# Statement of compliance to Maximum Permissible Exposure (MPE) No. 160602869SHA-002

| | | |
|---|---|---|
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| Manufacturer | : | Hansong(Nanjing) Technology Ltd<br>8th Kangping Road, Jiangning Economy&Technology Development Zone, Nanjing, 211106, China |
| Product Name | : | Power Amplifier |
| Type/Model | : | POWER GATE |

**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.**

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Reviewed by:

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Power density (S) is calculated according to the formula:

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

Where S = power density in mW/cm²
P = transmit power in mW
G = numeric gain of transmit antenna (numeric gain=Log-1(dB antenna gain/10))
R = distance (cm)

The calculations in the table below use the highest gain of antenna for client EUT. These calculations represent worst case in terms of the exposure levels.

| Frequency band | Power | | Antenna Gain | | R | S | Limits |
|---|---|---|---|---|---|---|---|
| (MHz) | dBm | mW | dBi | (Numeric) | (cm) | (mW/cm2) | (mW/cm2) |
| 2402 - 2480 | 8.983 | 7.91 | 2.0 | 1.58 | 20 | 0.002 | 1 |
| 2412 - 2462 | 24.66 | 292.42 | 3.0 | 2.00 | 20 | 0.099 | 1 |
| 5150 - 5250 | 13.23 | 21.04 | 2.7 | 1.86 | 20 | 0.008 | 1 |
| 5250 - 5350 | 13.50 | 22.39 | 2.7 | 1.86 | 20 | 0.008 | 1 |
| 5470 - 5725 | 13.31 | 21.43 | 2.7 | 1.86 | 20 | 0.008 | 1 |
| 5725 - 5850 | 13.73 | 23.60 | 2.7 | 1.86 | 20 | 0.009 | 1 |

Note: 1 mW/cm2 from 1.310 Table 1

For the device consider simultaneous transmission of WIFI and BT,

The worst MPE = 0.002 + 0.099 = 0.101 mW/cm$^2$ < 1 mW/cm$^2$.

# 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.