



FCC ID: XCO-ZEMIARIA  
IC: 7756A-ZEMIARIA

## Statement of compliance to Maximum Permissible Exposure (MPE)

Applicant : Hansong (Nanjing) Technology Ltd.  
8th Kangping Road, Jiangning Economy and Technology  
Development Zone, Nanjing, 211106, China.

Manufacturer : Hansong (Nanjing) Technology Ltd.  
8th Kangping Road, Jiangning Economy and Technology  
Development Zone, Nanjing, 211106, China.

Equipment : Wireless Speaker

Type/Model : Zemi Aria

**According to §2.1091, §2.1093 and §1.1307(b), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.**

The  $S = PG / (4\pi R^2)$

Where S = power density in mW/cm<sup>2</sup>

P = transmit power in mW

G = numeric gain of transmit antenna

R = distance (cm)

R is chosen to be 20cm, the gain of antenna G = 2.00dBi = 1.584(WIFI)

G = 1.00dBi = 1.259(BT)

As we can see from the test reports 140901079SHA-001:

The maximum output power for Wi-Fi = 22.11dBm = 162mW

The MPE of Wi-Fi =  $PG / (4\pi R^2) = 162 * 1.584 / (4 * 3.14 * 20 * 20) = 0.05 \text{ mW/cm}^2$

As we can see from the test reports 140901079SHA-002:

The maximum output power for Bluetooth = 2.31dBm = 1.702mW

$S = PG / (4\pi R^2) = 1.702 * 1.259 / (4 * 3.14 * 20 * 20) = 0.00042 \text{ mW/cm}^2$

For the device can support simultaneous transmission, according to 447498 D01 General RF Exposure Guidance v05r02,


The sum of the MPE ratios =  $0.05 / 1.0 + 0.00042 / 1.0 = 0.05$

This level is below the simultaneous transmission MPE test exclusion requirements ( $\leq 1.0$ ).

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## **Appendix I**

**Definition below must be outlined in the User Manual:**

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.  
To ensure compliance, operations at closer than this distance is not recommended.