

ANNEX A: Test Result

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 (Y axis) and the loop antenna is vertical, the others are vertical and horizontal. and the worst case was recorded.

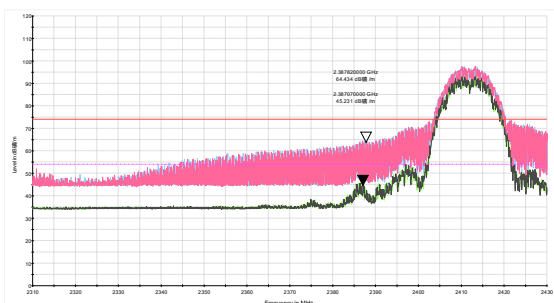
1. Unwanted Emission

1.1. Wi-Fi 2.4GHz

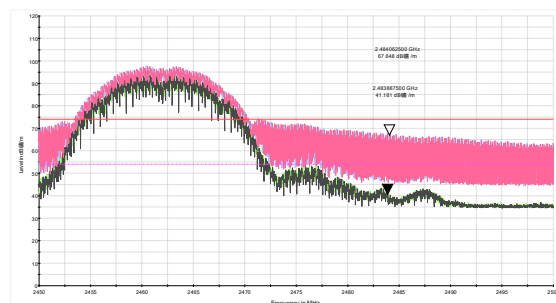
The following graphs display the maximum values of horizontal and vertical by software.
Blue trace uses the peak detection, Green trace uses the average detection.

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

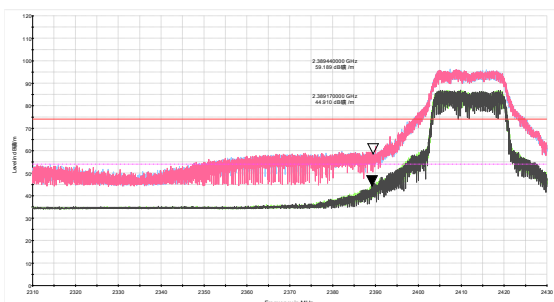
The signal beyond the limit is carrier.



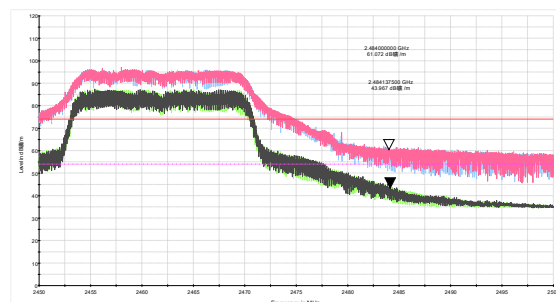
802.11b-Channel 1 Peak+ Average



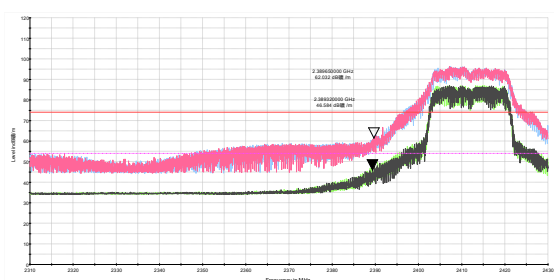
802.11b-Channel 11 Peak+ Average



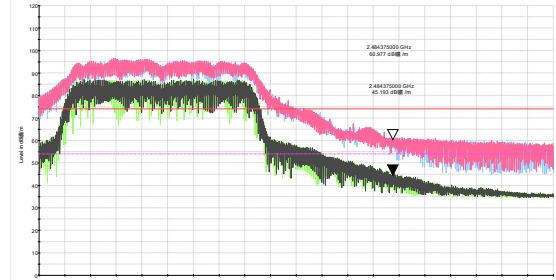
802.11g-Channel 1 Peak+ Average



802.11g-Channel 11 Peak+ Average



802.11n HT20-Channel 1 Peak+ Average



802.11n HT20-Channel 11 Peak+ Average

Result of RE

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

Remark:

1. **Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)**
2. **Margin = Limit – Quasi-Peak/ MAX Peak/ Average**
3. **A symbol ($\text{dB } \mu\text{V/m}$) in the test plot below means ($\text{dB}\mu\text{V/m}$)**
4. **The following graphs display the maximum values of horizontal and vertical by software.**
5. **For below 1GHz**

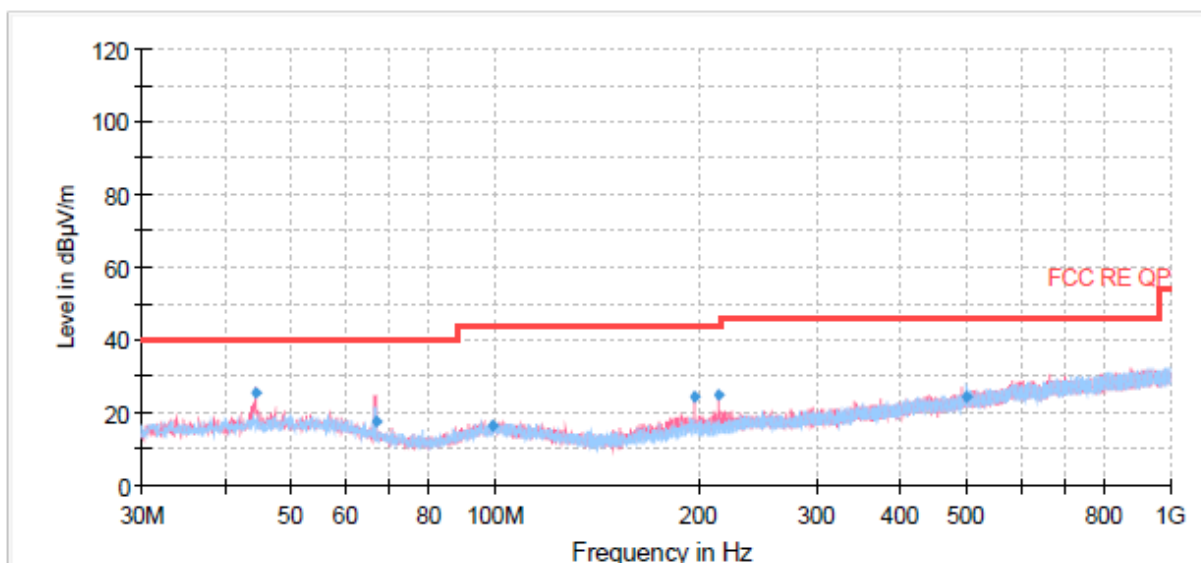
~ QP Level @Spectrum Overview H ~ QP Level @Spectrum Overview V ◆ QP Level @Final Results — QP Limit

For above 1GHz

~ PK Level @Spectrum Overview H ~ PK Level @Spectrum Overview V ◆ PK Level @Final Results — PK Limit
~ AVG Level @Spectrum Overview H ~ AVG Level @Spectrum Overview V ◆ AVG Level @Final Results — AVG Limit

Continuous TX mode:

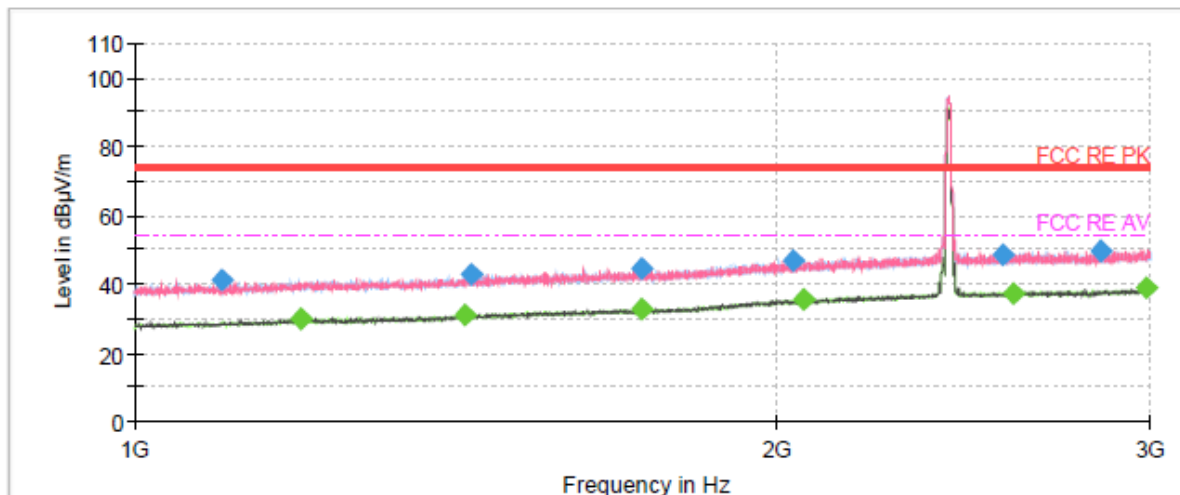
During the test, the Radiates Emission from 30MHz to 1GHz was performed in all modes with all channels, the test data of the worst-case condition was recorded in this report.



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dB $\mu\text{V/m}$)	Limit (dB $\mu\text{V/m}$)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
44.21	25.55	40.00	14.45	100.0	V	68.00	20
66.62	17.79	40.00	22.21	109.0	V	134.00	17
98.97	16.54	43.50	26.96	100.0	H	216.00	19
198.00	24.37	43.50	19.13	225.0	V	300.00	18
214.49	24.69	43.50	18.81	216.0	V	193.00	18
500.74	24.28	46.00	21.72	108.0	H	292.00	25

