



# Maximum Permissible Exposure Evaluation

**FCC ID: 2AC9E-NSP-0327**

Report No.	:	TBR-C-202507-0153-33
Applicant	:	JASKEY LIMITED
<b>Equipment Under Test (EUT)</b>		
EUT Name	:	Wireless Speaker with RGB Light
Model No.	:	NSP-0327
Series Model No.	:	NSP-0414
Brand Name	:	----
Sample ID	:	HC-C-202507-0153-01-01-1#&HC-C-202507-0153-01-01-2#
Receipt Date	:	2025-07-23
Test Date	:	2025-07-23 to 2025-08-06
Issue Date	:	2025-08-07
Standards	:	FCC Part 2.1091
Test Method	:	KDB 680106 D01 Wireless Power Transfer v04
Conclusions	:	<b>PASS</b>
In the configuration tested, the EUT complied with the standards specified above.		
Test By	:	<div> <div>Rick Chen</div> <div>Rick Chen</div> </div>
Reviewed By	:	<div> <div>Wade Lv</div> <div>Wade Lv</div> </div>
Approved By	:	<div> <div>Ivan Su</div> <div>Ivan Su</div> </div>
<p>This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.</p>		



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## Revision History

Report No.	Version	Description	Issued Date
TBR-C-202507-0153-33	Rev.01	Initial issue of report	2025-08-07





# 1. General Information about EUT

## 1.1 Client Information

<b>Applicant</b>	:	JASKEY LIMITED
<b>Address</b>	:	4/Floor Building 1 of Xingji Center, DanzhuTou Industrial Area, Longguang District, Shenzhen, China
<b>Manufacturer</b>	:	JASKEY LIMITED
<b>Address</b>	:	4/Floor Building 1 of Xingji Center, DanzhuTou Industrial Area, Longguang District, Shenzhen, China

## 1.2 General Description of EUT (Equipment Under Test)

EUT Name	:	Wireless Speaker with RGB Light	
Models No.	:	NSP-0327, NSP-0414	
Model Different	:	All these models are identical in the same PCB layout and electrical circuit, only difference is model name.	
Product Description	:	Operation Frequency:	110-205KHz
		Modulation Type:	ASK
Power Rating	:	INPUT: DC 5V2A; 9V2A OUTPUT: 5W/7.5W/10W DC 3.7V 1800mAh 6.66Wh Rechargeable Li-ion battery	
Software Version	:	V0.3	
Hardware Version	:	V0.3	
<b>Remark:</b> 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.			





## 2. Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expanded uncertainty  $U$  is based on a standard uncertainty multiplied by a coverage factor of  $k=2$ , providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty ( $U_{Lab}$ )
Conducted Emission	Level Accuracy: 9kHz~150kHz 150kHz to 30MHz	$\pm 3.50$ dB $\pm 3.10$ dB
Radiated Emission	Level Accuracy: 9kHz to 30 MHz	$\pm 4.60$ dB
Radiated Emission	Level Accuracy: 30MHz to 1000 MHz	$\pm 4.50$ dB
Radiated Emission	Level Accuracy: Above 1000MHz	$\pm 4.20$ dB
RF Power-Conducted	Level Accuracy: Above 1000MHz	$\pm 0.95$ dB
Power Spectral Density-Conducted	Level Accuracy: Above 1000MHz	$\pm 3$ dB
Occupied Bandwidth	Level Accuracy: 30MHz to 1000 MHz Above 1000MHz	$\pm 3.8\%$
Unwanted Emission-Conducted	Level Accuracy: 30MHz to 1000 MHz Above 1000MHz	$\pm 2.72$ dB
Temperature	/	$\pm 0.6^{\circ}\text{C}$
Humidity	/	$\pm 4\%$
Supply voltages	/	$\pm 2\%$
Time	/	$\pm 4\%$





### 3. Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

#### **CNAS (L5813)**

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

#### **A2LA Certificate No.: 4750.01**

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

#### **IC Registration No.: (11950A)**

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.





## 4. RF Exposure Considerations for FCC

### 4.1. Measuring Standard

KDB 680106 D01 Wireless Power Transfer v04.

