

ANNEX A: Test Result

1. Unwanted Emission

The radiated 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 lie-down position (X axis) and the loop antenna is vertical, the others are vertical and horizontal. and the worst case was recorded.

1.1. Wi-Fi 5GHz

The following graphs display the maximum values of horizontal and vertical by software.

Blue trace uses the peak detection, Green trace uses the average detection.

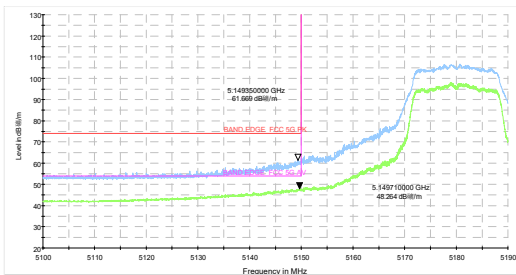
The modulation and bandwidth are similar for 802.11n mode for 20MHz/40MHz and 802.11ac mode for V20MHz/V40MHz, therefore investigated worst case to representative mode in test report.

A symbol ($\text{dB}\mu\text{V/m}$) in the test plot below means ($\text{dB}\mu\text{V/m}$)

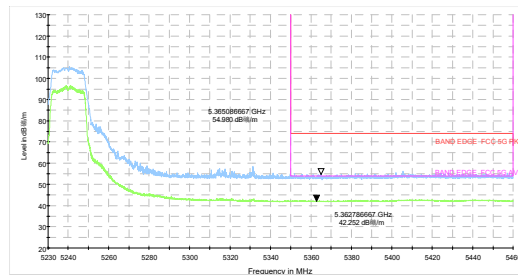
The signal beyond the limit is carrier.

U-NII-1

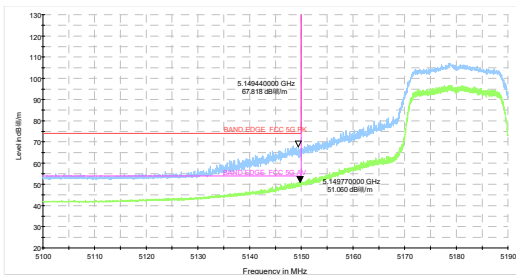
802.11a-Channel 36: Peak + Average



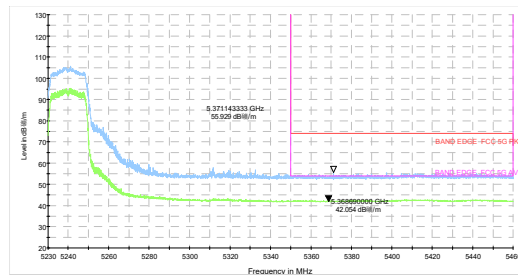
802.11a-Channel 48: Peak + Average



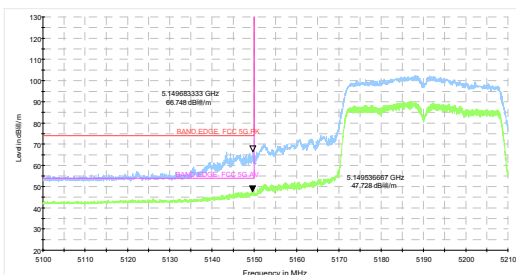
802.11n HT20-Channel 36: Peak + Average



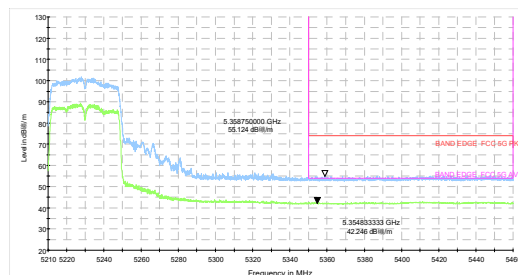
802.11n HT20-Channel 48: Peak + Average



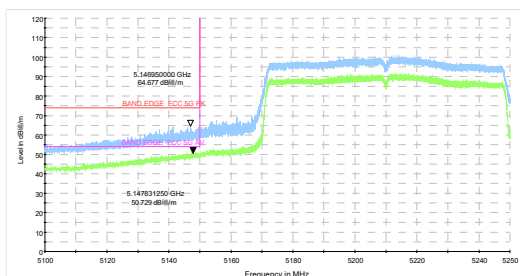
802.11n HT40-Channel 38: Peak + Average



802.11n HT40-Channel 46: Peak + Average

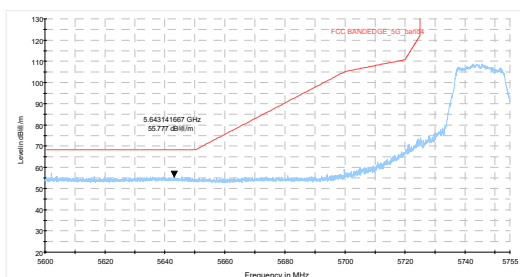


802.11ac VHT80 –Channel 42: Peak + Average

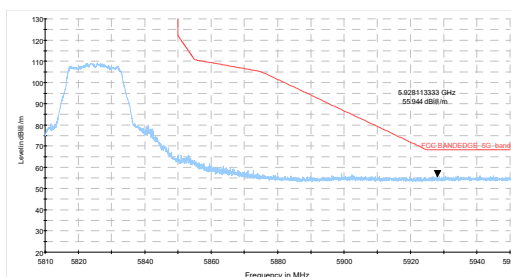


U-NII-3

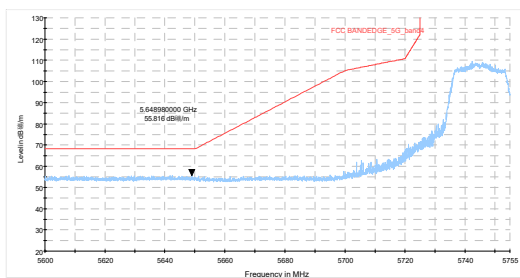
802.11a-Channel 149: Peak



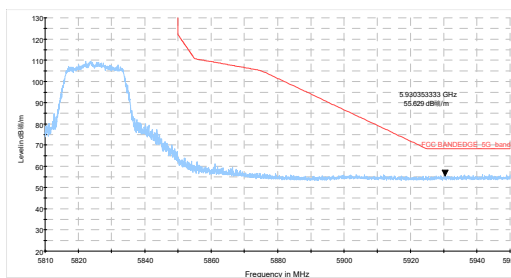
802.11a-Channel 165: Peak



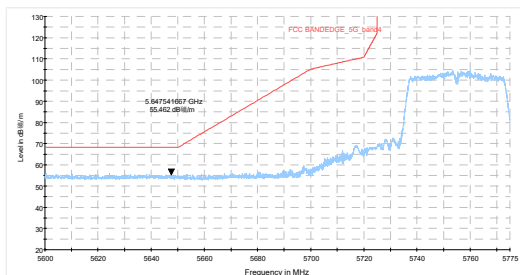
802.11n HT20-Channel 149: Peak



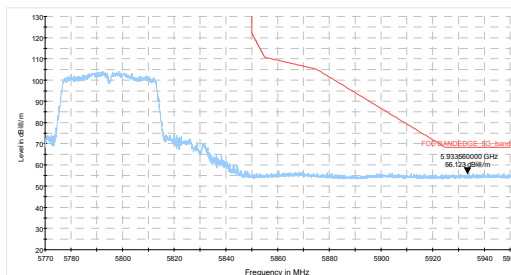
802.11n HT20-Channel 165: Peak



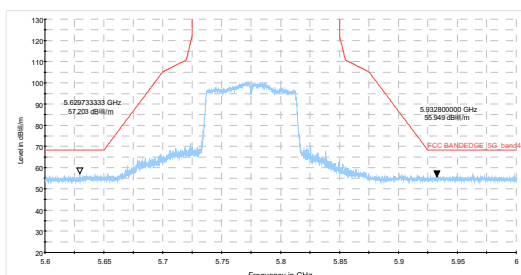
802.11n HT40-Channel 151: Peak



802.11n HT40-Channel 159: Peak



802.11ac VHT80- Channel 155: Peak



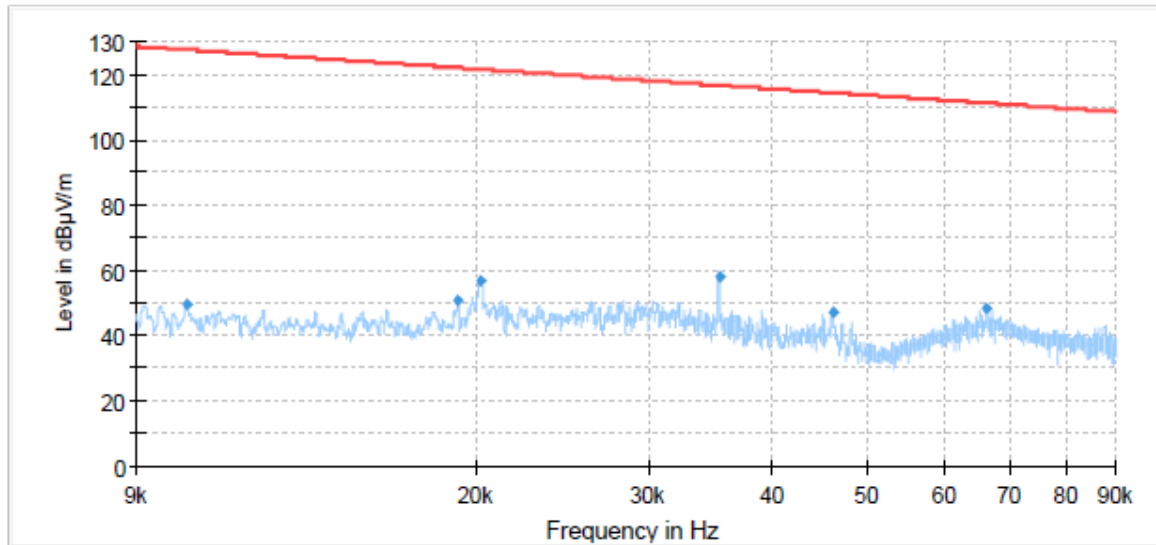
Result of RE

Test result

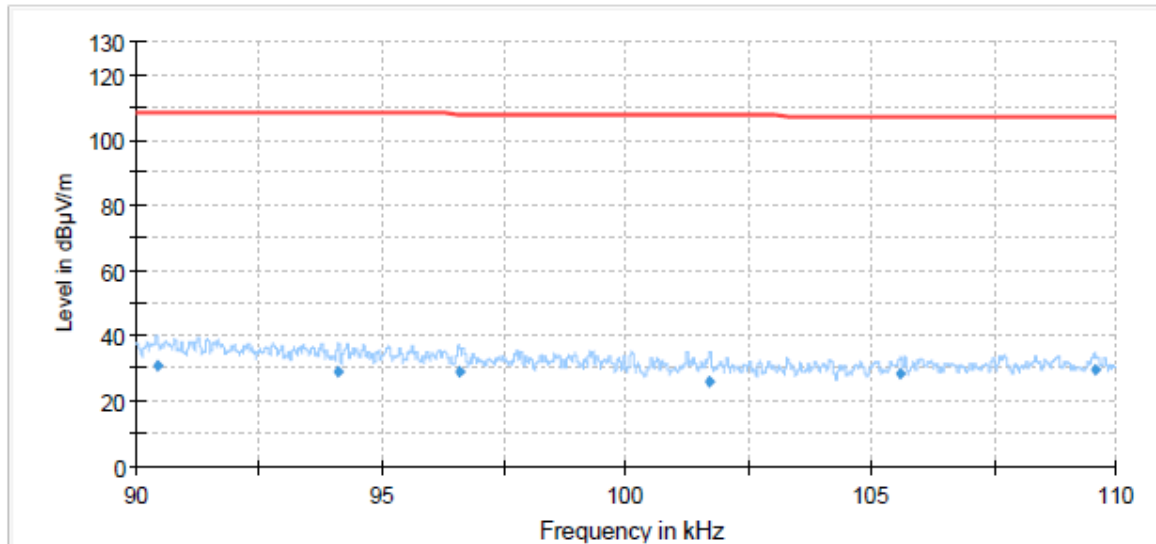
Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier, the Emissions in the frequency 18GHz-40GHz are more than 20dB below the limit are not reported.

