

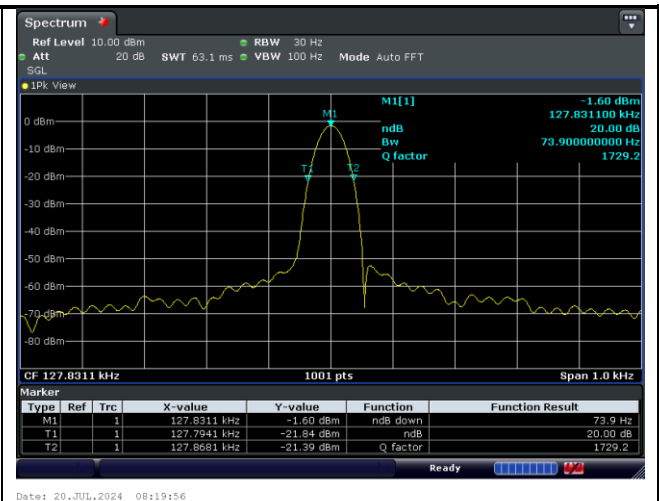
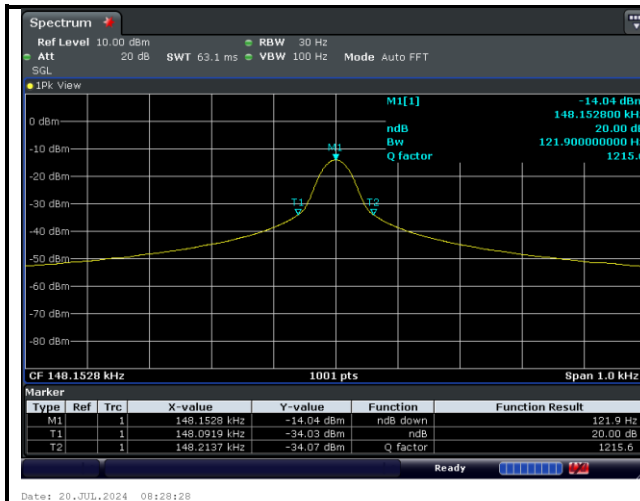
Appendix A: Test Results of FCC Part 15C

APPENDIX A: TEST RESULTS OF FCC PART 15C.....	1
APPENDIX A.1: TEST RESULTS OF 20DB BANDWIDTH	2
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APPENDIX A.3: TEST RESULTS OF CONDUCTED EMISSION ON AC MAINS.....	12

Appendix A.1: Test Results of 20dB Bandwidth

Frequency	20 dB Bandwidth (Hz)
Output 1: 110.5-205kHz	121.9
Output 1: 127.7kHz	73.9
Output 2: 360kHz	73.9
Output 2: 127.7kHz	74.9
Output 3: 326.5kHz	73.9
Output 3: 1.778MHz	247.8
Output 4: 110.5-205kHz	75.3

The test plot as follows:

