

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

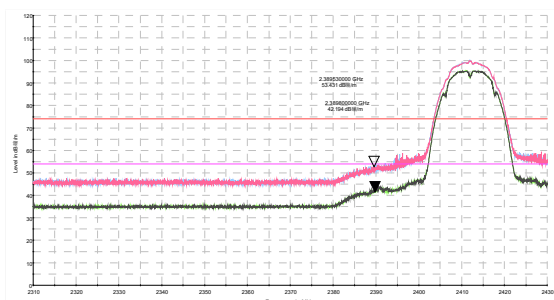
1. Unwanted Emission

1.1. Wi-Fi 2.4GHz

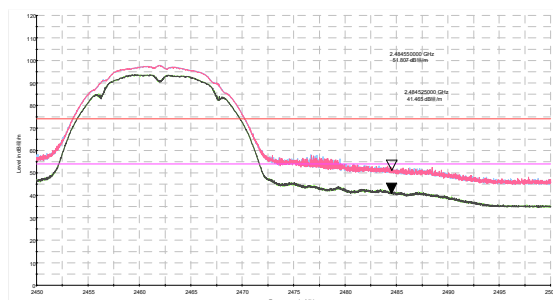
The following graphs display the maximum values of horizontal and vertical by software. Blue trace uses the peak detection, Green trace uses the average detection.

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

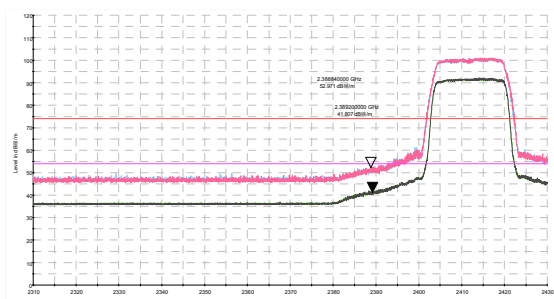
The signal beyond the limit is carrier.



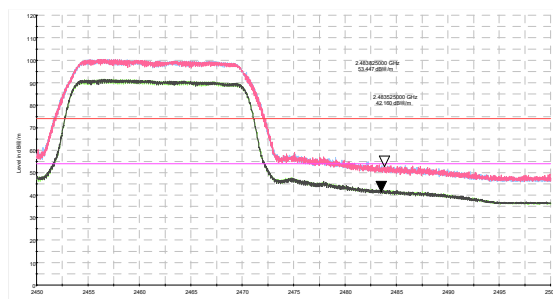
802.11b-Channel 1 Peak+ Average



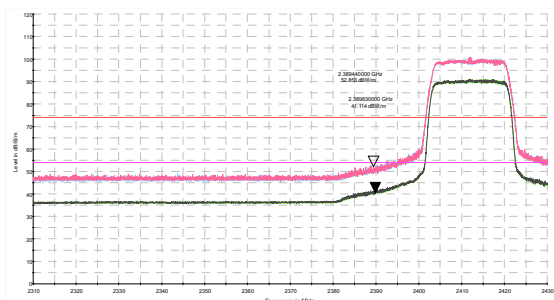
802.11b-Channel 11 Peak+ Average



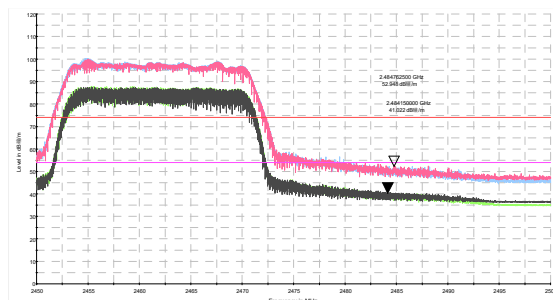
802.11g-Channel 1 Peak+ Average



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 (dB $\mu\text{V/m}$)**
4. **The following graphs display the maximum values of coaxial and coplanar for 9k-30MHz; horizontal and vertical for above 30MHz by software.**
5. **For below 1GHz**

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

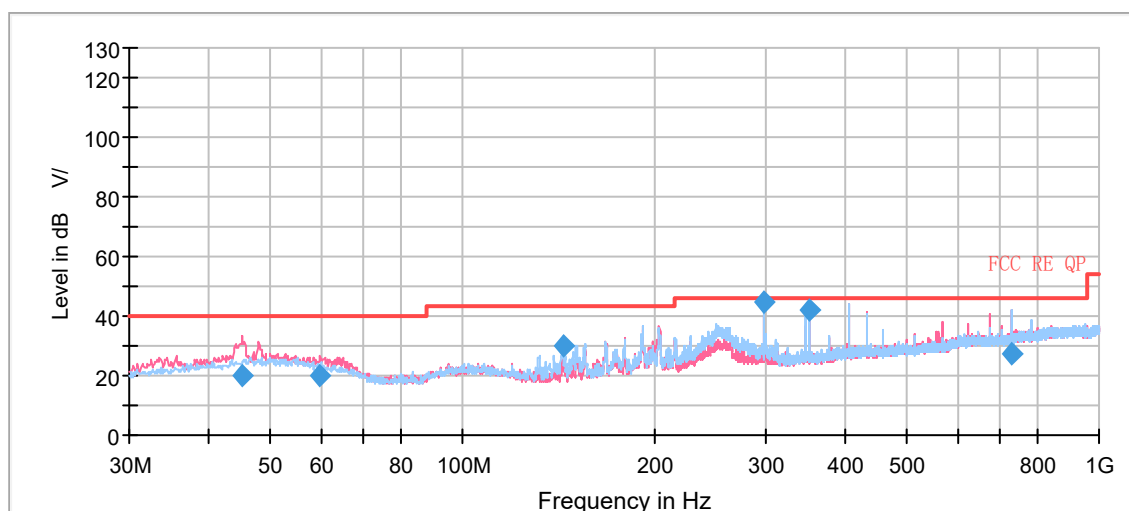
For above 1GHz

 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:

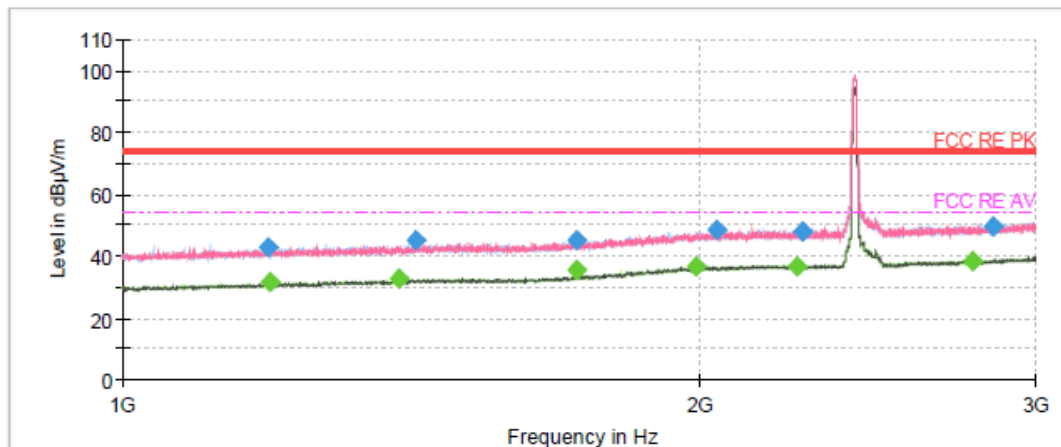
During the test, the Radiates Emission from 30kHz to 1GHz was performed in all modes with all channels, the test data of the worst-case condition was recorded in this report.



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)
45.156250	19.87	40.00	20.13	105.0	V	0.0	21.0
59.827500	20.00	40.00	20.00	112.0	V	216.0	19.8
143.975000	29.91	43.50	13.59	189.0	H	0.0	15.6
296.992500	44.37	46.00	1.63	103.0	H	229.0	21.1
350.948750	42.31	46.00	3.69	117.0	H	334.0	22.5
729.127500	27.39	46.00	18.61	121.0	V	328.0	28.6

802.11b CH1

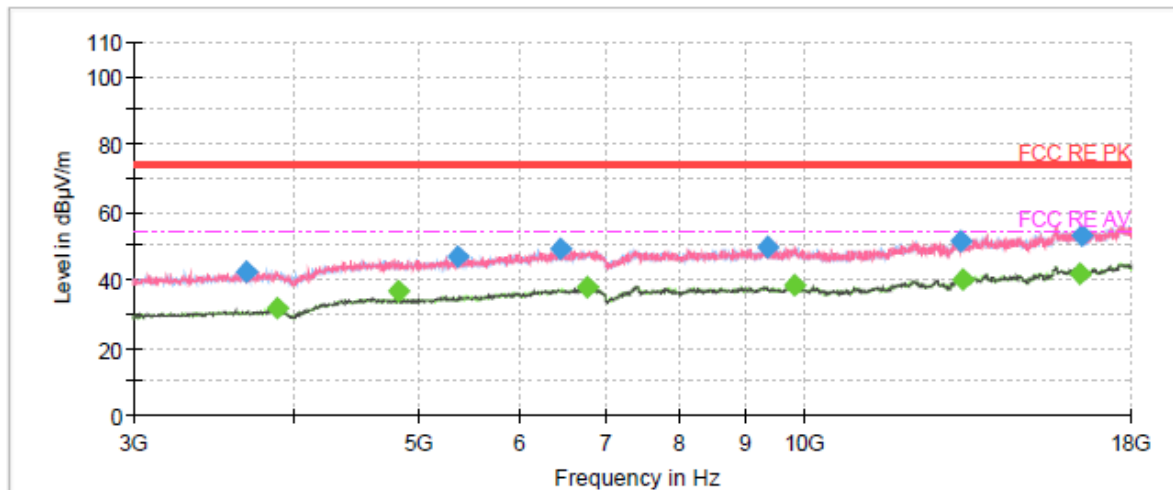


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1191.250000	42.61	---	74.00	31.39	500.0	200.0	H	107.0	-6
1194.000000	---	31.46	54.00	22.54	500.0	100.0	H	253.0	-6
1396.000000	---	32.51	54.00	21.49	500.0	100.0	V	273.0	-5
1423.000000	45.18	---	74.00	28.82	500.0	200.0	H	357.0	-4
1727.750000	---	35.71	54.00	18.29	500.0	200.0	V	0.0	-2
1728.000000	44.88	---	74.00	29.12	500.0	100.0	H	346.0	-2
1993.500000	---	36.82	54.00	17.18	500.0	100.0	H	327.0	0
2045.250000	48.41	---	74.00	25.59	500.0	200.0	V	0.0	0
2248.500000	---	36.74	54.00	17.26	500.0	100.0	H	189.0	1
2268.000000	48.12	---	74.00	25.88	500.0	100.0	V	108.0	1
2780.000000	---	38.25	54.00	15.75	500.0	200.0	V	254.0	3
2851.000000	49.40	---	74.00	24.60	500.0	100.0	H	77.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

