



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1
Test Date	Oct. 13, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 1TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
1	5138.00	63.22	74.00	-10.78	56.39	6.17	33.71	33.05	263	81	Peak	VERTICAL
2	5149.00	52.70	54.00	-1.30	45.80	6.21	33.74	33.05	263	81	Average	VERTICAL
3	5239.00	94.82			87.70	6.30	33.87	33.05	263	81	Average	VERTICAL
4	5245.00	103.78			96.63	6.30	33.90	33.05	263	81	Peak	VERTICAL
5	5354.00	49.82	54.00	-4.18	42.35	6.47	34.06	33.06	263	81	Average	VERTICAL
6	5367.00	62.98	74.00	-11.02	55.48	6.47	34.09	33.06	263	81	Peak	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
1	5715.00	66.38	68.20	-1.82	58.26	6.83	34.42	33.13	251	82	Peak	VERTICAL
2	5722.00	66.21	78.20	-11.99	58.08	6.83	34.43	33.13	251	82	Peak	VERTICAL
3	5762.00	99.86			91.67	6.88	34.46	33.15	251	82	Peak	VERTICAL
4	5770.00	90.25			82.05	6.88	34.47	33.15	251	82	Average	VERTICAL
5	5850.00	68.77	78.20	-9.43	60.48	6.95	34.51	33.17	251	82	Peak	VERTICAL
6	5862.00	66.92	68.20	-1.28	58.61	6.97	34.52	33.18	251	82	Peak	VERTICAL

Item 3, 4 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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 12, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB	cm	deg
1	5097.20	60.42	74.00	-13.58	53.67	6.14	33.66	33.05	271	81	Peak	VERTICAL
2	5105.60	47.63	54.00	-6.37	40.85	6.14	33.69	33.05	271	81	Average	VERTICAL
3	5186.00	100.48			93.50	6.24	33.79	33.05	271	81	Average	VERTICAL
4	5186.00	111.16			104.18	6.24	33.79	33.05	271	81	Peak	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB	cm	deg
1	5117.20	48.54	54.00	-5.46	41.76	6.14	33.69	33.05	299	134	Average	VERTICAL
2	5126.00	61.13	74.00	-12.87	54.30	6.17	33.71	33.05	299	134	Peak	VERTICAL
3	5202.80	103.69			96.65	6.27	33.82	33.05	299	134	Average	VERTICAL
4	5202.80	114.29			107.25	6.27	33.82	33.05	299	134	Peak	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB	cm	deg
1	5131.40	60.49	74.00	-13.51	53.66	6.17	33.71	33.05	250	124	Peak	VERTICAL
2	5145.20	47.31	54.00	-6.69	40.41	6.21	33.74	33.05	250	124	Average	VERTICAL
3	5237.00	113.57			106.45	6.30	33.87	33.05	250	124	Peak	VERTICAL
4	5246.60	104.07			96.89	6.34	33.90	33.06	250	124	Average	VERTICAL
5	5359.40	48.43	54.00	-5.57	40.96	6.47	34.06	33.06	250	124	Average	VERTICAL
6	5385.80	60.57	74.00	-13.43	53.02	6.50	34.11	33.06	250	124	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 12, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5715.00	62.84	68.20	-5.36	54.72	6.83	34.42	33.13	295	62	Peak	VERTICAL
2	5723.00	76.83	78.20	-1.37	68.70	6.83	34.43	33.13	295	62	Peak	VERTICAL
3	5743.00	111.49			103.33	6.86	34.44	33.14	295	62	Peak	VERTICAL
4	5743.40	101.73			93.57	6.86	34.44	33.14	295	62	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5711.00	62.26	68.20	-5.94	54.14	6.83	34.42	33.13	268	129	Peak	VERTICAL
2	5722.20	60.70	78.20	-17.50	52.57	6.83	34.43	33.13	268	129	Peak	VERTICAL
3	5782.20	114.79			106.58	6.90	34.47	33.16	268	129	Peak	VERTICAL
4	5782.60	104.11			95.90	6.90	34.47	33.16	268	129	Average	VERTICAL
5	5850.40	61.76	78.20	-16.44	53.47	6.95	34.51	33.17	268	129	Peak	VERTICAL
6	5864.60	62.42	68.20	-5.78	54.11	6.97	34.52	33.18	268	129	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5829.00	113.59			105.33	6.92	34.50	33.16	300	150	Peak	VERTICAL
2	5829.40	103.98			95.72	6.92	34.50	33.16	300	150	Average	VERTICAL
3	5851.00	73.12	78.20	-5.08	64.83	6.95	34.51	33.17	300	150	Peak	VERTICAL
4	5870.20	67.16	68.20	-1.04	58.85	6.97	34.52	33.18	300	150	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 12, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5145.60	61.15	74.00	-12.85	54.25	6.21	33.74	33.05	300	78	Peak	VERTICAL
2	5150.00	49.15	54.00	-4.85	42.25	6.21	33.74	33.05	300	78	Average	VERTICAL
3	5185.60	111.17			104.19	6.24	33.79	33.05	300	78	Peak	VERTICAL
4	5187.60	100.77			93.79	6.24	33.79	33.05	300	78	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5145.20	61.44	74.00	-12.56	54.54	6.21	33.74	33.05	300	80	Peak	VERTICAL
2	5148.00	49.06	54.00	-4.94	42.16	6.21	33.74	33.05	300	80	Average	VERTICAL
3	5185.20	110.68			103.70	6.24	33.79	33.05	300	80	Peak	VERTICAL
4	5188.00	100.72			93.74	6.24	33.79	33.05	300	80	Average	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5111.00	58.29	74.00	-15.71	51.51	6.14	33.69	33.05	274	193	Peak	HORIZONTAL
2	5117.60	46.55	54.00	-7.45	39.77	6.14	33.69	33.05	274	193	Average	HORIZONTAL
3	5233.40	94.34			87.22	6.30	33.87	33.05	274	193	Average	HORIZONTAL
4	5234.00	104.23			97.11	6.30	33.87	33.05	274	193	Peak	HORIZONTAL
5	5354.60	60.37	74.00	-13.63	52.90	6.47	34.06	33.06	274	193	Peak	HORIZONTAL
6	5374.40	48.39	54.00	-5.61	40.86	6.50	34.09	33.06	274	193	Average	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 12, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB	cm	deg
1	5711.80	62.65	68.20	-5.55	54.53	6.83	34.42	33.13	298	63	Peak	VERTICAL
2	5724.20	76.90	78.20	-1.30	68.77	6.83	34.43	33.13	298	63	Peak	VERTICAL
3	5744.20	99.70			91.54	6.86	34.44	33.14	298	63	Average	VERTICAL
4	5746.60	109.32			101.16	6.86	34.44	33.14	298	63	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB	cm	deg
1	5711.00	60.69	68.20	-7.51	52.57	6.83	34.42	33.13	267	129	Peak	VERTICAL
2	5721.00	61.36	78.20	-16.84	53.23	6.83	34.43	33.13	267	129	Peak	VERTICAL
3	5778.60	114.02			105.82	6.88	34.47	33.15	267	129	Peak	VERTICAL
4	5783.80	102.69			94.48	6.90	34.47	33.16	267	129	Average	VERTICAL
5	5853.20	61.59	78.20	-16.61	53.30	6.95	34.51	33.17	267	129	Peak	VERTICAL
6	5862.20	62.72	68.20	-5.48	54.41	6.97	34.52	33.18	267	129	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB	cm	deg
1	5831.80	102.05			93.79	6.92	34.50	33.16	266	137	Average	VERTICAL
2	5831.80	112.06			103.80	6.92	34.50	33.16	266	137	Peak	VERTICAL
3	5850.00	76.30	78.20	-1.90	68.01	6.95	34.51	33.17	266	137	Peak	VERTICAL
4	5864.20	67.13	68.20	-1.07	58.82	6.97	34.52	33.18	266	137	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Oct. 12, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 38

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.60	64.93	74.00	-9.07	58.03	6.21	33.74	33.05	288	78 Peak	VERTICAL
2	5150.00	52.51	54.00	-1.49	45.61	6.21	33.74	33.05	288	78 Average	VERTICAL
3	5205.20	99.50			92.46	6.27	33.82	33.05	288	78 Average	VERTICAL
4	5205.20	109.43		102.39	6.27	33.82	33.05	288	78 Peak		VERTICAL

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

Channel 46

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5134.40	59.75	74.00	-14.25	52.92	6.17	33.71	33.05	299	79 Peak	VERTICAL
2	5150.00	48.47	54.00	-5.53	41.57	6.21	33.74	33.05	299	79 Average	VERTICAL
3	5215.20	101.05			93.98	6.27	33.85	33.05	299	79 Average	VERTICAL
4	5215.60	110.49		103.42	6.27	33.85	33.05	299	79 Peak		VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Oct. 12, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 151

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5709.80	66.96	68.20	-1.24	58.84	6.83	34.42	33.13	237	128	Peak	VERTICAL
2	5719.80	69.18	78.20	-9.02	61.05	6.83	34.43	33.13	237	128	Peak	VERTICAL
3	5768.60	95.08			86.88	6.88	34.47	33.15	237	128	Average	VERTICAL
4	5771.40	105.60			97.40	6.88	34.47	33.15	237	128	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5711.80	65.14	68.20	-3.06	57.02	6.83	34.42	33.13	263	130	Peak	VERTICAL
2	5722.20	65.04	78.20	-13.16	56.91	6.83	34.43	33.13	263	130	Peak	VERTICAL
3	5778.60	99.12			90.92	6.88	34.47	33.15	263	130	Average	VERTICAL
4	5781.00	109.90			101.70	6.88	34.47	33.15	263	130	Peak	VERTICAL
5	5859.40	67.52	78.20	-10.68	59.21	6.97	34.52	33.18	263	130	Peak	VERTICAL
6	5865.00	67.19	68.20	-1.01	58.88	6.97	34.52	33.18	263	130	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2
Test Date	Oct. 12, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	dB	
1	5145.00	63.15	74.00	-10.85	56.25	6.21	33.74	33.05	300	126	Peak	VERTICAL
2	5148.00	52.96	54.00	-1.04	46.06	6.21	33.74	33.05	300	126	Average	VERTICAL
3	5223.00	104.68			97.58	6.30	33.85	33.05	300	126	Peak	VERTICAL
4	5241.00	95.73			88.61	6.30	33.87	33.05	300	126	Average	VERTICAL
5	5357.00	60.57	74.00	-13.43	53.10	6.47	34.06	33.06	300	126	Peak	VERTICAL
6	5359.00	49.85	54.00	-4.15	42.38	6.47	34.06	33.06	300	126	Average	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	dB	
1	5679.00	67.03	68.20	-1.17	58.96	6.79	34.40	33.12	268	130	Peak	VERTICAL
2	5724.00	66.75	78.20	-11.45	58.62	6.83	34.43	33.13	268	130	Peak	VERTICAL
3	5779.00	103.45			95.25	6.88	34.47	33.15	268	130	Peak	VERTICAL
4	5781.00	92.84			84.64	6.88	34.47	33.15	268	130	Average	VERTICAL
5	5859.00	68.42	78.20	-9.78	60.11	6.97	34.52	33.18	268	130	Peak	VERTICAL
6	5868.00	66.30	68.20	-1.90	57.99	6.97	34.52	33.18	268	130	Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 36

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.20	62.23	74.00	-11.77	55.33	6.21	33.74	33.05	300	319 Peak	VERTICAL
2	5150.00	48.77	54.00	-5.23	41.87	6.21	33.74	33.05	300	319 Average	VERTICAL
3	5181.20	103.67			96.69	6.24	33.79	33.05	300	319 Average	VERTICAL
4	5181.20	114.42			107.44	6.24	33.79	33.05	300	319 Peak	VERTICAL

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

Channel 40

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5112.40	47.49	54.00	-6.51	40.71	6.14	33.69	33.05	230	198 Average	VERTICAL
2	5122.40	59.66	74.00	-14.34	52.85	6.17	33.69	33.05	230	198 Peak	VERTICAL
3	5202.00	103.69			96.65	6.27	33.82	33.05	230	198 Average	VERTICAL
4	5202.00	114.27			107.23	6.27	33.82	33.05	230	198 Peak	VERTICAL

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

Channel 48

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5111.00	46.22	54.00	-7.78	39.44	6.14	33.69	33.05	247	307 Average	VERTICAL
2	5135.00	58.88	74.00	-15.12	52.05	6.17	33.71	33.05	247	307 Peak	VERTICAL
3	5242.40	114.87			107.72	6.30	33.90	33.05	247	307 Peak	VERTICAL
4	5243.00	104.20			97.05	6.30	33.90	33.05	247	307 Average	VERTICAL
5	5375.00	47.59	54.00	-6.41	40.06	6.50	34.09	33.06	247	307 Average	VERTICAL
6	5382.20	60.20	74.00	-13.80	52.65	6.50	34.11	33.06	247	307 Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5715.00	50.12	54.00	-3.88	42.00	6.83	34.42	33.13	227	219	Average	VERTICAL
2	5715.00	64.07	74.00	-9.93	55.95	6.83	34.42	33.13	227	219	Peak	VERTICAL
3	5725.00	76.71	78.20	-1.49	68.58	6.83	34.43	33.13	227	219	Peak	VERTICAL
4	5737.40	103.25			95.09	6.86	34.44	33.14	227	219	Average	VERTICAL
5	5747.40	113.42			105.26	6.86	34.44	33.14	227	219	Peak	VERTICAL

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

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5697.40	48.54	54.00	-5.46	40.44	6.81	34.41	33.12	219	257	Average	VERTICAL
2	5713.80	60.92	74.00	-13.08	52.80	6.83	34.42	33.13	219	257	Peak	VERTICAL
3	5719.00	60.71	78.20	-17.49	52.58	6.83	34.43	33.13	219	257	Peak	VERTICAL
4	5777.80	101.86			93.66	6.88	34.47	33.15	219	257	Average	VERTICAL
5	5778.20	112.13			103.93	6.88	34.47	33.15	219	257	Peak	VERTICAL
6	5852.40	60.94	78.20	-17.26	52.65	6.95	34.51	33.17	219	257	Peak	VERTICAL
7	5863.40	62.51	74.00	-11.49	54.20	6.97	34.52	33.18	219	257	Peak	VERTICAL
8	5869.00	48.53	54.00	-5.47	40.22	6.97	34.52	33.18	219	257	Average	VERTICAL

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

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5822.60	114.83			106.57	6.92	34.50	33.16	300	143	Peak	VERTICAL
2	5832.60	105.31			97.03	6.95	34.50	33.17	300	143	Average	VERTICAL
3	5851.40	73.11	78.20	-5.09	64.82	6.95	34.51	33.17	300	143	Peak	VERTICAL
4	5860.00	52.39	54.00	-1.61	44.08	6.97	34.52	33.18	300	143	Average	VERTICAL
5	5863.80	67.77	74.00	-6.23	59.46	6.97	34.52	33.18	300	143	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5148.00	62.39	74.00	-11.61	55.49	6.21	33.74	33.05	300	202	Peak	VERTICAL
2	5148.40	49.11	54.00	-4.89	42.21	6.21	33.74	33.05	300	202	Average	VERTICAL
3	5177.60	113.04			106.06	6.24	33.79	33.05	300	202	Peak	VERTICAL
4	5187.20	102.33			95.35	6.24	33.79	33.05	300	202	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5112.80	47.80	54.00	-6.20	41.02	6.14	33.69	33.05	226	200	Average	VERTICAL
2	5117.60	60.34	74.00	-13.66	53.56	6.14	33.69	33.05	226	200	Peak	VERTICAL
3	5192.80	113.37			106.36	6.24	33.82	33.05	226	200	Peak	VERTICAL
4	5197.60	102.75			95.71	6.27	33.82	33.05	226	200	Average	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5112.20	46.35	54.00	-7.65	39.57	6.14	33.69	33.05	225	203	Average	VERTICAL
2	5123.00	59.22	74.00	-14.78	52.39	6.17	33.71	33.05	225	203	Peak	VERTICAL
3	5237.60	114.18			107.06	6.30	33.87	33.05	225	203	Peak	VERTICAL
4	5243.00	103.41			96.26	6.30	33.90	33.05	225	203	Average	VERTICAL
5	5373.80	60.78	74.00	-13.22	53.25	6.50	34.09	33.06	225	203	Peak	VERTICAL
6	5374.40	47.63	54.00	-6.37	40.10	6.50	34.09	33.06	225	203	Average	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5712.20	49.42	54.00	-4.58	41.30	6.83	34.42	33.13	300	323	Average	VERTICAL
2	5713.40	62.09	74.00	-11.91	53.97	6.83	34.42	33.13	300	323	Peak	VERTICAL
3	5722.60	77.04	78.20	-1.16	68.91	6.83	34.43	33.13	300	323	Peak	VERTICAL
4	5742.60	101.38			93.22	6.86	34.44	33.14	300	323	Average	VERTICAL
5	5752.60	112.51			104.33	6.86	34.46	33.14	300	323	Peak	VERTICAL

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

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5703.00	61.02	74.00	-12.98	52.91	6.81	34.42	33.12	293	317	Peak	VERTICAL
2	5712.60	48.94	54.00	-5.06	40.82	6.83	34.42	33.13	293	317	Average	VERTICAL
3	5722.20	61.71	78.20	-16.49	53.58	6.83	34.43	33.13	293	317	Peak	VERTICAL
4	5787.80	103.20			94.98	6.90	34.48	33.16	293	317	Average	VERTICAL
5	5788.20	114.20			105.98	6.90	34.48	33.16	293	317	Peak	VERTICAL
6	5852.00	61.10	78.20	-17.10	52.81	6.95	34.51	33.17	293	317	Peak	VERTICAL
7	5863.00	49.43	54.00	-4.57	41.12	6.97	34.52	33.18	293	317	Average	VERTICAL
8	5869.00	61.83	74.00	-12.17	53.52	6.97	34.52	33.18	293	317	Peak	VERTICAL

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

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5822.60	114.92			106.66	6.92	34.50	33.16	294	316	Peak	VERTICAL
2	5832.60	104.50			96.22	6.95	34.50	33.17	294	316	Average	VERTICAL
3	5851.40	75.99	78.20	-2.21	67.70	6.95	34.51	33.17	294	316	Peak	VERTICAL
4	5861.40	67.63	74.00	-6.37	59.32	6.97	34.52	33.18	294	316	Peak	VERTICAL
5	5862.60	52.51	54.00	-1.49	44.20	6.97	34.52	33.18	294	316	Average	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 38

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.60	68.50	74.00	-5.50	61.60	6.21	33.74	33.05	225	199 Peak	VERTICAL
2	5148.00	52.89	54.00	-1.11	45.99	6.21	33.74	33.05	225	199 Average	VERTICAL
3	5197.60	98.55			91.51	6.27	33.82	33.05	225	199 Average	VERTICAL
4	5197.60	109.82			102.78	6.27	33.82	33.05	225	199 Peak	VERTICAL

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

Channel 46

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.20	47.35	54.00	-6.65	40.45	6.21	33.74	33.05	224	203 Average	VERTICAL
2	5147.60	59.75	74.00	-14.25	52.85	6.21	33.74	33.05	224	203 Peak	VERTICAL
3	5242.80	100.35			93.20	6.30	33.90	33.05	224	203 Average	VERTICAL
4	5242.80	111.44			104.29	6.30	33.90	33.05	224	203 Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5712.20	52.51	54.00	-1.49	44.39	6.83	34.42	33.13	291	322	Average	VERTICAL
2	5712.20	67.39	74.00	-6.61	59.27	6.83	34.42	33.13	291	322	Peak	VERTICAL
3	5767.80	96.20			88.01	6.88	34.46	33.15	291	322	Average	VERTICAL
4	5772.60	107.86			99.66	6.88	34.47	33.15	291	322	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	5699.80	48.02	54.00	-5.98	39.92	6.81	34.41	33.12	269	79	Average	VERTICAL
2	5709.40	60.46	74.00	-13.54	52.34	6.83	34.42	33.13	269	79	Peak	VERTICAL
3	5724.20	61.54	78.20	-16.66	53.41	6.83	34.43	33.13	269	79	Peak	VERTICAL
4	5809.80	110.23			101.98	6.92	34.49	33.16	269	79	Peak	VERTICAL
5	5810.20	98.75			90.50	6.92	34.49	33.16	269	79	Average	VERTICAL
6	5851.40	70.02	78.20	-8.18	61.73	6.95	34.51	33.17	269	79	Peak	VERTICAL
7	5860.00	52.98	54.00	-1.02	44.67	6.97	34.52	33.18	269	79	Average	VERTICAL
8	5861.80	68.45	74.00	-5.55	60.14	6.97	34.52	33.18	269	79	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
1	5114.00	64.77	74.00	-9.23	57.99	6.14	33.69	33.05	300	224	Peak	VERTICAL
2	5150.00	52.54	54.00	-1.46	45.64	6.21	33.74	33.05	300	224	Average	VERTICAL
3	5227.00	106.63			99.51	6.30	33.87	33.05	300	224	Peak	VERTICAL
4	5237.00	97.45			90.33	6.30	33.87	33.05	300	224	Average	VERTICAL
5	5353.00	61.82	74.00	-12.18	54.35	6.47	34.06	33.06	300	224	Peak	VERTICAL
6	5368.00	49.86	54.00	-4.14	42.36	6.47	34.09	33.06	300	224	Average	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
1	5708.00	67.06	68.20	-1.14	58.94	6.83	34.42	33.13	291	323	Peak	VERTICAL
2	5718.00	69.89	78.20	-8.31	61.76	6.83	34.43	33.13	291	323	Peak	VERTICAL
3	5768.00	94.81			86.62	6.88	34.46	33.15	291	323	Average	VERTICAL
4	5803.00	104.07			95.84	6.90	34.49	33.16	291	323	Peak	VERTICAL
5	5859.00	67.61	78.20	-10.59	59.30	6.97	34.52	33.18	291	323	Peak	VERTICAL
6	5863.00	66.67	68.20	-1.53	58.36	6.97	34.52	33.18	291	323	Peak	VERTICAL

Item 3, 4 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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBm			Loss	Factor	Factor	cm	deg		
MHz	dBm	dBm	dB	dBm	dBm	dB	dB/m	dB	cm	deg		
1	5101.60	47.54	54.00	-6.46	40.79	6.14	33.66	33.05	264	76	Average	VERTICAL
2	5101.60	59.46	74.00	-14.54	52.71	6.14	33.66	33.05	264	76	Peak	VERTICAL
3	5182.00	112.56			105.58	6.24	33.79	33.05	264	76	Peak	VERTICAL
4	5182.40	102.19			95.21	6.24	33.79	33.05	264	76	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBm			Loss	Factor	Factor	cm	deg		
MHz	dBm	dBm	dB	dBm	dBm	dB	dB/m	dB	cm	deg		
1	5113.60	58.55	74.00	-15.45	51.77	6.14	33.69	33.05	248	5	Peak	VERTICAL
2	5124.80	47.01	54.00	-6.99	40.18	6.17	33.71	33.05	248	5	Average	VERTICAL
3	5205.60	113.04			106.00	6.27	33.82	33.05	248	5	Peak	VERTICAL
4	5206.00	102.94			95.90	6.27	33.82	33.05	248	5	Average	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBm			Loss	Factor	Factor	cm	deg		
MHz	dBm	dBm	dB	dBm	dBm	dB	dB/m	dB	cm	deg		
1	5144.00	59.39	74.00	-14.61	52.49	6.21	33.74	33.05	280	261	Peak	VERTICAL
2	5150.00	45.89	54.00	-8.11	38.99	6.21	33.74	33.05	280	261	Average	VERTICAL
3	5242.40	105.06			97.91	6.30	33.90	33.05	280	261	Average	VERTICAL
4	5243.00	114.67			107.52	6.30	33.90	33.05	280	261	Peak	VERTICAL
5	5350.00	47.18	54.00	-6.82	39.71	6.47	34.06	33.06	280	261	Average	VERTICAL
6	5356.60	59.93	74.00	-14.07	52.46	6.47	34.06	33.06	280	261	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5699.00	62.08	68.20	-6.12	53.98	6.81	34.41	33.12	269	77	Peak	VERTICAL
2	5724.40	77.14	78.20	-1.06	69.01	6.83	34.43	33.13	269	77	Peak	VERTICAL
3	5738.60	103.54			95.38	6.86	34.44	33.14	269	77	Average	VERTICAL
4	5739.00	113.52			105.36	6.86	34.44	33.14	269	77	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5698.20	62.19	68.20	-6.01	54.09	6.81	34.41	33.12	287	73	Peak	VERTICAL
2	5723.40	59.81	78.20	-18.39	51.68	6.83	34.43	33.13	287	73	Peak	VERTICAL
3	5778.60	105.17			96.97	6.88	34.47	33.15	287	73	Average	VERTICAL
4	5779.00	115.43			107.23	6.88	34.47	33.15	287	73	Peak	VERTICAL
5	5852.80	61.55	78.20	-16.65	53.26	6.95	34.51	33.17	287	73	Peak	VERTICAL
6	5882.60	61.82	68.20	-6.38	53.50	6.97	34.53	33.18	287	73	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5817.40	106.20			97.95	6.92	34.49	33.16	282	257	Average	VERTICAL
2	5818.00	116.55			108.30	6.92	34.49	33.16	282	257	Peak	VERTICAL
3	5850.00	73.60	78.20	-4.60	65.31	6.95	34.51	33.17	282	257	Peak	VERTICAL
4	5860.00	52.89	54.00	-1.11	44.58	6.97	34.52	33.18	282	257	Average	VERTICAL
5	5860.00	66.42	74.00	-7.58	58.11	6.97	34.52	33.18	282	257	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m						
MHz														
1	5095.20	48.00	54.00	-6.00	41.25	6.14	33.66	33.05	276	260	Average		VERTICAL	
2	5145.60	61.74	74.00	-12.26	54.84	6.21	33.74	33.05	276	260	Peak		VERTICAL	
3	5180.80	101.56			94.58	6.24	33.79	33.05	276	260	Average		VERTICAL	
4	5186.00	111.92			104.94	6.24	33.79	33.05	276	260	Peak		VERTICAL	

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m						
MHz														
1	5125.20	46.78	54.00	-7.22	39.95	6.17	33.71	33.05	271	94	Average		VERTICAL	
2	5137.20	58.34	74.00	-15.66	51.51	6.17	33.71	33.05	271	94	Peak		VERTICAL	
3	5202.80	113.17			106.13	6.27	33.82	33.05	271	94	Peak		VERTICAL	
4	5206.00	102.89			95.85	6.27	33.82	33.05	271	94	Average		VERTICAL	

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m						
MHz														
1	5112.20	59.28	74.00	-14.72	52.50	6.14	33.69	33.05	290	269	Peak		VERTICAL	
2	5150.00	46.15	54.00	-7.85	39.25	6.21	33.74	33.05	290	269	Average		VERTICAL	
3	5235.80	103.90			96.78	6.30	33.87	33.05	290	269	Average		VERTICAL	
4	5242.40	114.41			107.26	6.30	33.90	33.05	290	269	Peak		VERTICAL	
5	5362.40	59.72	74.00	-14.28	52.22	6.47	34.09	33.06	290	269	Peak		VERTICAL	
6	5373.20	47.49	54.00	-6.51	39.99	6.47	34.09	33.06	290	269	Average		VERTICAL	

