

Appendix B_Radiated Spurious Emission Data for BLE:

1.Radiated Spurious Emission and Restricted Band

Test Result

Radiated Spurious Emission:

For 9 kHz ~ 30 MHz

Note:

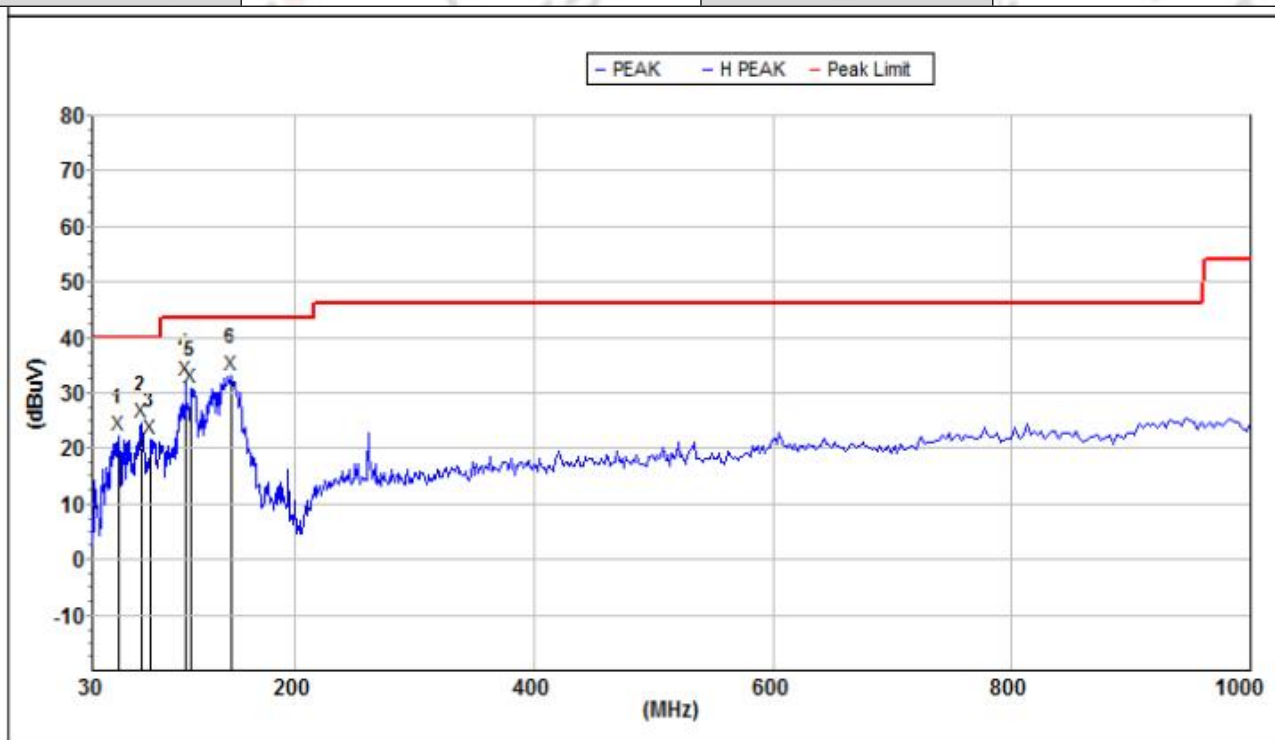
- 1.The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.
- 2.The all data rate modes had been test, but only worse test data was recorded in the test report.

Below 1GHz:

Note:

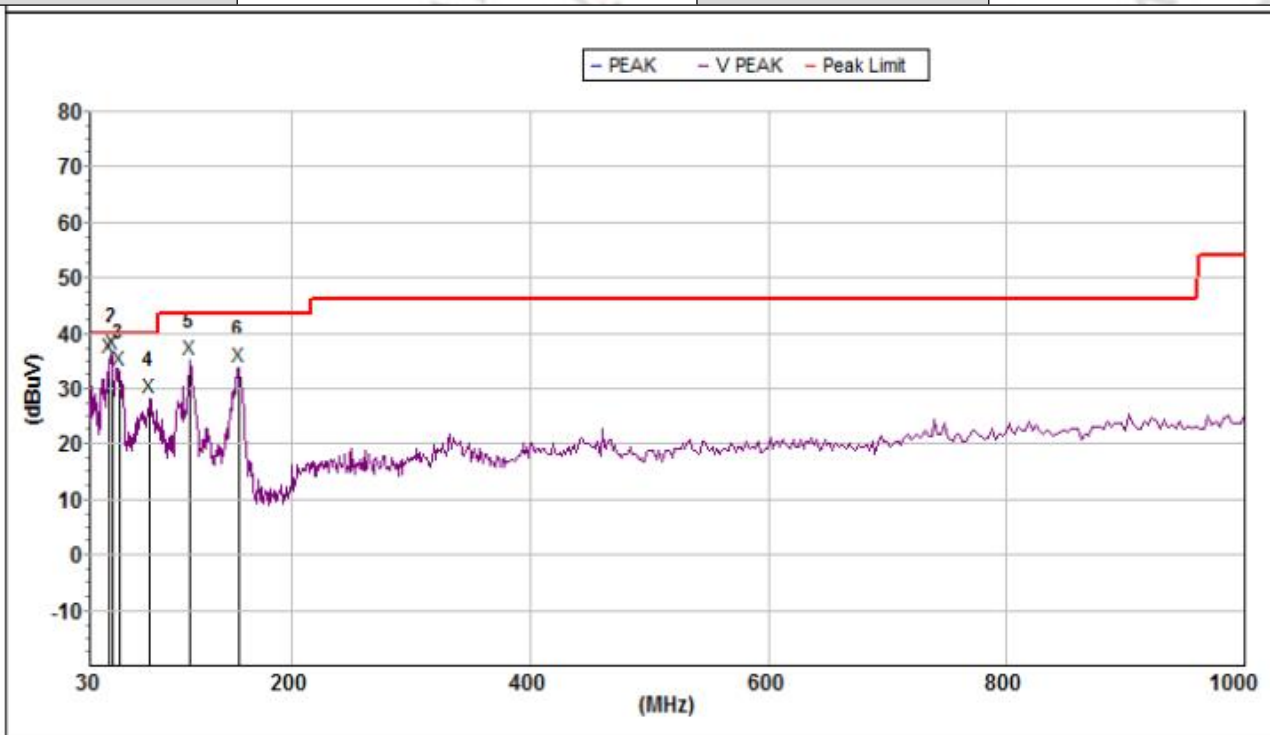
- 1.All modes have been tested, only worst (BLE_2M-TX-2402MHz)mode was recorded in the test report.
- 2.Emission Level (dBuV/m) = Reading Value (dBuV) + Correction Factor (dB/m).
- 3.Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)-Amplifier Gain.
- 4.The emission levels of other frequencies were less than 20dB margin against the limit.
- 5.Margin value = Emission level-Limit value.

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2402MHz	Antenna	Horizontal



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	51.843	64.9	-42.4	22.5	40.0	17.5	H
2	70.584	69.7	-45.1	24.6	40.0	15.4	H
3	78.689	66.0	-44.2	21.8	40.0	18.2	H
4	107.888	70.3	-38.1	32.2	43.5	11.3	H
5	112.920	68.1	-37.2	30.9	43.5	12.6	H
6	145.861	67.2	-34.0	33.2	43.5	10.3	H

