

Appendix B for test data:**1.Radiated Spurious Emission and Restricted Band**

Test Result

Radiated Spurious Emission:**For 9 kHz ~ 30 MHz**

Note:

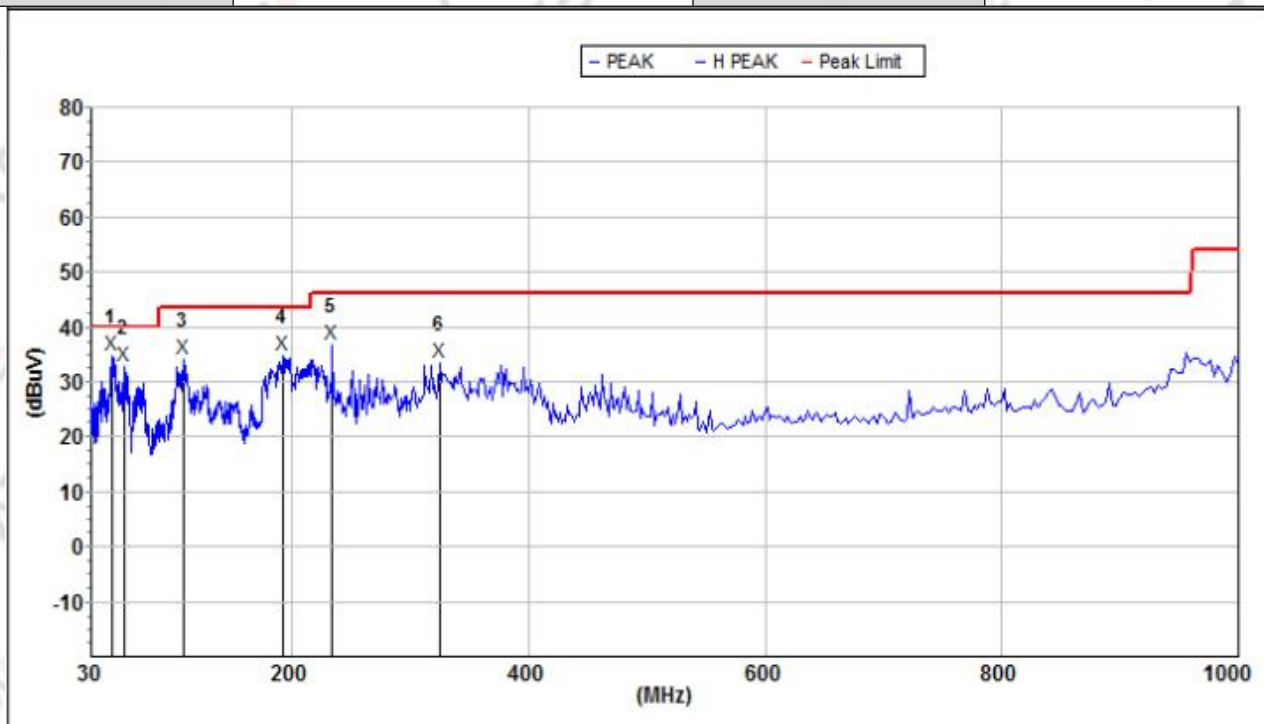
- 1.The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.
- 2.The all data rate modes had been test, but only worse test data was recorded in the test report.

Below 1GHz:

Note:

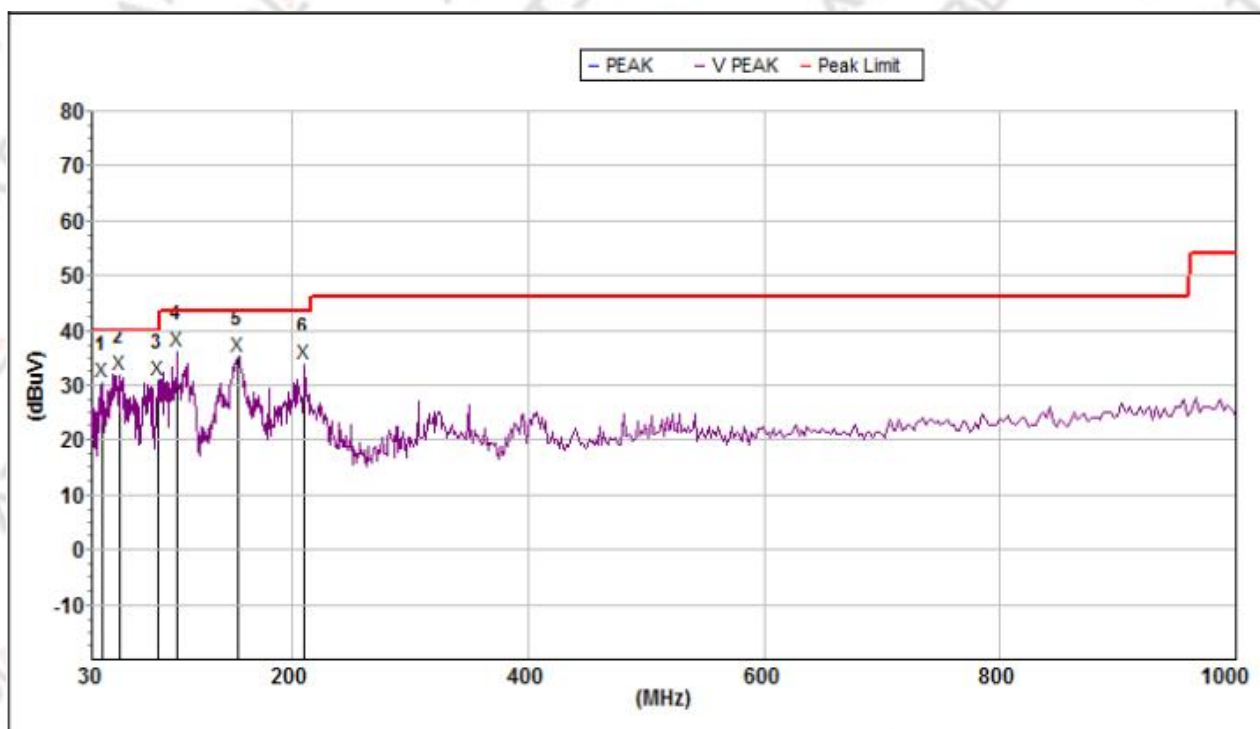
- 1.All modes have been tested, only worst (BLE_2M-TX-2480MHz)mode was recorded in the test report.
- 2.Emission Level (dBuV/m) = Reading Value (dBuV) + Correction Factor (dB/m).
- 3.Correction Factor (dB/m) = Antenna Pol. Factor (dB/m) + Cable Factor (dB)-Amplifier Gain.
- 4.The emission levels of other frequencies were less than 20dB margin against the limit.
- 5.Margin value = Emission level-Limit value.

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2480MHz	Antenna Pol.	Horizontal



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	48.332	77.3	-42.3	35.0	40.0	5.0	H
2	58.613	76.7	-43.8	32.9	40.0	7.1	H
3	108.647	72.3	-37.9	34.4	43.5	9.1	H
4	192.419	69.5	-34.6	34.9	43.5	8.6	H
5	234.168	64.3	-27.4	36.9	46.0	9.1	H
6	324.456	59.8	-26.1	33.7	46.0	12.3	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2480MHz	Antenna Pol.	Vertical

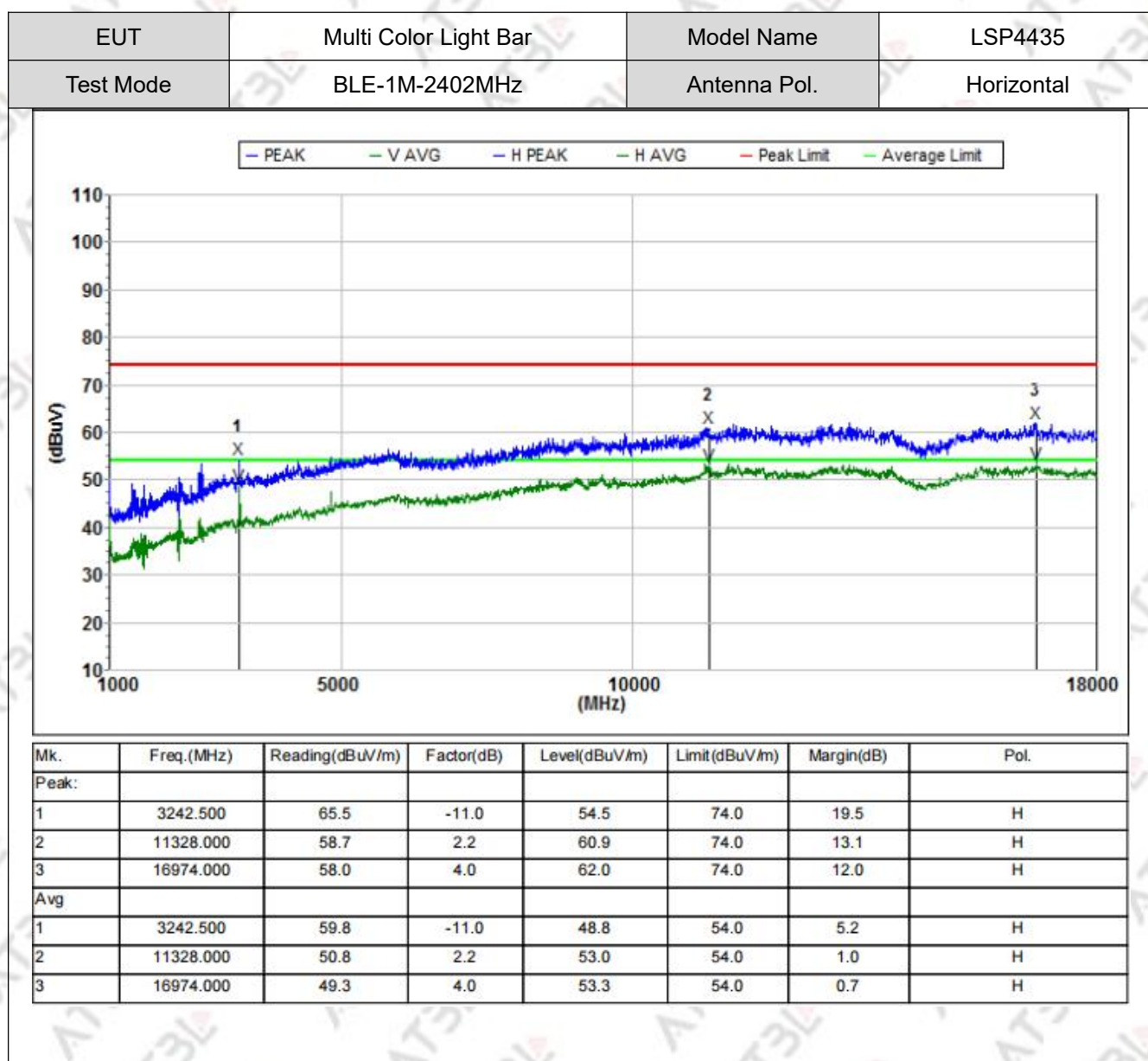


Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	38.752	76.6	-45.8	30.8	40.0	9.2	V
2	54.071	75.4	-43.3	32.1	40.0	7.9	V
3	85.898	73.0	-41.9	31.1	40.0	8.9	V
4	102.001	72.6	-36.2	36.4	43.5	7.1	V
5	153.200	71.6	-36.2	35.4	43.5	8.1	V
6	210.048	62.9	-29.0	33.9	43.5	9.6	V

