

# FCC RF EXPOSURE REPORT

**FCC ID: 2AANUWSB5** 

Project No. : 1407C051C

**Equipment**: Soundbar Speaker

Model : WSB5
Applicant : Gibson Innovations Limited

Address : 5/F Philips Electronics Building,5 Science Park

East Ave, HK Science Park, Shatin, NT, Hong Kong

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. | Brand | Model Name | Antenna Type | Connector | Gain<br>(dBi) |
|------|-------|------------|--------------|-----------|---------------|
| 1    | N/A   | N/A        | PIFA         | N/A       | 2.12          |



# **TEST RESULTS**

| EUT:          | Soundbar Speaker | Model Name :       | WSB5 |
|---------------|------------------|--------------------|------|
| Temperature:  | <b>25</b> ℃      | Relative Humidity: | 55 % |
| Test Voltage: | DC 7.4V          |                    |      |
| Test Mode :   | TX Mode _1Mbps   |                    |      |

| Antenna<br>Gain<br>(dBi) | Antenna Gain<br>(numeric) | Peak Output<br>Power (dBm) | Peak Output<br>Power (mW) | Power<br>Density (S)<br>(mW/cm²) | Limit of Power<br>Density (S)<br>(mW/cm²) | Test<br>Result |
|--------------------------|---------------------------|----------------------------|---------------------------|----------------------------------|---|----------------|
| 2.12                     | 1.6293                    | 4.92                       | 3.1046                    | 0.00100682                       | 1   | Complies       |
| 2.12                     | 1.6293                    | 4.87                       | 3.0690                    | 0.00099529                       | 1   | Complies       |
| 2.12                     | 1.6293                    | 4.88                       | 3.0761                    | 0.00099759                       | 1   | Complies       |

| EUT:          | Soundbar Speaker | Model Name :       | WSB5 |
|---------------|------------------|--------------------|------|
| Temperature:  | <b>25</b> ℃      | Relative Humidity: | 55 % |
| Test Voltage: | DC 7.4V          |                    |      |
| Test Mode :   | TX Mode _3Mbps   |                    |      |

| Antenna<br>Gain<br>(dBi) | Antenna Gain<br>(numeric) | Peak Output<br>Power (dBm) | •      | Power<br>Density (S)<br>(mW/cm²) | Limit of Power<br>Density (S)<br>(mW/cm²) | Test<br>Result |
|--------------------------|---------------------------|----------------------------|--------|----------------------------------|---|----------------|
| 2.12                     | 1.6293                    | 4.75                       | 2.9854 | 0.00096817                       | 1   | Complies       |
| 2.12                     | 1.6293                    | 4.39                       | 2.7479 | 0.00089115                       | 1   | Complies       |
| 2.12                     | 1.6293                    | 4.66                       | 2.9242 | 0.00094831                       | 1   | Complies       |

Note: the calculated distance is 20 cm.