



FCC §2.1091, LP0002-2018 §5.20.2, RF EXPOSURE REPORT

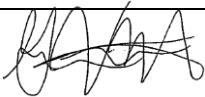
For

Cisco Systems, Inc.

125 W Tasman Drive
San Jose, CA 95134, USA

FCC ID: LDKSLTSP1905
IC: 2461N-SLTSP1905

C9115AXE-X
(X=A, B, and T)
2400-2483.5 MHz, 5150-5250 MHz
5250-5350 MHz, 5470-5725 MHz, 5725-5850 MHz

Cisco 802.11ax Access Point	
Product Type:	
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* This test report may contain data and test methods that are not covered by BACL's scope of accreditation as of the test report date shown above. These items are marked within the test report text with an asterisk "*"

1 FCC §2.1091, §15.247(i) & ISEDC RSS-102 & LP0002– RF Exposure

1.1 Applicable Standards

According to FCC §15.247(i), §1.1307(b)(1) and LP0002 5.20.2.2, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	* (100)	30
1.34-30	824/f	2.19/f	* (180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

f = frequency in MHz

* = Plane-wave equivalent power density

1.2 MPE Prediction

Predication of MPE limit at a given distance, Equation from OET Bulletin 65, Edition 97-01

$$S = PG/4\pi R^2$$

Where: S = power density

P = power input to antenna

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

1.3 MPE Results for FCC

2.4 GHz Wi-Fi

<u>Maximum output power at antenna input terminal (dBm):</u>	<u>23.86</u>
<u>Maximum output power at antenna input terminal (mW):</u>	<u>243.2204</u>
<u>Prediction distance (cm):</u>	<u>30</u>
<u>Prediction frequency (MHz):</u>	<u>2437</u>
<u>Maximum Antenna Gain, typical (dBi):</u>	<u>12</u>
<u>Maximum Antenna Gain (numeric):</u>	<u>15.85</u>
<u>Power density of prediction frequency at 30.0 cm (mW/cm²):</u>	<u>0.3410</u>
<u>FCC MPE limit for uncontrolled exposure at prediction frequency (mW/cm²):</u>	<u>1.0</u>

The device is compliant with the requirement MPE limit for uncontrolled exposure. The maximum power density at the distance of 30 cm is 0.3410 mW/cm². Limit is 1.0 mW/cm².

2.4 GHz BLE

<u>Maximum peak output power at antenna input terminal (dBm):</u>	<u>5.3</u>
<u>Maximum peak output power at antenna input terminal (mW):</u>	<u>3.39</u>
<u>Prediction distance (cm):</u>	<u>30</u>
<u>Prediction frequency (MHz):</u>	<u>2426</u>
<u>Maximum Antenna Gain, typical (dBi):</u>	<u>6.0</u>
<u>Maximum Antenna Gain (numeric):</u>	<u>3.98</u>
<u>Power density of prediction frequency at 30.0 cm (mW/cm²):</u>	<u>0.0012</u>
<u>FCC MPE limit for uncontrolled exposure at prediction frequency (mW/cm²):</u>	<u>1.0</u>

The device is compliant with the requirement MPE limit for uncontrolled exposure. The maximum power density at the distance of 30 cm is 0.0012 mW/cm². Limit is 1.0 mW/cm².

5 GHz Wi-Fi

<u>Maximum peak output power at antenna input terminal (dBm):</u>	<u>23.95</u>
<u>Maximum peak output power at antenna input terminal (mW):</u>	<u>248.3133</u>
<u>Prediction distance (cm):</u>	<u>30</u>
<u>Prediction frequency (MHz):</u>	<u>5785</u>
<u>Maximum Antenna Gain, typical (dBi):</u>	<u>12</u>
<u>Maximum Antenna Gain (numeric):</u>	<u>15.85</u>
<u>Power density of prediction frequency at 30.0 cm (mW/cm²):</u>	<u>0.3482</u>
<u>FCC MPE limit for uncontrolled exposure at prediction frequency (mW/cm²):</u>	<u>1.0</u>

The device is compliant with the requirement MPE limit for uncontrolled exposure. The maximum power density at the distance of 30 cm is 0.3482 mW/cm². Limit is 1.0 mW/cm².

Worst case colocation 2.4 GHz Wi-Fi, BLE and 5 GHz Wi-Fi.

Frequency Band	Max Conducted Power(dBm)	Evaluated Distance (cm)	Worst-Case MPE (mW/cm²)	MPE Limit (mW/cm²)	Limit
2.4 GHz WiFi	23.86	30	0.3410	1.0	100%
2.4 GHz BLE	4.47	30	0.0012	1.0	
5 GHz WiFi	23.95	30	0.3482	1.0	