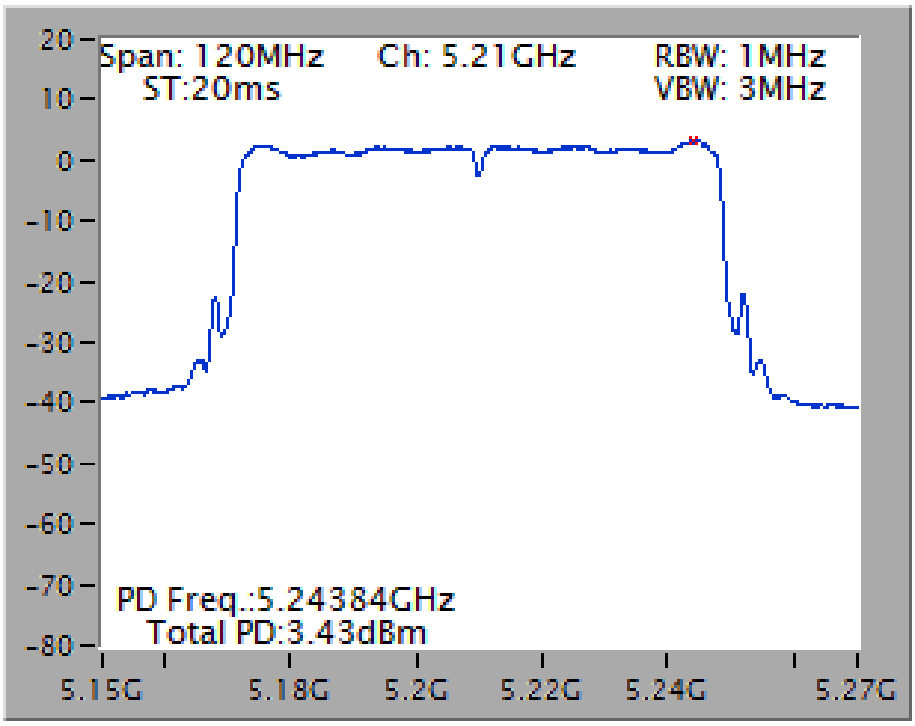
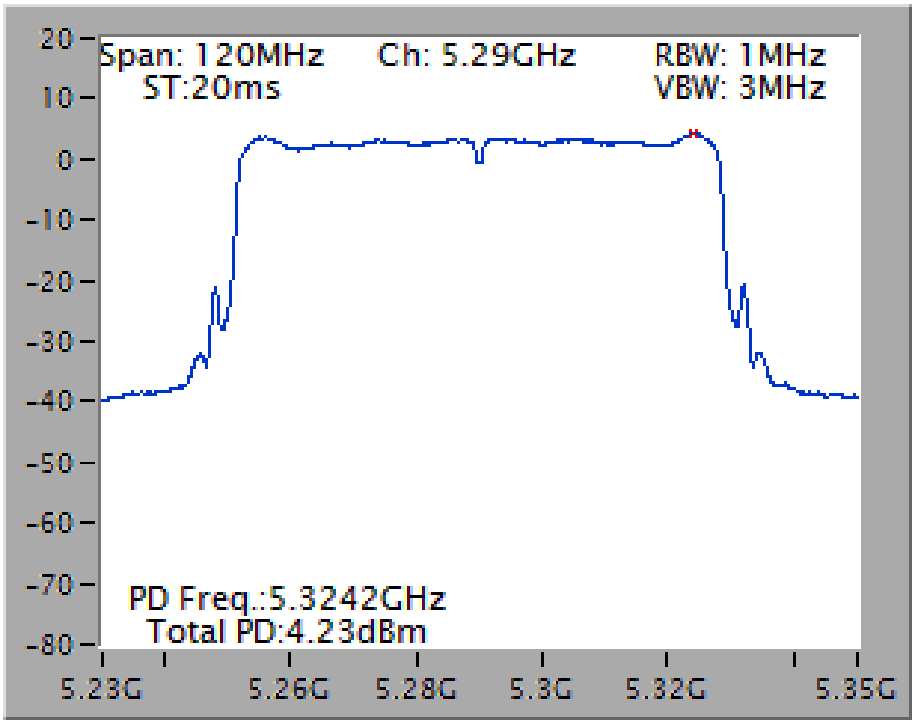
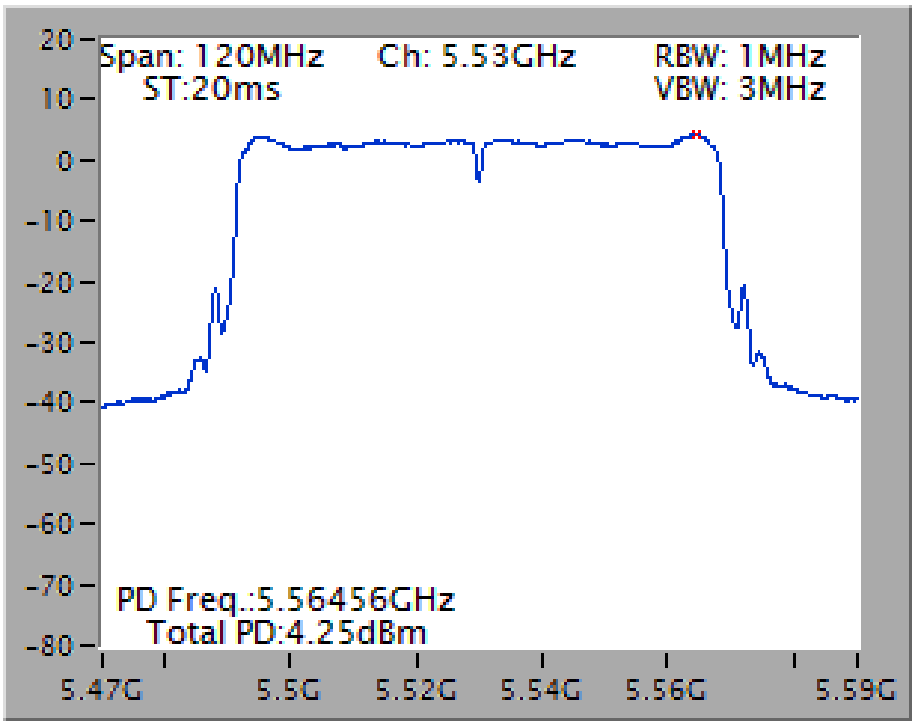
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5210 MHz



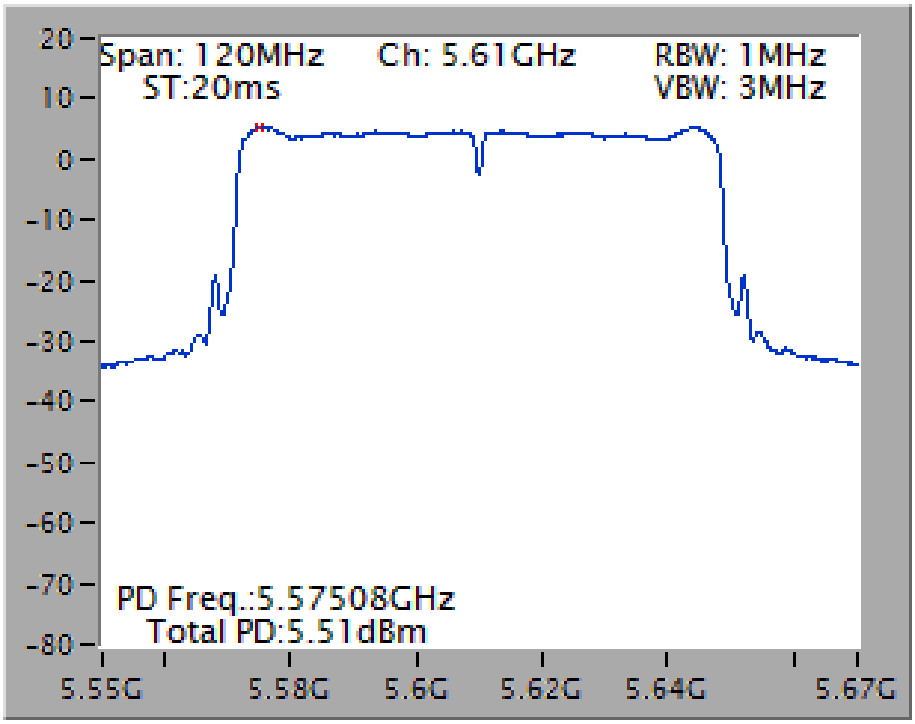
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5290 MHz



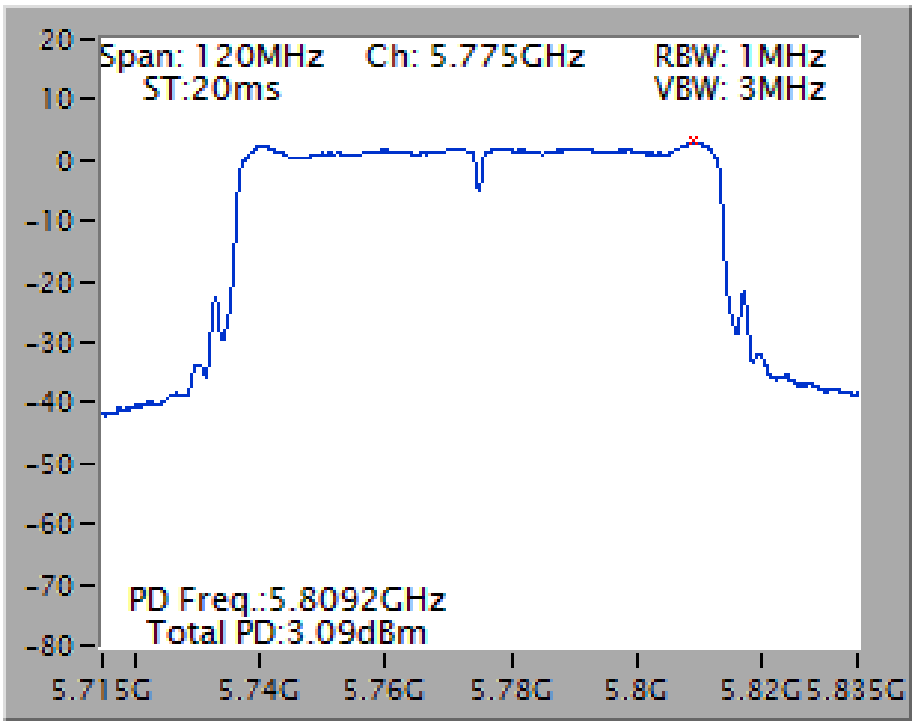
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5530 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5610 MHz

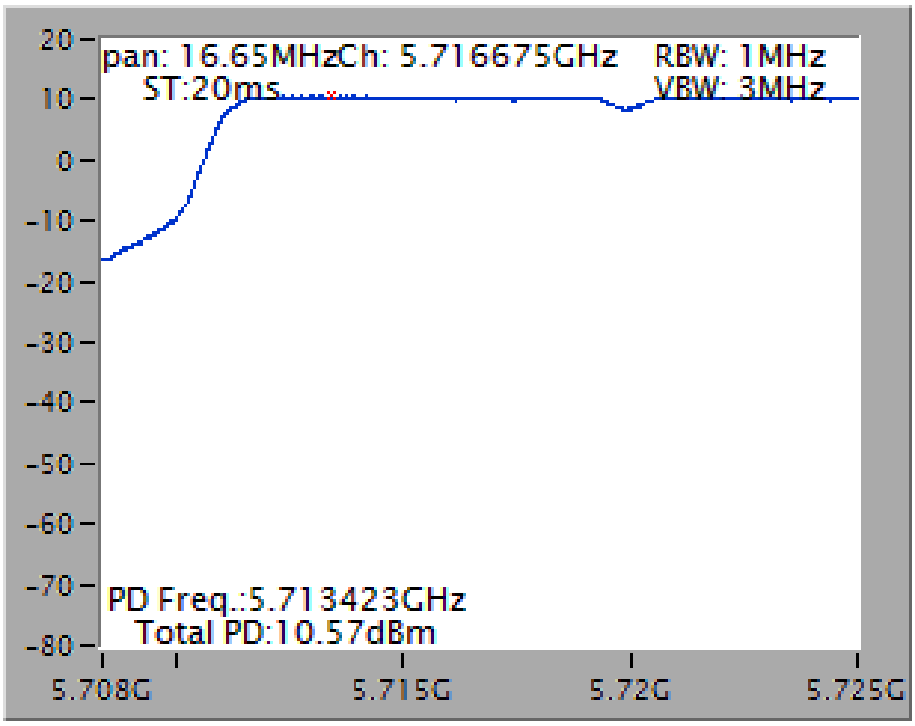


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5775 MHz

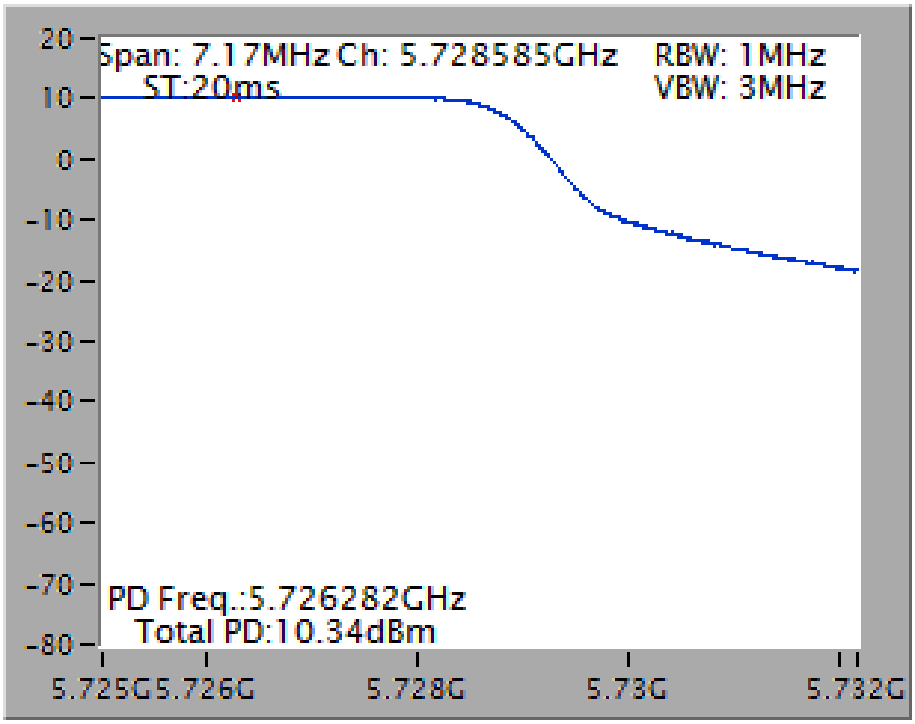


Straddle Channel

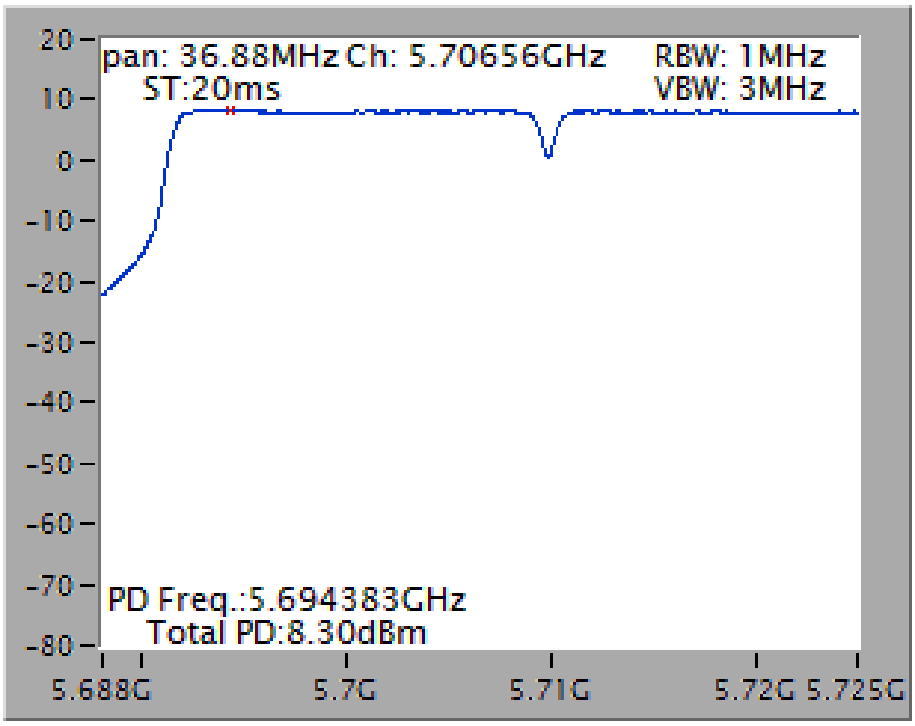
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz (UNII 2C)



