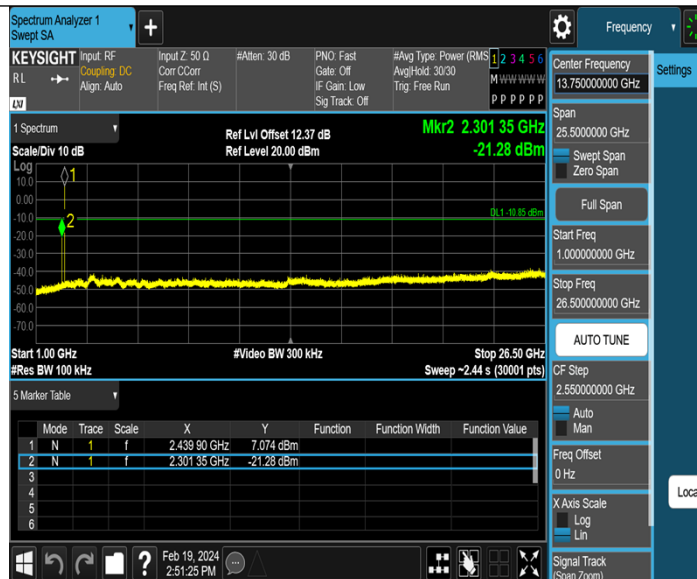
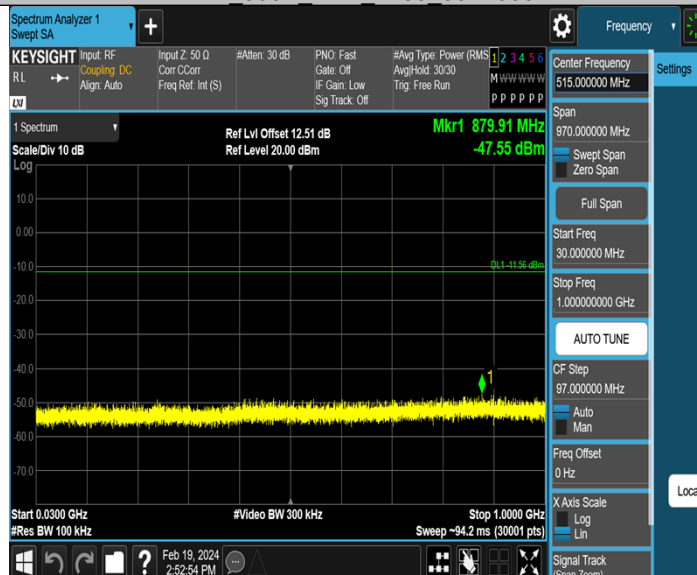




BLE_500K_Ant1_2480_0~Reference



BLE_500K_Ant1_2480_30~1000



BLE_500K_Ant1_2480_1000~26500

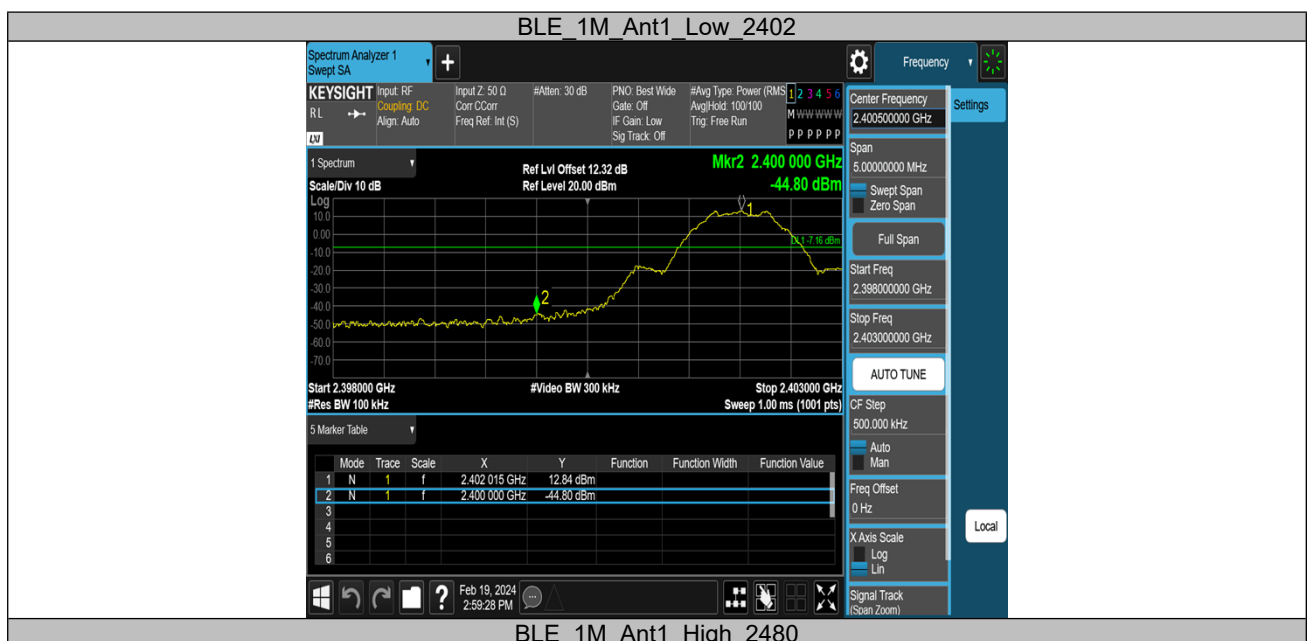


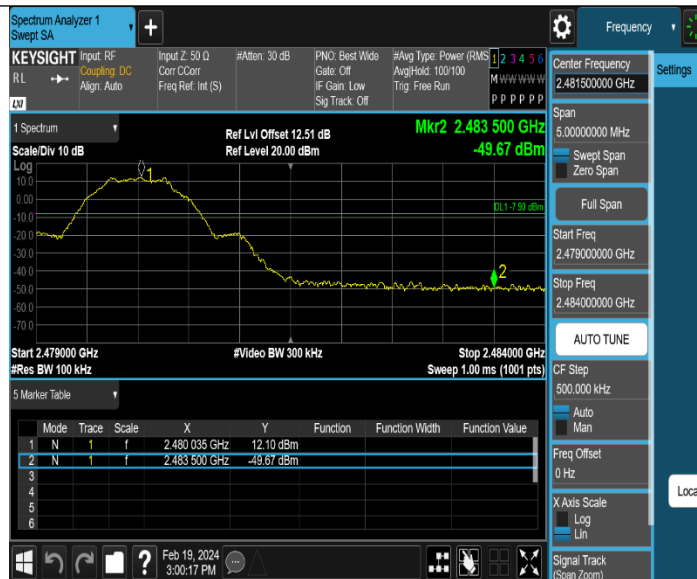
Band Edge

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	12.84	-44.8	≤-7.16	PASS
		High	2480	12.1	-49.67	≤-7.9	PASS
BLE_2M	Ant1	Low	2402	12.17	-18.76	≤-7.83	PASS
		High	2480	12.57	-48.83	≤-7.43	PASS
BLE 125K	Ant1	Low	2402	6.269	-48.04	≤-13.73	PASS
		High	2480	5.59	-49.55	≤-14.41	PASS
BLE 500K	Ant1	Low	2402	9.283	-49.87	≤-10.72	PASS
		High	2480	8.973	-50.01	≤-11.03	PASS

