

Appendix B _ Radiated Test Data

3.7.4. Test Result of Radiated Spurious Emission

Temperature:	24℃	Relative Humidity:	38%RH
Test Voltage:	AC 120V/60Hz		

For 9 kHz ~ 30 MHz

Note:The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

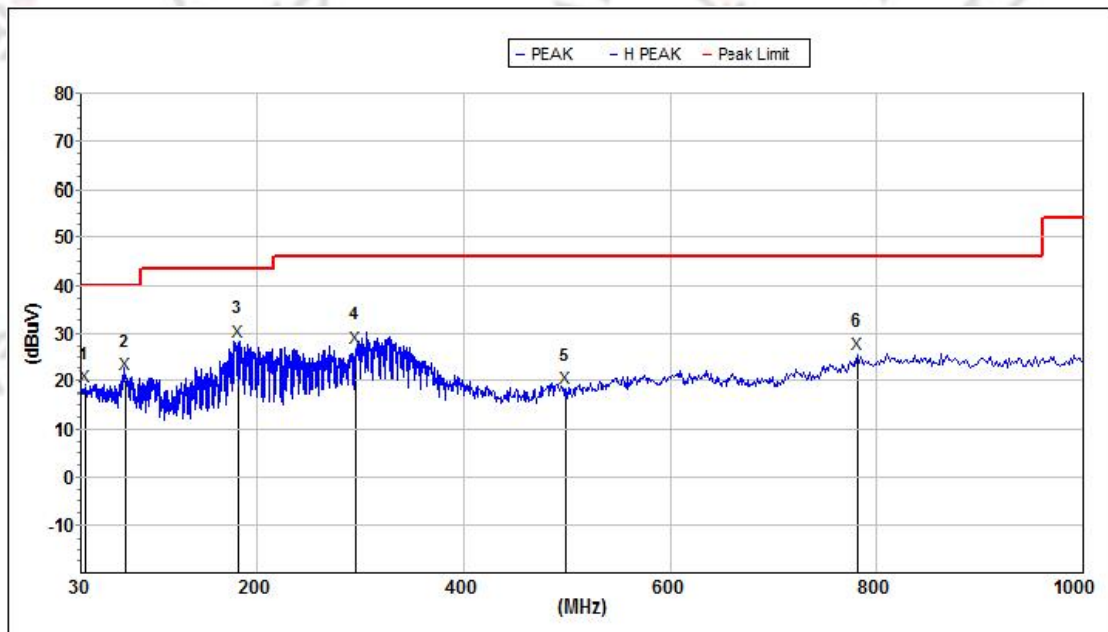
Distance extrapolation factor =40 log (specific distance/test distance)(dB);

Limit line = specific limits(dBμV) + distance extrapolation factor.

For 30 MHz ~ 1 GHz:

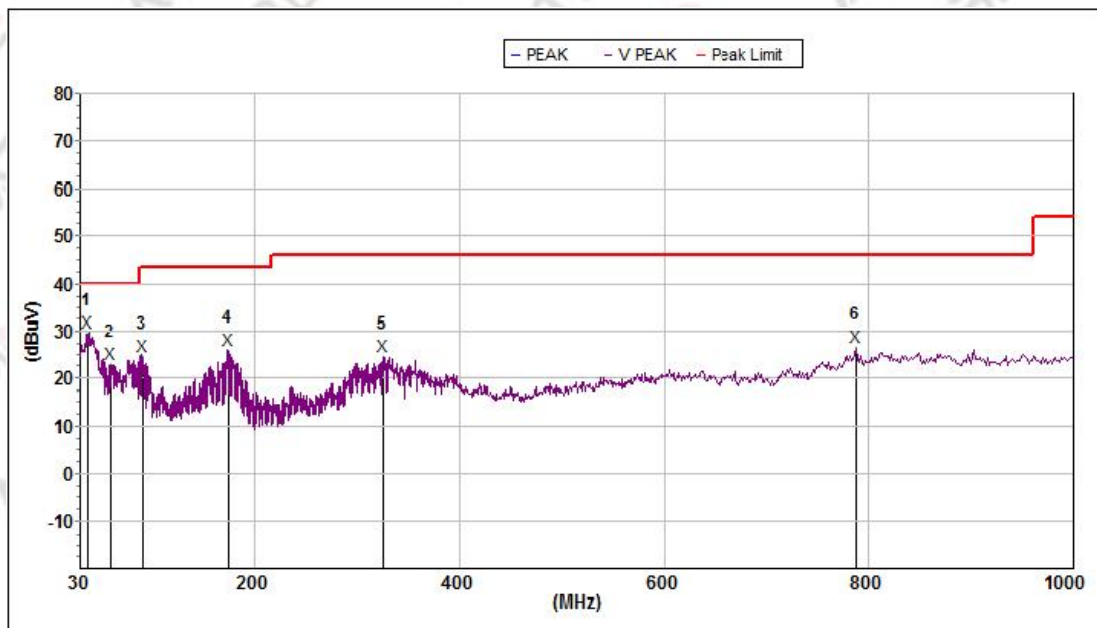
Note:All modes have been tested, only worst case(TX_1M_2402MHz)mode was recorded in the test report if no any others.

TX_1M_2402MHz Horizontal



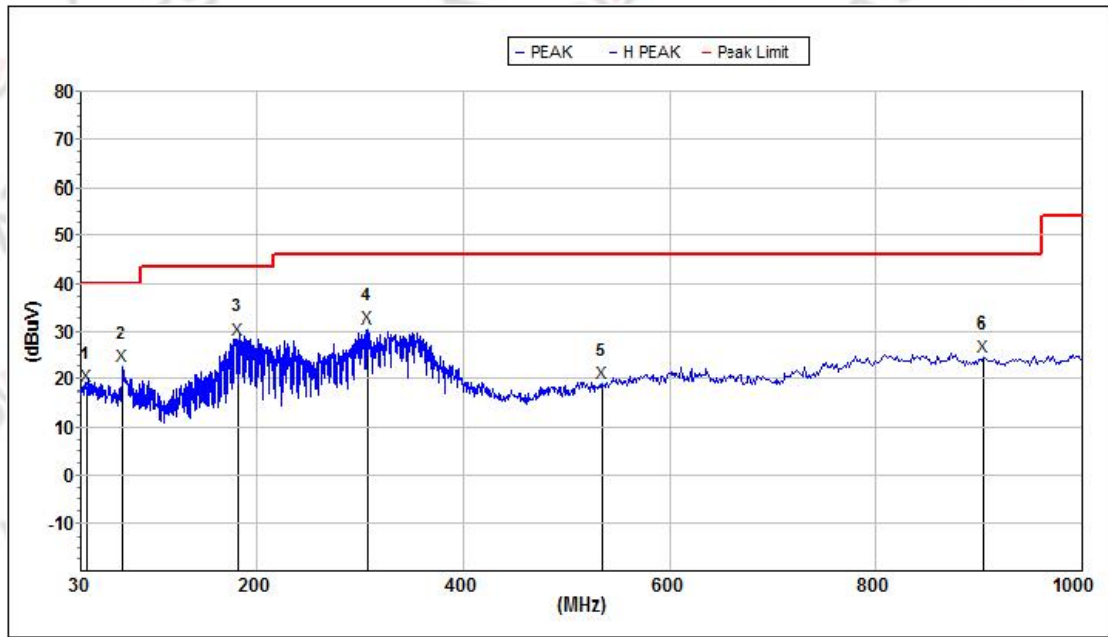
Mk.	Freq. (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak:									
1	34.578	18.9	40.0	21.1	22	100	18.7	29.5	H
2	72.592	21.6	40.0	18.4	22	300	15.9	29.3	H
3	182.559	28.3	43.5	15.2	216	200	16.9	33.4	H
4	295.665	27.0	46.0	19.0	199	100	19.1	31.9	H
5	498.550	18.6	46.0	27.4	231	200	23.4	32.2	H
6	782.345	25.6	46.0	20.4	150	300	28.2	31.9	H

