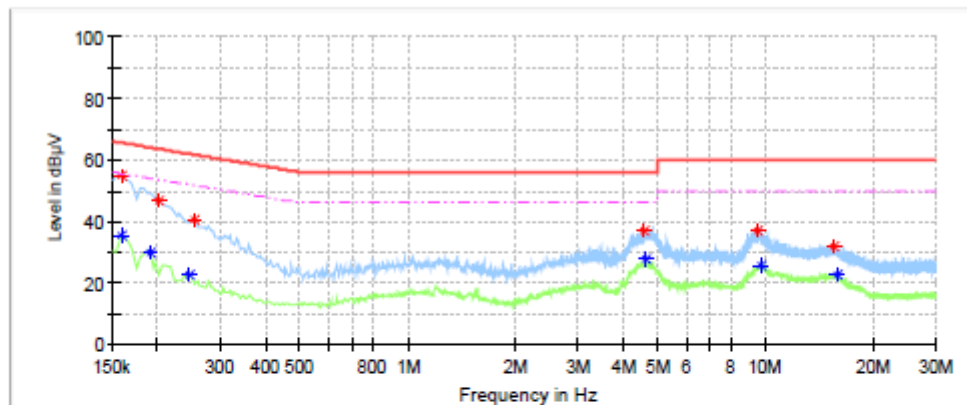


Appendix B: Test Results of FCC 15B & ICES-003

APPENDIX B: TEST RESULTS OF FCC 15B & ICES-003	1
APPENDIX B.1: TEST PLOTS OF CONDUCTED EMISSION	2
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Appendix B.1: Test Plots of Conducted Emission

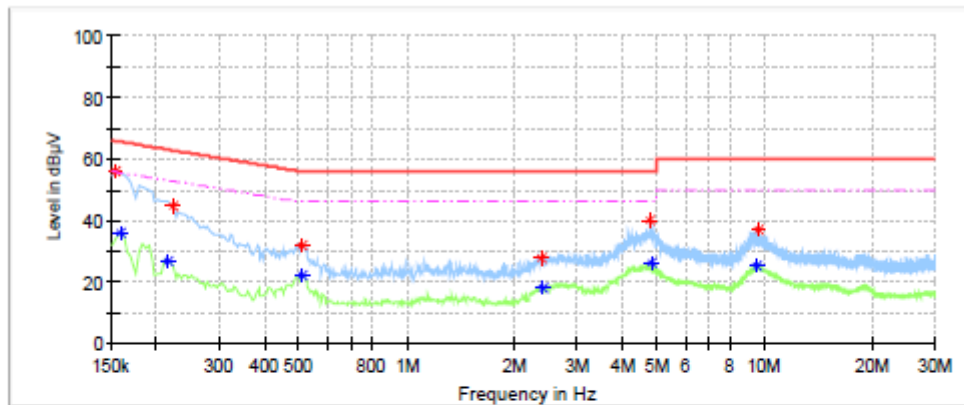
Mode 1_L



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.158000	---	35.17	55.57	20.40	L1	9.6
0.158000	54.95	---	65.57	10.61	L1	9.6
0.190000	---	29.71	54.04	24.33	L1	9.6
0.202000	46.48	---	63.53	17.05	L1	9.6
0.246000	---	22.45	51.89	29.44	L1	9.6
0.254000	40.60	---	61.63	21.03	L1	9.6
4.604000	36.89	---	56.00	19.11	L1	9.9
4.652000	---	27.50	46.00	18.50	L1	9.9
9.492000	36.78	---	60.00	23.22	L1	10.0
9.696000	---	25.79	50.00	24.21	L1	10.0
15.660000	31.91	---	60.00	28.09	L1	10.3
15.840000	---	22.32	50.00	27.68	L1	10.3

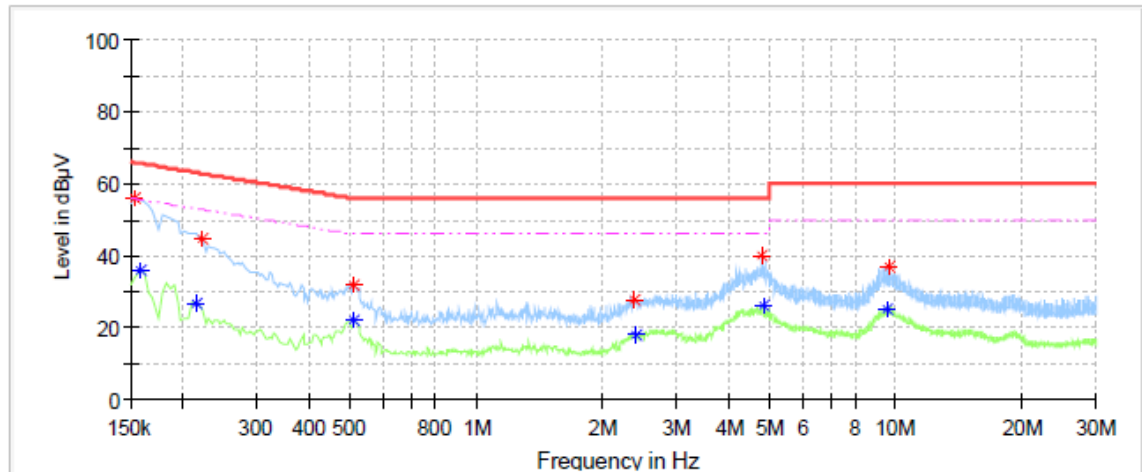
Mode 1_N



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.154000	55.81	---	65.78	9.97	N	9.6
0.158000	---	35.79	55.57	19.77	N	9.6
0.214000	---	26.75	53.05	26.30	N	9.6
0.222000	44.71	---	62.74	18.03	N	9.6
0.512000	---	22.05	46.00	23.95	N	9.7
0.512000	31.98	---	56.00	24.02	N	9.7
2.388000	27.76	---	56.00	28.24	N	9.7
2.408000	---	17.98	46.00	28.02	N	9.8
4.812000	39.78	---	56.00	16.22	N	9.9
4.852000	---	26.05	46.00	19.95	N	9.9
9.508000	---	25.28	50.00	24.72	N	10.0
9.660000	37.15	---	60.00	22.85	N	10.0

