

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 23, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5098.00	52.92	54.00	-1.08	46.34	6.14	34.04	33.60	360	115	Average	VERTICAL
2	5098.00	64.77	74.00	-9.23	58.19	6.14	34.04	33.60	360	115	Peak	VERTICAL
3	5179.00	107.94			101.11	6.24	34.16	33.57	360	115	Average	VERTICAL
4	5179.00	117.18			110.35	6.24	34.16	33.57	360	115	Peak	VERTICAL
5	5383.00	60.59	74.00	-13.41	53.14	6.50	34.44	33.49	360	115	Peak	VERTICAL
6	5397.00	48.86	54.00	-5.14	41.39	6.50	34.46	33.49	360	115	Average	VERTICAL

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5122.00	63.67	74.00	-10.33	57.03	6.17	34.06	33.59	357	165	Peak	VERTICAL
2	5126.00	52.83	54.00	-1.17	46.16	6.17	34.09	33.59	357	165	Average	VERTICAL
3	5205.00	109.75			102.86	6.27	34.18	33.56	357	165	Average	VERTICAL
4	5206.00	118.82			111.93	6.27	34.18	33.56	357	165	Peak	VERTICAL
5	5422.00	51.30	54.00	-2.70	43.77	6.53	34.48	33.48	357	165	Average	VERTICAL
6	5423.00	62.23	74.00	-11.77	54.70	6.53	34.48	33.48	357	165	Peak	VERTICAL

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5113.00	52.70	54.00	-1.30	46.10	6.14	34.06	33.60	12	217	Average	VERTICAL
2	5113.00	64.68	74.00	-9.32	58.08	6.14	34.06	33.60	12	217	Peak	VERTICAL
3	5232.00	111.32			104.34	6.30	34.23	33.55	12	217	Average	VERTICAL
4	5243.00	121.02			114.02	6.30	34.25	33.55	12	217	Peak	VERTICAL
5	5352.00	52.93	54.00	-1.07	45.58	6.47	34.39	33.51	12	217	Average	VERTICAL
6	5358.00	65.01	74.00	-8.99	57.65	6.47	34.39	33.50	12	217	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 23, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5714.00	67.18	68.20	-1.02	59.05	6.83	34.68	33.38	8	185 Peak	VERTICAL
2	5724.00	76.60	78.20	-1.60	68.45	6.83	34.69	33.37	8	185 Peak	VERTICAL
3	5737.00	107.31			99.12	6.86	34.70	33.37	8	185 Average	VERTICAL
4	5738.00	117.15			108.96	6.86	34.70	33.37	8	185 Peak	VERTICAL

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

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5707.00	65.18	68.20	-3.02	57.05	6.83	34.68	33.38	25	191 Peak	VERTICAL
2	5724.00	61.26	78.20	-16.94	53.11	6.83	34.69	33.37	25	191 Peak	VERTICAL
3	5783.00	119.86			111.60	6.90	34.71	33.35	25	192 Peak	VERTICAL
4	5784.00	109.54			101.28	6.90	34.71	33.35	25	192 Average	VERTICAL
5	5859.00	66.97	78.20	-11.23	58.59	6.97	34.74	33.33	25	192 Peak	VERTICAL
6	5862.00	66.70	68.20	-1.50	58.32	6.97	34.74	33.33	25	192 Peak	VERTICAL

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

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5823.00	118.54			110.23	6.92	34.73	33.34	340	187 Peak	VERTICAL
2	5824.00	107.08			98.77	6.92	34.73	33.34	340	187 Average	VERTICAL
3	5850.00	75.09	78.20	-3.11	66.73	6.95	34.74	33.33	340	187 Peak	VERTICAL
4	5860.00	67.03	68.20	-1.17	58.65	6.97	34.74	33.33	340	187 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 23, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	52.81	54.00	-1.19	46.07	6.21	34.11	33.58	360	182	Average	VERTICAL
2	5150.00	67.51	74.00	-6.49	60.77	6.21	34.11	33.58	360	182	Peak	VERTICAL
3	5186.00	103.86			97.03	6.24	34.16	33.57	360	182	Average	VERTICAL
4	5186.00	113.13			106.30	6.24	34.16	33.57	360	182	Peak	VERTICAL
5	5353.00	59.67	74.00	-14.33	52.32	6.47	34.39	33.51	360	182	Peak	VERTICAL
6	5356.00	47.08	54.00	-6.92	39.72	6.47	34.39	33.50	360	182	Average	VERTICAL

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	52.95	54.00	-1.05	46.21	6.21	34.11	33.58	357	186	Average	VERTICAL
2	5150.00	70.32	74.00	-3.68	63.58	6.21	34.11	33.58	357	186	Peak	VERTICAL
3	5235.00	110.40			103.42	6.30	34.23	33.55	357	186	Average	VERTICAL
4	5235.00	119.91			112.93	6.30	34.23	33.55	357	186	Peak	VERTICAL
5	5354.00	52.66	54.00	-1.34	45.30	6.47	34.39	33.50	357	186	Average	VERTICAL
6	5356.00	63.84	74.00	-10.16	56.48	6.47	34.39	33.50	357	186	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 23, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5714.00	66.68	68.20	-1.52	58.55	6.83	34.68	33.38	348	196 Peak	VERTICAL
2	5725.00	70.44	78.20	-7.76	62.29	6.83	34.69	33.37	348	196 Peak	VERTICAL
3	5750.00	102.08			93.88	6.86	34.70	33.36	348	196 Average	VERTICAL
4	5750.00	113.75			105.55	6.86	34.70	33.36	348	196 Peak	VERTICAL

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

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5699.00	63.44	68.20	-4.76	55.33	6.81	34.68	33.38	351	194 Peak	VERTICAL
2	5724.00	65.83	78.20	-12.37	57.68	6.83	34.69	33.37	351	194 Peak	VERTICAL
3	5790.00	104.53			96.26	6.90	34.72	33.35	351	194 Average	VERTICAL
4	5790.00	114.65			106.38	6.90	34.72	33.35	351	194 Peak	VERTICAL
5	5850.00	71.59	78.20	-6.61	63.23	6.95	34.74	33.33	351	194 Peak	VERTICAL
6	5862.00	67.12	68.20	-1.08	58.74	6.97	34.74	33.33	351	194 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 23, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1 dBi / 3TX)		

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5146.00	67.13	74.00	-6.87	60.39	6.21	34.11	33.58	0	157 Peak	VERTICAL
2	5150.00	52.81	54.00	-1.19	46.07	6.21	34.11	33.58	0	157 Average	VERTICAL
3	5201.00	108.90			102.01	6.27	34.18	33.56	0	157 Peak	VERTICAL
4	5220.00	98.65			91.73	6.27	34.20	33.55	0	157 Average	VERTICAL
5	5350.00	47.33	54.00	-6.67	39.98	6.47	34.39	33.51	0	157 Average	VERTICAL
6	5398.00	60.89	74.00	-13.11	53.42	6.50	34.46	33.49	0	157 Peak	VERTICAL

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

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5691.00	66.89	68.20	-1.31	58.78	6.81	34.68	33.38	360	184 Peak	VERTICAL
2	5723.00	73.16	78.20	-5.04	65.01	6.83	34.69	33.37	360	184 Peak	VERTICAL
3	5768.00	98.58			90.36	6.88	34.70	33.36	360	184 Average	VERTICAL
4	5770.00	109.33			101.10	6.88	34.71	33.36	360	184 Peak	VERTICAL
5	5858.00	65.18	78.20	-13.02	56.80	6.97	34.74	33.33	360	184 Peak	VERTICAL
6	5863.00	65.05	68.20	-3.15	56.67	6.97	34.74	33.33	360	184 Peak	VERTICAL

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

Note:

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

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 36, 40, 48 / Chain 4 + Chain 5
Test Date	Dec. 26, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	52.60	54.00	-1.40	45.86	6.21	34.11	33.58	17	182	Average	VERTICAL
2	5150.00	67.59	74.00	-6.41	60.85	6.21	34.11	33.58	17	182	Peak	VERTICAL
3	5185.40	116.07			109.24	6.24	34.16	33.57	17	182	Peak	VERTICAL
4	5186.00	105.94			99.11	6.24	34.16	33.57	17	182	Average	VERTICAL

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5111.20	52.75	54.00	-1.25	46.15	6.14	34.06	33.60	26	191	Average	HORIZONTAL
2	5111.80	63.91	74.00	-10.09	57.31	6.14	34.06	33.60	26	191	Peak	HORIZONTAL
3	5191.60	107.72			100.87	6.24	34.18	33.57	26	191	Average	HORIZONTAL
4	5191.60	116.57			109.72	6.24	34.18	33.57	26	191	Peak	HORIZONTAL

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5023.00	63.01	74.00	-10.99	56.65	6.04	33.95	33.63	16	208	Peak	VERTICAL
2	5024.00	52.66	54.00	-1.34	46.30	6.04	33.95	33.63	16	208	Average	VERTICAL
3	5242.00	108.55			101.55	6.30	34.25	33.55	16	208	Average	VERTICAL
4	5243.00	118.39			111.39	6.30	34.25	33.55	16	208	Peak	VERTICAL
5	5362.00	64.19	74.00	-9.81	56.81	6.47	34.41	33.50	16	208	Peak	VERTICAL
6	5364.00	51.94	54.00	-2.06	44.56	6.47	34.41	33.50	16	208	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 149, 157, 165 / Chain 4 + Chain 5
Test Date	Dec. 26, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5714.40	66.52	68.20	-1.68	58.39	6.83	34.68	33.38	345	193	Peak	VERTICAL
2	5725.00	75.43	78.20	-2.77	67.28	6.83	34.69	33.37	345	193	Peak	VERTICAL
3	5746.20	112.08			103.89	6.86	34.70	33.37	345	193	Peak	VERTICAL
4	5746.80	102.05			93.86	6.86	34.70	33.37	345	193	Average	VERTICAL

