

ANNEX A: Test Result

There is more than one Adapters, each one should be applied throughout the compliance test respectively, and however, only the worst case (Adapter 1) will be recorded in this report.

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

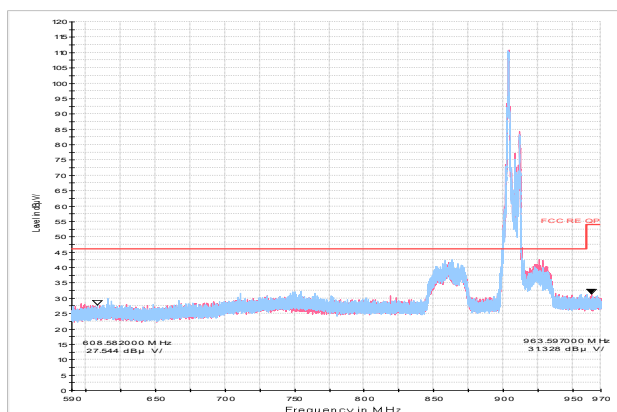
1.1. Hyper Wi-Fi

The following graphs display the maximum values of horizontal and vertical by software.
Blue trace represents horizontal polarization, Red trace represents vertical polarization.

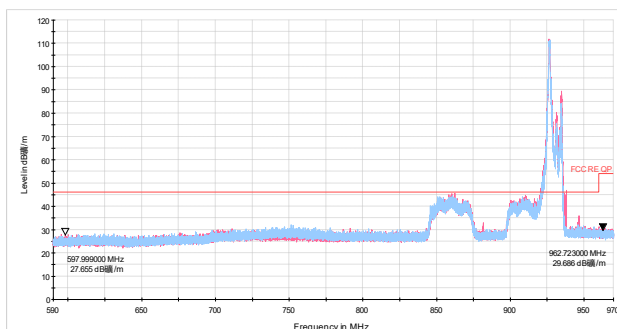
A symbol ($\text{dB}\mu\text{V/m}$) in the test plot below means ($\text{dB}\mu\text{V/m}$)

The peak value is tested here. After the pretest, Hyper Wi-Fi (1M) was selected as the worst Mode for Hyper Wi-Fi.

The signal beyond the limit is carrier.



Hyper Wi-Fi (1M) 903.5MHz



Hyper Wi-Fi (1M) 926.5MHz

Result of RE

Sweep the whole frequency band through the range from 9kHz to the 10th harmonic of the carrier.

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

For above 1GHz

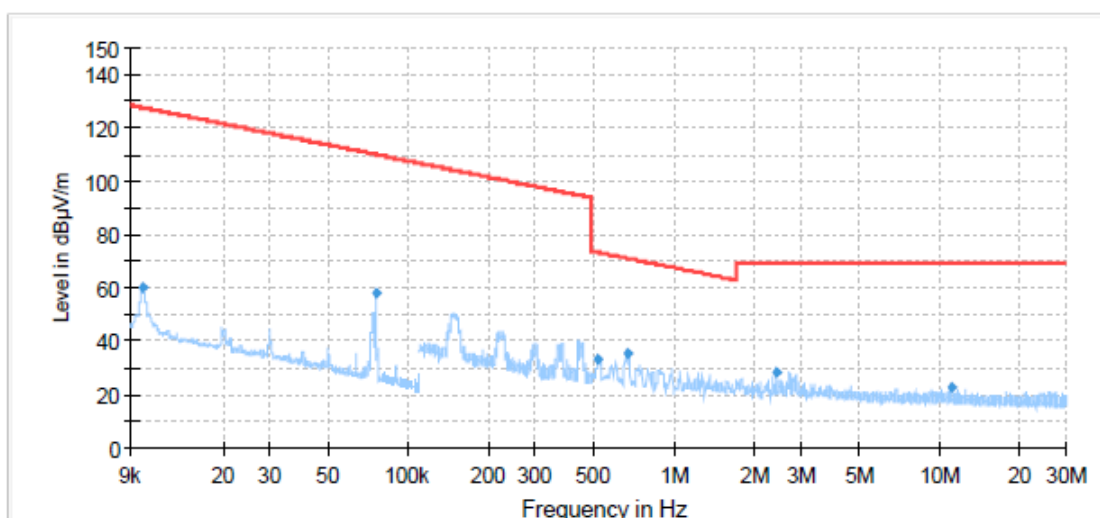
~ PK Level @Spectrum Overview H
 ~ PK Level @Spectrum Overview V
 ◆ PK Level @Final Results
 — PK Limit
~ AVG Level @Spectrum Overview H
 ~ AVG Level @Spectrum Overview V
 ◆ AVG Level @Final Results
 — AVG Limit

Continuous TX mode:

Test Voltage: 120V/60Hz.