Test Graphs





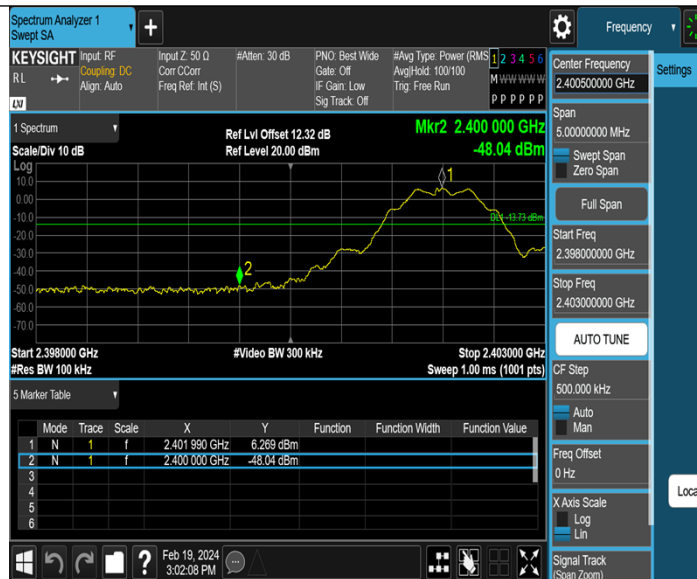
BLE 2M Ant1 Low 2402



BLE 2M Ant1 High 2480



BLE 1M Ant1 Low 2402



BLE 1M Ant1 High 2480



BLE 2M Ant1 Low 2402



BLE 2M Ant1 High 2480



APPENDIX C.5: RADIATED SPURIOUS EMISSIONS

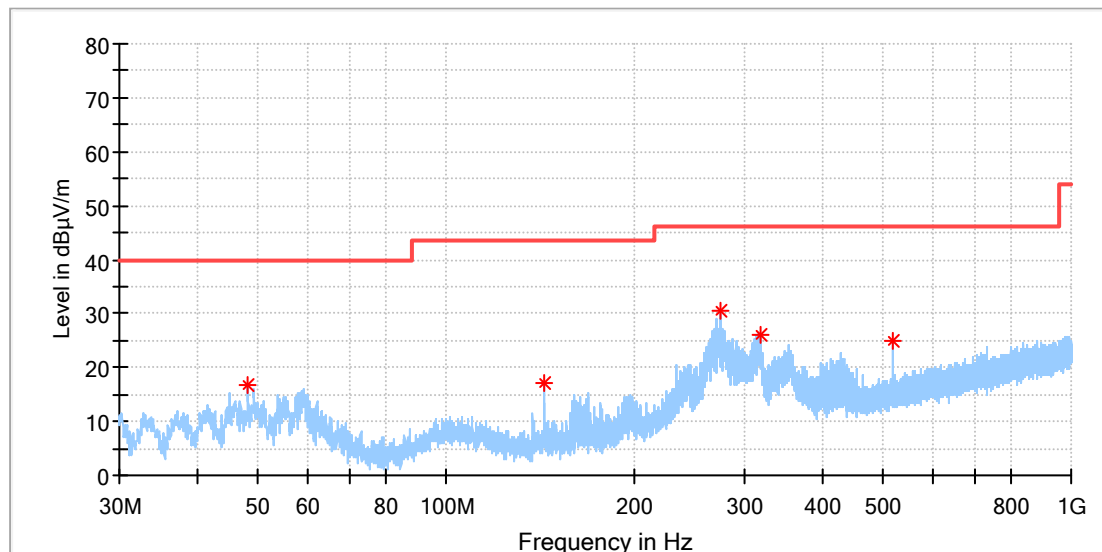
Note:

- 1) This testing was carried out on different modulations, but only the worst case was presented in this report.
- 2) Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz - 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30MHz - 1GHz (Worst case)

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

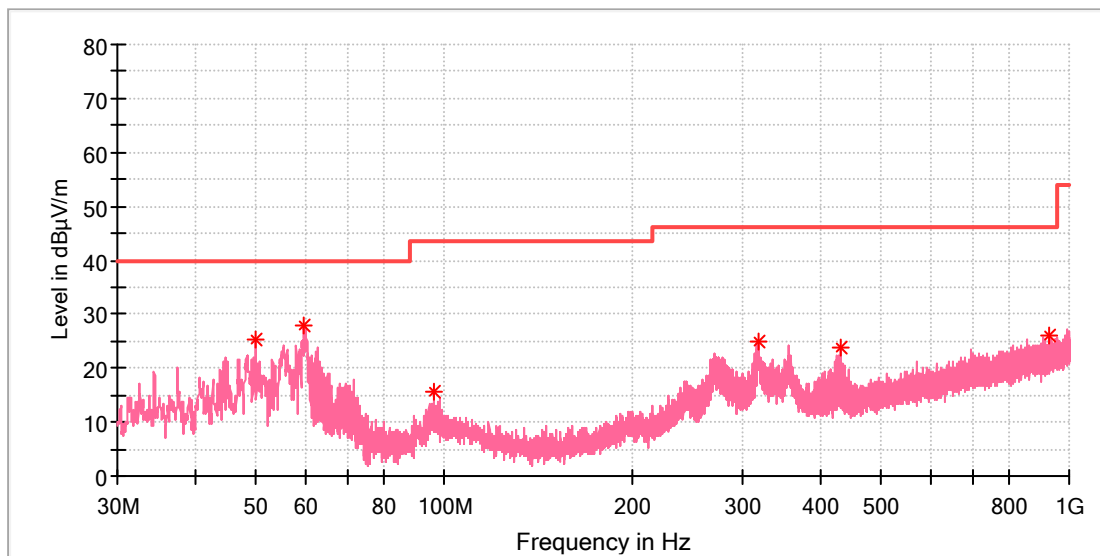


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
48.056923	16.76	40.00	23.24	100.0	H	334.0	-18.7
143.676539	16.94	43.50	26.56	100.0	H	83.0	-22.6
273.843077	30.40	46.00	15.60	100.0	H	290.0	-17.2
317.828846	26.13	46.00	19.87	100.0	H	59.0	-16.1
519.999231	24.89	46.00	21.11	100.0	H	215.0	-11.9

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



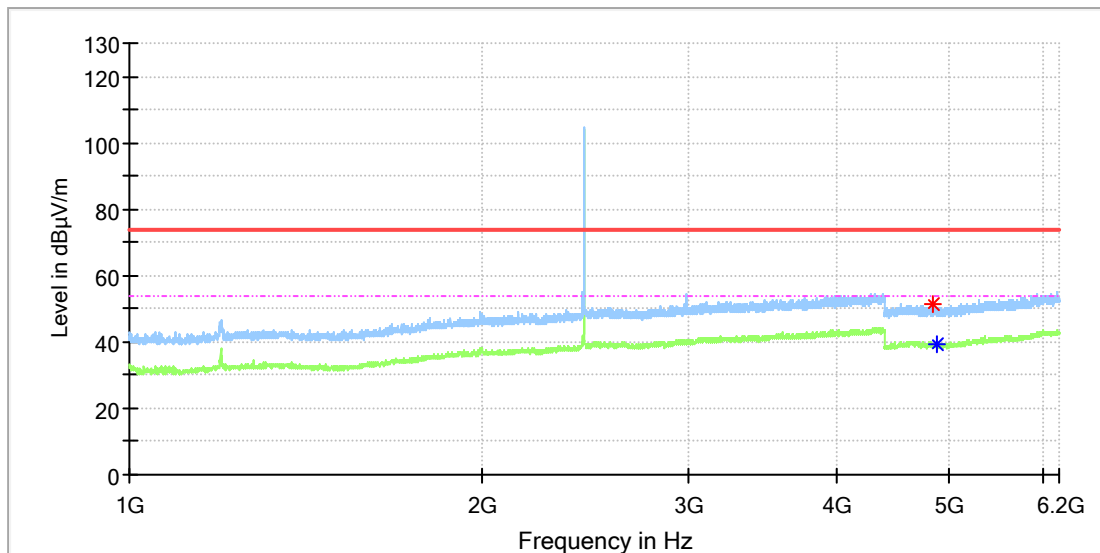
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.996923	25.37	40.00	14.63	100.0	V	0.0	-18.6
59.585000	27.82	40.00	12.18	100.0	V	0.0	-19.2
96.183846	15.66	43.50	27.84	100.0	V	354.0	-19.9
319.097308	24.91	46.00	21.09	100.0	V	219.0	-16.1
430.348846	23.76	46.00	22.24	100.0	V	354.0	-13.6
929.973462	26.19	46.00	19.81	100.0	V	16.0	-5.1

