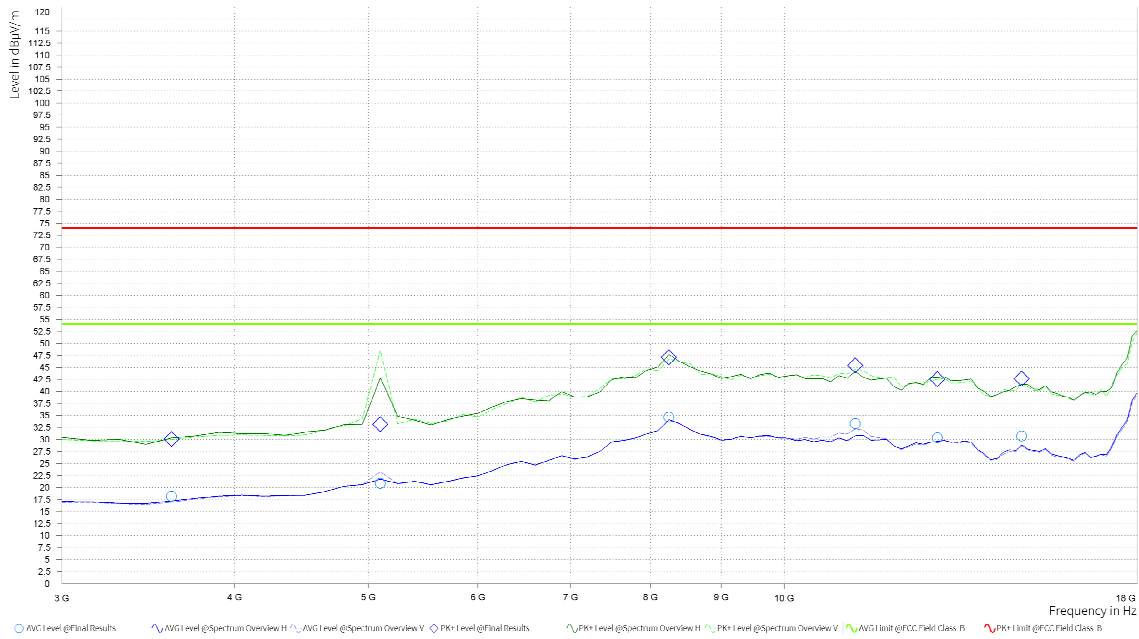


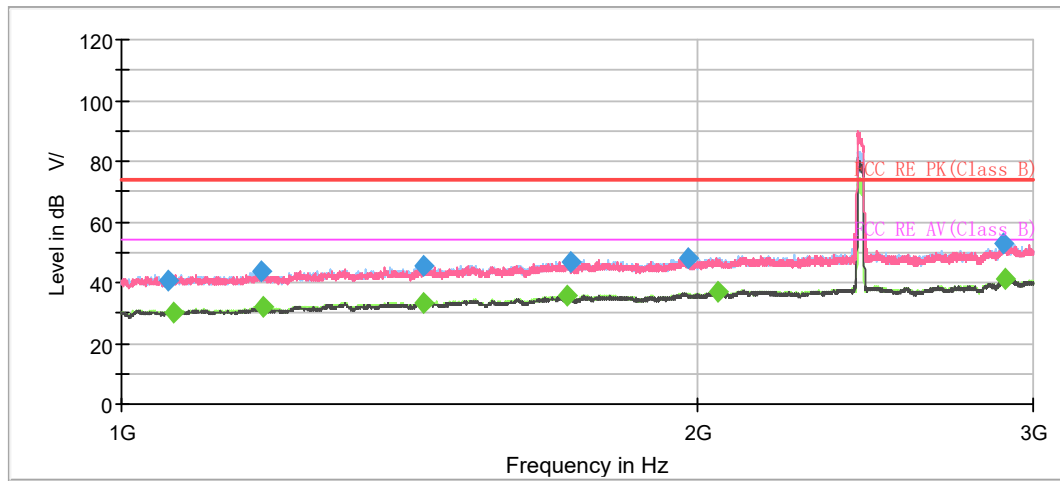
Spectrum Overview H/V



Radiates Emission from 3GHz to 18GHz

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]
3,601.023	30.08	74.00	43.92	18.17	54.00	35.83	-13.10	H	72.5	1.00	1.000
5,098.640	33.12	74.00	40.88	20.86	54.00	33.14	-9.16	V	203.1	2.00	1.000
8,248.475	47.08	74.00	26.92	34.66	54.00	19.34	1.94	H	24.8	1.00	1.000
11,249.400	45.39	74.00	28.61	33.31	54.00	20.69	0.49	V	121	2.00	1.000
12,900.173	42.53	74.00	31.47	30.36	54.00	23.64	1.36	H	225.7	2.00	1.000
14,847.476	42.64	74.00	31.36	30.75	54.00	23.25	-0.65	H	93.2	1.00	1.000

