

Non-contiguous 80+80 MHz Mode Fall within Same UNII Band 802.11ac-VHT80+80 Power Spectral Density - Ant 2 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3) (Beam-Forming Mode)

Channel 138 (5690MHz)

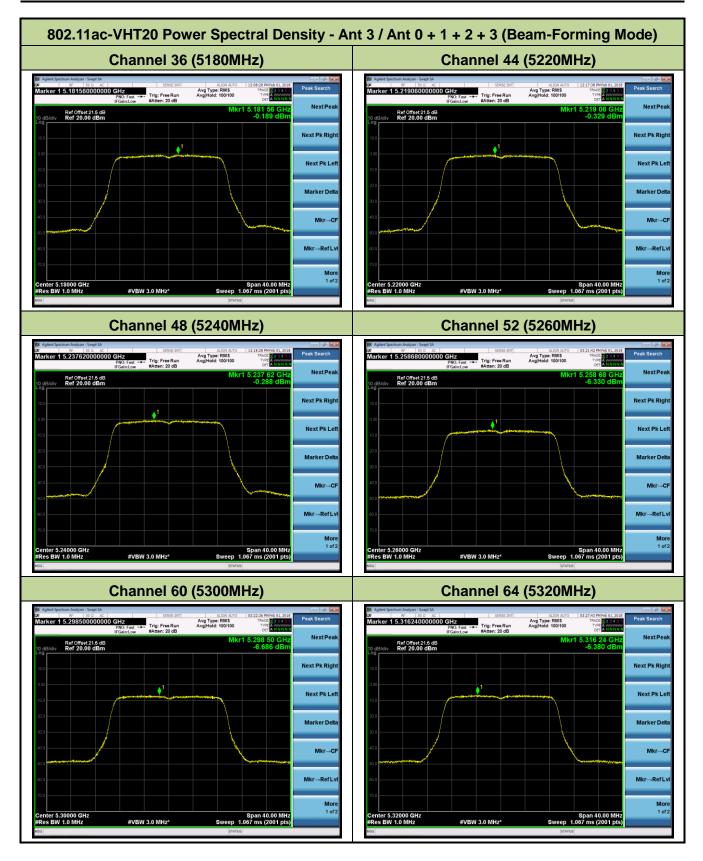


Channel 106 (5530MHz)



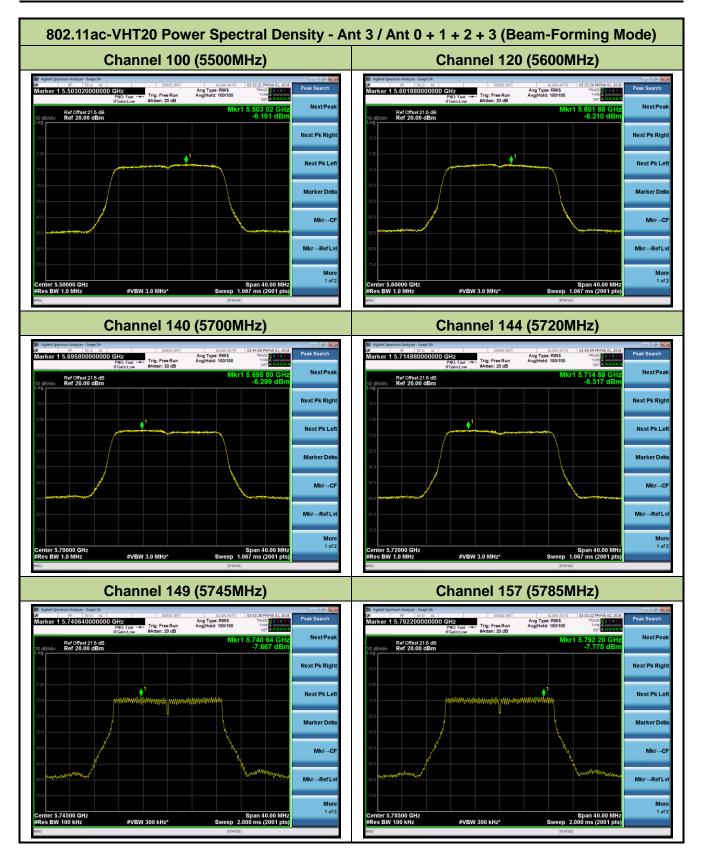
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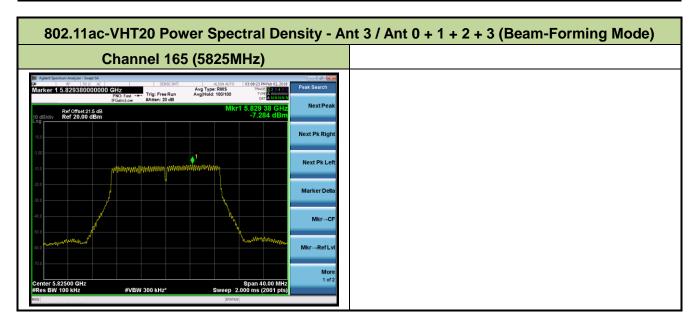


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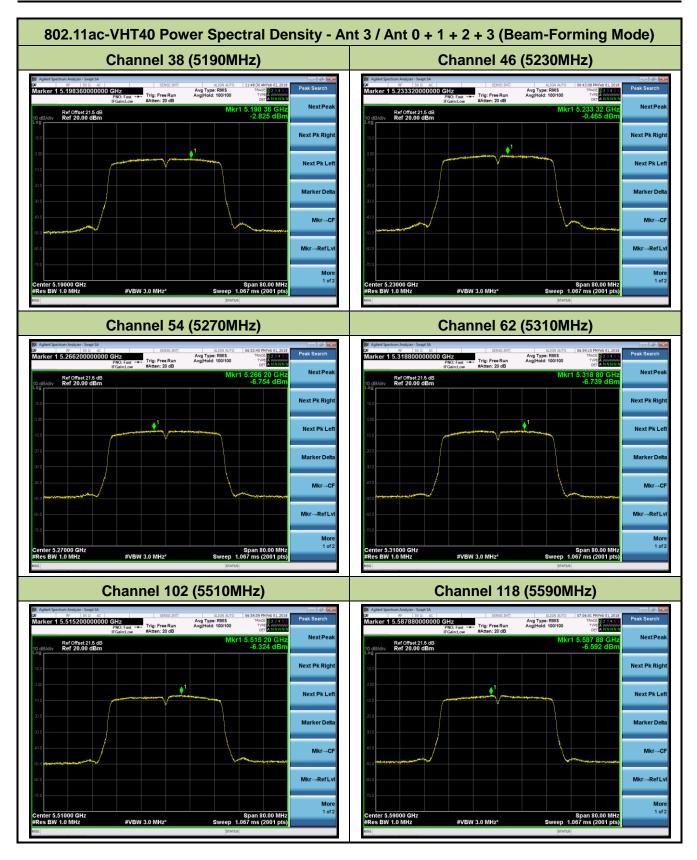






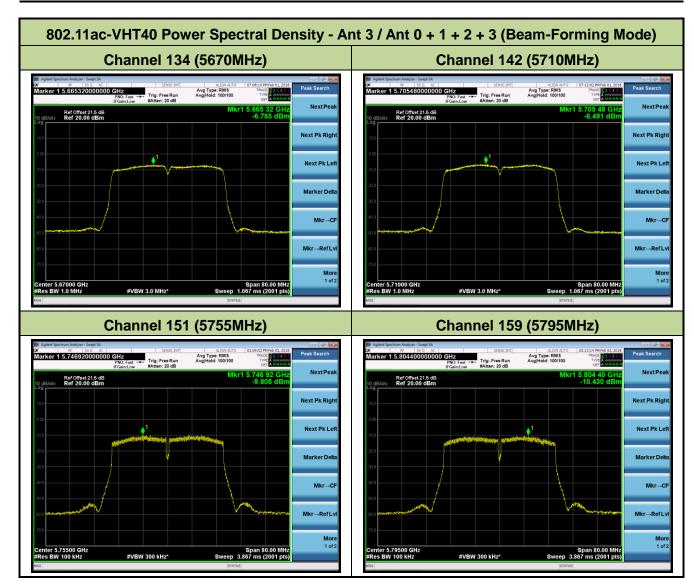




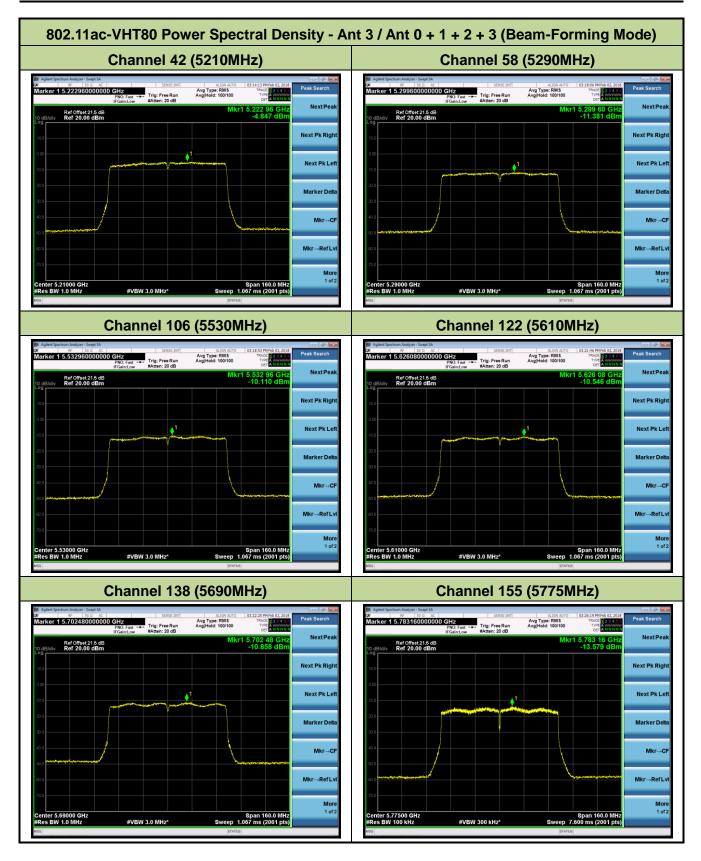


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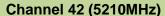








Non-contiguous 80+80 MHz Mode Fall within Different UNII Band 802.11ac-VHT80+80 Power Spectral Density - Ant 3 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3) (Beam-Forming Mode)





Channel 58 (5290MHz)



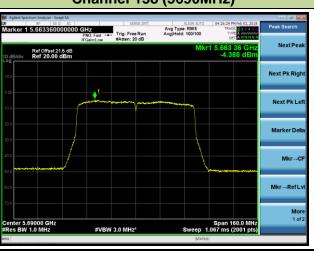
Channel 106 (5530MHz)



Channel 122 (5610MHz)



Channel 138 (5690MHz)



Channel 155 (5775MHz)



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Non-contiguous 80+80 MHz Mode Fall within Same UNII Band 802.11ac-VHT80+80 Power Spectral Density - Ant 3 / Ant 2 + 3 (Ant 0 + 1 + 2 + 3) (Beam-Forming Mode)

Channel 138 (5690MHz)



Channel 106 (5530MHz)



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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:

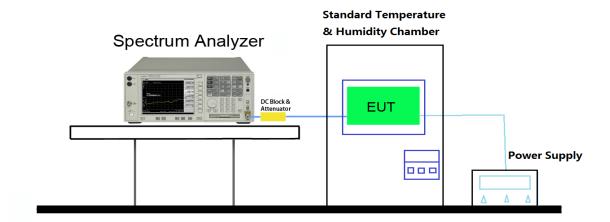
Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

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

Test Engineer	Kevin Ker	Temperature	-30 ~ 50°C
Test Time	2018/02/12	Relative Humidity	48 ~ 55%RH
Test Mode	5320MHz (Carrier Mode)	Test Site	SR2

Voltage	Power	Temp	Frequency Tolerance		
(%)	(VAC)	(°C)	(ppm)		
		- 30	2.32		
			2.14		
		- 10 1.98 0 1.77			
100%	120	+ 10	1.45		
		+ 20 (Ref)	0.84		
		+ 30	-0.18		
		+ 40	-1.46		
		+ 50	-2.31		
115%	138	+ 20	1.44		
85%	102	+ 20	0.98		

Note: Frequency Tolerance (ppm) = $\{[Measured\ Frequency\ (Hz)\ -\ Declared\ Frequency\ (Hz)]\ /\ Declared\ Frequency\ (Hz)\} *10^6$.

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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.

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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					

7.8.2.Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.4 (Standard test method below 30MHz)

ANSI C63.10 Section 6.5 (Standard test method above 30MHz to 1GHz)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

7.8.3.Test Setting

Table 1 - RBW as a function of frequency

Frequency	RBW
9 ~ 150 kHz	200 ~ 300 Hz
0.15 ~ 30 MHz	9 ~ 10 kHz
30 ~ 1000 MHz	100 ~ 120 kHz

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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 = as specified in Table 1
- 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 VB)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW; If the EUT is configured to transmit with duty cycle ≥ 98%, set VBW = 10 Hz.

If the EUT duty cycle is < 98%, set VBW ≥ 1/T. T is the minimum transmission duration.

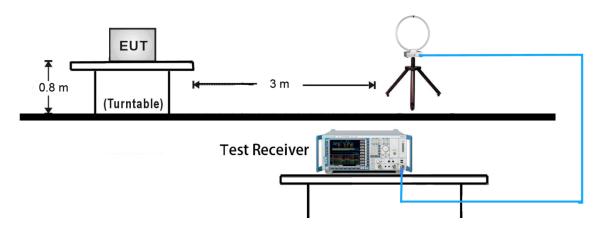
- 4. Detector = Peak
- 5. Sweep time = auto
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

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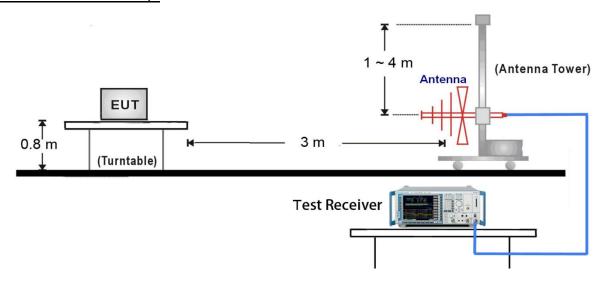


7.8.4.Test Setup

9kHz ~30MHz Test Setup:



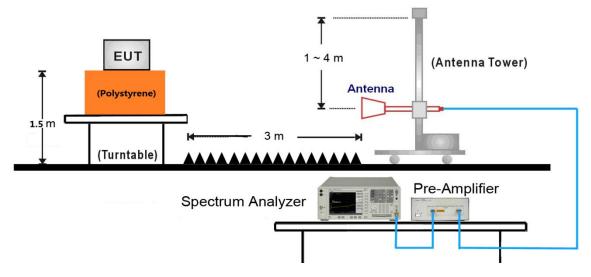
30MHz ~ 1GHz Test Setup:



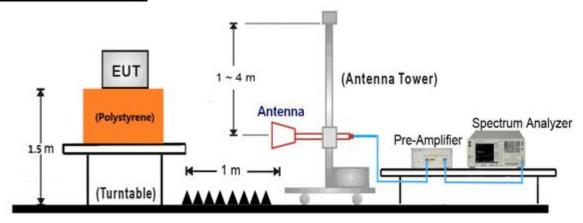
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1GHz ~18GHz Test Setup:

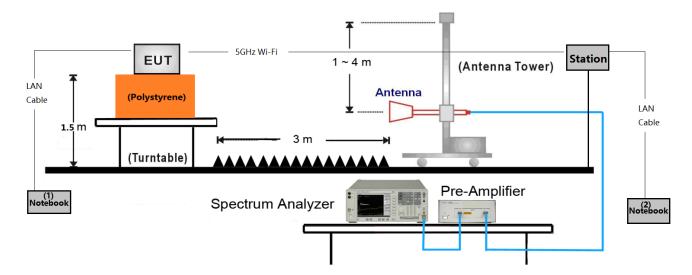


18GHz ~40GHz Test Setup:





Additional Beam-Forming Mode Test Setup (Apply to all BF radiated emission test frequency range)



Make the EUT connect with the station by 5GHz wireless.

Input some commands in the notebook (1) to open the EUT Beam Forming function, and setup the related test channel & data rate & power setting.

Make the notebook (1) ping with notebook (2) using the "iperf" software.

Test Mode	Duty Cycle	T = Transmission Duration
	(%)	(ms)
802.11ac-VHT20	95.64	1.995
802.11ac-VHT40	95.84	2.003
802.11ac-VHT80	96.38	1.968

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7.8.5.Test Result

Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C		
Test Engineer	Kevin Ker	Relative Humidity	57 %		
Test Site	AC1	Test Date	2018/02/28		
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	36		
Remark:	 Average measurement was not performed if peak 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)				
*	7842.5	36.3	12.4	48.7	68.2	-19.5	Peak	Horizontal
*	8692.5	34.6	13.7	48.3	68.2	-19.9	Peak	Horizontal
	11251.0	32.2	18.8	51.0	54.0	-3.0	Peak	Horizontal
	12186.0	32.6	18.8	51.4	54.0	-2.6	Peak	Horizontal
*	8837.0	34.7	14.0	48.7	68.2	-19.5	Peak	Vertical
*	9942.0	34.7	15.3	50.0	68.2	-18.2	Peak	Vertical
	11149.0	32.5	18.7	51.2	54.0	-2.8	Peak	Vertical
	12092.5	32.6	18.9	51.5	54.0	-2.5	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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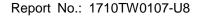
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C		
Test Engineer	Kevin Ker	Relative Humidity	57 %		
Test Site	AC1	Test Date	2018/02/28		
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	44		
Remark:	 Average measurement was not performed if peak level lower than average 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)				
*	8837.0	34.7	14.0	48.7	68.2	-19.5	Peak	Horizontal
*	9942.0	34.7	15.3	50.0	68.2	-18.2	Peak	Horizontal
	11149.0	32.5	18.7	51.2	54.0	-2.8	Peak	Horizontal
	12092.5	32.6	18.9	51.5	54.0	-2.5	Peak	Horizontal
*	8752.0	33.4	13.9	47.3	68.2	-20.9	Peak	Vertical
*	10078.0	34.7	15.6	50.3	68.2	-17.9	Peak	Vertical
	11225.5	32.7	18.8	51.5	54.0	-2.5	Peak	Vertical
	12050.0	32.5	18.8	51.3	54.0	-2.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C		
Test Engineer	Kevin Ker	Relative Humidity	57 %		
Test Site	AC1	Test Date	2018/02/28		
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	48		
Remark:	 Average measurement was not performed if peak 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)				
*	8820.0	35.8	14.0	49.8	68.2	-18.4	Peak	Horizontal
*	9772.0	35.3	14.9	50.2	68.2	-18.0	Peak	Horizontal
	11234.0	32.3	18.8	51.1	54.0	-2.9	Peak	Horizontal
	12058.5	32.7	18.8	51.5	54.0	-2.5	Peak	Horizontal
*	8786.0	34.3	13.9	48.2	68.2	-20.0	Peak	Vertical
*	9789.0	34.1	15.0	49.1	68.2	-19.1	Peak	Vertical
	11157.5	32.4	18.7	51.1	54.0	-2.9	Peak	Vertical
	11837.5	31.8	18.7	50.5	54.0	-3.5	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C		
Test Engineer	Kevin Ker	Relative Humidity	57 %		
Test Site	AC1	Test Date	2018/02/28		
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	52		
Remark:	 Average measurement was not performed if peak 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)				
*	8786.0	34.3	13.9	48.2	68.2	-20.0	Peak	Horizontal
*	9789.0	34.1	15.0	49.1	68.2	-19.1	Peak	Horizontal
	11157.5	32.4	18.7	51.1	54.0	-2.9	Peak	Horizontal
	11837.5	31.8	18.7	50.5	54.0	-3.5	Peak	Horizontal
*	8854.0	34.5	14.0	48.5	68.2	-19.7	Peak	Vertical
*	9925.0	34.7	15.3	50.0	68.2	-18.2	Peak	Vertical
	11166.0	33.0	18.7	51.7	54.0	-2.3	Peak	Vertical
	12169.0	33.5	18.8	52.3	54.0	-1.7	Peak	Vertical

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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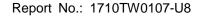
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	60
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8837.0	34.4	14.0	48.4	68.2	-19.8	Peak	Horizontal
*	9993.0	35.9	15.4	51.3	68.2	-16.9	Peak	Horizontal
	11157.5	32.3	18.7	51.0	54.0	-3.0	Peak	Horizontal
	12330.5	32.8	18.5	51.3	54.0	-2.7	Peak	Horizontal
*	8854.0	35.1	14.0	49.1	68.2	-19.1	Peak	Vertical
*	9789.0	34.6	15.0	49.6	68.2	-18.6	Peak	Vertical
	11191.5	32.9	18.7	51.6	54.0	-2.4	Peak	Vertical
	12007.5	32.3	18.7	51.0	54.0	-3.0	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	64
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8930.5	34.8	14.0	48.8	68.2	-19.4	Peak	Horizontal
*	9755.0	34.5	14.8	49.3	68.2	-18.9	Peak	Horizontal
	11021.5	33.4	18.5	51.9	54.0	-2.1	Peak	Horizontal
	11812.0	32.5	18.7	51.2	54.0	-2.8	Peak	Horizontal
*	8743.5	32.5	13.9	46.4	68.2	-21.8	Peak	Vertical
*	9712.5	34.1	14.7	48.8	68.2	-19.4	Peak	Vertical
	10877.0	34.5	18.2	52.7	54.0	-1.3	Peak	Vertical
	11735.5	32.6	19.0	51.6	54.0	-2.4	Peak	Vertical