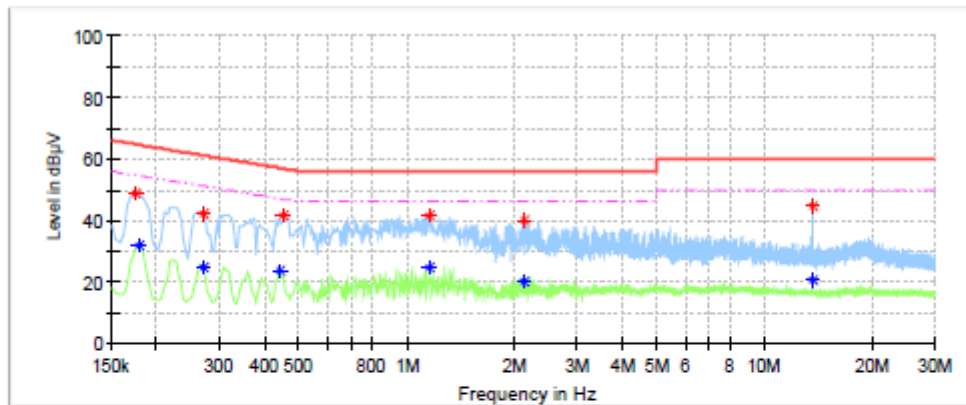
Mode 2_L



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.154000	55.81	---	65.78	9.97	N	9.6
0.158000	---	35.79	55.57	19.77	N	9.6
0.214000	---	26.75	53.05	26.30	N	9.6
0.222000	44.71	---	62.74	18.03	N	9.6
0.512000	---	22.05	46.00	23.95	N	9.7
0.512000	31.98	---	56.00	24.02	N	9.7
2.388000	27.76	---	56.00	28.24	N	9.7
2.408000	---	17.98	46.00	28.02	N	9.8
4.812000	39.78	---	56.00	16.22	N	9.9
4.852000	---	26.05	46.00	19.95	N	9.9
9.508000	---	25.28	50.00	24.72	N	10.0
9.660000	37.15	---	60.00	22.85	N	10.0

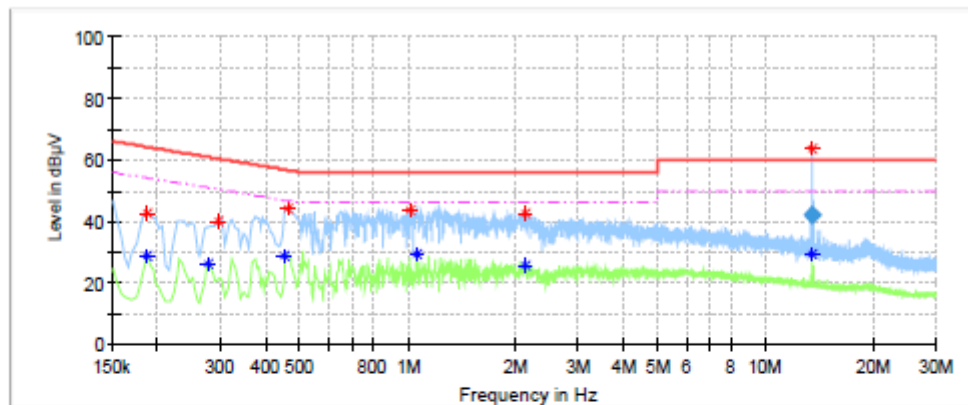
Mode 2_N



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.174000	48.59	---	64.77	16.18	N	9.6
0.178000	---	31.92	54.58	22.66	N	9.6
0.270000	---	24.69	51.12	26.43	N	9.6
0.270000	42.02	---	61.12	19.09	N	9.6
0.442000	---	23.52	47.02	23.50	N	9.7
0.454000	41.61	---	56.80	15.19	N	9.7
1.152000	41.30	---	56.00	14.70	N	9.7
1.156000	---	24.39	46.00	21.61	N	9.7
2.124000	39.82	---	56.00	16.18	N	9.7
2.132000	---	20.11	46.00	25.89	N	9.7
13.628000	---	20.76	50.00	29.24	N	10.3
13.628000	44.58	---	60.00	15.42	N	10.3