During the test, the Radiates Emission from 9kHz to 1GHz was performed in all modes with all channels, **802.11ac (VHT80) CH42** are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

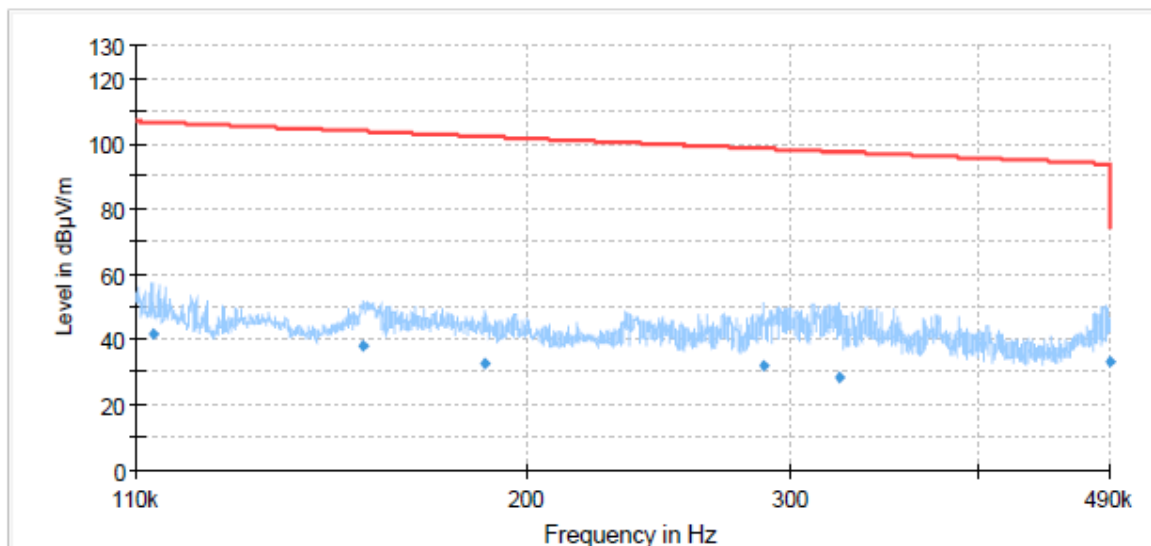
Continuous TX mode:



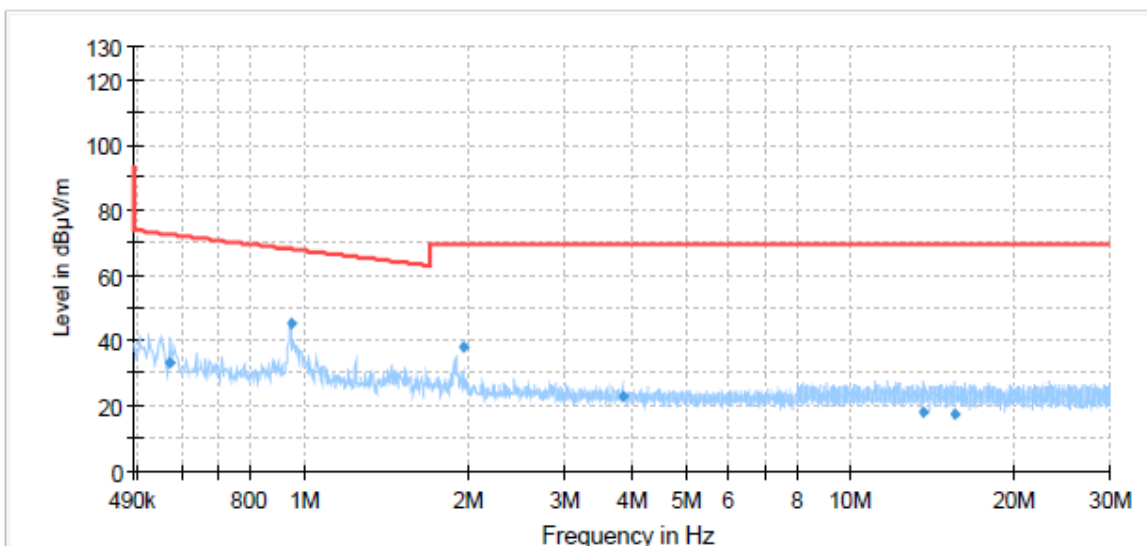
Radiates Emission from 9kHz to 90kHz



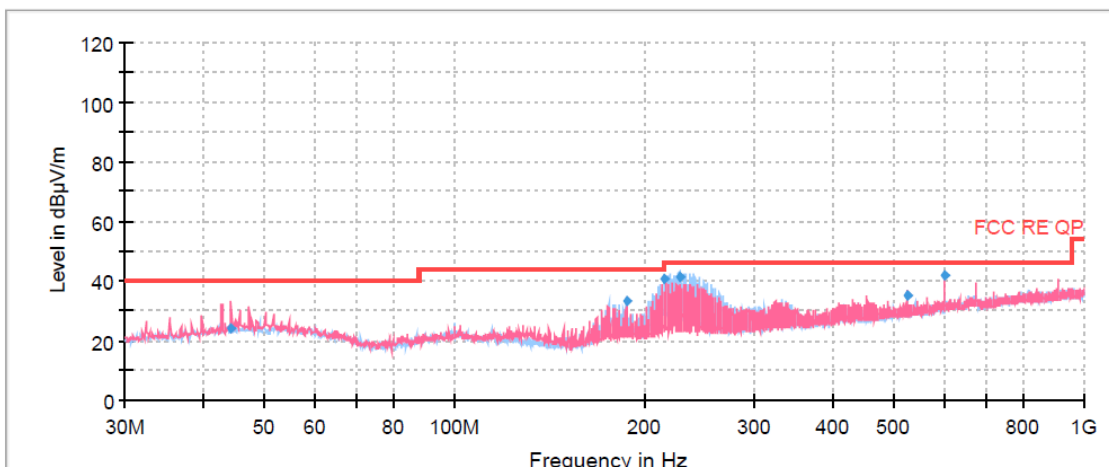
Radiates Emission from 90kHz to 110kHz



Radiates Emission from 110kHz to 490kHz



Radiates Emission from 490kHz to 30MHz



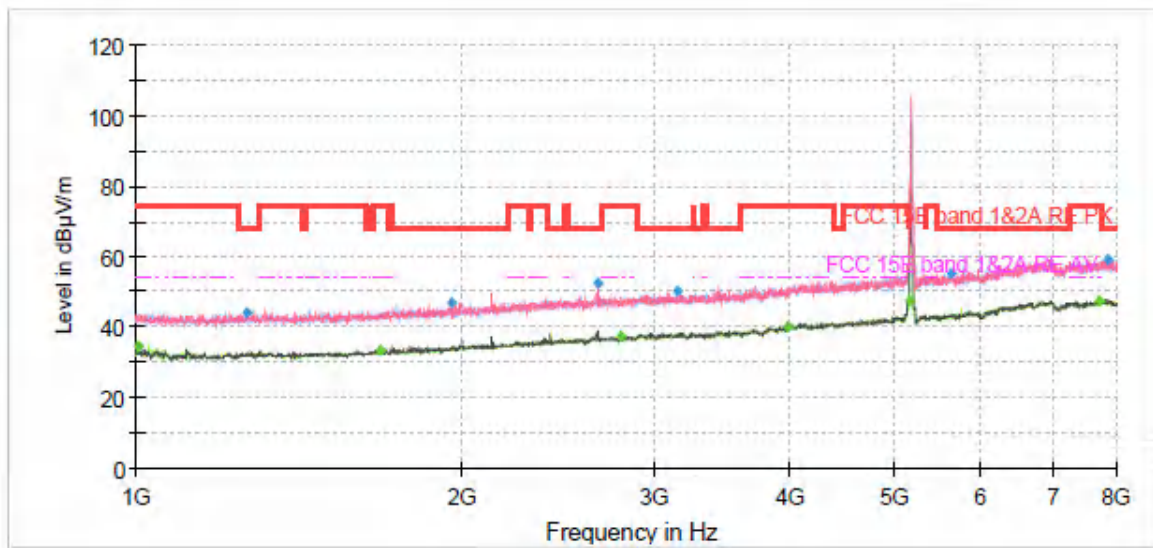
Radiates Emission from 30MHz to 1GHz

Final Result

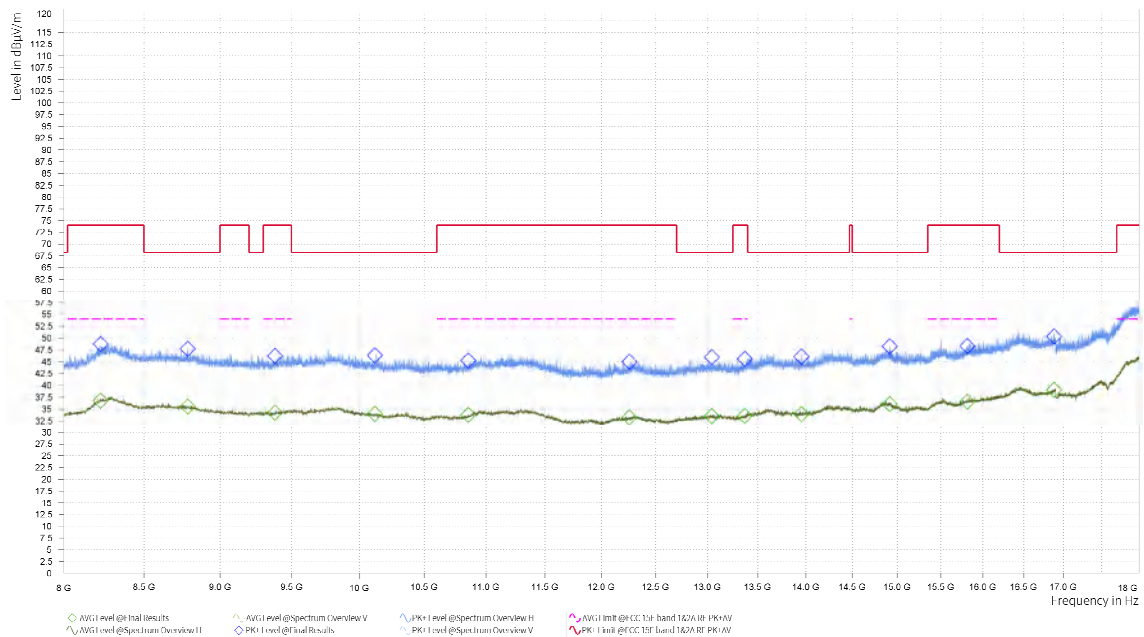
Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
44.19	24.00	40.00	16.00	1000.00	101.0	V	347.00	20
187.50	32.97	43.50	10.53	1000.00	176.0	H	128.00	18
215.63	40.49	43.50	3.01	1000.00	125.0	H	124.00	18
227.52	41.51	46.00	4.49	1000.00	125.0	H	107.00	19
525.06	35.19	46.00	10.81	1000.00	101.0	V	280.00	26
600.00	41.66	46.00	4.34	1000.00	100.0	V	10.00	27

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

2. Margin = Limit – Quasi-Peak



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



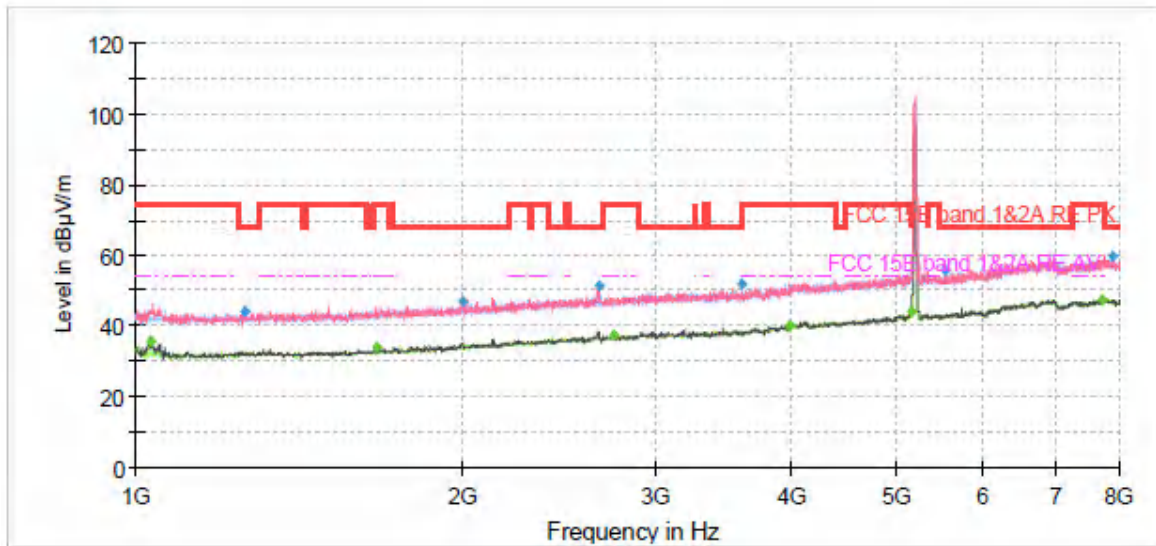
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1006.13	---	34.63	54.00	19.37	500.00	200.0	H	237.00	-3
1266.88	43.91	---	68.20	24.29	500.00	200.0	V	32.00	-2
1677.25	---	33.59	54.00	20.41	500.00	100.0	V	171.00	0
1951.13	46.82	---	68.20	21.38	500.00	200.0	V	341.00	1
2660.75	52.63	---	68.20	15.57	500.00	100.0	V	224.00	4
2794.63	---	37.41	54.00	16.59	500.00	200.0	V	2.00	4
3149.00	50.43	---	68.20	17.77	500.00	100.0	V	224.00	5
3994.25	---	40.25	54.00	13.75	500.00	200.0	V	237.00	6
5146.63	---	47.60	54.00	6.40	500.00	200.0	V	185.00	10
5634.00	55.39	---	68.20	12.81	500.00	100.0	V	310.00	11
7734.00	---	47.65	54.00	6.35	500.00	100.0	V	354.00	17
7846.00	59.07	---	68.20	9.13	500.00	200.0	V	7.00	17

