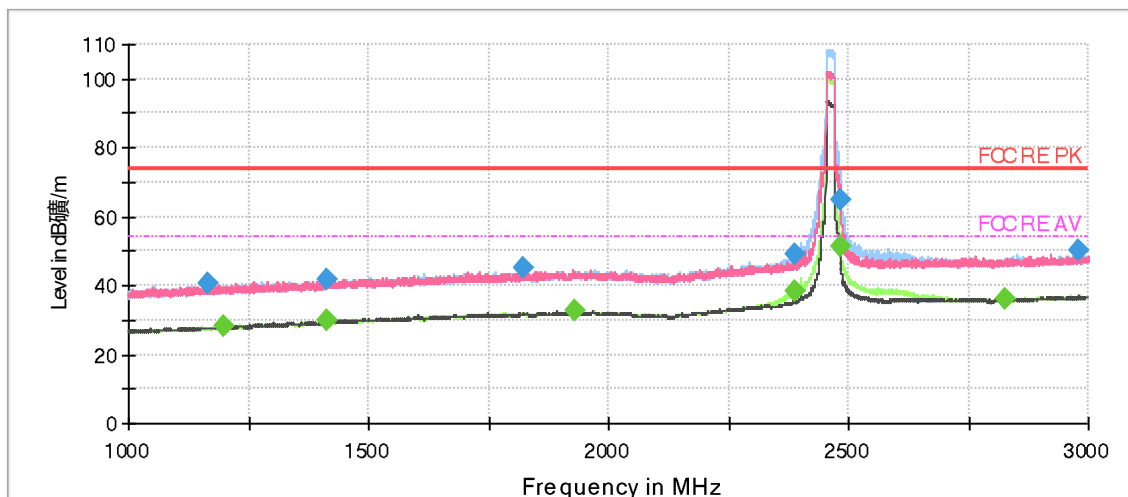
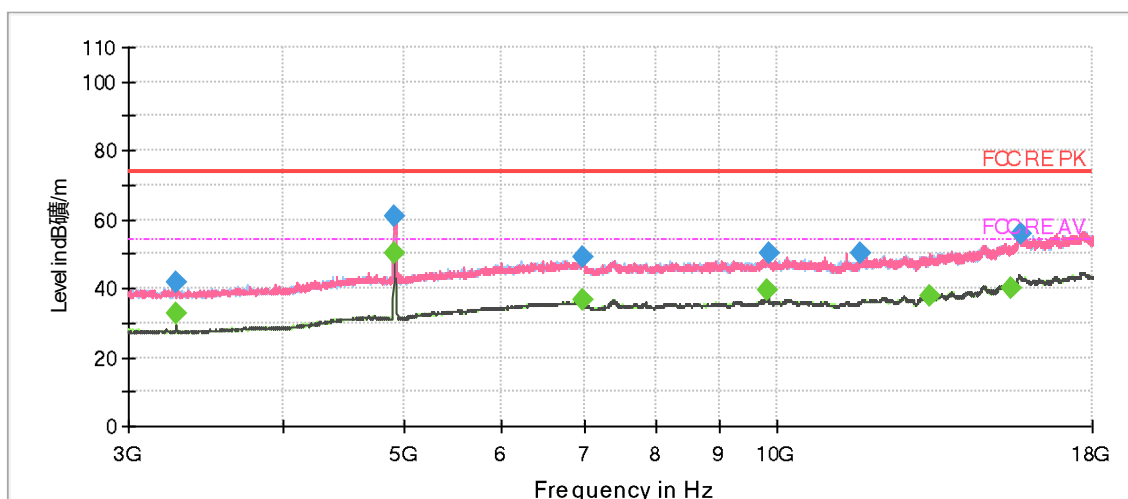


802.11g CH11



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



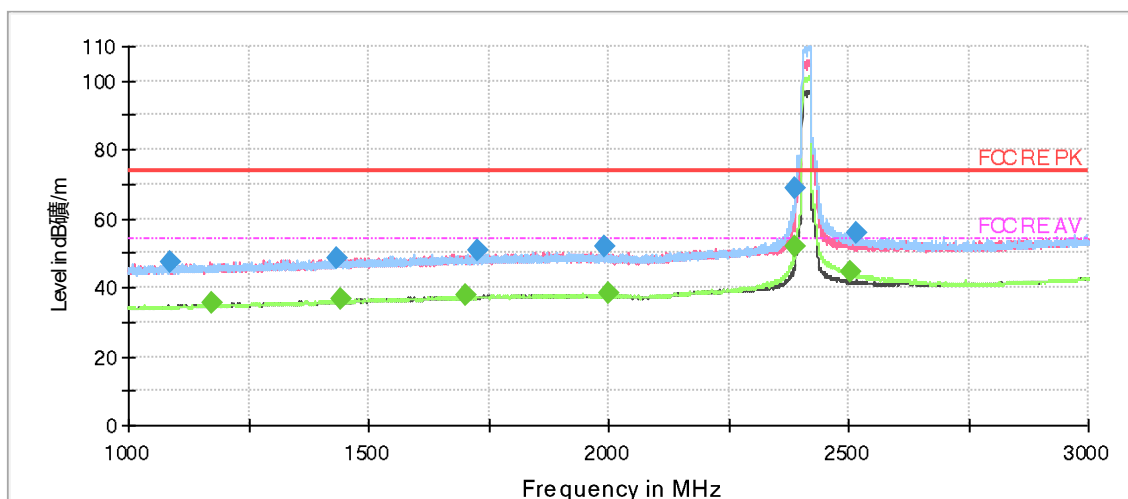
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1164.500000	40.44	---	74.00	33.56	1000.0	100.0	V	347.0	-6.4
1197.000000	---	28.31	54.00	25.69	1000.0	200.0	H	203.0	-6.2
1411.500000	---	29.88	54.00	24.12	1000.0	200.0	H	192.0	-4.5
1415.250000	41.61	---	74.00	32.39	1000.0	200.0	H	151.0	-4.5
1823.500000	44.97	---	74.00	29.03	1000.0	100.0	V	234.0	-1.7
1930.250000	---	32.60	54.00	21.40	1000.0	100.0	V	337.0	-1.0
2388.500000	---	38.16	54.00	15.84	1000.0	200.0	H	243.0	0.5
2389.500000	49.17	---	74.00	24.83	1000.0	200.0	H	213.0	0.5
2483.750000	---	51.41	54.00	2.59	1000.0	100.0	H	228.0	0.8
2484.500000	65.14	---	74.00	8.86	1000.0	100.0	H	228.0	0.8
2826.500000	---	36.19	54.00	17.81	1000.0	200.0	H	273.0	2.1
2978.500000	50.19	---	74.00	23.81	1000.0	200.0	V	90.0	2.7
4925.625000	---	50.01	54.00	3.99	1000.0	200.0	V	124.0	-2.1

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

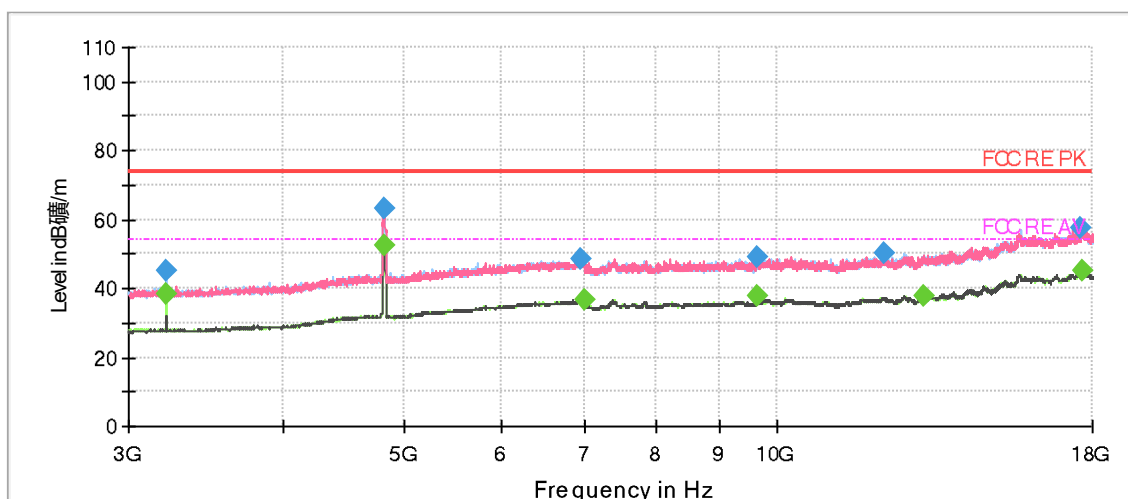
2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH1



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



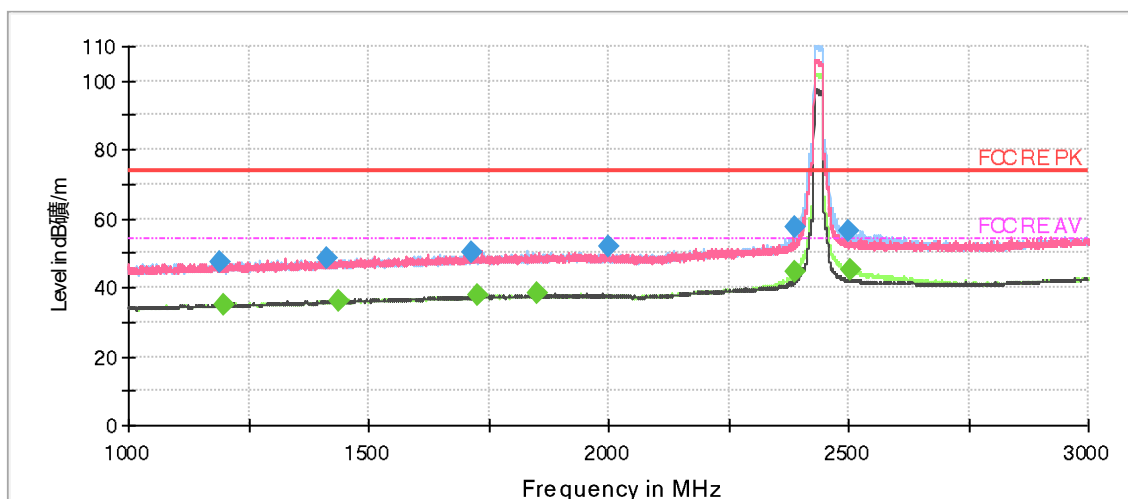
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1084.750000	47.40	---	74.00	26.60	1000.0	100.0	H	341.0	2.4
1174.500000	---	35.30	54.00	18.70	1000.0	100.0	H	201.0	3.0
1434.250000	48.32	---	74.00	25.68	1000.0	200.0	H	182.0	4.6
1440.500000	---	36.47	54.00	17.53	1000.0	200.0	H	212.0	4.7
1703.500000	---	37.63	54.00	16.37	1000.0	200.0	H	231.0	6.2
1729.000000	50.81	---	74.00	23.19	1000.0	200.0	V	299.0	6.3
1993.000000	51.63	---	74.00	22.37	1000.0	100.0	V	242.0	7.6
1998.750000	---	38.14	54.00	15.86	1000.0	100.0	H	311.0	7.6
2389.500000	---	51.65	54.00	2.35	1000.0	100.0	H	351.0	8.5
2389.750000	69.10	---	74.00	4.90	1000.0	200.0	H	354.0	8.5
2503.750000	---	44.35	54.00	9.65	1000.0	200.0	H	354.0	8.8
2515.750000	56.11	---	74.00	17.89	1000.0	200.0	H	354.0	8.9
4826.250000	---	52.21	54.00	1.79	1000.0	100.0	V	201.0	-2.3

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

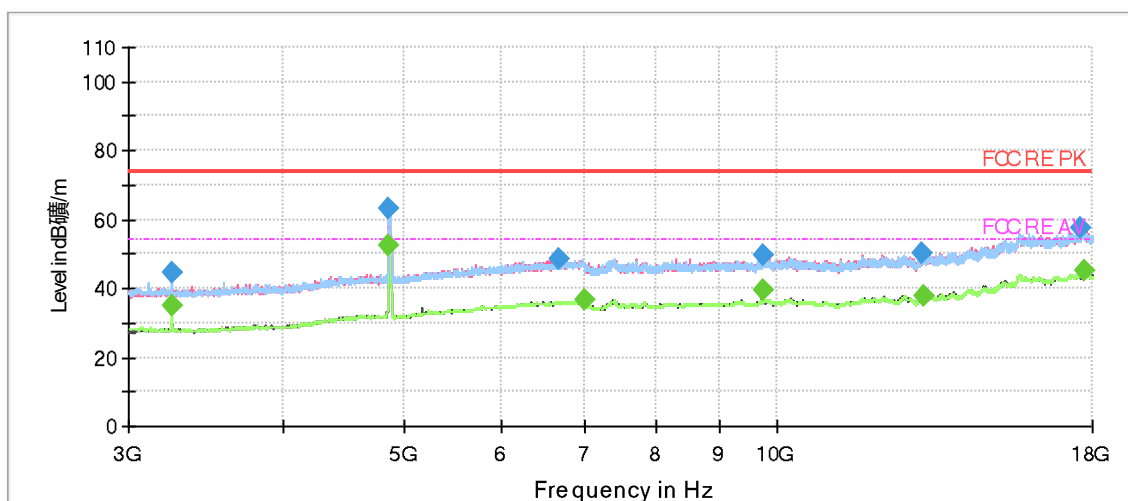
2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH6



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



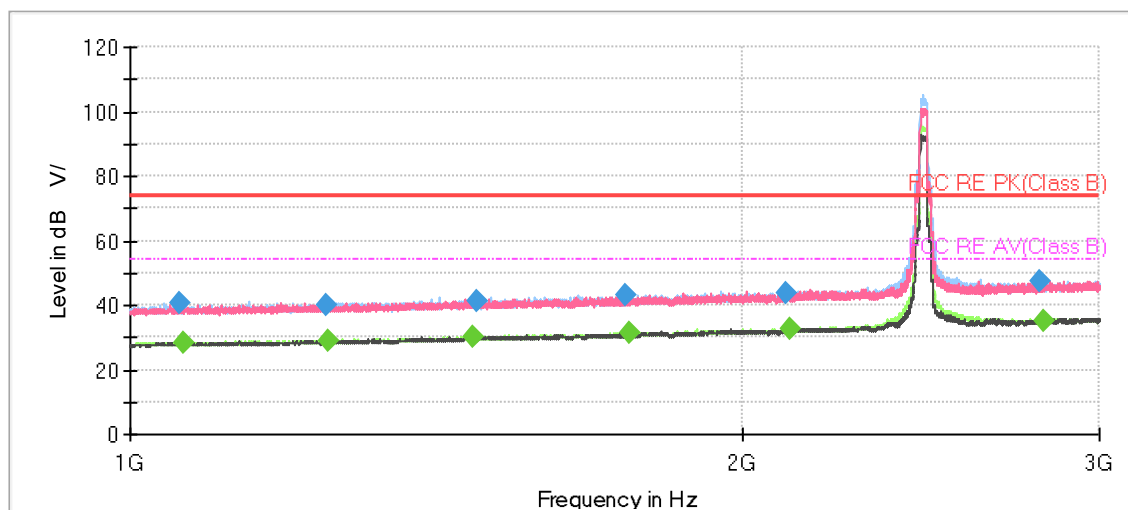
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1188.750000	47.36	---	74.00	26.64	1000.0	200.0	H	289.0	3.1
1198.500000	---	35.12	54.00	18.88	1000.0	100.0	H	21.0	3.2
1413.000000	48.41	---	74.00	25.59	1000.0	100.0	H	283.0	4.5
1439.000000	---	36.34	54.00	17.66	1000.0	200.0	V	190.0	4.6
1716.000000	50.19	---	74.00	23.82	1000.0	200.0	V	271.0	6.2
1727.000000	---	37.53	54.00	16.47	1000.0	200.0	H	359.0	6.3
1850.500000	---	38.24	54.00	15.76	1000.0	200.0	H	239.0	6.9
1999.750000	51.65	---	74.00	22.35	1000.0	200.0	V	291.0	7.6
2389.500000	---	44.82	54.00	9.18	1000.0	200.0	H	350.0	8.5
2389.500000	57.61	---	74.00	16.39	1000.0	200.0	H	350.0	8.5
2499.750000	56.34	---	74.00	17.66	1000.0	200.0	H	350.0	8.8
2503.000000	---	45.36	54.00	8.64	1000.0	100.0	H	354.0	8.8
4871.250000	---	52.53	54.00	1.47	1000.0	100.0	V	202.0	-2.2

