

Maximum Permissible Exposure Evaluation

FCC ID:2BAOD-0860

1. Client Information

Applicant	:	AirSuite Limited
Address	:	3 Melody Lane, Hamilton East, Hamilton 3216 New Zealand
Manufacturer	:	SHENZHEN FENDA SMART TECHNOLOGY LIMITED
Address	:	Fenda Hi-Tech Park, Zhoushi Road, Shiyan Baoan, Shenzhen, China. 518108

2. General Description of EUT

EUT Name	:	AirSuite Sense LTE	
Model(s) No.	:	SSCM860	
Model Difference	:	----	
Product Description	:	Operation Frequency:	Bluetooth (BLE) V5.2:2402MHz~2480MHz LTE Band 2/4/5/12/13/17/25/26/66
Power Supply	:	Input: DC 5V	
Software Version	:	1.3.0	
Hardware Version	:	S006F	

Remark: The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab.

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

MPE Calculations for WIFI

1. Antenna Gain:

BLE Ceramic Antenna: -0.65dBi.

LTE Ceramic Antenna: 2.4dBi

2. EUT Operation Condition:

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

3. Exposure Evaluation:

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = (PG) / 4\pi R^2$$

Where

S: power density

P: power input to the antenna

G: power gain of the antenna in the direction of interest relative to an isotropic radiator.

R: distance to the center of radiation of the antenna

4. Test Result:

Mode	N _{TX}	Conducted Power(max) (dBm)	Turn-up Power (dB)	Max tune up power (dBm) [P]	ANT Gain (dBi) [G]	Distance (cm) [R]	Power Density (mW/ cm ²) [S]	limit (mW/cm2)
BLE (1Mbps)	1	4.309	4±1	5	-0.65	20	0.0005	1
	1	4.4	4±1	5	-0.65	20	0.0005	1
	1	4.447	4±1	5	-0.65	20	0.0005	1
BLE (2Mbps)1	1	4.311	4±1	5	-0.65	20	0.0005	1
	1	4.392	4±1	5	-0.65	20	0.0005	1
	1	4.461	4±1	5	-0.65	20	0.0005	1
LTE Band 2 (M1)	1	23.88	24±1	25	2.4	20	0.1093	1
LTE Band 4 (M1)	1	24.00	24±1	25	2.4	20	0.1093	1
LTE Band 5 (M1)	1	23.85	24±1	25	2.4	20	0.1093	0.55
LTE Band 12 (M1)	1	23.90	24±1	25	2.4	20	0.1093	0.47
LTE Band 13 (M1)	1	23.87	24±1	25	2.4	20	0.1093	0.52
LTE Band 25 (M1)	1	23.80	24±1	25	2.4	20	0.1093	1
LTE Band 26A (M1)	1	23.89	24±1	25	2.4	20	0.1093	0.54
LTE Band 26B (M1)	1	23.92	24±1	25	2.4	20	0.1093	0.54
LTE Band 66 (M1)	1	23.91	24±1	25	2.4	20	0.1093	1
LTE Band 2 (NB)	1	23.77	24±1	25	2.4	20	0.1093	1
LTE Band 4 (NB)	1	23.83	24±1	25	2.4	20	0.1093	1
LTE Band 5 (NB)	1	23.62	24±1	25	2.4	20	0.1093	0.55
LTE Band 12 (NB)	1	23.81	24±1	25	2.4	20	0.1093	0.47
LTE Band 13 (NB)	1	23.69	24±1	25	2.4	20	0.1093	0.52
LTE Band 17 (NB)	1	23.78	24±1	25	2.4	20	0.1093	0.47
LTE Band 25 (NB)	1	23.72	24±1	25	2.4	20	0.1093	1
LTE Band 26A (NB)	1	23.61	24±1	25	2.4	20	0.1093	0.54
LTE Band 26B (NB)	1	23.67	24±1	25	2.4	20	0.1093	0.54
LTE Band 66 (NB)	1	23.74	24±1	25	2.4	20	0.1093	1

Note: RF Output power specifies that Maximum Conducted Peak Output Power.

5. Conclusion:

As specified in Table 1B of 47 CFR 1.1310- Limits for Maximum Permissible Exposure (MPE),

Limits for General Population/ Uncontrolled Exposure

Frequency Range (MHz)	Power density (mW/ cm ²)
300-1,500	F/1500
1,500-100,000	1.0

For BLE<E

MPE limit S: 1mW/ cm²

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6. Summary simultaneous transmission results

LTE and Bluetooth support simultaneous transmit the

LTE-M1 MPE (Ratio)	LTE-NB MPE (Ratio)	BLE MPE (Ratio)	simultaneous MPE (Ratio)	MPE Limits (Ratio)
0.1093	0.1093	0.0005	0.2191	1.0000

So, RF exposure limit warning or SAR test are not required.

The EUT will only be used with a separation of 20cm or greater between the antenna and nearby persons and can therefore be considered a mobile transmitter per 47 CFR2.1091 (b). The RF Exposure Information page from the manual is included here for reference.

-----END OF REPORT-----