Appendix A: Test Results

Appendix A.1: Test Results of Field Strength of Fundamental & Harmonics

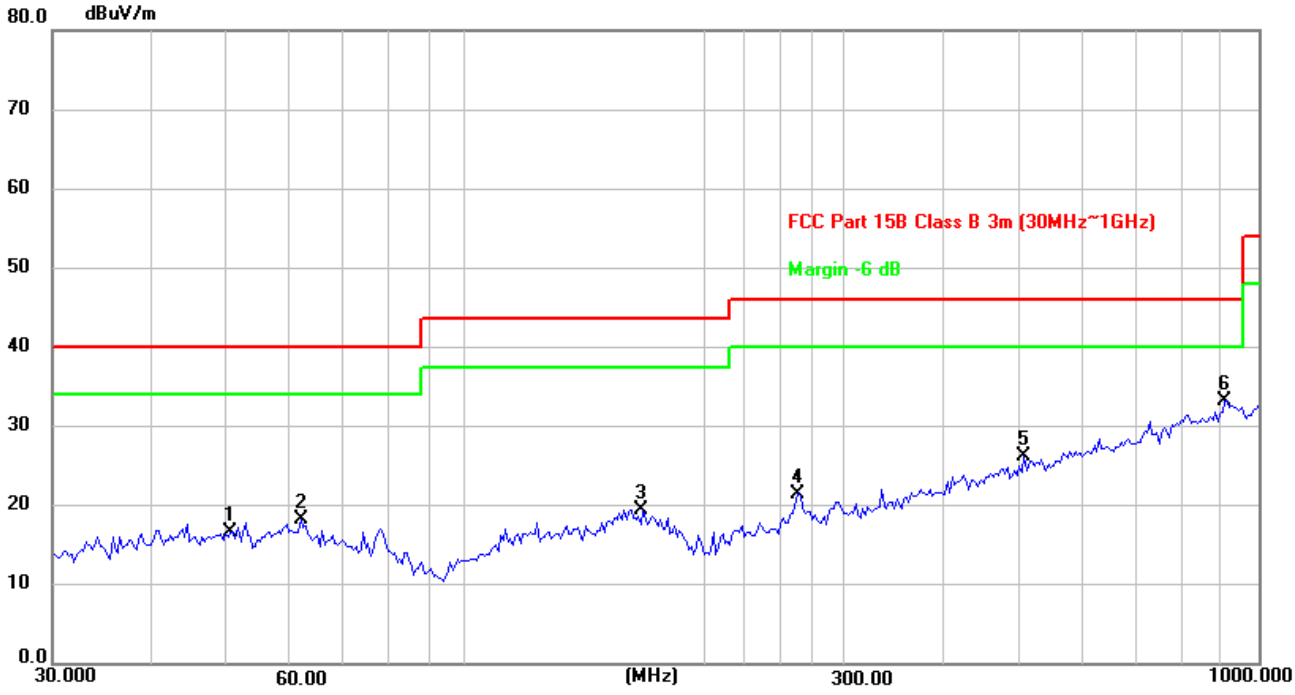
Note: The testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and 18GHz to 26.5GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30MHz - 1GHz

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2402MHz(1Mbps)
Test Voltage::	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