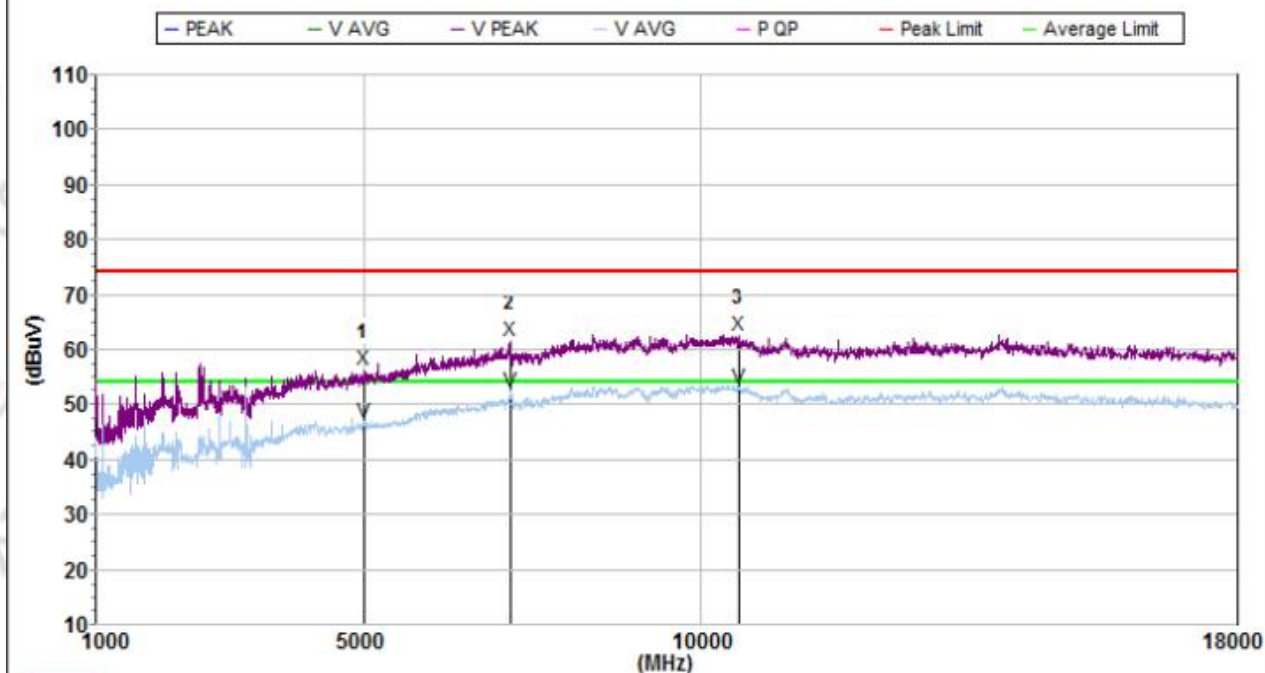
1GHz-18GHz:

Note:

- 1.All modes have been tested, only worst mode was recorded in the test report.
- 2.We used the filter to test and the main frequency was filtered out.
- 3.Emission Level (dBuV/m) = Reading Value (dBuV) + Correction Factor (dB/m).
4. Correction Factor (dB/m) = Antenna Pol. Factor (dB/m) + Cable Factor (dB)-Amplifier Gain.
5. Margin value = Emission level-Limit value.
- 6.While performing the testing, the notch filter is used for avoiding test instrument overload.

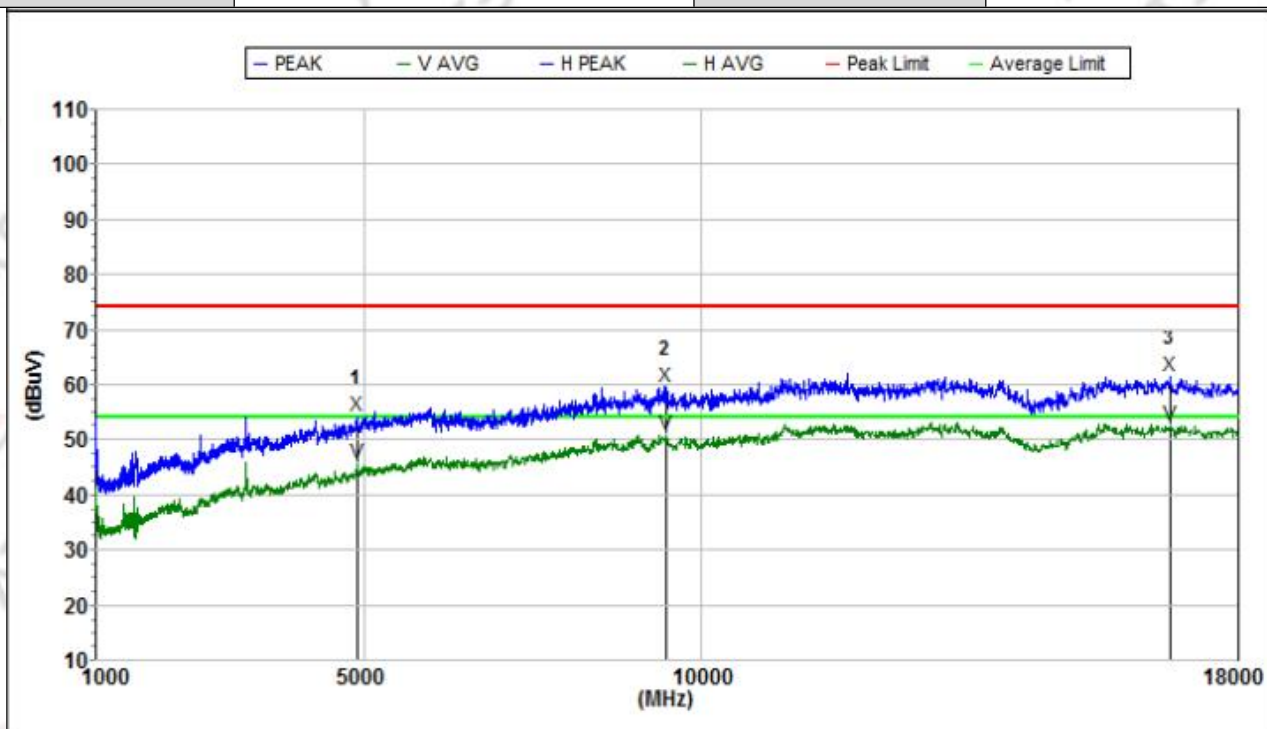


EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-1M-2402MHz	Antenna Pol.	Vertical



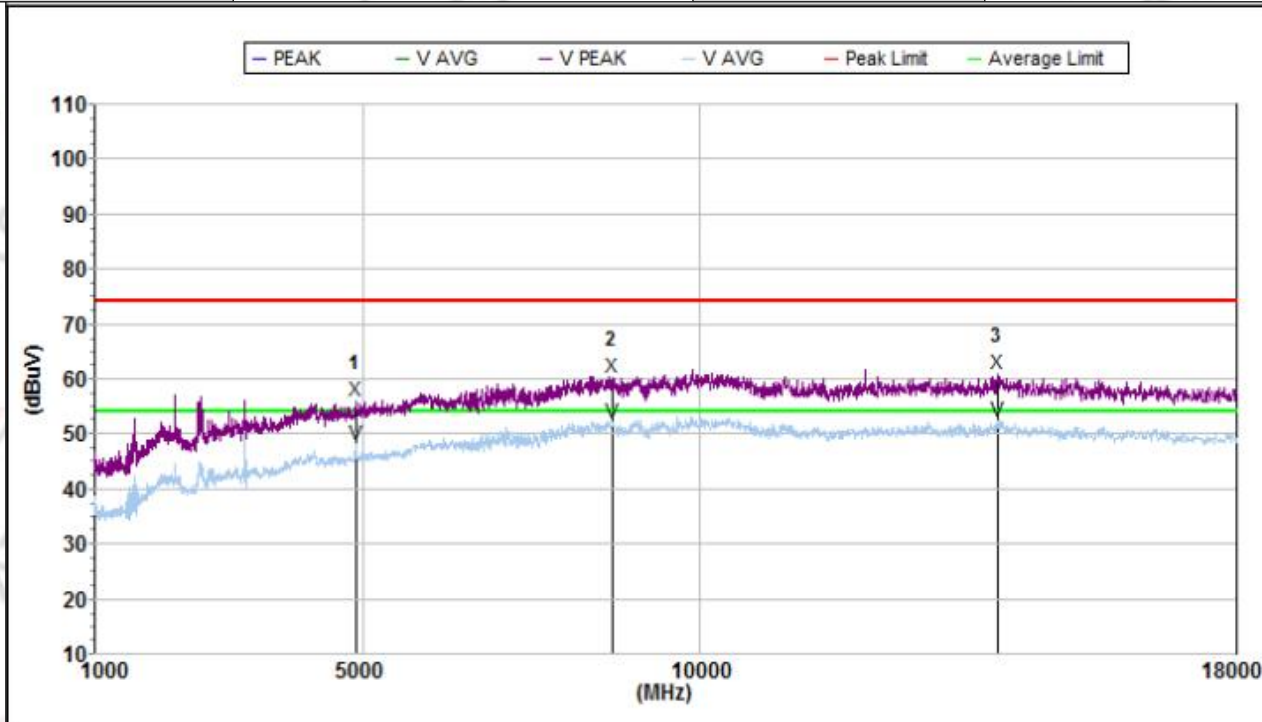
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	5005.000	60.6	-4.1	56.5	74.0	17.5	V
2	7182.000	61.0	0.7	61.7	74.0	12.3	V
3	10572.000	59.4	3.2	62.6	74.0	11.4	V
Avg							
1	5005.000	50.9	-4.1	46.8	54.0	7.2	V
2	7182.000	51.6	0.7	52.3	54.0	1.7	V
3	10572.000	49.8	3.2	53.0	54.0	1.0	V

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-1MHz-2440MHz	Antenna Pol.	Horizontal



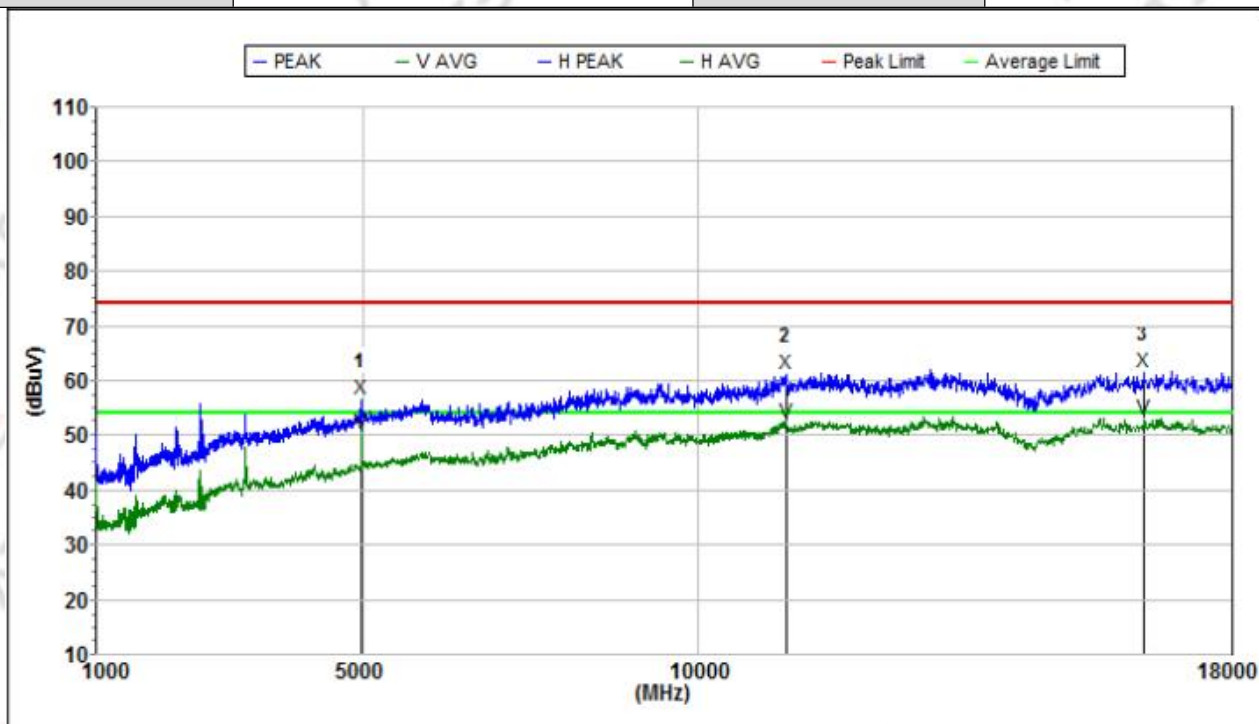
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4882.500	60.3	-6.0	54.3	74.0	19.7	H
2	9492.000	59.3	0.5	59.8	74.0	14.2	H
3	16986.000	57.5	4.0	61.5	74.0	12.5	H
Avg							
1	4882.500	52.0	-6.0	46.0	54.0	8.0	H
2	9492.000	50.6	0.5	51.1	54.0	2.9	H
3	16986.000	48.8	4.0	52.8	54.0	1.2	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-1MHz2440MHz	Antenna Pol.	Vertical