### 4.2. Requirements

According to the item 5.2 of KDB 680106 D01v04:

Inductive wireless power transfer applications that meet all of the following requirements are excluded from submitting an RF exposure evaluation:

- (1) Power transfer frequency is less than 1 MHz.
- (2) Output power from each primary coil is less than or equal to 15 watts.
- (3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.
- (4) Client device is placed directly in contact with the transmitter.
- (5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
- (6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

#### Limits For Maximum Permissible Exposure (MPE)

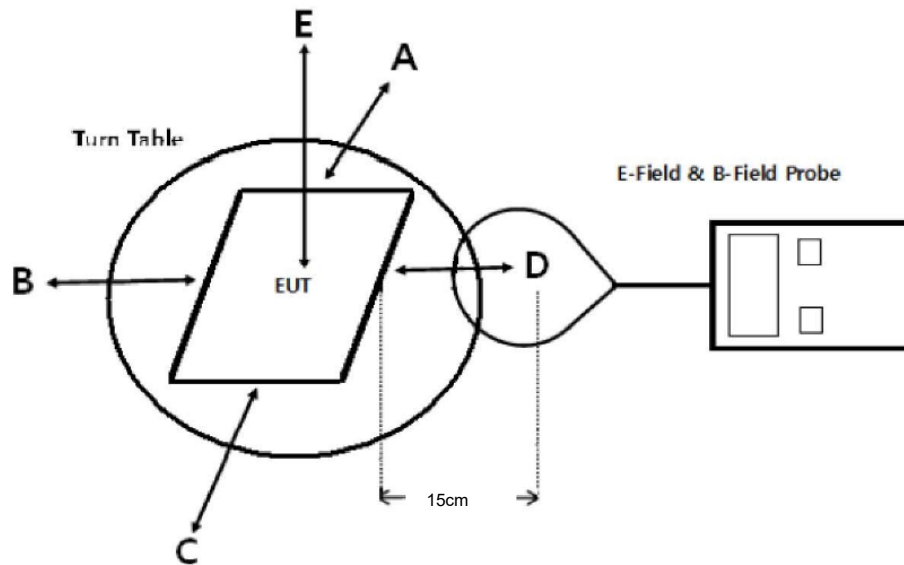
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
<b>(A) Limits for Occupational/Controlled Exposures</b>				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f <sup>2</sup> )	6
30-300	61.4	0.163	1.0	6
300-1500	/	/	f/300	6
1500-100,000	/	/	5	6
<b>(B) Limits for General Population/Uncontrolled Exposure</b>				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

F=frequency in MHz  
 \*=Plane-wave equivalent power density  
 RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).





### 4.3. Test Setup



**Note:** The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface.

### 4.4 Test Procedure

- 1) The RF exposure test was performed in anechoic chamber.
- 2) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface.
- 3) The highest emission level was recorded and compared with limit as soon as measurement of each points (A, B, C, D, E) were completed.
- 4) The EUT was measured according to the dictates of KDB 680106 D01 v03.

**Remark:**

The EUT's test position A, B, C, D and E is valid for the E and H field measurements.





#### 4.5 Equipment Approval Considerations

The EUT does comply with item 5.2 of KDB 680106 D01 Wireless Power Transfer v04 as follows table;

Requirements of KDB 680106 D01	Yes / No	Description
Power transfer frequency is less than 1 MHz	Yes	The device operate in the frequency range 110.0 KHz - 205 KHz.
Output power from each primary coil is less than 15 watts	Yes	The maximum output power of the primary coil is 10W.
The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	Yes	The transfer system includes only single primary and secondary coils. Charging systems have two primary coils and clients that are able to detect and allow coupling only between individual pairs of coils and the coil pairs powered on at the same time.
Client device is placed directly in contact with the transmitter.	Yes	Client device is placed directly in contact with the transmitter.
Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes	Mobile exposure conditions and mobile exposure conditions
The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.	Yes	The EUT H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

