

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

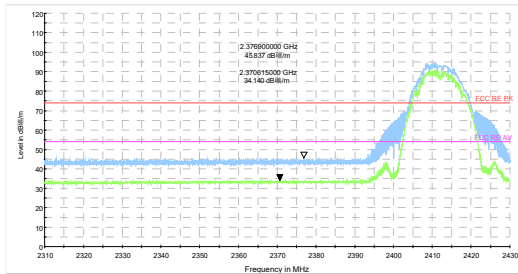
1. Unwanted Emission

1.1. Wi-Fi 2.4GHz

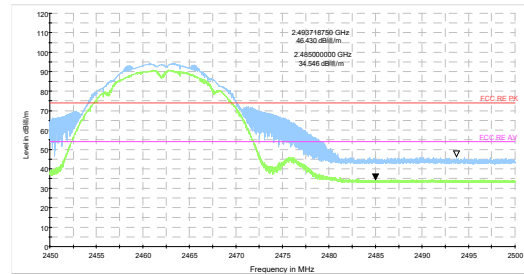
The following graphs display the maximum values of horizontal and vertical by software. Blue trace uses the peak detection, Green trace uses the average detection.

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

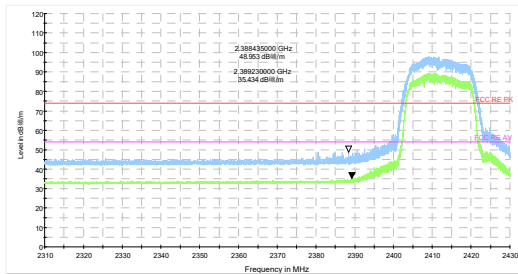
The signal beyond the limit is carrier.



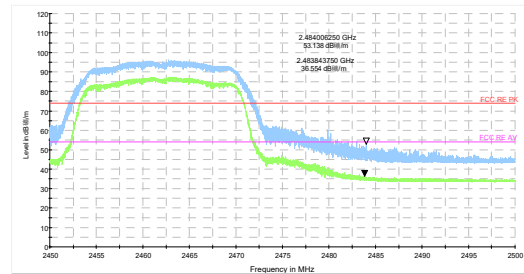
802.11b-Channel 1 Peak+ Average



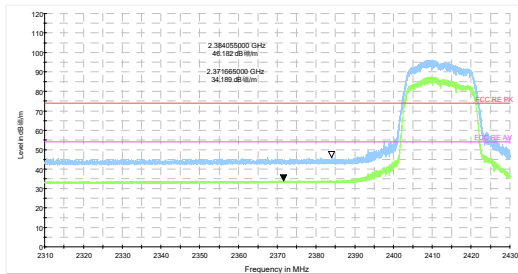
802.11b-Channel 11 Peak+ Average



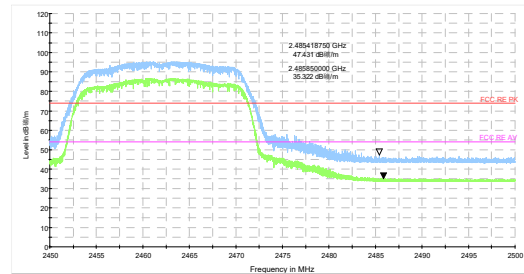
802.11g-Channel 1 Peak+ Average



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 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. **The following graphs display the maximum values of coaxial and coplanar for 9k-30MHz; horizontal and vertical for above 30MHz by software.**
4. **For below 1GHz**

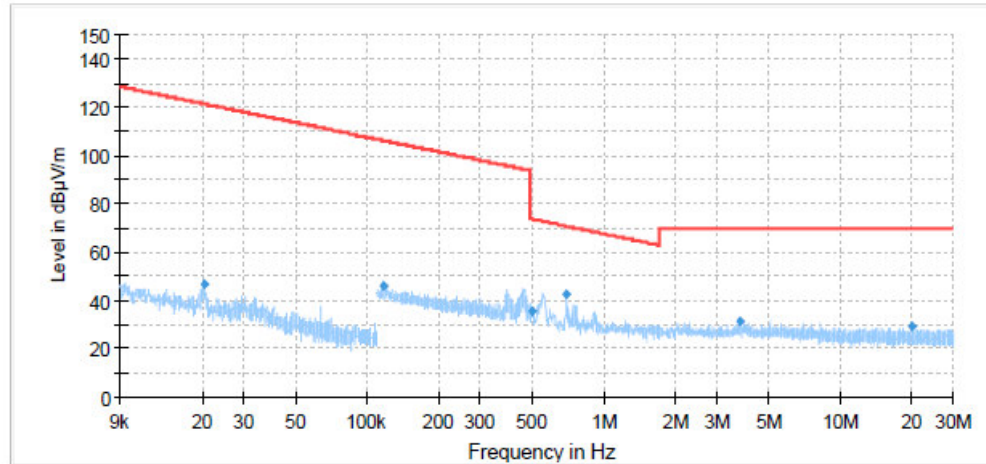
 QP Level @Spectrum Overview H
  QP Level @Spectrum Overview V
  QP Level @Final Results
  QP Limit

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:

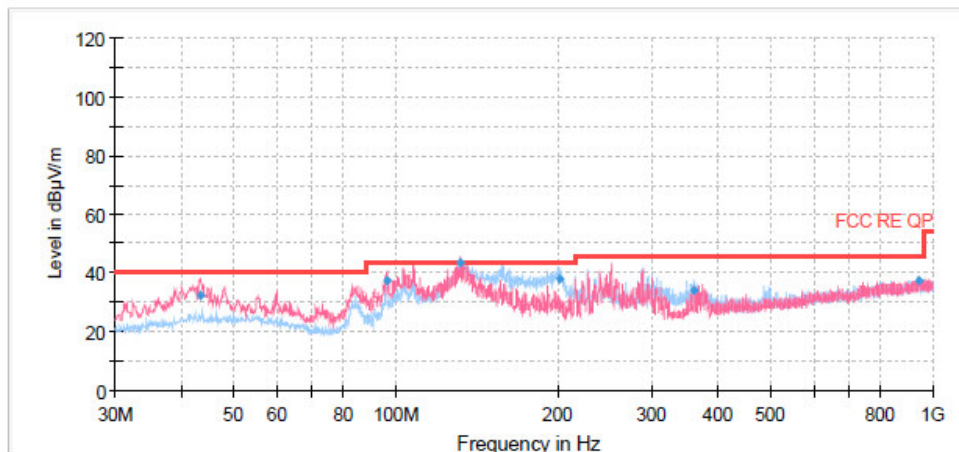
During the test, the Radiates Emission from 9kHz to 1GHz was performed in all modes with all channels, the test data of the worst-case condition (802.11n (HT20) CH11) was recorded in this report.



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Azimuth (deg)	Corr. (dB/m)
0.02	47.01	121.44	74.43	500.00	120.00	17
0.12	45.96	106.28	60.32	150.00	89.00	17
0.50	35.77	73.61	37.84	150.00	357.00	17
0.70	42.53	70.74	28.21	150.00	158.00	17
3.78	31.74	69.50	37.76	150.00	238.00	17
20.23	28.97	69.50	40.53	150.00	27.00	17

Radiates Emission from 9kHz to 30MHz

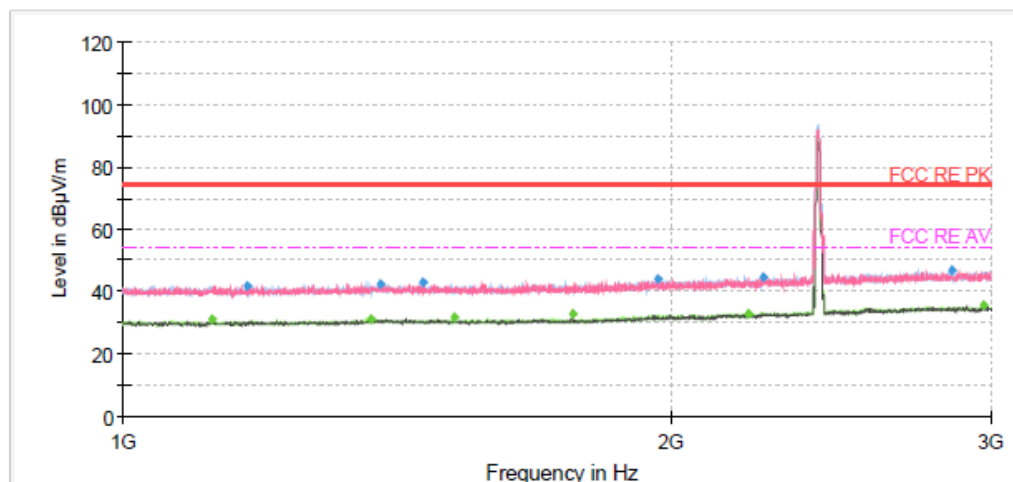


Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
43.22	32.23	40.00	7.77	1000.00	100.0	V	338.00	20
95.96	37.54	43.50	5.97	1000.00	100.0	V	358.00	18
132.09	43.44	43.50	0.06	1000.00	100.0	V	185.00	16
201.45	38.02	43.50	5.48	1000.00	200.0	H	24.00	18
359.92	34.24	46.00	11.76	1000.00	100.0	H	356.00	22
940.71	37.50	46.00	8.50	1000.00	100.0	H	347.00	32