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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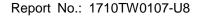
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	100
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8794.5	33.0	13.9	46.9	68.2	-21.3	Peak	Horizontal
*	10061.0	33.7	15.6	49.3	68.2	-18.9	Peak	Horizontal
	11140.5	32.1	18.7	50.8	54.0	-3.2	Peak	Horizontal
	12058.5	31.6	18.8	50.4	54.0	-3.6	Peak	Horizontal
*	8862.5	34.5	14.0	48.5	68.2	-19.7	Peak	Vertical
*	9950.5	35.0	15.3	50.3	68.2	-17.9	Peak	Vertical
	11013.0	32.7	18.5	51.2	54.0	-2.8	Peak	Vertical
	11480.5	32.5	19.3	51.8	54.0	-2.2	Peak	Vertical

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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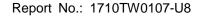
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	120
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8735.0	34.7	13.9	48.6	68.2	-19.6	Peak	Horizontal
*	9644.5	34.7	14.4	49.1	68.2	-19.1	Peak	Horizontal
	11123.5	33.1	18.6	51.7	54.0	-2.3	Peak	Horizontal
	11939.5	33.9	18.6	52.5	54.0	-1.5	Peak	Horizontal
*	8854.0	35.5	14.0	49.5	68.2	-18.7	Peak	Vertical
*	9814.5	34.6	15.4	50.0	68.2	-18.2	Peak	Vertical
	11234.0	32.8	18.8	51.6	54.0	-2.4	Peak	Vertical
	11820.5	32.3	18.7	51.0	54.0	-3.0	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	140
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	34.7	14.0	48.7	68.2	-19.5	Peak	Horizontal
*	9908.0	34.4	15.3	49.7	68.2	-18.5	Peak	Horizontal
	11242.5	31.9	18.8	50.7	54.0	-3.3	Peak	Horizontal
	11846.0	33.2	18.7	51.9	54.0	-2.1	Peak	Horizontal
*	8701.0	34.8	13.8	48.6	68.2	-19.6	Peak	Vertical
*	9908.0	35.1	15.3	50.4	68.2	-17.8	Peak	Vertical
	11038.5	32.1	18.5	50.6	54.0	-3.4	Peak	Vertical
	11897.0	34.0	18.6	52.6	54.0	-1.4	Peak	Vertical

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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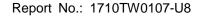
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	144
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8735.0	33.5	13.9	47.4	68.2	-20.8	Peak	Horizontal
*	10052.5	34.1	15.5	49.6	68.2	-18.6	Peak	Horizontal
	11225.5	32.1	18.8	50.9	54.0	-3.1	Peak	Horizontal
	12084.0	31.6	18.9	50.5	54.0	-3.5	Peak	Horizontal
*	8769.0	34.2	13.9	48.1	68.2	-20.1	Peak	Vertical
*	9738.0	34.1	14.8	48.9	68.2	-19.3	Peak	Vertical
	11021.5	32.7	18.5	51.2	54.0	-2.8	Peak	Vertical
	12041.5	31.8	18.8	50.6	54.0	-3.4	Peak	Vertical

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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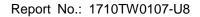
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	149
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ŭ

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	34.4	13.9	48.3	68.2	-19.9	Peak	Horizontal
*	9857.0	34.2	16.2	50.4	68.2	-17.8	Peak	Horizontal
	11242.5	32.0	18.8	50.8	54.0	-3.2	Peak	Horizontal
	12254.0	32.0	18.6	50.6	54.0	-3.4	Peak	Horizontal
*	8718.0	33.2	13.8	47.0	68.2	-21.2	Peak	Vertical
*	9857.0	34.1	16.2	50.3	68.2	-17.9	Peak	Vertical
	10877.0	35.2	18.2	53.4	54.0	-0.6	Peak	Vertical
	11633.5	33.0	19.4	52.4	54.0	-1.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	157
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8879.5	35.6	14.0	49.6	68.2	-18.6	Peak	Horizontal
*	10112.0	33.4	15.8	49.2	68.2	-19.0	Peak	Horizontal
	11047.0	33.0	18.5	51.5	54.0	-2.5	Peak	Horizontal
	11786.5	32.0	18.8	50.8	54.0	-3.2	Peak	Horizontal
*	8769.0	33.0	13.9	46.9	68.2	-21.3	Peak	Vertical
*	9814.5	34.2	15.4	49.6	68.2	-18.6	Peak	Vertical
	10792.0	33.9	17.9	51.8	54.0	-2.2	Peak	Vertical
	11761.0	32.7	18.9	51.6	54.0	-2.4	Peak	Vertical

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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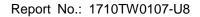
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	165
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8701.0	33.8	13.8	47.6	68.2	-20.6	Peak	Horizontal
*	9908.0	34.2	15.3	49.5	68.2	-18.7	Peak	Horizontal
	11081.0	34.5	18.6	53.1	54.0	-0.9	Peak	Horizontal
	11786.5	32.8	18.8	51.6	54.0	-2.4	Peak	Horizontal
*	8828.5	34.4	14.0	48.4	68.2	-19.8	Peak	Vertical
*	9721.0	34.1	14.7	48.8	68.2	-19.4	Peak	Vertical
	11183.0	33.2	18.7	51.9	54.0	-2.1	Peak	Vertical
	11897.0	32.9	18.6	51.5	54.0	-2.5	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	36
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8692.5	33.7	13.7	47.4	68.2	-20.8	Peak	Horizontal
*	9729.5	34.1	14.7	48.8	68.2	-19.4	Peak	Horizontal
	10970.5	33.6	18.4	52.0	54.0	-2.0	Peak	Horizontal
	11897.0	33.3	18.6	51.9	54.0	-2.1	Peak	Horizontal
*	8692.5	35.1	13.7	48.8	68.2	-19.4	Peak	Vertical
*	9678.5	34.5	14.6	49.1	68.2	-19.1	Peak	Vertical
	10783.5	34.5	17.8	52.3	54.0	-1.7	Peak	Vertical
	11922.5	32.8	18.6	51.4	54.0	-2.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	44
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8854.0	35.1	14.0	49.1	68.2	-19.1	Peak	Horizontal
*	9942.0	35.0	15.3	50.3	68.2	-17.9	Peak	Horizontal
	10987.5	32.7	18.5	51.2	54.0	-2.8	Peak	Horizontal
	11846.0	31.7	18.7	50.4	54.0	-3.6	Peak	Horizontal
*	8854.0	34.7	14.0	48.7	68.2	-19.5	Peak	Vertical
*	9806.0	34.1	15.2	49.3	68.2	-18.9	Peak	Vertical
	11200.0	31.7	18.7	50.4	54.0	-3.6	Peak	Vertical
	11684.5	31.7	19.2	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	48
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	32.9	14.0	46.9	68.2	-21.3	Peak	Horizontal
*	10027.0	34.2	15.4	49.6	68.2	-18.6	Peak	Horizontal
	10928.0	33.8	18.4	52.2	54.0	-1.8	Peak	Horizontal
	11812.0	31.4	18.7	50.1	54.0	-3.9	Peak	Horizontal
*	8752.0	34.7	13.9	48.6	68.2	-19.6	Peak	Vertical
*	9814.5	34.5	15.4	49.9	68.2	-18.3	Peak	Vertical
	11489.0	33.7	19.3	53.0	54.0	-1.0	Peak	Vertical
	12084.0	32.7	18.9	51.6	54.0	-2.4	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	52	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8786.0	33.5	13.9	47.4	68.2	-20.8	Peak	Horizontal
*	9772.0	35.0	14.9	49.9	68.2	-18.3	Peak	Horizontal
	10885.5	33.7	18.3	52.0	54.0	-2.0	Peak	Horizontal
	11973.5	32.7	18.7	51.4	54.0	-2.6	Peak	Horizontal
*	8692.5	33.6	13.7	47.3	68.2	-20.9	Peak	Vertical
*	9899.5	35.4	15.4	50.8	68.2	-17.4	Peak	Vertical
	10826.0	33.7	18.0	51.7	54.0	-2.3	Peak	Vertical
	11948.0	32.1	18.6	50.7	54.0	-3.3	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	60	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8760.5	34.5	13.9	48.4	68.2	-19.8	Peak	Horizontal
*	9806.0	33.8	15.2	49.0	68.2	-19.2	Peak	Horizontal
	10936.5	32.9	18.4	51.3	54.0	-2.7	Peak	Horizontal
	11820.5	31.9	18.7	50.6	54.0	-3.4	Peak	Horizontal
*	8794.5	33.0	13.9	46.9	68.2	-21.3	Peak	Vertical
*	9814.5	34.2	15.4	49.6	68.2	-18.6	Peak	Vertical
	11072.5	33.6	18.6	52.2	54.0	-1.8	Peak	Vertical
	11880.0	32.1	18.6	50.7	54.0	-3.3	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	64	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8845.5	35.2	14.0	49.2	68.2	-19.0	Peak	Horizontal
*	9687.0	34.1	14.6	48.7	68.2	-19.5	Peak	Horizontal
	10970.5	33.5	18.4	51.9	54.0	-2.1	Peak	Horizontal
	11701.5	31.6	19.1	50.7	54.0	-3.3	Peak	Horizontal
*	8862.5	33.9	14.0	47.9	68.2	-20.3	Peak	Vertical
*	10035.5	33.9	15.5	49.4	68.2	-18.8	Peak	Vertical
	10826.0	34.2	18.0	52.2	54.0	-1.8	Peak	Vertical
	11786.5	33.2	18.8	52.0	54.0	-2.0	Peak	Vertical

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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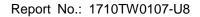
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)		100
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	ŭ

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8845.5	34.9	14.0	48.9	68.2	-19.3	Peak	Horizontal
*	9942.0	35.1	15.3	50.4	68.2	-17.8	Peak	Horizontal
	10894.0	34.3	18.3	52.6	54.0	-1.4	Peak	Horizontal
	11948.0	32.5	18.6	51.1	54.0	-2.9	Peak	Horizontal
*	8675.5	33.4	13.7	47.1	68.2	-21.1	Peak	Vertical
*	10001.5	34.1	15.4	49.5	68.2	-18.7	Peak	Vertical
	11174.5	32.8	18.7	51.5	54.0	-2.5	Peak	Vertical
	12135.0	31.3	18.9	50.2	54.0	-3.8	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	120
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8820.0	35.2	14.0	49.2	68.2	-19.0	Peak	Horizontal
*	10044.0	34.2	15.5	49.7	68.2	-18.5	Peak	Horizontal
	10928.0	35.0	18.4	53.4	54.0	-0.6	Peak	Horizontal
	12067.0	32.0	18.8	50.8	54.0	-3.2	Peak	Horizontal
*	8709.5	33.5	13.8	47.3	68.2	-20.9	Peak	Vertical
*	9721.0	34.1	14.7	48.8	68.2	-19.4	Peak	Vertical
	11064.0	33.9	18.5	52.4	54.0	-1.6	Peak	Vertical
	11812.0	31.8	18.7	50.5	54.0	-3.5	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)		140
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ü

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8828.5	35.3	14.0	49.3	68.2	-18.9	Peak	Horizontal
*	10069.5	33.9	15.6	49.5	68.2	-18.7	Peak	Horizontal
	11217.0	31.9	18.8	50.7	54.0	-3.3	Peak	Horizontal
	12007.5	32.4	18.7	51.1	54.0	-2.9	Peak	Horizontal
*	8718.0	34.1	13.8	47.9	68.2	-20.3	Peak	Vertical
*	10214.0	33.2	16.3	49.5	68.2	-18.7	Peak	Vertical
	11140.5	34.3	18.7	53.0	54.0	-1.0	Peak	Vertical
	11820.5	31.6	18.7	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	144
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8777.5	35.0	13.9	48.9	68.2	-19.3	Peak	Horizontal
*	10052.5	34.5	15.5	50.0	68.2	-18.2	Peak	Horizontal
	11021.5	33.0	18.5	51.5	54.0	-2.5	Peak	Horizontal
	12024.5	32.7	18.8	51.5	54.0	-2.5	Peak	Horizontal
*	8735.0	33.8	13.9	47.7	68.2	-20.5	Peak	Vertical
*	10078.0	34.2	15.6	49.8	68.2	-18.4	Peak	Vertical
	11072.5	33.6	18.6	52.2	54.0	-1.8	Peak	Vertical
	11846.0	33.7	18.7	52.4	54.0	-1.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	149
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8854.0	35.2	14.0	49.2	68.2	-19.0	Peak	Horizontal
*	9908.0	35.5	15.3	50.8	68.2	-17.4	Peak	Horizontal
	11174.5	34.1	18.7	52.8	54.0	-1.2	Peak	Horizontal
	12058.5	32.9	18.8	51.7	54.0	-2.3	Peak	Horizontal
*	8786.0	34.6	13.9	48.5	68.2	-19.7	Peak	Vertical
*	9840.0	33.4	16.0	49.4	68.2	-18.8	Peak	Vertical
	10962.0	32.3	18.4	50.7	54.0	-3.3	Peak	Vertical
	11786.5	32.0	18.8	50.8	54.0	-3.2	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	157	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8854.0	35.2	14.0	49.2	68.2	-19.0	Peak	Horizontal
*	9772.0	34.3	14.9	49.2	68.2	-19.0	Peak	Horizontal
	11251.0	31.8	18.8	50.6	54.0	-3.4	Peak	Horizontal
	12109.5	32.3	18.9	51.2	54.0	-2.8	Peak	Horizontal
*	8828.5	36.0	14.0	50.0	68.2	-18.2	Peak	Vertical
*	9772.0	35.6	14.9	50.5	68.2	-17.7	Peak	Vertical
	10970.5	33.2	18.4	51.6	54.0	-2.4	Peak	Vertical
	11846.0	33.0	18.7	51.7	54.0	-2.3	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	165
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8743.5	34.0	13.9	47.9	68.2	-20.3	Peak	Horizontal
*	9848.5	33.2	16.1	49.3	68.2	-18.9	Peak	Horizontal
	11140.5	33.1	18.7	51.8	54.0	-2.2	Peak	Horizontal
	11846.0	32.3	18.7	51.0	54.0	-3.0	Peak	Horizontal
*	8820.0	34.3	14.0	48.3	68.2	-19.9	Peak	Vertical
*	9721.0	34.2	14.7	48.9	68.2	-19.3	Peak	Vertical
	11038.5	32.8	18.5	51.3	54.0	-2.7	Peak	Vertical
	11897.0	32.3	18.6	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	38
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8820.0	33.6	14.0	47.6	68.2	-20.6	Peak	Horizontal
*	10180.0	33.9	16.1	50.0	68.2	-18.2	Peak	Horizontal
	10928.0	33.4	18.4	51.8	54.0	-2.2	Peak	Horizontal
	11846.0	31.9	18.7	50.6	54.0	-3.4	Peak	Horizontal
*	8811.5	34.8	14.0	48.8	68.2	-19.4	Peak	Vertical
*	10069.5	33.7	15.6	49.3	68.2	-18.9	Peak	Vertical
	10732.5	33.4	17.6	51.0	54.0	-3.0	Peak	Vertical
	12007.5	32.2	18.7	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	46	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8845.5	34.9	14.0	48.9	68.2	-19.3	Peak	Horizontal
*	9857.0	34.1	16.2	50.3	68.2	-17.9	Peak	Horizontal
	11021.5	32.5	18.5	51.0	54.0	-3.0	Peak	Horizontal
	11948.0	31.8	18.6	50.4	54.0	-3.6	Peak	Horizontal
*	8837.0	34.7	14.0	48.7	68.2	-19.5	Peak	Vertical
*	9678.5	34.0	14.6	48.6	68.2	-19.6	Peak	Vertical
	11106.5	33.6	18.6	52.2	54.0	-1.8	Peak	Vertical
	12007.5	33.7	18.7	52.4	54.0	-1.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	54
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8718.0	33.9	13.8	47.7	68.2	-20.5	Peak	Horizontal
*	9865.5	34.4	16.0	50.4	68.2	-17.8	Peak	Horizontal
	10877.0	34.4	18.2	52.6	54.0	-1.4	Peak	Horizontal
	11965.0	32.3	18.6	50.9	54.0	-3.1	Peak	Horizontal
*	8718.0	33.8	13.8	47.6	68.2	-20.6	Peak	Vertical
*	9865.5	34.5	16.0	50.5	68.2	-17.7	Peak	Vertical
	10877.0	34.7	18.2	52.9	54.0	-1.1	Peak	Vertical
	11965.0	32.1	18.6	50.7	54.0	-3.3	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	62
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	34.4	14.0	48.4	68.2	-19.8	Peak	Horizontal
*	10239.5	33.4	16.4	49.8	68.2	-18.4	Peak	Horizontal
	10970.5	33.2	18.4	51.6	54.0	-2.4	Peak	Horizontal
	11684.5	32.9	19.2	52.1	54.0	-1.9	Peak	Horizontal
*	8760.5	33.4	13.9	47.3	68.2	-20.9	Peak	Vertical
*	10137.5	33.9	15.9	49.8	68.2	-18.4	Peak	Vertical
	11072.5	32.9	18.6	51.5	54.0	-2.5	Peak	Vertical
	11846.0	33.4	18.7	52.1	54.0	-1.9	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	102	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8735.0	34.4	13.9	48.3	68.2	-19.9	Peak	Horizontal
*	10044.0	34.2	15.5	49.7	68.2	-18.5	Peak	Horizontal
	11625.0	33.2	19.4	52.6	54.0	-1.4	Peak	Horizontal
	12441.0	32.0	18.4	50.4	54.0	-3.6	Peak	Horizontal
*	8760.5	32.6	13.9	46.5	68.2	-21.7	Peak	Vertical
*	10044.0	33.8	15.5	49.3	68.2	-18.9	Peak	Vertical
	11021.5	34.6	18.5	53.1	54.0	-0.9	Peak	Vertical
	12058.5	31.8	18.8	50.6	54.0	-3.4	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	118	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8777.5	33.4	13.9	47.3	68.2	-20.9	Peak	Horizontal
*	10103.5	33.7	15.7	49.4	68.2	-18.8	Peak	Horizontal
	11072.5	33.1	18.6	51.7	54.0	-2.3	Peak	Horizontal
	12101.0	32.3	18.9	51.2	54.0	-2.8	Peak	Horizontal
*	8854.0	34.6	14.0	48.6	68.2	-19.6	Peak	Vertical
*	10086.5	34.2	15.7	49.9	68.2	-18.3	Peak	Vertical
	11455.0	31.6	19.2	50.8	54.0	-3.2	Peak	Vertical
	12441.0	32.2	18.4	50.6	54.0	-3.4	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	134
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8837.0	35.9	14.0	49.9	68.2	-18.3	Peak	Horizontal
*	9891.0	34.6	15.5	50.1	68.2	-18.1	Peak	Horizontal
	10945.0	33.0	18.4	51.4	54.0	-2.6	Peak	Horizontal
	11735.5	32.1	19.0	51.1	54.0	-2.9	Peak	Horizontal
*	8777.5	34.0	13.9	47.9	68.2	-20.3	Peak	Vertical
*	10146.0	34.0	16.0	50.0	68.2	-18.2	Peak	Vertical
	11336.0	32.7	19.0	51.7	54.0	-2.3	Peak	Vertical
	12373.0	31.6	18.4	50.0	54.0	-4.0	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	142
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8743.5	32.7	13.9	46.6	68.2	-21.6	Peak	Horizontal
*	10248.0	33.0	16.4	49.4	68.2	-18.8	Peak	Horizontal
	11225.5	31.9	18.8	50.7	54.0	-3.3	Peak	Horizontal
	12381.5	31.7	18.4	50.1	54.0	-3.9	Peak	Horizontal
*	8692.5	35.5	13.7	49.2	68.2	-19.0	Peak	Vertical
*	10137.5	34.0	15.9	49.9	68.2	-18.3	Peak	Vertical
	11293.5	31.7	18.9	50.6	54.0	-3.4	Peak	Vertical
	12339.0	31.7	18.5	50.2	54.0	-3.8	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	151
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	ŭ

