9.6	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	53.7	1000.0	1000.000	305.1	V	334.0	-1.0	0.2	53.9
1199.833333	47.9	1000.0	1000.000	218.4	V	158.0	-1.5	6.0	53.9
1500.000000	53.8	1000.0	1000.000	99.6	H	201.0	-1.9	0.1	53.9
1950.133333	51.6	1000.0	1000.000	100.6	H	241.0	1.9	2.3	53.9
11118.800000	44.2	1000.0	1000.000	123.6	V	261.0	16.6	9.7	53.9
17973.766667	51.3	1000.0	1000.000	401.7	H	229.0	23.9	2.6	53.9

Test Notes: Measurement was performed with a 2.4GHz notch filter. No significant emissions observed above 6GHz. Measurements above 6GHz are noise floor figures.

2.7.28 Test Results Above 1GHz (802.11n HT20 2.4GHz High Channel)



Peak Data

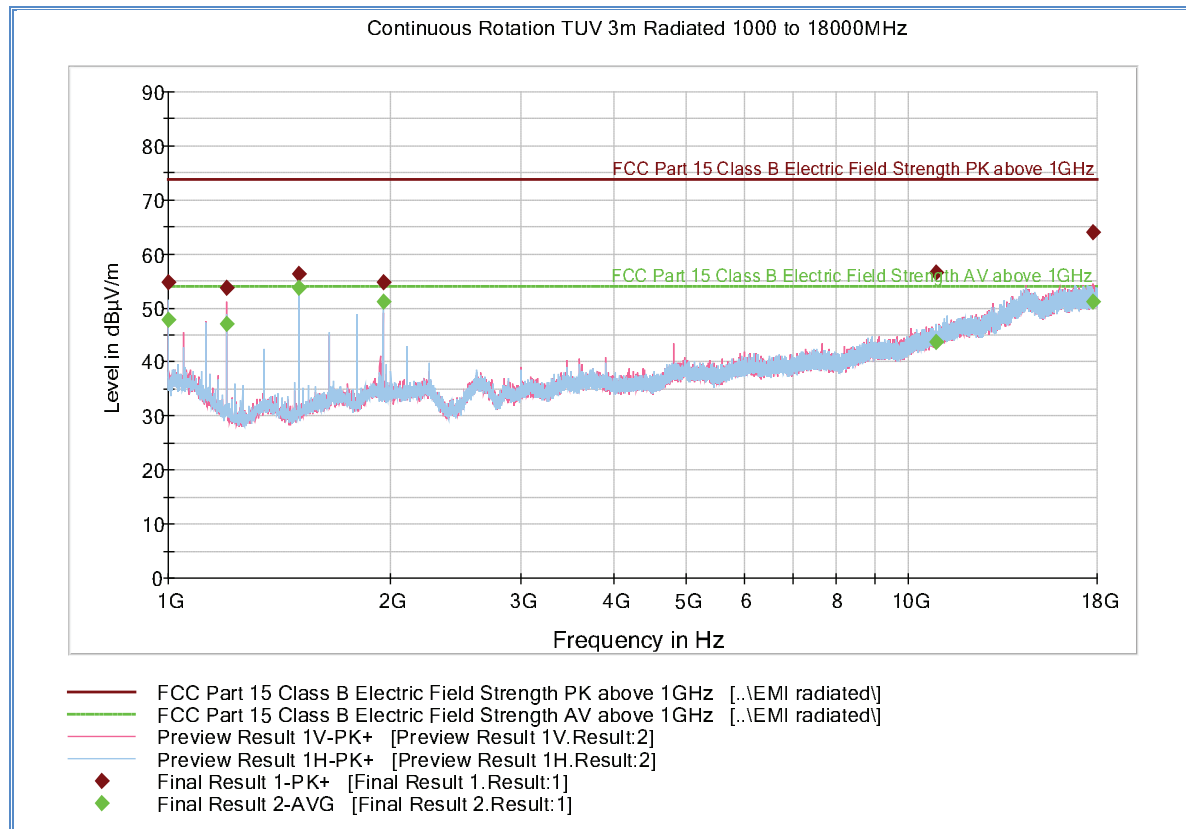
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	59.9	1000.0	1000.000	303.2	H	268.0	-1.0	14.0	73.9
1200.233333	55.2	1000.0	1000.000	99.6	V	194.0	-1.5	18.7	73.9
1500.000000	56.6	1000.0	1000.000	100.6	H	201.0	-1.9	17.3	73.9
1950.133333	55.2	1000.0	1000.000	101.6	H	235.0	1.9	18.7	73.9
11075.133333	57.2	1000.0	1000.000	99.6	H	102.0	16.5	16.7	73.9
17939.966667	64.0	1000.0	1000.000	100.6	V	263.0	23.8	9.9	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	53.5	1000.0	1000.000	303.2	H	268.0	-1.0	0.4	53.9
1200.233333	48.4	1000.0	1000.000	99.6	V	194.0	-1.5	5.5	53.9
1500.000000	53.7	1000.0	1000.000	100.6	H	201.0	-1.9	0.2	53.9
1950.133333	51.6	1000.0	1000.000	101.6	H	235.0	1.9	2.3	53.9
11075.133333	44.2	1000.0	1000.000	99.6	H	102.0	16.5	9.7	53.9
17939.966667	51.5	1000.0	1000.000	100.6	V	263.0	23.8	2.4	53.9

Test Notes: Measurement was performed with a 2.4GHz notch filter. No significant emissions observed above 6GHz. Measurements above 6GHz are noise floor figures.

2.7.29 Test Results Above 1GHz (802.11n HT40 2.4GHz Low Channel)



Peak Data

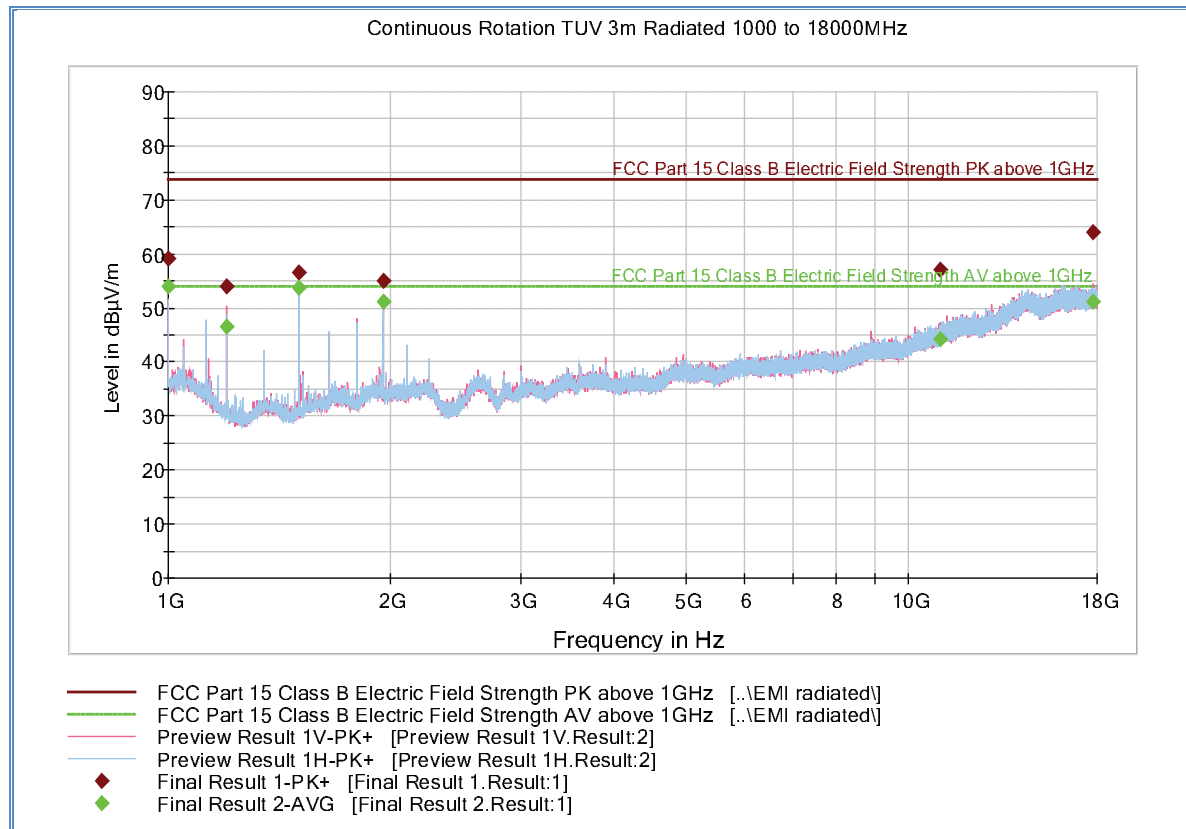
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	54.8	1000.0	1000.000	360.1	H	268.0	-1.0	19.1	73.9
1200.233333	53.8	1000.0	1000.000	228.3	V	159.0	-1.5	20.1	73.9
1500.000000	56.3	1000.0	1000.000	99.6	H	200.0	-1.9	17.6	73.9
1949.933333	54.7	1000.0	1000.000	100.6	H	242.0	1.9	19.2	73.9
10890.966667	56.5	1000.0	1000.000	404.0	H	219.0	16.0	17.4	73.9
17781.266667	64.1	1000.0	1000.000	326.1	V	155.0	23.5	9.8	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	47.8	1000.0	1000.000	360.1	H	268.0	-1.0	6.1	53.9
1200.233333	47.1	1000.0	1000.000	228.3	V	159.0	-1.5	6.8	53.9
1500.000000	53.7	1000.0	1000.000	99.6	H	200.0	-1.9	0.2	53.9
1949.933333	51.1	1000.0	1000.000	100.6	H	242.0	1.9	2.8	53.9
10890.966667	43.8	1000.0	1000.000	404.0	H	219.0	16.0	10.1	53.9
17781.266667	51.2	1000.0	1000.000	326.1	V	155.0	23.5	2.7	53.9

Test Notes: Measurement was performed with a 2.4GHz notch filter. No significant emissions observed above 6GHz. Measurements above 6GHz are noise floor figures.

2.7.30 Test Results Above 1GHz (802.11n HT40 2.4GHz Mid Channel)



Peak Data

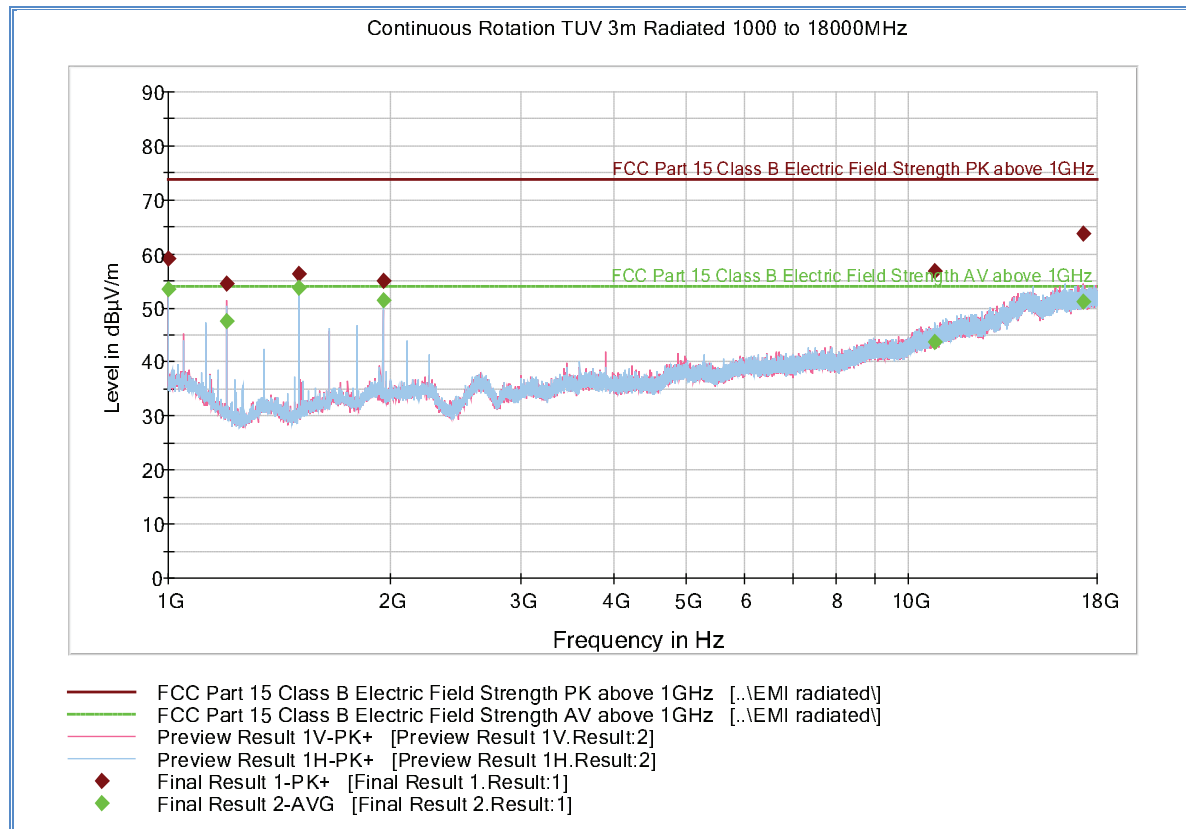
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	59.1	1000.0	1000.000	316.1	V	332.0	-1.0	14.8	73.9
1199.833333	53.9	1000.0	1000.000	99.6	V	205.0	-1.5	20.0	73.9
1500.000000	56.6	1000.0	1000.000	99.6	H	202.0	-1.9	17.3	73.9
1949.933333	55.1	1000.0	1000.000	100.6	H	242.0	1.9	18.8	73.9
11055.933333	57.1	1000.0	1000.000	201.4	V	108.0	16.5	16.8	73.9
17759.533333	63.9	1000.0	1000.000	101.6	V	254.0	23.4	10.0	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	53.9	1000.0	1000.000	316.1	V	332.0	-1.0	0.0	53.9
1199.833333	46.6	1000.0	1000.000	99.6	V	205.0	-1.5	7.3	53.9
1500.000000	53.8	1000.0	1000.000	99.6	H	202.0	-1.9	0.1	53.9
1949.933333	51.3	1000.0	1000.000	100.6	H	242.0	1.9	2.6	53.9
11055.933333	44.2	1000.0	1000.000	201.4	V	108.0	16.5	9.7	53.9
17759.533333	51.2	1000.0	1000.000	101.6	V	254.0	23.4	2.7	53.9

