Neutron Engineering Inc.

# FCC RF EXPOSURE REPORT

# FCC ID: COWB0513

| | |
|---|---|
| **Project No.** | **: 1307C159** |
| **Equipment** | **: Portable Bluetooth Speaker** |
| **Model** | **: B0513** |
| **Applicant** | **: Beats Electronics, LLC** |
| **Address** | **: 1601 Cloverfield Blvd. Suite 5000N Santa Monica, CA 90404, USA** |
| **According:** | **: FCC Guidelines for Human Exposure IEEE C95.1** |


***Neutron Engineering Inc.***

***No.3, Jinshagang 1st Road, ShiXia, Dalang Town, Dong Guan, China.***

***TEL : (0769) 8318-3000 FAX : (0769) 8319-6000***

# MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

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

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

| Ant. | Brand name | Model Name | Antenna Type | Connector | Gain (dBi) |
|---|---|---|---|---|---|
| 1 | N/A N/A | | PIFA | N/A | 2.5 |

# TEST RESULTS

| | | | |
|---|---|---|---|
| EUT: | Portable Bluetooth Speaker | Model Name | B0513 |
| Temperature: | 25 ℃ | Relative Humidity: | 58 % |
| Pressure: | 1009 hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode ： | CH00/ CH39 /CH78 -1Mbps | | |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) ($mW/cm^2$) | Limit of Power Density (S) ($mW/cm^2$) | Test Result |
|---|---|---|---|---|---|---|
| 2.5 | 1.7783 | -0.46 | 0.8995 | 0.00031838 | 1 | Complies |
| 2.5 | 1.7783 | 1.78 | 1.5066 | 0.00053327 | 1 | Complies |
| 2.5 | 1.7783 | 0.49 | 1.1194 | 0.00039623 | 1 | Complies |

| | | | |
|---|---|---|---|
| EUT: | Portable Bluetooth Speaker | Model Name | B0513 |
| Temperature: | 25 ℃ | Relative Humidity: | 58 % |
| Pressure: | 1009 hPa | Test Voltage ： | AC 120V/60Hz |
| Test Mode ： | CH00/ CH39 /CH78 -3Mbps | | |

| Antenna Gain (dBi) | Antenna Gain (numeric) | Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (S) ($mW/cm^2$) | Limit of Power Density (S) ($mW/cm^2$) | Test Result |
|---|---|---|---|---|---|---|
| 2.5 | 1.7783 | -3.64 | 0.4325 | 0.00015309 | 1 | Complies |
| 2.5 | 1.7783 | -0.82 | 0.8279 | 0.00029306 | 1 | Complies |
| 2.5 | 1.7783 | -2.23 | 0.5984 | 0.00021181 | 1 | Complies |

Note:The calculated distance is 20cm