



Test Report No.: FM181227N003

RF EXPOSURE REPORT

Applicant	SHENZHEN OTTO INTELLIGENCE TECHNOLOGY CO LTD
Address	RM.101-102, BLDG, F13, F518 IDEA LAND, NO:1065 BAOYUAN RD, XLXLANG AVENUE, BAO-AN, SHEN ZHEN, CHINA

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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RELEASE CONTROL RECORD

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



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1. CERTIFICATION

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

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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 ²)	AVERAGE TIME (minutes)
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE				
300-1500	...	...	F/1500	30
1500-100,000	...	...	1.0	30

F = Frequency in MHz

3. MPE CALCULATION FORMULA

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 ²)	LIMIT (mW/cm ²)
2402-2480	0	-1	20	0.000158	1.0

--- END ---