Appendix B: Test Results of Bluetooth LE - Bluetooth Chip1

Appendix B.1: DTS Bandwidth 2
Test Result 2
Test Graphs 3
Appendix B.2: Occupied Channel Bandwidth 6
Test Result 6
Test Graphs 7
Appendix B.3: Maximum conducted output power 10
Test Result PK 10
Test Graphs PK 11
Appendix B.4: Maximum power spectral density 14
Test Result 14
Test Graphs 15
Appendix B.5: Band edge measurements 18
Test Result 18
Test Graphs 19
Appendix B.6: Conducted Spurious Emission 21
Test Result 21
Test Graphs 22
Appendix B.7: Test Results of Radiated Spurious Emissions 31

Appendix B.1: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.644	2401.684	2402.328	0.5	PASS
		2440	0.644	2439.688	2440.332	0.5	PASS
		2480	0.636	2479.688	2480.324	0.5	PASS
BLE_2M	Ant1	2402	1.048	2401.464	2402.512	0.5	PASS
		2440	1.088	2439.460	2440.548	0.5	PASS
		2480	1.116	2479.456	2480.572	0.5	PASS

Test Graphs

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: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0470	2401.4937	2402.5407	---	---
		2440	1.0500	2439.4879	2440.5379	---	---
		2480	1.0629	2479.4821	2480.5450	---	---
BLE_2M	Ant1	2402	2.0402	2401.0052	2403.0454	---	---
		2440	2.0634	2438.9990	2441.0624	---	---
		2480	2.0716	2478.9919	2481.0635	---	---

Test Graphs

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: Maximum conducted output power

Test Result PK

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.74	≤30	PASS
		2440	-1.22	≤30	PASS
		2480	-1.61	≤30	PASS
BLE_2M	Ant1	2402	-0.56	≤30	PASS
		2440	-1.18	≤30	PASS
		2480	-1.61	≤30	PASS

Test Graphs PK

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: Maximum power spectral density

Test Result

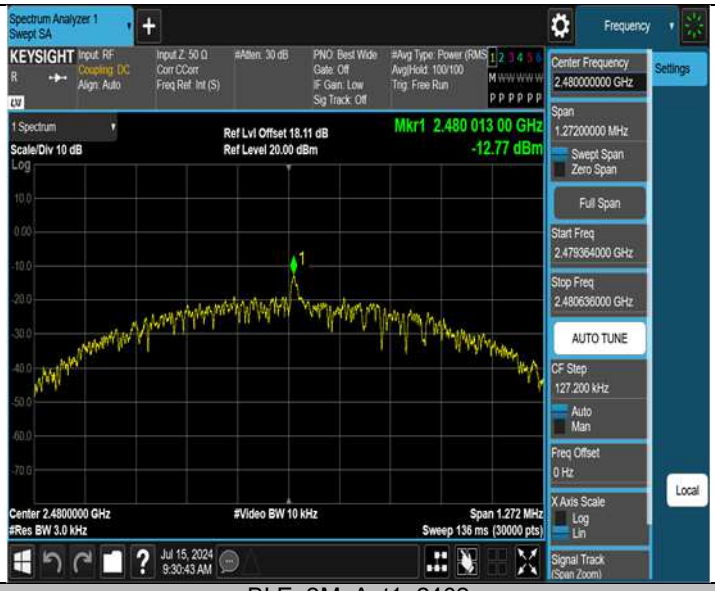
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-11.89	≤8.00	PASS
		2440	-12.31	≤8.00	PASS
		2480	-12.77	≤8.00	PASS
BLE_2M	Ant1	2402	-12.09	≤8.00	PASS
		2440	-12.73	≤8.00	PASS
		2480	-13.12	≤8.00	PASS

Test Graphs

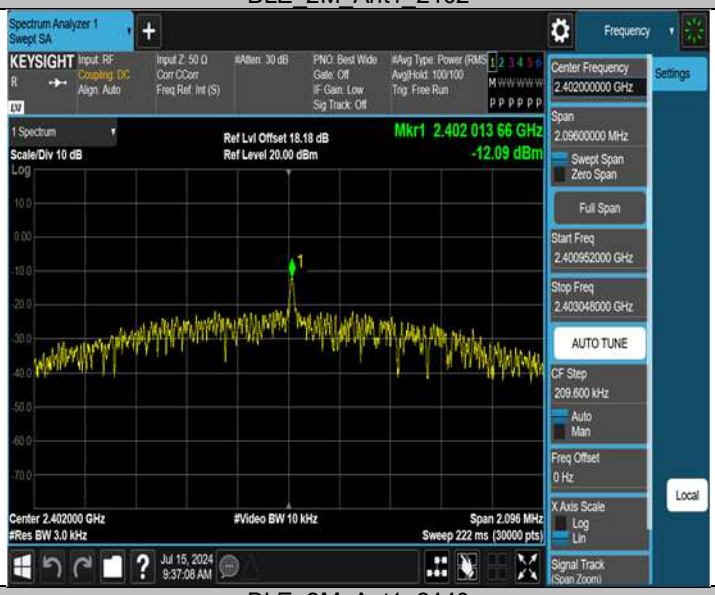
BLE_1M_Ant1_2402

BLE_1M_Ant1_2440

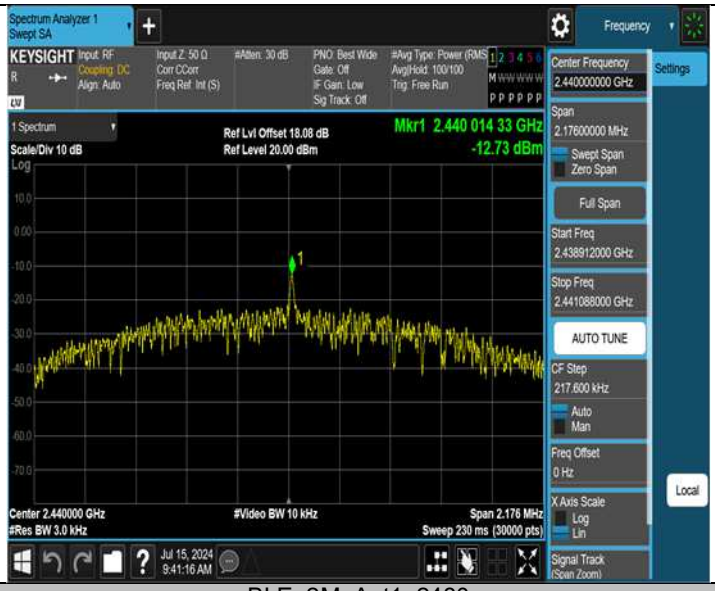
BLE_1M_Ant1_2480



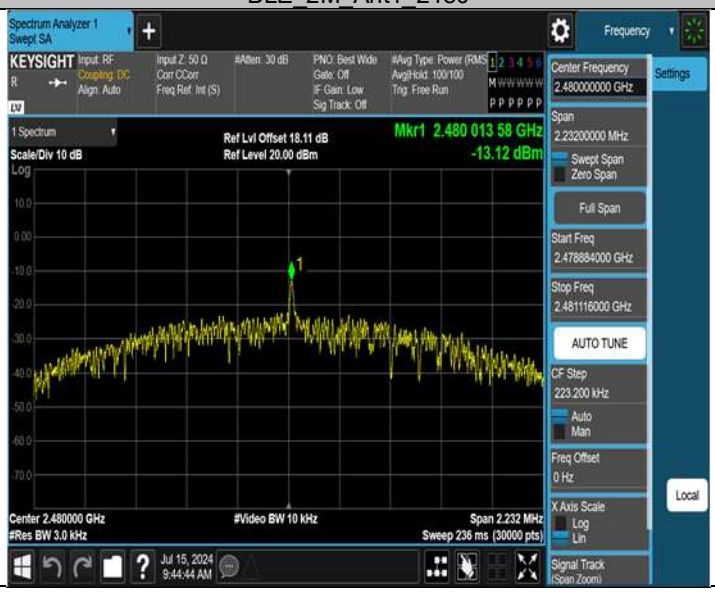
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix B.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-1.58	-39.00	≤-21.58	PASS
		High	2480	-2.68	-42.85	≤-22.68	PASS
BLE_2M	Ant1	Low	2402	-1.54	-33.64	≤-21.54	PASS
		High	2480	-2.65	-45.92	≤-22.65	PASS

Test Graphs

BLE_1M_Ant1_Low_2402

BLE_1M_Ant1_High_2480

BLE_2M_Ant1_Low_2402

BLE_2M_Ant1_High_2480

Appendix B.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.62	-1.62	---	PASS
			30~1000	-1.62	-42.07	≤-21.62	PASS
			1000~26500	-1.62	-31.95	≤-21.62	PASS
		2440	Reference	-2.21	-2.21	---	PASS
			30~1000	-2.21	-41.71	≤-22.21	PASS
			1000~26500	-2.21	-32.86	≤-22.21	PASS
		2480	Reference	-2.70	-2.70	---	PASS
			30~1000	-2.70	-41.48	≤-22.7	PASS
			1000~26500	-2.70	-32.89	≤-22.7	PASS
BLE_2M	Ant1	2402	Reference	-1.50	-1.50	---	PASS
			30~1000	-1.50	-41.56	≤-21.5	PASS
			1000~26500	-1.50	-32.5	≤-21.5	PASS
		2440	Reference	-2.20	-2.20	---	PASS
			30~1000	-2.20	-41.71	≤-22.2	PASS
			1000~26500	-2.20	-33.3	≤-22.2	PASS
		2480	Reference	-2.68	-2.68	---	PASS
			30~1000	-2.68	-41.86	≤-22.68	PASS
			1000~26500	-2.68	-32.61	≤-22.68	PASS