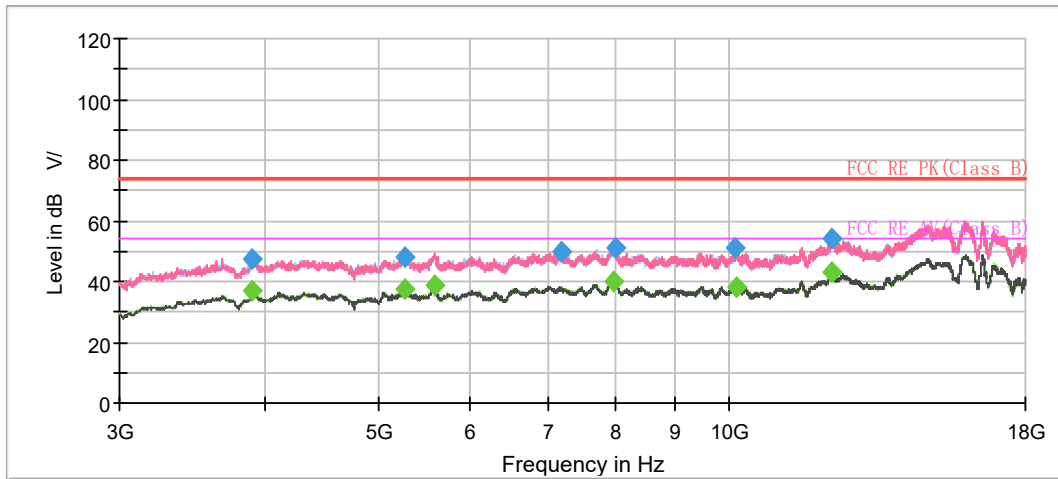
802.11n (HT20) CH6



Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

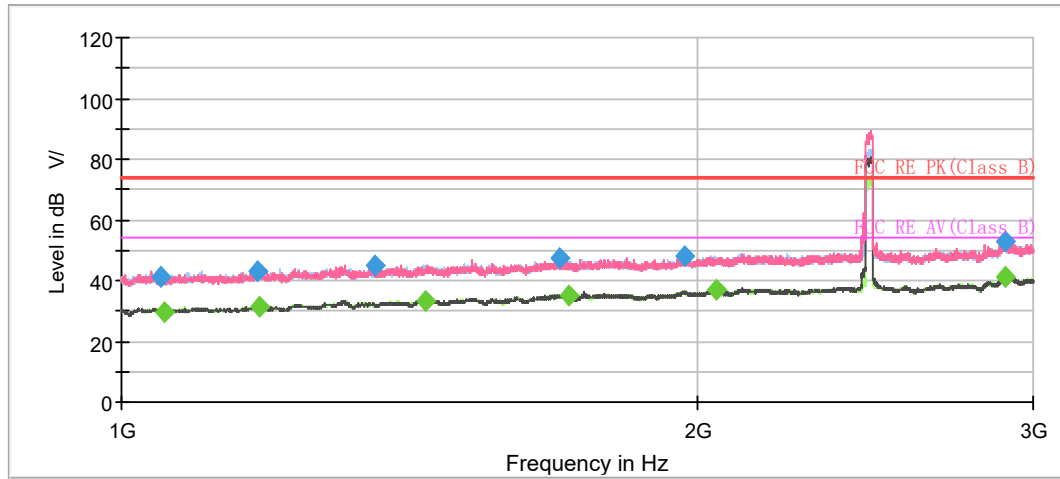
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1058.750000	40.75	---	74.00	33.25	500.0	100.0	V	171.0	-6.0
1064.250000	---	29.93	54.00	24.07	500.0	200.0	H	335.0	-5.8
1184.500000	43.81	---	74.00	30.19	500.0	100.0	H	80.0	-3.9
1187.500000	---	31.75	54.00	22.25	500.0	200.0	H	239.0	-4.1
1437.750000	45.61	---	74.00	28.39	500.0	200.0	H	263.0	-1.8
1438.000000	---	33.44	54.00	20.56	500.0	100.0	H	236.0	-1.7
1710.500000	---	35.48	54.00	18.52	500.0	200.0	V	166.0	0.5
1717.250000	46.80	---	74.00	27.20	500.0	200.0	H	311.0	0.1
1980.000000	48.23	---	74.00	25.77	500.0	100.0	H	272.0	1.8
2052.250000	---	36.76	54.00	17.24	500.0	100.0	V	1.0	2.4
2896.750000	52.78	---	74.00	21.22	500.0	200.0	H	239.0	8.4
2899.000000	---	41.31	54.00	12.69	500.0	100.0	H	210.0	8.5



