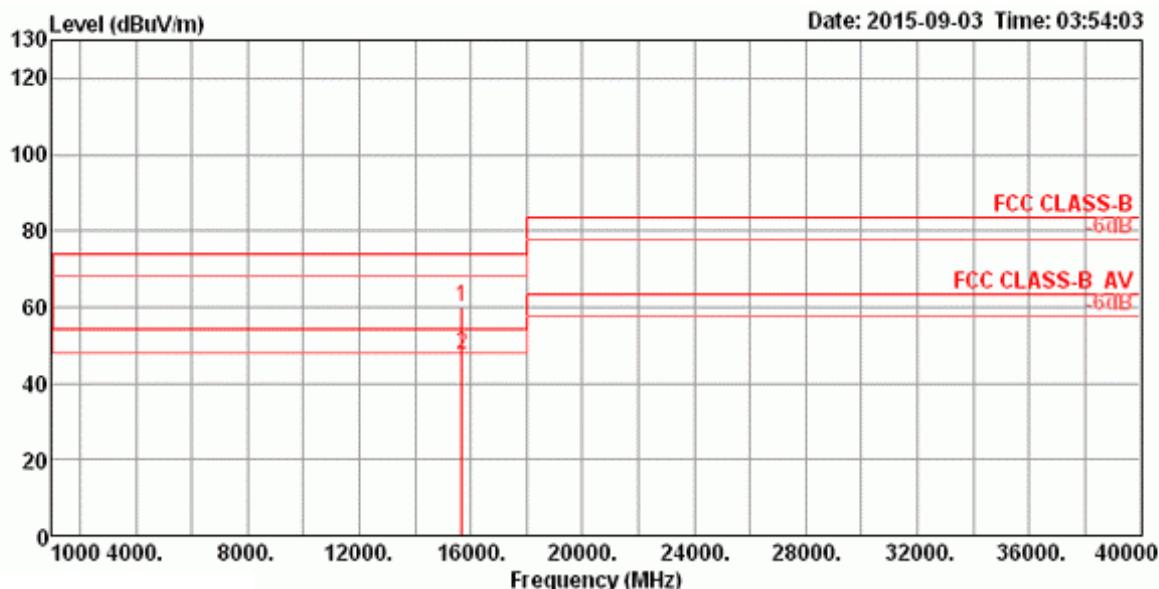
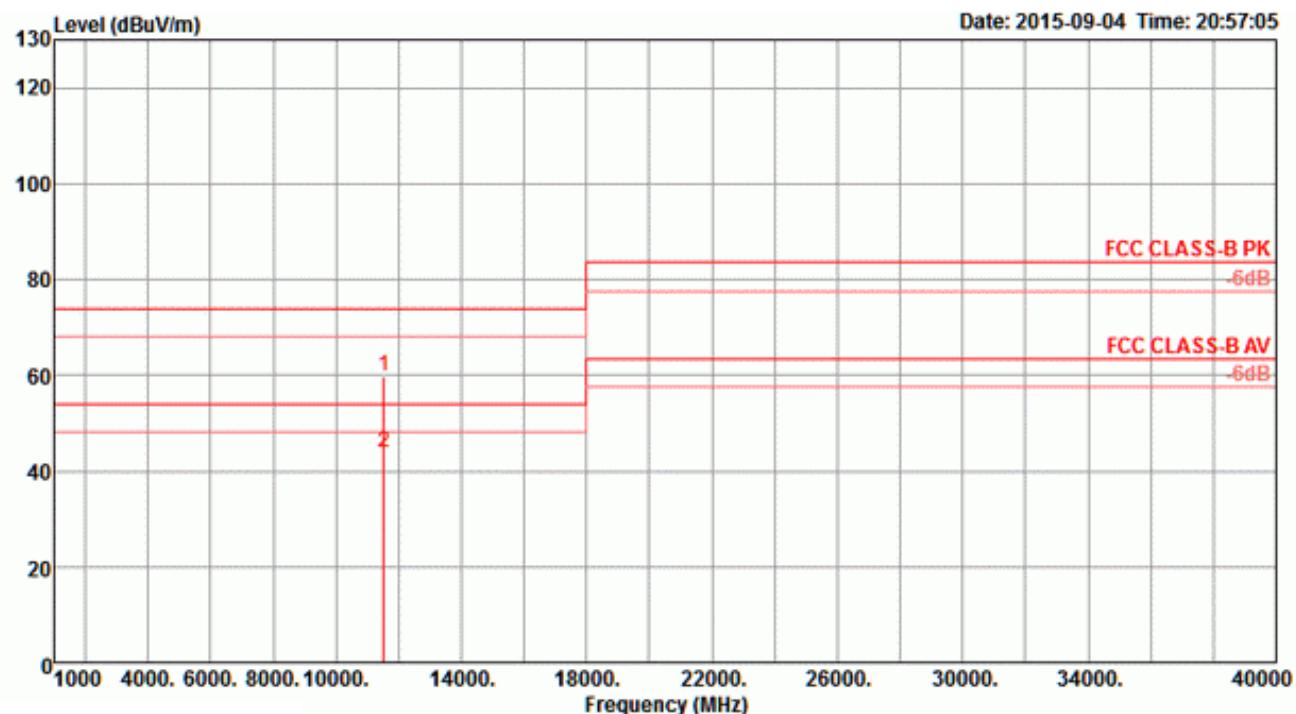


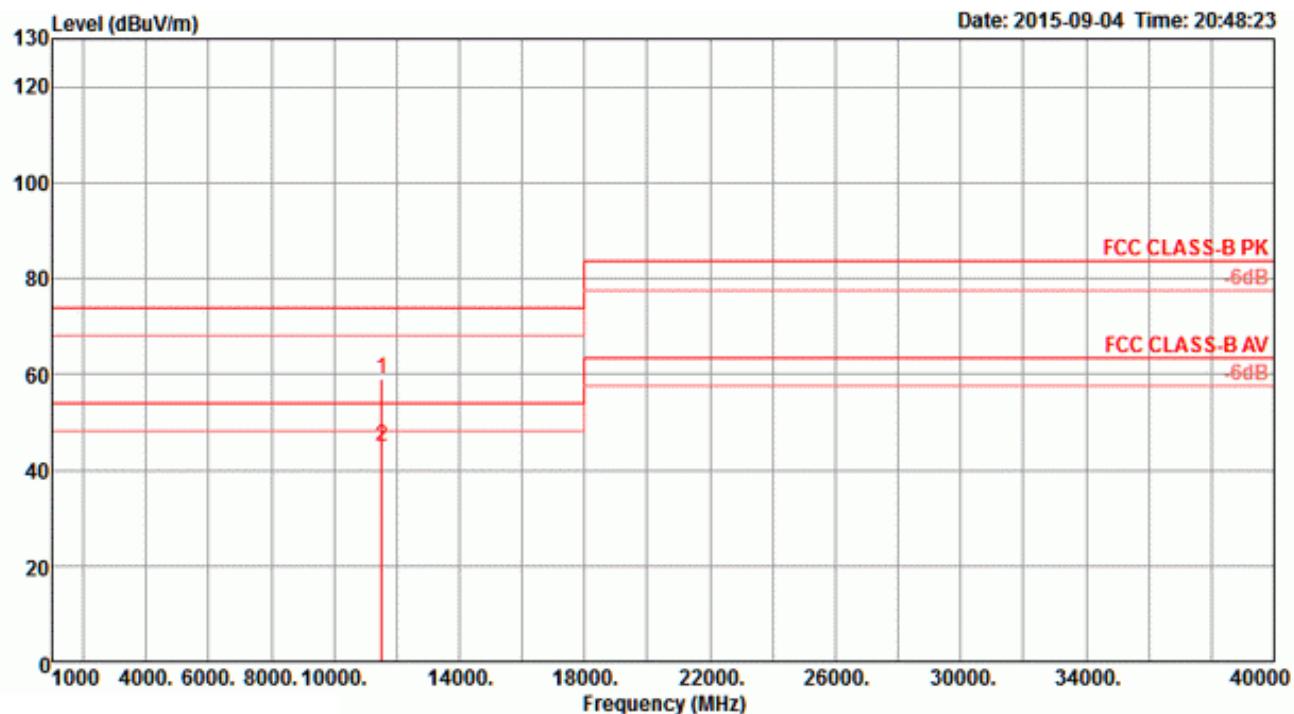
**Vertical**


Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV						
1	15690.32	59.95	74.00	-14.05	43.32	12.58	37.90	33.85	162	169	Peak	VERTICAL	
2	15692.61	47.71	54.00	-6.29	31.08	12.58	37.90	33.85	162	169	Average	VERTICAL	

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151 / Chain 9

**Horizontal**


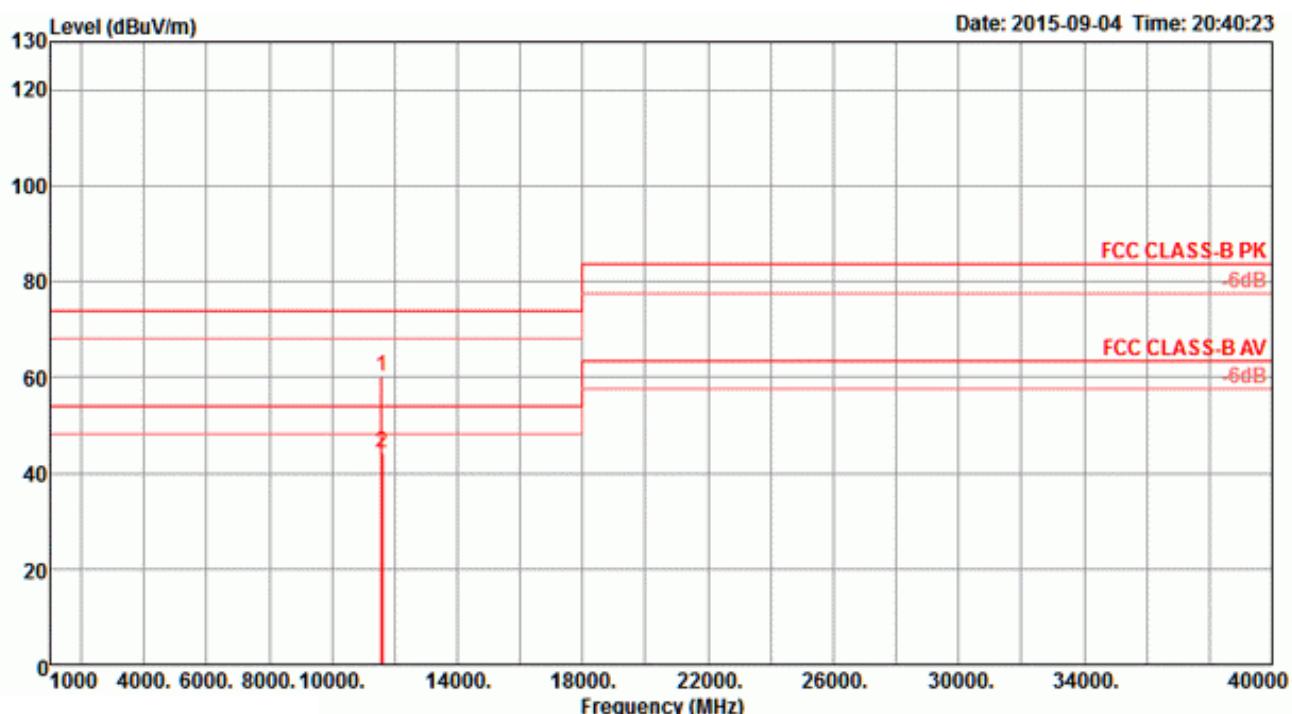
Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11511.92	59.73	74.00	-14.27	49.11	6.54	38.70	34.62	219	152 Peak	HORIZONTAL
2	11515.76	43.76	54.00	-10.24	33.14	6.54	38.70	34.62	219	152 Average	HORIZONTAL

**Vertical**


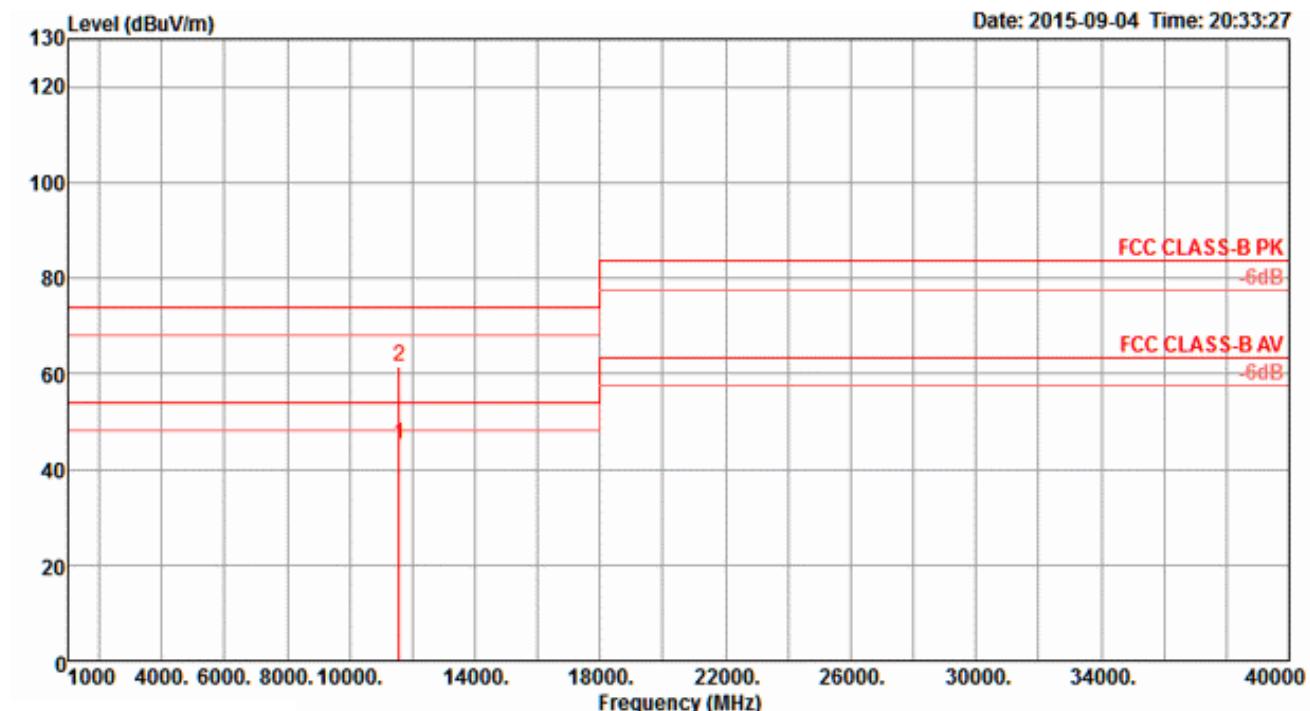
Freq	Level	Limit		Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit									
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11512.04	59.14	74.00	-14.86	48.52	6.54	38.70	34.62	171	163	Peak	VERTICAL
2	11516.72	44.81	54.00	-9.19	34.19	6.54	38.70	34.62	171	163	Average	VERTICAL

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 159 / Chain 9

## Horizontal

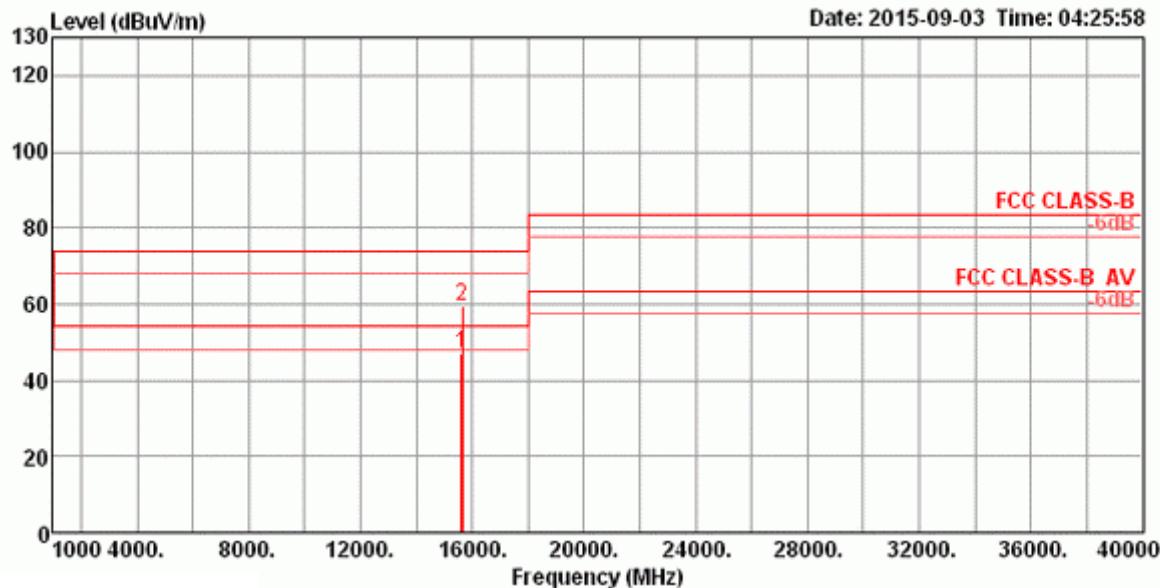


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11585.24	60.11	74.00	-13.89	49.49	6.55	38.72	34.65	119	169 Peak	HORIZONTAL
2	11594.72	44.06	54.00	-9.94	33.44	6.55	38.72	34.65	119	169 Average	HORIZONTAL

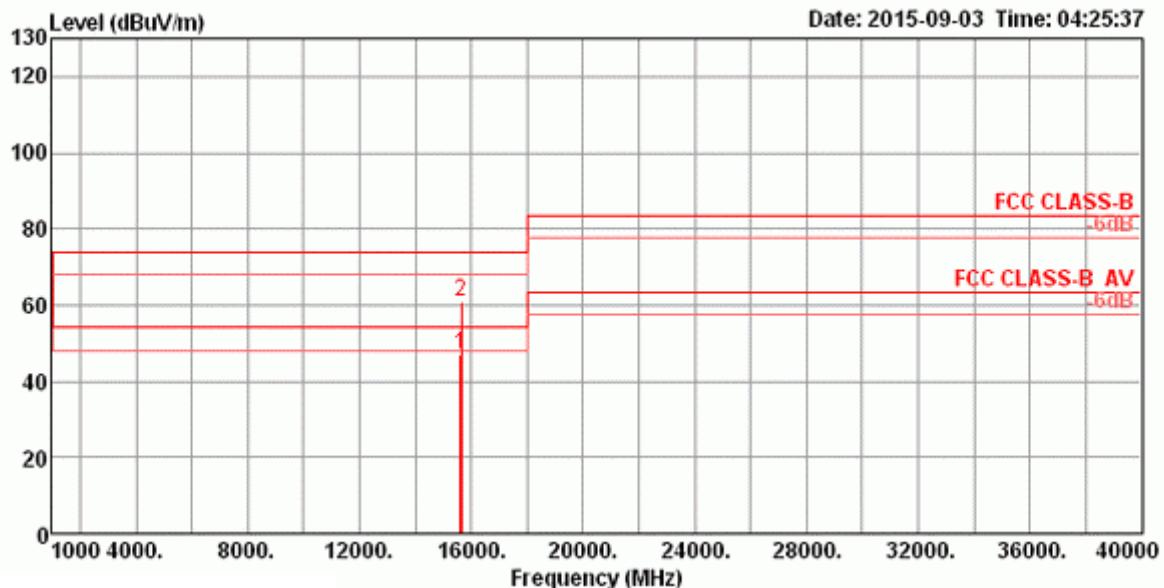
**Vertical**


Freq	Level	Limit		Over	Read	Cable		Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	Line	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11589.08	45.10	54.00	-8.90	34.48	6.55	38.72	34.65	171	176	Average	VERTICAL	
2	11591.24	61.52	74.00	-12.48	50.90	6.55	38.72	34.65	171	176	Peak	VERTICAL	

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42 / Chain 9

**Horizontal**


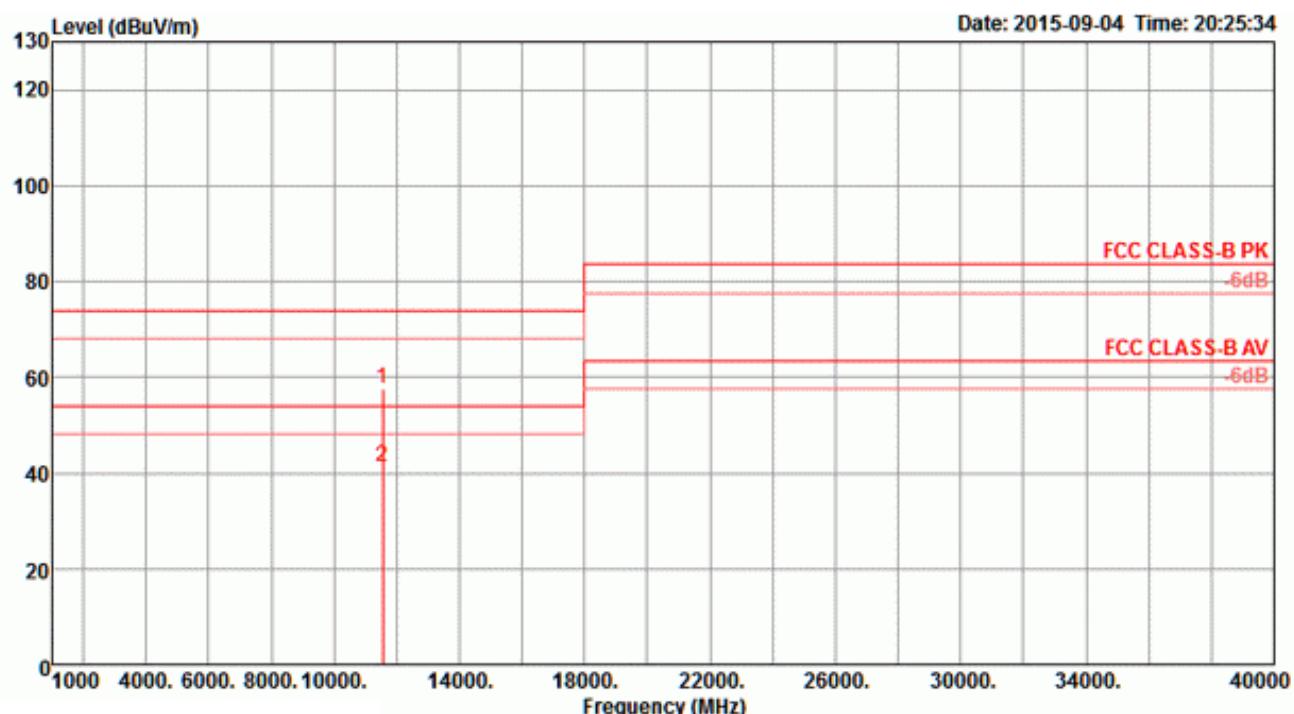
Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV			dB	dB/m	dB	cm
1	15627.34	47.21	54.00	-6.79	30.42	12.58	38.01	33.80	162	289	Average	HORIZONTAL	
2	15633.39	59.63	74.00	-14.37	42.87	12.58	37.98	33.80	162	289	Peak	HORIZONTAL	

**Vertical**


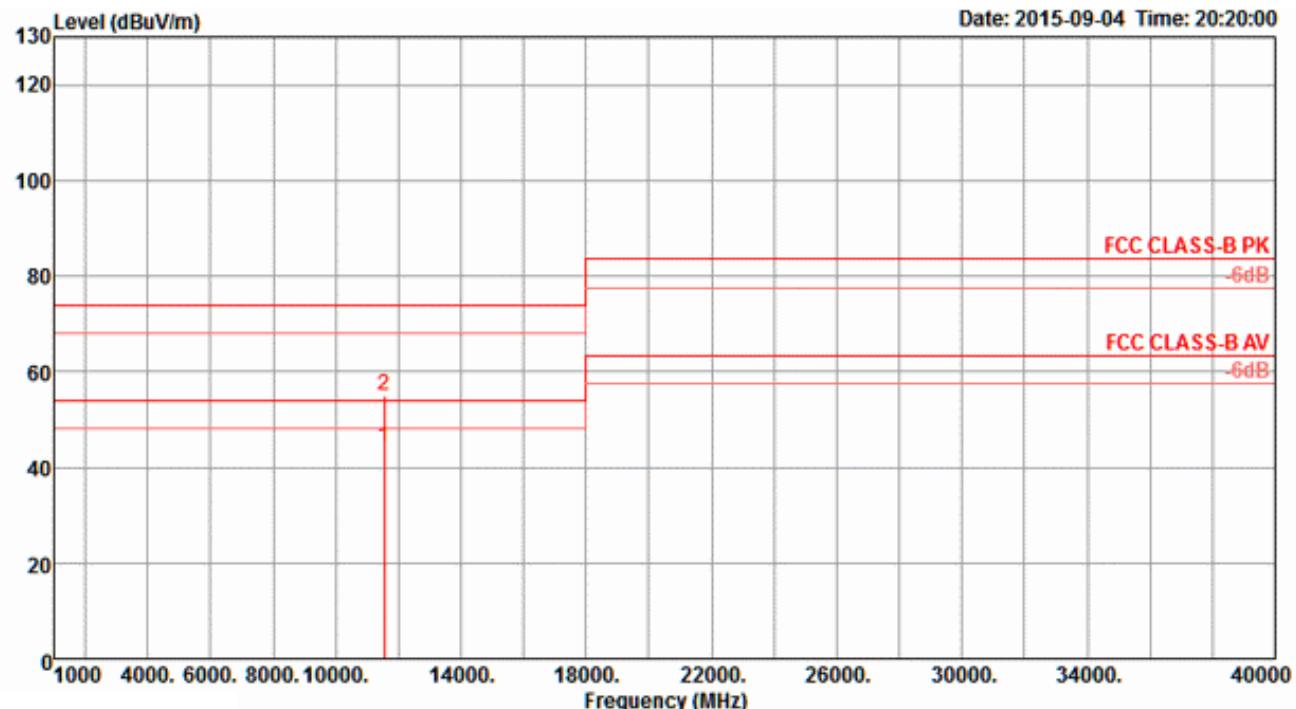
Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	15630.65	47.08	54.00	-6.92	30.32	12.58	37.98	33.80	135	330 Average	VERTICAL
2	15631.61	60.85	74.00	-13.15	44.09	12.58	37.98	33.80	135	330 Peak	VERTICAL

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 155 / Chain 9

## Horizontal



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	11547.92	57.42	74.00	-16.58	46.81	6.54	38.71	34.64	117	152 Peak	HORIZONTAL
2	11547.92	41.46	54.00	-12.54	30.85	6.54	38.71	34.64	117	152 Average	HORIZONTAL

**Vertical**


Freq	Level	Limit		Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		MHz	dBuV/m	Line	Limit	dB	dBuV	dB	dB/m	dB	deg	cm
1	11542.60	44.29	54.00	-9.71	33.67	6.54	38.71	34.63	144	113	Average	VERTICAL
2	11553.60	55.08	74.00	-18.92	44.46	6.55	38.71	34.64	144	113	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.

## 4.7. Band Edge Emissions Measurement

### 4.7.1. Limit

For transmitters operating in the 5.15-5.25 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 5.725-5.85 GHz band: all emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of  $-17$  dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions 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

### 4.7.2. 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	100 MHz
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, 1MHz / 1/T for Average
RBW / VBW (Emission in non-restricted band)	1MHz / 3MHz for Peak

### 4.7.3. Test Procedures

1. The test procedure is the same as section 4.6.3.

### 4.7.4. Test Setup Layout

This test setup layout is the same as that shown in section 4.6.4.

### 4.7.5. Test Deviation

There is no deviation with the original standard.

#### 4.7.6. EUT Operation during Test

##### **<For Non-beamforming Mode>**

The EUT was programmed to be in continuously transmitting mode.

##### **<For Beamforming Mode>**

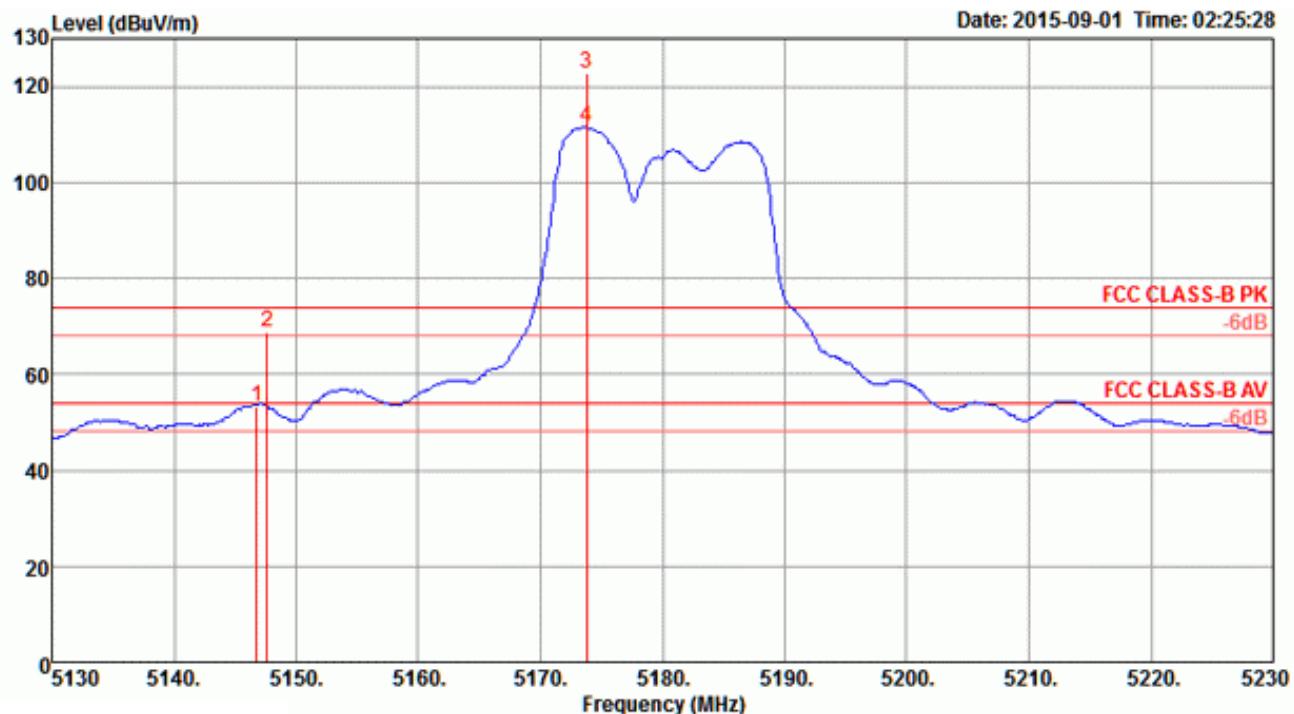
The EUT was programmed to be in beamforming transmitting mode.

