

# RF Exposure Evaluation Report

**Product** : Good Night Light Remote  
**Trade mark** : Novostella  
**Model/Type reference** : BNL-01  
**Serial Number** : N/A  
**Report Number** : EED32M00164302  
**FCC ID** : 2AWONBNL-01  
**Date of Issue** : Aug. 04, 2020  
**Test Standards** : 47 CFR Part 1.1307  
47 CFR Part 2.1093  
KDB447498D01 General RF Exposure Guidance v06  
**Test result** : PASS

Prepared for:

**Shenzhen Ustellar Technology Ltd.**  
**Rm.201, A Bldg., No. A Qianhai 1st Rd., Shen' gang**  
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Prepared by:

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## 2 Version

Version No.	Date	Description
00	Aug. 04, 2020	Original

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## 4 General Information

### 4.1 Client Information

Applicant:	Shenzhen Ustellar Technology Ltd.
Address of Applicant:	Rm.201, A Bldg., No. A Qianhai 1st Rd., Shen' gang Cooperation Zone, Qianhai, Shenzhen, CHINA 518000
Manufacturer:	Shenzhen Ustellar Technology Ltd.
Address of Manufacturer:	Rm.201, A Bldg., No. A Qianhai 1st Rd., Shen' gang Cooperation Zone, Qianhai, Shenzhen, CHINA 518000
Factory:	Shenzhen Ustellar Technology Ltd.
Address of Factory:	Rm.201, A Bldg., No. A Qianhai 1st Rd., Shen' gang Cooperation Zone, Qianhai, Shenzhen, CHINA 518000

### 4.2 General Description of EUT

Product Name:	Good Night Light Remote
Model No.(EUT):	BNL-01
Trade Mark:	Novostella
EUT Supports Radios application:	433.92MHz

### 4.3 Product Specification subjective to this standard

Frequency Range:	433.92MHz	
Modulation Type:	ASK	
Test Power Grade:	Default	
Test Software of EUT:	Default	
Antenna Type:	PCB antenna	
Antenna Gain:	3dBi	
Power Supply:	Battery	AAA 1.5V*2
	Adapter	Model:HJ-0501000E1-US Input:100-240V~50/60Hz 0.2A Output:5V --- 1000mA
Max Conducted Peak Output Power:	68.76dB $\mu$ V/m(-28.62dBm)	
Sample Received Date:	Jun. 10, 2020	
Sample tested Date:	Jun. 10, 2020 to Jul. 17, 2020	
The tested sample(s) and the sample information are provided by the client.		

#### **4.4 Test Location**

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

#### **4.5 Deviation from Standards**

None.

#### **4.6 Abnormalities from Standard Conditions**

None.

#### **4.7 Other Information Requested by the Customer**

None.

## 5 SAR Evaluation

### 5.1 RF Exposure Compliance Requirement

#### 5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

#### 5.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot$

$[\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  for 10-g extremity SAR, where

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is  $< 5$  mm, a distance of 5 mm is applied to determine SAR test exclusion



### 5.1.3 EUT RF Exposure

The tune-up power is -28.5 dBm +/- 0.5dB, therefore the highest tune-up power is

-28.5 dBm (0.001 mW) @ 433.92 MHz

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$$(0.001\text{mW} / 5\text{mm}) * (0.43392\text{GHz}^{\wedge}0.5) = 0.0001$$

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] * [\sqrt{f(\text{GHz})}] = 0.0001 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body

## PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32M00164301 for EUT external and internal photos.

\*\*\* End of Report \*\*\*

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