Statement of compliance to Maximum Permissible Exposure (MPE)

Equipment	:	RAEMesh Radio
Type/Model	:	RM2400A
Applicant	:	RAE Systems Inc. 3775 N. 1st St., San Jose, California USA 95134

Here assuming a worst-case prediction of power density (100% reflection), then
$S = 4PG / (4\pi R^2) = PG / (\pi R^2)$.
Where S = power density in mW/cm^2
P = transmit power in mW
G = numeric gain of transmit antenna
R = distance (cm)

As we can see from the test report SH11040699-001:
The maximum P = 20.21dBm = 104.95mW
G = 3.50dBi = 2.24
Here R is chosen to be 20cm,

$S = PG / (\pi R^2) = 104.95 * 2.24 / (3.14 * 20 * 20) = 0.19 mW/cm^2$

This level is below the 1 mW/cm^2 MPE for General Population / Uncontrolled Exposure as stated in OET BULLETIN 65 Edition 97-01.
Conclusion: this EUT fulfills 47CFR Part 15.247(i) (2007) with the definition outlined in the User's Manual. (See appendix I)

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Appendix I

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.
To ensure compliance, operations at closer than this distance is not recommended.