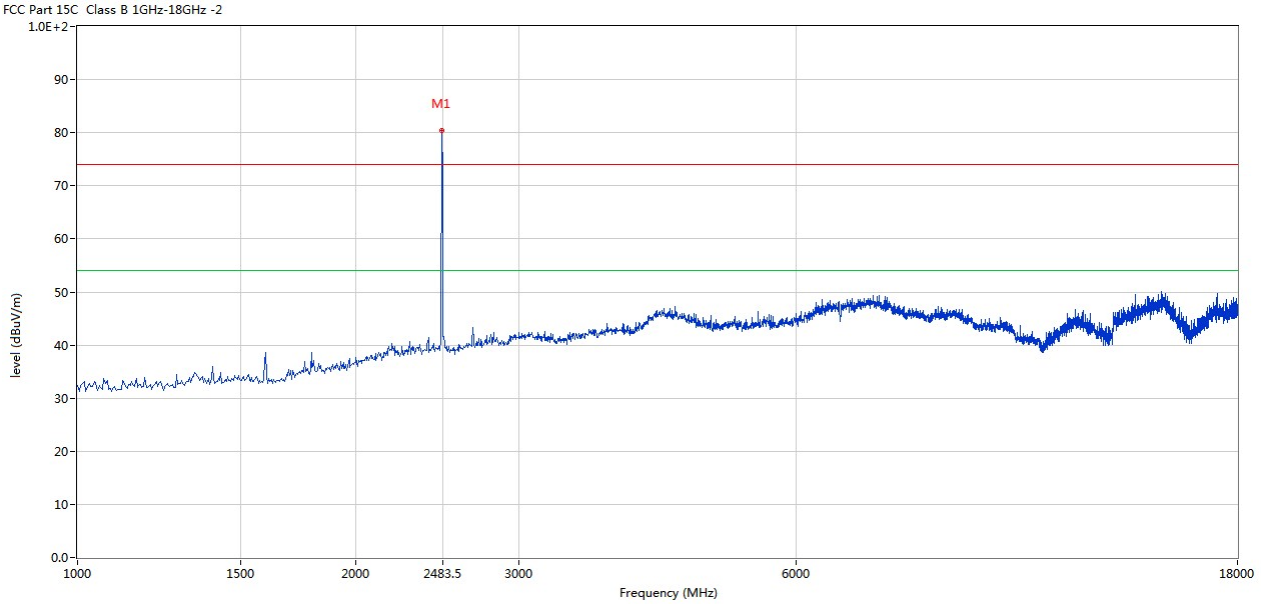
Vertical



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2480	80.37	-3.57	114.0	-33.63	Peak	349.00	100	Vertical	Pass

Note: (1) Emission Level = Reading Level + Antenna Factor + Cable Loss-Amplifier

(2) Margin=Emission-Limits

(3) According to section 15.35(b), the peak limit is 20dB higher than the average limit

(4) For test purpose, keep EUT continuous transmitting

(5) For emission above 18GHz and Below 30MHz, It is only the floor noise and less than the limit for more than 20dB. No necessary to take down.

(6) the measured PK value less than the AV limit.

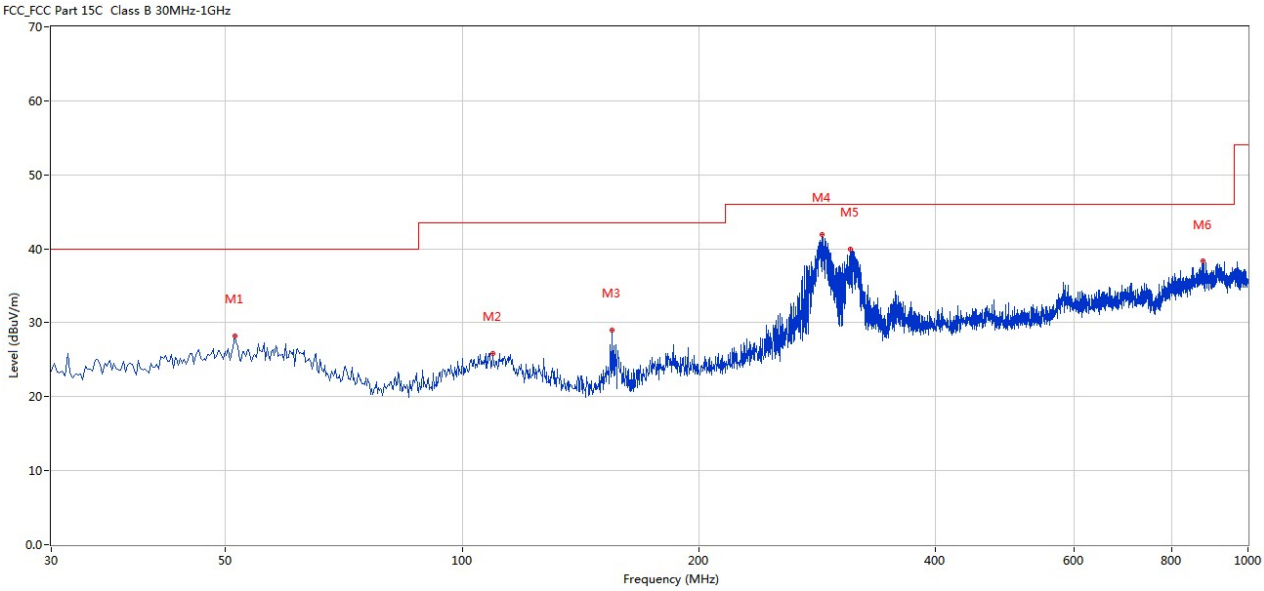
B. **General Radiated Emission Data**

Radiated Emission In Horizontal (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



