





# RF EXPOSURE REPORT

Applicant	SHENZHEN OTTO INTELLIGENCE TECHNOLOGY CO LTD
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Manufacturer or Supplier	LINGDONG INTELLIGENT TECHNOLOGIES CO.,LTD
Address	Room1002, BK Building, GaoXinNan 9Road, High-Tech Park, Nanshan District, Shenzhen, China
Product	Bluetooth board
Brand Name	N/A
Model	UL05mini-R
Additional Model & Model Difference	N/A
Date of tests	Dec. 27, 2018~ Jan. 31, 2019

- FCC Part 2 (Section 2.1091)
- KDB 447498 D01
- IEEE C95.1

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Tested by Breeze Jiang Project Engineer / EMC Department	Approved by Glyn He Supervisor/ EMC Department
	  Date: Feb. 15, 2019

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**BUREAU**  
**VERITAS**

Test Report No.: FM181227N003

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM181227N003	Original release	Feb. 15, 2019

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## 1. CERTIFICATION

<b>FCC ID:</b>	2APO6OTTOBMB
<b>PRODUCT:</b>	Bluetooth board
<b>BRAND NAME:</b>	N/A
<b>MODEL NO.:</b>	UL05mini-R
<b>ADDITIONAL NO.:</b>	N/A
<b>APPLICANT:</b>	SHENZHEN OTTO INTELLIGENCE TECHNOLOGY CO LTD
<b>STANDARDS:</b>	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1



## 2. RF EXPOSURE LIMIT

### 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> )	AVERAGE TIME (minutes)
<b>LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE</b>				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

## 3. MPE CALCULATION FORMULA

$$Pd = (Pout * G) / (4 * pi * r^2)$$

where

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

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

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

## 4. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



## 5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Peak Gain (dBi)	Antenna Type
Chain 0	-1	PCB Antenna

## 6. CALCULATION RESULT OF MAXIMUM CONDUCTED AV POWER

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
GFSK	2402-2480	-1	+/-1	-2	0
8DPSK	2402-2480	-1	+/-1	-2	0
LE- GFSK	2402-2480	-4	+/-3	-7	-1

The measured conducted Average Power

Mode	Frequency (MHz)	Averaged Power (dBm)
GFSK	2480	-0.63
8DPSK	2480	-0.92
LE- GFSK	2402	-2.35

FREQUENCY BAND (MHz)	MAX AVERAGE POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2402-2480	0	-1	20	0.000158	1.0

--- END ---