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			dB	dBuV	dB	dB/m	dB	cm	
1	5712.00	48.78	54.00	-5.22	40.66	6.83	34.42	33.13	297	77	Average	VERTICAL
2	5714.40	61.42	74.00	-12.58	53.30	6.83	34.42	33.13	297	77	Peak	VERTICAL
3	5722.40	76.87	78.20	-1.33	68.74	6.83	34.43	33.13	297	77	Peak	VERTICAL
4	5739.80	113.12			104.96	6.86	34.44	33.14	297	77	Peak	VERTICAL
5	5747.00	101.48			93.32	6.86	34.44	33.14	297	77	Average	VERTICAL

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

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			dB	dBuV	dB	dB/m	dB	cm	
1	5712.20	60.60	68.20	-7.60	52.48	6.83	34.42	33.13	250	77	Peak	VERTICAL
2	5723.00	60.93	78.20	-17.27	52.80	6.83	34.43	33.13	250	77	Peak	VERTICAL
3	5787.00	103.53			95.31	6.90	34.48	33.16	250	77	Average	VERTICAL
4	5787.00	113.61			105.39	6.90	34.48	33.16	250	77	Peak	VERTICAL
5	5856.00	61.90	78.20	-16.30	53.60	6.95	34.52	33.17	250	77	Peak	VERTICAL
6	5867.80	61.74	68.20	-6.46	53.43	6.97	34.52	33.18	250	77	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			dB	dBuV	dB	dB/m	dB	cm	
1	5831.80	115.89			107.63	6.92	34.50	33.16	274	77	Peak	VERTICAL
2	5832.00	104.67			96.41	6.92	34.50	33.16	274	77	Average	VERTICAL
3	5850.00	74.80	78.20	-3.40	66.51	6.95	34.51	33.17	274	77	Peak	VERTICAL
4	5860.40	66.59	74.00	-7.41	58.28	6.97	34.52	33.18	274	77	Peak	VERTICAL
5	5861.80	52.62	54.00	-1.38	44.31	6.97	34.52	33.18	274	77	Average	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5147.20	50.06	54.00	-3.94	43.16	6.21	33.74	33.05	250	75	Average	VERTICAL
2	5147.60	65.94	74.00	-8.06	59.04	6.21	33.74	33.05	250	75	Peak	VERTICAL
3	5202.00	109.59			102.55	6.27	33.82	33.05	250	75	Peak	VERTICAL
4	5202.40	100.12			93.08	6.27	33.82	33.05	250	75	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5144.00	59.33	74.00	-14.67	52.43	6.21	33.74	33.05	290	89	Peak	VERTICAL
2	5150.00	47.18	54.00	-6.82	40.28	6.21	33.74	33.05	290	89	Average	VERTICAL
3	5240.80	100.42			93.30	6.30	33.87	33.05	290	89	Average	VERTICAL
4	5245.60	109.84			102.69	6.30	33.90	33.05	290	89	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB			cm	deg		
MHz														
1	5710.20	66.68	68.20	-1.52	58.56	6.83	34.42	33.13	277	76	Peak		VERTICAL	
2	5716.60	69.77	78.20	-8.43	61.65	6.83	34.42	33.13	277	76	Peak		VERTICAL	
3	5742.20	97.65			89.49	6.86	34.44	33.14	277	76	Average		VERTICAL	
4	5747.00	108.13			99.97	6.86	34.44	33.14	277	76	Peak		VERTICAL	

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB			cm	deg		
MHz														
1	5707.40	60.46	74.00	-13.54	52.34	6.83	34.42	33.13	285	259	Peak		VERTICAL	
2	5711.00	48.55	54.00	-5.45	40.43	6.83	34.42	33.13	285	259	Average		VERTICAL	
3	5721.80	62.09	78.20	-16.11	53.96	6.83	34.43	33.13	285	259	Peak		VERTICAL	
4	5781.40	100.55			92.34	6.90	34.47	33.16	285	259	Average		VERTICAL	
5	5806.20	111.47			103.24	6.90	34.49	33.16	285	259	Peak		VERTICAL	
6	5851.20	66.91	78.20	-11.29	58.62	6.95	34.51	33.17	285	259	Peak		VERTICAL	
7	5861.40	52.90	54.00	-1.10	44.59	6.97	34.52	33.18	285	259	Average		VERTICAL	
8	5861.80	66.26	74.00	-7.74	57.95	6.97	34.52	33.18	285	259	Peak		VERTICAL	

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 11, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 42

Freq	Level	Limit		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						
1	5118.00	65.43	74.00	-8.57	58.65	6.14	33.69	33.05	250	88	Peak		VERTICAL	
2	5145.00	52.60	54.00	-1.40	45.70	6.21	33.74	33.05	250	88	Average		VERTICAL	
3	5236.00	96.77			89.65	6.30	33.87	33.05	250	88	Average		VERTICAL	
4	5241.00	106.03			98.91	6.30	33.87	33.05	250	88	Peak		VERTICAL	
5	5350.00	60.44	74.00	-13.56	52.97	6.47	34.06	33.06	250	88	Peak		VERTICAL	
6	5351.00	49.94	54.00	-4.06	42.47	6.47	34.06	33.06	250	88	Average		VERTICAL	

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

Channel 155

Freq	Level	Limit		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						
1	5687.00	65.21	68.20	-2.99	57.11	6.81	34.41	33.12	273	78	Peak		VERTICAL	
2	5720.00	67.44	78.20	-10.76	59.31	6.83	34.43	33.13	273	78	Peak		VERTICAL	
3	5747.00	94.72			86.56	6.86	34.44	33.14	273	78	Average		VERTICAL	
4	5749.00	103.77			95.61	6.86	34.44	33.14	273	78	Peak		VERTICAL	
5	5858.00	66.53	78.20	-11.67	58.22	6.97	34.52	33.18	273	78	Peak		VERTICAL	
6	5871.00	66.89	68.20	-1.31	58.57	6.97	34.53	33.18	273	78	Peak		VERTICAL	

Item 3, 4 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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1
Test Date	Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5149.40	68.16	74.00	-5.84	61.26	6.21	33.74	33.05	300	135	Peak	VERTICAL
2	5150.00	51.81	54.00	-2.19	44.91	6.21	33.74	33.05	300	135	Average	VERTICAL
3	5177.80	113.73			106.75	6.24	33.79	33.05	300	135	Peak	VERTICAL
4	5186.80	102.78			95.80	6.24	33.79	33.05	300	135	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5143.20	47.52	54.00	-6.48	40.66	6.17	33.74	33.05	300	131	Average	VERTICAL
2	5150.00	60.48	74.00	-13.52	53.58	6.21	33.74	33.05	300	131	Peak	VERTICAL
3	5198.00	113.69			106.65	6.27	33.82	33.05	300	131	Peak	VERTICAL
4	5201.20	102.34			95.30	6.27	33.82	33.05	300	131	Average	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5149.40	47.15	54.00	-6.85	40.25	6.21	33.74	33.05	299	130	Average	VERTICAL
2	5150.00	59.53	74.00	-14.47	52.63	6.21	33.74	33.05	299	130	Peak	VERTICAL
3	5232.80	102.27			95.15	6.30	33.87	33.05	299	130	Average	VERTICAL
4	5237.00	112.54			105.42	6.30	33.87	33.05	299	130	Peak	VERTICAL
5	5358.80	47.79	54.00	-6.21	40.32	6.47	34.06	33.06	299	130	Average	VERTICAL
6	5361.20	60.09	74.00	-13.91	52.59	6.47	34.09	33.06	299	130	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 1
Test Date	Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5713.00	67.50	74.00	-6.50	59.38	6.83	34.42	33.13	300	132	Peak	VERTICAL
2	5715.00	51.64	54.00	-2.36	43.52	6.83	34.42	33.13	300	132	Average	VERTICAL
3	5724.40	76.83	78.20	-1.37	68.70	6.83	34.43	33.13	300	132	Peak	VERTICAL
4	5738.00	102.03			93.87	6.86	34.44	33.14	300	132	Average	VERTICAL
5	5742.80	113.03			104.87	6.86	34.44	33.14	300	132	Peak	VERTICAL

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

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5702.20	50.00	54.00	-4.00	41.89	6.81	34.42	33.12	300	129	Average	VERTICAL
2	5703.40	64.50	74.00	-9.50	56.39	6.81	34.42	33.12	300	129	Peak	VERTICAL
3	5721.40	62.43	78.20	-15.77	54.30	6.83	34.43	33.13	300	129	Peak	VERTICAL
4	5778.20	103.92			95.72	6.88	34.47	33.15	300	129	Average	VERTICAL
5	5780.60	114.27			106.07	6.88	34.47	33.15	300	129	Peak	VERTICAL
6	5852.40	62.19	78.20	-16.01	53.90	6.95	34.51	33.17	300	129	Peak	VERTICAL
7	5863.80	50.38	54.00	-3.62	42.07	6.97	34.52	33.18	300	129	Average	VERTICAL
8	5868.20	62.65	74.00	-11.35	54.34	6.97	34.52	33.18	300	129	Peak	VERTICAL

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

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5822.20	102.51			94.25	6.92	34.50	33.16	299	134	Average	VERTICAL
2	5826.80	114.18			105.92	6.92	34.50	33.16	299	134	Peak	VERTICAL
3	5850.80	73.83	78.20	-4.37	65.54	6.95	34.51	33.17	299	134	Peak	VERTICAL
4	5860.80	52.48	54.00	-1.52	44.17	6.97	34.52	33.18	299	134	Average	VERTICAL
5	5861.40	69.70	74.00	-4.30	61.39	6.97	34.52	33.18	299	134	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1
Test Date	Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5145.40	66.18	74.00	-7.82	59.28	6.21	33.74	33.05	300	134	Peak	VERTICAL
2	5150.00	50.48	54.00	-3.52	43.58	6.21	33.74	33.05	300	134	Average	VERTICAL
3	5186.20	101.50			94.52	6.24	33.79	33.05	300	134	Average	VERTICAL
4	5186.20	112.32			105.34	6.24	33.79	33.05	300	134	Peak	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5113.20	59.91	74.00	-14.09	53.13	6.14	33.69	33.05	300	126	Peak	VERTICAL
2	5143.60	47.52	54.00	-6.48	40.66	6.17	33.74	33.05	300	126	Average	VERTICAL
3	5202.40	101.76			94.72	6.27	33.82	33.05	300	126	Average	VERTICAL
4	5202.40	112.52			105.48	6.27	33.82	33.05	300	126	Peak	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5144.60	59.72	74.00	-14.28	52.82	6.21	33.74	33.05	300	132	Peak	VERTICAL
2	5149.40	46.86	54.00	-7.14	39.96	6.21	33.74	33.05	300	132	Average	VERTICAL
3	5233.40	101.34			94.22	6.30	33.87	33.05	300	132	Average	VERTICAL
4	5234.60	111.02			103.90	6.30	33.87	33.05	300	132	Peak	VERTICAL
5	5350.00	47.59	54.00	-6.41	40.12	6.47	34.06	33.06	300	132	Average	VERTICAL
6	5354.20	59.34	74.00	-14.66	51.87	6.47	34.06	33.06	300	132	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1
Test Date	Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5713.60	65.67	68.20	-2.53	57.55	6.83	34.42	33.13	300	134	Peak	VERTICAL
2	5725.00	76.79	78.20	-1.41	68.66	6.83	34.43	33.13	300	134	Peak	VERTICAL
3	5737.40	100.51			92.35	6.86	34.44	33.14	300	134	Average	VERTICAL
4	5742.60	111.46			103.30	6.86	34.44	33.14	300	134	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5711.40	61.73	68.20	-6.47	53.61	6.83	34.42	33.13	300	135	Peak	VERTICAL
2	5723.00	61.20	78.20	-17.00	53.07	6.83	34.43	33.13	300	135	Peak	VERTICAL
3	5778.60	103.06			94.86	6.88	34.47	33.15	300	135	Average	VERTICAL
4	5782.20	113.86			105.65	6.90	34.47	33.16	300	135	Peak	VERTICAL
5	5852.00	62.27	78.20	-15.93	53.98	6.95	34.51	33.17	300	135	Peak	VERTICAL
6	5864.60	62.97	68.20	-5.23	54.66	6.97	34.52	33.18	300	135	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5818.80	101.49			93.24	6.92	34.49	33.16	300	135	Average	VERTICAL
2	5819.40	112.69			104.44	6.92	34.49	33.16	300	135	Peak	VERTICAL
3	5850.00	73.47	78.20	-4.73	65.18	6.95	34.51	33.17	300	135	Peak	VERTICAL
4	5860.00	52.67	54.00	-1.33	44.36	6.97	34.52	33.18	300	135	Average	VERTICAL
5	5861.20	70.65	74.00	-3.35	62.34	6.97	34.52	33.18	300	135	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1
Test Date	Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5148.00	66.67	74.00	-7.33	59.77	6.21	33.74	33.05	300	131	Peak	VERTICAL
2	5150.00	52.99	54.00	-1.01	46.09	6.21	33.74	33.05	300	131	Average	VERTICAL
3	5198.40	107.25			100.21	6.27	33.82	33.05	300	131	Peak	VERTICAL
4	5202.80	97.30			90.26	6.27	33.82	33.05	300	131	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5144.80	59.94	74.00	-14.06	53.04	6.21	33.74	33.05	300	131	Peak	VERTICAL
2	5148.40	48.58	54.00	-5.42	41.68	6.21	33.74	33.05	300	131	Average	VERTICAL
3	5225.20	109.62			102.50	6.30	33.87	33.05	300	131	Peak	VERTICAL
4	5234.00	99.40			92.28	6.30	33.87	33.05	300	131	Average	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1
Test Date	Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5713.80	68.21	74.00	-5.79	60.09	6.83	34.42	33.13	300	134	Peak	VERTICAL
2	5715.00	52.80	54.00	-1.20	44.68	6.83	34.42	33.13	300	134	Average	VERTICAL
3	5723.00	66.98	78.20	-11.22	58.85	6.83	34.43	33.13	300	134	Peak	VERTICAL
4	5769.40	106.41			98.21	6.88	34.47	33.15	300	134	Peak	VERTICAL
5	5770.20	97.14			88.94	6.88	34.47	33.15	300	134	Average	VERTICAL

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

Channel 159

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5713.40	61.65	74.00	-12.35	53.53	6.83	34.42	33.13	300	130	Peak	VERTICAL
2	5715.00	49.36	54.00	-4.64	41.24	6.83	34.42	33.13	300	130	Average	VERTICAL
3	5724.60	62.40	78.20	-15.80	54.27	6.83	34.43	33.13	300	130	Peak	VERTICAL
4	5779.80	98.62			90.42	6.88	34.47	33.15	300	130	Average	VERTICAL
5	5786.60	108.32			100.10	6.90	34.48	33.16	300	130	Peak	VERTICAL
6	5851.20	66.53	78.20	-11.67	58.24	6.95	34.51	33.17	300	130	Peak	VERTICAL
7	5860.60	52.97	54.00	-1.03	44.66	6.97	34.52	33.18	300	130	Average	VERTICAL
8	5868.60	69.13	74.00	-4.87	60.82	6.97	34.52	33.18	300	130	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1
Test Date	Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi / 1TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	5145.00	52.56	54.00	-1.44	45.66	6.21	33.74	33.05	300	133	Average	VERTICAL
2	5150.00	64.08	74.00	-9.92	57.18	6.21	33.74	33.05	300	133	Peak	VERTICAL
3	5201.00	94.65			87.61	6.27	33.82	33.05	300	133	Average	VERTICAL
4	5232.00	104.15			97.03	6.30	33.87	33.05	300	133	Peak	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	5713.00	66.97	68.20	-1.23	58.85	6.83	34.42	33.13	300	130	Peak	VERTICAL
2	5722.00	68.04	78.20	-10.16	59.91	6.83	34.43	33.13	300	130	Peak	VERTICAL
3	5777.00	104.34			96.14	6.88	34.47	33.15	300	130	Peak	VERTICAL
4	5780.00	94.67			86.47	6.88	34.47	33.15	300	130	Average	VERTICAL
5	5850.00	65.43	78.20	-12.77	57.14	6.95	34.51	33.17	300	133	Peak	VERTICAL
6	5862.00	64.38	68.20	-3.82	56.07	6.97	34.52	33.18	300	133	Peak	VERTICAL

Item 3, 4 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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5149.86	65.20	74.00	-8.80	58.30	6.21	33.74	33.05	300	108	Peak	VERTICAL
2	5150.00	50.71	54.00	-3.29	43.81	6.21	33.74	33.05	300	108	Average	VERTICAL
3	5176.09	115.87			108.89	6.24	33.79	33.05	300	108	Peak	VERTICAL
4	5181.01	105.24			98.26	6.24	33.79	33.05	300	108	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5122.21	62.39	74.00	-11.61	55.58	6.17	33.69	33.05	298	113	Peak	VERTICAL
2	5126.85	49.03	54.00	-4.97	42.20	6.17	33.71	33.05	298	113	Average	VERTICAL
3	5206.37	105.09			98.05	6.27	33.82	33.05	298	113	Average	VERTICAL
4	5206.66	115.03			107.99	6.27	33.82	33.05	298	113	Peak	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5147.40	60.75	74.00	-13.25	53.85	6.21	33.74	33.05	300	112	Peak	VERTICAL
2	5150.00	47.95	54.00	-6.05	41.05	6.21	33.74	33.05	300	112	Average	VERTICAL
3	5236.53	105.47			98.35	6.30	33.87	33.05	300	112	Average	VERTICAL
4	5236.53	115.35			108.23	6.30	33.87	33.05	300	112	Peak	VERTICAL
5	5350.00	47.36	54.00	-6.64	39.89	6.47	34.06	33.06	300	112	Average	VERTICAL
6	5351.74	60.40	74.00	-13.60	52.93	6.47	34.06	33.06	300	112	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	dB	
1	5712.40	65.90	74.00	-8.10	57.78	6.83	34.42	33.13	300	53	Peak	VERTICAL
2	5712.68	52.30	54.00	-1.70	44.18	6.83	34.42	33.13	300	53	Average	VERTICAL
3	5722.40	76.69	78.20	-1.51	68.56	6.83	34.43	33.13	300	53	Peak	VERTICAL
4	5742.25	116.10			107.94	6.86	34.44	33.14	300	53	Peak	VERTICAL
5	5742.40	104.35			96.19	6.86	34.44	33.14	300	53	Average	VERTICAL

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

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	dB	
1	5697.92	64.47	68.20	-3.73	56.37	6.81	34.41	33.12	300	132	Peak	VERTICAL
2	5720.95	63.75	78.20	-14.45	55.62	6.83	34.43	33.13	300	132	Peak	VERTICAL
3	5778.34	106.72			98.52	6.88	34.47	33.15	300	132	Average	VERTICAL
4	5782.97	116.92			108.71	6.90	34.47	33.16	300	132	Peak	VERTICAL
5	5851.45	63.14	78.20	-15.06	54.85	6.95	34.51	33.17	300	132	Peak	VERTICAL
6	5866.08	65.01	68.20	-3.19	56.70	6.97	34.52	33.18	300	132	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	dB	
1	5822.25	105.82			97.56	6.92	34.50	33.16	296	49	Average	VERTICAL
2	5822.40	117.70			109.44	6.92	34.50	33.16	296	49	Peak	VERTICAL
3	5850.00	76.62	78.20	-1.58	68.33	6.95	34.51	33.17	296	49	Peak	VERTICAL
4	5860.00	69.28	74.00	-4.72	60.97	6.97	34.52	33.18	296	49	Peak	VERTICAL
5	5862.46	52.89	54.00	-1.11	44.58	6.97	34.52	33.18	296	49	Average	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5147.97	67.95	74.00	-6.05	61.05	6.21	33.74	33.05	300	110	Peak	VERTICAL
2	5148.84	51.79	54.00	-2.21	44.89	6.21	33.74	33.05	300	110	Average	VERTICAL
3	5172.91	105.06			98.10	6.24	33.77	33.05	300	110	Average	VERTICAL
4	5180.58	116.07			109.09	6.24	33.79	33.05	300	110	Peak	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5128.00	49.14	54.00	-4.86	42.31	6.17	33.71	33.05	300	109	Average	VERTICAL
2	5144.21	61.89	74.00	-12.11	54.99	6.21	33.74	33.05	300	109	Peak	VERTICAL
3	5202.89	114.88			107.84	6.27	33.82	33.05	300	109	Peak	VERTICAL
4	5208.10	103.82			96.75	6.27	33.85	33.05	300	109	Average	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5147.40	61.24	74.00	-12.76	54.34	6.21	33.74	33.05	300	105	Peak	VERTICAL
2	5150.00	47.90	54.00	-6.10	41.00	6.21	33.74	33.05	300	105	Average	VERTICAL
3	5232.62	104.58			97.46	6.30	33.87	33.05	300	105	Average	VERTICAL
4	5233.49	115.63			108.51	6.30	33.87	33.05	300	105	Peak	VERTICAL
5	5350.43	47.30	54.00	-6.70	39.83	6.47	34.06	33.06	300	105	Average	VERTICAL
6	5354.34	60.16	74.00	-13.84	52.69	6.47	34.06	33.06	300	105	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 13, 2015 ~ Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 149

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5713.84	52.08	54.00	-1.92	43.96	6.83	34.42	33.13	300	53	Average	VERTICAL
2	5713.84	65.48	74.00	-8.52	57.36	6.83	34.42	33.13	300	53	Peak	VERTICAL
3	5723.55	77.11	78.20	-1.09	68.98	6.83	34.43	33.13	300	53	Peak	VERTICAL
4	5738.63	113.65			105.49	6.86	34.44	33.14	300	53	Peak	VERTICAL
5	5743.70	102.60			94.44	6.86	34.44	33.14	300	53	Average	VERTICAL

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

Channel 157

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5704.58	63.99	68.20	-4.21	55.88	6.81	34.42	33.12	300	131	Peak	VERTICAL
2	5722.68	62.79	78.20	-15.41	54.66	6.83	34.43	33.13	300	131	Peak	VERTICAL
3	5779.21	105.74			97.54	6.88	34.47	33.15	300	131	Average	VERTICAL
4	5787.03	116.25			108.03	6.90	34.48	33.16	300	131	Peak	VERTICAL
5	5853.18	63.87	78.20	-14.33	55.58	6.95	34.51	33.17	300	131	Peak	VERTICAL
6	5873.31	65.30	68.20	-2.90	56.98	6.97	34.53	33.18	300	131	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5819.07	104.43			96.18	6.92	34.49	33.16	300	130	Average	VERTICAL
2	5821.24	114.79			106.53	6.92	34.50	33.16	300	130	Peak	VERTICAL
3	5850.00	74.85	78.20	-3.35	66.56	6.95	34.51	33.17	300	130	Peak	VERTICAL
4	5860.00	52.89	54.00	-1.11	44.58	6.97	34.52	33.18	300	130	Average	VERTICAL
5	5860.14	70.63	74.00	-3.37	62.32	6.97	34.52	33.18	300	130	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5150.00	52.89	54.00	-1.11	45.99	6.21	33.74	33.05	300	112	Average	VERTICAL
2	5150.00	65.83	74.00	-8.17	58.93	6.21	33.74	33.05	300	112	Peak	VERTICAL
3	5175.53	109.71			102.73	6.24	33.79	33.05	300	112	Peak	VERTICAL
4	5175.82	98.29			91.31	6.24	33.79	33.05	300	112	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5147.68	63.43	74.00	-10.57	56.53	6.21	33.74	33.05	300	110	Peak	VERTICAL
2	5150.00	49.97	54.00	-4.03	43.07	6.21	33.74	33.05	300	110	Average	VERTICAL
3	5215.53	103.17			96.10	6.27	33.85	33.05	300	110	Average	VERTICAL
4	5233.18	113.31			106.19	6.30	33.87	33.05	300	110	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	5712.68	66.87	68.20	-1.33	58.75	6.83	34.42	33.13	300	51	Peak	VERTICAL
2	5723.26	69.71	78.20	-8.49	61.58	6.83	34.43	33.13	300	51	Peak	VERTICAL
3	5741.11	98.47			90.31	6.86	34.44	33.14	300	51	Average	VERTICAL
4	5741.40	108.30			100.14	6.86	34.44	33.14	300	51	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg		
1	5713.84	50.30	54.00	-3.70	42.18	6.83	34.42	33.13	299	48	Average	VERTICAL
2	5713.84	62.48	74.00	-11.52	54.36	6.83	34.42	33.13	299	48	Peak	VERTICAL
3	5723.26	63.86	78.20	-14.34	55.73	6.83	34.43	33.13	299	48	Peak	VERTICAL
4	5787.47	110.92			102.70	6.90	34.48	33.16	299	48	Peak	VERTICAL
5	5788.34	101.17			92.95	6.90	34.48	33.16	299	48	Average	VERTICAL
6	5851.74	66.67	78.20	-11.53	58.38	6.95	34.51	33.17	299	48	Peak	VERTICAL
7	5860.87	52.58	54.00	-1.42	44.27	6.97	34.52	33.18	299	48	Average	VERTICAL
8	5862.60	67.48	74.00	-6.52	59.17	6.97	34.52	33.18	299	48	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2
Test Date	Oct. 13, 2015 ~ Oct. 14, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5147.83	64.36	74.00	-9.64	57.46	6.21	33.74	33.05	300	106	Peak	VERTICAL
2	5150.00	52.74	54.00	-1.26	45.84	6.21	33.74	33.05	300	106	Average	VERTICAL
3	5180.33	96.18			89.20	6.24	33.79	33.05	300	106	Average	VERTICAL
4	5182.50	106.38			99.40	6.24	33.79	33.05	300	106	Peak	VERTICAL
5	5351.45	48.51	54.00	-5.49	41.04	6.47	34.06	33.06	300	106	Average	VERTICAL
6	5375.33	59.77	74.00	-14.23	52.24	6.50	34.09	33.06	300	106	Peak	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5691.12	67.03	68.20	-1.17	58.93	6.81	34.41	33.12	300	54	Peak	VERTICAL
2	5718.49	68.62	78.20	-9.58	60.49	6.83	34.43	33.13	300	54	Peak	VERTICAL
3	5743.16	94.71			86.55	6.86	34.44	33.14	300	54	Average	VERTICAL
4	5743.89	104.41			96.25	6.86	34.44	33.14	300	54	Peak	VERTICAL
5	5852.89	63.14	78.20	-15.06	54.85	6.95	34.51	33.17	300	54	Peak	VERTICAL
6	5862.17	63.19	68.20	-5.01	54.88	6.97	34.52	33.18	300	54	Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	5142.80	65.43	74.00	-8.57	58.57	6.17	33.74	33.05	299	113	Peak	VERTICAL
2	5150.00	52.44	54.00	-1.56	45.54	6.21	33.74	33.05	299	113	Average	VERTICAL
3	5172.80	107.16			100.20	6.24	33.77	33.05	299	113	Average	VERTICAL
4	5182.00	116.37			109.39	6.24	33.79	33.05	299	113	Peak	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	5116.00	62.23	74.00	-11.77	55.45	6.14	33.69	33.05	300	130	Peak	VERTICAL
2	5126.40	50.52	54.00	-3.48	43.69	6.17	33.71	33.05	300	130	Average	VERTICAL
3	5196.40	107.64			100.60	6.27	33.82	33.05	300	130	Average	VERTICAL
4	5196.40	117.01			109.97	6.27	33.82	33.05	300	130	Peak	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	5099.60	58.46	74.00	-15.54	51.71	6.14	33.66	33.05	298	214	Peak	HORIZONTAL
2	5109.20	46.45	54.00	-7.55	39.67	6.14	33.69	33.05	298	214	Average	HORIZONTAL
3	5237.60	93.63			86.51	6.30	33.87	33.05	298	214	Average	HORIZONTAL
4	5237.60	103.39			96.27	6.30	33.87	33.05	298	214	Peak	HORIZONTAL
5	5372.60	48.14	54.00	-5.86	40.64	6.47	34.09	33.06	298	214	Average	HORIZONTAL
6	5379.80	60.86	74.00	-13.14	53.31	6.50	34.11	33.06	298	214	Peak	HORIZONTAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB	cm	deg		
1	5712.00	66.09	68.20	-2.11	57.97	6.83	34.42	33.13	300	52	Peak	VERTICAL
2	5724.60	76.89	78.20	-1.31	68.76	6.83	34.43	33.13	300	52	Peak	VERTICAL
3	5741.20	106.40			98.24	6.86	34.44	33.14	300	52	Average	VERTICAL
4	5741.20	116.79			108.63	6.86	34.44	33.14	300	52	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB	cm	deg		
1	5701.00	64.79	68.20	-3.41	56.68	6.81	34.42	33.12	300	52	Peak	VERTICAL
2	5724.20	63.54	78.20	-14.66	55.41	6.83	34.43	33.13	300	52	Peak	VERTICAL
3	5780.60	107.94			99.74	6.88	34.47	33.15	300	52	Average	VERTICAL
4	5780.60	118.23			110.03	6.88	34.47	33.15	300	52	Peak	VERTICAL
5	5852.00	62.37	78.20	-15.83	54.08	6.95	34.51	33.17	300	52	Peak	VERTICAL
6	5862.60	62.98	68.20	-5.22	54.67	6.97	34.52	33.18	300	52	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB	cm	deg		
1	5820.80	118.04			109.78	6.92	34.50	33.16	300	56	Peak	VERTICAL
2	5821.09	106.90			98.64	6.92	34.50	33.16	300	56	Average	VERTICAL
3	5850.72	74.62	78.20	-3.58	66.33	6.95	34.51	33.17	300	56	Peak	VERTICAL
4	5860.58	68.34	74.00	-5.66	60.03	6.97	34.52	33.18	300	56	Peak	VERTICAL
5	5861.01	52.64	54.00	-1.36	44.33	6.97	34.52	33.18	300	56	Average	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz				dB	dBuV	dB	dB/m	dB	cm	deg		
1	5148.00	68.34	74.00	-5.66	61.44	6.21	33.74	33.05	288	224	Peak	VERTICAL
2	5148.20	52.68	54.00	-1.32	45.78	6.21	33.74	33.05	288	224	Average	VERTICAL
3	5173.20	116.27			109.31	6.24	33.77	33.05	288	224	Peak	VERTICAL
4	5173.40	105.55			98.59	6.24	33.77	33.05	288	224	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz				dB	dBuV	dB	dB/m	dB	cm	deg		
1	5112.40	61.02	74.00	-12.98	54.24	6.14	33.69	33.05	299	88	Peak	VERTICAL
2	5127.20	49.34	54.00	-4.66	42.51	6.17	33.71	33.05	299	88	Average	VERTICAL
3	5202.40	106.99			99.95	6.27	33.82	33.05	299	88	Average	VERTICAL
4	5202.40	116.43			109.39	6.27	33.82	33.05	299	88	Peak	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
MHz				dB	dBuV	dB	dB/m	dB	cm	deg		
1	5113.40	59.83	74.00	-14.17	53.05	6.14	33.69	33.05	298	88	Peak	VERTICAL
2	5148.80	47.68	54.00	-6.32	40.78	6.21	33.74	33.05	298	88	Average	VERTICAL
3	5232.20	106.95			99.83	6.30	33.87	33.05	298	88	Average	VERTICAL
4	5232.20	115.86			108.74	6.30	33.87	33.05	298	88	Peak	VERTICAL
5	5363.00	48.69	54.00	-5.31	41.19	6.47	34.09	33.06	298	88	Average	VERTICAL
6	5369.00	60.59	74.00	-13.41	53.09	6.47	34.09	33.06	298	88	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
1	5711.38	52.42	54.00	-1.58	44.30	6.83	34.42	33.13	300	52	Average	VERTICAL
2	5711.96	68.35	74.00	-5.65	60.23	6.83	34.42	33.13	300	52	Peak	VERTICAL
3	5721.53	76.97	78.20	-1.23	68.84	6.83	34.43	33.13	300	52	Peak	VERTICAL
4	5741.24	116.12			107.96	6.86	34.44	33.14	300	52	Peak	VERTICAL
5	5741.38	105.52			97.36	6.86	34.44	33.14	300	52	Average	VERTICAL