TX_1M_2402MHz Vertical



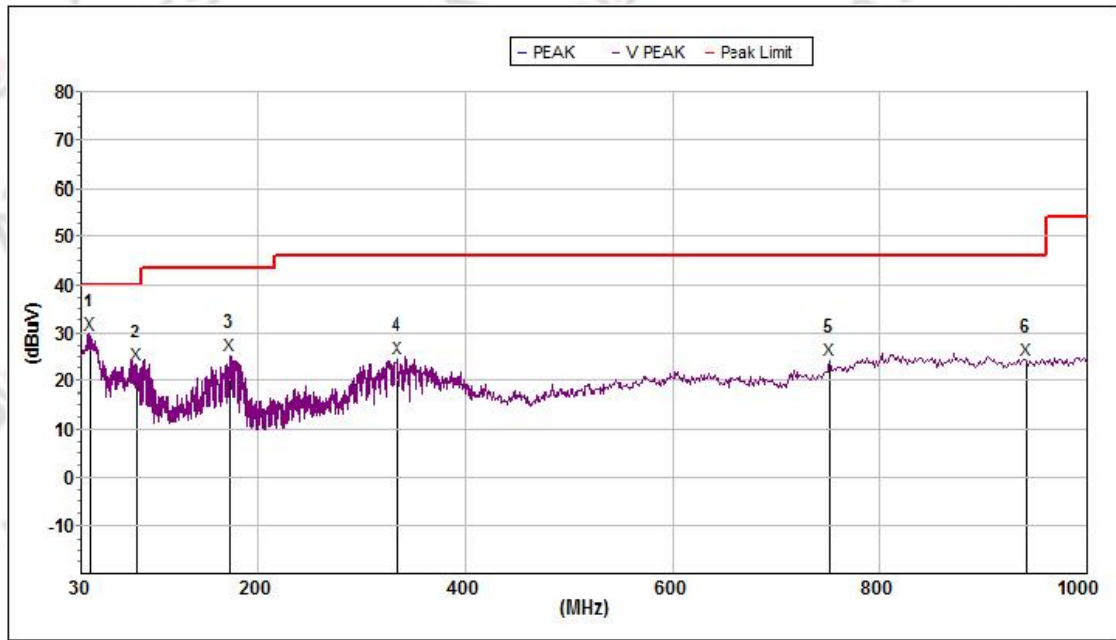
Mk.	Freq. (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak:									
1	36.766	29.7	40.0	10.3	0	100	18.8	29.5	V
2	59.025	23.1	40.0	16.9	110	300	18.1	29.6	V
3	91.015	24.9	43.5	18.6	0	200	14.8	30.3	V
4	174.424	26.1	43.5	17.4	0	100	17.5	33.5	V
5	325.025	24.8	46.0	21.2	142	200	19.7	32.2	V
6	787.851	26.6	46.0	19.4	142	300	28.3	31.8	V

TX_1M_2480MHz Horizontal



Mk.	Freq. (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak:									
1	36.445	18.5	40.0	21.5	36	100	18.8	29.5	H
2	69.723	22.9	40.0	17.1	229	300	16.4	29.3	H
3	182.559	28.5	43.5	15.0	229	200	16.9	33.4	H
4	307.292	30.7	46.0	15.3	36	100	19.4	32.0	H
5	533.832	19.0	46.0	27.0	278	200	24.3	32.2	H
6	904.895	24.6	46.0	21.4	244	300	29.0	32.8	H

TX_1M_2480MHz Vertical



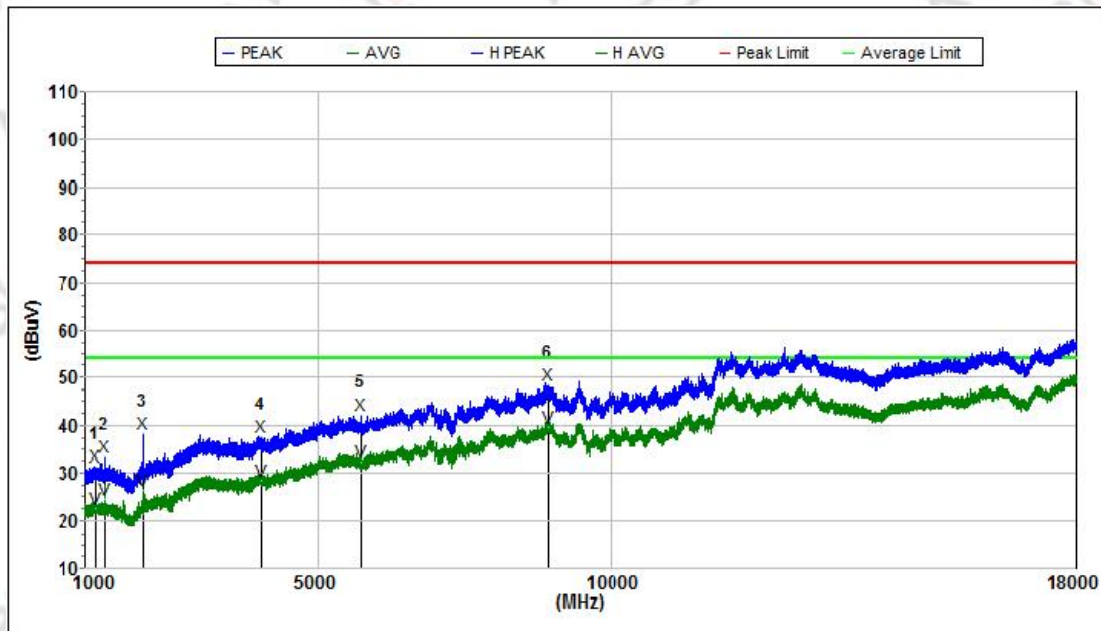
Mk.	Freq. (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak:									
1	39.162	29.7	40.0	10.3	194	100	18.9	29.6	V
2	83.230	23.4	40.0	16.6	131	300	14.8	29.5	V
3	172.902	25.5	43.5	18.0	3	200	17.6	33.5	V
4	334.859	24.8	46.0	21.2	131	100	19.9	32.3	V
5	751.425	24.5	46.0	21.5	360	200	27.6	32.7	V
6	940.480	24.5	46.0	21.5	292	300	29.4	33.2	V

