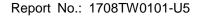
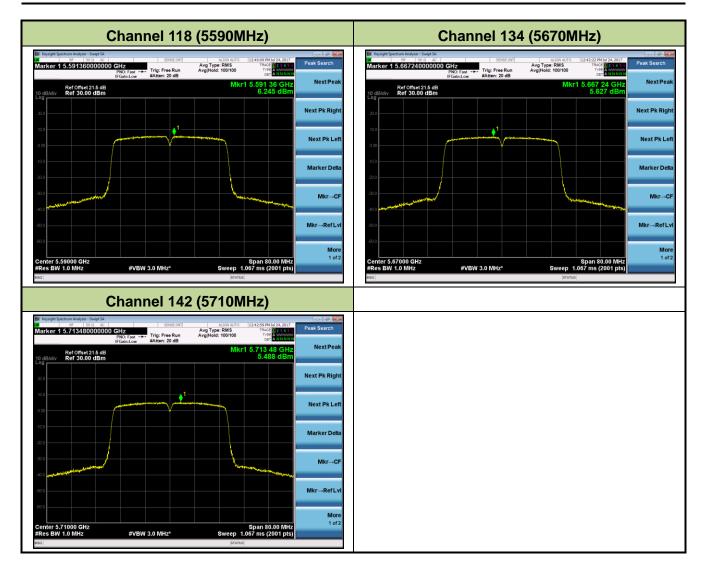
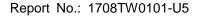


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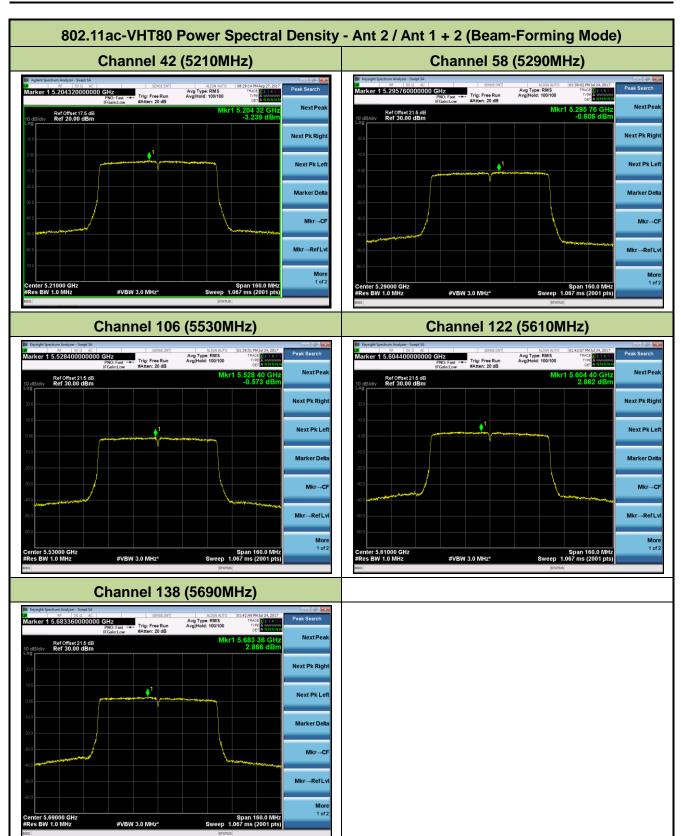




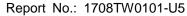








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## 7.7. Frequency Stability Measurement

#### 7.7.1.Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

The transmitter center frequency tolerance shall be ±20 ppm maximum for the 5GHz band (IEEE 802.11 specification).

#### 7.7.2.Test Procedure Used

## **Frequency Stability Under Temperature Variations:**

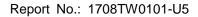
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

#### **Frequency Stability Under Voltage Variations:**

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

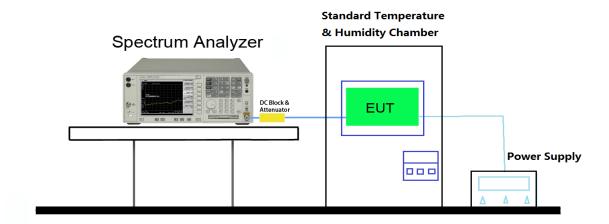
Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, recordthe maximum frequency change.

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## 7.7.3.Test Setup



### 7.7.4.Test Result

Refer to MRT Test report "1708TW0101-U2" section 7.7.4

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### 7.8. Radiated Spurious Emission Measurement

#### 7.8.1.Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

The first made that exceed the limite driewin in Table per Codicin Telego.									
FCC Part 15 Subpart C Paragraph 15.209									
Frequency Field Strength Measured Distan									
[MHz]	[uV/m]	[Meters]							
0.009 - 0.490	2400/F (kHz)	300							
0.490 - 1.705	24000/F (kHz)	30							
1.705 - 30	30	30							
30 - 88	100	3							
88 - 216	150	3							
216 - 960	200	3							
Above 960	500	3							

#### 7.8.2.Test Procedure Used

KDB 789033 D02v01r04 - Section G

# 7.8.3.Test Setting

## **Quasi-Peak& Average Measurements below30MHz**

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. Span was set greater than 1MHz
- 3. RBW = 200Hz for 9kHz to 150kHz frequency; RBW = 9kHz for 0.15MHz to 30MHz frequency
- 4. Detector = CISPR quasi-peak or power average (Average)
- 5. Sweep time = auto couple
- 6. Trace was allowed to stabilize

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### **Quasi-Peak Measurements below 1GHz**

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. Span was set greater than 1MHz
- 3. RBW = 120 kHz
- 4. Detector = CISPR quasi-peak
- 5. Sweep time = auto couple
- 6. Trace was allowed to stabilize

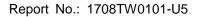
## Peak Measurements above 1GHz

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

#### Average Measurements above 1GHz (Method AD)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = power average (Average)
- 5. Number of measurement points = 1001 (Number of points must be  $> 2 \times \text{span/RBW}$ )
- 6. Sweep time = auto
- 7. Trace was averaged over at 100 sweeps

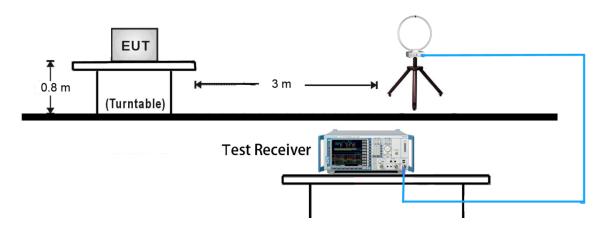
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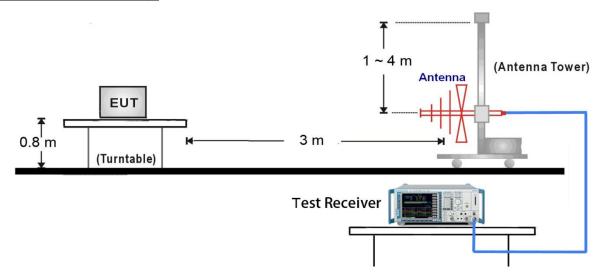


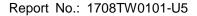
## 7.8.4.Test Setup

# 9kHz ~30MHz Test Setup:



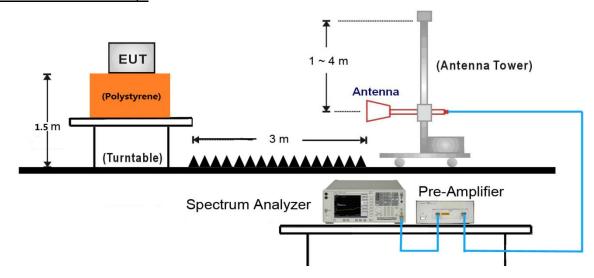
## 30MHz ~ 1GHz Test Setup:



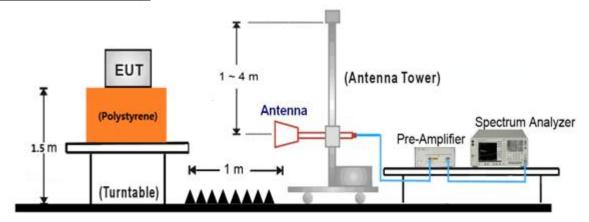


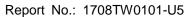


### 1GHz ~18GHz Test Setup:



## 18GHz ~40GHz Test Setup:







#### 7.8.5.Test Result

Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/27
Test Mode:	802.11a - Ant 1	Test Channel:	52
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8378.0	31.7	12.1	43.8	74.0	-30.2	Peak	Horizontal
	11089.5	29.4	18.6	48.0	74.0	-26.0	Peak	Horizontal
*	13784.0	28.1	22.1	50.2	68.2	-18.0	Peak	Horizontal
*	17311.5	26.3	25.9	52.2	68.2	-16.0	Peak	Horizontal
	8208.0	31.0	11.9	42.9	74.0	-31.1	Peak	Vertical
	11055.5	29.0	18.5	47.5	74.0	-26.5	Peak	Vertical
*	14226.0	28.2	23.1	51.3	68.2	-16.9	Peak	Vertical
*	16886.5	28.9	24.1	53.0	68.2	-15.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11a - Ant 1	Test Channel:	60				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8174.0	31.4	12.0	43.4	74.0	-30.6	Peak	Horizontal
	11089.5	29.1	18.6	47.7	74.0	-26.3	Peak	Horizontal
*	14081.5	27.9	22.8	50.7	68.2	-17.5	Peak	Horizontal
*	17294.5	26.9	25.8	52.7	68.2	-15.5	Peak	Horizontal
	8106.0	31.5	12.3	43.8	74.0	-30.2	Peak	Vertical
	11072.5	29.4	18.6	48.0	74.0	-26.0	Peak	Vertical
*	14319.5	27.6	23.1	50.7	68.2	-17.5	Peak	Vertical
*	16980.0	27.9	24.5	52.4	68.2	-15.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 158 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C					
Test Engineer	Kevin Ker	Relative Humidity	57 %					
Test Site	AC1	Test Date	2017/06/27					
Test Mode:	802.11a - Ant 1	Test Channel:	64					
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average					
	limit.	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8182.5	31.1	12.0	43.1	74.0	-30.9	Peak	Horizontal
	11030.0	28.9	18.5	47.4	74.0	-26.6	Peak	Horizontal
*	14090.0	27.8	22.8	50.6	68.2	-17.6	Peak	Horizontal
*	17269.0	26.3	25.7	52.0	68.2	-16.2	Peak	Horizontal
	8276.0	31.7	11.9	43.6	74.0	-30.4	Peak	Vertical
	11055.5	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	14158.0	27.2	23.1	50.3	68.2	-17.9	Peak	Vertical
*	16759.0	28.1	23.4	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11a - Ant 1	Test Channel:	100				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8233.5	31.2	11.9	43.1	74.0	-30.9	Peak	Horizontal
	10996.0	28.9	18.5	47.4	74.0	-26.6	Peak	Horizontal
*	13699.0	28.0	22.0	50.0	68.2	-18.2	Peak	Horizontal
*	16886.5	28.9	24.1	53.0	68.2	-15.2	Peak	Horizontal
	8233.5	31.2	11.9	43.1	74.0	-30.9	Peak	Vertical
	10996.0	29.5	18.5	48.0	74.0	-26.0	Peak	Vertical
*	13639.5	27.8	21.8	49.6	68.2	-18.6	Peak	Vertical
*	16920.5	27.7	24.3	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C					
Test Engineer	Kevin Ker	Relative Humidity	57 %					
Test Site	AC1	Test Date	2017/06/27					
Test Mode:	802.11a - Ant 1	Test Channel:	116					
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average					
	limit.	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9372.5	30.1	14.5	44.6	74.0	-29.4	Peak	Horizontal
	11098.0	28.6	18.6	47.2	74.0	-26.8	Peak	Horizontal
*	14243.0	26.8	23.1	49.9	68.2	-18.3	Peak	Horizontal
*	16810.0	27.2	23.8	51.0	68.2	-17.2	Peak	Horizontal
	7383.5	30.5	12.5	43.0	74.0	-31.0	Peak	Vertical
	10843.0	29.4	18.1	47.5	74.0	-26.5	Peak	Vertical
*	13792.5	27.5	22.1	49.6	68.2	-18.6	Peak	Vertical
*	16750.5	28.2	23.3	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C					
Test Engineer	Kevin Ker	Relative Humidity	57 %					
Test Site	AC1	Test Date	2017/06/27					
Test Mode:	802.11a - Ant 1	Test Channel:	120					
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average					
	limit.	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show							
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8165.5	31.5	12.1	43.6	74.0	-30.4	Peak	Horizontal
	11191.5	30.5	18.7	49.2	74.0	-24.8	Peak	Horizontal
*	14124.0	27.2	23.0	50.2	68.2	-18.0	Peak	Horizontal
*	16801.5	28.3	23.7	52.0	68.2	-16.2	Peak	Horizontal
	8063.5	31.5	12.4	43.9	74.0	-30.1	Peak	Vertical
	11200.0	29.8	18.7	48.5	74.0	-25.5	Peak	Vertical
*	14141.0	27.9	23.0	50.9	68.2	-17.3	Peak	Vertical
*	16436.0	29.9	21.6	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11a - Ant 1	Test Channel:	140				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8361.0	30.5	12.0	42.5	74.0	-31.5	Peak	Horizontal
	11395.5	31.0	19.1	50.1	74.0	-23.9	Peak	Horizontal
*	14260.0	27.4	23.1	50.5	68.2	-17.7	Peak	Horizontal
*	16861.0	28.4	24.0	52.4	68.2	-15.8	Peak	Horizontal
	8276.0	31.4	11.9	43.3	74.0	-30.7	Peak	Vertical
	11404.0	30.3	19.1	49.4	74.0	-24.6	Peak	Vertical
*	14192.0	27.8	23.1	50.9	68.2	-17.3	Peak	Vertical
*	16878.0	28.5	24.1	52.6	68.2	-15.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11a - Ant 1	Test Channel:	144				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8097.5	31.0	12.3	43.3	74.0	-30.7	Peak	Horizontal
	11446.5	31.0	19.2	50.2	74.0	-23.8	Peak	Horizontal
*	14090.0	27.5	22.8	50.3	68.2	-17.9	Peak	Horizontal
*	16937.5	27.5	24.4	51.9	68.2	-16.3	Peak	Horizontal
	8284.5	31.7	11.9	43.6	74.0	-30.4	Peak	Vertical
	11446.5	30.3	19.2	49.5	74.0	-24.5	Peak	Vertical
*	14285.5	27.1	23.1	50.2	68.2	-18.0	Peak	Vertical
*	16852.5	29.1	24.0	53.1	68.2	-15.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	52				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8488.5	30.5	12.7	43.2	74.0	-30.8	Peak	Horizontal
	11132.0	28.9	18.6	47.5	74.0	-26.5	Peak	Horizontal
*	14141.0	26.8	23.0	49.8	68.2	-18.4	Peak	Horizontal
*	16886.5	27.6	24.1	51.7	68.2	-16.5	Peak	Horizontal
	8055.0	31.7	12.5	44.2	74.0	-29.8	Peak	Vertical
	10681.5	30.3	17.4	47.7	74.0	-26.3	Peak	Vertical
*	14090.0	27.0	22.8	49.8	68.2	-18.4	Peak	Vertical
*	16750.5	28.5	23.3	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 165 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	60				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8497.0	30.4	12.8	43.2	74.0	-30.8	Peak	Horizontal
	11251.0	28.3	18.8	47.1	74.0	-26.9	Peak	Horizontal
*	13996.5	26.8	22.7	49.5	68.2	-18.7	Peak	Horizontal
*	16903.5	27.5	24.2	51.7	68.2	-16.5	Peak	Horizontal
	8055.0	31.8	12.5	44.3	74.0	-29.7	Peak	Vertical
	10987.5	28.7	18.5	47.2	74.0	-26.8	Peak	Vertical
*	14192.0	27.3	23.1	50.4	68.2	-17.8	Peak	Vertical
*	16844.0	28.0	23.9	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 166 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/27
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	64
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8344.0	31.9	12.0	43.9	74.0	-30.1	Peak	Horizontal
	11378.5	28.1	19.1	47.2	74.0	-26.8	Peak	Horizontal
*	13784.0	28.0	22.1	50.1	68.2	-18.1	Peak	Horizontal
*	16920.5	27.6	24.3	51.9	68.2	-16.3	Peak	Horizontal
	7366.5	29.1	12.5	41.6	74.0	-32.4	Peak	Vertical
	11072.5	28.8	18.6	47.4	74.0	-26.6	Peak	Vertical
*	14243.0	27.5	23.1	50.6	68.2	-17.6	Peak	Vertical
*	16861.0	28.4	24.0	52.4	68.2	-15.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 167 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	100				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8199.5	31.3	12.0	43.3	74.0	-30.7	Peak	Horizontal
	10996.0	30.3	18.5	48.8	74.0	-25.2	Peak	Horizontal
*	14438.5	28.4	23.1	51.5	68.2	-16.7	Peak	Horizontal
*	16971.5	28.1	24.5	52.6	68.2	-15.6	Peak	Horizontal
	8497.0	30.6	12.8	43.4	74.0	-30.6	Peak	Vertical
	11361.5	28.7	19.0	47.7	74.0	-26.3	Peak	Vertical
*	14090.0	27.5	22.8	50.3	68.2	-17.9	Peak	Vertical
*	16963.0	28.1	24.5	52.6	68.2	-15.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 168 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/27
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	116
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Š

