

**Measurement Uncertainty**

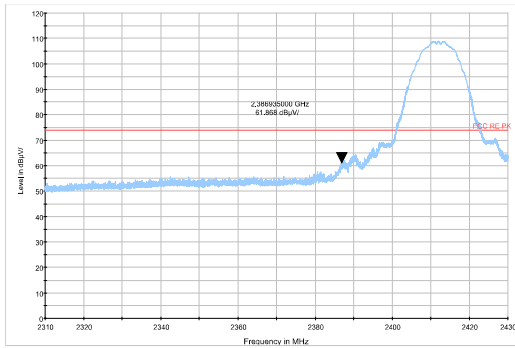
The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor $k = 1.96$.

Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.17 dB
200MHz-1GHz	4.84 dB
1-18GHz	4.35 dB
18-26.5GHz	5.90 dB
26.5GHz~40GHz	5.92 dB

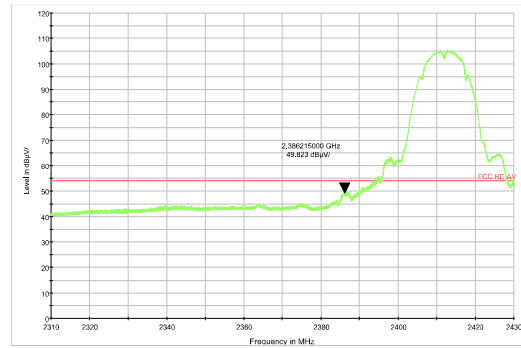


Test Results:

