

## 4.6. Radiated Emissions Measurement

### 4.6.1. Limit

For transmitters operating in the 5.15-5.35 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 5.470-5.725 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 shall be limited to a level of  $-27$  dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micovolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

### 4.6.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of spectrum analyzer and receiver.

Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RBW / VBW (Emission in restricted band)	1 MHz / 3MHz for Peak, 1 MHz / 1/T for Average
RBW / VBW (Emission in non-restricted band)	1 MHz / 3MHz for peak

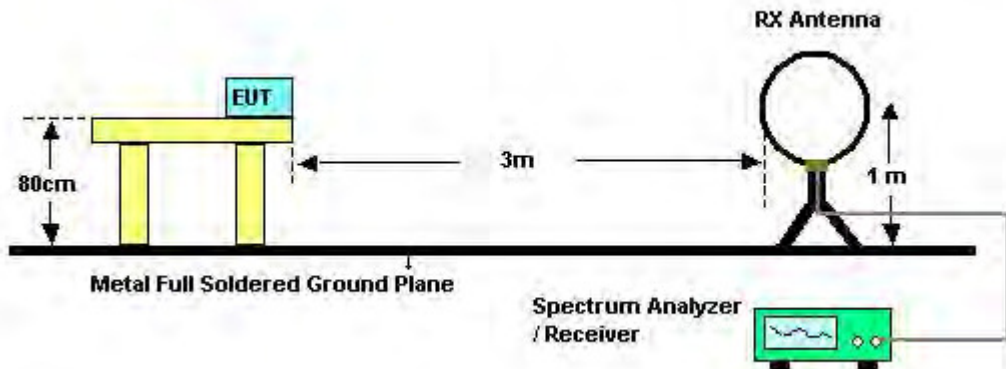
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RBW 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RBW 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RBW 120kHz for QP

#### 4.6.3. Test Procedures

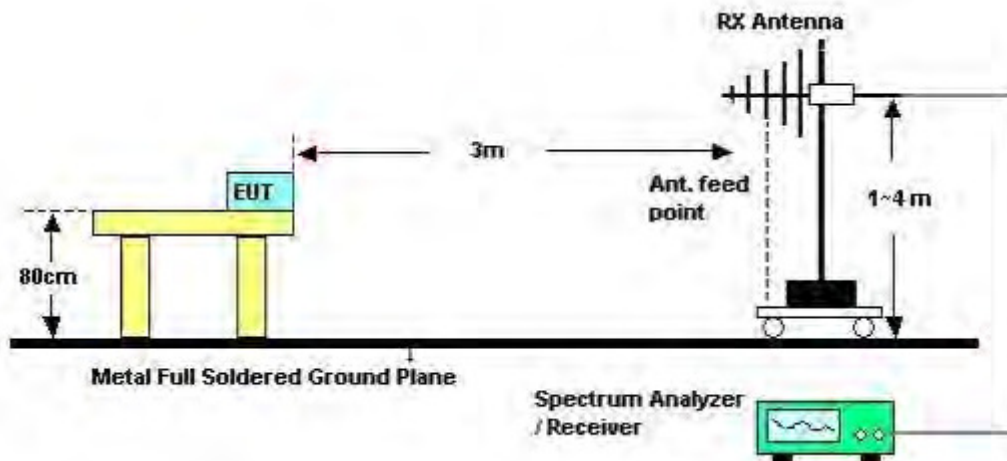
1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 1m & 3m far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and 3MHz RBW for peak reading. Then 1MHz RBW and 1/T VBW for average reading in spectrum analyzer.
7. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
8. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
9. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

#### 4.6.4. Test Setup Layout

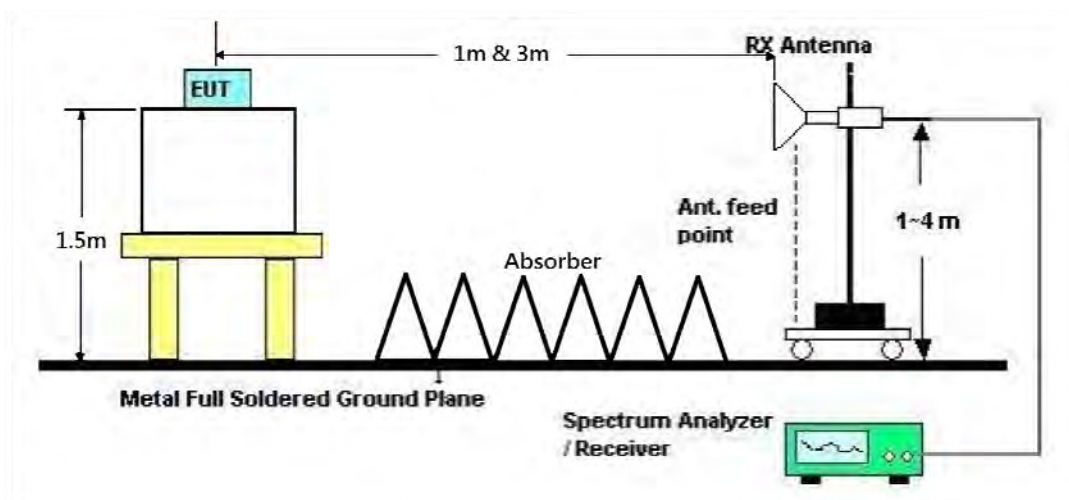
For Radiated Emissions: 9kHz ~30MHz



For Radiated Emissions: 30MHz~1GHz



For Radiated Emissions: Above 1GHz



#### 4.6.5. Test Deviation

There is no deviation with the original standard.

#### 4.6.6. EUT Operation during Test

For non-beamforming function:

The EUT was programmed to be in continuously transmitting mode.

For beamforming function:

The EUT was programmed to be in beamforming transmitting mode.

#### 4.6.7. Results of Radiated Emissions (9kHz~30MHz)

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	Normal Link
<b>Test Date</b>	Apr. 15, 2016	<b>Test Mode</b>	Mode 1

<b>Freq. (MHz)</b>	<b>Level (dBuV)</b>	<b>Over Limit (dB)</b>	<b>Limit Line (dBuV)</b>	<b>Remark</b>
-	-	-	-	See Note

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

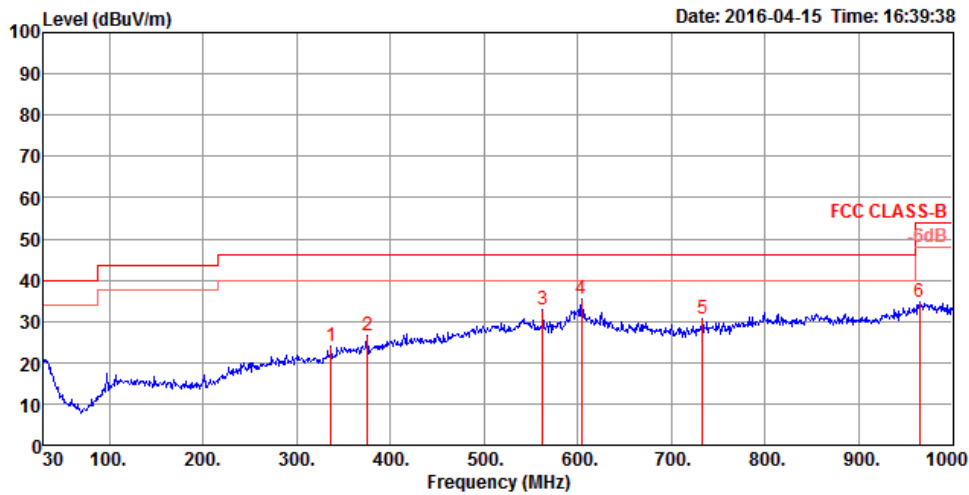
Distance extrapolation factor =  $40 \log(\text{specific distance} / \text{test distance})$  (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor.

4.6.8. Results of Radiated Emissions (30MHz~1GHz)

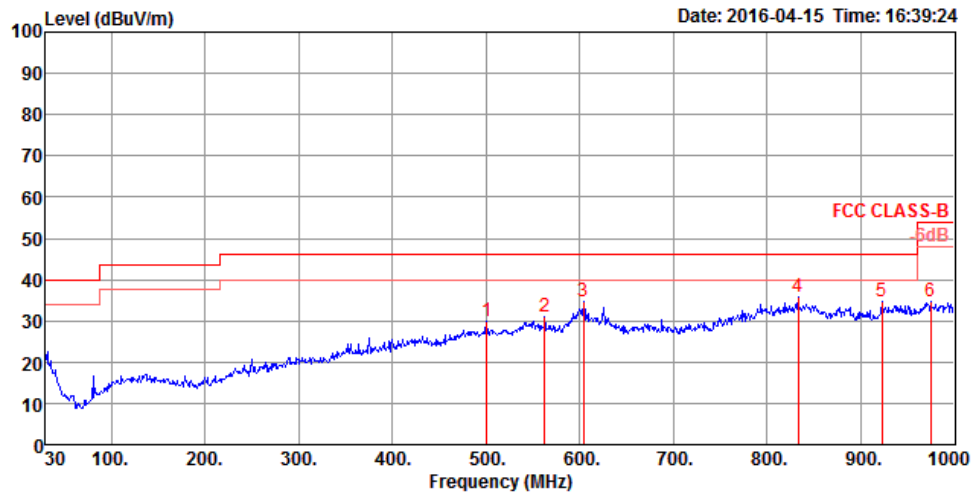
Temperature	20.7°C	Humidity	63%
Test Engineer	John Tang	Configurations	Normal Link
Test Mode	Mode 1		

Horizontal



	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	336.52	24.16	46.00	-21.84	33.87	1.57	21.02	32.30	125	0 Peak	HORIZONTAL
2	375.32	26.63	46.00	-19.37	35.20	1.67	22.08	32.32	125	196 Peak	HORIZONTAL
3	562.53	32.84	46.00	-13.16	38.23	2.05	24.95	32.39	100	324 Peak	HORIZONTAL
4	604.24	35.29	46.00	-10.71	40.11	2.13	25.46	32.41	100	341 Peak	HORIZONTAL
5	733.25	30.48	46.00	-15.52	34.21	2.34	26.25	32.32	125	225 Peak	HORIZONTAL
6	965.08	34.70	54.00	-19.30	34.88	2.70	28.27	31.15	100	296 Peak	HORIZONTAL

**Vertical**



	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	500.45	29.96	46.00	-16.04	36.34	1.94	24.03	32.35	100	249 Peak	VERTICAL
2	562.53	31.10	46.00	-14.90	36.49	2.05	24.95	32.39	100	318 Peak	VERTICAL
3	604.24	34.60	46.00	-11.40	39.42	2.13	25.46	32.41	100	150 Peak	VERTICAL
4	833.16	35.98	46.00	-10.02	38.36	2.50	27.20	32.08	100	34 Peak	VERTICAL
5	922.40	34.72	46.00	-11.28	35.75	2.62	27.89	31.54	100	50 Peak	VERTICAL
6	974.78	34.81	54.00	-19.19	34.79	2.72	28.37	31.07	100	290 Peak	VERTICAL

**Note:**

The amplitude of spurious emissions which are attenuated by more than 20 dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

## 4.6.9. Results for Radiated Emissions (1GHz~40GHz)

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 36 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15539.90	48.56	54.00	-5.44	31.63	12.28	38.38	33.73	161	87	Average	HORIZONTAL
2	15540.30	62.00	74.00	-12.00	45.07	12.28	38.38	33.73	161	87	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15539.19	48.60	54.00	-5.40	31.67	12.28	38.38	33.73	148	254	Average	VERTICAL
2	15539.54	61.59	74.00	-12.41	44.66	12.28	38.38	33.73	148	254	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 40 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15599.65	61.46	74.00	-12.54	44.67	12.30	38.26	33.77	154	56	Peak	HORIZONTAL
2	15599.88	49.03	54.00	-4.97	32.24	12.30	38.26	33.77	154	56	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15599.71	49.05	54.00	-4.95	32.26	12.30	38.26	33.77	139	283	Average	VERTICAL
2	15599.92	61.96	74.00	-12.04	45.17	12.30	38.26	33.77	139	283	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15712.56	48.20	54.00	-5.80	31.86	12.35	37.91	33.92	164	283	Average	HORIZONTAL
2	15712.76	60.47	74.00	-13.53	44.13	12.35	37.91	33.92	164	283	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15723.24	60.43	74.00	-13.57	44.09	12.35	37.91	33.92	142	185	Peak	VERTICAL
2	15728.44	48.44	54.00	-5.56	32.10	12.35	37.91	33.92	142	185	Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 52 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15777.58	46.18	54.00	-7.82	31.26	11.29	38.48	34.85	285	224	Average	HORIZONTAL
2	15782.98	59.57	74.00	-14.43	44.57	11.30	38.55	34.85	285	224	Peak	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15779.70	60.36	74.00	-13.64	45.44	11.29	38.48	34.85	221	209	Peak	VERTICAL
2	15783.60	46.42	54.00	-7.58	31.42	11.30	38.55	34.85	221	209	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 60 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15902.92	48.34	54.00	-5.66	33.29	11.32	38.67	34.94	163	193	Average	HORIZONTAL
2	15903.74	61.90	74.00	-12.10	46.85	11.32	38.67	34.94	163	193	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15901.08	61.02	74.00	-12.98	45.97	11.32	38.67	34.94	300	212	Peak	VERTICAL
2	15903.16	47.86	54.00	-6.14	32.81	11.32	38.67	34.94	300	212	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 64 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15963.24	48.22	54.00	-5.78	33.13	11.33	38.74	34.98	76	252	Average	HORIZONTAL
2	15964.48	61.17	74.00	-12.83	46.08	11.33	38.74	34.98	76	252	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15963.76	48.33	54.00	-5.67	33.24	11.33	38.74	34.98	186	268	Average	VERTICAL
2	15964.90	61.57	74.00	-12.43	46.48	11.33	38.74	34.98	186	268	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 100 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	10998.54	42.91	54.00	-11.09	29.39	9.68	38.50	34.66	51	240	Average	HORIZONTAL
2	11001.10	55.87	74.00	-18.13	42.35	9.68	38.50	34.66	51	240	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	10996.84	55.88	74.00	-18.12	42.36	9.68	38.50	34.66	336	209	Peak	VERTICAL
2	11000.64	43.13	54.00	-10.87	29.61	9.68	38.50	34.66	336	209	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 116 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11155.68	41.94	54.00	-12.06	28.43	9.66	38.50	34.65	137	207	Average	HORIZONTAL
2	11164.54	54.82	74.00	-19.18	41.31	9.66	38.50	34.65	137	207	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11159.14	55.42	74.00	-18.58	41.91	9.66	38.50	34.65	60	309	Peak	VERTICAL
2	11161.02	42.21	54.00	-11.79	28.70	9.66	38.50	34.65	60	309	Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 140 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

### Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11402.38	42.35	54.00	-11.65	28.85	9.63	38.50	34.63	176	196	Average	HORIZONTAL
2	11403.38	55.35	74.00	-18.65	41.85	9.63	38.50	34.63	176	196	Peak	HORIZONTAL

### Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11397.04	42.43	54.00	-11.57	28.93	9.63	38.50	34.63	307	201	Average	VERTICAL
2	11399.14	56.23	74.00	-17.77	42.73	9.63	38.50	34.63	307	201	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 144 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11435.56	57.24	74.00	-16.76	43.73	9.63	38.50	34.62	58	200	Peak	HORIZONTAL
2	11440.78	44.33	54.00	-9.67	30.82	9.63	38.50	34.62	58	200	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11438.88	60.24	74.00	-13.76	46.73	9.63	38.50	34.62	354	199	Peak	VERTICAL
2	11440.62	46.49	54.00	-7.51	32.98	9.63	38.50	34.62	354	199	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 149 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11488.68	46.31	54.00	-7.69	29.12	10.66	39.90	33.37	150	264	Average	HORIZONTAL
2	11489.76	59.35	74.00	-14.65	42.16	10.66	39.90	33.37	150	264	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11488.49	59.20	74.00	-14.80	42.01	10.66	39.90	33.37	150	84	Peak	VERTICAL
2	11488.60	46.32	54.00	-7.68	29.13	10.66	39.90	33.37	150	84	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 157 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11569.21	46.02	54.00	-7.98	28.96	10.68	39.77	33.39	150	179	Average	HORIZONTAL
2	11569.96	59.26	74.00	-14.74	42.20	10.68	39.77	33.39	150	179	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11569.20	45.97	54.00	-8.03	28.91	10.68	39.77	33.39	150	288	Average	VERTICAL
2	11572.28	58.99	74.00	-15.01	41.93	10.68	39.77	33.39	150	288	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11650.66	45.99	54.00	-8.01	29.08	10.69	39.63	33.41	150	84	Average	HORIZONTAL
2	11651.03	58.54	74.00	-15.46	41.69	10.69	39.57	33.41	150	84	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11649.99	46.16	54.00	-7.84	29.25	10.69	39.63	33.41	150	261	Average	VERTICAL
2	11650.95	58.53	74.00	-15.47	41.68	10.69	39.57	33.41	150	261	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15535.69	49.00	54.00	-5.00	32.07	12.28	38.38	33.73	128	254	Average	HORIZONTAL
2	15545.14	61.81	74.00	-12.19	44.88	12.28	38.38	33.73	128	254	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15537.05	62.39	74.00	-11.61	45.46	12.28	38.38	33.73	152	167	Peak	VERTICAL
2	15539.00	49.12	54.00	-4.88	32.19	12.28	38.38	33.73	152	167	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 40 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15602.77	49.06	54.00	-4.94	32.37	12.31	38.15	33.77	140	95	Average	HORIZONTAL
2	15604.89	62.26	74.00	-11.74	45.57	12.31	38.15	33.77	140	95	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15597.15	62.19	74.00	-11.81	45.40	12.30	38.26	33.77	154	197	Peak	VERTICAL
2	15602.54	49.18	54.00	-4.82	32.49	12.31	38.15	33.77	154	197	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15719.54	61.77	74.00	-12.23	45.43	12.35	37.91	33.92	168	338	Peak	HORIZONTAL
2	15720.54	48.31	54.00	-5.69	31.97	12.35	37.91	33.92	168	338	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15715.53	48.12	54.00	-5.88	31.78	12.35	37.91	33.92	143	239	Average	VERTICAL
2	15715.96	61.20	74.00	-12.80	44.86	12.35	37.91	33.92	143	239	Peak	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

#### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15780.00	46.28	54.00	-7.72	31.36	11.29	38.48	34.85	184	195	Average	HORIZONTAL
2	15783.38	59.40	74.00	-14.60	44.40	11.30	38.55	34.85	184	195	Peak	HORIZONTAL

#### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15777.20	59.95	74.00	-14.05	45.03	11.29	38.48	34.85	310	105	Peak	VERTICAL
2	15784.78	46.79	54.00	-7.21	31.79	11.30	38.55	34.85	310	105	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 60 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15897.46	47.99	54.00	-6.01	32.94	11.32	38.67	34.94	304	236	Average	HORIZONTAL
2	15897.98	61.33	74.00	-12.67	46.28	11.32	38.67	34.94	304	236	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15897.76	61.48	74.00	-12.52	46.43	11.32	38.67	34.94	22	204	Peak	VERTICAL
2	15903.78	48.24	54.00	-5.76	33.19	11.32	38.67	34.94	22	204	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 64 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15961.34	48.11	54.00	-5.89	33.02	11.33	38.74	34.98	345	236	Average	HORIZONTAL
2	15961.84	60.81	74.00	-13.19	45.72	11.33	38.74	34.98	345	236	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15955.32	48.18	54.00	-5.82	33.09	11.33	38.74	34.98	45	182	Average	VERTICAL
2	15960.96	61.25	74.00	-12.75	46.16	11.33	38.74	34.98	45	182	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	10995.60	38.47	54.00	-15.53	24.94	9.69	38.50	34.66	357	224	Average	HORIZONTAL
2	10997.40	51.99	74.00	-22.01	38.47	9.68	38.50	34.66	357	224	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	10995.48	38.46	54.00	-15.54	24.93	9.69	38.50	34.66	25	246	Average	VERTICAL
2	10996.16	51.30	74.00	-22.70	37.77	9.69	38.50	34.66	25	246	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 116 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11158.36	41.61	54.00	-12.39	28.10	9.66	38.50	34.65	285	205	Average	HORIZONTAL
2	11163.36	54.82	74.00	-19.18	41.31	9.66	38.50	34.65	285	205	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11158.44	41.96	54.00	-12.04	28.45	9.66	38.50	34.65	40	203	Average	VERTICAL
2	11164.32	55.24	74.00	-18.76	41.73	9.66	38.50	34.65	40	203	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 140 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11396.48	54.89	74.00	-19.11	41.39	9.63	38.50	34.63	175	207	Peak	HORIZONTAL
2	11400.10	42.24	54.00	-11.76	28.74	9.63	38.50	34.63	175	207	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11396.36	42.26	54.00	-11.74	28.76	9.63	38.50	34.63	35	230	Average	VERTICAL
2	11397.20	55.68	74.00	-18.32	42.18	9.63	38.50	34.63	35	230	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11440.10	42.96	54.00	-11.04	29.45	9.63	38.50	34.62	130	213	Average	HORIZONTAL
2	11440.30	54.37	74.00	-19.63	40.86	9.63	38.50	34.62	130	213	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11440.60	43.57	54.00	-10.43	30.06	9.63	38.50	34.62	356	213	Average	VERTICAL
2	11442.54	56.72	74.00	-17.28	43.21	9.63	38.50	34.62	356	213	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11488.34	46.29	54.00	-7.71	29.10	10.66	39.90	33.37	150	136	Average	HORIZONTAL
2	11488.41	59.14	74.00	-14.86	41.95	10.66	39.90	33.37	150	136	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11488.12	46.19	54.00	-7.81	29.00	10.66	39.90	33.37	150	241	Average	VERTICAL
2	11488.77	58.94	74.00	-15.06	41.75	10.66	39.90	33.37	150	241	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 157 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11569.55	45.96	54.00	-8.04	28.90	10.68	39.77	33.39	150	264 Average	HORIZONTAL
2	11572.28	59.52	74.00	-14.48	42.46	10.68	39.77	33.39	150	264 Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11567.66	59.23	74.00	-14.77	42.17	10.68	39.77	33.39	150	86 Peak	VERTICAL
2	11569.77	46.10	54.00	-7.90	29.04	10.68	39.77	33.39	150	86 Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11649.07	58.94	74.00	-15.06	42.03	10.69	39.63	33.41	150	85	Peak	HORIZONTAL
2	11649.28	45.94	54.00	-8.06	29.03	10.69	39.63	33.41	150	85	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11649.76	58.89	74.00	-15.11	41.98	10.69	39.63	33.41	150	235	Peak	VERTICAL
2	11649.86	45.95	54.00	-8.05	29.04	10.69	39.63	33.41	150	235	Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15568.20	61.78	74.00	-12.22	44.99	12.30	38.26	33.77	159	113	Peak	HORIZONTAL
2	15569.13	49.16	54.00	-4.84	32.37	12.30	38.26	33.77	159	113	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15569.20	49.09	54.00	-4.91	32.30	12.30	38.26	33.77	145	238	Average	VERTICAL
2	15571.79	62.24	74.00	-11.76	45.45	12.30	38.26	33.77	145	238	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15688.27	48.55	54.00	-5.45	32.06	12.33	38.03	33.87	151	341	Average	HORIZONTAL
2	15691.99	61.72	74.00	-12.28	45.33	12.35	37.91	33.87	151	341	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15692.21	48.45	54.00	-5.55	32.06	12.35	37.91	33.87	136	220	Average	VERTICAL
2	15692.42	61.70	74.00	-12.30	45.31	12.35	37.91	33.87	136	220	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15825.52	59.43	74.00	-14.57	44.47	11.30	38.55	34.89	39	196	Peak	HORIZONTAL
2	15826.48	46.95	54.00	-7.05	31.99	11.30	38.55	34.89	39	196	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15817.36	46.77	54.00	-7.23	31.81	11.30	38.55	34.89	324	156	Average	VERTICAL
2	15825.52	58.88	74.00	-15.12	43.92	11.30	38.55	34.89	324	156	Peak	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 62 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15929.36	61.40	74.00	-12.60	46.31	11.33	38.74	34.98	111	211	Peak	HORIZONTAL
2	15945.20	48.08	54.00	-5.92	32.99	11.33	38.74	34.98	111	211	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15941.68	47.92	54.00	-6.08	32.83	11.33	38.74	34.98	328	246	Average	VERTICAL
2	15945.68	60.66	74.00	-13.34	45.57	11.33	38.74	34.98	328	246	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11032.72	54.35	74.00	-19.65	40.83	9.68	38.50	34.66	165	245	Peak	HORIZONTAL
2	11035.60	41.59	54.00	-12.41	28.07	9.68	38.50	34.66	165	245	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11029.60	41.41	54.00	-12.59	27.89	9.68	38.50	34.66	358	142	Average	VERTICAL
2	11040.00	54.26	74.00	-19.74	40.74	9.68	38.50	34.66	358	142	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 110 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11086.56	41.78	54.00	-12.22	28.26	9.67	38.50	34.65	11	218	Average	HORIZONTAL
2	11109.36	54.40	74.00	-19.60	40.88	9.67	38.50	34.65	11	218	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11095.36	41.51	54.00	-12.49	27.99	9.67	38.50	34.65	245	231	Average	VERTICAL
2	11100.24	55.22	74.00	-18.78	41.70	9.67	38.50	34.65	245	231	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 134 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11326.72	54.89	74.00	-19.11	41.38	9.64	38.50	34.63	47	194	Peak	HORIZONTAL
2	11351.12	42.50	54.00	-11.50	28.99	9.64	38.50	34.63	47	194	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11328.40	54.88	74.00	-19.12	41.37	9.64	38.50	34.63	355	228	Peak	VERTICAL
2	11359.52	42.40	54.00	-11.60	28.90	9.63	38.50	34.63	355	228	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11423.44	42.29	54.00	-11.71	28.79	9.63	38.50	34.63	172	234	Average	HORIZONTAL
2	11439.76	55.25	74.00	-18.75	41.74	9.63	38.50	34.62	172	234	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11411.60	54.49	74.00	-19.51	40.99	9.63	38.50	34.63	354	246	Peak	VERTICAL
2	11419.68	42.31	54.00	-11.69	28.81	9.63	38.50	34.63	354	246	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11508.52	58.96	74.00	-15.04	41.77	10.66	39.90	33.37	150	188	Peak	HORIZONTAL
2	11511.11	46.46	54.00	-7.54	29.28	10.66	39.90	33.38	150	188	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11507.67	59.49	74.00	-14.51	42.30	10.66	39.90	33.37	150	227	Peak	VERTICAL
2	11510.97	47.05	54.00	-6.95	29.87	10.66	39.90	33.38	150	227	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11585.00	46.45	54.00	-7.55	29.47	10.68	39.70	33.40	150	153	Average	HORIZONTAL
2	11588.44	58.38	74.00	-15.62	41.40	10.68	39.70	33.40	150	153	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11588.55	58.07	74.00	-15.93	41.09	10.68	39.70	33.40	150	190	Peak	VERTICAL
2	11589.90	46.09	54.00	-7.91	29.11	10.68	39.70	33.40	150	190	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15627.59	48.89	54.00	-5.11	32.25	12.31	38.15	33.82	130	259	Average	HORIZONTAL
2	15630.99	61.68	74.00	-12.32	45.04	12.31	38.15	33.82	130	259	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15627.85	49.02	54.00	-4.98	32.38	12.31	38.15	33.82	153	161	Average	VERTICAL
2	15629.41	61.88	74.00	-12.12	45.24	12.31	38.15	33.82	153	161	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15892.88	61.07	74.00	-12.93	46.02	11.32	38.67	34.94	310	225	Peak	HORIZONTAL
2	15898.48	48.15	54.00	-5.85	33.10	11.32	38.67	34.94	310	225	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15892.88	60.90	74.00	-13.10	45.85	11.32	38.67	34.94	176	258	Peak	VERTICAL
2	15903.60	47.89	54.00	-6.11	32.84	11.32	38.67	34.94	176	258	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11053.28	39.23	54.00	-14.77	25.71	9.68	38.50	34.66	178	225	Average	HORIZONTAL
2	11086.72	51.71	74.00	-22.29	38.19	9.67	38.50	34.65	178	225	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11093.44	51.88	74.00	-22.12	38.36	9.67	38.50	34.65	356	277	Peak	VERTICAL
2	11096.96	39.29	54.00	-14.71	25.77	9.67	38.50	34.65	356	277	Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 122 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11234.08	41.47	54.00	-12.53	27.96	9.65	38.50	34.64	113	237	Average	HORIZONTAL
2	11241.60	54.40	74.00	-19.60	40.89	9.65	38.50	34.64	113	237	Peak	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11207.20	53.84	74.00	-20.16	40.32	9.66	38.50	34.64	346	188	Peak	VERTICAL
2	11230.56	41.59	54.00	-12.41	28.08	9.65	38.50	34.64	346	188	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11393.92	52.67	74.00	-21.33	39.17	9.63	38.50	34.63	1	229	Peak	HORIZONTAL
2	11414.56	40.13	54.00	-13.87	26.63	9.63	38.50	34.63	1	229	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11408.80	40.34	54.00	-13.66	26.84	9.63	38.50	34.63	349	223	Average	VERTICAL
2	11414.56	53.36	74.00	-20.64	39.86	9.63	38.50	34.63	349	223	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11549.56	46.54	54.00	-7.46	29.43	10.67	39.83	33.39	150	197 Average	HORIZONTAL
2	11550.24	58.47	74.00	-15.53	41.41	10.68	39.77	33.39	150	197 Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11547.08	58.99	74.00	-15.01	41.88	10.67	39.83	33.39	150	63 Peak	VERTICAL
2	11552.68	46.28	54.00	-7.72	29.22	10.68	39.77	33.39	150	63 Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT160 CH 50 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15741.40	47.79	54.00	-6.21	31.55	12.37	37.79	33.92	151	153	Average	HORIZONTAL
2	15751.40	60.91	74.00	-13.09	44.67	12.37	37.79	33.92	151	153	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15748.28	60.79	74.00	-13.21	44.55	12.37	37.79	33.92	151	300	Peak	VERTICAL
2	15753.72	47.83	54.00	-6.17	31.59	12.37	37.79	33.92	151	300	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT160 CH 114 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11139.50	45.04	54.00	-8.96	27.70	10.60	40.12	33.38	159	174	Average	HORIZONTAL
2	11139.50	56.41	74.00	-17.59	39.07	10.60	40.12	33.38	159	174	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11139.50	45.21	54.00	-8.79	27.87	10.60	40.12	33.38	171	65	Average	VERTICAL
2	11139.50	55.26	74.00	-18.74	37.92	10.60	40.12	33.38	171	65	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 36 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15541.78	48.78	54.00	-5.22	25.84	18.54	38.13	33.73	200	55	Average	HORIZONTAL
2	15544.74	60.97	74.00	-13.03	38.03	18.54	38.13	33.73	200	55	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15530.74	49.07	54.00	-4.93	26.13	18.54	38.13	33.73	200	345	Average	VERTICAL
2	15536.89	61.75	74.00	-12.25	38.81	18.54	38.13	33.73	200	345	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 40 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15600.82	61.11	74.00	-12.89	38.30	18.60	37.98	33.77	200	92	Peak	HORIZONTAL
2	15601.76	48.32	54.00	-5.68	25.51	18.60	37.98	33.77	200	92	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15596.46	49.03	54.00	-4.97	26.18	18.57	38.05	33.77	200	30	Average	VERTICAL
2	15604.02	61.79	74.00	-12.21	38.98	18.60	37.98	33.77	200	30	Peak	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15715.82	62.27	74.00	-11.73	39.69	18.66	37.84	33.92	200	263	Peak	HORIZONTAL
2	15716.51	48.69	54.00	-5.31	26.11	18.66	37.84	33.92	200	263	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15718.14	63.33	74.00	-10.67	40.75	18.66	37.84	33.92	233	335	Peak	VERTICAL
2	15721.06	49.97	54.00	-4.03	27.39	18.66	37.84	33.92	233	335	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 52 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Po1/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15778.14	48.67	54.00	-5.33	26.18	18.69	37.76	33.96	200	241	Average	HORIZONTAL
2	15782.39	61.75	74.00	-12.25	39.30	18.72	37.69	33.96	200	241	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Po1/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15775.82	49.58	54.00	-4.42	27.09	18.69	37.76	33.96	200	327	Average	VERTICAL
2	15776.76	62.45	74.00	-11.55	39.96	18.69	37.76	33.96	200	327	Peak	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 60 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10594.55	57.00	74.00	-17.00	38.33	13.91	38.40	33.64	200	101	Peak	HORIZONTAL
2	10604.01	44.08	54.00	-9.92	25.39	13.91	38.40	33.62	200	101	Average	HORIZONTAL
3	15890.42	60.79	74.00	-13.21	38.52	18.78	37.55	34.06	200	177	Peak	HORIZONTAL
4	15909.87	48.42	54.00	-5.58	26.15	18.78	37.55	34.06	200	177	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10602.05	44.35	54.00	-9.65	25.68	13.91	38.40	33.64	200	38	Average	VERTICAL
2	10604.13	57.20	74.00	-16.80	38.51	13.91	38.40	33.62	200	38	Peak	VERTICAL
3	15898.94	48.48	54.00	-5.52	26.21	18.78	37.55	34.06	200	90	Average	VERTICAL
4	15904.78	61.50	74.00	-12.50	39.23	18.78	37.55	34.06	200	90	Peak	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 64 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10641.47	44.14	54.00	-9.86	25.39	13.94	38.40	33.59	200	330	Average	HORIZONTAL
2	10645.03	56.26	74.00	-17.74	37.51	13.94	38.40	33.59	200	330	Peak	HORIZONTAL
3	15955.06	61.45	74.00	-12.55	39.27	18.81	37.47	34.10	200	279	Peak	HORIZONTAL
4	15955.61	48.46	54.00	-5.54	26.28	18.81	37.47	34.10	200	279	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10637.98	44.06	54.00	-9.94	25.34	13.94	38.40	33.62	200	152	Average	VERTICAL
2	10647.34	57.52	74.00	-16.48	38.77	13.94	38.40	33.59	200	152	Peak	VERTICAL
3	15955.64	61.07	74.00	-12.93	38.89	18.81	37.47	34.10	200	205	Peak	VERTICAL
4	15965.54	48.91	54.00	-5.09	26.77	18.84	37.40	34.10	200	205	Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 100 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10995.00	60.15	74.00	-13.85	40.83	14.30	38.40	33.38	200	233	Peak	HORIZONTAL
2	11009.49	47.28	54.00	-6.72	27.93	14.33	38.40	33.38	200	233	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10990.10	60.14	74.00	-13.86	40.84	14.30	38.40	33.40	200	334	Peak	VERTICAL
2	10990.42	47.52	54.00	-6.48	28.22	14.30	38.40	33.40	200	334	Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 116 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11154.68	47.43	54.00	-6.57	27.74	14.46	38.61	33.38	200	125	Average	HORIZONTAL
2	11162.56	60.97	74.00	-13.03	41.18	14.50	38.67	33.38	200	125	Peak	HORIZONTAL

### Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11153.81	61.07	74.00	-12.93	41.38	14.46	38.61	33.38	206	27	Peak	VERTICAL
2	11162.21	48.23	54.00	-5.77	28.44	14.50	38.67	33.38	206	27	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 140 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11401.06	61.05	74.00	-12.95	40.66	14.72	39.04	33.37	200	299	Peak	HORIZONTAL
2	11406.25	48.26	54.00	-5.74	27.87	14.72	39.04	33.37	200	299	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11398.88	49.02	54.00	-4.98	28.63	14.72	39.04	33.37	200	317	Average	VERTICAL
2	11400.90	61.72	74.00	-12.28	41.33	14.72	39.04	33.37	200	317	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 144 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 30, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11431.50	49.13	54.00	-4.87	28.65	14.76	39.09	33.37	215	264	Average	HORIZONTAL
2	11454.50	61.53	74.00	-12.47	40.96	14.79	39.15	33.37	215	264	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11439.90	66.57	74.00	-7.43	46.09	14.76	39.09	33.37	214	20	Peak	VERTICAL
2	11440.60	52.37	54.00	-1.63	31.89	14.76	39.09	33.37	214	20	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 149 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11491.22	49.87	54.00	-4.13	29.22	14.82	39.20	33.37	200	114	Average	HORIZONTAL
2	11495.10	61.54	74.00	-12.46	40.89	14.82	39.20	33.37	200	114	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11491.19	51.73	54.00	-2.27	31.08	14.82	39.20	33.37	202	333	Average	VERTICAL
2	11494.49	64.71	74.00	-9.29	44.06	14.82	39.20	33.37	202	333	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 157 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11567.85	61.24	74.00	-12.76	40.54	14.89	39.20	33.39	200	248	Peak	HORIZONTAL
2	11569.46	49.33	54.00	-4.67	28.63	14.89	39.20	33.39	200	248	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11569.87	62.98	74.00	-11.02	42.28	14.89	39.20	33.39	200	53	Peak	VERTICAL
2	11570.87	50.50	54.00	-3.50	29.80	14.89	39.20	33.39	200	53	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11645.67	61.05	74.00	-12.95	40.31	14.95	39.20	33.41	200	253	Peak	HORIZONTAL
2	11647.37	48.59	54.00	-5.41	27.85	14.95	39.20	33.41	200	253	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11650.10	50.13	54.00	-3.87	29.39	14.95	39.20	33.41	208	342	Average	VERTICAL
2	11655.77	63.12	74.00	-10.88	42.35	14.98	39.20	33.41	208	342	Peak	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15539.71	61.45	74.00	-12.55	38.51	18.54	38.13	33.73	200	62	Peak	HORIZONTAL
2	15545.38	48.53	54.00	-5.47	25.59	18.54	38.13	33.73	200	62	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15538.91	48.62	54.00	-5.38	25.68	18.54	38.13	33.73	200	21	Average	VERTICAL
2	15544.17	61.02	74.00	-12.98	38.08	18.54	38.13	33.73	200	21	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 40 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15596.25	48.47	54.00	-5.53	25.62	18.57	38.05	33.77	207	301	Average	HORIZONTAL
2	15609.01	61.05	74.00	-12.95	38.24	18.60	37.98	33.77	207	301	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15595.93	49.50	54.00	-4.50	26.65	18.57	38.05	33.77	207	345	Average	VERTICAL
2	15597.21	61.71	74.00	-12.29	38.86	18.57	38.05	33.77	207	345	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15718.37	60.74	74.00	-13.26	38.16	18.66	37.84	33.92	202	160	Peak	HORIZONTAL
2	15727.92	48.51	54.00	-5.49	25.93	18.66	37.84	33.92	202	160	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15718.49	61.88	74.00	-12.12	39.30	18.66	37.84	33.92	204	210	Peak	VERTICAL
2	15719.39	49.43	54.00	-4.57	26.85	18.66	37.84	33.92	204	210	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	dB	cm	deg	
1	15771.31	48.37	54.00	-5.63	25.88	18.69	37.76	33.96	214	6 Average	HORIZONTAL
2	15786.22	60.99	74.00	-13.01	38.54	18.72	37.69	33.96	214	6 Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	dB	cm	deg	
1	15772.08	49.51	54.00	-4.49	27.02	18.69	37.76	33.96	206	92 Average	VERTICAL
2	15779.90	62.51	74.00	-11.49	40.02	18.69	37.76	33.96	206	92 Peak	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 60 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10593.65	44.02	54.00	-9.98	25.35	13.91	38.40	33.64	200	263	Average	HORIZONTAL
2	10594.36	56.87	74.00	-17.13	38.20	13.91	38.40	33.64	200	263	Peak	HORIZONTAL
3	15891.79	61.54	74.00	-12.46	39.27	18.78	37.55	34.06	190	212	Peak	HORIZONTAL
4	15893.53	48.20	54.00	-5.80	25.93	18.78	37.55	34.06	190	212	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10591.54	58.17	74.00	-15.83	39.50	13.91	38.40	33.64	210	82	Peak	VERTICAL
2	10606.31	44.90	54.00	-9.10	26.21	13.91	38.40	33.62	210	82	Average	VERTICAL
3	15890.26	62.40	74.00	-11.60	40.13	18.78	37.55	34.06	208	151	Peak	VERTICAL
4	15891.15	49.35	54.00	-4.65	27.08	18.78	37.55	34.06	208	151	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 64 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10635.56	43.91	54.00	-10.09	25.19	13.94	38.40	33.62	200	81	Average	HORIZONTAL
2	10642.24	56.57	74.00	-17.43	37.82	13.94	38.40	33.59	200	81	Peak	HORIZONTAL
3	15958.51	48.15	54.00	-5.85	25.97	18.81	37.47	34.10	206	162	Average	HORIZONTAL
4	15963.64	61.71	74.00	-12.29	39.53	18.81	37.47	34.10	206	162	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10640.29	57.22	74.00	-16.78	38.47	13.94	38.40	33.59	208	320	Peak	VERTICAL
2	10641.19	43.97	54.00	-10.03	25.22	13.94	38.40	33.59	208	320	Average	VERTICAL
3	15955.54	61.38	74.00	-12.62	39.20	18.81	37.47	34.10	205	252	Peak	VERTICAL
4	15957.77	48.42	54.00	-5.58	26.24	18.81	37.47	34.10	205	252	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11000.88	60.90	74.00	-13.10	41.55	14.33	38.40	33.38	200	91	Peak	HORIZONTAL
2	11003.06	47.16	54.00	-6.84	27.81	14.33	38.40	33.38	200	91	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11002.92	47.27	54.00	-6.73	27.92	14.33	38.40	33.38	200	26	Average	VERTICAL
2	11003.00	59.56	74.00	-14.44	40.21	14.33	38.40	33.38	200	26	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 116 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11160.67	47.43	54.00	-6.57	27.64	14.50	38.67	33.38	200	267	Average	HORIZONTAL
2	11162.47	60.55	74.00	-13.45	40.76	14.50	38.67	33.38	200	267	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11156.86	47.98	54.00	-6.02	28.19	14.50	38.67	33.38	200	338	Average	VERTICAL
2	11159.63	61.01	74.00	-12.99	41.22	14.50	38.67	33.38	200	338	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 140 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11396.99	48.25	54.00	-5.75	27.86	14.72	39.04	33.37	200	95 Average	HORIZONTAL
2	11398.96	60.59	74.00	-13.41	40.20	14.72	39.04	33.37	200	95 Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11397.47	61.32	74.00	-12.68	40.93	14.72	39.04	33.37	200	176 Peak	VERTICAL
2	11399.94	48.39	54.00	-5.61	28.00	14.72	39.04	33.37	200	176 Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 30, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11431.90	48.83	54.00	-5.17	28.35	14.76	39.09	33.37	216	266	Average	HORIZONTAL
2	11464.10	61.24	74.00	-12.76	40.67	14.79	39.15	33.37	216	266	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11440.20	51.58	54.00	-2.42	31.10	14.76	39.09	33.37	216	351	Average	VERTICAL
2	11441.80	64.80	74.00	-9.20	44.32	14.76	39.09	33.37	216	351	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11486.51	61.39	74.00	-12.61	40.74	14.82	39.20	33.37	200	119	Peak	HORIZONTAL
2	11490.67	50.09	54.00	-3.91	29.44	14.82	39.20	33.37	200	119	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11489.90	52.39	54.00	-1.61	31.74	14.82	39.20	33.37	201	51	Average	VERTICAL
2	11490.93	65.58	74.00	-8.42	44.93	14.82	39.20	33.37	201	51	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 157 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11573.78	61.40	74.00	-12.60	40.70	14.89	39.20	33.39	200	245	Peak	HORIZONTAL
2	11575.26	50.05	54.00	-3.95	29.35	14.89	39.20	33.39	200	245	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11569.17	52.02	54.00	-1.98	31.32	14.89	39.20	33.39	200	42	Average	VERTICAL
2	11571.47	66.69	74.00	-7.31	45.99	14.89	39.20	33.39	200	42	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11644.84	62.66	74.00	-11.34	41.92	14.95	39.20	33.41	200	54	Peak	HORIZONTAL
2	11651.38	49.60	54.00	-4.40	28.83	14.98	39.20	33.41	200	54	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11650.93	52.03	54.00	-1.97	31.26	14.98	39.20	33.41	227	45	Average	VERTICAL
2	11656.38	65.73	74.00	-8.27	44.96	14.98	39.20	33.41	227	45	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15562.44	61.05	74.00	-12.95	38.20	18.57	38.05	33.77	200	293	Peak	HORIZONTAL
2	15569.71	48.56	54.00	-5.44	25.71	18.57	38.05	33.77	200	293	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15563.27	48.57	54.00	-5.43	25.72	18.57	38.05	33.77	200	340	Average	VERTICAL
2	15565.29	61.50	74.00	-12.50	38.65	18.57	38.05	33.77	200	340	Peak	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15682.18	62.04	74.00	-11.96	39.37	18.63	37.91	33.87	200	68	Peak	HORIZONTAL
2	15687.15	49.60	54.00	-4.40	26.93	18.63	37.91	33.87	200	68	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15684.58	49.80	54.00	-4.20	27.13	18.63	37.91	33.87	200	103	Average	VERTICAL
2	15696.99	62.51	74.00	-11.49	39.88	18.66	37.84	33.87	200	103	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15800.99	49.18	54.00	-4.82	26.73	18.72	37.69	33.96	200	232	Average	HORIZONTAL
2	15802.31	62.61	74.00	-11.39	40.16	18.72	37.69	33.96	200	232	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15800.03	49.36	54.00	-4.64	26.91	18.72	37.69	33.96	200	320	Average	VERTICAL
2	15810.80	61.82	74.00	-12.18	39.37	18.72	37.69	33.96	200	320	Peak	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 62 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10611.22	44.87	54.00	-9.13	26.18	13.91	38.40	33.62	200	100	Average	HORIZONTAL
2	10615.90	57.69	74.00	-16.31	39.00	13.91	38.40	33.62	200	100	Peak	HORIZONTAL
3	15921.79	62.22	74.00	-11.78	40.04	18.81	37.47	34.10	213	147	Peak	HORIZONTAL
4	15923.30	49.57	54.00	-4.43	27.39	18.81	37.47	34.10	213	147	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10626.03	45.01	54.00	-8.99	26.29	13.94	38.40	33.62	200	34	Average	VERTICAL
2	10626.44	58.00	74.00	-16.00	39.28	13.94	38.40	33.62	200	34	Peak	VERTICAL
3	15929.71	62.18	74.00	-11.82	40.00	18.81	37.47	34.10	205	77	Peak	VERTICAL
4	15938.85	49.44	54.00	-4.56	27.26	18.81	37.47	34.10	205	77	Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11023.78	58.08	74.00	-15.92	38.73	14.33	38.40	33.38	235	91	Peak	HORIZONTAL
2	11024.55	45.17	54.00	-8.83	25.82	14.33	38.40	33.38	235	91	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11011.28	45.29	54.00	-8.71	25.94	14.33	38.40	33.38	195	75	Average	VERTICAL
2	11021.41	58.46	74.00	-15.54	39.11	14.33	38.40	33.38	195	75	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 110 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11093.33	45.47	54.00	-8.53	25.86	14.43	38.56	33.38	200	150	Average	HORIZONTAL
2	11093.33	57.76	74.00	-16.24	38.15	14.43	38.56	33.38	200	150	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11092.82	46.45	54.00	-7.55	26.84	14.43	38.56	33.38	211	49	Average	VERTICAL
2	11101.92	60.43	74.00	-13.57	40.82	14.43	38.56	33.38	211	49	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 134 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11336.60	46.11	54.00	-7.89	25.89	14.66	38.93	33.37	209	302	Average	HORIZONTAL
2	11342.34	58.92	74.00	-15.08	38.70	14.66	38.93	33.37	209	302	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11333.65	58.86	74.00	-15.14	38.64	14.66	38.93	33.37	203	215	Peak	VERTICAL
2	11345.22	46.18	54.00	-7.82	25.96	14.66	38.93	33.37	203	215	Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11426.51	62.35	74.00	-11.65	41.87	14.76	39.09	33.37	200	52 Peak	HORIZONTAL
2	11429.52	49.48	54.00	-4.52	29.00	14.76	39.09	33.37	200	52 Average	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11422.31	62.87	74.00	-11.13	42.39	14.76	39.09	33.37	200	139 Peak	VERTICAL
2	11428.21	51.63	54.00	-2.37	31.15	14.76	39.09	33.37	200	139 Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11493.17	61.32	74.00	-12.68	40.67	14.82	39.20	33.37	200	183	Peak	HORIZONTAL
2	11504.07	48.51	54.00	-5.49	27.86	14.82	39.20	33.37	200	183	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11501.35	51.94	54.00	-2.06	31.29	14.82	39.20	33.37	201	53	Average	VERTICAL
2	11502.47	63.68	74.00	-10.32	43.03	14.82	39.20	33.37	201	53	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11590.40	49.02	54.00	-4.98	28.30	14.92	39.20	33.40	200	329 Average	HORIZONTAL
2	11591.52	61.71	74.00	-12.29	40.99	14.92	39.20	33.40	200	329 Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11588.24	52.59	54.00	-1.41	31.87	14.92	39.20	33.40	240	19 Average	VERTICAL
2	11590.72	65.15	74.00	-8.85	44.43	14.92	39.20	33.40	240	19 Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15630.96	61.56	74.00	-12.44	38.80	18.60	37.98	33.82	200	224 Peak	HORIZONTAL
2	15633.13	48.68	54.00	-5.32	25.92	18.60	37.98	33.82	200	224 Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	15646.67	48.97	54.00	-5.03	26.25	18.63	37.91	33.82	200	266 Average	VERTICAL
2	15653.80	61.72	74.00	-12.28	39.00	18.63	37.91	33.82	200	266 Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15878.57	47.83	54.00	-6.17	25.56	18.78	37.55	34.06	200	280	Average	HORIZONTAL
2	15888.03	60.70	74.00	-13.30	38.43	18.78	37.55	34.06	200	280	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15886.59	61.62	74.00	-12.38	39.35	18.78	37.55	34.06	200	330	Peak	VERTICAL
2	15891.71	48.69	54.00	-5.31	26.42	18.78	37.55	34.06	200	330	Average	VERTICAL