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8199.5	31.1	12.0	43.1	74.0	-30.9	Peak	Horizontal
	10902.5	28.7	18.3	47.0	74.0	-27.0	Peak	Horizontal
*	14302.5	27.7	23.1	50.8	68.2	-17.4	Peak	Horizontal
*	16827.0	27.9	23.9	51.8	68.2	-16.4	Peak	Horizontal
	8165.5	30.6	12.1	42.7	74.0	-31.3	Peak	Vertical
	11667.5	29.0	19.3	48.3	74.0	-25.7	Peak	Vertical
*	14268.5	26.8	23.1	49.9	68.2	-18.3	Peak	Vertical
*	16827.0	27.5	23.9	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 169 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	120				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8216.5	30.5	11.9	42.4	74.0	-31.6	Peak	Horizontal
	11200.0	30.5	18.7	49.2	74.0	-24.8	Peak	Horizontal
*	14081.5	27.4	22.8	50.2	68.2	-18.0	Peak	Horizontal
*	16776.0	28.0	23.5	51.5	68.2	-16.7	Peak	Horizontal
	8352.5	30.6	12.0	42.6	74.0	-31.4	Peak	Vertical
	11191.5	28.7	18.7	47.4	74.0	-26.6	Peak	Vertical
*	14200.5	27.1	23.1	50.2	68.2	-18.0	Peak	Vertical
*	16835.5	28.0	23.9	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 170 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	140				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8191.0	31.5	12.0	43.5	74.0	-30.5	Peak	Horizontal
	11404.0	30.7	19.1	49.8	74.0	-24.2	Peak	Horizontal
*	14226.0	26.8	23.1	49.9	68.2	-18.3	Peak	Horizontal
*	16869.5	28.2	24.1	52.3	68.2	-15.9	Peak	Horizontal
	8284.5	31.2	11.9	43.1	74.0	-30.9	Peak	Vertical
	11404.0	29.1	19.1	48.2	74.0	-25.8	Peak	Vertical
*	14149.5	26.8	23.0	49.8	68.2	-18.4	Peak	Vertical
*	16623.0	28.9	22.6	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 171 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT20 - Ant 1	Test Channel:	144				
Remark:	Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8242.0	30.8	11.9	42.7	74.0	-31.3	Peak	Horizontal
	11438.0	31.7	19.2	50.9	74.0	-23.1	Peak	Horizontal
*	13741.5	27.9	22.0	49.9	68.2	-18.3	Peak	Horizontal
*	16954.5	27.6	24.5	52.1	68.2	-16.1	Peak	Horizontal
	8267.5	31.1	11.9	43.0	74.0	-31.0	Peak	Vertical
	10741.0	30.2	17.6	47.8	74.0	-26.2	Peak	Vertical
*	13894.5	27.6	22.3	49.9	68.2	-18.3	Peak	Vertical
*	16852.5	28.0	24.0	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 172 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/27
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	54
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8216.5	31.8	11.9	43.7	74.0	-30.3	Peak	Horizontal
	11021.5	29.9	18.5	48.4	74.0	-25.6	Peak	Horizontal
*	13954.0	27.6	22.5	50.1	68.2	-18.1	Peak	Horizontal
*	16691.0	28.7	23.0	51.7	68.2	-16.5	Peak	Horizontal
	8191.0	31.7	12.0	43.7	74.0	-30.3	Peak	Vertical
	10928.0	30.5	18.4	48.9	74.0	-25.1	Peak	Vertical
*	14056.0	27.2	22.7	49.9	68.2	-18.3	Peak	Vertical
*	16767.5	28.2	23.5	51.7	68.2	-16.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 173 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	62				
Remark:	1. Average measurement was no	t performed if peak	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8208.0	31.5	11.9	43.4	74.0	-30.6	Peak	Horizontal
	11064.0	29.9	18.5	48.4	74.0	-25.6	Peak	Horizontal
*	14081.5	27.3	22.8	50.1	68.2	-18.1	Peak	Horizontal
*	16767.5	28.8	23.5	52.3	68.2	-15.9	Peak	Horizontal
	8267.5	31.5	11.9	43.4	74.0	-30.6	Peak	Vertical
	11021.5	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	13920.0	27.4	22.4	49.8	68.2	-18.4	Peak	Vertical
*	16835.5	28.9	23.9	52.8	68.2	-15.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 174 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/27
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	102
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8191.0	31.6	12.0	43.6	74.0	-30.4	Peak	Horizontal
	11030.0	30.5	18.5	49.0	74.0	-25.0	Peak	Horizontal
*	14413.0	28.0	23.2	51.2	68.2	-17.0	Peak	Horizontal
*	16929.0	28.1	24.4	52.5	68.2	-15.7	Peak	Horizontal
	8080.5	32.1	12.4	44.5	74.0	-29.5	Peak	Vertical
	11030.0	29.9	18.5	48.4	74.0	-25.6	Peak	Vertical
*	14141.0	28.2	23.0	51.2	68.2	-17.0	Peak	Vertical
*	16742.0	29.7	23.3	53.0	68.2	-15.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 175 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	110				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8259.0	30.8	11.9	42.7	74.0	-31.3	Peak	Horizontal
	11081.0	29.3	18.6	47.9	74.0	-26.1	Peak	Horizontal
*	14064.5	27.4	22.7	50.1	68.2	-18.1	Peak	Horizontal
*	16657.0	29.1	22.8	51.9	68.2	-16.3	Peak	Horizontal
	8148.5	30.9	12.1	43.0	74.0	-31.0	Peak	Vertical
	11047.0	28.6	18.5	47.1	74.0	-26.9	Peak	Vertical
*	14260.0	28.1	23.1	51.2	68.2	-17.0	Peak	Vertical
*	16912.0	27.1	24.3	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 176 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	118				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8335.5	31.3	11.9	43.2	74.0	-30.8	Peak	Horizontal
	10936.5	29.4	18.4	47.8	74.0	-26.2	Peak	Horizontal
*	14413.0	27.7	23.2	50.9	68.2	-17.3	Peak	Horizontal
*	16767.5	28.2	23.5	51.7	68.2	-16.5	Peak	Horizontal
	8174.0	31.9	12.0	43.9	74.0	-30.1	Peak	Vertical
	11030.0	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	13903.0	28.2	22.3	50.5	68.2	-17.7	Peak	Vertical
*	16733.5	28.6	23.2	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 177 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	134				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8369.5	31.8	12.1	43.9	74.0	-30.1	Peak	Horizontal
	11344.5	31.3	19.0	50.3	74.0	-23.7	Peak	Horizontal
*	13784.0	28.2	22.1	50.3	68.2	-17.9	Peak	Horizontal
*	16776.0	28.2	23.5	51.7	68.2	-16.5	Peak	Horizontal
	8267.5	32.5	11.9	44.4	74.0	-29.6	Peak	Vertical
	11353.0	30.5	19.0	49.5	74.0	-24.5	Peak	Vertical
*	14090.0	27.7	22.8	50.5	68.2	-17.7	Peak	Vertical
*	16980.0	27.8	24.5	52.3	68.2	-15.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 178 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11n-HT40 - Ant 1	Test Channel:	142				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8182.5	31.9	12.0	43.9	74.0	-30.1	Peak	Horizontal
	11055.5	29.4	18.5	47.9	74.0	-26.1	Peak	Horizontal
*	14268.5	28.0	23.1	51.1	68.2	-17.1	Peak	Horizontal
*	16793.0	28.7	23.7	52.4	68.2	-15.8	Peak	Horizontal
	8233.5	32.1	11.9	44.0	74.0	-30.0	Peak	Vertical
	11463.5	28.4	19.3	47.7	74.0	-26.3	Peak	Vertical
*	14124.0	27.8	23.0	50.8	68.2	-17.4	Peak	Vertical
*	16861.0	28.3	24.0	52.3	68.2	-15.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 179 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	52				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8352.5	31.2	12.0	43.2	74.0	-30.8	Peak	Horizontal
	10775.0	30.1	17.8	47.9	74.0	-26.1	Peak	Horizontal
*	13741.5	28.0	22.0	50.0	68.2	-18.2	Peak	Horizontal
*	16886.5	27.8	24.1	51.9	68.2	-16.3	Peak	Horizontal
	8233.5	30.4	11.9	42.3	74.0	-31.7	Peak	Vertical
	11463.5	28.7	19.3	48.0	74.0	-26.0	Peak	Vertical
*	13809.5	27.8	22.1	49.9	68.2	-18.3	Peak	Vertical
*	16742.0	28.9	23.3	52.2	68.2	-16.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 180 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	60				
Remark:	Average measurement was not performed if peak level lower than average						
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8429.0	31.6	12.4	44.0	74.0	-30.0	Peak	Horizontal
	10962.0	29.7	18.4	48.1	74.0	-25.9	Peak	Horizontal
*	13733.0	27.8	22.0	49.8	68.2	-18.4	Peak	Horizontal
*	16886.5	28.1	24.1	52.2	68.2	-16.0	Peak	Horizontal
	8208.0	31.5	11.9	43.4	74.0	-30.6	Peak	Vertical
	11072.5	30.0	18.6	48.6	74.0	-25.4	Peak	Vertical
*	13733.0	28.4	22.0	50.4	68.2	-17.8	Peak	Vertical
*	16980.0	28.5	24.5	53.0	68.2	-15.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 181 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/27			
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	64			
Remark:	Average measurement was not performed if peak level lower than average					
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8267.5	32.1	11.9	44.0	74.0	-30.0	Peak	Horizontal
	11021.5	28.8	18.5	47.3	74.0	-26.7	Peak	Horizontal
*	14141.0	27.5	23.0	50.5	68.2	-17.7	Peak	Horizontal
*	16895.0	27.7	24.2	51.9	68.2	-16.3	Peak	Horizontal
	8293.0	30.8	11.9	42.7	74.0	-31.3	Peak	Vertical
	11038.5	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	13809.5	27.8	22.1	49.9	68.2	-18.3	Peak	Vertical
*	16895.0	28.1	24.2	52.3	68.2	-15.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	100				
Remark:	1. Average measurement was no	t performed if peak	evel lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8454.5	30.9	12.5	43.4	74.0	-30.6	Peak	Horizontal
	11004.5	30.7	18.5	49.2	74.0	-24.8	Peak	Horizontal
*	13979.5	27.6	22.6	50.2	68.2	-18.0	Peak	Horizontal
*	16869.5	29.1	24.1	53.2	68.2	-15.0	Peak	Horizontal
	8344.0	31.1	12.0	43.1	74.0	-30.9	Peak	Vertical
	11115.0	29.0	18.6	47.6	74.0	-26.4	Peak	Vertical
*	14268.5	27.4	23.1	50.5	68.2	-17.7	Peak	Vertical
*	16886.5	28.4	24.1	52.5	68.2	-15.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 183 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/27			
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	116			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8497.0	30.8	12.8	43.6	74.0	-30.4	Peak	Horizontal
	11268.0	28.5	18.8	47.3	74.0	-26.7	Peak	Horizontal
*	14166.5	28.3	23.1	51.4	68.2	-16.8	Peak	Horizontal
*	17022.5	27.9	24.6	52.5	68.2	-15.7	Peak	Horizontal
	9330.0	31.2	14.6	45.8	74.0	-28.2	Peak	Vertical
	11021.5	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	14081.5	27.8	22.8	50.6	68.2	-17.6	Peak	Vertical
*	16971.5	27.2	24.5	51.7	68.2	-16.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/27			
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	120			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8106.0	31.9	12.3	44.2	74.0	-29.8	Peak	Horizontal
	11200.0	32.2	18.7	50.9	74.0	-23.1	Peak	Horizontal
*	13920.0	27.4	22.4	49.8	68.2	-18.4	Peak	Horizontal
*	16844.0	27.8	23.9	51.7	68.2	-16.5	Peak	Horizontal
	8165.5	31.7	12.1	43.8	74.0	-30.2	Peak	Vertical
	11021.5	29.0	18.5	47.5	74.0	-26.5	Peak	Vertical
*	14217.5	27.2	23.1	50.3	68.2	-17.9	Peak	Vertical
*	16861.0	27.7	24.0	51.7	68.2	-16.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 185 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/27			
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	140			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8250.5	31.4	11.9	43.3	74.0	-30.7	Peak	Horizontal
	11412.5	28.5	19.1	47.6	74.0	-26.4	Peak	Horizontal
*	13920.0	27.4	22.4	49.8	68.2	-18.4	Peak	Horizontal
*	16818.5	28.6	23.8	52.4	68.2	-15.8	Peak	Horizontal
	8182.5	31.5	12.0	43.5	74.0	-30.5	Peak	Vertical
	11013.0	29.4	18.5	47.9	74.0	-26.1	Peak	Vertical
*	14294.0	29.4	23.1	52.5	68.2	-15.7	Peak	Vertical
*	16733.5	28.8	23.2	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 186 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/27			
Test Mode:	802.11ac-VHT20 - Ant 1	Test Channel:	144			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8055.0	31.3	12.5	43.8	74.0	-30.2	Peak	Horizontal
	11038.5	29.6	18.5	48.1	74.0	-25.9	Peak	Horizontal
*	14047.5	27.2	22.7	49.9	68.2	-18.3	Peak	Horizontal
*	16835.5	27.9	23.9	51.8	68.2	-16.4	Peak	Horizontal
	9168.5	29.7	14.7	44.4	74.0	-29.6	Peak	Vertical
	11030.0	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	14319.5	27.6	23.1	50.7	68.2	-17.5	Peak	Vertical
*	16682.5	29.7	22.9	52.6	68.2	-15.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 187 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/27
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	54
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8055.0	31.6	12.5	44.1	74.0	-29.9	Peak	Horizontal
	11064.0	29.8	18.5	48.3	74.0	-25.7	Peak	Horizontal
*	14132.5	28.2	23.0	51.2	68.2	-17.0	Peak	Horizontal
*	16827.0	28.5	23.9	52.4	68.2	-15.8	Peak	Horizontal
	8352.5	32.7	12.0	44.7	74.0	-29.3	Peak	Vertical
	10902.5	29.8	18.3	48.1	74.0	-25.9	Peak	Vertical
*	14200.5	27.5	23.1	50.6	68.2	-17.6	Peak	Vertical
*	16937.5	28.8	24.4	53.2	68.2	-15.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 188 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/27
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	62
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8267.5	31.8	11.9	43.7	74.0	-30.3	Peak	Horizontal
	10868.5	30.1	18.2	48.3	74.0	-25.7	Peak	Horizontal
*	14056.0	27.4	22.7	50.1	68.2	-18.1	Peak	Horizontal
*	16776.0	28.3	23.5	51.8	68.2	-16.4	Peak	Horizontal
	8454.5	30.7	12.5	43.2	74.0	-30.8	Peak	Vertical
	10834.5	29.3	18.1	47.4	74.0	-26.6	Peak	Vertical
*	14124.0	27.2	23.0	50.2	68.2	-18.0	Peak	Vertical
*	16971.5	27.9	24.5	52.4	68.2	-15.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 189 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C					
Test Engineer	Kevin Ker	Relative Humidity	57 %					
Test Site	AC1	Test Date	2017/06/27					
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	102					
Remark:	Average measurement was no	t performed if peak l	evel lower than average					
	limit.							
	2. Other frequency was 20dB bel	Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8267.5	31.1	11.9	43.0	74.0	-31.0	Peak	Horizontal
	11030.0	30.0	18.5	48.5	74.0	-25.5	Peak	Horizontal
*	13809.5	27.8	22.1	49.9	68.2	-18.3	Peak	Horizontal
*	16878.0	27.6	24.1	51.7	68.2	-16.5	Peak	Horizontal
	8106.0	31.9	12.3	44.2	74.0	-29.8	Peak	Vertical
	11106.5	29.4	18.6	48.0	74.0	-26.0	Peak	Vertical
*	13996.5	28.1	22.7	50.8	68.2	-17.4	Peak	Vertical
*	16776.0	28.5	23.5	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 190 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C					
Test Engineer	Kevin Ker	Relative Humidity	57 %					
Test Site	AC1	Test Date	2017/06/27					
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	110					
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average					
	limit.							
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8352.5	31.3	12.0	43.3	74.0	-30.7	Peak	Horizontal
	11064.0	29.3	18.5	47.8	74.0	-26.2	Peak	Horizontal
*	14183.5	28.0	23.1	51.1	68.2	-17.1	Peak	Horizontal
*	16988.5	27.4	24.5	51.9	68.2	-16.3	Peak	Horizontal
	9160.0	29.6	14.7	44.3	74.0	-29.7	Peak	Vertical
	11038.5	29.8	18.5	48.3	74.0	-25.7	Peak	Vertical
*	14090.0	28.0	22.8	50.8	68.2	-17.4	Peak	Vertical
*	16835.5	28.4	23.9	52.3	68.2	-15.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 191 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	118				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.						
	2. Other frequency was 20dB bel	. Other frequency was 20dB below limit line within 1-18GHz, there is not sho					
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8259.0	31.5	11.9	43.4	74.0	-30.6	Peak	Horizontal
	11038.5	29.2	18.5	47.7	74.0	-26.3	Peak	Horizontal
*	13724.5	28.3	22.0	50.3	68.2	-17.9	Peak	Horizontal
*	16869.5	28.0	24.1	52.1	68.2	-16.1	Peak	Horizontal
	8089.0	30.0	12.3	42.3	74.0	-31.7	Peak	Vertical
	11021.5	29.4	18.5	47.9	74.0	-26.1	Peak	Vertical
*	14243.0	27.2	23.1	50.3	68.2	-17.9	Peak	Vertical
*	16852.5	27.5	24.0	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 192 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/27
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	134
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8284.5	31.4	11.9	43.3	74.0	-30.7	Peak	Horizontal
	11344.5	30.8	19.0	49.8	74.0	-24.2	Peak	Horizontal
*	14081.5	27.8	22.8	50.6	68.2	-17.6	Peak	Horizontal
*	16920.5	28.1	24.3	52.4	68.2	-15.8	Peak	Horizontal
	8242.0	31.6	11.9	43.5	74.0	-30.5	Peak	Vertical
	11132.0	29.0	18.6	47.6	74.0	-26.4	Peak	Vertical
*	13903.0	28.6	22.3	50.9	68.2	-17.3	Peak	Vertical
*	16988.5	28.0	24.5	52.5	68.2	-15.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 193 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C					
Test Engineer	Kevin Ker	Relative Humidity	57 %					
Test Site	AC1	Test Date	2017/06/27					
Test Mode:	802.11ac-VHT40 - Ant 1	Test Channel:	142					
Remark:	1. Average measurement was no	t performed if peak l	level lower than average					
	limit.							
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8310.0	31.4	11.9	43.3	74.0	-30.7	Peak	Horizontal
	11106.5	29.7	18.6	48.3	74.0	-25.7	Peak	Horizontal
*	14132.5	27.7	23.0	50.7	68.2	-17.5	Peak	Horizontal
*	16835.5	28.1	23.9	52.0	68.2	-16.2	Peak	Horizontal
	8318.5	31.2	11.9	43.1	74.0	-30.9	Peak	Vertical
	11055.5	30.1	18.5	48.6	74.0	-25.4	Peak	Vertical
*	13724.5	29.4	22.0	51.4	68.2	-16.8	Peak	Vertical
*	16920.5	27.7	24.3	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 194 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	58				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8310.0	31.0	11.9	42.9	74.0	-31.1	Peak	Horizontal
	11293.5	28.4	18.9	47.3	74.0	-26.7	Peak	Horizontal
*	14192.0	27.6	23.1	50.7	68.2	-17.5	Peak	Horizontal
*	16708.0	29.1	23.1	52.2	68.2	-16.0	Peak	Horizontal
	8497.0	31.6	12.8	44.4	74.0	-29.6	Peak	Vertical
	11072.5	28.9	18.6	47.5	74.0	-26.5	Peak	Vertical
*	14217.5	27.9	23.1	51.0	68.2	-17.2	Peak	Vertical
*	16929.0	28.4	24.4	52.8	68.2	-15.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	106				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8208.0	31.9	11.9	43.8	74.0	-30.2	Peak	Horizontal
	11421.0	28.7	19.1	47.8	74.0	-26.2	Peak	Horizontal
*	14175.0	27.5	23.1	50.6	68.2	-17.6	Peak	Horizontal
*	16750.5	29.1	23.3	52.4	68.2	-15.8	Peak	Horizontal
	8276.0	31.3	11.9	43.2	74.0	-30.8	Peak	Vertical
	11038.5	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	13741.5	27.9	22.0	49.9	68.2	-18.3	Peak	Vertical
*	16844.0	29.0	23.9	52.9	68.2	-15.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/27			
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	122			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8284.5	30.6	11.9	42.5	74.0	-31.5	Peak	Horizontal
	10894.0	29.8	18.3	48.1	74.0	-25.9	Peak	Horizontal
*	14260.0	27.8	23.1	50.9	68.2	-17.3	Peak	Horizontal
*	16640.0	28.8	22.7	51.5	68.2	-16.7	Peak	Horizontal
	8250.5	31.6	11.9	43.5	74.0	-30.5	Peak	Vertical
	11633.5	29.4	19.4	48.8	74.0	-25.2	Peak	Vertical
*	14030.5	27.5	22.7	50.2	68.2	-18.0	Peak	Vertical
*	16886.5	27.8	24.1	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/27				
Test Mode:	802.11ac-VHT80 - Ant 1	Test Channel:	138				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8267.5	31.2	11.9	43.1	74.0	-30.9	Peak	Horizontal
	11047.0	29.7	18.5	48.2	74.0	-25.8	Peak	Horizontal
*	14064.5	26.9	22.7	49.6	68.2	-18.6	Peak	Horizontal
*	17082.0	28.3	24.8	53.1	68.2	-15.1	Peak	Horizontal
	8225.0	30.8	11.9	42.7	74.0	-31.3	Peak	Vertical
	11072.5	30.5	18.6	49.1	74.0	-24.9	Peak	Vertical
*	14183.5	27.6	23.1	50.7	68.2	-17.5	Peak	Vertical
*	16750.5	28.1	23.3	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11a - Ant 2	Test Channel:	52			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8284.5	30.6	11.9	42.5	74.0	-31.5	Peak	Horizontal
	11030.0	28.9	18.5	47.4	74.0	-26.6	Peak	Horizontal
*	13809.5	27.4	22.1	49.5	68.2	-18.7	Peak	Horizontal
*	16920.5	27.5	24.3	51.8	68.2	-16.4	Peak	Horizontal
	8131.5	31.2	12.2	43.4	74.0	-30.6	Peak	Vertical
	11047.0	29.3	18.5	47.8	74.0	-26.2	Peak	Vertical
*	14387.5	27.6	23.2	50.8	68.2	-17.4	Peak	Vertical
*	16980.0	27.7	24.5	52.2	68.2	-16.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11a - Ant 2	Test Channel:	60			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8250.5	31.0	11.9	42.9	74.0	-31.1	Peak	Horizontal
	10945.0	28.4	18.4	46.8	74.0	-27.2	Peak	Horizontal
*	14183.5	28.0	23.1	51.1	68.2	-17.1	Peak	Horizontal
*	16980.0	27.2	24.5	51.7	68.2	-16.5	Peak	Horizontal
	8480.0	31.2	12.7	43.9	74.0	-30.1	Peak	Vertical
	11548.5	28.3	19.4	47.7	74.0	-26.3	Peak	Vertical
*	14345.0	27.3	23.2	50.5	68.2	-17.7	Peak	Vertical
*	16852.5	27.9	24.0	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11a - Ant 2	Test Channel:	64			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8369.5	31.2	12.1	43.3	74.0	-30.7	Peak	Horizontal
	11038.5	29.5	18.5	48.0	74.0	-26.0	Peak	Horizontal
*	13733.0	27.9	22.0	49.9	68.2	-18.3	Peak	Horizontal
*	16529.5	29.6	22.0	51.6	68.2	-16.6	Peak	Horizontal
	8208.0	31.2	11.9	43.1	74.0	-30.9	Peak	Vertical
	10996.0	29.1	18.5	47.6	74.0	-26.4	Peak	Vertical
*	14141.0	26.8	23.0	49.8	68.2	-18.4	Peak	Vertical
*	16572.0	29.0	22.3	51.3	68.2	-16.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11a - Ant 2	Test Channel:	100			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
	8055.0	30.7	12.5	43.2	74.0	-30.8	Peak	Horizontal
	11013.0	29.5	18.5	48.0	74.0	-26.0	Peak	Horizontal
*	14404.5	26.6	23.2	49.8	68.2	-18.4	Peak	Horizontal
*	17073.5	28.3	24.8	53.1	68.2	-15.1	Peak	Horizontal
	9117.5	30.4	14.5	44.9	74.0	-29.1	Peak	Vertical
	11565.5	27.5	19.5	47.0	74.0	-27.0	Peak	Vertical
*	14081.5	28.2	22.8	51.0	68.2	-17.2	Peak	Vertical
*	16861.0	27.8	24.0	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 202 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/28
Test Mode:	802.11a - Ant 2	Test Channel:	116
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9406.5	30.8	14.5	45.3	74.0	-28.7	Peak	Horizontal
	11072.5	29.0	18.6	47.6	74.0	-26.4	Peak	Horizontal
*	14302.5	27.1	23.1	50.2	68.2	-18.0	Peak	Horizontal
*	16835.5	27.7	23.9	51.6	68.2	-16.6	Peak	Horizontal
	9109.0	30.7	14.5	45.2	74.0	-28.8	Peak	Vertical
	10698.5	29.7	17.5	47.2	74.0	-26.8	Peak	Vertical
*	14336.5	27.3	23.2	50.5	68.2	-17.7	Peak	Vertical
*	16767.5	28.5	23.5	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 203 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11a - Ant 2	Test Channel:	120			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9457.5	30.8	14.4	45.2	74.0	-28.8	Peak	Horizontal
	11047.0	29.3	18.5	47.8	74.0	-26.2	Peak	Horizontal
*	14081.5	27.1	22.8	49.9	68.2	-18.3	Peak	Horizontal
*	16674.0	27.9	22.9	50.8	68.2	-17.4	Peak	Horizontal
	9338.5	30.7	14.6	45.3	74.0	-28.7	Peak	Vertical
	10996.0	29.0	18.5	47.5	74.0	-26.5	Peak	Vertical
*	14107.0	26.9	22.9	49.8	68.2	-18.4	Peak	Vertical
*	17320.0	26.4	26.0	52.4	68.2	-15.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 204 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11a - Ant 2	Test Channel:	140			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8267.5	31.5	11.9	43.4	74.0	-30.6	Peak	Horizontal
	10945.0	28.7	18.4	47.1	74.0	-26.9	Peak	Horizontal
*	14183.5	27.2	23.1	50.3	68.2	-17.9	Peak	Horizontal
*	17022.5	27.3	24.6	51.9	68.2	-16.3	Peak	Horizontal
	9440.5	30.9	14.4	45.3	74.0	-28.7	Peak	Vertical
	11064.0	29.4	18.5	47.9	74.0	-26.1	Peak	Vertical
*	14421.5	28.0	23.2	51.2	68.2	-17.0	Peak	Vertical
*	16742.0	28.1	23.3	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 205 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11a - Ant 2	Test Channel:	144			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9423.5	31.0	14.5	45.5	74.0	-28.5	Peak	Horizontal
	11370.0	28.3	19.0	47.3	74.0	-26.7	Peak	Horizontal
*	14064.5	26.8	22.7	49.5	68.2	-18.7	Peak	Horizontal
*	16776.0	28.1	23.5	51.6	68.2	-16.6	Peak	Horizontal
	8089.0	29.7	12.3	42.0	74.0	-32.0	Peak	Vertical
	11021.5	28.4	18.5	46.9	74.0	-27.1	Peak	Vertical
*	14124.0	27.2	23.0	50.2	68.2	-18.0	Peak	Vertical
*	16971.5	27.2	24.5	51.7	68.2	-16.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 206 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT20 - Ant 2	Test Channel:	52			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8174.0	31.3	12.0	43.3	74.0	-30.7	Peak	Horizontal
	10817.5	29.4	18.0	47.4	74.0	-26.6	Peak	Horizontal
*	14141.0	26.4	23.0	49.4	68.2	-18.8	Peak	Horizontal
*	16623.0	28.6	22.6	51.2	68.2	-17.0	Peak	Horizontal
	8089.0	30.9	12.3	43.2	74.0	-30.8	Peak	Vertical
	10826.0	29.5	18.0	47.5	74.0	-26.5	Peak	Vertical
*	14200.5	27.3	23.1	50.4	68.2	-17.8	Peak	Vertical
*	16589.0	29.8	22.4	52.2	68.2	-16.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 207 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT20 - Ant 2	Test Channel:	60			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9415.0	30.5	14.5	45.0	74.0	-29.0	Peak	Horizontal
	11072.5	29.1	18.6	47.7	74.0	-26.3	Peak	Horizontal
*	14183.5	26.9	23.1	50.0	68.2	-18.2	Peak	Horizontal
*	16827.0	27.6	23.9	51.5	68.2	-16.7	Peak	Horizontal
	8267.5	31.1	11.9	43.0	74.0	-31.0	Peak	Vertical
	11523.0	27.9	19.4	47.3	74.0	-26.7	Peak	Vertical
*	13792.5	27.4	22.1	49.5	68.2	-18.7	Peak	Vertical
*	16623.0	28.7	22.6	51.3	68.2	-16.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/28
Test Mode:	802.11n-HT20 - Ant 2	Test Channel:	64
Remark:	Average measurement was no limit.	t performed if peak l	level lower than average
	Other frequency was 20dB bel in the report.	ow limit line within 1	-18GHz, there is not show

