

RF Exposure / SAR Statement

No. : 25HE0235-HO-1

Applicant : TOSEI ENGINEERING CORP.
Type of Equipment : Wireless Module
Model No. : AE51041
FCC ID : TNY0999058

TOSEI ENGINEERING CORP. declares that Model : Wireless Module complies with FCC radiation exposure requirement specified in the FCC Rules 2.1093(for portable)/2.1091 (for mobile). The “AE51041“ has 12.3 mW of conducted Peak Output power and 5.69 mW of EIRP. This kind of equipment is below 60/frequency[GHz] mW(TCB Exclusion List) so that SAR testing is excluded. The Following calculation is the reference data for 20cm distance.

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the “AE51041“ as calculated from FCC OET Bulletin 65 Appendix A, Table (B) Limits for General Population / Uncontrolled Exposure. 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 = 12.30 mW (Maximum peak output power)
G = 0.46 Numerical Antenna gain; equal to -3.35 dBi
r = 20.0 cm

For: AE51041

S = 0.00113 mW/cm²

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