Mode 3_L



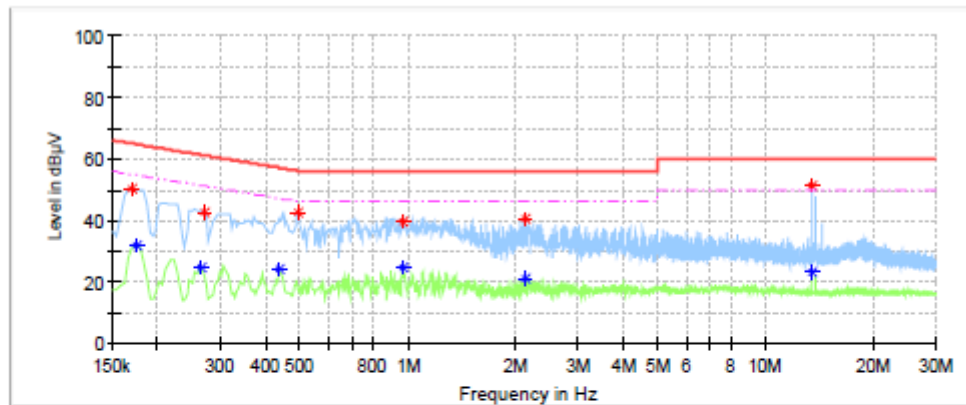
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.186000	---	28.64	54.21	25.57	L1	9.6
0.186000	42.45	---	64.21	21.77	L1	9.6
0.278000	---	26.08	50.88	24.80	L1	9.6
0.294000	40.20	---	60.41	20.21	L1	9.6
0.454000	---	28.94	46.80	17.86	L1	9.7
0.462000	43.94	---	56.66	12.72	L1	9.7
1.012000	43.38	---	56.00	12.62	L1	9.7
1.056000	---	29.46	46.00	16.54	L1	9.7
2.128000	42.68	---	56.00	13.32	L1	9.7
2.132000	---	25.55	46.00	20.45	L1	9.7
13.551500	63.46	---	60.00	-3.46	L1	10.2
13.556000	---	29.31	50.00	20.69	L1	10.2

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
13.551500	42.30	---	60.00	17.70	200.0	9.000	L1	10.2

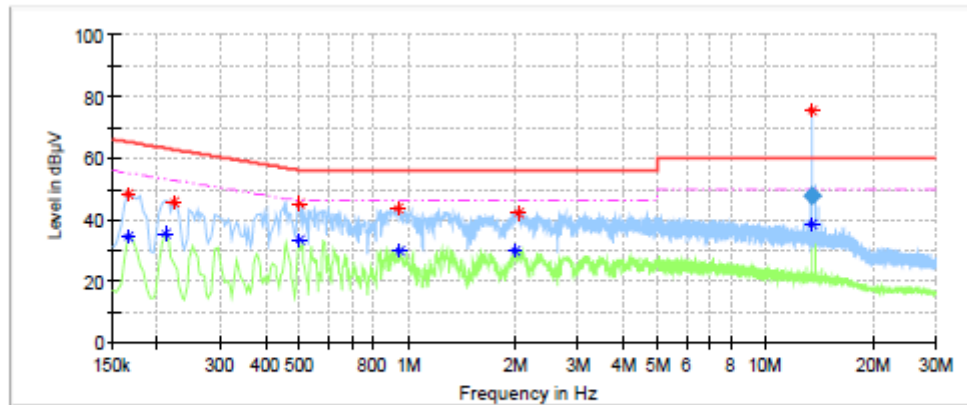
Mode 3_N



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.170000	50.01	---	64.96	14.95	N	9.6
0.174000	---	31.99	54.77	22.78	N	9.6
0.266000	---	24.55	51.24	26.69	N	9.6
0.270000	42.57	---	61.12	18.55	N	9.6
0.438000	---	23.96	47.10	23.14	N	9.7
0.494000	42.56	---	56.10	13.54	N	9.7
0.968000	---	24.61	46.00	21.39	N	9.7
0.968000	39.60	---	56.00	16.40	N	9.7
2.136000	---	20.84	46.00	25.16	N	9.7
2.136000	40.52	---	56.00	15.48	N	9.7
13.468000	---	22.93	50.00	27.07	N	10.3
13.568000	51.20	---	60.00	8.80	N	10.3

Mode 4_L



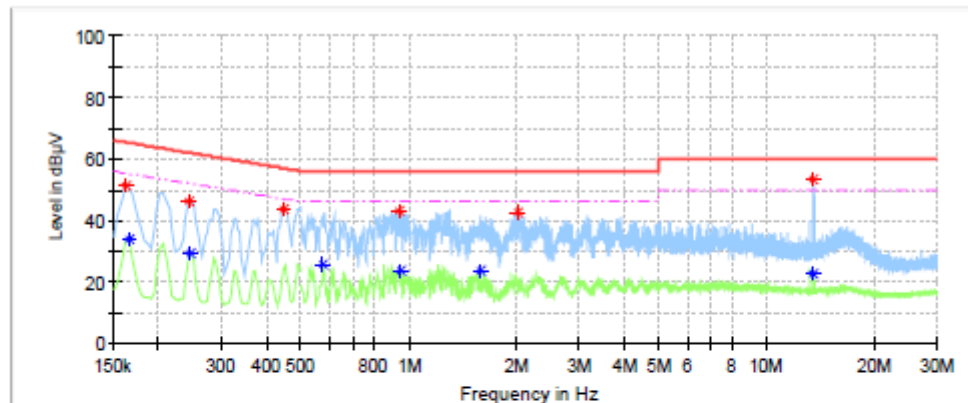
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.166000	48.27	---	65.16	16.89	L1	9.6
0.166000	---	34.57	55.16	20.59	L1	9.6
0.210000	---	35.16	53.21	18.05	L1	9.6
0.222000	45.50	---	62.74	17.24	L1	9.6
0.500000	---	33.28	46.00	12.72	L1	9.7
0.500000	45.29	---	56.00	10.71	L1	9.7
0.940000	43.64	---	56.00	12.36	L1	9.7
0.948000	---	29.90	46.00	16.10	L1	9.7
1.988000	---	29.65	46.00	16.35	L1	9.7
2.036000	41.99	---	56.00	14.01	L1	9.7
13.560000	---	38.39	50.00	11.61	L1	10.2
13.564500	75.52	---	60.00	-15.52	L1	10.2