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)
3900.000000	---	36.81	54.00	17.19	500.0	200.0	H	359.0	3.0
3903.750000	47.44	---	74.00	26.56	500.0	100.0	H	0.0	3.3
5268.750000	---	37.39	54.00	16.61	500.0	100.0	V	0.0	6.6
5274.375000	48.16	---	74.00	25.84	500.0	200.0	V	111.0	6.5
5591.250000	---	38.71	54.00	15.29	500.0	100.0	H	0.0	8.1
7181.250000	49.87	---	74.00	24.13	500.0	200.0	V	180.0	7.4
7978.125000	---	40.13	54.00	13.87	500.0	100.0	H	0.0	9.9
7991.250000	50.78	---	74.00	23.22	500.0	200.0	H	128.0	9.9
10140.000000	50.94	---	74.00	23.06	500.0	100.0	V	52.0	9.1
10166.250000	---	38.17	54.00	15.83	500.0	100.0	H	299.0	9.2
12247.500000	54.38	---	74.00	19.62	500.0	200.0	V	287.0	14.0
12275.625000	---	42.82	54.00	11.18	500.0	100.0	H	353.0	14.6

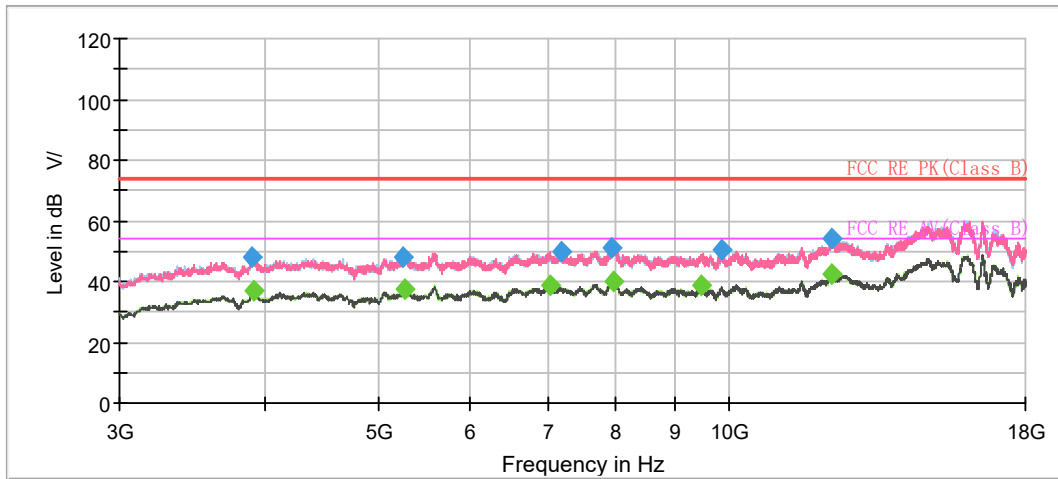
802.11n (HT20) CH11



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)
1047.250000	41.24	---	74.00	32.76	500.0	100.0	H	8.0	-6.0
1053.000000	---	29.40	54.00	24.60	500.0	100.0	H	141.0	-6.2
1177.750000	43.28	---	74.00	30.72	500.0	100.0	H	237.0	-4.1
1181.500000	---	31.64	54.00	22.36	500.0	200.0	V	143.0	-4.0
1356.000000	44.81	---	74.00	29.19	500.0	200.0	V	10.0	-2.9
1442.000000	---	33.36	54.00	20.64	500.0	100.0	H	81.0	-1.6
1697.000000	47.18	---	74.00	26.82	500.0	100.0	H	105.0	0.4
1712.750000	---	35.34	54.00	18.66	500.0	200.0	V	33.0	0.4
1971.250000	48.04	---	74.00	25.96	500.0	100.0	V	339.0	2.2
2049.000000	---	36.72	54.00	17.28	500.0	100.0	V	147.0	2.5
2898.250000	52.72	---	74.00	21.28	500.0	200.0	V	143.0	8.5
2899.250000	---	41.28	54.00	12.72	500.0	100.0	H	8.0	8.6