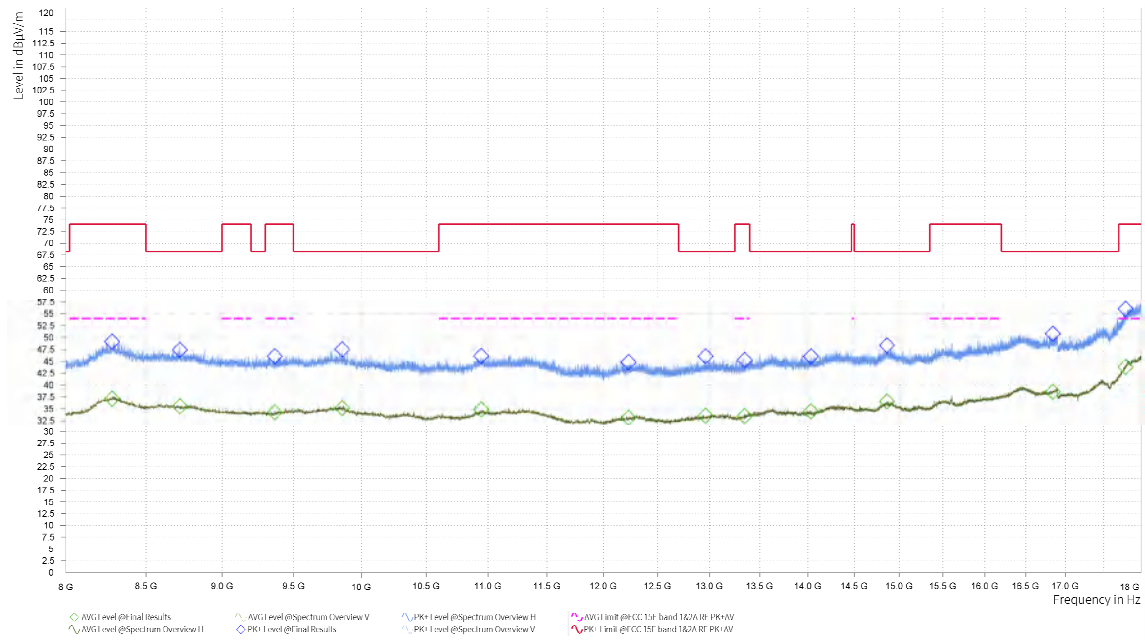
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH40



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



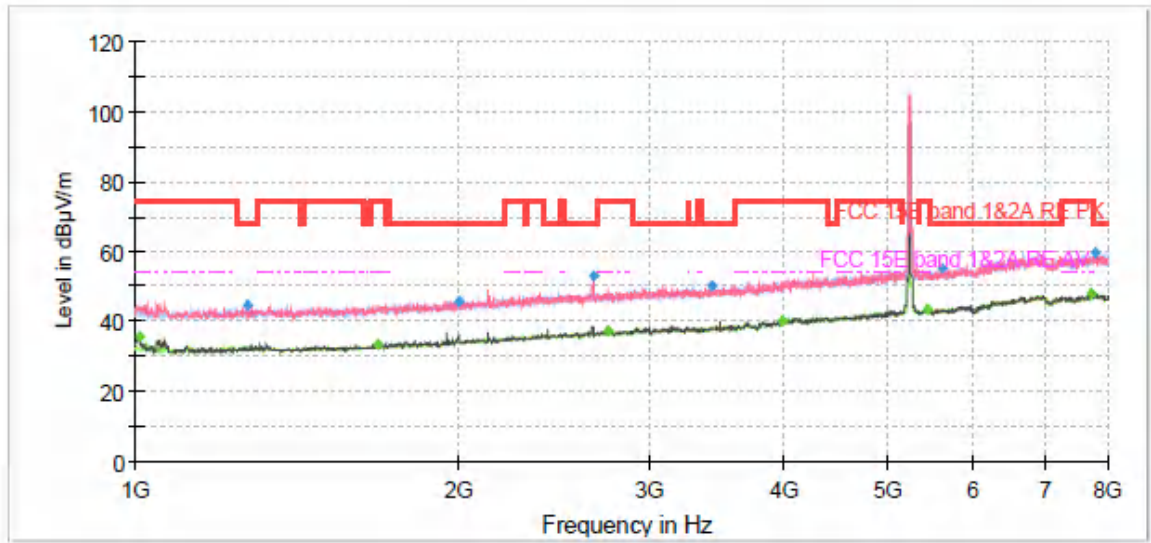
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1030.63	---	35.72	54.00	18.28	500.00	200.0	V	210.00	-3
1257.25	43.82	---	68.20	24.38	500.00	200.0	V	75.00	-2
1662.38	---	34.05	54.00	19.95	500.00	100.0	V	0.00	-1
1995.75	46.90	---	68.20	21.30	500.00	200.0	V	12.00	1
2660.75	51.41	---	68.20	16.79	500.00	100.0	V	110.00	4
2742.13	---	37.27	54.00	16.73	500.00	100.0	H	36.00	4
3595.25	51.80	---	68.20	16.40	500.00	200.0	H	1.00	5
3996.00	---	40.34	54.00	13.66	500.00	100.0	H	96.00	6
5149.25	---	43.83	54.00	10.17	500.00	200.0	V	217.00	10
5535.13	55.71	---	68.20	12.49	500.00	200.0	V	224.00	11
7734.00	---	47.62	54.00	6.38	500.00	100.0	H	36.00	17
7896.75	59.72	---	68.20	8.48	500.00	100.0	V	280.00	17

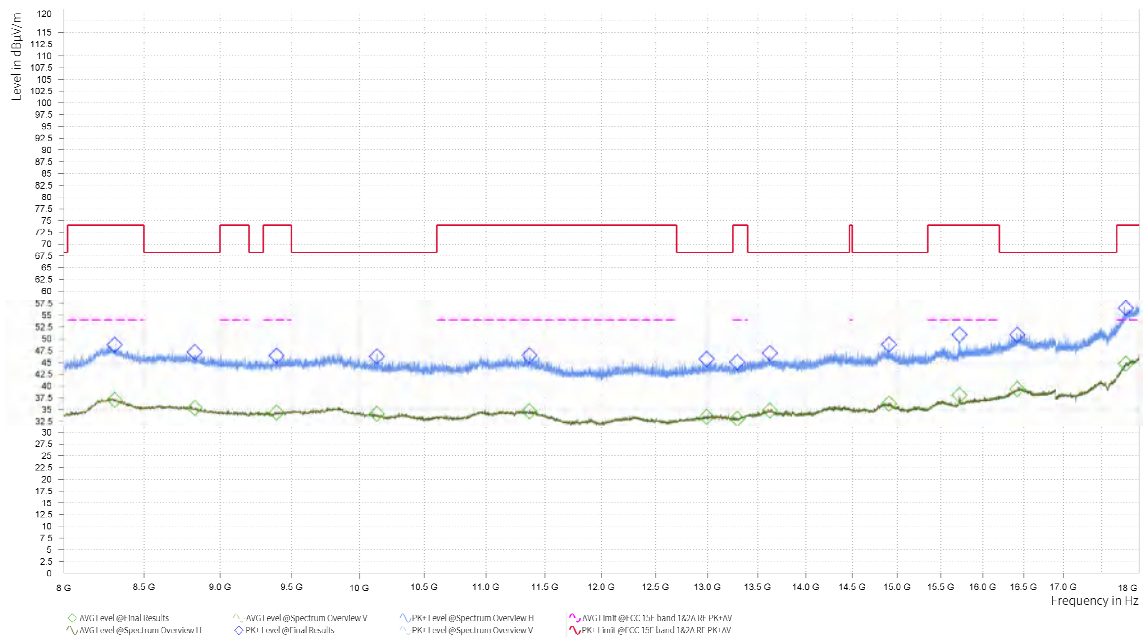
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH48



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



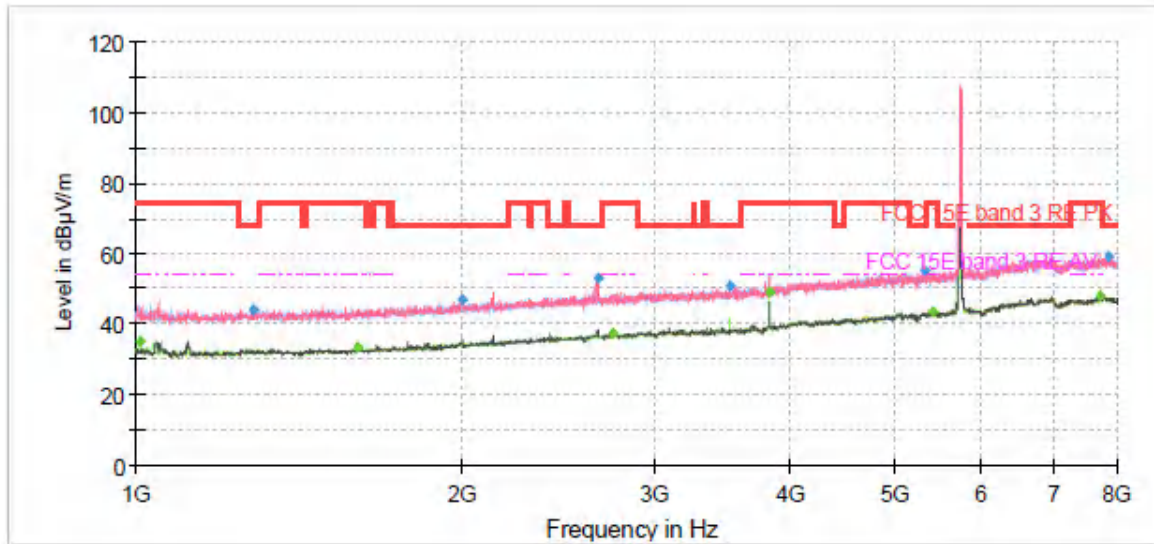
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1007.00	---	35.50	54.00	18.50	500.00	200.0	V	218.00	-3
1268.63	44.50	---	68.20	23.70	500.00	200.0	V	247.00	-2
1679.88	---	33.73	54.00	20.27	500.00	100.0	H	4.00	0
1996.63	45.95	---	68.20	22.25	500.00	200.0	V	14.00	1
2665.13	52.94	---	68.20	15.26	500.00	200.0	H	32.00	4
2746.50	---	37.19	54.00	16.81	500.00	100.0	V	291.00	4
3433.38	50.28	---	68.20	17.92	500.00	200.0	V	72.00	5
3996.00	---	40.29	54.00	13.71	500.00	100.0	H	0.00	6
5438.88	---	43.43	54.00	10.57	500.00	200.0	V	185.00	11
5606.00	55.19	---	68.20	13.01	500.00	200.0	H	176.00	11
7730.50	---	47.79	54.00	6.21	500.00	100.0	V	26.00	17
7793.50	59.67	---	68.20	8.53	500.00	100.0	V	244.00	17

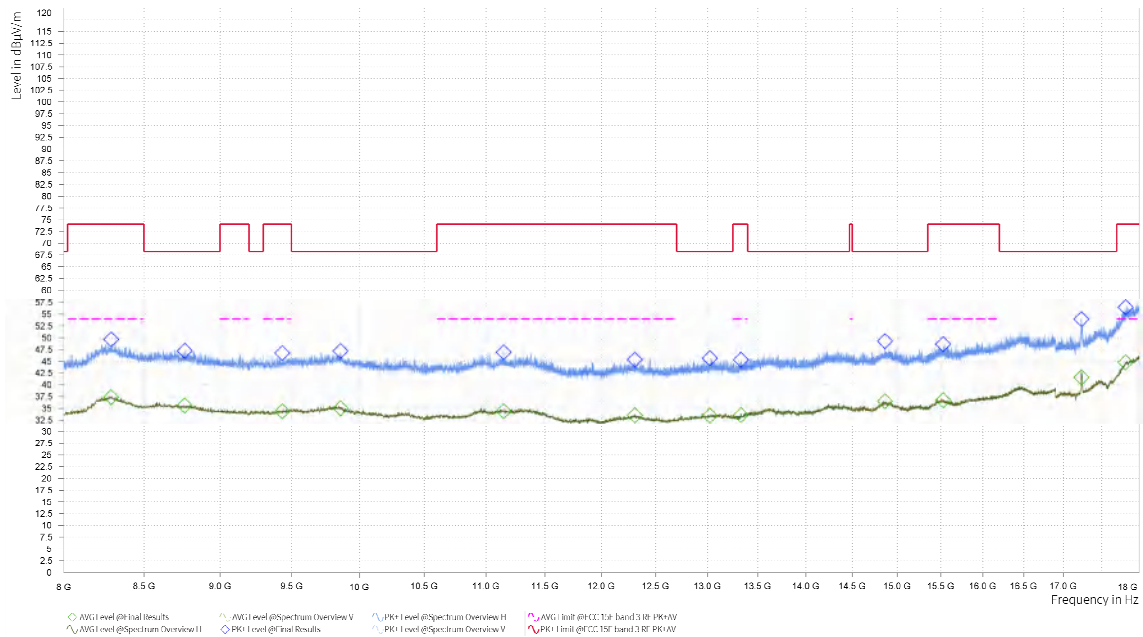
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH149