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

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.00	65.23	68.20	-2.97	57.10	6.83	34.68	33.38	344	202	Peak	VERTICAL
2	5719.00	65.12	78.20	-13.08	56.97	6.83	34.69	33.37	344	202	Peak	VERTICAL
3	5782.00	107.67			99.41	6.90	34.71	33.35	344	202	Average	VERTICAL
4	5784.00	117.99			109.73	6.90	34.71	33.35	344	202	Peak	VERTICAL
5	5858.00	68.34	78.20	-9.86	59.96	6.97	34.74	33.33	344	202	Peak	VERTICAL
6	5863.00	66.91	68.20	-1.29	58.53	6.97	34.74	33.33	344	202	Peak	VERTICAL

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

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5823.00	104.10			95.79	6.92	34.73	33.34	357	176	Average	VERTICAL
2	5824.00	113.94			105.63	6.92	34.73	33.34	357	176	Peak	VERTICAL
3	5855.00	73.37	78.20	-4.83	65.01	6.95	34.74	33.33	357	176	Peak	VERTICAL
4	5861.00	66.66	68.20	-1.54	58.28	6.97	34.74	33.33	357	176	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 38, 46 / Chain 4 + Chain 5
Test Date	Dec. 26, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5146.80	67.14	74.00	-6.86	60.40	6.21	34.11	33.58	18	219	Peak	VERTICAL
2	5150.00	52.98	54.00	-1.02	46.24	6.21	34.11	33.58	18	219	Average	VERTICAL
3	5202.80	101.42			94.53	6.27	34.18	33.56	18	219	Average	VERTICAL
4	5203.60	111.86			104.97	6.27	34.18	33.56	18	219	Peak	VERTICAL

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5142.00	65.61	74.00	-8.39	58.91	6.17	34.11	33.58	16	237	Peak	VERTICAL
2	5144.00	52.58	54.00	-1.42	45.84	6.21	34.11	33.58	16	237	Average	VERTICAL
3	5225.00	105.92			98.94	6.30	34.23	33.55	16	237	Average	VERTICAL
4	5226.00	116.96			109.98	6.30	34.23	33.55	16	237	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 151, 159 / Chain 4 + Chain 5
Test Date	Dec. 26, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5710.00	66.90	68.20	-1.30	58.77	6.83	34.68	33.38	348	189	Peak	VERTICAL
2	5717.00	71.14	78.20	-7.06	63.01	6.83	34.68	33.38	348	189	Peak	VERTICAL
3	5751.00	98.34			90.14	6.86	34.70	33.36	345	189	Average	VERTICAL
4	5752.00	108.98			100.78	6.86	34.70	33.36	348	189	Peak	VERTICAL

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

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5635.00	61.72	68.20	-6.48	53.70	6.76	34.66	33.40	347	184	Peak	VERTICAL
2	5725.00	61.46	78.20	-16.74	53.31	6.83	34.69	33.37	347	184	Peak	VERTICAL
3	5781.00	111.76			103.52	6.88	34.71	33.35	347	184	Peak	VERTICAL
4	5800.00	98.65			90.38	6.90	34.72	33.35	347	184	Average	VERTICAL
5	5852.00	69.46	78.20	-8.74	61.10	6.95	34.74	33.33	347	184	Peak	VERTICAL
6	5866.00	66.64	68.20	-1.56	58.25	6.97	34.74	33.32	347	184	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 42, 155 / Chain 4 + Chain 5
Test Date	Dec. 26, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.00	66.44	74.00	-7.56	59.70	6.21	34.11	33.58	22	216	Peak	VERTICAL
2	5150.00	52.90	54.00	-1.10	46.16	6.21	34.11	33.58	22	216	Average	VERTICAL
3	5202.00	109.21			102.32	6.27	34.18	33.56	22	216	Peak	VERTICAL
4	5238.00	98.82			91.84	6.30	34.23	33.55	22	216	Average	VERTICAL
5	5351.00	61.81	74.00	-12.19	54.46	6.47	34.39	33.51	22	216	Peak	VERTICAL
6	5356.00	48.90	54.00	-5.10	41.54	6.47	34.39	33.50	22	216	Average	VERTICAL

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

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5710.00	66.85	68.20	-1.35	58.72	6.83	34.68	33.38	33	192	Peak	HORIZONTAL
2	5720.00	71.58	78.20	-6.62	63.43	6.83	34.69	33.37	33	192	Peak	HORIZONTAL
3	5783.00	103.58			95.32	6.90	34.71	33.35	33	192	Peak	HORIZONTAL
4	5787.00	92.58			84.31	6.90	34.72	33.35	33	192	Average	HORIZONTAL
5	5852.00	64.79	78.20	-13.41	56.43	6.95	34.74	33.33	33	192	Peak	HORIZONTAL
6	5880.00	64.29	68.20	-3.91	55.89	6.97	34.75	33.32	33	192	Peak	HORIZONTAL

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

Note:

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

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 36, 40, 48 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 27, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 36

	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	dB	deg	cm		
1	5101.00	52.37	54.00	-1.63	45.79	6.14	34.04	33.60	333	208	Average	VERTICAL
2	5149.00	65.23	74.00	-8.77	58.49	6.21	34.11	33.58	333	208	Peak	VERTICAL
3	5182.00	106.43			99.60	6.24	34.16	33.57	333	208	Average	VERTICAL
4	5183.00	116.13			109.30	6.24	34.16	33.57	333	208	Peak	VERTICAL

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

Channel 40

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5112.00	52.95	54.00	-1.05	46.35	6.14	34.06	33.60	18	203	Average	VERTICAL
2	5122.00	65.26	74.00	-8.74	58.62	6.17	34.06	33.59	18	203	Peak	VERTICAL
3	5195.00	109.36			102.47	6.27	34.18	33.56	18	203	Average	VERTICAL
4	5205.00	119.86			112.97	6.27	34.18	33.56	18	203	Peak	VERTICAL

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

Channel 48

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5029.00	52.55	54.00	-1.45	46.19	6.04	33.95	33.63	16	184	Average	VERTICAL
2	5118.00	64.44	74.00	-9.56	57.83	6.14	34.06	33.59	16	184	Peak	VERTICAL
3	5238.00	121.47			114.49	6.30	34.23	33.55	16	184	Peak	VERTICAL
4	5239.00	110.46			103.48	6.30	34.23	33.55	16	184	Average	VERTICAL
5	5354.00	65.44	74.00	-8.56	58.08	6.47	34.39	33.50	16	184	Peak	VERTICAL
6	5357.00	52.88	54.00	-1.12	45.52	6.47	34.39	33.50	16	184	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 149, 157, 165 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 27, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5714.00	67.10	68.20	-1.10	58.97	6.83	34.68	33.38	12	200	Peak	VERTICAL
2	5725.00	73.25	78.20	-4.95	65.10	6.83	34.69	33.37	12	200	Peak	VERTICAL
3	5743.00	103.91			95.72	6.86	34.70	33.37	12	200	Average	VERTICAL
4	5745.00	115.30			107.11	6.86	34.70	33.37	12	200	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	5697.00	65.08	68.20	-3.12	56.97	6.81	34.68	33.38	355	172	Peak	VERTICAL
2	5716.60	59.67	78.20	-18.53	51.54	6.83	34.68	33.38	355	172	Peak	VERTICAL
3	5788.60	106.93			98.66	6.90	34.72	33.35	355	172	Average	VERTICAL
4	5791.00	119.13			110.86	6.90	34.72	33.35	355	172	Peak	VERTICAL
5	5859.00	66.82	78.20	-11.38	58.44	6.97	34.74	33.33	355	172	Peak	VERTICAL
6	5867.00	67.19	68.20	-1.01	58.80	6.97	34.74	33.32	355	172	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	5820.00	116.94			108.63	6.92	34.73	33.34	332	195	Peak	VERTICAL
2	5823.00	107.44			99.13	6.92	34.73	33.34	332	195	Average	VERTICAL
3	5852.00	72.42	78.20	-5.78	64.06	6.95	34.74	33.33	332	195	Peak	VERTICAL
4	5860.00	66.56	68.20	-1.64	58.18	6.97	34.74	33.33	332	195	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 38, 46 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 27, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	52.55	54.00	-1.45	45.81	6.21	34.11	33.58	25	199	Average	VERTICAL
2	5150.00	63.64	74.00	-10.36	56.90	6.21	34.11	33.58	25	199	Peak	VERTICAL
3	5185.00	102.87			96.04	6.24	34.16	33.57	25	199	Average	VERTICAL
4	5195.00	112.79			105.90	6.27	34.18	33.56	25	199	Peak	VERTICAL

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5109.00	63.93	74.00	-10.07	57.33	6.14	34.06	33.60	17	199	Peak	VERTICAL
2	5148.00	52.58	54.00	-1.42	45.84	6.21	34.11	33.58	17	199	Average	VERTICAL
3	5228.00	117.68			110.70	6.30	34.23	33.55	17	199	Peak	VERTICAL
4	5234.00	108.02			101.04	6.30	34.23	33.55	17	199	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 151, 159 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 27, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5708.00	67.07	68.20	-1.13	58.94	6.83	34.68	33.38	332	188	Peak	VERTICAL
2	5720.00	68.60	78.20	-9.60	60.45	6.83	34.69	33.37	332	188	Peak	VERTICAL
3	5752.00	101.56			93.36	6.86	34.70	33.36	332	188	Average	VERTICAL
4	5761.00	111.56			103.34	6.88	34.70	33.36	332	188	Peak	VERTICAL

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

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5709.00	62.81	68.20	-5.39	54.68	6.83	34.68	33.38	333	203	Peak	VERTICAL
2	5723.00	65.74	78.20	-12.46	57.59	6.83	34.69	33.37	333	203	Peak	VERTICAL
3	5800.00	103.08			94.81	6.90	34.72	33.35	333	203	Average	VERTICAL
4	5801.00	113.94			105.67	6.90	34.72	33.35	333	203	Peak	VERTICAL
5	5854.00	71.57	78.20	-6.63	63.21	6.95	34.74	33.33	333	203	Peak	VERTICAL
6	5864.00	66.66	68.20	-1.54	58.28	6.97	34.74	33.33	333	203	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 42, 155 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 27, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 42