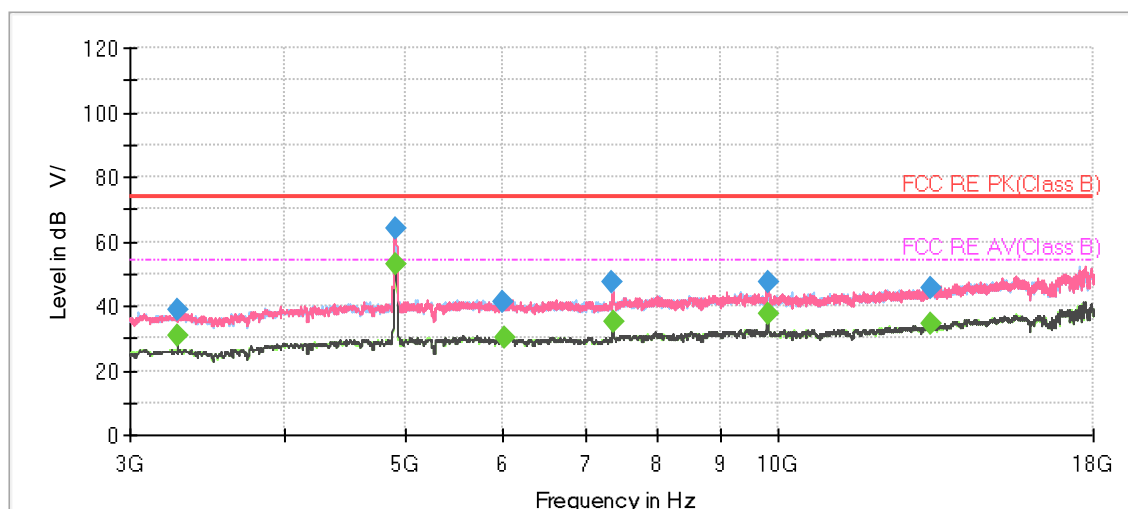
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH10



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



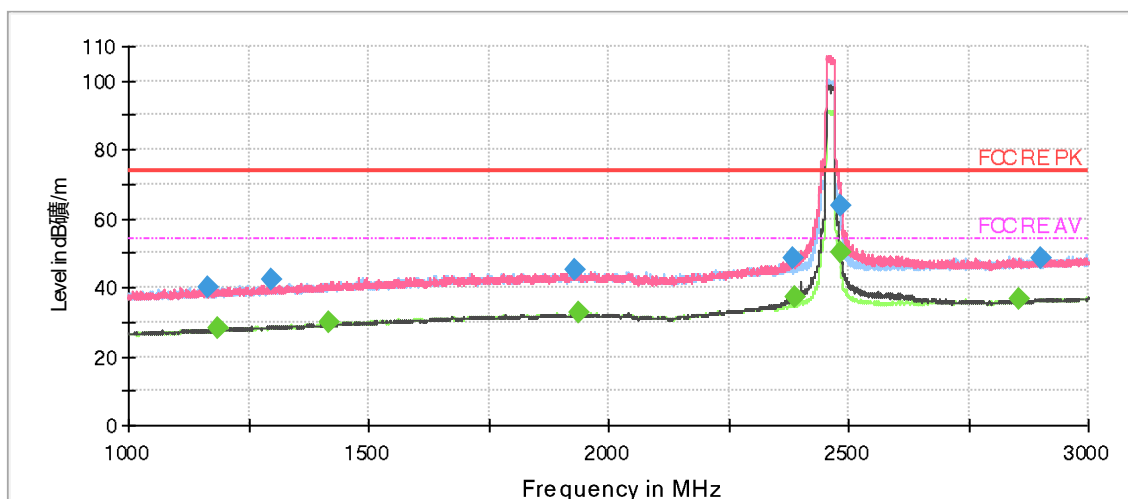
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1058.750000	40.51	---	74.00	33.49	500.0	100.0	V	16.0	-9.6
1061.750000	---	28.51	54.00	25.49	500.0	100.0	H	330.0	-9.5
1247.750000	40.29	---	74.00	33.71	500.0	100.0	H	122.0	-8.3
1251.000000	---	28.67	54.00	25.33	500.0	100.0	H	221.0	-8.3
1475.500000	---	29.94	54.00	24.06	500.0	200.0	H	119.0	-6.9
1482.000000	41.39	---	74.00	32.61	500.0	200.0	H	87.0	-6.9
1755.250000	42.95	---	74.00	31.05	500.0	200.0	H	132.0	-5.6
1760.250000	---	31.38	54.00	22.62	500.0	100.0	H	279.0	-5.6
2103.000000	43.76	---	74.00	30.24	500.0	200.0	H	128.0	-4.0
2114.500000	---	32.44	54.00	21.56	500.0	100.0	H	292.0	-4.0
2807.250000	47.46	---	74.00	26.54	500.0	200.0	H	36.0	-1.4
2815.250000	---	35.03	54.00	18.97	500.0	100.0	H	316.0	-1.3
4914.375000	---	52.74	54.00	1.26	500.0	100.0	V	10.0	-4.9

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

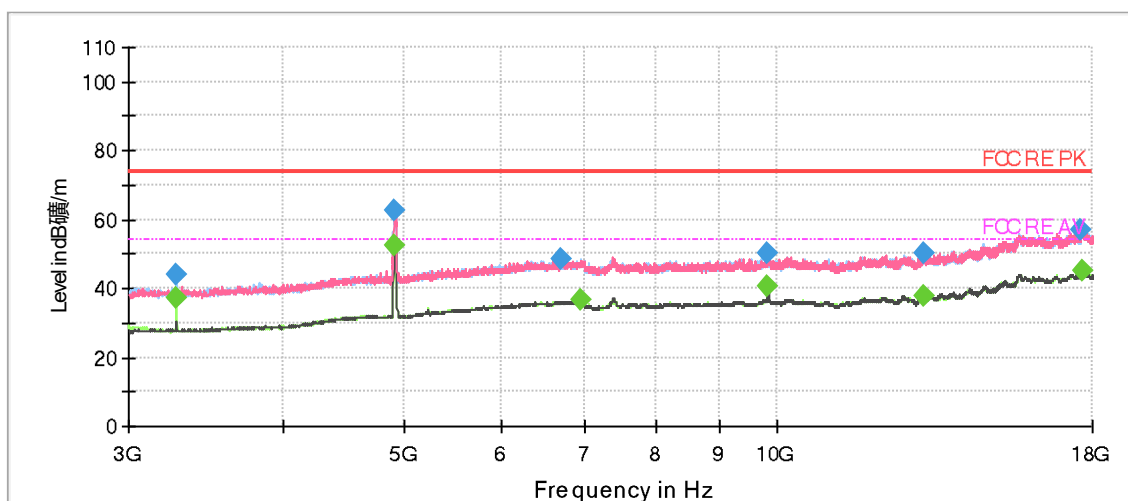
2. Margin = Limit –MAX Peak/ Average

802.11n (HT20) CH11



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



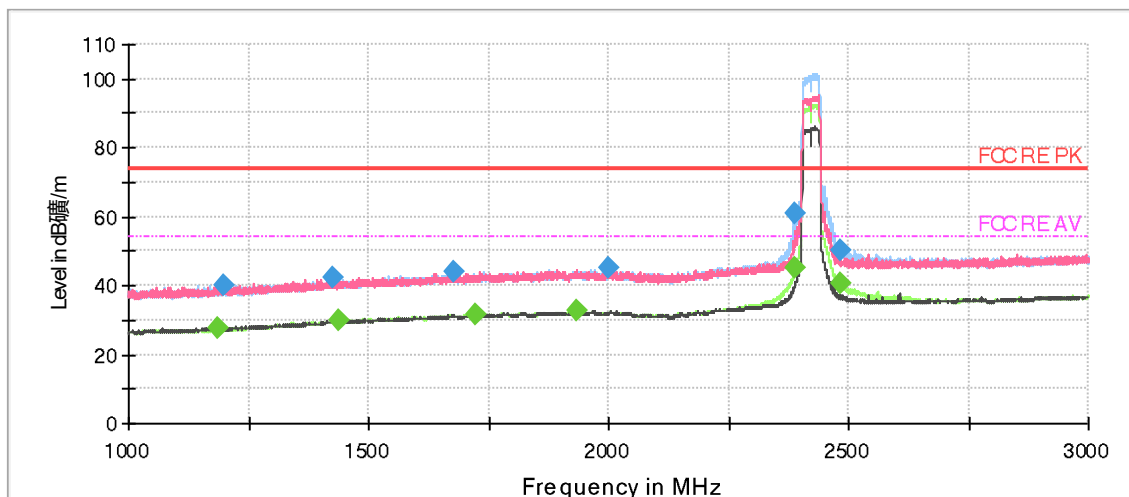
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1164.000000	40.09	---	74.00	33.91	1000.0	100.0	V	253.0	-6.4
1186.750000	---	28.19	54.00	25.81	1000.0	100.0	V	141.0	-6.3
1299.500000	42.26	---	74.00	31.74	1000.0	200.0	V	0.0	-5.4
1419.000000	---	29.81	54.00	24.19	1000.0	200.0	V	39.0	-4.4
1929.500000	45.00	---	74.00	29.00	1000.0	200.0	H	279.0	-1.0
1938.500000	---	32.60	54.00	21.40	1000.0	200.0	H	179.0	-1.0
2385.250000	48.44	---	74.00	25.56	1000.0	100.0	V	213.0	0.5
2387.750000	---	37.34	54.00	16.66	1000.0	100.0	V	223.0	0.5
2484.000000	---	50.03	54.00	3.97	1000.0	200.0	V	232.0	0.8
2484.000000	63.82	---	74.00	10.18	1000.0	200.0	V	232.0	0.8
2854.500000	---	36.54	54.00	17.46	1000.0	200.0	V	221.0	2.2
2899.000000	48.74	---	74.00	25.26	1000.0	200.0	V	99.0	2.4
4923.750000	---	52.44	54.00	1.56	1000.0	200.0	V	202.0	-2.1

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

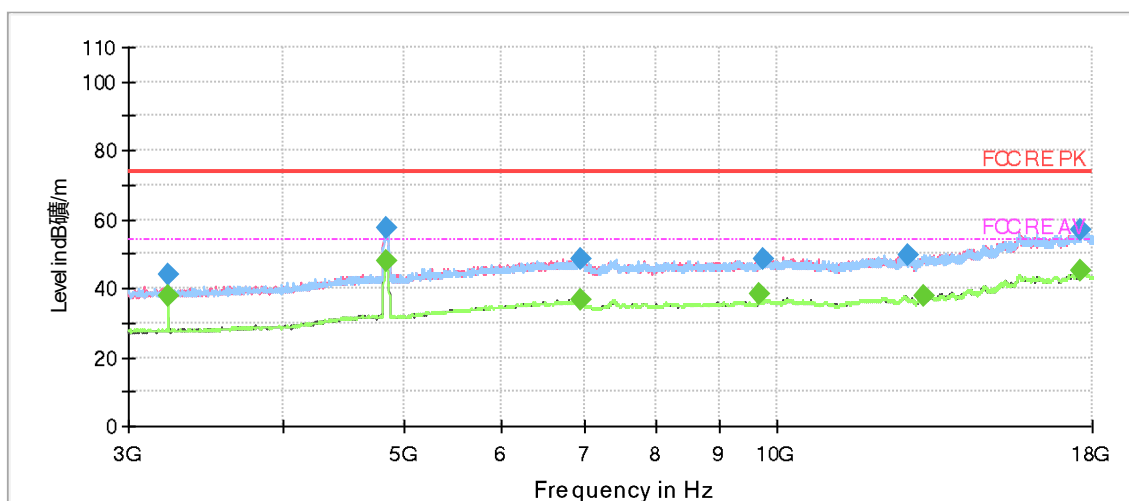
2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH3



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



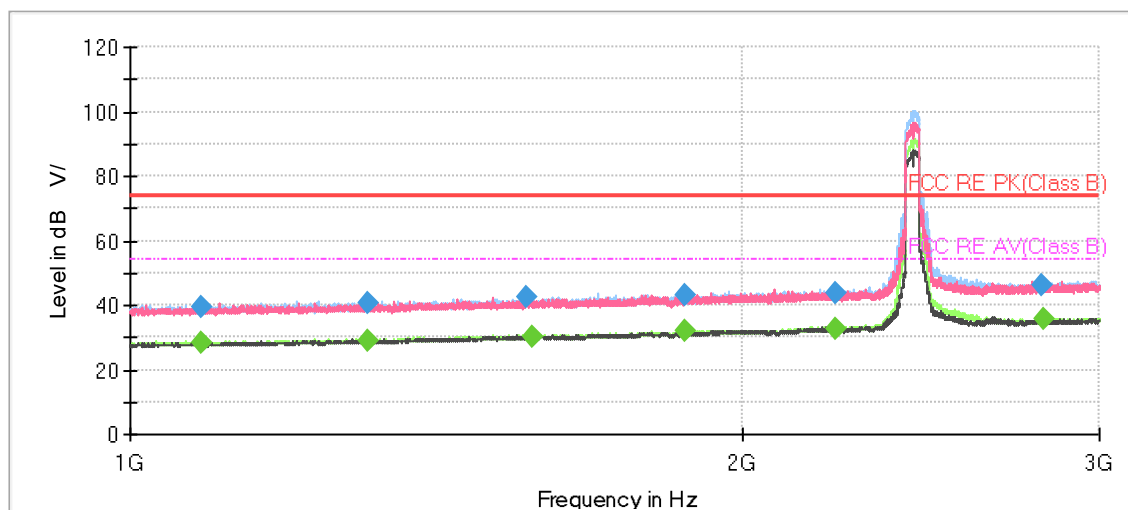
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1187.000000	---	27.76	54.00	26.24	1000.0	200.0	V	185.0	-6.3
1199.750000	39.93	---	74.00	34.07	1000.0	200.0	V	14.0	-6.2
1424.250000	42.16	---	74.00	31.84	1000.0	200.0	H	128.0	-4.4
1439.750000	---	29.87	54.00	24.13	1000.0	100.0	V	352.0	-4.3
1677.250000	44.25	---	74.00	29.75	1000.0	200.0	V	185.0	-2.6
1721.750000	---	31.73	54.00	22.27	1000.0	100.0	H	150.0	-2.3
1934.500000	---	32.57	54.00	21.43	1000.0	200.0	V	115.0	-1.0
2000.750000	44.92	---	74.00	29.08	1000.0	100.0	V	0.0	-0.6
2387.750000	---	45.31	54.00	8.69	1000.0	100.0	H	220.0	0.5
2389.000000	60.65	---	74.00	13.36	1000.0	100.0	H	230.0	0.5
2484.250000	---	40.37	54.00	13.63	1000.0	200.0	H	220.0	0.8
2484.750000	50.37	---	74.00	23.63	1000.0	200.0	H	220.0	0.8
4843.125000	---	48.18	54.00	5.82	1000.0	200.0	V	202.0	-2.2