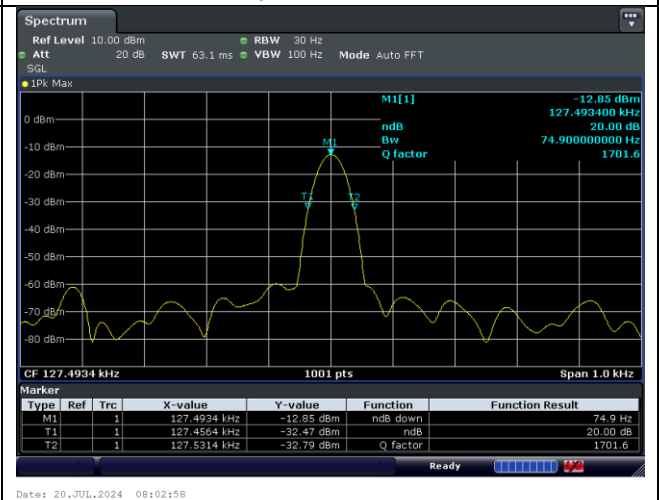


Output 1: 110.5-205kHz

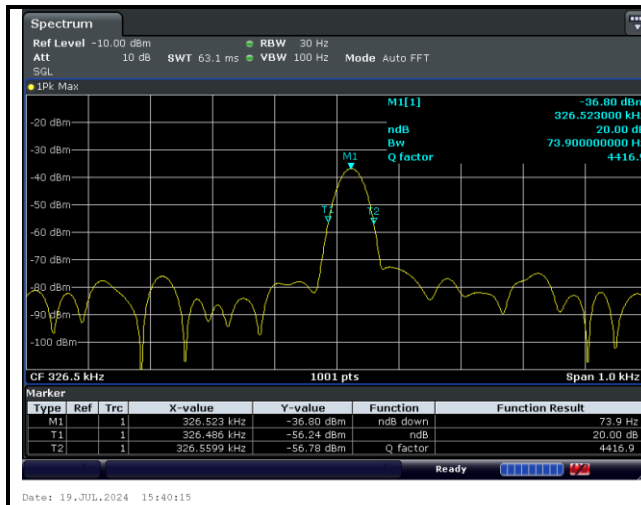


Output 2: 360kHz

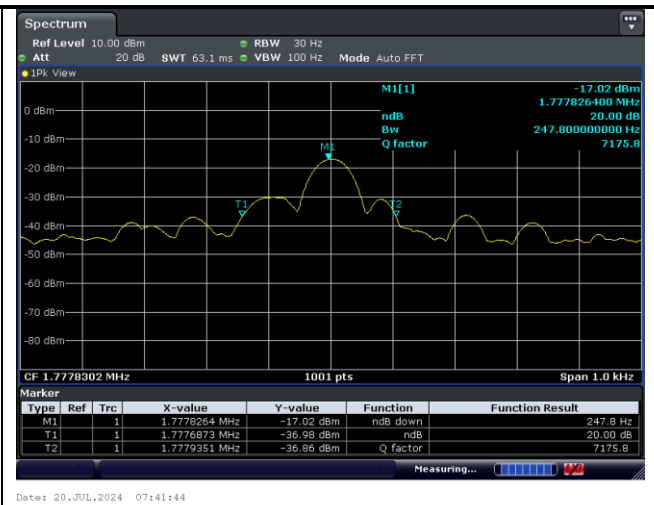
Output 1: 127.7kHz



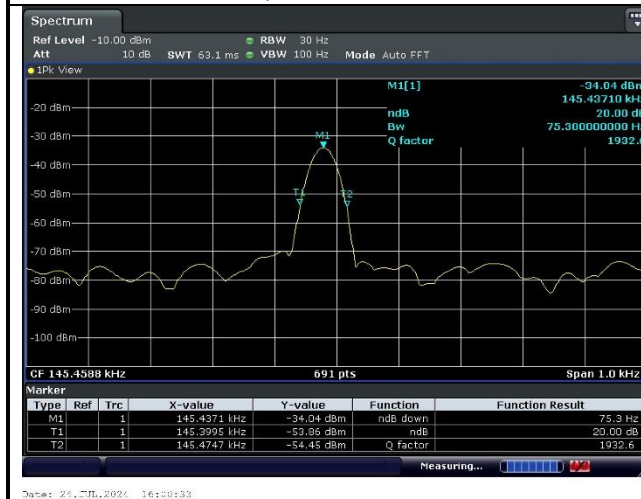
Output 2: 127.7kHz



Output 3: 326.5kHz



Output 3: 1.778MHz



Output 4: 110.5-205kHz

/

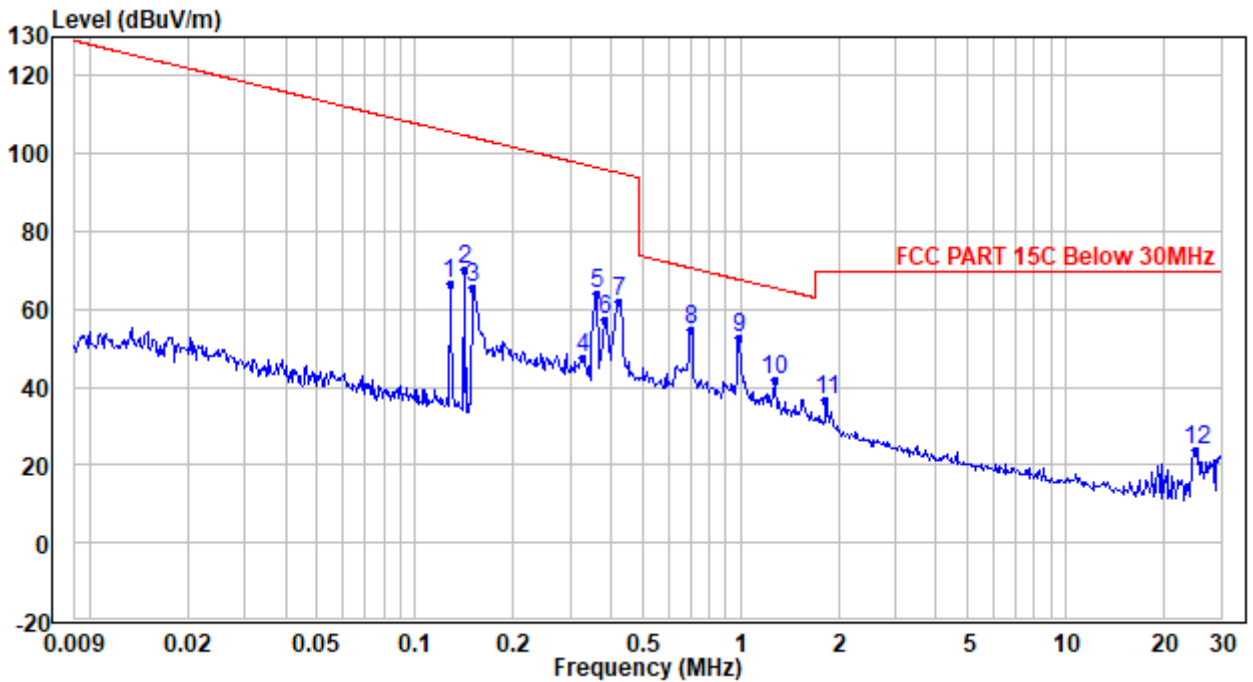
/

Appendix A.2: Test Results of Radiated Spurious Emission

Radiated Emission Test Data (9 KHz ~ 30MHz):

