



Canada

Exhibit: RF Exposure – FCC

(2ABFD-MD1150)

Report File #: 7169001943-000

Client	Ecobee Inc	
Product	EB-SMSWV-01	
Standard(s)	FCC Part 15 Subpart 15.247:2018 FCC KDB 447498:2015	

RF Exposure – FCC

The device is intended for use for mobile application and the minimum separation distance from the radiating structure to any part of the body or extremity of a user is greater than 20 cm as stated by the manufacturer during normal operation.

Radiofrequency Radiation Exposure Evaluation

This device is evaluated for Maximum Permissible Exposure (MPE) according to the MPE guidelines and limits identified in FCC section 1.1310. The limits, as defined FCC 1.1310 Table 1, “(B) Limits for General Population/Uncontrolled Exposure” was applied. The limit for the frequency range 1.5 GHz to 100 GHz is **1.0 mW/cm²**.

The power density formula is given by:

$$P_d = PG / (4\pi R^2)$$

Where,

P = Peak Antenna Conducted Power in mW

G = Numeric Antenna Gain

R = Separation distance in cm

MPE Calculations: 2400 – 2483.5 MHz transmitter

The transmitter has an antenna with 5 dBi (3.2 numerically) gain, and the maximum peak power is 3.72 mW.

$$P_d = (3.72 \text{ mW} * 3.2) / (4 * \pi * (20\text{cm})^2)$$

$$P_d = \mathbf{0.00234 \text{ mW/ cm}^2}$$

Results

The device passes the requirements for General Population/Uncontrolled Exposure. The calculated power density is 0.00234 mW/cm² and this is below the 1.0 mW/cm² limit.