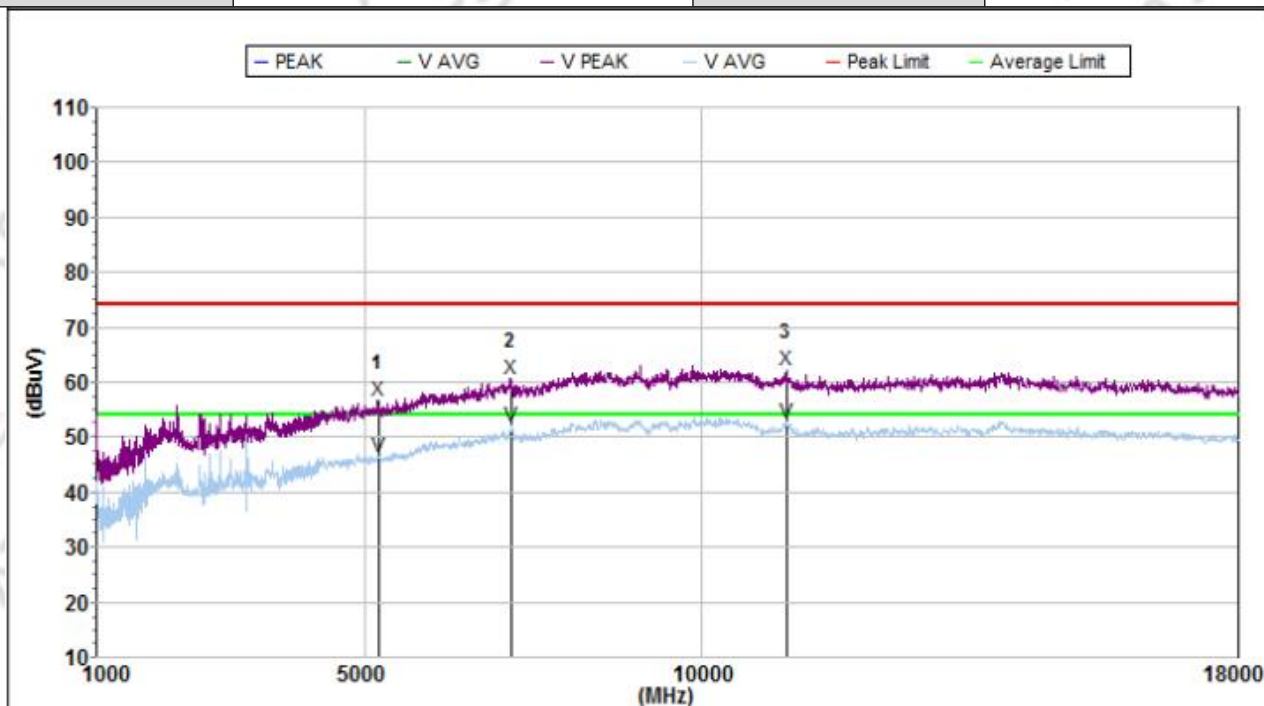
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4882.500	60.5	-4.3	56.2	74.0	17.8	V
2	8706.000	58.2	2.2	60.4	74.0	13.6	V
3	14442.000	58.7	2.4	61.1	74.0	12.9	V
Avg							
1	4882.500	52.3	-4.3	48.0	54.0	6.0	V
2	8706.000	50.0	2.2	52.2	54.0	1.8	V
3	14442.000	50.0	2.4	52.4	54.0	1.6	V

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-1MHz-2480MHz	Antenna Pol.	Horizontal



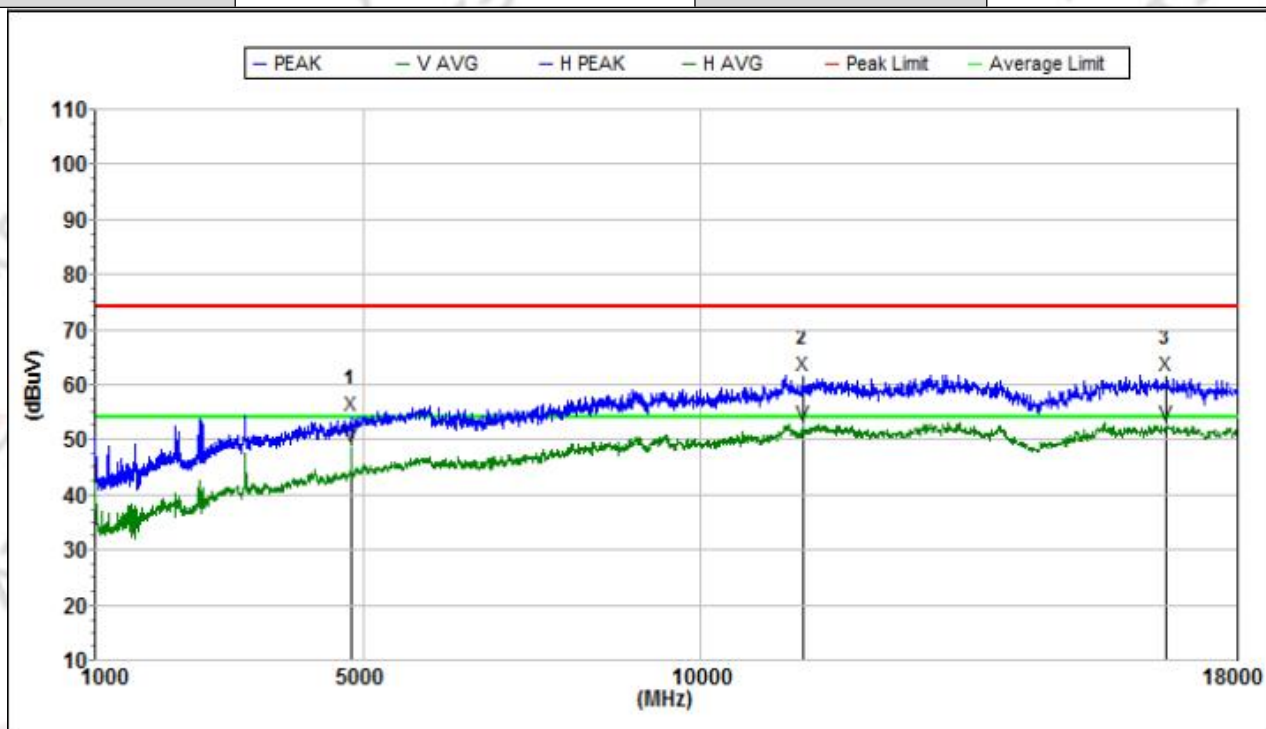
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4962.500	62.4	-5.7	56.7	74.0	17.3	H
2	11328.000	59.2	2.2	61.4	74.0	12.6	H
3	16686.000	58.0	3.7	61.7	74.0	12.3	H
Avg							
1	4962.500	56.2	-5.7	50.5	54.0	3.5	H
2	11328.000	50.3	2.2	52.5	54.0	1.5	H
3	16686.000	49.4	3.7	53.1	54.0	0.9	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-1MHz-2480MHz	Antenna Pol.	Vertical



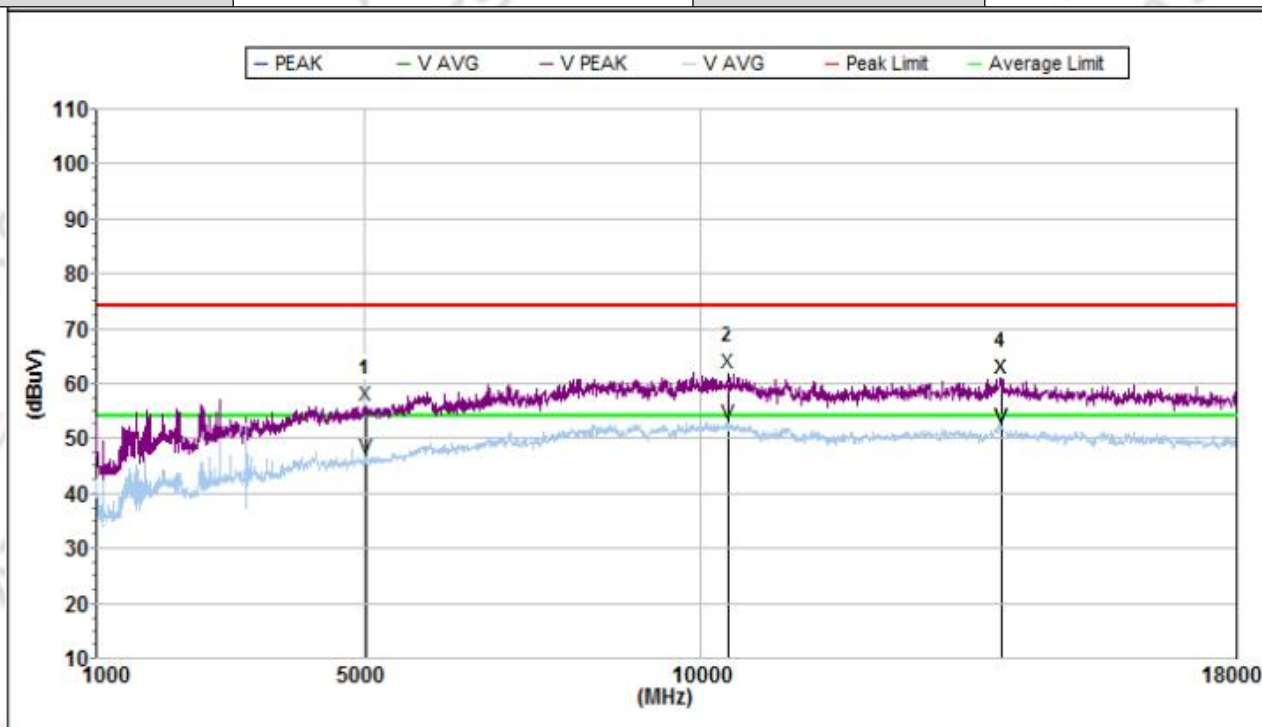
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	5215.000	60.6	-3.9	56.7	74.0	17.3	V
2	7188.000	59.9	0.7	60.6	74.0	13.4	V
3	11268.000	60.8	1.6	62.4	74.0	11.6	V
Avg							
1	5215.000	50.5	-3.9	46.6	54.0	7.4	V
2	7188.000	51.4	0.7	52.1	54.0	1.9	V
3	11268.000	51.1	1.6	52.7	54.0	1.3	V

