



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	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	11002.72	59.57	74.00	-14.43	41.11	13.44	38.40	33.38	193	171	Peak	HORIZONTAL
2	11006.31	46.81	54.00	-7.19	28.35	13.44	38.40	33.38	193	171	Average	HORIZONTAL

Vertical

	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	10990.39	46.63	54.00	-7.37	28.24	13.39	38.40	33.40	181	164	Average	VERTICAL
2	10993.55	59.63	74.00	-14.37	41.22	13.39	38.40	33.38	181	164	Peak	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 116 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11157.16	47.48	54.00	-6.52	28.48	13.71	38.67	33.38	210	210	Average	HORIZONTAL
2	11165.64	60.42	74.00	-13.58	41.42	13.71	38.67	33.38	210	210	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	CableAntenna Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11155.25	47.54	54.00	-6.46	28.66	13.65	38.61	33.38	174	172	Average	VERTICAL
2	11165.04	61.23	74.00	-12.77	42.23	13.71	38.67	33.38	174	172	Peak	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11390.19	48.37	54.00	-5.63	28.62	14.08	39.04	33.37	215	206 Average	HORIZONTAL
2	11397.97	61.77	74.00	-12.23	42.02	14.08	39.04	33.37	215	206 Peak	HORIZONTAL

Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11399.36	48.39	54.00	-5.61	28.64	14.08	39.04	33.37	222	187 Average	VERTICAL
2	11403.82	61.51	74.00	-12.49	41.76	14.08	39.04	33.37	222	187 Peak	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15683.63	50.21	54.00	-3.79	29.72	16.45	37.91	33.87	203	143	Average	HORIZONTAL
2	15692.37	63.70	74.00	-10.30	43.25	16.48	37.84	33.87	203	143	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15681.69	50.11	54.00	-3.89	29.62	16.45	37.91	33.87	195	134	Average	VERTICAL
2	15693.39	62.77	74.00	-11.23	42.32	16.48	37.84	33.87	195	134	Peak	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	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	10610.30	46.10	54.00	-7.90	28.57	12.75	38.40	33.62	214	153	Average	HORIZONTAL
2	10618.90	58.94	74.00	-15.06	41.41	12.75	38.40	33.62	214	153	Peak	HORIZONTAL
3	15930.90	50.65	54.00	-3.35	30.65	16.63	37.47	34.10	223	148	Average	HORIZONTAL
4	15931.45	63.18	74.00	-10.82	43.18	16.63	37.47	34.10	223	148	Peak	HORIZONTAL

Vertical

	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	10611.81	46.41	54.00	-7.59	28.88	12.75	38.40	33.62	224	158	Average	VERTICAL
2	10626.11	58.96	74.00	-15.04	41.38	12.80	38.40	33.62	224	158	Peak	VERTICAL
3	15931.62	50.69	54.00	-3.31	30.69	16.63	37.47	34.10	230	154	Average	VERTICAL
4	15938.97	63.82	74.00	-10.18	43.82	16.63	37.47	34.10	230	154	Peak	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	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	11011.66	60.22	74.00	-13.78	41.76	13.44	38.40	33.38	222	138	Peak	HORIZONTAL
2	11015.14	46.65	54.00	-7.35	28.19	13.44	38.40	33.38	222	138	Average	HORIZONTAL

Vertical

	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	11012.16	46.95	54.00	-7.05	28.49	13.44	38.40	33.38	227	139	Average	VERTICAL
2	11028.31	60.08	74.00	-13.92	41.52	13.49	38.45	33.38	227	139	Peak	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 110 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11099.42	47.41	54.00	-6.59	28.63	13.60	38.56	33.38	216	126 Average	HORIZONTAL
2	11103.47	60.83	74.00	-13.17	42.05	13.60	38.56	33.38	216	126 Peak	HORIZONTAL

Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	11106.25	47.42	54.00	-6.58	28.64	13.60	38.56	33.38	211	118 Average	VERTICAL
2	11109.99	60.94	74.00	-13.06	42.16	13.60	38.56	33.38	211	118 Peak	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	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	11343.30	48.21	54.00	-5.79	28.68	13.97	38.93	33.37	201	132	Average	HORIZONTAL
2	11344.89	61.11	74.00	-12.89	41.58	13.97	38.93	33.37	201	132	Peak	HORIZONTAL

Vertical

	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	11330.04	61.34	74.00	-12.66	41.81	13.97	38.93	33.37	205	126	Peak	VERTICAL
2	11333.83	48.23	54.00	-5.77	28.70	13.97	38.93	33.37	205	126	Average	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	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	15870.62	63.37	74.00	-10.63	43.24	16.57	37.62	34.06	137	311	Peak	HORIZONTAL
2	15870.64	51.15	54.00	-2.85	31.02	16.57	37.62	34.06	137	311	Average	HORIZONTAL

Vertical

	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	15869.51	63.66	74.00	-10.34	43.53	16.57	37.62	34.06	139	303	Peak	VERTICAL
2	15870.34	51.10	54.00	-2.90	30.97	16.57	37.62	34.06	139	303	Average	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	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	11060.19	45.85	54.00	-8.15	27.17	13.55	38.51	33.38	132	321	Average	HORIZONTAL
2	11060.55	59.91	74.00	-14.09	41.23	13.55	38.51	33.38	132	321	Peak	HORIZONTAL

Vertical

	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	11060.62	58.87	74.00	-15.13	40.19	13.55	38.51	33.38	136	301	Peak	VERTICAL
2	11060.90	45.55	54.00	-8.45	26.87	13.55	38.51	33.38	136	301	Average	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11219.12	47.36	54.00	-6.64	28.26	13.76	38.72	33.38	126	310	Average	HORIZONTAL
2	11219.74	58.82	74.00	-15.18	39.72	13.76	38.72	33.38	126	310	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11219.45	47.02	54.00	-6.98	27.92	13.76	38.72	33.38	129	333	Average	VERTICAL
2	11219.59	61.05	74.00	-12.95	41.95	13.76	38.72	33.38	129	333	Peak	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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



Straddle Channel

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	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	11433.00	61.62	74.00	-12.38	41.77	14.13	39.09	33.37	231	126	Peak	HORIZONTAL
2	11442.14	48.12	54.00	-5.88	28.27	14.13	39.09	33.37	231	126	Average	HORIZONTAL

Vertical

	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	11439.22	61.07	74.00	-12.93	41.22	14.13	39.09	33.37	233	165	Peak	VERTICAL
2	11441.13	48.13	54.00	-5.87	28.28	14.13	39.09	33.37	233	165	Average	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11412.33	48.42	54.00	-5.58	28.67	14.08	39.04	33.37	217	102	Average	HORIZONTAL
2	11412.97	61.25	74.00	-12.75	41.50	14.08	39.04	33.37	217	102	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11411.58	48.41	54.00	-5.59	28.66	14.08	39.04	33.37	242	23	Average	VERTICAL
2	11413.55	61.83	74.00	-12.17	42.08	14.08	39.04	33.37	242	23	Peak	VERTICAL



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Horizontal

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11379.58	46.61	54.00	-7.39	26.96	14.03	38.99	33.37	121	314	Average	HORIZONTAL
2	11379.99	59.80	74.00	-14.20	40.15	14.03	38.99	33.37	121	314	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit	Over	Read	CableAntenna	Preamp	A/Pos	T/Pos	Remark	PoI/Phase	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11379.21	59.81	74.00	-14.19	40.16	14.03	38.99	33.37	123	301	Peak	VERTICAL
2	11379.45	46.32	54.00	-7.68	26.67	14.03	38.99	33.37	123	301	Average	VERTICAL

Note:

The amplitude of spurious emissions that are attenuated by more than 20dB below the permissible value has no need to be reported.

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

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

4.6. Band Edge Emissions Measurement

4.6.1. Limit

For transmitters operating in the 5.25-5.35 GHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.470-5.725 GHz band: all emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

In addition, In case the emission fall within the restricted band specified on 15.205(a), then the 15.209(a) limit in the table below has to be followed.

Frequencies (MHz)	Field Strength (micorvolts/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(kHz)	300
0.490~1.705	24000/F(kHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

4.6.2. Measuring Instruments and Setting

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

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	100 MHz
RBW / VBW (Emission in restricted band)	1 MHz / 3MHz for Peak, 1 MHz / 1/T for Average
RBW / VBW (Emission in non-restricted band)	1 MHz / 3MHz for Peak

4.6.3. Test Procedures

1. The test procedure is the same as section 4.5.3.

4.6.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.5.4.

4.6.5. Test Deviation

There is no deviation with the original standard.

4.6.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

4.6.7. Test Result of Band Edge and Fundamental Emissions

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 23, 2015 ~ Nov. 24, 2015		
Test Mode	Mode 1: EUT 1 + Set 1 Ceiling Mount Omni Antenna / 7 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	5150.00	58.96	74.00	-15.04	50.12	8.15	33.74	33.05	221	332	Peak	VERTICAL
2	5150.00	48.32	54.00	-5.68	39.48	8.15	33.74	33.05	221	332	Average	VERTICAL
3	5252.20	119.55			110.43	8.27	33.91	33.06	221	332	Peak	VERTICAL
4	5252.20	109.42			100.30	8.27	33.91	33.06	221	332	Average	VERTICAL
5	5350.00	49.49	54.00	-4.51	40.29	8.20	34.06	33.06	221	332	Average	VERTICAL
6	5351.20	60.40	74.00	-13.60	51.20	8.20	34.06	33.06	221	332	Peak	VERTICAL

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	5299.20	109.76			100.60	8.24	33.98	33.06	228	39	Average	VERTICAL
2	5303.60	121.12			111.96	8.24	33.98	33.06	228	39	Peak	VERTICAL
3	5373.60	62.23	74.00	-11.77	53.00	8.18	34.11	33.06	228	39	Peak	VERTICAL
4	5376.00	49.93	54.00	-4.07	40.70	8.18	34.11	33.06	228	39	Average	VERTICAL

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	5314.20	108.81			99.63	8.23	34.01	33.06	214	33	Average	VERTICAL
2	5314.80	121.49			112.31	8.23	34.01	33.06	214	33	Peak	VERTICAL
3	5350.00	52.21	54.00	-1.79	43.01	8.20	34.06	33.06	214	33	Average	VERTICAL
4	5350.20	64.37	74.00	-9.63	55.17	8.20	34.06	33.06	214	33	Peak	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 1: EUT 1 + Set 1 Ceiling Mount Omni Antenna / 7 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	5453.60	63.84	74.00	-10.16	54.31	8.36	34.23	33.06	232	298	Peak	VERTICAL
2	5459.00	50.93	54.00	-3.07	41.40	8.36	34.23	33.06	232	298	Average	VERTICAL
3	5467.60	66.36	68.20	-1.84	56.76	8.41	34.25	33.06	232	298	Peak	VERTICAL
4	5495.00	120.89			111.21	8.46	34.28	33.06	232	298	Peak	VERTICAL
5	5495.40	108.20			98.45	8.51	34.30	33.06	232	298	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	5437.20	50.01	54.00	-3.99	40.55	8.32	34.20	33.06	170	358	Average	HORIZONTAL
2	5454.60	62.13	74.00	-11.87	52.60	8.36	34.23	33.06	170	358	Peak	HORIZONTAL
3	5464.60	62.98	68.20	-5.22	53.38	8.41	34.25	33.06	170	358	Peak	HORIZONTAL
4	5584.80	114.84			104.83	8.75	34.35	33.09	170	358	Peak	HORIZONTAL
5	5587.20	104.06			94.05	8.75	34.35	33.09	170	358	Average	HORIZONTAL
6	5728.20	61.32	68.20	-6.88	51.55	8.47	34.44	33.14	170	358	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	5695.20	116.66			106.81	8.56	34.42	33.13	150	350	Average	HORIZONTAL
2	5696.40	104.10			94.25	8.56	34.42	33.13	150	350	Peak	HORIZONTAL
3	5725.00	65.69	68.20	-2.51	55.91	8.47	34.44	33.13	150	350	Peak	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 1: EUT 1 + Set 1 Ceiling Mount Omni Antenna / 7 dBi		

Channel 54

	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	5272.00	107.84			98.70	8.26	33.94	33.06	224	339	Average	VERTICAL
2	5273.60	119.42			110.28	8.26	33.94	33.06	224	339	Peak	VERTICAL
3	5350.00	63.49	74.00	-10.51	54.29	8.20	34.06	33.06	224	339	Peak	VERTICAL
4	5350.80	50.64	54.00	-3.36	41.44	8.20	34.06	33.06	224	339	Average	VERTICAL