For 1 GHz ~ 18GHz

Note:

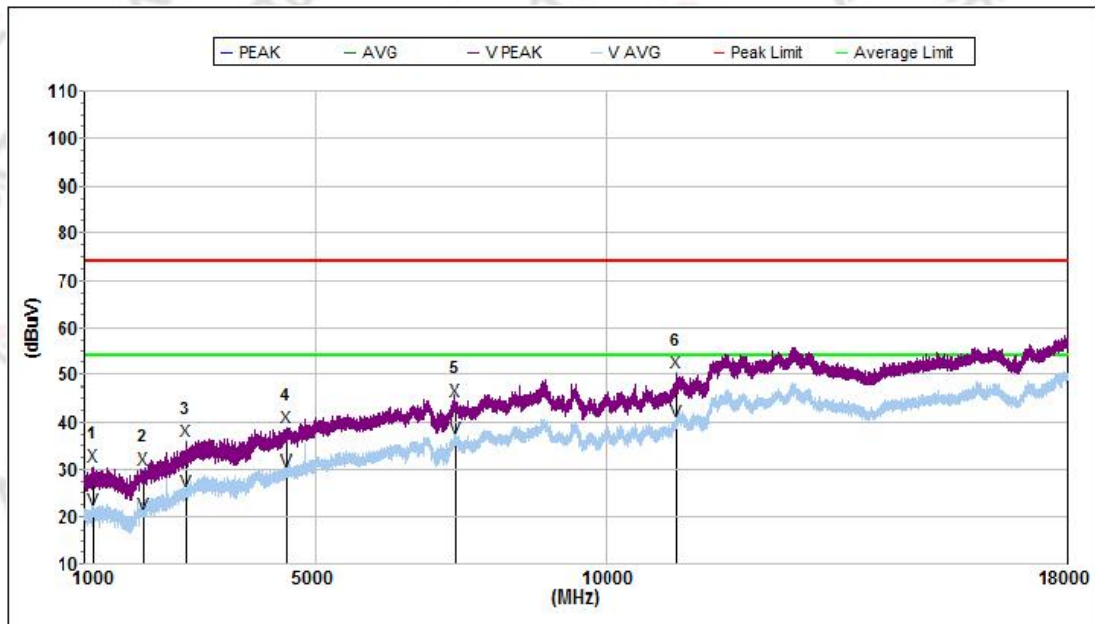
- 1.The all data rate modes had been test, but only worse test data was recorded in the test report.
- 2.In frequency ranges 18 ~25GHz no any other harmonic emissions detected which are tested to compliance with the limit. No recording in the test report. No any other emissions level which are attenuated less than 20dB below the limit. No recording in the test report.
- 3.We used the filter to test and the main frequency was filtered out.

TX_1M_2402MHz Horizontal



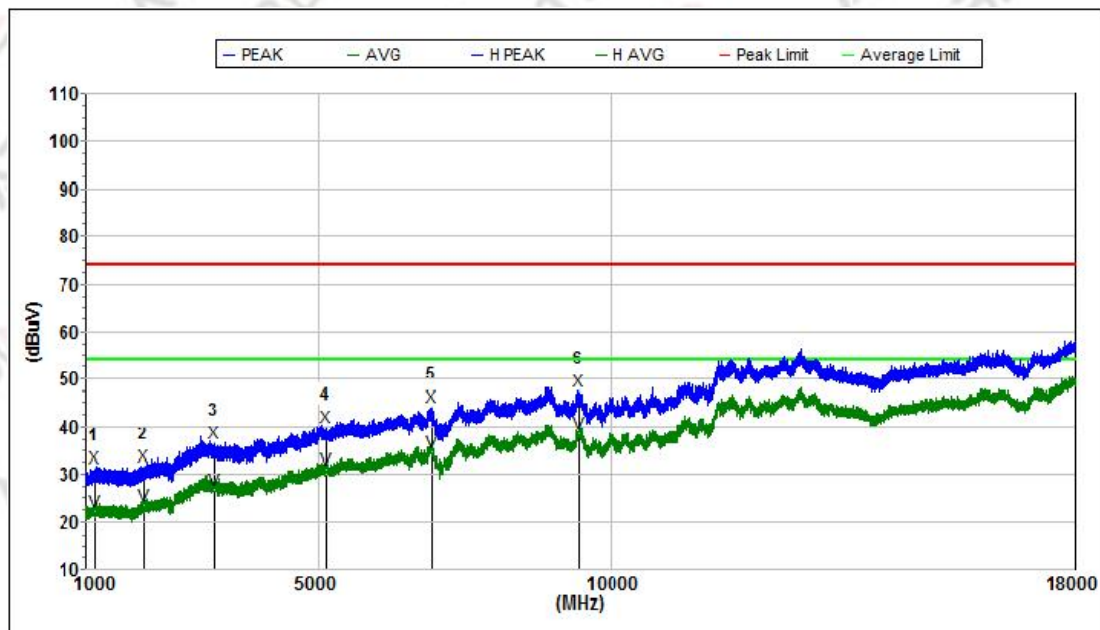
Mk.	Freq. (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak:									
1	1189.600	31.5	74.0	42.5	313	100	25.7	44.1	H
2	1328.800	33.5	74.0	40.5	169	300	25.6	44.1	H
3	1994.200	38.2	74.0	35.8	358	200	26.5	43.8	H
4	4016.200	37.6	74.0	36.4	134	100	30.9	42.7	H
5	5728.600	42.1	74.0	31.9	222	200	33.4	40.9	H
6	8947.550	48.5	74.0	25.5	56	300	37.8	40.0	H
Avg									
1	1189.600	22.4	54.0	31.6	313	100	25.7	44.1	H
2	1328.800	24.5	54.0	29.5	169	300	25.6	44.1	H
3	1994.200	26.4	54.0	27.6	358	200	26.5	43.8	H
4	4016.200	28.3	54.0	25.7	134	100	30.9	42.7	H
5	5728.600	32.4	54.0	21.6	222	200	33.4	40.9	H
6	8947.550	39.6	54.0	14.4	56	300	37.8	40.0	H

