U-NII-2C, 802.11n HT40, Channel No.: 102

U-NII-2C, 802.11ac VHT20, Channel No.: 100

U-NII-2C, 802.11n HT40, Channel No.: 110

U-NII-2C, 802.11ac VHT20, Channel No.: 116

U-NII-2C, 802.11n HT40, Channel No.: 134

U-NII-2C, 802.11ac VHT20, Channel No.: 140

U-NII-2C, 802.11n HT40, Channel No.: 142

U-NII-2C, 802.11ac VHT20, Channel No.: 144

U-NII-2C, 802.11ac VHT40, Channel No.: 102

U-NII-2C, 802.11ac VHT80, Channel No.: 106

U-NII-2C, 802.11ac VHT40, Channel No.: 110

U-NII-2C, 802.11ac VHT80, Channel No.: 122

U-NII-2C, 802.11ac VHT40, Channel No.: 134

U-NII-2C, 802.11ac VHT80, Channel No.: 138

U-NII-2C, 802.11ac VHT40, Channel No.: 142

U-NII-3, 802.11a, Channel No.: 144

U-NII-3, 802.11n HT20, Channel No.: 144

U-NII-3, 802.11a, Channel No.: 149

U-NII-3, 802.11n HT20, Channel No.: 149

U-NII-3, 802.11a, Channel No.: 157

U-NII-3, 802.11n HT20, Channel No.: 157

U-NII-3, 802.11a, Channel No.: 165

U-NII-3, 802.11n HT20, Channel No.: 165

U-NII-3, 802.11n HT40, Channel No.: 142

U-NII-3, 802.11ac VHT20, Channel No.: 142

U-NII-3, 802.11n HT40, Channel No.: 151

U-NII-3, 802.11ac VHT20, Channel No.: 149

U-NII-3, 802.11n HT40, Channel No.: 159

U-NII-3, 802.11ac VHT20, Channel No.: 157

U-NII-3, 802.11ac VHT40, Channel No.: 142

U-NII-3, 802.11ac VHT20, Channel No.: 165

U-NII-3, 802.11ac VHT40, Channel No.: 151

U-NII-3, 802.11ac VHT80, Channel No.: 138

U-NII-3, 802.11ac VHT40, Channel No.: 159

U-NII-3, 802.11ac VHT80, Channel No.: 155

5.5. Unwanted Emission

Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Method of Measurement

The test set-up was made in accordance to the general provisions of ANSI C63.10. The Equipment Under Test (EUT) was set up on a non-conductive table in the semi-anechoic chamber. The test was performed at the distance of 3 m between the EUT and the receiving antenna. The radiated emissions measurements were made in a typical installation configuration.
Sweep the whole frequency band range from 9kHz to the 10th harmonic of the carrier, and the emissions less than 20 dB below the permissible value are reported.

During the test, the height of receive antenna shall be moved from 1 to 4 meters, and the antenna shall be performed under horizontal and vertical polarization. The turntable shall be rotated from 0 to 360 degrees for detecting the maximum of radiated spurious signal level. The measurements shall be repeated with orthogonal polarization of the test antenna. The data of cable loss and antenna factor has been calibrated in full testing frequency range before the testing.
Set the spectrum analyzer in the following:
9kHz~150 kHz
RBW=200Hz, VBW=1kHz/ Sweep=AUTO
150 kHz~30MHz
RBW=9KHz, VBW=30KHz,/ Sweep=AUTO
Below 1GHz
RBW=100kHz / VBW=300kHz / Sweep=AUTO
a) Peak emission levels are measured by setting the instrument as follows:
Above 1GHz
PEAK: RBW=1MHz VBW=3MHz/ Sweep=AUTO
b) Average emission levels are measured by setting the instrument as follows:
Above 1GHz
AVERAGE: RBW=1MHz / VBW=3MHz / Sweep=AUTO
c) Detector: The measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 kHz, 110-490 kHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.
d) Averaging type = power (i.e., rms) (As an alternative, the detector and averaging type may be set for linear voltage averaging. Some instruments require linear display mode to use linear voltage averaging. Log or dB averaging shall not be used.)
e) Sweep time = auto.
f) Perform a trace average of at least 100 traces if the transmission is continuous. If the transmission is not continuous, then the number of traces shall be increased by a factor of 1 / D, where D is the duty cycle. For example, with 50% duty cycle, at least 200 traces shall be averaged. (If a specific

emission is demonstrated to be continuous—i.e., 100% duty cycle—then rather than turning ON and OFF with the transmit cycle, at least 100 traces shall be averaged.)

g) If tests are performed with the EUT transmitting at a duty cycle less than 98%, then a correction factor shall be added to the measurement results prior to comparing with the emission limit, to compute the emission level that would have been measured had the test been performed at 100% duty cycle. The correction factor is computed as follows:

1) If power averaging (rms) mode was used in the preceding step e), then the correction factor is [10 log (1 / D)], where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 3 dB shall be added to the measured emission levels.

2) If linear voltage averaging mode was used in the preceding step e), then the correction factor is [20 log (1 / D)], where D is the duty cycle. For example, if the transmit duty cycle was 50%, then 6 dB shall be added to the measured emission levels.

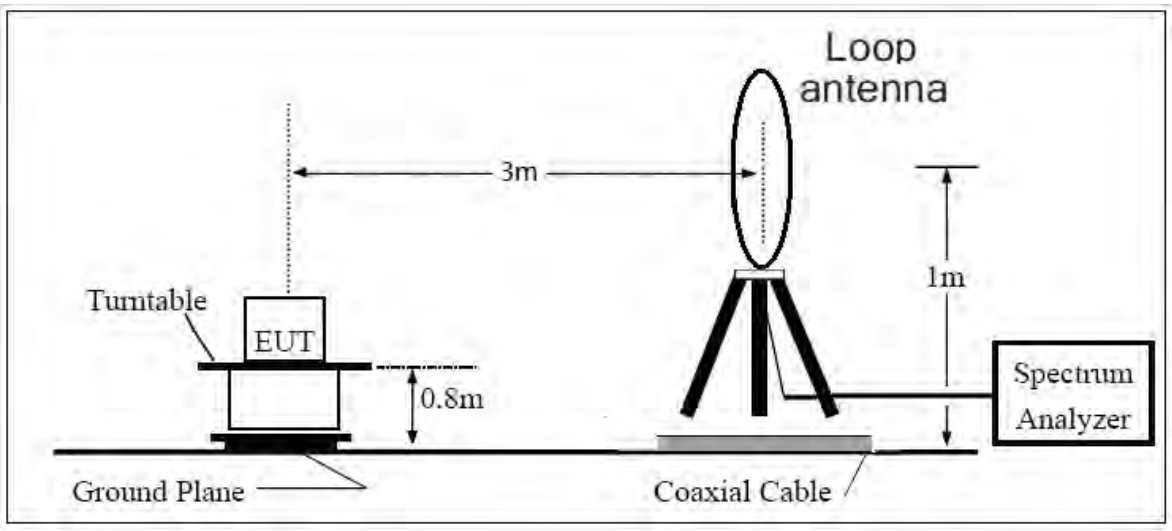
3) If a specific emission is demonstrated to be continuous (100% duty cycle) rather than turning ON and OFF with the transmit cycle, then no duty cycle correction is required for that emission.

Reduce the video bandwidth until no significant variations in the displayed signal are observed in subsequent traces, provided the video bandwidth is no less than 1 Hz. For regulatory requirements that specify averaging only over the transmit duration (e.g., digital transmission system [DTS] and Unlicensed National Information Infrastructure [U-NII]), the video bandwidth shall be greater than [1 / (minimum transmitter on time)] and no less than 1 Hz.

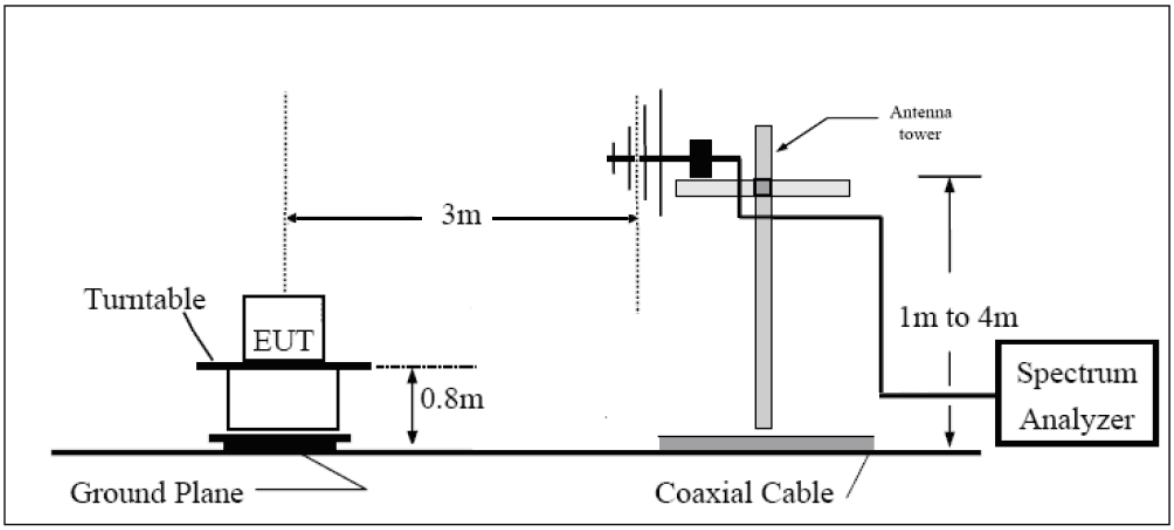
The field strength of spurious emission was measured in the following position: EUT stand-up position (Z axis), lie-down position (X, Y axis). The worst emission was found in stand-up position (Z axis) and the loop antenna is vertical, others antenna are vertical and horizontal.

The test is in transmitting mode.

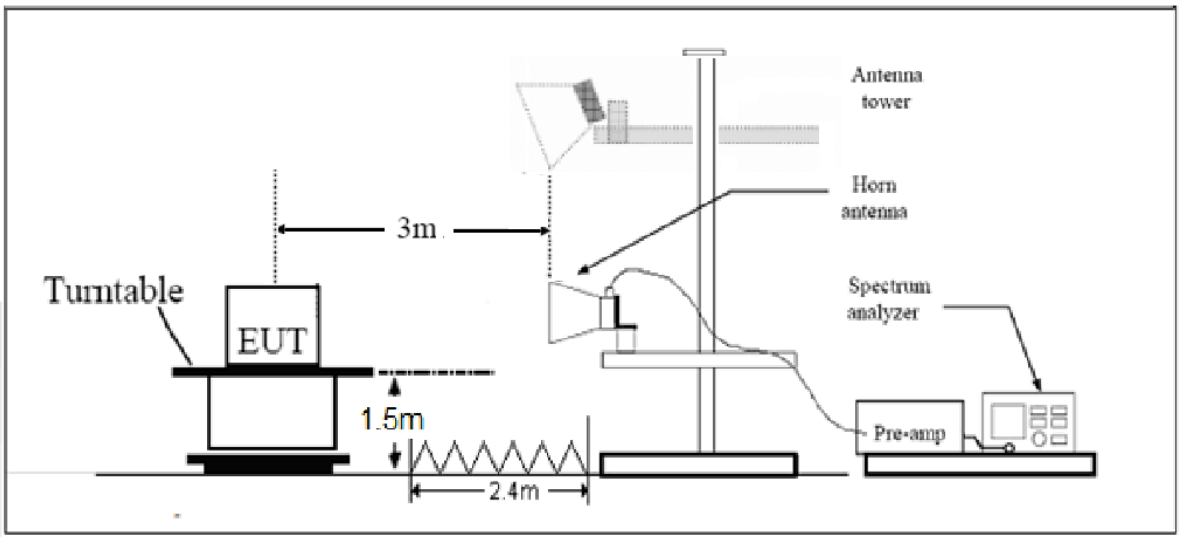
9KHz~~~30MHz



30MHz~~~ 1GHz



Above 1GHz



Note: Area side:2.4mX3.6m

Limits

(1) For transmitters operating in the 5725-5850 MHz band: All emissions shall be limited to a level of −27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

(2) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz(68.2dBμV/m).

(3) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz(68.2dBμV/m).

(4) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of −27 dBm/MHz(68.2dBμV/m).

Note: the following formula is used to convert the EIRP to field strength

§1、E[dBμV/m] = EIRP[dBm] - 20 log(d[meters]) + 104.77, where E = field strength and

d = distance at which field strength limit is specified in the rules;

§2、E[dBμV/m] = EIRP[dBm] + 95.2, for d = 3 meters

(5) Unwanted spurious emissions fallen in restricted bands per FCC Part15.205 shall comply with the general field strength limits set forth in § 15.209 as below table.

Frequency of emission (MHz)	Field strength(uV/m)	Field strength(dBuV/m)
0.009–0.490	2400/F(kHz)	/
0.490–1.705	24000/F(kHz)	/
1.705–30.0	30	/
30-88	100	40
88-216	150	43.5
216-960	200	46
Above960	500	54

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42 - 16.423	399.9 - 410	4.5 - 5.15
[1]0.495 - 0.505	16.69475 - 16.69525	608 - 614	5.35 - 5.46
2.1735 - 2.1905	16.80425 - 16.80475	960 - 1240	7.25 - 7.75
4.125 - 4.128	25.5 - 25.67	1300 - 1427	8.025 - 8.5
4.17725 - 4.17775	37.5 - 38.25	1435 - 1626.5	9.0 - 9.2
4.20725 - 4.20775	73 - 74.6	1645.5 - 1646.5	9.3 - 9.5
6.215 - 6.218	74.8 - 75.2	1660 - 1710	10.6 - 12.7
6.26775 - 6.26825	108 - 121.94	1718.8 - 1722.2	13.25 - 13.4
6.31175 - 6.31225	123 - 138	2200 - 2300	14.47 - 14.5
8.291 - 8.294	149.9 - 150.05	2310 - 2390	15.35 - 16.2
8.362 - 8.366	156.52475 - 156.52525	2483.5 - 2500	17.7 - 21.4
8.37625 - 8.38675	156.7 - 156.9	2690 - 2900	22.01 - 23.12
8.41425 - 8.41475	162.0125 - 167.17	3260 - 3267	23.6 - 24.0
12.29 - 12.293	167.72 - 173.2	3332 - 3339	31.2 - 31.8
12.51975 - 12.52025	240 - 285	3345.8 - 3358	36.43 - 36.5
12.57675 - 12.57725	322 - 335.4	3600 - 4400	([2])
13.36 - 13.41			

Measurement Uncertainty

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

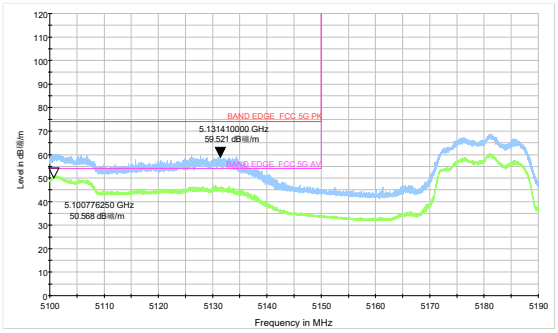
Frequency	Uncertainty
9KHz-30MHz	3.55 dB
30MHz-200MHz	4.17 dB
200MHz-1GHz	4.84 dB
1-18GHz	4.35 dB
18-26.5GHz	5.90 dB
26.5GHz~40GHz	5.92 dB

Test Results:

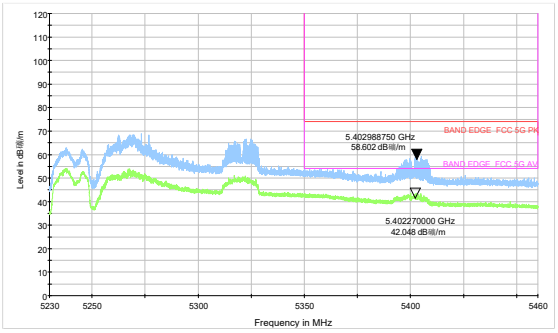
The signal beyond the limit is carrier.

