



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 2
Test Date	Jul. 15, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 1TX)		

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	5145.90	52.95	54.00	-1.05	49.89	4.26	33.27	34.47	345	151	Average	VERTICAL
2	5148.30	69.51	74.00	-4.49	66.45	4.26	33.27	34.47	345	151	Peak	VERTICAL
3	5222.02	96.38			93.17	4.29	33.39	34.47	345	151	Average	VERTICAL
4	5222.82	105.89			102.68	4.29	33.39	34.47	345	151	Peak	VERTICAL
5	5363.05	57.61	74.00	-16.39	54.06	4.36	33.66	34.47	345	151	Peak	VERTICAL
6	5364.65	46.58	54.00	-7.42	43.03	4.36	33.66	34.47	345	151	Average	VERTICAL

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

Channel 58

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	5123.33	58.30	74.00	-15.70	55.28	4.25	33.24	34.47	47	162	Peak	VERTICAL
2	5150.00	45.73	54.00	-8.27	42.67	4.26	33.27	34.47	47	162	Average	VERTICAL
3	5301.22	96.19			92.79	4.33	33.54	34.47	47	162	Average	VERTICAL
4	5304.42	106.57			103.17	4.33	33.54	34.47	47	162	Peak	VERTICAL
5	5350.00	52.85	54.00	-1.15	49.34	4.35	33.63	34.47	47	162	Average	VERTICAL
6	5351.70	69.13	74.00	-4.87	65.62	4.35	33.63	34.47	47	162	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 2
Test Date	Jul. 15, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 1TX)		

Channel 106

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5431.44	69.90	74.00	-4.10	66.20	4.39	33.78	34.47	45	176 Peak	VERTICAL
2	5445.06	51.63	54.00	-2.37	47.93	4.39	33.78	34.47	45	176 Average	VERTICAL
3	5469.10	52.68	54.00	-1.32	48.90	4.41	33.84	34.47	45	176 Average	VERTICAL
4	5470.00	70.37	74.00	-3.63	66.59	4.41	33.84	34.47	45	176 Peak	VERTICAL
5	5541.22	107.87			103.92	4.43	34.00	34.48	45	176 Peak	VERTICAL
6	5541.22	98.10			94.15	4.43	34.00	34.48	45	176 Average	VERTICAL
7	5727.12	47.38	54.00	-6.62	42.82	4.50	34.57	34.51	45	176 Average	VERTICAL
8	5734.33	59.62	74.00	-14.38	55.07	4.50	34.57	34.52	45	176 Peak	VERTICAL

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

Channel 122

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5456.96	62.89	74.00	-11.11	59.15	4.40	33.81	34.47	43	170 Peak	VERTICAL
2	5458.56	49.00	54.00	-5.00	45.26	4.40	33.81	34.47	43	170 Average	VERTICAL
3	5467.60	66.25	74.00	-7.75	62.47	4.41	33.84	34.47	43	170 Peak	VERTICAL
4	5470.00	49.68	54.00	-4.32	45.90	4.41	33.84	34.47	43	170 Average	VERTICAL
5	5583.56	98.88			94.76	4.45	34.16	34.49	43	170 Average	VERTICAL
6	5589.17	108.97			104.85	4.45	34.16	34.49	43	170 Peak	VERTICAL
7	5725.00	69.72	74.00	-4.28	65.16	4.50	34.57	34.51	43	170 Peak	VERTICAL
8	5725.00	52.95	54.00	-1.05	48.39	4.50	34.57	34.51	43	170 Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5610 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	5706.09	66.37	68.20	-1.83	61.87	4.49	34.52	34.51	305	175 Peak	VERTICAL
2	5723.72	72.76	78.20	-5.44	68.20	4.50	34.57	34.51	305	175 Peak	VERTICAL
3	5786.22	96.58			91.81	4.52	34.78	34.53	305	175 Average	VERTICAL
4	5787.82	107.18			102.41	4.52	34.78	34.53	305	175 Peak	VERTICAL
5	5850.00	68.88	78.20	-9.32	63.95	4.54	34.93	34.54	305	175 Peak	VERTICAL
6	5860.00	66.82	68.20	-1.38	61.82	4.55	34.99	34.54	305	175 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5775 MHz.

**Straddle Channel**

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 2
Test Date	Jul. 15, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 1TX)		

Channel 144

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	Line	Limit	dB	dBuV	dB	dB/m	deg	cm	
1	5715.51	120.93				116.43	4.49	34.52	34.51	45	151	Peak VERTICAL
2	5721.28	109.54				104.98	4.50	34.57	34.51	45	151	Average VERTICAL
3	5852.05	64.20	68.20	-4.00	59.27	4.54	34.93	34.54	45	151	Peak VERTICAL	

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 2
Test Date	Jul. 15, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 1TX)		

Channel 142

Freq MHz	Level dBuV/m	Limit Line	Over Limit	Read Level dBuV	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
					Loss	Factor	Factor	deg	cm			
1	5692.69	105.79		101.34	4.49	34.47	34.51	44	156	Average	VERTICAL	
2	5703.59	115.51		111.01	4.49	34.52	34.51	44	156	Peak	VERTICAL	
3	5854.23	66.93	68.20	-1.27	61.93	4.55	34.99	34.54	44	156	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 2
Test Date	Jul. 15, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 1TX)		

Channel 138

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	Factor	dB	deg	cm	
1	5677.18	102.28			97.89	4.48	34.42	34.51	44	156	Average	VERTICAL
2	5681.99	112.71			108.32	4.48	34.42	34.51	44	156	Peak	VERTICAL
3	5854.26	66.92	68.20	-1.28	61.92	4.55	34.99	34.54	44	156	Peak	VERTICAL

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

Note:

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

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 36

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	5149.71	70.79	74.00	-3.21	67.73	4.26	33.27	34.47	315	136	Peak	VERTICAL
2	5150.00	52.62	54.00	-1.38	49.56	4.26	33.27	34.47	315	136	Average	VERTICAL
3	5182.56	113.72			110.59	4.27	33.33	34.47	315	136	Peak	VERTICAL
4	5182.56	102.60			99.47	4.27	33.33	34.47	315	136	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	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5148.40	69.63	74.00	-4.37	66.57	4.26	33.27	34.47	314	145	Peak	VERTICAL
2	5150.00	52.88	54.00	-1.12	49.82	4.26	33.27	34.47	314	145	Average	VERTICAL
3	5205.13	118.99			115.82	4.28	33.36	34.47	314	145	Peak	VERTICAL
4	5205.13	107.85			104.68	4.28	33.36	34.47	314	145	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	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5114.52	60.48	74.00	-13.52	57.50	4.24	33.21	34.47	316	145	Peak	VERTICAL
2	5117.40	49.92	54.00	-4.08	46.94	4.24	33.21	34.47	316	145	Average	VERTICAL
3	5242.40	117.38			114.10	4.30	33.45	34.47	316	145	Peak	VERTICAL
4	5242.40	107.89			104.61	4.30	33.45	34.47	316	145	Average	VERTICAL
5	5357.79	51.30	54.00	-2.70	47.79	4.35	33.63	34.47	316	145	Average	VERTICAL
6	5364.52	62.98	74.00	-11.02	59.43	4.36	33.66	34.47	316	145	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 52

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	5132.12	62.59	74.00	-11.41	59.57	4.25	33.24	34.47	314	162	Peak	VERTICAL
2	5137.40	50.45	54.00	-3.55	47.43	4.25	33.24	34.47	314	162	Average	VERTICAL
3	5257.60	109.38			106.10	4.30	33.45	34.47	314	162	Average	VERTICAL
4	5262.89	120.02			116.70	4.31	33.48	34.47	314	162	Peak	VERTICAL
5	5377.79	65.43	74.00	-8.57	61.84	4.37	33.69	34.47	314	162	Peak	VERTICAL
6	5382.60	52.74	54.00	-1.26	49.15	4.37	33.69	34.47	314	162	Average	VERTICAL

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

Channel 60

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	5297.76	107.66			104.26	4.33	33.54	34.47	314	148	Average	VERTICAL
2	5302.56	119.02			115.62	4.33	33.54	34.47	314	148	Peak	VERTICAL
3	5351.60	66.92	74.00	-7.08	63.41	4.35	33.63	34.47	314	148	Peak	VERTICAL
4	5377.56	52.98	54.00	-1.02	49.39	4.37	33.69	34.47	314	148	Average	VERTICAL

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

Channel 64

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	5317.76	104.53			101.10	4.33	33.57	34.47	306	168	Average	VERTICAL
2	5318.08	115.62			112.19	4.33	33.57	34.47	306	168	Peak	VERTICAL
3	5350.00	52.46	54.00	-1.54	48.95	4.35	33.63	34.47	306	168	Average	VERTICAL
4	5350.45	67.74	74.00	-6.26	64.23	4.35	33.63	34.47	306	168	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 100

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5459.78	68.38	74.00	-5.62	64.64	4.40	33.81	34.47	303	153 Peak	VERTICAL
2	5460.00	48.32	54.00	-5.68	44.58	4.40	33.81	34.47	303	153 Average	VERTICAL
3	5468.27	52.82	54.00	-1.18	49.04	4.41	33.84	34.47	303	153 Average	VERTICAL
4	5470.00	71.24	74.00	-2.76	67.46	4.41	33.84	34.47	303	153 Peak	VERTICAL
5	5497.76	116.67			112.82	4.42	33.90	34.47	303	153 Peak	VERTICAL
6	5500.80	105.79			101.95	4.42	33.90	34.48	303	153 Average	VERTICAL

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

Channel 116

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5458.21	65.02	74.00	-8.98	61.28	4.40	33.81	34.47	308	148 Peak	VERTICAL
2	5460.00	52.36	54.00	-1.64	48.62	4.40	33.81	34.47	308	148 Average	VERTICAL
3	5463.33	52.44	54.00	-1.56	48.66	4.41	33.84	34.47	308	148 Average	VERTICAL
4	5468.08	66.25	74.00	-7.75	62.47	4.41	33.84	34.47	308	148 Peak	VERTICAL
5	5578.08	122.01			117.95	4.44	34.11	34.49	308	148 Peak	VERTICAL
6	5578.08	112.35			108.29	4.44	34.11	34.49	308	148 Average	VERTICAL
7	5737.69	64.76	74.00	-9.24	60.16	4.50	34.62	34.52	308	148 Peak	VERTICAL
8	5738.33	52.82	54.00	-1.18	48.22	4.50	34.62	34.52	308	148 Average	VERTICAL

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

Channel 140

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5696.80	114.54			110.09	4.49	34.47	34.51	40	149 Peak	VERTICAL
2	5699.36	103.10			98.65	4.49	34.47	34.51	40	149 Average	VERTICAL
3	5725.00	52.72	54.00	-1.28	48.16	4.50	34.57	34.51	40	149 Average	VERTICAL
4	5726.60	71.13	74.00	-2.87	66.57	4.50	34.57	34.51	40	149 Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

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	deg	cm		
1	5710.06	67.19	68.20	-1.01	62.69	4.49	34.52	34.51	39	151 Peak	VERTICAL
2	5723.85	74.15	78.20	-4.05	69.59	4.50	34.57	34.51	39	151 Peak	VERTICAL
3	5744.36	103.78			99.18	4.50	34.62	34.52	39	151 Average	VERTICAL
4	5746.92	113.44			108.84	4.50	34.62	34.52	39	151 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	deg	cm		
1	5696.86	66.88	68.20	-1.32	62.43	4.49	34.47	34.51	38	151 Peak	VERTICAL
2	5721.80	68.06	78.20	-10.14	63.50	4.50	34.57	34.51	38	151 Peak	VERTICAL
3	5786.60	106.98			102.21	4.52	34.78	34.53	38	151 Average	VERTICAL
4	5786.92	117.71			112.94	4.52	34.78	34.53	38	151 Peak	VERTICAL
5	5850.96	65.75	78.20	-12.45	60.82	4.54	34.93	34.54	38	151 Peak	VERTICAL
6	5869.30	65.51	68.20	-2.69	60.51	4.55	34.99	34.54	38	151 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	deg	cm		
1	5825.64	102.58			97.70	4.53	34.88	34.53	307	160 Average	VERTICAL
2	5830.45	113.25			108.37	4.53	34.88	34.53	307	160 Peak	VERTICAL
3	5853.21	74.99	78.20	-3.21	70.06	4.54	34.93	34.54	307	160 Peak	VERTICAL
4	5861.54	66.97	68.20	-1.23	61.97	4.55	34.99	34.54	307	160 Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

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	dB	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	deg	cm		
1	5142.56	69.52	74.00	-4.48	66.46	4.26	33.27	34.47	314	152	Peak	VERTICAL
2	5149.62	52.89	54.00	-1.11	49.83	4.26	33.27	34.47	314	152	Average	VERTICAL
3	5194.49	110.11			106.94	4.28	33.36	34.47	314	152	Peak	VERTICAL
4	5194.81	99.50			96.33	4.28	33.36	34.47	314	152	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	dB	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	deg	cm		
1	5147.95	52.78	54.00	-1.22	49.72	4.26	33.27	34.47	314	164	Average	VERTICAL
2	5149.55	67.70	74.00	-6.30	64.64	4.26	33.27	34.47	314	164	Peak	VERTICAL
3	5234.81	115.53			112.28	4.30	33.42	34.47	314	164	Peak	VERTICAL
4	5235.13	105.64			102.39	4.30	33.42	34.47	314	164	Average	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 54

	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	5265.19	105.64			102.32	4.31	33.48	34.47	316	161	Average	VERTICAL
2	5274.81	115.23			111.91	4.31	33.48	34.47	316	161	Peak	VERTICAL
3	5350.00	65.50	74.00	-8.50	61.99	4.35	33.63	34.47	316	161	Peak	VERTICAL
4	5352.69	52.60	54.00	-1.40	49.09	4.35	33.63	34.47	316	161	Average	VERTICAL

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

Channel 62

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5297.50	109.87			106.47	4.33	33.54	34.47	312	149	Peak	VERTICAL
2	5305.19	99.89			96.49	4.33	33.54	34.47	312	149	Average	VERTICAL
3	5350.00	52.70	54.00	-1.30	49.19	4.35	33.63	34.47	312	149	Average	VERTICAL
4	5350.71	72.33	74.00	-1.67	68.82	4.35	33.63	34.47	312	149	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 102

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	5453.59	67.40	74.00	-6.60	63.66	4.40	33.81	34.47	310	149	Peak	VERTICAL
2	5460.00	49.74	54.00	-4.26	46.00	4.40	33.81	34.47	310	149	Average	VERTICAL
3	5467.37	69.35	74.00	-4.65	65.57	4.41	33.84	34.47	310	149	Peak	VERTICAL
4	5468.33	52.74	54.00	-1.26	48.96	4.41	33.84	34.47	310	149	Average	VERTICAL
5	5508.08	100.93			97.09	4.42	33.90	34.48	310	149	Average	VERTICAL
6	5512.89	111.14			107.30	4.42	33.90	34.48	310	149	Peak	VERTICAL

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

Channel 110

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	5441.35	64.25	74.00	-9.75	60.55	4.39	33.78	34.47	46	152	Peak	VERTICAL
2	5458.65	50.55	54.00	-3.45	46.81	4.40	33.81	34.47	46	152	Average	VERTICAL
3	5465.39	69.15	74.00	-4.85	65.37	4.41	33.84	34.47	46	152	Peak	VERTICAL
4	5468.75	52.91	54.00	-1.09	49.13	4.41	33.84	34.47	46	152	Average	VERTICAL
5	5553.37	113.95			109.94	4.44	34.06	34.49	46	152	Peak	VERTICAL
6	5553.85	104.42			100.41	4.44	34.06	34.49	46	152	Average	VERTICAL

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

Channel 134

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	5664.55	112.37			108.04	4.47	34.37	34.51	38	145	Peak	VERTICAL
2	5664.55	102.47			98.14	4.47	34.37	34.51	38	145	Average	VERTICAL
3	5725.45	70.32	74.00	-3.68	65.76	4.50	34.57	34.51	38	145	Peak	VERTICAL
4	5732.18	52.74	54.00	-1.26	48.19	4.50	34.57	34.52	38	145	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 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	5712.05	66.94	68.20	-1.26	62.44	4.49	34.52	34.51	38	151 Peak	VERTICAL
2	5725.00	70.76	78.20	-7.44	66.20	4.50	34.57	34.51	38	151 Peak	VERTICAL
3	5759.49	109.13			104.47	4.51	34.68	34.53	38	151 Peak	VERTICAL
4	5759.81	99.92			95.26	4.51	34.68	34.53	38	151 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	5706.86	61.75	68.20	-6.45	57.25	4.49	34.52	34.51	38	143 Average	VERTICAL
2	5725.00	62.01	78.20	-16.19	57.45	4.50	34.57	34.51	38	143 Average	VERTICAL
3	5789.23	109.09			104.32	4.52	34.78	34.53	38	143 Average	VERTICAL
4	5811.99	99.12			94.29	4.53	34.83	34.53	38	143 Peak	VERTICAL
5	5850.00	67.88	78.20	-10.32	62.95	4.54	34.93	34.54	38	143 Average	VERTICAL
6	5861.35	66.68	68.20	-1.52	61.68	4.55	34.99	34.54	38	143 Average	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

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		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5142.69	52.85	54.00	-1.15	49.79	4.26	33.27	34.47	312	168	Average	VERTICAL
2	5144.30	67.10	74.00	-6.90	64.04	4.26	33.27	34.47	312	168	Peak	VERTICAL
3	5235.64	108.42			105.17	4.30	33.42	34.47	312	168	Peak	VERTICAL
4	5237.24	99.09			95.84	4.30	33.42	34.47	312	168	Average	VERTICAL
5	5350.00	48.05	54.00	-5.95	44.54	4.35	33.63	34.47	312	168	Average	VERTICAL
6	5353.43	59.46	74.00	-14.54	55.95	4.35	33.63	34.47	312	168	Peak	VERTICAL

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

Channel 58

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	deg	cm			
1	5122.53	56.34	74.00	-17.66	53.32	4.25	33.24	34.47	318	152	Peak	VERTICAL
2	5139.36	45.34	54.00	-8.66	42.32	4.25	33.24	34.47	318	152	Average	VERTICAL
3	5297.21	106.13			102.73	4.33	33.54	34.47	318	152	Peak	VERTICAL
4	5299.62	96.20			92.80	4.33	33.54	34.47	318	152	Average	VERTICAL
5	5350.90	66.11	74.00	-7.89	62.60	4.35	33.63	34.47	318	152	Peak	VERTICAL
6	5352.50	52.95	54.00	-1.05	49.44	4.35	33.63	34.47	318	152	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 106

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5455.48	68.85	74.00	-5.15	65.11	4.40	33.81	34.47	306	146 Peak	VERTICAL
2	5460.00	52.10	54.00	-1.90	48.36	4.40	33.81	34.47	306	146 Average	VERTICAL
3	5465.90	71.08	74.00	-2.92	67.30	4.41	33.84	34.47	306	146 Peak	VERTICAL
4	5468.30	52.91	54.00	-1.09	49.13	4.41	33.84	34.47	306	146 Average	VERTICAL
5	5520.50	98.69			94.79	4.43	33.95	34.48	306	146 Average	VERTICAL
6	5522.79	108.37			104.47	4.43	33.95	34.48	306	146 Peak	VERTICAL
7	5728.21	58.35	74.00	-15.65	53.79	4.50	34.57	34.51	306	146 Peak	VERTICAL
8	5733.53	46.61	54.00	-7.39	42.06	4.50	34.57	34.52	306	146 Average	VERTICAL

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

Channel 122

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5456.96	64.11	74.00	-9.89	60.37	4.40	33.81	34.47	313	152 Peak	VERTICAL
2	5460.00	49.81	54.00	-4.19	46.07	4.40	33.81	34.47	313	152 Average	VERTICAL
3	5467.37	50.07	54.00	-3.93	46.29	4.41	33.84	34.47	313	152 Average	VERTICAL
4	5470.00	63.69	74.00	-10.31	59.91	4.41	33.84	34.47	313	152 Peak	VERTICAL
5	5598.78	109.26			105.08	4.46	34.21	34.49	313	152 Peak	VERTICAL
6	5600.39	100.18			96.00	4.46	34.21	34.49	313	152 Average	VERTICAL
7	5725.00	52.78	54.00	-1.22	48.22	4.50	34.57	34.51	313	152 Average	VERTICAL
8	5730.99	67.53	74.00	-6.47	62.98	4.50	34.57	34.52	313	152 Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5610 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		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5691.67	67.16	68.20	-1.04	62.71	4.49	34.47	34.51	39	147 Peak	VERTICAL
2	5722.12	67.83	78.20	-10.37	63.27	4.50	34.57	34.51	39	147 Peak	VERTICAL
3	5746.96	94.94			90.34	4.50	34.62	34.52	39	147 Average	VERTICAL
4	5749.36	106.01			101.41	4.50	34.62	34.52	39	147 Peak	VERTICAL
5	5851.92	64.86	78.20	-13.34	59.93	4.54	34.93	34.54	39	147 Peak	VERTICAL
6	5863.94	63.88	68.20	-4.32	58.88	4.55	34.99	34.54	39	147 Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5775 MHz.



Straddle Channel

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 144

Freq MHz	Level dBuV/m	Limit Line	Over Limit	Read Level dB	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
					Loss	Factor	Factor	deg	cm			
1	5721.92	112.69		108.13	4.50	34.57	34.51	39	158	Average	VERTICAL	
2	5722.56	122.61		118.05	4.50	34.57	34.51	39	158	Peak	VERTICAL	
3	5882.18	65.00	68.20	-3.20	59.95	4.55	35.04	34.54	39	158	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 142

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	deg	cm	
1	5704.87	107.32			102.82	4.49	34.52	34.51	36	151 Average	VERTICAL
2	5715.13	116.87			112.37	4.49	34.52	34.51	36	151 Peak	VERTICAL
3	5854.87	66.93	68.20	-1.27	61.93	4.55	34.99	34.54	36	151 Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2
Test Date	Jul. 14, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 138

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	Line	Limit	Loss	Factor	Factor	deg	cm		
1	5677.18	101.37				96.98	4.48	34.42	34.51	38	165 Average	VERTICAL
2	5681.99	111.71				107.32	4.48	34.42	34.51	38	165 Peak	VERTICAL
3	5854.26	66.76	68.20	-1.44	61.76	4.55	34.99	34.54	38	165 Peak		VERTICAL

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

Note:

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

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

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	5150.00	52.66	54.00	-1.34	45.76	6.21	33.74	33.05	209	355	Average	HORIZONTAL
2	5150.00	72.49	74.00	-1.51	65.59	6.21	33.74	33.05	209	355	Peak	HORIZONTAL
3	5178.40	113.34			106.36	6.24	33.79	33.05	209	355	Peak	HORIZONTAL
4	5178.88	101.81			94.83	6.24	33.79	33.05	209	355	Average	HORIZONTAL

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	5150.00	52.49	54.00	-1.51	45.59	6.21	33.74	33.05	168	354	Average	HORIZONTAL
2	5150.00	68.35	74.00	-5.65	61.45	6.21	33.74	33.05	168	354	Peak	HORIZONTAL
3	5198.72	105.90			98.86	6.27	33.82	33.05	168	354	Average	HORIZONTAL
4	5199.68	116.69			109.65	6.27	33.82	33.05	168	354	Peak	HORIZONTAL

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	5117.89	62.91	74.00	-11.09	56.13	6.14	33.69	33.05	144	355	Peak	HORIZONTAL
2	5121.25	50.55	54.00	-3.45	43.74	6.17	33.69	33.05	144	355	Average	HORIZONTAL
3	5236.64	115.52			108.40	6.30	33.87	33.05	144	355	Peak	HORIZONTAL
4	5238.56	104.11			96.99	6.30	33.87	33.05	144	355	Average	HORIZONTAL
5	5352.98	62.72	74.00	-11.28	55.25	6.47	34.06	33.06	144	355	Peak	HORIZONTAL
6	5357.31	50.52	54.00	-3.48	43.05	6.47	34.06	33.06	144	355	Average	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

Channel 52

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	5138.37	64.58	74.00	-9.42	57.75	6.17	33.71	33.05	152	353	Peak	HORIZONTAL
2	5140.77	52.61	54.00	-1.39	45.75	6.17	33.74	33.05	152	353	Average	HORIZONTAL
3	5260.96	107.55			100.34	6.34	33.93	33.06	152	353	Average	HORIZONTAL
4	5265.77	118.66			111.45	6.34	33.93	33.06	152	353	Peak	HORIZONTAL
5	5376.83	64.96	74.00	-9.04	57.43	6.50	34.09	33.06	152	353	Peak	HORIZONTAL
6	5381.15	52.09	54.00	-1.91	44.54	6.50	34.11	33.06	152	353	Average	HORIZONTAL

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

Channel 60

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	5298.56	105.90			98.58	6.40	33.98	33.06	171	352	Average	HORIZONTAL
2	5298.56	116.76			109.44	6.40	33.98	33.06	171	352	Peak	HORIZONTAL
3	5350.00	52.91	54.00	-1.09	45.44	6.47	34.06	33.06	171	352	Average	HORIZONTAL
4	5351.44	68.23	74.00	-5.77	60.76	6.47	34.06	33.06	171	352	Peak	HORIZONTAL