Test Notes: Measurement was performed with a 2.4GHz notch filter. No significant emissions observed above 6GHz. Measurements above 6GHz are noise floor figures.

2.7.31 Test Results Above 1GHz (802.11n HT40 2.4GHz High Channel)



Peak Data

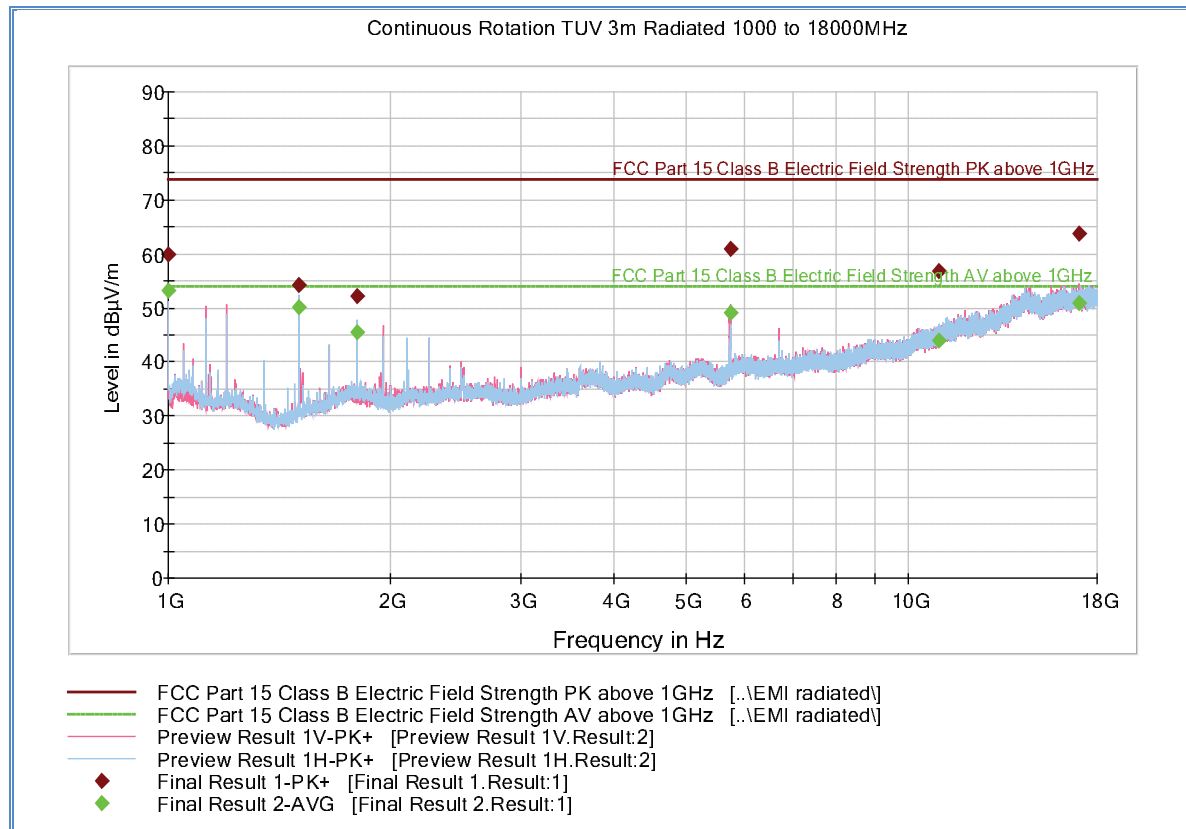
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	59.3	1000.0	1000.000	303.1	V	333.0	-1.0	14.6	73.9
1199.833333	54.4	1000.0	1000.000	99.6	V	200.0	-1.5	19.5	73.9
1500.000000	56.4	1000.0	1000.000	99.6	H	202.0	-1.9	17.5	73.9
1949.933333	55.0	1000.0	1000.000	100.6	H	241.0	1.9	18.9	73.9
10855.033333	56.8	1000.0	1000.000	300.6	H	16.0	15.9	17.1	73.9
17234.966667	63.8	1000.0	1000.000	169.5	V	178.0	23.1	10.1	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	53.5	1000.0	1000.000	303.1	V	333.0	-1.0	0.4	53.9
1199.833333	47.7	1000.0	1000.000	99.6	V	200.0	-1.5	6.2	53.9
1500.000000	53.6	1000.0	1000.000	99.6	H	202.0	-1.9	0.3	53.9
1949.933333	51.5	1000.0	1000.000	100.6	H	241.0	1.9	2.4	53.9
10855.033333	43.8	1000.0	1000.000	300.6	H	16.0	15.9	10.1	53.9
17234.966667	51.1	1000.0	1000.000	169.5	V	178.0	23.1	2.8	53.9

Test Notes: Measurement was performed with a 2.4GHz notch filter. No significant emissions observed above 6GHz. Measurements above 6GHz are noise floor figures.

2.7.32 Test Results Above 1GHz (802.11n HT20 5GHz Low Channel)



Peak Data

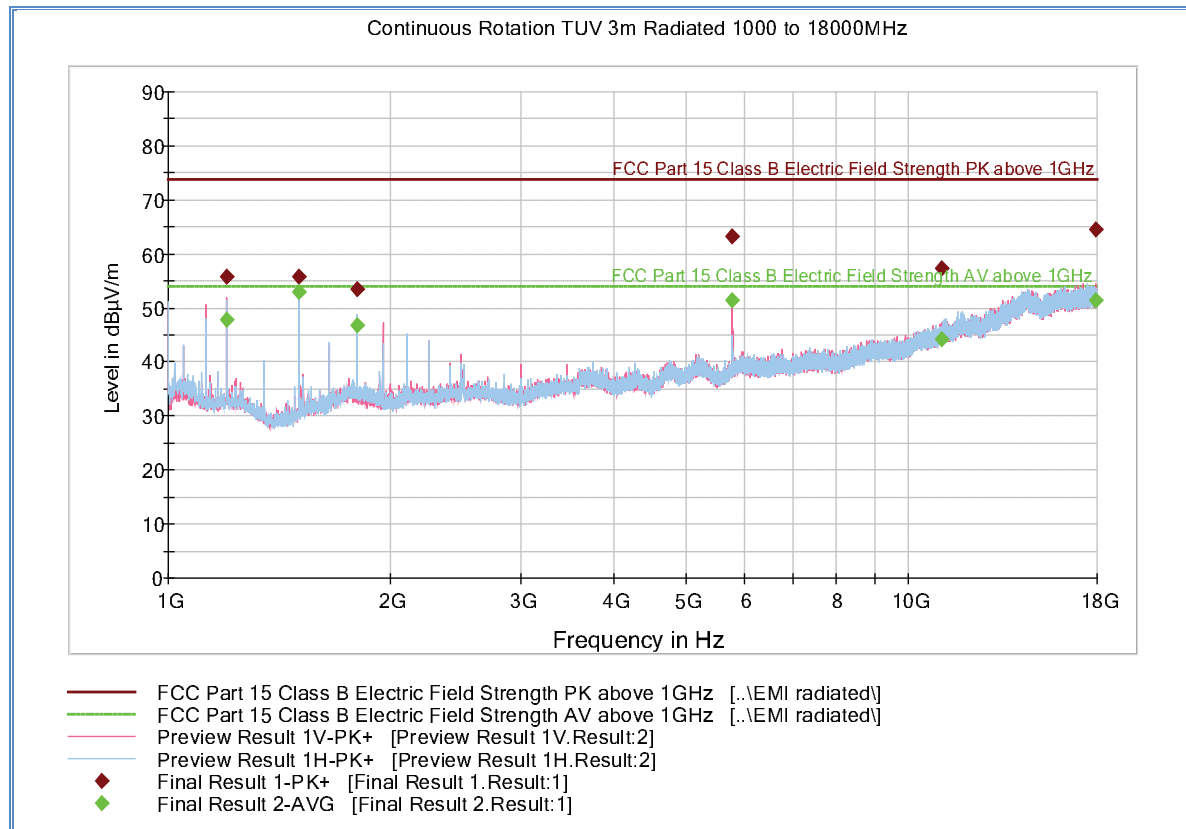
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	59.8	1000.0	1000.000	314.1	H	268.0	-1.0	14.1	73.9
1500.000000	54.2	1000.0	1000.000	102.6	H	20.0	-1.9	19.7	73.9
1800.166667	52.1	1000.0	1000.000	168.5	H	224.0	1.0	21.8	73.9
5747.000000	60.9	1000.0	1000.000	189.4	V	208.0	9.5	13.0	73.9
10986.400000	56.8	1000.0	1000.000	219.3	H	20.0	16.3	17.1	73.9
17020.766667	63.7	1000.0	1000.000	279.2	V	202.0	23.4	10.2	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	53.3	1000.0	1000.000	314.1	H	268.0	-1.0	0.6	53.9
1500.000000	50.1	1000.0	1000.000	102.6	H	20.0	-1.9	3.8	53.9
1800.166667	45.5	1000.0	1000.000	168.5	H	224.0	1.0	8.4	53.9
5747.000000	49.2	1000.0	1000.000	189.4	V	208.0	9.5	4.7	53.9
10986.400000	44.0	1000.0	1000.000	219.3	H	20.0	16.3	9.9	53.9
17020.766667	51.0	1000.0	1000.000	279.2	V	202.0	23.4	2.9	53.9

Test Notes: Measurement was performed with a 5.0GHz notch filter. No significant emissions observed above 8GHz. Measurements above 8GHz are noise floor figures.

