

Client:	GE MDS LLC	Job Number:	JD99760
Model:	LN900	T-Log Number:	T99783
Contact:	Dennis McCarthy	Project Manager:	Christine Krebill
Standard:	FCC Parts 90 and 101, RSS-119	Project Coordinator:	-
		Class:	N/A

Maximum Permissible Exposure / SAR Exclusion

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 Test: 12/10/2015

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 cm):	405.1



EMC Test Data

Client: GE MDS LLC	Job Number: JD99760
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Contact: Dennis McCarthy	Project Manager: Christine Krebill
Standard: FCC Parts 90 and 101, RSS-119	Project Coordinator: -
	Class: N/A

FCC MPE Calculation

Use: General

Antenna: 16.5 dBi

USE THIS FOR 300-1500 MHz single transmitters (General use)

Freq. MHz	EUT Power		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	dBm	mW*						
896	41.0	12589.3	0	16.5	41.0	562341.33	111.874	0.597
929	41.0	12589.3	0	16.5	41.0	562341.33	111.874	0.619
960	41.0	12589.3	0	16.5	41.0	562341.33	111.874	0.640

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	111.874	0.597	273.7
929	111.874	0.619	268.8
960	111.874	0.640	264.4

FCC MPE Calculation

Use: General

Antenna: 10 dBi

USE THIS FOR 300-1500 MHz single transmitters (General use)

Freq. MHz	EUT Power		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	dBm	mW*						
896	41.0	12589.3	0	10	41.0	125892.54	25.046	0.597
929	41.0	12589.3	0	10	41.0	125892.54	25.046	0.619
960	41.0	12589.3	0	10	41.0	125892.54	25.046	0.640

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	25.046	0.597	129.5
929	25.046	0.619	127.2
960	25.046	0.640	125.1

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		Class:	N/A

FCC MPE Calculation

Use: General

Antenna: 5 dBi

USE THIS FOR 300-1500 MHz single transmitters (General use)

Freq. MHz	EUT Power		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	dBm	mW*						
896	41.0	12589.3	0	5	41.0	39810.72	7.920	0.597
929	41.0	12589.3	0	5	41.0	39810.72	7.920	0.619
960	41.0	12589.3	0	5	41.0	39810.72	7.920	0.640

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	7.920	0.597	72.8
929	7.920	0.619	71.5
960	7.920	0.640	70.4

Industry Canada MPE Calculation

Use: General

Antenna: 16.5 dBi

USE THIS FOR 300-6000 MHz single transmitters (General use)

Freq. MHz	EUT Power		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	dBm	mW*						
896	41.0	12589.3	0	16.5	41.0	562341.33	111.874	0.273
929	41.0	12589.3	0	16.5	41.0	562341.33	111.874	0.280
960	41.0	12589.3	0	16.5	41.0	562341.33	111.874	0.286

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	111.874	0.273	405.1
929	111.874	0.280	400.1
960	111.874	0.286	395.6

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		Class:	N/A

Industry Canada MPE Calculation

Use: General

Antenna: 10 dBi

USE THIS FOR 300-6000 MHz single transmitters (General use)

Freq. MHz	EUT Power		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
	dBm	mW*						
896	41.0	12589.3	0	10	41.0	125892.54	25.046	0.273
929	41.0	12589.3	0	10	41.0	125892.54	25.046	0.280
960	41.0	12589.3	0	10	41.0	125892.54	25.046	0.286

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	25.046	0.273	191.7
929	25.046	0.280	189.3
960	25.046	0.286	187.2

Industry Canada MPE Calculation

Use: General

Antenna: 5 dBi

USE THIS FOR 300-6000 MHz single transmitters (General use)

Freq. MHz	EUT Power		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
	dBm	mW*						
896	41.0	12589.3	0	5	41.0	39810.72	7.920	0.273
929	41.0	12589.3	0	5	41.0	39810.72	7.920	0.280
960	41.0	12589.3	0	5	41.0	39810.72	7.920	0.286

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	7.920	0.273	107.8
929	7.920	0.280	106.5
960	7.920	0.286	105.3