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2MHz-2402MHz	Antenna Pol.	Horizontal



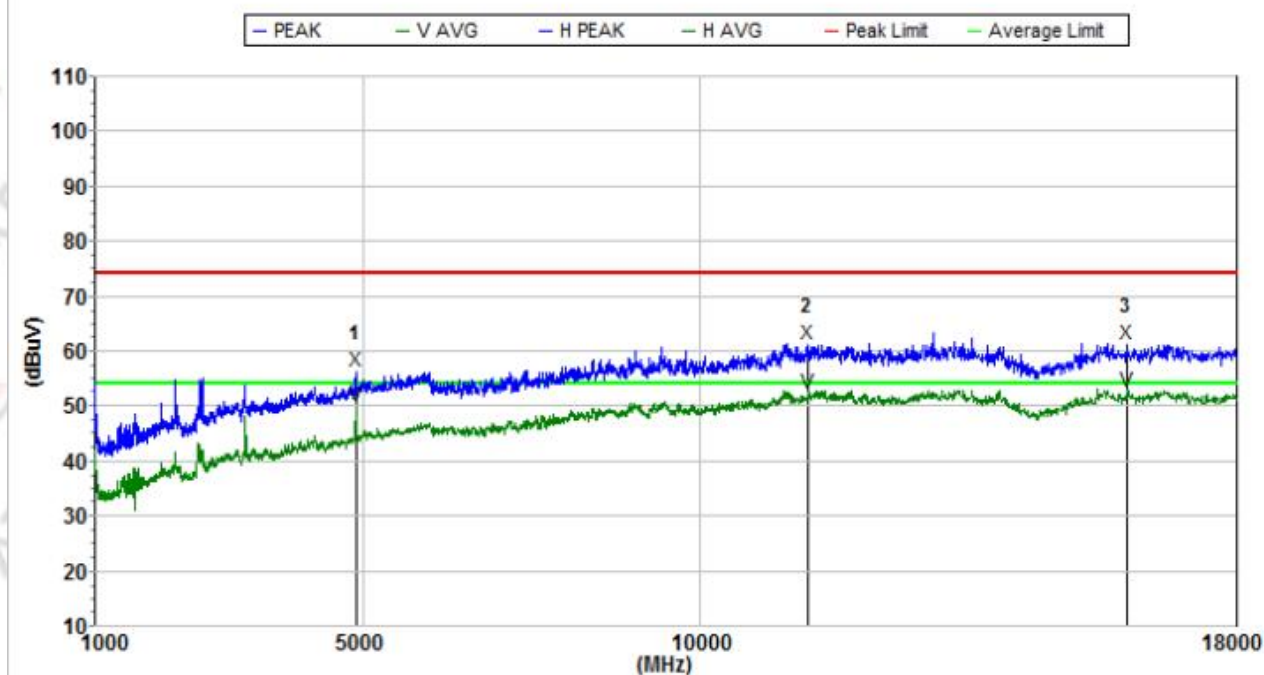
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4807.500	60.8	-6.3	54.5	74.0	19.5	H
2	11550.000	59.0	2.5	61.5	74.0	12.5	H
3	16944.000	57.6	3.9	61.5	74.0	12.5	H
Avg							
1	4807.500	55.1	-6.3	48.8	54.0	5.2	H
2	11550.000	50.3	2.5	52.8	54.0	1.2	H
3	16944.000	48.8	3.9	52.7	54.0	1.3	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2MHz-2402MHz	Antenna Pol.	Vertical



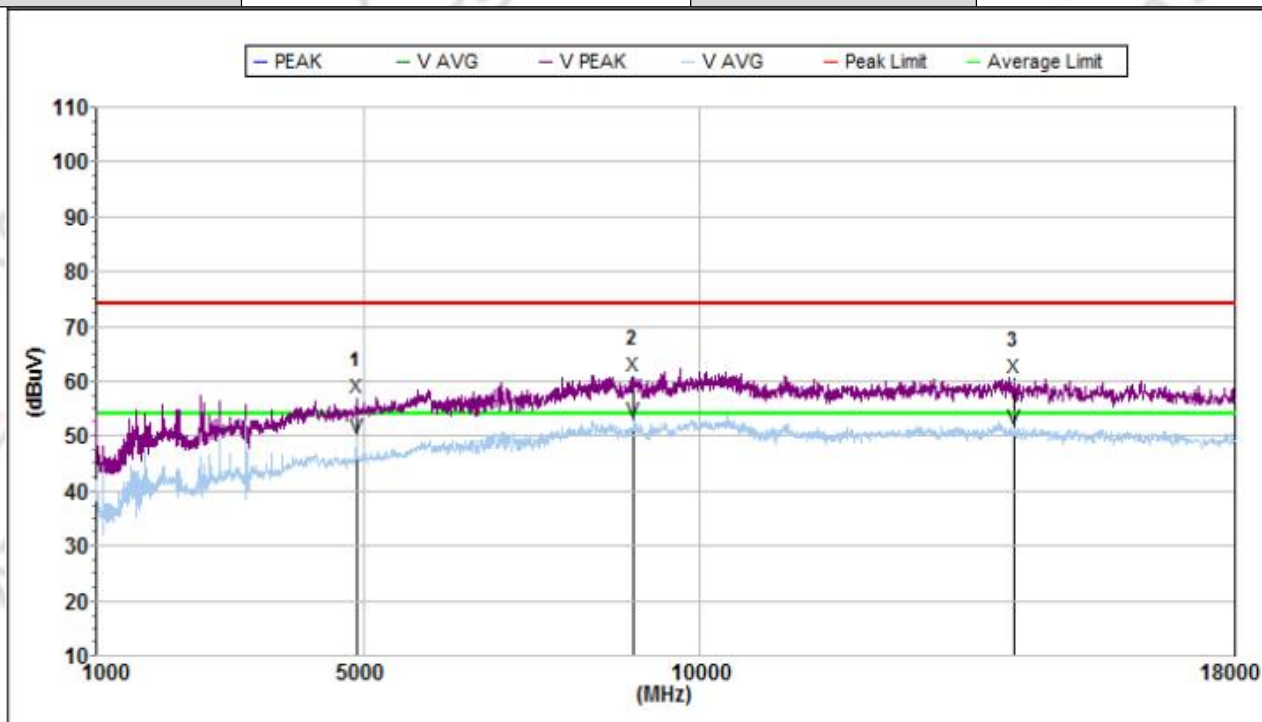
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	5027.500	60.0	-4.1	55.9	74.0	18.1	V
2	10410.000	58.6	3.3	61.9	74.0	12.1	V
3	14502.000	58.5	2.6	61.1	74.0	12.9	V
4	14502.000	58.5	2.6	61.1	74.0	12.9	V
Avg							
1	5027.500	50.7	-4.1	46.6	54.0	7.4	V
2	10410.000	49.5	3.3	52.8	54.0	1.2	V
3	14502.000	49.4	2.6	52.0	54.0	2.0	V
4	14502.000	49.4	2.6	52.0	54.0	2.0	V

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2MHz-2440MHz	Antenna Pol.	Horizontal



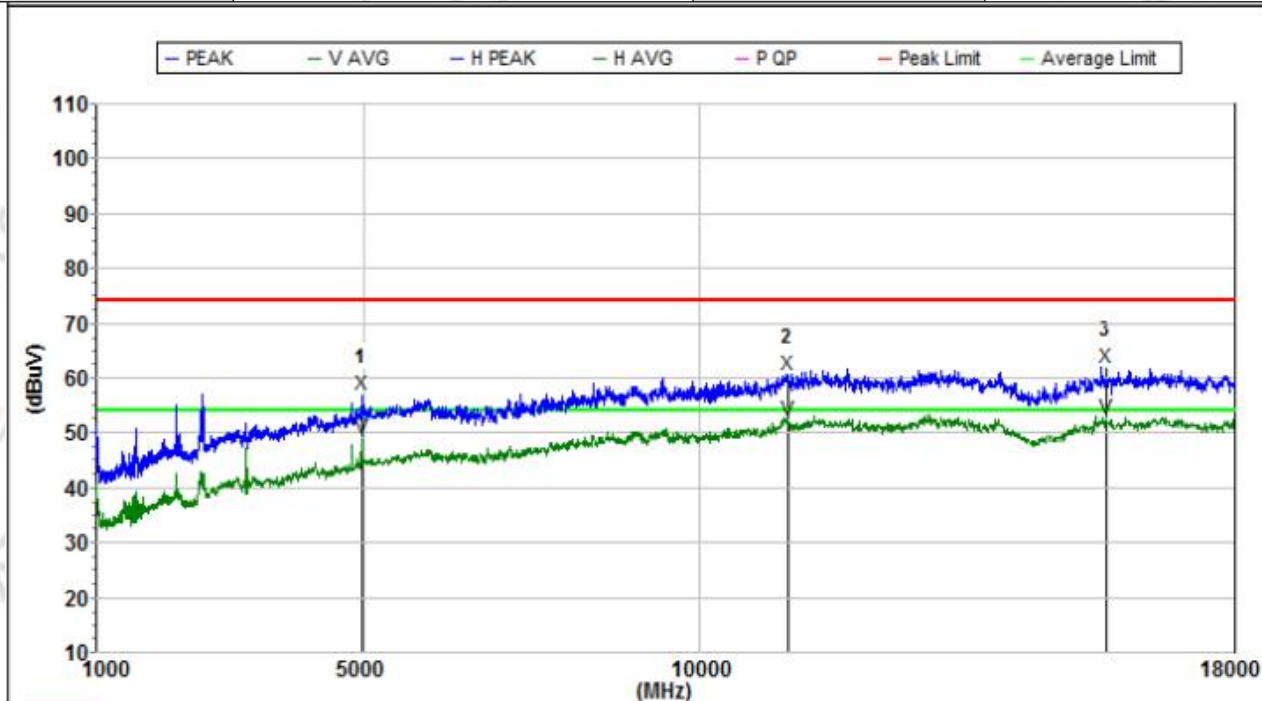
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4882.500	62.3	-6.0	56.3	74.0	17.7	H
2	11628.000	58.7	2.6	61.3	74.0	12.7	H
3	16368.000	57.8	3.6	61.4	74.0	12.6	H
Avg							
1	4882.500	56.1	-6.0	50.1	54.0	3.9	H
2	11628.000	49.9	2.6	52.5	54.0	1.5	H
3	16368.000	49.3	3.6	52.9	54.0	1.1	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2MHz-2440MHz	Antenna Pol.	Vertical



