

# **FCC RF EXPOSURE REPORT**

**FCC ID: EMOIBT68**

**Project No. : 1601C157**  
**Equipment : Color Changing Rechargeable Bluetooth  
Speaker  
with Speakerphone**  
**Model : iBT68, iBT68X, iBT68XC ("X"= a to Z, denote as  
color of cabinet)**  
**Applicant : SDI TECHNOLOGIES INC.**  
**Address : 1299 Main Street, Rahway, NJ 07065, U.S.A**  
**According: : FCC Guidelines for Human Exposure IEEE  
C95.1**

**B T L I N C .**

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## MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)
1	N/A	N/A	PCB	N/A	2.3

## TEST RESULTS

EUT :	Color Changing Rechargeable Bluetooth Speaker with Speakerphone	Model Name :	iBT68
Temperature :	20 °C	Relative Humidity:	65 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX Mode _1Mbps		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.3	1.6982	3.55	2.2646	0.00076551	1	Complies
2.3	1.6982	3.65	2.3174	0.00078334	1	Complies
2.3	1.6982	3.51	2.2439	0.00075849	1	Complies

EUT :	Color Changing Rechargeable Bluetooth Speaker with Speakerphone	Model Name :	iBT68
Temperature :	20 °C	Relative Humidity:	65 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX Mode _3Mbps		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.3	1.6982	4.71	2.9580	0.00099989	1	Complies
2.3	1.6982	4.27	2.6730	0.00090355	1	Complies
2.3	1.6982	4.2	2.6303	0.00088910	1	Complies

Note: the calculated distance is 20 cm.