2.7.33 Test Results Above 1GHz (802.11n HT20 5GHz Mid Channel)



Peak Data

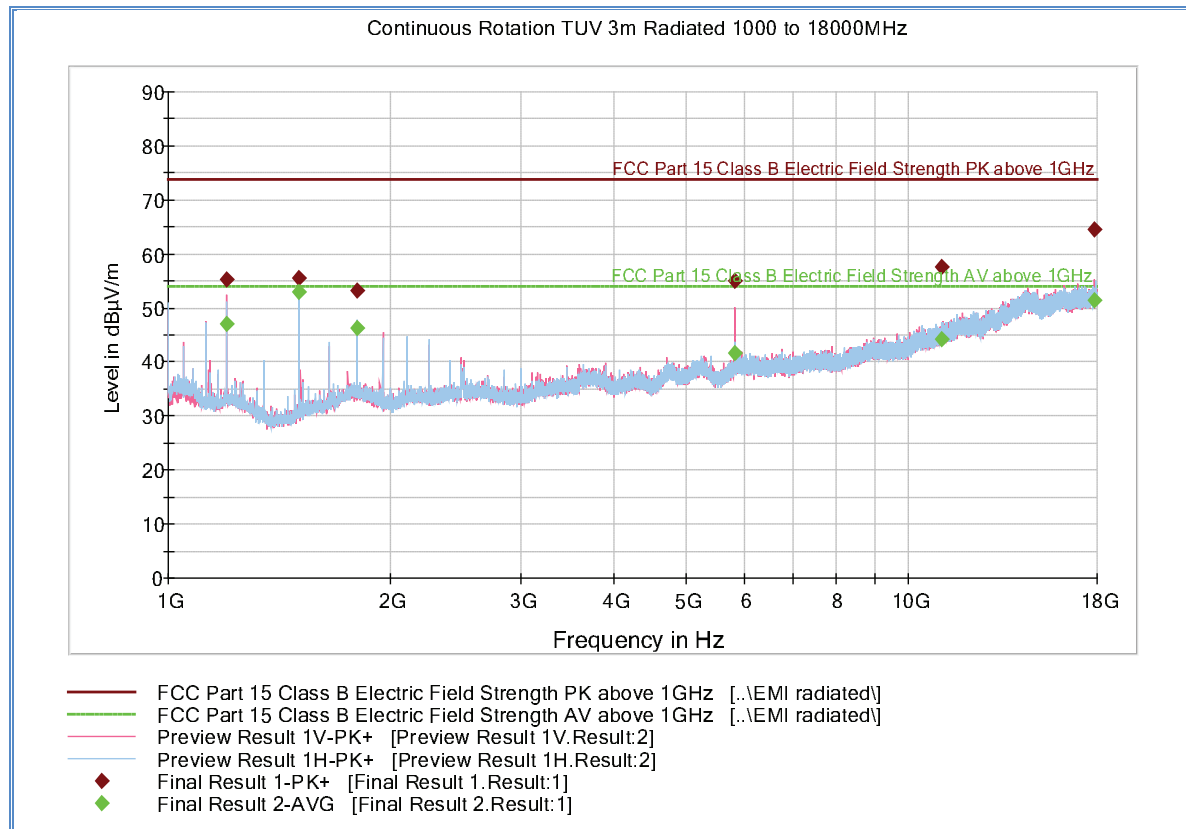
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1199.833333	55.9	1000.0	1000.000	102.6	V	0.0	-1.5	18.0	73.9
1500.000000	55.7	1000.0	1000.000	99.6	H	202.0	-1.9	18.2	73.9
1799.966667	53.5	1000.0	1000.000	115.6	H	224.0	1.0	20.4	73.9
5786.866667	63.2	1000.0	1000.000	197.4	V	41.0	9.5	10.7	73.9
11084.200000	57.3	1000.0	1000.000	202.4	V	9.0	16.5	16.6	73.9
17912.033333	64.6	1000.0	1000.000	134.6	V	182.0	23.7	9.3	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1199.833333	47.9	1000.0	1000.000	102.6	V	0.0	-1.5	6.0	53.9
1500.000000	53.1	1000.0	1000.000	99.6	H	202.0	-1.9	0.8	53.9
1799.966667	46.9	1000.0	1000.000	115.6	H	224.0	1.0	7.0	53.9
5786.866667	51.4	1000.0	1000.000	197.4	V	41.0	9.5	2.5	53.9
11084.200000	44.2	1000.0	1000.000	202.4	V	9.0	16.5	9.7	53.9
17912.033333	51.6	1000.0	1000.000	134.6	V	182.0	23.7	2.3	53.9

Test Notes: Measurement was performed with a 5.0GHz notch filter. No significant emissions observed above 8GHz. Measurements above 8GHz are noise floor figures.

2.7.34 Test Results Above 1GHz (802.11n HT20 5GHz High Channel)



Peak Data

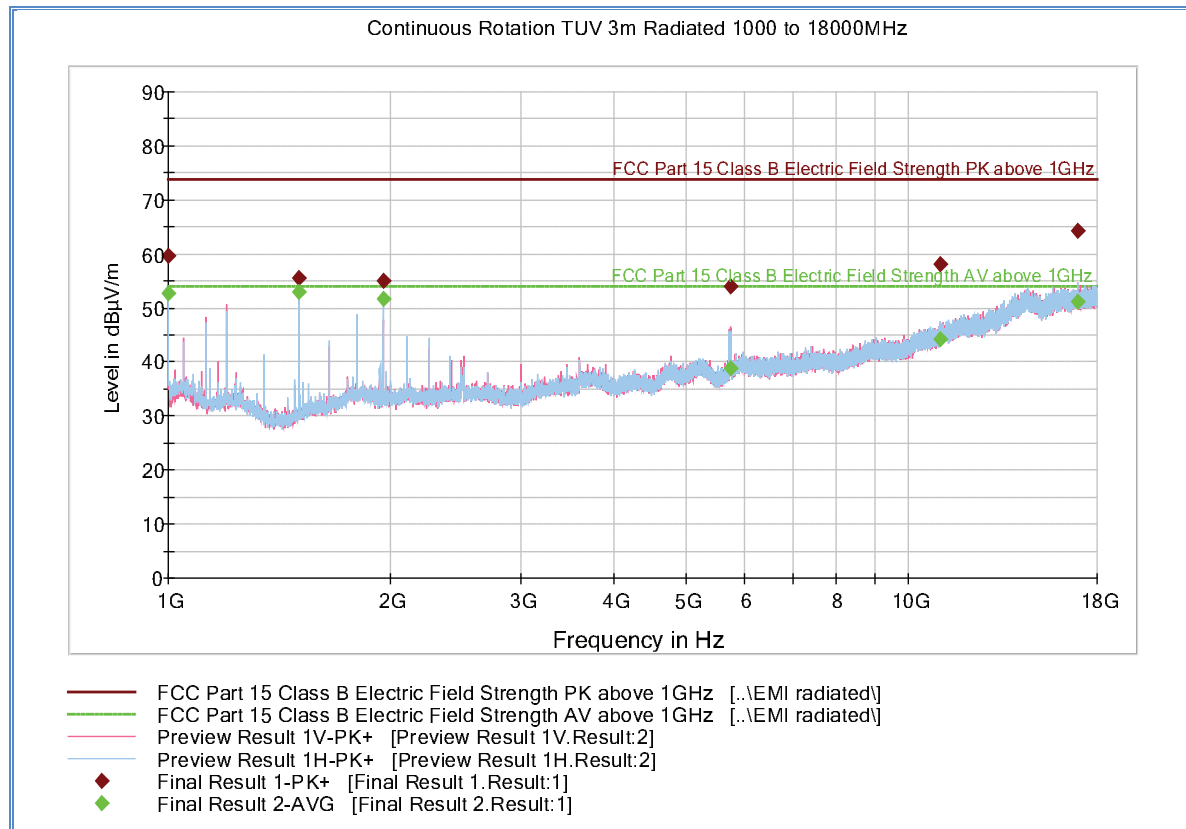
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1200.233333	55.3	1000.0	1000.000	101.6	V	3.0	-1.5	18.6	73.9
1500.000000	55.6	1000.0	1000.000	99.6	H	202.0	-1.9	18.3	73.9
1800.166667	53.1	1000.0	1000.000	115.6	H	224.0	1.0	20.8	73.9
5827.800000	55.1	1000.0	1000.000	248.3	V	68.0	9.6	18.8	73.9
11105.033333	57.6	1000.0	1000.000	131.6	H	90.0	16.6	16.3	73.9
17851.533333	64.5	1000.0	1000.000	114.6	V	326.0	23.6	9.4	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1200.233333	47.1	1000.0	1000.000	101.6	V	3.0	-1.5	6.8	53.9
1500.000000	53.1	1000.0	1000.000	99.6	H	202.0	-1.9	0.8	53.9
1800.166667	46.2	1000.0	1000.000	115.6	H	224.0	1.0	7.7	53.9
5827.800000	41.8	1000.0	1000.000	248.3	V	68.0	9.6	12.1	53.9
11105.033333	44.2	1000.0	1000.000	131.6	H	90.0	16.6	9.7	53.9
17851.533333	51.5	1000.0	1000.000	114.6	V	326.0	23.6	2.4	53.9

Test Notes: Measurement was performed with a 5.0GHz notch filter. No significant emissions observed above 8GHz. Measurements above 8GHz are noise floor figures.

2.7.35 Test Results Above 1GHz (802.11n HT40 5GHz Low Channel)



Peak Data

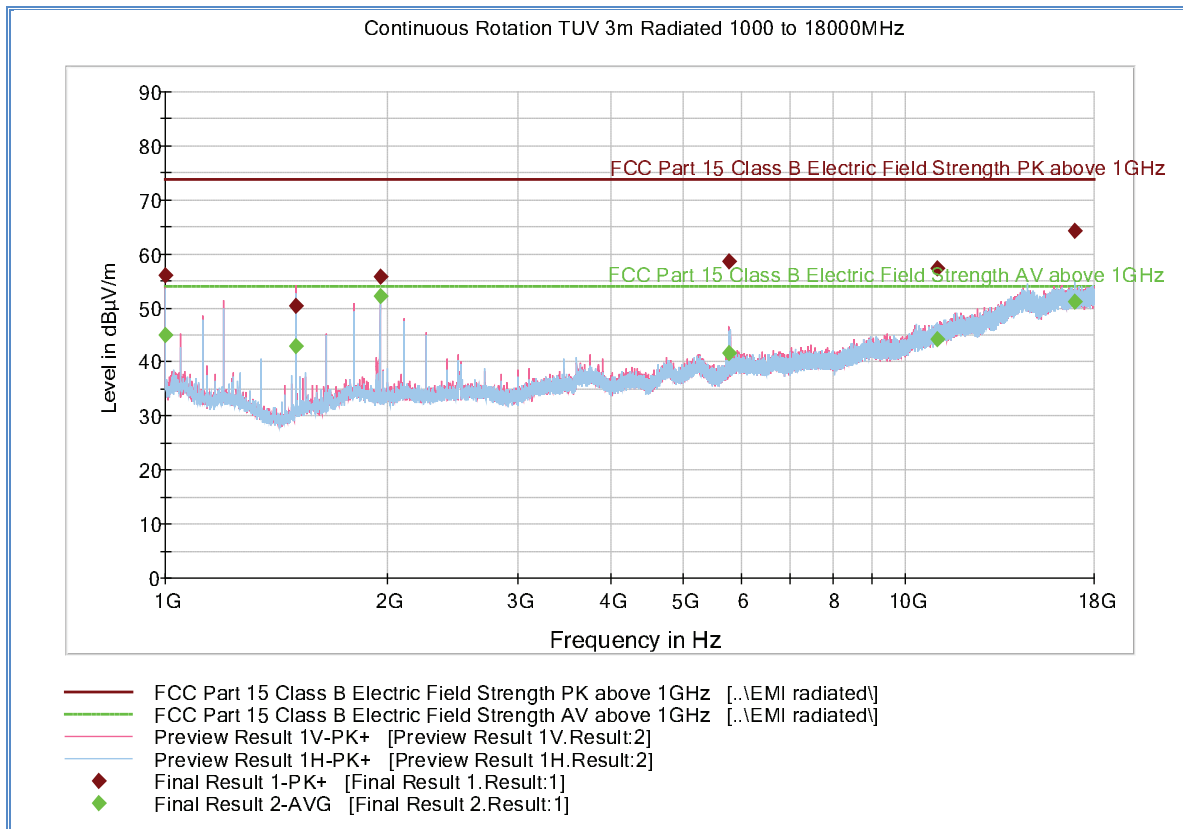
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	59.7	1000.0	1000.000	189.4	V	204.0	-1.0	14.2	73.9
1500.000000	55.6	1000.0	1000.000	99.6	H	201.0	-1.9	18.3	73.9
1950.133333	55.0	1000.0	1000.000	100.6	H	213.0	1.9	18.9	73.9
5754.366667	53.9	1000.0	1000.000	133.6	V	43.0	9.5	20.0	73.9
11041.466667	58.2	1000.0	1000.000	301.2	H	65.0	16.4	15.7	73.9
16917.500000	64.4	1000.0	1000.000	392.1	H	0.0	23.4	9.5	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	52.6	1000.0	1000.000	189.4	V	204.0	-1.0	1.3	53.9
1500.000000	52.9	1000.0	1000.000	99.6	H	201.0	-1.9	1.0	53.9
1950.133333	51.6	1000.0	1000.000	100.6	H	213.0	1.9	2.3	53.9
5754.366667	38.9	1000.0	1000.000	133.6	V	43.0	9.5	15.0	53.9
11041.466667	44.2	1000.0	1000.000	301.2	H	65.0	16.4	9.7	53.9
16917.500000	51.2	1000.0	1000.000	392.1	H	0.0	23.4	2.7	53.9

Test Notes: Measurement was performed with a 5.0GHz notch filter. No significant emissions observed above 8GHz. Measurements above 8GHz are noise floor figures.