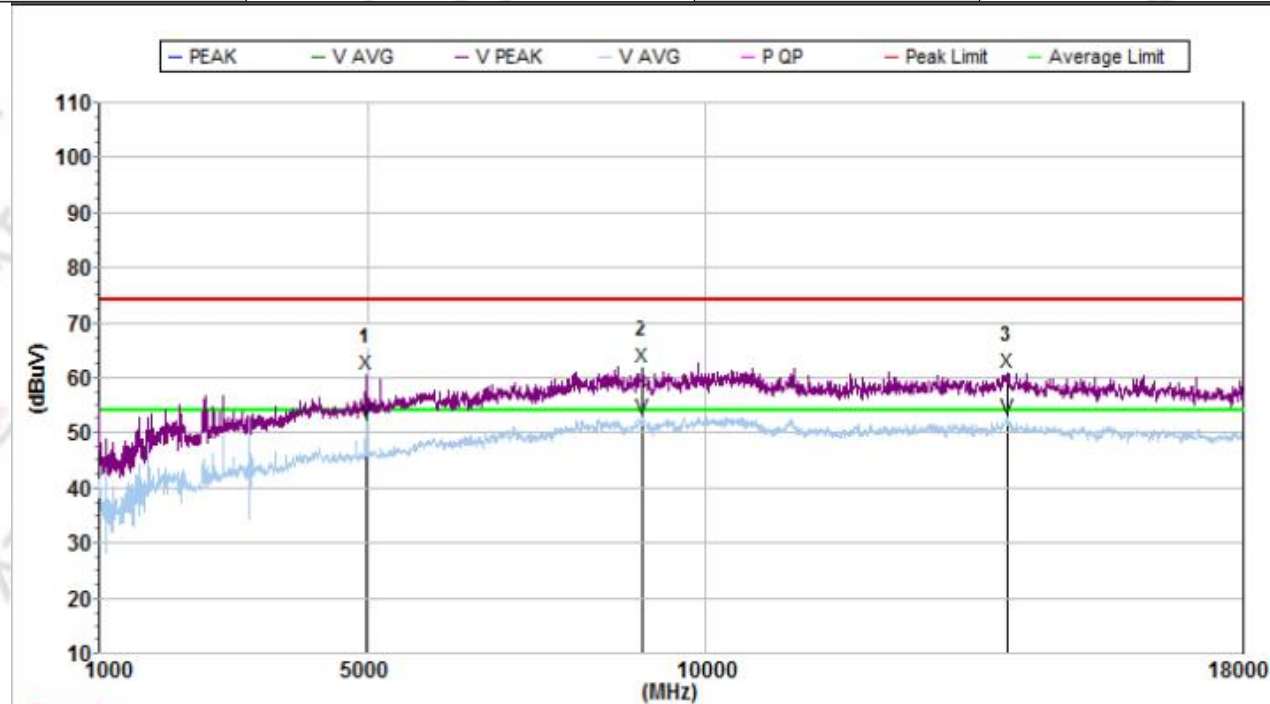
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4882.500	61.5	-4.3	57.2	74.0	16.8	V
2	9030.000	59.0	2.0	61.0	74.0	13.0	V
3	14700.000	58.4	2.1	60.5	74.0	13.5	V
Avg							
1	4882.500	54.1	-4.3	49.8	54.0	4.2	V
2	9030.000	50.7	2.0	52.7	54.0	1.3	V
3	14700.000	49.5	2.1	51.6	54.0	2.4	V

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2MHz-2480MHz	Antenna Pol.	Horizontal



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4960.000	62.8	-5.7	57.1	74.0	16.9	H
2	11334.000	58.4	2.2	60.6	74.0	13.4	H
3	16074.000	58.5	3.6	62.1	74.0	11.9	H
Avg							
1	4960.000	54.7	-5.7	49.0	54.0	5.0	H
2	11334.000	50.2	2.2	52.4	54.0	1.6	H
3	16074.000	49.1	3.6	52.7	54.0	1.3	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2MHz-2480MHz	Antenna Pol.	Vertical



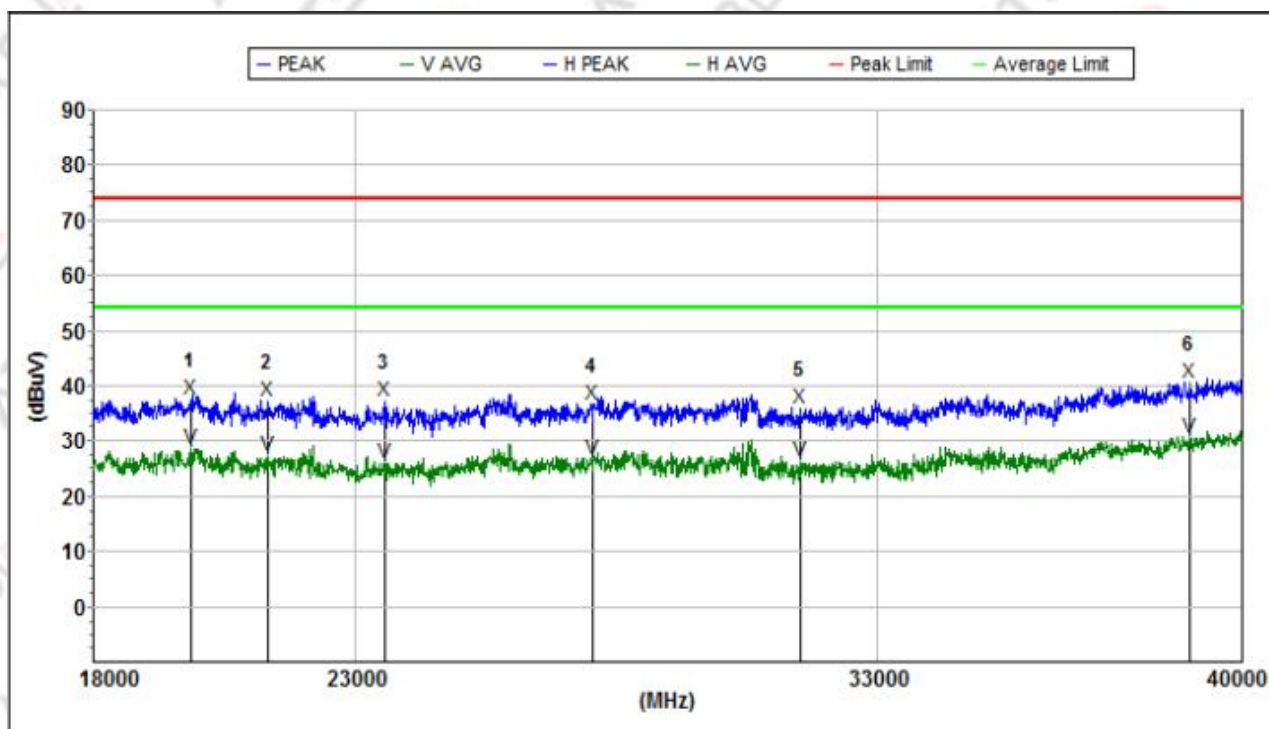
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4960.000	64.8	-4.2	60.6	74.0	13.4	V
2	9066.000	59.9	2.0	61.9	74.0	12.1	V
3	14490.000	58.3	2.6	60.9	74.0	13.1	V
Avg							
1	4960.000	56.2	-4.2	52.0	54.0	2.0	V
2	9066.000	50.6	2.0	52.6	54.0	1.4	V
3	14490.000	50.0	2.6	52.6	54.0	1.4	V

18GHz-40GHz:

Note:

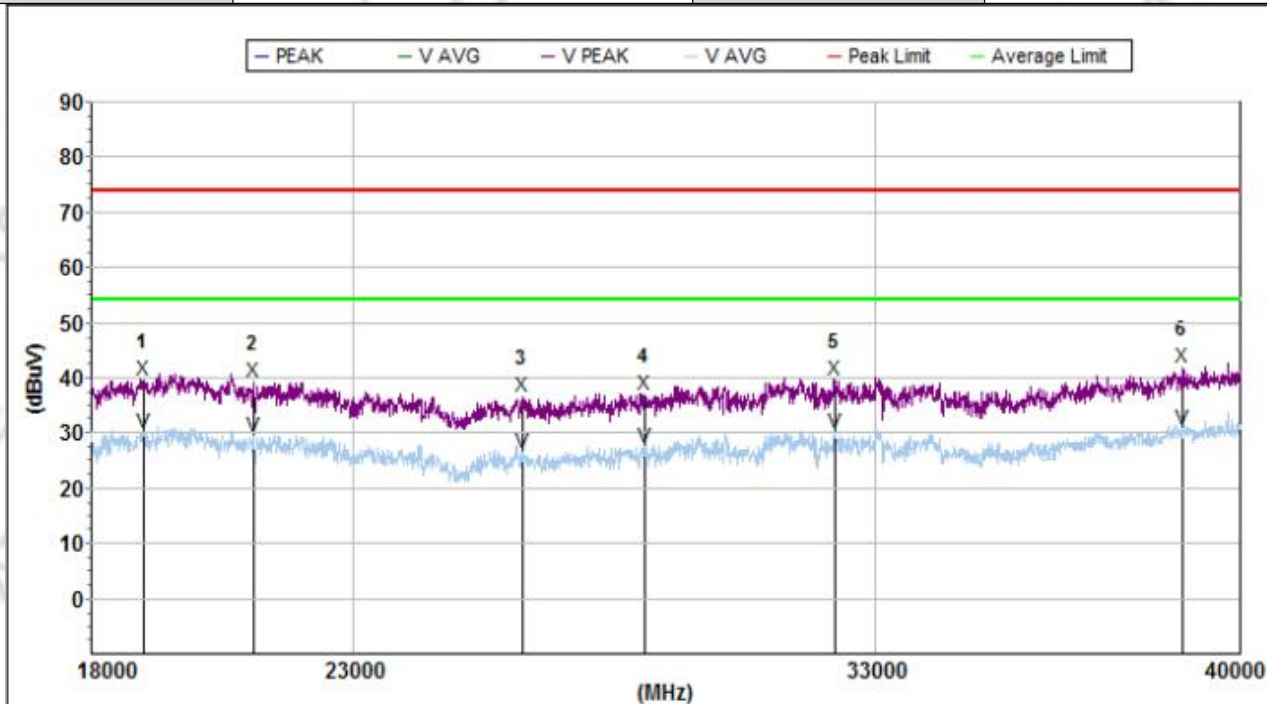
- 1.All modes have been tested, only worst (BLE_2M-2480MHz)mode was recorded in the test report.
- 2.While performing the testing, the notch filter is used for avoiding test instrument overload.