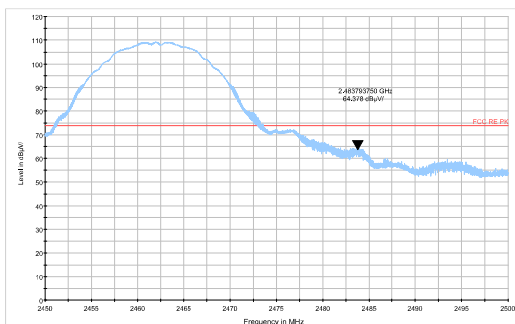
ESP32-S2-MINI-1



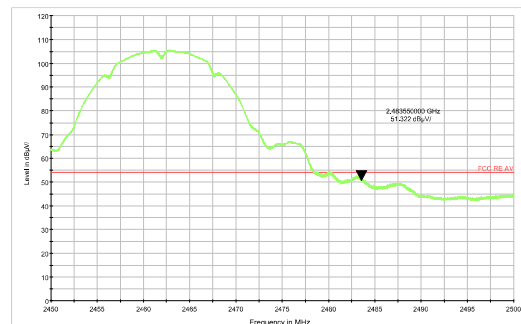
802.11b-Channel 1 Peak



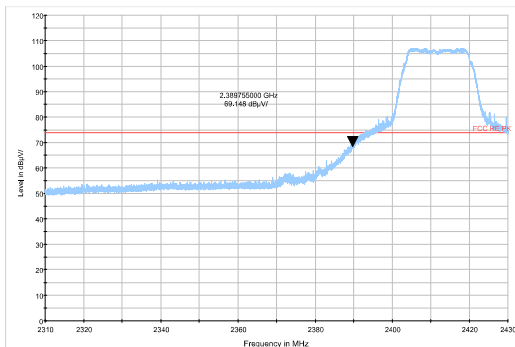
802.11b-Channel 1 Average



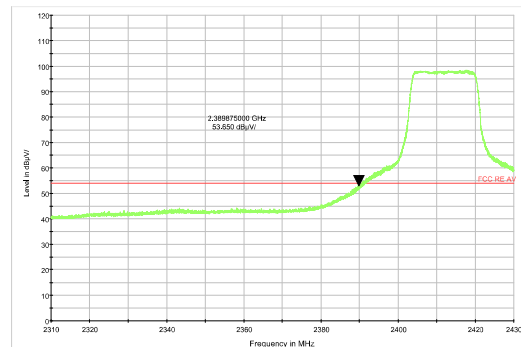
802.11b-Channel 11 Average



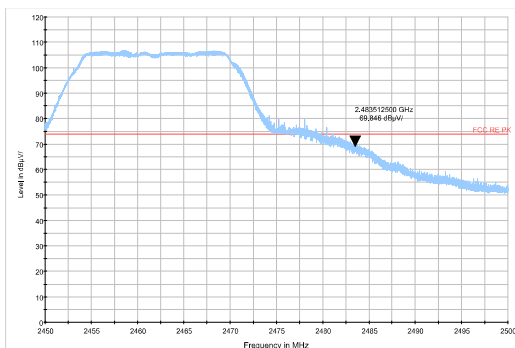
802.11b-Channel 11 Average



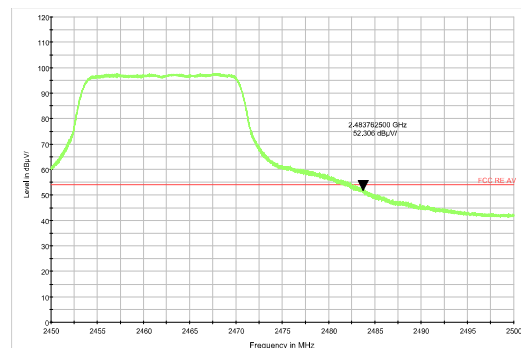
802.11g-Channel 1 Peak



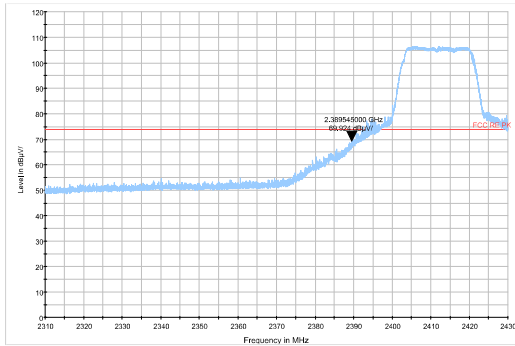
802.11g-Channel 1 Average



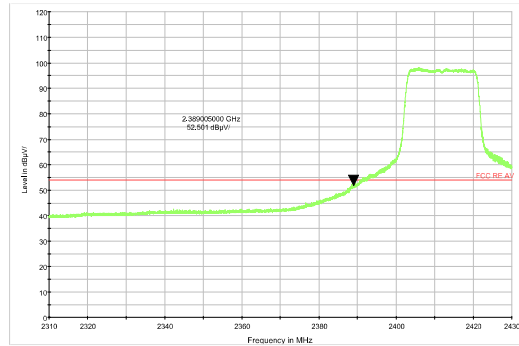
802.11g-Channel 11 Peak



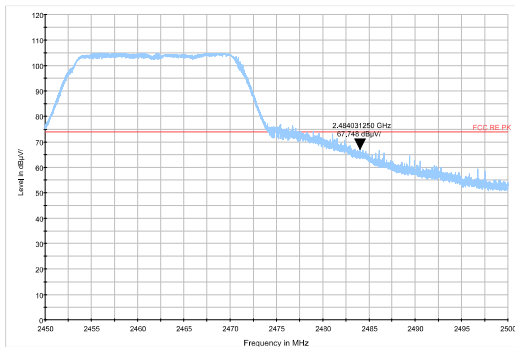
802.11g-Channel 11 Average



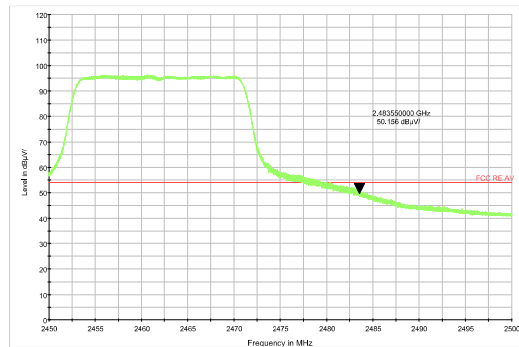
802.11n HT20 -Channel 1 Peak



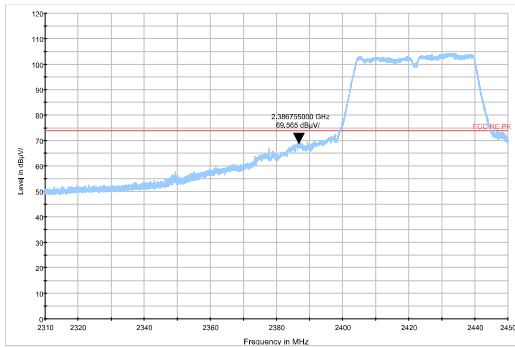
802.11n HT20 -Channel 1 Average



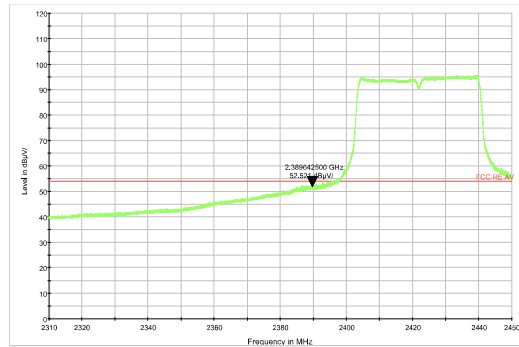
802.11n HT20 -Channel 11 Peak



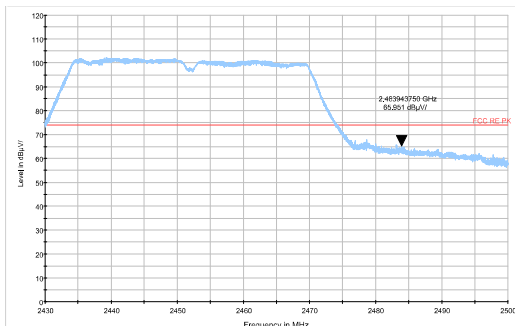
802.11n HT20 -Channel 11 Average



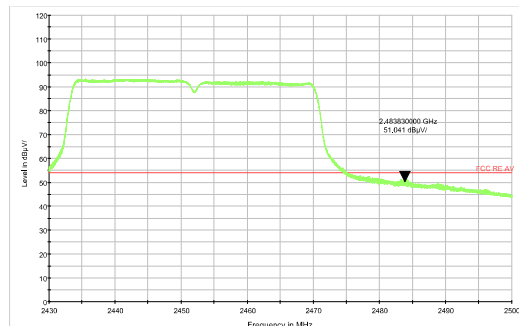
802.11n HT40 -Channel 3 Peak



802.11n HT40 -Channel 3 Average



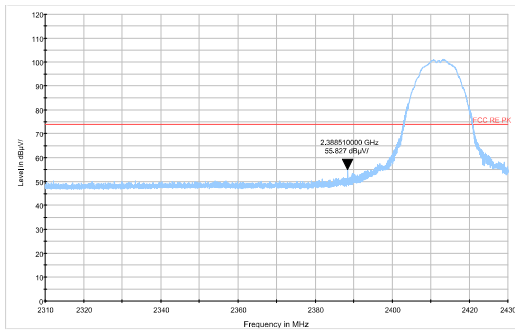
802.11n HT40 -Channel 9 Peak



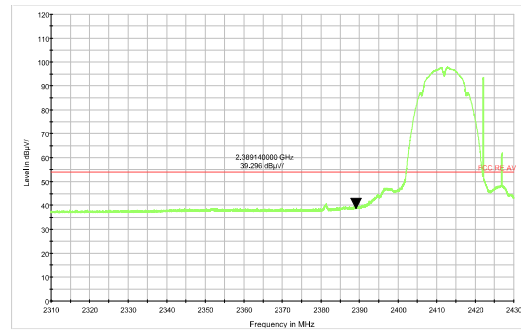
802.11n HT40 -Channel 9 Average



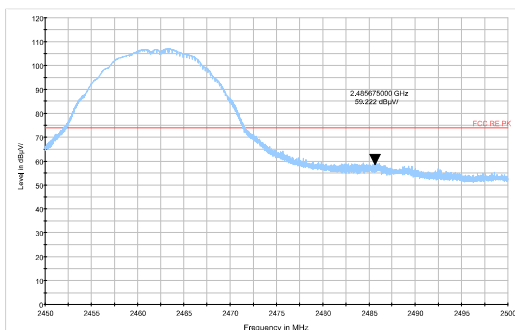
ESP32-S2-MINI-1U



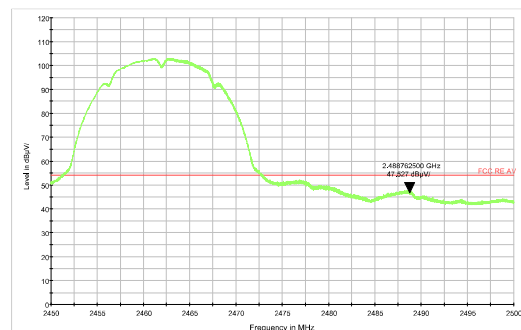
802.11b-Channel 1 Peak



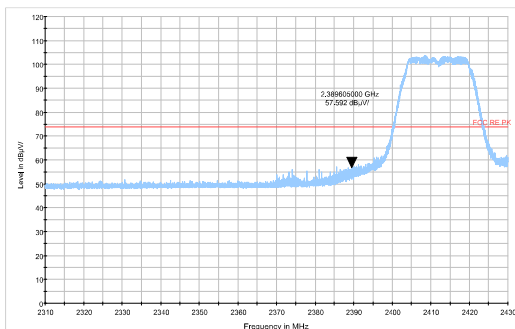
802.11b-Channel 1 Average



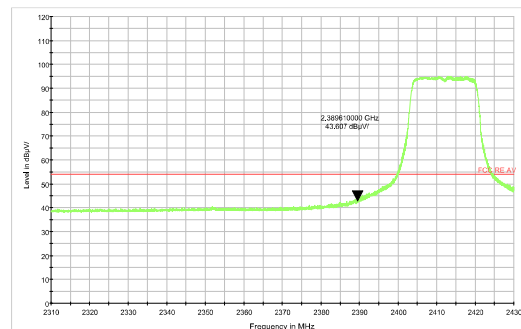
802.11b-Channel 11 Peak



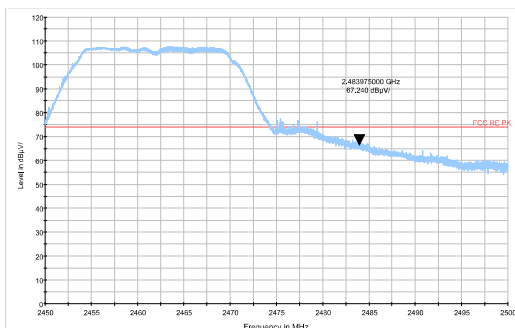
802.11b-Channel 11 Average



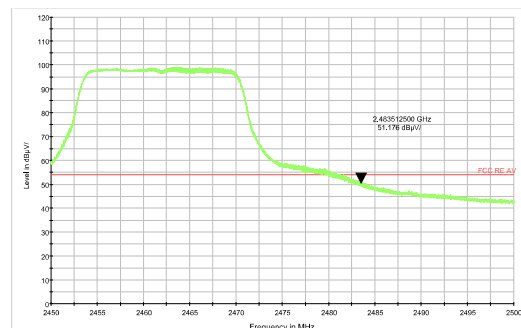
802.11g-Channel 1 Peak



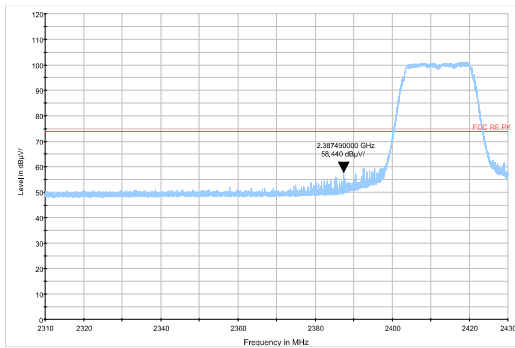
802.11g-Channel 1 Average



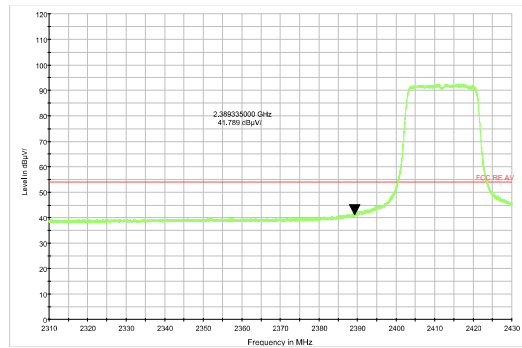
802.11g-Channel 11 Peak



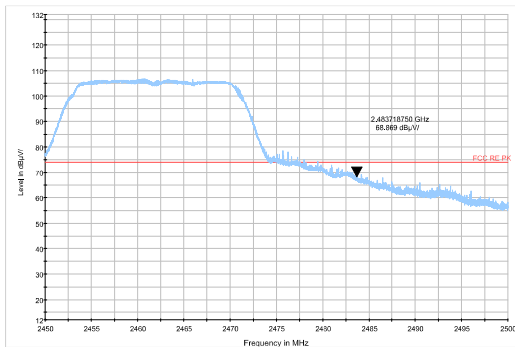
802.11g-Channel 11 Average



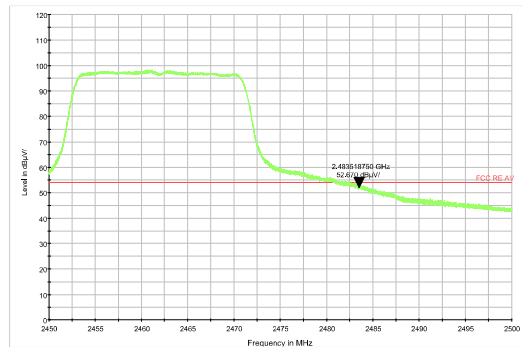
802.11n HT20 -Channel 1 Peak



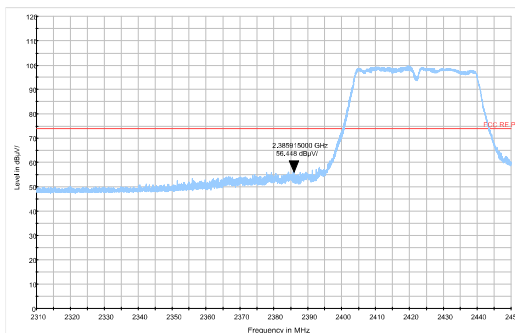
802.11n HT20 -Channel 1 Average



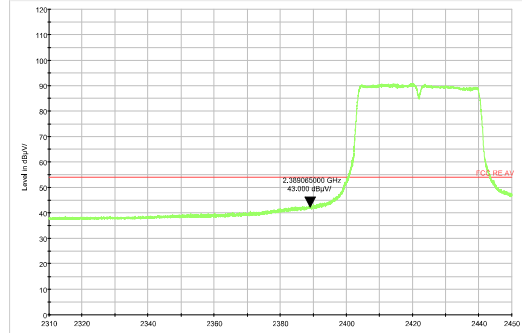
802.11n HT20 -Channel 11 Peak



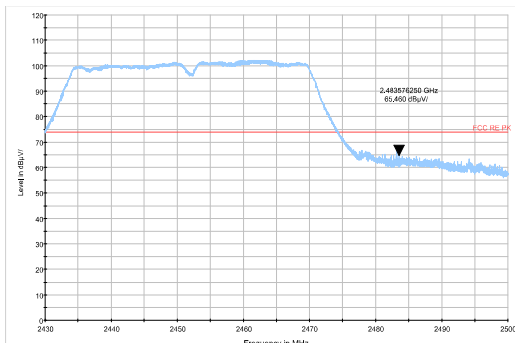
802.11n HT20 -Channel 11 Average



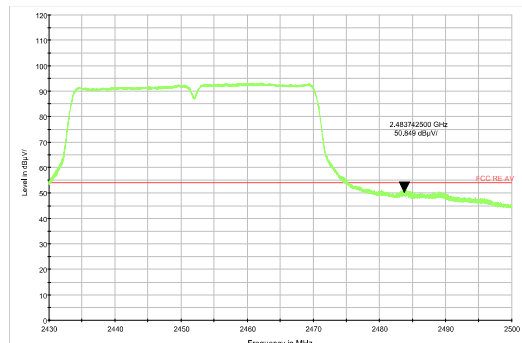
802.11n HT40 -Channel 3 Peak