During the test, the Radiates Emission was performed in all modes with all channels, Hyper Wi-Fi (1M) are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

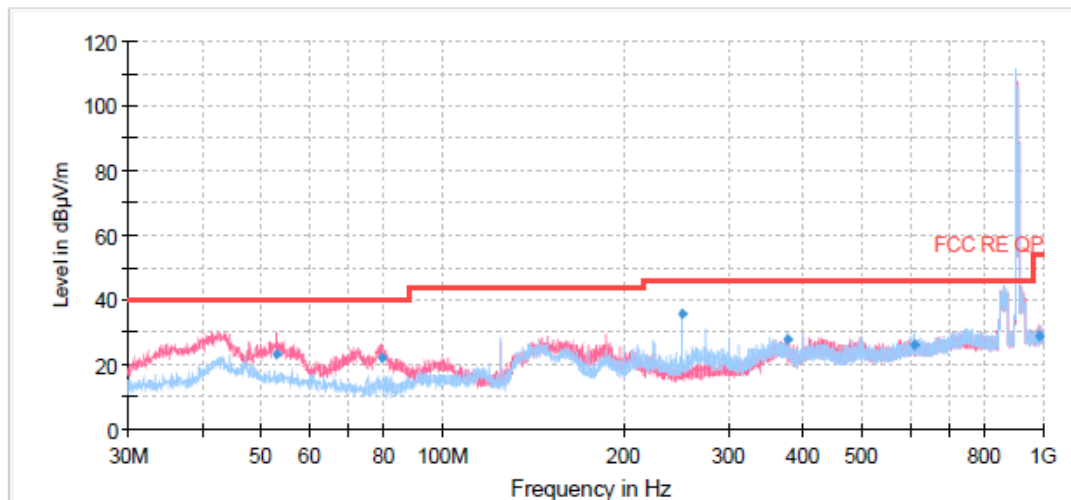
Hyper Wi-Fi (1M): 903.5MHz



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Azimuth (deg)	Corr. (dB/m)
0.01	60.33	127.66	67.32	500.00	0.200	144.00	18
0.08	57.94	110.03	52.09	500.00	0.200	90.00	17
0.52	33.02	73.29	40.27	150.00	9.000	132.00	17
0.67	35.22	71.07	35.85	150.00	9.000	107.00	17
2.42	28.53	69.50	40.97	150.00	9.000	180.00	17
11.00	22.35	69.50	47.15	150.00	9.000	359.00	17