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

Channel 64

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	5321.28	102.07			94.72	6.40	34.01	33.06	181	352	Average	HORIZONTAL
2	5323.21	113.12			105.74	6.43	34.01	33.06	181	352	Peak	HORIZONTAL
3	5350.00	52.44	54.00	-1.56	44.97	6.47	34.06	33.06	181	352	Average	HORIZONTAL
4	5350.00	67.36	74.00	-6.64	59.89	6.47	34.06	33.06	181	352	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

Channel 100

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	5378.80	49.34	54.00	-4.66	41.79	6.50	34.11	33.06	167	356	Average	HORIZONTAL
2	5459.62	63.43	74.00	-10.57	55.67	6.60	34.22	33.06	167	356	Peak	HORIZONTAL
3	5469.23	70.31	74.00	-3.69	62.52	6.60	34.25	33.06	167	356	Peak	HORIZONTAL
4	5470.00	52.32	54.00	-1.68	44.53	6.60	34.25	33.06	167	356	Average	HORIZONTAL
5	5501.28	102.96			95.08	6.65	34.30	33.07	167	356	Average	HORIZONTAL
6	5501.28	115.04			107.16	6.65	34.30	33.07	167	356	Peak	HORIZONTAL

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

Channel 116

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	5457.40	63.53	74.00	-10.47	55.77	6.60	34.22	33.06	139	352	Peak	HORIZONTAL
2	5458.85	52.70	54.00	-1.30	44.94	6.60	34.22	33.06	139	352	Average	HORIZONTAL
3	5460.96	52.71	54.00	-1.29	44.95	6.60	34.22	33.06	139	352	Average	HORIZONTAL
4	5460.96	64.54	74.00	-9.46	56.78	6.60	34.22	33.06	139	352	Peak	HORIZONTAL
5	5578.56	115.19			107.22	6.72	34.34	33.09	139	352	Peak	HORIZONTAL
6	5581.44	104.93			96.96	6.72	34.34	33.09	139	352	Average	HORIZONTAL
7	5725.00	48.25	54.00	-5.75	40.12	6.83	34.43	33.13	139	352	Average	HORIZONTAL
8	5725.00	59.36	74.00	-14.64	51.23	6.83	34.43	33.13	139	352	Peak	HORIZONTAL

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

Channel 140

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	5698.40	100.72			92.62	6.81	34.41	33.12	150	0	Average	HORIZONTAL
2	5701.92	112.53			104.42	6.81	34.42	33.12	150	0	Peak	HORIZONTAL
3	5725.00	52.62	54.00	-1.38	44.49	6.83	34.43	33.13	150	0	Average	HORIZONTAL
4	5725.00	72.67	74.00	-1.33	64.54	6.83	34.43	33.13	150	0	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

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	5711.03	67.08	68.20	-1.12	58.96	6.83	34.42	33.13	142	362	Peak	HORIZONTAL
2	5725.00	76.49	78.20	-1.71	68.36	6.83	34.43	33.13	142	362	Peak	HORIZONTAL
3	5743.08	100.72			92.56	6.86	34.44	33.14	142	362	Average	HORIZONTAL
4	5743.72	111.93			103.77	6.86	34.44	33.14	142	362	Peak	HORIZONTAL

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	m			dB	dBuV	dB	dB/m	dB	cm	
1	5712.56	66.44	68.20	-1.76	58.32	6.83	34.42	33.13	214	2	Peak	HORIZONTAL
2	5718.85	66.44	78.20	-11.76	58.31	6.83	34.43	33.13	214	2	Peak	HORIZONTAL
3	5786.28	106.22			98.00	6.90	34.48	33.16	214	2	Average	HORIZONTAL
4	5786.28	117.57			109.35	6.90	34.48	33.16	214	2	Peak	HORIZONTAL
5	5852.95	67.62	78.20	-10.58	59.33	6.95	34.51	33.17	214	2	Peak	HORIZONTAL
6	5865.77	66.35	68.20	-1.85	58.04	6.97	34.52	33.18	214	2	Peak	HORIZONTAL

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	5823.40	113.39			105.13	6.92	34.50	33.16	162	1	Peak	HORIZONTAL
2	5824.04	102.07			93.81	6.92	34.50	33.16	162	1	Average	HORIZONTAL
3	5850.00	76.84	78.20	-1.36	68.55	6.95	34.51	33.17	162	1	Peak	HORIZONTAL
4	5860.32	68.63	74.00	-5.37	60.32	6.97	34.52	33.18	162	1	Peak	HORIZONTAL
5	5907.05	50.70	54.00	-3.30	42.35	6.99	34.55	33.19	162	1	Average	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 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	5147.69	70.56	74.00	-3.44	63.66	6.21	33.74	33.05	159	348	Peak	HORIZONTAL
2	5149.62	52.26	54.00	-1.74	45.36	6.21	33.74	33.05	159	348	Average	HORIZONTAL
3	5186.15	110.61			103.63	6.24	33.79	33.05	159	348	Peak	HORIZONTAL
4	5186.47	99.60			92.62	6.24	33.79	33.05	159	348	Average	HORIZONTAL

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	5139.94	66.76	74.00	-7.24	59.90	6.17	33.74	33.05	149	351	Peak	HORIZONTAL
2	5148.91	52.96	54.00	-1.04	46.06	6.21	33.74	33.05	149	351	Average	HORIZONTAL
3	5225.83	103.28			96.16	6.30	33.87	33.05	149	351	Average	HORIZONTAL
4	5227.44	112.73			105.61	6.30	33.87	33.05	149	351	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

Channel 54

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	5265.83	113.47			106.26	6.34	33.93	33.06	151	347	Peak	HORIZONTAL
2	5266.47	103.12			95.91	6.34	33.93	33.06	151	347	Average	HORIZONTAL
3	5351.09	52.80	54.00	-1.20	45.33	6.47	34.06	33.06	151	347	Average	HORIZONTAL
4	5357.18	65.26	74.00	-8.74	57.79	6.47	34.06	33.06	151	347	Peak	HORIZONTAL

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

Channel 62

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	5304.87	108.40			101.08	6.40	33.98	33.06	164	353	Peak	HORIZONTAL
2	5314.49	98.08			90.73	6.40	34.01	33.06	164	353	Average	HORIZONTAL
3	5350.00	52.97	54.00	-1.03	45.50	6.47	34.06	33.06	164	353	Average	HORIZONTAL
4	5351.03	69.46	74.00	-4.54	61.99	6.47	34.06	33.06	164	353	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

Channel 102

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	5457.12	68.36	74.00	-5.64	60.60	6.60	34.22	33.06	175	352	Peak	HORIZONTAL
2	5459.68	50.77	54.00	-3.23	43.01	6.60	34.22	33.06	175	352	Average	HORIZONTAL
3	5469.62	52.79	54.00	-1.21	45.00	6.60	34.25	33.06	175	352	Average	HORIZONTAL
4	5469.62	72.31	74.00	-1.69	64.52	6.60	34.25	33.06	175	352	Peak	HORIZONTAL
5	5512.89	110.87			102.99	6.65	34.30	33.07	175	352	Peak	HORIZONTAL
6	5514.49	100.46			92.57	6.65	34.31	33.07	175	352	Average	HORIZONTAL

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

Channel 110

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	5457.05	65.47	74.00	-8.53	57.71	6.60	34.22	33.06	149	361	Peak	HORIZONTAL
2	5458.97	51.94	54.00	-2.06	44.18	6.60	34.22	33.06	149	361	Average	HORIZONTAL
3	5467.63	52.69	54.00	-1.31	44.90	6.60	34.25	33.06	149	361	Average	HORIZONTAL
4	5468.27	69.05	74.00	-4.95	61.26	6.60	34.25	33.06	149	361	Peak	HORIZONTAL
5	5543.59	112.65			104.73	6.68	34.32	33.08	149	361	Peak	HORIZONTAL
6	5545.19	102.80			94.88	6.68	34.32	33.08	149	361	Average	HORIZONTAL

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

Channel 134

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	5674.49	100.36			92.29	6.79	34.40	33.12	153	2	Average	HORIZONTAL
2	5675.45	111.47			103.40	6.79	34.40	33.12	153	2	Peak	HORIZONTAL
3	5728.65	52.75	54.00	-1.25	44.62	6.83	34.43	33.13	153	2	Average	HORIZONTAL
4	5732.18	70.94	74.00	-3.06	62.79	6.86	34.43	33.14	153	2	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

Channel 151

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	5710.93	66.50	68.20	-1.70	58.38	6.83	34.42	33.13	140	1	Peak	HORIZONTAL
2	5724.55	70.97	78.20	-7.23	62.84	6.83	34.43	33.13	140	1	Peak	HORIZONTAL
3	5741.38	97.28			89.12	6.86	34.44	33.14	140	1	Average	HORIZONTAL
4	5750.99	107.06			98.90	6.86	34.44	33.14	140	1	Peak	HORIZONTAL

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	m			dB	dBuV	dB	dB/m	dB	cm	
1	5701.73	62.60	68.20	-5.60	54.49	6.81	34.42	33.12	209	357	Peak	HORIZONTAL
2	5724.49	64.27	78.20	-13.93	56.14	6.83	34.43	33.13	209	357	Peak	HORIZONTAL
3	5806.22	110.23			102.00	6.90	34.49	33.16	209	357	Peak	HORIZONTAL
4	5809.10	100.00			91.75	6.92	34.49	33.16	209	357	Average	HORIZONTAL
5	5850.00	70.38	78.20	-7.82	62.09	6.95	34.51	33.17	209	357	Peak	HORIZONTAL
6	5862.31	66.83	68.20	-1.37	58.52	6.97	34.52	33.18	209	357	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 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/m	dB	cm	deg			
1	5142.69	71.97	74.00	-2.03	65.11	6.17	33.74	33.05	155	351	Peak	HORIZONTAL
2	5145.10	52.59	54.00	-1.41	45.69	6.21	33.74	33.05	155	351	Average	HORIZONTAL
3	5201.19	106.29			99.25	6.27	33.82	33.05	155	351	Peak	HORIZONTAL
4	5220.42	96.50			89.40	6.30	33.85	33.05	155	351	Average	HORIZONTAL
5	5351.03	60.13	74.00	-13.87	52.66	6.47	34.06	33.06	155	351	Peak	HORIZONTAL
6	5352.63	48.52	54.00	-5.48	41.05	6.47	34.06	33.06	155	351	Average	HORIZONTAL

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

Channel 58

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	5138.56	58.94	74.00	-15.06	52.11	6.17	33.71	33.05	153	353	Peak	HORIZONTAL
2	5144.97	47.88	54.00	-6.12	40.98	6.21	33.74	33.05	153	353	Average	HORIZONTAL
3	5280.39	94.45			87.19	6.37	33.95	33.06	153	353	Average	HORIZONTAL
4	5306.03	104.54			97.22	6.40	33.98	33.06	153	353	Peak	HORIZONTAL
5	5350.90	52.67	54.00	-1.33	45.20	6.47	34.06	33.06	153	353	Average	HORIZONTAL
6	5351.70	69.28	74.00	-4.72	61.81	6.47	34.06	33.06	153	353	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

Channel 106

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	5458.69	69.01	74.00	-4.99	61.25	6.60	34.22	33.06	150	348	Peak	HORIZONTAL
2	5460.00	52.05	54.00	-1.95	44.29	6.60	34.22	33.06	150	348	Average	HORIZONTAL
3	5463.49	71.97	74.00	-2.03	64.18	6.60	34.25	33.06	150	348	Peak	HORIZONTAL
4	5470.00	52.73	54.00	-1.27	44.94	6.60	34.25	33.06	150	348	Average	HORIZONTAL
5	5516.38	107.55			99.66	6.65	34.31	33.07	150	348	Peak	HORIZONTAL
6	5520.39	97.16			89.27	6.65	34.31	33.07	150	348	Average	HORIZONTAL
7	5728.21	47.89	54.00	-6.11	39.76	6.83	34.43	33.13	150	348	Average	HORIZONTAL
8	5743.14	61.02	74.00	-12.98	52.86	6.86	34.44	33.14	150	348	Peak	HORIZONTAL

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

Channel 122

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	5448.94	61.84	74.00	-12.16	54.12	6.56	34.22	33.06	147	3	Peak	HORIZONTAL
2	5459.36	50.19	54.00	-3.81	42.43	6.60	34.22	33.06	147	3	Average	HORIZONTAL
3	5464.17	63.44	74.00	-10.56	55.65	6.60	34.25	33.06	147	3	Peak	HORIZONTAL
4	5470.00	50.88	54.00	-3.12	43.09	6.60	34.25	33.06	147	3	Average	HORIZONTAL
5	5618.81	108.74			100.73	6.74	34.37	33.10	147	3	Peak	HORIZONTAL
6	5620.42	98.20			90.19	6.74	34.37	33.10	147	3	Average	HORIZONTAL
7	5726.19	52.93	54.00	-1.07	44.80	6.83	34.43	33.13	147	3	Average	HORIZONTAL
8	5731.80	67.50	74.00	-6.50	59.35	6.86	34.43	33.14	147	3	Peak	HORIZONTAL

Item 5, 6 are the fundamental frequency at 5610 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	deg	
MHz	dBuV/m	dBuV/m	dB									
1	5710.90	67.13	68.20	-1.07	59.01	6.83	34.42	33.13	206	2	Peak	HORIZONTAL
2	5725.00	69.66	78.20	-8.54	61.53	6.83	34.43	33.13	206	2	Peak	HORIZONTAL
3	5800.64	95.10			86.88	6.90	34.48	33.16	206	2	Average	HORIZONTAL
4	5801.44	105.51			97.29	6.90	34.48	33.16	206	2	Peak	HORIZONTAL
5	5855.13	67.21	78.20	-10.99	58.91	6.95	34.52	33.17	206	2	Peak	HORIZONTAL
6	5863.94	66.24	68.20	-1.96	57.93	6.97	34.52	33.18	206	2	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5775 MHz.



Straddle Channel

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

Channel 144

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5718.56	108.37			100.24	6.83	34.43	33.13	152	0	Average	HORIZONTAL
2	5719.04	119.62			111.49	6.83	34.43	33.13	152	0	Peak	HORIZONTAL
3	5854.14	64.76	68.20	-3.44	56.46	6.95	34.52	33.17	152	0	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

Channel 142

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5705.19	116.11			107.99	6.83	34.42	33.13	142	358	Peak	HORIZONTAL
2	5715.61	105.69			97.57	6.83	34.42	33.13	142	358	Average	HORIZONTAL
3	5853.43	66.81	68.20	-1.39	58.52	6.95	34.51	33.17	142	358	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 2
Test Date	Jul. 27, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 1TX)		

Channel 138

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5676.38	110.25			102.18	6.79	34.40	33.12	147	354	Peak	HORIZONTAL
2	5681.99	100.25			92.16	6.81	34.40	33.12	147	354	Average	HORIZONTAL
3	5874.30	67.12	68.20	-1.08	58.80	6.97	34.53	33.18	147	354	Peak	HORIZONTAL

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

Note:

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

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5150.00	52.91	54.00	-1.09	46.01	6.21	33.74	33.05	162	341	Average	HORIZONTAL
2	5150.20	70.60	74.00	-3.40	63.70	6.21	33.74	33.05	162	341	Peak	HORIZONTAL
3	5179.20	102.08			95.10	6.24	33.79	33.05	162	341	Average	HORIZONTAL
4	5180.80	113.81			106.83	6.24	33.79	33.05	162	341	Peak	HORIZONTAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5150.00	52.87	54.00	-1.13	45.97	6.21	33.74	33.05	158	337	Average	HORIZONTAL
2	5150.00	69.00	74.00	-5.00	62.10	6.21	33.74	33.05	158	337	Peak	HORIZONTAL
3	5199.20	106.80			99.76	6.27	33.82	33.05	158	337	Average	HORIZONTAL
4	5201.60	118.57			111.53	6.27	33.82	33.05	158	337	Peak	HORIZONTAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5111.80	62.32	74.00	-11.68	55.54	6.14	33.69	33.05	161	334	Peak	HORIZONTAL
2	5118.21	49.17	54.00	-4.83	42.39	6.14	33.69	33.05	161	334	Average	HORIZONTAL
3	5236.80	115.92			108.80	6.30	33.87	33.05	161	334	Peak	HORIZONTAL
4	5237.60	104.15			97.03	6.30	33.87	33.05	161	334	Average	HORIZONTAL
5	5352.40	60.68	74.00	-13.32	53.21	6.47	34.06	33.06	161	334	Peak	HORIZONTAL
6	5356.99	49.00	54.00	-5.00	41.53	6.47	34.06	33.06	161	334	Average	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 52

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	5138.21	52.70	54.00	-1.30	45.87	6.17	33.71	33.05	149	337	Average	HORIZONTAL
2	5146.80	65.22	74.00	-8.78	58.32	6.21	33.74	33.05	149	337	Peak	HORIZONTAL
3	5259.20	119.52			112.31	6.34	33.93	33.06	149	337	Peak	HORIZONTAL
4	5260.80	108.88			101.67	6.34	33.93	33.06	149	337	Average	HORIZONTAL
5	5372.18	52.12	54.00	-1.88	44.62	6.47	34.09	33.06	149	337	Average	HORIZONTAL
6	5372.98	64.95	74.00	-9.05	57.45	6.47	34.09	33.06	149	337	Peak	HORIZONTAL

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

Channel 60

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	5299.20	105.67			98.35	6.40	33.98	33.06	167	339	Average	HORIZONTAL
2	5306.41	117.07			109.75	6.40	33.98	33.06	167	339	Peak	HORIZONTAL
3	5350.00	52.78	54.00	-1.22	45.31	6.47	34.06	33.06	167	339	Average	HORIZONTAL
4	5350.80	69.26	74.00	-4.74	61.79	6.47	34.06	33.06	167	339	Peak	HORIZONTAL

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

Channel 64

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	5318.40	114.62			107.27	6.40	34.01	33.06	162	335	Peak	HORIZONTAL
2	5321.60	102.37			95.02	6.40	34.01	33.06	162	335	Average	HORIZONTAL
3	5350.00	52.71	54.00	-1.29	45.24	6.47	34.06	33.06	162	335	Average	HORIZONTAL
4	5353.65	68.59	74.00	-5.41	61.12	6.47	34.06	33.06	162	335	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 100

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	
1	5341.35	49.63	54.00	-4.37	42.23	6.43	34.03	33.06	156	339	Average	HORIZONTAL
2	5455.19	64.64	74.00	-9.36	56.88	6.60	34.22	33.06	156	339	Peak	HORIZONTAL
3	5467.60	71.88	74.00	-2.12	64.09	6.60	34.25	33.06	156	339	Peak	HORIZONTAL
4	5470.00	52.74	54.00	-1.26	44.95	6.60	34.25	33.06	156	339	Average	HORIZONTAL
5	5493.59	114.64			106.80	6.63	34.27	33.06	156	339	Peak	HORIZONTAL
6	5498.40	103.18			95.31	6.63	34.30	33.06	156	339	Average	HORIZONTAL

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

Channel 116

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	
1	5418.94	50.96	54.00	-3.04	43.32	6.53	34.17	33.06	211	351	Average	HORIZONTAL
2	5444.58	64.08	74.00	-9.92	56.39	6.56	34.19	33.06	211	351	Peak	HORIZONTAL
3	5460.80	50.65	54.00	-3.35	42.89	6.60	34.22	33.06	211	351	Average	HORIZONTAL
4	5470.00	66.60	74.00	-7.40	58.81	6.60	34.25	33.06	211	351	Peak	HORIZONTAL
5	5580.80	108.65			100.68	6.72	34.34	33.09	211	351	Average	HORIZONTAL
6	5581.60	120.21			112.23	6.72	34.35	33.09	211	351	Peak	HORIZONTAL
7	5733.81	64.33	74.00	-9.67	56.18	6.86	34.43	33.14	211	351	Peak	HORIZONTAL
8	5738.65	51.43	54.00	-2.57	43.27	6.86	34.44	33.14	211	351	Average	HORIZONTAL

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

Channel 140

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	
1	5697.60	100.55			92.45	6.81	34.41	33.12	156	348	Average	HORIZONTAL
2	5697.60	112.37			104.27	6.81	34.41	33.12	156	348	Peak	HORIZONTAL
3	5725.00	51.57	54.00	-2.43	43.44	6.83	34.43	33.13	156	348	Average	HORIZONTAL
4	5729.81	72.62	74.00	-1.38	64.49	6.83	34.43	33.13	156	348	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 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	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5622.56	51.22	54.00	-2.78	43.21	6.74	34.37	33.10	146	3	Average	HORIZONTAL
2	5714.23	70.34	74.00	-3.66	62.22	6.83	34.42	33.13	146	3	Peak	HORIZONTAL
3	5723.85	76.86	78.20	-1.34	68.73	6.83	34.43	33.13	146	3	Peak	HORIZONTAL
4	5737.95	101.62			93.46	6.86	34.44	33.14	146	3	Average	HORIZONTAL
5	5739.23	113.71			105.55	6.86	34.44	33.14	146	3	Peak	HORIZONTAL

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	5713.40	66.99	68.20	-1.21	58.87	6.83	34.42	33.13	204	353	Peak	HORIZONTAL
2	5725.00	68.04	78.20	-10.16	59.91	6.83	34.43	33.13	204	353	Peak	HORIZONTAL
3	5783.40	117.88			109.67	6.90	34.47	33.16	204	353	Peak	HORIZONTAL
4	5784.20	106.30			98.09	6.90	34.47	33.16	204	353	Average	HORIZONTAL
5	5850.00	70.19	78.20	-8.01	61.90	6.95	34.51	33.17	204	353	Peak	HORIZONTAL
6	5868.01	66.51	68.20	-1.69	58.20	6.97	34.52	33.18	204	353	Peak	HORIZONTAL

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	5822.44	103.63			95.37	6.92	34.50	33.16	142	11	Average	HORIZONTAL
2	5830.13	116.21			107.95	6.92	34.50	33.16	142	11	Peak	HORIZONTAL
3	5850.64	77.13	78.20	-1.07	68.84	6.95	34.51	33.17	142	11	Peak	HORIZONTAL
4	5860.00	52.00	54.00	-2.00	43.69	6.97	34.52	33.18	142	11	Average	HORIZONTAL
5	5863.46	70.56	74.00	-3.44	62.25	6.97	34.52	33.18	142	11	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			dB	dBuV			cm	deg		
1	5150.00	52.35	54.00	-1.65	45.45	6.21	33.74	33.05	153	336	Average	HORIZONTAL	
2	5150.00	70.56	74.00	-3.44	63.66	6.21	33.74	33.05	153	336	Peak	HORIZONTAL	
3	5194.81	99.17			92.13	6.27	33.82	33.05	153	336	Average	HORIZONTAL	
4	5196.41	111.10			104.06	6.27	33.82	33.05	153	336	Peak	HORIZONTAL	

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

Channel 46

Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			dB	dBuV			cm	deg		
1	5144.39	65.86	74.00	-8.14	58.96	6.21	33.74	33.05	154	334	Peak	HORIZONTAL	
2	5150.00	52.66	54.00	-1.34	45.76	6.21	33.74	33.05	154	334	Average	HORIZONTAL	
3	5224.39	102.41			95.31	6.30	33.85	33.05	154	334	Average	HORIZONTAL	
4	5224.39	113.41			106.31	6.30	33.85	33.05	154	334	Peak	HORIZONTAL	

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 54

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	5265.19	103.09			95.88	6.34	33.93	33.06	153	334	Average	HORIZONTAL
2	5268.40	114.32			107.11	6.34	33.93	33.06	153	334	Peak	HORIZONTAL
3	5350.80	52.71	54.00	-1.29	45.24	6.47	34.06	33.06	153	334	Average	HORIZONTAL
4	5354.81	65.20	74.00	-8.80	57.73	6.47	34.06	33.06	153	334	Peak	HORIZONTAL

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

Channel 62

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	5296.38	109.11			101.82	6.37	33.98	33.06	150	335	Peak	HORIZONTAL
2	5314.81	97.43			90.08	6.40	34.01	33.06	150	335	Average	HORIZONTAL
3	5350.00	52.81	54.00	-1.19	45.34	6.47	34.06	33.06	150	335	Average	HORIZONTAL
4	5353.21	69.62	74.00	-4.38	62.15	6.47	34.06	33.06	150	335	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 102

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	5460.00	49.36	54.00	-4.64	41.60	6.60	34.22	33.06	156	332	Average	HORIZONTAL
2	5460.00	67.85	74.00	-6.15	60.09	6.60	34.22	33.06	156	332	Peak	HORIZONTAL
3	5463.21	72.41	74.00	-1.59	64.62	6.60	34.25	33.06	156	332	Peak	HORIZONTAL
4	5470.00	51.64	54.00	-2.36	43.85	6.60	34.25	33.06	156	332	Average	HORIZONTAL
5	5514.01	111.77			103.88	6.65	34.31	33.07	156	332	Peak	HORIZONTAL
6	5515.61	100.15			92.26	6.65	34.31	33.07	156	332	Average	HORIZONTAL

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

Channel 110

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	5456.80	66.91	74.00	-7.09	59.15	6.60	34.22	33.06	149	340	Peak	HORIZONTAL
2	5458.40	51.37	54.00	-2.63	43.61	6.60	34.22	33.06	149	340	Average	HORIZONTAL
3	5468.40	52.69	54.00	-1.31	44.90	6.60	34.25	33.06	149	340	Average	HORIZONTAL
4	5470.00	68.00	74.00	-6.00	60.21	6.60	34.25	33.06	149	340	Peak	HORIZONTAL
5	5545.19	102.67			94.75	6.68	34.32	33.08	149	340	Average	HORIZONTAL
6	5546.80	113.87			105.95	6.68	34.32	33.08	149	340	Peak	HORIZONTAL