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8480.0	31.0	12.7	43.7	74.0	-30.3	Peak	Horizontal
	10936.5	29.3	18.4	47.7	74.0	-26.3	Peak	Horizontal
*	13886.0	27.7	22.3	50.0	68.2	-18.2	Peak	Horizontal
*	16767.5	28.2	23.5	51.7	68.2	-16.5	Peak	Horizontal
	9406.5	30.3	14.5	44.8	74.0	-29.2	Peak	Vertical
	11642.0	28.0	19.4	47.4	74.0	-26.6	Peak	Vertical
*	13945.5	27.4	22.5	49.9	68.2	-18.3	Peak	Vertical
*	16674.0	28.8	22.9	51.7	68.2	-16.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 209 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT20 - Ant 2	Test Channel:	100			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8089.0	30.8	12.3	43.1	74.0	-30.9	Peak	Horizontal
	11336.0	28.6	19.0	47.6	74.0	-26.4	Peak	Horizontal
*	14421.5	28.1	23.2	51.3	68.2	-16.9	Peak	Horizontal
*	16895.0	27.5	24.2	51.7	68.2	-16.5	Peak	Horizontal
	8199.5	31.5	12.0	43.5	74.0	-30.5	Peak	Vertical
	10962.0	29.7	18.4	48.1	74.0	-25.9	Peak	Vertical
*	13894.5	28.6	22.3	50.9	68.2	-17.3	Peak	Vertical
*	17048.0	27.4	24.7	52.1	68.2	-16.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 210 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT20 - Ant 2	Test Channel:	116			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8310.0	31.4	11.9	43.3	74.0	-30.7	Peak	Horizontal
	11106.5	29.7	18.6	48.3	74.0	-25.7	Peak	Horizontal
*	14132.5	27.7	23.0	50.7	68.2	-17.5	Peak	Horizontal
*	16835.5	28.1	23.9	52.0	68.2	-16.2	Peak	Horizontal
	8318.5	31.2	11.9	43.1	74.0	-30.9	Peak	Vertical
	11055.5	30.1	18.5	48.6	74.0	-25.4	Peak	Vertical
*	13724.5	29.4	22.0	51.4	68.2	-16.8	Peak	Vertical
*	16920.5	27.7	24.3	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/28
Test Mode:	802.11n-HT20 - Ant 2	Test Channel:	120
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9134.5	30.9	14.6	45.5	74.0	-28.5	Peak	Horizontal
	10834.5	29.1	18.1	47.2	74.0	-26.8	Peak	Horizontal
*	14090.0	26.7	22.8	49.5	68.2	-18.7	Peak	Horizontal
*	16776.0	28.0	23.5	51.5	68.2	-16.7	Peak	Horizontal
	9151.5	30.7	14.7	45.4	74.0	-28.6	Peak	Vertical
	11038.5	29.5	18.5	48.0	74.0	-26.0	Peak	Vertical
*	14141.0	26.5	23.0	49.5	68.2	-18.7	Peak	Vertical
*	16835.5	28.7	23.9	52.6	68.2	-15.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 212 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT20 - Ant 2	Test Channel:	140			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8174.0	30.1	12.0	42.1	74.0	-31.9	Peak	Horizontal
	10724.0	29.9	17.6	47.5	74.0	-26.5	Peak	Horizontal
*	14047.5	26.9	22.7	49.6	68.2	-18.6	Peak	Horizontal
*	16886.5	28.1	24.1	52.2	68.2	-16.0	Peak	Horizontal
	9151.5	29.2	14.7	43.9	74.0	-30.1	Peak	Vertical
	11013.0	28.7	18.5	47.2	74.0	-26.8	Peak	Vertical
*	14175.0	26.9	23.1	50.0	68.2	-18.2	Peak	Vertical
*	16937.5	27.0	24.4	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 213 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT20 - Ant 2	Test Channel:	144			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency (MHz)	Reading Level (dBµV)	Factor (dB)	Measure Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
	8165.5	31.4	12.1	43.5	74.0	-30.5	Peak	Horizontal
	11030.0	29.5	18.5	48.0	74.0	-26.0	Peak	Horizontal
*	14608.5	29.5	22.9	52.4	68.2	-15.8	Peak	Horizontal
*	16844.0	27.5	23.9	51.4	68.2	-16.8	Peak	Horizontal
	8174.0	31.3	12.0	43.3	74.0	-30.7	Peak	Vertical
	11446.5	29.6	19.2	48.8	74.0	-25.2	Peak	Vertical
*	14200.5	27.4	23.1	50.5	68.2	-17.7	Peak	Vertical
*	16750.5	27.8	23.3	51.1	68.2	-17.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 214 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT40 - Ant 2	Test Channel:	54			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8276.0	31.3	11.9	43.2	74.0	-30.8	Peak	Horizontal
	10775.0	29.7	17.8	47.5	74.0	-26.5	Peak	Horizontal
*	14073.0	26.7	22.8	49.5	68.2	-18.7	Peak	Horizontal
*	16861.0	27.8	24.0	51.8	68.2	-16.4	Peak	Horizontal
	9338.5	30.6	14.6	45.2	74.0	-28.8	Peak	Vertical
	11038.5	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	14107.0	26.0	22.9	48.9	68.2	-19.3	Peak	Vertical
*	16912.0	27.5	24.3	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 215 of 585



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT40 - Ant 2	Test Channel:	62			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8233.5	30.6	11.9	42.5	74.0	-31.5	Peak	Horizontal
	11030.0	28.6	18.5	47.1	74.0	-26.9	Peak	Horizontal
*	13809.5	27.7	22.1	49.8	68.2	-18.4	Peak	Horizontal
*	16436.0	29.7	21.6	51.3	68.2	-16.9	Peak	Horizontal
	8191.0	30.4	12.0	42.4	74.0	-31.6	Peak	Vertical
	10826.0	29.0	18.0	47.0	74.0	-27.0	Peak	Vertical
*	14217.5	27.5	23.1	50.6	68.2	-17.6	Peak	Vertical
*	16912.0	28.0	24.3	52.3	68.2	-15.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 216 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT40 - Ant 2	Test Channel:	102			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8480.0	31.1	12.7	43.8	74.0	-30.2	Peak	Horizontal
	11021.5	28.7	18.5	47.2	74.0	-26.8	Peak	Horizontal
*	14141.0	26.3	23.0	49.3	68.2	-18.9	Peak	Horizontal
*	16929.0	27.9	24.4	52.3	68.2	-15.9	Peak	Horizontal
	9415.0	30.8	14.5	45.3	74.0	-28.7	Peak	Vertical
	11038.5	29.5	18.5	48.0	74.0	-26.0	Peak	Vertical
*	14141.0	26.8	23.0	49.8	68.2	-18.4	Peak	Vertical
*	16699.5	27.6	23.0	50.6	68.2	-17.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 217 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/28				
Test Mode:	802.11n-HT40 - Ant 2	Test Channel:	110				
Remark:	Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8267.5	31.1	11.9	43.0	74.0	-31.0	Peak	Horizontal
	11030.0	30.0	18.5	48.5	74.0	-25.5	Peak	Horizontal
*	13809.5	27.8	22.1	49.9	68.2	-18.3	Peak	Horizontal
*	16878.0	27.6	24.1	51.7	68.2	-16.5	Peak	Horizontal
	8106.0	31.9	12.3	44.2	74.0	-29.8	Peak	Vertical
	11106.5	29.4	18.6	48.0	74.0	-26.0	Peak	Vertical
*	13996.5	28.1	22.7	50.8	68.2	-17.4	Peak	Vertical
*	16776.0	28.5	23.5	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 218 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT40 - Ant 2	Test Channel:	118			
Remark:	1. Average measurement was no	t performed if peak	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9168.5	28.6	14.7	43.3	74.0	-30.7	Peak	Horizontal
	10885.5	28.8	18.3	47.1	74.0	-26.9	Peak	Horizontal
*	14200.5	27.1	23.1	50.2	68.2	-18.0	Peak	Horizontal
*	16886.5	27.6	24.1	51.7	68.2	-16.5	Peak	Horizontal
	8293.0	31.1	11.9	43.0	74.0	-31.0	Peak	Vertical
	11038.5	28.6	18.5	47.1	74.0	-26.9	Peak	Vertical
*	14260.0	28.1	23.1	51.2	68.2	-17.0	Peak	Vertical
*	16835.5	27.5	23.9	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 219 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT40 - Ant 2	Test Channel:	134			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8080.5	30.3	12.4	42.7	74.0	-31.3	Peak	Horizontal
	11132.0	29.0	18.6	47.6	74.0	-26.4	Peak	Horizontal
*	13843.5	26.9	22.2	49.1	68.2	-19.1	Peak	Horizontal
*	16844.0	27.2	23.9	51.1	68.2	-17.1	Peak	Horizontal
	9457.5	30.3	14.4	44.7	74.0	-29.3	Peak	Vertical
	11319.0	27.9	18.9	46.8	74.0	-27.2	Peak	Vertical
*	14039.0	26.6	22.7	49.3	68.2	-18.9	Peak	Vertical
*	16716.5	27.3	23.1	50.4	68.2	-17.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 220 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11n-HT40 - Ant 2	Test Channel:	142			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9347.0	30.1	14.5	44.6	74.0	-29.4	Peak	Horizontal
	11004.5	29.0	18.5	47.5	74.0	-26.5	Peak	Horizontal
*	13750.0	27.6	22.0	49.6	68.2	-18.6	Peak	Horizontal
*	16827.0	27.6	23.9	51.5	68.2	-16.7	Peak	Horizontal
	8165.5	30.9	12.1	43.0	74.0	-31.0	Peak	Vertical
	10970.5	29.5	18.4	47.9	74.0	-26.1	Peak	Vertical
*	14634.0	28.5	22.9	51.4	68.2	-16.8	Peak	Vertical
*	16861.0	27.5	24.0	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 221 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/28
Test Mode:	802.11ac-VHT20 - Ant 2	Test Channel:	52
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9423.5	30.7	14.5	45.2	74.0	-28.8	Peak	Horizontal
	11030.0	29.0	18.5	47.5	74.0	-26.5	Peak	Horizontal
*	14260.0	28.4	23.1	51.5	68.2	-16.7	Peak	Horizontal
*	16725.0	28.8	23.2	52.0	68.2	-16.2	Peak	Horizontal
	8199.5	30.5	12.0	42.5	74.0	-31.5	Peak	Vertical
	11047.0	29.0	18.5	47.5	74.0	-26.5	Peak	Vertical
*	14107.0	26.9	22.9	49.8	68.2	-18.4	Peak	Vertical
*	16980.0	27.3	24.5	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 222 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/28				
Test Mode:	802.11ac-VHT20 - Ant 2	Test Channel:	60				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8293.0	30.9	11.9	42.8	74.0	-31.2	Peak	Horizontal
	11030.0	29.2	18.5	47.7	74.0	-26.3	Peak	Horizontal
*	14081.5	27.3	22.8	50.1	68.2	-18.1	Peak	Horizontal
*	16895.0	27.9	24.2	52.1	68.2	-16.1	Peak	Horizontal
	8182.5	30.7	12.0	42.7	74.0	-31.3	Peak	Vertical
	11081.0	28.8	18.6	47.4	74.0	-26.6	Peak	Vertical
*	14370.5	27.3	23.2	50.5	68.2	-17.7	Peak	Vertical
*	16937.5	27.6	24.4	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 223 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/28				
Test Mode:	802.11ac-VHT20 - Ant 2	Test Channel:	64				
Remark:	1. Average measurement was no	t performed if peak	evel lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8497.0	30.8	12.8	43.6	74.0	-30.4	Peak	Horizontal
	11268.0	28.5	18.8	47.3	74.0	-26.7	Peak	Horizontal
*	14166.5	28.3	23.1	51.4	68.2	-16.8	Peak	Horizontal
*	17022.5	27.9	24.6	52.5	68.2	-15.7	Peak	Horizontal
	9330.0	31.2	14.6	45.8	74.0	-28.2	Peak	Vertical
	11021.5	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	14081.5	27.8	22.8	50.6	68.2	-17.6	Peak	Vertical
*	16971.5	27.2	24.5	51.7	68.2	-16.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 224 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT20 - Ant 2	Test Channel:	100			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8259.0	30.4	11.9	42.3	74.0	-31.7	Peak	Horizontal
	10775.0	29.6	17.8	47.4	74.0	-26.6	Peak	Horizontal
*	13962.5	27.4	22.5	49.9	68.2	-18.3	Peak	Horizontal
*	16835.5	27.5	23.9	51.4	68.2	-16.8	Peak	Horizontal
	9304.5	30.6	14.7	45.3	74.0	-28.7	Peak	Vertical
	11361.5	28.4	19.0	47.4	74.0	-26.6	Peak	Vertical
*	14217.5	27.3	23.1	50.4	68.2	-17.8	Peak	Vertical
*	16657.0	28.6	22.8	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 225 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT20 - Ant 2	Test Channel:	116			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8250.5	31.4	11.9	43.3	74.0	-30.7	Peak	Horizontal
	11412.5	28.5	19.1	47.6	74.0	-26.4	Peak	Horizontal
*	13920.0	27.4	22.4	49.8	68.2	-18.4	Peak	Horizontal
*	16818.5	28.6	23.8	52.4	68.2	-15.8	Peak	Horizontal
	8182.5	31.5	12.0	43.5	74.0	-30.5	Peak	Vertical
	11013.0	29.4	18.5	47.9	74.0	-26.1	Peak	Vertical
*	14294.0	29.4	23.1	52.5	68.2	-15.7	Peak	Vertical
*	16733.5	28.8	23.2	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT20 - Ant 2	Test Channel:	120			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9168.5	30.1	14.7	44.8	74.0	-29.2	Peak	Horizontal
	11021.5	28.9	18.5	47.4	74.0	-26.6	Peak	Horizontal
*	13724.5	27.9	22.0	49.9	68.2	-18.3	Peak	Horizontal
*	16521.0	29.2	22.0	51.2	68.2	-17.0	Peak	Horizontal
	8089.0	31.3	12.3	43.6	74.0	-30.4	Peak	Vertical
	11038.5	28.8	18.5	47.3	74.0	-26.7	Peak	Vertical
*	14234.5	27.0	23.1	50.1	68.2	-18.1	Peak	Vertical
*	17320.0	26.2	26.0	52.2	68.2	-16.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 227 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/28
Test Mode:	802.11ac-VHT20 - Ant 2	Test Channel:	140
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9313.0	30.1	14.7	44.8	74.0	-29.2	Peak	Horizontal
	11353.0	28.3	19.0	47.3	74.0	-26.7	Peak	Horizontal
*	14217.5	27.2	23.1	50.3	68.2	-17.9	Peak	Horizontal
*	16733.5	27.4	23.2	50.6	68.2	-17.6	Peak	Horizontal
	8148.5	30.9	12.1	43.0	74.0	-31.0	Peak	Vertical
	11072.5	29.1	18.6	47.7	74.0	-26.3	Peak	Vertical
*	14396.0	27.6	23.2	50.8	68.2	-17.4	Peak	Vertical
*	16903.5	27.4	24.2	51.6	68.2	-16.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 228 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT20 - Ant 2	Test Channel:	144			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8165.5	30.3	12.1	42.4	74.0	-31.6	Peak	Horizontal
	11599.5	28.0	19.4	47.4	74.0	-26.6	Peak	Horizontal
*	13860.5	27.1	22.3	49.4	68.2	-18.8	Peak	Horizontal
*	16878.0	27.8	24.1	51.9	68.2	-16.3	Peak	Horizontal
	8089.0	31.3	12.3	43.6	74.0	-30.4	Peak	Vertical
	10877.0	28.8	18.2	47.0	74.0	-27.0	Peak	Vertical
*	14022.0	26.9	22.7	49.6	68.2	-18.6	Peak	Vertical
*	16767.5	28.1	23.5	51.6	68.2	-16.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 229 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT40 - Ant 2	Test Channel:	54			
Remark:	1. Average measurement was no	t performed if peak	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8089.0	31.0	12.3	43.3	74.0	-30.7	Peak	Horizontal
	11055.5	28.7	18.5	47.2	74.0	-26.8	Peak	Horizontal
*	14370.5	27.9	23.2	51.1	68.2	-17.1	Peak	Horizontal
*	16827.0	27.7	23.9	51.6	68.2	-16.6	Peak	Horizontal
	7460.0	30.3	12.8	43.1	74.0	-30.9	Peak	Vertical
	11021.5	28.6	18.5	47.1	74.0	-26.9	Peak	Vertical
*	14200.5	26.9	23.1	50.0	68.2	-18.2	Peak	Vertical
*	16971.5	27.3	24.5	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 230 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT40 - Ant 2	Test Channel:	62			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7570.5	30.3	12.8	43.1	74.0	-30.9	Peak	Horizontal
	10783.5	29.5	17.8	47.3	74.0	-26.7	Peak	Horizontal
*	13792.5	27.4	22.1	49.5	68.2	-18.7	Peak	Horizontal
*	16878.0	27.7	24.1	51.8	68.2	-16.4	Peak	Horizontal
	7579.0	29.8	12.7	42.5	74.0	-31.5	Peak	Vertical
	11030.0	28.7	18.5	47.2	74.0	-26.8	Peak	Vertical
*	14047.5	27.0	22.7	49.7	68.2	-18.5	Peak	Vertical
*	17031.0	27.2	24.6	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 231 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT40 - Ant 2	Test Channel:	102			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9185.5	29.8	14.7	44.5	74.0	-29.5	Peak	Horizontal
	11123.5	27.8	18.6	46.4	74.0	-27.6	Peak	Horizontal
*	14166.5	28.2	23.1	51.3	68.2	-16.9	Peak	Horizontal
*	16886.5	27.8	24.1	51.9	68.2	-16.3	Peak	Horizontal
	8301.5	31.1	11.9	43.0	74.0	-31.0	Peak	Vertical
	11047.0	29.0	18.5	47.5	74.0	-26.5	Peak	Vertical
*	13903.0	27.8	22.3	50.1	68.2	-18.1	Peak	Vertical
*	16750.5	28.0	23.3	51.3	68.2	-16.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT40 - Ant 2	Test Channel:	110			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8199.5	31.1	12.0	43.1	74.0	-30.9	Peak	Horizontal
	10902.5	28.7	18.3	47.0	74.0	-27.0	Peak	Horizontal
*	14302.5	27.7	23.1	50.8	68.2	-17.4	Peak	Horizontal
*	16827.0	27.9	23.9	51.8	68.2	-16.4	Peak	Horizontal
	8165.5	30.6	12.1	42.7	74.0	-31.3	Peak	Vertical
	11667.5	29.0	19.3	48.3	74.0	-25.7	Peak	Vertical
*	14268.5	26.8	23.1	49.9	68.2	-18.3	Peak	Vertical
*	16827.0	27.5	23.9	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 233 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT40 - Ant 2	Test Channel:	118			
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9466.0	30.2	14.4	44.6	74.0	-29.4	Peak	Horizontal
	11310.5	28.7	18.9	47.6	74.0	-26.4	Peak	Horizontal
*	14430.0	27.2	23.1	50.3	68.2	-17.9	Peak	Horizontal
*	16793.0	27.5	23.7	51.2	68.2	-17.0	Peak	Horizontal
	9449.0	31.6	14.4	46.0	74.0	-28.0	Peak	Vertical
	10800.5	30.0	17.9	47.9	74.0	-26.1	Peak	Vertical
*	14209.0	27.8	23.1	50.9	68.2	-17.3	Peak	Vertical
*	16903.5	27.9	24.2	52.1	68.2	-16.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/28				
Test Mode:	802.11ac-VHT40 - Ant 2	Test Channel:	134				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8242.0	31.1	11.9	43.0	74.0	-31.0	Peak	Horizontal
	11030.0	29.5	18.5	48.0	74.0	-26.0	Peak	Horizontal
*	14251.5	27.7	23.1	50.8	68.2	-17.4	Peak	Horizontal
*	16861.0	28.5	24.0	52.5	68.2	-15.7	Peak	Horizontal
	8352.5	31.3	12.0	43.3	74.0	-30.7	Peak	Vertical
	11123.5	29.2	18.6	47.8	74.0	-26.2	Peak	Vertical
*	14175.0	27.1	23.1	50.2	68.2	-18.0	Peak	Vertical
*	16801.5	28.6	23.7	52.3	68.2	-15.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 235 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/28				
Test Mode:	802.11ac-VHT40 - Ant 2	Test Channel:	142				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.						
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8259.0	31.9	11.9	43.8	74.0	-30.2	Peak	Horizontal
	11047.0	29.2	18.5	47.7	74.0	-26.3	Peak	Horizontal
*	14047.5	27.2	22.7	49.9	68.2	-18.3	Peak	Horizontal
*	16793.0	27.8	23.7	51.5	68.2	-16.7	Peak	Horizontal
	8259.0	31.5	11.9	43.4	74.0	-30.6	Peak	Vertical
	11310.5	28.9	18.9	47.8	74.0	-26.2	Peak	Vertical
*	14430.0	28.5	23.1	51.6	68.2	-16.6	Peak	Vertical
*	16912.0	27.8	24.3	52.1	68.2	-16.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 236 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/28				
Test Mode:	802.11ac-VHT80 - Ant 2	Test Channel:	58				
Remark:	1. Average measurement was no	t performed if peak l	level lower than average				
	limit.						
	2. Other frequency was 20dB bel	. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9372.5	30.1	14.5	44.6	74.0	-29.4	Peak	Horizontal
	11098.0	28.6	18.6	47.2	74.0	-26.8	Peak	Horizontal
*	14243.0	26.8	23.1	49.9	68.2	-18.3	Peak	Horizontal
*	16810.0	27.2	23.8	51.0	68.2	-17.2	Peak	Horizontal
	7383.5	30.5	12.5	43.0	74.0	-31.0	Peak	Vertical
	10843.0	29.4	18.1	47.5	74.0	-26.5	Peak	Vertical
*	13792.5	27.5	22.1	49.6	68.2	-18.6	Peak	Vertical
*	16750.5	28.2	23.3	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C		
Test Engineer	Kevin Ker	Relative Humidity	57 %		
Test Site	AC1	Test Date	2017/06/28		
Test Mode:	802.11ac-VHT80 - Ant 2	Test Channel:	106		
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average		
	limit.				
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show				
	in the report.				

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9449.0	30.4	14.4	44.8	74.0	-29.2	Peak	Horizontal
	11387.0	28.3	19.1	47.4	74.0	-26.6	Peak	Horizontal
*	14090.0	26.7	22.8	49.5	68.2	-18.7	Peak	Horizontal
*	16886.5	28.3	24.1	52.4	68.2	-15.8	Peak	Horizontal
	7536.5	31.0	12.8	43.8	74.0	-30.2	Peak	Vertical
	10996.0	29.0	18.5	47.5	74.0	-26.5	Peak	Vertical
*	13741.5	27.3	22.0	49.3	68.2	-18.9	Peak	Vertical
*	17090.5	27.4	24.8	52.2	68.2	-16.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 238 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/28
Test Mode:	802.11ac-VHT80 - Ant 2	Test Channel:	122
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9423.5	31.2	14.5	45.7	74.0	-28.3	Peak	Horizontal
	10987.5	29.8	18.5	48.3	74.0	-25.7	Peak	Horizontal
*	13869.0	27.7	22.3	50.0	68.2	-18.2	Peak	Horizontal
*	16912.0	28.3	24.3	52.6	68.2	-15.6	Peak	Horizontal
	8267.5	31.8	11.9	43.7	74.0	-30.3	Peak	Vertical
	11319.0	28.4	18.9	47.3	74.0	-26.7	Peak	Vertical
*	14362.0	27.1	23.2	50.3	68.2	-17.9	Peak	Vertical
*	17073.5	27.5	24.8	52.3	68.2	-15.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 239 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/28			
Test Mode:	802.11ac-VHT80 - Ant 2	Test Channel:	138			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7468.5	30.2	12.8	43.0	74.0	-31.0	Peak	Horizontal
	11030.0	28.8	18.5	47.3	74.0	-26.7	Peak	Horizontal
*	13877.5	28.1	22.3	50.4	68.2	-17.8	Peak	Horizontal
*	16708.0	28.6	23.1	51.7	68.2	-16.5	Peak	Horizontal
	9117.5	30.2	14.5	44.7	74.0	-29.3	Peak	Vertical
	11591.0	28.0	19.5	47.5	74.0	-26.5	Peak	Vertical
*	14404.5	27.4	23.2	50.6	68.2	-17.6	Peak	Vertical
*	16827.0	27.9	23.9	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 240 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C		
Test Engineer	Kevin Ker	Relative Humidity	57 %		
Test Site	AC1	Test Date	2017/06/29		
Test Mode:	802.11a - Ant 1+2 (CDD Mode)	Test Channel:	52		
Remark:	1. Average measurement was no	t performed if peak l	level lower than average		
	limit.				
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not sh				
	in the report.				