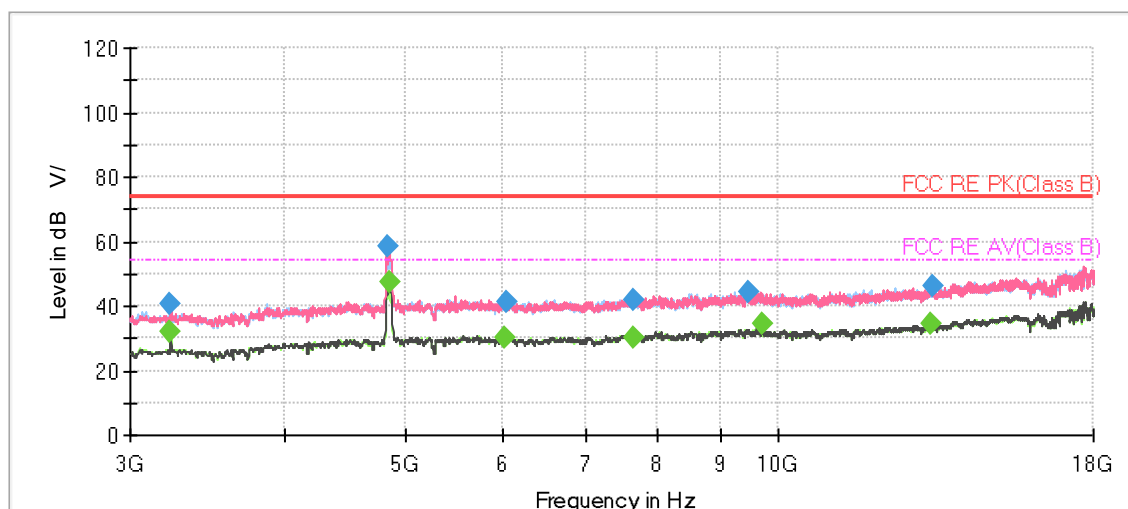
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH4



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



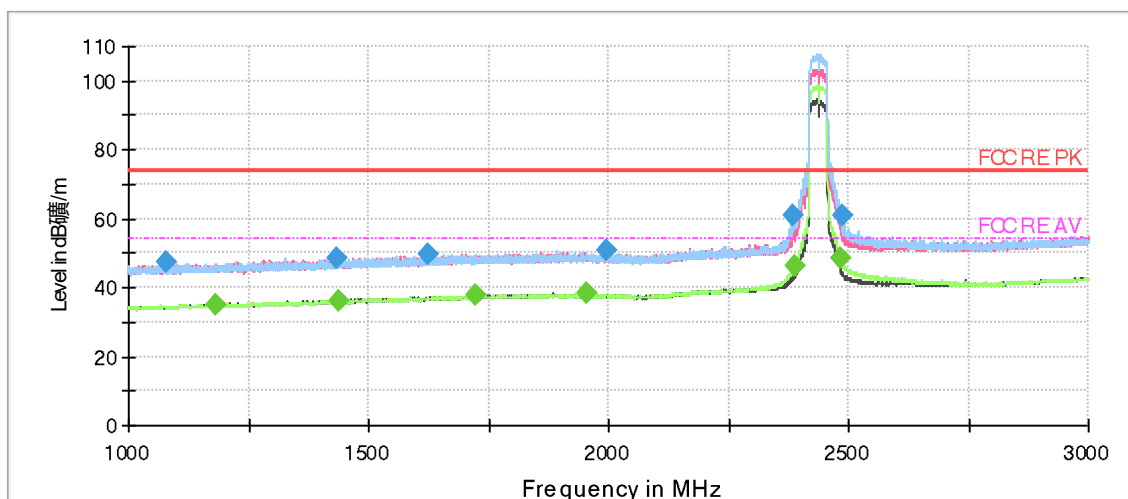
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1083.250000	---	28.39	54.00	25.61	500.0	200.0	H	253.0	-9.4
1084.000000	39.30	---	74.00	34.70	500.0	200.0	H	36.0	-9.4
1309.500000	40.77	---	74.00	33.23	500.0	100.0	H	358.0	-8.0
1310.250000	---	28.82	54.00	25.18	500.0	200.0	H	118.0	-8.0
1567.500000	42.24	---	74.00	31.76	500.0	200.0	H	235.0	-6.5
1576.250000	---	30.04	54.00	23.96	500.0	200.0	H	8.0	-6.5
1874.750000	43.38	---	74.00	30.62	500.0	100.0	H	346.0	-5.0
1875.000000	---	31.89	54.00	22.11	500.0	100.0	V	13.0	-5.0
2223.000000	---	32.87	54.00	21.13	500.0	200.0	H	94.0	-3.5
2224.250000	43.64	---	74.00	30.36	500.0	100.0	H	299.0	-3.5
2810.500000	46.35	---	74.00	27.65	500.0	100.0	H	354.0	-1.3
2816.250000	---	35.64	54.00	18.36	500.0	200.0	H	179.0	-1.3

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

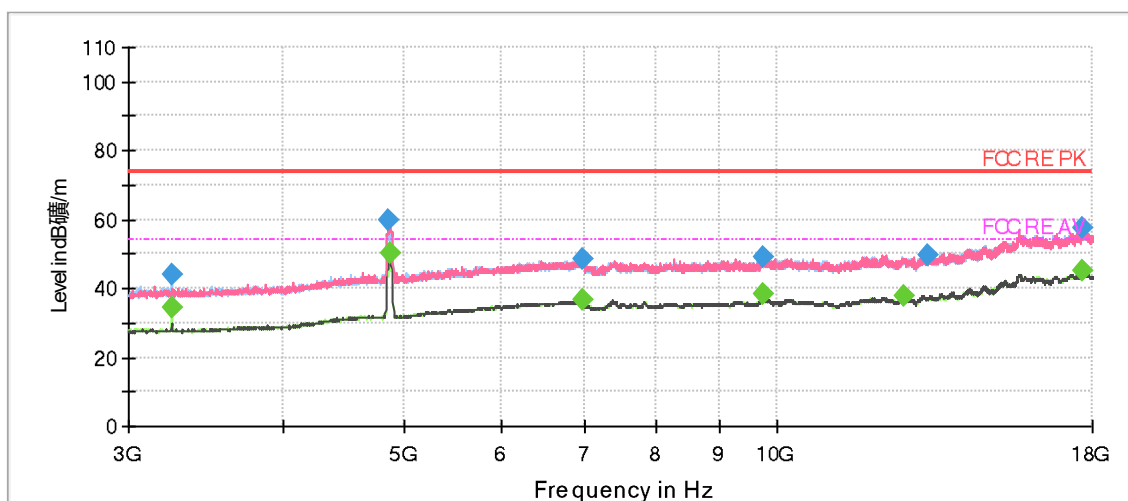
2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH6



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



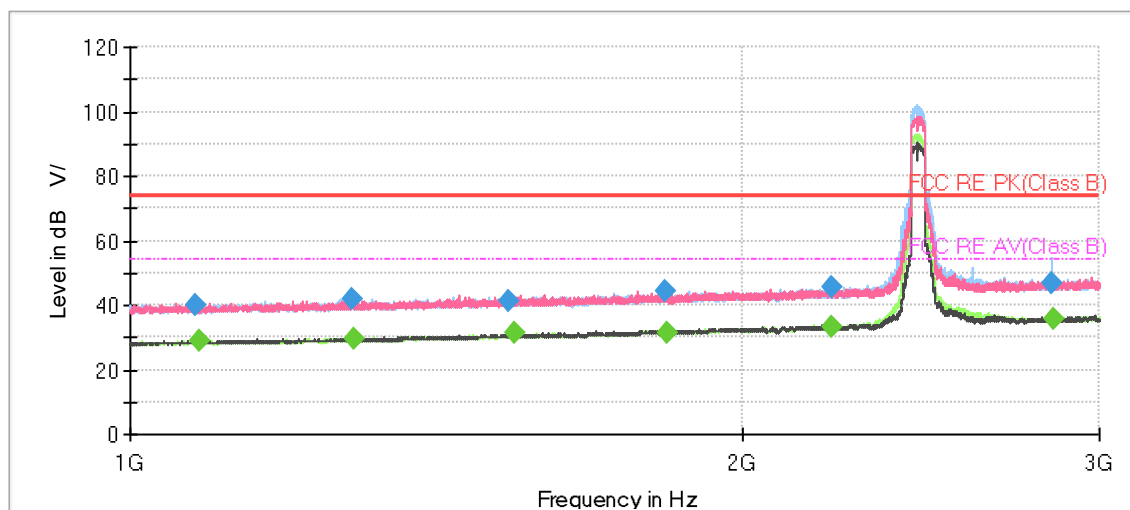
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1080.000000	47.39	---	74.00	26.61	1000.0	100.0	V	213.0	2.4
1180.500000	---	35.09	54.00	18.91	1000.0	200.0	V	238.0	3.0
1434.000000	48.65	---	74.00	25.35	1000.0	100.0	H	0.0	4.6
1436.750000	---	36.35	54.00	17.65	1000.0	100.0	H	216.0	4.6
1624.750000	49.77	---	74.00	24.23	1000.0	200.0	V	328.0	5.7
1724.750000	---	37.60	54.00	16.40	1000.0	200.0	V	278.0	6.3
1953.750000	---	38.18	54.00	15.82	1000.0	200.0	V	258.0	7.4
1994.750000	50.79	---	74.00	23.21	1000.0	100.0	H	137.0	7.6
2386.250000	60.88	---	74.00	13.12	1000.0	200.0	H	0.0	8.5
2388.250000	---	46.53	54.00	7.47	1000.0	100.0	H	0.0	8.5
2484.250000	---	48.56	54.00	5.44	1000.0	200.0	H	354.0	8.8
2485.750000	60.90	---	74.00	13.10	1000.0	200.0	H	354.0	8.8
4875.000000	---	50.08	54.00	3.92	1000.0	200.0	V	202.0	-2.2

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

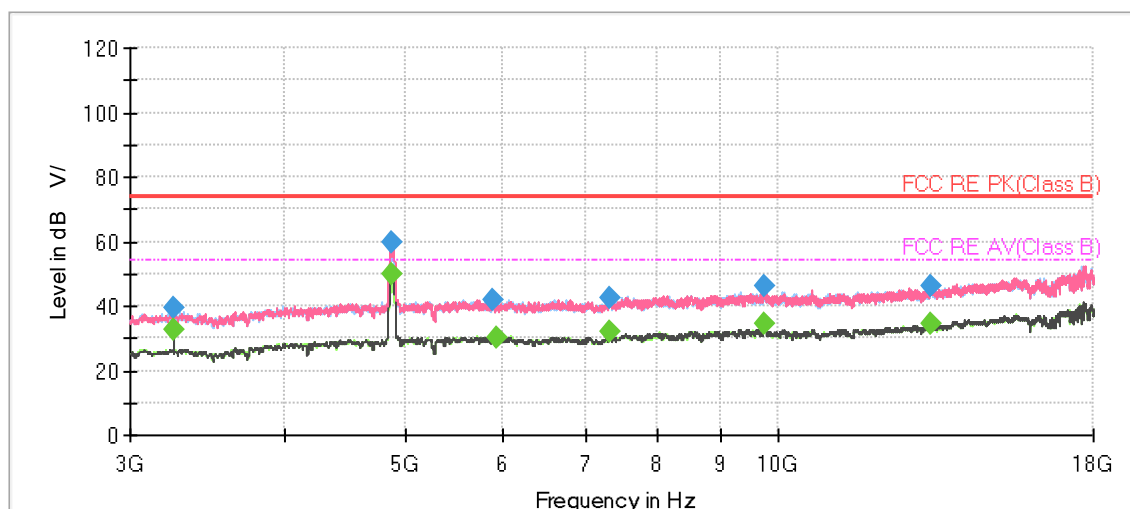
2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH7



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



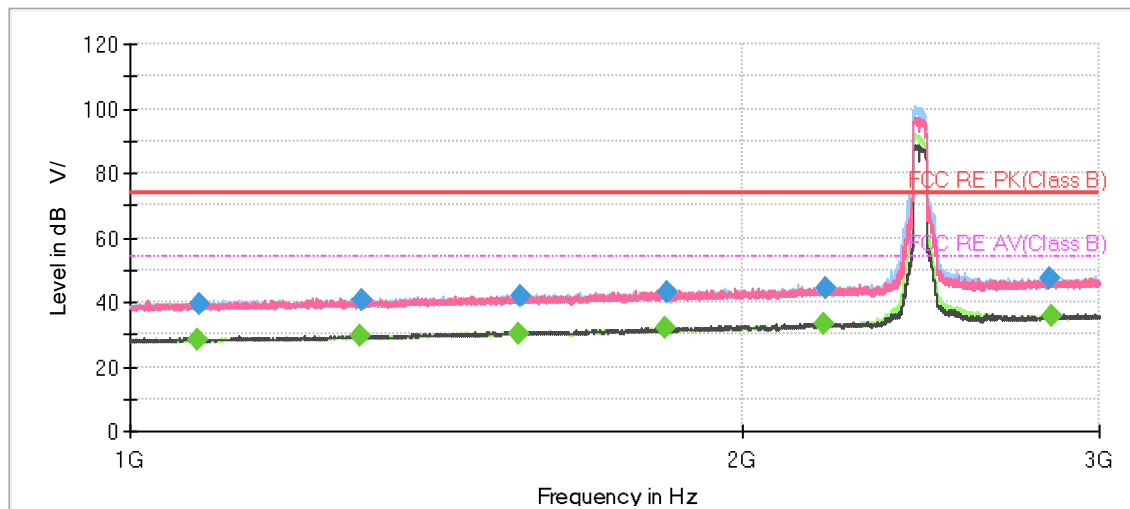
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1078.000000	39.90	---	74.00	34.10	500.0	100.0	H	44.0	-9.5
1082.750000	---	28.73	54.00	25.27	500.0	100.0	H	99.0	-9.4
1287.500000	41.58	---	74.00	32.42	500.0	200.0	V	8.0	-8.1
1290.000000	---	29.74	54.00	24.26	500.0	200.0	H	330.0	-8.1
1536.500000	41.52	---	74.00	32.48	500.0	200.0	H	0.0	-6.6
1545.250000	---	31.14	54.00	22.86	500.0	200.0	V	105.0	-6.6
1835.750000	44.21	---	74.00	29.79	500.0	100.0	V	138.0	-5.1
1840.000000	---	31.36	54.00	22.64	500.0	200.0	H	349.0	-5.1
2213.750000	---	33.25	54.00	20.75	500.0	100.0	H	25.0	-3.6
2216.750000	45.53	---	74.00	28.47	500.0	200.0	H	30.0	-3.6
2843.500000	47.01	---	74.00	26.99	500.0	200.0	H	83.0	-1.1
2846.250000	---	35.93	54.00	18.07	500.0	100.0	H	140.0	-1.1
4886.250000	---	49.58	54.00	4.42	500.0	100.0	V	330.0	-5.2