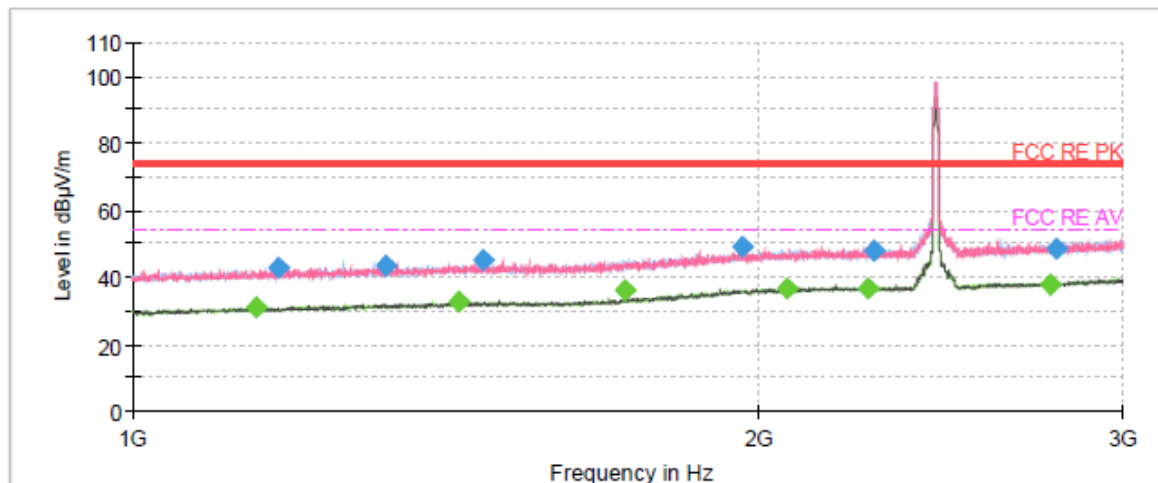


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3673.125000	42.21	---	74.00	31.79	500.0	100.0	H	72.0	-6
3879.375000	---	31.34	54.00	22.66	500.0	100.0	V	298.0	-5
4822.500000	---	36.80	54.00	17.20	500.0	200.0	V	94.0	-2
5364.375000	46.59	---	74.00	27.41	500.0	200.0	H	292.0	-1
6470.625000	48.92	---	74.00	25.08	500.0	200.0	V	64.0	1
6768.750000	---	37.56	54.00	16.44	500.0	200.0	H	303.0	1
9373.125000	49.86	---	74.00	24.14	500.0	200.0	V	184.0	3
9815.625000	---	38.38	54.00	15.62	500.0	100.0	H	244.0	3
13258.125000	51.37	---	74.00	22.63	500.0	100.0	V	357.0	5
13310.625000	---	40.11	54.00	13.89	500.0	200.0	V	2.0	5
16389.375000	---	41.67	54.00	12.33	500.0	100.0	H	82.0	7
16451.250000	52.85	---	74.00	21.15	500.0	100.0	H	103.0	7

Radiates Emission from 3GHz to 18GHz

802.11b CH6

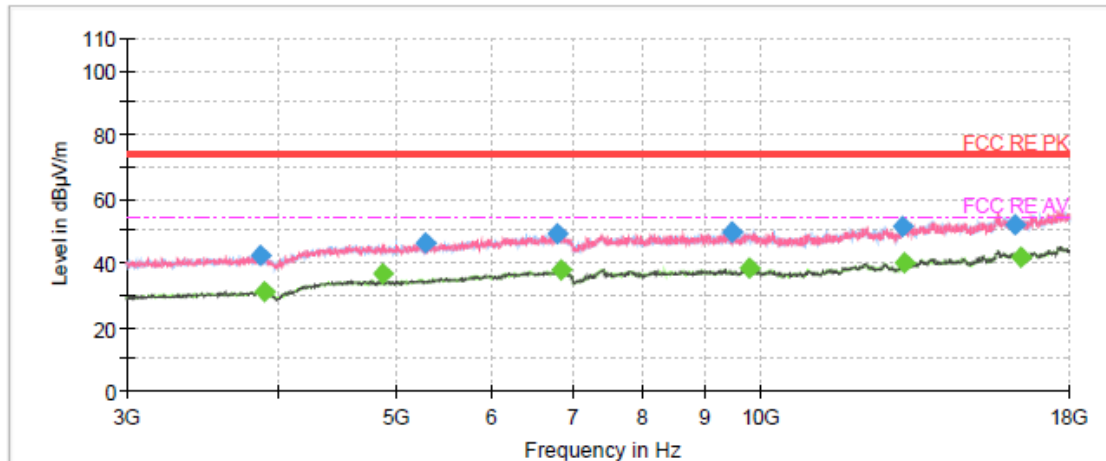


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1147.750000	---	31.23	54.00	22.77	500.0	100.0	H	359.0	-6
1174.500000	42.61	---	74.00	31.39	500.0	100.0	H	335.0	-6
1323.000000	43.57	---	74.00	30.43	500.0	100.0	V	38.0	-5
1435.500000	---	32.73	54.00	21.27	500.0	200.0	V	326.0	-4
1475.250000	45.20	---	74.00	28.80	500.0	200.0	H	115.0	-4
1728.000000	---	36.18	54.00	17.82	500.0	100.0	V	326.0	-2
1966.000000	49.19	---	74.00	24.81	500.0	200.0	H	115.0	0
2065.250000	---	36.54	54.00	17.46	500.0	100.0	V	149.0	0
2259.250000	---	36.85	54.00	17.15	500.0	100.0	V	233.0	1
2276.500000	47.72	---	74.00	26.28	500.0	200.0	V	188.0	1
2766.250000	---	37.90	54.00	16.10	500.0	100.0	H	317.0	2
2788.250000	48.51	---	74.00	25.49	500.0	200.0	V	353.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

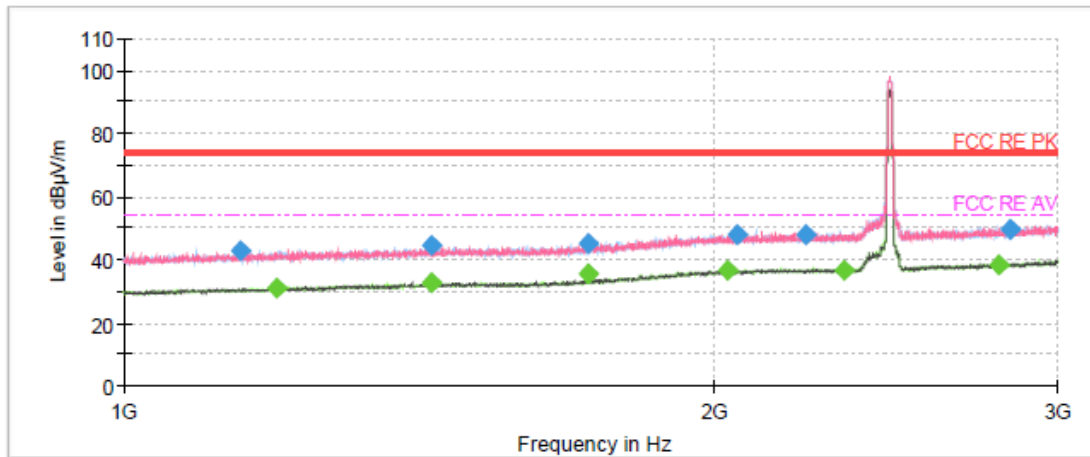


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3862.500000	42.42	---	74.00	31.58	500.0	200.0	V	32.0	-5
3894.375000	---	31.23	54.00	22.77	500.0	200.0	H	356.0	-5
4873.125000	---	36.72	54.00	17.28	500.0	100.0	V	34.0	-2
5285.625000	46.39	---	74.00	27.61	500.0	100.0	V	168.0	-1
6811.875000	49.03	---	74.00	24.97	500.0	200.0	V	72.0	1
6856.875000	---	37.67	54.00	16.33	500.0	100.0	H	164.0	1
9493.125000	49.60	---	74.00	24.40	500.0	200.0	V	21.0	3
9800.625000	---	38.46	54.00	15.54	500.0	200.0	V	62.0	3
13121.250000	51.41	---	74.00	22.59	500.0	200.0	H	116.0	5
13138.125000	---	40.06	54.00	13.94	500.0	100.0	H	286.0	5
16245.000000	52.11	---	74.00	21.89	500.0	200.0	H	327.0	7
16406.250000	---	41.87	54.00	12.13	500.0	200.0	H	337.0	7

