Test Report

Applicant:	Shenzhen Hanrongda Electronics Co.,Ltd
Product Name:	Headset With FM Receiver
Brand Name:	HanRongDa
FCC ID:	2APU9-HRD-392
Model No.:	HRD-392, SWD-392, ZWS-392
Remark:	Only the model “HRD-392” was tested, Their electrical circuit design, layout, components used and internal wiring are identical, Only the model name and Appearance colour is different.
Date of Receipt :	Aug.29,2025
Date of Test:	Sep.01,2025
Date of Report:	Sep.02,2025
Prepared by:	Shenzhen Most Technology Service Co., Ltd.

The testing has been performed on the submitted samples and found in compliance with the council FCC Rules and Regulations Part 15 Subpart B.

Shenzhen Most Technology Service Co., Ltd.
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TEST REPORT VERIFICATION

Report Number	MTEB25090016	
Applicant	Shenzhen Hanrongda Electronics Co.,Ltd	
	No.21,LiYuan Xia,XinLi Road,PingHu Town,LongGang District Shenzhen	
Manufacturer	Shenzhen Hanrongda Electronics Co.,Ltd	
	No.21,LiYuan Xia,XinLi Road,PingHu Town,LongGang District Shenzhen	
Product	Product Name	Headset With FM Receiver
	Model No.	HRD-392
	Power Supply	DC 3V by Batteries
Test Result	The EUT was found compliant with the requirement(s) of the standards.	
Standard	FCC Rules and Regulations Part 15 Subpart B Class B.	

*Note

The above device has been tested by Shenzhen Most Technology Service Co., Ltd. To determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test record, data evaluation & Equipment Under Test (EUT) configurations represented are contained in this test report and Shenzhen Most Technology Service Co., Ltd. Is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the requirement of the above standards.

This report applies to above tested sample only. This report shall not be reproduced except in full, without written approval of Shenzhen Most Technology Service Co., Ltd., this document may be altered or revised by Shenzhen Most Technology Service Co., Ltd., personal only, and shall be noted in the revision of the document.

Prepared by	Alisa Luo
	Alisa Luo(Engineer)
Reviewed by	Sunny Deng
	Sunny Deng(Engineer)
Approved by	Yvette
	Yvette Zhou(Manager)

1. GENERAL INFORMATION

1.1.Description of Device (EUT)

Description	:	Headset With FM Receiver
Model Number	:	HRD-392, SWD-392, ZWS-392
Remark	:	Used HRD-392 does all tests

1.2.Operational Mode(s) of EUT

Order Number	:	Test Mode(s)
1	:	FM mode
2	:	AUX IN

1.3.Test Voltage(s) of EUT

Order Number	:	Test Voltage(s)
1	:	DC 3V by Batteries

2. LABORATORY INFORMATION

2.1.Laboratory Name

Shenzhen Most Technology Service Co., Ltd.

2.2.Location

East A, 1/F., New Aolin Factory Buiding, Langshan Erlu, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China

2.3.Test facility

3m Anechoic Chamber	:	Nov. 28, 2012 File on Federal Communication Commission Registration Number:490827
Shielding Room	:	Nov. 28, 2012 File on Federal Communication Commission Registration Number:490827
EMC Lab.	:	Accredited by TUV Rheinland Shenzhen Audit Report: UA 50149851 Mar. 12, 2009 Accredited by Industry Canada Registration Number: 7103A-1 Oct. 22, 2012 Accredited by TIMCO Registration Number: Q1460 March 28, 2010

2.4.Measurement Uncertainty

No.	Item	Uncertainty
1.	Uncertainty for Conducted Disturbance Test	1.25dB
2.	Uncertainty for Radiated Disturbance Test	3.15dB

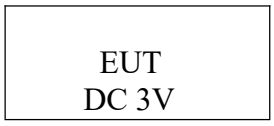
3. SUMMARY OF TEST RESULTS

EMISSION			
Test Item	**Standard**	**Limits**	**Results**
Conducted disturbance at mains terminals	FCC Part 15	Class B	N/A
Radiated disturbance	FCC Part 15	Class B	PASS
N/A is an abbreviation for Not Applicable.			