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2480MHz	Antenna	Vertical

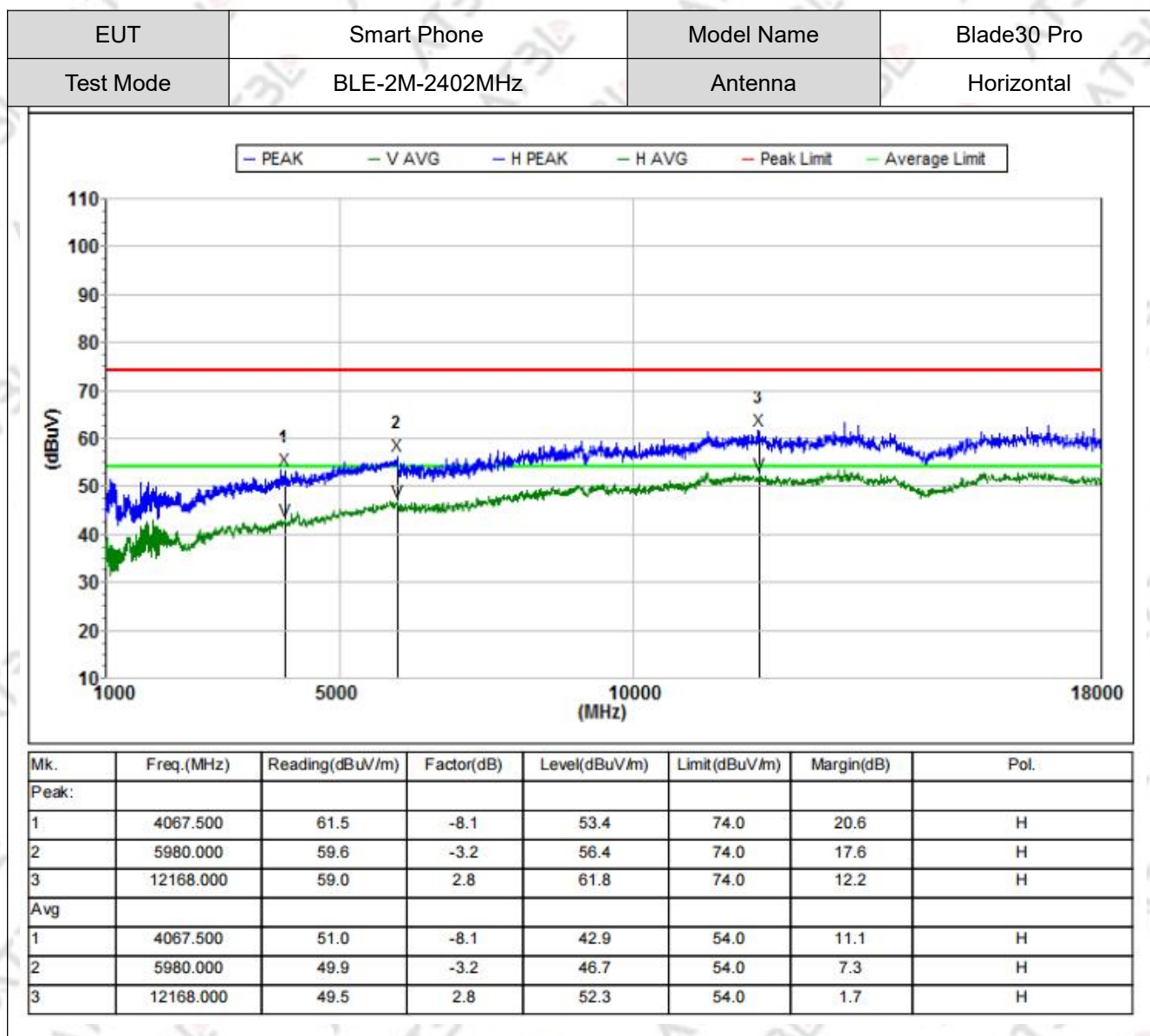


Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	46.178	79.9	-44.4	35.5	40.0	4.5	V
2	48.502	80.5	-44.1	36.4	40.0	3.6	V
3	54.835	76.6	-43.2	33.4	40.0	6.6	V
4	79.800	71.6	-43.2	28.4	40.0	11.6	V
5	114.114	67.1	-32.0	35.1	43.5	8.4	V
6	155.364	69.2	-35.3	33.9	43.5	9.6	V

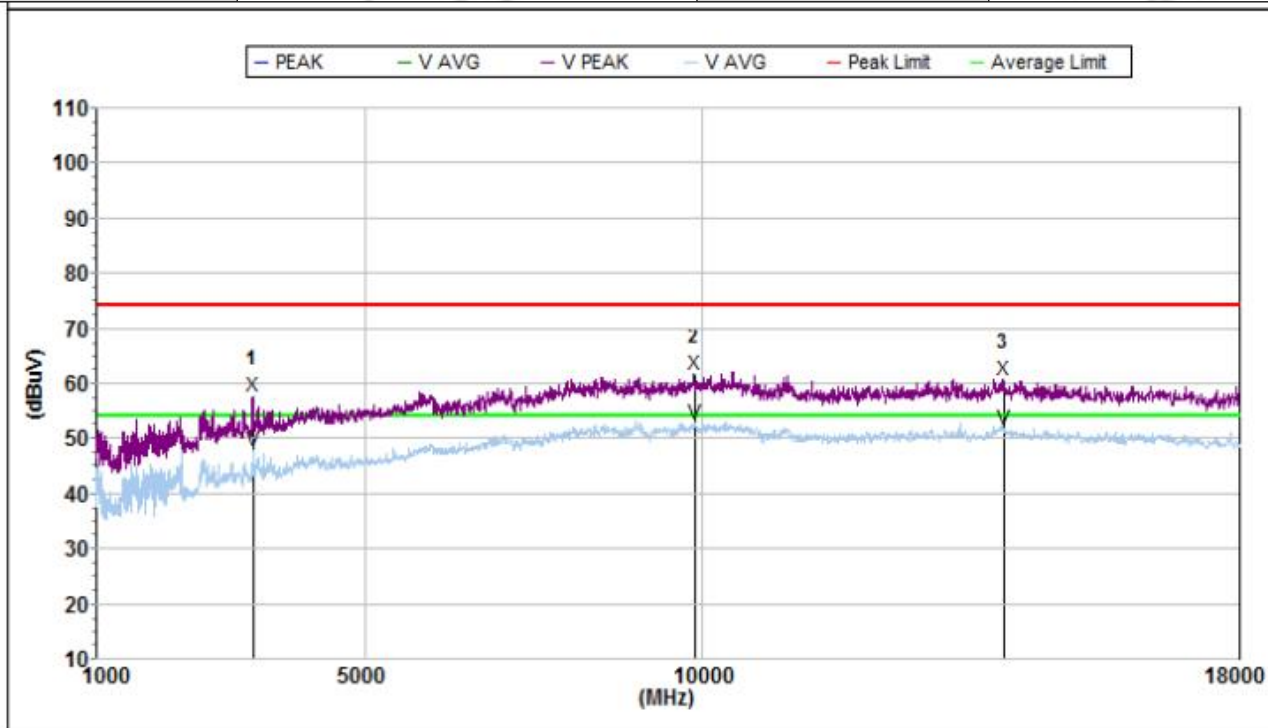
1GHz-18GHz:

Note:

- 1.All modes have been tested, only worst (BLE_2M)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 Factor (dB/m) + Cable Factor (dB)-Amplifier Gain.
5. Margin value = Emission level-Limit value.

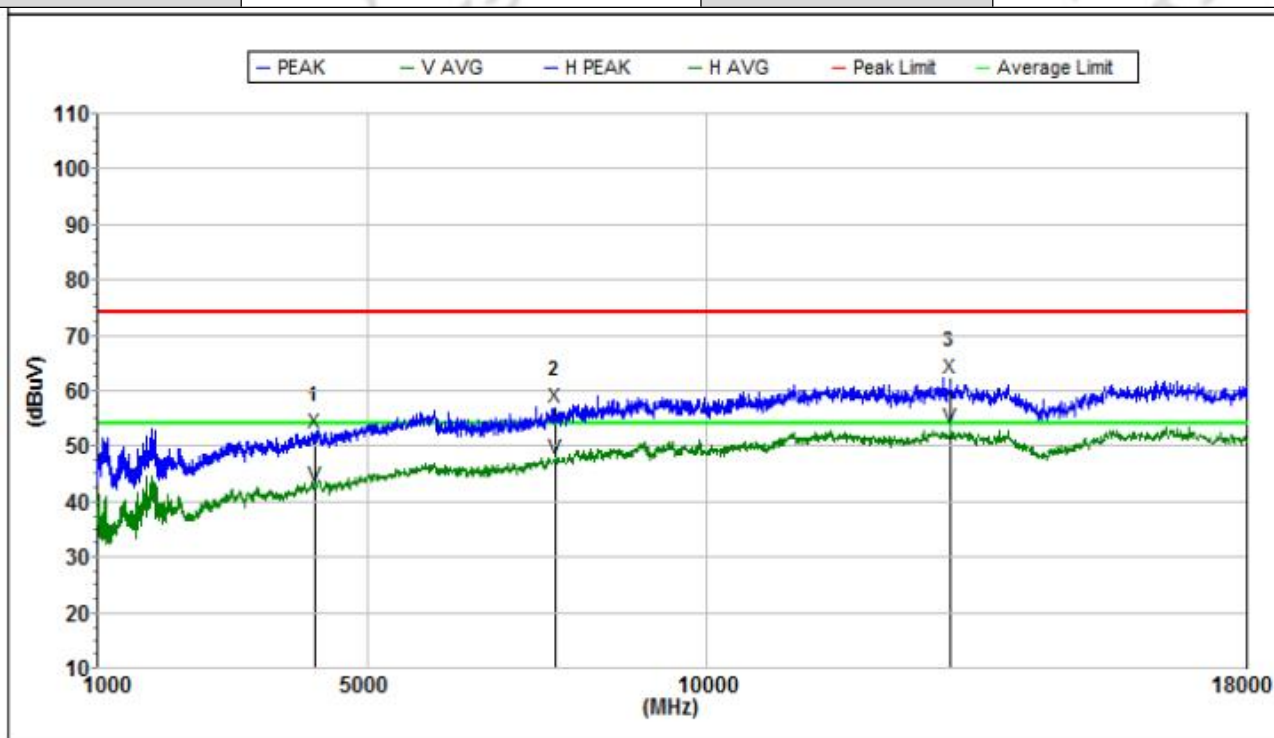


EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2402MHz	Antenna	Vertical



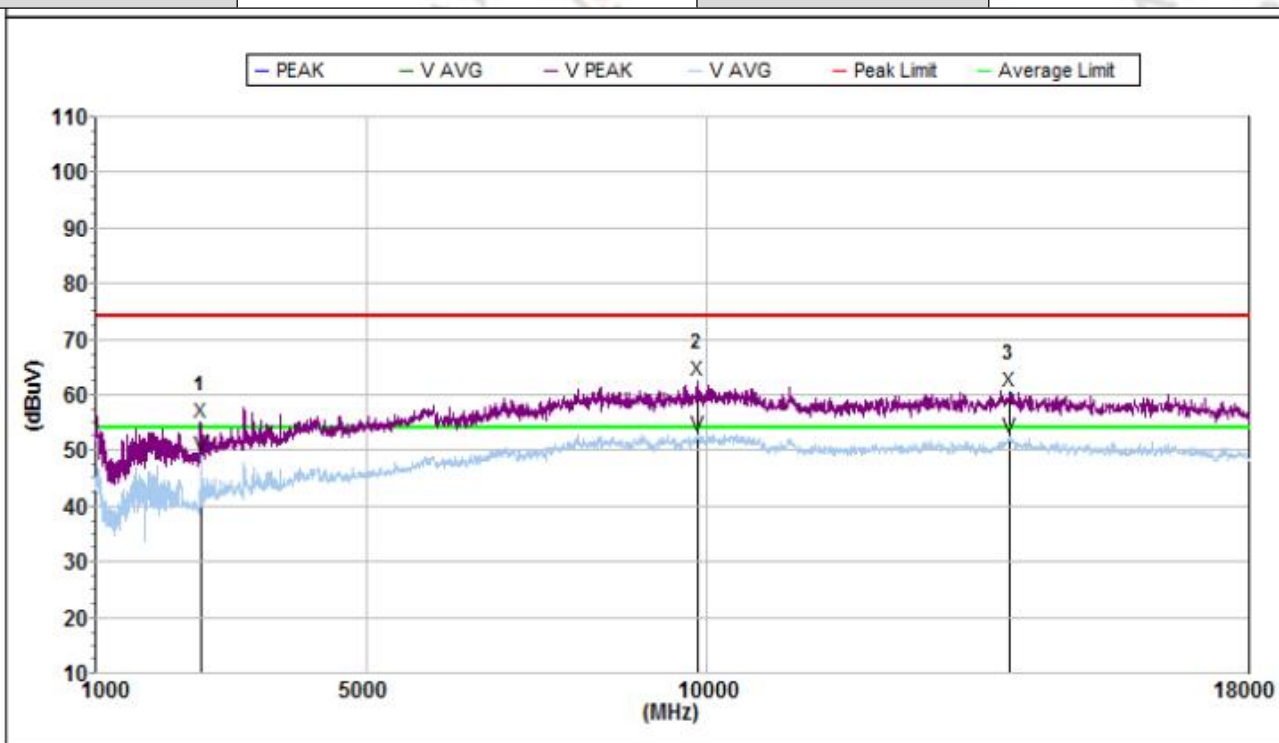
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	3332.500	66.6	-9.0	57.6	74.0	16.4	V
2	9900.000	58.8	2.9	61.7	74.0	12.3	V
3	14490.000	58.2	2.6	60.8	74.0	13.2	V
Avg							
1	3332.500	56.9	-9.0	47.9	54.0	6.1	V
2	9900.000	49.7	2.9	52.6	54.0	1.4	V
3	14490.000	49.3	2.6	51.9	54.0	2.1	V

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2MHz2440MHz	Antenna	Horizontal



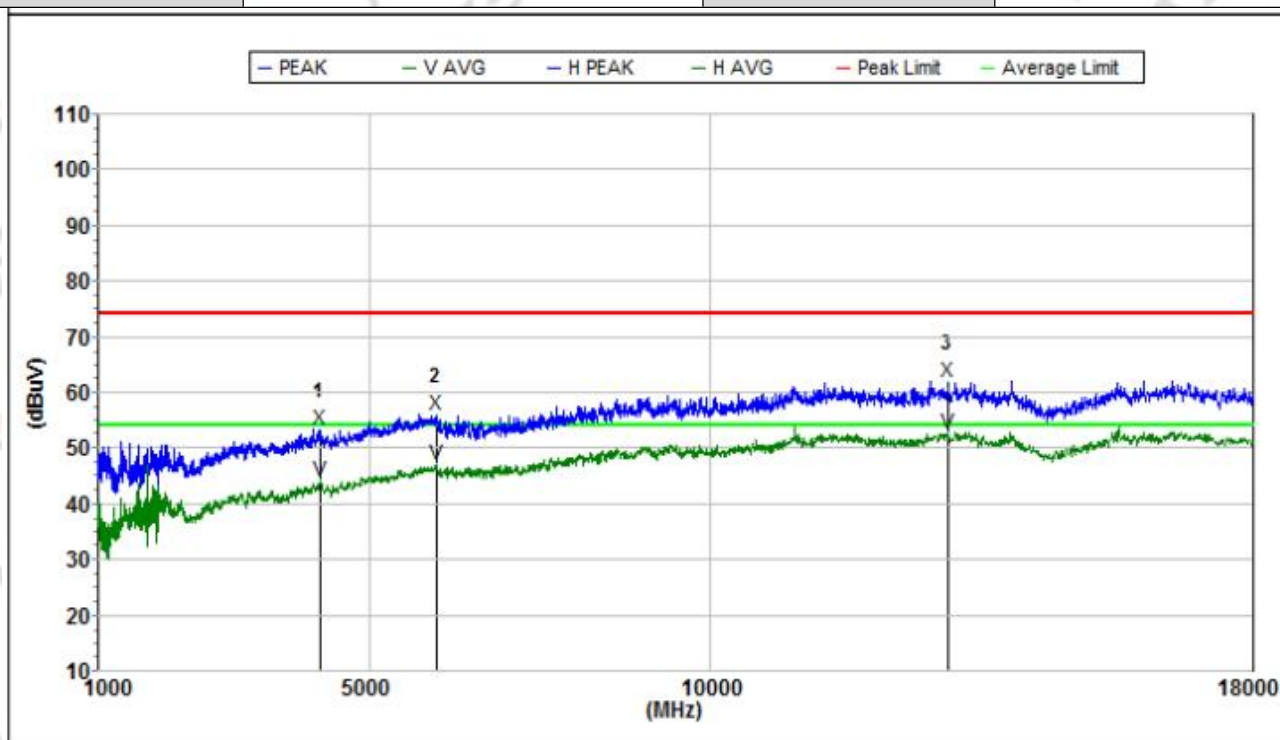
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4217.500	60.4	-7.9	52.5	74.0	21.5	H
2	7770.000	58.5	-1.4	57.1	74.0	16.9	H
3	13626.000	59.4	2.9	62.3	74.0	11.7	H
Avg							
1	4217.500	50.7	-7.9	42.8	54.0	11.2	H
2	7770.000	49.3	-1.4	47.9	54.0	6.1	H
3	13626.000	50.5	2.9	53.4	54.0	0.6	H

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2MHz2440MHz	Antenna	Vertical



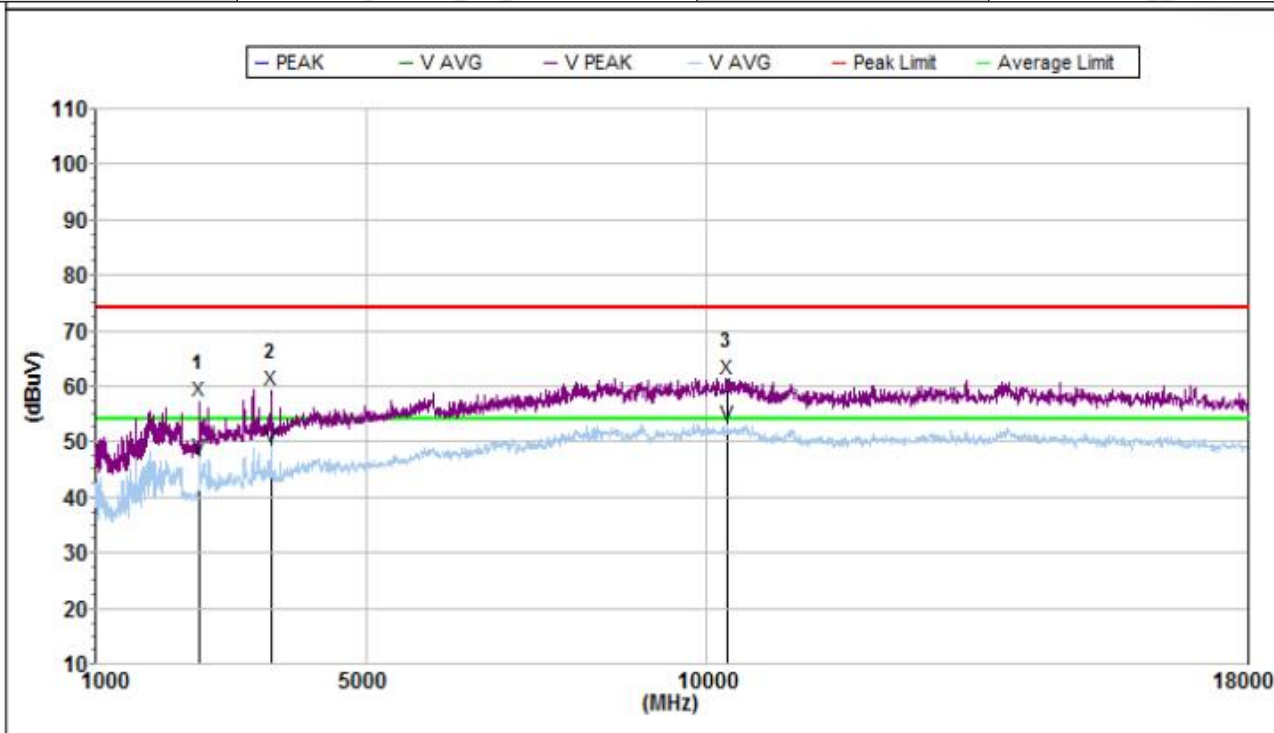
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2552.500	66.5	-11.4	55.1	74.0	18.9	V
2	9870.000	59.7	2.8	62.5	74.0	11.5	V
3	14460.000	58.0	2.5	60.5	74.0	13.5	V
Avg							
1	2552.500	60.4	-11.4	49.0	54.0	5.0	V
2	9870.000	50.1	2.8	52.9	54.0	1.1	V
3	14460.000	49.9	2.5	52.4	54.0	1.6	V