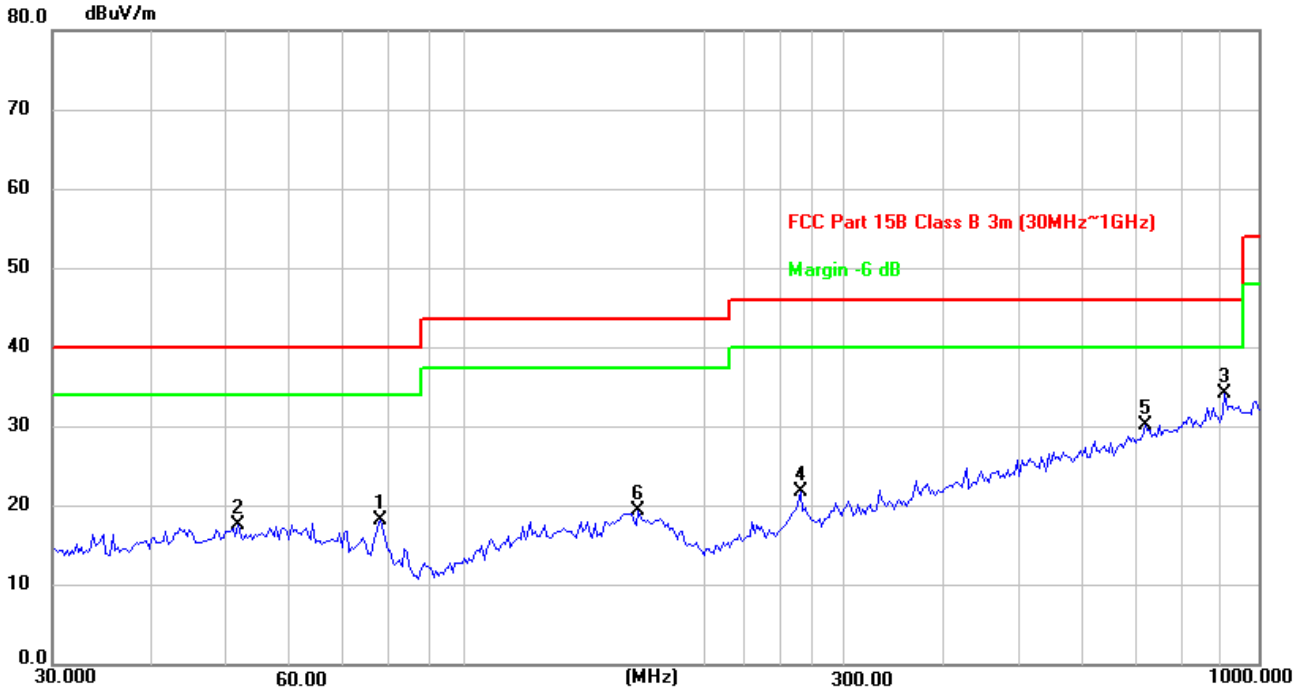
Horizontal



Critical_Freqs

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	50.4090	31.62	-14.92	16.70	40.00	-23.30	peak	100	360
2	61.7780	33.58	-15.27	18.31	40.00	-21.69	peak	100	360
3	167.2366	33.21	-13.76	19.45	43.50	-24.05	peak	100	360
4	261.9752	35.93	-14.48	21.45	46.00	-24.55	peak	100	360
5	506.4790	32.72	-6.58	26.14	46.00	-19.86	peak	100	360
6	906.4824	31.85	1.33	33.18	46.00	-12.82	peak	100	360

Vertical



Critical_Freqs

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	77.8654	36.46	-18.15	18.31	40.00	-21.69	peak	100	360
2	51.4807	32.75	-15.00	17.75	40.00	-22.25	peak	100	360
3	906.4824	32.89	1.33	34.22	46.00	-11.78	peak	100	360
4	263.8190	36.07	-14.17	21.90	46.00	-24.10	peak	100	360
5	719.1995	32.10	-1.79	30.31	46.00	-15.69	peak	100	360
6	164.9075	33.13	-13.69	19.44	43.50	-24.06	peak	100	360

1GHz - 18GHz

Note: The highest waveform in the figure is ANT+ Fundamental.

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2402MHz(1Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

Horizontal

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2402.144	96.10	-0.39	95.71	114	-18.29	peak	272	41
2	2402.144	84.27	-0.39	83.88	94	-10.12	AVG	272	41

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4804.000	46.05	5.30	51.35	74.00	-22.65	peak	264	87
2	4804.000	36.75	5.30	42.05	54.00	-11.95	AVG	264	87
3	7206.000	42.89	12.40	55.29	74.00	-18.71	peak	100	234
4	7206.000	36.91	12.40	49.31	54.00	-4.69	AVG	100	234

Vertical

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2402.335	102.50	-0.39	102.11	114	-11.89	peak	239	211
2	2402.335	91.52	-0.39	91.13	94	-2.87	AVG	239	211

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4804.000	42.47	5.30	47.77	74.00	-26.23	peak	105	122
2	4804.000	31.22	5.30	36.52	54.00	-17.48	AVG	105	122
3	7206.000	43.33	12.40	55.73	74.00	-18.27	peak	100	320
4	7206.000	36.39	12.40	48.79	54.00	-5.21	AVG	100	320

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2440MHz(1Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

Horizontal

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2440.000	97.69	-0.31	97.38	114	-16.62	peak	127	36
2	2440.000	87.06	-0.31	86.75	94	-7.25	AVG	127	36

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4880.000	42.15	6.25	48.40	74.00	-25.60	peak	226	289
2	4880.000	29.87	6.25	36.12	54.00	-17.88	AVG	226	289
3	7320.000	42.80	12.65	55.45	74.00	-18.55	peak	127	317
4	7320.000	33.42	12.65	46.07	54.00	-7.93	AVG	127	317

Vertical

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2440.000	102.57	-0.31	102.26	114	-11.74	peak	151	210
2	2440.000	90.63	-0.31	90.32	94	-3.68	AVG	151	210

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4880.000	44.40	6.25	50.65	74.00	-23.35	peak	100	191
2	4880.000	32.36	6.25	38.61	54.00	-15.39	AVG	100	191
3	7320.000	42.62	12.65	55.27	74.00	-18.73	peak	124	236
4	7320.000	31.44	12.65	44.09	54.00	-9.91	AVG	124	236

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2480MHz(1Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

Horizontal

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2479.796	97.80	-0.21	97.59	114	-16.41	peak	150	38
2	2479.796	87.09	-0.21	86.88	94	-7.12	AVG	150	38

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4960.000	43.70	6.16	49.86	74.00	-24.14	peak	204	172
2	4960.000	29.68	6.16	35.84	54.00	-18.16	AVG	204	172
3	7440.000	43.19	12.91	56.10	74.00	-17.90	peak	185	265
4	7440.000	31.81	12.91	44.72	54.00	-9.28	AVG	185	265

Vertical

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2479.796	100.44	-0.21	100.23	114	-13.77	peak	147	216
2	2479.796	89.41	-0.21	89.20	94	-4.8-	AVG	147	216

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4960.000	40.79	6.16	46.95	74.00	-27.05	peak	116	207
2	4960.000	29.36	6.16	35.52	54.00	-18.48	AVG	116	207
3	7440.000	42.21	12.91	55.12	74.00	-18.88	peak	127	235
4	7440.000	28.55	12.91	41.46	54.00	-12.54	AVG	127	235

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2402MHz(2Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

Horizontal

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2402.525	95.67	-0.39	95.28	114	-18.72	peak	168	202
2	2402.525	85.38	-0.39	84.99	94	-9.01	AVG	168	202

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4804.000	43.08	5.30	48.38	74.00	-25.62	peak	332	203
2	4804.000	29.99	5.30	35.29	54.00	-18.71	AVG	332	203
3	7206.000	43.68	12.40	56.08	74.00	-17.92	peak	224	156
4	7206.000	34.30	12.40	46.70	54.00	-7.30	AVG	224	156