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

Channel 62

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5300.00	112.72			103.56	8.24	33.98	33.06	220	346	Peak	VERTICAL
2	5300.40	101.60			92.44	8.24	33.98	33.06	220	346	Average	VERTICAL
3	5350.00	52.75	54.00	-1.25	43.55	8.20	34.06	33.06	220	346	Average	VERTICAL
4	5356.80	64.94	74.00	-9.06	55.73	8.19	34.08	33.06	220	346	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 1: EUT 1 + Set 1 Ceiling Mount Omni Antenna / 7 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	5440.00	52.13	54.00	-1.87	42.67	8.32	34.20	33.06	146	300	Average	VERTICAL
2	5455.60	65.03	74.00	-8.97	55.50	8.36	34.23	33.06	146	300	Peak	VERTICAL
3	5465.60	67.01	68.20	-1.19	57.41	8.41	34.25	33.06	146	300	Peak	VERTICAL
4	5498.00	105.86			96.11	8.51	34.30	33.06	146	300	Average	VERTICAL
5	5520.40	117.40			107.60	8.56	34.31	33.07	146	300	Peak	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	5457.20	52.03	54.00	-1.97	42.50	8.36	34.23	33.06	136	26	Average	VERTICAL
2	5460.00	65.35	74.00	-8.65	55.82	8.36	34.23	33.06	136	26	Peak	VERTICAL
3	5470.00	67.12	68.20	-1.08	57.52	8.41	34.25	33.06	136	26	Peak	VERTICAL
4	5541.60	121.64			111.78	8.61	34.32	33.07	136	26	Peak	VERTICAL
5	5547.60	109.90			100.00	8.65	34.33	33.08	136	26	Average	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	5668.40	107.54			97.61	8.64	34.40	33.11	180	31	Average	VERTICAL
2	5678.40	118.30			108.41	8.60	34.41	33.12	180	31	Peak	VERTICAL
3	5731.20	66.89	68.20	-1.31	57.12	8.47	34.44	33.14	180	31	Peak	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 1: EUT 1 + Set 1 Ceiling Mount Omni Antenna / 7 dBi		

Channel 58

	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	5051.00	49.01	54.00	-4.99	40.75	7.74	33.57	33.05	179	308	Average	VERTICAL
2	5059.00	61.20	74.00	-12.80	52.85	7.80	33.60	33.05	179	308	Peak	VERTICAL
3	5254.00	107.97			98.85	8.27	33.91	33.06	179	308	Peak	VERTICAL
4	5266.00	97.01			87.87	8.26	33.94	33.06	179	308	Average	VERTICAL
5	5350.00	52.97	54.00	-1.03	43.77	8.20	34.06	33.06	179	308	Average	VERTICAL
6	5377.00	64.60	74.00	-9.40	55.37	8.18	34.11	33.06	179	308	Peak	VERTICAL

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

Channel 106

	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	5444.00	63.98	74.00	-10.02	54.52	8.32	34.20	33.06	178	33	Peak	VERTICAL
2	5459.00	52.27	54.00	-1.73	42.74	8.36	34.23	33.06	178	33	Average	VERTICAL
3	5463.00	52.60	54.00	-1.40	43.07	8.36	34.23	33.06	178	33	Average	VERTICAL
4	5469.00	69.16	74.00	-4.84	59.56	8.41	34.25	33.06	178	33	Peak	VERTICAL
5	5546.00	108.82			98.92	8.65	34.33	33.08	178	33	Peak	VERTICAL
6	5548.00	97.59			87.69	8.65	34.33	33.08	178	33	Average	VERTICAL
7	5771.00	61.69	74.00	-12.31	51.99	8.39	34.46	33.15	178	33	Peak	VERTICAL
8	5773.00	49.60	54.00	-4.40	39.93	8.35	34.47	33.15	178	33	Average	VERTICAL

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

Channel 122

	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	5460.00	63.95	74.00	-10.05	54.42	8.36	34.23	33.06	181	31	Peak	VERTICAL
2	5460.00	51.99	54.00	-2.01	42.46	8.36	34.23	33.06	181	31	Average	VERTICAL
3	5467.00	67.90	74.00	-6.10	58.30	8.41	34.25	33.06	181	31	Peak	VERTICAL
4	5470.00	52.59	54.00	-1.41	42.99	8.41	34.25	33.06	181	31	Average	VERTICAL
5	5582.00	104.68			94.67	8.75	34.35	33.09	181	31	Average	VERTICAL
6	5586.00	116.87			106.86	8.75	34.35	33.09	181	31	Peak	VERTICAL
7	5731.00	52.00	54.00	-2.00	42.23	8.47	34.44	33.14	181	31	Average	VERTICAL
8	5743.00	62.90	74.00	-11.10	53.16	8.43	34.45	33.14	181	31	Peak	VERTICAL

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	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 1: EUT 1 + Set 1 Ceiling Mount Omni Antenna / 7 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	5724.20	106.46			96.68	8.47	34.44	33.13	215	352	Average	VERTICAL
2	5724.80	117.52			107.74	8.47	34.44	33.13	215	352	Peak	VERTICAL
3	5866.40	62.35	68.20	-5.85	52.37	8.64	34.52	33.18	215	352	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 1: EUT 1 + Set 1 Ceiling Mount Omni Antenna / 7 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	dB	cm	deg	
1	5711.80	107.92			98.11	8.51	34.43	33.13	183	47 Average	VERTICAL
2	5712.40	118.86			109.05	8.51	34.43	33.13	183	47 Peak	VERTICAL
3	5858.80	62.90	68.20	-5.30	52.91	8.64	34.52	33.17	183	47 Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 1: EUT 1 + Set 1 Ceiling Mount Omni Antenna / 7 dBi		

Channel 138

	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	5693.00	114.88			105.03	8.56	34.42	33.13	174	40 Peak	VERTICAL
2	5697.00	103.12			93.27	8.56	34.42	33.13	174	40 Average	VERTICAL
3	5863.00	62.76	68.20	-5.44	52.78	8.64	34.52	33.18	174	40 Peak	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 2: EUT 1 + Set 2 Sector Antenna / 6.5 dBi		

Channel 52

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5116.60	60.87	74.00	-13.13	52.20	8.03	33.69	33.05	195	7	Peak	HORIZONTAL
2	5119.60	48.70	54.00	-5.30	40.03	8.03	33.69	33.05	195	7	Average	HORIZONTAL
3	5256.40	119.64			110.52	8.27	33.91	33.06	195	7	Peak	HORIZONTAL
4	5261.80	106.00			96.88	8.27	33.91	33.06	195	7	Average	HORIZONTAL
5	5363.80	61.72	74.00	-12.28	52.51	8.19	34.08	33.06	195	7	Peak	HORIZONTAL
6	5372.20	50.20	54.00	-3.80	40.97	8.18	34.11	33.06	195	7	Average	HORIZONTAL

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	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5302.80	109.62			100.46	8.24	33.98	33.06	207	0	Average	HORIZONTAL
2	5303.60	118.66			109.50	8.24	33.98	33.06	207	0	Peak	HORIZONTAL
3	5351.20	62.26	74.00	-11.74	53.06	8.20	34.06	33.06	207	0	Peak	HORIZONTAL
4	5354.40	50.62	54.00	-3.38	41.41	8.19	34.08	33.06	207	0	Average	HORIZONTAL

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	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5315.00	120.56			111.38	8.23	34.01	33.06	186	350	Peak	VERTICAL
2	5315.40	108.42			99.24	8.23	34.01	33.06	186	350	Average	VERTICAL
3	5350.60	52.83	54.00	-1.17	43.63	8.20	34.06	33.06	186	350	Average	VERTICAL
4	5351.60	67.37	74.00	-6.63	58.17	8.20	34.06	33.06	186	350	Peak	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 2: EUT 1 + Set 2 Sector Antenna / 6.5 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	5456.80	64.48	74.00	-9.52	54.95	8.36	34.23	33.06	192	352	Peak	HORIZONTAL
2	5459.20	51.42	54.00	-2.58	41.89	8.36	34.23	33.06	192	352	Average	HORIZONTAL
3	5468.80	66.62	68.20	-1.58	57.02	8.41	34.25	33.06	192	352	Peak	HORIZONTAL
4	5503.20	110.05			100.30	8.51	34.30	33.06	192	352	Average	HORIZONTAL
5	5503.60	122.49			112.74	8.51	34.30	33.06	192	352	Peak	HORIZONTAL

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	5439.60	62.00	74.00	-12.00	52.54	8.32	34.20	33.06	195	351	Peak	HORIZONTAL
2	5439.60	51.29	54.00	-2.71	41.83	8.32	34.20	33.06	195	351	Average	HORIZONTAL
3	5467.00	62.23	68.20	-5.97	52.63	8.41	34.25	33.06	195	351	Peak	HORIZONTAL
4	5577.60	123.47			113.45	8.75	34.35	33.08	195	351	Peak	HORIZONTAL
5	5578.20	111.81			101.80	8.75	34.35	33.09	195	351	Average	HORIZONTAL
6	5728.20	61.67	68.20	-6.53	51.90	8.47	34.44	33.14	195	351	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	5704.20	105.02			95.17	8.56	34.42	33.13	219	347	Average	VERTICAL
2	5705.00	117.34			107.49	8.56	34.42	33.13	219	347	Peak	VERTICAL
3	5725.00	67.19	68.20	-1.01	57.41	8.47	34.44	33.13	219	347	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 2: EUT 1 + Set 2 Sector Antenna / 6.5 dBi		

Channel 54

	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	5260.80	104.68			95.56	8.27	33.91	33.06	219	346	Average	VERTICAL
2	5281.20	117.32			108.17	8.25	33.96	33.06	219	346	Peak	VERTICAL
3	5356.40	62.63	74.00	-11.37	53.42	8.19	34.08	33.06	219	346	Peak	VERTICAL
4	5357.60	50.12	54.00	-3.88	40.91	8.19	34.08	33.06	219	346	Average	VERTICAL

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

Channel 62

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5300.00	100.33			91.17	8.24	33.98	33.06	205	350	Average	HORIZONTAL
2	5307.60	111.76			102.60	8.24	33.98	33.06	205	350	Peak	HORIZONTAL
3	5350.00	52.14	54.00	-1.86	42.94	8.20	34.06	33.06	205	350	Average	HORIZONTAL
4	5354.00	62.84	74.00	-11.16	53.64	8.20	34.06	33.06	205	350	Peak	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 2: EUT 1 + Set 2 Sector Antenna / 6.5 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	5452.00	52.85	54.00	-1.15	43.32	8.36	34.23	33.06	193	354	Average	HORIZONTAL
2	5460.00	70.53	74.00	-3.47	61.00	8.36	34.23	33.06	193	354	Peak	HORIZONTAL
3	5461.20	67.17	68.20	-1.03	57.64	8.36	34.23	33.06	193	354	Peak	HORIZONTAL
4	5501.20	119.37			109.62	8.51	34.30	33.06	193	354	Peak	HORIZONTAL
5	5520.40	106.25			96.45	8.56	34.31	33.07	193	354	Average	HORIZONTAL

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	64.83	74.00	-9.17	55.30	8.36	34.23	33.06	184	357	Peak	HORIZONTAL
2	5459.20	51.29	54.00	-2.71	41.76	8.36	34.23	33.06	184	357	Average	HORIZONTAL
3	5468.80	66.34	68.20	-1.86	56.74	8.41	34.25	33.06	184	357	Peak	HORIZONTAL
4	5544.00	107.29			97.39	8.65	34.33	33.08	184	357	Average	HORIZONTAL
5	5544.80	122.49			112.59	8.65	34.33	33.08	184	357	Peak	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	5675.60	106.96			97.07	8.60	34.41	33.12	199	348	Average	HORIZONTAL
2	5679.20	119.03			109.14	8.60	34.41	33.12	199	348	Peak	HORIZONTAL
3	5726.00	67.18	68.20	-1.02	57.40	8.47	34.44	33.13	199	348	Peak	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 2: EUT 1 + Set 2 Sector Antenna / 6.5 dBi		

Channel 58

	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	5099.00	48.85	54.00	-5.15	40.26	7.97	33.67	33.05	200	346	Average	HORIZONTAL
2	5136.00	60.16	74.00	-13.84	51.40	8.09	33.72	33.05	200	346	Peak	HORIZONTAL
3	5255.00	97.41			88.29	8.27	33.91	33.06	200	346	Average	HORIZONTAL
4	5266.00	110.21			101.07	8.26	33.94	33.06	200	346	Peak	HORIZONTAL
5	5358.00	65.77	74.00	-8.23	56.56	8.19	34.08	33.06	200	346	Peak	HORIZONTAL
6	5360.00	52.66	54.00	-1.34	43.45	8.19	34.08	33.06	200	346	Average	HORIZONTAL

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

Channel 106

	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	5446.00	63.95	74.00	-10.05	54.49	8.32	34.20	33.06	188	357	Peak	HORIZONTAL
2	5452.00	52.38	54.00	-1.62	42.85	8.36	34.23	33.06	188	357	Average	HORIZONTAL
3	5461.00	52.15	54.00	-1.85	42.62	8.36	34.23	33.06	188	357	Average	HORIZONTAL
4	5469.00	69.57	74.00	-4.43	59.97	8.41	34.25	33.06	188	357	Peak	HORIZONTAL
5	5524.00	108.58			98.78	8.56	34.31	33.07	188	357	Peak	HORIZONTAL
6	5526.00	96.08			86.28	8.56	34.31	33.07	188	357	Average	HORIZONTAL
7	5725.00	49.20	54.00	-4.80	39.42	8.47	34.44	33.13	188	357	Average	HORIZONTAL
8	5762.00	61.79	74.00	-12.21	52.08	8.39	34.46	33.14	188	357	Peak	HORIZONTAL