802.11n HT40 -Channel 3 Average



802.11n HT40 -Channel 9 Peak



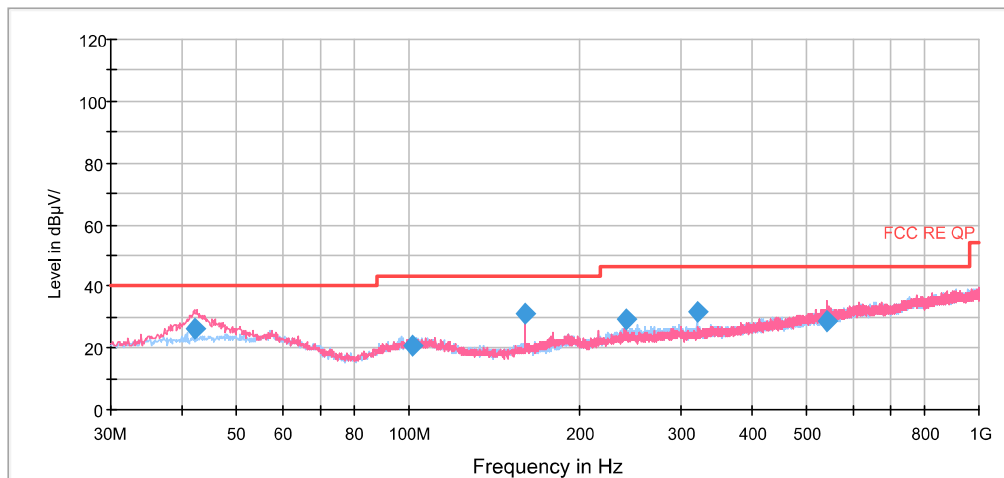
802.11n HT40 -Channel 9 Average

**Result of RE****Test result**

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the Emissions in the frequency band 9kHz-30MHz and 18GHz-26.5GHz are more than 20dB below the limit are not reported.

The following graphs display the maximum values of horizontal and vertical by software.
For above 1GHz, Blue trace uses the peak detection, Green trace uses the average detection.

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, 802.11n (HT40), Channel 9 of ESP32-S2-MINI-1 and 802.11n (HT40), Channel 3 of ESP32-S2-MINI-1U are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

ESP32-S2-MINI-1**Continuous TX mode:**

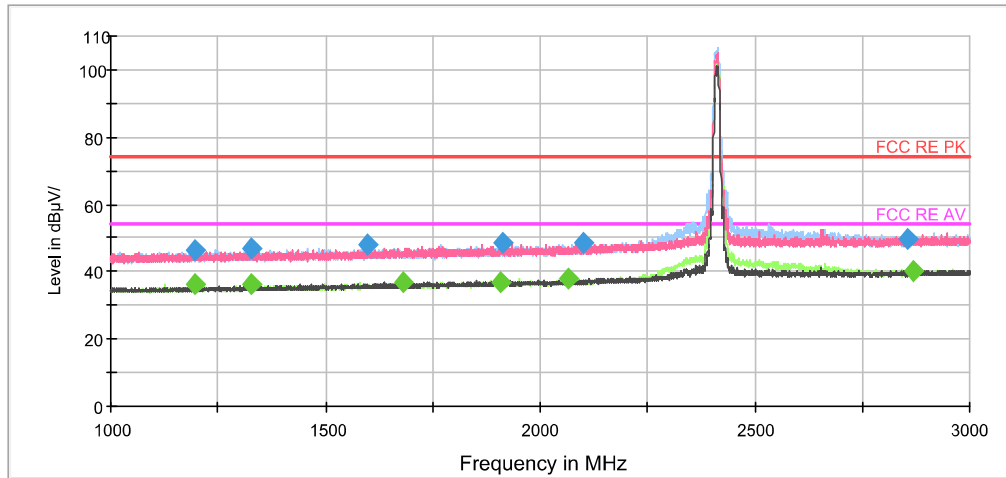
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
42.088750	26.0	125.0	V	59.0	14.4	14.0	40.0
101.288750	20.5	125.0	H	327.0	13.6	23.0	43.5
159.980000	30.8	100.0	V	100.0	10.4	12.7	43.5
240.005000	29.0	118.0	H	270.0	14.5	17.0	46.0
319.990000	31.8	111.0	H	144.0	16.2	14.2	46.0
541.675000	28.7	100.0	V	39.0	21.0	17.3	46.0

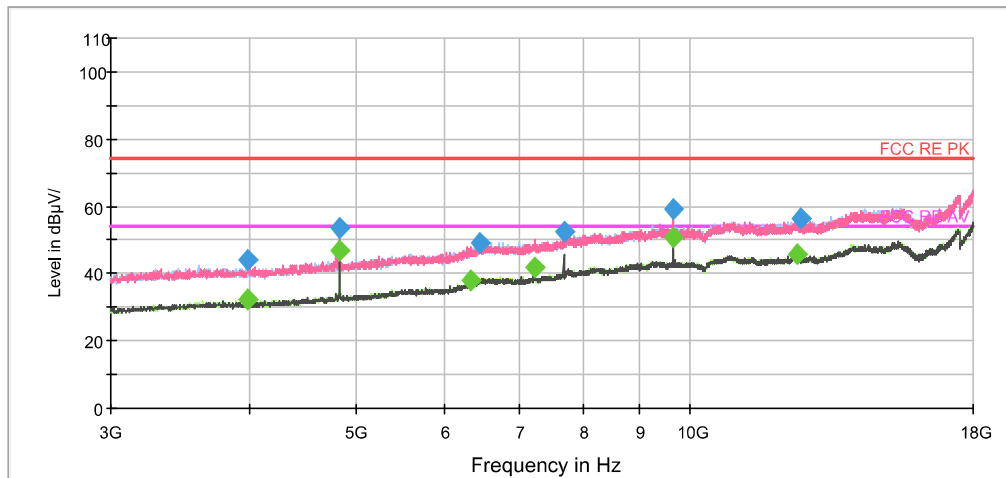
Remark: 1. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

2. Margin = Limit – Quasi-Peak

802.11b CH1



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



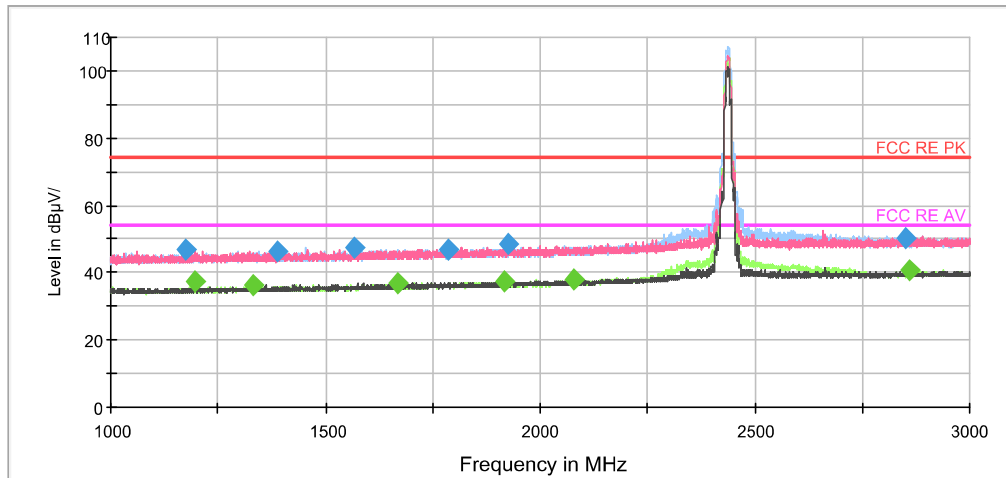
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.250000	46.1	200.0	V	255.0	-1.2	27.9	74.0
1327.750000	47.2	200.0	V	350.0	-0.9	26.8	74.0
1599.500000	47.8	100.0	H	334.0	0.0	26.2	74.0
1914.500000	48.5	100.0	V	166.0	0.9	25.5	74.0
2100.250000	48.7	200.0	H	0.0	1.7	25.3	74.0
2855.500000	49.6	100.0	H	358.0	4.4	24.4	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

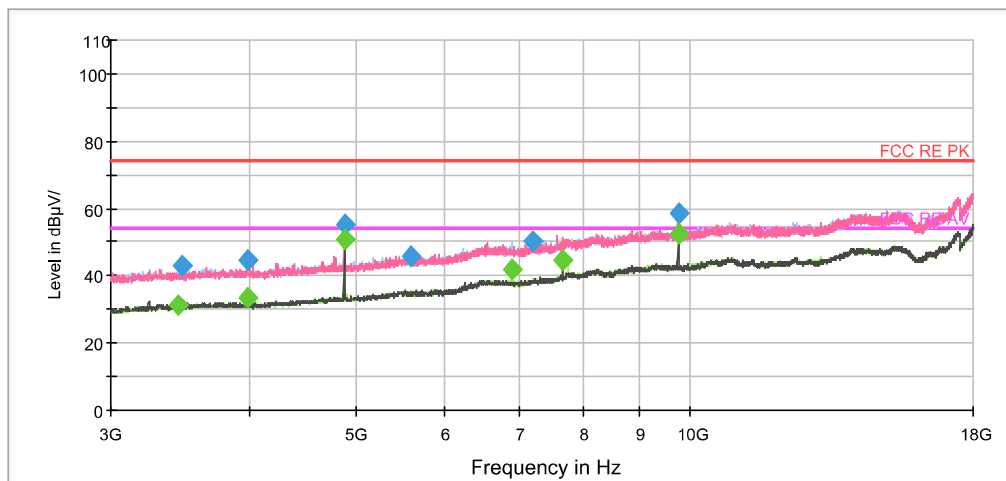
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.750000	36.5	100.0	V	98.0	-1.2	17.5	54.0
1327.750000	36.2	200.0	V	350.0	-0.9	17.8	54.0
1679.500000	36.8	200.0	V	353.0	0.3	17.2	54.0
1907.750000	37.0	100.0	H	201.0	0.9	17.0	54.0
2066.750000	37.8	100.0	H	151.0	1.5	16.2	54.0
2868.500000	40.1	100.0	H	0.0	4.4	13.9	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11b CH6