Vertical

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2402.525	102.07	-0.39	101.68	114	-12.32	peak	172	205
2	2402.525	90.48	-0.39	90.09	94	-3.91	AVG	172	205

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4804.000	42.02	5.30	47.32	74.00	-26.68	peak	113	265
2	4804.000	29.99	5.30	35.29	54.00	-18.71	AVG	113	265
3	7206.000	43.02	12.40	55.42	74.00	-18.58	peak	128	139
4	7206.000	34.46	12.40	46.86	54.00	-7.14	AVG	128	139

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2440MHz(2Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

Horizontal

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2440.000	97.49	-0.31	97.18	114	-16.82	peak	134	43
2	2440.000	86.58	-0.31	86.27	94	-7.73	AVG	134	43

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4880.000	42.15	6.25	48.40	74.00	-25.60	peak	195	43
2	4880.000	28.70	6.25	34.95	54.00	-19.05	AVG	195	43
3	7320.000	41.56	12.65	54.21	74.00	-19.79	peak	201	124
4	7320.000	32.02	12.65	44.67	54.00	-9.33	AVG	201	124

Vertical

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2440.000	101.53	-0.31	101.22	114.00	-12.78	peak	167	206
2	2440.000	90.20	-0.31	89.89	94.00	-4.11	AVG	167	206

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4880.000	41.40	6.25	47.65	74.00	-26.35	peak	110	273
2	4880.000	28.91	6.25	35.16	54.00	-18.84	AVG	110	273
3	7320.000	43.48	12.65	56.13	74.00	-17.87	peak	123	66
4	7320.000	31.91	12.65	44.56	54.00	-9.44	AVG	123	66

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2480MHz(2Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

Horizontal

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2479.423	97.18	-0.21	96.97	114.00	-17.03	peak	100	195
2	2479.423	86.38	-0.21	86.17	94.00	-7.83	AVG	100	195

Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4960.000	41.71	6.16	47.87	74.00	-26.13	peak	172	342
2	4960.000	29.32	6.16	35.48	54.00	-18.52	AVG	172	342
3	7440.000	42.78	12.91	55.69	74.00	-18.31	peak	236	56
4	7440.000	32.17	12.91	45.08	54.00	-8.92	AVG	236	56

Vertical

Critical_Freqs(Fundamental frequency)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2480.355	101.19	-0.21	100.98	114.00	-13.02	peak	134	214
2	2480.355	90.05	-0.21	89.84	94.00	-4.16	AVG	134	214

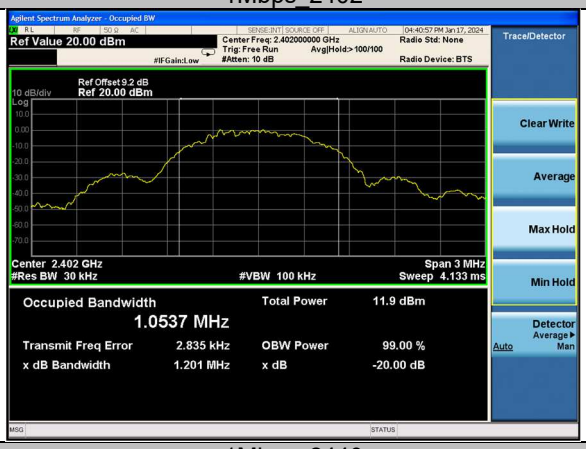
Critical_Freqs(Suprious Emission out of band)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	4960.000	41.52	6.16	47.68	74.00	-26.32	peak	124	227
2	4960.000	29.04	6.16	35.20	54.00	-18.80	AVG	124	227
3	7440.000	40.94	12.91	53.85	74.00	-20.15	peak	100	16
4	7440.000	30.19	12.91	43.10	54.00	-10.90	AVG	100	16

Appendix A.2: Test Results of 20dB Bandwidth

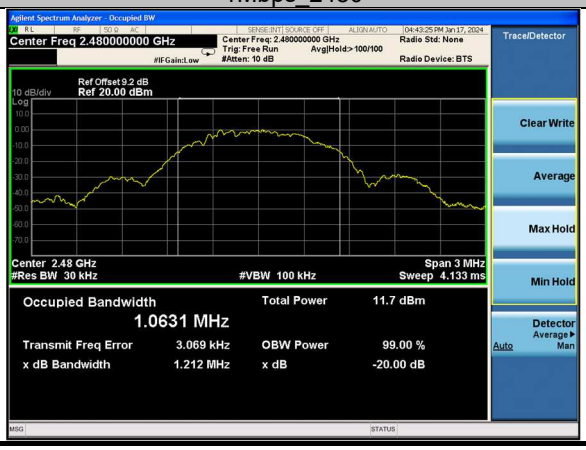
TestMode	Antenna	Channel	OCB [MHz]	Limit[MHz]	Verdict
1Mbps	Ant1	2402	1.201	---	PASS
		2440	1.210	---	PASS
		2480	1.212	---	PASS
2Mbps	Ant1	2402	2.259	---	PASS
		2440	2.286	---	PASS
		2480	2.290	---	PASS