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

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
1	5706.32	65.46	68.20	-2.74	57.34	6.83	34.42	33.13	300	56	Peak	VERTICAL
2	5721.82	63.94	78.20	-14.26	55.81	6.83	34.43	33.13	300	56	Peak	VERTICAL
3	5780.37	118.80			110.60	6.88	34.47	33.15	300	56	Peak	VERTICAL
4	5781.53	108.30			100.09	6.90	34.47	33.16	300	56	Average	VERTICAL
5	5851.16	63.97	78.20	-14.23	55.68	6.95	34.51	33.17	300	56	Peak	VERTICAL
6	5861.45	64.04	68.20	-4.16	55.73	6.97	34.52	33.18	300	56	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
1	5821.24	106.39			98.13	6.92	34.50	33.16	300	49	Average	VERTICAL
2	5826.30	116.95			108.69	6.92	34.50	33.16	300	49	Peak	VERTICAL
3	5850.58	74.91	78.20	-3.29	66.62	6.95	34.51	33.17	300	49	Peak	VERTICAL
4	5860.87	52.84	54.00	-1.16	44.53	6.97	34.52	33.18	300	49	Average	VERTICAL
5	5861.74	69.73	74.00	-4.27	61.42	6.97	34.52	33.18	300	49	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm	deg	
MHz	dBuV/m	dBuV/m	dB									
1	5148.40	66.42	74.00	-7.58	59.52	6.21	33.74	33.05	298	217	Peak	VERTICAL
2	5148.80	52.48	54.00	-1.52	45.58	6.21	33.74	33.05	298	217	Average	VERTICAL
3	5198.80	110.92			103.88	6.27	33.82	33.05	298	217	Peak	VERTICAL
4	5204.00	99.99			92.95	6.27	33.82	33.05	298	217	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm	deg	
MHz	dBuV/m	dBuV/m	dB									
1	5148.40	50.38	54.00	-3.62	43.48	6.21	33.74	33.05	300	215	Average	VERTICAL
2	5149.20	63.17	74.00	-10.83	56.27	6.21	33.74	33.05	300	215	Peak	VERTICAL
3	5244.00	104.44			97.29	6.30	33.90	33.05	300	215	Average	VERTICAL
4	5244.00	114.36			107.21	6.30	33.90	33.05	300	215	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBm			Loss	Factor	Factor	cm	deg		
1	5710.37	67.00	68.20	-1.20	58.88	6.83	34.42	33.13	300	46 Peak	VERTICAL	
2	5721.24	68.70	78.20	-9.50	60.57	6.83	34.43	33.13	300	46 Peak	VERTICAL	
3	5741.11	99.25			91.09	6.86	34.44	33.14	300	46 Average	VERTICAL	
4	5741.40	110.89			102.73	6.86	34.44	33.14	300	46 Peak	VERTICAL	

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBm			Loss	Factor	Factor	cm	deg		
1	5705.45	64.46	74.00	-9.54	56.34	6.83	34.42	33.13	300	56 Peak	VERTICAL	
2	5710.95	50.75	54.00	-3.25	42.63	6.83	34.42	33.13	300	56 Average	VERTICAL	
3	5723.84	64.03	78.20	-14.17	55.90	6.83	34.43	33.13	300	56 Peak	VERTICAL	
4	5781.40	102.45			94.24	6.90	34.47	33.16	300	56 Average	VERTICAL	
5	5781.40	113.73			105.52	6.90	34.47	33.16	300	56 Peak	VERTICAL	
6	5851.45	68.26	78.20	-9.94	59.97	6.95	34.51	33.17	300	56 Peak	VERTICAL	
7	5861.45	52.68	54.00	-1.32	44.37	6.97	34.52	33.18	300	56 Average	VERTICAL	
8	5861.45	67.99	74.00	-6.01	59.68	6.97	34.52	33.18	300	56 Peak	VERTICAL	

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5148.00	52.42	54.00	-1.58	45.52	6.21	33.74	33.05	300	211	Average	VERTICAL
2	5149.00	63.34	74.00	-10.66	56.44	6.21	33.74	33.05	300	211	Peak	VERTICAL
3	5199.00	107.80			100.76	6.27	33.82	33.05	300	211	Peak	VERTICAL
4	5240.00	97.56			90.44	6.30	33.87	33.05	300	211	Average	VERTICAL
5	5350.00	50.16	54.00	-3.84	42.69	6.47	34.06	33.06	300	211	Average	VERTICAL
6	5350.00	61.69	74.00	-12.31	54.22	6.47	34.06	33.06	300	211	Peak	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5706.32	66.90	68.20	-1.30	58.78	6.83	34.42	33.13	266	53	Peak	VERTICAL
2	5716.32	67.63	78.20	-10.57	59.51	6.83	34.42	33.13	266	53	Peak	VERTICAL
3	5740.99	96.48			88.32	6.86	34.44	33.14	266	53	Average	VERTICAL
4	5781.51	106.05			97.84	6.90	34.47	33.16	266	53	Peak	VERTICAL
5	5852.17	63.19	78.20	-15.01	54.90	6.95	34.51	33.17	266	53	Peak	VERTICAL
6	5862.17	62.62	68.20	-5.58	54.31	6.97	34.52	33.18	266	53	Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5098.00	63.35	74.00	-10.65	56.60	6.14	33.66	33.05	300	334	Peak	VERTICAL
2	5098.80	51.86	54.00	-2.14	45.11	6.14	33.66	33.05	300	334	Average	VERTICAL
3	5178.80	108.65			101.67	6.24	33.79	33.05	300	334	Average	VERTICAL
4	5178.80	117.97			110.99	6.24	33.79	33.05	300	334	Peak	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5113.20	51.23	54.00	-2.77	44.45	6.14	33.69	33.05	300	47	Average	VERTICAL
2	5113.60	64.10	74.00	-9.90	57.32	6.14	33.69	33.05	300	47	Peak	VERTICAL
3	5193.20	106.78			99.77	6.24	33.82	33.05	300	47	Average	VERTICAL
4	5194.00	117.05			110.04	6.24	33.82	33.05	300	47	Peak	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5148.80	59.55	74.00	-14.45	52.65	6.21	33.74	33.05	300	330	Peak	VERTICAL
2	5149.40	47.49	54.00	-6.51	40.59	6.21	33.74	33.05	300	330	Average	VERTICAL
3	5238.20	107.90			100.78	6.30	33.87	33.05	300	330	Average	VERTICAL
4	5238.20	117.16			110.04	6.30	33.87	33.05	300	330	Peak	VERTICAL
5	5358.20	48.43	54.00	-5.57	40.96	6.47	34.06	33.06	300	330	Average	VERTICAL
6	5359.40	60.40	74.00	-13.60	52.93	6.47	34.06	33.06	300	330	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	5706.40	63.80	68.20	-4.40	55.68	6.83	34.42	33.13	297	157	Peak	VERTICAL
2	5724.20	77.12	78.20	-1.08	68.99	6.83	34.43	33.13	297	157	Peak	VERTICAL
3	5743.80	106.29			98.13	6.86	34.44	33.14	297	157	Average	VERTICAL
4	5743.80	115.96			107.80	6.86	34.44	33.14	297	157	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	5710.60	64.95	68.20	-3.25	56.83	6.83	34.42	33.13	297	304	Peak	VERTICAL
2	5724.20	63.35	78.20	-14.85	55.22	6.83	34.43	33.13	297	304	Peak	VERTICAL
3	5790.60	110.07			101.85	6.90	34.48	33.16	297	304	Average	VERTICAL
4	5790.60	119.31			111.09	6.90	34.48	33.16	297	304	Peak	VERTICAL
5	5852.80	62.84	78.20	-15.36	54.55	6.95	34.51	33.17	297	304	Peak	VERTICAL
6	5872.60	63.52	68.20	-4.68	55.20	6.97	34.53	33.18	297	304	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	5830.60	109.43			101.17	6.92	34.50	33.16	298	305	Average	VERTICAL
2	5831.20	119.01			110.75	6.92	34.50	33.16	298	305	Peak	VERTICAL
3	5850.40	72.47	78.20	-5.73	64.18	6.95	34.51	33.17	298	305	Peak	VERTICAL
4	5868.80	66.70	68.20	-1.50	58.39	6.97	34.52	33.18	298	305	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5150.00	51.52	54.00	-2.48	44.62	6.21	33.74	33.05	300	339	Average	VERTICAL
2	5150.00	64.44	74.00	-9.56	57.54	6.21	33.74	33.05	300	339	Peak	VERTICAL
3	5174.80	106.74			99.76	6.24	33.79	33.05	300	339	Average	VERTICAL
4	5175.20	116.36			109.38	6.24	33.79	33.05	300	339	Peak	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5113.60	60.35	74.00	-13.65	53.57	6.14	33.69	33.05	300	204	Peak	VERTICAL
2	5124.80	48.77	54.00	-5.23	41.94	6.17	33.71	33.05	300	204	Average	VERTICAL
3	5198.40	104.35			97.31	6.27	33.82	33.05	300	204	Average	VERTICAL
4	5198.80	113.54			106.50	6.27	33.82	33.05	300	204	Peak	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
1	5108.00	59.92	74.00	-14.08	53.14	6.14	33.69	33.05	299	301	Peak	VERTICAL
2	5144.00	46.72	54.00	-7.28	39.82	6.21	33.74	33.05	299	301	Average	VERTICAL
3	5232.80	104.88			97.76	6.30	33.87	33.05	299	301	Average	VERTICAL
4	5233.40	114.47			107.35	6.30	33.87	33.05	299	301	Peak	VERTICAL
5	5351.00	48.20	54.00	-5.80	40.73	6.47	34.06	33.06	299	301	Average	VERTICAL
6	5366.60	60.01	74.00	-13.99	52.51	6.47	34.09	33.06	299	301	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
1	5711.00	64.51	68.20	-3.69	56.39	6.83	34.42	33.13	299	56 Peak	VERTICAL	
2	5724.20	76.62	78.20	-1.58	68.49	6.83	34.43	33.13	299	56 Peak	VERTICAL	
3	5741.00	105.89			97.73	6.86	34.44	33.14	299	56 Average	VERTICAL	
4	5741.00	115.83			107.67	6.86	34.44	33.14	299	56 Peak	VERTICAL	

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
1	5697.40	64.85	68.20	-3.35	56.75	6.81	34.41	33.12	300	173 Peak	VERTICAL	
2	5723.80	62.57	78.20	-15.63	54.44	6.83	34.43	33.13	300	173 Peak	VERTICAL	
3	5787.40	108.88			100.66	6.90	34.48	33.16	300	173 Average	VERTICAL	
4	5787.80	119.03			110.81	6.90	34.48	33.16	300	173 Peak	VERTICAL	
5	5850.40	62.21	78.20	-15.99	53.92	6.95	34.51	33.17	300	173 Peak	VERTICAL	
6	5873.00	63.36	68.20	-4.84	55.04	6.97	34.53	33.18	300	173 Peak	VERTICAL	

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
1	5830.80	117.51			109.25	6.92	34.50	33.16	300	302 Peak	VERTICAL	
2	5833.20	107.02			98.74	6.95	34.50	33.17	300	302 Average	VERTICAL	
3	5850.40	72.97	78.20	-5.23	64.68	6.95	34.51	33.17	300	302 Peak	VERTICAL	
4	5863.00	67.05	68.20	-1.15	58.74	6.97	34.52	33.18	300	302 Peak	VERTICAL	

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	dB	
1	5148.00	66.61	74.00	-7.39	59.71	6.21	33.74	33.05	280	203	Peak	VERTICAL
2	5150.00	52.97	54.00	-1.03	46.07	6.21	33.74	33.05	280	203	Average	VERTICAL
3	5198.00	110.38			103.34	6.27	33.82	33.05	280	203	Peak	VERTICAL
4	5204.00	100.65			93.61	6.27	33.82	33.05	280	203	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	dB	
1	5145.60	59.76	74.00	-14.24	52.86	6.21	33.74	33.05	275	56	Peak	VERTICAL
2	5150.00	47.46	54.00	-6.54	40.56	6.21	33.74	33.05	275	56	Average	VERTICAL
3	5240.40	101.63			94.51	6.30	33.87	33.05	275	56	Average	VERTICAL
4	5240.40	110.98			103.86	6.30	33.87	33.05	275	56	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 151

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5712.20	67.07	68.20	-1.13	58.95	6.83	34.42	33.13	296	59 Peak	VERTICAL
2	5716.20	69.58	78.20	-8.62	61.46	6.83	34.42	33.13	296	59 Peak	VERTICAL
3	5741.00	100.49			92.33	6.86	34.44	33.14	296	59 Average	VERTICAL
4	5741.40	110.34			102.18	6.86	34.44	33.14	296	59 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5620.00	63.66	68.20	-4.54	55.65	6.74	34.37	33.10	300	0 Peak	VERTICAL
2	5718.00	64.44	78.20	-13.76	56.31	6.83	34.43	33.13	300	0 Peak	VERTICAL
3	5778.00	113.06			104.86	6.88	34.47	33.15	300	0 Peak	VERTICAL
4	5808.00	102.72			94.47	6.92	34.49	33.16	300	0 Average	VERTICAL
5	5858.00	65.85	78.20	-12.35	57.54	6.97	34.52	33.18	300	0 Peak	VERTICAL
6	5862.00	67.01	68.20	-1.19	58.70	6.97	34.52	33.18	300	0 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 13, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	dB	
1	5145.00	63.33	74.00	-10.67	56.43	6.21	33.74	33.05	298	205	Peak	VERTICAL
2	5146.00	52.43	54.00	-1.57	45.53	6.21	33.74	33.05	298	205	Average	VERTICAL
3	5198.00	107.13			100.09	6.27	33.82	33.05	298	205	Peak	VERTICAL
4	5244.00	97.61			90.46	6.30	33.90	33.05	298	205	Average	VERTICAL
5	5351.00	51.08	54.00	-2.92	43.61	6.47	34.06	33.06	298	205	Average	VERTICAL
6	5354.00	61.05	74.00	-12.95	53.58	6.47	34.06	33.06	298	205	Peak	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	dB	
1	5693.00	67.19	68.20	-1.01	59.09	6.81	34.41	33.12	299	310	Peak	VERTICAL
2	5718.00	67.68	78.20	-10.52	59.55	6.83	34.43	33.13	299	310	Peak	VERTICAL
3	5800.00	106.63			98.41	6.90	34.48	33.16	299	310	Peak	VERTICAL
4	5803.00	96.90			88.67	6.90	34.49	33.16	299	310	Average	VERTICAL
5	5855.00	62.05	78.20	-16.15	53.75	6.95	34.52	33.17	299	310	Peak	VERTICAL
6	5873.00	63.42	68.20	-4.78	55.10	6.97	34.53	33.18	299	310	Peak	VERTICAL

Item 3, 4 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

For Beamforming Mode

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5106.00	50.88	54.00	-3.12	46.29	5.85	33.21	34.47	132	205	Average	VERTICAL
2	5150.00	63.20	74.00	-10.80	58.56	5.84	33.27	34.47	132	205	Peak	VERTICAL
3	5176.00	118.07			113.39	5.82	33.33	34.47	132	205	Peak	VERTICAL
4	5186.40	107.53			102.85	5.82	33.33	34.47	132	205	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5122.80	63.56	74.00	-10.44	58.95	5.84	33.24	34.47	137	207	Peak	VERTICAL
2	5127.60	50.36	54.00	-3.64	45.75	5.84	33.24	34.47	137	207	Average	VERTICAL
3	5206.00	118.08			113.38	5.81	33.36	34.47	137	207	Peak	VERTICAL
4	5206.80	108.12			103.42	5.81	33.36	34.47	137	207	Average	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5125.40	58.56	74.00	-15.44	53.95	5.84	33.24	34.47	160	220	Peak	VERTICAL
2	5150.00	46.67	54.00	-7.33	42.03	5.84	33.27	34.47	160	220	Average	VERTICAL
3	5242.40	108.43			103.67	5.78	33.45	34.47	160	220	Average	VERTICAL
4	5242.60	117.43			112.67	5.78	33.45	34.47	160	220	Peak	VERTICAL
5	5350.00	46.05	54.00	-7.95	41.16	5.73	33.63	34.47	160	220	Average	VERTICAL
6	5362.40	59.81	74.00	-14.19	54.89	5.73	33.66	34.47	160	220	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5710.20	61.69	68.20	-6.51	55.90	5.78	34.52	34.51	132	229	Peak	VERTICAL
2	5722.80	76.81	78.20	-1.39	70.96	5.79	34.57	34.51	132	229	Peak	VERTICAL
3	5738.80	102.66			96.76	5.80	34.62	34.52	132	229	Average	VERTICAL
4	5739.00	113.39			107.49	5.80	34.62	34.52	132	229	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5703.40	64.14	68.20	-4.06	58.35	5.78	34.52	34.51	131	225	Peak	VERTICAL
2	5717.40	63.03	78.20	-15.17	57.24	5.78	34.52	34.51	131	225	Peak	VERTICAL
3	5779.40	107.74			101.71	5.83	34.73	34.53	131	225	Average	VERTICAL
4	5782.20	117.94			111.91	5.83	34.73	34.53	131	225	Peak	VERTICAL
5	5851.80	64.81	78.20	-13.39	58.55	5.87	34.93	34.54	131	225	Peak	VERTICAL
6	5867.40	62.85	68.20	-5.35	56.52	5.88	34.99	34.54	131	225	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5830.00	105.64			99.43	5.86	34.88	34.53	202	224	Average	VERTICAL
2	5831.80	115.45			109.24	5.86	34.88	34.53	202	224	Peak	VERTICAL
3	5850.00	74.00	78.20	-4.20	67.74	5.87	34.93	34.54	202	224	Peak	VERTICAL
4	5860.40	67.09	68.20	-1.11	60.76	5.88	34.99	34.54	202	224	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)		

Channel 38

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
1	5149.60	63.53	74.00	-10.47	58.89	5.84	33.27	34.47	136	208 Peak	VERTICAL
2	5149.60	52.90	54.00	-1.10	48.26	5.84	33.27	34.47	136	208 Average	VERTICAL
3	5204.80	102.51			97.81	5.81	33.36	34.47	136	208 Average	VERTICAL
4	5205.20	112.29			107.59	5.81	33.36	34.47	136	208 Peak	VERTICAL

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

Channel 46

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
1	5145.20	47.10	54.00	-6.90	42.46	5.84	33.27	34.47	162	203 Average	VERTICAL
2	5148.40	59.02	74.00	-14.98	54.38	5.84	33.27	34.47	162	203 Peak	VERTICAL
3	5242.80	116.51			111.75	5.78	33.45	34.47	162	203 Peak	VERTICAL
4	5243.20	106.55			101.79	5.78	33.45	34.47	162	203 Average	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	deg	cm
1	5714.60	66.78	68.20	-1.42	60.99	5.78	34.52	34.51	132	225	Peak	VERTICAL
2	5718.20	68.45	78.20	-9.75	62.60	5.79	34.57	34.51	132	225	Peak	VERTICAL
3	5765.40	107.42			101.45	5.82	34.68	34.53	132	225	Peak	VERTICAL
4	5772.20	97.32			91.29	5.83	34.73	34.53	132	225	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m	deg	cm
1	5704.20	62.77	68.20	-5.43	56.98	5.78	34.52	34.51	127	221	Peak	VERTICAL
2	5724.60	65.31	78.20	-12.89	59.46	5.79	34.57	34.51	127	221	Peak	VERTICAL
3	5808.20	104.19			98.04	5.85	34.83	34.53	127	221	Average	VERTICAL
4	5809.00	114.09			107.94	5.85	34.83	34.53	127	221	Peak	VERTICAL
5	5850.60	68.18	78.20	-10.02	61.92	5.87	34.93	34.54	127	221	Peak	VERTICAL
6	5861.40	66.96	68.20	-1.24	60.63	5.88	34.99	34.54	127	221	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2
Test Date	Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 2TX)		

Channel 42

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	deg	cm		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5147.00	64.73	74.00	-9.27	60.09	5.84	33.27	34.47	141	210	Peak	VERTICAL
2	5150.00	52.85	54.00	-1.15	48.21	5.84	33.27	34.47	141	210	Average	VERTICAL
3	5186.00	112.60			107.92	5.82	33.33	34.47	141	210	Peak	VERTICAL
4	5223.00	97.92			93.20	5.80	33.39	34.47	141	210	Average	VERTICAL

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

Channel 155

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	deg	cm		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5710.00	66.79	68.20	-1.41	61.00	5.78	34.52	34.51	128	226	Peak	VERTICAL
2	5723.00	69.99	78.20	-8.21	64.14	5.79	34.57	34.51	128	226	Peak	VERTICAL
3	5753.00	106.35			100.37	5.82	34.68	34.52	128	226	Peak	VERTICAL
4	5764.00	95.45			89.48	5.82	34.68	34.53	128	226	Average	VERTICAL
5	5853.00	66.83	78.20	-11.37	60.57	5.87	34.93	34.54	128	226	Peak	VERTICAL
6	5860.00	66.18	68.20	-2.02	59.85	5.88	34.99	34.54	128	226	Peak	VERTICAL

Item 3, 4 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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 26, 2015 ~ Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB	dB/m	deg		
1	5091.20	52.87	54.00	-1.13	48.30	5.86	33.18	34.47	137	223	Average	VERTICAL
2	5093.60	63.97	74.00	-10.03	59.40	5.86	33.18	34.47	137	223	Peak	VERTICAL
3	5173.60	119.73			115.05	5.82	33.33	34.47	137	223	Peak	VERTICAL
4	5174.00	110.46			105.78	5.82	33.33	34.47	137	223	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB	dB/m	deg		
1	5127.20	63.51	74.00	-10.49	58.90	5.84	33.24	34.47	321	189	Peak	VERTICAL
2	5128.00	52.70	54.00	-1.30	48.09	5.84	33.24	34.47	321	189	Average	VERTICAL
3	5208.40	120.51			115.79	5.80	33.39	34.47	321	189	Peak	VERTICAL
4	5208.40	111.44			106.72	5.80	33.39	34.47	321	189	Average	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB	dB/m	deg		
1	5143.40	61.27	74.00	-12.73	56.63	5.84	33.27	34.47	170	205	Peak	VERTICAL
2	5150.00	49.10	54.00	-4.90	44.46	5.84	33.27	34.47	170	205	Average	VERTICAL
3	5232.80	111.28			106.54	5.79	33.42	34.47	170	205	Average	VERTICAL
4	5234.00	121.12			116.38	5.79	33.42	34.47	170	205	Peak	VERTICAL
5	5350.00	47.51	54.00	-6.49	42.62	5.73	33.63	34.47	170	205	Average	VERTICAL
6	5357.00	59.43	74.00	-14.57	54.54	5.73	33.63	34.47	170	205	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5713.00	61.89	68.20	-6.31	56.10	5.78	34.52	34.51	120	225	Peak	VERTICAL
2	5722.00	77.07	78.20	-1.13	71.22	5.79	34.57	34.51	120	225	Peak	VERTICAL
3	5736.80	115.53			109.63	5.80	34.62	34.52	120	225	Peak	VERTICAL
4	5736.80	105.74			99.84	5.80	34.62	34.52	120	225	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5712.20	64.95	68.20	-3.25	59.16	5.78	34.52	34.51	50	199	Peak	VERTICAL
2	5725.00	60.23	78.20	-17.97	54.38	5.79	34.57	34.51	50	199	Peak	VERTICAL
3	5791.40	112.38			106.29	5.84	34.78	34.53	50	199	Average	VERTICAL
4	5791.80	121.48			115.39	5.84	34.78	34.53	50	199	Peak	VERTICAL
5	5850.00	63.27	78.20	-14.93	57.01	5.87	34.93	34.54	50	199	Peak	VERTICAL
6	5871.80	64.75	68.20	-3.45	58.36	5.89	35.04	34.54	50	199	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5817.00	109.84			103.69	5.85	34.83	34.53	225	226	Average	VERTICAL
2	5818.80	119.94			113.79	5.85	34.83	34.53	225	226	Peak	VERTICAL
3	5850.00	77.11	78.20	-1.09	70.85	5.87	34.93	34.54	225	226	Peak	VERTICAL
4	5860.20	65.83	68.20	-2.37	59.50	5.88	34.99	34.54	225	226	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5146.00	64.42	74.00	-9.58	59.78	5.84	33.27	34.47	141	211	Peak	VERTICAL
2	5150.00	52.83	54.00	-1.17	48.19	5.84	33.27	34.47	141	211	Average	VERTICAL
3	5206.40	116.99			112.29	5.81	33.36	34.47	141	211	Peak	VERTICAL
4	5207.20	106.99			102.29	5.81	33.36	34.47	141	211	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5135.20	63.85	74.00	-10.15	59.24	5.84	33.24	34.47	143	205	Peak	VERTICAL
2	5150.00	50.62	54.00	-3.38	45.98	5.84	33.27	34.47	143	205	Average	VERTICAL
3	5217.60	108.99			104.27	5.80	33.39	34.47	143	205	Average	VERTICAL
4	5223.20	120.99			116.27	5.80	33.39	34.47	143	205	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)		

