

Applicant's name : SHENZHEN D-light Technolgy Limited

Manufacture's name : SHENZHEN D-light Technolgy Limited

Model name : DP30A

RF Exposure

Test Requirement : FCC Part 1.1307

Evaluation Method : KDB 447498 D01 General RF Exposure Guidance v05

Requirements

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR where}$$

$f(\text{GHz}) \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR where

1. $f(\text{GHz})$ is the RF channel transmit frequency in GHz
2. Power and distance are rounded to the nearest mW and mm before calculation
3. The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

The Result:

$P_t = 9.24 \text{ dBm} = 8.395 \text{ mW}$

The result is rounded to one decimal place for comparison Worst case is as below: [2462 MHz – 8.395mW output power]

$$(8.395 \text{ mW} / 5 \text{ mm}) \cdot [\sqrt{2.462 \text{ (GHz)}}] = 2.634 < 3.0 \text{ for 1 - g SAR}$$

Then SAR evaluation is not required

Note : For the maximum power, refer to FCC test report.