



# EMC Test Data

Client:	GE MDS LLC	Job Number:	PR089859
Model:	LN400	T-Log Number:	TL089859-RA
Contact:	Dennis McCarthy	Project Manager:	Christine Krebill
Standard:	FCC part 90	Project Coordinator:	David Bare
		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: 11/30/2018  
 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):	390

### 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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**Run #1: FCC MPE Calculation for 300-1500 MHz single transmitters (General use)**

Use: General  
 Antenna: 5 dBi, 10 dBi and 16 dBi

**Run #1a: Antenna gain: 5 dBi**

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 <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>
	dBm	mW*						
406.1	41.1	12882.5	0	5	41.1	40738.03	8.105	0.271
470	41.1	12882.5	0	5	41.1	40738.03	8.105	0.313
512	41.1	12882.5	0	5	41.1	40738.03	8.105	0.341

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
406.1	8.105	0.271	109.4
470	8.105	0.313	101.7
512	8.105	0.341	97.5

**Run #1b: Antenna gain: 10 dBi**

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 <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>
	dBm	mW*						
406.1	41.1	12882.5	0	10	41.1	128824.96	25.629	0.271
470	41.1	12882.5	0	10	41.1	128824.96	25.629	0.313
512	41.1	12882.5	0	10	41.1	128824.96	25.629	0.341

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
406.1	25.629	0.271	194.6
470	25.629	0.313	180.9
512	25.629	0.341	173.3

Note: These power values include margin for acceptable tolerance, refer to user's guide.



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## Run #1c: Antenna gain: 16 dBi

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 <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>
	dBm	mW*						
406.1	41.1	12882.5	0	16	41.1	512861.38	102.031	0.271
470	41.1	12882.5	0	16	41.1	512861.38	102.031	0.313
512	41.1	12882.5	0	16	41.1	512861.38	102.031	0.341

## 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
406.1	102.031	0.271	388.3
470	102.031	0.313	360.9
512	102.031	0.341	345.8

Note: These power values include margin for acceptable tolerance, refer to user's guide.