Radiates Emission from 3GHz to 18GHz

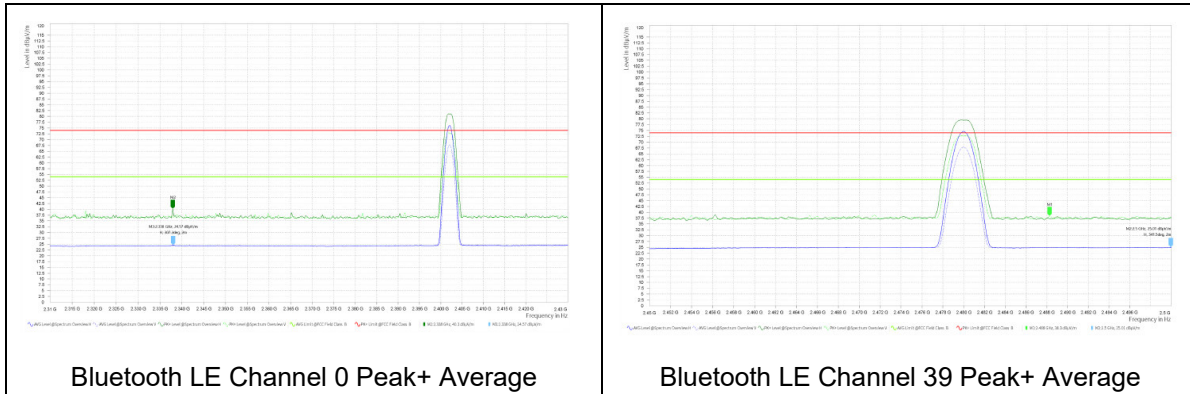
Frequency (MHz)	MaxPeak (dB μ V/m)	Average (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
3903.750000	47.90	---	74.00	26.10	500.0	200.0	H	128.0	3.3
3907.500000	---	36.85	54.00	17.15	500.0	100.0	V	212.0	3.6
5244.375000	48.23	---	74.00	25.77	500.0	100.0	V	83.0	5.8
5270.625000	---	37.50	54.00	16.50	500.0	200.0	H	142.0	6.5
7021.875000	---	38.67	54.00	15.33	500.0	200.0	V	199.0	6.9
7183.125000	50.06	---	74.00	23.94	500.0	200.0	H	183.0	7.4
7953.750000	50.91	---	74.00	23.09	500.0	100.0	H	40.0	9.9
7966.875000	---	40.12	54.00	13.88	500.0	200.0	H	183.0	9.9
9478.125000	---	38.49	54.00	15.51	500.0	100.0	V	238.0	9.5
9864.375000	50.46	---	74.00	23.54	500.0	100.0	H	166.0	9.6
12285.000000	---	42.70	54.00	11.30	500.0	100.0	H	0.0	14.4
12285.000000	54.33	---	74.00	19.67	500.0	100.0	V	212.0	14.4

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 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 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