1GHz-18GHz

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

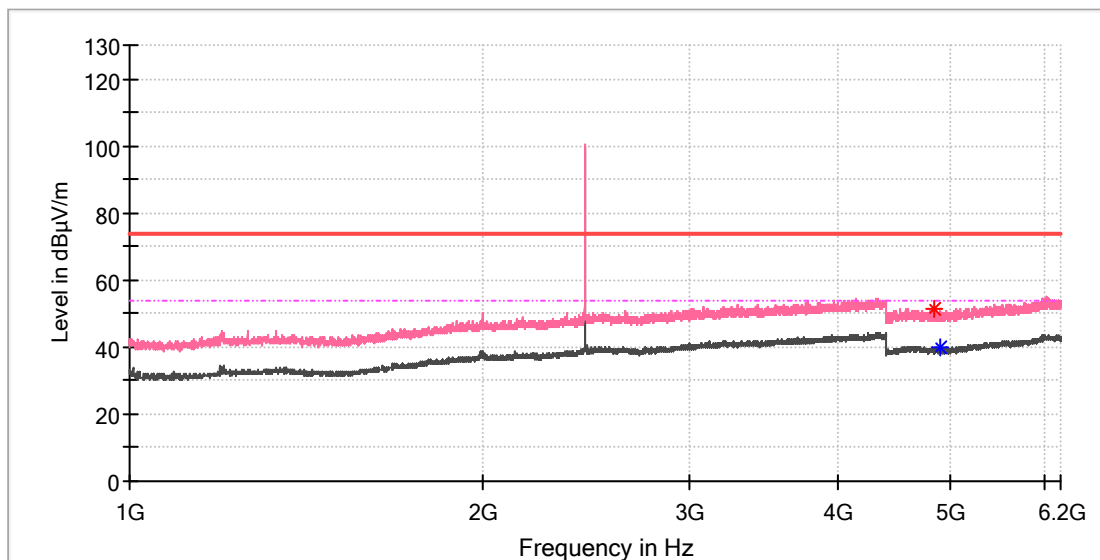


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4848.500000	51.18	---	74.00	22.82	150.0	H	174.0	11.8
4880.000000	---	39.56	54.00	14.44	150.0	H	310.0	11.8

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

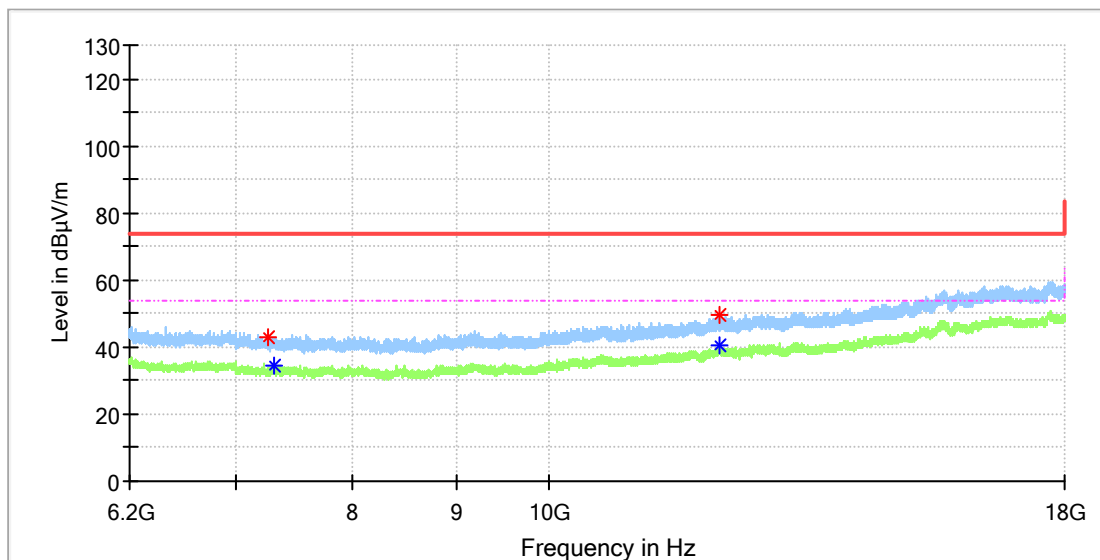


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4845.500000	51.13	---	74.00	22.87	150.0	V	129.0	11.8
4897.000000	---	39.72	54.00	14.28	150.0	V	208.0	11.8

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

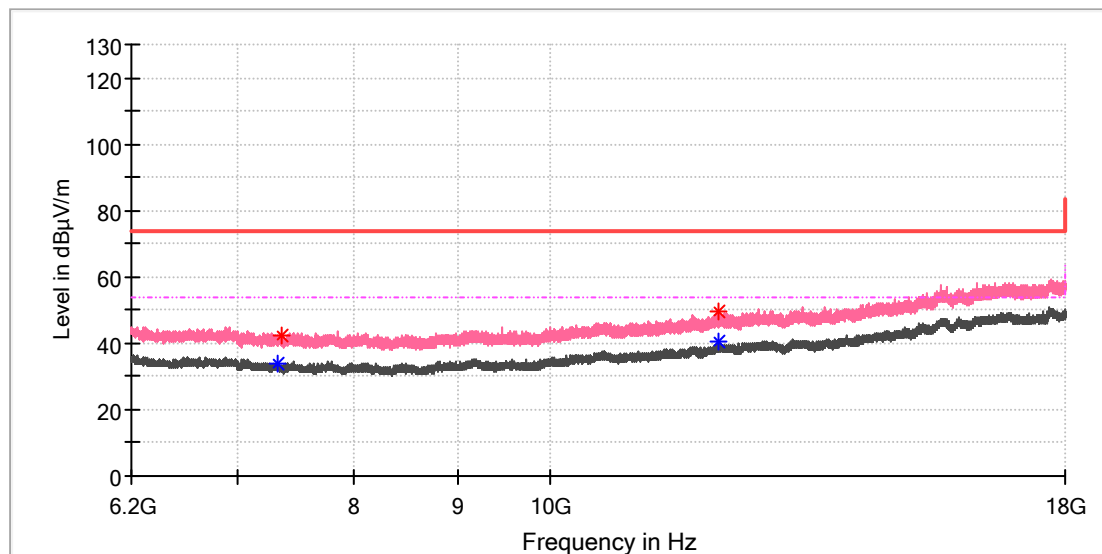


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7264.950000	42.94	---	74.00	31.06	150.0	H	187.0	8.5
7313.133333	---	34.35	54.00	19.65	150.0	H	275.0	8.2
12134.416667	---	40.27	54.00	13.73	150.0	H	0.0	14.3
12151.133333	49.47	---	74.00	24.53	150.0	H	51.0	14.4

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

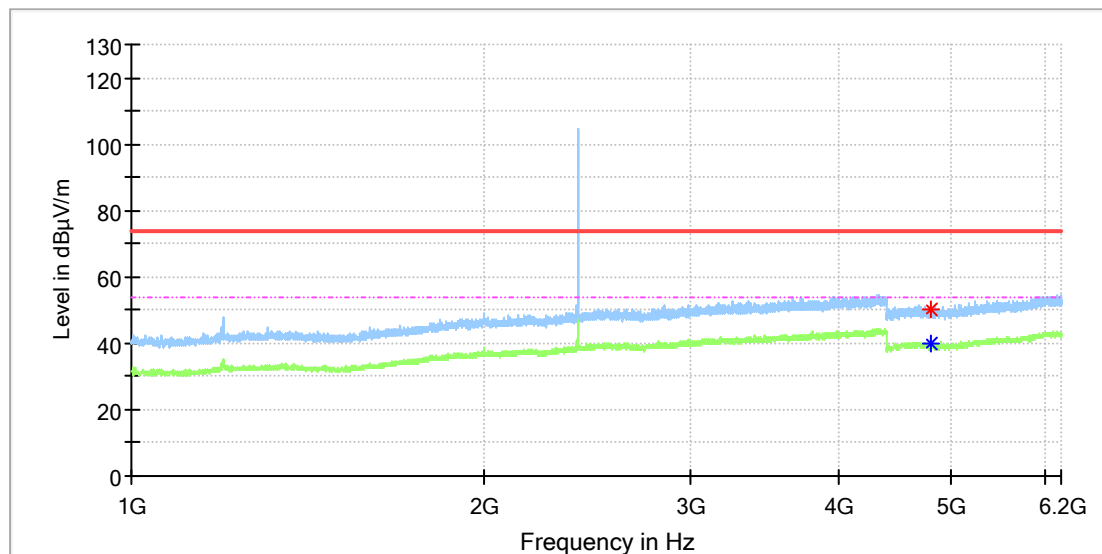


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7333.291667	---	33.87	54.00	20.13	150.0	V	323.0	8.1
7357.875000	42.39	---	74.00	31.61	150.0	V	348.0	8.1
12113.275000	---	40.26	54.00	13.74	150.0	V	206.0	14.2
12124.091667	49.41	---	74.00	24.59	150.0	V	75.0	14.3