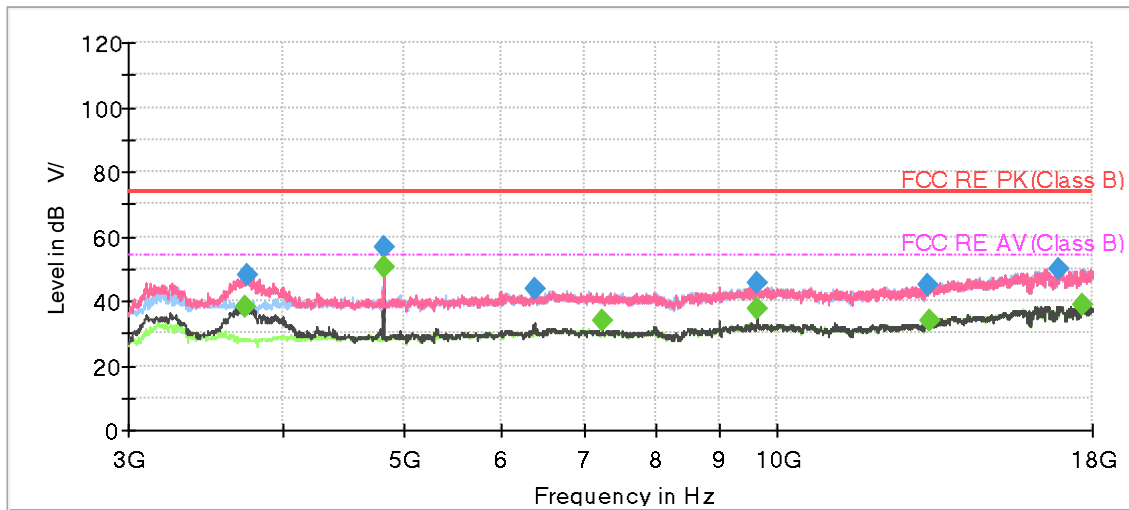
802.11b CH1



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

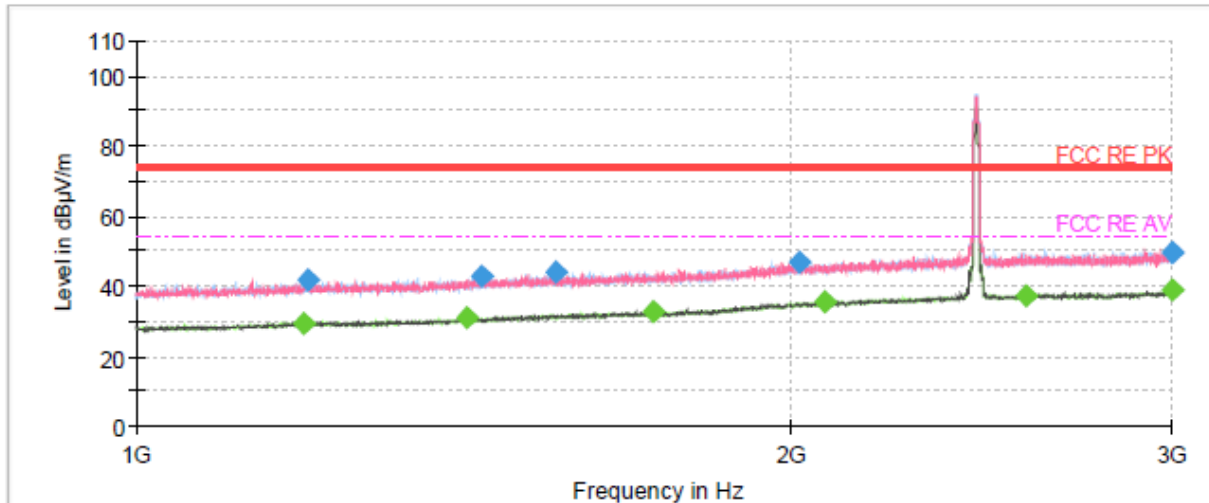
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1098.000000	41.16	---	74.00	32.84	500.0	200.0	V	163.0	-7
1197.750000	---	29.87	54.00	24.13	500.0	200.0	H	142.0	-6
1430.750000	---	30.82	54.00	23.18	500.0	200.0	V	303.0	-4
1438.000000	42.92	---	74.00	31.08	500.0	200.0	V	0.0	-4
1728.750000	44.34	---	74.00	29.66	500.0	200.0	H	95.0	-2
1730.250000	---	32.72	54.00	21.28	500.0	200.0	H	160.0	-2
2040.250000	46.81	---	74.00	27.19	500.0	200.0	V	163.0	0
2060.000000	---	35.38	54.00	18.62	500.0	200.0	V	275.0	0
2560.500000	48.73	---	74.00	25.27	500.0	200.0	V	357.0	2
2585.750000	---	37.09	54.00	16.91	500.0	200.0	H	104.0	2
2843.750000	49.84	---	74.00	24.16	500.0	200.0	V	79.0	3
2984.000000	---	38.75	54.00	15.25	500.0	200.0	H	235.0	3



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3725.625000	---	38.08	54.00	15.92	500.0	200.0	V	159.0	-7.9
3738.750000	48.09	---	74.00	25.91	500.0	200.0	V	159.0	-7.8
4822.500000	---	50.53	54.00	3.47	500.0	100.0	H	208.0	-6.1
4822.500000	56.55	---	74.00	17.45	500.0	100.0	H	208.0	-6.1
6384.375000	43.64	---	74.00	30.36	500.0	100.0	V	280.0	-4.2
7233.750000	---	34.04	54.00	19.96	500.0	100.0	H	222.0	-2.9
9646.875000	45.60	---	74.00	28.40	500.0	100.0	V	74.0	-0.5
9646.875000	---	37.56	54.00	16.44	500.0	100.0	V	74.0	-0.5
13252.500000	45.17	---	74.00	28.83	500.0	100.0	V	152.0	2.1
13325.625000	---	33.93	54.00	20.07	500.0	100.0	V	7.0	2.3
16927.500000	50.15	---	74.00	23.85	500.0	200.0	H	100.0	8.8
17675.625000	---	38.92	54.00	15.08	500.0	200.0	H	15.0	10.3

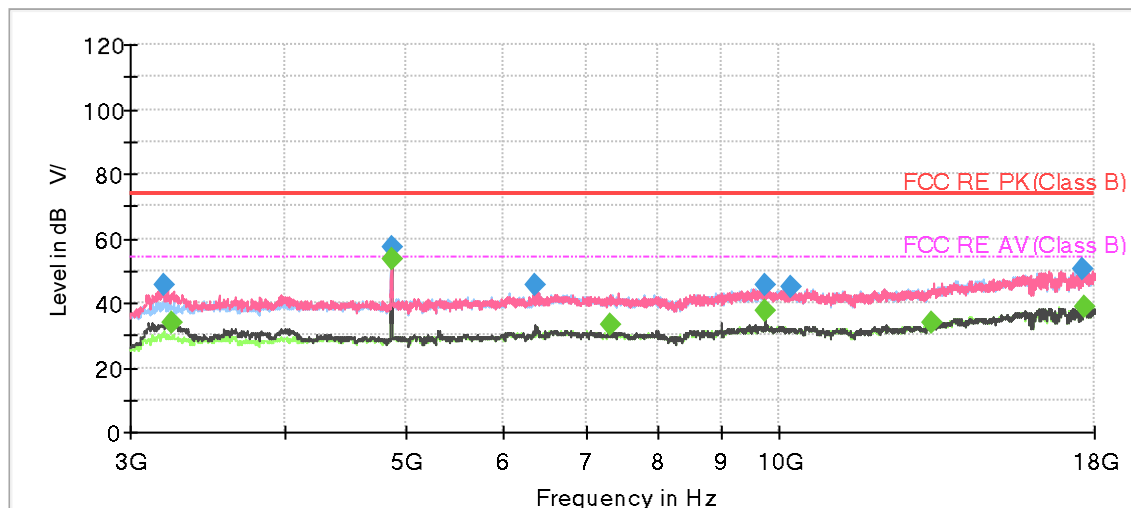
802.11b CH6



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

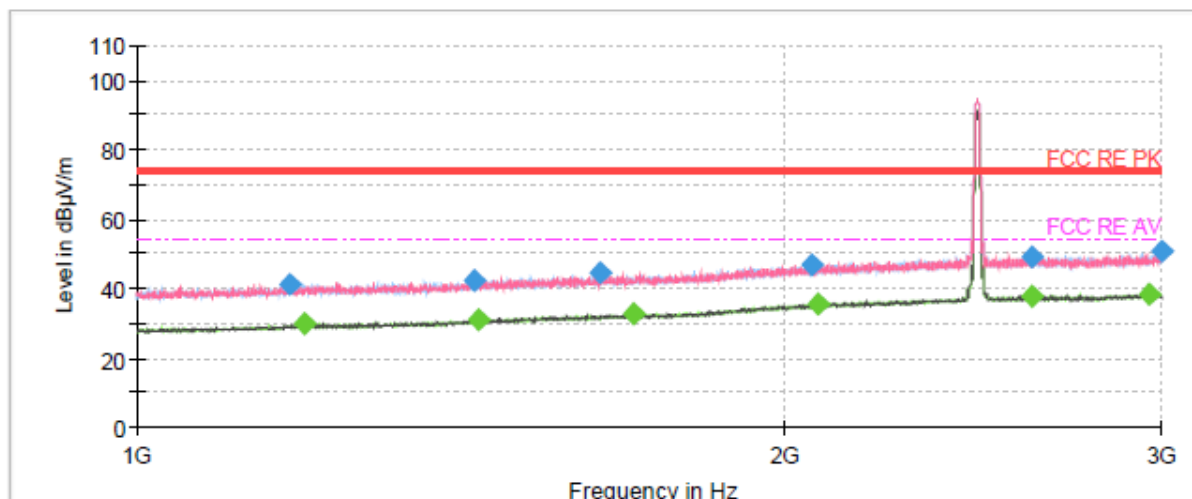
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1193.250000	---	29.55	54.00	24.45	500.0	100.0	H	93.0	-6
1200.000000	41.51	---	74.00	32.49	500.0	200.0	V	314.0	-6
1419.750000	---	30.99	54.00	23.01	500.0	200.0	V	212.0	-4
1441.000000	42.85	---	74.00	31.15	500.0	100.0	V	221.0	-4
1559.750000	44.01	---	74.00	29.99	500.0	200.0	H	19.0	-3
1731.250000	---	32.59	54.00	21.41	500.0	200.0	H	329.0	-2
2020.500000	46.70	---	74.00	27.31	500.0	100.0	H	139.0	0
2074.250000	---	35.52	54.00	18.48	500.0	200.0	H	233.0	0
2571.000000	---	37.43	54.00	16.57	500.0	100.0	V	0.0	2
2998.250000	49.72	---	74.00	24.28	500.0	200.0	H	158.0	3
2999.500000	---	38.65	54.00	15.35	500.0	100.0	H	38.0	3



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)
3191.250000	45.45	---	74.00	28.55	500.0	200.0	V	223.0	-10.0
3241.875000	---	34.08	54.00	19.92	500.0	200.0	V	223.0	-9.7
4873.125000	---	53.35	54.00	0.65	500.0	100.0	H	208.0	-5.8
4873.125000	57.14	---	74.00	16.86	500.0	100.0	H	208.0	-5.8
6371.250000	45.66	---	74.00	28.34	500.0	100.0	V	268.0	-4.3
7308.750000	---	33.14	54.00	20.86	500.0	200.0	V	179.0	-3.0
9748.125000	45.41	---	74.00	28.59	500.0	100.0	V	75.0	-0.5
9748.125000	---	37.82	54.00	16.18	500.0	100.0	V	75.0	-0.5
10235.625000	44.76	---	74.00	29.24	500.0	100.0	H	267.0	-1.1
13327.500000	---	33.76	54.00	20.24	500.0	100.0	V	85.0	2.3
17636.250000	50.25	---	74.00	23.75	500.0	100.0	V	303.0	10.2
17664.375000	---	38.98	54.00	15.02	500.0	200.0	H	122.0	10.2

