

Client: Neato Robotics	Job Number: JD105849
Model: Botvac D7 Connected	T-Log Number: T105971
Contact: Jason Law	Project Manager: Christine Krebill
Standard: RSS-247, FCC 15.247, FCC 15E	Project Coordinator: -
	Class: N/A

Maximum Permissible Exposure

Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 10/23/2017

Test Engineer: Deniz Demirci

General Test Configuration

Calculation uses the free space transmission formula:

$$S = (PG)/(4 \pi d^2)$$

Where: S is power density (W/m²), P is output power (W), G is antenna gain relative to isotropic, d is separation distance from the transmitting antenna (m).

Summary of Results

Device complies with Power Density requirements at 20 cm separation: Yes

Deviations From The Standard

No deviations were made from the requirements of the standard.

Antenna: Chip antenna (2.1 dBi for 2.4 GHz, 0.7 dBi for 5 GHz)

FCC MPE Calculation

Use: General

For 1.5-15 GHz single transmitters (General use)

Freq. MHz	EUT Power		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm ²	MPE Limit at 20 cm mW/cm ²
2462	dBm	mW*						
2462	13.2	20.9	0	2.1	13.2	33.88	0.007	1.000
5240	9.6	9.1	0	0.7	9.6	10.72	0.002	1.000

Industry Canada MPE Calculation

Use: General

For 300-6000 MHz single transmitters (General use)

Freq. MHz	EUT Power		Cable Loss Loss dB	Ant Gain dBi	Power at Ant dBm	EIRP mW	Power Density (S) at 20 cm mW/cm ²	MPE Limit at 20 cm mW/cm ²
2462	dBm	mW*						
2462	13.2	20.9	0	2.1	13.2	33.88	0.007	0.544
5240	9.6	9.1	0	0.7	9.6	10.72	0.002	0.912