

Client:	GE MDS LLC	Job Number:	J80799
Model:	MERCURY2	T-Log Number:	T80830
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC Part 90, RSS-119	Class:	-

## Maximum Permissible Exposure

### Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Evaluation 10/14/2010  
 Test Engineer Mehran Birgani

### General Test Configuration

Calculation uses the free space transmission formula:

$$S = (PG)/(4 \pi d^2)$$

Where: S is power density ( $W/m^2$ ), P is output power (W), G is antenna gain relative to isotropic, d is separation distance from the transmitting antenna (m).

### Summary of Results

Minimum separation distance for 18dBi ant. (in cm):	<b>24.9</b>	(Note - manual states 25cm required)
Minimum separation distance for 13dBi ant. (in cm):	<b>24.6</b>	

### Modifications Made During Testing

No modifications were made to the EUT during testing

### Deviations From The Standard

No deviations were made from the requirements of the standard.

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Use: General      Antenna: Panel 18dBi less 6dB cable loss

Freq. MHz	EUT Total Power*		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>
	dBm	mW						
3652 - 3673	26.9	489.8	6	18	20.9	7762.47	1.544	1.000

For the cases where S > the MPE Limit

Freq. MHz	Power Density (S) at 20 cm mW/cm <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>	Distance where S <= MPE Limit cm
3652 - 3673	1.544	1.000	<b>24.9</b>

Use: General      Antenna: Omni 13dBi less 6dB cable loss

Freq. MHz	EUT Total Power*		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>
	dBm	mW						
3652 - 3673	31.8	1513.6	6	13	25.8	7585.78	1.509	1.000

For the cases where S > the MPE Limit

Freq. MHz	Power Density (S) at 20 cm mW/cm <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>	Distance where S <= MPE Limit cm
3652 - 3673	1.509	1.000	<b>24.6</b>

\* Maximum measured total output power from the radio for this antenna. The total power is integrated over the 99% bandwidth of the output.