

Radio frequency radiation exposure evaluation: portable devices

RESULT :

Pass

Test Specification

Test item	: LED RGB STRIP
Identification / Type No.	: XX5050RGB-03
FCC ID	: 2A855-XX1617
Test standard	: CFR47 FCC Part 2: Section 2.1093 FCC KDB Publication 447498 D04

Calculation Method according to KDB 447498 D04

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B. 2})$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and ERP20cm is per Formula (B.1). The example values shown in Table B.2 are for illustration only.

FCC Measurement Record:

Test Mode	Conducted Power (dBm)	Conducted Power (mW)	ERP (dBm)	ERP (mW)	Minimum Separation Distances (mm)	Limit (mW)
BLE	3.16	2.07	1.01	1.26	5	2.72