

RF Exposure Statement

No. : 23IE0032-HO-1

Applicant : DENSO WAVE INCORPORATED
Type of Equipment : BARCODE HANDY TERMINAL
Model No. : BHT-8000DB, BHT-8000B, BHT-8100B
FCC ID : PZWBHT8000

RF Exposure Statement:

DENSO WAVE INCORPORATED declares that **Barcode Handy Terminal (Model: BHT-8000DB)** complies with FCC radiation exposure requirement specified in the FCC Rules 2.1093(2).

BHT8000DB has 1.35mW of conducted Peak output power and 2.17mW of EIRP.(Antenna gain : 2.1dBi)
According to RF output power of this module transmitter, values for both Conducted peak output power and EIRP are below 5mW. This kind of equipment hardly ever go over SAR value limited of 1.6W/Kg for public resident which is regulated by "OET Bulletin65, Supplement C".

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the "BHT-8000DB" as calculated from FCC OET 65 Appendix B, 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 1.0m W/cm² uncontrolled exposure limit. The Friis formula used was:

$$S = (P * G) / (4 * \pi * r^2) \quad \text{or} \quad r = \sqrt{(P * G) / (4 * \pi * S)}$$

Where **S = 1.00 mW/cm² for 2400 MHz (equivalent to 10W/m²)**

P = 1.35 mW(Maximum Conducted Power)

G =1.61 (Numerical Antenna gain; equal to 2.1 dBi)

r = Minimum safe distance from antenna (cm)

For: BHT-8000DB r = 0.42 cm

Notes in Installation Manual:

FCC Radiated Exposure Statement:

This module may be installed into any end product both mobile and portable applications. Because the module only radiates very low power levels, it complies with RF exposure requirements. According to Supplement C, Edition 01-01 to OET Bulletin 65, Edition 97-01 spread spectrum transmitters are categorically excluded from routine environmental evaluation because of the low power level, where there is a high likelihood of compliance with RF exposure standards.

Note:

The difference between Series Models (BHT-8000DB, BHT-8000B, BHT-8100B) is shown in the Test Report. The test was performed on the Model (BHT-8000DB) that had Worst case (of three models' margins). Therefore, the other two models (BHT-8000B, BHT-8100B) also comply with above RF Exposure Requirements.

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