

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 7: EUT 1 + Set 8 Sector Antenna / 12 dBi		

Channel 102

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5456.00	63.02	74.00	-10.98	53.49	8.36	34.23	33.06	158	350	Peak	VERTICAL
2	5460.00	50.80	54.00	-3.20	41.27	8.36	34.23	33.06	158	350	Average	VERTICAL
3	5467.60	67.06	68.20	-1.14	57.46	8.41	34.25	33.06	158	350	Peak	VERTICAL
4	5492.40	113.50			103.82	8.46	34.28	33.06	158	350	Peak	VERTICAL
5	5501.60	102.38			92.63	8.51	34.30	33.06	158	350	Average	VERTICAL

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

Channel 110

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5456.40	63.75	74.00	-10.25	54.22	8.36	34.23	33.06	175	354	Peak	HORIZONTAL
2	5460.00	51.11	54.00	-2.89	41.58	8.36	34.23	33.06	175	354	Average	HORIZONTAL
3	5466.80	67.17	68.20	-1.03	57.57	8.41	34.25	33.06	175	354	Peak	HORIZONTAL
4	5555.20	122.69			112.79	8.65	34.33	33.08	175	354	Peak	HORIZONTAL
5	5556.00	111.71			101.81	8.65	34.33	33.08	175	354	Average	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5550 MHz.

Channel 134

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5658.80	117.27			107.34	8.64	34.40	33.11	175	350	Peak	HORIZONTAL
2	5680.40	105.97			96.08	8.60	34.41	33.12	175	350	Average	HORIZONTAL
3	5725.00	67.06	68.20	-1.14	57.28	8.47	34.44	33.13	175	350	Peak	HORIZONTAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 7: EUT 1 + Set 8 Sector Antenna / 12 dBi		

Channel 58

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5119.00	59.93	74.00	-14.07	51.26	8.03	33.69	33.05	175	358	Peak	HORIZONTAL
2	5150.00	47.84	54.00	-6.16	39.00	8.15	33.74	33.05	175	358	Average	HORIZONTAL
3	5305.00	106.26			97.10	8.24	33.98	33.06	175	358	Peak	HORIZONTAL
4	5318.00	94.32			85.14	8.23	34.01	33.06	175	358	Average	HORIZONTAL
5	5351.00	67.34	74.00	-6.66	58.14	8.20	34.06	33.06	175	358	Peak	HORIZONTAL
6	5364.00	52.69	54.00	-1.31	43.48	8.19	34.08	33.06	175	358	Average	HORIZONTAL

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

Channel 106

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5457.00	65.84	74.00	-8.16	56.31	8.36	34.23	33.06	175	354	Peak	HORIZONTAL
2	5458.00	52.70	54.00	-1.30	43.17	8.36	34.23	33.06	175	354	Average	HORIZONTAL
3	5468.00	64.36	68.20	-3.84	54.76	8.41	34.25	33.06	175	354	Peak	HORIZONTAL
4	5506.00	108.38			98.64	8.51	34.30	33.07	175	354	Peak	HORIZONTAL
5	5517.00	96.85			87.05	8.56	34.31	33.07	175	354	Average	HORIZONTAL
6	5725.00	61.13	68.20	-7.07	51.35	8.47	34.44	33.13	175	354	Peak	HORIZONTAL

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

Channel 122

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.00	64.90	74.00	-9.10	55.37	8.36	34.23	33.06	223	354	Peak	HORIZONTAL
2	5460.00	52.63	54.00	-1.37	43.10	8.36	34.23	33.06	223	354	Average	HORIZONTAL
3	5463.00	66.16	68.20	-2.04	56.63	8.36	34.23	33.06	223	354	Peak	HORIZONTAL
4	5577.00	117.27			107.25	8.75	34.35	33.08	223	354	Peak	HORIZONTAL
5	5587.00	105.28			95.27	8.75	34.35	33.09	223	354	Average	HORIZONTAL
6	5739.00	63.74	68.20	-4.46	54.00	8.43	34.45	33.14	223	354	Peak	HORIZONTAL

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

Note:

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

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



Straddle Channel

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 7: EUT 1 + Set 8 Sector Antenna / 12 dBi		

Channel 144

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	dB	cm	deg	
1	5716.80	113.22			103.41	8.51	34.43	33.13	207	1 Average	HORIZONTAL
2	5721.60	123.56			113.75	8.51	34.43	33.13	207	1 Peak	HORIZONTAL
3	5872.80	50.90	54.00	-3.10	40.92	8.64	34.52	33.18	207	1 Average	HORIZONTAL
4	5885.60	63.09	74.00	-10.91	53.02	8.72	34.53	33.18	207	1 Peak	HORIZONTAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 7: EUT 1 + Set 8 Sector Antenna / 12 dBi		

Channel 142

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	cm	deg		
			dBuV/m	dB	dBuV	dB	dB/m	dB			
1	5709.20	120.41			110.60	8.51	34.43	33.13	190	346 Peak	HORIZONTAL
2	5714.00	109.52			99.71	8.51	34.43	33.13	190	346 Average	HORIZONTAL
3	5853.20	62.05	68.20	-6.15	52.15	8.56	34.51	33.17	190	346 Peak	HORIZONTAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 7: EUT 1 + Set 8 Sector Antenna / 12 dBi		

Channel 138

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	cm	deg		
			dBuV/m	dB	dBuV	dB	dB/m	dB			
1	5686.00	107.13			97.24	8.60	34.41	33.12	209	355 Average	HORIZONTAL
2	5719.00	119.02			109.21	8.51	34.43	33.13	209	355 Peak	HORIZONTAL
3	5875.00	63.25	68.20	-4.95	53.18	8.72	34.53	33.18	209	355 Peak	HORIZONTAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 01, 2015 ~ Dec. 02, 2015		
Test Mode	Mode 8: EUT 1 + Set 9 Sector Antenna / 4 dBi		

Channel 52

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5149.00	60.47	74.00	-13.53	51.63	8.15	33.74	33.05	175	90 Peak	HORIZONTAL
2	5150.00	48.09	54.00	-5.91	39.25	8.15	33.74	33.05	175	90 Average	HORIZONTAL
3	5264.80	116.36			107.22	8.26	33.94	33.06	175	90 Peak	HORIZONTAL
4	5265.40	105.66			96.52	8.26	33.94	33.06	175	90 Average	HORIZONTAL
5	5350.00	49.49	54.00	-4.51	40.29	8.20	34.06	33.06	175	90 Average	HORIZONTAL
6	5359.60	62.07	74.00	-11.93	52.86	8.19	34.08	33.06	175	90 Peak	HORIZONTAL

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

Channel 60

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5305.60	106.40			97.24	8.24	33.98	33.06	175	86 Average	HORIZONTAL
2	5306.40	116.76			107.60	8.24	33.98	33.06	175	86 Peak	HORIZONTAL
3	5352.00	50.00	54.00	-4.00	40.80	8.20	34.06	33.06	175	86 Average	HORIZONTAL
4	5385.60	62.45	74.00	-11.55	53.21	8.17	34.13	33.06	175	86 Peak	HORIZONTAL

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

Channel 64

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5316.20	106.56			97.38	8.23	34.01	33.06	178	83 Average	VERTICAL
2	5317.60	118.93			109.75	8.23	34.01	33.06	178	83 Peak	VERTICAL
3	5351.60	51.08	54.00	-2.92	41.88	8.20	34.06	33.06	178	83 Average	VERTICAL
4	5357.80	63.43	74.00	-10.57	54.22	8.19	34.08	33.06	178	83 Peak	VERTICAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 02, 2015		
Test Mode	Mode 8: EUT 1 + Set 9 Sector Antenna / 4 dBi		

Channel 100

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5459.00	63.51	74.00	-10.49	53.98	8.36	34.23	33.06	178	94 Peak	VERTICAL
2	5459.40	50.52	54.00	-3.48	40.99	8.36	34.23	33.06	178	94 Average	VERTICAL
3	5468.60	64.52	68.20	-3.68	54.92	8.41	34.25	33.06	178	94 Peak	VERTICAL
4	5494.80	118.32			108.64	8.46	34.28	33.06	178	94 Peak	VERTICAL
5	5496.00	106.64			96.89	8.51	34.30	33.06	178	94 Average	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 116

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5420.80	61.53	74.00	-12.47	52.14	8.27	34.18	33.06	175	95 Peak	HORIZONTAL
2	5460.00	49.68	54.00	-4.32	40.15	8.36	34.23	33.06	175	95 Average	HORIZONTAL
3	5468.00	62.64	68.20	-5.56	53.04	8.41	34.25	33.06	175	95 Peak	HORIZONTAL
4	5584.00	114.39			104.38	8.75	34.35	33.09	175	95 Peak	HORIZONTAL
5	5584.80	105.19			95.18	8.75	34.35	33.09	175	95 Average	HORIZONTAL
6	5725.20	58.18	68.20	-10.02	48.40	8.47	34.44	33.13	175	95 Peak	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5580 MHz.