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8123.0	31.2	12.2	43.4	74.0	-30.6	Peak	Horizontal
	11370.0	28.5	19.0	47.5	74.0	-26.5	Peak	Horizontal
*	14183.5	26.8	23.1	49.9	68.2	-18.3	Peak	Horizontal
*	16767.5	28.6	23.5	52.1	68.2	-16.1	Peak	Horizontal
	7511.0	29.9	12.8	42.7	74.0	-31.3	Peak	Vertical
	11030.0	28.2	18.5	46.7	74.0	-27.3	Peak	Vertical
*	14047.5	27.1	22.7	49.8	68.2	-18.4	Peak	Vertical
*	16750.5	27.5	23.3	50.8	68.2	-17.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C		
Test Engineer	Kevin Ker	Relative Humidity	57 %		
Test Site	AC1	Test Date	2017/06/29		
Test Mode:	802.11a - Ant 1+2 (CDD Mode)	Test Channel:	60		
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average		
	limit.				
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not sho				
	in the report.				

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7587.5	31.1	12.7	43.8	74.0	-30.2	Peak	Horizontal
	11098.0	29.0	18.6	47.6	74.0	-26.4	Peak	Horizontal
*	14141.0	26.9	23.0	49.9	68.2	-18.3	Peak	Horizontal
*	16708.0	27.4	23.1	50.5	68.2	-17.7	Peak	Horizontal
	7511.0	29.8	12.8	42.6	74.0	-31.4	Peak	Vertical
	10996.0	29.8	18.5	48.3	74.0	-25.7	Peak	Vertical
*	14175.0	26.5	23.1	49.6	68.2	-18.6	Peak	Vertical
*	16835.5	28.8	23.9	52.7	68.2	-15.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11a - Ant 1+2 (CDD Mode)	Test Channel:	64
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7417.5	30.1	12.6	42.7	74.0	-31.3	Peak	Horizontal
	11242.5	28.5	18.8	47.3	74.0	-26.7	Peak	Horizontal
*	14149.5	26.5	23.0	49.5	68.2	-18.7	Peak	Horizontal
*	16759.0	27.6	23.4	51.0	68.2	-17.2	Peak	Horizontal
	7485.5	29.5	12.8	42.3	74.0	-31.7	Peak	Vertical
	11030.0	29.6	18.5	48.1	74.0	-25.9	Peak	Vertical
*	14183.5	27.4	23.1	50.5	68.2	-17.7	Peak	Vertical
*	16810.0	27.9	23.8	51.7	68.2	-16.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/29			
Test Mode:	802.11a - Ant 1+2 (CDD Mode)	Test Channel:	100			
Remark:	Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9474.5	31.3	14.4	45.7	74.0	-28.3	Peak	Horizontal
	11004.5	29.2	18.5	47.7	74.0	-26.3	Peak	Horizontal
*	14396.0	27.8	23.2	51.0	68.2	-17.2	Peak	Horizontal
*	16835.5	27.8	23.9	51.7	68.2	-16.5	Peak	Horizontal
	9406.5	29.9	14.5	44.4	74.0	-29.6	Peak	Vertical
	10996.0	29.4	18.5	47.9	74.0	-26.1	Peak	Vertical
*	14073.0	27.4	22.8	50.2	68.2	-18.0	Peak	Vertical
*	16920.5	27.6	24.3	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 244 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2017/06/29				
Test Mode:	802.11a - Ant 1+2 (CDD Mode)	Test Channel:	116				
Remark:	1. Average measurement was no	t performed if peak l	evel lower than average				
	limit.						
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.						

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8191.0	31.6	12.0	43.6	74.0	-30.4	Peak	Horizontal
	11030.0	30.5	18.5	49.0	74.0	-25.0	Peak	Horizontal
*	14413.0	28.0	23.2	51.2	68.2	-17.0	Peak	Horizontal
*	16929.0	28.1	24.4	52.5	68.2	-15.7	Peak	Horizontal
	8080.5	32.1	12.4	44.5	74.0	-29.5	Peak	Vertical
	11030.0	29.9	18.5	48.4	74.0	-25.6	Peak	Vertical
*	14141.0	28.2	23.0	51.2	68.2	-17.0	Peak	Vertical
*	16742.0	29.7	23.3	53.0	68.2	-15.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 245 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C					
Test Engineer	Kevin Ker	Relative Humidity	57 %					
Test Site	AC1	Test Date	2017/06/29					
Test Mode:	802.11a - Ant 1+2 (CDD Mode)	Test Channel:	120					
Remark:	1. Average measurement was no	t performed if peak l	level lower than average					
	limit.							
	2. Other frequency was 20dB bel	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show						
	in the report.							

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9466.0	31.4	14.4	45.8	74.0	-28.2	Peak	Horizontal
	11200.0	32.2	18.7	50.9	74.0	-23.1	Peak	Horizontal
*	14056.0	27.2	22.7	49.9	68.2	-18.3	Peak	Horizontal
*	16827.0	27.6	23.9	51.5	68.2	-16.7	Peak	Horizontal
	9126.0	29.6	14.6	44.2	74.0	-29.8	Peak	Vertical
	11200.0	28.7	18.7	47.4	74.0	-26.6	Peak	Vertical
*	14268.5	27.4	23.1	50.5	68.2	-17.7	Peak	Vertical
*	16784.5	28.8	23.6	52.4	68.2	-15.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/29			
Test Mode:	802.11a - Ant 1+2 (CDD Mode)	Test Channel:	140			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8182.5	31.1	12.0	43.1	74.0	-30.9	Peak	Horizontal
	11370.0	28.8	19.0	47.8	74.0	-26.2	Peak	Horizontal
*	14209.0	27.9	23.1	51.0	68.2	-17.2	Peak	Horizontal
*	16895.0	28.5	24.2	52.7	68.2	-15.5	Peak	Horizontal
	8267.5	32.0	11.9	43.9	74.0	-30.1	Peak	Vertical
	11404.0	29.7	19.1	48.8	74.0	-25.2	Peak	Vertical
*	13792.5	27.9	22.1	50.0	68.2	-18.2	Peak	Vertical
*	16835.5	28.5	23.9	52.4	68.2	-15.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 247 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2017/06/29			
Test Mode:	802.11a - Ant 1+2 (CDD Mode)	Test Channel:	144			
Remark:	1. Average measurement was no	t performed if peak l	level lower than average			
	limit.					
	2. Other frequency was 20dB below limit line within 1-18GHz, there is not show					
	in the report.					

