

RF Exposure / MPE Calculation

No. : 10662332H

Applicant : Murata Manufacturing Company, Ltd.
Type of Equipment : Communication Module (2.4GHz Band)
Model No. : LBEE5ZZ1CK
FCC ID : VPYLB1CK

Murata Manufacturing Company, Ltd. declares that Model : LBEE5ZZ1CK
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 "LBEE5ZZ1CK" 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 maximum power and antenna gain, and considering a 1.0mW/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = (P * G) / (4 * \pi * r^2)$$

Where

P = 44.26 mW (Maximum average output power)
G = 1.00 Numerical Antenna gain; equal to 0.00 dBi
r = 20.0 cm

For: LBEE5ZZ1CK

$$S = 0.00881 \text{ mW/cm}^2$$

Even taking into account the tolerance, this device can be satisfied with the limits.

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