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11050.79	60.38	74.00	-13.62	40.94	14.37	38.45	33.38	200	113	Peak	HORIZONTAL
2	11082.60	47.90	54.00	-6.10	28.37	14.40	38.51	33.38	200	113	Average	HORIZONTAL

### Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11035.16	47.95	54.00	-6.05	28.51	14.37	38.45	33.38	200	199	Average	VERTICAL
2	11036.60	59.81	74.00	-14.19	40.37	14.37	38.45	33.38	200	199	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 122 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11235.46	60.65	74.00	-13.35	40.70	14.56	38.77	33.38	213	94	Peak	HORIZONTAL
2	11239.63	47.92	54.00	-6.08	27.97	14.56	38.77	33.38	213	94	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11236.19	48.09	54.00	-5.91	28.14	14.56	38.77	33.38	198	27	Average	VERTICAL
2	11241.47	60.91	74.00	-13.09	40.96	14.56	38.77	33.38	198	27	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11364.62	62.26	74.00	-11.74	41.95	14.69	38.99	33.37	210	233	Peak	HORIZONTAL
2	11369.74	49.42	54.00	-4.58	29.11	14.69	38.99	33.37	210	233	Average	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11378.08	50.35	54.00	-3.65	30.04	14.69	38.99	33.37	200	325	Average	VERTICAL
2	11404.76	62.06	74.00	-11.94	41.67	14.72	39.04	33.37	200	325	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 26, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11543.62	49.03	54.00	-4.97	28.36	14.85	39.20	33.38	209	42	Average	HORIZONTAL
2	11550.64	61.57	74.00	-12.43	40.87	14.89	39.20	33.39	209	42	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11545.19	61.91	74.00	-12.09	41.24	14.85	39.20	33.38	197	113	Peak	VERTICAL
2	11549.13	49.58	54.00	-4.42	28.92	14.85	39.20	33.39	197	113	Average	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT160 CH 50 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15755.19	49.78	54.00	-4.22	27.25	18.69	37.76	33.92	202	103	Average	HORIZONTAL
2	15755.54	62.19	74.00	-11.81	39.66	18.69	37.76	33.92	202	103	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15753.53	49.90	54.00	-4.10	27.37	18.69	37.76	33.92	200	46	Average	VERTICAL
2	15755.96	63.12	74.00	-10.88	40.59	18.69	37.76	33.92	200	46	Peak	VERTICAL



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT160 CH 114 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Horizontal**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11131.25	47.53	54.00	-6.47	27.84	14.46	38.61	33.38	200	194	Average	HORIZONTAL
2	11146.76	60.01	74.00	-13.99	40.32	14.46	38.61	33.38	200	194	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11147.18	47.76	54.00	-6.24	28.07	14.46	38.61	33.38	207	325	Average	VERTICAL
2	11148.78	59.96	74.00	-14.04	40.27	14.46	38.61	33.38	207	325	Peak	VERTICAL

**Note:**

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

Emission level (dBuV/m) = 20 log Emission level (uV/m).

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level.

## 4.7. Band Edge Emissions Measurement

### 4.7.1. Limit

For transmitters operating in the 5.15-5.35 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 5.470-5.725 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 shall be limited to a level of  $-27$  dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micovolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

### 4.7.2. Measuring Instruments and Setting

Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
RBW / VBW (Emission in restricted band)	1 MHz / 3MHz for Peak, 1 MHz / 1/T for Average
RBW / VBW (Emission in non-restricted band)	1 MHz / 3MHz for Peak

### 4.7.3. Test Procedures

The test procedure is the same as section 4.6.3.

### 4.7.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.6.4.

#### 4.7.5. Test Deviation

There is no deviation with the original standard.

#### 4.7.6. EUT Operation during Test

For non-beamforming function:

The EUT was programmed to be in continuously transmitting mode.

For beamforming function:

The EUT was programmed to be in beamforming transmitting mode.

#### 4.7.7. Test Result of Band Edge and Fundamental Emissions

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

##### Channel 36

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5145.20	67.44	74.00	-6.56	61.08	7.96	31.45	33.05	214	165	Peak	VERTICAL
2	5150.00	53.51	54.00	-0.49	47.15	7.96	31.45	33.05	214	165	Average	VERTICAL
3	5176.80	118.85			112.44	7.98	31.48	33.05	214	165	Peak	VERTICAL
4	5182.80	108.10			101.69	7.98	31.48	33.05	214	165	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

##### Channel 40

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5127.20	49.18	54.00	-4.82	42.85	7.94	31.44	33.05	192	166	Average	VERTICAL
2	5144.40	61.12	74.00	-12.88	54.76	7.96	31.45	33.05	192	166	Peak	VERTICAL
3	5202.80	120.41			113.95	8.00	31.51	33.05	192	166	Peak	VERTICAL
4	5207.60	110.00			103.54	8.00	31.51	33.05	192	166	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

##### Channel 48

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5108.00	47.69	54.00	-6.31	41.41	7.92	31.41	33.05	171	167	Average	VERTICAL
2	5117.00	60.34	74.00	-13.66	54.04	7.93	31.42	33.05	171	167	Peak	VERTICAL
3	5237.00	120.67			114.15	8.03	31.54	33.05	171	167	Peak	VERTICAL
4	5243.00	110.28			103.77	8.03	31.54	33.06	171	167	Average	VERTICAL
5	5381.00	48.11	54.00	-5.89	41.32	8.17	31.68	33.06	171	167	Average	VERTICAL
6	5383.40	61.01	74.00	-12.99	54.22	8.17	31.68	33.06	171	167	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 52**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5040.00	64.92	74.00	-9.08	58.51	7.72	33.16	34.47	160	200	Peak	VERTICAL
2	5102.00	51.58	54.00	-2.42	44.98	7.82	33.25	34.47	160	200	Average	VERTICAL
3	5257.00	125.44			118.51	7.94	33.46	34.47	160	200	Peak	VERTICAL
4	5263.00	114.84			107.90	7.93	33.48	34.47	160	200	Average	VERTICAL
5	5410.00	65.12	74.00	-8.88	58.05	7.87	33.67	34.47	160	200	Peak	VERTICAL
6	5418.00	52.31	54.00	-1.69	45.22	7.87	33.69	34.47	160	200	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

**Channel 60**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5297.20	125.56			118.60	7.91	33.52	34.47	160	200	Peak	VERTICAL
2	5302.80	114.50			107.54	7.91	33.52	34.47	160	200	Average	VERTICAL
3	5350.00	68.51	74.00	-5.49	61.50	7.89	33.59	34.47	160	200	Peak	VERTICAL
4	5350.00	52.87	54.00	-1.13	45.86	7.89	33.59	34.47	160	200	Average	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

**Channel 64**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5317.20	121.66			114.67	7.91	33.55	34.47	159	197	Peak	VERTICAL
2	5317.60	109.87			102.88	7.91	33.55	34.47	159	197	Average	VERTICAL
3	5350.00	53.63	54.00	-0.37	46.62	7.89	33.59	34.47	159	197	Average	VERTICAL
4	5350.40	71.59	74.00	-2.41	64.58	7.89	33.59	34.47	159	197	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 21, 2016 / Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 100**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5459.40	67.03	74.00	-6.97	59.87	7.89	33.74	34.47	160	200	Peak	VERTICAL
2	5460.00	51.04	54.00	-2.96	43.88	7.89	33.74	34.47	160	200	Average	VERTICAL
3	5469.40	70.79	74.00	-3.21	63.60	7.90	33.76	34.47	160	200	Peak	VERTICAL
4	5470.00	53.89	54.00	-0.11	46.70	7.90	33.76	34.47	160	200	Average	VERTICAL
5	5502.40	111.41			104.17	7.91	33.80	34.47	160	200	Average	VERTICAL
6	5502.80	122.65			115.41	7.91	33.80	34.47	160	200	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

**Channel 116**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5368.00	66.95	74.00	-7.05	59.93	7.88	33.61	34.47	161	206	Peak	VERTICAL
2	5417.00	53.80	54.00	-0.20	46.71	7.87	33.69	34.47	161	206	Average	VERTICAL
3	5462.00	65.46	74.00	-8.54	58.30	7.89	33.74	34.47	161	206	Peak	VERTICAL
4	5466.00	52.71	54.00	-1.29	45.52	7.90	33.76	34.47	161	206	Average	VERTICAL
5	5572.00	115.12			107.66	7.94	34.00	34.48	161	206	Average	VERTICAL
6	5577.00	125.82			118.31	7.94	34.05	34.48	161	206	Peak	VERTICAL
7	5744.00	65.08	74.00	-8.92	57.19	7.86	34.55	34.52	161	206	Peak	VERTICAL
8	5748.00	52.08	54.00	-1.92	44.19	7.86	34.55	34.52	161	206	Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

**Channel 140**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5696.60	118.80			111.02	7.89	34.40	34.51	172	225	Peak	VERTICAL
2	5697.40	107.42			99.64	7.89	34.40	34.51	172	225	Average	VERTICAL
3	5725.00	53.88	54.00	-0.12	46.02	7.87	34.50	34.51	172	225	Average	VERTICAL
4	5725.80	71.48	74.00	-2.52	63.62	7.87	34.50	34.51	172	225	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 144 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 144**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm		
1	5446.00	66.54	74.00	-7.46	59.41	7.88	33.72	34.47	172	217 Peak	VERTICAL
2	5454.00	53.89	54.00	-0.11	46.73	7.89	33.74	34.47	172	217 Average	VERTICAL
3	5468.00	66.40	68.20	-1.80	59.21	7.90	33.76	34.47	172	217 Peak	VERTICAL
4	5722.00	113.79			105.97	7.88	34.45	34.51	172	217 Average	VERTICAL
5	5724.00	124.23			116.37	7.87	34.50	34.51	172	217 Peak	VERTICAL
6	5888.00	64.28	68.20	-3.92	56.10	7.78	34.95	34.55	172	217 Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5720 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 149**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5530.00	64.62	68.20	-3.58	57.59	8.26	31.84	33.07	200	125	Peak	VERTICAL
2	5742.00	122.40			115.07	8.37	32.10	33.14	200	125	Peak	VERTICAL
3	5743.00	112.13			104.80	8.37	32.10	33.14	200	125	Average	VERTICAL

Item 2, 3 are the fundamental frequency at 5745 MHz.

**Channel 157**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5569.00	64.00	68.20	-4.20	56.93	8.27	31.88	33.08	185	266	Peak	VERTICAL
2	5788.00	110.20			102.82	8.39	32.14	33.15	185	266	Average	VERTICAL
3	5788.00	120.06			112.68	8.39	32.14	33.15	185	266	Peak	VERTICAL
4	5947.00	61.06	68.20	-7.14	53.47	8.45	32.34	33.20	185	266	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5785 MHz.