#### 4.7.7. Test Result of Band Edge and Fundamental Emissions

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 5 + Chain 6 + Chain 7 + Chain 8

<For Radio 2 Non-beamforming Mode>

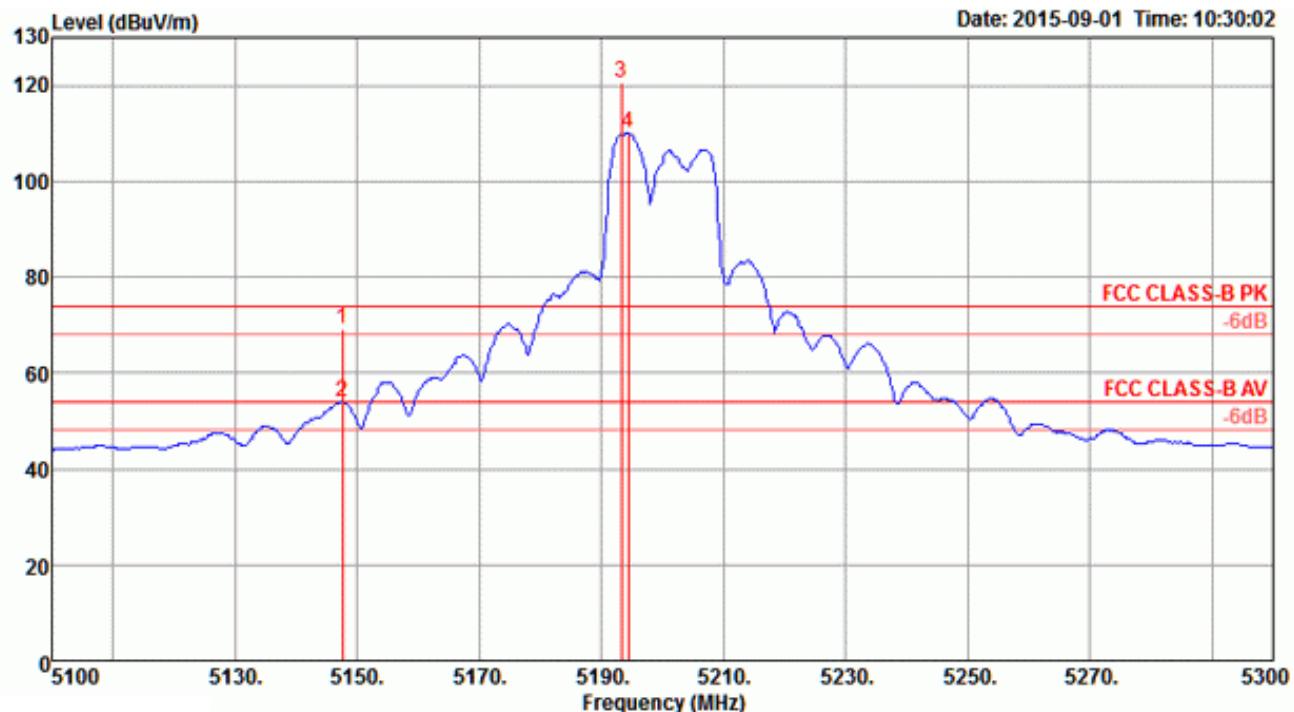
##### Channel 36



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	Cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	Cm		
1	5146.80	53.39	54.00	-0.61	50.33	4.26	33.27	34.47	39	179 Average	HORIZONTAL
2	5147.60	68.78	74.00	-5.22	65.72	4.26	33.27	34.47	39	179 Peak	HORIZONTAL
3	5173.80	122.67			119.54	4.27	33.33	34.47	39	179 Peak	HORIZONTAL
4	5173.80	111.45			108.32	4.27	33.33	34.47	39	179 Average	HORIZONTAL

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

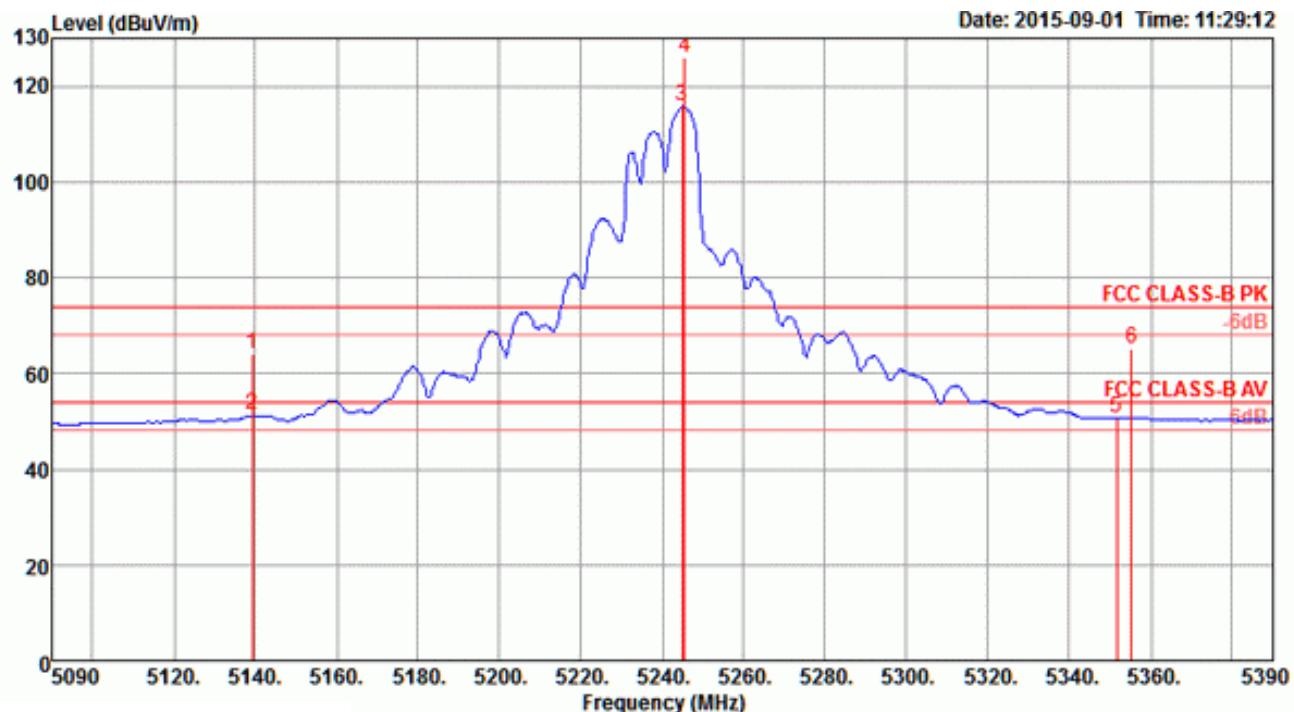
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 40**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					MHz	dBuV/m	dBuV/m	dB	dBuV	dB	deg	Cm
1	5147.60	69.10	74.00	-4.90	66.04	4.26	33.27	34.47	38	172	Peak	HORIZONTAL
2	5147.60	53.79	54.00	-0.21	50.73	4.26	33.27	34.47	38	172	Average	HORIZONTAL
3	5193.20	120.52			117.35	4.28	33.36	34.47	38	172	Peak	HORIZONTAL
4	5194.40	110.09			106.92	4.28	33.36	34.47	38	172	Average	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 48**


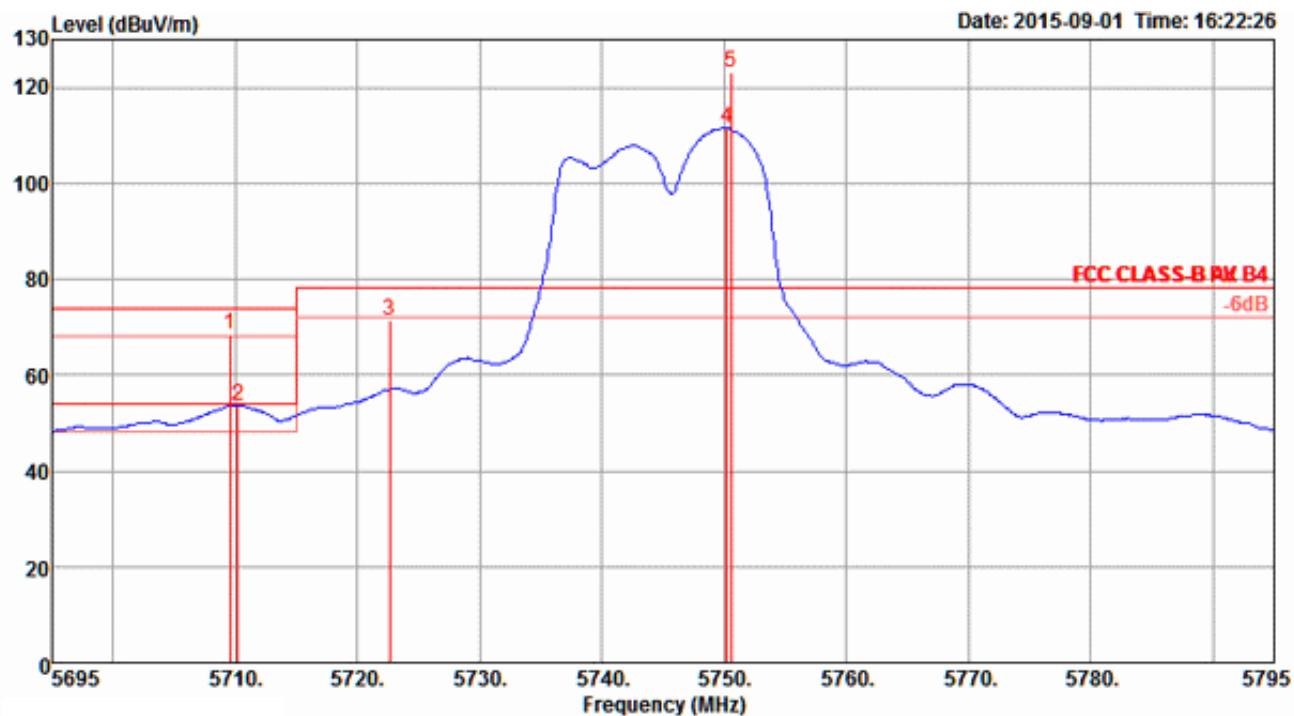
Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	deg	cm		
1 5139.20	64.19	74.00	-9.81	61.17	4.25	33.24	34.47	305	215	Peak	HORIZONTAL
2 5139.20	51.37	54.00	-2.63	48.35	4.25	33.24	34.47	305	215	Average	HORIZONTAL
3 5244.80	115.79			112.51	4.30	33.45	34.47	305	215	Average	HORIZONTAL
4 5245.40	126.03			122.75	4.30	33.45	34.47	305	215	Peak	HORIZONTAL
5 5351.60	50.78	54.00	-3.22	47.27	4.35	33.63	34.47	305	215	Average	HORIZONTAL
6 5355.20	65.19	74.00	-8.81	61.68	4.35	33.63	34.47	305	215	Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 5 + Chain 6 + Chain 7 + Chain 8

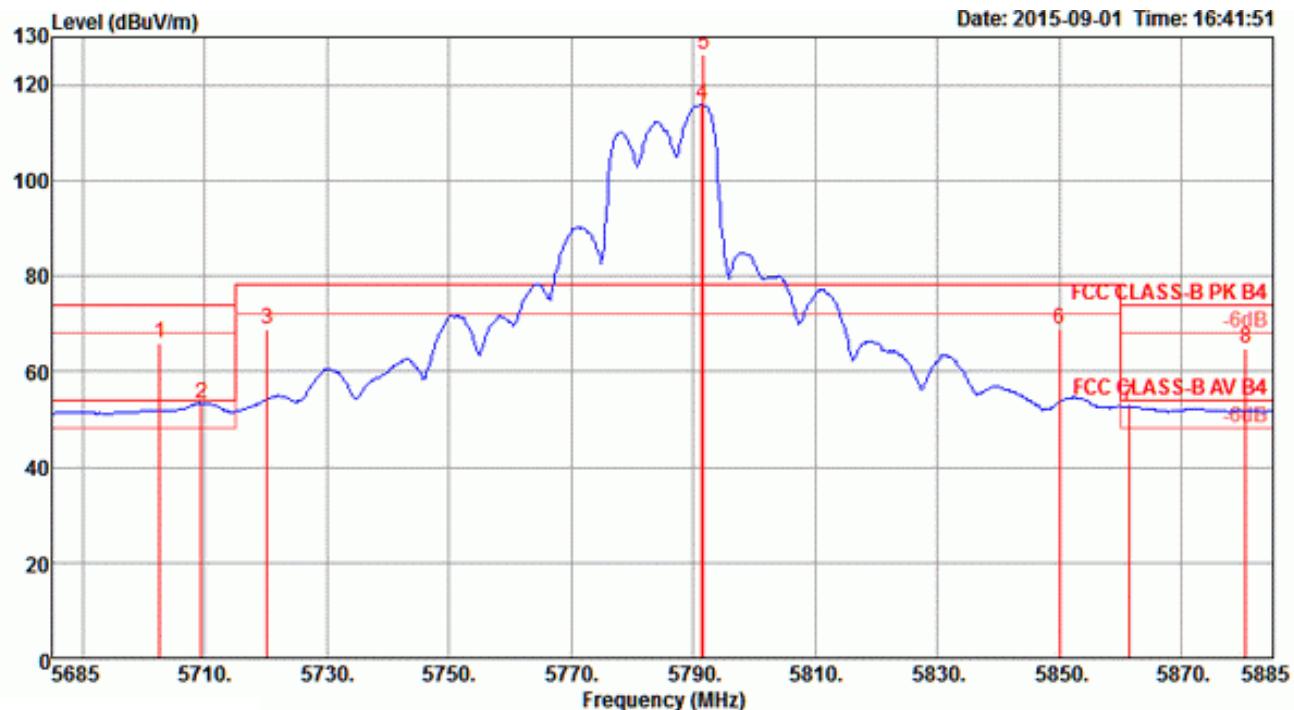
## Channel 149



Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable			Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna Loss Factor	Preamp Factor	T/Pos deg						
1 5709.60	68.44	74.00	-5.56	63.94	4.49	34.52	34.51	312	194	Peak		HORIZONTAL	
2 5710.20	53.55	54.00	-0.45	49.05	4.49	34.52	34.51	312	194	Average		HORIZONTAL	
3 5722.60	71.24	78.20	-6.96	66.68	4.50	34.57	34.51	312	194	Peak		HORIZONTAL	
4 5750.20	111.44			106.84	4.50	34.62	34.52	312	194	Average		HORIZONTAL	
5 5750.60	123.03			118.43	4.50	34.62	34.52	312	194	Peak		HORIZONTAL	

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

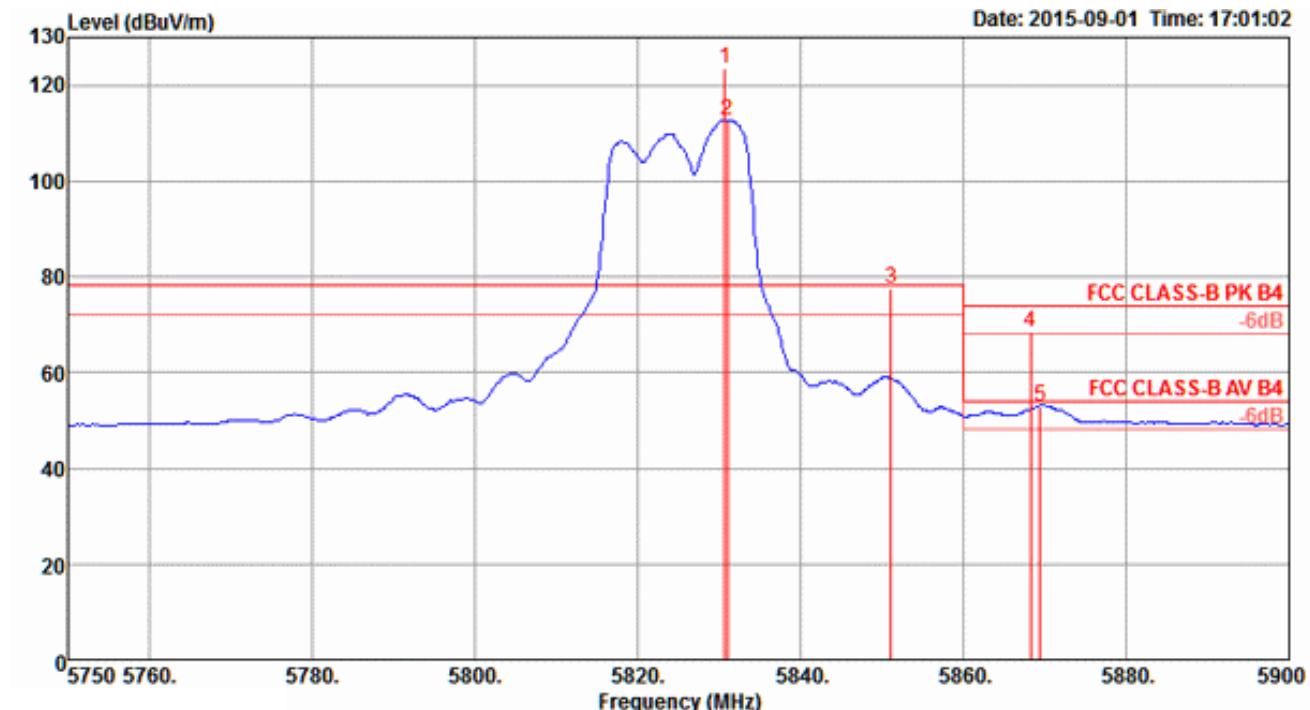
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 157**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor						
1 5702.60	65.87	74.00	-8.13	61.37	4.49	34.52	34.51	309	170	Peak	HORIZONTAL	
2 5709.40	53.26	54.00	-0.74	48.76	4.49	34.52	34.51	309	170	Average	HORIZONTAL	
3 5720.20	68.76	78.20	-9.44	64.20	4.50	34.57	34.51	309	170	Peak	HORIZONTAL	
4 5791.40	115.95			111.18	4.52	34.78	34.53	309	170	Average	HORIZONTAL	
5 5791.80	126.36			121.59	4.52	34.78	34.53	309	170	Peak	HORIZONTAL	
6 5850.00	68.67	78.20	-9.53	63.74	4.54	34.93	34.54	309	170	Peak	HORIZONTAL	
7 5861.40	52.71	54.00	-1.29	47.71	4.55	34.99	34.54	309	170	Average	HORIZONTAL	
8 5880.60	64.77	74.00	-9.23	59.72	4.55	35.04	34.54	309	170	Peak	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

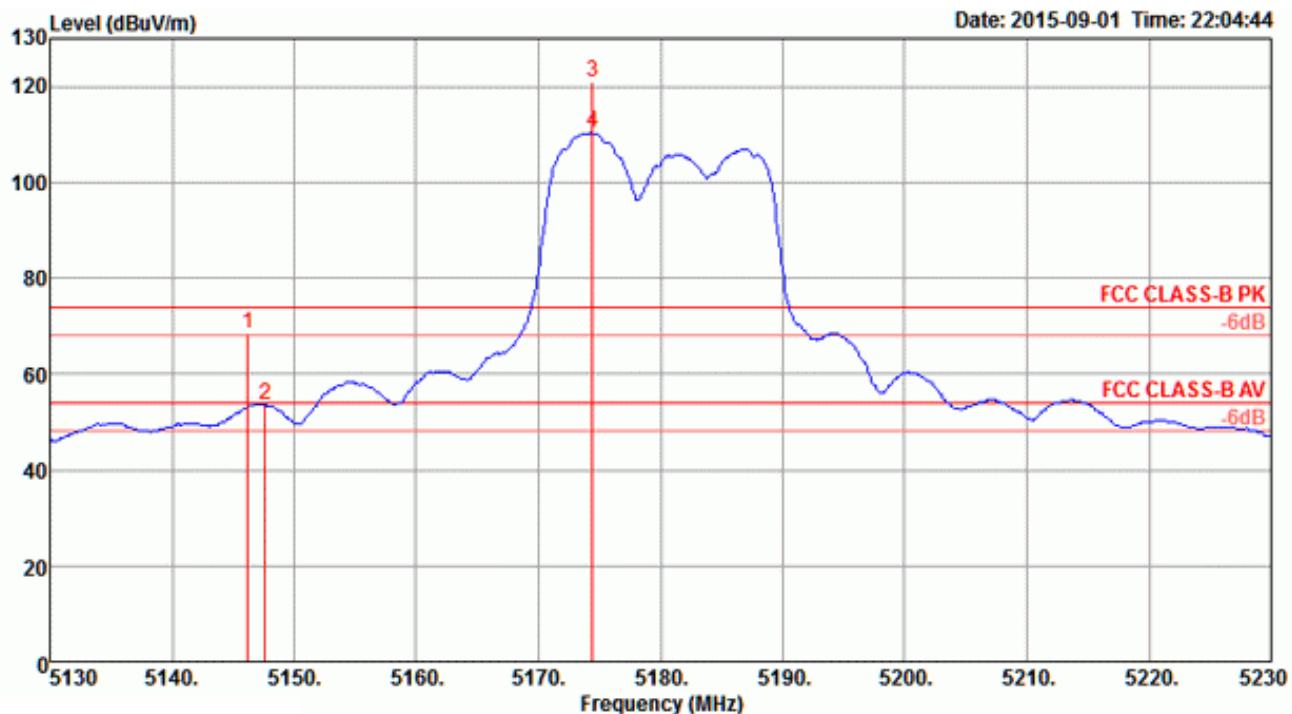
**Channel 165**


Freq MHz	Level dBuV/m	Limit Line dB	Over Limit	Read Level dBuV	Cable Loss dB	Antenna Factor dB/m	Preamp Factor dB	T/Pos deg	A/Pos cm	Remark	Pol/Phase
1 5830.70	123.38			118.50	4.53	34.88	34.53	310	188	Peak	HORIZONTAL
2 5831.00	112.67			107.79	4.53	34.88	34.53	310	188	Average	HORIZONTAL
3 5851.10	77.67	78.20	-0.53	72.74	4.54	34.93	34.54	310	188	Peak	HORIZONTAL
4 5868.20	68.29	74.00	-5.71	63.29	4.55	34.99	34.54	310	188	Peak	HORIZONTAL
5 5869.40	53.00	54.00	-1.00	48.00	4.55	34.99	34.54	310	188	Average	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

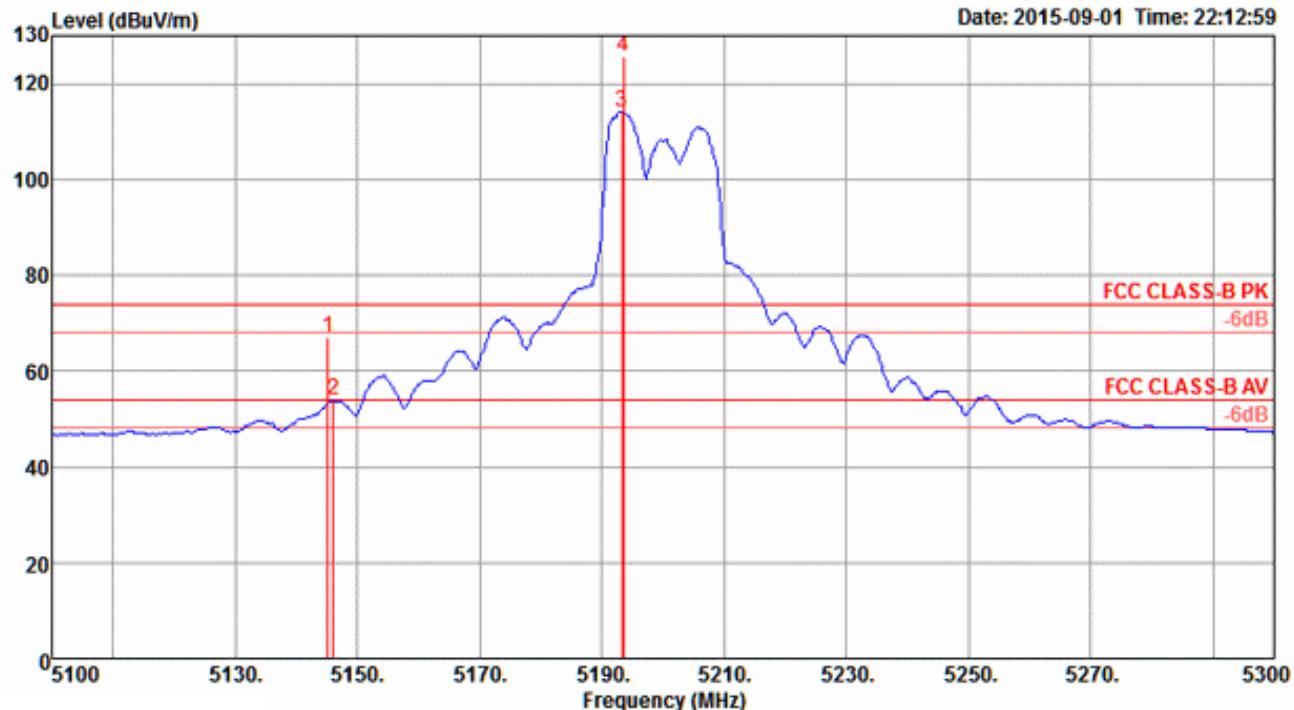
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 36**


Freq MHz	Level dBuV/m	Limit Line dB	Over Limit dB	Read Level dBuV	Cable Loss dB	Antenna Factor dB/m	Preamp Factor dB	T/Pos deg	A/Pos cm	Remark	Pol/Phase
1 5146.20	68.43	74.00	-5.57	65.37	4.26	33.27	34.47	37	173	Peak	HORIZONTAL
2 5147.60	53.52	54.00	-0.48	50.46	4.26	33.27	34.47	37	173	Average	HORIZONTAL
3 5174.40	120.95			117.82	4.27	33.33	34.47	37	173	Peak	HORIZONTAL
4 5174.40	110.30			107.17	4.27	33.33	34.47	37	173	Average	HORIZONTAL

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

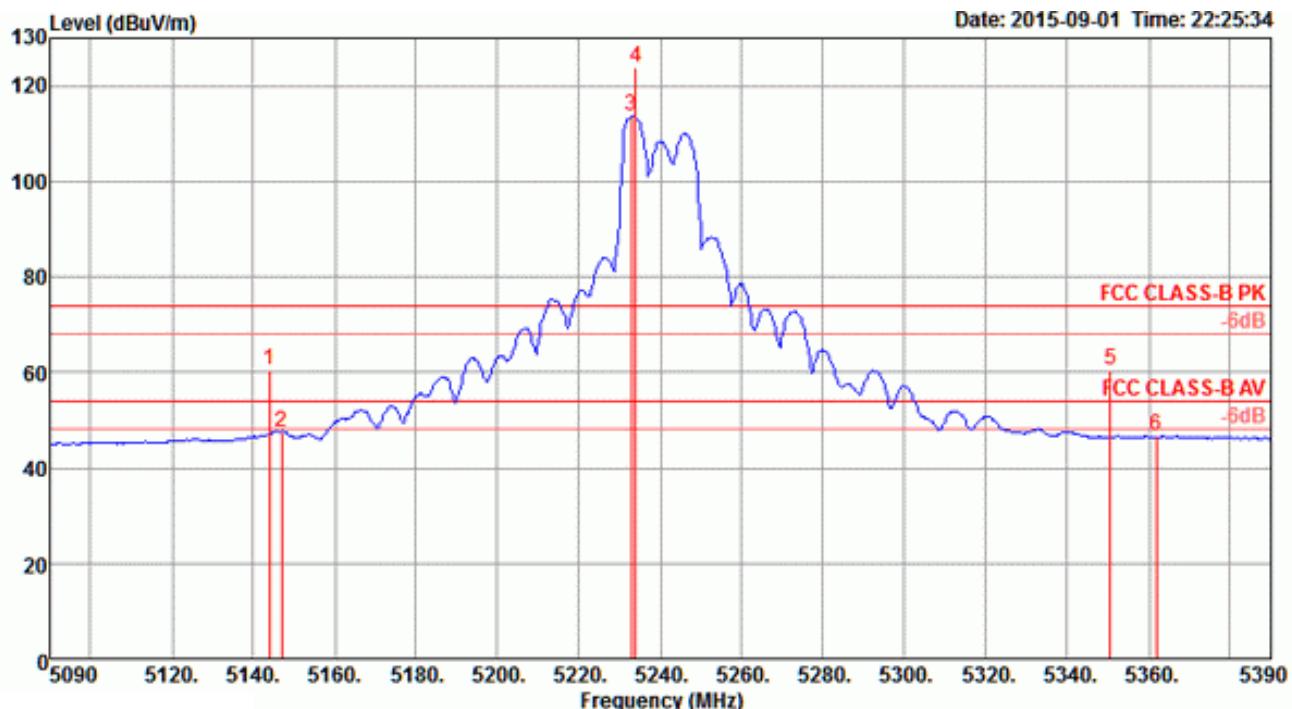
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 40**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor						
1 5145.20	66.88	74.00	-7.12	63.82	4.26	33.27	34.47	43	185	Peak		HORIZONTAL
2 5146.00	53.82	54.00	-0.18	50.76	4.26	33.27	34.47	43	185	Average		HORIZONTAL
3 5193.20	114.15			110.98	4.28	33.36	34.47	43	185	Average		HORIZONTAL
4 5193.60	125.54			122.37	4.28	33.36	34.47	43	185	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

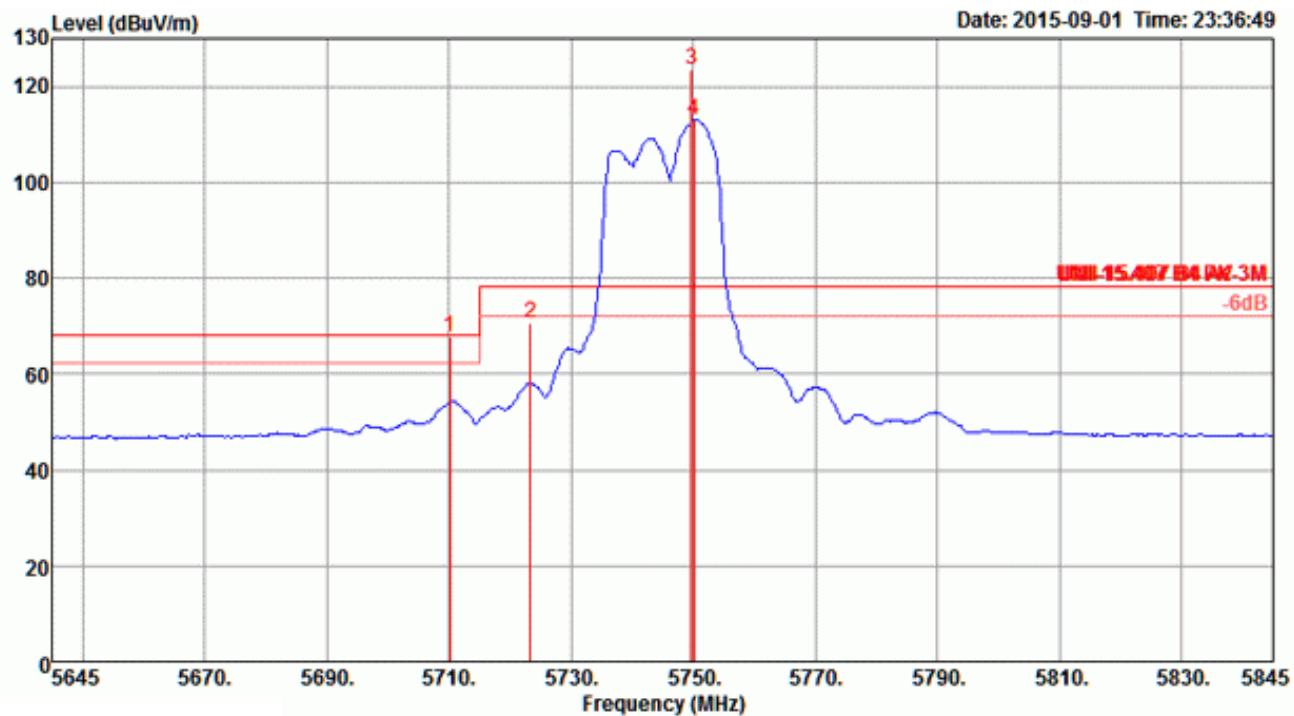
**Channel 48**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor						
1 5144.00	60.31	74.00	-13.69	57.25	4.26	33.27	34.47	47	182	Peak	HORIZONTAL	
2 5147.00	47.56	54.00	-6.44	44.50	4.26	33.27	34.47	47	182	Average	HORIZONTAL	
3 5232.80	113.70			110.45	4.30	33.42	34.47	47	182	Average	HORIZONTAL	
4 5234.00	124.00			120.75	4.30	33.42	34.47	47	182	Peak	HORIZONTAL	
5 5350.60	60.41	74.00	-13.59	56.90	4.35	33.63	34.47	47	182	Peak	HORIZONTAL	
6 5361.80	46.70	54.00	-7.30	43.15	4.36	33.66	34.47	47	182	Average	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 5 + Chain 6 + Chain 7 + Chain 8

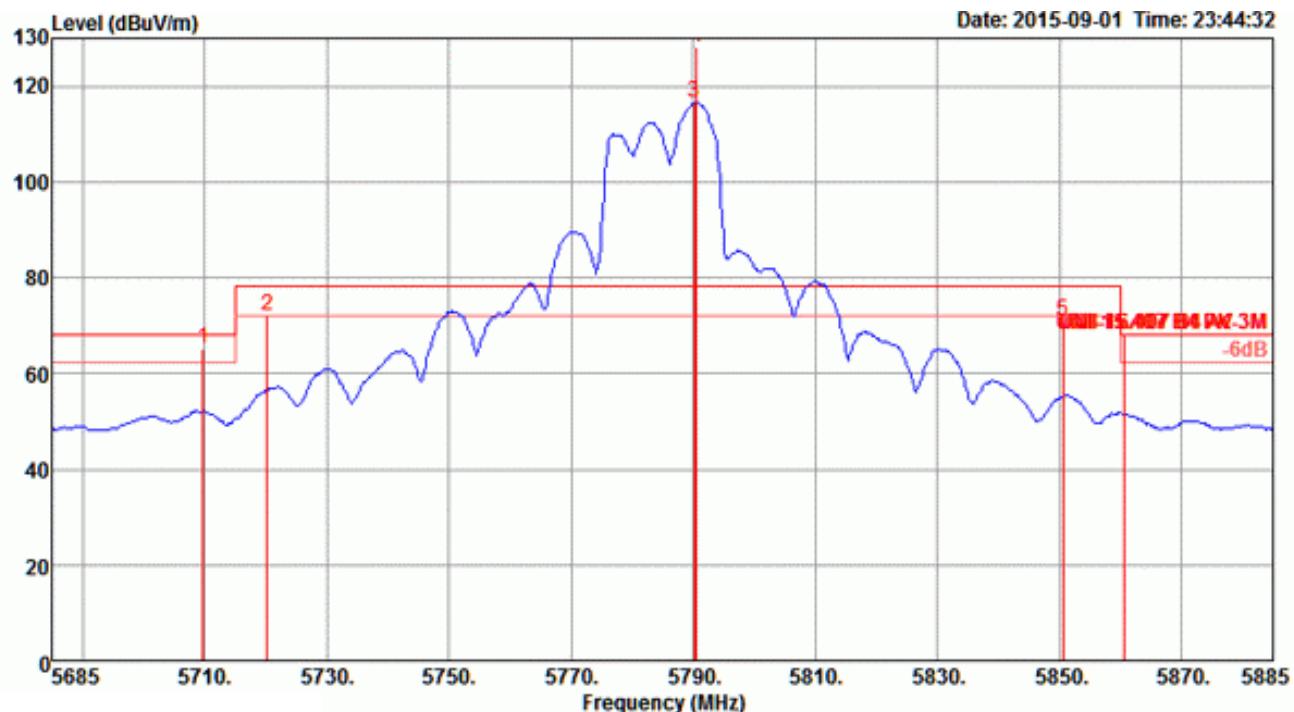
**Channel 149**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level						
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	deg	cm			
1	5710.20	67.84	68.20	-0.36	63.34	4.49	34.52	34.51	310	183	Peak		HORIZONTAL
2	5723.40	70.77	78.20	-7.43	66.21	4.50	34.57	34.51	310	183	Peak		HORIZONTAL
3	5749.80	123.57			118.97	4.50	34.62	34.52	310	183	Peak		HORIZONTAL
4	5750.20	113.02			108.42	4.50	34.62	34.52	310	183	Average		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

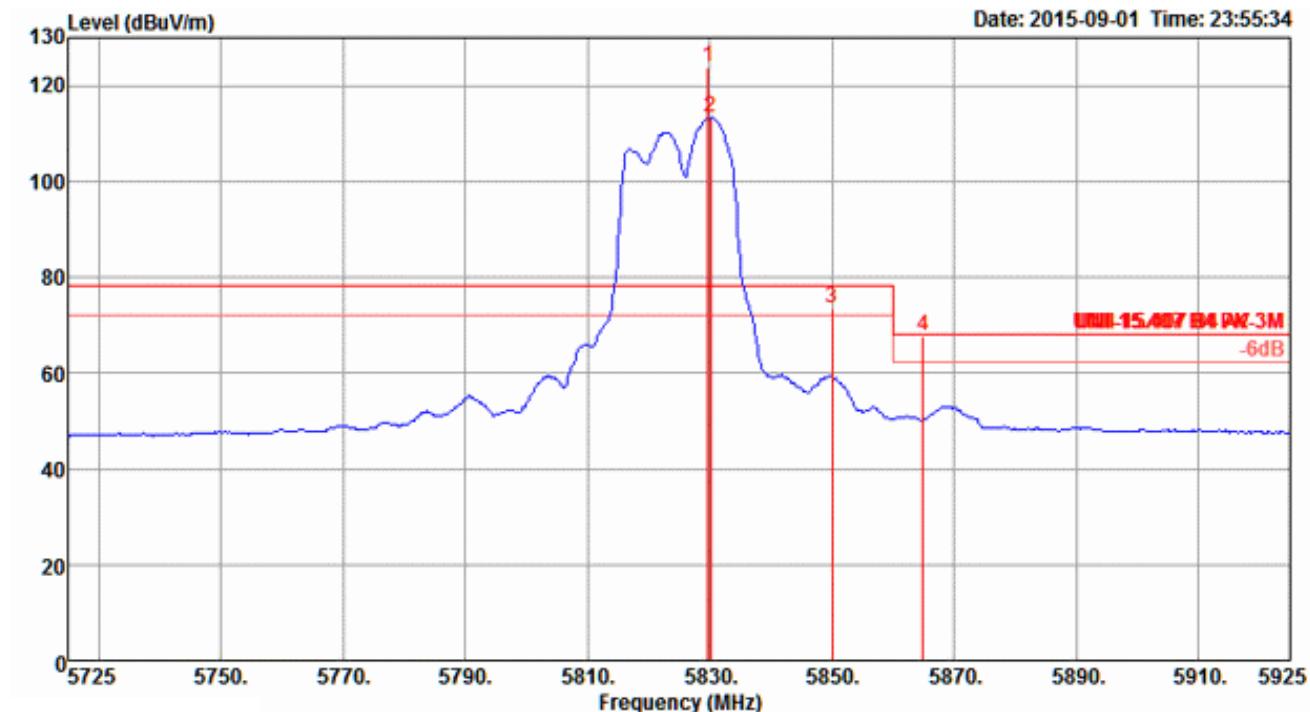
## Channel 157



Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor						
1 5709.80	65.34	68.20	-2.86	60.84	4.49	34.52	34.51	314	182	Peak	HORIZONTAL	
2 5720.20	72.20	78.20	-6.00	67.64	4.50	34.57	34.51	314	182	Peak	HORIZONTAL	
3 5790.20	116.64			111.87	4.52	34.78	34.53	314	182	Average	HORIZONTAL	
4 5790.60	128.03			123.26	4.52	34.78	34.53	314	182	Peak	HORIZONTAL	
5 5850.60	71.00	78.20	-7.20	66.07	4.54	34.93	34.54	314	182	Peak	HORIZONTAL	
6 5860.60	67.99	68.20	-0.21	62.99	4.55	34.99	34.54	314	182	Peak	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

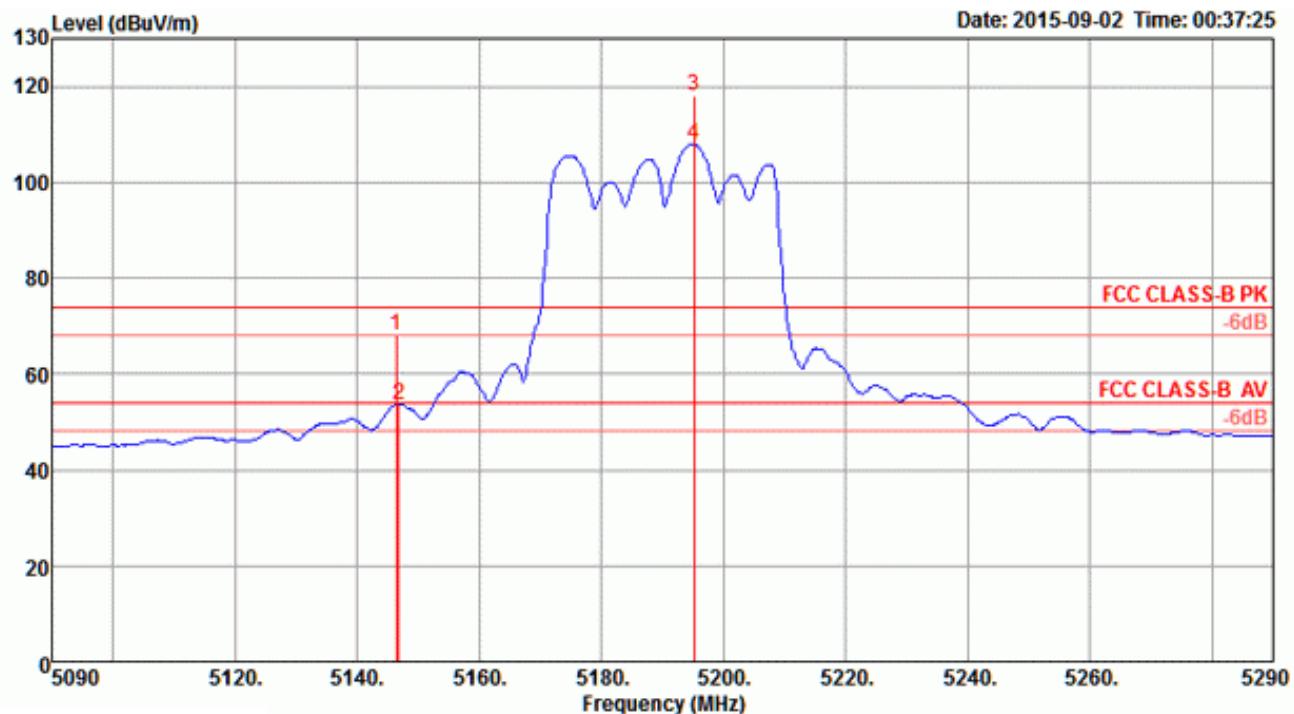
**Channel 165**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor						
1 5829.80	123.98			119.10	4.53	34.88	34.53	315	195	Peak		HORIZONTAL
2 5830.20	113.33			108.45	4.53	34.88	34.53	315	195	Average		HORIZONTAL
3 5850.00	73.58	78.20	-4.62	68.65	4.54	34.93	34.54	315	195	Peak		HORIZONTAL
4 5865.00	67.86	68.20	-0.34	62.86	4.55	34.99	34.54	315	195	Peak		HORIZONTAL

Item 3, 4 are the fundamental frequency at 5825 MHz.