U-NII-1

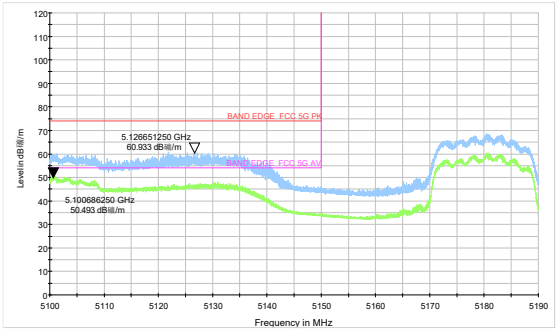
802.11a-Channel 36: Peak+ Average



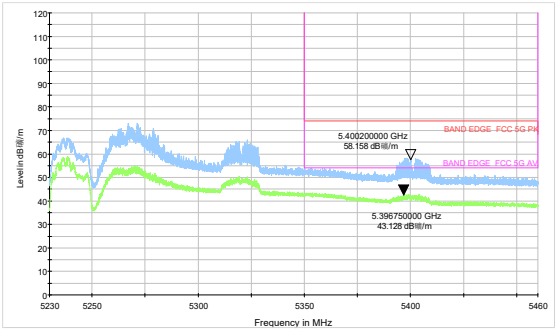
802.11a-Channel 48: Peak+ Average



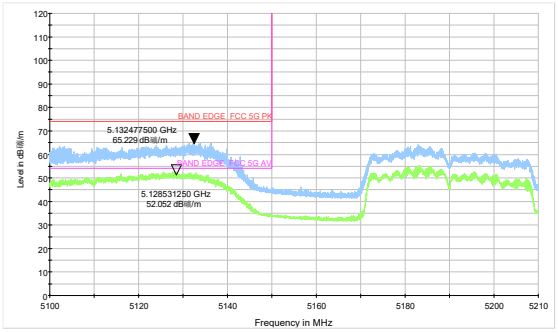
802.11n HT20-Channel 36: Peak+ Average



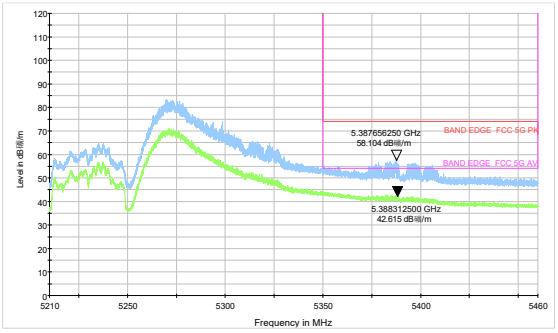
802.11n HT20-Channel 48: Peak+ Average



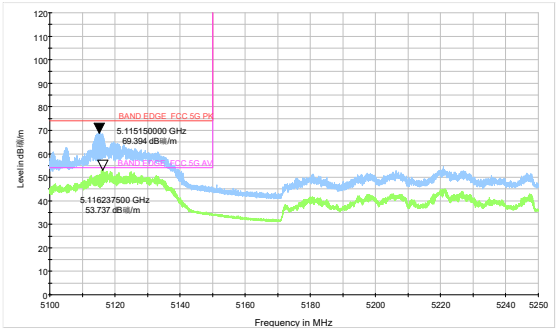
802.11n HT40-Channel 38: Peak+ Average



802.11n HT40-Channel 46: Peak+ Average

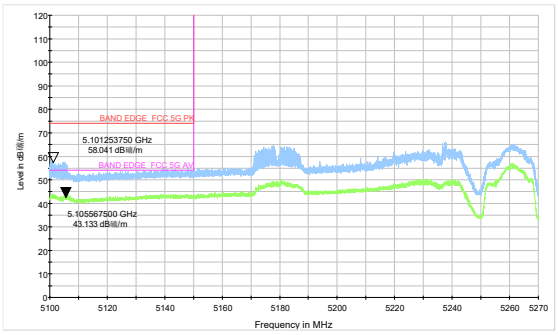


802.11ac VHT80 –Channel 42: Peak+ Average

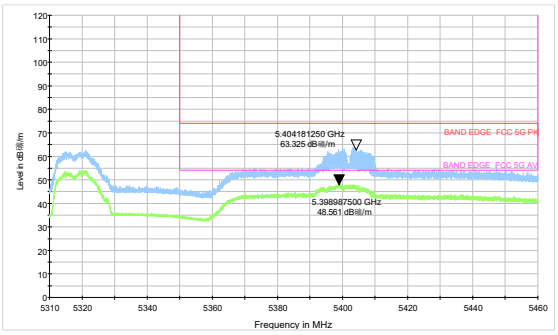


U-NII-2A

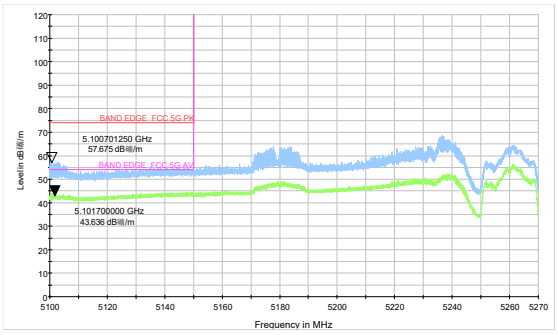
802.11a-Channel 52: Peak+ Average



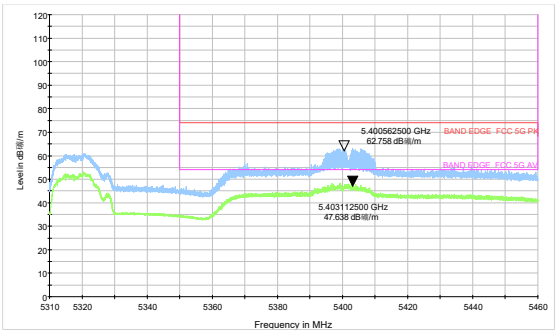
802.11a-Channel 64: Peak+ Average



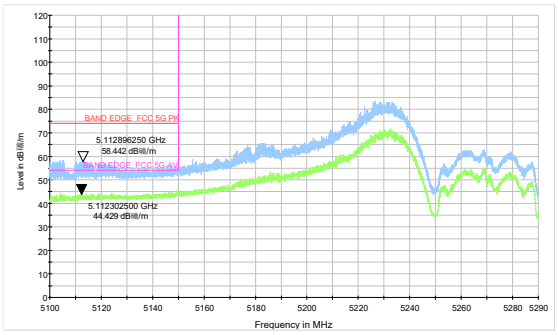
802.11n HT20-Channel 52: Peak+ Average



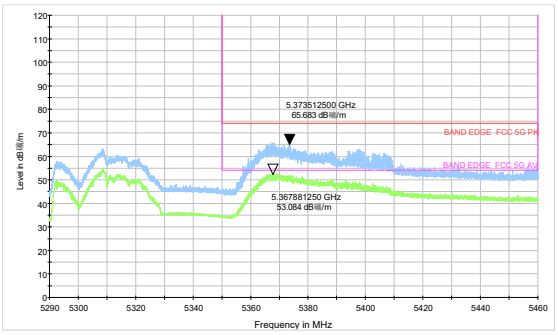
802.11n HT20-Channel 64: Peak+ Average



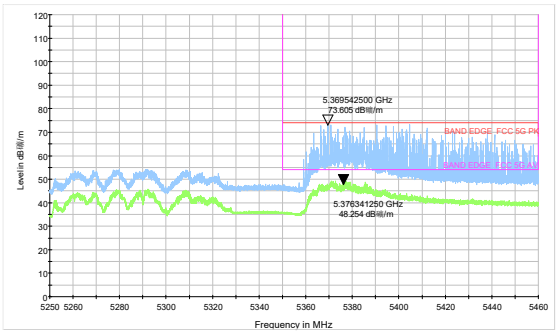
802.11n HT40-Channel 54: Peak+ Average



802.11n HT40-Channel 62: Peak+ Average

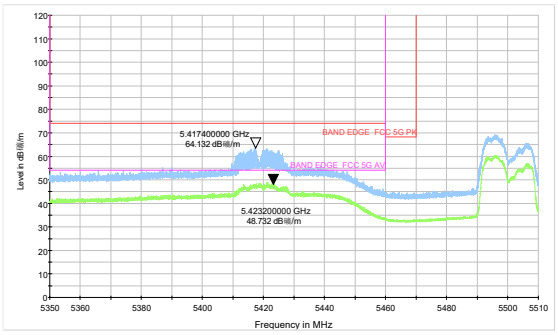


802.11ac VHT80 –Channel 58: Peak+ Average

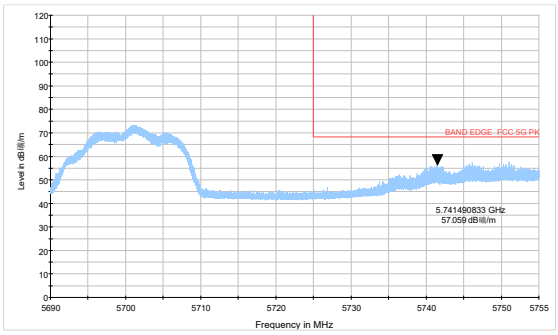


U-NII-2C

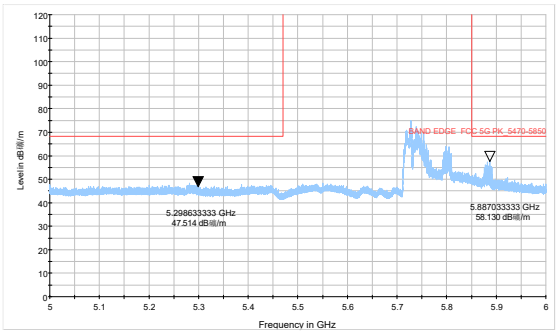
802.11a-Channel 100: Peak+ Average



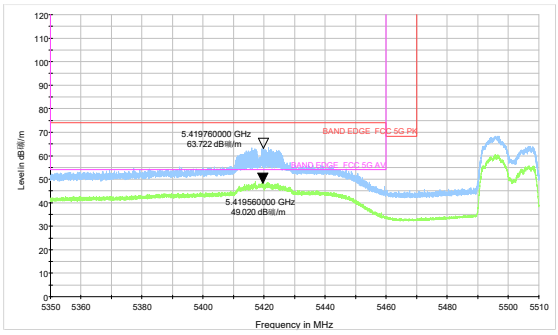
802.11n HT20-Channel 140: Peak



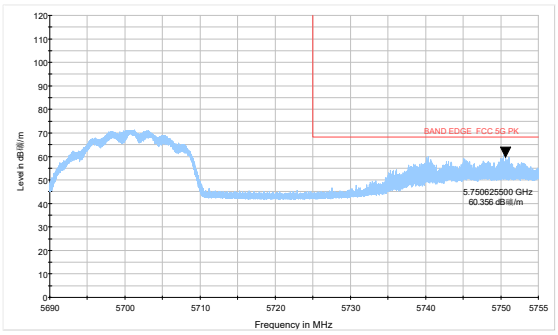
802.11a-Channel 144: Average



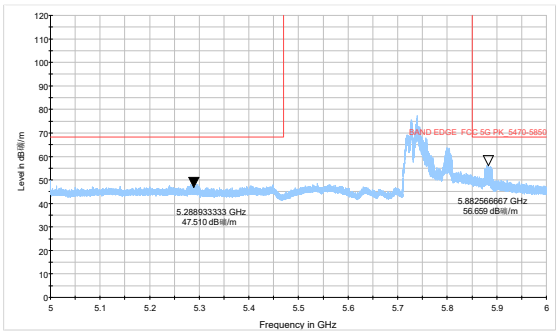
802.11n HT20-Channel 100: Average



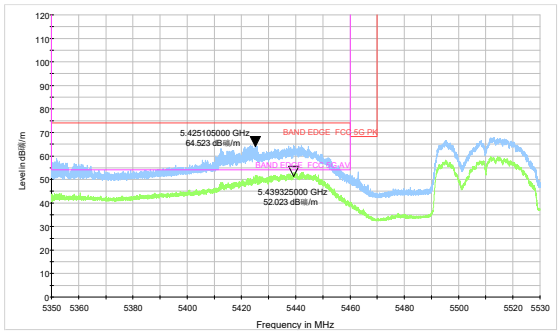
802.11a-Channel 140: Peak



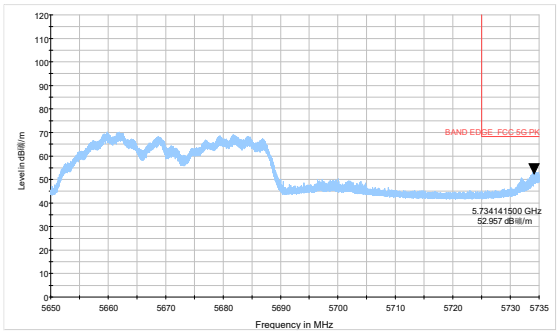
802.11n HT20-Channel 144: Peak



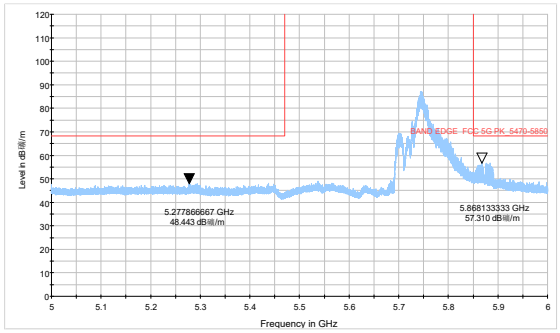
802.11n HT40-Channel 102: Peak+ Average



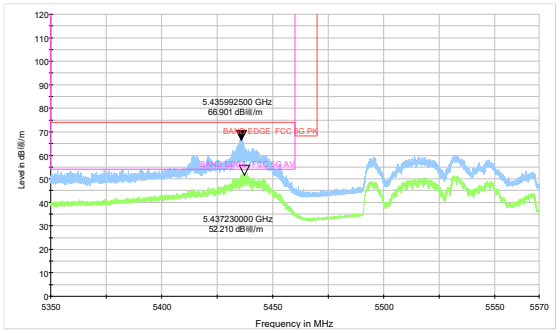
802.11n HT40-Channel 134: Peak



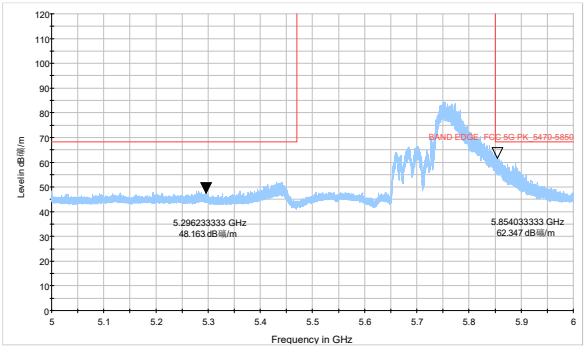
802.11n HT40-Channel 142: Peak



802.11ac VHT80 –Channel 106: Peak+ Average

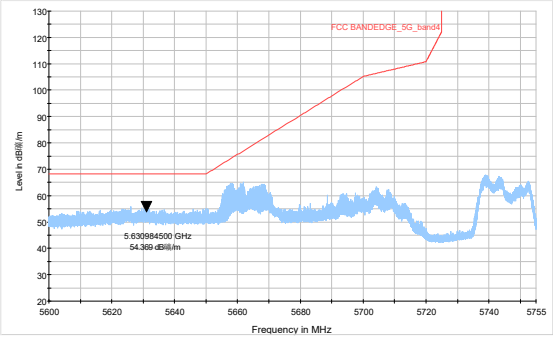


802.11ac VHT80 –Channel 138: Peak+ Average

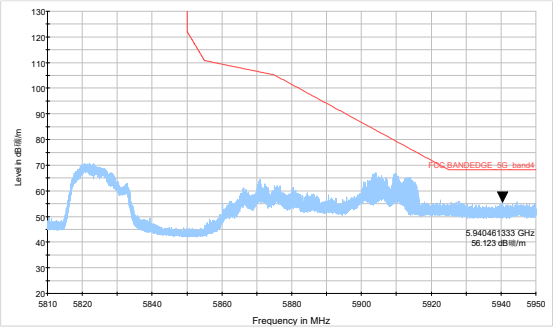


U-NII-3

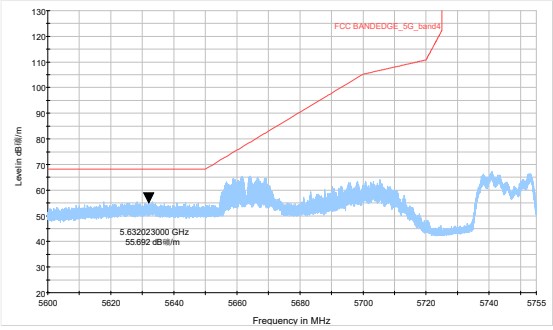
802.11a-Channel 149: Peak



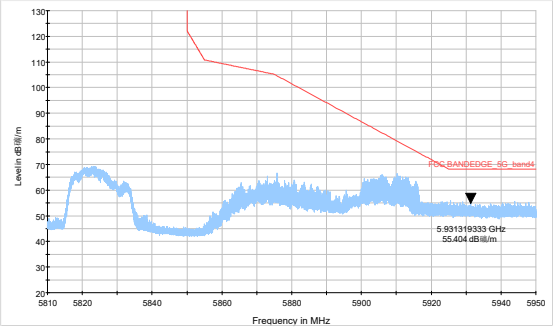
802.11a-Channel 165: Peak



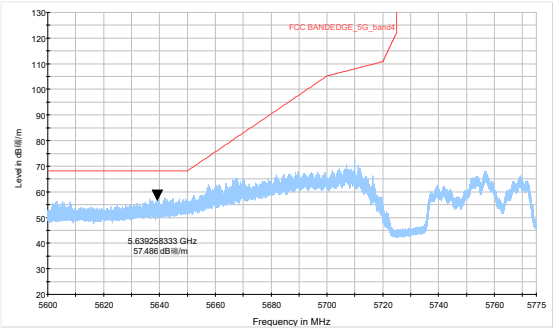
802.11n HT40-Channel 149: Peak



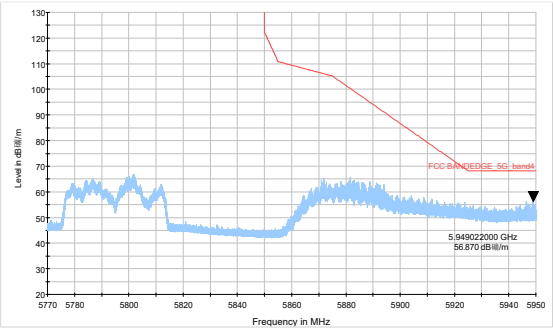
802.11n HT40-Channel 165: Peak



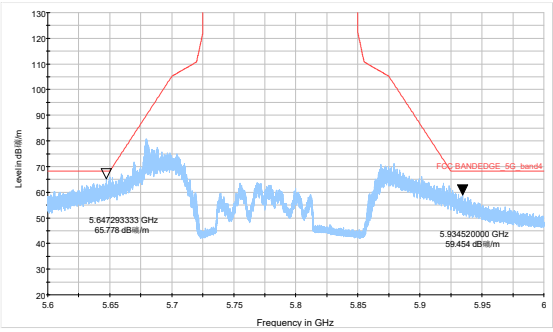
802.11n HT40-Channel 151: Peak



802.11n HT40-Channel 159: Peak



802.11ac VHT80- Channel 155: Peak



Result of RE

Test result

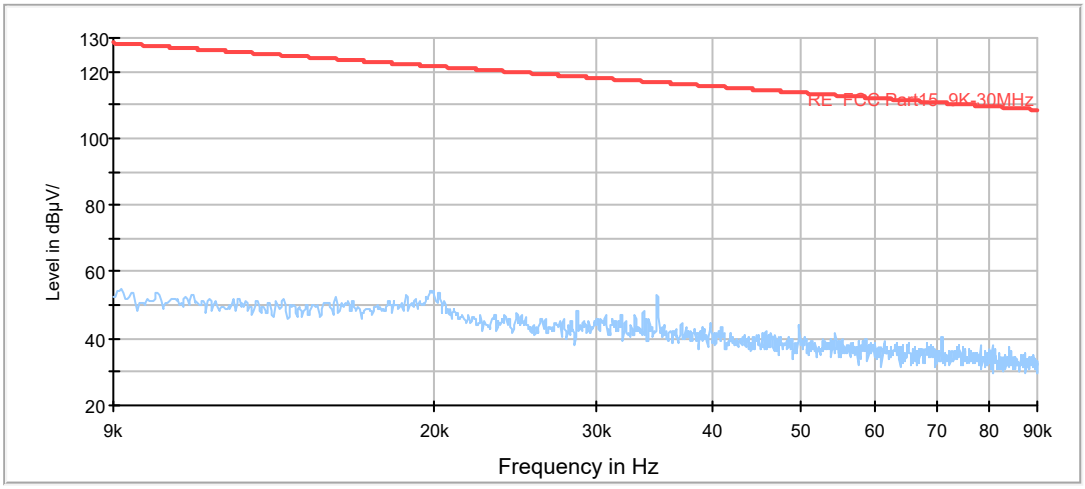
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the Emissions in the frequency band 9kHz-30MHz are more than 20dB below the limit are not reported.

After the pretest, MIMO was selected as the worst antenna.

During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, 802.11a, Channel 64 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

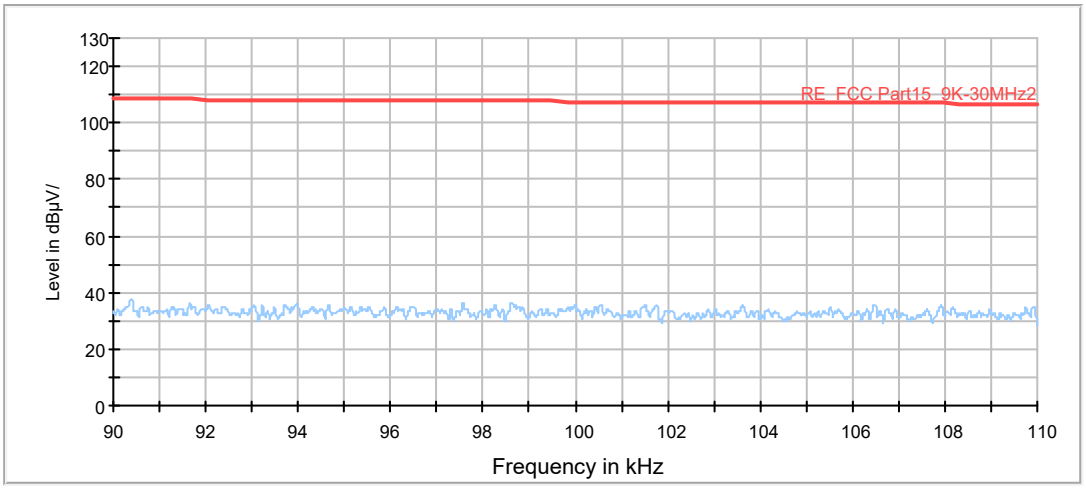
Continuous TX mode:

FCC RE 9K-90KHz AV



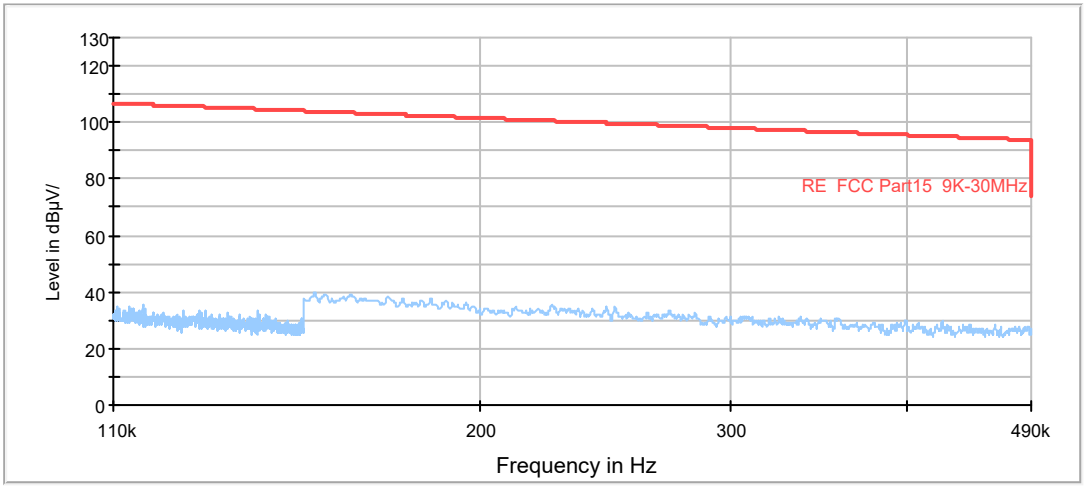
Radiates Emission from 9KHz to 90KHz

FCC RE 90K-110KHz QP



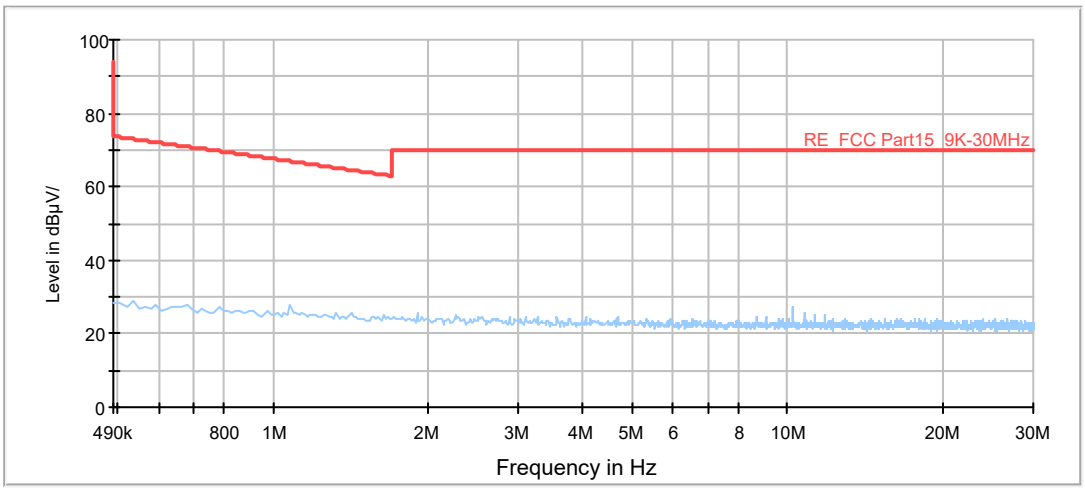
Radiates Emission from 90KHz to 110KHz

FCC RE 110K-490KHz AV

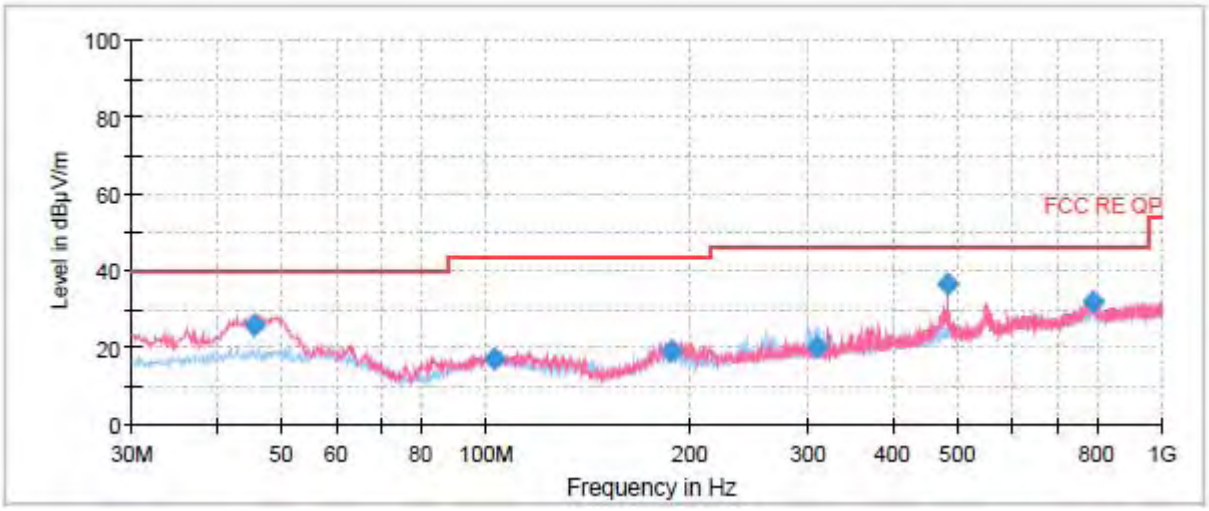


Radiates Emission from 110KHz to 490KHz

FCC RE 490K-30MHz QP



Radiates Emission from 490KHz to 30MHz



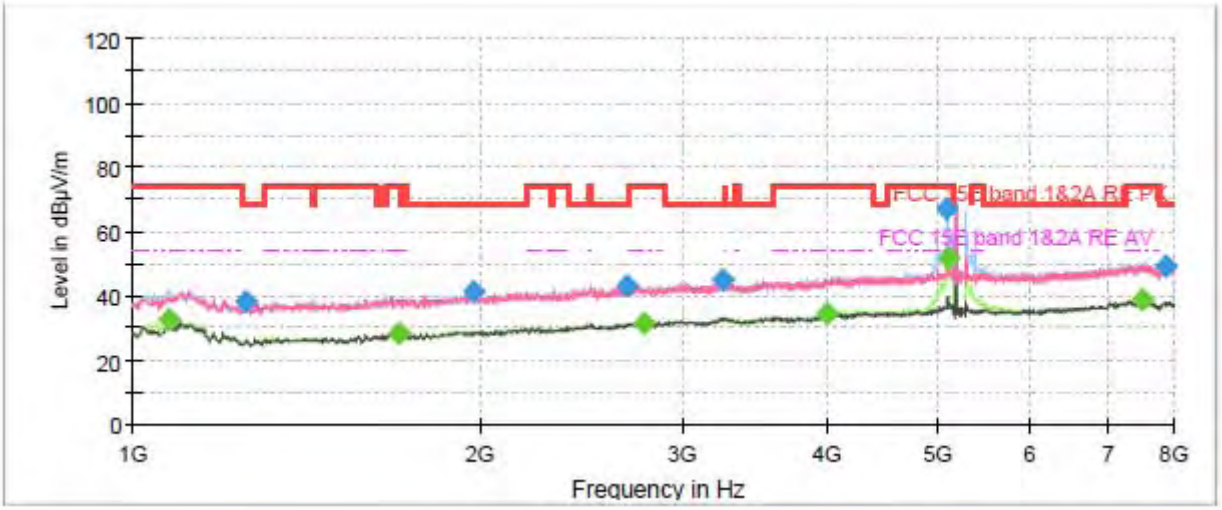
Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBuV/m)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)	Margin (dB)	Limit (dBuV/m)
45.481250	25.59	105.0	V	22.0	14.2	14.41	40.00
103.270000	16.76	220.0	V	22.0	13.0	26.74	43.50
188.431250	19.16	100.0	V	336.0	12.1	24.34	43.50
307.982500	19.87	100.0	H	323.0	15.1	26.13	46.00
479.998750	36.26	105.0	V	160.0	19.1	9.74	46.00
788.017500	31.78	179.0	V	0.0	23.4	14.22	46.00

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

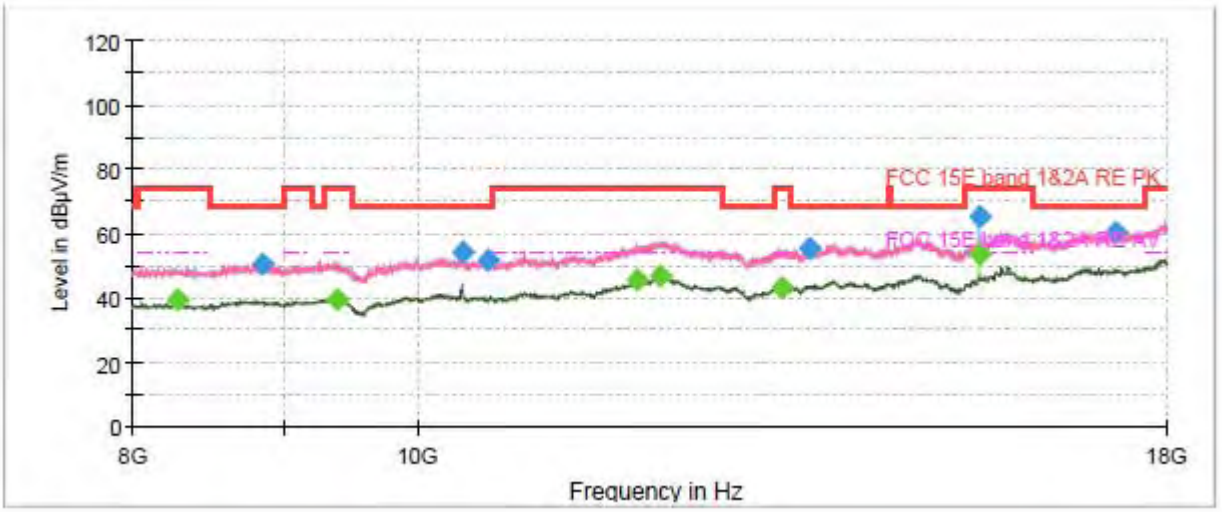
2. Margin = Limit – Quasi-Peak

802.11a CH36



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

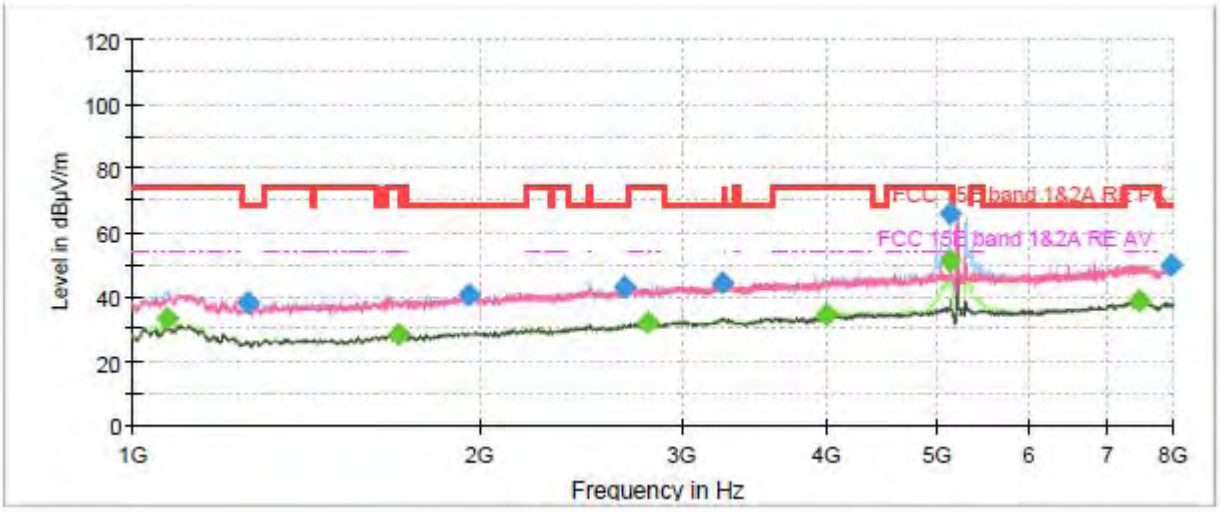


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1074.375000	---	32.62	54.00	21.38	100.0	H	47.0	-20.7
1252.000000	38.22	---	68.20	29.98	200.0	H	186.0	-19.9
1698.250000	---	28.26	54.00	25.74	200.0	H	217.0	-17.2
1972.125000	40.98	---	68.20	27.22	200.0	H	263.0	-15.7
2680.000000	43.14	---	68.20	25.06	100.0	H	83.0	-13.7
2769.250000	---	31.62	54.00	22.38	100.0	H	351.0	-13.5
3248.750000	44.77	---	68.20	23.43	200.0	H	289.0	-12.0
3998.625000	---	34.19	54.00	19.81	200.0	H	305.0	-9.5
5086.250000	66.85	---	74.00	7.15	200.0	H	232.0	-6.3
5099.375000	---	51.47	54.00	2.53	200.0	H	232.0	-6.2
7517.000000	---	38.66	54.00	15.34	200.0	H	326.0	-2.1
7862.625000	49.45	---	68.20	18.75	200.0	V	163.0	-2.0
15538.750000	---	53.32	54.00	0.68	200.0	H	194.0	5.1

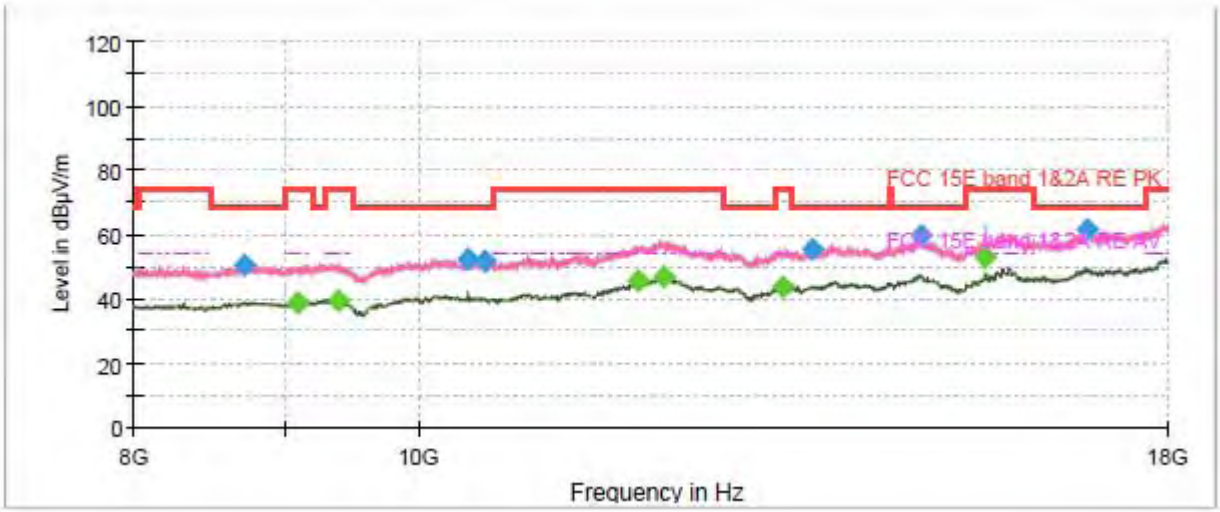
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH40



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

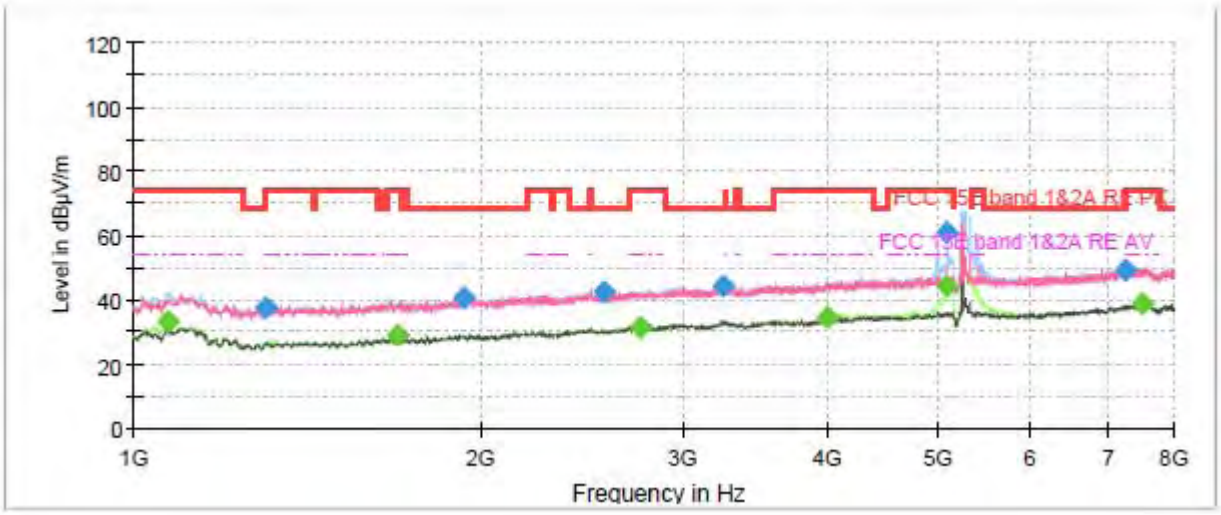


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1071.750000	---	33.09	54.00	20.91	100.0	H	47.0	-20.7
1256.375000	37.97	---	68.20	30.23	100.0	V	49.0	-19.8
1698.250000	---	28.46	54.00	25.54	200.0	H	263.0	-17.2
1961.625000	40.75	---	68.20	27.45	100.0	V	197.0	-15.8
2669.500000	42.85	---	68.20	25.35	100.0	V	332.0	-13.8
2793.750000	---	31.72	54.00	22.28	100.0	H	16.0	-13.4
3243.500000	44.44	---	68.20	23.76	200.0	V	5.0	-12.0
3996.875000	---	34.36	54.00	19.64	200.0	H	111.0	-9.5
5121.250000	---	50.94	54.00	3.06	200.0	H	220.0	-6.1
5123.000000	65.63	---	74.00	8.37	200.0	H	111.0	-6.1
7489.000000	---	38.69	54.00	15.31	200.0	H	334.0	-2.1
7957.125000	49.91	---	68.20	18.29	100.0	H	87.0	-2.2
15598.750000	---	52.74	54.00	1.26	200.0	H	158.0	5.4

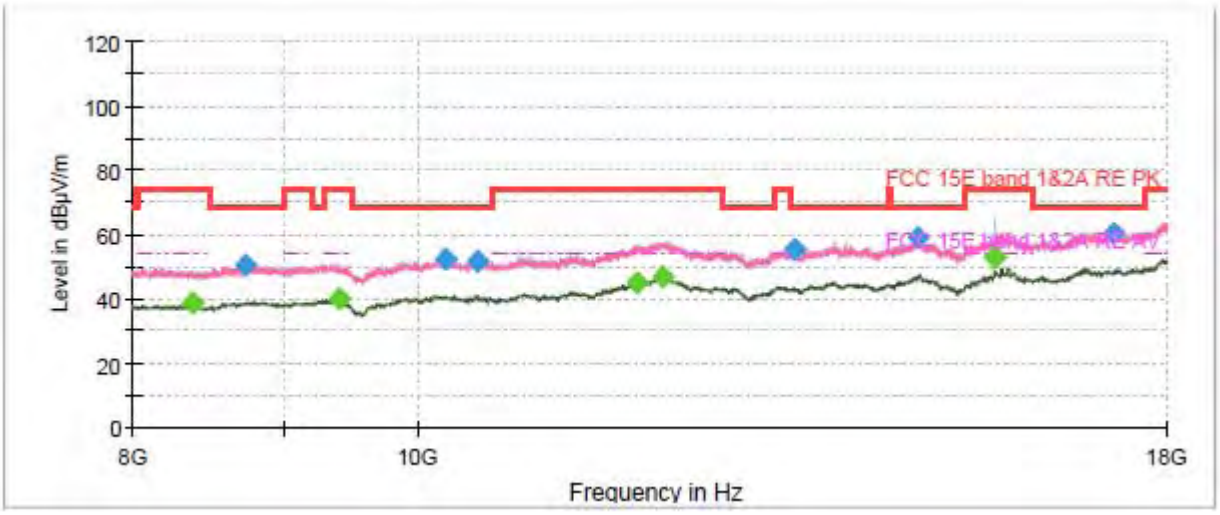
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH48



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

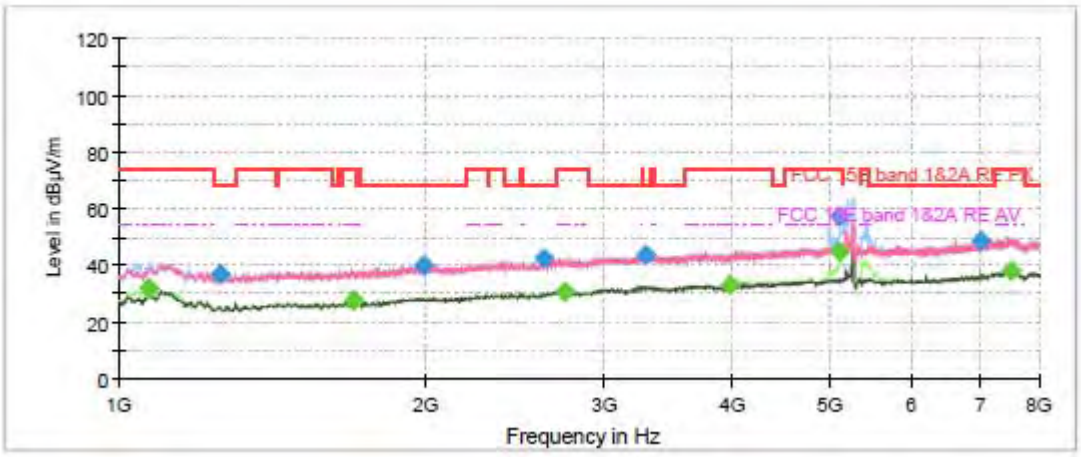


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1072.625000	---	33.32	54.00	20.68	100.0	H	45.0	-20.7
1299.250000	37.77	---	68.20	30.43	200.0	H	40.0	-19.6
1697.375000	---	28.84	54.00	25.16	200.0	H	34.0	-17.2
1934.500000	40.54	---	68.20	27.66	200.0	V	202.0	-15.9
2562.750000	42.53	---	68.20	25.67	200.0	V	43.0	-14.4
2745.625000	---	31.59	54.00	22.41	200.0	V	283.0	-13.5
3245.250000	44.59	---	68.20	23.61	100.0	V	350.0	-12.0
3997.750000	---	34.47	54.00	19.53	200.0	H	292.0	-9.5
5083.625000	---	44.59	54.00	9.41	200.0	H	230.0	-6.3
5083.625000	61.20	---	74.00	12.80	200.0	H	230.0	-6.3
7244.000000	49.54	---	68.20	18.66	200.0	V	54.0	-1.6
7516.125000	---	38.72	54.00	15.28	100.0	H	195.0	-2.1
15720.000000	---	53.21	54.00	0.79	200.0	H	195.0	6.2
15725.000000	---	52.83	54.00	1.17	200.0	H	238.0	6.2

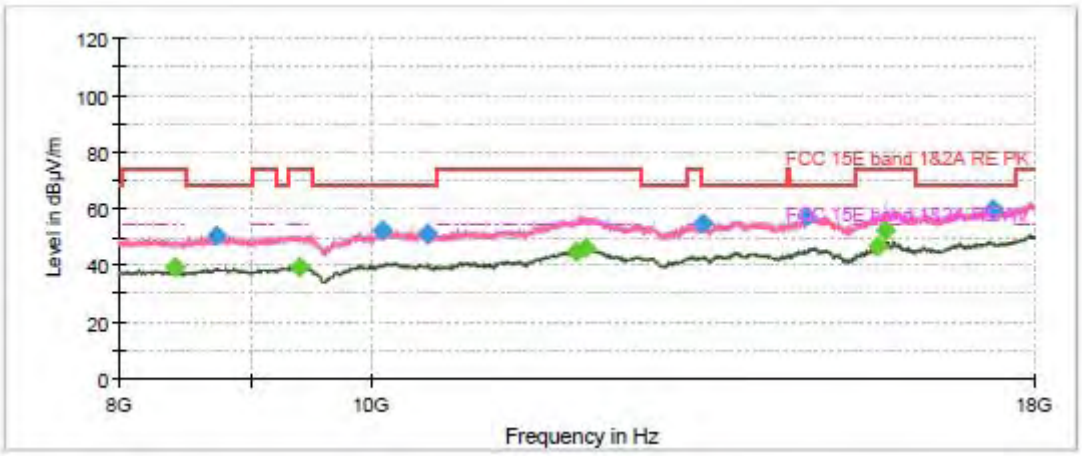
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH52



