H.B. Compliance Solutions

Maximum Permissible Exposure Statement

For the

Globalstar, Inc.

ST150M

December 7, 2021

Prepared for:

Globalstar, Inc.

1351 Holiday Square Blvd.

Covington, LA 70433

Prepared By:

H.B. Compliance Solutions

5005 S. Ash Avenue, Suite # A-10

Tempe, Arizona 85282

Reviewed By:

Hoosamuddin Bandukwala

iNARTE

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/4πR2

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)

For Bluetooth Transmitter

Maximum peak output power at antenna input terminal = -2.54 (dBm)
Maximum peak output power at antenna input terminal = 0.557 (mW)
Antenna gain (typical) = 1.3(dBi)
Maximum antenna gain = 1.4(numeric)
Prediction distance = 20 (cm)
Prediction frequency = 2480 (MHz)
MPE limit for uncontrolled exposure at prediction frequency = 1 (mW/cm^2)
Power density at prediction frequency = 0.00015 (mW/cm^2)

To solve for the minimum mounting distance required;

R = √ (PG/4πS)

R = √ (0.557 x 1.4 / 4π x 0.00016) = 20 cm (Based on continuous transmission)

For Satellite Transmitter

Maximum peak output power at antenna input terminal = <u>20.30 (dBm)</u> *
Maximum peak output power at antenna input terminal = <u>107.15 (mW)</u>
Antenna gain (typical) = <u>5.1 (dBi)</u>
Maximum antenna gain = <u>3.16 (numeric)</u>
Prediction distance = <u>20 (cm)</u>
Prediction frequency = <u>1618.75 (MHz)</u>
MPE limit for uncontrolled exposure at prediction frequency = <u>1.0 (mW/cm^2)</u>
Power density at prediction frequency = <u>0.06736 (mW/cm^2)</u>

*Includes 1dB of manufacturer output power tolerance.

To solve for the minimum mounting distance required;

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

R = √ (107.15 x 1.26 / 4π x 0.02685) = <u>20 cm</u> (Based on continuous transmission)

Note:

Both transmitters (Bluetooth and Satellite) do not operate at the same time.

END OF TEST REPORT