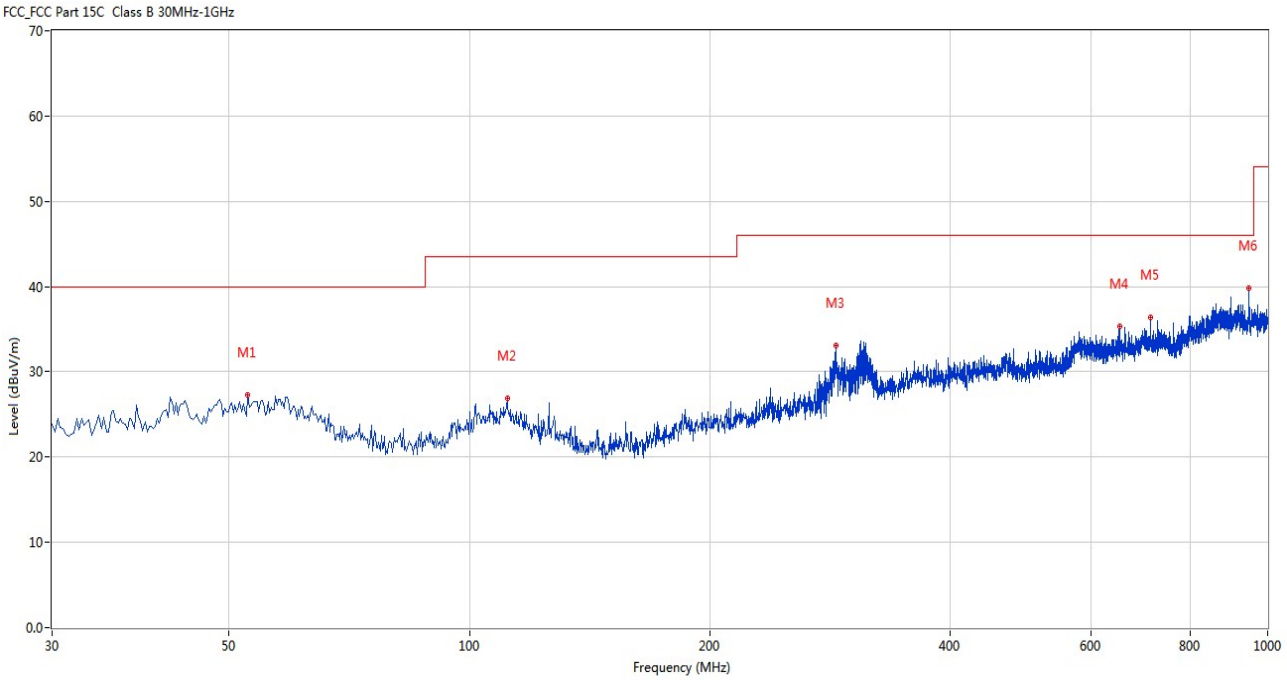
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	51.335	28.21	-4.95	40.0	11.79	Peak	125.00	100	Horizontal	Pass
2	109.278	25.87	-5.98	43.5	17.63	Peak	1.00	100	Horizontal	Pass
3	155.341	29.03	-9.65	43.5	14.47	Peak	360.00	100	Horizontal	Pass
4	286.986	41.93	-4.51	46.0	4.07	Peak	260.00	100	Horizontal	Pass
5	311.957	39.97	-3.72	46.0	6.03	Peak	272.00	100	Horizontal	Pass
6	877.811	38.30	5.10	46.0	7.70	Peak	39.00	100	Horizontal	Pass

Radiated Emission In Vertical (30MHz----1000MHz)

EUT set Condition: Keep Tx transmitting

Results: Pass

Please refer to following diagram for individual



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Margin (dB)	Detector	Table (Degree)	Height (cm)	Antenna	Verdict
1	52.789	27.35	-4.99	40.0	12.65	Peak	139.00	100	Vertical	Pass
2	111.460	26.88	-6.04	43.5	16.62	Peak	252.00	100	Vertical	Pass
3	288.198	33.15	-4.47	46.0	12.85	Peak	1.00	100	Vertical	Pass
4	653.312	35.34	2.00	46.0	10.66	Peak	316.00	100	Vertical	Pass
5	713.437	36.35	2.19	46.0	9.65	Peak	80.00	100	Vertical	Pass
6	947.876	39.79	4.84	46.0	6.21	Peak	269.00	100	Vertical	Pass

7. Band Edge

7.1 Test Method and test Procedure:

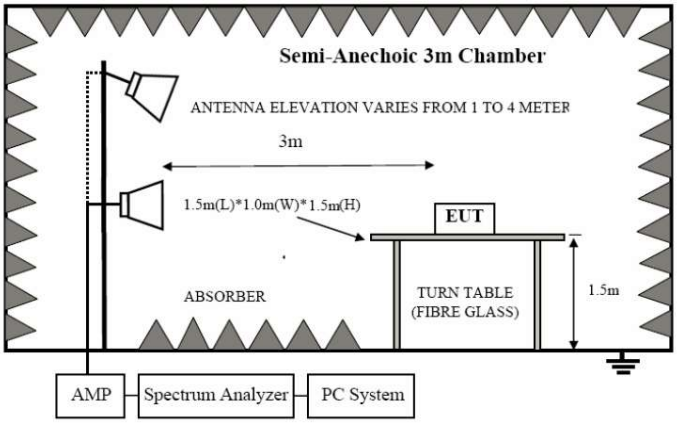
(1) The EUT was tested according to ANSI C63.10–2013. The radiated test was performed at Timeway EMC Laboratory. This site is on file with the FCC laboratory division, Registration No. 744189

(2) Set Spectrum as RBW=1MHz, VBW=3MHz and Peak detector used for PK value. RBW=1MHz, VBW=10Hz and Peak detector used for AV value.

(3) The antenna high is varied from 1 m to 4 m high to find the maximum emission for each frequency.

(4) The antenna polarization: Vertical polarization and Horizontal polarization.