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



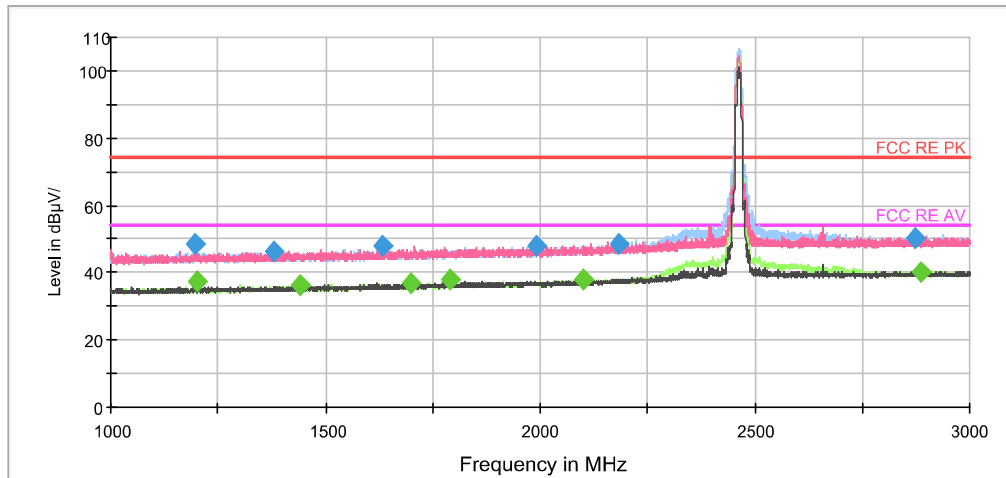
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1176.750000	46.9	100.0	H	182.0	-1.3	27.1	74.0
1389.750000	46.6	100.0	V	0.0	-0.7	27.4	74.0
1566.750000	47.4	200.0	H	91.0	-0.1	26.6	74.0
1786.500000	46.9	100.0	V	50.0	0.6	27.1	74.0
1925.750000	48.4	200.0	H	33.0	1.0	25.6	74.0
2850.000000	50.1	200.0	H	0.0	4.4	23.9	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

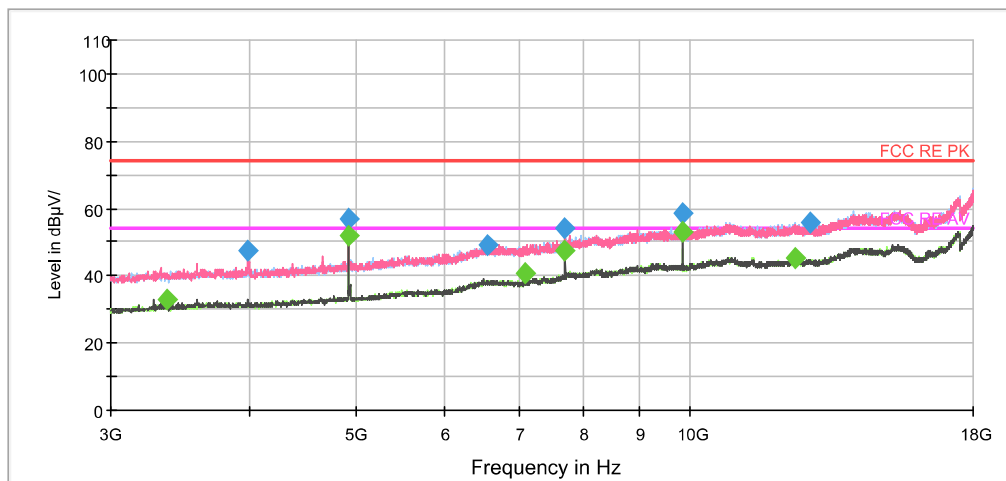
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.000000	37.6	100.0	V	267.0	-1.2	16.4	54.0
1332.000000	36.3	200.0	V	79.0	-0.9	17.7	54.0
1666.250000	37.0	200.0	V	212.0	0.2	17.0	54.0
1916.000000	37.2	100.0	H	312.0	1.0	16.8	54.0
2079.250000	37.8	200.0	H	315.0	1.5	16.2	54.0
2860.500000	40.5	200.0	V	202.0	4.4	13.5	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11b CH11



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



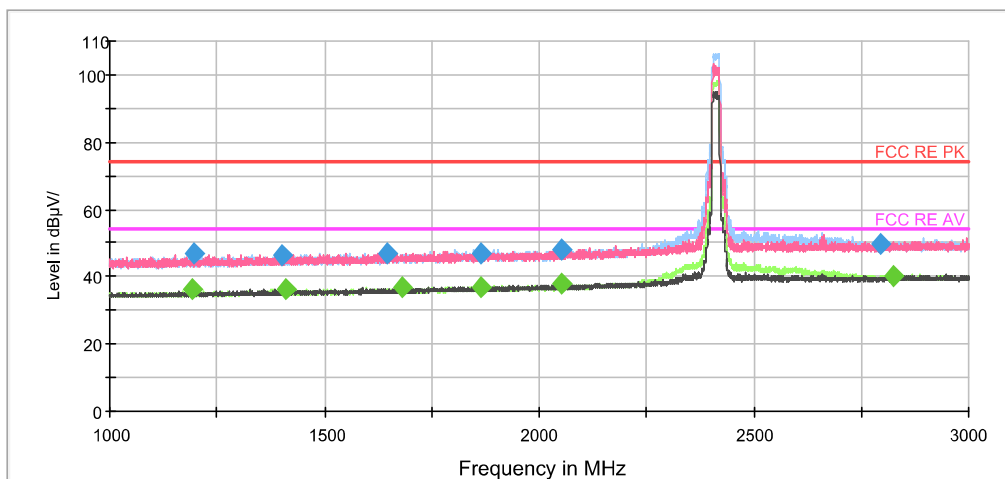
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	48.4	100.0	V	0.0	-1.2	25.6	74.0
1380.000000	46.4	100.0	H	249.0	-0.7	27.6	74.0
1635.250000	47.9	100.0	V	8.0	0.1	26.1	74.0
1993.000000	48.1	100.0	V	51.0	1.1	25.9	74.0
2183.750000	48.8	200.0	H	113.0	2.1	25.2	74.0
2875.000000	50.0	200.0	V	354.0	4.5	24.0	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

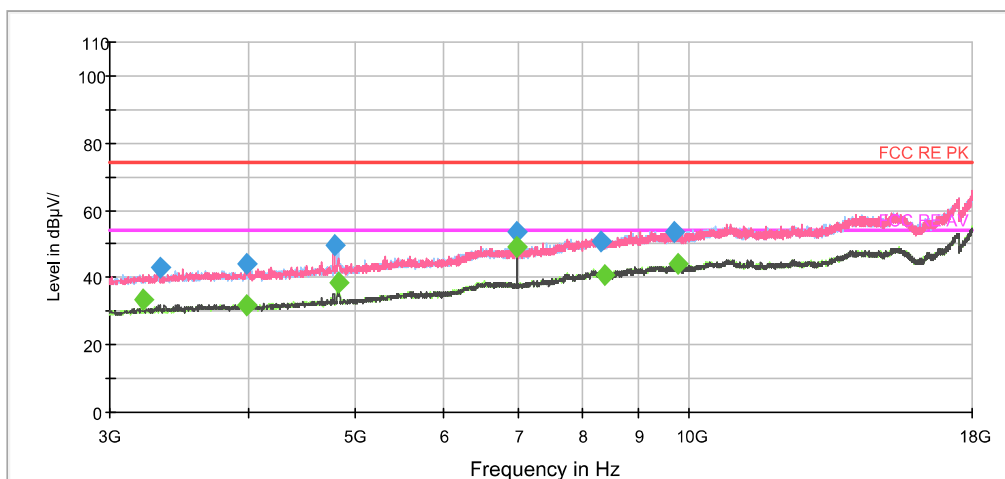
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.750000	37.7	100.0	V	0.0	-1.2	16.3	54.0
1441.750000	36.4	200.0	H	304.0	-0.6	17.6	54.0
1698.750000	36.7	100.0	H	338.0	0.4	17.3	54.0
1791.500000	37.7	100.0	V	24.0	0.6	16.3	54.0
2099.750000	37.9	100.0	V	109.0	1.7	16.1	54.0
2887.000000	40.0	200.0	H	9.0	4.5	14.0	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11g CH1



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.000000	46.9	100.0	H	298.0	-1.2	27.1	74.0
1402.000000	46.6	100.0	V	166.0	-0.7	27.4	74.0
1644.250000	47.1	100.0	V	186.0	0.2	26.9	74.0
1862.750000	46.9	200.0	V	359.0	0.8	27.1	74.0
2050.500000	48.3	100.0	V	352.0	1.4	25.7	74.0
2795.750000	49.7	200.0	H	88.0	4.3	24.3	74.0

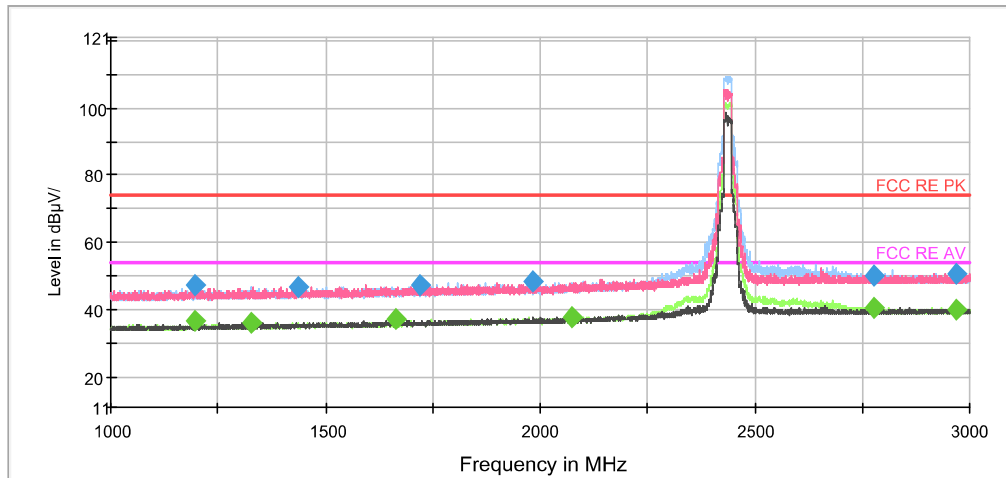
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1191.000000	36.3	200.0	V	342.0	-1.2	17.7	54.0
1409.500000	36.4	100.0	V	127.0	-0.7	17.6	54.0
1681.500000	37.0	100.0	V	1.0	0.3	17.0	54.0
1864.750000	36.6	100.0	H	182.0	0.8	17.4	54.0
2050.500000	37.9	100.0	H	269.0	1.4	16.1	54.0
2825.750000	40.4	200.0	H	15.0	4.4	13.6	54.0