TX_1M_2402MHz Vertical



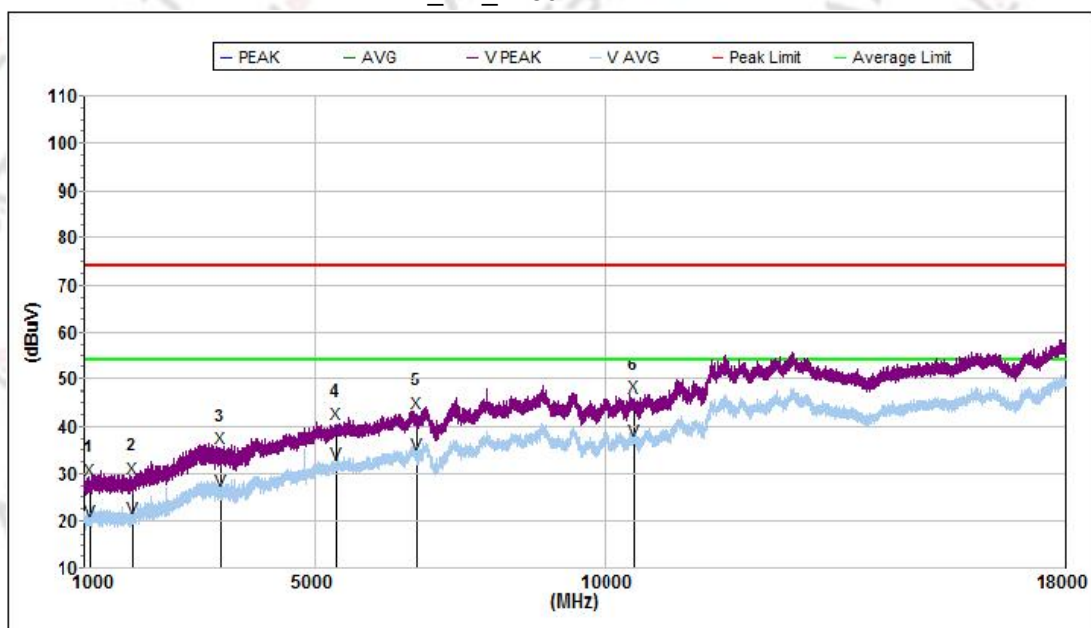
Mk.	Freq. (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak:									
1	1163.200	30.7	74.0	43.3	167	100	25.6	44.1	V
2	2020.300	30.1	74.0	43.9	26	300	26.5	43.8	V
3	2775.100	35.9	74.0	38.1	39	200	28.6	42.4	V
4	4511.800	38.8	74.0	35.2	12	100	31.6	42.4	V
5	7414.700	44.6	74.0	29.4	69	200	36.2	40.0	V
6	11228.400	50.4	74.0	23.6	245	300	38.7	35.5	V
Avg									
1	1163.200	21.6	54.0	32.4	167	100	25.6	44.1	V
2	2020.300	20.4	54.0	33.6	26	300	26.5	43.8	V
3	2775.100	25.3	54.0	28.7	39	200	28.6	42.4	V
4	4511.800	29.8	54.0	24.2	12	100	31.6	42.4	V
5	7414.700	36.7	54.0	17.3	69	200	36.2	40.0	V
6	11228.400	40.2	54.0	13.8	245	300	38.7	35.5	V

TX_1M_2480MHz Horizontal



Mk.	Freq. (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak:									
1	1166.800	31.5	74.0	42.5	110	100	25.6	44.1	H
2	1975.600	31.6	74.0	42.4	328	300	26.3	43.8	H
3	3215.200	36.5	74.0	37.5	328	200	29.4	41.8	H
4	5134.000	39.8	74.0	34.2	360	100	33.0	41.3	H
5	6934.300	44.2	74.0	29.8	257	200	35.9	40.1	H
6	9468.400	47.5	74.0	26.5	28	300	38.1	40.3	H
Avg									H
1	1166.800	22.3	54.0	31.7	110	100	25.6	44.1	H
2	1975.600	23.5	54.0	30.5	328	300	26.3	43.8	H
3	3215.200	26.8	54.0	27.2	328	200	29.4	41.8	H
4	5134.000	31.0	54.0	23.0	360	100	33.0	41.3	H
5	6934.300	34.7	54.0	19.3	257	200	35.9	40.1	H
6	9468.400	38.6	54.0	15.4	28	300	38.1	40.3	H

TX_1M_2480MHz Vertical

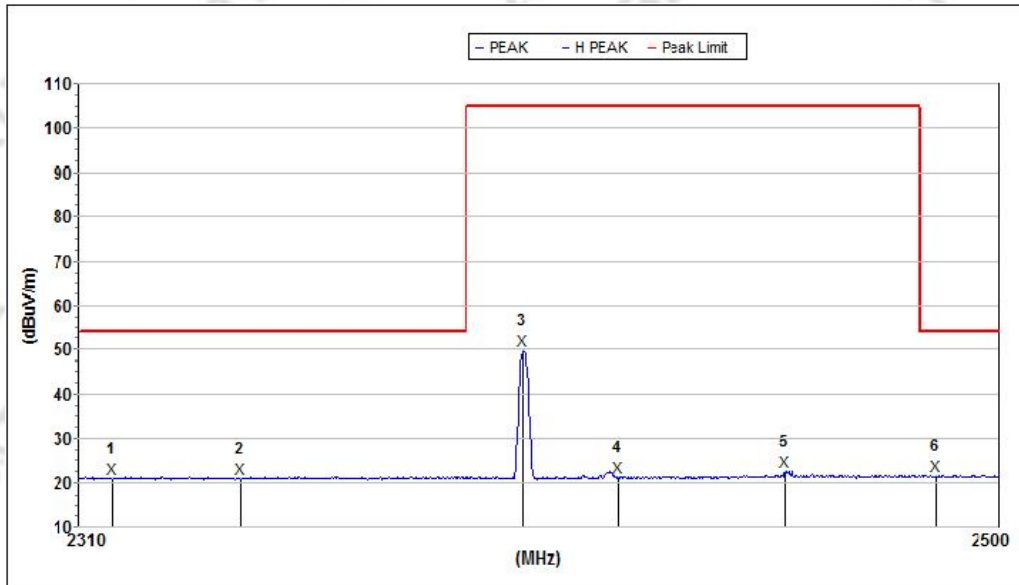


Mk.	Freq. (MHz)	Level (dBm)	Limit (dBm)	Margin (dB)	Deg. (deg.)	Hi. (cm)	Ant.F/G. (dB)	Amp.G. (dB)	Pol.
Peak:									
1	1110.100	28.6	74.0	45.4	360	100	25.3	44.2	V
2	1830.100	29.1	74.0	44.9	319	300	25.3	43.9	V
3	3367.900	35.3	74.0	38.7	31	200	29.5	42.0	V
4	5367.700	40.7	74.0	33.3	31	100	32.9	40.9	V
5	6750.700	42.9	74.0	31.1	31	200	35.6	40.3	V
6	10514.500	46.1	74.0	27.9	333	300	38.5	39.6	V
Avg									
1	1110.100	20.0	54.0	34.0	360	100	25.3	44.2	V
2	1830.100	20.5	54.0	33.5	319	300	25.3	43.9	V
3	3367.900	26.4	54.0	27.6	31	200	29.5	42.0	V
4	5367.700	32.0	54.0	22.0	31	100	32.9	40.9	V
5	6750.700	34.1	54.0	19.9	31	200	35.6	40.3	V
6	10514.500	36.9	54.0	17.1	333	300	38.5	39.6	V