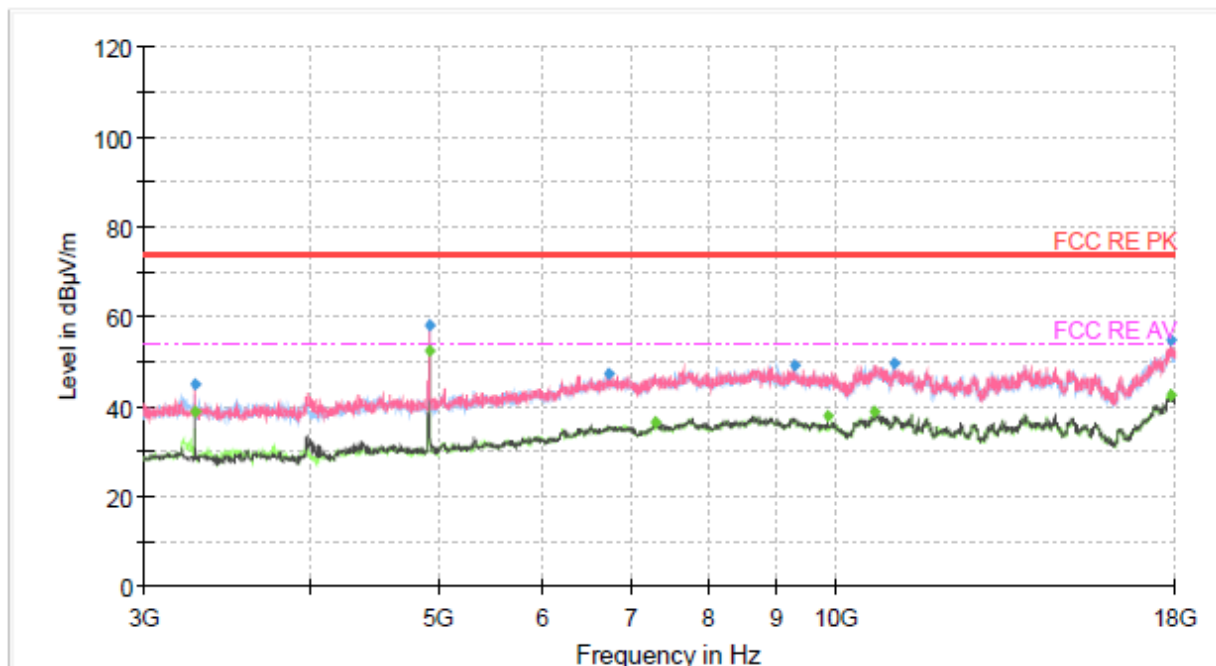
802.11b CH11



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

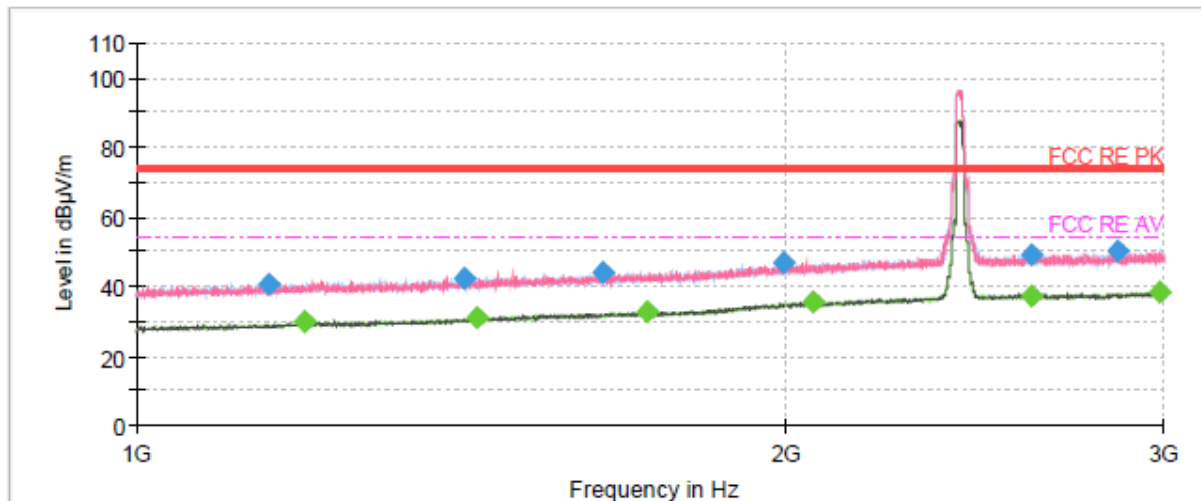
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1178.750000	41.26	---	74.00	32.74	500.0	200.0	H	351.0	-6
1196.500000	---	29.69	54.00	24.31	500.0	200.0	V	12.0	-6
1434.500000	42.12	---	74.00	31.88	500.0	100.0	V	144.0	-4
1441.500000	---	30.95	54.00	23.05	500.0	100.0	V	144.0	-4
1641.500000	44.60	---	74.00	29.40	500.0	200.0	V	114.0	-3
1702.500000	---	32.65	54.00	21.35	500.0	100.0	V	172.0	-2
2060.750000	46.98	---	74.00	27.02	500.0	200.0	V	48.0	0
2074.000000	---	35.61	54.00	18.39	500.0	200.0	V	0.0	0
2607.500000	---	37.64	54.00	16.36	500.0	100.0	V	97.0	2
2612.000000	48.97	---	74.00	25.03	500.0	100.0	H	225.0	2
2960.750000	---	38.35	54.00	15.65	500.0	200.0	V	142.0	3
3000.000000	50.52	---	74.00	23.48	500.0	200.0	H	313.0	3



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)
3281.25	45.23	---	74.00	28.77	500.00	200.0	V	248.00	-8
3281.25	---	38.87	54.00	15.13	500.00	200.0	V	248.00	-8
4923.75	58.17	---	74.00	15.83	500.00	200.0	V	336.00	-3
4923.75	---	52.30	54.00	1.70	500.00	200.0	V	336.00	-3
6738.75	47.36	---	74.00	26.64	500.00	200.0	H	210.00	1
7291.88	---	36.39	54.00	17.61	500.00	200.0	H	325.00	2
9273.75	49.17	---	74.00	24.83	500.00	200.0	V	73.00	6
9847.50	---	38.00	54.00	16.00	500.00	200.0	V	152.00	5
10672.50	---	39.07	54.00	14.93	500.00	200.0	V	169.00	6
11034.38	49.70	---	74.00	24.30	500.00	200.0	H	358.00	7
17853.75	---	42.85	54.00	11.15	500.00	200.0	V	73.00	15
17859.38	54.64	---	74.00	19.36	500.00	200.0	V	184.00	15

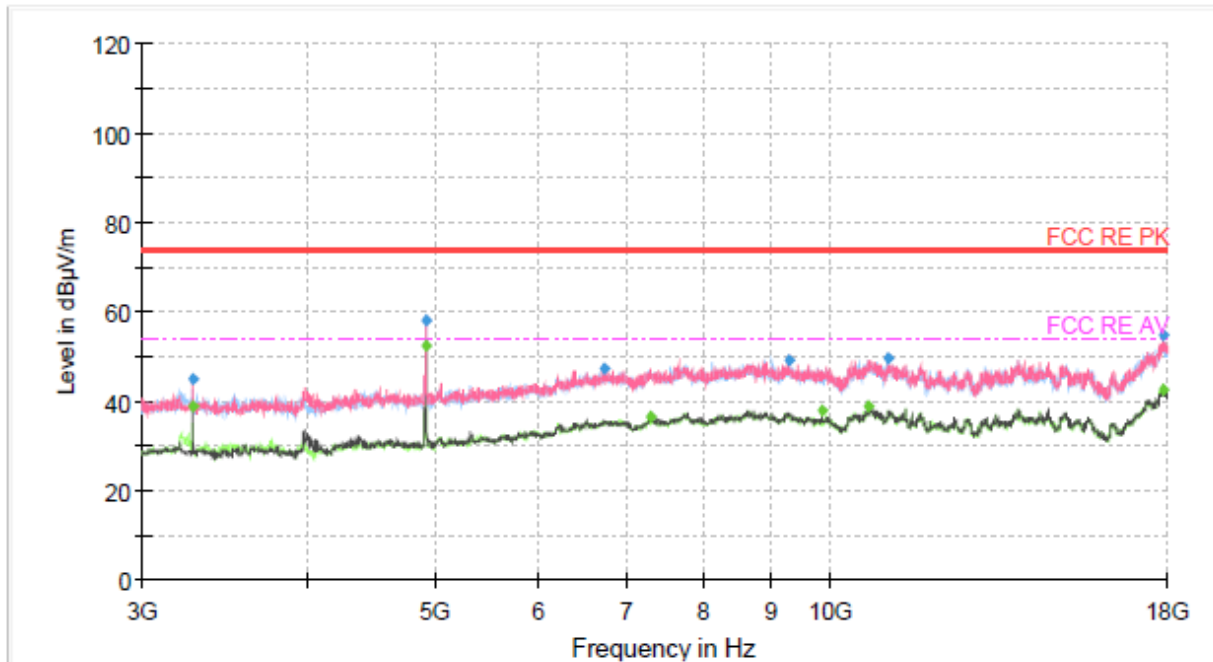
802.11g CH1



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

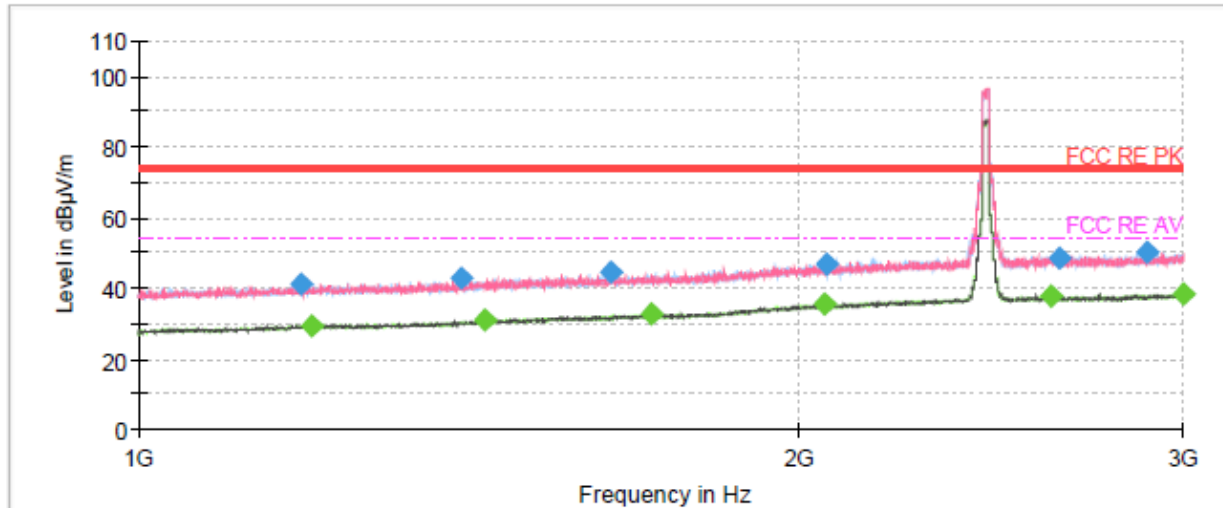
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1152.250000	40.75	---	74.00	33.25	500.0	100.0	V	304.0	-6
1197.000000	---	29.64	54.00	24.36	500.0	100.0	H	112.0	-6
1420.500000	42.33	---	74.00	31.67	500.0	200.0	V	0.0	-4
1438.000000	---	30.97	54.00	23.03	500.0	100.0	H	84.0	-4
1647.500000	43.76	---	74.00	30.24	500.0	100.0	V	323.0	-3
1727.000000	---	32.51	54.00	21.49	500.0	100.0	V	248.0	-2
1997.500000	46.72	---	74.00	27.28	500.0	200.0	V	320.0	0
2060.750000	---	35.69	54.00	18.31	500.0	100.0	H	149.0	0
2604.000000	48.93	---	74.00	25.07	500.0	200.0	V	0.0	2
2604.750000	---	36.99	54.00	17.01	500.0	200.0	H	303.0	2
2852.250000	49.96	---	74.00	24.04	500.0	100.0	V	106.0	3
2986.500000	---	38.58	54.00	15.42	500.0	200.0	V	330.0	3