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7519.5	30.0	12.8	42.8	74.0	-31.2	Peak	Horizontal
	11438.0	28.8	19.2	48.0	74.0	-26.0	Peak	Horizontal
*	14226.0	26.5	23.1	49.6	68.2	-18.6	Peak	Horizontal
*	16725.0	28.1	23.2	51.3	68.2	-16.9	Peak	Horizontal
	9185.5	29.2	14.7	43.9	74.0	-30.1	Peak	Vertical
	11013.0	29.1	18.5	47.6	74.0	-26.4	Peak	Vertical
*	14260.0	27.4	23.1	50.5	68.2	-17.7	Peak	Vertical
*	16818.5	27.8	23.8	51.6	68.2	-16.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 248 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT20 - Ant 1+2 (CDD Mode)	Test Channel:	52
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8267.5	32.3	11.9	44.2	74.0	-29.8	Peak	Horizontal
	11115.0	29.2	18.6	47.8	74.0	-26.2	Peak	Horizontal
*	14294.0	27.4	23.1	50.5	68.2	-17.7	Peak	Horizontal
*	16895.0	27.6	24.2	51.8	68.2	-16.4	Peak	Horizontal
	8369.5	31.5	12.1	43.6	74.0	-30.4	Peak	Vertical
	10936.5	29.1	18.4	47.5	74.0	-26.5	Peak	Vertical
*	13911.5	27.1	22.4	49.5	68.2	-18.7	Peak	Vertical
*	16818.5	27.8	23.8	51.6	68.2	-16.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 249 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT20 - Ant 1+2 (CDD Mode)	Test Channel:	60
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8165.5	31.7	12.1	43.8	74.0	-30.2	Peak	Horizontal
	11370.0	28.7	19.0	47.7	74.0	-26.3	Peak	Horizontal
*	14277.0	26.1	23.1	49.2	68.2	-19.0	Peak	Horizontal
*	16835.5	28.0	23.9	51.9	68.2	-16.3	Peak	Horizontal
	9398.0	30.3	14.5	44.8	74.0	-29.2	Peak	Vertical
	11616.5	27.6	19.4	47.0	74.0	-27.0	Peak	Vertical
*	14183.5	27.2	23.1	50.3	68.2	-17.9	Peak	Vertical
*	16980.0	27.4	24.5	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 250 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/06/29	
Test Mode:	802.11n-HT20 - Ant 1+2 (CDD Mode)	Test Channel:	64	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8335.5	31.6	11.9	43.5	74.0	-30.5	Peak	Horizontal
	11013.0	30.1	18.5	48.6	74.0	-25.4	Peak	Horizontal
*	14192.0	27.2	23.1	50.3	68.2	-17.9	Peak	Horizontal
*	16555.0	28.6	22.2	50.8	68.2	-17.4	Peak	Horizontal
	7494.0	29.3	12.8	42.1	74.0	-31.9	Peak	Vertical
	11030.0	29.4	18.5	47.9	74.0	-26.1	Peak	Vertical
*	13920.0	27.5	22.4	49.9	68.2	-18.3	Peak	Vertical
*	16759.0	28.4	23.4	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 251 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/06/29	
Test Mode:	802.11n-HT20 - Ant 1+2 (CDD Mode)	Test Channel:	100	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7451.5	30.0	12.8	42.8	74.0	-31.2	Peak	Horizontal
	11004.5	32.0	18.5	50.5	74.0	-23.5	Peak	Horizontal
*	14064.5	26.5	22.7	49.2	68.2	-19.0	Peak	Horizontal
*	16512.5	29.3	21.9	51.2	68.2	-17.0	Peak	Horizontal
	8369.5	31.3	12.1	43.4	74.0	-30.6	Peak	Vertical
	11123.5	28.7	18.6	47.3	74.0	-26.7	Peak	Vertical
*	13699.0	27.9	22.0	49.9	68.2	-18.3	Peak	Vertical
*	16725.0	27.9	23.2	51.1	68.2	-17.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT20 - Ant 1+2 (CDD Mode)	Test Channel:	116
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8412.0	31.3	12.3	43.6	74.0	-30.4	Peak	Horizontal
	11531.5	28.5	19.4	47.9	74.0	-26.1	Peak	Horizontal
*	14141.0	27.4	23.0	50.4	68.2	-17.8	Peak	Horizontal
*	16827.0	27.6	23.9	51.5	68.2	-16.7	Peak	Horizontal
	8114.5	31.7	12.2	43.9	74.0	-30.1	Peak	Vertical
	11123.5	29.0	18.6	47.6	74.0	-26.4	Peak	Vertical
*	14183.5	27.9	23.1	51.0	68.2	-17.2	Peak	Vertical
*	16402.0	30.3	21.5	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 253 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/06/29	
Test Mode:	802.11n-HT20 - Ant 1+2 (CDD Mode)	Test Channel:	120	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9330.0	29.8	14.6	44.4	74.0	-29.6	Peak	Horizontal
	11200.0	30.8	18.7	49.5	74.0	-24.5	Peak	Horizontal
*	13954.0	27.0	22.5	49.5	68.2	-18.7	Peak	Horizontal
*	16818.5	28.5	23.8	52.3	68.2	-15.9	Peak	Horizontal
	7553.5	31.1	12.8	43.9	74.0	-30.1	Peak	Vertical
	11191.5	29.0	18.7	47.7	74.0	-26.3	Peak	Vertical
*	14056.0	26.5	22.7	49.2	68.2	-19.0	Peak	Vertical
*	16716.5	28.1	23.1	51.2	68.2	-17.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 254 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT20 - Ant 1+2 (CDD Mode)	Test Channel:	140
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8437.5	30.2	12.4	42.6	74.0	-31.4	Peak	Horizontal
	10817.5	28.8	18.0	46.8	74.0	-27.2	Peak	Horizontal
*	14158.0	27.1	23.1	50.2	68.2	-18.0	Peak	Horizontal
*	16929.0	27.5	24.4	51.9	68.2	-16.3	Peak	Horizontal
	7502.5	30.1	12.8	42.9	74.0	-31.1	Peak	Vertical
	10826.0	29.3	18.0	47.3	74.0	-26.7	Peak	Vertical
*	14064.5	27.3	22.7	50.0	68.2	-18.2	Peak	Vertical
*	16869.5	27.7	24.1	51.8	68.2	-16.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 255 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT20 - Ant 1+2 (CDD Mode)	Test Channel:	144
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8301.5	31.7	11.9	43.6	74.0	-30.4	Peak	Horizontal
	11438.0	29.0	19.2	48.2	74.0	-25.8	Peak	Horizontal
*	13537.5	28.5	21.8	50.3	68.2	-17.9	Peak	Horizontal
*	16852.5	27.5	24.0	51.5	68.2	-16.7	Peak	Horizontal
	9423.5	30.1	14.5	44.6	74.0	-29.4	Peak	Vertical
	11404.0	28.4	19.1	47.5	74.0	-26.5	Peak	Vertical
*	14132.5	27.0	23.0	50.0	68.2	-18.2	Peak	Vertical
*	16895.0	27.5	24.2	51.7	68.2	-16.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 256 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT40 - Ant 1+2 (CDD Mode)	Test Channel:	54
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9304.5	30.2	14.7	44.9	74.0	-29.1	Peak	Horizontal
	11021.5	28.9	18.5	47.4	74.0	-26.6	Peak	Horizontal
*	14166.5	27.1	23.1	50.2	68.2	-18.0	Peak	Horizontal
*	16929.0	27.8	24.4	52.2	68.2	-16.0	Peak	Horizontal
	7613.0	30.1	12.6	42.7	74.0	-31.3	Peak	Vertical
	11013.0	28.7	18.5	47.2	74.0	-26.8	Peak	Vertical
*	14141.0	27.4	23.0	50.4	68.2	-17.8	Peak	Vertical
*	16716.5	28.0	23.1	51.1	68.2	-17.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 257 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT40 - Ant 1+2 (CDD Mode)	Test Channel:	62
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8208.0	31.1	11.9	43.0	74.0	-31.0	Peak	Horizontal
	11115.0	29.5	18.6	48.1	74.0	-25.9	Peak	Horizontal
*	14039.0	27.8	22.7	50.5	68.2	-17.7	Peak	Horizontal
*	16937.5	27.7	24.4	52.1	68.2	-16.1	Peak	Horizontal
	7562.0	29.6	12.8	42.4	74.0	-31.6	Peak	Vertical
	11047.0	28.9	18.5	47.4	74.0	-26.6	Peak	Vertical
*	14200.5	27.0	23.1	50.1	68.2	-18.1	Peak	Vertical
*	16886.5	28.2	24.1	52.3	68.2	-15.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 258 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT40 - Ant 1+2 (CDD Mode)	Test Channel:	102
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9160.0	31.0	14.7	45.7	74.0	-28.3	Peak	Horizontal
	11242.5	29.0	18.8	47.8	74.0	-26.2	Peak	Horizontal
*	13928.5	26.4	22.4	48.8	68.2	-19.4	Peak	Horizontal
*	16852.5	27.1	24.0	51.1	68.2	-17.1	Peak	Horizontal
	7536.5	30.4	12.8	43.2	74.0	-30.8	Peak	Vertical
	11132.0	29.3	18.6	47.9	74.0	-26.1	Peak	Vertical
*	14098.5	27.0	22.9	49.9	68.2	-18.3	Peak	Vertical
*	17303.0	26.7	25.9	52.6	68.2	-15.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 259 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT40 - Ant 1+2 (CDD Mode)	Test Channel:	110
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7655.5	30.8	12.5	43.3	74.0	-30.7	Peak	Horizontal
	11174.5	28.7	18.7	47.4	74.0	-26.6	Peak	Horizontal
*	13707.5	27.4	22.0	49.4	68.2	-18.8	Peak	Horizontal
*	16716.5	28.1	23.1	51.2	68.2	-17.0	Peak	Horizontal
	8208.0	32.3	11.9	44.2	74.0	-29.8	Peak	Vertical
	11021.5	30.1	18.5	48.6	74.0	-25.4	Peak	Vertical
*	13877.5	27.3	22.3	49.6	68.2	-18.6	Peak	Vertical
*	16708.0	28.4	23.1	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 260 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/06/29	
Test Mode:	802.11n-HT40 - Ant 1+2 (CDD Mode)	Test Channel:	118	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8378.0	30.8	12.1	42.9	74.0	-31.1	Peak	Horizontal
	11183.0	28.6	18.7	47.3	74.0	-26.7	Peak	Horizontal
*	14243.0	26.7	23.1	49.8	68.2	-18.4	Peak	Horizontal
*	16691.0	28.9	23.0	51.9	68.2	-16.3	Peak	Horizontal
	8106.0	31.2	12.3	43.5	74.0	-30.5	Peak	Vertical
	10792.0	30.1	17.9	48.0	74.0	-26.0	Peak	Vertical
*	14311.0	27.4	23.1	50.5	68.2	-17.7	Peak	Vertical
*	16912.0	27.8	24.3	52.1	68.2	-16.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 261 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/06/29	
Test Mode:	802.11n-HT40 - Ant 1+2 (CDD Mode)	Test Channel:	134	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8216.5	30.5	11.9	42.4	74.0	-31.6	Peak	Horizontal
	11200.0	30.5	18.7	49.2	74.0	-24.8	Peak	Horizontal
*	14081.5	27.4	22.8	50.2	68.2	-18.0	Peak	Horizontal
*	16776.0	28.0	23.5	51.5	68.2	-16.7	Peak	Horizontal
	8352.5	30.6	12.0	42.6	74.0	-31.4	Peak	Vertical
	11191.5	28.7	18.7	47.4	74.0	-26.6	Peak	Vertical
*	14200.5	27.1	23.1	50.2	68.2	-18.0	Peak	Vertical
*	16835.5	28.0	23.9	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 262 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/29
Test Mode:	802.11n-HT40 - Ant 1+2 (CDD Mode)	Test Channel:	142
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7553.5	31.4	12.8	44.2	74.0	-29.8	Peak	Horizontal
	10987.5	28.8	18.5	47.3	74.0	-26.7	Peak	Horizontal
*	14311.0	27.0	23.1	50.1	68.2	-18.1	Peak	Horizontal
*	16971.5	27.6	24.5	52.1	68.2	-16.1	Peak	Horizontal
	8106.0	30.9	12.3	43.2	74.0	-30.8	Peak	Vertical
	10962.0	28.6	18.4	47.0	74.0	-27.0	Peak	Vertical
*	14251.5	27.0	23.1	50.1	68.2	-18.1	Peak	Vertical
*	16487.0	29.6	21.8	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 263 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT20 - Ant 1+2 (CDD Mode)	Test Channel:	52
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)	,	(dBµV/m)	<b>\</b> 1 /	, ,		
	7417.5	30.0	12.6	42.6	74.0	-31.4	Peak	Horizontal
	11081.0	28.6	18.6	47.2	74.0	-26.8	Peak	Horizontal
*	14600.0	29.1	22.9	52.0	68.2	-16.2	Peak	Horizontal
*	16801.5	27.8	23.7	51.5	68.2	-16.7	Peak	Horizontal
	8114.5	31.3	12.2	43.5	74.0	-30.5	Peak	Vertical
	10979.0	29.5	18.5	48.0	74.0	-26.0	Peak	Vertical
*	13682.0	28.0	21.9	49.9	68.2	-18.3	Peak	Vertical
*	16963.0	28.1	24.5	52.6	68.2	-15.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 264 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT20 - Ant 1+2 (CDD Mode)	Test Channel:	60
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7545.0	30.7	12.8	43.5	74.0	-30.5	Peak	Horizontal
	11744.0	29.0	18.9	47.9	74.0	-26.1	Peak	Horizontal
*	14387.5	27.1	23.2	50.3	68.2	-17.9	Peak	Horizontal
*	16878.0	27.9	24.1	52.0	68.2	-16.2	Peak	Horizontal
	9423.5	31.0	14.5	45.5	74.0	-28.5	Peak	Vertical
	10970.5	29.3	18.4	47.7	74.0	-26.3	Peak	Vertical
*	14311.0	27.4	23.1	50.5	68.2	-17.7	Peak	Vertical
*	16793.0	28.4	23.7	52.1	68.2	-16.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 265 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT20 - Ant 1+2 (CDD Mode)	Test Channel:	64
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
	()	(dBµV)	(3.2)	(dBµV/m)	(	()		
	7468.5	29.9	12.8	42.7	74.0	-31.3	Peak	Horizontal
	11072.5	29.0	18.6	47.6	74.0	-26.4	Peak	Horizontal
*	14396.0	27.7	23.2	50.9	68.2	-17.3	Peak	Horizontal
*	16852.5	27.8	24.0	51.8	68.2	-16.4	Peak	Horizontal
	8063.5	32.1	12.4	44.5	74.0	-29.5	Peak	Vertical
	11072.5	30.0	18.6	48.6	74.0	-25.4	Peak	Vertical
*	14149.5	26.7	23.0	49.7	68.2	-18.5	Peak	Vertical
*	16793.0	28.3	23.7	52.0	68.2	-16.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 266 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT20 - Ant 1+2 (CDD Mode)	Test Channel:	100
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7570.5	29.7	12.8	42.5	74.0	-31.5	Peak	Horizontal
	11089.5	29.1	18.6	47.7	74.0	-26.3	Peak	Horizontal
*	14379.0	27.0	23.2	50.2	68.2	-18.0	Peak	Horizontal
*	16708.0	28.1	23.1	51.2	68.2	-17.0	Peak	Horizontal
	8446.0	31.9	12.5	44.4	74.0	-29.6	Peak	Vertical
	10843.0	29.5	18.1	47.6	74.0	-26.4	Peak	Vertical
*	14379.0	27.9	23.2	51.1	68.2	-17.1	Peak	Vertical
*	16980.0	27.4	24.5	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 267 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT20 - Ant 1+2 (CDD Mode)	Test Channel:	116
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
	8497.0	30.4	12.8	43.2	74.0	-30.8	Peak	Horizontal
	11251.0	28.3	18.8	47.1	74.0	-26.9	Peak	Horizontal
*	13996.5	26.8	22.7	49.5	68.2	-18.7	Peak	Horizontal
*	16903.5	27.5	24.2	51.7	68.2	-16.5	Peak	Horizontal
	8055.0	31.8	12.5	44.3	74.0	-29.7	Peak	Vertical
	10987.5	28.7	18.5	47.2	74.0	-26.8	Peak	Vertical
*	14192.0	27.3	23.1	50.4	68.2	-17.8	Peak	Vertical
*	16844.0	28.0	23.9	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT20 - Ant 1+2 (CDD Mode)	Test Channel:	120
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8463.0	31.0	12.6	43.6	74.0	-30.4	Peak	Horizontal
	11191.5	31.1	18.7	49.8	74.0	-24.2	Peak	Horizontal
*	14039.0	27.9	22.7	50.6	68.2	-17.6	Peak	Horizontal
*	16810.0	27.9	23.8	51.7	68.2	-16.5	Peak	Horizontal
	9321.5	31.0	14.6	45.6	74.0	-28.4	Peak	Vertical
	11200.0	30.4	18.7	49.1	74.0	-24.9	Peak	Vertical
*	13741.5	27.7	22.0	49.7	68.2	-18.5	Peak	Vertical
*	16980.0	27.2	24.5	51.7	68.2	-16.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 269 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT20 - Ant 1+2 (CDD Mode)	Test Channel:	140
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9432.0	30.8	14.4	45.2	74.0	-28.8	Peak	Horizontal
	11115.0	29.6	18.6	48.2	74.0	-25.8	Peak	Horizontal
*	14013.5	27.9	22.7	50.6	68.2	-17.6	Peak	Horizontal
*	16521.0	29.7	22.0	51.7	68.2	-16.5	Peak	Horizontal
	7545.0	30.2	12.8	43.0	74.0	-31.0	Peak	Vertical
	11047.0	29.5	18.5	48.0	74.0	-26.0	Peak	Vertical
*	13809.5	28.5	22.1	50.6	68.2	-17.6	Peak	Vertical
*	16852.5	27.6	24.0	51.6	68.2	-16.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 270 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/06/30	
Test Mode:	802.11ac-VHT20 - Ant 1+2 (CDD Mode)	Test Channel:	144	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9466.0	31.1	14.4	45.5	74.0	-28.5	Peak	Horizontal
	11514.5	28.7	19.4	48.1	74.0	-25.9	Peak	Horizontal
*	14183.5	28.9	23.1	52.0	68.2	-16.2	Peak	Horizontal
*	16844.0	28.0	23.9	51.9	68.2	-16.3	Peak	Horizontal
	9151.5	29.9	14.7	44.6	74.0	-29.4	Peak	Vertical
	11438.0	30.4	19.2	49.6	74.0	-24.4	Peak	Vertical
*	14430.0	27.3	23.1	50.4	68.2	-17.8	Peak	Vertical
*	16886.5	28.3	24.1	52.4	68.2	-15.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 271 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT40 - Ant 1+2 (CDD Mode)	Test Channel:	62
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8199.5	30.4	12.0	42.4	74.0	-31.6	Peak	Horizontal
	11251.0	28.2	18.8	47.0	74.0	-27.0	Peak	Horizontal
*	14132.5	26.8	23.0	49.8	68.2	-18.4	Peak	Horizontal
*	16699.5	28.1	23.0	51.1	68.2	-17.1	Peak	Horizontal
	9440.5	31.1	14.4	45.5	74.0	-28.5	Peak	Vertical
	11480.5	28.0	19.3	47.3	74.0	-26.7	Peak	Vertical
*	14149.5	26.5	23.0	49.5	68.2	-18.7	Peak	Vertical
*	16827.0	27.2	23.9	51.1	68.2	-17.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 272 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT40 - Ant 1+2 (CDD Mode)	Test Channel:	102
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8097.5	31.3	12.3	43.6	74.0	-30.4	Peak	Horizontal
	11021.5	28.6	18.5	47.1	74.0	-26.9	Peak	Horizontal
*	14846.5	29.8	22.4	52.2	68.2	-16.0	Peak	Horizontal
*	17311.5	26.7	25.9	52.6	68.2	-15.6	Peak	Horizontal
	9381.0	30.1	14.5	44.6	74.0	-29.4	Peak	Vertical
	11013.0	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	14192.0	27.1	23.1	50.2	68.2	-18.0	Peak	Vertical
*	16929.0	27.0	24.4	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 273 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT40 - Ant 1+2 (CDD Mode)	Test Channel:	110
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8284.5	30.9	11.9	42.8	74.0	-31.2	Peak	Horizontal
	11565.5	28.6	19.5	48.1	74.0	-25.9	Peak	Horizontal
*	14192.0	27.6	23.1	50.7	68.2	-17.5	Peak	Horizontal
*	16954.5	27.4	24.5	51.9	68.2	-16.3	Peak	Horizontal
	8250.5	31.1	11.9	43.0	74.0	-31.0	Peak	Vertical
	10715.5	29.7	17.5	47.2	74.0	-26.8	Peak	Vertical
*	14226.0	27.7	23.1	50.8	68.2	-17.4	Peak	Vertical
*	16971.5	27.6	24.5	52.1	68.2	-16.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 274 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT40 - Ant 1+2 (CDD Mode)	Test Channel:	118
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8318.5	31.1	11.9	43.0	74.0	-31.0	Peak	Horizontal
	11191.5	29.5	18.7	48.2	74.0	-25.8	Peak	Horizontal
*	14234.5	27.5	23.1	50.6	68.2	-17.6	Peak	Horizontal
*	16852.5	28.1	24.0	52.1	68.2	-16.1	Peak	Horizontal
	7536.5	30.7	12.8	43.5	74.0	-30.5	Peak	Vertical
	11021.5	29.9	18.5	48.4	74.0	-25.6	Peak	Vertical
*	14872.0	29.7	22.3	52.0	68.2	-16.2	Peak	Vertical
*	16691.0	28.9	23.0	51.9	68.2	-16.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 275 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT40 - Ant 1+2 (CDD Mode)	Test Channel:	134
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8063.5	32.2	12.4	44.6	74.0	-29.4	Peak	Horizontal
	11013.0	28.8	18.5	47.3	74.0	-26.7	Peak	Horizontal
*	14073.0	26.5	22.8	49.3	68.2	-18.9	Peak	Horizontal
*	16861.0	28.4	24.0	52.4	68.2	-15.8	Peak	Horizontal
	9449.0	31.0	14.4	45.4	74.0	-28.6	Peak	Vertical
	11191.5	29.1	18.7	47.8	74.0	-26.2	Peak	Vertical
*	14192.0	27.8	23.1	50.9	68.2	-17.3	Peak	Vertical
*	17345.5	26.9	26.1	53.0	68.2	-15.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 276 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT40 - Ant 1+2 (CDD Mode)	Test Channel:	142
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9168.5	30.7	14.7	45.4	74.0	-28.6	Peak	Horizontal
	11047.0	29.2	18.5	47.7	74.0	-26.3	Peak	Horizontal
*	14073.0	26.9	22.8	49.7	68.2	-18.5	Peak	Horizontal
*	16827.0	28.3	23.9	52.2	68.2	-16.0	Peak	Horizontal
	8310.0	30.1	11.9	42.0	74.0	-32.0	Peak	Vertical
	11421.0	28.5	19.1	47.6	74.0	-26.4	Peak	Vertical
*	14132.5	27.6	23.0	50.6	68.2	-17.6	Peak	Vertical
*	16844.0	27.7	23.9	51.6	68.2	-16.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 277 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT80 - Ant 1+2 (CDD Mode)	Test Channel:	58
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8437.5	30.6	12.4	43.0	74.0	-31.0	Peak	Horizontal
	11106.5	28.4	18.6	47.0	74.0	-27.0	Peak	Horizontal
*	13877.5	27.3	22.3	49.6	68.2	-18.6	Peak	Horizontal
*	16852.5	28.5	24.0	52.5	68.2	-15.7	Peak	Horizontal
	8335.5	30.6	11.9	42.5	74.0	-31.5	Peak	Vertical
	11021.5	28.6	18.5	47.1	74.0	-26.9	Peak	Vertical
*	14124.0	26.1	23.0	49.1	68.2	-19.1	Peak	Vertical
*	16878.0	26.9	24.1	51.0	68.2	-17.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 278 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT80 - Ant 1+2 (CDD Mode)	Test Channel:	106
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8335.5	30.6	11.9	42.5	74.0	-31.5	Peak	Horizontal
	11021.5	28.6	18.5	47.1	74.0	-26.9	Peak	Horizontal
*	13988.0	27.0	22.7	49.7	68.2	-18.5	Peak	Horizontal
*	16997.0	27.1	24.5	51.6	68.2	-16.6	Peak	Horizontal
	8165.5	30.3	12.1	42.4	74.0	-31.6	Peak	Vertical
	11021.5	28.6	18.5	47.1	74.0	-26.9	Peak	Vertical
*	14319.5	27.4	23.1	50.5	68.2	-17.7	Peak	Vertical
*	16733.5	28.0	23.2	51.2	68.2	-17.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 279 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT80 - Ant 1+2 (CDD Mode)	Test Channel:	122
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8378.0	32.1	12.1	44.2	74.0	-29.8	Peak	Horizontal
	11038.5	29.8	18.5	48.3	74.0	-25.7	Peak	Horizontal
*	14141.0	27.3	23.0	50.3	68.2	-17.9	Peak	Horizontal
*	16844.0	28.3	23.9	52.2	68.2	-16.0	Peak	Horizontal
	9117.5	31.3	14.5	45.8	74.0	-28.2	Peak	Vertical
	11038.5	29.2	18.5	47.7	74.0	-26.3	Peak	Vertical
*	14005.0	26.6	22.7	49.3	68.2	-18.9	Peak	Vertical
*	16861.0	29.4	24.0	53.4	68.2	-14.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 280 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/06/30
Test Mode:	802.11ac-VHT80 - Ant 1+2 (CDD Mode)	Test Channel:	138
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7485.5	29.9	12.8	42.7	74.0	-31.3	Peak	Horizontal
	11021.5	29.1	18.5	47.6	74.0	-26.4	Peak	Horizontal
*	14192.0	28.0	23.1	51.1	68.2	-17.1	Peak	Horizontal
*	16801.5	28.2	23.7	51.9	68.2	-16.3	Peak	Horizontal
	8344.0	31.3	12.0	43.3	74.0	-30.7	Peak	Vertical
	11030.0	28.6	18.5	47.1	74.0	-26.9	Peak	Vertical
*	14124.0	27.6	23.0	50.6	68.2	-17.6	Peak	Vertical
*	16725.0	28.9	23.2	52.1	68.2	-16.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 281 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11n-HT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	52	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7460.0	31.3	12.8	44.1	74.0	-29.9	Peak	Horizontal
	8267.5	31.9	11.9	43.8	74.0	-30.2	Peak	Horizontal
*	9814.5	30.9	15.4	46.3	68.2	-21.9	Peak	Horizontal
*	10520.0	35.5	12.4	47.9	68.2	-20.3	Peak	Horizontal
	7400.5	30.7	12.6	43.3	74.0	-30.7	Peak	Vertical
	8293.0	32.0	11.9	43.9	74.0	-30.1	Peak	Vertical
*	9814.5	30.7	15.4	46.1	68.2	-22.1	Peak	Vertical
*	10511.5	29.7	17.2	46.9	68.2	-21.3	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 282 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/07/03
Test Mode:	802.11n-HT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	60
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7485.5	32.1	12.8	44.9	74.0	-29.1	Peak	Horizontal
	8165.5	32.9	12.1	45.0	74.0	-29.0	Peak	Horizontal
*	9797.5	32.4	15.1	47.5	68.2	-20.7	Peak	Horizontal
*	10528.5	31.6	17.2	48.8	68.2	-19.4	Peak	Horizontal
	7400.5	31.0	12.6	43.6	74.0	-30.4	Peak	Vertical
	8165.5	32.9	12.1	45.0	74.0	-29.0	Peak	Vertical
*	9797.5	32.4	15.1	47.5	68.2	-20.7	Peak	Vertical
*	10528.5	31.6	17.2	48.8	68.2	-19.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 283 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/07/03
Test Mode:	802.11n-HT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	64
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7604.5	32.3	12.7	45.0	74.0	-29.0	Peak	Horizontal
	8157.0	32.6	12.1	44.7	74.0	-29.3	Peak	Horizontal
*	9746.5	32.0	14.8	46.8	68.2	-21.4	Peak	Horizontal
*	10537.0	31.0	17.2	48.2	68.2	-20.0	Peak	Horizontal
	7366.5	31.1	12.5	43.6	74.0	-30.4	Peak	Vertical
	8284.5	32.7	11.9	44.6	74.0	-29.4	Peak	Vertical
*	9840.0	31.5	16.0	47.5	68.2	-20.7	Peak	Vertical
*	10273.5	30.8	16.5	47.3	68.2	-20.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 284 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11n-HT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	100	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7460.0	32.1	12.8	44.9	74.0	-29.1	Peak	Horizontal
	8208.0	32.9	11.9	44.8	74.0	-29.2	Peak	Horizontal
*	9814.5	31.2	15.4	46.6	68.2	-21.6	Peak	Horizontal
*	10528.5	31.1	17.2	48.3	68.2	-19.9	Peak	Horizontal
	7545.0	31.2	12.8	44.0	74.0	-30.0	Peak	Vertical
	8174.0	32.0	12.0	44.0	74.0	-30.0	Peak	Vertical
*	9653.0	31.6	14.5	46.1	68.2	-22.1	Peak	Vertical
*	9993.0	31.0	15.4	46.4	68.2	-21.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 285 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11n-HT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	116	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8165.5	31.5	12.1	43.6	74.0	-30.4	Peak	Horizontal
	11191.5	30.5	18.7	49.2	74.0	-24.8	Peak	Horizontal
*	14124.0	27.2	23.0	50.2	68.2	-18.0	Peak	Horizontal
*	16801.5	28.3	23.7	52.0	68.2	-16.2	Peak	Horizontal
	8063.5	31.5	12.4	43.9	74.0	-30.1	Peak	Vertical
	11200.0	29.8	18.7	48.5	74.0	-25.5	Peak	Vertical
*	14141.0	27.9	23.0	50.9	68.2	-17.3	Peak	Vertical
*	16436.0	29.9	21.6	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 286 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11n-HT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	120	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7460.0	32.0	12.8	44.8	74.0	-29.2	Peak	Horizontal
	8165.5	31.8	12.1	43.9	74.0	-30.1	Peak	Horizontal
*	10001.5	31.4	15.4	46.8	68.2	-21.4	Peak	Horizontal
*	10392.5	30.3	16.9	47.2	68.2	-21.0	Peak	Horizontal
	7485.5	31.7	12.8	44.5	74.0	-29.5	Peak	Vertical
	8378.0	32.6	12.1	44.7	74.0	-29.3	Peak	Vertical
*	9797.5	31.7	15.1	46.8	68.2	-21.4	Peak	Vertical
*	10401.0	30.8	16.9	47.7	68.2	-20.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11n-HT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	140	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7519.5	30.8	12.8	43.6	74.0	-30.4	Peak	Horizontal
	8267.5	33.0	11.9	44.9	74.0	-29.1	Peak	Horizontal
*	9806.0	31.7	15.2	46.9	68.2	-21.3	Peak	Horizontal
*	10188.5	30.7	16.2	46.9	68.2	-21.3	Peak	Horizontal
	7519.5	30.9	12.8	43.7	74.0	-30.3	Peak	Vertical
	8123.0	32.6	12.2	44.8	74.0	-29.2	Peak	Vertical
*	9789.0	31.5	15.0	46.5	68.2	-21.7	Peak	Vertical
*	10137.5	30.9	15.9	46.8	68.2	-21.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 288 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11n-HT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	144	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9372.5	30.1	14.5	44.6	74.0	-29.4	Peak	Horizontal
	11098.0	28.6	18.6	47.2	74.0	-26.8	Peak	Horizontal
*	14243.0	26.8	23.1	49.9	68.2	-18.3	Peak	Horizontal
*	16810.0	27.2	23.8	51.0	68.2	-17.2	Peak	Horizontal
	7383.5	30.5	12.5	43.0	74.0	-31.0	Peak	Vertical
	10843.0	29.4	18.1	47.5	74.0	-26.5	Peak	Vertical
*	13792.5	27.5	22.1	49.6	68.2	-18.6	Peak	Vertical
*	16750.5	28.2	23.3	51.5	68.2	-16.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 289 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11n-HT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	54	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7460.0	31.2	12.8	44.0	74.0	-30.0	Peak	Horizontal
	8327.0	32.3	11.9	44.2	74.0	-29.8	Peak	Horizontal
*	9755.0	31.0	14.8	45.8	68.2	-22.4	Peak	Horizontal
*	10214.0	28.8	16.3	45.1	68.2	-23.1	Peak	Horizontal
	7409.0	31.2	12.6	43.8	74.0	-30.2	Peak	Vertical
	8310.0	32.2	11.9	44.1	74.0	-29.9	Peak	Vertical
*	9806.0	31.1	15.2	46.3	68.2	-21.9	Peak	Vertical
*	10426.5	29.8	17.0	46.8	68.2	-21.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 290 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/07/03
Test Mode:	802.11n-HT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	62
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7460.0	31.4	12.8	44.2	74.0	-29.8	Peak	Horizontal
	8497.0	31.2	12.8	44.0	74.0	-30.0	Peak	Horizontal
*	9865.5	30.8	16.0	46.8	68.2	-21.4	Peak	Horizontal
*	10358.5	30.0	16.8	46.8	68.2	-21.4	Peak	Horizontal
	7460.0	30.6	12.8	43.4	74.0	-30.6	Peak	Vertical
	8106.0	32.1	12.3	44.4	74.0	-29.6	Peak	Vertical
*	9848.5	29.7	16.1	45.8	68.2	-22.4	Peak	Vertical
*	10460.5	29.4	17.1	46.5	68.2	-21.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 291 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/07/03
Test Mode:	802.11n-HT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	102
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7494.0	30.3	12.8	43.1	74.0	-30.9	Peak	Horizontal
	8497.0	30.6	12.8	43.4	74.0	-30.6	Peak	Horizontal
*	9746.5	32.2	14.8	47.0	68.2	-21.2	Peak	Horizontal
*	10520.0	29.5	17.2	46.7	68.2	-21.5	Peak	Horizontal
	7417.5	30.9	12.6	43.5	74.0	-30.5	Peak	Vertical
	8174.0	31.5	12.0	43.5	74.0	-30.5	Peak	Vertical
*	9831.5	30.0	15.9	45.9	68.2	-22.3	Peak	Vertical
*	10392.5	29.3	16.9	46.2	68.2	-22.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 292 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11n-HT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	110	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8250.5	30.3	11.9	42.2	74.0	-31.8	Peak	Horizontal
	11650.5	28.1	19.3	47.4	74.0	-26.6	Peak	Horizontal
*	13911.5	27.9	22.4	50.3	68.2	-17.9	Peak	Horizontal
*	16937.5	27.3	24.4	51.7	68.2	-16.5	Peak	Horizontal
	9457.5	31.2	14.4	45.6	74.0	-28.4	Peak	Vertical
	11650.5	29.9	19.3	49.2	74.0	-24.8	Peak	Vertical
*	14073.0	27.1	22.8	49.9	68.2	-18.3	Peak	Vertical
*	16988.5	28.2	24.5	52.7	68.2	-15.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