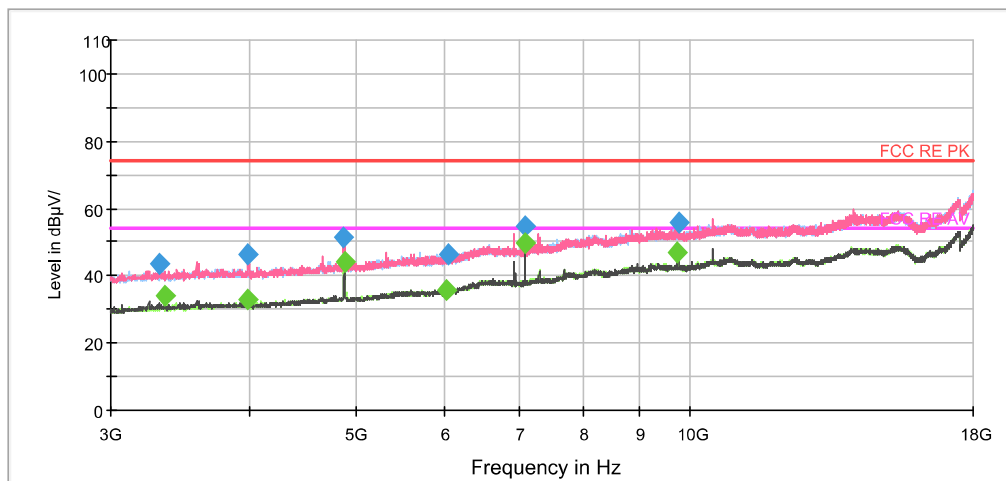
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)



802.11g CH6



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.000000	47.1	100.0	V	79.0	-1.2	26.9	74.0
1436.250000	46.9	200.0	V	354.0	-0.6	27.1	74.0
1720.000000	47.2	100.0	H	354.0	0.4	26.8	74.0
1980.750000	48.2	100.0	V	128.0	1.1	25.8	74.0
2776.000000	50.2	100.0	V	1.0	4.2	23.8	74.0
2968.500000	50.4	200.0	V	249.0	4.7	23.6	74.0

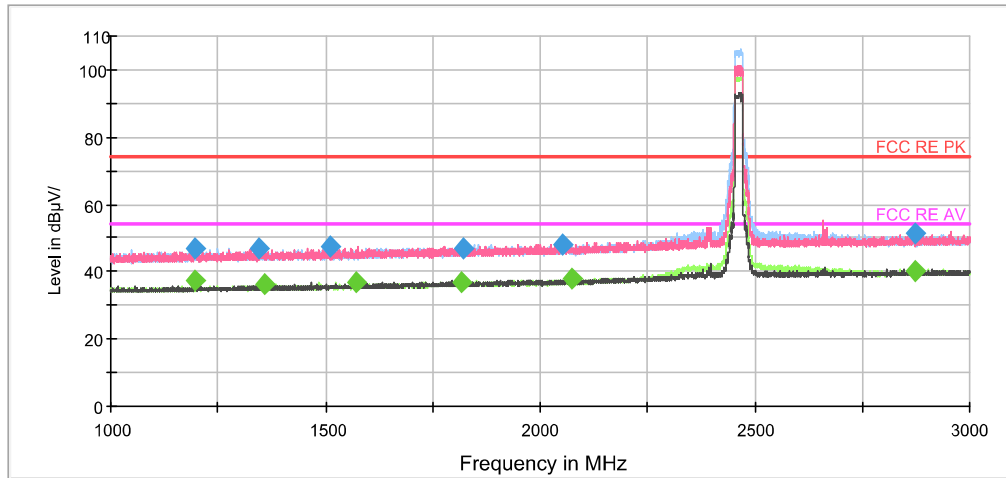
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.000000	36.9	100.0	V	79.0	-1.2	17.1	54.0
1329.500000	36.4	100.0	V	157.0	-0.9	17.6	54.0
1663.500000	37.0	100.0	V	2.0	0.2	17.0	54.0
2075.750000	37.8	200.0	H	122.0	1.5	16.2	54.0
2777.750000	40.4	100.0	H	297.0	4.2	13.6	54.0
2970.750000	39.9	200.0	V	0.0	4.7	14.1	54.0

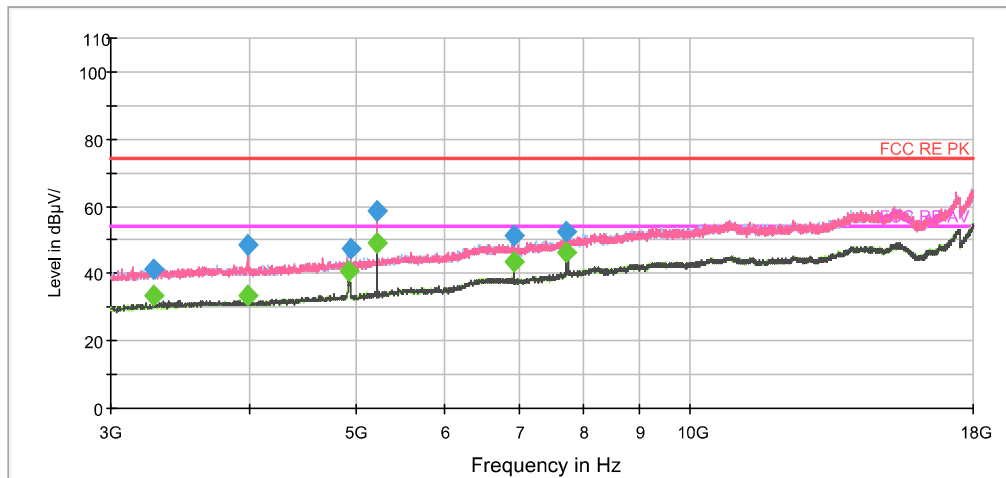
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)



802.11g CH11



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



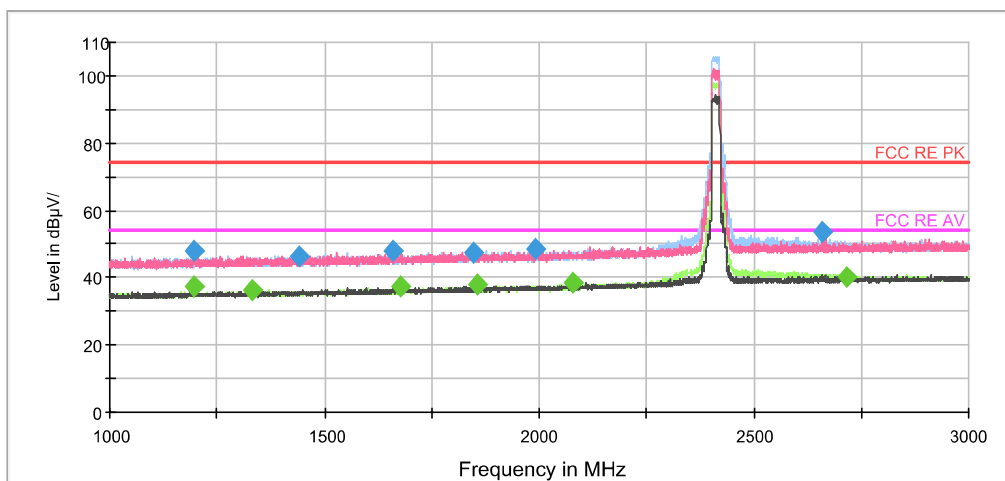
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.500000	46.9	200.0	V	314.0	-1.2	27.1	74.0
1344.250000	46.9	100.0	V	60.0	-0.9	27.1	74.0
1509.000000	47.3	100.0	H	357.0	-0.4	26.7	74.0
1819.000000	46.7	200.0	V	324.0	0.7	27.3	74.0
2054.000000	48.2	200.0	H	12.0	1.4	25.8	74.0
2871.250000	51.3	200.0	H	8.0	4.4	22.7	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

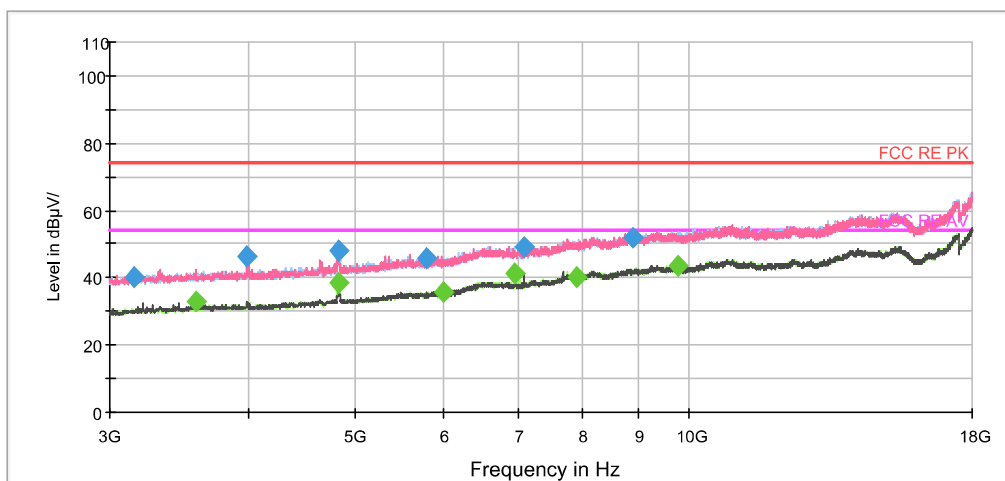
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.500000	37.2	200.0	V	314.0	-1.2	16.8	54.0
1356.750000	36.6	100.0	H	354.0	-0.9	17.4	54.0
1572.250000	36.8	200.0	H	100.0	-0.1	17.2	54.0
1817.500000	37.1	200.0	V	112.0	0.7	16.9	54.0
2075.250000	37.9	100.0	V	89.0	1.5	16.1	54.0
2871.500000	40.1	200.0	V	340.0	4.4	13.9	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH1