	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	dB	deg	cm		
1	5150.00	52.42	54.00	-1.58	45.68	6.21	34.11	33.58	21	218	Average	VERTICAL
2	5150.00	65.39	74.00	-8.61	58.65	6.21	34.11	33.58	21	218	Peak	VERTICAL
3	5200.00	97.94			91.05	6.27	34.18	33.56	21	218	Average	VERTICAL
4	5200.00	107.42			100.53	6.27	34.18	33.56	21	218	Peak	VERTICAL
5	5358.00	48.61	54.00	-5.39	41.25	6.47	34.39	33.50	21	218	Average	VERTICAL
6	5392.00	60.38	74.00	-13.62	52.93	6.50	34.44	33.49	21	218	Peak	VERTICAL

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

Channel 155

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5714.00	66.17	68.20	-2.03	58.04	6.83	34.68	33.38	347	190	Peak	VERTICAL
2	5721.00	68.83	78.20	-9.37	60.68	6.83	34.69	33.37	347	190	Peak	VERTICAL
3	5766.00	107.59			99.37	6.88	34.70	33.36	347	190	Peak	VERTICAL
4	5781.00	96.89			88.65	6.88	34.71	33.35	347	190	Average	VERTICAL
5	5850.00	67.62	78.20	-10.58	59.26	6.95	34.74	33.33	347	190	Peak	VERTICAL
6	5867.00	66.71	68.20	-1.49	58.32	6.97	34.74	33.32	347	190	Peak	VERTICAL

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

Note:

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

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

<For STBC Mode>

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 4 + Chain 5
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

Channel 36

	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	dB	deg	cm		
1	5149.00	68.18	74.00	-5.82	61.44	6.21	34.11	33.58	199	150	Peak	VERTICAL
2	5150.00	52.41	54.00	-1.59	45.67	6.21	34.11	33.58	199	150	Average	VERTICAL
3	5185.00	111.79			104.96	6.24	34.16	33.57	199	150	Peak	VERTICAL
4	5187.00	101.68			94.85	6.24	34.16	33.57	199	150	Average	VERTICAL

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

Channel 40

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	52.73	54.00	-1.27	45.99	6.21	34.11	33.58	210	153	Average	VERTICAL
2	5150.00	67.64	74.00	-6.36	60.90	6.21	34.11	33.58	210	153	Peak	VERTICAL
3	5198.00	115.78			108.89	6.27	34.18	33.56	210	153	Peak	VERTICAL
4	5202.00	105.23			98.34	6.27	34.18	33.56	210	153	Average	VERTICAL

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

Channel 48

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5113.00	48.78	54.00	-5.22	42.18	6.14	34.06	33.60	199	190	Average	VERTICAL
2	5113.00	60.70	74.00	-13.30	54.10	6.14	34.06	33.60	199	190	Peak	VERTICAL
3	5244.00	118.34			111.34	6.30	34.25	33.55	199	190	Peak	VERTICAL
4	5247.00	107.94			100.89	6.34	34.25	33.54	199	190	Average	VERTICAL
5	5362.00	52.83	54.00	-1.17	45.45	6.47	34.41	33.50	199	190	Average	VERTICAL
6	5362.00	64.86	74.00	-9.14	57.48	6.47	34.41	33.50	199	190	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 4 + Chain 5
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5711.00	66.76	68.20	-1.44	58.63	6.83	34.68	33.38	159	159 Peak	VERTICAL
2	5724.00	76.25	78.20	-1.95	68.10	6.83	34.69	33.37	159	159 Peak	VERTICAL
3	5743.00	102.53			94.34	6.86	34.70	33.37	159	159 Average	VERTICAL
4	5743.00	113.41			105.22	6.86	34.70	33.37	159	159 Peak	VERTICAL

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

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5706.00	64.82	68.20	-3.38	56.69	6.83	34.68	33.38	154	169 Peak	VERTICAL
2	5723.00	67.60	78.20	-10.60	59.45	6.83	34.69	33.37	154	169 Peak	VERTICAL
3	5787.00	106.81			98.54	6.90	34.72	33.35	154	169 Average	VERTICAL
4	5788.00	118.45			110.18	6.90	34.72	33.35	154	169 Peak	VERTICAL
5	5850.00	69.52	78.20	-8.68	61.16	6.95	34.74	33.33	154	169 Peak	VERTICAL
6	5860.00	66.57	68.20	-1.63	58.19	6.97	34.74	33.33	154	169 Peak	VERTICAL

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

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5818.00	101.62			93.32	6.92	34.72	33.34	188	137 Average	VERTICAL
2	5824.00	113.05			104.74	6.92	34.73	33.34	188	137 Peak	VERTICAL
3	5850.00	74.70	78.20	-3.50	66.34	6.95	34.74	33.33	188	137 Peak	VERTICAL
4	5860.00	66.61	68.20	-1.59	58.23	6.97	34.74	33.33	188	137 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 4 + Chain 5
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5147.00	69.21	74.00	-4.79	62.47	6.21	34.11	33.58	149	193 Peak	VERTICAL
2	5150.00	52.65	54.00	-1.35	45.91	6.21	34.11	33.58	149	193 Average	VERTICAL
3	5182.00	97.37			90.54	6.24	34.16	33.57	149	193 Average	VERTICAL
4	5186.00	107.76			100.93	6.24	34.16	33.57	149	193 Peak	VERTICAL

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5142.00	67.01	74.00	-6.99	60.31	6.17	34.11	33.58	200	199 Peak	VERTICAL
2	5150.00	52.60	54.00	-1.40	45.86	6.21	34.11	33.58	200	199 Average	VERTICAL
3	5226.00	104.52			97.54	6.30	34.23	33.55	200	199 Average	VERTICAL
4	5226.00	115.64			108.66	6.30	34.23	33.55	200	199 Peak	VERTICAL
5	5353.00	51.45	54.00	-2.55	44.10	6.47	34.39	33.51	200	199 Average	VERTICAL
6	5359.00	63.83	74.00	-10.17	56.47	6.47	34.39	33.50	200	199 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 4 + Chain 5
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5714.00	67.14	68.20	-1.06	59.01	6.83	34.68	33.38	139	156	Peak	VERTICAL
2	5725.00	70.67	78.20	-7.53	62.52	6.83	34.69	33.37	139	156	Peak	VERTICAL
3	5761.00	97.34			89.12	6.88	34.70	33.36	139	156	Average	VERTICAL
4	5761.00	108.97			100.75	6.88	34.70	33.36	139	156	Peak	VERTICAL

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

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5698.00	61.23	68.20	-6.97	53.12	6.81	34.68	33.38	142	159	Peak	VERTICAL
2	5725.00	66.95	78.20	-11.25	58.80	6.83	34.69	33.37	142	159	Peak	VERTICAL
3	5791.00	99.70			91.43	6.90	34.72	33.35	142	159	Average	VERTICAL
4	5799.00	110.65			102.38	6.90	34.72	33.35	142	159	Peak	VERTICAL
5	5850.00	70.32	78.20	-7.88	61.96	6.95	34.74	33.33	142	159	Peak	VERTICAL
6	5862.00	66.74	68.20	-1.46	58.36	6.97	34.74	33.33	142	159	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 4 + Chain 5
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 2TX)		

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5125.00	52.76	54.00	-1.24	46.09	6.17	34.09	33.59	210	193	Average	VERTICAL
2	5140.00	69.49	74.00	-4.51	62.80	6.17	34.11	33.59	210	193	Peak	VERTICAL
3	5222.00	96.60			89.65	6.30	34.20	33.55	210	193	Average	VERTICAL
4	5235.00	106.12			99.14	6.30	34.23	33.55	210	193	Peak	VERTICAL
5	5351.00	50.17	54.00	-3.83	42.82	6.47	34.39	33.51	210	193	Average	VERTICAL
6	5351.00	61.01	74.00	-12.99	53.66	6.47	34.39	33.51	210	193	Peak	VERTICAL

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

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5710.00	66.84	68.20	-1.36	58.71	6.83	34.68	33.38	138	194	Peak	VERTICAL
2	5719.00	70.17	78.20	-8.03	62.02	6.83	34.69	33.37	138	194	Peak	VERTICAL
3	5784.00	95.45			87.19	6.90	34.71	33.35	138	194	Average	VERTICAL
4	5786.00	105.83			97.56	6.90	34.72	33.35	138	194	Peak	VERTICAL
5	5851.00	66.37	78.20	-11.83	58.01	6.95	34.74	33.33	138	194	Peak	VERTICAL
6	5860.00	64.93	68.20	-3.27	56.55	6.97	34.74	33.33	138	194	Peak	VERTICAL

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

Note:

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

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5145.00	66.51	74.00	-7.49	59.77	6.21	34.11	33.58	213	140	Peak	VERTICAL
2	5149.00	52.36	54.00	-1.64	45.62	6.21	34.11	33.58	213	140	Average	VERTICAL
3	5182.00	104.13			97.30	6.24	34.16	33.57	213	140	Average	VERTICAL
4	5186.00	114.00			107.17	6.24	34.16	33.57	213	140	Peak	VERTICAL

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5147.00	66.33	74.00	-7.67	59.59	6.21	34.11	33.58	211	141	Peak	VERTICAL
2	5150.00	52.75	54.00	-1.25	46.01	6.21	34.11	33.58	211	141	Average	VERTICAL
3	5197.00	118.00			111.11	6.27	34.18	33.56	211	141	Peak	VERTICAL
4	5198.00	107.97			101.08	6.27	34.18	33.56	211	141	Average	VERTICAL

