



RF Exposure Evaluation Declaration

FCC ID: O9C-BJNGAFB0008

APPLICANT: Hewlett Packard Company

Application Type: Certification

Product: Wireless LAN Access Point

Model No.: BJNGA-FB0008, JH306A

Brand Name: HP

FCC Classification: Digital Transmission System (DTS)
Unlicensed National Information Infrastructure (UNII)

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The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

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Revision History


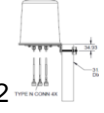
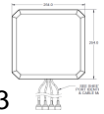
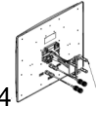
Report No.	Version	Description	Issue Date
1503RSU02005	Rev. 01	Initial report	06-01-2015

1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name	Wireless LAN Access Point
Model No.	BJNGA-FB0008, JH306A
Power Type	POE input
Frequency Range	For 2.4GHz Band: 802.11b/g/n: 2412 ~ 2462 MHz For 5.0GHz Band: 802.11a/n/ac: 5150 ~ 5350MHz 5470 ~ 5725MHz 5725 ~ 5850MHz
Type of Modulation	802.11b: DSSS 802.11g/a/n/ac: OFDM

1.2. Antenna Description

Antenna No.	Frequency Band (GHz)	Operation Mode	Product Number	Tx Paths	Max Peak Gain (dBi)	> 30 Degree Peak Gain (dBi)	Directional Gain (dBi)	
							For Power	For PSD
 1	2.4	Indoor P-T-MP	JG696A	2	3.83	---	3.83	6.84
	5							
 2	2.4	Outdoor P-T-MP	JL195A	2	6.70	---	6.70	9.71
	5							
 3	2.4	Outdoor P-T-MP	JL193A	2	8.80	---	8.80	8.80
	5							
 4	2.4	Outdoor P-T-P	JL194A	2	11.50	---	11.50	11.50
	5							

2. RF Exposure Evaluation

2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

Calculation Formula: $Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

r = distance between observation point and center of the radiator in cm

Pd is the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

2.2. Test Result of RF Exposure Evaluation

Product	Wireless LAN Access Point
Test Item	RF Exposure Evaluation

Antenna Gain: Refer to Clause 1.2 of antenna description.

ANT 1#

Test Mode	Frequency Band (MHz)	Maximum Average Output Power (dBm)	Limit of Power Density S(mW/cm ²)	Safety Distance (cm)
802.11b/g/n	2412 ~ 2462	28.93	1	12.26
802.11a/n/ac	5180 ~ 5320, 5500 ~ 5720, 5745 ~ 5825	29.08	1	15.45

ANT 2#

Test Mode	Frequency Band (MHz)	Maximum Average Output Power (dBm)	Limit of Power Density S(mW/cm ²)	Safety Distance (cm)
802.11b/g/n	2412 ~ 2462	27.38	1	14.27
802.11a/n/ac	5180 ~ 5320, 5500 ~ 5720, 5745 ~ 5825	24.65	1	16.52

ANT 3#

Test Mode	Frequency Band (MHz)	Maximum Average Output Power (dBm)	Limit of Power Density S(mW/cm ²)	Safety Distance (cm)
802.11b/g/n	2412 ~ 2462	26.83	1	17.06
802.11a/n/ac	5180 ~ 5320, 5500 ~ 5720, 5745 ~ 5825	26.81	1	17.21

ANT 4#

Test Mode	Frequency Band (MHz)	Maximum Average Output Power (dBm)	Limit of Power Density S(mW/cm ²)	Safety Distance (cm)
802.11b/g/n	2412 ~ 2462	26.96	1	23.63
802.11a/n/ac	5180 ~ 5320, 5500 ~ 5720, 5745 ~ 5825	28.50	1	45.23

CONCLUSION:

The Safety Distance of the **Wireless LAN Access Point FCC ID: O9C-BJNGAFB0008** was 45.23 cm.

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