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



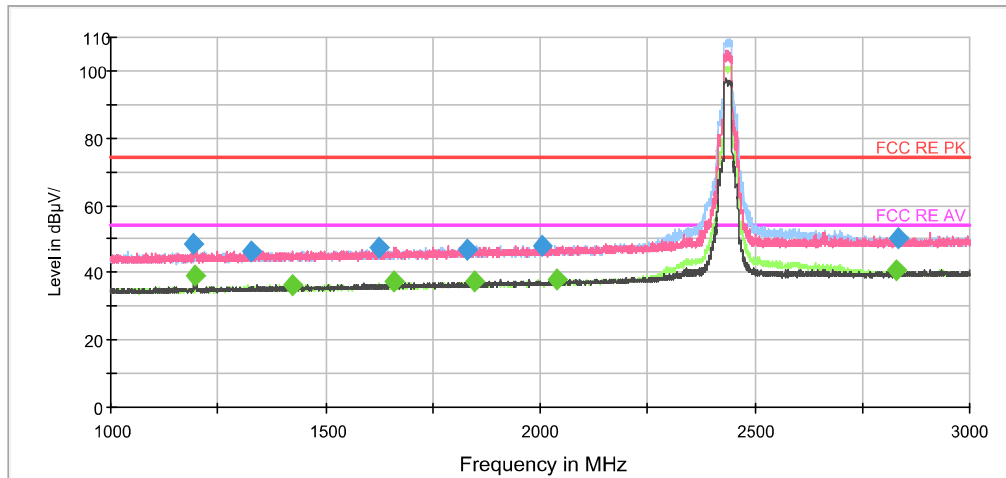
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1195.250000	47.9	200.0	V	132.0	-1.2	26.1	74.0
1440.250000	46.6	100.0	H	348.0	-0.6	27.4	74.0
1660.000000	48.0	100.0	V	219.0	0.2	26.0	74.0
1845.250000	47.4	200.0	H	9.0	0.7	26.6	74.0
1991.250000	48.6	200.0	V	351.0	1.1	25.4	74.0
2658.750000	53.4	100.0	V	229.0	3.9	20.6	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

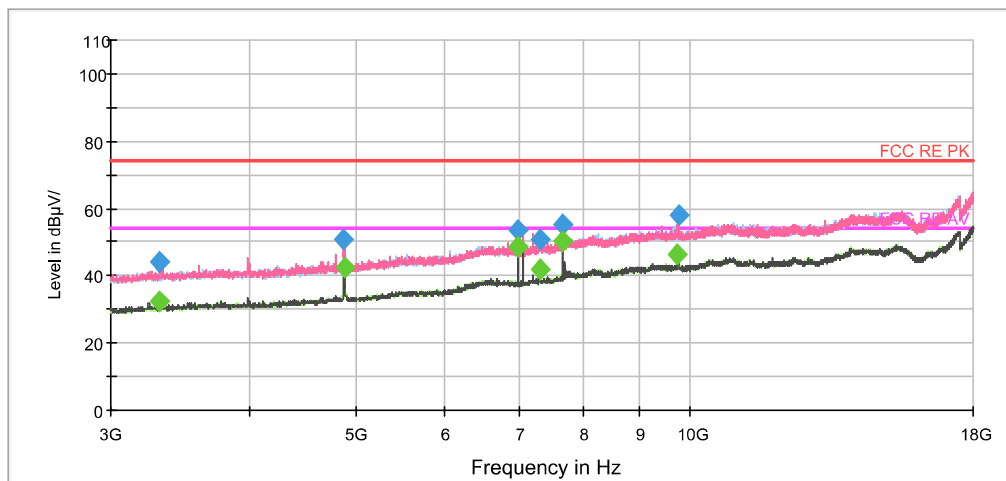
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.750000	37.6	100.0	V	260.0	-1.2	16.4	54.0
1330.750000	36.2	200.0	V	348.0	-0.9	17.8	54.0
1678.000000	37.4	100.0	V	43.0	0.3	16.6	54.0
1857.500000	37.9	100.0	V	199.0	0.8	16.1	54.0
2077.500000	38.3	100.0	H	356.0	1.5	15.7	54.0
2718.000000	40.2	100.0	H	292.0	4.1	13.8	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH6



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



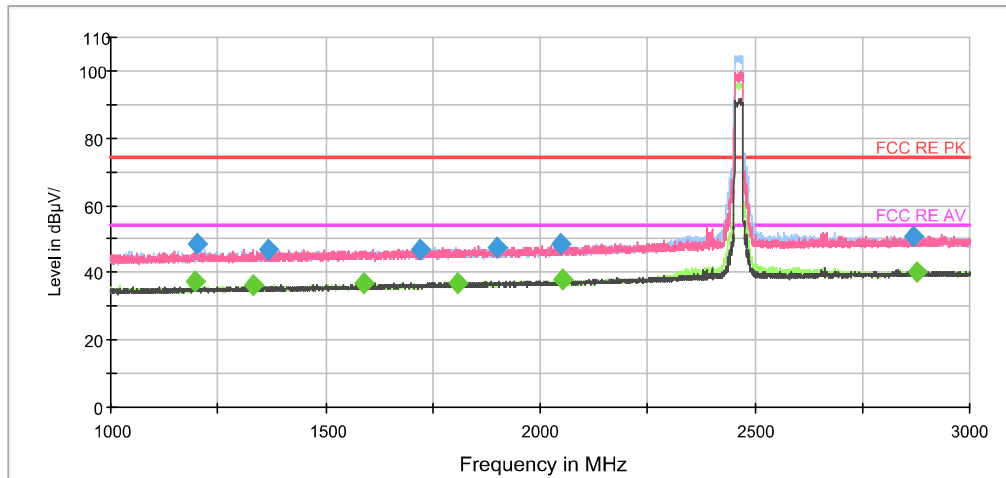
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.250000	48.8	100.0	V	0.0	-1.2	25.2	74.0
1328.000000	46.6	200.0	V	336.0	-0.9	27.4	74.0
1622.500000	47.5	200.0	H	272.0	0.1	26.5	74.0
1828.250000	46.8	200.0	V	222.0	0.7	27.2	74.0
2005.000000	48.2	200.0	V	309.0	1.1	25.8	74.0
2833.000000	50.0	200.0	H	2.0	4.4	24.0	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

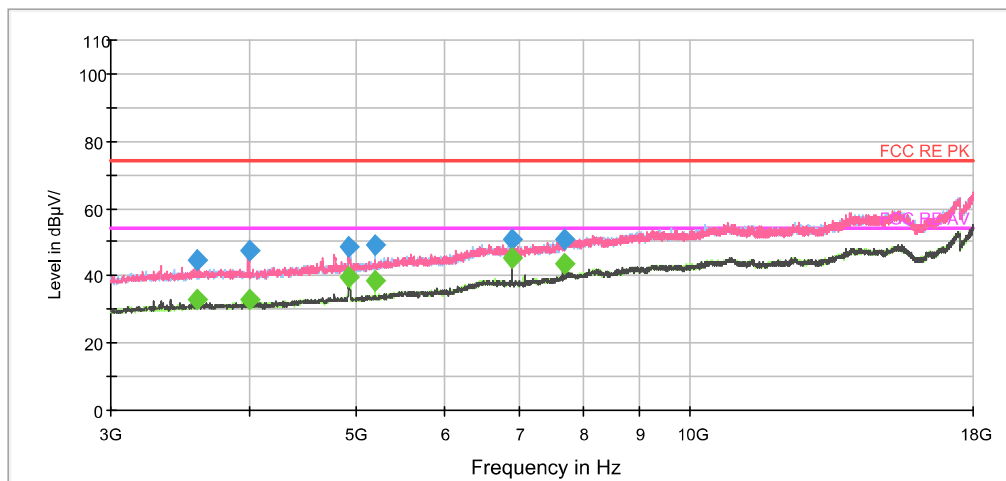
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1198.250000	39.0	100.0	V	0.0	-1.2	15.0	54.0
1425.750000	36.3	100.0	H	312.0	-0.6	17.7	54.0
1660.000000	37.5	200.0	V	222.0	0.2	16.5	54.0
1845.250000	37.4	100.0	V	191.0	0.7	16.6	54.0
2040.000000	37.9	200.0	H	0.0	1.3	16.1	54.0
2831.750000	40.6	200.0	V	261.0	4.4	13.4	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH11



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



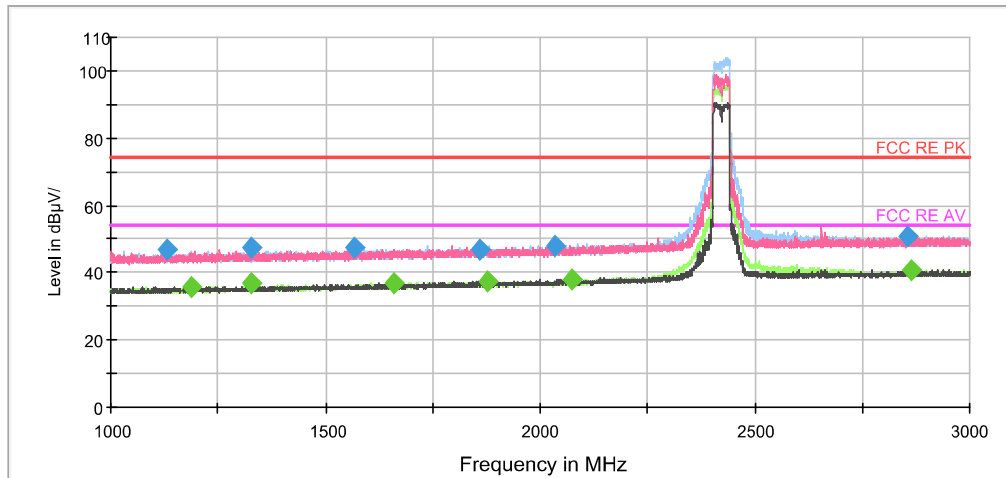
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1199.500000	48.3	200.0	V	358.0	-1.2	25.7	74.0
1368.750000	46.9	200.0	H	0.0	-0.8	27.1	74.0
1719.000000	47.1	100.0	H	354.0	0.4	26.9	74.0
1901.250000	47.5	100.0	H	341.0	0.9	26.5	74.0
2047.500000	48.4	100.0	H	171.0	1.4	25.6	74.0
2868.500000	50.7	100.0	H	298.0	4.4	23.3	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