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Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/07/03
Test Mode:	802.11n-HT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	118
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	31.5	12.8	44.3	74.0	-29.7	Peak	Horizontal
	8446.0	31.0	12.5	43.5	74.0	-30.5	Peak	Horizontal
*	9831.5	30.5	15.9	46.4	68.2	-21.8	Peak	Horizontal
*	10469.0	30.0	17.1	47.1	68.2	-21.1	Peak	Horizontal
	7519.5	30.7	12.8	43.5	74.0	-30.5	Peak	Vertical
	8488.5	31.2	12.7	43.9	74.0	-30.1	Peak	Vertical
*	9831.5	30.1	15.9	46.0	68.2	-22.2	Peak	Vertical
*	10469.0	29.9	17.1	47.0	68.2	-21.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 294 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/07/03
Test Mode:	802.11n-HT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	134
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7528.0	31.3	12.8	44.1	74.0	-29.9	Peak	Horizontal
	8454.5	31.3	12.5	43.8	74.0	-30.2	Peak	Horizontal
*	9789.0	30.8	15.0	45.8	68.2	-22.4	Peak	Horizontal
*	10350.0	30.3	16.8	47.1	68.2	-21.1	Peak	Horizontal
	7460.0	31.1	12.8	43.9	74.0	-30.1	Peak	Vertical
	8267.5	32.2	11.9	44.1	74.0	-29.9	Peak	Vertical
*	9806.0	31.5	15.2	46.7	68.2	-21.5	Peak	Vertical
*	10171.5	31.0	16.1	47.1	68.2	-21.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 295 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11n-HT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	142	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	8259.0	30.4	11.9	42.3	74.0	-31.7	Peak	Horizontal
	10775.0	29.6	17.8	47.4	74.0	-26.6	Peak	Horizontal
*	13962.5	27.4	22.5	49.9	68.2	-18.3	Peak	Horizontal
*	16835.5	27.5	23.9	51.4	68.2	-16.8	Peak	Horizontal
	9304.5	30.6	14.7	45.3	74.0	-28.7	Peak	Vertical
	11361.5	28.4	19.0	47.4	74.0	-26.6	Peak	Vertical
*	14217.5	27.3	23.1	50.4	68.2	-17.8	Peak	Vertical
*	16657.0	28.6	22.8	51.4	68.2	-16.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 296 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	52	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7468.5	31.3	12.8	44.1	74.0	-29.9	Peak	Horizontal
	8199.5	32.1	12.0	44.1	74.0	-29.9	Peak	Horizontal
*	9797.5	30.7	15.1	45.8	68.2	-22.4	Peak	Horizontal
*	10418.0	30.3	17.0	47.3	68.2	-20.9	Peak	Horizontal
	7434.5	30.9	12.7	43.6	74.0	-30.4	Peak	Vertical
	8242.0	31.5	11.9	43.4	74.0	-30.6	Peak	Vertical
*	9763.5	30.3	14.9	45.2	68.2	-23.0	Peak	Vertical
*	10341.5	29.6	16.7	46.3	68.2	-21.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 297 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	60	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7519.5	30.7	12.8	43.5	74.0	-30.5	Peak	Horizontal
	8497.0	31.8	12.8	44.6	74.0	-29.4	Peak	Horizontal
*	9925.0	30.8	15.3	46.1	68.2	-22.1	Peak	Horizontal
*	10316.0	29.9	16.7	46.6	68.2	-21.6	Peak	Horizontal
	7392.0	30.9	12.6	43.5	74.0	-30.5	Peak	Vertical
	8293.0	31.7	11.9	43.6	74.0	-30.4	Peak	Vertical
*	9823.0	31.1	15.6	46.7	68.2	-21.5	Peak	Vertical
*	10333.0	29.8	16.7	46.5	68.2	-21.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 298 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	64	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7443.0	30.0	12.7	42.7	74.0	-31.3	Peak	Horizontal
	8318.5	31.9	11.9	43.8	74.0	-30.2	Peak	Horizontal
*	9738.0	30.4	14.8	45.2	68.2	-23.0	Peak	Horizontal
*	10537.0	30.0	17.2	47.2	68.2	-21.0	Peak	Horizontal
	7519.5	30.4	12.8	43.2	74.0	-30.8	Peak	Vertical
	8276.0	32.1	11.9	44.0	74.0	-30.0	Peak	Vertical
*	9865.5	29.5	16.0	45.5	68.2	-22.7	Peak	Vertical
*	10333.0	29.8	16.7	46.5	68.2	-21.7	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 299 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	100	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7485.5	29.6	12.8	42.4	74.0	-31.6	Peak	Horizontal
	8293.0	30.9	11.9	42.8	74.0	-31.2	Peak	Horizontal
*	9763.5	30.0	14.9	44.9	68.2	-23.3	Peak	Horizontal
*	10392.5	29.5	16.9	46.4	68.2	-21.8	Peak	Horizontal
	7375.0	31.1	12.5	43.6	74.0	-30.4	Peak	Vertical
	8131.5	31.3	12.2	43.5	74.0	-30.5	Peak	Vertical
*	9797.5	30.5	15.1	45.6	68.2	-22.6	Peak	Vertical
*	10520.0	29.8	17.2	47.0	68.2	-21.2	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 300 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	116	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		_	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	9457.5	30.8	14.4	45.2	74.0	-28.8	Peak	Horizontal
	11472.0	29.3	19.3	48.6	74.0	-25.4	Peak	Horizontal
*	14251.5	27.0	23.1	50.1	68.2	-18.1	Peak	Horizontal
*	16886.5	27.4	24.1	51.5	68.2	-16.7	Peak	Horizontal
	8216.5	30.9	11.9	42.8	74.0	-31.2	Peak	Vertical
	11021.5	28.3	18.5	46.8	74.0	-27.2	Peak	Vertical
*	14421.5	28.4	23.2	51.6	68.2	-16.6	Peak	Vertical
*	16835.5	27.4	23.9	51.3	68.2	-16.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 301 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	120	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7460.0	30.2	12.8	43.0	74.0	-31.0	Peak	Horizontal
	8157.0	32.2	12.1	44.3	74.0	-29.7	Peak	Horizontal
*	9814.5	30.8	15.4	46.2	68.2	-22.0	Peak	Horizontal
*	10537.0	29.8	17.2	47.0	68.2	-21.2	Peak	Horizontal
	7545.0	29.9	12.8	42.7	74.0	-31.3	Peak	Vertical
	8488.5	31.0	12.7	43.7	74.0	-30.3	Peak	Vertical
*	9823.0	29.5	15.6	45.1	68.2	-23.1	Peak	Vertical
*	10129.0	29.9	15.9	45.8	68.2	-22.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 302 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	140	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7468.5	30.8	12.8	43.6	74.0	-30.4	Peak	Horizontal
	8259.0	32.2	11.9	44.1	74.0	-29.9	Peak	Horizontal
*	9789.0	31.6	15.0	46.6	68.2	-21.6	Peak	Horizontal
*	10418.0	29.6	17.0	46.6	68.2	-21.6	Peak	Horizontal
	7553.5	30.6	12.8	43.4	74.0	-30.6	Peak	Vertical
	8148.5	32.1	12.1	44.2	74.0	-29.8	Peak	Vertical
*	9806.0	31.4	15.2	46.6	68.2	-21.6	Peak	Vertical
*	10180.0	30.7	16.1	46.8	68.2	-21.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 303 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT20 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	144	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7511.0	29.6	12.8	42.4	74.0	-31.6	Peak	Horizontal
	8157.0	31.1	12.1	43.2	74.0	-30.8	Peak	Horizontal
*	9755.0	31.0	14.8	45.8	68.2	-22.4	Peak	Horizontal
*	10350.0	28.7	16.8	45.5	68.2	-22.7	Peak	Horizontal
	7409.0	39.5	3.7	43.2	74.0	-30.8	Peak	Vertical
	8199.5	41.5	2.5	44.0	74.0	-30.0	Peak	Vertical
*	9806.0	40.8	5.0	45.8	68.2	-22.4	Peak	Vertical
*	10341.5	41.4	6.2	47.6	68.2	-20.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 304 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	54	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7409.0	30.5	12.6	43.1	74.0	-30.9	Peak	Horizontal
	8199.5	31.9	12.0	43.9	74.0	-30.1	Peak	Horizontal
*	9823.0	30.6	15.6	46.2	68.2	-22.0	Peak	Horizontal
*	10358.5	29.8	16.8	46.6	68.2	-21.6	Peak	Horizontal
	7477.0	30.4	12.8	43.2	74.0	-30.8	Peak	Vertical
	8165.5	30.4	12.1	42.5	74.0	-31.5	Peak	Vertical
*	9806.0	31.2	15.2	46.4	68.2	-21.8	Peak	Vertical
*	10418.0	30.4	17.0	47.4	68.2	-20.8	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 305 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	52	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		Ç	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7519.5	31.6	12.8	44.4	74.0	-29.6	Peak	Horizontal
	8157.0	31.9	12.1	44.0	74.0	-30.0	Peak	Horizontal
*	9704.0	30.8	14.6	45.4	68.2	-22.8	Peak	Horizontal
*	10307.5	28.6	16.6	45.2	68.2	-23.0	Peak	Horizontal
	7451.5	29.7	12.8	42.5	74.0	-31.5	Peak	Vertical
	8233.5	31.8	11.9	43.7	74.0	-30.3	Peak	Vertical
*	9831.5	30.2	15.9	46.1	68.2	-22.1	Peak	Vertical
*	10511.5	29.5	17.2	46.7	68.2	-21.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 306 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	102	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7468.5	31.0	12.8	43.8	74.0	-30.2	Peak	Horizontal
	8276.0	31.2	11.9	43.1	74.0	-30.9	Peak	Horizontal
*	9729.5	30.9	14.7	45.6	68.2	-22.6	Peak	Horizontal
*	10537.0	30.1	17.2	47.3	68.2	-20.9	Peak	Horizontal
	7477.0	30.5	12.8	43.3	74.0	-30.7	Peak	Vertical
	8131.5	31.2	12.2	43.4	74.0	-30.6	Peak	Vertical
*	9789.0	30.9	15.0	45.9	68.2	-22.3	Peak	Vertical
*	10545.5	29.6	17.2	46.8	68.2	-21.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 307 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	110	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7451.5	29.8	12.8	42.6	74.0	-31.4	Peak	Horizontal
	8140.0	29.4	12.2	41.6	74.0	-32.4	Peak	Horizontal
*	9721.0	29.7	14.7	44.4	68.2	-23.8	Peak	Horizontal
*	10443.5	27.6	17.1	44.7	68.2	-23.5	Peak	Horizontal
	7511.0	29.3	12.8	42.1	74.0	-31.9	Peak	Vertical
	8233.5	29.9	11.9	41.8	74.0	-32.2	Peak	Vertical
*	9814.5	30.1	15.4	45.5	68.2	-22.7	Peak	Vertical
*	10443.5	27.6	17.1	44.7	68.2	-23.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 308 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2017/07/03
Test Mode:	802.11ac-VHT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	118
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	30.6	12.8	43.4	74.0	-30.6	Peak	Horizontal
	8174.0	31.9	12.0	43.9	74.0	-30.1	Peak	Horizontal
*	9780.5	31.1	14.9	46.0	68.2	-22.2	Peak	Horizontal
*	10350.0	29.6	16.8	46.4	68.2	-21.8	Peak	Horizontal
	7562.0	31.2	12.8	44.0	74.0	-30.0	Peak	Vertical
	8199.5	32.0	12.0	44.0	74.0	-30.0	Peak	Vertical
*	9789.0	30.9	15.0	45.9	68.2	-22.3	Peak	Vertical
*	10299.0	29.7	16.6	46.3	68.2	-21.9	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 309 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	134	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7443.0	30.9	12.7	43.6	74.0	-30.4	Peak	Horizontal
	8165.5	31.6	12.1	43.7	74.0	-30.3	Peak	Horizontal
*	9806.0	30.7	15.2	45.9	68.2	-22.3	Peak	Horizontal
*	10401.0	29.1	16.9	46.0	68.2	-22.2	Peak	Horizontal
	7536.5	29.7	12.8	42.5	74.0	-31.5	Peak	Vertical
	8225.0	32.1	11.9	44.0	74.0	-30.0	Peak	Vertical
*	9755.0	31.5	14.8	46.3	68.2	-21.9	Peak	Vertical
*	10290.5	29.0	16.6	45.6	68.2	-22.6	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 310 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT40 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	142	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		_	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7400.5	31.3	12.6	43.9	74.0	-30.1	Peak	Horizontal
	8199.5	32.6	12.0	44.6	74.0	-29.4	Peak	Horizontal
*	9797.5	31.5	15.1	46.6	68.2	-21.6	Peak	Horizontal
*	10307.5	30.6	16.6	47.2	68.2	-21.0	Peak	Horizontal
	7536.5	30.7	12.8	43.5	74.0	-30.5	Peak	Vertical
	8174.0	30.9	12.0	42.9	74.0	-31.1	Peak	Vertical
*	9695.5	29.9	14.6	44.5	68.2	-23.7	Peak	Vertical
*	10358.5	30.0	16.8	46.8	68.2	-21.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 311 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT80 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	58	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7494.0	30.7	12.8	43.5	74.0	-30.5	Peak	Horizontal
	8165.5	31.7	12.1	43.8	74.0	-30.2	Peak	Horizontal
*	9814.5	30.8	15.4	46.2	68.2	-22.0	Peak	Horizontal
*	10401.0	30.8	16.9	47.7	68.2	-20.5	Peak	Horizontal
	7392.0	29.5	12.6	42.1	74.0	-31.9	Peak	Vertical
	8174.0	30.0	12.0	42.0	74.0	-32.0	Peak	Vertical
*	9814.5	30.4	15.4	45.8	68.2	-22.4	Peak	Vertical
*	10333.0	29.5	16.7	46.2	68.2	-22.0	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 312 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT80 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	106	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		•	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7392.0	30.2	12.6	42.8	74.0	-31.2	Peak	Horizontal
	8301.5	31.7	11.9	43.6	74.0	-30.4	Peak	Horizontal
*	9797.5	30.1	15.1	45.2	68.2	-23.0	Peak	Horizontal
*	10418.0	28.3	17.0	45.3	68.2	-22.9	Peak	Horizontal
	7485.5	30.2	12.8	43.0	74.0	-31.0	Peak	Vertical
	8216.5	30.8	11.9	42.7	74.0	-31.3	Peak	Vertical
*	9755.0	30.5	14.8	45.3	68.2	-22.9	Peak	Vertical
*	10299.0	29.1	16.6	45.7	68.2	-22.5	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 313 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2017/07/03	
Test Mode:	802.11ac-VHT80 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	122	
Remark:	<ol> <li>Average measurement was no limit.</li> <li>Other frequency was 20dB bel in the report.</li> </ol>		-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7502.5	31.0	12.8	43.8	74.0	-30.2	Peak	Horizontal
	8242.0	32.5	11.9	44.4	74.0	-29.6	Peak	Horizontal
*	9763.5	31.6	14.9	46.5	68.2	-21.7	Peak	Horizontal
*	10401.0	29.3	16.9	46.2	68.2	-22.0	Peak	Horizontal
	7536.5	29.5	12.8	42.3	74.0	-31.7	Peak	Vertical
	8148.5	32.6	12.1	44.7	74.0	-29.3	Peak	Vertical
*	9857.0	28.1	16.2	44.3	68.2	-23.9	Peak	Vertical
*	10367.0	30.3	16.8	47.1	68.2	-21.1	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 314 of 585 IC: 109D-FZCWI2B1



Product	AC220i Wi-Fi AP ID omni antenna US	Temperature	26°C					
Test Engineer	Kevin Ker	Relative Humidity	57 %					
Test Site	AC1	Test Date	2017/07/03					
Test Mode:	802.11ac-VHT80 - Ant 1 + 2 (Beam-Forming Mode)	Test Channel:	138					
Remark:	limit.	<ol> <li>Average measurement was not performed if peak level lower than average limit.</li> <li>Other frequency was 20dB below limit line within 1-18GHz, there is not show</li> </ol>						

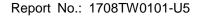
Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
	7434.5	31.1	12.7	43.8	74.0	-30.2	Peak	Horizontal
	8165.5	30.8	12.1	42.9	74.0	-31.1	Peak	Horizontal
*	9729.5	31.4	14.7	46.1	68.2	-22.1	Peak	Horizontal
*	10350.0	29.0	16.8	45.8	68.2	-22.4	Peak	Horizontal
	7502.5	30.9	12.8	43.7	74.0	-30.3	Peak	Vertical
	8174.0	32.1	12.0	44.1	74.0	-29.9	Peak	Vertical
*	9814.5	30.6	15.4	46.0	68.2	-22.2	Peak	Vertical
*	10273.5	29.3	16.5	45.8	68.2	-22.4	Peak	Vertical

Note 1: "\*" is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBµV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBµV/m) = Reading Level (dBµV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre\_Amplifier Gain (dB)

FCC ID: 2AD8UFZCWI2B1 Page Number: 315 of 585 IC: 109D-FZCWI2B1





### The worst case of Radiated Emission below 1GHz:

Note: There is the worst case within frequency range 30MHz~1GHz.					
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Site: AC1	Time: 2017/06/29 - 08:04				

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Level(dBuV/m)	40							
(m/	50							

No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			50.855	21.378	7.390	-18.622	40.000	13.987	QP
2			55.705	19.986	6.320	-20.014	40.000	13.667	QP
3			107.600	25.490	13.750	-18.010	43.500	11.740	QP
4			134.760	22.303	8.210	-21.197	43.500	14.093	QP
5		*	199.750	25.491	14.380	-18.009	43.500	11.111	QP
6			398.600	22.770	6.320	-23.230	46.000	16.450	QP

Note 1: Measure Level  $(dB\mu V/m)$  = Reading Level  $(dB\mu V)$  + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

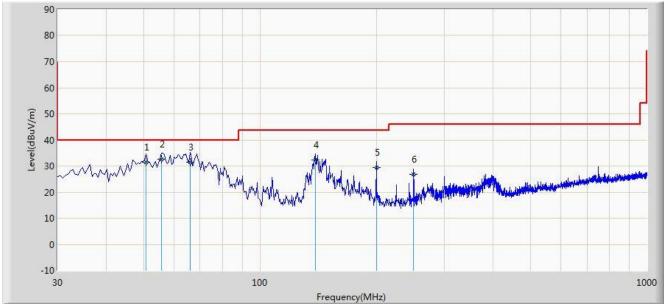
Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

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Note: There is the worst case within frequency range 30MHz~1GHz.					
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Probe: VULB 9168_20-2000MHz	Polarity: Vertical				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Site: AC1	Time: 2017/06/29 - 08:06				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			50.855	31.308	17.320	-8.692	40.000	13.987	QP
2		*	55.705	32.586	18.920	-7.414	40.000	13.667	QP
3			65.890	31.555	19.290	-8.445	40.000	12.265	QP
4			139.125	32.252	17.830	-11.248	43.500	14.422	QP
5			199.750	29.401	18.290	-14.099	43.500	11.111	QP
6			249.705	26.861	13.940	-19.139	46.000	12.921	QP

Note 1: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

Note 2: The test trace is same as the ambient noise and the amplitude of the emissions are attenuated more than 20dB below the permissible (the test frequency range: 9kHz ~ 30MHz, 18GHz ~ 40GHz), therefore no data appear in the report.

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# 7.9. Radiated Restricted Band Edge Measurement

# 7.9.1.Test Limit

# For 15.205 requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a) of FCC part 15, must also comply with the radiated emission limits specified in Section 15.209(a).

Frequency (MHz)	Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.090 - 0.110	16.42-16.423	399.9 - 410	4.5-5.15
<sup>1</sup> 0.495 - 0.505	16.69475-16.69525	608 - 614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960 - 1240	7.25-7.75
4.125-4.128	25.5 -25.67	1300 - 1427	8.25 - 8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660 - 1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123 - 138	2200 - 2300	14.47-14.5
8.291-8.294	149.9-150.05	2310–2390	15.35-16.2
8.362-8.366	156.52475-156.525	2483.5 - 2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690 - 2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260 - 3267	23.6-24.0
12.29-12.293	167.72-173.2	3332 - 3339	31.2-31.8
12.51975-12.52025	240 - 285	3345.8 - 3358	36.43-36.5
12.57675-12.57725	322-335.4	3600 - 4400	( <sup>2</sup> )
13.36-13.41			

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## For RSS-Gen Section 8.10 Requirement:

Radiated emissions which fall in the restricted bands, as defined in Section 8.10 of RSS-Gen, must also comply with the radiated emission limits specified in Section 8.9.

Frequency (MHz)	Frequency (MHz)	Frequency (GHz)
0.009 ~ 0.110	240 ~ 285	9.0 ~ 9.2
2.1735 ~ 2.1905	322 ~ 335.4	9.3 ~ 9.5
3.020 ~ 3.026	399.9 ~ 410	10.6 ~ 12.7
4.125 ~ 4.128	608 ~ 614	13.25 ~ 13.4
4.17725 ~ 4.17775	960 ~ 1427	14.47 ~ 14.5
4.20725 ~ 4.20775	1435 ~ 1626.5	15.35 ~ 16.2
5.677 ~ 5.683	1645.5 ~ 1646.5	17.7 ~ 21.4
6.215 ~ 6.218	1660 ~ 1710	22.01 ~ 23.12
6.26775 ~ 6.26825	1718.8 ~1722.2	23.6 ~ 24.0
6.31175 ~ 6.31225	2200 ~ 2300	31.2 ~ 31.8
8.291 ~ 8.294	2310 ~ 2390	36.43 ~ 36.5
8.362 ~ 8.366	2655 ~ 2900	Above 38.6
8.37625 ~ 8.38675	3260 ~ 3267	
8.41425 ~ 8.41475	3332 ~ 3339	
12.29 ~ 12.293	334.5 ~ 3358	
12.51975 ~ 12.52025	3500 ~ 4400	
12.57675 ~ 12.57725	4500 ~ 5150	
13.36 ~13.41	5350 ~ 5460	
16.42 ~ 16.423	7250 ~ 7750	
16.69475 ~ 16.69525	8025 ~ 8500	
16.80425 ~ 16.80475		
25.5 ~ 25.67		
37.5 ~ 38.25		
73 ~ 74.6		
74.8 ~ 75.2		
108 ~ 138		
156.52475 ~ 156.525225		
156.7 ~ 156.9		

Note: \*Certain frequency bands listed in Table 6 and in bands above 38.6 GHz are designated for licence-exempt applications. These frequency bands and the requirements that apply to the devices are set out in the 200- and 300-series of RSSs, such as RSS-210 and RSS-310, which contain the

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requirements that apply to licence-exempt radio apparatus.

#### For 15.407(b) requirement:

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of -17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of -27 dBm/MHz.

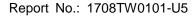
Refer to KDB 789033 D02v01r04 G)2)c), as specified in § 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a maximum emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in § 15.407(b)(4)). However, an out-of-band emission that complies with both the peak and average limits of § 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz maximum emission limit.

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209							
Frequency	Field Strength	Measured Distance					
[MHz]	[uV/m]	[Meters]					
0.009 - 0.490	2400/F (kHz)	300					
0.490 - 1.705	24000/F (kHz)	30					
1.705 - 30	30	30					
30 - 88	100	3					
88 - 216	150	3					
216 - 960	200	3					
Above 960	500	3					

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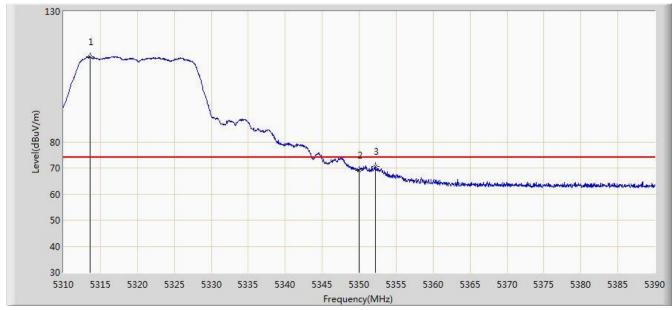
IC: 109D-FZCWI2B1





### 7.9.2.Test Result

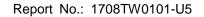
Site: AC1	Time: 2017/06/25 - 12:17			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal			
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 1				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5313.600	112.488	73.261	N/A	N/A	39.227	PK
2			5350.000	69.165	29.840	-4.835	74.000	39.324	PK
3			5352.200	70.576	31.245	-3.424	74.000	39.330	PK

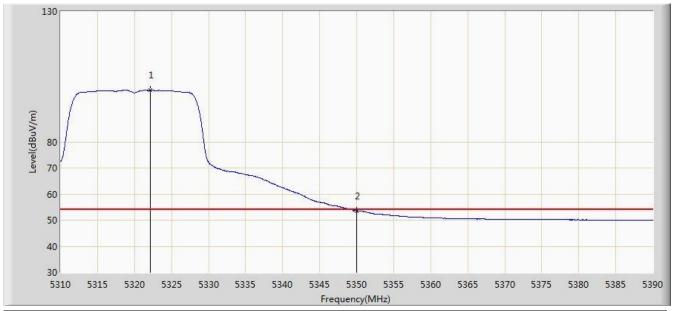
Test Mode: Measure Level ( $dB\mu V/m$ ) = Reading Level ( $dB\mu V$ ) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



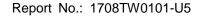


Site: AC1	Time: 2017/06/25 - 12:19				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 1					



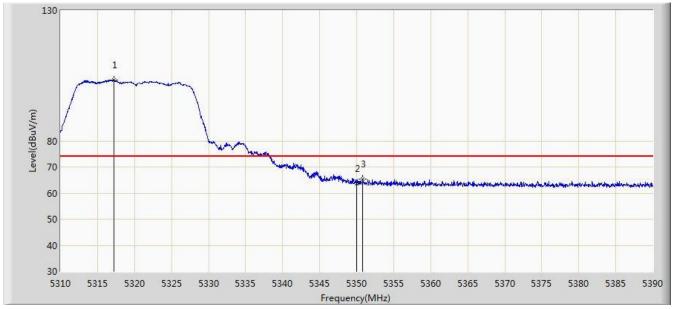
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5322.160	99.726	60.476	N/A	N/A	39.251	AV
2			5350.000	53.621	14.296	-0.379	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



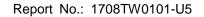


ASite: AC1	Time: 2017/06/25 - 12:19				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 1					



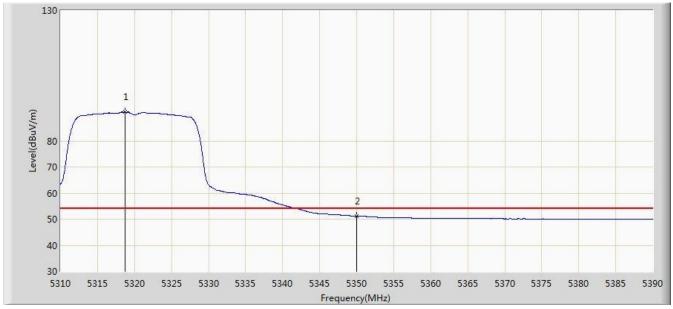
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5317.200	103.191	63.954	N/A	N/A	39.237	PK
2			5350.000	63.651	24.326	-10.349	74.000	39.324	PK
3			5350.840	65.282	25.955	-8.718	74.000	39.327	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



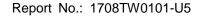


Site: AC1	Time: 2017/06/25 - 12:21			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical			
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11a at Channel 5320MHz Ant 1				



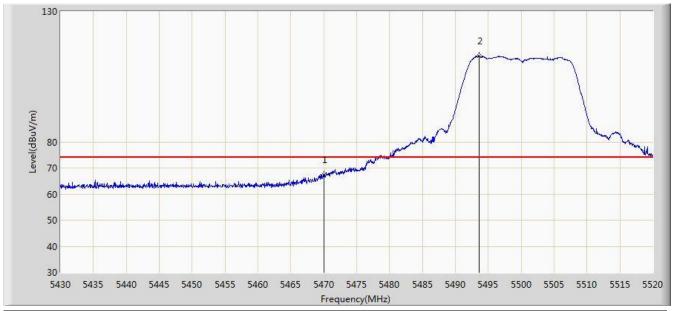
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5318.680	91.044	51.803	N/A	N/A	39.241	AV
2			5350.000	51.143	11.818	-2.857	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



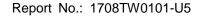


Site: AC1	Time: 2017/06/25 - 12:22			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal			
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 1				



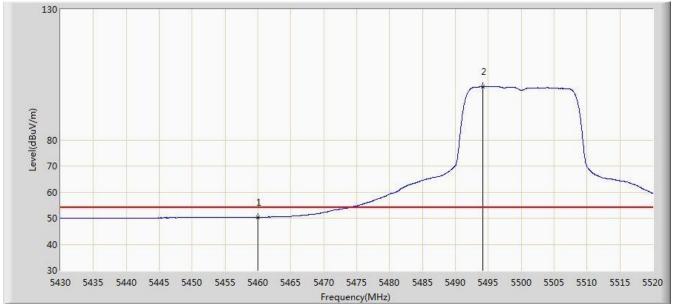
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5470.000	67.380	27.726	-6.620	74.000	39.654	PK
2		*	5493.630	112.844	73.145	N/A	N/A	39.699	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



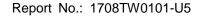


Site: AC1	Time: 2017/06/25 - 12:23			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal			
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 1				