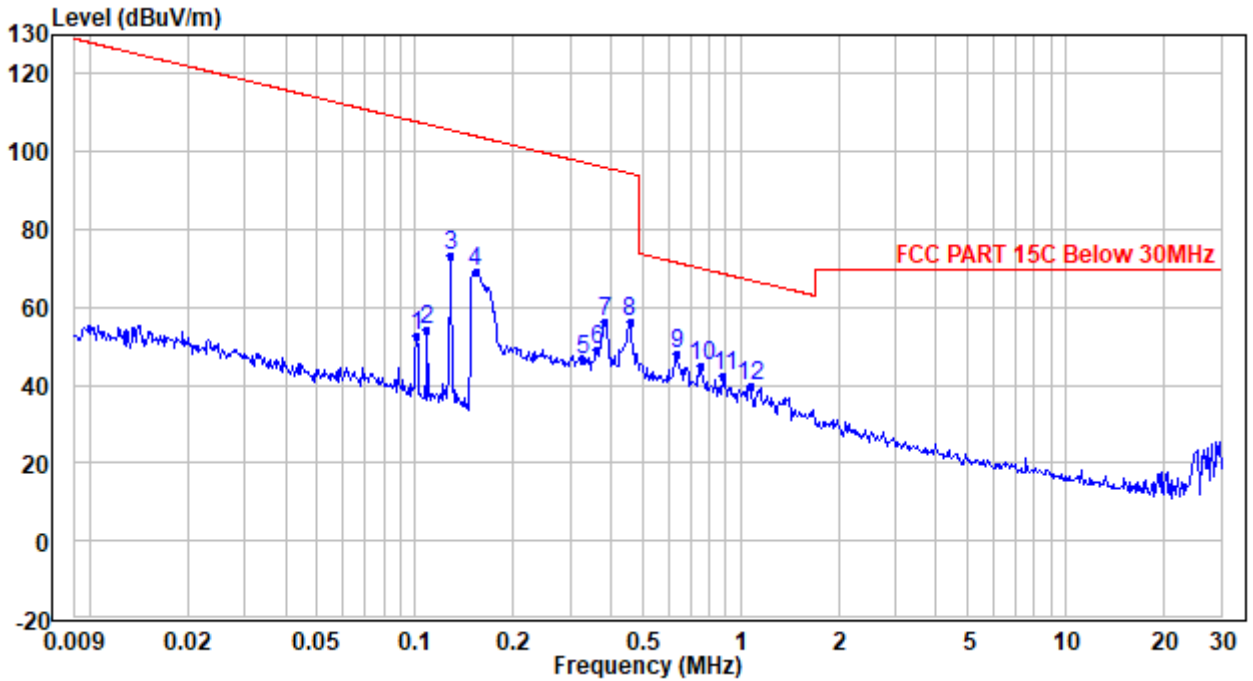
Worst Test data: Test Mode 11

X-axis



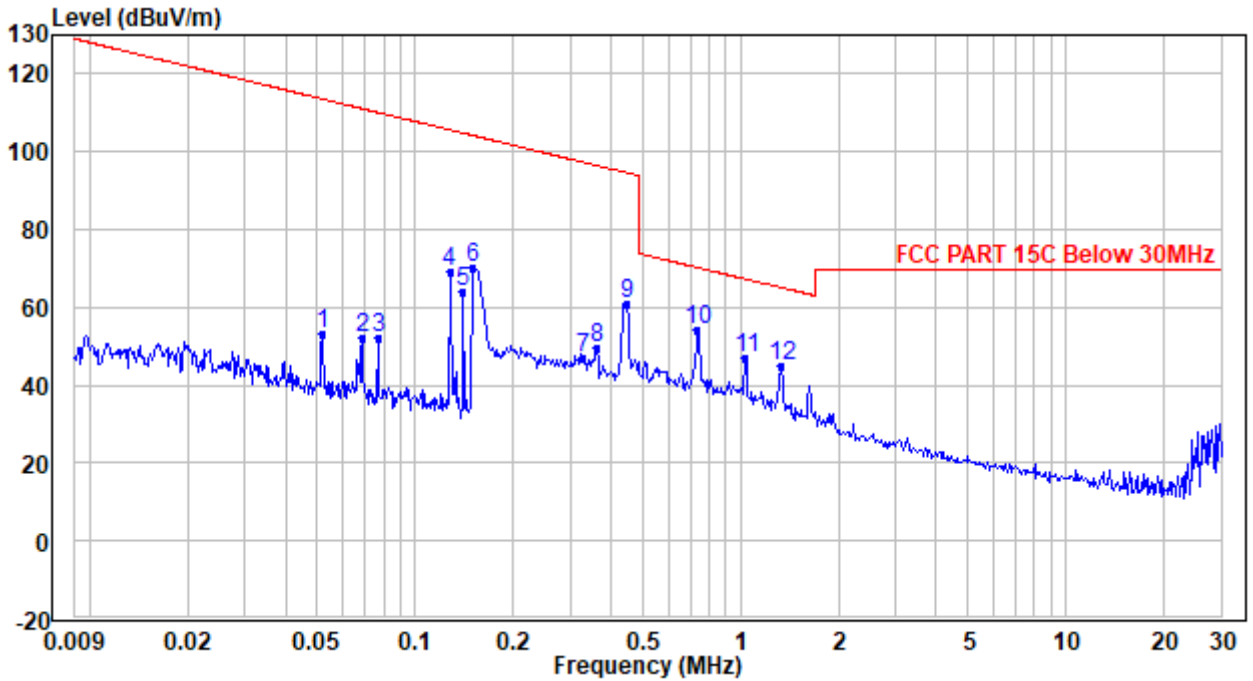
No.	Frequency (MHz)	Reading (dB μ V/m)	Correction factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1	0.128	84.54	-18.13	66.41	105.64	-39.23	Peak
2	0.142	88.19	-18.22	69.97	104.74	-34.77	Peak
3	0.150	84.01	-18.30	65.71	104.22	-38.51	Peak
4	0.327	65.91	-18.34	47.57	97.38	-49.81	Peak
5	0.360	82.61	-18.35	64.26	96.51	-32.25	Peak
6	0.382	75.48	-18.36	57.12	96.00	-38.88	Peak
7	0.425	80.57	-18.37	62.20	95.06	-32.86	Peak
8	0.707	73.02	-18.39	54.63	70.63	-16.00	Peak
9	0.993	71.28	-18.35	52.93	67.68	-14.75	Peak
10	1.271	60.02	-18.37	41.65	65.55	-23.90	Peak
11	1.832	55.23	-18.44	36.79	69.50	-32.71	Peak
12	25.088	44.48	-20.45	24.03	69.50	-45.47	Peak