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
13.564500	47.82	---	60.00	12.18	200.0	9.000	L1	10.2

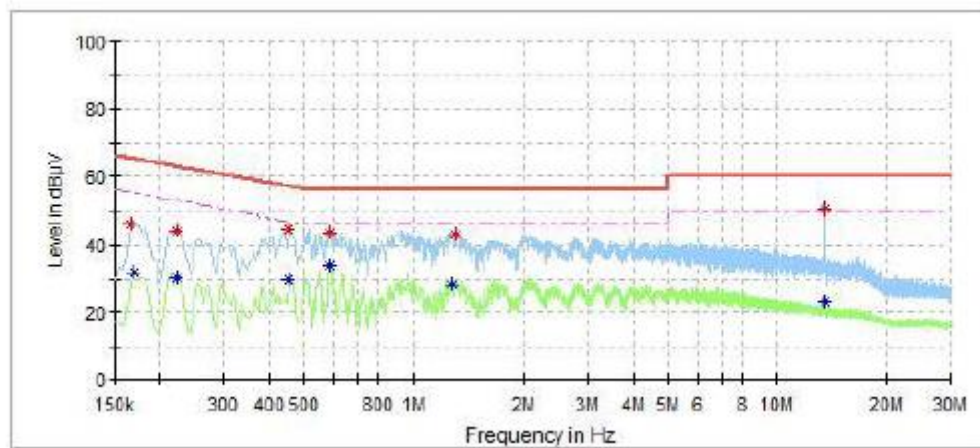
Mode 4_N



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.162000	51.28	---	65.36	14.08	N	9.6
0.166000	---	33.93	55.16	21.23	N	9.6
0.242000	45.93	---	62.03	16.10	N	9.6
0.246000	---	29.25	51.89	22.64	N	9.6
0.446000	43.64	---	56.95	13.31	N	9.7
0.576000	---	25.76	46.00	20.24	N	9.7
0.944000	43.21	---	56.00	12.79	N	9.7
0.952000	---	23.71	46.00	22.29	N	9.7
1.596000	---	23.38	46.00	22.62	N	9.7
2.020000	42.71	---	56.00	13.29	N	9.7
13.580000	53.46	---	60.00	6.54	N	10.3
13.584000	---	22.72	50.00	27.28	N	10.3

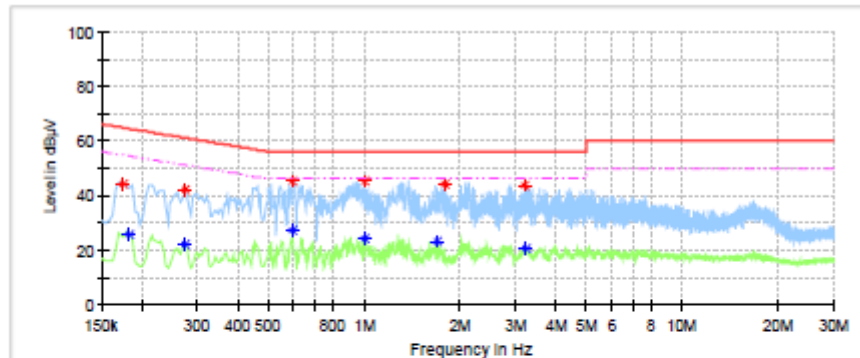
Mode 5_L



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.166000	46.10	—	65.16	19.06	L1	9.6
0.170000	—	31.72	54.96	23.24	L1	9.6
0.222000	43.91	—	62.74	18.84	L1	9.6
0.222000	—	30.27	52.74	22.48	L1	9.6
0.450000	44.45	—	56.88	12.43	L1	9.7
0.454000	—	29.78	46.80	17.02	L1	9.7
0.588000	—	33.98	46.00	12.02	L1	9.7
0.588000	43.39	—	56.00	12.61	L1	9.7
1.272000	—	28.39	46.00	17.61	L1	9.7
1.304000	43.15	—	56.00	12.85	L1	9.7
13.556000	—	23.05	50.00	26.95	L1	10.2
13.556000	50.12	—	60.00	9.88	L1	10.2

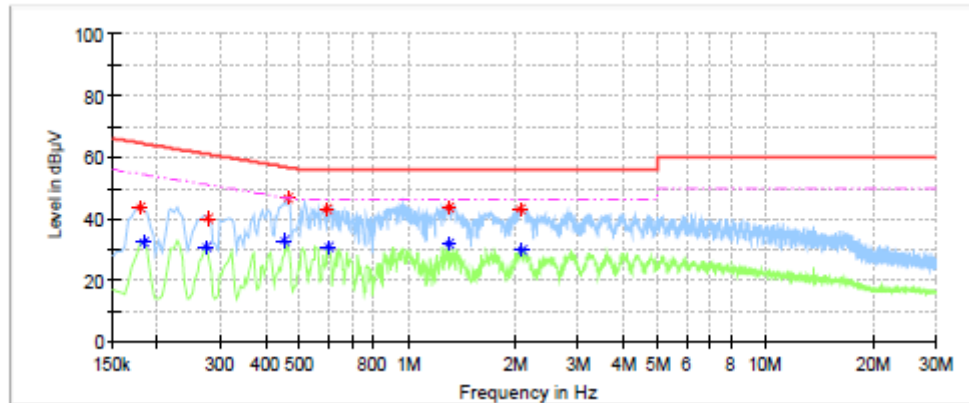
Mode 5_N



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.174000	44.34	---	64.77	20.43	N	9.6
0.182000	---	25.71	54.39	28.68	N	9.6
0.274000	---	22.27	51.00	28.73	N	9.6
0.274000	42.19	---	61.00	18.81	N	9.6
0.596000	---	27.13	46.00	18.87	N	9.7
0.596000	45.16	---	56.00	10.84	N	9.7
1.004000	---	24.27	46.00	21.73	N	9.7
1.004000	45.26	---	56.00	10.74	N	9.7
1.696000	---	22.95	46.00	23.05	N	9.7
1.788000	44.24	---	56.00	11.76	N	9.7
3.188000	43.54	---	56.00	12.46	N	9.8
3.228000	---	20.64	46.00	25.36	N	9.8