2.7.36 Test Results Above 1GHz (802.11n HT40 5GHz Mid Channel)



Peak Data

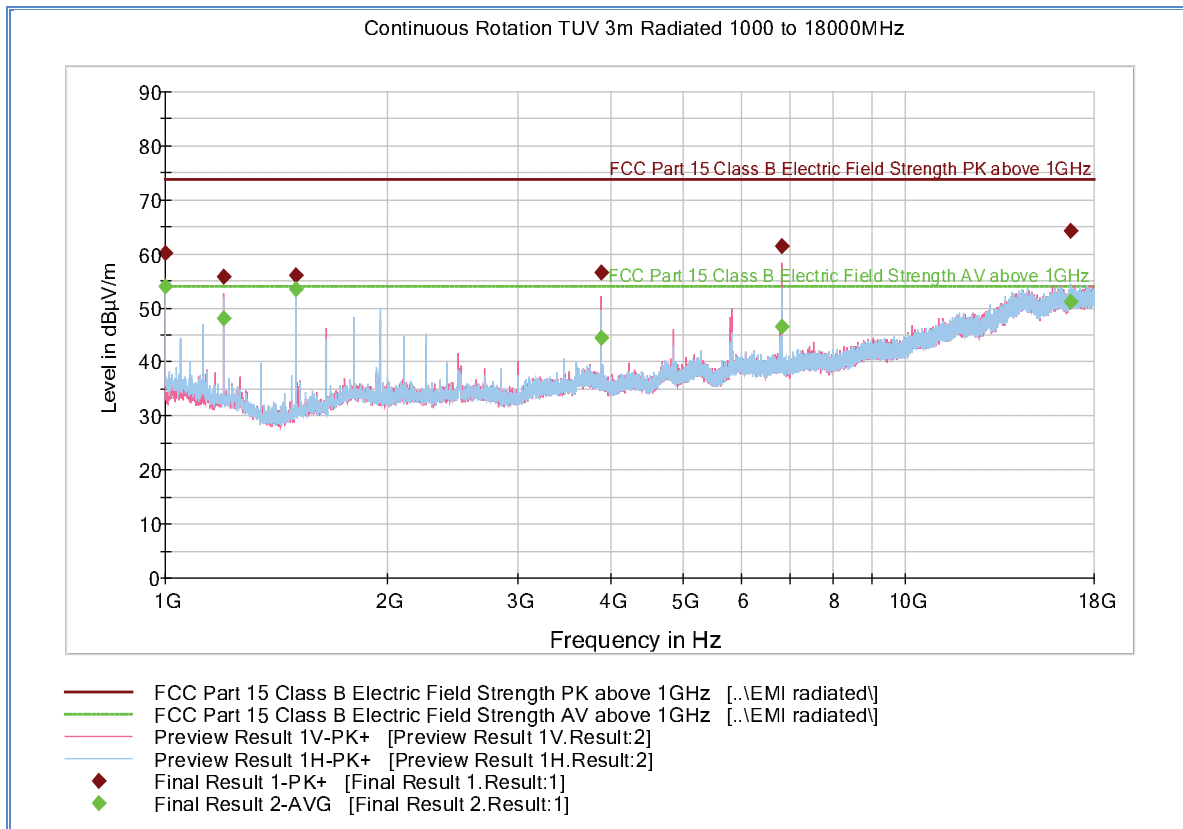
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	56.0	1000.0	1000.000	175.5	V	92.0	-1.0	17.9	73.9
1500.000000	50.5	1000.0	1000.000	122.6	V	211.0	-1.9	23.4	73.9
1949.933333	55.8	1000.0	1000.000	103.6	H	211.0	1.9	18.1	73.9
5780.633333	58.7	1000.0	1000.000	124.6	V	26.0	9.5	15.2	73.9
11048.000000	57.4	1000.0	1000.000	140.6	H	279.0	16.4	16.5	73.9
16911.100000	64.2	1000.0	1000.000	302.2	H	69.0	23.4	9.7	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	45.0	1000.0	1000.000	175.5	V	92.0	-1.0	8.9	53.9
1500.000000	43.1	1000.0	1000.000	122.6	V	211.0	-1.9	10.8	53.9
1949.933333	52.1	1000.0	1000.000	103.6	H	211.0	1.9	1.8	53.9
5780.633333	41.6	1000.0	1000.000	124.6	V	26.0	9.5	12.3	53.9
11048.000000	44.2	1000.0	1000.000	140.6	H	279.0	16.4	9.7	53.9
16911.100000	51.2	1000.0	1000.000	302.2	H	69.0	23.4	2.7	53.9

Test Notes: Measurement was performed with a 5.0GHz notch filter. No significant emissions observed above 8GHz. Measurements above 8GHz are noise floor figures.

2.7.37 Test Results Above 1GHz (802.11n HT40 5GHz High Channel)



Peak Data

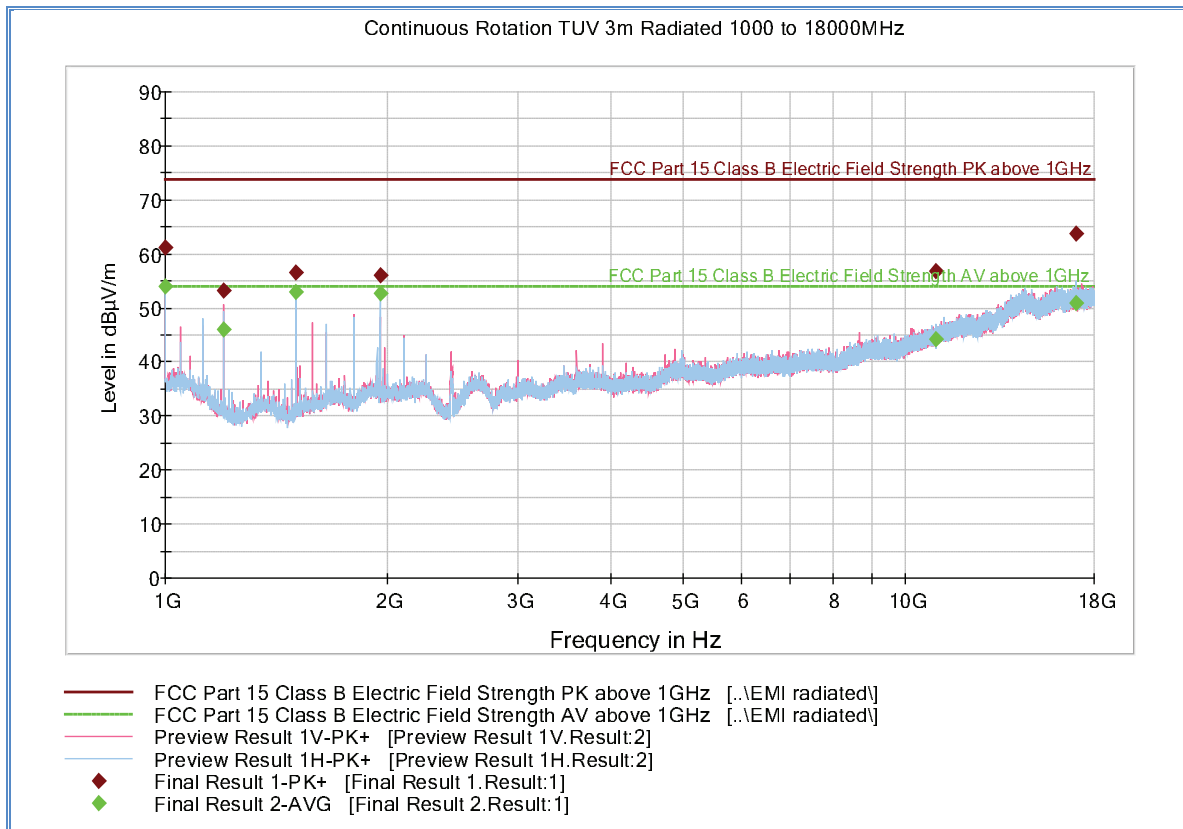
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	60.1	1000.0	1000.000	99.6	H	49.0	-1.0	13.8	73.9
1199.833333	55.8	1000.0	1000.000	103.6	V	43.0	-1.5	18.1	73.9
1500.000000	56.0	1000.0	1000.000	99.6	H	176.0	-1.9	17.9	73.9
3883.400000	56.4	1000.0	1000.000	278.2	V	-3.0	5.6	17.5	73.9
6796.266667	61.4	1000.0	1000.000	99.6	V	50.0	10.5	12.5	73.9
16704.433333	64.2	1000.0	1000.000	125.6	H	154.0	23.4	9.7	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	53.9	1000.0	1000.000	99.6	H	49.0	-1.0	0.0	53.9
1199.833333	48.0	1000.0	1000.000	103.6	V	43.0	-1.5	5.9	53.9
1500.000000	53.5	1000.0	1000.000	99.6	H	176.0	-1.9	0.4	53.9
3883.400000	44.4	1000.0	1000.000	278.2	V	-3.0	5.6	9.5	53.9
6796.266667	46.5	1000.0	1000.000	99.6	V	50.0	10.5	7.4	53.9
16704.433333	51.2	1000.0	1000.000	125.6	H	154.0	23.4	2.7	53.9

Test Notes: Measurement was performed with a 5.0GHz notch filter. No significant emissions observed above 8GHz. Measurements above 8GHz are noise floor figures.

2.7.38 Test Results Above 1GHz (802.11n HT20 MIMO 2.4GHz Worst Case Channel)



Peak Data

Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	61.1	1000.0	1000.000	301.2	H	280.0	-1.0	12.8	73.9
1199.833333	53.2	1000.0	1000.000	99.6	V	241.0	-1.5	20.7	73.9
1500.000000	56.6	1000.0	1000.000	99.6	H	225.0	-1.9	17.3	73.9
1949.933333	56.1	1000.0	1000.000	100.6	H	243.0	1.9	17.8	73.9
11013.366667	56.9	1000.0	1000.000	103.6	H	164.0	16.4	17.0	73.9
16983.833333	63.9	1000.0	1000.000	300.6	H	9.0	23.4	10.0	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
1000.000000	53.9	1000.0	1000.000	301.2	H	280.0	-1.0	0.0	53.9
1199.833333	46.0	1000.0	1000.000	99.6	V	241.0	-1.5	7.9	53.9
1500.000000	52.9	1000.0	1000.000	99.6	H	225.0	-1.9	1.0	53.9
1949.933333	52.7	1000.0	1000.000	100.6	H	243.0	1.9	1.2	53.9
11013.366667	44.1	1000.0	1000.000	103.6	H	164.0	16.4	9.8	53.9
16983.833333	50.9	1000.0	1000.000	300.6	H	9.0	23.4	3.0	53.9

Test Notes: Measurement was performed with a 2.4GHz notch filter. No significant emissions observed above 6GHz. Measurements above 6GHz are noise floor figures. Only the worst case channel presented (Mid Channel in MIMO mode).



2.8 RADIATED BAND EDGE MEASUREMENTS AND IMMEDIATE RESTRICTED BANDS

2.8.1 Specification Reference

Part 15 Subpart C §15.247(d)

2.8.2 Standard Applicable

(d) In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a) (see §15.205(c)).

2.8.3 Equipment Under Test and Modification State

Serial No: 34008112 and 34008096/ Test Configuration B

2.8.4 Date of Test/Initial of test personnel who performed the test

December 24, 2013/FSC

2.8.5 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.8.6 Environmental Conditions

Ambient Temperature	25.4 °C
Relative Humidity	43.5 %
ATM Pressure	99.0 kPa

2.8.7 Additional Observations

- This is a radiated test. The spectrum was searched from 2310MHz to 2390MHz for lower immediate restricted band and 2483.5MHz to 2500MHz for the upper immediate restricted band.
- There are no emissions found that do not comply with the restricted bands defined in FCC Part 15 Subpart C, 15.205.
- Only worst-case WiFi mode presented (802.11 n HT20 2.4GHz).



- Measurement was done using EMC32 automated software. Reported level is the actual level with all the correction factors factored in. Correction Factor column is for informational purposes only. See Section 2.8.8 for sample computation.