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

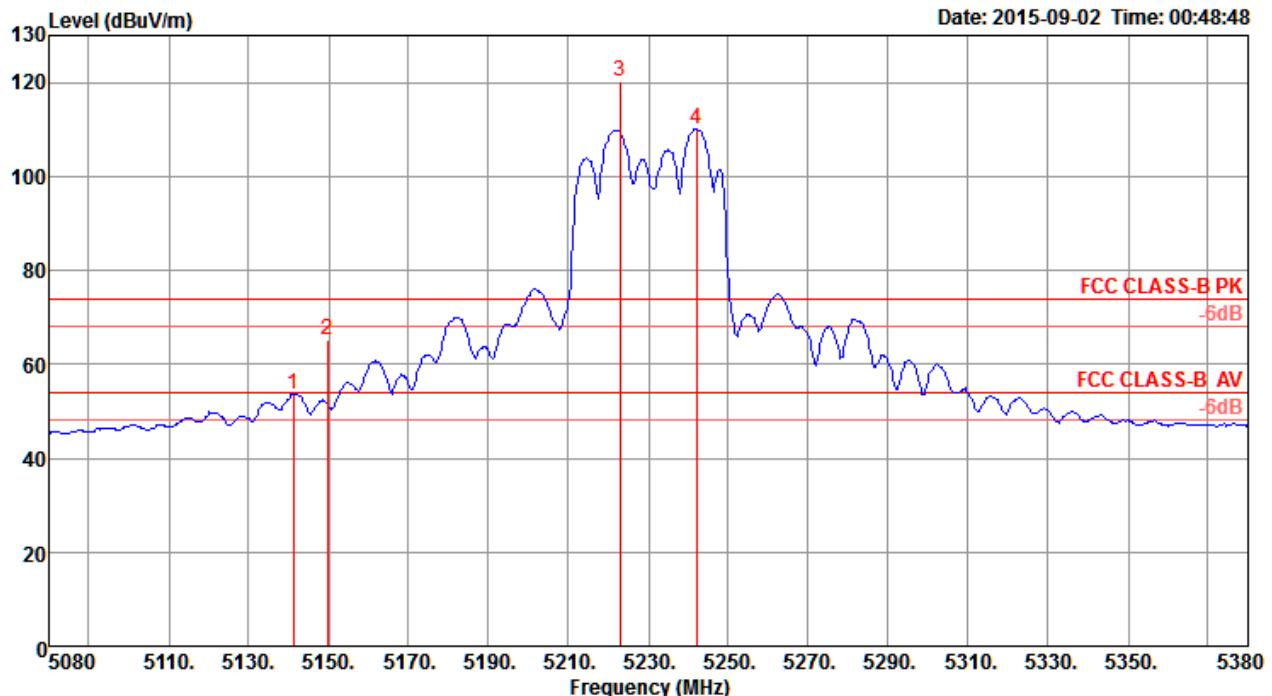
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 38**


Freq MHz	Level dBuV/m	Limit Line dB	Over Limit dB	Read Level dBuV	Cable			Antenna Loss Factor dB	Preamp Factor dB	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna Loss Factor dB	Preamp Factor dB	T/Pos deg						
1 5146.40	68.07	74.00	-5.93	65.01	4.26	33.27	34.47	298	218	Peak			HORIZONTAL
2 5146.80	53.63	54.00	-0.37	50.57	4.26	33.27	34.47	298	218	Average			HORIZONTAL
3 5195.20	118.20			115.03	4.28	33.36	34.47	298	218	Peak			HORIZONTAL
4 5195.20	107.82			104.65	4.28	33.36	34.47	298	218	Average			HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

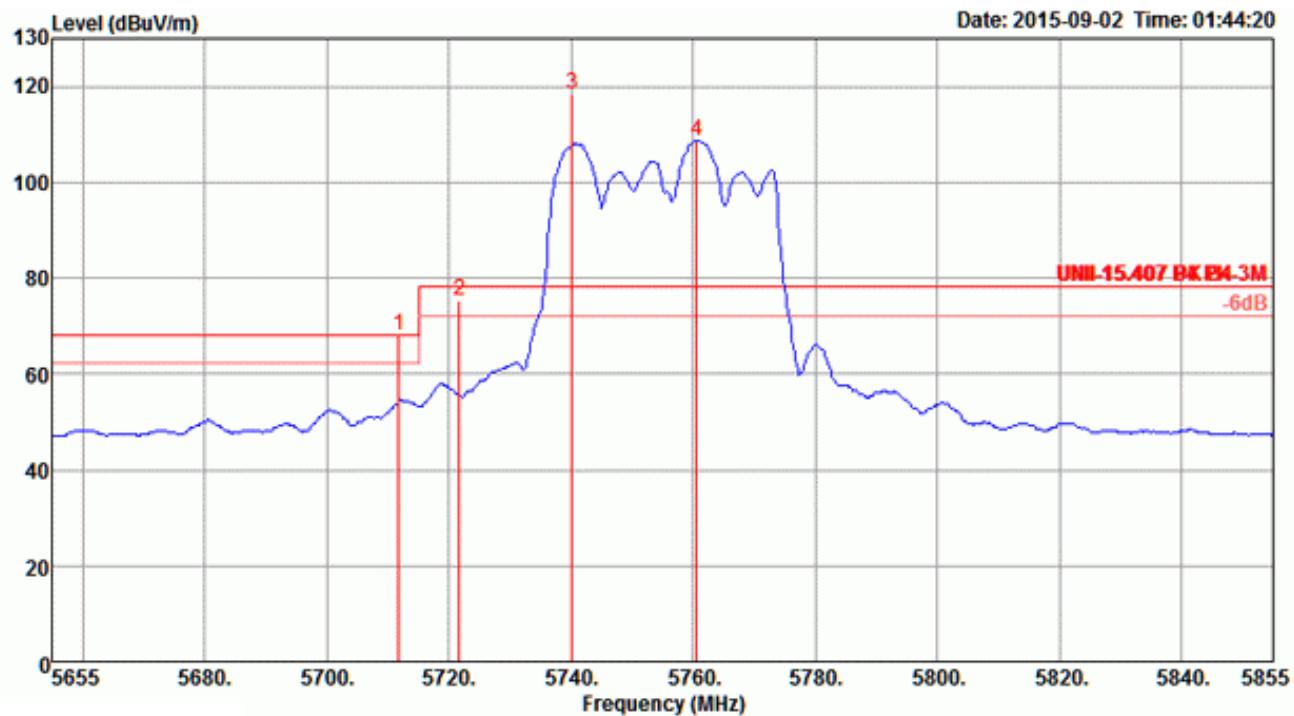
**Channel 46**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level						
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm			
1	5141.20	53.66	54.00	-0.34	50.60	4.26	33.27	34.47	55	188	Average		HORIZONTAL
2	5149.60	65.36	74.00	-8.64	62.30	4.26	33.27	34.47	55	188	Peak		HORIZONTAL
3	5222.80	120.08			116.87	4.29	33.39	34.47	55	188	Peak		HORIZONTAL
4	5242.00	110.17			106.89	4.30	33.45	34.47	55	188	Average		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

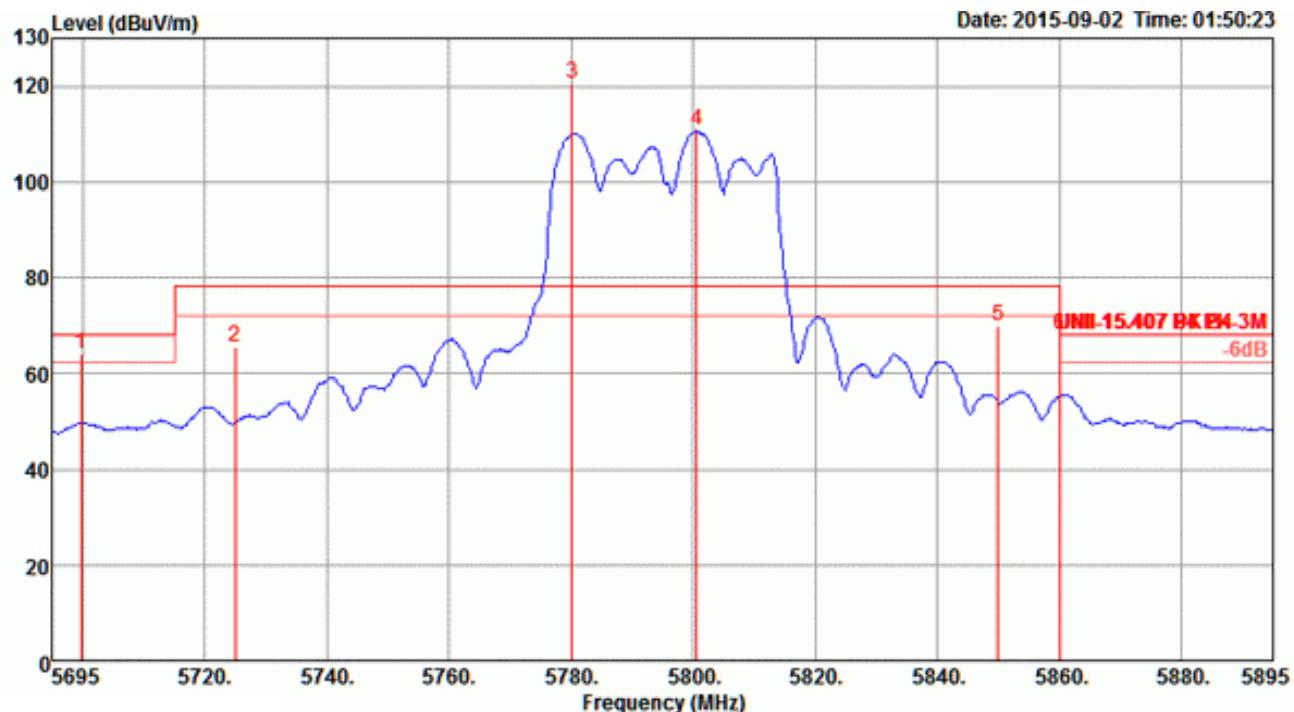
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 151**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level						
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm				
1	5711.80	68.10	68.20	-0.10	63.60	4.49	34.52	34.51	309	179	Peak		HORIZONTAL
2	5721.80	75.32	78.20	-2.88	70.76	4.50	34.57	34.51	309	179	Peak		HORIZONTAL
3	5740.20	118.46			113.86	4.50	34.62	34.52	309	179	Peak		HORIZONTAL
4	5760.60	108.74			104.08	4.51	34.68	34.53	309	179	Average		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

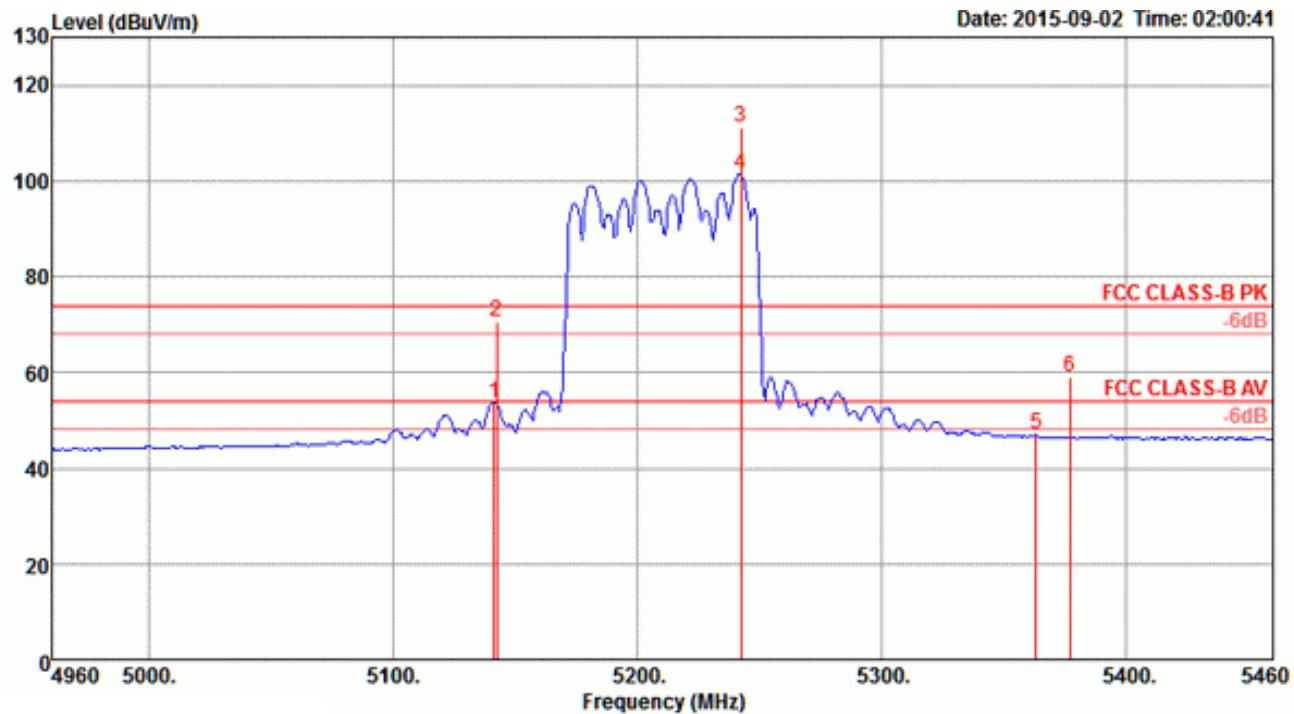
**Channel 159**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor						
1 5699.80	64.02	68.20	-4.18	59.57	4.49	34.47	34.51	312	190	Peak	HORIZONTAL	
2 5725.00	65.41	78.20	-12.79	60.85	4.50	34.57	34.51	312	190	Peak	HORIZONTAL	
3 5780.20	120.51			115.79	4.52	34.73	34.53	312	190	Peak	HORIZONTAL	
4 5800.60	110.63			105.86	4.52	34.78	34.53	312	190	Average	HORIZONTAL	
5 5850.00	69.82	78.20	-8.38	64.89	4.54	34.93	34.54	312	190	Peak	HORIZONTAL	
6 5860.00	68.06	68.20	-0.14	63.06	4.55	34.99	34.54	312	190	Peak	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

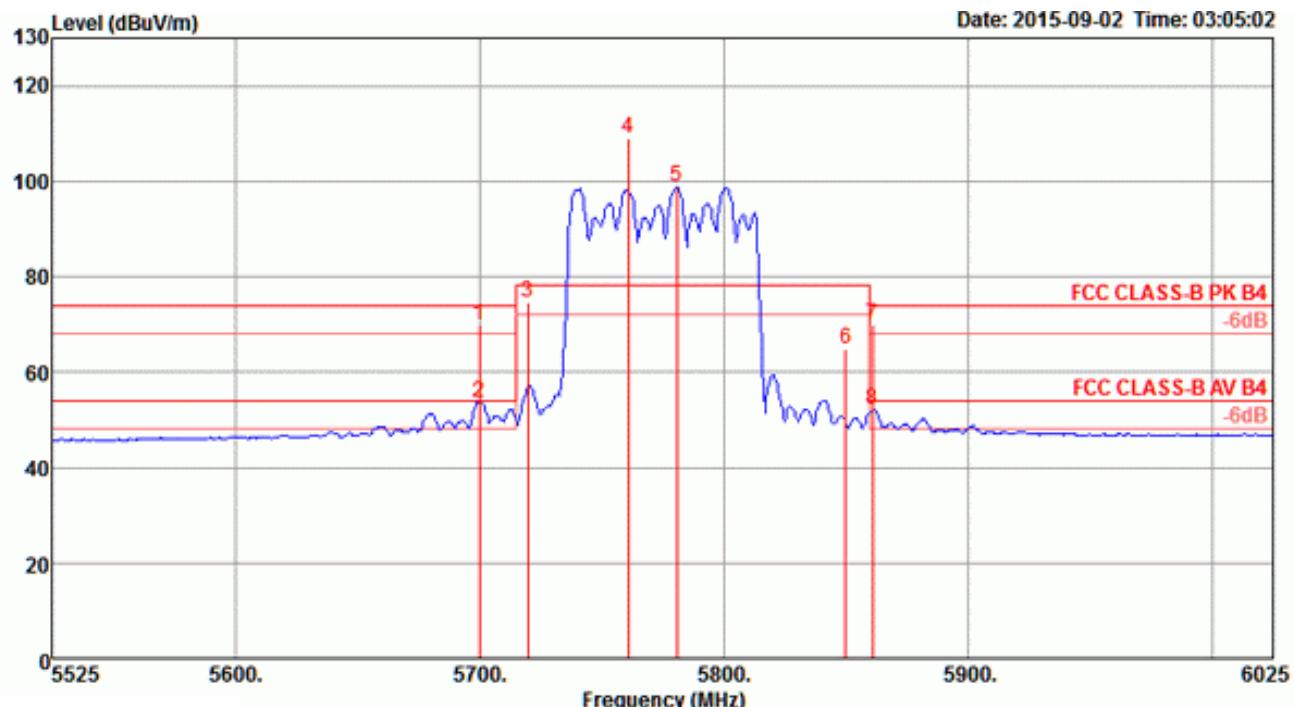
<b>Temperature</b>	26°C	<b>Humidity</b>	57%
<b>Test Engineer</b>	Roki Liu	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**


Freq	Level	Limit Line	Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor						
1	5141.00	53.75	54.00	-0.25	50.69	4.26	33.27	34.47	56	202	Average	HORIZONTAL
2	5142.00	70.74	74.00	-3.26	67.68	4.26	33.27	34.47	56	202	Peak	HORIZONTAL
3	5242.00	111.16			107.88	4.30	33.45	34.47	56	202	Peak	HORIZONTAL
4	5242.00	101.56			98.28	4.30	33.45	34.47	56	202	Average	HORIZONTAL
5	5363.00	47.09	54.00	-6.91	43.54	4.36	33.66	34.47	56	202	Average	HORIZONTAL
6	5377.00	59.19	74.00	-14.81	55.64	4.36	33.66	34.47	56	202	Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

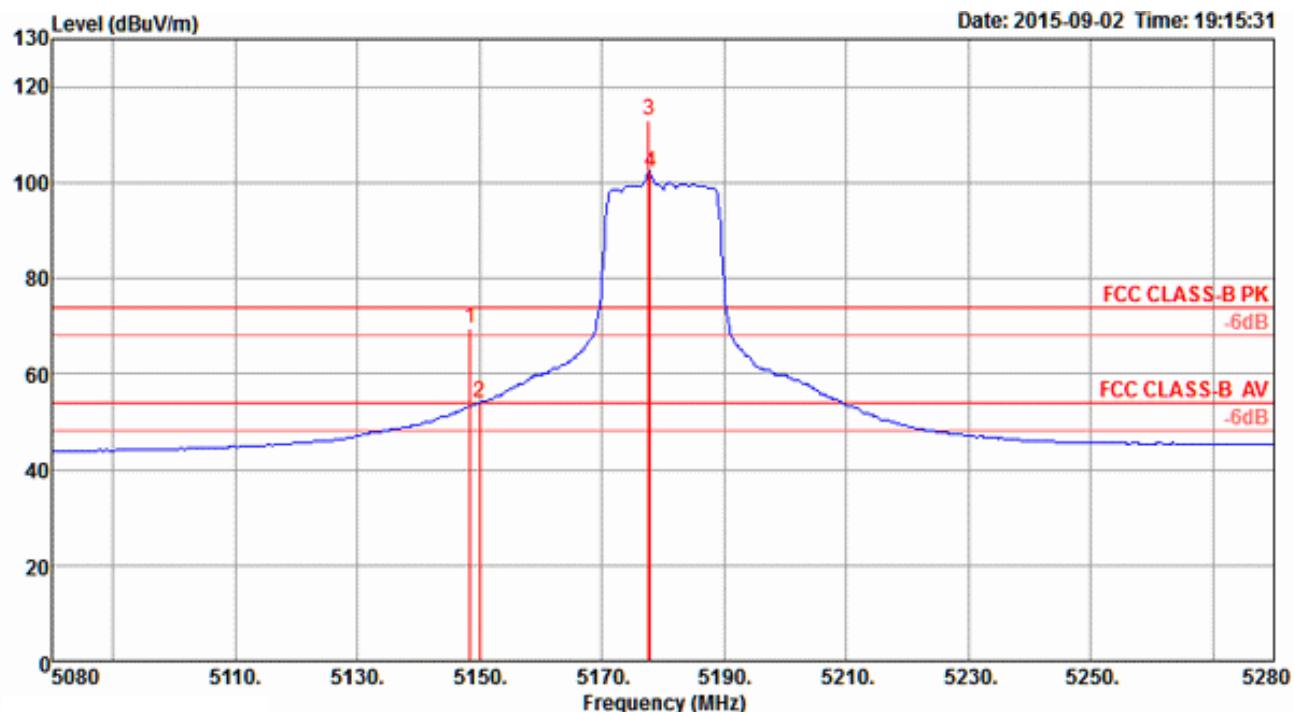
**Channel 155**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor						
1 5700.00	69.78	74.00	-4.22	65.33	4.49	34.47	34.51	310	185	Peak	HORIZONTAL	
2 5700.00	53.67	54.00	-0.33	49.22	4.49	34.47	34.51	310	185	Average	HORIZONTAL	
3 5720.00	74.77	78.20	-3.43	70.21	4.50	34.57	34.51	310	185	Peak	HORIZONTAL	
4 5761.00	108.86			104.20	4.51	34.68	34.53	310	185	Peak	HORIZONTAL	
5 5781.00	98.71			93.99	4.52	34.73	34.53	310	185	Average	HORIZONTAL	
6 5850.00	64.88	78.20	-13.32	59.95	4.54	34.93	34.54	310	185	Peak	HORIZONTAL	
7 5861.00	69.83	74.00	-4.17	64.83	4.55	34.99	34.54	310	185	Peak	HORIZONTAL	
8 5861.00	52.03	54.00	-1.97	47.03	4.55	34.99	34.54	310	185	Average	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

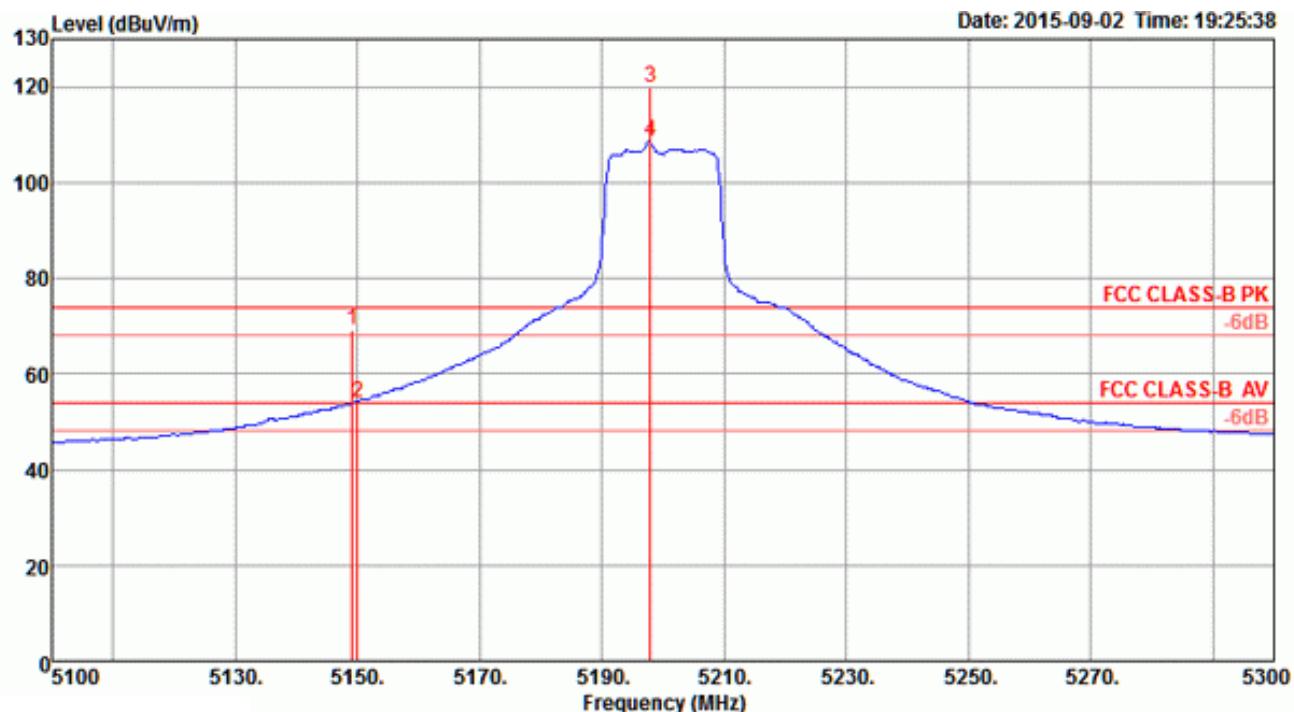
<b>Temperature</b>	26°C	<b>Humidity</b>	57%
<b>Test Engineer</b>	Roki Liu	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss4 VHT20 CH 36, 40, 48 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 36**


	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.40	69.61	74.00	-4.39	66.55	4.26	33.27	34.47	353	310	Peak	HORIZONTAL
2	5150.00	53.81	54.00	-0.19	50.75	4.26	33.27	34.47	353	310	Average	HORIZONTAL
3	5177.60	112.91			109.78	4.27	33.33	34.47	353	310	Peak	HORIZONTAL
4	5178.00	102.29			99.16	4.27	33.33	34.47	353	310	Average	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

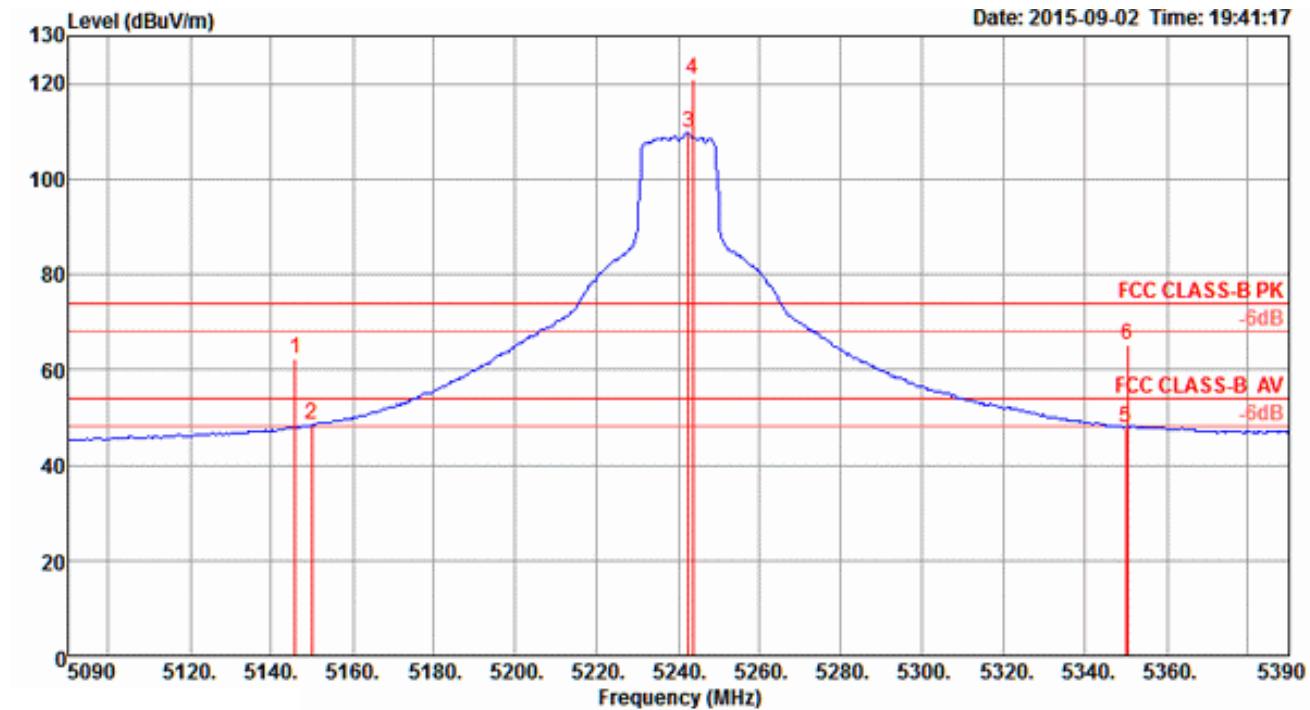
**Channel 40**


Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit						
MHz	dBuV/m	dBuV/m			dB	dBuV	dB	dB/m	dB	deg	cm	
1 5149.20	69.28	74.00	-4.72	66.22	4.26	33.27	34.47	294	188	Peak		HORIZONTAL
2 5150.00	53.95	54.00	-0.05	50.89	4.26	33.27	34.47	294	188	Average		HORIZONTAL
3 5198.00	119.68			116.51	4.28	33.36	34.47	294	188	Peak		HORIZONTAL
4 5198.00	108.51			105.34	4.28	33.36	34.47	294	188	Average		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

### Channel 48

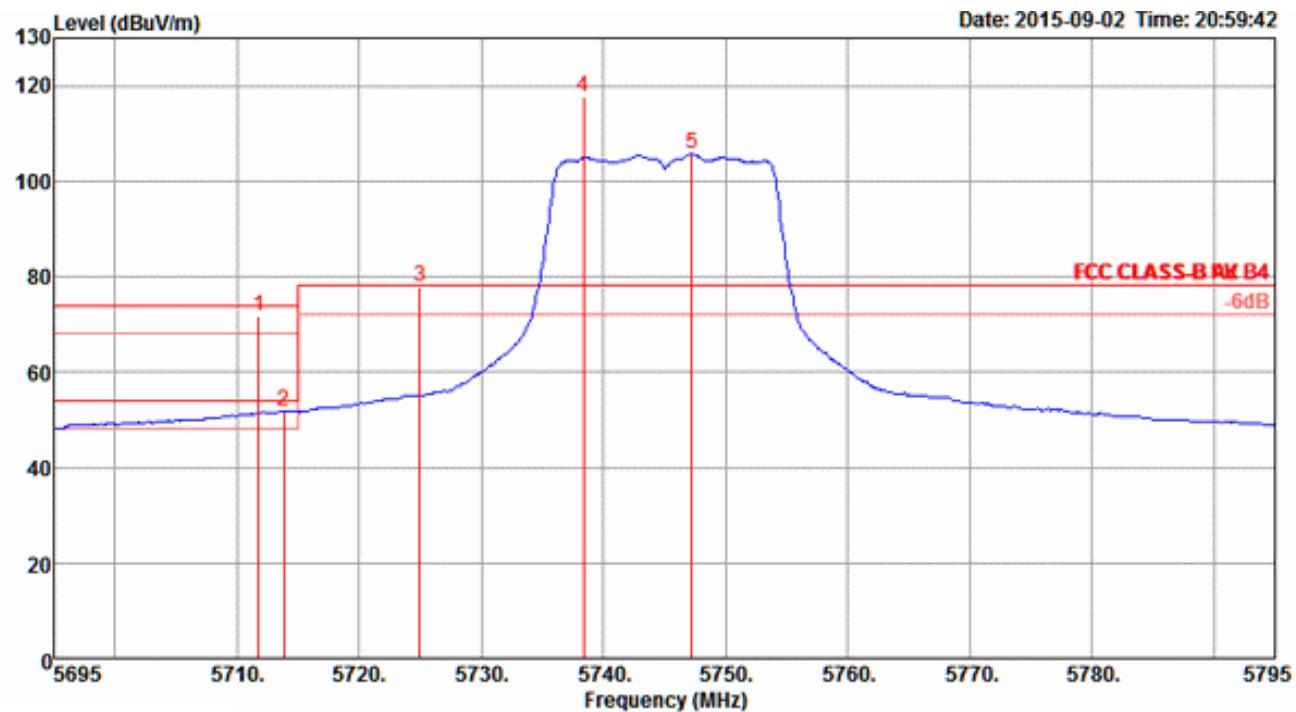


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable			Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Antenna Factor	Preamp Factor						
1 5145.80	62.43	74.00	-11.57	59.37	4.26	33.27	34.47	52	242	Peak		HORIZONTAL	
2 5150.00	48.42	54.00	-5.58	45.36	4.26	33.27	34.47	52	242	Average		HORIZONTAL	
3 5242.40	109.83	54.00			4.30	33.45	34.47	52	242	Average		HORIZONTAL	
4 5243.60	120.77	74.00			4.30	33.45	34.47	52	242	Peak		HORIZONTAL	
5 5350.00	47.97	54.00	-6.03	44.46	4.35	33.63	34.47	52	242	Average		HORIZONTAL	
6 5350.40	65.27	74.00	-8.73	61.76	4.35	33.63	34.47	52	242	Peak		HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

