

# RF Exposure Evaluation

## FCC ID: 2AK5Q-VKL-001-3M

### 1. Client Information

**Applicant** : SHENZHEN MSD SCIENCE & TECHNOLOGY CO., LTD  
**Address** : R3009, BLOCK C, SUNNY NEW GANXIAN, GONGMEN S RD, LO WU, SHENZHEN, CHINA  
**Manufacturer** : SHENZHEN MSD SCIENCE & TECHNOLOGY CO., LTD  
**Address** : R3009, BLOCK C, SUNNY NEW GANXIAN, GONGMEN S RD, LO WU, SHENZHEN, CHINA

### 2. General Description of EUT

<b>EUT Name</b>	:	BLE LED STRIP LIGHT	
<b>Models No.</b>	:	VKL-001-3M	
<b>Product Description</b>	:	Operation Frequency:	BLE: 2402~2480MHz
		Number of Channel:	BLE: 40 Channels
		Max Peak Output Power:	GFSK: 3.209 dBm
		Antenna Gain:	2 dBi PCB Antenna
		Modulation Type:	1Mbps(GFSK)
<b>Power Supply</b>	:	DC Voltage Supply From The AC Adapter	
<b>Power Rating</b>	:	AC Input: 100~240V 50/60Hz	
<b>Connecting I/O Port(S)</b>	:	Please refer to the User's Manual	

#### Note:

More test information about the EUT please refer to 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						
Bluetooth Mode (GFSK)						
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	2.601	3±0.5	3.5	2.239	0.694	3.0
2.441	3.158	3±0.5	3.5	2.239	0.700	3.0
2.480	3.209	3±0.5	3.5	2.239	0.705	3.0

**So standalone SAR measurements are not required.**

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