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



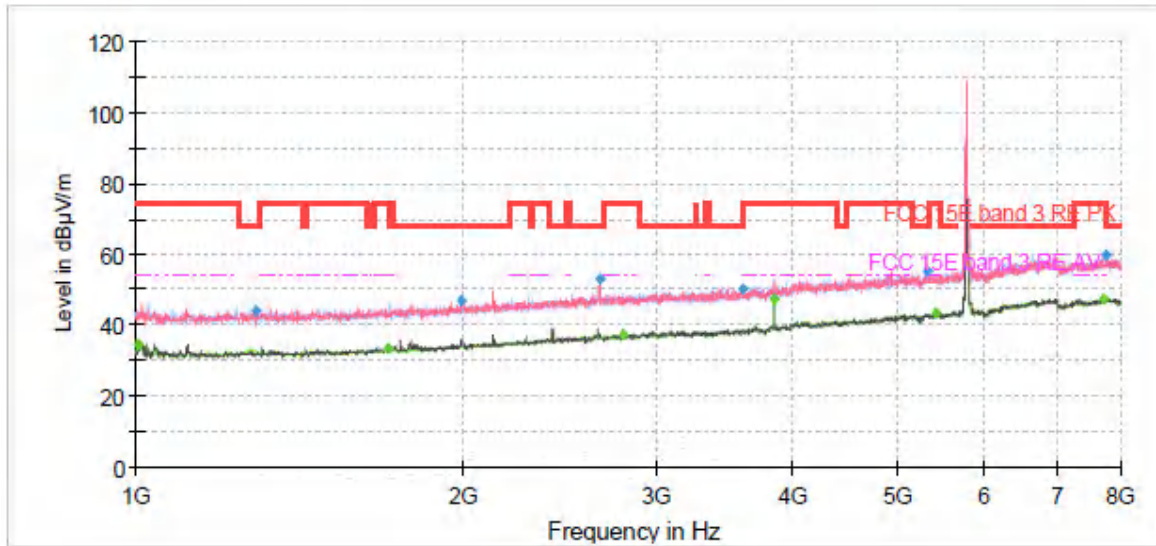
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1007.00	---	35.34	54.00	18.66	500.00	200.0	H	261.00	-3
1280.00	44.02	---	68.20	24.18	500.00	200.0	H	46.00	-2
1599.38	---	33.56	54.00	20.44	500.00	100.0	V	359.00	-1
1997.50	46.92	---	68.20	21.28	500.00	200.0	V	355.00	1
2659.88	53.29	---	68.20	14.91	500.00	100.0	V	220.00	4
2749.13	---	37.63	54.00	16.37	500.00	200.0	V	349.00	4
3517.38	50.64	---	68.20	17.56	500.00	200.0	H	124.00	5
3829.75	---	49.04	54.00	4.96	500.00	200.0	H	184.00	6
5332.13	55.41	---	68.20	12.79	500.00	100.0	V	107.00	11
5416.13	---	43.30	54.00	10.70	500.00	200.0	H	252.00	11
7728.75	---	47.88	54.00	6.12	500.00	100.0	V	0.00	17
7854.75	59.10	---	68.20	9.10	500.00	100.0	H	4.00	17

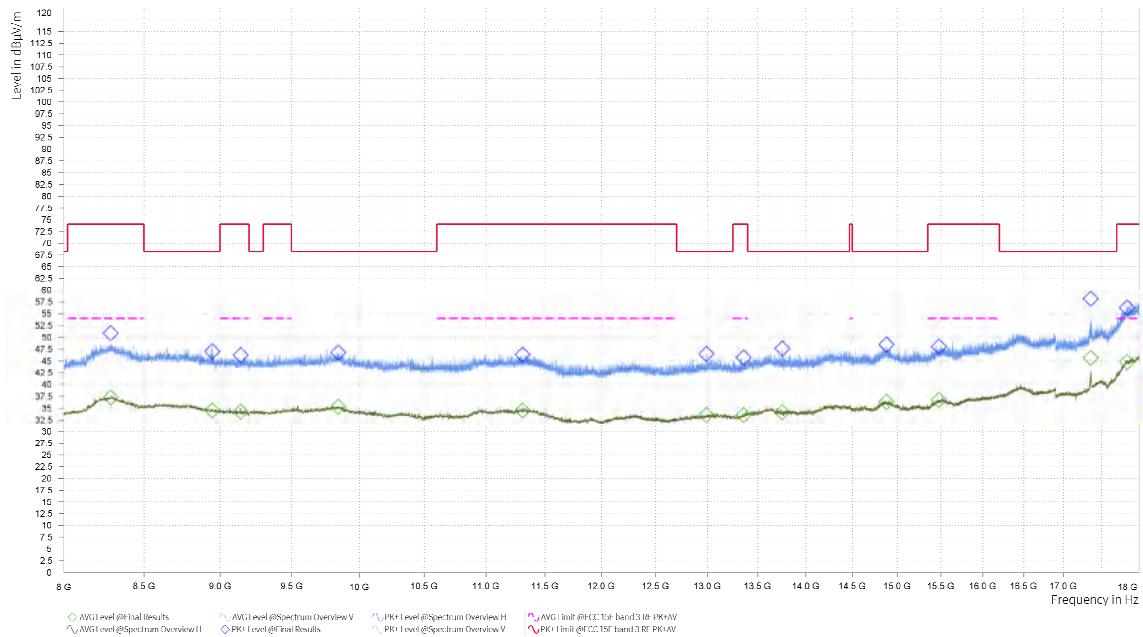
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11a CH157



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



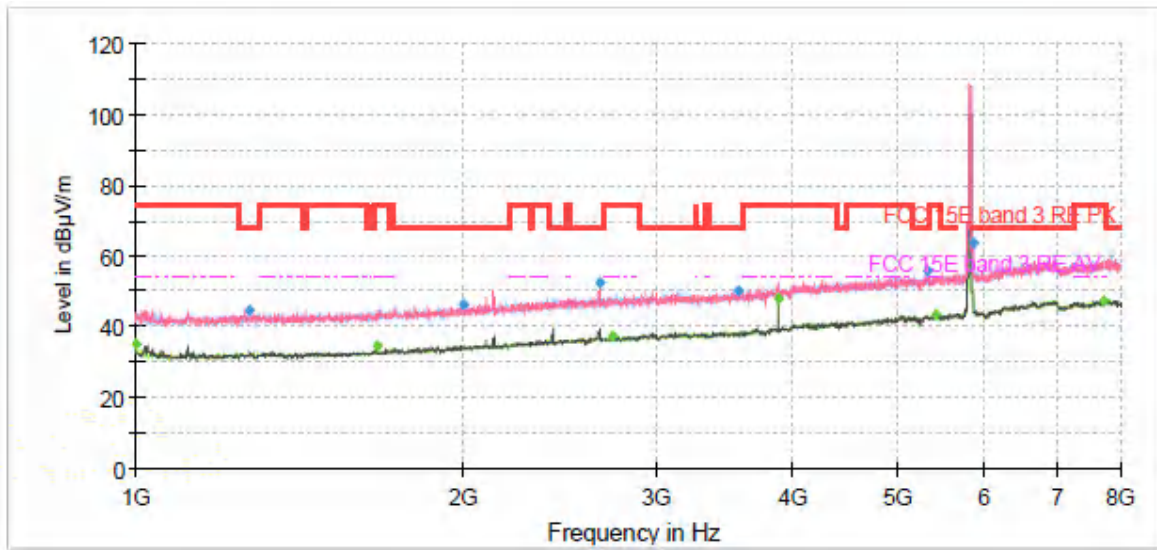
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1003.50	---	34.76	54.00	19.24	500.00	200.0	H	261.00	-3
1287.88	44.11	---	68.20	24.09	500.00	100.0	H	234.00	-2
1700.88	---	33.70	54.00	20.30	500.00	200.0	V	144.00	0
1992.25	46.85	---	68.20	21.35	500.00	200.0	V	2.00	1
2665.13	52.89	---	68.20	15.31	500.00	100.0	V	40.00	4
2798.13	---	37.26	54.00	16.74	500.00	200.0	H	303.00	4
3594.38	50.37	---	68.20	17.83	500.00	100.0	V	230.00	5
3856.88	---	47.61	54.00	6.39	500.00	100.0	V	255.00	6
5316.38	55.14	---	68.20	13.06	500.00	100.0	V	49.00	11
5417.88	---	43.43	54.00	10.57	500.00	100.0	V	170.00	11
7727.88	---	47.55	54.00	6.45	500.00	200.0	V	162.00	17
7762.88	59.75	---	68.20	8.45	500.00	100.0	H	15.00	17

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

2. Margin = Limit –MAX Peak/ Average

802.11a CH165



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



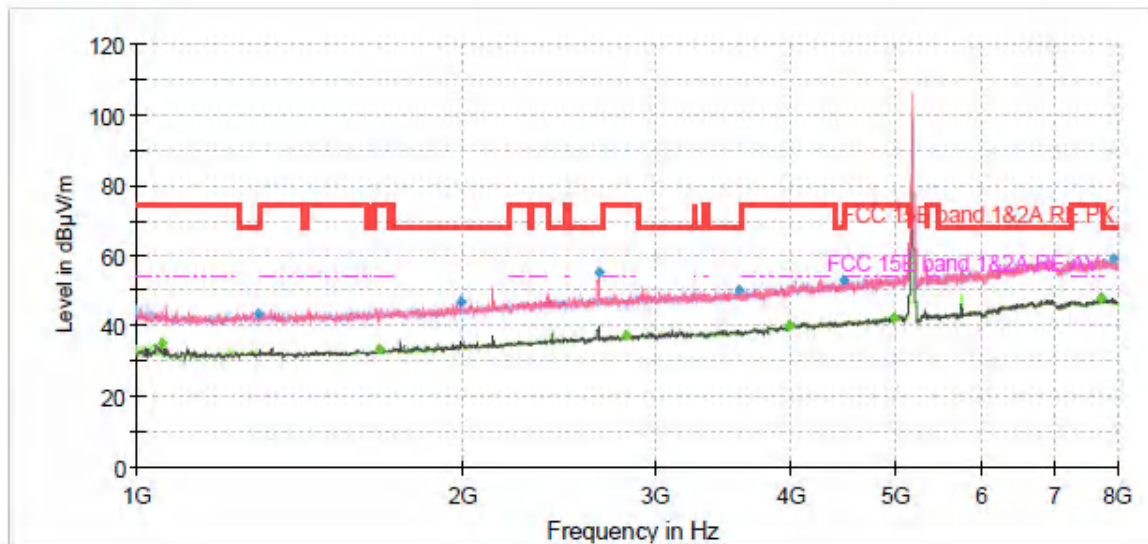
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1000.88	---	35.09	54.00	18.91	500.00	200.0	V	226.00	-3
1270.38	44.52	---	68.20	23.68	500.00	200.0	H	266.00	-2
1664.13	---	34.77	54.00	19.23	500.00	100.0	V	1.00	-1
1994.88	46.58	---	68.20	21.62	500.00	100.0	V	249.00	1
2666.88	52.47	---	68.20	15.73	500.00	200.0	V	236.00	4
2732.50	---	37.38	54.00	16.62	500.00	100.0	V	179.00	4
3566.38	50.47	---	68.20	17.73	500.00	100.0	V	358.00	5
3883.13	---	48.04	54.00	5.96	500.00	200.0	H	197.00	6
5313.75	55.84	---	68.20	12.36	500.00	100.0	V	110.00	11
5409.13	---	43.31	54.00	10.69	500.00	200.0	H	356.00	11
5852.75	63.59	---	68.20	4.61	500.00	200.0	V	279.00	11
7729.63	---	47.48	54.00	6.52	500.00	100.0	H	52.00	17

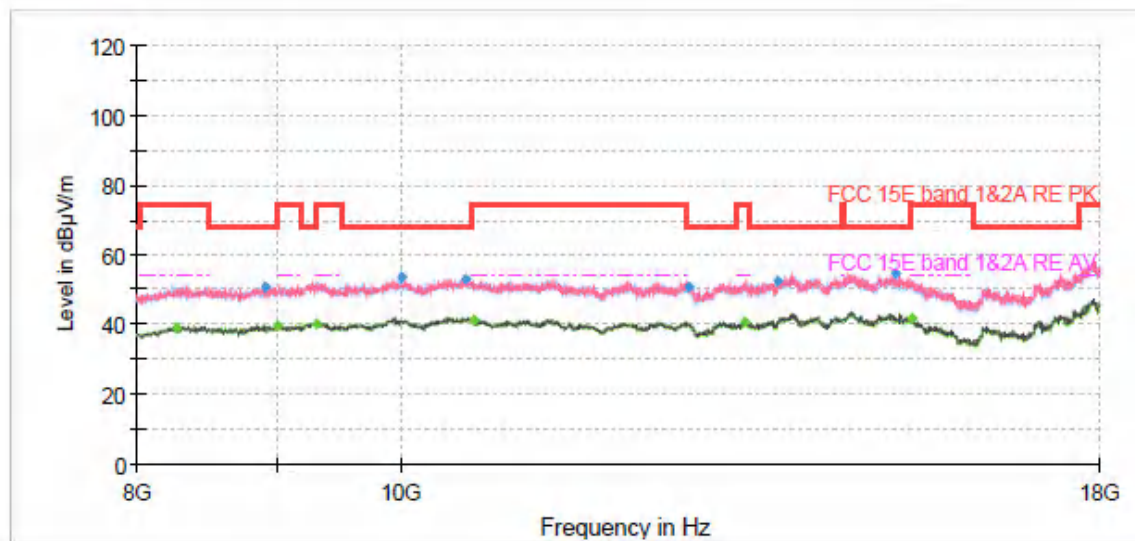
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH36