4. BLOCK DIAGRAM OF TEST SETUP

The equipments are installed test to meet ANSI C63.4:2014 requirement and operating in a manner which tends to maximize its emission characteristics in a normal application. EUT was tested in normal configuration (Please See following Block diagrams)

4.1. Block Diagram of connection between EUT and simulation-EMI



(EUT: Headset With FM Receiver)

5. TEST INSTRUMENT USED

5.1.For Conducted Disturbance at Mains Terminals Emission Test

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESPI	101202	Mar. 04, 25	1 Year
2.	L.I.S.N.	Rohde & Schwarz	ENV216	100093	Mar. 04, 25	1 Year
3.	Coaxial Switch	Anritsu Corp	MP59B	6200283933	Mar. 04, 25	1 Year
4.	Terminator	Hubersuhner	50Ω	No.1	Mar. 04, 25	1 Year
5.	RF Cable	SchwarzBeck	N/A	No.1	Mar. 04, 25	1 Year
6.	Testing software	Fala	EZ-EMC(CE)	Ver.con-03A1	/	/

5.2.For Radiation Test (In Anechoic Chamber)(Below 1000MHz)

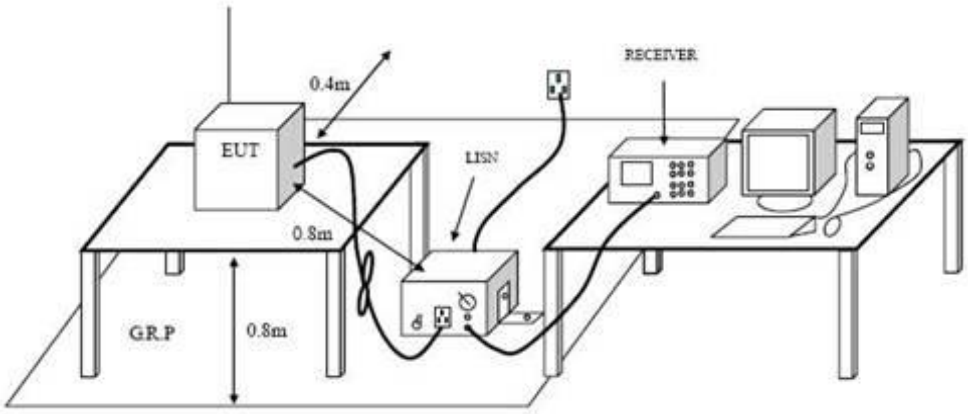
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Test Receiver	Rohde & Schwarz	ESCI	100492	Mar. 04, 25	1 Year
2.	Bilog Antenna	Sunol	JB3	A121206	Aug. 13, 25	1 Year
3.	Cable	Times	N/A	NO.1	Mar. 04, 25	1 Year
4.	Cable	Times	N/A	NO.2	Mar. 04, 25	1 Year
5.	Cable	Times	N/A	NO.3	Mar. 04, 25	1 Year
6.	DC Power Filter	DuoJi	DL2&30B	N/A	N/A	N/A
7.	Single Phase Power Line Filter	DuoJi	FNF 202B30	N/A	N/A	N/A
8.	3 Phase Power Line Filter	DuoJi	FNF 402B30	N/A	N/A	N/A
9.	Testing software	Fala	EZ-EMC(RE)	Ver.FA-03A1	/	/

5.3.For Radiation Test (In Anechoic Chamber)(Above 1000MHz)

