

Maximum Permissible Exposure Evaluation

FCC ID: 2AAH9-3700

1. Client Information

Applicant	:	Navori Inc.
Address	:	1000 rue Sherbrooke st W,Suite 710, Montreal, QC, Canada H3A 3G4
Manufacturer	:	Shenzhen MicoRose Technology Co., Ltd.
Address	:	8B2A, Daqing Building, southeast of the intersection of Shennan Road and Guangshen Expressway, Futian District, Shenzhen,China

2. General Description of EUT

EUT Name	:	StiX
Models No.	:	3700
Brand Name	:	Navori
Product Description	Operation Frequency:	Bluetooth V4.0(BT): 2402~2480 MHz Bluetooth 4.0(BLE): 2402MHz~2480MHz 802.11b/g/n(HT20): 2412MHz~2462MHz U-NII-1: 5180MHz~5240MHz U-NII-3: 5745MHz~5825MHz
	Number of Channel:	Bluetooth: 79 Channels Bluetooth (BLE) : 40 channels 802.11b/g/n(HT20):11 channels U-NII-1:4 channels U-NII-3:6 channels
	RF Output Power:	GFSK:5.089dBm $\pi/4$ -DQPSK:5.16dBm 8DPSK:5.831dBm GFSK (BLE) :5.615dBm 802.11b: 15.844dBm 802.11g: 14.627dBm 802.11n (HT20): 13.571dBm 802.11a: 7.56dBm 802.11a: 4.194dBm
	Antenna Gain:	2.0dBi RP-SMA Antenna
Power Rating	:	For Adapter: Input: 100-240V~ Output:5V $\overline{\text{---}}$, 2.5A
Software Version	:	android 9.0
Hardware Version	:	V1
Connecting I/O Port(S)	:	Please refer to the User's Manual
Remark	:	the MPE report used the EUT(TBBJ-20210325-18_01-1#).

MPE Calculations for WIFI

1. Antenna Gain:

Dipole Antenna: 2.0dBi.

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:

Worst Maximum MPE Result								
Mode	N _{TX}	Freq. (MHz)	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]
802.11b	1	2412	15.844	15±1	16	2.0	20	0.0126
		2437	15.7	15±1	16	2.0	20	0.0126
		2462	14.966	14±1	15	2.0	20	0.0100
802.11g	1	2412	14.627	14±1	15	2.0	20	0.0100
		2437	14.366	14±1	15	2.0	20	0.0100
		2462	13.976	13±1	14	2.0	20	0.0079
802.11n(HT20)	1	2412	13.523	13±1	14	2.0	20	0.0079
		2437	13.571	13±1	14	2.0	20	0.0079
		2462	13.128	13±1	14	2.0	20	0.0079
BT(GFSK)	1	2402	4.653	4±1	5	2.0	20	0.0010
		2441	5.089	5±1	6	2.0	20	0.0013
		2480	4.514	4±1	5	2.0	20	0.0010

BT(π /4-DQPSK)	1	2402	4.705	4 ± 1	5	2.0	20	0.0010
		2441	5.16	5 ± 1	6	2.0	20	0.0013
		2480	4.148	4 ± 1	5	2.0	20	0.0010
BT(8DPSK)	1	2402	4.296	4 ± 1	5	2.0	20	0.0013
		2441	5.831	5 ± 1	6	2.0	20	0.0013
		2480	5.166	5 ± 1	6	2.0	20	0.0013
BLE(GFSK)	1	2402	5.615	5 ± 1	6	2.0	20	0.0013
		2442	4.908	4 ± 1	5	2.0	20	0.0010
		2480	4.287	4 ± 1	5	2.0	20	0.0010
802.11a (U-NII-1)	1	5180	7.56	7 ± 1	8	2.0	20	0.0020
	1	5200	7.311	7 ± 1	8	2.0	20	0.0020
	1	5200	7.074	7 ± 1	8	2.0	20	0.0020
802.11a (U-NII-3)	1	5745	4.194	4 ± 1	5	2.0	20	0.0013
	1	5785	2.402	2 ± 1	3	2.0	20	0.0006
	1	5825	3.251	3 ± 1	4	2.0	20	0.0008

Note:

(1) N_{TX} = Number of Transmit Antennas

(2) 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 2.4WIFI:2412~2462 MHz

MPE limit S: 1mW/ cm²

The MPE is calculated as $0.0070 \text{ mW} / \text{cm}^2 < \text{limit } 1 \text{mW} / \text{cm}^2$. 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.

6. Conclusion:

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

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