Channel 151

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5711.40	66.73	68.20	-1.47	60.94	5.78	34.52	34.51	120	222 Peak	VERTICAL
2	5720.20	67.41	78.20	-10.79	61.56	5.79	34.57	34.51	120	222 Peak	VERTICAL
3	5737.40	110.09			104.19	5.80	34.62	34.52	120	222 Peak	VERTICAL
4	5737.40	100.12			94.22	5.80	34.62	34.52	120	222 Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5712.60	60.96	68.20	-7.24	55.17	5.78	34.52	34.51	45	198 Peak	VERTICAL
2	5722.60	62.13	78.20	-16.07	56.28	5.79	34.57	34.51	45	198 Peak	VERTICAL
3	5800.20	105.75			99.66	5.84	34.78	34.53	45	198 Average	VERTICAL
4	5801.80	116.56			110.47	5.84	34.78	34.53	45	198 Peak	VERTICAL
5	5851.40	69.30	78.20	-8.90	63.04	5.87	34.93	34.54	45	198 Peak	VERTICAL
6	5860.60	66.82	68.20	-1.38	60.49	5.88	34.99	34.54	45	198 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 27, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 3TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	deg	cm		
1	5141.00	68.63	74.00	-5.37	63.99	5.84	33.27	34.47	143	204	Peak	VERTICAL
2	5150.00	52.77	54.00	-1.23	48.13	5.84	33.27	34.47	143	204	Average	VERTICAL
3	5220.00	111.91			107.19	5.80	33.39	34.47	143	204	Peak	VERTICAL
4	5239.00	101.69			96.95	5.79	33.42	34.47	143	204	Average	VERTICAL
5	5350.00	47.68	54.00	-6.32	42.79	5.73	33.63	34.47	143	204	Average	VERTICAL
6	5355.00	60.06	74.00	-13.94	55.17	5.73	33.63	34.47	143	204	Peak	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	deg	cm		
1	5701.00	66.79	68.20	-1.41	61.00	5.78	34.52	34.51	222	196	Peak	VERTICAL
2	5719.00	67.78	78.20	-10.42	61.93	5.79	34.57	34.51	222	196	Peak	VERTICAL
3	5811.00	107.68			101.53	5.85	34.83	34.53	222	196	Peak	VERTICAL
4	5813.00	98.53			92.38	5.85	34.83	34.53	222	196	Average	VERTICAL
5	5858.00	67.04	78.20	-11.16	60.71	5.88	34.99	34.54	222	196	Peak	VERTICAL
6	5871.00	64.79	68.20	-3.41	58.40	5.89	35.04	34.54	222	196	Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 26, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5105.20	65.31	74.00	-8.69	60.74	5.86	33.18	34.47	137	211	Peak	VERTICAL
2	5105.60	52.93	54.00	-1.07	48.34	5.85	33.21	34.47	137	211	Average	VERTICAL
3	5186.40	118.57			113.89	5.82	33.33	34.47	137	211	Peak	VERTICAL
4	5188.00	108.64			103.96	5.82	33.33	34.47	137	211	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5111.20	52.69	54.00	-1.31	48.10	5.85	33.21	34.47	131	205	Average	VERTICAL
2	5112.00	63.36	74.00	-10.64	58.77	5.85	33.21	34.47	131	205	Peak	VERTICAL
3	5191.60	109.66			104.96	5.81	33.36	34.47	131	205	Average	VERTICAL
4	5192.00	119.25			114.55	5.81	33.36	34.47	131	205	Peak	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5146.40	61.74	74.00	-12.26	57.10	5.84	33.27	34.47	142	225	Peak	VERTICAL
2	5150.00	50.51	54.00	-3.49	45.87	5.84	33.27	34.47	142	225	Average	VERTICAL
3	5234.00	113.44			108.70	5.79	33.42	34.47	142	225	Average	VERTICAL
4	5234.60	122.98			118.24	5.79	33.42	34.47	142	225	Peak	VERTICAL
5	5350.00	47.87	54.00	-6.13	42.98	5.73	33.63	34.47	142	225	Average	VERTICAL
6	5353.00	60.11	74.00	-13.89	55.22	5.73	33.63	34.47	142	225	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 26, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)		

Channel 149

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5658.60	64.69	68.20	-3.51	59.08	5.75	34.37	34.51	126	222 Peak	VERTICAL
2	5725.00	76.85	78.20	-1.35	71.00	5.79	34.57	34.51	126	222 Peak	VERTICAL
3	5737.80	119.61			113.71	5.80	34.62	34.52	126	222 Peak	VERTICAL
4	5739.00	109.81			103.91	5.80	34.62	34.52	126	222 Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5703.40	66.99	68.20	-1.21	61.20	5.78	34.52	34.51	132	203 Peak	VERTICAL
2	5725.00	61.34	78.20	-16.86	55.49	5.79	34.57	34.51	132	203 Peak	VERTICAL
3	5777.00	112.04			106.01	5.83	34.73	34.53	132	203 Average	VERTICAL
4	5779.00	121.41			115.38	5.83	34.73	34.53	132	203 Peak	VERTICAL
5	5850.00	61.54	78.20	-16.66	55.28	5.87	34.93	34.54	132	203 Peak	VERTICAL
6	5863.80	64.57	68.20	-3.63	58.24	5.88	34.99	34.54	132	203 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5833.00	117.81			111.61	5.86	34.88	34.54	233	191 Peak	VERTICAL
2	5833.00	108.53			102.33	5.86	34.88	34.54	233	191 Average	VERTICAL
3	5850.00	70.62	78.20	-7.58	64.36	5.87	34.93	34.54	233	191 Peak	VERTICAL
4	5860.40	67.01	68.20	-1.19	60.68	5.88	34.99	34.54	233	191 Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 26, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	deg	cm		
1	5146.00	67.17	74.00	-6.83	62.53	5.84	33.27	34.47	142	213	Peak	VERTICAL
2	5150.00	52.84	54.00	-1.16	48.20	5.84	33.27	34.47	142	213	Average	VERTICAL
3	5205.60	116.53			111.83	5.81	33.36	34.47	142	213	Peak	VERTICAL
4	5206.80	107.15			102.45	5.81	33.36	34.47	142	213	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	deg	cm		
1	5142.00	52.94	54.00	-1.06	48.30	5.84	33.27	34.47	168	210	Average	VERTICAL
2	5146.80	65.05	74.00	-8.95	60.41	5.84	33.27	34.47	168	210	Peak	VERTICAL
3	5223.60	111.55			106.83	5.80	33.39	34.47	168	210	Average	VERTICAL
4	5224.40	121.65			116.93	5.80	33.39	34.47	168	210	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 26, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5712.60	67.08	68.20	-1.12	61.29	5.78	34.52	34.51	136	226	Peak	VERTICAL
2	5723.80	68.65	78.20	-9.55	62.80	5.79	34.57	34.51	136	226	Peak	VERTICAL
3	5761.80	102.10			96.13	5.82	34.68	34.53	136	226	Average	VERTICAL
4	5763.00	112.38			106.41	5.82	34.68	34.53	136	226	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5711.00	62.76	68.20	-5.44	56.97	5.78	34.52	34.51	130	203	Peak	VERTICAL
2	5725.00	62.91	78.20	-15.29	57.06	5.79	34.57	34.51	130	203	Peak	VERTICAL
3	5779.40	107.69			101.66	5.83	34.73	34.53	130	203	Average	VERTICAL
4	5783.40	118.31			112.28	5.83	34.73	34.53	130	203	Peak	VERTICAL
5	5857.80	67.97	78.20	-10.23	61.64	5.88	34.99	34.54	130	203	Peak	VERTICAL
6	5867.40	67.16	68.20	-1.04	60.83	5.88	34.99	34.54	130	203	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 26, 2015		
Test Mode	Mode 1 (Set 1 Dipole antenna / 3.96dBi / 4TX)		

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5119.00	66.12	74.00	-7.88	61.53	5.85	33.21	34.47	139	227	Peak	VERTICAL
2	5149.00	52.81	54.00	-1.19	48.17	5.84	33.27	34.47	139	227	Average	VERTICAL
3	5234.00	113.88			109.14	5.79	33.42	34.47	139	227	Peak	VERTICAL
4	5238.00	104.05			99.31	5.79	33.42	34.47	139	227	Average	VERTICAL

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

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5715.00	66.78	68.20	-1.42	60.99	5.78	34.52	34.51	131	200	Peak	VERTICAL
2	5721.00	67.49	78.20	-10.71	61.64	5.79	34.57	34.51	131	200	Peak	VERTICAL
3	5761.00	98.77			92.80	5.82	34.68	34.53	131	200	Average	VERTICAL
4	5764.00	109.24			103.27	5.82	34.68	34.53	131	200	Peak	VERTICAL
5	5850.00	61.29	78.20	-16.91	55.03	5.87	34.93	34.54	131	200	Peak	VERTICAL
6	5867.00	65.20	68.20	-3.00	58.87	5.88	34.99	34.54	131	200	Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 26, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.80	63.55	74.00	-10.45	58.91	5.84	33.27	34.47	304	205	Peak	HORIZONTAL
2	5149.60	50.39	54.00	-3.61	45.75	5.84	33.27	34.47	304	205	Average	HORIZONTAL
3	5186.40	114.63			109.95	5.82	33.33	34.47	304	205	Peak	HORIZONTAL
4	5188.40	105.17			100.49	5.82	33.33	34.47	304	205	Average	HORIZONTAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5126.40	48.69	54.00	-5.31	44.08	5.84	33.24	34.47	309	200	Average	HORIZONTAL
2	5127.20	60.82	74.00	-13.18	56.21	5.84	33.24	34.47	309	200	Peak	HORIZONTAL
3	5196.80	115.18			110.48	5.81	33.36	34.47	309	200	Peak	HORIZONTAL
4	5197.60	105.15			100.45	5.81	33.36	34.47	309	200	Average	HORIZONTAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5138.00	59.39	74.00	-14.61	54.78	5.84	33.24	34.47	309	215	Peak	HORIZONTAL
2	5150.00	46.85	54.00	-7.15	42.21	5.84	33.27	34.47	309	215	Average	HORIZONTAL
3	5234.00	113.65			108.91	5.79	33.42	34.47	309	215	Peak	HORIZONTAL
4	5234.60	104.15			99.41	5.79	33.42	34.47	309	215	Average	HORIZONTAL
5	5351.00	46.14	54.00	-7.86	41.25	5.73	33.63	34.47	309	215	Average	HORIZONTAL
6	5375.00	59.29	74.00	-14.71	54.37	5.73	33.66	34.47	309	215	Peak	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 26, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5711.80	61.49	68.20	-6.71	55.70	5.78	34.52	34.51	327	190	Peak	HORIZONTAL
2	5722.60	76.95	78.20	-1.25	71.10	5.79	34.57	34.51	327	190	Peak	HORIZONTAL
3	5739.00	111.32			105.42	5.80	34.62	34.52	327	190	Peak	HORIZONTAL
4	5739.00	102.07			96.17	5.80	34.62	34.52	327	190	Average	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5713.40	60.94	68.20	-7.26	55.15	5.78	34.52	34.51	11	200	Peak	HORIZONTAL
2	5723.80	59.65	78.20	-18.55	53.80	5.79	34.57	34.51	11	200	Peak	HORIZONTAL
3	5793.00	115.67			109.58	5.84	34.78	34.53	11	200	Peak	HORIZONTAL
4	5793.00	106.73			100.64	5.84	34.78	34.53	11	200	Average	HORIZONTAL
5	5851.00	62.98	78.20	-15.22	56.72	5.87	34.93	34.54	11	200	Peak	HORIZONTAL
6	5860.00	61.35	68.20	-6.85	55.02	5.88	34.99	34.54	11	200	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5831.80	113.89			107.68	5.86	34.88	34.53	300	176	Peak	VERTICAL
2	5833.40	104.79			98.59	5.86	34.88	34.54	300	176	Average	VERTICAL
3	5850.00	77.08	78.20	-1.12	70.82	5.87	34.93	34.54	300	176	Peak	VERTICAL
4	5863.80	63.02	68.20	-5.18	56.69	5.88	34.99	34.54	300	176	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Oct. 26, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.80	66.92	74.00	-7.08	62.28	5.84	33.27	34.47	301	200	Peak	HORIZONTAL
2	5150.00	52.96	54.00	-1.04	48.32	5.84	33.27	34.47	301	200	Average	HORIZONTAL
3	5185.60	111.13			106.45	5.82	33.33	34.47	301	200	Peak	HORIZONTAL
4	5197.20	100.37			95.67	5.81	33.36	34.47	301	200	Average	HORIZONTAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5147.80	47.88	54.00	-6.12	43.24	5.84	33.27	34.47	309	206	Average	HORIZONTAL
2	5150.00	60.05	74.00	-13.95	55.41	5.84	33.27	34.47	309	206	Peak	HORIZONTAL
3	5224.00	113.62			108.90	5.80	33.39	34.47	309	206	Peak	HORIZONTAL
4	5242.60	102.50			97.74	5.78	33.45	34.47	309	206	Average	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Oct. 26, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)		

Channel 151

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1 5711.80	66.99	68.20	-1.21	61.20	5.78	34.52	34.51	324	209	Peak	HORIZONTAL
2 5722.60	69.69	78.20	-8.51	63.84	5.79	34.57	34.51	324	209	Peak	HORIZONTAL
3 5768.20	96.31			90.34	5.82	34.68	34.53	324	209	Average	HORIZONTAL
4 5769.80	106.96			100.93	5.83	34.73	34.53	324	209	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1 5710.60	60.28	68.20	-7.92	54.49	5.78	34.52	34.51	312	200	Peak	HORIZONTAL
2 5725.00	65.28	78.20	-12.92	59.43	5.79	34.57	34.51	312	200	Peak	HORIZONTAL
3 5799.40	110.80			104.71	5.84	34.78	34.53	312	200	Peak	HORIZONTAL
4 5800.20	99.81			93.72	5.84	34.78	34.53	312	200	Average	HORIZONTAL
5 5850.60	68.38	78.20	-9.82	62.12	5.87	34.93	34.54	312	200	Peak	HORIZONTAL
6 5863.80	67.07	68.20	-1.13	60.74	5.88	34.99	34.54	312	200	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2
Test Date	Oct. 26, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*1, (2B)1.66dBi*1 / 2TX)		

Channel 42

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna	Preamp						
1 5130.00	65.37	74.00	-8.63	60.76	5.84	33.24	34.47	305	201	Peak	HORIZONTAL	
2 5147.60	52.90	54.00	-1.10	48.26	5.84	33.27	34.47	305	201	Average	HORIZONTAL	
3 5197.20	107.18			102.48	5.81	33.36	34.47	305	201	Peak	HORIZONTAL	
4 5197.20	96.59			91.89	5.81	33.36	34.47	305	201	Average	HORIZONTAL	
5 5350.80	46.16	54.00	-7.84	41.27	5.73	33.63	34.47	305	201	Average	HORIZONTAL	
6 5400.40	58.67	74.00	-15.33	53.71	5.71	33.72	34.47	305	201	Peak	HORIZONTAL	

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

Channel 155

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna	Preamp						
1 5708.00	66.78	68.20	-1.42	60.99	5.78	34.52	34.51	328	201	Peak	HORIZONTAL	
2 5723.00	68.09	78.20	-10.11	62.24	5.79	34.57	34.51	328	201	Peak	HORIZONTAL	
3 5747.00	105.63			99.73	5.80	34.62	34.52	328	201	Peak	HORIZONTAL	
4 5769.00	92.41			86.38	5.83	34.73	34.53	328	201	Average	HORIZONTAL	
5 5852.00	65.00	78.20	-13.20	58.74	5.87	34.93	34.54	328	201	Peak	HORIZONTAL	
6 5862.00	65.37	68.20	-2.83	59.04	5.88	34.99	34.54	328	201	Peak	HORIZONTAL	

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 25, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5108.00	51.88	54.00	-2.12	47.29	5.85	33.21	34.47	313	182	Average	VERTICAL
2	5149.60	65.26	74.00	-8.74	60.62	5.84	33.27	34.47	313	182	Peak	VERTICAL
3	5188.00	118.62			113.94	5.82	33.33	34.47	313	182	Peak	VERTICAL
4	5188.40	109.10			104.42	5.82	33.33	34.47	313	182	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5127.60	61.56	74.00	-12.44	56.95	5.84	33.24	34.47	194	181	Peak	VERTICAL
2	5128.00	50.56	54.00	-3.44	45.95	5.84	33.24	34.47	194	181	Average	VERTICAL
3	5208.40	120.49			115.77	5.80	33.39	34.47	194	181	Peak	VERTICAL
4	5208.40	111.47			106.75	5.80	33.39	34.47	194	181	Average	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5131.40	58.70	74.00	-15.30	54.09	5.84	33.24	34.47	282	224	Peak	HORIZONTAL
2	5150.00	46.65	54.00	-7.35	42.01	5.84	33.27	34.47	282	224	Average	HORIZONTAL
3	5232.80	104.40			99.66	5.79	33.42	34.47	282	224	Average	HORIZONTAL
4	5237.00	114.00			109.26	5.79	33.42	34.47	282	224	Peak	HORIZONTAL
5	5354.00	45.59	54.00	-8.41	40.70	5.73	33.63	34.47	282	224	Average	HORIZONTAL
6	5374.40	58.66	74.00	-15.34	53.74	5.73	33.66	34.47	282	224	Peak	HORIZONTAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 26, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)		

Channel 149

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.00	64.37	68.20	-3.83	58.58	5.78	34.52	34.51	11	175 Peak	VERTICAL
2	5721.80	77.14	78.20	-1.06	71.29	5.79	34.57	34.51	11	175 Peak	VERTICAL
3	5737.80	102.78			96.88	5.80	34.62	34.52	11	175 Average	VERTICAL
4	5742.20	112.92			107.02	5.80	34.62	34.52	11	175 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5712.40	61.70	68.20	-6.50	55.91	5.78	34.52	34.51	32	173 Peak	VERTICAL
2	5720.80	60.30	78.20	-17.90	54.45	5.79	34.57	34.51	32	173 Peak	VERTICAL
3	5791.60	118.28			112.19	5.84	34.78	34.53	32	173 Peak	VERTICAL
4	5793.40	109.14			103.05	5.84	34.78	34.53	32	173 Average	VERTICAL
5	5853.00	61.77	78.20	-16.43	55.51	5.87	34.93	34.54	32	173 Peak	VERTICAL
6	5870.20	61.70	68.20	-6.50	55.37	5.88	34.99	34.54	32	173 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5833.00	115.95			109.75	5.86	34.88	34.54	232	185 Peak	VERTICAL
2	5833.00	106.86			100.66	5.86	34.88	34.54	232	185 Average	VERTICAL
3	5850.00	76.96	78.20	-1.24	70.70	5.87	34.93	34.54	232	185 Peak	VERTICAL
4	5860.60	63.88	68.20	-4.32	57.55	5.88	34.99	34.54	232	185 Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 26, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5142.00	71.99	74.00	-2.01	67.35	5.84	33.27	34.47	198	175	Peak	VERTICAL
2	5146.00	52.65	54.00	-1.35	48.01	5.84	33.27	34.47	198	175	Average	VERTICAL
3	5205.60	115.16			110.46	5.81	33.36	34.47	198	175	Peak	VERTICAL
4	5206.00	105.57			100.87	5.81	33.36	34.47	198	175	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5061.20	61.14	74.00	-12.86	56.61	5.88	33.12	34.47	222	176	Peak	VERTICAL
2	5062.00	48.57	54.00	-5.43	44.04	5.88	33.12	34.47	222	176	Average	VERTICAL
3	5222.00	117.76			113.04	5.80	33.39	34.47	222	176	Peak	VERTICAL
4	5222.80	108.06			103.34	5.80	33.39	34.47	222	176	Average	VERTICAL
5	5380.40	50.39	54.00	-3.61	45.45	5.72	33.69	34.47	222	176	Average	VERTICAL
6	5382.80	62.59	74.00	-11.41	57.65	5.72	33.69	34.47	222	176	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 26, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5715.00	66.97	68.20	-1.23	61.18	5.78	34.52	34.51	308	194	Peak	VERTICAL
2	5725.00	66.22	78.20	-11.98	60.37	5.79	34.57	34.51	308	194	Peak	VERTICAL
3	5768.60	101.17			95.14	5.83	34.73	34.53	308	194	Average	VERTICAL
4	5770.20	111.42			105.39	5.83	34.73	34.53	308	194	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.40	61.38	68.20	-6.82	55.59	5.78	34.52	34.51	233	228	Peak	HORIZONTAL
2	5724.60	65.66	78.20	-12.54	59.81	5.79	34.57	34.51	233	228	Peak	HORIZONTAL
3	5791.00	111.91			105.82	5.84	34.78	34.53	233	228	Peak	HORIZONTAL
4	5812.60	99.62			93.47	5.85	34.83	34.53	233	228	Average	HORIZONTAL
5	5852.60	74.83	78.20	-3.37	68.57	5.87	34.93	34.54	233	228	Peak	HORIZONTAL
6	5863.80	67.08	68.20	-1.12	60.75	5.88	34.99	34.54	233	228	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5795 MHz.

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 26, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*1 / 3TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg	cm	
1	5141.20	65.95	74.00	-8.05	61.31	5.84	33.27	34.47	269	217	Peak	HORIZONTAL
2	5146.80	52.92	54.00	-1.08	48.28	5.84	33.27	34.47	269	217	Average	HORIZONTAL
3	5172.40	107.10			102.44	5.83	33.30	34.47	269	217	Peak	HORIZONTAL
4	5180.40	94.93			90.25	5.82	33.33	34.47	269	217	Average	HORIZONTAL
5	5350.00	45.66	54.00	-8.34	40.77	5.73	33.63	34.47	269	217	Average	HORIZONTAL
6	5354.80	58.13	74.00	-15.87	53.24	5.73	33.63	34.47	269	217	Peak	HORIZONTAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg	cm	
1	5702.00	66.59	68.20	-1.61	60.80	5.78	34.52	34.51	14	174	Peak	VERTICAL
2	5722.00	69.29	78.20	-8.91	63.44	5.79	34.57	34.51	14	174	Peak	VERTICAL
3	5752.00	110.21			104.23	5.82	34.68	34.52	14	174	Peak	VERTICAL
4	5787.00	96.35			90.26	5.84	34.78	34.53	14	174	Average	VERTICAL
5	5851.00	68.45	78.20	-9.75	62.19	5.87	34.93	34.54	14	174	Peak	VERTICAL
6	5871.00	67.13	68.20	-1.07	60.74	5.89	35.04	34.54	14	174	Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)		

Channel 36

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	dB	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5147.60	50.61	54.00	-3.39	45.97	5.84	33.27	34.47	222	178	Average	HORIZONTAL
2	5149.20	65.36	74.00	-8.64	60.72	5.84	33.27	34.47	222	178	Peak	HORIZONTAL
3	5186.80	117.53			112.85	5.82	33.33	34.47	222	178	Peak	HORIZONTAL
4	5186.80	107.00			102.32	5.82	33.33	34.47	222	178	Average	HORIZONTAL

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

Channel 40

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	dB	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5123.20	63.83	74.00	-10.17	59.22	5.84	33.24	34.47	207	179	Peak	HORIZONTAL
2	5125.20	51.00	54.00	-3.00	46.39	5.84	33.24	34.47	207	179	Average	HORIZONTAL
3	5202.80	119.16			114.46	5.81	33.36	34.47	207	179	Peak	HORIZONTAL
4	5202.80	108.33			103.63	5.81	33.36	34.47	207	179	Average	HORIZONTAL

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

Channel 48

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	dB	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	58.57	74.00	-15.43	53.93	5.84	33.27	34.47	310	178	Peak	HORIZONTAL
2	5150.00	47.49	54.00	-6.51	42.85	5.84	33.27	34.47	310	178	Average	HORIZONTAL
3	5236.40	107.87			103.13	5.79	33.42	34.47	310	178	Average	HORIZONTAL
4	5237.60	118.08			113.34	5.79	33.42	34.47	310	178	Peak	HORIZONTAL
5	5350.00	46.45	54.00	-7.55	41.56	5.73	33.63	34.47	310	178	Average	HORIZONTAL
6	5369.60	59.71	74.00	-14.29	54.79	5.73	33.66	34.47	310	178	Peak	HORIZONTAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5672.60	62.82	68.20	-5.38	57.15	5.76	34.42	34.51	293	171	Peak	HORIZONTAL
2	5723.00	76.93	78.20	-1.27	71.08	5.79	34.57	34.51	293	171	Peak	HORIZONTAL
3	5751.40	105.75			99.85	5.80	34.62	34.52	293	171	Average	HORIZONTAL
4	5752.20	116.57			110.59	5.82	34.68	34.52	293	171	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5708.20	64.21	68.20	-3.99	58.42	5.78	34.52	34.51	309	170	Peak	HORIZONTAL
2	5725.00	63.21	78.20	-14.99	57.36	5.79	34.57	34.51	309	170	Peak	HORIZONTAL
3	5791.40	119.23			113.14	5.84	34.78	34.53	309	170	Peak	HORIZONTAL
4	5792.20	109.12			103.03	5.84	34.78	34.53	309	170	Average	HORIZONTAL
5	5853.00	62.96	78.20	-15.24	56.70	5.87	34.93	34.54	309	170	Peak	HORIZONTAL
6	5868.20	63.25	68.20	-4.95	56.92	5.88	34.99	34.54	309	170	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5817.00	108.94			102.79	5.85	34.83	34.53	297	176	Average	HORIZONTAL
2	5817.40	118.60			112.45	5.85	34.83	34.53	297	176	Peak	HORIZONTAL
3	5850.00	77.15	78.20	-1.05	70.89	5.87	34.93	34.54	297	176	Peak	HORIZONTAL
4	5860.60	66.55	68.20	-1.65	60.22	5.88	34.99	34.54	297	176	Peak	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB	dB/m	deg		
1	5142.80	69.49	74.00	-4.51	64.85	5.84	33.27	34.47	324	173	Peak	HORIZONTAL
2	5150.00	52.95	54.00	-1.05	48.31	5.84	33.27	34.47	324	173	Average	HORIZONTAL
3	5205.60	114.48			109.78	5.81	33.36	34.47	324	173	Peak	HORIZONTAL
4	5207.20	104.02			99.32	5.81	33.36	34.47	324	173	Average	HORIZONTAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB	dB/m	deg		
1	5082.80	60.98	74.00	-13.02	56.43	5.87	33.15	34.47	190	172	Peak	HORIZONTAL
2	5083.60	48.87	54.00	-5.13	44.32	5.87	33.15	34.47	190	172	Average	HORIZONTAL
3	5241.20	115.67			110.93	5.79	33.42	34.47	190	172	Peak	HORIZONTAL
4	5243.60	105.40			100.64	5.78	33.45	34.47	190	172	Average	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)		