7. 2 Radiated Test Setup



For the actual test configuration, please refer to the related items – Photos of Testing

7.3 Configuration of the EUT

Same as section 5.3 of this report

7.4 EUT Operating Condition

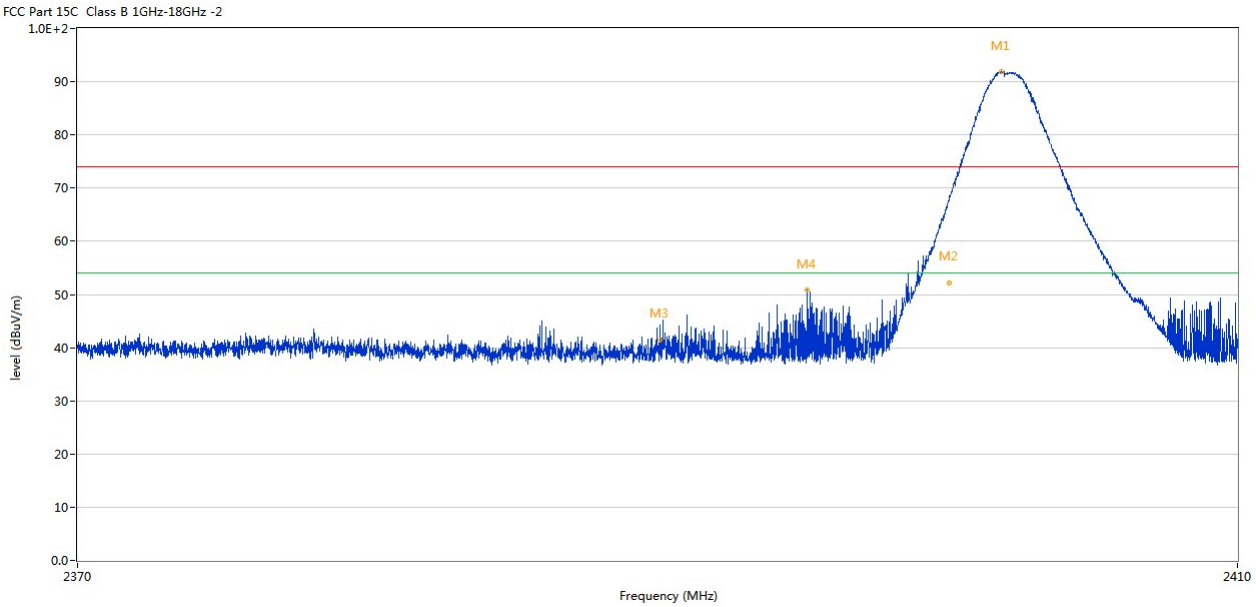
Same as section 5.4 of this report.

7.5 Band Edge Limit

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in Section 15.209, whichever is the lesser attenuation.

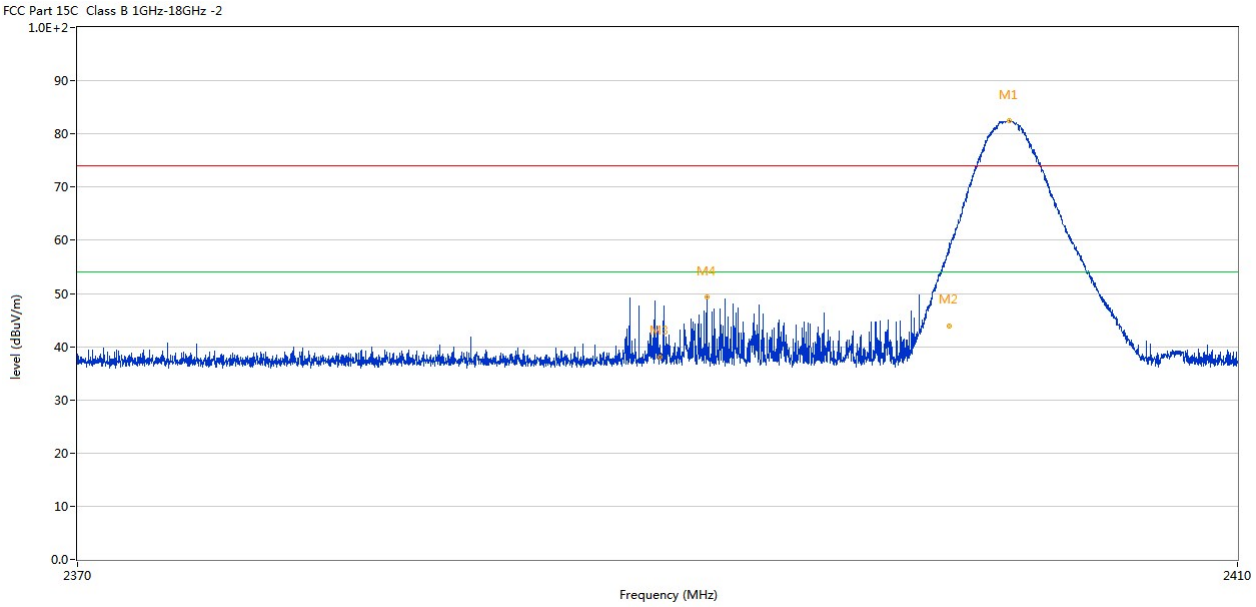
7.6 Test Result

Product:	Wireless Headphone	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	--	--