Test Graphs

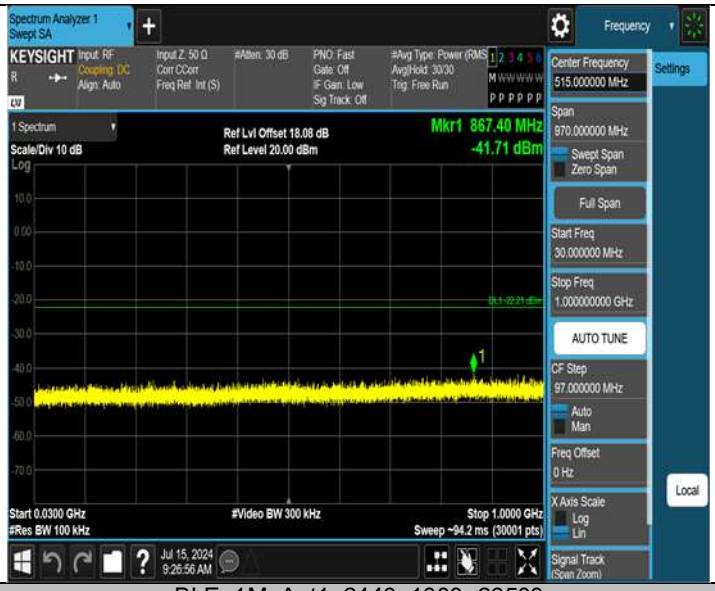
BLE_1M_Ant1_2402_0~Reference

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

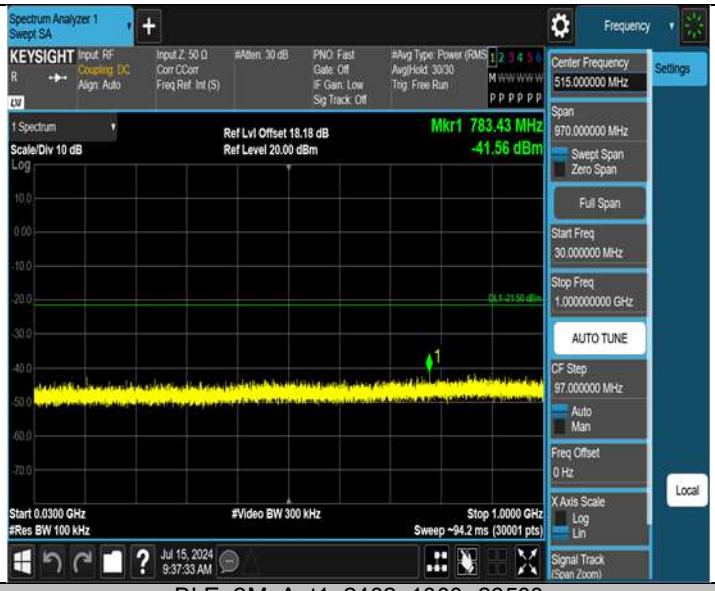
BLE_1M_Ant1_2480_0~Reference

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

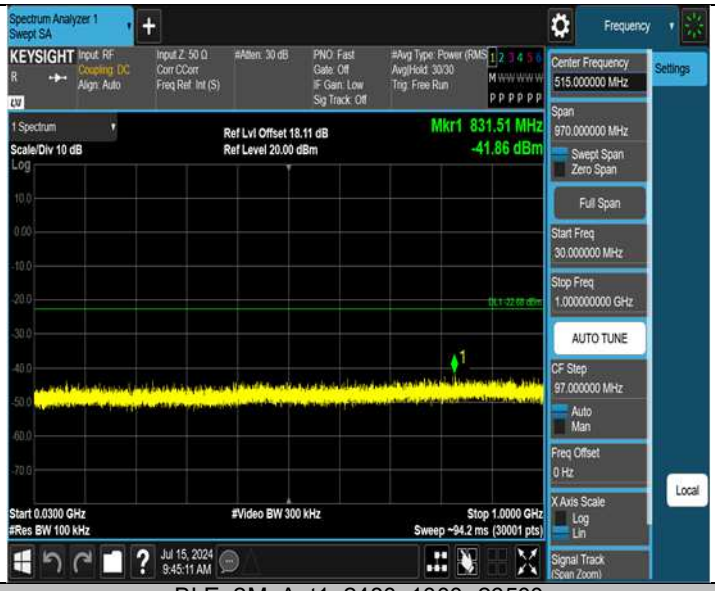
BLE_2M_Ant1_2440_0~Reference

BLE_2M_Ant1_2440_30~1000

BLE_2M_Ant1_2440_1000~26500

BLE_2M_Ant1_2480_0~Reference

BLE_2M_Ant1_2480_30~1000



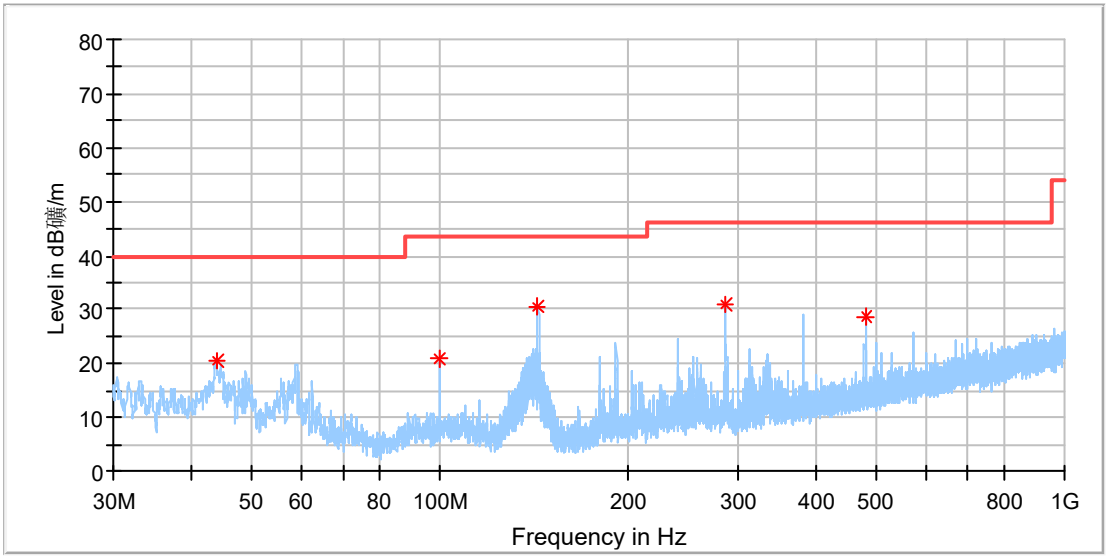
BLE_2M_Ant1_2480_1000~26500

Appendix B.7: 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.

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

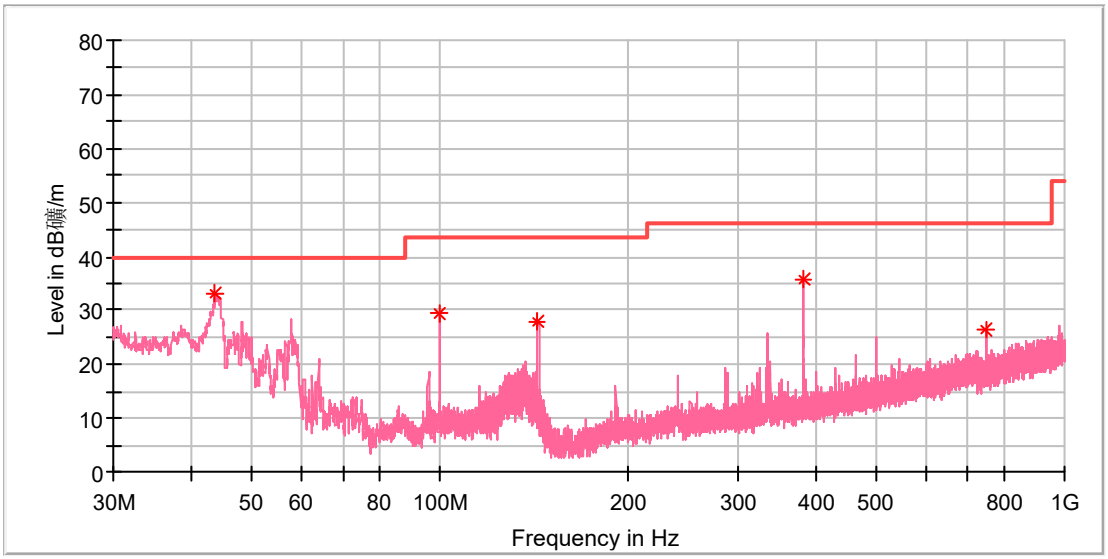
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
44.065000	20.61	40.00	19.39	100.0	H	101.0	-19.3
99.989231	20.95	43.50	22.55	100.0	H	217.0	-19.3
144.012308	30.51	43.50	12.99	100.0	H	359.0	-22.6
288.020000	31.04	46.00	14.96	100.0	H	23.0	-16.9
480.042692	28.62	46.00	17.38	100.0	H	39.0	-12.6

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

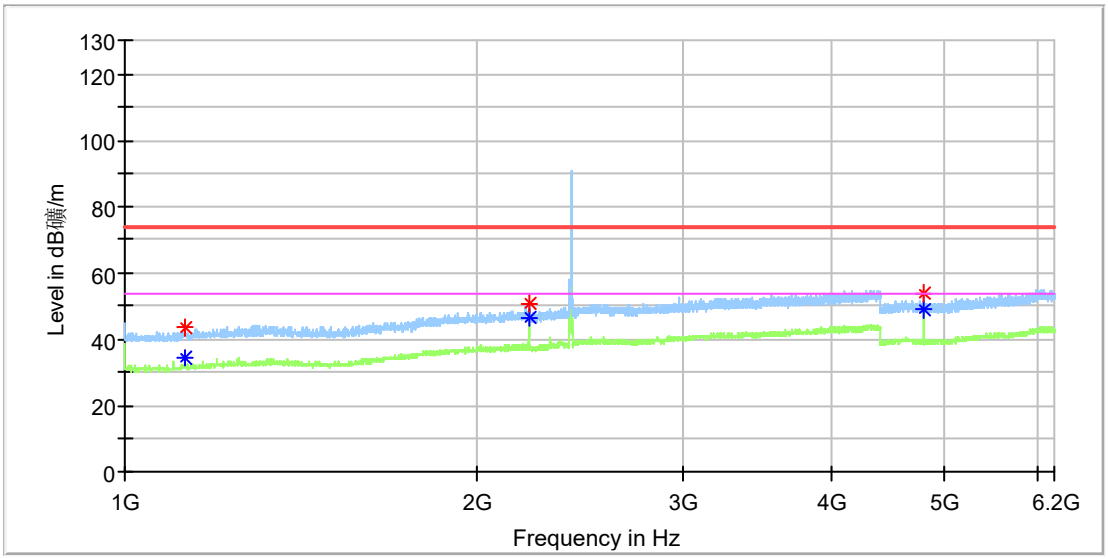
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
43.841154	32.95	40.00	7.05	100.0	V	54.0	-19.4
100.026539	29.34	43.50	14.16	100.0	V	201.0	-19.3
144.012308	27.92	43.50	15.58	100.0	V	211.0	-22.6
384.012692	35.68	46.00	10.32	100.0	V	201.0	-14.5
750.038462	26.47	46.00	19.53	100.0	V	8.0	-7.6

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low Channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

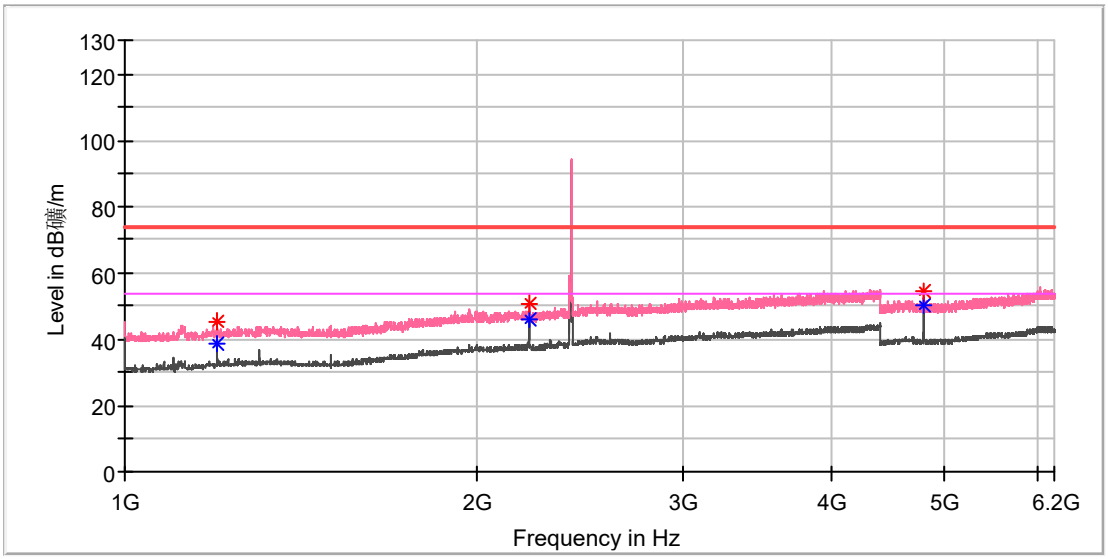
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1125.000000	---	34.60	54.00	19.40	150.0	H	143.0	0.3
1125.000000	43.31	---	74.00	30.69	150.0	H	143.0	0.3
2210.000000	50.94	---	74.00	23.06	150.0	H	150.0	6.3
2210.000000	---	46.65	54.00	7.35	150.0	H	150.0	6.3
4801.000000	53.88	---	74.00	20.12	150.0	H	68.0	11.8
4801.000000	---	49.13	54.00	4.87	150.0	H	68.0	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:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low Channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

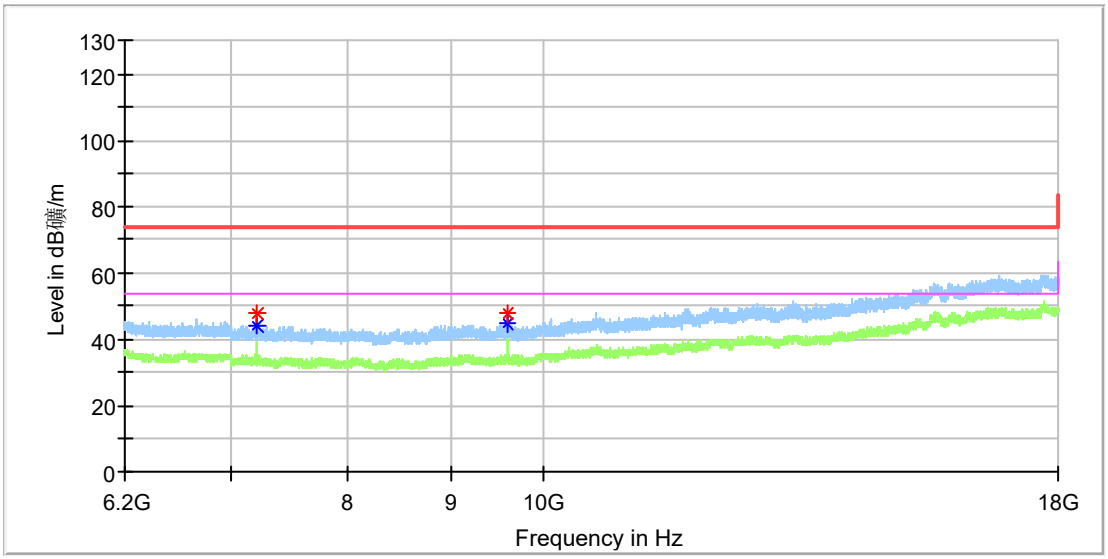
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1200.000000	---	38.50	54.00	15.50	150.0	V	239.0	1.1
1200.000000	45.41	---	74.00	28.59	150.0	V	239.0	1.1
2210.000000	50.56	---	74.00	23.44	150.0	V	330.0	6.3
2210.000000	---	45.94	54.00	8.06	150.0	V	330.0	6.3
4801.000000	---	50.03	54.00	3.97	150.0	V	212.0	11.8
4801.000000	54.54	---	74.00	19.46	150.0	V	212.0	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:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low Channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

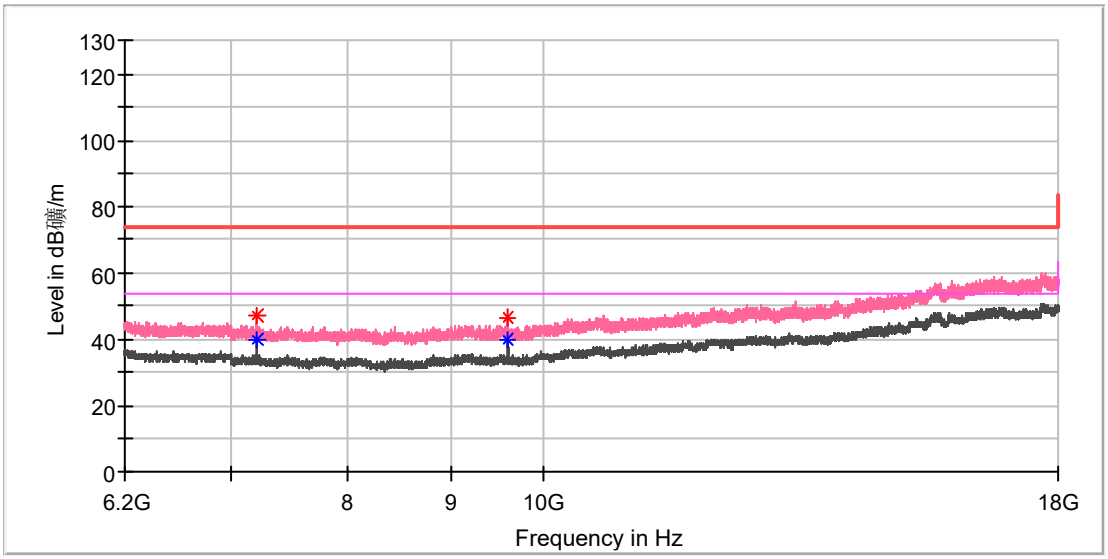
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.950000	47.83	---	74.00	26.17	150.0	H	301.0	8.8
7205.950000	---	44.40	54.00	9.60	150.0	H	301.0	8.8
9601.841667	---	44.44	54.00	9.56	150.0	H	87.0	10.4
9602.333333	47.68	---	74.00	26.32	150.0	H	87.0	10.4