Radiates Emission from 3GHz to 18GHz

802.11b CH11

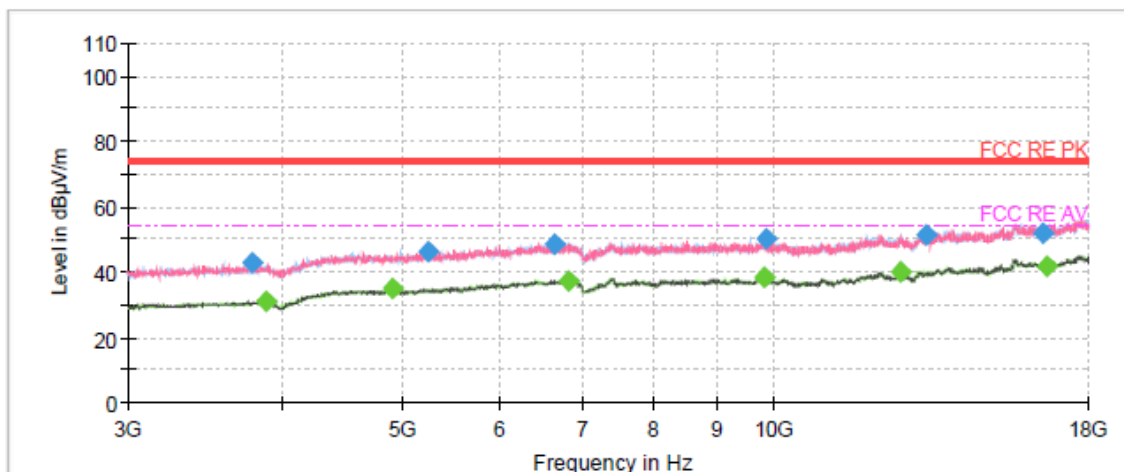


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1148.000000	42.63	---	74.00	31.37	500.0	100.0	H	320.0	-6
1196.500000	---	31.06	54.00	22.94	500.0	100.0	V	2.0	-6
1435.250000	---	32.90	54.00	21.10	500.0	100.0	H	320.0	-4
1435.250000	44.48	---	74.00	29.52	500.0	200.0	H	0.0	-4
1727.750000	---	35.79	54.00	18.21	500.0	100.0	V	9.0	-2
1727.750000	45.02	---	74.00	28.98	500.0	100.0	V	9.0	-2
2032.750000	---	36.62	54.00	17.38	500.0	100.0	V	222.0	0
2056.500000	48.09	---	74.00	25.91	500.0	100.0	V	212.0	0
2232.000000	47.85	---	74.00	26.16	500.0	200.0	V	105.0	0
2331.000000	---	36.73	54.00	17.27	500.0	200.0	H	4.0	1
2797.250000	---	38.19	54.00	15.81	500.0	100.0	H	339.0	3
2834.250000	49.70	---	74.00	24.30	500.0	100.0	H	204.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

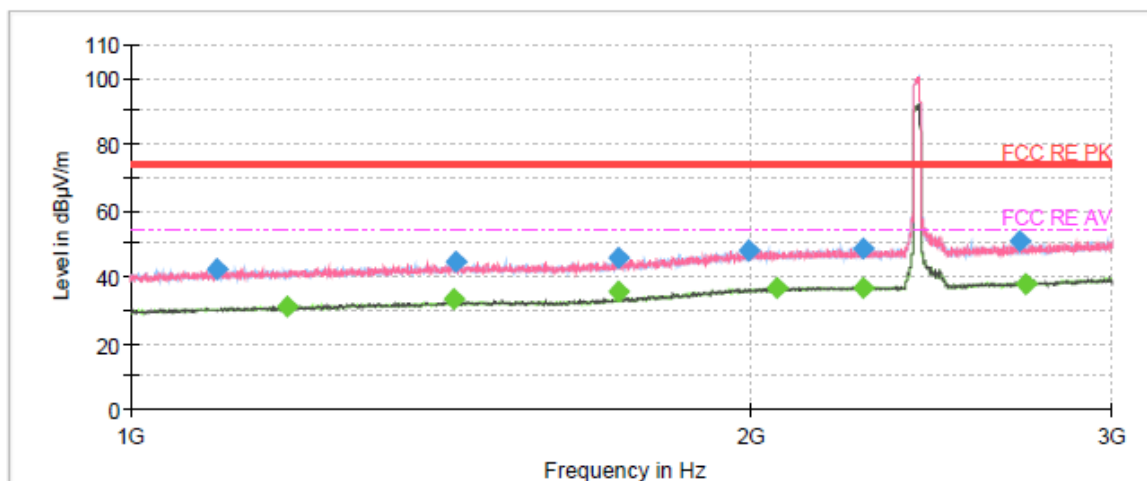


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3781.875000	42.63	---	74.00	31.37	500.0	200.0	V	140.0	-5
3885.000000	---	31.26	54.00	22.74	500.0	100.0	V	330.0	-5
4923.750000	---	35.08	54.00	18.92	500.0	100.0	V	87.0	-2
5259.375000	46.34	---	74.00	27.66	500.0	100.0	V	279.0	-1
6646.875000	48.75	---	74.00	25.25	500.0	100.0	H	131.0	1
6813.750000	---	37.47	54.00	16.53	500.0	200.0	H	256.0	1
9815.625000	---	38.26	54.00	15.74	500.0	100.0	V	350.0	3
9864.375000	49.95	---	74.00	24.05	500.0	200.0	H	0.0	3
12691.875000	---	40.18	54.00	13.82	500.0	200.0	V	9.0	5
13316.250000	51.39	---	74.00	22.61	500.0	200.0	H	176.0	5
16552.500000	51.93	---	74.00	22.07	500.0	200.0	H	267.0	7
16689.375000	---	41.57	54.00	12.43	500.0	200.0	H	267.0	8

Radiates Emission from 3GHz to 18GHz

802.11g CH1

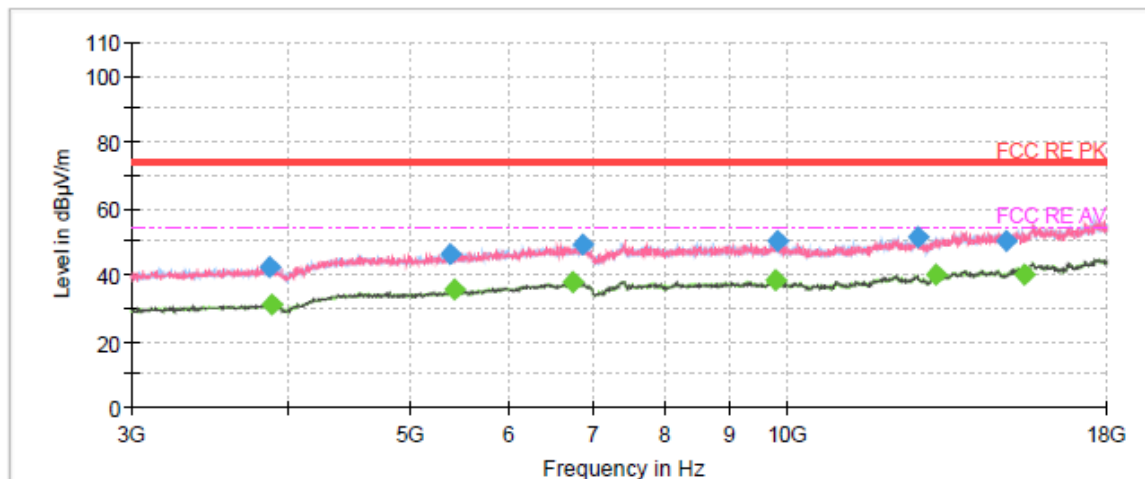


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1100.750000	42.22	---	74.00	31.78	500.0	200.0	V	0.0	-7
1191.250000	---	31.21	54.00	22.79	500.0	100.0	H	139.0	-6
1435.000000	---	33.30	54.00	20.70	500.0	200.0	V	320.0	-4
1440.000000	44.32	---	74.00	29.68	500.0	200.0	H	20.0	-4
1727.500000	45.47	---	74.00	28.53	500.0	100.0	V	358.0	-2
1728.000000	---	35.69	54.00	18.31	500.0	100.0	V	12.0	-2
1998.250000	48.20	---	74.00	25.80	500.0	200.0	V	356.0	0
2060.000000	---	36.62	54.00	17.38	500.0	100.0	H	341.0	0
2269.750000	48.57	---	74.00	25.43	500.0	100.0	V	248.0	1
2270.500000	---	36.65	54.00	17.35	500.0	100.0	V	257.0	1
2706.500000	50.75	---	74.00	23.25	500.0	200.0	V	139.0	2
2726.750000	---	37.83	54.00	16.17	500.0	200.0	H	201.0	2