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5118.00	63.40	74.00	-10.60	56.79	6.14	34.06	33.59	213	193	Peak	VERTICAL
2	5122.00	50.65	54.00	-3.35	44.01	6.17	34.06	33.59	213	193	Average	VERTICAL
3	5242.00	109.86			102.86	6.30	34.25	33.55	213	193	Average	VERTICAL
4	5242.00	120.98			113.98	6.30	34.25	33.55	213	193	Peak	VERTICAL
5	5368.00	52.68	54.00	-1.32	45.30	6.47	34.41	33.50	213	193	Average	VERTICAL
6	5369.00	64.19	74.00	-9.81	56.81	6.47	34.41	33.50	213	193	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5714.00	66.61	68.20	-1.59	58.48	6.83	34.68	33.38	133	181	Peak	VERTICAL
2	5725.00	75.46	78.20	-2.74	67.31	6.83	34.69	33.37	133	181	Peak	VERTICAL
3	5743.00	103.19			95.00	6.86	34.70	33.37	133	181	Average	VERTICAL
4	5746.00	114.02			105.83	6.86	34.70	33.37	133	181	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	5713.00	67.08	68.20	-1.12	58.95	6.83	34.68	33.38	190	176	Peak	VERTICAL
2	5725.00	69.56	78.20	-8.64	61.41	6.83	34.69	33.37	190	176	Peak	VERTICAL
3	5780.00	119.88			111.64	6.88	34.71	33.35	190	176	Peak	VERTICAL
4	5784.00	107.55			99.29	6.90	34.71	33.35	190	176	Average	VERTICAL
5	5855.00	68.86	78.20	-9.34	60.50	6.95	34.74	33.33	190	176	Peak	VERTICAL
6	5865.00	66.40	68.20	-1.80	58.01	6.97	34.74	33.32	190	176	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	5820.00	113.89			105.58	6.92	34.73	33.34	189	161	Peak	VERTICAL
2	5823.00	103.83			95.52	6.92	34.73	33.34	189	161	Average	VERTICAL
3	5850.00	73.89	78.20	-4.31	65.53	6.95	34.74	33.33	189	161	Peak	VERTICAL
4	5862.00	67.04	68.20	-1.16	58.66	6.97	34.74	33.33	189	161	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5149.00	69.26	74.00	-4.74	62.52	6.21	34.11	33.58	212	153	Peak	VERTICAL
2	5150.00	52.65	54.00	-1.35	45.91	6.21	34.11	33.58	212	153	Average	VERTICAL
3	5182.00	98.97			92.14	6.24	34.16	33.57	212	153	Average	VERTICAL
4	5185.00	108.46			101.63	6.24	34.16	33.57	212	153	Peak	VERTICAL

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5115.00	66.81	74.00	-7.19	60.21	6.14	34.06	33.60	194	191	Peak	VERTICAL
2	5142.00	52.71	54.00	-1.29	46.01	6.17	34.11	33.58	194	191	Average	VERTICAL
3	5233.00	104.96			97.98	6.30	34.23	33.55	194	191	Average	VERTICAL
4	5236.00	117.67			110.69	6.30	34.23	33.55	194	191	Peak	VERTICAL
5	5361.00	52.08	54.00	-1.92	44.70	6.47	34.41	33.50	194	191	Average	VERTICAL
6	5368.00	66.36	74.00	-7.64	58.98	6.47	34.41	33.50	194	191	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5714.00	66.83	68.20	-1.37	58.70	6.83	34.68	33.38	134	184 Peak	VERTICAL
2	5724.00	71.70	78.20	-6.50	63.55	6.83	34.69	33.37	134	184 Peak	VERTICAL
3	5758.00	100.42			92.20	6.88	34.70	33.36	134	184 Average	VERTICAL
4	5768.00	111.97			103.75	6.88	34.70	33.36	134	184 Peak	VERTICAL

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

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5705.00	61.51	68.20	-6.69	53.38	6.83	34.68	33.38	132	188 Peak	VERTICAL
2	5724.00	62.17	78.20	-16.03	54.02	6.83	34.69	33.37	132	188 Peak	VERTICAL
3	5789.00	112.39			104.12	6.90	34.72	33.35	132	188 Peak	VERTICAL
4	5791.00	101.34			93.07	6.90	34.72	33.35	132	188 Average	VERTICAL
5	5853.00	67.95	78.20	-10.25	59.59	6.95	34.74	33.33	132	188 Peak	VERTICAL
6	5864.00	66.78	68.20	-1.42	58.40	6.97	34.74	33.33	132	188 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 28, 2014		
Test Mode	Mode 1: (Ant.2 Dipole antenna / 7.3dBi / 3TX)		

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	52.59	54.00	-1.41	45.85	6.21	34.11	33.58	211	197	Average	VERTICAL
2	5150.00	66.26	74.00	-7.74	59.52	6.21	34.11	33.58	211	197	Peak	VERTICAL
3	5221.00	108.14			101.19	6.30	34.20	33.55	211	197	Peak	VERTICAL
4	5222.00	98.35			91.40	6.30	34.20	33.55	211	197	Average	VERTICAL
5	5352.00	50.13	54.00	-3.87	42.78	6.47	34.39	33.51	211	197	Average	VERTICAL
6	5364.00	61.64	74.00	-12.36	54.26	6.47	34.41	33.50	211	197	Peak	VERTICAL

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

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5711.00	67.06	68.20	-1.14	58.93	6.83	34.68	33.38	188	174	Peak	VERTICAL
2	5724.00	71.00	78.20	-7.20	62.85	6.83	34.69	33.37	188	174	Peak	VERTICAL
3	5781.00	107.44			99.20	6.88	34.71	33.35	188	174	Peak	VERTICAL
4	5785.00	96.96			88.70	6.90	34.71	33.35	188	174	Average	VERTICAL
5	5850.00	66.08	78.20	-12.12	57.72	6.95	34.74	33.33	188	174	Peak	VERTICAL
6	5882.00	64.06	68.20	-4.14	55.66	6.97	34.75	33.32	188	174	Peak	VERTICAL

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

Note:

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

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 4 + Chain 5
Test Date	Dec. 22, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5140.00	68.15	74.00	-5.85	61.46	6.17	34.11	33.59	0	173	Peak	VERTICAL
2	5150.00	52.99	54.00	-1.01	46.25	6.21	34.11	33.58	0	173	Average	VERTICAL
3	5179.00	115.03			108.20	6.24	34.16	33.57	0	173	Peak	VERTICAL
4	5182.00	103.64			96.81	6.24	34.16	33.57	0	173	Average	VERTICAL
5	5395.00	49.46	54.00	-4.54	41.99	6.50	34.46	33.49	0	173	Average	VERTICAL
6	5398.00	62.29	74.00	-11.71	54.82	6.50	34.46	33.49	0	173	Peak	VERTICAL

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5149.00	66.84	74.00	-7.16	60.10	6.21	34.11	33.58	360	200	Peak	VERTICAL
2	5150.00	52.88	54.00	-1.12	46.14	6.21	34.11	33.58	360	200	Average	VERTICAL
3	5201.00	118.59			111.70	6.27	34.18	33.56	360	200	Peak	VERTICAL
4	5202.00	107.50			100.61	6.27	34.18	33.56	360	200	Average	VERTICAL
5	5419.00	49.65	54.00	-4.35	42.12	6.53	34.48	33.48	360	200	Average	VERTICAL
6	5425.00	62.72	74.00	-11.28	55.16	6.56	34.48	33.48	360	200	Peak	VERTICAL

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5117.00	52.50	54.00	-1.50	45.89	6.14	34.06	33.59	353	160	Average	VERTICAL
2	5120.00	64.22	74.00	-9.78	57.58	6.17	34.06	33.59	353	160	Peak	VERTICAL
3	5235.00	120.53			113.55	6.30	34.23	33.55	353	160	Peak	VERTICAL
4	5238.00	109.03			102.05	6.30	34.23	33.55	353	160	Average	VERTICAL
5	5358.00	51.76	54.00	-2.24	44.40	6.47	34.39	33.50	353	160	Average	VERTICAL
6	5361.00	64.66	74.00	-9.34	57.28	6.47	34.41	33.50	353	160	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 4 + Chain 5
Test Date	Dec. 22, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5715.00	66.69	68.20	-1.51	58.56	6.83	34.68	33.38	24	207 Peak	VERTICAL
2	5724.00	72.89	78.20	-5.31	64.74	6.83	34.69	33.37	24	207 Peak	VERTICAL
3	5742.00	111.89			103.70	6.86	34.70	33.37	24	207 Peak	VERTICAL
4	5743.00	102.05			93.86	6.86	34.70	33.37	24	207 Average	VERTICAL

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

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5713.00	65.85	68.20	-2.35	57.72	6.83	34.68	33.38	348	182 Peak	VERTICAL
2	5725.00	71.72	78.20	-6.48	63.57	6.83	34.69	33.37	348	182 Peak	VERTICAL
3	5787.00	108.77			100.50	6.90	34.72	33.35	348	182 Average	VERTICAL
4	5787.00	118.83			110.56	6.90	34.72	33.35	348	182 Peak	VERTICAL
5	5856.00	68.88	78.20	-9.32	60.52	6.95	34.74	33.33	348	182 Peak	VERTICAL
6	5862.00	66.74	68.20	-1.46	58.36	6.97	34.74	33.33	348	182 Peak	VERTICAL

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

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5824.00	114.32			106.01	6.92	34.73	33.34	12	205 Peak	VERTICAL
2	5827.00	104.25			95.94	6.92	34.73	33.34	12	205 Average	VERTICAL
3	5850.00	73.76	78.20	-4.44	65.40	6.95	34.74	33.33	12	205 Peak	VERTICAL
4	5864.00	67.08	68.20	-1.12	58.70	6.97	34.74	33.33	12	205 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 4 + Chain 5
Test Date	Dec. 22, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5147.00	69.80	74.00	-4.20	63.06	6.21	34.11	33.58	7	219 Peak	VERTICAL
2	5150.00	52.93	54.00	-1.07	46.19	6.21	34.11	33.58	7	219 Average	VERTICAL
3	5187.00	108.13			101.30	6.24	34.16	33.57	7	219 Peak	VERTICAL
4	5193.00	99.54			92.69	6.24	34.18	33.57	7	219 Average	VERTICAL