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	N9020A	/	Mar. 04, 25	1 Year
2	Pre- Amplifier	MW	KA-LNA18-40-01	24001	Mar. 04, 25	1 Year
3	Horn Antenna	Schwarzback	BBHA9120 D	D69250	Mar. 16, 25	1 Year
4	RF Cable(below1GHz)	Times	9kHz-1GHz	RF Cable No.1	Mar. 04, 25	1 Year
5	RF Cable(above1GHz)	Times	1-18G	RF Cable No.2	Mar. 04, 25	1 Year
6	DC Power Filter	DuoJi	DL2×30B	N/A	N/A	N/A
7	Single Phase Power Line Filter	DuoJi	FNF 202B30	N/A	N/A	N/A
8	3 Phase Power Line Filter	DuoJi	FNF 402B30	N/A	N/A	N/A
9.	Testing software	Fala	EZ-EMC(RE)	Ver.FA-03A1	/	/

6. CONDUCTED DISTURBANCE AT MAINS TERMINALS TEST

6.1.Configuration of Test System



6.2.Test Standard

FCC Subpart 15 B Section 15.107

6.3.Power Line Conducted Disturbance at Mains Terminals Limit

Frequency (MHz)	Maximum RF Line Voltage	
	Quasi-Peak Level dB(μV)	Average Level dB(μV)
0.15 ~ 0.50	66 ~ 56*	56 ~ 46*
0.50 ~ 5.00	56	46
5.00 ~ 30.00	60	50

Notes: 1. * Decreasing linearly with logarithm of frequency.
2. The lower limit shall apply at the transition frequencies.

6.4.Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provided a 50-ohm coupling impedance for the EUT (Please refer to the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). Both sides of power line were checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4:2014 on conducted Disturbance test.

The bandwidth of test receiver is set at 9 kHz.

The frequency range from 150kHz to 30MHz is checked. The test result are reported on Section 6.5.

6.5. Conducted Disturbance at Mains Terminals Test Results

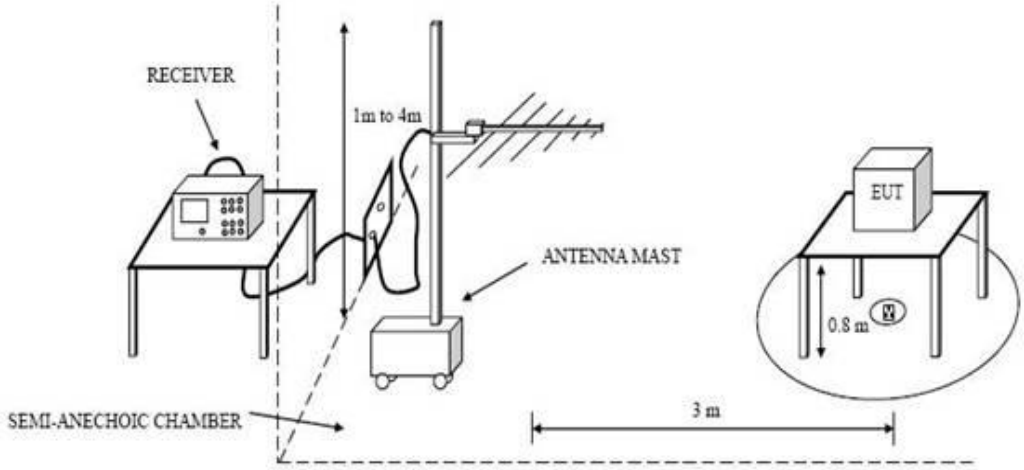
Test Results: N/A

If the average limit is met when using a quasi-peak detector, the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

Emission Level= Correct Factor + Reading Level.

7. RADIATED DISTURBANCE TEST

7.1.Configuration of Test System



7.2.Test Standard

FCC Subpart 15 B Section 15.109

7.3.Radiated Disturbance Limit

Frequency (MHz)	Distance (Meters)	Field Strengths Limits (dBμV/m)	
30 ~ 88	3	40.0	
88~216	3	43.5	
216~960	3	46.0	
960 ~ 1000	3	54.0	
1000-18000	3	74(Peak)	54(AV)

Note: 1. Emission level (dB)μV = 20 log Emission level μV/m
2.The lower limit shall apply at the transition frequencies.
3. Distance refers to the distance in meters between the test antenna and the closed point of any part of the EUT.