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

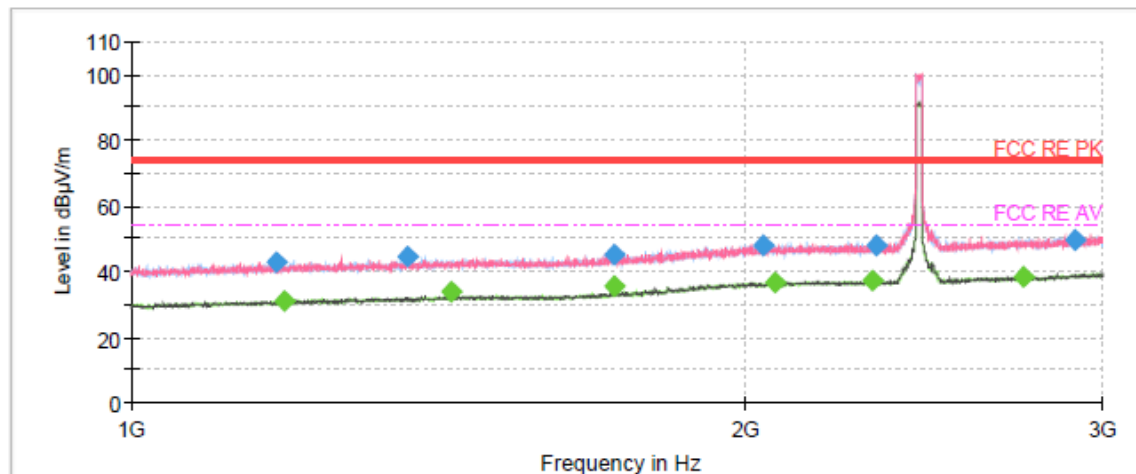


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3864.375000	42.19	---	74.00	31.81	500.0	100.0	V	188.0	-5
3886.875000	---	31.23	54.00	22.77	500.0	200.0	H	104.0	-5
5388.750000	46.47	---	74.00	27.53	500.0	200.0	V	213.0	-1
5441.250000	---	35.30	54.00	18.70	500.0	100.0	H	153.0	0
6750.000000	---	37.63	54.00	16.37	500.0	200.0	H	319.0	1
6870.000000	49.28	---	74.00	24.72	500.0	100.0	H	11.0	1
9813.750000	---	38.44	54.00	15.56	500.0	100.0	H	71.0	3
9821.250000	50.07	---	74.00	23.93	500.0	200.0	H	0.0	3
12720.000000	51.59	---	74.00	22.41	500.0	200.0	H	0.0	5
13138.125000	---	40.10	54.00	13.90	500.0	100.0	V	107.0	5
14970.000000	50.29	---	74.00	23.71	500.0	200.0	V	224.0	6
15465.000000	---	40.26	54.00	13.74	500.0	200.0	H	237.0	6

Radiates Emission from 3GHz to 18GHz

802.11g CH6

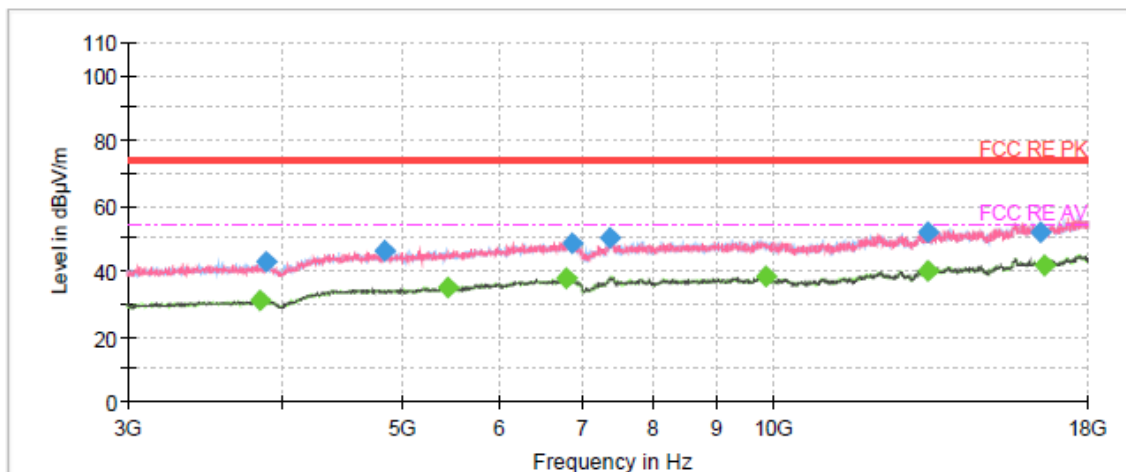


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1179.000000	42.83	---	74.00	31.17	500.0	200.0	H	83.0	-6
1188.250000	---	31.24	54.00	22.76	500.0	200.0	V	48.0	-6
1368.000000	44.58	---	74.00	29.42	500.0	200.0	V	0.0	-5
1435.500000	---	33.88	54.00	20.12	500.0	100.0	V	272.0	-4
1728.000000	---	35.71	54.00	18.29	500.0	100.0	V	7.0	-2
1728.000000	45.00	---	74.00	29.00	500.0	200.0	H	340.0	-2
2041.000000	48.15	---	74.00	25.85	500.0	100.0	H	286.0	0
2068.500000	---	36.82	54.00	17.18	500.0	100.0	V	263.0	0
2310.500000	---	36.99	54.00	17.02	500.0	100.0	V	189.0	1
2320.750000	47.94	---	74.00	26.06	500.0	200.0	H	29.0	1
2741.500000	---	38.36	54.00	15.64	500.0	200.0	H	83.0	2
2908.750000	49.43	---	74.00	24.57	500.0	200.0	V	158.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

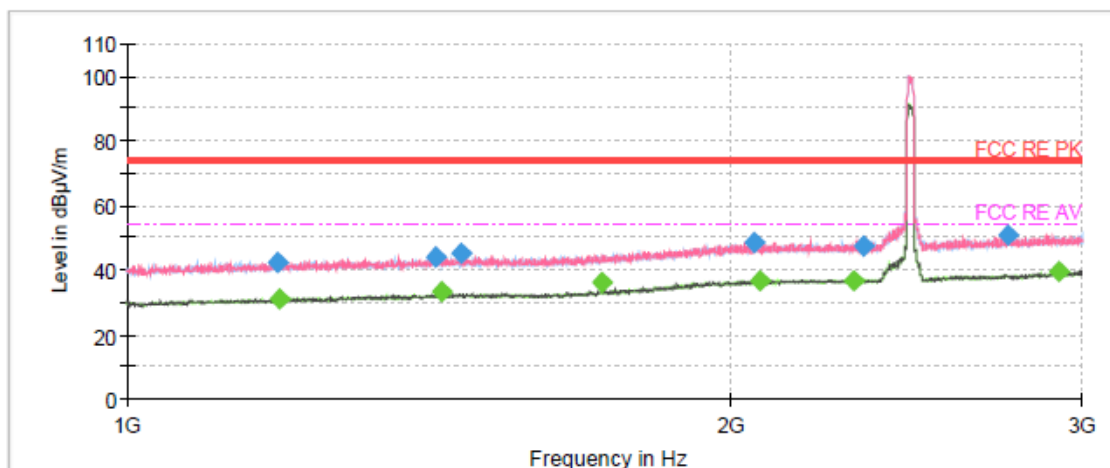


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3840.000000	---	31.08	54.00	22.92	500.0	200.0	H	166.0	-5
3881.250000	42.61	---	74.00	31.39	500.0	100.0	H	125.0	-5
4846.875000	46.43	---	74.00	27.57	500.0	100.0	H	74.0	-2
5450.625000	---	35.19	54.00	18.81	500.0	200.0	V	0.0	0
6811.875000	---	37.62	54.00	16.38	500.0	200.0	V	18.0	1
6888.750000	48.65	---	74.00	25.35	500.0	100.0	H	225.0	1
7380.000000	50.17	---	74.00	23.83	500.0	200.0	V	79.0	2
9875.625000	---	38.33	54.00	15.67	500.0	200.0	H	0.0	3
13336.875000	51.87	---	74.00	22.13	500.0	100.0	V	0.0	5
13342.500000	---	40.29	54.00	13.71	500.0	100.0	V	259.0	5
16490.625000	52.02	---	74.00	21.98	500.0	200.0	V	141.0	7
16573.125000	---	41.85	54.00	12.15	500.0	100.0	V	146.0	7

Radiates Emission from 3GHz to 18GHz

802.11g CH11

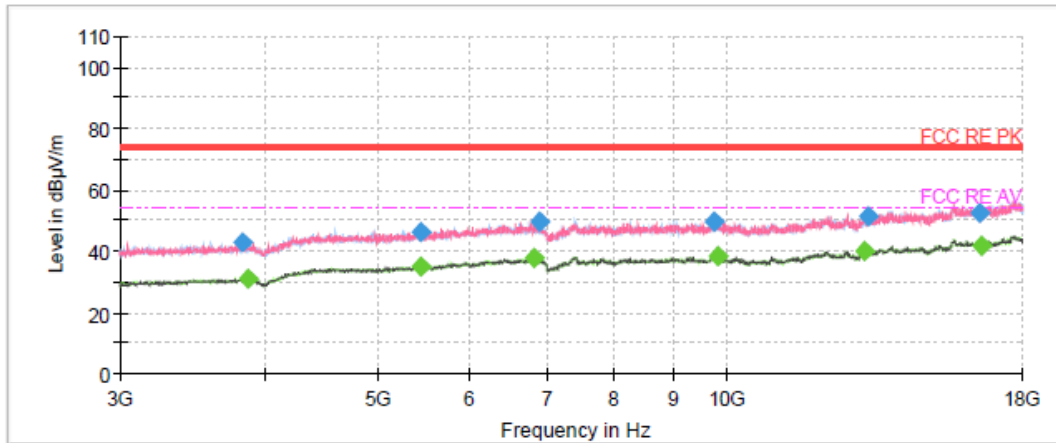


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1188.750000	42.55	---	74.00	31.45	500.0	200.0	V	55.0	-6
1191.250000	---	31.27	54.00	22.73	500.0	200.0	H	123.0	-6
1425.750000	44.17	---	74.00	29.83	500.0	200.0	V	103.0	-4
1435.500000	---	33.16	54.00	20.84	500.0	100.0	V	331.0	-4
1469.750000	44.99	---	74.00	29.01	500.0	200.0	V	331.0	-4
1727.750000	---	35.85	54.00	18.15	500.0	100.0	V	0.0	-2
2057.250000	48.35	---	74.00	25.65	500.0	200.0	V	239.0	0
2072.750000	---	36.78	54.00	17.22	500.0	100.0	V	322.0	0
2306.000000	---	36.60	54.00	17.40	500.0	100.0	H	218.0	1
2331.750000	47.17	---	74.00	26.83	500.0	100.0	H	181.0	1
2757.000000	50.80	---	74.00	23.20	500.0	100.0	H	0.0	2
2921.750000	---	39.41	54.00	14.59	500.0	200.0	V	94.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

