

# RF TEST REPORT

Product Name: High Speed USB Receiver

Model Name: WL-MF

FCC ID: 2BD6J-WLMF

Issued For : Jiangxi Dewa Electronic Industry Co., Ltd.

1F, 6B, Phase II, Dexing high-tech industrial park, Dexing City,

Jiangxi

Issued By : Shenzhen LGT Test Service Co., Ltd.

Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan

District, Shenzhen, Guangdong, China

Report Number: LGT23L059HA02

Sample Received Date: Dec. 14, 2023

Date of Test: Dec. 14, 2023 – Jan. 03, 2024

Date of Issue: Jan. 03, 2024

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## **TEST REPORT CERTIFICATION**

**Applicant:** Jiangxi Dewa Electronic Industry Co., Ltd.

Address: 1F, 6B, Phase II, Dexing high-tech industrial park, Dexing City,

Jiangxi

Manufacture: RUIWA TECHNOLOGIES(CHONGQING)CO.,LTD

Address: No. 36 Fengsheng Road, Jinfeng Town, Chongqing high-tech zone

Product Name: High Speed USB Receiver

Trademark:

Model Name: WL-MF

Sample Status: Normal

APPLICABLE STANDARDS					
STANDARD	TEST RESULTS				
FCC 47CFR §2.1093 KDB 447498 D01 General RF Exposure Guidance v06	PASS				

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# **Revision History**

Rev.	Issue Date	Revisions
00	Jan. 03, 2024	Initial Issue

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# 1. GENERAL INFORMATION

## 1.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	High Speed USB Receiver			
Trademark:	Ψ			
Model Name:	WL-MF			
Series Model:	N/A			
Model Difference:	N/A			
Frequency Bands:	Bluetooth 2402-2480MHz			
Rating:	DC 5V			
Hardware Version:	N/A			
Software Version:	N/A			

## **1.2 TEST LABORATORY**

Company Name:	Shenzhen LGT Test Service Co., Ltd.		
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China		
Accreditation Certificate	A2LA Certificate No.: 6727.01		
	FCC Registration No.: 746540		
	CAB ID: CN0136		

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#### 2. FCC 47CFR §2.1093 REQUIREMENT

#### 2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in KDB 447498 D01 General RF Exposure Guidance v06 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached. Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

#### **2.2 LIMIT**

Approximate SAR Test Exclusion Power Thresholds at Selected Frequencies and Test Separation Distances are illustrated in the following Table.

MHz	5	10	15	20	25	mm	
150	39	77	116	155	194		
300	27	55	82	110	137		
450	22	45	67	89	112		
835	16	33	49	66	82		
900	16	32	47	63	79		
1500	12	24	37	49	61	SAR Test	
1900	11	22	33	44	54	Exclusion Threshold (mW)	
2450	10	19	29	38	48	1111 conota (2211)	
3600	8	16	24	32	40		
5200	7	13	20	26	33		
5400	6	13	19	26	32		
5800	6	12	19	25	31		
MHz	30	35	40	45	50	mm	
150	232	271	310	349	387		
300	164	192	219	246	274		
450	134	157	179	201	224		
835	98	115	131	148	164		
900	95	111	126	142	158	CART	
1500	73	86	98	110	122	SAR Test Exclusion	
1900	65	76	87	98	109	Threshold (mW)	
2450	57	67	77	86	96	The conour (mw)	
3600	47	55	63	71	79		
5200	39	46	53	59	66		
5400	39	45	52	58	65		
5800	37	44	50	56	62		

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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:

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

Power and distance are rounded to the nearest mW and mm before calculation. The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq$  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.

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## 2.3 TEST RESULT

## **Turn up Result**

Mode	Turn up Power		
2.4G-GFSK	-0.5±1dBm		

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### The MPE result of worst mode:

RF Function	Frequency (MHz)	Max Turn up Power (dBm)	Max Turn up Power (mW)	Estimated SAR	Limit	Ratio	Result
2.4G	2402	0.50	1.12	0.348	3	0.116	Pass

#### Note:

1. The estimated SAR≤ 3.0 for 1-g SAR, Separation distance ≤ 5mm, complies with the exemption requirements.

\* \* \* \* \* END OF THE REPORT \* \* \* \* \*

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