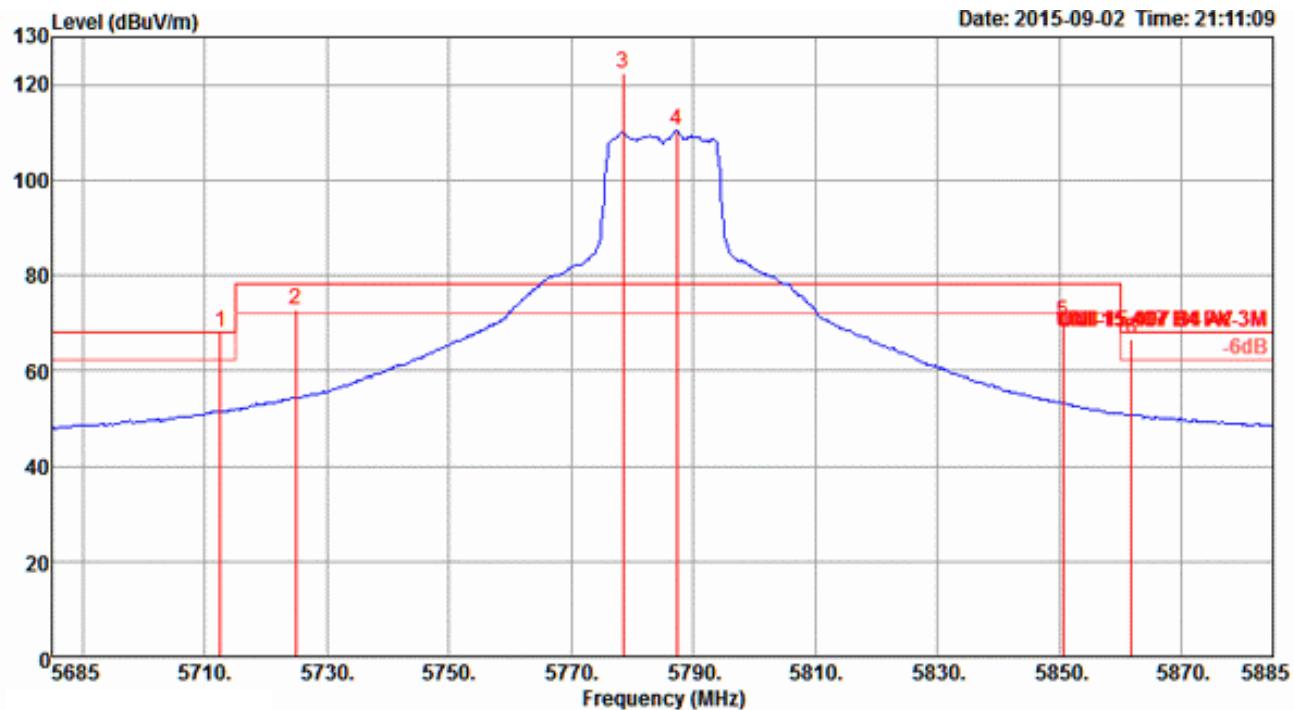
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss4 VHT20 CH 149, 157, 165 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 149**


Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	dB	dBuV	dB	dB/m	deg	Cm	
MHz	dBuV/m	dBuV/m	dB	dBuV								
1	5711.80	71.57	74.00	-2.43	67.07	4.49	34.52	34.51	42	175	Peak	HORIZONTAL
2	5713.80	51.81	54.00	-2.19	47.31	4.49	34.52	34.51	42	175	Average	HORIZONTAL
3	5725.00	77.96	78.20	-0.24	73.40	4.50	34.57	34.51	42	175	Peak	HORIZONTAL
4	5738.40	117.51			112.91	4.50	34.62	34.52	42	175	Peak	HORIZONTAL
5	5747.20	105.87			101.27	4.50	34.62	34.52	42	175	Average	HORIZONTAL

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

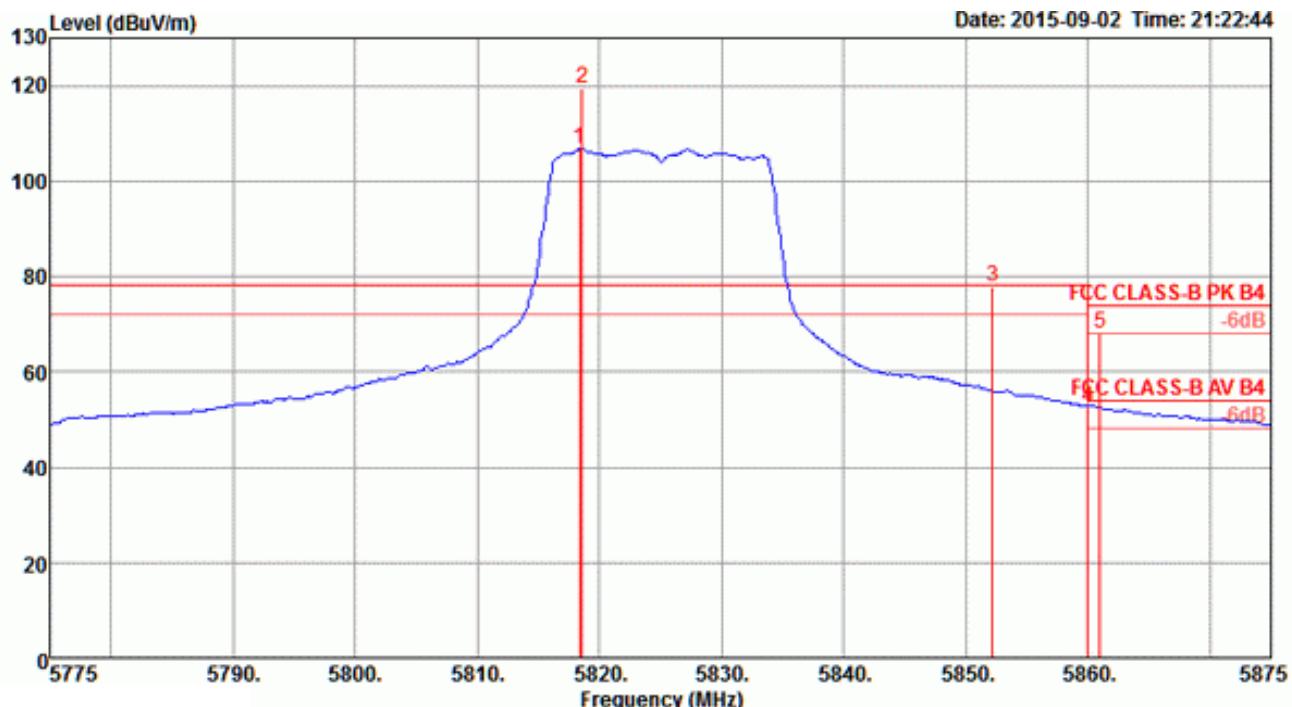
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 157**


Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit						
MHz	dBuV/m	dBuV/m			dB	dBuV	dB	dB/u	dB	deg	cm	
1 5712.60	67.97	68.20	-0.23	63.47	4.49	34.52	34.51	45	168	Peak		HORIZONTAL
2 5725.00	72.86	78.20	-5.34	68.30	4.50	34.57	34.51	45	168	Peak		HORIZONTAL
3 5778.60	122.46			117.74	4.52	34.73	34.53	45	168	Peak		HORIZONTAL
4 5787.40	110.35			105.58	4.52	34.78	34.53	45	168	Average		HORIZONTAL
5 5850.60	70.38	78.20	-7.82	65.45	4.54	34.93	34.54	45	168	Peak		HORIZONTAL
6 5861.80	66.79	68.20	-1.41	61.79	4.55	34.99	34.54	45	168	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

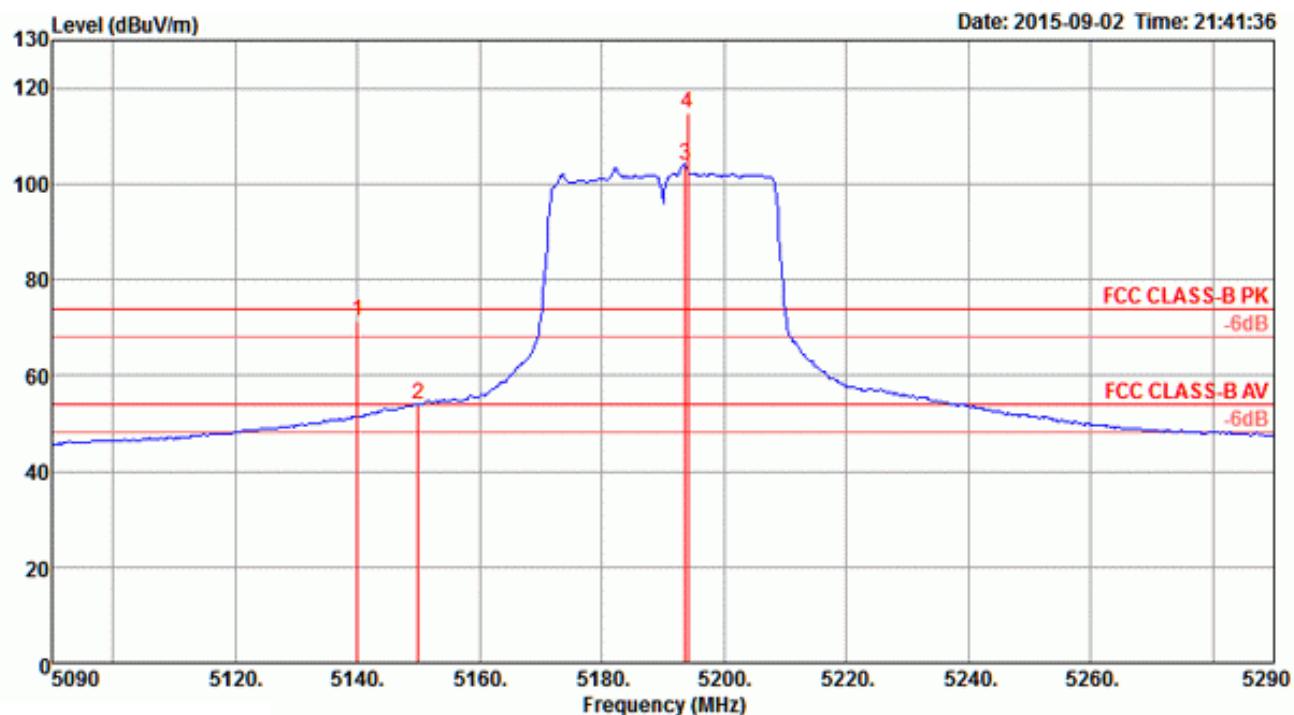
**Channel 165**


Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
					Line	Limit							
	MHz	dBuV/m	dBuV/m		dB	dB	dB	dB/m	dB	deg	cm		
1	5818.40	106.94				102.11	4.53	34.83	34.53	45	171	Average	HORIZONTAL
2	5818.60	119.33				114.50	4.53	34.83	34.53	45	171	Peak	HORIZONTAL
3	5852.20	77.93	78.20	-0.27	73.00	4.54	34.93	34.54	45	171	Peak	HORIZONTAL	
4	5860.00	52.60	54.00	-1.40	47.60	4.55	34.99	34.54	45	171	Average	HORIZONTAL	
5	5861.00	68.14	74.00	-5.86	63.14	4.55	34.99	34.54	45	171	Peak	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

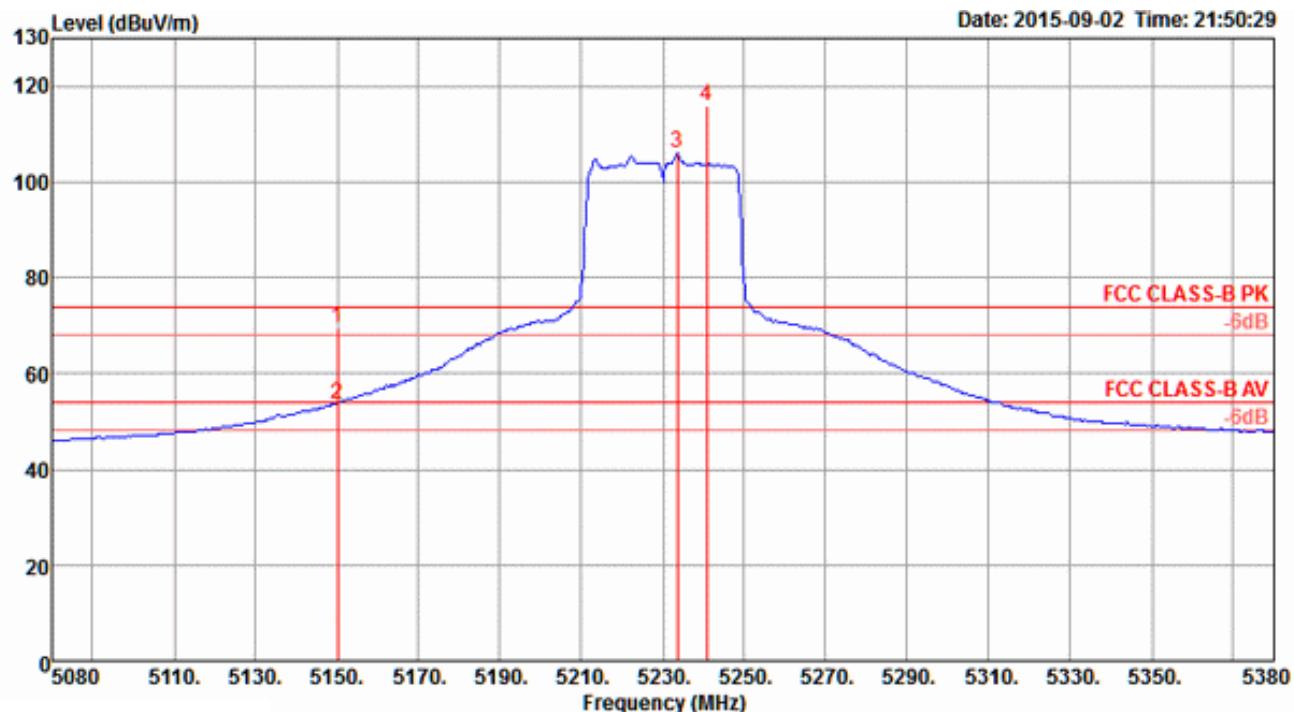
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss4 VHT40 CH 38, 46 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 38**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level						
MHz	dBuV/m	dBuV/m			dB		dBuV	dB	dB/m	dB	deg	cm	
1 5140.00	71.23	74.00	-2.77	68.17	4.26	33.27	34.47	318	182	Peak			HORIZONTAL
2 5150.00	53.79	54.00	-0.21	50.73	4.26	33.27	34.47	318	182	Average			HORIZONTAL
3 5193.60	104.04	54.00			4.28	33.36	34.47	318	182	Average			HORIZONTAL
4 5194.00	114.70	74.00			4.28	33.36	34.47	318	182	Peak			HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

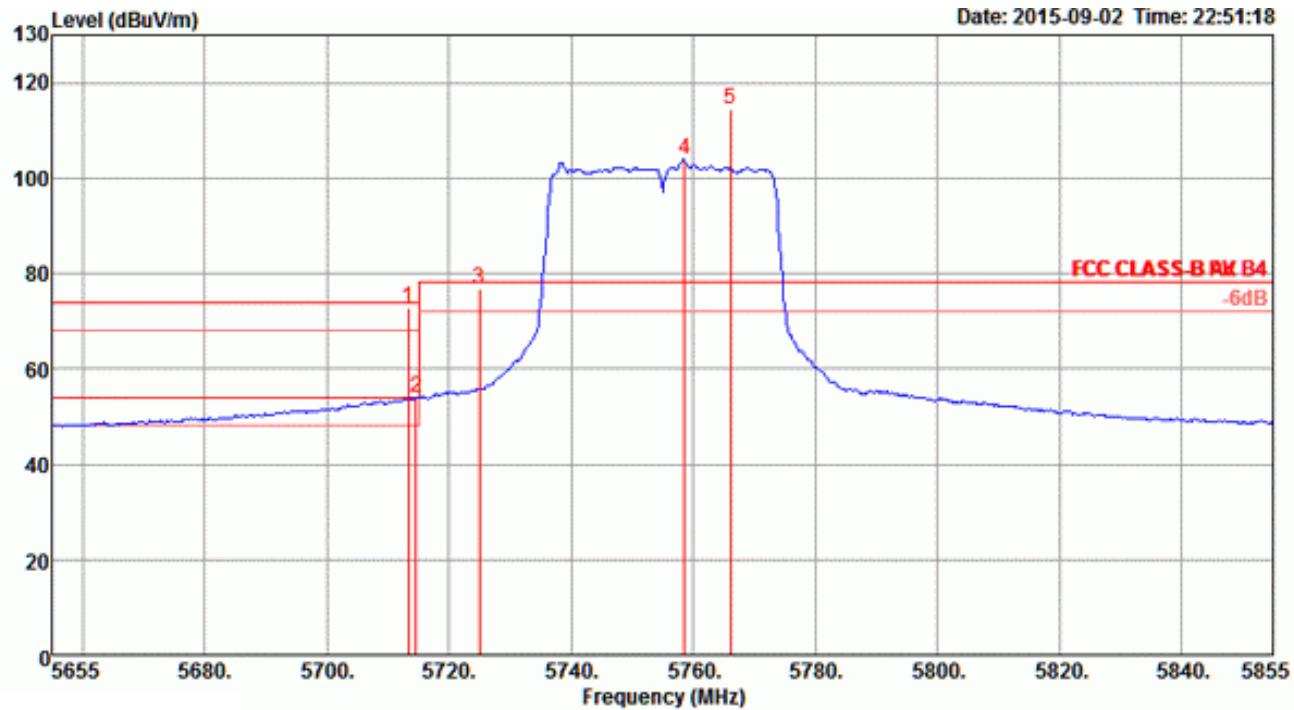
**Channel 46**


Freq	Level	Limit Line	Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	Factor						
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1 5150.00	69.57	74.00		-4.43	66.51	4.26	33.27	34.47	325	184	Peak	HORIZONTAL
2 5150.00	53.73	54.00		-0.27	50.67	4.26	33.27	34.47	325	184	Average	HORIZONTAL
3 5233.60	106.06				102.81	4.30	33.42	34.47	325	184	Average	HORIZONTAL
4 5240.80	115.86				112.61	4.30	33.42	34.47	325	184	Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

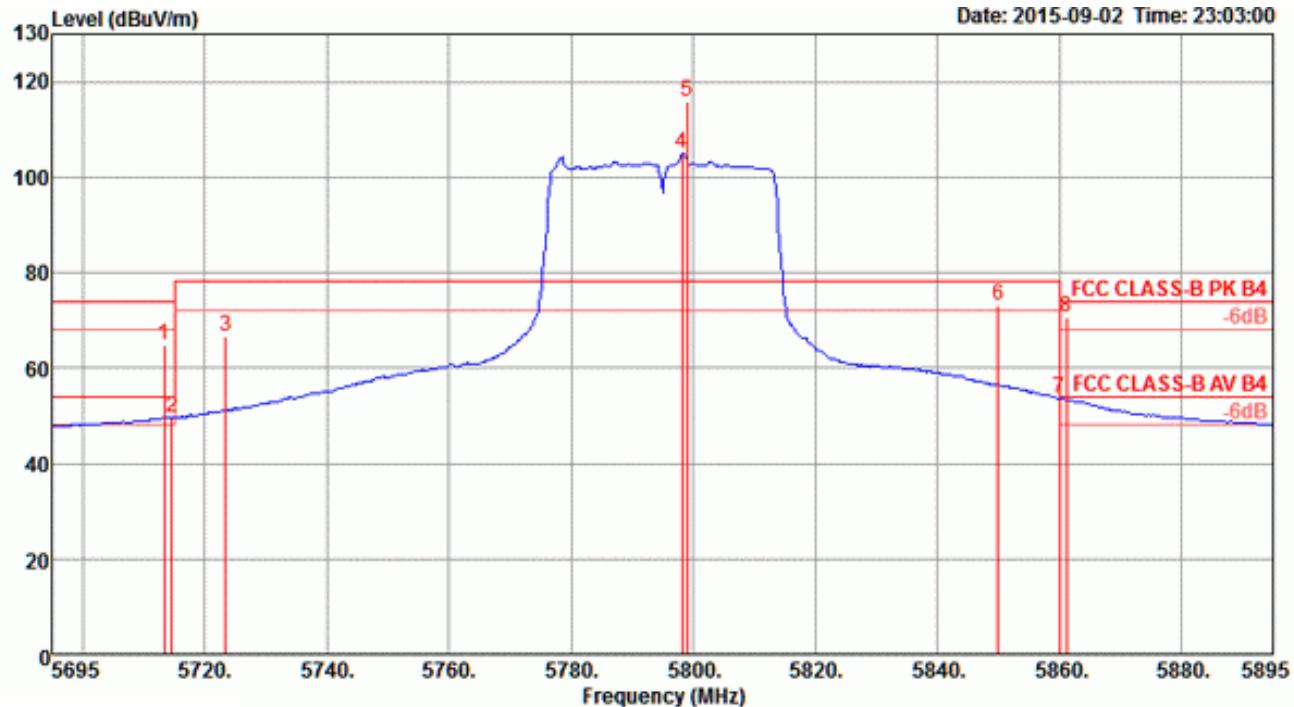
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss4 VHT40 CH 151, 159 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 151**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level						
1	5713.40	72.68	74.00	-1.32	68.18	4.49	34.52	34.51	51	205	Peak		HORIZONTAL
2	5714.60	53.78	54.00	-0.22	49.28	4.49	34.52	34.51	51	205	Average		HORIZONTAL
3	5725.00	76.92	78.20	-1.28	72.36	4.50	34.57	34.51	51	205	Peak		HORIZONTAL
4	5758.60	103.87			99.21	4.51	34.68	34.53	51	205	Average		HORIZONTAL
5	5766.20	114.28			109.62	4.51	34.68	34.53	51	205	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

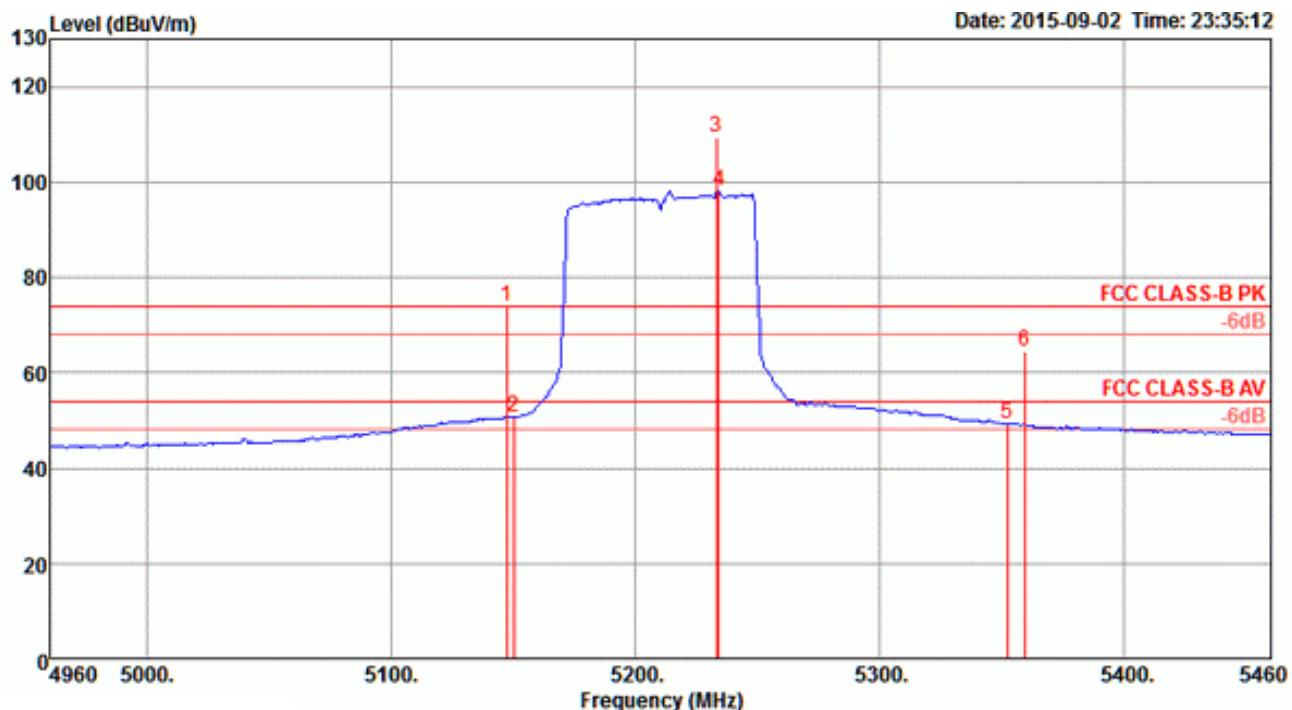
**Channel 159**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	dB			deg	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/u	dB	dB	deg	cm		
1 5713.40	64.90	74.00	-9.10	60.40	4.49	34.52	34.51	55	209	Peak		HORIZONTAL	
2 5714.60	49.48	54.00	-4.52	44.98	4.49	34.52	34.51	55	209	Average		HORIZONTAL	
3 5723.40	66.69	78.20	-11.51	62.13	4.50	34.57	34.51	55	209	Peak		HORIZONTAL	
4 5798.20	104.88			100.11	4.52	34.78	34.53	55	209	Average		HORIZONTAL	
5 5799.00	115.89			111.12	4.52	34.78	34.53	55	209	Peak		HORIZONTAL	
6 5850.00	73.22	78.20	-4.98	68.29	4.54	34.93	34.54	55	209	Peak		HORIZONTAL	
7 5860.00	53.54	54.00	-0.46	48.54	4.55	34.99	34.54	55	209	Average		HORIZONTAL	
8 5861.20	70.57	74.00	-3.43	65.57	4.55	34.99	34.54	55	209	Peak		HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

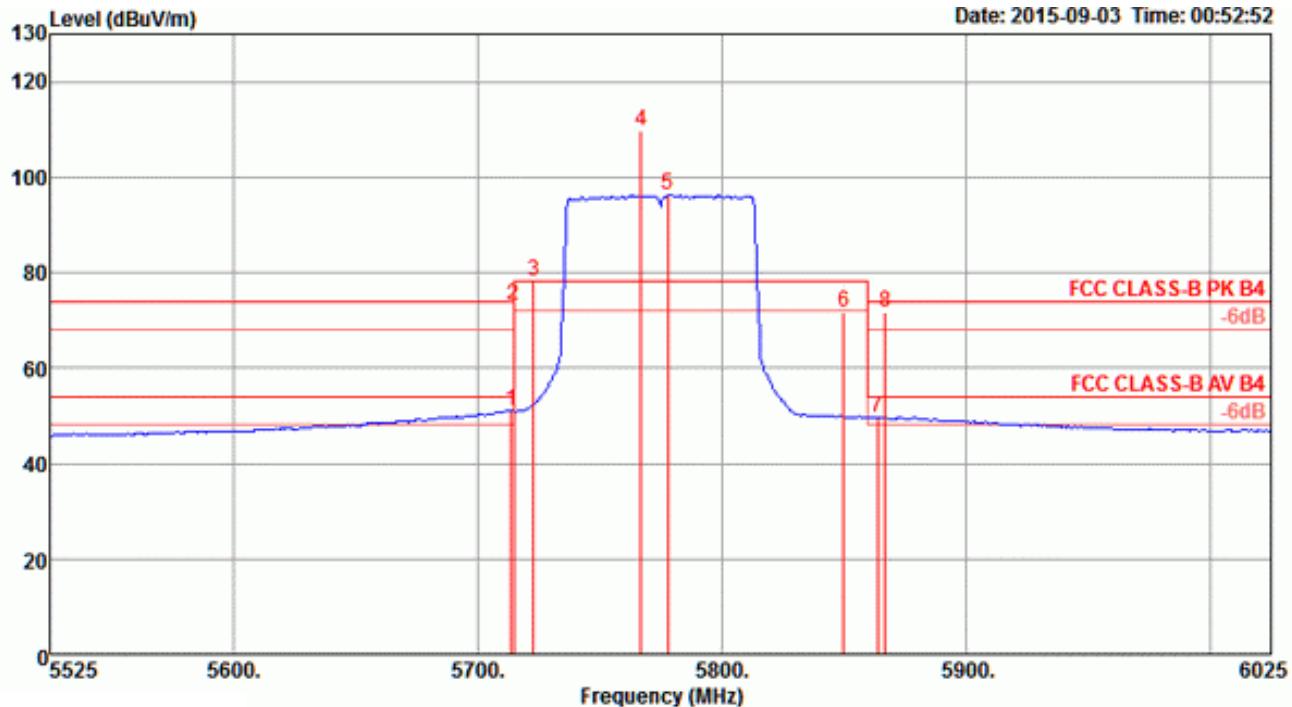
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss4 VHT80 CH 42, 155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					MHz	dBuV/m	dBuV/m			deg	cm		
1	5147.00	73.72	74.00	-0.28	70.66	4.26	33.27	34.47	315	194	Peak		HORIZONTAL
2	5150.00	50.59	54.00	-3.41	47.53	4.26	33.27	34.47	315	194	Average		HORIZONTAL
3	5233.00	109.44	74.00			4.30	33.42	34.47	315	194	Peak		HORIZONTAL
4	5234.00	98.02	54.00			4.30	33.42	34.47	315	194	Average		HORIZONTAL
5	5352.00	49.36	54.00	-4.64	45.85	4.35	33.63	34.47	315	194	Average		HORIZONTAL
6	5359.00	64.63	74.00	-9.37	61.12	4.35	33.63	34.47	315	194	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

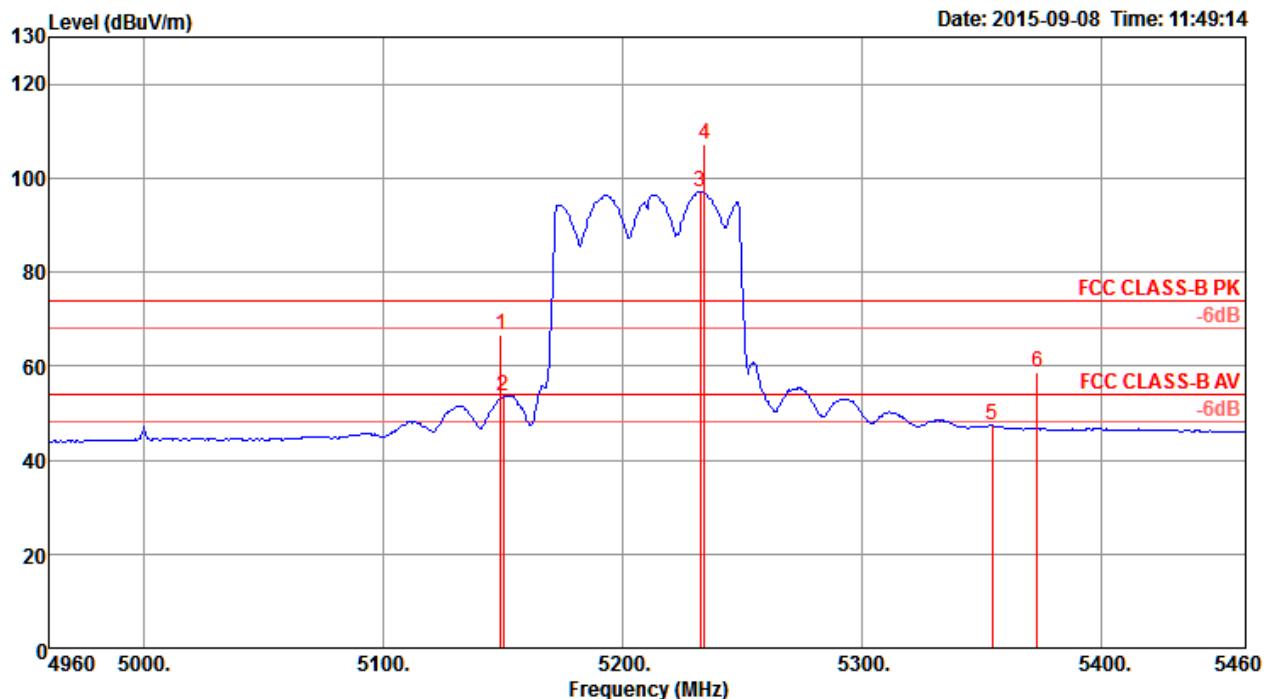
**Channel 155**


Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/u	deg
1	5714.00	50.89	54.00	-3.11	46.39	4.49	34.52	34.51	53	166	Average	HORIZONTAL
2	5715.00	73.17	74.00	-0.83	68.67	4.49	34.52	34.51	53	166	Peak	HORIZONTAL
3	5723.00	78.16	78.20	-0.04	73.60	4.50	34.57	34.51	53	166	Peak	HORIZONTAL
4	5767.00	109.82			105.16	4.51	34.68	34.53	53	166	Peak	HORIZONTAL
5	5778.00	96.36			91.64	4.52	34.73	34.53	53	166	Average	HORIZONTAL
6	5850.00	71.70	78.20	-6.50	66.77	4.54	34.93	34.54	53	166	Peak	HORIZONTAL
7	5864.00	49.72	54.00	-4.28	44.72	4.55	34.99	34.54	53	166	Average	HORIZONTAL
8	5867.00	71.64	74.00	-2.36	66.64	4.55	34.99	34.54	53	166	Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