Y-axis



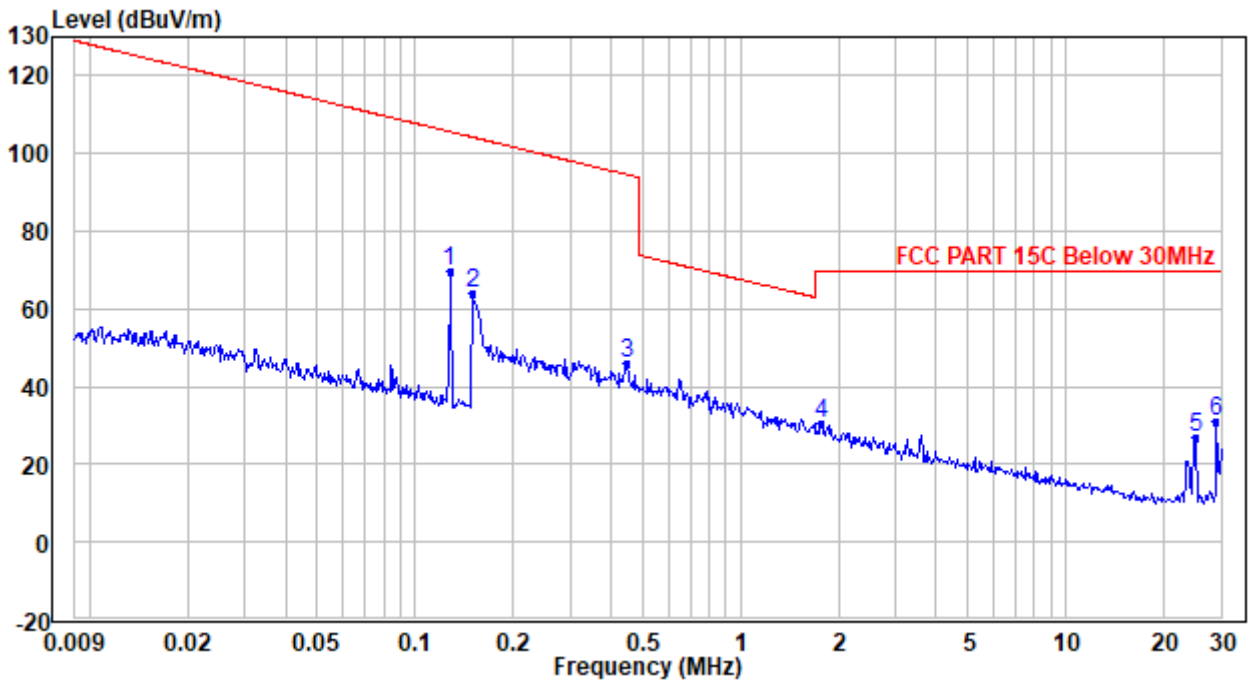
No.	Frequency (MHz)	Reading (dBUV/m)	Correction factor (dB/m)	Result (dBUV/m)	Limit (dBUV/m)	Margin (dB)	Detector
1	0.102	71.05	-18.32	52.73	107.65	-54.92	Peak
2	0.109	72.72	-18.39	54.33	107.05	-52.72	Peak
3	0.128	91.24	-18.12	73.12	105.59	-32.47	Peak
4	0.154	87.41	-18.30	69.11	104.02	-34.91	Peak
5	0.327	65.05	-18.34	46.71	97.38	-50.67	Peak
6	0.360	67.51	-18.35	49.16	96.51	-47.35	Peak
7	0.382	74.75	-18.36	56.39	96.00	-39.61	Peak
8	0.457	74.58	-18.38	56.20	94.41	-38.21	Peak
9	0.636	66.21	-18.39	47.82	71.55	-23.73	Peak
10	0.761	63.32	-18.39	44.93	69.98	-25.05	Peak
11	0.889	60.94	-18.37	42.57	68.65	-26.08	Peak
12	1.071	58.20	-18.36	39.84	67.03	-27.19	Peak