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8845.5	34.4	14.0	48.4	68.2	-19.8	Peak	Horizontal
*	10239.5	33.3	16.4	49.7	68.2	-18.5	Peak	Horizontal
	11149.0	32.2	18.7	50.9	54.0	-3.1	Peak	Horizontal
	12084.0	31.3	18.9	50.2	54.0	-3.8	Peak	Horizontal
*	8862.5	34.5	14.0	48.5	68.2	-19.7	Peak	Vertical
*	10248.0	33.6	16.4	50.0	68.2	-18.2	Peak	Vertical
	11030.0	32.4	18.5	50.9	54.0	-3.1	Peak	Vertical
	12118.0	31.5	18.9	50.4	54.0	-3.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	159
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ü

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8735.0	33.5	13.9	47.4	68.2	-20.8	Peak	Horizontal
*	10154.5	33.8	16.0	49.8	68.2	-18.4	Peak	Horizontal
	11327.5	32.5	18.9	51.4	54.0	-2.6	Peak	Horizontal
	11922.5	32.1	18.6	50.7	54.0	-3.3	Peak	Horizontal
*	8888.0	34.7	14.0	48.7	68.2	-19.5	Peak	Vertical
*	10112.0	35.7	15.8	51.5	68.2	-16.7	Peak	Vertical
	11327.5	32.5	18.9	51.4	54.0	-2.6	Peak	Vertical
	11897.0	32.8	18.6	51.4	54.0	-2.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	42
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ü

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8786.0	34.2	13.9	48.1	68.2	-20.1	Peak	Horizontal
*	9950.5	34.0	15.3	49.3	68.2	-18.9	Peak	Horizontal
	11412.5	31.7	19.1	50.8	54.0	-3.2	Peak	Horizontal
	12594.0	31.2	18.7	49.9	54.0	-4.1	Peak	Horizontal
*	8845.5	34.8	14.0	48.8	68.2	-19.4	Peak	Vertical
*	9908.0	35.0	15.3	50.3	68.2	-17.9	Peak	Vertical
	11497.5	31.9	19.3	51.2	54.0	-2.8	Peak	Vertical
	12483.5	31.8	18.5	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	58
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8735.0	34.4	13.9	48.3	68.2	-19.9	Peak	Horizontal
*	10095.0	34.0	15.7	49.7	68.2	-18.5	Peak	Horizontal
	11234.0	32.5	18.8	51.3	54.0	-2.7	Peak	Horizontal
	12126.5	33.3	18.9	52.2	54.0	-1.8	Peak	Horizontal
*	8854.0	33.5	14.0	47.5	68.2	-20.7	Peak	Vertical
*	10095.0	33.7	15.7	49.4	68.2	-18.8	Peak	Vertical
	11123.5	33.0	18.6	51.6	54.0	-2.4	Peak	Vertical
	12220.0	32.2	18.7	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	106	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8794.5	35.7	13.9	49.6	68.2	-18.6	Peak	Horizontal
*	9993.0	34.3	15.4	49.7	68.2	-18.5	Peak	Horizontal
	11242.5	32.0	18.8	50.8	54.0	-3.2	Peak	Horizontal
	12330.5	32.2	18.5	50.7	54.0	-3.3	Peak	Horizontal
*	8837.0	33.2	14.0	47.2	68.2	-21.0	Peak	Vertical
*	9899.5	34.8	15.4	50.2	68.2	-18.0	Peak	Vertical
	11123.5	33.0	18.6	51.6	54.0	-2.4	Peak	Vertical
	12109.5	32.4	18.9	51.3	54.0	-2.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	122	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ü	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	33.8	14.0	47.8	68.2	-20.4	Peak	Horizontal
*	9950.5	34.8	15.3	50.1	68.2	-18.1	Peak	Horizontal
	11327.5	32.6	18.9	51.5	54.0	-2.5	Peak	Horizontal
	12220.0	32.7	18.7	51.4	54.0	-2.6	Peak	Horizontal
*	8811.5	35.0	14.0	49.0	68.2	-19.2	Peak	Vertical
*	9857.0	34.7	16.2	50.9	68.2	-17.3	Peak	Vertical
	11276.5	32.5	18.8	51.3	54.0	-2.7	Peak	Vertical
	12220.0	32.5	18.7	51.2	54.0	-2.8	Peak	Vertical

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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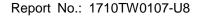
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	138	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	34.6	13.9	48.5	68.2	-19.7	Peak	Horizontal
*	9857.0	34.1	16.2	50.3	68.2	-17.9	Peak	Horizontal
	10987.5	32.7	18.5	51.2	54.0	-2.8	Peak	Horizontal
	11939.5	32.0	18.6	50.6	54.0	-3.4	Peak	Horizontal
*	8854.0	35.6	14.0	49.6	68.2	-18.6	Peak	Vertical
*	10035.5	34.8	15.5	50.3	68.2	-17.9	Peak	Vertical
	11174.5	33.0	18.7	51.7	54.0	-2.3	Peak	Vertical
	12203.0	32.4	18.8	51.2	54.0	-2.8	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	155	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8667.0	35.9	13.6	49.5	68.2	-18.7	Peak	Horizontal
*	10052.5	33.8	15.5	49.3	68.2	-18.9	Peak	Horizontal
	11327.5	33.5	18.9	52.4	54.0	-1.6	Peak	Horizontal
	12109.5	33.2	18.9	52.1	54.0	-1.9	Peak	Horizontal
*	8769.0	32.8	13.9	46.7	68.2	-21.5	Peak	Vertical
*	9814.5	34.0	15.4	49.4	68.2	-18.8	Peak	Vertical
	11234.0	32.8	18.8	51.6	54.0	-2.4	Peak	Vertical
	12118.0	32.0	18.9	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	42
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	33.8	13.9	47.7	68.2	-20.5	Peak	Horizontal
*	10035.5	34.9	15.5	50.4	68.2	-17.8	Peak	Horizontal
	11081.0	33.2	18.6	51.8	54.0	-2.2	Peak	Horizontal
	12075.5	32.7	18.9	51.6	54.0	-2.4	Peak	Horizontal
*	8820.0	34.6	14.0	48.6	68.2	-19.6	Peak	Vertical
*	9823.0	34.5	15.6	50.1	68.2	-18.1	Peak	Vertical
	10979.0	34.6	18.5	53.1	54.0	-0.9	Peak	Vertical
	11905.5	32.4	18.6	51.0	54.0	-3.0	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	58	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8794.5	34.4	13.9	48.3	68.2	-19.9	Peak	Horizontal
*	9874.0	34.6	15.8	50.4	68.2	-17.8	Peak	Horizontal
	10911.0	33.8	18.4	52.2	54.0	-1.8	Peak	Horizontal
	12271.0	33.5	18.6	52.1	54.0	-1.9	Peak	Horizontal
*	8811.5	33.2	14.0	47.2	68.2	-21.0	Peak	Vertical
*	10103.5	33.7	15.7	49.4	68.2	-18.8	Peak	Vertical
	10885.5	33.5	18.3	51.8	54.0	-2.2	Peak	Vertical
	12058.5	33.6	18.8	52.4	54.0	-1.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	106
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	34.4	14.0	48.4	68.2	-19.8	Peak	Horizontal
*	9814.5	34.7	15.4	50.1	68.2	-18.1	Peak	Horizontal
	10911.0	33.1	18.4	51.5	54.0	-2.5	Peak	Horizontal
	12339.0	31.9	18.5	50.4	54.0	-3.6	Peak	Horizontal
*	8845.5	34.6	14.0	48.6	68.2	-19.6	Peak	Vertical
*	9959.0	34.2	15.3	49.5	68.2	-18.7	Peak	Vertical
	11157.5	32.0	18.7	50.7	54.0	-3.3	Peak	Vertical
	12364.5	31.9	18.4	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	122	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	-	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	34.9	14.0	48.9	68.2	-19.3	Peak	Horizontal
*	9678.5	34.0	14.6	48.6	68.2	-19.6	Peak	Horizontal
	10902.5	32.6	18.3	50.9	54.0	-3.1	Peak	Horizontal
	12245.5	32.3	18.7	51.0	54.0	-3.0	Peak	Horizontal
*	8862.5	34.9	14.0	48.9	68.2	-19.3	Peak	Vertical
*	10069.5	33.8	15.6	49.4	68.2	-18.8	Peak	Vertical
	11327.5	32.1	18.9	51.0	54.0	-3.0	Peak	Vertical
	12500.5	31.7	18.5	50.2	54.0	-3.8	Peak	Vertical

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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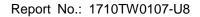
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	138
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	_

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8905.0	35.4	14.0	49.4	68.2	-18.8	Peak	Horizontal
*	9857.0	34.1	16.2	50.3	68.2	-17.9	Peak	Horizontal
	11123.5	32.6	18.6	51.2	54.0	-2.8	Peak	Horizontal
	12254.0	32.0	18.6	50.6	54.0	-3.4	Peak	Horizontal
*	8692.5	34.3	13.7	48.0	68.2	-20.2	Peak	Vertical
*	9857.0	33.9	16.2	50.1	68.2	-18.1	Peak	Vertical
	11021.5	33.0	18.5	51.5	54.0	-2.5	Peak	Vertical
	12279.5	32.6	18.6	51.2	54.0	-2.8	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	155
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8913.5	32.7	14.0	46.7	68.2	-21.5	Peak	Horizontal
*	9814.5	34.0	15.4	49.4	68.2	-18.8	Peak	Horizontal
	10979.0	33.1	18.5	51.6	54.0	-2.4	Peak	Horizontal
	12007.5	32.5	18.7	51.2	54.0	-2.8	Peak	Horizontal
*	8854.0	34.1	14.0	48.1	68.2	-20.1	Peak	Vertical
*	10001.5	33.8	15.4	49.2	68.2	-19.0	Peak	Vertical
	11021.5	32.5	18.5	51.0	54.0	-3.0	Peak	Vertical
	12058.5	31.8	18.8	50.6	54.0	-3.4	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	42
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8854.0	34.1	14.0	48.1	68.2	-20.1	Peak	Horizontal
*	10001.5	33.8	15.4	49.2	68.2	-19.0	Peak	Horizontal
	11021.5	32.5	18.5	51.0	54.0	-3.0	Peak	Horizontal
	12058.5	31.8	18.8	50.6	54.0	-3.4	Peak	Horizontal
*	8769.0	33.7	13.9	47.6	68.2	-20.6	Peak	Vertical
*	10035.5	34.1	15.5	49.6	68.2	-18.6	Peak	Vertical
	11599.5	31.5	19.4	50.9	54.0	-3.1	Peak	Vertical
	12500.5	33.2	18.5	51.7	54.0	-2.3	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	58
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	34.4	14.0	48.4	68.2	-19.8	Peak	Horizontal
*	9772.0	34.2	14.9	49.1	68.2	-19.1	Peak	Horizontal
	11021.5	32.5	18.5	51.0	54.0	-3.0	Peak	Horizontal
	12007.5	32.0	18.7	50.7	54.0	-3.3	Peak	Horizontal
*	8692.5	33.9	13.7	47.6	68.2	-20.6	Peak	Vertical
*	9967.5	34.5	15.3	49.8	68.2	-18.4	Peak	Vertical
	11174.5	33.2	18.7	51.9	54.0	-2.1	Peak	Vertical
	12058.5	31.6	18.8	50.4	54.0	-3.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	106
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8794.5	32.8	13.9	46.7	68.2	-21.5	Peak	Horizontal
*	10205.5	33.8	16.2	50.0	68.2	-18.2	Peak	Horizontal
	10953.5	32.8	18.4	51.2	54.0	-2.8	Peak	Horizontal
	12177.5	32.2	18.8	51.0	54.0	-3.0	Peak	Horizontal
*	8658.5	34.3	13.6	47.9	68.2	-20.3	Peak	Vertical
*	10103.5	33.8	15.7	49.5	68.2	-18.7	Peak	Vertical
	11140.5	32.0	18.7	50.7	54.0	-3.3	Peak	Vertical
	11854.5	31.4	18.7	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	122
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	35.2	14.0	49.2	68.2	-19.0	Peak	Horizontal
*	10129.0	34.4	15.9	50.3	68.2	-17.9	Peak	Horizontal
	11191.5	32.8	18.7	51.5	54.0	-2.5	Peak	Horizontal
	12007.5	32.7	18.7	51.4	54.0	-2.6	Peak	Horizontal
*	8769.0	34.1	13.9	48.0	68.2	-20.2	Peak	Vertical
*	9678.5	33.8	14.6	48.4	68.2	-19.8	Peak	Vertical
	11472.0	31.7	19.3	51.0	54.0	-3.0	Peak	Vertical
	12398.5	31.9	18.4	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	138
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8735.0	33.5	13.9	47.4	68.2	-20.8	Peak	Horizontal
*	9729.5	34.0	14.7	48.7	68.2	-19.5	Peak	Horizontal
	10970.5	33.2	18.4	51.6	54.0	-2.4	Peak	Horizontal
	11812.0	32.2	18.7	50.9	54.0	-3.1	Peak	Horizontal
*	8828.5	33.5	14.0	47.5	68.2	-20.7	Peak	Vertical
*	10129.0	33.9	15.9	49.8	68.2	-18.4	Peak	Vertical
	11183.0	33.1	18.7	51.8	54.0	-2.2	Peak	Vertical
	12143.5	31.6	18.9	50.5	54.0	-3.5	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)		155
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8735.0	33.5	13.9	47.4	68.2	-20.8	Peak	Horizontal
*	10052.5	33.8	15.5	49.3	68.2	-18.9	Peak	Horizontal
	11225.5	31.7	18.8	50.5	54.0	-3.5	Peak	Horizontal
	12058.5	31.6	18.8	50.4	54.0	-3.6	Peak	Horizontal
*	8692.5	33.3	13.7	47.0	68.2	-21.2	Peak	Vertical
*	10129.0	33.9	15.9	49.8	68.2	-18.4	Peak	Vertical
*	11217.0	32.0	18.8	50.8	54.0	-3.2	Peak	Vertical
*	12296.5	31.8	18.6	50.4	54.0	-3.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 Contiguous - Ant 0 + 1 + 2 + 3 (CDD Mode)		42 + 58
Remark:	 Average measurement was not perlimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	33.5	13.9	47.4	68.2	-20.8	Peak	Horizontal
*	9865.5	33.4	16.0	49.4	68.2	-18.8	Peak	Horizontal
	11217.0	32.2	18.8	51.0	54.0	-3.0	Peak	Horizontal
	12143.5	32.0	18.9	50.9	54.0	-3.1	Peak	Horizontal
*	8769.0	33.4	13.9	47.3	68.2	-20.9	Peak	Vertical
*	10010.0	34.0	15.4	49.4	68.2	-18.8	Peak	Vertical
	11319.0	32.6	18.9	51.5	54.0	-2.5	Peak	Vertical
	12169.0	31.9	18.8	50.7	54.0	-3.3	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 Contiguous - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	106 + 122
Remark:	 Average measurement was not perlimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	34.3	14.0	48.3	68.2	-19.9	Peak	Horizontal
*	9882.5	36.9	15.6	52.5	68.2	-15.7	Peak	Horizontal
	11004.5	34.6	18.5	53.1	54.0	-0.9	Peak	Horizontal
	12135.0	33.0	18.9	51.9	54.0	-2.1	Peak	Horizontal
*	8803.0	34.9	14.0	48.9	68.2	-19.3	Peak	Vertical
*	9984.5	34.5	15.4	49.9	68.2	-18.3	Peak	Vertical
	11072.5	33.4	18.6	52.0	54.0	-2.0	Peak	Vertical
	12279.5	33.4	18.6	52.0	54.0	-2.0	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	36
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8752.0	32.7	13.9	46.6	68.2	-21.6	Peak	Horizontal
*	10282.0	33.5	16.5	50.0	68.2	-18.2	Peak	Horizontal
	11455.0	31.9	19.2	51.1	54.0	-2.9	Peak	Horizontal
	12407.0	31.9	18.4	50.3	54.0	-3.7	Peak	Horizontal
*	8769.0	33.2	13.9	47.1	68.2	-21.1	Peak	Vertical
*	9661.5	34.0	14.5	48.5	68.2	-19.7	Peak	Vertical
	10928.0	33.8	18.4	52.2	54.0	-1.8	Peak	Vertical
	12177.5	32.1	18.8	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	44
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8888.0	34.2	14.0	48.2	68.2	-20.0	Peak	Horizontal
*	9551.0	33.4	14.4	47.8	68.2	-20.4	Peak	Horizontal
	11123.5	33.0	18.6	51.6	54.0	-2.4	Peak	Horizontal
	12177.5	32.2	18.8	51.0	54.0	-3.0	Peak	Horizontal
*	8777.5	32.9	13.9	46.8	68.2	-21.4	Peak	Vertical
*	10027.0	33.7	15.4	49.1	68.2	-19.1	Peak	Vertical
	11200.0	31.7	18.7	50.4	54.0	-3.6	Peak	Vertical
	12033.0	31.9	18.8	50.7	54.0	-3.3	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	48
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	32.9	14.0	46.9	68.2	-21.3	Peak	Horizontal
*	9772.0	35.4	14.9	50.3	68.2	-17.9	Peak	Horizontal
	11234.0	31.8	18.8	50.6	54.0	-3.4	Peak	Horizontal
	12339.0	32.0	18.5	50.5	54.0	-3.5	Peak	Horizontal
*	8769.0	33.6	13.9	47.5	68.2	-20.7	Peak	Vertical
*	9721.0	34.7	14.7	49.4	68.2	-18.8	Peak	Vertical
	10970.5	33.3	18.4	51.7	54.0	-2.3	Peak	Vertical
	12152.0	31.7	18.9	50.6	54.0	-3.4	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	52
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	35.3	14.0	49.3	68.2	-18.9	Peak	Horizontal
*	10095.0	33.9	15.7	49.6	68.2	-18.6	Peak	Horizontal
	10877.0	33.9	18.2	52.1	54.0	-1.9	Peak	Horizontal
	12109.5	31.6	18.9	50.5	54.0	-3.5	Peak	Horizontal
*	8616.0	35.2	13.5	48.7	68.2	-19.5	Peak	Vertical
*	10112.0	33.7	15.8	49.5	68.2	-18.7	Peak	Vertical
	11370.0	31.8	19.0	50.8	54.0	-3.2	Peak	Vertical
	12551.5	32.4	18.6	51.0	54.0	-3.0	Peak	Vertical