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



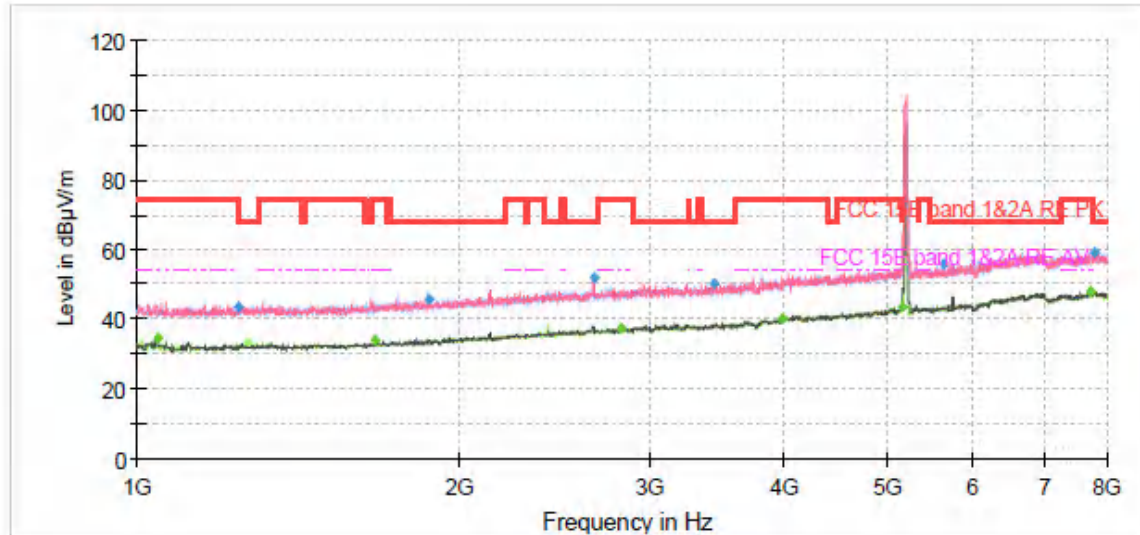
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1053.38	---	34.90	54.00	19.10	500.00	200.0	V	197.00	-3
1295.75	43.77	---	68.20	24.43	500.00	100.0	V	170.00	-2
1674.63	---	33.70	54.00	20.30	500.00	200.0	V	8.00	-1
1991.38	46.64	---	68.20	21.56	500.00	100.0	V	8.00	1
2660.75	55.13	---	68.20	13.07	500.00	100.0	V	54.00	4
2827.88	---	37.60	54.00	16.40	500.00	200.0	H	203.00	4
3592.63	50.33	---	68.20	17.87	500.00	100.0	V	120.00	5
3996.88	---	40.42	54.00	13.58	500.00	100.0	H	2.00	6
4482.50	53.14	---	68.20	15.06	500.00	100.0	V	88.00	7
4980.38	---	42.41	54.00	11.59	500.00	200.0	V	74.00	9
7731.38	---	47.86	54.00	6.14	500.00	100.0	V	60.00	17
7921.25	58.99	---	68.20	9.21	500.00	200.0	V	224.00	17

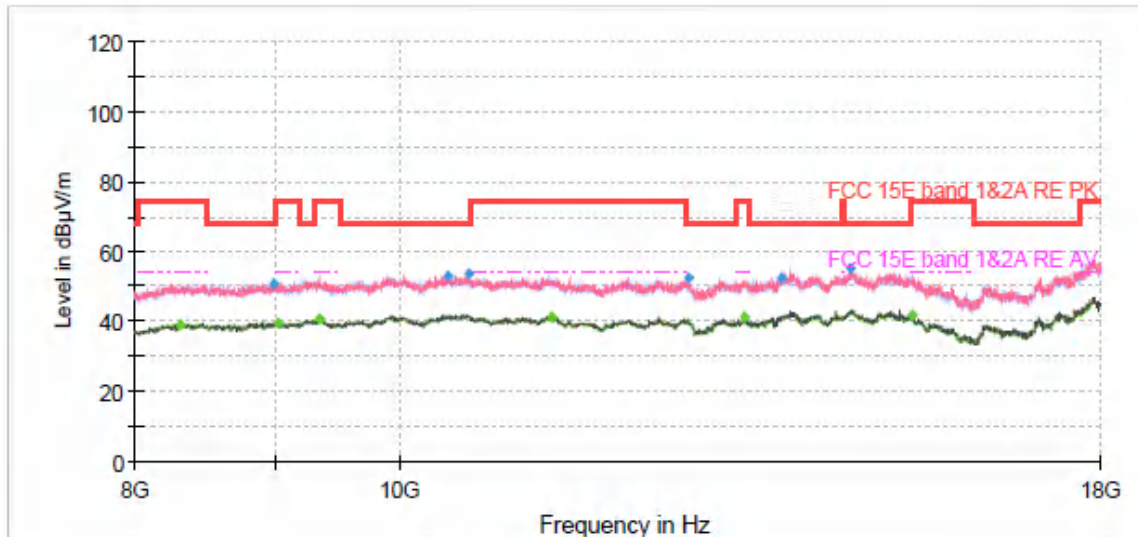
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH40



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



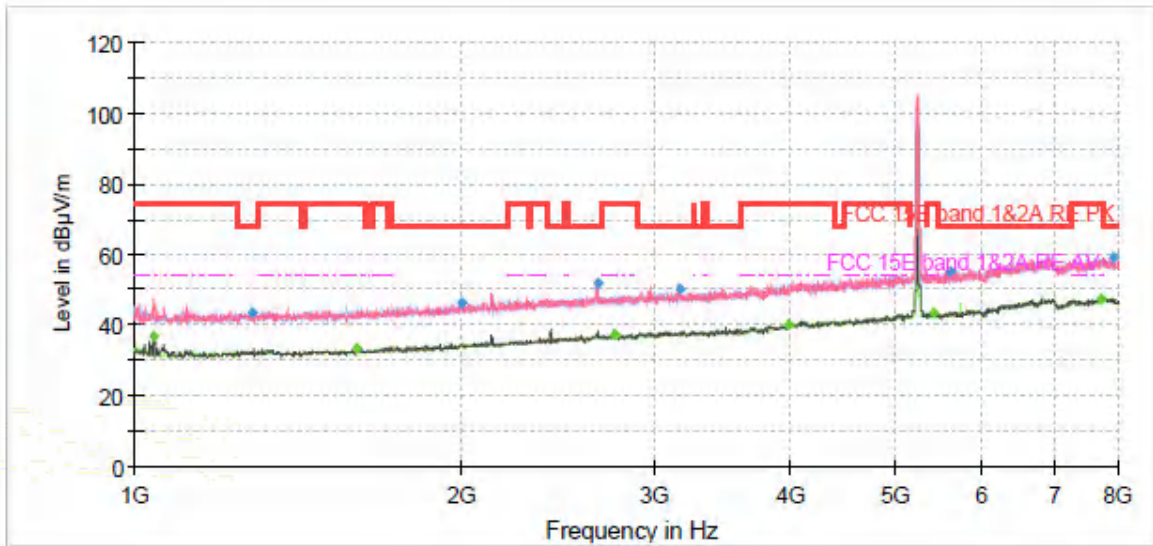
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1043.75	---	34.68	54.00	19.32	500.00	200.0	V	206.00	-3
1240.63	43.56	---	68.20	24.64	500.00	200.0	V	84.00	-2
1665.88	---	34.03	54.00	19.97	500.00	200.0	V	1.00	-1
1864.50	45.78	---	68.20	22.42	500.00	200.0	H	252.00	0
2659.00	51.73	---	68.20	16.47	500.00	200.0	V	260.00	4
2827.88	---	37.26	54.00	16.74	500.00	200.0	V	3.00	4
3445.63	50.42	---	68.20	17.78	500.00	200.0	V	124.00	5
3995.13	---	40.26	54.00	13.74	500.00	100.0	H	0.00	6
5149.25	---	43.39	54.00	10.61	500.00	200.0	V	219.00	10
5632.25	55.57	---	68.20	12.63	500.00	200.0	H	252.00	11
7727.88	---	47.73	54.00	6.28	500.00	200.0	H	0.00	17
7782.13	59.30	---	68.20	8.90	500.00	200.0	H	292.00	17

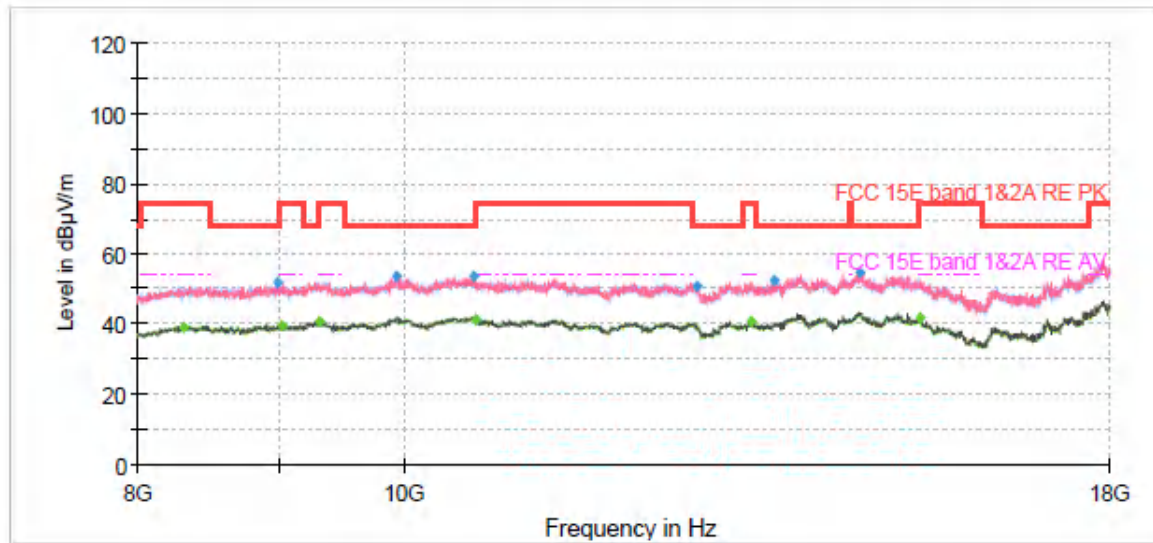
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH48



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



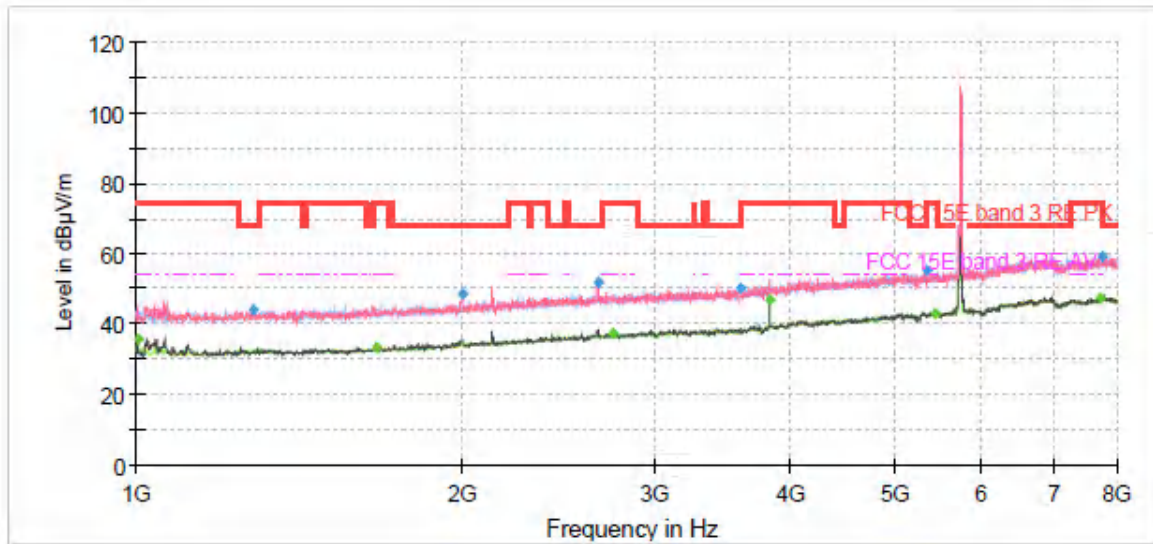
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1039.38	---	36.86	54.00	17.14	500.00	200.0	V	213.00	-3
1281.75	43.81	---	68.20	24.39	500.00	100.0	V	357.00	-2
1599.38	---	33.47	54.00	20.53	500.00	100.0	V	355.00	-1
1995.75	46.55	---	68.20	21.65	500.00	200.0	V	0.00	1
2662.50	52.06	---	68.20	16.14	500.00	100.0	V	87.00	4
2762.25	---	37.22	54.00	16.78	500.00	100.0	H	359.00	4
3160.38	50.14	---	68.20	18.06	500.00	100.0	V	228.00	5
3995.13	---	40.12	54.00	13.88	500.00	200.0	V	159.00	6
5427.50	---	43.39	54.00	10.61	500.00	200.0	H	353.00	11
5600.75	55.40	---	68.20	12.80	500.00	100.0	V	288.00	11
7734.88	---	47.65	54.00	6.35	500.00	200.0	V	0.00	17
7927.38	59.42	---	68.20	8.78	500.00	200.0	V	2.00	17

