

## RF Exposure Report

FCC ID: 2AOHT-HLT-320

The EUT is a SMART POWER STRIP operated in the 2412MHz ~ 2462MHz frequency band.

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

### (A) Limits for Occupational / Controlled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm <sup>2</sup> ) | Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|------------------------------------------|------------------------------------------------------------------|
| 0.3-3.0               | 614                               | 1.63                              | (100)*                                   | 6                                                                |
| 3.0-30                | 1842 / f                          | 4.89 / f                          | (900 / f)*                               | 6                                                                |
| 30-300                | 61.4                              | 0.163                             | 1.0                                      | 6                                                                |
| 300-1500              |                                   |                                   | f/300                                    | 6                                                                |
| 1500-100,000          |                                   |                                   | 5                                        | 6                                                                |

### (B) Limits for General Population / Uncontrolled Exposure

| Frequency Range (MHz) | Electric Field Strength (E) (V/m) | Magnetic Field Strength (H) (A/m) | Power Density (S) (mW/ cm <sup>2</sup> ) | Averaging Time  E  <sup>2</sup> , H  <sup>2</sup> or S (minutes) |
|-----------------------|-----------------------------------|-----------------------------------|------------------------------------------|------------------------------------------------------------------|
| 0.3-1.34              | 614                               | 1.63                              | (100)*                                   | 30                                                               |
| 1.34-30               | 824/f                             | 2.19/f                            | (180/f)*                                 | 30                                                               |
| 30-300                | 27.5                              | 0.073                             | 0.2                                      | 30                                                               |
| 300-1500              |                                   |                                   | f/1500                                   | 30                                                               |
| 1500-100,000          |                                   |                                   | 1.0                                      | 30                                                               |

Note: f = frequency in MHz

### MPE calculation method

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi r^2}$$

S: power density mW/ cm<sup>2</sup>;

P: power input to the antenna in mW;

g: numeric gain of antenna;

r: distance to centre of radiation in cm

### Calculated result

| Mode      | Max. Peak<br>output<br>power<br>(dBm) | Max. Peak<br>output<br>power<br>(mW) | Antenna<br>Gain<br>(numeric) | Power Density<br>(S)<br>(mW/ cm <sup>2</sup> ) | Limit of<br>Power Density<br>(S)<br>(mW/ cm <sup>2</sup> ) |
|-----------|---------------------------------------|--------------------------------------|------------------------------|------------------------------------------------|------------------------------------------------------------|
| 802.11b   | 16.35                                 | 43.152                               | 1.259                        | 0.010814                                       | 1                                                          |
| 802.11g   | 15.77                                 | 37.757                               | 1.259                        | 0.009462                                       | 1                                                          |
| 802.11n20 | 14.54                                 | 28.445                               | 1.259                        | 0.007129                                       | 1                                                          |

Note1: the antenna gain is 1.0dBi;

Note2: Calculated distance is 20cm, which is declared by the manufacture.