

Appendix B: Test Results of Bluetooth Low Energy

APPENDIX B: TEST RESULTS OF BLUETOOTH LOW ENERGY	1
APPENDIX B.1: TEST RESULTS OF CONDUCTED POWER SPECTRAL DENSITY	2
APPENDIX B.2: TEST RESULTS OF 6dB BANDWIDTH	5
APPENDIX B.3: TEST RESULTS OF 99% BANDWIDTH	8
APPENDIX B.4: TEST RESULTS OF CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 kHz BANDWIDTH	11
<i>Band Edge</i>	<i>11</i>
<i>Conducted Spurious Emission</i>	<i>13</i>
APPENDIX B.5: TEST RESULTS OF RADIATED SPURIOUS EMISSIONS	20
<i>30 MHz - 1GHz</i>	<i>20</i>
<i>1GHz - 18GHz</i>	<i>22</i>
APPENDIX B.6: TEST RESULTS OF RADIATED EMISSIONS IN RESTRICTED BANDS	34
APPENDIX B.7: TEST RESULTS OF CONDUCTED EMISSION	38

Appendix B.1: Test Results of Conducted Power Spectral Density

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	1.32	≤8.00	PASS
		2440	1.28	≤8.00	PASS
		2480	1.13	≤8.00	PASS
BLE_2M	Ant1	2402	-2.45	≤8.00	PASS
		2440	-2.37	≤8.00	PASS
		2480	-2.44	≤8.00	PASS

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix B.2: Test Results of 6dB Bandwidth

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.564	2401.736	2402.300	0.5	PASS
		2440	0.560	2439.736	2440.296	0.5	PASS
		2480	0.632	2479.676	2480.308	0.5	PASS
BLE_2M	Ant1	2402	1.016	2401.520	2402.536	0.5	PASS
		2440	1.052	2439.496	2440.548	0.5	PASS
		2480	1.020	2479.516	2480.536	0.5	PASS

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix B.3: Test Results of 99% Bandwidth

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0298	2401.5163	2402.5461	---	PASS
		2440	1.0288	2439.5163	2440.5451	---	PASS
		2480	1.0265	2479.5152	2480.5417	---	PASS
BLE_2M	Ant1	2402	2.0325	2401.0379	2403.0704	---	PASS
		2440	2.0320	2439.0297	2441.0617	---	PASS
		2480	2.0408	2479.0251	2481.0659	---	PASS

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480

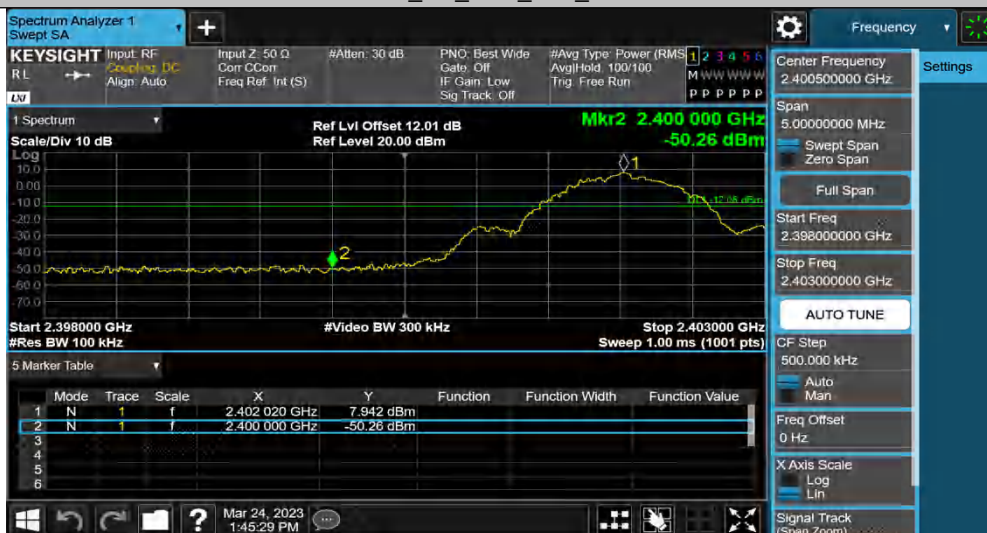


Appendix B.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Band Edge

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	7.94	-50.26	≤-12.06	PASS
		High	2480	7.82	-50.78	≤-12.18	PASS
BLE_2M	Ant1	Low	2402	7.81	-25.64	≤-12.19	PASS
		High	2480	7.03	-49.79	≤-12.97	PASS

BLE_1M_Ant1_Low_2402



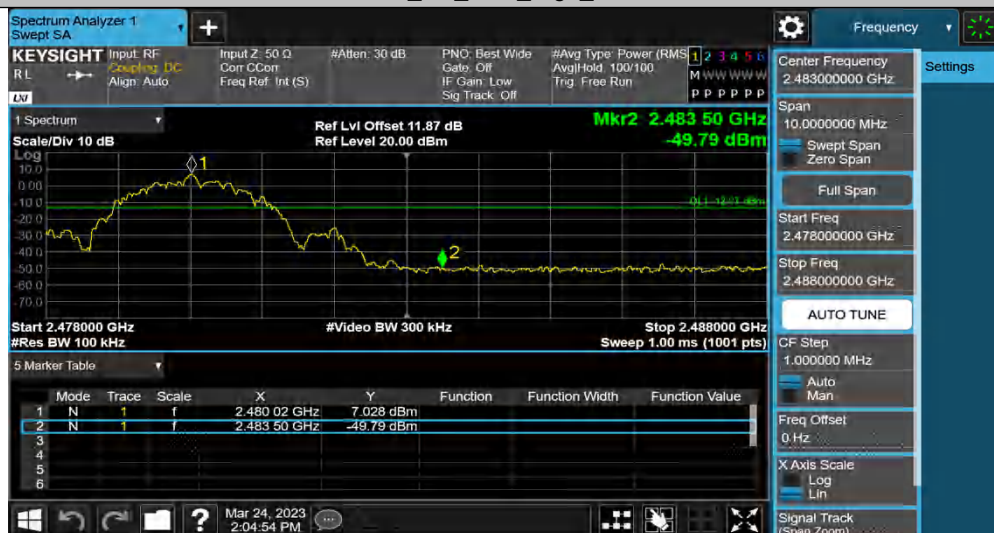
BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



BLE_2M_Ant1_High_2480



Conducted Spurious Emission

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	6.47	6.47	---	PASS
			30~1000	6.47	-47.73	≤-13.53	PASS
			1000~26500	6.47	-39.05	≤-13.53	PASS
		2440	Reference	5.45	5.45	---	PASS
			30~1000	5.45	-47.76	≤-14.55	PASS
			1000~26500	5.45	-39.05	≤-14.55	PASS
		2480	Reference	4.64	4.64	---	PASS
			30~1000	4.64	-47.84	≤-15.36	PASS
			1000~26500	4.64	-39.06	≤-15.36	PASS
BLE_2M	Ant1	2402	Reference	5.12	5.12	---	PASS
			30~1000	5.12	-47.55	≤-14.88	PASS
			1000~26500	5.12	-38.53	≤-14.88	PASS
		2440	Reference	6.76	6.76	---	PASS
			30~1000	6.76	-47.36	≤-13.24	PASS
			1000~26500	6.76	-38.86	≤-13.24	PASS
		2480	Reference	7.13	7.13	---	PASS
			30~1000	7.13	-48.56	≤-12.87	PASS
			1000~26500	7.13	-38.38	≤-12.87	PASS

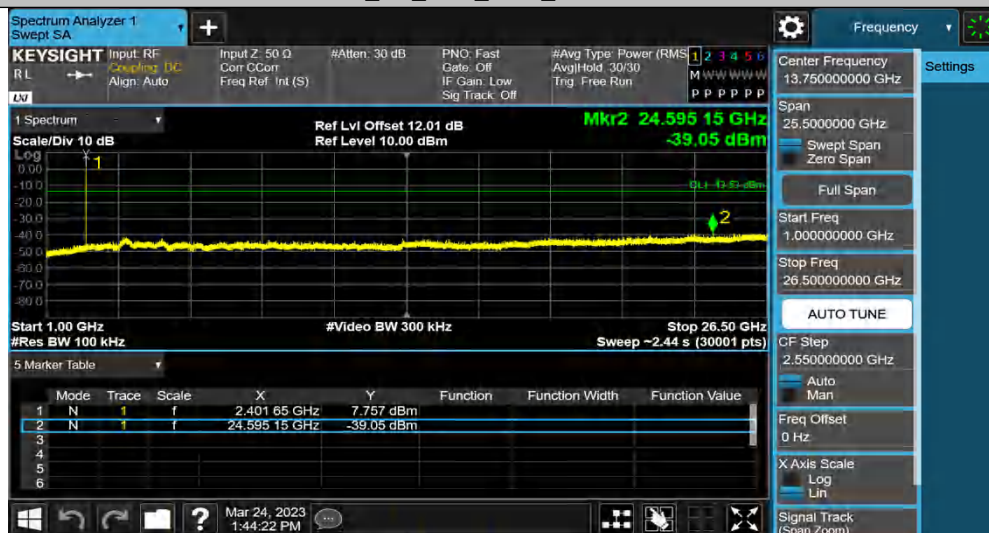
BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