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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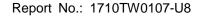
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	60
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8777.5	34.9	13.9	48.8	68.2	-19.4	Peak	Horizontal
*	9806.0	33.8	15.2	49.0	68.2	-19.2	Peak	Horizontal
	10894.0	33.1	18.3	51.4	54.0	-2.6	Peak	Horizontal
	11693.0	32.5	19.2	51.7	54.0	-2.3	Peak	Horizontal
*	8701.0	34.8	13.8	48.6	68.2	-19.6	Peak	Vertical
*	10078.0	34.0	15.6	49.6	68.2	-18.6	Peak	Vertical
	11021.5	33.1	18.5	51.6	54.0	-2.4	Peak	Vertical
	12177.5	32.1	18.8	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	64
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	· ·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8888.0	33.8	14.0	47.8	68.2	-20.4	Peak	Horizontal
*	10001.5	34.7	15.4	50.1	68.2	-18.1	Peak	Horizontal
	11268.0	31.9	18.8	50.7	54.0	-3.3	Peak	Horizontal
	12322.0	31.9	18.5	50.4	54.0	-3.6	Peak	Horizontal
*	8820.0	33.3	14.0	47.3	68.2	-20.9	Peak	Vertical
*	10035.5	33.9	15.5	49.4	68.2	-18.8	Peak	Vertical
	11251.0	32.0	18.8	50.8	54.0	-3.2	Peak	Vertical
	12475.0	31.6	18.5	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	100
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8845.5	34.9	14.0	48.9	68.2	-19.3	Peak	Horizontal
*	10018.5	33.8	15.4	49.2	68.2	-19.0	Peak	Horizontal
	11191.5	32.2	18.7	50.9	54.0	-3.1	Peak	Horizontal
	12407.0	32.0	18.4	50.4	54.0	-3.6	Peak	Horizontal
*	8794.5	33.0	13.9	46.9	68.2	-21.3	Peak	Vertical
*	10001.5	34.1	15.4	49.5	68.2	-18.7	Peak	Vertical
	11276.5	32.2	18.8	51.0	54.0	-3.0	Peak	Vertical
	12109.5	32.6	18.9	51.5	54.0	-2.5	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	120
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8981.5	32.9	14.1	47.0	68.2	-21.2	Peak	Horizontal
*	10044.0	34.2	15.5	49.7	68.2	-18.5	Peak	Horizontal
	11268.0	32.2	18.8	51.0	54.0	-3.0	Peak	Horizontal
	12339.0	32.1	18.5	50.6	54.0	-3.4	Peak	Horizontal
*	8786.0	33.0	13.9	46.9	68.2	-21.3	Peak	Vertical
*	9772.0	34.9	14.9	49.8	68.2	-18.4	Peak	Vertical
	11208.5	32.0	18.8	50.8	54.0	-3.2	Peak	Vertical
	11897.0	32.6	18.6	51.2	54.0	-2.8	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	140
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8820.0	33.5	14.0	47.5	68.2	-20.7	Peak	Horizontal
*	9729.5	34.1	14.7	48.8	68.2	-19.4	Peak	Horizontal
	11217.0	31.9	18.8	50.7	54.0	-3.3	Peak	Horizontal
	11846.0	32.1	18.7	50.8	54.0	-3.2	Peak	Horizontal
*	8735.0	33.0	13.9	46.9	68.2	-21.3	Peak	Vertical
*	10214.0	33.2	16.3	49.5	68.2	-18.7	Peak	Vertical
	11242.5	32.2	18.8	51.0	54.0	-3.0	Peak	Vertical
	12441.0	31.9	18.4	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	144
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	· ·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	34.3	14.0	48.3	68.2	-19.9	Peak	Horizontal
*	10061.0	33.8	15.6	49.4	68.2	-18.8	Peak	Horizontal
	11208.5	32.9	18.8	51.7	54.0	-2.3	Peak	Horizontal
	12432.5	32.0	18.4	50.4	54.0	-3.6	Peak	Horizontal
*	8616.0	36.3	13.5	49.8	68.2	-18.4	Peak	Vertical
*	10078.0	34.2	15.6	49.8	68.2	-18.4	Peak	Vertical
	11531.5	30.8	19.4	50.2	54.0	-3.8	Peak	Vertical
	12220.0	33.6	18.7	52.3	54.0	-1.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	149	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8854.0	35.2	14.0	49.2	68.2	-19.0	Peak	Horizontal
*	9891.0	34.3	15.5	49.8	68.2	-18.4	Peak	Horizontal
	11455.0	31.9	19.2	51.1	54.0	-2.9	Peak	Horizontal
	12381.5	32.5	18.4	50.9	54.0	-3.1	Peak	Horizontal
*	8769.0	33.4	13.9	47.3	68.2	-20.9	Peak	Vertical
*	9899.5	35.2	15.4	50.6	68.2	-17.6	Peak	Vertical
	11072.5	33.1	18.6	51.7	54.0	-2.3	Peak	Vertical
	11914.0	33.0	18.6	51.6	54.0	-2.4	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	157	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	32.7	14.0	46.7	68.2	-21.5	Peak	Horizontal
*	10239.5	33.3	16.4	49.7	68.2	-18.5	Peak	Horizontal
	11021.5	33.3	18.5	51.8	54.0	-2.2	Peak	Horizontal
	11999.0	31.7	18.7	50.4	54.0	-3.6	Peak	Horizontal
*	8888.0	34.2	14.0	48.2	68.2	-20.0	Peak	Vertical
*	10044.0	34.2	15.5	49.7	68.2	-18.5	Peak	Vertical
	11225.5	31.9	18.8	50.7	54.0	-3.3	Peak	Vertical
	12220.0	33.4	18.7	52.1	54.0	-1.9	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	165
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8888.0	33.5	14.0	47.5	68.2	-20.7	Peak	Horizontal
*	10103.5	33.9	15.7	49.6	68.2	-18.6	Peak	Horizontal
	11191.5	32.3	18.7	51.0	54.0	-3.0	Peak	Horizontal
	12373.0	32.0	18.4	50.4	54.0	-3.6	Peak	Horizontal
*	8888.0	33.5	14.0	47.5	68.2	-20.7	Peak	Vertical
*	10103.5	33.9	15.7	49.6	68.2	-18.6	Peak	Vertical
	11191.5	32.3	18.7	51.0	54.0	-3.0	Peak	Vertical
	12373.0	32.0	18.4	50.4	54.0	-3.6	Peak	Vertical

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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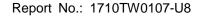
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	38
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8752.0	32.9	13.9	46.8	68.2	-21.4	Peak	Horizontal
*	9721.0	34.4	14.7	49.1	68.2	-19.1	Peak	Horizontal
	11293.5	32.1	18.9	51.0	54.0	-3.0	Peak	Horizontal
	12169.0	31.9	18.8	50.7	54.0	-3.3	Peak	Horizontal
*	8888.0	34.5	14.0	48.5	68.2	-19.7	Peak	Vertical
*	10103.5	33.6	15.7	49.3	68.2	-18.9	Peak	Vertical
	10970.5	33.2	18.4	51.6	54.0	-2.4	Peak	Vertical
	11965.0	31.5	18.6	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	46
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	34.0	14.0	48.0	68.2	-20.2	Peak	Horizontal
*	9721.0	34.2	14.7	48.9	68.2	-19.3	Peak	Horizontal
	11276.5	32.0	18.8	50.8	54.0	-3.2	Peak	Horizontal
	12407.0	31.9	18.4	50.3	54.0	-3.7	Peak	Horizontal
*	8735.0	34.8	13.9	48.7	68.2	-19.5	Peak	Vertical
*	10095.0	33.9	15.7	49.6	68.2	-18.6	Peak	Vertical
	11276.5	32.0	18.8	50.8	54.0	-3.2	Peak	Vertical
	12424.0	31.9	18.4	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	54
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	34.0	14.0	48.0	68.2	-20.2	Peak	Horizontal
*	9763.5	33.9	14.9	48.8	68.2	-19.4	Peak	Horizontal
	11276.5	31.3	18.8	50.1	54.0	-3.9	Peak	Horizontal
	11990.5	31.5	18.7	50.2	54.0	-3.8	Peak	Horizontal
*	8811.5	33.3	14.0	47.3	68.2	-20.9	Peak	Vertical
*	10061.0	33.5	15.6	49.1	68.2	-19.1	Peak	Vertical
	11276.5	31.3	18.8	50.1	54.0	-3.9	Peak	Vertical
	12381.5	31.2	18.4	49.6	54.0	-4.4	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	62
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8854.0	33.7	14.0	47.7	68.2	-20.5	Peak	Horizontal
*	10061.0	33.9	15.6	49.5	68.2	-18.7	Peak	Horizontal
	11072.5	32.8	18.6	51.4	54.0	-2.6	Peak	Horizontal
	12381.5	31.9	18.4	50.3	54.0	-3.7	Peak	Horizontal
*	8879.5	33.2	14.0	47.2	68.2	-21.0	Peak	Vertical
*	10052.5	33.9	15.5	49.4	68.2	-18.8	Peak	Vertical
	11208.5	31.8	18.8	50.6	54.0	-3.4	Peak	Vertical
	12109.5	32.7	18.9	51.6	54.0	-2.4	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	102
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8786.0	34.3	13.9	48.2	68.2	-20.0	Peak	Horizontal
*	9806.0	33.9	15.2	49.1	68.2	-19.1	Peak	Horizontal
	11293.5	32.0	18.9	50.9	54.0	-3.1	Peak	Horizontal
	12186.0	31.5	18.8	50.3	54.0	-3.7	Peak	Horizontal
*	8760.5	32.6	13.9	46.5	68.2	-21.7	Peak	Vertical
*	10044.0	33.8	15.5	49.3	68.2	-18.9	Peak	Vertical
	11242.5	31.8	18.8	50.6	54.0	-3.4	Peak	Vertical
	12500.5	31.7	18.5	50.2	54.0	-3.8	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	118	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8743.5	34.3	13.9	48.2	68.2	-20.0	Peak	Horizontal
*	9644.5	33.6	14.4	48.0	68.2	-20.2	Peak	Horizontal
	10928.0	32.7	18.4	51.1	54.0	-2.9	Peak	Horizontal
	11939.5	31.7	18.6	50.3	54.0	-3.7	Peak	Horizontal
*	8854.0	34.6	14.0	48.6	68.2	-19.6	Peak	Vertical
*	9959.0	34.4	15.3	49.7	68.2	-18.5	Peak	Vertical
	10970.5	34.0	18.4	52.4	54.0	-1.6	Peak	Vertical
	11948.0	32.5	18.6	51.1	54.0	-2.9	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	134	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	33.4	14.0	47.4	68.2	-20.8	Peak	Horizontal
*	9721.0	34.1	14.7	48.8	68.2	-19.4	Peak	Horizontal
	11200.0	32.1	18.7	50.8	54.0	-3.2	Peak	Horizontal
	12330.5	31.9	18.5	50.4	54.0	-3.6	Peak	Horizontal
*	8854.0	33.3	14.0	47.3	68.2	-20.9	Peak	Vertical
*	9874.0	33.9	15.8	49.7	68.2	-18.5	Peak	Vertical
	11200.0	31.9	18.7	50.6	54.0	-3.4	Peak	Vertical
	12373.0	31.6	18.4	50.0	54.0	-4.0	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	142
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	33.9	14.0	47.9	68.2	-20.3	Peak	Horizontal
*	10248.0	33.0	16.4	49.4	68.2	-18.8	Peak	Horizontal
	11123.5	33.3	18.6	51.9	54.0	-2.1	Peak	Horizontal
	12347.5	31.9	18.4	50.3	54.0	-3.7	Peak	Horizontal
*	8888.0	34.9	14.0	48.9	68.2	-19.3	Peak	Vertical
*	10129.0	33.4	15.9	49.3	68.2	-18.9	Peak	Vertical
	11293.5	31.7	18.9	50.6	54.0	-3.4	Peak	Vertical
	11905.5	32.3	18.6	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	151
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8658.5	33.5	13.6	47.1	68.2	-21.1	Peak	Horizontal
*	10239.5	33.3	16.4	49.7	68.2	-18.5	Peak	Horizontal
	10970.5	32.8	18.4	51.2	54.0	-2.8	Peak	Horizontal
	11846.0	31.8	18.7	50.5	54.0	-3.5	Peak	Horizontal
*	8811.5	33.7	14.0	47.7	68.2	-20.5	Peak	Vertical
*	10044.0	33.9	15.5	49.4	68.2	-18.8	Peak	Vertical
	11208.5	32.3	18.8	51.1	54.0	-2.9	Peak	Vertical
	12330.5	31.6	18.5	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	159
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8837.0	34.9	14.0	48.9	68.2	-19.3	Peak	Horizontal
*	10061.0	34.0	15.6	49.6	68.2	-18.6	Peak	Horizontal
	11072.5	34.6	18.6	53.2	54.0	-0.8	Peak	Horizontal
	11948.0	34.6	18.6	53.2	54.0	-0.8	Peak	Horizontal
*	8735.0	33.1	13.9	47.0	68.2	-21.2	Peak	Vertical
*	9857.0	34.5	16.2	50.7	68.2	-17.5	Peak	Vertical
	11123.5	32.3	18.6	50.9	54.0	-3.1	Peak	Vertical
	12407.0	31.7	18.4	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	42
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8777.5	32.5	13.9	46.4	68.2	-21.8	Peak	Horizontal
*	9950.5	34.0	15.3	49.3	68.2	-18.9	Peak	Horizontal
	10928.0	33.2	18.4	51.6	54.0	-2.4	Peak	Horizontal
	11846.0	31.6	18.7	50.3	54.0	-3.7	Peak	Horizontal
*	8743.5	32.7	13.9	46.6	68.2	-21.6	Peak	Vertical
*	10069.5	33.8	15.6	49.4	68.2	-18.8	Peak	Vertical
	11336.0	31.8	19.0	50.8	54.0	-3.2	Peak	Vertical
	12058.5	31.8	18.8	50.6	54.0	-3.4	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	58
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	33.3	13.9	47.2	68.2	-21.0	Peak	Horizontal
*	9959.0	34.1	15.3	49.4	68.2	-18.8	Peak	Horizontal
	11259.5	32.1	18.8	50.9	54.0	-3.1	Peak	Horizontal
	12135.0	31.8	18.9	50.7	54.0	-3.3	Peak	Horizontal
*	8735.0	33.9	13.9	47.8	68.2	-20.4	Peak	Vertical
*	10095.0	33.7	15.7	49.4	68.2	-18.8	Peak	Vertical
	11055.5	32.4	18.5	50.9	54.0	-3.1	Peak	Vertical
	12245.5	31.7	18.7	50.4	54.0	-3.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	106
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8658.5	34.4	13.6	48.0	68.2	-20.2	Peak	Horizontal
*	9925.0	34.4	15.3	49.7	68.2	-18.5	Peak	Horizontal
	11217.0	32.0	18.8	50.8	54.0	-3.2	Peak	Horizontal
	12058.5	31.5	18.8	50.3	54.0	-3.7	Peak	Horizontal
*	8888.0	34.0	14.0	48.0	68.2	-20.2	Peak	Vertical
*	9729.5	33.7	14.7	48.4	68.2	-19.8	Peak	Vertical
	10996.0	32.5	18.5	51.0	54.0	-3.0	Peak	Vertical
	11982.0	31.6	18.7	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	122
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8803.0	35.0	14.0	49.0	68.2	-19.2	Peak	Horizontal
*	10061.0	33.7	15.6	49.3	68.2	-18.9	Peak	Horizontal
	11259.5	31.6	18.8	50.4	54.0	-3.6	Peak	Horizontal
	12381.5	32.8	18.4	51.2	54.0	-2.8	Peak	Horizontal
*	8769.0	33.9	13.9	47.8	68.2	-20.4	Peak	Vertical
*	10231.0	32.8	16.4	49.2	68.2	-19.0	Peak	Vertical
	11200.0	32.2	18.7	50.9	54.0	-3.1	Peak	Vertical
	12356.0	31.6	18.4	50.0	54.0	-4.0	Peak	Vertical

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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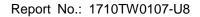
Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	138
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	34.6	13.9	48.5	68.2	-19.7	Peak	Horizontal
*	9925.0	34.4	15.3	49.7	68.2	-18.5	Peak	Horizontal
	11132.0	32.5	18.6	51.1	54.0	-2.9	Peak	Horizontal
	12237.0	31.8	18.7	50.5	54.0	-3.5	Peak	Horizontal
*	8820.0	34.5	14.0	48.5	68.2	-19.7	Peak	Vertical
*	10035.5	34.8	15.5	50.3	68.2	-17.9	Peak	Vertical
	11047.0	33.0	18.5	51.5	54.0	-2.5	Peak	Vertical
	12024.5	32.5	18.8	51.3	54.0	-2.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	155
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8658.5	34.1	13.6	47.7	68.2	-20.5	Peak	Horizontal
*	10052.5	33.8	15.5	49.3	68.2	-18.9	Peak	Horizontal
	11021.5	34.1	18.5	52.6	54.0	-1.4	Peak	Horizontal
	12381.5	32.3	18.4	50.7	54.0	-3.3	Peak	Horizontal
*	8913.5	32.9	14.0	46.9	68.2	-21.3	Peak	Vertical
*	10027.0	34.3	15.4	49.7	68.2	-18.5	Peak	Vertical
	11251.0	31.9	18.8	50.7	54.0	-3.3	Peak	Vertical
	12517.5	31.8	18.6	50.4	54.0	-3.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 0 + 1 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	42			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lo	wer 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)				
*	8769.0	33.8	13.9	47.7	68.2	-20.5	Peak	Horizontal
*	9908.0	34.5	15.3	49.8	68.2	-18.4	Peak	Horizontal
	11242.5	31.9	18.8	50.7	54.0	-3.3	Peak	Horizontal
	12075.5	32.7	18.9	51.6	54.0	-2.4	Peak	Horizontal
*	8769.0	33.0	13.9	46.9	68.2	-21.3	Peak	Vertical
*	10069.5	34.1	15.6	49.7	68.2	-18.5	Peak	Vertical
	11013.0	32.4	18.5	50.9	54.0	-3.1	Peak	Vertical
	11897.0	31.8	18.6	50.4	54.0	-3.6	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 0 + 1 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	58			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lo	wer 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)				
*	8854.0	35.3	14.0	49.3	68.2	-18.9	Peak	Horizontal
*	10265.0	34.5	16.5	51.0	68.2	-17.2	Peak	Horizontal
	11072.5	34.6	18.6	53.2	54.0	-0.8	Peak	Horizontal
	12050.0	32.9	18.8	51.7	54.0	-2.3	Peak	Horizontal
*	8692.5	34.8	13.7	48.5	68.2	-19.7	Peak	Vertical
*	9908.0	34.7	15.3	50.0	68.2	-18.2	Peak	Vertical
	11123.5	32.7	18.6	51.3	54.0	-2.7	Peak	Vertical
	12305.0	31.5	18.5	50.0	54.0	-4.0	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 0 + 1 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	106			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8769.0	33.3	13.9	47.2	68.2	-21.0	Peak	Horizontal
*	9857.0	34.8	16.2	51.0	68.2	-17.2	Peak	Horizontal
	11149.0	32.3	18.7	51.0	54.0	-3.0	Peak	Horizontal
	11931.0	32.2	18.6	50.8	54.0	-3.2	Peak	Horizontal
*	8803.0	33.8	14.0	47.8	68.2	-20.4	Peak	Vertical
*	10129.0	35.2	15.9	51.1	68.2	-17.1	Peak	Vertical
	11429.5	32.6	19.2	51.8	54.0	-2.2	Peak	Vertical
	12500.5	32.2	18.5	50.7	54.0	-3.3	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 0 + 1 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	122			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8888.0	33.7	14.0	47.7	68.2	-20.5	Peak	Horizontal
*	10069.5	33.8	15.6	49.4	68.2	-18.8	Peak	Horizontal
	11574.0	30.9	19.5	50.4	54.0	-3.6	Peak	Horizontal
	12424.0	31.5	18.4	49.9	54.0	-4.1	Peak	Horizontal
*	8854.0	34.2	14.0	48.2	68.2	-20.0	Peak	Vertical
*	10069.5	33.8	15.6	49.4	68.2	-18.8	Peak	Vertical
	11846.0	31.3	18.7	50.0	54.0	-4.0	Peak	Vertical
	12500.5	31.7	18.5	50.2	54.0	-3.8	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2018/02/28				
	802.11ac-VHT80+80 - Ant 0 + 1 /						
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	138				
	(Beam-Forming Mode)						
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8616.0	34.3	13.5	47.8	68.2	-20.4	Peak	Horizontal
*	9712.5	33.8	14.7	48.5	68.2	-19.7	Peak	Horizontal
	11251.0	32.0	18.8	50.8	54.0	-3.2	Peak	Horizontal
	12305.0	32.1	18.5	50.6	54.0	-3.4	Peak	Horizontal
*	8854.0	34.0	14.0	48.0	68.2	-20.2	Peak	Vertical
*	10018.5	33.6	15.4	49.0	68.2	-19.2	Peak	Vertical
	11336.0	31.4	19.0	50.4	54.0	-3.6	Peak	Vertical
	12271.0	32.1	18.6	50.7	54.0	-3.3	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 0 + 1 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	155			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	erformed if peak level lov	wer 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)	(3.2)	(dBµV/m)	(4.2 4.7711)	(0.2)		
*	8735.0	34.1	13.9	48.0	68.2	-20.2	Peak	Horizontal
*	9772.0	34.1	14.9	49.0	68.2	-19.2	Peak	Horizontal
	11276.5	32.8	18.8	51.6	54.0	-2.4	Peak	Horizontal
	12449.5	31.5	18.4	49.9	54.0	-4.1	Peak	Horizontal
*	8905.0	33.2	14.0	47.2	68.2	-21.0	Peak	Vertical
*	10001.5	33.8	15.4	49.2	68.2	-19.0	Peak	Vertical
	11021.5	32.5	18.5	51.0	54.0	-3.0	Peak	Vertical
	11948.0	33.2	18.6	51.8	54.0	-2.2	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 2 + 3 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	42			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8718.0	34.6	13.8	48.4	68.2	-19.8	Peak	Horizontal
*	10095.0	33.3	15.7	49.0	68.2	-19.2	Peak	Horizontal
	11404.0	31.6	19.1	50.7	54.0	-3.3	Peak	Horizontal
	12517.5	31.2	18.6	49.8	54.0	-4.2	Peak	Horizontal
*	8837.0	34.9	14.0	48.9	68.2	-19.3	Peak	Vertical
*	10035.5	34.1	15.5	49.6	68.2	-18.6	Peak	Vertical
	11055.5	32.9	18.5	51.4	54.0	-2.6	Peak	Vertical
	12220.0	32.6	18.7	51.3	54.0	-2.7	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 2 + 3 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	58			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	erformed if peak level lov	wer 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)				
*	8769.0	34.9	13.9	48.8	68.2	-19.4	Peak	Horizontal
*	9772.0	34.2	14.9	49.1	68.2	-19.1	Peak	Horizontal
	11242.5	32.2	18.8	51.0	54.0	-3.0	Peak	Horizontal
	12509.0	32.0	18.5	50.5	54.0	-3.5	Peak	Horizontal
*	8811.5	34.4	14.0	48.4	68.2	-19.8	Peak	Vertical
*	10103.5	33.9	15.7	49.6	68.2	-18.6	Peak	Vertical
	10970.5	33.9	18.4	52.3	54.0	-1.7	Peak	Vertical
	12109.5	32.1	18.9	51.0	54.0	-3.0	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 2 + 3 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	106			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8582.0	34.8	13.4	48.2	68.2	-20.0	Peak	Horizontal
*	10205.5	33.8	16.2	50.0	68.2	-18.2	Peak	Horizontal
	11268.0	32.1	18.8	50.9	54.0	-3.1	Peak	Horizontal
	12670.5	31.7	18.7	50.4	54.0	-3.6	Peak	Horizontal
*	8845.5	34.8	14.0	48.8	68.2	-19.4	Peak	Vertical
*	10137.5	33.9	15.9	49.8	68.2	-18.4	Peak	Vertical
	11140.5	32.0	18.7	50.7	54.0	-3.3	Peak	Vertical
	11812.0	31.8	18.7	50.5	54.0	-3.5	Peak	Vertical