**Channel 165**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5580.00	63.14	68.20	-5.06	56.05	8.28	31.90	33.09	201	123	Peak	VERTICAL
2	5818.00	111.40			103.97	8.41	32.18	33.16	201	123	Average	VERTICAL
3	5822.00	121.36			113.94	8.41	32.18	33.17	201	123	Peak	VERTICAL
4	5951.00	61.67	68.20	-6.53	54.08	8.45	32.34	33.20	201	123	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5825 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

### Channel 36

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.60	66.22	74.00	-7.78	59.86	7.96	31.45	33.05	215	209	Peak	VERTICAL
2	5150.00	53.67	54.00	-0.33	47.31	7.96	31.45	33.05	215	209	Average	VERTICAL
3	5183.20	106.77			100.36	7.98	31.48	33.05	215	209	Average	VERTICAL
4	5188.40	117.64			111.20	7.99	31.50	33.05	215	209	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

### Channel 40

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5119.20	48.37	54.00	-5.63	42.07	7.93	31.42	33.05	180	154	Average	VERTICAL
2	5149.60	60.92	74.00	-13.08	54.56	7.96	31.45	33.05	180	154	Peak	VERTICAL
3	5202.00	117.65			111.19	8.00	31.51	33.05	180	154	Peak	VERTICAL
4	5202.40	108.39			101.93	8.00	31.51	33.05	180	154	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

### Channel 48

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5107.40	48.09	54.00	-5.91	41.81	7.92	31.41	33.05	175	216	Average	VERTICAL
2	5110.40	59.72	74.00	-14.28	53.44	7.92	31.41	33.05	175	216	Peak	VERTICAL
3	5232.20	118.18			111.66	8.03	31.54	33.05	175	216	Peak	VERTICAL
4	5243.00	107.24			100.73	8.03	31.54	33.06	175	216	Average	VERTICAL
5	5379.80	61.03	74.00	-12.97	54.24	8.17	31.68	33.06	175	216	Peak	VERTICAL
6	5387.00	48.31	54.00	-5.69	41.50	8.18	31.69	33.06	175	216	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 52**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5045.00	64.40	74.00	-9.60	57.99	7.72	33.16	34.47	186	200	Peak	VERTICAL
2	5049.00	51.75	54.00	-2.25	45.34	7.72	33.16	34.47	186	200	Average	VERTICAL
3	5258.00	124.29			117.36	7.94	33.46	34.47	186	200	Peak	VERTICAL
4	5258.00	114.50			107.57	7.94	33.46	34.47	186	200	Average	VERTICAL
5	5416.00	53.38	54.00	-0.62	46.31	7.87	33.67	34.47	186	200	Average	VERTICAL
6	5455.00	65.59	74.00	-8.41	58.43	7.89	33.74	34.47	186	200	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

**Channel 60**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5298.00	114.72			107.76	7.91	33.52	34.47	187	200	Average	VERTICAL
2	5301.60	124.46			117.50	7.91	33.52	34.47	187	200	Peak	VERTICAL
3	5350.00	53.64	54.00	-0.36	46.63	7.89	33.59	34.47	187	200	Average	VERTICAL
4	5351.20	66.75	74.00	-7.25	59.74	7.89	33.59	34.47	187	200	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

**Channel 64**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5317.60	120.05			113.06	7.91	33.55	34.47	186	202	Peak	VERTICAL
2	5317.80	109.93			102.94	7.91	33.55	34.47	186	202	Average	VERTICAL
3	5350.00	53.96	54.00	-0.04	46.95	7.89	33.59	34.47	186	202	Average	VERTICAL
4	5356.00	68.14	74.00	-5.86	61.12	7.88	33.61	34.47	186	202	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 100**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5459.00	65.28	74.00	-8.72	58.12	7.89	33.74	34.47	187	200	Peak	VERTICAL
2	5460.00	51.44	54.00	-2.56	44.28	7.89	33.74	34.47	187	200	Average	VERTICAL
3	5469.40	70.80	74.00	-3.20	63.61	7.90	33.76	34.47	187	200	Peak	VERTICAL
4	5469.80	53.83	54.00	-0.17	46.64	7.90	33.76	34.47	187	200	Average	VERTICAL
5	5497.40	120.37			113.13	7.91	33.80	34.47	187	200	Peak	VERTICAL
6	5497.80	110.35			103.11	7.91	33.80	34.47	187	200	Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

**Channel 116**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5366.00	66.02	74.00	-7.98	59.00	7.88	33.61	34.47	146	200	Peak	VERTICAL
2	5388.00	53.84	54.00	-0.16	46.80	7.86	33.65	34.47	146	200	Average	VERTICAL
3	5464.00	65.08	74.00	-8.92	57.89	7.90	33.76	34.47	146	200	Peak	VERTICAL
4	5464.00	53.15	54.00	-0.85	45.96	7.90	33.76	34.47	146	200	Average	VERTICAL
5	5582.00	113.81			106.31	7.94	34.05	34.49	146	200	Average	VERTICAL
6	5584.00	124.28			116.78	7.94	34.05	34.49	146	200	Peak	VERTICAL
7	5760.00	52.58	54.00	-1.42	44.65	7.85	34.60	34.52	146	200	Average	VERTICAL
8	5772.00	64.14	74.00	-9.86	56.18	7.84	34.65	34.53	146	200	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

**Channel 140**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5693.40	105.83			98.05	7.89	34.40	34.51	186	201	Average	VERTICAL
2	5696.80	115.92			108.14	7.89	34.40	34.51	186	201	Peak	VERTICAL
3	5725.00	70.68	74.00	-3.32	62.82	7.87	34.50	34.51	186	201	Peak	VERTICAL
4	5725.00	53.38	54.00	-0.62	45.52	7.87	34.50	34.51	186	201	Average	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 144**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5430.00	65.74	74.00	-8.26	58.65	7.87	33.69	34.47	158	200 Peak	VERTICAL
2	5454.00	53.63	54.00	-0.37	46.47	7.89	33.74	34.47	158	200 Average	VERTICAL
3	5468.00	66.00	68.20	-2.20	58.81	7.90	33.76	34.47	158	200 Peak	VERTICAL
4	5722.00	120.01			112.19	7.88	34.45	34.51	158	200 Peak	VERTICAL
5	5722.00	110.09			102.27	7.88	34.45	34.51	158	200 Average	VERTICAL
6	5910.00	62.89	68.20	-5.31	54.63	7.76	35.05	34.55	158	200 Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5720 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 149**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5536.00	63.01	68.20	-5.19	55.98	8.26	31.84	33.07	187	271	Peak	VERTICAL
2	5747.00	110.68			103.35	8.37	32.10	33.14	187	271	Average	VERTICAL
3	5747.00	120.89			113.56	8.37	32.10	33.14	187	271	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5745 MHz.

**Channel 157**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5553.00	64.71	68.20	-3.49	57.67	8.26	31.86	33.08	188	222	Peak	VERTICAL
2	5783.00	109.56			102.18	8.39	32.14	33.15	188	222	Average	VERTICAL
3	5787.00	120.72			113.34	8.39	32.14	33.15	188	222	Peak	VERTICAL
4	5961.00	62.67	68.20	-5.53	55.06	8.46	32.36	33.21	188	222	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5785 MHz.

**Channel 165**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5633.00	64.39	68.20	-3.81	57.22	8.31	31.96	33.10	184	270	Peak	VERTICAL
2	5827.00	110.00			102.56	8.41	32.20	33.17	184	270	Average	VERTICAL
3	5828.00	119.52			112.08	8.41	32.20	33.17	184	270	Peak	VERTICAL
4	5959.00	62.85	68.20	-5.35	55.24	8.46	32.36	33.21	184	270	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5825 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 38**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.20	65.08	74.00	-8.92	58.72	7.96	31.45	33.05	170	163	Peak	VERTICAL
2	5150.00	53.67	54.00	-0.33	47.31	7.96	31.45	33.05	170	163	Average	VERTICAL
3	5205.60	110.17			103.71	8.00	31.51	33.05	170	163	Peak	VERTICAL
4	5206.80	100.28			93.82	8.00	31.51	33.05	170	163	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

**Channel 46**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5134.60	62.35	74.00	-11.65	56.02	7.94	31.44	33.05	191	177	Peak	VERTICAL
2	5150.00	49.53	54.00	-4.47	43.17	7.96	31.45	33.05	191	177	Average	VERTICAL
3	5213.80	116.66			110.20	8.00	31.51	33.05	191	177	Peak	VERTICAL
4	5214.40	104.94			98.48	8.00	31.51	33.05	191	177	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 54**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm		
1	5256.00	120.39			113.46	7.94	33.46	189	207	Peak	VERTICAL
2	5278.00	109.63			102.68	7.92	33.50	189	207	Average	VERTICAL
3	5350.00	53.87	54.00	-0.13	46.86	7.89	33.59	189	207	Average	VERTICAL
4	5352.00	65.66	74.00	-8.34	58.65	7.89	33.59	189	207	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5270 MHz.

**Channel 62**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm		
1	5293.60	102.12			95.16	7.91	33.52	188	204	Average	VERTICAL
2	5315.20	113.35			106.36	7.91	33.55	188	204	Peak	VERTICAL
3	5350.00	53.82	54.00	-0.18	46.81	7.89	33.59	188	204	Average	VERTICAL
4	5350.80	70.35	74.00	-3.65	63.34	7.89	33.59	188	204	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5310 MHz.



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 102**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5459.00	67.29	74.00	-6.71	60.13	7.89	33.74	34.47	186	208	Peak	VERTICAL
2	5460.00	50.96	54.00	-3.04	43.80	7.89	33.74	34.47	186	208	Average	VERTICAL
3	5470.00	73.42	74.00	-0.58	66.23	7.90	33.76	34.47	186	208	Peak	VERTICAL
4	5470.00	53.90	54.00	-0.10	46.71	7.90	33.76	34.47	186	208	Average	VERTICAL
5	5518.00	103.12			95.82	7.92	33.85	34.47	186	208	Average	VERTICAL
6	5525.00	113.61			106.32	7.92	33.85	34.48	186	208	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5510 MHz.

**Channel 110**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5460.00	64.29	74.00	-9.71	57.13	7.89	33.74	34.47	186	207	Peak	VERTICAL
2	5460.00	52.80	54.00	-1.20	45.64	7.89	33.74	34.47	186	207	Average	VERTICAL
3	5464.00	65.04	74.00	-8.96	57.85	7.90	33.76	34.47	186	207	Peak	VERTICAL
4	5464.00	53.68	54.00	-0.32	46.49	7.90	33.76	34.47	186	207	Average	VERTICAL
5	5534.00	121.33			113.99	7.92	33.90	34.48	186	207	Peak	VERTICAL
6	5534.00	110.78			103.44	7.92	33.90	34.48	186	207	Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5550 MHz.



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 134, 142 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 134**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5416.00	65.57	74.00	-8.43	58.50	7.87	33.67	34.47	186	207	Peak	VERTICAL
2	5422.00	52.81	54.00	-1.19	45.72	7.87	33.69	34.47	186	207	Average	VERTICAL
3	5460.00	65.83	74.00	-8.17	58.67	7.89	33.74	34.47	186	207	Peak	VERTICAL
4	5654.00	107.08			99.41	7.92	34.25	34.50	186	207	Average	VERTICAL
5	5674.00	117.20			109.46	7.90	34.35	34.51	186	207	Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5670 MHz.

**Channel 142**

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5416.00	65.00	74.00	-9.00	57.93	7.87	33.67	34.47	184	188	Peak	VERTICAL
2	5452.00	53.43	54.00	-0.57	46.27	7.89	33.74	34.47	184	188	Average	VERTICAL
3	5476.00	65.75	68.20	-2.45	58.56	7.90	33.76	34.47	184	188	Peak	VERTICAL
4	5694.00	107.48			99.70	7.89	34.40	34.51	184	188	Average	VERTICAL
5	5716.00	117.71			109.89	7.88	34.45	34.51	184	188	Peak	VERTICAL
6	5872.00	63.04	68.20	-5.16	54.89	7.79	34.90	34.54	184	188	Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5710 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 151**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5538.00	64.38	68.20	-3.82	57.35	8.26	31.84	33.07	208	275	Peak	VERTICAL
2	5748.00	118.00			110.67	8.37	32.10	33.14	208	275	Peak	VERTICAL
3	5771.00	106.53			99.18	8.38	32.12	33.15	208	275	Average	VERTICAL

Item 2, 3 are the fundamental frequency at 5755 MHz.

**Channel 159**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5591.00	63.97	68.20	-4.23	56.88	8.28	31.90	33.09	189	250	Peak	VERTICAL
2	5803.00	106.74			99.34	8.40	32.16	33.16	189	250	Average	VERTICAL
3	5807.00	117.21			109.78	8.41	32.18	33.16	189	250	Peak	VERTICAL
4	6016.00	62.50	68.20	-5.70	54.77	8.49	32.46	33.22	189	250	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5795 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 42**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5144.00	62.96	74.00	-11.04	56.60	7.96	31.45	33.05	180	163	Peak	VERTICAL
2	5150.00	53.76	54.00	-0.24	47.40	7.96	31.45	33.05	180	163	Average	VERTICAL
3	5217.00	105.27			98.77	8.02	31.53	33.05	180	163	Peak	VERTICAL
4	5222.00	96.13			89.63	8.02	31.53	33.05	180	163	Average	VERTICAL
5	5434.00	48.90	54.00	-5.10	42.01	8.21	31.74	33.06	180	163	Average	VERTICAL
6	5451.00	59.86	74.00	-14.14	52.96	8.21	31.75	33.06	180	163	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5210 MHz.

**Channel 58**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm			
1	5064.00	59.81	74.00	-14.19	53.35	7.75	33.18	34.47	187	224	Peak	VERTICAL
2	5087.00	48.57	54.00	-5.43	42.01	7.80	33.23	34.47	187	224	Average	VERTICAL
3	5258.00	96.40			89.47	7.94	33.46	34.47	187	224	Average	VERTICAL
4	5282.00	106.32			99.37	7.92	33.50	34.47	187	224	Peak	VERTICAL
5	5350.00	53.17	54.00	-0.83	46.16	7.89	33.59	34.47	187	224	Average	VERTICAL
6	5354.00	63.71	74.00	-10.29	56.70	7.89	33.59	34.47	187	224	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5290 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 138 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 22, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 106**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm		
1	5451.00	64.91	74.00	-9.09	57.75	7.89	33.74	34.47	186	209 Peak	VERTICAL
2	5459.00	53.65	54.00	-0.35	46.49	7.89	33.74	34.47	186	209 Average	VERTICAL
3	5464.00	66.28	68.20	-1.92	59.09	7.90	33.76	34.47	186	209 Peak	VERTICAL
4	5518.00	99.50			92.20	7.92	33.85	34.47	186	209 Average	VERTICAL
5	5549.00	109.84			102.44	7.93	33.95	34.48	186	209 Peak	VERTICAL
6	5756.00	60.71	68.20	-7.49	52.78	7.85	34.60	34.52	186	209 Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5530 MHz.

**Channel 122**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm		
1	5438.00	53.71	54.00	-0.29	46.58	7.88	33.72	34.47	187	179 Average	VERTICAL
2	5439.00	65.83	74.00	-8.17	58.70	7.88	33.72	34.47	187	179 Peak	VERTICAL
3	5464.00	65.15	74.00	-8.85	57.96	7.90	33.76	34.47	187	179 Peak	VERTICAL
4	5465.00	53.52	54.00	-0.48	46.33	7.90	33.76	34.47	187	179 Average	VERTICAL
5	5574.00	115.42			107.96	7.94	34.00	34.48	187	179 Peak	VERTICAL
6	5578.00	105.70			98.19	7.94	34.05	34.48	187	179 Average	VERTICAL
7	5725.00	53.01	54.00	-0.99	45.15	7.87	34.50	34.51	187	179 Average	VERTICAL
8	5732.00	64.01	74.00	-9.99	56.16	7.87	34.50	34.52	187	179 Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5610 MHz.

**Channel 138**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm		
1	5428.00	53.29	54.00	-0.71	46.20	7.87	33.69	34.47	185	211 Average	VERTICAL
2	5430.00	64.68	74.00	-9.32	57.59	7.87	33.69	34.47	185	211 Peak	VERTICAL
3	5450.00	53.76	54.00	-0.24	46.60	7.89	33.74	34.47	185	211 Average	VERTICAL
4	5462.00	64.97	74.00	-9.03	57.81	7.89	33.74	34.47	185	211 Peak	VERTICAL
5	5658.00	103.67			95.96	7.91	34.30	34.50	185	211 Average	VERTICAL
6	5678.00	113.94			106.20	7.90	34.35	34.51	185	211 Peak	VERTICAL
7	5872.00	51.27	54.00	-2.73	43.12	7.79	34.90	34.54	185	211 Average	VERTICAL
8	5916.00	62.23	74.00	-11.77	53.97	7.76	35.05	34.55	185	211 Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5690 MHz.



