SAR Exclusion Evaluation Report

Applicant	:	RONDISH COMPANY LIMITED
Product Type	:	Early Alert Bed Sensor Pad
Trade Name	:	Rondish
Model Number	:	WPAS-10
Date of Received	:	Feb. 02, 2021
Test Period	:	Mar. 09 ~ Mar. 10, 2021
Test Period	:	Mar. 23, 2021

Issue by

A Test Lab Techno Corp.
101-104, 1F, A building, Safflower ridge industrial area,
Taoyuan street, Nanshan district, Shenzhen
Tel：+86-755-23987770 / Fax：+86-755-26637771

Certificate #3464.02

American Association for Laboratory Accreditation number: 3464.02
Test Firm MRA designation number: CN1168

Approved By : Louis Shen (Louis Shen)

Tested By : Joyce Feng (Joyce Feng)

Revision History

Rev.	Issue Date	Revisions
00	Mar. 23, 2021	Initial Issue

Contents

1. Description of Equipment under Test (EUT)

Applicant	RONDISH COMPANY LIMITED UNIT G&H, 4/F, Block 1, KWAI TAK IND. CTR, 15-33 K Hong Kong		
Manufacturer	RONDISH COMPANY LIMITED UNIT G&H, 4/F, Block 1, KWAI TAK IND. CTR, 15-33 K Hong Kong		
Product Type	Early Alert Bed Sensor Pad		
Trade Name	Rondish		
Model Number	WPAS-10		
FCC ID	WNG-WPAS-10		
Frequency Range	Operate Band	Frequency Range (MHz)	
	SRD	433.92	
Antenna information	Type	Max. Gain (dBi)	
	wire antenna	433.92	-3

The above equipment was tested by A Test Lab Techno Corp. For compliance with the requirements set forth in 47 CFR § 2.1093. The results of testing in this report apply only to the product/system, which was tested. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

2. Reference Applicable Standard

Standard	Description	Version
ANSI/IEEE C95.1	American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300 kHz to 100 GHz, New York.	1992
IEEE 1528	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head From Wireless Communications Devices: Measurement Techniques.	2013
FCC 47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices.	---
FCC KDB 865664 D01	SAR measurement 100 MHz to 6 GHz - describes SAR measurement procedures for devices operating between 100 MHz to 6 GHz	v01r04
FCC KDB 865664 D02	RF Exposure Reporting - provides general reporting requirements as well as certain specific information required to support MPE and SAR compliance.	v01r02
FCC KDB 447498 D01	General RF Exposure Guidance - provides guidance pertaining to RF exposure requirements for mobile and portable device equipment authorizations.	v06

3. SAR Test Exclusion

As RF exposure evaluation of portable device, SAR test is not required when the evaluation results. According to KDB 447498 4.3.1, unless excluded by specific FCC test procedures, portable devices shall include SAR data for equipment approval. SAR test necessity will be based on the exclusion result.

The test exclusion refers KDB 447498 as below:

≤50 mm:

[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

>50 mm and <200 mm:

a) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance - 50 mm)·(f(MHz)/150)] mW, at 100 MHz to 1500 MHz

b) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz

3.1 Conducted Power

The conducted power turn-up tolerance, please reference manufacturer specification.

Band	Modulation Type	Frequency (MHz)	Average Power (dBm)
SRD	ASK	433.92	-9.005

3.2 Antenna Location

Ant. Used	Antenna to user distance (mm)					
	Side 1	Side 2	Side 3	Side 4	Side 5	Side 6
SRD Antenna	1	6	7	8	10	30

3.3 Evaluation Results

The evaluation of SAR test reduction according to KDB447498

SAR test is not required when the results showed “EXEMPT”.

SAR test reduction									
Ant. Used	Frequency (GHz)	Power		Calculated threshold value					
		(dBm)	(mW)	Side 1	Side 2	Side 3	Side 4	Side 5	Side 6
SRD Antenna	433.92	-11.005	0.079	0.0	0.0	0.0	0.0	0.0	0.0
				EXEMPT	EXEMPT	EXEMPT	EXEMPT	EXEMPT	EXEMPT

Exclusion Considerations: SAR is not required

Note: 1. Calculated Value include string "mW", that is mean through compare output power with threshold, if the output power more than threshold value the SAR test should be perform. Otherwise, the SAR test could be exempt. (>50mm)

2. Calculated Value only include number format, that is mean through compare output power with threshold, if the threshold value more than 3, the SAR test should be perform. Otherwise, the SAR test could be exempt. (<50mm)
3. When an antenna qualifies for the standalone SAR test exclusion of KDB447498 section 4.3.1 and also transmits simultaneously with other antennas, the standalone SAR value must be estimated according to KDB447498 section "4.3.2. Simultaneous transmission SAR test exclusion considerations b) ".
4. We used highest frequency and power, the result should be evaluated the worst case.
5. Power and distance are rounded to the nearest mW and mm before calculation.
6. The result is rounded to once decimal place for comparison.
7. We use a minimum distance of 5mm for Bluetooth function.