Client:	GE MDS LLC	Job Number:	JD99150
Model:	GPA-9	T-Log Number:	T99463
		Project Manager:	Christine Krebill
Contact:	Dennis McCarthy	Project Coordinator:	-
Standard:	FCC part 90 & RSS-131	Class:	N/A

Maximum Permissible Exposure / SAR Exclusion

Test Specific Details

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

Date of Test: 4/28/2017
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^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

Device complies with Power Density requirements at 20cm separation:	No
If not, required separation distance (in m):	3.82

Notes

Radiated power in 896-901 and 935-940 band per §90.635 = 1,000 W. Radiated power in the 929–930 MHz band per §90.494 = 3,500W

Operation is not subject to routine environmental evaluation per table 1 of FCC Rules §1.1307 or §1.1307(b)(2)

Deviations From The Standard

No deviations were made from the requirements of the standard.

Client:	GE MDS LLC	Job Number:	JD99150
Model:	GPA-9	T-Log Number:	T99463
		Project Manager:	Christine Krebill
Contact:	Dennis McCarthy	Project Coordinator:	-
Standard:	FCC part 90 & RSS-131	Class:	N/A

FCC MPE Calculation

Use: General EUT Power adjusted for maximum including any tolerance

Antenna: 0 dBi

Freq. MHz	EUT Power dBm	EUT 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
896	46.3	42658.0	0	0	46.3	42657.95	8.487	0.597
928	46.3	42658.0	0	0	46.3	42657.95	8.487	0.619
940	46.3	42658.0	0	0	46.3	42657.95	8.487	0.627

For the cases where S > the MPE Limit

Freq. MHz	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2	Distance where S <= MPE Limit cm
896	8.487	0.597	75.4
928	8.487	0.619	74.1
940	8.487	0.627	73.6

Antenna: 8.5 dBd < max allowed based on ERP limit

Freq. MHz	EUT Power dBm	EUT Power mW*	Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP W	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2
896	46.3	42658.0	0	10.7	46.3	498.88	99.250	0.597
928	46.3	42658.0	0	10.7	46.3	498.88	99.250	0.619
940	46.3	42658.0	0	10.7	46.3	498.88	99.250	0.627

For the cases where S > the MPE Limit

Freq. MHz	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2	Distance where S <= MPE Limit cm
896	99.250	0.597	257.8
928	99.250	0.619	253.3
940	99.250	0.627	251.7

Client:	GE MDS LLC	Job Number:	JD99150
Model:	GPA-9	T-Log Number:	T99463
		Project Manager:	Christine Krebill
Contact:	Dennis McCarthy	Project Coordinator:	-
Standard:	FCC part 90 & RSS-131	Class:	N/A

Industry Canada MPE Calculation
Use: General
Antenna: 0 dBi

Freq. MHz	EUT Power dBm	EUT 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
896	46.3	42658.0	0	0	46.3	42657.95	8.487	0.273
928	46.3	42658.0	0	0	46.3	42657.95	8.487	0.279
953	46.3	42658.0	0	0	46.3	42657.95	8.487	0.284

For the cases where S > the MPE Limit

Freq. MHz	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2	Distance where S <= MPE Limit cm
896	8.487	0.273	111.6
928	8.487	0.279	110.2
953	8.487	0.284	109.2

Antenna: 8.5 dBd < max allwoed based on ERP limit

Freq. MHz	EUT Power dBm	EUT Power mW*	Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP W	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2
896	46.3	42658.0	0	10.7	46.3	498.88	99.250	0.273
928	46.3	42658.0	0	10.7	46.3	498.88	99.250	0.279
953	46.3	42658.0	0	10.7	46.3	498.88	99.250	0.284

For the cases where S > the MPE Limit

Freq. MHz	Power Density (S) at 20 cm mW/cm^2	MPE Limit at 20 cm mW/cm^2	Distance where S <= MPE Limit cm
896	99.250	0.273	381.5
928	99.250	0.279	377.0
953	99.250	0.284	373.6