1Mbps_2402



1Mbps_2440

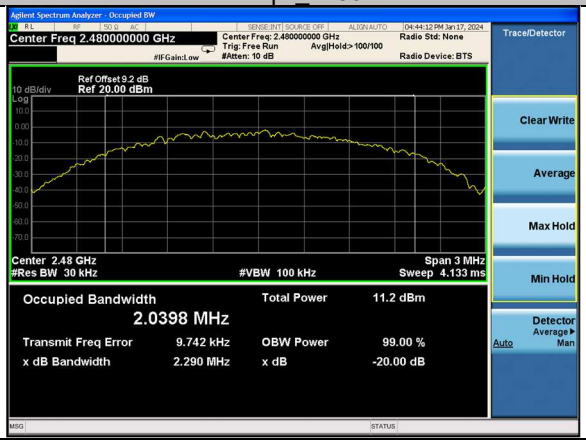
1Mbps_2480



2Mbps_2402

2Mbps_2440

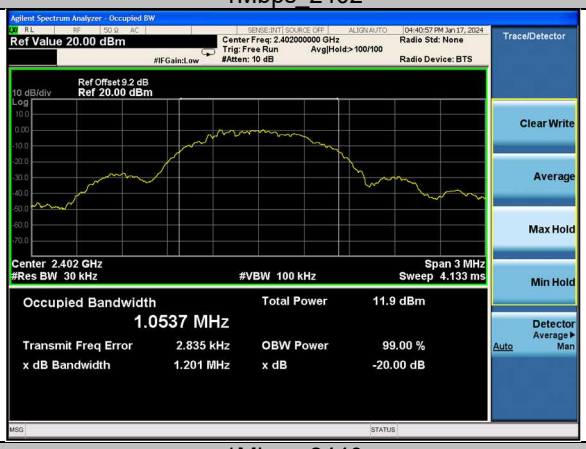
2Mbps_2480



Appendix A.3: Test Results of 99% Bandwidth

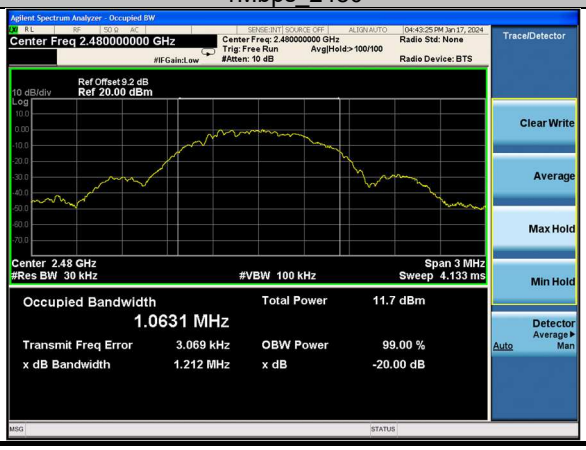
TestMode	Antenna	Channel	OCB [MHz]	Limit[MHz]	Verdict
1Mbps	Ant1	2402	1.0537	---	PASS
		2440	1.0554	---	PASS
		2480	1.0631	---	PASS
2Mbps	Ant1	2402	2.0202	---	PASS
		2440	2.0333	---	PASS
		2480	2.0398	---	PASS