Z-axis



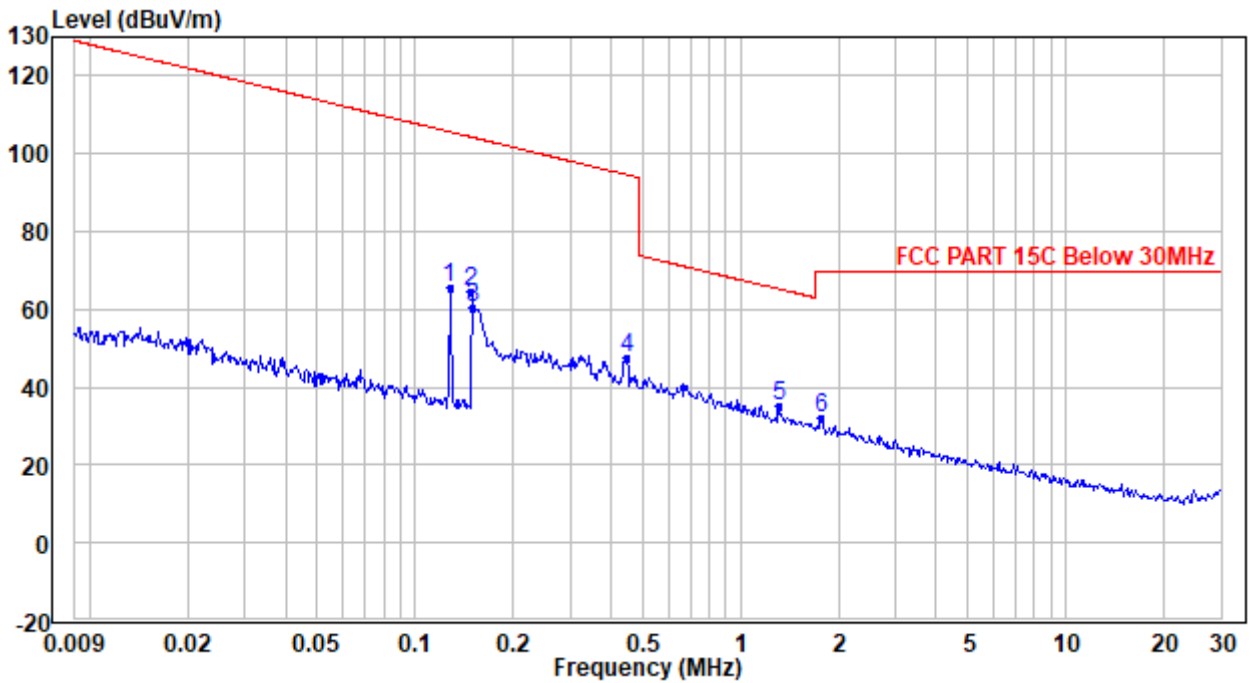
No.	Frequency (MHz)	Reading (dBμV/m)	Correction factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.052	71.50	-18.48	53.02	113.61	-60.59	Peak
2	0.069	70.56	-18.40	52.16	111.13	-58.97	Peak
3	0.077	70.51	-18.33	52.18	110.13	-57.95	Peak
4	0.128	87.13	-18.13	69.00	105.64	-36.64	Peak
5	0.140	82.09	-18.20	63.89	104.82	-40.93	Peak
6	0.150	88.46	-18.30	70.16	104.22	-34.06	Peak
7	0.327	65.10	-18.34	46.76	97.38	-50.62	Peak
8	0.360	68.14	-18.35	49.79	96.51	-46.72	Peak
9	0.448	79.35	-18.38	60.97	94.59	-33.62	Peak
10	0.738	72.56	-18.39	54.17	70.26	-16.09	Peak
11	1.036	65.51	-18.36	47.15	67.32	-20.17	Peak
12	1.334	63.25	-18.39	44.86	65.13	-20.27	Peak

Worst Test data: Test Mode 9
1.778MHz mode_X-axis



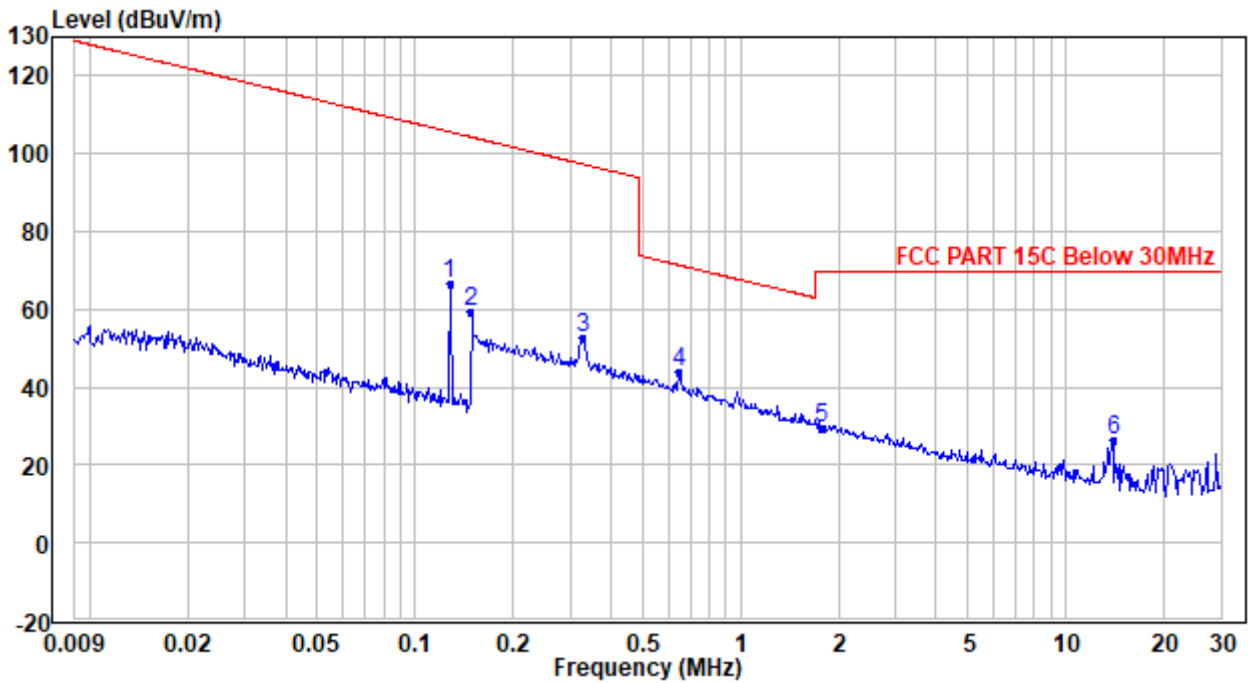
No.	Frequency (MHz)	Reading (dB μ V/m)	Correction factor (dB/m)	Result (dB μ V/m)	Limit (dB μ V/m)	Margin (dB)	Detector
1	0.128	88.06	-18.13	69.93	105.64	-35.71	Peak
2	0.150	82.06	-18.30	63.76	104.22	-40.46	Peak
3	0.448	64.31	-18.38	45.93	94.59	-48.66	Peak
4	1.778	48.74	-18.44	30.30	69.50	-39.20	Peak
5	25.045	47.10	-20.44	26.66	69.50	-42.84	Peak
6	29.059	51.68	-20.61	31.07	69.50	-38.43	Peak