Radiates Emission from 30MHz to 1GHz

802.11b CH1

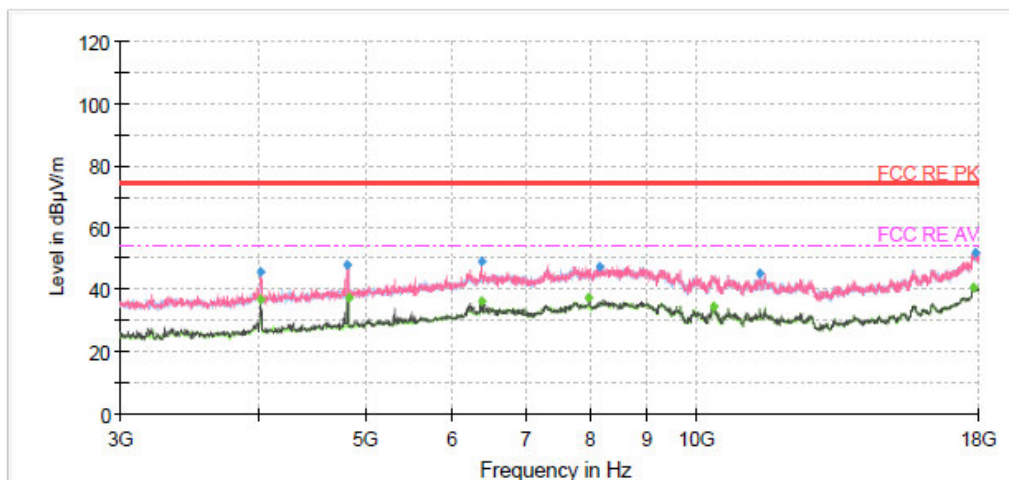


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1119.50	---	31.11	54.00	22.89	500.00	200.0	H	30.00	-12
1170.75	42.13	---	74.00	31.87	500.00	100.0	V	181.00	-12
1369.25	---	31.12	54.00	22.88	500.00	200.0	H	4.00	-11
1384.75	42.53	---	74.00	31.47	500.00	100.0	H	0.00	-11
1461.50	43.18	---	74.00	30.82	500.00	200.0	V	20.00	-11
1519.25	---	31.54	54.00	22.46	500.00	100.0	H	0.00	-11
1766.25	---	33.02	54.00	20.98	500.00	100.0	V	68.00	-10
1966.50	43.82	---	74.00	30.18	500.00	200.0	H	178.00	-8
2209.75	---	32.83	54.00	21.17	500.00	100.0	H	240.00	-7
2250.75	44.68	---	74.00	29.32	500.00	100.0	H	352.00	-7
2855.50	46.67	---	74.00	27.33	500.00	100.0	H	344.00	-5
2972.50	---	35.46	54.00	18.54	500.00	200.0	V	359.00	-4

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

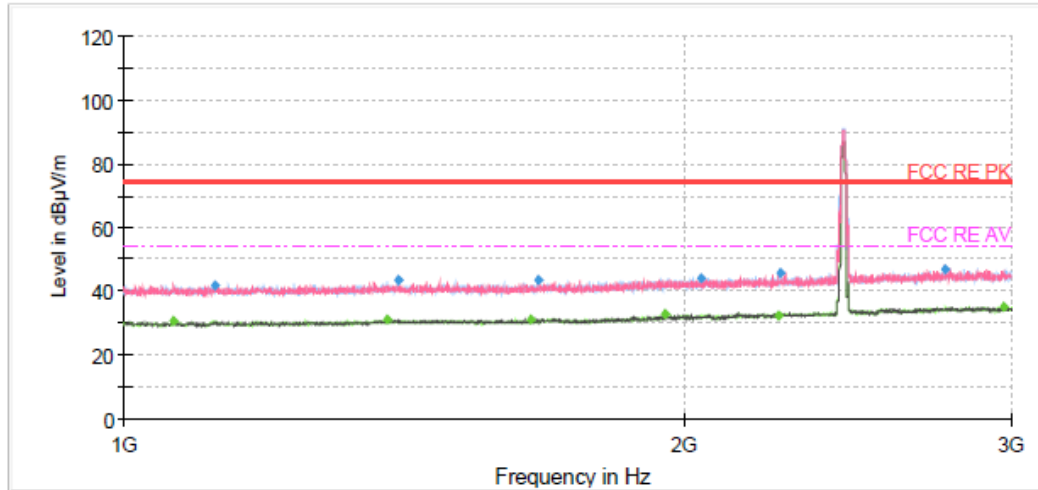


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4016.25	46.00	---	74.00	28.00	500.00	200.0	V	0.00	-12
4018.13	---	37.07	54.00	16.93	500.00	200.0	V	0.00	-12
4816.88	48.05	---	74.00	25.95	500.00	100.0	V	247.00	-10
4824.38	---	37.42	54.00	16.58	500.00	200.0	V	49.00	-10
6363.75	49.37	---	74.00	24.63	500.00	100.0	V	262.00	-4
6373.13	---	36.45	54.00	17.55	500.00	100.0	V	262.00	-4
7980.00	---	37.16	54.00	16.84	500.00	100.0	V	65.00	1
8154.38	47.57	---	74.00	26.43	500.00	200.0	H	247.00	1
10335.00	---	34.76	54.00	19.24	500.00	200.0	H	94.00	2
11394.38	45.09	---	74.00	28.91	500.00	100.0	V	33.00	5
17821.88	---	41.02	54.00	12.98	500.00	200.0	H	19.00	15
17840.63	52.07	---	74.00	21.93	500.00	200.0	V	0.00	15

Radiates Emission from 3GHz to 18GHz

802.11b CH6

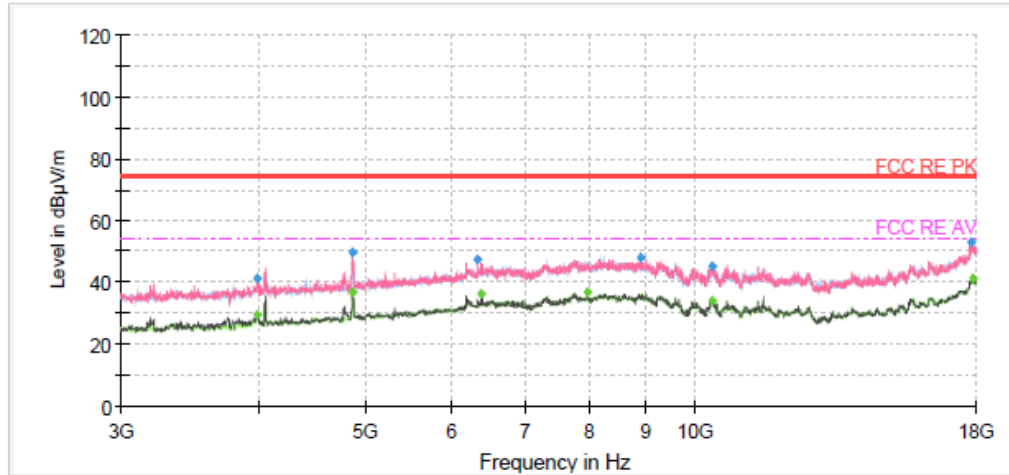


Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1061.75	---	30.81	54.00	23.19	500.00	200.0	H	107.00	-12
1119.25	42.09	---	74.00	31.91	500.00	200.0	H	7.00	-12
1386.00	---	31.34	54.00	22.66	500.00	100.0	V	2.00	-11
1406.00	43.38	---	74.00	30.62	500.00	100.0	H	159.00	-11
1655.50	---	31.47	54.00	22.53	500.00	100.0	V	34.00	-10
1670.75	43.26	---	74.00	30.74	500.00	100.0	V	2.00	-10
1956.00	---	33.06	54.00	20.94	500.00	200.0	V	350.00	-8
2043.50	44.08	---	74.00	29.92	500.00	200.0	V	127.00	-8
2247.75	---	32.50	54.00	21.50	500.00	200.0	H	149.00	-7
2253.50	45.60	---	74.00	28.40	500.00	100.0	H	356.00	-7
2767.00	46.98	---	74.00	27.02	500.00	200.0	V	341.00	-5
2974.75	---	35.26	54.00	18.74	500.00	100.0	H	358.00	-4

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

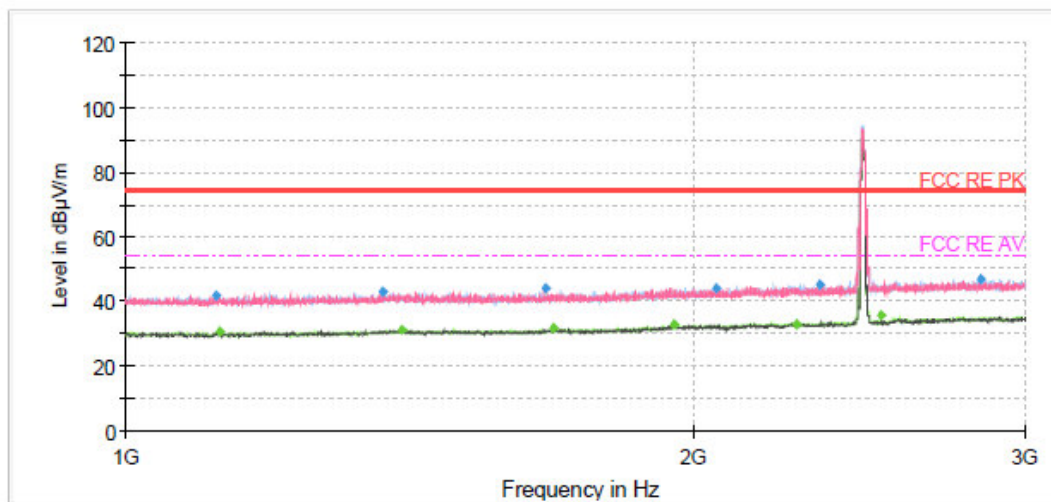


Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3991.88	---	29.47	54.00	24.53	500.00	200.0	V	112.00	-11
3991.88	41.14	---	74.00	32.86	500.00	200.0	V	112.00	-11
4871.25	49.65	---	74.00	24.36	500.00	200.0	V	66.00	-10
4873.13	---	36.90	54.00	17.10	500.00	100.0	H	236.00	-10
6330.00	47.33	---	74.00	26.67	500.00	100.0	V	279.00	-4
6365.63	---	36.14	54.00	17.86	500.00	100.0	V	263.00	-4
7970.63	---	36.77	54.00	17.23	500.00	100.0	V	24.00	1
8906.25	48.21	---	74.00	25.79	500.00	100.0	V	220.00	1
10333.13	---	34.17	54.00	19.83	500.00	100.0	V	40.00	2
10350.00	45.37	---	74.00	28.63	500.00	200.0	H	265.00	2
17821.88	52.85	---	74.00	21.15	500.00	200.0	H	10.00	15
17838.75	---	41.19	54.00	12.81	500.00	200.0	H	249.00	15