BLE_1M_Ant1_2402_1000~26500



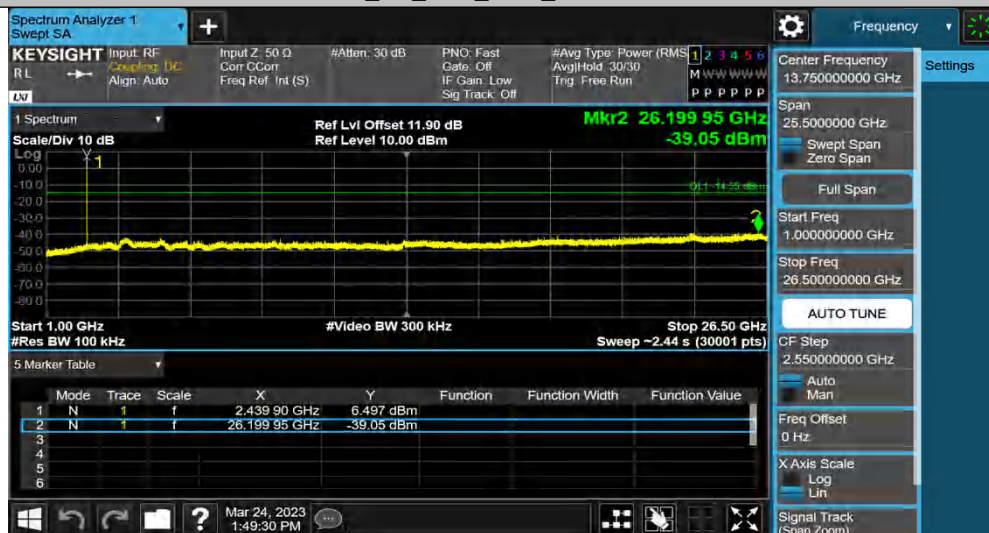
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



BLE_1M_Ant1_2440_1000~26500



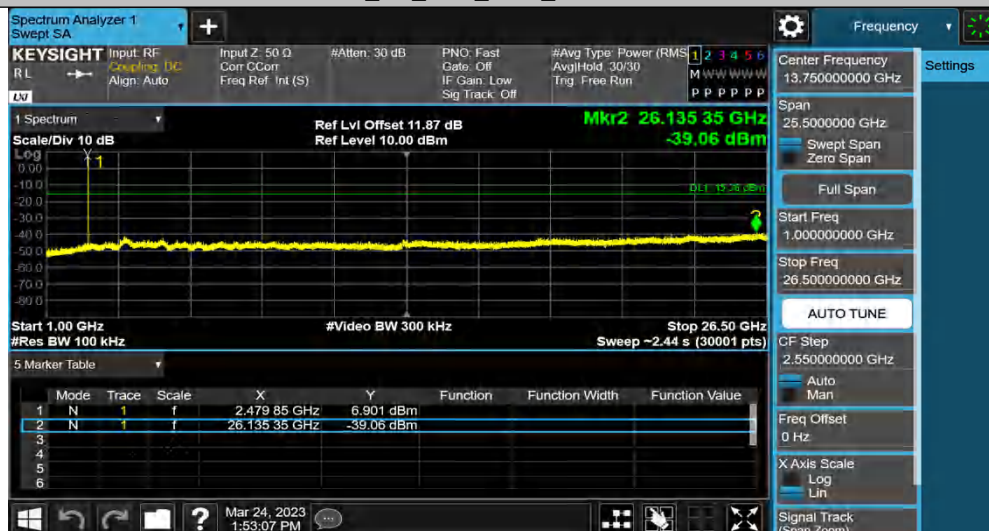
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