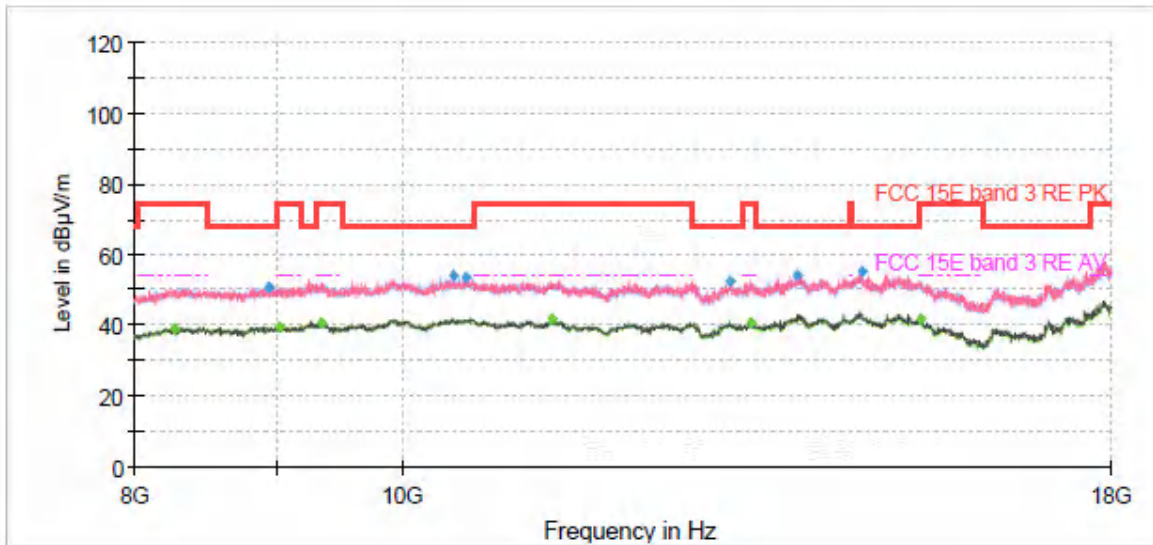
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH149



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



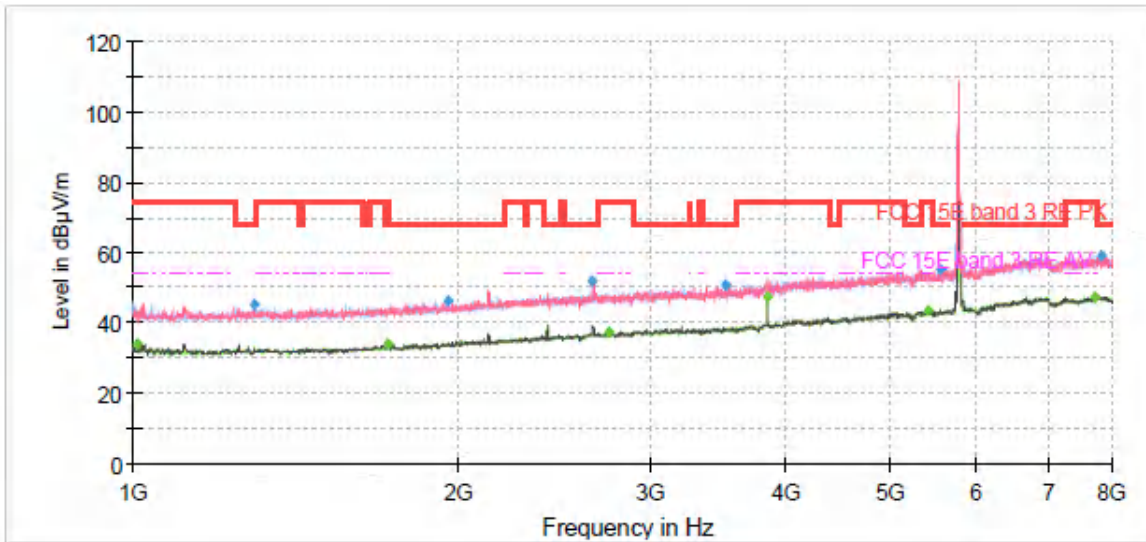
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1002.63	---	35.84	54.00	18.16	500.00	200.0	V	228.00	-3
1280.88	44.01	---	68.20	24.19	500.00	100.0	H	234.00	-2
1663.25	---	33.67	54.00	20.33	500.00	200.0	V	2.00	-1
1994.00	48.29	---	68.20	19.91	500.00	200.0	V	0.00	1
2666.00	51.88	---	68.20	16.32	500.00	100.0	V	220.00	4
2745.63	---	37.32	54.00	16.68	500.00	200.0	V	228.00	4
3595.25	50.19	---	68.20	18.01	500.00	200.0	V	2.00	5
3829.75	---	47.02	54.00	6.98	500.00	200.0	H	185.00	6
5333.88	55.00	---	68.20	13.20	500.00	200.0	H	73.00	11
5441.50	---	43.20	54.00	10.80	500.00	100.0	V	358.00	11
7732.25	---	47.42	54.00	6.58	500.00	200.0	V	95.00	17
7766.38	58.98	---	68.20	9.22	500.00	200.0	V	5.00	17

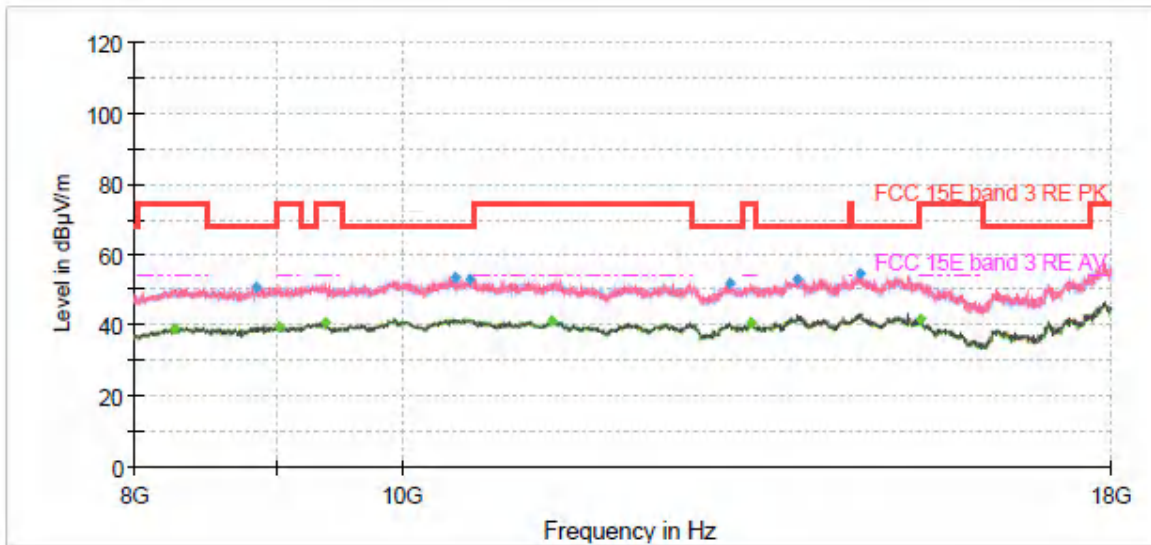
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH157



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



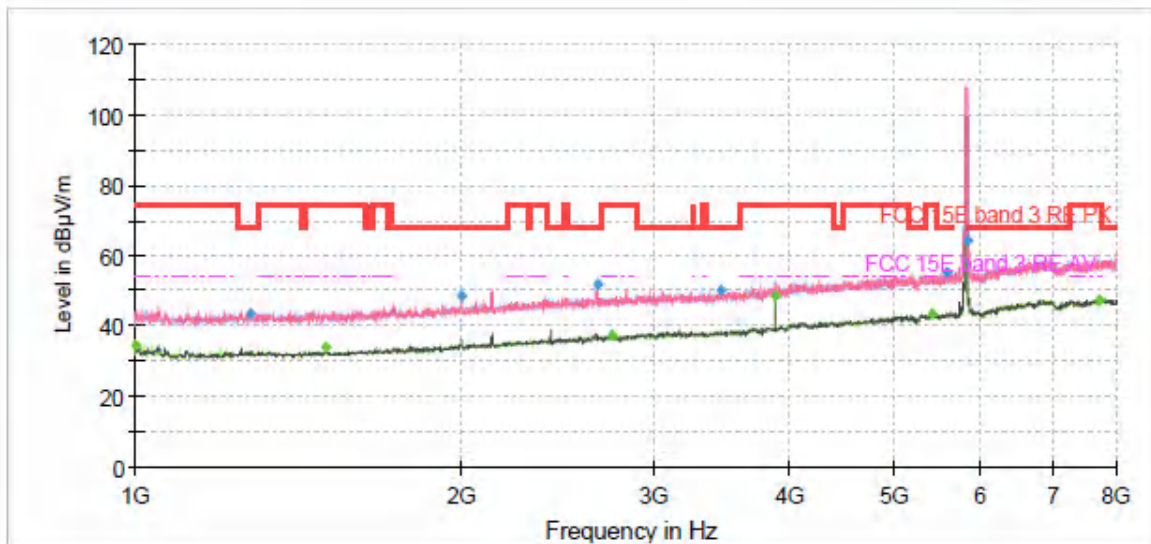
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1007.00	---	34.26	54.00	19.74	500.00	200.0	H	46.00	-3
1294.00	45.05	---	68.20	23.15	500.00	100.0	H	236.00	-2
1721.00	---	34.13	54.00	19.87	500.00	100.0	V	347.00	0
1956.38	46.23	---	68.20	21.97	500.00	100.0	V	221.00	1
2656.38	51.86	---	68.20	16.34	500.00	200.0	V	59.00	4
2743.00	---	37.25	54.00	16.75	500.00	200.0	H	0.00	4
3519.13	50.70	---	68.20	17.50	500.00	100.0	V	187.00	5
3856.88	---	47.19	54.00	6.81	500.00	200.0	H	185.00	6
5417.88	---	43.52	54.00	10.48	500.00	200.0	H	81.00	11
5569.25	55.04	---	68.20	13.16	500.00	200.0	V	170.00	11
7732.25	---	47.58	54.00	6.42	500.00	100.0	H	3.00	17
7826.75	59.01	---	68.20	9.19	500.00	100.0	V	99.00	17

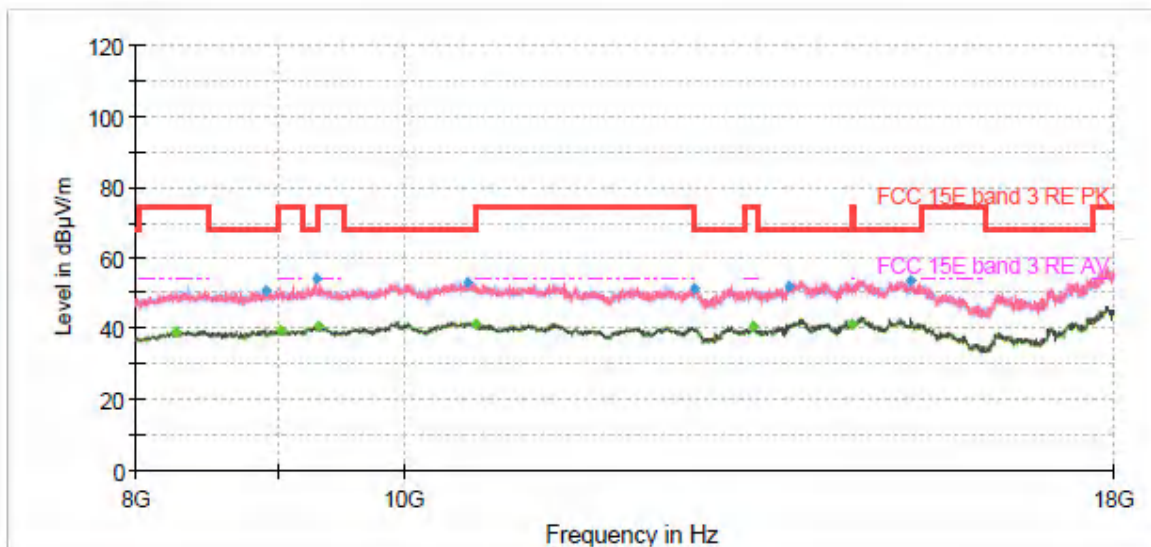
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH165



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



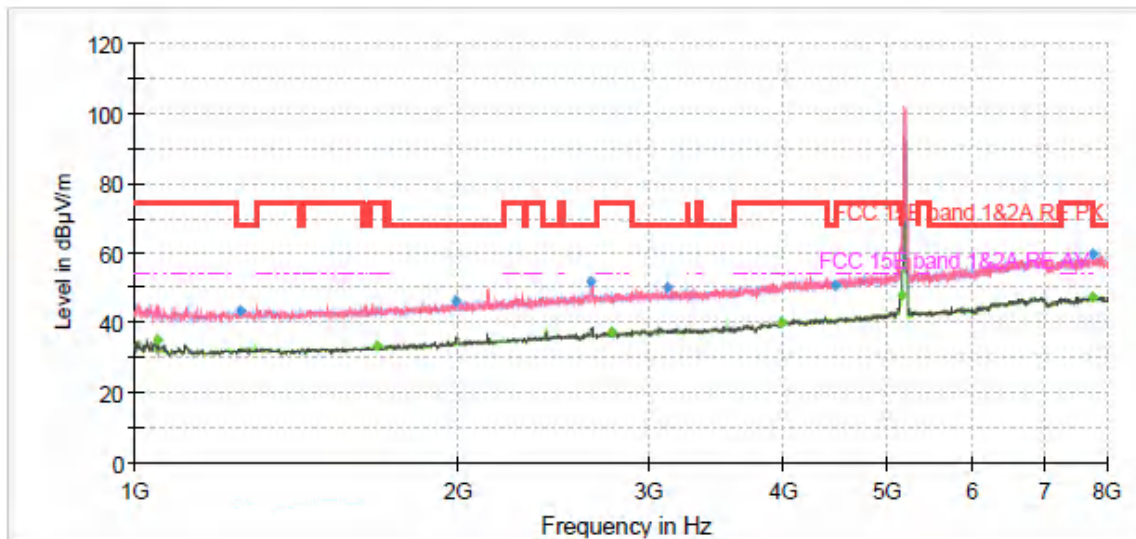
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1000.00	---	34.55	54.00	19.45	500.00	200.0	V	225.00	-3
1277.38	43.69	---	68.20	24.51	500.00	200.0	V	269.00	-2
1496.13	---	33.82	54.00	20.18	500.00	100.0	V	2.00	-1
1997.50	48.37	---	68.20	19.83	500.00	200.0	V	0.00	1
2662.50	52.12	---	68.20	16.08	500.00	100.0	H	61.00	4
2744.75	---	37.47	54.00	16.53	500.00	200.0	V	173.00	4
3457.00	50.41	---	68.20	17.79	500.00	200.0	H	358.00	5
3883.13	---	48.77	54.00	5.23	500.00	100.0	V	254.00	6
5417.00	---	43.27	54.00	10.73	500.00	100.0	H	6.00	11
5577.13	55.47	---	68.20	12.73	500.00	200.0	V	138.00	11
5850.13	64.33	---	68.20	3.87	500.00	200.0	V	277.00	11
7732.25	---	47.59	54.00	6.41	500.00	100.0	V	0.00	17

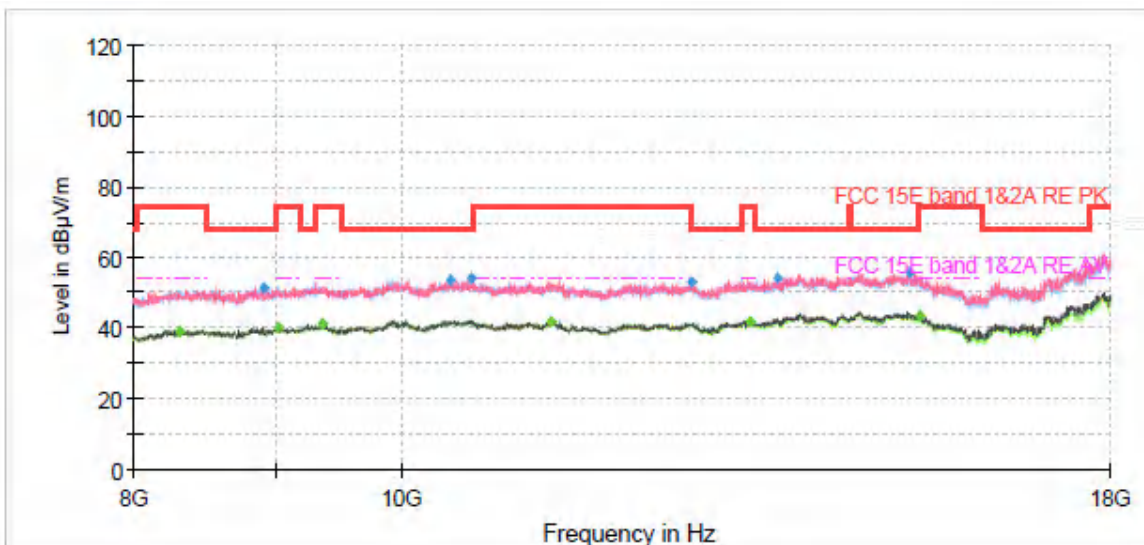
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH38



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



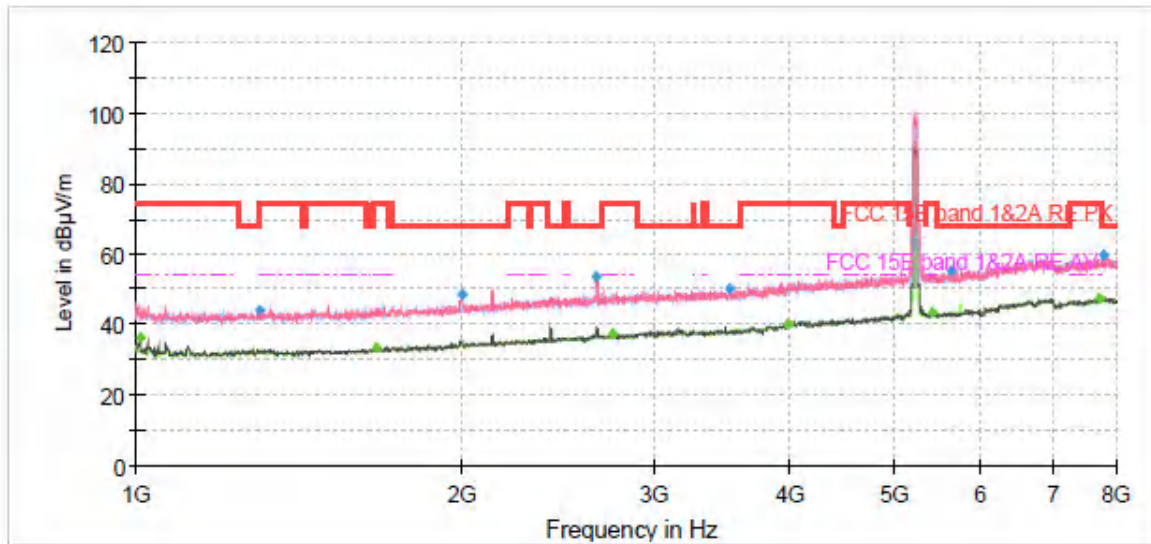
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1051.63	---	35.38	54.00	18.62	500.00	200.0	V	205.00	-3
1253.75	43.58	---	68.20	24.62	500.00	200.0	V	3.00	-2
1678.13	---	33.43	54.00	20.57	500.00	200.0	V	2.00	0
1991.38	46.56	---	68.20	21.64	500.00	200.0	V	17.00	1
2658.13	51.84	---	68.20	16.36	500.00	200.0	V	279.00	4
2767.50	---	37.22	54.00	16.78	500.00	100.0	H	42.00	4
3119.25	50.09	---	68.20	18.11	500.00	100.0	H	4.00	5
3996.00	---	40.09	54.00	13.91	500.00	200.0	V	107.00	6
4473.75	50.94	---	68.20	17.26	500.00	200.0	H	198.00	7
5148.38	---	47.97	54.00	6.03	500.00	100.0	V	257.00	10
7739.25	---	47.58	54.00	6.43	500.00	100.0	V	264.00	17
7757.63	59.55	---	68.20	8.65	500.00	100.0	H	151.00	17

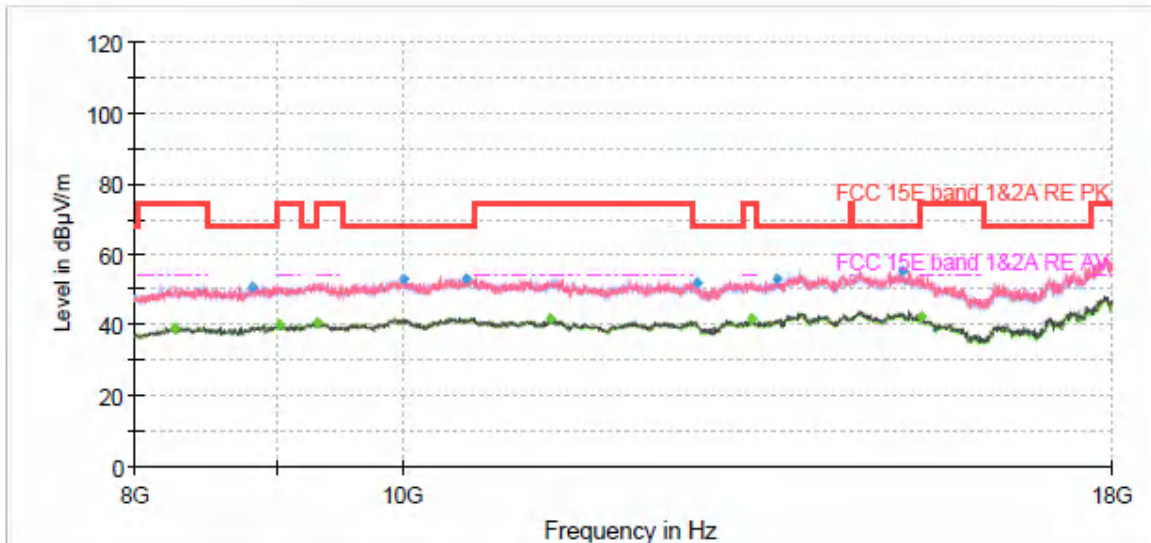
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH46



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



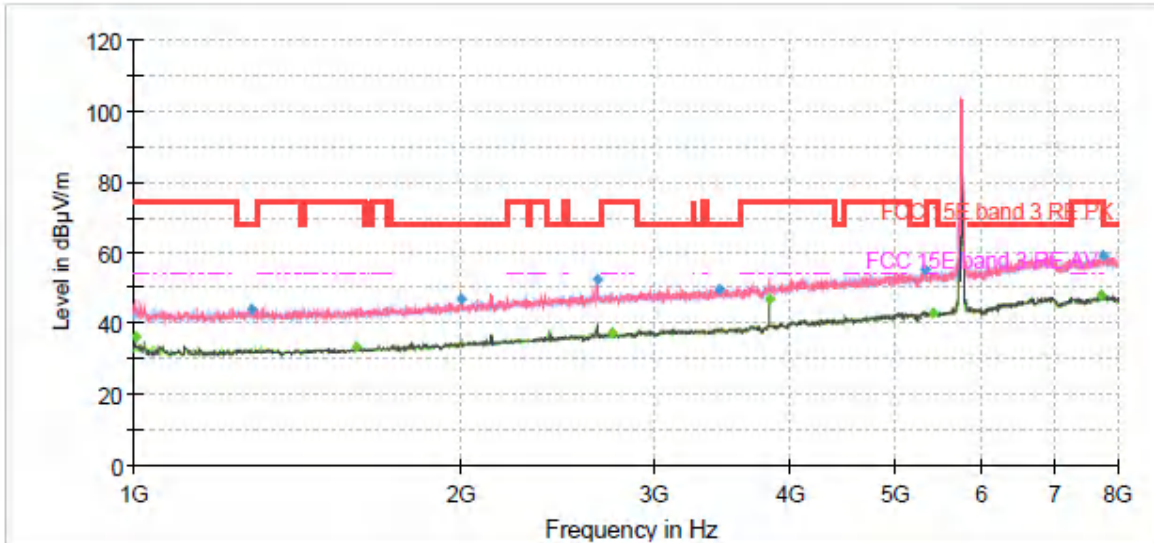
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1007.00	---	36.08	54.00	17.92	500.00	200.0	H	261.00	-3
1296.63	44.03	---	68.20	24.17	500.00	200.0	V	239.00	-2
1668.50	---	33.59	54.00	20.41	500.00	100.0	V	356.00	-1
1998.38	48.49	---	68.20	19.71	500.00	200.0	V	0.00	1
2655.50	53.47	---	68.20	14.73	500.00	200.0	V	232.00	4
2747.38	---	37.38	54.00	16.62	500.00	100.0	V	0.00	4
3522.63	50.12	---	68.20	18.08	500.00	100.0	H	355.00	5
3995.13	---	40.34	54.00	13.66	500.00	200.0	V	122.00	6
5408.25	---	43.56	54.00	10.44	500.00	200.0	H	275.00	11
5625.25	55.05	---	68.20	13.15	500.00	200.0	H	309.00	11
7731.38	---	47.68	54.00	6.32	500.00	100.0	V	359.00	17
7782.13	59.79	---	68.20	8.41	500.00	100.0	H	293.00	17

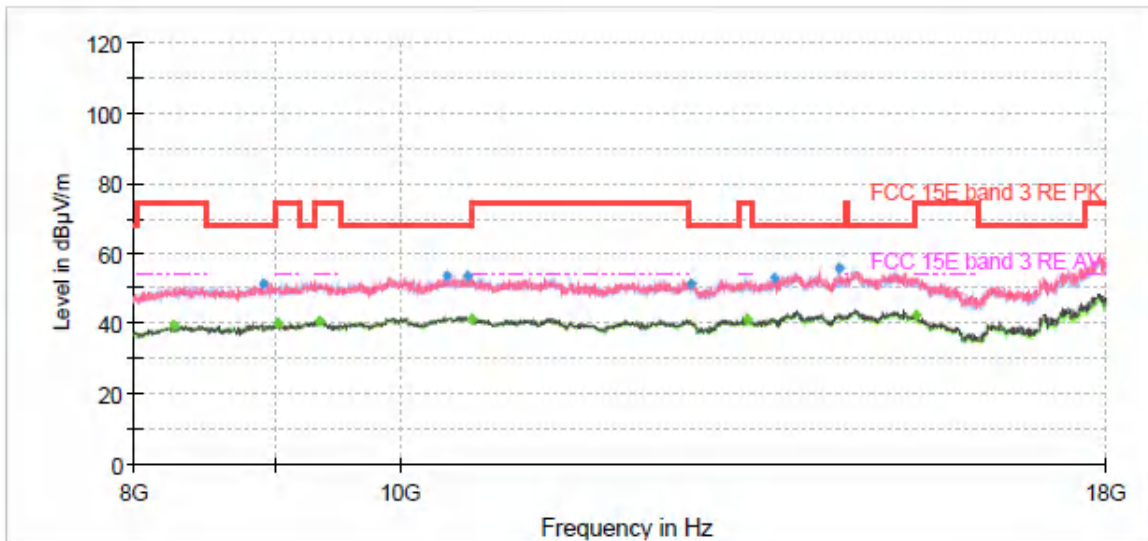
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH151