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low Channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

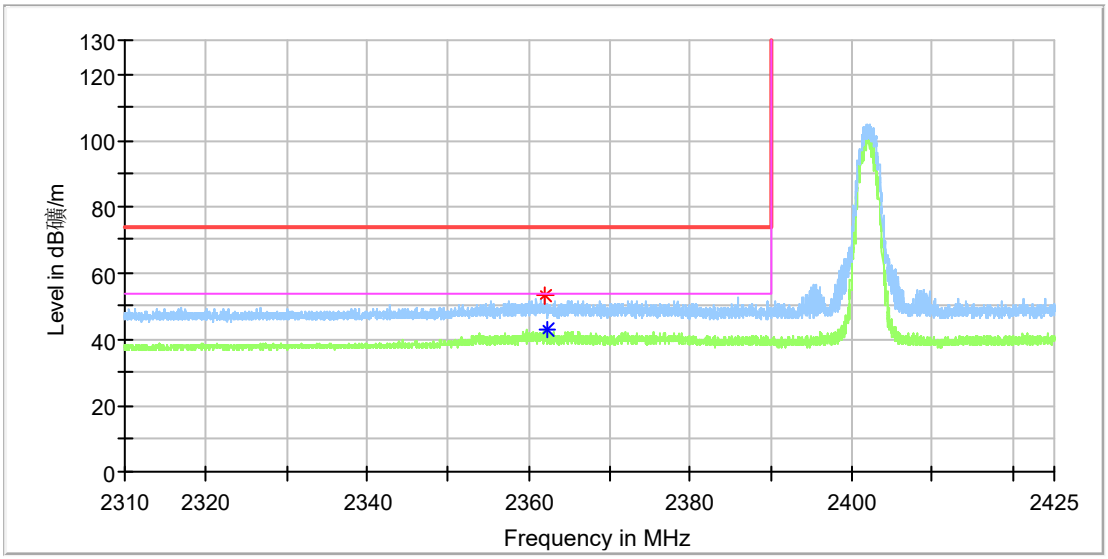
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.458333	46.97	---	74.00	27.03	150.0	V	272.0	8.8
7205.458333	---	40.09	54.00	13.91	150.0	V	272.0	8.8
9601.841667	46.26	---	74.00	27.74	150.0	V	28.0	10.4
9601.841667	---	39.82	54.00	14.18	150.0	V	28.0	10.4

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

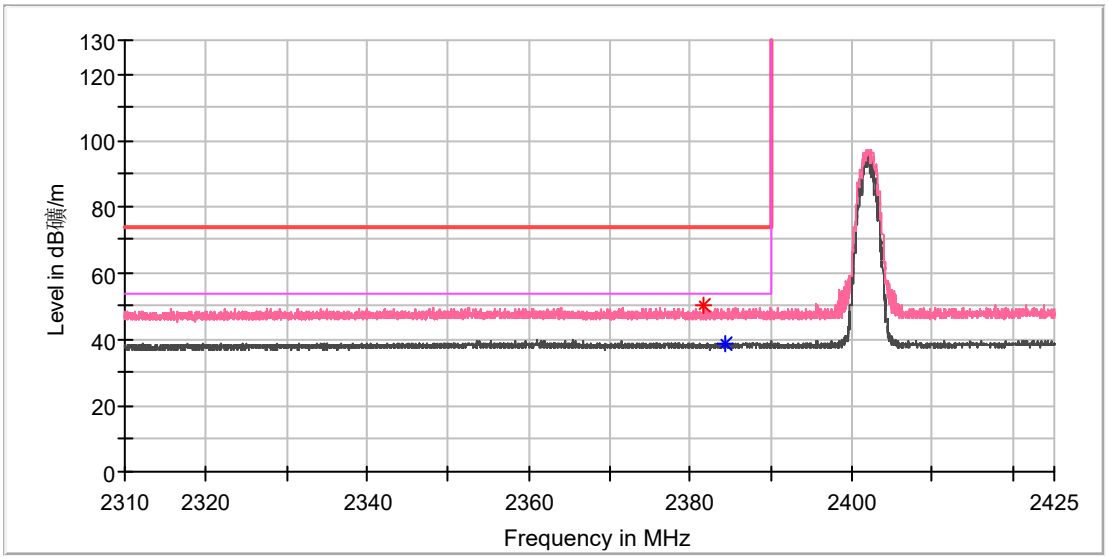
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2362.088235	53.48	---	74.00	20.52	150.0	H	299.0	6.9
2362.308088	---	42.86	54.00	11.14	150.0	H	292.0	6.9

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

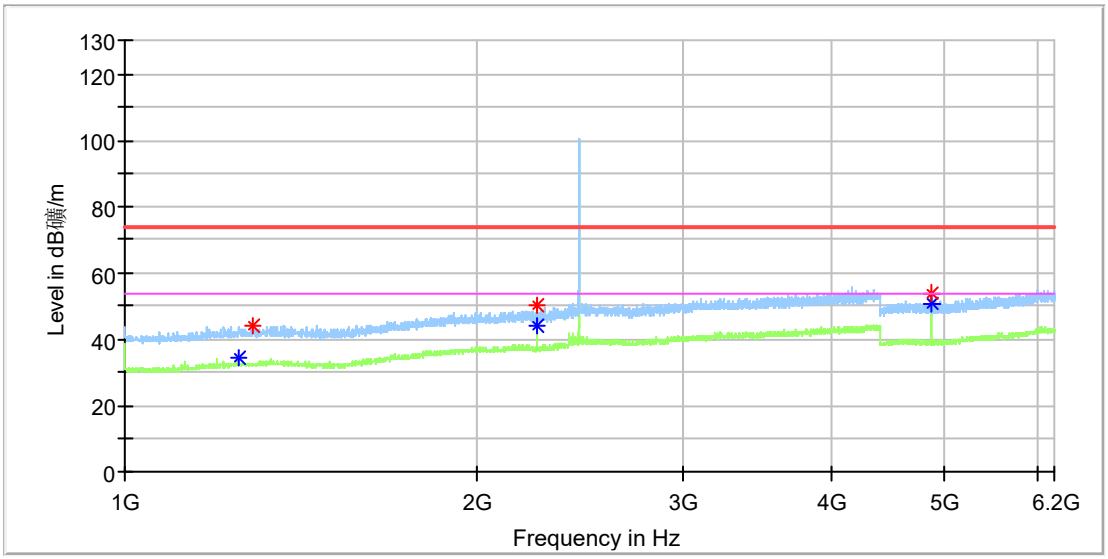
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2381.621324	50.09	---	74.00	23.91	150.0	V	1.0	7.0
2384.259559	---	38.93	54.00	15.07	150.0	V	91.0	7.0

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

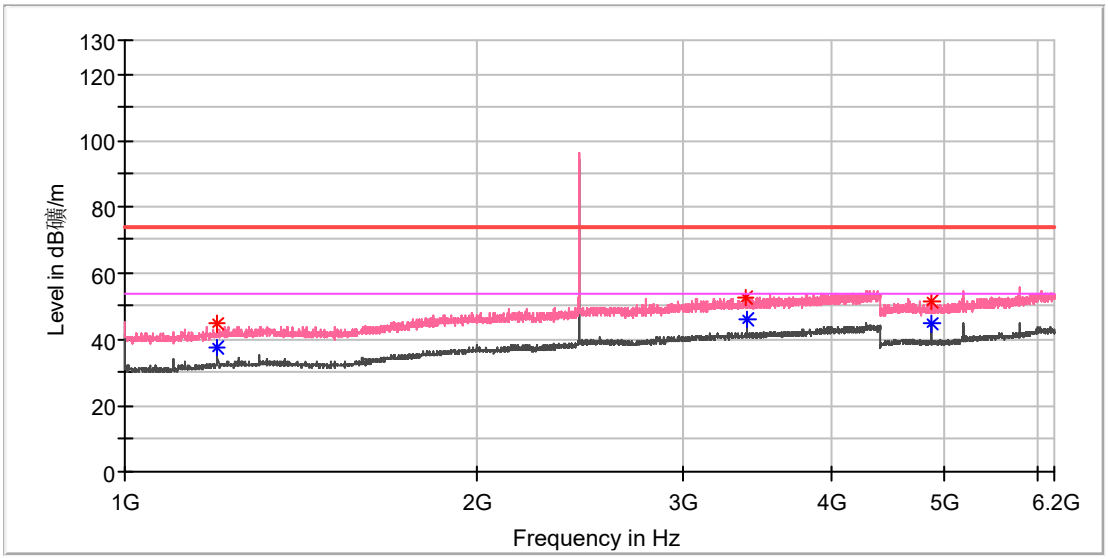
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1250.000000	---	34.21	54.00	19.79	150.0	H	299.0	1.9
1288.500000	44.19	---	74.00	29.81	150.0	H	209.0	1.9
2248.000000	50.19	---	74.00	23.81	150.0	H	266.0	6.4
2248.000000	---	44.03	54.00	9.97	150.0	H	266.0	6.4
4880.000000	---	50.67	54.00	3.33	150.0	H	153.0	11.8
4880.000000	53.90	---	74.00	20.10	150.0	H	153.0	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:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

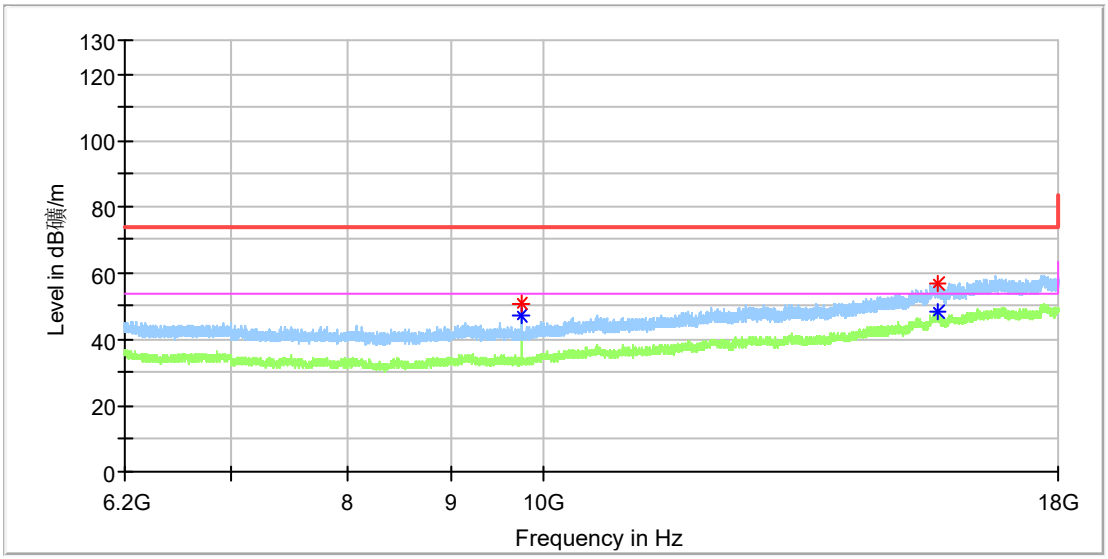
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1200.000000	---	37.56	54.00	16.44	150.0	V	252.0	1.1
1200.000000	44.96	---	74.00	29.04	150.0	V	252.0	1.1
3382.000000	52.59	---	74.00	21.41	150.0	V	139.0	8.7
3402.000000	---	45.81	54.00	8.19	150.0	V	340.0	8.7
4879.500000	---	44.95	54.00	9.05	150.0	V	105.0	11.8
4883.500000	51.46	---	74.00	22.54	150.0	V	105.0	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:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