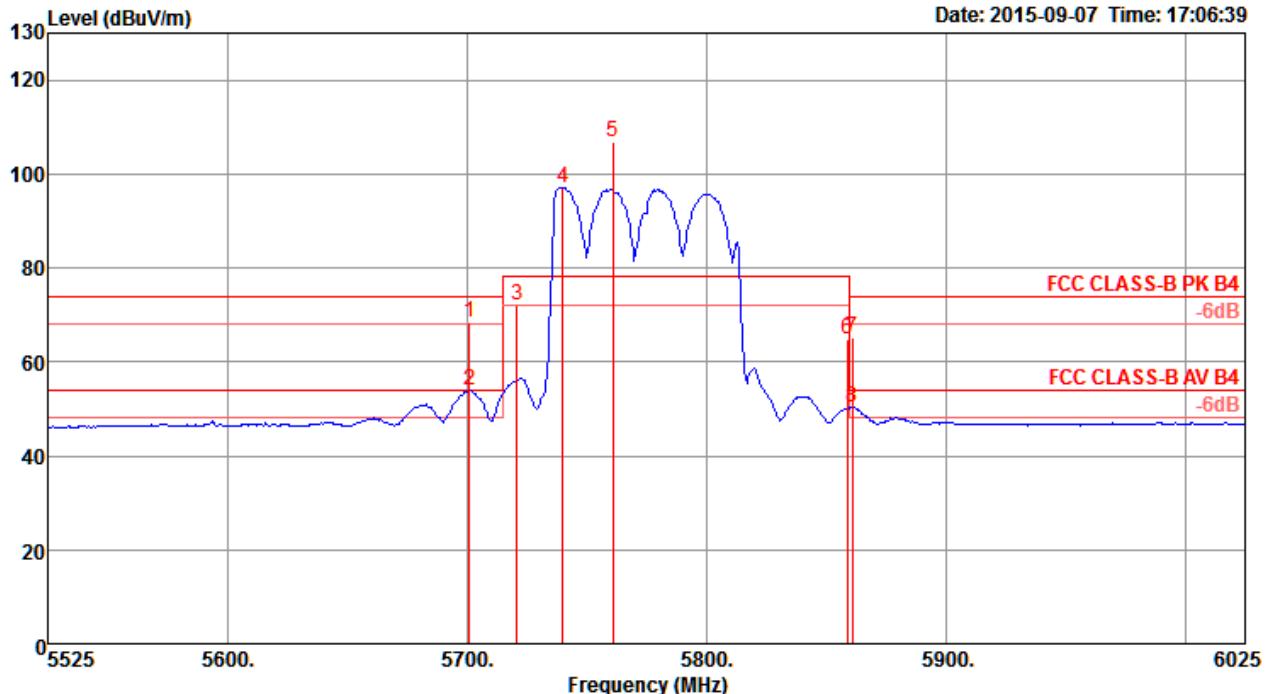
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 1 / CH 42+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable			Antenna Loss dB	Preamp Factor dB	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna Loss dB	Factor dB/m	Preamp Factor dB						
1 5149.00	66.80	74.00	-7.20	63.74	4.26	33.27	34.47	299	214	Peak			HORIZONTAL
2 5150.00	53.49	54.00	-0.51	50.43	4.26	33.27	34.47	299	214	Average			HORIZONTAL
3 5232.00	97.00			93.75	4.30	33.42	34.47	299	214	Average			HORIZONTAL
4 5234.00	107.08			103.83	4.30	33.42	34.47	299	214	Peak			HORIZONTAL
5 5354.00	47.41	54.00	-6.59	43.90	4.35	33.63	34.47	299	214	Average			HORIZONTAL
6 5373.00	58.71	74.00	-15.29	55.16	4.36	33.66	34.47	299	214	Peak			HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 155**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level					
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm		
1	5701.00	68.57	74.00	-5.43	64.07	4.49	34.52	34.51	314	228	Peak	HORIZONTAL
2	5701.00	53.90	54.00	-0.10	49.40	4.49	34.52	34.51	314	228	Average	HORIZONTAL
3	5721.00	72.03	78.20	-6.17	67.47	4.50	34.57	34.51	314	228	Peak	HORIZONTAL
4	5740.00	97.21			92.61	4.50	34.62	34.52	314	228	Average	HORIZONTAL
5	5761.00	106.76			102.10	4.51	34.68	34.53	314	228	Peak	HORIZONTAL
6	5859.00	64.86	78.20	-13.34	59.86	4.55	34.99	34.54	314	228	Peak	HORIZONTAL
7	5861.00	65.30	74.00	-8.70	60.30	4.55	34.99	34.54	314	228	Peak	HORIZONTAL
8	5861.00	50.28	54.00	-3.72	45.28	4.55	34.99	34.54	314	228	Average	HORIZONTAL

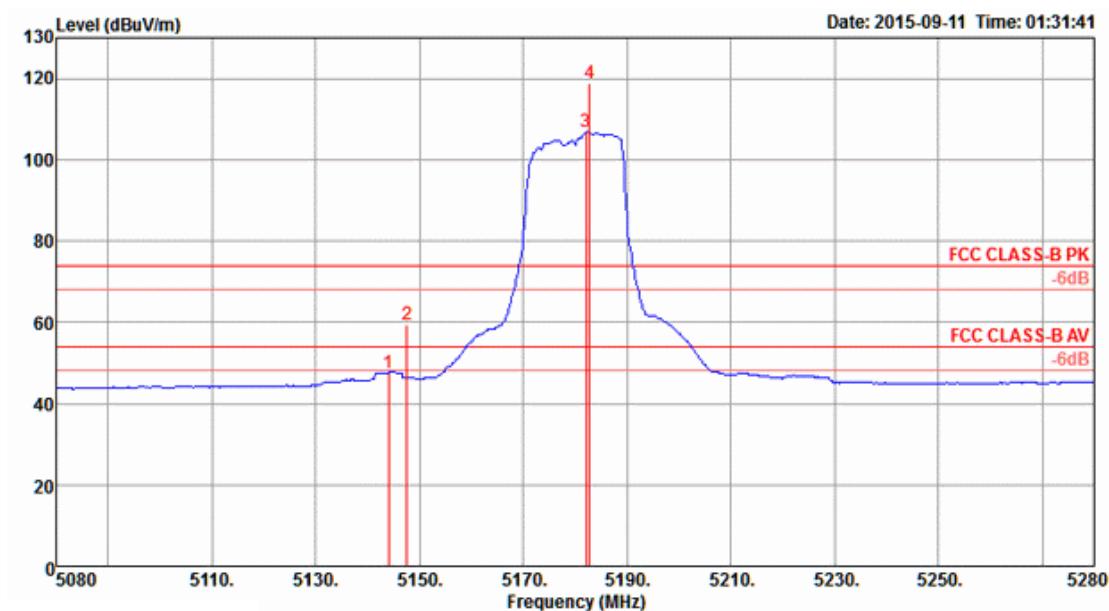
Item 4, 5 are the fundamental frequency at 5775 MHz.

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

## &lt;For Radio 2 Beamforming Mode&gt;

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 5 + Chain 6 + Chain 7 + Chain 8

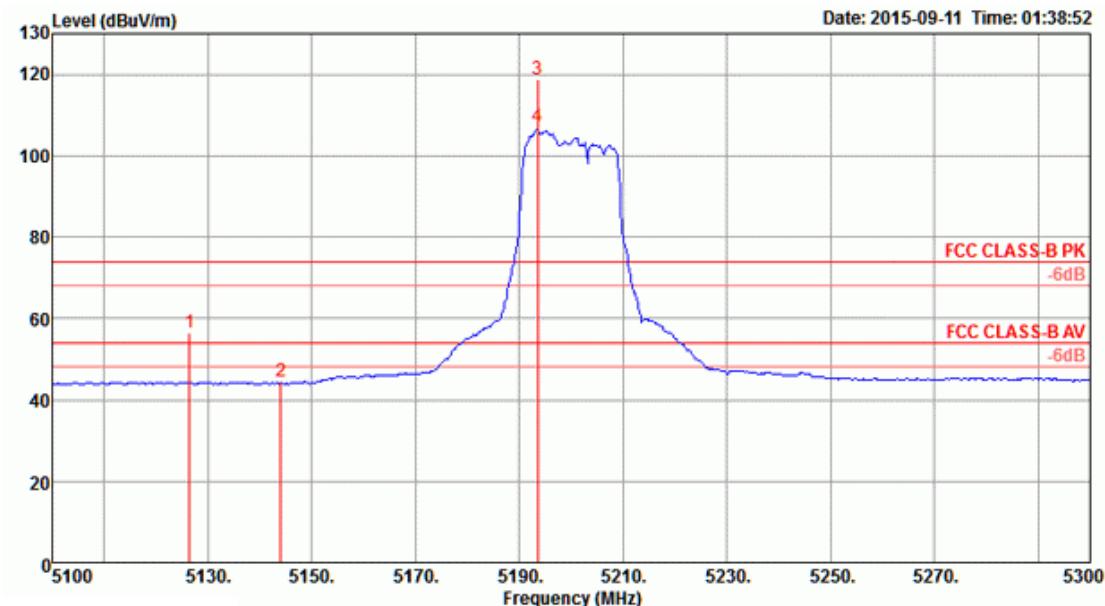
## Channel 36



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5144.00	47.55	54.00	-6.45	44.49	4.26	33.27	34.47	285	151 Average	HORIZONTAL
2	5147.60	59.44	74.00	-14.56	56.38	4.26	33.27	34.47	285	151 Peak	HORIZONTAL
3	5182.00	106.78			103.65	4.27	33.33	34.47	285	151 Average	HORIZONTAL
4	5182.80	118.71			115.58	4.27	33.33	34.47	285	151 Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

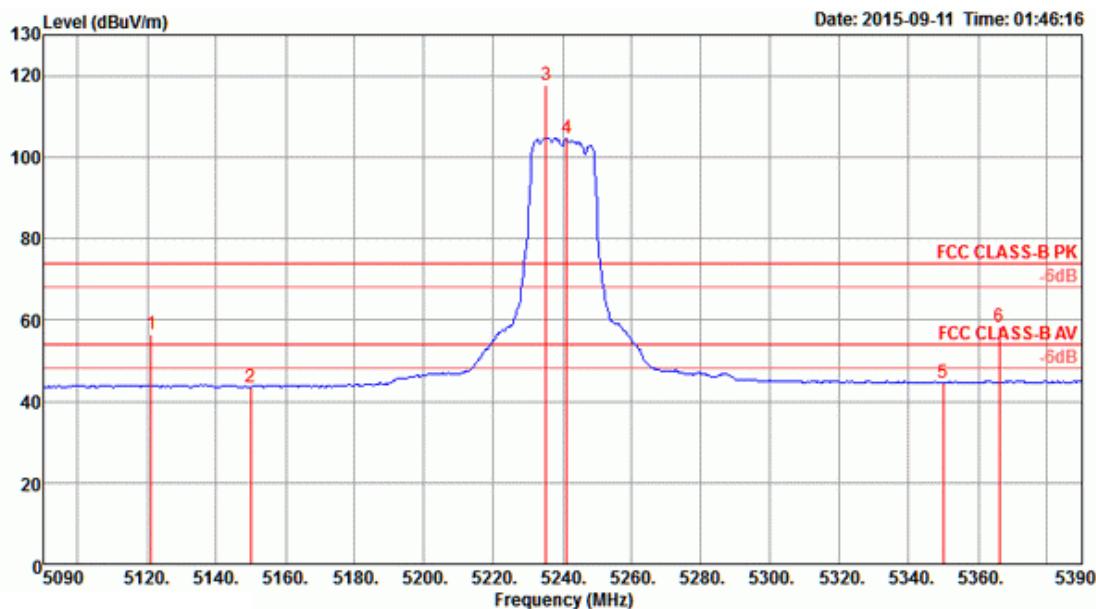
**Channel 40**


Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg
1	5126.40	56.66	74.00	-17.34	53.64	4.25	33.24	34.47	38	178	Peak	HORIZONTAL
2	5144.00	44.63	54.00	-9.37	41.57	4.26	33.27	34.47	38	178	Average	HORIZONTAL
3	5193.60	118.94			115.77	4.28	33.36	34.47	38	178	Peak	HORIZONTAL
4	5193.60	107.04			103.87	4.28	33.36	34.47	38	178	Average	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

### Channel 48



Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					dB	dB/m						
1 5121.20	56.56	74.00	-17.44	53.58	4.24	33.21	34.47	37	163	Peak	HORIZONTAL	
2 5150.00	43.55	54.00	-10.45	40.49	4.26	33.27	34.47	37	163	Average	HORIZONTAL	
3 5235.20	117.60			114.35	4.30	33.42	34.47	37	163	Peak	HORIZONTAL	
4 5241.20	104.74			101.49	4.30	33.42	34.47	37	163	Average	HORIZONTAL	
5 5350.00	44.62	54.00	-9.38	41.11	4.35	33.63	34.47	37	163	Average	HORIZONTAL	
6 5366.00	58.21	74.00	-15.79	54.66	4.36	33.66	34.47	37	163	Peak	HORIZONTAL	

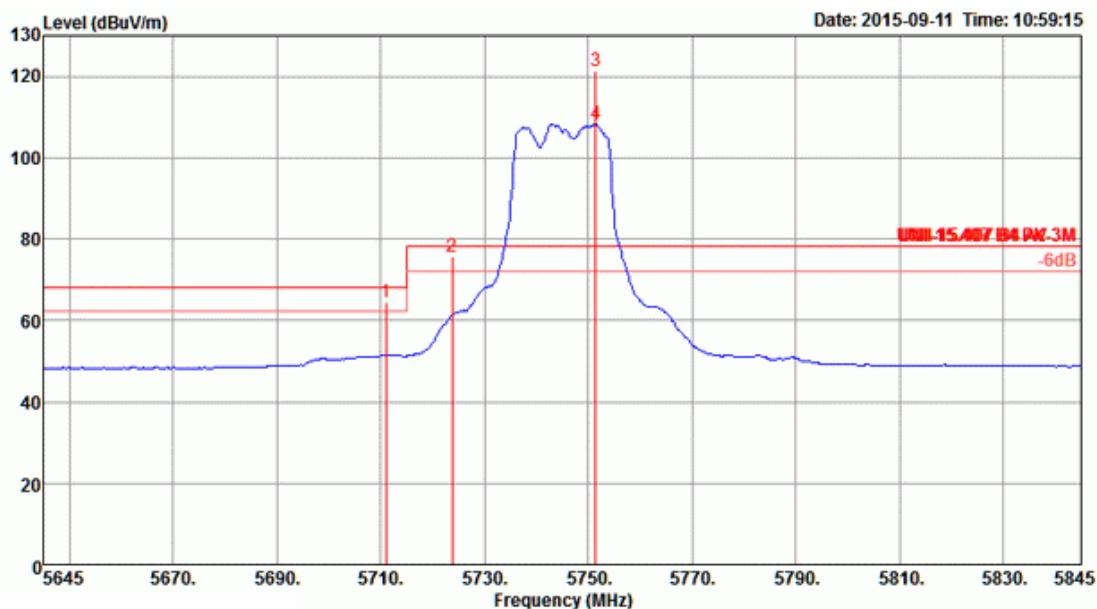
Item 3, 4 are the fundamental frequency at 5240 MHz.

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.



Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 5 + Chain 6 + Chain 7 + Chain 8

## Channel 149

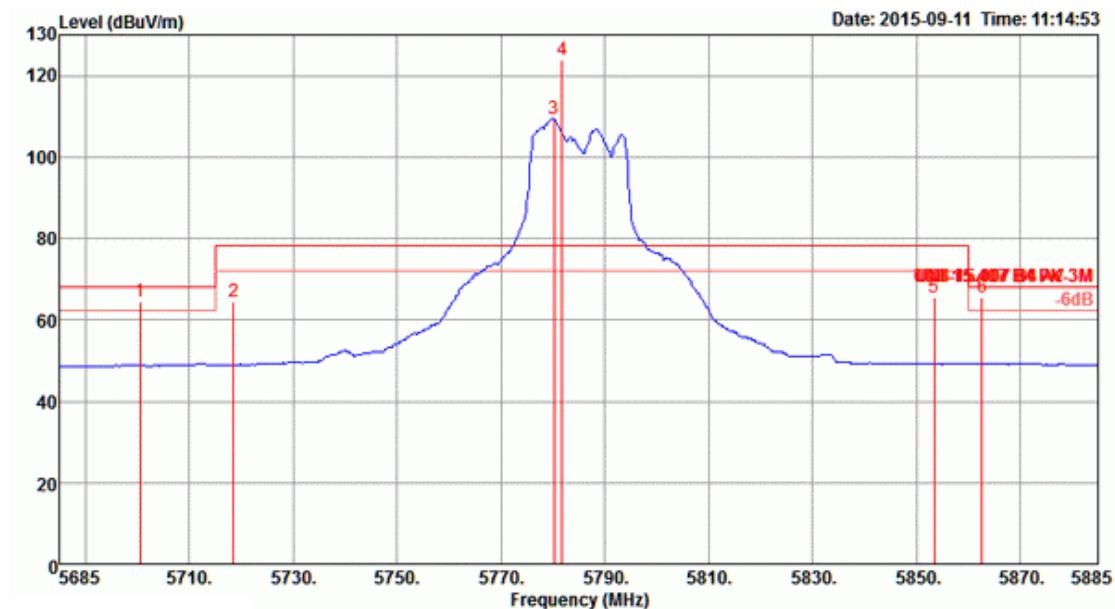


Freq	Level	Limit		Over Limit	Read Level	Cable		Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor					
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5711.00	64.28	68.20	-3.92	59.78	4.49	34.52	34.51	49	156	Peak	HORIZONTAL
2	5723.80	75.61	78.20	-2.59	71.05	4.50	34.57	34.51	49	156	Peak	HORIZONTAL
3	5751.40	121.25			116.65	4.50	34.62	34.52	49	156	Peak	HORIZONTAL
4	5751.40	108.40			103.80	4.50	34.62	34.52	49	156	Average	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

### Channel 157

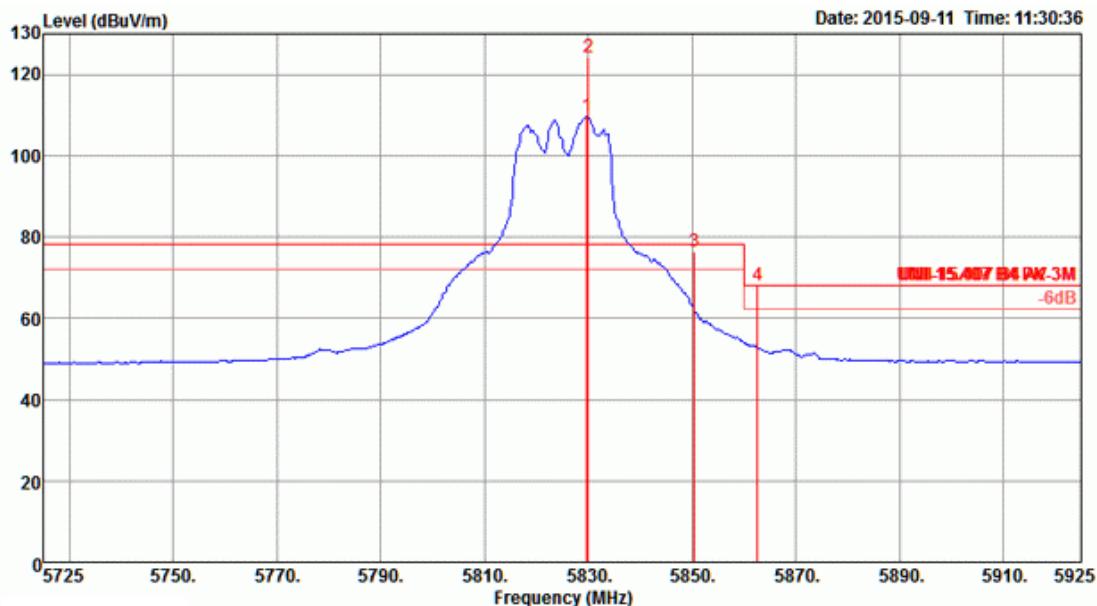


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable			Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna	Preamp	T/Pos						
1 5700.60	64.44	68.20	-3.76	59.94	4.49	34.52	34.51	318	272	Peak			HORIZONTAL
2 5718.60	64.50	78.20	-13.70	59.94	4.50	34.57	34.51	318	272	Peak			HORIZONTAL
3 5780.20	109.20			104.48	4.52	34.73	34.53	318	272	Average			HORIZONTAL
4 5781.80	124.01			119.29	4.52	34.73	34.53	318	272	Peak			HORIZONTAL
5 5853.40	65.56	78.20	-12.64	60.63	4.54	34.93	34.54	318	272	Peak			HORIZONTAL
6 5862.60	65.45	68.20	-2.75	60.45	4.55	34.99	34.54	318	272	Peak			HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

## Channel 165

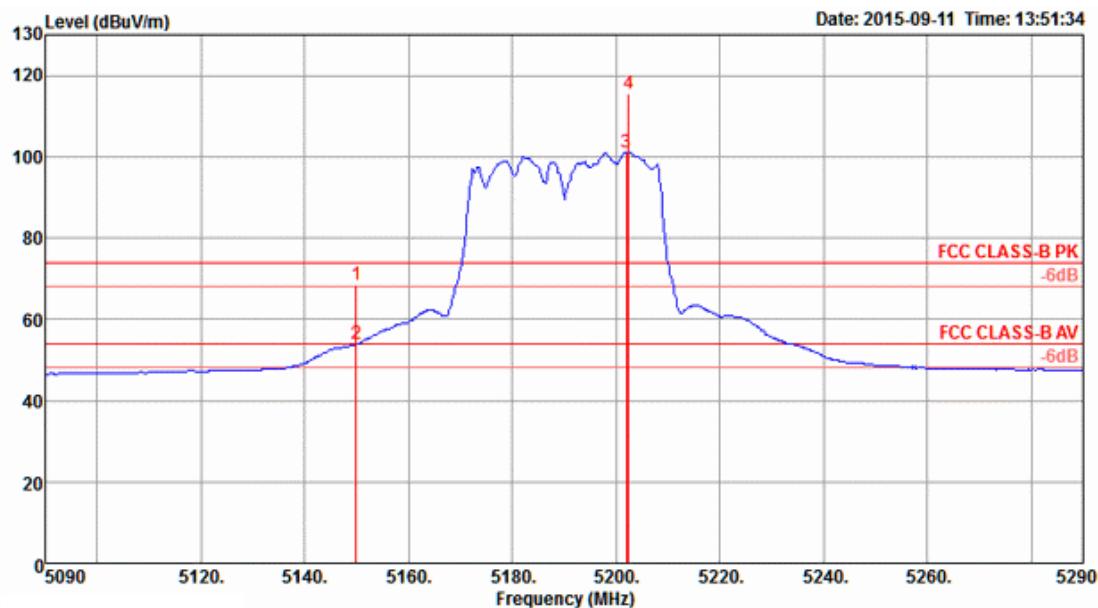


Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit						
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	deg	cm	
1	5829.80	109.60				104.72	4.53	34.88	34.53	316	212	Average
2	5830.00	124.30				119.42	4.53	34.88	34.53	316	212	Peak
3	5850.40	76.44	78.20	-1.76	71.51	4.54	34.93	34.54	316	212	Peak	HORIZONTAL
4	5862.60	68.07	68.20	-0.13	63.07	4.55	34.99	34.54	316	212	Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

<b>Temperature</b>	26°C	<b>Humidity</b>	57%
<b>Test Engineer</b>	Roki Liu	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 5 + Chain 6 + Chain 7 + Chain 8

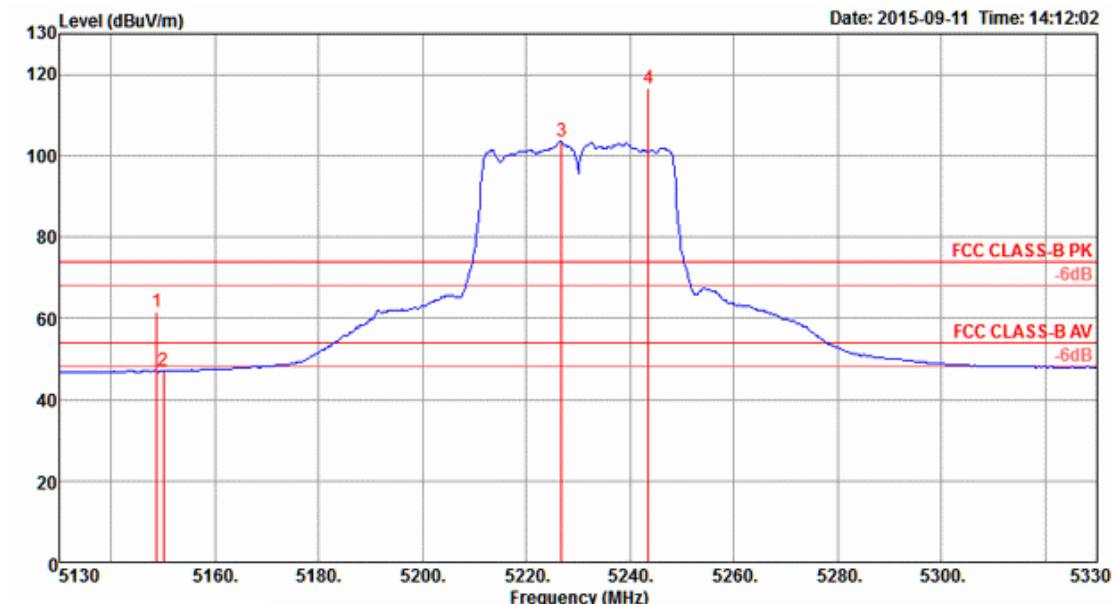
**Channel 38**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level					
MHz	dBuV/m	dBuV/m		dB	dBuV		dB	dB/m	dB	deg	cm	
1 5150.00	68.31	74.00	-5.69	65.25	4.26	33.27	34.47	301	294	Peak		HORIZONTAL
2 5150.00	53.86	54.00	-0.14	50.80	4.26	33.27	34.47	301	294	Average		HORIZONTAL
3 5202.00	101.12			97.95	4.28	33.36	34.47	301	294	Average		HORIZONTAL
4 5202.40	115.58			112.41	4.28	33.36	34.47	301	294	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

## Channel 46

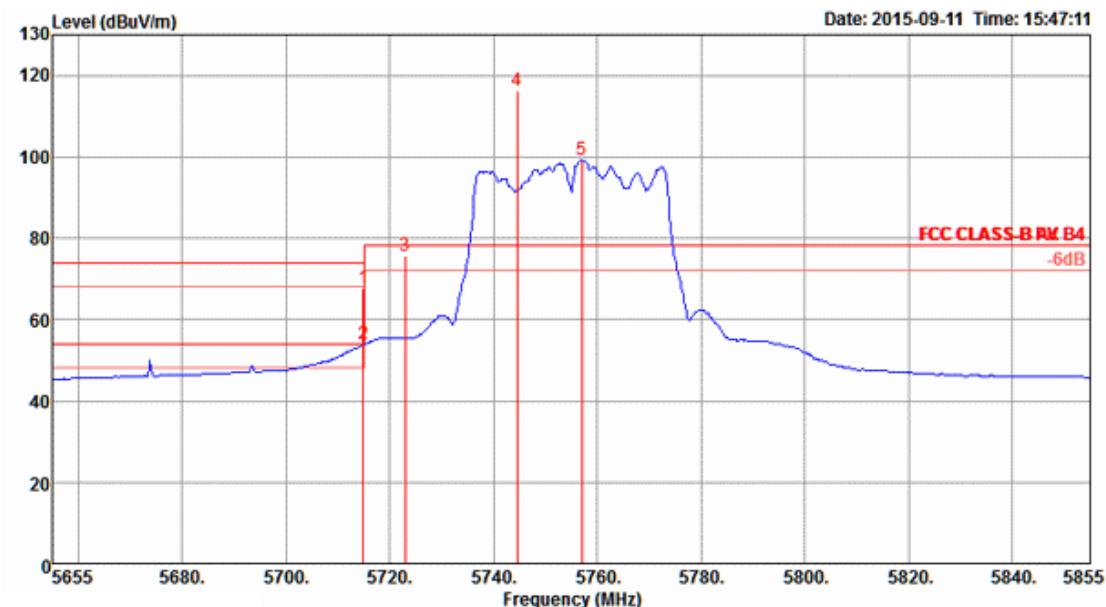


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5148.80	61.61	74.00	-12.39	58.55	4.26	33.27	34.47	311	193 Peak	HORIZONTAL
2	5150.00	47.00	54.00	-7.00	43.94	4.26	33.27	34.47	311	193 Average	HORIZONTAL
3	5226.80	103.55			100.30	4.30	33.42	34.47	311	193 Average	HORIZONTAL
4	5243.60	116.61			113.33	4.30	33.45	34.47	311	193 Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 5 + Chain 6 + Chain 7 + Chain 8

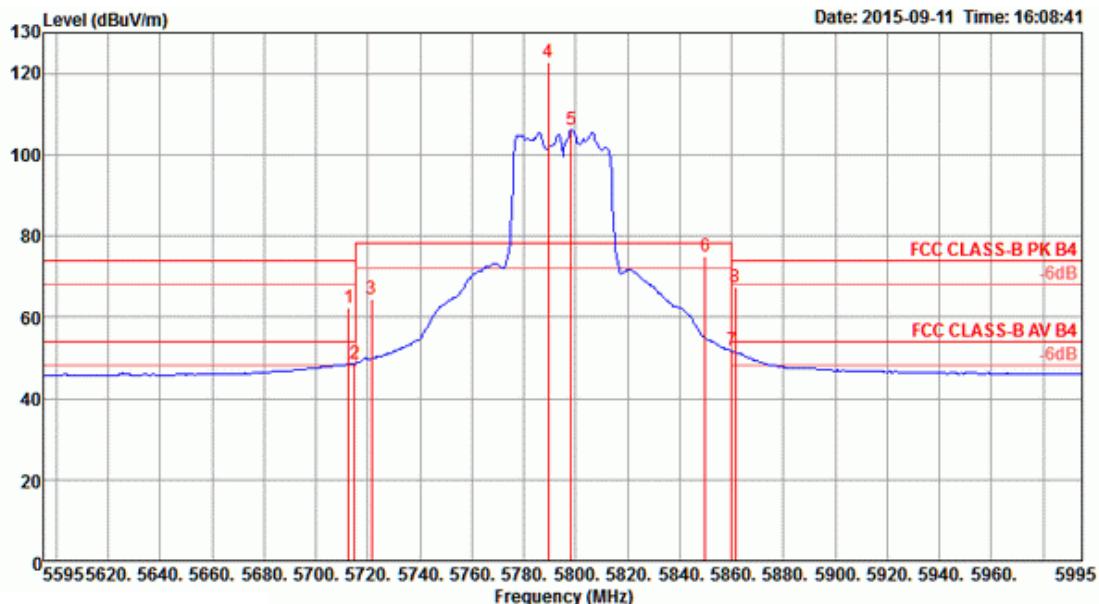
**Channel 151**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level	Loss	Factor	Factor		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB/m	dB	deg	cm		
1	5715.00	67.75	74.00	-6.25	63.25	4.49	34.52	34.51	290	296	Peak	HORIZONTAL
2	5715.00	53.83	54.00	-0.17	49.33	4.49	34.52	34.51	290	296	Average	HORIZONTAL
3	5723.00	75.84	78.20	-2.36	71.28	4.50	34.57	34.51	290	296	Peak	HORIZONTAL
4	5744.60	116.16			111.56	4.50	34.62	34.52	290	296	Peak	HORIZONTAL
5	5757.00	99.18			94.52	4.51	34.68	34.53	290	296	Average	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

### Channel 159

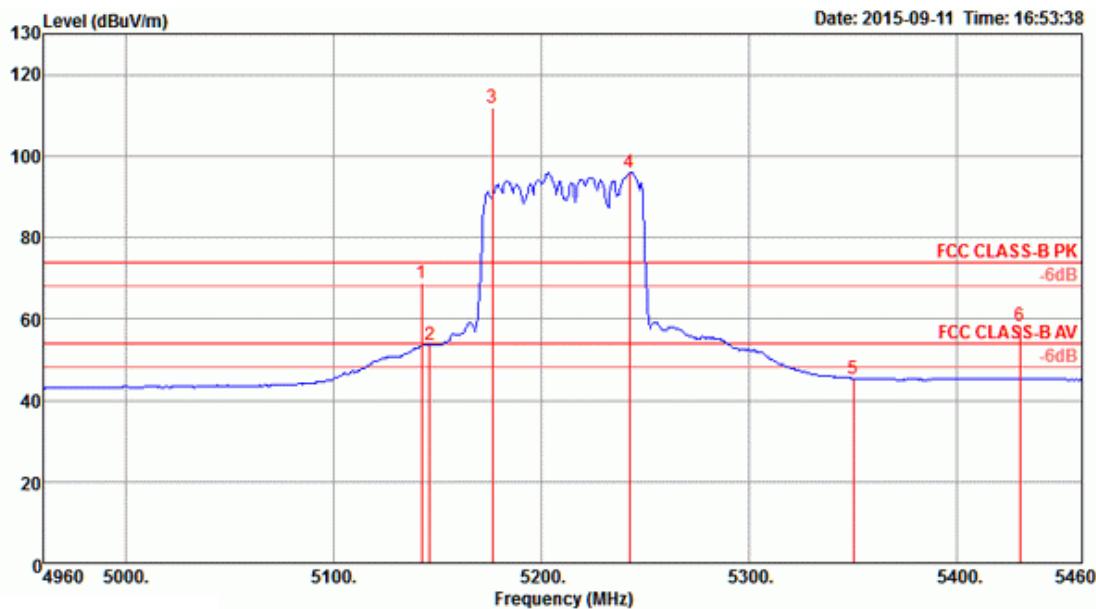


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level					
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1	5712.60	62.44	74.00	-11.56	57.94	4.49	34.52	34.51	309	191	Peak	HORIZONTAL
2	5715.00	48.46	54.00	-5.54	43.96	4.49	34.52	34.51	309	191	Average	HORIZONTAL
3	5721.40	64.53	78.20	-13.67	59.97	4.50	34.57	34.51	309	191	Peak	HORIZONTAL
4	5789.40	122.65			117.88	4.52	34.78	34.53	309	191	Peak	HORIZONTAL
5	5798.20	106.01			101.24	4.52	34.78	34.53	309	191	Average	HORIZONTAL
6	5850.00	74.82	78.20	-3.38	69.89	4.54	34.93	34.54	309	191	Peak	HORIZONTAL
7	5860.00	51.70	54.00	-2.30	46.70	4.55	34.99	34.54	309	191	Average	HORIZONTAL
8	5861.40	67.44	74.00	-6.56	62.44	4.55	34.99	34.54	309	191	Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