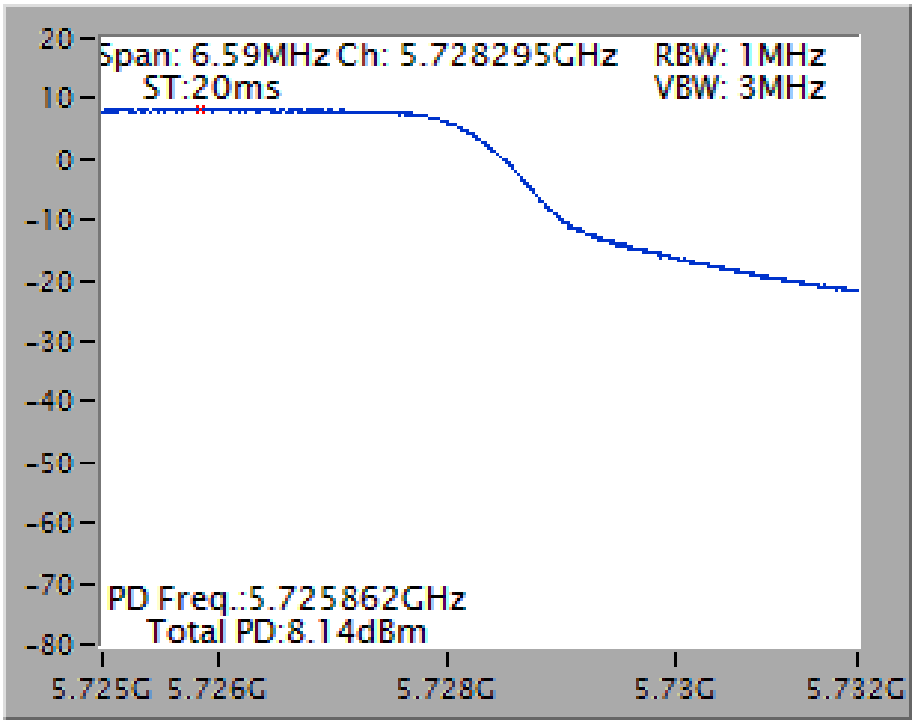
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT20 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5720 MHz (UNII 3)



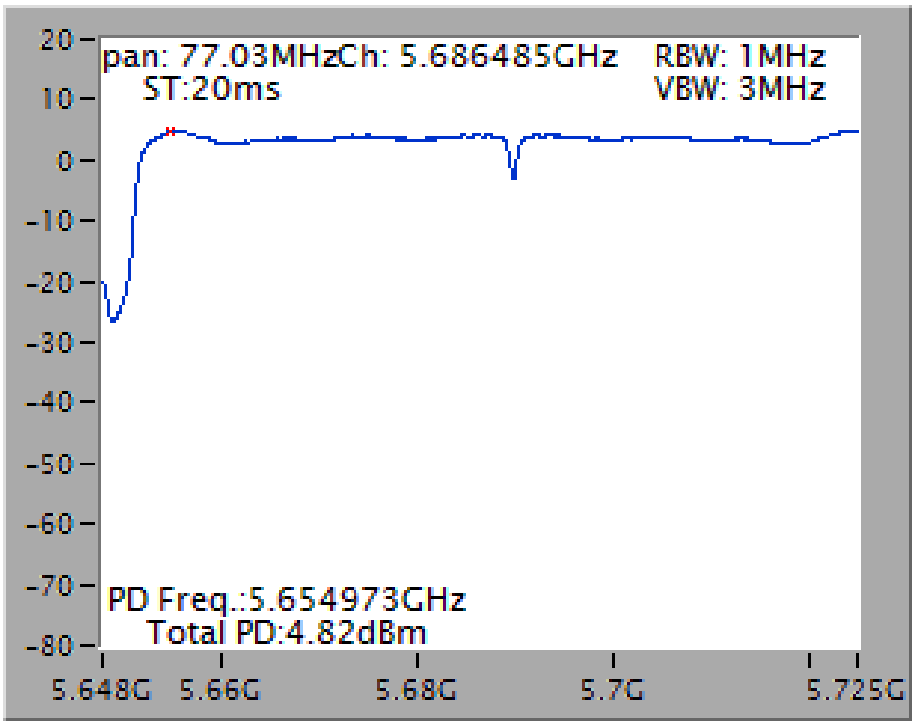
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5710 MHz (UNII 2C)



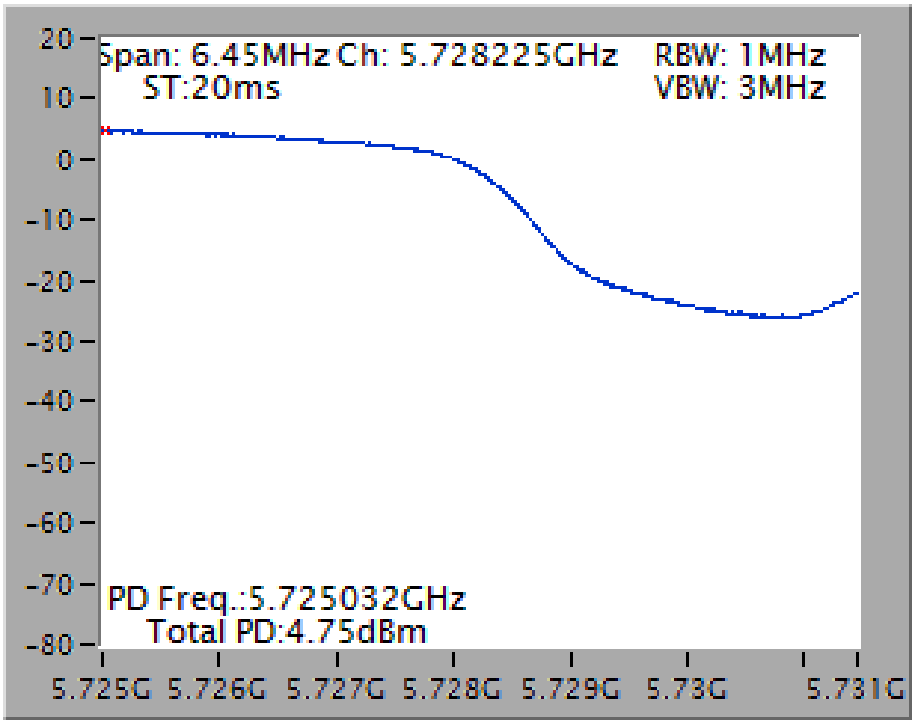
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT40 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5710 MHz (UNII 3)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5690 MHz (UNII 2C)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss2 VHT80 / Chain 1 + Chain 2 + Chain 3 + Chain 4 / 5690 MHz (UNII 3)



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 within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.

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 (micorvolts/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)	1MHz / 3MHz for Peak, 1MHz / 1/T for Average
RBW / VBW (Emission in non-restricted band)	1MHz / 3MHz for peak

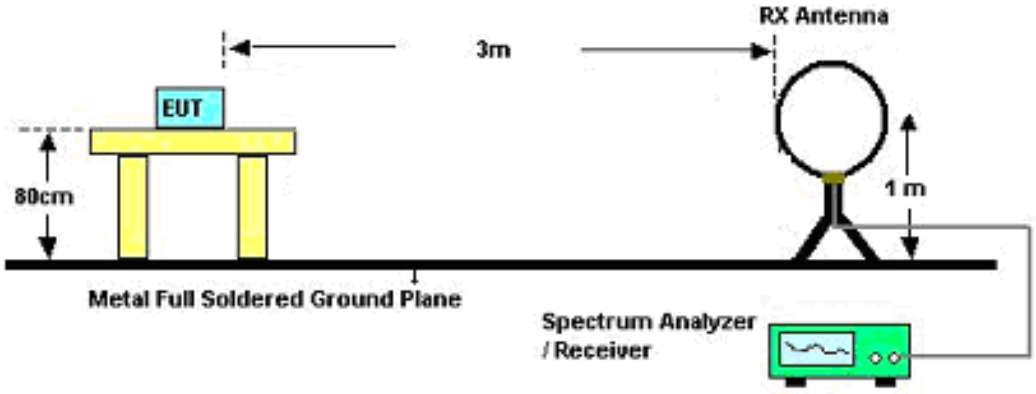
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RBW 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RBW 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RBW 120kHz for QP

4.6.3. Test Procedures

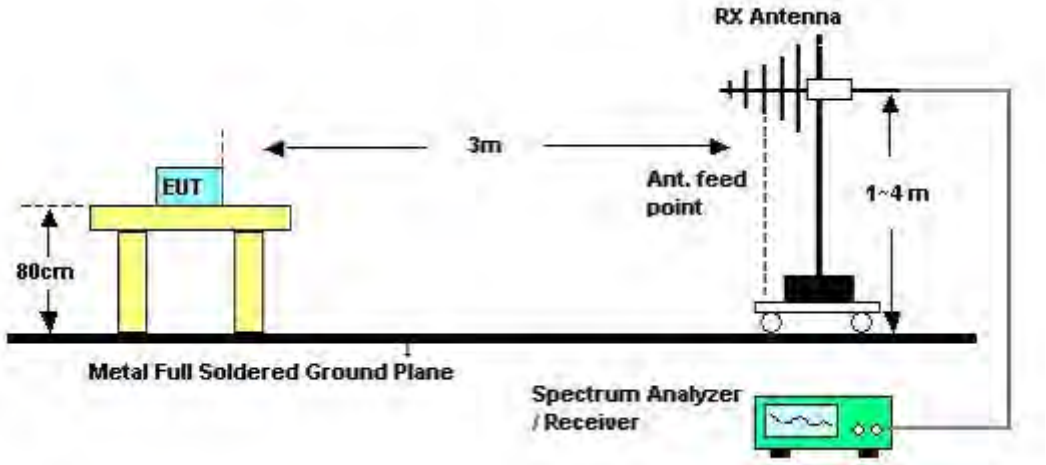
1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 1m & 3m far away from the turntable.
2. Power on the EUT and all the supporting 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

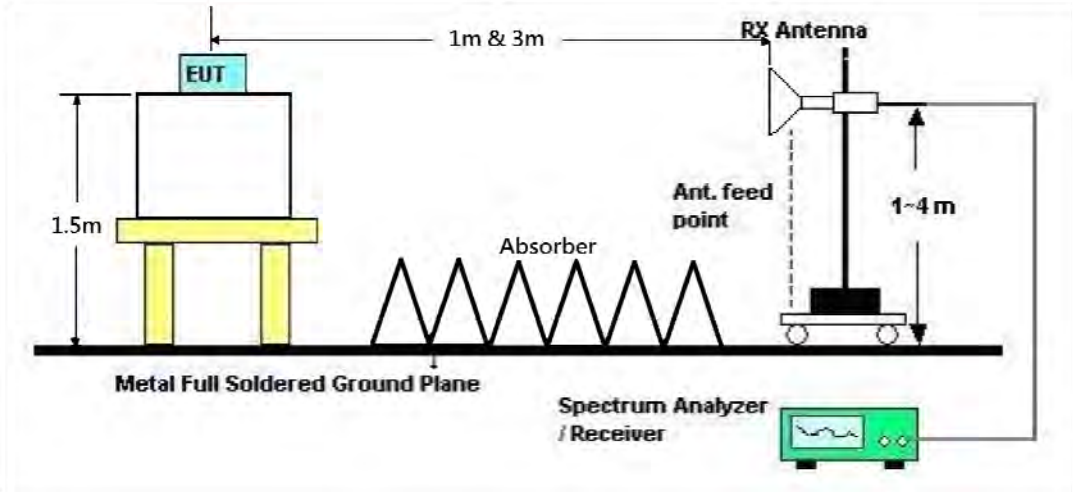
For Radiated Emissions: 9kHz ~30MHz



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)

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	CTX
Test Date	Jan. 02, 2016	Test Mode	Mode 2

Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Limit Line (dBuV)	Remark
-	-	-	-	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.

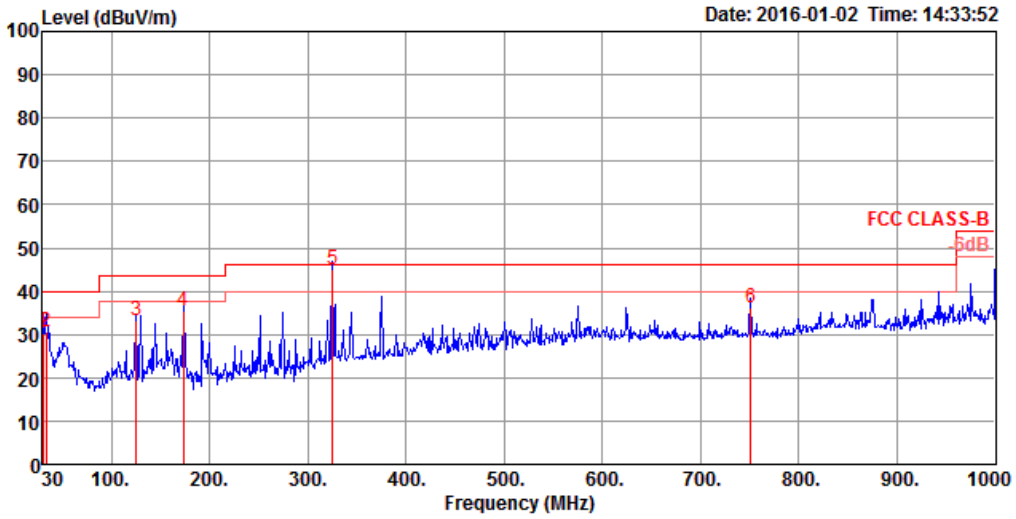
Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

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

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

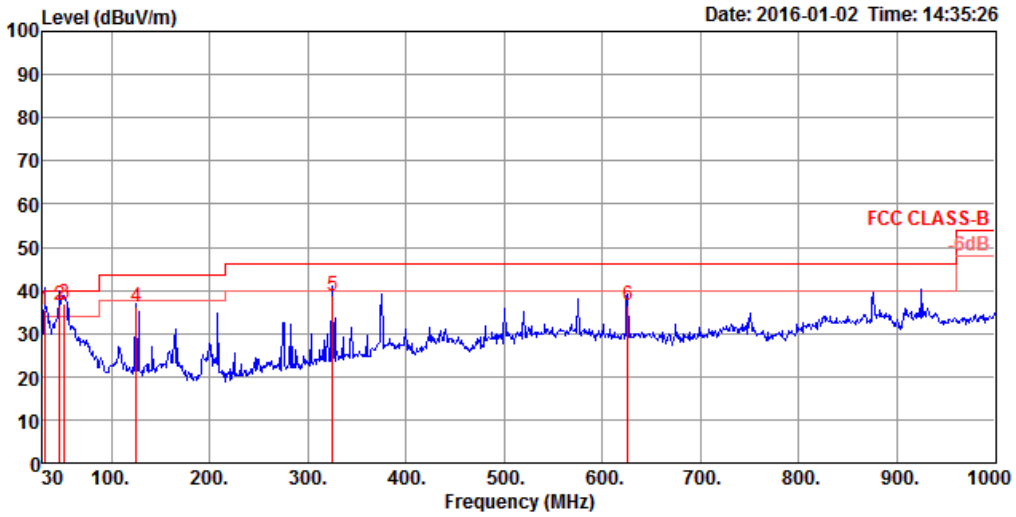
Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	CTX
Test Date	Jan. 02, 2016	Test Mode	Mode 2