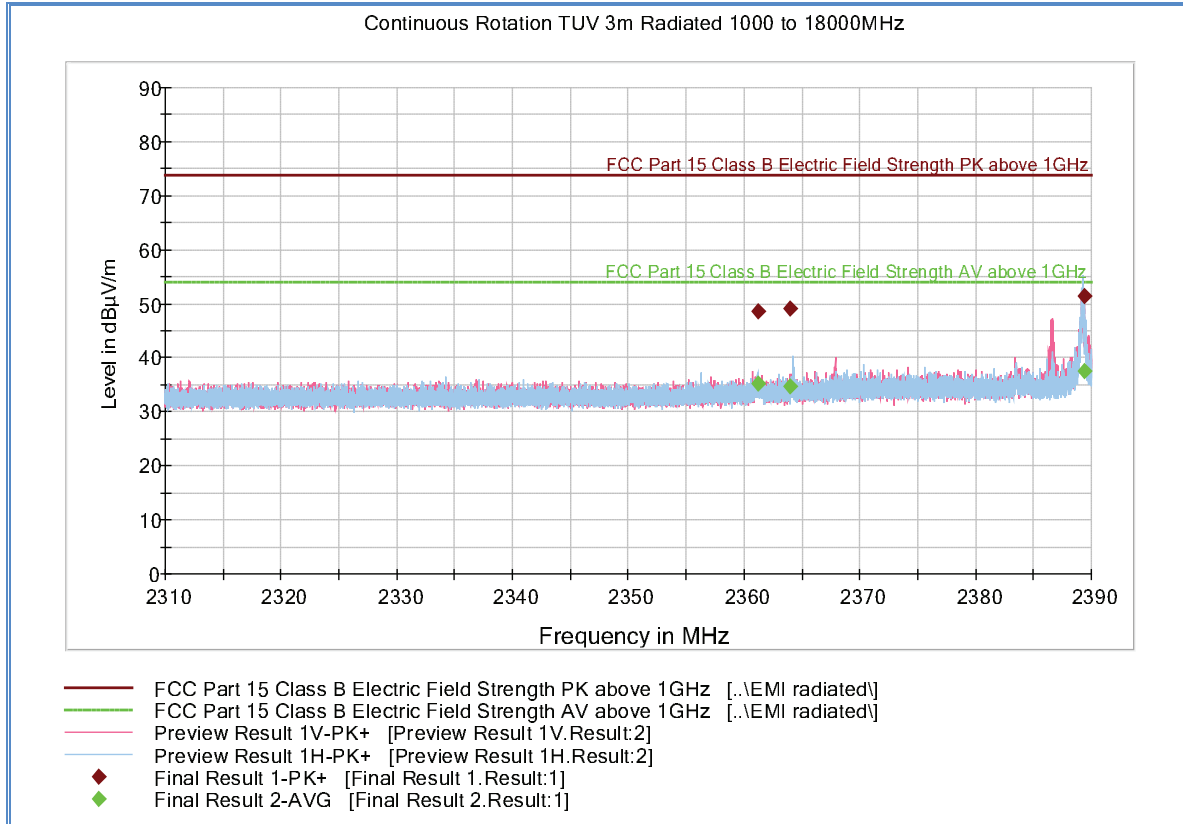
2.8.8 Sample Computation (Radiated Emission)

Measuring equipment raw measurement (dbμV) @ 2400 MHz			53.9
Correction Factor (dB)	Asset# 1153 (cable)	3.4	-0.4
	Asset# 8628(preamplifier)	-36.5	
	Asset#7575 (antenna)	32.7	
Reported Max Peak Final Measurement (dbμV/m) @ 2400 MHz			53.5

2.8.9 Test Results

See attached plots.

2.8.10 Test Results Restricted Band 2310MHz to 2490MHz (Bluetooth LE Low Channel)



Peak Data

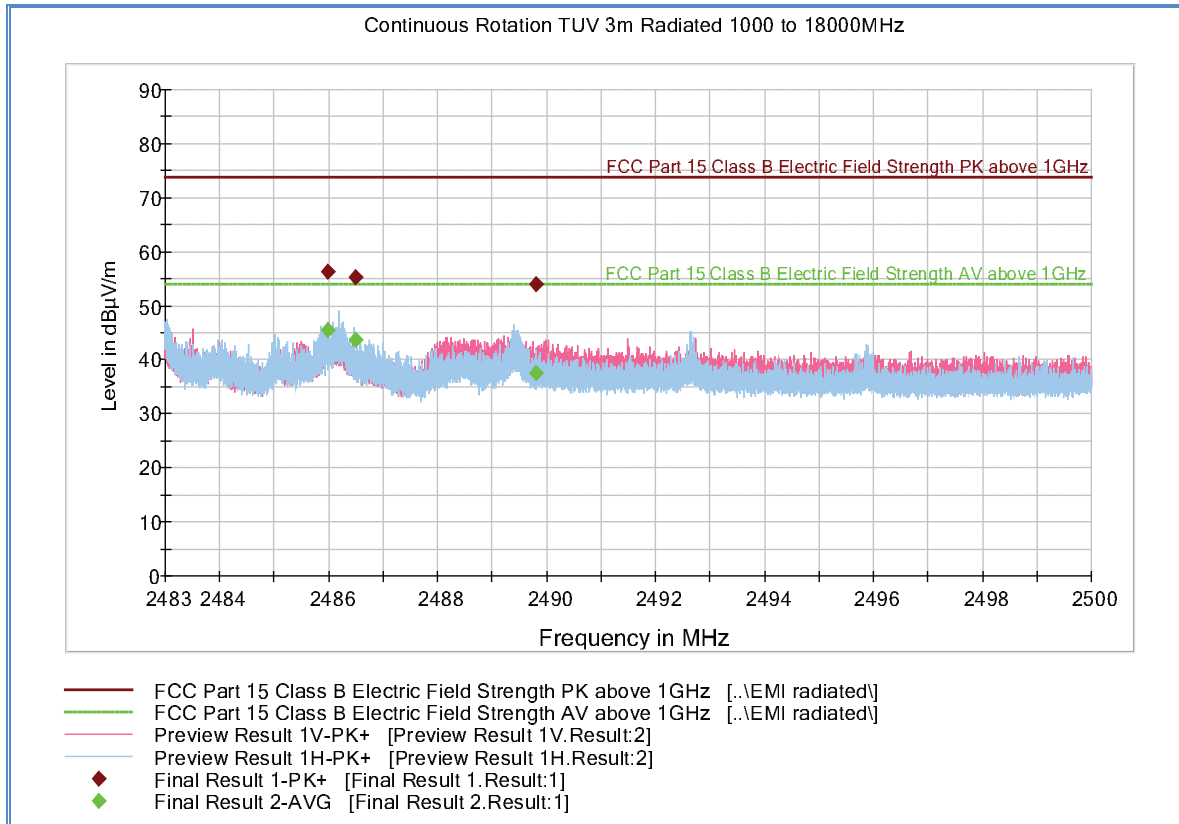
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
2361.178667	48.6	1000.0	1000.000	390.0	V	131.0	2.4	25.3	73.9
2363.997333	49.1	1000.0	1000.000	405.1	H	86.0	2.4	24.8	73.9
2389.453333	51.4	1000.0	1000.000	402.0	H	80.0	2.4	22.5	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
2361.178667	35.3	1000.0	1000.000	390.0	V	131.0	2.4	18.6	53.9
2363.997333	34.7	1000.0	1000.000	405.1	H	86.0	2.4	19.2	53.9
2389.453333	37.4	1000.0	1000.000	402.0	H	80.0	2.4	16.5	53.9

Test Notes: 2.4GHz notch filter removed for this test.

2.8.11 Test Results Restricted Band 2483.5MHz to 2500MHz (Bluetooth LE High Channel)



Peak Data

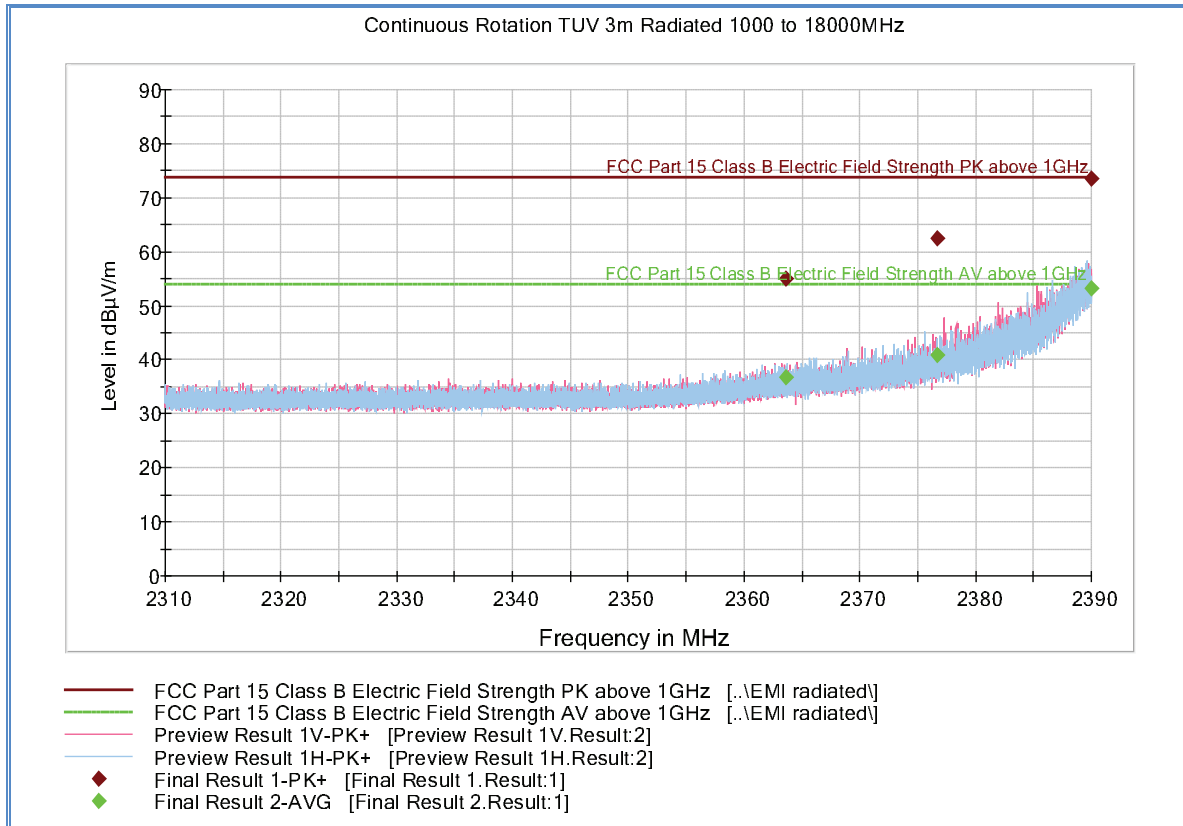
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
2485.989767	56.2	1000.0	1000.000	177.5	H	102.0	2.4	17.7	73.9
2486.489767	55.2	1000.0	1000.000	178.5	H	103.0	2.4	18.7	73.9
2489.807300	54.1	1000.0	1000.000	186.5	H	102.0	2.4	19.8	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
2485.989767	45.5	1000.0	1000.000	177.5	H	102.0	2.4	8.4	53.9
2486.489767	43.8	1000.0	1000.000	178.5	H	103.0	2.4	10.1	53.9
2489.807300	37.6	1000.0	1000.000	186.5	H	102.0	2.4	16.3	53.9

Test Notes: 2.4GHz notch filter removed for this test.