7.4.Test Procedure

The EUT was placed on a non-metallic table, 80 cm above the ground plane inside a semi-anechoic chamber. An antenna was located 3m from the EUT on an adjustable mast. A pre-scan was first performed in order to find prominent radiated emissions. For final emissions measurements at each frequency of interest, the EUT were rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.4:2014 on Radiated Disturbance test.

The bandwidth setting on the test receiver is 120 kHz.

The frequency range from 30MHz to 1000MHz is checked. The test result are reported on Section 7.5

7.5. Radiated Disturbance Test Results

Test Results: PASS

Emission Level= Correct Factor + Reading Level.

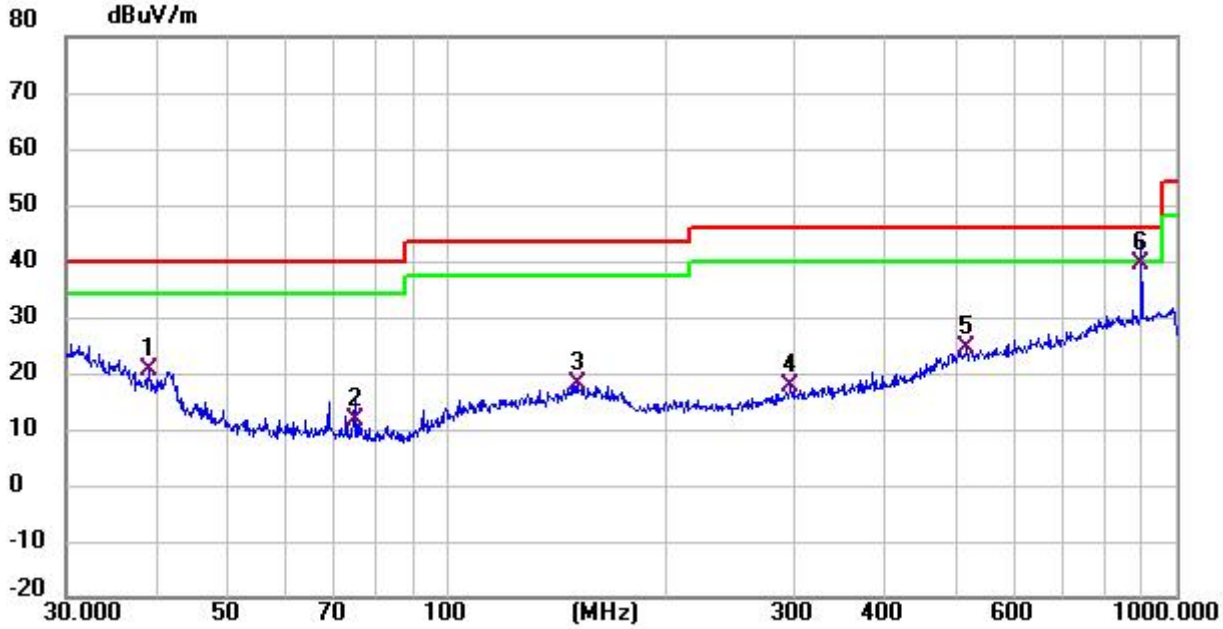
All reading are Quasi-Peak values.

The test data and the scanning waveform are attached within Appendix I.

Note : All test modes are performed, only the worst case is recorded in this report.

