

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

Applicant : LUMI LEGEND ELECTRICAL CO., LTD  
No.18, lane239, Beihai Road, Jiangbei, Ningbo, China 315032

Manufacturer : LUMI LEGEND ELECTRICAL CO., LTD  
No.18, lane239, Beihai Road, Jiangbei, Ningbo, China 315032

Equipment : WIFI Switch

Type/Model : SW5101

**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  $\text{mW/cm}^2$

$P$  = transmit power in  $\text{mW}$

$G$  = numeric gain of transmit antenna

$R$  = distance (cm)

$R$  is chosen to be 20cm, the gain of antenna  $G = 2.00\text{dBi} = 1.585$

As we can see from the test reports 131201748SHA-001:

The maximum output power for Wi-Fi = 23.38dBm = 217.77mW

The MPE of Wi-Fi =  $PG / (4\pi R^2) = 217.77 * 1.585 / (4 * 3.14 * 20 * 20) = 0.069$

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

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Prepared by:



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Reviewed by:



Daniel Zhao (*Reviewer*)

## **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.