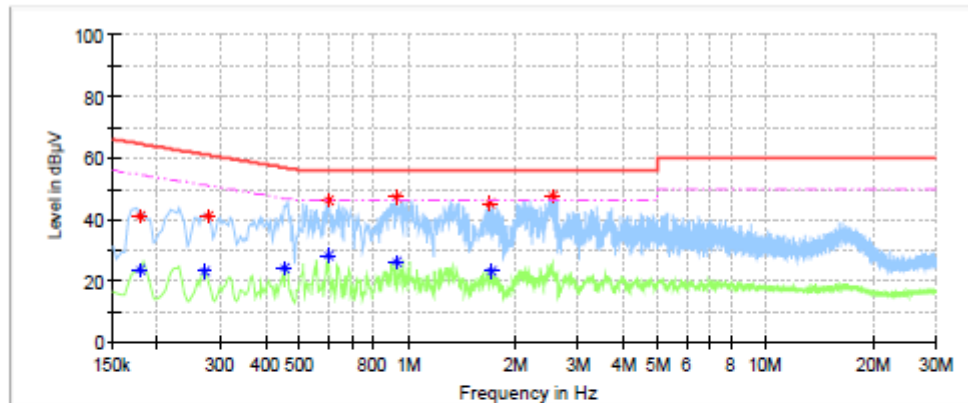
Mode 6_L



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.178000	43.66	---	64.58	20.92	L1	9.6
0.182000	---	32.37	54.39	22.02	L1	9.6
0.274000	---	30.91	51.00	20.08	L1	9.6
0.278000	40.25	---	60.88	20.62	L1	9.6
0.454000	---	32.69	46.80	14.11	L1	9.7
0.462000	46.64	---	56.66	10.02	L1	9.7
0.596000	42.89	---	56.00	13.11	L1	9.7
0.600000	---	30.95	46.00	15.05	L1	9.7
1.300000	43.62	---	56.00	12.38	L1	9.7
1.300000	---	31.93	46.00	14.07	L1	9.7
2.064000	43.22	---	56.00	12.78	L1	9.7
2.080000	---	29.54	46.00	16.46	L1	9.7

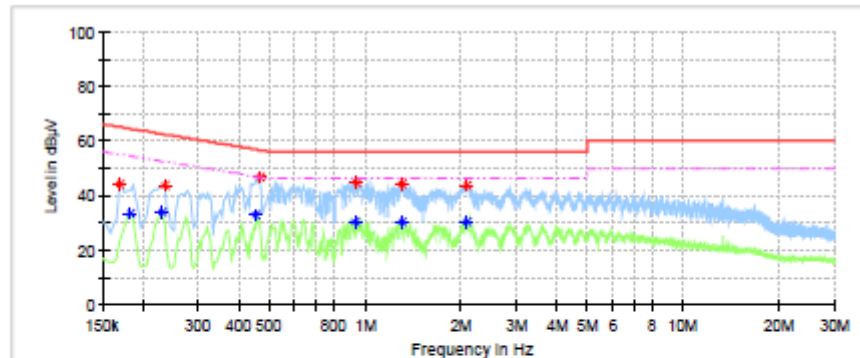
Mode 6_N



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.178000	---	23.73	54.58	30.85	N	9.6
0.178000	40.81	---	64.58	23.77	N	9.6
0.270000	---	23.24	51.12	27.88	N	9.6
0.278000	40.88	---	60.88	19.99	N	9.6
0.454000	---	23.93	46.80	22.87	N	9.7
0.600000	46.16	---	56.00	9.84	N	9.7
0.600000	---	28.02	46.00	17.98	N	9.7
0.928000	---	26.09	46.00	19.91	N	9.7
0.928000	47.21	---	56.00	8.79	N	9.7
1.696000	45.27	---	56.00	10.73	N	9.7
1.712000	---	22.93	46.00	23.07	N	9.7
2.540000	47.88	---	56.00	8.12	N	9.8