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 155**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	cm	deg			
1	5591.00	63.61	68.20	-4.59	56.52	8.28	31.90	33.09	193	252	Peak	VERTICAL
2	5799.00	101.46			94.05	8.40	32.16	33.15	193	252	Average	VERTICAL
3	5807.00	113.04			105.61	8.41	32.18	33.16	193	252	Peak	VERTICAL
4	5925.00	65.10	68.20	-3.10	57.53	8.45	32.32	33.20	193	252	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5775 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT160 CH 50, 114 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Apr. 20, 2016	<b>Test Function</b>	Non-beamforming function

**Channel 50**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5126.00	66.97	74.00	-7.03	60.67	7.93	31.42	33.05	188	167	Peak	VERTICAL
2	5147.00	53.51	54.00	-0.49	47.15	7.96	31.45	33.05	188	167	Average	VERTICAL
3	5179.00	104.35			97.94	7.98	31.48	33.05	188	167	Peak	VERTICAL
4	5222.00	94.43			87.93	8.02	31.53	33.05	188	167	Average	VERTICAL
5	5351.00	52.96	54.00	-1.04	46.23	8.14	31.65	33.06	188	167	Average	VERTICAL
6	5397.00	64.54	74.00	-9.46	57.73	8.18	31.69	33.06	188	167	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5250 MHz.

**Channel 114**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5432.00	53.43	54.00	-0.57	46.57	8.20	31.72	33.06	180	194	Average	VERTICAL
2	5446.00	67.86	74.00	-6.14	60.97	8.21	31.74	33.06	180	194	Peak	VERTICAL
3	5465.00	53.85	54.00	-0.15	46.92	8.22	31.77	33.06	180	194	Average	VERTICAL
4	5466.00	65.96	74.00	-8.04	59.03	8.22	31.77	33.06	180	194	Peak	VERTICAL
5	5554.00	94.71			87.67	8.26	31.86	33.08	180	194	Average	VERTICAL
6	5554.00	105.73			98.69	8.26	31.86	33.08	180	194	Peak	VERTICAL
7	5727.00	65.06	74.00	-8.94	57.76	8.36	32.08	33.14	180	194	Peak	VERTICAL
8	5728.00	51.44	54.00	-2.56	44.14	8.36	32.08	33.14	180	194	Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5570 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016	<b>Test Function</b>	Beamforming function

### Channel 36

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5148.27	67.56	74.00	-6.44	56.44	10.43	33.74	33.05	193	163	Peak	VERTICAL
2	5150.00	53.84	54.00	-0.16	42.72	10.43	33.74	33.05	193	163	Average	VERTICAL
3	5172.31	112.27			101.07	10.46	33.79	33.05	193	163	Average	VERTICAL
4	5178.08	121.32			110.12	10.46	33.79	33.05	193	163	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

### Channel 40

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5145.83	63.80	74.00	-10.20	52.68	10.43	33.74	33.05	200	211	Peak	VERTICAL
2	5149.68	52.54	54.00	-1.46	41.42	10.43	33.74	33.05	200	211	Average	VERTICAL
3	5197.44	116.06			104.81	10.48	33.82	33.05	200	211	Average	VERTICAL
4	5197.76	126.06			114.81	10.48	33.82	33.05	200	211	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

### Channel 48

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5028.46	63.09	74.00	-10.91	52.29	10.30	33.55	33.05	197	209	Peak	VERTICAL
2	5078.14	50.71	54.00	-3.29	39.79	10.35	33.62	33.05	197	209	Average	VERTICAL
3	5242.40	113.44			102.14	10.47	33.89	33.06	197	209	Average	VERTICAL
4	5242.40	122.95			111.65	10.47	33.89	33.06	197	209	Peak	VERTICAL
5	5437.92	51.14	54.00	-2.86	39.48	10.52	34.20	33.06	197	209	Average	VERTICAL
6	5437.92	63.60	74.00	-10.40	51.94	10.52	34.20	33.06	197	209	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016	<b>Test Function</b>	Beamforming function

### Channel 52

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5102.95	50.30	54.00	-3.70	39.30	10.38	33.67	33.05	201	150	Average	VERTICAL
2	5139.49	62.82	74.00	-11.18	51.73	10.42	33.72	33.05	201	150	Peak	VERTICAL
3	5262.56	122.45			111.11	10.46	33.94	33.06	201	150	Peak	VERTICAL
4	5263.21	112.75			101.41	10.46	33.94	33.06	201	150	Average	VERTICAL
5	5417.05	64.20	74.00	-9.80	52.59	10.49	34.18	33.06	201	150	Peak	VERTICAL
6	5422.82	51.48	54.00	-2.52	39.87	10.49	34.18	33.06	201	150	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

### Channel 60

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5297.44	113.44			102.07	10.45	33.98	33.06	203	221	Average	VERTICAL
2	5298.40	123.41			112.04	10.45	33.98	33.06	203	221	Peak	VERTICAL
3	5350.64	50.83	54.00	-3.17	39.40	10.43	34.06	33.06	203	221	Average	VERTICAL
4	5351.92	67.64	74.00	-6.36	56.21	10.43	34.06	33.06	203	221	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

### Channel 64

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5321.92	110.46			99.07	10.44	34.01	33.06	213	274	Average	VERTICAL
2	5322.24	120.83			109.44	10.44	34.01	33.06	213	274		VERTICAL
3	5350.00	53.88	54.00	-0.12	42.45	10.43	34.06	33.06	213	274	Average	VERTICAL
4	5350.45	72.22	74.00	-1.78	60.79	10.43	34.06	33.06	213	274		VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016	<b>Test Function</b>	Beamforming function

**Channel 100**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.65	65.75	74.00	-8.25	54.02	10.56	34.23	33.06	201	198	Peak	VERTICAL
2	5459.30	51.74	54.00	-2.26	40.01	10.56	34.23	33.06	201	198	Average	VERTICAL
3	5468.27	70.24	74.00	-3.76	58.46	10.59	34.25	33.06	201	198	Peak	VERTICAL
4	5470.00	53.76	54.00	-0.24	41.98	10.59	34.25	33.06	201	198	Average	VERTICAL
5	5496.47	122.49			110.59	10.66	34.30	33.06	201	198	Peak	VERTICAL
6	5497.12	112.03			100.13	10.66	34.30	33.06	201	198	Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

**Channel 116**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5421.03	52.40	54.00	-1.60	40.79	10.49	34.18	33.06	201	185	Average	VERTICAL
2	5421.03	64.98	74.00	-9.02	53.37	10.49	34.18	33.06	201	185	Peak	VERTICAL
3	5466.80	64.00	74.00	-10.00	52.22	10.59	34.25	33.06	201	185	Peak	VERTICAL
4	5467.44	52.28	54.00	-1.72	40.50	10.59	34.25	33.06	201	185	Average	VERTICAL
5	5582.56	124.99			112.90	10.83	34.35	33.09	201	185	Peak	VERTICAL
6	5587.69	114.81			102.72	10.83	34.35	33.09	201	185	Average	VERTICAL
7	5732.56	50.92	54.00	-3.08	38.85	10.77	34.44	33.14	201	185	Average	VERTICAL
8	5732.56	62.44	74.00	-11.56	50.37	10.77	34.44	33.14	201	185	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

**Channel 140**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5696.47	119.65			107.56	10.80	34.42	33.13	202	235	Peak	VERTICAL
2	5703.53	107.29			95.20	10.80	34.42	33.13	202	235	Average	VERTICAL
3	5725.00	70.46	74.00	-3.54	58.38	10.77	34.44	33.13	202	235	Peak	VERTICAL
4	5725.64	53.74	54.00	-0.26	41.66	10.77	34.44	33.13	202	235	Average	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 144 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 30, 2016	<b>Test Function</b>	Beamforming function

**Channel 144**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5723.00	116.51			104.43	10.77	34.44	33.13	203	267	Average	VERTICAL
2	5723.00	125.72			113.64	10.77	34.44	33.13	203	267	Peak	VERTICAL
3	5864.60	63.86	74.00	-10.14	51.56	10.96	34.52	33.18	203	267	Peak	VERTICAL
4	5867.00	52.50	54.00	-1.50	40.20	10.96	34.52	33.18	203	267	Average	VERTICAL

Item 1, 2 are the fundamental frequency at 5720 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016 / Mar. 25, 2016	<b>Test Function</b>	Beamforming function

#### Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5535.06	66.59	68.20	-1.61	54.62	10.72	34.32	33.07	210	197	Peak	VERTICAL
2	5737.79	114.40			102.33	10.77	34.44	33.14	210	197	Average	VERTICAL
3	5742.96	124.92			112.85	10.76	34.45	33.14	210	197	Peak	VERTICAL
4	5929.80	64.36	68.20	-3.84	51.80	11.20	34.56	33.20	210	197	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5745 MHz.

#### Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5617.68	65.87	68.20	-2.33	53.75	10.85	34.37	33.10	205	196	Peak	VERTICAL
2	5782.79	114.28			102.22	10.74	34.47	33.15	205	196	Average	VERTICAL
3	5787.78	124.97			112.91	10.74	34.47	33.15	205	196	Peak	VERTICAL
4	5963.82	64.66	68.20	-3.54	51.98	11.31	34.58	33.21	205	196	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5785 MHz.

#### Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5615.52	66.57	68.20	-1.63	54.45	10.85	34.37	33.10	212	197	Peak	VERTICAL
2	5827.74	124.75			112.57	10.85	34.50	33.17	212	197	Peak	VERTICAL
3	5832.98	114.48			102.30	10.85	34.50	33.17	212	197	Average	VERTICAL
4	5961.66	64.99	68.20	-3.21	52.31	11.31	34.58	33.21	212	197	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5825 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016	<b>Test Function</b>	Beamforming function

### Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5148.91	69.41	74.00	-4.59	58.29	10.43	33.74	33.05	214	159	Peak	VERTICAL
2	5150.00	53.97	54.00	-0.03	42.85	10.43	33.74	33.05	214	159	Average	VERTICAL
3	5172.63	111.71			100.51	10.46	33.79	33.05	214	159	Average	VERTICAL
4	5173.27	121.87			110.67	10.46	33.79	33.05	214	159	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5180 MHz.

### Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.76	63.63	74.00	-10.37	52.51	10.43	33.74	33.05	204	199	Peak	VERTICAL
2	5150.00	51.73	54.00	-2.27	40.61	10.43	33.74	33.05	204	199	Average	VERTICAL
3	5197.76	114.32			103.07	10.48	33.82	33.05	204	199	Average	VERTICAL
4	5201.60	123.56			112.29	10.48	33.84	33.05	204	199	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5200 MHz.

### Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5112.60	49.89	54.00	-4.11	38.85	10.40	33.69	33.05	224	207	Average	VERTICAL
2	5124.62	62.66	74.00	-11.34	51.62	10.40	33.69	33.05	224	207	Peak	VERTICAL
3	5232.31	123.79			112.48	10.47	33.89	33.05	224	207	Peak	VERTICAL
4	5232.79	113.18			101.87	10.47	33.89	33.05	224	207	Average	VERTICAL
5	5351.92	49.94	54.00	-4.06	38.51	10.43	34.06	33.06	224	207	Average	VERTICAL
6	5353.46	64.00	74.00	-10.00	52.57	10.43	34.06	33.06	224	207	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5240 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016	<b>Test Function</b>	Beamforming function

### Channel 52

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5134.52	63.26	74.00	-10.74	52.17	10.42	33.72	33.05	194	148	Peak	VERTICAL
2	5143.65	50.49	54.00	-3.51	39.37	10.43	33.74	33.05	194	148	Average	VERTICAL
3	5262.89	123.03			111.69	10.46	33.94	33.06	194	148	Peak	VERTICAL
4	5267.69	112.66			101.32	10.46	33.94	33.06	194	148	Average	VERTICAL
5	5400.39	49.55	54.00	-4.45	38.06	10.42	34.13	33.06	194	148	Average	VERTICAL
6	5404.23	63.17	74.00	-10.83	51.63	10.45	34.15	33.06	194	148	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5260 MHz.

### Channel 60

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5298.40	124.83			113.46	10.45	33.98	33.06	199	197	Peak	VERTICAL
2	5302.89	114.39			103.02	10.45	33.98	33.06	199	197	Average	VERTICAL
3	5350.64	50.70	54.00	-3.30	39.27	10.43	34.06	33.06	199	197	Average	VERTICAL
4	5354.49	63.31	74.00	-10.69	51.86	10.43	34.08	33.06	199	197	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5300 MHz.

### Channel 64

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5327.05	123.20			111.79	10.44	34.03	33.06	231	260	Peak	VERTICAL
2	5327.37	112.37			100.96	10.44	34.03	33.06	231	260	Average	VERTICAL
3	5350.00	53.82	54.00	-0.18	42.39	10.43	34.06	33.06	231	260	Average	VERTICAL
4	5353.33	71.16	74.00	-2.84	59.73	10.43	34.06	33.06	231	260	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5320 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016	<b>Test Function</b>	Beamforming function

### Channel 100

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5453.53	64.03	74.00	-9.97	52.30	10.56	34.23	33.06	200	189	Peak	VERTICAL
2	5459.62	50.93	54.00	-3.07	39.20	10.56	34.23	33.06	200	189	Average	VERTICAL
3	5468.59	70.57	74.00	-3.43	58.79	10.59	34.25	33.06	200	189	Peak	VERTICAL
4	5470.00	53.78	54.00	-0.22	42.00	10.59	34.25	33.06	200	189	Average	VERTICAL
5	5492.31	114.68			102.84	10.62	34.28	33.06	200	189	Average	VERTICAL
6	5492.31	124.71			112.87	10.62	34.28	33.06	200	189	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5500 MHz.

### Channel 116

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5448.27	62.66	74.00	-11.34	50.93	10.56	34.23	33.06	199	153	Peak	VERTICAL
2	5453.56	50.82	54.00	-3.18	39.09	10.56	34.23	33.06	199	153	Average	VERTICAL
3	5463.75	50.18	54.00	-3.82	38.40	10.59	34.25	33.06	199	153	Average	VERTICAL
4	5467.12	61.83	74.00	-12.17	50.05	10.59	34.25	33.06	199	153	Peak	VERTICAL
5	5582.40	114.72			102.63	10.83	34.35	33.09	199	153	Average	VERTICAL
6	5582.40	125.34			113.25	10.83	34.35	33.09	199	153	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5580 MHz.

### Channel 140

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5692.31	111.88			99.79	10.80	34.42	33.13	199	237	Average	VERTICAL
2	5692.31	122.56			110.47	10.80	34.42	33.13	199	237	Peak	VERTICAL
3	5725.00	53.92	54.00	-0.08	41.84	10.77	34.44	33.13	199	237	Average	VERTICAL
4	5725.64	70.86	74.00	-3.14	58.78	10.77	34.44	33.13	199	237	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5700 MHz.



<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 30, 2016	<b>Test Function</b>	Beamforming function

**Channel 144**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5718.40	115.11			103.03	10.78	34.43	33.13	212	243	Average	VERTICAL
2	5721.60	126.59			114.51	10.78	34.43	33.13	212	243	Peak	VERTICAL
3	5880.80	52.07	54.00	-1.93	39.70	11.02	34.53	33.18	212	243	Average	VERTICAL
4	5912.00	64.36	74.00	-9.64	51.86	11.14	34.55	33.19	212	243	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5720 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Channel 149**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5536.14	65.90	68.20	-2.30	53.93	10.72	34.32	33.07	219	259	Peak	VERTICAL
2	5737.56	124.91			112.84	10.77	34.44	33.14	219	259	Peak	VERTICAL
3	5737.79	114.61			102.54	10.77	34.44	33.14	219	259	Average	VERTICAL
4	5961.12	64.69	68.20	-3.51	52.01	11.31	34.58	33.21	219	259	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5745 MHz.