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

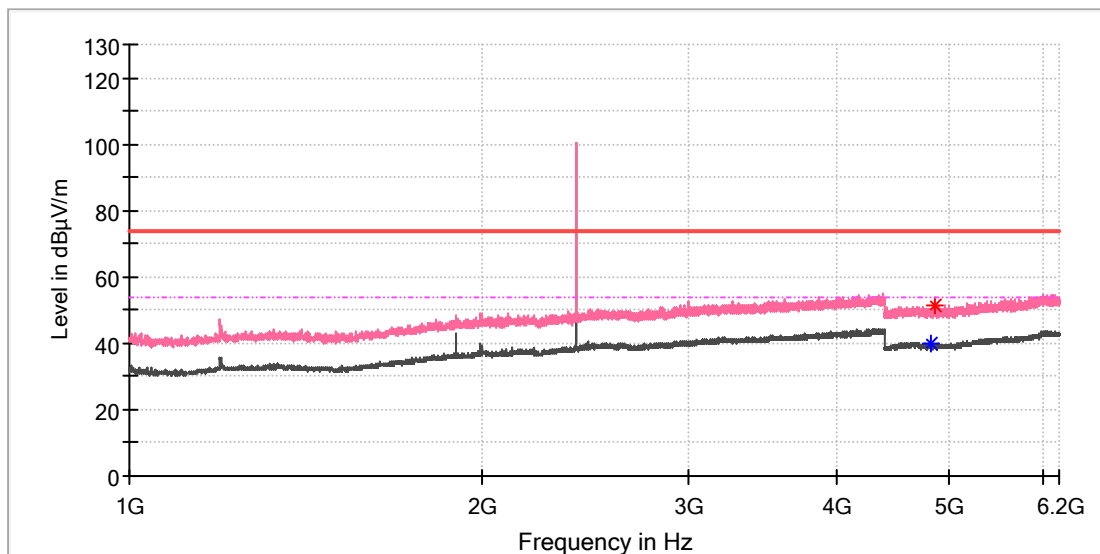


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.000000	50.20	---	74.00	23.80	150.0	H	253.0	11.8
4803.500000	---	40.19	54.00	13.81	150.0	H	82.0	11.8

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

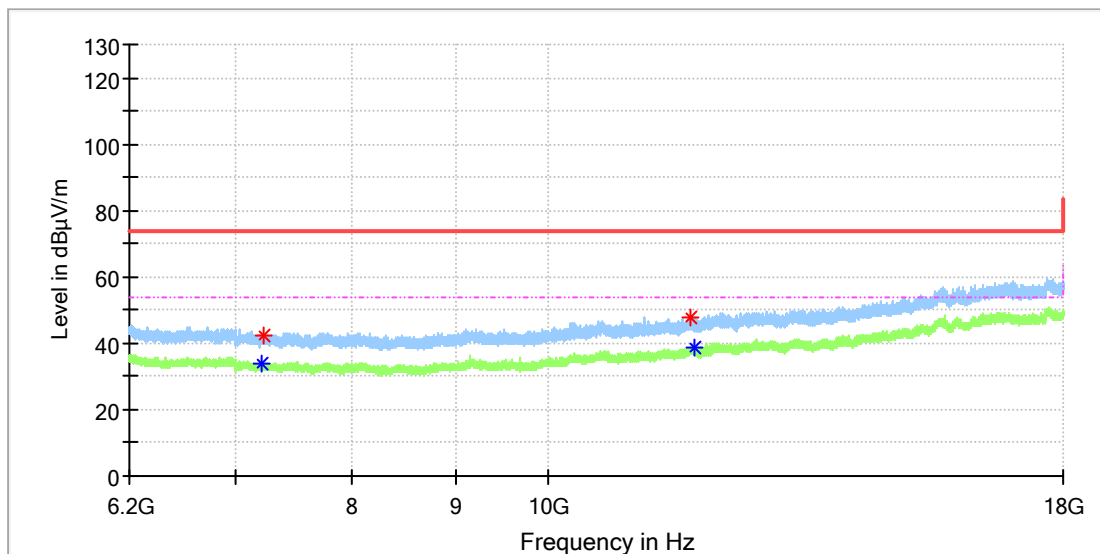


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4820.000000	---	39.65	54.00	14.35	150.0	V	252.0	11.8
4852.000000	51.20	---	74.00	22.80	150.0	V	309.0	11.8

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

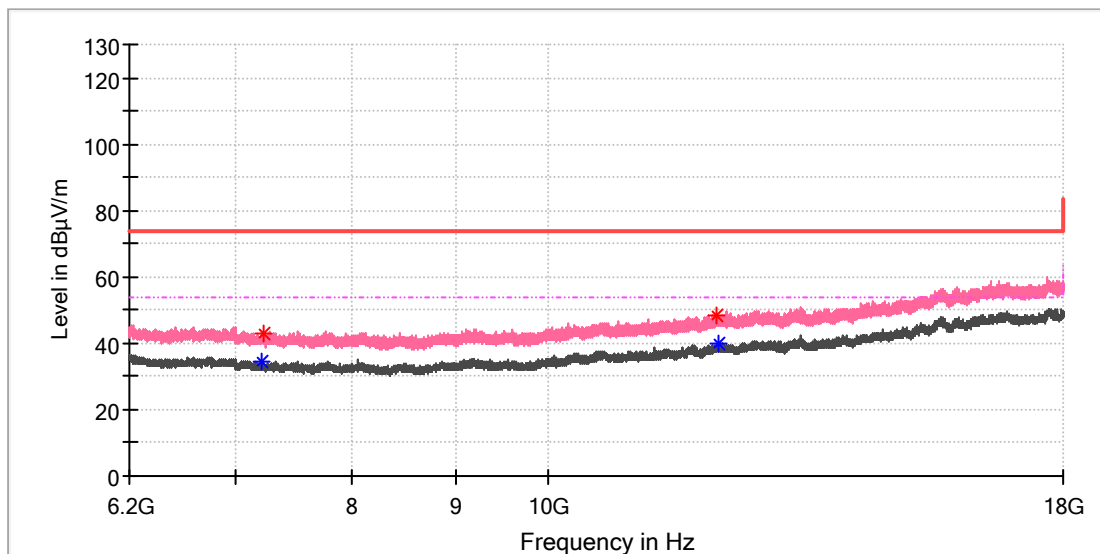


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7218.241667	---	34.13	54.00	19.87	150.0	H	57.0	8.7
7219.225000	42.51	---	74.00	31.49	150.0	H	297.0	8.7
11764.191667	47.69	---	74.00	26.31	150.0	H	284.0	13.4
11806.966667	---	38.62	54.00	15.38	150.0	H	32.0	13.5