APPENDIX I

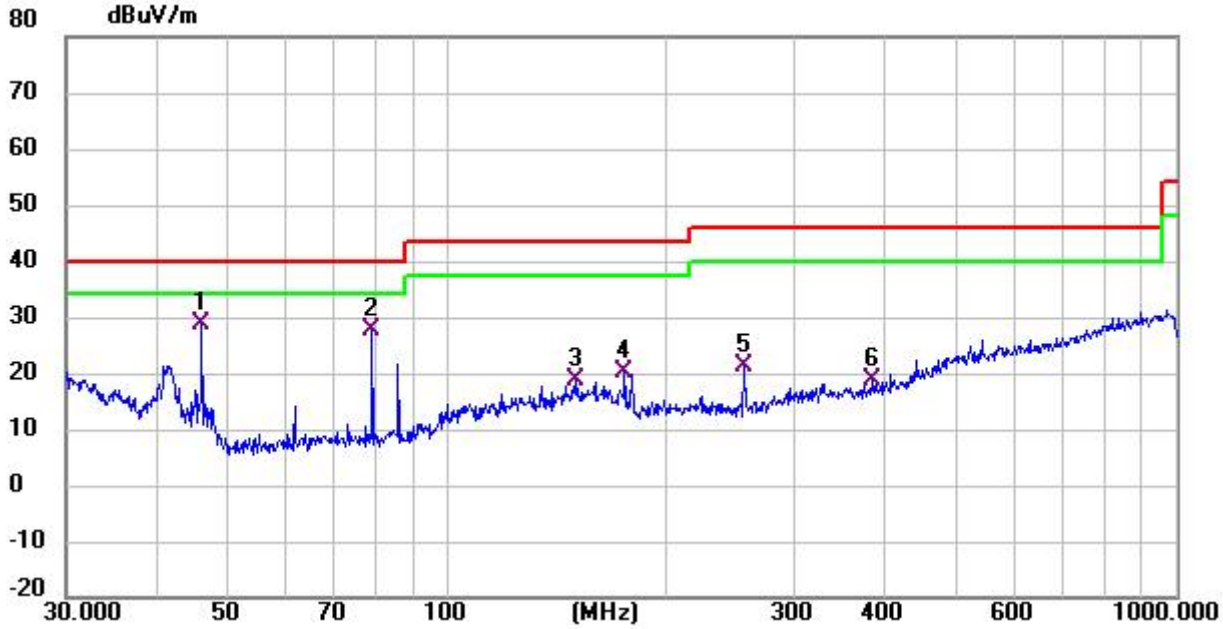
EUT:	**Headset With FM Receiver**	**M/N:**	**HRD-392**
Mode:	**FM mode**	**Polarization:**	**Horizontal**
Tested by:	**Cole**	**Power:**	**DC 3V by Batteries**
Temperature: / Humidity	**25.4℃/ 55.0%**	**Test date:**	**2025-09-01**



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	39.0800	1.71	18.98	20.69	40.00	-19.31	QP	200	50	P	
2	74.8399	1.27	10.26	11.53	40.00	-28.47	QP	200	100	P	
3	151.4400	0.27	17.64	17.91	43.50	-25.59	QP	200	150	P	
4	296.9600	1.17	16.40	17.57	46.00	-28.43	QP	200	250	P	
5	518.6000	1.60	22.90	24.50	46.00	-21.50	QP	200	300	P	
6 *	898.3600	10.32	28.98	39.30	46.00	-6.70	QP	200	330	P	