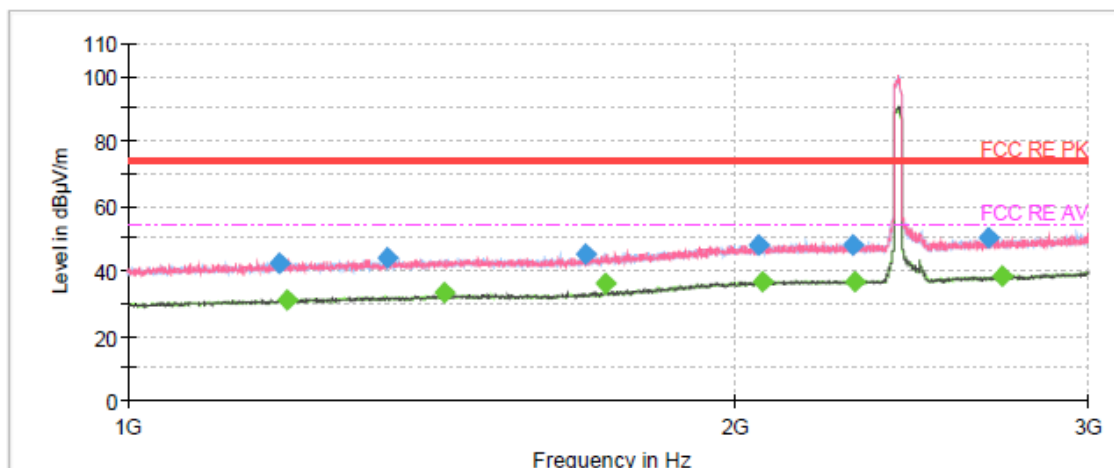


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3828.750000	42.97	---	74.00	31.03	500.0	200.0	V	195.0	-5
3868.125000	---	31.30	54.00	22.70	500.0	100.0	H	112.0	-5
5443.125000	---	34.99	54.00	19.01	500.0	100.0	H	133.0	0
5450.625000	46.53	---	74.00	27.47	500.0	100.0	V	257.0	0
6821.250000	---	37.82	54.00	16.18	500.0	100.0	V	176.0	1
6901.875000	49.36	---	74.00	24.64	500.0	200.0	V	124.0	1
9763.125000	49.75	---	74.00	24.25	500.0	200.0	H	187.0	3
9826.875000	---	38.59	54.00	15.41	500.0	100.0	V	135.0	3
13162.500000	---	40.14	54.00	13.86	500.0	100.0	H	22.0	5
13246.875000	51.51	---	74.00	22.49	500.0	200.0	V	235.0	5
16516.875000	52.27	---	74.00	21.73	500.0	200.0	V	337.0	7
16569.375000	---	41.84	54.00	12.16	500.0	100.0	H	0.0	7

Radiates Emission from 3GHz to 18GHz

802.11n (HT20) CH1

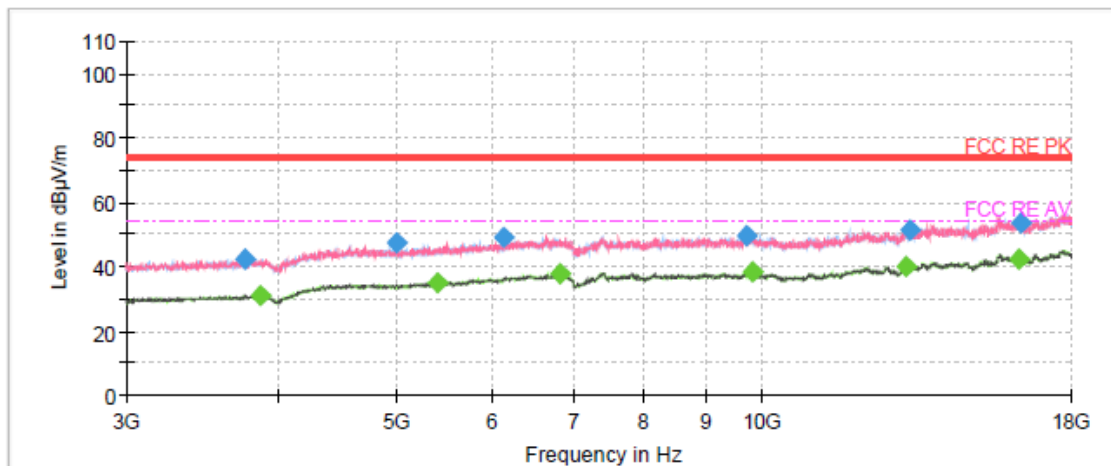


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1189.750000	42.56	---	74.00	31.44	500.0	200.0	H	247.0	-6
1199.250000	---	31.28	54.00	22.72	500.0	200.0	V	330.0	-6
1346.500000	43.95	---	74.00	30.05	500.0	200.0	V	70.0	-5
1435.500000	---	33.12	54.00	20.88	500.0	200.0	V	340.0	-4
1687.000000	45.11	---	74.00	28.89	500.0	200.0	H	312.0	-2
1728.000000	---	36.12	54.00	17.88	500.0	200.0	H	331.0	-2
2056.500000	48.11	---	74.00	25.89	500.0	200.0	V	5.0	0
2064.250000	---	36.70	54.00	17.30	500.0	200.0	V	52.0	0
2290.000000	47.92	---	74.00	26.08	500.0	200.0	V	274.0	1
2295.250000	---	36.87	54.00	17.13	500.0	200.0	H	144.0	1
2675.750000	49.98	---	74.00	24.02	500.0	100.0	H	42.0	2
2716.250000	---	38.28	54.00	15.72	500.0	100.0	H	284.0	2

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

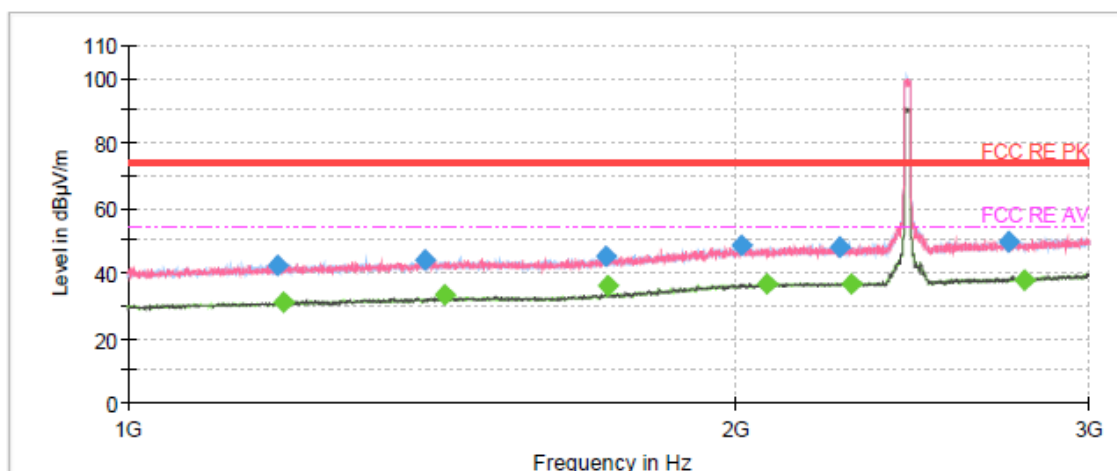


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3757.500000	42.49	---	74.00	31.51	500.0	100.0	V	354.0	-5
3875.625000	---	31.06	54.00	22.94	500.0	200.0	V	32.0	-5
5015.625000	47.16	---	74.00	26.84	500.0	100.0	V	112.0	-2
5407.500000	---	35.12	54.00	18.88	500.0	200.0	H	145.0	0
6123.750000	49.23	---	74.00	24.77	500.0	100.0	H	72.0	0
6819.375000	---	37.91	54.00	16.09	500.0	100.0	H	112.0	1
9723.750000	49.62	---	74.00	24.38	500.0	100.0	H	122.0	3
9819.375000	---	38.36	54.00	15.64	500.0	200.0	V	174.0	3
13140.000000	---	40.21	54.00	13.79	500.0	200.0	V	0.0	5
13271.250000	51.55	---	74.00	22.45	500.0	100.0	V	354.0	5
16273.125000	---	42.37	54.00	11.63	500.0	100.0	H	295.0	7
16361.250000	53.48	---	74.00	20.52	500.0	100.0	V	0.0	7

Radiates Emission from 3GHz to 18GHz

802.11n (HT20) CH6

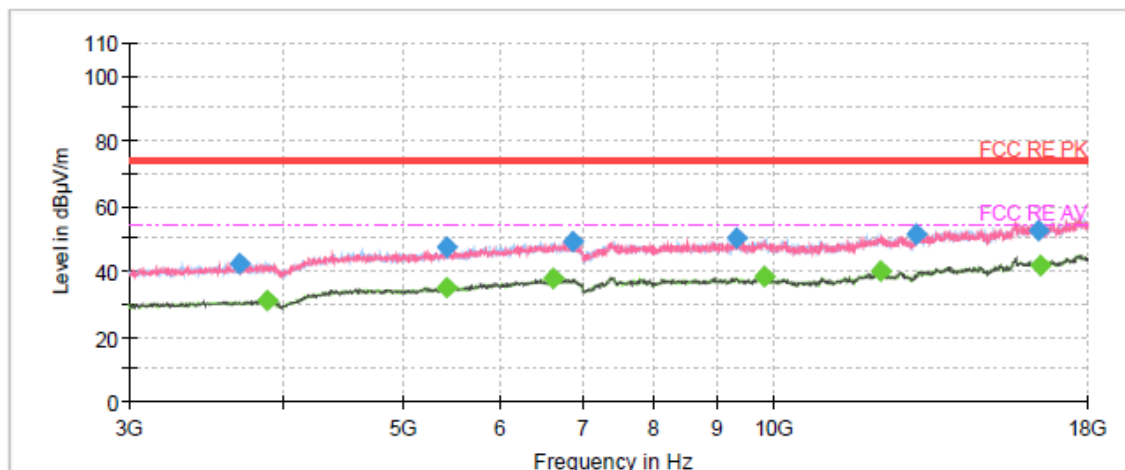


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1186.750000	42.38	---	74.00	31.62	500.0	100.0	V	42.0	-6
1194.500000	---	31.15	54.00	22.85	500.0	200.0	V	135.0	-6
1404.250000	43.75	---	74.00	30.25	500.0	100.0	V	126.0	-4
1435.250000	---	33.20	54.00	20.80	500.0	100.0	V	330.0	-4
1727.750000	44.90	---	74.00	29.10	500.0	200.0	H	326.0	-2
1728.250000	---	35.82	54.00	18.18	500.0	200.0	H	0.0	-2
2013.750000	48.31	---	74.00	25.69	500.0	200.0	H	317.0	0
2074.750000	---	36.73	54.00	17.27	500.0	100.0	H	57.0	0
2254.500000	48.12	---	74.00	25.88	500.0	100.0	H	180.0	1
2285.750000	---	36.82	54.00	17.18	500.0	100.0	H	97.0	1
2737.500000	49.45	---	74.00	24.55	500.0	100.0	H	227.0	2
2785.250000	---	37.92	54.00	16.08	500.0	100.0	H	273.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