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

Channel 134

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	5675.61	99.56			91.49	6.79	34.40	33.12	164	334	Average	HORIZONTAL
2	5675.61	110.93			102.86	6.79	34.40	33.12	164	334	Peak	HORIZONTAL
3	5725.00	52.36	54.00	-1.64	44.23	6.83	34.43	33.13	164	334	Average	HORIZONTAL
4	5725.00	68.84	74.00	-5.16	60.71	6.83	34.43	33.13	164	334	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable Loss		Antenna Factor		Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			dB	dBuV	dB	dB/m				cm	deg
1	5711.80	66.96	68.20	-1.24	58.84	6.83	34.42	33.13	162	338	Peak			HORIZONTAL
2	5725.00	69.34	78.20	-8.86	61.21	6.83	34.43	33.13	162	338	Peak			HORIZONTAL
3	5759.81	96.72			88.53	6.88	34.46	33.15	162	338	Average			HORIZONTAL
4	5760.61	108.09			99.90	6.88	34.46	33.15	162	338	Peak			HORIZONTAL

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

Channel 159

Freq	Level	Limit		Over Limit	Read Level	Cable Loss		Antenna Factor		Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			dB	dBuV	dB	dB/m				cm	deg
1	5709.42	65.65	74.00	-8.35	57.53	6.83	34.42	33.13	212	345	Peak			HORIZONTAL
2	5712.95	50.49	54.00	-3.51	42.37	6.83	34.42	33.13	212	345	Average			HORIZONTAL
3	5724.04	66.60	78.20	-11.60	58.47	6.83	34.43	33.13	212	345	Peak			HORIZONTAL
4	5807.50	110.21			101.96	6.92	34.49	33.16	212	345	Peak			HORIZONTAL
5	5808.14	99.18			90.93	6.92	34.49	33.16	212	345	Average			HORIZONTAL
6	5851.60	72.55	78.20	-5.65	64.26	6.95	34.51	33.17	212	345	Peak			HORIZONTAL
7	5861.03	52.91	54.00	-1.09	44.60	6.97	34.52	33.18	212	345	Average			HORIZONTAL
8	5861.60	71.72	74.00	-2.28	63.41	6.97	34.52	33.18	212	345	Peak			HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

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									
1	5142.69	52.72	54.00	-1.28	45.86	6.17	33.74	33.05	157	331	Average	HORIZONTAL
2	5150.00	71.05	74.00	-2.95	64.15	6.21	33.74	33.05	157	331	Peak	HORIZONTAL
3	5197.18	107.10			100.06	6.27	33.82	33.05	157	331	Peak	HORIZONTAL
4	5200.39	95.88			88.84	6.27	33.82	33.05	157	331	Average	HORIZONTAL

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

Channel 58

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									
1	5133.75	57.91	74.00	-16.09	51.08	6.17	33.71	33.05	164	334	Peak	HORIZONTAL
2	5150.00	45.98	54.00	-8.02	39.08	6.21	33.74	33.05	164	334	Average	HORIZONTAL
3	5278.78	93.95			86.69	6.37	33.95	33.06	164	334	Average	HORIZONTAL
4	5280.39	105.61			98.35	6.37	33.95	33.06	164	334	Peak	HORIZONTAL
5	5350.00	52.63	54.00	-1.37	45.16	6.47	34.06	33.06	164	334	Average	HORIZONTAL
6	5350.90	70.35	74.00	-3.65	62.88	6.47	34.06	33.06	164	334	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 106

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	5458.40	70.17	74.00	-3.83	62.41	6.60	34.22	33.06	158	331	Peak	HORIZONTAL	
2	5459.20	51.81	54.00	-2.19	44.05	6.60	34.22	33.06	158	331	Average	HORIZONTAL	
3	5468.30	52.98	54.00	-1.02	45.19	6.60	34.25	33.06	158	331	Average	HORIZONTAL	
4	5469.20	71.36	74.00	-2.64	63.57	6.60	34.25	33.06	158	331	Peak	HORIZONTAL	
5	5516.38	107.40			99.51	6.65	34.31	33.07	158	331	Peak	HORIZONTAL	
6	5518.78	96.27			88.38	6.65	34.31	33.07	158	331	Average	HORIZONTAL	
7	5725.00	46.59	54.00	-7.41	38.46	6.83	34.43	33.13	158	331	Average	HORIZONTAL	
8	5745.03	59.54	74.00	-14.46	51.38	6.86	34.44	33.14	158	331	Peak	HORIZONTAL	

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

Channel 122

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	5455.19	63.05	74.00	-10.95	55.29	6.60	34.22	33.06	168	334	Peak	HORIZONTAL	
2	5459.20	50.00	54.00	-4.00	42.24	6.60	34.22	33.06	168	334	Average	HORIZONTAL	
3	5467.60	63.20	74.00	-10.80	55.41	6.60	34.25	33.06	168	334	Peak	HORIZONTAL	
4	5469.20	50.46	54.00	-3.54	42.67	6.60	34.25	33.06	168	334	Average	HORIZONTAL	
5	5617.21	108.68			100.67	6.74	34.37	33.10	168	334	Peak	HORIZONTAL	
6	5620.42	97.71			89.70	6.74	34.37	33.10	168	334	Average	HORIZONTAL	
7	5725.80	52.97	54.00	-1.03	44.84	6.83	34.43	33.13	168	334	Average	HORIZONTAL	
8	5725.80	66.83	74.00	-7.17	58.70	6.83	34.43	33.13	168	334	Peak	HORIZONTAL	

Item 5, 6 are the fundamental frequency at 5610 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	deg		
MHz	dBuV/m	dBuV/m	dB										
1	5702.18	66.68	68.20	-1.52	58.57	6.81	34.42	33.12	211	341	Peak	HORIZONTAL	
2	5716.51	69.82	78.20	-8.38	61.70	6.83	34.42	33.13	211	341	Peak	HORIZONTAL	
3	5783.81	94.13			85.92	6.90	34.47	33.16	211	341	Average	HORIZONTAL	
4	5803.05	105.49			97.26	6.90	34.49	33.16	211	341	Peak	HORIZONTAL	
5	5850.00	66.47	78.20	-11.73	58.18	6.95	34.51	33.17	211	341	Peak	HORIZONTAL	
6	5861.60	64.66	68.20	-3.54	56.35	6.97	34.52	33.18	211	341	Peak	HORIZONTAL	

Item 3, 4 are the fundamental frequency at 5775 MHz.



Straddle Channel

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 144

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5712.79	120.48				112.36	6.83	34.42	33.13	150	344	Peak HORIZONTAL
2	5717.28	109.67				101.55	6.83	34.42	33.13	150	344	Average HORIZONTAL
3	5858.01	65.12	68.20	-3.08	56.81	6.97	34.52	33.18	150	344	Peak HORIZONTAL	

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 142

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5705.19	116.14				108.02	6.83	34.42	33.13	165	338	Peak HORIZONTAL
2	5714.81	104.99				96.87	6.83	34.42	33.13	165	338	Average HORIZONTAL
3	5856.64	66.71	68.20	-1.49	58.41	6.95	34.52	33.17	165	338	Peak HORIZONTAL	

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2
Test Date	Jul. 26, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 138

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	deg
1	5680.39	99.80			91.71	6.81	34.40	33.12		157	343	Average
2	5680.39	111.33			103.24	6.81	34.40	33.12		157	343	Peak
3	5850.80	66.81	68.20	-1.39	58.52	6.95	34.51	33.17		157	343	Peak

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

Note:

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

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.23	72.68	74.00	-1.32	65.78	6.21	33.74	33.05	230	345	Peak	VERTICAL
2	5150.00	52.99	54.00	-1.01	46.09	6.21	33.74	33.05	230	345	Average	VERTICAL
3	5181.60	97.70			90.72	6.24	33.79	33.05	230	345	Average	VERTICAL
4	5181.76	108.65			101.67	6.24	33.79	33.05	230	345	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	m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	5148.08	68.37	74.00	-5.63	61.47	6.21	33.74	33.05	211	343	Peak	VERTICAL
2	5150.00	52.39	54.00	-1.61	45.49	6.21	33.74	33.05	211	343	Average	VERTICAL
3	5198.40	113.53			106.49	6.27	33.82	33.05	211	343	Peak	VERTICAL
4	5199.04	102.69			95.65	6.27	33.82	33.05	211	343	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	m			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	5115.96	58.78	74.00	-15.22	52.00	6.14	33.69	33.05	204	223	Peak	VERTICAL
2	5117.89	46.08	54.00	-7.92	39.30	6.14	33.69	33.05	204	223	Average	VERTICAL
3	5238.08	109.93			102.81	6.30	33.87	33.05	204	223	Peak	VERTICAL
4	5238.56	98.63			91.51	6.30	33.87	33.05	204	223	Average	VERTICAL
5	5362.12	46.97	54.00	-7.03	39.47	6.47	34.09	33.06	204	223	Average	VERTICAL
6	5363.08	59.17	74.00	-14.83	51.67	6.47	34.09	33.06	204	223	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

Channel 52

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	5140.77	48.91	54.00	-5.09	42.05	6.17	33.74	33.05	193	341	Average	VERTICAL
2	5146.54	61.62	74.00	-12.38	54.72	6.21	33.74	33.05	193	341	Peak	VERTICAL
3	5258.56	101.96			94.75	6.34	33.93	33.06	193	341	Average	VERTICAL
4	5259.04	114.13			106.92	6.34	33.93	33.06	193	341	Peak	VERTICAL
5	5350.00	46.28	54.00	-7.72	38.81	6.47	34.06	33.06	193	341	Average	VERTICAL
6	5367.21	59.57	74.00	-14.43	52.07	6.47	34.09	33.06	193	341	Peak	VERTICAL

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

Channel 60

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	5298.40	99.10			91.78	6.40	33.98	33.06	154	317	Average	VERTICAL
2	5301.28	110.25			102.93	6.40	33.98	33.06	154	317	Peak	VERTICAL
3	5350.00	50.42	54.00	-3.58	42.95	6.47	34.06	33.06	154	317	Average	VERTICAL
4	5353.53	63.41	74.00	-10.59	55.94	6.47	34.06	33.06	154	317	Peak	VERTICAL

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

Channel 64

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	5321.28	101.95			94.60	6.40	34.01	33.06	148	340	Average	VERTICAL
2	5321.92	113.14			105.79	6.40	34.01	33.06	148	340	Peak	VERTICAL
3	5350.00	52.65	54.00	-1.35	45.18	6.47	34.06	33.06	148	340	Average	VERTICAL
4	5352.05	67.92	74.00	-6.08	60.45	6.47	34.06	33.06	148	340	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

Channel 100

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	5459.62	64.22	74.00	-9.78	56.46	6.60	34.22	33.06	171	337	Peak	VERTICAL
2	5460.00	48.57	54.00	-5.43	40.81	6.60	34.22	33.06	171	337	Average	VERTICAL
3	5469.23	72.99	74.00	-1.01	65.20	6.60	34.25	33.06	171	337	Peak	VERTICAL
4	5470.00	52.94	54.00	-1.06	45.15	6.60	34.25	33.06	171	337	Average	VERTICAL
5	5501.28	99.42			91.54	6.65	34.30	33.07	171	337	Average	VERTICAL
6	5501.92	110.63			102.75	6.65	34.30	33.07	171	337	Peak	VERTICAL

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

Channel 116

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	5458.37	47.52	54.00	-6.48	39.76	6.60	34.22	33.06	203	336	Average	VERTICAL
2	5458.37	59.53	74.00	-14.47	51.77	6.60	34.22	33.06	203	336	Peak	VERTICAL
3	5464.62	60.90	74.00	-13.10	53.11	6.60	34.25	33.06	203	336	Peak	VERTICAL
4	5467.50	47.89	54.00	-6.11	40.10	6.60	34.25	33.06	203	336	Average	VERTICAL
5	5585.77	113.98			106.00	6.72	34.35	33.09	203	336	Peak	VERTICAL
6	5587.69	102.96			94.98	6.72	34.35	33.09	203	336	Average	VERTICAL
7	5725.00	61.06	74.00	-12.94	52.93	6.83	34.43	33.13	203	336	Peak	VERTICAL
8	5725.67	46.69	54.00	-7.31	38.56	6.83	34.43	33.13	203	336	Average	VERTICAL

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

Channel 140

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	5701.28	97.92			89.81	6.81	34.42	33.12	226	330	Average	VERTICAL
2	5701.60	109.02			100.91	6.81	34.42	33.12	226	330	Peak	VERTICAL
3	5725.00	52.98	54.00	-1.02	44.85	6.83	34.43	33.13	226	330	Average	VERTICAL
4	5725.00	71.49	74.00	-2.51	63.36	6.83	34.43	33.13	226	330	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

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	5714.40	69.75	74.00	-4.25	61.63	6.83	34.42	33.13	198	311	Peak	VERTICAL
2	5715.00	50.04	54.00	-3.96	41.92	6.83	34.42	33.13	198	311	Average	VERTICAL
3	5724.80	76.93	78.20	-1.27	68.80	6.83	34.43	33.13	198	311	Peak	VERTICAL
4	5752.20	106.08			97.90	6.86	34.46	33.14	198	311	Peak	VERTICAL
5	5753.00	95.05			86.87	6.86	34.46	33.14	198	311	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	5697.02	63.32	68.20	-4.88	55.22	6.81	34.41	33.12	206	330	Peak	VERTICAL
2	5716.25	62.02	78.20	-16.18	53.90	6.83	34.42	33.13	206	330	Peak	VERTICAL
3	5777.31	100.27			92.07	6.88	34.47	33.15	206	330	Average	VERTICAL
4	5780.67	111.52			103.32	6.88	34.47	33.15	206	330	Peak	VERTICAL
5	5851.44	62.61	78.20	-15.59	54.32	6.95	34.51	33.17	206	330	Peak	VERTICAL
6	5861.44	64.00	68.20	-4.20	55.69	6.97	34.52	33.18	206	330	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	5823.80	97.24			88.98	6.92	34.50	33.16	264	226	Average	VERTICAL
2	5824.00	108.92			100.66	6.92	34.50	33.16	264	226	Peak	VERTICAL
3	5850.00	74.76	78.20	-3.44	66.47	6.95	34.51	33.17	264	226	Peak	VERTICAL
4	5860.00	52.55	54.00	-1.45	44.24	6.97	34.52	33.18	264	226	Average	VERTICAL
5	5861.00	70.74	74.00	-3.26	62.43	6.97	34.52	33.18	264	226	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

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	5147.37	68.16	74.00	-5.84	61.26	6.21	33.74	33.05	135	345 Peak	VERTICAL
2	5150.00	52.88	54.00	-1.12	45.98	6.21	33.74	33.05	135	345 Average	VERTICAL
3	5193.85	107.03			100.02	6.24	33.82	33.05	135	345 Peak	VERTICAL
4	5194.81	96.89			89.85	6.27	33.82	33.05	135	345 Average	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	5143.46	67.00	74.00	-7.00	60.14	6.17	33.74	33.05	157	344 Peak	VERTICAL
2	5148.27	52.74	54.00	-1.26	45.84	6.21	33.74	33.05	157	344 Average	VERTICAL
3	5233.21	112.87			105.75	6.30	33.87	33.05	157	344 Peak	VERTICAL
4	5233.85	102.08			94.96	6.30	33.87	33.05	157	344 Average	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

Channel 54

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									
1	5274.49	101.39			94.15	6.37	33.93	33.06	139	339	Average	VERTICAL
2	5279.62	112.03			104.77	6.37	33.95	33.06	139	339	Peak	VERTICAL
3	5351.09	66.20	74.00	-7.80	58.73	6.47	34.06	33.06	139	339	Peak	VERTICAL
4	5351.41	52.84	54.00	-1.16	45.37	6.47	34.06	33.06	139	339	Average	VERTICAL

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

Channel 62

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									
1	5305.19	96.48			89.16	6.40	33.98	33.06	129	342	Average	VERTICAL
2	5306.80	106.71			99.39	6.40	33.98	33.06	129	342	Peak	VERTICAL
3	5350.71	52.71	54.00	-1.29	45.24	6.47	34.06	33.06	129	342	Average	VERTICAL
4	5352.31	72.56	74.00	-1.44	65.09	6.47	34.06	33.06	129	342	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

Channel 102

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	5457.76	64.60	74.00	-9.40	56.84	6.60	34.22	33.06	202	339	Peak	VERTICAL
2	5460.00	49.81	54.00	-4.19	42.05	6.60	34.22	33.06	202	339	Average	VERTICAL
3	5466.41	69.61	74.00	-4.39	61.82	6.60	34.25	33.06	202	339	Peak	VERTICAL
4	5469.62	52.97	54.00	-1.03	45.18	6.60	34.25	33.06	202	339	Average	VERTICAL
5	5514.81	105.30			97.41	6.65	34.31	33.07	202	339	Peak	VERTICAL
6	5515.45	95.52			87.63	6.65	34.31	33.07	202	339	Average	VERTICAL

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

Channel 110

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	5456.73	63.91	74.00	-10.09	56.15	6.60	34.22	33.06	145	332	Peak	VERTICAL
2	5459.62	50.67	54.00	-3.33	42.91	6.60	34.22	33.06	145	332	Average	VERTICAL
3	5468.91	52.81	54.00	-1.19	45.02	6.60	34.25	33.06	145	332	Average	VERTICAL
4	5469.23	67.85	74.00	-6.15	60.06	6.60	34.25	33.06	145	332	Peak	VERTICAL
5	5555.13	100.53			92.58	6.70	34.33	33.08	145	332	Average	VERTICAL
6	5556.41	111.34			103.39	6.70	34.33	33.08	145	332	Peak	VERTICAL

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

Channel 134

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	5673.21	95.89			87.82	6.79	34.40	33.12	231	335	Average	VERTICAL
2	5673.53	105.67			97.60	6.79	34.40	33.12	231	335	Peak	VERTICAL
3	5725.00	52.96	54.00	-1.04	44.83	6.83	34.43	33.13	231	335	Average	VERTICAL
4	5726.09	67.37	74.00	-6.63	59.24	6.83	34.43	33.13	231	335	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

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	5713.40	69.54	74.00	-4.46	61.42	6.83	34.42	33.13	201	313 Peak	VERTICAL
2	5714.60	52.71	54.00	-1.29	44.59	6.83	34.42	33.13	201	313 Average	VERTICAL
3	5724.20	74.44	78.20	-3.76	66.31	6.83	34.43	33.13	201	313 Peak	VERTICAL
4	5760.20	94.19			86.00	6.88	34.46	33.15	201	313 Average	VERTICAL
5	5769.40	104.38			96.18	6.88	34.47	33.15	201	313 Peak	VERTICAL

Item 4, 5 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	5708.94	65.48	68.20	-2.72	57.36	6.83	34.42	33.13	147	293 Peak	VERTICAL
2	5718.27	64.73	78.20	-13.47	56.60	6.83	34.43	33.13	147	293 Peak	VERTICAL
3	5806.06	106.95			98.72	6.90	34.49	33.16	147	293 Peak	VERTICAL
4	5807.98	97.00			88.75	6.92	34.49	33.16	147	293 Average	VERTICAL
5	5851.73	70.69	78.20	-7.51	62.40	6.95	34.51	33.17	147	293 Peak	VERTICAL
6	5870.96	66.90	68.20	-1.30	58.58	6.97	34.53	33.18	147	293 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 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		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5147.50	64.99	74.00	-9.01	58.09	6.21	33.74	33.05	148	343	Peak	VERTICAL
2	5150.00	52.74	54.00	-1.26	45.84	6.21	33.74	33.05	148	343	Average	VERTICAL
3	5234.04	103.16			96.04	6.30	33.87	33.05	148	343	Peak	VERTICAL
4	5237.24	93.50			86.38	6.30	33.87	33.05	148	343	Average	VERTICAL
5	5353.43	47.82	54.00	-6.18	40.35	6.47	34.06	33.06	148	343	Average	VERTICAL
6	5387.08	59.80	74.00	-14.20	52.25	6.50	34.11	33.06	148	343	Peak	VERTICAL

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

Channel 58

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	5141.76	59.32	74.00	-14.68	52.46	6.17	33.74	33.05	154	340	Peak	VERTICAL
2	5145.77	47.64	54.00	-6.36	40.74	6.21	33.74	33.05	154	340	Average	VERTICAL
3	5282.79	93.56			86.30	6.37	33.95	33.06	154	340	Average	VERTICAL
4	5282.79	103.65			96.39	6.37	33.95	33.06	154	340	Peak	VERTICAL
5	5350.00	70.31	74.00	-3.69	62.84	6.47	34.06	33.06	154	340	Peak	VERTICAL
6	5351.70	52.61	54.00	-1.39	45.14	6.47	34.06	33.06	154	340	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1
Test Date	Jul. 29, 2015 ~ Jul. 30, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

Channel 106

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	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5460.00	52.20	54.00	-1.80	44.44	6.60	34.22	33.06	152	336	Average	VERTICAL
2	5460.00	65.46	74.00	-8.54	57.70	6.60	34.22	33.06	152	336	Peak	VERTICAL
3	5465.10	68.65	74.00	-5.35	60.86	6.60	34.25	33.06	152	336	Peak	VERTICAL
4	5468.30	52.82	54.00	-1.18	45.03	6.60	34.25	33.06	152	336	Average	VERTICAL
5	5521.19	103.92			96.03	6.65	34.31	33.07	152	336	Peak	VERTICAL
6	5558.05	93.34			85.39	6.70	34.33	33.08	152	336	Average	VERTICAL
7	5731.41	59.41	74.00	-14.59	51.26	6.86	34.43	33.14	152	336	Peak	VERTICAL
8	5740.74	48.15	54.00	-5.85	39.99	6.86	34.44	33.14	152	336	Average	VERTICAL

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

Channel 122

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	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5456.96	62.51	74.00	-11.49	54.75	6.60	34.22	33.06	202	335	Peak	VERTICAL
2	5457.76	49.88	54.00	-4.12	42.12	6.60	34.22	33.06	202	335	Average	VERTICAL
3	5464.17	63.65	74.00	-10.35	55.86	6.60	34.25	33.06	202	335	Peak	VERTICAL
4	5470.00	51.38	54.00	-2.62	43.59	6.60	34.25	33.06	202	335	Average	VERTICAL
5	5592.37	105.19			97.21	6.72	34.35	33.09	202	335	Peak	VERTICAL
6	5598.78	95.42			87.43	6.72	34.36	33.09	202	335	Average	VERTICAL
7	5726.19	52.77	54.00	-1.23	44.64	6.83	34.43	33.13	202	335	Average	VERTICAL
8	5727.79	67.73	74.00	-6.27	59.60	6.83	34.43	33.13	202	335	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5610 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	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5715.00	67.15	68.20	-1.05	59.03	6.83	34.42	33.13	199	330	Peak	VERTICAL
2	5725.00	68.06	78.20	-10.14	59.93	6.83	34.43	33.13	199	330	Peak	VERTICAL
3	5764.58	100.11			91.92	6.88	34.46	33.15	199	330	Peak	VERTICAL
4	5766.99	90.95			82.76	6.88	34.46	33.15	199	330	Average	VERTICAL
5	5856.73	66.06	78.20	-12.14	57.76	6.95	34.52	33.17	199	330	Peak	VERTICAL
6	5867.95	66.13	68.20	-2.07	57.82	6.97	34.52	33.18	199	330	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5775 MHz.