1Mbps_2402



1Mbps_2440

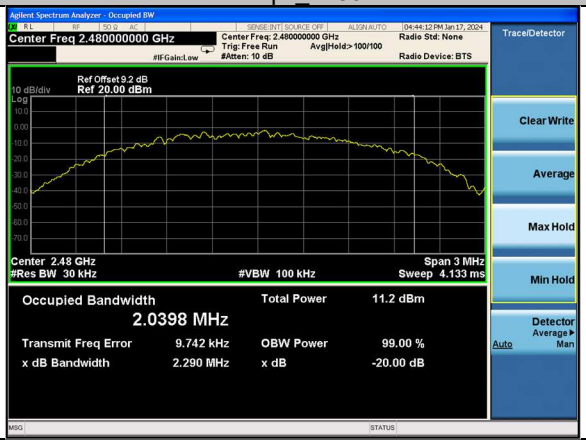
1Mbps_2480



2Mbps_2402

2Mbps_2440

2Mbps_2480

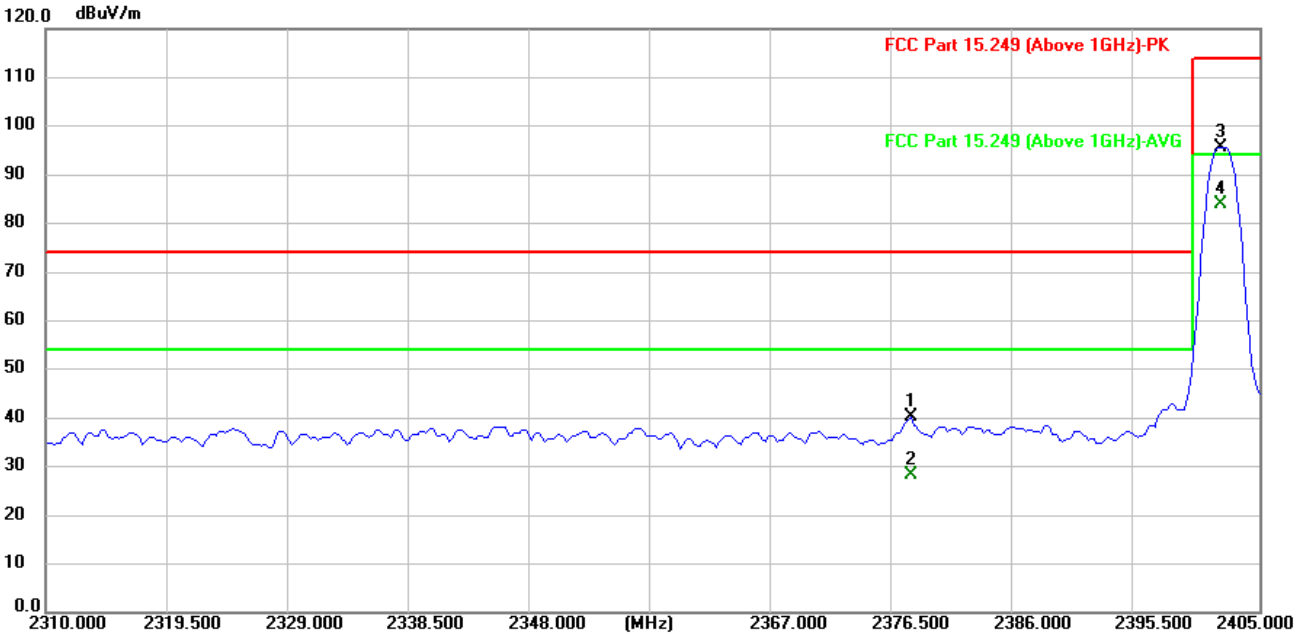


Appendix A.4: Test Results of Band Edge

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2402MHz(1Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

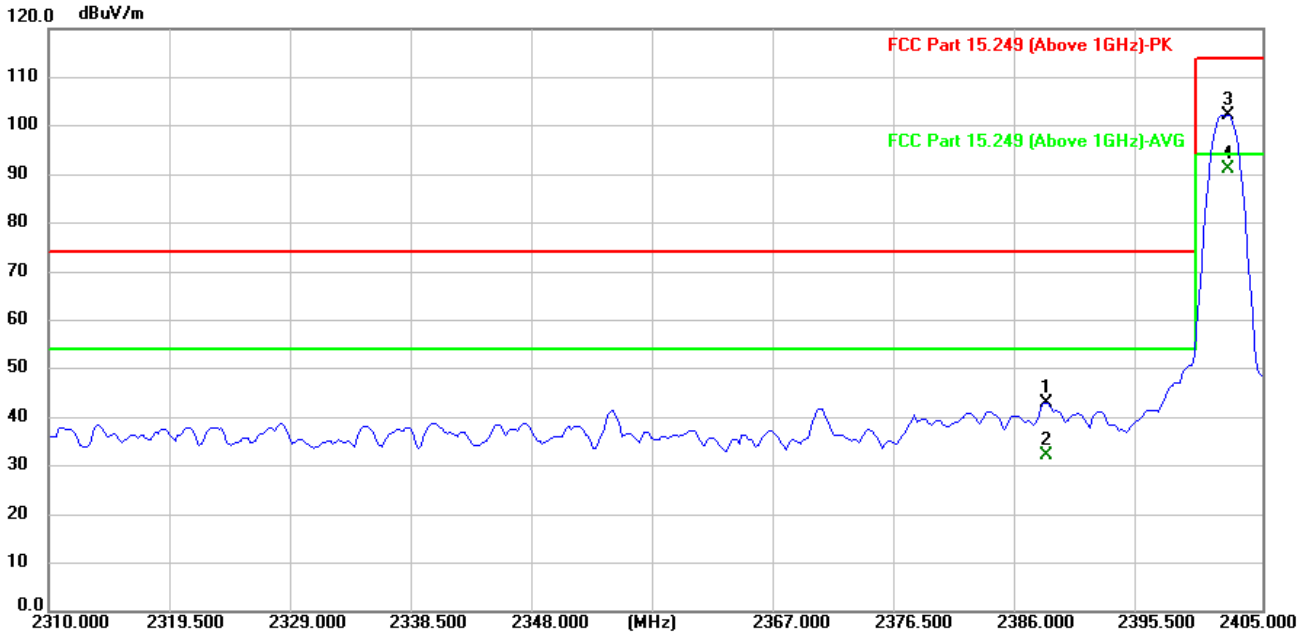
Horizontal



Critical_Freqs(Fundamental frequency & Bandedge)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2377.776	40.65	-0.44	40.21	74.00	-33.79	peak	272	41
2	2377.776	28.58	-0.44	28.14	54.00	-25.86	AVG	272	41

Vertical



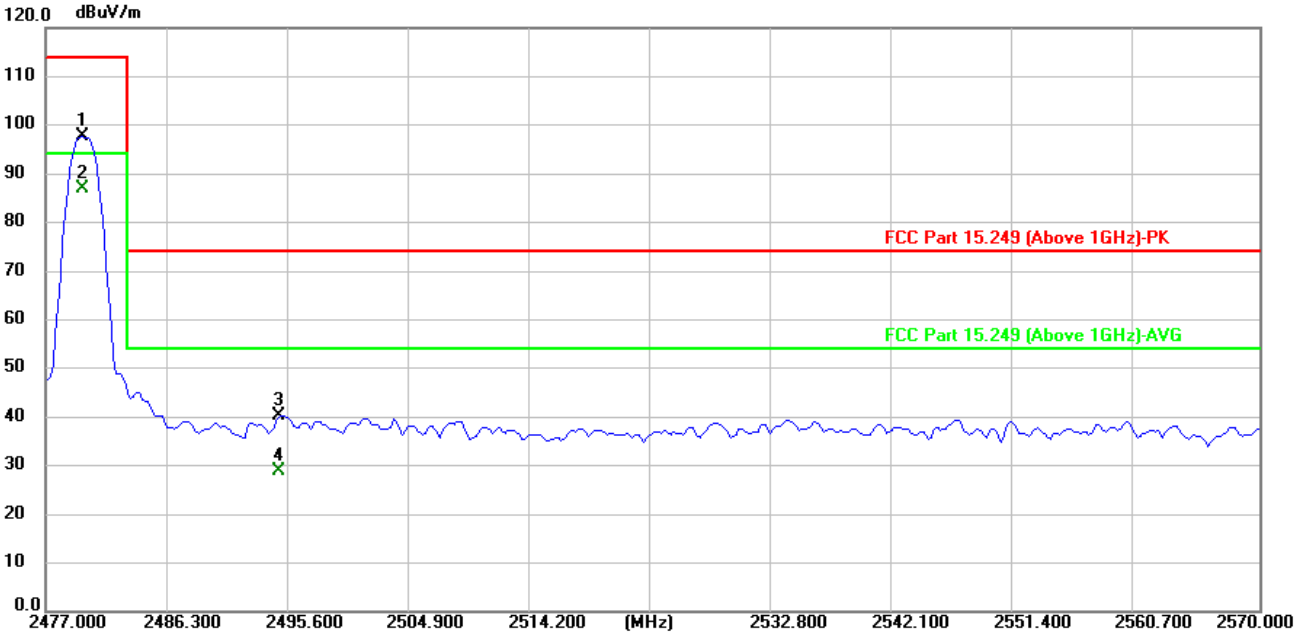
Critical_Freqs(Fundamental frequency & Bandedge)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2388.056	43.43	-0.42	43.01	74.00	-30.99	peak	239	211
2	2388.056	32.61	-0.42	32.19	54.00	-21.81	AVG	239	211