Channel 140

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5698.60	117.81			107.96	8.56	34.42	33.13	174	77 Peak	VERTICAL
2	5699.20	105.32			95.47	8.56	34.42	33.13	174	77 Average	VERTICAL
3	5725.00	67.10	68.20	-1.10	57.32	8.47	34.44	33.13	174	77 Peak	VERTICAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 02, 2015		
Test Mode	Mode 8: EUT 1 + Set 9 Sector Antenna / 4 dBi		

Channel 54

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5264.40	105.66			96.52	8.26	33.94	33.06	171	95 Average	HORIZONTAL
2	5275.60	113.30			104.16	8.26	33.94	33.06	171	95 Peak	HORIZONTAL
3	5350.00	49.95	54.00	-4.05	40.75	8.20	34.06	33.06	171	95 Average	HORIZONTAL
4	5360.80	61.91	74.00	-12.09	52.70	8.19	34.08	33.06	171	95 Peak	HORIZONTAL

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

Channel 62

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5302.40	111.53			102.37	8.24	33.98	33.06	173	90 Peak	VERTICAL
2	5304.00	100.73			91.57	8.24	33.98	33.06	173	90 Average	VERTICAL
3	5351.60	52.91	54.00	-1.09	43.71	8.20	34.06	33.06	173	90 Average	VERTICAL
4	5352.00	63.29	74.00	-10.71	54.09	8.20	34.06	33.06	173	90 Peak	VERTICAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 02, 2015		
Test Mode	Mode 8: EUT 1 + Set 9 Sector Antenna / 4 dBi		

Channel 102

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.80	63.26	74.00	-10.74	53.73	8.36	34.23	33.06	185	93	Peak	VERTICAL
2	5460.00	51.62	54.00	-2.38	42.09	8.36	34.23	33.06	185	93	Average	VERTICAL
3	5464.00	67.15	68.20	-1.05	57.55	8.41	34.25	33.06	185	93	Peak	VERTICAL
4	5511.20	113.77			103.97	8.56	34.31	33.07	185	93	Peak	VERTICAL
5	5511.20	101.77			91.97	8.56	34.31	33.07	185	93	Average	VERTICAL

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

Channel 110

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.20	61.91	74.00	-12.09	52.38	8.36	34.23	33.06	174	91	Peak	HORIZONTAL
2	5457.60	50.21	54.00	-3.79	40.68	8.36	34.23	33.06	174	91	Average	HORIZONTAL
3	5470.00	61.54	68.20	-6.66	51.94	8.41	34.25	33.06	174	91	Peak	HORIZONTAL
4	5554.80	116.97			107.07	8.65	34.33	33.08	174	91	Peak	HORIZONTAL
5	5555.40	105.94			96.04	8.65	34.33	33.08	174	91	Average	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5550 MHz.

Channel 134

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5675.20	115.61			105.72	8.60	34.41	33.12	177	98	Peak	VERTICAL
2	5679.60	104.16			94.27	8.60	34.41	33.12	177	98	Average	VERTICAL
3	5725.00	67.02	68.20	-1.18	57.24	8.47	34.44	33.13	177	98	Peak	VERTICAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 02, 2015		
Test Mode	Mode 8: EUT 1 + Set 9 Sector Antenna / 4 dBi		

Channel 58

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5092.00	60.37	74.00	-13.63	51.85	7.92	33.65	33.05	186	90	Peak	VERTICAL
2	5150.00	48.22	54.00	-5.78	39.38	8.15	33.74	33.05	186	90	Average	VERTICAL
3	5275.00	106.77			97.63	8.26	33.94	33.06	186	90	Peak	VERTICAL
4	5284.00	95.86			86.71	8.25	33.96	33.06	186	90	Average	VERTICAL
5	5356.00	64.23	74.00	-9.77	55.02	8.19	34.08	33.06	186	90	Peak	VERTICAL
6	5358.00	52.82	54.00	-1.18	43.61	8.19	34.08	33.06	186	90	Average	VERTICAL

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

Channel 106

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5437.00	65.51	74.00	-8.49	56.05	8.32	34.20	33.06	175	95	Peak	VERTICAL
2	5457.00	52.89	54.00	-1.11	43.36	8.36	34.23	33.06	175	95	Average	VERTICAL
3	5467.00	65.33	68.20	-2.87	55.73	8.41	34.25	33.06	175	95	Peak	VERTICAL
4	5544.00	94.85			84.95	8.65	34.33	33.08	175	95	Average	VERTICAL
5	5561.00	105.91			95.95	8.70	34.34	33.08	175	95	Peak	VERTICAL
6	5731.00	60.64	68.20	-7.56	50.87	8.47	34.44	33.14	175	95	Peak	VERTICAL
7	5731.00	48.64	68.20	-19.56	38.87	8.47	34.44	33.14	175	95	Average	VERTICAL

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

Channel 122

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.00	52.44	54.00	-1.56	42.91	8.36	34.23	33.06	173	87	Average	HORIZONTAL
2	5456.00	64.67	74.00	-9.33	55.14	8.36	34.23	33.06	173	87	Peak	HORIZONTAL
3	5466.00	65.09	68.20	-3.11	55.49	8.41	34.25	33.06	173	87	Peak	HORIZONTAL
4	5607.00	114.85			104.79	8.80	34.36	33.10	173	87	Peak	HORIZONTAL
5	5616.00	102.43			92.40	8.76	34.37	33.10	173	87	Average	HORIZONTAL
6	5737.00	62.76	68.20	-5.44	52.99	8.47	34.44	33.14	173	87	Peak	HORIZONTAL

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

Note:

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

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



Straddle Channel

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 02, 2015		
Test Mode	Mode 8: EUT 1 + Set 9 Sector Antenna / 4 dBi		

Channel 144

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg		
1	5727.20	113.41			103.64	8.47	34.44	33.14	175	79	Peak	HORIZONTAL
2	5728.00	104.05			94.28	8.47	34.44	33.14	175	79	Average	HORIZONTAL
3	5872.00	62.32	68.20	-5.88	52.34	8.64	34.52	33.18	175	79	Peak	HORIZONTAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 02, 2015		
Test Mode	Mode 8: EUT 1 + Set 9 Sector Antenna / 4 dBi		

Channel 142

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg		
1	5716.40	104.23			94.42	8.51	34.43	33.13	180	84	Average	VERTICAL
2	5718.00	115.61			105.80	8.51	34.43	33.13	180	84	Peak	VERTICAL
3	5871.60	62.37	68.20	-5.83	52.39	8.64	34.52	33.18	180	84	Peak	VERTICAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 02, 2015		
Test Mode	Mode 8: EUT 1 + Set 9 Sector Antenna / 4 dBi		

Channel 138

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5440.00	62.10	74.00	-11.90	52.64	8.32	34.20	33.06	178	91	Peak	HORIZONTAL
2	5440.00	50.10	54.00	-3.90	40.64	8.32	34.20	33.06	178	91	Average	HORIZONTAL
3	5462.00	61.12	68.20	-7.08	51.59	8.36	34.23	33.06	178	91	Peak	HORIZONTAL
4	5716.00	109.32			99.51	8.51	34.43	33.13	178	91	Peak	HORIZONTAL
5	5717.00	100.09			90.28	8.51	34.43	33.13	178	91	Average	HORIZONTAL
6	5876.00	62.69	68.20	-5.51	52.62	8.72	34.53	33.18	178	91	Peak	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5690 MHz.