Straddle Channel

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

Channel 144

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5712.79	101.47			93.35	6.83	34.42	33.13	231	331	Average	VERTICAL
2	5714.23	112.72			104.60	6.83	34.42	33.13	231	331	Peak	VERTICAL
3	5866.15	61.44	68.20	-6.76	53.13	6.97	34.52	33.18	231	331	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

Channel 142

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5704.71	99.86			91.75	6.81	34.42	33.12	203	230	Average	VERTICAL
2	5707.12	109.99			101.87	6.83	34.42	33.13	203	230	Peak	VERTICAL
3	5855.67	60.81	68.20	-7.39	52.51	6.95	34.52	33.17	203	230	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1
Test Date	Jul. 29, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 1TX)		

Channel 138

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	Loss	Factor	Factor	cm	deg	
1	5678.78	96.51			88.44	6.79	34.40	33.12	236	338	Average	VERTICAL
2	5702.82	106.62			98.51	6.81	34.42	33.12	236	338	Peak	VERTICAL
3	5855.06	67.11	68.20	-1.09	58.81	6.95	34.52	33.17	236	338	Peak	VERTICAL

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

Note:

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

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Jul. 30, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 36

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5150.00	52.99	54.00	-1.01	46.09	6.21	33.74	33.05	150	339	Average	VERTICAL
2	5150.00	72.69	74.00	-1.31	65.79	6.21	33.74	33.05	150	339	Peak	VERTICAL
3	5182.56	103.12			96.14	6.24	33.79	33.05	150	339	Average	VERTICAL
4	5182.56	113.44			106.46	6.24	33.79	33.05	150	339	Peak	VERTICAL

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

Channel 40

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5144.87	69.79	74.00	-4.21	62.89	6.21	33.74	33.05	156	338	Peak	VERTICAL
2	5150.00	52.64	54.00	-1.36	45.74	6.21	33.74	33.05	156	338	Average	VERTICAL
3	5197.44	107.60			100.56	6.27	33.82	33.05	156	338	Average	VERTICAL
4	5197.44	118.64			111.60	6.27	33.82	33.05	156	338	Peak	VERTICAL

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

Channel 48

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5122.12	50.41	54.00	-3.59	43.60	6.17	33.69	33.05	152	341	Average	VERTICAL
2	5126.44	63.70	74.00	-10.30	56.87	6.17	33.71	33.05	152	341	Peak	VERTICAL
3	5237.60	106.68			99.56	6.30	33.87	33.05	152	341	Average	VERTICAL
4	5237.60	117.64			110.52	6.30	33.87	33.05	152	341	Peak	VERTICAL
5	5354.81	61.77	74.00	-12.23	54.30	6.47	34.06	33.06	152	341	Peak	VERTICAL
6	5357.21	50.50	54.00	-3.50	43.03	6.47	34.06	33.06	152	341	Average	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Jul. 30, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 52

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		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5142.31	52.52	54.00	-1.48	45.66	6.17	33.74	33.05	160	338	Average	VERTICAL
2	5142.79	64.40	74.00	-9.60	57.54	6.17	33.74	33.05	160	338	Peak	VERTICAL
3	5254.71	119.19			112.01	6.34	33.90	33.06	160	338	Peak	VERTICAL
4	5262.40	108.31			101.10	6.34	33.93	33.06	160	338	Average	VERTICAL
5	5372.60	51.76	54.00	-2.24	44.26	6.47	34.09	33.06	160	338	Average	VERTICAL
6	5375.48	64.16	74.00	-9.84	56.63	6.50	34.09	33.06	160	338	Peak	VERTICAL

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

Channel 60

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		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5297.12	117.23			109.91	6.40	33.98	33.06	159	338	Peak	VERTICAL
2	5302.24	106.67			99.35	6.40	33.98	33.06	159	338	Average	VERTICAL
3	5350.00	52.99	54.00	-1.01	45.52	6.47	34.06	33.06	159	338	Average	VERTICAL
4	5350.32	68.06	74.00	-5.94	60.59	6.47	34.06	33.06	159	338	Peak	VERTICAL

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

Channel 64

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		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5314.55	114.80			107.45	6.40	34.01	33.06	158	338	Peak	VERTICAL
2	5317.44	103.51			96.16	6.40	34.01	33.06	158	338	Average	VERTICAL
3	5350.00	52.97	54.00	-1.03	45.50	6.47	34.06	33.06	158	338	Average	VERTICAL
4	5350.00	68.32	74.00	-5.68	60.85	6.47	34.06	33.06	158	338	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Jul. 30, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable			Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBm			dBuV	dB	dB/m					
1	5422.04	65.35	74.00	-8.65	57.71	6.53	34.17	33.06	152	331	Peak	VERTICAL	
2	5422.18	49.53	54.00	-4.47	41.89	6.53	34.17	33.06	152	331	Average	VERTICAL	
3	5468.72	71.40	74.00	-2.60	63.61	6.60	34.25	33.06	152	331	Peak	VERTICAL	
4	5469.04	52.69	54.00	-1.31	44.90	6.60	34.25	33.06	152	331	Average	VERTICAL	
5	5494.55	114.29			106.45	6.63	34.27	33.06	152	331	Peak	VERTICAL	
6	5497.44	102.90			95.03	6.63	34.30	33.06	152	331	Average	VERTICAL	

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

Channel 116

Freq	Level	Limit		Over Limit	Read Level	Cable			Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBm			dBuV	dB	dB/m					
1	5457.60	51.52	54.00	-2.48	43.76	6.60	34.22	33.06	157	330	Average	VERTICAL	
2	5458.08	63.47	74.00	-10.53	55.71	6.60	34.22	33.06	157	330	Peak	VERTICAL	
3	5462.40	51.29	54.00	-2.71	43.53	6.60	34.22	33.06	157	330	Average	VERTICAL	
4	5470.00	63.75	74.00	-10.25	55.96	6.60	34.25	33.06	157	330	Peak	VERTICAL	
5	5586.73	116.67			108.69	6.72	34.35	33.09	157	330	Peak	VERTICAL	
6	5587.21	106.36			98.38	6.72	34.35	33.09	157	330	Average	VERTICAL	
7	5725.00	47.92	54.00	-6.08	39.79	6.83	34.43	33.13	157	330	Average	VERTICAL	
8	5725.00	59.33	74.00	-14.67	51.20	6.83	34.43	33.13	157	330	Peak	VERTICAL	

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

Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable			Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBm			dBuV	dB	dB/m					
1	5702.24	100.02			91.91	6.81	34.42	33.12	154	327	Average	VERTICAL	
2	5702.56	110.71			102.60	6.81	34.42	33.12	154	327	Peak	VERTICAL	
3	5725.00	52.24	54.00	-1.76	44.11	6.83	34.43	33.13	154	327	Average	VERTICAL	
4	5725.00	72.75	74.00	-1.25	64.62	6.83	34.43	33.13	154	327	Peak	VERTICAL	

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 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	dB/m	
1	5712.63	69.15	74.00	-4.85	61.03	6.83	34.42	33.13	126	319	Peak	VERTICAL
2	5715.00	50.98	54.00	-3.02	42.86	6.83	34.42	33.13	126	319	Average	VERTICAL
3	5723.37	77.07	78.20	-1.13	68.94	6.83	34.43	33.13	126	319	Peak	VERTICAL
4	5742.60	98.45			90.29	6.86	34.44	33.14	126	319	Average	VERTICAL
5	5742.60	110.13			101.97	6.86	34.44	33.14	126	319	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	dB	dB	dB/m	
1	5702.63	51.41	54.00	-2.59	43.30	6.81	34.42	33.12	180	317	Average	VERTICAL
2	5705.19	63.89	74.00	-10.11	55.77	6.83	34.42	33.13	180	317	Peak	VERTICAL
3	5715.64	62.12	78.20	-16.08	54.00	6.83	34.42	33.13	180	317	Peak	VERTICAL
4	5782.76	113.79			105.58	6.90	34.47	33.16	180	317	Peak	VERTICAL
5	5787.56	102.99			94.77	6.90	34.48	33.16	180	317	Average	VERTICAL
6	5851.35	68.70	78.20	-9.50	60.41	6.95	34.51	33.17	180	317	Peak	VERTICAL
7	5862.56	52.40	54.00	-1.60	44.09	6.97	34.52	33.18	180	317	Average	VERTICAL
8	5862.89	66.80	74.00	-7.20	58.49	6.97	34.52	33.18	180	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	dB	dB	dB/m	
1	5824.04	100.74			92.48	6.92	34.50	33.16	206	343	Average	VERTICAL
2	5824.20	111.56			103.30	6.92	34.50	33.16	206	343	Peak	VERTICAL
3	5852.08	75.61	78.20	-2.59	67.32	6.95	34.51	33.17	206	343	Peak	VERTICAL
4	5860.00	52.18	54.00	-1.82	43.87	6.97	34.52	33.18	206	343	Average	VERTICAL
5	5861.70	67.79	74.00	-6.21	59.48	6.97	34.52	33.18	206	343	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 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	deg	
1	5147.37	71.25	74.00	-2.75	64.35	6.21	33.74	33.05	212	1	Peak	VERTICAL
2	5149.30	52.97	54.00	-1.03	46.07	6.21	33.74	33.05	212	1	Average	VERTICAL
3	5194.17	96.32			89.31	6.24	33.82	33.05	212	1	Average	VERTICAL
4	5194.49	106.66			99.65	6.24	33.82	33.05	212	1	Peak	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	
1	5149.20	64.95	74.00	-9.05	58.05	6.21	33.74	33.05	132	241	Peak	VERTICAL
2	5149.60	50.67	54.00	-3.33	43.77	6.21	33.74	33.05	132	241	Average	VERTICAL
3	5234.80	99.84			92.72	6.30	33.87	33.05	132	241	Average	VERTICAL
4	5234.80	109.99			102.87	6.30	33.87	33.05	132	241	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 54

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5265.19	99.85			92.64	6.34	33.93	33.06	162	118	Average	VERTICAL
2	5265.19	109.92			102.71	6.34	33.93	33.06	162	118	Peak	VERTICAL
3	5350.00	52.77	54.00	-1.23	45.30	6.47	34.06	33.06	162	118	Average	VERTICAL
4	5352.69	68.30	74.00	-5.70	60.83	6.47	34.06	33.06	162	118	Peak	VERTICAL

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

Channel 62

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
1	5305.19	96.56			89.24	6.40	33.98	33.06	213	254	Average	VERTICAL
2	5305.19	105.60			98.28	6.40	33.98	33.06	213	254	Peak	VERTICAL
3	5350.00	52.86	54.00	-1.14	45.39	6.47	34.06	33.06	213	254	Average	VERTICAL
4	5350.71	69.56	74.00	-4.44	62.09	6.47	34.06	33.06	213	254	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 102

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	5459.36	65.20	74.00	-8.80	57.44	6.60	34.22	33.06	184	252	Peak	VERTICAL
2	5460.00	50.56	54.00	-3.44	42.80	6.60	34.22	33.06	184	252	Average	VERTICAL
3	5467.37	72.76	74.00	-1.24	64.97	6.60	34.25	33.06	184	252	Peak	VERTICAL
4	5470.00	52.77	54.00	-1.23	44.98	6.60	34.25	33.06	184	252	Average	VERTICAL
5	5512.89	97.66			89.78	6.65	34.30	33.07	184	252	Average	VERTICAL
6	5515.13	107.18			99.29	6.65	34.31	33.07	184	252	Peak	VERTICAL

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

Channel 110

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	5459.30	63.02	74.00	-10.98	55.26	6.60	34.22	33.06	152	249	Peak	VERTICAL
2	5460.00	51.24	54.00	-2.76	43.48	6.60	34.22	33.06	152	249	Average	VERTICAL
3	5467.40	52.83	54.00	-1.17	45.04	6.60	34.25	33.06	152	249	Average	VERTICAL
4	5469.55	66.43	74.00	-7.57	58.64	6.60	34.25	33.06	152	249	Peak	VERTICAL
5	5555.13	100.69			92.74	6.70	34.33	33.08	152	249	Average	VERTICAL
6	5555.13	110.96			103.01	6.70	34.33	33.08	152	249	Peak	VERTICAL

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

Channel 134

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	5674.81	96.29			88.22	6.79	34.40	33.12	149	253	Average	VERTICAL
2	5675.13	105.59			97.52	6.79	34.40	33.12	149	253	Peak	VERTICAL
3	5725.77	52.78	54.00	-1.22	44.65	6.83	34.43	33.13	149	253	Average	VERTICAL
4	5725.77	67.93	74.00	-6.07	59.80	6.83	34.43	33.13	149	253	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 151

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	dB/m	
1	5713.40	70.35	74.00	-3.65	62.23	6.83	34.42	33.13	150	253	Peak	VERTICAL
2	5715.00	52.76	54.00	-1.24	44.64	6.83	34.42	33.13	150	253	Average	VERTICAL
3	5717.95	72.59	78.20	-5.61	64.46	6.83	34.43	33.13	150	253	Peak	VERTICAL
4	5759.81	103.95			95.76	6.88	34.46	33.15	150	253	Peak	VERTICAL
5	5760.13	94.38			86.19	6.88	34.46	33.15	150	253	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			Loss	Factor	Factor	dB	dB	dB/m	
1	5710.39	64.66	74.00	-9.34	56.54	6.83	34.42	33.13	177	251	Peak	VERTICAL
2	5712.31	49.69	54.00	-4.31	41.57	6.83	34.42	33.13	177	251	Average	VERTICAL
3	5724.68	66.91	78.20	-11.29	58.78	6.83	34.43	33.13	177	251	Peak	VERTICAL
4	5800.13	97.03			88.81	6.90	34.48	33.16	177	251	Average	VERTICAL
5	5800.13	106.46			98.24	6.90	34.48	33.16	177	251	Peak	VERTICAL
6	5851.28	71.77	78.20	-6.43	63.48	6.95	34.51	33.17	177	251	Peak	VERTICAL
7	5860.39	52.54	54.00	-1.46	44.23	6.97	34.52	33.18	177	251	Average	VERTICAL
8	5860.39	68.00	74.00	-6.00	59.69	6.97	34.52	33.18	177	251	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

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/m	dB	cm	deg			
1	5145.10	52.89	54.00	-1.11	45.99	6.21	33.74	33.05	188	256	Average	VERTICAL
2	5150.00	67.24	74.00	-6.76	60.34	6.21	33.74	33.05	188	256	Peak	VERTICAL
3	5195.58	93.10			86.06	6.27	33.82	33.05	188	256	Average	VERTICAL
4	5195.58	102.10			95.06	6.27	33.82	33.05	188	256	Peak	VERTICAL
5	5361.44	59.96	74.00	-14.04	52.46	6.47	34.09	33.06	188	256	Peak	VERTICAL
6	5403.91	47.74	54.00	-6.26	40.13	6.53	34.14	33.06	188	256	Average	VERTICAL

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

Channel 58

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	5057.63	57.18	74.00	-16.82	50.54	6.08	33.61	33.05	192	252	Peak	VERTICAL
2	5135.35	47.33	54.00	-6.67	40.50	6.17	33.71	33.05	192	252	Average	VERTICAL
3	5285.19	92.64			85.38	6.37	33.95	33.06	192	252	Average	VERTICAL
4	5298.01	101.75			94.43	6.40	33.98	33.06	192	252	Peak	VERTICAL
5	5350.00	52.93	54.00	-1.07	45.46	6.47	34.06	33.06	192	252	Average	VERTICAL
6	5358.11	67.68	74.00	-6.32	60.21	6.47	34.06	33.06	192	252	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 106

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	5456.28	66.07	74.00	-7.93	58.31	6.60	34.22	33.06	152	131	Peak	VERTICAL
2	5457.08	52.27	54.00	-1.73	44.51	6.60	34.22	33.06	152	131	Average	VERTICAL
3	5460.80	52.35	54.00	-1.65	44.59	6.60	34.22	33.06	152	131	Average	VERTICAL
4	5460.80	68.91	74.00	-5.09	61.15	6.60	34.22	33.06	152	131	Peak	VERTICAL
5	5534.81	103.22			95.30	6.68	34.32	33.08	152	131	Peak	VERTICAL
6	5539.62	93.28			85.36	6.68	34.32	33.08	152	131	Average	VERTICAL
7	5764.78	59.52	74.00	-14.48	51.33	6.88	34.46	33.15	152	131	Peak	VERTICAL
8	5767.18	48.26	54.00	-5.74	40.07	6.88	34.46	33.15	152	131	Average	VERTICAL

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

Channel 122

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	5457.76	50.56	54.00	-3.44	42.80	6.60	34.22	33.06	135	251	Average	VERTICAL
2	5459.36	63.83	74.00	-10.17	56.07	6.60	34.22	33.06	135	251	Peak	VERTICAL
3	5465.99	64.47	68.20	-3.73	56.68	6.60	34.25	33.06	135	251	Peak	VERTICAL
4	5597.18	95.30			87.32	6.72	34.35	33.09	135	251	Average	VERTICAL
5	5602.79	104.59			96.59	6.74	34.36	33.10	135	251	Peak	VERTICAL
6	5730.19	67.12	68.20	-1.08	58.99	6.83	34.43	33.13	135	251	Peak	VERTICAL

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

Channel 155

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	5706.09	52.72	54.00	-1.28	44.60	6.83	34.42	33.13	260	344	Average	VERTICAL
2	5711.70	68.14	74.00	-5.86	60.02	6.83	34.42	33.13	260	344	Peak	VERTICAL
3	5723.40	71.60	78.20	-6.60	63.47	6.83	34.43	33.13	260	344	Peak	VERTICAL
4	5811.86	93.26			85.01	6.92	34.49	33.16	260	344	Average	VERTICAL
5	5811.86	103.36			95.11	6.92	34.49	33.16	260	344	Peak	VERTICAL
6	5857.53	70.03	78.20	-8.17	61.73	6.95	34.52	33.17	260	344	Peak	VERTICAL
7	5860.00	52.26	54.00	-1.74	43.95	6.97	34.52	33.18	260	344	Average	VERTICAL
8	5867.95	67.50	74.00	-6.50	59.19	6.97	34.52	33.18	260	344	Peak	VERTICAL

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

**Straddle Channel**

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2
Test Date	Jul. 30, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 144

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5717.44	105.85			97.73	6.83	34.42	33.13	150	328	Average	VERTICAL
2	5722.56	117.10			108.97	6.83	34.43	33.13	150	328	Peak	VERTICAL
3	5850.00	60.33	68.20	-7.87	52.04	6.95	34.51	33.17	150	328	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 142

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	5705.51	102.89			94.77	6.83	34.42	33.13	254	256 Average	VERTICAL
2	5707.44	112.46			104.34	6.83	34.42	33.13	254	256 Peak	VERTICAL
3	5865.77	51.91	54.00	-2.09	43.60	6.97	34.52	33.18	254	256 Average	VERTICAL
4	5867.69	65.00	74.00	-9.00	56.69	6.97	34.52	33.18	254	256 Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 138

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5699.62	108.56				100.46	6.81	34.41	33.12	194	340	Peak VERTICAL
2	5701.22	98.86				90.75	6.81	34.42	33.12	194	340	Average VERTICAL
3	5853.46	66.95	68.20	-1.25	58.66	6.95	34.51	33.17	194	340	Peak VERTICAL	

Item 1, 2 are the fundamental frequency at 5690 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	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 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	5148.84	72.81	74.00	-1.19	65.91	6.21	33.74	33.05	158	28	Peak	VERTICAL
2	5150.00	51.82	54.00	-2.18	44.92	6.21	33.74	33.05	158	28	Average	VERTICAL
3	5172.76	113.27			106.31	6.24	33.77	33.05	158	28	Peak	VERTICAL
4	5173.05	103.74			96.78	6.24	33.77	33.05	158	28	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	5118.16	52.47	54.00	-1.53	45.69	6.14	33.69	33.05	158	273	Average	VERTICAL
2	5143.49	65.79	74.00	-8.21	58.93	6.17	33.74	33.05	158	273	Peak	VERTICAL
3	5197.83	116.02			108.98	6.27	33.82	33.05	158	273	Peak	VERTICAL
4	5198.55	106.86			99.82	6.27	33.82	33.05	158	273	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	5113.10	50.32	54.00	-3.68	43.54	6.14	33.69	33.05	160	312	Average	VERTICAL
2	5117.00	61.78	74.00	-12.22	55.00	6.14	33.69	33.05	160	312	Peak	VERTICAL
3	5233.05	108.42			101.30	6.30	33.87	33.05	160	312	Average	VERTICAL
4	5237.83	117.36			110.24	6.30	33.87	33.05	160	312	Peak	VERTICAL
5	5352.50	52.54	54.00	-1.46	45.07	6.47	34.06	33.06	160	312	Average	VERTICAL
6	5358.25	64.58	74.00	-9.42	57.11	6.47	34.06	33.06	160	312	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 52

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	5142.76	50.78	54.00	-3.22	43.92	6.17	33.74	33.05	156	31	Average	VERTICAL
2	5144.21	62.03	74.00	-11.97	55.13	6.21	33.74	33.05	156	31	Peak	VERTICAL
3	5257.83	116.95			109.77	6.34	33.90	33.06	156	31	Peak	VERTICAL
4	5258.55	108.09			100.88	6.34	33.93	33.06	156	31	Average	VERTICAL
5	5381.50	52.51	54.00	-1.49	44.96	6.50	34.11	33.06	156	31	Average	VERTICAL
6	5384.73	64.62	74.00	-9.38	57.07	6.50	34.11	33.06	156	31	Peak	VERTICAL

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

Channel 60

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	5302.03	107.77			100.45	6.40	33.98	33.06	171	33	Average	VERTICAL
2	5304.05	117.16			109.84	6.40	33.98	33.06	171	33	Peak	VERTICAL
3	5380.97	52.81	54.00	-1.19	45.26	6.50	34.11	33.06	171	33	Average	VERTICAL
4	5380.97	64.79	74.00	-9.21	57.24	6.50	34.11	33.06	171	33	Peak	VERTICAL

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

Channel 64

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	5311.61	107.52			100.17	6.40	34.01	33.06	159	44	Average	VERTICAL
2	5313.34	116.88			109.53	6.40	34.01	33.06	159	44	Peak	VERTICAL
3	5350.00	52.82	54.00	-1.18	45.35	6.47	34.06	33.06	159	44	Average	VERTICAL
4	5355.79	69.47	74.00	-4.53	62.00	6.47	34.06	33.06	159	44	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 100

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	5459.13	64.71	74.00	-9.29	56.95	6.60	34.22	33.06	164	41 Peak	VERTICAL
2	5460.00	49.71	54.00	-4.29	41.95	6.60	34.22	33.06	164	41 Average	VERTICAL
3	5468.99	70.55	74.00	-3.45	62.76	6.60	34.25	33.06	164	41 Peak	VERTICAL
4	5470.00	52.83	54.00	-1.17	45.04	6.60	34.25	33.06	164	41 Average	VERTICAL
5	5500.58	107.35			99.48	6.63	34.30	33.06	164	41 Average	VERTICAL
6	5501.74	118.69			110.81	6.65	34.30	33.07	164	41 Peak	VERTICAL

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

Channel 116

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	5448.42	62.56	74.00	-11.44	54.84	6.56	34.22	33.06	153	37 Peak	VERTICAL
2	5460.00	50.38	54.00	-3.62	42.62	6.60	34.22	33.06	153	37 Average	VERTICAL
3	5462.04	50.41	54.00	-3.59	42.65	6.60	34.22	33.06	153	37 Average	VERTICAL
4	5466.38	63.16	74.00	-10.84	55.37	6.60	34.25	33.06	153	37 Peak	VERTICAL
5	5581.45	107.65			99.68	6.72	34.34	33.09	153	37 Average	VERTICAL
6	5582.89	117.85			109.87	6.72	34.35	33.09	153	37 Peak	VERTICAL
7	5740.92	51.11	54.00	-2.89	42.95	6.86	34.44	33.14	153	37 Average	VERTICAL
8	5745.26	62.91	74.00	-11.09	54.75	6.86	34.44	33.14	153	37 Peak	VERTICAL

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

Channel 140

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	5691.75	102.70			94.60	6.81	34.41	33.12	170	37 Average	VERTICAL
2	5698.55	113.25			105.15	6.81	34.41	33.12	170	37 Peak	VERTICAL
3	5725.00	51.59	54.00	-2.41	43.46	6.83	34.43	33.13	170	37 Average	VERTICAL
4	5725.14	72.97	74.00	-1.03	64.84	6.83	34.43	33.13	170	37 Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

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	5711.67	66.96	68.20	-1.24	58.84	6.83	34.42	33.13	173	35	Peak	VERTICAL
2	5723.99	73.86	78.20	-4.34	65.73	6.83	34.43	33.13	173	35	Peak	VERTICAL
3	5743.99	102.86			94.70	6.86	34.44	33.14	173	35	Average	VERTICAL
4	5746.59	113.04			104.88	6.86	34.44	33.14	173	35	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	m			dB	dBuV	dB	dB/m	dB	cm	
1	5707.19	67.12	68.20	-1.08	59.00	6.83	34.42	33.13	167	38	Peak	VERTICAL
2	5721.24	63.63	78.20	-14.57	55.50	6.83	34.43	33.13	167	38	Peak	VERTICAL
3	5786.74	107.31			99.09	6.90	34.48	33.16	167	38	Average	VERTICAL
4	5788.18	117.42			109.20	6.90	34.48	33.16	167	38	Peak	VERTICAL
5	5857.11	65.75	78.20	-12.45	57.45	6.95	34.52	33.17	167	38	Peak	VERTICAL
6	5861.74	66.69	68.20	-1.51	58.38	6.97	34.52	33.18	167	38	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	5822.54	114.10			105.84	6.92	34.50	33.16	169	307	Peak	VERTICAL
2	5822.68	102.96			94.70	6.92	34.50	33.16	169	307	Average	VERTICAL
3	5850.58	76.48	78.20	-1.72	68.19	6.95	34.51	33.17	169	307	Peak	VERTICAL
4	5860.29	65.82	68.20	-2.38	57.51	6.97	34.52	33.18	169	307	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 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	5138.13	72.81	74.00	-1.19	65.98	6.17	33.71	33.05	159	28 Peak	VERTICAL
2	5150.00	50.10	54.00	-3.90	43.20	6.21	33.74	33.05	159	28 Average	VERTICAL
3	5178.71	108.33			101.35	6.24	33.79	33.05	159	28 Peak	VERTICAL
4	5207.37	97.44			90.40	6.27	33.82	33.05	159	28 Average	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	5123.23	64.04	74.00	-9.96	57.21	6.17	33.71	33.05	157	39 Peak	VERTICAL
2	5147.11	51.49	54.00	-2.51	44.59	6.21	33.74	33.05	157	39 Average	VERTICAL
3	5234.34	106.68			99.56	6.30	33.87	33.05	157	39 Average	VERTICAL
4	5237.24	116.59			109.47	6.30	33.87	33.05	157	39 Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 54

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	deg
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5274.63	104.68			97.44	6.37	33.93	33.06	162	309	Average	VERTICAL
2	5275.50	114.92			107.66	6.37	33.95	33.06	162	309	Peak	VERTICAL
3	5351.16	63.73	74.00	-10.27	56.26	6.47	34.06	33.06	162	309	Peak	VERTICAL
4	5354.00	52.25	54.00	-1.75	44.78	6.47	34.06	33.06	162	309	Average	VERTICAL

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

Channel 62

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	deg
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5305.95	99.80			92.48	6.40	33.98	33.06	166	34	Average	VERTICAL
2	5306.53	110.38			103.06	6.40	33.98	33.06	166	34	Peak	VERTICAL
3	5350.00	52.36	54.00	-1.64	44.89	6.47	34.06	33.06	166	34	Average	VERTICAL
4	5352.60	68.71	74.00	-5.29	61.24	6.47	34.06	33.06	166	34	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 102

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	5452.34	66.26	74.00	-7.74	58.50	6.60	34.22	33.06	182	46	Peak	VERTICAL
2	5460.00	50.70	54.00	-3.30	42.94	6.60	34.22	33.06	182	46	Average	VERTICAL
3	5466.53	68.35	74.00	-5.65	60.56	6.60	34.25	33.06	182	46	Peak	VERTICAL
4	5470.00	52.39			44.60	6.60	34.25	33.06	182	46	Average	VERTICAL
5	5492.63	100.15			92.31	6.63	34.27	33.06	182	46	Average	VERTICAL
6	5506.82	110.94	74.00	36.94	103.06	6.65	34.30	33.07	182	46	Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5510 MHz.

