

# RF Exposure Evaluation

## FCC ID: 2AFIH-BND501

### 1. Client Information

<b>Applicant</b>	: Brand New Days Limited
<b>Address</b>	: Flat B, 6/F, Tong Yuen Factory Building, 505 Castle Peak Road, Lai Chi Kok, Kowloon, Hongkong
<b>Manufacturer</b>	: Shenzhen Casun Electronic Co, Ltd.
<b>Address</b>	: 4/F, B Building, No.8 Eastern Zone, Shangxue Technology Park, Bantian, ShenZhen, China

### 2. General Description of EUT

<b>EUT Name</b>	:	Bluetooth Wireless Speaker	
<b>Models No.</b>	:	BND501 BOBBY	
<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: -0.56dBm
	:	Antenna Gain:	-0.68 dBi PCB Antenna
	:	Modulation Type:	GFSK 1Mbps(1 Mbps) $\pi$ /4-DQPSK(2 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 5V by USB Cable from PC system. DC 3.7V by Li-ion Battery.	
<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:

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

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

## 2.

**Calculation:**

Test separation: 5mm						
Bluetooth Mode (GFSK)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-0.13	-0.68	±0.5	1.089	0.338	3.0
2.441	-0.44	-0.68	±0.5	1.014	0.317	3.0
2.480	-0.58	-0.68	±0.5	0.982	0.309	3.0
Bluetooth Mode ( $\pi/4$ -DQPSK)						
Frequency (GHz)	Conducted Power (dBm)	Ant Gain (dBi)	Turn-up Power Tolerance (dB)	Max power of tune up tolerance (mw)	Calculation Value	Threshold Value
2.402	-5.07	-0.68	±0.5	0.349	0.108	3.0
2.441	-5.49	-0.68	±0.5	0.317	0.099	3.0
2.480	-5.89	-0.68	±0.5	0.289	0.091	3.0

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