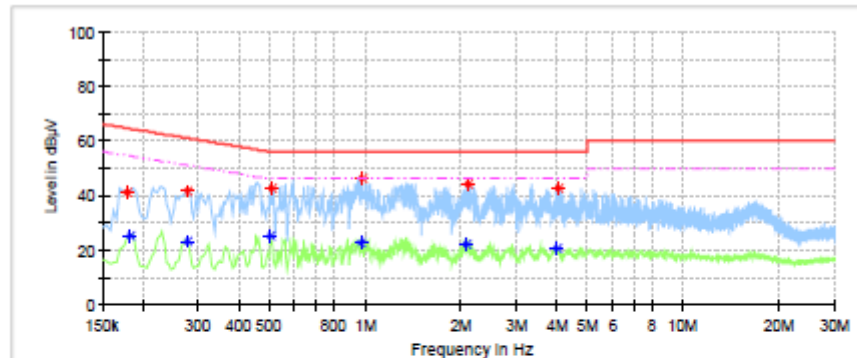
Mode 7_L



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.170000	43.90	---	64.96	21.06	L1	9.6
0.182000	---	33.22	54.39	21.17	L1	9.6
0.230000	---	33.80	52.45	18.65	L1	9.6
0.234000	43.35	---	62.31	18.96	L1	9.6
0.454000	---	32.94	46.80	13.86	L1	9.7
0.466000	46.62	---	56.59	9.97	L1	9.7
0.928000	---	30.01	46.00	15.99	L1	9.7
0.940000	44.50	---	56.00	11.50	L1	9.7
1.304000	---	30.25	46.00	15.76	L1	9.7
1.304000	44.04	---	56.00	11.96	L1	9.7
2.080000	43.70	---	56.00	12.30	L1	9.7
2.092000	---	30.44	46.00	15.56	L1	9.7

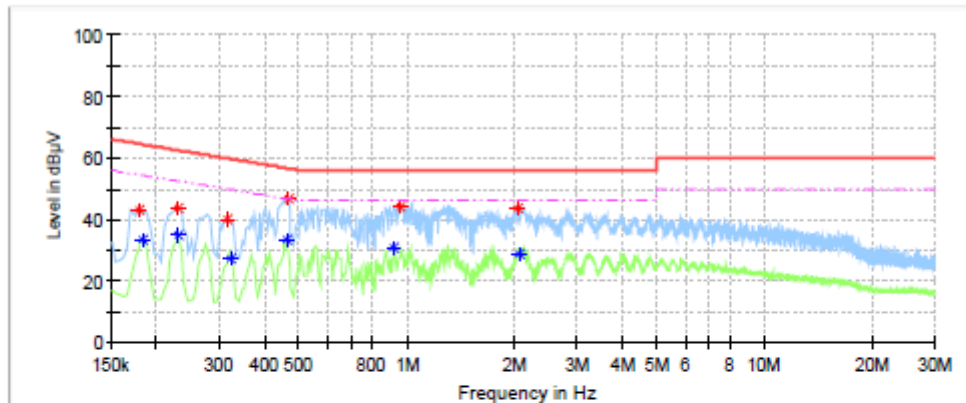
Mode 7_N



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.178000	41.13	---	64.58	23.45	N	9.6
0.182000	---	25.09	54.39	29.31	N	9.6
0.278000	---	23.29	50.88	27.58	N	9.6
0.278000	41.71	---	60.88	19.16	N	9.6
0.504000	---	25.15	46.00	20.85	N	9.7
0.512000	42.71	---	56.00	13.29	N	9.7
0.976000	---	22.59	46.00	23.41	N	9.7
0.980000	45.91	---	56.00	10.09	N	9.7
2.088000	---	22.03	46.00	23.97	N	9.7
2.100000	44.30	---	56.00	11.70	N	9.7
4.004000	---	20.56	46.00	25.44	N	9.8
4.064000	42.66	---	56.00	13.34	N	9.8

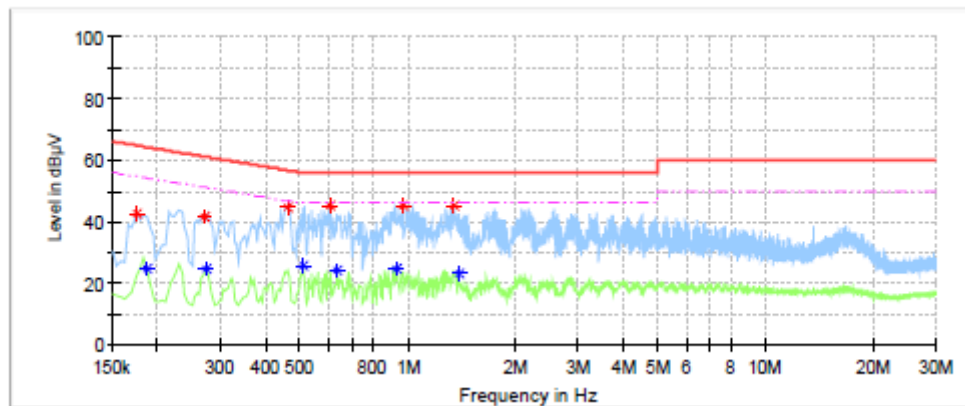
Mode 8_L



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.178000	42.94	---	64.58	21.64	L1	9.6
0.182000	---	33.32	54.39	21.07	L1	9.6
0.230000	---	34.72	52.45	17.73	L1	9.6
0.230000	43.62	---	62.45	18.83	L1	9.6
0.314000	40.24	---	59.86	19.62	L1	9.6
0.322000	---	27.29	49.66	22.37	L1	9.7
0.462000	---	33.58	46.66	13.07	L1	9.7
0.466000	46.78	---	56.59	9.81	L1	9.7
0.924000	---	30.77	46.00	15.23	L1	9.7
0.960000	44.27	---	56.00	11.73	L1	9.7
2.032000	43.55	---	56.00	12.45	L1	9.7
2.072000	---	28.71	46.00	17.29	L1	9.7