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

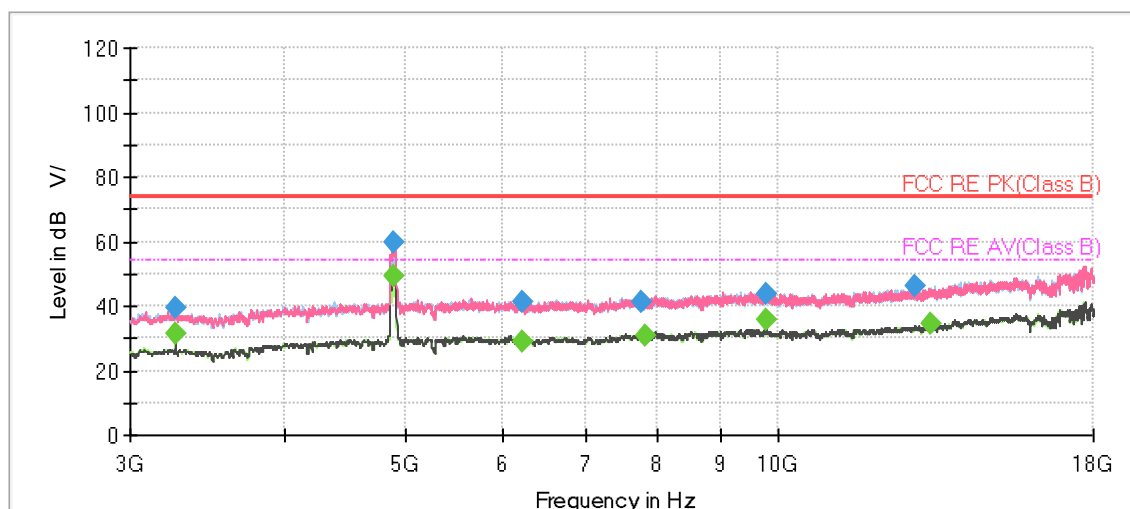
2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH8



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



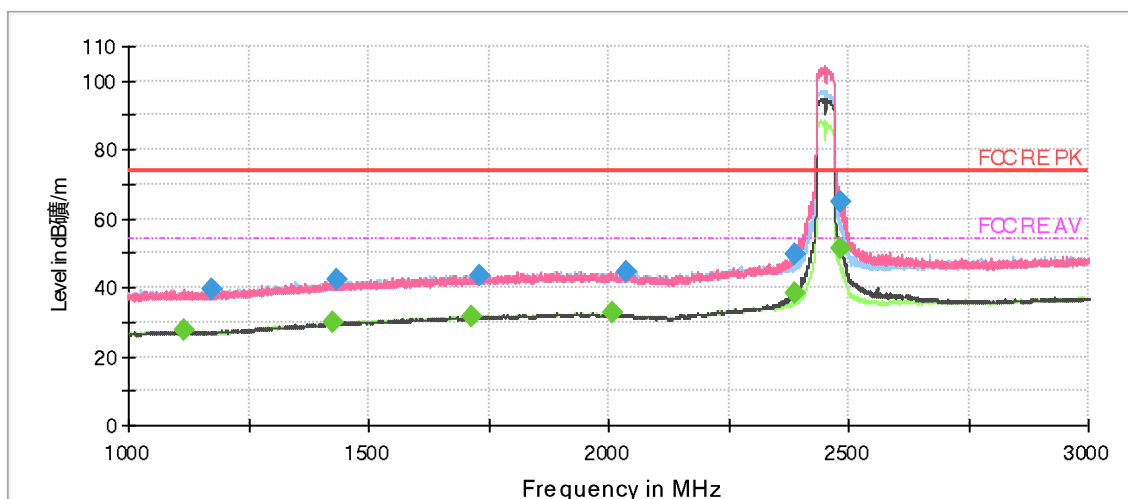
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1079.500000	---	28.48	54.00	25.52	500.0	200.0	H	26.0	-9.5
1081.250000	39.41	---	74.00	34.59	500.0	200.0	H	39.0	-9.5
1296.750000	---	29.60	54.00	24.40	500.0	200.0	V	263.0	-8.1
1299.500000	40.35	---	74.00	33.65	500.0	100.0	H	167.0	-8.0
1552.500000	---	30.25	54.00	23.75	500.0	200.0	H	39.0	-6.5
1557.750000	41.84	---	74.00	32.16	500.0	100.0	V	125.0	-6.5
1834.500000	---	31.95	54.00	22.05	500.0	100.0	V	56.0	-5.1
1837.500000	43.35	---	74.00	30.65	500.0	200.0	V	323.0	-5.1
2193.750000	---	33.19	54.00	20.81	500.0	200.0	H	48.0	-3.7
2200.000000	44.56	---	74.00	29.44	500.0	200.0	H	26.0	-3.6
2837.000000	47.58	---	74.00	26.42	500.0	200.0	V	328.0	-1.2
2843.250000	---	35.67	54.00	18.33	500.0	200.0	H	62.0	-1.1
4891.875000	---	48.94	54.00	5.06	500.0	100.0	V	0.0	-5.1

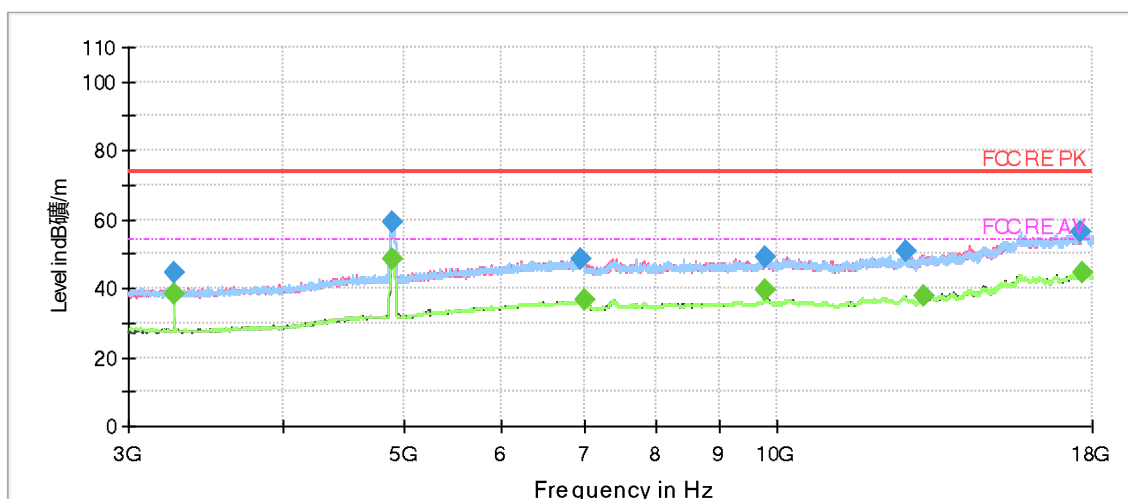
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

802.11n (HT40) CH9



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



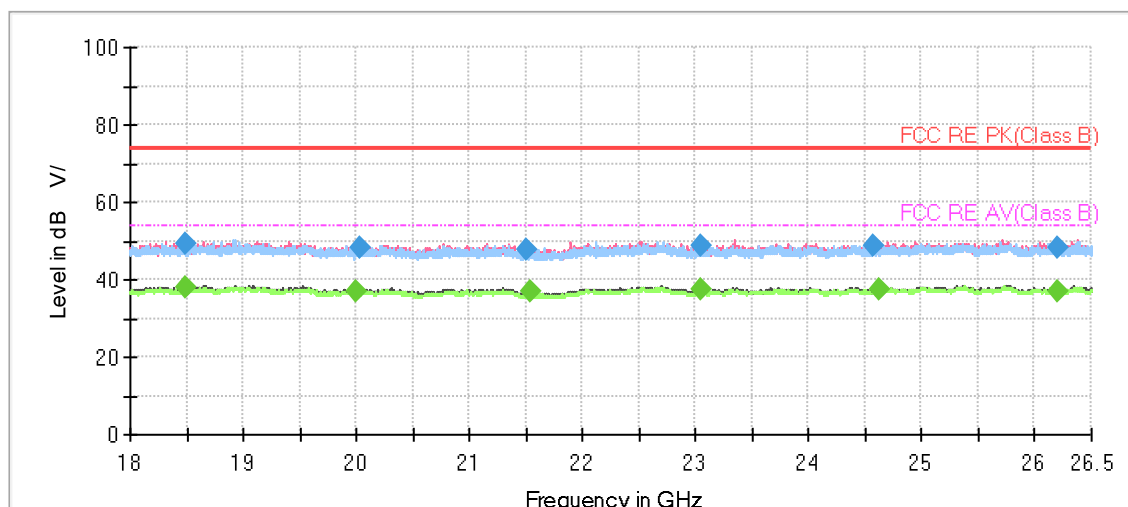
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1115.750000	---	27.40	54.00	26.60	1000.0	100.0	H	0.0	-6.8
1174.500000	39.76	---	74.00	34.24	1000.0	100.0	H	109.0	-6.4
1424.000000	---	30.01	54.00	23.99	1000.0	200.0	H	180.0	-4.4
1433.250000	42.19	---	74.00	31.81	1000.0	200.0	V	272.0	-4.3
1714.750000	---	31.73	54.00	22.27	1000.0	200.0	V	19.0	-2.3
1731.750000	43.65	---	74.00	30.35	1000.0	100.0	H	0.0	-2.2
2006.250000	---	32.62	54.00	21.38	1000.0	100.0	V	0.0	-0.6
2039.250000	44.71	---	74.00	29.29	1000.0	100.0	H	281.0	-0.5
2388.250000	---	38.49	54.00	15.51	1000.0	100.0	V	218.0	0.5
2389.750000	49.51	---	74.00	24.49	1000.0	100.0	V	218.0	0.5
2484.250000	---	51.30	54.00	2.70	1000.0	100.0	V	248.0	0.8
2484.500000	64.87	---	74.00	9.13	1000.0	100.0	V	218.0	0.8
4903.125000	---	48.61	54.00	5.39	1000.0	100.0	V	205.0	-2.2

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

2. Margin = Limit –MAX Peak/ Average

During the test, the Radiates Emission from 18GHz to 26.5GHz was performed in all modes with all channels, 802.11g, Channel 6 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

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
18487.687500	49.32	---	74.00	24.68	500.0	100.0	H	33.0	-4.6
18490.875000	---	37.72	54.00	16.28	500.0	200.0	V	86.0	-4.6
19997.500000	---	36.68	54.00	17.32	500.0	100.0	V	169.0	-4.7
20028.312500	48.27	---	74.00	25.73	500.0	100.0	V	334.0	-4.6
21511.562500	47.64	---	74.00	26.36	500.0	200.0	V	232.0	-4.2
21534.937500	---	36.74	54.00	17.26	500.0	100.0	V	219.0	-4.1
23043.687500	---	37.31	54.00	16.69	500.0	100.0	V	113.0	-2.9
23055.375000	48.83	---	74.00	25.17	500.0	200.0	V	126.0	-2.9
24567.312500	48.49	---	74.00	25.51	500.0	100.0	V	0.0	-2.3
24628.937500	---	37.21	54.00	16.79	500.0	100.0	V	287.0	-2.2
26201.437500	48.22	---	74.00	25.78	500.0	200.0	V	160.0	-1.3
26207.812500	---	37.15	54.00	16.86	500.0	200.0	V	232.0	-1.3

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

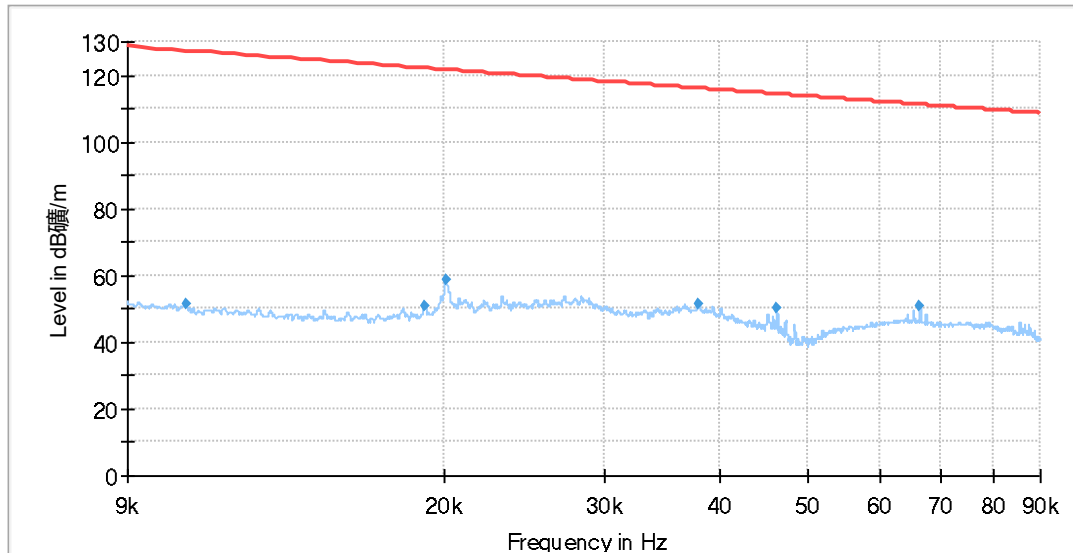
2. Margin = Limit - MAX Peak/ Average

Bluetooth LE

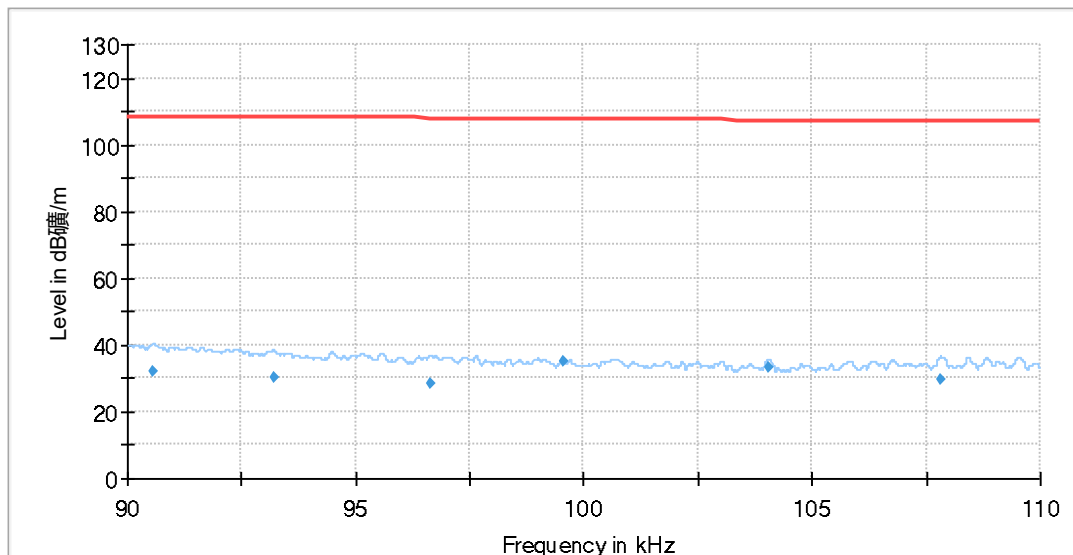
During the test, the Radiates Emission from 9kHz to 1GHz was performed in all modes with all channels, Bluetooth LE-Channel 0 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