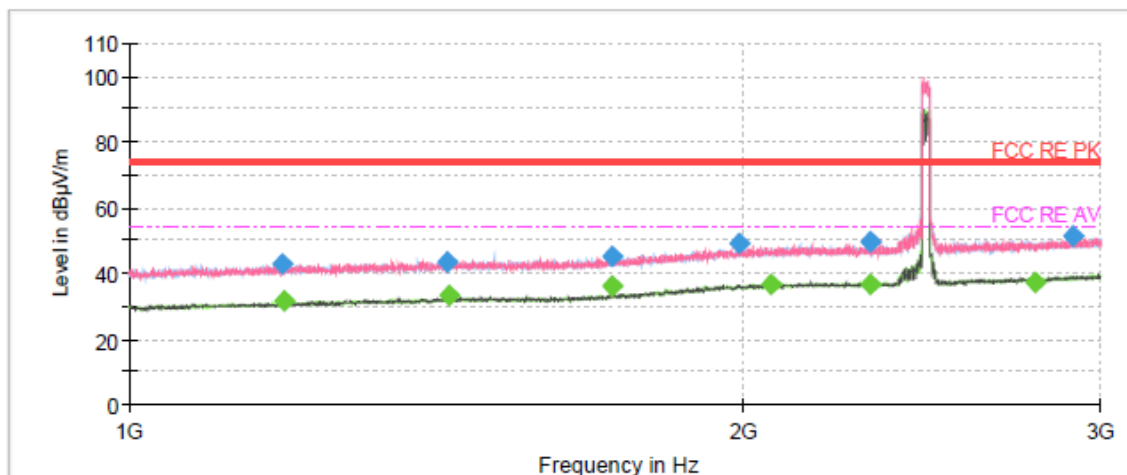


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3682.500000	42.58	---	74.00	31.42	500.0	200.0	V	171.0	-6
3886.875000	---	31.22	54.00	22.78	500.0	100.0	V	356.0	-5
5431.875000	---	35.03	54.00	18.97	500.0	100.0	H	183.0	0
5431.875000	47.58	---	74.00	26.42	500.0	200.0	V	0.0	0
6622.500000	---	37.53	54.00	16.47	500.0	100.0	V	286.0	1
6881.250000	49.08	---	74.00	24.92	500.0	100.0	V	246.0	1
9333.750000	50.14	---	74.00	23.86	500.0	100.0	V	0.0	3
9821.250000	---	38.29	54.00	15.71	500.0	100.0	V	347.0	3
12215.625000	---	39.96	54.00	14.04	500.0	200.0	V	80.0	5
13038.750000	51.44	---	74.00	22.56	500.0	200.0	V	171.0	5
16425.000000	52.26	---	74.00	21.74	500.0	100.0	H	245.0	7
16500.000000	---	41.62	54.00	12.38	500.0	200.0	H	124.0	7

Radiates Emission from 3GHz to 18GHz

802.11n (HT20) CH11

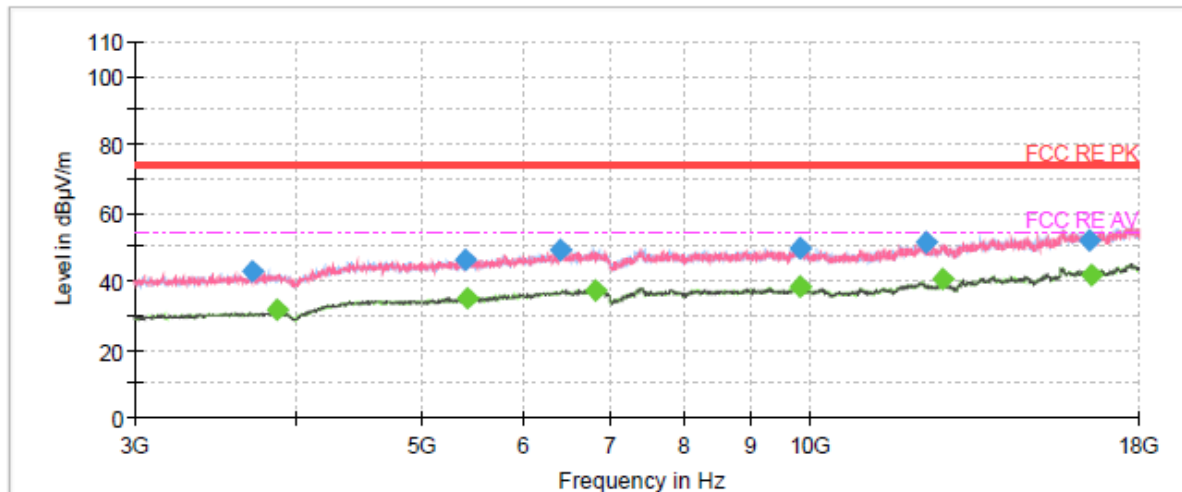


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1189.250000	42.72	---	74.00	31.28	500.0	200.0	V	134.0	-6
1191.000000	---	31.43	54.00	22.57	500.0	200.0	V	69.0	-6
1431.500000	43.66	---	74.00	30.34	500.0	100.0	V	0.0	-4
1435.250000	---	33.19	54.00	20.81	500.0	200.0	H	329.0	-4
1727.500000	45.10	---	74.00	28.90	500.0	200.0	V	330.0	-2
1728.000000	---	36.21	54.00	17.79	500.0	100.0	V	330.0	-2
1995.250000	48.82	---	74.00	25.18	500.0	200.0	V	125.0	0
2065.000000	---	36.62	54.00	17.38	500.0	100.0	V	348.0	0
2312.000000	49.50	---	74.00	24.50	500.0	100.0	H	0.0	1
2313.500000	---	36.63	54.00	17.37	500.0	100.0	H	46.0	1
2786.500000	---	37.48	54.00	16.52	500.0	200.0	V	78.0	3
2904.250000	51.11	---	74.00	22.89	500.0	200.0	V	51.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



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)
3705.000000	42.80	---	74.00	31.20	500.0	100.0	V	165.0	-6
3868.125000	---	31.31	54.00	22.69	500.0	200.0	V	184.0	-5
5403.750000	46.45	---	74.00	27.55	500.0	200.0	V	0.0	0
5441.250000	---	35.05	54.00	18.95	500.0	100.0	H	150.0	0
6412.500000	49.18	---	74.00	24.82	500.0	200.0	H	155.0	1
6821.250000	---	37.46	54.00	16.54	500.0	200.0	H	266.0	1
9817.500000	---	38.43	54.00	15.57	500.0	200.0	V	73.0	3
9823.125000	49.78	---	74.00	24.22	500.0	100.0	H	19.0	3
12313.125000	51.43	---	74.00	22.57	500.0	200.0	V	295.0	5
12682.500000	---	40.43	54.00	13.57	500.0	100.0	V	326.0	5
16479.375000	52.01	---	74.00	21.99	500.0	200.0	H	104.0	7
16515.000000	---	41.86	54.00	12.14	500.0	200.0	V	0.0	7

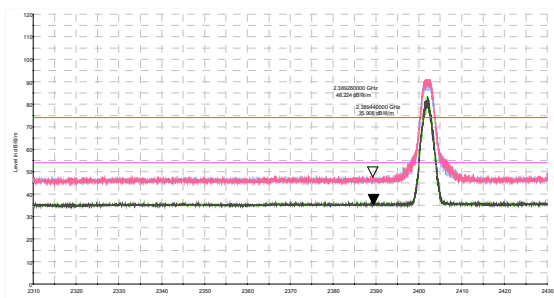
Radiates Emission from 3GHz to 18GHz

1.2. Bluetooth LE

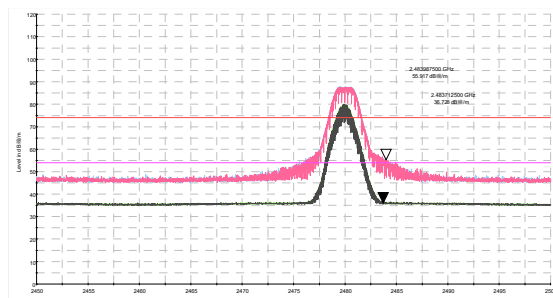
The following graphs display the maximum values of horizontal and vertical by software. Blue trace uses the peak detection, Green trace uses the average detection.

