

RF Exposure / SAR Statement (Reference)

No. : 11922902S

Applicant : **PIONEER CORPORATION**
Type of Equipment : **MULTIMEDIA NAVIGATION RECEIVER**
Model No. : **AVIC-W 8400NEX**
FCC ID : **AJDK103**

PIONEER CORPORATION declares that Model : AVIC-W8400NEX complies with FCC radiation exposure requirement specified in the FCC Rules 2.1091(for mobile). AVIC-W8400NEX is intended to be used BT (Bluetooth) and Wi-Fi (2.4 GHz band), or BT and Wi-Fi (5 GHz Band) simultaneously within 20 cm.

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the "AVIC-W8400NEX" as calculated from FCC Part 1, §1.1310, TABLE 1 (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:

$$S1 = ((P1 * G1) + (P2 * G2)) / (4 * \pi * r^2)$$

$$S2 = ((P1 * G1) + (P3 * G3)) / (4 * \pi * r^2)$$

Where

P1 = 0.90 mW (Maximum peak output power) *1)
P2 = 35.40 mW (Maximum peak output power) *2)
P3 = 13.89 mW (Maximum peak output power) *3)
G1 = 0.16 Numerical Antenna gain; equal to -8.00 dBi *1)
G2 = 0.34 Numerical Antenna gain; equal to -4.70 dBi *2)
G3 = 0.50 Numerical Antenna gain; equal to -3.00 dBi *3)
r = 20.0 cm

For: AVIC-W 8400NEX (BT and Wi-Fi(2.4 GHz band)) S1 = 0.00241 mW/cm²

For: AVIC-W 8400NEX (BT and Wi-Fi(5 GHz band)) S2 = 0.00141 mW/cm²

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

*1) BT value

*2) Wi-Fi (2.4 GHz band) value

*3) Wi-Fi (5 GHz band) value

This calculation was made to show that the EUT complies with the limit in simultaneous transmitting of BT and Wi-Fi (2.4 GHz band), or BT and Wi-Fi (5 GHz band).

UL Japan, Inc.

Shonan EMC Lab.

1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN

Telephone : +81 463 50 6400

Facsimile : +81 463 50 6401