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	30.00	30.14	40.00	-9.86	36.45	0.49	25.60	32.40	100	162	QP	HORIZONTAL
2	33.88	30.66	40.00	-9.34	38.78	0.51	23.77	32.40	150	121	QP	HORIZONTAL
3	125.06	33.37	43.50	-10.13	45.83	0.97	18.94	32.37	300	103	QP	HORIZONTAL
4	173.56	35.32	43.50	-8.18	50.11	1.14	16.41	32.34	150	125	QP	HORIZONTAL
5	324.88	45.16	46.00	-0.84	55.20	1.55	20.70	32.29	100	132	QP	HORIZONTAL
6	750.71	35.99	46.00	-10.01	39.52	2.37	26.40	32.30	100	51	QP	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	31.94	35.39	40.00	-4.61	42.63	0.50	24.66	32.40	100	123	QP	VERTICAL
2	47.46	36.68	40.00	-3.32	52.48	0.61	16.00	32.41	100	171	QP	VERTICAL
3	52.31	36.95	40.00	-3.05	54.13	0.63	14.60	32.41	100	145	QP	VERTICAL
4	125.06	36.07	43.50	-7.43	48.53	0.97	18.94	32.37	100	135	QP	VERTICAL
5	324.88	38.71	46.00	-7.29	48.75	1.55	20.70	32.29	150	124	QP	VERTICAL
6	625.58	36.69	46.00	-9.31	41.16	2.16	25.77	32.40	100	126	QP	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)