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 27, 2015		
Test Mode	Mode 9: EUT 1 + Set 10 Panel Antenna / 23 dB		

Channel 52

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm		
1	5119.78	52.97	54.00	-1.03	48.13	6.04	33.27	34.47	358	176 Average	VERTICAL
2	5136.44	62.24	74.00	-11.76	57.35	6.07	33.29	34.47	358	176 Peak	VERTICAL
3	5257.12	124.83			119.49	6.35	33.46	34.47	358	176 Peak	VERTICAL
4	5259.04	112.68			107.34	6.35	33.46	34.47	358	176 Average	VERTICAL
5	5350.00	51.12	54.00	-2.88	45.42	6.58	33.59	34.47	358	176 Average	VERTICAL
6	5370.58	64.86	74.00	-9.14	59.04	6.66	33.63	34.47	358	176 Peak	VERTICAL

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

Channel 60

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm		
1	5302.89	111.54			106.02	6.47	33.52	34.47	354	174 Average	HORIZONTAL
2	5303.53	126.29			120.77	6.47	33.52	34.47	354	174 Peak	HORIZONTAL
3	5350.64	66.60	74.00	-7.40	60.90	6.58	33.59	34.47	354	174 Peak	HORIZONTAL
4	5376.28	52.99	54.00	-1.01	47.17	6.66	33.63	34.47	354	174 Average	HORIZONTAL

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

Channel 64

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	cm		
1	5313.59	113.33			107.74	6.51	33.55	34.47	357	172 Average	HORIZONTAL
2	5315.35	124.63			119.04	6.51	33.55	34.47	357	172 Peak	HORIZONTAL
3	5350.13	65.83	74.00	-8.17	60.13	6.58	33.59	34.47	357	172 Peak	HORIZONTAL
4	5365.67	52.98	54.00	-1.02	47.22	6.62	33.61	34.47	357	172 Average	HORIZONTAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 27, 2015		
Test Mode	Mode 9: EUT 1 + Set 10 Panel Antenna / 23 dBi		

Channel 100

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5458.49	52.96	54.00	-1.04	46.90	6.79	33.74	34.47	357	168	Average	HORIZONTAL
2	5459.78	63.39	74.00	-10.61	57.33	6.79	33.74	34.47	357	168	Peak	HORIZONTAL
3	5466.80	50.42	54.00	-3.58	44.31	6.82	33.76	34.47	357	168	Average	HORIZONTAL
4	5469.68	62.33	74.00	-11.67	56.22	6.82	33.76	34.47	357	168	Peak	HORIZONTAL
5	5506.57	125.67			119.48	6.86	33.80	34.47	357	168	Peak	HORIZONTAL
6	5506.73	115.46			109.27	6.86	33.80	34.47	357	168	Average	HORIZONTAL

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

Channel 116

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5439.62	64.40	74.00	-9.60	58.38	6.77	33.72	34.47	353	158	Peak	VERTICAL
2	5439.62	52.95	54.00	-1.05	46.93	6.77	33.72	34.47	353	158	Average	VERTICAL
3	5464.23	62.42	74.00	-11.58	56.31	6.82	33.76	34.47	353	158	Peak	VERTICAL
4	5470.00	50.11	54.00	-3.89	44.00	6.82	33.76	34.47	353	158	Average	VERTICAL
5	5583.85	118.47			111.93	6.98	34.05	34.49	353	158	Average	VERTICAL
6	5585.77	128.75			122.21	6.98	34.05	34.49	353	158	Peak	VERTICAL
7	5727.44	64.35	74.00	-9.65	57.94	6.43	34.50	34.52	353	158	Peak	VERTICAL
8	5760.13	51.75	54.00	-2.25	45.38	6.29	34.60	34.52	353	158	Average	VERTICAL

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

Channel 140

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5696.80	112.06			105.60	6.57	34.40	34.51	355	172	Average	HORIZONTAL
2	5697.76	125.31			118.85	6.57	34.40	34.51	355	172	Peak	HORIZONTAL
3	5725.00	67.34	74.00	-6.66	60.92	6.43	34.50	34.51	355	172	Peak	HORIZONTAL
4	5725.00	52.98	54.00	-1.02	46.56	6.43	34.50	34.51	355	172	Average	HORIZONTAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 9: EUT 1 + Set 10 Panel Antenna / 23 dBi		

Channel 54

	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	5120.00	60.87	74.00	-13.13	56.03	6.04	33.27	34.47	356	174 Peak	HORIZONTAL
2	5120.00	52.62	54.00	-1.38	47.78	6.04	33.27	34.47	356	174 Average	HORIZONTAL
3	5267.44	120.62			115.22	6.39	33.48	34.47	356	174 Peak	HORIZONTAL
4	5267.44	108.51			103.11	6.39	33.48	34.47	356	174 Average	HORIZONTAL
5	5439.87	52.88	54.00	-1.12	46.86	6.77	33.72	34.47	356	174 Average	HORIZONTAL
6	5440.51	63.64	74.00	-10.36	57.62	6.77	33.72	34.47	356	174 Peak	HORIZONTAL

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

Channel 62

	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	5302.31	116.77			111.25	6.47	33.52	34.47	354	171 Peak	HORIZONTAL
2	5302.31	106.59			101.07	6.47	33.52	34.47	354	171 Average	HORIZONTAL
3	5350.39	52.83	54.00	-1.17	47.13	6.58	33.59	34.47	354	171 Average	HORIZONTAL
4	5357.44	63.89	74.00	-10.11	58.13	6.62	33.61	34.47	354	171 Peak	HORIZONTAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 9: EUT 1 + Set 10 Panel Antenna / 23 dBi		

Channel 102

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5437.89	62.62	74.00	-11.38	56.60	6.77	33.72	34.47	359	180	Peak	HORIZONTAL
2	5439.81	49.30	54.00	-4.70	43.28	6.77	33.72	34.47	359	180	Average	HORIZONTAL
3	5468.97	67.77	74.00	-6.23	61.66	6.82	33.76	34.47	359	180	Peak	HORIZONTAL
4	5470.00	52.94	54.00	-1.06	46.83	6.82	33.76	34.47	359	180	Average	HORIZONTAL
5	5517.05	115.90			109.64	6.88	33.85	34.47	359	180	Peak	HORIZONTAL
6	5519.62	105.72			99.46	6.88	33.85	34.47	359	180	Average	HORIZONTAL

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

Channel 110

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5457.69	51.82	54.00	-2.18	45.76	6.79	33.74	34.47	358	174	Average	HORIZONTAL
2	5458.01	63.78	74.00	-10.22	57.72	6.79	33.74	34.47	358	174	Peak	HORIZONTAL
3	5466.47	67.57	74.00	-6.43	61.46	6.82	33.76	34.47	358	174	Peak	HORIZONTAL
4	5467.95	52.70	54.00	-1.30	46.59	6.82	33.76	34.47	358	174	Average	HORIZONTAL
5	5538.46	126.08			119.75	6.91	33.90	34.48	358	174	Peak	HORIZONTAL
6	5545.83	114.62			108.22	6.93	33.95	34.48	358	174	Average	HORIZONTAL

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

Channel 134

	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	5439.23	61.22	74.00	-12.78	55.20	6.77	33.72	34.47	357	171	Peak	HORIZONTAL
2	5439.23	50.69	54.00	-3.31	44.67	6.77	33.72	34.47	357	171	Average	HORIZONTAL
3	5468.00	58.11	74.00	-15.89	52.00	6.82	33.76	34.47	357	171	Peak	HORIZONTAL
4	5468.00	47.11	54.00	-6.89	41.00	6.82	33.76	34.47	357	171	Average	HORIZONTAL
5	5666.80	123.24			116.72	6.72	34.30	34.50	357	171	Peak	HORIZONTAL
6	5677.21	109.80			103.31	6.65	34.35	34.51	357	171	Average	HORIZONTAL
7	5729.30	67.45	74.00	-6.55	61.04	6.43	34.50	34.52	357	171	Peak	HORIZONTAL
8	5731.70	52.99	54.00	-1.01	46.58	6.43	34.50	34.52	357	171	Average	HORIZONTAL

Item 5, 6 are the fundamental frequency at 5670 MHz.

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 9: EUT 1 + Set 10 Panel Antenna / 23 dBi		

Channel 58

	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	5119.33	49.24	54.00	-4.76	44.40	6.04	33.27	34.47	355	171	Average	HORIZONTAL
2	5135.35	58.88	74.00	-15.12	53.99	6.07	33.29	34.47	355	171	Peak	HORIZONTAL
3	5294.01	111.57			106.05	6.47	33.52	34.47	355	171	Peak	HORIZONTAL
4	5302.02	100.97			95.45	6.47	33.52	34.47	355	171	Average	HORIZONTAL
5	5351.70	52.84	54.00	-1.16	47.14	6.58	33.59	34.47	355	171	Average	HORIZONTAL
6	5360.51	72.17	74.00	-1.83	66.41	6.62	33.61	34.47	355	171	Peak	HORIZONTAL

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

Channel 106

	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	5439.46	52.93	54.00	-1.07	46.91	6.77	33.72	34.47	354	172	Average	VERTICAL
2	5458.69	66.44	74.00	-7.56	60.38	6.79	33.74	34.47	354	172	Peak	VERTICAL
3	5465.90	69.32	74.00	-4.68	63.21	6.82	33.76	34.47	354	172	Peak	VERTICAL
4	5470.00	51.08	54.00	-2.92	44.97	6.82	33.76	34.47	354	172	Average	VERTICAL
5	5501.96	113.53			107.34	6.86	33.80	34.47	354	172	Peak	VERTICAL
6	5551.64	101.69			95.29	6.93	33.95	34.48	354	172	Average	VERTICAL
7	5728.72	61.87	74.00	-12.13	55.46	6.43	34.50	34.52	354	172	Peak	VERTICAL
8	5759.97	50.24	54.00	-3.76	43.87	6.29	34.60	34.52	354	172	Average	VERTICAL