2.8.12 Test Results Restricted Band 2310MHz to 2390MHz (Low Channel Worst Case WiFi Mode)



Peak Data

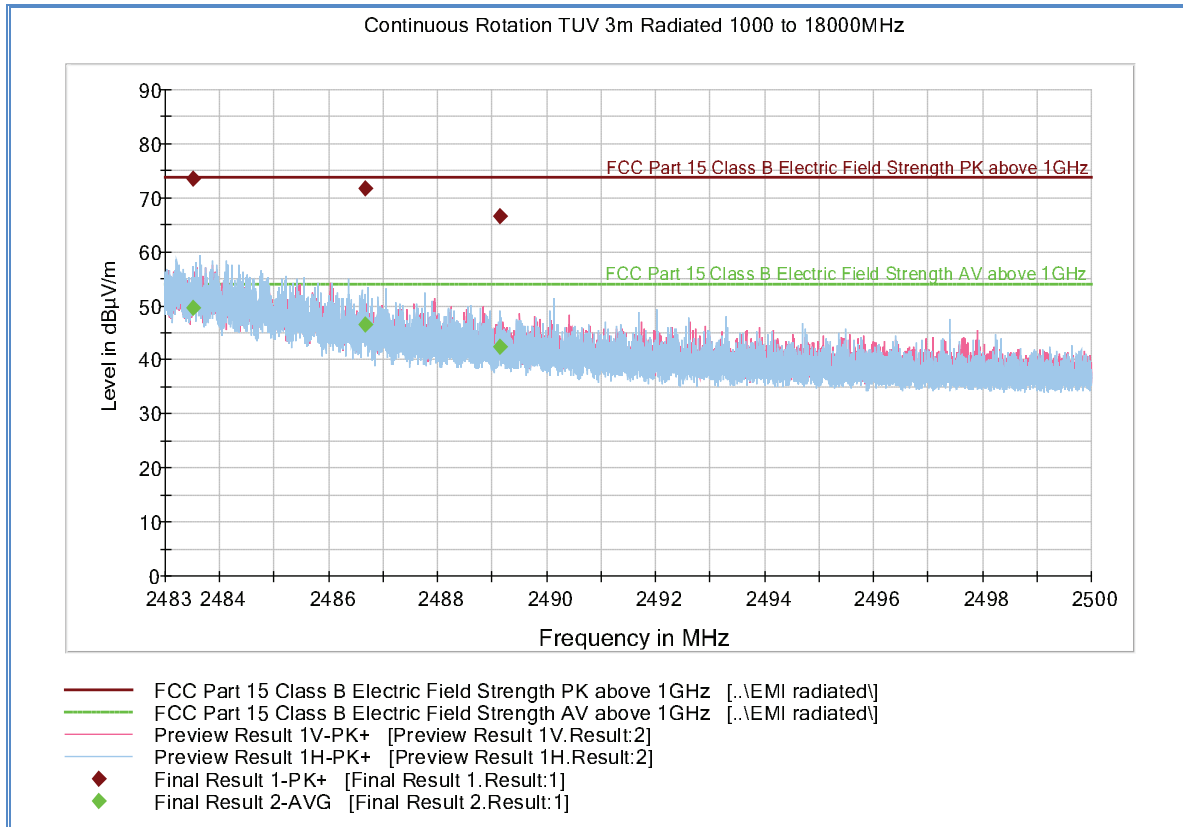
Frequency (MHz)	MaxPeak (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
2363.600000	55.1	1000.0	1000.000	200.4	V	301.0	2.4	18.8	73.9
2376.629333	62.4	1000.0	1000.000	314.1	H	70.0	2.4	11.5	73.9
2390.000000	73.5	1000.0	1000.000	304.2	H	71.0	2.4	0.1	73.9

Average Data

Frequency (MHz)	Average (dBμV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBμV/m)
2363.600000	36.7	1000.0	1000.000	200.4	V	301.0	2.4	17.2	53.9
2376.629333	40.9	1000.0	1000.000	314.1	H	70.0	2.4	13.0	53.9
2390.000000	53.3	1000.0	1000.000	304.2	H	71.0	2.4	0.6	53.9

Test Notes: 2.4GHz notch filter removed for this test.

2.8.13 Test Results Restricted Band 2483.5MHz to 2500MHz (High Channel Worst Case WiFi Mode)



Peak Data

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2483.500000	73.5	1000.0	1000.000	99.6	H	100.0	2.4	0.4	73.9
2486.668267	71.7	1000.0	1000.000	179.5	H	100.0	2.4	2.2	73.9
2489.142267	66.6	1000.0	1000.000	187.4	H	100.0	2.4	7.3	73.9

Average Data

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
2483.500000	49.6	1000.0	1000.000	99.6	H	100.0	2.4	4.3	53.9
2486.668267	46.5	1000.0	1000.000	179.5	H	100.0	2.4	7.4	53.9
2489.142267	42.3	1000.0	1000.000	187.4	H	100.0	2.4	11.6	53.9

Test Notes: 2.4GHz notch filter removed for this test.



2.9 POWER SPECTRAL DENSITY

2.9.1 Specification Reference

Part 15 Subpart C §15.247(e)

2.9.2 Standard Applicable

(e) For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. This power spectral density shall be determined in accordance with the provisions of paragraph (b) of this section. The same method of determining the conducted output power shall be used to determine the power spectral density.

2.9.3 Equipment Under Test and Modification State

Serial No: N/A (Sample #1) / Test Configuration A

2.9.4 Date of Test/Initial of test personnel who performed the test

December 13, 2013/FSC

2.9.5 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.9.6 Environmental Conditions

Ambient Temperature	17.9°C
Relative Humidity	30.0.%
ATM Pressure	99.8 kPa

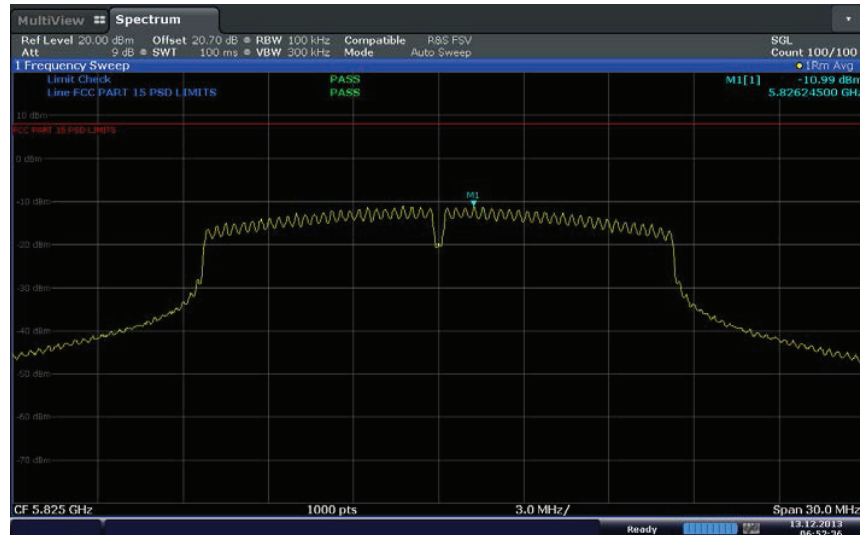
2.9.7 Additional Observations

- This is a conducted test.
- Test procedure is per Section 10.3 of KDB 558074 (April 09, 2013).
- An offset of 20.7dB was added to compensate for the external attenuator and cable used.
- Detector is RMS power averaging.
- Trace averaging mode over 100 traces.
- Sweep time is Auto Couple.
- EUT complies with 100 kHz RBW.
- For MIMO mode, the limit was adjusted using a factor of $10\log(N)$ dB where "N" is the number of outputs and assuming number of spatial streams is 1 (MCS 0).

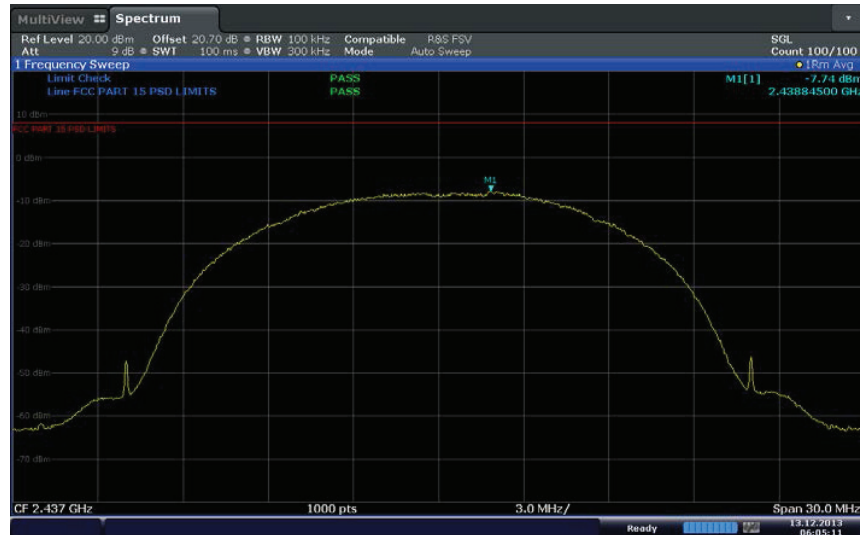
2.9.8 Test Results Summary

Mode	Channel	Marker Reading using 100 kHz RBW (dBm)	PSD Limit (dBm)	Margin (dB)	Compliance
802.11a	149 (5745 MHz)	-11.10	8	19.1	Complies
	157 (5785 MHz)	-12.19	8	20.19	Complies
	165 (5825 MHz)	-10.99	8	18.99	Complies
802.11b	1 (2412 MHz)	-7.72	8	15.72	Complies
	6 (2437 MHz)	-7.74	8	15.74	Complies
	11 (2462 MHz)	-7.71	8	15.71	Complies
802.11g	1 (2412 MHz)	-9.01	8	17.01	Complies
	6 (2437 MHz)	-8.35	8	16.35	Complies
	11 (2462 MHz)	-8.66	8	16.66	Complies
802.11n HT20	1 (2412 MHz)	-8.69	8	16.69	Complies
	6 (2437 MHz)	-8.61	8	16.61	Complies
	11 (2462 MHz)	-8.53	8	16.53	Complies
802.11n HT20 MIMO	1 (2412 MHz)	-9.74	5	14.74	Complies
	6 (2437 MHz)	-9.06	5	14.06	Complies
	11 (2462 MHz)	-9.07	5	14.07	Complies
802.11n HT20	149 (5745 MHz)	-11.29	8	19.29	Complies
	157 (5785 MHz)	-11.42	8	19.42	Complies
	165 (5825 MHz)	-10.69	8	18.69	Complies
802.11n HT40	3 (2422 MHz)	-17.14	8	25.14	Complies
	6 (2437 MHz)	-17.29	8	25.29	Complies
	9 (2452 MHz)	-16.50	8	24.5	Complies
802.11n HT40	149 (5745 MHz)	-15.55	8	23.55	Complies
	157 (5785 MHz)	-15.86	8	23.86	Complies
	165 (5825 MHz)	-15.61	8	23.61	Complies
Bluetooth LE	37 (2402 MHz)	-0.75	8	8.75	Complies
	17 (2440 MHz)	0.98	8	7.02	Complies
	39 (2480 MHz)	0.53	8	7.47	Complies