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

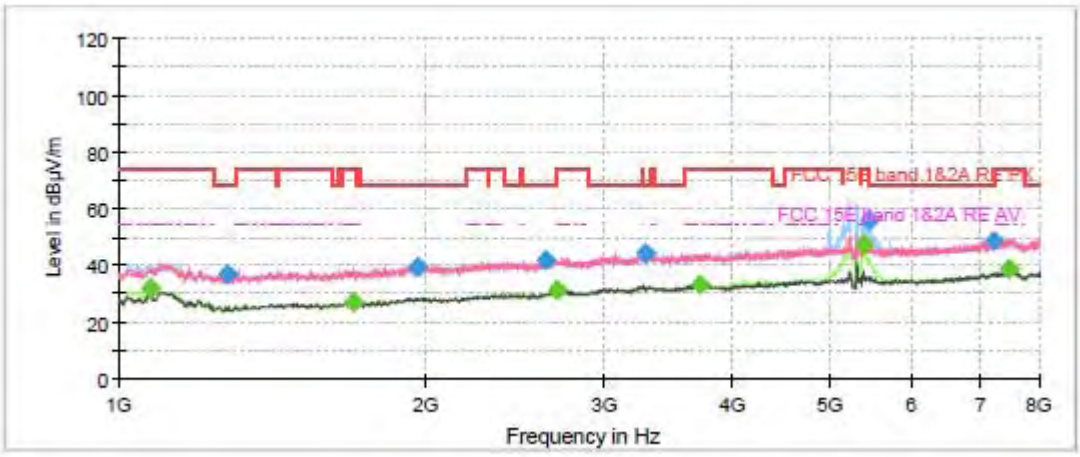


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1070.875000	---	31.75	54.00	22.25	100.0	H	45.0	-20.7
1258.125000	36.71	---	68.20	31.49	100.0	V	316.0	-19.8
1698.250000	---	27.63	54.00	26.37	200.0	H	30.0	-17.2
1989.625000	40.29	---	68.20	27.91	100.0	V	256.0	-15.7
2616.125000	42.25	---	68.20	25.95	100.0	H	344.0	-14.1
2742.125000	---	31.05	54.00	22.95	200.0	H	30.0	-13.5
3287.250000	43.74	---	68.20	24.46	100.0	V	1.0	-11.9
3982.000000	---	33.39	54.00	20.61	200.0	H	292.0	-9.6
5097.625000	---	44.62	54.00	9.38	200.0	H	230.0	-6.2
5097.625000	57.09	---	74.00	16.91	200.0	H	230.0	-6.2
7021.750000	48.83	---	68.20	19.37	100.0	H	203.0	-2.4
7514.375000	---	38.31	54.00	15.69	200.0	H	35.0	-2.1
15778.750000	---	52.40	54.00	1.60	200.0	H	227.0	6.4

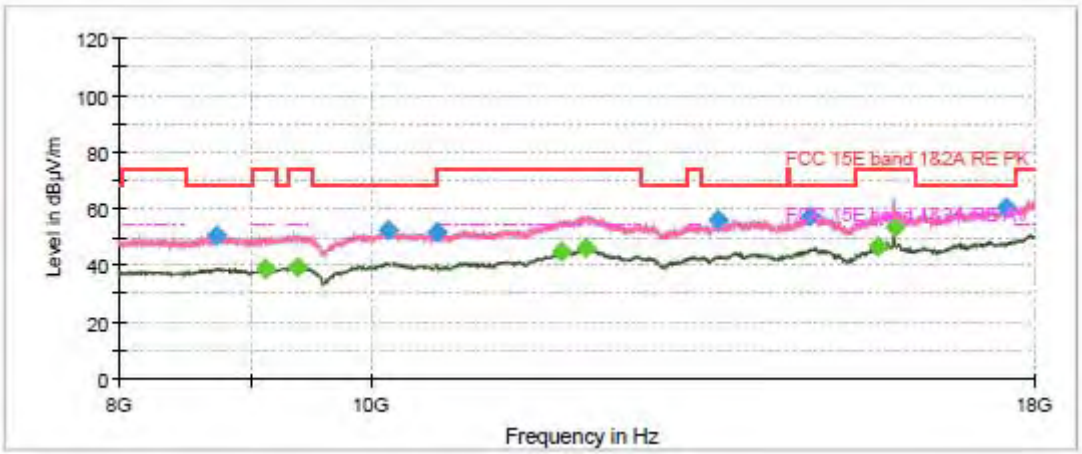
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH60



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

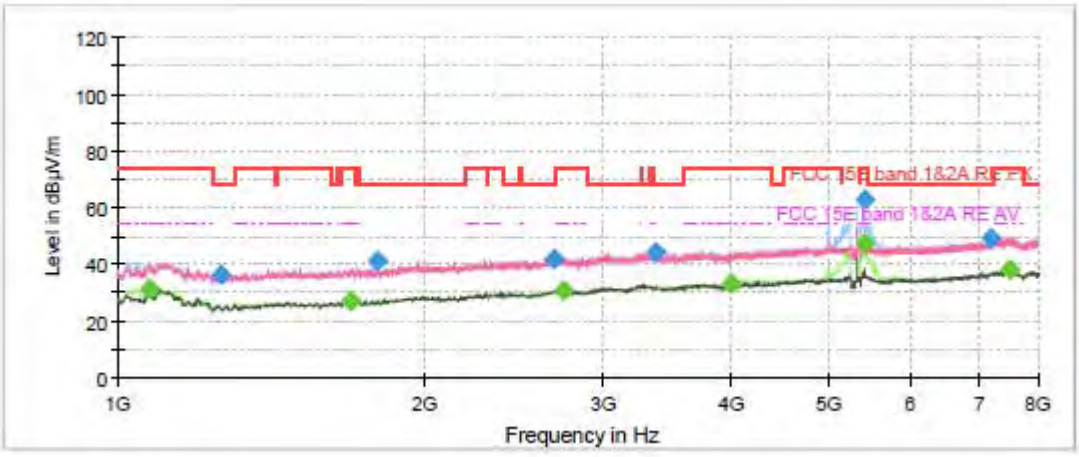


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1073.500000	---	31.92	54.00	22.08	100.0	H	45.0	-20.7
1281.750000	36.86	---	68.20	31.34	200.0	V	148.0	-19.7
1699.125000	---	27.35	54.00	26.65	200.0	H	34.0	-17.2
1966.000000	39.69	---	68.20	28.51	200.0	H	118.0	-15.7
2623.125000	41.80	---	68.20	26.40	200.0	H	0.0	-14.0
2693.125000	---	31.09	54.00	22.91	100.0	V	212.0	-13.7
3292.500000	44.25	---	68.20	23.95	200.0	V	352.0	-11.9
3715.125000	---	33.40	54.00	20.60	200.0	V	0.0	-10.2
5382.000000	---	47.44	54.00	6.56	200.0	H	81.0	-5.8
5465.125000	55.71	---	68.20	12.49	200.0	H	87.0	-5.3
7228.250000	48.83	---	68.20	19.37	200.0	V	285.0	-1.7
7489.000000	---	38.53	54.00	15.47	200.0	H	277.0	-2.1
15901.250000	---	53.71	54.00	0.29	200.0	H	220.0	6.7

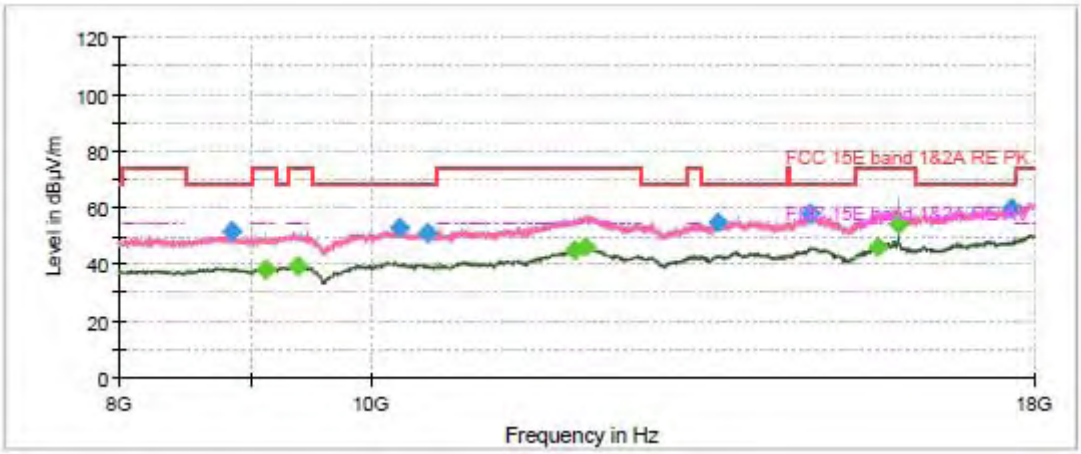
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH64



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

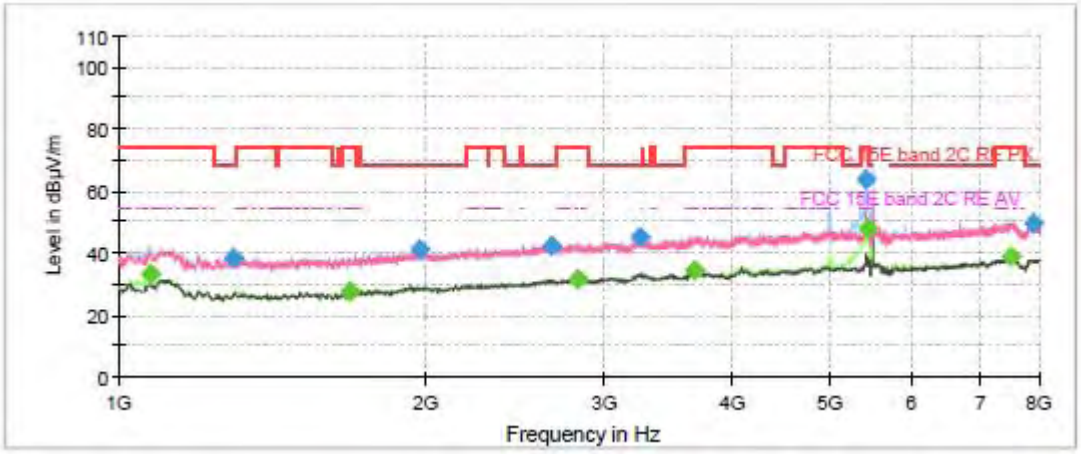


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1076.125000	---	31.68	54.00	22.32	100.0	H	44.0	-20.7
1262.500000	36.22	---	68.20	31.98	100.0	V	76.0	-19.8
1697.375000	---	27.35	54.00	26.65	200.0	H	34.0	-17.2
1797.125000	41.13	---	68.20	27.07	200.0	H	322.0	-16.6
2679.125000	42.10	---	68.20	26.10	200.0	V	316.0	-13.7
2743.000000	---	30.91	54.00	23.09	200.0	H	136.0	-13.5
3376.500000	44.03	---	68.20	24.17	100.0	V	52.0	-11.6
3999.500000	---	33.35	54.00	20.65	200.0	H	7.0	-9.5
5401.250000	---	47.62	54.00	6.38	200.0	H	87.0	-5.7
5403.875000	62.60	---	74.00	11.40	200.0	H	82.0	-5.7
7196.750000	49.27	---	68.20	18.93	200.0	V	279.0	-1.7
7500.375000	---	38.42	54.00	15.58	200.0	H	28.0	-2.1
15956.250000	---	53.96	54.00	0.04	200.0	H	243.0	7.1

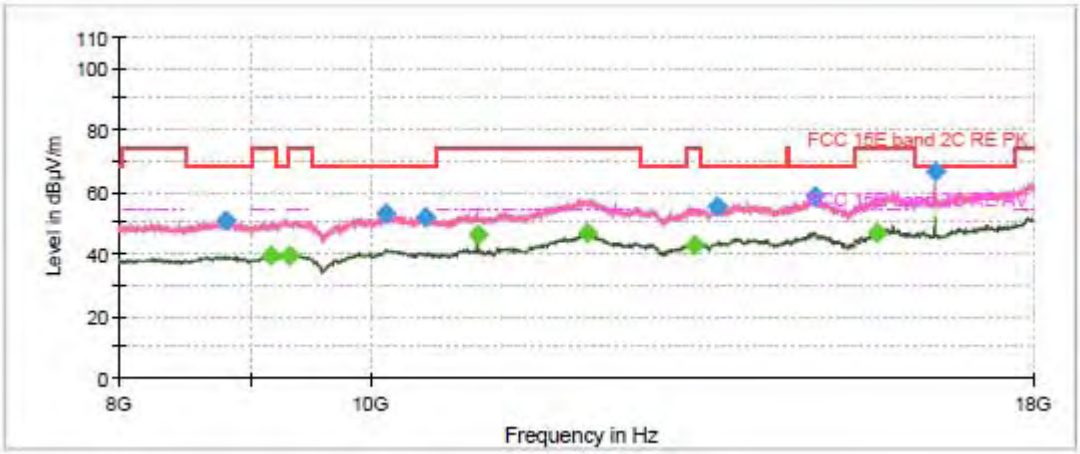
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH100



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

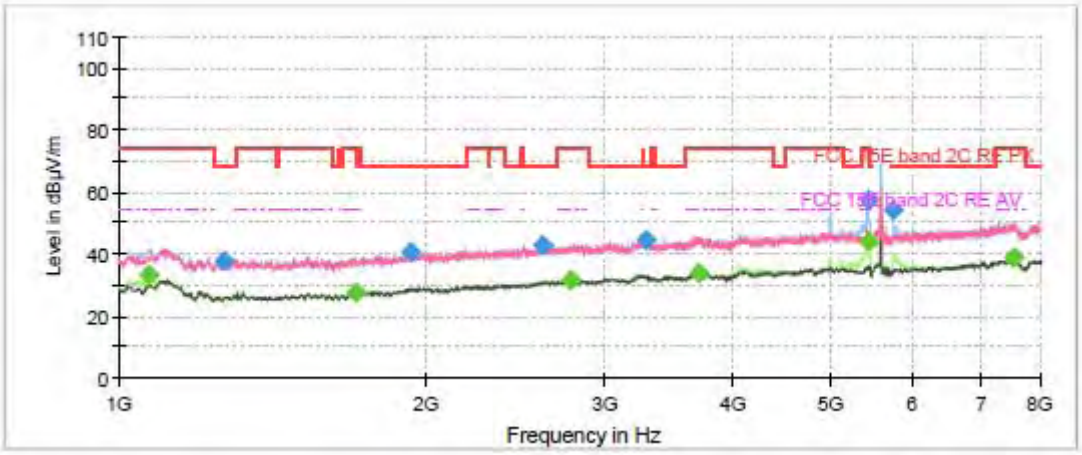


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1076.125000	---	33.19	54.00	20.81	100.0	H	46.0	-20.7
1297.500000	38.17	---	68.20	30.03	200.0	H	325.0	-19.6
1686.000000	---	27.69	54.00	26.31	100.0	H	35.0	-17.2
1978.250000	40.96	---	68.20	27.24	200.0	V	25.0	-15.7
2653.750000	42.44	---	68.20	25.76	100.0	V	336.0	-13.9
2817.375000	---	31.85	54.00	22.15	100.0	H	0.0	-13.3
3242.625000	45.20	---	68.20	23.00	200.0	V	355.0	-12.0
3678.375000	---	34.52	54.00	19.48	100.0	V	118.0	-10.2
5417.000000	63.65	---	74.00	10.35	200.0	H	265.0	-5.6
5421.375000	---	48.21	54.00	5.79	200.0	H	270.0	-5.6
7491.625000	---	38.70	54.00	15.30	200.0	H	325.0	-2.1
7893.250000	49.50	---	68.20	18.70	100.0	V	325.0	-2.0
16496.250000	66.67	---	68.20	1.53	200.0	H	219.0	11.3

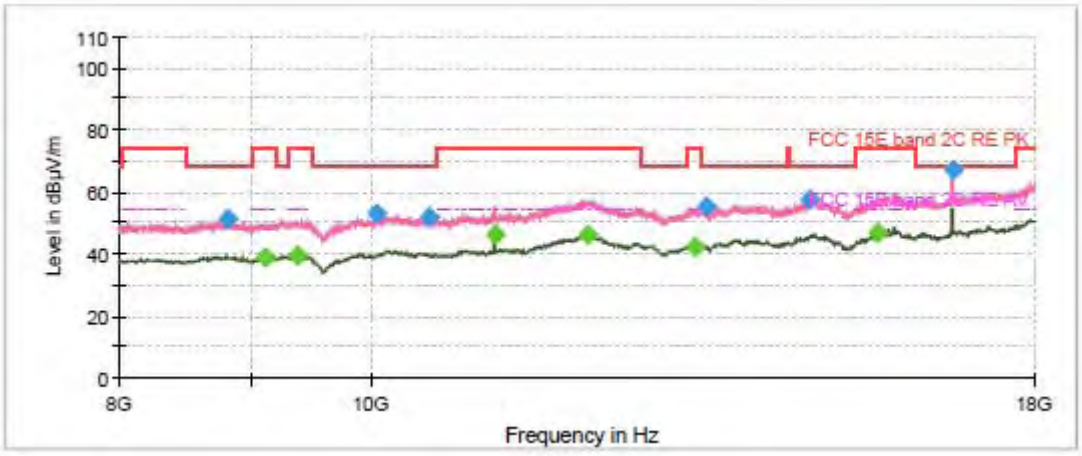
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH116



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

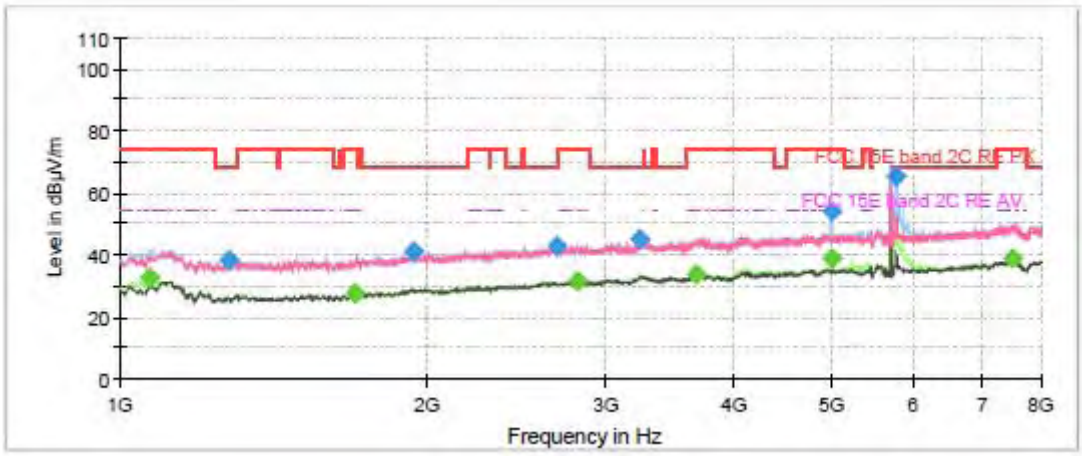


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1070.000000	---	33.27	54.00	20.73	100.0	H	43.0	-20.7
1269.500000	37.88	---	68.20	30.32	200.0	H	148.0	-19.8
1709.625000	---	27.71	54.00	26.29	100.0	H	301.0	-17.1
1936.250000	40.42	---	68.20	27.78	200.0	H	284.0	-15.9
2603.000000	42.83	---	68.20	25.37	100.0	H	130.0	-14.1
2780.625000	---	31.75	54.00	22.25	200.0	V	101.0	-13.4
3289.875000	44.60	---	68.20	23.60	200.0	H	284.0	-11.9
3709.875000	---	34.05	54.00	19.95	200.0	V	45.0	-10.2
5422.250000	---	43.80	54.00	10.20	200.0	H	115.0	-5.6
5422.250000	57.38	---	74.00	16.62	200.0	H	115.0	-5.6
5752.125000	53.98	---	68.20	14.22	200.0	H	83.0	-5.1
7538.000000	---	38.91	54.00	15.09	200.0	V	30.0	-2.2
16742.500000	67.33	---	68.20	0.87	200.0	H	53.0	9.9

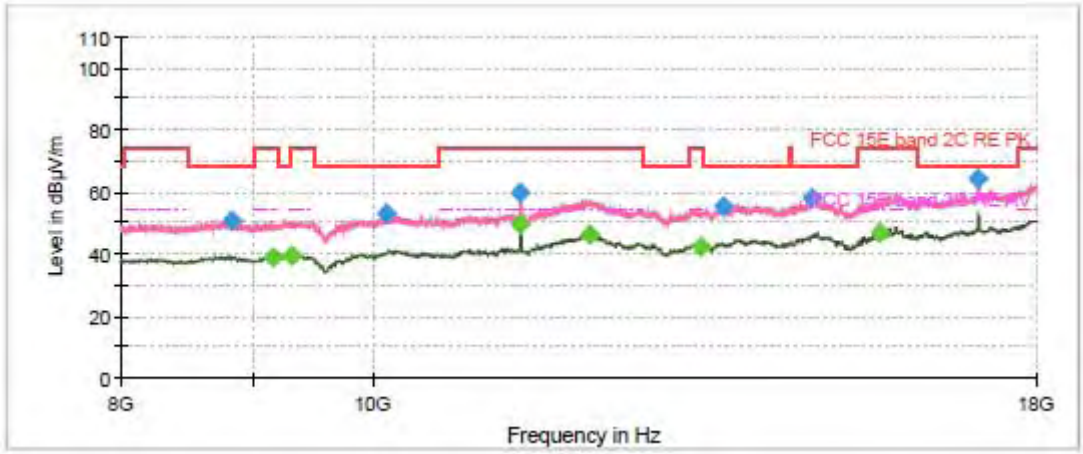
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH140



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

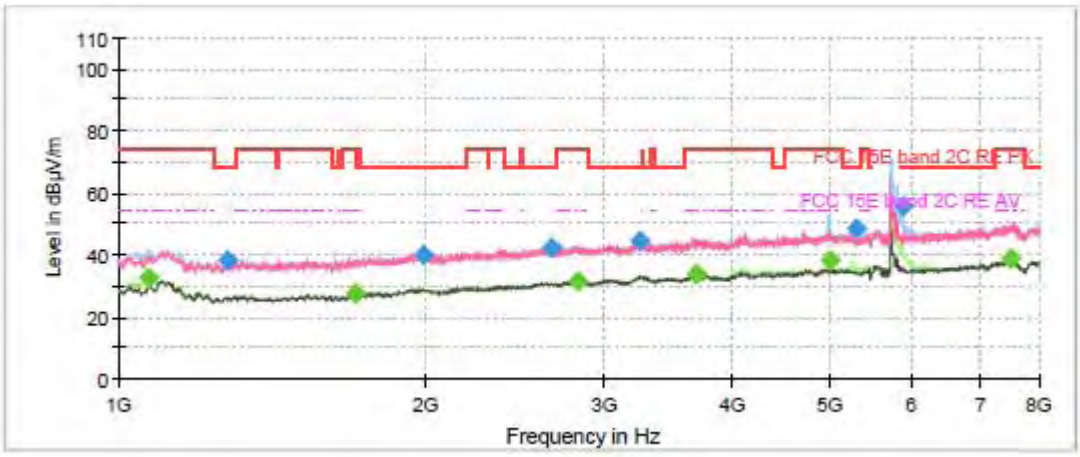


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1072.625000	---	33.00	54.00	21.00	100.0	H	50.0	-20.7
1279.125000	38.33	---	68.20	29.87	100.0	H	161.0	-19.7
1701.750000	---	27.67	54.00	26.33	200.0	H	78.0	-17.2
1941.500000	40.99	---	68.20	27.21	200.0	H	247.0	-15.9
2677.375000	42.78	---	68.20	25.42	200.0	V	321.0	-13.8
2811.250000	---	31.72	54.00	22.28	100.0	V	201.0	-13.3
3239.125000	45.31	---	68.20	22.89	200.0	H	294.0	-12.0
3674.000000	---	34.03	54.00	19.97	200.0	V	355.0	-10.2
4989.125000	---	38.86	54.00	15.14	200.0	H	299.0	-5.9
4997.000000	54.44	---	74.00	19.56	200.0	H	289.0	-5.9
5775.750000	65.35	---	68.20	2.85	200.0	H	262.0	-5.0
7517.000000	---	39.19	54.00	14.81	200.0	H	322.0	-2.1
11400.000000	---	49.64	54.00	4.36	200.0	H	327.0	1.2
17105.000000	64.48	---	68.20	3.72	200.0	H	49.0	6.3

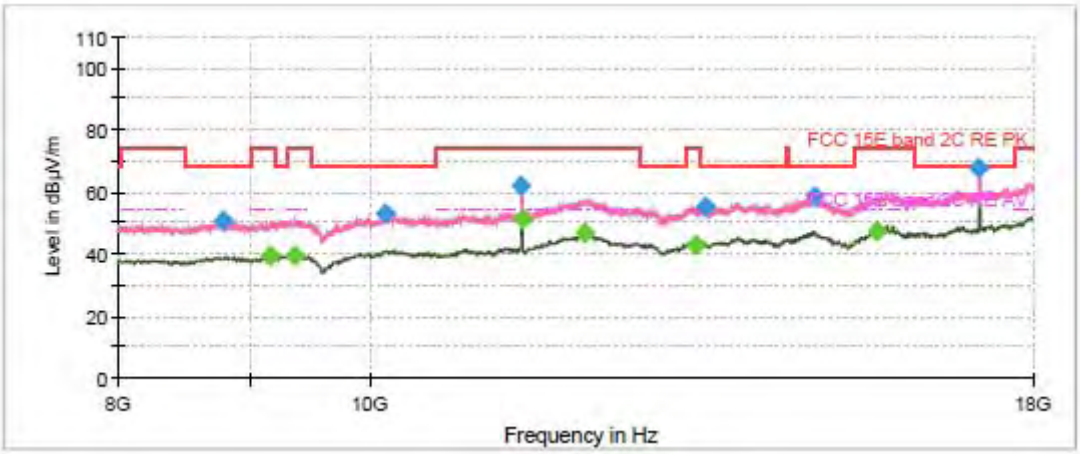
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH144



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

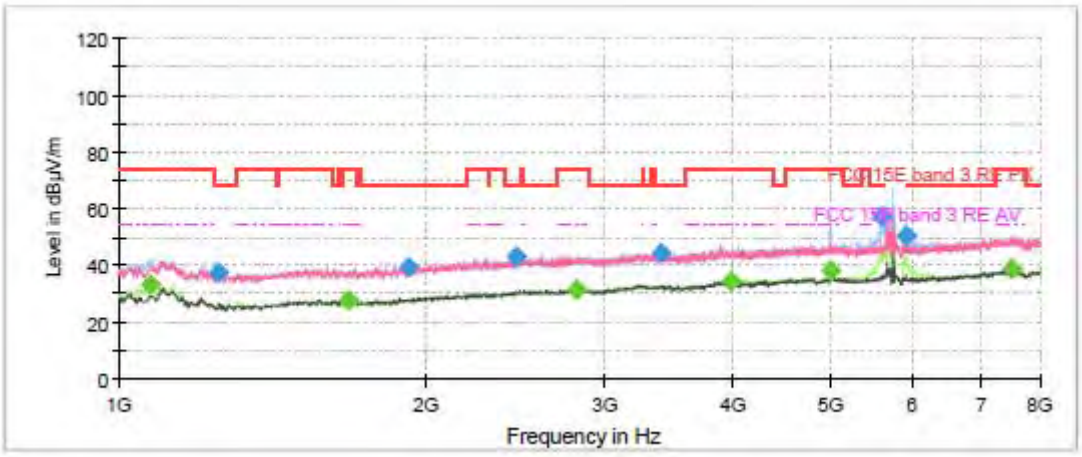


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1072.625000	---	32.78	54.00	21.22	100.0	H	45.0	-20.7
1277.375000	38.33	---	68.20	29.87	200.0	V	331.0	-19.7
1706.125000	---	27.48	54.00	26.52	200.0	H	29.0	-17.1
1992.250000	40.14	---	68.20	28.06	100.0	V	105.0	-15.6
2658.125000	42.51	---	68.20	25.69	200.0	H	29.0	-13.9
2827.875000	---	31.78	54.00	22.22	200.0	V	294.0	-13.2
3245.250000	44.54	---	68.20	23.66	200.0	V	337.0	-12.0
3694.125000	---	34.03	54.00	19.97	100.0	V	0.0	-10.2
4988.250000	---	38.20	54.00	15.80	100.0	H	295.0	-5.9
5289.250000	48.76	---	68.20	19.44	100.0	H	269.0	-6.1
5879.875000	55.95	---	68.20	12.25	200.0	H	221.0	-4.9
7495.125000	---	38.64	54.00	15.36	200.0	H	122.0	-2.1
11443.750000	---	51.56	54.00	2.44	200.0	H	14.0	1.2
17162.500000	67.69	---	68.20	0.51	200.0	H	69.0	6.5

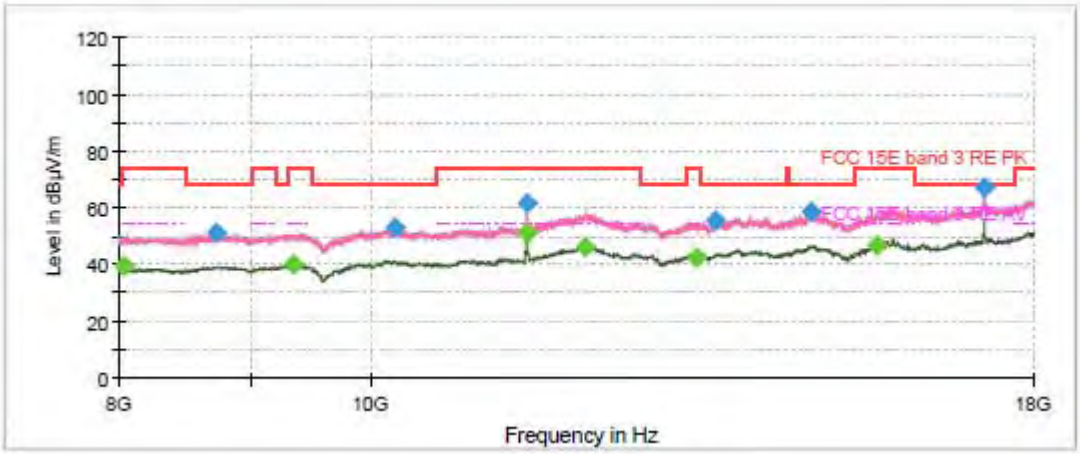
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH149



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

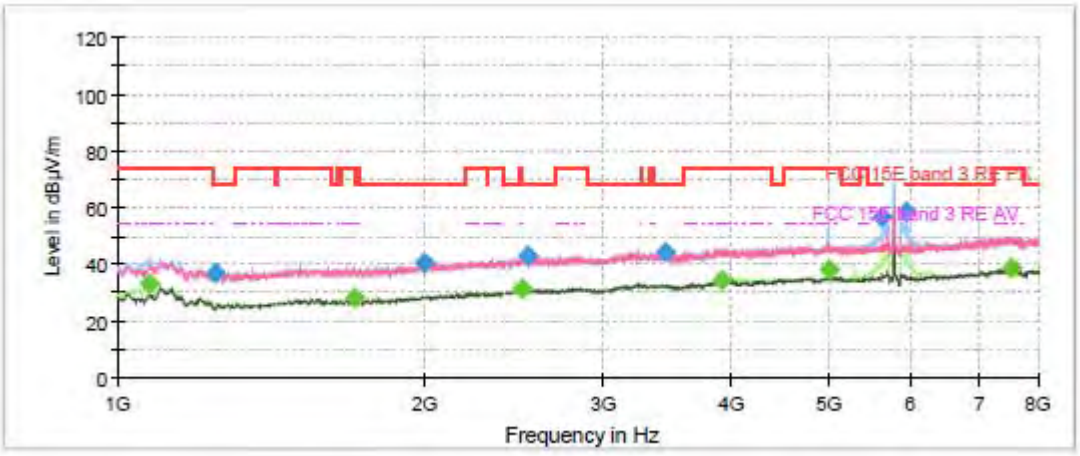


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1075.250000	---	33.03	54.00	20.97	100.0	H	51.0	-20.7
1253.750000	37.28	---	68.20	30.92	200.0	H	0.0	-19.8
1679.875000	---	27.81	54.00	26.19	200.0	H	40.0	-17.3
1921.375000	39.50	---	68.20	28.70	100.0	V	330.0	-16.0
2455.125000	43.00	---	68.20	25.20	200.0	H	267.0	-14.5
2811.250000	---	31.64	54.00	22.36	100.0	V	103.0	-13.3
3405.375000	44.21	---	68.20	23.99	200.0	V	10.0	-11.5
3985.500000	---	34.45	54.00	19.55	200.0	H	292.0	-9.6
4989.125000	---	38.43	54.00	15.57	200.0	H	292.0	-5.9
5586.750000	57.13	---	68.20	11.07	100.0	H	89.0	-5.3
5926.250000	50.17	---	68.20	18.03	200.0	H	230.0	-5.0
7510.000000	---	38.55	54.00	15.45	200.0	H	324.0	-2.1
11490.000000	---	51.29	54.00	2.71	200.0	H	310.0	1.4
17238.750000	67.20	---	68.20	1.00	200.0	H	182.0	7.3