Channel 151

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
1	5707.00	66.98	68.20	-1.22	61.19	5.78	34.52	34.51	308	174 Average	HORIZONTAL
2	5724.60	72.30	78.20	-5.90	66.45	5.79	34.57	34.51	308	174 Average	HORIZONTAL
3	5763.80	110.94			104.97	5.82	34.68	34.53	308	174 Average	HORIZONTAL
4	5769.40	99.92			93.89	5.83	34.73	34.53	308	174 Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
1	5715.00	63.45	68.20	-4.75	57.66	5.78	34.52	34.51	245	165 Peak	HORIZONTAL
2	5725.00	63.02	78.20	-15.18	57.17	5.79	34.57	34.51	245	165 Peak	HORIZONTAL
3	5778.20	105.13			99.10	5.83	34.73	34.53	245	165 Average	HORIZONTAL
4	5787.00	115.34			109.25	5.84	34.78	34.53	245	165 Peak	HORIZONTAL
5	5855.00	70.90	78.20	-7.30	64.57	5.88	34.99	34.54	245	165 Peak	HORIZONTAL
6	5864.60	67.18	68.20	-1.02	60.85	5.88	34.99	34.54	245	165 Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 2 (Set 5 Polarized Dipole antenna / (2A)3.96dBi*2, (2B)1.66dBi*2 / 4TX)		

Channel 42

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna	Preamp						
1 5145.20	67.29	74.00	-6.71	62.65	5.84	33.27	34.47	233	177	Peak	HORIZONTAL	
2 5146.80	52.65	54.00	-1.35	48.01	5.84	33.27	34.47	233	177	Average	HORIZONTAL	
3 5172.40	111.07			106.41	5.83	33.30	34.47	233	177	Peak	HORIZONTAL	
4 5199.60	99.82			95.12	5.81	33.36	34.47	233	177	Average	HORIZONTAL	
5 5350.00	48.04	54.00	-5.96	43.15	5.73	33.63	34.47	233	177	Average	HORIZONTAL	
6 5382.80	59.59	74.00	-14.41	54.65	5.72	33.69	34.47	233	177	Peak	HORIZONTAL	

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

Channel 155

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna	Preamp						
1 5709.00	67.04	68.20	-1.16	61.25	5.78	34.52	34.51	162	176	Peak	HORIZONTAL	
2 5720.00	69.33	78.20	-8.87	63.48	5.79	34.57	34.51	162	176	Peak	HORIZONTAL	
3 5744.00	97.20			91.30	5.80	34.62	34.52	162	176	Average	HORIZONTAL	
4 5750.00	112.22			106.32	5.80	34.62	34.52	162	176	Peak	HORIZONTAL	
5 5850.00	64.78	78.20	-13.42	58.52	5.87	34.93	34.54	162	176	Peak	HORIZONTAL	
6 5869.00	65.81	68.20	-2.39	59.48	5.88	34.99	34.54	162	176	Peak	HORIZONTAL	

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)		

Channel 36

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5146.40	65.56	74.00	-8.44	60.92	5.84	33.27	34.47	0	179 Peak	VERTICAL
2	5150.00	52.75	54.00	-1.25	48.11	5.84	33.27	34.47	0	179 Average	VERTICAL
3	5182.00	108.60			103.92	5.82	33.33	34.47	0	179 Average	VERTICAL
4	5182.40	118.52			113.84	5.82	33.33	34.47	0	179 Peak	VERTICAL

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

Channel 40

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5125.60	64.41	74.00	-9.59	59.80	5.84	33.24	34.47	16	191 Peak	VERTICAL
2	5127.60	52.57	54.00	-1.43	47.96	5.84	33.24	34.47	16	191 Average	VERTICAL
3	5205.60	108.98			104.28	5.81	33.36	34.47	16	191 Average	VERTICAL
4	5206.40	119.11			114.41	5.81	33.36	34.47	16	191 Peak	VERTICAL

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

Channel 48

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5127.80	61.53	74.00	-12.47	56.92	5.84	33.24	34.47	334	209 Peak	VERTICAL
2	5150.00	50.22	54.00	-3.78	45.58	5.84	33.27	34.47	334	209 Average	VERTICAL
3	5231.60	119.72			114.98	5.79	33.42	34.47	334	209 Peak	VERTICAL
4	5232.20	110.31			105.57	5.79	33.42	34.47	334	209 Average	VERTICAL
5	5357.00	49.51	54.00	-4.49	44.62	5.73	33.63	34.47	334	209 Average	VERTICAL
6	5357.60	61.83	74.00	-12.17	56.94	5.73	33.63	34.47	334	209 Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5714.20	64.15	68.20	-4.05	58.36	5.78	34.52	34.51	305	176	Peak	VERTICAL
2	5721.00	77.00	78.20	-1.20	71.15	5.79	34.57	34.51	305	176	Peak	VERTICAL
3	5738.20	112.62			106.72	5.80	34.62	34.52	305	176	Peak	VERTICAL
4	5738.60	102.78			96.88	5.80	34.62	34.52	305	176	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5705.00	65.10	68.20	-3.10	59.31	5.78	34.52	34.51	341	205	Peak	VERTICAL
2	5724.20	63.80	78.20	-14.40	57.95	5.79	34.57	34.51	341	205	Peak	VERTICAL
3	5781.80	109.37			103.34	5.83	34.73	34.53	341	205	Average	VERTICAL
4	5783.00	119.36			113.33	5.83	34.73	34.53	341	205	Peak	VERTICAL
5	5850.60	65.58	78.20	-12.62	59.32	5.87	34.93	34.54	341	205	Peak	VERTICAL
6	5868.60	65.46	68.20	-2.74	59.13	5.88	34.99	34.54	341	205	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5819.00	117.32			111.17	5.85	34.83	34.53	315	187	Peak	VERTICAL
2	5821.80	107.23			101.02	5.86	34.88	34.53	315	187	Average	VERTICAL
3	5850.00	75.05	78.20	-3.15	68.79	5.87	34.93	34.54	315	187	Peak	VERTICAL
4	5861.80	66.93	68.20	-1.27	60.60	5.88	34.99	34.54	315	187	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg	cm	
1	5147.60	64.69	74.00	-9.31	60.05	5.84	33.27	34.47	0	178	Peak	VERTICAL
2	5150.00	52.78	54.00	-1.22	48.14	5.84	33.27	34.47	0	178	Average	VERTICAL
3	5182.40	101.34			96.66	5.82	33.33	34.47	0	178	Average	VERTICAL
4	5187.20	114.59			109.91	5.82	33.33	34.47	0	178	Peak	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg	cm	
1	5148.80	50.74	54.00	-3.26	46.10	5.84	33.27	34.47	1	213	Average	VERTICAL
2	5150.00	62.82	74.00	-11.18	58.18	5.84	33.27	34.47	1	213	Peak	VERTICAL
3	5222.40	115.86			111.14	5.80	33.39	34.47	1	213	Peak	VERTICAL
4	5234.00	105.83			101.09	5.79	33.42	34.47	1	213	Average	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.00	66.99	68.20	-1.21	61.20	5.78	34.52	34.51	353	181	Peak	VERTICAL
2	5723.40	67.64	78.20	-10.56	61.79	5.79	34.57	34.51	353	181	Peak	VERTICAL
3	5765.40	108.09			102.12	5.82	34.68	34.53	353	181	Peak	VERTICAL
4	5768.60	98.61			92.58	5.83	34.73	34.53	353	181	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5647.00	63.03	68.20	-5.17	57.48	5.74	34.31	34.50	317	191	Peak	VERTICAL
2	5720.20	64.75	78.20	-13.45	58.90	5.79	34.57	34.51	317	191	Peak	VERTICAL
3	5809.40	103.38			97.23	5.85	34.83	34.53	317	191	Average	VERTICAL
4	5811.00	113.36			107.21	5.85	34.83	34.53	317	191	Peak	VERTICAL
5	5852.60	75.76	78.20	-2.44	69.50	5.87	34.93	34.54	317	191	Peak	VERTICAL
6	5869.40	67.12	68.20	-1.08	60.79	5.88	34.99	34.54	317	191	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 2TX)		

Channel 42

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna	Preamp						
1 5147.60	66.20	74.00	-7.80	61.56	5.84	33.27	34.47	16	188	Peak	VERTICAL	
2 5150.00	52.99	54.00	-1.01	48.35	5.84	33.27	34.47	16	188	Average	VERTICAL	
3 5185.20	113.33			108.65	5.82	33.33	34.47	16	188	Peak	VERTICAL	
4 5246.80	98.65			93.89	5.78	33.45	34.47	16	188	Average	VERTICAL	
5 5366.80	49.40	54.00	-4.60	44.48	5.73	33.66	34.47	16	188	Average	VERTICAL	
6 5378.00	61.31	74.00	-12.69	56.37	5.72	33.69	34.47	16	188	Peak	VERTICAL	

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

Channel 155

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna	Preamp						
1 5706.00	67.19	68.20	-1.01	61.40	5.78	34.52	34.51	339	199	Peak	VERTICAL	
2 5724.00	68.81	78.20	-9.39	62.96	5.79	34.57	34.51	339	199	Peak	VERTICAL	
3 5737.00	108.84			102.94	5.80	34.62	34.52	339	199	Peak	VERTICAL	
4 5781.00	97.28			91.25	5.83	34.73	34.53	339	199	Average	VERTICAL	
5 5850.00	68.36	78.20	-9.84	62.10	5.87	34.93	34.54	339	199	Peak	VERTICAL	
6 5865.00	65.61	68.20	-2.59	59.28	5.88	34.99	34.54	339	199	Peak	VERTICAL	

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)		

Channel 36

Freq MHz	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	Level dBuV/m	Line dBuV/m			Loss	Factor	Factor	deg	cm		
1 5150.00	68.20	74.00	-5.80	63.56	5.84	33.27	34.47	15	178	Peak	VERTICAL
2 5150.00	52.79	54.00	-1.21	48.15	5.84	33.27	34.47	15	178	Average	VERTICAL
3 5182.00	107.92			103.24	5.82	33.33	34.47	15	178	Average	VERTICAL
4 5183.00	120.73			116.05	5.82	33.33	34.47	15	178	Peak	VERTICAL

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

Channel 40

Freq MHz	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	Level dBuV/m	Line dBuV/m			Loss	Factor	Factor	deg	cm		
1 5115.20	64.89	74.00	-9.11	60.30	5.85	33.21	34.47	354	163	Peak	VERTICAL
2 5122.00	52.28	54.00	-1.72	47.69	5.85	33.21	34.47	354	163	Average	VERTICAL
3 5202.00	110.27			105.57	5.81	33.36	34.47	354	163	Average	VERTICAL
4 5206.00	120.61			115.91	5.81	33.36	34.47	354	163	Peak	VERTICAL

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

Channel 48

Freq MHz	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	Level dBuV/m	Line dBuV/m			Loss	Factor	Factor	deg	cm		
1 5144.00	62.75	74.00	-11.25	58.11	5.84	33.27	34.47	336	162	Peak	VERTICAL
2 5150.00	50.86	54.00	-3.14	46.22	5.84	33.27	34.47	336	162	Average	VERTICAL
3 5233.40	111.21			106.47	5.79	33.42	34.47	336	162	Average	VERTICAL
4 5243.00	121.69			116.93	5.78	33.45	34.47	336	162	Peak	VERTICAL
5 5350.40	49.43	54.00	-4.57	44.54	5.73	33.63	34.47	336	162	Average	VERTICAL
6 5355.80	61.89	74.00	-12.11	57.00	5.73	33.63	34.47	336	162	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)		

Channel 149

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					dB	dB	dB/m	deg	cm		
1 5715.00	64.95	68.20	-3.25	59.16	5.78	34.52	34.51	354	174	Peak	VERTICAL
2 5723.80	76.92	78.20	-1.28	71.07	5.79	34.57	34.51	354	174	Peak	VERTICAL
3 5737.00	105.85			99.95	5.80	34.62	34.52	354	174	Average	VERTICAL
4 5751.80	116.30			110.32	5.82	34.68	34.52	354	174	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					dB	dB	dB/m	deg	cm		
1 5709.40	65.65	68.20	-2.55	59.86	5.78	34.52	34.51	296	183	Peak	VERTICAL
2 5725.00	63.15	78.20	-15.05	57.30	5.79	34.57	34.51	296	183	Peak	VERTICAL
3 5788.00	119.84			113.75	5.84	34.78	34.53	296	183	Peak	VERTICAL
4 5788.00	109.57			103.48	5.84	34.78	34.53	296	183	Average	VERTICAL
5 5850.00	64.18	78.20	-14.02	57.92	5.87	34.93	34.54	296	183	Peak	VERTICAL
6 5864.20	66.20	68.20	-2.00	59.87	5.88	34.99	34.54	296	183	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					dB	dB	dB/m	deg	cm		
1 5831.40	117.95			111.74	5.86	34.88	34.53	51	169	Peak	VERTICAL
2 5831.80	107.55			101.34	5.86	34.88	34.53	51	169	Average	VERTICAL
3 5850.00	72.71	78.20	-5.49	66.45	5.87	34.93	34.54	51	169	Peak	VERTICAL
4 5861.40	67.05	68.20	-1.15	60.72	5.88	34.99	34.54	51	169	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5150.00	65.15	74.00	-8.85	60.51	5.84	33.27	34.47	1	179	Peak	VERTICAL
2	5150.00	52.75	54.00	-1.25	48.11	5.84	33.27	34.47	1	179	Average	VERTICAL
3	5173.60	115.79			111.11	5.82	33.33	34.47	1	179	Peak	VERTICAL
4	5184.40	103.59			98.91	5.82	33.33	34.47	1	179	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5147.60	66.60	74.00	-7.40	61.96	5.84	33.27	34.47	360	179	Peak	VERTICAL
2	5150.00	52.99	54.00	-1.01	48.35	5.84	33.27	34.47	360	179	Average	VERTICAL
3	5232.40	108.84			104.10	5.79	33.42	34.47	360	179	Average	VERTICAL
4	5234.00	121.07			116.33	5.79	33.42	34.47	360	179	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)		

Channel 151

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					dB	dB	dB/m	deg	cm		
1 5711.80	67.00	68.20	-1.20	61.21	5.78	34.52	34.51	351	176	Peak	VERTICAL
2 5724.20	71.67	78.20	-6.53	65.82	5.79	34.57	34.51	351	176	Peak	VERTICAL
3 5738.20	100.71			94.81	5.80	34.62	34.52	351	176	Average	VERTICAL
4 5739.40	110.95			105.05	5.80	34.62	34.52	351	176	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					dB	dB	dB/m	deg	cm		
1 5706.20	63.93	68.20	-4.27	58.14	5.78	34.52	34.51	294	174	Peak	VERTICAL
2 5725.00	62.69	78.20	-15.51	56.84	5.79	34.57	34.51	294	174	Peak	VERTICAL
3 5791.00	105.00			98.91	5.84	34.78	34.53	294	174	Average	VERTICAL
4 5792.60	115.51			109.42	5.84	34.78	34.53	294	174	Peak	VERTICAL
5 5852.60	71.66	78.20	-6.54	65.40	5.87	34.93	34.54	294	174	Peak	VERTICAL
6 5861.40	66.91	68.20	-1.29	60.58	5.88	34.99	34.54	294	174	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 3TX)		

Channel 42

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5144.40	64.57	74.00	-9.43	59.93	5.84	33.27	34.47	359	189 Peak	VERTICAL
2	5150.00	52.87	54.00	-1.13	48.23	5.84	33.27	34.47	359	189 Average	VERTICAL
3	5194.00	101.43			96.73	5.81	33.36	34.47	359	189 Average	VERTICAL
4	5197.20	111.58			106.88	5.81	33.36	34.47	359	189 Peak	VERTICAL
5	5352.40	49.25	54.00	-4.75	44.36	5.73	33.63	34.47	359	189 Average	VERTICAL
6	5393.20	61.18	74.00	-12.82	56.24	5.72	33.69	34.47	359	189 Peak	VERTICAL

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

Channel 155

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5711.00	66.99	68.20	-1.21	61.20	5.78	34.52	34.51	297	180 Peak	VERTICAL
2	5725.00	66.45	78.20	-11.75	60.60	5.79	34.57	34.51	297	180 Peak	VERTICAL
3	5752.00	111.99			106.01	5.82	34.68	34.52	297	180 Peak	VERTICAL
4	5787.00	96.99			90.90	5.84	34.78	34.53	297	180 Average	VERTICAL
5	5850.00	64.52	78.20	-13.68	58.26	5.87	34.93	34.54	297	180 Peak	VERTICAL
6	5863.00	65.94	68.20	-2.26	59.61	5.88	34.99	34.54	297	180 Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 22, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5145.95	64.82	74.00	-9.18	59.65	6.13	34.04	35.00	Peak	176	300 VERTICAL
2	5148.41	50.00	54.00	-4.00	44.83	6.13	34.04	35.00	Average	176	300 VERTICAL
3	5173.78	105.63			100.39	6.15	34.09	35.00	Average	176	300 VERTICAL
4	5174.21	116.08			110.84	6.15	34.09	35.00	Peak	176	300 VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5144.21	48.25	54.00	-5.75	43.08	6.13	34.04	35.00	Average	156	300 VERTICAL
2	5148.84	60.45	74.00	-13.55	55.28	6.13	34.04	35.00	Peak	156	300 VERTICAL
3	5206.95	116.58			111.30	6.16	34.12	35.00	Peak	156	300 VERTICAL
4	5207.81	107.01			101.69	6.17	34.15	35.00	Average	156	300 VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5142.19	59.70	74.00	-14.30	54.53	6.13	34.04	35.00	Peak	175	300 VERTICAL
2	5150.00	46.78	54.00	-7.22	41.61	6.13	34.04	35.00	Average	175	300 VERTICAL
3	5243.91	116.44			111.04	6.20	34.20	35.00	Peak	175	300 VERTICAL
4	5247.81	105.91			100.51	6.20	34.20	35.00	Average	175	300 VERTICAL
5	5350.00	47.09	54.00	-6.91	41.47	6.26	34.36	35.00	Average	175	300 VERTICAL
6	5351.74	59.00	74.00	-15.00	53.38	6.26	34.36	35.00	Peak	175	300 VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5713.70	49.98	54.00	-4.02	43.93	6.44	34.64	35.03	Average	177	295 VERTICAL
2	5713.70	63.78	74.00	-10.22	57.73	6.44	34.64	35.03	Peak	177	295 VERTICAL
3	5724.28	77.16	78.20	-1.04	71.10	6.45	34.64	35.03	Peak	177	295 VERTICAL
4	5742.81	112.79			106.73	6.45	34.65	35.04	Peak	177	295 VERTICAL
5	5752.81	102.80			96.73	6.46	34.65	35.04	Average	177	295 VERTICAL

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

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5697.34	50.06	54.00	-3.94	44.02	6.43	34.64	35.03	Average	163	293 VERTICAL
2	5712.11	63.07	74.00	-10.93	57.02	6.44	34.64	35.03	Peak	163	293 VERTICAL
3	5724.13	60.73	78.20	-17.47	54.67	6.45	34.64	35.03	Peak	163	293 VERTICAL
4	5779.21	105.43			99.36	6.46	34.66	35.05	Average	163	293 VERTICAL
5	5783.26	116.15			110.08	6.46	34.66	35.05	Peak	163	293 VERTICAL
6	5851.45	60.67	78.20	-17.53	54.57	6.49	34.67	35.06	Peak	163	293 VERTICAL
7	5860.00	48.62	54.00	-5.38	42.52	6.50	34.67	35.07	Average	163	293 VERTICAL
8	5862.60	61.21	74.00	-12.79	55.11	6.50	34.67	35.07	Peak	163	293 VERTICAL

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

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5818.49	115.37			109.29	6.48	34.66	35.06	Peak	192	293 VERTICAL
2	5822.25	104.54			98.45	6.48	34.67	35.06	Average	192	293 VERTICAL
3	5850.00	77.10	78.20	-1.10	71.00	6.49	34.67	35.06	Peak	192	293 VERTICAL
4	5860.00	51.47	54.00	-2.53	45.37	6.50	34.67	35.07	Average	192	293 VERTICAL
5	5860.00	69.96	74.00	-4.04	63.86	6.50	34.67	35.07	Peak	192	293 VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 22, 2015 ~ Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1 5148.26	67.10	74.00	-6.90	61.93	6.13	34.04	35.00	Peak	174	302	VERTICAL
2 5150.00	52.78	54.00	-1.22	47.61	6.13	34.04	35.00	Average	174	302	VERTICAL
3 5187.68 114.44			109.20	6.15	34.09	35.00	Peak		174	302	VERTICAL
4 5204.18 102.52			97.24	6.16	34.12	35.00	Average		174	302	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1 5148.26	60.14	74.00	-13.86	54.97	6.13	34.04	35.00	Peak	157	298	VERTICAL
2 5150.00	47.78	54.00	-6.22	42.61	6.13	34.04	35.00	Average	157	298	VERTICAL
3 5212.34 103.76			98.44	6.17	34.15	35.00	Average		157	298	VERTICAL
4 5231.74 113.38			108.03	6.18	34.17	35.00	Peak		157	298	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5708.63	66.92	68.20	-1.28	60.87	6.44	34.64	35.03	Peak	109	16 VERTICAL
2	5722.68	65.97	78.20	-12.23	59.91	6.45	34.64	35.03	Peak	109	16 VERTICAL
3	5739.66	100.01			93.95	6.45	34.65	35.04	Average	109	16 VERTICAL
4	5746.90	110.56			104.50	6.45	34.65	35.04	Peak	109	16 VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dB			Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5707.62	61.76	68.20	-6.44	55.71	6.44	34.64	35.03	Peak	175	292 VERTICAL
2	5724.13	61.26	78.20	-16.94	55.20	6.45	34.64	35.03	Peak	175	292 VERTICAL
3	5782.41	112.06			105.99	6.46	34.66	35.05	Peak	175	292 VERTICAL
4	5807.59	101.26			95.18	6.48	34.66	35.06	Average	175	292 VERTICAL
5	5851.74	66.87	78.20	-11.33	60.77	6.49	34.67	35.06	Peak	175	292 VERTICAL
6	5870.85	66.92	68.20	-1.28	60.81	6.50	34.68	35.07	Peak	175	292 VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 23, 2015		
Test Mode	Mode 3 (Set 6 Panel antenna / 2.66dBi / 4TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5111.65	66.20	74.00	-7.80	61.11	6.11	33.99	35.01	Peak	170	340 VERTICAL
2	5149.28	52.69	54.00	-1.31	47.52	6.13	34.04	35.00	Average	170	340 VERTICAL
3	5228.09	103.41			98.06	6.18	34.17	35.00	Average	170	340 VERTICAL
4	5228.09	111.84			106.49	6.18	34.17	35.00	Peak	170	340 VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	CableAntenna Preamp			A/Pos	T/Pos	Pol/Phase
		Line	dBuV/m			Cable Loss	Antenna Factor	Preamp Factor			
1	5709.93	66.99	68.20	-1.21	60.94	6.44	34.64	35.03	Peak	170	15 VERTICAL
2	5724.28	67.68	78.20	-10.52	61.62	6.45	34.64	35.03	Peak	170	15 VERTICAL
3	5743.16	96.62			90.56	6.45	34.65	35.04	Average	170	15 VERTICAL
4	5744.61	110.31			104.25	6.45	34.65	35.04	Peak	170	15 VERTICAL
5	5853.62	64.28	78.20	-13.92	58.17	6.50	34.67	35.06	Peak	170	15 VERTICAL
6	5865.07	64.27	68.20	-3.93	58.17	6.50	34.67	35.07	Peak	170	15 VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5143.80	66.85	74.00	-7.15	62.21	5.84	33.27	34.47	353	221	Peak	HORIZONTAL
2	5148.40	50.43	54.00	-3.57	45.79	5.84	33.27	34.47	353	221	Average	HORIZONTAL
3	5187.00	115.95			111.27	5.82	33.33	34.47	353	221	Peak	HORIZONTAL
4	5188.20	106.39			101.71	5.82	33.33	34.47	353	221	Average	HORIZONTAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5111.60	51.12	54.00	-2.88	46.53	5.85	33.21	34.47	359	192	Average	HORIZONTAL
2	5112.80	63.49	74.00	-10.51	58.90	5.85	33.21	34.47	359	192	Peak	HORIZONTAL
3	5192.00	107.55			102.85	5.81	33.36	34.47	359	192	Average	HORIZONTAL
4	5192.40	116.93			112.23	5.81	33.36	34.47	359	192	Peak	HORIZONTAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5130.20	59.02	74.00	-14.98	54.41	5.84	33.24	34.47	338	203	Peak	HORIZONTAL
2	5150.00	46.83	54.00	-7.17	42.19	5.84	33.27	34.47	338	203	Average	HORIZONTAL
3	5231.60	108.98			104.24	5.79	33.42	34.47	338	203	Average	HORIZONTAL
4	5232.80	118.34			113.60	5.79	33.42	34.47	338	203	Peak	HORIZONTAL
5	5350.00	59.25	74.00	-14.75	54.36	5.73	33.63	34.47	338	203	Peak	HORIZONTAL
6	5350.00	46.48	54.00	-7.52	41.59	5.73	33.63	34.47	338	203	Average	HORIZONTAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5713.00	64.42	68.20	-3.78	58.63	5.78	34.52	34.51	342	183	Peak	HORIZONTAL
2	5722.20	76.79	78.20	-1.41	70.94	5.79	34.57	34.51	342	183	Peak	HORIZONTAL
3	5753.00	114.96			108.98	5.82	34.68	34.52	342	183	Peak	HORIZONTAL
4	5753.00	105.00			99.02	5.82	34.68	34.52	342	183	Average	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5709.80	63.05	68.20	-5.15	57.26	5.78	34.52	34.51	340	175	Peak	HORIZONTAL
2	5724.20	60.08	78.20	-18.12	54.23	5.79	34.57	34.51	340	175	Peak	HORIZONTAL
3	5791.40	118.67			112.58	5.84	34.78	34.53	340	175	Peak	HORIZONTAL
4	5791.40	108.95			102.86	5.84	34.78	34.53	340	175	Average	HORIZONTAL
5	5850.00	61.52	78.20	-16.68	55.26	5.87	34.93	34.54	340	175	Peak	HORIZONTAL
6	5865.00	62.55	68.20	-5.65	56.22	5.88	34.99	34.54	340	175	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5822.60	116.98			110.77	5.86	34.88	34.53	334	161	Peak	HORIZONTAL
2	5822.80	107.18			100.97	5.86	34.88	34.53	334	161	Average	HORIZONTAL
3	5850.00	76.46	78.20	-1.74	70.20	5.87	34.93	34.54	334	161	Peak	HORIZONTAL
4	5860.80	66.91	68.20	-1.29	60.58	5.88	34.99	34.54	334	161	Peak	HORIZONTAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)		