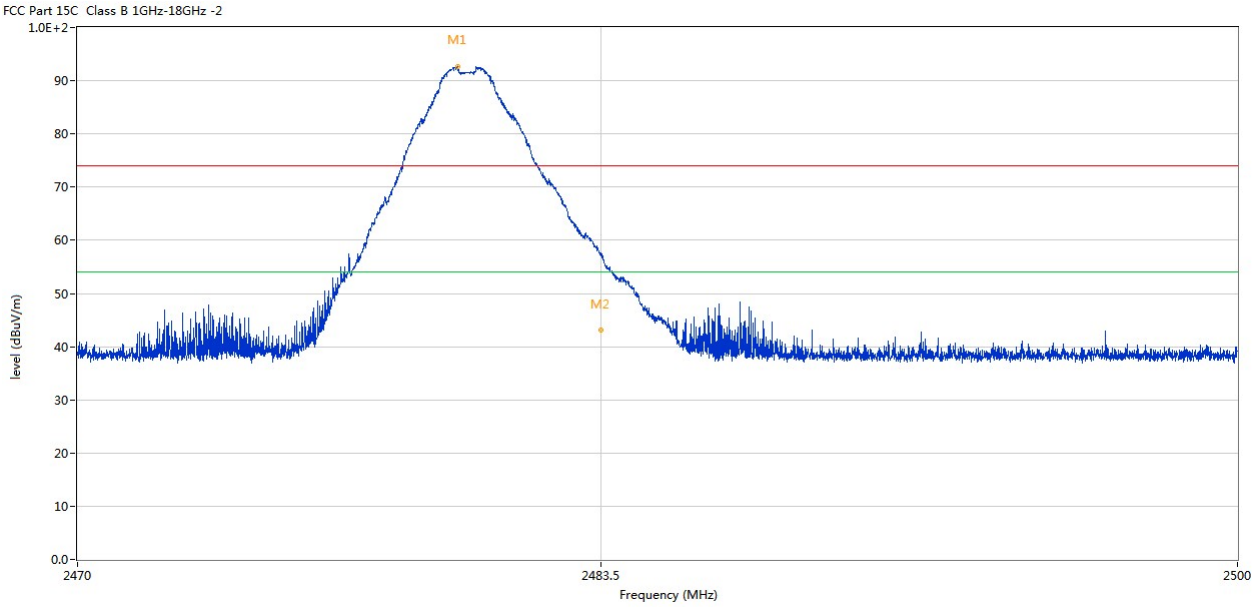
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2401.802	91.93	-3.57	74.0	17.93	Peak	175.00	100	Horizontal	N/A
2	2400.000	68.07	-3.57	74.0	-5.93	Peak	168.11	100	Horizontal	Pass
2**	2400.000	52.24	-3.57	54.0	-1.76	AV	168.11	100	Horizontal	Pass
3	2390.000	41.43	-3.53	74.0	-32.57	Peak	217.00	100	Horizontal	Pass
4	2395.094	50.80	-3.55	74.0	-23.20	Peak	164.00	100	Horizontal	Pass

Product:	Wireless Headphone	Detector	Vertical
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	--	--



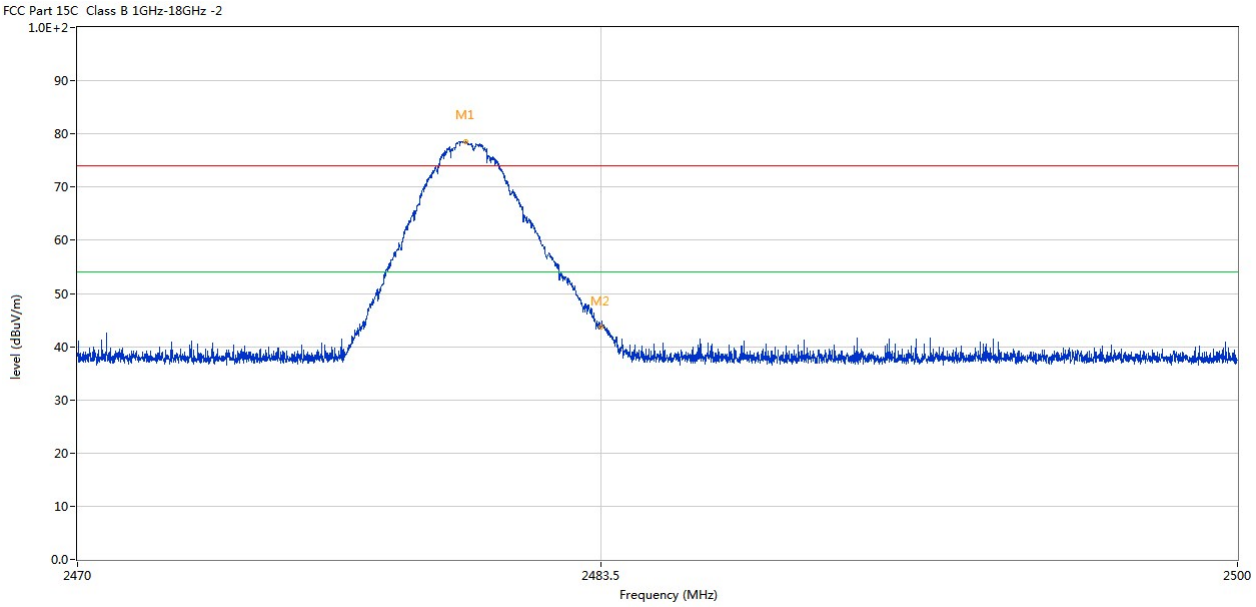
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2402.082	82.44	-3.57	74.0	8.44	Peak	179.00	100	Vertical	N/A
2	2400.000	58.43	-3.57	74.0	-15.57	Peak	190.00	100	Vertical	Pass
2**	2400.000	43.81	-3.57	54.0	-10.19	AV	190.00	100	Vertical	Pass
3	2390.000	38.07	-3.53	74.0	-35.93	Peak	344.00	100	Vertical	Pass
4	2391.615	49.27	-3.54	74.0	-24.73	Peak	324.00	100	Vertical	Pass

Product:	Wireless Headphone	Polarity	Horizontal
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	--	--



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2479.785	92.56	-3.57	74.0	18.56	Peak	181.00	100	Horizontal	N/A
2	2483.500	57.56	-3.57	74.0	-16.44	Peak	181.00	100	Horizontal	Pass
2**	2483.500	43.17	-3.57	54.0	-10.83	AV	181.00	100	Horizontal	Pass

Product:	Wireless Headphone	Detector	Vertical
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	--	--



No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Limit (dBuV/m)	Over Limit (dB)	Detector	Table (o)	Height (cm)	ANT	Verdict
1	2479.995	78.60	-3.57	74.0	4.60	Peak	355.00	100	Vertical	N/A
2	2483.500	43.64	-3.57	74.0	-30.36	Peak	352.71	100	Vertical	Pass

Note: 1. The PK emission level less than the AV limit. No necessary to record the AV emission level.

