

ANNEX A: Test Result

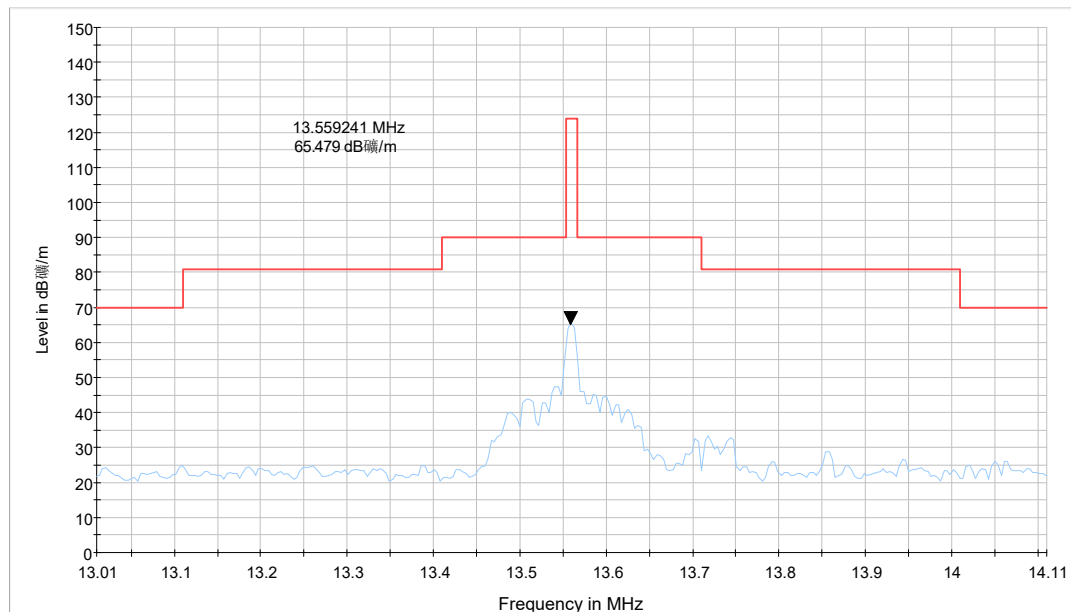
1. Radiates Emission

The test is in transmitting all mode, NFC-A was selected as the worst condition. The test data of the worst-case condition was recorded in this report.

The field strength of spurious 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 other antennas are vertical and horizontal.

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

In-band



Radiates Emission from 13.01MHz to 14.11MHz

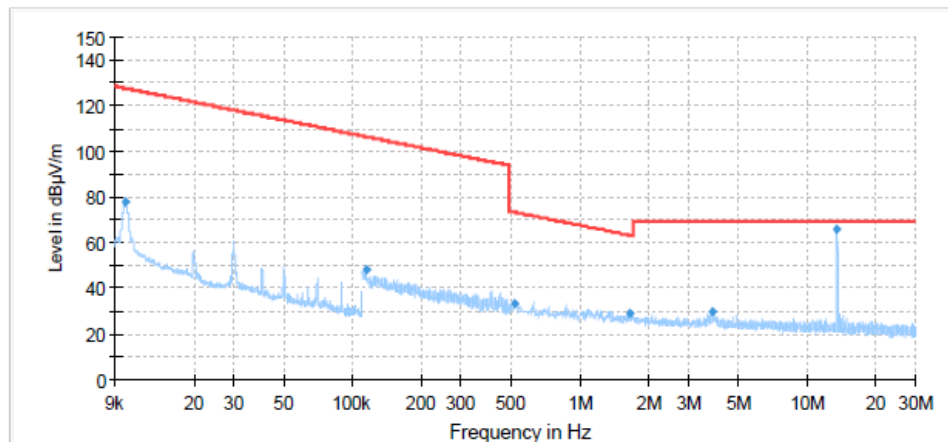
Note: This graph displays the maximum values of coaxial and coplanar by software

Out-of-band

The test is in transmitting all mode, NFC-A was selected as the worst condition. The test data of the worst-case condition was recorded in this report.