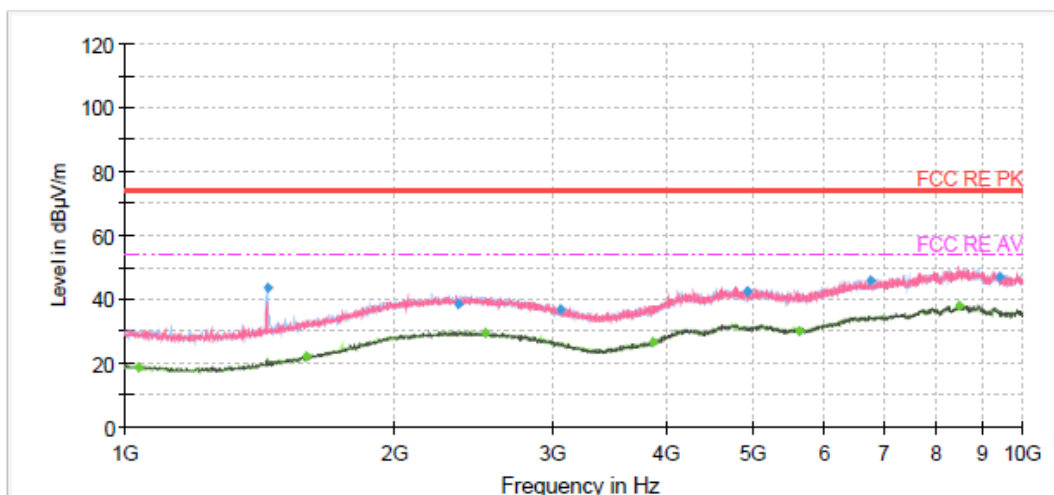
Radiates Emission from 9kHz to 30MHz



Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
52.99	23.44	40.00	16.56	1000.00	108.0	V	300.00	20
79.52	22.28	40.00	17.72	1000.00	125.0	V	159.00	15
250.00	35.72	46.00	10.28	1000.00	125.0	H	331.00	20
375.02	27.67	46.00	18.33	1000.00	224.0	H	185.00	22
608.43	26.23	46.00	19.77	1000.00	124.0	H	52.00	27
984.95	29.04	54.00	24.96	1000.00	225.0	H	0.00	31

Note: The signal beyond the limit is carrier.
Radiates Emission from 30MHz to 1GHz

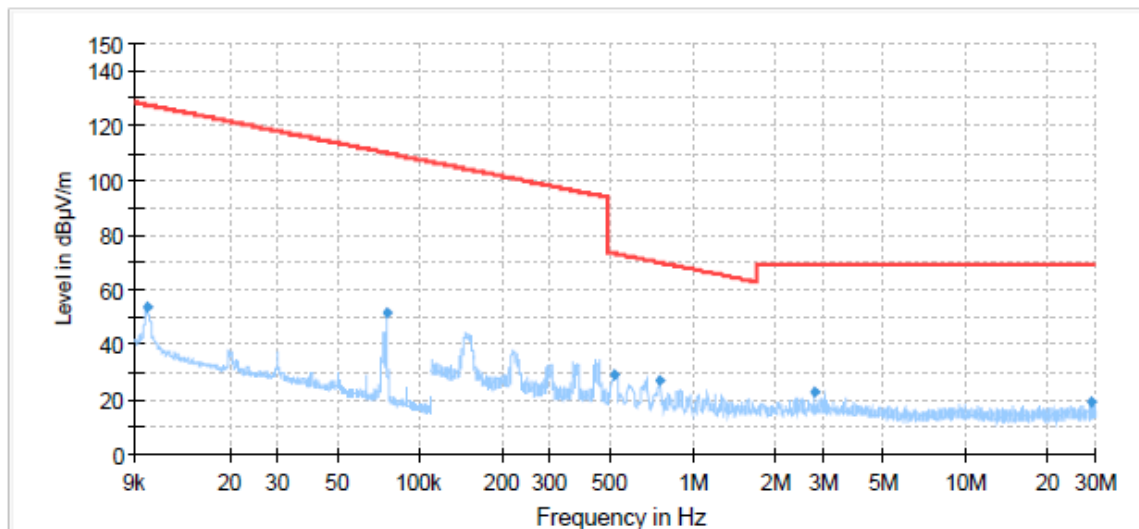


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1034.88	---	18.57	54.00	35.43	500.00	200.0	H	0.00	-17
1439.88	43.43	---	74.00	30.57	500.00	100.0	H	301.00	-14
1594.00	---	21.99	54.00	32.01	500.00	200.0	V	268.00	-14
2348.88	38.65	---	74.00	35.35	500.00	100.0	V	163.00	-11
2514.25	---	29.23	54.00	24.77	500.00	100.0	H	352.00	-10
3062.13	36.74	---	74.00	37.26	500.00	200.0	H	109.00	-9
3878.88	---	26.71	54.00	27.29	500.00	100.0	H	359.00	-7
4921.75	42.20	---	74.00	31.80	500.00	100.0	H	348.00	-4
5648.50	---	29.85	54.00	24.15	500.00	100.0	H	352.00	-3
6770.13	45.67	---	74.00	28.33	500.00	200.0	H	339.00	0
8486.88	---	37.66	54.00	16.34	500.00	200.0	H	8.00	3
9401.50	46.87	---	74.00	27.13	500.00	100.0	H	21.00	5