Radiates Emission from 3GHz to 18GHz

802.11b CH11

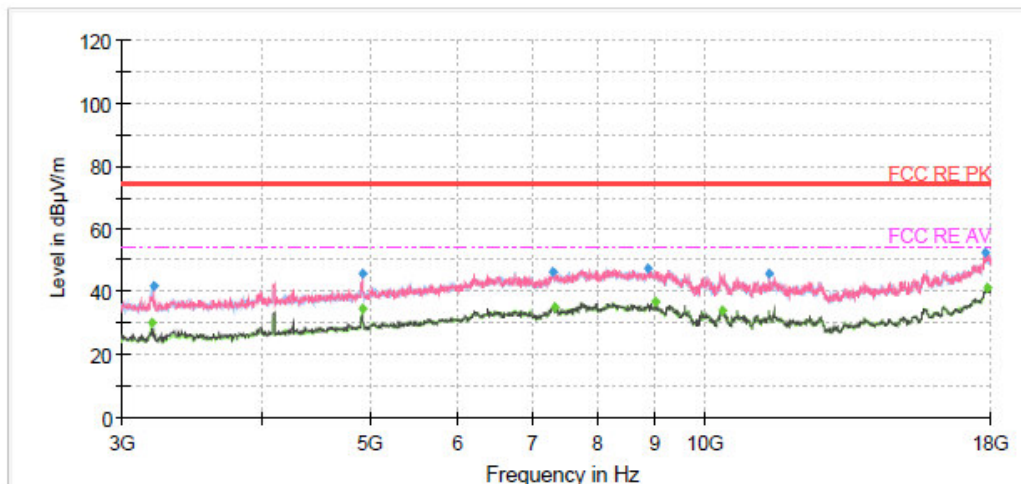


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1116.75	41.99	---	74.00	32.01	500.00	100.0	H	169.00	-12
1121.50	---	30.72	54.00	23.28	500.00	200.0	V	205.00	-12
1370.00	42.90	---	74.00	31.10	500.00	100.0	V	142.00	-11
1402.75	---	31.19	54.00	22.81	500.00	100.0	H	333.00	-11
1671.00	44.10	---	74.00	29.90	500.00	200.0	H	71.00	-10
1687.00	---	31.59	54.00	22.41	500.00	100.0	H	354.00	-10
1956.25	---	32.84	54.00	21.16	500.00	200.0	V	218.00	-8
2055.50	44.16	---	74.00	29.84	500.00	100.0	H	358.00	-8
2271.75	---	32.99	54.00	21.01	500.00	100.0	H	326.00	-7
2337.25	45.27	---	74.00	28.73	500.00	100.0	H	339.00	-7
2518.25	---	35.95	54.00	18.05	500.00	200.0	V	328.00	-6
2845.75	47.06	---	74.00	26.94	500.00	100.0	H	99.00	-5

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

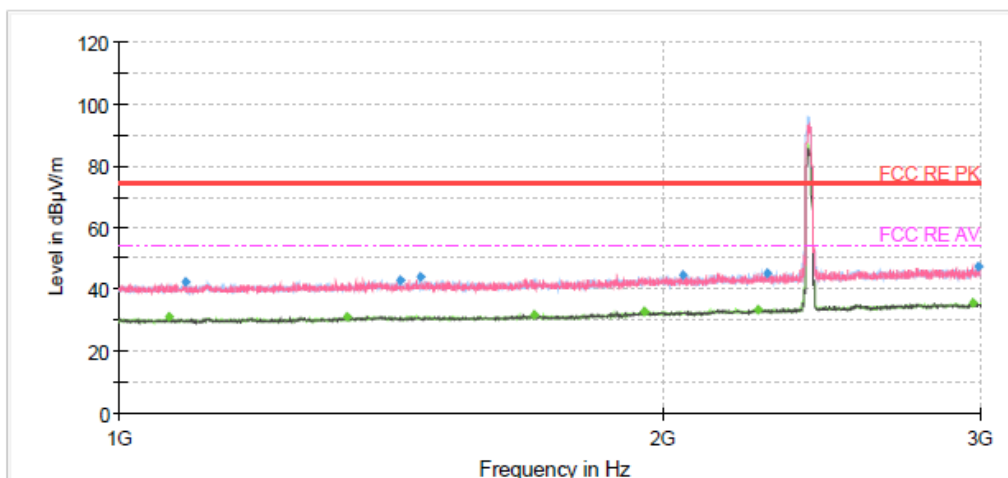


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3185.63	---	30.16	54.00	23.84	500.00	100.0	H	142.00	-14
3204.38	41.62	---	74.00	32.38	500.00	100.0	V	172.00	-14
4925.63	---	34.46	54.00	19.54	500.00	200.0	V	65.00	-10
4927.50	45.50	---	74.00	28.50	500.00	200.0	V	80.00	-10
7295.63	46.08	---	74.00	27.92	500.00	100.0	H	67.00	0
7306.88	---	34.98	54.00	19.02	500.00	100.0	H	202.00	-1
8881.88	47.40	---	74.00	26.60	500.00	100.0	H	339.00	1
9000.00	---	36.75	54.00	17.25	500.00	100.0	V	263.00	1
10333.13	---	34.31	54.00	19.69	500.00	200.0	H	9.00	2
11400.00	45.63	---	74.00	28.37	500.00	200.0	V	0.00	5
17788.13	52.41	---	74.00	21.59	500.00	100.0	H	277.00	14
17840.63	---	41.28	54.00	12.72	500.00	200.0	H	95.00	15

Radiates Emission from 3GHz to 18GHz

802.11g CH1

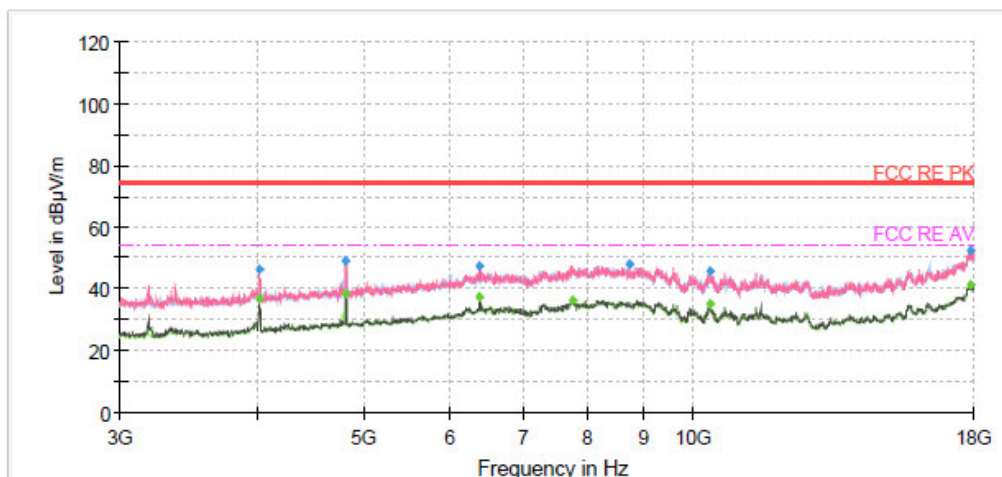


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1065.50	---	31.16	54.00	22.84	500.00	200.0	H	102.00	-12
1088.50	42.44	---	74.00	31.56	500.00	100.0	H	217.00	-12
1338.50	---	31.52	54.00	22.48	500.00	200.0	H	278.00	-11
1430.00	43.09	---	74.00	30.91	500.00	200.0	V	339.00	-11
1466.75	43.91	---	74.00	30.09	500.00	200.0	H	0.00	-11
1698.00	---	31.74	54.00	22.26	500.00	200.0	H	244.00	-10
1954.25	---	33.15	54.00	20.85	500.00	200.0	V	99.00	-8
2050.50	44.42	---	74.00	29.58	500.00	200.0	V	354.00	-8
2258.25	---	33.26	54.00	20.74	500.00	100.0	H	359.00	-7
2286.00	45.17	---	74.00	28.83	500.00	200.0	H	0.00	-7
2973.25	---	35.63	54.00	18.37	500.00	100.0	V	8.00	-4
2990.50	47.31	---	74.00	26.69	500.00	200.0	H	131.00	-4