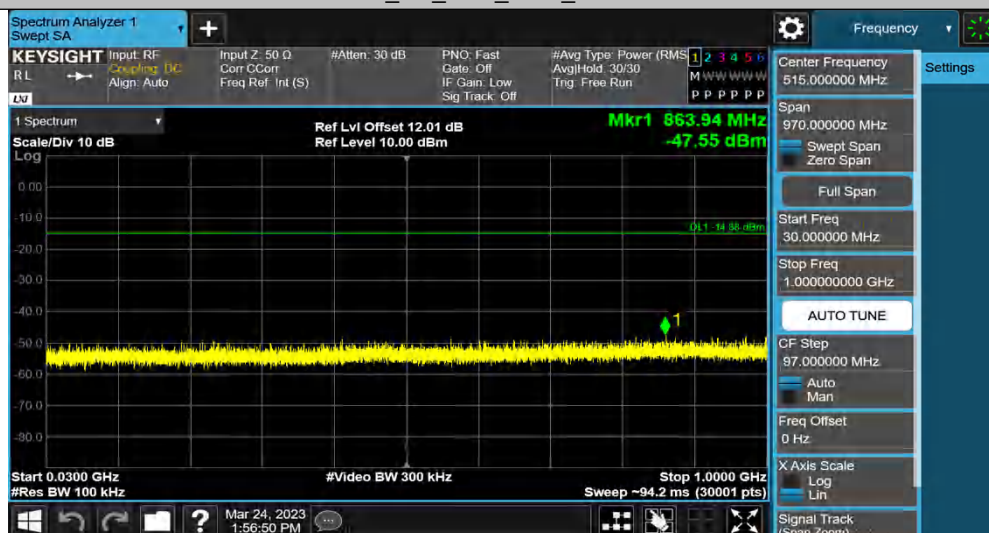
BLE_1M_Ant1_2480_1000~26500



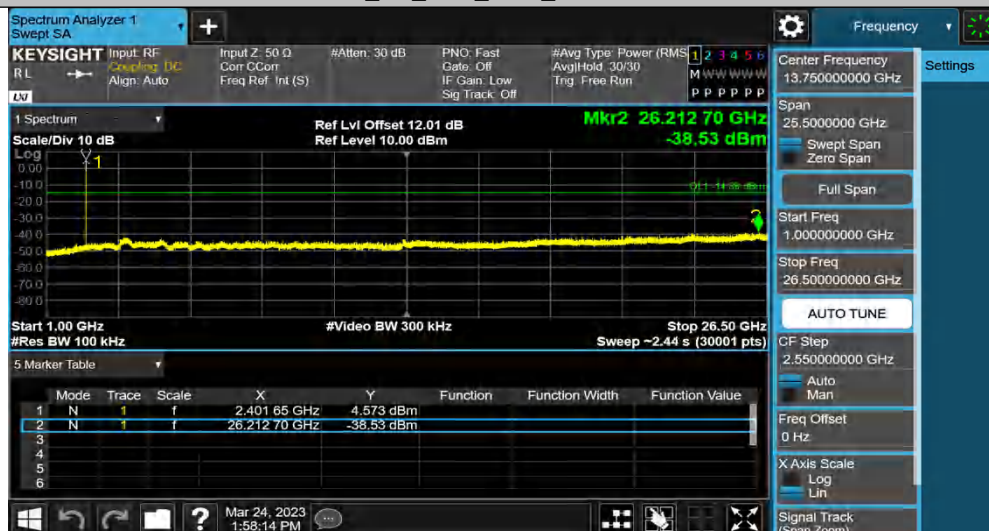
BLE_2M_Ant1_2402_0~Reference



BLE_2M_Ant1_2402_30~1000



BLE_2M_Ant1_2402_1000~26500



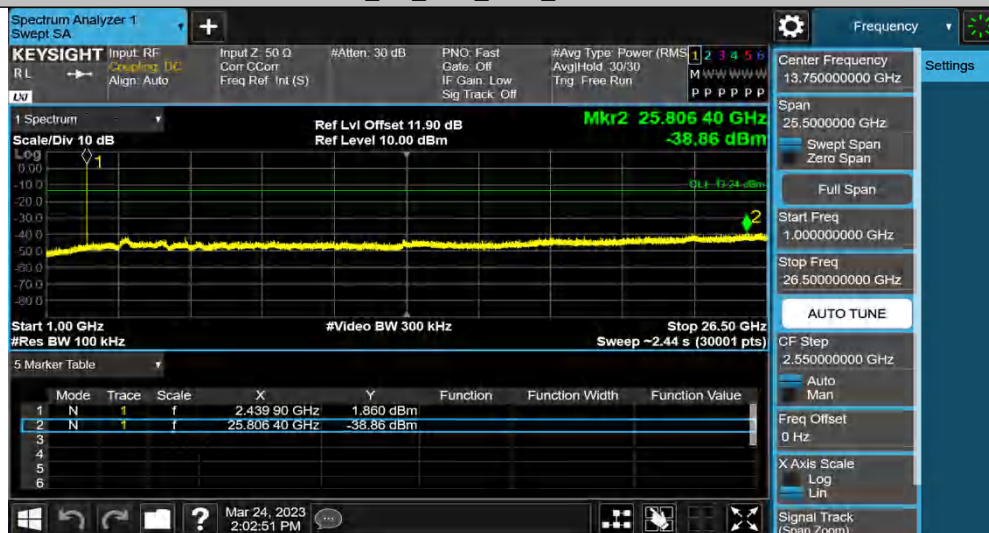
BLE_2M_Ant1_2440_0~Reference



BLE_2M_Ant1_2440_30~1000



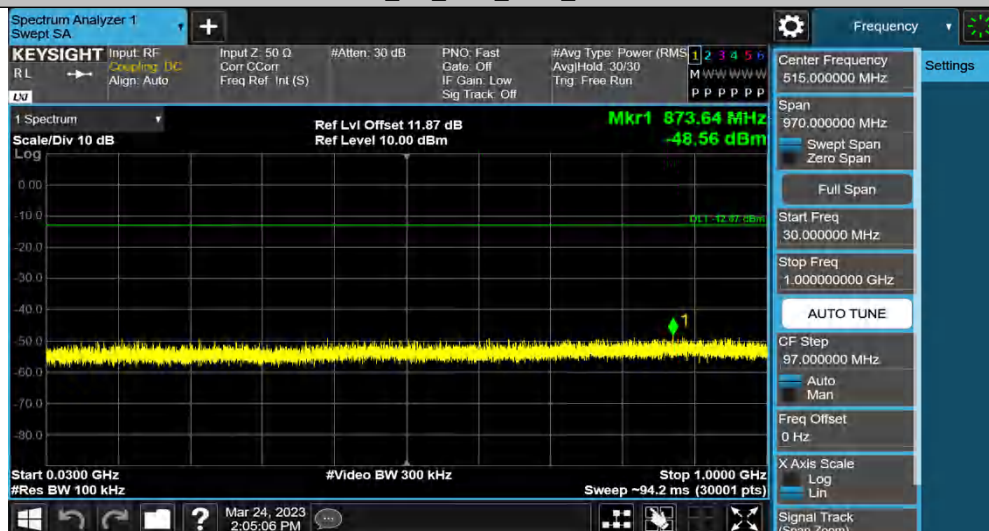
BLE_2M_Ant1_2440_1000~26500



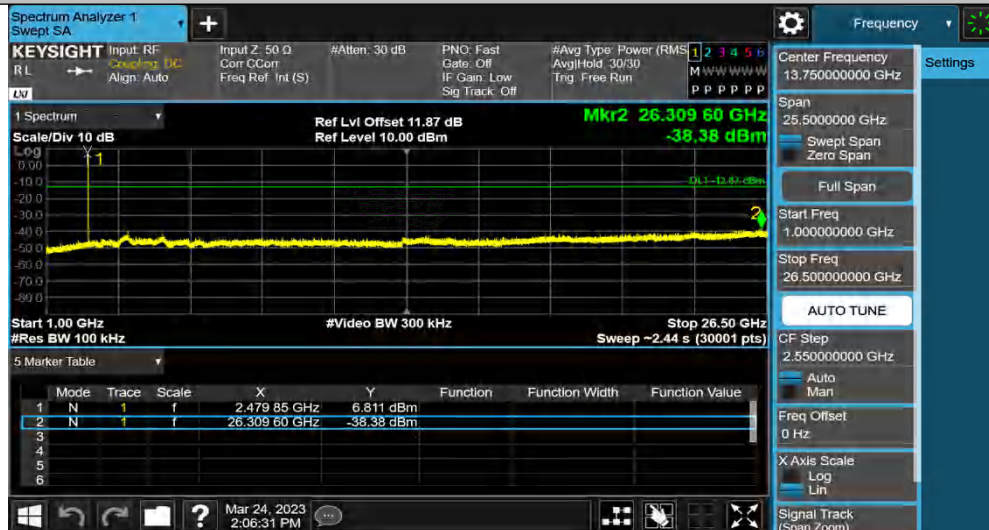
BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



BLE_2M_Ant1_2480_1000~26500



Appendix B.5: Test Results of Radiated Spurious Emissions

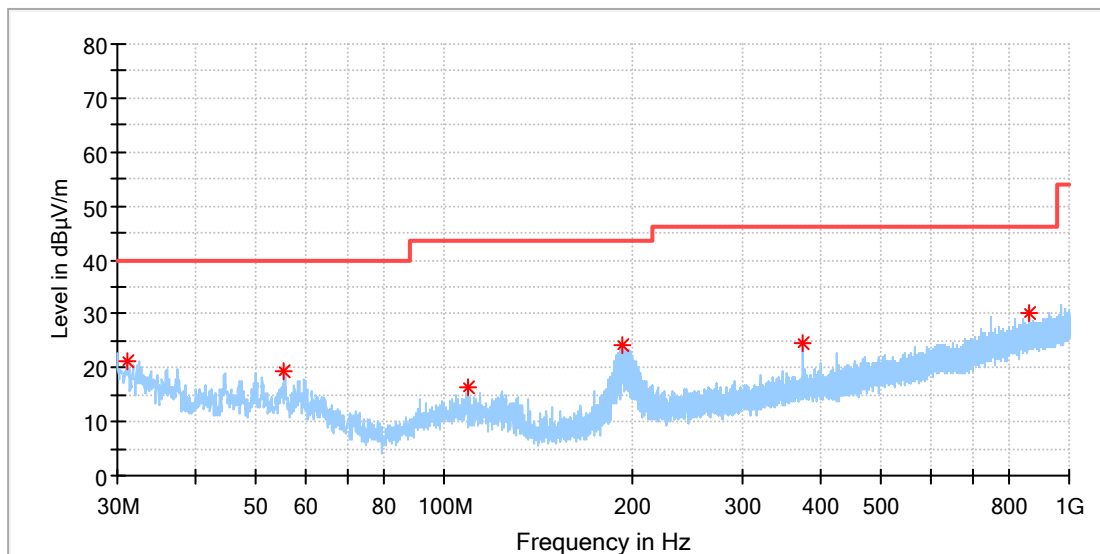
Note:

- 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.

30 MHz - 1GHz

EUT Information

EUT Name:	OPS-A
Model:	OPS-1A-8R64S
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168417547/A003427527-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

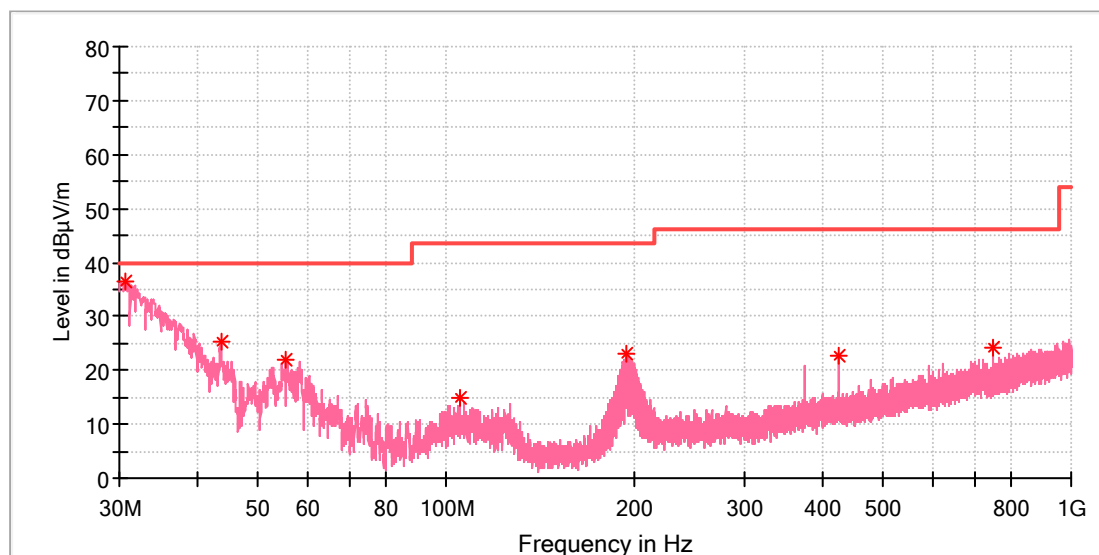
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.067000	21.39	40.00	18.61	100.0	H	52.0	-22.8
55.559500	19.46	40.00	20.54	100.0	H	18.0	-18.5
109.346000	16.28	43.50	27.22	100.0	H	52.0	-19.0
192.523500	24.29	43.50	19.21	100.0	H	284.0	-19.3
375.029000	24.60	46.00	21.40	100.0	H	45.0	-14.3
860.368500	30.22	46.00	15.78	100.0	H	172.0	-5.3