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2MHz2480MHz	Antenna	Horizontal



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	4267.500	61.1	-7.8	53.3	74.0	20.7	H
2	5980.000	59.2	-3.2	56.0	74.0	18.0	H
3	13500.000	58.8	3.2	62.0	74.0	12.0	H
Avg							
1	4267.500	51.9	-7.8	44.1	54.0	9.9	H
2	5980.000	50.5	-3.2	47.3	54.0	6.7	H
3	13500.000	49.5	3.2	52.7	54.0	1.3	H

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2MHz2480MHz	Antenna	Vertical



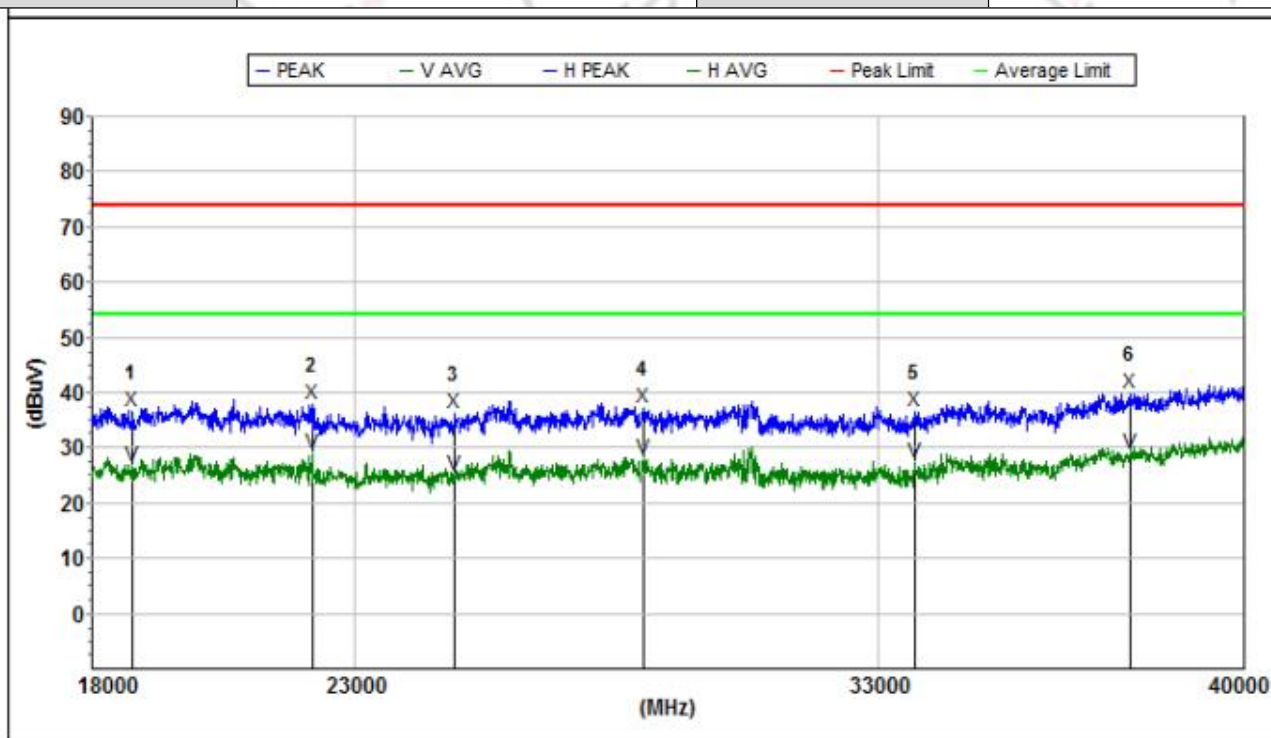
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2530.000	68.9	-11.6	57.3	74.0	16.7	V
2	3590.000	67.8	-8.3	59.5	74.0	14.5	V
3	10308.000	58.1	3.2	61.3	74.0	12.7	V
Avg							
1	2530.000	58.9	-11.6	47.3	54.0	6.7	V
2	3590.000	57.6	-8.3	49.3	54.0	4.7	V
3	10308.000	49.8	3.2	53.0	54.0	1.0	V

18GHz-40GHz:

Note:

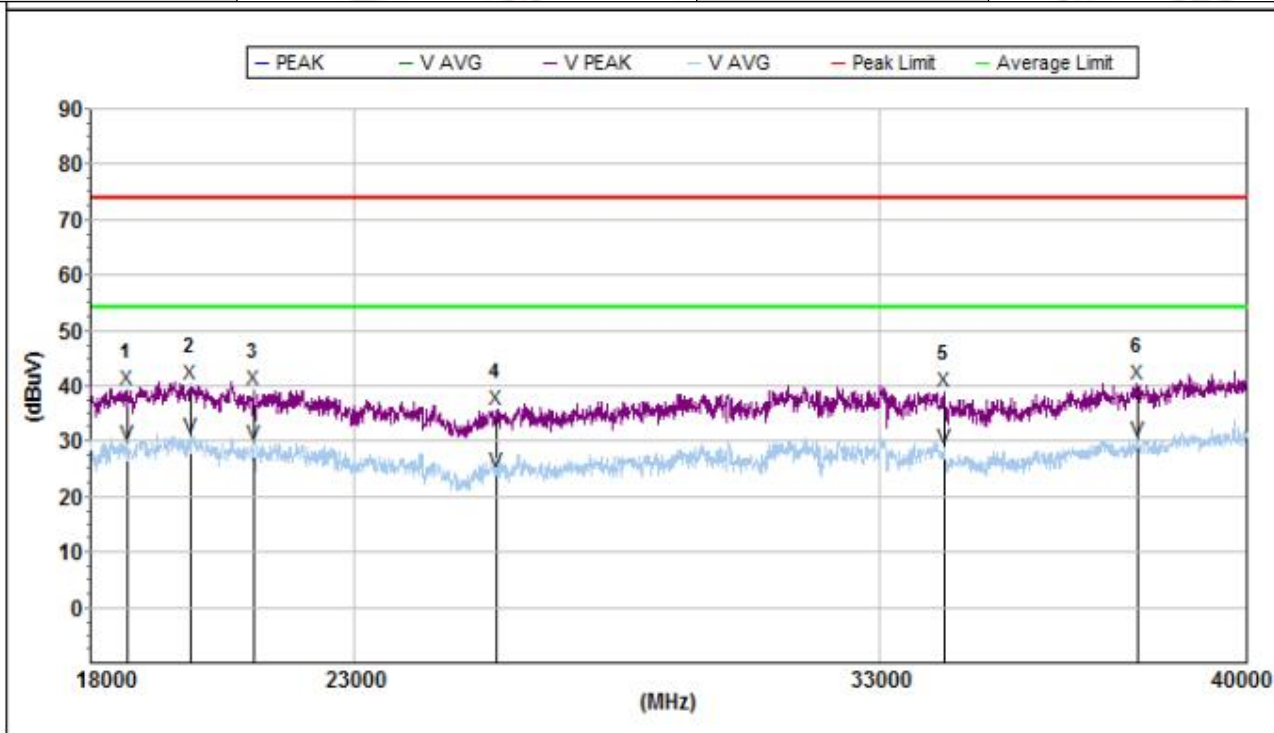
All modes have been tested, only worst (BLE_2M-2402MHz)mode was recorded in the test report.