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2480MHz(1Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

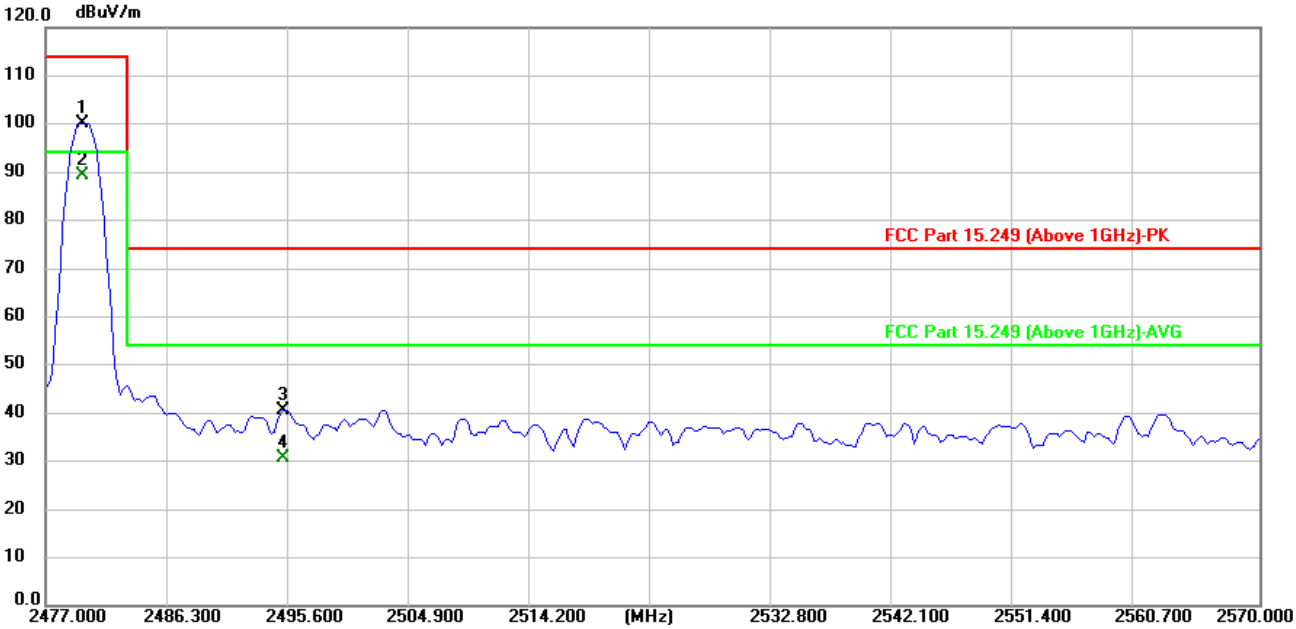
Horizontal



Critical_Freqs(Fundamental frequency & Bandedge)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
3	2495.078	40.44	-0.18	40.26	74.00	-33.74	peak	150	38
4	2495.078	29.03	-0.18	28.85	54.00	-25.15	AVG	150	38

