EXPOSURE REPORT

FCC ID: A7M-RWC36

Date of issue: Feb. 12, 2020

Report Number:	MTi19112909-8E2
Sample Description:	Wireless Charging Stand
Model(s):	RWC36, MWC36
Applicant:	Shenzhen Reflying Electronic Co., Ltd.
Address:	6 Bldg., Gaoxinjian Industrial Zone, Heping Villag Fuyong Town, Bao'an District, Shenzhen, Guangdong, China
Date of Test:	Dec. 14, 2019 – Jan. 10, 2020

Shenzhen Microtest Co., Ltd.

http://www.mtitest.com

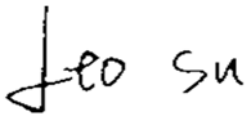
Test Result Certification

Applicant’s name:	Shenzhen Reflying Electronic Co., Ltd.
Address:	6 Bldg., Gaoxinjian Industrial Zone, Heping Villag Fuyong Town, Bao'an District, Shenzhen, Guangdong, China
Manufacture's name:	Shenzhen Reflying Electronic Co., Ltd.
Address:	6 Bldg., Gaoxinjian Industrial Zone, Heping Villag Fuyong Town, Bao'an District, Shenzhen, Guangdong, China
Product name:	Wireless Charging Stand
Trademark:	Reflying, Mangotek
Model name:	RWC36, MWC36
Standard:	FCC CFR 47 PART 1 , 1.1310
RF Exposure Procedures:	KDB 680106 D01 RF Exposure Wireless Charging App v03

This device described above has been tested by Shenzhen Microtest Co., Ltd. and the test results show that the equipment under test (EUT) compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

Tested by: 

Danny Xu Jan. 10, 2020

Reviewed by: 

Leo Su Feb. 12, 2020

Approved by: 

Tom Xue Feb. 12, 2020

1 General Information

1.1 Description of EUT

Product name:	Wireless Charging Stand
Brand name:	Reflying, Mangotek
Model name:	RWC36
Series model:	MWC36
Deference in serial model:	All the models are of the same circuit and RF module, except the brand and model No.
Operation frequency:	115–205 kHz
Operational mode:	Wireless charging
Modulation type:	ASK modulation
Antenna type:	Coil Antenna
Power source:	DC 12V from adapter AC 120V/60Hz
Battery:	N/A
Adapter information:	N/A

1.2 Ancillary equipment list

Equipment	Model	S/N	Manufacturer
Mobile phone	S9+	/	SAMSUNG
watch	/	/	Apple

1.3 Measurement uncertainty

Measurement Uncertainty for a Level of Confidence of 95 %, U=2xUc(y)

Radiated emission(150kHz~30MHz)	± 2.5 dB
Radiated emission(30MHz~1GHz)	± 4.2 dB
Radiated emission (above 1GHz)	± 4.3 dB
Temperature	±1 degree
Humidity	± 5 %

2 Testing site

Test Site	Shenzhen Microtest Co., Ltd
Test Site Location	No.102A & 302A, East Block, Hengfang Industrial Park, Xingye Road, Xixiang, Bao'an District, Shenzhen, Guangdong, China
FCC Registration No.:	448573

3 List of test equipment

Equipment No.	Equipment Name	Manufacturer	Model	Serial No.	Calibration date	Due date
MTI-E068	Broadband Field Meter	Narda Safety Test Solutions GmbH	NBM-520	D-1699	2019/07/13	2020/07/12
MTI-E069	Probe E-Field	Narda Safety Test Solutions	EF0691	H-0571	2019/07/13	2020/07/12

4 Test Results

4.4 Maximum permissible exposure

4.4.1 Limit

Frequency range(MHz)	Electric field strength(V/m)	Magnetic field strength(A/m)	Power density(mW/cm2)	Averaging time(minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f^2	6
30-300	61.4	0.163	1.0 6	6
300-1500			f/300	6
1500-100000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f^2	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100000			1	30
f = frequency in MHz * = Plane-wave equivalent power density				

4.4.2 Test Procedures

E and H-field measurements should be made with the center of the probe at a distance of 15 cm surrounding the device and 20 cm above the top surface of the primary/client pair.

These measurements should be repeated for three different client battery levels, 1%, 50%, and 99%.

Record the test results.

KDB 680106 D01 RF Exposure Wireless Charging App v03:

(1) Power transfer frequency is less than 1MHz.

(2) Output power from each primary coil is less than or equal to 15 watts.

(3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.

