

RF Exposure Evaluation

FCC ID: 2AE8S-SH06

1. Client Information

Applicant : TRASENSE INTERNATIONAL CORPORATION LIMITED
Address : FLAT/RM B07 23/F HOVER INDUSTRIAL BUILDING NO.26-38
 KWAI CHEONG ROAD HK
Manufacturer : TRASENSE INTERNATIONAL CORPORATION LIMITED
Address : FLAT/RM B07 23/F HOVER INDUSTRIAL BUILDING NO.26-38
 KWAI CHEONG ROAD HK

2. General Description of EUT

EUT Name	:	TRASENSE Smart Bracelet	
Models No.	:	SH06, SH01, SH02, SH03 , SH04, SH05, SH07, SH08, SH09, SH10	
Model Difference	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is model name for commercial.	
Product Description	:	Operation Frequency: 2402~2480MHz	
	:	Number of Channel:	Bluetooth 4.0 (BLE): 40 channels
	:	Max Peak Output Power:	-1.17dBm Conducted Power
	:	Antenna Gain:	0 dBi PCB Antenna
	:	Modulation Type:	GFSK
Power Supply	:	DC Voltage supplied from Host System by USB cable DC power by Li-ion Battery	
Power Rating	:	DC 5.0V by USB cable. DC 3.7V 45mAh Li-ion Battery.	
Connecting I/O Port(S)	:	Please refer to the User's Manual	

Note:

More test information about the EUT please refer the RF Test Report.

SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v05r02.

(1) Clause 4.3: General SAR test reduction and exclusion guidance

Sub clause 4.31: Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance ≤ 5 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 3.0 \text{ for 1-g SAR}$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f_{(\text{GHz})}}] \leq 7.5.0 \text{ for 10-g SAR}$$

2.

Calculation:

Test separation: 5mm					
BLE(GFSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-1.18	±0.5	0.855	0.265	3.0
2.442	-1.17	±0.5	0.857	0.268	3.0
2.480	-1.32	±0.5	0.828	0.261	3.0

So standalone SAR measurements are not required.