Channel 110

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	5458.55	67.69	74.00	-6.31	59.93	6.60	34.22	33.06	178	46	Peak	VERTICAL
2	5459.71	52.06	54.00	-1.94	44.30	6.60	34.22	33.06	178	46	Average	VERTICAL
3	5465.95	68.35	74.00	-5.65	60.56	6.60	34.25	33.06	178	46	Peak	VERTICAL
4	5469.42	52.52	54.00	-1.48	44.73	6.60	34.25	33.06	178	46	Average	VERTICAL
5	5546.82	115.43			107.51	6.68	34.32	33.08	178	46	Peak	VERTICAL
6	5563.31	103.62			95.67	6.70	34.33	33.08	178	46	Average	VERTICAL

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

Channel 134

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	5663.05	112.63			104.57	6.79	34.39	33.12	163	37	Peak	VERTICAL
2	5674.92	101.93			93.86	6.79	34.40	33.12	163	37	Average	VERTICAL
3	5727.32	72.52	74.00	-1.48	64.39	6.83	34.43	33.13	163	37	Peak	VERTICAL
4	5732.53	52.83	54.00	-1.17	44.68	6.86	34.43	33.14	163	37	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 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	cm	deg		
1	5712.11	66.50	68.20	-1.70	58.38	6.83	34.42	33.13	160	31 Peak	VERTICAL
2	5722.68	69.90	78.20	-8.30	61.77	6.83	34.43	33.13	160	31 Peak	VERTICAL
3	5750.37	98.46			90.30	6.86	34.44	33.14	160	31 Average	VERTICAL
4	5750.95	109.61			101.45	6.86	34.44	33.14	160	31 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	5710.08	63.42	68.20	-4.78	55.30	6.83	34.42	33.13	171	309 Peak	VERTICAL
2	5718.92	64.40	78.20	-13.80	56.27	6.83	34.43	33.13	171	309 Peak	VERTICAL
3	5791.82	111.29			103.07	6.90	34.48	33.16	171	309 Peak	VERTICAL
4	5812.08	100.65			92.40	6.92	34.49	33.16	171	309 Average	VERTICAL
5	5851.74	72.36	78.20	-5.84	64.07	6.95	34.51	33.17	171	309 Peak	VERTICAL
6	5860.58	67.19	68.20	-1.01	58.88	6.97	34.52	33.18	171	309 Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

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/m	dB	cm	deg			
1	5147.83	69.39	74.00	-4.61	62.49	6.21	33.74	33.05	153	311	Peak	VERTICAL
2	5150.00	52.70	54.00	-1.30	45.80	6.21	33.74	33.05	153	311	Average	VERTICAL
3	5236.05	98.44			91.32	6.30	33.87	33.05	153	311	Average	VERTICAL
4	5236.05	108.05			100.93	6.30	33.87	33.05	153	311	Peak	VERTICAL
5	5350.00	49.86	54.00	-4.14	42.39	6.47	34.06	33.06	153	311	Average	VERTICAL
6	5350.00	62.10	74.00	-11.90	54.63	6.47	34.06	33.06	153	311	Peak	VERTICAL

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

Channel 58

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	5144.21	59.57	74.00	-14.43	52.67	6.21	33.74	33.05	170	309	Peak	VERTICAL
2	5150.00	47.81	54.00	-6.19	40.91	6.21	33.74	33.05	170	309	Average	VERTICAL
3	5261.78	107.54			100.33	6.34	33.93	33.06	170	309	Peak	VERTICAL
4	5283.49	95.50			88.24	6.37	33.95	33.06	170	309	Average	VERTICAL
5	5350.00	52.85	54.00	-1.15	45.38	6.47	34.06	33.06	170	309	Average	VERTICAL
6	5352.89	67.77	74.00	-6.23	60.30	6.47	34.06	33.06	170	309	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 106

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5459.28	68.49	74.00	-5.51	60.73	6.60	34.22	33.06	165	317	Peak	VERTICAL
2	5460.00	52.48	54.00	-1.52	44.72	6.60	34.22	33.06	165	317	Average	VERTICAL
3	5465.66	52.72	54.00	-1.28	44.93	6.60	34.25	33.06	165	317	Average	VERTICAL
4	5466.38	71.25	74.00	-2.75	63.46	6.60	34.25	33.06	165	317	Peak	VERTICAL
5	5494.54	97.21			89.37	6.63	34.27	33.06	165	317	Average	VERTICAL
6	5495.99	109.21			101.37	6.63	34.27	33.06	165	317	Peak	VERTICAL
7	5725.00	49.47	54.00	-4.53	41.34	6.83	34.43	33.13	165	317	Average	VERTICAL
8	5729.34	61.23	74.00	-12.77	53.10	6.83	34.43	33.13	165	317	Peak	VERTICAL

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

Channel 122

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5453.49	61.81	74.00	-12.19	54.05	6.60	34.22	33.06	169	34	Peak	VERTICAL
2	5458.55	50.88	54.00	-3.12	43.12	6.60	34.22	33.06	169	34	Average	VERTICAL
3	5464.21	65.97	74.00	-8.03	58.18	6.60	34.25	33.06	169	34	Peak	VERTICAL
4	5467.83	50.42	54.00	-3.58	42.63	6.60	34.25	33.06	169	34	Average	VERTICAL
5	5578.89	110.57			102.60	6.72	34.34	33.09	169	34	Peak	VERTICAL
6	5619.41	99.32			91.31	6.74	34.37	33.10	169	34	Average	VERTICAL
7	5726.45	52.66	54.00	-1.34	44.53	6.83	34.43	33.13	169	34	Average	VERTICAL
8	5732.96	65.80	74.00	-8.20	57.65	6.86	34.43	33.14	169	34	Peak	VERTICAL

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

Channel 155

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5715.00	65.94	68.20	-2.26	57.82	6.83	34.42	33.13	190	34	Peak	VERTICAL
2	5719.21	67.62	78.20	-10.58	59.49	6.83	34.43	33.13	190	34	Peak	VERTICAL
3	5752.57	110.16			101.98	6.86	34.46	33.14	190	34	Peak	VERTICAL
4	5801.05	95.16			86.94	6.90	34.48	33.16	190	34	Average	VERTICAL
5	5854.34	67.29	78.20	-10.91	58.99	6.95	34.52	33.17	190	34	Peak	VERTICAL
6	5869.54	67.05	68.20	-1.15	58.74	6.97	34.52	33.18	190	34	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5775 MHz.

**Straddle Channel**

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 144

Freq	Level	Limit		Over Line	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5712.04	111.96				103.84	6.83	34.42	33.13	211	39	Average VERTICAL
2	5714.21	121.34				113.22	6.83	34.42	33.13	211	39	Peak VERTICAL
3	5881.84	65.18	68.20	-3.02	56.86	6.97	34.53	33.18	211	39	Peak VERTICAL	

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 142

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	deg
1	5704.21	119.03			110.92	6.81	34.42	33.12	162	36	Peak	VERTICAL
2	5713.62	108.02			99.90	6.83	34.42	33.13	162	36	Average	VERTICAL
3	5889.07	66.72	68.20	-1.48	58.38	6.99	34.54	33.19	162	36	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2
Test Date	Jul. 18, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 138

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
		Line	Limit	Level	Loss	Factor	Factor	cm	deg			
1	5658.89	113.43		105.37	6.79	34.39	33.12	181	38	Peak	VERTICAL	
2	5701.58	100.89		92.78	6.81	34.42	33.12	181	38	Average	VERTICAL	
3	5855.07	66.82	68.20	-1.38	58.52	6.95	34.52	33.17	181	38	Peak	VERTICAL

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

Note:

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

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Jul. 28, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

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	5149.55	70.10	74.00	-3.90	63.20	6.21	33.74	33.05	150	343 Peak	HORIZONTAL
2	5150.00	52.95	54.00	-1.05	46.05	6.21	33.74	33.05	150	343 Average	HORIZONTAL
3	5171.99	105.75			98.79	6.24	33.77	33.05	150	343 Average	HORIZONTAL
4	5171.99	114.85			107.89	6.24	33.77	33.05	150	343 Peak	HORIZONTAL

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	5121.47	52.95	54.00	-1.05	46.14	6.17	33.69	33.05	196	348 Average	HORIZONTAL
2	5122.28	63.78	74.00	-10.22	56.97	6.17	33.69	33.05	196	348 Peak	HORIZONTAL
3	5200.80	107.49			100.45	6.27	33.82	33.05	196	348 Average	HORIZONTAL
4	5202.40	116.69			109.65	6.27	33.82	33.05	196	348 Peak	HORIZONTAL

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	5111.80	51.72	54.00	-2.28	44.94	6.14	33.69	33.05	199	344 Average	HORIZONTAL
2	5111.80	62.87	74.00	-11.13	56.09	6.14	33.69	33.05	199	344 Peak	HORIZONTAL
3	5232.79	107.97			100.85	6.30	33.87	33.05	199	344 Average	HORIZONTAL
4	5233.59	117.61			110.49	6.30	33.87	33.05	199	344 Peak	HORIZONTAL
5	5352.18	63.53	74.00	-10.47	56.06	6.47	34.06	33.06	199	344 Peak	HORIZONTAL
6	5352.98	51.52	54.00	-2.48	44.05	6.47	34.06	33.06	199	344 Average	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Jul. 28, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 52

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	5136.60	52.84	54.00	-1.16	46.01	6.17	33.71	33.05	180	353	Average	HORIZONTAL
2	5136.60	63.54	74.00	-10.46	56.71	6.17	33.71	33.05	180	353	Peak	HORIZONTAL
3	5257.60	109.85			102.67	6.34	33.90	33.06	180	353	Average	HORIZONTAL
4	5257.60	118.68			111.50	6.34	33.90	33.06	180	353	Peak	HORIZONTAL
5	5376.99	51.73	54.00	-2.27	44.20	6.50	34.09	33.06	180	353	Average	HORIZONTAL
6	5377.79	63.57	74.00	-10.43	56.02	6.50	34.11	33.06	180	353	Peak	HORIZONTAL

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

Channel 60

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	5308.01	108.78			101.46	6.40	33.98	33.06	151	14	Average	HORIZONTAL
2	5308.01	117.13			109.81	6.40	33.98	33.06	151	14	Peak	HORIZONTAL
3	5388.14	52.98	54.00	-1.02	45.43	6.50	34.11	33.06	151	14	Average	HORIZONTAL
4	5388.14	63.88	74.00	-10.12	56.33	6.50	34.11	33.06	151	14	Peak	HORIZONTAL

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

Channel 64

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	5321.44	112.99			105.64	6.40	34.01	33.06	230	344	Peak	VERTICAL
2	5321.92	103.22			95.87	6.40	34.01	33.06	230	344	Average	VERTICAL
3	5350.00	52.75	54.00	-1.25	45.28	6.47	34.06	33.06	230	344	Average	VERTICAL
4	5352.21	67.21	74.00	-6.79	59.74	6.47	34.06	33.06	230	344	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Jul. 28, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 100

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	5420.67	50.80	54.00	-3.20	43.16	6.53	34.17	33.06	119	355	Average	HORIZONTAL
2	5459.14	63.22	74.00	-10.78	55.46	6.60	34.22	33.06	119	355	Peak	HORIZONTAL
3	5467.79	71.47	74.00	-2.53	63.68	6.60	34.25	33.06	119	355	Peak	HORIZONTAL
4	5470.00	52.71	54.00	-1.29	44.92	6.60	34.25	33.06	119	355	Average	HORIZONTAL
5	5498.08	115.98			108.11	6.63	34.30	33.06	119	355	Peak	HORIZONTAL
6	5498.56	106.24			98.37	6.63	34.30	33.06	119	355	Average	HORIZONTAL

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

Channel 116

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	5121.67	52.77	54.00	-1.23	45.96	6.17	33.69	33.05	148	343	Average	HORIZONTAL
2	5123.27	62.63	74.00	-11.37	55.80	6.17	33.71	33.05	148	343	Peak	HORIZONTAL
3	5427.76	62.73	74.00	-11.27	55.06	6.56	34.17	33.06	148	343	Peak	HORIZONTAL
4	5427.95	52.46	54.00	-1.54	44.79	6.56	34.17	33.06	148	343	Average	HORIZONTAL
5	5468.40	51.80	54.00	-2.20	44.01	6.60	34.25	33.06	148	343	Average	HORIZONTAL
6	5468.40	62.56	74.00	-11.44	54.77	6.60	34.25	33.06	148	343	Peak	HORIZONTAL
7	5584.81	120.73			112.75	6.72	34.35	33.09	148	343	Peak	HORIZONTAL
8	5588.01	111.47			103.49	6.72	34.35	33.09	148	343	Average	HORIZONTAL
9	5748.27	51.19	54.00	-2.81	43.03	6.86	34.44	33.14	148	343	Average	HORIZONTAL
10	5748.27	62.98	74.00	-11.02	54.82	6.86	34.44	33.14	148	343	Peak	HORIZONTAL

Item 7, 8 are the fundamental frequency at 5580 MHz.

Channel 140

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	5691.35	105.92			97.82	6.81	34.41	33.12	212	354	Average	HORIZONTAL
2	5692.31	115.46			107.36	6.81	34.41	33.12	212	354	Peak	HORIZONTAL
3	5725.48	72.91	74.00	-1.09	64.78	6.83	34.43	33.13	212	354	Peak	HORIZONTAL
4	5771.64	52.48	54.00	-1.52	44.28	6.88	34.47	33.15	212	354	Average	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Jul. 29, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 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	5710.39	67.14	68.20	-1.06	59.02	6.83	34.42	33.13	171	335	Peak	HORIZONTAL
2	5722.40	73.36	78.20	-4.84	65.23	6.83	34.43	33.13	171	335	Peak	HORIZONTAL
3	5751.73	115.25			107.07	6.86	34.46	33.14	171	335	Peak	HORIZONTAL
4	5753.17	105.12			96.94	6.86	34.46	33.14	171	335	Average	HORIZONTAL

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	5713.37	66.86	68.20	-1.34	58.74	6.83	34.42	33.13	200	7	Peak	HORIZONTAL
2	5724.04	62.48	78.20	-15.72	54.35	6.83	34.43	33.13	200	7	Peak	HORIZONTAL
3	5793.17	110.50			102.28	6.90	34.48	33.16	200	7	Average	HORIZONTAL
4	5793.17	119.85			111.63	6.90	34.48	33.16	200	7	Peak	HORIZONTAL
5	5852.40	65.34	78.20	-12.86	57.05	6.95	34.51	33.17	200	7	Peak	HORIZONTAL
6	5872.98	67.14	68.20	-1.06	58.82	6.97	34.53	33.18	200	7	Peak	HORIZONTAL

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	5832.05	101.76			93.50	6.92	34.50	33.16	202	6	Average	VERTICAL
2	5832.05	111.80			103.54	6.92	34.50	33.16	202	6	Peak	VERTICAL
3	5851.28	76.84	78.20	-1.36	68.55	6.95	34.51	33.17	202	6	Peak	VERTICAL
4	5863.14	71.53	74.00	-2.47	63.22	6.97	34.52	33.18	202	6	Peak	VERTICAL
5	5902.56	51.17	54.00	-2.83	42.83	6.99	34.54	33.19	202	6	Average	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Jul. 29, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 38

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dB	dB	dB/m	dB	cm	
1	5143.37	49.19	54.00	-4.81	42.33	6.17	33.74	33.05	215	335	Average	HORIZONTAL
2	5149.14	72.96	74.00	-1.04	66.06	6.21	33.74	33.05	215	335	Peak	HORIZONTAL
3	5205.39	111.78			104.74	6.27	33.82	33.05	215	335	Peak	HORIZONTAL
4	5207.31	101.38			94.34	6.27	33.82	33.05	215	335	Average	HORIZONTAL

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			dB	dB	dB	dB/m	dB	cm	
1	5147.31	66.91	74.00	-7.09	60.01	6.21	33.74	33.05	185	311	Peak	HORIZONTAL
2	5148.75	52.76	54.00	-1.24	45.86	6.21	33.74	33.05	185	311	Average	HORIZONTAL
3	5212.69	105.99			98.92	6.27	33.85	33.05	185	311	Average	HORIZONTAL
4	5212.69	114.77			107.70	6.27	33.85	33.05	185	311	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Jul. 29, 2015 ~ Aug. 03, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 54

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	
1	5137.79	52.65	54.00	-1.35	45.82	6.17	33.71	33.05	140	351	Average	HORIZONTAL
2	5137.79	63.84	74.00	-10.16	57.01	6.17	33.71	33.05	140	351	Peak	HORIZONTAL
3	5257.98	109.50			102.32	6.34	33.90	33.06	140	351	Average	HORIZONTAL
4	5257.98	118.54			111.36	6.34	33.90	33.06	140	351	Peak	HORIZONTAL
5	5356.54	67.29	74.00	-6.71	59.82	6.47	34.06	33.06	140	351	Peak	HORIZONTAL
6	5376.73	51.82	54.00	-2.18	44.29	6.50	34.09	33.06	140	351	Average	HORIZONTAL

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

Channel 62

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	
1	5294.62	102.46			95.17	6.37	33.98	33.06	149	357	Average	HORIZONTAL
2	5299.10	111.28			103.96	6.40	33.98	33.06	149	357	Peak	HORIZONTAL
3	5350.00	52.61	54.00	-1.39	45.14	6.47	34.06	33.06	149	357	Average	HORIZONTAL
4	5356.80	68.56	74.00	-5.44	61.09	6.47	34.06	33.06	149	357	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2
Test Date	Jul. 29, 2015 ~ Aug. 03, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 102

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	5447.18	50.52	54.00	-3.48	42.80	6.56	34.22	33.06	129	354	Average	HORIZONTAL
2	5457.44	63.05	74.00	-10.95	55.29	6.60	34.22	33.06	129	354	Peak	HORIZONTAL
3	5463.85	66.45	68.20	-1.75	58.66	6.60	34.25	33.06	129	354	Peak	HORIZONTAL
4	5522.18	105.77			97.88	6.65	34.31	33.07	129	354	Average	HORIZONTAL
5	5524.10	114.31			106.42	6.65	34.31	33.07	129	354	Peak	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5510 MHz.

Channel 110

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	5452.40	52.83	54.00	-1.17	45.07	6.60	34.22	33.06	207	350	Average	HORIZONTAL
2	5455.77	66.84	74.00	-7.16	59.08	6.60	34.22	33.06	207	350	Peak	HORIZONTAL
3	5465.19	51.48	54.00	-2.52	43.69	6.60	34.25	33.06	207	350	Average	HORIZONTAL
4	5468.27	67.73	74.00	-6.27	59.94	6.60	34.25	33.06	207	350	Peak	HORIZONTAL
5	5532.69	104.83			96.91	6.68	34.32	33.08	207	350	Average	HORIZONTAL
6	5532.69	114.21			106.29	6.68	34.32	33.08	207	350	Peak	HORIZONTAL

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

Channel 134

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	5656.54	106.04			97.98	6.79	34.39	33.12	135	329	Average	HORIZONTAL
2	5657.02	116.96			108.90	6.79	34.39	33.12	135	329	Peak	HORIZONTAL
3	5731.54	67.07	68.20	-1.13	58.92	6.86	34.43	33.14	135	329	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Jul. 29, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 151

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	5714.30	52.61	54.00	-1.39	44.49	6.83	34.42	33.13	150	351	Average	HORIZONTAL
2	5714.30	71.73	74.00	-2.27	63.61	6.83	34.42	33.13	150	351	Peak	HORIZONTAL
3	5721.67	75.00	78.20	-3.20	66.87	6.83	34.43	33.13	150	351	Peak	HORIZONTAL
4	5767.18	110.04			101.85	6.88	34.46	33.15	150	351	Peak	HORIZONTAL
5	5772.95	100.95			92.75	6.88	34.47	33.15	150	351	Average	HORIZONTAL

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			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5697.24	52.97	54.00	-1.03	44.87	6.81	34.41	33.12	124	357	Average	HORIZONTAL
2	5697.24	63.73	74.00	-10.27	55.63	6.81	34.41	33.12	124	357	Peak	HORIZONTAL
3	5720.00	64.85	78.20	-13.35	56.72	6.83	34.43	33.13	124	357	Peak	HORIZONTAL
4	5777.69	104.34			96.14	6.88	34.47	33.15	124	357	Average	HORIZONTAL
5	5782.50	113.18			104.97	6.90	34.47	33.16	124	357	Peak	HORIZONTAL
6	5852.05	72.70	78.20	-5.50	64.41	6.95	34.51	33.17	124	357	Peak	HORIZONTAL
7	5860.00	52.46	54.00	-1.54	44.15	6.97	34.52	33.18	124	357	Average	HORIZONTAL
8	5865.19	66.20	74.00	-7.80	57.89	6.97	34.52	33.18	124	357	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2
Test Date	Jul. 29, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

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		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5149.10	72.61	74.00	-1.39	65.71	6.21	33.74	33.05	180	339	Peak	HORIZONTAL
2	5150.00	52.99	54.00	-1.01	46.09	6.21	33.74	33.05	180	339	Average	HORIZONTAL
3	5202.79	99.92			92.88	6.27	33.82	33.05	180	339	Average	HORIZONTAL
4	5203.59	108.98			101.94	6.27	33.82	33.05	180	339	Peak	HORIZONTAL
5	5350.80	60.50	74.00	-13.50	53.03	6.47	34.06	33.06	180	339	Peak	HORIZONTAL
6	5363.85	47.14	54.00	-6.86	39.64	6.47	34.09	33.06	180	339	Average	HORIZONTAL

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

Channel 58

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	5057.63	58.45	74.00	-15.55	51.81	6.08	33.61	33.05	141	351	Peak	HORIZONTAL
2	5133.75	47.26	54.00	-6.74	40.43	6.17	33.71	33.05	141	351	Average	HORIZONTAL
3	5287.60	99.97			92.71	6.37	33.95	33.06	141	351	Average	HORIZONTAL
4	5293.21	109.59			102.30	6.37	33.98	33.06	141	351	Peak	HORIZONTAL
5	5351.70	52.59	54.00	-1.41	45.12	6.47	34.06	33.06	141	351	Average	HORIZONTAL
6	5354.10	68.20	74.00	-5.80	60.73	6.47	34.06	33.06	141	351	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1 + Chain 2
Test Date	Jul. 29, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 106

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	5457.08	69.23	74.00	-4.77	61.47	6.60	34.22	33.06	141	353	Peak	HORIZONTAL
2	5459.49	52.41	54.00	-1.59	44.65	6.60	34.22	33.06	141	353	Average	HORIZONTAL
3	5467.50	52.89	54.00	-1.11	45.10	6.60	34.25	33.06	141	353	Average	HORIZONTAL
4	5467.50	72.98	74.00	-1.02	65.19	6.60	34.25	33.06	141	353	Peak	HORIZONTAL
5	5505.96	109.85			101.97	6.65	34.30	33.07	141	353	Peak	HORIZONTAL
6	5532.40	98.37			90.45	6.68	34.32	33.08	141	353	Average	HORIZONTAL
7	5728.21	61.31	74.00	-12.69	53.18	6.83	34.43	33.13	141	353	Peak	HORIZONTAL
8	5744.74	47.89	54.00	-6.11	39.73	6.86	34.44	33.14	141	353	Average	HORIZONTAL

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

Channel 122

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	5454.55	52.19	54.00	-1.81	44.43	6.60	34.22	33.06	187	358	Average	HORIZONTAL
2	5459.36	67.96	74.00	-6.04	60.20	6.60	34.22	33.06	187	358	Peak	HORIZONTAL
3	5460.16	52.57	54.00	-1.43	44.81	6.60	34.22	33.06	187	358	Average	HORIZONTAL
4	5461.76	67.98	74.00	-6.02	60.22	6.60	34.22	33.06	187	358	Peak	HORIZONTAL
5	5574.74	101.53			93.57	6.70	34.34	33.08	187	358	Average	HORIZONTAL
6	5579.55	112.31			104.34	6.72	34.34	33.09	187	358	Peak	HORIZONTAL
7	5725.00	51.82	54.00	-2.18	43.69	6.83	34.43	33.13	187	358	Average	HORIZONTAL
8	5745.42	68.62	74.00	-5.38	60.46	6.86	34.44	33.14	187	358	Peak	HORIZONTAL

Item 5, 6 are the fundamental frequency at 5610 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	5697.28	66.83	68.20	-1.37	58.73	6.81	34.41	33.12	174	359	Peak	HORIZONTAL
2	5718.59	66.64	78.20	-11.56	58.51	6.83	34.43	33.13	174	359	Peak	HORIZONTAL
3	5741.35	107.72			99.56	6.86	34.44	33.14	174	359	Peak	HORIZONTAL
4	5749.36	95.18			87.02	6.86	34.44	33.14	174	359	Average	HORIZONTAL
5	5850.00	67.27	78.20	-10.93	58.98	6.95	34.51	33.17	174	359	Peak	HORIZONTAL
6	5860.74	64.75	68.20	-3.45	56.44	6.97	34.52	33.18	174	359	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5775 MHz.



Straddle Channel

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2
Test Date	Jul. 28, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 144

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5722.40	113.05			104.92	6.83	34.43	33.13	154	353	Average	HORIZONTAL
2	5724.01	122.75			114.62	6.83	34.43	33.13	154	353	Peak	HORIZONTAL
3	5884.26	66.62	68.20	-1.58	58.29	6.99	34.53	33.19	154	353	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2
Test Date	Jul. 29, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 142

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5692.37	111.15			103.05	6.81	34.41	33.12	188	332	Average	HORIZONTAL
2	5692.37	119.76			111.66	6.81	34.41	33.12	188	332	Peak	HORIZONTAL
3	5852.63	67.00	68.20	-1.20	58.71	6.95	34.51	33.17	188	332	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2
Test Date	Jul. 29, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 138

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5691.60	106.96				98.86	6.81	34.41	33.12	149	329	Average
2	5691.60	116.74				108.64	6.81	34.41	33.12	149	329	Peak
3	5853.46	66.98	68.20	-1.22	58.69	6.95	34.51	33.17	149	329	Peak	HORIZONTAL

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

Note:

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

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Aug. 06, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 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/m		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5148.80	72.16	74.00	-1.84	65.26	6.21	33.74	33.05	196	228	Peak	VERTICAL
2	5150.00	52.84	54.00	-1.16	45.94	6.21	33.74	33.05	196	228	Average	VERTICAL
3	5178.00	113.25			106.27	6.24	33.79	33.05	196	228	Peak	VERTICAL
4	5181.80	101.33			94.35	6.24	33.79	33.05	196	228	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	dB	dB/m		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5149.60	52.99	54.00	-1.01	46.09	6.21	33.74	33.05	222	231	Average	VERTICAL
2	5150.00	68.30	74.00	-5.70	61.40	6.21	33.74	33.05	222	231	Peak	VERTICAL
3	5198.80	105.48			98.44	6.27	33.82	33.05	222	231	Average	VERTICAL
4	5201.80	115.39			108.35	6.27	33.82	33.05	222	231	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/m		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5112.20	49.45	54.00	-4.55	42.67	6.14	33.69	33.05	201	227	Average	VERTICAL
2	5118.80	62.33	74.00	-11.67	55.52	6.17	33.69	33.05	201	227	Peak	VERTICAL
3	5233.40	106.26			99.14	6.30	33.87	33.05	201	227	Average	VERTICAL
4	5234.00	116.62			109.50	6.30	33.87	33.05	201	227	Peak	VERTICAL
5	5354.00	63.06	74.00	-10.94	55.59	6.47	34.06	33.06	201	227	Peak	VERTICAL
6	5358.20	51.21	54.00	-2.79	43.74	6.47	34.06	33.06	201	227	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Aug. 06, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 52

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5138.80	63.84	74.00	-10.16	57.01	6.17	33.71	33.05	194	307	Peak	VERTICAL
2	5140.00	50.91	54.00	-3.09	44.05	6.17	33.74	33.05	194	307	Average	VERTICAL
3	5258.80	107.44			100.23	6.34	33.93	33.06	194	307	Average	VERTICAL
4	5258.80	118.19			110.98	6.34	33.93	33.06	194	307	Peak	VERTICAL
5	5378.20	50.77	54.00	-3.23	43.22	6.50	34.11	33.06	194	307	Average	VERTICAL
6	5378.20	64.34	74.00	-9.66	56.79	6.50	34.11	33.06	194	307	Peak	VERTICAL

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

Channel 60

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5299.20	106.78			99.46	6.40	33.98	33.06	197	304	Average	VERTICAL
2	5301.60	117.17			109.85	6.40	33.98	33.06	197	304	Peak	VERTICAL
3	5350.00	52.87	54.00	-1.13	45.40	6.47	34.06	33.06	197	304	Average	VERTICAL
4	5354.40	66.41	74.00	-7.59	58.94	6.47	34.06	33.06	197	304	Peak	VERTICAL

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

Channel 64

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5318.60	102.45			95.10	6.40	34.01	33.06	203	229	Average	VERTICAL
2	5321.80	112.43			105.08	6.40	34.01	33.06	203	229	Peak	VERTICAL
3	5350.00	52.98	54.00	-1.02	45.51	6.47	34.06	33.06	203	229	Average	VERTICAL
4	5351.20	69.25	74.00	-4.75	61.78	6.47	34.06	33.06	203	229	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Aug. 06, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 100

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	5459.80	64.07	74.00	-9.93	56.31	6.60	34.22	33.06	190	14	Peak	VERTICAL
2	5460.00	49.14	54.00	-4.86	41.38	6.60	34.22	33.06	190	14	Average	VERTICAL
3	5469.80	71.19	74.00	-2.81	63.40	6.60	34.25	33.06	190	14	Peak	VERTICAL
4	5470.00	52.79	54.00	-1.21	45.00	6.60	34.25	33.06	190	14	Average	VERTICAL
5	5492.60	112.71			104.87	6.63	34.27	33.06	190	14	Peak	VERTICAL
6	5498.20	102.31			94.44	6.63	34.30	33.06	190	14	Average	VERTICAL

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

Channel 116

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	5428.00	50.67	54.00	-3.33	43.00	6.56	34.17	33.06	240	3	Average	VERTICAL
2	5428.00	62.70	74.00	-11.30	55.03	6.56	34.17	33.06	240	3	Peak	VERTICAL
3	5467.60	50.57	54.00	-3.43	42.78	6.60	34.25	33.06	240	3	Average	VERTICAL
4	5467.60	62.37	74.00	-11.63	54.58	6.60	34.25	33.06	240	3	Peak	VERTICAL
5	5588.00	107.87			99.89	6.72	34.35	33.09	240	3	Average	VERTICAL
6	5588.00	116.82			108.84	6.72	34.35	33.09	240	3	Peak	VERTICAL
7	5747.20	61.66	74.00	-12.34	53.50	6.86	34.44	33.14	240	3	Peak	VERTICAL
8	5748.80	48.89	54.00	-5.11	40.73	6.86	34.44	33.14	240	3	Average	VERTICAL

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

Channel 140

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	5691.60	102.85			94.75	6.81	34.41	33.12	145	321	Average	VERTICAL
2	5692.00	112.47			104.37	6.81	34.41	33.12	145	321	Peak	VERTICAL
3	5725.00	52.98	54.00	-1.02	44.85	6.83	34.43	33.13	145	321	Average	VERTICAL
4	5725.20	70.49	74.00	-3.51	62.36	6.83	34.43	33.13	145	321	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Aug. 06, 2015 ~ Aug. 11, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 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	5713.60	69.12	74.00	-4.88	61.00	6.83	34.42	33.13	200	339	Peak	VERTICAL
2	5714.80	49.99	54.00	-4.01	41.87	6.83	34.42	33.13	200	339	Average	VERTICAL
3	5724.40	76.95	78.20	-1.25	68.82	6.83	34.43	33.13	200	339	Peak	VERTICAL
4	5743.00	110.55			102.39	6.86	34.44	33.14	200	339	Peak	VERTICAL
5	5743.40	99.86			91.70	6.86	34.44	33.14	200	339	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	5711.20	51.79	54.00	-2.21	43.67	6.83	34.42	33.13	202	315	Average	VERTICAL
2	5713.60	64.50	74.00	-9.50	56.38	6.83	34.42	33.13	202	315	Peak	VERTICAL
3	5723.20	64.23	78.20	-13.97	56.10	6.83	34.43	33.13	202	315	Peak	VERTICAL
4	5782.60	105.26			97.05	6.90	34.47	33.16	202	315	Average	VERTICAL
5	5783.20	115.11			106.90	6.90	34.47	33.16	202	315	Peak	VERTICAL
6	5850.60	66.95	78.20	-11.25	58.66	6.95	34.51	33.17	202	315	Peak	VERTICAL
7	5860.00	67.84	74.00	-6.16	59.53	6.97	34.52	33.18	202	315	Peak	VERTICAL
8	5863.60	52.69	54.00	-1.31	44.38	6.97	34.52	33.18	202	315	Average	VERTICAL

Item 4, 5 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	5817.00	111.99			103.74	6.92	34.49	33.16	200	108	Peak	VERTICAL
2	5817.80	102.63			94.38	6.92	34.49	33.16	200	108	Average	VERTICAL
3	5850.40	74.62	78.20	-3.58	66.33	6.95	34.51	33.17	200	108	Peak	VERTICAL
4	5860.00	52.36	54.00	-1.64	44.05	6.97	34.52	33.18	200	108	Average	VERTICAL
5	5862.00	72.73	74.00	-1.27	64.42	6.97	34.52	33.18	200	108	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Aug. 07, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 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	5148.00	70.94	74.00	-3.06	64.04	6.21	33.74	33.05	216	230	Peak	VERTICAL
2	5149.60	52.92	54.00	-1.08	46.02	6.21	33.74	33.05	216	230	Average	VERTICAL
3	5194.00	97.36			90.35	6.24	33.82	33.05	216	230	Average	VERTICAL
4	5194.00	107.23			100.22	6.24	33.82	33.05	216	230	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	5148.00	66.66	74.00	-7.34	59.76	6.21	33.74	33.05	198	228	Peak	VERTICAL
2	5148.80	52.59	54.00	-1.41	45.69	6.21	33.74	33.05	198	228	Average	VERTICAL
3	5226.00	102.95			95.83	6.30	33.87	33.05	198	228	Average	VERTICAL
4	5236.00	113.73			106.61	6.30	33.87	33.05	198	228	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Aug. 07, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 54

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m	dB	cm		
1	5264.80	112.16			104.95	6.34	33.93	33.06	187	229	Peak	VERTICAL
2	5265.20	102.15			94.94	6.34	33.93	33.06	187	229	Average	VERTICAL
3	5354.40	52.80	54.00	-1.20	45.33	6.47	34.06	33.06	187	229	Average	VERTICAL
4	5358.80	64.99	74.00	-9.01	57.52	6.47	34.06	33.06	187	229	Peak	VERTICAL

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

Channel 62

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	dB/m	dB	cm		
1	5297.20	107.82			100.50	6.40	33.98	33.06	195	303	Peak	VERTICAL
2	5304.80	97.39			90.07	6.40	33.98	33.06	195	303	Average	VERTICAL
3	5350.00	52.66	54.00	-1.34	45.19	6.47	34.06	33.06	195	303	Average	VERTICAL
4	5350.80	68.68	74.00	-5.32	61.21	6.47	34.06	33.06	195	303	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2
Test Date	Aug. 07, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 102

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	5457.20	68.92	74.00	-5.08	61.16	6.60	34.22	33.06	201	18	Peak	VERTICAL
2	5460.00	50.34	54.00	-3.66	42.58	6.60	34.22	33.06	201	18	Average	VERTICAL
3	5466.80	72.66	74.00	-1.34	64.87	6.60	34.25	33.06	201	18	Peak	VERTICAL
4	5470.00	52.21	54.00	-1.79	44.42	6.60	34.25	33.06	201	18	Average	VERTICAL
5	5513.20	107.87			99.99	6.65	34.30	33.07	201	18	Peak	VERTICAL
6	5514.80	97.48			89.59	6.65	34.31	33.07	201	18	Average	VERTICAL

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

Channel 110

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	5460.00	51.85	54.00	-2.15	44.09	6.60	34.22	33.06	206	321	Average	VERTICAL
2	5460.00	64.68	74.00	-9.32	56.92	6.60	34.22	33.06	206	321	Peak	VERTICAL
3	5466.00	52.96	54.00	-1.04	45.17	6.60	34.25	33.06	206	321	Average	VERTICAL
4	5467.20	70.46	74.00	-3.54	62.67	6.60	34.25	33.06	206	321	Peak	VERTICAL
5	5545.60	112.85			104.93	6.68	34.32	33.08	206	321	Peak	VERTICAL
6	5546.00	102.37			94.45	6.68	34.32	33.08	206	321	Average	VERTICAL

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

Channel 134

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	5683.20	88.37			80.28	6.81	34.40	33.12	121	201	Average	HORIZONTAL
2	5683.60	98.78			90.68	6.81	34.41	33.12	121	201	Peak	HORIZONTAL
3	5725.00	61.23	74.00	-12.77	53.10	6.83	34.43	33.13	121	201	Peak	HORIZONTAL
4	5725.60	48.21	54.00	-5.79	40.08	6.83	34.43	33.13	121	201	Average	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Aug. 07, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dB	dB	dB/m	dB	cm	
1	5713.00	67.26	74.00	-6.74	59.14	6.83	34.42	33.13	198	325	Peak	VERTICAL
2	5713.40	52.78	54.00	-1.22	44.66	6.83	34.42	33.13	198	325	Average	VERTICAL
3	5719.00	71.68	78.20	-6.52	63.55	6.83	34.43	33.13	198	325	Peak	VERTICAL
4	5767.00	107.78			99.59	6.88	34.46	33.15	198	325	Peak	VERTICAL
5	5767.40	97.05			88.86	6.88	34.46	33.15	198	325	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	dB	dB	dB/m	dB	cm	
1	5707.00	49.88	54.00	-4.12	41.76	6.83	34.42	33.13	196	322	Average	VERTICAL
2	5713.40	63.11	74.00	-10.89	54.99	6.83	34.42	33.13	196	322	Peak	VERTICAL
3	5720.20	63.56	78.20	-14.64	55.43	6.83	34.43	33.13	196	322	Peak	VERTICAL
4	5785.00	109.23			101.02	6.90	34.47	33.16	196	322	Peak	VERTICAL
5	5787.00	98.94			90.72	6.90	34.48	33.16	196	322	Average	VERTICAL
6	5853.40	71.33	78.20	-6.87	63.04	6.95	34.51	33.17	196	322	Peak	VERTICAL
7	5861.80	52.65	54.00	-1.35	44.34	6.97	34.52	33.18	196	322	Average	VERTICAL
8	5863.00	68.71	74.00	-5.29	60.40	6.97	34.52	33.18	196	322	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2
Test Date	Aug. 07, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

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	deg	
1	5138.00	52.54	54.00	-1.46	45.71	6.17	33.71	33.05	194	248	Average	VERTICAL
2	5147.00	68.71	74.00	-5.29	61.81	6.21	33.74	33.05	194	248	Peak	VERTICAL
3	5179.00	105.74			98.76	6.24	33.79	33.05	194	248	Peak	VERTICAL
4	5221.00	94.96			87.86	6.30	33.85	33.05	194	248	Average	VERTICAL
5	5351.00	60.25	74.00	-13.75	52.78	6.47	34.06	33.06	194	248	Peak	VERTICAL
6	5354.00	48.60	54.00	-5.40	41.13	6.47	34.06	33.06	194	248	Average	VERTICAL

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

Channel 58

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	
1	5085.00	57.84	74.00	-16.16	51.15	6.11	33.63	33.05	195	327	Peak	VERTICAL
2	5132.00	47.20	54.00	-6.80	40.37	6.17	33.71	33.05	195	327	Average	VERTICAL
3	5300.00	94.09			86.77	6.40	33.98	33.06	195	327	Average	VERTICAL
4	5304.00	103.83			96.51	6.40	33.98	33.06	195	327	Peak	VERTICAL
5	5350.00	52.74	54.00	-1.26	45.27	6.47	34.06	33.06	195	327	Average	VERTICAL
6	5354.00	67.47	74.00	-6.53	60.00	6.47	34.06	33.06	195	327	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1 + Chain 2
Test Date	Aug. 07, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 106

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	5454.00	52.16	54.00	-1.84	44.40	6.60	34.22	33.06	175	246	Average	VERTICAL
2	5454.00	67.70	74.00	-6.30	59.94	6.60	34.22	33.06	175	246	Peak	VERTICAL
3	5466.00	68.94	74.00	-5.06	61.15	6.60	34.25	33.06	175	246	Peak	VERTICAL
4	5470.00	52.55	54.00	-1.45	44.76	6.60	34.25	33.06	175	246	Average	VERTICAL
5	5517.00	95.45			87.56	6.65	34.31	33.07	175	246	Average	VERTICAL
6	5521.00	104.05			96.16	6.65	34.31	33.07	175	246	Peak	VERTICAL
7	5753.00	60.46	74.00	-13.54	52.28	6.86	34.46	33.14	175	246	Peak	VERTICAL
8	5772.00	48.75	54.00	-5.25	40.55	6.88	34.47	33.15	175	246	Average	VERTICAL

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

Channel 122

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	5458.00	65.68	74.00	-8.32	57.92	6.60	34.22	33.06	174	36	Peak	VERTICAL
2	5460.00	52.67	54.00	-1.33	44.91	6.60	34.22	33.06	174	36	Average	VERTICAL
3	5462.00	64.67	68.20	-3.53	56.91	6.60	34.22	33.06	174	36	Peak	VERTICAL
4	5584.00	107.58			99.60	6.72	34.35	33.09	174	36	Peak	VERTICAL
5	5585.00	99.53			91.55	6.72	34.35	33.09	174	36	Average	VERTICAL
6	5728.00	67.15	68.20	-1.05	59.02	6.83	34.43	33.13	174	36	Average	VERTICAL

Item 4, 5 are the fundamental frequency at 5610 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		
1	5712.00	67.76	74.00	-6.24	59.64	6.83	34.42	33.13	355	355	Peak	VERTICAL
2	5713.00	52.37	54.00	-1.63	44.25	6.83	34.42	33.13	203	355	Average	VERTICAL
3	5722.00	71.85	78.20	-6.35	63.72	6.83	34.43	33.13	203	355	Peak	VERTICAL
4	5801.00	92.94			84.72	6.90	34.48	33.16	203	355	Average	VERTICAL
5	5809.00	102.42			94.17	6.92	34.49	33.16	203	355	Peak	VERTICAL
6	5850.00	70.34	78.20	-7.86	62.05	6.95	34.51	33.17	203	355	Peak	VERTICAL
7	5863.00	67.32	74.00	-6.68	59.01	6.97	34.52	33.18	203	355	Peak	VERTICAL
8	5870.00	52.81	54.00	-1.19	44.50	6.97	34.52	33.18	203	355	Average	VERTICAL

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

**Straddle Channel**

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2
Test Date	Aug. 06, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 144

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5714.00	107.43				99.31	6.83	34.42	33.13	168	330	Average VERTICAL
2	5714.00	117.75				109.63	6.83	34.42	33.13	168	330	Peak VERTICAL
3	5851.40	63.04	68.20	-5.16	54.75	6.95	34.51	33.17	168	330	Peak VERTICAL	

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2
Test Date	Aug. 07, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 142

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5696.40	102.58			94.48	6.81	34.41	33.12	184	333	Average	VERTICAL
2	5702.80	112.62			104.51	6.81	34.42	33.12	184	333	Peak	VERTICAL
3	5878.80	65.11	68.20	-3.09	56.79	6.97	34.53	33.18	184	333	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2
Test Date	Aug. 07, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 138

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5699.00	97.11				89.01	6.81	34.41	33.12	210	321	Average VERTICAL
2	5704.00	106.44				98.33	6.81	34.42	33.12	210	321	Peak VERTICAL
3	5854.00	66.83	68.20	-1.37	58.53	6.95	34.52	33.17	210	321	Peak VERTICAL	

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

Note:

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

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



<For STBC Mode>

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Jul. 16, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 36

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5149.55	69.83	74.00	-4.17	66.77	4.26	33.27	34.47	313	140 Peak	VERTICAL
2	5150.00	52.64	54.00	-1.36	49.58	4.26	33.27	34.47	313	140 Average	VERTICAL
3	5177.76	103.28			100.15	4.27	33.33	34.47	313	140 Average	VERTICAL
4	5178.56	114.06			110.93	4.27	33.33	34.47	313	140 Peak	VERTICAL

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

Channel 40

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5149.04	67.76	74.00	-6.24	64.70	4.26	33.27	34.47	313	138 Peak	VERTICAL
2	5150.00	52.64	54.00	-1.36	49.58	4.26	33.27	34.47	313	138 Average	VERTICAL
3	5197.76	106.90			103.73	4.28	33.36	34.47	313	138 Average	VERTICAL
4	5201.92	118.30			115.13	4.28	33.36	34.47	313	138 Peak	VERTICAL

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

Channel 48

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5117.89	50.21	54.00	-3.79	47.23	4.24	33.21	34.47	312	161 Average	VERTICAL
2	5122.21	61.75	74.00	-12.25	58.77	4.24	33.21	34.47	312	161 Peak	VERTICAL
3	5237.60	109.11			105.86	4.30	33.42	34.47	312	161 Average	VERTICAL
4	5241.92	119.09			115.81	4.30	33.45	34.47	312	161 Peak	VERTICAL
5	5357.79	51.30	54.00	-2.70	47.79	4.35	33.63	34.47	312	161 Average	VERTICAL
6	5366.44	63.38	74.00	-10.62	59.83	4.36	33.66	34.47	312	161 Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Jul. 16, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 52

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	5133.56	63.17	74.00	-10.83	60.15	4.25	33.24	34.47	314	155	Peak	VERTICAL
2	5137.89	50.76	54.00	-3.24	47.74	4.25	33.24	34.47	314	155	Average	VERTICAL
3	5257.60	120.83			117.55	4.30	33.45	34.47	314	155	Peak	VERTICAL
4	5257.60	109.47			106.19	4.30	33.45	34.47	314	155	Average	VERTICAL
5	5377.79	52.81	54.00	-1.19	49.22	4.37	33.69	34.47	314	155	Average	VERTICAL
6	5380.67	64.48	74.00	-9.52	60.89	4.37	33.69	34.47	314	155	Peak	VERTICAL

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

Channel 60

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	5297.76	119.41			116.01	4.33	33.54	34.47	313	160	Peak	VERTICAL
2	5297.76	108.55			105.15	4.33	33.54	34.47	313	160	Average	VERTICAL
3	5350.32	66.87	74.00	-7.13	63.36	4.35	33.63	34.47	313	160	Peak	VERTICAL
4	5377.89	52.74	54.00	-1.26	49.15	4.37	33.69	34.47	313	160	Average	VERTICAL

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

Channel 64

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	5317.76	104.78			101.35	4.33	33.57	34.47	313	168	Average	VERTICAL
2	5322.56	115.75			112.32	4.33	33.57	34.47	313	168	Peak	VERTICAL
3	5350.00	52.55	54.00	-1.45	49.04	4.35	33.63	34.47	313	168	Average	VERTICAL
4	5352.05	68.19	74.00	-5.81	64.68	4.35	33.63	34.47	313	168	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Jul. 16, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 100

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	5460.00	65.59	74.00	-8.41	61.85	4.40	33.81	34.47	49	174	Peak	VERTICAL
2	5460.00	47.41	54.00	-6.59	43.67	4.40	33.81	34.47	49	174	Average	VERTICAL
3	5468.91	69.64	74.00	-4.36	65.86	4.41	33.84	34.47	49	174	Peak	VERTICAL
4	5470.00	52.67	54.00	-1.33	48.89	4.41	33.84	34.47	49	174	Average	VERTICAL
5	5493.43	104.24			100.43	4.41	33.87	34.47	49	174	Average	VERTICAL
6	5499.36	116.58			112.73	4.42	33.90	34.47	49	174	Peak	VERTICAL

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

Channel 116

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	5458.21	52.19	54.00	-1.81	48.45	4.40	33.81	34.47	37	183	Average	VERTICAL
2	5459.49	64.80	74.00	-9.20	61.06	4.40	33.81	34.47	37	183	Peak	VERTICAL
3	5462.05	52.98	54.00	-1.02	49.24	4.40	33.81	34.47	37	183	Average	VERTICAL
4	5464.62	64.35	74.00	-9.65	60.57	4.41	33.84	34.47	37	183	Peak	VERTICAL
5	5581.92	119.50			115.38	4.45	34.16	34.49	37	183	Peak	VERTICAL
6	5581.92	107.90			103.78	4.45	34.16	34.49	37	183	Average	VERTICAL
7	5738.97	61.87	74.00	-12.13	57.27	4.50	34.62	34.52	37	183	Peak	VERTICAL
8	5742.18	49.83	54.00	-4.17	45.23	4.50	34.62	34.52	37	183	Average	VERTICAL

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

Channel 140

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	5697.76	102.25			97.80	4.49	34.47	34.51	307	148	Average	VERTICAL
2	5698.72	113.65			109.20	4.49	34.47	34.51	307	148	Peak	VERTICAL
3	5725.00	51.37	54.00	-2.63	46.81	4.50	34.57	34.51	307	148	Average	VERTICAL
4	5725.48	72.84	74.00	-1.16	68.28	4.50	34.57	34.51	307	148	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Jul. 16, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 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	5714.23	67.07	68.20	-1.13	62.57	4.49	34.52	34.51	309	146	Peak	VERTICAL
2	5723.85	77.15	78.20	-1.05	72.59	4.50	34.57	34.51	309	146	Peak	VERTICAL
3	5742.76	102.87			98.27	4.50	34.62	34.52	309	146	Average	VERTICAL
4	5745.96	114.07			109.47	4.50	34.62	34.52	309	146	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	5709.68	65.95	68.20	-2.25	61.45	4.49	34.52	34.51	310	158	Peak	VERTICAL
2	5724.10	69.36	78.20	-8.84	64.80	4.50	34.57	34.51	310	158	Peak	VERTICAL
3	5782.76	107.82			103.10	4.52	34.73	34.53	310	158	Average	VERTICAL
4	5786.28	119.32			114.55	4.52	34.78	34.53	310	158	Peak	VERTICAL
5	5850.64	68.92	78.20	-9.28	63.99	4.54	34.93	34.54	310	158	Peak	VERTICAL
6	5861.28	66.98	68.20	-1.22	61.98	4.55	34.99	34.54	310	158	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	5822.28	114.17			109.29	4.53	34.88	34.53	308	169	Peak	VERTICAL
2	5824.04	102.62			97.74	4.53	34.88	34.53	308	169	Average	VERTICAL
3	5850.32	74.36	78.20	-3.84	69.43	4.54	34.93	34.54	308	169	Peak	VERTICAL
4	5860.90	66.84	68.20	-1.36	61.84	4.55	34.99	34.54	308	169	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Jul. 16, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 38

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	5148.40	70.40	74.00	-3.60	63.50	6.21	33.74	33.05	140	35	Peak	VERTICAL
2	5148.80	52.71	54.00	-1.29	45.81	6.21	33.74	33.05	140	35	Average	VERTICAL
3	5186.80	97.79			90.81	6.24	33.79	33.05	140	35	Average	VERTICAL
4	5203.60	108.45			101.41	6.27	33.82	33.05	140	35	Peak	VERTICAL

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

Channel 46

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	5146.80	65.62	74.00	-8.38	58.72	6.21	33.74	33.05	139	37	Peak	VERTICAL
2	5148.00	52.35	54.00	-1.65	45.45	6.21	33.74	33.05	139	37	Average	VERTICAL
3	5226.40	104.06			96.94	6.30	33.87	33.05	139	37	Average	VERTICAL
4	5234.80	114.74			107.62	6.30	33.87	33.05	139	37	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Jul. 16, 2015 ~ Jul. 17, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 54

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	5266.40	103.01		95.80	6.34	33.93	33.06	137	32	Average	VERTICAL	
2	5266.40	114.11		106.90	6.34	33.93	33.06	137	32	Peak	VERTICAL	
3	5350.80	52.72	54.00	-1.28	45.25	6.47	34.06	33.06	137	32	Average	VERTICAL
4	5352.00	65.30	74.00	-8.70	57.83	6.47	34.06	33.06	137	32	Peak	VERTICAL

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

Channel 62

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	5313.20	97.91		90.56	6.40	34.01	33.06	138	46	Average	VERTICAL	
2	5313.60	109.48		102.13	6.40	34.01	33.06	138	46	Peak	VERTICAL	
3	5350.00	52.89	54.00	-1.11	45.42	6.47	34.06	33.06	138	46	Average	VERTICAL
4	5352.00	71.20	74.00	-2.80	63.73	6.47	34.06	33.06	138	46	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2
Test Date	Jul. 17, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 102

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5458.40	64.94	74.00	-9.06	57.18	6.60	34.22	33.06	150	48	Peak	VERTICAL
2	5460.00	50.89	54.00	-3.11	43.13	6.60	34.22	33.06	150	48	Average	VERTICAL
3	5468.80	69.57	74.00	-4.43	61.78	6.60	34.25	33.06	150	48	Peak	VERTICAL
4	5470.00	52.86	54.00	-1.14	45.07	6.60	34.25	33.06	150	48	Average	VERTICAL
5	5513.60	99.74			91.85	6.65	34.31	33.07	150	48	Average	VERTICAL
6	5515.20	110.82			102.93	6.65	34.31	33.07	150	48	Peak	VERTICAL

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

Channel 110

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5457.20	64.39	74.00	-9.61	56.63	6.60	34.22	33.06	122	41	Peak	VERTICAL
2	5457.60	51.83	54.00	-2.17	44.07	6.60	34.22	33.06	122	41	Average	VERTICAL
3	5466.40	52.85	54.00	-1.15	45.06	6.60	34.25	33.06	122	41	Average	VERTICAL
4	5468.00	67.97	74.00	-6.03	60.18	6.60	34.25	33.06	122	41	Peak	VERTICAL
5	5546.40	102.24			94.32	6.68	34.32	33.08	122	41	Average	VERTICAL
6	5553.20	113.61			105.66	6.70	34.33	33.08	122	41	Peak	VERTICAL

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

Channel 134

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5666.40	99.58			91.52	6.79	34.39	33.12	120	39	Average	VERTICAL
2	5674.80	110.19			102.12	6.79	34.40	33.12	120	39	Peak	VERTICAL
3	5725.00	52.63	54.00	-1.37	44.50	6.83	34.43	33.13	120	39	Average	VERTICAL
4	5728.00	70.68	74.00	-3.32	62.55	6.83	34.43	33.13	120	39	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Jul. 17, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 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	cm	deg		
1	5708.20	67.08	68.20	-1.12	58.96	6.83	34.42	33.13	149	42 Peak	VERTICAL
2	5722.60	72.40	78.20	-5.80	64.27	6.83	34.43	33.13	149	42 Peak	VERTICAL
3	5768.80	108.46			100.26	6.88	34.47	33.15	149	42 Peak	VERTICAL
4	5771.80	97.24			89.04	6.88	34.47	33.15	149	42 Average	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	5714.60	63.26	68.20	-4.94	55.14	6.83	34.42	33.13	136	302 Peak	VERTICAL
2	5720.60	64.96	78.20	-13.24	56.83	6.83	34.43	33.13	136	302 Peak	VERTICAL
3	5798.60	99.22			91.00	6.90	34.48	33.16	136	302 Average	VERTICAL
4	5800.60	110.84			102.62	6.90	34.48	33.16	136	302 Peak	VERTICAL
5	5859.80	70.20	78.20	-8.00	61.89	6.97	34.52	33.18	136	302 Peak	VERTICAL
6	5879.40	66.92	68.20	-1.28	58.60	6.97	34.53	33.18	136	302 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2
Test Date	Jul. 17, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 42

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5149.00	52.72	54.00	-1.28	45.82	6.21	33.74	33.05	131	34	Average	VERTICAL
2	5149.00	67.09	74.00	-6.91	60.19	6.21	33.74	33.05	131	34	Peak	VERTICAL
3	5239.00	107.73			100.61	6.30	33.87	33.05	131	34	Peak	VERTICAL
4	5242.00	95.65			88.50	6.30	33.90	33.05	131	34	Average	VERTICAL
5	5350.00	48.31	54.00	-5.69	40.84	6.47	34.06	33.06	131	34	Average	VERTICAL
6	5361.00	62.21	74.00	-11.79	54.71	6.47	34.09	33.06	131	34	Peak	VERTICAL

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

Channel 58

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			Loss	Antenna Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5086.00	48.24	54.00	-5.76	41.55	6.11	33.63	33.05	114	32	Average	VERTICAL
2	5103.00	60.73	74.00	-13.27	53.98	6.14	33.66	33.05	114	32	Peak	VERTICAL
3	5299.00	105.22			97.90	6.40	33.98	33.06	114	32	Peak	VERTICAL
4	5302.00	94.87			87.55	6.40	33.98	33.06	114	32	Average	VERTICAL
5	5351.00	52.96	54.00	-1.04	45.49	6.47	34.06	33.06	114	32	Average	VERTICAL
6	5351.00	65.76	74.00	-8.24	58.29	6.47	34.06	33.06	114	32	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1 + Chain 2
Test Date	Jul. 17, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 106

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	dBmV	dB	dB/m	dB	cm	deg			
1	5439.00	52.57	54.00	-1.43	44.88	6.56	34.19	33.06	128	44	Average	VERTICAL
2	5460.00	68.11	74.00	-5.89	60.35	6.60	34.22	33.06	128	44	Peak	VERTICAL
3	5469.00	69.93	74.00	-4.07	62.14	6.60	34.25	33.06	128	44	Peak	VERTICAL
4	5470.00	52.88	54.00	-1.12	45.09	6.60	34.25	33.06	128	44	Average	VERTICAL
5	5522.00	106.46			98.57	6.65	34.31	33.07	128	44	Peak	VERTICAL
6	5527.00	95.37			87.46	6.68	34.31	33.08	128	44	Average	VERTICAL
7	5749.00	49.57	54.00	-4.43	41.41	6.86	34.44	33.14	128	44	Average	VERTICAL
8	5765.00	61.69	74.00	-12.31	53.50	6.88	34.46	33.15	128	44	Peak	VERTICAL

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

Channel 122

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	dBmV	dB	dB/m	dB	cm	deg			
1	5458.00	51.42	54.00	-2.58	43.66	6.60	34.22	33.06	133	37	Average	VERTICAL
2	5460.00	61.72	74.00	-12.28	53.96	6.60	34.22	33.06	133	37	Peak	VERTICAL
3	5469.00	51.49	54.00	-2.51	43.70	6.60	34.25	33.06	133	37	Average	VERTICAL
4	5470.00	62.86	74.00	-11.14	55.07	6.60	34.25	33.06	133	37	Peak	VERTICAL
5	5587.00	96.86			88.88	6.72	34.35	33.09	133	37	Average	VERTICAL
6	5599.00	107.00			99.01	6.72	34.36	33.09	133	37	Peak	VERTICAL
7	5725.00	52.73	54.00	-1.27	44.60	6.83	34.43	33.13	133	37	Average	VERTICAL
8	5728.00	67.34	74.00	-6.66	59.21	6.83	34.43	33.13	133	37	Peak	VERTICAL

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

Channel 155

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	dBmV	dB	dB/m	dB	cm	deg			
1	5715.00	67.00	68.20	-1.20	58.88	6.83	34.42	33.13	151	36	Peak	VERTICAL
2	5724.00	73.86	78.20	-4.34	65.73	6.83	34.43	33.13	151	36	Peak	VERTICAL
3	5764.00	105.75			97.56	6.88	34.46	33.15	151	36	Peak	VERTICAL
4	5772.00	94.68			86.48	6.88	34.47	33.15	151	36	Average	VERTICAL
5	5850.00	65.82	78.20	-12.38	57.53	6.95	34.51	33.17	151	36	Peak	VERTICAL
6	5869.00	66.91	68.20	-1.29	58.60	6.97	34.52	33.18	151	36	Peak	VERTICAL

Item 3, 4 are the fundamental frequency at 5775 MHz.



Straddle Channel

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2
Test Date	Jul. 16, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 144

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1	5718.72	121.96		117.40	4.50	34.57	34.51	43	159	Peak	VERTICAL
2	5721.92	111.38		106.82	4.50	34.57	34.51	43	159	Average	VERTICAL
3	5851.41	63.88	68.20	-4.32	58.95	4.54	34.93	34.54	43	159	Peak

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2
Test Date	Jul. 17, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 142

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5696.20	116.77			108.67	6.81	34.41	33.12	123	40	Peak	VERTICAL
2	5706.40	106.32			98.20	6.83	34.42	33.13	123	40	Average	VERTICAL
3	5855.20	66.92	68.20	-1.28	58.62	6.95	34.52	33.17	123	40	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2
Test Date	Jul. 17, 2015		
Test Mode	Mode 1 (Ant. 6 Dipole antenna / 6.4dBi / 2TX)		

Channel 138

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5683.00	110.83				102.74	6.81	34.40	33.12	129	39	Peak VERTICAL
2	5687.00	100.66				92.56	6.81	34.41	33.12	129	39	Average VERTICAL
3	5858.00	67.18	68.20	-1.02	58.87	6.97	34.52	33.18	129	39	Peak VERTICAL	

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

Note:

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

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 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		
1	5067.50	61.02	74.00	-12.98	54.35	6.11	33.61	33.05	166	342	Peak	HORIZONTAL
2	5150.00	52.79	54.00	-1.21	45.89	6.21	33.74	33.05	166	342	Average	HORIZONTAL
3	5178.08	102.75			95.77	6.24	33.79	33.05	166	342	Average	HORIZONTAL
4	5180.96	113.38			106.40	6.24	33.79	33.05	166	342	Peak	HORIZONTAL

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		
1	5143.27	68.26	74.00	-5.74	61.40	6.17	33.74	33.05	155	342	Peak	HORIZONTAL
2	5150.00	52.51	54.00	-1.49	45.61	6.21	33.74	33.05	155	342	Average	HORIZONTAL
3	5200.96	105.99			98.95	6.27	33.82	33.05	155	342	Average	HORIZONTAL
4	5202.89	118.14			111.10	6.27	33.82	33.05	155	342	Peak	HORIZONTAL

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		
1	5118.85	60.90	74.00	-13.10	54.09	6.17	33.69	33.05	163	342	Peak	HORIZONTAL
2	5121.73	50.24	54.00	-3.76	43.43	6.17	33.69	33.05	163	342	Average	HORIZONTAL
3	5238.08	104.95			97.83	6.30	33.87	33.05	163	342	Average	HORIZONTAL
4	5240.96	115.46			108.34	6.30	33.87	33.05	163	342	Peak	HORIZONTAL
5	5353.46	61.79	74.00	-12.21	54.32	6.47	34.06	33.06	163	342	Peak	HORIZONTAL
6	5358.27	50.42	54.00	-3.58	42.95	6.47	34.06	33.06	163	342	Average	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 52

Freq	Level	Limit		Over Limit	Read Level	Cable Loss			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m						
1	5138.85	52.60	54.00	-1.40	45.77	6.17	33.71	33.05	153	346	Average		HORIZONTAL	
2	5143.65	65.01	74.00	-8.99	58.15	6.17	33.74	33.05	153	346	Peak		HORIZONTAL	
3	5261.92	108.10			100.89	6.34	33.93	33.06	153	346	Average		HORIZONTAL	
4	5266.73	119.52			112.31	6.34	33.93	33.06	153	346	Peak		HORIZONTAL	
5	5381.15	51.79	54.00	-2.21	44.24	6.50	34.11	33.06	153	346	Average		HORIZONTAL	
6	5385.00	65.24	74.00	-8.76	57.69	6.50	34.11	33.06	153	346	Peak		HORIZONTAL	

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

Channel 60

Freq	Level	Limit		Over Limit	Read Level	Cable Loss			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m						
1	5299.04	105.48			98.16	6.40	33.98	33.06	159	351	Average		HORIZONTAL	
2	5302.89	117.02			109.70	6.40	33.98	33.06	159	351	Peak		HORIZONTAL	
3	5350.00	52.98	54.00	-1.02	45.51	6.47	34.06	33.06	159	351	Average		HORIZONTAL	
4	5352.89	66.93	74.00	-7.07	59.46	6.47	34.06	33.06	159	351	Peak		HORIZONTAL	

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

Channel 64

Freq	Level	Limit		Over Limit	Read Level	Cable Loss			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m						
1	5319.04	102.04			94.69	6.40	34.01	33.06	161	344	Average		HORIZONTAL	
2	5326.73	113.80			106.40	6.43	34.03	33.06	161	344	Peak		HORIZONTAL	
3	5350.00	52.28	54.00	-1.72	44.81	6.47	34.06	33.06	161	344	Average		HORIZONTAL	
4	5350.00	67.95	74.00	-6.05	60.48	6.47	34.06	33.06	161	344	Peak		HORIZONTAL	

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 100

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB						cm	deg		
1	5341.35	49.96	54.00	-4.04	42.56	6.43	34.03	33.06	159	352	Average	HORIZONTAL
2	5460.00	65.32	74.00	-8.68	57.56	6.60	34.22	33.06	159	352	Peak	HORIZONTAL
3	5470.00	52.29	54.00	-1.71	44.50	6.60	34.25	33.06	159	352	Average	HORIZONTAL
4	5470.00	72.50	74.00	-1.50	64.71	6.60	34.25	33.06	159	352	Peak	HORIZONTAL
5	5498.08	102.67			94.80	6.63	34.30	33.06	159	352	Average	HORIZONTAL
6	5500.96	114.53			106.65	6.65	34.30	33.07	159	352	Peak	HORIZONTAL

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

Channel 116

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB						cm	deg		
1	5417.50	52.33	54.00	-1.67	44.69	6.53	34.17	33.06	160	355	Average	HORIZONTAL
2	5457.89	64.65	74.00	-9.35	56.89	6.60	34.22	33.06	160	355	Peak	HORIZONTAL
3	5460.77	66.53	74.00	-7.47	58.77	6.60	34.22	33.06	160	355	Peak	HORIZONTAL
4	5460.96	52.11	54.00	-1.89	44.35	6.60	34.22	33.06	160	355	Average	HORIZONTAL
5	5580.00	120.42			112.45	6.72	34.34	33.09	160	355	Peak	HORIZONTAL
6	5581.92	109.52			101.54	6.72	34.35	33.09	160	355	Average	HORIZONTAL
7	5738.65	52.50	54.00	-1.50	44.34	6.86	34.44	33.14	160	355	Average	HORIZONTAL
8	5812.69	63.39	74.00	-10.61	55.14	6.92	34.49	33.16	160	355	Peak	HORIZONTAL

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

Channel 140

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB						cm	deg		
1	5699.04	101.01			92.91	6.81	34.41	33.12	159	355	Average	HORIZONTAL
2	5699.04	112.59			104.49	6.81	34.41	33.12	159	355	Peak	HORIZONTAL
3	5725.00	52.87	54.00	-1.13	44.74	6.83	34.43	33.13	159	355	Average	HORIZONTAL
4	5825.96	61.96	74.00	-12.04	53.70	6.92	34.50	33.16	159	355	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 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	cm	deg		
1	5715.00	50.64	54.00	-3.36	42.52	6.83	34.42	33.13	157	353 Average	HORIZONTAL
2	5715.00	70.86	74.00	-3.14	62.74	6.83	34.42	33.13	157	353 Peak	HORIZONTAL
3	5725.00	76.86	78.20	-1.34	68.73	6.83	34.43	33.13	157	353 Peak	HORIZONTAL
4	5742.44	100.63			92.47	6.86	34.44	33.14	157	353 Average	HORIZONTAL
5	5745.64	113.31			105.15	6.86	34.44	33.14	157	353 Peak	HORIZONTAL

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	cm	deg		
1	5712.89	66.79	68.20	-1.41	58.67	6.83	34.42	33.13	147	353 Peak	HORIZONTAL
2	5720.58	71.60	78.20	-6.60	63.47	6.83	34.43	33.13	147	353 Peak	HORIZONTAL
3	5782.12	118.75			110.54	6.90	34.47	33.16	147	353 Peak	HORIZONTAL
4	5784.04	105.93			97.72	6.90	34.47	33.16	147	353 Average	HORIZONTAL
5	5854.23	68.78	78.20	-9.42	60.48	6.95	34.52	33.17	147	353 Peak	HORIZONTAL
6	5868.65	66.87	68.20	-1.33	58.56	6.97	34.52	33.18	147	353 Peak	HORIZONTAL

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	cm	deg		
1	5826.92	100.59			92.33	6.92	34.50	33.16	148	358 Average	HORIZONTAL
2	5826.92	113.34			105.08	6.92	34.50	33.16	148	358 Peak	HORIZONTAL
3	5851.92	75.15	78.20	-3.05	66.86	6.95	34.51	33.17	148	358 Peak	HORIZONTAL
4	5860.00	66.35	68.20	-1.85	58.04	6.97	34.52	33.18	148	358 Peak	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 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	5140.00	70.10	74.00	-3.90	63.24	6.17	33.74	33.05	148	347 Peak	HORIZONTAL
2	5150.00	52.59	54.00	-1.41	45.69	6.21	33.74	33.05	148	347 Average	HORIZONTAL
3	5193.85	99.57			92.56	6.24	33.82	33.05	148	347 Average	HORIZONTAL
4	5194.81	110.65			103.61	6.27	33.82	33.05	148	347 Peak	HORIZONTAL

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	5144.42	63.77	74.00	-10.23	56.87	6.21	33.74	33.05	149	356 Peak	HORIZONTAL
2	5147.31	52.52	54.00	-1.48	45.62	6.21	33.74	33.05	149	356 Average	HORIZONTAL
3	5225.19	102.04			94.92	6.30	33.87	33.05	149	356 Average	HORIZONTAL
4	5232.89	113.17			106.05	6.30	33.87	33.05	149	356 Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 54

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	5273.85	102.72			95.48	6.37	33.93	33.06	154	355	Average	HORIZONTAL
2	5273.85	114.13			106.89	6.37	33.93	33.06	154	355	Peak	HORIZONTAL
3	5350.00	52.63	54.00	-1.37	45.16	6.47	34.06	33.06	154	355	Average	HORIZONTAL
4	5350.00	65.05	74.00	-8.95	57.58	6.47	34.06	33.06	154	355	Peak	HORIZONTAL

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

Channel 62

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	5307.12	108.39			101.07	6.40	33.98	33.06	159	356	Peak	HORIZONTAL
2	5315.77	97.74			90.39	6.40	34.01	33.06	159	356	Average	HORIZONTAL
3	5350.00	52.89	54.00	-1.11	45.42	6.47	34.06	33.06	159	356	Average	HORIZONTAL
4	5350.00	69.80	74.00	-4.20	62.33	6.47	34.06	33.06	159	356	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 102

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1 5459.04	67.55	74.00	-6.45	59.79	6.60	34.22	33.06	150	354	Peak	HORIZONTAL	
2 5460.00	50.79	54.00	-3.21	43.03	6.60	34.22	33.06	150	354	Average	HORIZONTAL	
3 5468.65	52.80	54.00	-1.20	45.01	6.60	34.25	33.06	150	354	Average	HORIZONTAL	
4 5468.65	72.62	74.00	-1.38	64.83	6.60	34.25	33.06	150	354	Peak	HORIZONTAL	
5 5515.77	100.19			92.30	6.65	34.31	33.07	150	354	Average	HORIZONTAL	
6 5516.73	111.16			103.27	6.65	34.31	33.07	150	354	Peak	HORIZONTAL	

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

Channel 110

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1 5456.73	51.53	54.00	-2.47	43.77	6.60	34.22	33.06	157	358	Average	HORIZONTAL	
2 5460.00	66.90	74.00	-7.10	59.14	6.60	34.22	33.06	157	358	Peak	HORIZONTAL	
3 5463.46	67.18	74.00	-6.82	59.39	6.60	34.25	33.06	157	358	Peak	HORIZONTAL	
4 5468.27	52.69	54.00	-1.31	44.90	6.60	34.25	33.06	157	358	Average	HORIZONTAL	
5 5548.08	113.39			105.46	6.68	34.33	33.08	157	358	Peak	HORIZONTAL	
6 5553.85	101.86			93.91	6.70	34.33	33.08	157	358	Average	HORIZONTAL	

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

Channel 134

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Antenna Loss	Factor	Preamp Factor				
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1 5672.89	110.64			102.57	6.79	34.40	33.12	155	345	Peak	HORIZONTAL	
2 5674.81	99.49			91.42	6.79	34.40	33.12	155	345	Average	HORIZONTAL	
3 5725.77	69.41	74.00	-4.59	61.28	6.83	34.43	33.13	155	345	Peak	HORIZONTAL	
4 5726.73	52.84	54.00	-1.16	44.71	6.83	34.43	33.13	155	345	Average	HORIZONTAL	

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 151

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dBuV	dB	dB/m	dB	cm		
1	5710.77	69.86	74.00	-4.14	61.74	6.83	34.42	33.13	149	356	Peak	HORIZONTAL
2	5715.00	52.71	54.00	-1.29	44.59	6.83	34.42	33.13	149	356	Average	HORIZONTAL
3	5724.23	77.15	78.20	-1.05	69.02	6.83	34.43	33.13	149	356	Peak	HORIZONTAL
4	5737.37	97.41			89.25	6.86	34.44	33.14	149	356	Average	HORIZONTAL
5	5768.78	108.60			100.40	6.88	34.47	33.15	149	356	Peak	HORIZONTAL

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			dBuV	dB	dB/m	dB	cm		
1	5711.99	50.21	54.00	-3.79	42.09	6.83	34.42	33.13	161	356	Average	HORIZONTAL
2	5713.59	65.59	74.00	-8.41	57.47	6.83	34.42	33.13	161	356	Peak	HORIZONTAL
3	5725.00	67.22	78.20	-10.98	59.09	6.83	34.43	33.13	161	356	Peak	HORIZONTAL
4	5807.50	111.80			103.55	6.92	34.49	33.16	161	356	Peak	HORIZONTAL
5	5808.14	99.95			91.70	6.92	34.49	33.16	161	356	Average	HORIZONTAL
6	5852.05	72.92	78.20	-5.28	64.63	6.95	34.51	33.17	161	356	Peak	HORIZONTAL
7	5860.00	52.72	54.00	-1.28	44.41	6.97	34.52	33.18	161	356	Average	HORIZONTAL
8	5860.39	71.70	74.00	-2.30	63.39	6.97	34.52	33.18	161	356	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

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	5143.65	52.87	54.00	-1.13	46.01	6.17	33.74	33.05	158	346	Average	HORIZONTAL
2	5146.54	70.14	74.00	-3.86	63.24	6.21	33.74	33.05	158	346	Peak	HORIZONTAL
3	5199.42	96.20			89.16	6.27	33.82	33.05	158	346	Average	HORIZONTAL
4	5223.46	107.57			100.47	6.30	33.85	33.05	158	346	Peak	HORIZONTAL
5	5351.35	60.40	74.00	-13.60	52.93	6.47	34.06	33.06	158	346	Peak	HORIZONTAL
6	5357.12	48.71	54.00	-5.29	41.24	6.47	34.06	33.06	158	346	Average	HORIZONTAL

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

Channel 58

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	5125.58	58.87	74.00	-15.13	52.04	6.17	33.71	33.05	161	348	Peak	HORIZONTAL
2	5145.77	47.66	54.00	-6.34	40.76	6.21	33.74	33.05	161	348	Average	HORIZONTAL
3	5283.27	94.76			87.50	6.37	33.95	33.06	161	348	Average	HORIZONTAL
4	5284.23	105.87			98.61	6.37	33.95	33.06	161	348	Peak	HORIZONTAL
5	5350.00	52.96	54.00	-1.04	45.49	6.47	34.06	33.06	161	348	Average	HORIZONTAL
6	5350.00	68.07	74.00	-5.93	60.60	6.47	34.06	33.06	161	348	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 106

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	5456.92	65.87	74.00	-8.13	58.11	6.60	34.22	33.06	151	352	Peak	HORIZONTAL
2	5458.85	52.17	54.00	-1.83	44.41	6.60	34.22	33.06	151	352	Average	HORIZONTAL
3	5469.42	52.48	54.00	-1.52	44.69	6.60	34.25	33.06	151	352	Average	HORIZONTAL
4	5469.42	70.67	74.00	-3.33	62.88	6.60	34.25	33.06	151	352	Peak	HORIZONTAL
5	5520.39	96.32			88.43	6.65	34.31	33.07	151	352	Average	HORIZONTAL
6	5523.27	106.71			98.82	6.65	34.31	33.07	151	352	Peak	HORIZONTAL
7	5736.73	48.39	54.00	-5.61	40.23	6.86	34.44	33.14	151	352	Average	HORIZONTAL
8	5765.58	58.53	74.00	-15.47	50.34	6.88	34.46	33.15	151	352	Peak	HORIZONTAL

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

Channel 122

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	5460.00	49.68	54.00	-4.32	41.92	6.60	34.22	33.06	156	353	Average	HORIZONTAL
2	5460.00	61.55	74.00	-12.45	53.79	6.60	34.22	33.06	156	353	Peak	HORIZONTAL
3	5465.77	61.68	74.00	-12.32	53.89	6.60	34.25	33.06	156	353	Peak	HORIZONTAL
4	5470.20	50.01	54.00	-3.99	42.22	6.60	34.25	33.06	156	353	Average	HORIZONTAL
5	5617.69	97.71			89.70	6.74	34.37	33.10	156	353	Average	HORIZONTAL
6	5619.62	108.00			99.99	6.74	34.37	33.10	156	353	Peak	HORIZONTAL
7	5726.35	52.21	54.00	-1.79	44.08	6.83	34.43	33.13	156	353	Average	HORIZONTAL
8	5732.12	65.05	74.00	-8.95	56.90	6.86	34.43	33.14	156	353	Peak	HORIZONTAL

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

Channel 155

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	5702.89	66.35	68.20	-1.85	58.24	6.81	34.42	33.12	156	358	Peak	HORIZONTAL
2	5718.27	71.34	78.20	-6.86	63.21	6.83	34.43	33.13	156	358	Peak	HORIZONTAL
3	5803.85	94.54			86.31	6.90	34.49	33.16	156	358	Average	HORIZONTAL
4	5805.77	105.84			97.61	6.90	34.49	33.16	156	358	Peak	HORIZONTAL
5	5850.00	67.03	78.20	-11.17	58.74	6.95	34.51	33.17	156	358	Peak	HORIZONTAL
6	5861.54	66.27	68.20	-1.93	57.96	6.97	34.52	33.18	156	358	Peak	HORIZONTAL

Item 3, 4 are the fundamental frequency at 5775 MHz.