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

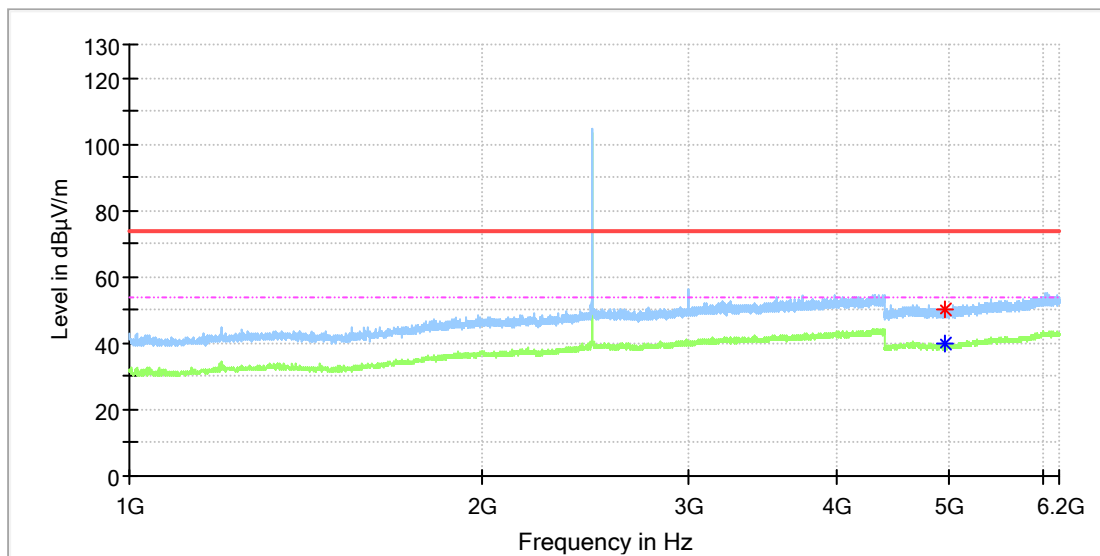


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.458333	---	34.41	54.00	19.59	150.0	V	91.0	8.8
7219.225000	42.94	---	74.00	31.06	150.0	V	287.0	8.7
12125.566667	48.41	---	74.00	25.59	150.0	V	312.0	14.3
12131.958333	---	40.03	54.00	13.97	150.0	V	30.0	14.3

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

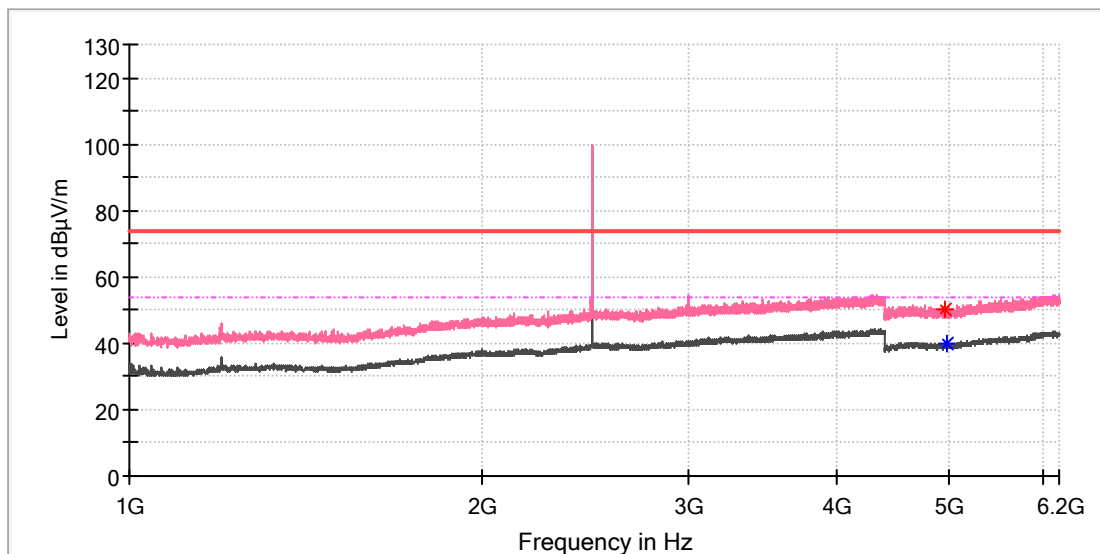


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4954.500000	50.49	---	74.00	23.51	150.0	H	266.0	11.8
4957.500000	---	39.61	54.00	14.39	150.0	H	334.0	11.8

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

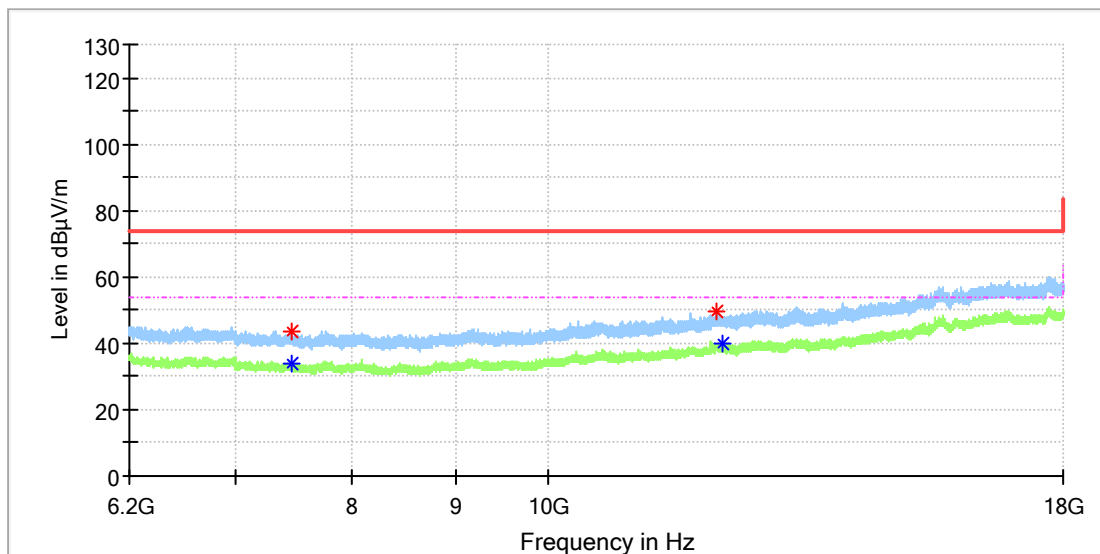


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4959.500000	50.48	---	74.00	23.52	150.0	V	326.0	11.8
4969.000000	---	39.76	54.00	14.24	150.0	V	43.0	11.8

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

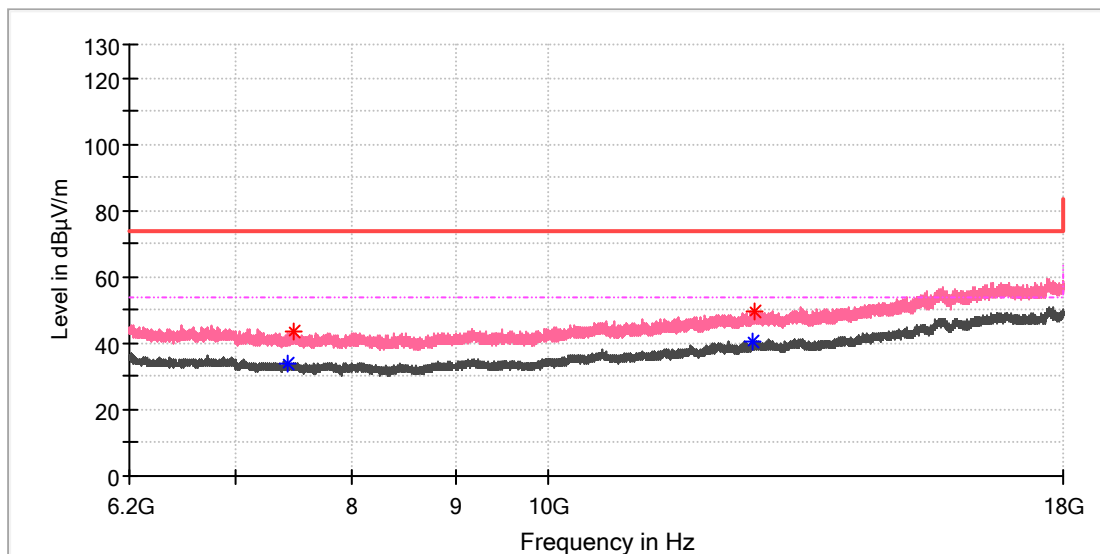


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7466.041667	43.78	---	74.00	30.22	150.0	H	160.0	8.6
7466.041667	---	33.96	54.00	20.04	150.0	H	160.0	8.6
12130.975000	49.54	---	74.00	24.46	150.0	H	266.0	14.3
12194.891667	---	40.13	54.00	13.87	150.0	H	35.0	14.6