Channel 38

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5140.80	68.55	74.00	-5.45	63.91	5.84	33.27	34.47	14	160 Peak	HORIZONTAL
2	5149.60	52.82	54.00	-1.18	48.18	5.84	33.27	34.47	14	160 Average	HORIZONTAL
3	5207.20	103.07			98.37	5.81	33.36	34.47	14	160 Average	HORIZONTAL
4	5207.60	112.10			107.38	5.80	33.39	34.47	14	160 Peak	HORIZONTAL

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

Channel 46

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.00	62.11	74.00	-11.89	57.47	5.84	33.27	34.47	1	172 Peak	HORIZONTAL
2	5150.00	48.81	54.00	-5.19	44.17	5.84	33.27	34.47	1	172 Average	HORIZONTAL
3	5228.80	114.11			109.37	5.79	33.42	34.47	1	172 Peak	HORIZONTAL
4	5228.80	105.35			100.61	5.79	33.42	34.47	1	172 Average	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)		

Channel 151

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5712.20	66.78	68.20	-1.42	60.99	5.78	34.52	34.51	339	175 Peak	HORIZONTAL
2	5725.00	72.14	78.20	-6.06	66.29	5.79	34.57	34.51	339	175 Peak	HORIZONTAL
3	5759.00	100.56			94.59	5.82	34.68	34.53	339	175 Average	HORIZONTAL
4	5761.00	110.05			104.08	5.82	34.68	34.53	339	175 Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5711.40	61.27	68.20	-6.93	55.48	5.78	34.52	34.51	336	183 Peak	HORIZONTAL
2	5723.00	62.73	78.20	-15.47	56.88	5.79	34.57	34.51	336	183 Peak	HORIZONTAL
3	5792.20	114.52			108.43	5.84	34.78	34.53	336	183 Peak	HORIZONTAL
4	5802.60	103.85			97.70	5.85	34.83	34.53	336	183 Average	HORIZONTAL
5	5852.60	68.23	78.20	-9.97	61.97	5.87	34.93	34.54	336	183 Peak	HORIZONTAL
6	5873.00	66.87	68.20	-1.33	60.48	5.89	35.04	34.54	336	183 Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 2TX)		

Channel 42

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5138.00	65.12	74.00	-8.88	60.51	5.84	33.24	34.47	354	169 Peak	HORIZONTAL
2	5148.00	52.53	54.00	-1.47	47.89	5.84	33.27	34.47	354	169 Average	HORIZONTAL
3	5241.00	98.68			93.94	5.79	33.42	34.47	354	169 Average	HORIZONTAL
4	5247.00	108.22			103.46	5.78	33.45	34.47	354	169 Peak	HORIZONTAL
5	5350.00	46.65	54.00	-7.35	41.76	5.73	33.63	34.47	354	169 Average	HORIZONTAL
6	5351.00	60.65	74.00	-13.35	55.76	5.73	33.63	34.47	354	169 Peak	HORIZONTAL

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

Channel 155

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5694.00	67.07	68.20	-1.13	61.34	5.77	34.47	34.51	342	178 Peak	HORIZONTAL
2	5723.00	69.17	78.20	-9.03	63.32	5.79	34.57	34.51	342	178 Peak	HORIZONTAL
3	5801.00	96.32			90.23	5.84	34.78	34.53	342	178 Average	HORIZONTAL
4	5803.00	106.90			100.75	5.85	34.83	34.53	342	178 Peak	HORIZONTAL
5	5852.00	65.39	78.20	-12.81	59.13	5.87	34.93	34.54	342	178 Peak	HORIZONTAL
6	5862.00	64.97	68.20	-3.23	58.64	5.88	34.99	34.54	342	178 Peak	HORIZONTAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dB	dB/m	dB	deg	cm		
1	5106.00	52.79	54.00	-1.21	48.20	5.85	33.21	34.47	0	170	Average	HORIZONTAL
2	5144.80	64.47	74.00	-9.53	59.83	5.84	33.27	34.47	0	170	Peak	HORIZONTAL
3	5185.60	108.30			103.62	5.82	33.33	34.47	0	170	Average	HORIZONTAL
4	5186.00	117.84			113.16	5.82	33.33	34.47	0	170	Peak	HORIZONTAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dB	dB/m	dB	deg	cm		
1	5111.60	51.35	54.00	-2.65	46.76	5.85	33.21	34.47	357	167	Average	HORIZONTAL
2	5127.60	62.80	74.00	-11.20	58.19	5.84	33.24	34.47	357	167	Peak	HORIZONTAL
3	5193.60	118.29			113.59	5.81	33.36	34.47	357	167	Peak	HORIZONTAL
4	5193.60	108.62			103.92	5.81	33.36	34.47	357	167	Average	HORIZONTAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dB	dB/m	dB	deg	cm		
1	5140.40	59.46	74.00	-14.54	54.82	5.84	33.27	34.47	1	289	Peak	HORIZONTAL
2	5150.00	48.24	54.00	-5.76	43.60	5.84	33.27	34.47	1	289	Average	HORIZONTAL
3	5243.00	120.96			116.20	5.78	33.45	34.47	1	289	Peak	HORIZONTAL
4	5245.40	111.48			106.72	5.78	33.45	34.47	1	289	Average	HORIZONTAL
5	5351.60	47.76	54.00	-6.24	42.87	5.73	33.63	34.47	1	289	Average	HORIZONTAL
6	5353.40	60.54	74.00	-13.46	55.65	5.73	33.63	34.47	1	289	Peak	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5713.40	67.01	68.20	-1.19	61.22	5.78	34.52	34.51	341	175	Peak	HORIZONTAL
2	5723.40	76.25	78.20	-1.95	70.40	5.79	34.57	34.51	341	175	Peak	HORIZONTAL
3	5752.60	117.09			111.11	5.82	34.68	34.52	341	175	Peak	HORIZONTAL
4	5753.00	107.14			101.16	5.82	34.68	34.52	341	175	Average	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5712.20	66.89	68.20	-1.31	61.10	5.78	34.52	34.51	336	188	Peak	HORIZONTAL
2	5720.60	66.47	78.20	-11.73	60.62	5.79	34.57	34.51	336	188	Peak	HORIZONTAL
3	5793.00	122.52			116.43	5.84	34.78	34.53	336	188	Peak	HORIZONTAL
4	5793.00	113.38			107.29	5.84	34.78	34.53	336	188	Average	HORIZONTAL
5	5850.80	65.91	78.20	-12.29	59.65	5.87	34.93	34.54	336	188	Peak	HORIZONTAL
6	5873.40	66.68	68.20	-1.52	60.29	5.89	35.04	34.54	336	188	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5817.40	110.37			104.22	5.85	34.83	34.53	340	253	Average	VERTICAL
2	5819.00	121.39			115.24	5.85	34.83	34.53	340	253	Peak	VERTICAL
3	5850.60	75.02	78.20	-3.18	68.76	5.87	34.93	34.54	340	253	Peak	VERTICAL
4	5861.00	67.16	68.20	-1.04	60.83	5.88	34.99	34.54	340	253	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	deg	cm	cm	cm	cm
1	5148.80	63.72	74.00	-10.28	59.08	5.84	33.27	34.47	357	162	Peak	HORIZONTAL
2	5150.00	52.63	54.00	-1.37	47.99	5.84	33.27	34.47	357	162	Average	HORIZONTAL
3	5204.80	115.64			110.94	5.81	33.36	34.47	357	162	Peak	HORIZONTAL
4	5206.00	105.60			100.90	5.81	33.36	34.47	357	162	Average	HORIZONTAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	deg	cm	cm	cm	cm
1	5146.40	51.75	54.00	-2.25	47.11	5.84	33.27	34.47	352	224	Average	HORIZONTAL
2	5148.80	66.33	74.00	-7.67	61.69	5.84	33.27	34.47	352	224	Peak	HORIZONTAL
3	5226.40	119.43			114.69	5.79	33.42	34.47	352	224	Peak	HORIZONTAL
4	5228.00	109.28			104.54	5.79	33.42	34.47	352	224	Average	HORIZONTAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5713.40	66.79	68.20	-1.41	61.00	5.78	34.52	34.51	335	181	Peak	HORIZONTAL
2	5717.40	71.69	78.20	-6.51	65.90	5.78	34.52	34.51	335	181	Peak	HORIZONTAL
3	5758.20	110.75			104.78	5.82	34.68	34.53	335	181	Peak	HORIZONTAL
4	5759.40	100.45			94.48	5.82	34.68	34.53	335	181	Average	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5712.60	64.74	74.00	-9.26	58.95	5.78	34.52	34.51	338	175	Peak	HORIZONTAL
2	5713.00	49.99	54.00	-4.01	44.20	5.78	34.52	34.51	338	175	Average	HORIZONTAL
3	5724.20	67.28	78.20	-10.92	61.43	5.79	34.57	34.51	338	175	Peak	HORIZONTAL
4	5793.80	116.77			110.68	5.84	34.78	34.53	338	175	Peak	HORIZONTAL
5	5797.00	107.64			101.55	5.84	34.78	34.53	338	175	Average	HORIZONTAL
6	5853.40	77.20	78.20	-1.00	70.94	5.87	34.93	34.54	338	175	Peak	HORIZONTAL
7	5862.60	52.66	54.00	-1.34	46.33	5.88	34.99	34.54	338	175	Average	HORIZONTAL
8	5864.60	71.84	74.00	-2.16	65.51	5.88	34.99	34.54	338	175	Peak	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 3TX)		

Channel 42

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5138.00	52.65	54.00	-1.35	48.04	5.84	33.24	34.47	353	158	Average
2	5150.00	67.83	74.00	-6.17	63.19	5.84	33.27	34.47	353	158	Peak
3	5241.00	103.53			98.79	5.79	33.42	34.47	353	158	Average
4	5244.00	113.15			108.39	5.78	33.45	34.47	353	158	Peak
5	5350.00	48.42	54.00	-5.58	43.53	5.73	33.63	34.47	353	158	Average
6	5393.00	60.28	74.00	-13.72	55.34	5.72	33.69	34.47	353	158	Peak

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

Channel 155

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5712.00	66.78	68.20	-1.42	60.99	5.78	34.52	34.51	337	160	Peak
2	5720.00	67.91	78.20	-10.29	62.06	5.79	34.57	34.51	337	160	Peak
3	5748.00	108.74			102.84	5.80	34.62	34.52	337	160	Peak
4	5812.00	99.07			92.92	5.85	34.83	34.53	337	160	Average
5	5853.00	61.57	78.20	-16.63	55.31	5.87	34.93	34.54	337	160	Peak
6	5860.00	61.63	68.20	-6.57	55.30	5.88	34.99	34.54	337	160	Peak

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5102.00	52.85	54.00	-1.15	48.28	5.86	33.18	34.47	7	278	Average	VERTICAL
2	5106.40	63.97	74.00	-10.03	59.38	5.85	33.21	34.47	7	278	Peak	VERTICAL
3	5182.40	108.68			104.00	5.82	33.33	34.47	7	278	Average	VERTICAL
4	5186.00	118.54			113.86	5.82	33.33	34.47	7	278	Peak	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5112.00	52.74	54.00	-1.26	48.15	5.85	33.21	34.47	359	175	Average	HORIZONTAL
2	5113.60	64.10	74.00	-9.90	59.51	5.85	33.21	34.47	359	175	Peak	HORIZONTAL
3	5192.00	110.75			106.05	5.81	33.36	34.47	359	175	Average	HORIZONTAL
4	5196.40	120.01			115.31	5.81	33.36	34.47	359	175	Peak	HORIZONTAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	60.21	74.00	-13.79	55.57	5.84	33.27	34.47	1	166	Peak	HORIZONTAL
2	5150.00	48.90	54.00	-5.10	44.26	5.84	33.27	34.47	1	166	Average	HORIZONTAL
3	5232.20	119.17			114.43	5.79	33.42	34.47	1	166	Peak	HORIZONTAL
4	5232.20	110.61			105.87	5.79	33.42	34.47	1	166	Average	HORIZONTAL
5	5352.20	46.68	54.00	-7.32	41.79	5.73	33.63	34.47	1	166	Average	HORIZONTAL
6	5388.20	59.47	74.00	-14.53	54.53	5.72	33.69	34.47	1	166	Peak	HORIZONTAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB	deg	cm		
1	5713.80	64.93	74.00	-9.07	59.14	5.78	34.52	34.51	340	183	Peak	HORIZONTAL
2	5713.80	52.99	54.00	-1.01	47.20	5.78	34.52	34.51	340	183	Average	HORIZONTAL
3	5721.80	76.88	78.20	-1.32	71.03	5.79	34.57	34.51	340	183	Peak	HORIZONTAL
4	5753.40	115.49			109.51	5.82	34.68	34.52	340	183	Peak	HORIZONTAL
5	5753.40	106.60			100.62	5.82	34.68	34.52	340	183	Average	HORIZONTAL

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

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB	deg	cm		
1	5708.20	65.59	68.20	-2.61	59.80	5.78	34.52	34.51	340	177	Peak	HORIZONTAL
2	5724.20	62.84	78.20	-15.36	56.99	5.79	34.57	34.51	340	177	Peak	HORIZONTAL
3	5789.00	110.03			103.94	5.84	34.78	34.53	340	177	Average	HORIZONTAL
4	5791.00	120.27			114.18	5.84	34.78	34.53	340	177	Peak	HORIZONTAL
5	5850.80	62.25	78.20	-15.95	55.99	5.87	34.93	34.54	340	177	Peak	HORIZONTAL
6	5860.00	63.79	68.20	-4.41	57.46	5.88	34.99	34.54	340	177	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB		dBuV	dB	dB/m	dB	deg	cm		
1	5817.00	109.89			103.74	5.85	34.83	34.53	337	175	Average	HORIZONTAL
2	5818.20	120.56			114.41	5.85	34.83	34.53	337	175	Peak	HORIZONTAL
3	5850.00	73.60	78.20	-4.60	67.34	5.87	34.93	34.54	337	175	Peak	HORIZONTAL
4	5860.00	67.01	68.20	-1.19	60.68	5.88	34.99	34.54	337	175	Peak	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
1	5143.60	68.06	74.00	-5.94	63.42	5.84	33.27	34.47	0	168	Peak	HORIZONTAL
2	5149.20	52.98	54.00	-1.02	48.34	5.84	33.27	34.47	0	168	Average	HORIZONTAL
3	5195.60	116.95			112.25	5.81	33.36	34.47	0	168	Peak	HORIZONTAL
4	5195.60	107.05			102.35	5.81	33.36	34.47	0	168	Average	HORIZONTAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	deg	cm		
1	5144.40	61.35	74.00	-12.65	56.71	5.84	33.27	34.47	339	159	Peak	HORIZONTAL
2	5148.40	49.59	54.00	-4.41	44.95	5.84	33.27	34.47	339	159	Average	HORIZONTAL
3	5242.00	116.58			111.82	5.78	33.45	34.47	339	159	Peak	HORIZONTAL
4	5242.80	107.24			102.48	5.78	33.45	34.47	339	159	Average	HORIZONTAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)		

Channel 151

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
1	5708.60	66.53	68.20	-1.67	60.74	5.78	34.52	34.51	335	160 Peak	HORIZONTAL
2	5716.60	71.70	78.20	-6.50	65.91	5.78	34.52	34.51	335	160 Peak	HORIZONTAL
3	5769.80	103.56			97.53	5.83	34.73	34.53	335	160 Average	HORIZONTAL
4	5770.20	113.27			107.24	5.83	34.73	34.53	335	160 Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
1	5698.60	62.41	68.20	-5.79	56.68	5.77	34.47	34.51	340	184 Peak	HORIZONTAL
2	5725.00	63.47	78.20	-14.73	57.62	5.79	34.57	34.51	340	184 Peak	HORIZONTAL
3	5811.40	117.52			111.37	5.85	34.83	34.53	340	184 Peak	HORIZONTAL
4	5811.80	107.01			100.86	5.85	34.83	34.53	340	184 Average	HORIZONTAL
5	5852.20	68.01	78.20	-10.19	61.75	5.87	34.93	34.54	340	184 Peak	HORIZONTAL
6	5865.80	66.87	68.20	-1.33	60.54	5.88	34.99	34.54	340	184 Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 24, 2015		
Test Mode	Mode 4 (Set 7 Polarized Panel antenna / 3.89dBi / 4TX)		

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5126.80	66.01	74.00	-7.99	61.40	5.84	33.24	34.47	340	136	Peak	HORIZONTAL
2	5148.40	52.43	54.00	-1.57	47.79	5.84	33.27	34.47	340	136	Average	HORIZONTAL
3	5245.20	112.61			107.85	5.78	33.45	34.47	340	136	Peak	HORIZONTAL
4	5247.60	103.43			98.67	5.78	33.45	34.47	340	136	Average	HORIZONTAL
5	5351.60	49.71	54.00	-4.29	44.82	5.73	33.63	34.47	340	136	Average	HORIZONTAL
6	5352.40	62.29	74.00	-11.71	57.40	5.73	33.63	34.47	340	136	Peak	HORIZONTAL

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

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.00	66.91	68.20	-1.29	61.12	5.78	34.52	34.51	336	175	Peak	HORIZONTAL
2	5719.00	68.56	78.20	-9.64	62.71	5.79	34.57	34.51	336	175	Peak	HORIZONTAL
3	5805.00	100.00			93.85	5.85	34.83	34.53	336	175	Average	HORIZONTAL
4	5808.00	109.22			103.07	5.85	34.83	34.53	336	175	Peak	HORIZONTAL
5	5851.00	65.11	78.20	-13.09	58.85	5.87	34.93	34.54	336	175	Peak	HORIZONTAL
6	5866.00	62.07	68.20	-6.13	55.74	5.88	34.99	34.54	336	175	Peak	HORIZONTAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.60	47.69	54.00	-6.31	43.05	5.84	33.27	34.47	205	225	Average	VERTICAL
2	5148.80	59.54	74.00	-14.46	54.90	5.84	33.27	34.47	205	225	Peak	VERTICAL
3	5186.20	114.95			110.27	5.82	33.33	34.47	205	225	Peak	VERTICAL
4	5187.00	105.18			100.50	5.82	33.33	34.47	205	225	Average	VERTICAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5114.00	60.77	74.00	-13.23	56.18	5.85	33.21	34.47	123	231	Peak	VERTICAL
2	5114.40	48.37	54.00	-5.63	43.78	5.85	33.21	34.47	123	231	Average	VERTICAL
3	5191.60	105.83			101.13	5.81	33.36	34.47	123	231	Average	VERTICAL
4	5194.80	115.75			111.05	5.81	33.36	34.47	123	231	Peak	VERTICAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5120.60	45.82	54.00	-8.18	41.23	5.85	33.21	34.47	336	223	Average	VERTICAL
2	5141.60	58.81	74.00	-15.19	54.17	5.84	33.27	34.47	336	223	Peak	VERTICAL
3	5246.60	117.58			112.82	5.78	33.45	34.47	336	223	Peak	VERTICAL
4	5248.40	107.73			102.97	5.78	33.45	34.47	336	223	Average	VERTICAL
5	5350.00	45.63	54.00	-8.37	40.74	5.73	33.63	34.47	336	223	Average	VERTICAL
6	5369.60	58.14	74.00	-15.86	53.22	5.73	33.66	34.47	336	223	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dB	dB/m	dB	deg	cm		
1	5715.00	59.30	68.20	-8.90	53.51	5.78	34.52	34.51	323	225	Peak	VERTICAL
2	5723.40	76.73	78.20	-1.47	70.88	5.79	34.57	34.51	323	225	Peak	VERTICAL
3	5741.40	112.23			106.33	5.80	34.62	34.52	323	225	Peak	VERTICAL
4	5742.20	102.58			96.68	5.80	34.62	34.52	323	225	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dB	dB/m	dB	deg	cm		
1	5711.80	60.21	68.20	-7.99	54.42	5.78	34.52	34.51	319	232	Peak	VERTICAL
2	5725.00	59.15	78.20	-19.05	53.30	5.79	34.57	34.51	319	232	Peak	VERTICAL
3	5793.00	115.16			109.07	5.84	34.78	34.53	319	232	Peak	VERTICAL
4	5793.00	105.81			99.72	5.84	34.78	34.53	319	232	Average	VERTICAL
5	5853.60	65.36	78.20	-12.84	59.03	5.88	34.99	34.54	319	232	Peak	VERTICAL
6	5873.00	61.27	68.20	-6.93	54.88	5.89	35.04	34.54	319	232	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dB	dB/m	dB	deg	cm		
1	5833.20	115.04			108.84	5.86	34.88	34.54	333	267	Peak	VERTICAL
2	5833.20	105.04			98.84	5.86	34.88	34.54	333	267	Average	VERTICAL
3	5850.00	76.99	78.20	-1.21	70.73	5.87	34.93	34.54	333	267	Peak	VERTICAL
4	5860.00	51.04	54.00	-2.96	44.71	5.88	34.99	34.54	333	267	Average	VERTICAL
5	5860.20	69.41	74.00	-4.59	63.08	5.88	34.99	34.54	333	267	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5145.20	65.73	74.00	-8.27	61.09	5.84	33.27	34.47	269	217	Peak	VERTICAL
2	5150.00	52.63	54.00	-1.37	47.99	5.84	33.27	34.47	269	217	Average	VERTICAL
3	5195.20	101.95			97.25	5.81	33.36	34.47	269	217	Average	VERTICAL
4	5196.40	111.46			106.76	5.81	33.36	34.47	269	217	Peak	VERTICAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.00	47.75	54.00	-6.25	43.11	5.84	33.27	34.47	269	241	Average	VERTICAL
2	5150.00	61.03	74.00	-12.97	56.39	5.84	33.27	34.47	269	241	Peak	VERTICAL
3	5214.00	103.52			98.80	5.80	33.39	34.47	269	241	Average	VERTICAL
4	5236.00	113.99			109.25	5.79	33.42	34.47	269	241	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 151

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5711.80	66.82	68.20	-1.38	61.03	5.78	34.52	34.51	215	229 Peak	VERTICAL
2	5724.60	68.94	78.20	-9.26	63.09	5.79	34.57	34.51	215	229 Peak	VERTICAL
3	5747.40	108.44			102.54	5.80	34.62	34.52	215	229 Peak	VERTICAL
4	5750.20	98.09			92.19	5.80	34.62	34.52	215	229 Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5711.40	64.40	68.20	-3.80	58.61	5.78	34.52	34.51	219	241 Peak	VERTICAL
2	5723.80	63.48	78.20	-14.72	57.63	5.79	34.57	34.51	219	241 Peak	VERTICAL
3	5777.80	114.52			108.49	5.83	34.73	34.53	219	241 Peak	VERTICAL
4	5777.80	104.88			98.85	5.83	34.73	34.53	219	241 Average	VERTICAL
5	5850.00	71.73	78.20	-6.47	65.47	5.87	34.93	34.54	219	241 Peak	VERTICAL
6	5865.00	67.00	68.20	-1.20	60.67	5.88	34.99	34.54	219	241 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2
Test Date	Oct. 24, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 2TX)		

Channel 42

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5147.00	52.55	54.00	-1.45	47.91	5.84	33.27	34.47	43	260	Average
2	5148.00	63.64	74.00	-10.36	59.00	5.84	33.27	34.47	43	260	Peak
3	5239.00	95.62			90.88	5.79	33.42	34.47	43	260	Average
4	5240.00	106.17			101.43	5.79	33.42	34.47	43	260	Peak
5	5350.50	46.72	54.00	-7.28	41.83	5.73	33.63	34.47	43	260	Average
6	5360.50	61.72	74.00	-12.28	56.83	5.73	33.63	34.47	43	260	Peak

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

Channel 155

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5690.00	67.14	68.20	-1.06	61.41	5.77	34.47	34.51	222	248	Peak
2	5721.00	67.81	78.20	-10.39	61.96	5.79	34.57	34.51	222	248	Peak
3	5744.00	107.09			101.19	5.80	34.62	34.52	222	248	Peak
4	5770.00	93.79			87.76	5.83	34.73	34.53	222	248	Average
5	5851.00	64.08	78.20	-14.12	57.82	5.87	34.93	34.54	222	248	Peak
6	5861.00	65.45	68.20	-2.75	59.12	5.88	34.99	34.54	222	248	Peak

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 23, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.40	62.73	74.00	-11.27	58.09	5.84	33.27	34.47	200	238	Peak	VERTICAL
2	5148.40	50.58	54.00	-3.42	45.94	5.84	33.27	34.47	200	238	Average	VERTICAL
3	5187.40	119.04			114.36	5.82	33.33	34.47	200	238	Peak	VERTICAL
4	5188.40	109.53			104.85	5.82	33.33	34.47	200	238	Average	VERTICAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5112.40	49.38	54.00	-4.62	44.79	5.85	33.21	34.47	203	218	Average	VERTICAL
2	5113.20	61.94	74.00	-12.06	57.35	5.85	33.21	34.47	203	218	Peak	VERTICAL
3	5192.80	119.12			114.42	5.81	33.36	34.47	203	218	Peak	VERTICAL
4	5194.80	108.64			103.94	5.81	33.36	34.47	203	218	Average	VERTICAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5146.40	58.75	74.00	-15.25	54.11	5.84	33.27	34.47	208	225	Peak	VERTICAL
2	5150.00	46.78	54.00	-7.22	42.14	5.84	33.27	34.47	208	225	Average	VERTICAL
3	5244.20	118.59			113.83	5.78	33.45	34.47	208	225	Peak	VERTICAL
4	5248.40	109.40			104.64	5.78	33.45	34.47	208	225	Average	VERTICAL
5	5350.00	45.99	54.00	-8.01	41.10	5.73	33.63	34.47	208	225	Average	VERTICAL
6	5353.00	57.30	74.00	-16.70	52.41	5.73	33.63	34.47	208	225	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 24, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 149

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5714.60	62.21	68.20	-5.99	56.42	5.78	34.52	34.51	328	240	Peak	VERTICAL
2	5724.80	77.02	78.20	-1.18	71.17	5.79	34.57	34.51	328	240	Peak	VERTICAL
3	5740.60	113.79			107.89	5.80	34.62	34.52	328	240	Peak	VERTICAL
4	5742.20	103.63			97.73	5.80	34.62	34.52	328	240	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5698.60	63.52	68.20	-4.68	57.79	5.77	34.47	34.51	218	252	Peak	VERTICAL
2	5723.00	61.45	78.20	-16.75	55.60	5.79	34.57	34.51	218	252	Peak	VERTICAL
3	5779.80	120.09			114.06	5.83	34.73	34.53	218	252	Peak	VERTICAL
4	5779.80	108.98			102.95	5.83	34.73	34.53	218	252	Average	VERTICAL
5	5855.60	63.27	78.20	-14.93	56.94	5.88	34.99	34.54	218	252	Peak	VERTICAL
6	5861.40	62.86	68.20	-5.34	56.53	5.88	34.99	34.54	218	252	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5827.60	118.74			112.53	5.86	34.88	34.53	329	227	Peak	VERTICAL
2	5831.20	108.29			102.08	5.86	34.88	34.53	329	227	Average	VERTICAL
3	5850.20	72.56	78.20	-5.64	66.30	5.87	34.93	34.54	329	227	Peak	VERTICAL
4	5862.20	67.05	68.20	-1.15	60.72	5.88	34.99	34.54	329	227	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 23, 2015 ~ Oct. 24, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 38

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	66.74	74.00	-7.26	62.10	5.84	33.27	34.47	206	234 Peak	VERTICAL
2	5150.00	52.61	54.00	-1.39	47.97	5.84	33.27	34.47	206	234 Average	VERTICAL
3	5202.80	104.43			99.73	5.81	33.36	34.47	206	234 Average	VERTICAL
4	5204.00	114.36			109.66	5.81	33.36	34.47	206	234 Peak	VERTICAL

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

Channel 46

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5141.60	60.93	74.00	-13.07	56.29	5.84	33.27	34.47	210	231 Peak	VERTICAL
2	5147.60	48.32	54.00	-5.68	43.68	5.84	33.27	34.47	210	231 Average	VERTICAL
3	5244.00	118.45			113.69	5.78	33.45	34.47	210	231 Peak	VERTICAL
4	5247.20	108.61			103.85	5.78	33.45	34.47	210	231 Average	VERTICAL

Item 1, 2 are the fundamental frequency at 5230 MHz.