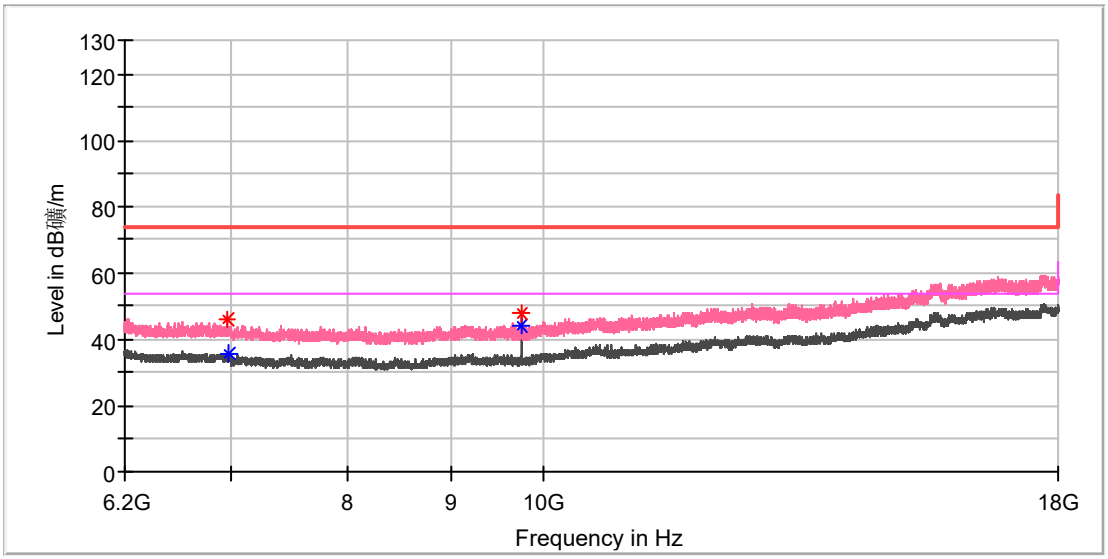
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9754.258333	50.75	---	74.00	23.25	150.0	H	114.0	10.4
9754.258333	---	47.40	54.00	6.60	150.0	H	114.0	10.4
15678.350000	---	48.47	54.00	5.53	150.0	H	0.0	19.0
15681.791667	56.88	---	74.00	17.12	150.0	H	91.0	19.0

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

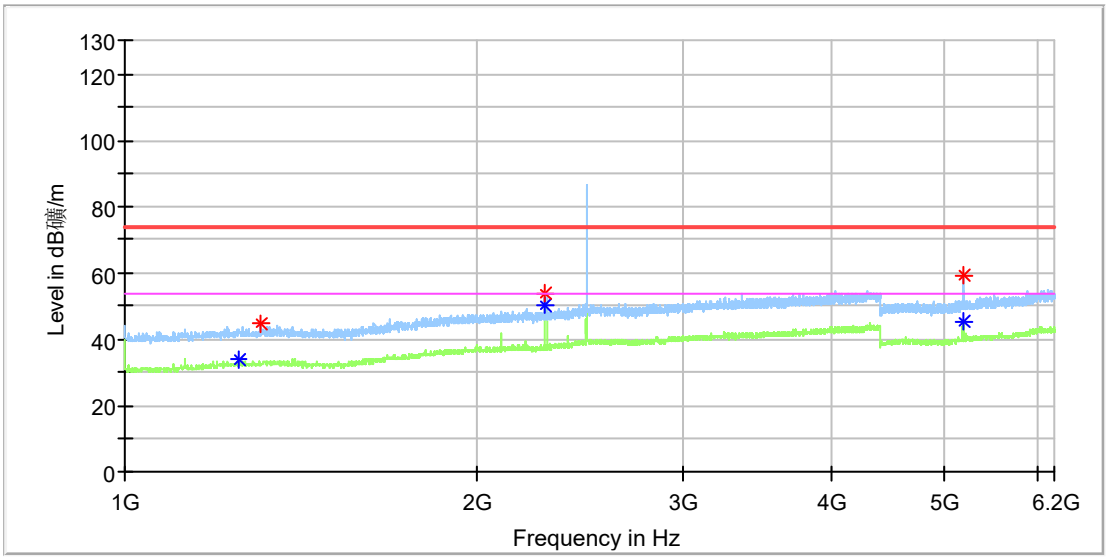
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
6973.391667	45.71	---	74.00	28.29	150.0	V	0.0	8.6
6982.733333	---	35.51	54.00	18.49	150.0	V	84.0	8.6
9753.766667	47.68	---	74.00	26.32	150.0	V	255.0	10.4
9754.258333	---	44.17	54.00	9.83	150.0	V	255.0	10.4

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High Channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

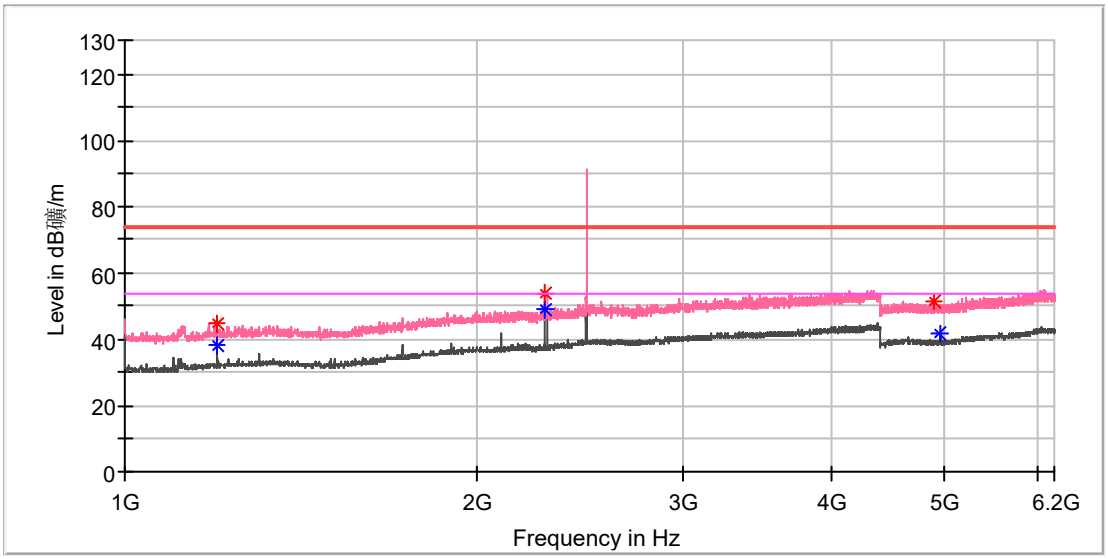
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1249.500000	---	33.94	54.00	20.06	150.0	H	16.0	1.9
1305.500000	44.52	---	74.00	29.48	150.0	H	22.0	2.0
2288.000000	---	50.37	54.00	3.63	150.0	H	11.0	6.4
2288.000000	54.08	---	74.00	19.92	150.0	H	11.0	6.4
5199.500000	---	45.43	54.00	8.57	150.0	H	83.0	12.6
5199.500000	58.97	---	74.00	15.03	150.0	H	83.0	12.6

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High Channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

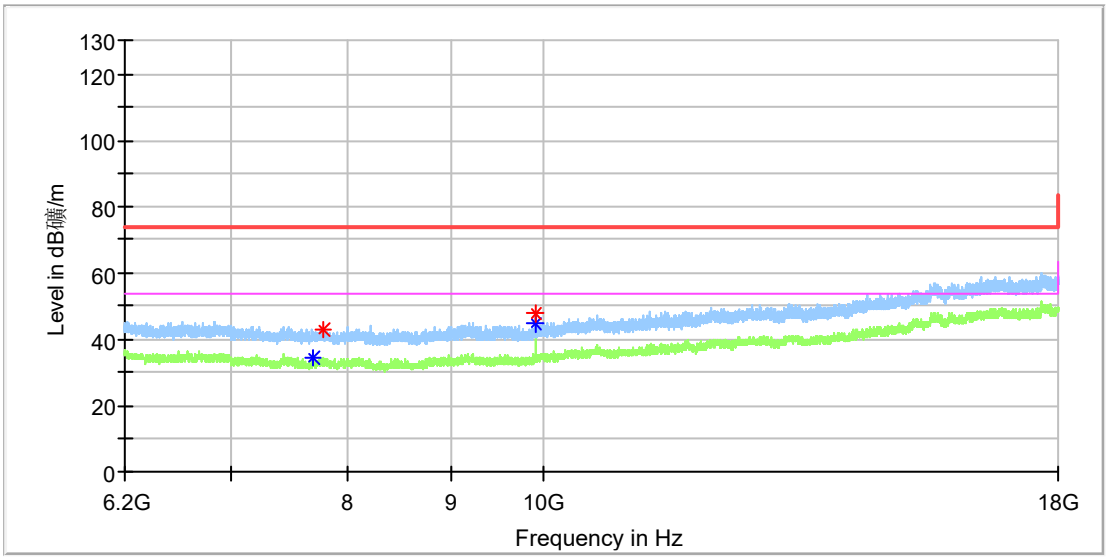
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1200.000000	44.57	---	74.00	29.43	150.0	V	125.0	1.1
1200.000000	---	38.20	54.00	15.80	150.0	V	125.0	1.1
2287.500000	---	49.06	54.00	4.94	150.0	V	51.0	6.4
2288.000000	53.66	---	74.00	20.34	150.0	V	86.0	6.4
4896.000000	51.68	---	74.00	22.32	150.0	V	344.0	11.8
4957.000000	---	41.45	54.00	12.55	150.0	V	254.0	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:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High Channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

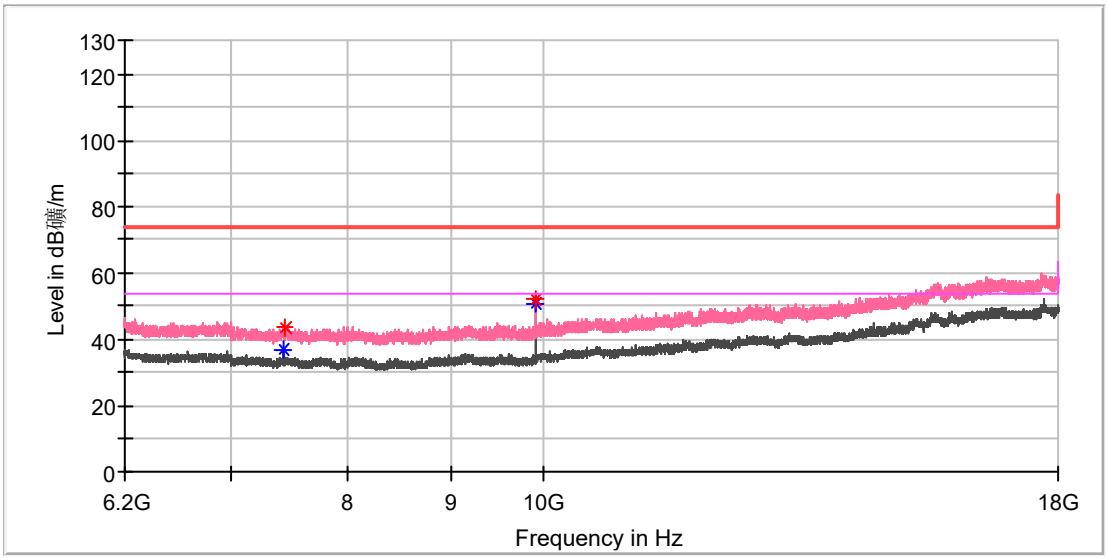
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7687.783333	---	34.43	54.00	19.57	150.0	H	3.0	8.6
7766.941667	43.23	---	74.00	30.77	150.0	H	124.0	8.8
9914.050000	---	44.85	54.00	9.15	150.0	H	255.0	10.8
9914.050000	47.49	---	74.00	26.51	150.0	H	255.0	10.8

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High Channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

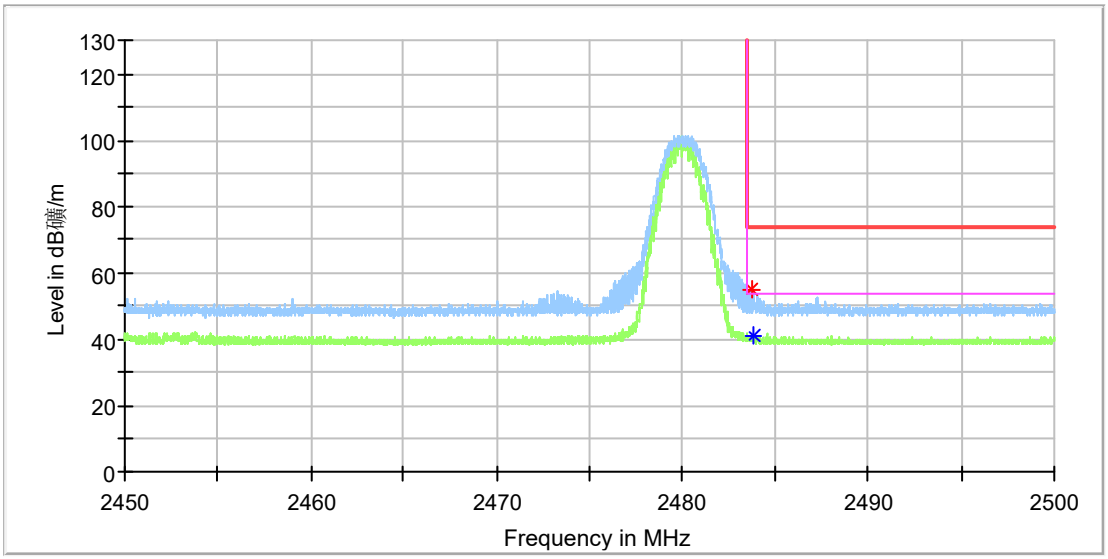
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7434.083333	---	37.18	54.00	16.82	150.0	V	280.0	8.4
7447.358333	43.76	---	74.00	30.24	150.0	V	317.0	8.5
9914.050000	---	50.55	54.00	3.45	150.0	V	221.0	10.8
9914.050000	52.10	---	74.00	21.90	150.0	V	221.0	10.8