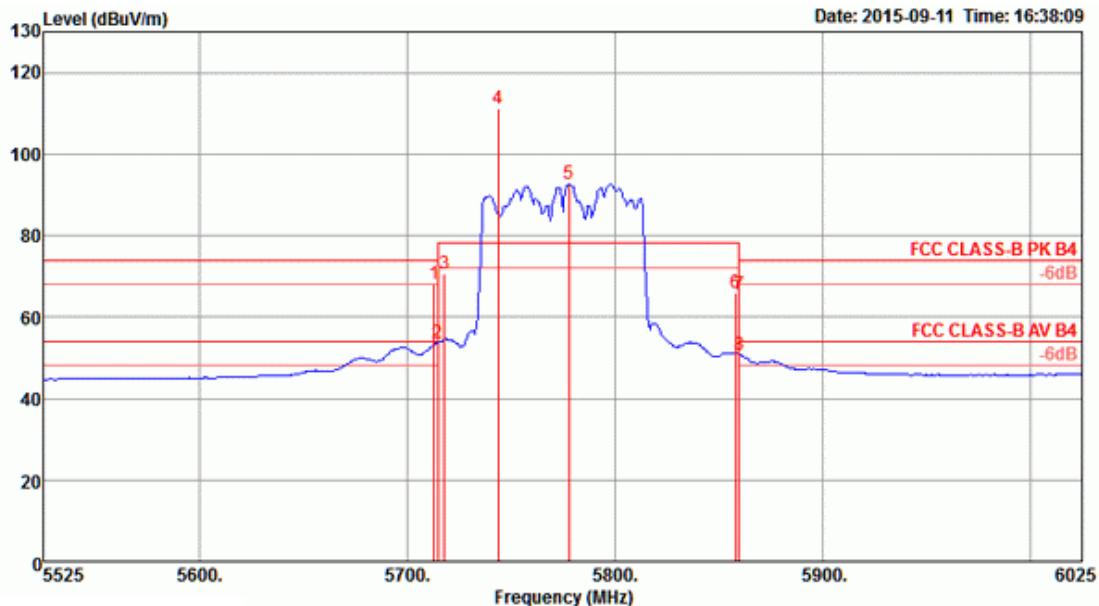
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg
1	5142.00	68.69	74.00	-5.31	65.63	4.26	33.27	34.47	296	290	Peak		HORIZONTAL
2	5146.00	53.77	54.00	-0.23	50.71	4.26	33.27	34.47	296	290	Average		HORIZONTAL
3	5176.00	111.99	74.00			4.27	33.33	34.47	296	290	Peak		HORIZONTAL
4	5242.00	96.13	54.00			4.30	33.45	34.47	296	290	Average		HORIZONTAL
5	5350.00	45.42	54.00	-8.58	41.91	4.35	33.63	34.47	296	290	Average		HORIZONTAL
6	5430.00	58.26	74.00	-15.74	54.56	4.39	33.78	34.47	296	290	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

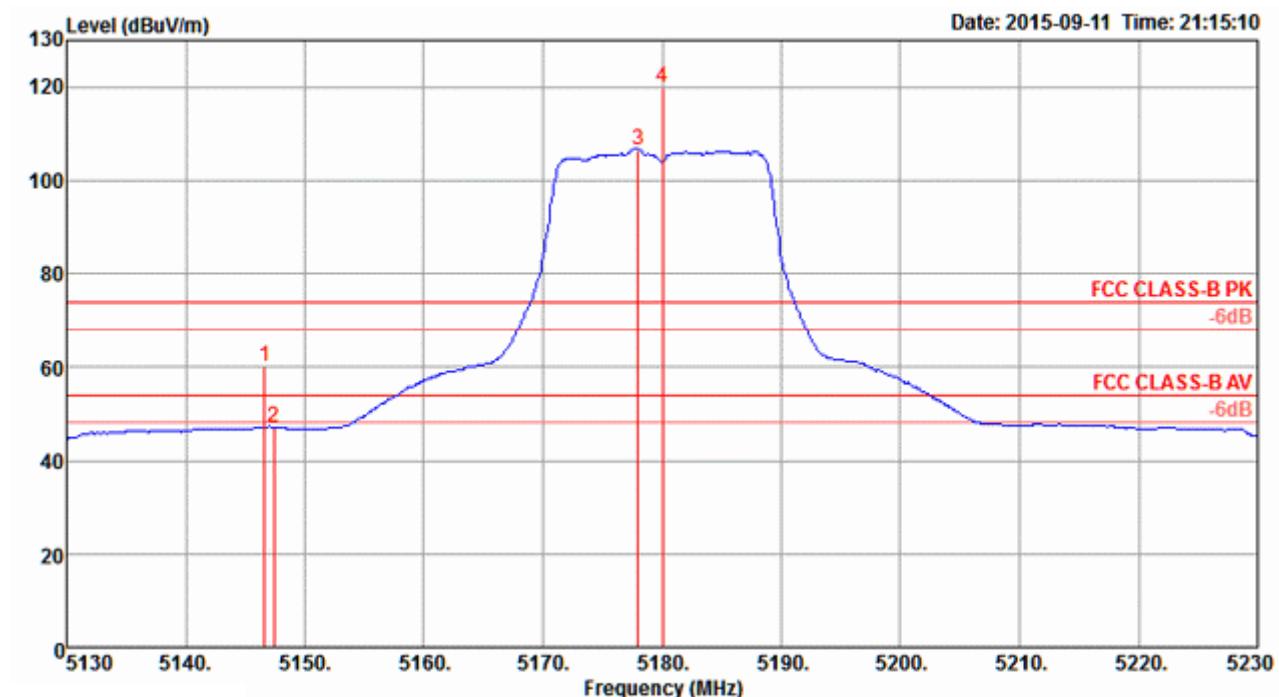
**Channel 155**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level					
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/n	dB	deg	cm		
1	5713.00	68.06	74.00	-5.94	63.56	4.49	34.52	34.51	294	309	Peak	HORIZONTAL
2	5715.00	53.62	54.00	-0.38	49.12	4.49	34.52	34.51	294	309	Average	HORIZONTAL
3	5718.00	70.46	78.20	-7.74	65.90	4.50	34.57	34.51	294	309	Peak	HORIZONTAL
4	5744.00	111.11	78.20			4.50	34.62	34.52	294	309	Peak	HORIZONTAL
5	5778.00	92.72	78.20			4.52	34.73	34.53	294	309	Average	HORIZONTAL
6	5858.00	66.02	78.20	-12.18	61.02	4.55	34.99	34.54	294	309	Peak	HORIZONTAL
7	5860.00	65.61	74.00	-8.39	60.61	4.55	34.99	34.54	294	309	Peak	HORIZONTAL
8	5860.00	50.78	54.00	-3.22	45.78	4.55	34.99	34.54	294	309	Average	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

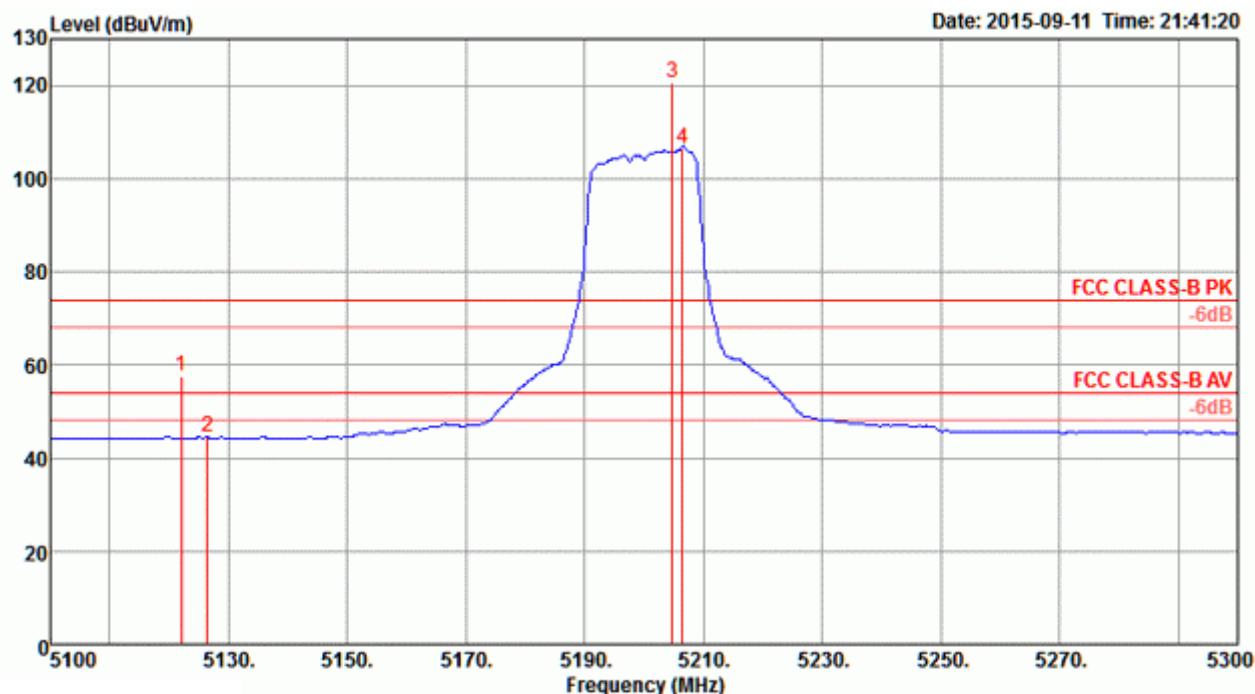
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 36, 40, 48 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 36**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Antenna Preamp			T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Antenna Factor	Preamp Factor				
1 5146.60	60.13	74.00	-13.87	57.07	4.26	33.27	34.47	286	152	Peak	HORIZONTAL
2 5147.40	47.16	54.00	-6.84	44.10	4.26	33.27	34.47	286	152	Average	HORIZONTAL
3 5178.00	106.57			103.44	4.27	33.33	34.47	286	152	Average	HORIZONTAL
4 5180.00	119.69			116.56	4.27	33.33	34.47	286	152	Peak	HORIZONTAL

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

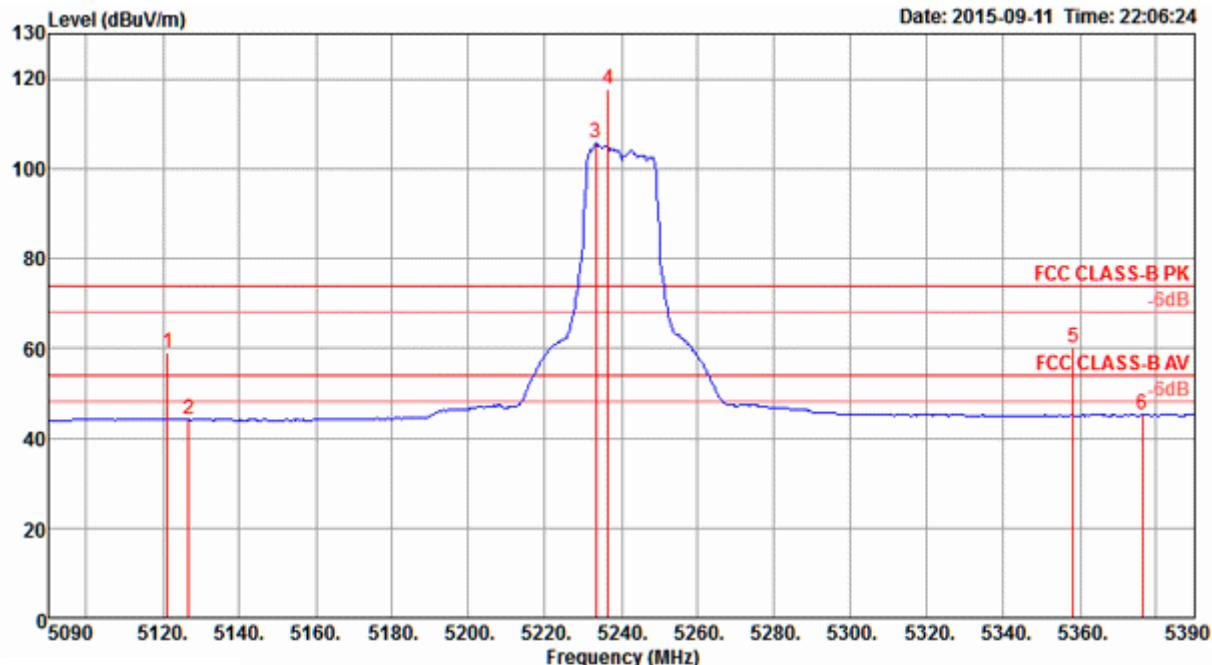
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 40**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Antenna			Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor	Factor					
1 5122.00	57.59	74.00	-16.41	54.61	4.24	33.21	34.47	299	230	Peak		HORIZONTAL
2 5126.40	44.46	54.00	-9.54	41.44	4.25	33.24	34.47	299	230	Average		HORIZONTAL
3 5204.80	120.57			117.40	4.28	33.36	34.47	299	230	Peak		HORIZONTAL
4 5206.40	106.64			103.47	4.28	33.36	34.47	299	230	Average		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

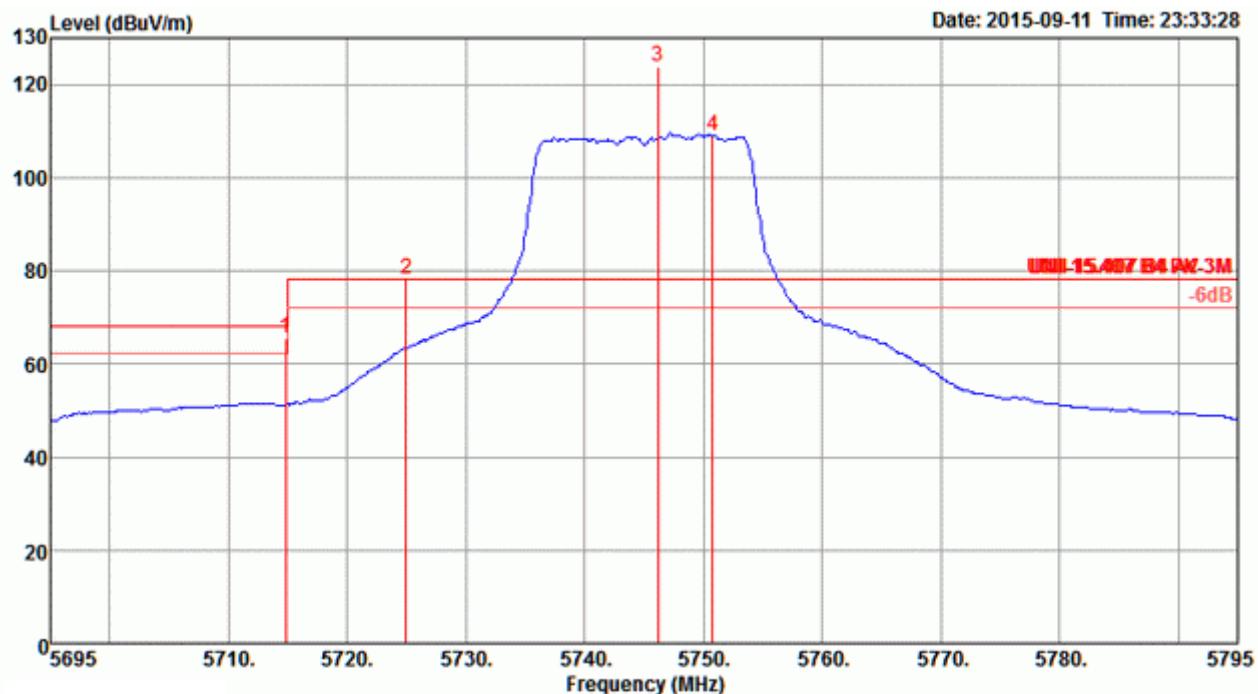
**Channel 48**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					MHz	dBuV/m	dBuV/m						
1	5121.20	59.06	74.00	-14.94	56.08	4.24	33.21	34.47	326	157	Peak		HORIZONTAL
2	5126.60	44.28	54.00	-9.72	41.26	4.25	33.24	34.47	326	157	Average		HORIZONTAL
3	5233.40	105.59			102.34	4.30	33.42	34.47	326	157	Average		HORIZONTAL
4	5236.40	117.66			114.41	4.30	33.42	34.47	326	157	Peak		HORIZONTAL
5	5358.20	60.04	74.00	-13.96	56.53	4.35	33.63	34.47	326	157	Peak		HORIZONTAL
6	5376.20	45.26	54.00	-8.74	41.71	4.36	33.66	34.47	326	157	Average		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

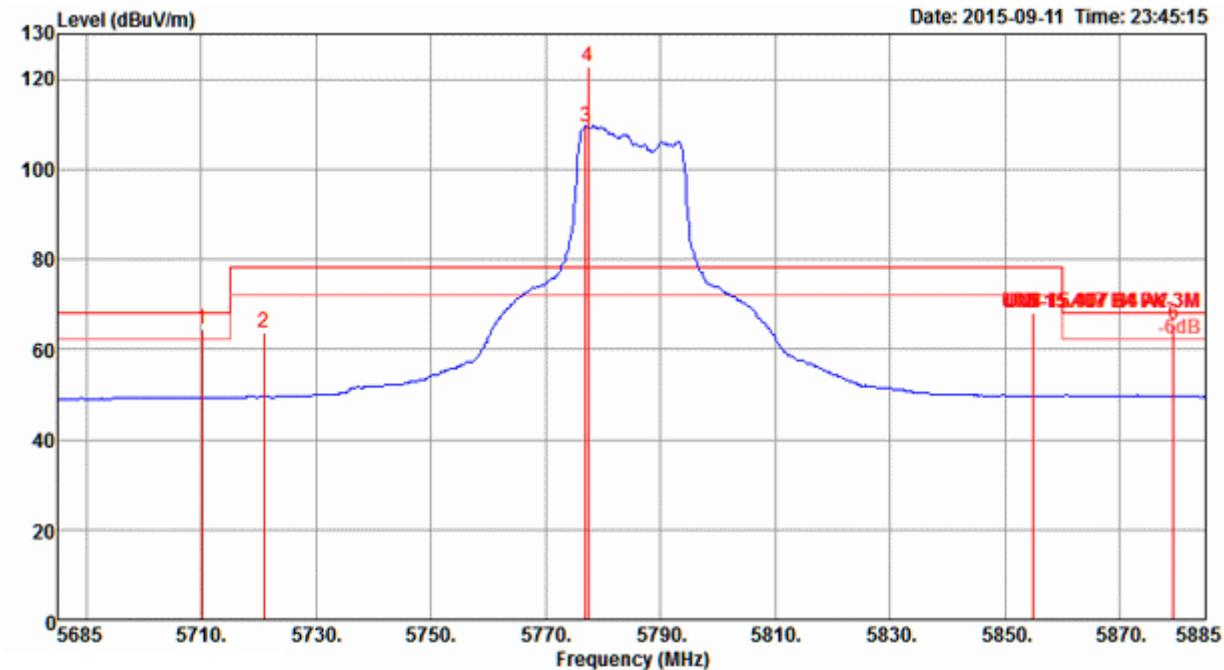
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT20 CH 149, 157, 165 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 149**


Freq	Level	Limit Line	Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
					Loss	dB	dBuV			deg	cm		
1	5714.80	65.49	68.20	-2.71	60.99	4.49	34.52	34.51	48	169	Peak	HORIZONTAL	
2	5725.00	78.13	78.20	-0.07	73.57	4.50	34.57	34.51	48	169	Peak	HORIZONTAL	
3	5745.00	123.80			119.20	4.50	34.62	34.52	48	169	Peak	HORIZONTAL	
4	5750.80	109.10			104.50	4.50	34.62	34.52	48	169	Average	HORIZONTAL	

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

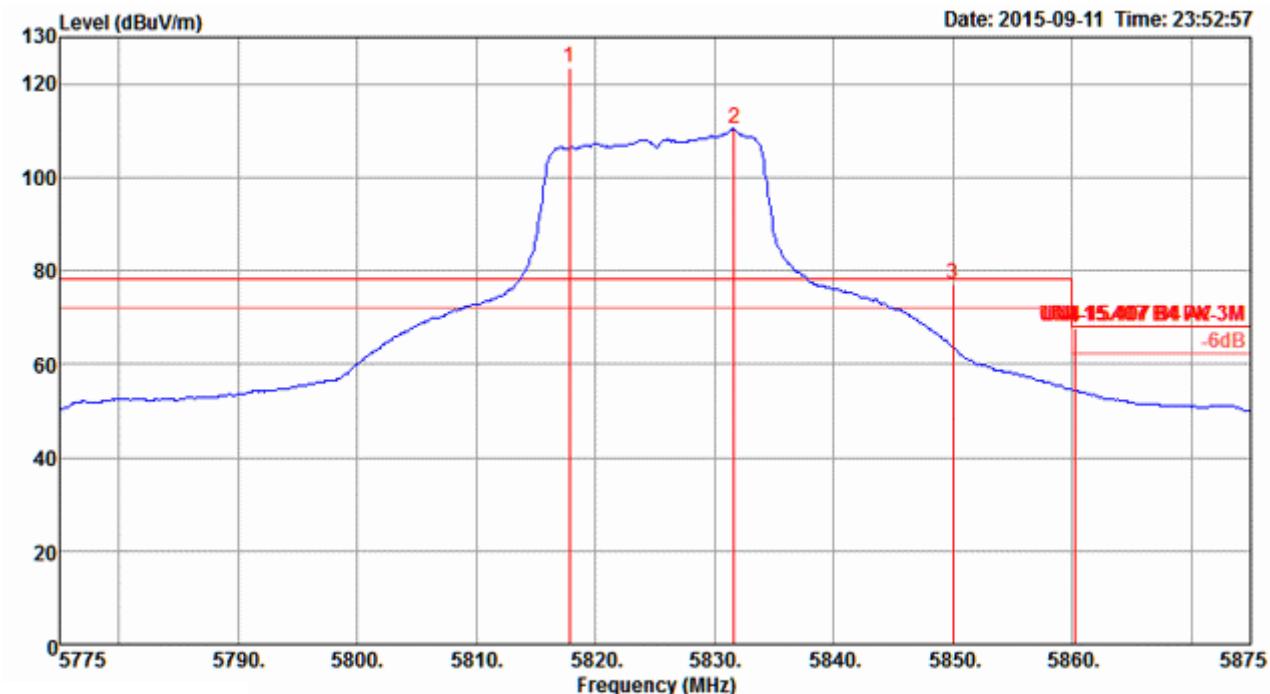
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 157**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dB	Cable			Antenna Loss dB	Preamp Factor dB	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna Loss dB/m	Factor Factor	T/Pos deg						
1 5710.20	64.59	68.20	-3.61	60.09	4.49	34.52	34.51	47	189	Peak			HORIZONTAL
2 5721.00	63.88	78.20	-14.32	59.32	4.50	34.57	34.51	47	189	Peak			HORIZONTAL
3 5777.00	109.53			104.81	4.52	34.73	34.53	47	189	Average			HORIZONTAL
4 5777.40	122.81			118.09	4.52	34.73	34.53	47	189	Peak			HORIZONTAL
5 5855.00	68.03	78.20	-10.17	63.03	4.55	34.99	34.54	47	189	Peak			HORIZONTAL
6 5879.40	65.37	68.20	-2.83	60.32	4.55	35.04	34.54	47	189	Peak			HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

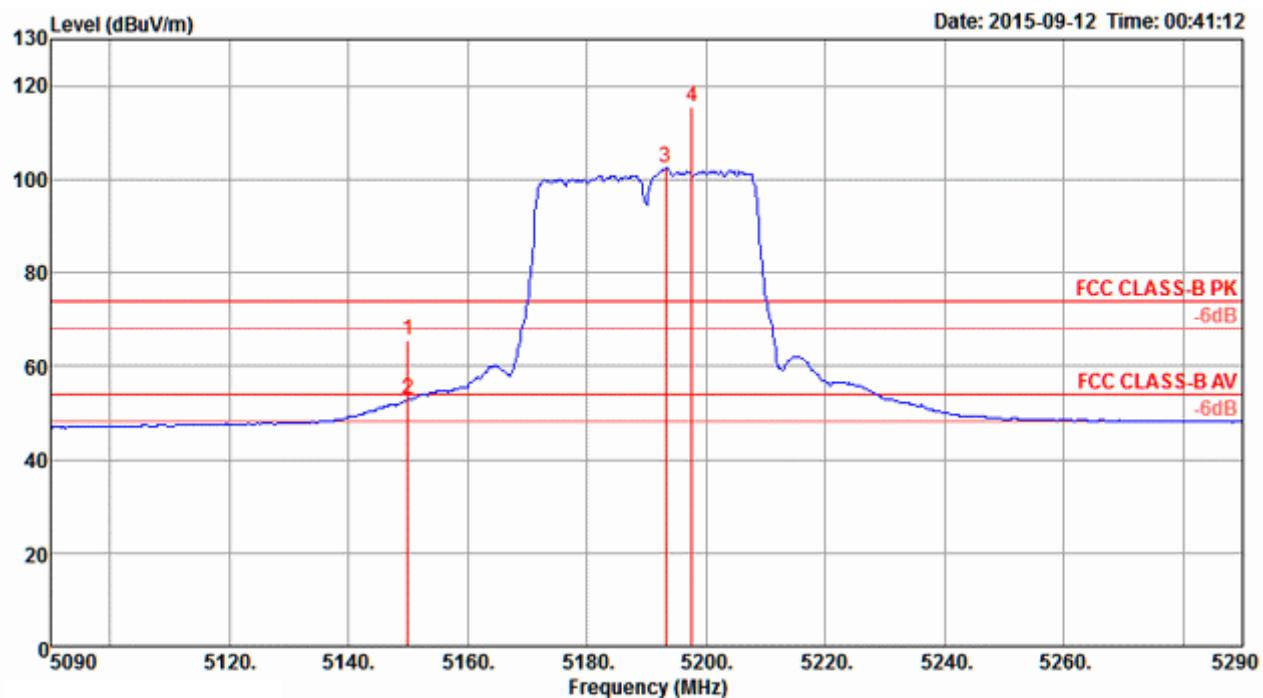
**Channel 165**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
					Line	Limit	dB	dBuV	dB	dB/m	dB	deg	cm	
1	5817.80	123.39					118.56	4.53	34.83	34.53	50	178	Peak	HORIZONTAL
2	5831.60	110.34					105.46	4.53	34.88	34.53	50	178	Average	HORIZONTAL
3	5850.00	77.22	78.20	-0.98	72.29	4.54	34.93	34.54	50	178	Peak		HORIZONTAL	
4	5860.20	67.63	68.20	-0.57	62.63	4.55	34.99	34.54	50	178	Peak		HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

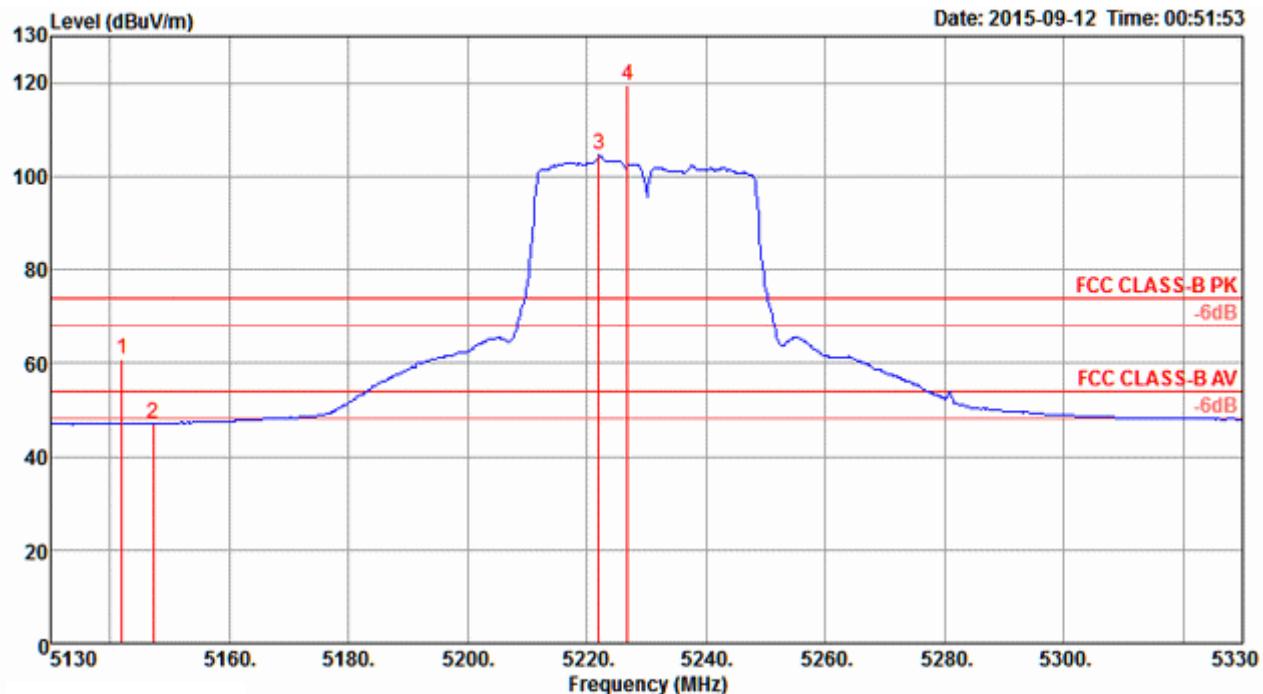
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 38, 46 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 38**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
1	5150.00	65.54	74.00	-8.46	62.48	4.26	33.27	34.47	305	197 Peak	HORIZONTAL
2	5150.00	52.85	54.00	-1.15	49.79	4.26	33.27	34.47	305	197 Average	HORIZONTAL
3	5193.20	102.62			99.45	4.28	33.36	34.47	305	197 Average	HORIZONTAL
4	5197.60	115.35			112.18	4.28	33.36	34.47	305	197 Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

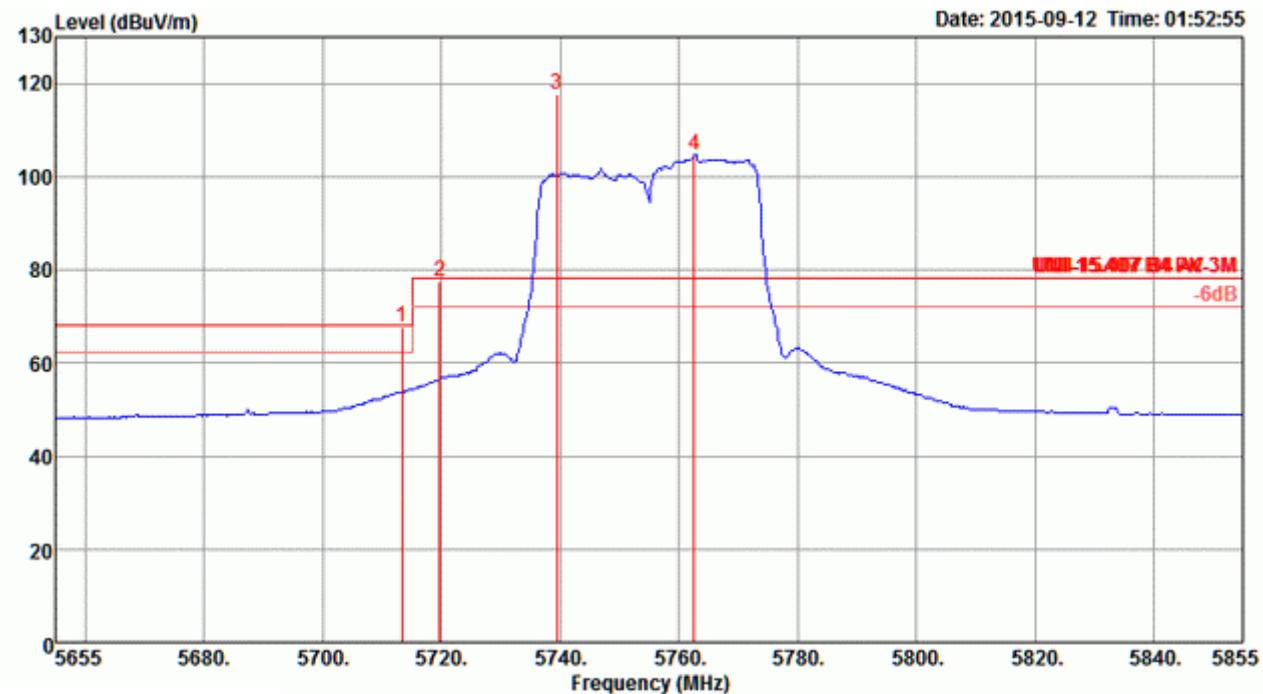
**Channel 46**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Loss					
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm			
1 5142.00	60.81	74.00	-13.19	57.75	4.26	33.27	34.47	299	231	Peak		HORIZONTAL
2 5147.20	47.19	54.00	-6.81	44.13	4.26	33.27	34.47	299	231	Average		HORIZONTAL
3 5222.00	104.53			101.32	4.29	33.39	34.47	299	231	Average		HORIZONTAL
4 5226.80	119.53			116.28	4.30	33.42	34.47	299	231	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

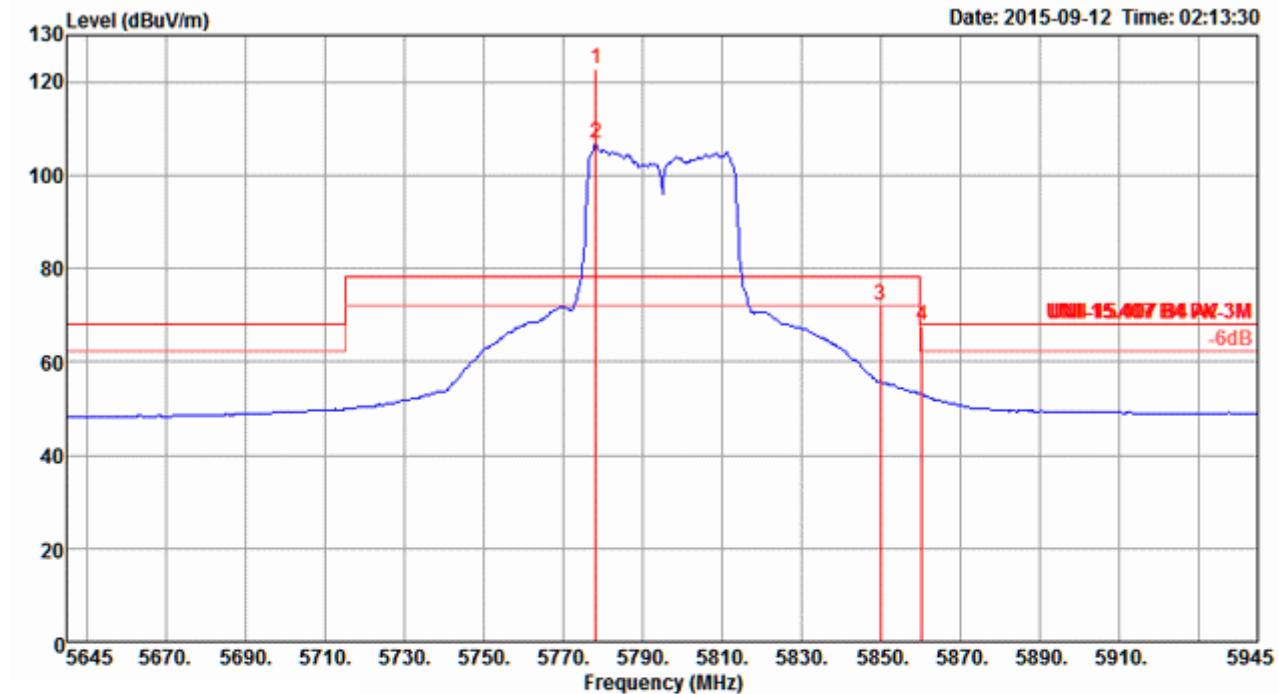
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss2 VHT40 CH 151, 159 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 151**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	5713.40	67.69	68.20	-0.51	63.19	4.49	34.52	34.51	34	144 Peak	HORIZONTAL
2	5719.80	77.35	78.20	-0.85	72.79	4.50	34.57	34.51	34	144 Peak	HORIZONTAL
3	5739.40	117.75			113.15	4.50	34.62	34.52	34	144 Peak	HORIZONTAL
4	5762.60	104.60			99.94	4.51	34.68	34.53	34	144 Average	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

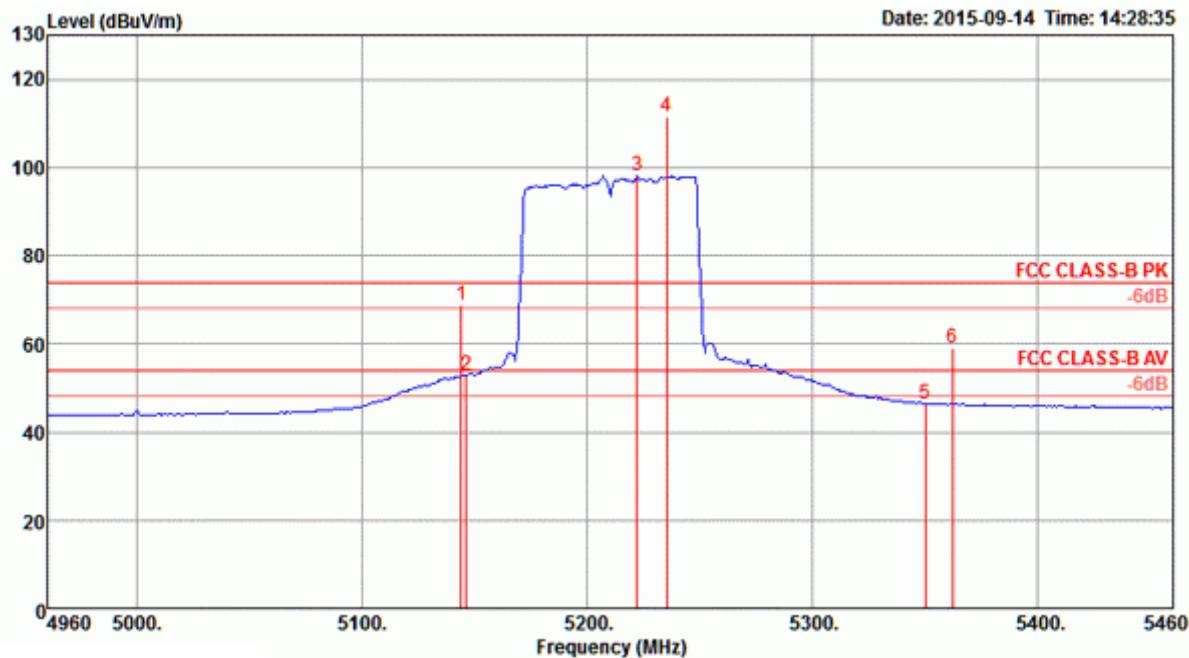
**Channel 159**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	dBuV					
MHz	dBuV/m	dBuV/m		dB	dB	dB	dBuV	dB	deg	cm		
1 5778.20	122.58				117.86	4.52	34.73	34.53	47	164	Peak	HORIZONTAL
2 5778.20	106.76				102.04	4.52	34.73	34.53	47	164	Average	HORIZONTAL
3 5850.00	72.22	78.20	-5.98	67.29	4.54	34.93	34.54	47	164	Peak		HORIZONTAL
4 5860.40	67.76	68.20	-0.44	62.76	4.55	34.99	34.54	47	164	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

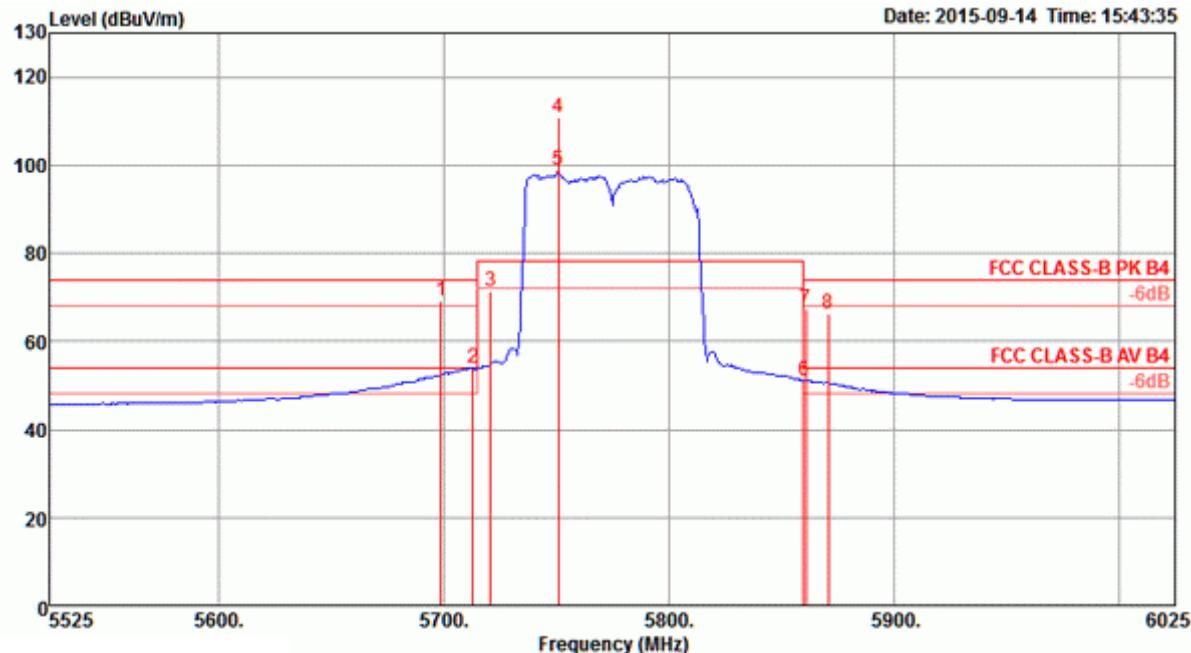
<b>Temperature</b>	26°C	<b>Humidity</b>	57%
<b>Test Engineer</b>	Roki Liu	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80 CH 42, 155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
					Line	Limit	dB			dB	dB/m	dB		
MHz	dBuV/m	dBuV/m					dB	dBuV		dB	dB/m	deg	cm	
1 5144.00	68.85	74.00	-5.15	65.79	4.26	33.27	34.47	285	156	Peak			HORIZONTAL	
2 5146.00	52.96	54.00	-1.04	49.90	4.26	33.27	34.47	285	156	Average			HORIZONTAL	
3 5222.00	98.21			95.00	4.29	33.39	34.47	285	156	Average			HORIZONTAL	
4 5235.00	111.60			108.35	4.30	33.42	34.47	285	156	Peak			HORIZONTAL	
5 5350.00	46.43	54.00	-7.57	42.92	4.35	33.63	34.47	285	156	Average			HORIZONTAL	
6 5362.00	59.15	74.00	-14.85	55.60	4.36	33.66	34.47	285	156	Peak			HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

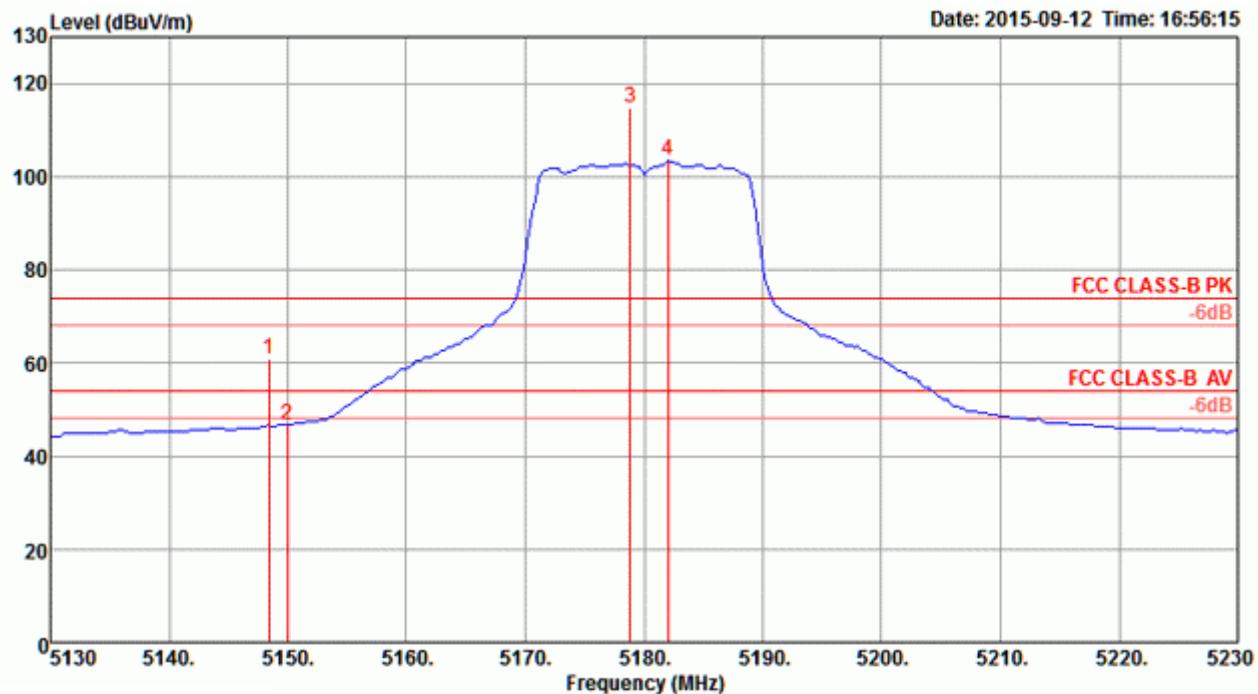
**Channel 155**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase	
					Line	Limit	dB	dBuV	dB	dB/u	dB		
MHz	dBuV/m	dBuV/m											
1	5699.00	69.19	74.00	-4.81	64.74	4.49	34.47	34.51	314	190	Peak	HORIZONTAL	
2	5713.00	53.81	54.00	-0.19	49.31	4.49	34.52	34.51	314	190	Average	HORIZONTAL	
3	5721.00	71.23	78.20	-6.97	66.67	4.50	34.57	34.51	314	190	Peak	HORIZONTAL	
4	5751.00	110.76			106.16	4.50	34.62	34.52	314	190	Peak	HORIZONTAL	
5	5751.00	98.68			94.08	4.50	34.62	34.52	314	190	Average	HORIZONTAL	
6	5860.00	51.08	54.00	-2.92	46.08	4.55	34.99	34.54	314	190	Average	HORIZONTAL	
7	5861.00	67.37	74.00	-6.63	62.37	4.55	34.99	34.54	314	190	Peak	HORIZONTAL	
8	5871.00	66.18	74.00	-7.82	61.13	4.55	35.04	34.54	314	190	Peak	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

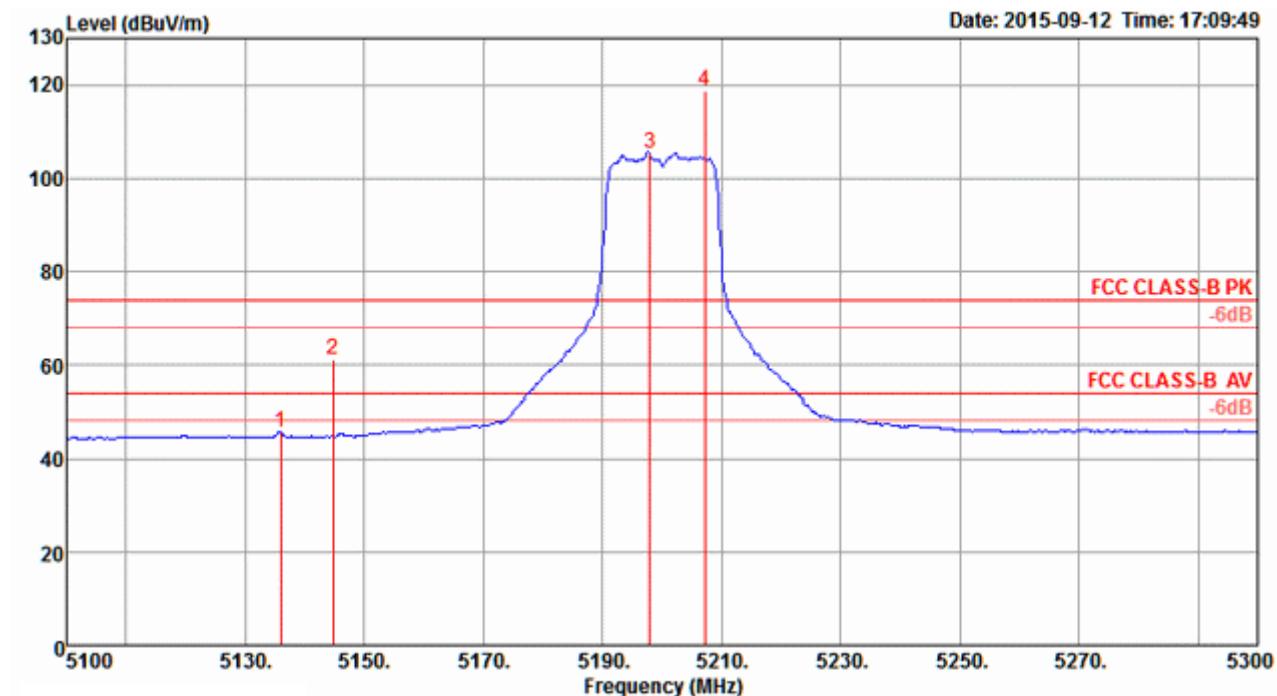
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss3 VHT20 CH 36, 40, 48 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 36**


Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB						
1	5148.40	60.89	74.00	-13.11	57.83	4.26	33.27	34.47	271	150	Peak	HORIZONTAL	
2	5150.00	46.81	54.00	-7.19	43.75	4.26	33.27	34.47	271	150	Average	HORIZONTAL	
3	5178.80	114.61			111.48	4.27	33.33	34.47	271	150	Peak	HORIZONTAL	
4	5182.00	103.45			100.32	4.27	33.33	34.47	271	150	Average	HORIZONTAL	

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

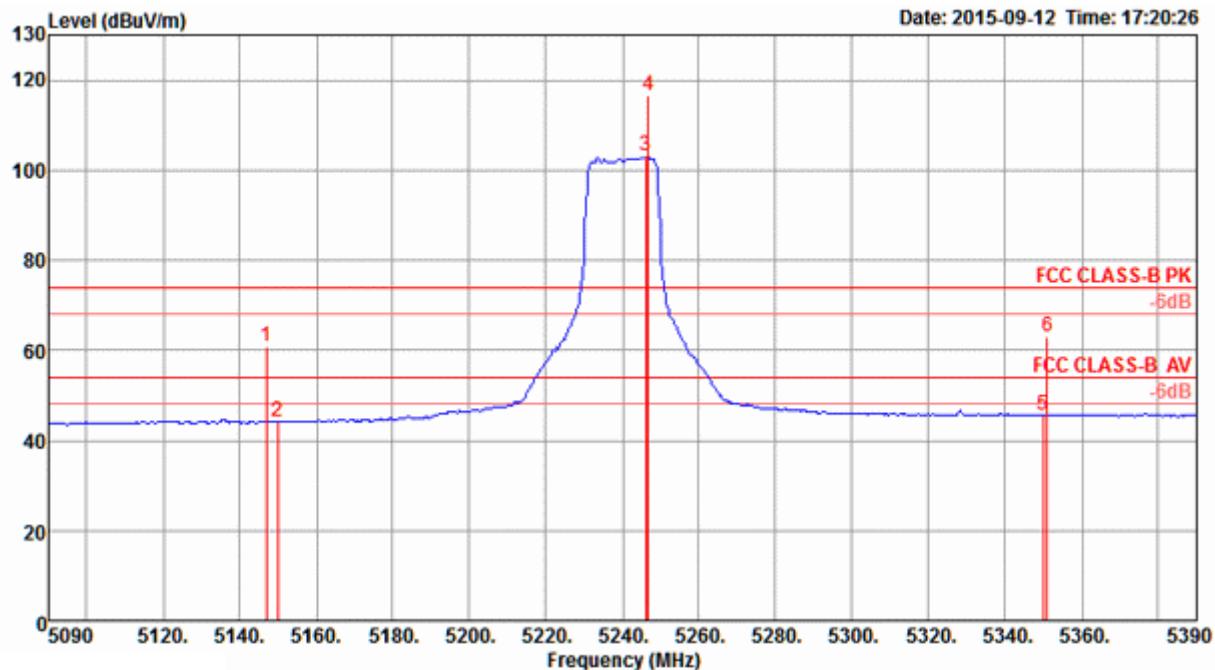
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 40**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	CableAntenna			Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Cable Loss	Antenna Factor	Preamp Factor					
1 5136.00	45.49	54.00	-8.51	42.47	4.25	33.24	34.47	290	188	Average	HORIZONTAL	
2 5144.80	61.31	74.00	-12.69	58.25	4.26	33.27	34.47	290	188	Peak	HORIZONTAL	
3 5198.00	105.53			102.36	4.28	33.36	34.47	290	188	Average	HORIZONTAL	
4 5207.20	118.86			115.69	4.28	33.36	34.47	290	188	Peak	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

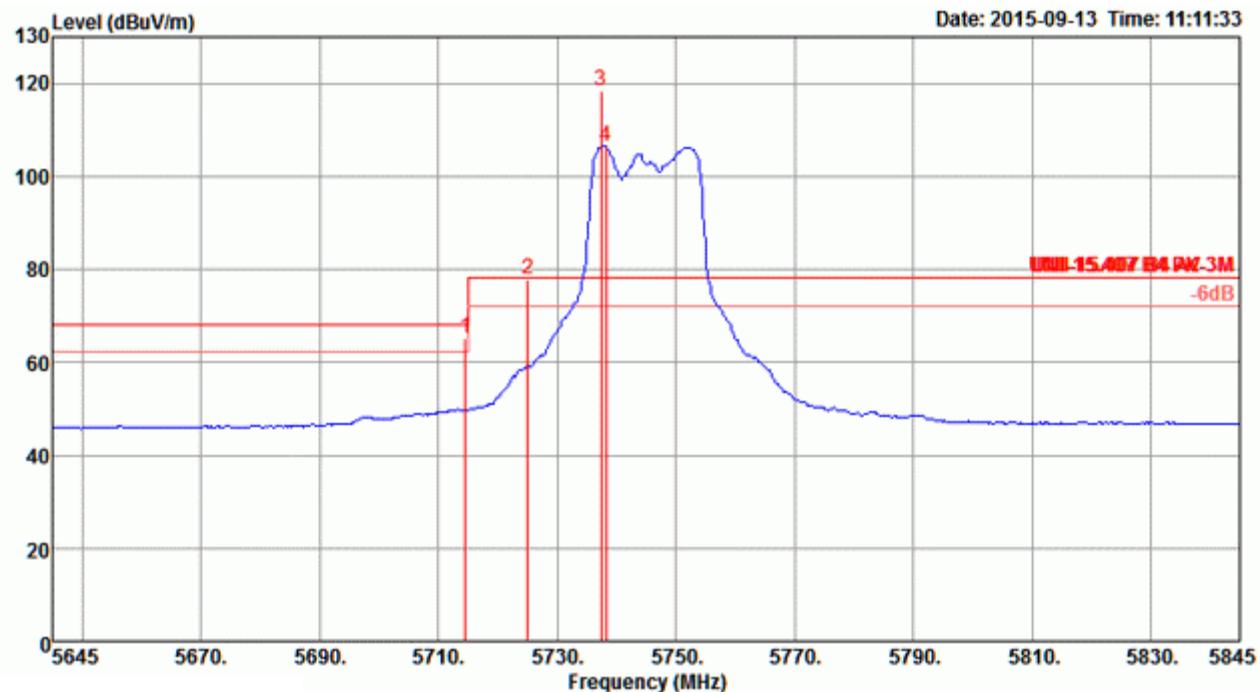
**Channel 48**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Antenna			Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
					Cable Loss	Antenna Factor	Preamp Factor					
1 5147.00	60.93	74.00	-13.07	57.87	4.26	33.27	34.47	308	172	Peak		HORIZONTAL
2 5150.00	44.03	54.00	-9.97	40.97	4.26	33.27	34.47	308	172	Average		HORIZONTAL
3 5246.00	103.13			99.85	4.30	33.45	34.47	308	172	Average		HORIZONTAL
4 5246.60	116.67			113.39	4.30	33.45	34.47	308	172	Peak		HORIZONTAL
5 5350.00	45.50	54.00	-8.50	41.99	4.35	33.63	34.47	308	172	Average		HORIZONTAL
6 5351.00	62.86	74.00	-11.14	59.35	4.35	33.63	34.47	308	172	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

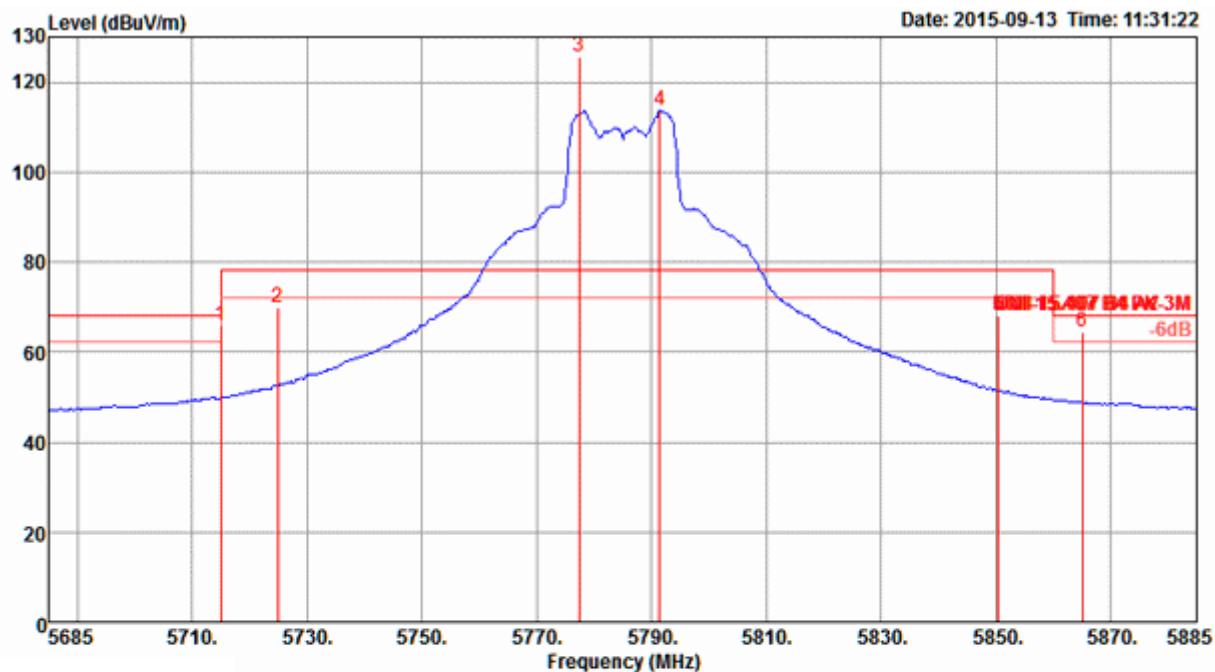
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss3 VHT20 CH 149, 157, 165 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 149**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	deg	cm		
1	5714.60	65.34	68.20	-2.86	60.84	4.49	34.52	34.51	44	150 Peak	HORIZONTAL
2	5725.00	77.90	78.20	-0.30	73.34	4.50	34.57	34.51	44	150 Peak	HORIZONTAL
3	5737.40	118.52	78.20			4.50	34.62	34.52	44	150 Peak	HORIZONTAL
4	5738.20	106.50	78.20			4.50	34.62	34.52	44	150 Average	HORIZONTAL

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

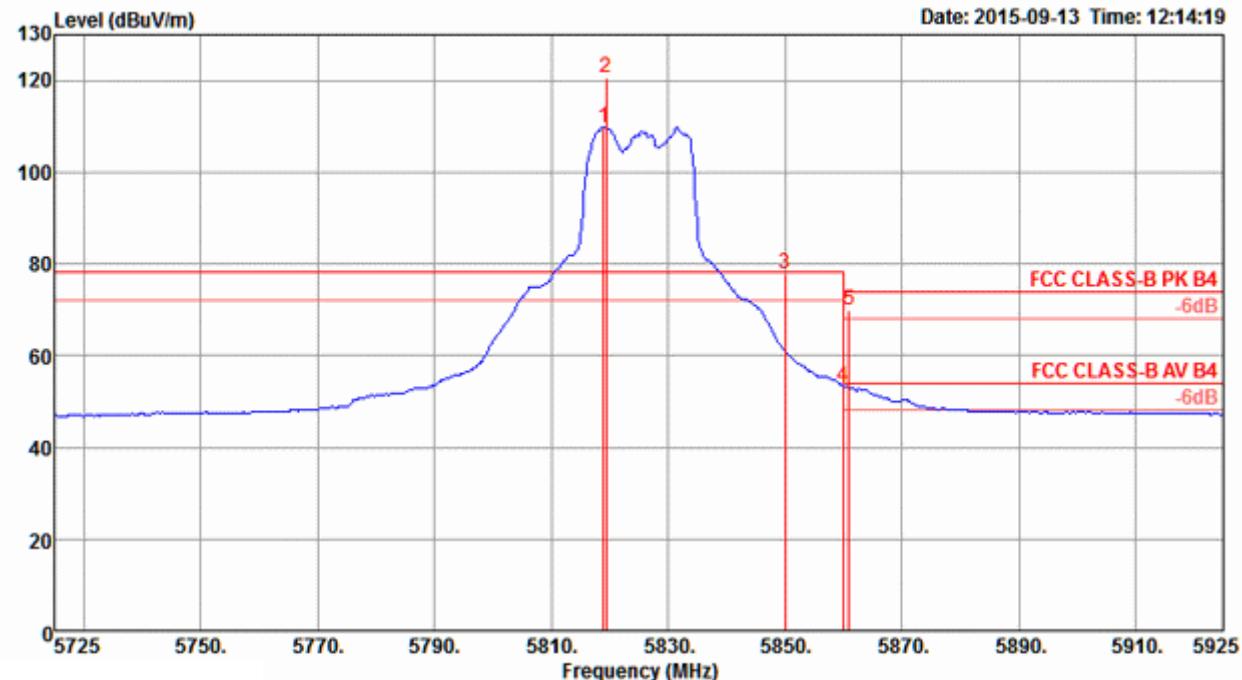
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 157**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dB	Cable			Antenna Loss dB	Preamp Factor dB	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna Loss dB/m	Preamp Factor dB	T/Pos deg						
1 5715.00	65.85	68.20	-2.35	61.35	4.49	34.52	34.51	45	150	Peak			HORIZONTAL
2 5725.00	70.00	78.20	-8.20	65.44	4.50	34.57	34.51	45	150	Peak			HORIZONTAL
3 5777.40	125.58			120.86	4.52	34.73	34.53	45	150	Peak			HORIZONTAL
4 5791.40	113.79			109.02	4.52	34.78	34.53	45	150	Average			HORIZONTAL
5 5850.40	67.99	78.20	-10.21	63.06	4.54	34.93	34.54	45	150	Peak			HORIZONTAL
6 5865.00	64.59	68.20	-3.61	59.59	4.55	34.99	34.54	45	150	Peak			HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

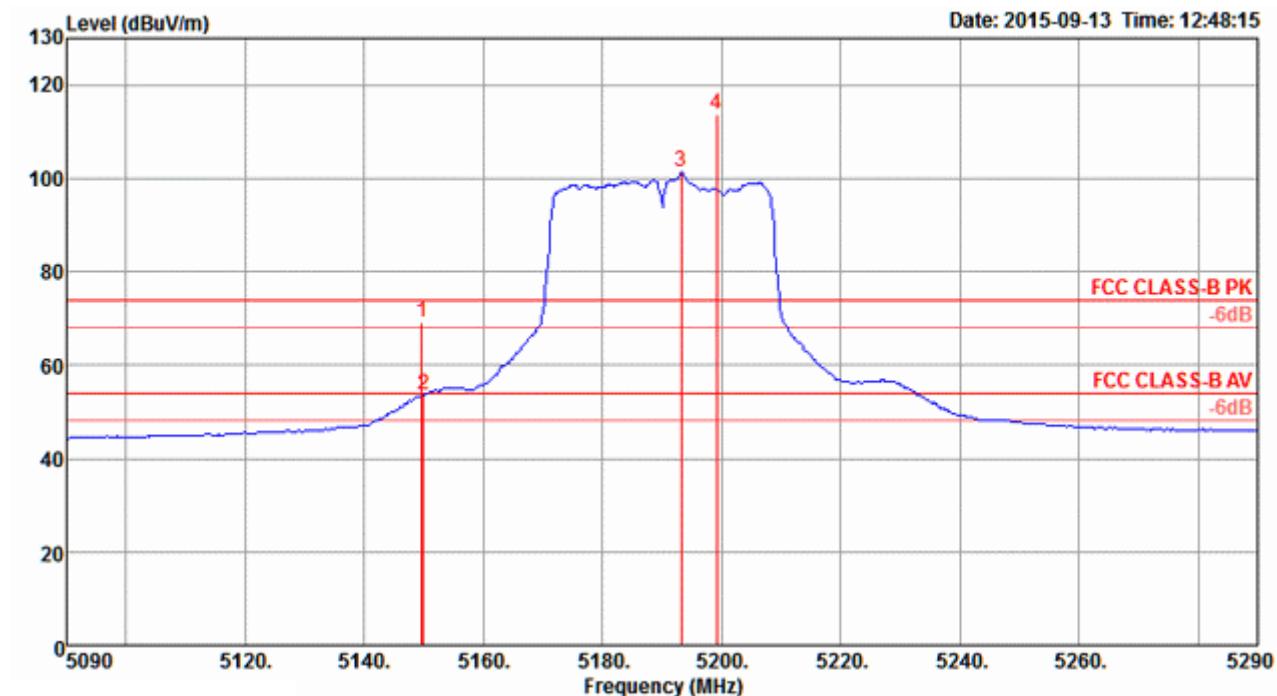
**Channel 165**


Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m			deg	cm		
MHz	dBuV/m	dBuV/m	dB	dB										
1	5819.00	109.62			104.79	4.53	34.83	34.53	42	156	Average		HORIZONTAL	
2	5819.40	120.61			115.78	4.53	34.83	34.53	42	156	Peak		HORIZONTAL	
3	5850.00	77.84	78.20	-0.36	72.91	4.54	34.93	34.54	42	156	Peak		HORIZONTAL	
4	5860.00	53.22	54.00	-0.78	48.22	4.55	34.99	34.54	42	156	Average		HORIZONTAL	
5	5861.00	69.83	74.00	-4.17	64.83	4.55	34.99	34.54	42	156	Peak		HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

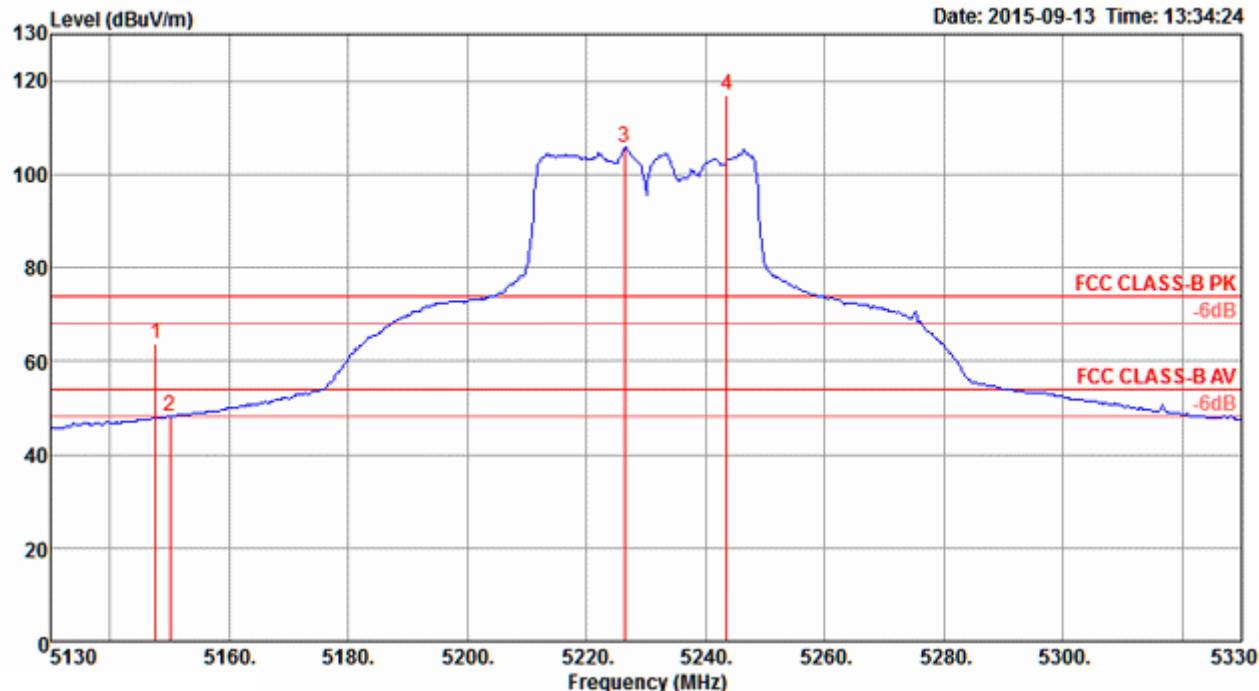
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss3 VHT40 CH 38, 46 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 38**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss			Antenna Factor dB	Preamp Factor dB	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna dB/m	Preamp dB	T/Pos deg						
1 5149.60	69.32	74.00	-4.68	66.26	4.26	33.27	34.47	287	150	Peak		HORIZONTAL	
2 5150.00	53.43	54.00	-0.57	50.37	4.26	33.27	34.47	287	150	Average		HORIZONTAL	
3 5193.20	101.23			98.06	4.28	33.36	34.47	287	150	Average		HORIZONTAL	
4 5199.20	113.53			110.36	4.28	33.36	34.47	287	150	Peak		HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

