

RF Exposure Evaluation

FCC ID: 2AR4Y-WF1162T

1. Client Information

Applicant	:	SHENZHEN HOPESTAR SCI-TECH CO., LIMITED
Address	:	601-606, Floor 6, Building E, Yuanfen Industrial Park, Dalang Sub-District, Longhua District, Shenzhen, Guangdong, CN
Manufacturer	:	SHENZHEN HOPESTAR SCI-TECH CO., LIMITED
Address	:	601-606, Floor 6, Building E, Yuanfen Industrial Park, Dalang Sub-District, Longhua District, Shenzhen, Guangdong, CN

2. General Description of EUT

EUT Name	:	Android Tablet
Models No.	:	WF1162T, See note (2)
Model Different	:	All these models are the same PCB, layout and electrical circuit, the only different is appearance and color.
Product Description	Operation Frequency:	Bluetooth V4.0: 2402MHz~2480MHz 802.11b/g/n(HT20): 2412MHz~2462MHz
	RF Output Power:	802.11b: 16.62dBm 802.11g: 15.48dBm 802.11n (HT20): 15.45dBm BLE: 2.045dBm
	Antenna Gain:	1.14dBi FPC Antenna
Power Supply	:	DC Voltage Supply from DC Adapter(FJ-SW1202000U). DC Voltage supplied by Li-ion battery.
Power Rating	:	Input: DC 12V2A by DC Adapter. DC 3.7V by 5000mAh Li-ion battery.
Product HW/SW	:	N/A
Radio HW/SW	:	N/A
Test Software	:	RFTestTool.exe
TX Power setting Parameters	:	DEF
Connecting I/O Port(S)	:	Please refer to the User's Manual

Note: (1) More test information about the EUT please refer the RF Test Report.

(2) Models No.

Models No.

WF7008, WF1008, WL1303, WL1506, WL1703, WB1901A, WB2101A, WB2401A, WB2801A, WB3701A, HP8280T, H108T, HP1012T, HP1020T, HP1162T, HP1332T, HP1411T, HP1413T, HP1561T, HP1562T, HP1563T, HP1564T, HP1731T, HP1733T, HP1851T, HP1852, HP1853T, HP2151T, HP2153T, HP2401T, HP2403T, HP2701T, HP2703T, HP3201T, HP3203T, HP4301T, HP4303T, HP5501T, HP5503T, 708, 8078, 1001, ZA108T, ZA133T-64, ZA140T, ZA215T-64, YF-008G, SA133T-64

MPE Calculations for WIFI

1. Antenna Gain:

PCB Antenna: 1.14dBi.

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	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 of Power Density (mW/ cm ²) (S)
BLE	2.045	2±1	3	1.14	20	0.00052	1
802.11B	16.62	16±1	17	1.14	20	0.01296	1
802.11G	15.48	15±1	16	1.14	20	0.01030	1
802.11N(HT20)	15.45	15±1	16	1.14	20	0.01030	1

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 BT:2402~2480 MHz

For WIFI:2412~2462 MHz

MPE limit S: 1mW/ cm²

The MPE is calculated as $0.01296\text{mW} / \text{cm}^2 < \text{limit } 1\text{mW} / \text{cm}^2$. 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.

Note

For a more detailed features description, please refer to the RF Test Report.

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