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

Channel 122

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5449.00	63.99	74.00	-10.01	54.46	8.36	34.23	33.06	195	353	Peak	HORIZONTAL
2	5458.00	51.53	54.00	-2.47	42.00	8.36	34.23	33.06	195	353	Average	HORIZONTAL
3	5470.00	64.70	68.20	-3.50	55.10	8.41	34.25	33.06	195	353	Peak	HORIZONTAL
4	5621.00	104.34			94.31	8.76	34.37	33.10	195	353	Average	HORIZONTAL
5	5622.00	116.94			106.91	8.76	34.37	33.10	195	353	Peak	HORIZONTAL
6	5754.00	66.48	68.20	-1.72	56.74	8.43	34.45	33.14	195	353	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	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 2: EUT 1 + Set 2 Sector Antenna / 6.5 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	dB	dB/m	dB	cm	deg		
1	5715.80	109.83			100.02	8.51	34.43	33.13	193	356	Average	HORIZONTAL
2	5725.40	120.93			111.15	8.47	34.44	33.13	193	356	Peak	HORIZONTAL
3	5864.00	62.29	68.20	-5.91	52.31	8.64	34.52	33.18	193	356	Peak	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 2: EUT 1 + Set 2 Sector Antenna / 6.5 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	5707.60	113.79			103.98	8.51	34.43	33.13	214	335	Peak	VERTICAL
2	5713.00	102.68			92.87	8.51	34.43	33.13	214	335	Average	VERTICAL
3	5850.00	62.12	68.20	-6.08	52.22	8.56	34.51	33.17	214	335	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 2: EUT 1 + Set 2 Sector Antenna / 6.5 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	5684.00	115.49			105.60	8.60	34.41	33.12	192	356 Peak	HORIZONTAL
2	5684.00	102.32			92.43	8.60	34.41	33.12	192	356 Average	HORIZONTAL
3	5863.00	64.53	68.20	-3.67	54.55	8.64	34.52	33.18	192	356 Peak	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 3: EUT 1 + Set 3 Sector Antenna / 5.5 dBi		

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	dB	deg	cm	
1	5125.00	46.69	54.00	-7.31	41.85	6.04	33.27	34.47	356	163 Average	HORIZONTAL
2	5145.20	57.98	74.00	-16.02	53.03	6.11	33.31	34.47	356	163 Peak	HORIZONTAL
3	5252.80	119.11			113.77	6.35	33.46	34.47	356	163 Peak	HORIZONTAL
4	5252.80	108.45			103.11	6.35	33.46	34.47	356	163 Average	HORIZONTAL
5	5350.60	47.38	54.00	-6.62	41.68	6.58	33.59	34.47	356	163 Average	HORIZONTAL
6	5351.20	58.95	74.00	-15.05	53.25	6.58	33.59	34.47	356	163 Peak	HORIZONTAL

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	dB	deg	cm	
1	5294.80	119.77			114.25	6.47	33.52	34.47	351	197 Peak	HORIZONTAL
2	5304.40	108.68			103.16	6.47	33.52	34.47	351	197 Average	HORIZONTAL
3	5351.20	48.36	54.00	-5.64	42.66	6.58	33.59	34.47	351	197 Average	HORIZONTAL
4	5352.40	59.74	74.00	-14.26	54.04	6.58	33.59	34.47	351	197 Peak	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	dB	deg	cm	
1	5314.60	109.46			103.87	6.51	33.55	34.47	354	186 Average	HORIZONTAL
2	5316.20	122.72			117.13	6.51	33.55	34.47	354	186 Peak	HORIZONTAL
3	5351.20	62.96	74.00	-11.04	57.26	6.58	33.59	34.47	354	186 Peak	HORIZONTAL
4	5351.20	50.95	54.00	-3.05	45.25	6.58	33.59	34.47	354	186 Average	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 3: EUT 1 + Set 3 Sector Antenna / 5.5 dBi		

Channel 100

	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	5452.40	60.49	74.00	-13.51	54.43	6.79	33.74	34.47	25	131 Peak	VERTICAL
2	5458.80	49.23	54.00	-4.77	43.17	6.79	33.74	34.47	25	131 Average	VERTICAL
3	5470.00	63.24	74.00	-10.76	57.13	6.82	33.76	34.47	25	131 Peak	VERTICAL
4	5470.00	52.00	54.00	-2.00	45.89	6.82	33.76	34.47	25	131 Average	VERTICAL
5	5498.00	107.33			101.14	6.86	33.80	34.47	25	131 Average	VERTICAL
6	5502.80	118.90			112.71	6.86	33.80	34.47	25	131 Peak	VERTICAL

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

Channel 116

	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	5459.20	59.54	74.00	-14.46	53.48	6.79	33.74	34.47	340	176 Peak	HORIZONTAL
2	5460.00	47.55	54.00	-6.45	41.49	6.79	33.74	34.47	340	176 Average	HORIZONTAL
3	5468.80	48.05	54.00	-5.95	41.94	6.82	33.76	34.47	340	176 Average	HORIZONTAL
4	5469.20	59.36	74.00	-14.64	53.25	6.82	33.76	34.47	340	176 Peak	HORIZONTAL
5	5575.20	109.56			103.01	6.98	34.05	34.48	340	176 Average	HORIZONTAL
6	5577.60	121.40			114.85	6.98	34.05	34.48	340	176 Peak	HORIZONTAL
7	5725.00	47.63	54.00	-6.37	41.21	6.43	34.50	34.51	340	176 Average	HORIZONTAL
8	5727.40	60.15	74.00	-13.85	53.74	6.43	34.50	34.52	340	176 Peak	HORIZONTAL

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

Channel 140

	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	5701.40	104.91			98.45	6.57	34.40	34.51	355	187 Average	VERTICAL
2	5703.80	116.68			110.22	6.57	34.40	34.51	355	187 Peak	VERTICAL
3	5725.00	52.93	54.00	-1.07	46.51	6.43	34.50	34.51	355	187 Average	VERTICAL
4	5725.20	65.34	74.00	-8.66	58.92	6.43	34.50	34.51	355	187 Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 3: EUT 1 + Set 3 Sector Antenna / 5.5 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	deg	cm		
1	5271.80	106.97			101.57	6.39	33.48	34.47	4	172 Average	VERTICAL
2	5283.80	118.36			112.90	6.43	33.50	34.47	4	172 Peak	VERTICAL
3	5350.40	48.39	54.00	-5.61	42.69	6.58	33.59	34.47	4	172 Average	VERTICAL
4	5362.40	63.42	74.00	-10.58	57.66	6.62	33.61	34.47	4	172 Peak	VERTICAL

Item 1, 2 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	deg	cm		
1	5297.60	112.01			106.49	6.47	33.52	34.47	16	168 Peak	VERTICAL
2	5311.60	99.91			94.32	6.51	33.55	34.47	16	168 Average	VERTICAL
3	5350.40	51.66	54.00	-2.34	45.96	6.58	33.59	34.47	16	168 Average	VERTICAL
4	5351.20	63.57	74.00	-10.43	57.87	6.58	33.59	34.47	16	168 Peak	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 3: EUT 1 + Set 3 Sector Antenna / 5.5 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	5458.00	61.56	74.00	-12.44	55.50	6.79	33.74	34.47	337	156	Peak	VERTICAL
2	5460.00	48.74	54.00	-5.26	42.68	6.79	33.74	34.47	337	156	Average	VERTICAL
3	5469.60	52.31	54.00	-1.69	46.20	6.82	33.76	34.47	337	156	Average	VERTICAL
4	5470.00	67.74	74.00	-6.26	61.63	6.82	33.76	34.47	337	156	Peak	VERTICAL
5	5505.20	101.85			95.66	6.86	33.80	34.47	337	156	Average	VERTICAL
6	5507.60	114.46			108.27	6.86	33.80	34.47	337	156	Peak	VERTICAL

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	5455.80	62.31	74.00	-11.69	56.25	6.79	33.74	34.47	336	172	Peak	HORIZONTAL
2	5459.40	48.53	54.00	-5.47	42.47	6.79	33.74	34.47	336	172	Average	HORIZONTAL
3	5469.00	49.86	54.00	-4.14	43.75	6.82	33.76	34.47	336	172	Average	HORIZONTAL
4	5469.40	63.63	74.00	-10.37	57.52	6.82	33.76	34.47	336	172	Peak	HORIZONTAL
5	5557.80	119.74			113.34	6.93	33.95	34.48	336	172	Peak	HORIZONTAL
6	5559.00	107.22			100.82	6.93	33.95	34.48	336	172	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	5667.20	118.69			112.17	6.72	34.30	34.50	345	166	Peak	HORIZONTAL
2	5668.00	107.36			100.84	6.72	34.30	34.50	345	166	Average	HORIZONTAL
3	5726.40	70.72	74.00	-3.28	64.31	6.43	34.50	34.52	345	166	Peak	HORIZONTAL
4	5731.20	50.79	54.00	-3.21	44.38	6.43	34.50	34.52	345	166	Average	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 3: EUT 1 + Set 3 Sector Antenna / 5.5 dBi		

Channel 58

	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	5124.00	59.15	74.00	-14.85	54.31	6.04	33.27	34.47	358	148	Peak	VERTICAL
2	5134.00	46.09	54.00	-7.91	41.20	6.07	33.29	34.47	358	148	Average	VERTICAL
3	5304.00	109.48			103.96	6.47	33.52	34.47	358	148	Peak	VERTICAL
4	5304.00	97.83			92.31	6.47	33.52	34.47	358	148	Average	VERTICAL
5	5350.00	52.57	54.00	-1.43	46.87	6.58	33.59	34.47	358	148	Average	VERTICAL
6	5354.00	65.55	74.00	-8.45	59.85	6.58	33.59	34.47	358	148	Peak	VERTICAL

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

Channel 106

	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	5458.00	65.49	74.00	-8.51	59.43	6.79	33.74	34.47	344	140	Peak	VERTICAL
2	5460.00	52.25	54.00	-1.75	46.19	6.79	33.74	34.47	344	140	Average	VERTICAL
3	5462.00	52.45	54.00	-1.55	46.39	6.79	33.74	34.47	344	140	Average	VERTICAL
4	5463.00	66.90	74.00	-7.10	60.84	6.79	33.74	34.47	344	140	Peak	VERTICAL
5	5506.00	106.09			99.90	6.86	33.80	34.47	344	140	Peak	VERTICAL
6	5513.00	93.92			87.66	6.88	33.85	34.47	344	140	Average	VERTICAL
7	5725.00	47.22	54.00	-6.78	40.80	6.43	34.50	34.51	344	140	Average	VERTICAL
8	5768.00	60.11	74.00	-13.89	53.75	6.29	34.60	34.53	344	140	Peak	VERTICAL

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

Channel 122

	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	5446.00	49.82	54.00	-4.18	43.80	6.77	33.72	34.47	13	173	Average	VERTICAL
2	5456.00	64.55	74.00	-9.45	58.49	6.79	33.74	34.47	13	173	Peak	VERTICAL
3	5467.00	67.39	74.00	-6.61	61.28	6.82	33.76	34.47	13	173	Peak	VERTICAL
4	5467.00	52.45	54.00	-1.55	46.34	6.82	33.76	34.47	13	173	Average	VERTICAL
5	5604.00	101.41			94.80	7.00	34.10	34.49	13	173	Average	VERTICAL
6	5605.00	113.49			106.88	7.00	34.10	34.49	13	173	Peak	VERTICAL
7	5728.00	50.10	54.00	-3.90	43.69	6.43	34.50	34.52	13	173	Average	VERTICAL
8	5740.00	62.10	74.00	-11.90	55.71	6.36	34.55	34.52	13	173	Peak	VERTICAL

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	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 3: EUT 1 + Set 3 Sector Antenna / 5.5 dBi		

Channel 144

	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	5714.40	119.09			112.65	6.50	34.45	34.51	333	161	Peak	HORIZONTAL
2	5716.00	108.47			102.03	6.50	34.45	34.51	333	161	Average	HORIZONTAL
3	5850.00	48.10	54.00	-5.90	41.40	6.39	34.85	34.54	333	161	Average	HORIZONTAL
4	5861.20	59.28	74.00	-14.72	52.45	6.47	34.90	34.54	333	161	Peak	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 3: EUT 1 + Set 3 Sector Antenna / 5.5 dBi		

Channel 142

	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	5698.80	117.63			111.17	6.57	34.40	34.51	342	165	Peak	HORIZONTAL
2	5704.40	106.12			99.66	6.57	34.40	34.51	342	165	Average	HORIZONTAL
3	5859.60	60.43	74.00	-13.57	53.60	6.47	34.90	34.54	342	165	Peak	HORIZONTAL
4	5865.20	47.74	54.00	-6.26	40.91	6.47	34.90	34.54	342	165	Average	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 24, 2015		
Test Mode	Mode 3: EUT 1 + Set 3 Sector Antenna / 5.5 dBi		