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



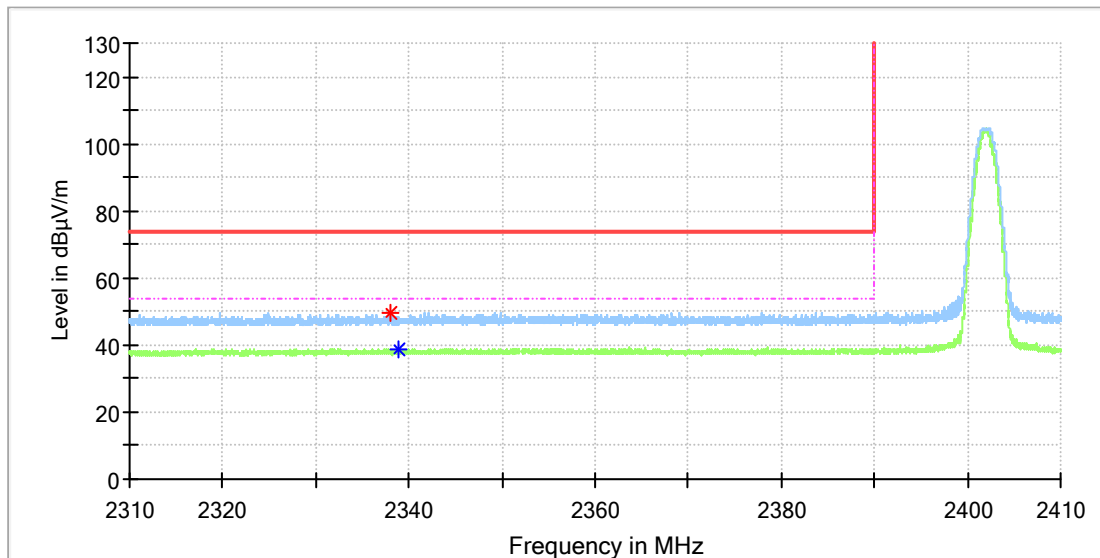
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7434.083333	---	33.77	54.00	20.23	150.0	V	118.0	8.4
7483.741667	43.33	---	74.00	30.67	150.0	V	68.0	8.7
12640.833333	---	40.61	54.00	13.39	150.0	V	0.0	15.0
12657.550000	49.84	---	74.00	24.16	150.0	V	105.0	15.0

APPENDIX C.6: RADIATED EMISSIONS IN RESTRICTED BANDS

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

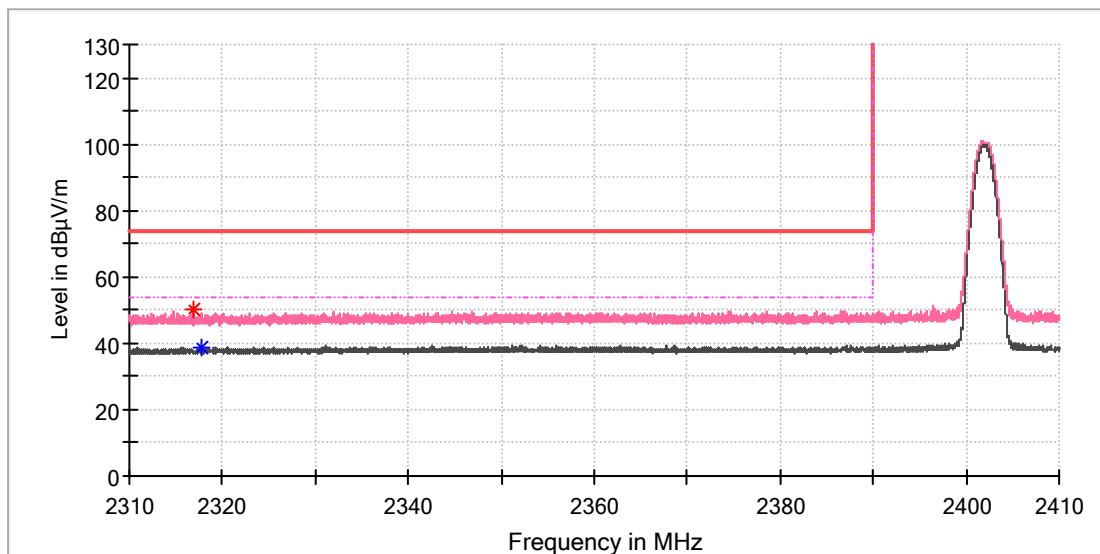


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2338.088235	49.50	---	74.00	24.50	150.0	H	240.0	6.8
2338.970588	---	38.59	54.00	15.41	150.0	H	240.0	6.8

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

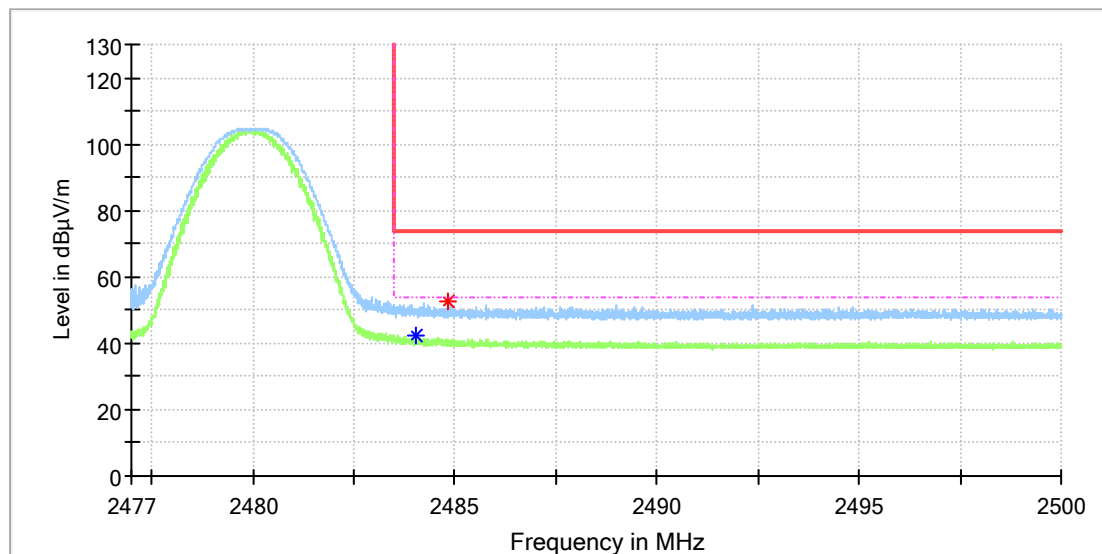


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2316.897059	50.20	---	74.00	23.80	150.0	V	288.0	6.6
2317.750000	---	38.55	54.00	15.45	150.0	V	294.0	6.6

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

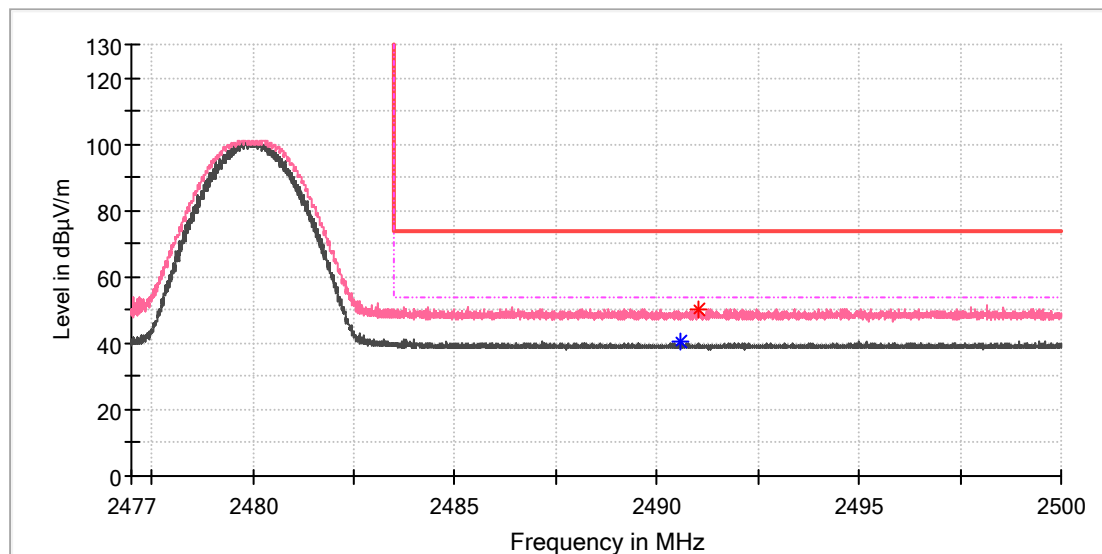


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.016177	---	42.39	54.00	11.61	150.0	H	247.0	7.4
2484.836765	52.31	---	74.00	21.69	150.0	H	247.0	7.4

