

# EMC Test Data

An 2(22) company			
Client:	GE MDS LLC	Job Number:	J83512
Model:	Marcum/5800	T-Log Number:	T83623
		Account Manager:	Susan Pelzl
Contact:	Dennis McCarthy		
Standard:	FCC 15.247, RSS-210, RSS-GEN	Class:	N/A

# Maximum Permissible Exposure

# Test Specific Details

Objective: Evaluate the RF Exposure requirements per FCC 1.1310, 2.1091 and RSS-102.

Date of Test: 10/10/2011 Test Engineer: David Bare

# 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

Device complies with Power Density requirements at 20cm separation: If not, required separation distance (in cm):

## 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.

		ot	npany					
Client	GE MDS	LLC	ipany				Job Number:	J83512
							T-Log Number:	T83623
Model	Mercury5	800					Account Manager:	Susan Pelzl
Contact	: Dennis McCarthy							
Standard	: FCC 15.247, RSS-210, RSS-GEN						Class:	N/A
Jse:	General							
ntenna:	Sector							
	EU	IT	Cable	Ant	Power		Power Density (S)	MPE Limit
Freq.	Pov	ver	Loss	Gain	at Ant	EIRP	at 20 cm	at 20 cm
MHz	dBm	mW*	dB	dBi	dBm	mW	mW/cm^2	mW/cm^2
5731	16.5	44.7	0	18.5	16.5	3162.28	0.629	1.000
5788	16.3	42.7	0	18.5	16.3	3019.95	0.601	1.000
5844	16.3	42.7	0	18.5	16.3	3019.95	0.601	1.000
N 41 I	S @ 20 cm mW/cm^2 0.629				Distance where S <= MPE Limit 15.9cm			
MHz 5731	0.6	29	1.0	<u>cm^2</u> )00	15	.9cm		
5731 5788	0.6 0.6	29 01	1.0 1.0	)00 )00	15 15	.9cm .5cm		
5731 5788 5844	0.6 0.6 0.6	29 01	1.0 1.0	000	15 15	.9cm		
5731 5788 5844 Antenna: Freq.	0.6 0.6 0.6 Panel EU Pov	29 01 01 IT ver	1.0 1.0 1.0 1.0 Cable Loss	000 000 000 Ant Gain	15 15 15 Power at Ant	<u>.9cm</u> .5cm .5cm EIRP	Power Density (S) at 20 cm	at 20 cm
5731 5788 5844 Antenna: Freq. MHz	0.6 0.6 0.6 Panel EU Pov dBm	29 01 01 JT ver mW*	1.0 1.0 1.0 1.0 Cable Loss dB	000 000 Ant Gain dBi	15 15 15 Power at Ant dBm	<u>.9cm</u> .5cm .5cm EIRP mW	at 20 cm mW/cm^2	mW/cm^2
5731 5788 5844 Intenna: Freq. MHz 5727	0.6 0.6 0.6 Panel EU Pov dBm 17.5	29 01 01 Ver mW* 56.2	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	000 000 000 Ant Gain dBi 18	15 15 15 Power at Ant dBm 17.5	<u>.9cm</u> .5cm .5cm EIRP mW 3548.13	at 20 cm mW/cm^2 0.706	at 20 cm <u>mW/cm^2</u> 1.000
5731 5788 5844 ntenna: Freq. MHz 5727 5788	0.6 0.6 0.6 Panel EU Pov dBm 17.5 17.7	29 01 01 VT ver mW* 56.2 58.9	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	000 000 Ant Gain dBi 18 18	15 15 15 15 15 Power at Ant dBm 17.5 17.7	9cm .5cm .5cm EIRP mW 3548.13 3715.35	at 20 cm mW/cm^2 0.706 0.739	at 20 cm mW/cm^2 1.000 1.000
5731 5788 5844 ntenna: Freq. MHz 5727	0.6 0.6 0.6 Panel EU Pov dBm 17.5	29 01 01 Ver mW* 56.2	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	000 000 000 Ant Gain dBi 18	15 15 15 Power at Ant dBm 17.5	<u>.9cm</u> .5cm .5cm EIRP mW 3548.13	at 20 cm mW/cm^2 0.706	at 20 cm <u>mW/cm^2</u> 1.000
5731 5788 5844 .ntenna: Freq. MHz 5727 5788 5847 or the cas	0.6 0.6 0.6 Panel EU Pov dBm 17.5 17.7 17.7	29 01 01 ver 56.2 58.9 58.9 58.9	1.0 1.0 1.0 1.0 1.0 1.0 1.0 0 0 0 0 0 0	000 000 Ant Gain dBi 18 18 18 18	15 15 15 15 Power at Ant dBm 17.5 17.7 17.7	<u>.9cm</u> .5cm .5cm EIRP mW 3548.13 3715.35 3715.35	at 20 cm mW/cm^2 0.706 0.739	at 20 cm mW/cm^2 1.000 1.000
5731 5788 5844 .ntenna: Freq. MHz 5727 5788 5847 or the cas Freq.	0.6 0.6 0.6 Panel Panel EU Pov dBm 17.5 17.7 17.7 17.7 ses where \$ \$ @ 2	29 01 01 ver 56.2 58.9 58.9 58.9 58 > the M	1.0 1.0 1.0 1.0 1.0 1.0 1.0 0 0 0 0 0 0	000 000 000 Ant Gain dBi 18 18 18 18 18 Limit	15 15 15 15 17.5 17.7 17.7 17.7	9cm .5cm .5cm EIRP mW 3548.13 3715.35 3715.35 ce where	at 20 cm mW/cm^2 0.706 0.739	at 20 cm mW/cm^2 1.000 1.000
5731 5788 5844 .ntenna: Freq. MHz 5727 5788 5847 or the cas	0.6 0.6 0.6 Panel Pov dBm 17.5 17.7 17.7 ses where \$ S @ 2 mW/c	29 01 01 Ver 56.2 58.9 58.9 S > the M 20 cm cm^2	1.0 1.0 1.0 1.0 1.0 1.0 1.0 0 0 0 0 0 0	000 000 Ant Gain dBi 18 18 18 18	15 15 15 15 17.5 17.7 17.7 17.7	<u>.9cm</u> .5cm .5cm EIRP mW 3548.13 3715.35 3715.35	at 20 cm mW/cm^2 0.706 0.739	at 20 cm mW/cm^2 1.000 1.000
5731 5788 5844 ntenna: Freq. MHz 5727 5788 5847 or the cas Freq.	0.6 0.6 0.6 Panel Panel EU Pov dBm 17.5 17.7 17.7 17.7 ses where \$ \$ @ 2	29 01 01 Ver 56.2 58.9 58.9 S > the M 20 cm cm^2	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 0 0 0 0	000 000 000 Ant Gain dBi 18 18 18 18 18 Limit	15 15 15 15 15 15 15 15 15 17.7 17.7 17.	9cm .5cm .5cm EIRP mW 3548.13 3715.35 3715.35 ce where	at 20 cm mW/cm^2 0.706 0.739	at 20 cm mW/cm^2 1.000 1.000
5731 5788 5844 Intenna: Freq. MHz 5727 5788 5847 For the cas Freq. MHz	0.6 0.6 0.6 Panel Pov dBm 17.5 17.7 17.7 ses where \$ S @ 2 mW/c	29 01 01 Ver 56.2 58.9 58.9 58.9 58.9 S > the M 20 cm cm^2 06	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	000 000 000 Ant Gain dBi 18 18 18 18 18 Limit cm <sup>2</sup> 2	15   15   15   15   17.7   17.7   17.7   17.7   17.7   16	9cm .5cm .5cm EIRP mW 3548.13 3715.35 3715.35 3715.35	at 20 cm mW/cm^2 0.706 0.739	at 20 cm mW/cm^2 1.000 1.000