NTS WE ENGINEER SUCCESS

EMC Test Data

Client:	Neato Robotics	Job Number:	J97654
Model:	Botvac Connected	T-Log Number:	T97691
		Project Manager:	Christine Krebill
Contact:	Matt Tenuta	Project Coordinator:	-
Standard:	FCC 15.247, RSS 247	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: 8/3/2015

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/m^2), 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 20cm separation:	Yes
If not, required separation distance (in cm):	-

Modifications Made During Testing

No modifications were made to the EUT during testing

Deviations From The Standard

No deviations were made from the requirements of the standard.

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FCC MPE Calculation
Use: General
Antenna: -2.5 dBi

FOR 1.5-15 GHz single transmitters (General use)

Freq. MHz	EUT Power dBm	EUT Power mW*	Cable 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
2412	19.3	85.1	0	-2.5	19.3	47.86	0.010	1.000
2437	20.5	112.2	0	-2.5	20.5	63.10	0.013	1.000
2462	20.1	102.3	0	-2.5	20.1	57.54	0.011	1.000

Industry Canada MPE Calculation
Use: General
Antenna: -2.5 dBi

FOR 300-6000 MHz single transmitters (General use)

Freq. MHz	EUT Power dBm	EUT Power mW*	Cable 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
2412	19.3	85.1	0	-2.5	19.3	47.86	0.010	0.537
2437	20.5	112.2	0	-2.5	20.5	63.10	0.013	0.540
2462	20.1	102.3	0	-2.5	20.1	57.54	0.011	0.544

Maximum eirp is calculated as follows:
Uses the peak power for each channel (where given) as a worst case MPE