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	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 2 + 3 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	122			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8701.0	34.7	13.8	48.5	68.2	-19.7	Peak	Horizontal
*	10044.0	34.3	15.5	49.8	68.2	-18.4	Peak	Horizontal
	11285.0	31.9	18.8	50.7	54.0	-3.3	Peak	Horizontal
	12271.0	32.1	18.6	50.7	54.0	-3.3	Peak	Horizontal
*	8930.5	33.9	14.0	47.9	68.2	-20.3	Peak	Vertical
*	9678.5	33.8	14.6	48.4	68.2	-19.8	Peak	Vertical
	10877.0	35.1	18.2	53.3	54.0	-0.7	Peak	Vertical
	11956.5	32.0	18.6	50.6	54.0	-3.4	Peak	Vertical

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: Q9DAPIN0318 Page Number: 332 of 826



Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 2 + 3 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	138			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8692.5	33.9	13.7	47.6	68.2	-20.6	Peak	Horizontal
*	9729.5	34.0	14.7	48.7	68.2	-19.5	Peak	Horizontal
	11217.0	32.2	18.8	51.0	54.0	-3.0	Peak	Horizontal
	11897.0	32.1	18.6	50.7	54.0	-3.3	Peak	Horizontal
*	8888.0	33.3	14.0	47.3	68.2	-20.9	Peak	Vertical
*	9721.0	33.7	14.7	48.4	68.2	-19.8	Peak	Vertical
	11242.5	31.8	18.8	50.6	54.0	-3.4	Peak	Vertical
	12466.5	31.4	18.5	49.9	54.0	-4.1	Peak	Vertical

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: Q9DAPIN0318 Page Number: 333 of 826



Product	ACCESS POINT - Omni Antenna (AP-ANT-20W)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 2 + 3 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	155			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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
	(1711 12)	(dBµV)	(d <i>D</i>)	(dBµV/m)	(αδμν/π)	(dD)		
*	8735.0	33.5	13.9	47.4	68.2	-20.8	Peak	Horizontal
*	10052.5	33.8	15.5	49.3	68.2	-18.9	Peak	Horizontal
	11225.5	31.7	18.8	50.5	54.0	-3.5	Peak	Horizontal
	12398.5	31.6	18.4	50.0	54.0	-4.0	Peak	Horizontal
*	8811.5	34.8	14.0	48.8	68.2	-19.4	Peak	Vertical
*	9755.0	34.2	14.8	49.0	68.2	-19.2	Peak	Vertical
	11285.0	31.8	18.8	50.6	54.0	-3.4	Peak	Vertical
	12432.5	31.8	18.4	50.2	54.0	-3.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	36
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ŭ

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	7043.5	34.8	11.0	45.8	68.2	-22.4	Peak	Horizontal
*	7842.5	35.0	12.4	47.4	68.2	-20.8	Peak	Horizontal
	10877.0	33.2	18.2	51.4	54.0	-2.6	Peak	Horizontal
	11999.0	32.7	18.7	51.4	54.0	-2.6	Peak	Horizontal
*	7851.0	34.9	12.4	47.3	68.2	-20.9	Peak	Vertical
*	8735.0	32.8	13.9	46.7	68.2	-21.5	Peak	Vertical
	10962.0	31.6	18.4	50.0	54.0	-4.0	Peak	Vertical
	11744.0	30.7	18.9	49.6	54.0	-4.4	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode: 802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)		Test Channel:	44
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8837.0	34.8	14.0	48.8	68.2	-19.4	Peak	Horizontal
*	9797.5	33.6	15.1	48.7	68.2	-19.5	Peak	Horizontal
	10979.0	32.2	18.5	50.7	54.0	-3.3	Peak	Horizontal
	11795.0	31.9	18.8	50.7	54.0	-3.3	Peak	Horizontal
*	8811.5	32.3	14.0	46.3	68.2	-21.9	Peak	Vertical
*	9899.5	33.5	15.4	48.9	68.2	-19.3	Peak	Vertical
	10894.0	32.7	18.3	51.0	54.0	-3.0	Peak	Vertical
	11905.5	31.9	18.6	50.5	54.0	-3.5	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	48
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	7927.5	35.7	12.4	48.1	68.2	-20.1	Peak	Horizontal
*	8735.0	33.2	13.9	47.1	68.2	-21.1	Peak	Horizontal
	11047.0	31.9	18.5	50.4	54.0	-3.6	Peak	Horizontal
	11948.0	31.5	18.6	50.1	54.0	-3.9	Peak	Horizontal
*	8752.0	34.7	13.9	48.6	68.2	-19.6	Peak	Vertical
*	9721.0	33.2	14.7	47.9	68.2	-20.3	Peak	Vertical
	11072.5	32.4	18.6	51.0	54.0	-3.0	Peak	Vertical
	11948.0	32.7	18.6	51.3	54.0	-2.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	52	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	7987.0	35.8	12.5	48.3	68.2	-19.9	Peak	Horizontal
*	8735.0	32.6	13.9	46.5	68.2	-21.7	Peak	Horizontal
	11191.5	31.2	18.7	49.9	54.0	-4.1	Peak	Horizontal
	12007.5	30.9	18.7	49.6	54.0	-4.4	Peak	Horizontal
*	8837.0	33.4	14.0	47.4	68.2	-20.8	Peak	Vertical
*	10103.5	33.2	15.7	48.9	68.2	-19.3	Peak	Vertical
	11021.5	32.5	18.5	51.0	54.0	-3.0	Peak	Vertical
	12109.5	32.0	18.9	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	60
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8879.5	34.7	13.3	48.0	68.2	-20.2	Peak	Horizontal
*	9772.0	33.8	14.3	48.1	68.2	-20.1	Peak	Horizontal
	11021.5	32.6	17.7	50.3	54.0	-3.7	Peak	Horizontal
	12169.0	32.2	18.1	50.3	54.0	-3.7	Peak	Horizontal
*	8811.5	34.3	14.0	48.3	68.2	-19.9	Peak	Vertical
*	9882.5	33.3	15.6	48.9	68.2	-19.3	Peak	Vertical
	11234.0	31.9	18.8	50.7	54.0	-3.3	Peak	Vertical
	12169.0	31.3	18.8	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	64
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8828.5	33.6	15.1	48.7	68.2	-19.5	Peak	Horizontal
*	9814.5	32.1	16.5	48.6	68.2	-19.6	Peak	Horizontal
	10979.0	31.0	19.3	50.3	54.0	-3.7	Peak	Horizontal
	11871.5	31.4	19.3	50.7	54.0	-3.3	Peak	Horizontal
*	8854.0	32.9	14.0	46.9	68.2	-21.3	Peak	Vertical
*	10069.5	33.2	15.6	48.8	68.2	-19.4	Peak	Vertical
	11021.5	32.9	18.5	51.4	54.0	-2.6	Peak	Vertical
	11905.5	32.8	18.6	51.4	54.0	-2.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	100
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	ŭ

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8888.0	34.8	14.0	48.8	68.2	-19.4	Peak	Horizontal
*	9814.5	33.7	15.4	49.1	68.2	-19.1	Peak	Horizontal
	11047.0	33.5	18.5	52.0	54.0	-2.0	Peak	Horizontal
	12007.5	31.0	18.7	49.7	54.0	-4.3	Peak	Horizontal
*	8769.0	33.3	13.9	47.2	68.2	-21.0	Peak	Vertical
*	10316.0	34.7	16.7	51.4	68.2	-16.8	Peak	Vertical
	11540.0	32.6	19.4	52.0	54.0	-2.0	Peak	Vertical
	12492.0	33.0	18.5	51.5	54.0	-2.5	Peak	Vertical

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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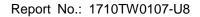
Product	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	120
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8701.0	34.6	13.8	48.4	68.2	-19.8	Peak	Horizontal
*	9814.5	33.4	15.4	48.8	68.2	-19.4	Peak	Horizontal
	10953.5	33.2	18.4	51.6	54.0	-2.4	Peak	Horizontal
	11999.0	33.5	18.7	52.2	54.0	-1.8	Peak	Horizontal
*	8769.0	33.3	13.9	47.2	68.2	-21.0	Peak	Vertical
*	9755.0	36.1	14.8	50.9	68.2	-17.3	Peak	Vertical
	10885.5	33.7	18.3	52.0	54.0	-2.0	Peak	Vertical
	11914.0	33.3	18.6	51.9	54.0	-2.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	140
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	ŭ

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8777.5	34.6	13.9	48.5	68.2	-19.7	Peak	Horizontal
*	10112.0	33.2	15.8	49.0	68.2	-19.2	Peak	Horizontal
	10987.5	32.5	18.5	51.0	54.0	-3.0	Peak	Horizontal
	11905.5	32.5	18.6	51.1	54.0	-2.9	Peak	Horizontal
*	8888.0	34.6	14.0	48.6	68.2	-19.6	Peak	Vertical
*	9857.0	33.2	16.2	49.4	68.2	-18.8	Peak	Vertical
	11276.5	31.7	18.8	50.5	54.0	-3.5	Peak	Vertical
	12109.5	32.0	18.9	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	144
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8803.0	34.4	14.0	48.4	68.2	-19.8	Peak	Horizontal
*	9721.0	35.1	14.7	49.8	68.2	-18.4	Peak	Horizontal
	11064.0	33.2	18.5	51.7	54.0	-2.3	Peak	Horizontal
	11965.0	32.8	18.6	51.4	54.0	-2.6	Peak	Horizontal
*	8658.5	33.6	13.6	47.2	68.2	-21.0	Peak	Vertical
*	9925.0	33.5	15.3	48.8	68.2	-19.4	Peak	Vertical
	11021.5	31.6	18.5	50.1	54.0	-3.9	Peak	Vertical
	11863.0	31.6	18.7	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	149
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8803.0	34.3	14.0	48.3	68.2	-19.9	Peak	Horizontal
*	9721.0	33.2	14.7	47.9	68.2	-20.3	Peak	Horizontal
	11038.5	31.8	18.5	50.3	54.0	-3.7	Peak	Horizontal
	11710.0	31.2	19.1	50.3	54.0	-3.7	Peak	Horizontal
*	8862.5	34.2	14.0	48.2	68.2	-20.0	Peak	Vertical
*	9857.0	33.6	16.2	49.8	68.2	-18.4	Peak	Vertical
	10970.5	32.1	18.4	50.5	54.0	-3.5	Peak	Vertical
	12169.0	31.5	18.8	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	157
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8888.0	33.4	14.0	47.4	68.2	-20.8	Peak	Horizontal
*	9984.5	33.9	15.4	49.3	68.2	-18.9	Peak	Horizontal
	11064.0	32.0	18.5	50.5	54.0	-3.5	Peak	Horizontal
	12194.5	31.5	18.8	50.3	54.0	-3.7	Peak	Horizontal
*	8811.5	33.0	14.0	47.0	68.2	-21.2	Peak	Vertical
*	9814.5	33.9	15.4	49.3	68.2	-18.9	Peak	Vertical
	11072.5	33.4	18.6	52.0	54.0	-2.0	Peak	Vertical
	12271.0	33.1	18.6	51.7	54.0	-2.3	Peak	Vertical

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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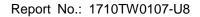
Product	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11a - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	165
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8845.5	34.6	14.0	48.6	68.2	-19.6	Peak	Horizontal
*	9959.0	35.7	15.3	51.0	68.2	-17.2	Peak	Horizontal
	11123.5	34.1	18.6	52.7	54.0	-1.3	Peak	Horizontal
	11931.0	33.7	18.6	52.3	54.0	-1.7	Peak	Horizontal
*	8726.5	35.0	13.8	48.8	68.2	-19.4	Peak	Vertical
*	9899.5	34.2	15.4	49.6	68.2	-18.6	Peak	Vertical
	10885.5	33.9	18.3	52.2	54.0	-1.8	Peak	Vertical
	12033.0	32.6	18.8	51.4	54.0	-2.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	36
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8658.5	34.5	13.6	48.1	68.2	-20.1	Peak	Horizontal
*	9678.5	35.0	14.6	49.6	68.2	-18.6	Peak	Horizontal
	11115.0	33.1	18.6	51.7	54.0	-2.3	Peak	Horizontal
	11786.5	32.6	18.8	51.4	54.0	-2.6	Peak	Horizontal
*	8769.0	32.9	13.9	46.8	68.2	-21.4	Peak	Vertical
*	9865.5	33.6	16.0	49.6	68.2	-18.6	Peak	Vertical
	10834.5	34.1	18.1	52.2	54.0	-1.8	Peak	Vertical
	11659.0	32.9	19.3	52.2	54.0	-1.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	44
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8692.5	34.0	13.7	47.7	68.2	-20.5	Peak	Horizontal
*	9772.0	34.5	14.9	49.4	68.2	-18.8	Peak	Horizontal
	11030.0	32.1	18.5	50.6	54.0	-3.4	Peak	Horizontal
	11846.0	32.2	18.7	50.9	54.0	-3.1	Peak	Horizontal
*	8862.5	34.1	14.0	48.1	68.2	-20.1	Peak	Vertical
*	9891.0	36.0	15.5	51.5	68.2	-16.7	Peak	Vertical
	11276.5	31.8	18.8	50.6	54.0	-3.4	Peak	Vertical
	12007.5	32.3	18.7	51.0	54.0	-3.0	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	48
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8888.0	34.8	14.0	48.8	68.2	-19.4	Peak	Horizontal
*	10018.5	36.0	15.4	51.4	68.2	-16.8	Peak	Horizontal
	11327.5	33.1	18.9	52.0	54.0	-2.0	Peak	Horizontal
	12084.0	32.7	18.9	51.6	54.0	-2.4	Peak	Horizontal
*	8777.5	33.8	13.9	47.7	68.2	-20.5	Peak	Vertical
*	9993.0	36.1	15.4	51.5	68.2	-16.7	Peak	Vertical
	10928.0	34.1	18.4	52.5	54.0	-1.5	Peak	Vertical
	12126.5	33.0	18.9	51.9	54.0	-2.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	52
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8879.5	34.9	14.0	48.9	68.2	-19.3	Peak	Horizontal
*	9899.5	34.9	15.4	50.3	68.2	-17.9	Peak	Horizontal
	10851.5	33.9	18.1	52.0	54.0	-2.0	Peak	Horizontal
	11642.0	33.1	19.4	52.5	54.0	-1.5	Peak	Horizontal
*	8777.5	34.9	13.9	48.8	68.2	-19.4	Peak	Vertical
*	10333.0	34.6	16.7	51.3	68.2	-16.9	Peak	Vertical
	11404.0	33.4	19.1	52.5	54.0	-1.5	Peak	Vertical
	12585.5	33.4	18.7	52.1	54.0	-1.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	60
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8803.0	33.6	14.0	47.6	68.2	-20.6	Peak	Horizontal
*	9772.0	34.3	14.9	49.2	68.2	-19.0	Peak	Horizontal
	10877.0	34.1	18.2	52.3	54.0	-1.7	Peak	Horizontal
	12177.5	32.6	18.8	51.4	54.0	-2.6	Peak	Horizontal
*	8862.5	34.9	14.0	48.9	68.2	-19.3	Peak	Vertical
*	9899.5	34.4	15.4	49.8	68.2	-18.4	Peak	Vertical
	11081.0	33.0	18.6	51.6	54.0	-2.4	Peak	Vertical
	12517.5	33.1	18.6	51.7	54.0	-2.3	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	64
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	7978.5	36.4	12.5	48.9	68.2	-19.3	Peak	Horizontal
*	8845.5	34.0	14.0	48.0	68.2	-20.2	Peak	Horizontal
	11072.5	32.1	18.6	50.7	54.0	-3.3	Peak	Horizontal
	12109.5	31.4	18.9	50.3	54.0	-3.7	Peak	Horizontal
*	8862.5	34.4	14.0	48.4	68.2	-19.8	Peak	Vertical
*	9942.0	34.9	15.3	50.2	68.2	-18.0	Peak	Vertical
	11021.5	32.5	18.5	51.0	54.0	-3.0	Peak	Vertical
	12135.0	32.6	18.9	51.5	54.0	-2.5	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	100
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8871.0	33.7	14.0	47.7	68.2	-20.5	Peak	Horizontal
*	9780.5	34.2	14.9	49.1	68.2	-19.1	Peak	Horizontal
	10851.5	33.1	18.1	51.2	54.0	-2.8	Peak	Horizontal
	11820.5	33.0	18.7	51.7	54.0	-2.3	Peak	Horizontal
*	8777.5	33.1	13.9	47.0	68.2	-21.2	Peak	Vertical
*	10052.5	33.5	15.5	49.0	68.2	-19.2	Peak	Vertical
	10987.5	31.8	18.5	50.3	54.0	-3.7	Peak	Vertical
	12339.0	31.6	18.5	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	120
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	33.2	14.0	47.2	68.2	-21.0	Peak	Horizontal
*	10027.0	35.3	15.4	50.7	68.2	-17.5	Peak	Horizontal
	10970.5	33.0	18.4	51.4	54.0	-2.6	Peak	Horizontal
	12160.5	33.3	18.9	52.2	54.0	-1.8	Peak	Horizontal
*	8692.5	33.6	13.7	47.3	68.2	-20.9	Peak	Vertical
*	9823.0	34.7	15.6	50.3	68.2	-17.9	Peak	Vertical
	11344.5	33.3	19.0	52.3	54.0	-1.7	Peak	Vertical
	11965.0	32.6	18.6	51.2	54.0	-2.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	140
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8879.5	34.6	14.0	48.6	68.2	-19.6	Peak	Horizontal
*	10163.0	33.0	16.0	49.0	68.2	-19.2	Peak	Horizontal
	11174.5	32.9	18.7	51.6	54.0	-2.4	Peak	Horizontal
	12058.5	32.4	18.8	51.2	54.0	-2.8	Peak	Horizontal
*	8769.0	35.4	13.9	49.3	68.2	-18.9	Peak	Vertical
*	9959.0	35.2	15.3	50.5	68.2	-17.7	Peak	Vertical
	10885.5	34.6	18.3	52.9	54.0	-1.1	Peak	Vertical
	11939.5	33.9	18.6	52.5	54.0	-1.5	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity		
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	144	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8743.5	33.5	13.9	47.4	68.2	-20.8	Peak	Horizontal
*	9789.0	34.9	15.0	49.9	68.2	-18.3	Peak	Horizontal
	10970.5	32.0	18.4	50.4	54.0	-3.6	Peak	Horizontal
	12058.5	31.6	18.8	50.4	54.0	-3.6	Peak	Horizontal
*	8769.0	32.7	13.9	46.6	68.2	-21.6	Peak	Vertical
*	9874.0	32.7	15.8	48.5	68.2	-19.7	Peak	Vertical
	11064.0	34.0	18.5	52.5	54.0	-1.5	Peak	Vertical
	12186.0	32.6	18.8	51.4	54.0	-2.6	Peak	Vertical