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

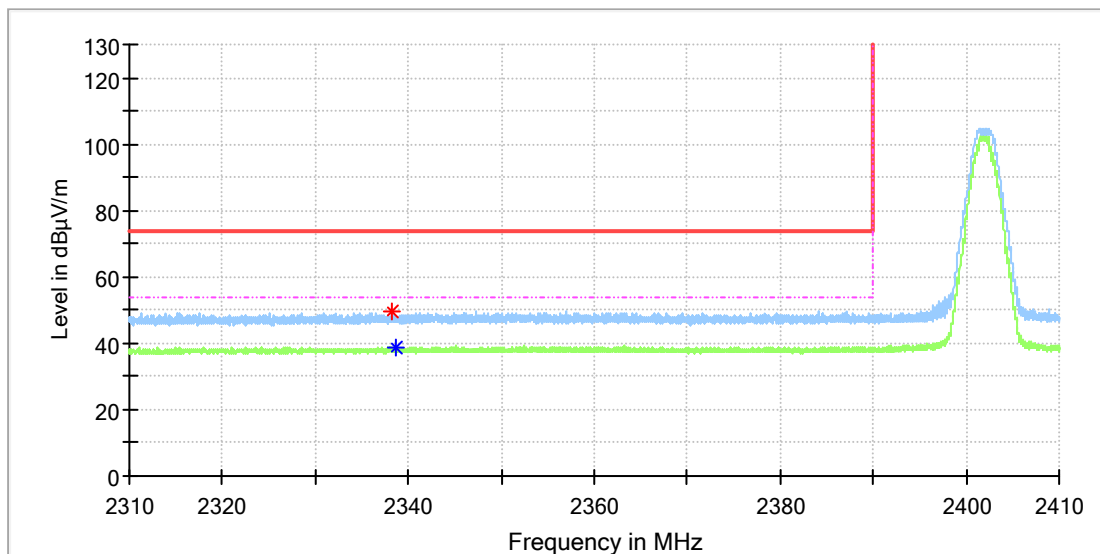


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2490.598529	---	40.26	54.00	13.74	150.0	V	51.0	7.4
2491.008824	50.26	---	74.00	23.74	150.0	V	129.0	7.4

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 2M_Low channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

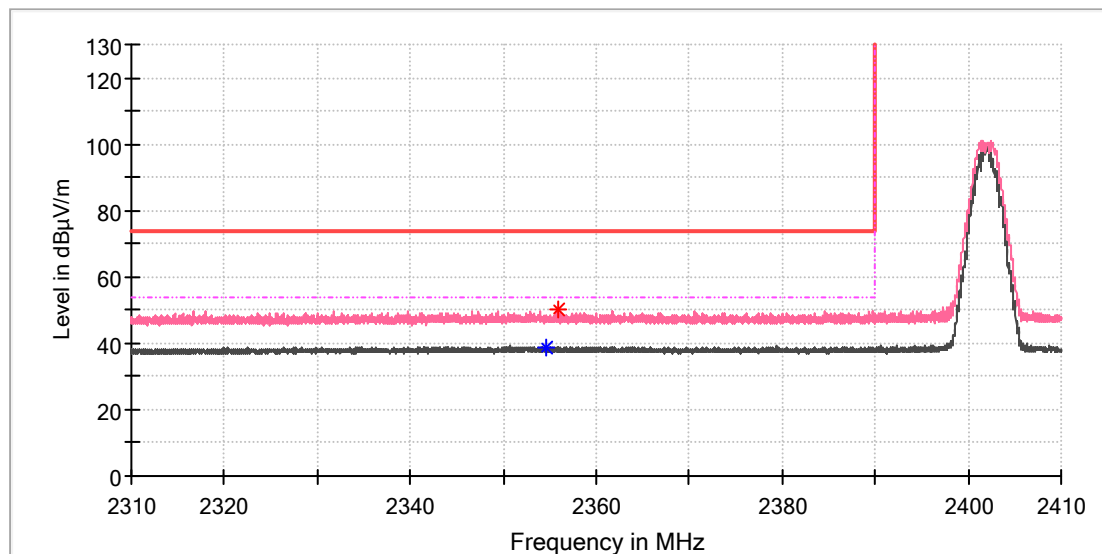


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2338.220588	49.44	---	74.00	24.56	150.0	H	332.0	6.8
2338.750000	---	38.67	54.00	15.33	150.0	H	249.0	6.8

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 2M_Low channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

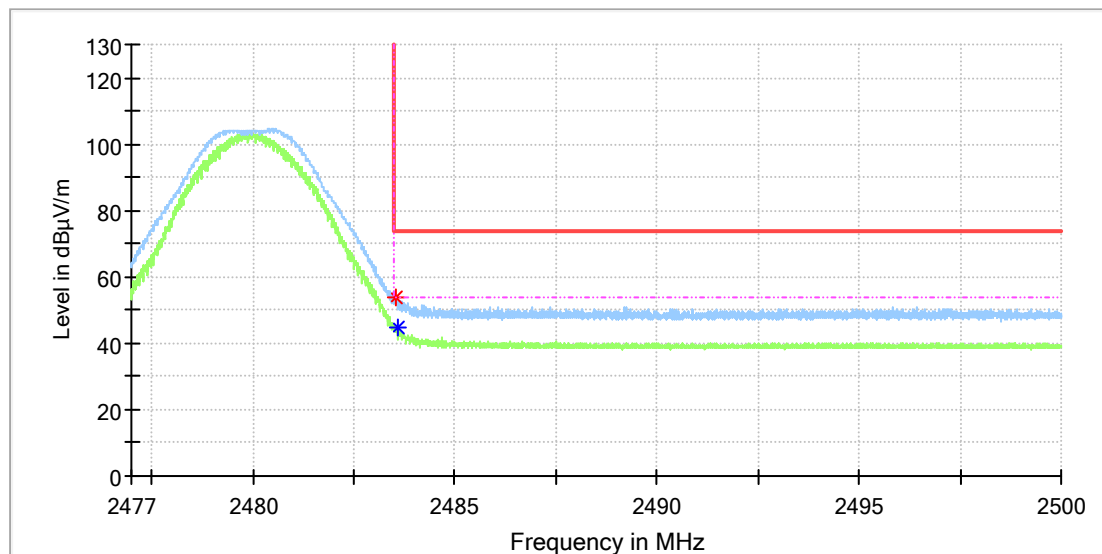


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2354.573530	---	38.84	54.00	15.16	150.0	V	270.0	6.9
2355.926471	49.94	---	74.00	24.06	150.0	V	174.0	6.9

EUT Information

EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 2M_High channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