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)
3281.25	45.23	---	74.00	28.77	500.00	200.0	V	248.00	-8
3281.25	---	38.87	54.00	15.13	500.00	200.0	V	248.00	-8
4923.75	58.17	---	74.00	15.83	500.00	200.0	V	336.00	-3
4923.75	---	52.30	54.00	1.70	500.00	200.0	V	336.00	-3
6738.75	47.36	---	74.00	26.64	500.00	200.0	H	210.00	1
7291.88	---	36.39	54.00	17.61	500.00	200.0	H	325.00	2
9273.75	49.17	---	74.00	24.83	500.00	200.0	V	73.00	6
9847.50	---	38.00	54.00	16.00	500.00	200.0	V	152.00	5
10672.50	---	39.07	54.00	14.93	500.00	200.0	V	169.00	6
11034.38	49.70	---	74.00	24.30	500.00	200.0	H	358.00	7
17853.75	---	42.85	54.00	11.15	500.00	200.0	V	73.00	15
17859.38	54.64	---	74.00	19.36	500.00	200.0	V	184.00	15

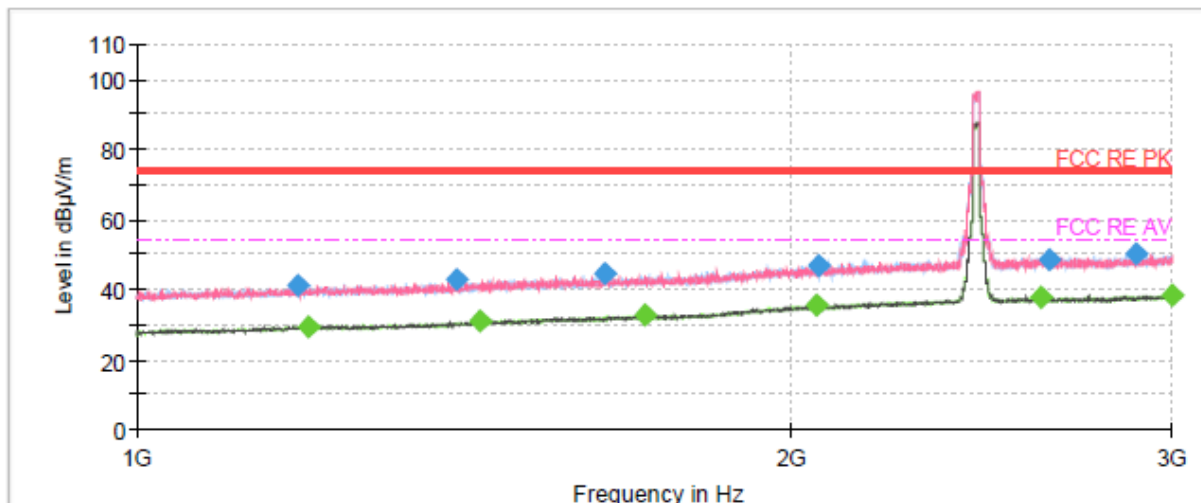
802.11g CH6



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

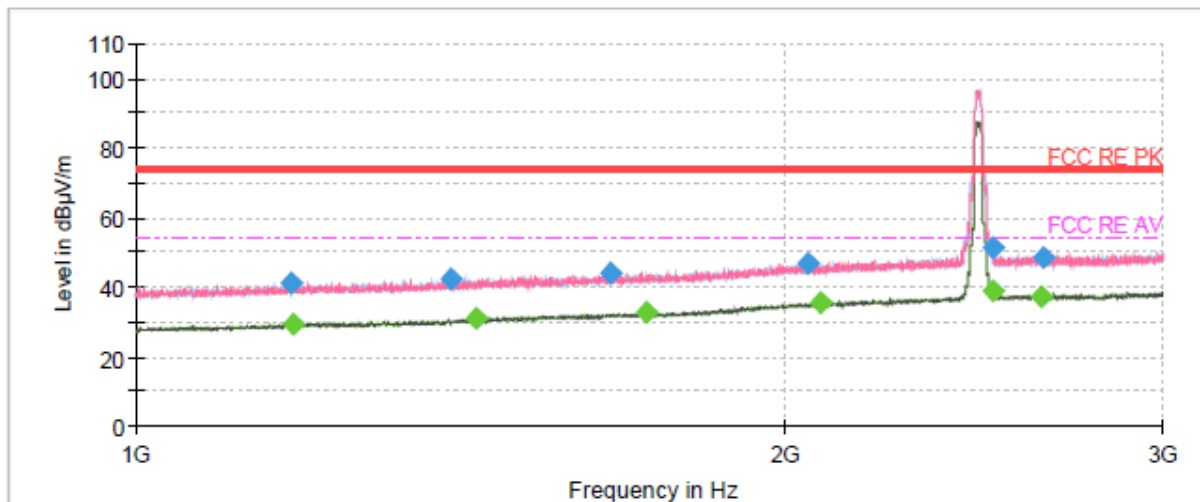
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1187.500000	41.37	---	74.00	32.63	500.0	200.0	V	320.0	-6
1200.750000	---	29.56	54.00	24.44	500.0	100.0	H	141.0	-6
1404.000000	42.79	---	74.00	31.21	500.0	100.0	H	20.0	-4
1439.000000	---	31.01	54.00	22.99	500.0	200.0	H	238.0	-4
1642.750000	44.52	---	74.00	29.48	500.0	100.0	H	151.0	-3
1715.250000	---	32.62	54.00	21.38	500.0	100.0	V	257.0	-2
2058.250000	---	35.30	54.00	18.70	500.0	100.0	V	152.0	0
2063.250000	46.96	---	74.00	27.04	500.0	200.0	V	178.0	0
2612.500000	---	37.64	54.00	16.36	500.0	100.0	V	134.0	2
2635.750000	48.24	---	74.00	25.76	500.0	200.0	V	10.0	2
2889.500000	50.17	---	74.00	23.83	500.0	100.0	H	0.0	3
2999.750000	---	38.51	54.00	15.49	500.0	100.0	V	192.0	3



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)
1187.500000	41.37	---	74.00	32.63	500.0	200.0	V	320.0	-6
1200.750000	---	29.56	54.00	24.44	500.0	100.0	H	141.0	-6
1404.000000	42.79	---	74.00	31.21	500.0	100.0	H	20.0	-4
1439.000000	---	31.01	54.00	22.99	500.0	200.0	H	238.0	-4
1642.750000	44.52	---	74.00	29.48	500.0	100.0	H	151.0	-3
1715.250000	---	32.62	54.00	21.38	500.0	100.0	V	257.0	-2
2058.250000	---	35.30	54.00	18.70	500.0	100.0	V	152.0	0
2063.250000	46.96	---	74.00	27.04	500.0	200.0	V	178.0	0
2612.500000	---	37.64	54.00	16.36	500.0	100.0	V	134.0	2
2635.750000	48.24	---	74.00	25.76	500.0	200.0	V	10.0	2
2889.500000	50.17	---	74.00	23.83	500.0	100.0	H	0.0	3
2999.750000	---	38.51	54.00	15.49	500.0	100.0	V	192.0	3

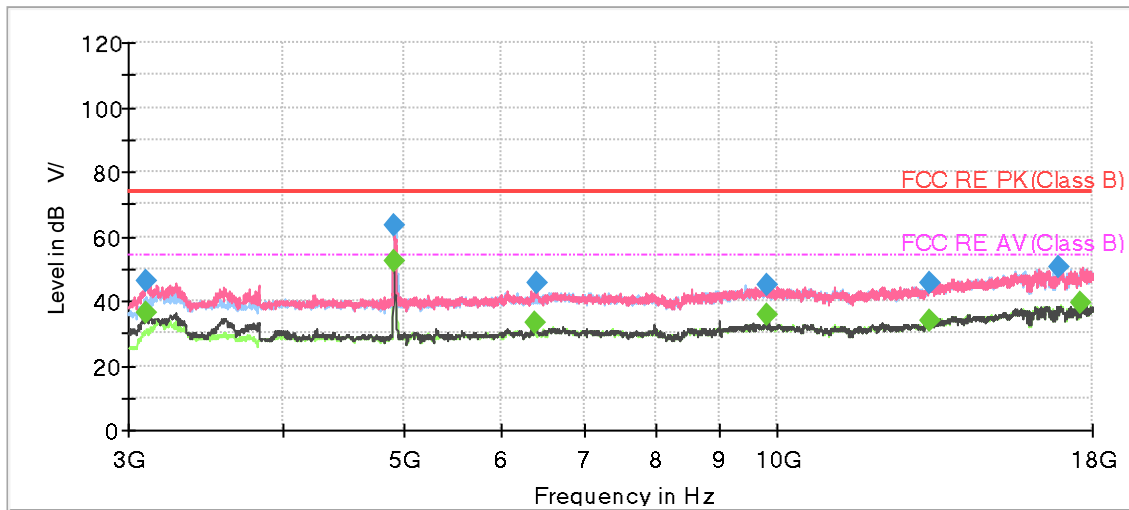
802.11g CH11



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

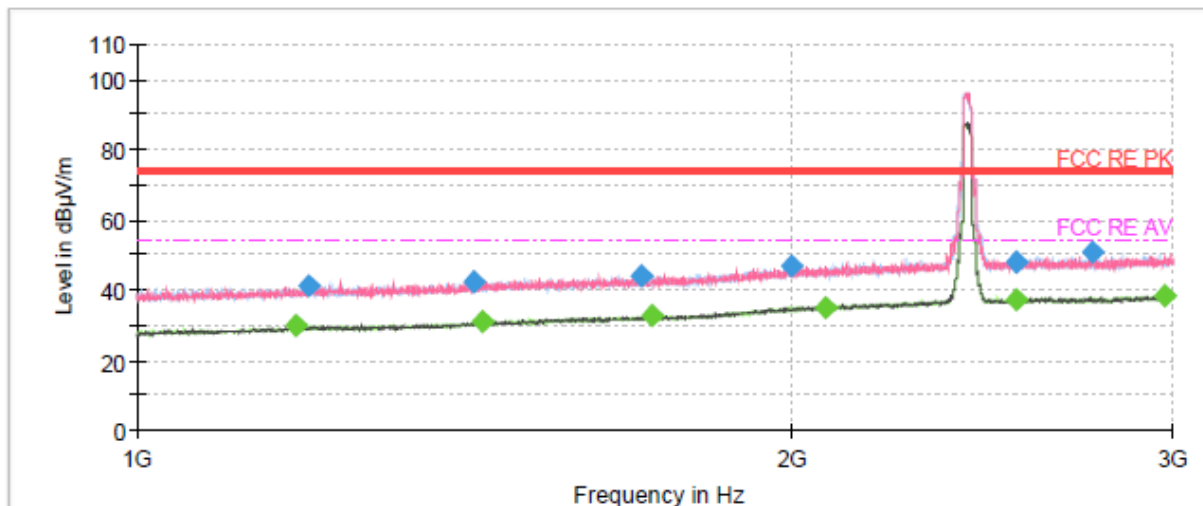
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1181.000000	40.98	---	74.00	33.02	500.0	200.0	V	0.0	-6
1183.500000	---	29.52	54.00	24.48	500.0	100.0	H	77.0	-6
1402.250000	42.10	---	74.00	31.90	500.0	100.0	H	123.0	-4
1438.750000	---	30.91	54.00	23.09	500.0	200.0	H	99.0	-4
1662.500000	43.81	---	74.00	30.19	500.0	100.0	H	188.0	-2
1726.500000	---	32.68	54.00	21.32	500.0	200.0	V	198.0	-2
2052.750000	46.74	---	74.00	27.26	500.0	200.0	V	217.0	0
2078.750000	---	35.44	54.00	18.56	500.0	200.0	H	358.0	0
2498.500000	---	38.73	54.00	15.27	500.0	200.0	H	313.0	1
2499.000000	51.53	---	74.00	22.47	500.0	200.0	V	0.0	1
2634.750000	---	37.45	54.00	16.55	500.0	100.0	H	310.0	2
2637.750000	48.60	---	74.00	25.40	500.0	200.0	V	217.0	2