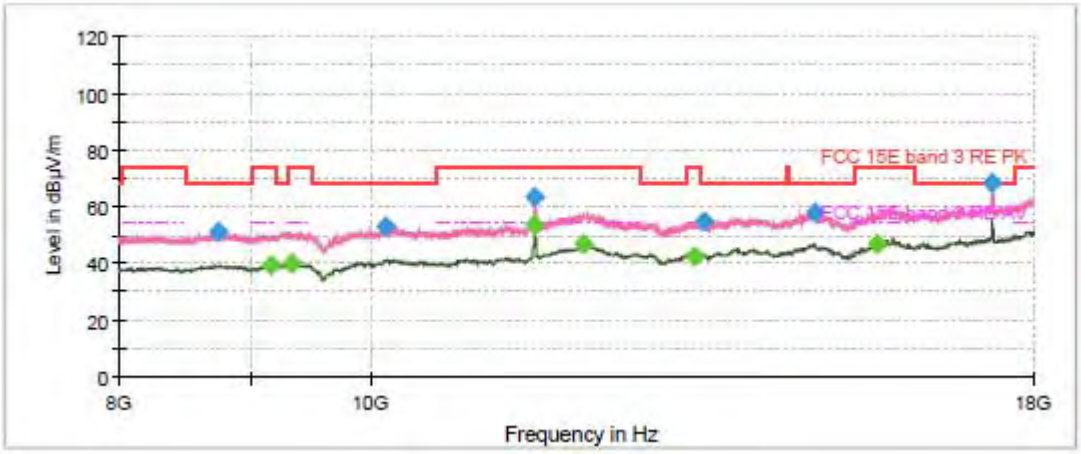
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH157



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

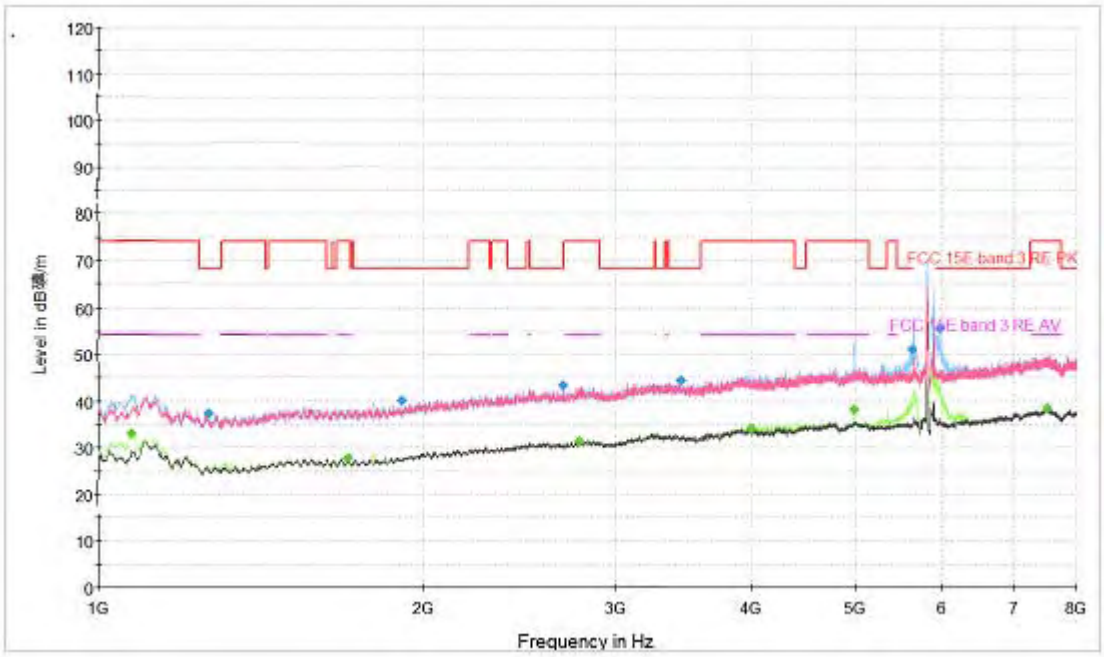


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1073.500000	---	33.40	54.00	20.60	100.0	H	47.0	-20.7
1249.375000	37.09	---	68.20	31.11	200.0	V	0.0	-19.9
1706.125000	---	28.13	54.00	25.87	100.0	V	334.0	-17.1
1996.625000	40.44	---	68.20	27.76	100.0	V	320.0	-15.6
2494.500000	---	31.47	54.00	22.53	100.0	H	316.0	-14.5
2528.625000	42.88	---	68.20	25.32	200.0	V	112.0	-14.4
3452.625000	44.49	---	68.20	23.71	200.0	V	51.0	-11.4
3921.625000	---	34.47	54.00	19.53	200.0	H	280.0	-9.8
4983.000000	---	38.18	54.00	15.82	200.0	H	293.0	-5.9
5613.875000	56.57	---	68.20	11.63	200.0	H	253.0	-5.4
5948.125000	58.64	---	68.20	9.56	200.0	H	214.0	-5.0
7540.625000	---	38.64	54.00	15.36	200.0	H	333.0	-2.2
11570.000000	---	53.54	54.00	0.46	200.0	H	309.0	2.2
17355.000000	68.11	---	68.20	0.09	200.0	H	222.0	7.7

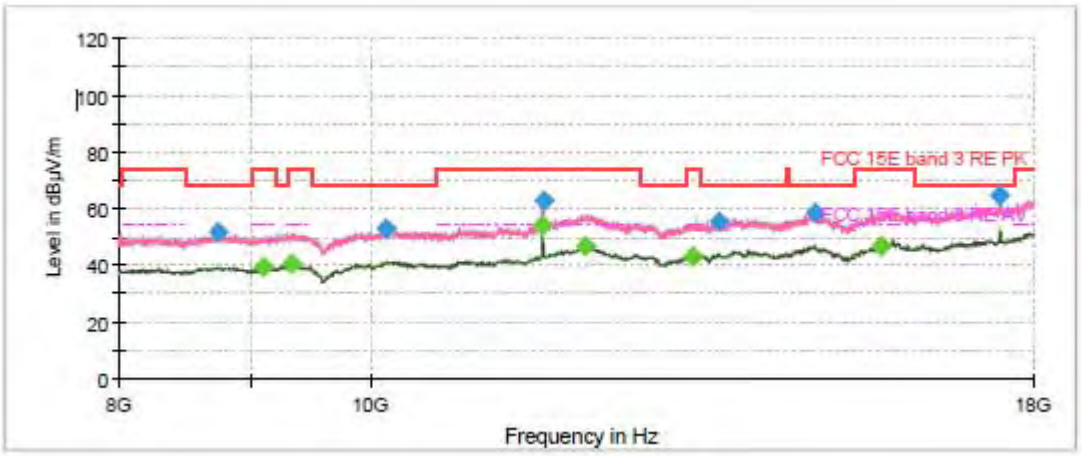
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11a CH165



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

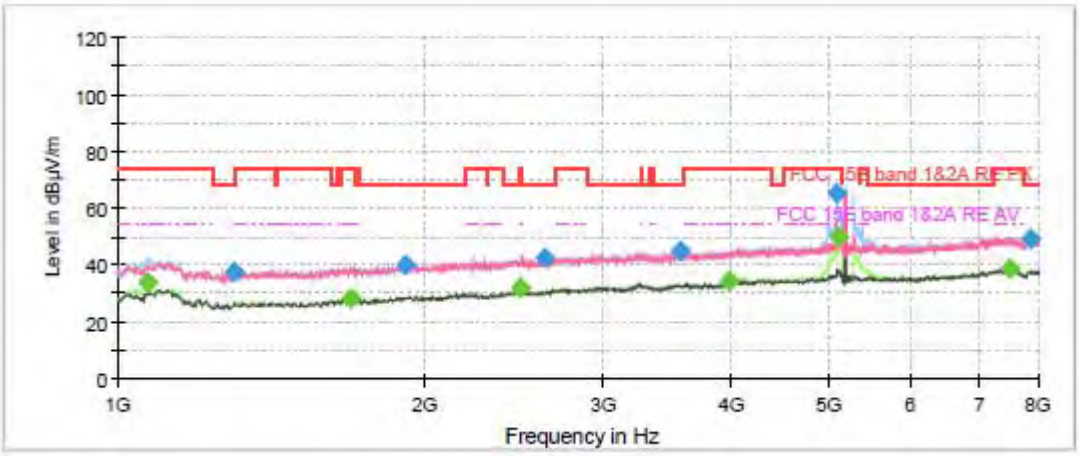


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1071.750000	---	32.99	54.00	21.01	100.0	H	49.0	-20.7
1264.250000	37.26	---	68.20	30.94	200.0	H	48.0	-19.8
1703.500000	---	27.80	54.00	26.20	100.0	V	50.0	-17.2
1907.375000	40.10	---	68.20	28.10	200.0	H	35.0	-16.1
2679.125000	43.47	---	68.20	24.73	100.0	H	63.0	-13.7
2772.750000	---	31.44	54.00	22.56	200.0	V	73.0	-13.5
3444.750000	44.40	---	68.20	23.80	200.0	V	276.0	-11.4
3998.625000	---	34.13	54.00	19.87	200.0	H	135.0	-9.5
4987.375000	---	38.29	54.00	15.71	100.0	H	300.0	-5.9
5641.000000	51.14	---	68.20	17.06	100.0	H	83.0	-5.3
5987.500000	55.65	---	68.20	12.55	100.0	H	220.0	-4.9
7521.375000	---	38.47	54.00	15.53	200.0	H	16.0	-2.2
11650.000000	---	53.88	54.00	0.12	200.0	H	40.0	3.0
17477.500000	64.70	---	68.20	3.50	200.0	H	192.0	7.6

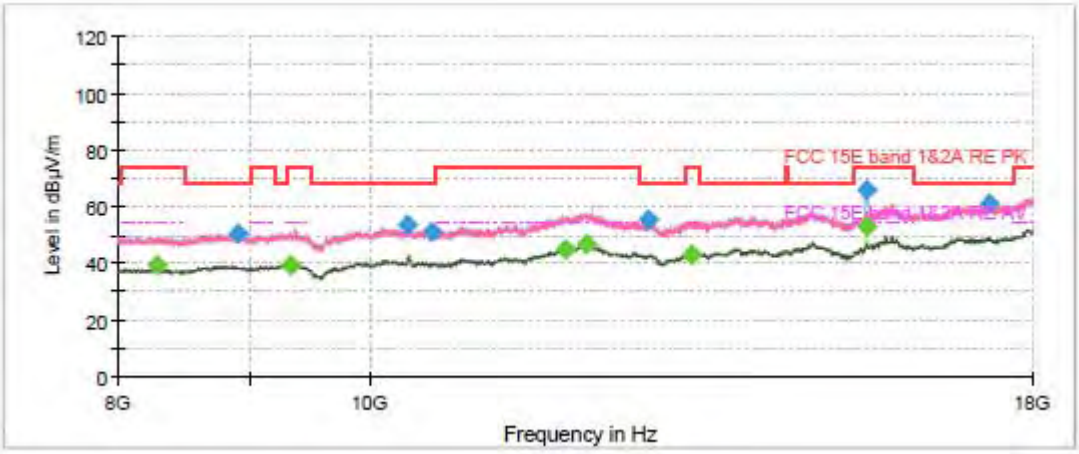
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH36



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

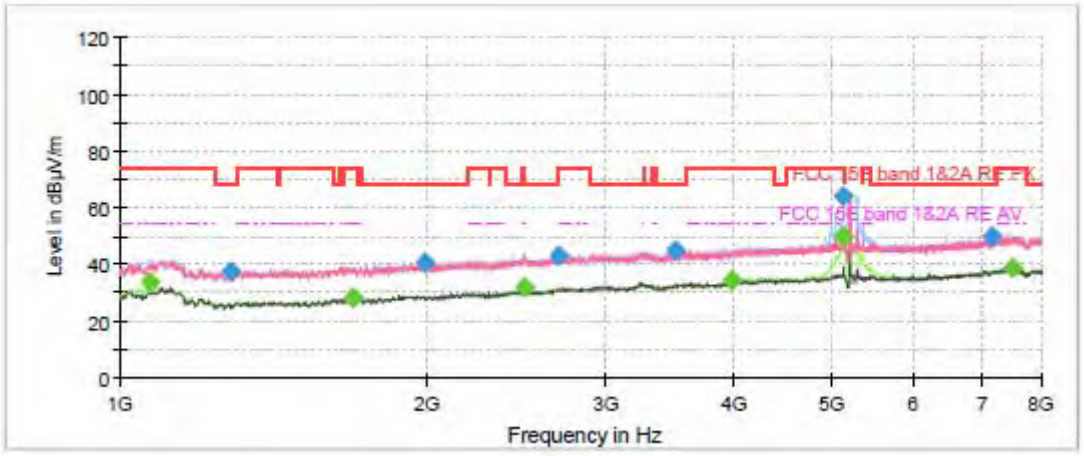


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1072.625000	---	33.61	54.00	20.39	100.0	H	44.0	-20.7
1299.250000	37.45	---	68.20	30.75	200.0	V	41.0	-19.6
1697.375000	---	28.28	54.00	25.72	200.0	H	261.0	-17.2
1917.875000	40.10	---	68.20	28.10	200.0	V	111.0	-16.0
2489.250000	---	31.69	54.00	22.31	200.0	H	326.0	-14.5
2622.250000	42.51	---	68.20	25.69	200.0	V	132.0	-14.0
3567.250000	44.88	---	68.20	23.32	100.0	V	172.0	-11.1
3989.000000	---	34.26	54.00	19.74	200.0	H	278.0	-9.6
5081.000000	65.21	---	74.00	8.79	200.0	H	121.0	-6.3
5095.875000	---	49.88	54.00	4.12	200.0	H	231.0	-6.2
7502.125000	---	38.72	54.00	15.28	200.0	H	332.0	-2.1
7873.125000	49.35	---	68.20	18.85	100.0	V	326.0	-2.0
15542.500000	---	52.64	54.00	1.36	200.0	H	233.0	5.1

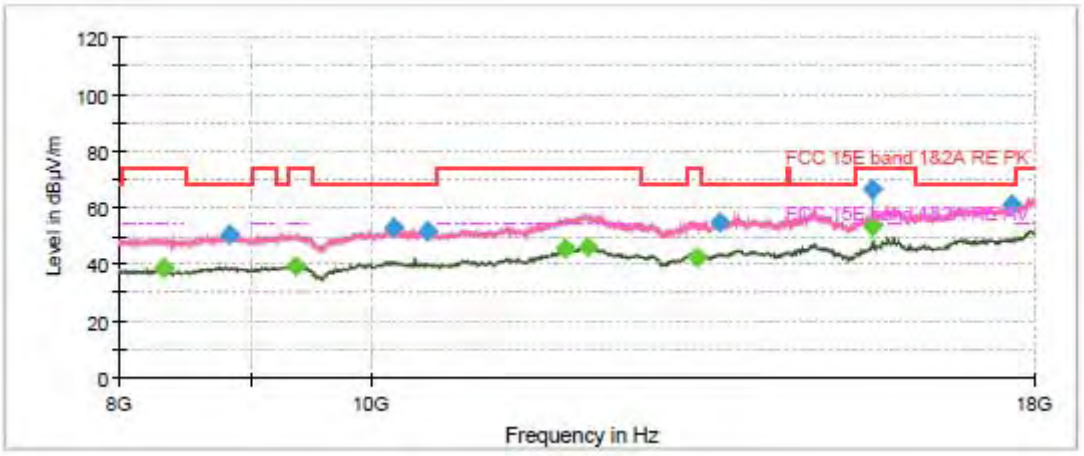
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH40



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

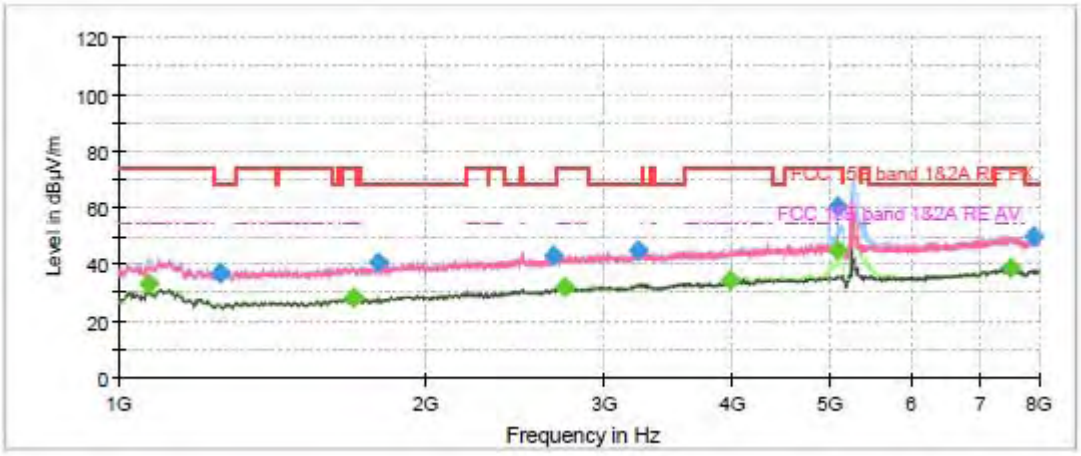


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1071.750000	---	33.56	54.00	20.44	100.0	H	49.0	-20.7
1284.375000	37.69	---	68.20	30.51	100.0	H	2.0	-19.7
1697.375000	---	28.50	54.00	25.50	200.0	H	77.0	-17.2
1989.625000	40.43	---	68.20	27.77	100.0	H	140.0	-15.7
2490.125000	---	31.76	54.00	22.24	200.0	H	306.0	-14.5
2688.750000	43.29	---	68.20	24.91	100.0	H	61.0	-13.7
3504.250000	44.83	---	68.20	23.37	200.0	H	152.0	-11.3
3985.500000	---	34.20	54.00	19.80	200.0	H	66.0	-9.6
5117.750000	64.11	---	74.00	9.89	200.0	H	115.0	-6.1
5118.625000	---	49.57	54.00	4.43	200.0	H	230.0	-6.1
7154.750000	50.06	---	68.20	18.14	200.0	V	78.0	-1.8
7496.000000	---	38.80	54.00	15.20	200.0	H	168.0	-2.1
15601.250000	---	53.56	54.00	0.44	200.0	H	174.0	5.4

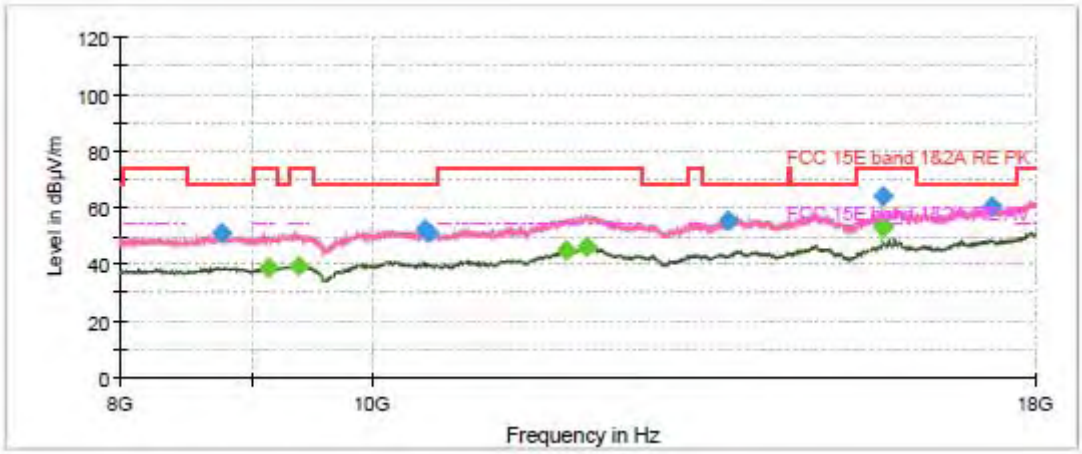
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH48



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

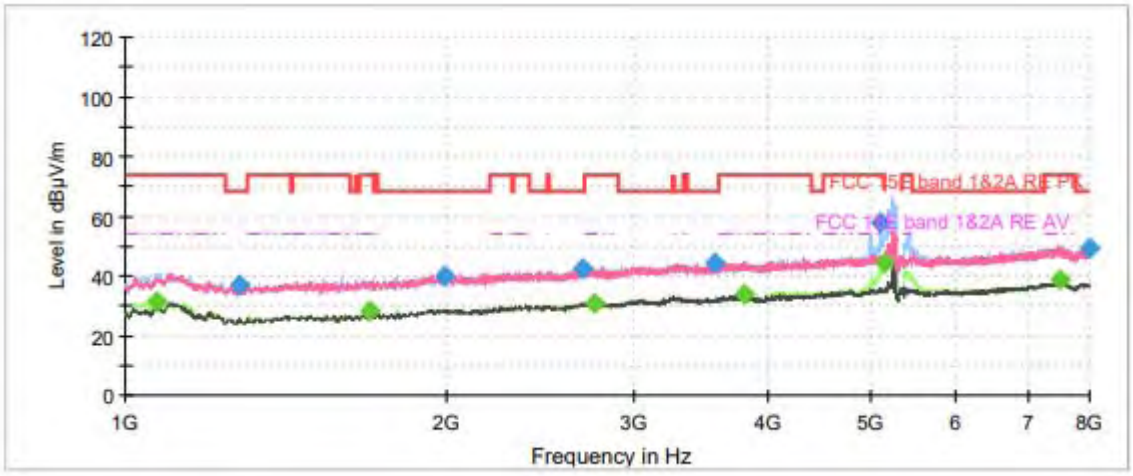


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1070.875000	---	32.94	54.00	21.06	100.0	H	49.0	-20.7
1257.250000	36.83	---	68.20	31.37	100.0	V	261.0	-19.8
1699.125000	---	28.47	54.00	25.53	200.0	H	33.0	-17.2
1798.875000	40.49	---	68.20	27.71	200.0	H	339.0	-16.6
2666.000000	43.04	---	68.20	25.16	100.0	H	112.0	-13.8
2744.750000	---	31.71	54.00	22.29	200.0	V	20.0	-13.5
3233.000000	44.62	---	68.20	23.58	100.0	H	278.0	-12.1
3986.375000	---	34.30	54.00	19.70	200.0	H	322.0	-9.6
5077.500000	60.06	---	74.00	13.94	200.0	H	228.0	-6.4
5081.000000	---	44.73	54.00	9.27	200.0	H	270.0	-6.3
7499.500000	---	38.67	54.00	15.33	200.0	H	311.0	-2.1
7888.875000	49.77	---	68.20	18.43	100.0	H	71.0	-2.0
15723.750000	---	53.07	54.00	0.93	200.0	H	244.0	6.2
15725.000000	---	53.83	54.00	0.17	200.0	H	244.0	6.2

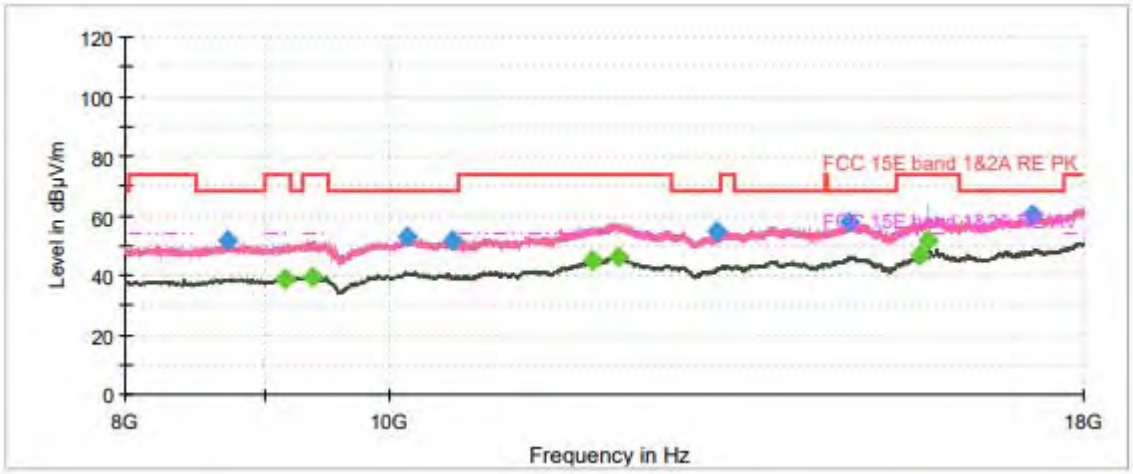
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH52



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

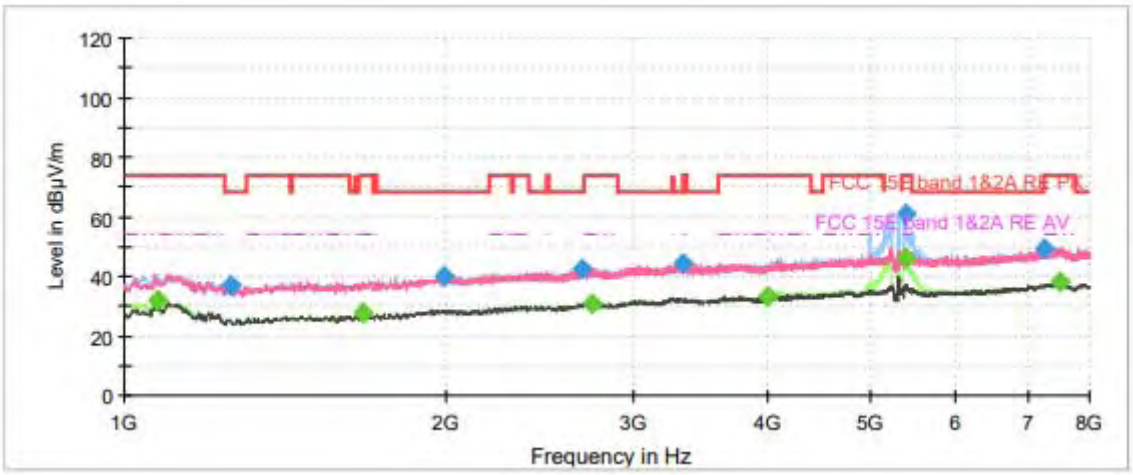


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1070.875000	---	31.63	54.00	22.37	100.0	H	39.0	-20.7
1277.375000	36.78	---	68.20	31.42	100.0	V	0.0	-19.7
1692.125000	---	28.08	54.00	25.92	200.0	H	36.0	-17.2
1987.875000	40.20	---	68.20	28.00	100.0	H	348.0	-15.7
2676.500000	42.69	---	68.20	25.51	100.0	H	148.0	-13.8
2745.625000	---	30.97	54.00	23.03	200.0	V	242.0	-13.5
3560.250000	44.30	---	68.20	23.90	100.0	H	251.0	-11.1
3799.125000	---	33.55	54.00	20.45	100.0	V	333.0	-10.0
5099.375000	57.97	---	74.00	16.03	200.0	H	224.0	-6.2
5137.875000	---	44.01	54.00	9.99	200.0	H	84.0	-6.1
7517.000000	---	38.59	54.00	15.41	200.0	H	306.0	-2.1
7999.125000	49.49	---	68.20	18.71	200.0	H	14.0	-2.2
15778.750000	---	51.92	54.00	2.08	200.0	H	201.0	6.4

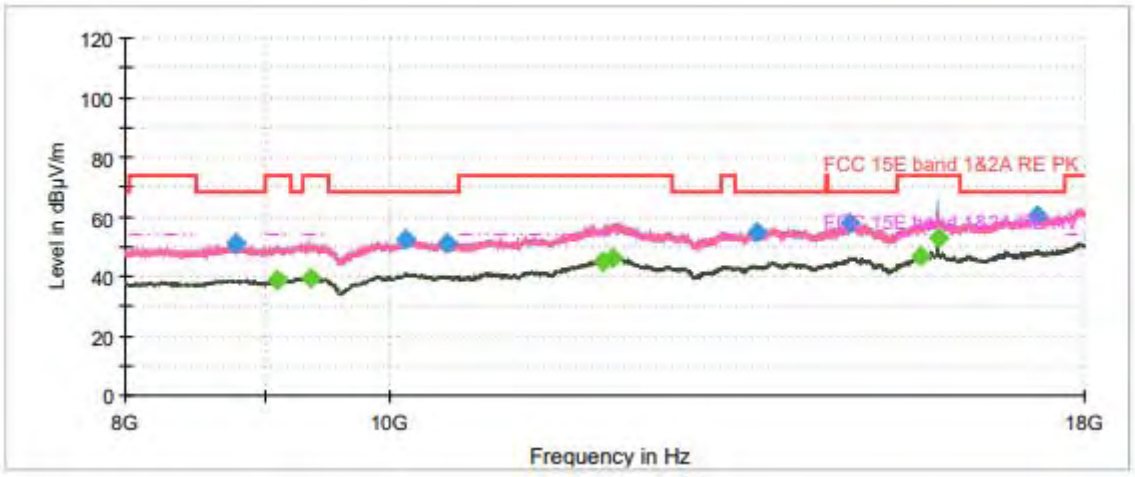
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH60



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

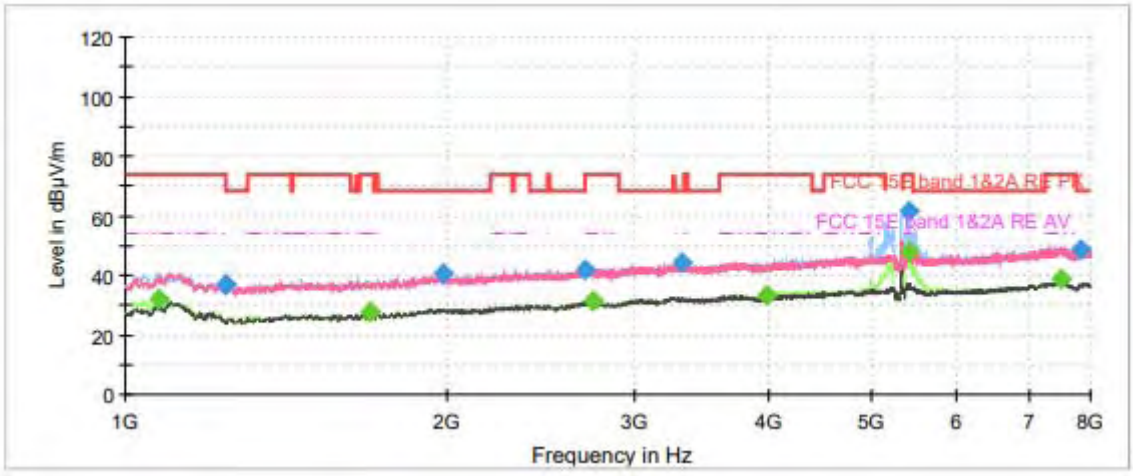


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1075.250000	---	31.82	54.00	22.18	100.0	H	45.0	-20.7
1259.000000	36.77	---	68.20	31.43	200.0	H	43.0	-19.8
1670.250000	---	27.39	54.00	26.61	100.0	H	341.0	-17.3
1991.375000	39.79	---	68.20	28.41	100.0	V	33.0	-15.7
2677.375000	42.43	---	68.20	25.77	100.0	V	28.0	-13.8
2740.375000	---	31.02	54.00	22.98	200.0	V	301.0	-13.5
3328.375000	44.14	---	68.20	24.06	200.0	V	353.0	-11.7
3996.875000	---	33.32	54.00	20.68	200.0	H	16.0	-9.5
5378.500000	60.75	---	74.00	13.25	200.0	H	119.0	-5.8
5381.125000	---	46.20	54.00	7.80	200.0	H	80.0	-5.8
7249.250000	49.03	---	68.20	19.17	200.0	V	77.0	-1.6
7510.000000	---	38.28	54.00	15.72	200.0	V	327.0	-2.1
15901.250000	---	53.22	54.00	0.78	200.0	H	227.0	6.7

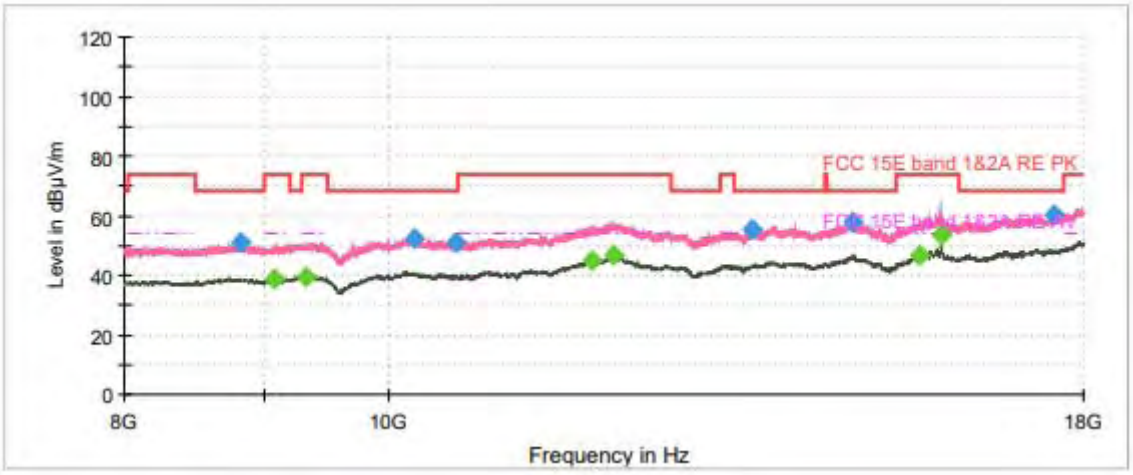
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH64



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.



