# Radio Test Data

N N	E ENGINEER SUCCESS		
Client:	GE MDS LLC	Job Number:	J80799
Model:	Margury 2650 Page Station and Margury 2650 Subacriber	T-Log Number:	T80830
	Mercury 3050 base Station and Mercury 3050 Subscriber	Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC Part 90, RSS-197	Class:	-

# Maximum Permissible Exposure

### Test Specific Details

**NTS** 

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<sup>2</sup>), 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):
 24.9
 (Note - manual states 25cm required)

 Minimum separation distance for 13dBi ant. (in cm):
 24.6

### 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.

Client	: GE MDS LL	C					Job Number:	J80799
Medel Mercury 2050 Deep Station and Mercury 2050 Outparties						T-Log Number:	T80830	
Model: Mercury 3650 Base Station and Mercury 3650 Subscriber						Account Manager:	Susan Pelzl	
Contact	: Dennis McC	arthy						
Standard	: FCC Part 90	), RSS-197					Class:	-
lse <sup>.</sup>	General		Antenna <sup>.</sup>	Panel 18dB	i less 6dB ca	ble loss plus (	3dB for two chains	
<u>,,,,,</u>	El	JT	Cable Loss	Ant	Power		Power Density (S)	MPE Limit
Freq.	Total F	Power*	Loss	Gain	at Ant	EIRP	at 20 cm	at 20 cm
MHz	dBm	mW	dB	dBi	dBm	mW	mW/cm^2	mW/cm^2
3653 - 3697	23.9	245.5	6	21	17.9	7762.47	1.544	1.000
						1 1		1
or the cas	es where S >	the MPE Li	mit			. 1		
Frag	Power Density (S)		MPE Limit		Distance where			
гтеq. MHz	mW/	cm^2	at 20 cm mW/cm^2		Cm			
3653 -	1.5	544	1 (	1 000 24 0		10		
3697	1.0	744	1.0	1.000		1.7		
	General		Antonno	o				
JSE.	Contorui		Antenna:	Omni 13dBi	less 6dB ca	die Ioss pius 3	3dB for two chains	
JSE.	El	JT	Cable Loss	Ant	Power	ble loss plus d	Power Density (S)	MPE Limit
Freq.	El Total F	JT Power*	Cable Loss Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
Freq. MHz	EL Total F dBm	JT Power* mW	Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2
Freq. MHz 3653 - 3697	EL Total F dBm 28.8	JT <sup>P</sup> ower* mW 758.6	Cable Loss Loss dB 6	Ant Gain dBi 16	Power at Ant dBm 22.8	EIRP mW 7585.78	Power Density (S) at 20 cm mW/cm^2 1.509	MPE Limit at 20 cm mW/cm^2 1.000
Freq. MHz 3653 - <u>3697</u>	El Total F dBm 28.8	JT <sup>2</sup> ower* mW 758.6	Cable Loss Loss dB 6	Ant Gain dBi 16	Power at Ant dBm 22.8	EIRP mW 7585.78	Power Density (S) at 20 cm mW/cm <sup>2</sup> 1.509	MPE Limit at 20 cm mW/cm^2 1.000
Freq. MHz 3653 - 3697 For the cas	EL Total F dBm 28.8 Ees where S >	JT Power* MW 758.6 the MPE Li	Cable Loss Loss dB 6	Omni 13dBi Ant Gain dBi 16	Power at Ant dBm 22.8	EIRP mW 7585.78	AdB for two chains Power Density (S) at 20 cm mW/cm^2 1.509	MPE Limit at 20 cm mW/cm^2 1.000
Freq. MHz 3653 - 3697 For the cas	EL Total F dBm 28.8 Ees where S > Power Do	JT Power* MW 758.6 the MPE Li ensity (S)	Antenna: Cable Loss Loss dB 6 mit MPE at 20	Ant Gain dBi 16 Limit	less 6dB ca Power at Ant dBm 22.8 Distanc	EIRP mW 7585.78	Power Density (S) at 20 cm mW/cm^2 1.509	MPE Limit at 20 cm mW/cm^2 1.000
Freq. <u>MHz</u> 3653 - <u>3697</u> For the cas Freq. MHz	EL Total F dBm 28.8 Power De at 20 mW/	JT Power* 758.6 the MPE Li ensity (S) 0 cm cm^2	Antenna: Cable Loss Loss dB 6 mit MPE at 20 mW/	Ant Gain dBi 16 Limit C cm cm^2	Power at Ant dBm 22.8 Distanc S <= M	EIRP mW 7585.78 e where PE Limit	Power Density (S) at 20 cm mW/cm^2 1.509	MPE Limit at 20 cm mW/cm^2 1.000
Freq. MHz 3653 - 3697 or the cas Freq. MHz 3653 -	El Total F dBm 28.8 Power Do at 20 mW/ 1.5	JT Power* 758.6 the MPE Li ensity (S) 0 cm cm^2	Antenna: Cable Loss dB 6 mit MPE at 2( mW/r	Ant Gain dBi 16 Limit Cm cm <sup>2</sup>	less 6dB ca         Power         at Ant         dBm         22.8         Distance         S <= M	EIRP mW 7585.78 PE Limit m	AdB for two chains Power Density (S) at 20 cm mW/cm^2 1.509	MPE Limit at 20 cm mW/cm^2 1.000