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2402MHz	Antenna	Horizontal



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	18781.000	58.5	-21.9	36.6	74.0	37.4	H
2	22202.000	59.7	-21.6	38.1	74.0	35.9	H
3	24930.000	58.0	-21.5	36.5	74.0	37.5	H
4	28516.000	53.9	-16.6	37.3	74.0	36.7	H
5	33708.000	55.4	-18.8	36.6	74.0	37.4	H
6	37811.000	56.4	-16.5	39.9	74.0	34.1	H
Avg							
1	18781.000	48.7	-21.9	26.8	54.0	27.2	H
2	22202.000	50.7	-21.6	29.1	54.0	24.9	H
3	24930.000	46.8	-21.5	25.3	54.0	28.7	H
4	28516.000	44.7	-16.6	28.1	54.0	25.9	H
5	33708.000	46.3	-18.8	27.5	54.0	26.5	H
6	37811.000	45.5	-16.5	29.0	54.0	25.0	H

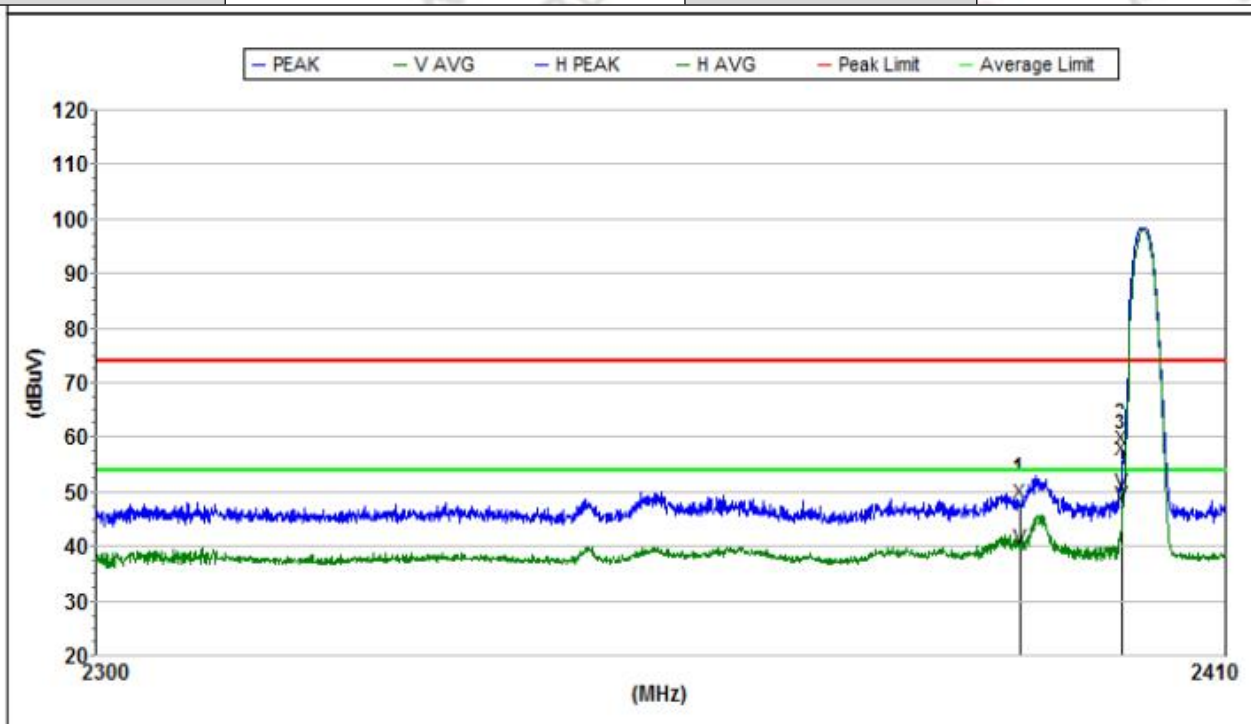
EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2402MHz	Antenna	Vertical



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	18704.000	56.4	-16.9	39.5	74.0	34.5	V
2	19892.000	56.7	-16.5	40.2	74.0	33.8	V
3	21124.000	55.1	-15.7	39.4	74.0	34.6	V
4	25733.000	53.5	-17.9	35.6	74.0	38.4	V
5	34258.000	57.4	-18.5	38.9	74.0	35.1	V
6	37943.000	56.8	-16.4	40.4	74.0	33.6	V
Avg							
1	18704.000	46.3	-16.9	29.4	54.0	24.6	V
2	19892.000	47.3	-16.5	30.8	54.0	23.2	V
3	21124.000	45.2	-15.7	29.5	54.0	24.5	V
4	25733.000	42.3	-17.9	24.4	54.0	29.6	V
5	34258.000	47.4	-18.5	28.9	54.0	25.1	V
6	37943.000	46.5	-16.4	30.1	54.0	23.9	V

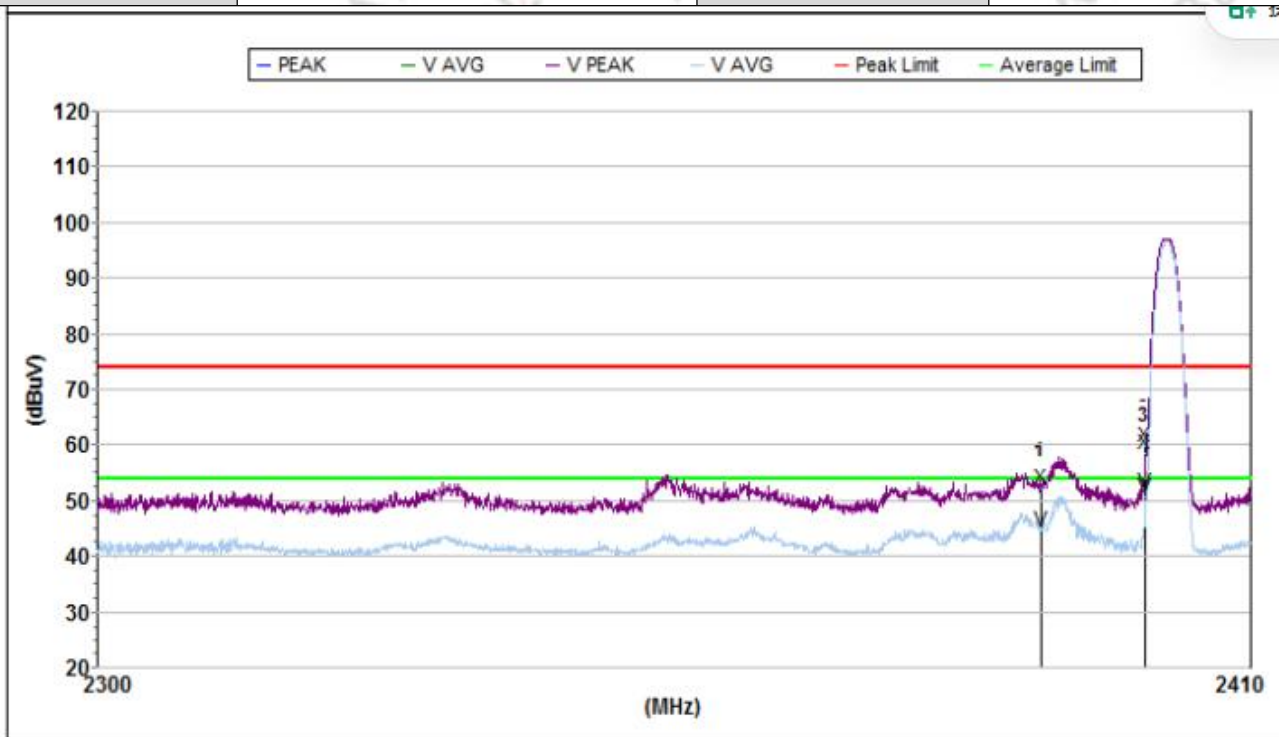
Restricted Band:

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-1M-2402MHz	Antenna	Horizontal



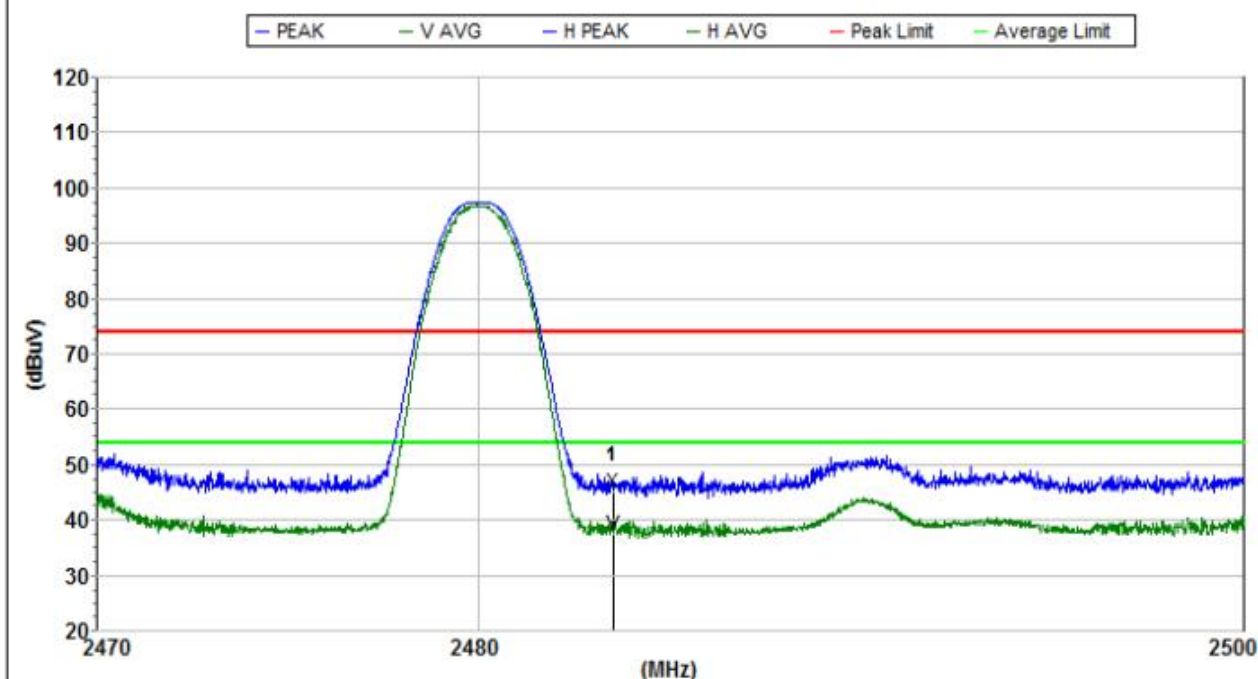
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2390.000	62.0	-14.2	47.8	74.0	26.2	H
2	2400.000	72.1	-14.2	57.9	74.0	16.1	H
3	2400.000	69.9	-14.2	55.7	74.0	18.3	H
Avg							
1	2390.000	53.8	-14.2	39.6	54.0	14.4	H
2	2400.000	64.1	-14.2	49.9	54.0	4.1	H
3	2400.000	61.9	-14.2	47.7	54.0	6.3	H