Channel 138

	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	5702.00	102.97			96.51	6.57	34.40	34.51	342	171 Average	HORIZONTAL
2	5704.00	115.38			108.92	6.57	34.40	34.51	342	171 Peak	HORIZONTAL
3	5851.00	49.03	54.00	-4.97	42.33	6.39	34.85	34.54	342	171 Average	HORIZONTAL
4	5868.00	62.66	74.00	-11.34	55.83	6.47	34.90	34.54	342	171 Peak	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 23, 2015		
Test Mode	Mode 4: EUT 1 + Set 4 Sector Antenna / 7.5 dBi		

Channel 52

	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	5113.00	48.88	54.00	-5.12	40.21	8.03	33.69	33.05	234	5	Average	VERTICAL
2	5121.40	61.19	74.00	-12.81	52.52	8.03	33.69	33.05	234	5	Peak	VERTICAL
3	5251.60	112.48			103.36	8.27	33.91	33.06	234	5	Average	VERTICAL
4	5263.00	121.78			112.64	8.26	33.94	33.06	234	5	Peak	VERTICAL
5	5360.80	50.89	54.00	-3.11	41.68	8.19	34.08	33.06	234	5	Average	VERTICAL
6	5378.80	62.90	74.00	-11.10	53.67	8.18	34.11	33.06	234	5	Peak	VERTICAL

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

Channel 60

	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	5296.00	111.06			101.90	8.24	33.98	33.06	250	360	Average	VERTICAL
2	5296.80	121.27			112.11	8.24	33.98	33.06	250	360	Peak	VERTICAL
3	5350.40	51.31	54.00	-2.69	42.11	8.20	34.06	33.06	250	360	Average	VERTICAL
4	5386.40	62.64	74.00	-11.36	53.40	8.17	34.13	33.06	250	360	Peak	VERTICAL

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

Channel 64

	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	5314.80	108.97			99.79	8.23	34.01	33.06	212	332	Average	VERTICAL
2	5316.20	120.33			111.15	8.23	34.01	33.06	212	332	Peak	VERTICAL
3	5350.80	52.67	54.00	-1.33	43.47	8.20	34.06	33.06	212	332	Average	VERTICAL
4	5351.40	64.70	74.00	-9.30	55.50	8.20	34.06	33.06	212	332	Peak	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 23, 2015		
Test Mode	Mode 4: EUT 1 + Set 4 Sector Antenna / 7.5 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	5458.00	67.43	74.00	-6.57	57.90	8.36	34.23	33.06	152	9 Peak	HORIZONTAL
2	5459.20	52.20	54.00	-1.80	42.67	8.36	34.23	33.06	152	9 Average	HORIZONTAL
3	5467.20	66.44	68.20	-1.76	56.84	8.41	34.25	33.06	152	9 Peak	HORIZONTAL
4	5498.00	122.32			112.57	8.51	34.30	33.06	152	9 Peak	HORIZONTAL
5	5498.40	111.06			101.31	8.51	34.30	33.06	152	9 Average	HORIZONTAL

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	5440.00	62.66	74.00	-11.34	53.20	8.32	34.20	33.06	201	342 Peak	VERTICAL
2	5440.00	51.66	54.00	-2.34	42.20	8.32	34.20	33.06	201	342 Average	VERTICAL
3	5465.20	62.90	68.20	-5.30	53.30	8.41	34.25	33.06	201	342 Peak	VERTICAL
4	5584.00	122.47			112.46	8.75	34.35	33.09	201	342 Peak	VERTICAL
5	5584.00	111.78			101.77	8.75	34.35	33.09	201	342 Average	VERTICAL
6	5715.20	61.47	68.20	-6.73	51.66	8.51	34.43	33.13	201	342 Peak	VERTICAL

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	5695.20	119.58			109.73	8.56	34.42	33.13	220	360 Peak	VERTICAL
2	5697.00	108.00			98.15	8.56	34.42	33.13	220	360 Average	VERTICAL
3	5725.00	66.95	68.20	-1.25	57.17	8.47	34.44	33.13	220	360 Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 23, 2015		
Test Mode	Mode 4: EUT 1 + Set 4 Sector Antenna / 7.5 dBi		

Channel 54

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5258.40	121.30			112.18	8.27	33.91	33.06	267	344	Peak	VERTICAL
2	5264.00	108.62			99.48	8.26	33.94	33.06	267	344	Average	VERTICAL
3	5350.00	50.69	54.00	-3.31	41.49	8.20	34.06	33.06	267	344	Average	VERTICAL
4	5352.40	63.84	74.00	-10.16	54.64	8.20	34.06	33.06	267	344	Peak	VERTICAL

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

Channel 62

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	PoI/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5304.80	100.90			91.74	8.24	33.98	33.06	242	357	Average	VERTICAL
2	5305.60	113.37			104.21	8.24	33.98	33.06	242	357	Peak	VERTICAL
3	5350.40	52.52	54.00	-1.48	43.32	8.20	34.06	33.06	242	357	Average	VERTICAL
4	5374.40	71.98	74.00	-2.02	62.75	8.18	34.11	33.06	242	357	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 23, 2015		
Test Mode	Mode 4: EUT 1 + Set 4 Sector Antenna / 7.5 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	5457.20	62.57	74.00	-11.43	53.04	8.36	34.23	33.06	109	358	Peak	HORIZONTAL
2	5459.60	51.19	54.00	-2.81	41.66	8.36	34.23	33.06	109	358	Average	HORIZONTAL
3	5467.20	67.18	68.20	-1.02	57.58	8.41	34.25	33.06	109	358	Peak	HORIZONTAL
4	5499.20	101.53			91.78	8.51	34.30	33.06	109	358	Average	HORIZONTAL
5	5504.80	112.44			102.69	8.51	34.30	33.06	109	358	Peak	HORIZONTAL

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	5454.80	63.66	74.00	-10.34	54.13	8.36	34.23	33.06	242	355	Peak	VERTICAL
2	5458.80	51.30	54.00	-2.70	41.77	8.36	34.23	33.06	242	355	Average	VERTICAL
3	5468.80	66.50	68.20	-1.70	56.90	8.41	34.25	33.06	242	355	Peak	VERTICAL
4	5535.60	120.15			110.29	8.61	34.32	33.07	242	355	Peak	VERTICAL
5	5544.40	108.18			98.28	8.65	34.33	33.08	242	355	Average	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	5682.80	117.09			107.20	8.60	34.41	33.12	241	356	Peak	VERTICAL
2	5682.80	104.47			94.58	8.60	34.41	33.12	241	356	Average	VERTICAL
3	5726.80	66.79	68.20	-1.41	57.02	8.47	34.44	33.14	241	356	Peak	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 23, 2015		
Test Mode	Mode 4: EUT 1 + Set 4 Sector Antenna / 7.5 dBi		

Channel 58

	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	5042.00	48.46	54.00	-5.54	40.20	7.74	33.57	33.05	200	342	Average	VERTICAL
2	5051.00	61.40	74.00	-12.60	53.14	7.74	33.57	33.05	200	342	Peak	VERTICAL
3	5255.00	111.74			102.62	8.27	33.91	33.06	200	342	Peak	VERTICAL
4	5258.00	100.50			91.38	8.27	33.91	33.06	200	342	Average	VERTICAL
5	5354.00	65.53	74.00	-8.47	56.33	8.20	34.06	33.06	200	342	Peak	VERTICAL
6	5357.00	52.97	54.00	-1.03	43.76	8.19	34.08	33.06	200	342	Average	VERTICAL

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

Channel 106

	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	5456.00	65.68	74.00	-8.32	56.15	8.36	34.23	33.06	232	349	Peak	VERTICAL
2	5459.00	52.99	54.00	-1.01	43.46	8.36	34.23	33.06	232	349	Average	VERTICAL
3	5461.00	65.58	68.20	-2.62	56.05	8.36	34.23	33.06	232	349	Peak	VERTICAL
4	5506.00	105.72			95.98	8.51	34.30	33.07	232	349	Peak	VERTICAL
5	5517.00	93.49			83.69	8.56	34.31	33.07	232	349	Average	VERTICAL
6	5759.00	62.09	68.20	-6.11	52.38	8.39	34.46	33.14	232	349	Peak	VERTICAL

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

Channel 122

	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	5457.00	65.45	74.00	-8.55	55.92	8.36	34.23	33.06	251	354	Peak	VERTICAL
2	5457.00	52.43	54.00	-1.57	42.90	8.36	34.23	33.06	251	354	Average	VERTICAL
3	5462.00	65.74	68.20	-2.46	56.21	8.36	34.23	33.06	251	354	Peak	VERTICAL
4	5602.00	114.39			104.33	8.80	34.36	33.10	251	354	Peak	VERTICAL
5	5604.00	100.97			90.91	8.80	34.36	33.10	251	354	Average	VERTICAL
6	5725.00	64.65	68.20	-3.55	54.87	8.47	34.44	33.13	251	354	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	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 23, 2015		
Test Mode	Mode 4: EUT 1 + Set 4 Sector Antenna / 7.5 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	dB	dB/m	dB	cm	deg		
1	5714.00	109.08			99.27	8.51	34.43	33.13	241	358	Average	VERTICAL
2	5714.60	118.95			109.14	8.51	34.43	33.13	241	358	Peak	VERTICAL
3	5857.40	62.80	68.20	-5.40	52.81	8.64	34.52	33.17	241	358	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 23, 2015		
Test Mode	Mode 4: EUT 1 + Set 4 Sector Antenna / 7.5 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	5713.00	103.21			93.40	8.51	34.43	33.13	148	357	Average	HORIZONTAL
2	5727.40	115.12			105.35	8.47	34.44	33.14	148	357	Peak	HORIZONTAL
3	5850.00	62.04	68.20	-6.16	52.14	8.56	34.51	33.17	148	357	Peak	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 23, 2015		
Test Mode	Mode 4: EUT 1 + Set 4 Sector Antenna / 7.5 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	5671.00	116.12			106.20	8.64	34.40	33.12	247	360	Peak	VERTICAL
2	5673.00	103.73			93.84	8.60	34.41	33.12	247	360	Average	VERTICAL
3	5862.00	64.19	68.20	-4.01	54.21	8.64	34.52	33.18	247	360	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 5: EUT 1 + Set 5 Sector Antenna / 4.5 dBi		

Channel 52

	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	5123.80	59.08	74.00	-14.92	54.24	6.04	33.27	34.47	357	158	Peak	HORIZONTAL
2	5150.00	45.89	54.00	-8.11	40.94	6.11	33.31	34.47	357	158	Average	HORIZONTAL
3	5253.40	106.29			100.95	6.35	33.46	34.47	357	158	Average	HORIZONTAL
4	5254.00	117.81			112.47	6.35	33.46	34.47	357	158	Peak	HORIZONTAL
5	5360.20	47.12	54.00	-6.88	41.36	6.62	33.61	34.47	357	158	Average	HORIZONTAL
6	5377.00	60.30	74.00	-13.70	54.48	6.66	33.63	34.47	357	158	Peak	HORIZONTAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5307.60	117.91			112.39	6.47	33.52	34.47	356	175	Peak	HORIZONTAL
2	5308.00	107.20			101.61	6.51	33.55	34.47	356	175	Average	HORIZONTAL
3	5355.60	47.50	54.00	-6.50	41.74	6.62	33.61	34.47	356	175	Average	HORIZONTAL
4	5356.00	60.78	74.00	-13.22	55.02	6.62	33.61	34.47	356	175	Peak	HORIZONTAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5313.80	118.80			113.21	6.51	33.55	34.47	349	171	Peak	HORIZONTAL
2	5314.00	107.51			101.92	6.51	33.55	34.47	349	171	Average	HORIZONTAL
3	5350.00	62.10	74.00	-11.90	56.40	6.58	33.59	34.47	349	171	Peak	HORIZONTAL
4	5350.00	48.84	54.00	-5.16	43.14	6.58	33.59	34.47	349	171	Average	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 5: EUT 1 + Set 5 Sector Antenna / 4.5 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	5457.20	61.47	74.00	-12.53	55.41	6.79	33.74	34.47	360	141	Peak	HORIZONTAL
2	5459.20	48.80	54.00	-5.20	42.74	6.79	33.74	34.47	360	141	Average	HORIZONTAL
3	5468.20	64.10	74.00	-9.90	57.99	6.82	33.76	34.47	360	141	Peak	HORIZONTAL
4	5469.40	50.64	54.00	-3.36	44.53	6.82	33.76	34.47	360	141	Average	HORIZONTAL
5	5496.00	119.29			113.10	6.86	33.80	34.47	360	141	Peak	HORIZONTAL
6	5497.20	105.99			99.80	6.86	33.80	34.47	360	141	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	5440.80	47.27	54.00	-6.73	41.25	6.77	33.72	34.47	3	153	Average	HORIZONTAL
2	5448.80	60.24	74.00	-13.76	54.18	6.79	33.74	34.47	3	153	Peak	HORIZONTAL
3	5470.00	59.20	74.00	-14.80	53.09	6.82	33.76	34.47	3	153	Peak	HORIZONTAL
4	5470.00	47.15	54.00	-6.85	41.04	6.82	33.76	34.47	3	153	Average	HORIZONTAL
5	5575.20	116.56			110.01	6.98	34.05	34.48	3	153	Peak	HORIZONTAL
6	5576.80	105.17			98.62	6.98	34.05	34.48	3	153	Average	HORIZONTAL
7	5725.00	47.13	54.00	-6.87	40.71	6.43	34.50	34.51	3	153	Average	HORIZONTAL
8	5743.20	59.67	74.00	-14.33	53.28	6.36	34.55	34.52	3	153	Peak	HORIZONTAL