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5132.00	64.90	74.00	-9.10	58.23	6.17	34.09	33.59	354	196 Peak	VERTICAL
2	5150.00	52.89	54.00	-1.11	46.15	6.21	34.11	33.58	354	196 Average	VERTICAL
3	5233.00	104.46			97.48	6.30	34.23	33.55	354	196 Average	VERTICAL
4	5234.00	114.36			107.38	6.30	34.23	33.55	354	196 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 4 + Chain 5
Test Date	Dec. 22, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 2TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5714.00	67.07	68.20	-1.13	58.94	6.83	34.68	33.38	350	201	Peak	VERTICAL
2	5725.00	72.27	78.20	-5.93	64.12	6.83	34.69	33.37	350	201	Peak	VERTICAL
3	5749.00	110.15			101.95	6.86	34.70	33.36	350	201	Peak	VERTICAL
4	5752.00	100.09			91.89	6.86	34.70	33.36	350	201	Average	VERTICAL

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

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.00	63.30	68.20	-4.90	55.17	6.83	34.68	33.38	350	148	Peak	VERTICAL
2	5721.00	64.59	78.20	-13.61	56.44	6.83	34.69	33.37	350	148	Peak	VERTICAL
3	5792.00	100.81			92.54	6.90	34.72	33.35	350	148	Average	VERTICAL
4	5798.00	111.51			103.24	6.90	34.72	33.35	350	148	Peak	VERTICAL
5	5853.00	71.29	78.20	-6.91	62.93	6.95	34.74	33.33	350	148	Peak	VERTICAL
6	5864.00	66.92	68.20	-1.28	58.54	6.97	34.74	33.33	350	148	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 4 + Chain 5
Test Date	Dec. 22, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1 dBi / 2TX)		

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5149.00	52.92	54.00	-1.08	46.18	6.21	34.11	33.58	5	174	Average	VERTICAL
2	5149.00	69.35	74.00	-4.65	62.61	6.21	34.11	33.58	5	174	Peak	VERTICAL
3	5214.00	96.08			89.17	6.27	34.20	33.56	5	174	Average	VERTICAL
4	5214.00	106.43			99.52	6.27	34.20	33.56	5	174	Peak	VERTICAL
5	5351.00	60.47	74.00	-13.53	53.12	6.47	34.39	33.51	5	174	Peak	VERTICAL
6	5398.00	48.80	54.00	-5.20	41.33	6.50	34.46	33.49	5	174	Average	VERTICAL

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

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5711.00	66.49	68.20	-1.71	58.36	6.83	34.68	33.38	336	186	Peak	VERTICAL
2	5722.00	70.77	78.20	-7.43	62.62	6.83	34.69	33.37	336	186	Peak	VERTICAL
3	5759.00	106.19			97.97	6.88	34.70	33.36	336	186	Peak	VERTICAL
4	5772.00	95.33			87.10	6.88	34.71	33.36	336	186	Average	VERTICAL
5	5851.00	66.89	78.20	-11.31	58.53	6.95	34.74	33.33	336	186	Peak	VERTICAL
6	5864.00	66.85	68.20	-1.35	58.47	6.97	34.74	33.33	336	186	Peak	VERTICAL

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

Note:

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

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 22, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5097.00	63.33	74.00	-10.67	56.75	6.14	34.04	33.60	356	175	Peak	VERTICAL
2	5150.00	52.66	54.00	-1.34	45.92	6.21	34.11	33.58	356	175	Average	VERTICAL
3	5178.00	105.75			98.92	6.24	34.16	33.57	356	175	Average	VERTICAL
4	5183.00	116.62			109.79	6.24	34.16	33.57	356	175	Peak	VERTICAL

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5118.00	53.00	54.00	-1.00	46.39	6.14	34.06	33.59	356	170	Average	VERTICAL
2	5120.00	65.70	74.00	-8.30	59.06	6.17	34.06	33.59	356	170	Peak	VERTICAL
3	5198.00	108.78			101.89	6.27	34.18	33.56	356	170	Average	VERTICAL
4	5202.00	118.90			112.01	6.27	34.18	33.56	356	170	Peak	VERTICAL

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5117.00	52.39	54.00	-1.61	45.78	6.14	34.06	33.59	340	195	Average	VERTICAL
2	5119.00	63.85	74.00	-10.15	57.21	6.17	34.06	33.59	340	195	Peak	VERTICAL
3	5236.00	121.52			114.54	6.30	34.23	33.55	340	195	Peak	VERTICAL
4	5238.00	111.21			104.23	6.30	34.23	33.55	340	195	Average	VERTICAL
5	5357.00	65.05	74.00	-8.95	57.69	6.47	34.39	33.50	340	195	Peak	VERTICAL
6	5359.00	52.50	54.00	-1.50	45.14	6.47	34.39	33.50	340	195	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 23, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5715.00	67.02	68.20	-1.18	58.89	6.83	34.68	33.38	357	202 Peak	VERTICAL
2	5725.00	76.12	78.20	-2.08	67.97	6.83	34.69	33.37	357	202 Peak	VERTICAL
3	5743.00	105.24			97.05	6.86	34.70	33.37	357	202 Average	VERTICAL
4	5744.00	115.64			107.45	6.86	34.70	33.37	357	202 Peak	VERTICAL

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

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5698.00	66.51	68.20	-1.69	58.40	6.81	34.68	33.38	357	162 Peak	VERTICAL
2	5720.00	66.92	78.20	-11.28	58.77	6.83	34.69	33.37	357	162 Peak	VERTICAL
3	5783.00	110.45			102.19	6.90	34.71	33.35	357	162 Average	VERTICAL
4	5784.00	121.09			112.83	6.90	34.71	33.35	357	162 Peak	VERTICAL
5	5857.00	68.78	78.20	-9.42	60.42	6.95	34.74	33.33	357	162 Peak	VERTICAL
6	5908.00	66.72	68.20	-1.48	58.27	6.99	34.77	33.31	357	162 Peak	VERTICAL

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

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5823.00	106.35			98.04	6.92	34.73	33.34	343	177 Average	VERTICAL
2	5824.00	116.57			108.26	6.92	34.73	33.34	343	177 Peak	VERTICAL
3	5850.00	77.09	78.20	-1.11	68.73	6.95	34.74	33.33	343	177 Peak	VERTICAL
4	5860.00	66.89	68.20	-1.31	58.51	6.97	34.74	33.33	343	177 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 23, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5148.00	70.04	74.00	-3.96	63.30	6.21	34.11	33.58	0	194 Peak	VERTICAL
2	5149.00	52.82	54.00	-1.18	46.08	6.21	34.11	33.58	0	194 Average	VERTICAL
3	5187.00	100.93			94.10	6.24	34.16	33.57	0	194 Average	VERTICAL
4	5187.00	111.73			104.90	6.24	34.16	33.57	0	194 Peak	VERTICAL

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5141.00	69.53	74.00	-4.47	62.84	6.17	34.11	33.59	355	205 Peak	VERTICAL
2	5149.00	52.80	54.00	-1.20	46.06	6.21	34.11	33.58	355	205 Average	VERTICAL
3	5235.00	116.36			109.38	6.30	34.23	33.55	355	205 Peak	VERTICAL
4	5238.00	105.59			98.61	6.30	34.23	33.55	355	205 Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 23, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1dBi / 3TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5714.00	67.17	68.20	-1.03	59.04	6.83	34.68	33.38	348	197	Peak	VERTICAL
2	5720.00	71.54	78.20	-6.66	63.39	6.83	34.69	33.37	348	197	Peak	VERTICAL
3	5751.00	111.68			103.48	6.86	34.70	33.36	348	197	Peak	VERTICAL
4	5752.00	101.59			93.39	6.86	34.70	33.36	348	197	Average	VERTICAL

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

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5710.00	62.67	68.20	-5.53	54.54	6.83	34.68	33.38	2	198	Peak	VERTICAL
2	5724.00	62.43	78.20	-15.77	54.28	6.83	34.69	33.37	2	198	Peak	VERTICAL
3	5791.00	101.69			93.42	6.90	34.72	33.35	2	198	Average	VERTICAL
4	5791.00	112.83			104.56	6.90	34.72	33.35	2	198	Peak	VERTICAL
5	5852.00	65.60	78.20	-12.60	57.24	6.95	34.74	33.33	2	198	Peak	VERTICAL
6	5860.00	66.50	68.20	-1.70	58.12	6.97	34.74	33.33	2	198	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 23, 2014		
Test Mode	Mode 2: (Ant.8 Panel antenna / 5.1 dBi / 3TX)		

Channel 42

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5119.00	64.79	74.00	-9.21	58.15	6.17	34.06	33.59	356	168	Peak	VERTICAL
2	5147.00	52.91	54.00	-1.09	46.17	6.21	34.11	33.58	356	168	Average	VERTICAL
3	5198.00	96.97			90.08	6.27	34.18	33.56	356	168	Average	VERTICAL
4	5219.00	108.81			101.90	6.27	34.20	33.56	356	168	Peak	VERTICAL
5	5369.00	60.49	74.00	-13.51	53.11	6.47	34.41	33.50	356	168	Peak	VERTICAL
6	5395.00	48.67	54.00	-5.33	41.20	6.50	34.46	33.49	356	168	Average	VERTICAL

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

Channel 155

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5709.00	66.95	68.20	-1.25	58.82	6.83	34.68	33.38	348	175	Peak	VERTICAL
2	5721.00	70.40	78.20	-7.80	62.25	6.83	34.69	33.37	348	175	Peak	VERTICAL
3	5760.00	108.28			100.06	6.88	34.70	33.36	348	175	Peak	VERTICAL
4	5771.00	97.52			89.29	6.88	34.71	33.36	348	175	Average	VERTICAL
5	5851.00	65.46	78.20	-12.74	57.10	6.95	34.74	33.33	348	175	Peak	VERTICAL
6	5861.00	66.62	68.20	-1.58	58.24	6.97	34.74	33.33	348	175	Peak	VERTICAL

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

Note:

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

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 36, 40, 48 / Chain 4 + Chain 5
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5144.93	69.21	74.00	-4.79	62.47	6.21	34.11	33.58	13	234	Peak	VERTICAL
2	5150.00	52.36	54.00	-1.64	45.62	6.21	34.11	33.58	13	234	Average	VERTICAL
3	5177.83	102.98			96.15	6.24	34.16	33.57	13	234	Average	VERTICAL
4	5180.00	113.64			106.81	6.24	34.16	33.57	13	234	Peak	VERTICAL