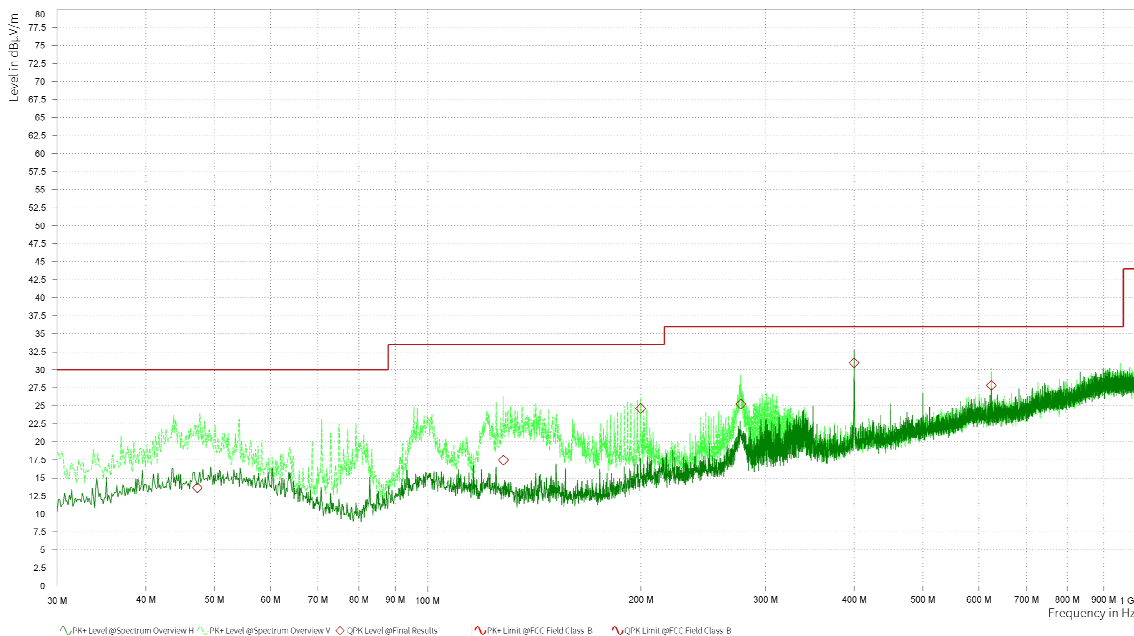
 PK Level @Spectrum Overview H
  PK Level @Spectrum Overview V
  PK Level @Final Results
  PK Limit

 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 30MHz to 1GHz was performed in all modes with all channels. The test data of the worst-case condition (**Bluetooth LE-Channel 19**) was recorded in this report.

Spectrum Overview H/V

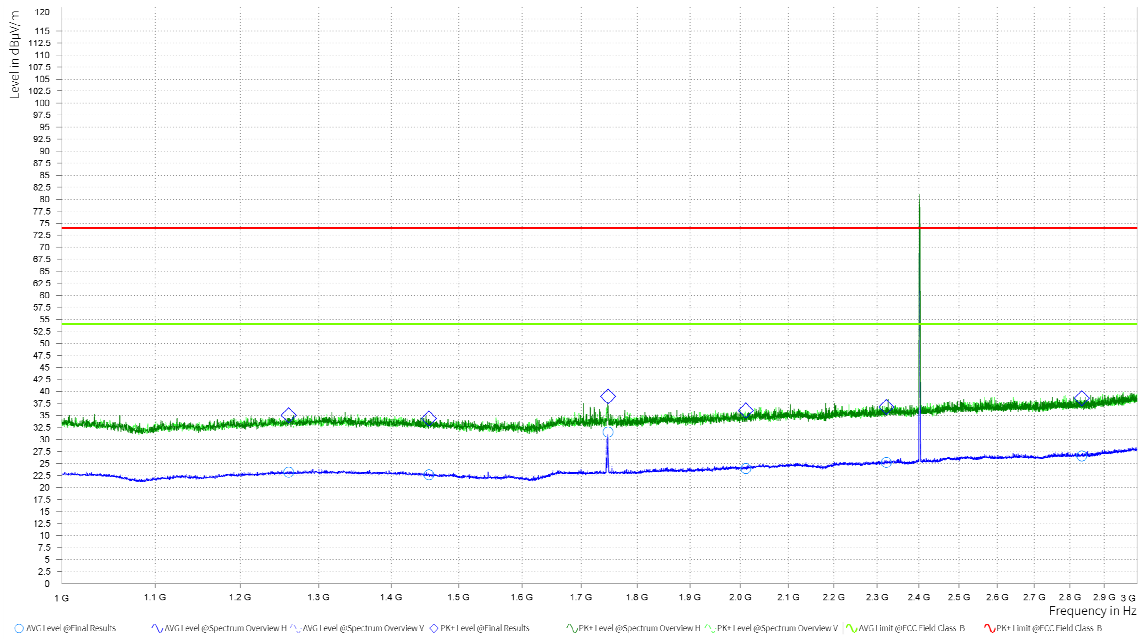


Radiates Emission from 30MHz to 1GHz

Frequency [MHz]	QPK Level [dBμV/m]	QPK Limit [dBμV/m]	QPK Margin [dB]	Correction [dB]	Polarization	Azimuth [deg]	Antenna Height [m]	Meas. BW [kHz]	Meas. Time [s]
47.303	13.61	30.00	16.39	-8.63	V	307	1.16	120.000	1.000
127.976	17.45	33.50	16.05	-12.25	V	142.7	1.99	120.000	1.000
199.777	24.64	33.50	8.86	-9.75	V	254.9	1.00	120.000	1.000
276.994	25.22	36.00	10.78	-7.93	V	356.8	1.08	120.000	1.000
400.018	30.95	36.00	5.05	-4.60	H	105	1.83	120.000	1.000
624.985	27.81	36.00	8.19	-0.73	V	85.3	1.00	120.000	1.000