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3097.500000	46.38	---	74.00	27.62	500.0	200.0	V	165.0	-10.2
3106.875000	---	36.42	54.00	17.58	500.0	200.0	V	165.0	-10.2
4918.125000	63.26	---	74.00	10.74	500.0	200.0	H	205.0	-5.3
4923.750000	---	52.31	54.00	1.69	500.0	100.0	H	205.0	-5.3
6395.625000	---	33.28	54.00	20.72	500.0	200.0	V	175.0	-4.2
6412.500000	45.57	---	74.00	28.43	500.0	200.0	V	269.0	-4.2
9845.625000	---	35.40	54.00	18.60	500.0	100.0	V	86.0	-0.4
9849.375000	45.01	---	74.00	28.99	500.0	100.0	V	76.0	-0.4
13314.375000	45.71	---	74.00	28.29	500.0	100.0	H	329.0	2.3
13325.625000	---	33.74	54.00	20.26	500.0	100.0	V	33.0	2.3
16878.750000	50.21	---	74.00	23.79	500.0	100.0	H	106.0	8.9
17632.500000	---	39.25	54.00	14.75	500.0	100.0	H	334.0	10.2

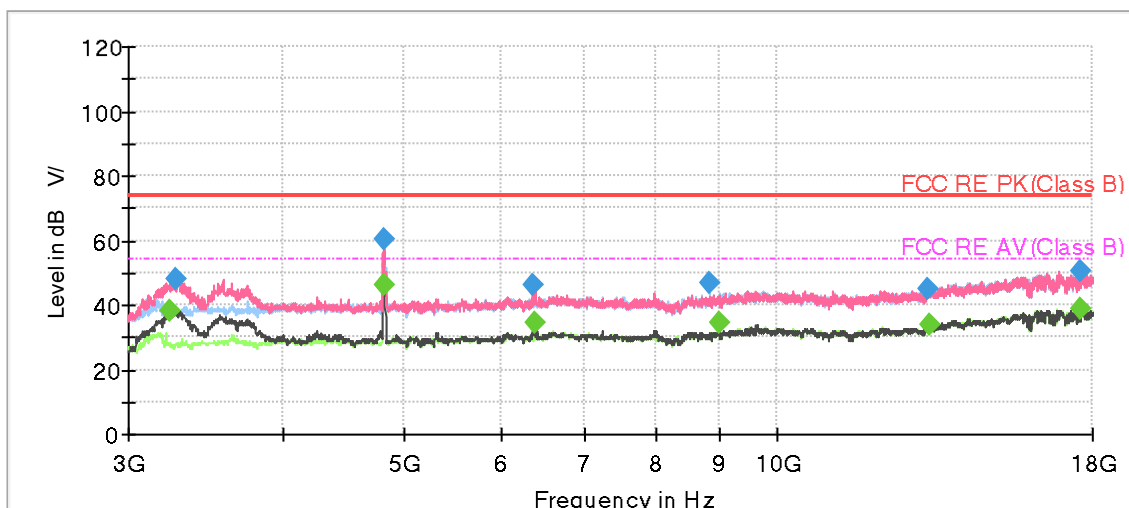
802.11n (HT20) CH1



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

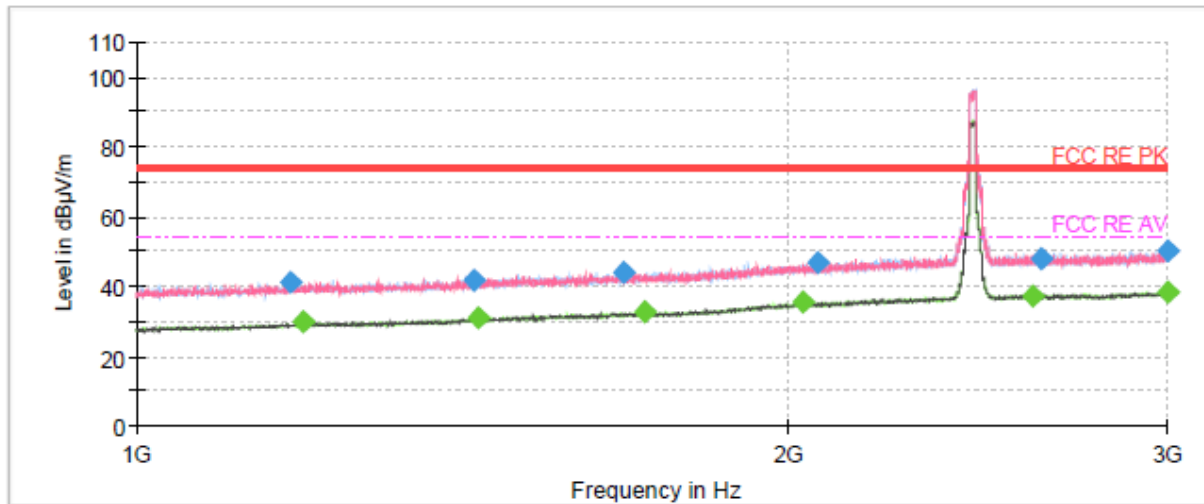
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1183.500000	---	29.62	54.00	24.38	500.0	200.0	V	111.0	-6
1200.000000	41.03	---	74.00	32.97	500.0	200.0	V	204.0	-6
1428.500000	42.16	---	74.00	31.84	500.0	200.0	H	255.0	-4
1441.750000	---	30.87	54.00	23.13	500.0	100.0	V	238.0	-4
1706.500000	44.07	---	74.00	29.93	500.0	100.0	V	331.0	-2
1725.250000	---	32.46	54.00	21.54	500.0	100.0	V	134.0	-2
2001.000000	46.90	---	74.00	27.10	500.0	100.0	H	170.0	0
2076.000000	---	35.17	54.00	18.83	500.0	100.0	V	293.0	0
2542.750000	48.16	---	74.00	25.84	500.0	100.0	H	86.0	1
2543.000000	---	37.05	54.00	16.95	500.0	100.0	H	179.0	1
2755.500000	50.54	---	74.00	23.46	500.0	200.0	V	186.0	2
2971.250000	---	38.47	54.00	15.53	500.0	200.0	H	264.0	3



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)
3241.875000	---	38.31	54.00	15.69	500.0	200.0	V	178.0	-9.7
3281.250000	48.13	---	74.00	25.87	500.0	200.0	V	178.0	-9.3
4820.625000	60.44	---	74.00	13.56	500.0	100.0	H	213.0	-6.1
4822.500000	---	46.31	54.00	7.69	500.0	100.0	H	209.0	-6.1
6371.250000	45.98	---	74.00	28.02	500.0	200.0	V	162.0	-4.3
6384.375000	---	34.48	54.00	19.52	500.0	200.0	V	162.0	-4.2
8835.000000	46.79	---	74.00	27.21	500.0	200.0	H	284.0	-1.4
9000.000000	---	34.21	54.00	19.79	500.0	100.0	V	261.0	-1.3
13256.250000	44.67	---	74.00	29.33	500.0	100.0	H	265.0	2.1
13321.875000	---	33.78	54.00	20.22	500.0	200.0	V	14.0	2.3
17626.875000	50.26	---	74.00	23.74	500.0	100.0	H	348.0	10.2
17638.125000	---	38.96	54.00	15.04	500.0	100.0	H	223.0	10.2