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

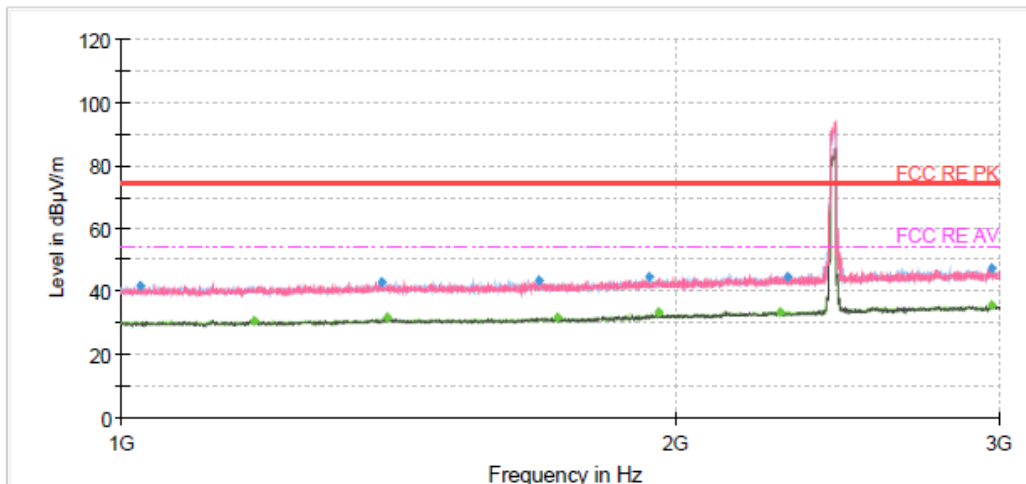


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4018.13	46.21	---	74.00	27.79	500.00	200.0	V	0.00	-12
4020.00	---	36.75	54.00	17.25	500.00	200.0	V	359.00	-12
4822.50	---	38.52	54.00	15.48	500.00	200.0	V	50.00	-10
4822.50	49.07	---	74.00	24.93	500.00	200.0	V	50.00	-10
6376.88	47.50	---	74.00	26.50	500.00	100.0	V	265.00	-3
6382.50	---	37.29	54.00	16.71	500.00	100.0	V	265.00	-3
7741.88	---	36.43	54.00	17.57	500.00	200.0	H	263.00	1
8733.75	47.86	---	74.00	26.14	500.00	200.0	V	358.00	2
10335.00	---	34.98	54.00	19.02	500.00	100.0	V	13.00	2
10340.63	45.95	---	74.00	28.05	500.00	100.0	V	2.00	2
17829.38	52.53	---	74.00	21.47	500.00	100.0	H	0.00	15
17840.63	---	41.10	54.00	12.90	500.00	200.0	V	207.00	15

Radiates Emission from 3GHz to 18GHz

802.11g CH6

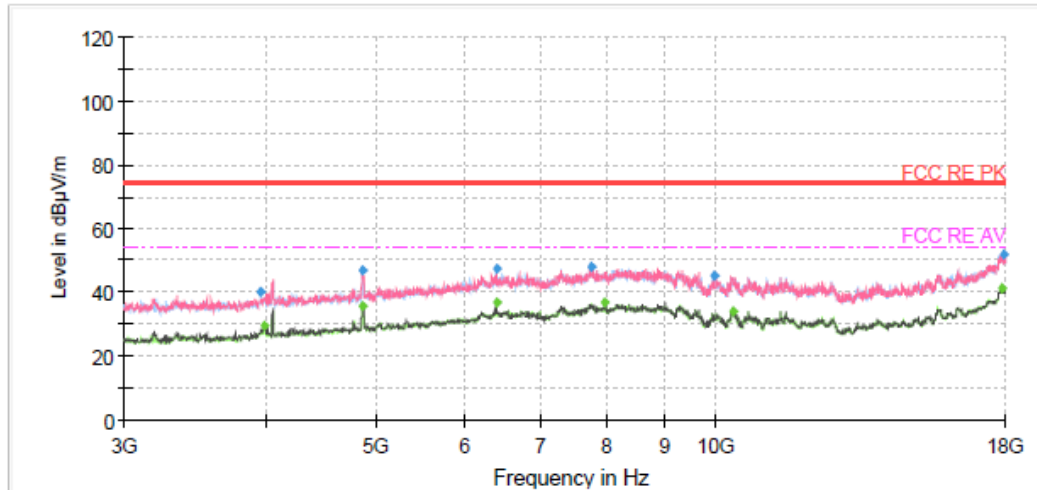


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1023.00	42.13	---	74.00	31.87	500.00	200.0	H	142.00	-12
1181.50	---	30.82	54.00	23.18	500.00	100.0	H	356.00	-12
1384.00	43.10	---	74.00	30.90	500.00	100.0	H	356.00	-11
1395.00	---	31.72	54.00	22.28	500.00	100.0	V	4.00	-11
1686.25	43.40	---	74.00	30.60	500.00	100.0	H	358.00	-10
1727.50	---	31.86	54.00	22.14	500.00	100.0	H	349.00	-10
1938.00	44.68	---	74.00	29.32	500.00	200.0	H	4.00	-9
1956.50	---	33.45	54.00	20.55	500.00	200.0	V	167.00	-8
2282.75	---	33.76	54.00	20.24	500.00	200.0	H	25.00	-7
2302.75	44.52	---	74.00	29.48	500.00	100.0	V	4.00	-7
2969.50	47.28	---	74.00	26.72	500.00	200.0	H	7.00	-5
2970.50	---	35.65	54.00	18.35	500.00	200.0	H	15.00	-4

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

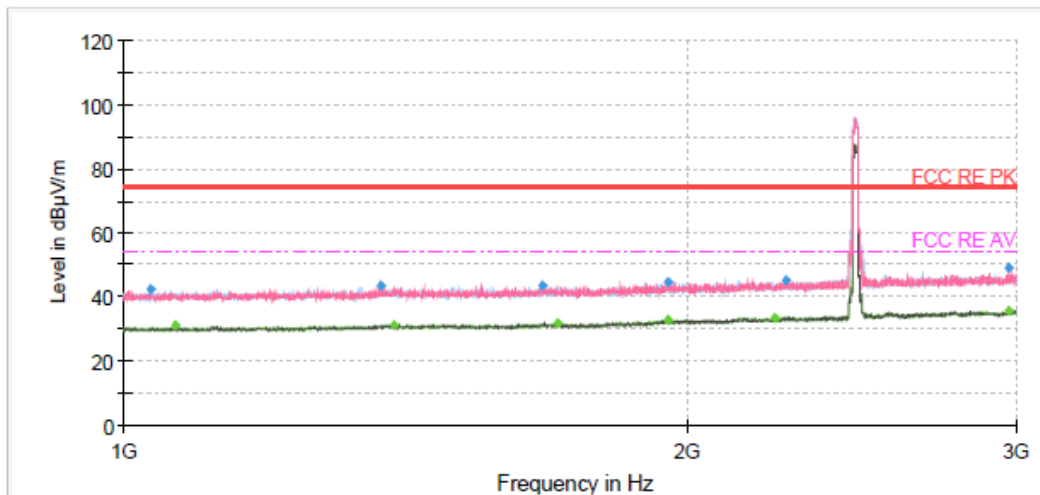


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3961.88	40.40	---	74.00	33.60	500.00	200.0	H	0.00	-11
3984.38	---	29.38	54.00	24.62	500.00	100.0	V	249.00	-11
4875.00	---	35.71	54.00	18.29	500.00	100.0	H	233.00	-10
4875.00	46.86	---	74.00	27.14	500.00	100.0	H	233.00	-10
6397.50	---	36.68	54.00	17.32	500.00	100.0	V	297.00	-3
6397.50	47.67	---	74.00	26.33	500.00	100.0	V	297.00	-3
7745.63	48.24	---	74.00	25.76	500.00	200.0	H	95.00	1
7972.50	---	36.73	54.00	17.27	500.00	100.0	V	7.00	1
9961.88	44.95	---	74.00	29.05	500.00	200.0	H	14.00	1
10346.25	---	34.28	54.00	19.72	500.00	200.0	V	0.00	2
17836.88	---	41.13	54.00	12.87	500.00	100.0	V	125.00	15
17906.25	52.07	---	74.00	21.93	500.00	100.0	H	292.00	16

Radiates Emission from 3GHz to 18GHz

802.11g CH11

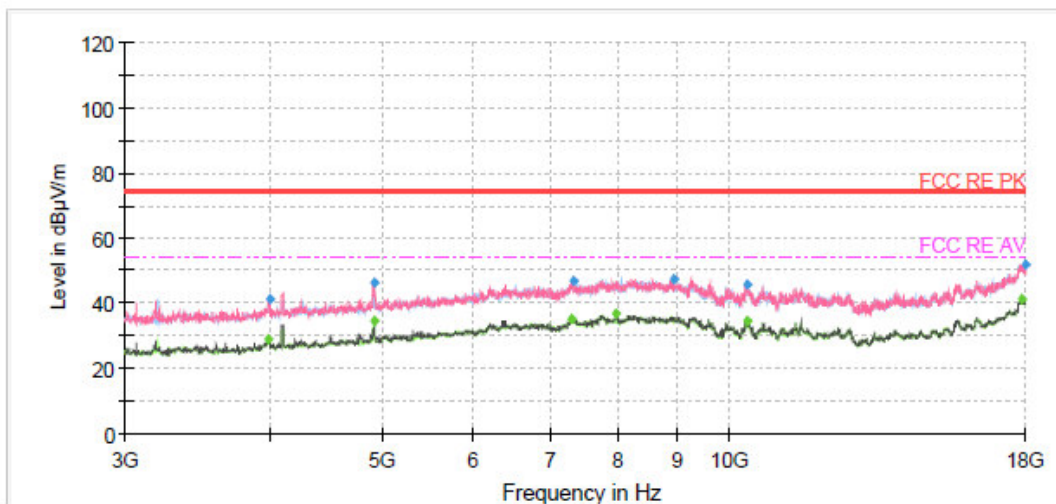


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1034.25	42.22	---	74.00	31.78	500.00	100.0	H	358.00	-12
1064.25	---	31.38	54.00	22.62	500.00	100.0	H	91.00	-12
1370.50	43.57	---	74.00	30.43	500.00	200.0	V	284.00	-11
1396.00	---	31.51	54.00	22.49	500.00	100.0	V	0.00	-11
1672.50	43.46	---	74.00	30.54	500.00	200.0	V	349.00	-10
1705.50	---	31.85	54.00	22.15	500.00	100.0	V	0.00	-10
1955.50	44.62	---	74.00	29.38	500.00	100.0	V	62.00	-8
1956.25	---	33.16	54.00	20.84	500.00	200.0	V	230.00	-8
2227.00	---	33.21	54.00	20.79	500.00	100.0	H	228.00	-7
2260.25	45.21	---	74.00	28.79	500.00	100.0	H	0.00	-7
2972.00	49.04	---	74.00	24.96	500.00	100.0	V	116.00	-4
2973.75	---	35.93	54.00	18.07	500.00	100.0	H	0.00	-4