2. The two modulation modes of GFSK, Pi/4D-QPSK were tested. And only the worst case was recorded in the test report. GFSK was the worst case.

8.0 Antenna Requirement

Applicable Standard

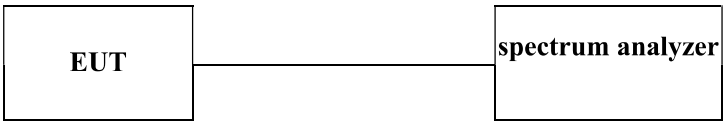
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section.

This product has a PCB antenna with gain 2.499dBi maximum. It fulfills the requirement of this section.

Test Result: Pass

9.0 20dB Bandwidth Measurement

Test Configuration



Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 30kHz RBW and 100kHz VBW.

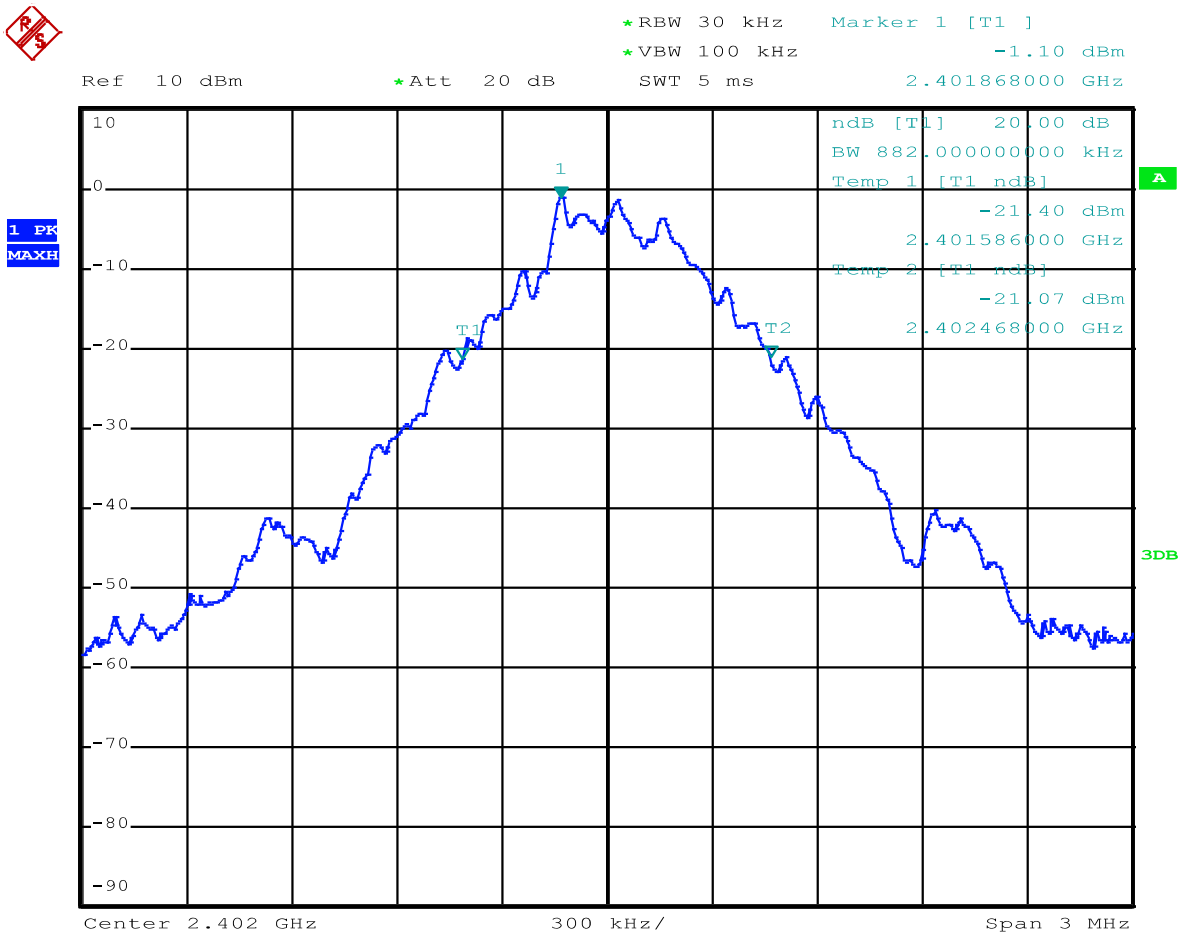
The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