**Channel 157**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5593.92	66.41	68.20	-1.79	54.28	10.86	34.36	33.09	206	248	Peak	VERTICAL
2	5777.60	115.50			103.44	10.74	34.47	33.15	206	248	Average	VERTICAL
3	5787.24	126.28			114.22	10.74	34.47	33.15	206	248	Peak	VERTICAL
4	5937.90	65.53	68.20	-2.67	52.97	11.20	34.56	33.20	206	248	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5785 MHz.

**Channel 165**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5648.46	66.07	68.20	-2.13	53.96	10.83	34.39	33.11	206	248	Peak	VERTICAL
2	5817.40	115.46			103.34	10.79	34.49	33.16	206	248	Average	VERTICAL
3	5821.80	125.77			113.66	10.79	34.49	33.17	206	248	Peak	VERTICAL
4	5935.74	65.23	68.20	-2.97	52.67	11.20	34.56	33.20	206	248	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5825 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016	<b>Test Function</b>	Beamforming function

### Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5143.21	66.04	74.00	-7.96	54.92	10.43	33.74	33.05	201	210	Peak	VERTICAL
2	5150.00	53.73	54.00	-0.27	42.61	10.43	33.74	33.05	201	210	Average	VERTICAL
3	5195.77	104.02			92.77	10.48	33.82	33.05	201	210	Average	VERTICAL
4	5197.05	114.58			103.33	10.48	33.82	33.05	201	210	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5190 MHz.

### Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.71	65.04	74.00	-8.96	53.92	10.43	33.74	33.05	201	200	Peak	VERTICAL
2	5150.00	52.56	54.00	-1.44	41.44	10.43	33.74	33.05	201	200	Average	VERTICAL
3	5214.62	121.13			109.86	10.48	33.84	33.05	201	200	Peak	VERTICAL
4	5225.67	111.01			99.73	10.47	33.86	33.05	201	200	Average	VERTICAL
5	5359.33	63.06	74.00	-10.94	51.61	10.43	34.08	33.06	201	200	Peak	VERTICAL
6	5372.31	51.16	54.00	-2.84	39.69	10.42	34.11	33.06	201	200	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5230 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016 / Mar. 31, 2016	<b>Test Function</b>	Beamforming function

### Channel 54

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg		
1	5133.46	63.65	74.00	-10.35	52.56	10.42	33.72	33.05	201	151	Peak	VERTICAL
2	5142.60	51.05	54.00	-2.95	39.93	10.43	33.74	33.05	201	151	Average	VERTICAL
3	5264.23	110.20			98.86	10.46	33.94	33.06	201	151	Average	VERTICAL
4	5267.60	121.32			109.98	10.46	33.94	33.06	201	151	Peak	VERTICAL
5	5351.44	50.20	54.00	-3.80	38.77	10.43	34.06	33.06	201	151	Average	VERTICAL
6	5352.21	66.07	74.00	-7.93	54.64	10.43	34.06	33.06	201	151	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5270 MHz.

### Channel 62

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg		
1	5314.80	116.46			108.81	7.54	35.02	34.91	187	172	Peak	VERTICAL
2	5315.60	104.55			96.90	7.54	35.02	34.91	187	172	Average	VERTICAL
3	5350.00	53.95	54.00	-0.05	46.25	7.56	35.05	34.91	187	172	Average	VERTICAL
4	5354.40	67.56	74.00	-6.44	59.85	7.56	35.06	34.91	187	172	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5310 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016	<b>Test Function</b>	Beamforming function

### Channel 102

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5459.04	64.98	74.00	-9.02	53.25	10.56	34.23	33.06	199	190	Peak	VERTICAL
2	5460.00	52.08	54.00	-1.92	40.35	10.56	34.23	33.06	199	190	Average	VERTICAL
3	5463.37	53.77	54.00	-0.23	42.04	10.56	34.23	33.06	199	190	Average	VERTICAL
4	5463.37	71.67	74.00	-2.33	59.94	10.56	34.23	33.06	199	190	Peak	VERTICAL
5	5493.17	105.65			93.81	10.62	34.28	33.06	199	190	Average	VERTICAL
6	5493.17	115.86			104.02	10.62	34.28	33.06	199	190	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5510 MHz.

### Channel 110

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5387.82	51.41	54.00	-2.59	39.92	10.42	34.13	33.06	199	260	Average	VERTICAL
2	5458.97	65.56	74.00	-8.44	53.83	10.56	34.23	33.06	199	260	Peak	VERTICAL
3	5468.59	65.65	74.00	-8.35	53.87	10.59	34.25	33.06	199	260	Peak	VERTICAL
4	5470.00	51.80	54.00	-2.20	40.02	10.59	34.25	33.06	199	260	Average	VERTICAL
5	5553.85	123.35			111.34	10.76	34.33	33.08	199	260	Peak	VERTICAL
6	5554.49	112.23			100.22	10.76	34.33	33.08	199	260	Average	VERTICAL
7	5727.56	63.29	74.00	-10.71	51.22	10.77	34.44	33.14	199	260	Peak	VERTICAL
8	5728.21	50.83	54.00	-3.17	38.76	10.77	34.44	33.14	199	260	Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5550 MHz.

### Channel 134

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5684.90	120.11			108.01	10.81	34.41	33.12	199	279	Peak	VERTICAL
2	5685.39	109.18			97.08	10.81	34.41	33.12	199	279	Average	VERTICAL
3	5725.77	53.69	54.00	-0.31	41.61	10.77	34.44	33.13	199	279	Average	VERTICAL
4	5727.21	70.37	74.00	-3.63	58.30	10.77	34.44	33.14	199	279	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5670 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142, 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016 / Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Channel 142

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5694.62	113.65			101.56	10.80	34.42	33.13	198	237	Average	VERTICAL
2	5694.62	124.55			112.46	10.80	34.42	33.13	198	237	Peak	VERTICAL
3	5852.95	51.74	54.00	-2.26	39.50	10.90	34.51	33.17	198	237	Average	VERTICAL
4	5874.74	64.52	74.00	-9.48	52.15	11.02	34.53	33.18	198	237	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5710 MHz.

### Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5549.10	66.46	68.20	-1.74	54.45	10.76	34.33	33.08	207	252	Peak	VERTICAL
2	5770.67	111.93			99.87	10.75	34.46	33.15	207	252	Average	VERTICAL
3	5771.58	122.26			110.20	10.75	34.46	33.15	207	252	Peak	VERTICAL
4	5970.84	65.46	68.20	-2.74	52.78	11.31	34.58	33.21	207	252	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5755 MHz.

### Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5620.92	65.95	68.20	-2.25	53.83	10.85	34.37	33.10	206	251	Peak	VERTICAL
2	5810.48	112.11			99.99	10.79	34.49	33.16	206	251	Average	VERTICAL
3	5811.54	122.97			110.85	10.79	34.49	33.16	206	251	Peak	VERTICAL
4	5974.08	65.48	68.20	-2.72	52.80	11.31	34.58	33.21	206	251	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5795 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 31, 2016	<b>Test Function</b>	Beamforming function

**Channel 42**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5138.00	66.97	74.00	-7.03	59.56	7.48	34.84	34.91	182	279	Peak	VERTICAL
2	5149.00	53.83	54.00	-0.17	46.41	7.48	34.85	34.91	182	279	Average	VERTICAL
3	5200.00	110.43			102.96	7.48	34.90	34.91	182	279	Peak	VERTICAL
4	5203.00	98.15			90.66	7.49	34.91	34.91	182	279	Average	VERTICAL
5	5350.00	47.56	54.00	-6.44	39.86	7.56	35.05	34.91	182	279	Average	VERTICAL
6	5376.00	60.71	74.00	-13.29	52.98	7.57	35.08	34.92	182	279	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5210 MHz.

**Channel 58**

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5278.00	108.62			101.01	7.53	34.99	34.91	190	63	Peak	VERTICAL
2	5279.00	98.85			91.24	7.53	34.99	34.91	190	63	Average	VERTICAL
3	5350.00	53.65	54.00	-0.35	45.95	7.56	35.05	34.91	190	63	Average	VERTICAL
4	5350.00	64.26	74.00	-9.74	56.56	7.56	35.05	34.91	190	63	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5290 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 31, 2016	<b>Test Function</b>	Beamforming function

**Channel 106**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5459.00	64.52	74.00	-9.48	56.60	7.69	35.15	34.92	213	254 Peak	VERTICAL
2	5460.00	52.14	54.00	-1.86	44.22	7.69	35.15	34.92	213	254 Average	VERTICAL
3	5468.00	68.05	74.00	-5.95	60.08	7.72	35.17	34.92	213	254 Peak	VERTICAL
4	5470.00	53.84	54.00	-0.16	45.87	7.72	35.17	34.92	213	254 Average	VERTICAL
5	5510.00	100.36			92.31	7.77	35.20	34.92	213	254 Average	VERTICAL
6	5510.00	110.55			102.50	7.77	35.20	34.92	213	254 Peak	VERTICAL
7	5725.00	47.68	54.00	-6.32	39.58	7.79	35.25	34.94	213	254 Average	VERTICAL
8	5764.00	60.80	74.00	-13.20	52.75	7.75	35.25	34.95	213	254 Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5530 MHz.

**Channel 122**

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5408.00	53.99	54.00	-0.01	46.19	7.61	35.11	34.92	195	270 Average	VERTICAL
2	5415.00	65.30	74.00	-8.70	57.50	7.61	35.11	34.92	195	270 Peak	VERTICAL
3	5462.00	65.74	74.00	-8.26	57.82	7.69	35.15	34.92	195	270 Peak	VERTICAL
4	5470.00	53.03	54.00	-0.97	45.06	7.72	35.17	34.92	195	270 Average	VERTICAL
5	5574.00	104.66			96.50	7.88	35.21	34.93	195	270 Average	VERTICAL
6	5574.00	114.83			106.67	7.88	35.21	34.93	195	270 Peak	VERTICAL
7	5725.00	51.49	54.00	-2.51	43.39	7.79	35.25	34.94	195	270 Average	VERTICAL
8	5734.00	63.85	74.00	-10.15	55.75	7.79	35.25	34.94	195	270 Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5610 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138, 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 24, 2016 / Mar. 25, 2016	<b>Test Function</b>	Beamforming function

**Channel 138**

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg		
1	5691.92	120.32			108.23	10.80	34.42	33.13	200	237	Peak	VERTICAL
2	5693.85	109.18			97.09	10.80	34.42	33.13	200	237	Average	VERTICAL
3	5855.39	68.89	74.00	-5.11	56.65	10.90	34.51	33.17	200	237	Peak	VERTICAL
4	5858.59	52.76	54.00	-1.24	40.45	10.96	34.52	33.17	200	237	Average	VERTICAL

Item 1, 2 are the fundamental frequency at 5690 MHz.

**Channel 155**

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg		
1	5647.92	67.88	68.20	-0.32	55.77	10.83	34.39	33.11	206	252	Peak	VERTICAL
2	5807.22	119.39			107.27	10.79	34.49	33.16	206	252	Peak	VERTICAL
3	5810.48	107.67			95.55	10.79	34.49	33.16	206	252	Average	VERTICAL
4	5926.56	66.98	68.20	-1.22	54.42	11.20	34.56	33.20	206	252	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5775 MHz.

<b>Temperature</b>	20.7°C	<b>Humidity</b>	63%
<b>Test Engineer</b>	John Tang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT160 CH 50, 114 / Chain 1 + Chain 2 + Chain 3 + Chain 4
<b>Test Date</b>	Mar. 25, 2016	<b>Test Function</b>	Beamforming function

### Channel 50

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5117.79	68.47	74.00	-5.53	57.43	10.40	33.69	33.05	201	217	Peak	VERTICAL
2	5150.00	53.78	54.00	-0.22	42.66	10.43	33.74	33.05	201	217	Average	VERTICAL
3	5200.32	109.96			98.71	10.48	33.82	33.05	201	217	Peak	VERTICAL
4	5201.12	97.55			86.30	10.48	33.82	33.05	201	217	Average	VERTICAL
5	5350.00	52.12	54.00	-1.88	40.69	10.43	34.06	33.06	201	217	Average	VERTICAL
6	5397.44	65.57	74.00	-8.43	54.08	10.42	34.13	33.06	201	217	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5250 MHz.

### Channel 114

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5439.39	65.10	74.00	-8.90	53.44	10.52	34.20	33.06	201	265	Peak	VERTICAL
2	5459.42	52.08	54.00	-1.92	40.35	10.56	34.23	33.06	201	265	Average	VERTICAL
3	5468.24	68.57	74.00	-5.43	56.79	10.59	34.25	33.06	201	265	Peak	VERTICAL
4	5470.00	53.95	54.00	-0.05	42.17	10.59	34.25	33.06	201	265	Average	VERTICAL
5	5586.83	110.60			98.51	10.83	34.35	33.09	201	265	Peak	VERTICAL
6	5587.63	99.52			87.43	10.83	34.35	33.09	201	265	Average	VERTICAL
7	5725.45	48.54	54.00	-5.46	36.46	10.77	34.44	33.13	201	265	Average	VERTICAL
8	5728.65	60.90	74.00	-13.10	48.83	10.77	34.44	33.14	201	265	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5570 MHz.

Note:

Emission level (dBuV/m) = 20 log Emission level (uV/m)

Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level

## 4.8. Frequency Stability Measurement

### 4.8.1. Limit

In-band 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  $\pm 20$  ppm maximum for the 5 GHz band (IEEE 802.11n specification).

### 4.8.2. Measuring Instruments and Setting

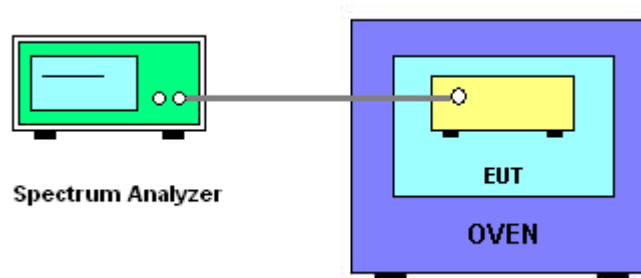
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Entire absence of modulation emissions bandwidth
RBW	10 kHz
VBW	10 kHz
Sweep Time	Auto

### 4.8.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5.  $f_c$  is declaring of channel frequency. Then the frequency error formula is  $(f_c - f) / f_c \times 10^6$  ppm and the limit is less than  $\pm 20$  ppm (IEEE 802.11n specification).
6. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
7. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
8. Extreme temperature is  $-30^\circ\text{C} \sim 50^\circ\text{C}$ .

### 4.8.4. Test Setup Layout



#### 4.8.5. Test Deviation

There is no deviation with the original standard.

#### 4.8.6. EUT Operation during Test

The EUT was programmed to be in continuously un-modulation transmitting mode.