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

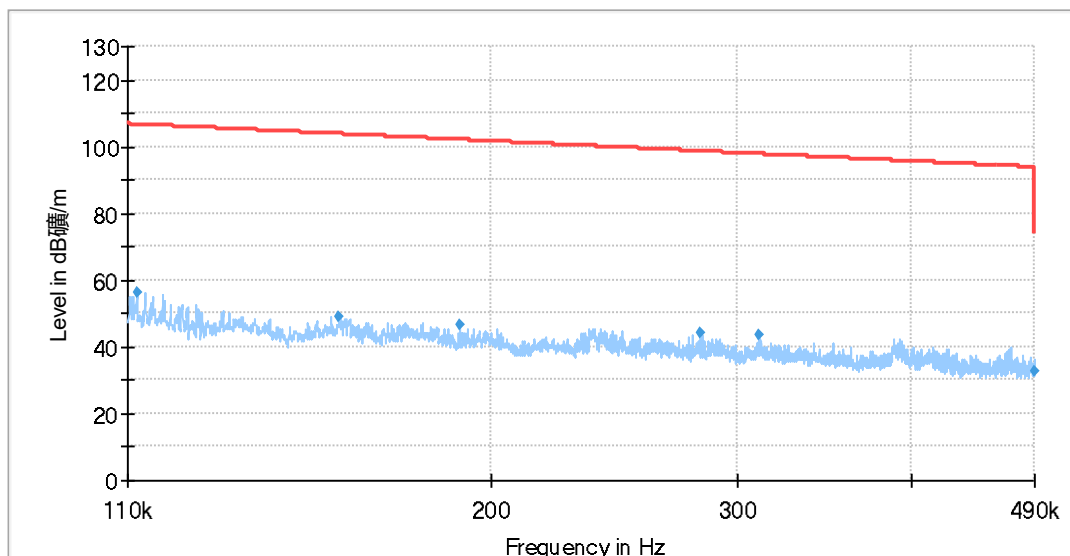
A symbol (dB V) in the test plot below means (dBV/m)



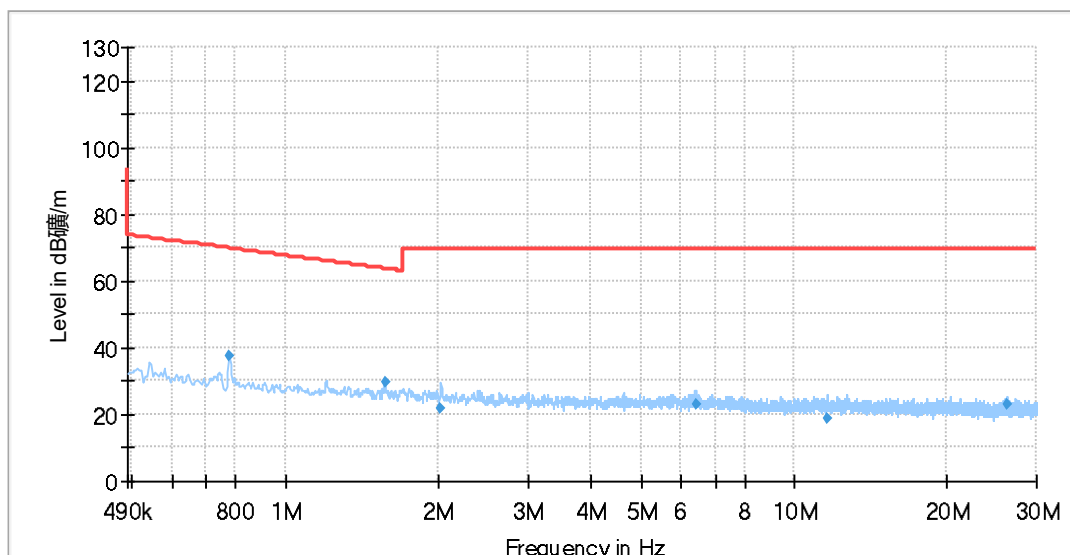
Radiates Emission from 9kHz to 90kHz



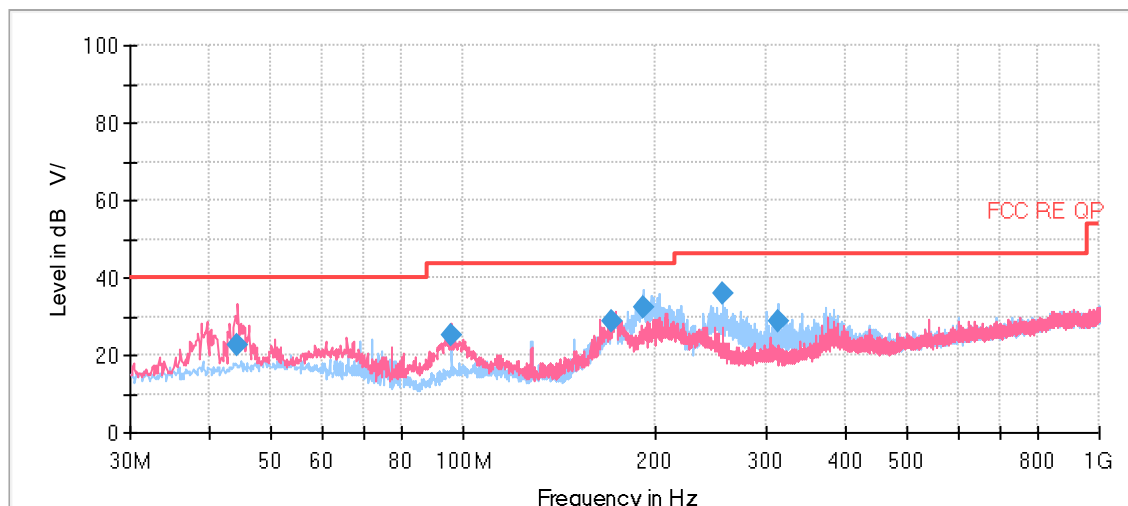
Radiates Emission from 90kHz to 110kHz



Radiates Emission from 110kHz to 490kHz



Radiates Emission from 490kHz to 30MHz

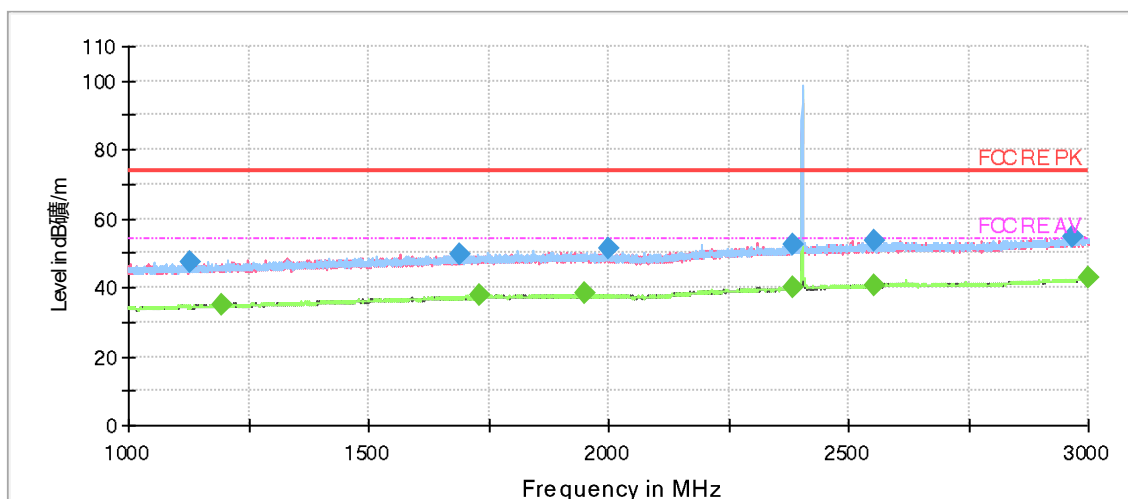


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
44.067500	22.73	40.00	17.27	109.0	V	153.0	20.7
96.121250	25.18	43.50	18.32	100.0	V	0.0	18.6
171.538750	28.96	43.50	14.54	110.0	V	63.0	17.8
192.072500	32.12	43.50	11.38	110.0	H	72.0	18.6
256.373750	35.66	46.00	10.34	111.0	H	78.0	20.2
311.987500	28.94	46.00	17.06	100.0	H	150.0	21.2

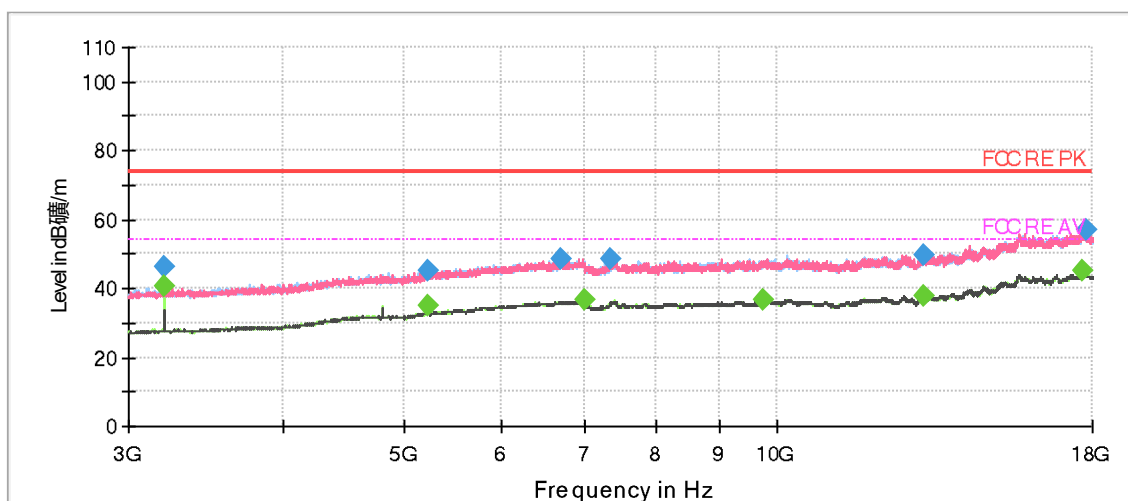
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
 2. Margin = Limit – Quasi-Peak

Bluetooth LE-Channel 0



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



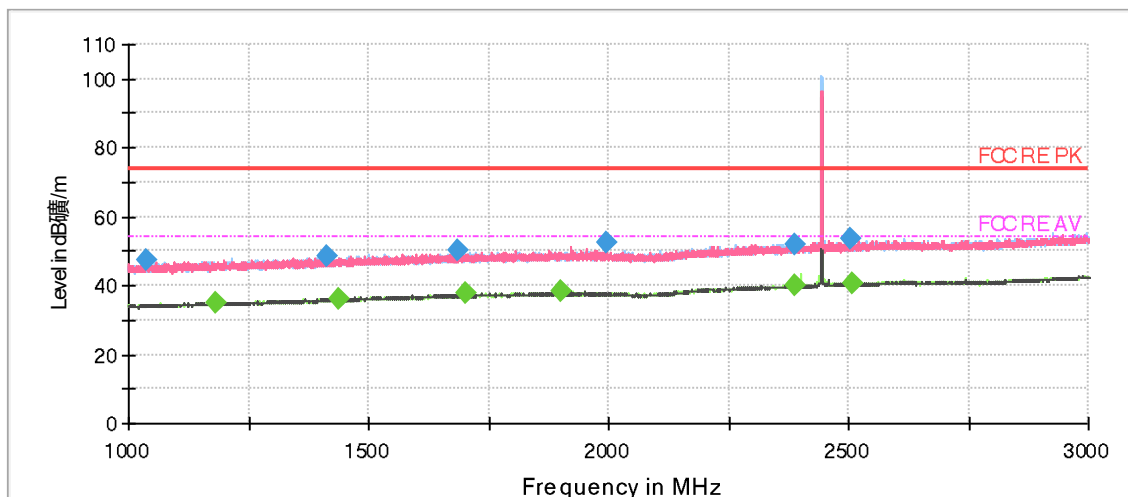
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1128.750000	47.60	---	74.00	26.40	1000.0	100.0	H	269.0	2.7
1195.500000	---	35.17	54.00	18.83	1000.0	100.0	H	33.0	3.2
1691.000000	49.73	---	74.00	24.27	1000.0	100.0	H	323.0	6.1
1730.750000	---	37.67	54.00	16.33	1000.0	200.0	V	112.0	6.3
1952.250000	---	38.34	54.00	15.66	1000.0	100.0	H	43.0	7.4
1999.500000	51.21	---	74.00	22.79	1000.0	200.0	V	323.0	7.6
2384.750000	---	39.94	54.00	14.06	1000.0	100.0	V	117.0	8.5
2385.000000	52.36	---	74.00	21.64	1000.0	200.0	V	163.0	8.5
2552.000000	---	40.83	54.00	13.17	1000.0	200.0	V	203.0	9.0
2552.500000	53.78	---	74.00	20.22	1000.0	100.0	V	306.0	9.0
2965.500000	54.90	---	74.00	19.10	1000.0	100.0	V	306.0	10.6
2999.000000	---	42.85	54.00	11.15	1000.0	100.0	V	296.0	10.7

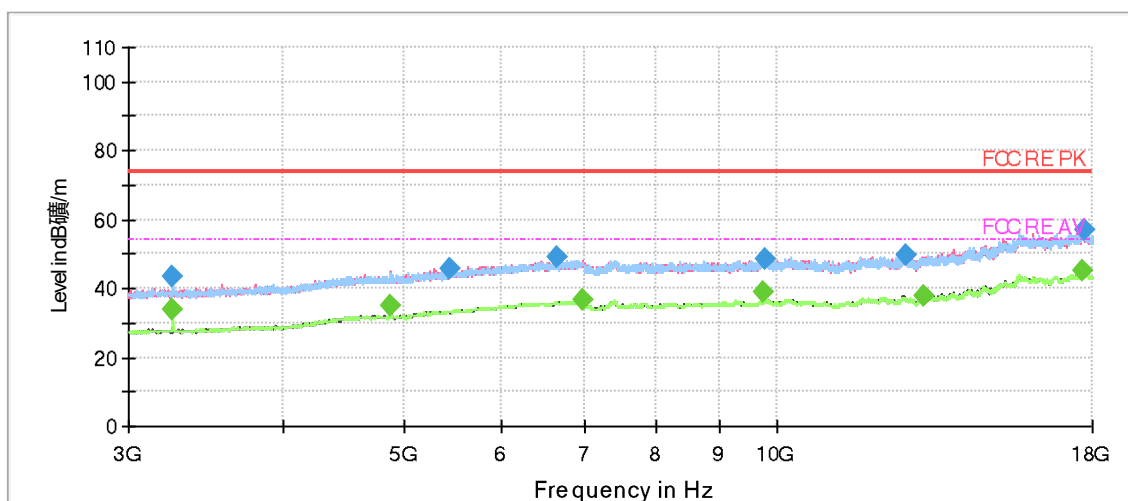
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

