H.B. Compliance Solutions

Maximum Permissible Exposure Statement

For the

Raveon Technologies Corporation

DART Data Modem RV-D80-EB/RV-M80-EB

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Prepared for:

Raveon Technologies Corporation

2320 Cousteau Court,

Vista, CA 92081

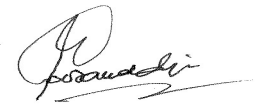
Prepared By:

H.B. Compliance Solutions

5005 S. Ash Avenue, Suite # A-10

Tempe, Arizona 85282

Reviewed By:



Hoosamuddin Bandukwala

Cert # ATL-0062-E

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$S = PG/4\pi R^2$

Where,

S = power density (mW/cm2)
P = output power at the antenna terminal (mW)
G = gain of transmit antenna (numeric)
R = distance from transmitting antenna (cm)

Maximum peak output power at antenna input terminal = 36.74 (dBm)
Maximum peak output power at antenna input terminal = 4720 (mW)
Antenna gain (typical) = 0 (dBi)
Maximum antenna gain = 1.0 (numeric)
Prediction distance = 36 (cm)
Prediction frequency = 896.1 (MHz)
MPE limit for uncontrolled exposure at prediction frequency = 0.597 (mW/cm^2)
Power density at prediction frequency = 0.2898277 (mW/cm^2)

To solve for the minimum mounting distance required;

$R = \sqrt{(PG/4\pi S)}$

$R = \sqrt{(4720 \times 1.0 / 4\pi \times 0.2898277)}$ = 36 cm (Based on continuous transmission)

Maximum peak output power at antenna input terminal = 36.74 (dBm)
Maximum peak output power at antenna input terminal = 4720 (mW)
Antenna gain (typical) = 6 (dBi)
Maximum antenna gain = 3.98 (numeric)
Prediction distance = 100 (cm)
Prediction frequency = 896.1 (MHz)
MPE limit for uncontrolled exposure at prediction frequency = 0.597 (mW/cm^2)
Power density at prediction frequency = 0.1494954 (mW/cm^2)

To solve for the minimum mounting distance required;

$R = \sqrt{(PG/4\pi S)}$

R = √ (4720 x 3.98 / 4π x 0.1494954) = 100 cm (Based on continuous transmission)

END OF TEST REPORT