

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

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

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	Radio	Power	Radio	Antenna	Antenna	Dietonee	Power Density			
Frequency	Power	Density Limit	Power	Gain	Gain (mW	(cm)	(mW/cm^2)			
(MHz)	(dBm)	(mW/Cm2)	(mW)	(dBi)	eq.)	(CIII)	(IIIW/CIII^2)			
2402	-2.09	1.00	0.62	3.3	2.138	20	0.000			

Table 2: Innovation Science Economic Development Canada Requirements

	14210 21 11110 1441011 00101100 20101100 2010100 1110110 0411444 1100 41101100											
MPE Calculator for Mobile Equipment												
Limits for General Population/Uncontrolled Exposure*												
Transmit	Radio	Power	Radio	Antenna	Antenna	Dictoroo	Power Density					
Frequency	Power	Density Limit	Power	Gain	Gain (mW	(cm)	(W/m^2)					
(MHz)	(dBm)	(W/m2)	(mW)	(dBi)	eq.)	(CIII)	(VV/III^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.