

RF EXPOSURE REPORT


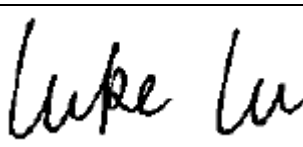
Applicant:	Fibocom Wireless Inc.
Address:	5/F, Tower A, Technology Building II, 1057 Nanhai Avenue, Shenzhen, China

Manufacturer or Supplier:	Fibocom Wireless Inc.
Address:	5/F, Tower A, Technology Building II, 1057 Nanhai Avenue, Shenzhen, China
Product:	BT Module
Brand Name:	Fibocom
Model Name:	B830-GL
FCC ID:	ZMOB830GL
Date of tests:	Aug 14, 2019 ~ Sep 03, 2019

The tests have been carried out according to the requirements of the following standard:

- ☒ IEEE C95.1
- ☒ FCC Part 2.1091
- ☒ KDB 447498 D01 General RF Exposure Guidance v06

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

Prepared by Alex Chen Engineer / Mobile Department	Approved by Luke Lu Manager / Mobile Department
 Date: Sept. 06, 2019	 Date: Sept. 06, 2019

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Test Report No.: SA190813W001-1

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA190813W001-1	Original release	Sept. 06, 2019

1 GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF EUT

PRODUCT	BT Module
BRAND NAME	Fibocom
MODEL NAME	B830-GL
NOMINAL VOLTAGE	DC 3.3V
MODULATION	GFSK
TRANSMISSION RATE	BT_LE 5.0: 0.125 Mbps/0.5 Mbps/1 Mbps/2 Mbps
OPERATING FREQUENCY	2402-2480MHz for BT-LE5.0
MAX. OUTPUT POWER	BT-LE : 6.546mW (Maximum conducted output power)
ANTENNA TYPE	BT-LE : External Antenna with -2dBi gain
HW VERSION	V1.0.3
SW VERSION	B830-GL-02-TA-V1.0.0
I/O PORTS	Refer to user's manual

NOTE:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

2 RF EXPOSURE

2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	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
300-1,500			f/300	6
1,500-100,000			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
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = Frequency in MHz

2.2 MPE CALCULATION FORMULA

$$Pd = (P_{out} \cdot G) / (4 \cdot \pi \cdot R^2)$$

where

Pd = 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



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2.3 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**.



2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

BT LE

Mode	Frequency (MHz)	Operating Mode (Mbps)	Antenna Gain (dBi)	Tune-up Power (dBm)	Tune-up Power (mW)	Power Density (mW/cm ²)	limit (mW/cm ²)	PASS / FAIL
BT LE CODED S2	2402-2480	0.125	-2	10	10.00	0.0013	1.00	PASS
BT LE CODED S8	2402-2480	0.5	-2	10	10.00	0.0013	1.00	PASS
BT LE (1M)	2402-2480	1	-2	10	10.00	0.0013	1.00	PASS
BT LE (2M)	2402-2480	2	-2	10	10.00	0.0013	1.00	PASS

Note: The power value above is peak power value.

--END--