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5147.83	70.51	74.00	-3.49	63.77	6.21	34.11	33.58	15	218	Peak	VERTICAL
2	5150.00	52.94	54.00	-1.06	46.20	6.21	34.11	33.58	15	218	Average	VERTICAL
3	5198.55	118.30			111.41	6.27	34.18	33.56	15	218	Peak	VERTICAL
4	5202.17	107.57			100.68	6.27	34.18	33.56	15	218	Average	VERTICAL
5	5350.00	48.67	54.00	-5.33	41.32	6.47	34.39	33.51	15	218	Average	VERTICAL
6	5350.00	61.09	74.00	-12.91	53.74	6.47	34.39	33.51	15	218	Peak	VERTICAL

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5117.44	51.38	54.00	-2.62	44.77	6.14	34.06	33.59	15	203	Average	VERTICAL
2	5144.21	64.93	74.00	-9.07	58.19	6.21	34.11	33.58	15	203	Peak	VERTICAL
3	5237.83	109.80			102.82	6.30	34.23	33.55	15	203	Average	VERTICAL
4	5237.83	120.75			113.77	6.30	34.23	33.55	15	203	Peak	VERTICAL
5	5352.17	65.62	74.00	-8.38	58.27	6.47	34.39	33.51	15	203	Peak	VERTICAL
6	5362.30	52.84	54.00	-1.16	45.46	6.47	34.41	33.50	15	203	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 149, 157, 165 / Chain 4 + Chain 5
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 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	5713.55	67.00	68.20	-1.20	58.87	6.83	34.68	33.38	26	203	Peak	HORIZONTAL
2	5725.00	74.58	78.20	-3.62	66.43	6.83	34.69	33.37	26	203	Peak	HORIZONTAL
3	5745.72	100.64			92.45	6.86	34.70	33.37	26	203	Average	HORIZONTAL
4	5745.72	112.81			104.62	6.86	34.70	33.37	26	203	Peak	HORIZONTAL

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	5712.83	67.01	68.20	-1.19	58.88	6.83	34.68	33.38	27	205	Peak	HORIZONTAL
2	5724.28	70.17	78.20	-8.03	62.02	6.83	34.69	33.37	27	205	Peak	HORIZONTAL
3	5785.72	107.58			99.31	6.90	34.72	33.35	27	205	Average	HORIZONTAL
4	5787.89	119.18			110.91	6.90	34.72	33.35	27	205	Peak	HORIZONTAL
5	5852.89	69.04	78.20	-9.16	60.68	6.95	34.74	33.33	27	205	Peak	HORIZONTAL
6	5860.00	67.11	68.20	-1.09	58.73	6.97	34.74	33.33	27	205	Peak	HORIZONTAL

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	5826.45	101.60			93.29	6.92	34.73	33.34	31	209	Average	HORIZONTAL
2	5826.45	113.86			105.55	6.92	34.73	33.34	31	209	Peak	HORIZONTAL
3	5850.00	76.86	78.20	-1.34	68.50	6.95	34.74	33.33	31	209	Peak	HORIZONTAL
4	5860.00	67.11	68.20	-1.09	58.73	6.97	34.74	33.33	31	209	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 38, 46 / Chain 4 + Chain 5
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Channel 38

	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	dB	deg	cm		
1	5149.28	69.63	74.00	-4.37	62.89	6.21	34.11	33.58	12	214	Peak	VERTICAL
2	5150.00	52.71	54.00	-1.29	45.97	6.21	34.11	33.58	12	214	Average	VERTICAL
3	5184.21	99.05			92.22	6.24	34.16	33.57	12	214	Average	VERTICAL
4	5185.66	108.76			101.93	6.24	34.16	33.57	12	214	Peak	VERTICAL

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

Channel 46

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.55	67.70	74.00	-6.30	60.96	6.21	34.11	33.58	40	204	Peak	HORIZONTAL
2	5150.00	51.50	54.00	-2.50	44.76	6.21	34.11	33.58	40	204	Average	HORIZONTAL
3	5216.98	113.79			106.88	6.27	34.20	33.56	40	204	Peak	HORIZONTAL
4	5234.34	102.63			95.65	6.30	34.23	33.55	40	204	Average	HORIZONTAL
5	5350.00	49.13	54.00	-4.87	41.78	6.47	34.39	33.51	40	204	Average	HORIZONTAL
6	5352.89	61.33	74.00	-12.67	53.98	6.47	34.39	33.51	40	204	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 151, 159 / Chain 4 + Chain 5
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5704.15	66.96	68.20	-1.24	58.85	6.81	34.68	33.38	25	211 Peak	HORIZONTAL
2	5723.55	73.91	78.20	-4.29	65.76	6.83	34.69	33.37	25	211 Peak	HORIZONTAL
3	5741.25	108.37			100.18	6.86	34.70	33.37	25	211 Peak	HORIZONTAL
4	5750.66	96.96			88.76	6.86	34.70	33.36	25	211 Peak	HORIZONTAL

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

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5710.66	63.85	68.20	-4.35	55.72	6.83	34.68	33.38	341	198 Peak	VERTICAL
2	5723.55	66.58	78.20	-11.62	58.43	6.83	34.69	33.37	341	198 Peak	VERTICAL
3	5789.21	100.84			92.57	6.90	34.72	33.35	341	198 Average	VERTICAL
4	5789.93	111.25			102.98	6.90	34.72	33.35	341	198 Peak	VERTICAL
5	5852.17	71.67	78.20	-6.53	63.31	6.95	34.74	33.33	341	198 Peak	VERTICAL
6	5862.17	67.07	68.20	-1.13	58.69	6.97	34.74	33.33	341	198 Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 42, 155 / Chain 4 + Chain 5
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 2TX)		

Channel 42

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5149.28	52.92	54.00	-1.08	46.18	6.21	34.11	33.58	41	204 Average	HORIZONTAL
2	5150.00	70.32	74.00	-3.68	63.58	6.21	34.11	33.58	41	204 Peak	HORIZONTAL
3	5217.96	95.66			88.75	6.27	34.20	33.56	41	204 Average	HORIZONTAL
4	5220.13	106.10			99.18	6.27	34.20	33.55	41	204 Peak	HORIZONTAL
5	5350.00	49.67	54.00	-4.33	42.32	6.47	34.39	33.51	41	204 Average	HORIZONTAL
6	5433.21	62.38	74.00	-11.62	54.79	6.56	34.51	33.48	41	204 Peak	HORIZONTAL

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

Channel 155

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5707.76	67.06	68.20	-1.14	58.93	6.83	34.68	33.38	26	200 Peak	HORIZONTAL
2	5722.11	73.25	78.20	-4.95	65.10	6.83	34.69	33.37	26	200 Peak	HORIZONTAL
3	5785.13	94.77			86.51	6.90	34.71	33.35	26	200 Average	HORIZONTAL
4	5787.30	105.51			97.24	6.90	34.72	33.35	26	200 Peak	HORIZONTAL
5	5854.34	68.91	78.20	-9.29	60.55	6.95	34.74	33.33	26	200 Peak	HORIZONTAL
6	5869.41	67.13	68.20	-1.07	58.74	6.97	34.74	33.32	26	200 Peak	HORIZONTAL

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

Note:

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

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 36, 40, 48 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 36

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5097.90	52.43	54.00	-1.57	45.85	6.14	34.04	33.60	22	193	Average	VERTICAL
2	5147.68	66.64	74.00	-7.36	59.90	6.21	34.11	33.58	22	193	Peak	VERTICAL
3	5177.68	107.13			100.30	6.24	34.16	33.57	22	193	Average	VERTICAL
4	5182.32	119.09			112.26	6.24	34.16	33.57	22	193	Peak	VERTICAL

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

Channel 40

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5117.87	52.98	54.00	-1.02	46.37	6.14	34.06	33.59	21	202	Average	VERTICAL
2	5120.77	66.52	74.00	-7.48	59.88	6.17	34.06	33.59	21	202	Peak	VERTICAL
3	5197.11	121.17			114.28	6.27	34.18	33.56	21	202	Peak	VERTICAL
4	5197.68	109.51			102.62	6.27	34.18	33.56	21	202	Average	VERTICAL

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

Channel 48

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5117.60	50.98	54.00	-3.02	44.37	6.14	34.06	33.59	21	202	Average	VERTICAL
2	5118.20	64.16	74.00	-9.84	57.55	6.14	34.06	33.59	21	202	Peak	VERTICAL
3	5237.60	108.55			101.57	6.30	34.23	33.55	21	202	Average	VERTICAL
4	5238.80	119.92			112.94	6.30	34.23	33.55	21	202	Peak	VERTICAL
5	5358.40	52.93	54.00	-1.07	45.57	6.47	34.39	33.50	21	202	Average	VERTICAL
6	5365.00	65.79	74.00	-8.21	58.41	6.47	34.41	33.50	21	202	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 149, 157, 165 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 149

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.40	67.08	68.20	-1.12	58.95	6.83	34.68	33.38	30	201	Peak	HORIZONTAL
2	5725.00	73.93	78.20	-4.27	65.78	6.83	34.69	33.37	30	201	Peak	HORIZONTAL
3	5740.20	111.10			102.91	6.86	34.70	33.37	30	201	Peak	HORIZONTAL
4	5746.20	100.05			91.86	6.86	34.70	33.37	30	201	Average	HORIZONTAL

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

Channel 157

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5697.60	66.18	68.20	-2.02	58.07	6.81	34.68	33.38	288	188	Peak	VERTICAL
2	5722.00	64.28	78.20	-13.92	56.13	6.83	34.69	33.37	288	188	Peak	VERTICAL
3	5786.80	109.14			100.87	6.90	34.72	33.35	288	188	Average	VERTICAL
4	5786.80	119.67			111.40	6.90	34.72	33.35	288	188	Peak	VERTICAL
5	5857.20	67.28	78.20	-10.92	58.92	6.95	34.74	33.33	288	188	Peak	VERTICAL
6	5864.20	67.17	68.20	-1.03	58.79	6.97	34.74	33.33	288	188	Peak	VERTICAL