Bluetooth LE-Channel 0

Spectrum Overview H/V

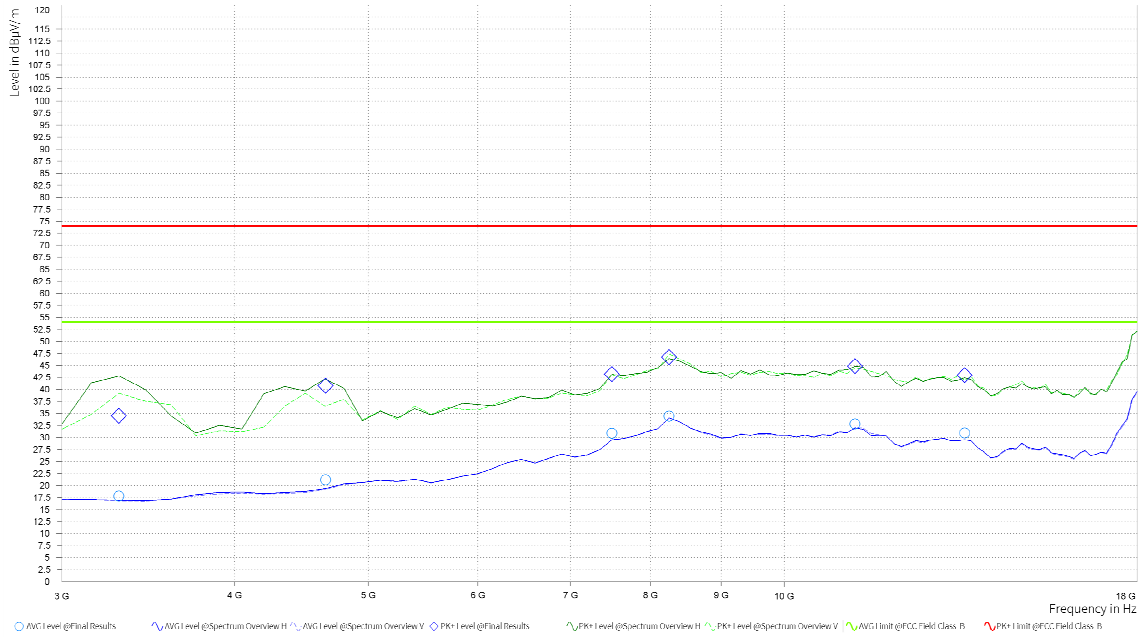


Note: The signal beyond the limit is carrier.

Radiates Emission from 1GHz to 3GHz

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]
1,260.625	35.00	74.00	39.00	23.16	54.00	30.84	-12.02	H	72.6	1.00	1.000
1,454.849	34.32	74.00	39.68	22.64	54.00	31.36	-11.84	H	93.1	1.00	1.000
1,747.154	38.95	74.00	35.05	31.51	54.00	22.49	-11.35	H	0.5	1.00	1.000
2,011.030	36.03	74.00	37.97	23.96	54.00	30.04	-9.27	V	273.2	2.00	1.000
2,321.397	36.71	74.00	37.29	25.21	54.00	28.79	-7.27	H	99.5	1.00	1.000
2,834.486	38.54	74.00	35.46	26.54	54.00	27.46	-4.58	H	254.8	2.00	1.000

Spectrum Overview H/V



Radiates Emission from 3GHz to 18GHz

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]
3,298.238	34.47	74.00	39.53	17.80	54.00	36.20	-13.48	H	340.7	1.00	1.000
4,654.538	40.73	74.00	33.27	21.16	54.00	32.84	-10.75	H	351.1	2.00	1.000
7,500.944	43.13	74.00	30.87	30.89	54.00	23.11	-2.76	H	15.4	1.00	1.000
8,252.035	46.67	74.00	27.33	34.45	54.00	19.55	1.96	V	28	2.00	1.000
11,245.941	44.81	74.00	29.19	32.84	54.00	21.16	0.49	H	135.3	2.00	1.000
13,498.178	42.94	74.00	31.06	30.92	54.00	23.08	1.41	V	278	1.00	1.000