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	5696.20	105.23			98.77	6.57	34.40	34.51	353	176	Average	VERTICAL
2	5698.80	117.37			110.91	6.57	34.40	34.51	353	176	Peak	VERTICAL
3	5725.00	52.91	54.00	-1.09	46.49	6.43	34.50	34.51	353	176	Average	VERTICAL
4	5725.20	67.33	74.00	-6.67	60.91	6.43	34.50	34.51	353	176	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 5: EUT 1 + Set 5 Sector Antenna / 4.5 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	deg	cm		
1	5262.80	116.17			110.77	6.39	33.48	34.47	356	161 Peak	HORIZONTAL
2	5268.00	103.90			98.50	6.39	33.48	34.47	356	161 Average	HORIZONTAL
3	5350.80	58.63	74.00	-15.37	52.93	6.58	33.59	34.47	356	161 Peak	HORIZONTAL
4	5352.80	46.27	54.00	-7.73	40.57	6.58	33.59	34.47	356	161 Average	HORIZONTAL

Item 1, 2 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	deg	cm		
1	5297.60	109.47			103.95	6.47	33.52	34.47	350	156 Peak	VERTICAL
2	5301.60	98.32			92.80	6.47	33.52	34.47	350	156 Average	VERTICAL
3	5352.40	63.37	74.00	-10.63	57.67	6.58	33.59	34.47	350	156 Peak	VERTICAL
4	5352.80	52.87	54.00	-1.13	47.17	6.58	33.59	34.47	350	156 Average	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 5: EUT 1 + Set 5 Sector Antenna / 4.5 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	5459.20	60.15	74.00	-13.85	54.09	6.79	33.74	34.47	359	160	Peak	VERTICAL
2	5460.00	47.94	54.00	-6.06	41.88	6.79	33.74	34.47	359	160	Average	VERTICAL
3	5465.60	50.63	54.00	-3.37	44.52	6.82	33.76	34.47	359	160	Average	VERTICAL
4	5468.00	62.12	74.00	-11.88	56.01	6.82	33.76	34.47	359	160	Peak	VERTICAL
5	5521.60	113.32			107.06	6.88	33.85	34.47	359	160	Peak	VERTICAL
6	5523.60	101.21			94.95	6.88	33.85	34.47	359	160	Average	VERTICAL

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	5450.40	46.48	54.00	-7.52	40.42	6.79	33.74	34.47	1	131	Average	HORIZONTAL
2	5457.60	61.77	74.00	-12.23	55.71	6.79	33.74	34.47	1	131	Peak	HORIZONTAL
3	5469.40	60.67	74.00	-13.33	54.56	6.82	33.76	34.47	1	131	Peak	HORIZONTAL
4	5469.60	48.44	54.00	-5.56	42.33	6.82	33.76	34.47	1	131	Average	HORIZONTAL
5	5547.00	104.83			98.43	6.93	33.95	34.48	1	131	Average	HORIZONTAL
6	5547.60	116.17			109.77	6.93	33.95	34.48	1	131	Peak	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	5660.00	116.15			109.63	6.72	34.30	34.50	354	181	Peak	VERTICAL
2	5660.80	104.47			97.95	6.72	34.30	34.50	354	181	Average	VERTICAL
3	5725.60	62.85	74.00	-11.15	56.43	6.43	34.50	34.51	354	181	Peak	VERTICAL
4	5726.00	49.85	54.00	-4.15	43.43	6.43	34.50	34.51	354	181	Average	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 5: EUT 1 + Set 5 Sector Antenna / 4.5 dBi		

Channel 58

	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	5139.00	56.33	74.00	-17.67	51.44	6.07	33.29	34.47	355	171	Peak	HORIZONTAL
2	5150.00	46.03	54.00	-7.97	41.08	6.11	33.31	34.47	355	171	Average	HORIZONTAL
3	5273.00	108.91			103.51	6.39	33.48	34.47	355	171	Peak	HORIZONTAL
4	5275.00	96.14			90.74	6.39	33.48	34.47	355	171	Average	HORIZONTAL
5	5372.00	52.93	54.00	-1.07	47.11	6.66	33.63	34.47	355	171	Average	HORIZONTAL
6	5384.00	65.46	74.00	-8.54	59.64	6.66	33.63	34.47	355	171	Peak	HORIZONTAL

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

Channel 106

	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	5438.00	66.43	74.00	-7.57	60.41	6.77	33.72	34.47	359	167	Peak	HORIZONTAL
2	5457.00	52.67	54.00	-1.33	46.61	6.79	33.74	34.47	359	167	Average	HORIZONTAL
3	5470.00	64.71	74.00	-9.29	58.60	6.82	33.76	34.47	359	167	Peak	HORIZONTAL
4	5470.00	52.97	54.00	-1.03	46.86	6.82	33.76	34.47	359	167	Average	HORIZONTAL
5	5504.00	105.67			99.48	6.86	33.80	34.47	359	167	Peak	HORIZONTAL
6	5547.00	90.61			84.21	6.93	33.95	34.48	359	167	Average	HORIZONTAL
7	5725.00	58.42	74.00	-15.58	52.00	6.43	34.50	34.51	359	167	Peak	HORIZONTAL
8	5725.00	46.07	54.00	-7.93	39.65	6.43	34.50	34.51	359	167	Average	HORIZONTAL

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

Channel 122

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5448.00	48.54	54.00	-5.46	42.48	6.79	33.74	34.47	355	172	Average	HORIZONTAL
2	5457.00	63.33	74.00	-10.67	57.27	6.79	33.74	34.47	355	172	Peak	HORIZONTAL
3	5470.00	62.17	74.00	-11.83	56.06	6.82	33.76	34.47	355	172	Peak	HORIZONTAL
4	5470.00	50.88	54.00	-3.12	44.77	6.82	33.76	34.47	355	172	Average	HORIZONTAL
5	5627.00	108.83			102.27	6.86	34.20	34.50	355	172	Peak	HORIZONTAL
6	5633.00	97.28			90.72	6.86	34.20	34.50	355	172	Average	HORIZONTAL
7	5726.00	63.04	74.00	-10.96	56.62	6.43	34.50	34.51	355	172	Peak	HORIZONTAL
8	5730.00	51.06	54.00	-2.94	44.65	6.43	34.50	34.52	355	172	Average	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	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 5: EUT 1 + Set 5 Sector Antenna / 4.5 dBi		

Channel 144

	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	5714.40	106.86			100.42	6.50	34.45	34.51	354	149 Average	HORIZONTAL
2	5717.60	117.93			111.49	6.50	34.45	34.51	354	149 Peak	HORIZONTAL
3	5896.00	62.66	74.00	-11.34	55.58	6.63	35.00	34.55	354	149 Peak	HORIZONTAL
4	5896.80	48.54	54.00	-5.46	41.46	6.63	35.00	34.55	354	149 Average	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 5: EUT 1 + Set 5 Sector Antenna / 4.5 dBi		

Channel 142

	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	5706.80	102.81			96.37	6.50	34.45	34.51	350	181 Average	HORIZONTAL
2	5711.60	114.12			107.68	6.50	34.45	34.51	350	181 Peak	HORIZONTAL
3	5850.00	46.48	54.00	-7.52	39.78	6.39	34.85	34.54	350	181 Average	HORIZONTAL
4	5854.00	57.65	74.00	-16.35	50.95	6.39	34.85	34.54	350	181 Peak	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 5: EUT 1 + Set 5 Sector Antenna / 4.5 dBi		

Channel 138

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.00	110.42			103.98	6.50	34.45	34.51	352	183	Peak	HORIZONTAL
2	5714.00	99.88			93.44	6.50	34.45	34.51	352	183	Average	HORIZONTAL
3	5859.00	47.27	54.00	-6.73	40.44	6.47	34.90	34.54	352	183	Average	HORIZONTAL
4	5875.00	59.11	74.00	-14.89	52.15	6.55	34.95	34.54	352	183	Peak	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 6: EUT 1 + Set 6 Sector Antenna / 4 dBi		

Channel 52

	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	5143.60	57.42	74.00	-16.58	52.47	6.11	33.31	34.47	2	187	Peak	HORIZONTAL
2	5150.00	45.54	54.00	-8.46	40.59	6.11	33.31	34.47	2	187	Average	HORIZONTAL
3	5255.20	121.08			115.74	6.35	33.46	34.47	2	187	Peak	HORIZONTAL
4	5255.20	109.91			104.57	6.35	33.46	34.47	2	187	Average	HORIZONTAL
5	5354.20	46.90	54.00	-7.10	41.14	6.62	33.61	34.47	2	187	Average	HORIZONTAL
6	5356.00	59.43	74.00	-14.57	53.67	6.62	33.61	34.47	2	187	Peak	HORIZONTAL

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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5292.00	110.59			105.13	6.43	33.50	34.47	356	176	Average	VERTICAL
2	5295.20	121.71			116.19	6.47	33.52	34.47	356	176	Peak	VERTICAL
3	5352.00	47.78	54.00	-6.22	42.08	6.58	33.59	34.47	356	176	Average	VERTICAL
4	5392.40	59.00	74.00	-15.00	53.12	6.70	33.65	34.47	356	176	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	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5324.20	109.43			103.78	6.55	33.57	34.47	350	188	Average	VERTICAL
2	5325.00	121.29			115.64	6.55	33.57	34.47	350	188	Peak	VERTICAL
3	5350.40	64.80	74.00	-9.20	59.10	6.58	33.59	34.47	350	188	Peak	VERTICAL
4	5352.00	50.63	54.00	-3.37	44.93	6.58	33.59	34.47	350	188	Average	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 6: EUT 1 + Set 6 Sector Antenna / 4 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	5458.40	48.38	54.00	-5.62	42.32	6.79	33.74	34.47	2	177	Average	HORIZONTAL
2	5460.00	59.95	74.00	-14.05	53.89	6.79	33.74	34.47	2	177	Peak	HORIZONTAL
3	5468.80	64.08	74.00	-9.92	57.97	6.82	33.76	34.47	2	177	Peak	HORIZONTAL
4	5470.00	52.96	54.00	-1.04	46.85	6.82	33.76	34.47	2	177	Average	HORIZONTAL
5	5494.40	107.63			101.48	6.84	33.78	34.47	2	177	Average	HORIZONTAL
6	5497.40	120.07			113.88	6.86	33.80	34.47	2	177	Peak	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	5436.00	46.78	54.00	-7.22	40.76	6.77	33.72	34.47	359	162	Average	HORIZONTAL
2	5452.20	58.10	74.00	-15.90	52.04	6.79	33.74	34.47	359	162	Peak	HORIZONTAL
3	5466.60	46.96	54.00	-7.04	40.85	6.82	33.76	34.47	359	162	Average	HORIZONTAL
4	5467.00	59.07	74.00	-14.93	52.96	6.82	33.76	34.47	359	162	Peak	HORIZONTAL
5	5577.60	120.28			113.73	6.98	34.05	34.48	359	162	Peak	HORIZONTAL
6	5581.80	108.82			102.28	6.98	34.05	34.49	359	162	Average	HORIZONTAL
7	5725.00	58.63	74.00	-15.37	52.21	6.43	34.50	34.51	359	162	Peak	HORIZONTAL
8	5725.00	46.86	54.00	-7.14	40.44	6.43	34.50	34.51	359	162	Average	HORIZONTAL

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	5704.00	103.83			97.37	6.57	34.40	34.51	4	160	Average	HORIZONTAL
2	5704.80	115.66			109.20	6.57	34.40	34.51	4	160	Peak	HORIZONTAL
3	5725.00	66.28	74.00	-7.72	59.86	6.43	34.50	34.51	4	160	Peak	HORIZONTAL
4	5725.00	52.55	54.00	-1.45	46.13	6.43	34.50	34.51	4	160	Average	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 6: EUT 1 + Set 6 Sector Antenna / 4 dBi		

Channel 54

	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	5255.60	107.35			102.01	6.35	33.46	34.47	3	166	Average	HORIZONTAL
2	5262.80	119.44			114.04	6.39	33.48	34.47	3	166	Peak	HORIZONTAL
3	5351.00	47.17	54.00	-6.83	41.47	6.58	33.59	34.47	3	166	Average	HORIZONTAL
4	5363.60	61.16	74.00	-12.84	55.40	6.62	33.61	34.47	3	166	Peak	HORIZONTAL