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2480MHz	Antenna Pol.	Horizontal



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	19859.000	59.2	-21.5	37.7	74.0	36.3	H
2	21333.000	58.0	-20.6	37.4	74.0	36.6	H
3	23577.000	58.9	-21.5	37.4	74.0	36.6	H
4	27548.000	53.9	-17.1	36.8	74.0	37.2	H
5	31541.000	53.0	-16.8	36.2	74.0	37.8	H
6	38988.000	55.8	-15.3	40.5	74.0	33.5	H
Avg							
1	19859.000	50.3	-21.5	28.8	54.0	25.2	H
2	21333.000	48.0	-20.6	27.4	54.0	26.6	H
3	23577.000	47.8	-21.5	26.3	54.0	27.7	H
4	27548.000	44.0	-17.1	26.9	54.0	27.1	H
5	31541.000	43.4	-16.8	26.6	54.0	27.4	H
6	38988.000	46.0	-15.3	30.7	54.0	23.3	H

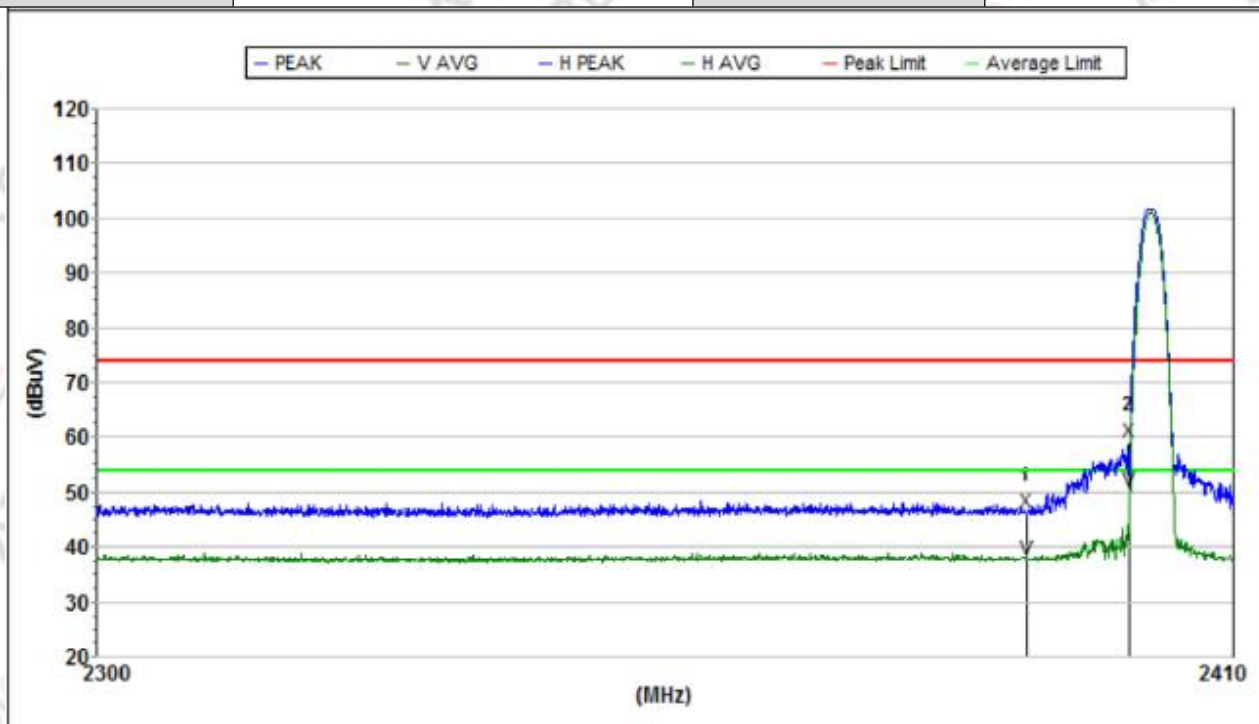
EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2480MHz	Antenna Pol.	Vertical



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	18990.000	56.7	-16.9	39.8	74.0	34.2	V
2	21124.000	55.1	-15.7	39.4	74.0	34.6	V
3	26250.000	54.2	-17.6	36.6	74.0	37.4	V
4	28604.000	53.7	-16.6	37.1	74.0	36.9	V
5	32234.000	56.3	-16.7	39.6	74.0	34.4	V
6	38889.000	57.4	-15.5	41.9	74.0	32.1	V
Avg							
1	18990.000	47.0	-16.9	30.1	54.0	23.9	V
2	21124.000	45.2	-15.7	29.5	54.0	24.5	V
3	26250.000	44.0	-17.6	26.4	54.0	27.6	V
4	28604.000	44.0	-16.6	27.4	54.0	26.6	V
5	32234.000	46.8	-16.7	30.1	54.0	23.9	V
6	38889.000	46.2	-15.5	30.7	54.0	23.3	V

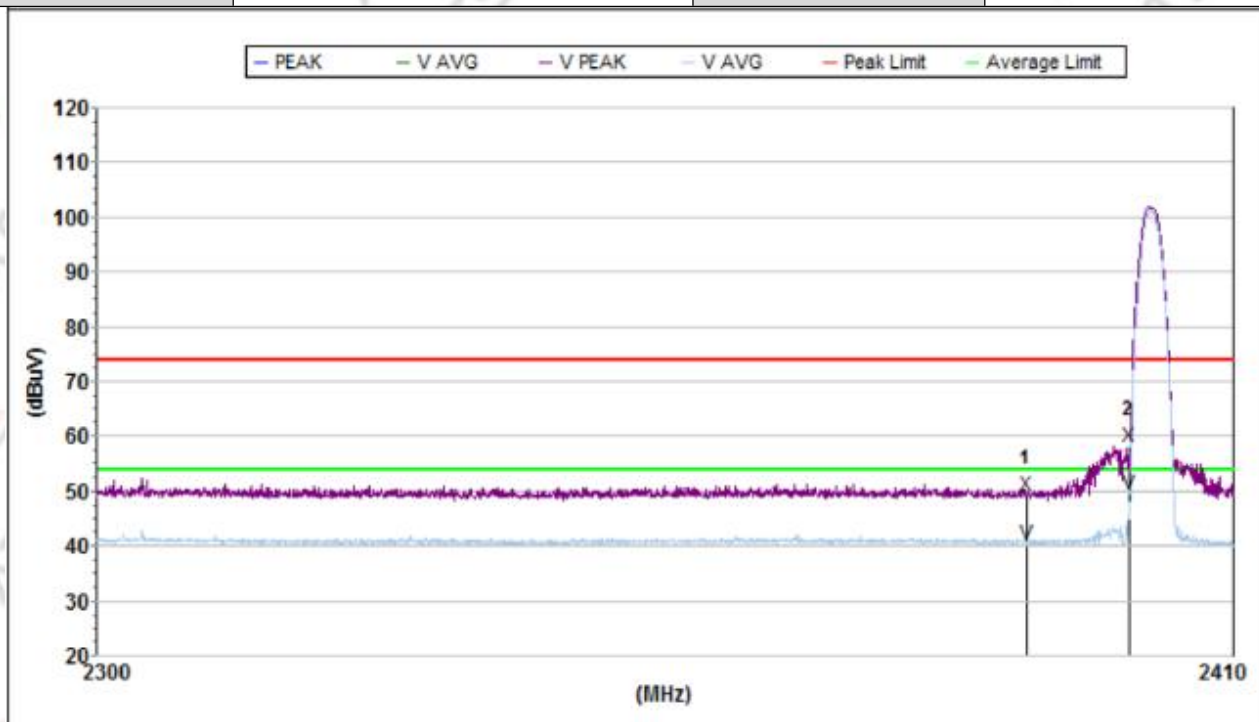
Restricted Band:

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-1M-2402MHz	Antenna Pol.	Horizontal



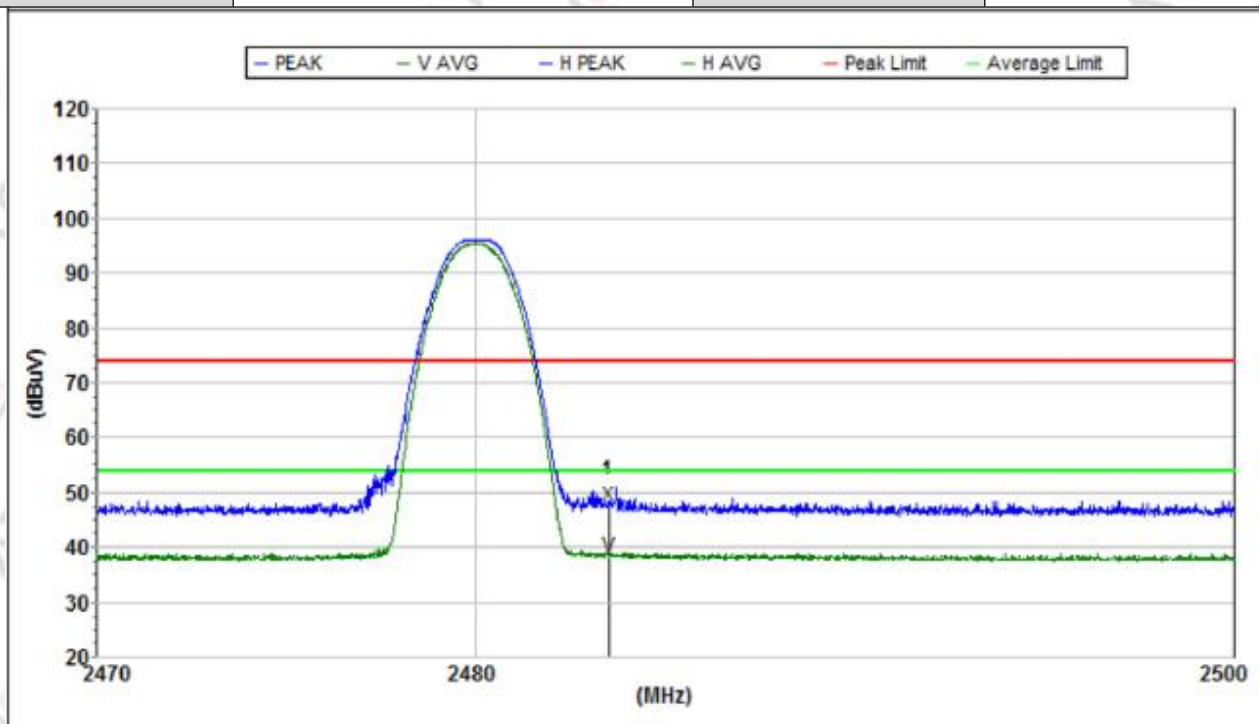
Mk.	Freq. (MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol
Peak:							
1	2390.000	60.6	-14.2	46.4	74.0	27.6	H
2	2400.000	73.3	-14.2	59.1	74.0	14.9	H
Avg							
1	2390.000	52.1	-14.2	37.9	54.0	16.1	H
2	2400.000	64.6	-14.2	50.4	54.0	3.6	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-1M-2402MHz	Antenna Pol.	Vertical



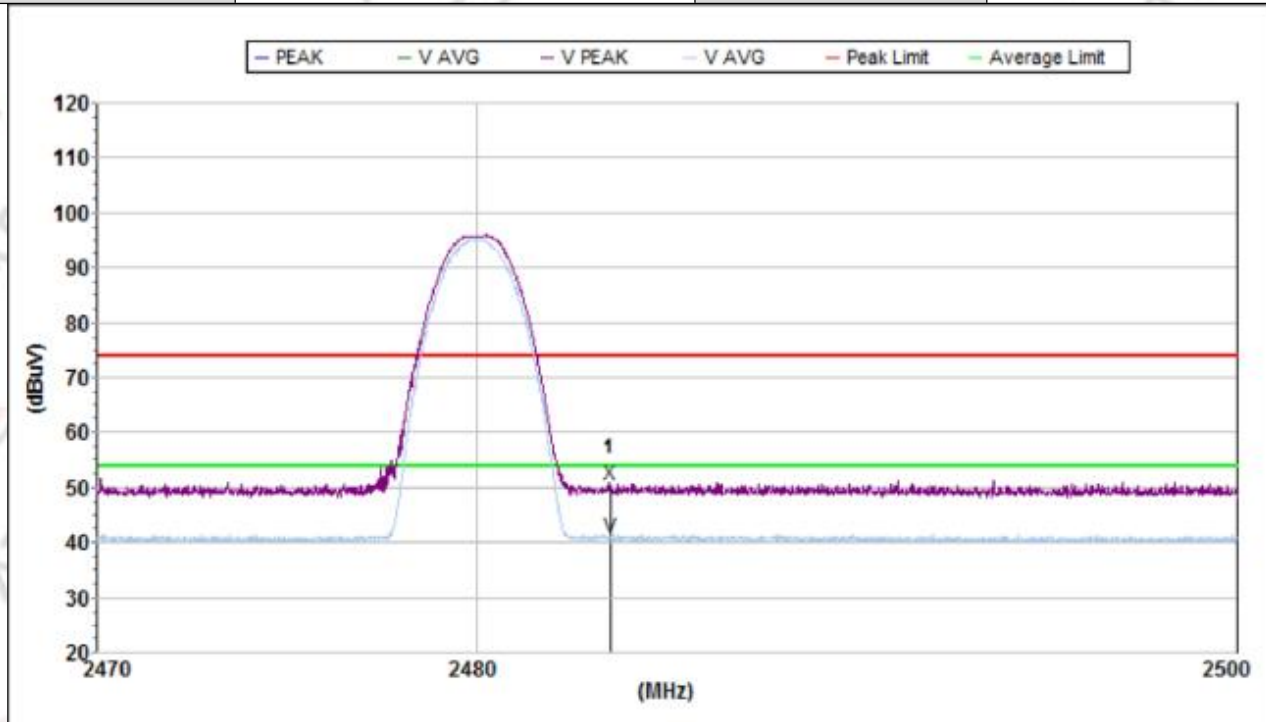
Mk.	Freq (MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol
Peak:							
1	2390.000	60.5	-11.3	49.2	74.0	24.8	V
2	2400.000	69.7	-11.4	58.3	74.0	15.7	V
Avg							
1	2390.000	51.6	-11.3	40.3	54.0	13.7	V
2	2400.000	61.0	-11.4	49.6	54.0	4.4	V