Vertical



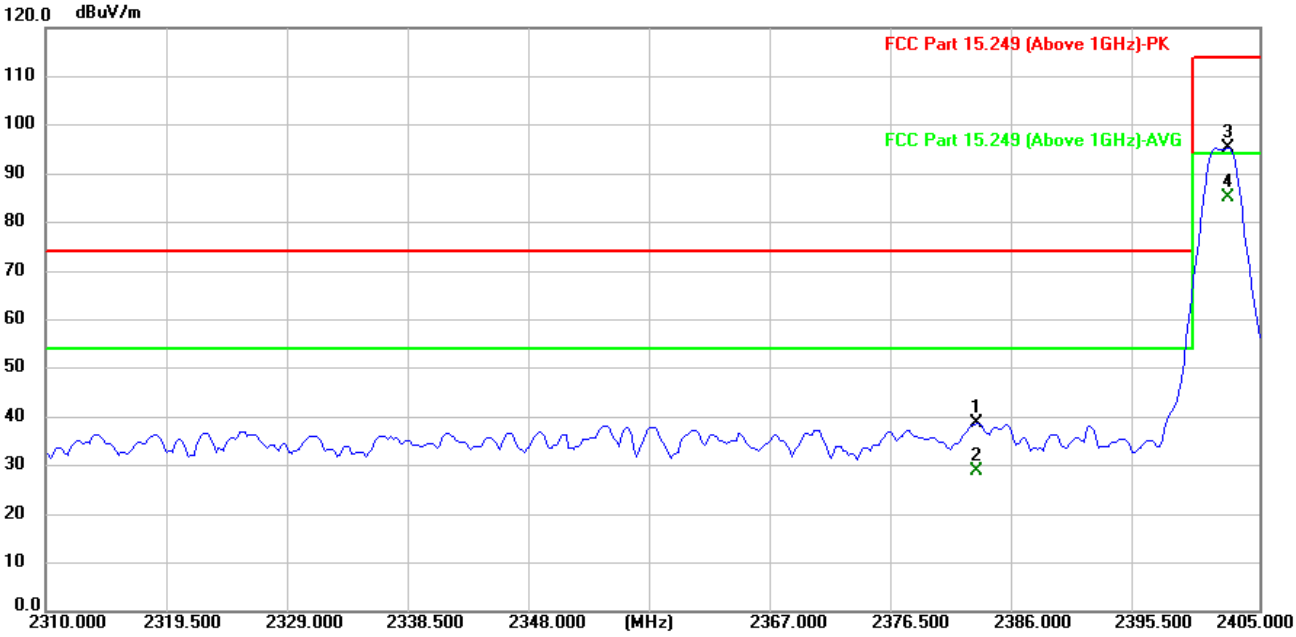
Critical_Freqs(Fundamental frequency & Bandedge)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
3	2495.265	40.70	-0.18	40.52	74.00	-33.48	peak	147	216
4	2495.265	30.75	-0.18	30.57	54.00	-23.43	AVG	147	216

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2402MHz(2Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

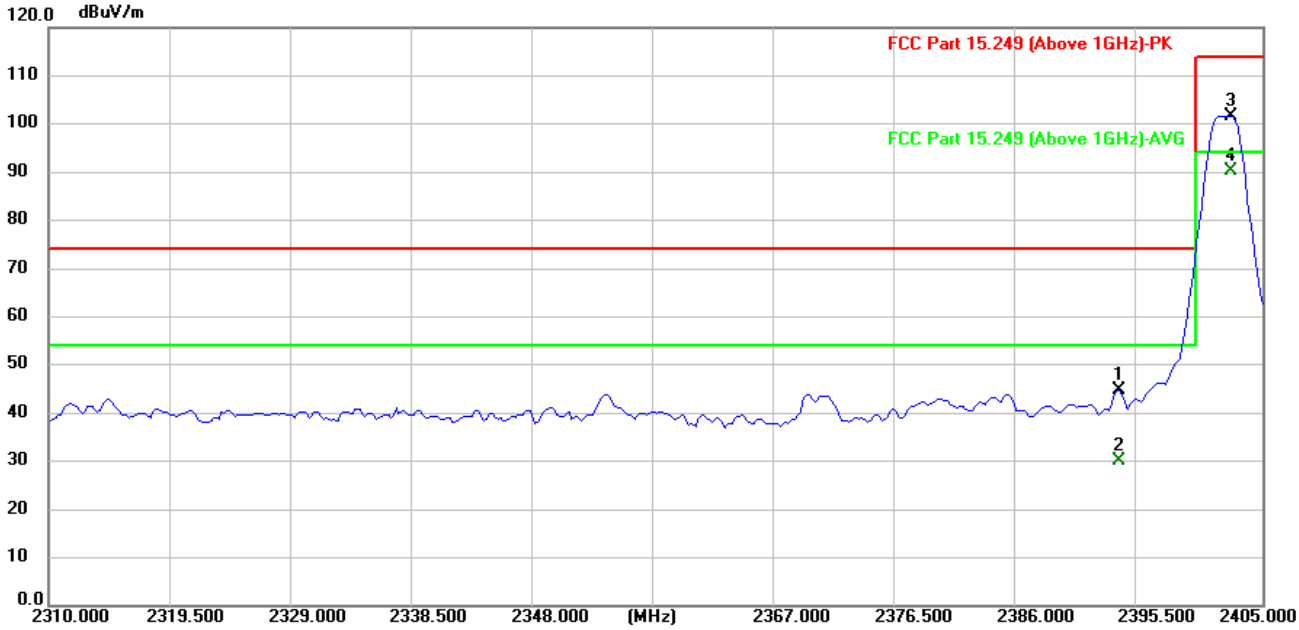
Horizontal



Critical_Freqs(Fundamental frequency & Bandedge)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2382.916	39.05	-0.42	38.63	74.00	-35.37	peak	168	202
2	2382.916	29.15	-0.42	28.73	54.00	-25.27	AVG	168	202