Straddle Channel

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 144

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5719.04	109.06			100.93	6.83	34.43	33.13	153	352	Average	HORIZONTAL
2	5723.85	120.51			112.38	6.83	34.43	33.13	153	352	Peak	HORIZONTAL
3	5858.46	65.52	68.20	-2.68	57.21	6.97	34.52	33.18	153	352	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 142

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5704.23	104.92				96.81	6.81	34.42	33.12	157	355	Average
2	5708.08	116.01				107.89	6.83	34.42	33.13	157	355	Peak
3	5871.54	66.98	68.20	-1.22	58.66	6.97	34.53	33.18	157	355	Peak	HORIZONTAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2
Test Date	Jul. 25, 2015		
Test Mode	Mode 2 (Ant. 7 Polarized Panel / 10.7dBi / 2TX)		

Channel 138

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	Loss	Factor	Factor	cm	deg	
1	5679.42	99.99			91.90	6.81	34.40	33.12	152	349	Average	HORIZONTAL
2	5685.19	110.56			102.46	6.81	34.41	33.12	152	349	Peak	HORIZONTAL
3	5850.58	67.04	68.20	-1.16	58.75	6.95	34.51	33.17	152	349	Peak	HORIZONTAL

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

Note:

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

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

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	5149.00	70.01	74.00	-3.99	63.11	6.21	33.74	33.05	201	4	Peak	VERTICAL
2	5150.00	52.99	54.00	-1.01	46.09	6.21	33.74	33.05	201	4	Average	VERTICAL
3	5181.00	110.84			103.86	6.24	33.79	33.05	201	4	Peak	VERTICAL
4	5182.00	99.34			92.36	6.24	33.79	33.05	201	4	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			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5146.00	66.64	74.00	-7.36	59.74	6.21	33.74	33.05	195	257	Peak	VERTICAL
2	5150.00	52.84	54.00	-1.16	45.94	6.21	33.74	33.05	195	257	Average	VERTICAL
3	5194.80	114.85			107.81	6.27	33.82	33.05	195	257	Peak	VERTICAL
4	5197.60	103.42			96.38	6.27	33.82	33.05	195	257	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			Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5117.60	48.00	54.00	-6.00	41.22	6.14	33.69	33.05	204	257	Average	VERTICAL
2	5125.40	60.95	74.00	-13.05	54.12	6.17	33.71	33.05	204	257	Peak	VERTICAL
3	5237.00	113.87			106.75	6.30	33.87	33.05	204	257	Peak	VERTICAL
4	5237.60	102.52			95.40	6.30	33.87	33.05	204	257	Average	VERTICAL
5	5358.20	48.69	54.00	-5.31	41.22	6.47	34.06	33.06	204	257	Average	VERTICAL
6	5360.60	61.91	74.00	-12.09	54.41	6.47	34.09	33.06	204	257	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 52

Freq	Level	Limit		Over Limit	Read Level	Cable Loss			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m						
1	5134.60	61.61	74.00	-12.39	54.78	6.17	33.71	33.05	214	2	Peak		VERTICAL	
2	5138.20	49.19	54.00	-4.81	42.36	6.17	33.71	33.05	214	2	Average		VERTICAL	
3	5260.60	115.16			107.95	6.34	33.93	33.06	214	2	Peak		VERTICAL	
4	5261.80	102.87			95.66	6.34	33.93	33.06	214	2	Average		VERTICAL	
5	5350.60	62.34	74.00	-11.66	54.87	6.47	34.06	33.06	214	2	Peak		VERTICAL	
6	5381.20	49.21	54.00	-4.79	41.66	6.50	34.11	33.06	214	2	Average		VERTICAL	

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

Channel 60

Freq	Level	Limit		Over Limit	Read Level	Cable Loss			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m						
1	5302.80	113.41			106.09	6.40	33.98	33.06	210	6	Peak		VERTICAL	
2	5306.40	101.94			94.62	6.40	33.98	33.06	210	6	Average		VERTICAL	
3	5350.00	52.94	54.00	-1.06	45.47	6.47	34.06	33.06	210	6	Average		VERTICAL	
4	5353.20	68.93	74.00	-5.07	61.46	6.47	34.06	33.06	210	6	Peak		VERTICAL	

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

Channel 64

Freq	Level	Limit		Over Limit	Read Level	Cable Loss			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m						
1	5317.00	111.63			104.28	6.40	34.01	33.06	174	258	Peak		VERTICAL	
2	5317.80	100.60			93.25	6.40	34.01	33.06	174	258	Average		VERTICAL	
3	5350.00	52.78	54.00	-1.22	45.31	6.47	34.06	33.06	174	258	Average		VERTICAL	
4	5350.40	71.38	74.00	-2.62	63.91	6.47	34.06	33.06	174	258	Peak		VERTICAL	

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 100

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	5459.20	61.81	74.00	-12.19	54.05	6.60	34.22	33.06	198	255	Peak	VERTICAL
2	5460.00	48.64	54.00	-5.36	40.88	6.60	34.22	33.06	198	255	Average	VERTICAL
3	5466.00	68.39	74.00	-5.61	60.60	6.60	34.25	33.06	198	255	Peak	VERTICAL
4	5470.00	52.69	54.00	-1.31	44.90	6.60	34.25	33.06	198	255	Average	VERTICAL
5	5497.60	100.03			92.16	6.63	34.30	33.06	198	255	Average	VERTICAL
6	5500.80	110.67			102.79	6.65	34.30	33.07	198	255	Peak	VERTICAL

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

Channel 116

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	5422.40	59.82	74.00	-14.18	52.18	6.53	34.17	33.06	207	34	Peak	VERTICAL
2	5460.00	48.57	54.00	-5.43	40.81	6.60	34.22	33.06	207	34	Average	VERTICAL
3	5462.40	48.76	54.00	-5.24	41.00	6.60	34.22	33.06	207	34	Average	VERTICAL
4	5462.40	61.70	74.00	-12.30	53.94	6.60	34.22	33.06	207	34	Peak	VERTICAL
5	5582.40	102.94			94.96	6.72	34.35	33.09	207	34	Average	VERTICAL
6	5582.40	114.51			106.53	6.72	34.35	33.09	207	34	Peak	VERTICAL
7	5737.60	47.53	54.00	-6.47	39.37	6.86	34.44	33.14	207	34	Average	VERTICAL
8	5740.80	60.23	74.00	-13.77	52.07	6.86	34.44	33.14	207	34	Peak	VERTICAL

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

Channel 140

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	5702.60	109.77			101.66	6.81	34.42	33.12	202	350	Peak	VERTICAL
2	5706.60	98.92			90.80	6.83	34.42	33.13	202	350	Average	VERTICAL
3	5725.00	52.70	54.00	-1.30	44.57	6.83	34.43	33.13	202	350	Average	VERTICAL
4	5725.00	72.87	74.00	-1.13	64.74	6.83	34.43	33.13	202	350	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 1 + Chain 2
Test Date	Aug. 05, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 149

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	dB	dB/m	dB	cm	deg			
1	5714.80	70.41	74.00	-3.59	62.29	6.83	34.42	33.13	177	255	Peak	VERTICAL
2	5715.00	51.70	54.00	-2.30	43.58	6.83	34.42	33.13	177	255	Average	VERTICAL
3	5724.80	77.05	78.20	-1.15	68.92	6.83	34.43	33.13	177	255	Peak	VERTICAL
4	5742.60	98.71			90.55	6.86	34.44	33.14	177	255	Average	VERTICAL
5	5747.20	110.40			102.24	6.86	34.44	33.14	177	255	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	dBm			Loss	Factor	Factor	cm	deg		
MHz	dBm	dBm	dB	dBm	dB	dB/m	dB	cm	deg			
1	5707.00	51.44	54.00	-2.56	43.32	6.83	34.42	33.13	208	20	Average	VERTICAL
2	5710.20	64.82	74.00	-9.18	56.70	6.83	34.42	33.13	208	20	Peak	VERTICAL
3	5725.00	66.68	78.20	-11.52	58.55	6.83	34.43	33.13	208	20	Peak	VERTICAL
4	5783.80	115.03			106.82	6.90	34.47	33.16	208	20	Peak	VERTICAL
5	5787.00	102.76			94.54	6.90	34.48	33.16	208	20	Average	VERTICAL
6	5858.20	68.99	78.20	-9.21	60.68	6.97	34.52	33.18	208	20	Peak	VERTICAL
7	5867.40	52.79	54.00	-1.21	44.48	6.97	34.52	33.18	208	20	Average	VERTICAL
8	5868.60	68.10	74.00	-5.90	59.79	6.97	34.52	33.18	208	20	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	dBm			Loss	Factor	Factor	cm	deg		
MHz	dBm	dBm	dB	dBm	dB	dB/m	dB	cm	deg			
1	5831.60	100.02			91.76	6.92	34.50	33.16	208	347	Average	VERTICAL
2	5831.80	112.05			103.79	6.92	34.50	33.16	208	347	Peak	VERTICAL
3	5851.40	75.44	78.20	-2.76	67.15	6.95	34.51	33.17	208	347	Peak	VERTICAL
4	5860.00	52.78	54.00	-1.22	44.47	6.97	34.52	33.18	208	347	Average	VERTICAL
5	5864.20	72.27	74.00	-1.73	63.96	6.97	34.52	33.18	208	347	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 1 + Chain 2
Test Date	Aug. 05, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 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	5148.40	70.57	74.00	-3.43	63.67	6.21	33.74	33.05	215	11	Peak	VERTICAL
2	5149.20	52.61	54.00	-1.39	45.71	6.21	33.74	33.05	215	11	Average	VERTICAL
3	5183.60	106.20			99.22	6.24	33.79	33.05	215	11	Peak	VERTICAL
4	5186.80	95.15			88.17	6.24	33.79	33.05	215	11	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	5147.20	64.42	74.00	-9.58	57.52	6.21	33.74	33.05	215	256	Peak	VERTICAL
2	5149.20	51.80	54.00	-2.20	44.90	6.21	33.74	33.05	215	256	Average	VERTICAL
3	5235.20	110.70			103.58	6.30	33.87	33.05	215	256	Peak	VERTICAL
4	5238.00	100.05			92.93	6.30	33.87	33.05	215	256	Average	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2
Test Date	Aug. 05, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 54

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	5262.00	99.03			91.82	6.34	33.93	33.06	197	7	Average	VERTICAL
2	5266.80	110.25			103.04	6.34	33.93	33.06	197	7	Peak	VERTICAL
3	5351.60	52.97	54.00	-1.03	45.50	6.47	34.06	33.06	197	7	Average	VERTICAL
4	5356.00	65.95	74.00	-8.05	58.48	6.47	34.06	33.06	197	7	Peak	VERTICAL

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

Channel 62

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	5306.40	94.41			87.09	6.40	33.98	33.06	217	3	Average	VERTICAL
2	5306.40	105.46			98.14	6.40	33.98	33.06	217	3	Peak	VERTICAL
3	5350.00	52.66	54.00	-1.34	45.19	6.47	34.06	33.06	217	3	Average	VERTICAL
4	5350.40	69.43	74.00	-4.57	61.96	6.47	34.06	33.06	217	3	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2
Test Date	Aug. 05, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 102

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5459.60	64.66	74.00	-9.34	56.90	6.60	34.22	33.06	222	253	Peak	VERTICAL
2	5460.00	49.86	54.00	-4.14	42.10	6.60	34.22	33.06	222	253	Average	VERTICAL
3	5468.80	70.73	74.00	-3.27	62.94	6.60	34.25	33.06	222	253	Peak	VERTICAL
4	5469.60	52.59	54.00	-1.41	44.80	6.60	34.25	33.06	222	253	Average	VERTICAL
5	5515.20	106.30			98.41	6.65	34.31	33.07	222	253	Peak	VERTICAL
6	5518.00	95.85			87.96	6.65	34.31	33.07	222	253	Average	VERTICAL

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

Channel 110

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dB	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5455.20	65.26	74.00	-8.74	57.50	6.60	34.22	33.06	200	259	Peak	VERTICAL
2	5459.20	51.15	54.00	-2.85	43.39	6.60	34.22	33.06	200	259	Average	VERTICAL
3	5466.80	67.32	74.00	-6.68	59.53	6.60	34.25	33.06	200	259	Peak	VERTICAL
4	5469.60	52.87	54.00	-1.13	45.08	6.60	34.25	33.06	200	259	Average	VERTICAL
5	5544.80	99.63			91.71	6.68	34.32	33.08	200	259	Average	VERTICAL
6	5545.60	110.56			102.64	6.68	34.32	33.08	200	259	Peak	VERTICAL

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

Channel 134

Freq	Level	Limit		Over Limit	Read Level	Cable			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/m	dB	dB	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5674.80	105.89			97.82	6.79	34.40	33.12	213	257	Peak	VERTICAL
2	5678.00	95.44			87.37	6.79	34.40	33.12	213	257	Average	VERTICAL
3	5725.00	52.69	54.00	-1.31	44.56	6.83	34.43	33.13	213	257	Average	VERTICAL
4	5725.00	68.47	74.00	-5.53	60.34	6.83	34.43	33.13	213	257	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 1 + Chain 2
Test Date	Aug. 05, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 151

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		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5711.00	67.56	74.00	-6.44	59.44	6.83	34.42	33.13	186	254	Peak	VERTICAL
2	5715.00	52.80	54.00	-1.20	44.68	6.83	34.42	33.13	186	254	Average	VERTICAL
3	5725.00	71.33	78.20	-6.87	63.20	6.83	34.43	33.13	186	254	Peak	VERTICAL
4	5759.80	105.94			97.75	6.88	34.46	33.15	186	254	Peak	VERTICAL
5	5762.60	95.29			87.10	6.88	34.46	33.15	186	254	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			Loss	Factor	Factor	dB	dB		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5711.60	49.34	54.00	-4.66	41.22	6.83	34.42	33.13	239	349	Average	VERTICAL
2	5714.00	61.11	74.00	-12.89	52.99	6.83	34.42	33.13	239	349	Peak	VERTICAL
3	5725.00	63.90	78.20	-14.30	55.77	6.83	34.43	33.13	239	349	Peak	VERTICAL
4	5811.80	96.86			88.61	6.92	34.49	33.16	239	349	Average	VERTICAL
5	5811.80	107.37			99.12	6.92	34.49	33.16	239	349	Peak	VERTICAL
6	5850.80	70.74	78.20	-7.46	62.45	6.95	34.51	33.17	239	349	Peak	VERTICAL
7	5860.00	52.93	54.00	-1.07	44.62	6.97	34.52	33.18	239	349	Average	VERTICAL
8	5863.40	68.44	74.00	-5.56	60.13	6.97	34.52	33.18	239	349	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 58 / Chain 1 + Chain 2
Test Date	Aug. 05, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

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/m	dB	cm	deg			
1	5146.00	68.78	74.00	-5.22	61.88	6.21	33.74	33.05	196	7 Peak	VERTICAL	
2	5150.00	52.83	54.00	-1.17	45.93	6.21	33.74	33.05	196	7 Average	VERTICAL	
3	5219.00	103.01			95.94	6.27	33.85	33.05	196	7 Peak	VERTICAL	
4	5222.00	92.22			85.12	6.30	33.85	33.05	196	7 Average	VERTICAL	
5	5355.00	48.62	54.00	-5.38	41.15	6.47	34.06	33.06	196	7 Average	VERTICAL	
6	5374.00	60.24	74.00	-13.76	52.71	6.50	34.09	33.06	196	7 Peak	VERTICAL	

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

Channel 58

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	5143.00	59.41	74.00	-14.59	52.55	6.17	33.74	33.05	192	359 Peak	VERTICAL	
2	5150.00	47.26	54.00	-6.74	40.36	6.21	33.74	33.05	192	359 Average	VERTICAL	
3	5298.00	100.74			93.42	6.40	33.98	33.06	192	359 Peak	VERTICAL	
4	5302.00	89.83			82.51	6.40	33.98	33.06	192	359 Average	VERTICAL	
5	5351.00	65.94	74.00	-8.06	58.47	6.47	34.06	33.06	192	359 Peak	VERTICAL	
6	5353.00	52.72	54.00	-1.28	45.25	6.47	34.06	33.06	192	359 Average	VERTICAL	

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

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122, 155 / Chain 1 + Chain 2
Test Date	Aug. 05, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 106

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	5457.00	51.20	54.00	-2.80	43.44	6.60	34.22	33.06	201	252	Average	VERTICAL
2	5459.00	63.83	74.00	-10.17	56.07	6.60	34.22	33.06	201	252	Peak	VERTICAL
3	5470.00	52.73	54.00	-1.27	44.94	6.60	34.25	33.06	201	252	Average	VERTICAL
4	5470.00	67.62	74.00	-6.38	59.83	6.60	34.25	33.06	201	252	Peak	VERTICAL
5	5515.00	102.11			94.22	6.65	34.31	33.07	201	252	Peak	VERTICAL
6	5518.00	92.34			84.45	6.65	34.31	33.07	201	252	Average	VERTICAL
7	5725.00	48.14	54.00	-5.86	40.01	6.83	34.43	33.13	201	252	Average	VERTICAL
8	5736.00	60.31	74.00	-13.69	52.15	6.86	34.44	33.14	201	252	Peak	VERTICAL

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

Channel 122

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	5457.00	64.26	74.00	-9.74	56.50	6.60	34.22	33.06	163	351	Peak	VERTICAL
2	5458.00	52.32	54.00	-1.68	44.56	6.60	34.22	33.06	163	351	Average	VERTICAL
3	5464.00	65.01	68.20	-3.19	57.22	6.60	34.25	33.06	163	351	Peak	VERTICAL
4	5607.00	94.79			86.79	6.74	34.36	33.10	163	351	Average	VERTICAL
5	5619.00	105.02			97.01	6.74	34.37	33.10	163	351	Peak	VERTICAL
6	5737.00	66.82	68.20	-1.38	58.66	6.86	34.44	33.14	163	351	Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5610 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		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5712.00	52.99	54.00	-1.01	44.87	6.83	34.42	33.13	200	341	Average	VERTICAL
2	5713.00	68.79	74.00	-5.21	60.67	6.83	34.42	33.13	200	341	Peak	VERTICAL
3	5721.00	69.40	78.20	-8.80	61.27	6.83	34.43	33.13	200	341	Peak	VERTICAL
4	5804.00	91.56			83.33	6.90	34.49	33.16	200	341	Average	VERTICAL
5	5804.00	103.05			94.82	6.90	34.49	33.16	200	341	Peak	VERTICAL
6	5851.00	66.76	78.20	-11.44	58.47	6.95	34.51	33.17	200	341	Peak	VERTICAL
7	5869.00	52.11	54.00	-1.89	43.80	6.97	34.52	33.18	200	341	Average	VERTICAL
8	5869.00	65.95	74.00	-8.05	57.64	6.97	34.52	33.18	200	341	Peak	VERTICAL

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

**Straddle Channel**

Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2
Test Date	Aug. 04, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 144

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dB	dB/m	dB	cm	deg		
1	5715.20	113.69			105.57	6.83	34.42	33.13	197	253	Peak	VERTICAL
2	5717.60	102.77			94.64	6.83	34.43	33.13	197	253	Average	VERTICAL
3	5850.00	60.84	68.20	-7.36	52.55	6.95	34.51	33.17	197	253	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2
Test Date	Aug. 05, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 142

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5705.80	112.56			104.44	6.83	34.42	33.13	198	347	Peak	VERTICAL
2	5706.40	102.23			94.11	6.83	34.42	33.13	198	347	Average	VERTICAL
3	5851.00	65.83	68.20	-2.37	57.54	6.95	34.51	33.17	198	347	Peak	VERTICAL

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



Temperature	23°C	Humidity	61%
Test Engineer	Paul Chen	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2
Test Date	Aug. 05, 2015		
Test Mode	Mode 3 (Ant. 9 Patch antenna / 5.4dBi / 2TX)		

Channel 138

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5704.00	95.06				86.95	6.81	34.42	33.12	186	344	Average
2	5707.00	106.74				98.62	6.83	34.42	33.13	186	344	Peak
3	5850.00	66.97	68.20	-1.23	58.68	6.95	34.51	33.17	186	344	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5690 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. Antenna Requirements

4.8.1. Limit

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

4.8.2. Antenna Connector Construction

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

5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Test Receiver	R&S	ESCS 30	100355	9kHz ~ 2.75GHz	Apr. 22, 2015	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 02, 2014	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 02, 2014	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	Dec. 03, 2014	Conduction (CO01-CB)
Software	Audix	E3	5.410e	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA	Schaffner	CBL6112D	22021	20MHz ~ 2GHz	May 06, 2015	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 12, 2015*	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 28, 2014	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Aug. 22, 2014	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2015	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Feb. 24, 2015	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 12, 2015	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Nov. 25, 2014	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 06, 2014	Radiation (03CH01-CB)
EMI Receiver	Agilent	N9038A	MY52260123	9kHz ~ 8.4GHz	Jan. 21, 2015	Radiation (03CH01-CB)
EMI Test Receiver	R&S	ESR26	101289	9kHz ~ 26GHz	Aug. 22, 2014	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz ~ 1 GHz	Nov. 15, 2014	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	1 GHz ~ 40 GHz	Nov. 15, 2014	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	1 GHz ~ 40 GHz	Nov. 15, 2014	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSP40	100979	9kHz~40GHz	Dec. 12, 2014	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz – 26.5 GHz	Nov. 15, 2014	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz – 26.5 GHz	Nov. 15, 2014	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz – 26.5 GHz	Nov. 15, 2014	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Nov. 15, 2014	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Nov. 15, 2014	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 03, 2014	Conducted (TH01-CB)



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

"*" Calibration Interval of instruments listed above is two years.

NCR means Non-Calibration required.

6. MEASUREMENT UNCERTAINTY

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	2.4 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%