

# RF Exposure Evaluation

## FCC ID: 2AYQDEL-FR002

### 1. Client Information

<b>Applicant</b>	:	Everlin International CO., LTD.
<b>Address</b>	:	NO. 120, Minli St, Zhonghe District New Taipei, Taiwan China
<b>Manufacturer</b>	:	Everlin International CO., LTD.
<b>Address</b>	:	NO.12, shunfengdi industrial district humen dongguan Guangdong, China

### 2. General Description of EUT

EUT Name	:	SMART FITNESS RING	
Model(s) No.	:	EL-FR002	
Model Different	:	----	
Sample ID	:	TBBJ-20201208-09-1# & TBBJ-20201208-09-2#	
Product Description	:	Operation Frequency:	Bluetooth 5.0(BLE): 2402MHz~2480MHz
		Number of Channel:	Bluetooth 5.0(BLE): 40 channels
		RF Output Power:	1.754 dBm (Max)
		Antenna Gain:	2 dB PCB Antenna
		Modulation Type:	GFSK
		Bit Rate of Transmitter:	1Mbps
Power Rating	:	Input: DC 5V DC 3.7V by 400mAh Li-ion battery	
Software Version	:	V0.1	
Hardware Version	:	V0.1	
Connecting I/O Port(S)	:	Please refer to the User's Manual	
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.



## SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

- (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  $\leq 5$  mm are determined by:

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

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



## 2. Calculation:

Test separation: 5mm

BLE Mode (1Mbps)						
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (dBm)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	1.754	1±1	2	1.585	0.491	3.0
2.442	1.615	1±1	2	1.585	0.495	3.0
2.480	0.885	0±1	1	1.259	0.397	3.0

Test separation: 5mm

### Conclusion:

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

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