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

Channel 62

	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	5305.20	113.55			108.03	6.47	33.52	34.47	357	196	Peak	VERTICAL
2	5313.20	101.40			95.81	6.51	33.55	34.47	357	196	Average	VERTICAL
3	5350.00	52.94	54.00	-1.06	47.24	6.58	33.59	34.47	357	196	Average	VERTICAL
4	5352.80	67.97	74.00	-6.03	62.27	6.58	33.59	34.47	357	196	Peak	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 6: EUT 1 + Set 6 Sector Antenna / 4 dBi		

Channel 102

	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	5460.00	59.39	74.00	-14.61	53.33	6.79	33.74	34.47	353	161 Peak	HORIZONTAL
2	5460.00	47.73	54.00	-6.27	41.67	6.79	33.74	34.47	353	161 Average	HORIZONTAL
3	5469.60	67.28	74.00	-6.72	61.17	6.82	33.76	34.47	353	161 Peak	HORIZONTAL
4	5470.00	52.87	54.00	-1.13	46.76	6.82	33.76	34.47	353	161 Average	HORIZONTAL
5	5514.00	110.51			104.25	6.88	33.85	34.47	353	161 Peak	HORIZONTAL
6	5516.80	98.98			92.72	6.88	33.85	34.47	353	161 Average	HORIZONTAL

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

Channel 110

	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	5456.40	62.61	74.00	-11.39	56.55	6.79	33.74	34.47	356	148 Peak	VERTICAL
2	5459.40	48.48	54.00	-5.52	42.42	6.79	33.74	34.47	356	148 Average	VERTICAL
3	5470.00	64.81	74.00	-9.19	58.70	6.82	33.76	34.47	356	148 Peak	VERTICAL
4	5470.00	50.45	54.00	-3.55	44.34	6.82	33.76	34.47	356	148 Average	VERTICAL
5	5553.60	117.70			111.30	6.93	33.95	34.48	356	148 Peak	VERTICAL
6	5554.20	105.64			99.24	6.93	33.95	34.48	356	148 Average	VERTICAL

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

Channel 134

	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	5662.00	105.27			98.75	6.72	34.30	34.50	359	200 Average	VERTICAL
2	5662.40	117.85			111.33	6.72	34.30	34.50	359	200 Peak	VERTICAL
3	5725.00	49.31	54.00	-4.69	42.89	6.43	34.50	34.51	359	200 Average	VERTICAL
4	5726.00	70.45	74.00	-3.55	64.03	6.43	34.50	34.51	359	200 Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 6: EUT 1 + Set 6 Sector Antenna / 4 dBi		

Channel 58

	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	44.79	54.00	-9.21	40.00	6.01	33.25	34.47	6	207	Average	VERTICAL
2	5138.00	58.03	74.00	-15.97	53.14	6.07	33.29	34.47	6	207	Peak	VERTICAL
3	5303.00	92.92			87.40	6.47	33.52	34.47	6	207	Average	VERTICAL
4	5311.00	104.36			98.77	6.51	33.55	34.47	6	207	Peak	VERTICAL
5	5350.00	51.17	54.00	-2.83	45.47	6.58	33.59	34.47	6	207	Average	VERTICAL
6	5357.00	62.85	74.00	-11.15	57.09	6.62	33.61	34.47	6	207	Peak	VERTICAL

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

Channel 106

	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	5457.00	64.08	74.00	-9.92	58.02	6.79	33.74	34.47	5	198	Peak	VERTICAL
2	5458.00	50.84	54.00	-3.16	44.78	6.79	33.74	34.47	5	198	Average	VERTICAL
3	5469.00	66.68	74.00	-7.32	60.57	6.82	33.76	34.47	5	198	Peak	VERTICAL
4	5470.00	52.33	54.00	-1.67	46.22	6.82	33.76	34.47	5	198	Average	VERTICAL
5	5539.00	106.65			100.32	6.91	33.90	34.48	5	198	Peak	VERTICAL
6	5542.00	94.14			87.81	6.91	33.90	34.48	5	198	Average	VERTICAL
7	5725.00	46.14	54.00	-7.86	39.72	6.43	34.50	34.51	5	198	Average	VERTICAL
8	5734.00	59.07	74.00	-14.93	52.66	6.43	34.50	34.52	5	198	Peak	VERTICAL

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

Channel 122

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5450.00	64.18	74.00	-9.82	58.12	6.79	33.74	34.47	356	176	Peak	HORIZONTAL
2	5458.00	50.93	54.00	-3.07	44.87	6.79	33.74	34.47	356	176	Average	HORIZONTAL
3	5470.00	67.19	74.00	-6.81	61.08	6.82	33.76	34.47	356	176	Peak	HORIZONTAL
4	5470.00	52.88	54.00	-1.12	46.77	6.82	33.76	34.47	356	176	Average	HORIZONTAL
5	5599.00	104.28			97.67	7.00	34.10	34.49	356	176	Average	HORIZONTAL
6	5600.00	116.08			109.47	7.00	34.10	34.49	356	176	Peak	HORIZONTAL
7	5725.00	51.02	54.00	-2.98	44.60	6.43	34.50	34.51	356	176	Average	HORIZONTAL
8	5735.00	63.09	74.00	-10.91	56.68	6.43	34.50	34.52	356	176	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	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 6: EUT 1 + Set 6 Sector Antenna / 4 dBi		

Channel 144

	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	5715.20	119.28			112.84	6.50	34.45	34.51	359	199	Peak	HORIZONTAL
2	5718.20	107.56			101.12	6.50	34.45	34.51	359	199	Average	HORIZONTAL
3	5850.00	46.61	54.00	-7.39	39.91	6.39	34.85	34.54	359	199	Average	HORIZONTAL
4	5852.00	58.23	74.00	-15.77	51.53	6.39	34.85	34.54	359	199	Peak	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 6: EUT 1 + Set 6 Sector Antenna / 4 dBi		

Channel 142

	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	5702.80	116.44			109.98	6.57	34.40	34.51	1	160	Peak	HORIZONTAL
2	5718.00	105.47			99.03	6.50	34.45	34.51	1	160	Average	HORIZONTAL
3	5854.00	59.47	74.00	-14.53	52.77	6.39	34.85	34.54	1	160	Peak	HORIZONTAL
4	5881.20	46.71	54.00	-7.29	39.76	6.55	34.95	34.55	1	160	Average	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 6: EUT 1 + Set 6 Sector Antenna / 4 dBi		

Channel 138

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5668.00	102.66			96.14	6.72	34.30	34.50	354	167	Average	HORIZONTAL
2	5669.00	113.15			106.63	6.72	34.30	34.50	354	167	Peak	HORIZONTAL
3	5853.00	47.95	54.00	-6.05	41.25	6.39	34.85	34.54	354	167	Average	HORIZONTAL
4	5864.00	59.84	74.00	-14.16	53.01	6.47	34.90	34.54	354	167	Peak	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 7: EUT 1 + Set 9 Dipole Antenna / 4.67 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	5134.00	60.43	74.00	-13.57	51.67	8.09	33.72	33.05	201	210	Peak	VERTICAL
2	5150.00	47.77	54.00	-6.23	38.93	8.15	33.74	33.05	201	210	Average	VERTICAL
3	5265.40	118.78			109.64	8.26	33.94	33.06	201	210	Peak	VERTICAL
4	5266.00	106.65			97.51	8.26	33.94	33.06	201	210	Average	VERTICAL
5	5365.00	62.15	74.00	-11.85	52.94	8.19	34.08	33.06	201	210	Peak	VERTICAL
6	5393.80	49.99	54.00	-4.01	40.75	8.17	34.13	33.06	201	210	Average	VERTICAL

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	5294.80	118.56			109.40	8.24	33.98	33.06	214	214	Peak	VERTICAL
2	5296.80	107.10			97.94	8.24	33.98	33.06	214	214	Average	VERTICAL
3	5354.00	62.24	74.00	-11.76	53.04	8.20	34.06	33.06	214	214	Peak	VERTICAL
4	5356.40	49.82	54.00	-4.18	40.61	8.19	34.08	33.06	214	214	Average	VERTICAL

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	5314.20	107.94			98.76	8.23	34.01	33.06	203	211	Average	VERTICAL
2	5315.00	120.40			111.22	8.23	34.01	33.06	203	211	Peak	VERTICAL
3	5350.00	66.61	74.00	-7.39	57.41	8.20	34.06	33.06	203	211	Peak	VERTICAL
4	5350.00	52.24	54.00	-1.76	43.04	8.20	34.06	33.06	203	211	Average	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 7: EUT 1 + Set 9 Dipole Antenna / 4.67 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	5455.60	50.73	54.00	-3.27	41.20	8.36	34.23	33.06	206	292	Average	VERTICAL
2	5458.00	63.96	74.00	-10.04	54.43	8.36	34.23	33.06	206	292	Peak	VERTICAL
3	5469.80	66.69	68.20	-1.51	57.09	8.41	34.25	33.06	206	292	Peak	VERTICAL
4	5496.20	107.61			97.86	8.51	34.30	33.06	206	292	Average	VERTICAL
5	5496.40	120.42			110.67	8.51	34.30	33.06	206	292	Peak	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	5455.80	62.09	74.00	-11.91	52.56	8.36	34.23	33.06	207	282	Peak	VERTICAL
2	5460.00	49.89	54.00	-4.11	40.36	8.36	34.23	33.06	207	282	Average	VERTICAL
3	5469.40	61.75	68.20	-6.45	52.15	8.41	34.25	33.06	207	282	Peak	VERTICAL
4	5582.40	122.98			112.97	8.75	34.35	33.09	207	282	Peak	VERTICAL
5	5586.00	110.59			100.58	8.75	34.35	33.09	207	282	Average	VERTICAL
6	5725.00	60.55	68.20	-7.65	50.77	8.47	34.44	33.13	207	282	Peak	VERTICAL

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	5697.60	117.91			108.06	8.56	34.42	33.13	197	298	Peak	VERTICAL
2	5701.80	105.70			95.85	8.56	34.42	33.13	197	298	Average	VERTICAL
3	5725.20	67.02	68.20	-1.18	57.24	8.47	34.44	33.13	197	298	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 7: EUT 1 + Set 9 Dipole Antenna / 4.67 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	5257.60	118.46			109.34	8.27	33.91	33.06	198	288	Peak	VERTICAL
2	5263.20	107.56			98.42	8.26	33.94	33.06	198	288	Average	VERTICAL
3	5352.00	51.13	54.00	-2.87	41.93	8.20	34.06	33.06	198	288	Average	VERTICAL
4	5356.80	62.37	74.00	-11.63	53.16	8.19	34.08	33.06	198	288	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	5299.60	101.07			91.91	8.24	33.98	33.06	198	334	Average	VERTICAL
2	5306.40	112.84			103.68	8.24	33.98	33.06	198	334	Peak	VERTICAL
3	5350.00	65.83	74.00	-8.17	56.63	8.20	34.06	33.06	198	334	Peak	VERTICAL
4	5350.00	52.50	54.00	-1.50	43.30	8.20	34.06	33.06	198	334	Average	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 7: EUT 1 + Set 9 Dipole Antenna / 4.67 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	5460.00	65.16	74.00	-8.84	55.63	8.36	34.23	33.06	228	278	Peak	VERTICAL
2	5460.00	51.68	54.00	-2.32	42.15	8.36	34.23	33.06	228	278	Average	VERTICAL
3	5470.00	67.01	68.20	-1.19	57.41	8.41	34.25	33.06	228	278	Peak	VERTICAL
4	5518.40	115.19			105.39	8.56	34.31	33.07	228	278	Peak	VERTICAL
5	5522.40	103.87			94.07	8.56	34.31	33.07	228	278	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	5459.20	67.87	74.00	-6.13	58.34	8.36	34.23	33.06	225	195	Peak	VERTICAL
2	5459.60	52.46	54.00	-1.54	42.93	8.36	34.23	33.06	225	195	Average	VERTICAL
3	5470.00	66.73	68.20	-1.47	57.13	8.41	34.25	33.06	225	195	Peak	VERTICAL
4	5541.20	120.92			111.06	8.61	34.32	33.07	225	195	Peak	VERTICAL
5	5552.00	109.99			100.09	8.65	34.33	33.08	225	195	Average	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	5673.60	105.08			95.19	8.60	34.41	33.12	214	0	Average	VERTICAL
2	5682.40	115.19			105.30	8.60	34.41	33.12	214	0	Peak	VERTICAL
3	5725.00	66.78	68.20	-1.42	57.00	8.47	34.44	33.13	214	0	Peak	VERTICAL
4	5725.00	52.10	68.20	-16.10	42.32	8.47	34.44	33.13	214	0	Average	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 7: EUT 1 + Set 9 Dipole Antenna / 4.67 dBi		

Channel 58

	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	5047.00	48.50	54.00	-5.50	40.24	7.74	33.57	33.05	187	325	Average	VERTICAL
2	5078.00	61.67	74.00	-12.33	53.24	7.86	33.62	33.05	187	325	Peak	VERTICAL
3	5253.00	94.90			85.78	8.27	33.91	33.06	187	325	Average	VERTICAL
4	5259.00	106.92			97.80	8.27	33.91	33.06	187	325	Peak	VERTICAL
5	5351.00	64.23	74.00	-9.77	55.03	8.20	34.06	33.06	187	325	Peak	VERTICAL
6	5351.00	52.26	54.00	-1.74	43.06	8.20	34.06	33.06	187	325	Average	VERTICAL