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

Channel 122

	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	5439.33	52.73	54.00	-1.27	46.71	6.77	33.72	34.47	355	177	Average	VERTICAL
2	5454.55	62.55	74.00	-11.45	56.49	6.79	33.74	34.47	355	177	Peak	VERTICAL
3	5467.60	61.03	68.20	-7.17	54.92	6.82	33.76	34.47	355	177	Peak	VERTICAL
4	5592.37	120.21			113.60	7.00	34.10	34.49	355	177	Peak	VERTICAL
5	5611.60	106.21			99.62	6.93	34.15	34.49	355	177	Average	VERTICAL
6	5725.00	67.16	68.20	-1.04	60.74	6.43	34.50	34.51	355	177	Peak	VERTICAL

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

Note:

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

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



Straddle Channel

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 29, 2015		
Test Mode	Mode 9: EUT 1 + Set 10 Panel Antenna / 23 dBi		

Channel 144

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	Factor	cm	deg		
			dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5722.40	120.99			111.21	8.47	34.44	33.13	175	352	Peak	VERTICAL
2	5722.40	109.53			99.75	8.47	34.44	33.13	175	352	Average	VERTICAL
3	5908.80	61.99	68.20	-6.21	51.75	8.88	34.55	33.19	175	352	Peak	VERTICAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 29, 2015		
Test Mode	Mode 9: EUT 1 + Set 10 Panel Antenna / 23 dBi		

Channel 142

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg	
1	5712.40	117.43			107.62	8.51	34.43	33.13	182	0 Peak	VERTICAL
2	5712.40	107.69			97.88	8.51	34.43	33.13	182	0 Average	VERTICAL
3	5858.00	62.27	68.20	-5.93	52.28	8.64	34.52	33.17	182	0 Peak	VERTICAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 29, 2015		
Test Mode	Mode 9: EUT 1 + Set 10 Panel Antenna / 23 dBi		

Channel 138

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	Line	Limit	Level	Loss	Factor	Factor	cm	deg	
			dBuV/m	dB	dBuV	dB	dB/m	dB			
1	5724.00	116.42			106.64	8.47	34.44	33.13	179	2 Peak	VERTICAL
2	5724.00	105.62			95.84	8.47	34.44	33.13	179	2 Average	VERTICAL
3	5851.00	63.38	68.20	-4.82	53.48	8.56	34.51	33.17	179	2 Peak	VERTICAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 30, 2015		
Test Mode	Mode 10: EUT 1 + Set 11 Omni Antenna / 6 dBi		

Channel 52

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5111.20	48.55	54.00	-5.45	39.96	7.97	33.67	33.05	173	360	Average	VERTICAL
2	5121.40	61.64	74.00	-12.36	52.97	8.03	33.69	33.05	173	360	Peak	VERTICAL
3	5263.60	119.84			110.70	8.26	33.94	33.06	173	360	Peak	VERTICAL
4	5263.60	108.32			99.18	8.26	33.94	33.06	173	360	Average	VERTICAL
5	5361.40	50.24	54.00	-3.76	41.03	8.19	34.08	33.06	173	360	Average	VERTICAL
6	5407.00	62.02	74.00	-11.98	52.71	8.22	34.15	33.06	173	360	Peak	VERTICAL

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

Channel 60

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5297.60	119.74			110.58	8.24	33.98	33.06	186	15	Peak	VERTICAL
2	5303.60	109.25			100.09	8.24	33.98	33.06	186	15	Average	VERTICAL
3	5355.20	51.01	54.00	-2.99	41.80	8.19	34.08	33.06	186	15	Average	VERTICAL
4	5383.20	62.74	74.00	-11.26	53.51	8.18	34.11	33.06	186	15	Peak	VERTICAL

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

Channel 64

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5312.80	109.55			100.37	8.23	34.01	33.06	177	70	Average	VERTICAL
2	5317.60	121.27			112.09	8.23	34.01	33.06	177	70	Peak	VERTICAL
3	5350.40	64.15	74.00	-9.85	54.95	8.20	34.06	33.06	177	70	Peak	VERTICAL
4	5350.40	52.95	54.00	-1.05	43.75	8.20	34.06	33.06	177	70	Average	VERTICAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 30, 2015		
Test Mode	Mode 10: EUT 1 + Set 11 Omni Antenna / 6 dBi		

Channel 100

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5457.20	63.72	74.00	-10.28	54.19	8.36	34.23	33.06	174	59	Peak	VERTICAL
2	5460.00	52.03	54.00	-1.97	42.50	8.36	34.23	33.06	174	59	Average	VERTICAL
3	5464.20	66.54	68.20	-1.66	56.94	8.41	34.25	33.06	174	59	Peak	VERTICAL
4	5496.40	110.34			100.59	8.51	34.30	33.06	174	59	Average	VERTICAL
5	5497.40	121.88			112.13	8.51	34.30	33.06	174	59	Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5500 MHz.

Channel 116

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5460.00	61.77	74.00	-12.23	52.24	8.36	34.23	33.06	146	130	Peak	HORIZONTAL
2	5460.00	50.39	54.00	-3.61	40.86	8.36	34.23	33.06	146	130	Average	HORIZONTAL
3	5465.20	62.57	68.20	-5.63	52.97	8.41	34.25	33.06	146	130	Peak	HORIZONTAL
4	5583.00	94.10			84.09	8.75	34.35	33.09	146	130	Average	HORIZONTAL
5	5585.40	106.37			96.36	8.75	34.35	33.09	146	130	Peak	HORIZONTAL
6	5730.00	62.19	68.20	-6.01	52.42	8.47	34.44	33.14	146	130	Peak	HORIZONTAL

Item 4, 5 are the fundamental frequency at 5580 MHz.

Channel 140

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5696.60	109.29			99.44	8.56	34.42	33.13	175	277	Average	VERTICAL
2	5697.40	121.11			111.26	8.56	34.42	33.13	175	277	Peak	VERTICAL
3	5725.00	67.11	68.20	-1.09	57.33	8.47	34.44	33.13	175	277	Peak	VERTICAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 01, 2015		
Test Mode	Mode 10: EUT 1 + Set 11 Omni Antenna / 6 dBi		

Channel 54

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5272.00	107.03			97.89	8.26	33.94	33.06	177	72	Average	VERTICAL
2	5273.60	119.58			110.44	8.26	33.94	33.06	177	72	Peak	VERTICAL
3	5350.00	51.61	54.00	-2.39	42.41	8.20	34.06	33.06	177	72	Average	VERTICAL
4	5352.40	64.12	74.00	-9.88	54.92	8.20	34.06	33.06	177	72	Peak	VERTICAL

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

Channel 62

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5311.60	113.05			103.87	8.23	34.01	33.06	178	68	Peak	VERTICAL
2	5312.00	101.16			91.98	8.23	34.01	33.06	178	68	Average	VERTICAL
3	5350.00	52.85	54.00	-1.15	43.65	8.20	34.06	33.06	178	68	Average	VERTICAL
4	5352.40	64.59	74.00	-9.41	55.39	8.20	34.06	33.06	178	68	Peak	VERTICAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 01, 2015		
Test Mode	Mode 10: EUT 1 + Set 11 Omni Antenna / 6 dBi		

Channel 102

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.40	51.90	54.00	-2.10	42.37	8.36	34.23	33.06	178	68	Average	VERTICAL
2	5459.20	64.88	74.00	-9.12	55.35	8.36	34.23	33.06	178	68	Peak	VERTICAL
3	5468.40	66.96	68.20	-1.24	57.36	8.41	34.25	33.06	178	68	Peak	VERTICAL
4	5508.40	113.89			104.15	8.51	34.30	33.07	178	68	Peak	VERTICAL
5	5514.40	102.46			92.66	8.56	34.31	33.07	178	68	Average	VERTICAL

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

Channel 110

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5449.80	63.49	74.00	-10.51	53.96	8.36	34.23	33.06	177	50	Peak	VERTICAL
2	5451.60	51.48	54.00	-2.52	41.95	8.36	34.23	33.06	177	50	Average	VERTICAL
3	5470.00	63.92	68.20	-4.28	54.32	8.41	34.25	33.06	177	50	Peak	VERTICAL
4	5556.60	108.03			98.13	8.65	34.33	33.08	177	50	Average	VERTICAL
5	5559.00	120.13			110.23	8.65	34.33	33.08	177	50	Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5550 MHz.