Bluetooth LE-Channel 19



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



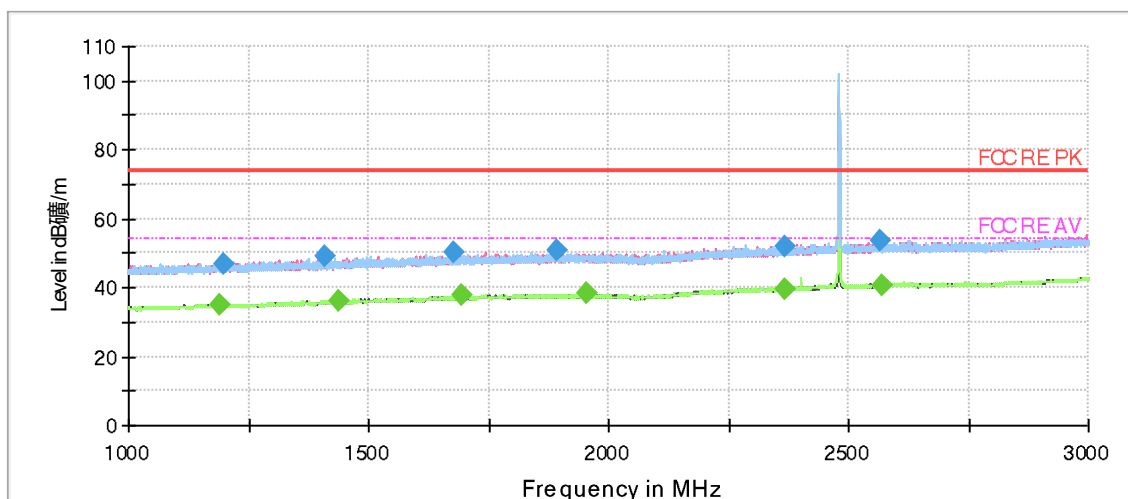
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1038.750000	47.38	---	74.00	26.62	1000.0	100.0	H	308.0	2.1
1180.000000	---	35.18	54.00	18.82	1000.0	100.0	V	141.0	3.0
1411.500000	48.75	---	74.00	25.25	1000.0	200.0	V	197.0	4.5
1439.750000	---	36.37	54.00	17.63	1000.0	200.0	V	227.0	4.6
1685.750000	50.21	---	74.00	23.79	1000.0	100.0	V	12.0	6.1
1702.250000	---	37.91	54.00	16.09	1000.0	100.0	V	0.0	6.2
1899.000000	---	38.23	54.00	15.77	1000.0	100.0	H	0.0	7.1
1994.500000	52.23	---	74.00	21.77	1000.0	100.0	V	22.0	7.6
2388.750000	---	40.12	54.00	13.88	1000.0	100.0	H	337.0	8.5
2389.750000	52.04	---	74.00	21.96	1000.0	100.0	V	171.0	8.5
2505.750000	53.51	---	74.00	20.49	1000.0	200.0	H	0.0	8.8
2508.000000	---	40.49	54.00	13.51	1000.0	200.0	V	117.0	8.9

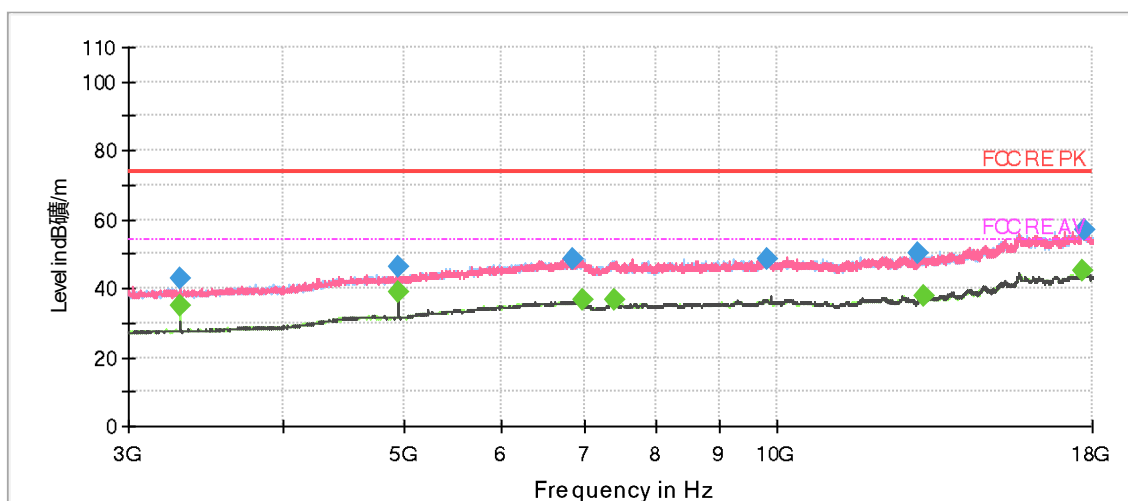
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit –MAX Peak/ Average

Bluetooth LE-Channel 39



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



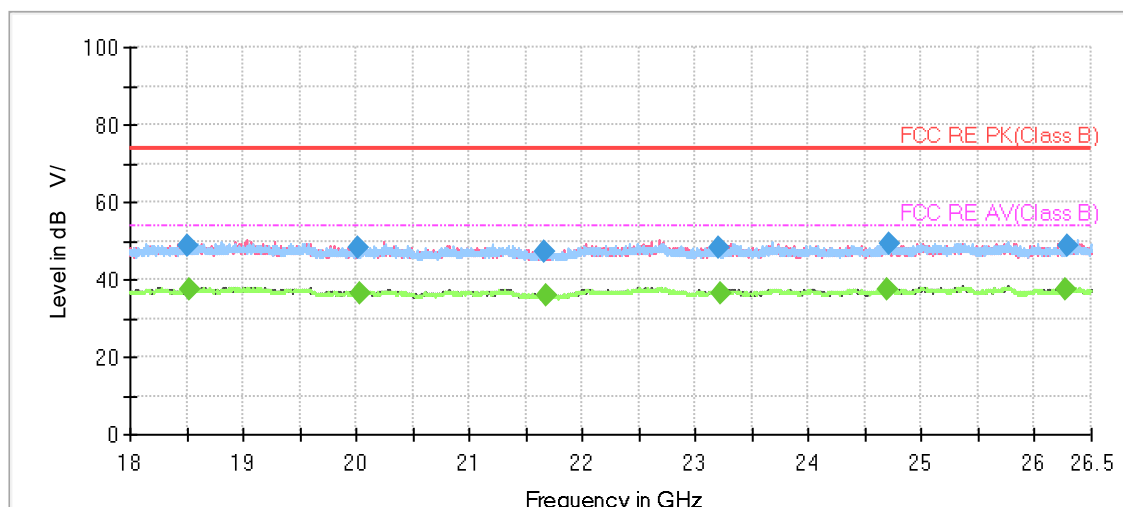
Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1188.750000	---	35.12	54.00	18.88	1000.0	100.0	V	288.0	3.1
1200.000000	47.05	---	74.00	26.95	1000.0	200.0	V	303.0	3.2
1408.000000	48.83	---	74.00	25.17	1000.0	100.0	V	0.0	4.4
1437.750000	---	36.15	54.00	17.85	1000.0	200.0	V	303.0	4.6
1678.750000	50.27	---	74.00	23.73	1000.0	200.0	V	114.0	6.1
1693.750000	---	37.53	54.00	16.47	1000.0	100.0	V	0.0	6.2
1891.500000	50.57	---	74.00	23.43	1000.0	200.0	H	238.0	7.1
1954.000000	---	38.12	54.00	15.88	1000.0	200.0	H	278.0	7.4
2366.250000	---	39.74	54.00	14.26	1000.0	200.0	V	213.0	8.4
2366.750000	52.10	---	74.00	21.90	1000.0	200.0	V	183.0	8.4
2564.750000	53.43	---	74.00	20.57	1000.0	100.0	V	0.0	9.0
2572.000000	---	40.87	54.00	13.13	1000.0	200.0	V	263.0	9.1

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

2. Margin = Limit –MAX Peak/ Average

During the test, the Radiates Emission from 18GHz to 26.5GHz was performed in all modes with all channels, Bluetooth LE-Channel 0 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



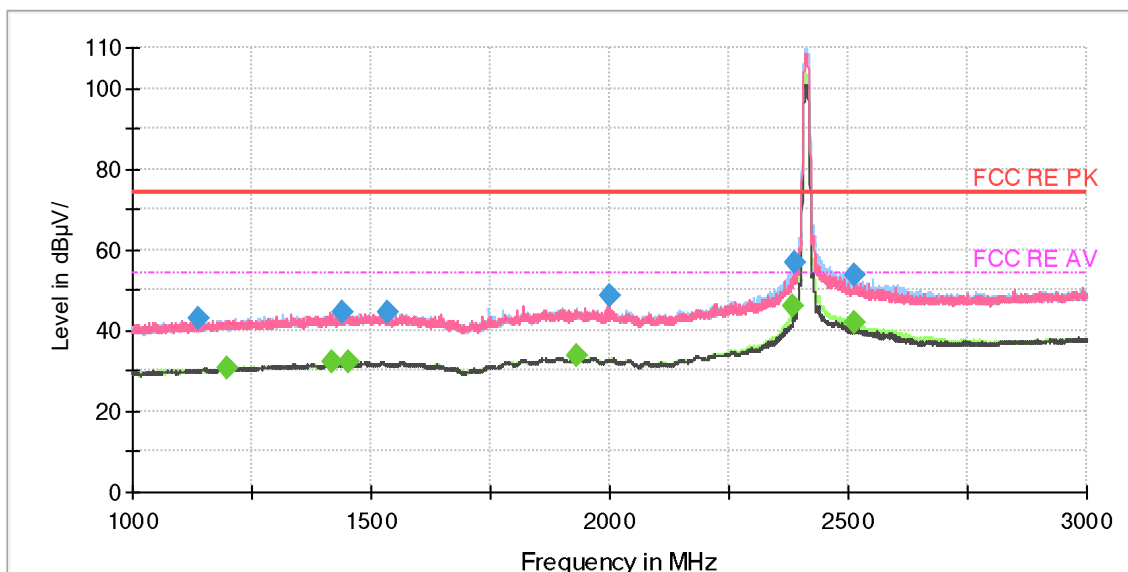
Radiates Emission from 18GHz to 26.5GHz

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
18508.937500	48.58	---	74.00	25.42	500.0	200.0	V	34.0	-4.6
18533.375000	---	37.65	54.00	16.35	500.0	200.0	V	208.0	-4.6
20021.937500	48.01	---	74.00	25.99	500.0	200.0	V	0.0	-4.6
20025.125000	---	36.53	54.00	17.47	500.0	100.0	V	199.0	-4.6
21665.625000	47.42	---	74.00	26.58	500.0	100.0	H	105.0	-4.0
21672.000000	---	36.04	54.00	17.96	500.0	100.0	H	26.0	-4.0
23202.000000	48.28	---	74.00	25.72	500.0	100.0	H	4.0	-2.8
23229.625000	---	36.59	54.00	17.41	500.0	100.0	V	164.0	-2.8
24700.125000	---	37.66	54.00	16.34	500.0	100.0	V	164.0	-2.2
24712.875000	49.20	---	74.00	24.80	500.0	200.0	H	167.0	-2.2
26277.937500	---	37.18	54.00	16.82	500.0	100.0	V	158.0	-1.3
26286.437500	48.60	---	74.00	25.40	500.0	200.0	V	28.0	-1.3

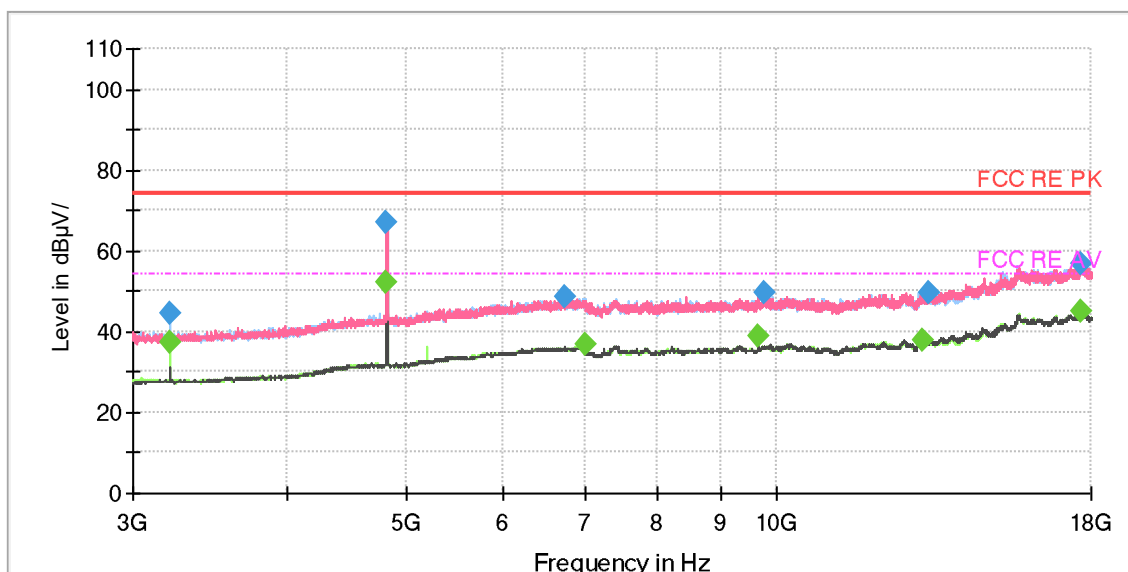
Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit -MAX Peak/ Average

XXX14aaaYYVbbW:



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



Radiates Emission from 3GHz 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)
1137.500000	42.74	---	74.00	31.26	1000.0	200.0	V	261.0	-6.7
1196.750000	---	30.91	54.00	23.09	1000.0	200.0	V	180.0	-6.2
1417.750000	---	32.12	54.00	21.88	1000.0	200.0	H	229.0	-4.4
1441.000000	44.67	---	74.00	29.33	1000.0	200.0	H	28.0	-4.3
1454.500000	---	32.31	54.00	21.69	1000.0	100.0	H	110.0	-4.2
1533.500000	44.27	---	74.00	29.73	1000.0	200.0	V	0.0	-3.6
1931.000000	---	33.61	54.00	20.39	1000.0	200.0	H	0.0	-1.0
1999.000000	48.49	---	74.00	25.51	1000.0	100.0	V	323.0	-0.6
2385.500000	---	46.10	54.00	7.90	1000.0	100.0	H	0.0	0.5
2386.000000	56.73	---	74.00	17.27	1000.0	200.0	H	8.0	0.5
2512.500000	53.91	---	74.00	20.09	1000.0	100.0	H	6.0	0.8
2513.750000	---	42.20	54.00	11.80	1000.0	100.0	H	6.0	0.8
4822.500000	---	52.13	54.00	1.83	1000.0	100.0	V	202.0	-2.3

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

2. Margin = Limit –MAX Peak/ Average

5.7. Conducted Emission

Ambient Condition

Temperature	Relative humidity
15°C ~ 35°C	20% ~ 80%

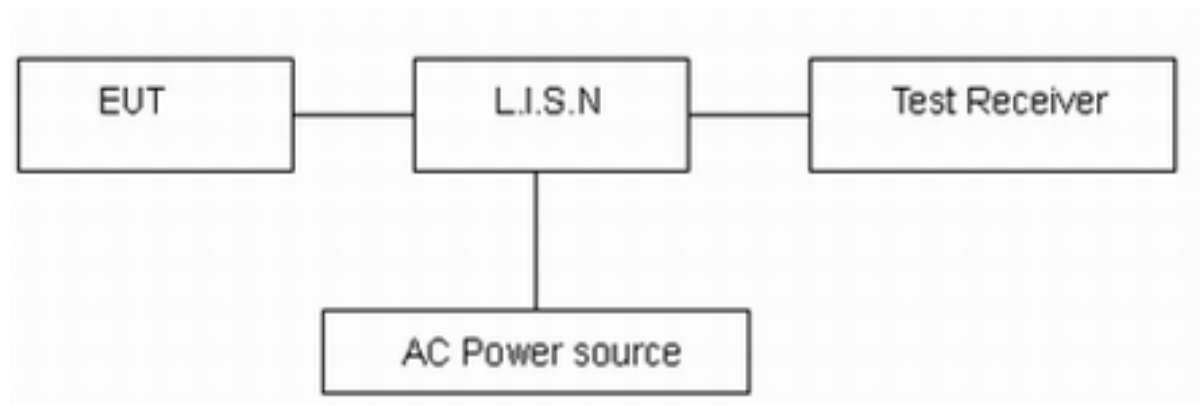
Methods of Measurement

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 L.I.S.N. Use EMI receiver to detect the average and Quasi-peak value. RBW is set to 9 kHz, 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 120V/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.