Radiates Emission from 8GHz to 18GHz

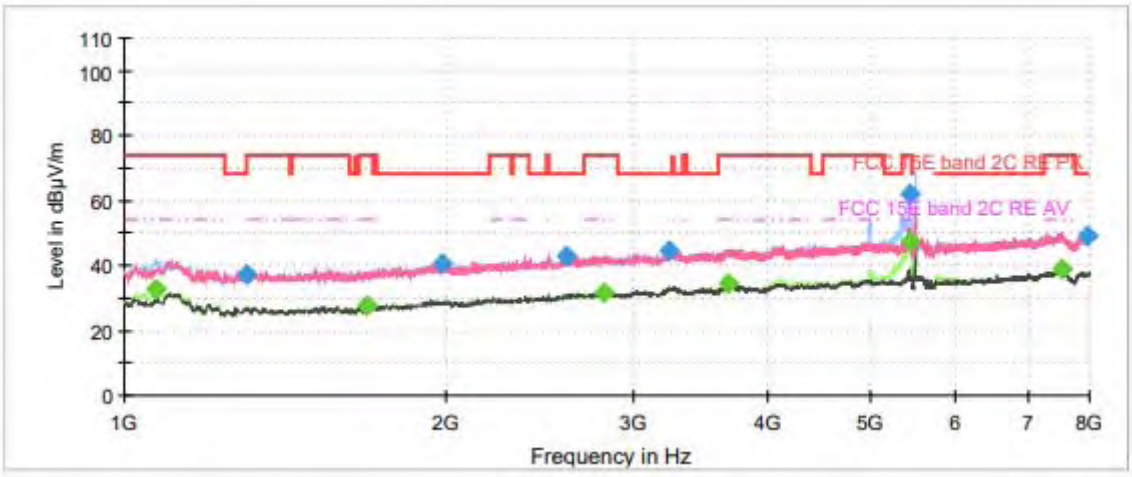
Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1073.500000	---	32.16	54.00	21.84	100.0	H	44.0	-20.7
1243.250000	37.23	---	68.20	30.97	200.0	V	0.0	-19.9
1696.500000	---	27.57	54.00	26.43	200.0	H	26.0	-17.2
1980.000000	40.64	---	68.20	27.56	200.0	V	300.0	-15.7
2688.750000	42.04	---	68.20	26.16	100.0	V	118.0	-13.7
2744.750000	---	31.14	54.00	22.86	200.0	H	106.0	-13.5
3314.375000	44.53	---	68.20	23.67	200.0	V	0.0	-11.8
3984.625000	---	33.23	54.00	20.77	200.0	H	290.0	-9.6
5399.500000	---	47.87	54.00	6.13	200.0	H	121.0	-5.7
5399.500000	61.75	---	74.00	12.25	200.0	H	121.0	-5.7
7503.875000	---	38.48	54.00	15.52	200.0	H	182.0	-2.1
7823.250000	48.72	---	68.20	19.48	200.0	V	351.0	-2.1
15961.250000	---	53.44	54.00	0.56	200.0	H	227.0	7.1

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

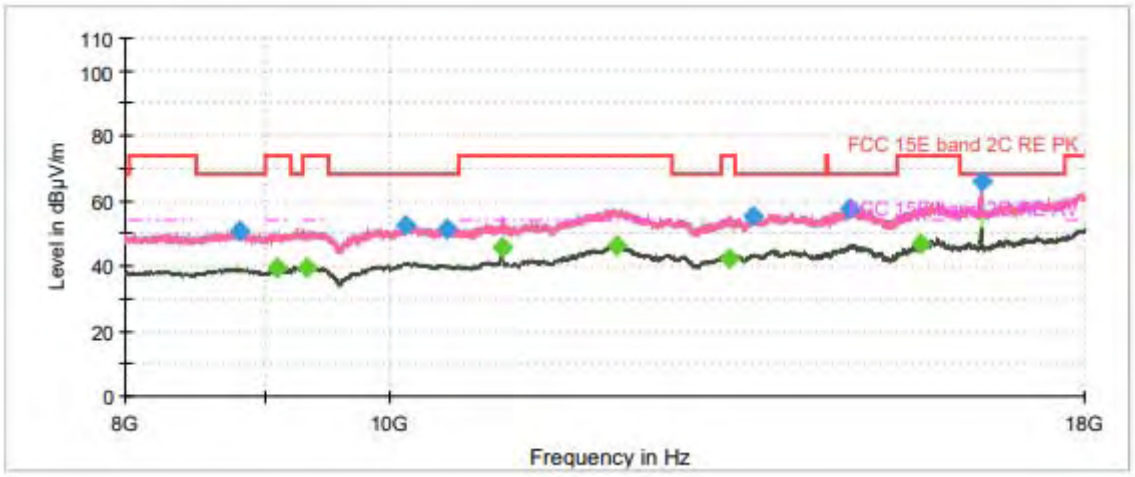
802.11n (HT20) CH100

Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.



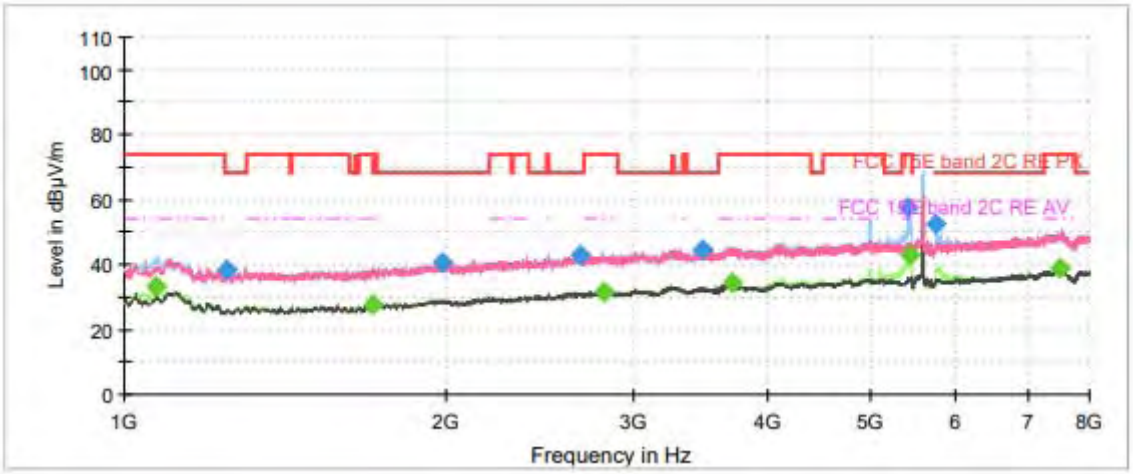
Radiates Emission from 8GHz to 18GHz



Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1072.625000	---	32.68	54.00	21.32	100.0	H	45.0	-20.7
1299.250000	37.51	---	68.20	30.69	100.0	H	34.0	-19.6
1685.125000	---	27.70	54.00	26.30	200.0	H	44.0	-17.2
1980.875000	40.83	---	68.20	27.37	200.0	H	295.0	-15.7
2589.875000	43.11	---	68.20	25.09	200.0	H	14.0	-14.2
2805.125000	---	31.83	54.00	22.17	100.0	H	294.0	-13.4
3235.625000	44.54	---	68.20	23.66	200.0	V	337.0	-12.0
3673.125000	---	34.27	54.00	19.73	100.0	V	85.0	-10.2
5421.375000	---	47.37	54.00	6.63	200.0	H	122.0	-5.6
5421.375000	61.95	---	74.00	12.05	200.0	H	122.0	-5.6
7545.000000	---	38.76	54.00	15.24	200.0	H	149.0	-2.2
7964.125000	49.01	---	68.20	19.19	200.0	V	331.0	-2.2
16496.250000	65.90	---	68.20	2.30	200.0	H	227.0	11.3

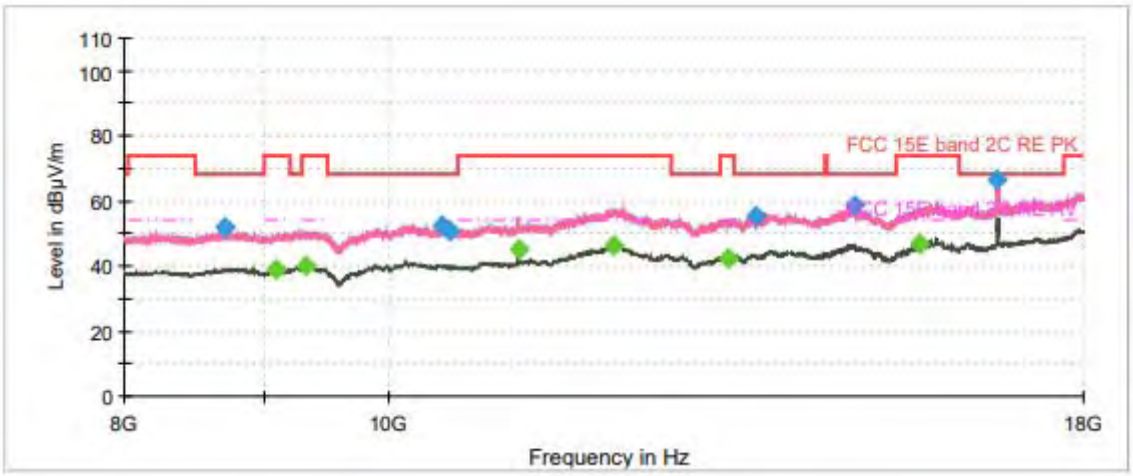
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH116



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

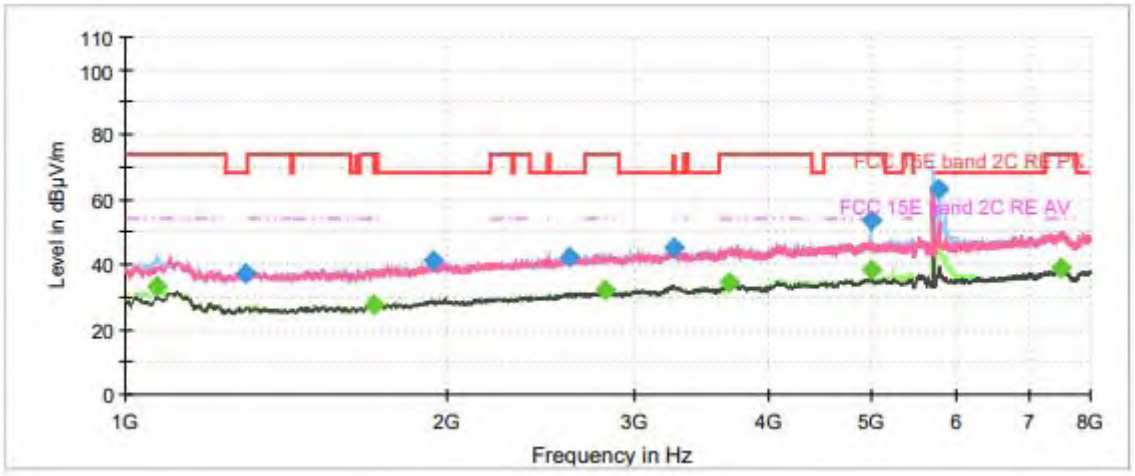


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1071.750000	---	33.07	54.00	20.93	100.0	H	47.0	-20.7
1245.875000	38.47	---	68.20	29.73	200.0	V	192.0	-19.9
1706.125000	---	27.67	54.00	26.33	100.0	H	42.0	-17.1
1986.125000	40.64	---	68.20	27.56	200.0	V	203.0	-15.7
2667.750000	42.88	---	68.20	25.32	200.0	H	245.0	-13.8
2810.375000	---	31.64	54.00	22.36	100.0	H	121.0	-13.3
3478.875000	44.60	---	68.20	23.60	100.0	H	74.0	-11.4
3700.250000	---	34.21	54.00	19.79	100.0	V	13.0	-10.2
5416.125000	57.43	---	74.00	16.57	200.0	H	121.0	-5.6
5425.750000	---	42.83	54.00	11.17	200.0	H	83.0	-5.5
5751.250000	52.21	---	68.20	15.99	200.0	H	88.0	-5.1
7507.375000	---	38.79	54.00	15.21	200.0	H	284.0	-2.1
16733.750000	66.84	---	68.20	1.36	200.0	H	243.0	10.0

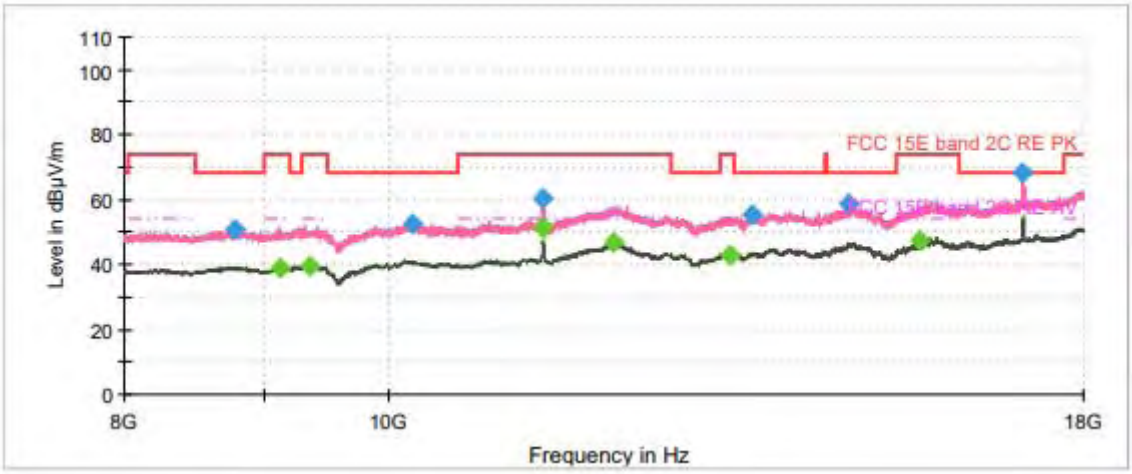
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH140



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

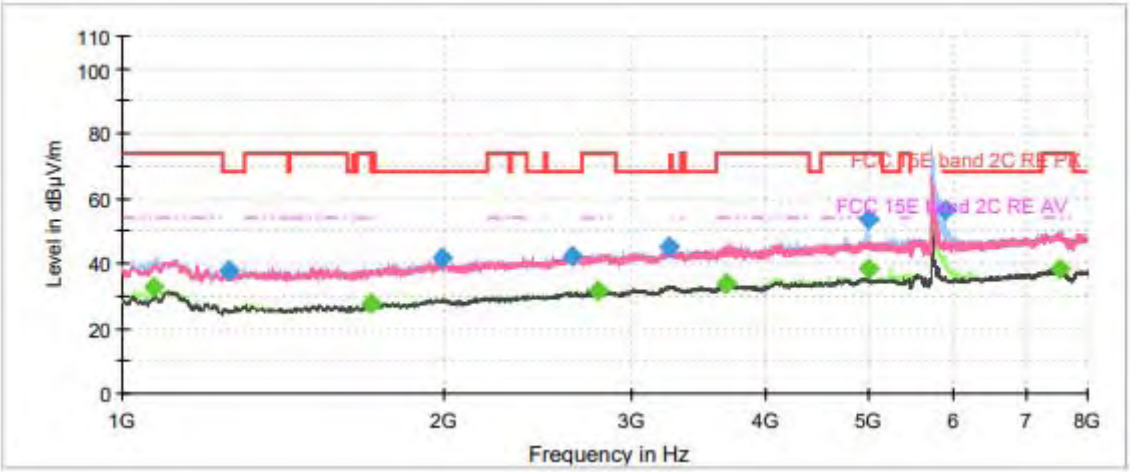


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1071.750000	---	33.19	54.00	20.81	100.0	H	49.0	-20.7
1296.625000	37.46	---	68.20	30.74	100.0	V	192.0	-19.6
1709.625000	---	27.57	54.00	26.43	200.0	H	288.0	-17.1
1938.000000	40.98	---	68.20	27.22	200.0	H	0.0	-15.9
2603.875000	42.52	---	68.20	25.68	100.0	H	260.0	-14.1
2809.500000	---	31.99	54.00	22.01	100.0	V	296.0	-13.3
3256.625000	44.96	---	68.20	23.24	200.0	H	88.0	-11.9
3680.125000	---	34.15	54.00	19.85	200.0	V	22.0	-10.2
4979.500000	53.57	---	74.00	20.43	100.0	H	288.0	-5.9
4985.625000	---	38.64	54.00	15.36	200.0	H	299.0	-5.9
5777.500000	63.45	---	68.20	4.75	200.0	H	262.0	-5.0
7510.000000	---	38.82	54.00	15.18	200.0	H	336.0	-2.1
11400.000000	---	51.11	54.00	2.89	200.0	H	322.0	1.2
17097.500000	68.05	---	68.20	0.15	200.0	H	48.0	6.3

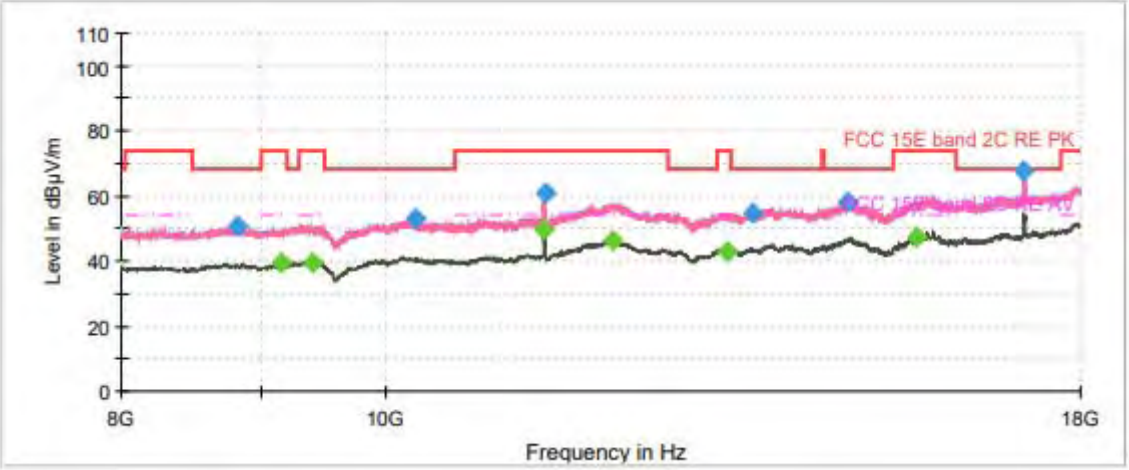
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH144



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

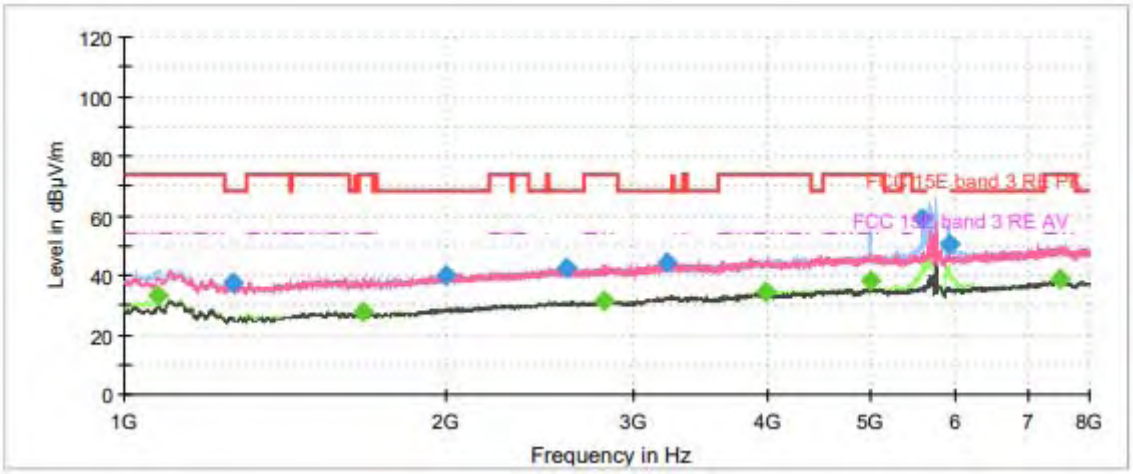


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1072.625000	---	32.71	54.00	21.29	100.0	H	49.0	-20.7
1259.000000	37.72	---	68.20	30.48	100.0	V	67.0	-19.8
1705.250000	---	27.59	54.00	26.41	200.0	H	42.0	-17.1
1994.875000	41.98	---	68.20	26.22	100.0	V	167.0	-15.6
2634.500000	42.38	---	68.20	25.82	100.0	H	241.0	-14.0
2787.625000	---	31.52	54.00	22.48	100.0	H	298.0	-13.4
3243.500000	45.11	---	68.20	23.09	200.0	H	52.0	-12.0
3676.625000	---	33.94	54.00	20.06	100.0	V	26.0	-10.2
4983.875000	53.80	---	74.00	20.20	200.0	H	300.0	-5.9
4991.750000	---	38.15	54.00	15.85	200.0	H	294.0	-5.9
5880.750000	56.36	---	68.20	11.84	200.0	H	93.0	-4.9
7524.000000	---	38.52	54.00	15.48	200.0	H	57.0	-2.2
11440.000000	---	49.92	54.00	4.08	200.0	H	16.0	1.2
17160.000000	67.66	---	68.20	0.54	200.0	H	43.0	6.5

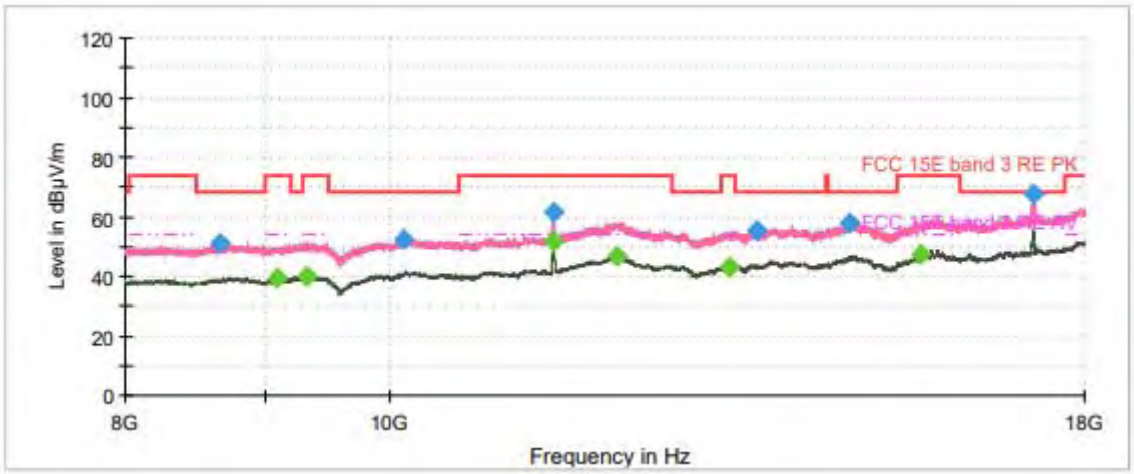
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH149



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

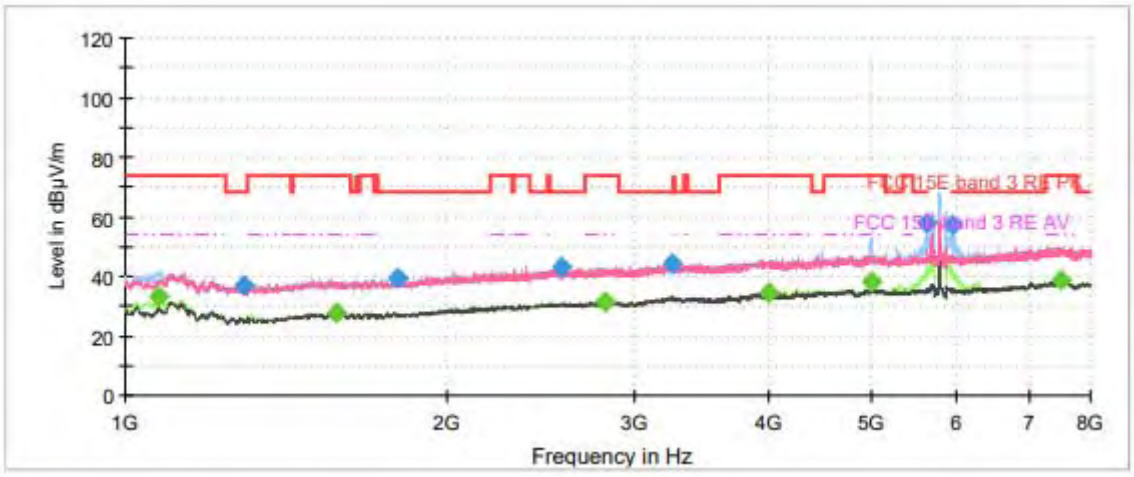


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1076.125000	---	33.05	54.00	20.95	100.0	H	47.0	-20.7
1266.000000	37.23	---	68.20	30.97	200.0	V	36.0	-19.8
1675.500000	---	27.68	54.00	26.32	100.0	H	96.0	-17.3
1997.500000	39.83	---	68.20	28.37	100.0	H	246.0	-15.6
2591.625000	42.41	---	68.20	25.79	100.0	V	164.0	-14.2
2813.875000	---	31.42	54.00	22.58	100.0	H	348.0	-13.3
3221.625000	44.41	---	68.20	23.79	100.0	V	26.0	-12.1
3985.500000	---	34.33	54.00	19.67	200.0	H	332.0	-9.6
4989.125000	---	38.14	54.00	15.86	200.0	H	301.0	-5.9
5582.375000	59.04	---	68.20	9.16	100.0	H	84.0	-5.3
5927.125000	50.44	---	68.20	17.76	200.0	H	219.0	-5.0
7491.625000	---	38.54	54.00	15.46	200.0	H	326.0	-2.1
11492.500000	---	51.66	54.00	2.34	200.0	H	319.0	1.4
17228.750000	67.85	---	68.20	0.35	200.0	H	40.0	7.2

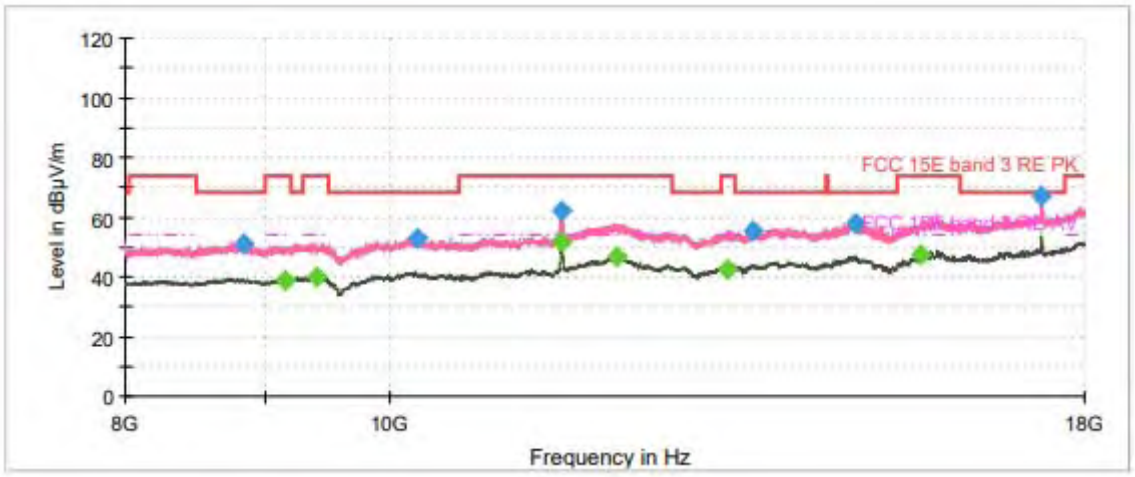
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH157



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

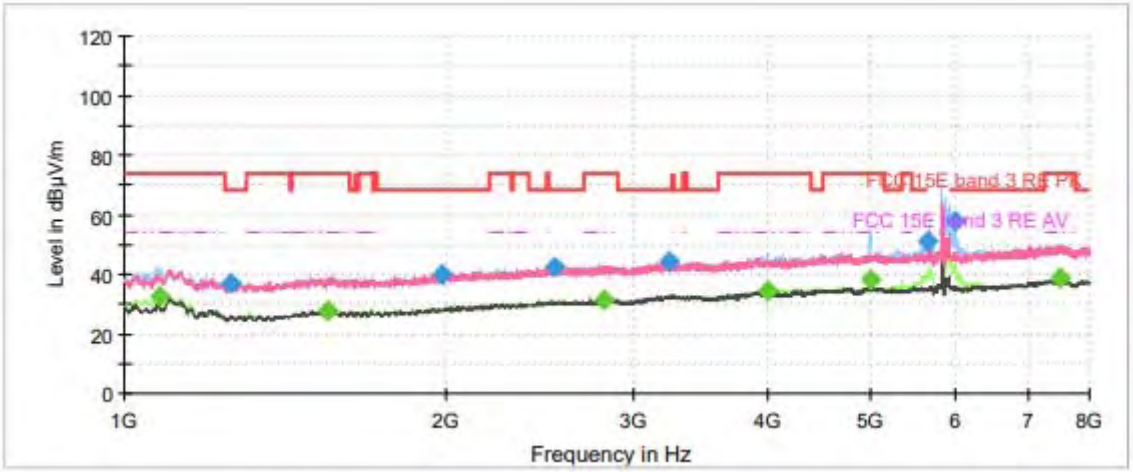


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1074.375000	---	33.26	54.00	20.74	100.0	H	47.0	-20.7
1292.250000	37.09	---	68.20	31.11	100.0	H	47.0	-19.6
1575.750000	---	27.59	54.00	26.41	100.0	V	281.0	-17.9
1794.500000	39.67	---	68.20	28.53	200.0	H	337.0	-16.6
2560.125000	42.79	---	68.20	25.41	100.0	V	287.0	-14.4
2806.875000	---	31.37	54.00	22.63	100.0	V	19.0	-13.3
3254.000000	44.53	---	68.20	23.67	200.0	V	349.0	-11.9
3998.625000	---	34.28	54.00	19.72	200.0	H	304.0	-9.5
4984.750000	---	38.29	54.00	15.71	200.0	H	297.0	-5.9
5620.875000	57.92	---	68.20	10.28	200.0	H	87.0	-5.4
5947.250000	57.42	---	68.20	10.78	200.0	H	127.0	-5.0
7521.375000	---	38.99	54.00	15.01	200.0	H	324.0	-2.2
11570.000000	---	51.55	54.00	2.45	200.0	H	301.0	2.2
17356.250000	67.15	---	68.20	1.05	200.0	H	40.0	7.7