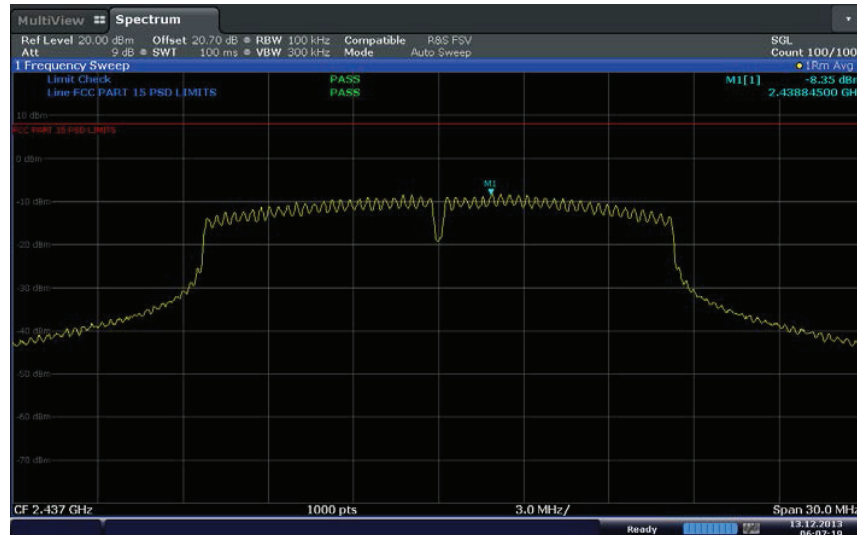
2.9.9 Test Results Plots



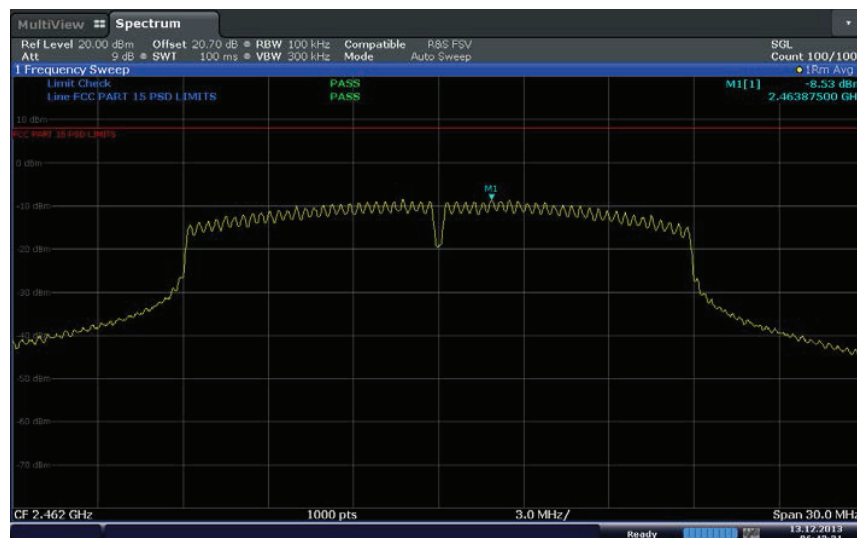
802.11a Worst Case Channel



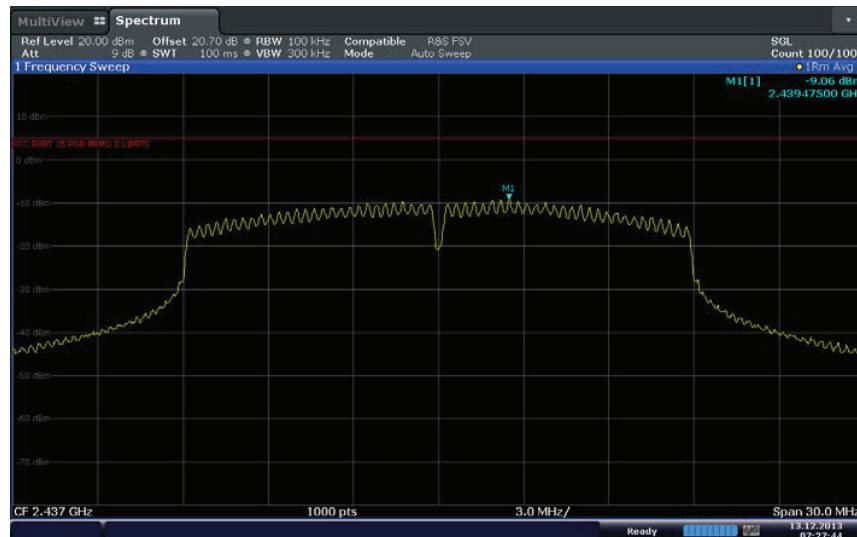
802.11b Worst Case Channel



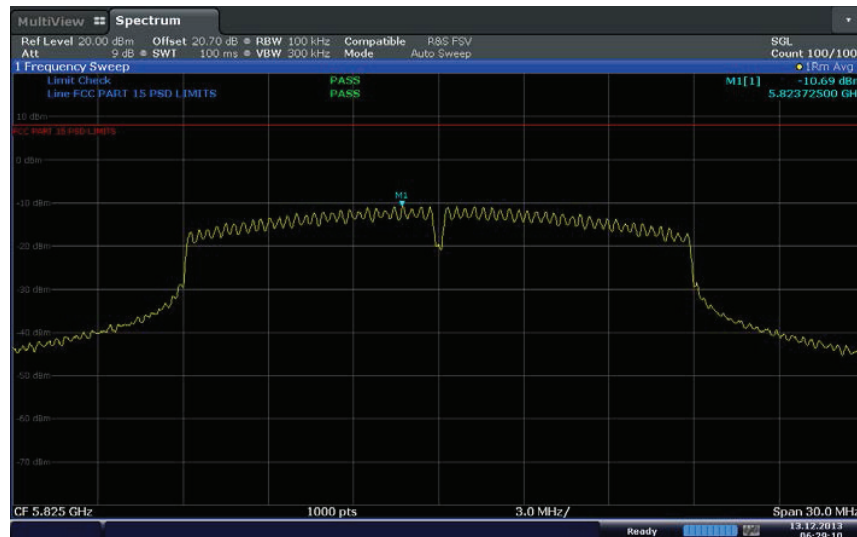
802.11g Worst Case Channel



802.11n HT20 Worst Case Channel

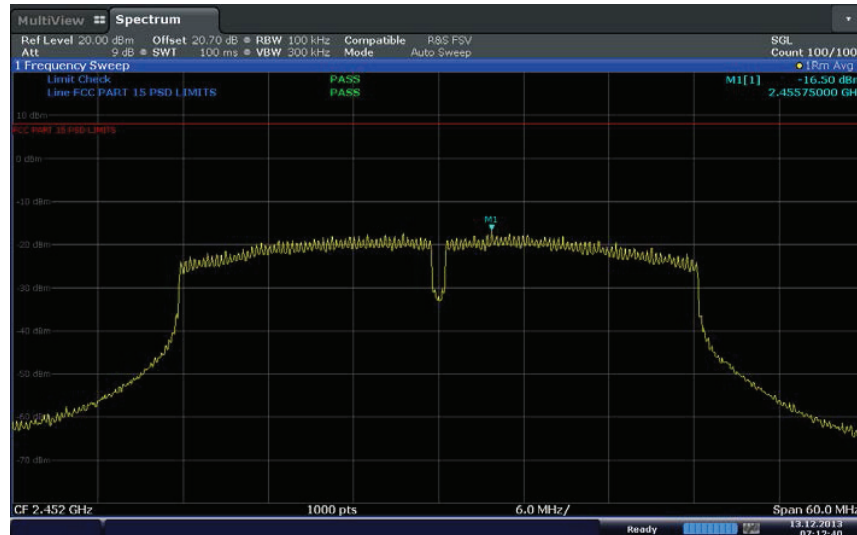


802.11n HT20 MIMO Worst Case Channel*

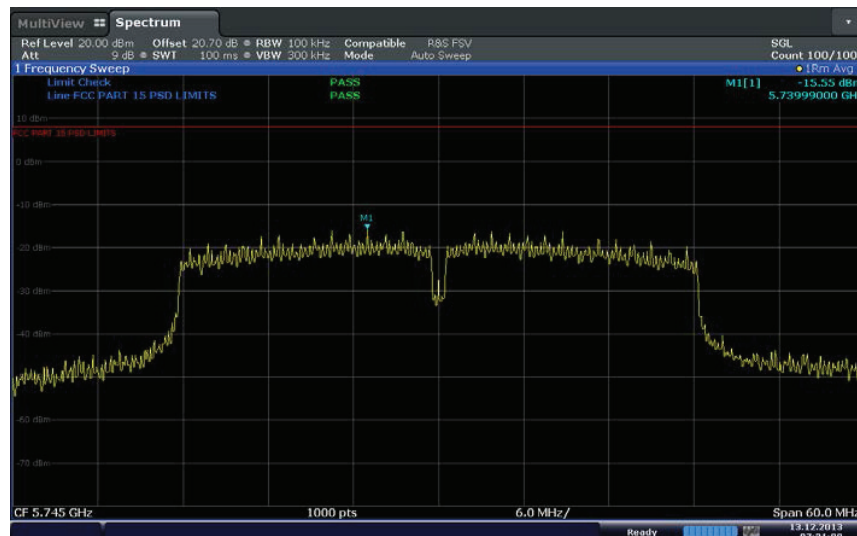


802.11n HT20 5GHz Worst Case Channel

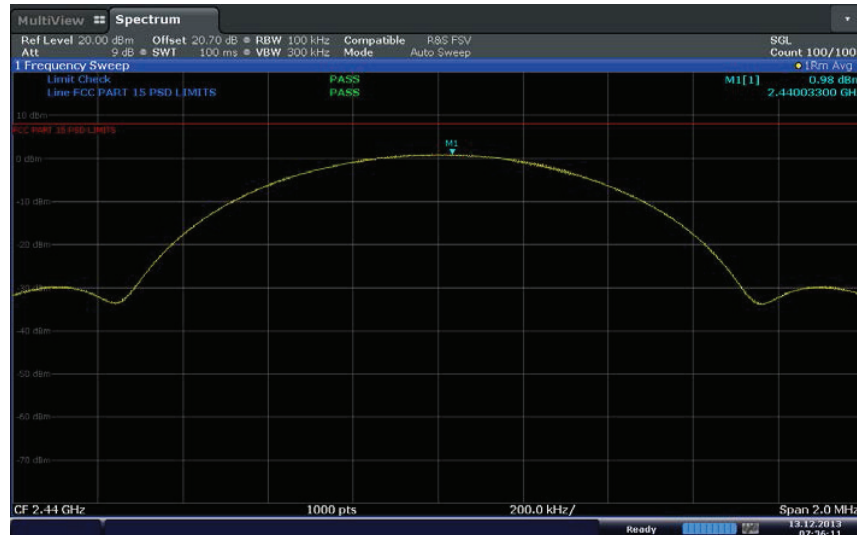
*The limits for MIMO mode adjusted by $10\log(n)$ where n is the number of outputs.



802.11n HT40 Worst Case Channel



802.11n HT40 5GHz Worst Case Channel



Bluetooth LE Worst Case Channel



SECTION 3

TEST EQUIPMENT USED



3.1 TEST EQUIPMENT USED

List of absolute measuring and other principal items of test equipment.

ID Number (SDGE/SDRB)	Test Equipment	Type	Serial Number	Manufacturer	Cal Date	Cal Due Date
Antenna Conducted Port Setup						
7569	Series Power Meter	N1911A P-	MY45100625	Agilent	04/15/13	04/15/14
7570	50MHz-18GHz Wideband Power Sensor	N1921A	MY45240588	Agilent	05/06/13	05/06/14
7582	Signal/Spectrum Analyzer	FSW26	101614	Rhode & Schwarz	11/19/13	11/19/14
1189	Signal Generator	8648C	3623A03059	Hewlett Packard	08/06/13	08/06/14
-	20dB Attenuator	46-20-34	BK5773	Weinschel Corp.	Verified by 1189 and 7582	
Radiated Test Setup						
1002	Bilog Antenna	3142C	00058717	ETS-Lindgren	01/21/13	01/21/14
7575	Double-ridged waveguide horn antenna	3117	00155511	EMCO	03/25/13	03/25/14
8628	Pre-amplifier	QLJ 01182835-JO	8986002	QuinStar Technologies Inc.	09/03/13	09/03/14
1150	Horn antenna	3160-09	012054-004	ETS	04/26/13	04/26/15
1151	Pre-amplifier	TS-PR26	100026	Rhode & Schwarz	05/02/13	05/02/14
1051	Double-ridged waveguide horn antenna	3115	9408-4329	EMCO	06/11/13	06/11/14
8760	Pre-amplifier	ZKL-2	1001	Mini-Circuits	09/03/13	09/03/14
1153	High-frequency cable	SucoFlex 100 SX	N/A	Suhner	09/03/13	09/03/14
8543	High-frequency cable	Micropore 19057793	N/A	United Microwave Products	09/03/13	09/03/14
1040	EMI Test Receiver	ESIB40	100292	Rhode & Schwarz	07/31/13	07/31/14
1049	EMI Test Receiver	ESU	100133	Rhode & Schwarz	07/24/13	07/24/14
-	5.0GHz Band Notch Filter	BRM50716	015	Micro-Tronics	Verified by 1189 and 7582	
6815	2.4GHz Band Notch Filter	BRM50702	008	Micro-Tronics	Verified by 1189 and 7582	
1016	Pre-amplifier	PAM-0202	187	PAM	10/08/13	10/08/14
Conducted Emissions						
1024	EMI Test Receiver	ESCS 30	847793/001	Rhode & Schwarz	03/11/13	03/11/14
7567	LISN	FCC-LISN-50-25-2-10	120304	Fischer Custom Comm.	06/11/13	06/11/14
7568	LISN	FCC-LISN-50-25-2-10	120305	Fischer Custom Comm.	07/10/13	07/10/14
8789	20dB Attenuator	HAT-20	YUU29001245	Mini Circuits	03/01/13	03/01/14
8792	20dB Attenuator	HAT-20	YUU29001245	Mini Circuits	03/01/13	03/01/14
Miscellaneous						
6452	Multimeter	3478A	2911A52177	Hewlett Packard	08/02/13	08/02/14
7554	Barometer/Temperature /Humidity Transmitter	iBTHX-W	0400706	Omega	04/17/13	04/17/14
1123	DC Power Supply	E3631A	N/A	Hewlett Packard	Verified by 6452	
	Test Software	EMC32	V8.53	Rhode & Schwarz	N/A	

3.2 MEASUREMENT UNCERTAINTY

For a 95% confidence level, the measurement uncertainties for defined systems are:

3.2.1 Radiated Emission Measurements (Below 1GHz)

Contribution		Probability Distribution Type	Probability Distribution x_i	Standard Uncertainty $u(x_i)$	$[u(x_i)]^2$
1	Receiver/Spectrum Analyzer	Rectangular	0.45	0.26	0.07
2	Cables	Rectangular	0.50	0.29	0.08
3	Preamp	Rectangular	0.50	0.29	0.08
4	Antenna	Rectangular	0.75	0.43	0.19
5	Site	Rectangular	3.89	2.25	5.04
6	EUT Setup	Rectangular	1.00	0.58	0.33
Combined Uncertainty (u_c):					2.41
Coverage Factor (k):					2
Expanded Uncertainty:					4.82

