

MPE Calculations

R33AVM16S11

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1.0 **SCOPE**:

This Report Demonstrates Evaluation and Compliance for Human Exposure to Radiofrequency Electromagnetic Fields as Outlined by the Federal Communications Commission Office of Engineering and Technology Bulletin 65.

2.0 **REVISION LEVEL:**

DATE	COMMENTS	REVISIO N
04/18/05	Created.	1.0

3.0 **REFERANCE DOCUMENTS:**

- (A) Limits for Maximum Permissible Exposure (MPE). Code of Federal Regulations Title 47, Volume 1, Section 1.1310.
- (B) Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields. OET Bulletin 67 Edition 97-01.

4.0 CALCULATIONS:

B)

The following worst case emissions are based on a PPt (Peak Power Total) measurement of 10.7 dBm. And the worst case antenna gain on axis is found to be 1.469 dBi.

Total radiated power at the Transmitter:

Power density at a distance of .02 meters is:

 $S = EIRP/4\pi \cdot R^2$

S = 33 mW per meter squared.

Power density based on a Per Centimeter Squared is:

3.3 µW per centimeter squared.

5.0 CONCLUSION:

Based on the FCC Limits for Maximum Permissible Exposure (MPE) given in Table 1 of reference document (A) this device falls under the required limits.