Radiates Emission from 1GHz to 10GHz

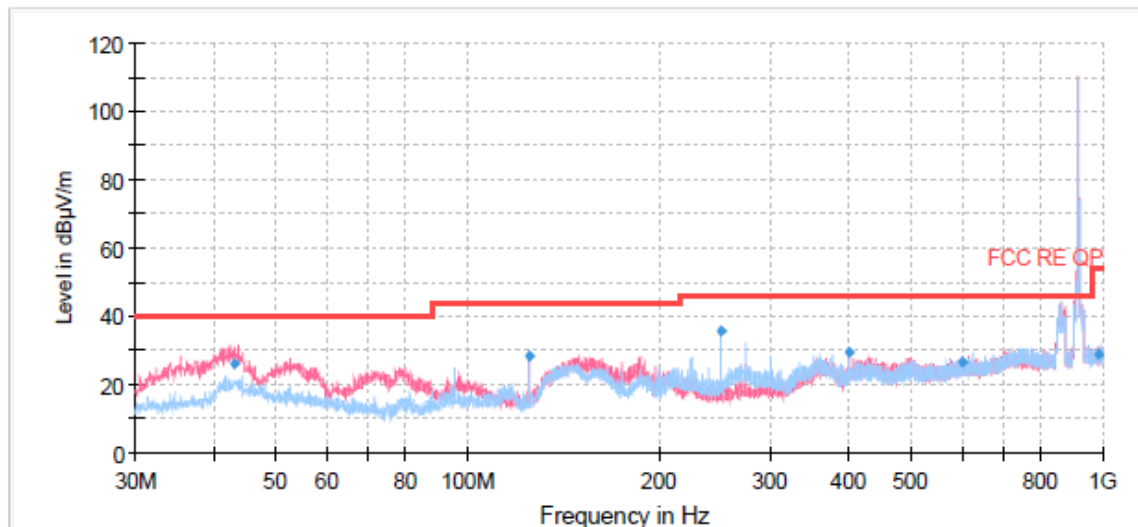
Hyper Wi-Fi (1M): 915.5 MHz



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Azimuth (deg)	Corr. (dB/m)
0.01	53.91	127.66	73.75	500.00	0.200	0.00	18
0.08	51.54	110.02	58.48	500.00	0.200	94.00	17
0.52	28.80	73.29	44.49	150.00	9.000	124.00	17
0.76	26.83	70.04	43.20	150.00	9.000	106.00	17
2.80	22.48	69.50	47.02	150.00	9.000	156.00	17
29.12	18.77	69.50	50.73	150.00	9.000	66.00	17

Radiates Emission from 9kHz to 30MHz

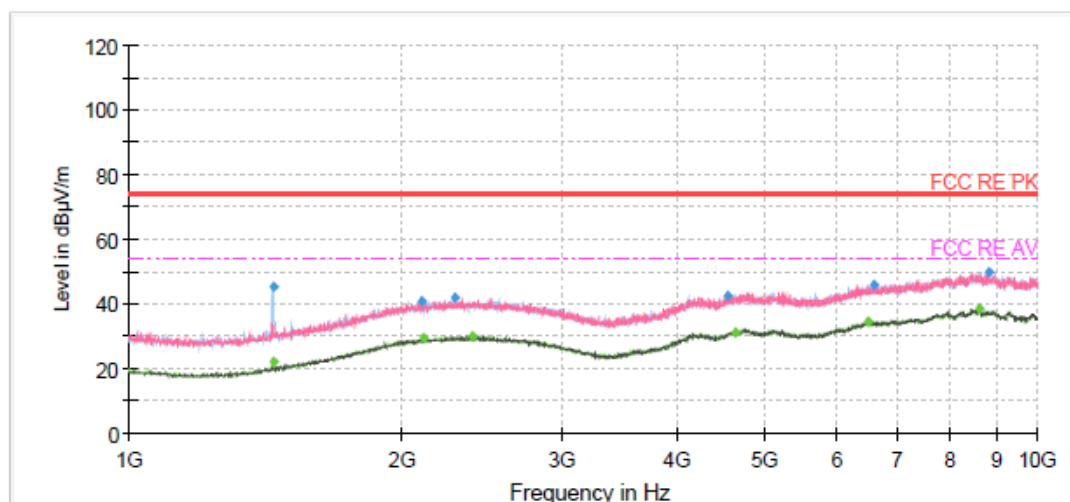


Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
43.11	26.23	40.00	13.77	1000.00	101.0	V	2.00	19
125.00	28.36	43.50	15.14	1000.00	176.0	H	306.00	16
250.00	35.45	46.00	10.55	1000.00	100.0	H	329.00	20
400.01	29.35	46.00	16.65	1000.00	198.0	H	162.00	23
600.02	26.84	46.00	19.16	1000.00	124.0	H	142.00	27
987.86	29.13	54.00	24.87	1000.00	101.0	H	11.00	31

Note: The signal beyond the limit is carrier.