3.7.5. Test Result of Restricted Band

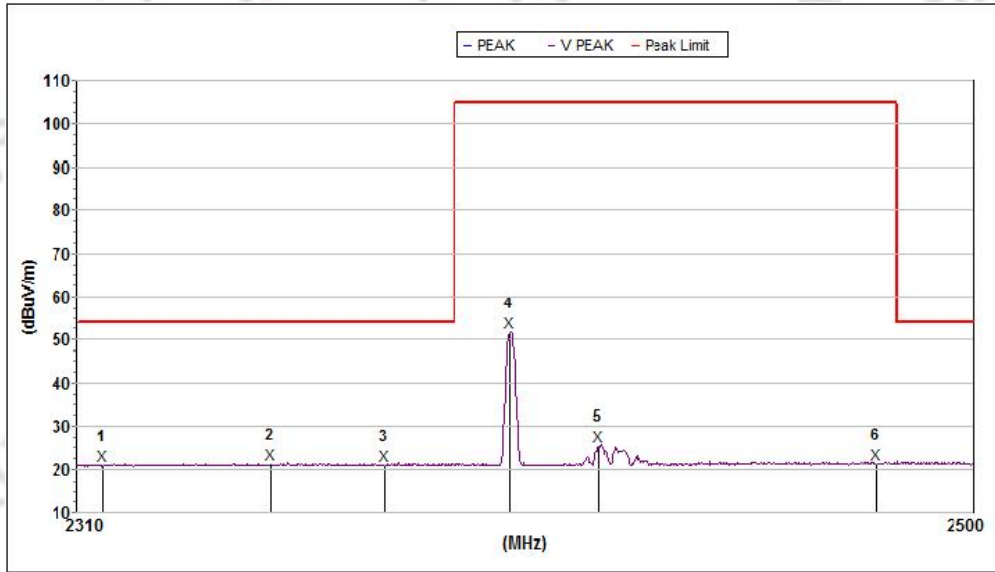
GFSK-Low

TX_1M_2402MHz Horizontal



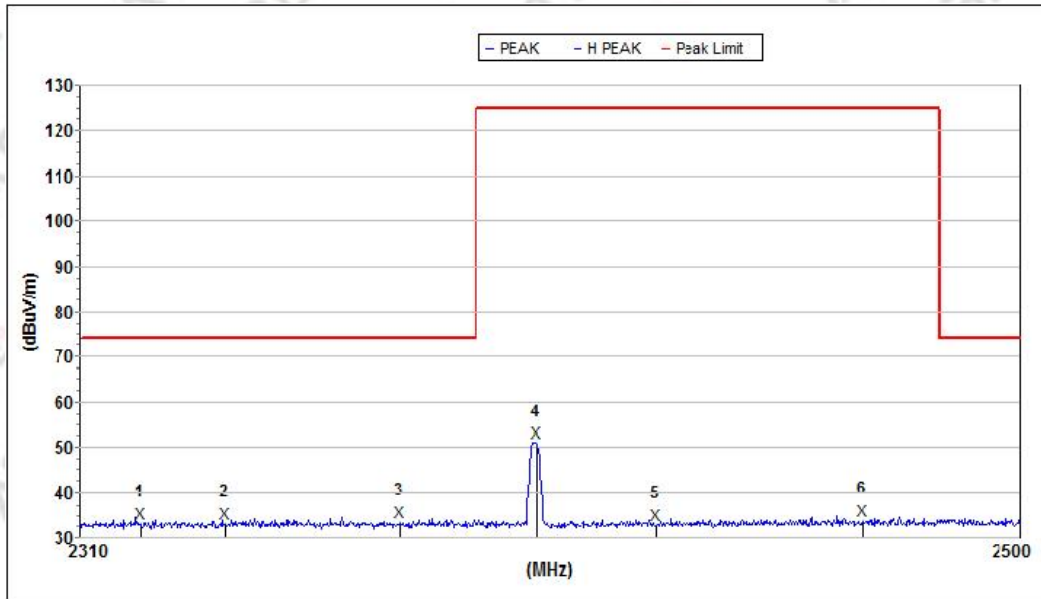
Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Deg. (deg.)	Margin (dB)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Pol.
Avg									
1	2316.949	21.0	54.0	5	33.0	100	27.2	43.6	H
2	2343.286	21.0	54.0	64	33.0	300	27.3	43.6	H
3	2401.794	49.8	105.2	238	55.4	200	27.4	43.6	H
4	2421.428	21.3	105.2	0	83.9	100	27.4	43.5	H
5	2455.931	22.6	105.2	128	82.6	200	27.5	43.5	H
6	2486.992	21.4	54.0	357	32.6	300	27.6	43.5	H

TX_1M_2402MHz Vertical



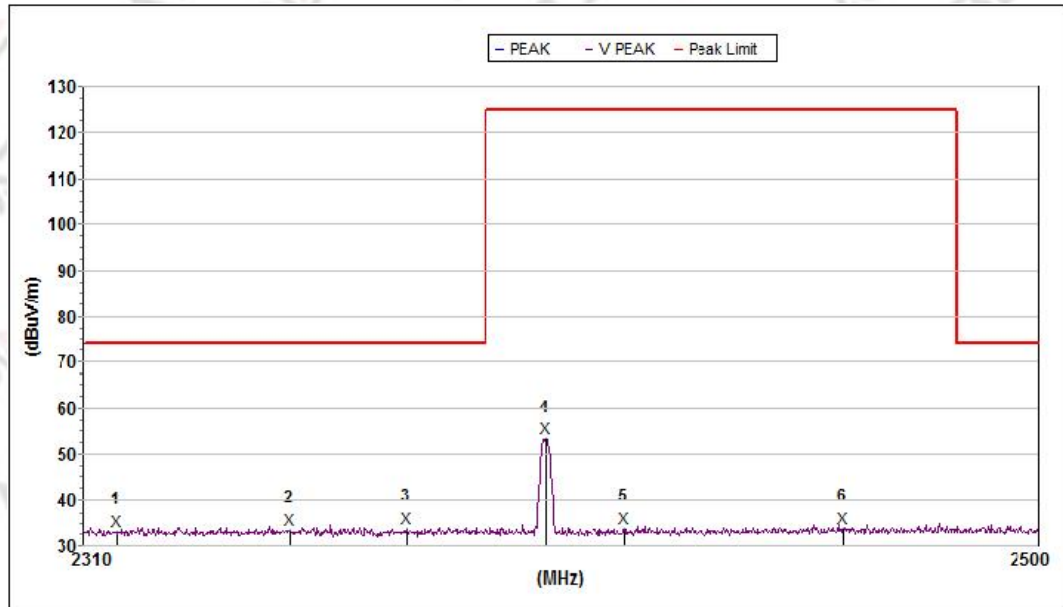
Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Deg. (deg.)	Margin (dB)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Pol.
Avg									
1	2315.484	20.8	54.0	290	33.2	100	27.2	43.6	V
2	2351.079	21.1	54.0	360	32.9	300	27.3	43.6	V
3	2375.362	20.9	54.0	19	33.1	200	27.3	43.6	V
4	2401.794	51.9	105.2	253	53.3	100	27.4	43.6	V
5	2420.662	25.3	105.2	11	79.9	200	27.4	43.5	V
6	2479.337	21.3	105.2	253	83.9	300	27.6	43.5	V