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

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



Bluetooth LE (2M) Channel 0 Peak+ Average



Bluetooth LE (2M) Channel 39 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 (dB μ V/m) in the test plot below means (dB μ V/m)**
A symbol (dB V/m) in the test plot below means (dB μ V/m)
4. **The following graphs display the maximum values of coaxial and coplanar for 9k-30MHz; horizontal and vertical for above 30MHz by software.**
5. **For below 1GHz**

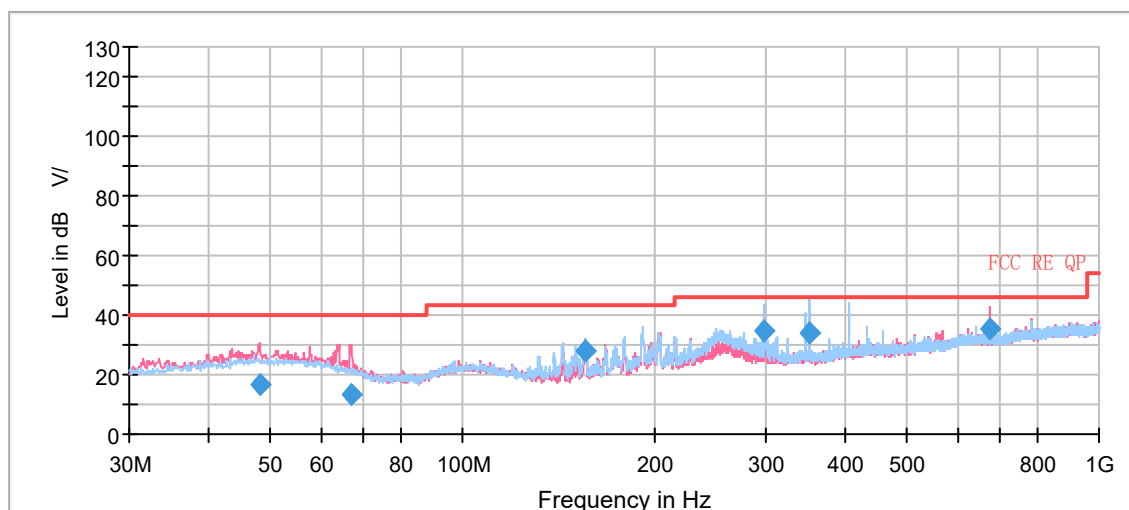
~ QP Level @Spectrum Overview H
 ~ QP Level @Spectrum Overview V
 ◆ QP Level @Final Results
 — QP Limit

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:

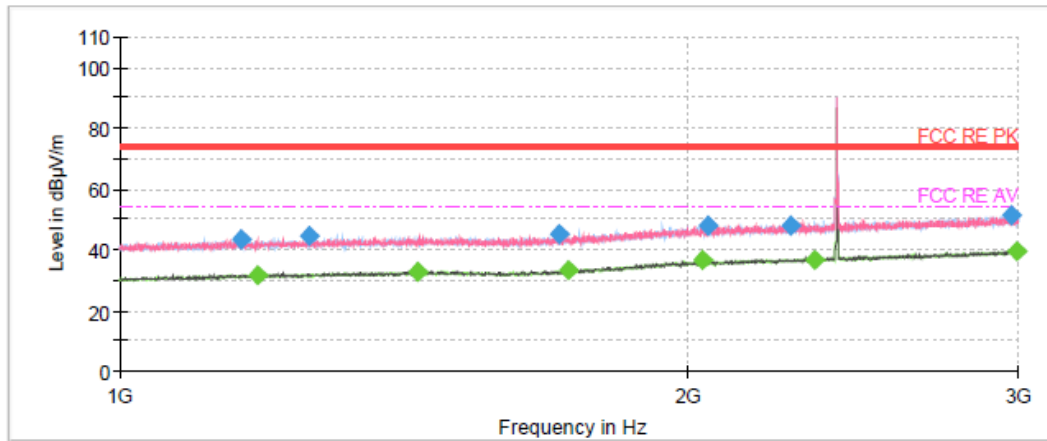
During the test, the Radiates Emission from 30kHz to 1GHz was performed in all modes with all channels. The test data of the worst-case condition was recorded in this report.



Radiates Emission from 30MHz to 1GHz

Frequency (MHz)	Quasi-Peak (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
48.066250	16.83	40.00	23.17	125.0	V	152.0	21.2
66.981250	13.37	40.00	26.63	100.0	V	22.0	17.5
156.221250	28.26	43.50	15.24	200.0	H	134.0	15.9
296.992500	34.54	46.00	11.46	100.0	H	342.0	21.1
350.948750	34.09	46.00	11.91	116.0	H	342.0	22.5
675.050000	35.41	46.00	10.59	100.0	V	313.0	28.0

Bluetooth LE-Channel 0

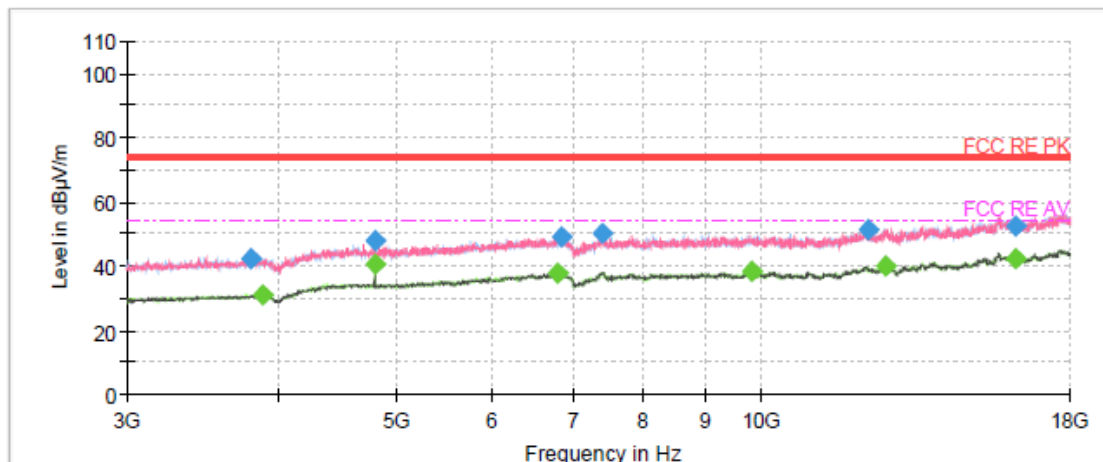


Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1160.750000	43.23	---	74.00	30.77	500.0	100.0	H	87.0	-6
1184.500000	---	31.84	54.00	22.16	500.0	200.0	H	246.0	-6
1259.000000	44.76	---	74.00	29.24	500.0	100.0	H	283.0	-6
1440.000000	---	32.93	54.00	21.07	500.0	100.0	V	0.0	-4
1709.000000	45.36	---	74.00	28.65	500.0	100.0	H	274.0	-2
1728.500000	---	33.17	54.00	20.83	500.0	200.0	V	144.0	-2
2036.250000	---	36.45	54.00	17.55	500.0	200.0	V	265.0	0
2051.750000	47.88	---	74.00	26.12	500.0	200.0	V	265.0	0
2271.750000	47.99	---	74.00	26.01	500.0	200.0	H	31.0	1
2340.250000	---	36.83	54.00	17.17	500.0	200.0	H	21.0	1
2971.000000	51.43	---	74.00	22.57	500.0	100.0	V	349.0	3
2990.750000	---	39.58	54.00	14.42	500.0	100.0	H	292.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

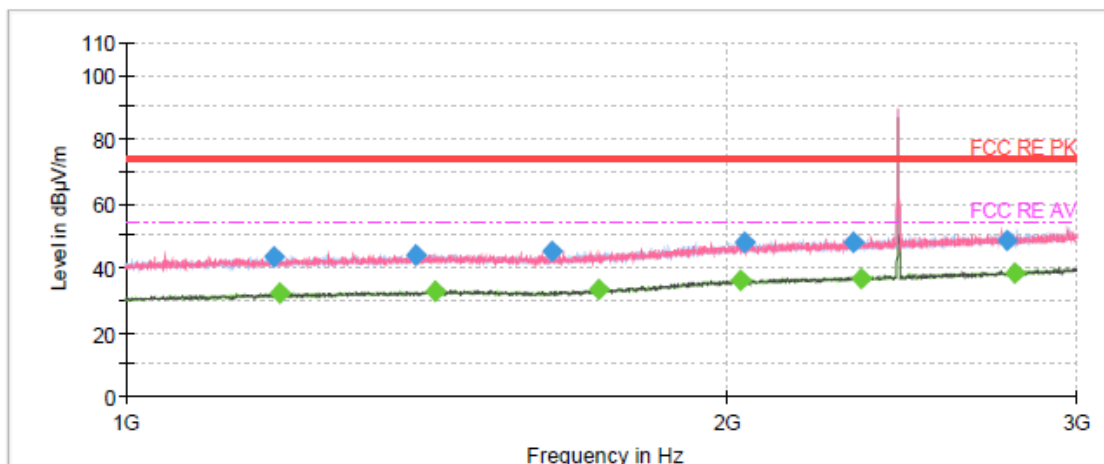


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3802.500000	42.47	---	74.00	31.53	500.0	100.0	V	93.0	-5
3879.375000	---	31.29	54.00	22.71	500.0	100.0	V	33.0	-5
4803.750000	---	40.82	54.00	13.18	500.0	100.0	V	0.0	-2
4803.750000	47.90	---	74.00	26.10	500.0	100.0	V	0.0	-2
6811.875000	---	37.72	54.00	16.28	500.0	200.0	H	306.0	1
6851.250000	49.06	---	74.00	24.94	500.0	100.0	H	347.0	1
7415.625000	49.93	---	74.00	24.07	500.0	100.0	H	256.0	2
9819.375000	---	38.32	54.00	15.68	500.0	200.0	H	296.0	3
12262.500000	51.34	---	74.00	22.66	500.0	200.0	H	112.0	5
12671.250000	---	40.30	54.00	13.70	500.0	200.0	V	270.0	5
16220.625000	---	42.16	54.00	11.84	500.0	100.0	V	143.0	7
16245.000000	52.57	---	74.00	21.43	500.0	100.0	H	296.0	7