Radiates Emission from 30MHz to 1GHz

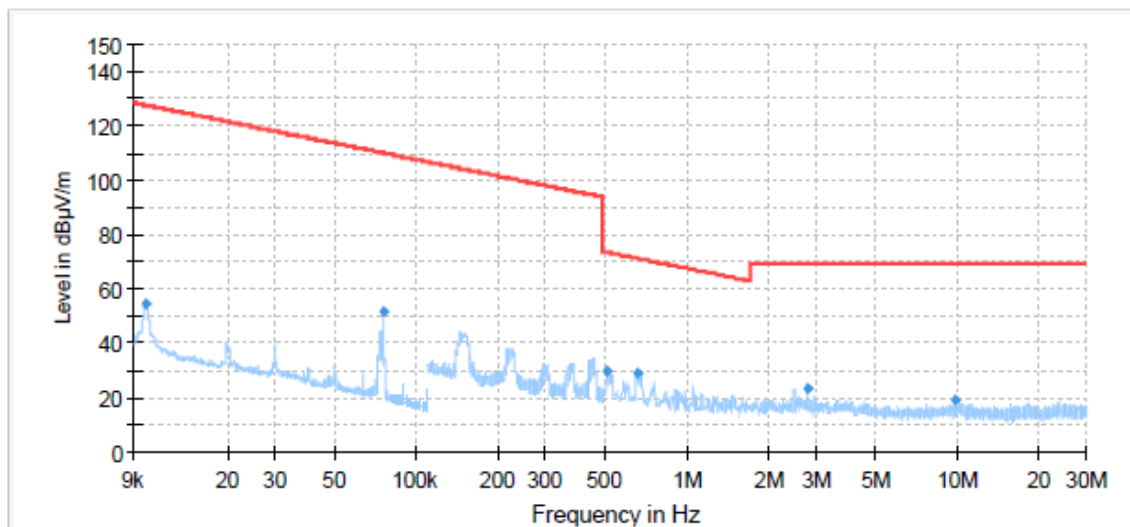


Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1438.75	---	22.17	54.00	31.83	500.00	100.0	H	226.00	-14
1438.75	45.22	---	74.00	28.78	500.00	100.0	H	226.00	-14
2102.50	41.01	---	74.00	32.99	500.00	100.0	H	355.00	-12
2108.13	---	29.48	54.00	24.52	500.00	100.0	H	241.00	-12
2283.63	41.81	---	74.00	32.19	500.00	200.0	H	0.00	-11
2383.75	---	29.99	54.00	24.01	500.00	100.0	H	0.00	-10
4551.63	42.68	---	74.00	31.32	500.00	100.0	H	256.00	-5
4639.38	---	31.38	54.00	22.62	500.00	100.0	H	355.00	-5
6513.63	---	34.69	54.00	19.31	500.00	100.0	V	130.00	0
6609.25	45.89	---	74.00	28.11	500.00	100.0	V	0.00	0
8628.63	---	38.26	54.00	15.74	500.00	100.0	H	211.00	3
8828.88	49.53	---	74.00	24.47	500.00	200.0	V	358.00	4