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 36 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15539.79	57.27	74.00	-16.73	42.25	12.49	38.39	35.86	144	45	HORIZONTAL	Peak
2	15540.30	45.41	54.00	-8.59	30.39	12.49	38.39	35.86	144	45	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15540.00	57.57	74.00	-16.43	42.55	12.49	38.39	35.86	159	270	VERTICAL	Peak
2	15540.37	44.48	54.00	-9.52	29.46	12.49	38.39	35.86	159	270	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 40 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15600.96	45.72	54.00	-8.28	30.66	12.55	38.37	35.86	128	149	HORIZONTAL	Average
2	15607.88	59.54	74.00	-14.46	44.48	12.55	38.37	35.86	128	149	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15596.44	43.77	54.00	-10.23	28.73	12.52	38.38	35.86	157	242	VERTICAL	Average
2	15605.32	56.84	74.00	-17.16	41.78	12.55	38.37	35.86	157	242	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 48 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15711.64	56.77	74.00	-17.23	41.68	12.60	38.35	35.86	142	341	HORIZONTAL	Peak
2	15714.72	44.24	54.00	-9.76	29.15	12.60	38.35	35.86	142	341	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15710.92	56.36	74.00	-17.64	41.27	12.60	38.35	35.86	168	156	VERTICAL	Peak
2	15714.72	43.49	54.00	-10.51	28.40	12.60	38.35	35.86	168	156	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 52 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15777.84	43.43	54.00	-10.57	28.31	12.63	38.35	35.86	170	111	HORIZONTAL	Average
2	15779.16	55.87	74.00	-18.13	40.75	12.63	38.35	35.86	170	111	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15775.24	55.97	74.00	-18.03	40.85	12.63	38.35	35.86	153	218	VERTICAL	Peak
2	15779.08	43.23	54.00	-10.77	28.11	12.63	38.35	35.86	153	218	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 60 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10594.16	40.87	54.00	-13.13	27.37	10.46	38.98	35.94	160	250	HORIZONTAL	Average
2	10608.48	53.15	74.00	-20.85	39.65	10.46	38.98	35.94	160	250	HORIZONTAL	Peak
3	15894.32	44.58	54.00	-9.42	29.41	12.71	38.32	35.86	142	64	HORIZONTAL	Average
4	15894.40	56.28	74.00	-17.72	41.11	12.71	38.32	35.86	142	64	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10591.72	53.92	74.00	-20.08	40.42	10.46	38.98	35.94	166	165	VERTICAL	Peak
2	10596.32	40.70	54.00	-13.30	27.20	10.46	38.98	35.94	166	165	VERTICAL	Average
3	15897.32	43.13	54.00	-10.87	27.96	12.71	38.32	35.86	166	226	VERTICAL	Average
4	15907.60	55.77	74.00	-18.23	40.60	12.71	38.32	35.86	166	226	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10640.24	54.83	74.00	-19.17	41.30	10.48	39.00	35.95	142	160	HORIZONTAL	Peak
2	10642.08	41.75	54.00	-12.25	28.22	10.48	39.00	35.95	142	160	HORIZONTAL	Average
3	15954.56	56.03	74.00	-17.97	40.84	12.74	38.31	35.86	158	194	HORIZONTAL	Peak
4	15962.24	43.30	54.00	-10.70	28.11	12.74	38.31	35.86	158	194	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10641.52	54.04	74.00	-19.96	40.51	10.48	39.00	35.95	126	276	VERTICAL	Peak
2	10646.28	41.96	54.00	-12.04	28.43	10.48	39.00	35.95	126	276	VERTICAL	Average
3	15954.08	55.56	74.00	-18.44	40.37	12.74	38.31	35.86	126	133	VERTICAL	Peak
4	15965.76	43.04	54.00	-10.96	27.83	12.77	38.30	35.86	126	133	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 100 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11001.96	56.07	74.00	-17.93	42.05	10.69	39.30	35.97	139	360	HORIZONTAL	Peak
2	11002.04	43.16	54.00	-10.84	29.14	10.69	39.30	35.97	139	360	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10999.64	54.69	74.00	-19.31	40.67	10.69	39.30	35.97	154	85	VERTICAL	Peak
2	10999.80	42.68	54.00	-11.32	28.66	10.69	39.30	35.97	154	85	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 116 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11161.28	45.84	54.00	-8.16	31.76	10.77	39.27	35.96	139	30	HORIZONTAL	Average
2	11161.54	59.05	74.00	-14.95	44.97	10.77	39.27	35.96	139	30	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11159.86	42.20	54.00	-11.80	28.12	10.77	39.27	35.96	127	98	VERTICAL	Average
2	11160.52	53.81	74.00	-20.19	39.73	10.77	39.27	35.96	127	98	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11400.41	43.58	54.00	-10.42	29.40	10.89	39.22	35.93	160	37	HORIZONTAL	Average
2	11400.51	56.97	74.00	-17.03	42.79	10.89	39.22	35.93	160	37	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11400.39	40.80	54.00	-13.20	26.62	10.89	39.22	35.93	170	258	VERTICAL	Average
2	11400.59	54.16	74.00	-19.84	39.98	10.89	39.22	35.93	170	258	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11430.00	42.93	54.00	-11.07	28.74	10.91	39.21	35.93	135	332	HORIZONTAL	Average
2	11430.00	52.48	74.00	-21.52	38.29	10.91	39.21	35.93	135	332	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11442.12	43.21	54.00	-10.79	29.02	10.91	39.21	35.93	128	220	VERTICAL	Average
2	11444.28	55.56	74.00	-18.44	41.37	10.91	39.21	35.93	128	220	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 149 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11488.68	55.14	74.00	-18.86	40.93	10.94	39.20	35.93	166	216	HORIZONTAL	Peak
2	11499.12	41.33	54.00	-12.67	27.12	10.94	39.20	35.93	166	216	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11496.40	55.11	74.00	-18.89	40.90	10.94	39.20	35.93	171	153	VERTICAL	Peak
2	11497.08	41.41	54.00	-12.59	27.20	10.94	39.20	35.93	171	153	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 157 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11571.88	55.75	74.00	-18.25	41.54	10.98	39.15	35.92	149	37	HORIZONTAL	Peak
2	11572.80	43.15	54.00	-10.85	28.94	10.98	39.15	35.92	149	37	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11567.24	54.47	74.00	-19.53	40.26	10.98	39.15	35.92	136	142	VERTICAL	Peak
2	11572.56	41.86	54.00	-12.14	27.65	10.98	39.15	35.92	136	142	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 165 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11648.32	55.31	74.00	-18.69	41.12	11.01	39.09	35.91	158	150	HORIZONTAL	Peak
2	11654.08	42.60	54.00	-11.40	28.41	11.03	39.07	35.91	158	150	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11640.36	42.17	54.00	-11.83	27.98	11.01	39.09	35.91	136	296	VERTICAL	Average
2	11651.16	55.53	74.00	-18.47	41.34	11.03	39.07	35.91	136	296	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15530.08	43.46	54.00	-10.54	28.44	12.49	38.39	35.86	161	283	HORIZONTAL	Average
2	15540.80	56.91	74.00	-17.09	41.89	12.49	38.39	35.86	161	283	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15538.56	43.65	54.00	-10.35	28.63	12.49	38.39	35.86	132	195	VERTICAL	Average
2	15545.24	56.62	74.00	-17.38	41.60	12.49	38.39	35.86	132	195	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 40 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15593.08	56.58	74.00	-17.42	41.54	12.52	38.38	35.86	166	340	HORIZONTAL	Peak
2	15601.20	43.48	54.00	-10.52	28.42	12.55	38.37	35.86	166	340	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15598.28	55.91	74.00	-18.09	40.87	12.52	38.38	35.86	149	194	VERTICAL	Peak
2	15608.68	43.58	54.00	-10.42	28.52	12.55	38.37	35.86	149	194	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 48 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15715.12	44.55	54.00	-9.45	29.46	12.60	38.35	35.86	164	357	HORIZONTAL	Average
2	15715.76	56.30	74.00	-17.70	41.21	12.60	38.35	35.86	164	357	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15712.96	55.97	74.00	-18.03	40.88	12.60	38.35	35.86	128	288	VERTICAL	Peak
2	15727.92	43.16	54.00	-10.84	28.07	12.60	38.35	35.86	128	288	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15774.00	43.44	54.00	-10.56	28.32	12.63	38.35	35.86	162	318	HORIZONTAL	Average
2	15788.32	55.85	74.00	-18.15	40.71	12.66	38.34	35.86	162	318	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15770.32	43.42	54.00	-10.58	28.30	12.63	38.35	35.86	153	154	VERTICAL	Average
2	15789.08	56.41	74.00	-17.59	41.27	12.66	38.34	35.86	153	154	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 60 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10598.52	54.41	74.00	-19.59	40.91	10.46	38.98	35.94	178	52	HORIZONTAL	Peak
2	10599.00	42.27	54.00	-11.73	28.77	10.46	38.98	35.94	178	52	HORIZONTAL	Average
3	15891.72	56.55	74.00	-17.45	41.38	12.71	38.32	35.86	170	263	HORIZONTAL	Peak
4	15904.64	42.64	54.00	-11.36	27.47	12.71	38.32	35.86	170	263	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10593.28	42.08	54.00	-11.92	28.58	10.46	38.98	35.94	190	146	VERTICAL	Average
2	10604.00	54.58	74.00	-19.42	41.08	10.46	38.98	35.94	190	146	VERTICAL	Peak
3	15897.00	55.37	74.00	-18.63	40.20	12.71	38.32	35.86	180	183	VERTICAL	Peak
4	15898.52	42.84	54.00	-11.16	27.67	12.71	38.32	35.86	180	183	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10637.56	41.43	54.00	-12.57	27.89	10.48	39.00	35.94	174	266	HORIZONTAL	Average
2	10638.92	53.80	74.00	-20.20	40.27	10.48	39.00	35.95	174	266	HORIZONTAL	Peak
3	15955.64	55.70	74.00	-18.30	40.51	12.74	38.31	35.86	154	187	HORIZONTAL	Peak
4	15957.64	42.87	54.00	-11.13	27.68	12.74	38.31	35.86	154	187	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10637.36	53.49	74.00	-20.51	39.95	10.48	39.00	35.94	190	332	VERTICAL	Peak
2	10645.04	41.33	54.00	-12.67	27.80	10.48	39.00	35.95	190	332	VERTICAL	Average
3	15965.48	43.12	54.00	-10.88	27.91	12.77	38.30	35.86	173	261	VERTICAL	Average
4	15969.56	56.50	74.00	-17.50	41.29	12.77	38.30	35.86	173	261	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10999.76	45.06	54.00	-8.94	31.04	10.69	39.30	35.97	128	357	HORIZONTAL	Average
2	11001.72	57.97	74.00	-16.03	43.95	10.69	39.30	35.97	128	357	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10999.88	44.20	54.00	-9.80	30.18	10.69	39.30	35.97	128	94	VERTICAL	Average
2	10999.92	57.02	74.00	-16.98	43.00	10.69	39.30	35.97	128	94	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 116 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11153.92	56.26	74.00	-17.74	42.20	10.75	39.27	35.96	128	76	HORIZONTAL	Peak
2	11156.04	43.87	54.00	-10.13	29.81	10.75	39.27	35.96	128	76	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11159.80	43.52	54.00	-10.48	29.44	10.77	39.27	35.96	128	95	VERTICAL	Average
2	11160.96	55.06	74.00	-18.94	40.98	10.77	39.27	35.96	128	95	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11403.24	56.38	74.00	-17.62	42.20	10.89	39.22	35.93	138	139	HORIZONTAL	Peak
2	11403.48	43.31	54.00	-10.69	29.13	10.89	39.22	35.93	138	139	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11399.92	42.91	54.00	-11.09	28.73	10.89	39.22	35.93	138	98	VERTICAL	Average
2	11401.24	55.07	74.00	-18.93	40.89	10.89	39.22	35.93	138	98	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11443.44	57.03	74.00	-16.97	42.84	10.91	39.21	35.93	148	135	HORIZONTAL	Peak
2	11443.88	44.02	54.00	-9.98	29.83	10.91	39.21	35.93	148	135	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11439.68	42.17	54.00	-11.83	27.98	10.91	39.21	35.93	120	90	VERTICAL	Average
2	11441.04	55.11	74.00	-18.89	40.92	10.91	39.21	35.93	120	90	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11491.00	55.18	74.00	-18.82	40.97	10.94	39.20	35.93	158	85	HORIZONTAL	Peak
2	11493.68	42.02	54.00	-11.98	27.81	10.94	39.20	35.93	158	85	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11496.32	41.33	54.00	-12.67	27.12	10.94	39.20	35.93	162	248	VERTICAL	Average
2	11497.00	54.15	74.00	-19.85	39.94	10.94	39.20	35.93	162	248	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 157 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11571.72	54.97	74.00	-19.03	40.76	10.98	39.15	35.92	156	135	HORIZONTAL	Peak
2	11572.72	42.12	54.00	-11.88	27.91	10.98	39.15	35.92	156	135	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11574.84	41.63	54.00	-12.37	27.42	10.98	39.15	35.92	151	77	VERTICAL	Average
2	11575.60	54.47	74.00	-19.53	40.26	10.98	39.15	35.92	151	77	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 165 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11652.56	42.17	54.00	-11.83	27.98	11.03	39.07	35.91	165	162	HORIZONTAL	Average
2	11654.00	54.68	74.00	-19.32	40.49	11.03	39.07	35.91	165	162	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11640.00	42.05	54.00	-11.95	27.86	11.01	39.09	35.91	151	53	VERTICAL	Average
2	11653.08	55.30	74.00	-18.70	41.11	11.03	39.07	35.91	151	53	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15570.34	44.19	54.00	-9.81	29.15	12.52	38.38	35.86	147	108	HORIZONTAL	Average
2	15570.72	57.13	74.00	-16.87	42.09	12.52	38.38	35.86	147	108	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15570.38	43.73	54.00	-10.27	28.69	12.52	38.38	35.86	178	192	VERTICAL	Average
2	15570.47	56.64	74.00	-17.36	41.60	12.52	38.38	35.86	178	192	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 46 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15689.20	44.28	54.00	-9.72	29.21	12.57	38.36	35.86	154	263	HORIZONTAL	Average
2	15693.36	57.44	74.00	-16.56	42.35	12.60	38.35	35.86	154	263	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15678.80	56.56	74.00	-17.44	41.49	12.57	38.36	35.86	163	142	VERTICAL	Peak
2	15681.92	43.75	54.00	-10.25	28.68	12.57	38.36	35.86	163	142	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15794.48	55.53	74.00	-18.47	40.39	12.66	38.34	35.86	162	294	HORIZONTAL	Peak
2	15803.92	43.32	54.00	-10.68	28.18	12.66	38.34	35.86	162	294	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15813.92	55.99	74.00	-18.01	40.85	12.66	38.34	35.86	148	0	VERTICAL	Peak
2	15829.52	43.19	54.00	-10.81	28.03	12.69	38.33	35.86	148	205	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10612.64	41.46	54.00	-12.54	27.96	10.46	38.98	35.94	139	186	HORIZONTAL	Average
2	10622.72	54.29	74.00	-19.71	40.75	10.48	39.00	35.94	139	186	HORIZONTAL	Peak
3	15920.72	43.44	54.00	-10.56	28.25	12.74	38.31	35.86	161	250	HORIZONTAL	Average
4	15948.32	55.88	74.00	-18.12	40.69	12.74	38.31	35.86	161	250	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10601.52	40.40	54.00	-13.60	26.90	10.46	38.98	35.94	154	34	VERTICAL	Average
2	10623.76	53.51	74.00	-20.49	39.97	10.48	39.00	35.94	154	34	VERTICAL	Peak
3	15910.08	56.05	74.00	-17.95	40.88	12.71	38.32	35.86	138	150	VERTICAL	Peak
4	15943.36	43.12	54.00	-10.88	27.93	12.74	38.31	35.86	138	150	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11019.92	45.05	54.00	-8.95	31.03	10.69	39.30	35.97	151	45	HORIZONTAL	Average
2	11027.28	56.99	74.00	-17.01	42.97	10.69	39.30	35.97	151	45	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11021.08	53.74	74.00	-20.26	39.72	10.69	39.30	35.97	102	279	VERTICAL	Peak
2	11027.28	40.90	54.00	-13.10	26.88	10.69	39.30	35.97	102	279	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 110 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11099.80	44.36	54.00	-9.64	30.30	10.74	39.28	35.96	154	43	HORIZONTAL	Average
2	11099.84	56.87	74.00	-17.13	42.81	10.74	39.28	35.96	154	43	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11097.72	54.50	74.00	-19.50	40.44	10.74	39.28	35.96	165	93	VERTICAL	Peak
2	11099.80	42.32	54.00	-11.68	28.26	10.74	39.28	35.96	165	93	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11339.46	53.67	74.00	-20.33	39.52	10.86	39.23	35.94	126	101	HORIZONTAL	Peak
2	11339.94	41.71	54.00	-12.29	27.56	10.86	39.23	35.94	126	101	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11339.68	41.44	54.00	-12.56	27.29	10.86	39.23	35.94	126	58	VERTICAL	Average
2	11340.46	54.18	74.00	-19.82	40.03	10.86	39.23	35.94	126	58	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11400.00	41.54	54.00	-12.46	27.36	10.89	39.22	35.93	122	360	HORIZONTAL	Average
2	11434.64	55.37	74.00	-18.63	41.18	10.91	39.21	35.93	122	360	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11421.02	41.41	54.00	-12.59	27.22	10.91	39.21	35.93	132	142	VERTICAL	Average
2	11421.94	55.12	74.00	-18.88	40.93	10.91	39.21	35.93	132	142	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11502.56	55.40	74.00	-18.60	41.19	10.94	39.20	35.93	174	174	HORIZONTAL	Peak
2	11511.72	41.68	54.00	-12.32	27.46	10.94	39.20	35.92	174	174	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11504.04	41.67	54.00	-12.33	27.46	10.94	39.20	35.93	155	233	VERTICAL	Average
2	11506.80	55.24	74.00	-18.76	41.03	10.94	39.20	35.93	155	233	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 159 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11585.18	54.06	74.00	-19.94	39.86	10.99	39.12	35.91	182	316	HORIZONTAL	Peak
2	11589.92	41.75	54.00	-12.25	27.55	10.99	39.12	35.91	182	316	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11589.74	54.43	74.00	-19.57	40.23	10.99	39.12	35.91	158	199	VERTICAL	Peak
2	11589.80	41.56	54.00	-12.44	27.36	10.99	39.12	35.91	158	199	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15629.02	43.80	54.00	-10.20	28.74	12.55	38.37	35.86	187	47	HORIZONTAL	Average
2	15629.31	57.38	74.00	-16.62	42.32	12.55	38.37	35.86	187	47	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15631.20	43.95	54.00	-10.05	28.89	12.55	38.37	35.86	163	253	VERTICAL	Average
2	15632.12	56.92	74.00	-17.08	41.86	12.55	38.37	35.86	163	253	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15867.96	43.31	54.00	-10.69	28.15	12.69	38.33	35.86	146	100	HORIZONTAL	Average
2	15873.12	56.32	74.00	-17.68	41.16	12.69	38.33	35.86	146	100	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15868.08	55.96	74.00	-18.04	40.80	12.69	38.33	35.86	154	308	VERTICAL	Peak
2	15879.16	43.03	54.00	-10.97	27.86	12.71	38.32	35.86	154	308	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11059.92	41.76	54.00	-12.24	27.74	10.70	39.29	35.97	172	359	HORIZONTAL	Average
2	11069.52	55.81	74.00	-18.19	41.76	10.72	39.29	35.96	172	359	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11059.92	42.79	54.00	-11.21	28.77	10.70	39.29	35.97	156	97	VERTICAL	Average
2	11060.68	56.72	74.00	-17.28	42.68	10.72	39.29	35.97	156	97	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11218.48	40.44	54.00	-13.56	26.34	10.79	39.26	35.95	142	112	HORIZONTAL	Average
2	11222.20	52.66	74.00	-21.34	38.55	10.81	39.25	35.95	142	112	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11221.12	40.50	54.00	-13.50	26.39	10.81	39.25	35.95	167	221	VERTICAL	Average
2	11223.20	52.70	74.00	-21.30	38.59	10.81	39.25	35.95	167	221	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11375.22	54.36	74.00	-19.64	40.20	10.87	39.23	35.94	175	43	HORIZONTAL	Peak
2	11380.60	42.01	54.00	-11.99	27.85	10.87	39.23	35.94	175	43	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11379.92	41.79	54.00	-12.21	27.63	10.87	39.23	35.94	152	102	VERTICAL	Average
2	11383.40	53.65	74.00	-20.35	39.49	10.87	39.23	35.94	152	102	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 29, 2015	Test Function	Non-beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11550.02	53.53	74.00	-20.47	39.32	10.96	39.17	35.92	175	185	HORIZONTAL	Peak
2	11554.60	41.25	54.00	-12.75	27.04	10.98	39.15	35.92	175	185	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11547.90	53.39	74.00	-20.61	39.18	10.96	39.17	35.92	167	68	VERTICAL	Peak
2	11549.78	41.30	54.00	-12.70	27.09	10.96	39.17	35.92	167	68	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 36 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15531.92	44.65	54.00	-9.35	29.63	12.49	38.39	35.86	166	85	HORIZONTAL	Average
2	15538.20	57.31	74.00	-16.69	42.29	12.49	38.39	35.86	166	85	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15536.88	44.44	54.00	-9.56	29.42	12.49	38.39	35.86	181	156	VERTICAL	Average
2	15549.88	57.29	74.00	-16.71	42.27	12.49	38.39	35.86	181	156	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 40 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15596.96	44.32	54.00	-9.68	29.28	12.52	38.38	35.86	153	134	HORIZONTAL	Average
2	15603.88	58.08	74.00	-15.92	43.02	12.55	38.37	35.86	153	134	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15590.92	57.02	74.00	-16.98	41.98	12.52	38.38	35.86	165	194	VERTICAL	Peak
2	15598.16	44.49	54.00	-9.51	29.45	12.52	38.38	35.86	165	194	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 48 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15719.81	58.67	74.00	-15.33	43.58	12.60	38.35	35.86	150	299	HORIZONTAL	Peak
2	15720.09	45.36	54.00	-8.64	30.27	12.60	38.35	35.86	150	299	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15719.63	45.20	54.00	-8.80	30.11	12.60	38.35	35.86	154	187	VERTICAL	Average
2	15720.32	57.98	74.00	-16.02	42.89	12.60	38.35	35.86	154	187	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 52 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15770.28	44.46	54.00	-9.54	29.34	12.63	38.35	35.86	150	224	HORIZONTAL	Average
2	15770.96	57.29	74.00	-16.71	42.17	12.63	38.35	35.86	150	224	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15778.72	44.65	54.00	-9.35	29.53	12.63	38.35	35.86	167	154	VERTICAL	Average
2	15781.56	57.09	74.00	-16.91	41.97	12.63	38.35	35.86	167	154	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 60 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10608.96	41.75	54.00	-12.25	28.25	10.46	38.98	35.94	167	284	HORIZONTAL	Average
2	10608.96	54.01	74.00	-19.99	40.51	10.46	38.98	35.94	167	284	HORIZONTAL	Peak
3	15893.00	45.00	54.00	-9.00	29.83	12.71	38.32	35.86	116	200	HORIZONTAL	Average
4	15904.40	58.67	74.00	-15.33	43.50	12.71	38.32	35.86	116	200	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10599.80	55.09	74.00	-18.91	41.59	10.46	38.98	35.94	179	201	VERTICAL	Peak
2	10606.40	42.69	54.00	-11.31	29.19	10.46	38.98	35.94	179	201	VERTICAL	Average
3	15894.60	45.08	54.00	-8.92	29.91	12.71	38.32	35.86	149	250	VERTICAL	Average
4	15894.68	58.07	74.00	-15.93	42.90	12.71	38.32	35.86	149	250	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10631.88	55.52	74.00	-18.48	41.98	10.48	39.00	35.94	159	143	HORIZONTAL	Peak
2	10632.84	43.10	54.00	-10.90	29.56	10.48	39.00	35.94	159	143	HORIZONTAL	Average
3	15955.48	44.09	54.00	-9.91	28.90	12.74	38.31	35.86	173	201	HORIZONTAL	Average
4	15956.32	56.52	74.00	-17.48	41.33	12.74	38.31	35.86	173	201	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10639.96	59.42	74.00	-14.58	45.89	10.48	39.00	35.95	167	137	VERTICAL	Peak
2	10640.96	44.79	54.00	-9.21	31.26	10.48	39.00	35.95	167	137	VERTICAL	Average
3	15950.04	44.22	54.00	-9.78	29.03	12.74	38.31	35.86	138	267	VERTICAL	Average
4	15965.80	57.35	74.00	-16.65	42.14	12.77	38.30	35.86	138	267	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 100 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11000.72	57.95	74.00	-16.05	43.93	10.69	39.30	35.97	128	147	HORIZONTAL	Peak
2	11001.48	45.09	54.00	-8.91	31.07	10.69	39.30	35.97	128	147	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11000.24	56.25	74.00	-17.75	42.23	10.69	39.30	35.97	160	187	VERTICAL	Peak
2	11005.88	42.75	54.00	-11.25	28.73	10.69	39.30	35.97	160	187	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 116 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11723.60	42.89	54.00	-11.11	28.72	11.06	39.01	35.90	128	212	HORIZONTAL	Average
2	11727.48	56.29	74.00	-17.71	42.12	11.06	39.01	35.90	128	212	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11712.08	55.47	74.00	-18.53	41.28	11.05	39.04	35.90	146	145	VERTICAL	Peak
2	11725.48	42.89	54.00	-11.11	28.72	11.06	39.01	35.90	146	145	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11399.88	43.96	54.00	-10.04	29.78	10.89	39.22	35.93	142	109	HORIZONTAL	Average
2	11400.80	56.05	74.00	-17.95	41.87	10.89	39.22	35.93	142	109	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11396.16	43.10	54.00	-10.90	28.93	10.89	39.22	35.94	126	183	VERTICAL	Average
2	11403.12	55.31	74.00	-18.69	41.13	10.89	39.22	35.93	126	183	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11439.92	44.28	54.00	-9.72	30.09	10.91	39.21	35.93	161	160	HORIZONTAL	Average
2	11440.96	56.15	74.00	-17.85	41.96	10.91	39.21	35.93	161	160	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11439.64	43.50	54.00	-10.50	29.31	10.91	39.21	35.93	143	270	VERTICAL	Average
2	11446.20	55.45	74.00	-18.55	41.26	10.91	39.21	35.93	143	270	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 149 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11482.36	55.50	74.00	-18.50	41.29	10.93	39.21	35.93	182	266	HORIZONTAL	Peak
2	11483.56	43.07	54.00	-10.93	28.86	10.93	39.21	35.93	182	266	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11482.48	55.29	74.00	-18.71	41.08	10.93	39.21	35.93	174	141	VERTICAL	Peak
2	11489.84	43.60	54.00	-10.40	29.39	10.94	39.20	35.93	174	141	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 157 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11569.80	43.94	54.00	-10.06	29.73	10.98	39.15	35.92	135	141	HORIZONTAL	Average
2	11569.96	57.16	74.00	-16.84	42.95	10.98	39.15	35.92	135	141	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11569.84	43.51	54.00	-10.49	29.30	10.98	39.15	35.92	139	219	VERTICAL	Average
2	11573.96	55.28	74.00	-18.72	41.07	10.98	39.15	35.92	139	219	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 165 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11640.16	56.86	74.00	-17.14	42.67	11.01	39.09	35.91	131	149	HORIZONTAL	Peak
2	11654.48	44.59	54.00	-9.41	30.40	11.03	39.07	35.91	131	149	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11640.64	55.43	74.00	-18.57	41.24	11.01	39.09	35.91	126	215	VERTICAL	Peak
2	11641.48	43.19	54.00	-10.81	29.00	11.01	39.09	35.91	126	215	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 38 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15562.24	57.48	74.00	-16.52	42.44	12.52	38.38	35.86	138	195	HORIZONTAL	Peak
2	15576.16	44.96	54.00	-9.04	29.92	12.52	38.38	35.86	138	195	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15569.36	45.10	54.00	-8.90	30.06	12.52	38.38	35.86	154	70	VERTICAL	Average
2	15576.80	58.22	74.00	-15.78	43.18	12.52	38.38	35.86	154	70	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 46 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15670.32	45.15	54.00	-8.85	30.08	12.57	38.36	35.86	166	95	HORIZONTAL	Average
2	15695.20	57.39	74.00	-16.61	42.30	12.60	38.35	35.86	166	95	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15676.80	44.77	54.00	-9.23	29.70	12.57	38.36	35.86	151	183	VERTICAL	Average
2	15708.80	57.22	74.00	-16.78	42.13	12.60	38.35	35.86	151	183	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 54 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15821.20	57.56	74.00	-16.44	42.42	12.66	38.34	35.86	162	84	HORIZONTAL	Peak
2	15829.04	45.29	54.00	-8.71	30.13	12.69	38.33	35.86	162	84	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15817.60	44.16	54.00	-9.84	29.02	12.66	38.34	35.86	151	229	VERTICAL	Average
2	15821.92	57.35	74.00	-16.65	42.21	12.66	38.34	35.86	151	229	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10619.76	57.12	74.00	-16.88	43.62	10.46	38.98	35.94	174	123	HORIZONTAL	Peak
2	10634.32	43.55	54.00	-10.45	30.01	10.48	39.00	35.94	174	123	HORIZONTAL	Average
3	15926.64	56.36	74.00	-17.64	41.17	12.74	38.31	35.86	150	262	HORIZONTAL	Peak
4	15949.12	44.67	54.00	-9.33	29.48	12.74	38.31	35.86	150	262	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10610.08	54.46	74.00	-19.54	40.96	10.46	38.98	35.94	146	222	VERTICAL	Peak
2	10619.84	42.25	54.00	-11.75	28.75	10.46	38.98	35.94	146	222	VERTICAL	Average
3	15917.36	56.74	74.00	-17.26	41.57	12.71	38.32	35.86	164	158	VERTICAL	Peak
4	15933.04	44.01	54.00	-9.99	28.82	12.74	38.31	35.86	164	158	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 102 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11023.20	55.73	74.00	-18.27	41.71	10.69	39.30	35.97	159	300	HORIZONTAL	Peak
2	11025.36	44.12	54.00	-9.88	30.10	10.69	39.30	35.97	159	300	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11018.24	43.13	54.00	-10.87	29.11	10.69	39.30	35.97	145	130	VERTICAL	Average
2	11019.52	55.37	74.00	-18.63	41.35	10.69	39.30	35.97	145	130	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 110 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11080.00	46.43	54.00	-7.57	32.38	10.72	39.29	35.96	147	36	HORIZONTAL	Average
2	11100.96	58.26	74.00	-15.74	44.20	10.74	39.28	35.96	147	36	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11100.08	43.54	54.00	-10.46	29.48	10.74	39.28	35.96	154	192	VERTICAL	Average
2	11117.36	56.03	74.00	-17.97	41.97	10.74	39.28	35.96	154	192	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11327.12	55.38	74.00	-18.62	41.23	10.86	39.23	35.94	150	250	HORIZONTAL	Peak
2	11333.28	42.68	54.00	-11.32	28.53	10.86	39.23	35.94	150	250	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11326.80	55.07	74.00	-18.93	40.92	10.86	39.23	35.94	172	124	VERTICAL	Peak
2	11339.76	42.98	54.00	-11.02	28.83	10.86	39.23	35.94	172	124	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11408.64	56.82	74.00	-17.18	42.64	10.89	39.22	35.93	134	86	HORIZONTAL	Peak
2	11419.84	44.50	54.00	-9.50	30.31	10.91	39.21	35.93	134	86	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11401.12	56.28	74.00	-17.72	42.10	10.89	39.22	35.93	143	196	VERTICAL	Peak
2	11420.00	43.97	54.00	-10.03	29.78	10.91	39.21	35.93	143	196	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 151 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11492.88	55.88	74.00	-18.12	41.67	10.94	39.20	35.93	148	247	HORIZONTAL	Peak
2	11529.12	42.82	54.00	-11.18	28.61	10.96	39.17	35.92	148	247	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11509.76	43.24	54.00	-10.76	29.02	10.94	39.20	35.92	153	280	VERTICAL	Average
2	11528.48	56.38	74.00	-17.62	42.17	10.96	39.17	35.92	153	280	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11acMCS0/Nss2 VHT40 CH 159 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11589.97	56.34	74.00	-17.66	42.14	10.99	39.12	35.91	214	125	HORIZONTAL	Peak
2	11592.37	42.89	54.00	-11.11	28.69	10.99	39.12	35.91	214	125	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11590.44	55.08	74.00	-18.92	40.88	10.99	39.12	35.91	189	175	VERTICAL	Peak
2	11591.41	42.76	54.00	-11.24	28.56	10.99	39.12	35.91	189	175	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 42 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15668.72	45.13	54.00	-8.87	30.06	12.57	38.36	35.86	151	182	HORIZONTAL	Average
2	15668.72	45.31	74.00	-28.69	30.24	12.57	38.36	35.86	151	182	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15653.52	57.77	74.00	-16.23	42.70	12.57	38.36	35.86	166	249	VERTICAL	Peak
2	15668.40	45.30	54.00	-8.70	30.23	12.57	38.36	35.86	166	249	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 58 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15870.10	44.43	54.00	-9.57	29.27	12.69	38.33	35.86	139	207	HORIZONTAL	Average
2	15872.05	57.33	74.00	-16.67	42.17	12.69	38.33	35.86	139	207	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15870.13	44.29	54.00	-9.71	29.13	12.69	38.33	35.86	139	166	VERTICAL	Average
2	15871.97	57.11	74.00	-16.89	41.95	12.69	38.33	35.86	139	166	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 106 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11020.00	43.02	54.00	-10.98	29.00	10.69	39.30	35.97	140	251	HORIZONTAL	Average
2	11070.72	56.04	74.00	-17.96	41.99	10.72	39.29	35.96	140	251	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11020.00	43.12	54.00	-10.88	29.10	10.69	39.30	35.97	148	172	VERTICAL	Average
2	11087.36	55.15	74.00	-18.85	41.10	10.72	39.29	35.96	148	172	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11201.76	45.90	54.00	-8.10	31.80	10.79	39.26	35.95	148	132	HORIZONTAL	Average
2	11220.64	54.63	74.00	-19.37	40.53	10.79	39.26	35.95	148	132	HORIZONTAL	Peak

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11186.72	54.81	74.00	-19.19	40.72	10.77	39.27	35.95	134	230	VERTICAL	Peak
2	11204.32	42.47	54.00	-11.53	28.37	10.79	39.26	35.95	134	230	VERTICAL	Average

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11418.72	56.31	74.00	-17.69	42.12	10.91	39.21	35.93	160	262	HORIZONTAL	Peak
2	11419.84	42.79	54.00	-11.21	28.60	10.91	39.21	35.93	160	262	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11379.84	43.19	54.00	-10.81	29.03	10.87	39.23	35.94	134	153	VERTICAL	Average
2	11398.72	55.80	74.00	-18.20	41.62	10.89	39.22	35.93	134	153	VERTICAL	Peak

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 155 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 17, 2015	Test Function	Beamforming function

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11549.75	57.15	74.00	-16.85	42.94	10.96	39.17	35.92	169	29	HORIZONTAL	Peak
2	11549.82	45.03	54.00	-8.97	30.82	10.96	39.17	35.92	169	29	HORIZONTAL	Average

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11549.85	43.15	54.00	-10.85	28.94	10.96	39.17	35.92	156	36	VERTICAL	Average
2	11550.63	56.53	74.00	-17.47	42.32	10.98	39.15	35.92	156	36	VERTICAL	Peak

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 within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.

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 (micorvolts/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)	1MHz / 3MHz for Peak, 1MHz / 1/T for Average
RBW / VBW (Emission in non-restricted band)	1MHz / 3MHz for Peak

4.7.3. Test Procedures

1. 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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5145.60	68.05	74.00	-5.95	64.14	7.24	33.17	36.50	183	87	VERTICAL	Peak
2	5146.40	52.24	54.00	-1.76	48.33	7.24	33.17	36.50	183	87	VERTICAL	Average
3	5172.80	106.34			102.32	7.29	33.23	36.50	183	87	VERTICAL	Average
4	5172.80	116.49			112.47	7.29	33.23	36.50	183	87	VERTICAL	Peak

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.20	47.36	54.00	-6.64	43.45	7.24	33.17	36.50	178	89	VERTICAL	Average
2	5148.80	59.36	74.00	-14.64	55.45	7.24	33.17	36.50	178	89	VERTICAL	Peak
3	5192.80	105.89			101.81	7.32	33.25	36.49	178	89	VERTICAL	Average
4	5193.20	116.08			112.00	7.32	33.25	36.49	178	89	VERTICAL	Peak

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5099.60	57.44	74.00	-16.56	53.70	7.16	33.09	36.51	168	300	VERTICAL	Peak
2	5123.00	46.08	54.00	-7.92	42.27	7.19	33.12	36.50	168	300	VERTICAL	Average
3	5237.00	106.30			102.08	7.36	33.34	36.48	168	300	VERTICAL	Average
4	5237.00	116.05			111.83	7.36	33.34	36.48	168	300	VERTICAL	Peak
5	5352.20	58.00	74.00	-16.00	53.47	7.46	33.53	36.46	168	300	VERTICAL	Peak
6	5382.80	46.05	54.00	-7.95	41.43	7.49	33.58	36.45	168	300	VERTICAL	Average

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 52

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5122.60	58.16	74.00	-15.84	54.35	7.19	33.12	36.50	171	309	VERTICAL	Peak
2	5137.60	46.37	54.00	-7.63	42.50	7.22	33.15	36.50	171	309	VERTICAL	Average
3	5258.20	106.03			101.77	7.38	33.36	36.48	171	309	VERTICAL	Average
4	5258.20	115.71			111.45	7.38	33.36	36.48	171	309	VERTICAL	Peak
5	5379.40	47.02	54.00	-6.98	42.41	7.49	33.58	36.46	171	309	VERTICAL	Average
6	5405.80	59.28	74.00	-14.72	54.56	7.53	33.64	36.45	171	309	VERTICAL	Peak

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

Channel 60

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5292.40	106.04			101.69	7.40	33.42	36.47	189	89	VERTICAL	Average
2	5292.80	116.38			111.98	7.42	33.45	36.47	189	89	VERTICAL	Peak
3	5351.60	47.89	54.00	-6.11	43.36	7.46	33.53	36.46	189	89	VERTICAL	Average
4	5351.60	59.08	74.00	-14.92	54.55	7.46	33.53	36.46	189	89	VERTICAL	Peak

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

Channel 64

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5313.60	106.11			101.68	7.43	33.47	36.47	169	86	VERTICAL	Average
2	5313.60	116.34			111.91	7.43	33.47	36.47	169	86	VERTICAL	Peak
3	5353.20	53.98	54.00	-0.02	49.45	7.46	33.53	36.46	169	86	VERTICAL	Average
4	5353.20	72.01	74.00	-1.99	67.48	7.46	33.53	36.46	169	86	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 100, 116 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 100

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.60	63.26	74.00	-10.74	58.35	7.63	33.72	36.44	150	83	VERTICAL	Peak
2	5459.20	50.85	54.00	-3.15	45.94	7.63	33.72	36.44	150	83	VERTICAL	Average
3	5466.00	67.84	74.00	-6.16	62.87	7.66	33.75	36.44	150	83	VERTICAL	Peak
4	5466.80	52.72	54.00	-1.28	47.75	7.66	33.75	36.44	150	83	VERTICAL	Average
5	5493.60	106.34			101.31	7.69	33.77	36.43	150	83	VERTICAL	Average
6	5493.60	116.51			111.48	7.69	33.77	36.43	150	83	VERTICAL	Peak

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

Channel 116

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5456.40	58.58	74.00	-15.42	53.67	7.63	33.72	36.44	155	82	VERTICAL	Peak
2	5460.00	47.44	54.00	-6.56	42.53	7.63	33.72	36.44	155	82	VERTICAL	Average
3	5461.80	59.07	74.00	-14.93	54.16	7.63	33.72	36.44	155	82	VERTICAL	Peak
4	5470.00	46.93	54.00	-7.07	41.95	7.66	33.75	36.43	155	82	VERTICAL	Average
5	5572.80	116.84			111.41	7.85	33.99	36.41	155	82	VERTICAL	Peak
6	5573.40	106.75			101.32	7.85	33.99	36.41	155	82	VERTICAL	Average
7	5704.60	46.93	54.00	-7.07	41.07	7.88	34.36	36.38	155	82	VERTICAL	Average
8	5729.40	59.11	74.00	-14.89	53.16	7.87	34.45	36.37	155	82	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 140, 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 140

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5693.80	105.57			99.71	7.88	34.36	36.38	143	120	VERTICAL	Average
2	5693.80	115.83			109.97	7.88	34.36	36.38	143	120	VERTICAL	Peak
3	5725.20	68.60	74.00	-5.40	62.65	7.87	34.45	36.37	143	120	VERTICAL	Peak
4	5726.20	53.78	54.00	-0.22	47.83	7.87	34.45	36.37	143	120	VERTICAL	Average

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

Channel 144

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5724.20	107.41			101.46	7.87	34.45	36.37	203	73	VERTICAL	Average
2	5724.80	117.53			111.58	7.87	34.45	36.37	203	73	VERTICAL	Peak
3	5850.00	60.38	74.00	-13.62	54.10	7.84	34.78	36.34	203	73	VERTICAL	Peak
4	5855.60	47.85	54.00	-6.15	41.57	7.84	34.78	36.34	203	73	VERTICAL	Average

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5714.60	51.28	54.00	-2.72	45.36	7.88	34.41	36.37	207	93	HORIZONTAL	Average
2	5715.00	65.12	74.00	-8.88	59.20	7.88	34.41	36.37	207	93	HORIZONTAL	Peak
3	5724.20	78.09	78.20	-0.11	72.14	7.87	34.45	36.37	207	93	HORIZONTAL	Peak
4	5737.40	103.93			97.98	7.87	34.45	36.37	207	93	HORIZONTAL	Average
5	5738.20	113.68			107.73	7.87	34.45	36.37	207	93	HORIZONTAL	Peak

Item 4, 5 are the fundamental frequency at 5745 MHz.

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5693.40	59.83	74.00	-14.17	53.97	7.88	34.36	36.38	185	78	VERTICAL	Peak
2	5713.00	48.18	54.00	-5.82	42.26	7.88	34.41	36.37	185	78	VERTICAL	Average
3	5722.20	60.98	78.20	-17.22	55.03	7.87	34.45	36.37	185	78	VERTICAL	Peak
4	5789.40	116.61			110.47	7.85	34.64	36.35	185	78	VERTICAL	Peak
5	5790.20	106.67			100.53	7.85	34.64	36.35	185	78	VERTICAL	Average
6	5850.00	60.56	78.20	-17.64	54.28	7.84	34.78	36.34	185	78	VERTICAL	Peak
7	5865.00	48.25	54.00	-5.75	41.93	7.83	34.83	36.34	185	78	VERTICAL	Average
8	5878.20	61.02	74.00	-12.98	54.66	7.83	34.87	36.34	185	78	VERTICAL	Peak

Item 4, 5 are the fundamental frequency at 5785 MHz.

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5830.60	105.92			99.69	7.84	34.73	36.34	204	72	VERTICAL	Average
2	5830.60	115.84			109.61	7.84	34.73	36.34	204	72	VERTICAL	Peak
3	5850.00	71.25	78.20	-6.95	64.97	7.84	34.78	36.34	204	72	VERTICAL	Peak
4	5862.60	51.25	54.00	-2.75	44.93	7.83	34.83	36.34	204	72	VERTICAL	Average
5	5863.80	63.60	74.00	-10.40	57.28	7.83	34.83	36.34	204	72	VERTICAL	Peak

Item 1, 2 are the fundamental frequency at 5825 MHz.

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5146.40	52.73	54.00	-1.27	48.82	7.24	33.17	36.50	234	358	HORIZONTAL	Average
2	5146.40	70.71	74.00	-3.29	66.80	7.24	33.17	36.50	234	358	HORIZONTAL	Peak
3	5184.80	115.96			111.93	7.29	33.23	36.49	234	358	HORIZONTAL	Peak
4	5185.20	105.53			101.50	7.29	33.23	36.49	234	358	HORIZONTAL	Average

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5150.00	46.96	54.00	-7.04	43.05	7.24	33.17	36.50	178	89	VERTICAL	Average
2	5150.00	59.17	74.00	-14.83	55.26	7.24	33.17	36.50	178	89	VERTICAL	Peak
3	5192.80	105.70			101.62	7.32	33.25	36.49	178	89	VERTICAL	Average
4	5193.20	116.17			112.09	7.32	33.25	36.49	178	89	VERTICAL	Peak

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5114.60	45.77	54.00	-8.23	41.97	7.19	33.12	36.51	167	299	VERTICAL	Average
2	5120.60	58.45	74.00	-15.55	54.65	7.19	33.12	36.51	167	299	VERTICAL	Peak
3	5237.60	105.67			101.45	7.36	33.34	36.48	167	299	VERTICAL	Average
4	5238.20	116.33			112.11	7.36	33.34	36.48	167	299	VERTICAL	Peak
5	5358.20	58.42	74.00	-15.58	53.86	7.47	33.55	36.46	167	299	VERTICAL	Peak
6	5387.00	45.70	54.00	-8.30	41.04	7.50	33.61	36.45	167	299	VERTICAL	Average

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 52

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5117.20	43.77	54.00	-10.23	39.97	7.19	33.12	36.51	228	81	HORIZONTAL	Average
2	5122.60	56.25	74.00	-17.75	52.44	7.19	33.12	36.50	228	81	HORIZONTAL	Peak
3	5256.40	100.90			96.64	7.38	33.36	36.48	228	81	HORIZONTAL	Average
4	5256.40	111.83			107.57	7.38	33.36	36.48	228	81	HORIZONTAL	Peak
5	5374.60	58.81	74.00	-15.19	54.20	7.49	33.58	36.46	228	81	HORIZONTAL	Peak
6	5401.00	46.45	54.00	-7.55	41.73	7.53	33.64	36.45	228	81	HORIZONTAL	Average

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

Channel 60

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5292.80	105.42			101.02	7.42	33.45	36.47	175	87	VERTICAL	Average
2	5292.80	115.91			111.51	7.42	33.45	36.47	175	87	VERTICAL	Peak
3	5350.00	47.90	54.00	-6.10	43.37	7.46	33.53	36.46	175	87	VERTICAL	Average
4	5350.00	61.28	74.00	-12.72	56.75	7.46	33.53	36.46	175	87	VERTICAL	Peak

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

Channel 64

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5312.00	104.42			99.99	7.43	33.47	36.47	189	91	VERTICAL	Average
2	5312.40	114.71			110.28	7.43	33.47	36.47	189	91	VERTICAL	Average
3	5351.60	53.55	54.00	-0.45	49.02	7.46	33.53	36.46	189	91	VERTICAL	Average
4	5352.80	69.30	54.00	15.30	64.77	7.46	33.53	36.46	189	91	VERTICAL	Average

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 100

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5452.20	50.59	54.00	-3.41	45.68	7.63	33.72	36.44	172	86	VERTICAL	Average
2	5452.80	66.90	74.00	-7.10	61.99	7.63	33.72	36.44	172	86	VERTICAL	Peak
3	5470.00	53.84	54.00	-0.16	48.86	7.66	33.75	36.43	172	86	VERTICAL	Average
4	5470.00	68.53	74.00	-5.47	63.55	7.66	33.75	36.43	172	86	VERTICAL	Peak
5	5491.80	105.06			100.03	7.69	33.77	36.43	172	86	VERTICAL	Average
6	5492.40	115.51			110.48	7.69	33.77	36.43	172	86	VERTICAL	Peak

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

Channel 116

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5457.00	59.70	74.00	-14.30	54.79	7.63	33.72	36.44	170	87	VERTICAL	Peak
2	5459.40	46.51	54.00	-7.49	41.60	7.63	33.72	36.44	170	87	VERTICAL	Average
3	5466.40	59.46	74.00	-14.54	54.49	7.66	33.75	36.44	170	87	VERTICAL	Peak
4	5469.60	46.57	54.00	-7.43	41.59	7.66	33.75	36.43	170	87	VERTICAL	Average
5	5571.60	106.59			101.16	7.85	33.99	36.41	170	87	VERTICAL	Average
6	5572.20	117.09			111.66	7.85	33.99	36.41	170	87	VERTICAL	Peak
7	5725.00	46.92	54.00	-7.08	40.97	7.87	34.45	36.37	170	87	VERTICAL	Average
8	5725.00	58.79	74.00	-15.21	52.84	7.87	34.45	36.37	170	87	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 140, 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 140

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5691.80	103.15			97.29	7.88	34.36	36.38	174	83	VERTICAL	Average
2	5692.00	113.67			107.81	7.88	34.36	36.38	174	83	VERTICAL	Peak
3	5725.00	53.51	54.00	-0.49	47.56	7.87	34.45	36.37	174	83	VERTICAL	Average
4	5725.00	69.14	74.00	-4.86	63.19	7.87	34.45	36.37	174	83	VERTICAL	Peak

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

Channel 144

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5724.80	107.01			101.06	7.87	34.45	36.37	192	75	VERTICAL	Average
2	5725.40	117.73			111.78	7.87	34.45	36.37	192	75	VERTICAL	Peak
3	5850.80	59.64	74.00	-14.36	53.36	7.84	34.78	36.34	192	75	VERTICAL	Peak
4	5865.20	47.34	54.00	-6.66	41.02	7.83	34.83	36.34	192	75	VERTICAL	Average

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5715.00	50.82	54.00	-3.18	44.90	7.88	34.41	36.37	211	97	HORIZONTAL	Average
2	5715.00	65.14	74.00	-8.86	59.22	7.88	34.41	36.37	211	97	HORIZONTAL	Peak
3	5723.80	78.14	78.20	-0.06	72.19	7.87	34.45	36.37	211	97	HORIZONTAL	Peak
4	5736.60	102.85			96.90	7.87	34.45	36.37	211	97	HORIZONTAL	Average
5	5737.00	113.50			107.55	7.87	34.45	36.37	211	97	HORIZONTAL	Peak

Item 4, 5 are the fundamental frequency at 5745 MHz.

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5694.20	59.94	74.00	-14.06	54.08	7.88	34.36	36.38	180	77	VERTICAL	Peak
2	5714.60	47.61	54.00	-6.39	41.69	7.88	34.41	36.37	180	77	VERTICAL	Average
3	5722.60	61.38	78.20	-16.82	55.43	7.87	34.45	36.37	180	77	VERTICAL	Peak
4	5790.20	106.20			100.06	7.85	34.64	36.35	180	77	VERTICAL	Average
5	5790.60	116.24			110.10	7.85	34.64	36.35	180	77	VERTICAL	Peak
6	5857.20	60.80	78.20	-17.40	54.48	7.83	34.83	36.34	180	77	VERTICAL	Peak
7	5860.00	47.54	54.00	-6.46	41.22	7.83	34.83	36.34	180	77	VERTICAL	Average
8	5879.00	60.23	74.00	-13.77	53.86	7.83	34.87	36.33	180	77	VERTICAL	Peak

Item 4, 5 are the fundamental frequency at 5785 MHz.

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5830.60	106.10			99.87	7.84	34.73	36.34	201	70	VERTICAL	Average
2	5830.60	116.37			110.14	7.84	34.73	36.34	201	70	VERTICAL	Peak
3	5850.00	77.70	78.20	-0.50	71.42	7.84	34.78	36.34	201	70	VERTICAL	Peak
4	5863.40	51.29	54.00	-2.71	44.97	7.83	34.83	36.34	201	70	VERTICAL	Average
5	5863.40	65.17	74.00	-8.83	58.85	7.83	34.83	36.34	201	70	VERTICAL	Peak

Item 1, 2 are the fundamental frequency at 5825 MHz.

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5146.80	68.93	74.00	-5.07	65.02	7.24	33.17	36.50	172	306	VERTICAL	Peak
2	5148.00	53.76	54.00	-0.24	49.85	7.24	33.17	36.50	172	306	VERTICAL	Average
3	5188.00	99.07			94.99	7.32	33.25	36.49	172	306	VERTICAL	Average
4	5188.80	110.15			106.07	7.32	33.25	36.49	172	306	VERTICAL	Peak

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5148.40	62.49	74.00	-11.51	58.58	7.24	33.17	36.50	173	93	VERTICAL	Peak
2	5149.60	48.81	54.00	-5.19	44.90	7.24	33.17	36.50	173	93	VERTICAL	Average
3	5222.20	113.42			109.25	7.35	33.31	36.49	173	93	VERTICAL	Peak
4	5222.80	102.18			98.01	7.35	33.31	36.49	173	93	VERTICAL	Average

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 54

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5282.60	102.46			98.11	7.40	33.42	36.47	172	87	VERTICAL	Average
2	5283.80	113.74			109.39	7.40	33.42	36.47	172	87	VERTICAL	Peak
3	5350.00	50.99	54.00	-3.01	46.46	7.46	33.53	36.46	172	87	VERTICAL	Average
4	5351.60	64.81	74.00	-9.19	60.28	7.46	33.53	36.46	172	87	VERTICAL	Peak

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

Channel 62

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5308.00	99.54			95.11	7.43	33.47	36.47	160	300	VERTICAL	Average
2	5308.80	110.27			105.84	7.43	33.47	36.47	160	300	VERTICAL	Peak
3	5350.00	52.75	54.00	-1.25	48.22	7.46	33.53	36.46	160	300	VERTICAL	Average
4	5355.60	69.83	74.00	-4.17	65.27	7.47	33.55	36.46	160	300	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 102

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.40	63.31	74.00	-10.69	58.40	7.63	33.72	36.44	173	86	VERTICAL	Peak
2	5460.00	50.96	54.00	-3.04	46.05	7.63	33.72	36.44	173	86	VERTICAL	Average
3	5462.80	53.58	54.00	-0.42	48.67	7.63	33.72	36.44	173	86	VERTICAL	Average
4	5463.20	70.68	74.00	-3.32	65.77	7.63	33.72	36.44	173	86	VERTICAL	Peak
5	5502.00	99.73			94.64	7.72	33.80	36.43	173	86	VERTICAL	Average
6	5502.40	110.39			105.30	7.72	33.80	36.43	173	86	VERTICAL	Peak

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

Channel 110

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.00	48.26	54.00	-5.74	43.35	7.63	33.72	36.44	180	66	VERTICAL	Average
2	5460.00	61.07	74.00	-12.93	56.16	7.63	33.72	36.44	180	66	VERTICAL	Peak
3	5461.60	63.22	74.00	-10.78	58.31	7.63	33.72	36.44	180	66	VERTICAL	Peak
4	5470.00	50.20	54.00	-3.80	45.22	7.66	33.75	36.43	180	66	VERTICAL	Average
5	5556.80	103.32			97.98	7.82	33.94	36.42	180	66	VERTICAL	Average
6	5557.20	114.10			108.76	7.82	33.94	36.42	180	66	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 134, 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 134

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5661.20	102.59			96.82	7.89	34.27	36.39	173	89	VERTICAL	Average
2	5661.20	113.47			107.70	7.89	34.27	36.39	173	89	VERTICAL	Peak
3	5725.00	69.63	74.00	-4.37	63.68	7.87	34.45	36.37	173	89	VERTICAL	Peak
4	5726.40	53.92	54.00	-0.08	47.97	7.87	34.45	36.37	173	89	VERTICAL	Average

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

Channel 142

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5714.80	104.55			98.63	7.88	34.41	36.37	213	69	VERTICAL	Average
2	5714.80	115.17			109.25	7.88	34.41	36.37	213	69	VERTICAL	Peak
3	5854.60	48.28	54.00	-5.72	42.00	7.84	34.78	36.34	213	69	VERTICAL	Average
4	5855.80	60.60	74.00	-13.40	54.32	7.84	34.78	36.34	213	69	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5708.60	70.26	74.00	-3.74	64.34	7.88	34.41	36.37	173	115	VERTICAL	Peak
2	5709.40	53.64	54.00	-0.36	47.72	7.88	34.41	36.37	173	115	VERTICAL	Average
3	5720.60	72.91	78.20	-5.29	66.99	7.88	34.41	36.37	173	115	VERTICAL	Peak
4	5747.80	109.08			103.08	7.86	34.50	36.36	173	115	VERTICAL	Peak
5	5748.20	98.43			92.43	7.86	34.50	36.36	173	115	VERTICAL	Average

Item 4, 5 are the fundamental frequency at 5755 MHz.

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5714.60	49.15	54.00	-4.85	43.23	7.88	34.41	36.37	204	68	VERTICAL	Average
2	5715.00	61.03	74.00	-12.97	55.11	7.88	34.41	36.37	204	68	VERTICAL	Peak
3	5720.60	64.16	78.20	-14.04	58.24	7.88	34.41	36.37	204	68	VERTICAL	Peak
4	5779.80	115.02			108.93	7.86	34.59	36.36	204	68	VERTICAL	Peak
5	5780.60	103.85			97.76	7.86	34.59	36.36	204	68	VERTICAL	Average
6	5854.20	68.21	78.20	-9.99	61.93	7.84	34.78	36.34	204	68	VERTICAL	Peak
7	5861.00	67.59	74.00	-6.41	61.27	7.83	34.83	36.34	204	68	VERTICAL	Peak
8	5861.80	50.44	54.00	-3.56	44.12	7.83	34.83	36.34	204	68	VERTICAL	Average

Item 4, 5 are the fundamental frequency at 5795 MHz.

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5138.00	53.89	54.00	-0.11	50.02	7.22	33.15	36.50	173	309	VERTICAL	Average
2	5147.00	69.50	74.00	-4.50	65.59	7.24	33.17	36.50	173	309	VERTICAL	Peak
3	5208.00	105.87			101.75	7.33	33.28	36.49	173	309	VERTICAL	Peak
4	5209.00	95.88			91.76	7.33	33.28	36.49	173	309	VERTICAL	Average
5	5365.00	56.92	74.00	-17.08	52.36	7.47	33.55	36.46	173	309	VERTICAL	Peak
6	5403.00	45.87	54.00	-8.13	41.15	7.53	33.64	36.45	173	309	VERTICAL	Average

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

Channel 58

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.00	46.26	54.00	-7.74	42.35	7.24	33.17	36.50	175	300	VERTICAL	Average
2	5148.00	59.23	74.00	-14.77	55.32	7.24	33.17	36.50	175	300	VERTICAL	Peak
3	5307.00	96.87			92.47	7.42	33.45	36.47	175	300	VERTICAL	Average
4	5308.00	105.70			101.27	7.43	33.47	36.47	175	300	VERTICAL	Peak
5	5360.00	53.59	54.00	-0.41	49.03	7.47	33.55	36.46	175	300	VERTICAL	Average
6	5366.00	72.90	74.00	-1.10	68.34	7.47	33.55	36.46	175	300	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 106

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.00	53.92	54.00	-0.08	49.01	7.63	33.72	36.44	215	359	VERTICAL	Average
2	5456.00	68.71	74.00	-5.29	63.80	7.63	33.72	36.44	215	359	VERTICAL	Peak
3	5466.00	68.79	74.00	-5.21	63.82	7.66	33.75	36.44	215	359	VERTICAL	Peak
4	5470.00	50.54	54.00	-3.46	45.56	7.66	33.75	36.43	215	359	VERTICAL	Average
5	5495.00	99.01			93.98	7.69	33.77	36.43	215	359	VERTICAL	Average
6	5495.00	108.81			103.78	7.69	33.77	36.43	215	359	VERTICAL	Peak

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

Channel 122

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5456.00	51.33	54.00	-2.67	46.42	7.63	33.72	36.44	199	68	VERTICAL	Average
2	5458.00	64.90	74.00	-9.10	59.99	7.63	33.72	36.44	199	68	VERTICAL	Peak
3	5462.00	63.99	68.20	-4.21	59.08	7.63	33.72	36.44	199	68	VERTICAL	Peak
4	5576.00	103.27			97.77	7.88	34.03	36.41	199	68	VERTICAL	Average
5	5577.00	112.73			107.23	7.88	34.03	36.41	199	68	VERTICAL	Peak
6	5742.00	66.57	68.20	-1.63	60.58	7.86	34.50	36.37	199	68	VERTICAL	Peak

Item 4, 5 are the fundamental frequency at 5610 MHz.

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138, 155 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 18, 2015	Test Function	Non-beamforming function

Channel 138

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5722.00	109.27			103.35	7.88	34.41	36.37	148	87	VERTICAL	Peak
2	5723.00	100.48			94.53	7.87	34.45	36.37	148	87	VERTICAL	Average
3	5855.00	47.80	54.00	-6.20	41.52	7.84	34.78	36.34	148	87	VERTICAL	Average
4	5856.00	58.77	74.00	-15.23	52.45	7.83	34.83	36.34	148	87	VERTICAL	Peak

Item 4, 5 are the fundamental frequency at 5690 MHz

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5714.00	70.83	74.00	-3.17	64.91	7.88	34.41	36.37	202	75	VERTICAL	Peak
2	5715.00	53.98	54.00	-0.02	48.06	7.88	34.41	36.37	202	75	VERTICAL	Average
3	5719.00	75.32	78.20	-2.88	69.40	7.88	34.41	36.37	202	75	VERTICAL	Peak
4	5741.00	99.39			93.40	7.86	34.50	36.37	202	75	VERTICAL	Average
5	5741.00	108.73			102.74	7.86	34.50	36.37	202	75	VERTICAL	Peak
6	5851.00	71.22	78.20	-6.98	64.94	7.84	34.78	36.34	202	75	VERTICAL	Peak
7	5862.00	73.41	74.00	-0.59	67.09	7.83	34.83	36.34	202	75	VERTICAL	Peak
8	5863.00	52.58	54.00	-1.42	46.26	7.83	34.83	36.34	202	75	VERTICAL	Average

Item 4, 5 are the fundamental frequency at 5775 MHz.

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5146.40	66.10	74.00	-7.90	62.19	7.24	33.17	36.50	175	7	VERTICAL	Peak
2	5150.00	53.59	54.00	-0.41	49.68	7.24	33.17	36.50	175	7	VERTICAL	Average
3	5181.20	115.04			111.01	7.29	33.23	36.49	175	7	VERTICAL	Peak
4	5186.40	105.36			101.33	7.29	33.23	36.49	175	7	VERTICAL	Average

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.20	60.20	74.00	-13.80	56.29	7.24	33.17	36.50	148	320	VERTICAL	Peak
2	5150.00	48.55	54.00	-5.45	44.64	7.24	33.17	36.50	148	320	VERTICAL	Average
3	5197.60	105.86			101.78	7.32	33.25	36.49	148	320	VERTICAL	Average
4	5198.40	118.15			114.07	7.32	33.25	36.49	148	320	VERTICAL	Peak

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5119.40	46.31	54.00	-7.69	42.51	7.19	33.12	36.51	145	314	VERTICAL	Average
2	5133.80	58.92	74.00	-15.08	55.05	7.22	33.15	36.50	145	314	VERTICAL	Peak
3	5233.40	104.23			100.01	7.36	33.34	36.48	145	314	VERTICAL	Average
4	5236.40	115.70			111.48	7.36	33.34	36.48	145	314	VERTICAL	Peak
5	5360.00	46.39	54.00	-7.61	41.83	7.47	33.55	36.46	145	314	VERTICAL	Average
6	5366.00	59.37	74.00	-14.63	54.81	7.47	33.55	36.46	145	314	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 52

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5112.40	59.20	74.00	-14.80	55.40	7.19	33.12	36.51	100	318	VERTICAL	Peak
2	5131.00	46.34	54.00	-7.66	42.47	7.22	33.15	36.50	100	318	VERTICAL	Average
3	5257.60	105.38			101.12	7.38	33.36	36.48	100	318	VERTICAL	Average
4	5258.80	116.28			112.02	7.38	33.36	36.48	100	318	VERTICAL	Peak
5	5384.80	59.79	74.00	-14.21	55.17	7.49	33.58	36.45	100	318	VERTICAL	Peak
6	5404.60	47.11	54.00	-6.89	42.39	7.53	33.64	36.45	100	318	VERTICAL	Average

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

Channel 60

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5305.60	115.83			111.43	7.42	33.45	36.47	154	360	VERTICAL	Peak
2	5306.80	105.17			100.77	7.42	33.45	36.47	154	360	VERTICAL	Average
3	5350.00	47.33	54.00	-6.67	42.80	7.46	33.53	36.46	154	360	VERTICAL	Average
4	5350.00	60.23	74.00	-13.77	55.70	7.46	33.53	36.46	154	360	VERTICAL	Peak

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

Channel 64

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5313.20	104.31			99.88	7.43	33.47	36.47	170	317	VERTICAL	Average
2	5316.00	116.03			111.60	7.43	33.47	36.47	170	317	VERTICAL	Peak
3	5350.00	53.58	54.00	-0.42	49.05	7.46	33.53	36.46	170	317	VERTICAL	Average
4	5352.00	66.82	74.00	-7.18	62.29	7.46	33.53	36.46	170	317	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 100, 116 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 100

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5453.20	63.40	74.00	-10.60	58.49	7.63	33.72	36.44	182	319	VERTICAL	Peak
2	5458.80	50.91	54.00	-3.09	46.00	7.63	33.72	36.44	182	319	VERTICAL	Average
3	5468.80	68.24	74.00	-5.76	63.27	7.66	33.75	36.44	182	319	VERTICAL	Peak
4	5470.00	53.16	54.00	-0.84	48.18	7.66	33.75	36.43	182	319	VERTICAL	Average
5	5500.80	105.68			100.59	7.72	33.80	36.43	182	319	VERTICAL	Average
6	5501.20	117.60			112.51	7.72	33.80	36.43	182	319	VERTICAL	Peak

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

Channel 116

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5427.00	47.86	54.00	-6.14	43.09	7.56	33.66	36.45	165	309	VERTICAL	Average
2	5455.00	60.30	74.00	-13.70	55.39	7.63	33.72	36.44	165	309	VERTICAL	Peak
3	5463.00	59.00	74.00	-15.00	54.09	7.63	33.72	36.44	165	309	VERTICAL	Peak
4	5470.00	47.52	54.00	-6.48	42.54	7.66	33.75	36.43	165	309	VERTICAL	Average
5	5572.00	118.08			112.65	7.85	33.99	36.41	165	309	VERTICAL	Peak
6	5573.00	107.42			101.99	7.85	33.99	36.41	165	309	VERTICAL	Average
7	5741.00	48.66	54.00	-5.34	42.67	7.86	34.50	36.37	165	309	VERTICAL	Average
8	5741.00	60.69	74.00	-13.31	54.70	7.86	34.50	36.37	165	309	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 140, 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 140

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5693.60	104.81			98.95	7.88	34.36	36.38	203	304	VERTICAL	Average
2	5694.80	115.76			109.90	7.88	34.36	36.38	203	304	VERTICAL	Peak
3	5725.00	53.72	54.00	-0.28	47.77	7.87	34.45	36.37	203	304	VERTICAL	Average
4	5725.00	71.23	74.00	-2.77	65.28	7.87	34.45	36.37	203	304	VERTICAL	Peak

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

Channel 144

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5713.00	104.49			98.57	7.88	34.41	36.37	148	360	VERTICAL	Average
2	5715.00	115.80			109.88	7.88	34.41	36.37	148	360	VERTICAL	Peak
3	5879.00	60.81	74.00	-13.19	54.44	7.83	34.87	36.33	148	360	VERTICAL	Peak
4	5880.00	48.81	54.00	-5.19	42.44	7.83	34.87	36.33	148	360	VERTICAL	Average

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5713.80	64.06	74.00	-9.94	58.14	7.88	34.41	36.37	178	71	VERTICAL	Peak
2	5714.60	51.21	54.00	-2.79	45.29	7.88	34.41	36.37	178	71	VERTICAL	Average
3	5725.00	77.71	78.20	-0.49	71.76	7.87	34.45	36.37	178	71	VERTICAL	Peak
4	5738.20	114.71			108.76	7.87	34.45	36.37	178	71	VERTICAL	Peak
5	5751.40	104.64			98.64	7.86	34.50	36.36	178	71	VERTICAL	Average

Item 4, 5 are the fundamental frequency at 5745 MHz.

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5711.40	47.37	54.00	-6.63	41.45	7.88	34.41	36.37	137	332	VERTICAL	Average
2	5713.00	60.61	74.00	-13.39	54.69	7.88	34.41	36.37	137	332	VERTICAL	Peak
3	5723.80	60.40	78.20	-17.80	54.45	7.87	34.45	36.37	137	332	VERTICAL	Peak
4	5778.60	105.56			99.47	7.86	34.59	36.36	137	332	VERTICAL	Average
5	5782.20	116.81			110.72	7.86	34.59	36.36	137	332	VERTICAL	Peak
6	5853.40	61.99	78.20	-16.21	55.71	7.84	34.78	36.34	137	332	VERTICAL	Peak
7	5860.00	48.62	54.00	-5.38	42.30	7.83	34.83	36.34	137	332	VERTICAL	Average
8	5867.00	60.98	74.00	-13.02	54.66	7.83	34.83	36.34	137	332	VERTICAL	Peak

Item 4, 5 are the fundamental frequency at 5785 MHz.

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5831.80	106.25			100.02	7.84	34.73	36.34	156	2	VERTICAL	Average
2	5831.80	117.70			111.47	7.84	34.73	36.34	156	2	VERTICAL	Peak
3	5850.00	77.71	78.20	-0.49	71.43	7.84	34.78	36.34	156	2	VERTICAL	Peak
4	5861.40	51.07	54.00	-2.93	44.75	7.83	34.83	36.34	156	2	VERTICAL	Average
5	5861.80	64.45	74.00	-9.55	58.13	7.83	34.83	36.34	156	2	VERTICAL	Peak

Item 1, 2 are the fundamental frequency at 5825 MHz.

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5148.40	71.55	74.00	-2.45	71.55	0.00	0.00	0.00	139	317	VERTICAL	Peak
2	5150.00	53.68	54.00	-0.32	53.68	0.00	0.00	0.00	139	317	VERTICAL	Average
3	5177.60	100.82			100.82	0.00	0.00	0.00	139	317	VERTICAL	Average
4	5191.60	112.00			112.00	0.00	0.00	0.00	139	317	VERTICAL	Peak

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5146.00	62.40	74.00	-11.60	58.49	7.24	33.17	36.50	145	317	VERTICAL	Peak
2	5150.00	49.95	54.00	-4.05	46.04	7.24	33.17	36.50	145	317	VERTICAL	Average
3	5216.80	105.19			101.02	7.35	33.31	36.49	145	317	VERTICAL	Average
4	5218.00	116.43			112.26	7.35	33.31	36.49	145	317	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 54

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5285.60	114.00			109.65	7.40	33.42	36.47	158	312	VERTICAL	Peak
2	5286.20	103.73			99.38	7.40	33.42	36.47	158	312	VERTICAL	Average
3	5350.00	64.61	74.00	-9.39	60.08	7.46	33.53	36.46	158	312	VERTICAL	Peak
4	5350.40	49.50	54.00	-4.50	44.97	7.46	33.53	36.46	158	312	VERTICAL	Average

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

Channel 62

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5304.00	109.67			105.27	7.42	33.45	36.47	154	360	VERTICAL	Peak
2	5306.40	99.81			95.41	7.42	33.45	36.47	154	360	VERTICAL	Average
3	5350.80	53.78	54.00	-0.22	49.25	7.46	33.53	36.46	154	360	VERTICAL	Average
4	5350.80	73.04	74.00	-0.96	68.51	7.46	33.53	36.46	154	360	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 102, 110 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 102

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.40	65.95	74.00	-8.05	61.04	7.63	33.72	36.44	183	318	VERTICAL	Peak
2	5460.00	49.39	54.00	-4.61	44.48	7.63	33.72	36.44	183	318	VERTICAL	Average
3	5467.60	72.73	74.00	-1.27	67.76	7.66	33.75	36.44	183	318	VERTICAL	Peak
4	5469.60	52.76	54.00	-1.24	47.78	7.66	33.75	36.43	183	318	VERTICAL	Average
5	5501.20	111.75			106.66	7.72	33.80	36.43	183	318	VERTICAL	Peak
6	5513.60	100.64			95.46	7.75	33.85	36.42	183	318	VERTICAL	Average

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

Channel 110

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5456.40	48.87	54.00	-5.13	43.96	7.63	33.72	36.44	174	314	VERTICAL	Average
2	5460.00	64.26	74.00	-9.74	59.35	7.63	33.72	36.44	174	314	VERTICAL	Peak
3	5467.60	64.69	74.00	-9.31	59.72	7.66	33.75	36.44	174	314	VERTICAL	Peak
4	5469.20	50.36	54.00	-3.64	45.39	7.66	33.75	36.44	174	314	VERTICAL	Average
5	5547.60	115.91			110.57	7.82	33.94	36.42	174	314	VERTICAL	Peak
6	5553.20	104.96			99.62	7.82	33.94	36.42	174	314	VERTICAL	Average

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 134, 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 134

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5656.00	113.99			108.27	7.89	34.22	36.39	153	303	VERTICAL	Peak
2	5666.40	104.68			98.91	7.89	34.27	36.39	153	303	VERTICAL	Average
3	5725.60	67.54	74.00	-6.46	61.59	7.87	34.45	36.37	153	303	VERTICAL	Peak
4	5726.00	52.97	54.00	-1.03	47.02	7.87	34.45	36.37	153	303	VERTICAL	Average

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

Channel 142

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5705.80	104.60			98.69	7.88	34.41	36.38	202	303	VERTICAL	Average
2	5707.60	114.06			108.15	7.88	34.41	36.38	202	303	VERTICAL	Peak
3	5854.60	60.92	74.00	-13.08	54.64	7.84	34.78	36.34	202	303	VERTICAL	Peak
4	5855.20	49.20	54.00	-4.80	42.92	7.84	34.78	36.34	202	303	VERTICAL	Average

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5714.60	69.07	74.00	-4.93	63.15	7.88	34.41	36.37	144	1	VERTICAL	Peak
2	5715.00	53.88	54.00	-0.12	47.96	7.88	34.41	36.37	144	1	VERTICAL	Average
3	5717.00	74.76	78.20	-3.44	68.84	7.88	34.41	36.37	144	1	VERTICAL	Peak
4	5738.20	99.92			93.97	7.87	34.45	36.37	144	1	VERTICAL	Average
5	5738.60	110.32			104.37	7.87	34.45	36.37	144	1	VERTICAL	Peak

Item 4, 5 are the fundamental frequency at 5755 MHz.

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5710.60	61.62	74.00	-12.38	55.70	7.88	34.41	36.37	148	360	VERTICAL	Peak
2	5715.00	48.40	54.00	-5.60	42.48	7.88	34.41	36.37	148	360	VERTICAL	Average
3	5723.80	64.62	78.20	-13.58	58.67	7.87	34.45	36.37	148	360	VERTICAL	Peak
4	5787.80	113.56			107.46	7.86	34.59	36.35	148	360	VERTICAL	Peak
5	5811.80	103.42			97.23	7.85	34.69	36.35	148	360	VERTICAL	Average
6	5850.00	68.73	78.20	-9.47	62.45	7.84	34.78	36.34	148	360	VERTICAL	Peak
7	5860.00	50.33	54.00	-3.67	44.01	7.83	34.83	36.34	148	360	VERTICAL	Average
8	5863.80	65.18	74.00	-8.82	58.86	7.83	34.83	36.34	148	360	VERTICAL	Peak

Item 4, 5 are the fundamental frequency at 5795 MHz.

