

## MPE ESTIMATION

FCC ID: 2BNGN-GRIP-EXPRESS

### 1, Limit for General Population/ Uncontrolled Exposures

| Frequency        | Power density (mW/cm <sup>2</sup> ) | Averaging time (minutes) |
|------------------|-------------------------------------|--------------------------|
| 300MHz----1.5GHz | F/1500                              | 30                       |
| 1.5GHz---100GHz  | 1.0                                 | 30                       |

### 2, Estimation Result

|           | Mode | Max PK<br>Output power<br>(dBm) | Tune Up<br>Power<br>(dBm) | Max Tune<br>Up power<br>(mW) | Antenna<br>Gain (dBi) | Antenna<br>Gain<br>(linear) | MPE<br>(mW/cm <sup>2</sup> ) |
|-----------|------|---------------------------------|---------------------------|------------------------------|-----------------------|-----------------------------|------------------------------|
| BLE       | 2402 | 3.94                            | 4±1(5)                    | 3.16                         | -0.1                  | 0.98                        | 0.00062                      |
| 2.4G WIFI | 2462 | 14.89                           | 15±1(16)                  | 39.81                        | 0.71                  | 1.18                        | 0.00933                      |

$$Pd = \frac{P_{out} * G}{4\pi r^2};$$

Note:

Note: The estimation distance is 20cm

Note: PK Output power = conducted power.

Conducted power see the test report HK2411116637-1E/2E,

BT antenna gain = -0.1dBi, WIFI antenna gain = 0.71dBi;

Synchronous launch evaluation: BT+WIFI=0.00062+0.00933=0.00995mW/cm<sup>2</sup>

when the minimum test separation distance is >20 cm, a distance of 20 cm is applied to determine RF Exposure test exclusion. The test exclusion threshold is 0.00995 which is < 1.0, RF Exposure testing is not required.

-----The End-----