In all other cases, unless excluded above, an RF exposure evaluation report must be reviewed and accepted through a KDB or PBA inquiry to enable authorization of the equipment. When evaluation is required to show compliance; for example, using field strength, power density, SAR measurements or computational modeling etc., the specific authorization requirements will be determined based on the results of the RF exposure evaluation

#### 4.6 Test Equipment List

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Magnetic field meter & probe	NARDA	ELT-400	EE030	Jun. 29, 2025	Jun. 28, 2026

#### 4.7 Deviation from Test Standard

No deviation

#### 4.8 Description of Support Units

Equipment Information				
Name	Model	FCC ID/SDOC	Manufacturer	Used “√”
iPhone13	MLDY3CH/A	----	Apple	√
AC/DC Adapter	AP32	----	HUAWEI	√





#### 4.9 Mode of operation during the test / Test peripherals used

Test Modes:		
TM1	AC Power Supply + EUT(Output: 5W) + Mobile Phone (Battery Status: <1%)	Pre-tested
TM2	AC Power Supply + EUT(Output: 5W)+ Mobile Phone (Battery Status: <50%)	Pre-tested
TM3	AC Power Supply + EUT(Output: 5W) + Mobile Phone (Battery Status: <99%)	Pre-tested
TM4	AC Power Supply + EUT(Output: 7.5W) Mobile Phone (Battery Status: <1%)	Pre-tested
TM5	AC Power Supply + EUT(Output: 7.5W)Mobile Phone (Battery Status: <50%)	Pre-tested
TM6	AC Power Supply + EUT(Output: 7.5W)Mobile Phone (Battery Status: <99%)	Pre-tested
TM7	AC Power Supply + EUT(Output: 10W) Mobile Phone (Battery Status: <1%)	Record
TM8	AC Power Supply + EUT(Output: 10W)Mobile Phone (Battery Status: <50%)	Record
TM9	AC Power Supply + EUT(Output: 10W)Mobile Phone (Battery Status: <99%)	Record
Note: All test modes were pre-tested, but we only recorded the worst case (TM7, TM8, TM9) in this report.		





#### 4.10 Test Result

E-Filed Strength at 15 cm from the edges surrounding the EUT and 15 cm above the top surface

Charging Battery Level	Frequency Range (MHz)	Measured E-Field Strength Values (V/m)					E-Field Strength 50% Limits (V/m)	E-Field Strength Limits (V/m)
		Test Position						
		A	B	C	D	E		
1%	0.128	64.844	64.467	63.713	43.732	47.125	307.0	614.0
50%	0.128	70.876	53.534	63.713	55.419	50.895	307.0	614.0
99%	0.128	61.828	59.566	41.093	44.109	53.534	307.0	614.0

Note:  $V/m = A/m \cdot 377$

H-Filed Strength at 15 cm from the edges surrounding the EUT and 15 cm above the top surface

Charging Battery Level	unit	Frequency Range (MHz)	Measured H-Field Strength Values (A/m)					H-Field Strength 50% Limits (A/m)	H-Field Strength Limits (A/m)
			Test Position						
			A	B	C	D	E		
1%	uT	0.128	0.215	0.214	0.212	0.145	0.156	--	--
1%	A/m	0.128	0.172	0.171	0.169	0.116	0.125	0.815	1.63
50%	uT	0.128	0.235	0.178	0.135	0.184	0.169	--	--
50%	A/m	0.128	0.188	0.142	0.169	0.147	0.135	0.815	1.63
99%	uT	0.128	0.205	0.198	0.137	0.146	0.178	--	--
99%	A/m	0.128	0.164	0.158	0.109	0.117	0.142	0.815	1.63

H-Field Strength at 20cm from the top surface of the EUT

Charging Battery Level	Unit	Frequency Range (MHz)	Measured H-Field Strength Values (A/m)	FCC H-Field Strength 50% Limits (A/m)	FCC H-Field Strength Limits (A/m)
			Test Position E		
1%	uT	0.128	0.175	--	--
1%	A/m	0.128	0.140	0.815	1.63
50%	uT	0.128	0.123	--	--
50%	A/m	0.128	0.098	0.815	1.63
99%	uT	0.128	0.165	--	--
99%	A/m	0.128	0.132	0.815	1.63

Note:  $A/m = uT/1.25$





#### 4.11 Standalone MPE Result

As declared by the Applicant, the EUT is a wireless device used in a fix application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance,  $r = 20\text{cm}$ , as well as the gain of the used antenna, the RF power density can be obtained.