*:Maximum data x:Over limit !:over margin

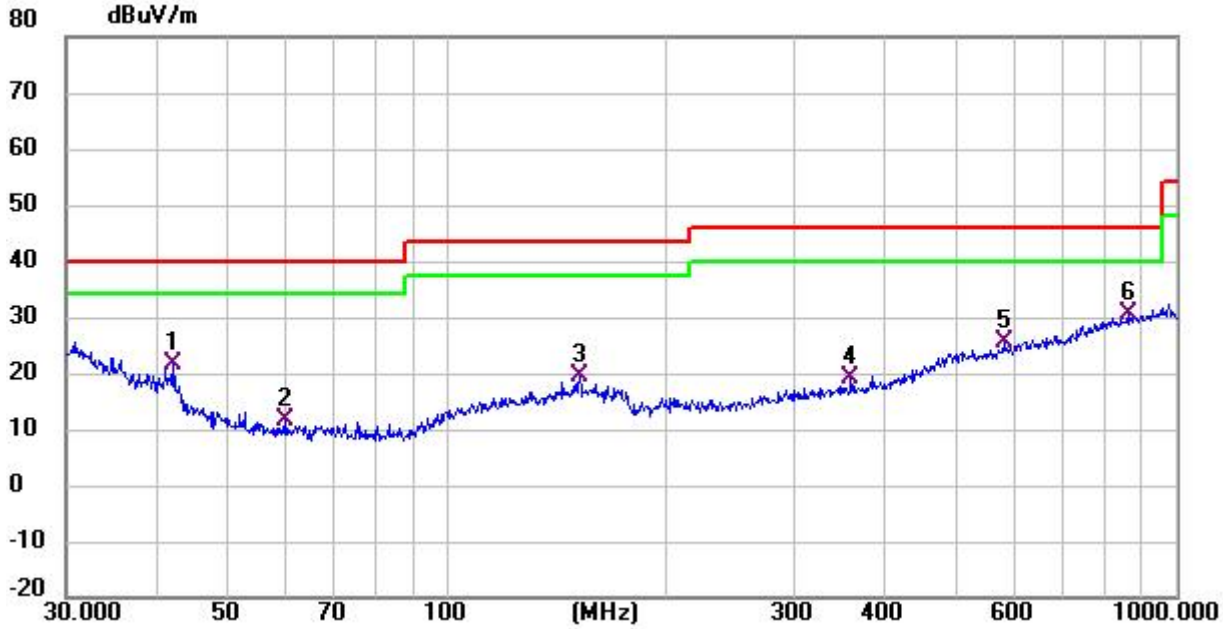
EUT:	**Headset With FM Receiver**	**M/N:**	**HRD-392**
Mode:	**FM mode**	**Polarization:**	**Vertical**
Tested by:	**Cole**	**Power:**	**DC 3V by Batteries**
Temperature: / Humidity	**25.4℃/ 55.0%**	**Test date:**	**2025-09-01**



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	46.0400	18.92	10.00	28.92	40.00	-11.08	QP	100	20	P	
2	79.2000	17.63	10.04	27.67	40.00	-12.33	QP	100	100	P	
3	150.9600	1.25	17.66	18.91	43.50	-24.59	QP	100	150	P	
4	175.4800	3.45	16.59	20.04	43.50	-23.46	QP	100	200	P	
5	255.7600	6.20	15.00	21.20	46.00	-24.80	QP	100	250	P	
6	384.0000	0.51	18.10	18.61	46.00	-27.39	QP	100	300	P	

*:Maximum data x:Over limit !:over margin

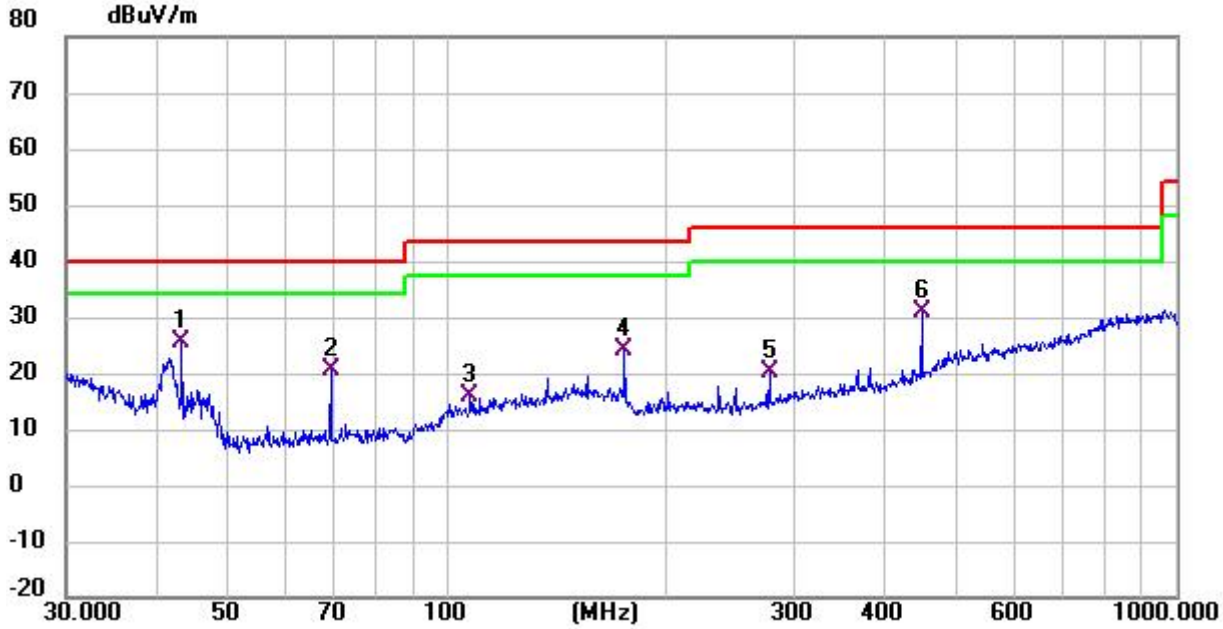
EUT:	**Headset With FM Receiver**	**M/N:**	**HRD-392**
Mode:	**AUX IN**	**Polarization:**	**Horizontal**
Tested by:	**Cole**	**Power:**	**DC 3V by Batteries**
Temperature: / Humidity	**25.4℃/ 55.0%**	**Test date:**	**2025-09-01**