Channel 134

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5676.00	105.90			96.01	8.60	34.41	33.12	170	96	Average	VERTICAL
2	5676.40	117.91			108.02	8.60	34.41	33.12	170	96	Peak	VERTICAL
3	5729.60	67.06	68.20	-1.14	57.29	8.47	34.44	33.14	170	96	Peak	VERTICAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 01, 2015		
Test Mode	Mode 10: EUT 1 + Set 11 Omni Antenna / 6 dBi		

Channel 58

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5095.00	61.98	74.00	-12.02	53.46	7.92	33.65	33.05	171	74	Peak	VERTICAL
2	5150.00	48.91	54.00	-5.09	40.07	8.15	33.74	33.05	171	74	Average	VERTICAL
3	5296.00	106.06			96.90	8.24	33.98	33.06	171	74	Peak	VERTICAL
4	5297.00	94.92			85.76	8.24	33.98	33.06	171	74	Average	VERTICAL
5	5354.00	68.93	74.00	-5.07	59.73	8.20	34.06	33.06	171	74	Peak	VERTICAL
6	5355.00	52.78	54.00	-1.22	43.57	8.19	34.08	33.06	171	74	Average	VERTICAL

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

Channel 106

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5451.00	64.45	74.00	-9.55	54.92	8.36	34.23	33.06	174	70	Peak	VERTICAL
2	5456.00	52.63	54.00	-1.37	43.10	8.36	34.23	33.06	174	70	Average	VERTICAL
3	5470.00	64.42	68.20	-3.78	54.82	8.41	34.25	33.06	174	70	Peak	VERTICAL
4	5523.00	93.91			84.11	8.56	34.31	33.07	174	70	Average	VERTICAL
5	5524.00	104.41			94.61	8.56	34.31	33.07	174	70	Peak	VERTICAL
6	5725.00	63.26	68.20	-4.94	53.48	8.47	34.44	33.13	174	70	Peak	VERTICAL
7	5725.00	50.26	68.20	-17.94	40.48	8.47	34.44	33.13	174	70	Average	VERTICAL

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

Channel 122

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.00	65.13	74.00	-8.87	55.60	8.36	34.23	33.06	175	140	Peak	VERTICAL
2	5460.00	52.97	54.00	-1.03	43.44	8.36	34.23	33.06	175	140	Average	VERTICAL
3	5467.00	67.09	68.20	-1.11	57.49	8.41	34.25	33.06	175	140	Peak	VERTICAL
4	5588.00	105.09			95.08	8.75	34.35	33.09	175	140	Average	VERTICAL
5	5596.00	116.70			106.63	8.80	34.36	33.09	175	140	Peak	VERTICAL
6	5728.00	64.94	68.20	-3.26	55.17	8.47	34.44	33.14	175	140	Peak	VERTICAL

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

Note:

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

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



Straddle Channel

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 30, 2015		
Test Mode	Mode 10: EUT 1 + Set 11 Omni Antenna / 6 dBi		

Channel 144

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg		
1	5714.60	108.35			98.54	8.51	34.43	33.13	175	268	Peak	HORIZONTAL
2	5720.60	97.41			87.60	8.51	34.43	33.13	175	268	Average	HORIZONTAL
3	5867.60	62.86	68.20	-5.34	52.88	8.64	34.52	33.18	175	268	Peak	HORIZONTAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 01, 2015		
Test Mode	Mode 10: EUT 1 + Set 11 Omni Antenna / 6 dBi		

Channel 142

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg	
1	5709.20	118.33			108.52	8.51	34.43	33.13	177	45 Peak	VERTICAL
2	5716.40	106.93			97.12	8.51	34.43	33.13	177	45 Average	VERTICAL
3	5860.40	63.62	68.20	-4.58	53.64	8.64	34.52	33.18	177	45 Peak	VERTICAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Dec. 01, 2015		
Test Mode	Mode 10: EUT 1 + Set 11 Omni Antenna / 6 dBi		

Channel 138

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	Loss	Factor	Factor	cm	deg		
1	5457.15	60.90	74.00	-13.10	51.37	8.36	34.23	33.06	175	195	Peak	VERTICAL
2	5460.00	50.90	54.00	-3.10	41.37	8.36	34.23	33.06	175	195	Average	VERTICAL
3	5470.00	62.11	68.20	-6.09	52.51	8.41	34.25	33.06	175	195	Peak	VERTICAL
4	5687.00	115.57			105.68	8.60	34.41	33.12	175	195	Peak	VERTICAL
5	5694.00	103.72			93.87	8.56	34.42	33.13	175	195	Average	VERTICAL
6	5867.00	63.99	68.20	-4.21	54.01	8.64	34.52	33.18	175	195	Peak	VERTICAL

Item 4, 5 are the fundamental frequency at 5690 MHz.

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 27, 2015		
Test Mode	Mode 11: EUT 2 + Set 12 PIFA Antenna / Chain1:5.96 dBi, Chain2:5.97 dBi, Chain3:6.25 dBi, Chain4:6.08 dBi		

Channel 52

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5135.80	47.43	54.00	-6.57	38.67	8.09	33.72	33.05	255	331	Average	HORIZONTAL
2	5149.00	60.17	74.00	-13.83	51.33	8.15	33.74	33.05	255	331	Peak	HORIZONTAL
3	5263.00	107.17			98.03	8.26	33.94	33.06	255	331	Average	HORIZONTAL
4	5263.60	118.14			109.00	8.26	33.94	33.06	255	331	Peak	HORIZONTAL
5	5370.40	48.67	54.00	-5.33	39.44	8.18	34.11	33.06	255	331	Average	HORIZONTAL
6	5396.80	61.65	74.00	-12.35	52.41	8.17	34.13	33.06	255	331	Peak	HORIZONTAL

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

Channel 60

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5298.80	116.40			107.24	8.24	33.98	33.06	275	345	Peak	HORIZONTAL
2	5299.20	105.25			96.09	8.24	33.98	33.06	275	345	Average	HORIZONTAL
3	5353.20	49.13	54.00	-4.87	39.93	8.20	34.06	33.06	275	345	Average	HORIZONTAL
4	5356.00	61.70	74.00	-12.30	52.49	8.19	34.08	33.06	275	345	Peak	HORIZONTAL

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

Channel 64

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5312.20	107.48			98.30	8.23	34.01	33.06	283	332	Average	HORIZONTAL
2	5312.40	117.55			108.37	8.23	34.01	33.06	283	332	Peak	HORIZONTAL
3	5351.20	68.77	74.00	-5.23	59.57	8.20	34.06	33.06	283	332	Peak	HORIZONTAL
4	5351.60	50.08	54.00	-3.92	40.88	8.20	34.06	33.06	283	332	Average	HORIZONTAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 27, 2015		
Test Mode	Mode 11: EUT 2 + Set 12 PIFA Antenna / Chain1:5.96 dBi, Chain2:5.97 dBi, Chain3:6.25 dBi, Chain4:6.08 dBi		

Channel 100

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.40	63.09	74.00	-10.91	53.56	8.36	34.23	33.06	297	355	Peak	HORIZONTAL
2	5459.00	50.50	54.00	-3.50	40.97	8.36	34.23	33.06	297	355	Average	HORIZONTAL
3	5466.40	52.58	54.00	-1.42	42.98	8.41	34.25	33.06	297	355	Average	HORIZONTAL
4	5468.20	67.02	74.00	-6.98	57.42	8.41	34.25	33.06	297	355	Peak	HORIZONTAL
5	5495.80	107.45			97.70	8.51	34.30	33.06	297	355	Average	HORIZONTAL
6	5498.60	119.42			109.67	8.51	34.30	33.06	297	355	Peak	HORIZONTAL

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

Channel 116

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5417.60	61.03	74.00	-12.97	51.64	8.27	34.18	33.06	300	355	Peak	HORIZONTAL
2	5424.00	48.84	54.00	-5.16	39.45	8.27	34.18	33.06	300	355	Average	HORIZONTAL
3	5466.80	62.91	74.00	-11.09	53.31	8.41	34.25	33.06	300	355	Peak	HORIZONTAL
4	5466.80	48.78	54.00	-5.22	39.18	8.41	34.25	33.06	300	355	Average	HORIZONTAL
5	5582.40	105.03			95.02	8.75	34.35	33.09	300	355	Average	HORIZONTAL
6	5584.00	119.22			109.21	8.75	34.35	33.09	300	355	Peak	HORIZONTAL
7	5725.00	48.21	54.00	-5.79	38.43	8.47	34.44	33.13	300	355	Average	HORIZONTAL
8	5747.20	60.82	74.00	-13.18	51.08	8.43	34.45	33.14	300	355	Peak	HORIZONTAL

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

Channel 140

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5705.00	105.43			95.58	8.56	34.42	33.13	299	351	Average	HORIZONTAL
2	5705.20	117.55			107.70	8.56	34.42	33.13	299	351	Peak	HORIZONTAL
3	5725.20	67.14	74.00	-6.86	57.36	8.47	34.44	33.13	299	351	Peak	HORIZONTAL
4	5725.20	52.66	54.00	-1.34	42.88	8.47	34.44	33.13	299	351	Average	HORIZONTAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 27, 2015		
Test Mode	Mode 11: EUT 2 + Set 12 PIFA Antenna / Chain1:5.96 dBi, Chain2:5.97 dBi, Chain3:6.25 dBi, Chain4:6.08 dBi		