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
 Model: OPS-1A-8R64S
 Test Mode: BLE 1M_Mid channel
 Order No/Sample No: 168417547/A003427527-003
 Test Voltage: 120V/60Hz
 Remark: Temp 23 Humi:56%
 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)
30.708846	36.61	40.00	3.39	100.0	V	6.0	-23.2
43.617308	25.38	40.00	14.62	100.0	V	15.0	-19.4
55.443846	21.96	40.00	18.04	100.0	V	305.0	-18.8
104.988462	14.79	43.50	28.71	100.0	V	1.0	-19.1
193.930000	23.03	43.50	20.47	100.0	V	0.0	-19.6
425.013846	22.80	46.00	23.20	100.0	V	142.0	-13.7
750.038462	24.25	46.00	21.75	100.0	V	0.0	-7.6

Final Result

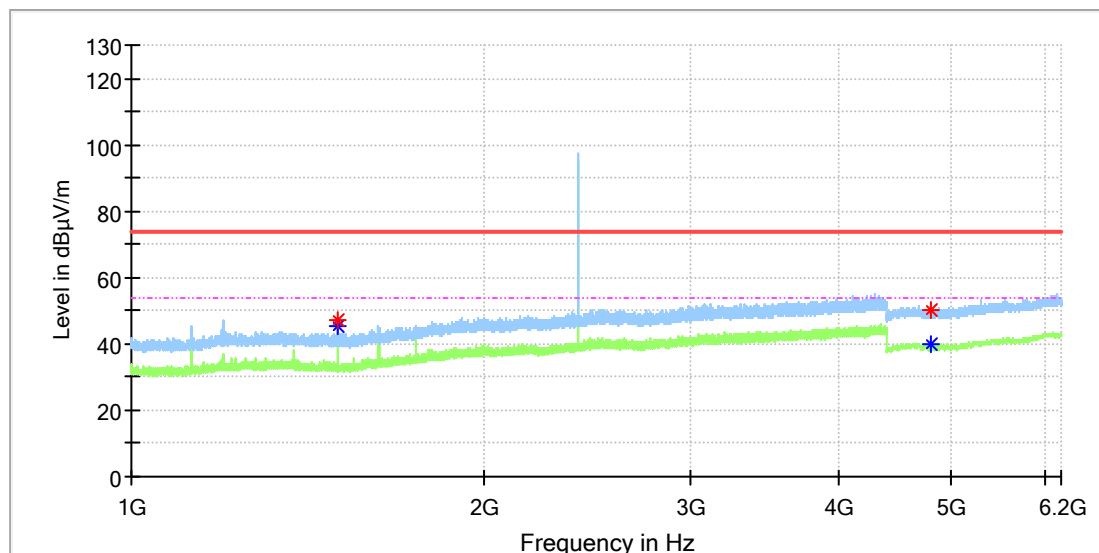
Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

1GHz - 18GHz

Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	OPS-A
Model:	OPS-1A-8R64S
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168417547/A003427527-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

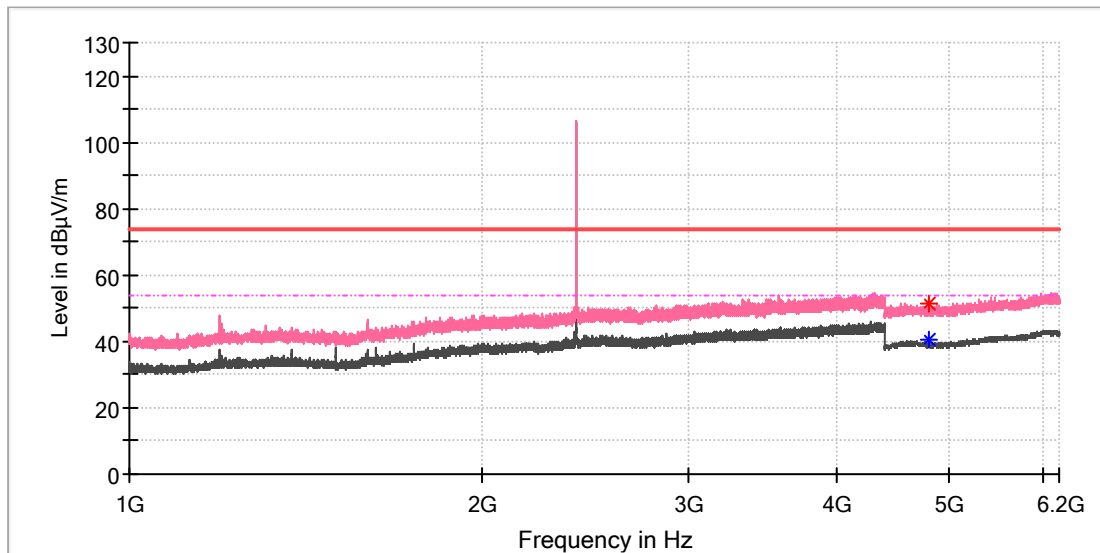
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1499.970000	47.43	---	74.00	26.57	150.0	H	311.0	1.2
1499.970000	---	45.08	54.00	8.92	150.0	H	311.0	1.2
4805.000000	49.94	---	74.00	24.06	150.0	H	216.0	11.8
4806.000000	---	40.01	54.00	13.99	150.0	H	223.0	11.8

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_Low channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

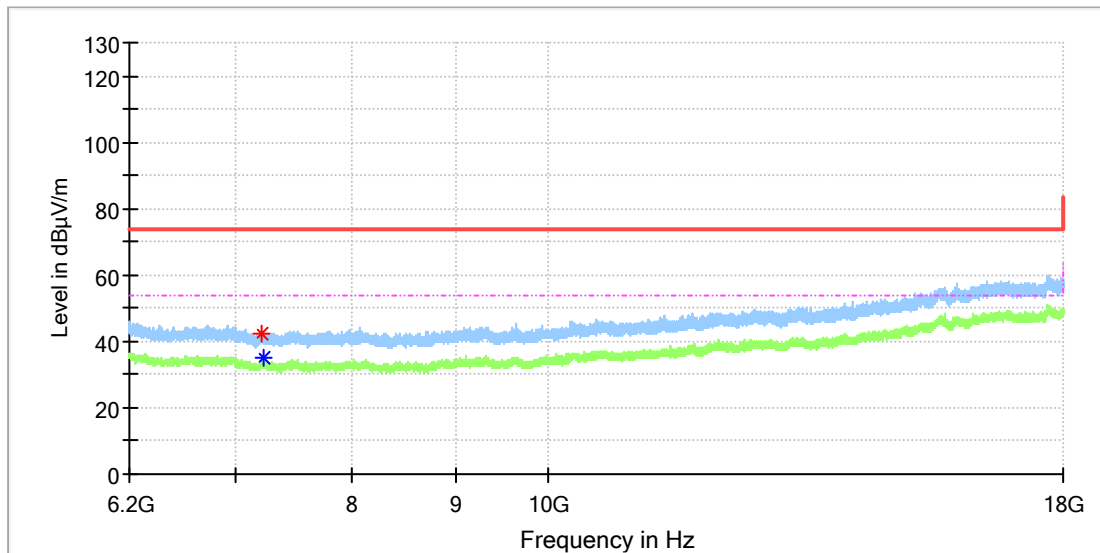
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.000000	---	40.54	54.00	13.46	150.0	V	221.0	11.8
4803.500000	51.49	---	74.00	22.51	150.0	V	248.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_Low channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

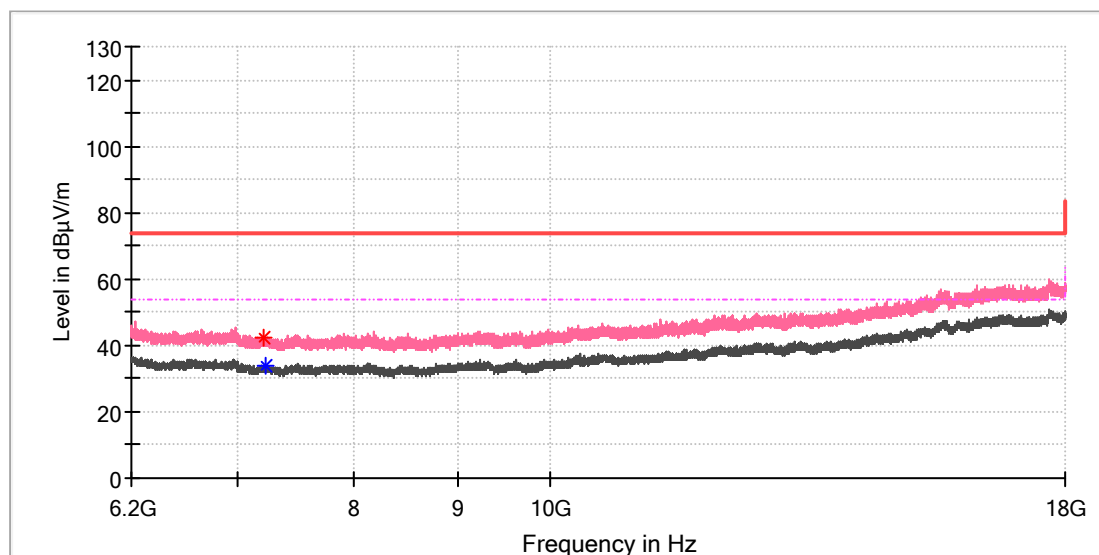
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7202.016667	42.60	---	74.00	31.40	150.0	H	154.0	8.8
7222.666667	---	34.93	54.00	19.07	150.0	H	358.0	8.7

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_Low channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

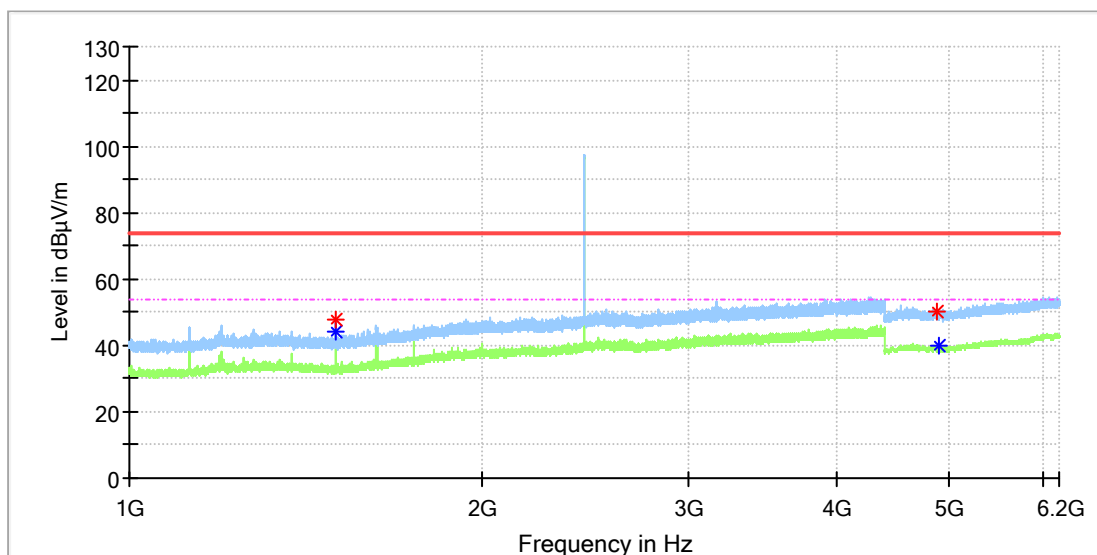
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7206.441667	42.40	---	74.00	31.60	150.0	V	26.0	8.8
7221.683333	---	33.95	54.00	20.05	150.0	V	341.0	8.7

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

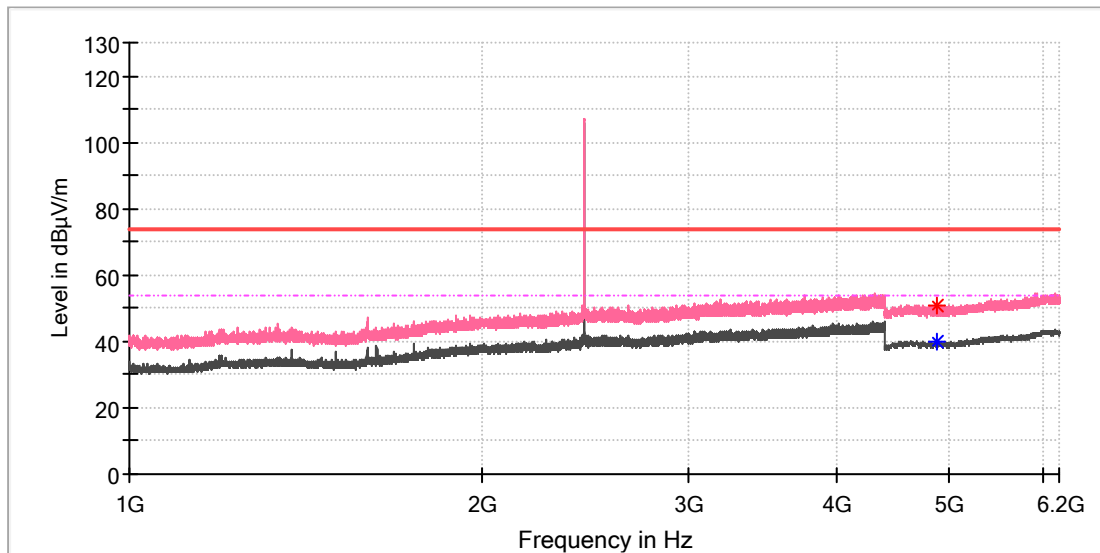
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1500.140000	47.47	---	74.00	26.53	150.0	H	182.0	1.2
1500.140000	---	44.22	54.00	9.78	150.0	H	182.0	1.2
4883.000000	50.01	---	74.00	23.99	150.0	H	343.0	11.8
4898.500000	---	39.64	54.00	14.36	150.0	H	93.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

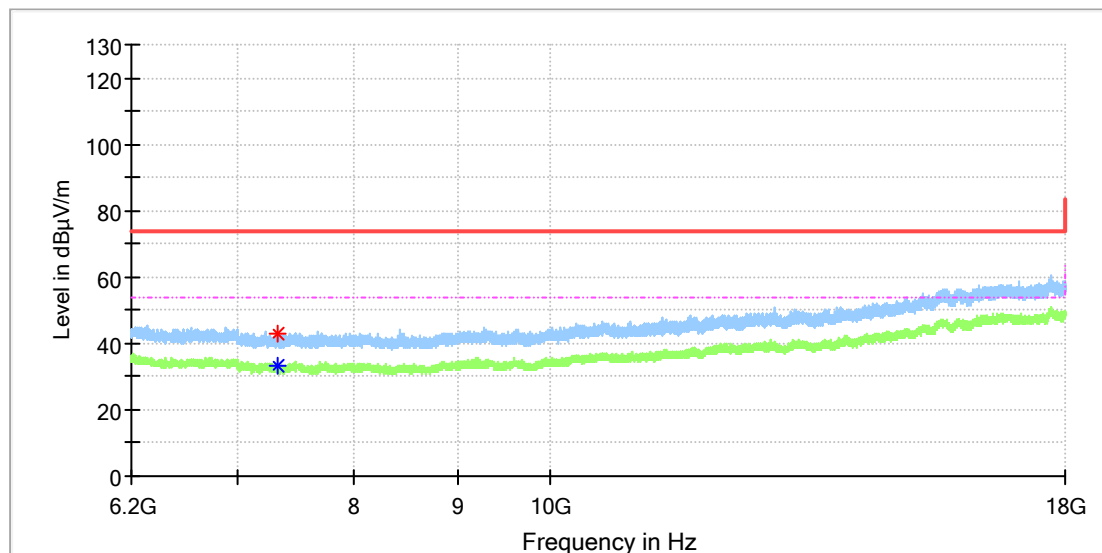
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4879.000000	50.82	---	74.00	23.18	150.0	V	108.0	11.8
4879.500000	---	40.07	54.00	13.93	150.0	V	161.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	OPS-A
Model:	OPS-1A-8R64S
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168417547/A003427527-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

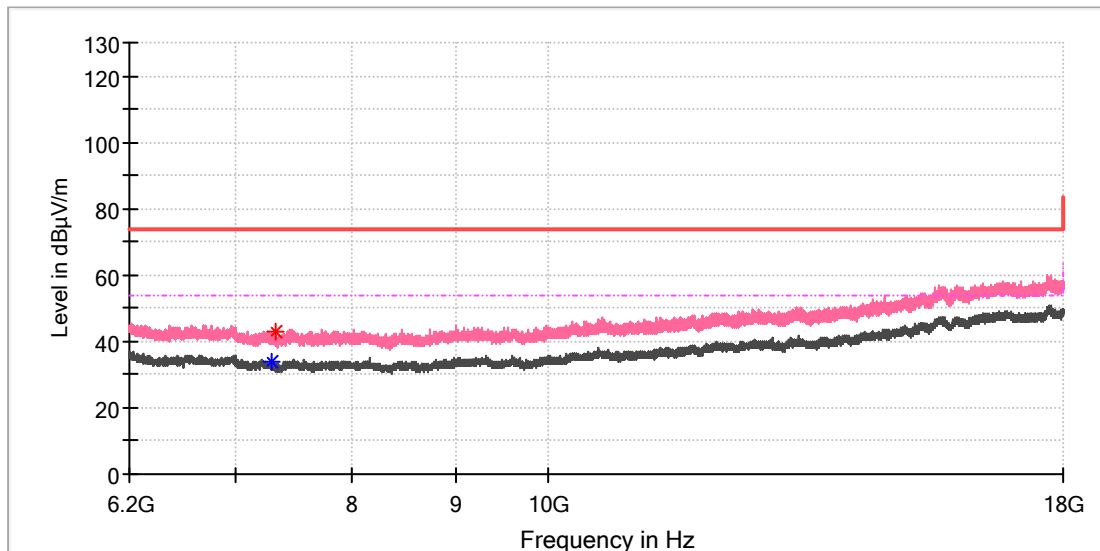
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7320.016667	---	33.45	54.00	20.55	150.0	H	245.0	8.2
7326.900000	42.67	---	74.00	31.33	150.0	H	186.0	8.1

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

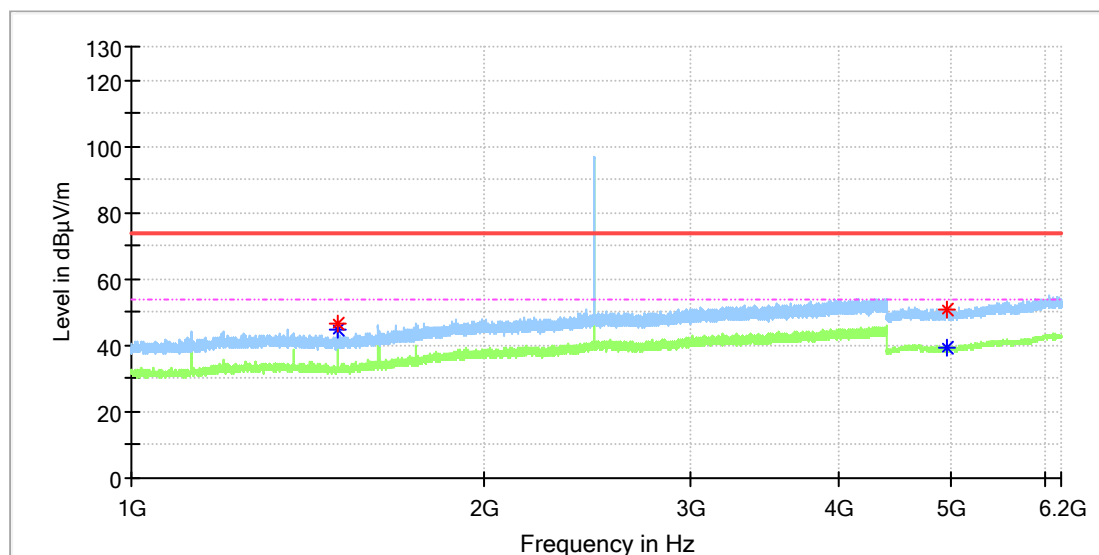
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7289.041667	---	33.98	54.00	20.02	150.0	V	148.0	8.4
7325.425000	43.11	---	74.00	30.89	150.0	V	0.0	8.2

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_High channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

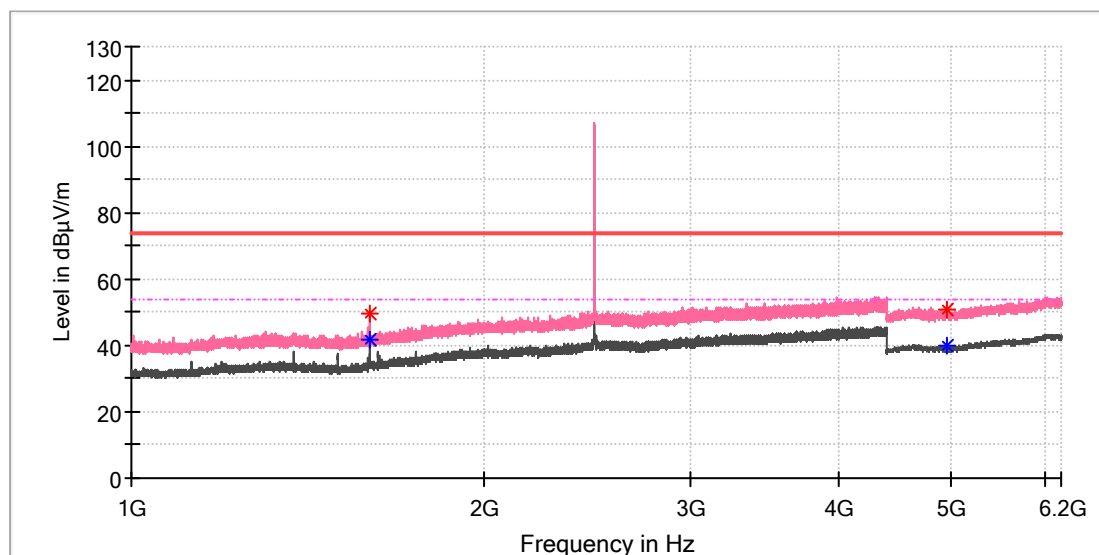
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1499.800000	46.83	---	74.00	27.17	150.0	H	53.0	1.2
1499.970000	---	44.65	54.00	9.35	150.0	H	190.0	1.2
4951.500000	---	39.41	54.00	14.59	150.0	H	279.0	11.8
4959.000000	50.57	---	74.00	23.43	150.0	H	235.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---	---	---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_High channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

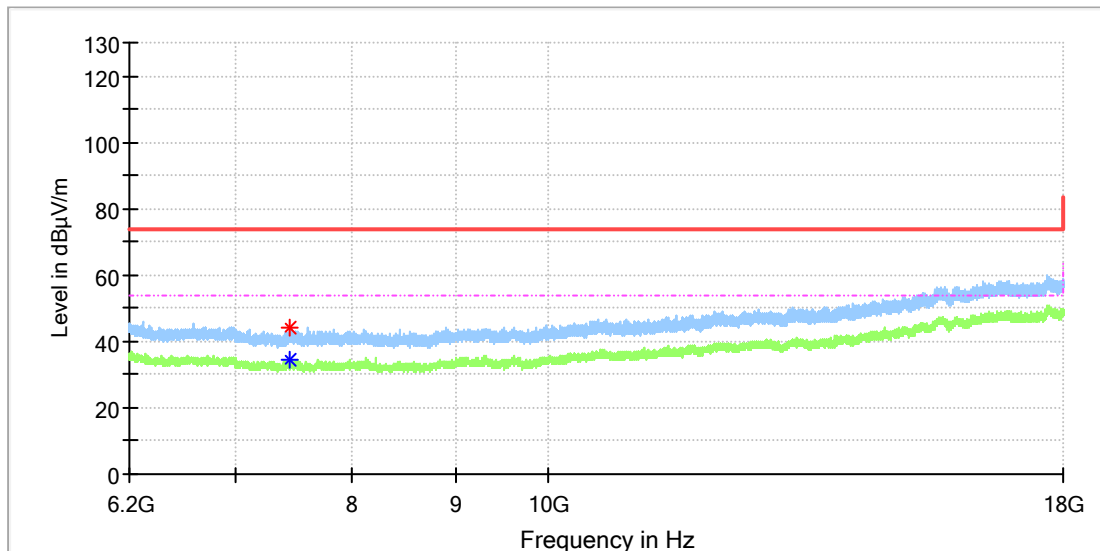
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1593.810000	49.47	---	74.00	24.53	150.0	V	309.0	2.0
1593.810000	---	41.99	54.00	12.01	150.0	V	309.0	2.0
4954.500000	50.76	---	74.00	23.24	150.0	V	356.0	11.8
4960.000000	---	39.98	54.00	14.02	150.0	V	274.0	11.8

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_High channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

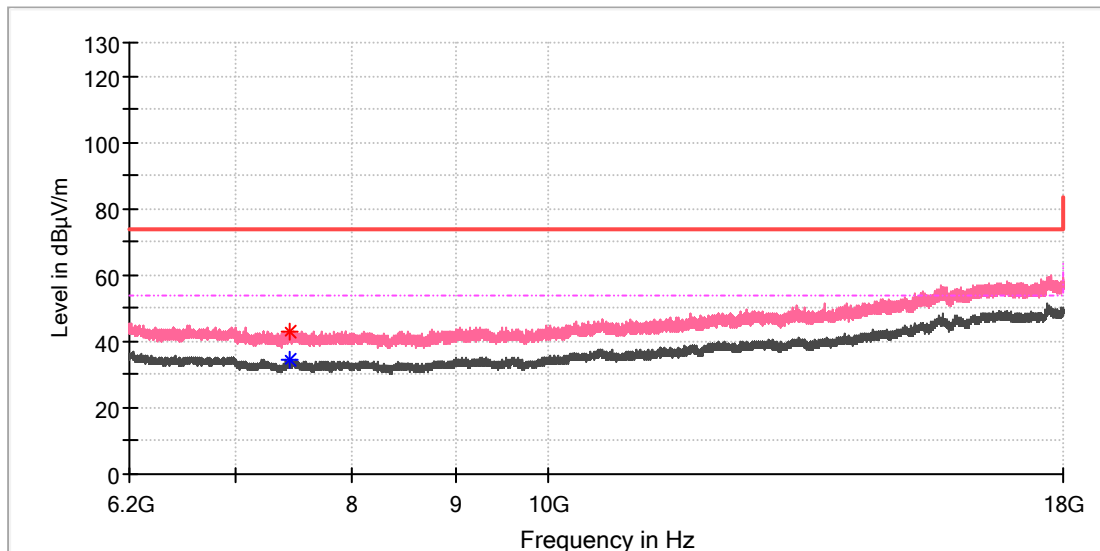
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7443.425000	---	34.56	54.00	19.44	150.0	H	339.0	8.5
7444.408333	44.15	---	74.00	29.85	150.0	H	110.0	8.5

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_High channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
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)
7439.000000	43.10	---	74.00	30.90	150.0	V	231.0	8.4
7451.291667	---	34.45	54.00	19.55	150.0	V	243.0	8.5

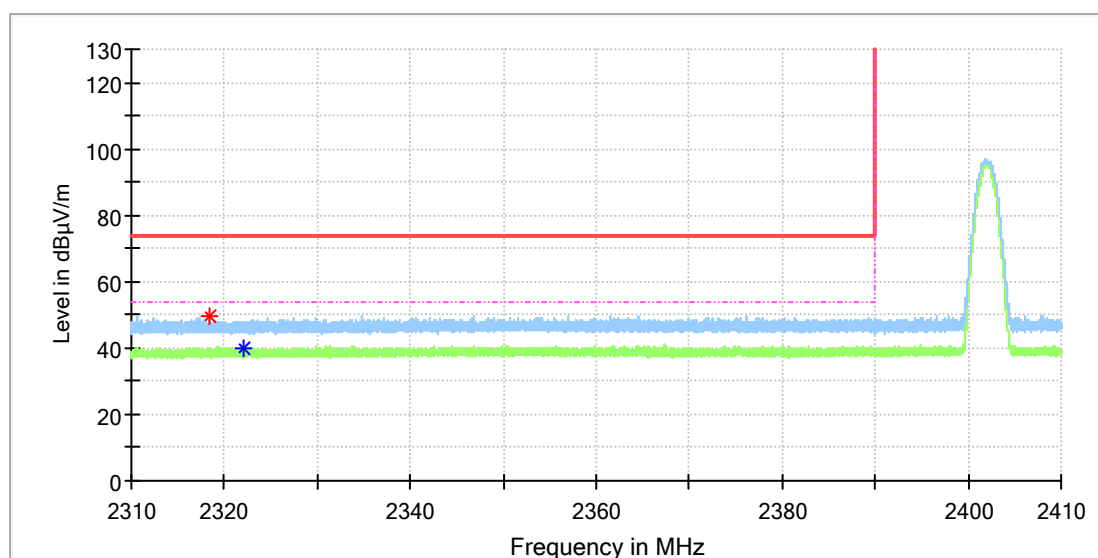
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Appendix B.6: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	OPS-A
Model:	OPS-1A-8R64S
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168417547/A003427527-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical_Freqs

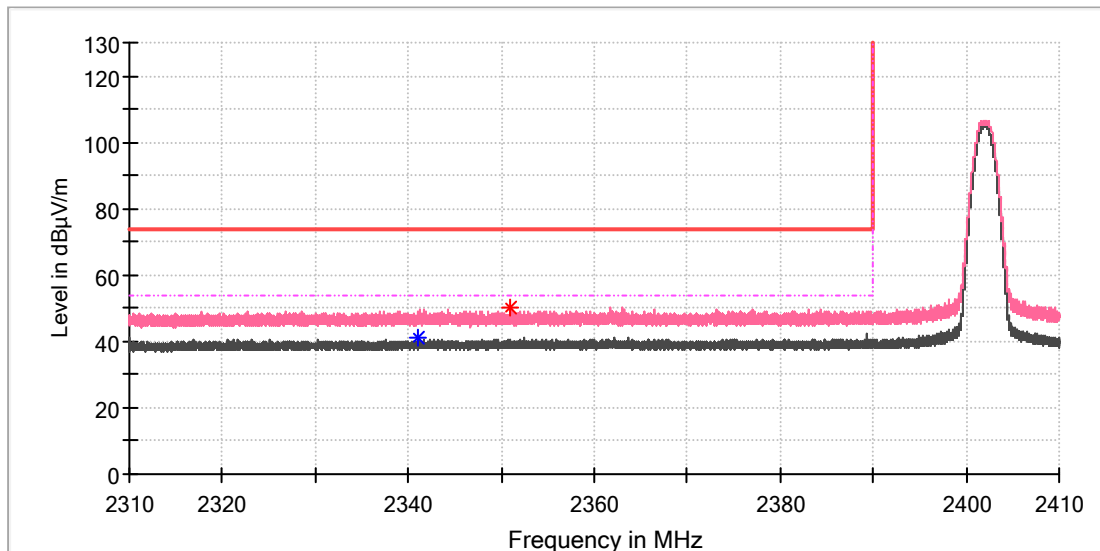
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2318.410000	49.32	---	74.00	24.68	150.0	H	34.0	6.6
2322.105000	---	40.12	54.00	13.88	150.0	H	195.0	6.6

Final_Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_Low channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

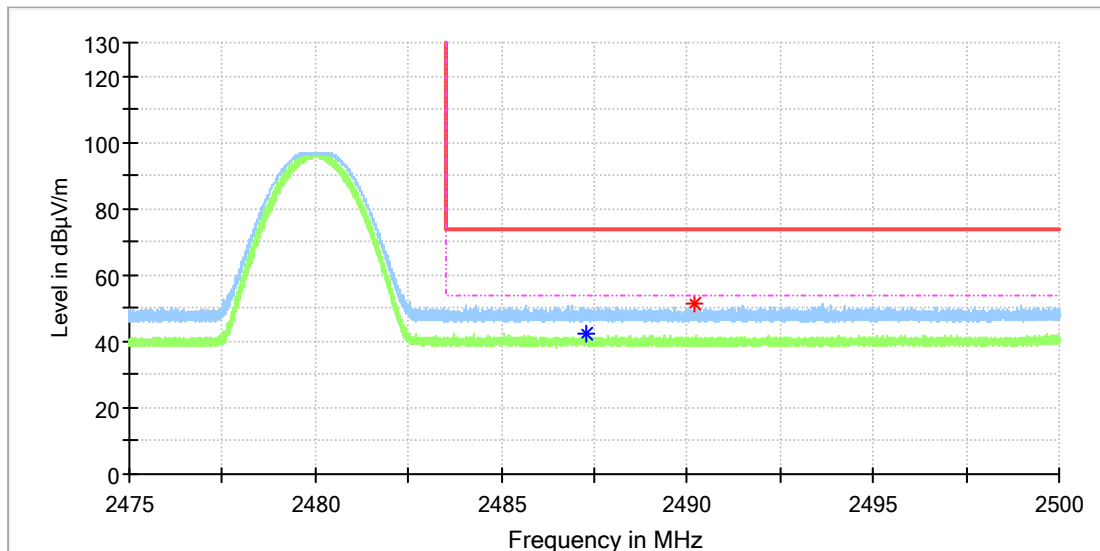
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2341.030000	---	41.02	54.00	12.98	150.0	V	0.0	6.8
2350.865000	50.28	---	74.00	23.72	150.0	V	205.0	6.9

Final Result

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: OPS-A
Model: OPS-1A-8R64S
Test Mode: BLE 1M_High channel
Order No/Sample No: 168417547/A003427527-003
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

