

IB-Lenhardt AG Heinrich-Hertz-Allee 7 D-66386 St Ingbert

ShangHai Ehong Technology Co.,Ltd.

Suite501, No.3 building, No.439 Jinglian road  
Minhang district, Shanghai,  
China

Contact:

Tel:

Fax:

E-Mail:

Date:

Carsten Steinröder

+49 (0) 6894 38938-38

+49 (0) 6894 389112-09

c.steinroeder@ib-lenhardt.de

11.08.20

## RF Exposure Evaluation acc. to FCC

### Administrative Data:

Applicant: ShangHai Ehong Technology Co.,Ltd.

Address: Suite501, No.3 building, No.439 Jinglian road, Minhang district, Shanghai, China

### Product Data:

Product Name: BT Module

Model Name: EH-MC17

FCC ID: 2ACCRMC17

Technology: Bluetooth Low Energy

Frequency Band: 2402 – 2480 MHz

Output Power (conducted)  $P_{\max}$ : 5.15 dBm (3.27 mW)<sup>1</sup>

Antenna Gain/Type: 0 dBi<sup>1</sup> / Ceramic Antenna

### Result:

The device is compliant according to FCC RF Exposure Evaluation procedures

Note 1: Values have been taken from FCC Part 15.247 Test Report with Report Number: RSHD190611013-00A issued by Bay Area Compliance Labs Corp. (Report Date: 2019-07-16)

## FCC (USA)

Reference: KDB 447498, Chapter 4.3.1

### General SAR test exclusion guidance

For 100 MHz to 6 GHz and test separation distances  $\leq 50$  mm, the 1-g and 10-g SAR test exclusion provisions; for example, handheld PTT two-way radios, handsets, laptops and tablets, etc. thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [vf_{(\text{GHz})}] \leq 3.0$  for 1-g SAR, and  $\leq 7.5$  for 10-g extremity SAR, where

- $f_{(\text{GHz})}$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation<sup>31</sup>
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

### Calculation

Threshold <sub>1-g;10-g</sub>	3	
d <sub>separation</sub>	5 mm	
f	2480,00 MHz	(RF channel transmit frequency)
Exempted, if power <sup>1</sup> lower than	9,53 mW	Threshold <sub>1-g;10-g</sub> * d <sub>separation</sub> / f <sup>0.5</sup>

### Conclusion

Pmax: 5.15 dBm (3.27 mW) < 9.53 mW (Threshold)

The device is compliant to RF exposure limits and while used in close proximity to the human body (0 mm)



Issued by  
Dipl.-Ing. Carsten Steinroeder  
Bluetooth® Lab Manager