

# **FCC RF EXPOSURE REPORT**

**FCC ID: QWHMPA100BT**

**Project No. : 1606C180**  
**Equipment : Portable Speaker**  
**Model : MPA100BT**  
**Applicant : Music Group Services PH Corp**  
**Address : 25th Floor Ayala Life FGU Center, 6811 Ayala**  
**Avenue, Makati City 1209, Philippines**

**According: : FCC Guidelines for Human Exposure IEEE**  
**C95.1**

**B T L I N C .**

No.3, Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, China.  
TEL: +86-769-8318-3000 FAX: +86-769-8319-6000

## 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

Table for Filed Antenna

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

## TEST RESULTS

|                |                  |                    |          |
|----------------|------------------|--------------------|----------|
| EUT :          | Portable Speaker | Model Name :       | MPA100BT |
| Temperature :  | 25 °C            | Relative Humidity: | 55 %     |
| 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                 | -2.44                   | 0.5702                 | 0.00019                                 | 1                                                | Complies    |
| 2.3                | 1.6982                 | -0.63                   | 0.8650                 | 0.00029                                 | 1                                                | Complies    |
| 2.3                | 1.6982                 | 1.20                    | 1.3183                 | 0.00045                                 | 1                                                | Complies    |

|                |                  |                    |          |
|----------------|------------------|--------------------|----------|
| EUT :          | Portable Speaker | Model Name :       | MPA100BT |
| Temperature :  | 25 °C            | Relative Humidity: | 55 %     |
| 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                 | -0.48                   | 0.8954                 | 0.00030                                 | 1                                                | Complies    |
| 2.3                | 1.6982                 | 1.84                    | 1.5276                 | 0.00052                                 | 1                                                | Complies    |
| 2.3                | 1.6982                 | 3.03                    | 2.0091                 | 0.00068                                 | 1                                                | Complies    |

Note: the calculated distance is 20 cm.