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 42, 58 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 16, 2015	Test Function	Beamforming function

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5137.00	68.19	74.00	-5.81	64.32	7.22	33.15	36.50	151	314	VERTICAL	Peak
2	5140.00	53.52	54.00	-0.48	49.65	7.22	33.15	36.50	151	314	VERTICAL	Average
3	5175.00	109.12			105.09	7.29	33.23	36.49	151	314	VERTICAL	Peak
4	5177.00	98.35			94.32	7.29	33.23	36.49	151	314	VERTICAL	Average
5	5429.00	59.66	74.00	-14.34	54.89	7.56	33.66	36.45	151	314	VERTICAL	Peak
6	5451.00	47.34	54.00	-6.66	42.43	7.63	33.72	36.44	151	314	VERTICAL	Average

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

Channel 58

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.00	46.99	54.00	-7.01	43.08	7.24	33.17	36.50	198	101	VERTICAL	Average
2	5148.00	60.39	74.00	-13.61	56.48	7.24	33.17	36.50	198	101	VERTICAL	Peak
3	5256.00	96.60			92.34	7.38	33.36	36.48	198	101	VERTICAL	Average
4	5304.00	108.03			103.63	7.42	33.45	36.47	198	101	VERTICAL	Peak
5	5358.00	53.88	54.00	-0.12	49.32	7.47	33.55	36.46	198	101	VERTICAL	Average
6	5362.00	73.41	74.00	-0.59	68.85	7.47	33.55	36.46	198	101	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 16, 2015 / Dec. 17, 2015	Test Function	Beamforming function

Channel 106

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5452.00	66.43	74.00	-7.57	61.52	7.63	33.72	36.44	169	96	VERTICAL	Peak
2	5458.00	52.15	54.00	-1.85	47.24	7.63	33.72	36.44	169	96	VERTICAL	Average
3	5468.00	70.56	74.00	-3.44	65.59	7.66	33.75	36.44	169	96	VERTICAL	Peak
4	5470.00	53.56	54.00	-0.44	48.58	7.66	33.75	36.43	169	96	VERTICAL	Average
5	5532.00	111.02			105.77	7.78	33.89	36.42	169	96	VERTICAL	Peak
6	5564.00	98.30			92.87	7.85	33.99	36.41	169	96	VERTICAL	Average
7	5733.00	60.47	74.00	-13.53	54.52	7.87	34.45	36.37	169	96	VERTICAL	Peak
8	5770.00	48.45	54.00	-5.55	42.40	7.86	34.55	36.36	169	96	VERTICAL	Average

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

Channel 122

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5457.00	50.49	54.00	-3.51	45.58	7.63	33.72	36.44	170	311	VERTICAL	Average
2	5458.00	64.18	74.00	-9.82	59.27	7.63	33.72	36.44	170	311	VERTICAL	Peak
3	5467.00	64.76	74.00	-9.24	59.79	7.66	33.75	36.44	170	311	VERTICAL	Peak
4	5470.00	51.30	54.00	-2.70	46.32	7.66	33.75	36.43	170	311	VERTICAL	Average
5	5575.00	101.87			96.44	7.85	33.99	36.41	170	311	VERTICAL	Average
6	5575.00	113.66			108.23	7.85	33.99	36.41	170	311	VERTICAL	Peak
7	5726.00	51.57	54.00	-2.43	45.62	7.87	34.45	36.37	170	311	VERTICAL	Average
8	5734.00	63.86	74.00	-10.14	57.91	7.87	34.45	36.37	170	311	VERTICAL	Peak

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

Temperature	23°C	Humidity	50%
Test Engineer	Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 138, 155 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 24, 2015	Test Function	Beamforming function

Channel 138

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5654.00	113.44			107.72	7.89	34.22	36.39	152	301	HORIZONTAL	Peak
2	5655.00	101.33			95.61	7.89	34.22	36.39	152	301	HORIZONTAL	Average
3	5857.00	48.89	54.00	-5.11	42.57	7.83	34.83	36.34	152	301	HORIZONTAL	Average
4	5874.00	60.23	74.00	-13.77	53.87	7.83	34.87	36.34	152	301	HORIZONTAL	Peak

Item 1, 2 are the fundamental frequency at 5690 MHz

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Pol/Phase	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5711.00	66.77	74.00	-7.23	60.85	7.88	34.41	36.37	151	62	VERTICAL	Peak
2	5715.00	53.54	54.00	-0.46	47.62	7.88	34.41	36.37	151	62	VERTICAL	Average
3	5725.00	71.06	78.20	-7.14	65.11	7.87	34.45	36.37	151	62	VERTICAL	Peak
4	5740.00	96.45			90.46	7.86	34.50	36.37	151	62	VERTICAL	Average
5	5808.00	106.95			100.76	7.85	34.69	36.35	151	62	VERTICAL	Peak
6	5855.00	66.54	78.20	-11.66	60.26	7.84	34.78	36.34	151	62	VERTICAL	Peak
7	5860.00	50.06	54.00	-3.94	43.74	7.83	34.83	36.34	151	62	VERTICAL	Average
8	5867.00	64.60	74.00	-9.40	58.28	7.83	34.83	36.34	151	62	VERTICAL	Peak

Item 4, 5 are the fundamental frequency at 5775 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 ± 20 ppm maximum for the 5 GHz band (IEEE 802.11n specification).

4.8.2. Measuring Instruments and Setting

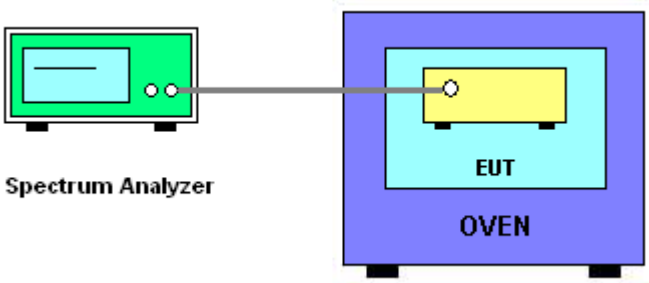
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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. fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc × 10^6 ppm and the limit is less than ±20ppm (IEEE 802.11nspecification).
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 0°C~50°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	21°C	Humidity	46%
Test Engineer	Lucas Huang	Test Date	Dec. 21, 2015

Mode: 20 MHz / Chain 1

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9350	5199.9336	5199.9318	5199.9297
110.00	5199.9338	5199.9325	5199.9309	5199.9290
93.50	5199.9324	5199.9313	5199.9301	5199.9279
Max. Deviation (MHz)	0.0676	0.0687	0.0699	0.0721
Max. Deviation (ppm)	13.00	13.21	13.44	13.87
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5199.9368	5199.9356	5199.9337	5199.9315
10	5199.9355	5199.9342	5199.9327	5199.9309
20	5199.9343	5199.9330	5199.9314	5199.9295
30	5199.9329	5199.9318	5199.9304	5199.9288
40	5199.9313	5199.9298	5199.9282	5199.9262
50	5199.9296	5199.9284	5199.9269	5199.9242
Max. Deviation (MHz)	0.0704	0.0716	0.0731	0.0758
Max. Deviation (ppm)	13.54	13.77	14.06	14.58
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5299.9319	5299.9305	5299.9287	5299.9266
110.00	5299.9307	5299.9294	5299.9278	5299.9259
93.50	5299.9293	5299.9282	5299.9270	5299.9248
Max. Deviation (MHz)	0.0707	0.0718	0.0730	0.0752
Max. Deviation (ppm)	13.34	13.55	13.78	14.19
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5299.9361	5299.9349	5299.9330	5299.9308
10	5299.9348	5299.9335	5299.9320	5299.9302
20	5299.9336	5299.9323	5299.9307	5299.9288
30	5299.9322	5299.9311	5299.9297	5299.9281
40	5299.9306	5299.9291	5299.9275	5299.9255
50	5299.9289	5299.9277	5299.9262	5299.9235
Max. Deviation (MHz)	0.0711	0.0723	0.0738	0.0765
Max. Deviation (ppm)	13.42	13.65	13.93	14.44
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5579.9264	5579.9250	5579.9232	5579.9211
110.00	5579.9252	5579.9239	5579.9223	5579.9204
93.50	5579.9238	5579.9227	5579.9215	5579.9193
Max. Deviation (MHz)	0.0762	0.0773	0.0785	0.0807
Max. Deviation (ppm)	13.66	13.85	14.07	14.46
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5579.9253	5579.9241	5579.9222	5579.9200
10	5579.9240	5579.9227	5579.9212	5579.9194
20	5579.9228	5579.9215	5579.9199	5579.9180
30	5579.9214	5579.9203	5579.9189	5579.9173
40	5579.9198	5579.9183	5579.9167	5579.9147
50	5579.9181	5579.9169	5579.9154	5579.9127
Max. Deviation (MHz)	0.0819	0.0831	0.0846	0.0873
Max. Deviation (ppm)	14.68	14.89	15.16	15.65
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9251	5784.9237	5784.9219	5784.9198
110.00	5784.9239	5784.9226	5784.9210	5784.9191
93.50	5784.9225	5784.9214	5784.9202	5784.9180
Max. Deviation (MHz)	0.0775	0.0786	0.0798	0.0820
Max. Deviation (ppm)	13.40	13.59	13.79	14.17
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5784.9210	5784.9198	5784.9179	5784.9157
10	5784.9197	5784.9184	5784.9169	5784.9151
20	5784.9185	5784.9172	5784.9156	5784.9137
30	5784.9171	5784.9160	5784.9146	5784.9130
40	5784.9155	5784.9140	5784.9124	5784.9104
50	5784.9138	5784.9126	5784.9111	5784.9084
Max. Deviation (MHz)	0.0862	0.0874	0.0889	0.0916
Max. Deviation (ppm)	14.90	15.11	15.37	15.83
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	5189.9296	5189.9282	5189.9264	5189.9243
110.00	5189.9284	5189.9271	5189.9255	5189.9236
93.50	5189.9270	5189.9259	5189.9247	5189.9225
Max. Deviation (MHz)	0.0730	0.0741	0.0753	0.0775
Max. Deviation (ppm)	14.07	14.28	14.51	14.93
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5189.9311	5189.9299	5189.9280	5189.9258
10	5189.9298	5189.9285	5189.9270	5189.9252
20	5189.9286	5189.9273	5189.9257	5189.9238
30	5189.9272	5189.9261	5189.9247	5189.9231
40	5189.9256	5189.9241	5189.9225	5189.9205
50	5189.9239	5189.9227	5189.9212	5189.9185
Max. Deviation (MHz)	0.0761	0.0773	0.0788	0.0815
Max. Deviation (ppm)	14.66	14.89	15.18	15.70
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5309.9343	5309.9329	5309.9311	5309.9290
110.00	5309.9331	5309.9318	5309.9302	5309.9283
93.50	5309.9317	5309.9306	5309.9294	5309.9272
Max. Deviation (MHz)	0.0683	0.0694	0.0706	0.0728
Max. Deviation (ppm)	12.86	13.07	13.30	13.71
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5309.9305	5309.9293	5309.9274	5309.9252
10	5309.9292	5309.9279	5309.9264	5309.9246
20	5309.9280	5309.9267	5309.9251	5309.9232
30	5309.9266	5309.9255	5309.9241	5309.9225
40	5309.9250	5309.9235	5309.9219	5309.9199
50	5309.9233	5309.9221	5309.9206	5309.9179
Max. Deviation (MHz)	0.0767	0.0779	0.0794	0.0821
Max. Deviation (ppm)	14.44	14.67	14.95	15.46
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5549.9322	5549.9308	5549.9290	5549.9269
110.00	5549.9310	5549.9297	5549.9281	5549.9262
93.50	5549.9296	5549.9285	5549.9273	5549.9251
Max. Deviation (MHz)	0.0704	0.0715	0.0727	0.0749
Max. Deviation (ppm)	12.68	12.88	13.10	13.50
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5549.9269	5549.9257	5549.9238	5549.9216
10	5549.9256	5549.9243	5549.9228	5549.9210
20	5549.9244	5549.9231	5549.9215	5549.9196
30	5549.9230	5549.9219	5549.9205	5549.9189
40	5549.9214	5549.9199	5549.9183	5549.9163
50	5549.9197	5549.9185	5549.9170	5549.9143
Max. Deviation (MHz)	0.0803	0.0815	0.0830	0.0857
Max. Deviation (ppm)	14.47	14.68	14.95	15.44
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9219	5754.9205	5754.9187	5754.9166
110.00	5754.9207	5754.9194	5754.9178	5754.9159
93.50	5754.9193	5754.9182	5754.9170	5754.9148
Max. Deviation (MHz)	0.0807	0.0818	0.0830	0.0852
Max. Deviation (ppm)	14.02	14.21	14.42	14.80
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5754.9268	5754.9256	5754.9237	5754.9215
10	5754.9255	5754.9242	5754.9227	5754.9209
20	5754.9243	5754.9230	5754.9214	5754.9195
30	5754.9229	5754.9218	5754.9204	5754.9188
40	5754.9213	5754.9198	5754.9182	5754.9162
50	5754.9196	5754.9184	5754.9169	5754.9142
Max. Deviation (MHz)	0.0804	0.0816	0.0831	0.0858
Max. Deviation (ppm)	13.97	14.18	14.44	14.91
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	5209.9304	5209.9290	5209.9272	5209.9251
110.00	5209.9292	5209.9279	5209.9263	5209.9244
93.50	5209.9278	5209.9267	5209.9255	5209.9233
Max. Deviation (MHz)	0.0722	0.0733	0.0745	0.0767
Max. Deviation (ppm)	13.86	14.07	14.30	14.72
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5209.9338	5209.9326	5209.9307	5209.9285
10	5209.9325	5209.9312	5209.9297	5209.9279
20	5209.9313	5209.9300	5209.9284	5209.9265
30	5209.9299	5209.9288	5209.9274	5209.9258
40	5209.9283	5209.9268	5209.9252	5209.9232
50	5209.9266	5209.9254	5209.9239	5209.9212
Max. Deviation (MHz)	0.0734	0.0746	0.0761	0.0788
Max. Deviation (ppm)	14.09	14.32	14.61	15.12
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5289.9252	5289.9238	5289.9220	5289.9199
110.00	5289.9240	5289.9227	5289.9211	5289.9192
93.50	5289.9226	5289.9215	5289.9203	5289.9181
Max. Deviation (MHz)	0.0774	0.0785	0.0797	0.0819
Max. Deviation (ppm)	14.63	14.84	15.07	15.48
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5289.9282	5289.9270	5289.9251	5289.9229
10	5289.9269	5289.9256	5289.9241	5289.9223
20	5289.9257	5289.9244	5289.9228	5289.9209
30	5289.9243	5289.9232	5289.9218	5289.9202
40	5289.9227	5289.9212	5289.9196	5289.9176
50	5289.9210	5289.9198	5289.9183	5289.9156
Max. Deviation (MHz)	0.0790	0.0802	0.0817	0.0844
Max. Deviation (ppm)	14.93	15.16	15.44	15.95
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5529.9255	5529.9241	5529.9223	5529.9202
110.00	5529.9243	5529.9230	5529.9214	5529.9195
93.50	5529.9229	5529.9218	5529.9206	5529.9184
Max. Deviation (MHz)	0.0771	0.0782	0.0794	0.0816
Max. Deviation (ppm)	13.94	14.14	14.36	14.76
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5529.9276	5529.9264	5529.9245	5529.9223
10	5529.9263	5529.9250	5529.9235	5529.9217
20	5529.9251	5529.9238	5529.9222	5529.9203
30	5529.9237	5529.9226	5529.9212	5529.9196
40	5529.9221	5529.9206	5529.9190	5529.9170
50	5529.9204	5529.9192	5529.9177	5529.9150
Max. Deviation (MHz)	0.0796	0.0808	0.0823	0.0850
Max. Deviation (ppm)	14.39	14.61	14.88	15.37
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9199	5774.9185	5774.9167	5774.9146
110.00	5774.9187	5774.9174	5774.9158	5774.9139
93.50	5774.9173	5774.9162	5774.9150	5774.9128
Max. Deviation (MHz)	0.0827	0.0838	0.0850	0.0872
Max. Deviation (ppm)	14.32	14.51	14.72	15.10
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5774.9214	5774.9202	5774.9183	5774.9161
10	5774.9201	5774.9188	5774.9173	5774.9155
20	5774.9189	5774.9176	5774.9160	5774.9141
30	5774.9175	5774.9164	5774.9150	5774.9134
40	5774.9159	5774.9144	5774.9128	5774.9108
50	5774.9142	5774.9130	5774.9115	5774.9088
Max. Deviation (MHz)	0.0858	0.0870	0.0885	0.0912
Max. Deviation (ppm)	14.86	15.06	15.32	15.79
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 Test Receiver	R&S	ESCS 30	100355	9kHz ~ 2.75GHz	Apr. 22, 2015	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 02, 2014	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. 02, 2014	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	Schaffner	CBL6112D	37880	20MHz ~ 2GHz	Sep. 03, 2015	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 22, 2015	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2015	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Feb. 24, 2015	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 12, 2015	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Feb.10, 2015	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Oct. 27, 2015	Radiation (03CH01-CB)
EMI Receiver	Agilent	N9038A	MY52260123	9kHz ~ 8.4GHz	Jan. 21, 2015	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz ~ 1 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-17	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 12, 2015*	Radiation (03CH01-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-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)
RF Cable-high	Woken	RG402	High Cable-6	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%