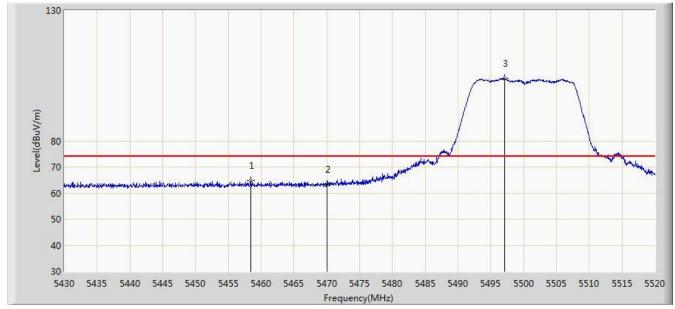
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5460.000	50.389	10.753	-3.611	54.000	39.636	AV
2		*	5494.125	100.404	60.704	N/A	N/A	39.699	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



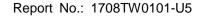


Site: AC1	Time: 2017/06/25 - 12:25				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 1					



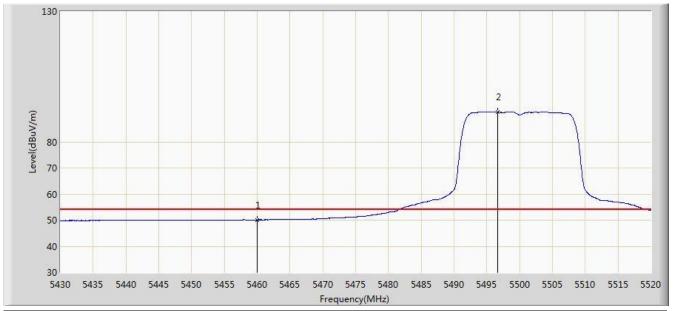
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5458.395	64.922	25.289	-9.078	74.000	39.633	PK
2			5470.000	63.198	23.544	-10.802	74.000	39.654	PK
3		*	5497.140	103.836	64.131	N/A	N/A	39.705	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



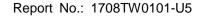


Site: AC1	Time: 2017/06/25 - 12:26				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5500MHz Ant 1					



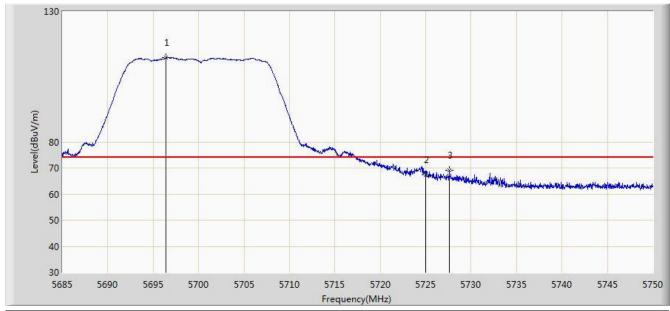
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5460.000	50.093	10.457	-3.907	54.000	39.636	AV
2		*	5496.600	91.581	51.877	N/A	N/A	39.704	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



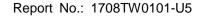


Site: AC1	Time: 2017/06/25 - 12:30				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 1					



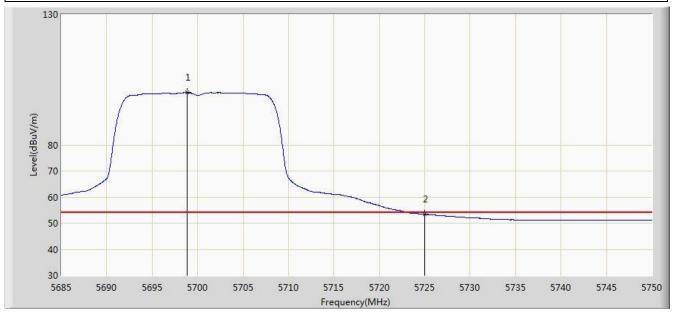
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5696.375	112.197	72.153	N/A	N/A	40.044	PK
2			5725.000	67.533	27.369	-6.467	74.000	40.164	PK
3			5727.607	69.179	29.003	-4.821	74.000	40.176	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



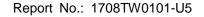


ASite: AC1	Time: 2017/06/25 - 12:29				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 1					



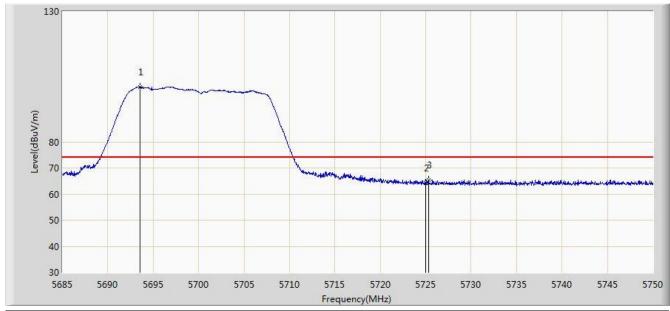
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5698.812	100.074	60.021	N/A	N/A	40.053	AV
2			5725.000	53.423	13.259	-0.577	54.000	40.164	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



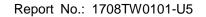


Site: AC1	Time: 2017/06/25 - 12:30				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 1					



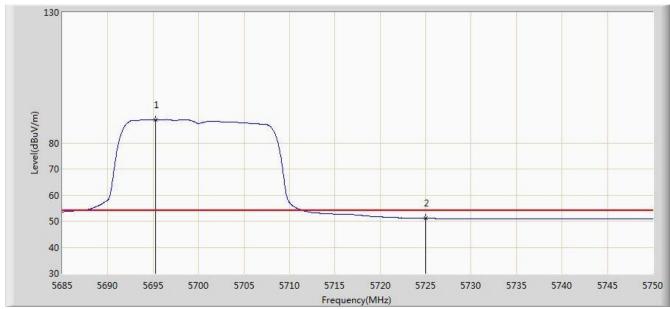
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5693.547	101.053	61.019	N/A	N/A	40.034	PK
2			5725.000	64.135	23.971	-9.865	74.000	40.164	PK
3			5725.300	65.259	25.094	-8.741	74.000	40.165	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



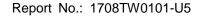


Site: AC1	Time: 2017/06/25 - 12:33				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11a at Channel 5700MHz Ant 1					



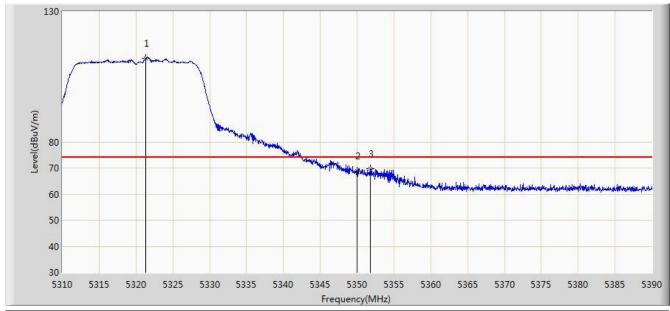
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5695.270	88.913	48.873	N/A	N/A	40.040	AV
2			5725.000	51.057	10.893	-2.943	54.000	40.164	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



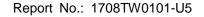


Site: AC1	Time: 2017/06/25 - 13:17				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 1					



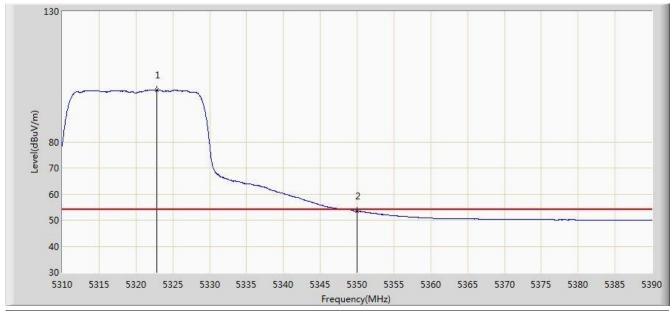
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5321.360	112.162	72.914	N/A	N/A	39.248	PK
2			5350.000	68.703	29.378	-5.297	74.000	39.324	PK
3			5351.840	69.727	30.397	-4.273	74.000	39.330	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



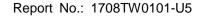


Site: AC1	Time: 2017/06/25 - 13:17				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 1					



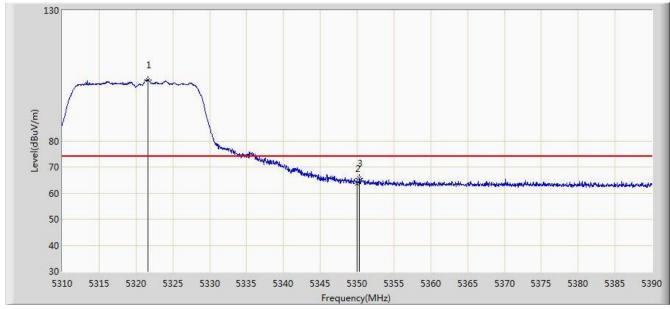
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5322.880	99.876	60.624	N/A	N/A	39.252	AV
2			5350.000	53.488	14.163	-0.512	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



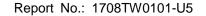


Site: AC1	Time: 2017/06/25 - 13:18				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 1					



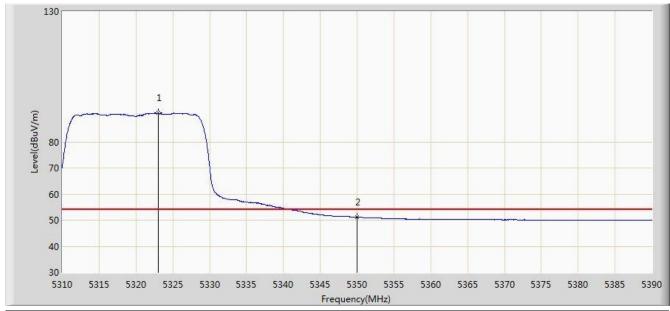
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5321.640	103.303	64.054	N/A	N/A	39.249	PK
2			5350.000	63.703	24.378	-10.297	74.000	39.324	PK
3			5350.320	65.628	26.302	-8.372	74.000	39.326	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



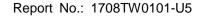


Site: AC1	Time: 2017/06/25 - 13:20				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5320MHz Ant 1					



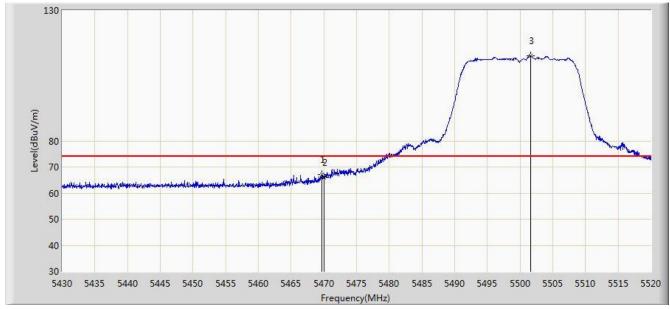
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5323.080	91.028	51.775	N/A	N/A	39.253	AV
2			5350.000	51.139	11.814	-2.861	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



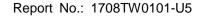


Site: AC1	Time: 2017/06/25 - 13:22				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 1					



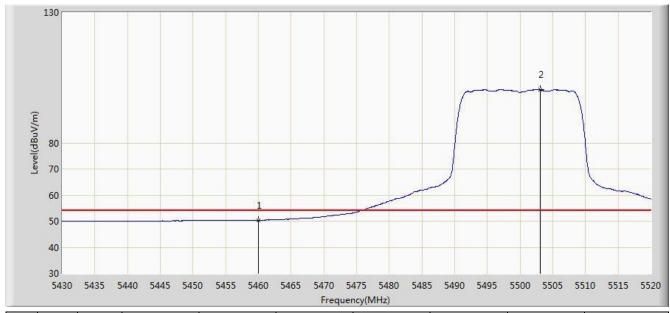
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5469.690	67.161	27.507	-6.839	74.000	39.654	PK
2			5470.000	65.818	26.164	-8.182	74.000	39.654	PK
3		*	5501.595	112.683	72.970	N/A	N/A	39.714	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



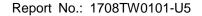


Site: AC1	Time: 2017/06/25 - 13:23				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 1					



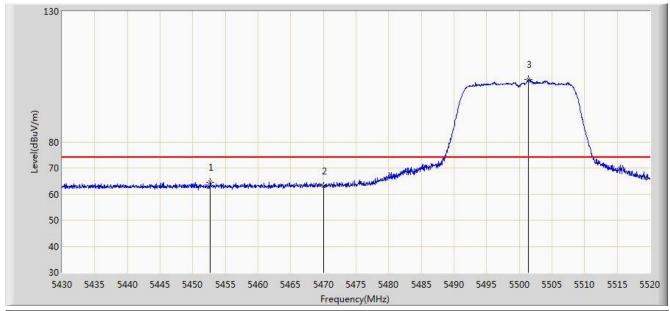
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5460.000	50.394	10.758	-3.606	54.000	39.636	AV
2		*	5503.125	100.409	60.693	N/A	N/A	39.716	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



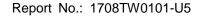


Site: AC1	Time: 2017/06/25 - 13:24					
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker					
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical					
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz					
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 1						



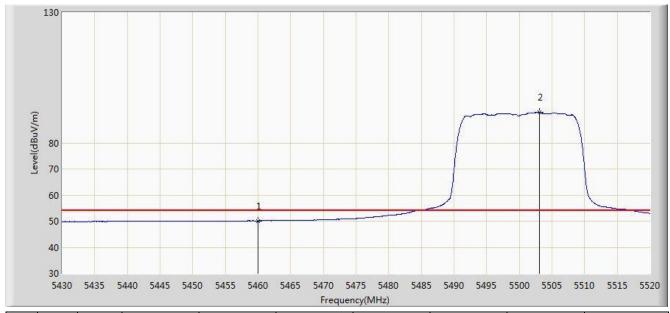
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5452.725	64.590	24.969	-9.410	74.000	39.621	PK
2			5470.000	62.923	23.269	-11.077	74.000	39.654	PK
3		*	5501.415	103.785	64.072	N/A	N/A	39.713	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



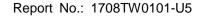


Site: AC1	Time: 2017/06/25 - 13:25					
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker					
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical					
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz					
Test Mode: Transmit by 802.11n-HT20 at Channel 5500MHz Ant 1						



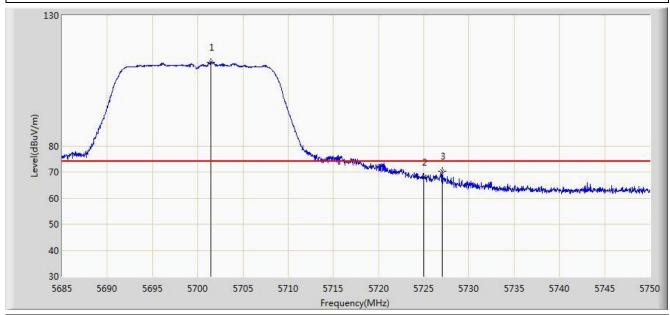
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5460.000	50.134	10.498	-3.866	54.000	39.636	AV
2		*	5503.035	91.655	51.939	N/A	N/A	39.716	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



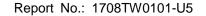


Site: AC1	Time: 2017/06/25 - 13:30					
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker					
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal					
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz					
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 1						



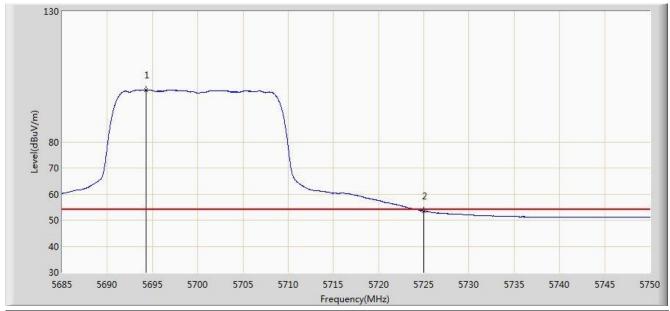
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5701.445	112.149	72.087	N/A	N/A	40.062	PK
2			5725.000	67.991	27.827	-6.009	74.000	40.164	PK
3			5726.990	70.220	30.047	-3.780	74.000	40.173	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



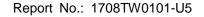


Site: AC1	Time: 2017/06/25 - 13:29				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 1					



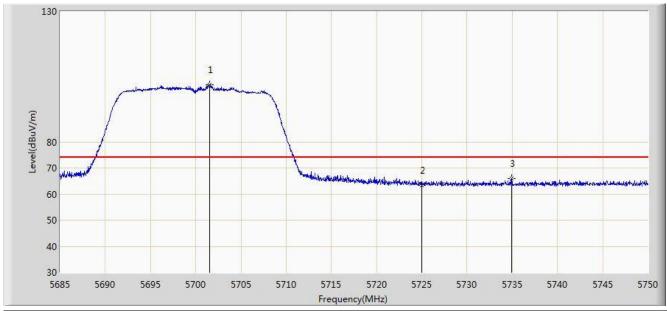
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5694.263	99.822	59.786	N/A	N/A	40.036	AV
2			5725.000	53.539	13.375	-0.461	54.000	40.164	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



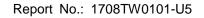


Site: AC1	Time: 2017/06/25 - 13:30					
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker					
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical					
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz					
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 1						



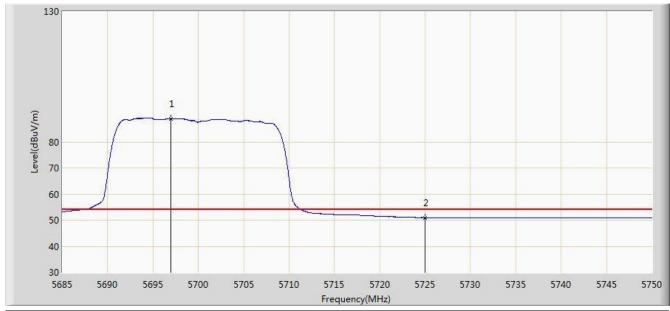
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5701.542	101.892	61.829	N/A	N/A	40.062	PK
2			5725.000	63.447	23.283	-10.553	74.000	40.164	PK
3			5734.953	65.929	25.719	-8.071	74.000	40.210	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



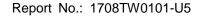


Site: AC1	Time: 2017/06/25 - 13:32				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT20 at Channel 5700MHz Ant 1					



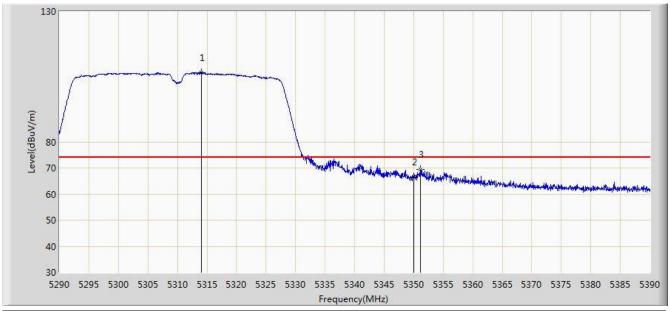
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5696.993	88.980	48.934	N/A	N/A	40.046	AV
2			5725.000	50.935	10.771	-3.065	54.000	40.164	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



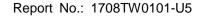


Site: AC1	Time: 2017/06/25 - 13:49				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 1					



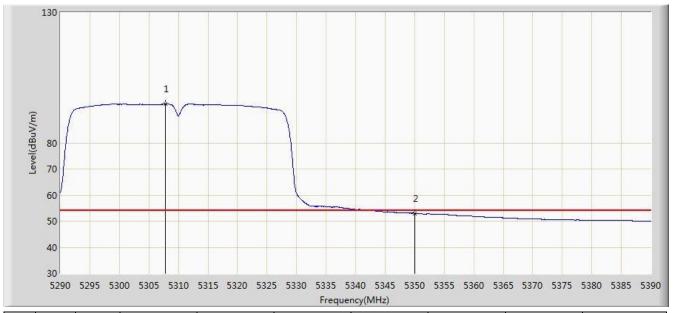
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5314.050	106.611	67.382	N/A	N/A	39.229	PK
2			5350.000	66.390	27.065	-7.610	74.000	39.324	PK
3			5351.100	69.543	30.215	-4.457	74.000	39.327	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



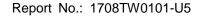


Site: AC1	Time: 2017/06/25 - 13:49				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 1					



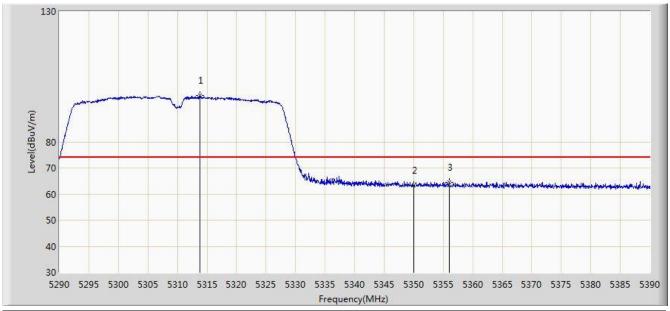
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5307.850	94.868	55.656	N/A	N/A	39.212	AV
2			5350.000	52.975	13.650	-1.025	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



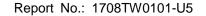


Site: AC1	Time: 2017/06/25 - 13:50				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 1					



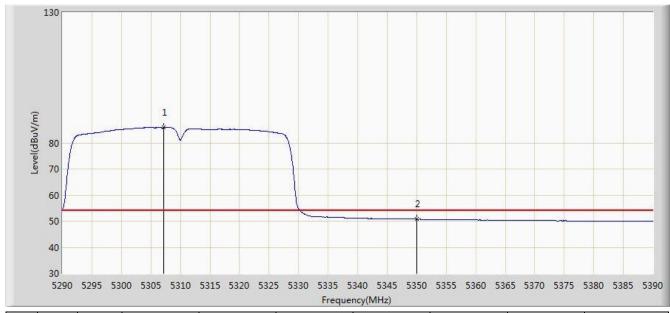
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5313.800	97.817	58.589	N/A	N/A	39.228	PK
2			5350.000	63.371	24.046	-10.629	74.000	39.324	PK
3			5356.000	64.507	25.167	-9.493	74.000	39.340	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



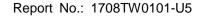


Site: AC1	Time: 2017/06/25 - 13:51				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5310MHz Ant 1					



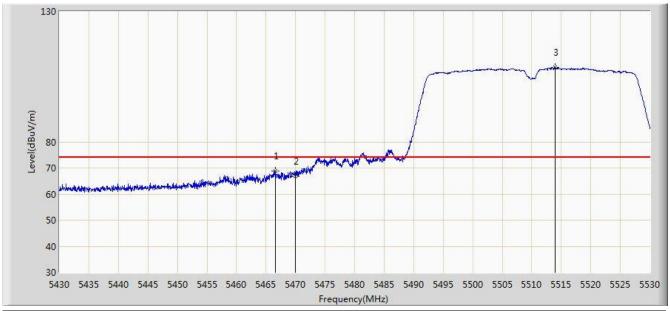
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5307.200	85.847	46.636	N/A	N/A	39.211	AV
2			5350.000	50.728	11.403	-3.272	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



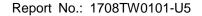


Site: AC1	Time: 2017/06/25 - 13:53				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 1					



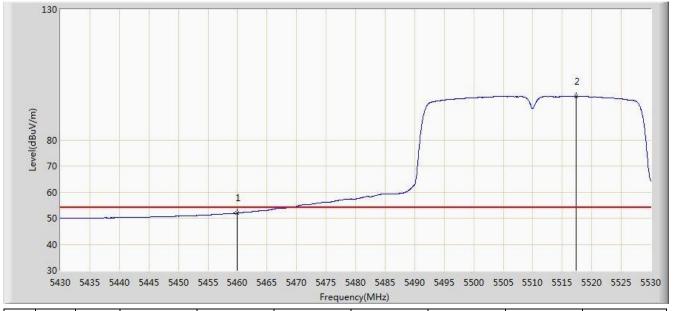
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5466.650	68.833	29.185	-5.167	74.000	39.649	PK
2			5470.000	66.893	27.239	-7.107	74.000	39.654	PK
3		*	5513.950	108.471	68.735	N/A	N/A	39.736	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