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-1M-2402MHz	Antenna	Vertical



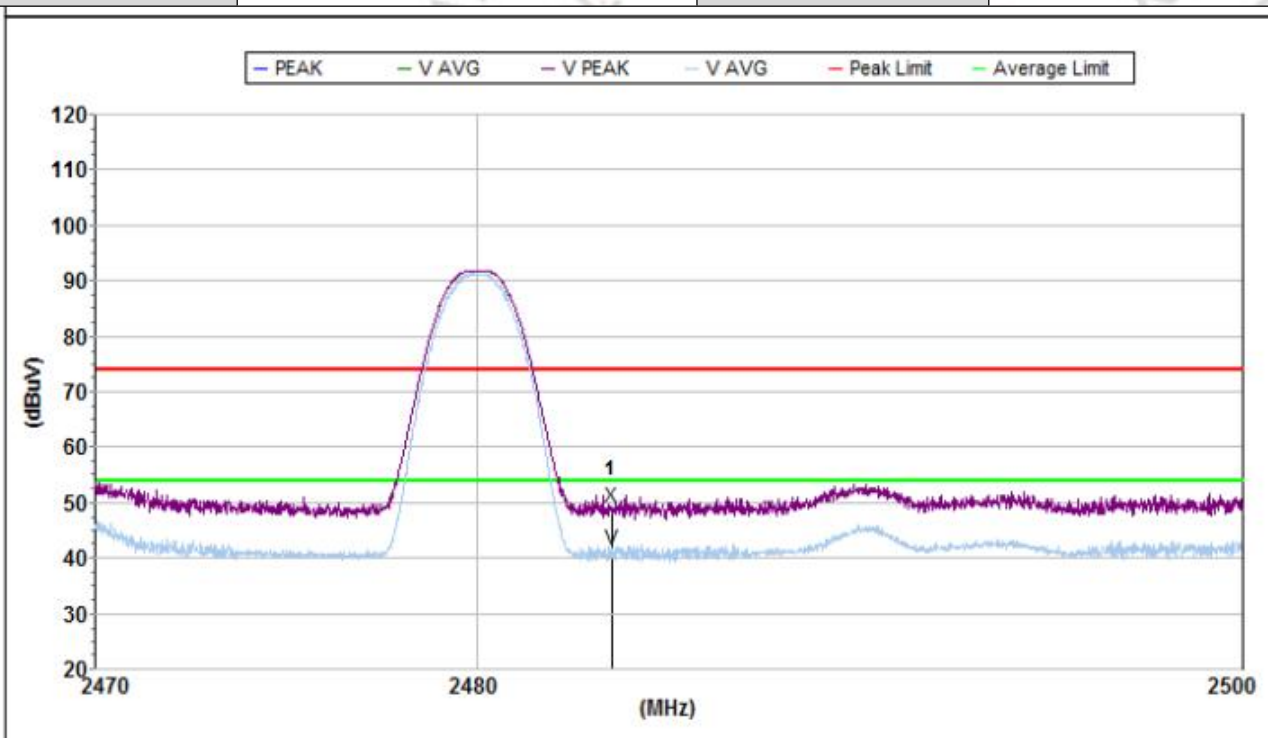
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2390.000	63.7	-11.3	52.4	74.0	21.6	V
2	2400.000	71.1	-11.4	59.7	74.0	14.3	V
3	2400.000	69.9	-11.4	58.5	74.0	15.5	V
Avg							
1	2390.000	56.0	-11.3	44.7	54.0	9.3	V
2	2400.000	63.1	-11.4	51.7	54.0	2.3	V
3	2400.000	61.9	-11.4	50.5	54.0	3.5	V

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-1M-2480MHz	Antenna	Horizontal



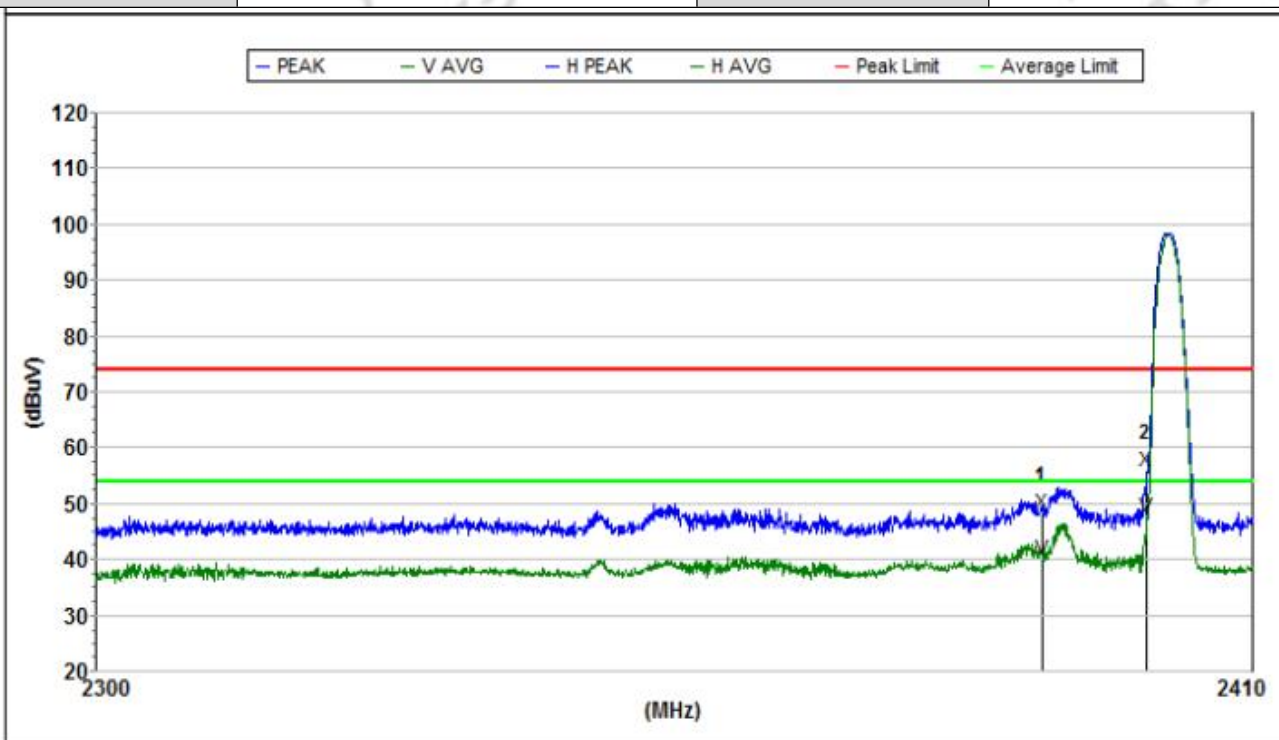
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2483.500	59.4	-14.3	45.1	74.0	28.9	H
Avg							
1	2483.500	51.6	-14.3	37.3	54.0	16.7	H

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-1M-2480MHz	Antenna	Vertical