Channel 54

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5265.20	115.98			106.84	8.26	33.94	33.06	229	330 Peak	HORIZONTAL
2	5265.20	104.09			94.95	8.26	33.94	33.06	229	330 Average	HORIZONTAL
3	5358.20	49.14	54.00	-4.86	39.93	8.19	34.08	33.06	229	330 Average	HORIZONTAL
4	5359.40	61.07	74.00	-12.93	51.86	8.19	34.08	33.06	229	330 Peak	HORIZONTAL

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

Channel 62

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5306.40	111.03			101.87	8.24	33.98	33.06	284	344 Peak	HORIZONTAL
2	5308.40	100.84			91.66	8.23	34.01	33.06	284	344 Average	HORIZONTAL
3	5350.40	52.10	54.00	-1.90	42.90	8.20	34.06	33.06	284	344 Average	HORIZONTAL
4	5350.80	63.18	74.00	-10.82	53.98	8.20	34.06	33.06	284	344 Peak	HORIZONTAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 27, 2015		
Test Mode	Mode 11: EUT 2 + Set 12 PIFA Antenna / Chain1:5.96 dBi, Chain2:5.97 dBi, Chain3:6.25 dBi, Chain4:6.08 dBi		

Channel 102

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5430.00	62.16	74.00	-11.84	52.77	8.27	34.18	33.06	297	353 Peak	HORIZONTAL
2	5458.80	50.03	54.00	-3.97	40.50	8.36	34.23	33.06	297	353 Average	HORIZONTAL
3	5470.00	65.39	74.00	-8.61	55.79	8.41	34.25	33.06	297	353 Peak	HORIZONTAL
4	5470.00	52.52	54.00	-1.48	42.92	8.41	34.25	33.06	297	353 Average	HORIZONTAL
5	5497.20	112.87			103.12	8.51	34.30	33.06	297	353 Peak	HORIZONTAL
6	5498.40	101.75			92.00	8.51	34.30	33.06	297	353 Average	HORIZONTAL

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

Channel 110

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5458.20	49.66	54.00	-4.34	40.13	8.36	34.23	33.06	300	358 Average	HORIZONTAL
2	5458.80	61.40	74.00	-12.60	51.87	8.36	34.23	33.06	300	358 Peak	HORIZONTAL
3	5464.20	50.44	54.00	-3.56	40.84	8.41	34.25	33.06	300	358 Average	HORIZONTAL
4	5467.20	64.92	74.00	-9.08	55.32	8.41	34.25	33.06	300	358 Peak	HORIZONTAL
5	5555.40	114.59			104.69	8.65	34.33	33.08	300	358 Peak	HORIZONTAL
6	5557.80	103.19			93.29	8.65	34.33	33.08	300	358 Average	HORIZONTAL

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

Channel 134

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5658.80	113.38			103.45	8.64	34.40	33.11	300	352 Peak	HORIZONTAL
2	5659.20	102.06			92.13	8.64	34.40	33.11	300	352 Average	HORIZONTAL
3	5725.00	51.90	54.00	-2.10	42.12	8.47	34.44	33.13	300	352 Average	HORIZONTAL
4	5726.00	66.53	74.00	-7.47	56.75	8.47	34.44	33.13	300	352 Peak	HORIZONTAL

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

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 11: EUT 2 + Set 12 PIFA Antenna / Chain1:5.96 dBi, Chain2:5.97 dBi, Chain3:6.25 dBi, Chain4:6.08 dBi		

Channel 58

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5118.00	59.66	74.00	-14.34	50.99	8.03	33.69	33.05	299	342 Peak	HORIZONTAL
2	5131.00	47.58	54.00	-6.42	38.82	8.09	33.72	33.05	299	342 Average	HORIZONTAL
3	5308.00	98.67			89.49	8.23	34.01	33.06	299	342 Average	HORIZONTAL
4	5310.00	108.48			99.30	8.23	34.01	33.06	299	342 Peak	HORIZONTAL
5	5357.00	65.89	74.00	-8.11	56.68	8.19	34.08	33.06	299	342 Peak	HORIZONTAL
6	5374.00	52.21	54.00	-1.79	42.98	8.18	34.11	33.06	299	342 Average	HORIZONTAL

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

Channel 106

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5457.00	64.13	74.00	-9.87	54.60	8.36	34.23	33.06	291	354 Peak	HORIZONTAL
2	5460.00	52.13	54.00	-1.87	42.60	8.36	34.23	33.06	291	354 Average	HORIZONTAL
3	5469.00	67.19	74.00	-6.81	57.59	8.41	34.25	33.06	291	354 Peak	HORIZONTAL
4	5469.00	52.95	54.00	-1.05	43.35	8.41	34.25	33.06	291	354 Average	HORIZONTAL
5	5539.00	94.36			84.50	8.61	34.32	33.07	291	354 Average	HORIZONTAL
6	5545.00	106.33			96.43	8.65	34.33	33.08	291	354 Peak	HORIZONTAL
7	5725.00	62.52	74.00	-11.48	52.74	8.47	34.44	33.13	291	354 Peak	HORIZONTAL
8	5725.00	48.31	54.00	-5.69	38.53	8.47	34.44	33.13	291	354 Average	HORIZONTAL

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

Channel 122

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5454.00	49.94	54.00	-4.06	40.41	8.36	34.23	33.06	298	355 Average	HORIZONTAL
2	5460.00	64.34	74.00	-9.66	54.81	8.36	34.23	33.06	298	355 Peak	HORIZONTAL
3	5464.00	64.88	74.00	-9.12	55.28	8.41	34.25	33.06	298	355 Peak	HORIZONTAL
4	5469.00	50.66	54.00	-3.34	41.06	8.41	34.25	33.06	298	355 Average	HORIZONTAL
5	5595.00	111.67			101.60	8.80	34.36	33.09	298	355 Peak	HORIZONTAL
6	5614.00	100.72			90.69	8.76	34.37	33.10	298	355 Average	HORIZONTAL
7	5728.00	52.61	54.00	-1.39	42.84	8.47	34.44	33.14	298	355 Average	HORIZONTAL
8	5748.00	67.11	74.00	-6.89	57.37	8.43	34.45	33.14	298	355 Peak	HORIZONTAL

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

Note:

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

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



Straddle Channel

Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 27, 2015		
Test Mode	Mode 11: EUT 2 + Set 12 PIFA Antenna / Chain1:5.96 dBi, Chain2:5.97 dBi, Chain3:6.25 dBi, Chain4:6.08 dBi		

Channel 144

	Freq	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
	MHz	dBuV/m	Line	Level	Loss	Factor	cm	deg			
			dB	dBuV	dB	dB/m					
1	5712.80	104.10		94.29	8.51	34.43	33.13	299	355 Average	HORIZONTAL	
2	5716.00	115.73		105.92	8.51	34.43	33.13	299	355 Peak	HORIZONTAL	
3	5857.60	63.58	74.00	-10.42	53.59	8.64	34.52	33.17	299	355 Peak	HORIZONTAL
4	5867.20	49.29	54.00	-4.71	39.31	8.64	34.52	33.18	299	355 Average	HORIZONTAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 27, 2015		
Test Mode	Mode 11: EUT 2 + Set 12 PIFA Antenna / Chain1:5.96 dBi, Chain2:5.97 dBi, Chain3:6.25 dBi, Chain4:6.08 dBi		

Channel 142

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5719.60	99.73			89.92	8.51	34.43	33.13	300	315	Average	VERTICAL
2	5720.40	112.25			102.44	8.51	34.43	33.13	300	315	Peak	VERTICAL
3	5865.20	63.99	74.00	-10.01	54.01	8.64	34.52	33.18	300	315	Peak	VERTICAL
4	5880.40	49.36	54.00	-4.64	39.29	8.72	34.53	33.18	300	315	Average	VERTICAL

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



Temperature	25°C	Humidity	58%
Test Engineer	Peter Wu & Owen Hsu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 28, 2015		
Test Mode	Mode 11: EUT 2 + Set 12 PIFA Antenna / Chain1:5.96 dBi, Chain2:5.97 dBi, Chain3:6.25 dBi, Chain4:6.08 dBi		

Channel 138

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5717.00	108.03			98.22	8.51	34.43	33.13	300	324 Peak	HORIZONTAL
2	5718.00	96.46			86.65	8.51	34.43	33.13	300	324 Average	HORIZONTAL
3	5900.00	49.81	54.00	-4.19	39.66	8.80	34.54	33.19	300	324 Average	HORIZONTAL
4	5907.00	64.18	74.00	-9.82	53.94	8.88	34.55	33.19	300	324 Peak	HORIZONTAL

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

4.7. Frequency Stability Measurement

4.7.1. 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).