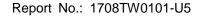


Site: AC1	Time: 2017/06/25 - 13:55				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 1					



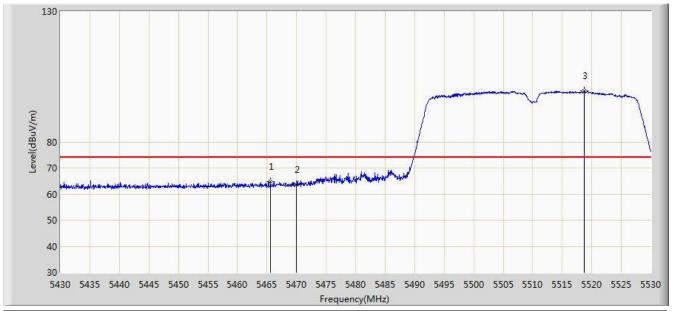
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5460.000	51.948	12.312	-2.052	54.000	39.636	AV
2		*	5517.350	96.705	56.963	N/A	N/A	39.742	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



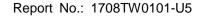


Site: AC1	Time: 2017/06/25 - 13:55				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 1					



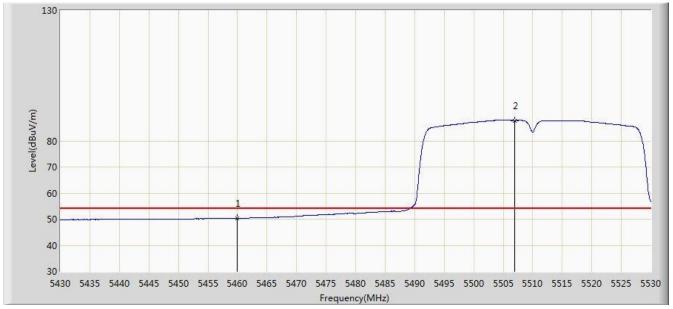
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5465.650	64.872	25.226	-9.128	74.000	39.647	PK
2			5470.000	63.698	24.044	-10.302	74.000	39.654	PK
3		*	5518.700	99.517	59.772	N/A	N/A	39.745	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



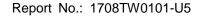


Site: AC1	Time: 2017/06/25 - 13:57				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5510MHz Ant 1					



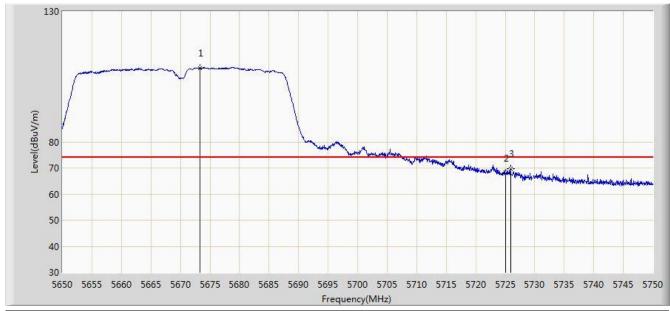
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5460.000	50.376	10.740	-3.624	54.000	39.636	AV
2		*	5506.950	87.793	48.070	33.793	54.000	39.723	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



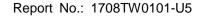


Site: AC1	Time: 2017/06/25 - 13:58				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 1					



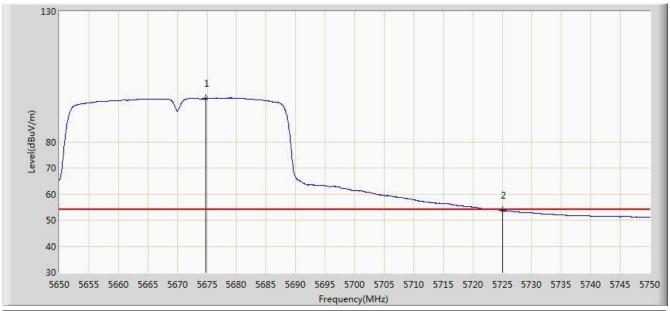
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5673.300	108.270	68.287	N/A	N/A	39.983	PK
2			5725.000	67.917	27.753	-6.083	74.000	40.164	PK
3			5725.900	69.701	29.533	-4.299	74.000	40.169	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



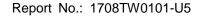


Site: AC1	Time: 2017/06/25 - 14:00				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 1					



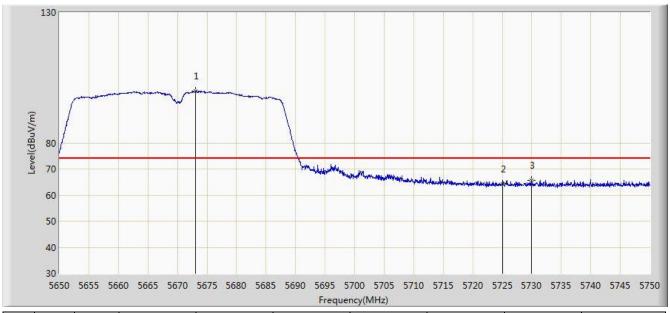
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5674.850	96.623	56.636	N/A	N/A	39.987	AV
2			5725.000	53.749	13.585	-0.251	54.000	40.164	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



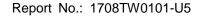


Site: AC1	Time: 2017/06/25 - 14:00				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 1					



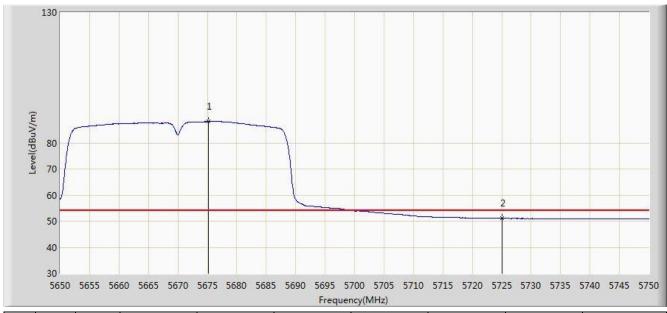
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5673.050	99.800	59.818	N/A	N/A	39.983	PK
2			5725.000	64.063	23.899	-9.937	74.000	40.164	PK
3			5730.000	65.620	25.433	-8.380	74.000	40.187	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



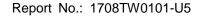


Site: AC1	Time: 2017/06/25 - 14:02				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11n-HT40 at Channel 5670MHz Ant 1					



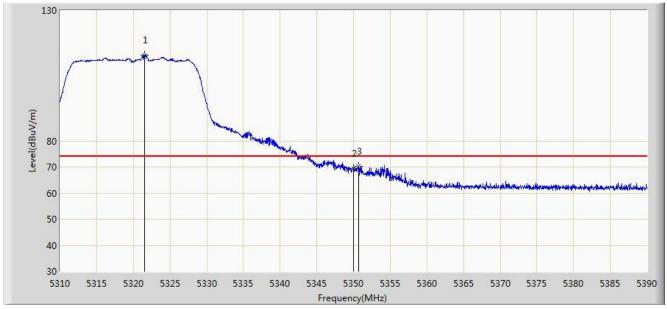
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5675.150	88.192	48.204	N/A	N/A	39.987	AV
2			5725.000	51.094	10.930	-2.906	54.000	40.164	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



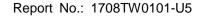


Site: AC1	Time: 2017/06/25 - 14:20					
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker					
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal					
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz					
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 1						



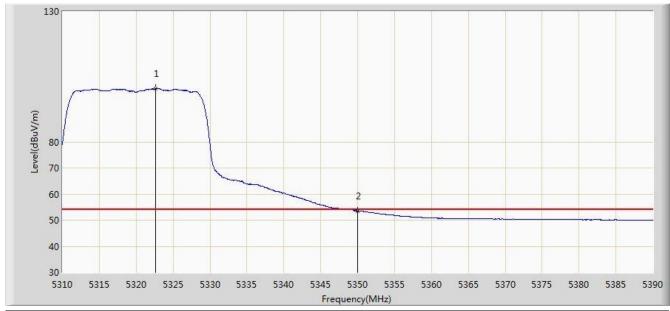
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5321.520	112.813	73.564	N/A	N/A	39.248	PK
2			5350.000	69.303	29.978	-4.697	74.000	39.324	PK
3			5350.720	70.262	30.935	-3.738	74.000	39.327	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



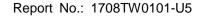


Site: AC1	Time: 2017/06/25 - 14:19				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 1					



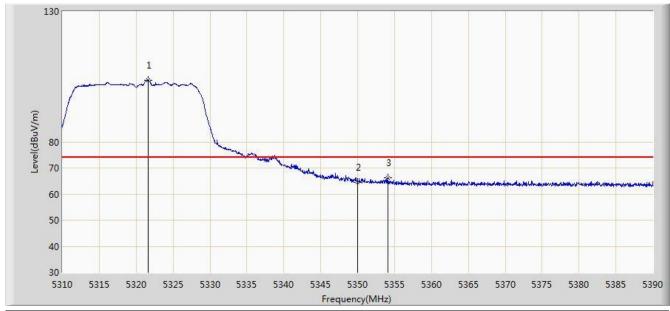
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5322.600	100.351	61.099	N/A	N/A	39.251	AV
2			5350.000	53.586	14.261	-0.414	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



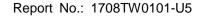


Site: AC1	Time: 2017/06/25 - 14:20				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 1					



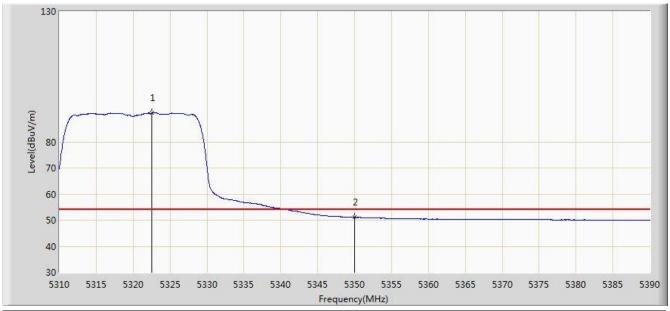
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5321.640	103.552	64.303	N/A	N/A	39.249	PK
2			5350.000	64.540	25.215	-9.460	74.000	39.324	PK
3			5354.160	66.330	26.994	-7.670	74.000	39.336	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



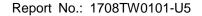


Site: AC1	Time: 2017/06/25 - 14:25				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5320MHz Ant 1					



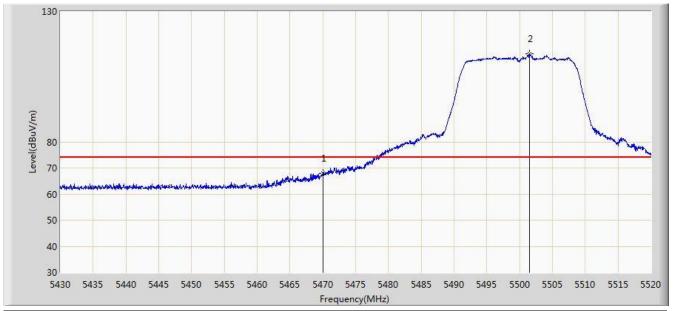
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5322.560	91.056	51.805	N/A	N/A	39.251	AV
2			5350.000	51.074	11.749	-2.926	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



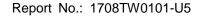


Site: AC1	Time: 2017/06/25 - 14:27				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 1					



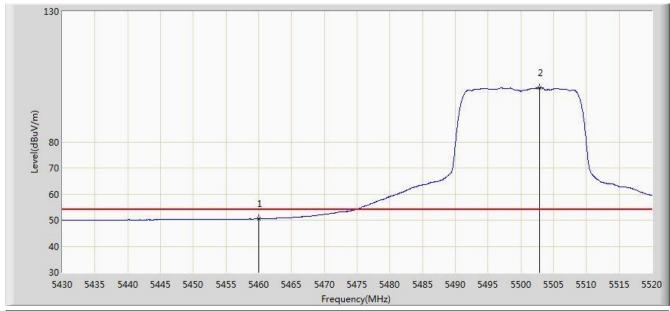
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5470.000	67.948	28.294	-6.052	74.000	39.654	PK
2		*	5501.550	113.833	74.120	N/A	N/A	39.714	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



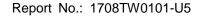


Site: AC1	Time: 2017/06/25 - 14:29				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 1					



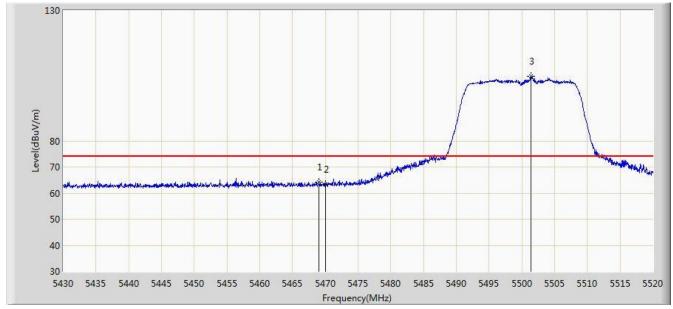
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5460.000	50.482	10.846	-3.518	54.000	39.636	AV
2		*	5502.855	100.653	60.937	N/A	N/A	39.716	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



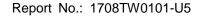


Site: AC1	Time: 2017/06/25 - 14:30				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 1					



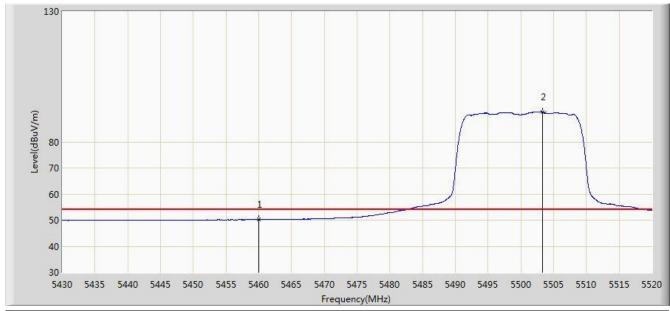
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5469.060	64.330	24.677	-9.670	74.000	39.653	PK
2			5470.000	63.228	23.574	-10.772	74.000	39.654	PK
3		*	5501.370	104.756	65.043	N/A	N/A	39.712	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



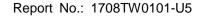


Site: AC1	Time: 2017/06/25 - 14:31				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5500MHz Ant 1					



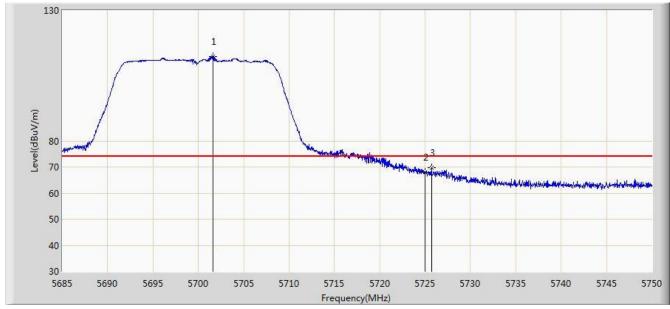
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5460.000	50.184	10.548	-3.816	54.000	39.636	AV
2		*	5503.305	91.412	51.696	N/A	N/A	39.716	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



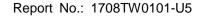


Site: AC1	Time: 2017/06/25 - 14:35				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 1					



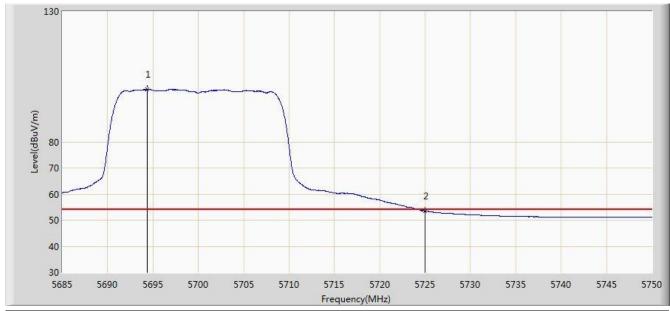
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5701.607	112.459	72.396	N/A	N/A	40.063	PK
2			5725.000	67.871	27.707	-6.129	74.000	40.164	PK
3			5725.690	69.842	29.675	-4.158	74.000	40.167	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



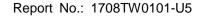


Site: AC1	Time: 2017/06/25 - 14:35				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 1					



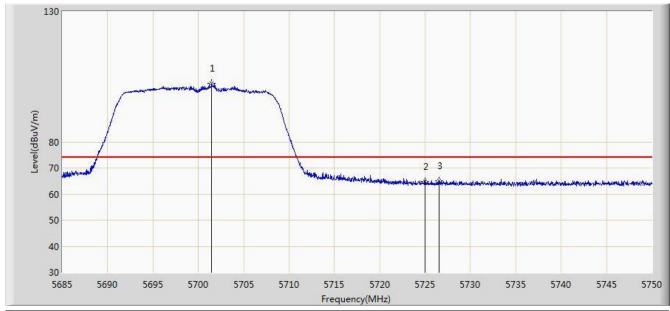
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5694.360	100.045	60.008	N/A	N/A	40.037	AV
2			5725.000	53.560	13.396	-0.440	54.000	40.164	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



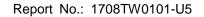


Site: AC1	Time: 2017/06/25 - 14:36				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 1					



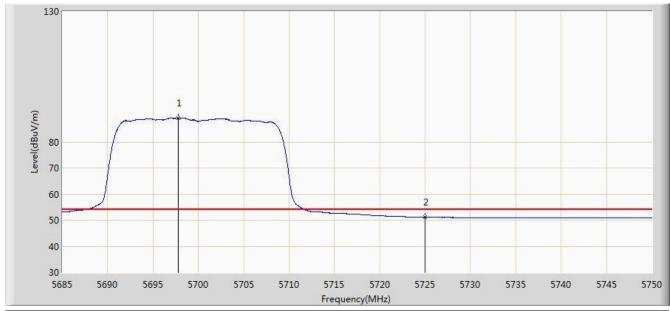
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5701.478	102.458	62.396	N/A	N/A	40.062	PK
2			5725.000	64.669	24.505	-9.331	74.000	40.164	PK
3			5726.502	65.016	24.845	-8.984	74.000	40.171	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



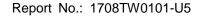


Site: AC1	Time: 2017/06/25 - 14:38				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT20 at Channel 5700MHz Ant 1					



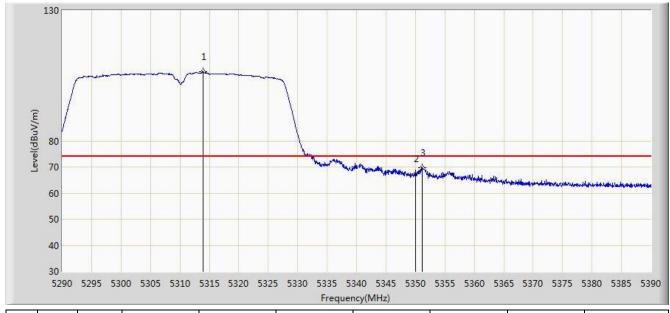
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5697.805	89.055	49.006	N/A	N/A	40.049	AV
2			5725.000	51.136	10.972	-2.864	54.000	40.164	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



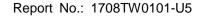


Site: AC1	Time: 2017/06/25 - 15:11				
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker				
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal				
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 1					



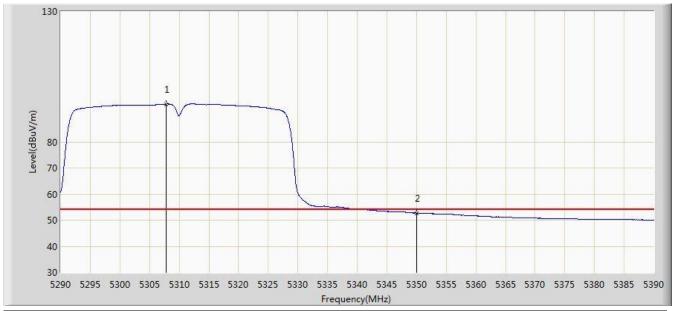
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5313.900	106.470	67.242	N/A	N/A	39.228	PK
2			5350.000	67.457	28.132	-6.543	74.000	39.324	PK
3			5351.200	69.639	30.311	-4.361	74.000	39.328	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



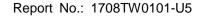


Site: AC1	Time: 2017/06/25 - 15:10			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal			
EUT: AC220i Wi-Fi AP ID omni antenna US Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 1				



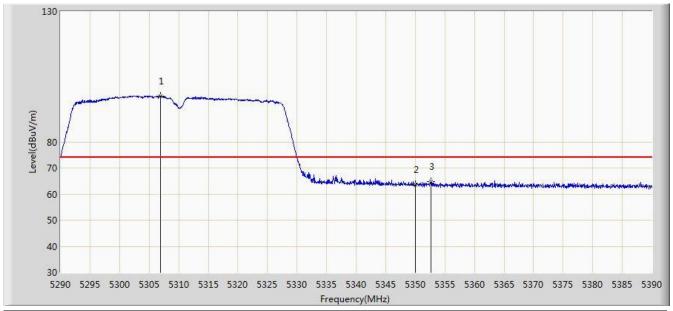
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5307.750	94.455	55.243	N/A	N/A	39.212	AV
2			5350.000	52.718	13.393	-1.282	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



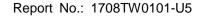


Site: AC1	Time: 2017/06/25 - 15:13			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical			
EUT: AC220i Wi-Fi AP ID omni antenna US	Power: AC 120V/60Hz			
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 1				



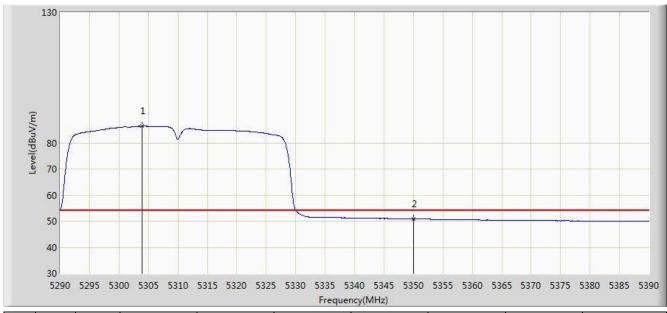
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5306.950	97.559	58.349	N/A	N/A	39.210	PK
2			5350.000	63.588	24.263	-10.412	74.000	39.324	PK
3			5352.600	64.792	25.460	-9.208	74.000	39.331	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)



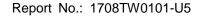


Site: AC1	Time: 2017/06/25 - 15:14			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: BBHA9120D_1GHz_18GHz	Polarity: Vertical			
EUT: AC220i Wi-Fi AP ID omni antenna US Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5310MHz Ant 1				



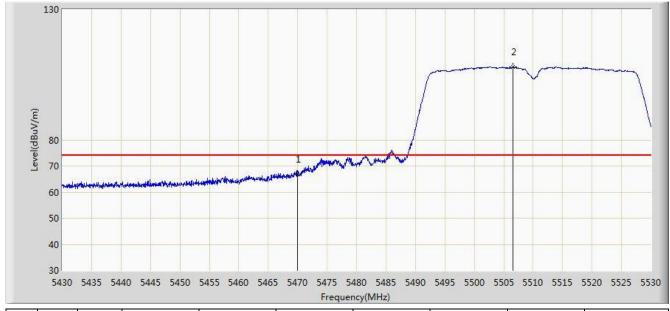
No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1		*	5303.950	86.401	47.199	N/A	N/A	39.202	AV
2			5350.000	50.825	11.500	-3.175	54.000	39.324	AV

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)





Site: AC1	Time: 2017/06/25 - 15:17			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal			
EUT: AC220i Wi-Fi AP ID omni antenna US Power: AC 120V/60Hz				
Test Mode: Transmit by 802.11ac-VHT40 at Channel 5510MHz Ant 1				



No	Flag	Mark	Frequency	Measure	Reading	Margin	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5470.000	66.767	27.113	-7.233	74.000	39.654	PK
2		*	5506.600	107.828	68.106	N/A	N/A	39.723	PK

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)