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

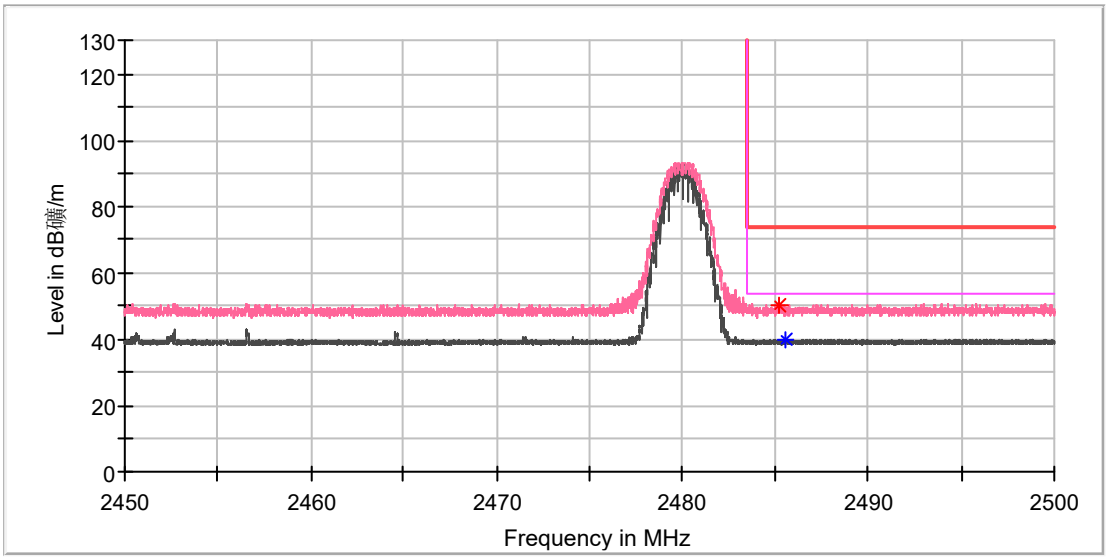
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.698529	55.28	---	74.00	18.72	150.0	H	307.0	7.4
2483.860294	---	40.95	54.00	13.05	150.0	H	321.0	7.4

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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)
2485.183824	50.00	---	74.00	24.00	150.0	V	22.0	7.4
2485.602941	---	39.83	54.00	14.17	150.0	V	72.0	7.4

Final_Result

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

Appendix C: Test Results of Bluetooth LE - Bluetooth Chip2

Appendix C.1: DTS Bandwidth....2
Test Result....2
Test Graphs....3
Appendix C.2: Occupied Channel Bandwidth....6
Test Result....6
Test Graphs....7
Appendix C.3: Maximum conducted output power....10
Test Result PK....10
Test Graphs PK....11
Appendix C.4: Maximum power spectral density....14
Test Result....14
Test Graphs....15
Appendix C.5: Band edge measurements....18
Test Result....18
Test Graphs....19
Appendix C.6: Conducted Spurious Emission....21
Test Result....21
Test Graphs....22
Appendix C.7: Test Results of Radiated Spurious Emissions....31

Appendix C.1: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.708	2401.664	2402.372	0.5	PASS
		2440	0.672	2439.700	2440.372	0.5	PASS
		2480	0.688	2479.676	2480.364	0.5	PASS
BLE_2M	Ant1	2402	1.144	2401.448	2402.592	0.5	PASS
		2440	1.092	2439.456	2440.548	0.5	PASS
		2480	1.060	2479.448	2480.508	0.5	PASS

Test Graphs

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 C.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0492	2401.5083	2402.5575	---	---
		2440	1.0797	2439.4899	2440.5696	---	---
		2480	1.0810	2479.4856	2480.5666	---	---
BLE_2M	Ant1	2402	2.0511	2401.0214	2403.0725	---	---
		2440	2.0538	2439.0205	2441.0743	---	---
		2480	2.0618	2479.0165	2481.0783	---	---

Test Graphs

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 C.3: Maximum conducted output power

Test Result PK

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	7.01	≤30	PASS
		2440	6.65	≤30	PASS
		2480	6.40	≤30	PASS
BLE_2M	Ant1	2402	7.02	≤30	PASS
		2440	6.67	≤30	PASS
		2480	6.33	≤30	PASS

Test Graphs PK

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 C.4: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-8.34	≤8.00	PASS
		2440	-8.68	≤8.00	PASS
		2480	-9.26	≤8.00	PASS
BLE_2M	Ant1	2402	-10.63	≤8.00	PASS
		2440	-11.41	≤8.00	PASS
		2480	-11.34	≤8.00	PASS

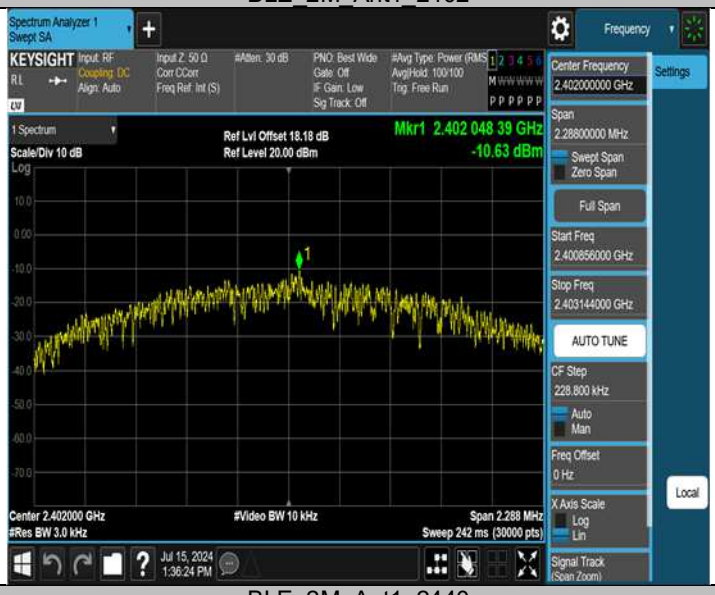
Test Graphs

BLE_1M_Ant1_2402

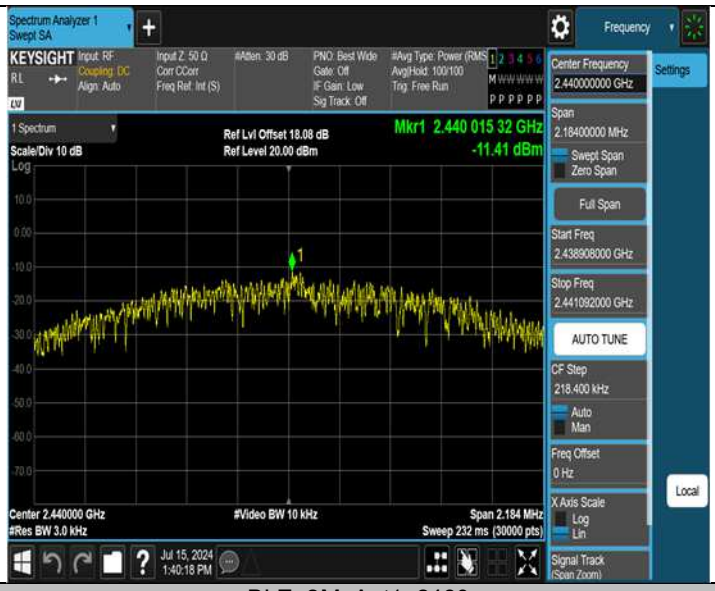
BLE_1M_Ant1_2440

BLE_1M_Ant1_2480

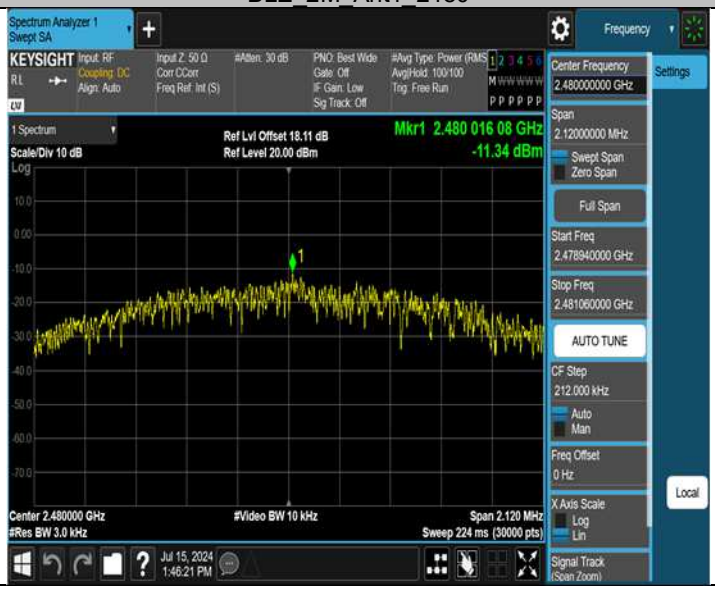
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



Appendix C.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	6.74	-45.31	≤-13.27	PASS
		High	2480	5.99	-44.47	≤-14.01	PASS
BLE_2M	Ant1	Low	2402	5.66	-31.45	≤-14.34	PASS
		High	2480	5.98	-45.77	≤-14.02	PASS

Test Graphs

BLE_1M_Ant1_Low_2402

BLE_1M_Ant1_High_2480

BLE_2M_Ant1_Low_2402

BLE_2M_Ant1_High_2480

Appendix C.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	6.45	6.45	---	PASS
			30~1000	6.45	-41.03	≤-13.55	PASS
			1000~26500	6.45	-32.29	≤-13.55	PASS
		2440	Reference	6.36	6.36	---	PASS
			30~1000	6.36	-40.61	≤-13.64	PASS
			1000~26500	6.36	-31.76	≤-13.64	PASS
		2480	Reference	5.85	5.85	---	PASS
			30~1000	5.85	-41.9	≤-14.15	PASS
			1000~26500	5.85	-32.34	≤-14.15	PASS
BLE_2M	Ant1	2402	Reference	6.53	6.53	---	PASS
			30~1000	6.53	-41.88	≤-13.47	PASS
			1000~26500	6.53	-32.5	≤-13.47	PASS
		2440	Reference	5.70	5.70	---	PASS
			30~1000	5.70	-41.97	≤-14.3	PASS
			1000~26500	5.70	-32.42	≤-14.3	PASS
		2480	Reference	5.78	5.78	---	PASS
			30~1000	5.78	-41.8	≤-14.22	PASS
			1000~26500	5.78	-32.68	≤-14.22	PASS

Test Graphs

BLE_1M_Ant1_2402_0~Reference

BLE_1M_Ant1_2402_30~1000

BLE_1M_Ant1_2402_1000~26500

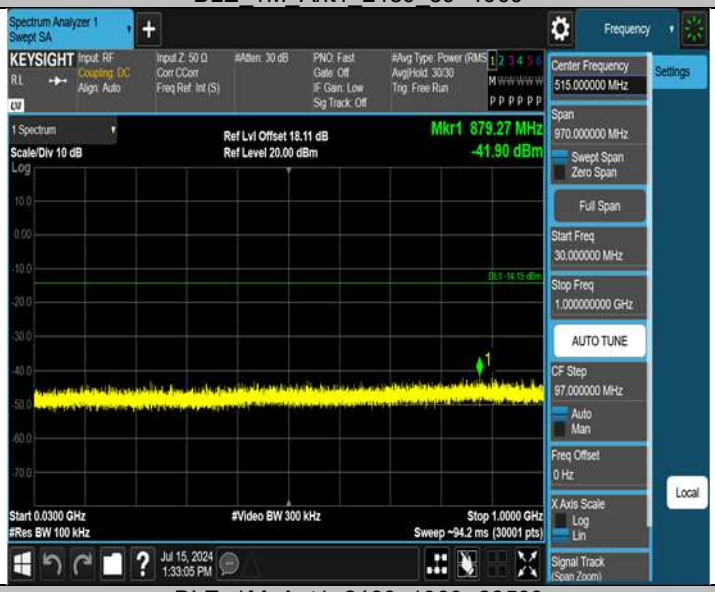
BLE_1M_Ant1_2440_0~Reference

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

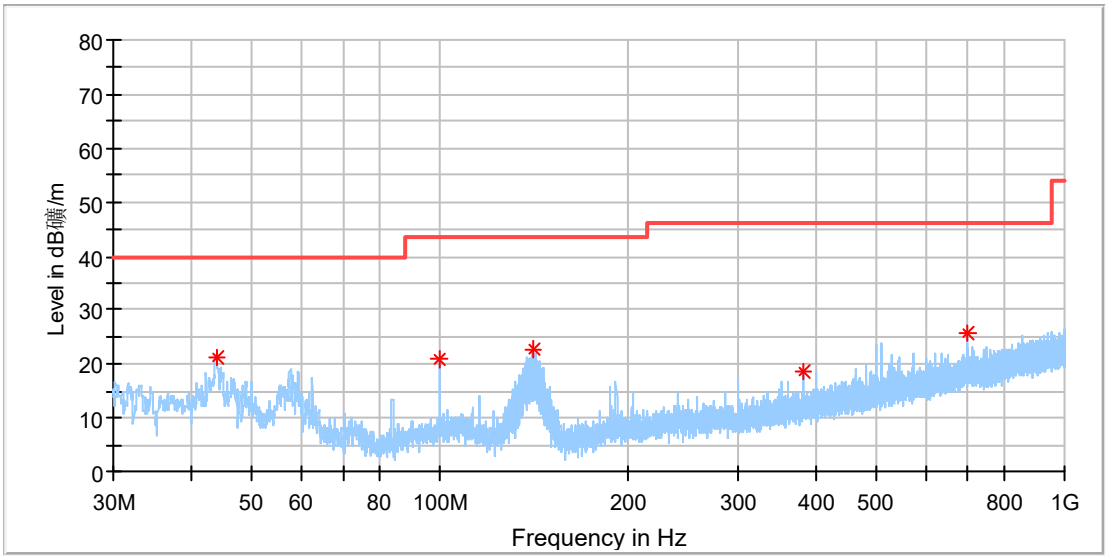
BLE_2M_Ant1_2480_1000~26500

Appendix C.7: 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.