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

Channel 165

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5822.00	117.46			109.15	6.92	34.73	33.34	280	180	Peak	VERTICAL
2	5822.60	106.39			98.08	6.92	34.73	33.34	280	180	Average	VERTICAL
3	5851.20	74.51	78.20	-3.69	66.15	6.95	34.74	33.33	280	180	Peak	VERTICAL
4	5866.00	66.96	68.20	-1.24	58.57	6.97	34.74	33.32	280	180	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 38, 46 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 38

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5150.00	52.96	54.00	-1.04	46.22	6.21	34.11	33.58	22	208	Average	VERTICAL
2	5150.00	69.15	74.00	-4.85	62.41	6.21	34.11	33.58	22	208	Peak	VERTICAL
3	5196.60	113.26			106.37	6.27	34.18	33.56	22	208	Peak	VERTICAL
4	5197.80	102.50			95.61	6.27	34.18	33.56	22	208	Average	VERTICAL

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

Channel 46

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5134.00	66.27	74.00	-7.73	59.60	6.17	34.09	33.59	23	212	Peak	VERTICAL
2	5147.60	52.65	54.00	-1.35	45.91	6.21	34.11	33.58	23	212	Average	VERTICAL
3	5221.20	118.19			111.24	6.30	34.20	33.55	23	212	Peak	VERTICAL
4	5238.00	106.58			99.60	6.30	34.23	33.55	23	212	Average	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 151, 159 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 151

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5715.00	66.97	68.20	-1.23	58.84	6.83	34.68	33.38	274	172	Peak	VERTICAL
2	5722.60	72.25	78.20	-5.95	64.10	6.83	34.69	33.37	274	172	Peak	VERTICAL
3	5747.20	99.48			91.28	6.86	34.70	33.36	274	172	Average	VERTICAL
4	5762.80	111.22			103.00	6.88	34.70	33.36	274	172	Peak	VERTICAL

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

Channel 159

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5715.00	64.69	68.20	-3.51	56.56	6.83	34.68	33.38	288	199	Peak	VERTICAL
2	5725.00	64.53	78.20	-13.67	56.38	6.83	34.69	33.37	288	199	Peak	VERTICAL
3	5780.60	114.27			106.03	6.88	34.71	33.35	288	199	Peak	VERTICAL
4	5787.20	102.35			94.08	6.90	34.72	33.35	288	199	Average	VERTICAL
5	5850.00	71.00	78.20	-7.20	62.64	6.95	34.74	33.33	288	199	Peak	VERTICAL
6	5863.00	66.80	68.20	-1.40	58.42	6.97	34.74	33.33	288	199	Peak	VERTICAL

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

Temperature	23°C	Humidity	61%
Test Engineer	Mars Lin	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80 CH 42, 155 / Chain 4 + Chain 5 + Chain 6
Test Date	Dec. 25, 2014		
Test Mode	Mode 3: (Ant.9 CROSS-POLARIZED PANEL ANTENNA / Chain 4: 8.3, Chain 5: 5.9, Chain 6: 8.2dBi / 3TX)		

Channel 42

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5148.00	52.60	54.00	-1.40	45.86	6.21	34.11	33.58	20	203 Average	VERTICAL
2	5148.00	65.26	74.00	-8.74	58.52	6.21	34.11	33.58	20	203 Peak	VERTICAL
3	5198.00	98.79			91.90	6.27	34.18	33.56	20	203 Average	VERTICAL
4	5198.00	108.89			102.00	6.27	34.18	33.56	20	203 Peak	VERTICAL
5	5350.00	49.97	54.00	-4.03	42.62	6.47	34.39	33.51	20	203 Average	VERTICAL
6	5350.00	61.13	74.00	-12.87	53.78	6.47	34.39	33.51	20	203 Peak	VERTICAL

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

Channel 155

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5715.00	66.72	68.20	-1.48	58.59	6.83	34.68	33.38	278	189 Peak	VERTICAL
2	5722.00	68.87	78.20	-9.33	60.72	6.83	34.69	33.37	278	189 Peak	VERTICAL
3	5786.00	109.51			101.24	6.90	34.72	33.35	278	189 Peak	VERTICAL
4	5787.00	97.32			89.05	6.90	34.72	33.35	278	189 Average	VERTICAL
5	5854.00	63.76	78.20	-14.44	55.40	6.95	34.74	33.33	278	189 Peak	VERTICAL
6	5867.00	64.92	68.20	-3.28	56.53	6.97	34.74	33.32	278	189 Peak	VERTICAL

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

Note:

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

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

4.8. Frequency Stability Measurement

4.8.1. Limit

In-band emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

The transmitter center frequency tolerance shall be ± 20 ppm maximum for the 5 GHz band (IEEE 802.11n specification).

4.8.2. Measuring Instruments and Setting

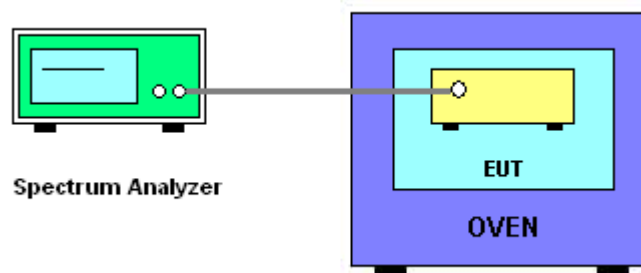
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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

4.8.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. f_c is declaring of channel frequency. Then the frequency error formula is $(f_c - f)/f_c \times 10^6$ ppm and the limit is less than ± 20 ppm (IEEE 802.11n specification).
6. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
7. Extreme temperature is $-30^\circ\text{C} \sim 60^\circ\text{C}$.

4.8.4. Test Setup Layout



4.8.5. Test Deviation

There is no deviation with the original standard.

4.8.6. EUT Operation during Test

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

4.8.7. Test Result of Frequency Stability

Temperature	22°C	Humidity	63%
Test Engineer	Nick Peng, Lucas Huang	Test Date	Jan. 08, 2015 ~ Jan. 14, 2015

Voltage vs. Frequency Stability

Mode	Voltage	Measurement Frequency (MHz)	
802.11ac MCS0/Nss1 VHT20	(V)	5200 MHz	5785 MHz
	126.50	5200.0300	5785.0400
	110.00	5200.0300	5785.0400
	93.50	5200.0300	5785.0400
	Max. Deviation (MHz)	0.0300	0.0400
	Max. Deviation (ppm)	5.77	6.91

Temperature vs. Frequency Stability

Mode	Temperature	Measurement Frequency (MHz)	
802.11ac MCS0/Nss1 VHT20	(°C)	5200 MHz	5785 MHz
	-30	5200.0300	5785.0600
	-20	5200.0400	5785.0400
	-10	5200.0600	5785.0500
	0	5200.0400	5785.0400
	10	5200.0300	5785.0600
	20	5200.0100	5785.0700
	30	5200.0400	5785.0400
	40	5200.0400	5785.0600
	50	5200.0100	5785.0700
	60	5200.0700	5785.0600
	Max. Deviation (MHz)	0.0600	0.0700
	Max. Deviation (ppm)	11.54	12.10

Voltage vs. Frequency Stability

Mode	Voltage	Measurement Frequency (MHz)	
802.11ac MCS0/Nss1 VHT40	(V)	5190 MHz	5755 MHz
	126.50	5190.0600	5755.0100
	110.00	5190.0600	5755.0100
	93.50	5190.0600	5755.0100
	Max. Deviation (MHz)	0.0600	0.0100
	Max. Deviation (ppm)	11.56	1.74

Temperature vs. Frequency Stability

Mode	Temperature	Measurement Frequency (MHz)	
802.11ac MCS0/Nss1 VHT40	(°C)	5190 MHz	5755 MHz
	-30	5190.0500	5755.0100
	-20	5190.0400	5755.0300
	-10	5190.0600	5755.0300
	0	5190.0500	5755.0200
	10	5190.0400	5755.0200
	20	5190.0500	5755.0300
	30	5190.0600	5755.0400
	40	5190.0600	5755.0600
	50	5190.0500	5755.0600
	60	5190.0400	5755.0400
	Max. Deviation (MHz)	0.0600	0.0600
	Max. Deviation (ppm)	11.56	10.43

Voltage vs. Frequency Stability

Mode	Voltage	Measurement Frequency (MHz)	
802.11ac MCS0/Nss1 VHT80	(V)	5210 MHz	5775 MHz
	126.50	5210.0300	5775.0400
	110.00	5210.0300	5775.0400
	93.50	5210.0300	5775.0400
	Max. Deviation (MHz)	0.0300	0.0400
	Max. Deviation (ppm)	5.76	6.93

Temperature vs. Frequency Stability

Mode	Temperature	Measurement Frequency (MHz)	
802.11ac MCS0/Nss1 VHT80	(°C)	5210 MHz	5775 MHz
	-30	5210.0300	5775.0600
	-20	5210.0600	5775.0500
	-10	5210.0400	5775.0500
	0	5210.0600	5775.0600
	10	5210.0500	5775.0300
	20	5210.0400	5775.0400
	30	5210.0600	5775.0900
	40	5210.0500	5775.0400
	50	5210.0500	5775.0600
	60	5210.0600	5775.0400
	Max. Deviation (MHz)	0.0600	0.0900
	Max. Deviation (ppm)	11.52	15.58