Limit

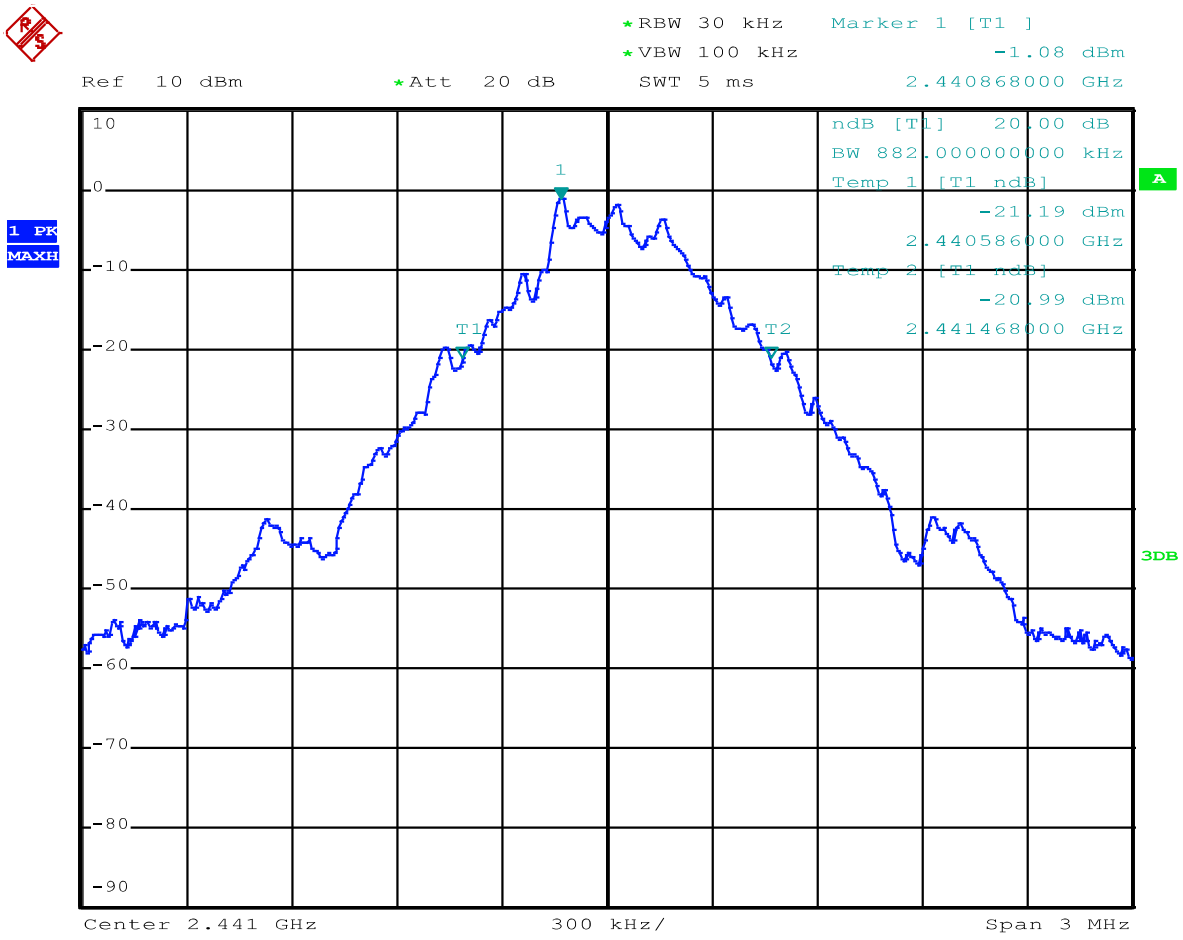
N/A

Test Result

GFSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	882kHz	--	--

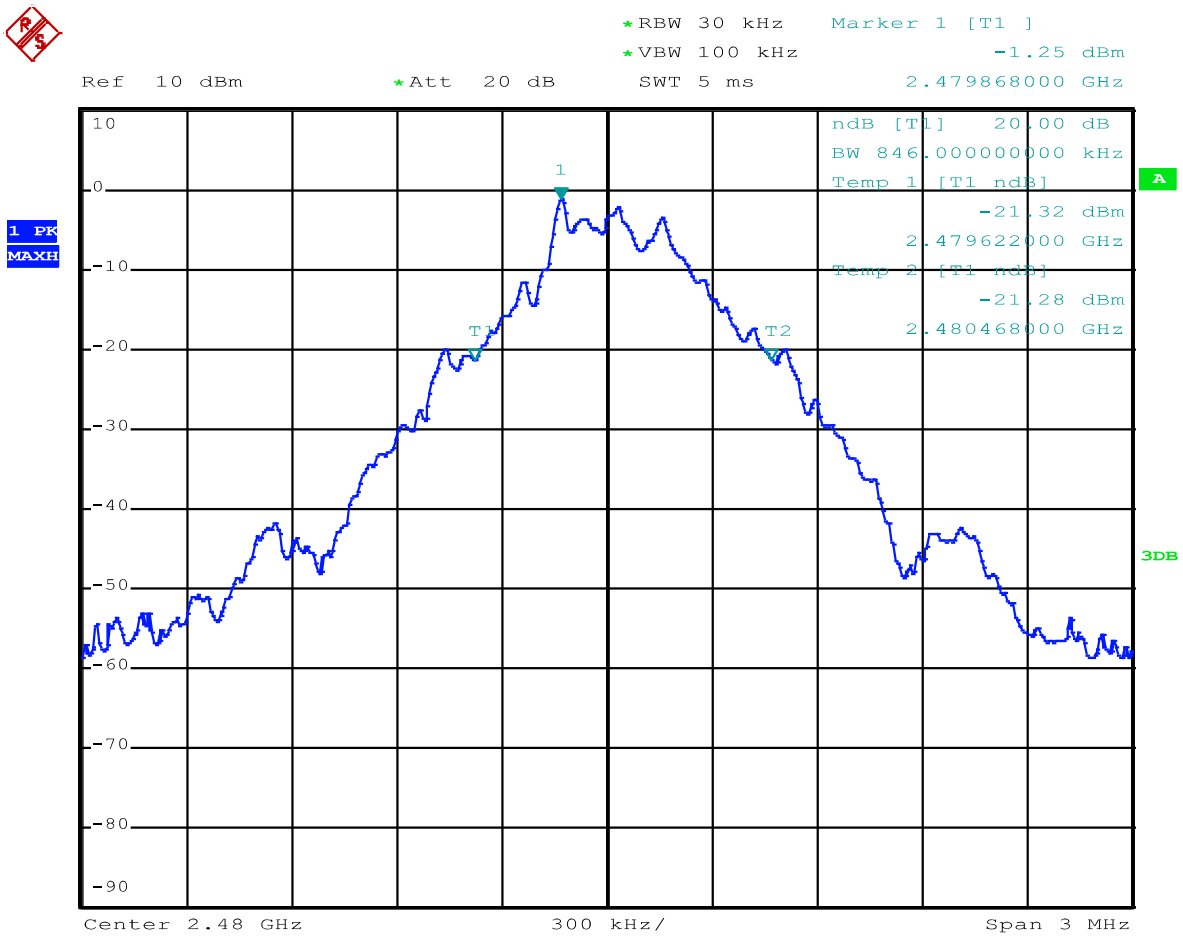


GFSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	882kHz	--	--



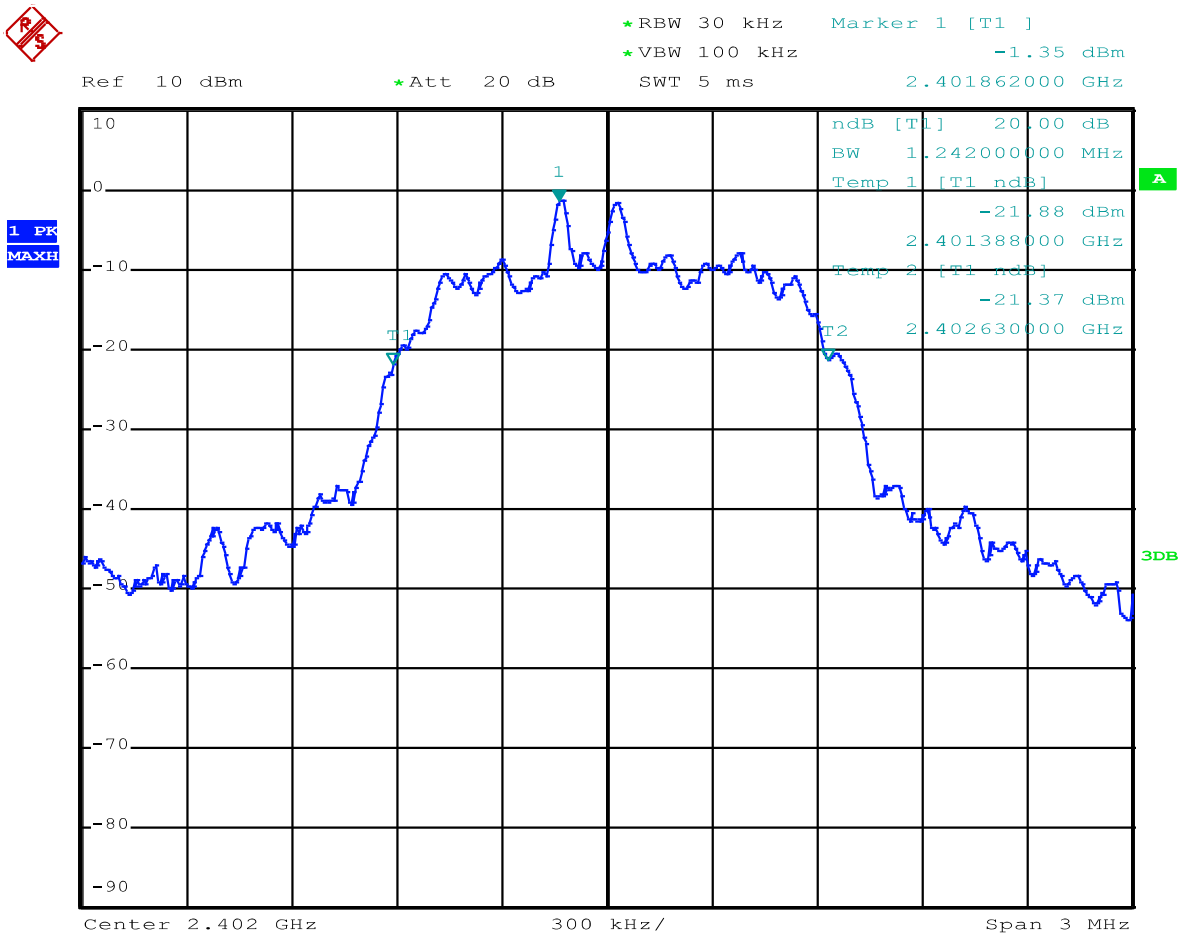
Date: 27.MAR.2025 09:09:17

GFSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	846kHz	--	--



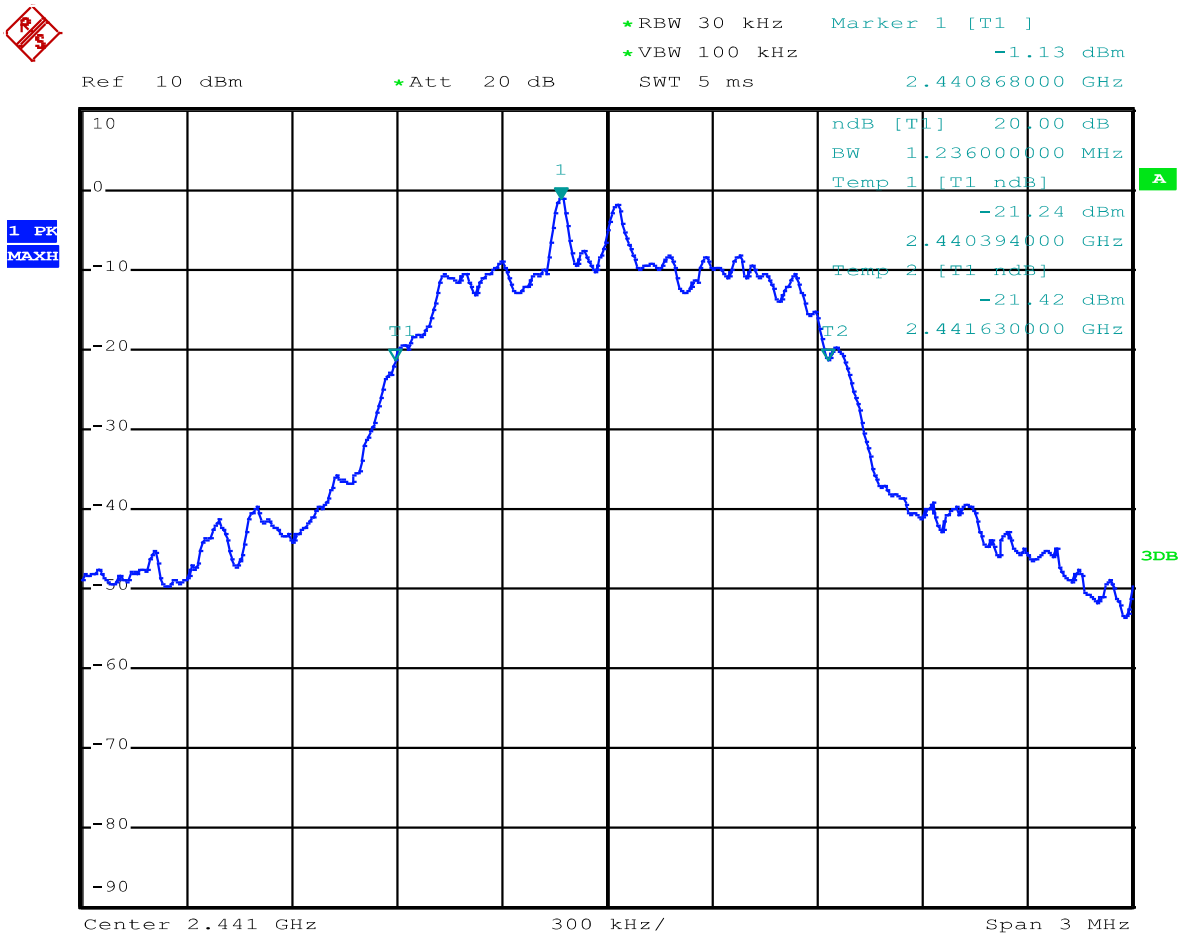
Date: 27.MAR.2025 09:09:55

Л/4DQPSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.242MHz	--	--



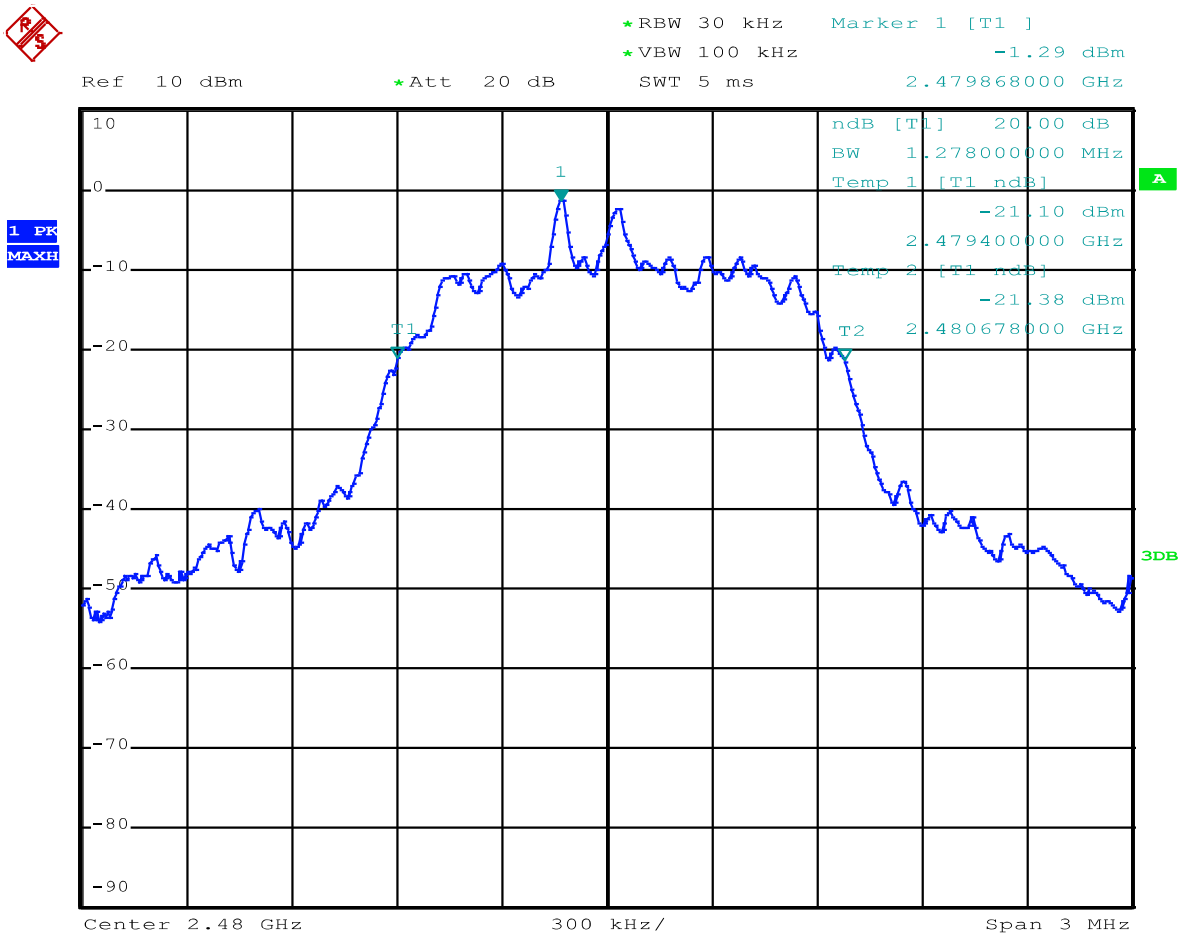
Date: 27.MAR.2025 09:10:31

Л/4DQPSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.236MHz	--	--



Date: 27.MAR.2025 09:11:07

Л/4DQPSK			
Product:	Wireless Headphone	Test Mode:	Keep transmitting
Mode	Keeping Transmitting	Test Voltage	DC3.7V
Temperature	24 deg. C,	Humidity	56% RH
Test Result:	Pass	Detector	PK
20dB Bandwidth	1.278MHz	--	--



Date: 27.MAR.2025 09:11:35