

RF Exposure Evaluation Report

Report Reference No..... : MTEB25070080-H

FCC ID..... : 2APU9-HRD-802

Compiled by

(position+printed name+signature) : File administrators Alisa Luo



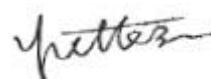
Supervised by

(position+printed name+signature) : Test Engineer Sunny Deng



Approved by

(position+printed name+signature) : Manager Yvette Zhou



Date of issue..... : **Jul.09,2025**

Representative Laboratory Name. : Shenzhen Most Technology Service Co., Ltd.

Address..... : No.5, 2nd Langshan Road, North District, Hi-tech Industrial Park,
Nanshan, Shenzhen, Guangdong, China.

Applicant's name..... : Shenzhen Hanrongda Electronics Co.,Ltd.

Address..... : No.21, LiYuanxia,Xin Li Road, Ping Hu Town,Long Gang
District,Shenzhen,China

Test specification/ Standard..... : 47 CFR Part 1.1307

47 CFR Part 2.1093

TRF Originator..... : Shenzhen Most Technology Service Co., Ltd.

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Test item description..... : Multi-Band Wooden Box Radio BT.TF Card.Aux-in Bass Music Player

Trade Mark..... : HanRongDa

Model/Type reference..... : HRD-802

Listed Models : HRD-802S, HRD-802PLUS, ZWS-802, ZWS-802S,
ZWS-802 PLUS

Modulation Type..... : GFSK, π/4DQPSK,8DPSK

Operation Frequency..... : From 2402MHz to 2480MHz

Hardware Version..... : 1.8

Software Version..... : V2.04

Rating..... : DC 3.7V by Battery*3
DC 5V by USB Port

Result..... : PASS

TEST REPORT

Equipment under Test : Multi-Band Wooden Box Radio BT.TF Card.Aux-in Bass Music Player

Model /Type : HRD-802

Listed Models : HRD-802S, HRD-802PLUS, ZWS-802, ZWS-802S, ZWS-802 PLUS

Remark : Only the model "HRD-802" was tested, Their electrical circuit design, layout, components used and internal wiring are identical, Only the Appearance color is different.

Applicant : Shenzhen Hanrongda Electronics Co.,Ltd

Address : No.21, LiYuanxia,Xin Li Road, Ping Hu Town,Long Gang District,Shenzhen,China

Manufacturer : Shenzhen Hanrongda Electronics Co.,Ltd

Address : No.21, LiYuanxia,Xin Li Road, Ping Hu Town,Long Gang District,Shenzhen,China

Test Result:	PASS
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The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2025.07.09	Initial Issue	Alisa Luo

2. SAR Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

2.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

2.1.3 EUT RF Exposure

Measurement Data

BLE

GFSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	2.49	2.49±1	3.49
Middle(2440MHz)	2.41	2.41±1	3.41
Highest(2480MHz)	2.85	2.85±1	3.85

Worst case: GFSK

Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Highest(2480MHz)	2.85	3.85	2.43	0.76	3.0	Yes

EDR

GFSK

Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	-0.87	-0.87±1	0.13
Middle(2441MHz)	-0.52	-0.52±1	0.48
Highest(2480MHz)	-0.51	-0.51±1	0.49

π/4DQPSK

Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	1.41	1.41±1	2.41
Middle(2441MHz)	1.81	1.81±1	2.81
Highest(2480MHz)	1.77	1.77±1	2.77

8DPSK			
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power
			(dBm)
Lowest(2402MHz)	1.88	1.88±1	2.88
Middle(2441MHz)	2.16	2.16±1	3.16
Highest(2480MHz)	2.21	2.21±1	3.21

Worst case: 8DPSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold	SAR Test Exclusion
		(dBm)	(mW)			
Highest(2480MHz)	2.21	3.21	2.09	0.66	3.0	Yes

.....THE END OF REPORT.....