Radiates Emission from 1GHz to 10GHz

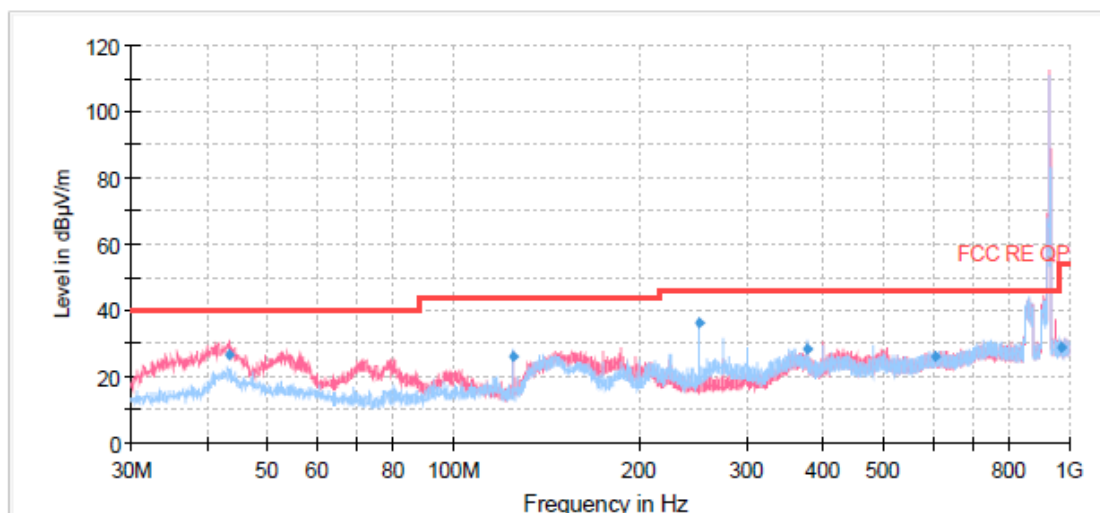
Hyper Wi-Fi (1M): 926.5 MHz



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Azimuth (deg)	Corr. (dB/m)
0.01	54.72	127.66	72.94	500.00	0.200	285.00	18
0.08	51.98	110.01	58.03	500.00	0.200	96.00	17
0.51	29.64	73.48	43.84	150.00	9.000	109.00	17
0.65	28.80	71.31	42.52	150.00	9.000	115.00	17
2.81	23.15	69.50	46.35	150.00	9.000	153.00	17
9.86	19.16	69.50	50.34	150.00	9.000	45.00	17

Radiates Emission from 9kHz to 30MHz

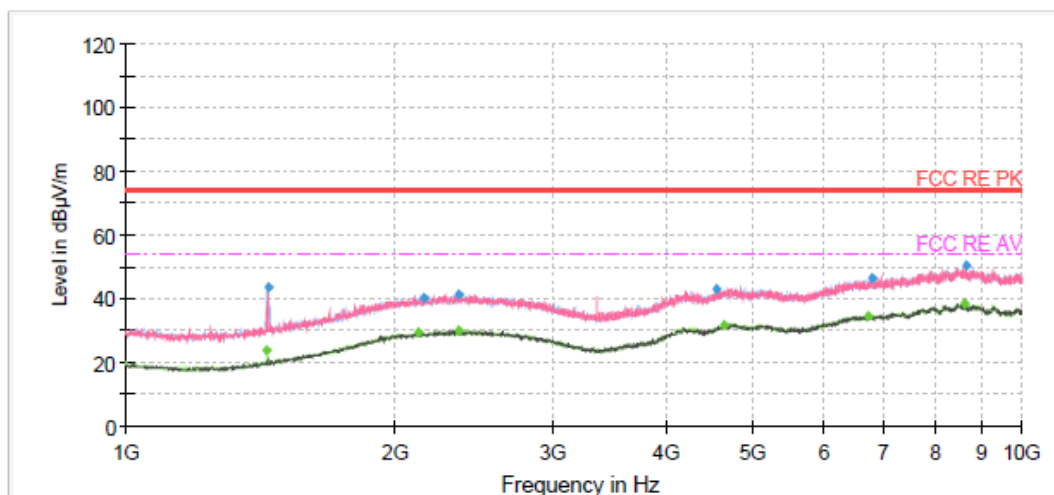


Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
43.14	26.47	40.00	13.53	1000.00	100.0	V	0.00	19
125.01	26.28	43.50	17.22	1000.00	213.0	H	136.00	16
250.00	36.15	46.00	9.85	1000.00	100.0	H	322.00	20
375.02	28.44	46.00	17.56	1000.00	100.0	H	325.00	22
605.46	25.90	46.00	20.10	1000.00	124.0	H	351.00	27
970.69	28.86	54.00	25.14	1000.00	125.0	H	24.00	31

Note: The signal beyond the limit is carrier.

