

RF Exposure / MPE Calculation

No.	14615663S
Customer	Canon Inc.
Description of EUT	Wireless LAN Module
Model Number of EUT	FM3-L998
FCC ID	AZDFM3L998

Canon Inc. declares that Model: FM3-L998 complies with FCC radiation exposure requirement specified in the FCC Rule 2.1091 (for mobile).

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the “FM3-L998” as calculated from (B) Limits for General Population / Uncontrolled Exposure of TABLE 1- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) of §1.1310 Radiofrequency radiation exposure limits.

[WLAN 2.4 GHz band part]

This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1 mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = \frac{P \times G}{4 \times \pi \times r^2}$$

Where

$P =$ 23.15 mW (Maximum average output power)

☐ Time average was used for the above value in consideration of 6-minutes time-averaging

☒ Burst power average was used for the above value in consideration of worst condition.

$G =$ 1.782 Numerical Antenna gain; equal to 2.51 dBi

$r =$ 20 cm (Separation distance)

Power Density Result $S = 0.00821 \text{ mW/cm}^2$

[WLAN 5 GHz band part]

This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = \frac{P \times G}{4 \times \pi \times r^2}$$

Where

$P =$ 25.72 mW (Maximum average output power)

☐ average was used for the above value in consideration of 6-minutes time-average

☒ power average was used for the above value in consideration of worst condition

$G =$ 2.692 Numerical Antenna gain; equal to 4.3 dBi

$r =$ 20 cm (Separation distance)

Power Density Result $S = 0.01377 \text{ mW/cm}^2$