

TEST REPORT

Reference No...... : WTS20S06036686W002
FCC ID : ZLZTDBTSE
Applicant..... : Shenzhen Mindray Bio-Medical Electronics Co., Ltd.
Address..... : Mindray Building, Keji 12th Road South, High-tech Industrial Park,
Nanshan, Shenzhen 518057, PEOPLE'S REPUBLIC OF CHINA
Manufacturer : The same as above
Address..... : The same as above
Product..... : wireless module
Model(s) : Panlink2
Brand Name..... : Mindray
Standards..... : FCC Part 2.1091
Date of Receipt sample : 2020-06-13
Date of Test : 2020-06-14 to 2020-06-28
Date of Issue..... : 2020-06-30
Test Result..... : **Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

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Reference No.: WTS20S06036686W002

Page 1 of 7

2 **Contents**

	Page
1 COVER PAGE.....	1
2 CONTENTS	2
3 REVISION HISTORY	3
4 GENERAL INFORMATION.....	4
4.1 GENERAL DESCRIPTION OF E.U.T.	4
4.2 DETAILS OF E.U.T.	4
5 TEST FACILITY	5
6 TEST SUMMARY	6
7 RF EXPOSURE.....	7
7.1 PROCEDURES AND REQUIREMENTS	7
7.2 CALCULATION METHOD.....	7
7.3 TEST RESULT	7

3 Revision History

Test report No.	Date of Receipt sample	Date of Test	Date of Issue	Purpose	Comment	Approved
WTS20S06036 686W002	2020-06-13	2020-06-14 to 2020-06-28	2020-06-30	original	-	Valid

4 General Information

4.1 General Description of E.U.T.

Product:	wireless module
Model(s):	Panlink2
Model Description:	N/A
Bluetooth Version:	Bluetooth v4.0 BLE
Hardware Version:	01-01-/
Software Version:	1.0

4.2 Details of E.U.T.

Operation Frequency:	2402-2480MHz
Max. RF output power:	1.96dBm
Type of Modulation:	GFSK
Change Antenna installation:	ANT1 FPC PIFA Antenna ANT2 PCB PIFA Antenna
Change Antenna Gain:	ANT1: 0.64dBi ANT2: 1.0dBi
Original Antenna installation:	ANT1 FPC dipole Antenna ANT2 Copper pipe dipole Antenna ANT3 FPC PIFA Antenna
Original Antenna Gain:	ANT1: 2.0dBi ANT2: 3.53dBi ANT3: 1.0dBi
Ratings:	DC 3.3V

5 Test Facility

The test facility has a test site registered with the following organizations:

ISED CAB identifier: CN0013. Test Firm Registration No.: 7760A.

Waltek Services(Shenzhen) Co., Ltd. Has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files.

Registration number 7760A, October 15, 2016.

FCC Designation No.: CN1201. Test Firm Registration No.: 523476.

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration number 523476, September 10, 2019.

6 **Test Summary**

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	2.1091	PASS

7 RF Exposure

Test Requirement: FCC Part 2.1091

Test Mode: The EUT work in test mode(Tx).

7.1 Procedures and Requirements

According to § 15.247 (i) and § 1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f_{\text{(GHz)}}}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,¹⁶ 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.

Routine SAR evaluation refers to that specifically required by § 2.1091, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

7.2 Calculation Method

FCC Part 2.1091:

$$\text{result} = P \sqrt{F} / D$$

P= Maximum turn-up power in mW

F= Channel frequency in GHz

D= Minimum test separation distance in mm

7.3 Test Result

FCC Part 2.1091:

A distance of 5mm normally can be maintained between the user and the device.

Modulation	CH	Conducted Power (dBm)	Tune Up Power (dBm)	Max Tune Up Power (dBm)	Max Tune Up Power (mW)	Result	Limit
GFSK	Low	1.96	1 ± 1	2	1.59	0.5	3
GFSK	Mid	1.24	1 ± 1	2	1.59	0.5	3
GFSK	High	1.35	-1 ± 1	2	1.59	0.5	3

=====End of Report=====