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

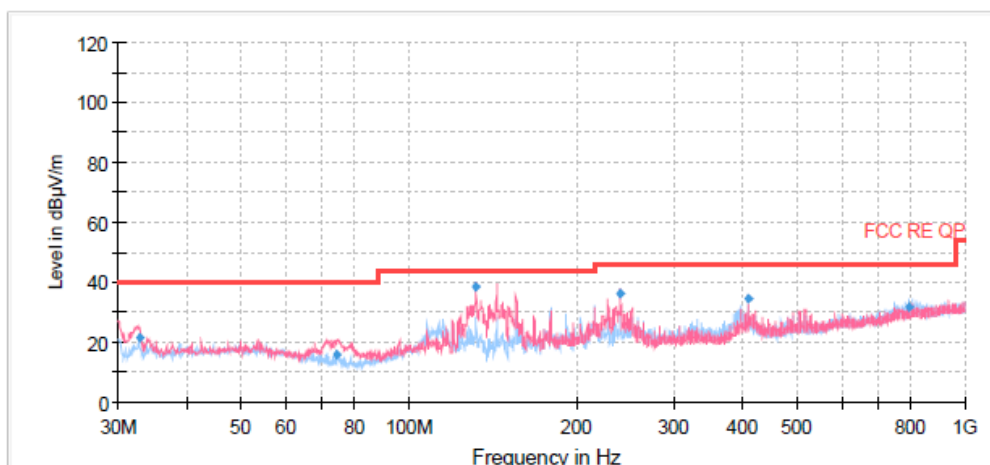
For above 1GHz, Blue trace uses the peak detection, Green trace uses the average detection.



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Azimuth (deg)	Corr. (dB/m)
0.01	77.59	127.65	50.06	500.00	0.00	18
0.11	47.88	106.40	58.52	150.00	68.00	17
0.52	33.19	73.35	40.16	150.00	243.00	17
1.65	28.76	63.25	34.50	150.00	88.00	17
3.80	29.48	69.50	40.02	150.00	14.00	17
13.56	65.48	69.50	4.02	150.00	353.00	17

Radiates Emission from 9kHz to 30MHz



Radiates Emission from 30MHz to 1GHz

Note: This graph displays the maximum values of horizontal and vertical by software

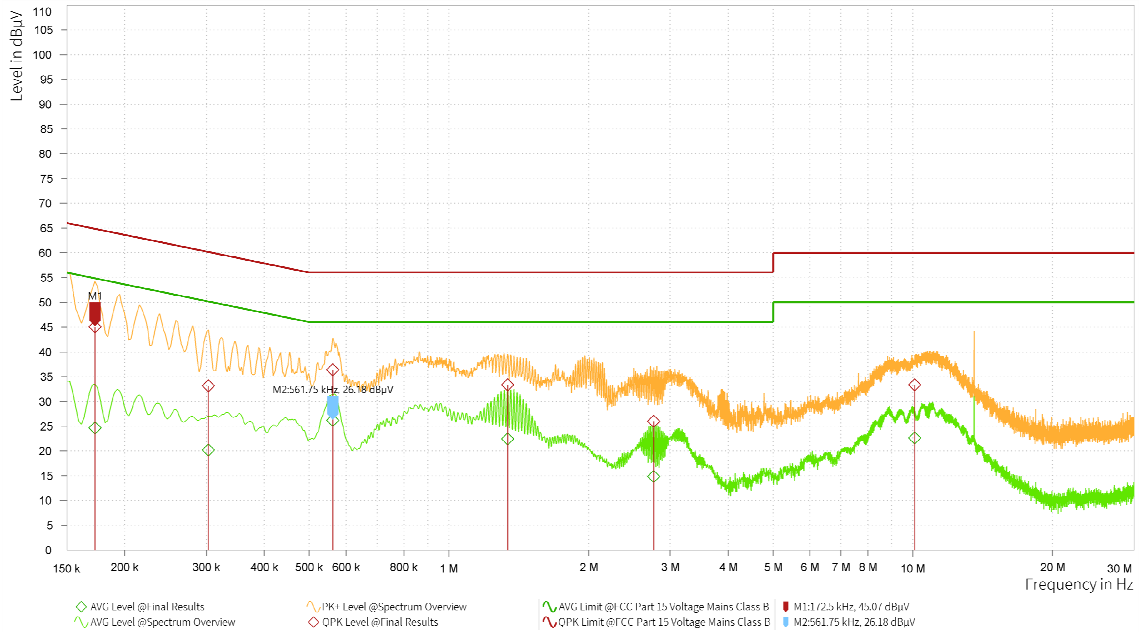
Frequency (MHz)	Quasi-Peak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Polarization	Azimuth (deg)	Correct Factor (dB)
32.87	21.77	40.00	18.23	101.0	V	22.00	17
74.26	15.97	40.00	24.03	184.0	V	268.00	15
132.01	38.44	43.50	5.06	101.0	V	26.00	16
240.01	35.95	46.00	10.05	198.0	V	174.00	20
407.98	34.36	46.00	11.64	124.0	V	178.00	24
792.06	31.77	46.00	14.23	101.0	H	95.00	30

