



# RF Exposure Evaluation

## FCC ID: 2BEXZ-PATHLT

### 1. Client Information

<b>Applicant</b>	:	ZHUHAI SUPER BRIGHT NEW ENERGY LIMITED
<b>Address</b>	:	Floor1-6, Building5, No.5, Chuangyexi Road, Liangang Industrial Zone, Jinwan District, Zhuhai, China, 519090
<b>Manufacturer</b>	:	ZHUHAI SUPER BRIGHT NEW ENERGY LIMITED
<b>Address</b>	:	Floor1-6, Building5, No.5, Chuangyexi Road, Liangang Industrial Zone, Jinwan District, Zhuhai, China, 519090

### 2. General Description of EUT

<b>EUT Name</b>	:	SOLAR PATH LIGHT WITH LINKABLE & PIR SENSOR	
<b>Model(s) No.</b>	:	ELI1621G, ELI1577G, ELI1576G, ELI1622G, DR-0582, DR-0593	
<b>Model Difference</b>	:	All these models are identical in the same PCB, layout and electrical circuit, the only difference is just outlook, size and color difference.	
<b>Product Description</b>	Operation Frequency:	2.4G: 2420MHz~2470MHz	
	Number of Channel:	3 channels	
	Antenna Gain:	0dBi Wire Antenna	
	Modulation Type:	GFSK	
<b>Power Supply</b>	:	DC 3.2V	
<b>Software Version</b>	:	----	
<b>Hardware Version</b>	:	REV01	

**Remark:** The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab.

The above antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

**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:

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

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

### 2. Calculation:

Test separation: 5mm						
2.4G 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
2420	-0.768	0 $\pm$ 1	1	1.259	0.392	3.0
2450	-0.411	0 $\pm$ 1	1	1.259	0.394	3.0
2470	-0.436	0 $\pm$ 1	1	1.259	0.396	3.0

### 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.

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