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 24, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5711.40	70.74	74.00	-3.26	64.95	5.78	34.52	34.51	324	245	Peak	VERTICAL
2	5712.60	52.78	54.00	-1.22	46.99	5.78	34.52	34.51	324	245	Average	VERTICAL
3	5721.40	65.95	78.20	-12.25	60.10	5.79	34.57	34.51	324	245	Peak	VERTICAL
4	5771.40	108.86			102.83	5.83	34.73	34.53	324	245	Peak	VERTICAL
5	5772.60	99.43			93.40	5.83	34.73	34.53	324	245	Average	VERTICAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5697.00	61.68	68.20	-6.52	55.95	5.77	34.47	34.51	217	258	Peak	VERTICAL
2	5722.20	62.81	78.20	-15.39	56.96	5.79	34.57	34.51	217	258	Peak	VERTICAL
3	5778.20	104.67			98.64	5.83	34.73	34.53	217	258	Average	VERTICAL
4	5779.40	114.90			108.87	5.83	34.73	34.53	217	258	Peak	VERTICAL
5	5850.00	67.59	78.20	-10.61	61.26	5.88	34.99	34.54	217	258	Peak	VERTICAL
6	5860.00	66.92	68.20	-1.28	60.59	5.88	34.99	34.54	217	258	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 24, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 3TX)		

Channel 42

Freq MHz	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	Freq MHz	Level dBuV/m	Line dBuV/m		Loss	Factor	Factor	deg	cm		
1 5142.00	68.79	74.00	-5.21	64.15	5.84	33.27	34.47	210	234	Peak	VERTICAL
2 5150.00	52.86	54.00	-1.14	48.22	5.84	33.27	34.47	210	234	Average	VERTICAL
3 5234.00	112.09			107.35	5.79	33.42	34.47	210	234	Peak	VERTICAL
4 5247.00	101.65			96.89	5.78	33.45	34.47	210	234	Average	VERTICAL
5 5350.00	48.85	54.00	-5.15	43.96	5.73	33.63	34.47	210	234	Average	VERTICAL
6 5359.00	61.72	74.00	-12.28	56.83	5.73	33.63	34.47	210	234	Peak	VERTICAL

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

Channel 155

Freq MHz	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	Freq MHz	Level dBuV/m	Line dBuV/m		Loss	Factor	Factor	deg	cm		
1 5710.00	67.02	68.20	-1.18	61.23	5.78	34.52	34.51	215	215	Peak	VERTICAL
2 5721.00	69.71	78.20	-8.49	63.86	5.79	34.57	34.51	215	215	Peak	VERTICAL
3 5767.00	96.47			90.50	5.82	34.68	34.53	215	215	Average	VERTICAL
4 5770.00	107.42			101.39	5.83	34.73	34.53	215	215	Peak	VERTICAL
5 5855.00	66.56	78.20	-11.64	60.23	5.88	34.99	34.54	215	215	Peak	VERTICAL
6 5862.00	67.10	68.20	-1.10	60.77	5.88	34.99	34.54	215	215	Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 23, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 36

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5147.20	63.46	74.00	-10.54	58.82	5.84	33.27	34.47	49	250	Peak
2	5148.40	50.39	54.00	-3.61	45.75	5.84	33.27	34.47	49	250	Average
3	5187.00	120.52			115.84	5.82	33.33	34.47	49	250	Peak
4	5188.40	110.13			105.45	5.82	33.33	34.47	49	250	Average

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

Channel 40

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5126.00	51.60	54.00	-2.40	46.99	5.84	33.24	34.47	321	249	Average
2	5127.20	63.52	74.00	-10.48	58.91	5.84	33.24	34.47	321	249	Peak
3	5206.00	119.83			115.13	5.81	33.36	34.47	321	249	Peak
4	5206.80	110.47			105.77	5.81	33.36	34.47	321	249	Average

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

Channel 48

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5146.40	59.86	74.00	-14.14	55.22	5.84	33.27	34.47	316	254	Peak
2	5150.00	48.47	54.00	-5.53	43.83	5.84	33.27	34.47	316	254	Average
3	5246.60	110.48			105.72	5.78	33.45	34.47	316	254	Average
4	5247.20	120.33			115.57	5.78	33.45	34.47	316	254	Peak
5	5350.00	48.30	54.00	-5.70	43.41	5.73	33.63	34.47	316	254	Average
6	5352.40	60.15	74.00	-13.85	55.26	5.73	33.63	34.47	316	254	Peak

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 23, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 149

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5713.99	64.00	68.20	-4.20	58.21	5.78	34.52	34.51	155	250	Peak
2	5723.12	77.18	78.20	-1.02	71.33	5.79	34.57	34.51	155	250	Peak
3	5736.90	105.46			99.56	5.80	34.62	34.52	155	250	Average
4	5737.76	115.35			109.45	5.80	34.62	34.52	155	250	Peak

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5704.29	65.22	68.20	-2.98	59.43	5.78	34.52	34.51	162	252	Peak
2	5724.42	62.55	78.20	-15.65	56.70	5.79	34.57	34.51	162	252	Peak
3	5778.63	108.68			102.65	5.83	34.73	34.53	162	252	Average
4	5779.21	119.49			113.46	5.83	34.73	34.53	162	252	Peak
5	5850.87	62.90	78.20	-15.30	56.64	5.87	34.93	34.54	162	252	Peak
6	5862.89	66.05	68.20	-2.15	59.72	5.88	34.99	34.54	162	252	Peak

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5817.91	107.70			101.55	5.85	34.83	34.53	140	266	Average
2	5819.07	118.07			111.92	5.85	34.83	34.53	140	266	Peak
3	5850.00	76.39	78.20	-1.81	70.13	5.87	34.93	34.54	140	266	Peak
4	5860.29	66.93	68.20	-1.27	60.60	5.88	34.99	34.54	140	266	Peak

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 23, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	deg	cm		
1	5142.80	68.85	74.00	-5.15	64.21	5.84	33.27	34.47	359	249	Peak	VERTICAL
2	5150.00	52.51	54.00	-1.49	47.87	5.84	33.27	34.47	359	249	Average	VERTICAL
3	5202.00	112.96			108.26	5.81	33.36	34.47	359	249	Peak	VERTICAL
4	5204.80	103.21			98.51	5.81	33.36	34.47	359	249	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	deg	cm		
1	5147.20	63.82	74.00	-10.18	59.18	5.84	33.27	34.47	319	255	Peak	VERTICAL
2	5150.00	49.81	54.00	-4.19	45.17	5.84	33.27	34.47	319	255	Average	VERTICAL
3	5212.00	107.22			102.50	5.80	33.39	34.47	319	255	Average	VERTICAL
4	5215.20	116.18			111.46	5.80	33.39	34.47	319	255	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 23, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 151

Freq	Level	Limit		Read Level	Cable Loss		Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m		dB	dBuV	dB	dB/m	deg	cm		
1	5712.68	68.99	74.00	-5.01	63.20	5.78	34.52	34.51	156	254	Peak	VERTICAL
2	5715.00	52.82	54.00	-1.18	47.03	5.78	34.52	34.51	156	254	Average	VERTICAL
3	5717.76	73.37	78.20	-4.83	67.52	5.79	34.57	34.51	156	254	Peak	VERTICAL
4	5767.45	112.25			106.28	5.82	34.68	34.53	156	254	Peak	VERTICAL
5	5768.02	100.90			94.93	5.82	34.68	34.53	156	254	Average	VERTICAL

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

Channel 159

Freq	Level	Limit		Read Level	Cable Loss		Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m		dB	dBuV	dB	dB/m	deg	cm		
1	5714.42	61.65	68.20	-6.55	55.86	5.78	34.52	34.51	158	274	Peak	VERTICAL
2	5723.84	64.85	78.20	-13.35	59.00	5.79	34.57	34.51	158	274	Peak	VERTICAL
3	5780.53	104.15			98.12	5.83	34.73	34.53	158	274	Average	VERTICAL
4	5789.50	116.30			110.21	5.84	34.78	34.53	158	274	Peak	VERTICAL
5	5850.00	71.22	78.20	-6.98	64.96	5.87	34.93	34.54	158	274	Peak	VERTICAL
6	5860.00	66.71	68.20	-1.49	60.38	5.88	34.99	34.54	158	274	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 23, 2015		
Test Mode	Mode 5 (Set 8 Patch antenna / 3.26dBi / 4TX)		

Channel 42

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5138.42	65.24	74.00	-8.76	60.63	5.84	33.24	34.47	318	250 Peak	VERTICAL
2	5150.00	52.63	54.00	-1.37	47.99	5.84	33.27	34.47	318	250 Average	VERTICAL
3	5176.71	111.82			107.14	5.82	33.33	34.47	318	250 Peak	VERTICAL
4	5204.93	102.81			98.11	5.81	33.36	34.47	318	250 Average	VERTICAL
5	5350.00	49.30	54.00	-4.70	44.41	5.73	33.63	34.47	318	250 Average	VERTICAL
6	5357.96	62.17	74.00	-11.83	57.28	5.73	33.63	34.47	318	250 Peak	VERTICAL

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

Channel 155

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5713.55	66.64	68.20	-1.56	60.85	5.78	34.52	34.51	33	261 Peak	VERTICAL
2	5723.55	68.61	78.20	-9.59	62.76	5.79	34.57	34.51	33	261 Peak	VERTICAL
3	5743.89	95.92			90.02	5.80	34.62	34.52	33	261 Average	VERTICAL
4	5747.50	108.49			102.59	5.80	34.62	34.52	33	261 Peak	VERTICAL
5	5851.45	63.62	78.20	-14.58	57.36	5.87	34.93	34.54	33	261 Peak	VERTICAL
6	5870.13	63.69	68.20	-4.51	57.36	5.88	34.99	34.54	33	261 Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5104.40	49.71	54.00	-4.29	45.14	5.86	33.18	34.47	120	282	Average	VERTICAL
2	5146.40	62.28	74.00	-11.72	57.64	5.84	33.27	34.47	120	282	Peak	VERTICAL
3	5185.60	102.54			97.86	5.82	33.33	34.47	120	282	Average	VERTICAL
4	5187.20	113.00			108.32	5.82	33.33	34.47	120	282	Peak	VERTICAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5125.60	50.82	54.00	-3.18	46.21	5.84	33.24	34.47	241	269	Average	VERTICAL
2	5127.60	63.08	74.00	-10.92	58.47	5.84	33.24	34.47	241	269	Peak	VERTICAL
3	5205.60	118.14			113.44	5.81	33.36	34.47	241	269	Peak	VERTICAL
4	5207.20	107.42			102.72	5.81	33.36	34.47	241	269	Average	VERTICAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5146.40	62.23	74.00	-11.77	57.59	5.84	33.27	34.47	247	249	Peak	VERTICAL
2	5150.00	49.19	54.00	-4.81	44.55	5.84	33.27	34.47	247	249	Average	VERTICAL
3	5243.60	117.32			112.56	5.78	33.45	34.47	247	249	Peak	VERTICAL
4	5246.60	106.52			101.76	5.78	33.45	34.47	247	249	Average	VERTICAL
5	5350.00	48.23	54.00	-5.77	43.34	5.73	33.63	34.47	247	249	Average	VERTICAL
6	5375.00	60.45	74.00	-13.55	55.53	5.73	33.66	34.47	247	249	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 149

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line dBuV/m	dB dB			Loss	Factor	Factor	deg	cm		
1 5713.40	64.24	68.20	-3.96	58.45	5.78	34.52	34.51	269	296	Peak	VERTICAL	
2 5724.60	76.96	78.20	-1.24	71.11	5.79	34.57	34.51	269	296	Peak	VERTICAL	
3 5751.40	103.91			98.01	5.80	34.62	34.52	269	296	Average	VERTICAL	
4 5752.20	114.44			108.46	5.82	34.68	34.52	269	296	Peak	VERTICAL	

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line dBuV/m	dB dB			Loss	Factor	Factor	deg	cm		
1 5697.00	64.77	68.20	-3.43	59.04	5.77	34.47	34.51	231	292	Peak	VERTICAL	
2 5724.20	63.42	78.20	-14.78	57.57	5.79	34.57	34.51	231	292	Peak	VERTICAL	
3 5779.40	107.91			101.88	5.83	34.73	34.53	231	292	Average	VERTICAL	
4 5779.80	118.83			112.80	5.83	34.73	34.53	231	292	Peak	VERTICAL	
5 5850.00	62.79	78.20	-15.41	56.53	5.87	34.93	34.54	231	292	Peak	VERTICAL	
6 5862.20	65.07	68.20	-3.13	58.74	5.88	34.99	34.54	231	292	Peak	VERTICAL	

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line dBuV/m	dB dB			Loss	Factor	Factor	deg	cm		
1 5818.20	104.88			98.73	5.85	34.83	34.53	228	272	Average	VERTICAL	
2 5824.60	115.25			109.04	5.86	34.88	34.53	228	272	Peak	VERTICAL	
3 5850.00	70.53	78.20	-7.67	64.27	5.87	34.93	34.54	228	272	Peak	VERTICAL	
4 5861.00	66.99	68.20	-1.21	60.66	5.88	34.99	34.54	228	272	Peak	VERTICAL	

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 /Chain 1 + Chain 2
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 38

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5148.80	64.74	74.00	-9.26	60.10	5.84	33.27	34.47	244	253 Peak	VERTICAL
2	5150.00	52.89	54.00	-1.11	48.25	5.84	33.27	34.47	244	253 Average	VERTICAL
3	5186.40	99.91			95.23	5.82	33.33	34.47	244	253 Average	VERTICAL
4	5196.40	111.21			106.51	5.81	33.36	34.47	244	253 Peak	VERTICAL

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

Channel 46

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5141.20	62.80	74.00	-11.20	58.16	5.84	33.27	34.47	241	268 Peak	VERTICAL
2	5147.60	50.78	54.00	-3.22	46.14	5.84	33.27	34.47	241	268 Average	VERTICAL
3	5244.40	115.52			110.76	5.78	33.45	34.47	241	268 Peak	VERTICAL
4	5244.40	105.29			100.53	5.78	33.45	34.47	241	268 Average	VERTICAL
5	5373.20	50.01	54.00	-3.99	45.09	5.73	33.66	34.47	241	268 Average	VERTICAL
6	5382.00	64.24	74.00	-9.76	59.30	5.72	33.69	34.47	241	268 Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 151

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					dB	dB/m	dB	deg	cm		
1 5712.20	66.91	68.20	-1.29	61.12	5.78	34.52	34.51	228	282	Peak	VERTICAL
2 5723.00	66.87	78.20	-11.33	61.02	5.79	34.57	34.51	228	282	Peak	VERTICAL
3 5742.20	98.52			92.62	5.80	34.62	34.52	228	282	Average	VERTICAL
4 5746.60	111.48			105.58	5.80	34.62	34.52	228	282	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					dB	dB/m	dB	deg	cm		
1 5711.80	62.72	68.20	-5.48	56.93	5.78	34.52	34.51	228	291	Average	VERTICAL
2 5725.00	62.43	78.20	-15.77	56.58	5.79	34.57	34.51	228	291	Average	VERTICAL
3 5781.40	102.15			96.12	5.83	34.73	34.53	228	291	Peak	VERTICAL
4 5789.40	112.91			106.82	5.84	34.78	34.53	228	291	Average	VERTICAL
5 5850.00	67.44	78.20	-10.76	61.18	5.87	34.93	34.54	228	291	Average	VERTICAL
6 5862.20	67.09	68.20	-1.11	60.76	5.88	34.99	34.54	228	291	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi / 2TX)		

Channel 42

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5146.00	65.44	74.00	-8.56	60.80	5.84	33.27	34.47	292	264 Peak	VERTICAL
2	5149.20	52.97	54.00	-1.03	48.33	5.84	33.27	34.47	292	264 Average	VERTICAL
3	5174.00	108.97			104.29	5.82	33.33	34.47	292	264 Peak	VERTICAL
4	5179.60	95.90			91.22	5.82	33.33	34.47	292	264 Average	VERTICAL
5	5350.00	47.28	54.00	-6.72	42.39	5.73	33.63	34.47	292	264 Average	VERTICAL
6	5355.60	59.86	74.00	-14.14	54.97	5.73	33.63	34.47	292	264 Peak	VERTICAL

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

Channel 155

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5710.00	66.97	68.20	-1.23	61.18	5.78	34.52	34.51	230	302 Peak	VERTICAL
2	5721.00	66.90	78.20	-11.30	61.05	5.79	34.57	34.51	230	302 Peak	VERTICAL
3	5742.00	110.14			104.24	5.80	34.62	34.52	230	302 Peak	VERTICAL
4	5745.00	95.69			89.79	5.80	34.62	34.52	230	302 Average	VERTICAL
5	5854.00	65.58	78.20	-12.62	59.25	5.88	34.99	34.54	230	302 Peak	VERTICAL
6	5868.00	65.09	68.20	-3.11	58.76	5.88	34.99	34.54	230	302 Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 36

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5146.80	68.43	74.00	-5.57	63.79	5.84	33.27	34.47	25	250 Peak	VERTICAL
2	5149.60	52.97	54.00	-1.03	48.33	5.84	33.27	34.47	25	250 Average	VERTICAL
3	5173.60	109.57			104.89	5.82	33.33	34.47	25	250 Average	VERTICAL
4	5174.80	119.28			114.60	5.82	33.33	34.47	25	250 Peak	VERTICAL

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

Channel 40

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5124.80	64.02	74.00	-9.98	59.41	5.84	33.24	34.47	39	272 Peak	VERTICAL
2	5125.20	51.97	54.00	-2.03	47.36	5.84	33.24	34.47	39	272 Average	VERTICAL
3	5197.60	120.53			115.83	5.81	33.36	34.47	39	272 Peak	VERTICAL
4	5203.20	109.96			105.26	5.81	33.36	34.47	39	272 Average	VERTICAL

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

Channel 48

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	67.63	74.00	-6.37	62.99	5.84	33.27	34.47	39	272 Peak	VERTICAL
2	5150.00	50.84	54.00	-3.16	46.20	5.84	33.27	34.47	39	272 Average	VERTICAL
3	5243.00	111.75			106.99	5.78	33.45	34.47	39	272 Average	VERTICAL
4	5247.20	122.28			117.52	5.78	33.45	34.47	39	272 Peak	VERTICAL
5	5350.00	49.29	54.00	-4.71	44.40	5.73	33.63	34.47	39	272 Average	VERTICAL
6	5353.00	61.09	74.00	-12.91	56.20	5.73	33.63	34.47	39	272 Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m		dB	dBuV		dB/m		deg	cm	
1	5713.40	67.00	68.20	-1.20	61.21	5.78	34.52	34.51	139	250	Peak	VERTICAL
2	5724.00	75.22	78.20	-2.98	69.37	5.79	34.57	34.51	139	250	Peak	VERTICAL
3	5750.80	119.87			113.97	5.80	34.62	34.52	139	250	Peak	VERTICAL
4	5751.80	109.46			103.48	5.82	34.68	34.52	139	250	Average	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m		dB	dBuV		dB/m		deg	cm	
1	5711.40	66.78	68.20	-1.42	60.99	5.78	34.52	34.51	127	247	Peak	VERTICAL
2	5725.00	63.34	78.20	-14.86	57.49	5.79	34.57	34.51	127	247	Peak	VERTICAL
3	5791.80	110.96			104.87	5.84	34.78	34.53	127	247	Average	VERTICAL
4	5792.20	121.52			115.43	5.84	34.78	34.53	127	247	Peak	VERTICAL
5	5850.00	63.80	78.20	-14.40	57.54	5.87	34.93	34.54	127	247	Peak	VERTICAL
6	5861.00	65.42	68.20	-2.78	59.09	5.88	34.99	34.54	127	247	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m		dB	dBuV		dB/m		deg	cm	
1	5830.80	109.26			103.05	5.86	34.88	34.53	133	270	Average	VERTICAL
2	5831.40	119.57			113.36	5.86	34.88	34.53	133	270	Peak	VERTICAL
3	5850.60	72.84	78.20	-5.36	66.58	5.87	34.93	34.54	133	270	Peak	VERTICAL
4	5860.20	67.16	68.20	-1.04	60.83	5.88	34.99	34.54	133	270	Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 38

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5149.60	69.35	74.00	-4.65	64.71	5.84	33.27	34.47	26	291 Peak	VERTICAL
2	5150.00	52.79	54.00	-1.21	48.15	5.84	33.27	34.47	26	291 Average	VERTICAL
3	5203.60	114.59			109.89	5.81	33.36	34.47	26	291 Peak	VERTICAL
4	5204.00	104.32			99.62	5.81	33.36	34.47	26	291 Average	VERTICAL

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

Channel 46

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5148.00	70.08	74.00	-3.92	65.44	5.84	33.27	34.47	29	261 Peak	VERTICAL
2	5150.00	52.65	54.00	-1.35	48.01	5.84	33.27	34.47	29	261 Average	VERTICAL
3	5213.20	119.42			114.70	5.80	33.39	34.47	29	261 Peak	VERTICAL
4	5213.20	109.35			104.63	5.80	33.39	34.47	29	261 Average	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 151

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5707.40	66.78	68.20	-1.42	60.99	5.78	34.52	34.51	134	247 Peak	VERTICAL
2	5723.40	67.55	78.20	-10.65	61.70	5.79	34.57	34.51	134	247 Peak	VERTICAL
3	5749.00	102.62			96.72	5.80	34.62	34.52	134	247 Average	VERTICAL
4	5758.20	113.30			107.33	5.82	34.68	34.53	134	247 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5712.20	63.88	68.20	-4.32	58.09	5.78	34.52	34.51	228	267 Peak	VERTICAL
2	5725.00	64.13	78.20	-14.07	58.28	5.79	34.57	34.51	228	267 Peak	VERTICAL
3	5799.80	116.50			110.41	5.84	34.78	34.53	228	267 Peak	VERTICAL
4	5799.80	105.62			99.53	5.84	34.78	34.53	228	267 Average	VERTICAL
5	5853.00	72.44	78.20	-5.76	66.18	5.87	34.93	34.54	228	267 Peak	VERTICAL
6	5862.20	67.05	68.20	-1.15	60.72	5.88	34.99	34.54	228	267 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi / 3TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	64.68	74.00	-9.32	60.04	5.84	33.27	34.47	32	271	Peak	VERTICAL
2	5150.00	52.90	54.00	-1.10	48.26	5.84	33.27	34.47	32	271	Average	VERTICAL
3	5219.00	101.19			96.47	5.80	33.39	34.47	32	271	Average	VERTICAL
4	5220.00	111.56			106.84	5.80	33.39	34.47	32	271	Peak	VERTICAL
5	5350.00	49.22	54.00	-4.78	44.33	5.73	33.63	34.47	32	271	Average	VERTICAL
6	5446.00	61.87	74.00	-12.13	56.85	5.68	33.81	34.47	32	271	Peak	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5698.00	67.17	68.20	-1.03	61.44	5.77	34.47	34.51	147	247	Peak	VERTICAL
2	5725.00	66.66	78.20	-11.54	60.81	5.79	34.57	34.51	147	247	Peak	VERTICAL
3	5743.00	111.78			105.88	5.80	34.62	34.52	147	247	Peak	VERTICAL
4	5762.00	98.25			92.28	5.82	34.68	34.53	147	247	Average	VERTICAL
5	5850.00	65.16	78.20	-13.04	58.90	5.87	34.93	34.54	147	247	Peak	VERTICAL
6	5861.00	63.09	68.20	-5.11	56.76	5.88	34.99	34.54	147	247	Peak	VERTICAL

Item 3, 4 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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna			T/Pos	A/Pos	Remark	Pol/Phase
		Line	Cable			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5100.80	65.17	74.00	-8.83	60.60	5.86	33.18	34.47	34	279	Peak	VERTICAL
2	5101.20	52.93	54.00	-1.07	48.36	5.86	33.18	34.47	34	279	Average	VERTICAL
3	5182.40	118.15			113.47	5.82	33.33	34.47	34	279	Peak	VERTICAL
4	5182.40	108.96			104.28	5.82	33.33	34.47	34	279	Average	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna			T/Pos	A/Pos	Remark	Pol/Phase
		Line	Cable			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5126.40	52.92	54.00	-1.08	48.31	5.84	33.24	34.47	32	270	Average	VERTICAL
2	5127.20	64.56	74.00	-9.44	59.95	5.84	33.24	34.47	32	270	Peak	VERTICAL
3	5204.80	120.45			115.75	5.81	33.36	34.47	32	270	Peak	VERTICAL
4	5205.20	110.78			106.08	5.81	33.36	34.47	32	270	Average	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable Antenna			T/Pos	A/Pos	Remark	Pol/Phase
		Line	Cable			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5139.20	62.70	74.00	-11.30	58.09	5.84	33.24	34.47	38	258	Peak	VERTICAL
2	5150.00	52.00	54.00	-2.00	47.36	5.84	33.27	34.47	38	258	Average	VERTICAL
3	5231.60	113.69			108.95	5.79	33.42	34.47	38	258	Average	VERTICAL
4	5232.20	121.91			117.17	5.79	33.42	34.47	38	258	Peak	VERTICAL
5	5350.00	62.02	74.00	-11.98	57.13	5.73	33.63	34.47	38	258	Peak	VERTICAL
6	5352.20	48.21	54.00	-5.79	43.32	5.73	33.63	34.47	38	258	Average	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 149

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5712.40	66.33	68.20	-1.87	60.54	5.78	34.52	34.51	234	250 Peak	VERTICAL
2	5723.20	76.75	78.20	-1.45	70.90	5.79	34.57	34.51	234	250 Peak	VERTICAL
3	5750.20	108.24			102.34	5.80	34.62	34.52	234	250 Average	VERTICAL
4	5750.60	118.88			112.98	5.80	34.62	34.52	234	250 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5745 MHz.

Channel 157

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5710.60	66.78	68.20	-1.42	60.99	5.78	34.52	34.51	129	266 Peak	VERTICAL
2	5725.00	62.54	78.20	-15.66	56.69	5.79	34.57	34.51	129	266 Peak	VERTICAL
3	5779.00	121.48			115.45	5.83	34.73	34.53	129	266 Peak	VERTICAL
4	5781.80	110.47			104.44	5.83	34.73	34.53	129	266 Average	VERTICAL
5	5850.00	62.21	78.20	-15.99	55.95	5.87	34.93	34.54	129	266 Peak	VERTICAL
6	5861.80	64.96	68.20	-3.24	58.63	5.88	34.99	34.54	129	266 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5785 MHz.