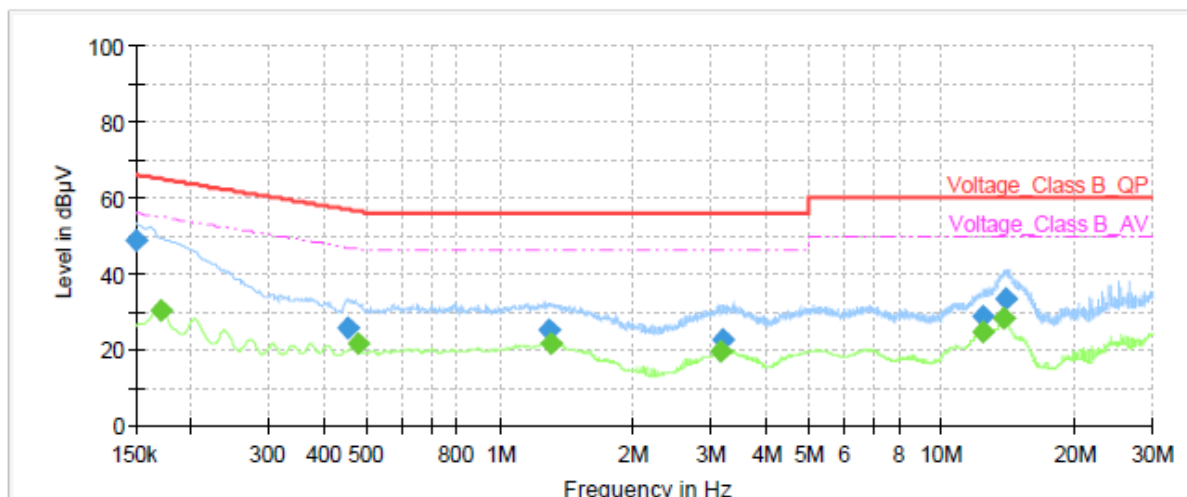
Test Results:

Following plots, Blue trace uses the peak detection and Green trace uses the average detection.

XXX14aaaYYVbbA:

Wi-Fi 2.4G

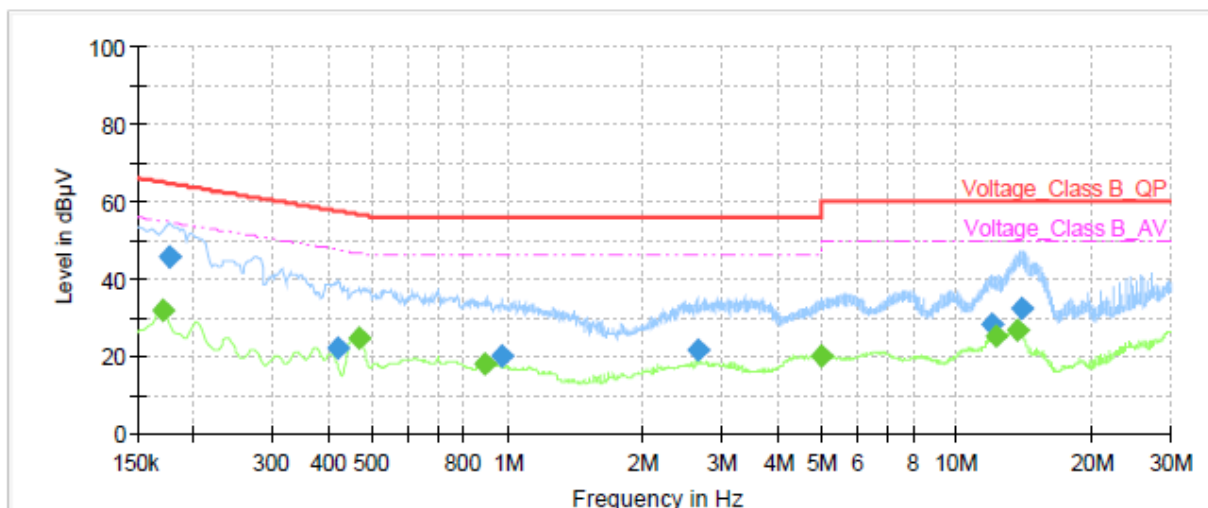
During the test, the Conducted Emission was performed in all modes with all channels, 802.11g, Channel 6 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	48.86	---	66.00	17.14	1000.0	9.000	L1	ON	21.0
0.17	---	30.12	54.95	24.83	1000.0	9.000	L1	ON	21.0
0.45	25.40	---	56.81	31.41	1000.0	9.000	L1	ON	20.9
0.48	---	21.45	46.40	24.95	1000.0	9.000	L1	ON	20.9
1.30	25.11	---	56.00	30.89	1000.0	9.000	L1	ON	20.0
1.30	---	21.59	46.00	24.41	1000.0	9.000	L1	ON	20.0
3.16	---	19.66	46.00	26.34	1000.0	9.000	L1	ON	19.5
3.21	22.47	---	56.00	33.53	1000.0	9.000	L1	ON	19.5
12.36	28.56	---	60.00	31.44	1000.0	9.000	L1	ON	19.6
12.40	---	24.46	50.00	25.54	1000.0	9.000	L1	ON	19.6
13.84	---	27.98	50.00	22.02	1000.0	9.000	L1	ON	19.6
13.91	33.50	---	60.00	26.50	1000.0	9.000	L1	ON	19.6

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 kHz to 30 MHz



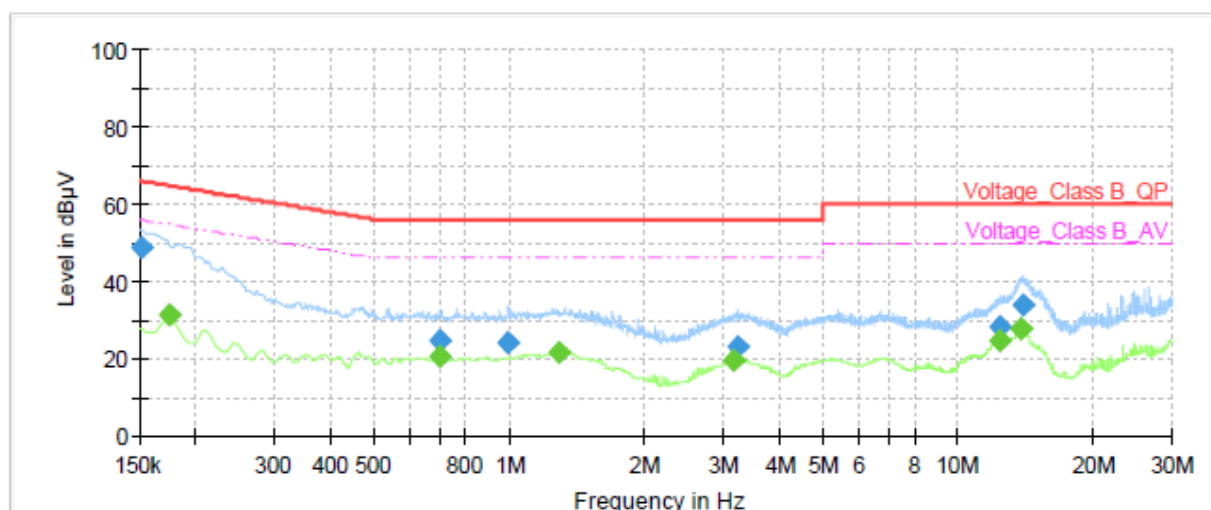
Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.17	---	31.80	54.95	23.15	1000.0	9.000	N	ON	21.0
0.18	45.52	---	64.63	19.11	1000.0	9.000	N	ON	21.1
0.42	22.06	---	57.45	35.39	1000.0	9.000	N	ON	21.0
0.47	---	24.50	46.56	22.06	1000.0	9.000	N	ON	20.9
0.89	---	18.17	46.00	27.83	1000.0	9.000	N	ON	20.3
0.97	19.83	---	56.00	36.17	1000.0	9.000	N	ON	20.3
2.64	21.71	---	56.00	34.29	1000.0	9.000	N	ON	19.6
4.99	---	20.01	46.00	25.99	1000.0	9.000	N	ON	19.5
12.00	28.29	---	60.00	31.71	1000.0	9.000	N	ON	19.6
12.26	---	24.99	50.00	25.01	1000.0	9.000	N	ON	19.6
13.72	---	26.67	50.00	23.33	1000.0	9.000	N	ON	19.6
13.99	32.25	---	60.00	27.75	1000.0	9.000	N	ON	19.6

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz

Bluetooth LE

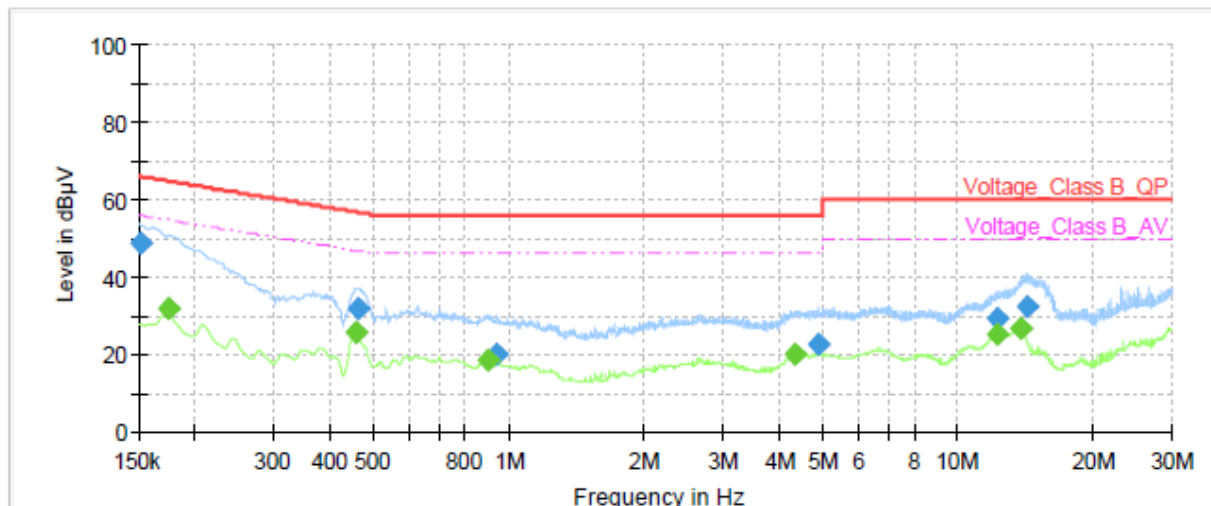
During the test, the Conducted Emission was performed in all modes with all channels, Bluetooth LE-Channel 0 are selected as the worst condition. The test data of the worst-case condition was recorded in this report.



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	48.78	---	65.88	17.10	1000.0	9.000	L1	ON	21.0
0.17	---	31.33	54.73	23.40	1000.0	9.000	L1	ON	21.1
0.70	---	20.61	46.00	25.39	1000.0	9.000	L1	ON	20.6
0.70	24.64	---	56.00	31.36	1000.0	9.000	L1	ON	20.6
1.00	23.94	---	56.00	32.06	1000.0	9.000	L1	ON	20.2
1.29	---	21.68	46.00	24.32	1000.0	9.000	L1	ON	20.0
3.16	---	19.73	46.00	26.27	1000.0	9.000	L1	ON	19.5
3.24	23.03	---	56.00	32.97	1000.0	9.000	L1	ON	19.5
12.32	28.35	---	60.00	31.65	1000.0	9.000	L1	ON	19.6
12.40	---	24.42	50.00	25.58	1000.0	9.000	L1	ON	19.6
13.84	---	27.94	50.00	22.06	1000.0	9.000	L1	ON	19.6
13.97	34.02	---	60.00	25.98	1000.0	9.000	L1	ON	19.6

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 kHz to 30 MHz

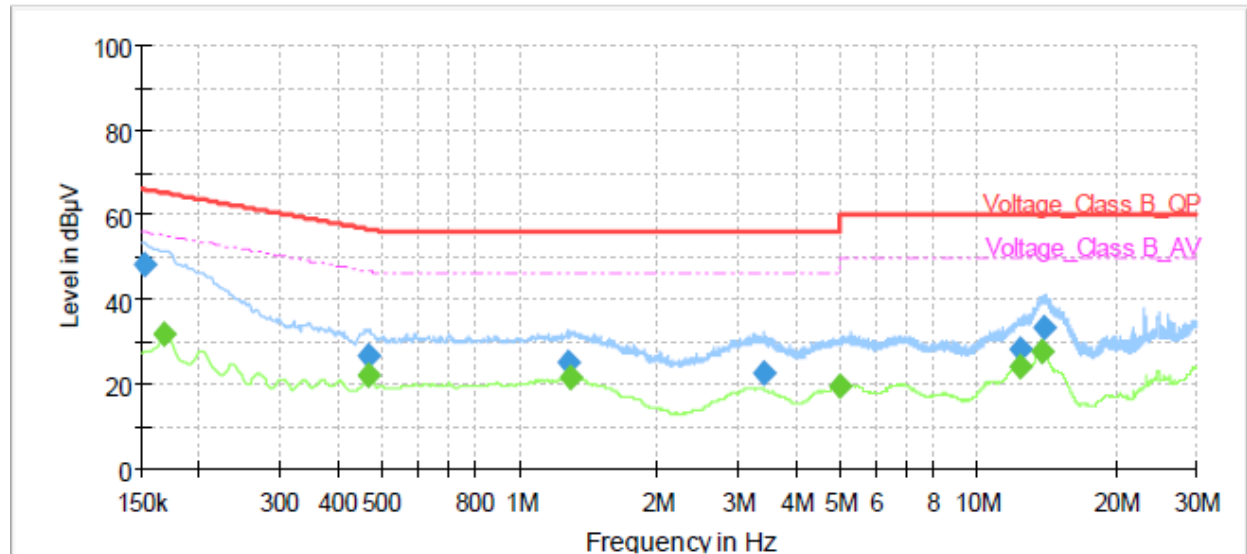


Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	48.79	---	65.88	17.09	1000.0	9.000	N	ON	21.0
0.17	---	31.66	54.73	23.07	1000.0	9.000	N	ON	21.1
0.46	---	25.57	46.77	21.20	1000.0	9.000	N	ON	20.9
0.46	31.66	---	56.68	25.02	1000.0	9.000	N	ON	20.9
0.90	---	18.22	46.00	27.78	1000.0	9.000	N	ON	20.3
0.94	20.20	---	56.00	35.80	1000.0	9.000	N	ON	20.3
4.36	---	20.09	46.00	25.91	1000.0	9.000	N	ON	19.5
4.90	22.75	---	56.00	33.25	1000.0	9.000	N	ON	19.5
12.26	---	25.12	50.00	24.88	1000.0	9.000	N	ON	19.6
12.26	29.23	---	60.00	30.77	1000.0	9.000	N	ON	19.6
13.84	---	26.76	50.00	23.24	1000.0	9.000	N	ON	19.6
14.25	32.27	---	60.00	27.73	1000.0	9.000	N	ON	19.6