4.7.2. Measuring Instruments and Setting

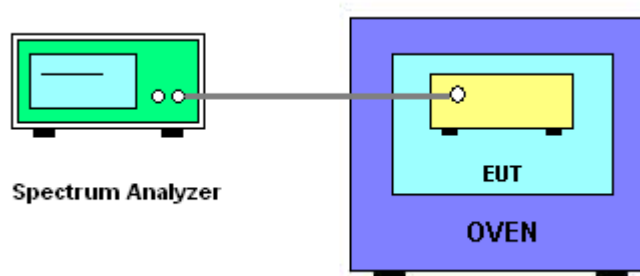
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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

4.7.3. 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. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
7. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
8. Extreme temperature is $-40^\circ\text{C} \sim 70^\circ\text{C}$.

4.7.4. Test Setup Layout





4.7.5. Test Deviation

There is no deviation with the original standard.

4.7.6. EUT Operation during Test

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

4.7.7. Test Result of Frequency Stability

Temperature	25°C	Humidity	45%
Test Engineer	Roki Liu	Test Date	Dec. 11, 2015 ~ Dec. 14, 2015

For EUT 1

Mode: 20 MHz / Chain 3

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5299.9433	5299.9422	5299.9620	5299.9366
110.00	5299.9421	5299.9398	5299.9587	5299.9358
93.50	5299.9411	5299.9391	5299.9506	5299.9303
Max. Deviation (MHz)	0.0589	0.0609	0.0494	0.0697
Max. Deviation (ppm)	11.11	11.49	9.32	13.15
Result	Complies			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5299.9486	5299.9496	5299.9522	5299.9494
-30	5299.9485	5299.9482	5299.9513	5299.9488
-20	5299.9484	5299.9480	5299.9499	5299.9488
-10	5299.9476	5299.9471	5299.9473	5299.9467
0	5299.9462	5299.9455	5299.9466	5299.9428
10	5299.9452	5299.9438	5299.9454	5299.9417
20	5299.9450	5299.9430	5299.9433	5299.9406
30	5299.9437	5299.9418	5299.9416	5299.9395
40	5299.9429	5299.9391	5299.9406	5299.9373
50	5299.9398	5299.9384	5299.9377	5299.9365
60	5299.9383	5299.9379	5299.9362	5299.9362
70	5299.9380	5299.9371	5299.9352	5299.9356
Max. Deviation (MHz)	0.0620	0.0629	0.0648	0.0644
Max. Deviation (ppm)	11.70	11.87	12.23	12.15
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5579.9503	5579.9560	5579.9516	5579.9555
110.00	5579.9488	5579.9430	5579.9486	5579.9416
93.50	5579.9472	5579.9432	5579.9472	5579.9406
Max. Deviation (MHz)	0.0528	0.0570	0.0528	0.0594
Max. Deviation (ppm)	9.46	10.22	9.46	10.65
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5579.9503	5579.9569	5579.9516	5579.9488
-30	5579.9496	5579.9558	5579.9511	5579.9473
-20	5579.9491	5579.9555	5579.9503	5579.9465
-10	5579.9472	5579.9531	5579.9488	5579.9452
0	5579.9460	5579.9450	5579.9462	5579.9422
10	5579.9453	5579.9498	5579.9451	5579.9416
20	5579.9440	5579.9477	5579.9433	5579.9401
30	5579.9425	5579.9465	5579.9416	5579.9399
40	5579.9413	5579.9435	5579.9398	5579.9371
50	5579.9397	5579.9409	5579.9372	5579.9353
60	5579.9388	5579.9400	5579.9365	5579.9345
70	5579.9379	5579.9391	5579.9355	5579.9336
Max. Deviation (MHz)	0.0621	0.0609	0.0645	0.0664
Max. Deviation (ppm)	11.13	10.91	11.56	11.90
Result	Complies			

Mode: 40 MHz / Chain 3

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5309.9488	5309.9486	5309.9479	5309.9426
110.00	5309.9464	5309.9485	5309.9468	5309.9417
93.50	5309.9435	5309.9481	5309.9433	5309.9396
Max. Deviation (MHz)	0.0566	0.0519	0.0567	0.0604
Max. Deviation (ppm)	10.65	9.77	10.68	11.37
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5309.9520	5309.9513	5309.9471	5309.9463
-30	5309.9510	5309.9499	5309.9468	5309.9451
-20	5309.9493	5309.9484	5309.9460	5309.9432
-10	5309.9474	5309.9481	5309.9455	5309.9416
0	5309.9462	5309.9464	5309.9434	5309.9400
10	5309.9446	5309.9435	5309.9414	5309.9391
20	5309.9432	5309.9427	5309.9401	5309.9382
30	5309.9425	5309.9411	5309.9391	5309.9356
40	5309.9417	5309.9390	5309.9371	5309.9342
50	5309.9395	5309.9371	5309.9363	5309.9333
60	5309.9390	5309.9368	5309.9355	5309.9327
70	5309.9383	5309.9362	5309.9354	5309.9321
Max. Deviation (MHz)	0.0617	0.0638	0.0646	0.0679
Max. Deviation (ppm)	11.62	12.02	12.17	12.79
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5549.9406	5549.9386	5549.9403	5549.9329
110.00	5549.9392	5549.9371	5549.9388	5549.9317
93.50	5549.9374	5549.9362	5549.9368	5549.9299
Max. Deviation (MHz)	0.0626	0.0638	0.0632	0.0701
Max. Deviation (ppm)	11.28	11.50	11.39	12.63
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5549.9453	5549.9446	5549.9428	5549.9373
-30	5549.9446	5549.9433	5549.9419	5549.9374
-20	5549.9432	5549.9426	5549.9403	5549.9374
-10	5549.9410	5549.9398	5549.9382	5549.9363
0	5549.9396	5549.9384	5549.9365	5549.9343
10	5549.9383	5549.9370	5549.9355	5549.9337
20	5549.9371	5549.9358	5549.9342	5549.9321
30	5549.9357	5549.9346	5549.9332	5549.9316
40	5549.9341	5549.9326	5549.9310	5549.9290
50	5549.9317	5549.9316	5549.9306	5549.9288
60	5549.9310	5549.9316	5549.9300	5549.9285
70	5549.9300	5549.9311	5549.9288	5549.9281
Max. Deviation (MHz)	0.0700	0.0689	0.0712	0.0719
Max. Deviation (ppm)	12.61	12.41	12.83	12.95
Result	Complies			



Mode: 80 MHz / Chain 3

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5289.9649	5289.9633	5289.9629	5289.9620
110.00	5289.9639	5289.9624	5289.9626	5289.9595
93.50	5289.9622	5289.9615	5289.9614	5289.9584
Max. Deviation (MHz)	0.0378	0.0385	0.0386	0.0416
Max. Deviation (ppm)	7.15	7.28	7.30	7.86
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5289.9738	5289.9728	5289.9749	5289.9696
-30	5289.9738	5289.9724	5289.9725	5289.9686
-20	5289.9733	5289.9728	5289.9711	5289.9671
-10	5289.9711	5289.9699	5289.9683	5289.9664
0	5289.9692	5289.9685	5289.9674	5289.9654
10	5289.9684	5289.9671	5289.9656	5289.9638
20	5289.9672	5289.9659	5289.9643	5289.9625
30	5289.9652	5289.9647	5289.9632	5289.9611
40	5289.9642	5289.9627	5289.9611	5289.9591
50	5289.9626	5289.9623	5289.9603	5289.9598
60	5289.9620	5289.9617	5289.9591	5289.9592
70	5289.9607	5289.9613	5289.9581	5289.9587
Max. Deviation (MHz)	0.0393	0.0387	0.0419	0.0413
Max. Deviation (ppm)	7.43	7.32	7.92	7.81
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5529.9622	5529.9598	5529.9630	5529.9552
110.00	5529.9617	5529.9593	5529.9571	5529.9552
93.50	5529.9595	5529.9584	5529.9565	5529.9546
Max. Deviation (MHz)	0.0405	0.0416	0.0435	0.0454
Max. Deviation (ppm)	7.32	7.52	7.87	8.21
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5529.9674	5529.9633	5529.9616	5529.9636
-30	5529.9666	5529.9595	5529.9608	5529.9624
-20	5529.9654	5529.9595	5529.9584	5529.9600
-10	5529.9589	5529.9577	5529.9561	5529.9542
0	5529.9575	5529.9563	5529.9554	5529.9523
10	5529.9562	5529.9553	5529.9543	5529.9512
20	5529.9550	5529.9546	5529.9532	5529.9499
30	5529.9536	5529.9533	5529.9513	5529.9495
40	5529.9520	5529.9511	5529.9489	5529.9462
50	5529.9513	5529.9490	5529.9481	5529.9455
60	5529.9501	5529.9485	5529.9471	5529.9452
70	5529.9498	5529.9471	5529.9455	5529.9427
Max. Deviation (MHz)	0.0502	0.0529	0.0545	0.0573
Max. Deviation (ppm)	9.08	9.57	9.86	10.36
Result	Complies			