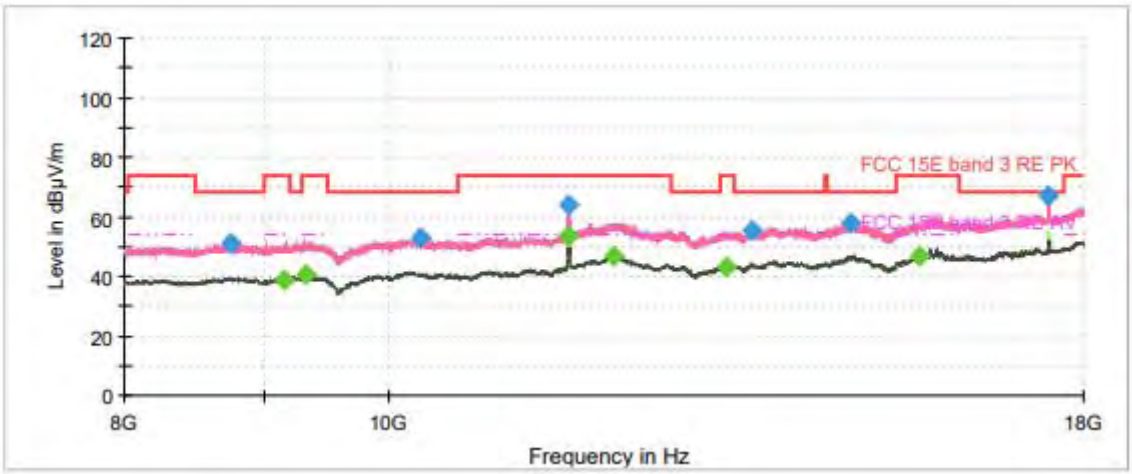
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT20) CH165



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

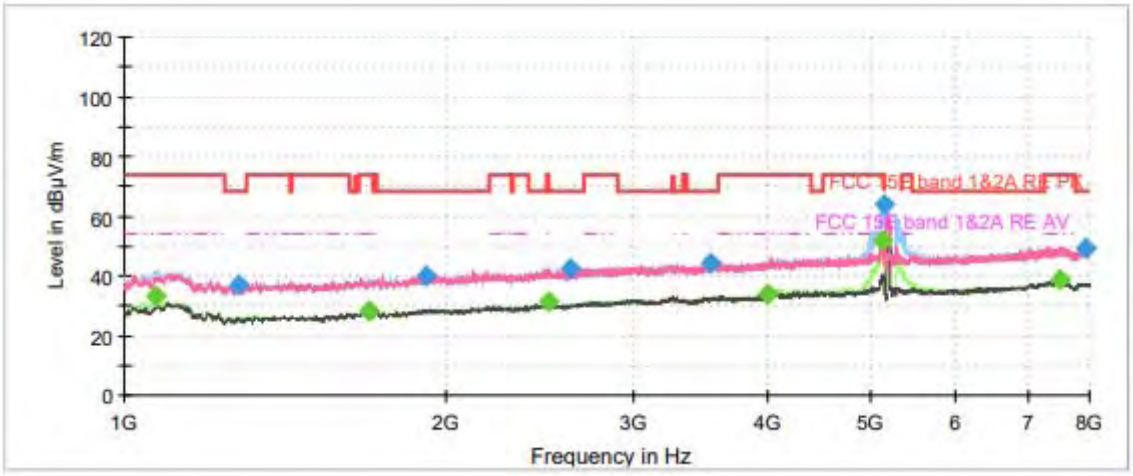


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1078.750000	---	32.88	54.00	21.12	100.0	H	40.0	-20.7
1259.000000	36.96	---	68.20	31.24	200.0	H	161.0	-19.8
1552.125000	---	27.78	54.00	26.22	100.0	H	320.0	-18.0
1979.125000	39.77	---	68.20	28.43	200.0	V	30.0	-15.7
2522.500000	42.38	---	68.20	25.82	100.0	V	138.0	-14.4
2809.500000	---	31.39	54.00	22.61	100.0	H	0.0	-13.3
3237.375000	44.25	---	68.20	23.95	200.0	H	148.0	-12.0
3996.875000	---	34.50	54.00	19.50	200.0	H	289.0	-9.5
4991.750000	---	38.11	54.00	15.89	100.0	H	288.0	-5.9
5637.500000	51.21	---	68.20	16.99	200.0	H	86.0	-5.4
5988.375000	57.67	---	68.20	10.53	200.0	H	135.0	-4.9
7517.000000	---	38.92	54.00	15.08	200.0	H	336.0	-2.1
11652.500000	---	53.28	54.00	0.72	200.0	H	40.0	3.0
17472.500000	67.37	---	68.20	0.83	200.0	H	220.0	7.6

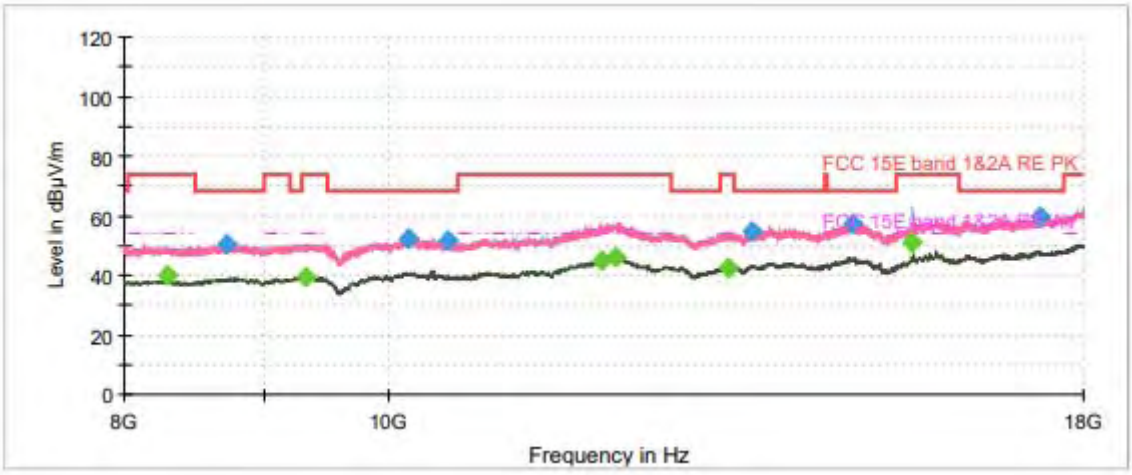
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH38



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

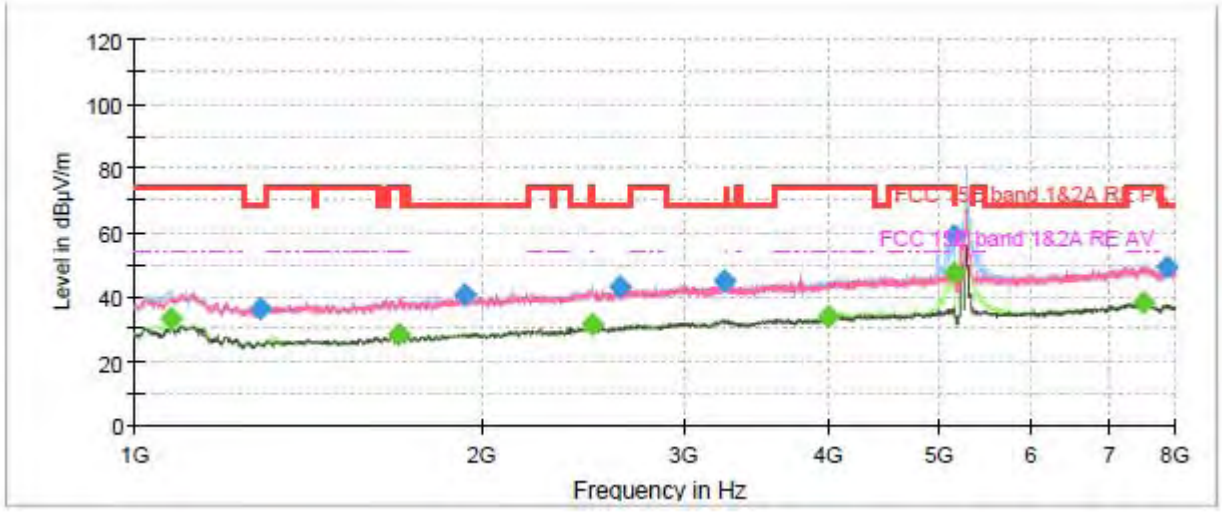


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1072.625000	---	33.01	54.00	20.99	100.0	H	44.0	-20.7
1281.750000	36.84	---	68.20	31.36	100.0	V	155.0	-19.7
1693.000000	---	28.00	54.00	26.00	200.0	H	51.0	-17.2
1920.500000	40.01	---	68.20	28.19	200.0	H	229.0	-16.0
2494.500000	---	31.37	54.00	22.63	200.0	H	322.0	-14.5
2617.875000	42.36	---	68.20	25.84	100.0	V	324.0	-14.1
3534.000000	44.42	---	68.20	23.78	100.0	H	48.0	-11.2
3999.500000	---	33.81	54.00	20.19	100.0	H	0.0	-9.5
5128.250000	---	51.88	54.00	2.12	200.0	H	229.0	-6.1
5131.750000	63.74	---	74.00	10.26	100.0	H	84.0	-6.1
7521.375000	---	38.47	54.00	15.53	200.0	H	334.0	-2.2
7936.125000	49.21	---	68.20	18.99	200.0	V	10.0	-2.1

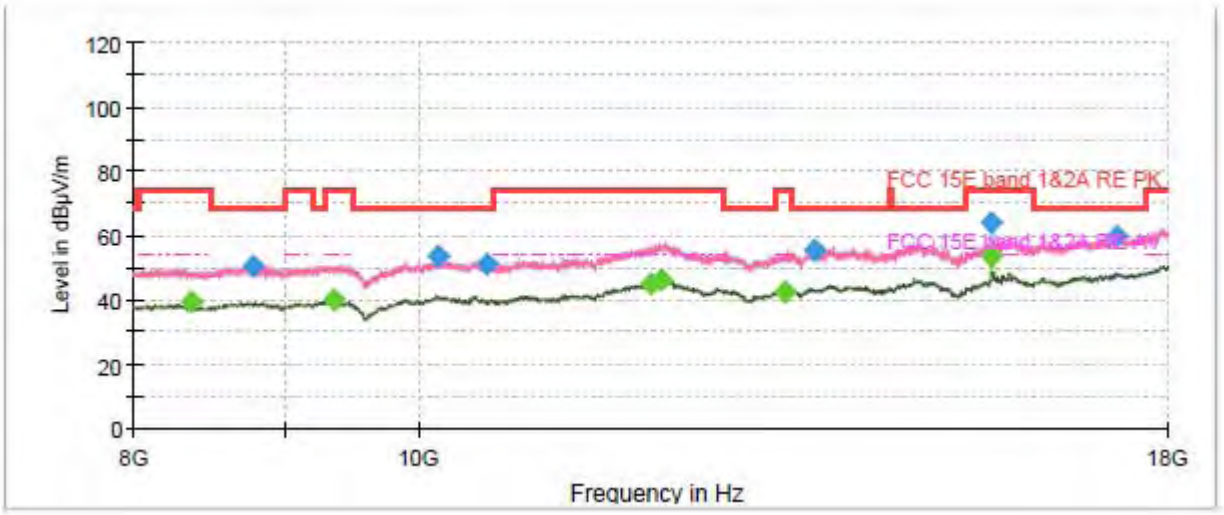
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH46



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

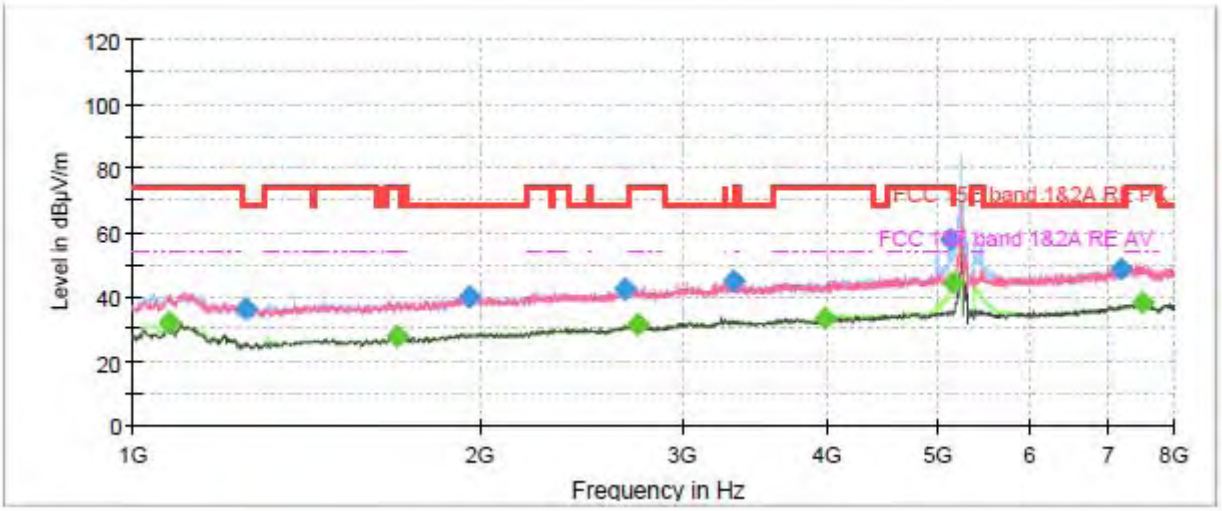


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1075.250000	---	33.15	54.00	20.85	100.0	H	48.0	-20.7
1282.625000	36.54	---	68.20	31.66	100.0	H	74.0	-19.7
1695.625000	---	28.01	54.00	25.99	200.0	H	50.0	-17.2
1931.875000	40.32	---	68.20	27.88	200.0	H	1.0	-15.9
2497.125000	---	31.30	54.00	22.70	200.0	H	331.0	-14.5
2640.625000	42.77	---	68.20	25.43	200.0	H	241.0	-14.0
3244.375000	44.67	---	68.20	23.53	200.0	V	344.0	-12.0
3996.875000	---	33.94	54.00	20.06	200.0	H	306.0	-9.5
5132.625000	59.06	---	74.00	14.94	200.0	H	115.0	-6.1
5133.500000	---	47.45	54.00	6.55	200.0	H	236.0	-6.1
7516.125000	---	38.34	54.00	15.66	200.0	H	326.0	-2.1
7861.750000	49.17	---	68.20	19.03	100.0	H	265.0	-2.0
15685.000000	---	53.66	54.00	0.34	200.0	H	226.0	6.1

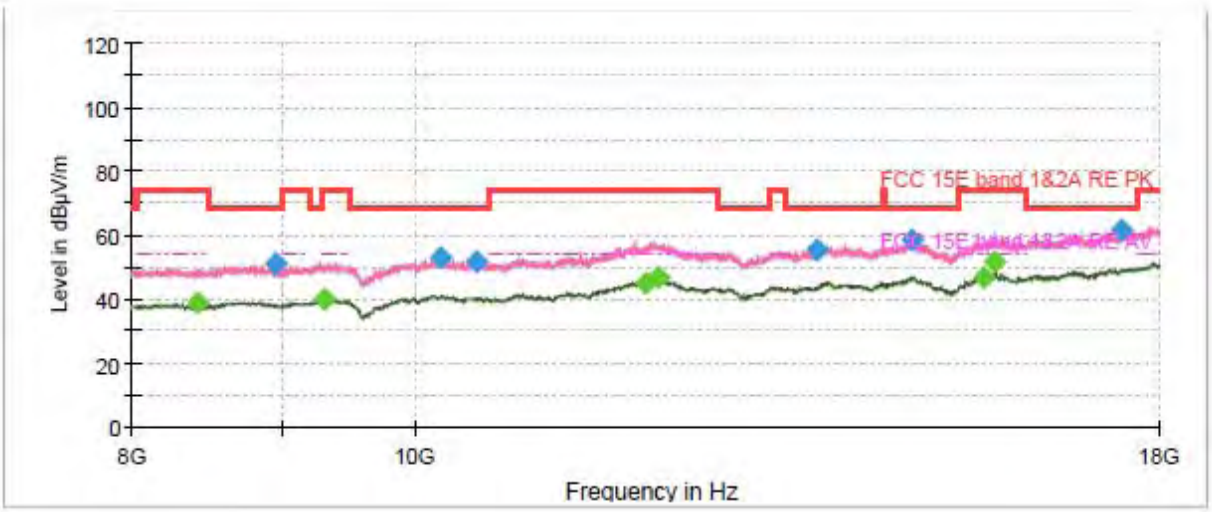
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH54



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

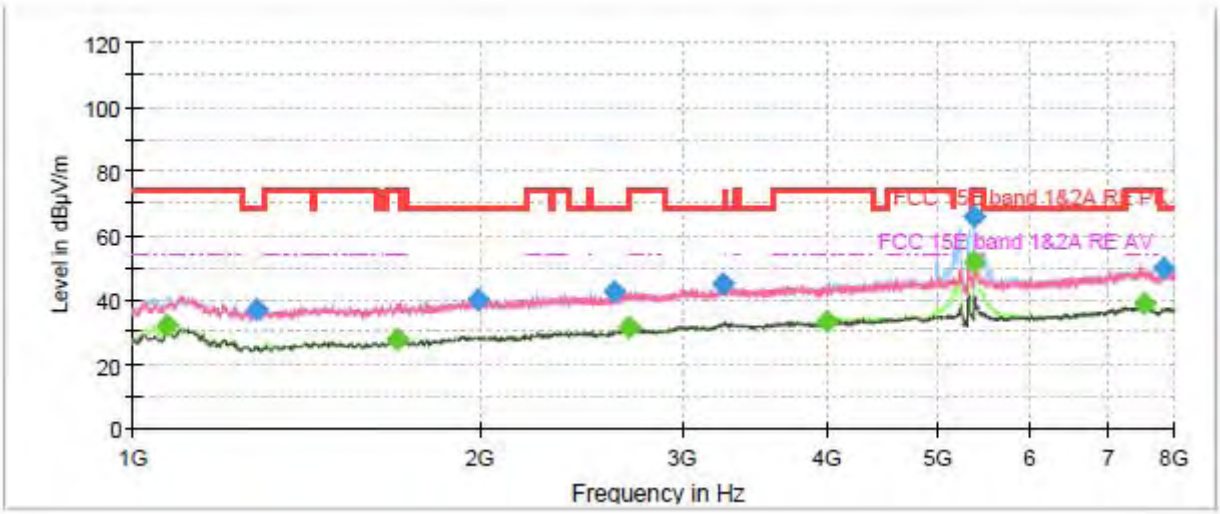


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1073.500000	---	32.12	54.00	21.88	100.0	H	45.0	-20.7
1252.875000	36.48	---	68.20	31.72	200.0	V	148.0	-19.9
1694.750000	---	27.41	54.00	26.59	200.0	H	9.0	-17.2
1960.750000	40.29	---	68.20	27.91	100.0	H	100.0	-15.8
2670.375000	42.30	---	68.20	25.90	100.0	H	202.0	-13.8
2739.500000	---	31.23	54.00	22.77	200.0	H	25.0	-13.5
3313.500000	44.69	---	68.20	23.51	200.0	V	339.0	-11.8
3988.125000	---	33.29	54.00	20.71	200.0	H	288.0	-9.6
5111.625000	57.84	---	74.00	16.16	200.0	H	235.0	-6.1
5148.375000	---	44.38	54.00	9.62	200.0	H	121.0	-6.2
7194.125000	48.91	---	68.20	19.29	200.0	V	100.0	-1.7
7498.625000	---	38.33	54.00	15.67	200.0	H	333.0	-2.1
15812.500000	---	51.50	54.00	2.50	200.0	H	191.0	6.3

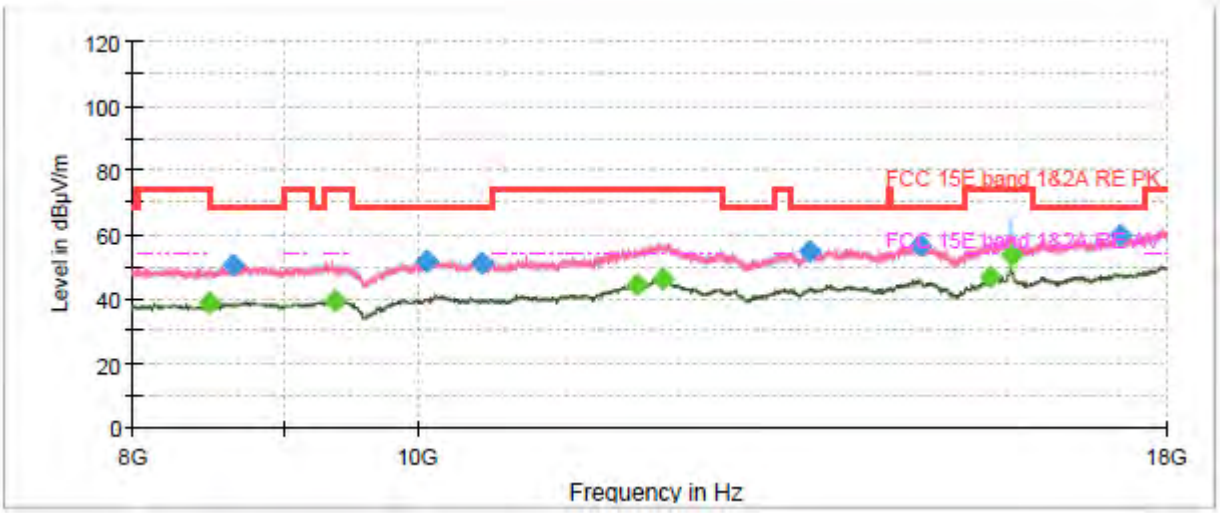
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH62



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

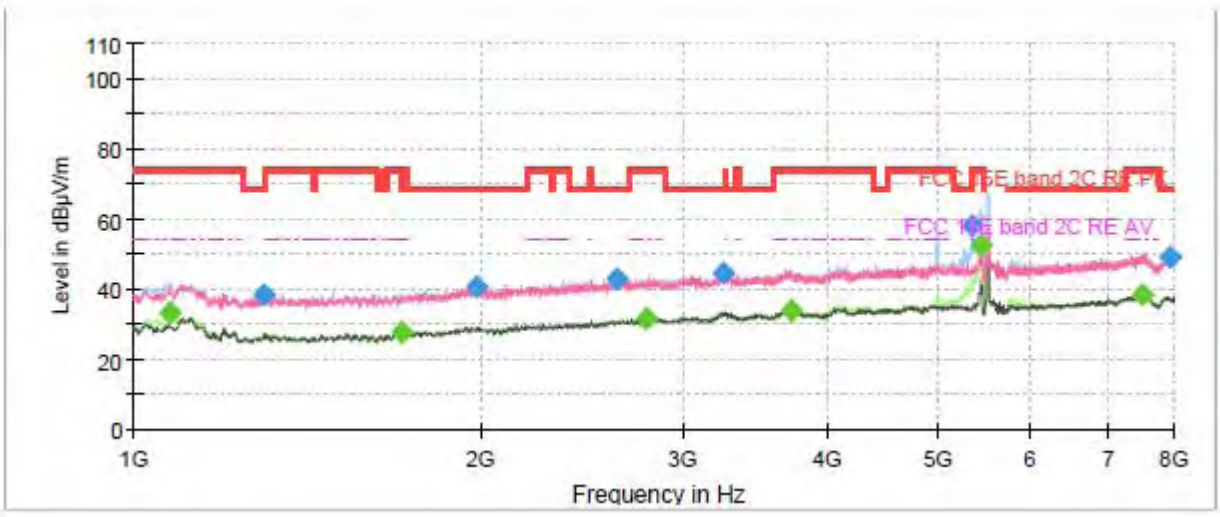


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1072.625000	---	32.09	54.00	21.91	100.0	H	42.0	-20.7
1277.375000	37.09	---	68.20	31.11	200.0	V	28.0	-19.7
1697.375000	---	27.53	54.00	26.47	200.0	H	21.0	-17.2
1994.000000	40.20	---	68.20	28.00	200.0	H	230.0	-15.6
2617.000000	42.57	---	68.20	25.63	200.0	V	194.0	-14.1
2692.250000	---	31.08	54.00	22.92	100.0	H	0.0	-13.7
3254.000000	45.00	---	68.20	23.20	200.0	V	340.0	-11.9
3997.750000	---	33.28	54.00	20.72	200.0	H	294.0	-9.5
5368.000000	65.70	---	74.00	8.30	200.0	H	78.0	-5.8
5369.750000	---	51.65	54.00	2.35	200.0	H	120.0	-5.8
7525.750000	---	38.78	54.00	15.22	200.0	H	83.0	-2.2
7819.750000	49.73	---	68.20	18.47	100.0	H	315.0	-2.1
15936.250000	---	53.52	54.00	0.48	200.0	H	227.0	6.9

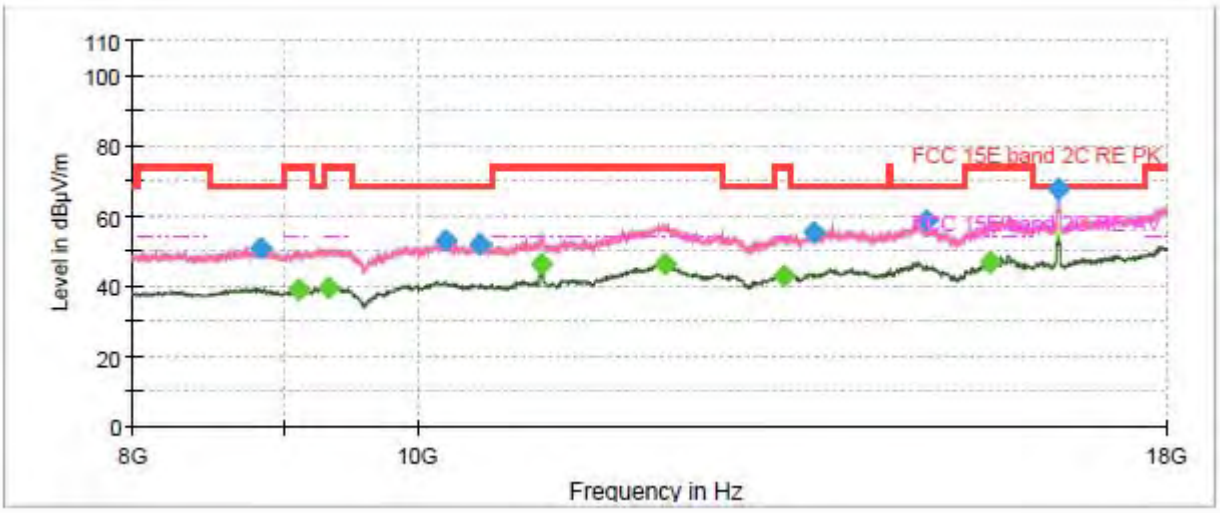
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH102



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

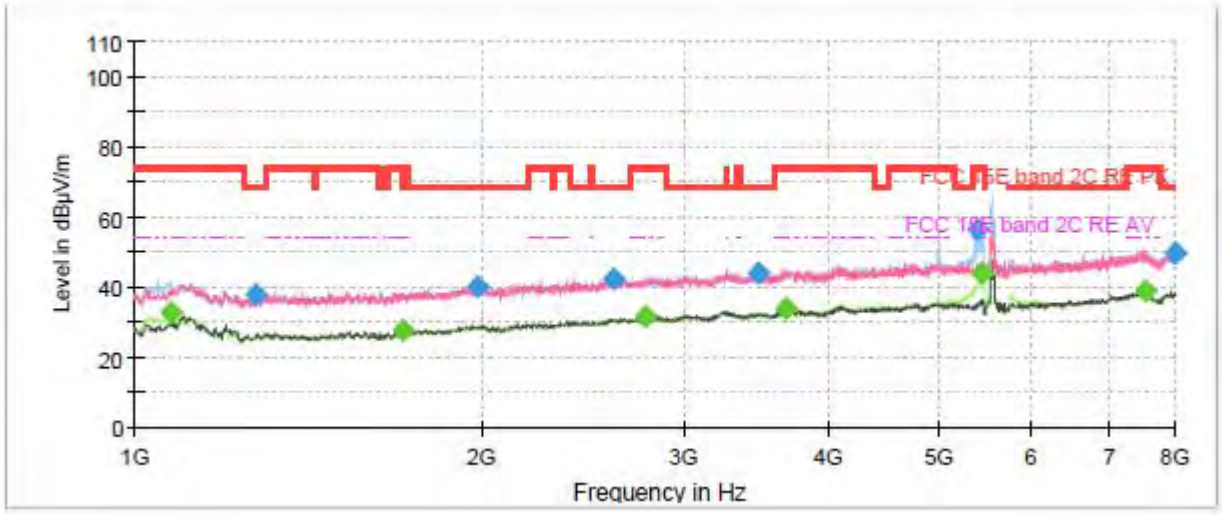


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1077.000000	---	33.03	54.00	20.97	100.0	H	45.0	-20.7
1294.000000	38.23	---	68.20	29.97	200.0	H	47.0	-19.6
1708.750000	---	27.51	54.00	26.49	100.0	H	72.0	-17.1
1980.875000	40.63	---	68.20	27.57	200.0	V	0.0	-15.7
2627.500000	42.59	---	68.20	25.61	200.0	H	0.0	-14.0
2789.375000	---	31.70	54.00	22.30	200.0	H	166.0	-13.4
3250.500000	44.41	---	68.20	23.79	200.0	V	345.0	-12.0
3716.000000	---	33.95	54.00	20.05	100.0	V	0.0	-10.2
5349.625000	58.25	---	68.20	9.95	200.0	H	78.0	-5.9
5440.625000	---	52.20	54.00	1.80	200.0	H	118.0	-5.4
7507.375000	---	38.62	54.00	15.38	200.0	V	17.0	-2.1
7930.000000	49.30	---	68.20	18.90	100.0	V	167.0	-2.1
16530.000000	67.87	---	68.20	0.33	200.0	H	47.0	11.2

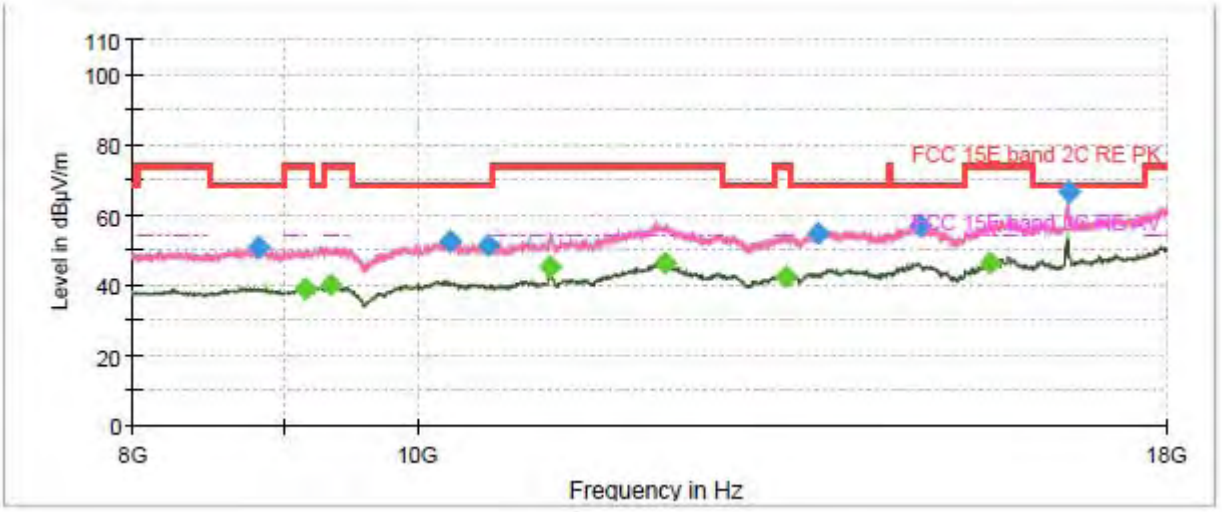
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH110