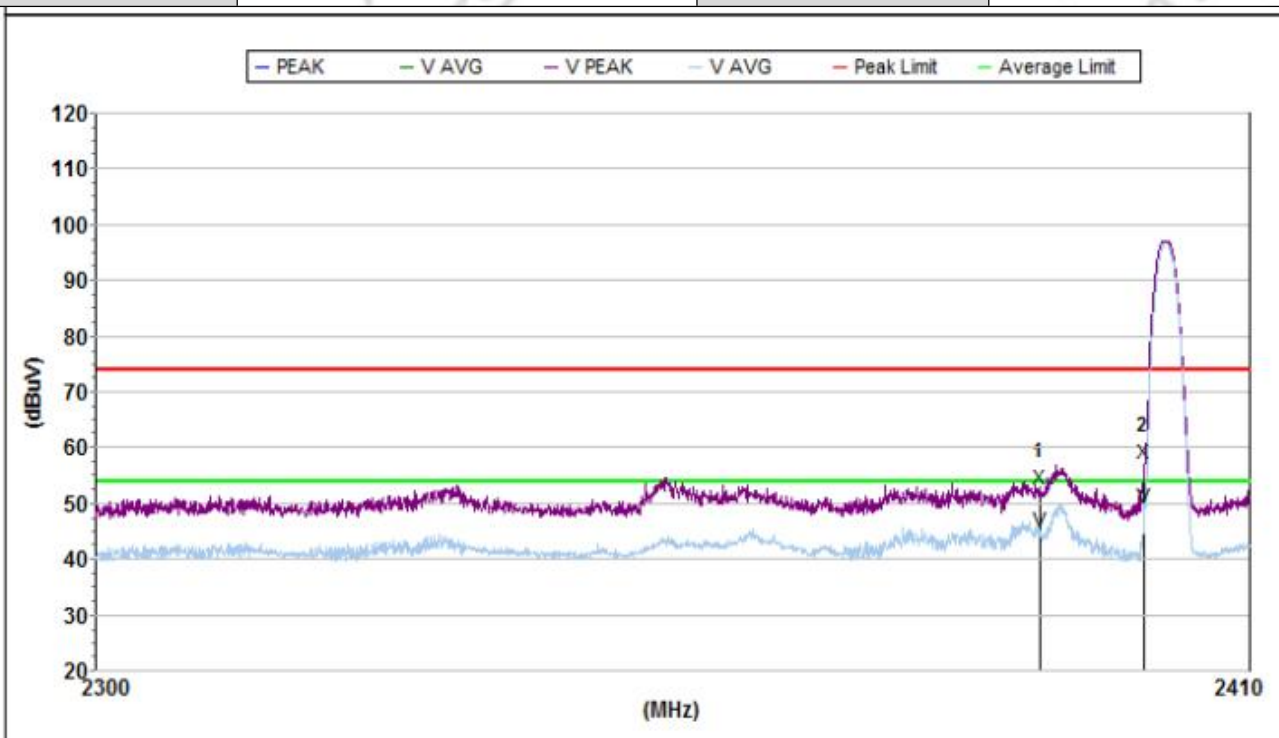
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2483.500	61.0	-11.6	49.4	74.0	24.6	V
Avg							
1	2483.500	53.4	-11.6	41.8	54.0	12.2	V

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2402MHz	Antenna	Horizontal



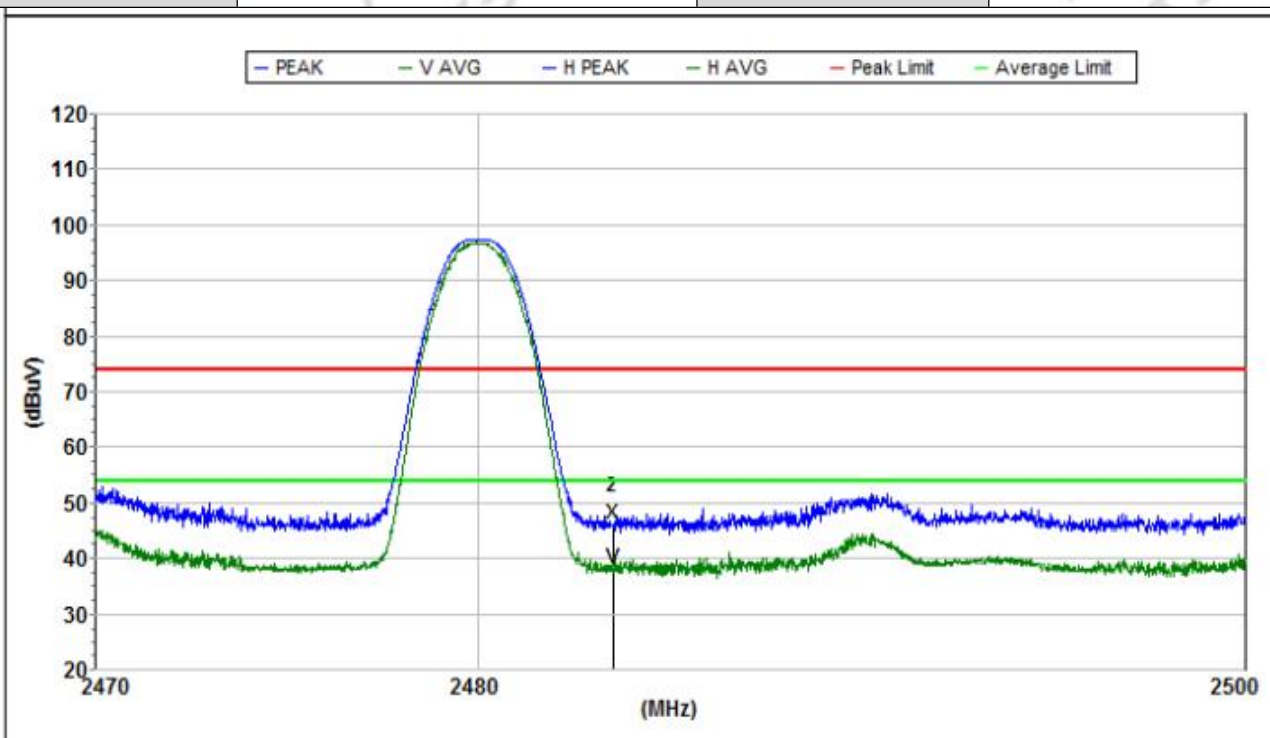
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2390.000	62.4	-14.2	48.2	74.0	25.8	H
2	2400.000	69.9	-14.2	55.7	74.0	18.3	H
Avg							
1	2390.000	54.2	-14.2	40.0	54.0	14.0	H
2	2400.000	61.9	-14.2	47.7	54.0	6.3	H

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2402MHz	Antenna	Vertical



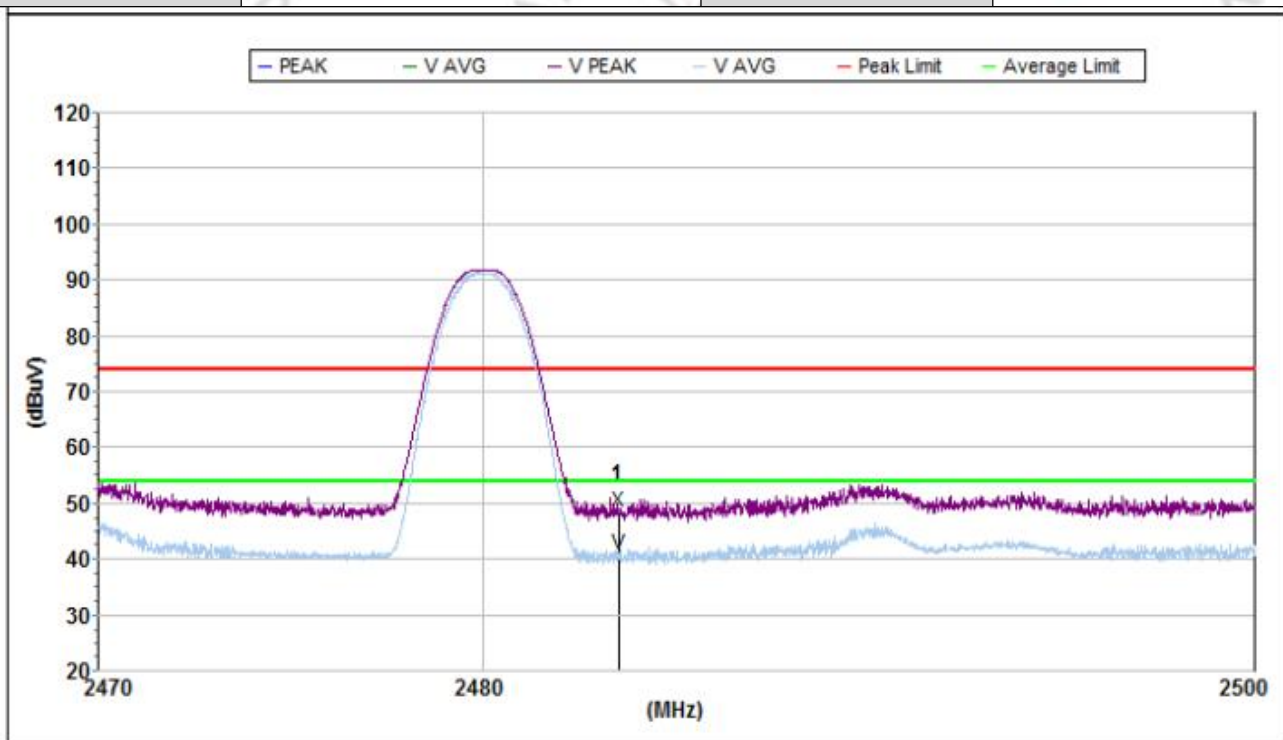
Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2390.000	63.9	-11.3	52.6	74.0	21.4	V
2	2400.000	68.7	-11.4	57.3	74.0	16.7	V
Avg							
1	2390.000	56.2	-11.3	44.9	54.0	9.1	V
2	2400.000	60.7	-11.4	49.3	54.0	4.7	V