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-1M-2480MHz	Antenna Pol.	Horizontal



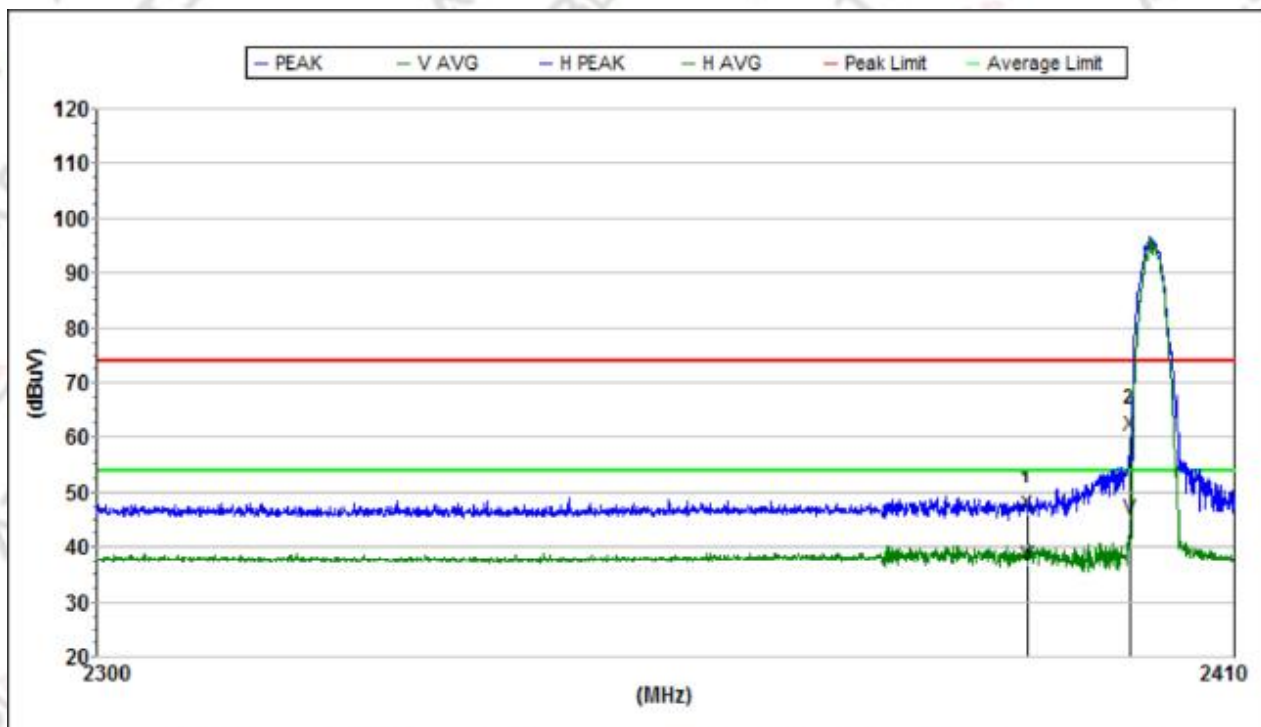
Mk.	Freq (MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol
Peak:							
1	2483.500	62.0	-14.3	47.7	74.0	26.3	H
Avg							
1	2483.500	52.8	-14.3	38.5	54.0	15.5	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-1M-2480MHz	Antenna Pol.	Vertical



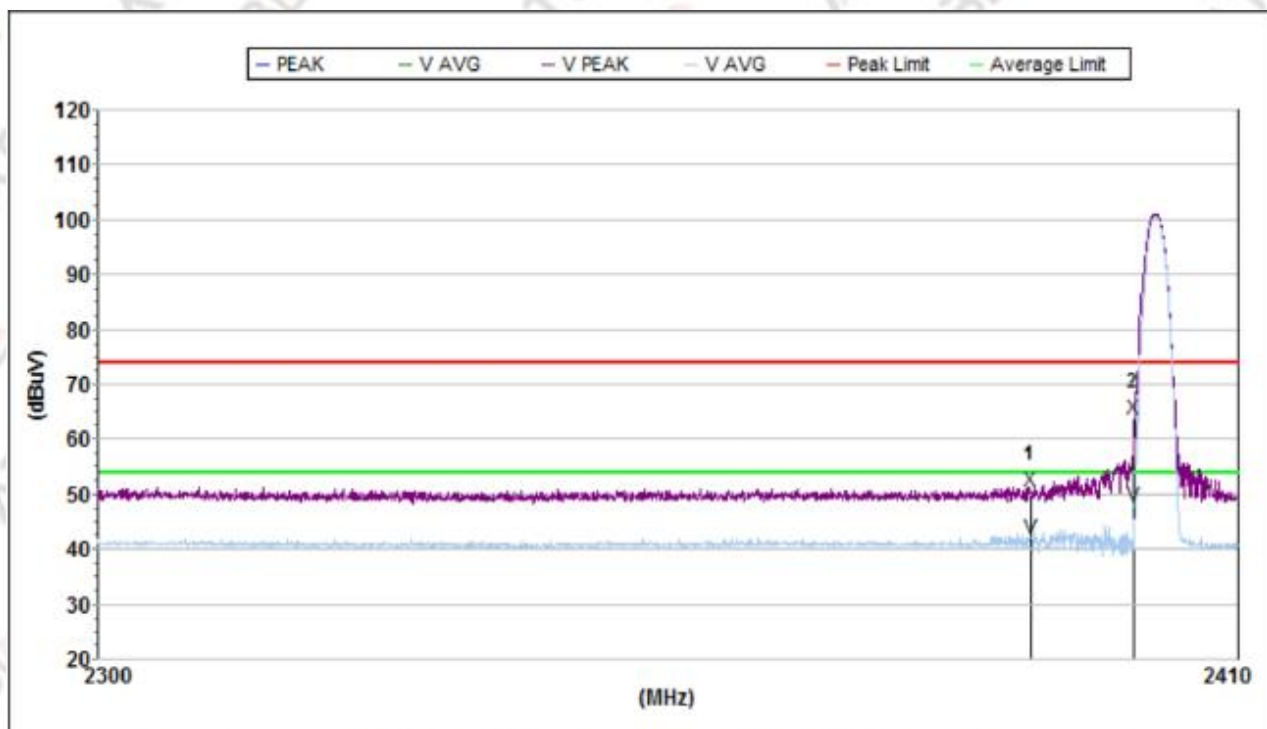
Mk	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol
Peak:							
1	2483.500	62.2	-11.7	50.5	74.0	23.5	V
Avg							
1	2483.500	52.7	-11.7	41.0	54.0	13.0	V

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2402MHz	Antenna Pol.	Horizontal



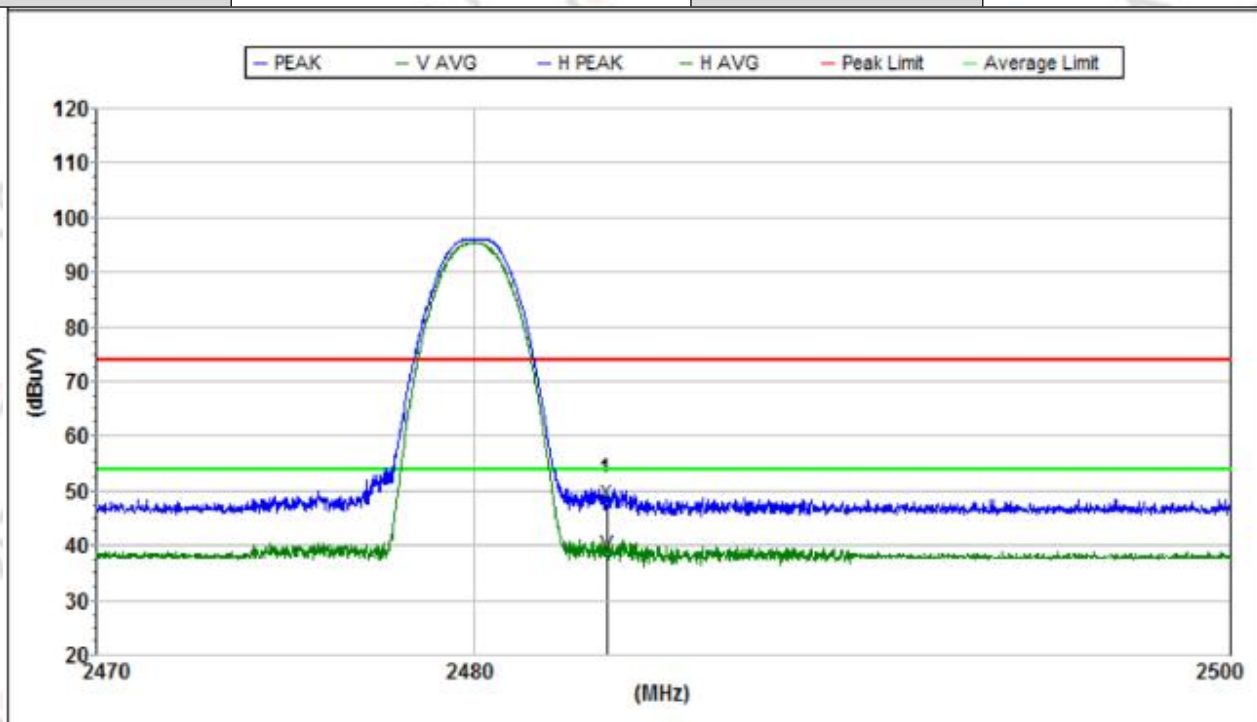
Mk.	Freq. (MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol
Peak:							
1	2390.000	60.2	-14.2	46.0	74.0	28.0	H
2	2400.000	74.6	-14.2	60.4	74.0	13.6	H
Avg							
1	2390.000	50.9	-14.2	36.7	54.0	17.3	H
2	2400.000	59.6	-14.2	45.4	54.0	8.6	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2402MHz	Antenna Pol.	Vertical