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

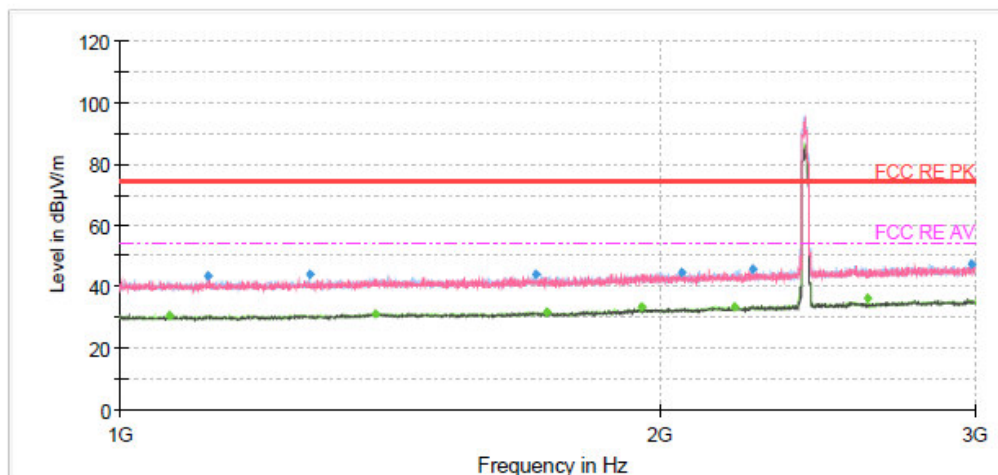


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3993.75	---	28.92	54.00	25.08	500.00	200.0	V	114.00	-11
3995.63	41.44	---	74.00	32.56	500.00	200.0	V	114.00	-11
4921.88	---	34.56	54.00	19.44	500.00	100.0	H	236.00	-10
4921.88	46.34	---	74.00	27.66	500.00	200.0	V	250.00	-10
7286.25	---	35.22	54.00	18.78	500.00	200.0	V	353.00	0
7310.63	46.75	---	74.00	27.25	500.00	200.0	V	23.00	-1
7978.13	---	36.98	54.00	17.02	500.00	100.0	V	65.00	1
8943.75	47.47	---	74.00	26.53	500.00	100.0	V	139.00	1
10331.25	45.71	---	74.00	28.29	500.00	200.0	V	35.00	2
10333.13	---	34.67	54.00	19.33	500.00	100.0	V	217.00	2
17836.88	---	41.10	54.00	12.90	500.00	100.0	V	2.00	15
17968.13	51.97	---	74.00	22.03	500.00	100.0	V	80.00	16

Radiates Emission from 3GHz to 18GHz

802.11n (HT20) CH1

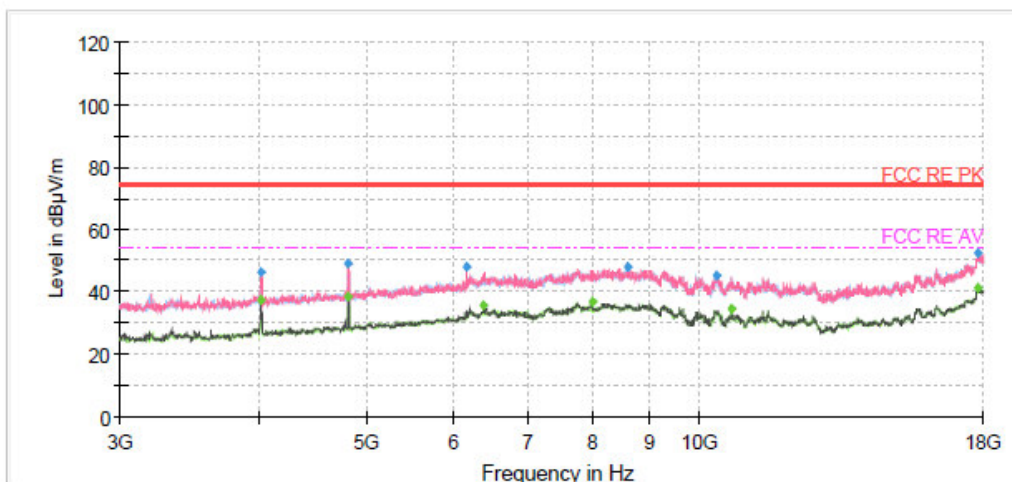


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1065.75	---	30.97	54.00	23.03	500.00	100.0	H	102.00	-12
1119.00	43.45	---	74.00	30.55	500.00	200.0	V	223.00	-12
1276.00	44.16	---	74.00	29.84	500.00	200.0	H	2.00	-12
1388.25	---	31.50	54.00	22.50	500.00	100.0	H	333.00	-11
1706.50	44.02	---	74.00	29.98	500.00	100.0	H	359.00	-10
1731.75	---	31.84	54.00	22.16	500.00	200.0	H	12.00	-10
1955.75	---	33.29	54.00	20.71	500.00	200.0	V	125.00	-8
2058.75	44.93	---	74.00	29.07	500.00	200.0	H	6.00	-8
2202.00	---	33.42	54.00	20.58	500.00	200.0	H	28.00	-7
2252.00	45.54	---	74.00	28.46	500.00	100.0	H	348.00	-7
2611.75	---	36.36	54.00	17.64	500.00	200.0	H	0.00	-6
2983.00	47.65	---	74.00	26.35	500.00	200.0	H	36.00	-4

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

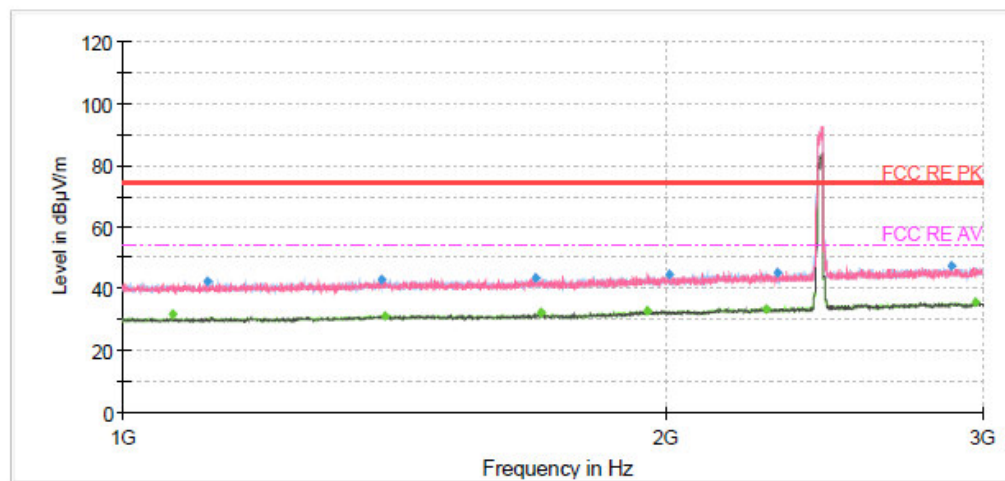


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4016.25	---	37.19	54.00	16.81	500.00	200.0	V	359.00	-12
4016.25	46.13	---	74.00	27.87	500.00	200.0	V	359.00	-12
4822.50	---	38.59	54.00	15.41	500.00	200.0	V	50.00	-10
4822.50	48.94	---	74.00	25.06	500.00	200.0	V	50.00	-10
6165.00	47.83	---	74.00	26.17	500.00	100.0	V	263.00	-5
6386.25	---	35.71	54.00	18.29	500.00	100.0	V	280.00	-3
8000.63	---	36.74	54.00	17.26	500.00	100.0	V	60.00	1
8615.63	47.87	---	74.00	26.13	500.00	100.0	V	74.00	1
10331.25	45.14	---	74.00	28.86	500.00	100.0	V	0.00	2
10672.50	---	34.49	54.00	19.51	500.00	100.0	V	30.00	3
17808.75	52.55	---	74.00	21.45	500.00	200.0	H	1.00	15
17820.00	---	41.11	54.00	12.89	500.00	200.0	V	188.00	15

Radiates Emission from 3GHz to 18GHz

802.11n (HT20) CH6

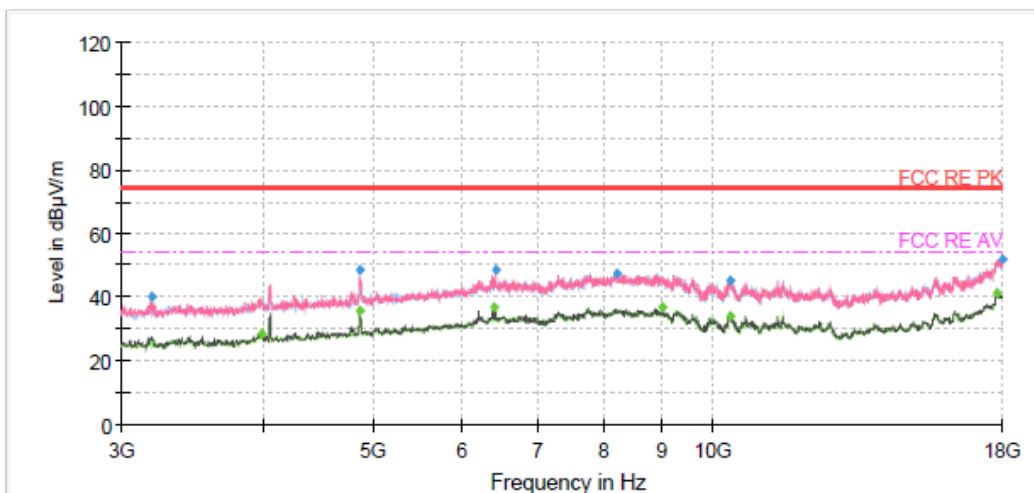


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1065.00	---	31.73	54.00	22.27	500.00	100.0	H	90.00	-12
1113.25	42.50	---	74.00	31.50	500.00	200.0	H	102.00	-12
1389.75	43.15	---	74.00	30.85	500.00	100.0	V	77.00	-11
1397.00	---	31.41	54.00	22.59	500.00	200.0	H	26.00	-11
1692.75	43.77	---	74.00	30.23	500.00	100.0	V	16.00	-10
1706.75	---	32.24	54.00	21.76	500.00	100.0	V	0.00	-10
1954.50	---	33.14	54.00	20.86	500.00	200.0	V	222.00	-8
2012.00	44.75	---	74.00	29.25	500.00	100.0	H	159.00	-8
2277.50	---	33.41	54.00	20.59	500.00	100.0	H	0.00	-7
2305.25	45.37	---	74.00	28.63	500.00	100.0	V	0.00	-7
2885.00	47.46	---	74.00	26.54	500.00	100.0	V	1.00	-5
2971.25	---	35.85	54.00	18.15	500.00	100.0	H	0.00	-4