Radiates Emission from 30MHz to 1GHz



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)
1436.50	---	23.84	54.00	30.16	500.00	100.0	H	230.00	-14
1439.88	43.53	---	74.00	30.47	500.00	100.0	V	235.00	-14
2122.75	---	29.70	54.00	24.30	500.00	200.0	V	261.00	-11
2148.63	40.41	---	74.00	33.59	500.00	200.0	H	87.00	-11
2346.63	---	29.96	54.00	24.04	500.00	200.0	V	230.00	-11
2351.13	41.32	---	74.00	32.68	500.00	200.0	H	237.00	-11
4561.75	43.19	---	74.00	30.81	500.00	200.0	V	358.00	-5
4638.25	---	31.63	54.00	22.37	500.00	200.0	V	2.00	-5
6739.75	---	34.61	54.00	19.39	500.00	200.0	V	261.00	0
6789.25	46.54	---	74.00	27.46	500.00	200.0	V	186.00	0
8628.63	---	38.28	54.00	15.72	500.00	200.0	V	349.00	3
8645.50	50.40	---	74.00	23.60	500.00	100.0	V	266.00	3

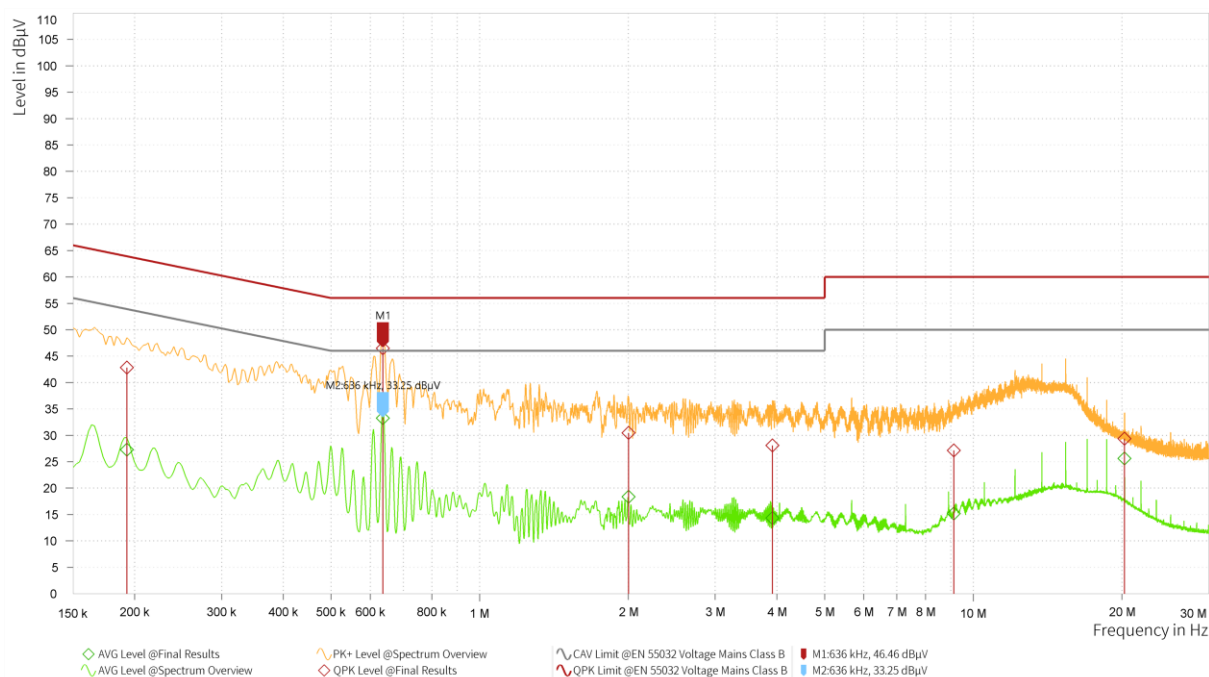
Radiates Emission from 1GHz to 10GHz

2. Conducted Emission

2.1. Hyper Wi-Fi

During the test, the Conducted Emission was performed in all modes with all channels, Hyper Wi-Fi (1M) are selected as the worst condition. The test data of the worst-case condition was recorded in this report.

