

Certification Exhibit

**FCC ID: 2AIEF-MCM1900
IC: 21528-MCM1900**

**FCC Rule Part: 15.247
ISED Canada Radio Standards Specification: RSS-247**

ACS Project Number: 16-2038

Manufacturer: MC Miller Co. Inc.

Model: MCM1900

RF Exposure

General Information:

Applicant: MC Miller Co. Inc.
 ACS Project: 16-2038
 Device Category: Mobile
 Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Meandered Printed Inverted-F Antenna
 Antenna Gain: 3.3 dBi
 Maximum Transmitter Conducted Power: -2.09 dBm, 0.62 mW
 Maximum System EIRP: 1.21 dBm, 1.321 mW
 Exposure Conditions: Greater than 20 centimeters

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: FCC Requirements

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
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)
2402	-2.09	1.00	0.62	3.3	2.138	20	0.000

Table 2: Innovation Science Economic Development Canada Requirements

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (W/m ²)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (W/m ²)
2402	-2.09	5.35	0.62	3.3	2.138	20	0.003

Installation Guidelines

The installation manual should contain text similar to the following advising how to install the equipment to maintain compliance with the FCC RF exposure requirements:

RF Exposure

In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 20 centimeters will be maintained.

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.