

ANNEX A: Test Result

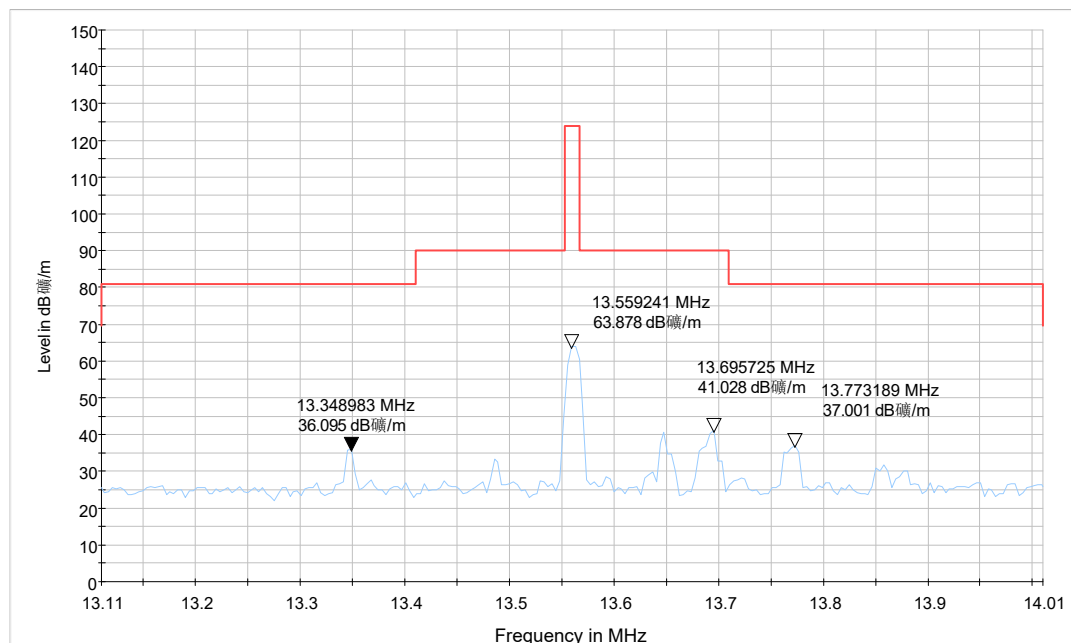
1. Radiates Emission

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

In-band



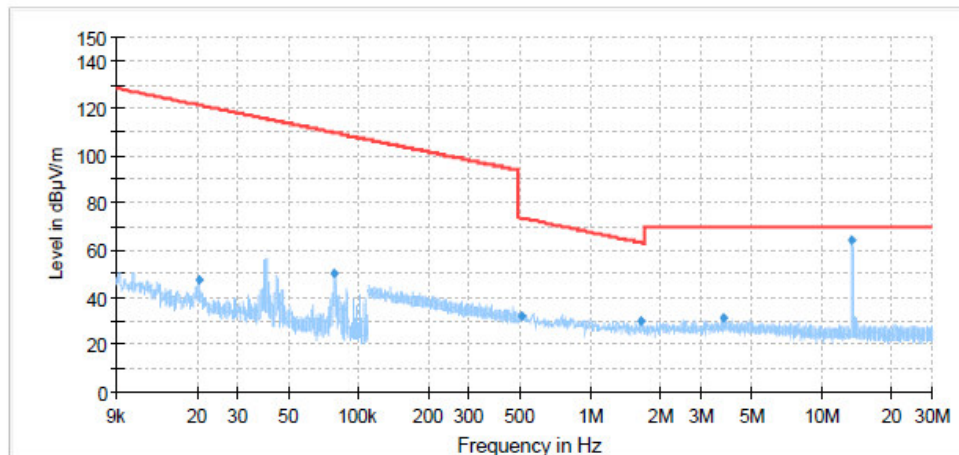
Radiates Emission from 13.11MHz to 14.01MHz

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.

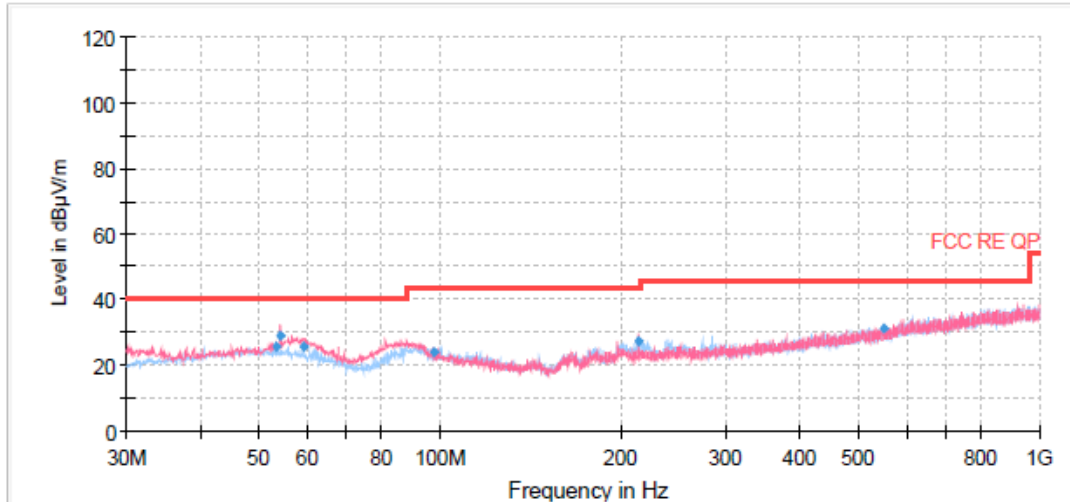
The following graphs display the maximum values of coaxial and coplanar for 9k-30MHz; horizontal and vertical for 30MHz to 1GHz by software.



Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Azimuth (deg)	Corr. (dB/m)
0.02	47.68	121.42	73.74	500.00	118.00	17
0.08	50.55	109.70	59.15	500.00	118.00	17
0.50	32.12	73.54	41.42	150.00	51.00	17
1.67	29.89	63.14	33.25	150.00	354.00	17
3.76	31.08	69.50	38.42	150.00	11.00	17
13.56	63.91	69.50	5.59	150.00	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)
53.52	25.81	40.00	14.19	1000.00	100.0	V	16.00	20
54.25	29.03	40.00	10.97	1000.00	100.0	V	0.00	20
59.10	25.93	40.00	14.07	1000.00	100.0	V	42.00	19
97.78	23.72	43.50	19.78	1000.00	200.0	H	304.00	18
214.54	27.15	43.50	16.35	1000.00	200.0	V	288.00	18
549.56	30.98	46.00	15.02	1000.00	200.0	H	176.00	26

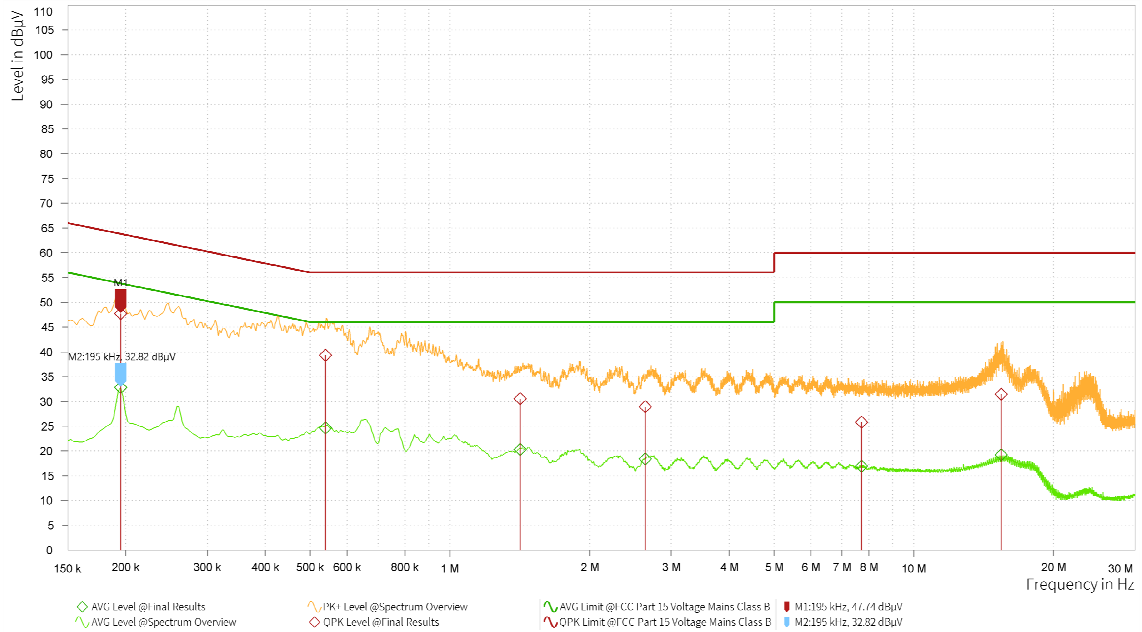
Radiates Emission from 30MHz to 1GHz

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]
0.195	47.74	63.82	16.08	32.82	53.82	21.00	21.02	L1	9.000
0.539	39.31	56.00	16.69	24.65	46.00	21.35	20.74	L1	9.000
1.417	30.54	56.00	25.46	20.30	46.00	25.70	19.88	L1	9.000
2.639	28.96	56.00	27.04	18.40	46.00	27.60	19.52	L1	9.000
7.717	25.82	60.00	34.18	16.92	50.00	33.08	19.41	L1	9.000
15.432	31.43	60.00	28.57	19.21	50.00	30.79	19.52	L1	9.000

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]
0.215	44.47	63.00	18.53	28.32	53.00	24.68	21.01	N	9.000	1.000
0.434	37.88	57.19	19.31	21.01	47.19	26.17	20.85	N	9.000	1.000
1.529	28.94	56.00	27.06	18.94	46.00	27.06	19.84	N	9.000	1.000
3.158	27.88	56.00	28.12	17.65	46.00	28.35	19.48	N	9.000	1.000
7.224	23.75	60.00	36.25	15.54	50.00	34.46	19.41	N	9.000	1.000
14.784	29.44	60.00	30.56	18.01	50.00	31.99	19.53	N	9.000	1.000

Remark: Correct factor=cable loss + LISN factor

N line Conducted Emission from 150 kHz to 30 MHz