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
43.953077	21.36	40.00	18.64	100.0	H	43.0	-19.4
99.989231	21.02	43.50	22.49	100.0	H	76.0	-19.3
141.587308	22.67	43.50	20.83	100.0	H	4.0	-22.6
384.012692	18.66	46.00	27.34	100.0	H	207.0	-14.5
700.046154	25.81	46.00	20.19	100.0	H	165.0	-8.4

Final_Result

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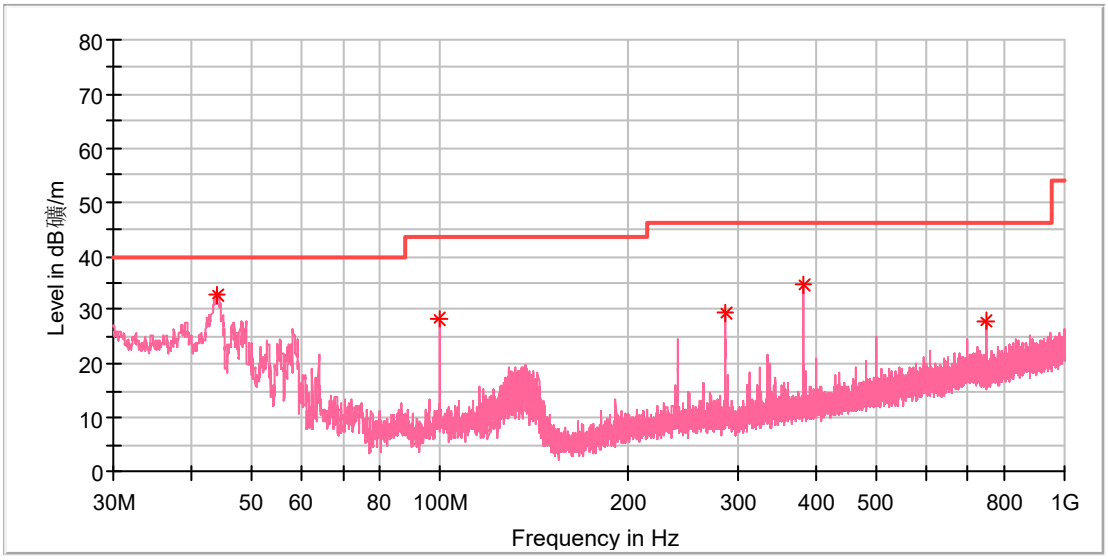
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
44.102308	32.87	40.00	7.13	100.0	V	21.0	-19.3
99.989231	28.14	43.50	15.36	100.0	V	203.0	-19.3
288.020000	29.58	46.00	16.42	100.0	V	229.0	-16.9
384.012692	34.47	46.00	11.53	100.0	V	40.0	-14.5
750.038462	27.97	46.00	18.03	100.0	V	76.0	-7.6

Final_Result

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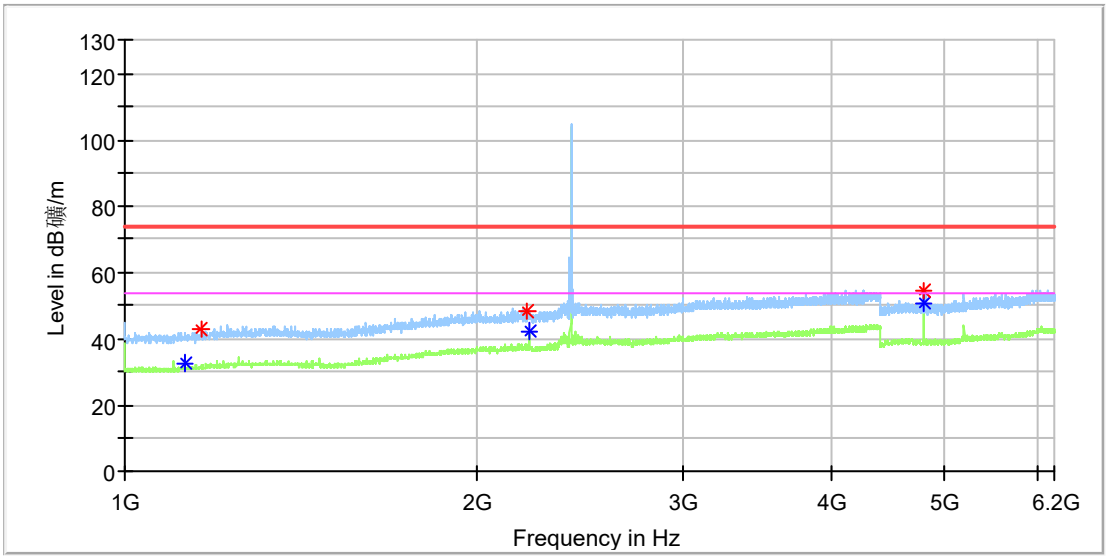
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

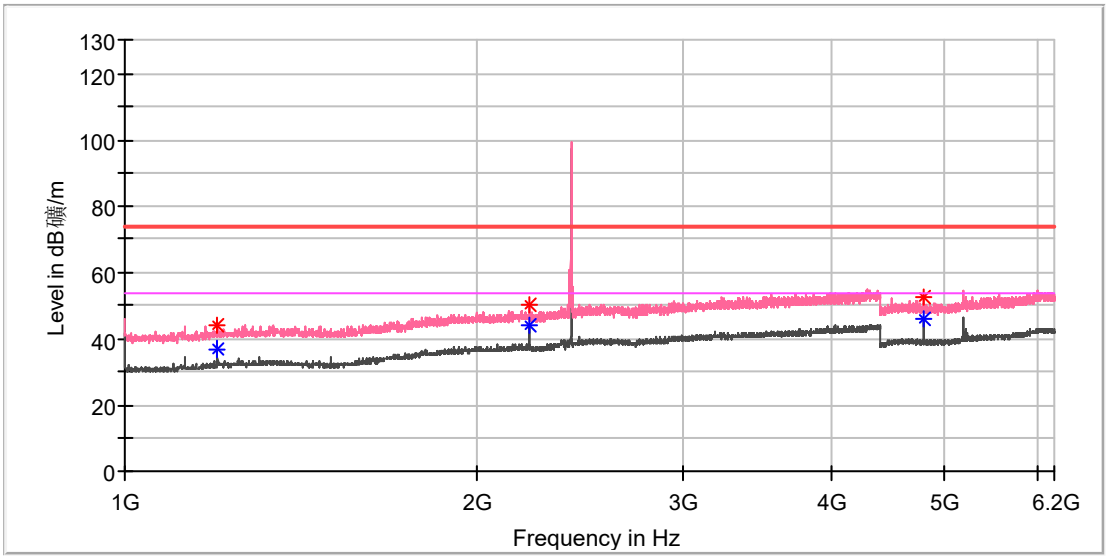
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1124.500000	---	32.61	54.00	21.39	150.0	H	3.0	0.3
1159.500000	42.82	---	74.00	31.18	150.0	H	0.0	0.8
2208.500000	48.66	---	74.00	25.34	150.0	H	7.0	6.3
2210.000000	---	42.24	54.00	11.76	150.0	H	279.0	6.3
4804.000000	---	50.74	54.00	3.26	150.0	H	85.0	11.8
4804.000000	54.51	---	74.00	19.49	150.0	H	85.0	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:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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)
1200.000000	44.41	---	74.00	29.59	150.0	V	353.0	1.1
1200.000000	---	37.09	54.00	16.91	150.0	V	353.0	1.1
2209.500000	50.05	---	74.00	23.95	150.0	V	70.0	6.3
2210.000000	---	44.02	54.00	9.98	150.0	V	52.0	6.3
4804.000000	52.75	---	74.00	21.25	150.0	V	132.0	11.8
4804.000000	---	46.08	54.00	7.92	150.0	V	132.0	11.8

Final_Result

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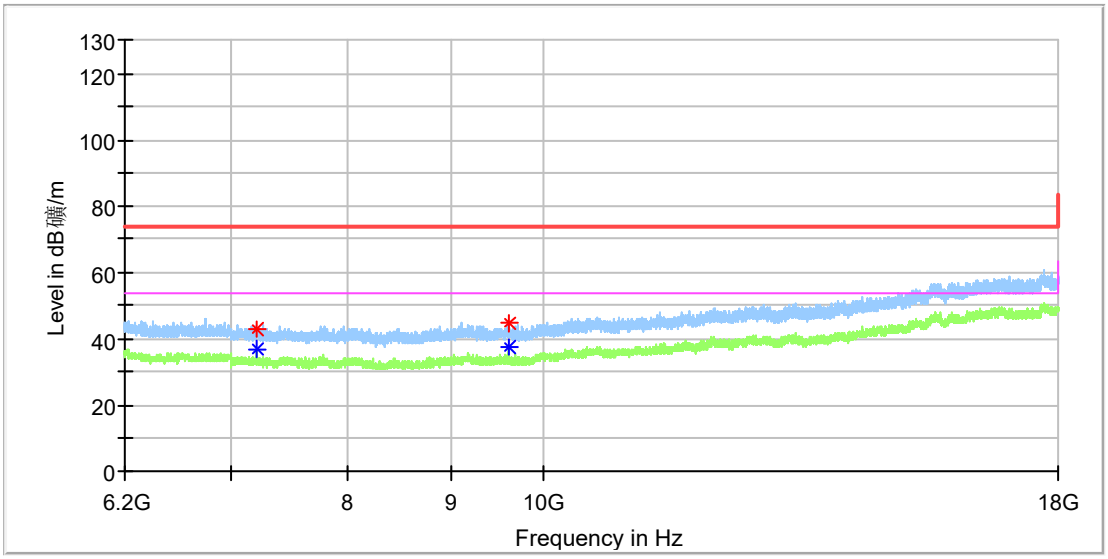
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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	43.03	---	74.00	30.97	150.0	H	289.0	8.8
7206.441667	---	36.75	54.00	17.25	150.0	H	289.0	8.8
9607.741667	---	37.42	54.00	16.58	150.0	H	338.0	10.4
9608.725000	44.50	---	74.00	29.50	150.0	H	253.0	10.4

Final_Result

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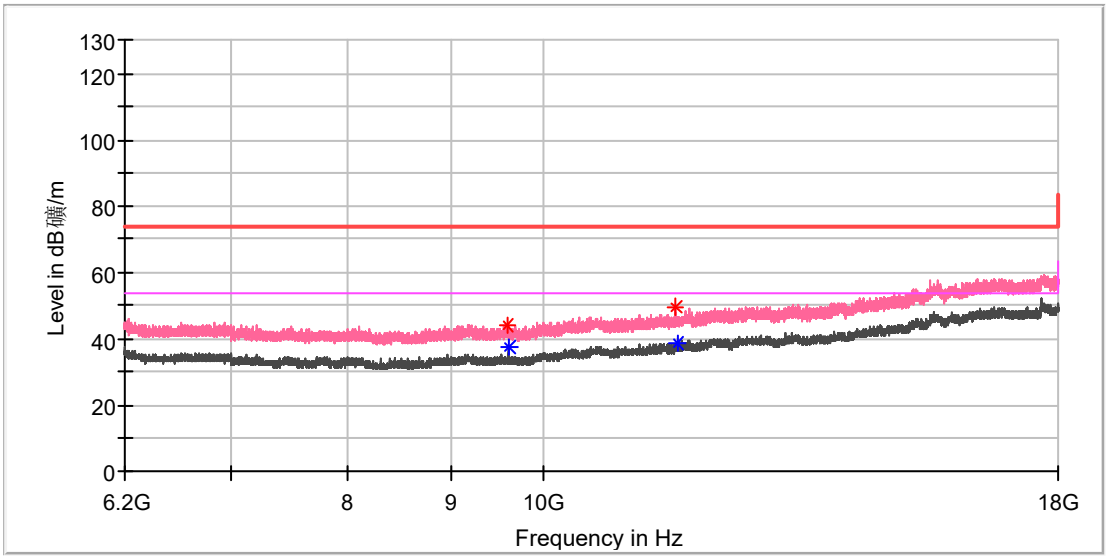
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

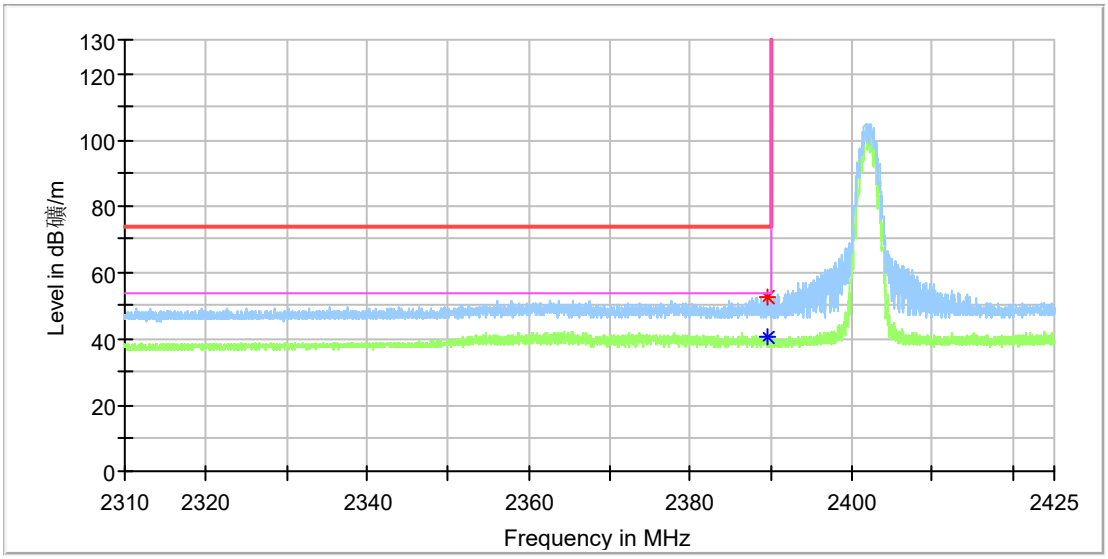
Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
9596.433333	44.41	---	74.00	29.59	150.0	V	2.0	10.3
9607.741667	---	37.73	54.00	16.27	150.0	V	46.0	10.4
11629.966667	49.50	---	74.00	24.50	150.0	V	93.0	13.3
11646.683333	---	38.78	54.00	15.22	150.0	V	338.0	13.3