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1	42.0800	4.64	16.80	21.44	40.00	-18.56	QP	200	10	P	
2	60.1200	1.02	10.60	11.62	40.00	-28.38	QP	200	20	P	
3	152.4000	1.95	17.60	19.55	43.50	-23.95	QP	200	50	P	
4	358.6800	1.47	17.61	19.08	46.00	-26.92	QP	200	150	P	
5	581.2000	1.89	23.59	25.48	46.00	-20.52	QP	200	200	P	
6 *	861.8000	1.93	28.58	30.51	46.00	-15.49	QP	200	330	P	

*:Maximum data x:Over limit !:over margin

EUT:	Headset With FM Receiver	M/N:	HRD-392
Mode:	AUX IN	Polarization:	Vertical
Tested by:	Cole	Power:	DC 3V by Batteries
Temperature: / Humidity	25.4℃/ 55.0%	Test date:	2025-09-01

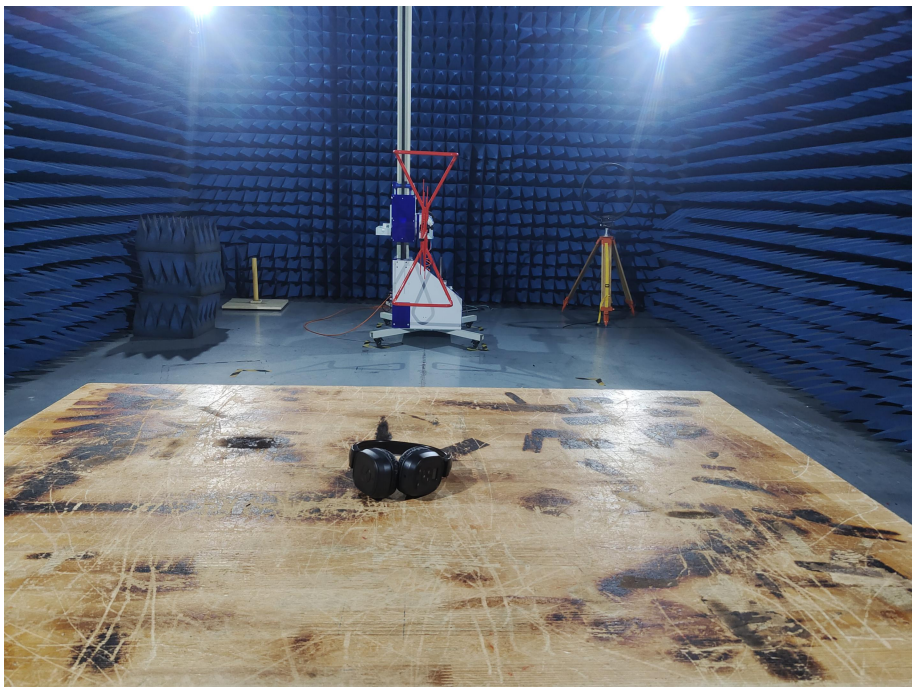


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	Height (cm)	Azimuth (deg.)	P/F	Remark