Mode 8_N



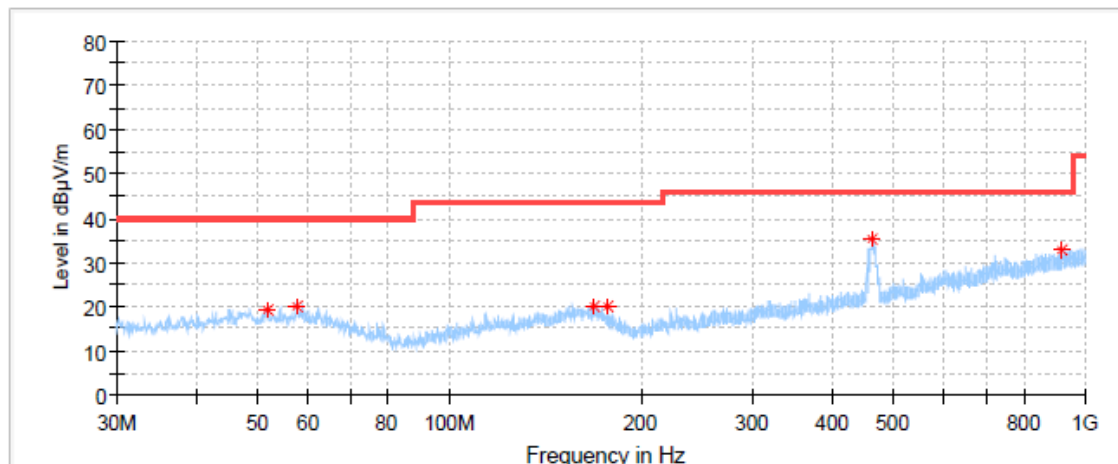
Critical Freqs

Frequency (MHz)	MaxPeak (dBuV)	Average (dBuV)	Limit (dBuV)	Margin (dB)	Line	Corr. (dB)
0.174000	42.50	---	64.77	22.27	N	9.6
0.186000	---	24.71	54.21	29.51	N	9.6
0.270000	41.54	---	61.12	19.57	N	9.6
0.274000	---	24.51	51.00	26.49	N	9.6
0.462000	44.46	---	56.66	12.19	N	9.7
0.512000	---	25.42	46.00	20.58	N	9.7
0.608000	45.34	---	56.00	10.66	N	9.7
0.636000	---	24.35	46.00	21.65	N	9.7
0.932000	---	24.86	46.00	21.14	N	9.7
0.968000	45.01	---	56.00	10.99	N	9.7
1.348000	44.90	---	56.00	11.10	N	9.7
1.388000	---	23.07	46.00	22.93	N	9.7

Appendix B.2: Test Plots of Radiated Emission, Below 1GHz

All modes from Mode 1 to Mode 8 have been tested, and only the worst case Mode 3 Horizontal and Mode 7 Vertical reported.

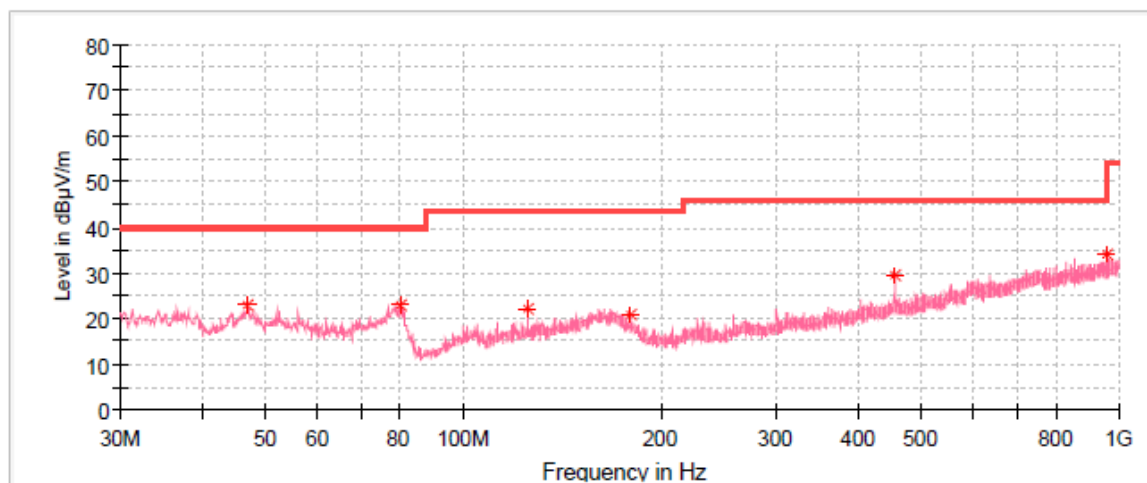
Mode 3_H



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
51.631000	19.41	40.00	20.59	100.0	H	10.0
463.105000	35.14	46.00	10.86	100.0	H	46.0
177.149000	19.91	43.50	23.59	100.0	H	332.0
57.742000	20.16	40.00	19.84	200.0	H	36.0
169.001000	20.08	43.50	23.42	200.0	H	259.0
918.423000	32.83	46.00	13.17	200.0	H	331.0

