



# EMC Test Data

Client: Xetawave LLC	Job Number: JD103500
Model: Xeta1	T-Log Number: T103571
	Project Manager: Christine Krebill
Contact: Sandee Malang	Project Coordinator: -
Standard: FCC Part 90, RSS-119	Class: N/A

## Maximum Permissible Exposure

### Test Specific Details

Objective: The objective of this test session is to perform final qualification testing/calculation of the EUT with respect to the specification listed above.

Date of Test: 1/6/2017

Test Engineer: Deniz Demirci

### 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 20 cm separation:	No
Required separation distance for US (in cm):	160.3
Required separation distance for Canada (in cm):	199.5

### 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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### FCC MPE Calculation

Use: General  
 Antenna: 11 dBi

#### For 30 - 300 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 <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>
	dBm	mW*						
150	37.1	5128.6	0	11	37.1	64565.42	12.845	0.200
162	37.1	5128.6	0	11	37.1	64565.42	12.845	0.200
173	37.1	5128.6	0	11	37.1	64565.42	12.845	0.200

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
150	12.845	0.200	160.3
162	12.845	0.200	160.3
173	12.845	0.200	160.3

### Innovation, Science and Economic Development Canada MPE Calculation

Use: General  
 Antenna: 11 dBi

#### For 48 - 300 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 <sup>2</sup>	MPE Limit at 20 cm mW/cm <sup>2</sup>
	dBm	mW*						
150	37.1	5128.6	0	11	37.1	64565.42	12.845	0.1291
162	37.1	5128.6	0	11	37.1	64565.42	12.845	0.1291
173	37.1	5128.6	0	11	37.1	64565.42	12.845	0.1291

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
150	12.845	0.129	199.5
162	12.845	0.129	199.5
173	12.845	0.129	199.5