#### 4.8.7. Test Result of Frequency Stability

Temperature	22°C	Humidity	64%
Test Engineer	Akina Chiu	Test Date	May 23, 2016~May 24, 2016

Mode: 20 MHz / Chain 1

##### Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9887	5199.9879	5199.9872	5199.9862
110.00	5199.9883	5199.9874	5199.9866	5199.9863
93.50	5199.9882	5199.9878	5199.9873	5199.9871
Max. Deviation (MHz)	0.0118	0.0126	0.0134	0.0138
Max. Deviation (ppm)	2.27	2.43	2.58	2.66
Result	Complies			

##### Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5199.9837	5199.9830	5199.9827	5199.9817
-20	5199.9841	5199.9835	5199.9830	5199.9824
-10	5199.9861	5199.9853	5199.9851	5199.9850
0	5199.9863	5199.9861	5199.9857	5199.9856
10	5199.9874	5199.9870	5199.9868	5199.9866
20	5199.9883	5199.9873	5199.9865	5199.9859
30	5199.9887	5199.9886	5199.9880	5199.9874
40	5199.9895	5199.9893	5199.9883	5199.9877
50	5199.9897	5199.9890	5199.9880	5199.9873
Max. Deviation (MHz)	0.0163	0.0170	0.0173	0.0183
Max. Deviation (ppm)	3.14	3.27	3.33	3.52
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5299.9890	5299.9885	5299.9883	5299.9879
110.00	5299.9883	5299.9877	5299.9868	5299.9864
93.50	5299.9874	5299.9873	5299.9869	5299.9861
Max. Deviation (MHz)	0.0126	0.0127	0.0132	0.0139
Max. Deviation (ppm)	2.38	2.40	2.49	2.63
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5299.9820	5299.9813	5299.9805	5299.9800
-20	5299.9835	5299.9833	5299.9824	5299.9820
-10	5299.9853	5299.9849	5299.9845	5299.9844
0	5299.9862	5299.9861	5299.9851	5299.9846
10	5299.9868	5299.9866	5299.9857	5299.9849
20	5299.9883	5299.9877	5299.9867	5299.9864
30	5299.9887	5299.9881	5299.9873	5299.9865
40	5299.9900	5299.9899	5299.9891	5299.9884
50	5299.9905	5299.9895	5299.9888	5299.9880
Max. Deviation (MHz)	0.0180	0.0187	0.0195	0.0200
Max. Deviation (ppm)	3.40	3.53	3.68	3.78
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5579.9888	5579.9878	5579.9875	5579.9865
110.00	5579.9883	5579.9875	5579.9870	5579.9864
93.50	5579.9881	5579.9876	5579.9871	5579.9870
Max. Deviation (MHz)	0.0119	0.0125	0.0130	0.0136
Max. Deviation (ppm)	2.14	2.24	2.33	2.44
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5579.9839	5579.9834	5579.9826	5579.9816
-20	5579.9852	5579.9846	5579.9844	5579.9842
-10	5579.9855	5579.9853	5579.9844	5579.9841
0	5579.9872	5579.9868	5579.9865	5579.9856
10	5579.9879	5579.9876	5579.9872	5579.9865
20	5579.9883	5579.9880	5579.9877	5579.9867
30	5579.9887	5579.9880	5579.9872	5579.9870
40	5579.9901	5579.9899	5579.9895	5579.9887
50	5579.9921	5579.9919	5579.9917	5579.9914
Max. Deviation (MHz)	0.0161	0.0166	0.0174	0.0184
Max. Deviation (ppm)	2.89	2.98	3.12	3.30
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9888	5784.9879	5784.9874	5784.9868
110.00	5784.9883	5784.9875	5784.9868	5784.9859
93.50	5784.9875	5784.9872	5784.9862	5784.9855
Max. Deviation (MHz)	0.0125	0.0128	0.0138	0.0145
Max. Deviation (ppm)	2.16	2.22	2.39	2.51
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5784.9832	5784.9830	5784.9829	5784.9824
-20	5784.9843	5784.9842	5784.9834	5784.9826
-10	5784.9859	5784.9856	5784.9853	5784.9851
0	5784.9861	5784.9855	5784.9853	5784.9849
10	5784.9879	5784.9875	5784.9868	5784.9864
20	5784.9883	5784.9873	5784.9872	5784.9868
30	5784.9887	5784.9882	5784.9878	5784.9871
40	5784.9897	5784.9889	5784.9882	5784.9879
50	5784.9911	5784.9905	5784.9903	5784.9897
Max. Deviation (MHz)	0.0168	0.0170	0.0171	0.0176
Max. Deviation (ppm)	2.91	2.94	2.96	3.05
Result	Complies			



Mode: 40 MHz / Chain 1

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9890	5189.9885	5189.9881	5189.9872
110.00	5189.9883	5189.9879	5189.9874	5189.9872
93.50	5189.9876	5189.9875	5189.9869	5189.9862
Max. Deviation (MHz)	0.0124	0.0125	0.0131	0.0138
Max. Deviation (ppm)	2.39	2.41	2.53	2.66
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5189.9817	5189.9812	5189.9805	5189.9800
-20	5189.9835	5189.9825	5189.9824	5189.9819
-10	5189.9839	5189.9831	5189.9824	5189.9823
0	5189.9854	5189.9850	5189.9842	5189.9841
10	5189.9867	5189.9863	5189.9860	5189.9852
20	5189.9883	5189.9875	5189.9868	5189.9867
30	5189.9887	5189.9879	5189.9870	5189.9869
40	5189.9895	5189.9893	5189.9890	5189.9888
50	5189.9902	5189.9896	5189.9892	5189.9883
Max. Deviation (MHz)	0.0183	0.0188	0.0195	0.0200
Max. Deviation (ppm)	3.53	3.63	3.76	3.86
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5309.9886	5309.9878	5309.9877	5309.9867
110.00	5309.9883	5309.9876	5309.9866	5309.9864
93.50	5309.9878	5309.9876	5309.9873	5309.9871
Max. Deviation (MHz)	0.0122	0.0124	0.0134	0.0136
Max. Deviation (ppm)	2.30	2.34	2.53	2.56
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5309.9820	5309.9815	5309.9813	5309.9803
-20	5309.9840	5309.9834	5309.9829	5309.9821
-10	5309.9846	5309.9839	5309.9835	5309.9834
0	5309.9862	5309.9852	5309.9845	5309.9844
10	5309.9871	5309.9868	5309.9860	5309.9850
20	5309.9883	5309.9875	5309.9866	5309.9858
30	5309.9887	5309.9880	5309.9871	5309.9863
40	5309.9903	5309.9900	5309.9897	5309.9896
50	5309.9912	5309.9909	5309.9906	5309.9905
Max. Deviation (MHz)	0.0180	0.0185	0.0187	0.0197
Max. Deviation (ppm)	3.39	3.49	3.53	3.71
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5549.9885	5549.9884	5549.9874	5549.9864
110.00	5549.9883	5549.9875	5549.9874	5549.9867
93.50	5549.9877	5549.9869	5549.9861	5549.9853
Max. Deviation (MHz)	0.0123	0.0131	0.0139	0.0147
Max. Deviation (ppm)	2.22	2.36	2.51	2.65
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5549.9817	5549.9812	5549.9806	5549.9799
-20	5549.9833	5549.9825	5549.9818	5549.9812
-10	5549.9835	5549.9826	5549.9816	5549.9807
0	5549.9855	5549.9848	5549.9845	5549.9843
10	5549.9869	5549.9866	5549.9862	5549.9860
20	5549.9883	5549.9875	5549.9868	5549.9859
30	5549.9887	5549.9884	5549.9882	5549.9881
40	5549.9895	5549.9885	5549.9876	5549.9875
50	5549.9915	5549.9908	5549.9904	5549.9900
Max. Deviation (MHz)	0.0183	0.0188	0.0194	0.0201
Max. Deviation (ppm)	3.30	3.39	3.50	3.63
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9887	5754.9877	5754.9870	5754.9862
110.00	5754.9883	5754.9879	5754.9869	5754.9868
93.50	5754.9881	5754.9876	5754.9869	5754.9863
Max. Deviation (MHz)	0.0119	0.0124	0.0131	0.0138
Max. Deviation (ppm)	2.07	2.16	2.28	2.40
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5754.9828	5754.9827	5754.9822	5754.9812
-20	5754.9848	5754.9842	5754.9832	5754.9827
-10	5754.9849	5754.9847	5754.9845	5754.9840
0	5754.9856	5754.9854	5754.9850	5754.9840
10	5754.9863	5754.9853	5754.9846	5754.9839
20	5754.9883	5754.9874	5754.9866	5754.9859
30	5754.9887	5754.9886	5754.9885	5754.9879
40	5754.9891	5754.9885	5754.9877	5754.9868
50	5754.9910	5754.9901	5754.9894	5754.9889
Max. Deviation (MHz)	0.0172	0.0173	0.0178	0.0188
Max. Deviation (ppm)	2.99	3.01	3.10	3.27
Result	Complies			

Mode: 80 MHz / Chain 1

## Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9886	5209.9876	5209.9874	5209.9872
110.00	5209.9883	5209.9876	5209.9874	5209.9869
93.50	5209.9880	5209.9878	5209.9873	5209.9863
Max. Deviation (MHz)	0.0120	0.0124	0.0127	0.0137
Max. Deviation (ppm)	2.31	2.38	2.44	2.63
Result	Complies			

## Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5209.9830	5209.9820	5209.9816	5209.9808
-20	5209.9832	5209.9825	5209.9819	5209.9816
-10	5209.9848	5209.9838	5209.9828	5209.9823
0	5209.9857	5209.9855	5209.9854	5209.9845
10	5209.9868	5209.9860	5209.9850	5209.9847
20	5209.9883	5209.9880	5209.9874	5209.9869
30	5209.9887	5209.9882	5209.9880	5209.9879
40	5209.9906	5209.9898	5209.9888	5209.9885
50	5209.9911	5209.9904	5209.9903	5209.9898
Max. Deviation (MHz)	0.0170	0.0180	0.0184	0.0192
Max. Deviation (ppm)	3.27	3.46	3.54	3.69
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5289.9892	5289.9885	5289.9883	5289.9880
110.00	5289.9883	5289.9880	5289.9872	5289.9865
93.50	5289.9881	5289.9874	5289.9873	5289.9863
Max. Deviation (MHz)	0.0119	0.0126	0.0128	0.0137
Max. Deviation (ppm)	2.25	2.39	2.42	2.59
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5289.9832	5289.9829	5289.9826	5289.9825
-20	5289.9833	5289.9826	5289.9821	5289.9813
-10	5289.9853	5289.9850	5289.9842	5289.9835
0	5289.9865	5289.9863	5289.9862	5289.9861
10	5289.9881	5289.9871	5289.9867	5289.9858
20	5289.9883	5289.9879	5289.9874	5289.9867
30	5289.9887	5289.9883	5289.9879	5289.9875
40	5289.9904	5289.9900	5289.9891	5289.9886
50	5289.9905	5289.9900	5289.9894	5289.9892
Max. Deviation (MHz)	0.0168	0.0174	0.0179	0.0187
Max. Deviation (ppm)	3.18	3.29	3.39	3.54
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5529.9891	5529.9886	5529.9883	5529.9879
110.00	5529.9883	5529.9873	5529.9871	5529.9870
93.50	5529.9881	5529.9879	5529.9870	5529.9868
Max. Deviation (MHz)	0.0119	0.0127	0.0130	0.0132
Max. Deviation (ppm)	2.16	2.30	2.35	2.39
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5529.9811	5529.9807	5529.9797	5529.9788
-20	5529.9812	5529.9803	5529.9802	5529.9801
-10	5529.9831	5529.9822	5529.9814	5529.9805
0	5529.9849	5529.9842	5529.9836	5529.9830
10	5529.9865	5529.9860	5529.9857	5529.9852
20	5529.9883	5529.9877	5529.9868	5529.9859
30	5529.9887	5529.9881	5529.9875	5529.9873
40	5529.9903	5529.9900	5529.9891	5529.9887
50	5529.9921	5529.9918	5529.9912	5529.9903
Max. Deviation (MHz)	0.0189	0.0197	0.0203	0.0212
Max. Deviation (ppm)	3.42	3.57	3.67	3.84
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9886	5774.9883	5774.9876	5774.9869
110.00	5774.9883	5774.9881	5774.9872	5774.9869
93.50	5774.9874	5774.9865	5774.9857	5774.9854
Max. Deviation (MHz)	0.0126	0.0135	0.0143	0.0146
Max. Deviation (ppm)	2.19	2.34	2.48	2.53
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5774.9839	5774.9830	5774.9824	5774.9816
-20	5774.9848	5774.9839	5774.9837	5774.9828
-10	5774.9852	5774.9846	5774.9836	5774.9834
0	5774.9864	5774.9855	5774.9846	5774.9845
10	5774.9872	5774.9869	5774.9860	5774.9856
20	5774.9883	5774.9880	5774.9876	5774.9868
30	5774.9887	5774.9885	5774.9881	5774.9872
40	5774.9905	5774.9902	5774.9892	5774.9888
50	5774.9907	5774.9905	5774.9900	5774.9891
Max. Deviation (MHz)	0.0161	0.0170	0.0176	0.0184
Max. Deviation (ppm)	2.79	2.95	3.05	3.19
Result	Complies			

Mode: 160 MHz / Chain 1

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5250 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5250.0956	5250.0894	5250.0799	5250.0988
110.00	5250.0944	5250.0947	5250.0945	5250.0977
93.50	5250.0944	5250.0877	5250.0997	5250.0997
Max. Deviation (MHz)	0.0956	0.0947	0.0997	0.0997
Max. Deviation (ppm)	18.21	18.04	18.99	18.99
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5250 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5250.0877	5250.0856	5250.0977	5250.0984
-20	5250.0877	5250.0856	5250.0977	5250.0984
-10	5250.0877	5250.0766	5250.0985	5250.0912
0	5250.0789	5250.0966	5250.0977	5250.0944
10	5250.0766	5250.0755	5250.0766	5250.0756
20	5250.0755	5250.0874	5250.0698	5250.0674
30	5250.0756	5250.0786	5250.0699	5250.0674
40	5250.0765	5250.0698	5250.0689	5250.0677
50	5250.0745	5250.0755	5250.0974	5250.0947
Max. Deviation (MHz)	0.0877	0.0966	0.0985	0.0984
Max. Deviation (ppm)	16.70	18.40	18.77	18.74
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5570 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5570.0146	5570.0189	5570.0210	5570.0211
110.00	5570.0156	5570.0169	5570.0212	5570.0232
93.50	5570.0165	5570.0147	5570.0215	5570.0264
Max. Deviation (MHz)	0.0165	0.0189	0.0215	0.0264
Max. Deviation (ppm)	2.96	3.39	3.86	4.74
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5570 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5570.0156	5570.0168	5570.0172	5570.0185
-20	5570.0156	5570.0168	5570.0172	5570.0185
-10	5570.0246	5570.0248	5570.0247	5570.0242
0	5570.0254	5570.0256	5570.0277	5570.0266
10	5570.0589	5570.0589	5570.0556	5570.0587
20	5570.0568	5570.0569	5570.0578	5570.0579
30	5570.0659	5570.0660	5570.0699	5570.0666
40	5570.0768	5570.0796	5570.0781	5570.0752
50	5570.0789	5570.0798	5570.0788	5570.0789
Max. Deviation (MHz)	0.0789	0.0798	0.0788	0.0789
Max. Deviation (ppm)	14.17	14.33	14.15	14.17
Result	Complies			

## 4.9. Antenna Requirements

### 4.9.1. Limit

Except for special regulations, the Low-power Radio-frequency Devices must not be equipped with any jacket for installing an antenna with extension cable. An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

### 4.9.2. Antenna Connector Construction

Please refer to section 3.3 in this test report; antenna connector complied with the requirements.

## 5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 27, 2016	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 08, 2015	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 23, 2015	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 25, 2015	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA	TESEQ	CBL6112D	37880	20MHz ~ 2GHz	Sep. 03, 2015	Radiation (O3CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 22, 2015	Radiation (O3CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2015	Radiation (O3CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Mar. 15, 2016	Radiation (O3CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 2016	Radiation (O3CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Nov. 13, 2015	Radiation (O3CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Oct. 27, 2015	Radiation (O3CH01-CB)
EMI Receiver	Agilent	N9038A	MY52260123	9kHz ~ 8.4GHz	Jan. 27, 2016	Radiation (O3CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz ~ 1 GHz	Nov. 02, 2015	Radiation (O3CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (O3CH01-CB)
RF Cable-high	Woken	High Cable-17	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (O3CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (O3CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (O3CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (O3CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 09, 2015	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz ~ 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz ~ 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz ~ 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz ~ 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz ~ 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 02, 2015	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year.

“\*” Calibration Interval of instruments listed above is two years.

N.C.R. means Non-Calibration required.

## 6. MEASUREMENT UNCERTAINTY

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%