Remark: 1. Correction Factor = Antenna factor + Insertion loss (cable loss + amplifier gain)

2. Margin = Limit – Quasi-Peak

2. Conducted Emission

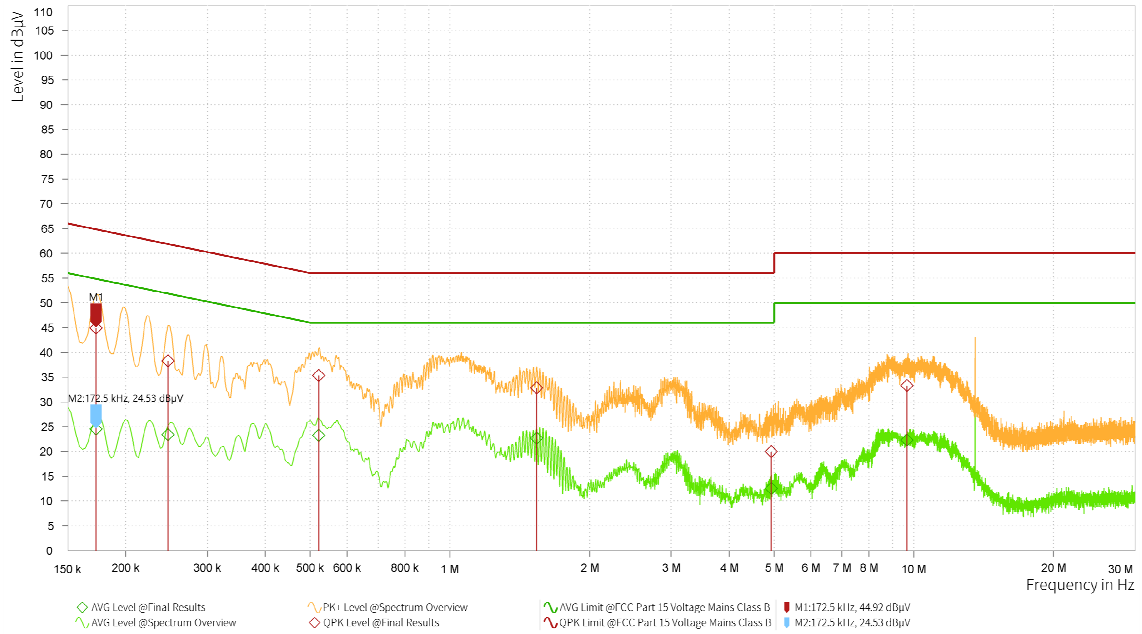
During the test, the Conducted Emission was performed in all modes with all channel. The test data of the worst-case condition was recorded in this report.



Frequency [MHz]	QPK Level [dBμV]	QPK Limit [dBμV]	QPK Margin [dB]	AVG Level [dBμV]	AVG Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.173	45.07	64.84	19.77	24.69	54.84	30.15	20.89	L1	9.000	1.000
0.303	33.14	60.16	27.02	20.22	50.16	29.94	20.94	L1	9.000	1.000
0.562	36.39	56.00	19.61	26.18	46.00	19.82	20.71	L1	9.000	1.000
1.338	33.34	56.00	22.66	22.41	46.00	23.59	19.93	L1	9.000	1.000
2.765	26.01	56.00	29.99	14.84	46.00	31.16	19.51	L1	9.000	1.000
10.093	33.33	60.00	26.67	22.63	50.00	27.37	19.42	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 Limit [dBμV]	AVG Margin [dB]	Correction [dB]	Line	Meas. BW [kHz]	Meas. Time [s]
0.173	44.92	64.84	19.92	24.53	54.84	30.31	20.90	N	9.000	1.000
0.247	38.29	61.87	23.57	23.40	51.87	28.47	20.99	N	9.000	1.000
0.521	35.33	56.00	20.67	23.24	46.00	22.76	20.77	N	9.000	1.000
1.538	32.85	56.00	23.15	22.68	46.00	23.32	19.83	N	9.000	1.000
4.931	19.96	56.00	36.04	12.54	46.00	33.46	19.41	N	9.000	1.000
9.670	33.32	60.00	26.68	22.28	50.00	27.72	19.43	N	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz