# FCC RF EXPOSURE REPORT

## FCC ID: EMOVIB72IM

| | |
|---|---|
| **Project No.** | **: 1606C160** |
| **Equipment** | **: Iron Man Helmet 1 to 2 Scale Speaker** |
| **Model Name** | **: Vi-B72IM** |
| **Applicant** | **: SDI TECHNOLOGIES INC.** |
| **Address** | **: 1299 Main Street, Rahway, NJ 07065, U.S.A** |
| **According:** | **: FCC Guidelines for Human Exposure IEEE C95.1** |


**BTL INC.**

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# 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. | Manufacturer | Model Name | Antenna Type | Connector | Gain(dBi) |
|---|---|---|---|---|---|
| 1 | N/A | N/A | Printed | N/A | 0 |

# TEST RESULTS

| EUT： | Iron Man Helmet 1 to 2 Scale Speaker | Model Name : | Vi-B72IM |
|---|---|---|---|
| Temperature： | 25 ℃ | 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) ($mW/cm^2$) | Limit of Power Density (S) ($mW/cm^2$) | Test Result |
|---|---|---|---|---|---|---|
| 0 | 1.0000 | 3.97 | 2.4946 | 0.00049654 | 1 | Complies |
| 0 | 1.0000 | 3.51 | 2.2439 | 0.00044663 | 1 | Complies |
| 0 | 1.0000 | 4.13 | 2.5882 | 0.00051517 | 1 | Complies |

| EUT： | Iron Man Helmet 1 to 2 Scale Speaker | Model Name : | Vi-B72IM |
|---|---|---|---|
| Temperature： | 25 ℃ | 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) ($mW/cm^2$) | Limit of Power Density (S) ($mW/cm^2$) | Test Result |
|---|---|---|---|---|---|---|
| 0 | 1.0000 | 4.04 | 2.5351 | 0.00050460 | 1 | Complies |
| 0 | 1.0000 | 3.51 | 2.2439 | 0.00044663 | 1 | Complies |
| 0 | 1.0000 | 4.09 | 2.5645 | 0.00051045 | 1 | Complies |

Note: the calculated distance is 20 cm.