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

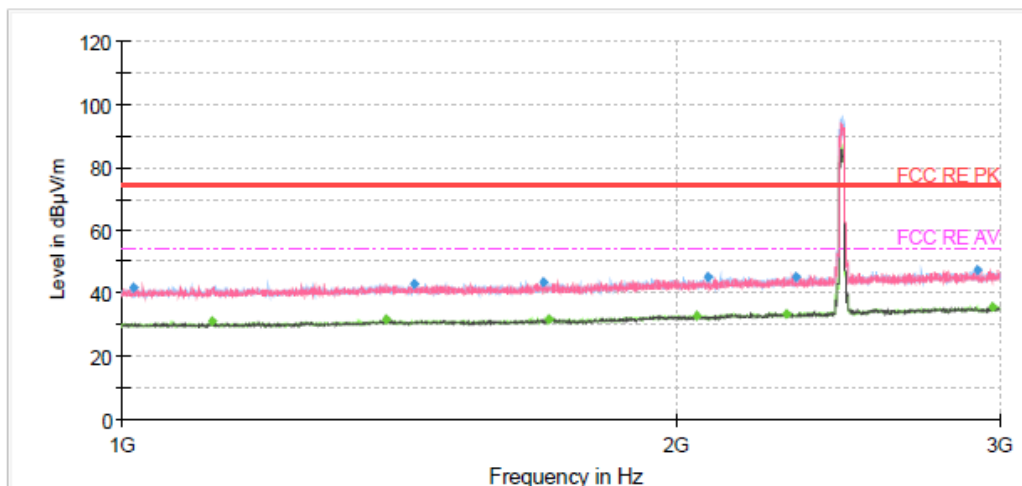


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3185.63	40.24	---	74.00	33.76	500.00	100.0	V	67.00	-14
3993.75	---	28.65	54.00	25.35	500.00	200.0	V	341.00	-11
4875.00	48.29	---	74.00	25.71	500.00	100.0	H	231.00	-10
4875.00	---	35.57	54.00	18.43	500.00	200.0	V	82.00	-10
6410.63	---	36.60	54.00	17.40	500.00	100.0	V	247.00	-3
6421.88	48.28	---	74.00	25.72	500.00	100.0	V	126.00	-3
8223.75	47.37	---	74.00	26.63	500.00	200.0	V	341.00	1
9000.00	---	36.97	54.00	17.03	500.00	100.0	V	14.00	1
10333.13	---	34.27	54.00	19.73	500.00	100.0	V	14.00	2
10340.63	45.03	---	74.00	28.97	500.00	100.0	H	200.00	2
17814.38	---	41.22	54.00	12.78	500.00	200.0	H	14.00	15
17996.25	52.09	---	74.00	21.91	500.00	200.0	V	35.00	16

Radiates Emission from 3GHz to 18GHz

802.11n (HT20) CH11

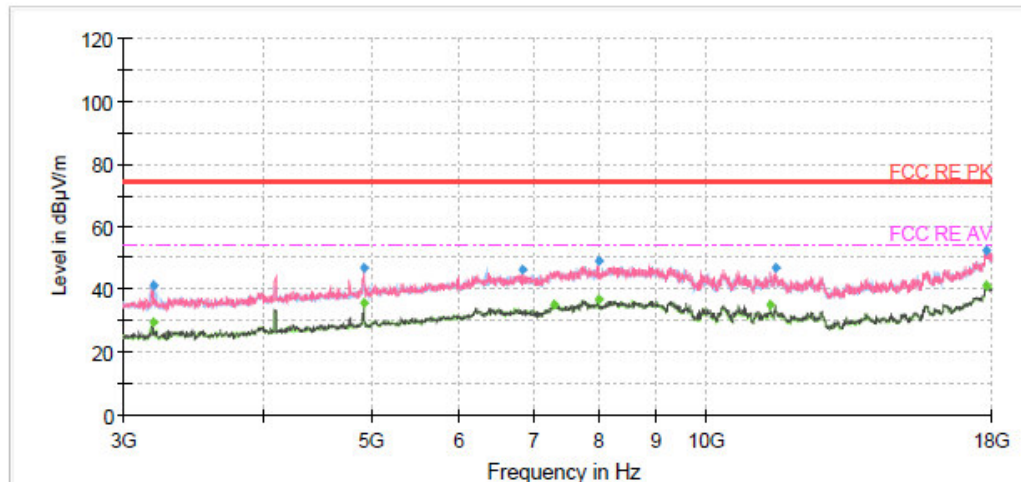


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1015.00	42.13	---	74.00	31.87	500.00	100.0	V	32.00	-12
1118.75	---	31.25	54.00	22.75	500.00	100.0	H	225.00	-12
1392.25	---	31.54	54.00	22.46	500.00	200.0	H	38.00	-11
1440.50	43.08	---	74.00	30.92	500.00	100.0	H	354.00	-11
1694.50	43.38	---	74.00	30.62	500.00	100.0	H	358.00	-10
1704.75	---	31.93	54.00	22.07	500.00	100.0	V	41.00	-10
2053.50	---	33.02	54.00	20.98	500.00	200.0	V	0.00	-8
2080.00	45.17	---	74.00	28.83	500.00	200.0	H	23.00	-8
2299.00	---	33.58	54.00	20.42	500.00	200.0	H	29.00	-7
2321.75	45.02	---	74.00	28.98	500.00	100.0	H	356.00	-7
2917.00	47.42	---	74.00	26.58	500.00	100.0	H	281.00	-5
2972.00	---	35.85	54.00	18.15	500.00	100.0	H	344.00	-4

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)
3187.50	---	29.44	54.00	24.56	500.00	100.0	V	359.00	-14
3187.50	41.42	---	74.00	32.58	500.00	100.0	V	359.00	-14
4923.75	46.73	---	74.00	27.27	500.00	100.0	H	230.00	-10
4925.63	---	35.56	54.00	18.44	500.00	100.0	H	230.00	-10
6830.63	46.53	---	74.00	27.47	500.00	200.0	V	0.00	-2
7286.25	---	35.39	54.00	18.61	500.00	200.0	H	45.00	0
7998.75	---	36.91	54.00	17.09	500.00	100.0	V	78.00	1
8000.63	48.85	---	74.00	25.15	500.00	100.0	V	122.00	1
11394.38	---	35.21	54.00	18.79	500.00	200.0	V	305.00	5
11505.00	46.97	---	74.00	27.03	500.00	200.0	V	334.00	6
17825.63	52.20	---	74.00	21.80	500.00	200.0	H	347.00	15
17825.63	---	41.51	54.00	12.49	500.00	200.0	H	347.00	15

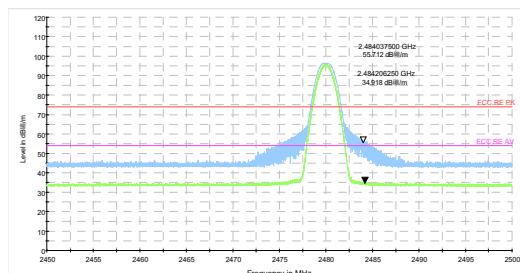
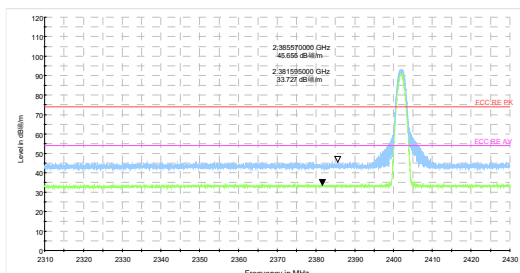
Radiates Emission from 3GHz to 18GHz

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 ($\text{dB}\mu\text{V/m}$)

The signal beyond the limit is carrier.