GFSK-Low
TX_1M_2402MHz Horizontal



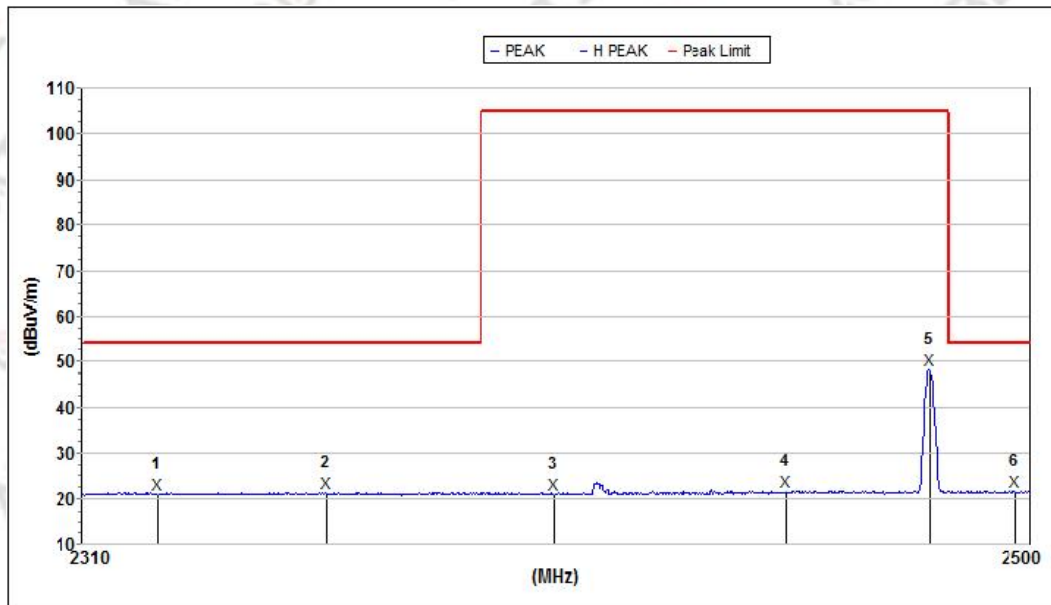
Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Deg. (deg.)	Margin (dB)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Pol.
Peak									
1	2322.082	33.4	74.0	7	40.6	100	27.2	43.6	H
2	2339.400	33.2	74.0	279	40.8	300	27.3	43.6	H
3	2374.799	33.7	74.0	315	40.3	200	27.3	43.6	H
4	2402.173	51.2	125.2	303	74.0	100	27.4	43.6	H
5	2426.217	33.1	125.2	2	92.1	200	27.5	43.5	H
6	2468.192	33.9	125.2	132	91.3	300	27.6	43.5	H

TX_1M_2402MHz Vertical



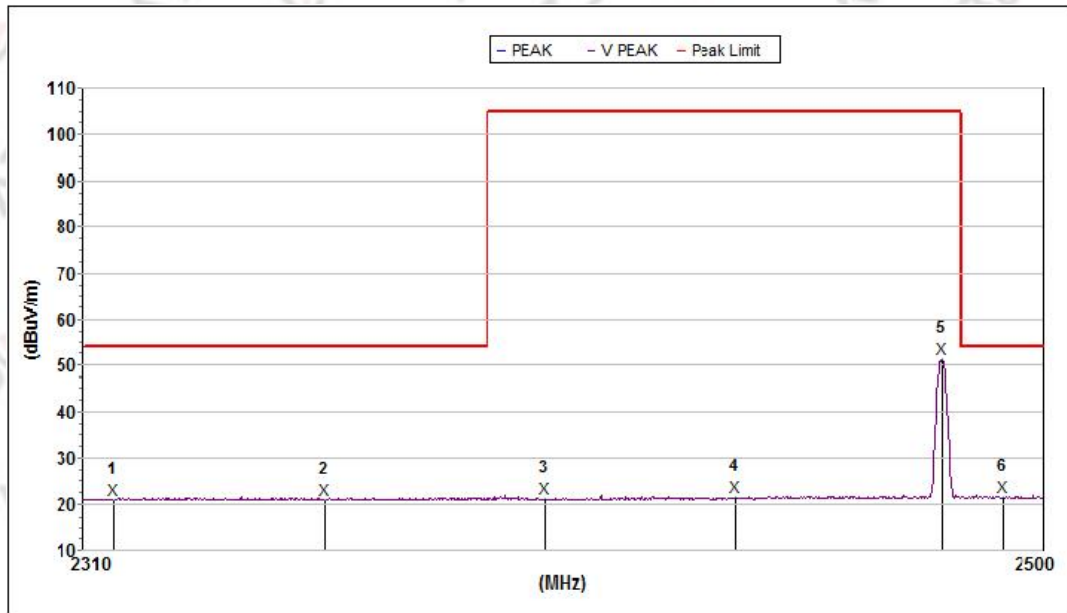
Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Deg. (deg.)	Margin (dB)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Pol.
Peak									
1	2316.766	33.3	74.0	141	40.7	100	27.2	43.6	V
2	2351.079	33.6	74.0	117	40.4	300	27.3	43.6	V
3	2374.423	33.8	74.0	239	40.2	200	27.3	43.6	V
4	2401.984	53.2	125.2	251	72.0	100	27.4	43.6	V
5	2417.603	34.1	125.2	215	91.1	200	27.4	43.5	V
6	2461.178	33.9	125.2	68	91.3	300	27.5	43.5	V

