



Excellence in Compliance Testing

Certification Exhibit

FCC ID: HSW-DNT90E

FCC Rule Part: 47 CFR Part 2.1091

ACS Project Number: 16-0152

Manufacturer: Murata Electronics North America
Models: DNT90EC, DNT90EP

RF Exposure

General Information:

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

Technical Information:

Max Antenna Gain: 6 dBi
 Maximum Transmitter Conducted Power: 25.50 dBm, 354.81 mW
 Maximum System EIRP: 31.50 dBm, 1412.54 mW
 Exposure Conditions: 21 centimeters or greater

Antenna Information:

Antenna Type / Gain: Dipole, 5dBi
 Yagi, 6dBi

MPE Calculation

The Power Density (mW/cm²) is calculated as follows:

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

Where:

S = power density (in appropriate units, e.g. mW/cm²)

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)

Table 1: MPE Calculation

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm ²)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm ²)
915.24	25.5	0.61	354.81	6	3.981	21	0.255