RF Exposure Information

(Duplicated from Section 6.2 of Test Report)

The maximum radiation level from the unit was determined by using an open-end waveguide probe feeding directly into a spectrum analyzer. In case the 1 mW/cm2 limit is exceeded, the maximum distance from the DUT is determined by measurement at a distance where the field density is 1 mW/cm2.

An open-end waveguide probe is as basic as a standard gain horn. Their characteristics have been extensively studied and experimentally verified. (Yaghjian, IEEE/APS pp. 378-384, April, 1984.) For the S-band (WR-284) waveguide at 2445 MHz, for an open-end waveguide the Gain is 5.7 dBi and this equates to Aeq = 44.25 cm2, giving

$$p(mW/cm2) = 0.026 * P(mW)$$

where P(mW) is power measured.

For the subject DUT, we probed each of the 12 configurations in the near field including the surface of the antenna. In every case the maximum power density was found at the feed of the antenna. Table 6.1 below summarizes the results.

Table 6.1. Measured EM Radiation Exposure Levels.

System	P(mW)	Max. Level (mW/cm^2)	Limit (mW/cm^2)
08U	1.0	0.030	1.0
08UA	3.2	0.080	1.0
10U	0.3	0.010	1.0
10UA	0.7	0.020	1.0
14P	0.5	0.010	1.0
14PA	0.5	0.010	1.0
15U	0.2	0.004	1.0
15UA	6.9	0.180	1.0
15Y	0.4	0.010	1.0
15YA	0.7	0.020	1.0
24G	0.5	0.013	1.0
24GA	5.6	0.146	1.0