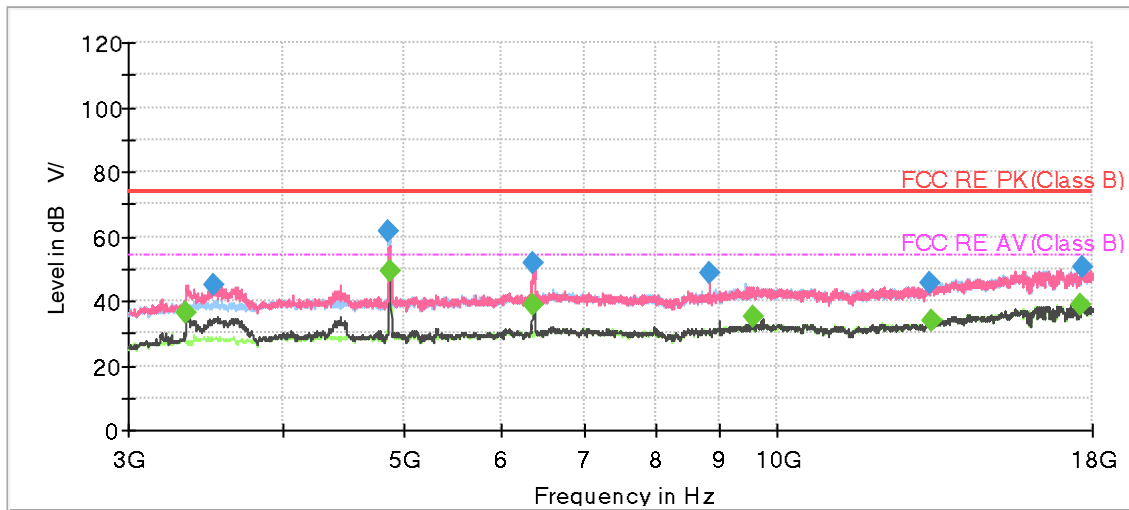
802.11n (HT20) CH6



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

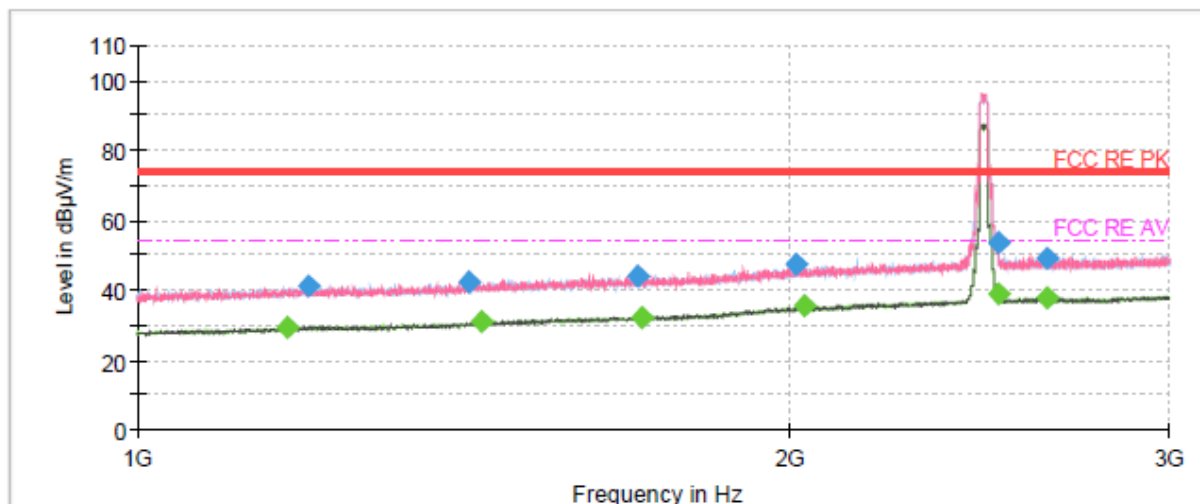
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1179.000000	41.14	---	74.00	32.86	500.0	100.0	H	310.0	-6
1195.000000	---	29.86	54.00	24.14	500.0	200.0	H	208.0	-6
1432.250000	41.95	---	74.00	32.05	500.0	200.0	V	49.0	-4
1439.500000	---	30.87	54.00	23.13	500.0	200.0	V	189.0	-4
1678.500000	44.09	---	74.00	29.91	500.0	100.0	H	9.0	-2
1719.250000	---	32.49	54.00	21.51	500.0	100.0	H	254.0	-2
2035.750000	---	35.43	54.00	18.57	500.0	200.0	V	104.0	0
2065.500000	46.66	---	74.00	27.34	500.0	200.0	H	152.0	0
2600.000000	---	37.47	54.00	16.53	500.0	100.0	H	2.0	2
2621.000000	47.88	---	74.00	26.12	500.0	200.0	V	321.0	2
2997.250000	49.97	---	74.00	24.03	500.0	100.0	V	356.0	3
2997.500000	---	38.40	54.00	15.60	500.0	100.0	H	9.0	3



Radiates Emission from 3GHz to 18GHz

Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3339.375000	---	36.03	54.00	17.97	500.0	200.0	V	185.0	-9.1
3510.000000	44.92	---	74.00	29.08	500.0	200.0	V	185.0	-8.2
4869.375000	61.42	---	74.00	12.58	500.0	100.0	H	204.0	-5.8
4876.875000	---	49.33	54.00	4.67	500.0	100.0	H	199.0	-5.8
6371.250000	---	38.92	54.00	15.08	500.0	100.0	V	85.0	-4.3
6373.125000	51.39	---	74.00	22.61	500.0	100.0	V	85.0	-4.3
8833.125000	48.34	---	74.00	25.66	500.0	100.0	V	30.0	-1.4
9575.625000	---	34.90	54.00	19.10	500.0	100.0	V	125.0	-0.6
13312.500000	45.32	---	74.00	28.68	500.0	100.0	H	298.0	2.3
13338.750000	---	33.84	54.00	20.16	500.0	100.0	H	302.0	2.3
17632.500000	---	38.94	54.00	15.06	500.0	200.0	V	200.0	10.2
17660.625000	50.40	---	74.00	23.60	500.0	100.0	V	120.0	10.2

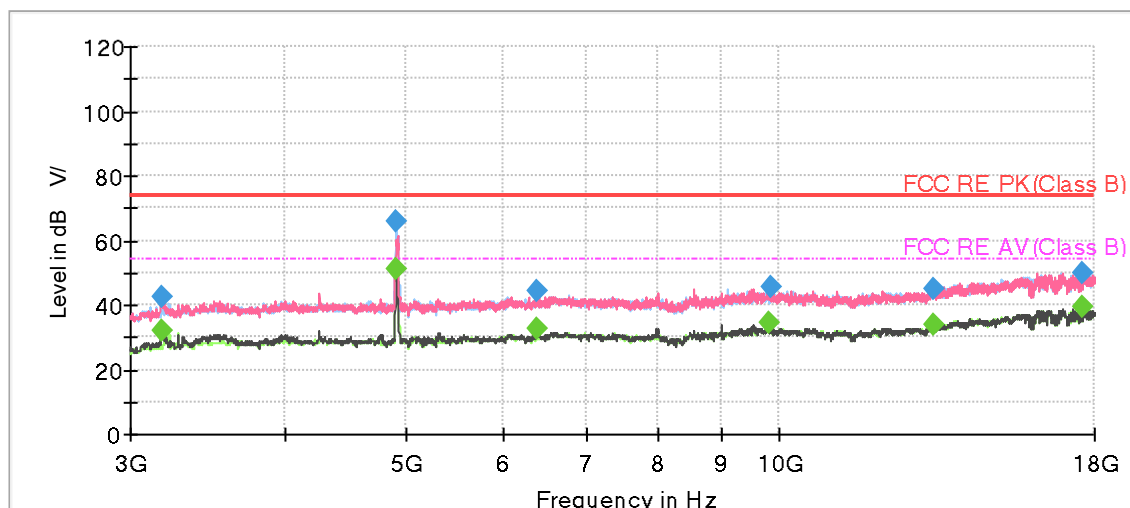
802.11n (HT20) CH11



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1173.750000	---	29.41	54.00	24.59	500.0	100.0	H	171.0	-6
1199.500000	41.17	---	74.00	32.83	500.0	200.0	H	227.0	-6
1422.750000	42.22	---	74.00	31.78	500.0	200.0	V	59.0	-4
1441.250000	---	30.78	54.00	23.22	500.0	100.0	H	106.0	-4
1704.750000	43.93	---	74.00	30.07	500.0	100.0	V	0.0	-2
1709.750000	---	32.41	54.00	21.59	500.0	100.0	V	330.0	-2
2014.500000	47.16	---	74.00	26.84	500.0	100.0	V	311.0	0
2033.000000	---	35.42	54.00	18.58	500.0	200.0	H	357.0	0
2498.250000	---	38.85	54.00	15.15	500.0	100.0	V	339.0	1
2498.750000	53.51	---	74.00	20.49	500.0	200.0	V	0.0	1
2633.250000	---	37.64	54.00	16.36	500.0	100.0	V	339.0	2
2636.000000	49.12	---	74.00	24.88	500.0	100.0	V	256.0	2



Radiates Emission from 3GHz to 18GHz

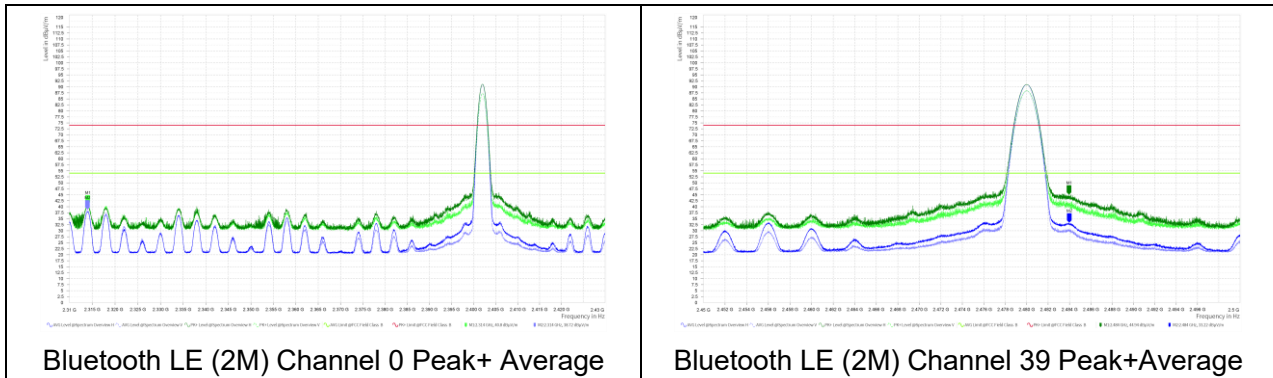
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3180.000000	42.55	---	74.00	31.45	500.0	200.0	V	38.0	-10.1
3185.625000	---	31.99	54.00	22.01	500.0	200.0	V	38.0	-10.0
4921.875000	66.15	---	74.00	7.85	500.0	100.0	H	206.0	-5.3
4923.750000	---	51.13	54.00	2.87	500.0	100.0	H	211.0	-5.3
6380.625000	---	32.75	54.00	21.25	500.0	100.0	V	2.0	-4.2
6397.500000	44.14	---	74.00	29.86	500.0	100.0	V	2.0	-4.2
9847.500000	---	34.68	54.00	19.32	500.0	100.0	V	77.0	-0.4
9858.750000	45.58	---	74.00	28.42	500.0	100.0	V	96.0	-0.5
13335.000000	45.12	---	74.00	28.88	500.0	100.0	H	338.0	2.3
13340.625000	---	33.75	54.00	20.25	500.0	100.0	V	131.0	2.3
17632.500000	50.13	---	74.00	23.87	500.0	100.0	V	96.0	10.2
17636.250000	---	39.13	54.00	14.87	500.0	100.0	H	285.0	10.2

1.2. Bluetooth LE

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 signal beyond the limit is carrier.

After the pretest, Bluetooth LE (2M) was selected as the worst Mode for Bluetooth LE.



Result of RE

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier.
The Radiates Emission from 9kHz to 30MHz and 18GHz to 26.5GHz are more than 20dB below the

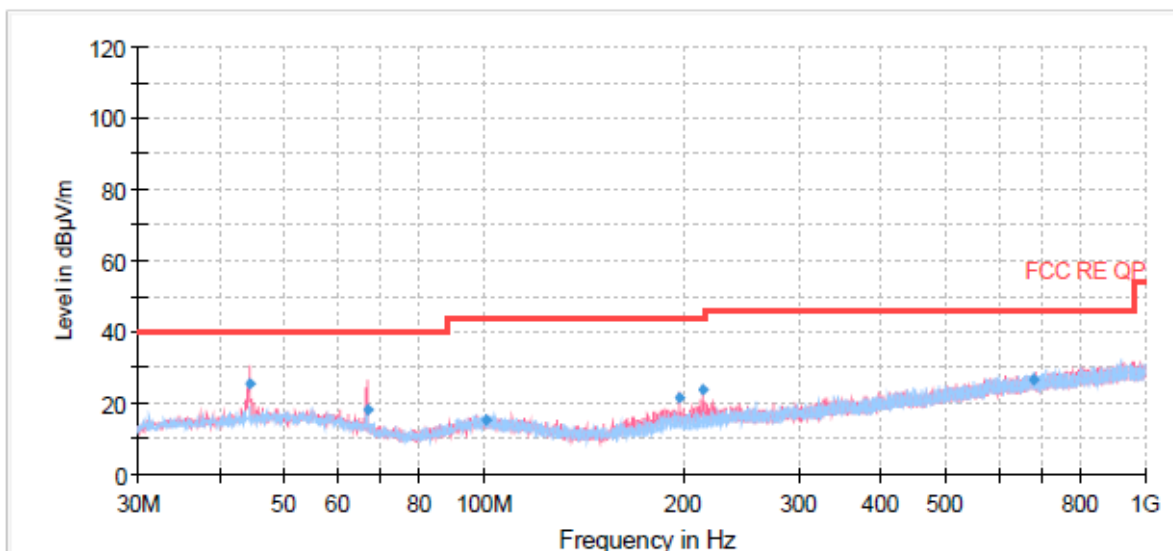
Remark:

1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)
2. Margin = Limit – Quasi-Peak/ MAX Peak/ Average
3. The following graphs display the maximum values of horizontal and vertical by software.
4. For below 1GHz

 QP Level @Spectrum Overview H
  QP Level @Spectrum Overview V
  QP Level @Final Results
  QP Limit

Continuous TX mode:

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

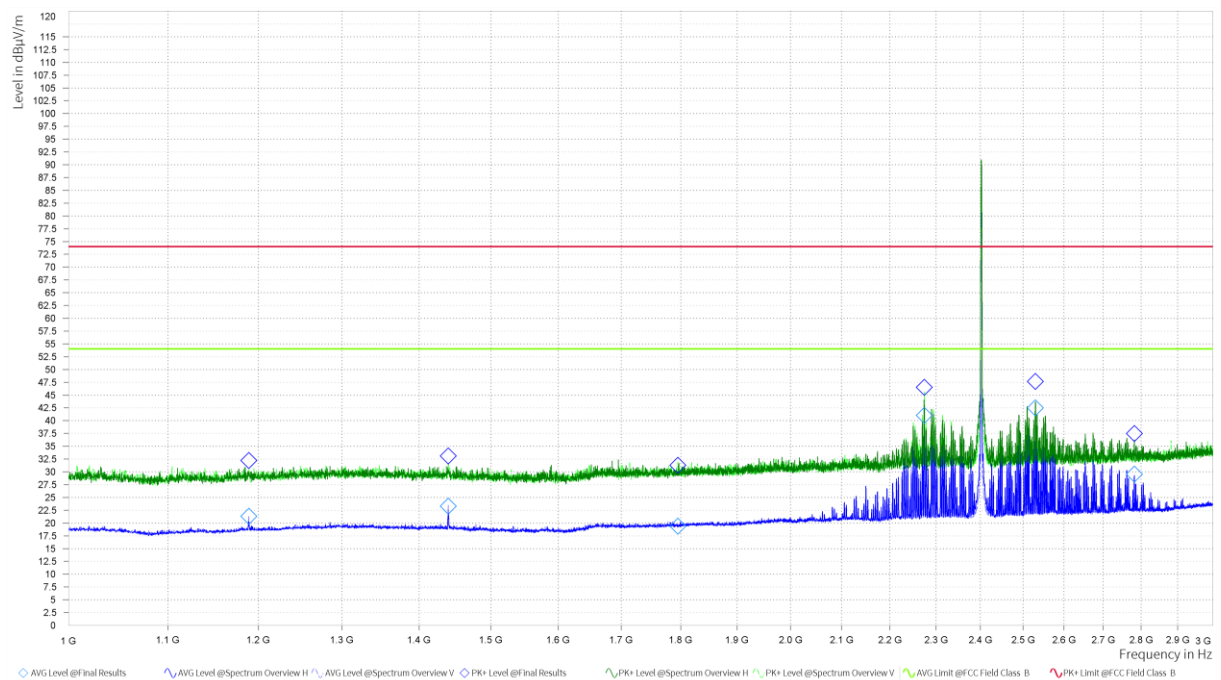


Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
44.21	25.58	40.00	14.42	100.0	V	303.00	20
66.62	18.10	40.00	21.90	184.0	V	230.00	17
100.81	15.11	43.50	28.39	110.0	H	228.00	19
197.96	21.23	43.50	22.27	225.0	V	314.00	18
214.49	23.75	43.50	19.75	210.0	V	1.00	18
675.73	26.61	46.00	19.40	225.0	H	80.00	28

Bluetooth LE-Channel 0

Spectrum Overview H/V

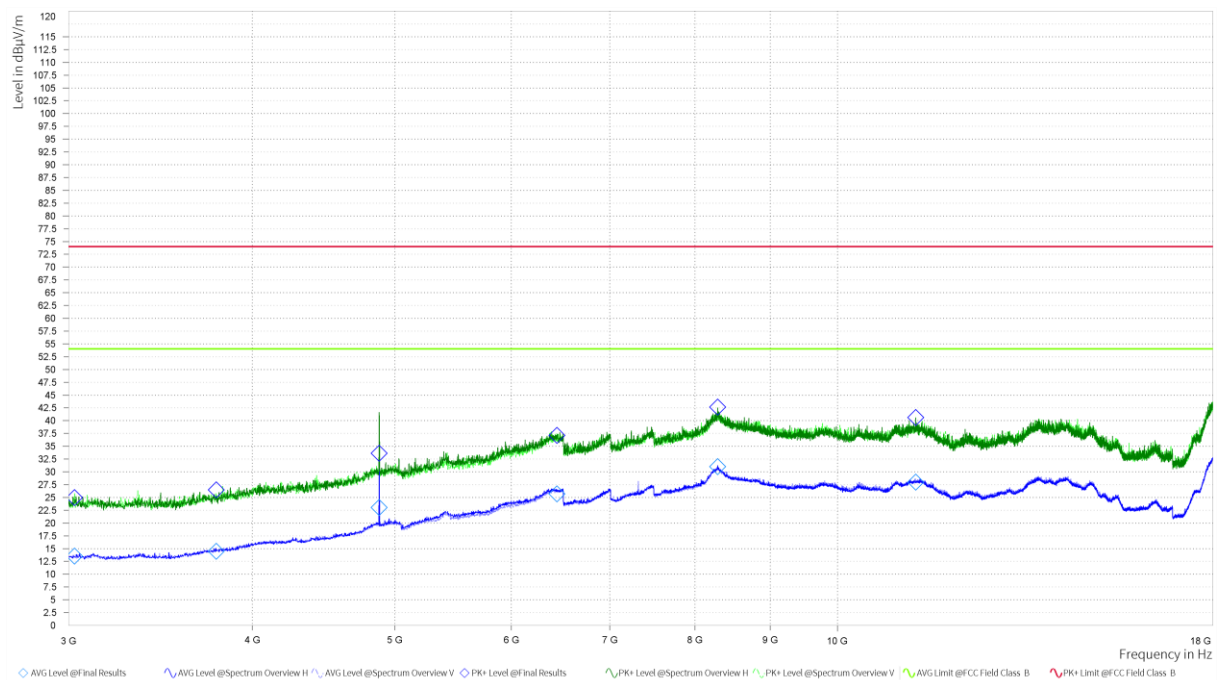


Frequency [MHz]	PK+ Level [dBµV/m]	PK+ Limit [dBµV/m]	PK+ Margin [dB]	AVG Level [dBµV/m]	AVG Limit [dBµV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]
1,188.750	32.19	74.00	41.81	21.29	54.00	32.71	-10.58	V	48.8	1.00
1,439.750	33.05	74.00	40.95	23.28	54.00	30.72	-10.50	V	292.2	1.00
1,795.000	31.25	74.00	42.75	19.36	54.00	34.64	-10.45	V	219	2.00
2,274.250	46.50	74.00	27.50	41.01	54.00	12.99	-8.08	V	104.7	2.00
2,530.000	47.62	74.00	26.38	42.46	54.00	11.54	-7.33	H	188	2.00
2,782.250	37.44	74.00	36.56	29.55	54.00	24.45	-6.48	H	181.1	1.00

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Spectrum Overview H/V

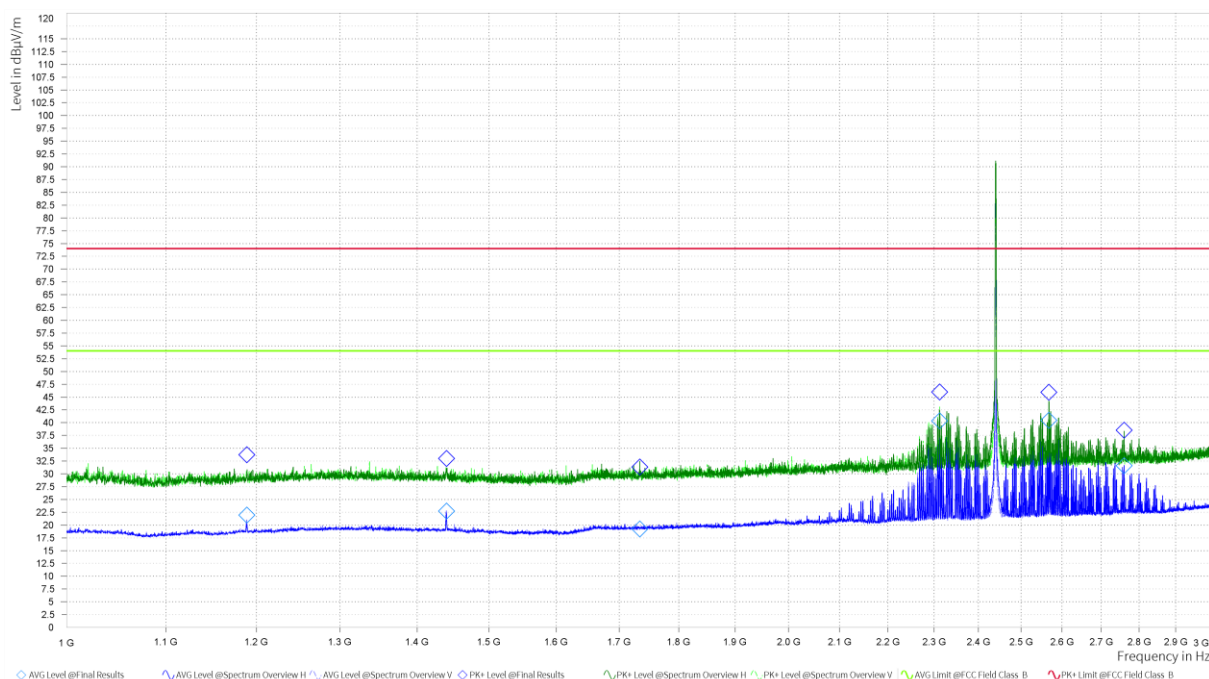


Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. Time [s]
3,028.125	24.94	74.00	49.06	13.53	54.00	40.47	-15.65	V	359.1	1.00	1.000
3,780.000	26.45	74.00	47.55	14.45	54.00	39.55	-14.40	V	291.1	1.00	1.000
4,878.750	33.58	74.00	40.42	23.00	54.00	31.00	-9.95	H	148.4	2.00	1.000
6,444.375	37.09	74.00	36.91	25.67	54.00	28.33	-4.57	V	343.4	1.00	1.000
8,289.375	42.65	74.00	31.35	30.99	54.00	23.01	0.05	H	3	2.00	1.000
11,302.500	40.60	74.00	33.40	27.97	54.00	26.03	-0.99	H	293.2	1.00	1.000