Result of RE

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier.
The Radiates Emission from 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. **The following graphs display the maximum values of coaxial and coplanar for 9k-30MHz; horizontal and vertical for above 30MHz by software.**
4. **For below 1GHz**

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

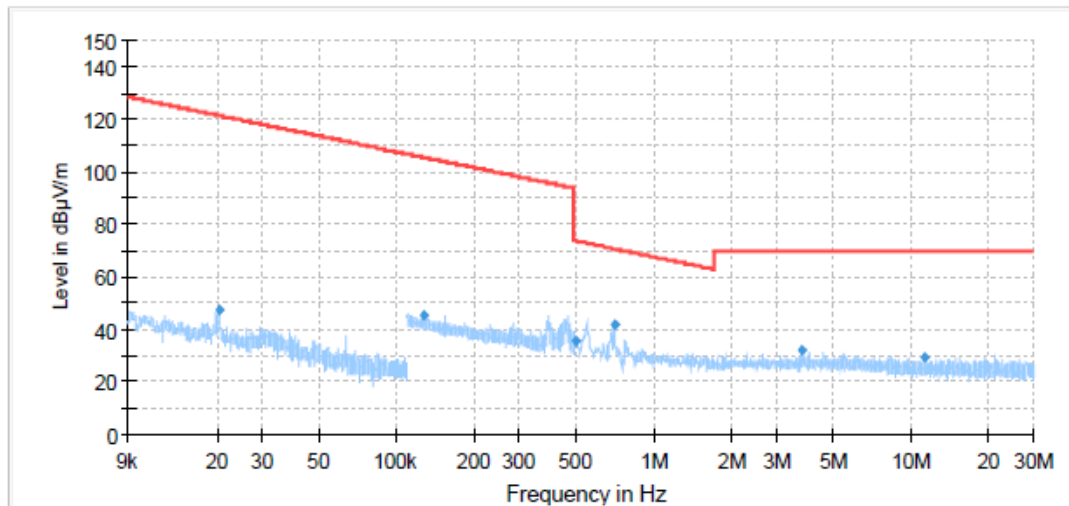
For above 1GHz

 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:

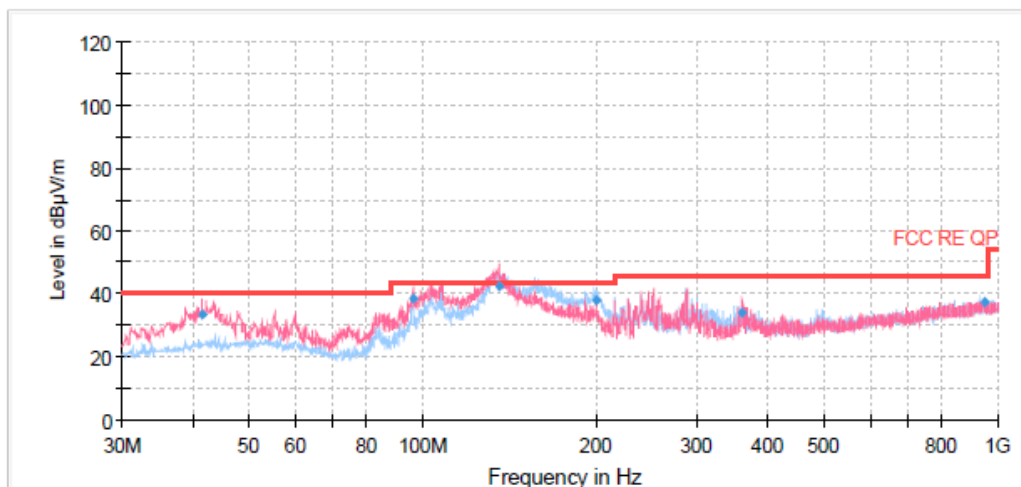
During the test, the Radiates Emission from 9kHz to 1GHz was performed in all modes with all channels. The test data of the worst-case condition (Bluetooth LE-Channel 39) was recorded in this report.



Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Azimuth (deg)	Corr. (dB/m)
0.02	47.55	121.45	73.90	500.00	255.00	17
0.13	45.41	105.49	60.08	150.00	182.00	17
0.49	35.55	73.74	38.18	150.00	0.00	17
0.70	41.82	70.70	28.88	150.00	26.00	17
3.79	32.41	69.50	37.09	150.00	130.00	17
11.32	29.62	69.50	39.88	150.00	338.00	17

Radiates Emission from 9kHz to 30MHz

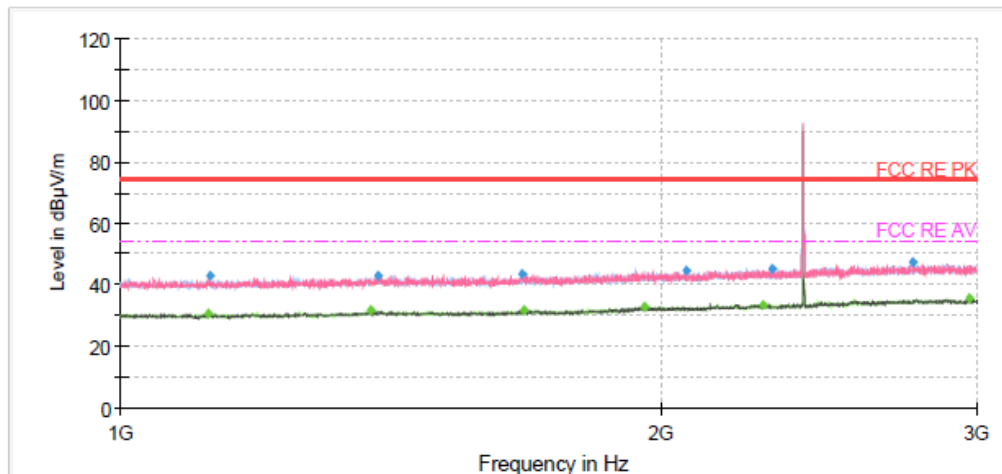


Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
41.40	33.67	40.00	6.33	1000.00	100.0	V	269.00	19
96.08	38.47	43.50	5.03	1000.00	100.0	V	358.00	18
136.22	42.65	43.50	0.85	1000.00	100.0	V	216.00	15
200.36	38.04	43.50	5.46	1000.00	200.0	H	23.00	18
360.29	33.89	46.00	12.11	1000.00	100.0	V	173.00	22
946.41	37.60	46.00	8.40	1000.00	200.0	H	293.00	32

Radiates Emission from 30MHz to 1GHz

Bluetooth LE-Channel 0

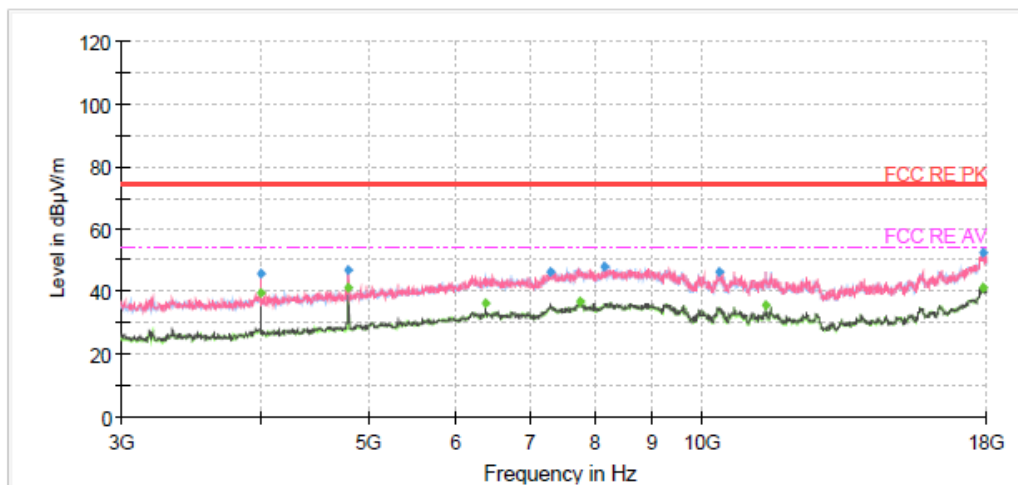


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1118.50	---	30.77	54.00	23.23	500.00	200.0	H	42.00	-12
1121.50	42.72	---	74.00	31.28	500.00	200.0	H	229.00	-12
1379.25	---	31.58	54.00	22.42	500.00	100.0	H	249.00	-11
1390.75	43.06	---	74.00	30.94	500.00	200.0	H	145.00	-11
1673.50	43.76	---	74.00	30.24	500.00	100.0	V	358.00	-10
1677.25	---	31.87	54.00	22.13	500.00	200.0	V	223.00	-10
1958.25	---	32.93	54.00	21.07	500.00	200.0	V	223.00	-8
2065.25	44.42	---	74.00	29.58	500.00	100.0	V	1.00	-8
2281.00	---	33.36	54.00	20.64	500.00	200.0	H	242.00	-7
2307.75	45.46	---	74.00	28.54	500.00	200.0	H	4.00	-7
2764.00	47.23	---	74.00	26.77	500.00	200.0	H	0.00	-5
2972.00	---	35.50	54.00	18.50	500.00	200.0	V	359.00	-4

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

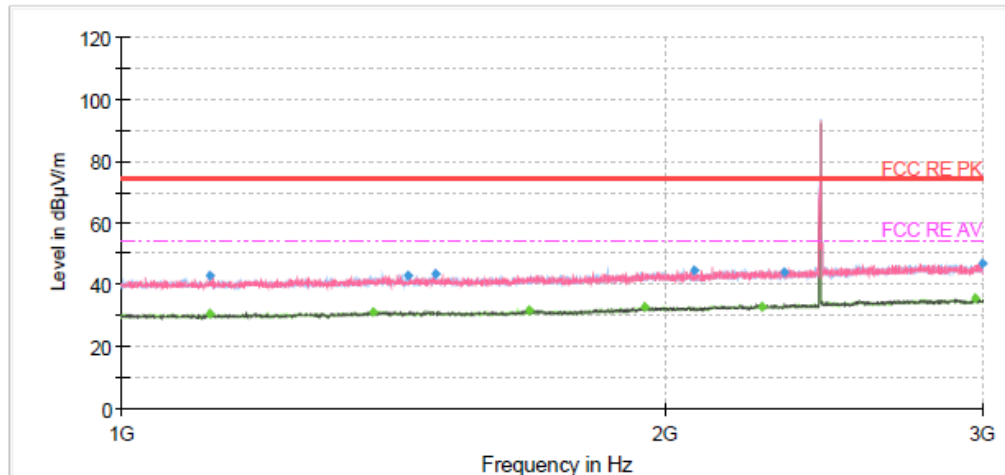


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4003.13	---	39.47	54.00	14.53	500.00	200.0	V	354.00	-12
4003.13	45.74	---	74.00	28.26	500.00	200.0	V	354.00	-12
4803.75	---	41.33	54.00	12.67	500.00	200.0	V	334.00	-10
4803.75	46.81	---	74.00	27.19	500.00	200.0	V	334.00	-10
6380.63	---	36.17	54.00	17.83	500.00	100.0	V	270.00	-3
7291.88	46.40	---	74.00	27.60	500.00	200.0	H	3.00	0
7749.38	---	36.91	54.00	17.10	500.00	100.0	V	39.00	1
8160.00	47.89	---	74.00	26.11	500.00	100.0	H	358.00	1
10346.25	46.55	---	74.00	27.45	500.00	100.0	V	1.00	2
11394.38	---	35.52	54.00	18.48	500.00	200.0	V	237.00	5
17833.13	52.19	---	74.00	21.81	500.00	100.0	V	133.00	15
17846.25	---	41.20	54.00	12.80	500.00	200.0	H	227.00	15