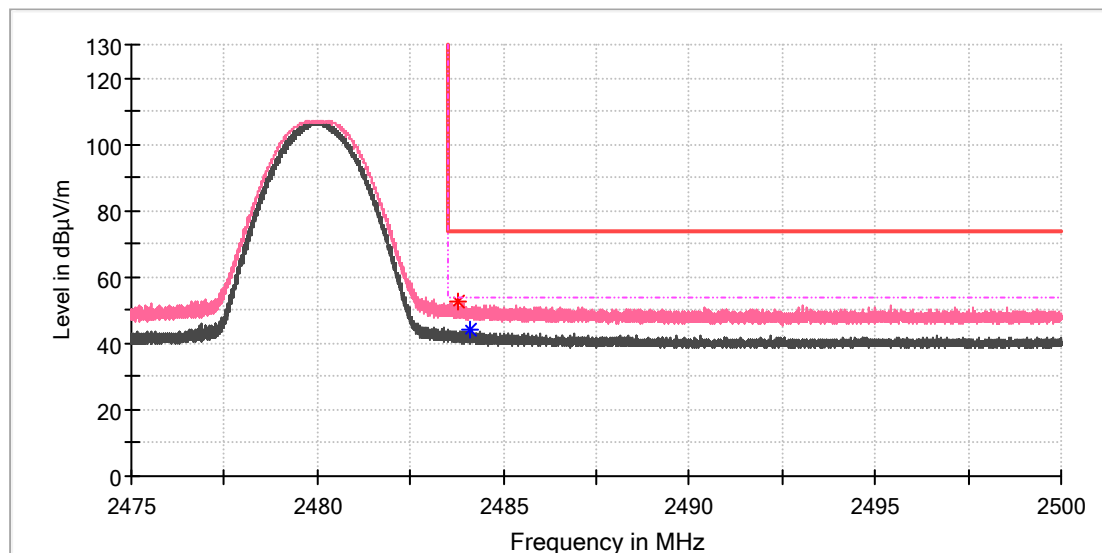
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2487.275000	---	42.30	54.00	11.70	150.0	H	3.0	7.4
2490.180000	51.40	---	74.00	22.60	150.0	H	93.0	7.4

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name:	OPS-A
Model:	OPS-1A-8R64S
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168417547/A003427527-003
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
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)
2483.807500	52.51	---	74.00	21.49	150.0	V	59.0	7.4
2484.113750	---	43.90	54.00	10.10	150.0	V	0.0	7.4

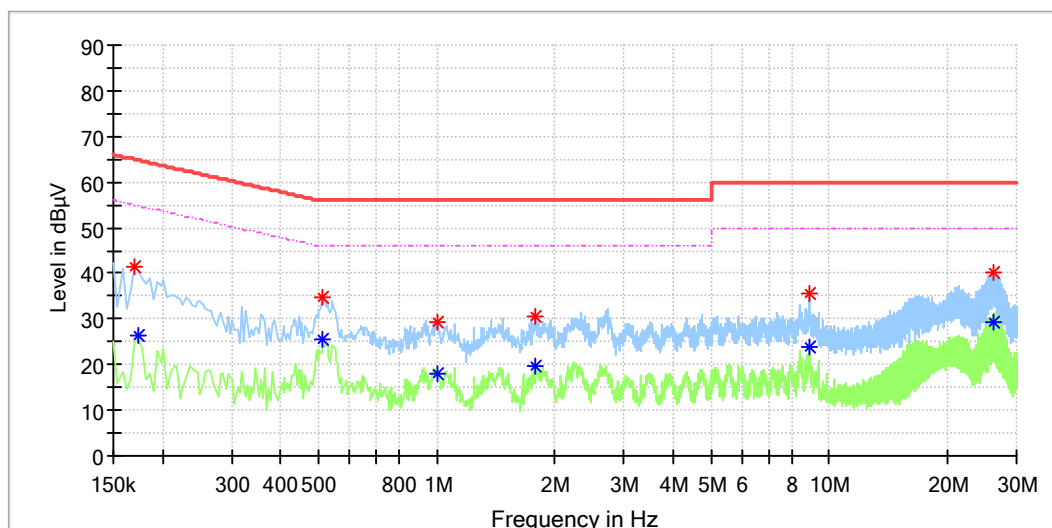
Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

Appendix B.7: Test Results of Conducted Emission

EUT Information

EUT Name:	OPS-A
Order Number:	168417547(P00935906)
Model:	OPS-1A-8R64S
Test Mode:	Normal Operating with 2.4GHz Wi-Fi and Bluetooth
Test Voltage:	AC 120V/60Hz
Test Standard:	FCC Part 15
Test By:/Review By:	Soloman Wu/Gary Chen
Tem./Hum./Pressure:	23.2°C/50.6%/101kPa
Remark:	SR1



Critical Freqs

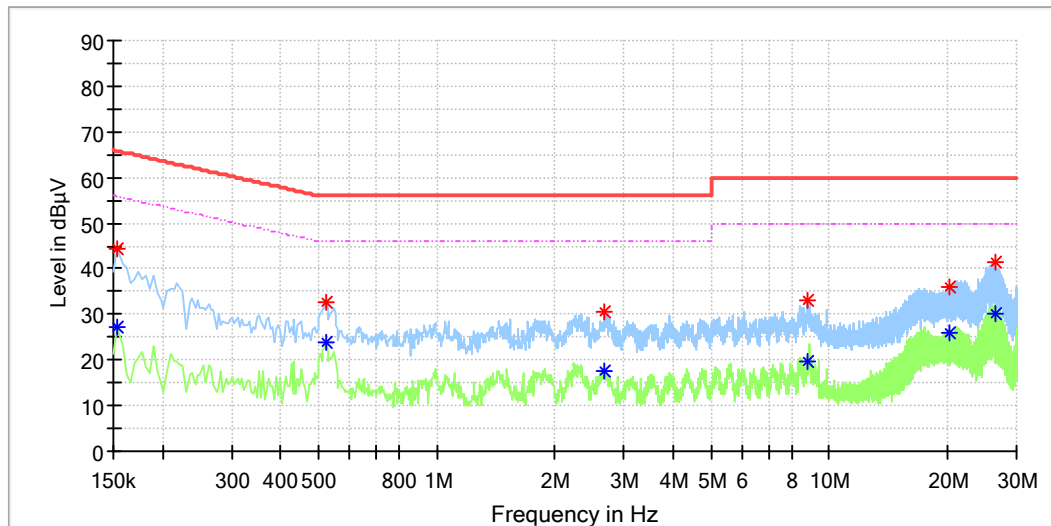
Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.170000	41.36	---	64.96	23.60	L1	9.9
0.174000	---	26.34	54.77	28.43	L1	9.9
0.510000	34.71	---	56.00	21.29	L1	10.0
0.514000	---	25.49	46.00	20.51	L1	10.0
1.006000	---	18.04	46.00	27.96	L1	10.0
1.006000	29.29	---	56.00	26.71	L1	10.0
1.782000	---	19.70	46.00	26.30	L1	10.1
1.782000	30.45	---	56.00	25.55	L1	10.1
8.878000	---	23.84	50.00	26.16	L1	10.3
8.878000	35.68	---	60.00	24.32	L1	10.3
26.354000	---	29.49	50.00	20.51	L1	10.4
26.354000	40.39	---	60.00	19.61	L1	10.4

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
93.5	58.0	55.0	55.0	3.0	100	9	1	0

EUT Information

EUT Name:	OPS-A
Order Number:	168417547(P00935906)
Model:	OPS-1A-8R64S
Test Mode:	Normal Operating with 2.4GHz Wi-Fi and Bluetooth
Test Voltage:	AC 120V/60Hz
Test Standard:	FCC Part 15
Test By:/Review By:	Soloman Wu/Gary Chen
Tem./Hum./Pressure:	23.2°C/50.6%/101kPa
Remark:	SR1



Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
0.154000	---	27.25	55.78	28.53	N	9.8
0.154000	44.19	---	65.78	21.59	N	9.8
0.522000	32.67	---	56.00	23.33	N	9.8
0.522000	---	23.96	46.00	22.04	N	9.8
2.666000	---	17.64	46.00	28.36	N	9.9
2.670000	30.48	---	56.00	25.52	N	9.9
8.850000	---	19.77	50.00	30.23	N	10.0
8.850000	33.23	---	60.00	26.77	N	10.0
20.214000	---	26.07	50.00	23.93	N	10.2
20.214000	35.84	---	60.00	24.16	N	10.2
26.606000	---	29.95	50.00	20.05	N	10.4
26.606000	41.30	---	60.00	18.70	N	10.4

Final_Result

[illegible]