

# RF Exposure Evaluation

## FCC ID: 2AENWAMK3W602B

### 1. Client Information

**Applicant** : GOAL ZERO  
**Address** : 675 WEST 14600 SOUTH BLUFFDALE US  
**Manufacturer** : Dongguan Meiluodi Electronics Co.,Ltd  
**Address** : No.16 Zhenxing Road, Shangjiao, Chang'an, Dongguan, Guangdong, 523878, China

### 2. General Description of EUT

<b>EUT Name</b>	:	ROCK OUT 2 WIRELESS	
<b>Models No.</b>	:	AMK-3W6-02B	
<b>Model difference</b>	:	N/A	
<b>Product Description</b>	:	Operation Frequency: Bluetooth:2402~2480MHz	
		Number of Channel:	Bluetooth:79 Channels
		Max Peak Output Power:	GFSK: 3.699dBm
		Antenna Gain:	0 dBi PCB Antenna
		Modulation Type:	GFSK 1Mbps(1 Mbps) $\pi$ /4-DQPSK(2 Mbps) 8-DPSK(3 Mbps)
<b>Power Supply</b>	:	DC Voltage supplied from Host System by USB cable DC power by Li-ion Battery	
<b>Power Rating</b>	:	DC 5.0V by USB cable. DC 3.7V 800mAh Li-ion Battery.	
<b>Product HW/SW</b>	:	AMK-3W6-02B	
<b>Radio HW/SW</b>	:	AMK-3W6-02B	
<b>Test Software</b>	:	RF Control Kit v1.0	
<b>Connecting I/O Port(S)</b>	:	Please refer to the User's Manual	

### 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 v05r02.
  - (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:  
$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] \times [\sqrt{f_{\text{(GHz)}}}]}{\leq 3.0 \text{ for 1-g SAR}}$$
  
$$\frac{[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] \times [\sqrt{f_{\text{(GHz)}}}]}{\leq 7.5.0 \text{ for 10-g SAR}}$$

## 2.

### Calculation:

Test separation: 5mm					
Bluetooth Mode (GFSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	3.582	$\pm 0.5$	2.560	0.793	3.0
2.441	3.699	$\pm 0.5$	2.630	0.822	3.0
2.480	3.582	$\pm 0.5$	2.560	0.806	3.0
Bluetooth Mode ( $\pi/4$ -DQPSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	2.213	$\pm 0.5$	1.868	0.579	3.0
2.441	2.389	$\pm 0.5$	1.945	0.608	3.0
2.480	2.273	$\pm 0.5$	1.894	0.596	3.0
Bluetooth Mode (8-DPSK)					
Frequency (GHz)	Conducted Power (dBm)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	2.357	$\pm 0.5$	1.931	0.598	3.0
2.441	2.521	$\pm 0.5$	2.005	0.626	3.0
2.480	2.395	$\pm 0.5$	1.948	0.613	3.0

So standalone SAR measurements are not required.