

RF exposure statement

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To whom it may concern:

ZACTA is authorized as an agency from **Applicant: Mitsumi Electric Co., Ltd.** to act on their behalf in all matters relating to applications for equipment authorization, including testing the device and the signing of all documents relating to these matters.

The maximum peak output power of the product **FCC ID: POO-WC69** is 8.4 mW.

Based on KDB 447498 D01 V05, 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:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})]$

$[\sqrt{f_{(\text{GHz})}}] \leq 3.0$ 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

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.

For this device, based on the highest RF channel frequency of 2480 MHz (2.48GHz), a separation distance of < 5 mm, and a maximum output power of 8.4mW the calculation for test exclusion is: $[8/5] [\sqrt{2.480}] = \underline{2.5}$.

As the calculated value of 2.5 is less than 3.0 this device may be installed into portable host devices used within 5mm of the body without requiring SAR evaluation.

Use in mobile host systems (devices used at least 20cm from persons) is also allowed without additional rf exposure evaluation based on the following MPE calculation showing that the power density is below the limit of $1\text{mW}/\text{cm}^2$ at a distance of 20cm from the antenna:

$$S = 4\pi R^2 = 0.002 \text{ mW}/\text{cm}^2$$

where:

- S = power density
- P = power input to the antenna (8.4 mW)

- G = power gain of the antenna in the direction of interest relative to an isotropic radiator (0.955 = -0.2dBi)
- R = distance to the center of radiation of the antenna (20 cm)

Collocation with other transmitters in portable or mobile host systems may require additional evaluation, and possible SAR testing, based on the application of FCC multi-transmitter rf exposure guidance.

Sincerely,



Eiji Akiba

Deputy General Manager of Technical Division

ZACTA Technology Corporation