Vertical



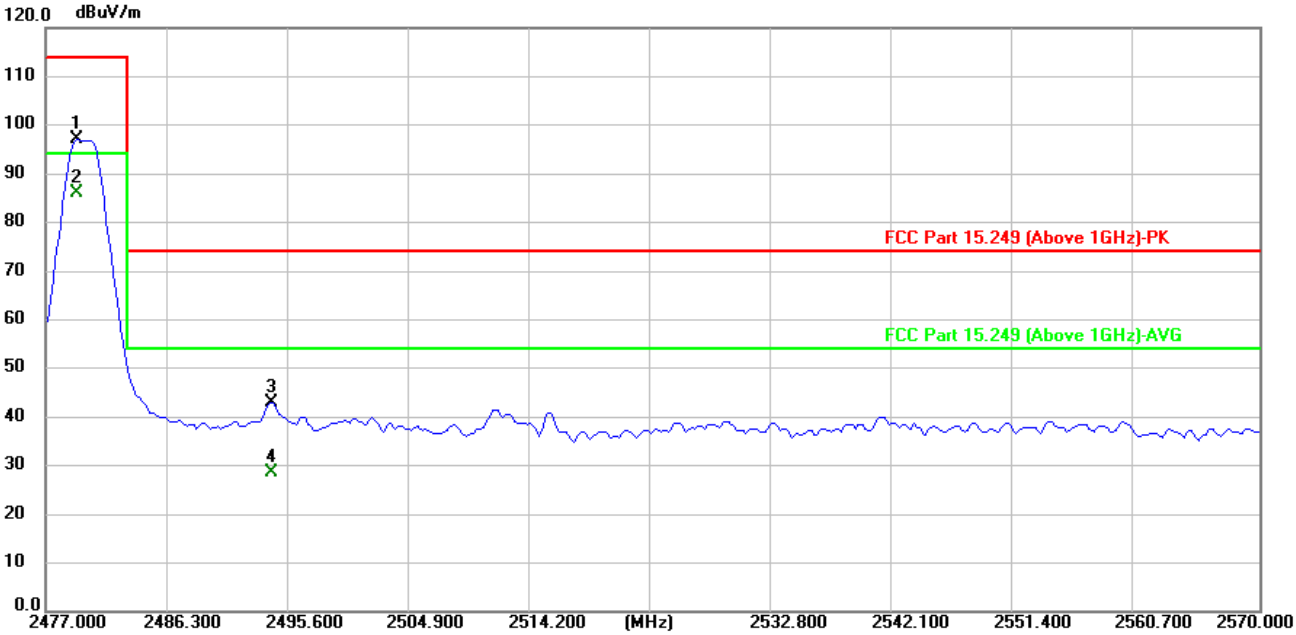
Critical_Freqs(Fundamental frequency & Bandedge)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
1	2393.768	45.01	-0.40	44.61	74.00	-29.39	peak	172	205
2	2393.768	30.43	-0.40	30.03	54.00	-23.97	AVG	172	205

EUT Information

EUT Name:	2.4GHz Digital Wireless Headphone
Model:	BH1080J
Test Mode:	TX 2480MHz(2Mbps)
Test Voltage:	DC 2.4V From battery (2*1.2V “AAA”)
Remark:	Temp 24 Humi: 55%
Test Standard:	FCC 15.249
Tested By:	Hua
Reviewed By:	Scott He

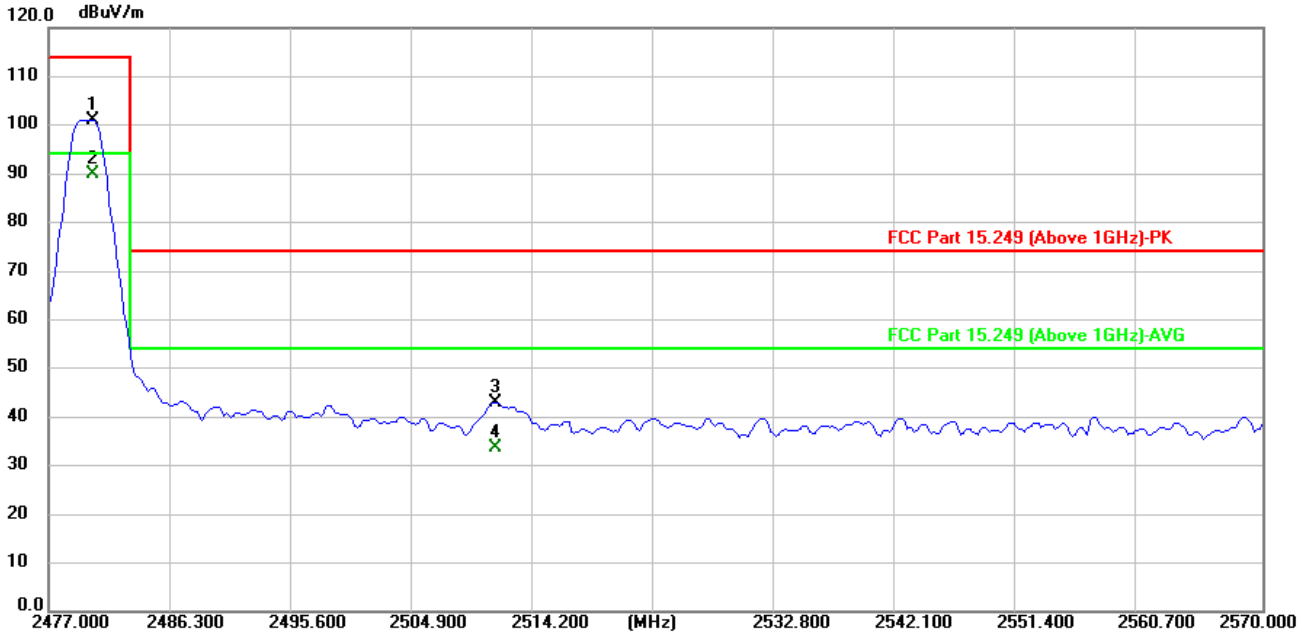
Horizontal



Critical_Freqs(Fundamental frequency & Bandedge)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
3	2494.333	43.05	-0.18	42.87	74.00	-31.13	peak	100	195
4	2494.333	28.88	-0.18	28.70	54.00	-25.30	AVG	100	195

Vertical



Critical_Freqs(Fundamental frequency & Bandedge)

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Det.	Height (cm)	Azimuth (deg)
3	2511.293	43.22	-0.14	43.08	74.00	-30.92	peak	134	214
4	2511.293	33.82	-0.14	33.68	54.00	-20.32	AVG	134	214