Mode 7_V



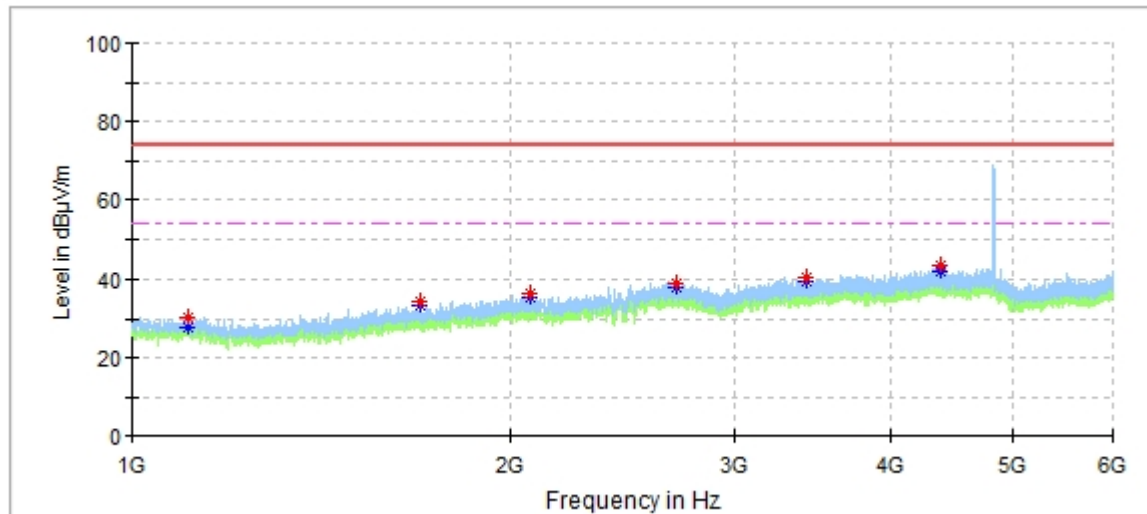
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
454.375000	29.47	46.00	16.53	100.0	V	12.0
80.052000	22.81	40.00	17.19	100.0	V	91.0
955.186000	34.07	46.00	11.93	100.0	V	141.0
125.157000	22.36	43.50	21.14	100.0	V	179.0
180.544000	20.93	43.50	22.57	100.0	V	202.0
46.975000	22.80	40.00	17.20	100.0	V	255.0

Appendix B.3: Test Plots of Radiated Emission, Above 1GHz

All modes from Mode 1 to Mode 8 have been tested, and only the worst case Mode 3 Horizontal and Mode 1 Vertical reported. The radiated emissions above 6GHz were more than 20dB down from the limit except the harmonic spurious emissions which were reported in respective report.

Mode 3_H



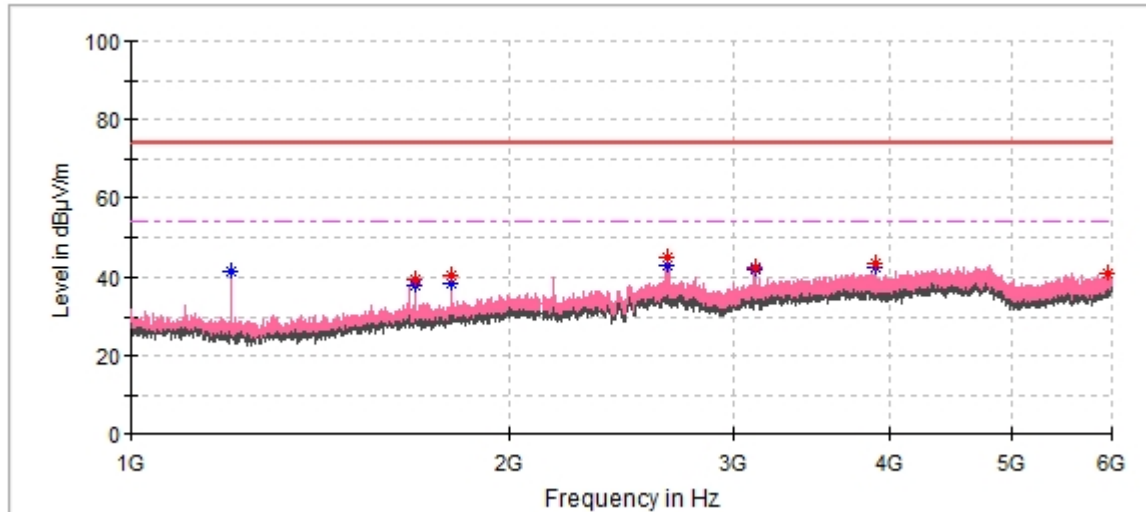
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
1107.500000	---	27.86	54.00	26.14	100.0	H	254.0
1108.500000	30.46	---	74.00	43.54	100.0	H	332.0
1694.500000	---	33.17	54.00	20.83	100.0	H	194.0
1694.500000	34.43	---	74.00	39.57	100.0	H	194.0
2073.000000	36.36	---	74.00	37.64	100.0	H	322.0
2073.000000	---	35.17	54.00	18.83	100.0	H	322.0
2695.000000	---	37.82	54.00	16.18	100.0	H	235.0
2695.000000	38.94	---	74.00	35.06	100.0	H	235.0
3423.000000	40.38	---	74.00	33.62	100.0	H	144.0
3423.000000	---	39.28	54.00	14.72	100.0	H	144.0
4377.500000	---	42.08	54.00	11.92	100.0	H	140.0
4377.500000	43.45	---	74.00	30.55	100.0	H	140.0

Produkte

Products

Mode 1_V



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)
1200.000000	---	41.47	54.00	12.53	100.0	V	80.0
1680.000000	---	38.20	54.00	15.80	100.0	V	173.0
1680.000000	39.65	---	74.00	34.35	100.0	V	173.0
1799.000000	---	38.36	54.00	15.64	100.0	V	178.0
1799.000000	40.68	---	74.00	33.32	100.0	V	178.0
2664.000000	---	42.93	54.00	11.07	100.0	V	173.0
2664.000000	45.05	---	74.00	28.95	100.0	V	173.0
3120.000000	---	42.06	54.00	11.94	100.0	V	128.0
3120.000000	42.38	---	74.00	31.62	100.0	V	128.0
3888.500000	---	42.61	54.00	11.39	100.0	V	165.0
3888.500000	43.58	---	74.00	30.42	100.0	V	165.0
5966.500000	41.14	---	74.00	32.86	100.0	V	9.0