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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)
2389.502206	52.51	---	74.00	21.49	150.0	H	300.0	7.0
2389.536029	---	40.56	54.00	13.44	150.0	H	292.0	7.0

Final_Result

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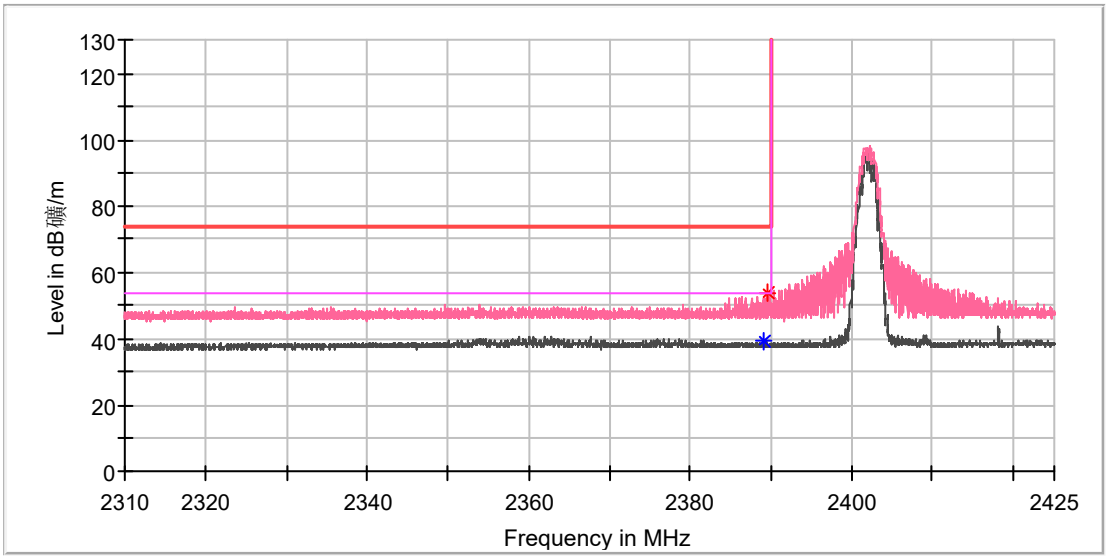
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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)
2389.011765	---	39.19	54.00	14.81	150.0	V	10.0	7.0
2389.620588	53.84	---	74.00	20.16	150.0	V	79.0	7.0

Final_Result

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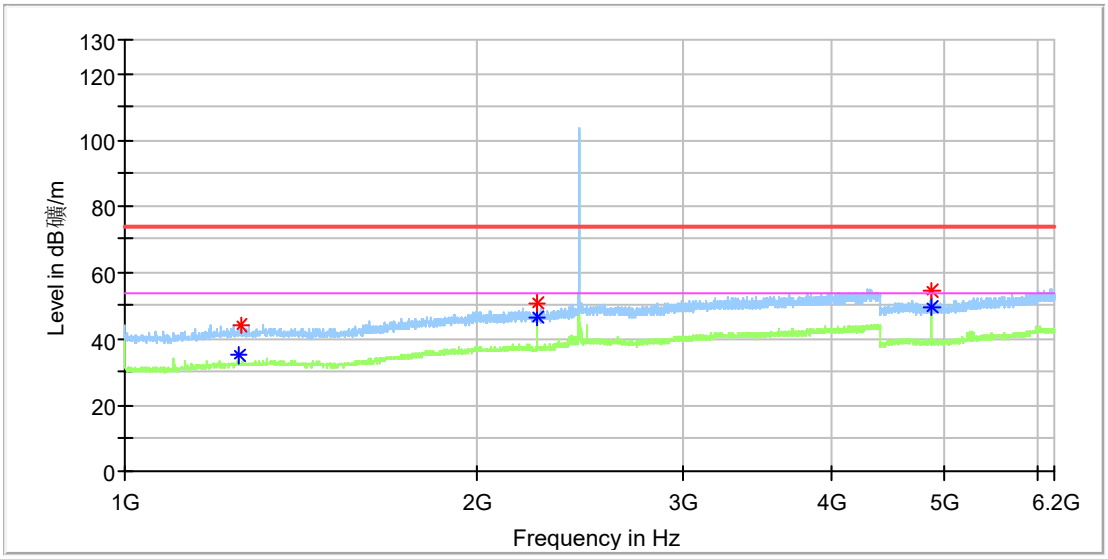
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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)
1250.000000	---	34.78	54.00	19.22	150.0	H	24.0	1.9
1254.000000	44.28	---	74.00	29.72	150.0	H	0.0	1.9
2247.500000	51.06	---	74.00	22.94	150.0	H	17.0	6.4
2248.000000	---	46.83	54.00	7.17	150.0	H	17.0	6.4
4880.000000	---	49.38	54.00	4.62	150.0	H	117.0	11.8
4880.000000	54.68	---	74.00	19.32	150.0	H	117.0	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:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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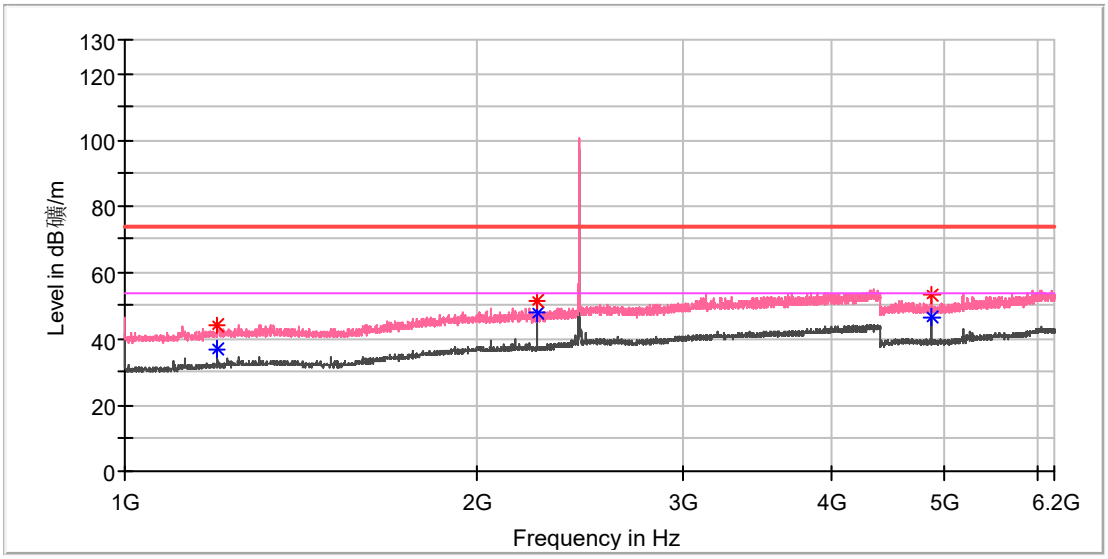

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1200.000000	43.84	---	74.00	30.16	150.0	V	181.0	1.1
1200.000000	---	37.14	54.00	16.86	150.0	V	181.0	1.1
2248.000000	51.52	---	74.00	22.48	150.0	V	335.0	6.4
2248.000000	---	47.60	54.00	6.40	150.0	V	335.0	6.4
4880.000000	53.03	---	74.00	20.97	150.0	V	98.0	11.8
4880.000000	---	46.41	54.00	7.59	150.0	V	98.0	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:	Bluetooth Speaker
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Order No/Sample No:	168490934/A003762173-002
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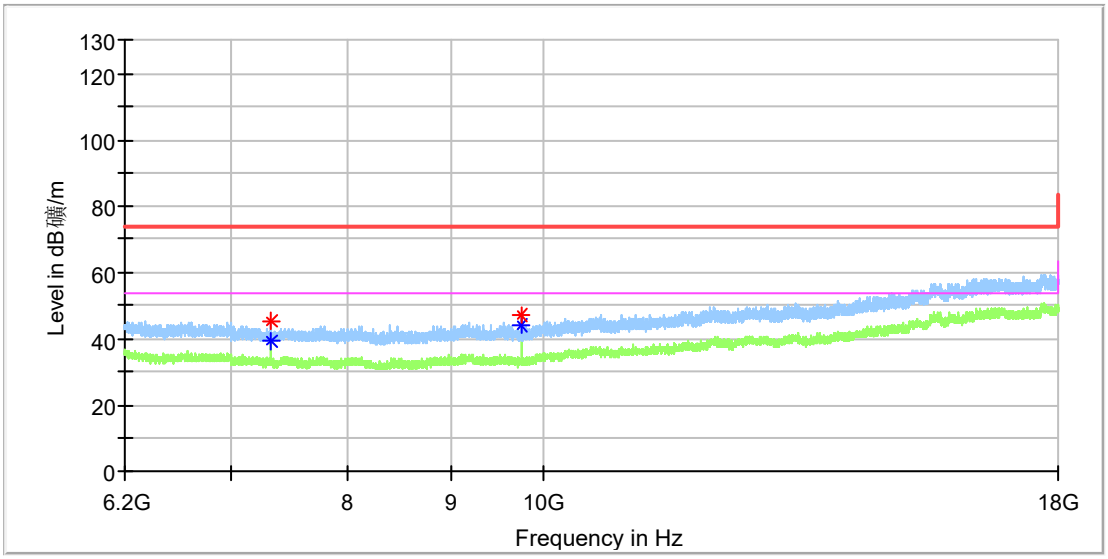

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7319.525000	45.48	---	74.00	28.52	150.0	H	295.0	8.2
7319.525000	---	39.32	54.00	14.68	150.0	H	295.0	8.2
9760.158333	---	43.93	54.00	10.07	150.0	H	308.0	10.4
9760.158333	47.01	---	74.00	26.99	150.0	H	308.0	10.4

Final_Result

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

EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
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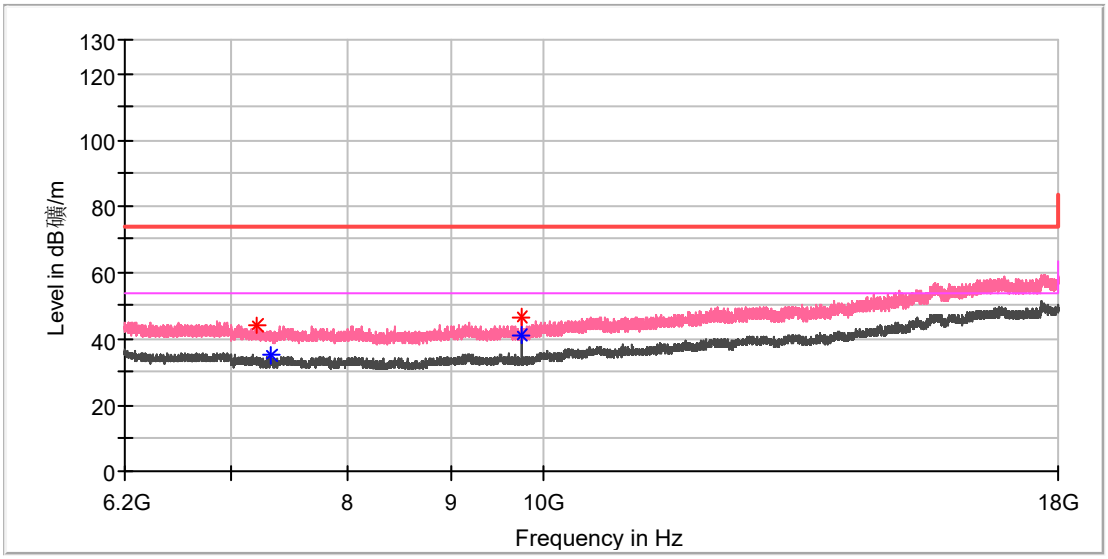
Test Standard:	FCC 15.247
Tested By:	Lich Chen
Reviewed By:	Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7208.900000	44.28	---	74.00	29.72	150.0	V	154.0	8.8
7319.525000	---	35.36	54.00	18.64	150.0	V	107.0	8.2
9760.158333	---	41.40	54.00	12.60	150.0	V	83.0	10.4
9760.650000	46.36	---	74.00	27.64	150.0	V	83.0	10.4