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

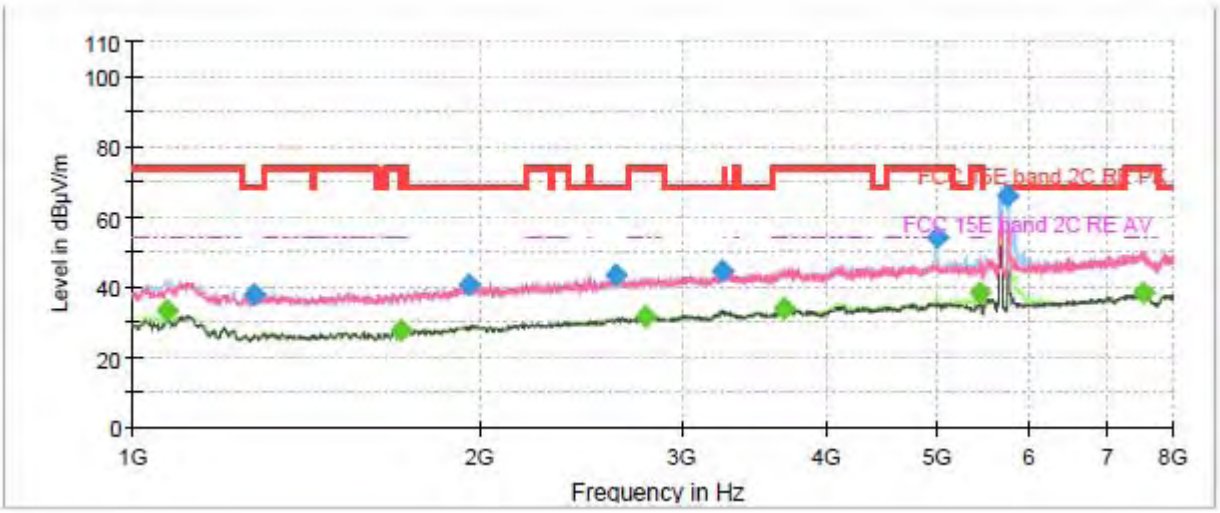


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1076.125000	---	32.69	54.00	21.31	100.0	H	50.0	-20.7
1273.875000	37.74	---	68.20	30.46	100.0	V	55.0	-19.7
1707.000000	---	27.63	54.00	26.37	200.0	H	48.0	-17.1
1980.000000	39.95	---	68.20	28.25	200.0	V	138.0	-15.7
2603.000000	42.47	---	68.20	25.73	200.0	V	307.0	-14.1
2779.750000	---	31.51	54.00	22.49	100.0	V	106.0	-13.4
3478.000000	44.18	---	68.20	24.02	100.0	V	95.0	-11.4
3677.500000	---	34.02	54.00	19.98	200.0	V	302.0	-10.2
5382.000000	56.18	---	74.00	17.82	200.0	H	84.0	-5.8
5438.875000	---	43.88	54.00	10.12	200.0	H	121.0	-5.4
7524.875000	---	38.73	54.00	15.27	200.0	V	132.0	-2.2
7999.125000	49.67	---	68.20	18.53	200.0	H	188.0	-2.2
16662.500000	66.37	---	68.20	1.83	200.0	H	48.0	10.7

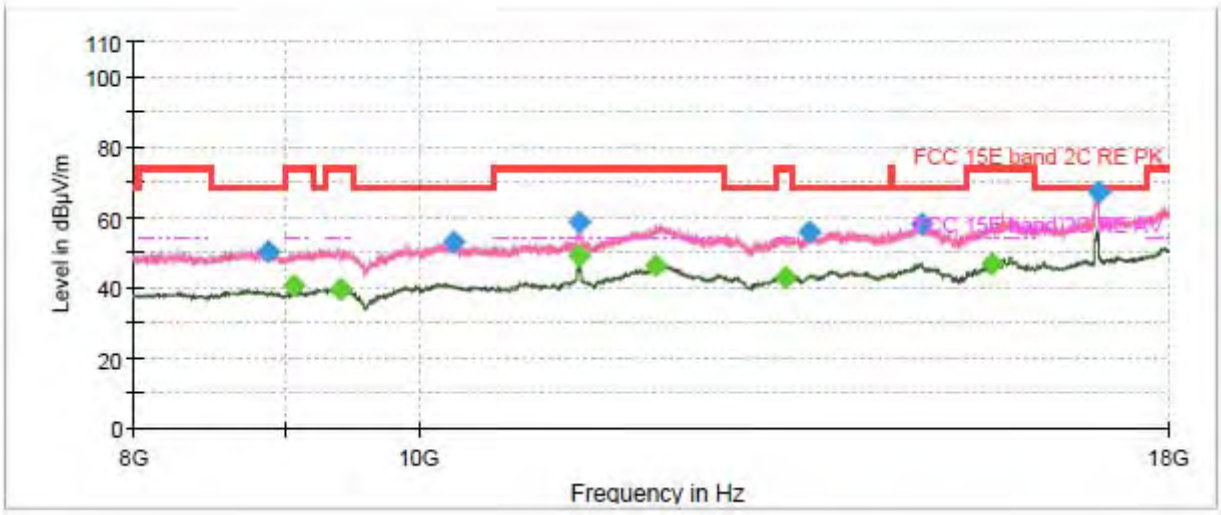
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH134



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

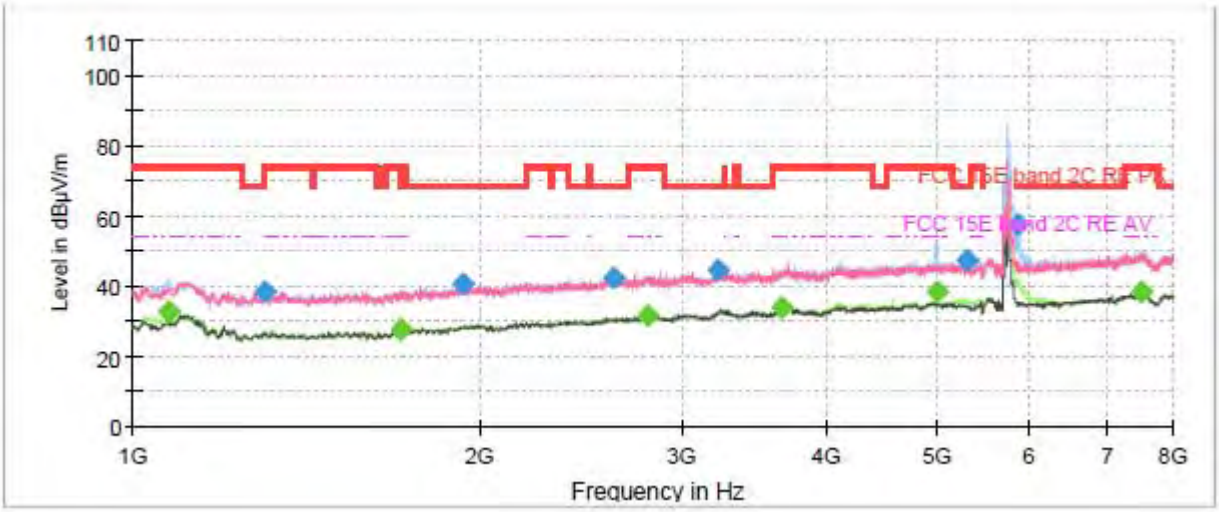


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1070.000000	---	33.47	54.00	20.53	100.0	H	40.0	-20.7
1275.625000	37.65	---	68.20	30.55	100.0	V	245.0	-19.7
1707.875000	---	27.86	54.00	26.14	200.0	V	252.0	-17.1
1960.750000	40.57	---	68.20	27.63	100.0	H	320.0	-15.8
2624.000000	43.22	---	68.20	24.98	200.0	H	163.0	-14.0
2782.375000	---	31.63	54.00	22.37	200.0	H	0.0	-13.4
3245.250000	44.59	---	68.20	23.61	200.0	H	0.0	-12.0
3674.875000	---	34.05	54.00	19.95	200.0	V	6.0	-10.2
4985.625000	54.36	---	74.00	19.64	100.0	H	298.0	-5.9
5428.375000	---	38.57	54.00	15.43	200.0	H	129.0	-5.5
5746.875000	65.84	---	68.20	2.36	200.0	H	86.0	-5.2
7543.250000	---	38.52	54.00	15.48	100.0	H	310.0	-2.2
17025.000000	66.98	---	68.20	1.22	200.0	H	45.0	6.6

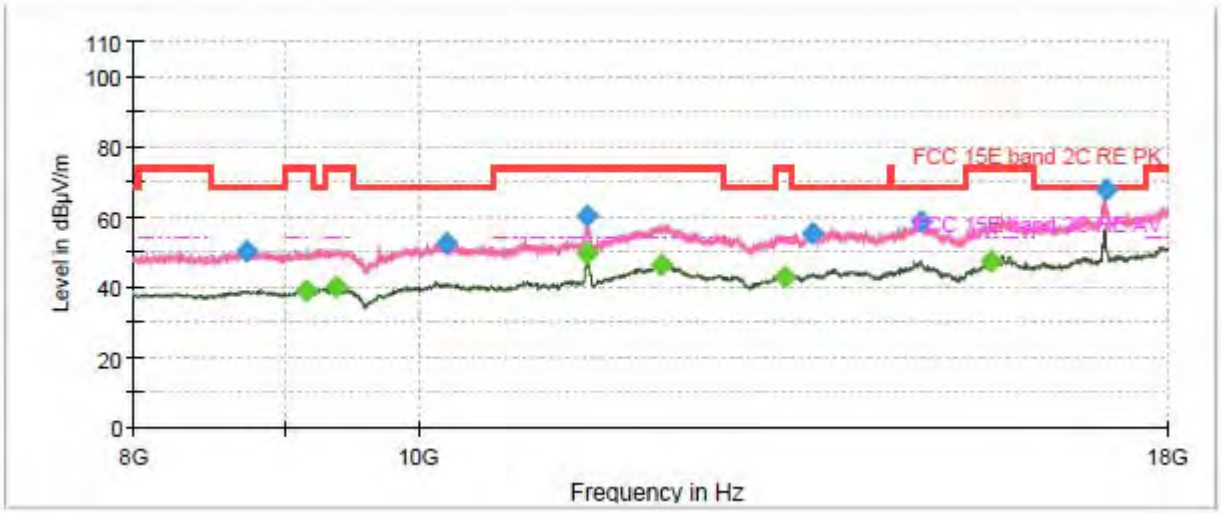
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH142



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

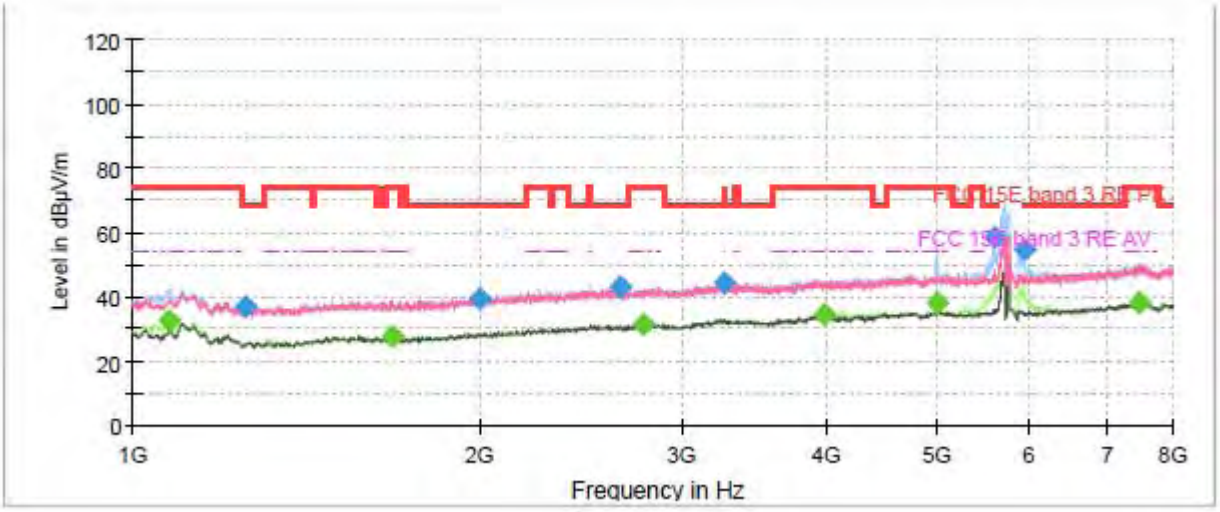


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1073.500000	---	32.94	54.00	21.06	100.0	H	45.0	-20.7
1299.250000	38.10	---	68.20	30.10	200.0	H	34.0	-19.6
1706.125000	---	27.52	54.00	26.48	100.0	V	98.0	-17.1
1931.000000	40.68	---	68.20	27.52	100.0	H	194.0	-15.9
2614.375000	42.28	---	68.20	25.92	100.0	H	315.0	-14.1
2804.250000	---	31.53	54.00	22.47	200.0	H	195.0	-13.4
3213.750000	44.59	---	68.20	23.61	200.0	H	122.0	-12.1
3665.250000	---	33.81	54.00	20.19	100.0	V	155.0	-10.2
4985.625000	---	38.30	54.00	15.70	100.0	H	305.0	-5.9
5287.500000	47.65	---	68.20	20.55	100.0	H	288.0	-6.1
5875.500000	57.59	---	68.20	10.61	200.0	H	133.0	-4.9
7517.000000	---	38.48	54.00	15.52	100.0	V	25.0	-2.1
17145.000000	67.70	---	68.20	0.50	200.0	H	42.0	6.3

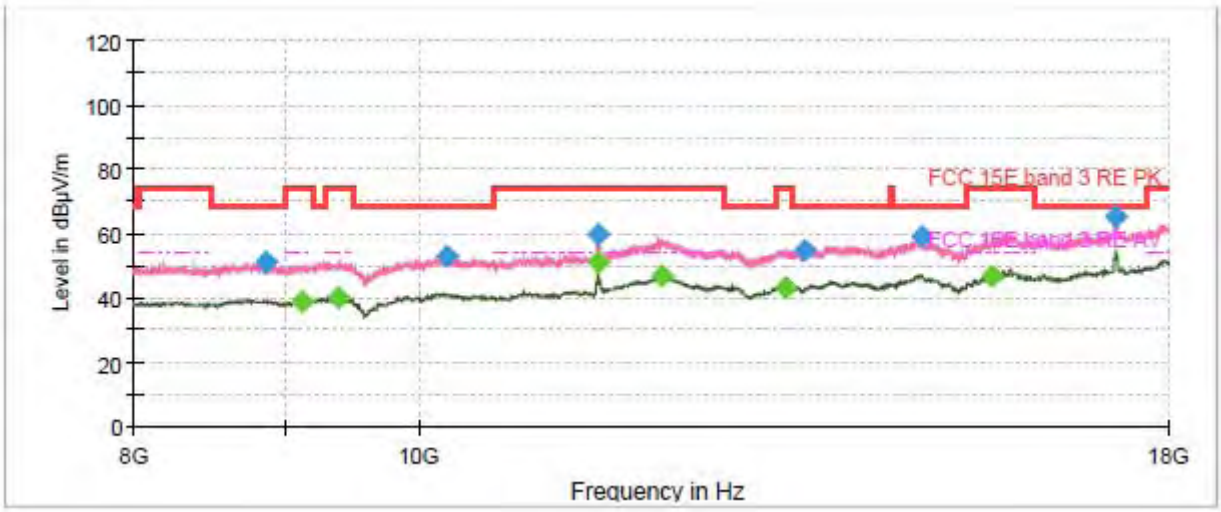
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH151



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

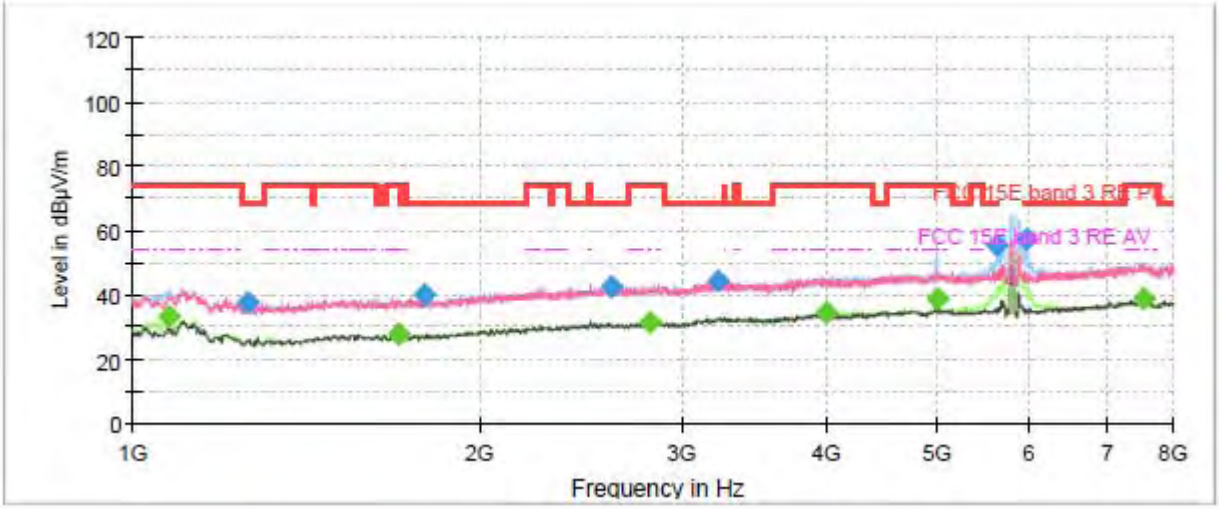


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1076.125000	---	32.90	54.00	21.10	100.0	H	43.0	-20.7
1254.625000	37.13	---	68.20	31.07	100.0	H	56.0	-19.8
1679.875000	---	27.64	54.00	26.36	200.0	H	32.0	-17.3
1998.375000	39.57	---	68.20	28.63	200.0	H	173.0	-15.6
2647.625000	42.78	---	68.20	25.42	200.0	V	62.0	-14.0
2778.875000	---	31.35	54.00	22.65	100.0	H	71.0	-13.4
3258.375000	44.56	---	68.20	23.64	100.0	V	356.0	-11.9
3981.125000	---	34.41	54.00	19.59	200.0	H	281.0	-9.7
4995.250000	---	38.37	54.00	15.63	200.0	H	300.0	-5.9
5598.125000	58.54	---	68.20	9.66	200.0	H	86.0	-5.4
5928.875000	54.48	---	68.20	13.72	100.0	H	222.0	-5.0
7468.875000	---	38.45	54.00	15.55	200.0	H	332.0	-2.1
17263.750000	65.30	---	68.20	2.90	200.0	H	34.0	7.5

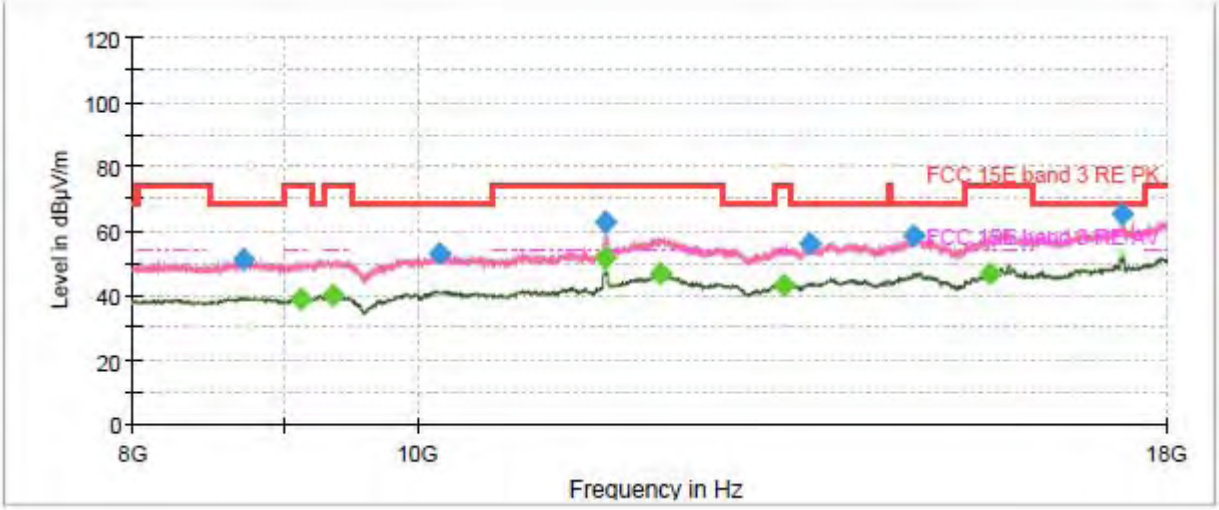
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11n (HT40) CH159



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

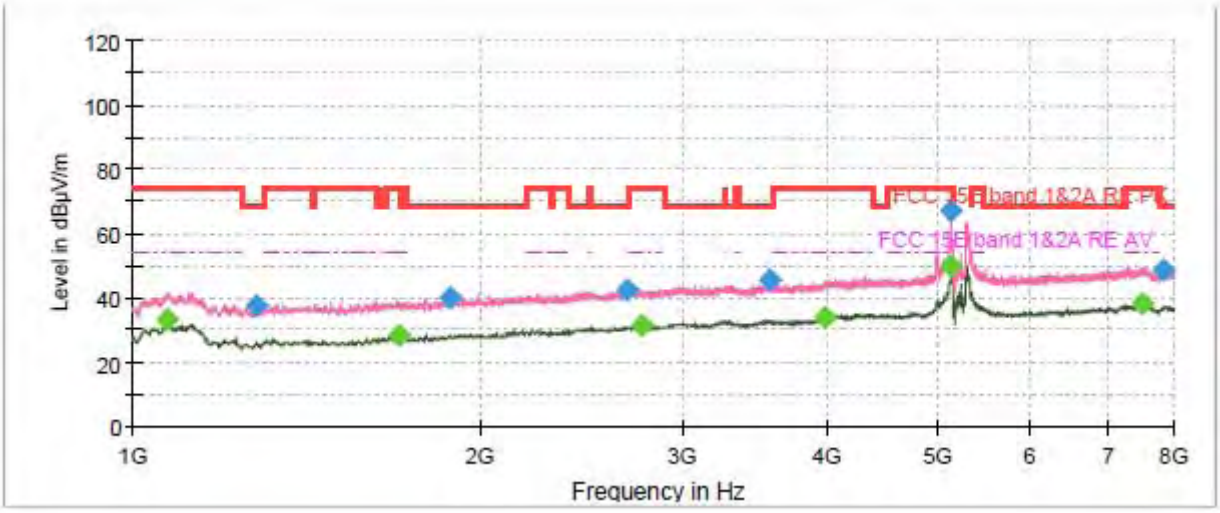


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1077.000000	---	33.03	54.00	20.97	100.0	H	42.0	-20.7
1260.750000	37.55	---	68.20	30.65	100.0	H	281.0	-19.8
1700.000000	---	27.65	54.00	26.35	100.0	H	42.0	-17.2
1793.625000	40.13	---	68.20	28.07	200.0	H	323.0	-16.6
2600.375000	42.61	---	68.20	25.59	100.0	V	250.0	-14.1
2813.000000	---	31.41	54.00	22.59	100.0	V	244.0	-13.3
3226.000000	44.33	---	68.20	23.87	200.0	V	24.0	-12.1
3998.625000	---	34.47	54.00	19.53	200.0	H	310.0	-9.5
4990.000000	---	38.62	54.00	15.38	200.0	H	304.0	-5.9
5626.125000	55.29	---	68.20	12.91	200.0	H	264.0	-5.4
5958.625000	57.06	---	68.20	11.14	200.0	H	218.0	-5.0
7522.250000	---	38.47	54.00	15.53	200.0	H	330.0	-2.2
17372.500000	65.34	---	68.20	2.86	200.0	H	278.0	7.7

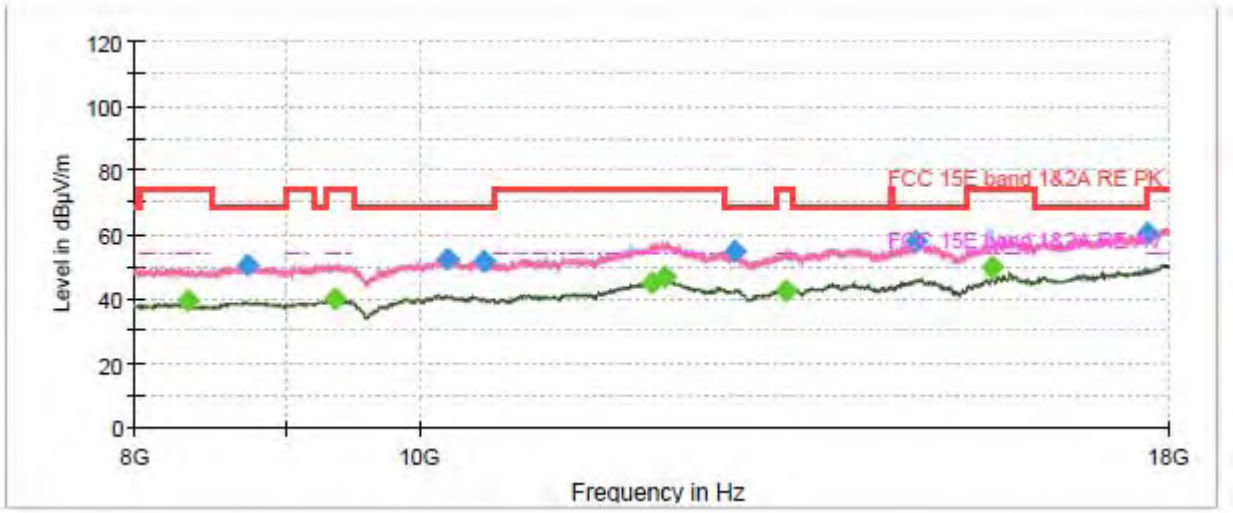
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11ac (VHT80) CH42



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

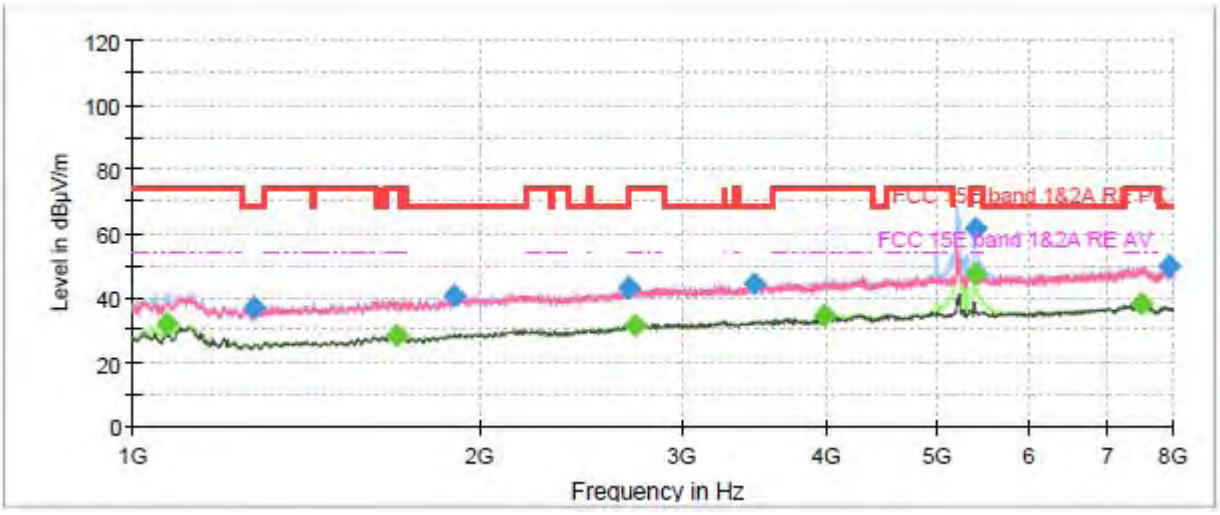


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1070.000000	---	32.94	54.00	21.06	200.0	H	47.0	-20.7
1280.000000	37.57	---	68.20	30.63	100.0	H	331.0	-19.7
1698.250000	---	28.41	54.00	25.59	100.0	H	23.0	-17.2
1882.000000	39.82	---	68.20	28.38	200.0	H	103.0	-16.2
2676.500000	42.60	---	68.20	25.60	200.0	H	21.0	-13.8
2767.500000	---	31.36	54.00	22.64	100.0	H	278.0	-13.5
3562.875000	45.47	---	68.20	22.73	200.0	H	52.0	-11.1
3986.375000	---	34.06	54.00	19.94	100.0	V	65.0	-9.6
5115.125000	66.92	---	74.00	7.08	200.0	V	114.0	-6.1
5116.875000	---	49.75	54.00	4.25	200.0	H	229.0	-6.1
7519.625000	---	38.10	54.00	15.90	100.0	H	320.0	-2.1
7832.875000	48.76	---	68.20	19.44	100.0	V	123.0	-2.0
15662.500000	---	50.11	54.00	3.89	200.0	H	201.0	6.0

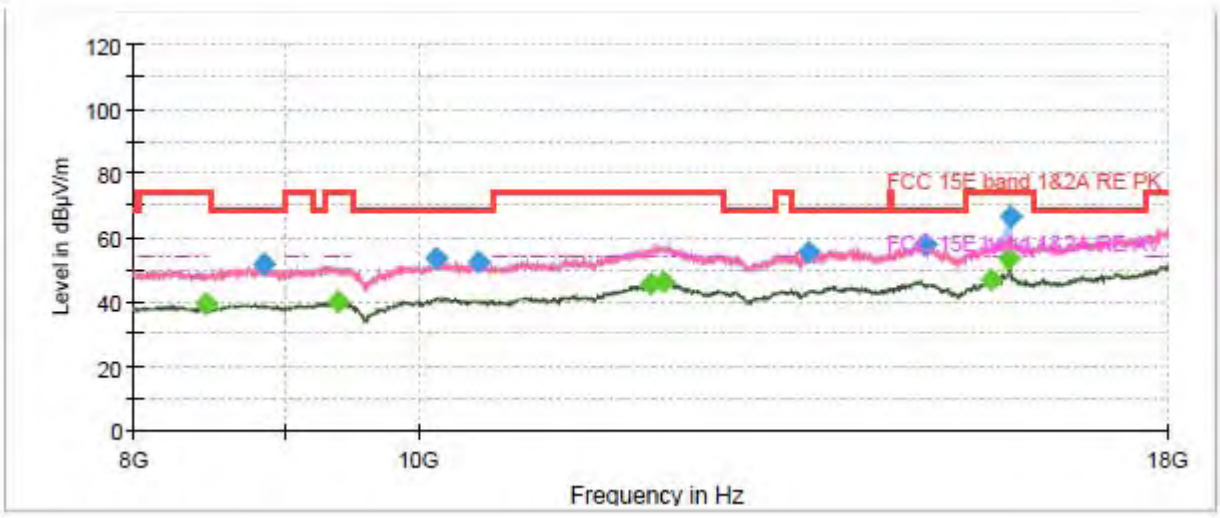
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11ac (VHT80) CH58