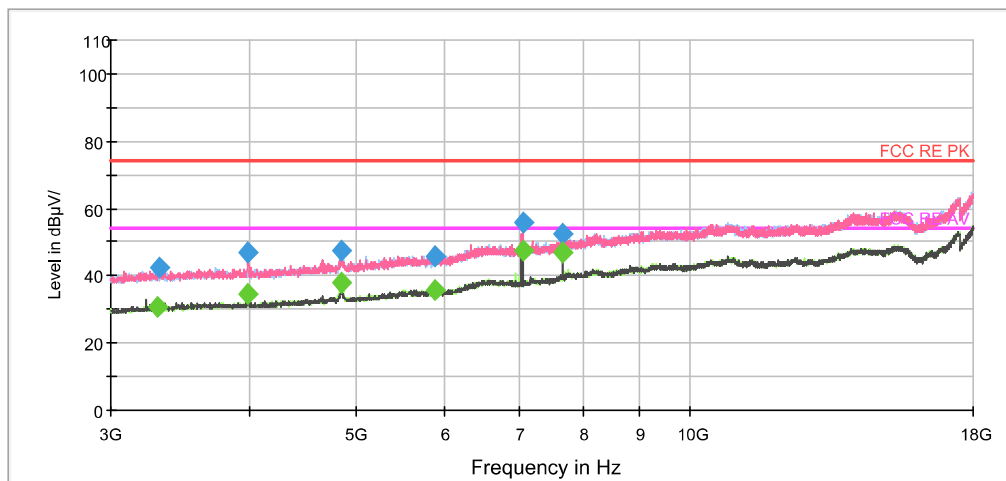
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1197.750000	37.7	200.0	V	358.0	-1.2	16.3	54.0
1332.250000	36.4	200.0	V	346.0	-0.9	17.6	54.0
1587.500000	36.9	200.0	V	355.0	-0.1	17.1	54.0
1808.750000	36.8	200.0	H	4.0	0.7	17.2	54.0
2050.250000	37.9	200.0	H	130.0	1.4	16.1	54.0
2877.500000	39.9	200.0	H	5.0	4.5	14.1	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH3



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



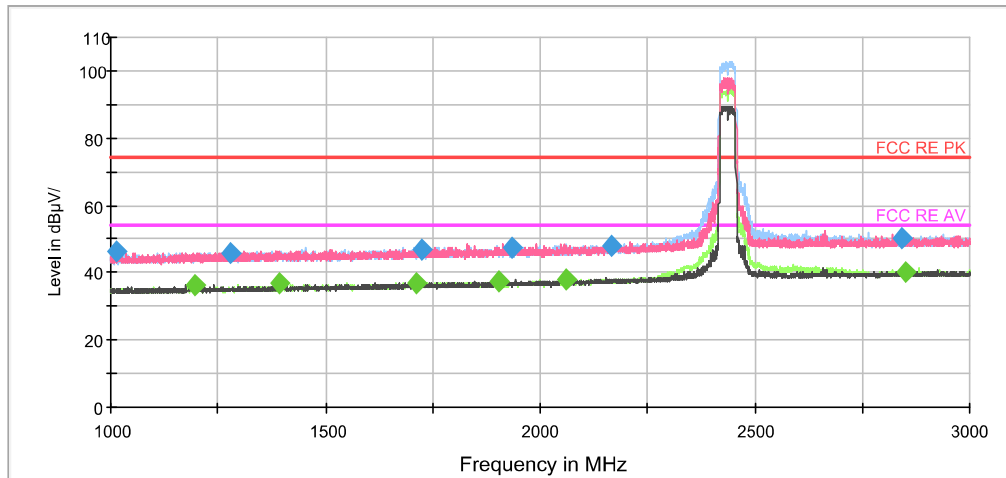
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1132.750000	46.9	100.0	V	167.0	-1.3	27.1	74.0
1328.250000	47.3	200.0	V	348.0	-0.9	26.7	74.0
1568.250000	47.4	200.0	H	207.0	-0.1	26.6	74.0
1860.500000	46.7	200.0	H	3.0	0.8	27.3	74.0
2035.500000	48.3	200.0	V	335.0	1.3	25.7	74.0
2855.250000	50.6	100.0	V	206.0	4.4	23.4	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

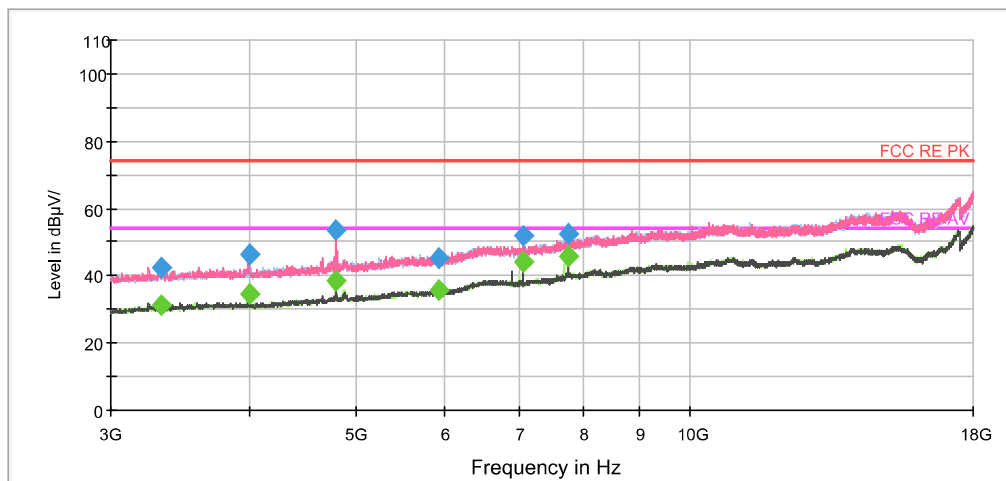
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1186.750000	35.8	100.0	H	350.0	-1.3	18.2	54.0
1328.250000	37.0	200.0	V	348.0	-0.9	17.0	54.0
1658.250000	37.1	100.0	V	1.0	0.2	16.9	54.0
1879.750000	37.2	100.0	V	3.0	0.8	16.8	54.0
2075.500000	38.2	200.0	H	7.0	1.5	15.8	54.0
2863.500000	40.6	200.0	H	59.0	4.4	13.4	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH6



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



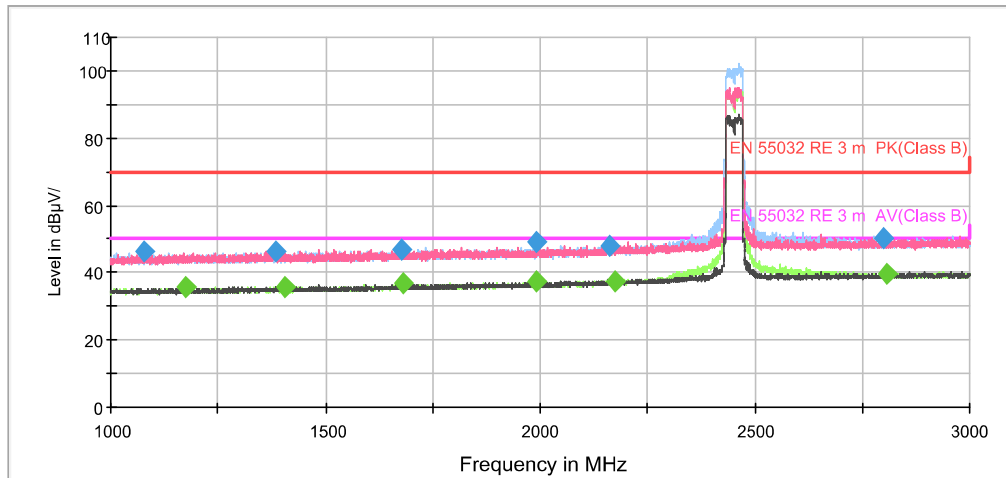
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1014.000000	46.1	200.0	H	4.0	-1.9	27.9	74.0
1278.750000	45.9	100.0	H	359.0	-1.1	28.1	74.0
1723.750000	46.7	200.0	H	296.0	0.4	27.3	74.0
1935.000000	47.2	100.0	H	288.0	1.0	26.8	74.0
2166.250000	48.1	200.0	H	204.0	2.1	25.9	74.0
2842.750000	50.5	200.0	H	0.0	4.4	23.5	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

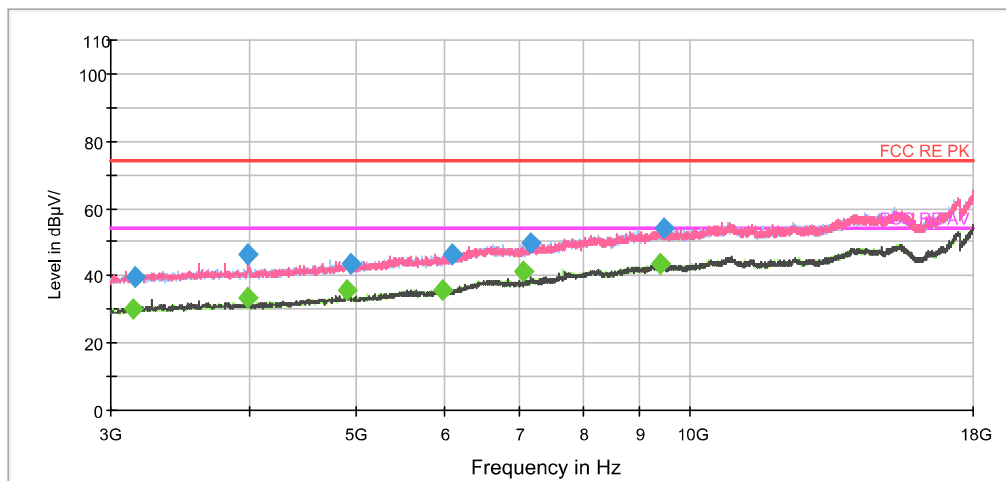
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1194.750000	36.5	200.0	V	146.0	-1.2	17.5	54.0
1391.750000	36.7	100.0	V	117.0	-0.7	17.3	54.0
1712.000000	36.9	200.0	V	245.0	0.4	17.1	54.0
1904.500000	37.2	100.0	H	0.0	0.9	16.8	54.0
2063.000000	38.2	100.0	H	259.0	1.5	15.8	54.0
2850.000000	40.4	200.0	H	264.0	4.4	13.6	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH9



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1076.750000	46.2	200.0	H	4.0	-1.5	23.8	70.0
1382.250000	46.4	200.0	V	288.0	-0.7	23.6	70.0
1677.250000	46.9	100.0	H	290.0	0.3	23.1	70.0
1989.750000	48.9	100.0	V	29.0	1.1	21.1	70.0
2162.500000	48.1	200.0	H	6.0	2.0	21.9	70.0
2799.250000	50.1	200.0	H	93.0	4.3	19.9	70.0