Radiates Emission from 3GHz to 18GHz

Bluetooth LE-Channel 19

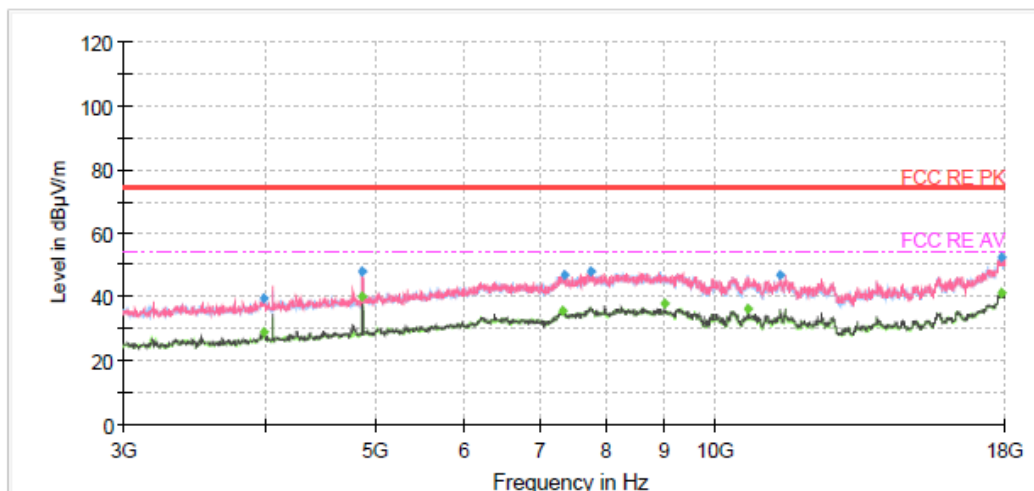


Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1120.00	---	30.89	54.00	23.11	500.00	200.0	V	105.00	-12
1120.25	42.93	---	74.00	31.07	500.00	200.0	V	190.00	-12
1378.50	---	31.36	54.00	22.64	500.00	200.0	H	2.00	-11
1442.00	43.12	---	74.00	30.88	500.00	100.0	H	356.00	-11
1492.75	43.33	---	74.00	30.67	500.00	200.0	H	68.00	-11
1680.25	---	32.03	54.00	21.97	500.00	200.0	V	230.00	-10
1951.00	---	33.11	54.00	20.89	500.00	100.0	H	0.00	-8
2079.25	44.67	---	74.00	29.33	500.00	200.0	H	7.00	-8
2266.50	---	33.01	54.00	20.99	500.00	100.0	H	301.00	-7
2328.25	44.14	---	74.00	29.86	500.00	200.0	H	0.00	-7
2971.25	---	35.47	54.00	18.53	500.00	100.0	V	172.00	-4
2997.50	47.04	---	74.00	26.96	500.00	200.0	V	105.00	-4

Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

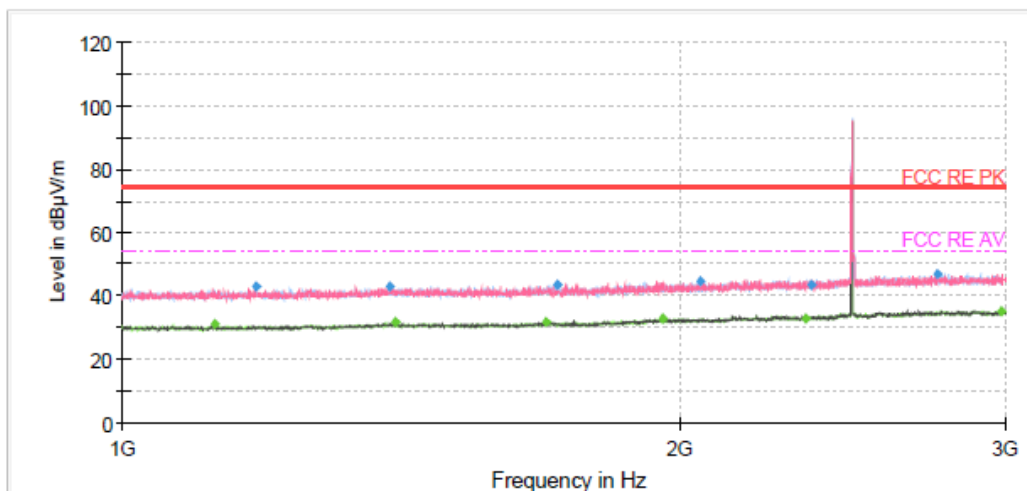


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3980.63	---	28.78	54.00	25.22	500.00	100.0	V	295.00	-11
3980.63	39.63	---	74.00	34.37	500.00	100.0	H	357.00	-11
4878.75	48.26	---	74.00	25.74	500.00	100.0	H	202.00	-10
4878.75	---	40.17	54.00	13.83	500.00	200.0	H	296.00	-10
7320.00	---	35.92	54.00	18.08	500.00	100.0	V	249.00	-1
7344.38	46.96	---	74.00	27.04	500.00	100.0	H	355.00	-1
7743.75	48.20	---	74.00	25.80	500.00	100.0	V	20.00	1
9000.00	---	37.76	54.00	16.24	500.00	100.0	V	264.00	1
10672.50	---	36.28	54.00	17.72	500.00	100.0	V	4.00	3
11394.38	47.08	---	74.00	26.92	500.00	100.0	V	280.00	5
17840.63	---	41.14	54.00	12.86	500.00	100.0	H	350.00	15
17870.63	52.70	---	74.00	21.30	500.00	200.0	H	48.00	15

Radiates Emission from 3GHz to 18GHz

Bluetooth LE-Channel 39

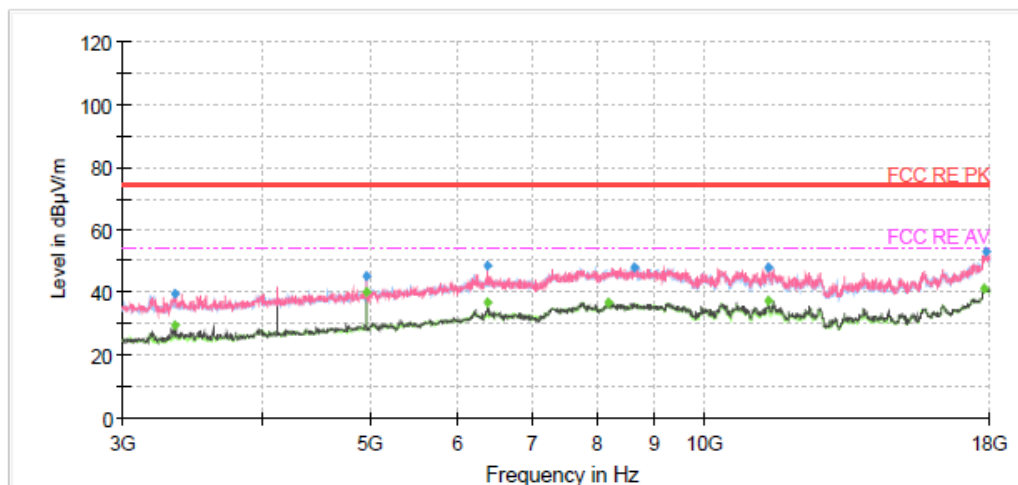


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1120.50	---	31.16	54.00	22.84	500.00	100.0	H	181.00	-12
1181.00	43.04	---	74.00	30.96	500.00	100.0	V	8.00	-12
1395.00	42.97	---	74.00	31.03	500.00	100.0	V	2.00	-11
1403.00	---	31.68	54.00	22.32	500.00	100.0	H	359.00	-11
1693.25	---	31.97	54.00	22.03	500.00	100.0	V	342.00	-10
1719.50	43.48	---	74.00	30.52	500.00	100.0	H	80.00	-10
1960.00	---	33.01	54.00	20.99	500.00	200.0	V	167.00	-8
2050.75	44.57	---	74.00	29.43	500.00	100.0	H	357.00	-8
2341.75	---	32.90	54.00	21.10	500.00	100.0	H	308.00	-7
2356.00	43.33	---	74.00	30.67	500.00	200.0	H	9.00	-7
2755.50	47.06	---	74.00	26.94	500.00	200.0	H	4.00	-5
2989.25	---	35.35	54.00	18.65	500.00	200.0	V	0.00	-4

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)
3343.13	---	29.60	54.00	24.40	500.00	100.0	V	286.00	-13
3343.13	39.76	---	74.00	34.24	500.00	100.0	V	286.00	-13
4959.38	---	40.38	54.00	13.62	500.00	200.0	H	51.00	-10
4959.38	45.17	---	74.00	28.83	500.00	200.0	H	51.00	-10
6378.75	---	36.79	54.00	17.21	500.00	100.0	V	286.00	-3
6378.75	48.63	---	74.00	25.37	500.00	100.0	V	286.00	-3
8191.88	---	36.68	54.00	17.32	500.00	100.0	H	310.00	1
8643.75	48.13	---	74.00	25.87	500.00	200.0	V	341.00	1
11381.25	47.89	---	74.00	26.11	500.00	200.0	H	2.00	5
11394.38	---	37.38	54.00	16.62	500.00	200.0	V	238.00	5
17808.75	---	41.52	54.00	12.48	500.00	100.0	V	271.00	15
17844.38	52.86	---	74.00	21.14	500.00	100.0	V	146.00	15

Radiates Emission from 3GHz to 18GHz