1 *	43.2800	13.77	11.64	25.41	40.00	-14.59	QP	100	20	P	
2	69.5199	11.10	9.27	20.37	40.00	-19.63	QP	100	310	P	
3	107.6000	1.28	14.44	15.72	43.50	-27.78	QP	100	80	P	
4	175.2800	7.35	16.68	24.03	43.50	-19.47	QP	100	160	P	
5	277.8400	4.27	15.75	20.02	46.00	-25.98	QP	100	200	P	
6	448.6400	10.57	20.49	31.06	46.00	-14.94	QP	100	270	P	

*:Maximum data x:Over limit !:over margin

APPENDIX II
(Test Photos)

RADIATED Test Setup Photograph



APPENDIX III
(Photos of the EUT)

PHOTO OF THE ENTIRE SAMPLE

FRONT VIEW OF SAMPLE

BACK VIEW OF SAMPLE

LEFT VIEW OF SAMPLE

RIGHT VIEW OF SAMPLE

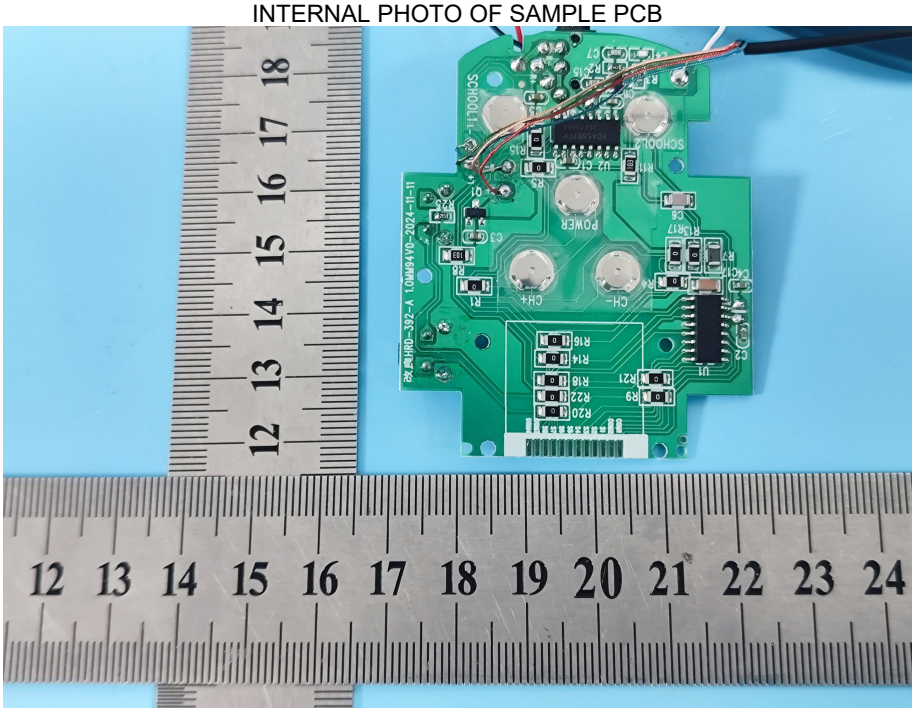
TOP VIEW OF SAMPLE

BOTTOM VIEW OF SAMPLE

INTERNAL PHOTO OF SAMPLE

INTERNAL PHOTO OF SAMPLE

INTERNAL PHOTO OF SAMPLE PCB



INTERNAL PHOTO OF SAMPLE PCB