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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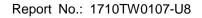
Product	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity		
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	149	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8803.0	33.9	14.0	47.9	68.2	-20.3	Peak	Horizontal
*	9857.0	35.0	16.2	51.2	68.2	-17.0	Peak	Horizontal
	10970.5	32.4	18.4	50.8	54.0	-3.2	Peak	Horizontal
	11812.0	33.6	18.7	52.3	54.0	-1.7	Peak	Horizontal
*	8854.0	34.0	14.0	48.0	68.2	-20.2	Peak	Vertical
*	10095.0	32.9	15.7	48.6	68.2	-19.6	Peak	Vertical
	11021.5	31.9	18.5	50.4	54.0	-3.6	Peak	Vertical
	11786.5	31.7	18.8	50.5	54.0	-3.5	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode: 802.11ac-VHT20 - Ant 0 + 1 + (CDD Mode)		Test Channel:	157
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8658.5	35.9	13.6	49.5	68.2	-18.7	Peak	Horizontal
*	9831.5	34.3	15.9	50.2	68.2	-18.0	Peak	Horizontal
	11174.5	32.4	18.7	51.1	54.0	-2.9	Peak	Horizontal
	12058.5	32.4	18.8	51.2	54.0	-2.8	Peak	Horizontal
*	8828.5	34.4	14.0	48.4	68.2	-19.8	Peak	Vertical
*	10418.0	34.7	17.0	51.7	68.2	-16.5	Peak	Vertical
	11021.5	33.0	18.5	51.5	54.0	-2.5	Peak	Vertical
	11795.0	33.1	18.8	51.9	54.0	-2.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	165	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ū	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8786.0	35.0	13.9	48.9	68.2	-19.3	Peak	Horizontal
*	9814.5	34.4	15.4	49.8	68.2	-18.4	Peak	Horizontal
	11412.5	33.2	19.1	52.3	54.0	-1.7	Peak	Horizontal
	11922.5	32.6	18.6	51.2	54.0	-2.8	Peak	Horizontal
*	8786.0	34.3	13.9	48.2	68.2	-20.0	Peak	Vertical
*	9899.5	33.6	15.4	49.0	68.2	-19.2	Peak	Vertical
	10826.0	33.2	18.0	51.2	54.0	-2.8	Peak	Vertical
	11531.5	32.2	19.4	51.6	54.0	-2.4	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	38
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8675.5	33.7	13.7	47.4	68.2	-20.8	Peak	Horizontal
*	9729.5	33.5	14.7	48.2	68.2	-20.0	Peak	Horizontal
	10928.0	32.6	18.4	51.0	54.0	-3.0	Peak	Horizontal
	11888.5	31.9	18.6	50.5	54.0	-3.5	Peak	Horizontal
*	8828.5	34.3	14.0	48.3	68.2	-19.9	Peak	Vertical
*	9780.5	34.3	14.9	49.2	68.2	-19.0	Peak	Vertical
	10911.0	33.6	18.4	52.0	54.0	-2.0	Peak	Vertical
	11633.5	32.0	19.4	51.4	54.0	-2.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	46
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8828.5	34.7	14.0	48.7	68.2	-19.5	Peak	Horizontal
*	9959.0	34.6	15.3	49.9	68.2	-18.3	Peak	Horizontal
	10970.5	34.3	18.4	52.7	54.0	-1.3	Peak	Horizontal
	11812.0	32.8	18.7	51.5	54.0	-2.5	Peak	Horizontal
*	8820.0	34.7	14.0	48.7	68.2	-19.5	Peak	Vertical
*	9925.0	34.4	15.3	49.7	68.2	-18.5	Peak	Vertical
	10894.0	33.9	18.3	52.2	54.0	-1.8	Peak	Vertical
	11854.5	32.7	18.7	51.4	54.0	-2.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	54
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	33.6	14.0	47.6	68.2	-20.6	Peak	Horizontal
*	9916.5	34.1	15.3	49.4	68.2	-18.8	Peak	Horizontal
	10877.0	34.5	18.2	52.7	54.0	-1.3	Peak	Horizontal
	11905.5	33.3	18.6	51.9	54.0	-2.1	Peak	Horizontal
*	8845.5	35.2	14.0	49.2	68.2	-19.0	Peak	Vertical
*	9772.0	33.9	14.9	48.8	68.2	-19.4	Peak	Vertical
	10928.0	33.8	18.4	52.2	54.0	-1.8	Peak	Vertical
	11837.5	33.2	18.7	51.9	54.0	-2.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode: 802.11ac-VHT40 - Ant 0 + 1 + 2 + (CDD Mode)		Test Channel:	62	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8820.0	34.1	14.0	48.1	68.2	-20.1	Peak	Horizontal
*	9797.5	33.6	15.1	48.7	68.2	-19.5	Peak	Horizontal
	11191.5	32.0	18.7	50.7	54.0	-3.3	Peak	Horizontal
	11752.5	31.7	18.9	50.6	54.0	-3.4	Peak	Horizontal
*	8828.5	34.8	14.0	48.8	68.2	-19.4	Peak	Vertical
*	9772.0	35.2	14.9	50.1	68.2	-18.1	Peak	Vertical
	11123.5	33.1	18.6	51.7	54.0	-2.3	Peak	Vertical
	11965.0	32.5	18.6	51.1	54.0	-2.9	Peak	Vertical

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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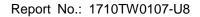
Product	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	57 % 2018/02/28 102 ver than average
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8692.5	33.4	13.7	47.1	68.2	-21.1	Peak	Horizontal
*	9721.0	32.8	14.7	47.5	68.2	-20.7	Peak	Horizontal
	11327.5	30.4	18.9	49.3	54.0	-4.7	Peak	Horizontal
	11965.0	30.7	18.6	49.3	54.0	-4.7	Peak	Horizontal
*	8794.5	33.9	13.9	47.8	68.2	-20.4	Peak	Vertical
*	9814.5	32.8	15.4	48.2	68.2	-20.0	Peak	Vertical
	10877.0	33.5	18.2	51.7	54.0	-2.3	Peak	Vertical
	11684.5	31.3	19.2	50.5	54.0	-3.5	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	118
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8760.5	33.7	13.9	47.6	68.2	-20.6	Peak	Horizontal
*	9908.0	32.9	15.3	48.2	68.2	-20.0	Peak	Horizontal
	11030.0	31.2	18.5	49.7	54.0	-4.3	Peak	Horizontal
	12075.5	30.7	18.9	49.6	54.0	-4.4	Peak	Horizontal
*	8820.0	33.2	14.0	47.2	68.2	-21.0	Peak	Vertical
*	9797.5	32.7	15.1	47.8	68.2	-20.4	Peak	Vertical
	10945.0	31.9	18.4	50.3	54.0	-3.7	Peak	Vertical
	12169.0	30.5	18.8	49.3	54.0	-4.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	134
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8820.0	33.7	14.0	47.7	68.2	-20.5	Peak	Horizontal
*	10018.5	32.9	15.4	48.3	68.2	-19.9	Peak	Horizontal
	11072.5	31.3	18.6	49.9	54.0	-4.1	Peak	Horizontal
	11965.0	32.1	18.6	50.7	54.0	-3.3	Peak	Horizontal
*	8879.5	34.3	14.0	48.3	68.2	-19.9	Peak	Vertical
*	9942.0	33.8	15.3	49.1	68.2	-19.1	Peak	Vertical
	10885.5	31.9	18.3	50.2	54.0	-3.8	Peak	Vertical
	11922.5	31.5	18.6	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel: 142	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8820.0	33.8	14.0	47.8	68.2	-20.4	Peak	Horizontal
*	10061.0	32.9	15.6	48.5	68.2	-19.7	Peak	Horizontal
	11047.0	31.2	18.5	49.7	54.0	-4.3	Peak	Horizontal
	11837.5	31.0	18.7	49.7	54.0	-4.3	Peak	Horizontal
*	8718.0	33.6	13.8	47.4	68.2	-20.8	Peak	Vertical
*	9721.0	32.7	14.7	47.4	68.2	-20.8	Peak	Vertical
	11047.0	30.9	18.5	49.4	54.0	-4.6	Peak	Vertical
	12118.0	30.4	18.9	49.3	54.0	-4.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel: 151	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	34.5	14.0	48.5	68.2	-19.7	Peak	Horizontal
*	9899.5	33.3	15.4	48.7	68.2	-19.5	Peak	Horizontal
	11225.5	31.0	18.8	49.8	54.0	-4.2	Peak	Horizontal
	12109.5	30.2	18.9	49.1	54.0	-4.9	Peak	Horizontal
*	8709.5	34.2	13.8	48.0	68.2	-20.2	Peak	Vertical
*	9772.0	33.2	14.9	48.1	68.2	-20.1	Peak	Vertical
	11463.5	33.1	19.3	52.4	54.0	-1.6	Peak	Vertical
	12194.5	31.5	18.8	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel: 159	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	33.4	14.0	47.4	68.2	-20.8	Peak	Horizontal
*	9738.0	34.2	14.8	49.0	68.2	-19.2	Peak	Horizontal
	10928.0	31.4	18.4	49.8	54.0	-4.2	Peak	Horizontal
	11897.0	30.5	18.6	49.1	54.0	-4.9	Peak	Horizontal
*	8845.5	33.8	14.0	47.8	68.2	-20.4	Peak	Vertical
*	9729.5	33.2	14.7	47.9	68.2	-20.3	Peak	Vertical
	10928.0	31.3	18.4	49.7	54.0	-4.3	Peak	Vertical
	11786.5	30.1	18.8	48.9	54.0	-5.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	42
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8794.5	31.3	13.9	45.2	68.2	-23.0	Peak	Horizontal
*	10018.5	32.5	15.4	47.9	68.2	-20.3	Peak	Horizontal
	10962.0	31.3	18.4	49.7	54.0	-4.3	Peak	Horizontal
	11752.5	30.1	18.9	49.0	54.0	-5.0	Peak	Horizontal
*	8862.5	33.6	14.0	47.6	68.2	-20.6	Peak	Vertical
*	9738.0	32.5	14.8	47.3	68.2	-20.9	Peak	Vertical
	11047.0	30.7	18.5	49.2	54.0	-4.8	Peak	Vertical
	11897.0	30.5	18.6	49.1	54.0	-4.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)		58
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8743.5	34.2	13.9	48.1	68.2	-20.1	Peak	Horizontal
*	10069.5	33.0	15.6	48.6	68.2	-19.6	Peak	Horizontal
	10817.5	32.1	18.0	50.1	54.0	-3.9	Peak	Horizontal
	11863.0	31.2	18.7	49.9	54.0	-4.1	Peak	Horizontal
*	8769.0	32.5	13.9	46.4	68.2	-21.8	Peak	Vertical
*	10010.0	32.6	15.4	48.0	68.2	-20.2	Peak	Vertical
	10953.5	31.5	18.4	49.9	54.0	-4.1	Peak	Vertical
	12007.5	30.8	18.7	49.5	54.0	-4.5	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	106
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8701.0	33.9	13.8	47.7	68.2	-20.5	Peak	Horizontal
*	9789.0	33.4	15.0	48.4	68.2	-19.8	Peak	Horizontal
	11072.5	31.7	18.6	50.3	54.0	-3.7	Peak	Horizontal
	11990.5	31.7	18.7	50.4	54.0	-3.6	Peak	Horizontal
*	8837.0	33.0	14.0	47.0	68.2	-21.2	Peak	Vertical
*	10061.0	31.7	15.6	47.3	68.2	-20.9	Peak	Vertical
	10936.5	30.3	18.4	48.7	54.0	-5.3	Peak	Vertical
	11990.5	29.6	18.7	48.3	54.0	-5.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	122
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	33.3	13.9	47.2	68.2	-21.0	Peak	Horizontal
*	9780.5	32.4	14.9	47.3	68.2	-20.9	Peak	Horizontal
	11166.0	30.5	18.7	49.2	54.0	-4.8	Peak	Horizontal
	12254.0	29.8	18.6	48.4	54.0	-5.6	Peak	Horizontal
*	8692.5	33.7	13.7	47.4	68.2	-20.8	Peak	Vertical
*	10001.5	32.1	15.4	47.5	68.2	-20.7	Peak	Vertical
	10987.5	30.2	18.5	48.7	54.0	-5.3	Peak	Vertical
	12007.5	29.9	18.7	48.6	54.0	-5.4	Peak	Vertical

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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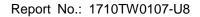
Product	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	138
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8828.5	33.6	14.0	47.6	68.2	-20.6	Peak	Horizontal
*	9772.0	34.5	14.9	49.4	68.2	-18.8	Peak	Horizontal
	11038.5	30.9	18.5	49.4	54.0	-4.6	Peak	Horizontal
	12347.5	30.3	18.4	48.7	54.0	-5.3	Peak	Horizontal
*	8675.5	32.8	13.7	46.5	68.2	-21.7	Peak	Vertical
*	10018.5	32.4	15.4	47.8	68.2	-20.4	Peak	Vertical
	11242.5	30.1	18.8	48.9	54.0	-5.1	Peak	Vertical
	12322.0	29.8	18.5	48.3	54.0	-5.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	155
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8692.5	32.7	13.7	46.4	68.2	-21.8	Peak	Horizontal
*	9738.0	35.4	14.8	50.2	68.2	-18.0	Peak	Horizontal
	11157.5	32.2	18.7	50.9	54.0	-3.1	Peak	Horizontal
	12169.0	31.3	18.8	50.1	54.0	-3.9	Peak	Horizontal
*	8760.5	34.2	13.9	48.1	68.2	-20.1	Peak	Vertical
*	10129.0	32.3	15.9	48.2	68.2	-20.0	Peak	Vertical
	11030.0	31.1	18.5	49.6	54.0	-4.4	Peak	Vertical
	12126.5	30.2	18.9	49.1	54.0	-4.9	Peak	Vertical

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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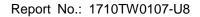
Product	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	42	
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8701.0	34.0	13.8	47.8	68.2	-20.4	Peak	Horizontal
*	9772.0	32.2	14.9	47.1	68.2	-21.1	Peak	Horizontal
	11013.0	30.5	18.5	49.0	54.0	-5.0	Peak	Horizontal
	11752.5	29.8	18.9	48.7	54.0	-5.3	Peak	Horizontal
*	8871.0	33.8	14.0	47.8	68.2	-20.4	Peak	Vertical
*	9772.0	34.7	14.9	49.6	68.2	-18.6	Peak	Vertical
	11021.5	30.8	18.5	49.3	54.0	-4.7	Peak	Vertical
	12220.0	30.5	18.7	49.2	54.0	-4.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode: 802.11ac-VHT80+80 - Ant 0 - Ant 0 + 1 + 2 + 3 (CDD Mode		Test Channel:	58
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8735.0	33.3	13.9	47.2	68.2	-21.0	Peak	Horizontal
*	9797.5	32.6	15.1	47.7	68.2	-20.5	Peak	Horizontal
	11242.5	31.0	18.8	49.8	54.0	-4.2	Peak	Horizontal
	12075.5	30.8	18.9	49.7	54.0	-4.3	Peak	Horizontal
*	8701.0	33.8	13.8	47.6	68.2	-20.6	Peak	Vertical
*	9874.0	33.3	15.8	49.1	68.2	-19.1	Peak	Vertical
	10979.0	31.8	18.5	50.3	54.0	-3.7	Peak	Vertical
	12007.5	31.3	18.7	50.0	54.0	-4.0	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	106
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ü

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8667.0	32.5	13.6	46.1	68.2	-22.1	Peak	Horizontal
*	9814.5	32.1	15.4	47.5	68.2	-20.7	Peak	Horizontal
	11038.5	30.2	18.5	48.7	54.0	-5.3	Peak	Horizontal
	12118.0	30.5	18.9	49.4	54.0	-4.6	Peak	Horizontal
*	8854.0	32.6	14.0	46.6	68.2	-21.6	Peak	Vertical
*	9899.5	32.5	15.4	47.9	68.2	-20.3	Peak	Vertical
	11387.0	30.7	19.1	49.8	54.0	-4.2	Peak	Vertical
	12271.0	30.6	18.6	49.2	54.0	-4.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	122	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	33.7	14.0	47.7	68.2	-20.5	Peak	Horizontal
*	10018.5	32.8	15.4	48.2	68.2	-20.0	Peak	Horizontal
	11021.5	31.1	18.5	49.6	54.0	-4.4	Peak	Horizontal
	11803.5	30.8	18.7	49.5	54.0	-4.5	Peak	Horizontal
*	8845.5	33.4	14.0	47.4	68.2	-20.8	Peak	Vertical
*	9772.0	32.7	14.9	47.6	68.2	-20.6	Peak	Vertical
	11276.5	30.7	18.8	49.5	54.0	-4.5	Peak	Vertical
	12237.0	30.4	18.7	49.1	54.0	-4.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	138
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8701.0	31.7	13.8	45.5	68.2	-22.7	Peak	Horizontal
*	9763.5	32.2	14.9	47.1	68.2	-21.1	Peak	Horizontal
	11055.5	30.6	18.5	49.1	54.0	-4.9	Peak	Horizontal
	12109.5	30.2	18.9	49.1	54.0	-4.9	Peak	Horizontal
*	8735.0	33.0	13.9	46.9	68.2	-21.3	Peak	Vertical
*	10103.5	32.1	15.7	47.8	68.2	-20.4	Peak	Vertical
	11038.5	30.8	18.5	49.3	54.0	-4.7	Peak	Vertical
	12033.0	30.6	18.8	49.4	54.0	-4.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	155	
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8828.5	33.7	14.0	47.7	68.2	-20.5	Peak	Horizontal
*	9780.5	32.7	14.9	47.6	68.2	-20.6	Peak	Horizontal
	11242.5	30.2	18.8	49.0	54.0	-5.0	Peak	Horizontal
	12432.5	30.6	18.4	49.0	54.0	-5.0	Peak	Horizontal
*	8820.0	33.4	14.0	47.4	68.2	-20.8	Peak	Vertical
*	9814.5	33.4	15.4	48.8	68.2	-19.4	Peak	Vertical
	10970.5	31.4	18.4	49.8	54.0	-4.2	Peak	Vertical
	11897.0	30.8	18.6	49.4	54.0	-4.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel: 42	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8854.0	34.4	14.0	48.4	68.2	-19.8	Peak	Horizontal
*	10078.0	34.1	15.6	49.7	68.2	-18.5	Peak	Horizontal
	11089.5	31.2	18.6	49.8	54.0	-4.2	Peak	Horizontal
	12220.0	31.6	18.7	50.3	54.0	-3.7	Peak	Horizontal
*	8743.5	32.6	13.9	46.5	68.2	-21.7	Peak	Vertical
*	9848.5	31.8	16.1	47.9	68.2	-20.3	Peak	Vertical
	11064.0	31.0	18.5	49.5	54.0	-4.5	Peak	Vertical
	12067.0	30.3	18.8	49.1	54.0	-4.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel: 58	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	-

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8820.0	34.2	14.0	48.2	68.2	-20.0	Peak	Horizontal
*	9874.0	32.2	15.8	48.0	68.2	-20.2	Peak	Horizontal
	11115.0	30.6	18.6	49.2	54.0	-4.8	Peak	Horizontal
	12007.5	30.8	18.7	49.5	54.0	-4.5	Peak	Horizontal
*	8820.0	33.7	14.0	47.7	68.2	-20.5	Peak	Vertical
*	10018.5	32.7	15.4	48.1	68.2	-20.1	Peak	Vertical
	11021.5	31.0	18.5	49.5	54.0	-4.5	Peak	Vertical
	11965.0	30.8	18.6	49.4	54.0	-4.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	106
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ç

