Applicant: Signify (China) Investment Co., Ltd.
Product Name: LED Lamp
Model Number: 9290032676,9290032675
FCC ID: 2AGBW9290032675X

## RADIO FRREQUENCY EXPOSURE COMPLIANCE RESULT:

Test Standard: FCC CFR 47 § 1.1310 : Radiofrequency radiation exposure limits.

Table 1-Limits for Maximum Permissible Exposure (MPE)

| Frequency range (MHz) | Electric field strength (V/m) | Magnetic field strength (A/m) | Power density ( $\mathrm{mW} / \mathrm{cm}^{2}$ ) | Averaging time (minutes) |
| :---: | :---: | :---: | :---: | :---: |
| (A) Limits for Occupational/Controlled Exposure |  |  |  |  |
| 0.3-3.0 | 614 | 1.63 | *100 | 6 |
| 3.0-30 | 1842/f | 4.89/f | *900/f ${ }^{2}$ | 6 |
| 30-300 | 61.4 | 0.163 | 1.0 | 6 |
| 300-1,500 |  |  | f/300 | 6 |
| 1,500-100,000 |  |  | 5 | 6 |
| (B) Limits for General Population/Uncontrolled Exposure |  |  |  |  |
| 0.3-1.34 | 614 | 1.63 | *100 | 30 |
| 1.34-30 | 824/f | 2.19/f | *180/f ${ }^{2}$ | 30 |
| 30-300 | 27.5 | 0.073 | 0.2 | 30 |
| 300-1,500 |  |  | f/1500 | 30 |
| 1,500-100,000 |  |  | 1.0 | 30 |

$\mathrm{f}=$ frequency in MHz * = Plane-wave equivalent power density

## Note:

(1) Occupational/controlled exposure limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when a person is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.
(2) General population/uncontrolled exposure limits apply in situations in which the general public may be exposed, or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

MPE Calculation Standard:

$$
\operatorname{MPE}(\mathrm{S})=\mathrm{PG} /\left(4 \pi R^{2}\right)
$$

where: $\mathrm{S}=$ power density (in appropriate units, e.g. $\mathrm{mW} / \mathrm{cm}^{2}$ )
$\mathrm{P}=$ power input to the antenna (in appropriate units, e.g., mW)
$\mathrm{G}=$ power gain of the antenna in the direction of interest relative to an isotropic radiator
$\mathrm{R}=$ distance to the center of radiation of the antenna (appropriate units, e.g., cm)

## Calculation Result:

For this EUT, General population/uncontrolled exposure limits applied.
The limit value $1.0 \mathrm{~mW} / \mathrm{cm}^{2}$ is available for this EUT.
The Output Power comes from the RF Test Report, and for this EUT, the Bluetooth and Wifi can not simultaneous transmission.

| Modulation | Peak Output Power |  | Antenna Gain |  | MPE | Limit | Verdict |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $(\mathrm{dBm})$ | $(\mathrm{mW})$ | $(\mathrm{dBi})$ | $($ Numeric $)$ | $\left(\mathrm{mW} / \mathrm{cm}^{2}\right)$ | $\left(\mathrm{mW} / \mathrm{cm}^{2}\right)$ |  |
| BLE | 6.422 | 4.38733 | -4 | 0.39811 | 0.00035 | 1.0 | Compliant |
| 802.11 b | 17.06 | 50.8159 | -4 | 0.39811 | 0.00402 | 1.0 | Compliant |
| 802.11 g | 17.92 | 61.9441 | -4 | 0.39811 | 0.00491 | 1.0 | Compliant |
| 802.11 n 20 | 16.88 | 48.7528 | -4 | 0.39811 | 0.00386 | 1.0 | Compliant |
| 802.11 n 40 | 15.91 | 38.9942 | -4 | 0.39811 | 0.00309 | 1.0 | Compliant |

For $R=20 \mathrm{~cm}$