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

Channel 106

	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	5445.00	52.85	54.00	-1.15	43.39	8.32	34.20	33.06	200	283	Average	VERTICAL
2	5451.00	65.80	74.00	-8.20	56.27	8.36	34.23	33.06	200	283	Peak	VERTICAL
3	5469.00	67.09	68.20	-1.11	57.49	8.41	34.25	33.06	200	283	Peak	VERTICAL
4	5552.00	98.52			88.62	8.65	34.33	33.08	200	283	Average	VERTICAL
5	5556.00	109.86			99.96	8.65	34.33	33.08	200	283	Peak	VERTICAL
6	5775.00	61.55	68.20	-6.65	51.88	8.35	34.47	33.15	200	283	Peak	VERTICAL

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

Channel 122

	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	5459.00	66.74	74.00	-7.26	57.21	8.36	34.23	33.06	196	99	Peak	VERTICAL
2	5460.00	52.65	54.00	-1.35	43.12	8.36	34.23	33.06	196	99	Average	VERTICAL
3	5470.00	67.00	68.20	-1.20	57.40	8.41	34.25	33.06	196	99	Peak	VERTICAL
4	5620.00	117.16			107.13	8.76	34.37	33.10	196	99	Peak	VERTICAL
5	5622.00	102.17			92.14	8.76	34.37	33.10	196	99	Average	VERTICAL
6	5727.00	67.10	68.20	-1.10	57.33	8.47	34.44	33.14	196	99	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	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 7: EUT 1 + Set 9 Dipole Antenna / 4.67 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	dB	dB/m	dB	cm	deg		
1	5722.40	109.17			99.39	8.47	34.44	33.13	203	279	Average	VERTICAL
2	5723.00	121.39			111.61	8.47	34.44	33.13	203	279	Peak	VERTICAL
3	5854.40	62.73	68.20	-5.47	52.83	8.56	34.51	33.17	203	279	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 7: EUT 1 + Set 9 Dipole Antenna / 4.67 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	5714.00	108.10			98.29	8.51	34.43	33.13	220	285	Average	VERTICAL
2	5723.00	117.70			107.92	8.47	34.44	33.13	220	285	Peak	VERTICAL
3	5851.40	62.58	68.20	-5.62	52.68	8.56	34.51	33.17	220	285	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 25, 2015		
Test Mode	Mode 7: EUT 1 + Set 9 Dipole Antenna / 4.67 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	5685.00	115.12			105.23	8.60	34.41	33.12	196	310	Peak	VERTICAL
2	5686.00	103.40			93.51	8.60	34.41	33.12	196	310	Average	VERTICAL
3	5925.00	64.14	68.20	-4.06	53.82	8.96	34.56	33.20	196	310	Peak	VERTICAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Channel 52

	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	5125.00	59.82	74.00	-14.18	51.15	8.03	33.69	33.05	205	62	Peak	HORIZONTAL
2	5150.00	47.73	54.00	-6.27	38.89	8.15	33.74	33.05	205	62	Average	HORIZONTAL
3	5253.40	121.36			112.24	8.27	33.91	33.06	205	62	Peak	HORIZONTAL
4	5257.60	110.62			101.50	8.27	33.91	33.06	205	62	Average	HORIZONTAL
5	5354.20	61.46	74.00	-12.54	52.25	8.19	34.08	33.06	205	62	Peak	HORIZONTAL
6	5357.80	49.12	54.00	-4.88	39.91	8.19	34.08	33.06	205	62	Average	HORIZONTAL

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

Channel 60

	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	5303.60	115.80			106.64	8.24	33.98	33.06	189	36	Peak	VERTICAL
2	5306.80	104.92			95.76	8.24	33.98	33.06	189	36	Average	VERTICAL
3	5350.80	48.85	54.00	-5.15	39.65	8.20	34.06	33.06	189	36	Average	VERTICAL
4	5369.60	60.98	74.00	-13.02	51.75	8.18	34.11	33.06	189	36	Peak	VERTICAL

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

Channel 64

	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	5323.80	121.54			112.35	8.22	34.03	33.06	224	56	Peak	HORIZONTAL
2	5328.00	108.19			99.00	8.22	34.03	33.06	224	56	Average	HORIZONTAL
3	5350.20	52.77	54.00	-1.23	43.57	8.20	34.06	33.06	224	56	Average	HORIZONTAL
4	5350.40	66.14	74.00	-7.86	56.94	8.20	34.06	33.06	224	56	Peak	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 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	5454.80	50.87	54.00	-3.13	41.34	8.36	34.23	33.06	208	53	Average	HORIZONTAL
2	5458.00	63.44	74.00	-10.56	53.91	8.36	34.23	33.06	208	53	Peak	HORIZONTAL
3	5469.20	66.63	68.20	-1.57	57.03	8.41	34.25	33.06	208	53	Peak	HORIZONTAL
4	5498.80	120.39			110.64	8.51	34.30	33.06	208	53	Peak	HORIZONTAL
5	5499.20	108.25			98.50	8.51	34.30	33.06	208	53	Average	HORIZONTAL

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	5452.20	49.22	54.00	-4.78	39.69	8.36	34.23	33.06	201	319	Average	HORIZONTAL
2	5454.60	61.08	74.00	-12.92	51.55	8.36	34.23	33.06	201	319	Peak	HORIZONTAL
3	5469.40	60.73	68.20	-7.47	51.13	8.41	34.25	33.06	201	319	Peak	HORIZONTAL
4	5575.20	107.76			97.74	8.75	34.35	33.08	201	319	Average	HORIZONTAL
5	5581.20	119.37			109.36	8.75	34.35	33.09	201	319	Peak	HORIZONTAL
6	5725.00	60.34	68.20	-7.86	50.56	8.47	34.44	33.13	201	319	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	5701.40	118.27			108.42	8.56	34.42	33.13	192	73	Peak	HORIZONTAL
2	5701.60	105.19			95.34	8.56	34.42	33.13	192	73	Average	HORIZONTAL
3	5725.00	66.85	68.20	-1.35	57.07	8.47	34.44	33.13	192	73	Peak	HORIZONTAL

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

Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 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	5267.00	107.59			98.45	8.26	33.94	33.06	197	59 Average	HORIZONTAL
2	5268.00	118.87			109.73	8.26	33.94	33.06	197	59 Peak	HORIZONTAL
3	5354.00	62.57	74.00	-11.43	53.37	8.20	34.06	33.06	197	59 Peak	HORIZONTAL
4	5355.00	49.92	54.00	-4.08	40.71	8.19	34.08	33.06	197	59 Average	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	5298.00	104.32			95.16	8.24	33.98	33.06	198	298 Average	HORIZONTAL
2	5302.40	115.07			105.91	8.24	33.98	33.06	198	298 Peak	HORIZONTAL
3	5352.00	65.45	74.00	-8.55	56.25	8.20	34.06	33.06	198	298 Peak	HORIZONTAL
4	5353.20	52.70	54.00	-1.30	43.50	8.20	34.06	33.06	198	298 Average	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 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	5453.20	52.35	54.00	-1.65	42.82	8.36	34.23	33.06	247	294	Average	HORIZONTAL
2	5460.00	72.65	74.00	-1.35	63.12	8.36	34.23	33.06	247	294	Peak	HORIZONTAL
3	5468.80	67.05	68.20	-1.15	57.45	8.41	34.25	33.06	247	294	Peak	HORIZONTAL
4	5500.00	113.28			103.53	8.51	34.30	33.06	247	294	Peak	HORIZONTAL
5	5502.00	101.69			91.94	8.51	34.30	33.06	247	294	Average	HORIZONTAL

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	5458.80	64.67	74.00	-9.33	55.14	8.36	34.23	33.06	203	321	Peak	HORIZONTAL
2	5460.00	52.32	54.00	-1.68	42.79	8.36	34.23	33.06	203	321	Average	HORIZONTAL
3	5470.00	65.76	68.20	-2.44	56.16	8.41	34.25	33.06	203	321	Peak	HORIZONTAL
4	5542.80	117.22			107.37	8.61	34.32	33.08	203	321	Peak	HORIZONTAL
5	5542.80	106.09			96.24	8.61	34.32	33.08	203	321	Average	HORIZONTAL

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	5682.40	111.29			101.40	8.60	34.41	33.12	203	301	Peak	VERTICAL
2	5682.80	98.82			88.93	8.60	34.41	33.12	203	301	Average	VERTICAL
3	5751.60	66.94	68.20	-1.26	57.20	8.43	34.45	33.14	203	301	Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58, 106, 122 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 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	5147.11	61.03	74.00	-12.97	52.19	8.15	33.74	33.05	228	52 Peak	HORIZONTAL
2	5150.00	49.02	54.00	-4.98	40.18	8.15	33.74	33.05	228	52 Average	HORIZONTAL
3	5255.99	98.71			89.59	8.27	33.91	33.06	228	52 Average	HORIZONTAL
4	5274.80	108.97			99.83	8.26	33.94	33.06	228	52 Peak	HORIZONTAL
5	5354.34	65.81	74.00	-8.19	56.60	8.19	34.08	33.06	228	52 Peak	HORIZONTAL
6	5361.58	52.43	54.00	-1.57	43.22	8.19	34.08	33.06	228	52 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	5436.85	66.34	74.00	-7.66	56.88	8.32	34.20	33.06	272	0 Peak	VERTICAL
2	5457.50	52.79	54.00	-1.21	43.26	8.36	34.23	33.06	272	0 Average	VERTICAL
3	5466.51	67.14	68.20	-1.06	57.54	8.41	34.25	33.06	272	0 Peak	VERTICAL
4	5497.44	91.77			82.02	8.51	34.30	33.06	272	0 Average	VERTICAL
5	5499.61	102.67			92.92	8.51	34.30	33.06	272	0 Peak	VERTICAL
6	5743.09	62.50	68.20	-5.70	52.76	8.43	34.45	33.14	272	0 Peak	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	5458.42	66.45	74.00	-7.55	56.92	8.36	34.23	33.06	200	68 Peak	HORIZONTAL
2	5460.00	52.85	54.00	-1.15	43.32	8.36	34.23	33.06	200	68 Average	HORIZONTAL
3	5464.93	67.05	68.20	-1.15	57.45	8.41	34.25	33.06	200	68 Peak	HORIZONTAL
4	5607.11	113.80			103.74	8.80	34.36	33.10	200	68 Peak	HORIZONTAL
5	5616.51	102.54			92.51	8.76	34.37	33.10	200	68 Average	HORIZONTAL
6	5741.64	67.12	68.20	-1.08	57.38	8.43	34.45	33.14	200	68 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	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Channel 144

	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	5719.40	103.64			93.83	8.51	34.43	33.13	197	302 Average	VERTICAL
2	5726.00	114.62			104.84	8.47	34.44	33.13	197	302 Peak	VERTICAL
3	5860.40	61.24	68.20	-6.96	51.26	8.64	34.52	33.18	197	302 Peak	VERTICAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Channel 142

	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	5718.68	106.35			96.54	8.51	34.43	33.13	298	293	Average	HORIZONTAL
2	5719.41	118.98			109.17	8.51	34.43	33.13	298	293	Peak	HORIZONTAL
3	5855.79	62.91	68.20	-5.29	53.01	8.56	34.51	33.17	298	293	Peak	HORIZONTAL

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



Temperature	25°C	Humidity	55%
Test Engineer	Stim Sung	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 1 + Chain 2 + Chain 3+ Chain 4
Test Date	Nov. 20, 2015		
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

Channel 138

	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	5686.38	113.85			103.96	8.60	34.41	33.12	298	283	Peak	HORIZONTAL
2	5687.83	103.02			93.13	8.60	34.41	33.12	298	283	Average	HORIZONTAL
3	5858.68	66.91	68.20	-1.29	56.92	8.64	34.52	33.17	298	283	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

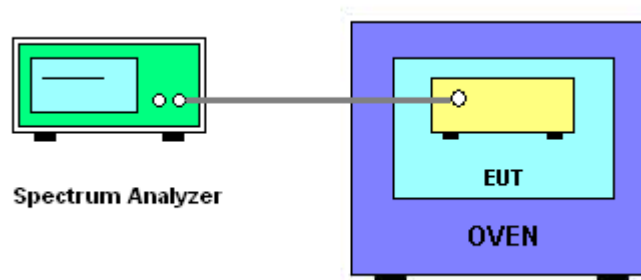
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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 $-20^\circ\text{C} \sim 50^\circ\text{C}$.