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8794.5	33.9	13.9	47.8	68.2	-20.4	Peak	Horizontal
*	9678.5	32.1	14.6	46.7	68.2	-21.5	Peak	Horizontal
	10987.5	31.5	18.5	50.0	54.0	-4.0	Peak	Horizontal
	12517.5	29.7	18.6	48.3	54.0	-5.7	Peak	Horizontal
*	8794.5	33.4	13.9	47.3	68.2	-20.9	Peak	Vertical
*	10086.5	32.8	15.7	48.5	68.2	-19.7	Peak	Vertical
	10979.0	30.6	18.5	49.1	54.0	-4.9	Peak	Vertical
	11982.0	31.0	18.7	49.7	54.0	-4.3	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	122
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	32.3	13.9	46.2	68.2	-22.0	Peak	Horizontal
*	9993.0	32.9	15.4	48.3	68.2	-19.9	Peak	Horizontal
	11157.5	30.9	18.7	49.6	54.0	-4.4	Peak	Horizontal
	12271.0	29.9	18.6	48.5	54.0	-5.5	Peak	Horizontal
*	8811.5	33.3	14.0	47.3	68.2	-20.9	Peak	Vertical
*	9899.5	33.5	15.4	48.9	68.2	-19.3	Peak	Vertical
	11174.5	31.2	18.7	49.9	54.0	-4.1	Peak	Vertical
	12169.0	31.1	18.8	49.9	54.0	-4.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	138
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8752.0	33.7	13.9	47.6	68.2	-20.6	Peak	Horizontal
*	10103.5	32.3	15.7	48.0	68.2	-20.2	Peak	Horizontal
	11013.0	31.0	18.5	49.5	54.0	-4.5	Peak	Horizontal
	12169.0	30.6	18.8	49.4	54.0	-4.6	Peak	Horizontal
*	8743.5	32.8	13.9	46.7	68.2	-21.5	Peak	Vertical
*	10307.5	33.6	16.6	50.2	68.2	-18.0	Peak	Vertical
	10970.5	31.8	18.4	50.2	54.0	-3.8	Peak	Vertical
	12041.5	30.4	18.8	49.2	54.0	-4.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	155
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8760.5	34.1	13.9	48.0	68.2	-20.2	Peak	Horizontal
*	9950.5	33.4	15.3	48.7	68.2	-19.5	Peak	Horizontal
	11174.5	30.3	18.7	49.0	54.0	-5.0	Peak	Horizontal
	12084.0	30.5	18.9	49.4	54.0	-4.6	Peak	Horizontal
*	8794.5	33.6	13.9	47.5	68.2	-20.7	Peak	Vertical
*	10044.0	33.0	15.5	48.5	68.2	-19.7	Peak	Vertical
	10970.5	31.1	18.4	49.5	54.0	-4.5	Peak	Vertical
	11922.5	30.8	18.6	49.4	54.0	-4.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 Contiguous - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	42 + 58
Remark:	 Average measurement was not perlimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	32.8	14.0	46.8	68.2	-21.4	Peak	Horizontal
*	9814.5	32.2	15.4	47.6	68.2	-20.6	Peak	Horizontal
	11021.5	30.5	18.5	49.0	54.0	-5.0	Peak	Horizontal
	11897.0	29.9	18.6	48.5	54.0	-5.5	Peak	Horizontal
*	8803.0	33.0	14.0	47.0	68.2	-21.2	Peak	Vertical
*	9925.0	32.6	15.3	47.9	68.2	-20.3	Peak	Vertical
	10851.5	32.7	18.1	50.8	54.0	-3.2	Peak	Vertical
	12135.0	31.4	18.9	50.3	54.0	-3.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 Contiguous - Ant 0 + 1 + 2 + 3 (CDD Mode)	Test Channel:	106 + 122
Remark:	 Average measurement was not perlimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8828.5	33.4	14.0	47.4	68.2	-20.8	Peak	Horizontal
*	9814.5	31.6	15.4	47.0	68.2	-21.2	Peak	Horizontal
	11336.0	31.8	19.0	50.8	54.0	-3.2	Peak	Horizontal
	12169.0	30.6	18.8	49.4	54.0	-4.6	Peak	Horizontal
*	8769.0	32.5	13.9	46.4	68.2	-21.8	Peak	Vertical
*	9780.5	32.9	14.9	47.8	68.2	-20.4	Peak	Vertical
	10800.5	32.0	17.9	49.9	54.0	-4.1	Peak	Vertical
	11863.0	31.0	18.7	49.7	54.0	-4.3	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	36	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8743.5	33.8	13.9	47.7	68.2	-20.5	Peak	Horizontal
*	9789.0	33.2	15.0	48.2	68.2	-20.0	Peak	Horizontal
	11030.0	31.9	18.5	50.4	54.0	-3.6	Peak	Horizontal
	12058.5	30.8	18.8	49.6	54.0	-4.4	Peak	Horizontal
*	8811.5	34.1	14.0	48.1	68.2	-20.1	Peak	Vertical
*	9984.5	33.4	15.4	48.8	68.2	-19.4	Peak	Vertical
	11234.0	31.3	18.8	50.1	54.0	-3.9	Peak	Vertical
	11982.0	31.4	18.7	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	44	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8854.0	34.1	14.0	48.1	68.2	-20.1	Peak	Horizontal
*	9789.0	33.4	15.0	48.4	68.2	-19.8	Peak	Horizontal
	10707.0	32.9	17.5	50.4	54.0	-3.6	Peak	Horizontal
	11812.0	30.7	18.7	49.4	54.0	-4.6	Peak	Horizontal
*	8811.5	33.6	14.0	47.6	68.2	-20.6	Peak	Vertical
*	9602.0	33.1	14.4	47.5	68.2	-20.7	Peak	Vertical
	10996.0	31.6	18.5	50.1	54.0	-3.9	Peak	Vertical
	11922.5	31.1	18.6	49.7	54.0	-4.3	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity		
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel: 48		
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8709.5	32.9	13.8	46.7	68.2	-21.5	Peak	Horizontal
*	9908.0	33.9	15.3	49.2	68.2	-19.0	Peak	Horizontal
	11115.0	31.8	18.6	50.4	54.0	-3.6	Peak	Horizontal
	12356.0	31.3	18.4	49.7	54.0	-4.3	Peak	Horizontal
*	8735.0	33.4	13.9	47.3	68.2	-20.9	Peak	Vertical
*	9806.0	34.0	15.2	49.2	68.2	-19.0	Peak	Vertical
	10996.0	31.6	18.5	50.1	54.0	-3.9	Peak	Vertical
	12016.0	31.2	18.7	49.9	54.0	-4.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	52
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ü

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	33.9	14.0	47.9	68.2	-20.3	Peak	Horizontal
*	9797.5	33.5	15.1	48.6	68.2	-19.6	Peak	Horizontal
	10877.0	34.2	18.2	52.4	54.0	-1.6	Peak	Horizontal
	11948.0	33.0	18.6	51.6	54.0	-2.4	Peak	Horizontal
*	8777.5	34.9	13.9	48.8	68.2	-19.4	Peak	Vertical
*	10035.5	33.3	15.5	48.8	68.2	-19.4	Peak	Vertical
	10732.5	32.1	17.6	49.7	54.0	-4.3	Peak	Vertical
	11778.0	30.6	18.8	49.4	54.0	-4.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	Test Mode: 802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)		60
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8667.0	33.2	13.6	46.8	68.2	-21.4	Peak	Horizontal
*	10035.5	34.1	15.5	49.6	68.2	-18.6	Peak	Horizontal
	11013.0	31.1	18.5	49.6	54.0	-4.4	Peak	Horizontal
	11897.0	32.1	18.6	50.7	54.0	-3.3	Peak	Horizontal
*	8854.0	32.3	14.0	46.3	68.2	-21.9	Peak	Vertical
*	9993.0	33.3	15.4	48.7	68.2	-19.5	Peak	Vertical
	11038.5	31.5	18.5	50.0	54.0	-4.0	Peak	Vertical
	11948.0	31.7	18.6	50.3	54.0	-3.7	Peak	Vertical

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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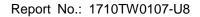
Product	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	64
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	32.8	14.0	46.8	68.2	-21.4	Peak	Horizontal
*	10069.5	33.4	15.6	49.0	68.2	-19.2	Peak	Horizontal
	11276.5	31.0	18.8	49.8	54.0	-4.2	Peak	Horizontal
	12356.0	30.9	18.4	49.3	54.0	-4.7	Peak	Horizontal
*	8854.0	33.2	14.0	47.2	68.2	-21.0	Peak	Vertical
*	10044.0	34.0	15.5	49.5	68.2	-18.7	Peak	Vertical
	11234.0	31.2	18.8	50.0	54.0	-4.0	Peak	Vertical
	11982.0	31.4	18.7	50.1	54.0	-3.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	100
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	32.6	13.9	46.5	68.2	-21.7	Peak	Horizontal
*	9908.0	33.3	15.3	48.6	68.2	-19.6	Peak	Horizontal
	10945.0	32.0	18.4	50.4	54.0	-3.6	Peak	Horizontal
	11769.5	31.1	18.8	49.9	54.0	-4.1	Peak	Horizontal
*	8811.5	33.2	14.0	47.2	68.2	-21.0	Peak	Vertical
*	10120.5	33.2	15.8	49.0	68.2	-19.2	Peak	Vertical
	11021.5	31.9	18.5	50.4	54.0	-3.6	Peak	Vertical
	11854.5	30.8	18.7	49.5	54.0	-4.5	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	Test Mode: 802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)		120
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	32.3	14.0	46.3	68.2	-21.9	Peak	Horizontal
*	9772.0	33.8	14.9	48.7	68.2	-19.5	Peak	Horizontal
	10877.0	32.2	18.2	50.4	54.0	-3.6	Peak	Horizontal
	11718.5	30.9	19.0	49.9	54.0	-4.1	Peak	Horizontal
*	8828.5	32.5	14.0	46.5	68.2	-21.7	Peak	Vertical
*	10078.0	33.1	15.6	48.7	68.2	-19.5	Peak	Vertical
	11013.0	31.4	18.5	49.9	54.0	-4.1	Peak	Vertical
	11897.0	31.8	18.6	50.4	54.0	-3.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	140
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8743.5	34.1	13.9	48.0	68.2	-20.2	Peak	Horizontal
*	10078.0	33.4	15.6	49.0	68.2	-19.2	Peak	Horizontal
	11251.0	31.2	18.8	50.0	54.0	-4.0	Peak	Horizontal
	12007.5	32.0	18.7	50.7	54.0	-3.3	Peak	Horizontal
*	8735.0	32.0	13.9	45.9	68.2	-22.3	Peak	Vertical
*	9916.5	33.4	15.3	48.7	68.2	-19.5	Peak	Vertical
	11208.5	31.1	18.8	49.9	54.0	-4.1	Peak	Vertical
	11948.0	32.5	18.6	51.1	54.0	-2.9	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	144
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	34.1	14.0	48.1	68.2	-20.1	Peak	Horizontal
*	10103.5	32.9	15.7	48.6	68.2	-19.6	Peak	Horizontal
	11004.5	31.6	18.5	50.1	54.0	-3.9	Peak	Horizontal
	12101.0	30.9	18.9	49.8	54.0	-4.2	Peak	Horizontal
*	8777.5	34.0	13.9	47.9	68.2	-20.3	Peak	Vertical
*	9874.0	32.7	15.8	48.5	68.2	-19.7	Peak	Vertical
	10979.0	31.6	18.5	50.1	54.0	-3.9	Peak	Vertical
	11684.5	31.2	19.2	50.4	54.0	-3.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode: 802.11ac-VHT20 - Ant 0 + 1 + 2 (Beam-Forming Mode)		Test Channel:	149
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8718.0	31.9	13.8	45.7	68.2	-22.5	Peak	Horizontal
*	10035.5	34.5	15.5	50.0	68.2	-18.2	Peak	Horizontal
	10970.5	32.4	18.4	50.8	54.0	-3.2	Peak	Horizontal
	12024.5	32.0	18.8	50.8	54.0	-3.2	Peak	Horizontal
*	8820.0	32.8	14.0	46.8	68.2	-21.4	Peak	Vertical
*	9772.0	34.4	14.9	49.3	68.2	-18.9	Peak	Vertical
	10970.5	32.0	18.4	50.4	54.0	-3.6	Peak	Vertical
	11778.0	30.9	18.8	49.7	54.0	-4.3	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT20 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	157
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	32.5	13.9	46.4	68.2	-21.8	Peak	Horizontal
*	9882.5	33.3	15.6	48.9	68.2	-19.3	Peak	Horizontal
	10996.0	32.1	18.5	50.6	54.0	-3.4	Peak	Horizontal
	11812.0	31.2	18.7	49.9	54.0	-4.1	Peak	Horizontal
*	8854.0	33.4	14.0	47.4	68.2	-20.8	Peak	Vertical
*	9729.5	34.0	14.7	48.7	68.2	-19.5	Peak	Vertical
	10928.0	33.9	18.4	52.3	54.0	-1.7	Peak	Vertical
	11633.5	32.8	19.4	52.2	54.0	-1.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode: 802.11ac-VHT20 - Ant 0 + 1 + 2 (Beam-Forming Mode)		Test Channel:	165
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8786.0	34.9	13.9	48.8	68.2	-19.4	Peak	Horizontal
*	9899.5	34.5	15.4	49.9	68.2	-18.3	Peak	Horizontal
	11013.0	31.9	18.5	50.4	54.0	-3.6	Peak	Horizontal
	11922.5	32.6	18.6	51.2	54.0	-2.8	Peak	Horizontal
*	8786.0	34.3	13.9	48.2	68.2	-20.0	Peak	Vertical
*	9993.0	34.7	15.4	50.1	68.2	-18.1	Peak	Vertical
	11123.5	33.1	18.6	51.7	54.0	-2.3	Peak	Vertical
	12058.5	32.4	18.8	51.2	54.0	-2.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode: 802.11ac-VHT40 - Ant 0 + 1 + 2 + (Beam-Forming Mode)		Test Channel:	38
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8769.0	32.7	13.9	46.6	68.2	-21.6	Peak	Horizontal
*	10044.0	33.3	15.5	48.8	68.2	-19.4	Peak	Horizontal
	10945.0	33.0	18.4	51.4	54.0	-2.6	Peak	Horizontal
	12135.0	32.1	18.9	51.0	54.0	-3.0	Peak	Horizontal
*	8828.5	34.3	14.0	48.3	68.2	-19.9	Peak	Vertical
*	9865.5	33.1	16.0	49.1	68.2	-19.1	Peak	Vertical
	11242.5	31.6	18.8	50.4	54.0	-3.6	Peak	Vertical
	12169.0	32.1	18.8	50.9	54.0	-3.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	46
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8837.0	33.7	14.0	47.7	68.2	-20.5	Peak	Horizontal
*	10103.5	33.6	15.7	49.3	68.2	-18.9	Peak	Horizontal
	11038.5	32.4	18.5	50.9	54.0	-3.1	Peak	Horizontal
	12007.5	32.1	18.7	50.8	54.0	-3.2	Peak	Horizontal
*	8854.0	34.7	14.0	48.7	68.2	-19.5	Peak	Vertical
*	9814.5	34.1	15.4	49.5	68.2	-18.7	Peak	Vertical
	11149.0	32.1	18.7	50.8	54.0	-3.2	Peak	Vertical
	12007.5	32.5	18.7	51.2	54.0	-2.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	54
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Č

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8675.5	35.0	13.7	48.7	68.2	-19.5	Peak	Horizontal
*	9916.5	34.1	15.3	49.4	68.2	-18.8	Peak	Horizontal
	11013.0	32.2	18.5	50.7	54.0	-3.3	Peak	Horizontal
	12228.5	31.7	18.7	50.4	54.0	-3.6	Peak	Horizontal
*	8743.5	33.4	13.9	47.3	68.2	-20.9	Peak	Vertical
*	9857.0	33.8	16.2	50.0	68.2	-18.2	Peak	Vertical
	11531.5	31.6	19.4	51.0	54.0	-3.0	Peak	Vertical
	12109.5	32.7	18.9	51.6	54.0	-2.4	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode: 802.11ac-VHT40 - Ant 0 + 1 + (Beam-Forming Mode)		Test Channel:	62
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	32.5	14.0	46.5	68.2	-21.7	Peak	Horizontal
*	9857.0	33.9	16.2	50.1	68.2	-18.1	Peak	Horizontal
	11004.5	32.5	18.5	51.0	54.0	-3.0	Peak	Horizontal
	12296.5	31.8	18.6	50.4	54.0	-3.6	Peak	Horizontal
*	8684.0	35.3	13.7	49.0	68.2	-19.2	Peak	Vertical
*	10018.5	34.3	15.4	49.7	68.2	-18.5	Peak	Vertical
	11072.5	33.3	18.6	51.9	54.0	-2.1	Peak	Vertical
	12271.0	32.7	18.6	51.3	54.0	-2.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	102
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8777.5	33.4	13.9	47.3	68.2	-20.9	Peak	Horizontal
*	9814.5	33.1	15.4	48.5	68.2	-19.7	Peak	Horizontal
	11047.0	31.1	18.5	49.6	54.0	-4.4	Peak	Horizontal
	12092.5	31.2	18.9	50.1	54.0	-3.9	Peak	Horizontal
*	8862.5	31.6	14.0	45.6	68.2	-22.6	Peak	Vertical
*	10103.5	32.5	15.7	48.2	68.2	-20.0	Peak	Vertical
	11106.5	31.0	18.6	49.6	54.0	-4.4	Peak	Vertical
	12075.5	30.7	18.9	49.6	54.0	-4.4	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	118
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8760.5	33.7	13.9	47.6	68.2	-20.6	Peak	Horizontal
*	10078.0	32.7	15.6	48.3	68.2	-19.9	Peak	Horizontal
	11072.5	31.5	18.6	50.1	54.0	-3.9	Peak	Horizontal
	12058.5	31.5	18.8	50.3	54.0	-3.7	Peak	Horizontal
*	8811.5	32.5	14.0	46.5	68.2	-21.7	Peak	Vertical
*	10069.5	32.9	15.6	48.5	68.2	-19.7	Peak	Vertical
	11132.0	31.0	18.6	49.6	54.0	-4.4	Peak	Vertical
	12245.5	30.3	18.7	49.0	54.0	-5.0	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	134	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8820.0	33.7	14.0	47.7	68.2	-20.5	Peak	Horizontal
*	9899.5	33.0	15.4	48.4	68.2	-19.8	Peak	Horizontal
	11004.5	30.8	18.5	49.3	54.0	-4.7	Peak	Horizontal
	12024.5	30.9	18.8	49.7	54.0	-4.3	Peak	Horizontal
*	8820.0	32.2	14.0	46.2	68.2	-22.0	Peak	Vertical
*	9806.0	32.0	15.2	47.2	68.2	-21.0	Peak	Vertical
	11021.5	32.1	18.5	50.6	54.0	-3.4	Peak	Vertical
	12007.5	31.2	18.7	49.9	54.0	-4.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	142
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	, and the second

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	31.8	14.0	45.8	68.2	-22.4	Peak	Horizontal
*	9644.5	32.8	14.4	47.2	68.2	-21.0	Peak	Horizontal
	11285.0	30.4	18.8	49.2	54.0	-4.8	Peak	Horizontal
	12169.0	31.1	18.8	49.9	54.0	-4.1	Peak	Horizontal
*	8828.5	33.4	14.0	47.4	68.2	-20.8	Peak	Vertical
*	9814.5	35.1	15.4	50.5	68.2	-17.7	Peak	Vertical
	10979.0	33.3	18.5	51.8	54.0	-2.2	Peak	Vertical
	11965.0	30.8	18.6	49.4	54.0	-4.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT40 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	151
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8811.5	34.6	14.0	48.6	68.2	-19.6	Peak	Horizontal
*	9857.0	32.2	16.2	48.4	68.2	-19.8	Peak	Horizontal
	10953.5	31.2	18.4	49.6	54.0	-4.4	Peak	Horizontal
	11948.0	30.6	18.6	49.2	54.0	-4.8	Peak	Horizontal
*	8752.0	33.1	13.9	47.0	68.2	-21.2	Peak	Vertical
*	10035.5	33.7	15.5	49.2	68.2	-19.0	Peak	Vertical
	10877.0	31.9	18.2	50.1	54.0	-3.9	Peak	Vertical
	11965.0	31.9	18.6	50.5	54.0	-3.5	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode: 802.11ac-VHT40 - Ant 0 + 1 + (Beam-Forming Mode)		Test Channel:	159
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8718.0	33.4	13.8	47.2	68.2	-21.0	Peak	Horizontal
*	9729.5	32.4	14.7	47.1	68.2	-21.1	Peak	Horizontal
	11030.0	30.1	18.5	48.6	54.0	-5.4	Peak	Horizontal
	11897.0	30.5	18.6	49.1	54.0	-4.9	Peak	Horizontal
*	8845.5	33.7	14.0	47.7	68.2	-20.5	Peak	Vertical
*	9916.5	34.0	15.3	49.3	68.2	-18.9	Peak	Vertical
	10877.0	31.8	18.2	50.0	54.0	-4.0	Peak	Vertical
	11846.0	30.2	18.7	48.9	54.0	-5.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity		
Test Site	AC1	Test Date	2018/02/28	
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	42	
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů	

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8913.5	31.3	14.0	45.3	68.2	-22.9	Peak	Horizontal
*	9814.5	31.9	15.4	47.3	68.2	-20.9	Peak	Horizontal
	11004.5	30.7	18.5	49.2	54.0	-4.8	Peak	Horizontal
	12058.5	29.7	18.8	48.5	54.0	-5.5	Peak	Horizontal
*	8811.5	31.8	14.0	45.8	68.2	-22.4	Peak	Vertical
*	10112.0	31.8	15.8	47.6	68.2	-20.6	Peak	Vertical
	11021.5	31.2	18.5	49.7	54.0	-4.3	Peak	Vertical
	11752.5	29.9	18.9	48.8	54.0	-5.2	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	58
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8854.0	33.8	14.0	47.8	68.2	-20.4	Peak	Horizontal
*	10069.5	33.0	15.6	48.6	68.2	-19.6	Peak	Horizontal
	11132.0	32.1	18.6	50.7	54.0	-3.3	Peak	Horizontal
	12220.0	32.6	18.7	51.3	54.0	-2.7	Peak	Horizontal
*	8896.5	32.2	14.0	46.2	68.2	-22.0	Peak	Vertical
*	10103.5	32.1	15.7	47.8	68.2	-20.4	Peak	Vertical
	11081.0	31.4	18.6	50.0	54.0	-4.0	Peak	Vertical
	12084.0	29.8	18.9	48.7	54.0	-5.3	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	106
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8743.5	33.2	13.9	47.1	68.2	-21.1	Peak	Horizontal
*	9993.0	33.4	15.4	48.8	68.2	-19.4	Peak	Horizontal
	11123.5	31.1	18.6	49.7	54.0	-4.3	Peak	Horizontal
	12016.0	31.0	18.7	49.7	54.0	-4.3	Peak	Horizontal
*	8777.5	32.6	13.9	46.5	68.2	-21.7	Peak	Vertical
*	10061.0	31.8	15.6	47.4	68.2	-20.8	Peak	Vertical
	11174.5	30.6	18.7	49.3	54.0	-4.7	Peak	Vertical
	12007.5	30.0	18.7	48.7	54.0	-5.3	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	122
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	·

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8862.5	33.2	14.0	47.2	68.2	-21.0	Peak	Horizontal
*	10197.0	33.1	16.2	49.3	68.2	-18.9	Peak	Horizontal
	11089.5	32.3	18.6	50.9	54.0	-3.1	Peak	Horizontal
	12262.5	32.4	18.6	51.0	54.0	-3.0	Peak	Horizontal
*	8930.5	33.5	14.0	47.5	68.2	-20.7	Peak	Vertical
*	9976.0	33.0	15.3	48.3	68.2	-19.9	Peak	Vertical
	10979.0	30.9	18.5	49.4	54.0	-4.6	Peak	Vertical
	11897.0	30.4	18.6	49.0	54.0	-5.0	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	138
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ů