1.778MHz mode_Y-axis



No.	Frequency (MHz)	Reading (dBμV/m)	Correction factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.128	83.90	-18.13	65.77	105.64	-39.87	Peak
2	0.149	82.66	-18.29	64.37	104.27	-39.90	Peak
3	0.150	78.60	-18.30	60.30	104.22	-43.92	Peak
4	0.448	66.04	-18.38	47.66	94.59	-46.93	Peak
5	1.309	53.60	-18.38	35.22	65.29	-30.07	Peak
6	1.778	50.72	-18.44	32.28	69.50	-37.22	Peak

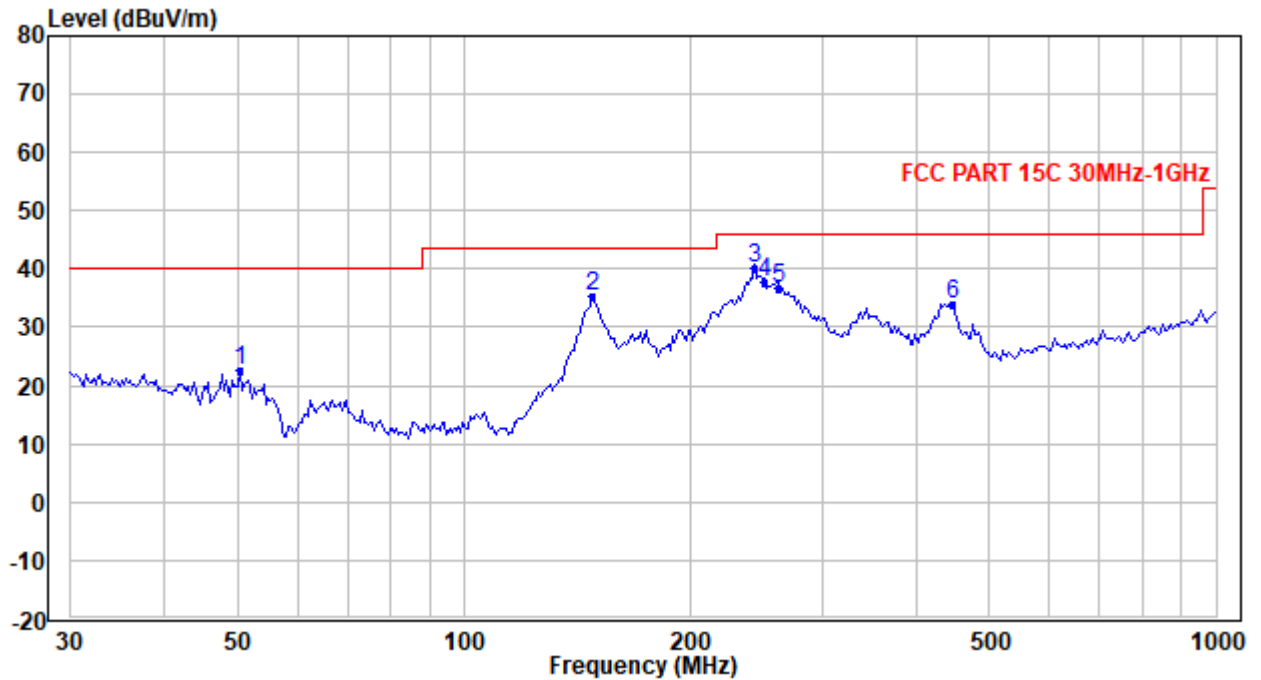
1.778MHz mode_Z-axis



No.	Frequency (MHz)	Reading (dBμV/m)	Correction factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	0.128	84.68	-18.13	66.55	105.64	-39.09	Peak
2	0.149	77.83	-18.29	59.54	104.27	-44.73	Peak
3	0.327	71.12	-18.34	52.78	97.38	-44.60	Peak
4	0.649	62.38	-18.39	43.99	71.36	-27.37	Peak
5	1.778	47.84	-18.44	29.40	69.50	-40.10	Peak
6	13.967	45.45	-18.86	26.59	69.50	-42.91	Peak