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	50%
Test Engineer	Eddie Weng & Lucas Huang	Test Date	Oct. 23, 2015 ~ Nov. 05, 2015
Test Mode	Mode 1: EUT 1 + Set 1 Ceiling Mount Omni Antenna / 7 dBi Mode 2: EUT 1 + Set 2 Sector Antenna / 6.5 dBi Mode 3: EUT 1 + Set 3 Sector Antenna / 5.5 dBi Mode 4: EUT 1 + Set 4 Sector Antenna / 7.5 dBi Mode 5: EUT 1 + Set 5 Sector Antenna / 4.5 dBi Mode 6: EUT 1 + Set 6 Sector Antenna / 4 dBi Mode 7: EUT 1 + Set 9 Dipole Antenna / 4.67 dBi		

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	5300.0077	5300.0063	5300.0045	5300.0024
110.00	5300.0065	5300.0052	5300.0036	5300.0017
93.50	5300.0051	5300.0040	5300.0028	5300.0006
Max. Deviation (MHz)	0.0077	0.0063	0.0045	0.0024
Max. Deviation (ppm)	1.45	1.19	0.85	0.45
Result	Complies			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5300.0119	5300.0106	5300.0089	5300.0065
-10	5300.0104	5300.0092	5300.0076	5300.0057
0	5300.0090	5300.0078	5300.0059	5300.0037
10	5300.0077	5300.0064	5300.0049	5300.0031
20	5300.0065	5300.0052	5300.0036	5300.0017
30	5300.0051	5300.0040	5300.0026	5300.0010
40	5300.0035	5300.0020	5300.0004	5299.9984
50	5300.0018	5300.0006	5299.9991	5299.9964
Max. Deviation (MHz)	0.0119	0.0106	0.0089	0.0065
Max. Deviation (ppm)	2.25	2.00	1.68	1.23
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5580.0042	5580.0028	5580.0010	5579.9989
110.00	5580.0030	5580.0017	5580.0001	5579.9982
93.50	5580.0016	5580.0005	5579.9993	5579.9971
Max. Deviation (MHz)	0.0042	0.0028	0.0010	0.0029
Max. Deviation (ppm)	0.75	0.50	0.18	0.52
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5580.0084	5580.0071	5580.0054	5580.0030
-10	5580.0069	5580.0057	5580.0041	5580.0022
0	5580.0055	5580.0043	5580.0024	5580.0002
10	5580.0042	5580.0029	5580.0014	5579.9996
20	5580.0030	5580.0017	5580.0001	5579.9982
30	5580.0016	5580.0005	5579.9991	5579.9975
40	5580.0000	5579.9985	5579.9969	5579.9949
50	5579.9983	5579.9971	5579.9956	5579.9929
Max. Deviation (MHz)	0.0084	0.0071	0.0054	0.0071
Max. Deviation (ppm)	1.51	1.27	0.97	1.27
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	5310.0085	5310.0071	5310.0053	5310.0032
110.00	5310.0073	5310.0060	5310.0044	5310.0025
93.50	5310.0059	5310.0048	5310.0036	5310.0014
Max. Deviation (MHz)	0.0085	0.0071	0.0053	0.0032
Max. Deviation (ppm)	1.60	1.34	1.00	0.60
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5310.0127	5310.0114	5310.0097	5310.0073
-10	5310.0112	5310.0100	5310.0084	5310.0065
0	5310.0098	5310.0086	5310.0067	5310.0045
10	5310.0085	5310.0072	5310.0057	5310.0039
20	5310.0073	5310.0060	5310.0044	5310.0025
30	5310.0059	5310.0048	5310.0034	5310.0018
40	5310.0043	5310.0028	5310.0012	5309.9992
50	5310.0026	5310.0014	5309.9999	5309.9972
Max. Deviation (MHz)	0.0127	0.0114	0.0097	0.0073
Max. Deviation (ppm)	2.39	2.15	1.83	1.37
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5550.0033	5550.0019	5550.0001	5549.9980
110.00	5550.0021	5550.0008	5549.9992	5549.9973
93.50	5550.0007	5549.9996	5549.9984	5549.9962
Max. Deviation (MHz)	0.0033	0.0019	0.0016	0.0038
Max. Deviation (ppm)	0.59	0.34	0.29	0.68
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5550.0075	5550.0062	5550.0045	5550.0021
-10	5550.0060	5550.0048	5550.0032	5550.0013
0	5550.0046	5550.0034	5550.0015	5549.9993
10	5550.0033	5550.0020	5550.0005	5549.9987
20	5550.0021	5550.0008	5549.9992	5549.9973
30	5550.0007	5549.9996	5549.9982	5549.9966
40	5549.9991	5549.9976	5549.9960	5549.9940
50	5549.9974	5549.9962	5549.9947	5549.9920
Max. Deviation (MHz)	0.0075	0.0062	0.0053	0.0080
Max. Deviation (ppm)	1.35	1.12	0.95	1.44
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	5290.0038	5290.0024	5290.0006	5289.9985
110.00	5290.0026	5290.0013	5289.9997	5289.9978
93.50	5290.0012	5290.0001	5289.9989	5289.9967
Max. Deviation (MHz)	0.0038	0.0024	0.0011	0.0033
Max. Deviation (ppm)	0.72	0.45	0.21	0.62
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5290.0080	5290.0067	5290.0050	5290.0026
-10	5290.0065	5290.0053	5290.0037	5290.0018
0	5290.0051	5290.0039	5290.0020	5289.9998
10	5290.0038	5290.0025	5290.0010	5289.9992
20	5290.0026	5290.0013	5289.9997	5289.9978
30	5290.0012	5290.0001	5289.9987	5289.9971
40	5289.9996	5289.9981	5289.9965	5289.9945
50	5289.9979	5289.9967	5289.9952	5289.9925
Max. Deviation (MHz)	0.0080	0.0067	0.0050	0.0075
Max. Deviation (ppm)	1.51	1.27	0.95	1.42
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5530.0025	5530.0011	5529.9993	5529.9972
110.00	5530.0013	5530.0000	5529.9984	5529.9965
93.50	5529.9999	5529.9988	5529.9976	5529.9954
Max. Deviation (MHz)	0.0025	0.0012	0.0024	0.0046
Max. Deviation (ppm)	0.45	0.22	0.43	0.83
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5530.0067	5530.0054	5530.0037	5530.0013
-10	5530.0052	5530.0040	5530.0024	5530.0005
0	5530.0038	5530.0026	5530.0007	5529.9985
10	5530.0025	5530.0012	5529.9997	5529.9979
20	5530.0013	5530.0000	5529.9984	5529.9965
30	5529.9999	5529.9988	5529.9974	5529.9958
40	5529.9983	5529.9968	5529.9952	5529.9932
50	5529.9966	5529.9954	5529.9939	5529.9912
Max. Deviation (MHz)	0.0067	0.0054	0.0061	0.0088
Max. Deviation (ppm)	1.21	0.98	1.10	1.59
Result	Complies			

Temperature	25°C	Humidity	50%
Test Engineer	Eddie Weng & Lucas Huang	Test Date	Oct. 20, 2015
Test Mode	Mode 8: EUT 2 + Set 10 PIFA Antenna / Chain1:5.84 dBi, Chain2:5.50 dBi, Chain3:5.84 dBi, Chain4:5.65 dBi		

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	5300.0481	5300.0467	5300.0449	5300.0428
110.00	5300.0469	5300.0456	5300.0440	5300.0421
93.50	5300.0455	5300.0444	5300.0432	5300.0410
Max. Deviation (MHz)	0.0481	0.0467	0.0449	0.0428
Max. Deviation (ppm)	9.08	8.81	8.47	8.08
Result	Complies			

Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5300.0523	5300.0510	5300.0493	5300.0469
-10	5300.0508	5300.0496	5300.0480	5300.0461
0	5300.0494	5300.0482	5300.0463	5300.0441
10	5300.0481	5300.0468	5300.0453	5300.0435
20	5300.0469	5300.0456	5300.0440	5300.0421
30	5300.0455	5300.0444	5300.0430	5300.0414
40	5300.0439	5300.0424	5300.0408	5300.0388
50	5300.0422	5300.0410	5300.0395	5300.0368
Max. Deviation (MHz)	0.0523	0.0510	0.0493	0.0469
Max. Deviation (ppm)	9.87	9.62	9.30	8.85
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5580.0599	5580.0585	5580.0567	5580.0546
110.00	5580.0587	5580.0574	5580.0558	5580.0539
93.50	5580.0573	5580.0562	5580.0550	5580.0528
Max. Deviation (MHz)	0.0599	0.0585	0.0567	0.0546
Max. Deviation (ppm)	10.73	10.48	10.16	9.78
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5580.0641	5580.0628	5580.0611	5580.0587
-10	5580.0626	5580.0614	5580.0598	5580.0579
0	5580.0612	5580.0600	5580.0581	5580.0559
10	5580.0599	5580.0586	5580.0571	5580.0553
20	5580.0587	5580.0574	5580.0558	5580.0539
30	5580.0573	5580.0562	5580.0548	5580.0532
40	5580.0557	5580.0542	5580.0526	5580.0506
50	5580.0540	5580.0528	5580.0513	5580.0486
Max. Deviation (MHz)	0.0641	0.0628	0.0611	0.0587
Max. Deviation (ppm)	11.49	11.25	10.95	10.52
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	5310.0557	5310.0543	5310.0525	5310.0504
110.00	5310.0545	5310.0532	5310.0516	5310.0497
93.50	5310.0531	5310.0520	5310.0508	5310.0486
Max. Deviation (MHz)	0.0557	0.0543	0.0525	0.0504
Max. Deviation (ppm)	10.49	10.23	9.89	9.50
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5310.0599	5310.0586	5310.0569	5310.0545
-10	5310.0584	5310.0572	5310.0556	5310.0537
0	5310.0570	5310.0558	5310.0539	5310.0517
10	5310.0557	5310.0544	5310.0529	5310.0511
20	5310.0545	5310.0532	5310.0516	5310.0497
30	5310.0531	5310.0520	5310.0506	5310.0490
40	5310.0515	5310.0500	5310.0484	5310.0464
50	5310.0498	5310.0486	5310.0471	5310.0444
Max. Deviation (MHz)	0.0599	0.0586	0.0569	0.0545
Max. Deviation (ppm)	11.28	11.04	10.72	10.26
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5550.0589	5550.0575	5550.0557	5550.0536
110.00	5550.0577	5550.0564	5550.0548	5550.0529
93.50	5550.0563	5550.0552	5550.0540	5550.0518
Max. Deviation (MHz)	0.0589	0.0575	0.0557	0.0536
Max. Deviation (ppm)	10.61	10.36	10.04	9.66
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5550.0631	5550.0618	5550.0601	5550.0577
-10	5550.0616	5550.0604	5550.0588	5550.0569
0	5550.0602	5550.0590	5550.0571	5550.0549
10	5550.0589	5550.0576	5550.0561	5550.0543
20	5550.0577	5550.0564	5550.0548	5550.0529
30	5550.0563	5550.0552	5550.0538	5550.0522
40	5550.0547	5550.0532	5550.0516	5550.0496
50	5550.0530	5550.0518	5550.0503	5550.0476
Max. Deviation (MHz)	0.0631	0.0618	0.0601	0.0577
Max. Deviation (ppm)	11.37	11.14	10.83	10.40
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	5290.0574	5290.0560	5290.0542	5290.0521
110.00	5290.0562	5290.0549	5290.0533	5290.0514
93.50	5290.0548	5290.0537	5290.0525	5290.0503
Max. Deviation (MHz)	0.0574	0.0560	0.0542	0.0521
Max. Deviation (ppm)	10.85	10.59	10.25	9.85
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5290.0616	5290.0603	5290.0586	5290.0562
-10	5290.0601	5290.0589	5290.0573	5290.0554
0	5290.0587	5290.0575	5290.0556	5290.0534
10	5290.0574	5290.0561	5290.0546	5290.0528
20	5290.0562	5290.0549	5290.0533	5290.0514
30	5290.0548	5290.0537	5290.0523	5290.0507
40	5290.0532	5290.0517	5290.0501	5290.0481
50	5290.0515	5290.0503	5290.0488	5290.0461
Max. Deviation (MHz)	0.0616	0.0603	0.0586	0.0562
Max. Deviation (ppm)	11.64	11.40	11.08	10.62
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5530.0383	5530.0369	5530.0351	5530.0330
110.00	5530.0371	5530.0358	5530.0342	5530.0323
93.50	5530.0357	5530.0346	5530.0334	5530.0312
Max. Deviation (MHz)	0.0383	0.0369	0.0351	0.0330
Max. Deviation (ppm)	6.93	6.67	6.35	5.97
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-20	5530.0425	5530.0412	5530.0395	5530.0371
-10	5530.0410	5530.0398	5530.0382	5530.0363
0	5530.0396	5530.0384	5530.0365	5530.0343
10	5530.0383	5530.0370	5530.0355	5530.0337
20	5530.0371	5530.0358	5530.0342	5530.0323
30	5530.0357	5530.0346	5530.0332	5530.0316
40	5530.0341	5530.0326	5530.0310	5530.0290
50	5530.0324	5530.0312	5530.0297	5530.0270
Max. Deviation (MHz)	0.0425	0.0412	0.0395	0.0371
Max. Deviation (ppm)	7.69	7.45	7.14	6.71
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	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-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. 12, 2014	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. 15, 2014	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. 15, 2014	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. 15, 2014	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. 15, 2014	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. 15, 2014	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. 03, 2014	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%