

June 30, 2023

FCC ID: 2ADBKFAZRSENSOR01

To whom it may concern,

[24 GHz Sensor part]

YAMAHA MOTOR CO., LTD. declares that Model: L75N57010 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 "L75N57010" 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.

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

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

Where

EIRP = 55.85 mW (EIRP Maximum average 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.

r = 20 cm (Separation distance)

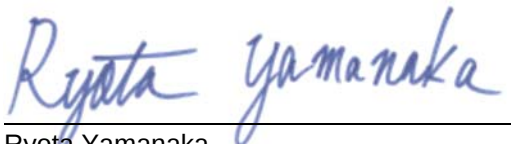
Power Density Result S = 0.01111 mW/cm²

*EIRP maximum average power was referred to Test report No. 14752026H-A.

Calculation: EIRP [dBm] = E [dBuV/m] + 20 log(3 [m]) – 104.77 (Refer to ANSI C 63.10 Section 9.5)

17.47 [dBm] = 112.7 [dBuV/m] + 9.54 – 104.77

Even the RF Specification EIRP of 20 dBm, the power density S is 0.02 mW/cm², which is below the RF Exposure Limit of 1 mW/cm².



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