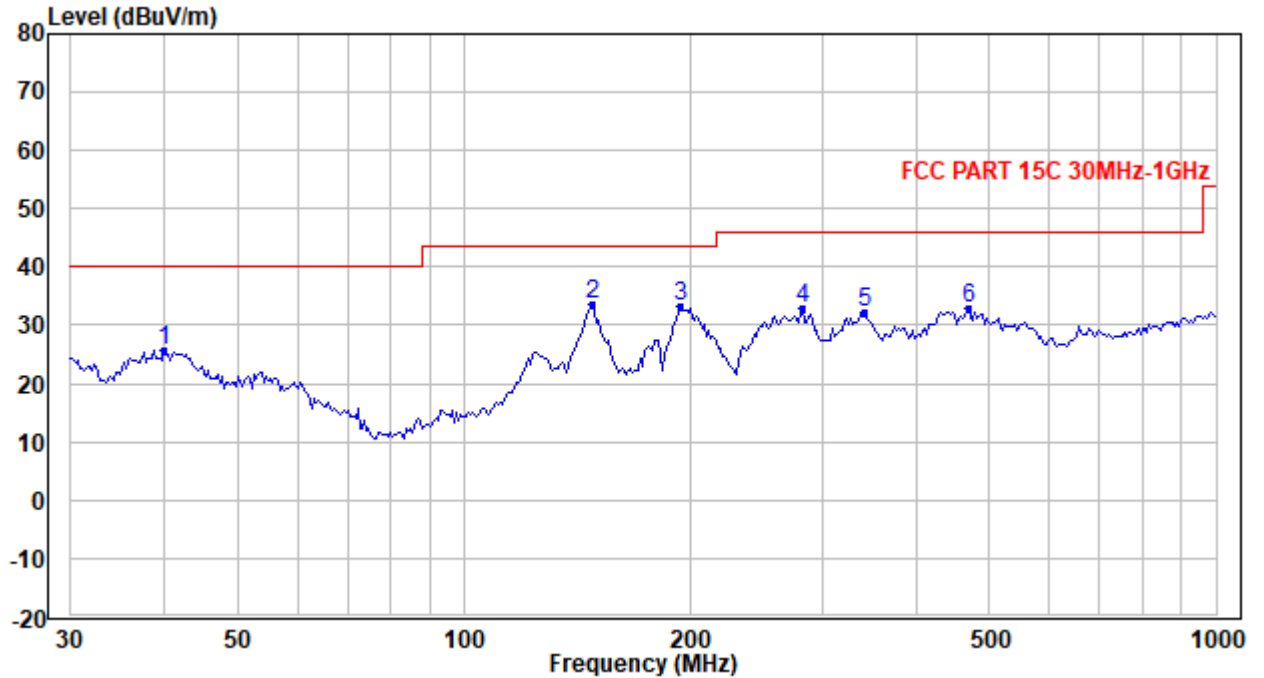
Radiated Emission Test Data (30 MHz ~ 1 GHz): Test Mode 11

Horizontal



No.	Frequency (MHz)	Reading (dBμV/m)	Correction factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	50.461	36.48	-13.75	22.73	40.00	-17.27	QP
2	147.875	50.09	-14.62	35.47	43.50	-8.03	QP
3	243.543	50.59	-10.61	39.98	46.00	-6.02	QP
4	250.486	48.19	-10.61	37.58	46.00	-8.42	QP
5	261.273	46.94	-10.35	36.59	46.00	-9.41	QP
6	445.693	38.09	-4.01	34.08	46.00	-11.92	QP

Vertical



No.	Frequency (MHz)	Reading (dBμV/m)	Correction factor (dB/m)	Result (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector
1	40.017	34.53	-8.93	25.60	40.00	-14.40	QP
2	147.875	48.26	-14.62	33.64	43.50	-9.86	QP
3	194.499	44.49	-11.18	33.31	43.50	-10.19	QP
4	282.270	42.59	-9.58	33.01	46.00	-12.99	QP
5	341.244	39.61	-7.29	32.32	46.00	-13.68	QP
6	468.165	36.40	-3.33	33.07	46.00	-12.93	QP

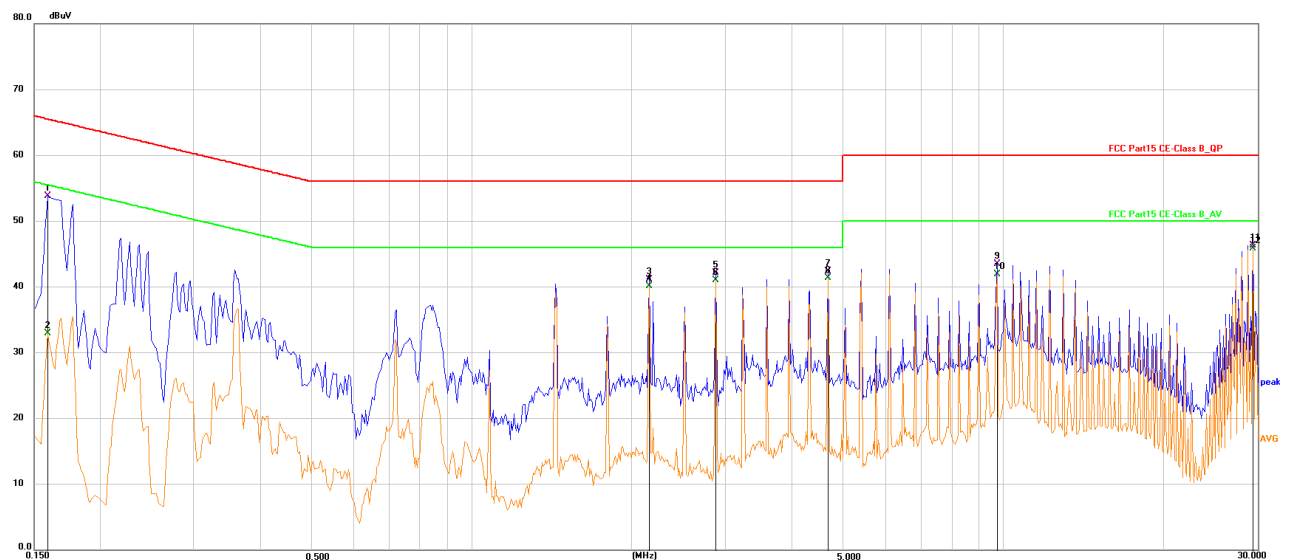
Remark:

1. Correct Factor = Antenna Factor + Cable Loss - Amplifier Gain, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result – Limit

Appendix A.3: Test Results of Conducted Emission on AC Mains

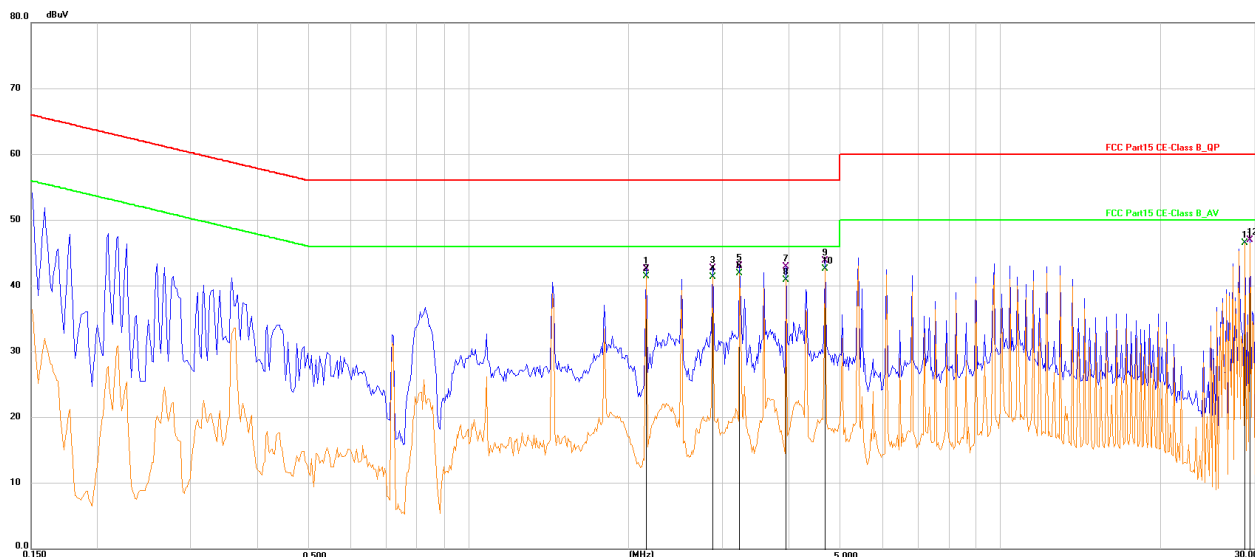
Quasi Peak and Average:
Worst Test data: Test Mode 13

Live Line



No.	Frequency (MHz)	Reading (dBμV)	Correction factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	0.1590	43.55	10.20	53.75	65.52	-11.77	QP
2	0.1590	22.72	10.20	32.92	55.52	-22.60	AVG
3	2.1570	30.92	10.24	41.16	56.00	-14.84	QP
4	2.1570	29.87	10.24	40.11	46.00	-5.89	AVG
5	2.8770	31.84	10.24	42.08	56.00	-13.92	QP
6	2.8770	30.74	10.24	40.98	46.00	-5.02	AVG
7	4.6725	32.09	10.24	42.33	56.00	-13.67	QP
8	4.6725	31.13	10.24	41.37	46.00	-4.63	AVG
9	9.7080	33.05	10.48	43.53	60.00	-16.47	QP
10	9.7080	31.43	10.48	41.91	50.00	-8.09	AVG
11	29.4852	35.41	10.91	46.32	60.00	-13.68	QP
12	29.4852	34.89	10.91	45.80	50.00	-4.20	AVG

Neutral Line



No.	Frequency (MHz)	Reading (dBμV)	Correction factor (dB)	Result (dBμV)	Limit (dBμV)	Margin (dB)	Detector
1	2.1570	32.25	10.33	42.58	56.00	-13.42	QP
2	2.1570	31.10	10.33	41.43	46.00	-4.57	AVG
3	2.8770	32.39	10.25	42.64	56.00	-13.36	QP
4	2.8770	31.08	10.25	41.33	46.00	-4.67	AVG
5	3.2370	32.84	10.24	43.08	56.00	-12.92	QP
6	3.2370	31.65	10.24	41.89	46.00	-4.11	AVG
7	3.9525	32.62	10.25	42.87	56.00	-13.13	QP
8	3.9525	30.64	10.25	40.89	46.00	-5.11	AVG
9	4.6725	33.48	10.28	43.76	56.00	-12.24	QP
10	4.6725	32.35	10.28	42.63	46.00	-3.37	AVG
11	28.7654	35.69	10.87	46.56	50.00	-3.44	AVG
12	29.4854	36.05	10.88	46.93	60.00	-13.07	QP

Remark:

1. Correct Factor = LISN Factor + Cable Loss + Pulse Limiter Factor, the value was added to Original Receiver Reading by the software automatically.
2. Result = Reading + Correct Factor.
3. Margin = Result - Limit
4. An initial pre-scan was performed on the Phase and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.
5. All possible modes of operation were investigated, and testing at two nominal voltages of 240V/50Hz and 120V/60Hz, only the worst case emissions reported.