

RF Exposure evaluation

Product Description: A8in Super WiFi Base Station

Model Number: WA8011N-HE

IC: 10856A-WA8011NHE

According to 447498 D01 General RF Exposure Guidance v05 and RSS-102
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:

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

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

Worse case is as below: [2.442MHz 16.36 dBm(43.35 mW) output power]

$(43.35\text{mW} / 20000\text{mm}) \cdot [\sqrt{2.442 (\text{GHz})}] = 0.00339 < 3.0$ for 1-g SAR

Then SAR evaluation is not required