Temperature	25°C	Humidity	45%
Test Engineer	Roki Liu	Test Date	Dec. 07, 2015

Fou EUT 2

Mode: 20 MHz / Chain 4

Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5299.9429	5299.9415	5299.9397	5299.9376
110.00	5299.9417	5299.9404	5299.9388	5299.9369
93.50	5299.9403	5299.9392	5299.9380	5299.9358
Max. Deviation (MHz)	0.0597	0.0608	0.0620	0.0642
Max. Deviation (ppm)	11.26	11.47	11.70	12.11
Result	Complies			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5299.9518	5299.9496	5299.9488	5299.9497
-30	5299.9516	5299.9494	5299.9475	5299.9466
-20	5299.9497	5299.9484	5299.9467	5299.9443
-10	5299.9482	5299.9470	5299.9454	5299.9435
0	5299.9468	5299.9456	5299.9437	5299.9415
10	5299.9455	5299.9442	5299.9427	5299.9409
20	5299.9443	5299.9430	5299.9414	5299.9395
30	5299.9429	5299.9418	5299.9404	5299.9388
40	5299.9413	5299.9398	5299.9382	5299.9362
50	5299.9396	5299.9384	5299.9369	5299.9342
60	5299.9383	5299.9378	5299.9362	5299.9340
70	5299.9379	5299.9371	5299.9357	5299.9336
Max. Deviation (MHz)	0.0621	0.0629	0.0643	0.0664
Max. Deviation (ppm)	11.72	11.87	12.13	12.53
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5579.9465	5579.9451	5579.9433	5579.9412
110.00	5579.9453	5579.9440	5579.9424	5579.9405
93.50	5579.9439	5579.9428	5579.9416	5579.9394
Max. Deviation (MHz)	0.0561	0.0572	0.0584	0.0606
Max. Deviation (ppm)	10.05	10.25	10.47	10.86
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5579.9513	5579.9516	5579.9490	5579.9471
-30	5579.9510	5579.9503	5579.9474	5579.9468
-20	5579.9498	5579.9485	5579.9468	5579.9444
-10	5579.9483	5579.9471	5579.9455	5579.9436
0	5579.9469	5579.9457	5579.9438	5579.9416
10	5579.9456	5579.9443	5579.9428	5579.9410
20	5579.9444	5579.9431	5579.9415	5579.9396
30	5579.9430	5579.9419	5579.9405	5579.9389
40	5579.9414	5579.9399	5579.9383	5579.9363
50	5579.9397	5579.9385	5579.9370	5579.9343
60	5579.9388	5579.9381	5579.9365	5579.9345
70	5579.9379	5579.9374	5579.9352	5579.9339
Max. Deviation (MHz)	0.0621	0.0626	0.0648	0.0661
Max. Deviation (ppm)	11.13	11.22	11.61	11.85
Result	Complies			



Mode: 40 MHz / Chain 4

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5309.9454	5309.9440	5309.9422	5309.9401
110.00	5309.9442	5309.9429	5309.9413	5309.9394
93.50	5309.9428	5309.9417	5309.9405	5309.9383
Max. Deviation (MHz)	0.0572	0.0583	0.0595	0.0617
Max. Deviation (ppm)	10.77	10.98	11.21	11.62
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5309.9516	5309.9492	5309.9472	5309.9458
-30	5309.9489	5309.9484	5309.9468	5309.9444
-20	5309.9484	5309.9471	5309.9454	5309.9430
-10	5309.9469	5309.9457	5309.9441	5309.9422
0	5309.9455	5309.9443	5309.9424	5309.9402
10	5309.9442	5309.9429	5309.9414	5309.9396
20	5309.9430	5309.9417	5309.9401	5309.9382
30	5309.9416	5309.9405	5309.9391	5309.9375
40	5309.9400	5309.9385	5309.9369	5309.9349
50	5309.9383	5309.9371	5309.9356	5309.9329
60	5309.9850	5309.9365	5309.9349	5309.9317
70	5309.9383	5309.9362	5309.9353	5309.9310
Max. Deviation (MHz)	0.0617	0.0638	0.0647	0.0690
Max. Deviation (ppm)	11.62	12.02	12.18	12.99
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5549.9388	5549.9374	5549.9356	5549.9335
110.00	5549.9376	5549.9363	5549.9347	5549.9328
93.50	5549.9362	5549.9351	5549.9339	5549.9317
Max. Deviation (MHz)	0.0638	0.0649	0.0661	0.0683
Max. Deviation (ppm)	11.50	11.69	11.91	12.31
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5549.9446	5549.9448	5549.9436	5549.9385
-30	5549.9433	5549.9435	5549.9425	5549.9381
-20	5549.9425	5549.9412	5549.9395	5549.9371
-10	5549.9410	5549.9398	5549.9382	5549.9363
0	5549.9396	5549.9384	5549.9365	5549.9343
10	5549.9383	5549.9370	5549.9355	5549.9337
20	5549.9371	5549.9358	5549.9342	5549.9323
30	5549.9357	5549.9346	5549.9332	5549.9316
40	5549.9341	5549.9326	5549.9310	5549.9290
50	5549.9324	5549.9312	5549.9297	5549.9270
60	5549.9317	5549.9310	5549.9292	5549.9285
70	5549.9300	5549.9288	5549.9288	5549.9272
Max. Deviation (MHz)	0.0700	0.0712	0.0712	0.0728
Max. Deviation (ppm)	12.61	12.83	12.83	13.12
Result	Complies			



Mode: 80 MHz / Chain 4

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5289.9653	5289.9639	5289.9621	5289.9600
110.00	5289.9641	5289.9628	5289.9612	5289.9593
93.50	5289.9627	5289.9616	5289.9604	5289.9582
Max. Deviation (MHz)	0.0373	0.0384	0.0396	0.0418
Max. Deviation (ppm)	7.05	7.26	7.49	7.90
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5289.9742	5289.9731	5289.9749	5289.9692
-30	5289.9736	5289.9728	5289.9733	5289.9679
-20	5289.9726	5289.9713	5289.9696	5289.9672
-10	5289.9711	5289.9699	5289.9683	5289.9664
0	5289.9697	5289.9685	5289.9666	5289.9644
10	5289.9684	5289.9671	5289.9656	5289.9638
20	5289.9672	5289.9659	5289.9643	5289.9624
30	5289.9658	5289.9647	5289.9633	5289.9617
40	5289.9642	5289.9627	5289.9611	5289.9591
50	5289.9625	5289.9613	5289.9598	5289.9571
60	5289.9620	5289.9602	5289.9591	5289.9569
70	5289.9591	5289.9602	5289.9581	5289.9565
Max. Deviation (MHz)	0.0409	0.0398	0.0419	0.0435
Max. Deviation (ppm)	7.73	7.52	7.92	8.22
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5529.9612	5529.9598	5529.9580	5529.9559
110.00	5529.9600	5529.9587	5529.9571	5529.9552
93.50	5529.9586	5529.9575	5529.9563	5529.9541
Max. Deviation (MHz)	0.0414	0.0425	0.0437	0.0459
Max. Deviation (ppm)	7.49	7.69	7.90	8.30
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-40	5529.9658	5529.9628	5529.9625	5529.9592
-30	5529.9632	5529.9602	5529.9594	5529.9587
-20	5529.9604	5529.9591	5529.9574	5529.9550
-10	5529.9589	5529.9577	5529.9561	5529.9542
0	5529.9575	5529.9563	5529.9544	5529.9522
10	5529.9562	5529.9549	5529.9534	5529.9516
20	5529.9550	5529.9537	5529.9521	5529.9502
30	5529.9536	5529.9525	5529.9511	5529.9495
40	5529.9520	5529.9505	5529.9489	5529.9469
50	5529.9503	5529.9491	5529.9476	5529.9449
60	5529.9481	5529.9482	5529.9469	5529.9444
70	5529.9476	5529.9475	5529.9456	5529.9436
Max. Deviation (MHz)	0.0524	0.0525	0.0544	0.0564
Max. Deviation (ppm)	9.48	9.49	9.84	10.20
Result	Complies			

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
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 22, 2015	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2015	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 12, 2015	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Feb.10, 2015	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Oct. 27, 2015	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz ~ 1 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-17	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-10-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 09, 2015	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 02, 2015	Conducted (TH01-CB)

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

6. MEASUREMENT UNCERTAINTY

Test Items	Uncertainty	Remark
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%