4.9. Antenna Requirements

4.9.1. Limit

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

4.9.2. Antenna Connector Construction

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

5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Test Receiver	R&S	ESCS 30	100355	9kHz ~ 2.75GHz	Apr. 23, 2014	Conduction (CO01-CB)
EMI Receiver	Agilent	N9038A	My52260123	9kHz ~ 8.45GHz	Jan. 23, 2017	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 02, 2014	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 14, 2016	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 02, 2014	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 21, 2016	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	Dec. 04, 2014	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	May 23, 2017	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA	Schaffner	CBL6112D	22021	20MHz ~ 2GHz	May 26, 2014	Radiation (03CH01-CB)
BILOG ANTENNA with 6dB Attenuator	TESEQ & EMCI	CBL6112D & N-6-06	37880 & AT-N0609	20MHz ~ 2GHz	Aug. 30, 2016	Radiation (03CH01-CB)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Jul. 28, 2014	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 16, 2016*	Radiation (10CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz~18GHz	Oct. 28, 2014	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Nov. 10, 2016	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. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8447D	2944A10991	0.1MHz ~ 1.3GHz	Nov. 15, 2014	Radiation (03CH01-CB)
Pre-Amplifier	EMCI	EMC330N	980332	20MHz ~ 3GHz	May 02, 2017	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Dec. 16, 2013	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 16, 2017	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	83017A	MY53270063	0.5GHz ~ 26.5GHz	Jun. 20, 2014	Radiation (03CH01-CB)
Pre-Amplifier	MITEQ	TTA1840-35-HG	1864479	18GHz ~ 40GHz	Jun. 28, 2016	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Nov. 25, 2014	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100080	9kHz ~ 40GHz	Oct. 15, 2014	Radiation (03CH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 22, 2016	Radiation (03CH01-CB)
EMI Test	R&S	ESCS	100355	9kHz ~ 2.75GHz	May 06, 2017	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz - 1 GHz	Nov. 15, 2014	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-16+17	N/A	30 MHz ~ 1 GHz	Oct. 24, 2016	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-3	N/A	1 GHz - 40 GHz	Nov. 15, 2014	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-4	N/A	1 GHz - 40 GHz	Nov. 15, 2014	Radiation (03CH01-CB)
Signal analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec.12, 2014	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 03, 2014	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-7	-	1 GHz – 26.5 GHz	Nov. 15, 2014	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-8	-	1 GHz – 26.5 GHz	Nov. 15, 2014	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-9	-	1 GHz – 26.5 GHz	Nov. 15, 2014	Conducted (TH01-CB)
RF Cable-high	Woken	High Cable-10	-	1 GHz – 26.5 GHz	Nov. 15, 2014	Conducted (TH01-CB)
Power Sensor	Anritsu	MA2411B	1126203	300MHz~40GHz	Oct. 06, 2014	Conducted (TH01-CB)
Power Meter	Anritsu	ML2495A	1210004	300MHz~40GHz	Oct. 06, 2014	Conducted (TH01-CB)

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

* Calibration Interval of instruments listed above is two years.

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

6. MEASUREMENT UNCERTAINTY

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%
Output Power Measurement	1.33 dB	Confidence levels of 95%
Power Density Measurement	1.27 dB	Confidence levels of 95%
Bandwidth Measurement	9.74×10^{-8}	Confidence levels of 95%
Frequency Stability	6.06×10^{-8}	Confidence levels of 95%

Appendix B. Maximum e.i.r.p. at any elevation angle above 30 degrees

1. Maximum e.i.r.p. at any elevation angle above 30 degrees

Ant.2 Omni-Directional antenna / 7.3dBi

For 1TX

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain 5 (dBm)	Elevation angle above 30° Max gain (dBi)	Elevation angle above 30° Max EIRP (dBm)	EIRP Power Limit (dBm)	Test Result
SISO	5180MHz	OFDM	Ch36	6Mbps	64	15.20	5.677	20.88	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	64	15.25	5.677	20.93	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	64	15.16	5.677	20.84	21	Complies
	5180MHz	HT20	Ch36	MCS0	64	15.22	5.677	20.90	21	Complies
	5200MHz	HT20	Ch40	MCS0	64	15.26	5.677	20.94	21	Complies
	5240MHz	HT20	Ch48	MCS0	64	15.17	5.677	20.85	21	Complies
	5190MHz	HT40	Ch38	MCS0	64	15.29	5.677	20.97	21	Complies
	5230MHz	HT40	Ch46	MCS0	63	15.30	5.677	20.98	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	64	15.19	5.677	20.87	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	64	15.29	5.677	20.97	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	64	15.16	5.677	20.84	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	64	15.28	5.677	20.96	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	63	15.25	5.677	20.93	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	65	15.27	5.677	20.95	21	Complies

For 2TX

Mode	Frequency	Modulation	Channel	Data Rate	Conducted Pass Setting	Chain 4 (dBm)	Chain 5 (dBm)	Total (dBm)	Elevation angle above 30° Max gain (dBi)	Elevation angle above 30° Max EIRP (dBm)	EIRP Power Limit (dBm)	Test Result
Non BF	5180MHz	OFDM	Ch36	6Mbps	52	12	12.43	15.23	5.677	20.91	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	52	12.11	12.45	15.29	5.677	20.97	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	52	12.13	12.4	15.28	5.677	20.95	21	Complies
	5180MHz	HT20	Ch36	MCS0	52	12.01	12.44	15.24	5.677	20.92	21	Complies
	5200MHz	HT20	Ch40	MCS0	52	12.12	12.46	15.30	5.677	20.98	21	Complies
	5240MHz	HT20	Ch48	MCS0	52	12.13	12.41	15.28	5.677	20.96	21	Complies
	5190MHz	HT40	Ch38	MCS0	51	11.99	12.26	15.14	5.677	20.81	21	Complies
	5230MHz	HT40	Ch46	MCS0	51	12.07	12.35	15.22	5.677	20.90	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	52	12.01	12.44	15.24	5.677	20.92	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	52	12.12	12.46	15.30	5.677	20.98	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	52	12.13	12.41	15.28	5.677	20.96	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	51	12.06	12.26	15.17	5.677	20.85	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	51	12.23	12.36	15.31	5.677	20.98	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	52	11.99	12.54	15.28	5.677	20.96	21	Complies
BF	5180MHz	OFDM	Ch36	6Mbps	39	9.31	9.22	12.28	8.687	20.96	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	38	8.88	9.13	12.02	8.687	20.70	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	39	8.95	9.44	12.21	8.687	20.90	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	39	9.3	9.25	12.29	8.687	20.97	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	38	8.89	9.12	12.02	8.687	20.70	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	39	9.01	9.45	12.25	8.687	20.93	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	39	9.13	9.45	12.30	8.687	20.99	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	38	9.07	8.84	11.97	8.687	20.65	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	40	8.75	9.39	12.09	8.687	20.78	21	Complies
STBC	5180MHz	VHT20	Ch36	MCS0-Nss1	52	11.94	12.44	15.21	5.677	20.88	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	52	12.01	12.43	15.24	5.677	20.91	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	52	12.07	12.23	15.16	5.677	20.84	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	51	11.88	12.36	15.14	5.677	20.81	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	52	11.87	12.54	15.23	5.677	20.91	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	52	11.93	12.52	15.25	5.677	20.92	21	Complies

For 3TX

Mode	Frequency	Modulation	Channel	Data Rate	Conduct ed Pass Setting	Chain 4 (dBm)	Chain 5 (dBm)	Chain 6 (dBm)	Total (dBm)	Elevation angle above 30° Max gain (dBi)	Elevation angle above 30° Max EIRP (dBm)	EIRP Power Limit (dBm)	Test Result
Non BF	5180MHz	OFDM	Ch36	6Mbps	46	10.05	10.61	10.34	15.11	5.677	20.79	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	46	10.28	10.61	10.43	15.21	5.677	20.89	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	46	10.22	10.8	10.13	15.16	5.677	20.84	21	Complies
	5180MHz	HT20	Ch36	MCS0	46	10.06	10.66	10.38	15.14	5.677	20.82	21	Complies
	5200MHz	HT20	Ch40	MCS0	46	10.33	10.6	10.22	15.16	5.677	20.83	21	Complies
	5240MHz	HT20	Ch48	MCS0	46	10.25	10.82	10.2	15.20	5.677	20.88	21	Complies
	5190MHz	HT40	Ch38	MCS0	46	10.12	10.83	10.55	15.28	5.677	20.96	21	Complies
	5230MHz	HT40	Ch46	MCS0	45	10.07	10.94	10.11	15.16	5.677	20.84	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	46	10.04	10.63	10.43	15.14	5.677	20.82	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	46	10.26	10.6	10.25	15.14	5.677	20.82	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	46	10.23	10.81	10.2	15.19	5.677	20.87	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	46	10.05	10.85	10.44	15.23	5.677	20.91	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	46	10.08	11.01	10.31	15.26	5.677	20.93	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	46	10.33	10.67	10.53	15.28	5.677	20.96	21	Complies
BF	5180MHz	OFDM	Ch36	6Mbps	26	5.35	6.01	5.32	10.34	10.448	20.79	21	Complies
	5200MHz	OFDM	Ch40	6Mbps	26	5.22	5.98	5.44	10.33	10.448	20.78	21	Complies
	5240MHz	OFDM	Ch48	6Mbps	26	5.26	5.78	5.49	10.29	10.448	20.73	21	Complies
	5180MHz	VHT20	Ch36	MCS0-Nss1	26	5.34	6	5.33	10.34	10.448	20.79	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	26	5.26	5.97	5.45	10.34	10.448	20.79	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	26	5.26	5.77	5.48	10.28	10.448	20.73	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	26	5.02	5.69	5.72	10.26	10.448	20.71	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	26	4.88	5.76	5.02	10.01	10.448	20.46	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	26	5.49	5.15	5.01	9.99	10.448	20.44	21	Complies
STBC	5180MHz	VHT20	Ch36	MCS0-Nss1	47	10.13	10.83	10.46	15.25	5.677	20.93	21	Complies
	5200MHz	VHT20	Ch40	MCS0-Nss1	46	10.22	10.33	10.41	15.09	5.677	20.77	21	Complies
	5240MHz	VHT20	Ch48	MCS0-Nss1	47	10.24	10.78	10.34	15.23	5.677	20.91	21	Complies
	5190MHz	VHT40	Ch38	MCS0-Nss1	46	10.01	10.68	10.51	15.18	5.677	20.86	21	Complies
	5230MHz	VHT40	Ch46	MCS0-Nss1	46	10.11	10.98	10.41	15.29	5.677	20.96	21	Complies
	5210MHz	VHT80	Ch42	MCS0-Nss1	46	10.17	10.54	10.58	15.21	5.677	20.88	21	Complies