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm <sup>2</sup> )	MPE Limit (mW/cm <sup>2</sup> )
	dBm	mW				
Bluetooth	3.129	2.055	-0.58	0.875	0.0004	1

Remark:

1. Output power (Peak) including turn-up tolerance;
2. MPE evaluate distance is 20cm from user manual provide by manufacturer.

#### Simultaneous

The function of Bluetooth and wireless charger can work at the same time.

$\Sigma_{\text{MPE ratios}}(\text{ratios of Wireless charger E-field (V/m)} + \text{ratios of BT}) = (70.876/614) + 0.0004 = 0.1158 < 1.0$

$\Sigma_{\text{MPE ratios}}(\text{ratios of Wireless charger H-field (A/m)} + \text{ratios of BT}) = (0.235/1.63) + 0.0004 = 0.1446 < 1.0$

#### 4.12 Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device.

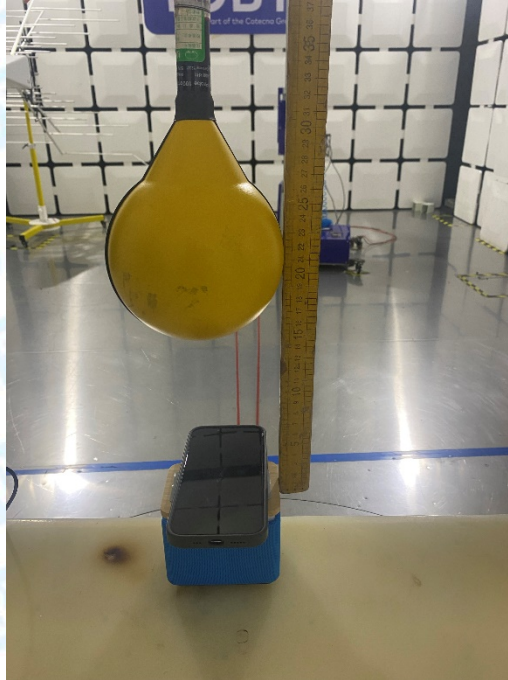




#### 4.13 Test Set-up Photo

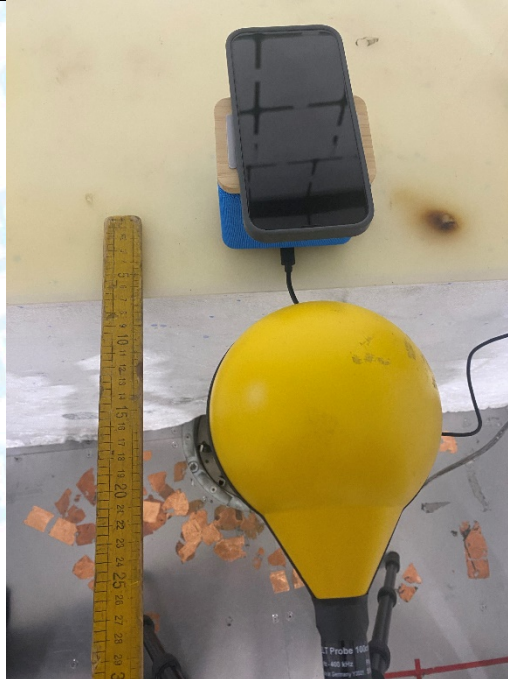
##### H-Field Strength-20cm

##### Test Position E - Exposure photo from top surface



##### H-Field Strength-15cm

##### Test Position A - Exposure photo from side edge surface-Rear





**H-Field Strength-15cm**

**Test Position B - Exposure photo from side edge surface-Left**



**H-Field Strength-15cm**

**Test Position C - Exposure photo from side edge surface-Front**





**H-Field Strength-15cm**

**Test Position D - Exposure photo from side edge surface-Right**



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