GFSK-High
TX_1M_2480MHz Horizontal



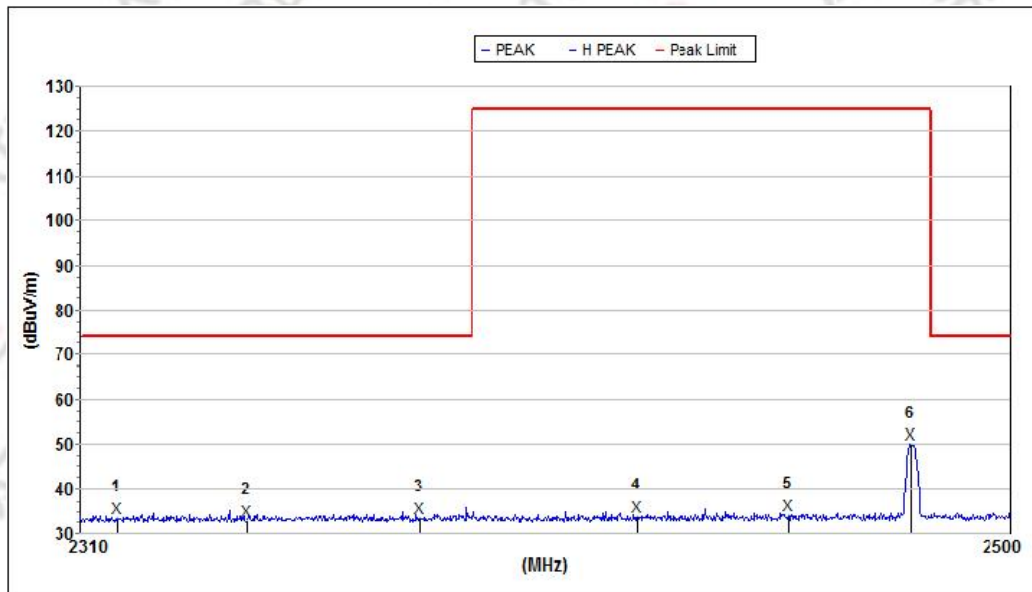
Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Deg. (deg.)	Margin (dB)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Pol.
Avg									
1	2325.021	20.9	54.0	358	33.1	100	27.2	43.6	H
2	2358.897	21.2	54.0	358	32.8	300	27.3	43.6	H
3	2404.453	21.0	105.2	358	84.2	200	27.4	43.6	H
4	2450.889	21.6	105.2	1	83.6	100	27.5	43.5	H
5	2479.925	48.3	105.2	257	56.9	200	27.6	43.5	H
6	2497.235	21.6	54.0	122	32.4	300	27.6	43.5	H

TX_1M_2480MHzVertical



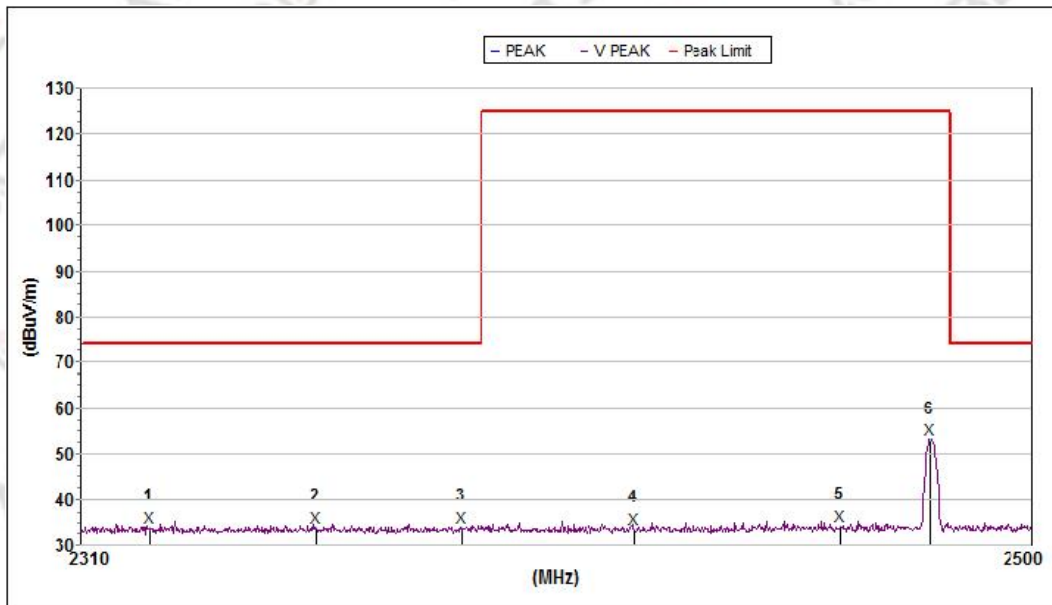
Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Deg. (deg.)	Margin (dB)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Pol.
Avg									
1	2316.216	21.0	54.0	359	33.0	100	27.2	43.6	V
2	2357.778	21.0	54.0	347	33.0	300	27.3	43.6	V
3	2401.414	21.2	105.2	217	84.0	200	27.4	43.6	V
4	2439.100	21.4	105.2	359	83.8	100	27.5	43.5	V
5	2479.925	51.5	105.2	7	53.7	200	27.6	43.5	V
6	2491.911	21.4	54.0	33	32.6	300	27.6	43.5	V

GFSK- High
TX_1M_2480MHz Horizontal



Mk.	Frequency	Level	Limit	Deg.	Margin	Hi.	Ant.F/G.	Amp.G.	Pol.
	(MHz)	(dBμV/m)	(dBμV/m)	(deg.)	(dB)	(cm)	(dB/m)	(dB)	
Peak									
1	2317.498	33.7	74.0	5	40.3	100	27.2	43.6	H
2	2343.842	33.0	74.0	280	41.0	300	27.3	43.6	H
3	2379.308	33.5	74.0	231	40.5	200	27.3	43.6	H
4	2423.725	33.9	125.2	292	91.3	100	27.4	43.5	H
5	2454.767	34.2	125.2	292	91.0	200	27.5	43.5	H
6	2479.729	50.1	125.2	256	75.1	300	27.6	43.5	H