Radiates Emission from 3GHz to 18GHz

Bluetooth LE-Channel 19

Spectrum Overview H/V

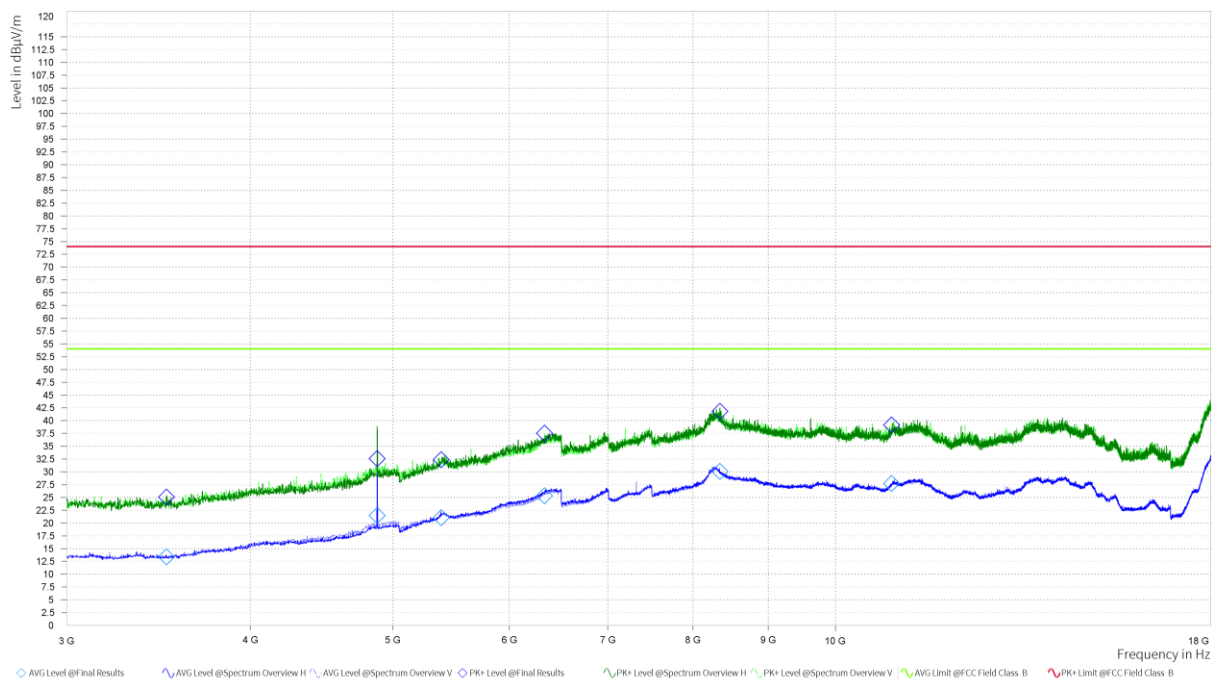


Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. Time [s]
1,188.750	33.70	74.00	40.30	21.90	54.00	32.10	-10.58	V	2.9	1.00	1.000
1,440.000	32.95	74.00	41.05	22.68	54.00	31.32	-10.50	V	169.5	2.00	1.000
1,733.750	31.28	74.00	42.72	19.20	54.00	34.80	-10.44	H	203.6	1.00	1.000
2,312.250	45.96	74.00	28.04	40.33	54.00	13.67	-7.97	V	87.5	2.00	1.000
2,568.000	45.89	74.00	28.11	40.43	54.00	13.57	-6.96	H	190.1	1.00	1.000
2,760.250	38.52	74.00	35.48	31.56	54.00	22.44	-6.50	H	190.1	1.00	1.000

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Spectrum Overview H/V

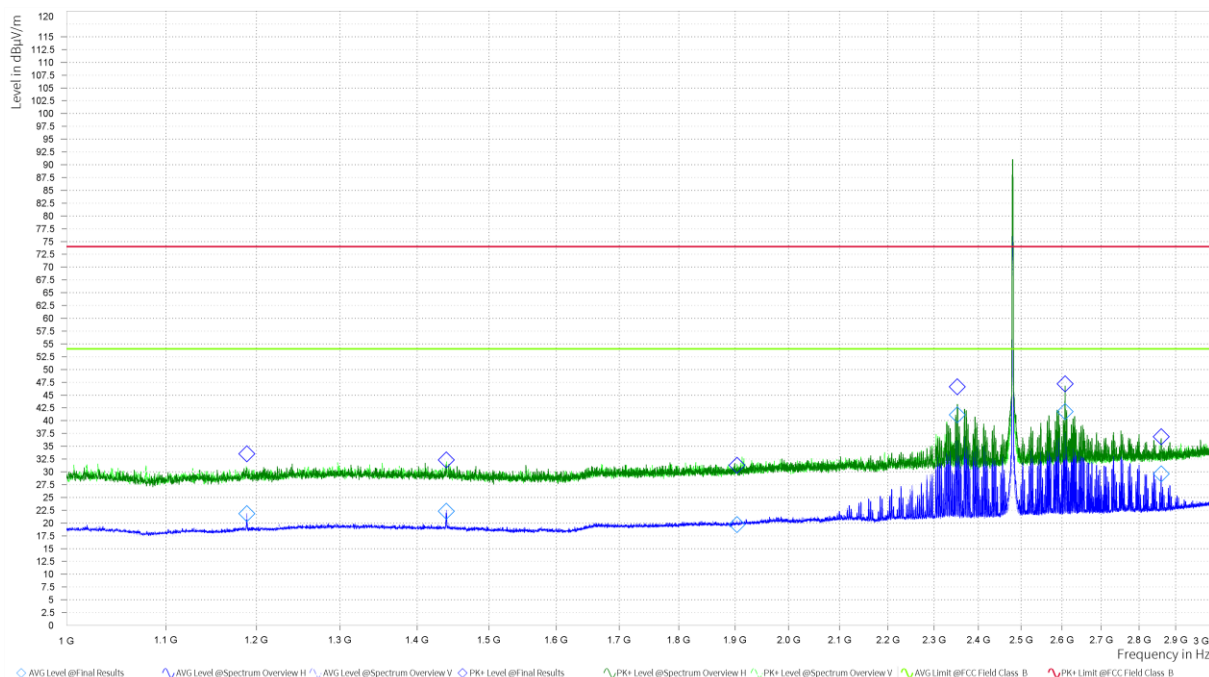


Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. Time [s]
3,508.125	25.04	74.00	48.96	13.38	54.00	40.62	-15.34	H	233.8	1.00	1.000
4,878.750	32.53	74.00	41.47	21.43	54.00	32.57	-9.95	H	147.6	2.00	1.000
5,392.500	32.34	74.00	41.66	21.05	54.00	32.95	-8.25	H	274.9	2.00	1.000
6,341.250	37.52	74.00	36.48	25.28	54.00	28.72	-4.61	V	241.1	2.00	1.000
8,345.625	41.79	74.00	32.21	30.06	54.00	23.94	-0.75	H	226.7	1.00	1.000
10,916.250	39.13	74.00	34.87	27.68	54.00	26.32	-2.35	V	218.9	2.00	1.000

Radiates Emission from 3GHz to 18GHz

Bluetooth LE-Channel 39

Spectrum Overview H/V

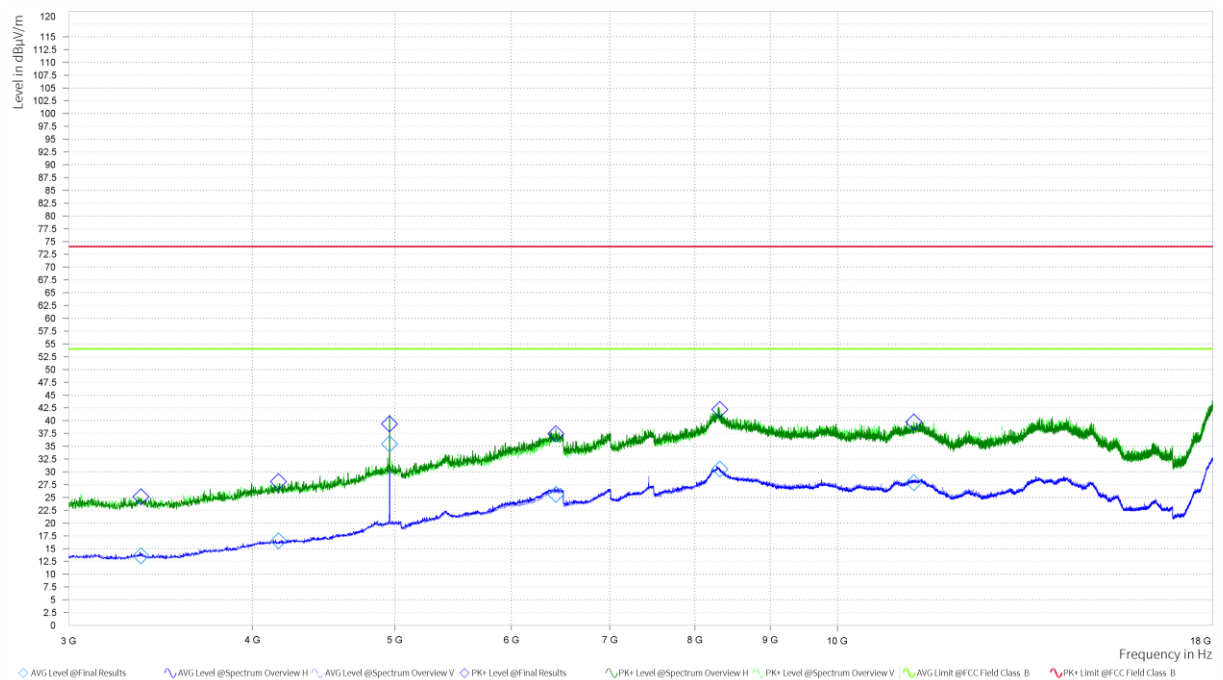


Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. Time [s]
1,188.750	33.48	74.00	40.52	21.79	54.00	32.21	-10.58	V	2.9	1.00	1.000
1,439.750	32.31	74.00	41.69	22.26	54.00	31.74	-10.50	V	189.4	2.00	1.000
1,903.250	31.28	74.00	42.72	19.68	54.00	34.32	-9.59	V	65.4	2.00	1.000
2,351.750	46.61	74.00	27.39	41.12	54.00	12.88	-7.75	H	190.8	1.00	1.000
2,608.250	47.18	74.00	26.82	41.72	54.00	12.28	-7.16	H	178.4	2.00	1.000
2,860.000	36.84	74.00	37.16	29.61	54.00	24.39	-6.25	H	176.8	1.00	1.000

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

Spectrum Overview H/V



Frequency [MHz]	PK+ Level [dBμV/m]	PK+ Limit [dBμV/m]	PK+ Margin [dB]	AVG Level [dBμV/m]	AVG Limit [dBμV/m]	AVG Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. Time [s]
3,360.000	25.08	74.00	48.92	13.56	54.00	40.44	-15.15	H	11.4	1.00	1.000
4,166.250	28.08	74.00	45.92	16.48	54.00	37.52	-13.16	H	222.8	2.00	1.000
4,959.375	39.33	74.00	34.67	35.40	54.00	18.60	-9.74	H	152.2	1.00	1.000
6,433.125	37.43	74.00	36.57	25.59	54.00	28.41	-4.51	H	348.7	2.00	1.000
8,317.500	42.16	74.00	31.84	30.54	54.00	23.46	-0.27	V	215.9	1.00	1.000
11,268.750	39.72	74.00	34.28	27.84	54.00	26.16	-1.07	V	256.7	2.00	1.000

Radiates Emission from 3GHz to 18GHz

2. Conducted Emission

2.1. Wi-Fi 2.4GHz

The equipment is not connected to the public network, so test items do not apply.

2.2. Bluetooth LE

The equipment is not connected to the public network, so test items do not apply.