Final_Result

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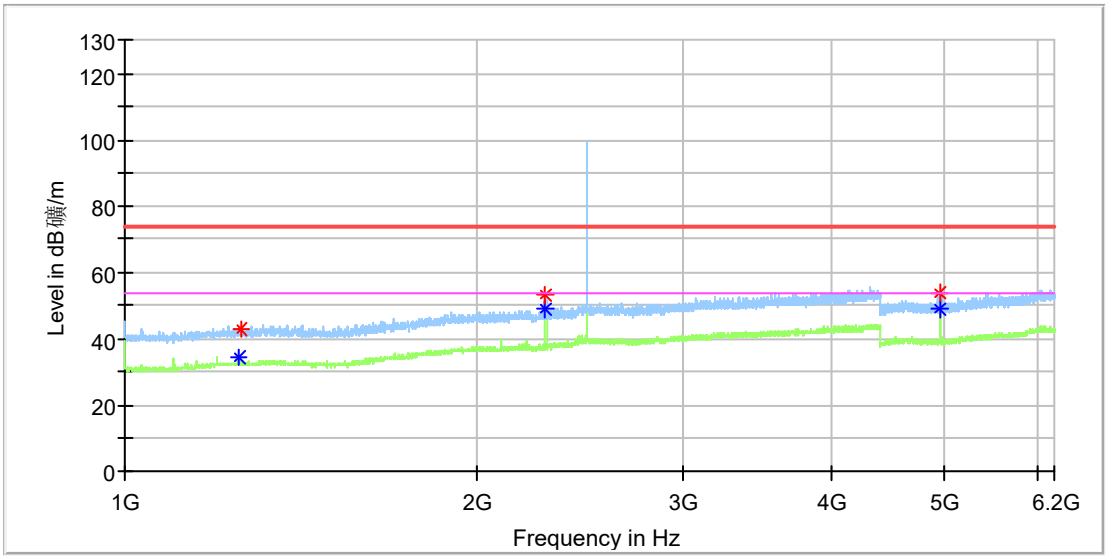
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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)
1250.000000	---	34.30	54.00	19.70	150.0	H	198.0	1.9
1257.500000	42.95	---	74.00	31.05	150.0	H	149.0	1.9
2287.500000	53.04	---	74.00	20.96	150.0	H	225.0	6.4
2288.000000	---	48.92	54.00	5.08	150.0	H	92.0	6.4
4960.000000	---	48.99	54.00	5.01	150.0	H	90.0	11.8
4960.500000	53.88	---	74.00	20.12	150.0	H	132.0	11.8

Final_Result

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

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High channel
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Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
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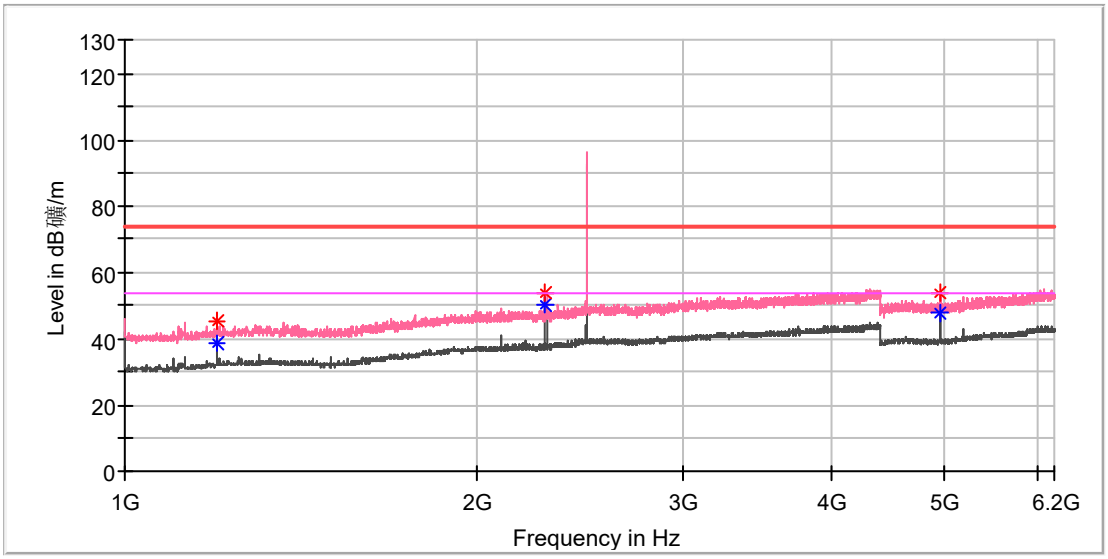

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1200.000000	45.16	---	74.00	28.84	150.0	V	264.0	1.1
1200.000000	---	38.40	54.00	15.60	150.0	V	264.0	1.1
2288.000000	54.09	---	74.00	19.91	150.0	V	100.0	6.4
2288.000000	---	50.11	54.00	3.89	150.0	V	100.0	6.4
4960.000000	53.51	---	74.00	20.49	150.0	V	82.0	11.8
4960.000000	---	48.00	54.00	6.00	150.0	V	82.0	11.8

Final_Result

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

EUT Information

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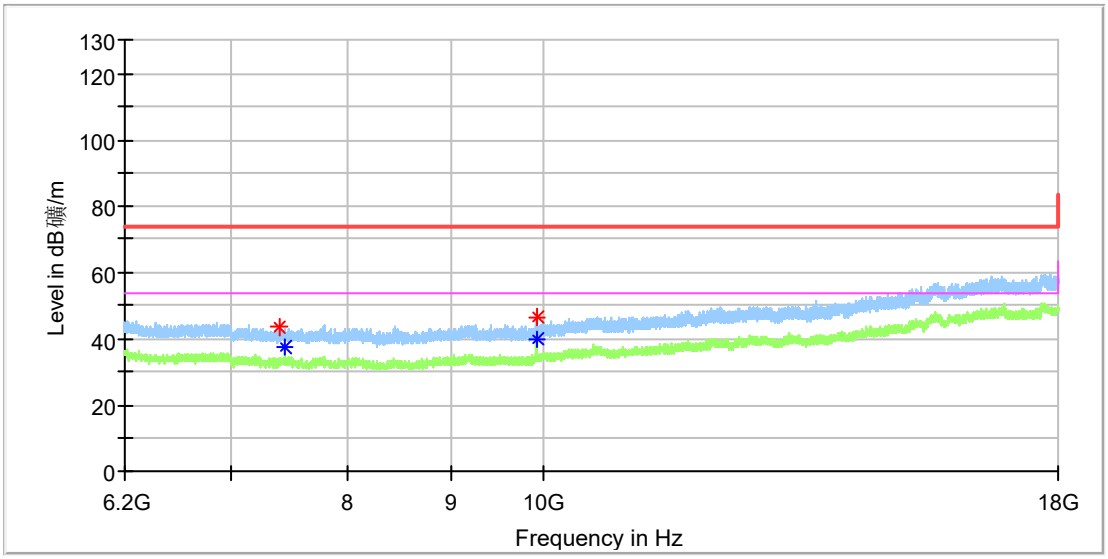

Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7388.358333	43.40	---	74.00	30.60	150.0	H	0.0	8.2
7439.983333	---	37.64	54.00	16.36	150.0	H	288.0	8.4
9920.441667	46.32	---	74.00	27.68	150.0	H	311.0	10.8
9920.441667	---	39.70	54.00	14.30	150.0	H	311.0	10.8

Final_Result

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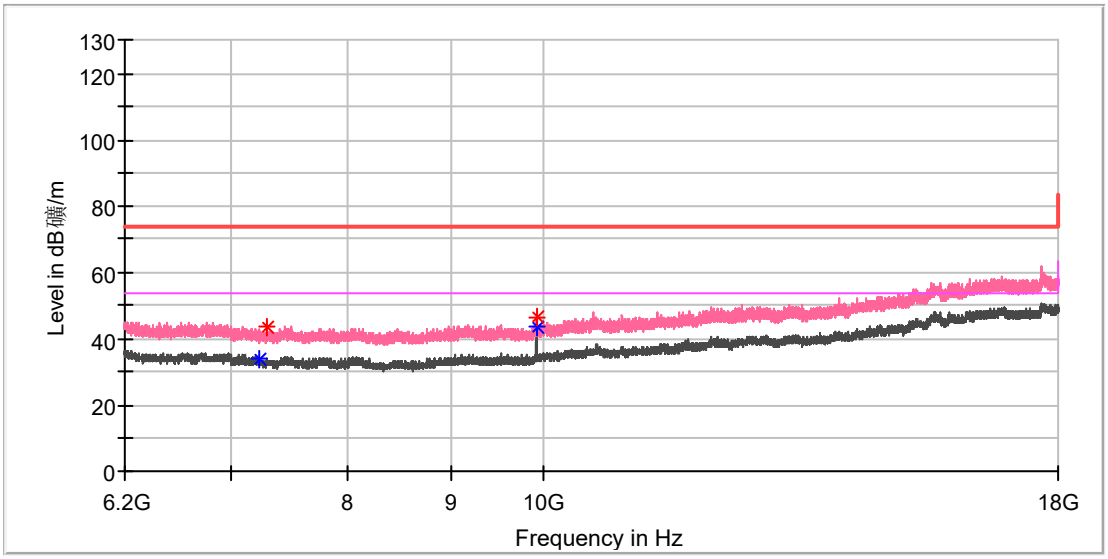
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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)
7233.975000	---	33.90	54.00	20.10	150.0	V	323.0	8.6
7295.433333	43.29	---	74.00	30.71	150.0	V	63.0	8.3
9920.441667	46.81	---	74.00	27.19	150.0	V	98.0	10.8
9920.441667	---	43.38	54.00	10.62	150.0	V	98.0	10.8

Final_Result

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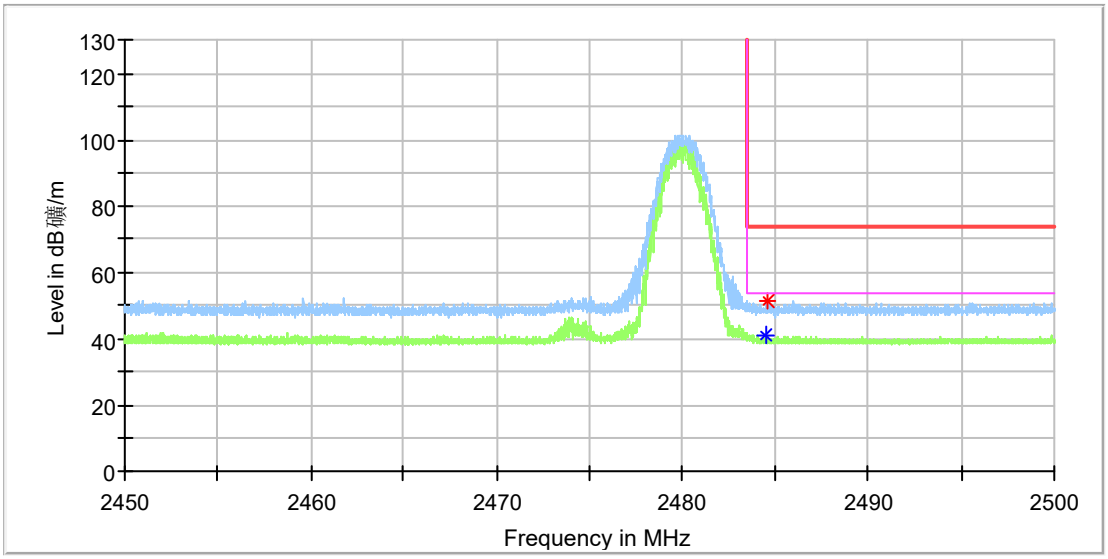
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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)
2484.433824	---	40.84	54.00	13.16	150.0	H	342.0	7.4
2484.558824	51.10	---	74.00	22.90	150.0	H	308.0	7.4

Final_Result

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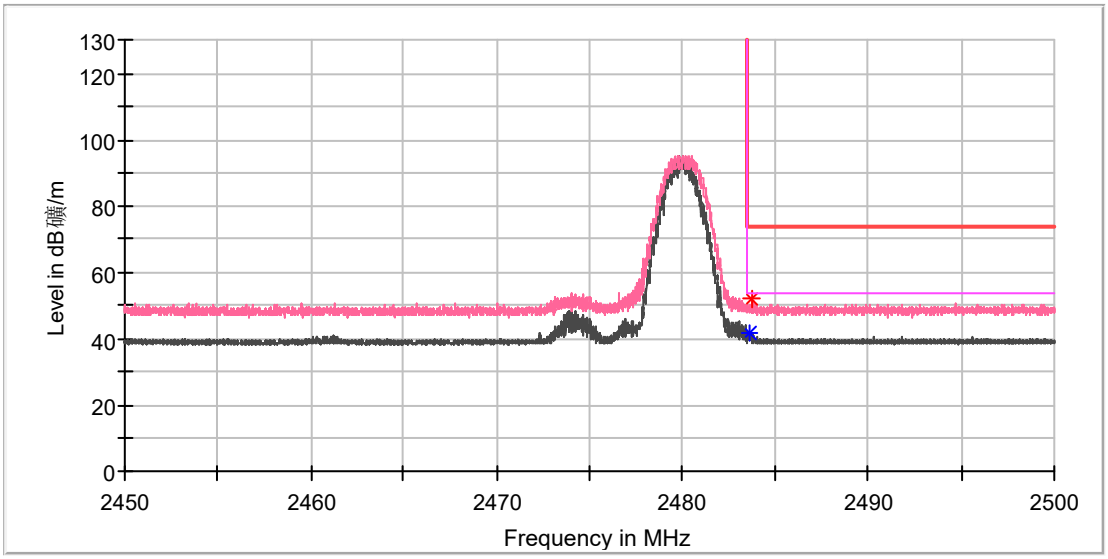
EUT Information

EUT Name:	Bluetooth Speaker
Model:	X5i
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168490934/A003762173-002
Test Voltage::	DC 3.3V
Remark:	Temp 23 Humi:58%
Test Standard:	FCC 15.247
Tested By:	Lich Chen
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)
2483.610294	---	41.94	54.00	12.06	150.0	V	78.0	7.4
2483.698529	51.94	---	74.00	22.06	150.0	V	71.0	7.4

Final_Result

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