



# MPE REPORT

FCC ID: 2AVJX-F2

Date of issue: Jan. 19, 2020

Report number: MTi19102215-4E3

Sample description: Wireless Charger Desk lamp

Model(s): F2, F1

Applicant: SHENZHEN FLYSHINE TECHNOLOGY CO., LTD

Address: 3/F, Building C6, HengFeng Industrial City, HeZhou, BaoAn, ShenZhen Guangdong China

Date of test: Oct. 28, 2019 to Dec. 31, 2019

Shenzhen Microtest Co., Ltd.

<http://www.mtitest.com>

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TEST RESULT CERTIFICATION	
Applicant's name:	SHENZHEN FLYSHINE TECHNOLOGY CO., LTD
Address:	3/F, Building C6, HengFeng Industrial City, HeZhou, BaoAn, ShenZhen Guangdong China
Manufacture's name:	SHENZHEN FLYSHINE TECHNOLOGY CO., LTD
Address:	3/F, Building C6, HengFeng Industrial City, HeZhou, BaoAn, ShenZhen Guangdong China
Product name:	Wireless Charger Desk lamp
Trademark:	N/A
Model and/or type reference :	F2
Serial model:	F1
RF exposure procedures:	KDB 447498 D01 v06

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

Tested by:

Demi Mu

Dec. 31, 2019

Reviewed by:

Leo Su

Jan. 19, 2020

Approved by:

Tom Xue

Jan. 19, 2020



## RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) Radiation as specified in §1.1307(b)

### Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposure</b>				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f <sup>2</sup>	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f <sup>2</sup>	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz \* = Plane-wave equivalent power density

### MPE Calculation Method

Friis transmission formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot R^2)$

Where

Pd= Power density in mW/cm<sup>2</sup>

Pout=output power to antenna in mW

G= Numeric gain of the antenna relative to isotropic antenna

Pi=3.1415926

R= distance between observation point and center of the radiator in cm(20cm)

Pd the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.



## Measurement Result

### BT:

Operation Frequency: BT GFSK,  $\pi/4$ -DQPSK: 2402-2480MHz,

Power density limited: 1mW/ cm<sup>2</sup>

Antenna Type: BT Antenna: PCB Antenna;

BT antenna gain: 0dBi

R=20cm

$mW = 10^{(dBm/10)}$

antenna gain Numeric= $10^{(dBi/10)} = 10^{(0/10)} = 1$

Channel Freq. (MHz)	modulation	conducted power (dBm)	Tune-up power (dBm)	Max	Antenna			Evaluation result (mW/cm <sup>2</sup> )	Power density Limits (mW/cm <sup>2</sup> )	
				tune-up power (dBm)	Gain					
		(dBm)		(dBm)	(mW)	(dBi)	Numeric			
2402	GFSK	1.260	1±1	2	1.585	0.00	1.00	0.0003	1	
2441		1.700	1±1	2	1.585	0.00	1.00	0.0003	1	
2480		1.090	1±1	2	1.585	0.00	1.00	0.0003	1	
2402	$\pi/4$ -DQPSK	2.170	2±1	3	1.995	0.00	1.00	0.0004	1	
2441		2.500	2±1	3	1.995	0.00	1.00	0.0004	1	
2480		1.907	2±1	3	1.995	0.00	1.00	0.0004	1	

### Conclusion:

For the max result:  $0.0004 \leq 1.0$  for 1g SAR, No SAR is required.

----END OF REPORT----