TX_1M_2480MHz Vertical



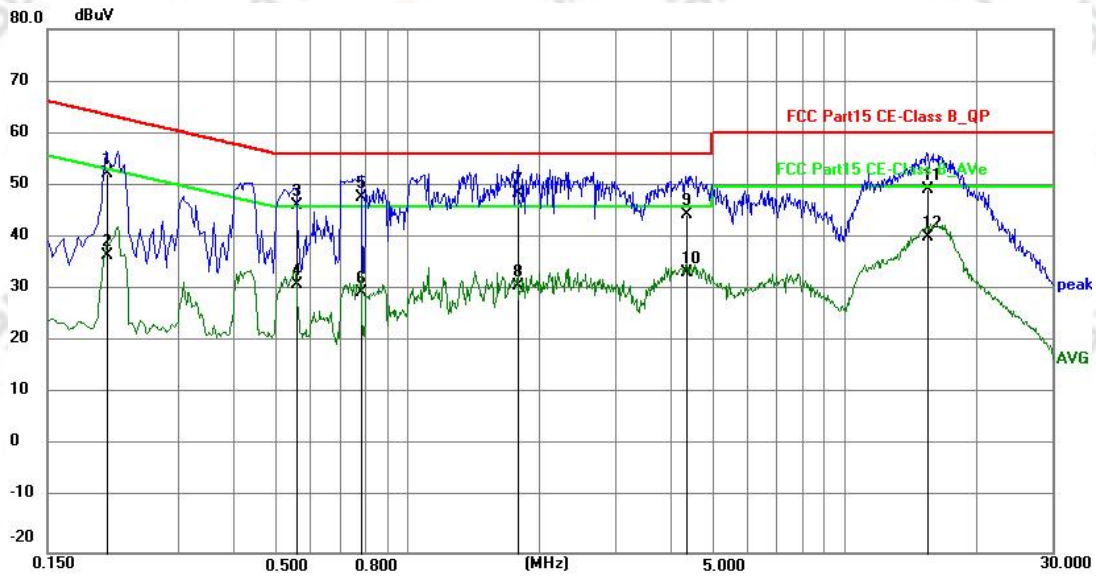
Mk.	Frequency (MHz)	Level (dBμV/m)	Limit (dBμV/m)	Deg. (deg.)	Margin (dB)	Hi. (cm)	Ant.F/G. (dB/m)	Amp.G. (dB)	Pol.
Peak									
1	2323.735	34.1	74.0	0	39.9	100	27.2	43.6	V
2	2357.033	34.0	74.0	202	40.0	300	27.3	43.6	V
3	2386.088	34.0	74.0	0	40.0	200	27.3	43.6	V
4	2420.662	33.5	125.2	0	91.7	100	27.4	43.5	V
5	2461.762	34.2	125.2	0	91.0	200	27.5	43.5	V
6	2479.729	53.0	125.2	0	72.2	300	27.6	43.5	V

3.8.4. Test Result of AC Power-Line Conducted Emission

Temperature:	23°C	Relative Humidity:	37%RH
Test Voltage:	AC 120V/60Hz	Phase:	L
Test Mode:	Mode 7		

Remark:

1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result =Reading + Factor)–Limit.
3. Factor=LISN factor+Cable loss+Limiter (10dB)

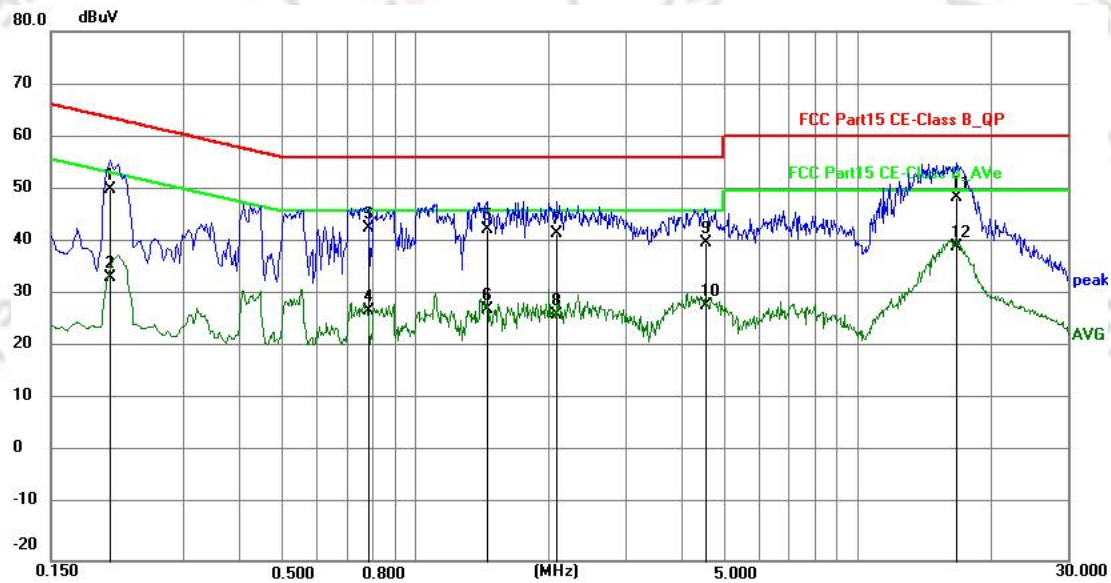


No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2040	42.28	10.08	52.36	63.45	-11.09	QP
2	0.2040	26.82	10.08	36.90	53.45	-16.55	AVG
3	0.5559	36.29	9.97	46.26	56.00	-9.74	QP
4	0.5559	21.41	9.97	31.38	46.00	-14.62	AVG
5	0.7810	38.01	9.94	47.95	56.00	-8.05	QP
6	0.7810	19.76	9.94	29.70	46.00	-16.30	AVG
7	1.7920	38.57	9.97	48.54	56.00	-7.46	QP
8	1.7920	21.01	9.97	30.98	46.00	-15.02	AVG
9	4.3439	34.45	10.06	44.51	56.00	-11.49	QP
10	4.3439	23.38	10.06	33.44	46.00	-12.56	AVG
11	15.5210	38.69	10.68	49.37	60.00	-10.63	QP
12	15.5210	29.74	10.68	40.42	50.00	-9.58	AVG

Temperature:	23°C	Relative Humidity:	37%RH
Test Voltage:	AC 120V/60Hz	Phase:	N
Test Mode:	Mode 7		

Remark:

1. All readings are Quasi-Peak and Average values.
2. Margin = Result (Result =Reading + Factor)–Limit.
3. Factor=LISN factor+Cable loss+Limiter (10dB)



No.	Frequency (MHz)	Reading (dBuV)	Correct (dB)	Result (dBuV)	Limit (dBuV)	Margin (dB)	Remark
1	0.2030	39.70	10.36	50.06	63.49	-13.43	QP
2	0.2030	23.25	10.36	33.61	53.49	-19.88	AVG
3	0.7810	32.73	10.14	42.87	56.00	-13.13	QP
4	0.7810	17.00	10.14	27.14	46.00	-18.86	AVG
5	1.4540	32.46	10.17	42.63	56.00	-13.37	QP
6	1.4540	17.35	10.17	27.52	46.00	-18.48	AVG
7	2.0940	31.57	10.21	41.78	56.00	-14.22	QP
8	2.0940	16.17	10.21	26.38	46.00	-19.62	AVG
9	4.5420	29.87	10.19	40.06	56.00	-15.94	QP
10	4.5420	18.13	10.19	28.32	46.00	-17.68	AVG
11	16.8110	38.24	10.36	48.60	60.00	-11.40	QP
12	16.8110	28.85	10.36	39.21	50.00	-10.79	AVG

*****END OF APPENDIX B *****