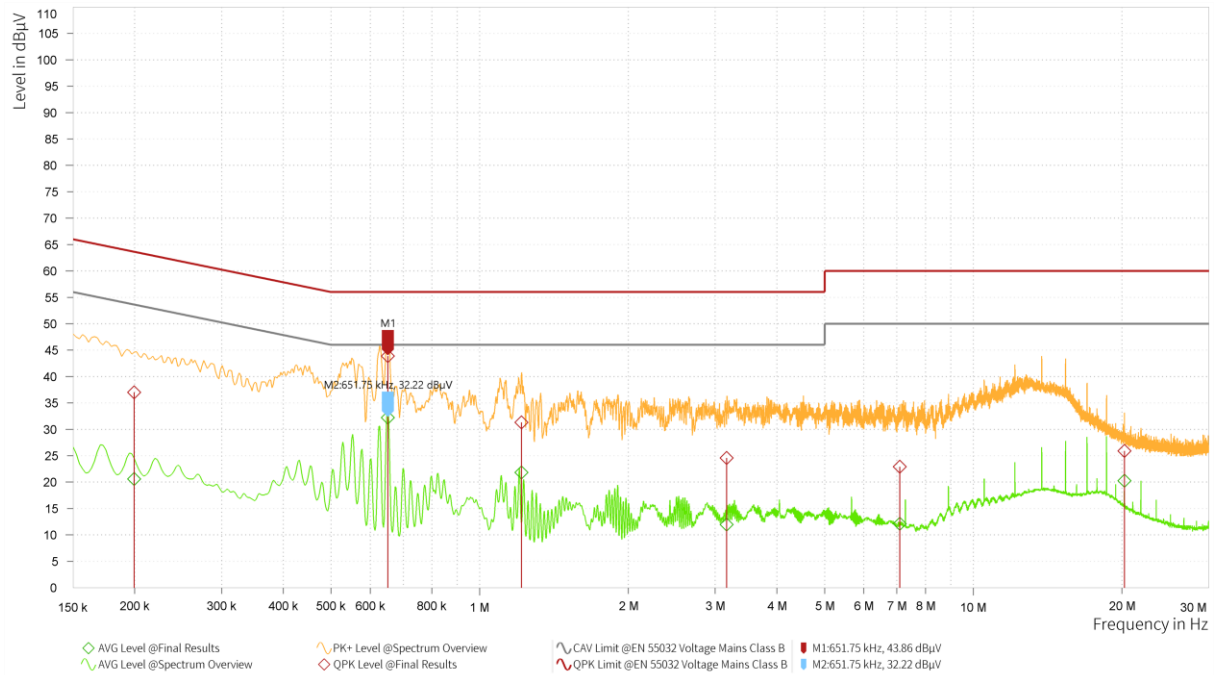
Test Voltage: 120V/60Hz.



Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	AVG Level [dBμV]	AVG: CAV Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.193	42.84	63.92	21.08	27.25	53.92	26.66	21.02	L1	9.000	1.000
0.636	46.46	56.00	9.54	33.25	46.00	12.75	20.64	L1	9.000	1.000
2.002	30.47	56.00	25.53	18.37	46.00	27.63	19.65	L1	9.000	1.000
3.919	28.08	56.00	27.92	14.33	46.00	31.67	19.43	L1	9.000	1.000
9.134	27.13	60.00	32.87	15.17	50.00	34.83	19.41	L1	9.000	1.000
20.249	29.36	60.00	30.64	25.60	50.00	24.40	19.67	L1	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

L line Conducted Emission from 150 kHz to 30 MHz



Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	AVG Level [dBμV]	AVG: CAV Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.200	37.01	63.63	26.62	20.59	53.63	33.04	21.02	N	9.000	1.000
0.652	43.86	56.00	12.14	32.22	46.00	13.78	20.63	N	9.000	1.000
1.214	31.30	56.00	24.70	21.82	46.00	24.18	20.02	N	9.000	1.000
3.163	24.58	56.00	31.42	11.94	46.00	34.06	19.48	N	9.000	1.000
7.098	22.92	60.00	37.08	12.10	50.00	37.90	19.41	N	9.000	1.000
20.238	25.92	60.00	34.08	20.27	50.00	29.73	19.72	N	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz