



Maximum Permissible Exposure (MPE) Requirement

Applicant: Control4 Corporation

Control4 Model: C4-EA1-V2

FCC ID: R33C4EA1V2

This document was prepared using data collected during testing and information provided by the applicant. The maximum power density requirements for the General Public (Uncontrolled Environment) listed in FCC Part 1.1310 were used. The power density is calculated using the following equation.

$$P_d = \frac{P_t G^*}{4\pi r^2}$$

P_d = power density in watts

P_t = transmit power in milliwatts

G = numeric antenna gain

r = distance between body and transmitter in centimeters

* $P_t G$ = EIRP

The calculated power density of the EUT listed in this application is calculated below. This calculation considers the potential for simultaneous operation, although not typical, of both the transmitter included in this application and the transmitter that was previously certified (WiFi Module) and included in this device. Both transmitters are located in the same unit with the same separation distance.

Transceiver #1 (ZigBee)

The Maximum source-based time averaged conducted output power is based on the worst case conducted output power as reported in VPI Laboratories test report V043815_02 section 6.2.4, and declared maximum variation for the output power during manufacturing testing (tune-up procedure) is ± 0.5 dB.

Max Transmit Power ERP (dBm):	19.11	Tune-up variance (dB):	0.50
Max Transmit Power EIRP (mW):	144.88	Max Antenna Gain (dBi):	2.00
Operating Frequency (MHz):	2412-2462	(Numeric Antenna Gain):	1.58
Min Operating Distance (cm):	20	Duty Cycle (%):	100
Power Density (mW/cm ²):	0.02882		
Limit (mW/cm ²):	1.0		



Transceiver #2 (WiFi Module)

Certified under FCC ID: PANWM8192EU

The worst case maximum MPE for the WiFi module as reported in Sporton International Inc. test report FA472267 is 0.022 mW/cm².

Combined Power

Zigbee Power Density (mW/cm ²):	0.02882
WiFi Module Power Density (mW/cm ²):	0.02200
Total (mW/cm ²):	0.05082
Limit (mW/cm ²):	1.0
Delta:	-0.949

CONCLUSION:

Therefore our device complies with the FCC's RF radiation exposure limits for general population without SAR evaluation.

Best Regards

A handwritten signature in blue ink that reads "Roger Midgley".

Roger Midgley
Sr. Regulatory Compliance Engineer