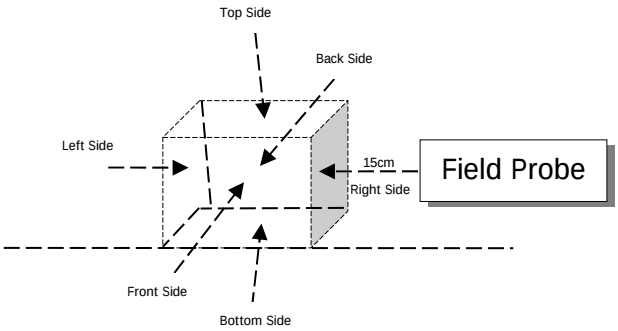
(4) Client device is placed directly in contact with the transmitter.

(5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).

(6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

Note: The device is in compliance with KDB 680106 D01 RF Exposure Wireless Charging App v03 6 conditions.

4.4.3 Test Setup



4.4.4 Test Result

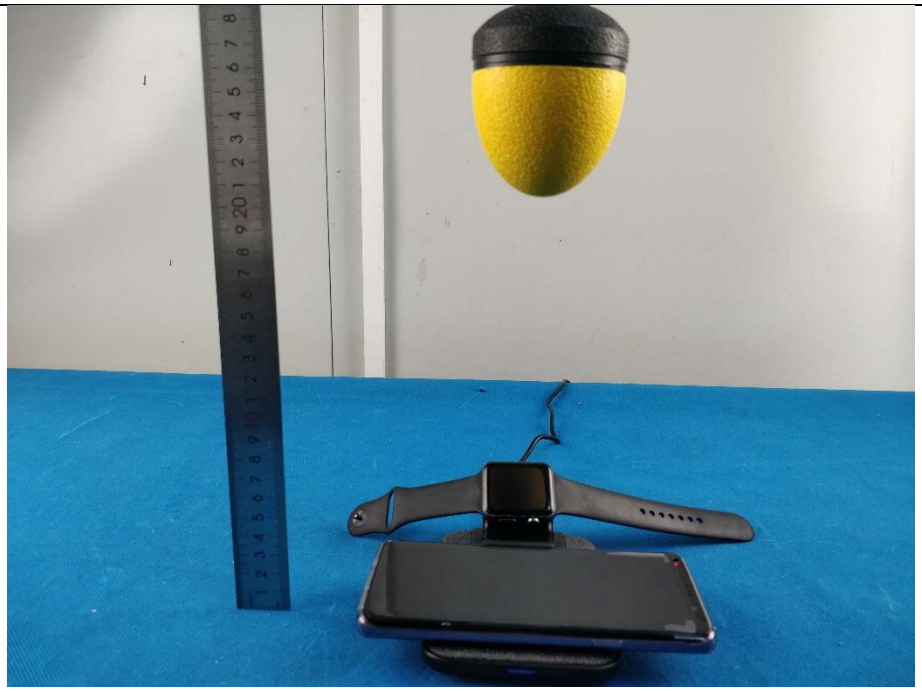
Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E –field(V/m)	H–field(A/m)
<1%	Top	20	0.430	0.122
<1%	Bottom	15	0.421	0.110
<1%	Left	15	0.424	0.114
<1%	Right	15	0.423	0.118
<1%	Front	15	0.419	0.115
<1%	Back	15	0.416	0.116
Limit			614	1.63
Margin Limit (%)			0.070	7.485

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E –field(V/m)	H–field(A/m)
<50%	Top	20	0.423	0.124
<50%	Bottom	15	0.418	0.114
<50%	Left	15	0.413	0.112
<50%	Right	15	0.416	0.119
<50%	Front	15	0.417	0.116
<50%	Back	15	0.420	0.118
Limit			614	1.63
Margin Limit (%)			0.069	7.607

Maximum permissible Exposure				
Battery levels	Test sides	Test distance(cm)	E –field(V/m)	H–field(A/m)
<99%	Top	20	0.431	0.129
<99%	Bottom	15	0.421	0.118
<99%	Left	15	0.422	0.115
<99%	Right	15	0.418	0.111
<99%	Front	15	0.420	0.112
<99%	Back	15	0.416	0.115
Limit			614	1.63
Margin Limit (%)			0.070	7.914

4.4.5 MPE Setup photo

Note 1: This product supports two coils for simultaneous transmission. The report only shows the worst mode: simultaneous transmission. The 12V operating voltages were tested and the results showed that the 12V operating voltage data was the worst, while the report only showed the worst mode.



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