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz

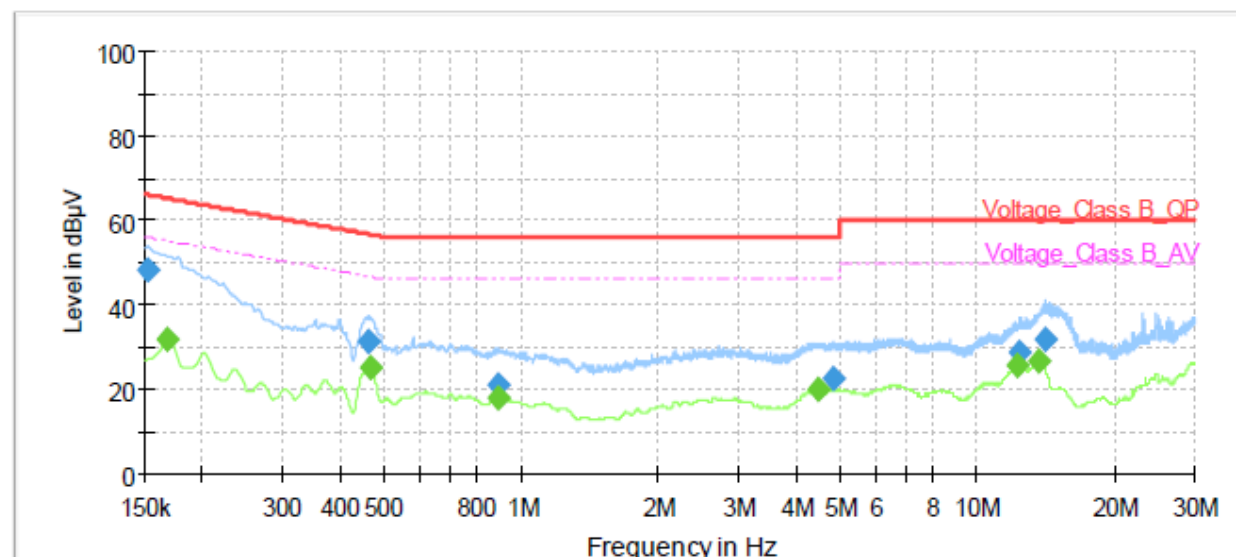
XXX14aaaYYVbbW:



Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Filter	Corr. (dB)
0.15	48.07	---	65.88	17.81	1000.0	9.000	L1	ON	21.0
0.17	---	31.95	55.06	23.11	1000.0	9.000	L1	ON	21.0
0.47	---	21.90	46.56	24.66	1000.0	9.000	L1	ON	20.9
0.47	26.62	---	56.56	29.94	1000.0	9.000	L1	ON	20.9
1.27	25.32	---	56.00	30.68	1000.0	9.000	L1	ON	20.0
1.30	---	21.70	46.00	24.30	1000.0	9.000	L1	ON	20.0
3.40	22.54	---	56.00	33.46	1000.0	9.000	L1	ON	19.5
4.99	---	19.43	46.00	26.57	1000.0	9.000	L1	ON	19.5
12.37	28.21	---	60.00	31.79	1000.0	9.000	L1	ON	19.6
12.40	---	24.22	50.00	25.78	1000.0	9.000	L1	ON	19.6
13.84	---	27.75	50.00	22.25	1000.0	9.000	L1	ON	19.6
14.02	33.21	---	60.00	26.79	1000.0	9.000	L1	ON	19.6

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	47.95	---	65.88	17.93	1000.0	9.000	N	ON	21.0
0.17	---	31.98	55.06	23.08	1000.0	9.000	N	ON	21.0
0.46	31.35	---	56.64	25.29	1000.0	9.000	N	ON	20.9
0.47	---	25.10	46.60	21.50	1000.0	9.000	N	ON	20.9
0.89	21.20	---	56.00	34.80	1000.0	9.000	N	ON	20.3
0.89	---	18.19	46.00	27.81	1000.0	9.000	N	ON	20.3
4.51	---	19.95	46.00	26.05	1000.0	9.000	N	ON	19.5
4.84	22.55	---	56.00	33.45	1000.0	9.000	N	ON	19.5
12.26	---	25.57	50.00	24.43	1000.0	9.000	N	ON	19.6
12.33	28.62	---	60.00	31.38	1000.0	9.000	N	ON	19.6
13.73	---	26.69	50.00	23.31	1000.0	9.000	N	ON	19.6
14.08	31.97	---	60.00	28.03	1000.0	9.000	N	ON	19.6

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz

6. Main Test Instruments

Date of Testing: May 29, 2024 ~ June 17, 2024

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Power sensor	R&S	NRP18S	101954	2024-05-07	2025-05-06
Spectrum Analyzer	KEYSIGHT	N9020A	MY51330870	2024-05-07	2025-05-06
Unwanted Emission					
EMI Test Receiver	R&S	ESR	102389	2024-05-07	2025-05-06
Signal Analyzer	R&S	FSV40	101186	2024-05-07	2025-05-06
Loop Antenna	SCHWARZBECK	FMZB1519	1519-047	2023-04-16	2026-04-15
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	1023	2023-07-14	2026-07-13
Horn Antenna	R&S	HF907	102723	2021-07-24	2024-07-23
Amplifier	R&S	SCU18	10034	2024-05-08	2025-05-07
Horn Antenna	ETS-Lindgren	3160-09	00102643	2021-10-10	2024-10-09
Amplifier	MicroWave	KLNA-1804 0050	220826001	2024-05-08	2025-05-07
Software	R&S	EMC32	9.26.01	/	/
Conducted Emission					
Artificial main network	R&S	ENV216	102191	2022-12-10	2024-12-09
EMI Test Receiver	R&S	ESR	101667	2024-05-07	2025-05-06
Software	R&S	EMC32	10.35.10	/	/

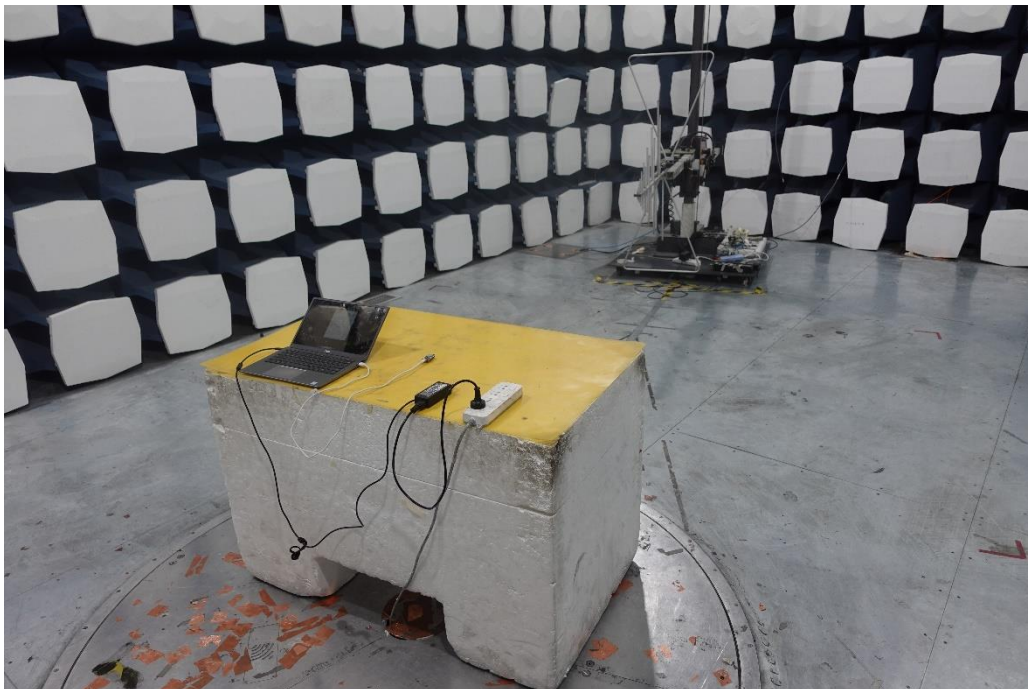
Date of Testing: August 6, 2025

Name	Manufacturer	Type	Serial Number	Calibration Date	Expiration Date
Unwanted Emission					
EMI Test Receiver	R&S	ESCI3	100948	2025-05-07	2026-05-06
TRILOG Broadband Antenna	SCHWARZBECK	VULB 9163	1023	2023-07-14	2026-07-13
Horn Antenna	SCHWARZBECK	BBHA 9120D	430	2024-07-18	2027-07-17
Software	R&S	EMC32	9.26.01	/	/
Conducted Emission					
Artificial main network	R&S	ENV216	102191	2024-12-02	2026-12-01
EMI Test Receiver	R&S	ESR	101667	2025-05-06	2026-05-05
Software	R&S	EMC32	10.35.10	/	/

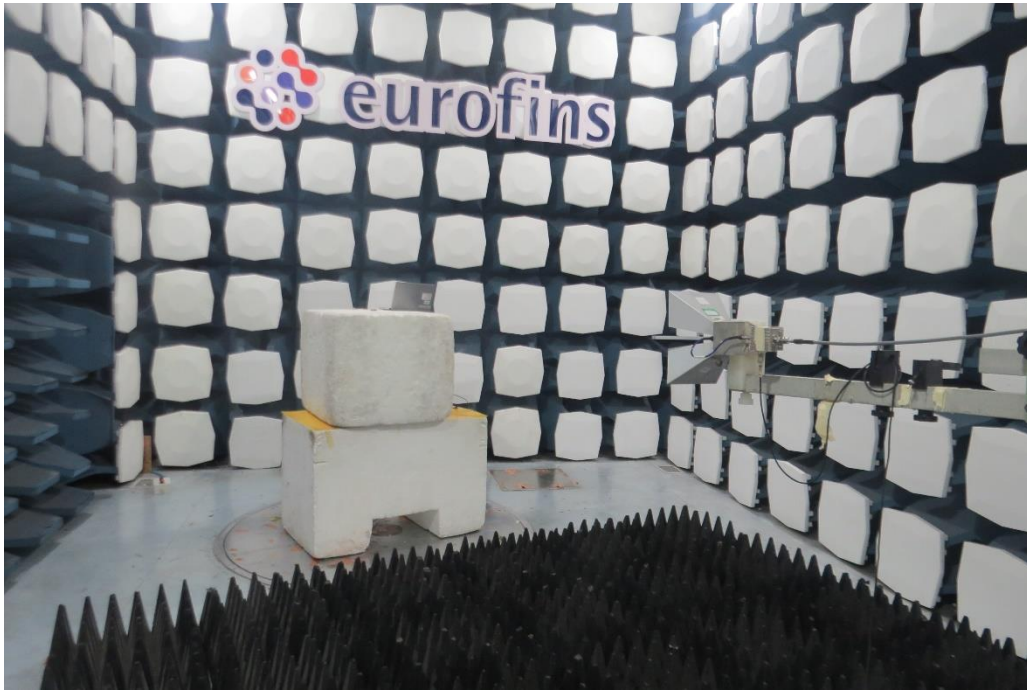
ANNEX A: Test Setup Photos



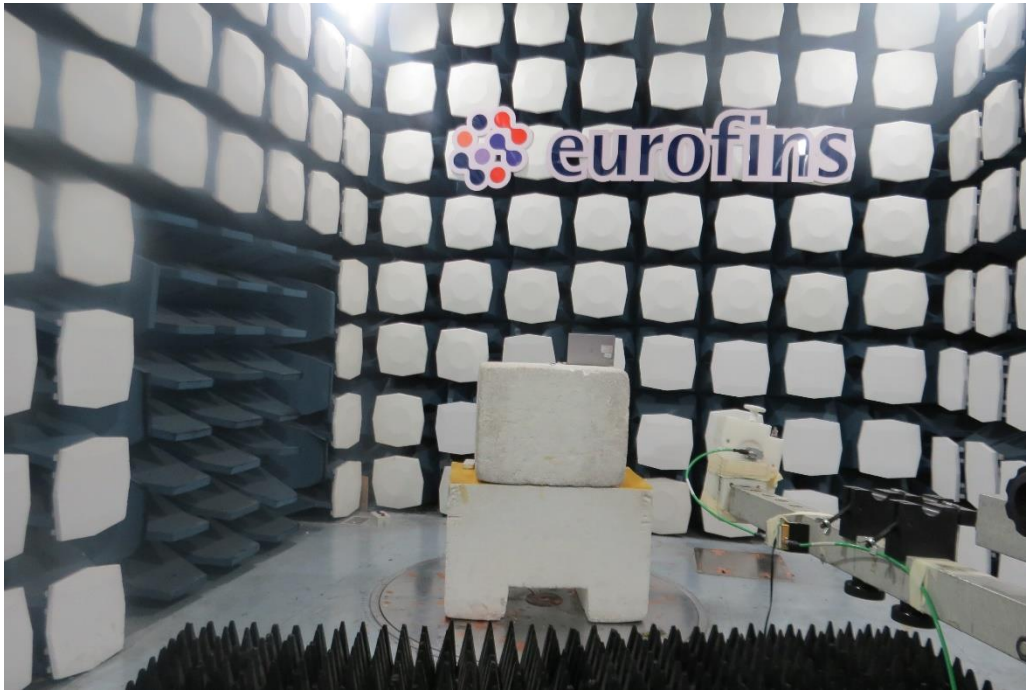
9kHz-30MHz



30MHz-1GHz

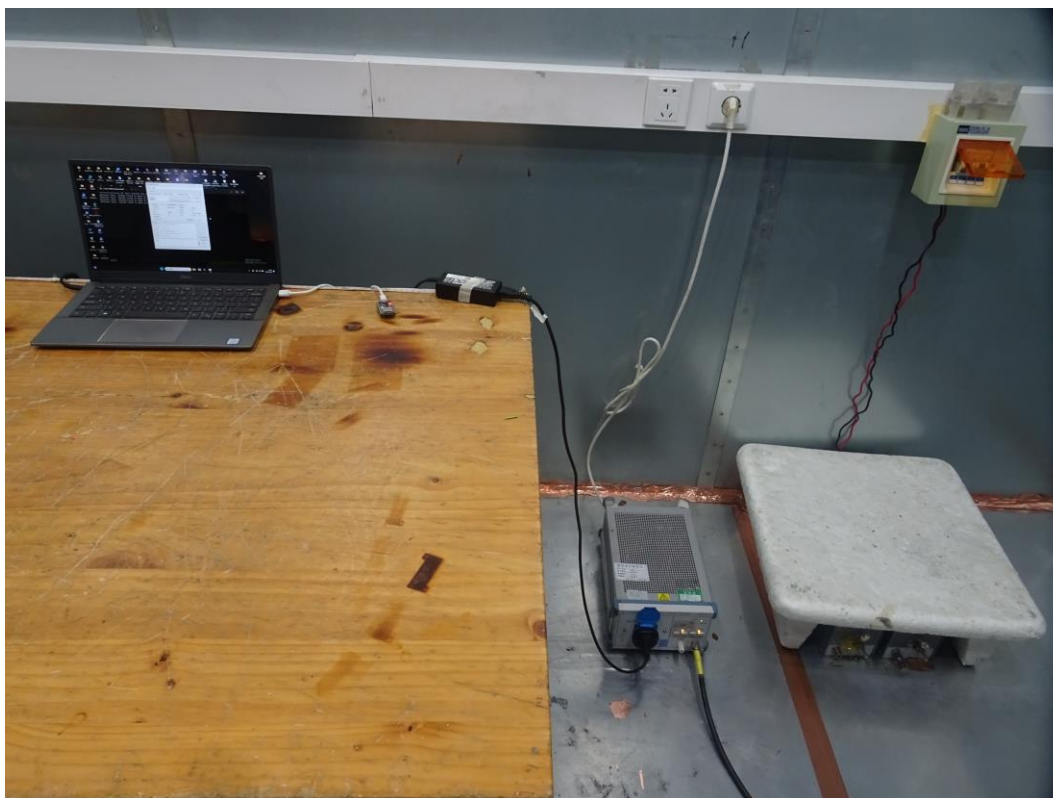


1GHz-18GHz



18GHz - 26.5GHz

Picture 1 Radiated Emission Test Setup



Picture 2 Conducted Emission Test Setup

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