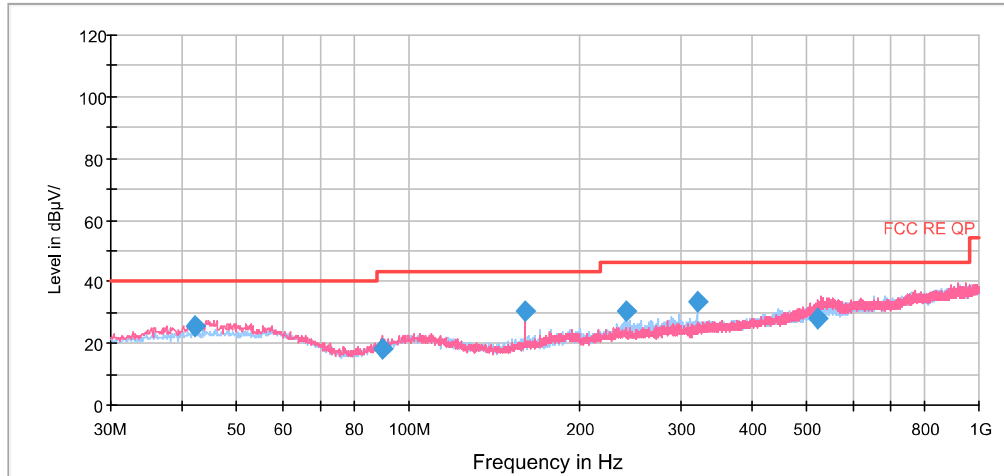
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1174.750000	35.8	200.0	H	6.0	-1.3	14.2	50.0
1408.250000	35.9	100.0	H	347.0	-0.7	14.1	50.0
1683.250000	36.7	100.0	H	195.0	0.3	13.3	50.0
1989.750000	37.6	100.0	V	29.0	1.1	12.4	50.0
2176.250000	37.3	100.0	H	342.0	2.1	12.7	50.0
2807.500000	39.4	200.0	H	0.0	4.3	10.6	50.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

ESP32-S2-MINI-1U

Continuous TX mode:



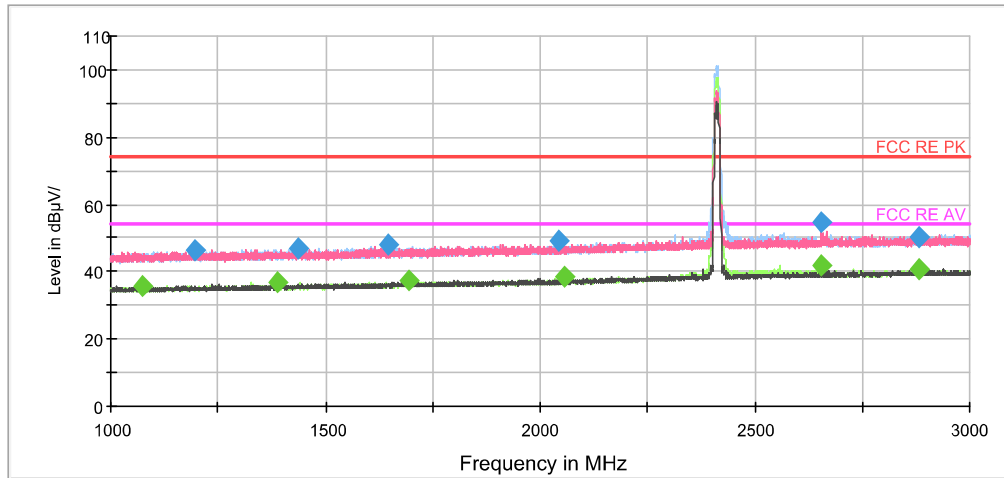
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
42.131250	25.5	125.0	V	84.0	14.4	14.5	40.0
89.893750	18.6	200.0	V	314.0	11.6	24.9	43.5
159.980000	30.5	100.0	V	84.0	10.4	13.0	43.5
240.003750	30.3	125.0	H	77.0	14.5	15.7	46.0
319.990000	33.8	100.0	H	144.0	16.2	12.2	46.0
522.390000	27.7	100.0	V	17.0	20.9	18.3	46.0

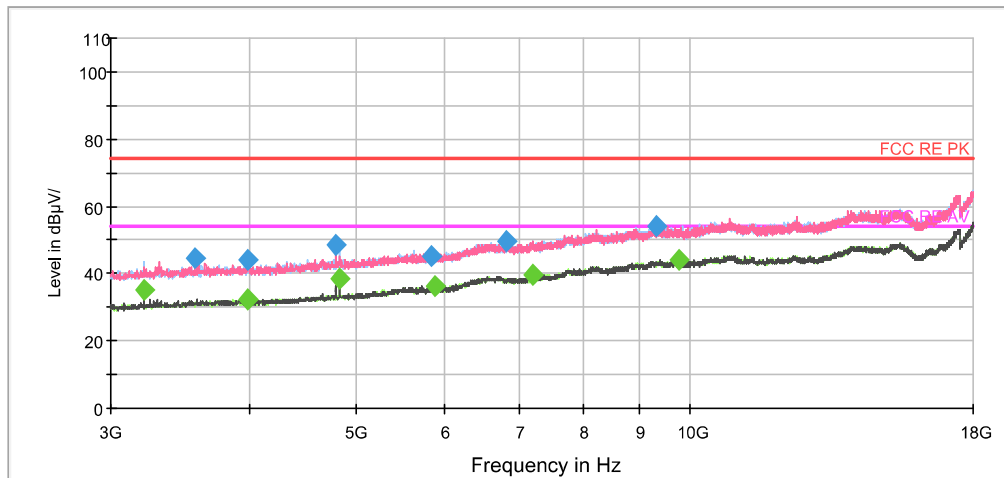
Remark: 1. Correction Factor = Antenna factor+ Insertion loss(cable loss+amplifier gain)

2. Margin = Limit – Quasi-Peak

802.11b CH1



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz



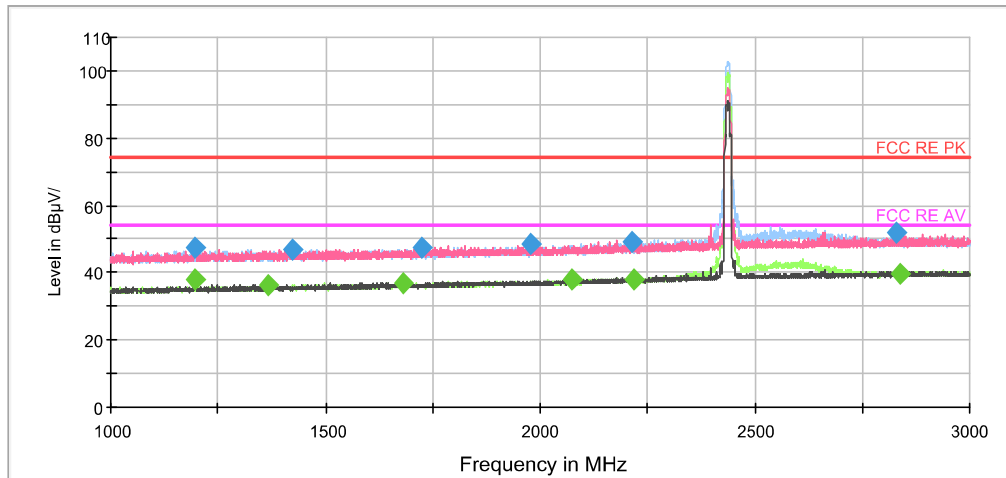
Frequency (MHz)	Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1196.000000	46.3	100.0	V	127.0	-1.2	27.7	74.0
1435.750000	46.9	200.0	V	353.0	-0.6	27.1	74.0
1648.000000	48.0	100.0	H	306.0	0.2	26.0	74.0
2043.250000	48.9	200.0	H	34.0	1.4	25.1	74.0
2656.750000	54.5	100.0	V	230.0	3.9	19.5	74.0
2880.000000	50.2	200.0	H	91.0	4.5	23.8	74.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

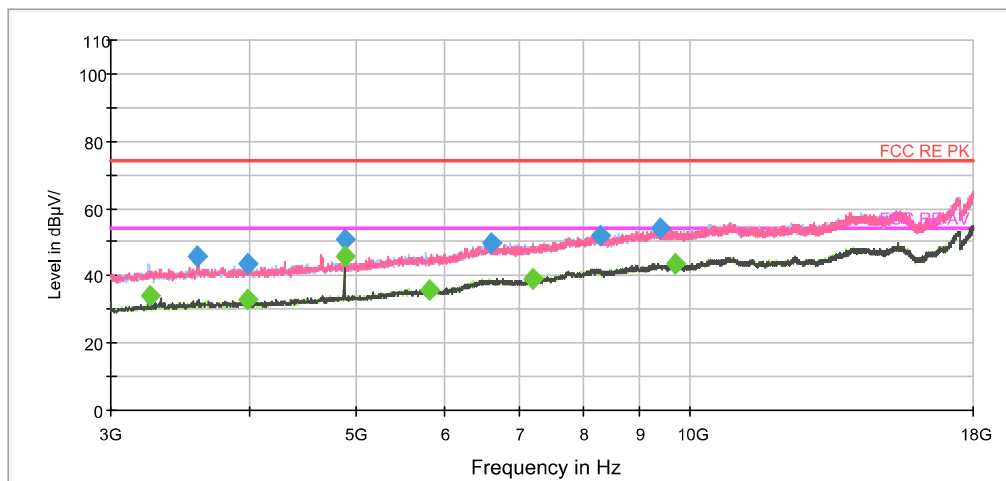
Frequency (MHz)	Average (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
1073.000000	35.9	100.0	H	296.0	-1.5	18.1	54.0
1387.000000	36.9	100.0	V	98.0	-0.7	17.1	54.0
1692.250000	37.1	200.0	H	238.0	0.4	16.9	54.0
2057.500000	38.3	200.0	H	34.0	1.4	15.7	54.0
2656.750000	41.8	100.0	V	230.0	3.9	12.2	54.0
2881.250000	40.6	100.0	V	1.0	4.5	13.4	54.0

Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11b CH6



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 3GHz



Radiates Emission from 3GHz to 18GHz