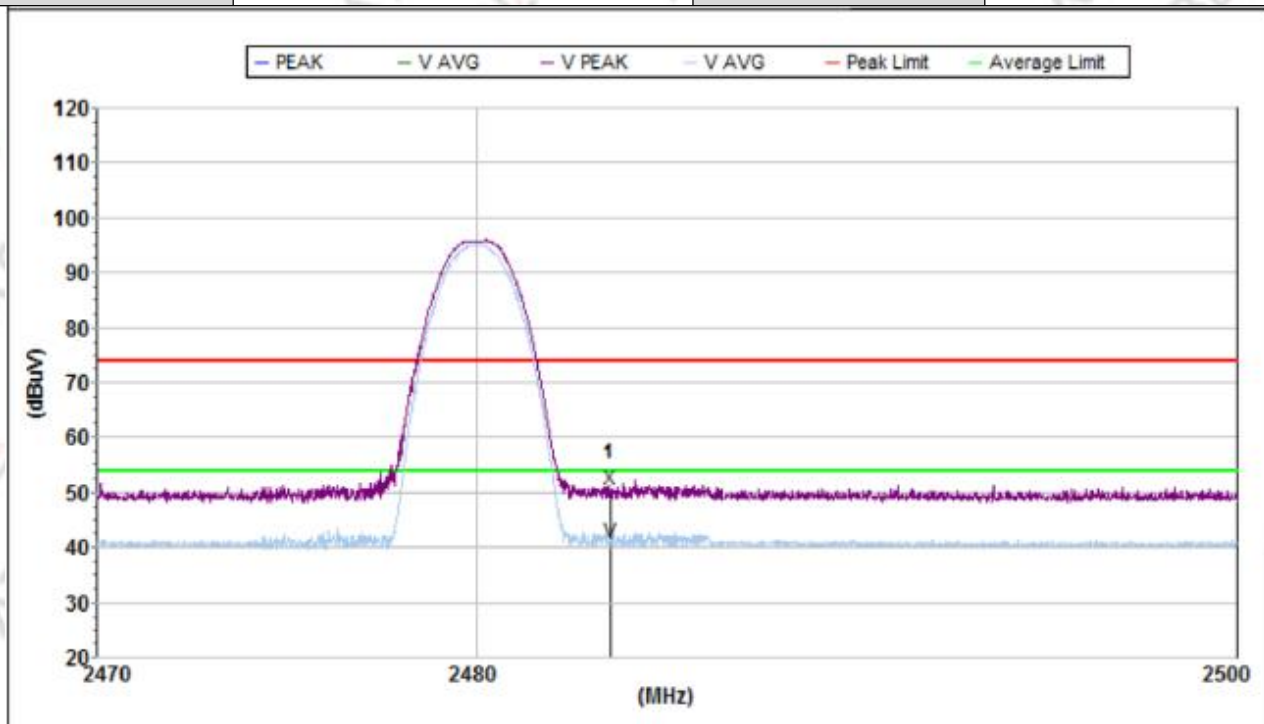
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol
Peak:							
1	2390.000	61.8	-11.3	50.5	74.0	23.5	V
2	2400.000	75.1	-11.4	63.7	74.0	10.3	V
Avg							
1	2390.000	53.4	-11.3	42.1	54.0	11.9	V
2	2400.000	59.4	-11.4	48.0	54.0	6.0	V

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2480MHz	Antenna Pol.	Horizontal



Mk.	Freq. (MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol
Peak:							
1	2483.500	62.0	-14.3	47.7	74.0	26.3	H
Avg							
1	2483.500	52.8	-14.3	38.5	54.0	15.5	H

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2480MHz	Antenna Pol.	Vertical



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol
Peak:							
1	2483.500	62.2	-11.6	50.6	74.0	23.4	V
Avg							
1	2483.500	52.7	-11.6	41.1	54.0	12.9	V

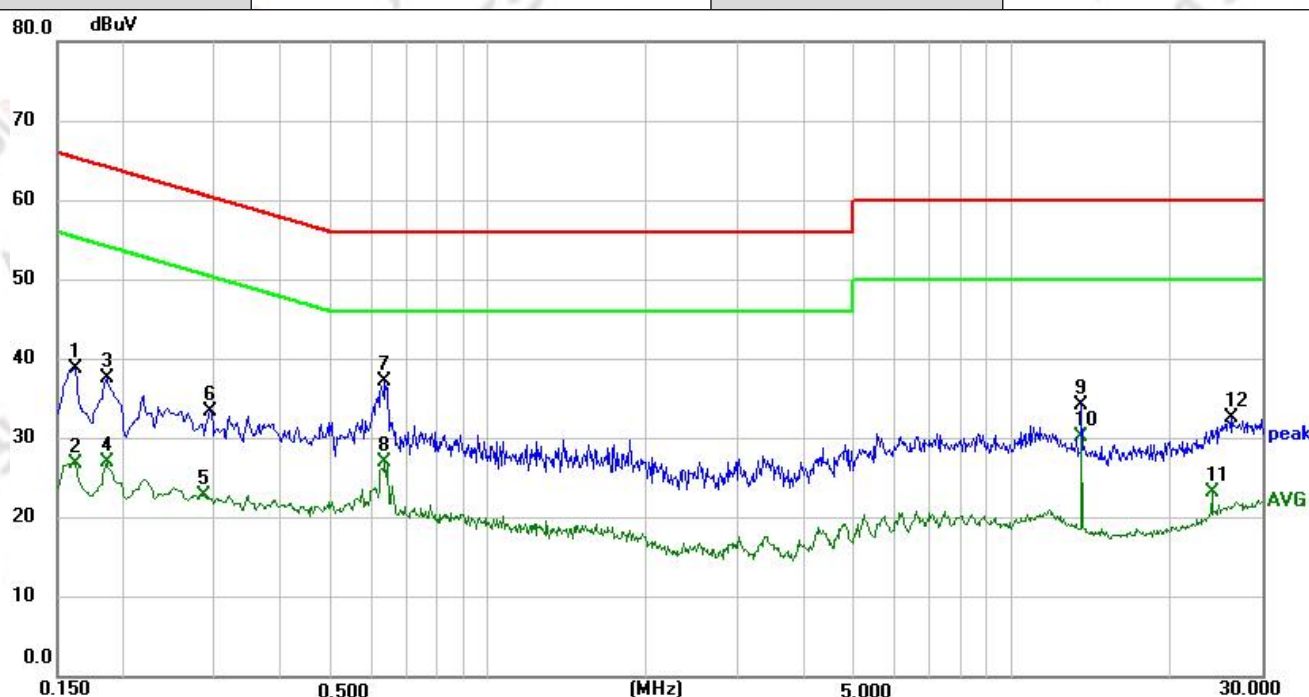
2.AC Power-Line Conducted Emission

Test Result

Note:

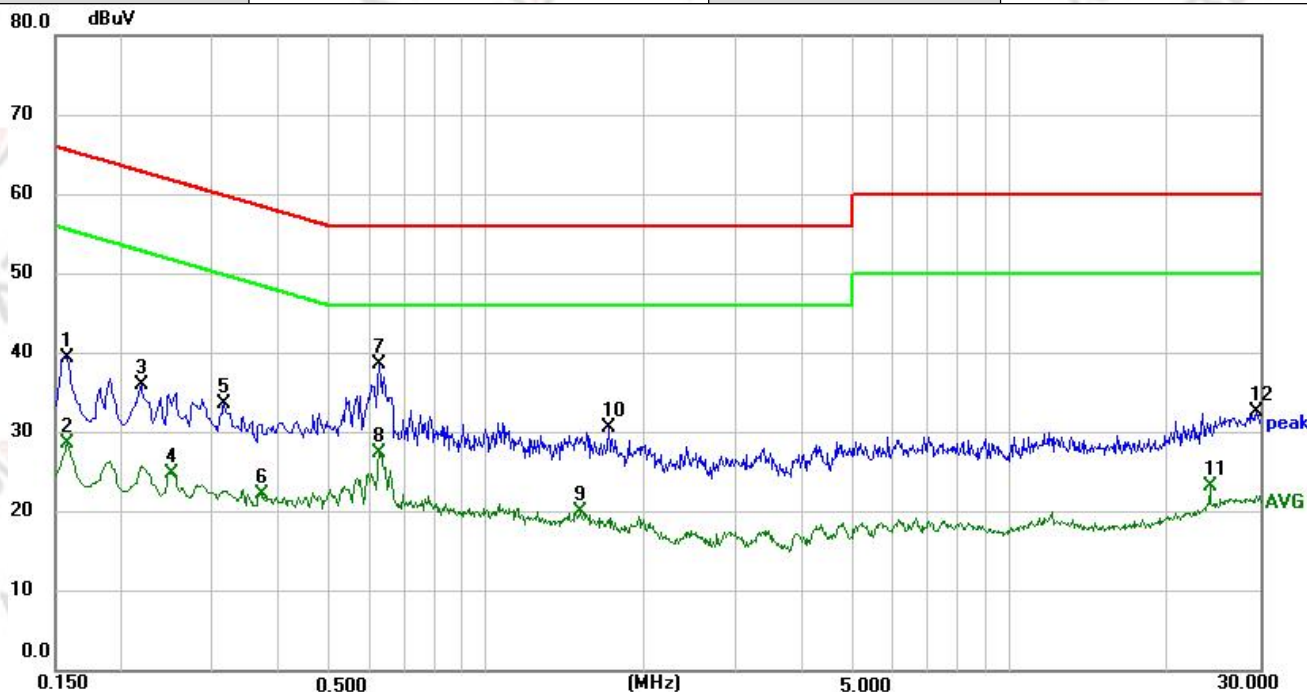
- 1.All modes have been tested, only worst mode(BLE-2M-2480MHz) was recorded in the test report.
- 2.Emission Level = Reading Value + Correction Factor .
3. Correction Factor = Insertion loss + Cable loss.
4. The emission levels of other frequencies were less than 20dB margin against the limit.
5. Margin value = Emission level-Limit value.

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2480MHz	Phase	L1



No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measurement(dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1620	19.07	19.74	38.81	65.36	-26.55	peak
2	0.1620	7.14	19.74	26.88	55.36	-28.48	AVG
3	0.1860	17.96	19.73	37.69	64.21	-26.52	peak
4	0.1860	7.34	19.73	27.07	54.21	-27.14	AVG
5	0.2860	3.08	19.78	22.86	50.64	-27.78	AVG
6	0.2940	13.54	19.79	33.33	60.41	-27.08	peak
7 *	0.6340	17.37	19.92	37.29	56.00	-18.71	peak
8	0.6340	7.08	19.92	27.00	46.00	-19.00	AVG
9	13.5620	12.50	21.63	34.13	60.00	-25.87	peak
10	13.5620	8.53	21.63	30.16	50.00	-19.84	AVG
11	24.0380	-1.57	24.74	23.17	50.00	-26.83	AVG
12	26.3300	7.34	25.29	32.63	60.00	-27.37	peak

EUT	Multi Color Light Bar	Model Name	LSP4435
Test Mode	BLE-2M-2480MHz	Phase	N



No.	Frequency (MHz)	Reading Level(dBuV)	Factor (dB)	Measurement(dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1580	19.71	19.74	39.45	65.57	-26.12	peak
2	0.1580	8.92	19.74	28.66	55.57	-26.91	AVG
3	0.2180	16.23	19.73	35.96	62.89	-26.93	peak
4	0.2500	5.14	19.74	24.88	51.76	-26.88	AVG
5	0.3140	13.84	19.80	33.64	59.86	-26.22	peak
6	0.3700	2.50	19.82	22.32	48.50	-26.18	AVG
7 *	0.6260	18.75	19.91	38.66	56.00	-17.34	peak
8	0.6260	7.46	19.91	27.37	46.00	-18.63	AVG
9	1.5060	0.12	19.96	20.08	46.00	-25.92	AVG
10	1.7100	10.64	20.05	30.69	56.00	-25.31	peak
11	24.0340	-1.43	24.74	23.31	50.00	-26.69	AVG
12	29.6060	6.43	26.09	32.52	60.00	-27.48	peak