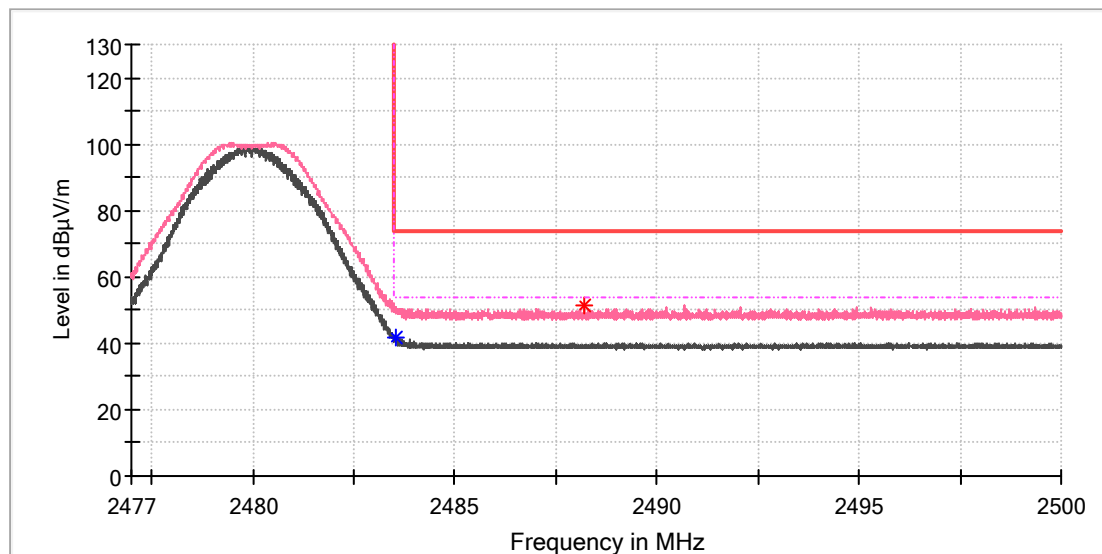


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.522059	54.06	---	74.00	19.94	150.0	H	133.0	7.4
2483.570588	---	44.69	54.00	9.31	150.0	H	246.0	7.4

EUT Information

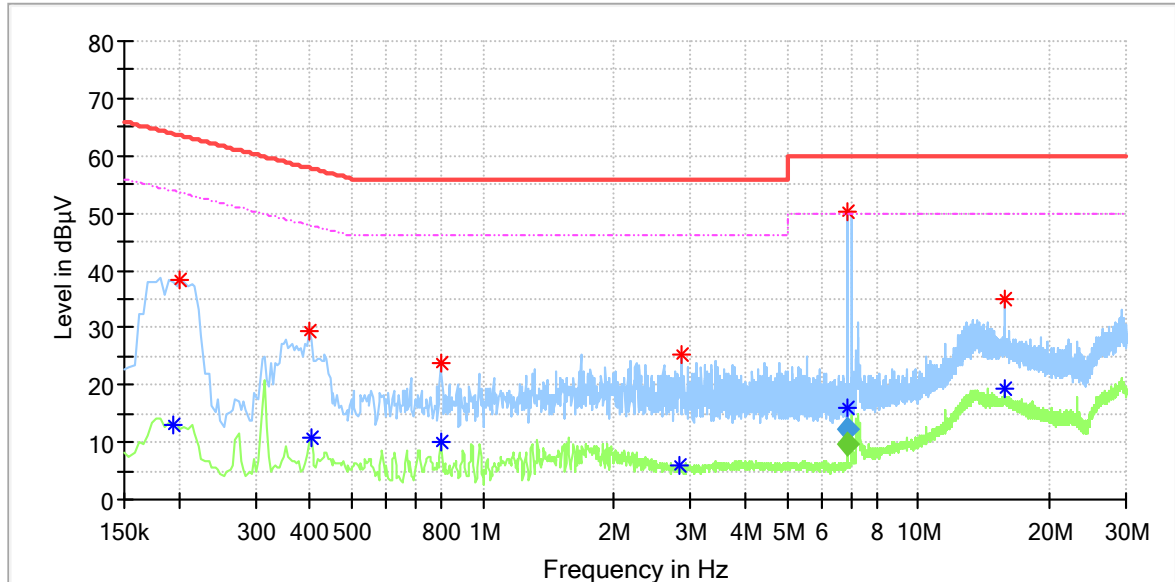
EUT Name:	Thermostat
Model:	TC320B-G
Test Mode:	BLE 2M_High channel
Order No/Sample No:	168467440/A003646592-002
Test Voltage::	120V/60HZ
Remark:	Temp 22 Humi:55%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.561765	---	41.98	54.00	12.02	150.0	V	88.0	7.4
2488.207353	51.18	---	74.00	22.82	150.0	V	304.0	7.4

APPENDIX C.7: CONDUCTED EMISSION ON AC MAINS

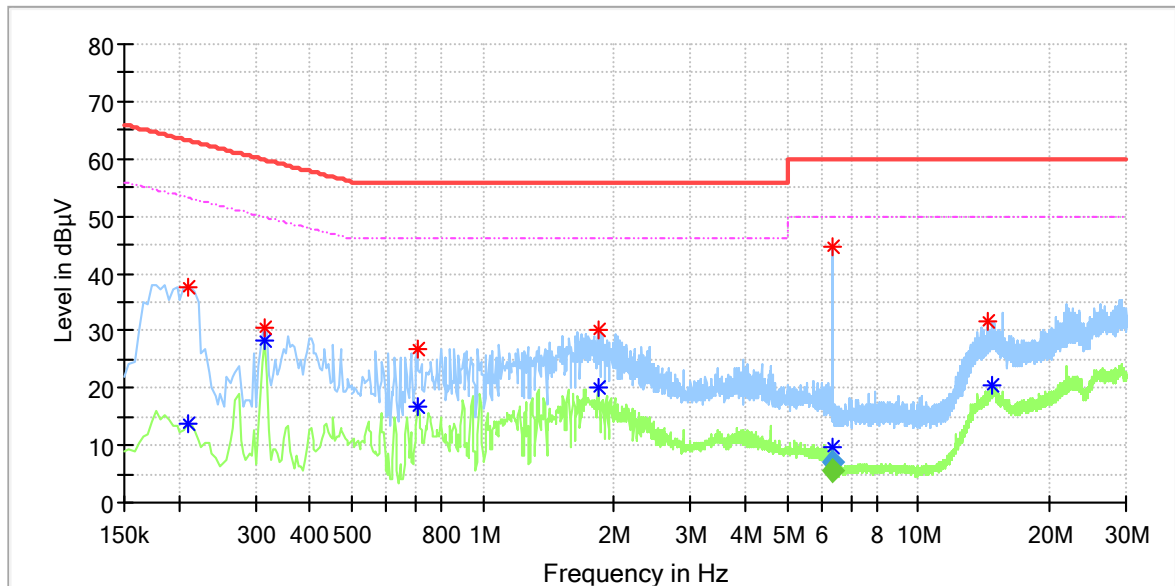


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.194000	---	13.20	53.86	40.67	L1	9.8
0.202000	38.31	---	63.53	25.22	L1	9.8
0.398000	29.34	---	57.90	28.55	L1	9.9
0.402000	---	10.61	47.81	37.20	L1	9.9
0.800000	---	9.87	46.00	36.13	L1	9.8
0.800000	23.70	---	56.00	32.30	L1	9.8
2.840000	---	6.06	46.00	39.94	L1	9.9
2.864000	25.21	---	56.00	30.79	L1	9.9
6.894500	---	15.99	50.00	34.01	L1	9.9
6.906500	50.25	---	60.00	9.75	L1	9.9
15.844000	---	19.36	50.00	30.64	L1	10.2
15.844000	34.97	---	60.00	25.03	L1	10.2

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
6.894500	---	9.74	50.00	40.26	1000.0	9.000	L1	9.9
6.906500	12.42	---	60.00	47.58	1000.0	9.000	L1	9.9



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.210000	---	13.94	53.21	39.27	N	9.7
0.210000	37.67	---	63.21	25.54	N	9.7
0.314000	---	28.41	49.86	21.45	N	9.7
0.314000	30.63	---	59.86	29.24	N	9.7
0.708000	26.78	---	56.00	29.22	N	9.8
0.712000	---	16.75	46.00	29.25	N	9.8
1.836000	---	20.20	46.00	25.80	N	9.9
1.836000	30.10	---	56.00	25.90	N	9.9
6.362500	44.64	---	60.00	15.36	N	9.9
6.374500	---	9.75	50.00	40.25	N	9.9
14.476000	31.48	---	60.00	28.52	N	10.1
14.748000	---	20.39	50.00	29.61	N	10.1

Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
6.362500	6.95	---	60.00	53.05	1000.0	9.000	N	9.9
6.374500	---	5.49	50.00	44.51	1000.0	9.000	N	9.9