Channel 165

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5818.00	110.68			104.53	5.85	34.83	34.53	123	283 Average	VERTICAL
2	5818.60	120.78			114.63	5.85	34.83	34.53	123	283 Peak	VERTICAL
3	5850.40	72.27	78.20	-5.93	66.01	5.87	34.93	34.54	123	283 Peak	VERTICAL
4	5861.80	66.86	68.20	-1.34	60.53	5.88	34.99	34.54	123	283 Peak	VERTICAL

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

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.00	66.53	74.00	-7.47	61.89	5.84	33.27	34.47	31	291	Peak	VERTICAL
2	5149.60	52.87	54.00	-1.13	48.23	5.84	33.27	34.47	31	291	Average	VERTICAL
3	5175.60	114.11			109.43	5.82	33.33	34.47	31	291	Peak	VERTICAL
4	5176.40	104.78			100.10	5.82	33.33	34.47	31	291	Average	VERTICAL

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5146.80	52.31	54.00	-1.69	47.67	5.84	33.27	34.47	34	305	Average	VERTICAL
2	5150.00	72.65	74.00	-1.35	68.01	5.84	33.27	34.47	34	305	Peak	VERTICAL
3	5214.00	109.23			104.51	5.80	33.39	34.47	34	305	Average	VERTICAL
4	5214.80	118.94			114.22	5.80	33.39	34.47	34	305	Peak	VERTICAL

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



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 151

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5714.60	66.94	68.20	-1.26	61.15	5.78	34.52	34.51	138	252 Peak	VERTICAL
2	5718.20	72.38	78.20	-5.82	66.53	5.79	34.57	34.51	138	252 Peak	VERTICAL
3	5740.60	103.22			97.32	5.80	34.62	34.52	138	252 Average	VERTICAL
4	5741.40	113.43			107.53	5.80	34.62	34.52	138	252 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5755 MHz.

Channel 159

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.40	62.61	68.20	-5.59	56.82	5.78	34.52	34.51	127	250 Peak	VERTICAL
2	5725.00	63.52	78.20	-14.68	57.67	5.79	34.57	34.51	127	250 Peak	VERTICAL
3	5800.20	116.51			110.42	5.84	34.78	34.53	127	250 Peak	VERTICAL
4	5800.60	105.87			99.78	5.84	34.78	34.53	127	250 Average	VERTICAL
5	5850.00	64.65	78.20	-13.55	58.39	5.87	34.93	34.54	127	250 Peak	VERTICAL
6	5868.20	66.86	68.20	-1.34	60.53	5.88	34.99	34.54	127	250 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5795 MHz.



Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun & Gino Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 1 + Chain 2 + Chain 3 + Chain 4
Test Date	Oct. 25, 2015		
Test Mode	Mode 6 (Set 9 Monopole antenna / Chain 1: 6.8dBi, Chain 2: 6.7dBi, Chain 3: 6.6dBi, Chain 4: 5.9dBi / 4TX)		

Channel 42

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable			Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna Loss	Factor	Preamp Factor						
1 5145.00	64.64	74.00	-9.36	60.00	5.84	33.27	34.47	26	291	Peak	291	Peak	VERTICAL
2 5149.00	52.96	54.00	-1.04	48.32	5.84	33.27	34.47	26	291	Average	291	Average	VERTICAL
3 5206.00	112.62			107.92	5.81	33.36	34.47	26	291	Peak	291	Peak	VERTICAL
4 5212.00	102.19			97.47	5.80	33.39	34.47	26	291	Average	291	Average	VERTICAL
5 5362.50	48.67	54.00	-5.33	43.75	5.73	33.66	34.47	26	291	Average	291	Average	VERTICAL
6 5365.50	60.67	74.00	-13.33	55.75	5.73	33.66	34.47	26	291	Peak	291	Peak	VERTICAL

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

Channel 155

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable			Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna Loss	Factor	Preamp Factor						
1 5699.00	67.06	68.20	-1.14	61.33	5.77	34.47	34.51	126	250	Peak	250	Peak	VERTICAL
2 5725.00	67.38	78.20	-10.82	61.53	5.79	34.57	34.51	126	250	Peak	250	Peak	VERTICAL
3 5798.00	109.85			103.76	5.84	34.78	34.53	126	250	Peak	250	Peak	VERTICAL
4 5805.00	99.68			93.53	5.85	34.83	34.53	126	250	Average	250	Average	VERTICAL
5 5852.00	63.90	78.20	-14.30	57.64	5.87	34.93	34.54	126	250	Peak	250	Peak	VERTICAL
6 5864.00	63.84	68.20	-4.36	57.51	5.88	34.99	34.54	126	250	Peak	250	Peak	VERTICAL

Item 3, 4 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

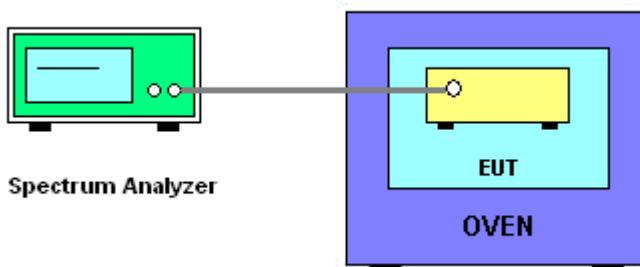
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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 $(fc-f)/fc \times 10^6$ ppm and the limit is less than ± 20 ppm (IEEE 802.11n specification).
6. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
7. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
8. Extreme temperature is 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	25°C	Humidity	46%
Test Engineer	Eddie Weng	Test Date	Oct. 14, 2015 ~ Oct. 21, 2015

Mode: 20 MHz / Chain 1

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9832	5199.9831	5199.9829	5199.9828
110.00	5199.9753	5199.9731	5199.9722	5199.9719
93.50	5199.9677	5199.9676	5199.9675	5199.9674
Max. Deviation (MHz)	0.0323	0.0324	0.0325	0.0326
Max. Deviation (ppm)	6.21	6.23	6.25	6.27
Result	Complies			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5200.0117	5200.0119	5200.0122	5200.0132
10	5200.0109	5200.0115	5200.0118	5200.0125
20	5199.9753	5199.9731	5199.9722	5199.9719
30	5199.9622	5199.9605	5199.9596	5199.9589
40	5199.9588	5199.9531	5199.9501	5199.9488
50	5199.9540	5199.9536	5199.9521	5199.9508
Max. Deviation (MHz)	0.0460	0.0469	0.0499	0.0512
Max. Deviation (ppm)	8.85	9.02	9.60	9.85
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9772	5784.9770	5784.9769	5784.9768
110.00	5784.9692	5784.9691	5784.9690	5784.9690
93.50	5784.9641	5784.9639	5784.9638	5784.9637
Max. Deviation (MHz)	0.0359	0.0361	0.0362	0.0363
Max. Deviation (ppm)	6.21	6.24	6.26	6.27
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5785.0135	5785.0135	5785.0117	5785.0109
10	5785.0065	5785.0062	5785.0048	5785.0041
20	5784.9692	5784.9691	5784.9690	5784.9690
30	5784.9592	5784.9589	5784.9587	5784.9585
40	5784.9418	5784.9405	5784.9401	5784.9397
50	5784.9405	5784.9396	5784.9392	5784.9389
Max. Deviation (MHz)	0.0595	0.0604	0.0608	0.0611
Max. Deviation (ppm)	10.28	10.44	10.51	10.56
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	5189.9822	5189.9821	5189.9819	5189.9817
110.00	5189.9755	5189.9742	5189.9728	5189.9726
93.50	5189.9665	5189.9662	5189.9660	5189.9659
Max. Deviation (MHz)	0.0335	0.0338	0.0340	0.0341
Max. Deviation (ppm)	6.45	6.51	6.55	6.57
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
($^{\circ}$ C)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5190.0115	5190.0118	5190.0124	5190.0131
10	5190.0106	5190.0114	5190.0120	5190.0124
20	5189.9755	5189.9742	5189.9728	5189.9726
30	5189.9625	5189.9616	5189.9602	5189.9596
40	5189.9590	5189.9542	5189.9507	5189.9495
50	5189.9542	5189.9547	5189.9527	5189.9515
Max. Deviation (MHz)	0.0458	0.0458	0.0493	0.0505
Max. Deviation (ppm)	8.82	8.82	9.51	9.74
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9765	5754.9763	5754.9761	5754.9759
110.00	5754.9691	5754.9691	5754.9690	5754.9690
93.50	5754.9633	5754.9631	5754.9629	5754.9627
Max. Deviation (MHz)	0.0367	0.0369	0.0371	0.0373
Max. Deviation (ppm)	6.38	6.41	6.45	6.48
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5755.0132	5755.0131	5755.0128	5755.0126
10	5755.0063	5755.0058	5755.0059	5755.0059
20	5754.9691	5754.9691	5754.9690	5754.9690
30	5754.9518	5754.9507	5754.9504	5754.9502
40	5754.9344	5754.9323	5754.9318	5754.9313
50	5754.9331	5754.9314	5754.9309	5754.9306
Max. Deviation (MHz)	0.0669	0.0686	0.0691	0.0694
Max. Deviation (ppm)	11.62	11.92	12.01	12.07
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	5209.9831	5209.9829	5209.9827	5209.9826
110.00	5209.9762	5209.9758	5209.9736	5209.9731
93.50	5209.9661	5209.9659	5209.9657	5209.9656
Max. Deviation (MHz)	0.0339	0.0341	0.0343	0.0344
Max. Deviation (ppm)	6.51	6.55	6.58	6.60
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
($^{\circ}$ C)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5210.0112	5210.0114	5210.0118	5210.0121
10	5210.0103	5210.0110	5210.0114	5210.0114
20	5209.9762	5209.9758	5209.9736	5209.9731
30	5209.9632	5209.9632	5209.9610	5209.9601
40	5209.9597	5209.9558	5209.9515	5209.9500
50	5209.9549	5209.9563	5209.9535	5209.9520
Max. Deviation (MHz)	0.0451	0.0442	0.0485	0.0500
Max. Deviation (ppm)	8.65	8.48	9.32	9.60
Result	Complies			

Voltage vs. Frequency Stability

Voltage		Measurement Frequency (MHz)			
(V)		5775 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9758	5774.9756	5774.9754	5774.9752	
110.00	5774.9688	5774.9688	5774.9688	5774.9687	
93.50	5774.9628	5774.9626	5774.9625	5774.9624	
Max. Deviation (MHz)	0.0372	0.0374	0.0375	0.0376	
Max. Deviation (ppm)	6.44	6.48	6.49	6.51	
Result	Complies				

Temperature vs. Frequency Stability

Temperature		Measurement Frequency (MHz)			
($^{\circ}$ C)		5775 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
0	5775.0128	5775.0127	5775.0116	5775.0115	
10	5775.0059	5775.0054	5775.0047	5775.0048	
20	5774.9688	5774.9688	5774.9688	5774.9687	
30	5774.9515	5774.9504	5774.9502	5774.9499	
40	5774.9341	5774.9320	5774.9316	5774.9310	
50	5774.9328	5774.9311	5774.9307	5774.9303	
Max. Deviation (MHz)	0.0672	0.0689	0.0693	0.0697	
Max. Deviation (ppm)	11.63	11.93	12.00	12.08	
Result	Complies				

**Mode: 20 MHz / Chain 2****Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9833	5199.9831	5199.9829	5199.9828
110.00	5199.9744	5199.9731	5199.9729	5199.9727
93.50	5199.9689	5199.9688	5199.9686	5199.9684
Max. Deviation (MHz)	0.0311	0.0312	0.0314	0.0316
Max. Deviation (ppm)	5.98	6.00	6.04	6.08
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5200.0113	5200.0122	5200.0133	5200.0143
10	5200.0023	5200.0033	5200.0045	5200.0065
20	5199.9744	5199.9731	5199.9729	5199.9727
30	5199.9654	5199.9645	5199.9642	5199.9641
40	5199.9566	5199.9518	5199.9501	5199.9479
50	5199.9523	5199.9505	5199.9489	5199.9476
Max. Deviation (MHz)	0.0477	0.0495	0.0511	0.0524
Max. Deviation (ppm)	9.17	9.52	9.83	10.08
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9762	5784.9761	5784.9759	5784.9758
110.00	5784.9696	5784.9693	5784.9692	5784.9691
93.50	5784.9623	5784.9622	5784.9619	5784.9618
Max. Deviation (MHz)	0.0377	0.0378	0.0381	0.0382
Max. Deviation (ppm)	6.52	6.53	6.59	6.60
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5785.0139	5785.0130	5785.0117	5785.0104
10	5785.0066	5785.0060	5785.0042	5785.0041
20	5784.9696	5784.9693	5784.9692	5784.9691
30	5784.9578	5784.9575	5784.9572	5784.9570
40	5784.9418	5784.9410	5784.9397	5784.9401
50	5784.9402	5784.9401	5784.9396	5784.9395
Max. Deviation (MHz)	0.0598	0.0599	0.0604	0.0605
Max. Deviation (ppm)	10.34	10.35	10.44	10.46
Result	Complies			

Mode: 40 MHz / Chain 2

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9832	5189.9831	5189.9828	5189.9826
110.00	5189.9748	5189.9732	5189.9722	5189.9718
93.50	5189.9691	5189.9690	5189.9689	5189.9688
Max. Deviation (MHz)	0.0309	0.0310	0.0311	0.0312
Max. Deviation (ppm)	5.95	5.97	5.99	6.01
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5190.0116	5190.0125	5190.0132	5190.0138
10	5190.0026	5190.0036	5190.0044	5190.0060
20	5189.9748	5189.9732	5189.9722	5189.9718
30	5189.9658	5189.9646	5189.9635	5189.9633
40	5189.9570	5189.9519	5189.9494	5189.9471
50	5189.9527	5189.9506	5189.9482	5189.9468
Max. Deviation (MHz)	0.0473	0.0494	0.0518	0.0532
Max. Deviation (ppm)	9.11	9.51	9.98	10.26
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9758	5754.9757	5754.9756	5754.9655
110.00	5754.9695	5754.9695	5754.9695	5754.9694
93.50	5754.9633	5754.9631	5754.9628	5754.9626
Max. Deviation (MHz)	0.0367	0.0369	0.0372	0.0374
Max. Deviation (ppm)	6.38	6.41	6.46	6.50
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5755.0135	5755.0131	5755.0123	5755.0098
10	5755.0062	5755.0061	5755.0048	5755.0035
20	5754.9695	5754.9695	5754.9695	5754.9694
30	5754.9535	5754.9530	5754.9520	5754.9525
40	5754.9375	5754.9364	5754.9344	5754.9356
50	5754.9359	5754.9356	5754.9344	5754.9350
Max. Deviation (MHz)	0.0641	0.0644	0.0656	0.0650
Max. Deviation (ppm)	11.13	11.20	11.41	11.30
Result	Complies			

**Mode: 80 MHz / Chain 2****Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9821	5209.9819	5209.9817	5209.9816
110.00	5209.9755	5209.9745	5209.9733	5209.9731
93.50	5209.9688	5209.9687	5209.9686	5209.9685
Max. Deviation (MHz)	0.0312	0.0313	0.0314	0.0315
Max. Deviation (ppm)	5.99	6.01	6.03	6.05
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5210.0114	5210.0125	5210.0131	5210.0136
10	5210.0024	5210.0036	5210.0043	5210.0058
20	5209.9755	5209.9745	5209.9733	5209.9731
30	5209.9665	5209.9659	5209.9646	5209.9646
40	5209.9577	5209.9532	5209.9505	5209.9484
50	5209.9534	5209.9519	5209.9493	5209.9481
Max. Deviation (MHz)	0.0466	0.0481	0.0507	0.0519
Max. Deviation (ppm)	8.94	9.23	9.73	9.97
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9756	5774.9754	5774.9752	5774.9750
110.00	5774.9692	5774.9691	5774.9690	5774.9690
93.50	5774.9628	5774.9626	5774.9625	5774.9624
Max. Deviation (MHz)	0.0372	0.0374	0.0375	0.0376
Max. Deviation (ppm)	6.44	6.48	6.49	6.51
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5775.0132	5775.0130	5775.0125	5775.0099
10	5775.0059	5775.0060	5775.0050	5775.0036
20	5774.9692	5774.9691	5774.9690	5774.9690
30	5774.9532	5774.9526	5774.9515	5774.9521
40	5774.9372	5774.9360	5774.9339	5774.9352
50	5774.9356	5774.9352	5774.9339	5774.9346
Max. Deviation (MHz)	0.0644	0.0648	0.0661	0.0654
Max. Deviation (ppm)	11.15	11.23	11.45	11.33
Result	Complies			

**Mode: 20 MHz / Chain 3****Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9816	5199.9815	5199.9814	5199.9812
110.00	5199.9753	5199.9740	5199.9727	5199.9714
93.50	5199.9698	5199.9696	5199.9695	5199.9694
Max. Deviation (MHz)	0.0302	0.0304	0.0305	0.0306
Max. Deviation (ppm)	5.81	5.85	5.87	5.88
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
($^{\circ}$ C)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5200.0117	5200.0122	5200.0135	5200.0148
10	5200.0045	5200.0051	5200.0062	5200.0078
20	5199.9753	5199.9740	5199.9727	5199.9714
30	5199.9678	5199.9665	5199.9652	5199.9642
40	5199.9557	5199.9522	5199.9496	5199.9483
50	5199.9503	5199.9498	5199.9462	5199.9453
Max. Deviation (MHz)	0.0497	0.0502	0.0538	0.0547
Max. Deviation (ppm)	9.56	9.65	10.35	10.52
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9765	5784.9762	5784.9761	5784.9759
110.00	5784.9696	5784.9696	5784.9695	5784.9695
93.50	5784.9638	5784.9636	5784.9634	5784.9632
Max. Deviation (MHz)	0.0362	0.0364	0.0366	0.0368
Max. Deviation (ppm)	6.26	6.29	6.33	6.36
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5785.0135	5785.0130	5785.0117	5785.0109
10	5785.0065	5785.0062	5785.0046	5785.0041
20	5784.9696	5784.9696	5784.9695	5784.9695
30	5784.9565	5784.9564	5784.9562	5784.9560
40	5784.9414	5784.9397	5784.9392	5784.9392
50	5784.9398	5784.9378	5784.9362	5784.9355
Max. Deviation (MHz)	0.0602	0.0622	0.0638	0.0645
Max. Deviation (ppm)	10.41	10.75	11.03	11.15
Result	Complies			

Mode: 40 MHz / Chain 3

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9808	5189.9806	5189.9802	5189.9800
110.00	5189.9756	5189.9751	5189.9743	5189.9738
93.50	5189.9688	5189.9686	5189.9684	5189.9682
Max. Deviation (MHz)	0.0312	0.0314	0.0316	0.0318
Max. Deviation (ppm)	6.01	6.05	6.09	6.13
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
($^{\circ}$ C)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5190.0113	5190.0126	5190.0131	5190.0145
10	5190.0041	5190.0055	5190.0058	5190.0075
20	5189.9756	5189.9751	5189.9743	5189.9738
30	5189.9682	5189.9677	5189.9669	5189.9667
40	5189.9561	5189.9534	5189.9513	5189.9508
50	5189.9507	5189.9510	5189.9479	5189.9478
Max. Deviation (MHz)	0.0494	0.0490	0.0521	0.0522
Max. Deviation (ppm)	9.51	9.45	10.05	10.07
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9762	5754.9761	5754.9759	5754.9758
110.00	5754.9695	5754.9694	5754.9693	5754.9692
93.50	5754.9642	5754.9640	5754.9638	5754.9635
Max. Deviation (MHz)	0.0358	0.0360	0.0362	0.0365
Max. Deviation (ppm)	6.22	6.26	6.29	6.34
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5755.0131	5755.0129	5755.0111	5755.0103
10	5755.0061	5755.0061	5755.0040	5755.0036
20	5754.9695	5754.9694	5754.9693	5754.9692
30	5754.9544	5754.9527	5754.9523	5754.9524
40	5754.9393	5754.9359	5754.9353	5754.9356
50	5754.9377	5754.9341	5754.9323	5754.9319
Max. Deviation (MHz)	0.0623	0.0660	0.0677	0.0681
Max. Deviation (ppm)	10.83	11.46	11.76	11.83
Result	Complies			

**Mode: 80 MHz / Chain 3****Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9811	5209.9809	5209.9807	5209.9806
110.00	5209.9758	5209.9751	5209.9742	5209.9738
93.50	5209.9691	5209.9688	5209.9687	5209.9686
Max. Deviation (MHz)	0.0309	0.0312	0.0313	0.0314
Max. Deviation (ppm)	5.93	5.99	6.01	6.03
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
($^{\circ}$ C)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5210.0111	5210.0125	5210.0129	5210.0141
10	5210.0039	5210.0054	5210.0056	5210.0071
20	5209.9758	5209.9751	5209.9742	5209.9738
30	5209.9684	5209.9677	5209.9668	5209.9667
40	5209.9563	5209.9534	5209.9512	5209.9508
50	5209.9509	5209.9510	5209.9478	5209.9478
Max. Deviation (MHz)	0.0491	0.0490	0.0522	0.0522
Max. Deviation (ppm)	9.43	9.41	10.03	10.03
Result	Complies			

Voltage vs. Frequency Stability

Voltage		Measurement Frequency (MHz)			
(V)		5775 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9755	5774.9752	5774.9751	5774.9749	
110.00	5774.9694	5774.9694	5774.9692	5774.9692	
93.50	5774.9664	5774.9662	5774.9660	5774.9658	
Max. Deviation (MHz)	0.0336	0.0338	0.0340	0.0342	
Max. Deviation (ppm)	5.82	5.85	5.89	5.92	
Result	Complies				

Temperature vs. Frequency Stability

Temperature		Measurement Frequency (MHz)			
($^{\circ}$ C)		5775 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
0	5775.0125	5775.0121	5775.0109	5775.0102	
10	5775.0055	5775.0053	5775.0038	5775.0035	
20	5774.9694	5774.9694	5774.9692	5774.9692	
30	5774.9543	5774.9527	5774.9522	5774.9524	
40	5774.9392	5774.9359	5774.9352	5774.9356	
50	5774.9376	5774.9341	5774.9322	5774.9319	
Max. Deviation (MHz)	0.0624	0.0660	0.0678	0.0681	
Max. Deviation (ppm)	10.81	11.42	11.74	11.79	
Result	Complies				

Mode: 20 MHz / Chain 4

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9865	5199.9862	5199.9859	5199.9855
110.00	5199.9748	5199.9731	5199.9728	5199.9722
93.50	5199.9698	5199.9696	5199.9692	5199.9689
Max. Deviation (MHz)	0.0302	0.0304	0.0308	0.0311
Max. Deviation (ppm)	5.81	5.85	5.92	5.98
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
($^{\circ}$ C)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5200.0109	5200.0126	5200.0139	5200.0143
10	5200.0003	5200.0023	5200.0033	5200.0038
20	5199.9748	5199.9731	5199.9728	5199.9722
30	5199.9666	5199.9636	5199.9624	5199.9621
40	5199.9544	5199.9522	5199.9496	5199.9483
50	5199.9503	5199.9487	5199.9456	5199.9451
Max. Deviation (MHz)	0.0497	0.0513	0.0544	0.0549
Max. Deviation (ppm)	9.56	9.87	10.46	10.56
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9755	5784.9754	5784.9752	5784.9749
110.00	5784.9696	5784.9695	5784.9694	5784.9693
93.50	5784.9623	5784.9622	5784.9619	5784.9617
Max. Deviation (MHz)	0.0377	0.0378	0.0381	0.0383
Max. Deviation (ppm)	6.52	6.53	6.59	6.62
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5785 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5785.0135	5785.0135	5785.0126	5785.0104
10	5785.0006	5785.0004	5784.9996	5784.9985
20	5784.9696	5784.9695	5784.9694	5784.9693
30	5784.9588	5784.9587	5784.9586	5784.9582
40	5784.9414	5784.9405	5784.9401	5784.9392
50	5784.9399	5784.9385	5784.9382	5784.9375
Max. Deviation (MHz)	0.0601	0.0615	0.0618	0.0625
Max. Deviation (ppm)	10.39	10.63	10.68	10.80
Result	Complies			

**Mode: 40 MHz / Chain 4****Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9855	5189.9852	5189.9849	5189.9847
110.00	5189.9744	5189.9738	5189.9731	5189.9729
93.50	5189.9689	5189.9688	5189.9687	5189.9686
Max. Deviation (MHz)	0.0311	0.0312	0.0313	0.0314
Max. Deviation (ppm)	5.99	6.01	6.03	6.05
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5190.0108	5190.0124	5190.0138	5190.0143
10	5190.0003	5190.0021	5190.0032	5190.0038
20	5189.9744	5189.9738	5189.9731	5189.9729
30	5189.9662	5189.9643	5189.9627	5189.9628
40	5189.9540	5189.9530	5189.9499	5189.9490
50	5189.9499	5189.9494	5189.9459	5189.9458
Max. Deviation (MHz)	0.0501	0.0506	0.0541	0.0542
Max. Deviation (ppm)	9.66	9.75	10.42	10.45
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9742	5754.9741	5754.9739	5754.9736
110.00	5754.9696	5754.9695	5754.9694	5754.9694
93.50	5754.9633	5754.9631	5754.9628	5754.9625
Max. Deviation (MHz)	0.0367	0.0369	0.0372	0.0375
Max. Deviation (ppm)	6.38	6.41	6.46	6.52
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5755 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5755.0135	5755.0134	5755.0125	5755.0116
10	5755.0006	5755.0003	5754.9995	5754.9997
20	5754.9696	5754.9695	5754.9694	5754.9694
30	5754.9522	5754.9513	5754.9509	5754.9504
40	5754.9348	5754.9331	5754.9324	5754.9314
50	5754.9333	5754.9311	5754.9305	5754.9297
Max. Deviation (MHz)	0.0667	0.0689	0.0695	0.0703
Max. Deviation (ppm)	11.59	11.97	12.08	12.21
Result	Complies			

**Mode: 80 MHz / Chain 4****Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9848	5209.9846	5209.9844	5209.9841
110.00	5209.9747	5209.9742	5209.9737	5209.9733
93.50	5209.9655	5209.9654	5209.9653	5209.9651
Max. Deviation (MHz)	0.0345	0.0346	0.0347	0.0349
Max. Deviation (ppm)	6.62	6.64	6.66	6.70
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
($^{\circ}$ C)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5210.0108	5210.0124	5210.0136	5210.0142
10	5210.0003	5210.0021	5210.0030	5210.0037
20	5209.9747	5209.9742	5209.9737	5209.9733
30	5209.9665	5209.9647	5209.9633	5209.9632
40	5209.9543	5209.9534	5209.9505	5209.9494
50	5209.9502	5209.9498	5209.9465	5209.9462
Max. Deviation (MHz)	0.0498	0.0502	0.0535	0.0538
Max. Deviation (ppm)	9.56	9.63	10.27	10.33
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9752	5774.9749	5774.9748	5774.9746
110.00	5774.9691	5774.9690	5774.9689	5774.9688
93.50	5774.9642	5774.9641	5774.9639	5774.9637
Max. Deviation (MHz)	0.0358	0.0359	0.0361	0.0363
Max. Deviation (ppm)	6.20	6.22	6.25	6.29
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5775 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5775.0134	5775.0132	5775.0128	5775.0113
10	5775.0005	5775.0001	5774.9998	5774.9994
20	5774.9691	5774.9690	5774.9689	5774.9688
30	5774.9517	5774.9508	5774.9504	5774.9498
40	5774.9343	5774.9326	5774.9319	5774.9308
50	5774.9328	5774.9306	5774.9300	5774.9291
Max. Deviation (MHz)	0.0672	0.0694	0.0700	0.0709
Max. Deviation (ppm)	11.64	12.01	12.12	12.27
Result	Complies			