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

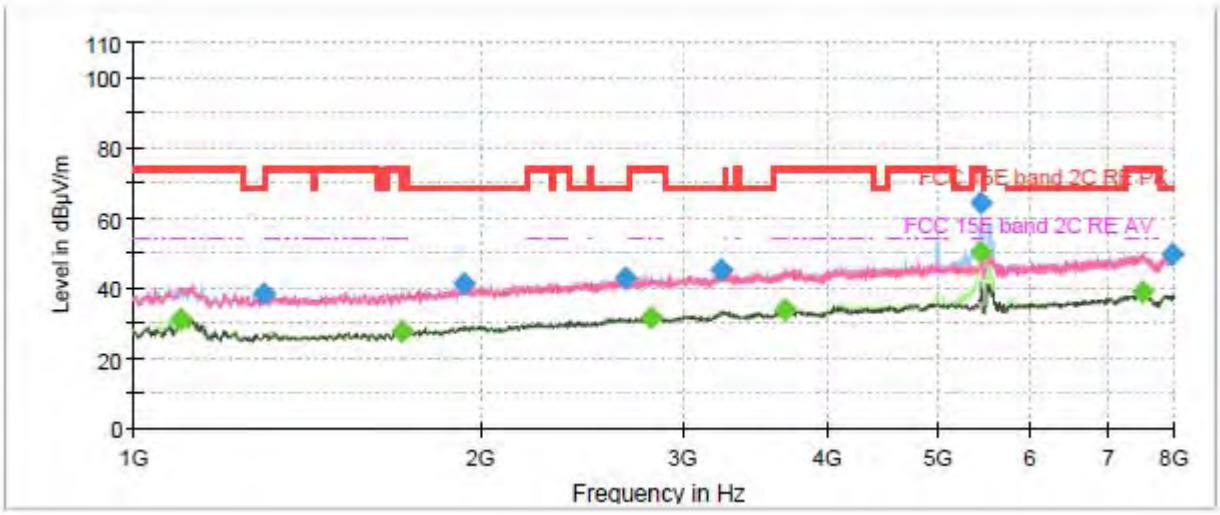


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1072.625000	---	32.00	54.00	22.00	100.0	H	50.0	-20.7
1276.500000	37.02	---	68.20	31.18	200.0	V	357.0	-19.7
1697.375000	---	28.42	54.00	25.58	100.0	H	293.0	-17.2
1897.750000	40.51	---	68.20	27.69	200.0	H	0.0	-16.1
2688.750000	43.13	---	68.20	25.07	100.0	V	218.0	-13.7
2733.375000	---	31.55	54.00	22.45	200.0	V	4.0	-13.6
3462.250000	44.24	---	68.20	23.96	100.0	H	201.0	-11.4
3988.125000	---	34.22	54.00	19.78	200.0	H	30.0	-9.6
5377.625000	---	47.37	54.00	6.63	100.0	H	77.0	-5.8
5385.500000	61.36	---	74.00	12.64	200.0	H	82.0	-5.7
7504.750000	---	38.44	54.00	15.56	200.0	V	145.0	-2.1
7930.000000	49.55	---	68.20	18.65	100.0	V	347.0	-2.1
15878.750000	---	53.62	54.00	0.38	200.0	H	240.0	6.6

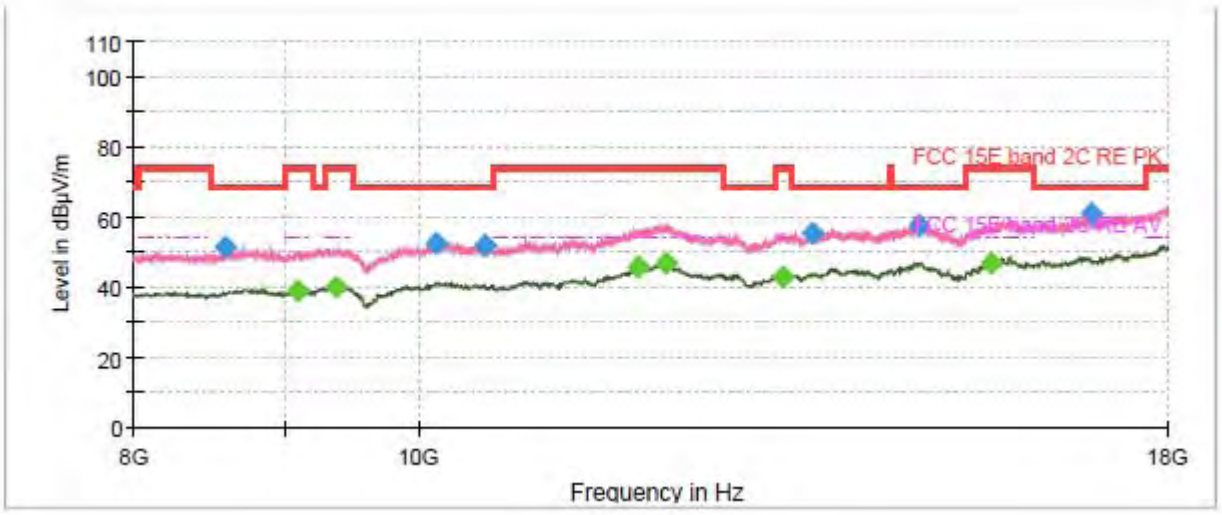
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11ac (VHT80) CH106



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

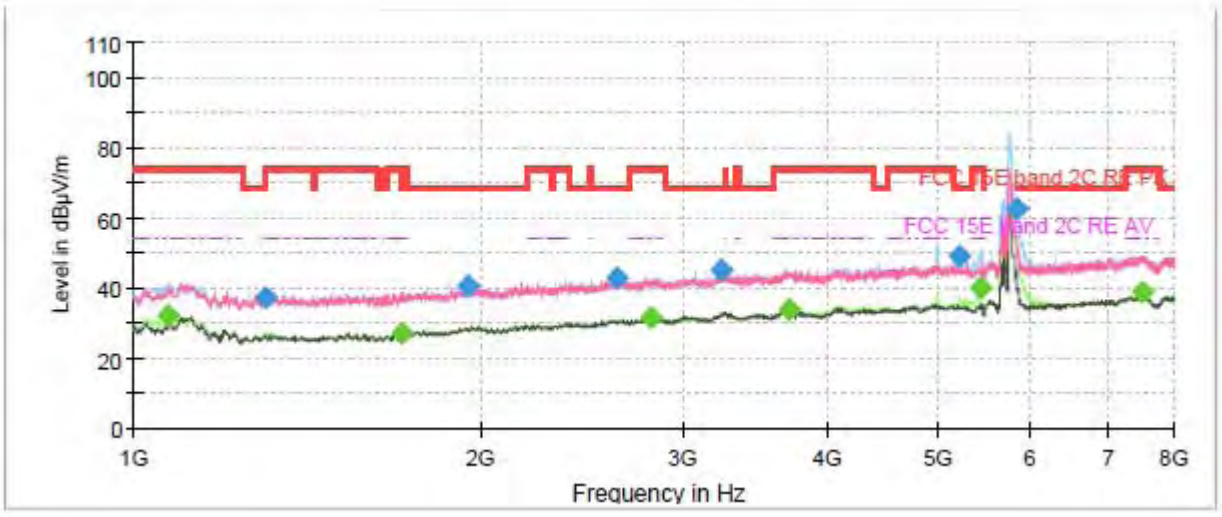


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1099.750000	---	30.81	54.00	23.19	200.0	V	357.0	-20.6
1297.500000	38.40	---	68.20	29.80	100.0	H	30.0	-19.6
1707.875000	---	27.71	54.00	26.29	200.0	H	343.0	-17.1
1930.125000	41.13	---	68.20	27.07	200.0	H	283.0	-15.9
2673.000000	43.03	---	68.20	25.17	100.0	V	299.0	-13.8
2809.500000	---	31.67	54.00	22.33	200.0	V	71.0	-13.3
3238.250000	45.05	---	68.20	23.15	200.0	V	334.0	-12.0
3674.000000	---	34.04	54.00	19.96	200.0	H	328.0	-10.2
5436.250000	64.30	---	74.00	9.70	200.0	H	219.0	-5.4
5438.000000	---	50.37	54.00	3.63	200.0	H	272.0	-5.4
7505.625000	---	39.11	54.00	14.89	200.0	V	9.0	-2.1
7978.125000	49.82	---	68.20	18.38	100.0	V	218.0	-2.2

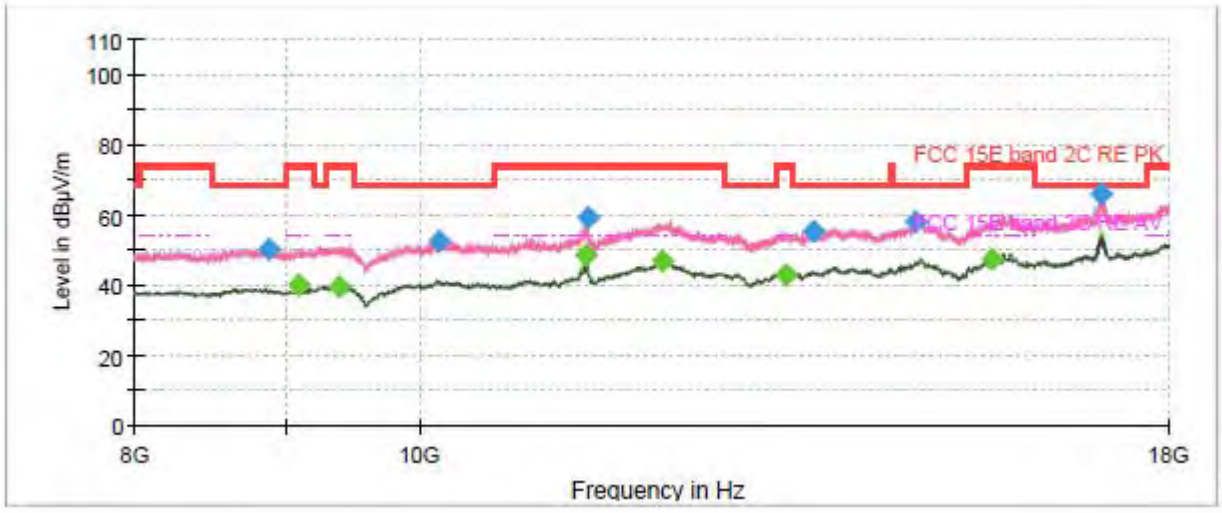
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11ac (VHT80) CH138



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

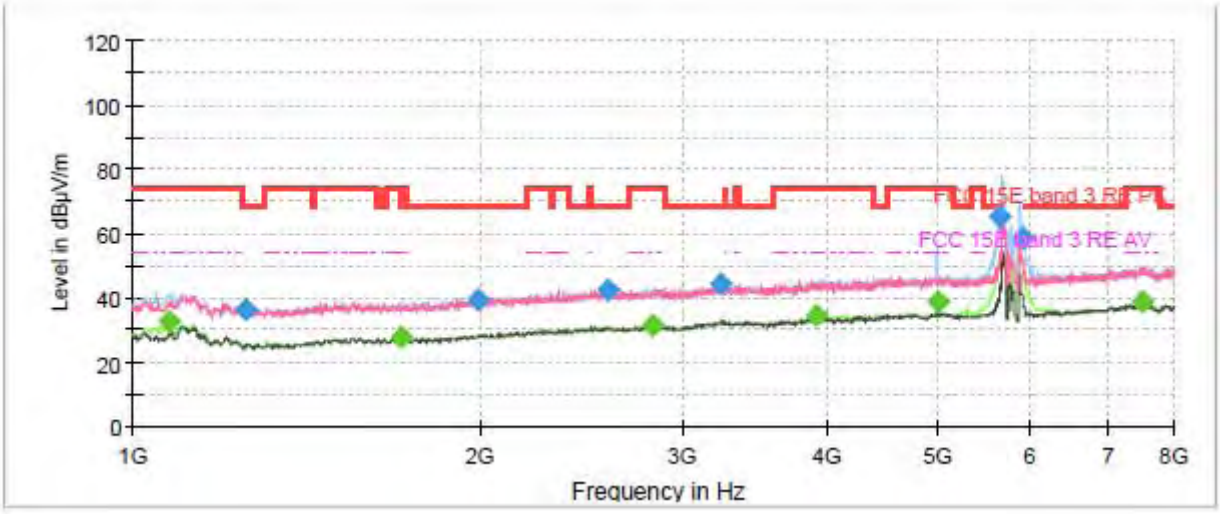


Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1070.875000	---	32.39	54.00	21.61	100.0	H	47.0	-20.7
1299.250000	37.30	---	68.20	30.90	100.0	H	202.0	-19.6
1708.750000	---	27.31	54.00	26.69	200.0	H	25.0	-17.1
1945.875000	40.49	---	68.20	27.71	100.0	H	243.0	-15.9
2624.000000	42.65	---	68.20	25.55	100.0	H	311.0	-14.0
2810.375000	---	31.65	54.00	22.35	100.0	H	0.0	-13.3
3237.375000	45.04	---	68.20	23.16	200.0	H	31.0	-12.0
3701.125000	---	33.69	54.00	20.31	100.0	V	213.0	-10.2
5210.500000	48.82	---	68.20	19.38	200.0	H	118.0	-6.1
5434.500000	---	40.21	54.00	13.79	200.0	H	118.0	-5.5
5851.875000	62.59	---	68.20	5.61	200.0	H	129.0	-5.0
7517.000000	---	38.69	54.00	15.31	200.0	H	63.0	-2.1
17051.250000	66.24	---	68.20	1.96	200.0	H	50.0	6.5

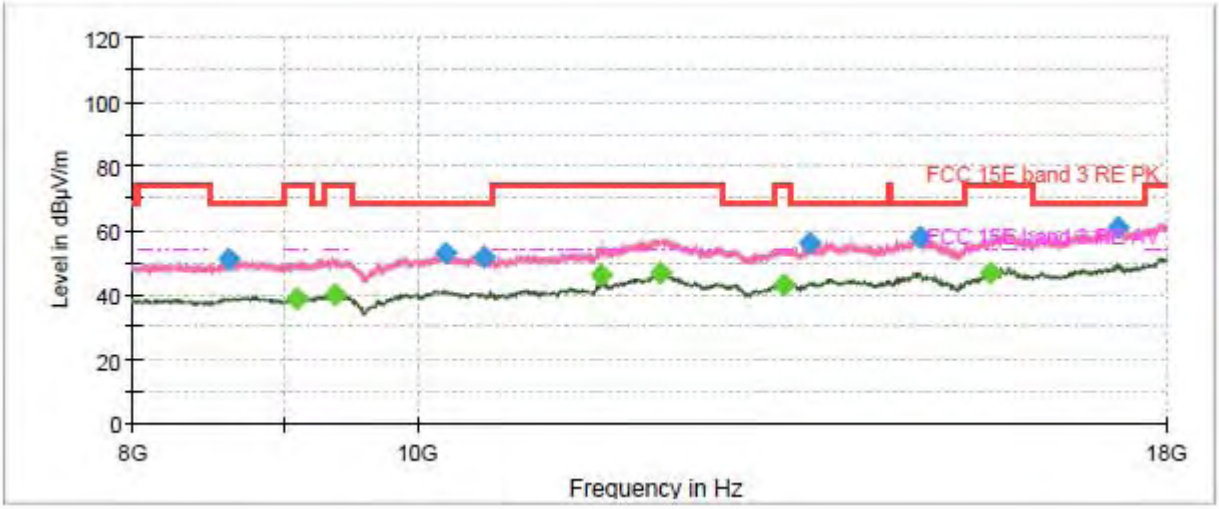
Remark: 1. Correction Factor = Antenna factor+ Insertion loss (cable loss + amplifier gain)

802.11ac (VHT80) CH155



Radiates Emission from 1GHz to 8GHz

Note: The signal beyond the limit is carrier.

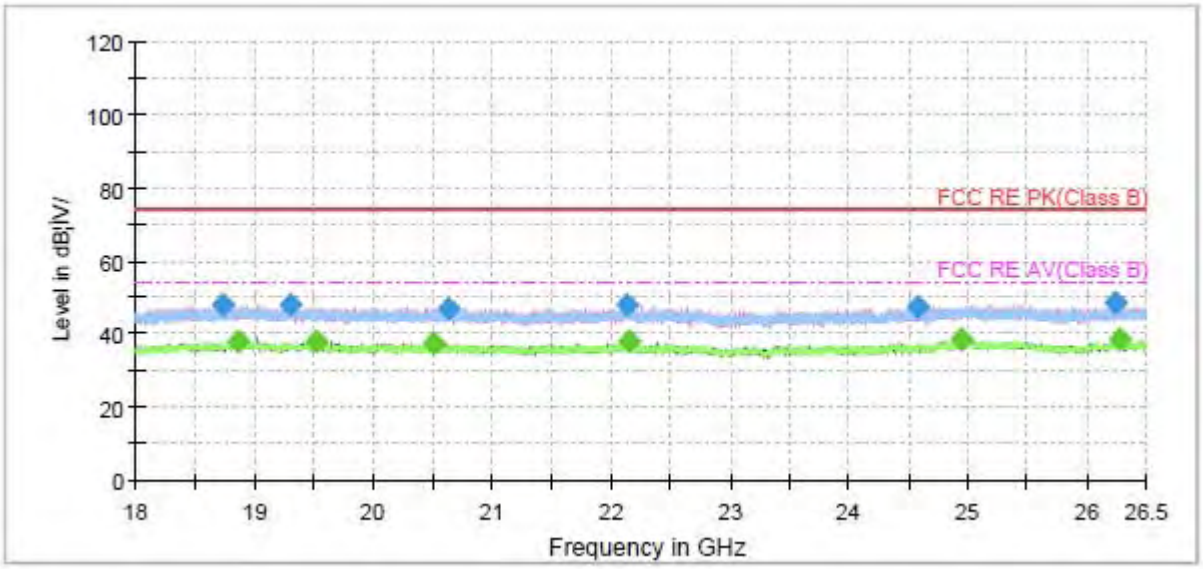


Radiates Emission from 8GHz to 18GHz

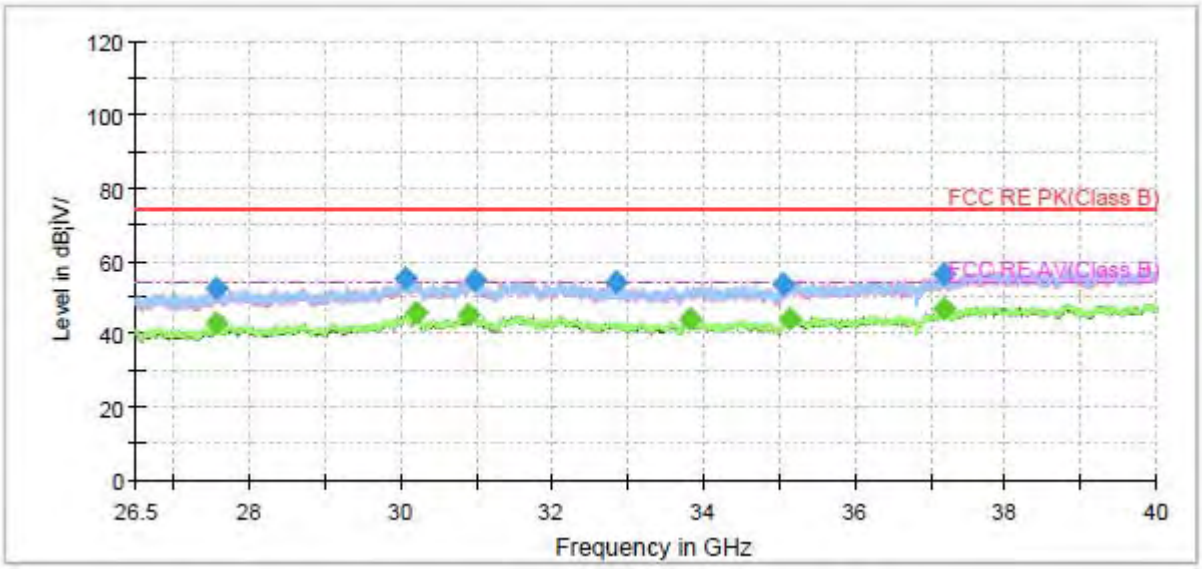
Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
1076.125000	---	32.64	54.00	21.36	100.0	H	49.0	-20.7
1253.750000	36.57	---	68.20	31.63	200.0	V	16.0	-19.8
1705.250000	---	27.44	54.00	26.56	100.0	H	49.0	-17.1
1994.000000	39.35	---	68.20	28.85	200.0	H	155.0	-15.6
2585.500000	42.53	---	68.20	25.67	200.0	V	216.0	-14.2
2827.000000	---	31.09	54.00	22.91	100.0	H	30.0	-13.2
3235.625000	44.14	---	68.20	24.06	200.0	H	300.0	-12.0
3914.625000	---	34.20	54.00	19.80	100.0	H	12.0	-9.8
4989.125000	---	38.85	54.00	15.15	200.0	H	288.0	-5.9
5649.750000	65.31	---	68.20	2.89	200.0	H	264.0	-5.3
5926.250000	58.39	---	68.20	9.81	200.0	H	219.0	-5.0
7496.000000	---	38.50	54.00	15.50	200.0	H	331.0	-2.1

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

During the test, the Radiates Emission from 18GHz to 40GHz was performed in all modes with all channels, 802.11a, Channel 64 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Radiates Emission from 18GHz to 26.5GHz



Radiates Emission from 26.5GHz to 40GHz

Frequency (MHz)	Peak (dBuV/m)	Average (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
18740.066667	48.01	---	74.00	25.99	200.0	V	276.0	-4.8
18861.050000	---	38.15	54.00	15.85	100.0	H	128.0	-4.8
19296.533333	48.03	---	74.00	25.97	200.0	H	353.0	-4.6
19517.816667	---	37.76	54.00	16.24	100.0	H	0.0	-4.6
20510.050000	---	37.39	54.00	16.61	100.0	V	60.0	-3.5
20624.233333	46.80	---	74.00	27.20	100.0	V	336.0	-3.5
22133.266667	47.81	---	74.00	26.19	200.0	V	312.0	-2.2
22148.283333	---	37.90	54.00	16.10	200.0	H	12.0	-2.2
24574.183333	47.67	---	74.00	26.33	100.0	V	232.0	-0.7
24952.433333	---	38.48	54.00	15.52	100.0	V	266.0	-0.1
26243.583333	48.35	---	74.00	25.65	200.0	H	157.0	-0.6
26289.766667	---	38.28	54.00	15.72	100.0	V	46.0	-0.5

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

5.6. Conducted Emission

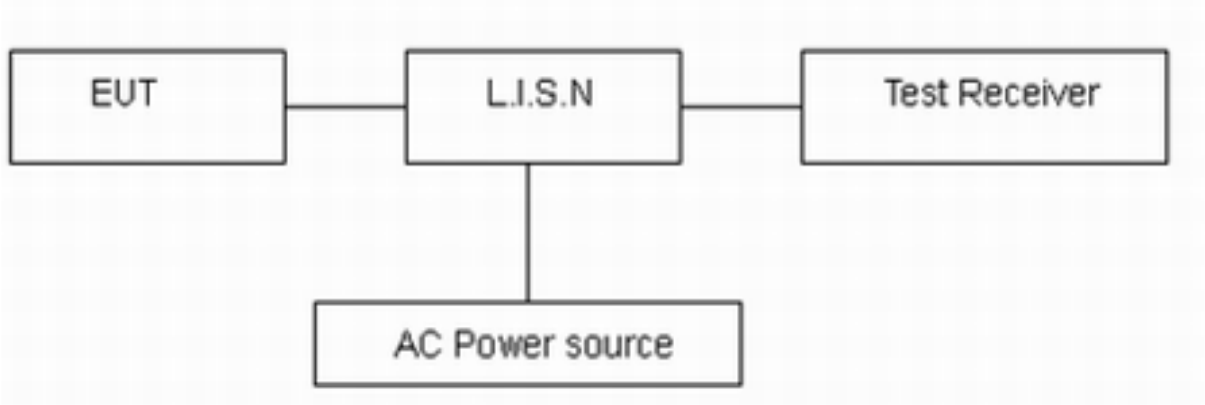
Ambient condition

Temperature	Relative humidity	Pressure
23°C ~25°C	45%~50%	101.5kPa

Methods of Measurement

The EUT IS placed on a non-metallic table of 80cm height above the horizontal metal reference ground plane. During the test, the EUT was operating in its typical mode. The test method is according to ANSI C63.10.Connect the AC power line of the EUT to the LISN Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9kHz, VBW is set to 30kHz The measurement result should include both L line and N line.
The test is in transmitting mode.

Test Setup



Note: AC Power source is used to change the voltage 110V/60Hz.

Limits

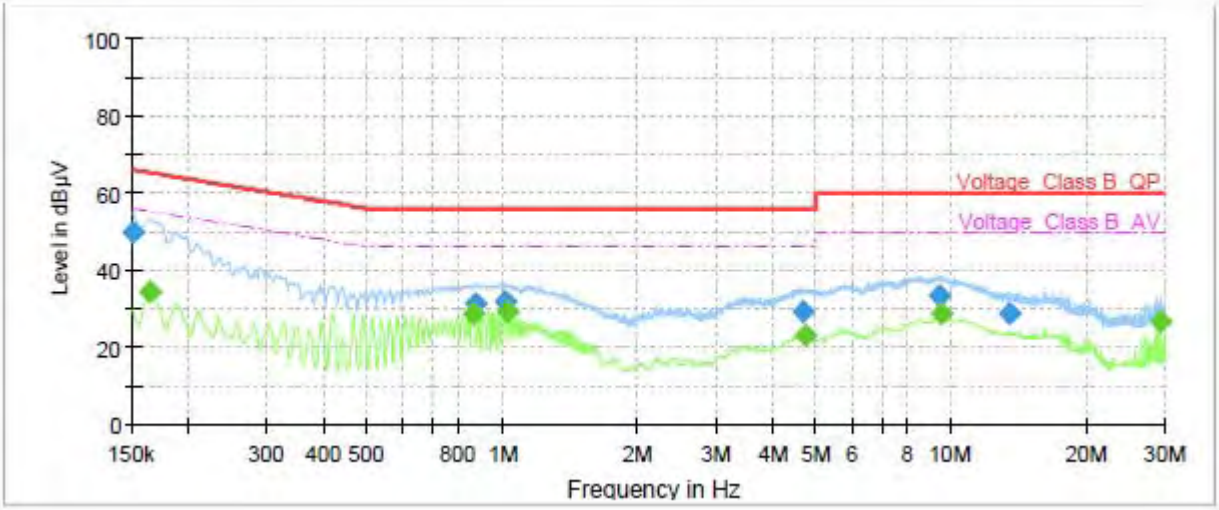
Frequency (MHz)	Conducted Limits(dBμV)	
	Quasi-peak	Average
0.15 - 0.5	66 to 56 *	56 to 46*
0.5 - 5	56	46
5 - 30	60	50
*: Decreases with the logarithm of the frequency.		

Measurement Uncertainty

The assessed measurement uncertainty to ensure 95% confidence level for the normal distribution is with the coverage factor k = 1.96, U= 2.69 dB.

Test Results:

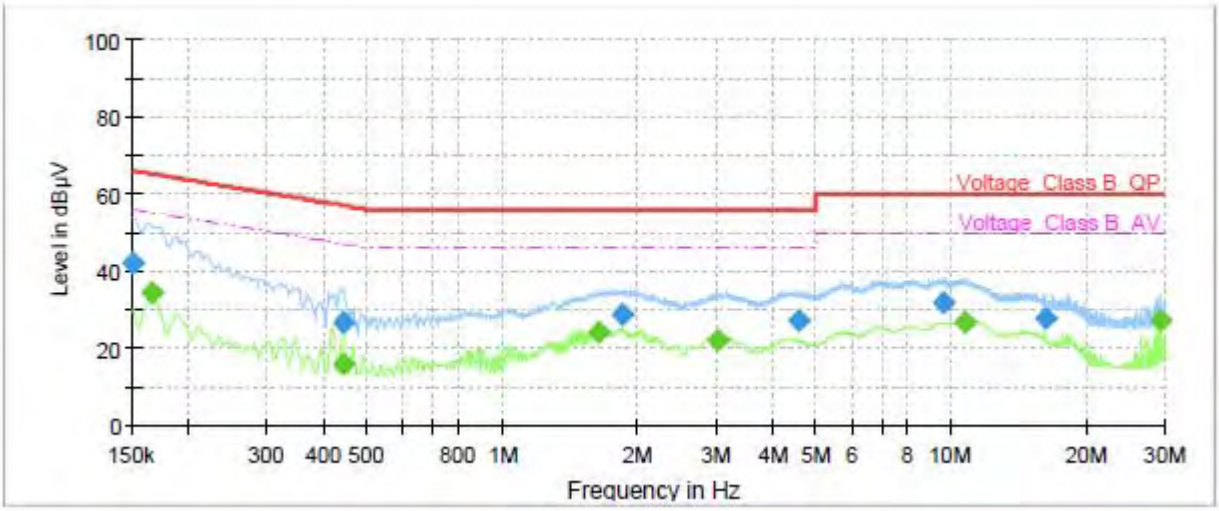
Following plots, Blue trace uses the peak detection and Green trace uses the average detection. During the test, the Conducted Emission was performed in all modes with all channels, 802.11a, Channel 64 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	49.98	---	66.00	16.02	70.0	9.000	L1	ON	21
0.16	---	34.43	55.28	20.86	70.0	9.000	L1	ON	21
0.86	---	28.50	46.00	17.50	70.0	9.000	L1	ON	20
0.87	31.36	---	56.00	24.64	70.0	9.000	L1	ON	20
1.02	31.73	---	56.00	24.27	70.0	9.000	L1	ON	20
1.03	---	29.41	46.00	16.59	70.0	9.000	L1	ON	20
4.70	29.11	---	56.00	26.89	70.0	9.000	L1	ON	19
4.76	---	23.00	46.00	23.00	70.0	9.000	L1	ON	19
9.39	33.42	---	60.00	26.58	70.0	9.000	L1	ON	20
9.51	---	28.48	50.00	21.52	70.0	9.000	L1	ON	20
13.48	28.88	---	60.00	31.12	70.0	9.000	L1	ON	20
29.24	---	26.81	50.00	23.19	70.0	9.000	L1	ON	20

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 KHz to 30 MHz



Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	42.05	---	66.00	23.95	70.0	9.000	N	ON	21
0.17	---	34.53	55.17	20.64	70.0	9.000	N	ON	21
0.44	---	15.98	47.06	31.08	70.0	9.000	N	ON	20
0.44	26.56	---	56.97	30.41	70.0	9.000	N	ON	20
1.63	---	24.00	46.00	22.00	70.0	9.000	N	ON	20
1.86	28.63	---	56.00	27.37	70.0	9.000	N	ON	20
3.03	---	21.96	46.00	24.04	70.0	9.000	N	ON	19
4.57	27.00	---	56.00	29.00	70.0	9.000	N	ON	19
9.60	31.77	---	60.00	28.23	70.0	9.000	N	ON	20
10.79	---	26.91	50.00	23.09	70.0	9.000	N	ON	20
16.23	27.52	---	60.00	32.48	70.0	9.000	N	ON	20
29.24	---	27.01	50.00	22.99	70.0	9.000	N	ON	20

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 KHz to 30 MHz

6. Main Test Instruments

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Spectrum Analyzer	R&S	FSV40	15195-01-00	2021-05-15	2022-05-14
EMI Test Receiver	R&S	ESCI	100948	2021-05-15	2022-05-14
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2020-04-02	2023-04-01
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	391	2019-12-16	2022-12-15
Horn Antenna	R&S	HF907	102723	2018-08-11	2021-08-10
Horn Antenna	ETS-Lindgren	3160-09	00102643	2018-06-20	2023-06-19
Standard Gain Horn	STEATITE	QSH-SL-26-40 -K-15	16779	2019-12-24	2022-12-23
Broadband Horn Antenna	SCHWARZBECK	BBHA 9120D	430	2018-07-07	2023-07-06
EMI Test Receiver	R&S	ESR	101667	2021-05-16	2022-05-15
LISN	R&S	ENV216	101171	2018-12-15	2021-12-14
Spectrum Analyzer	KEYSIGHT	N9020A	MY54420163	2020-12-13	2021-12-12
RF Cable	Agilent	SMA 15cm	0001	2021-06-09	2021-12-08
TEMPERATURE CHAMBER	WEISS	VT4002	582261194500 10	2020-12-13	2021-12-12
Power Meter	R&S	NRP	104306	2021-05-15	2022-05-14
Power Sensor	R&S	NRP-Z21	104799	2021-05-15	2022-05-14
DC Power Supply	GWINSTEK	GPS-3030D	GEP882653	2021-05-15	2022-05-14
Software	R&S	EMC32	9.26.0	/	/

********END OF REPORT ********

ANNEX A: The EUT Appearance

The EUT Appearance are submitted separately.

ANNEX B: Test Setup Photos

The Test Setup Photos are submitted separately.