3.2.2 Radiated Emission Measurements (Above 1GHz)

Contribution		Probability Distribution Type	Probability Distribution x_i	Standard Uncertainty $u(x_i)$	$[u(x_i)]^2$
1	Receiver/Spectrum Analyzer	Rectangular	0.57	0.33	0.11
2	Cables	Rectangular	0.70	0.40	0.16
3	Preamp	Rectangular	0.50	0.29	0.08
4	Antenna	Rectangular	0.37	0.21	0.05
5	Site	Rectangular	3.89	2.25	5.04
6	EUT Setup	Rectangular	1.00	0.58	0.33
Combined Uncertainty (u_c):					2.40
Coverage Factor (k):					2
Expanded Uncertainty:					4.81

3.2.3 Conducted Antenna Port Measurement

Contribution		Probability Distribution Type	Probability Distribution x_i	Standard Uncertainty $u(x_i)$	$[u(x_i)]^2$
1	Receiver/Spectrum Analyzer	Rectangular	0.57	0.33	0.11
2	Cables	Rectangular	0.50	0.29	0.08
3	EUT Setup	Rectangular	1.00	0.58	0.33
Combined Uncertainty (u_c):					0.72
Coverage Factor (k):					2
Expanded Uncertainty:					1.45

3.2.1 AC Conducted Emissions Measurements

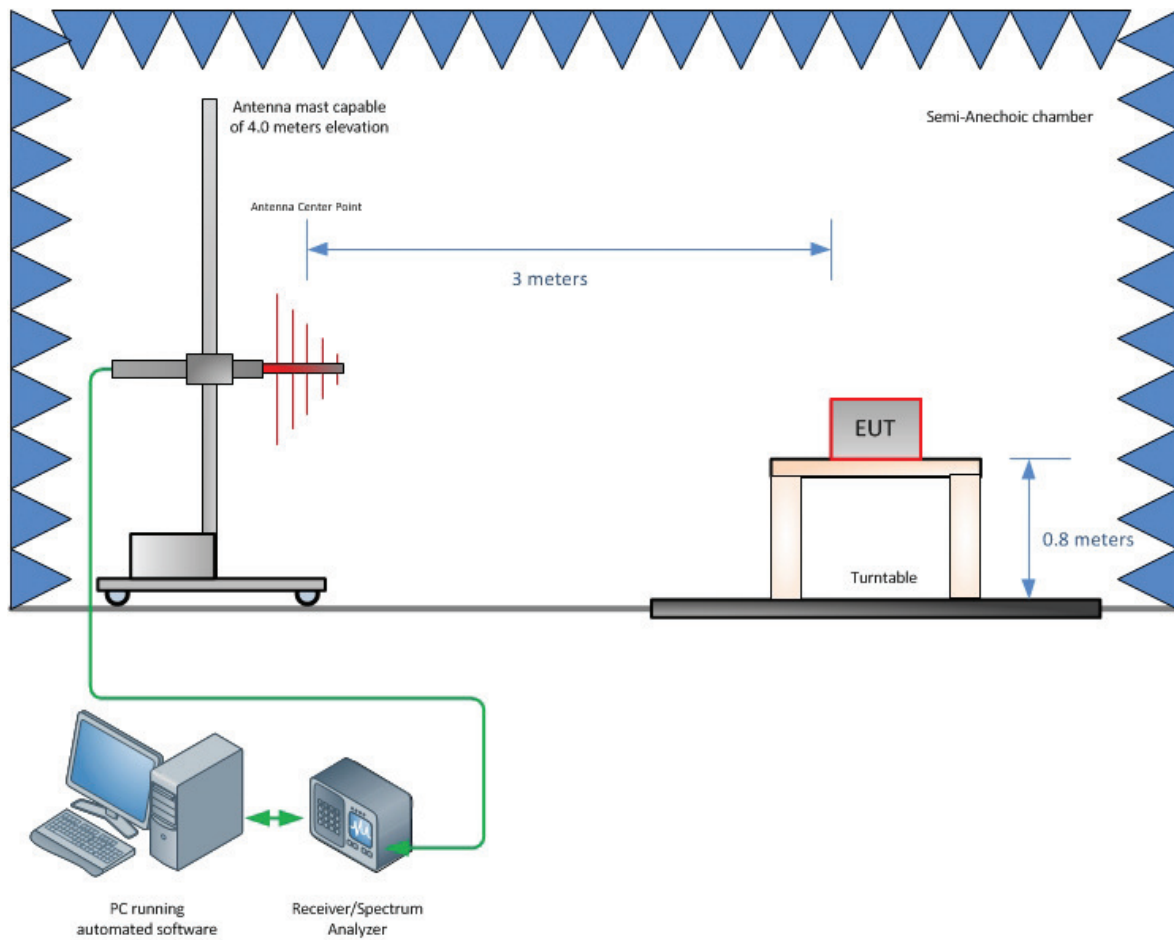
Contribution		Probability Distribution Type	Probability Distribution x_i	Standard Uncertainty $u(x_i)$	$[u(x_i)]^2$
1	Receiver/Spectrum Analyzer	Rectangular	0.36	0.21	0.04
2	Cables	Rectangular	0.50	0.29	0.08
3	LISN	Rectangular	0.66	0.38	0.15
4	Attenuator	Rectangular	0.30	0.17	0.03
5	EUT Setup	Rectangular	1.00	0.58	0.33
Combined Uncertainty (u_c):					0.80
Coverage Factor (k):					2
Expanded Uncertainty:					1.59



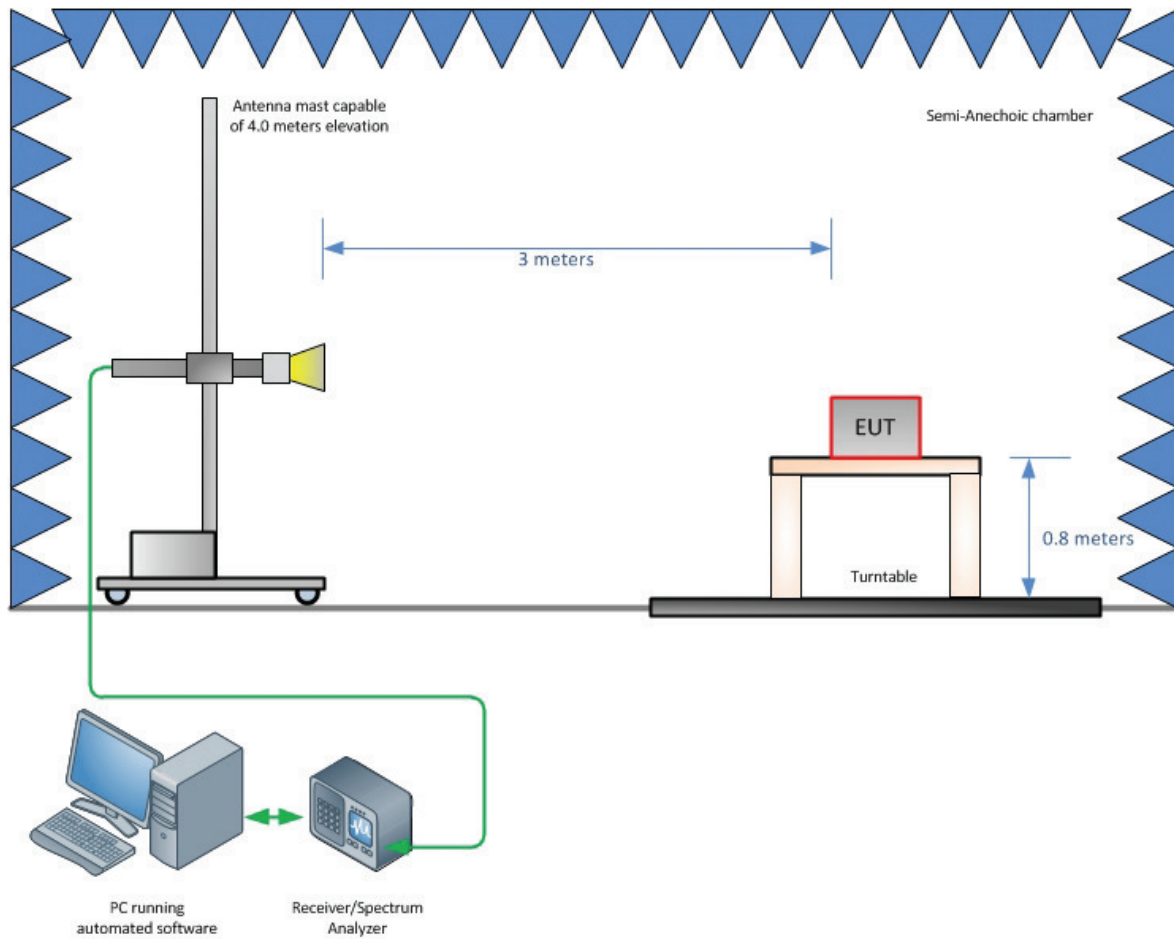
SECTION 4

DIAGRAM OF TEST SETUP

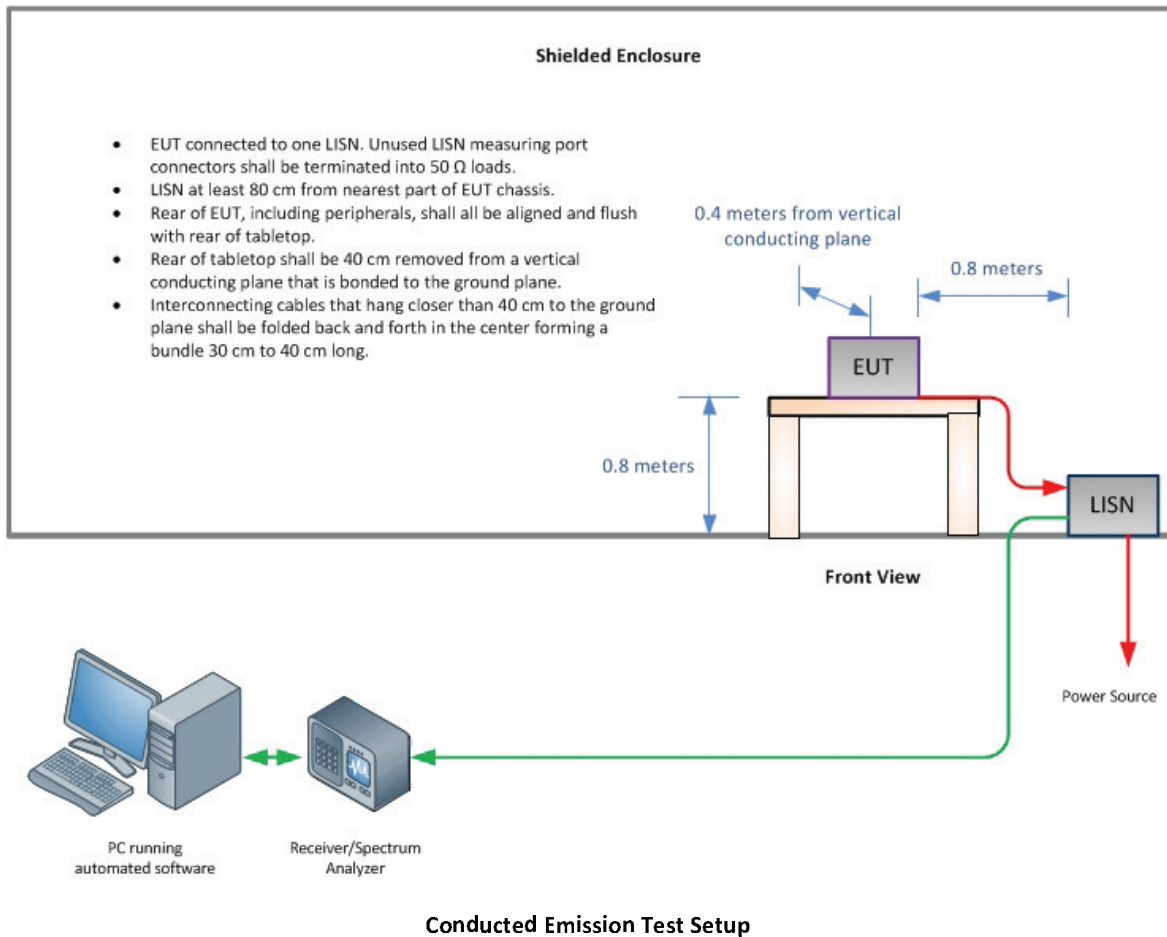
4.1 TEST SETUP DIAGRAM



Radiated Emission Test Setup (Below 1GHz)



Radiated Emission Test Setup (Above 1GHz)





SECTION 5

ACCREDITATION, DISCLAIMERS AND COPYRIGHT



5.1 ACCREDITATION, DISCLAIMERS AND COPYRIGHT

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