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



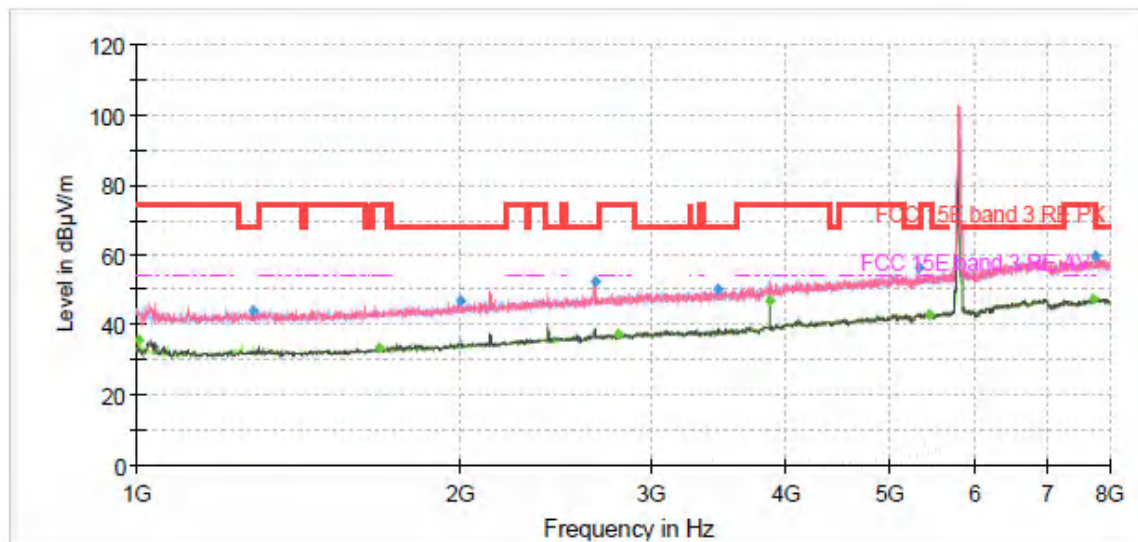
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1004.38	---	36.46	54.00	17.54	500.00	200.0	V	212.00	-3
1281.75	44.08	---	68.20	24.12	500.00	200.0	V	17.00	-2
1600.25	---	33.65	54.00	20.35	500.00	200.0	H	0.00	-1
1995.75	46.95	---	68.20	21.25	500.00	200.0	V	30.00	1
2663.38	52.62	---	68.20	15.58	500.00	200.0	H	37.00	4
2744.75	---	37.13	54.00	16.87	500.00	100.0	H	271.00	4
3443.88	49.83	---	68.20	18.37	500.00	100.0	H	129.00	5
3836.75	---	47.12	54.00	6.88	500.00	200.0	H	187.00	6
5317.25	55.39	---	68.20	12.81	500.00	200.0	V	64.00	11
5410.00	---	43.23	54.00	10.77	500.00	100.0	V	319.00	11
7734.88	---	48.03	54.00	5.97	500.00	100.0	V	74.00	17
7763.75	59.13	---	68.20	9.08	500.00	100.0	H	2.00	17

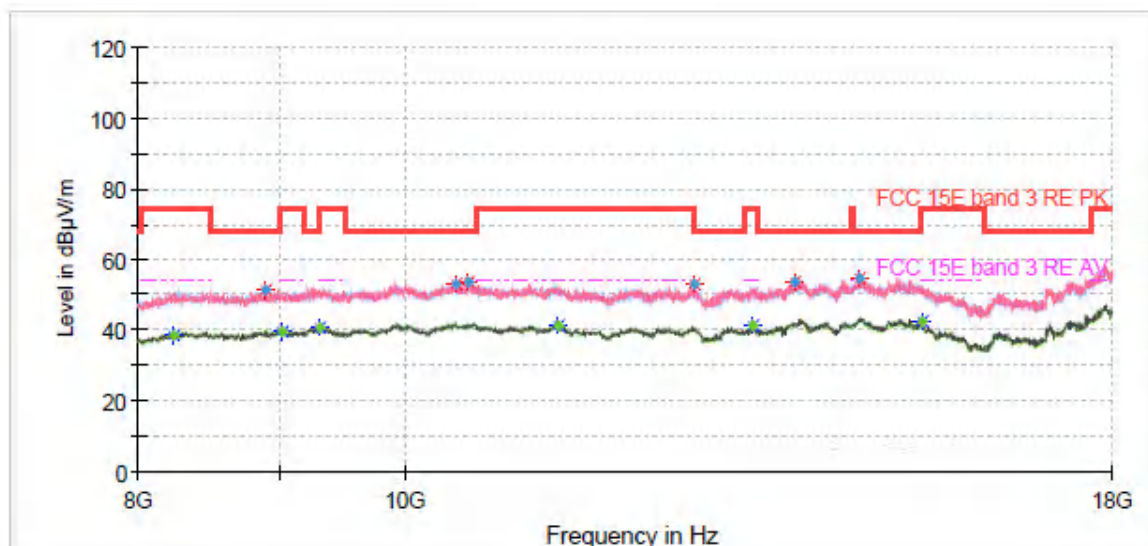
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH159



Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz



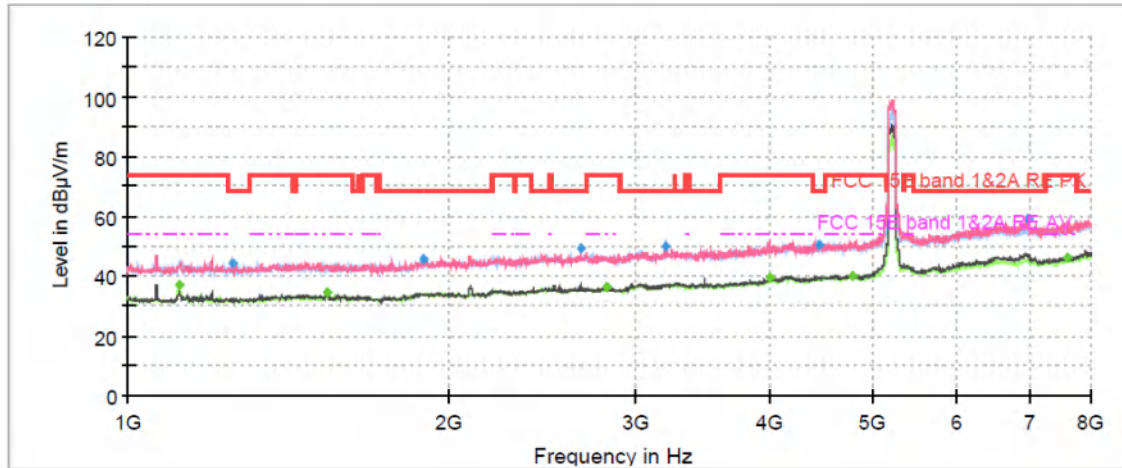
Radiates Emission from 8GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1003.50	---	35.55	54.00	18.45	500.00	100.0	H	212.00	-3
1280.00	43.85	---	68.20	24.35	500.00	200.0	V	134.00	-2
1678.13	---	33.67	54.00	20.33	500.00	200.0	V	185.00	0
1995.75	46.66	---	68.20	21.54	500.00	100.0	V	231.00	1
2659.00	52.74	---	68.20	15.46	500.00	100.0	V	30.00	4
2803.38	---	37.24	54.00	16.76	500.00	200.0	V	202.00	4
3453.50	50.00	---	68.20	18.20	500.00	100.0	V	0.00	5
3863.00	---	46.90	54.00	7.10	500.00	200.0	H	186.00	6
5311.13	56.52	---	68.20	11.68	500.00	200.0	V	125.00	11
5435.38	---	43.13	54.00	10.87	500.00	200.0	H	339.00	11
7727.88	---	47.53	54.00	6.47	500.00	100.0	V	292.00	17
7767.25	59.73	---	68.20	8.47	500.00	100.0	V	265.00	17

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

2. Margin = Limit –MAX Peak/ Average

802.11ac (VHT80) CH42

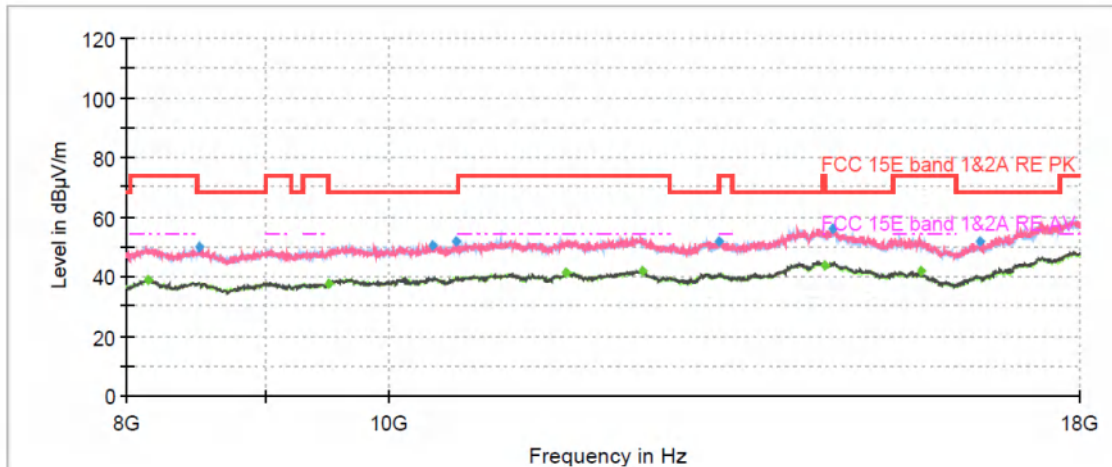


Note: The signal beyond the limit is carrier.
Radiates Emission from 1GHz to 8GHz

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1118.13	---	37.10	54.00	16.90	500.00	200.0	H	128.00	-13
1254.63	44.16	---	68.20	24.04	500.00	200.0	V	219.00	-13
1533.75	---	34.21	54.00	19.79	500.00	100.0	V	228.00	-12
1889.00	45.42	---	68.20	22.78	500.00	100.0	V	24.00	-9
2655.50	49.00	---	68.20	19.20	500.00	200.0	V	176.00	-5
2806.88	---	36.08	54.00	17.92	500.00	100.0	V	0.00	-5
3186.63	50.01	---	68.20	18.19	500.00	100.0	V	40.00	-4
3992.50	---	39.66	54.00	14.34	500.00	200.0	V	219.00	-2
4442.25	50.49	---	68.20	17.71	500.00	200.0	V	232.00	-1
4783.50	---	40.14	54.00	13.86	500.00	100.0	V	18.00	0
6971.00	58.97	---	68.20	9.23	500.00	100.0	V	10.00	7
7612.38	---	46.04	54.00	7.96	500.00	100.0	V	24.00	9

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit –MAX Peak/ Average



Radiates Emission from 8GHz to 18GHz

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
8143.75	---	38.74	54.00	15.26	500.00	200.0	V	140.00	0
8502.50	49.98	---	68.20	18.22	500.00	200.0	H	31.00	0
9495.00	---	37.63	54.00	16.37	500.00	200.0	H	87.00	1
10385.00	50.58	---	68.20	17.62	500.00	200.0	H	48.00	0
10588.75	51.75	---	68.20	16.45	500.00	200.0	V	246.00	1
11631.25	---	41.16	54.00	12.84	500.00	100.0	V	74.00	3
12401.25	---	42.05	54.00	11.95	500.00	200.0	H	59.00	5
13246.25	51.97	---	68.20	16.23	500.00	100.0	H	0.00	5
14481.25	---	43.84	54.00	10.16	500.00	100.0	V	9.00	7
14590.00	56.08	---	68.20	12.12	500.00	100.0	V	13.00	6
15727.50	---	41.63	54.00	12.37	500.00	200.0	V	140.00	4
16542.50	51.91	---	68.20	16.29	500.00	100.0	V	222.00	6

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
 2. Margin = Limit –MAX Peak/ Average

2. Conducted Emission

2.1. Wi-Fi 5GHz

During the test, the Conducted Emission was performed in all modes with all channels. The test data of the worst-case condition was recorded in this report.



Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	AVG Level [dBμV]	AVG Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.164	48.82	65.28	16.46	32.73	55.28	22.56	21.22	L1	9.000	1.000
0.317	37.96	59.80	21.83	29.73	49.80	20.07	21.26	L1	9.000	1.000
0.699	34.22	56.00	21.78	32.26	46.00	13.74	20.93	L1	9.000	1.000
1.478	35.88	56.00	20.12	34.66	46.00	11.34	20.18	L1	9.000	1.000
7.391	24.54	60.00	35.46	21.12	50.00	28.88	19.72	L1	9.000	1.000
13.306	26.83	60.00	33.17	23.03	50.00	26.97	19.75	L1	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 kHz to 30 MHz



Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	AVG Level [dBμV]	AVG Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.166	48.60	65.17	16.57	32.64	55.17	22.54	21.17	N	9.000	1.000
0.350	36.01	58.96	22.95	28.03	48.96	20.93	21.20	N	9.000	1.000
0.699	34.22	56.00	21.78	32.18	46.00	13.82	20.91	N	9.000	1.000
1.478	35.82	56.00	20.18	34.61	46.00	11.39	20.17	N	9.000	1.000
10.347	27.93	60.00	32.07	26.53	50.00	23.47	19.73	N	9.000	1.000
17.738	27.68	60.00	32.32	25.99	50.00	24.01	19.95	N	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz