



Excellence in Compliance Testing

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## **Certification Exhibit**

**FCC ID: HSW-CCT900**

**FCC Rule Part: 15.247**

**ACS Project Number: 16-0029**

Manufacturer: Murata Electronics North America  
Model: CCT900

## **RF Exposure**

**General Information:**

Applicant: Murata Electronics North America  
 Device Category: Mobile  
 Environment: General Population/Uncontrolled Exposure

**Technical Information:**

Max Antenna Gain (20cm): 8dBi  
 Maximum Transmitter Conducted Power: 22.83 dBm, 191.87 mW  
 Maximum System EIRP: 30.83 dBm, 1210.60 mW  
 Exposure Conditions: Greater than 20 centimeters

**Technical Information:**

Max Antenna Gain (30cm): 12dBi  
 Maximum Transmitter Conducted Power: 22.83 dBm, 191.87 mW  
 Maximum System EIRP: 34.83 dBm, 3040.89 mW  
 Exposure Conditions: Greater than 30 centimeters

**Antenna Information:**

Antenna Type / Gain: Dipole, 5dBi  
 PIFA, 4dBi  
 Yagi, 9dBi  
 Panel, 12dBi

**MPE Calculation**

The Power Density (mW/cm<sup>2</sup>) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

- S = power density (in appropriate units, e.g. mW/cm<sup>2</sup>)
- P = power input to the antenna (in appropriate units, e.g., mW)
- G = power gain of the antenna in the direction of interest relative to an isotropic radiator
- R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

MPE Calculator for Mobile Equipment							
Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
914.113	22.83	0.61	191.87	12	15.849	30	0.269
914.113	22.83	0.61	191.87	8	6.310	20	0.241