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8803.0	33.2	14.0	47.2	68.2	-21.0	Peak	Horizontal
*	10103.5	32.1	15.7	47.8	68.2	-20.4	Peak	Horizontal
	11200.0	30.3	18.7	49.0	54.0	-5.0	Peak	Horizontal
	12126.5	29.8	18.9	48.7	54.0	-5.3	Peak	Horizontal
*	8871.0	31.5	14.0	45.5	68.2	-22.7	Peak	Vertical
*	10018.5	32.4	15.4	47.8	68.2	-20.4	Peak	Vertical
	10953.5	30.7	18.4	49.1	54.0	-4.9	Peak	Vertical
	11803.5	29.1	18.7	47.8	54.0	-6.2	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80 - Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:	155
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	•

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8888.0	33.3	14.0	47.3	68.2	-20.9	Peak	Horizontal
*	10103.5	32.4	15.7	48.1	68.2	-20.1	Peak	Horizontal
	10953.5	32.0	18.4	50.4	54.0	-3.6	Peak	Horizontal
	11897.0	30.9	18.6	49.5	54.0	-4.5	Peak	Horizontal
*	8922.0	32.8	14.0	46.8	68.2	-21.4	Peak	Vertical
*	9942.0	33.3	15.3	48.6	68.2	-19.6	Peak	Vertical
	11081.0	30.8	18.6	49.4	54.0	-4.6	Peak	Vertical
	12109.5	29.4	18.9	48.3	54.0	-5.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 0 + 1 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	42			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	erformed if peak level lov	wer 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)				
*	8743.5	32.5	13.9	46.4	68.2	-21.8	Peak	Horizontal
*	10129.0	31.9	15.9	47.8	68.2	-20.4	Peak	Horizontal
	11013.0	30.5	18.5	49.0	54.0	-5.0	Peak	Horizontal
	11914.0	30.1	18.6	48.7	54.0	-5.3	Peak	Horizontal
*	8871.0	33.7	14.0	47.7	68.2	-20.5	Peak	Vertical
*	9899.5	33.4	15.4	48.8	68.2	-19.4	Peak	Vertical
	11021.5	30.8	18.5	49.3	54.0	-4.7	Peak	Vertical
	11948.0	30.6	18.6	49.2	54.0	-4.8	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3	Test Channel:	58
	(Beam-Forming Mode)		
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ü

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
	,	(dBµV)	(-)	(dBµV/m)	(' /	(*)		
*	8811.5	33.5	14.0	47.5	68.2	-20.7	Peak	Horizontal
*	9797.5	32.7	15.1	47.8	68.2	-20.4	Peak	Horizontal
	10970.5	31.9	18.4	50.3	54.0	-3.7	Peak	Horizontal
	12067.0	31.5	18.8	50.3	54.0	-3.7	Peak	Horizontal
*	8854.0	32.7	14.0	46.7	68.2	-21.5	Peak	Vertical
*	9916.5	32.8	15.3	48.1	68.2	-20.1	Peak	Vertical
	11021.5	30.8	18.5	49.3	54.0	-4.7	Peak	Vertical
	11956.5	30.9	18.6	49.5	54.0	-4.5	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 0 + 1 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	106			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8820.0	32.8	14.0	46.8	68.2	-21.4	Peak	Horizontal
*	9814.5	32.1	15.4	47.5	68.2	-20.7	Peak	Horizontal
	11038.5	30.2	18.5	48.7	54.0	-5.3	Peak	Horizontal
	12024.5	30.6	18.8	49.4	54.0	-4.6	Peak	Horizontal
*	8760.5	34.2	13.9	48.1	68.2	-20.1	Peak	Vertical
*	9908.0	32.7	15.3	48.0	68.2	-20.2	Peak	Vertical
	11089.5	30.6	18.6	49.2	54.0	-4.8	Peak	Vertical
	12007.5	30.2	18.7	48.9	54.0	-5.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C	
Test Engineer	Kevin Ker	Relative Humidity	57 %	
Test Site	AC1	Test Date	2018/02/28	
T	802.11ac-VHT80+80 - Ant 0 + 1 /	T + 0	122	
Test Mode:	Ant 0 + 1 + 2 + 3 (Beam-Forming Mode)	Test Channel:		
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	· ·	

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
	(IVII IZ)	(dBµV)	(ub)	(dBµV/m)	(ασμν/π)	(ub)		
*	8692.5	32.6	13.7	46.3	68.2	-21.9	Peak	Horizontal
*	9814.5	33.4	15.4	48.8	68.2	-19.4	Peak	Horizontal
	11174.5	30.7	18.7	49.4	54.0	-4.6	Peak	Horizontal
	12407.0	30.3	18.4	48.7	54.0	-5.3	Peak	Horizontal
*	8845.5	33.4	14.0	47.4	68.2	-20.8	Peak	Vertical
*	9814.5	31.9	15.4	47.3	68.2	-20.9	Peak	Vertical
	11234.0	30.9	18.8	49.7	54.0	-4.3	Peak	Vertical
	12169.0	30.2	18.8	49.0	54.0	-5.0	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 0 + 1 / Ant 0 + 1 + 2 + 3	Test Channel:	138
rest Mode.	(Beam-Forming Mode)	rest Chamilei.	130
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ü

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8752.0	33.6	13.9	47.5	68.2	-20.7	Peak	Horizontal
*	10146.0	34.1	16.0	50.1	68.2	-18.1	Peak	Horizontal
	10894.0	32.7	18.3	51.0	54.0	-3.0	Peak	Horizontal
	12220.0	31.4	18.7	50.1	54.0	-3.9	Peak	Horizontal
*	8845.5	32.5	14.0	46.5	68.2	-21.7	Peak	Vertical
*	10103.5	32.1	15.7	47.8	68.2	-20.4	Peak	Vertical
	10970.5	31.7	18.4	50.1	54.0	-3.9	Peak	Vertical
	12075.5	30.1	18.9	49.0	54.0	-5.0	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C				
Test Engineer	Kevin Ker	Relative Humidity	57 %				
Test Site	AC1	Test Date	2018/02/28				
	802.11ac-VHT80+80 - Ant 0 + 1 /						
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	155				
	(Beam-Forming Mode)						
Remark:	1. Average measurement was not p	erformed if peak level lov	wer than average				
	limit.	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)	(3.2)	(dBµV/m)	(()		
*	8769.0	32.0	13.9	45.9	68.2	-22.3	Peak	Horizontal
*	9678.5	32.4	14.6	47.0	68.2	-21.2	Peak	Horizontal
	10970.5	31.4	18.4	49.8	54.0	-4.2	Peak	Horizontal
	11837.5	31.1	18.7	49.8	54.0	-4.2	Peak	Horizontal
*	8811.5	32.6	14.0	46.6	68.2	-21.6	Peak	Vertical
*	10103.5	32.2	15.7	47.9	68.2	-20.3	Peak	Vertical
	11030.0	30.9	18.5	49.4	54.0	-4.6	Peak	Vertical
	12058.5	30.2	18.8	49.0	54.0	-5.0	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	42
rest Mode.	(Beam-Forming Mode)	rest Ghannel.	42
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency	Reading	Factor	Measure	Limit	Margin	Detector	Polarization
	(MHz)	Level	(dB)	Level	(dBµV/m)	(dB)		
		(dBµV)		(dBµV/m)				
*	8743.5	32.1	13.9	46.0	68.2	-22.2	Peak	Horizontal
*	9678.5	34.1	14.6	48.7	68.2	-19.5	Peak	Horizontal
	11123.5	31.6	18.6	50.2	54.0	-3.8	Peak	Horizontal
	11897.0	31.3	18.6	49.9	54.0	-4.1	Peak	Horizontal
*	8820.0	34.5	14.0	48.5	68.2	-19.7	Peak	Vertical
*	10018.5	33.3	15.4	48.7	68.2	-19.5	Peak	Vertical
	11064.0	30.9	18.5	49.4	54.0	-4.6	Peak	Vertical
	11948.0	31.3	18.6	49.9	54.0	-4.1	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	58
	(Beam-Forming Mode)		
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ü

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
		(dBµV)		(dBµV/m)				
*	8820.0	34.2	14.0	48.2	68.2	-20.0	Peak	Horizontal
*	9899.5	34.3	15.4	49.7	68.2	-18.5	Peak	Horizontal
	11327.5	30.8	18.9	49.7	54.0	-4.3	Peak	Horizontal
	12381.5	30.1	18.4	48.5	54.0	-5.5	Peak	Horizontal
*	8769.0	32.9	13.9	46.8	68.2	-21.4	Peak	Vertical
*	10018.5	32.7	15.4	48.1	68.2	-20.1	Peak	Vertical
	10826.0	32.1	18.0	50.1	54.0	-3.9	Peak	Vertical
	11846.0	30.6	18.7	49.3	54.0	-4.7	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	106
	(Beam-Forming Mode)		
Remark:	 Average measurement was not plimit. Other frequency was 20dB below in the report. 	·	Ü

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
	, ,	(dBµV)	,	(dBµV/m)	, ,			
*	8760.5	32.4	13.9	46.3	68.2	-21.9	Peak	Horizontal
*	10044.0	32.5	15.5	48.0	68.2	-20.2	Peak	Horizontal
	11021.5	30.4	18.5	48.9	54.0	-5.1	Peak	Horizontal
	12381.5	30.2	18.4	48.6	54.0	-5.4	Peak	Horizontal
*	8854.0	33.1	14.0	47.1	68.2	-21.1	Peak	Vertical
*	9772.0	32.7	14.9	47.6	68.2	-20.6	Peak	Vertical
	10979.0	30.6	18.5	49.1	54.0	-4.9	Peak	Vertical
	12024.5	30.8	18.8	49.6	54.0	-4.4	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C
Test Engineer	Kevin Ker	Relative Humidity	57 %
Test Site	AC1	Test Date	2018/02/28
Test Mode:	802.11ac-VHT80+80 - Ant 2 + 3 / Ant 0 + 1 + 2 + 3	Test Channel:	122
root wodo.	(Beam-Forming Mode)	reat offarmer.	122
Remark:	 Average measurement was not p limit. Other frequency was 20dB below in the report. 	·	Ū

Mark	Frequency (MHz)	Reading Level	Factor (dB)	Measure Level	Limit (dBµV/m)	Margin (dB)	Detector	Polarization
	()	(dBµV)	(3.2)	(dBµV/m)	(()		
*	8828.5	33.6	14.0	47.6	68.2	-20.6	Peak	Horizontal
*	9865.5	31.9	16.0	47.9	68.2	-20.3	Peak	Horizontal
	11191.5	30.4	18.7	49.1	54.0	-4.9	Peak	Horizontal
	12398.5	30.0	18.4	48.4	54.0	-5.6	Peak	Horizontal
*	8828.5	31.7	14.0	45.7	68.2	-22.5	Peak	Vertical
*	10103.5	32.1	15.7	47.8	68.2	-20.4	Peak	Vertical
	10851.5	32.9	18.1	51.0	54.0	-3.0	Peak	Vertical
	11863.0	30.7	18.7	49.4	54.0	-4.6	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C			
Test Engineer	Kevin Ker	Relative Humidity	57 %			
Test Site	AC1	Test Date	2018/02/28			
	802.11ac-VHT80+80 - Ant 2 + 3 /					
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	138			
	(Beam-Forming Mode)					
Remark:	1. Average measurement was not p	performed if peak level lo	wer 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)				
*	8726.5	31.3	13.8	45.1	68.2	-23.1	Peak	Horizontal
*	9814.5	32.7	15.4	48.1	68.2	-20.1	Peak	Horizontal
	11021.5	30.8	18.5	49.3	54.0	-4.7	Peak	Horizontal
	12364.5	30.4	18.4	48.8	54.0	-5.2	Peak	Horizontal
*	8828.5	33.3	14.0	47.3	68.2	-20.9	Peak	Vertical
*	9882.5	34.2	15.6	49.8	68.2	-18.4	Peak	Vertical
	10843.0	33.3	18.1	51.4	54.0	-2.6	Peak	Vertical
	11846.0	31.0	18.7	49.7	54.0	-4.3	Peak	Vertical

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	ACCESS POINT - Directional Antenna (ANT-4x4-5314)	Temperature	26°C		
Test Engineer	Kevin Ker	Relative Humidity	57 %		
Test Site	AC1	Test Date	2018/02/28		
	802.11ac-VHT80+80 - Ant 2 + 3 /				
Test Mode:	Ant 0 + 1 + 2 + 3	Test Channel:	155		
	(Beam-Forming Mode)				
Remark:	1. Average measurement was not p	performed if peak level lov	wer 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)				
*	8760.5	34.1	13.9	48.0	68.2	-20.2	Peak	Horizontal
*	9721.0	32.8	14.7	47.5	68.2	-20.7	Peak	Horizontal
	11293.5	30.0	18.9	48.9	54.0	-5.1	Peak	Horizontal
	12271.0	31.1	18.6	49.7	54.0	-4.3	Peak	Horizontal
*	8896.5	32.3	14.0	46.3	68.2	-21.9	Peak	Vertical
*	9993.0	33.8	15.4	49.2	68.2	-19.0	Peak	Vertical
	11225.5	30.7	18.8	49.5	54.0	-4.5	Peak	Vertical
	12067.0	30.0	18.8	48.8	54.0	-5.2	Peak	Vertical

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

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

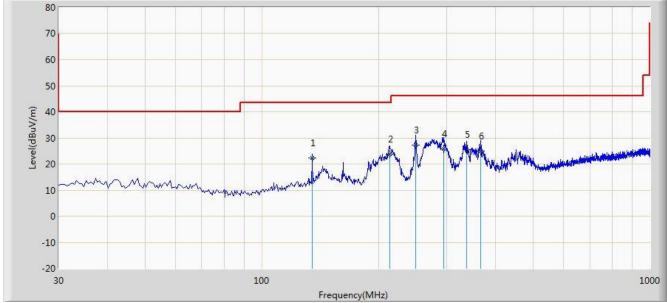
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The Worst Case of Radiated Emission below 1GHz:

Site: AC1	Time: 2018/03/10 - 15:09			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: VULB 9168_20-2000MHz	Polarity: Horizontal			
EUT: ACCESS POINT	Power: POE (DC 57V)			
Test Mode: Transmit by 802.11ac-VHT20 at channel 5785MHz (CDD Mode)				

Test Mode. Transmit by 802. Trac-VHT20 at channel 5765MH2 (CDD Mode)



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			134.760	22.445	8.250	-21.055	43.500	14.195	QP
2			213.330	23.634	12.030	-19.866	43.500	11.604	QP
3		*	249.220	27.369	14.360	-18.631	46.000	13.009	QP
4			293.840	25.865	11.620	-20.135	46.000	14.244	QP
5			337.005	25.576	10.260	-20.424	46.000	15.316	QP
6			367.075	24.886	8.960	-21.114	46.000	15.926	QP

Note 1: Measure Level ($dB\mu V/m$) = Reading Level ($dB\mu V$) + Factor (dB)

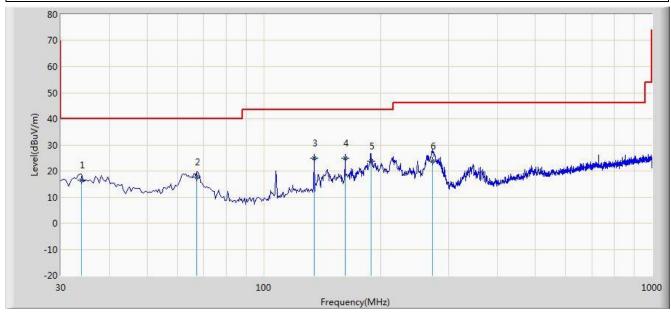
Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m)

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: $9kHz \sim 30MHz$, $18GHz \sim 40GHz$), therefore no data appear in the report.

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Site: AC1	Time: 2018/03/10 - 15:10			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: VULB 9168_20-2000MHz	Polarity: Vertical			
EUT: ACCESS POINT	Power: POE (DC 57V)			
Test Mode: Transmit by 802.11ac-VHT20 at channel 5785MHz (CDD Mode)				



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			33.880	16.521	2.630	-23.479	40.000	13.892	QP
2			67.345	17.716	5.630	-22.284	40.000	12.086	QP
3		*	134.760	24.885	10.690	-18.615	43.500	14.195	QP
4			161.920	24.820	9.690	-18.680	43.500	15.130	QP
5			189.300	23.873	12.050	-19.627	43.500	11.823	QP
6			271.530	23.896	10.250	-22.104	46.000	13.646	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.



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
¹ 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	(²)
13.36 - 13.41			

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 5.25-5.35 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 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 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

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exceed an e.i.r.p. of -27 dBm/MHz.

Refer to KDB 789033 D02v02r01 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	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					

7.9.2.Test Procedure Used

ANSI C63.10 Section 6.3 (General Requirements)

ANSI C63.10 Section 6.6 (Standard test method above 1GHz)

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7.9.3.Test Setting

Peak Measurements above 1GHz

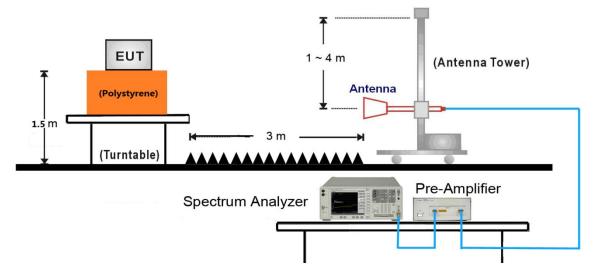
- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW = 3MHz
- 4. Detector = peak
- 5. Sweep time = auto couple
- 6. Trace mode = max hold
- 7. Trace was allowed to stabilize

Average Measurements above 1GHz (Method VB)

- 1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
- 2. RBW = 1MHz
- 3. VBW If the EUT is configured to transmit with duty cycle \geq 98%, set VBW \leq RBW/100 (i.e., 10 kHz) but not less than 10 Hz. If the EUT duty cycle is < 98%, set VBW \geq 1/T.
- 4. Detector = Peak
- 5. Sweep time = auto
- 6. Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98% duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of 1/x, where x is the duty cycle.

7.9.4.Test Setup

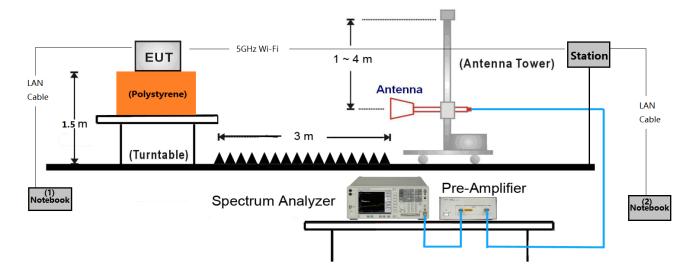
CDD Mode Test Setup:



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Additional Beam-Forming Mode Test Setup:



Make the EUT connect with the station by 5GHz wireless.

Input some commands in the notebook (1) to open the EUT Beam Forming function, and setup the related test channel & data rate & power setting.

Make the notebook (1) ping with notebook (2) using the "iperf" software.

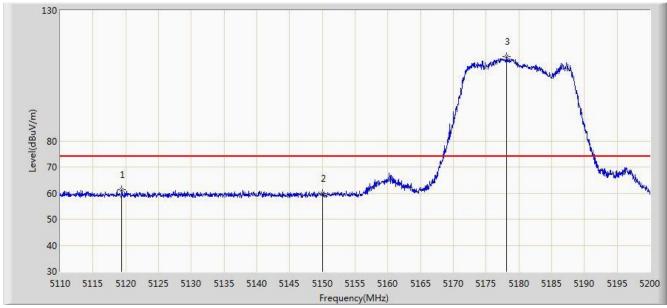
Test Mode	Duty Cycle	T = Transmission Duration		
	(%)	(ms)		
802.11ac-VHT20	95.64	1.995		
802.11ac-VHT40	95.84	2.003		
802.11ac-VHT80	96.38	1.968		

Note: This item was performed with the WIFI antenna connected.



7.9.5.Test Result

Site: AC1	Time: 2018/02/27 - 02:35			
Limit: FCC_Part15.209_RE(3m)	Engineer: Kevin Ker			
Probe: BBHA9120D_1GHz_18GHz	Polarity: Horizontal			
EUT: ACCESS POINT - Omni Antenna	Power: POE (DC 57V)			
(AP-ANT-20W)				
Test Mode: Transmit by 802 11a at Channel 5180MHz Ant 0 ± 1 ± 2 ± 3 (CDD Mode)				



No	Flag	Mark	Frequency	Measure	Reading	Over Limit	Limit	Factor	Туре
			(MHz)	Level	Level	(dB)	(dBuV/m)	(dB)	
				(dBuV/m)	(dBuV)				
1			5119.405	61.235	57.060	-12.765	74.000	4.175	PK
2			5150.000	59.807	55.638	-14.193	74.000	4.170	PK
3			5178.085	112.190	108.114	N/A	N/A	4.076	PK

Note: Measure Level (dB μ V/m) = Reading Level (dB μ V) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

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