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2480MHz	Antenna	Horizontal



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2483.500	60.6	-14.3	46.3	74.0	27.7	H
2	2483.500	60.6	-14.3	46.3	74.0	27.7	H
Avg							
1	2483.500	52.8	-14.3	38.5	54.0	15.5	H
2	2483.500	52.8	-14.3	38.5	54.0	15.5	H

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2480MHz	Antenna	Vertical



Mk.	Freq.(MHz)	Reading(dBuV/m)	Factor(dB)	Level(dBuV/m)	Limit(dBuV/m)	Margin(dB)	Pol.
Peak:							
1	2483.500	60.3	-11.6	48.7	74.0	25.3	V
Avg							
1	2483.500	52.7	-11.6	41.1	54.0	12.9	V

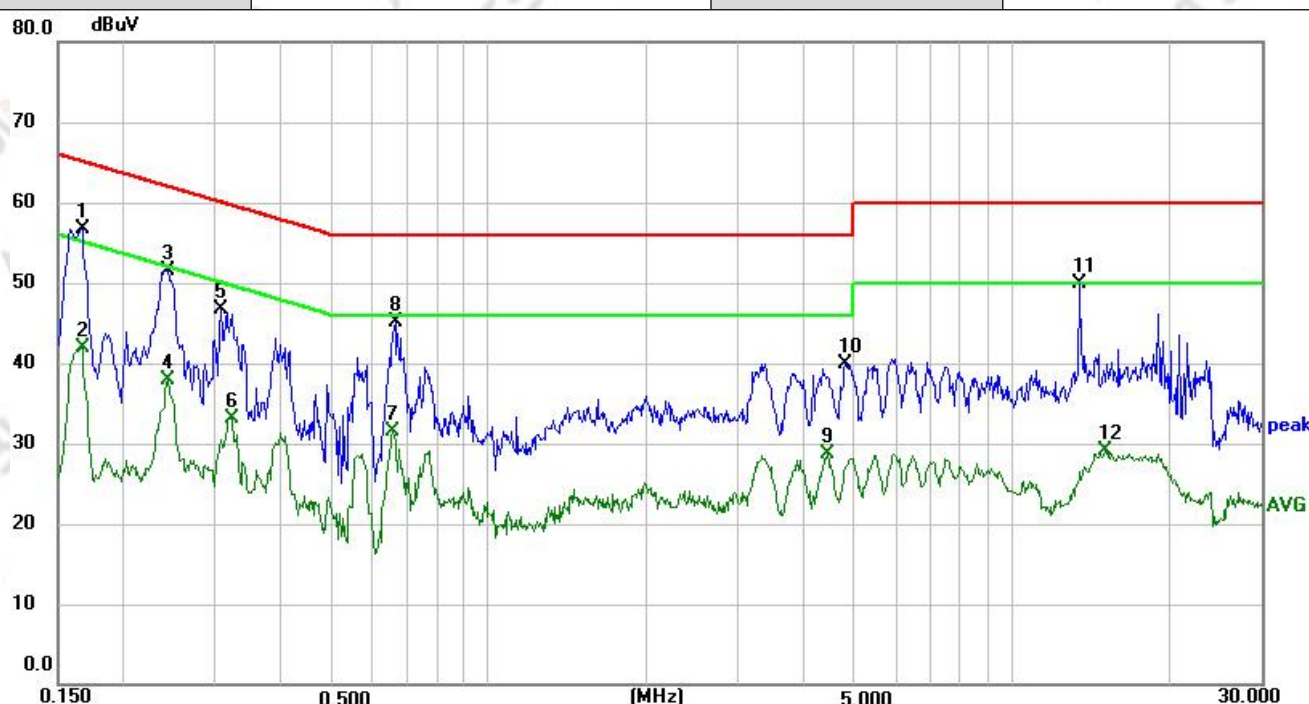
2.AC Power-Line Conducted Emission

Test Result

Note:

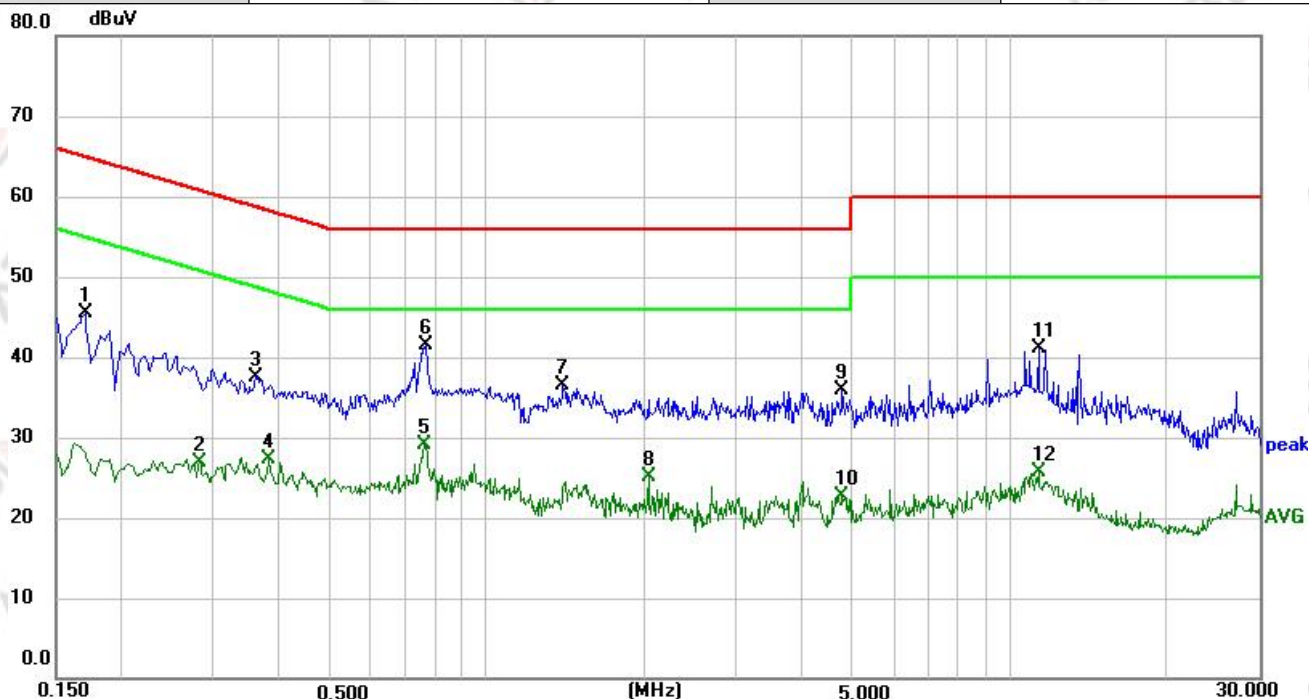
- 1.All modes have been tested, only worst mode(BLE-2M-2402MHz) was recorded in the test report.
- 2.Emission Level = Reading Value + Correction Factor .
3. Correction Factor = Insertion loss + Cable loss.
4. The emission levels of other frequencies were less than 20dB margin against the limit.
5. Margin value = Emission level-Limit value.

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2402MHz	Phase	L1



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1 *	0.1660	36.90	19.74	56.64	65.16	-8.52	peak	P	
2	0.1660	22.08	19.74	41.82	55.16	-13.34	AVG	P	
3	0.2420	31.76	19.73	51.49	62.03	-10.54	peak	P	
4	0.2420	18.13	19.73	37.86	52.03	-14.17	AVG	P	
5	0.3060	26.83	19.80	46.63	60.08	-13.45	peak	P	
6	0.3220	13.30	19.80	33.10	49.66	-16.56	AVG	P	
7	0.6540	11.64	19.93	31.57	46.00	-14.43	AVG	P	
8	0.6620	25.20	19.93	45.13	56.00	-10.87	peak	P	
9	4.4540	8.37	20.34	28.71	46.00	-17.29	AVG	P	
10	4.8100	19.55	20.37	39.92	56.00	-16.08	peak	P	
11	13.4380	28.41	21.59	50.00	60.00	-10.00	peak	P	
12	15.1100	7.10	22.07	29.17	50.00	-20.83	AVG	P	

EUT	Smart Phone	Model Name	Blade30 Pro
Test Mode	BLE-2M-2402MHz	Phase	N



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.1700	25.58	19.86	45.44	64.96	-19.52	peak	P	
2	0.2819	7.04	19.91	26.95	50.76	-23.81	AVG	P	
3	0.3613	17.76	19.79	37.55	58.70	-21.15	peak	P	
4	0.3820	7.56	19.75	27.31	48.24	-20.93	AVG	P	
5	0.7620	9.42	19.75	29.17	46.00	-16.83	AVG	P	
6 *	0.7660	21.69	19.75	41.44	56.00	-14.56	peak	P	
7	1.4020	16.62	19.88	36.50	56.00	-19.50	peak	P	
8	2.0340	4.99	20.07	25.06	46.00	-20.94	AVG	P	
9	4.7900	15.71	20.17	35.88	56.00	-20.12	peak	P	
10	4.7900	2.60	20.17	22.77	46.00	-23.23	AVG	P	
11	11.3180	20.08	21.00	41.08	60.00	-18.92	peak	P	
12	11.3180	4.77	21.00	25.77	50.00	-24.23	AVG	P	