Radiates Emission from 3GHz to 18GHz

Bluetooth LE-Channel 19

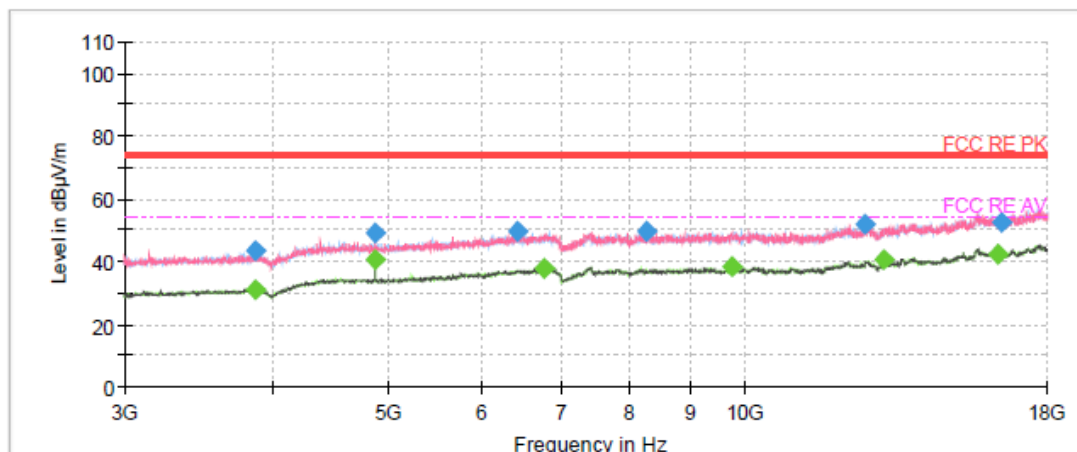


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1185.750000	43.63	---	74.00	30.37	500.0	200.0	V	245.0	-6
1195.250000	---	31.92	54.00	22.08	500.0	100.0	H	347.0	-6
1396.500000	44.25	---	74.00	29.75	500.0	200.0	H	97.0	-5
1428.500000	---	32.98	54.00	21.02	500.0	100.0	H	86.0	-4
1634.750000	44.95	---	74.00	29.05	500.0	100.0	H	96.0	-3
1726.250000	---	33.26	54.00	20.74	500.0	100.0	H	319.0	-2
2032.500000	---	36.23	54.00	17.77	500.0	100.0	V	232.0	0
2043.000000	47.92	---	74.00	26.08	500.0	100.0	H	217.0	0
2317.750000	47.92	---	74.00	26.08	500.0	100.0	V	139.0	1
2339.000000	---	36.53	54.00	17.47	500.0	100.0	H	170.0	1
2767.000000	48.64	---	74.00	25.36	500.0	100.0	V	0.0	2
2794.500000	---	38.35	54.00	15.65	500.0	100.0	H	236.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

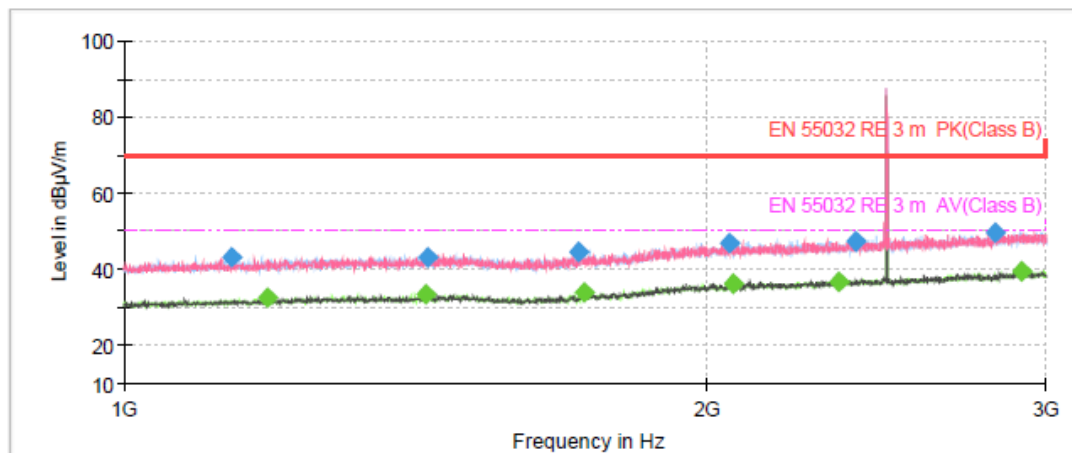


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3864.375000	43.57	---	74.00	30.43	500.0	100.0	H	226.0	-5
3875.625000	---	31.06	54.00	22.94	500.0	100.0	V	62.0	-5
4878.750000	---	40.73	54.00	13.27	500.0	200.0	H	0.0	-2
4878.750000	49.08	---	74.00	24.92	500.0	100.0	V	173.0	-2
6446.250000	49.48	---	74.00	24.52	500.0	200.0	H	93.0	1
6776.250000	---	37.98	54.00	16.02	500.0	200.0	H	205.0	1
8255.625000	49.37	---	74.00	24.63	500.0	200.0	V	0.0	3
9761.250000	---	38.35	54.00	15.65	500.0	100.0	H	126.0	3
12630.000000	51.78	---	74.00	22.22	500.0	200.0	V	339.0	5
13126.875000	---	40.42	54.00	13.58	500.0	100.0	V	103.0	5
16351.875000	---	42.56	54.00	11.44	500.0	100.0	V	193.0	7
16492.500000	52.63	---	74.00	21.37	500.0	200.0	H	63.0	7

Radiates Emission from 3GHz to 18GHz

Bluetooth LE-Channel 39

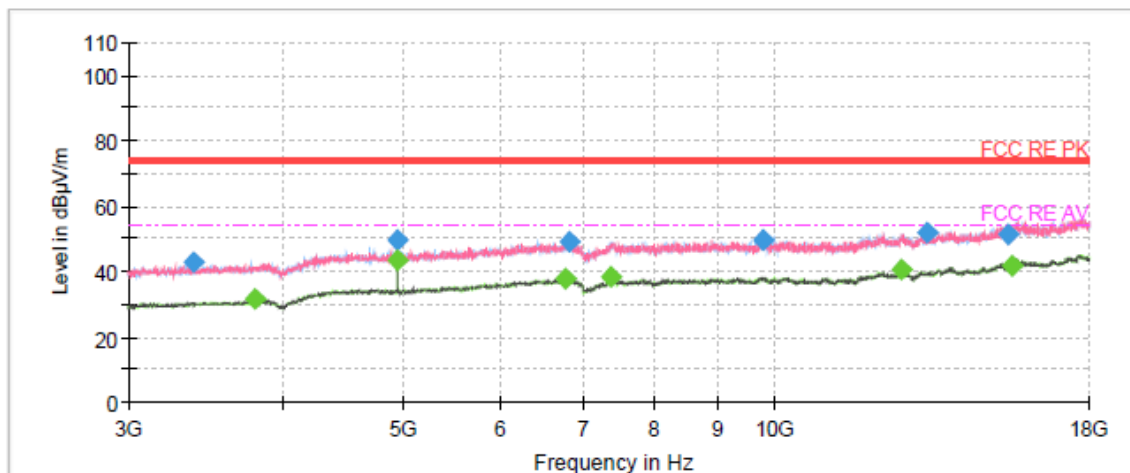


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1137.250000	43.03	---	70.00	26.97	200.0	200.0	V	222.0	-7
1187.500000	---	32.46	50.00	17.54	200.0	100.0	H	190.0	-6
1432.500000	---	33.46	50.00	16.54	200.0	200.0	V	96.0	-4
1437.250000	43.46	---	70.00	26.54	200.0	100.0	V	101.0	-4
1718.500000	44.46	---	70.00	25.54	200.0	200.0	H	125.0	-2
1730.500000	---	33.87	50.00	16.13	200.0	100.0	H	6.0	-2
2055.500000	46.97	---	70.00	23.03	200.0	200.0	H	4.0	0
2068.000000	---	36.30	50.00	13.70	200.0	200.0	V	214.0	0
2344.000000	---	36.71	50.00	13.29	200.0	100.0	V	69.0	1
2391.750000	47.23	---	70.00	22.77	200.0	200.0	H	57.0	1
2824.500000	49.90	---	70.00	20.10	200.0	100.0	H	289.0	3
2914.000000	---	39.71	50.00	10.29	200.0	200.0	H	49.0	3

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz



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)
3391.875000	42.60	---	74.00	31.40	500.0	100.0	V	317.0	-6
3802.500000	---	31.32	54.00	22.68	500.0	100.0	H	298.0	-5
4959.375000	---	43.61	54.00	10.39	500.0	200.0	H	256.0	-2
4959.375000	49.47	---	74.00	24.53	500.0	200.0	V	248.0	-2
6776.250000	---	37.59	54.00	16.41	500.0	100.0	H	116.0	1
6817.500000	49.04	---	74.00	24.96	500.0	200.0	H	226.0	1
7376.250000	---	38.24	54.00	15.76	500.0	200.0	H	347.0	2
9808.125000	49.49	---	74.00	24.51	500.0	100.0	H	267.0	3
12667.500000	---	40.59	54.00	13.41	500.0	200.0	H	42.0	5
13312.500000	51.77	---	74.00	22.23	500.0	100.0	V	34.0	5
15459.375000	51.58	---	74.00	22.42	500.0	100.0	H	247.0	6
15583.125000	---	41.84	54.00	12.16	500.0	100.0	V	317.0	6

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.