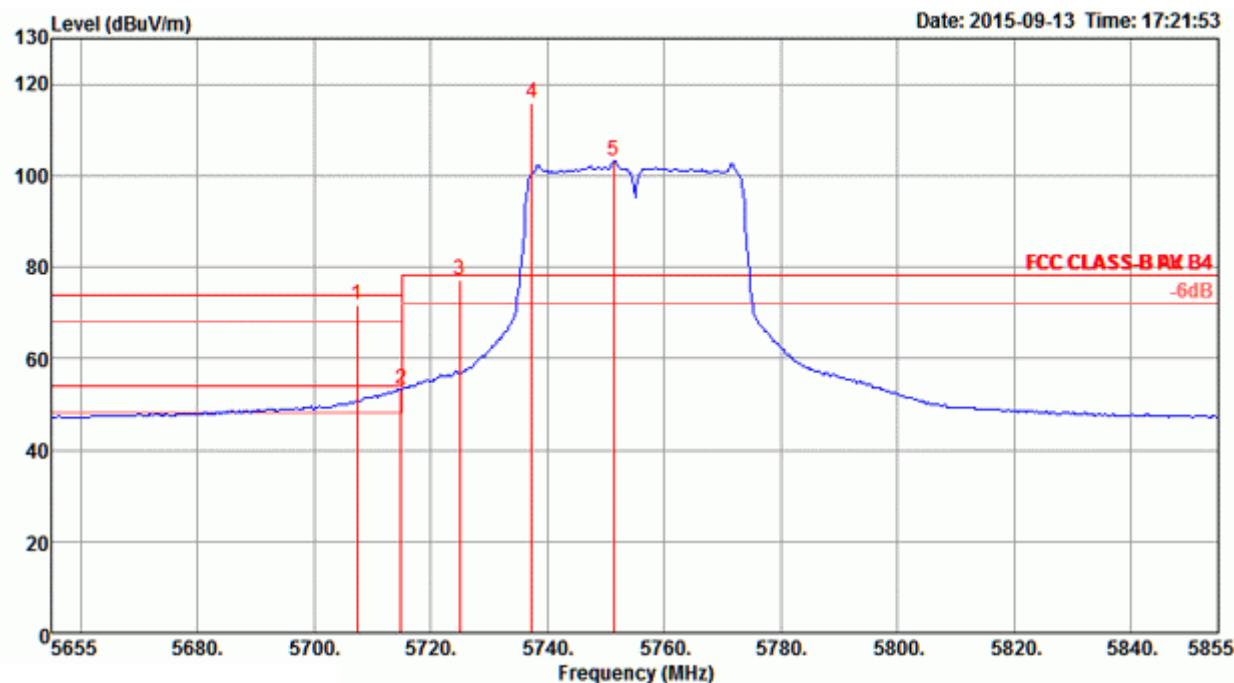
**Channel 46**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	CableAntenna Preamp			T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Cable Loss	Antenna Factor	Preamp Factor				
1 5147.60	63.82	74.00	-10.18	60.76	4.26	33.27	34.47	313	200	Peak	HORIZONTAL
2 5150.00	48.26	54.00	-5.74	45.20	4.26	33.27	34.47	313	200	Average	HORIZONTAL
3 5226.40	105.89			102.64	4.30	33.42	34.47	313	200	Average	HORIZONTAL
4 5243.60	116.96			113.68	4.30	33.45	34.47	313	200	Peak	HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

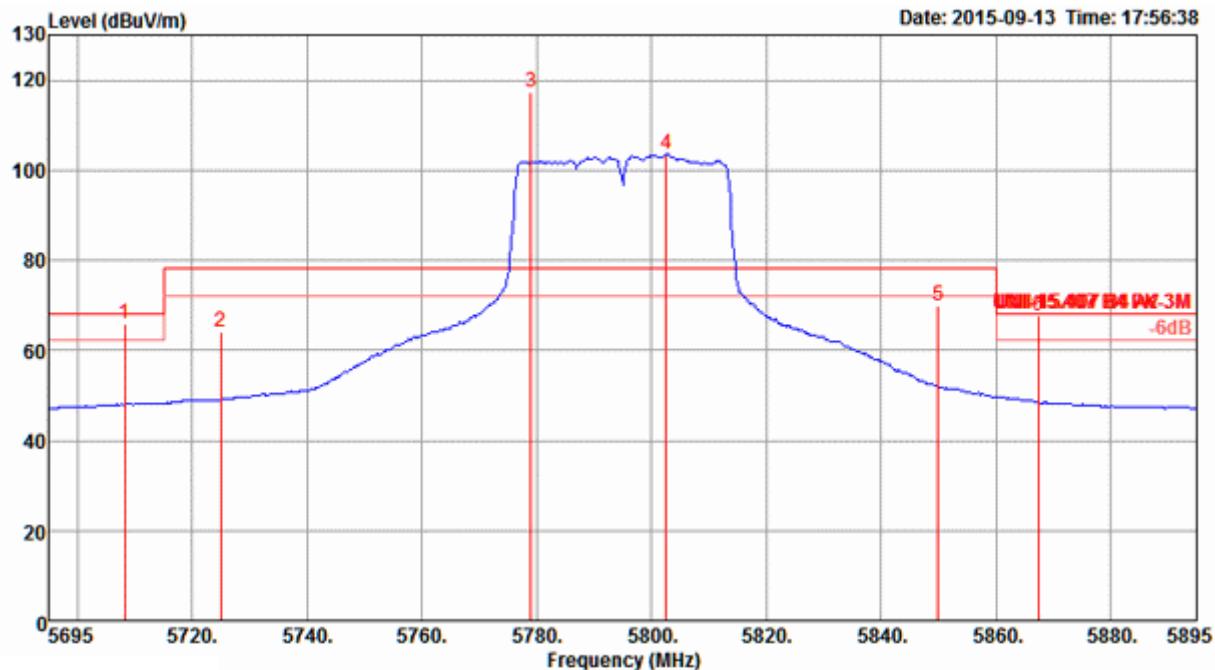
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss3 VHT40 CH 151, 159 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 151**


Freq MHz	Level		Limit	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
	dBuV/m	dBuV/n	dB	dBuV	dB	dB/n	dB	dB	deg	cm		
1 5707.40	71.60	74.00	-2.40	67.10	4.49	34.52	34.51	56	163	Peak	HORIZONTAL	
2 5715.00	53.19	54.00	-0.81	48.69	4.49	34.52	34.51	56	163	Average	HORIZONTAL	
3 5725.00	76.99	78.20	-1.21	72.43	4.50	34.57	34.51	56	163	Peak	HORIZONTAL	
4 5737.40	115.79			111.19	4.50	34.62	34.52	56	163	Peak	HORIZONTAL	
5 5751.40	103.32			98.72	4.50	34.62	34.52	56	163	Average	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

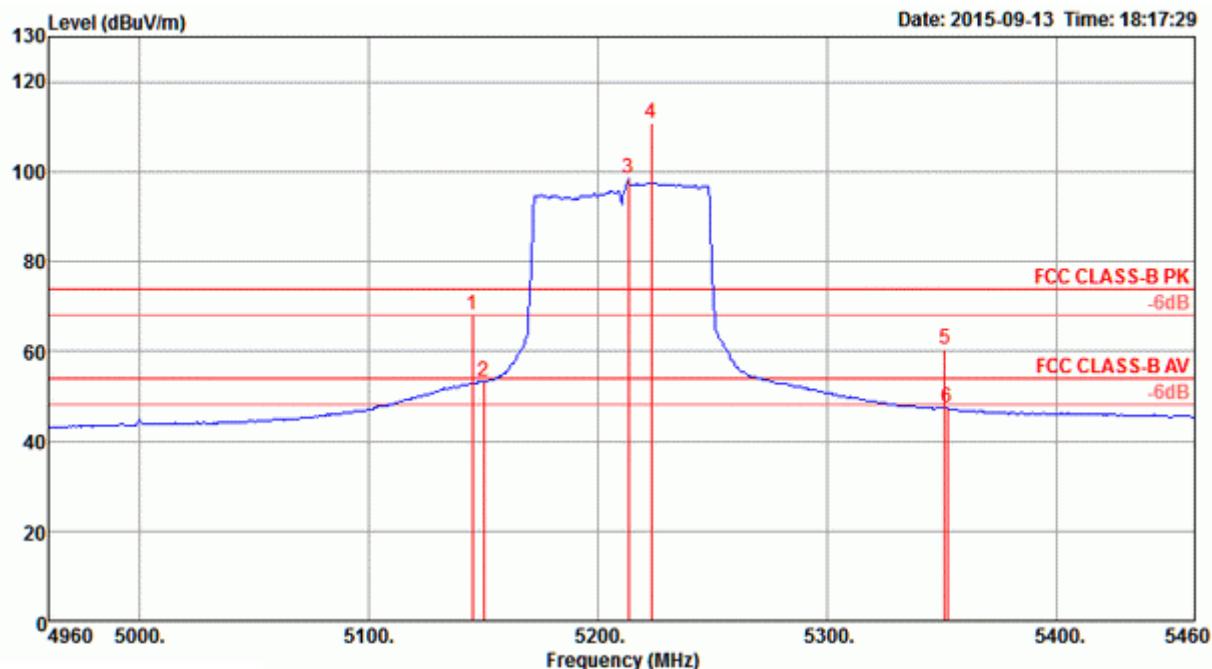
**Channel 159**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dB	Cable			Antenna Loss dB	Preamp Factor dB	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Antenna Loss dB/m	Factor Factor	T/Pos deg						
1 5708.20	65.79	68.20	-2.41	61.29	4.49	34.52	34.51	52	154	Peak			HORIZONTAL
2 5725.00	64.25	78.20	-13.95	59.69	4.50	34.57	34.51	52	154	Peak			HORIZONTAL
3 5779.00	117.40			112.68	4.52	34.73	34.53	52	154	Peak			HORIZONTAL
4 5802.60	103.58			98.75	4.53	34.83	34.53	52	154	Average			HORIZONTAL
5 5850.00	69.79	78.20	-8.41	64.86	4.54	34.93	34.54	52	154	Peak			HORIZONTAL
6 5867.40	67.73	68.20	-0.47	62.73	4.55	34.99	34.54	52	154	Peak			HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

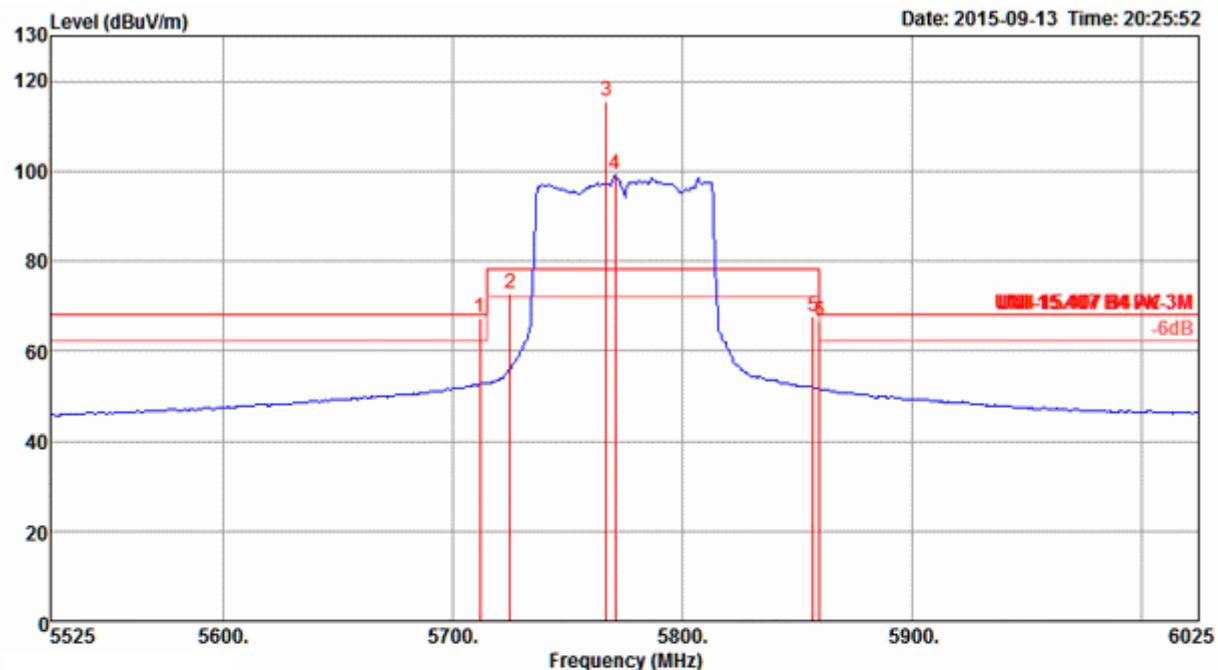
<b>Temperature</b>	26°C	<b>Humidity</b>	57%
<b>Test Engineer</b>	Roki Liu	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss3 VHT80 CH 42, 155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss Factor	Preamp Factor	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor						
1 5145.00	68.00	74.00	-6.00	64.94	4.26	33.27	34.47	46	207	Peak	HORIZONTAL	
2 5150.00	53.30	54.00	-0.70	50.24	4.26	33.27	34.47	46	207	Average	HORIZONTAL	
3 5213.00	98.56			95.35	4.29	33.39	34.47	46	207	Average	HORIZONTAL	
4 5223.00	110.67			107.46	4.29	33.39	34.47	46	207	Peak	HORIZONTAL	
5 5351.00	60.45	74.00	-13.55	56.94	4.35	33.63	34.47	46	207	Peak	HORIZONTAL	
6 5352.00	47.34	54.00	-6.66	43.83	4.35	33.63	34.47	46	207	Average	HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

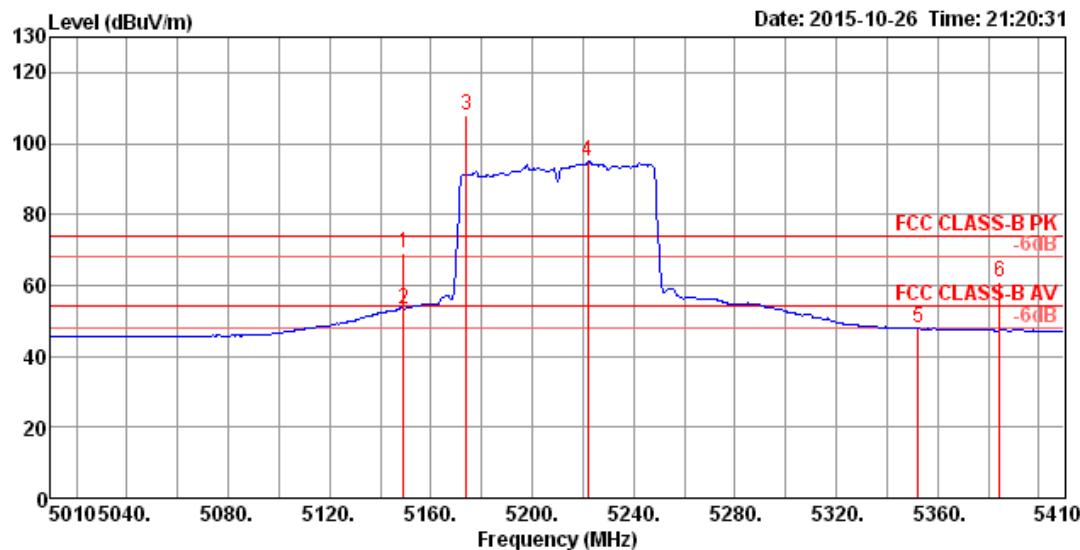
**Channel 155**


Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable		Antenna Loss dB	Preamp Factor dB	T/Pos deg	A/Pos cm	Remark	Pol/Phase
					Loss	Factor						
1 5712.00	67.33	68.20	-0.87	62.83	4.49	34.52	34.51	48	183	Peak		HORIZONTAL
2 5725.00	72.82	78.20	-5.38	68.26	4.50	34.57	34.51	48	183	Peak		HORIZONTAL
3 5767.00	115.63			110.97	4.51	34.68	34.53	48	183	Peak		HORIZONTAL
4 5771.00	99.07			94.35	4.52	34.73	34.53	48	183	Average		HORIZONTAL
5 5857.00	67.83	78.20	-10.37	62.83	4.55	34.99	34.54	48	183	Peak		HORIZONTAL
6 5860.00	66.63	68.20	-1.57	61.63	4.55	34.99	34.54	48	183	Peak		HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

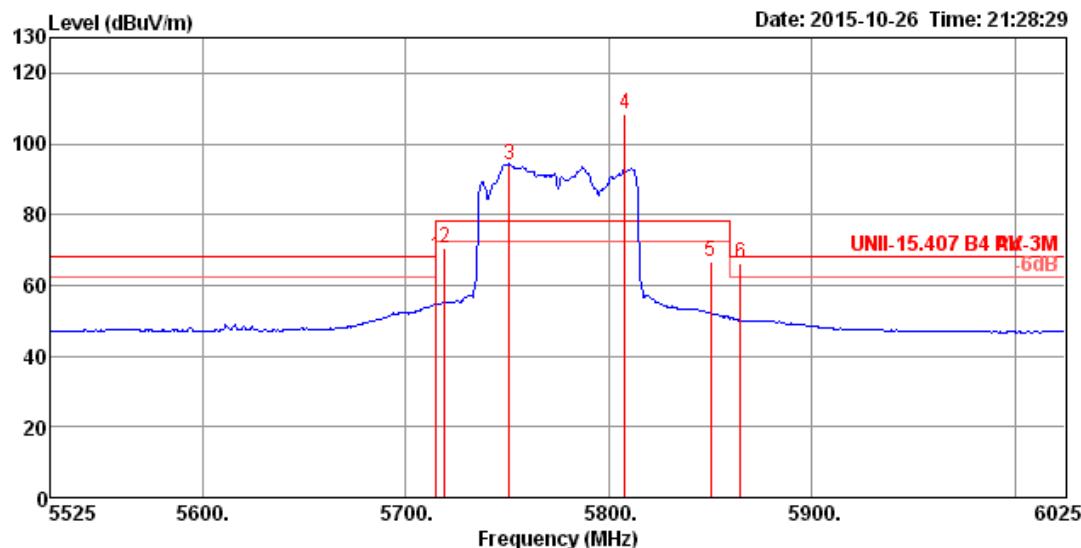
<b>Temperature</b>	26°C	<b>Humidity</b>	57%
<b>Test Engineer</b>	Roki Liu	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 1 / CH 42+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**


Freq	Level	Limit Line	Over Limit	Read Level	Cable			Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor						
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	dB	cm	deg		
1 5149.20	69.11	74.00	-4.89	62.21	6.21	33.74	33.05	152	280	Peak		HORIZONTAL	
2 5149.20	53.36	54.00	-0.64	46.46	6.21	33.74	33.05	152	280	Average		HORIZONTAL	
3 5174.00	107.74			100.76	6.24	33.79	33.05	152	280	Peak		HORIZONTAL	
4 5222.00	94.95			87.85	6.30	33.85	33.05	152	280	Average		HORIZONTAL	
5 5352.40	47.78	54.00	-6.22	40.31	6.47	34.06	33.06	152	280	Average		HORIZONTAL	
6 5384.40	60.88	74.00	-13.12	53.33	6.50	34.11	33.06	152	280	Peak		HORIZONTAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 155**


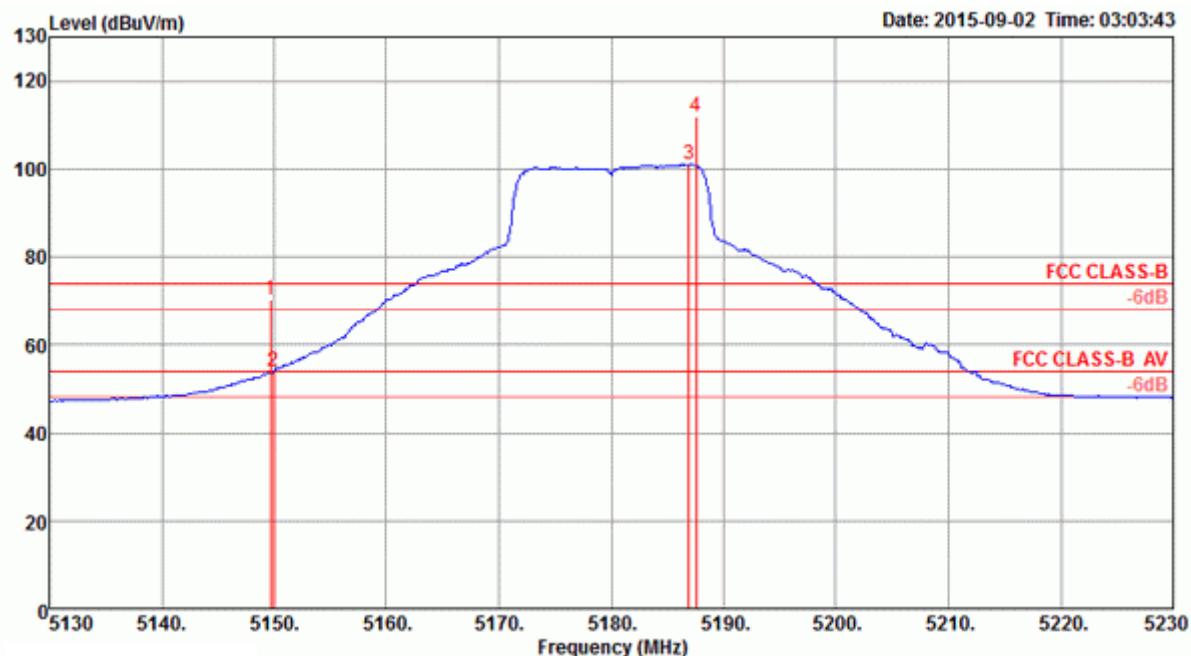
Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m						
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m	dB	cm	deg				
1	5715.00	67.89	68.20	-0.31	59.77	6.83	34.42	33.13	236	306	Peak			HORIZONTAL
2	5719.00	70.52	78.20	-7.68	62.39	6.83	34.43	33.13	236	306	Peak			HORIZONTAL
3	5751.00	94.24			86.08	6.86	34.44	33.14	236	306	Average			HORIZONTAL
4	5808.00	108.34			100.09	6.92	34.49	33.16	236	306	Peak			HORIZONTAL
5	5850.00	66.48	78.20	-11.72	58.19	6.95	34.51	33.17	236	306	Peak			HORIZONTAL
6	5865.00	66.00	68.20	-2.20	57.69	6.97	34.52	33.18	236	306	Peak			HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**<For Radio 3 Mode>**

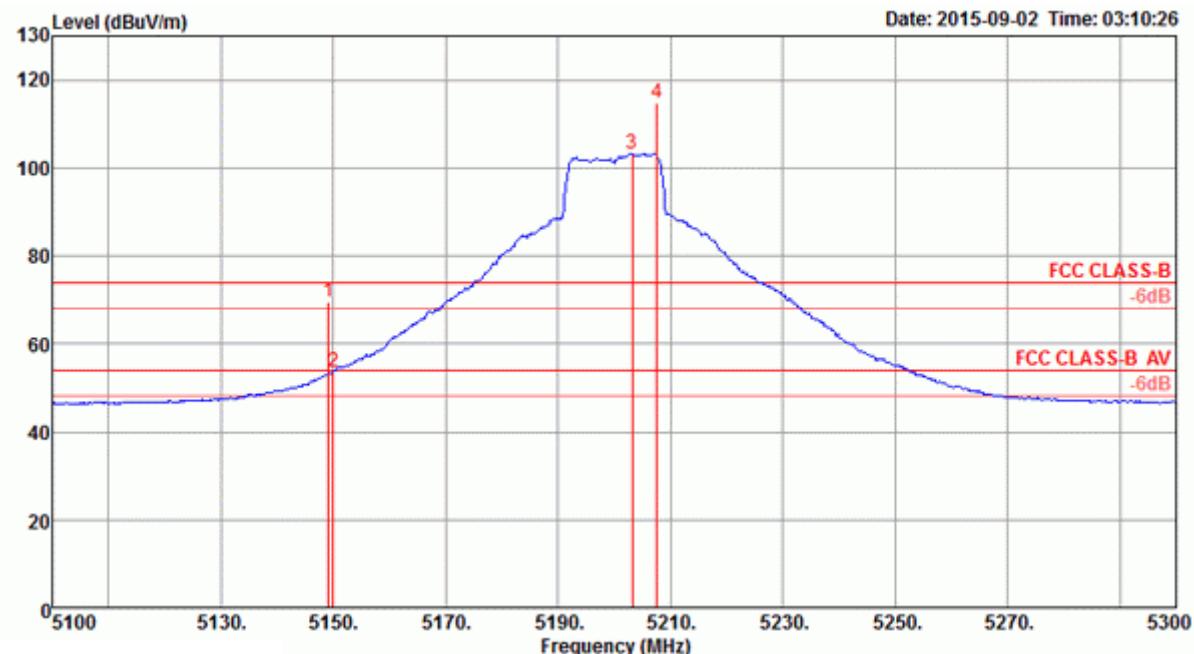
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11a CH 36, 40, 48 / Chain 9

**Channel 36**


Freq	Level	Limit	Over	Read	Cable			A/Pos	T/Pos	Pol/Phase
					Line	Limit	Level			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1 5149.71	70.29	74.00	-3.71	63.75	6.13	34.04	33.63	Peak	133	349 VERTICAL
2 5150.00	53.81	54.00	-0.19	47.27	6.13	34.04	33.63	Average	133	349 VERTICAL
3 5186.95	101.16			94.54	6.15	34.09	33.62	Average	133	349 VERTICAL
4 5187.53	111.74			105.12	6.15	34.09	33.62	Peak	133	349 VERTICAL

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

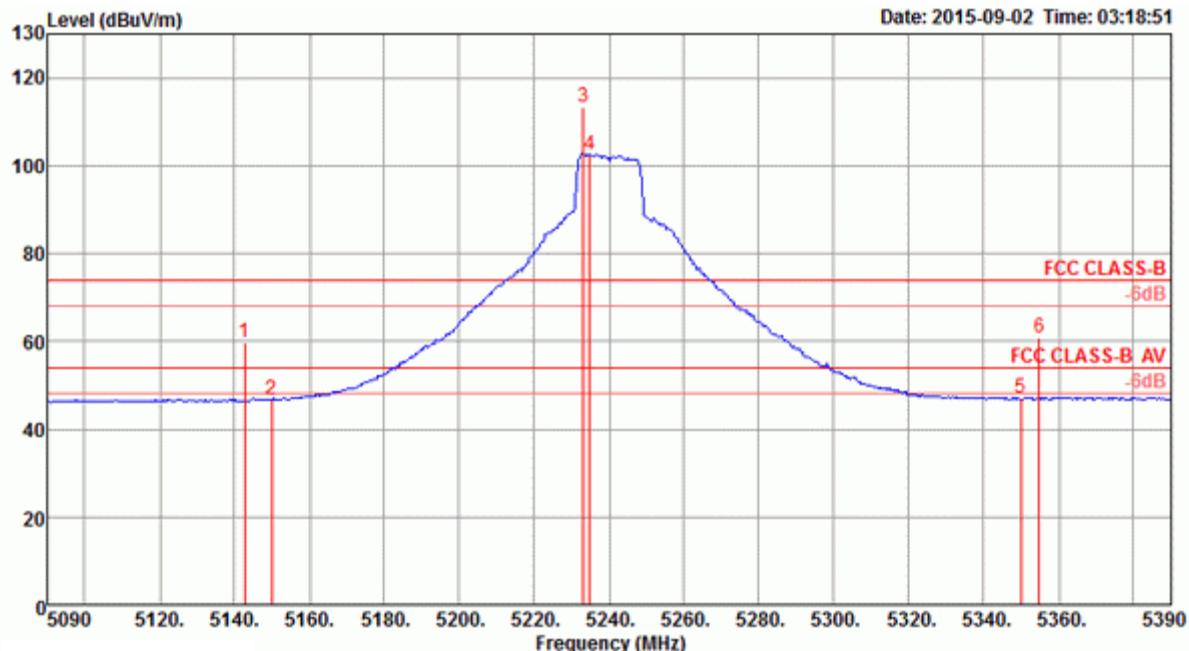
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 40**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1 5149.13	69.47	74.00	-4.53	62.93	6.13	34.04	33.63	Peak	125	344 VERTICAL
2 5150.00	53.70	54.00	-0.30	47.16	6.13	34.04	33.63	Average	125	344 VERTICAL
3 5203.18	103.17			96.51	6.16	34.12	33.62	Average	125	344 VERTICAL
4 5207.53	114.68			107.98	6.17	34.15	33.62	Peak	125	344 VERTICAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

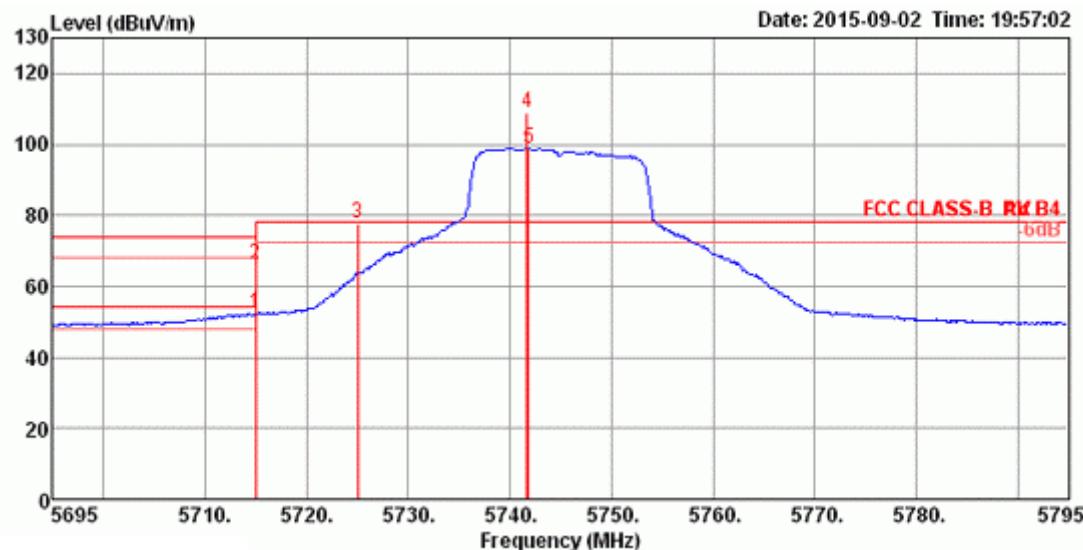
**Channel 48**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor			
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1 5142.62	59.66	74.00	-14.34	53.12	6.13	34.04	33.63	Peak	135	349 VERTICAL
2 5150.00	46.71	54.00	-7.29	40.17	6.13	34.04	33.63	Average	135	349 VERTICAL
3 5233.05	113.22			106.49	6.18	34.17	33.62	Peak	135	349 VERTICAL
4 5234.79	102.52			95.79	6.18	34.17	33.62	Average	135	349 VERTICAL
5 5350.00	46.96	54.00	-7.04	39.94	6.26	34.36	33.60	Average	135	349 VERTICAL
6 5354.78	60.69	74.00	-13.31	53.67	6.26	34.36	33.60	Peak	135	349 VERTICAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

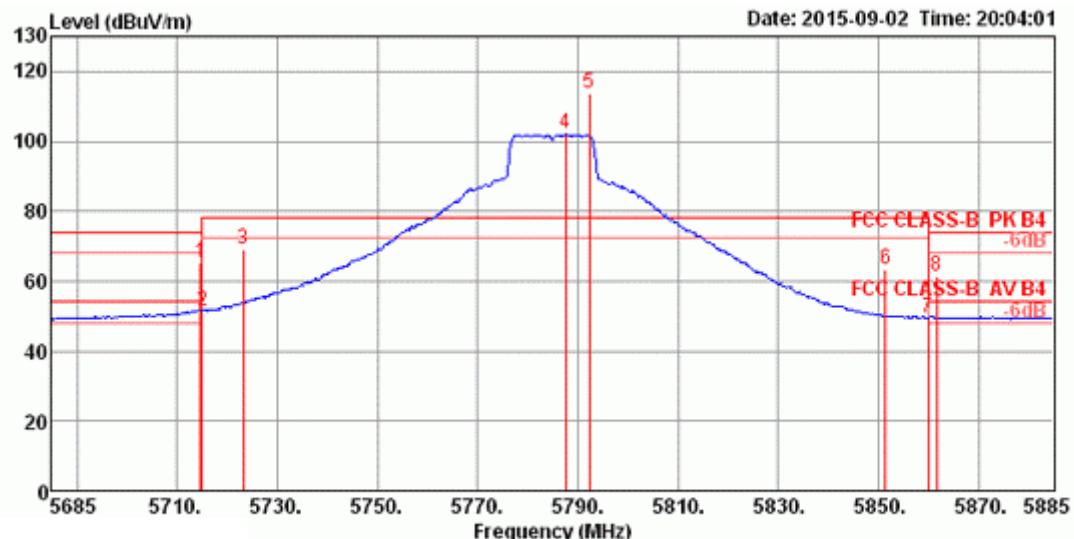
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11a CH 149, 157, 165 / Chain 9

**Channel 149**


Freq	Level	Limit		Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m						
MHz	dBuV/m	dBuV/m	dB								cm	deg		
1	5715.00	52.23	54.00	-1.77	44.11	6.83	34.42	33.13	102	347	Average		VERTICAL	
2	5715.00	66.23	74.00	-7.77	58.11	6.83	34.42	33.13	102	347	Peak		VERTICAL	
3	5725.00	77.88	78.20	-0.32	69.75	6.83	34.43	33.13	102	347	Peak		VERTICAL	
4	5741.67	108.81			100.65	6.86	34.44	33.14	102	347	Peak		VERTICAL	
5	5741.82	98.89			90.73	6.86	34.44	33.14	102	347	Average		VERTICAL	

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

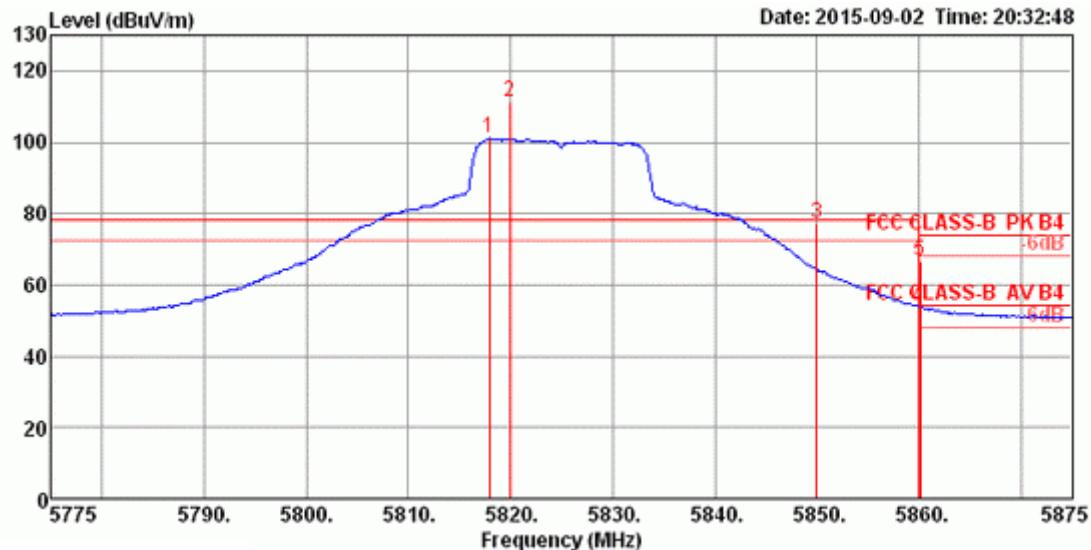
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 157**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1 5714.71	65.47	74.00	-8.53	57.35	6.83	34.42	33.13	100	360	Peak	VERTICAL
2 5715.00	51.47	54.00	-2.53	43.35	6.83	34.42	33.13	100	360	Average	VERTICAL
3 5723.26	69.16	78.20	-9.04	61.03	6.83	34.43	33.13	100	360	Peak	VERTICAL
4 5787.60	102.09			93.87	6.90	34.48	33.16	100	360	Average	VERTICAL
5 5792.24	113.53			105.31	6.90	34.48	33.16	100	360	Peak	VERTICAL
6 5851.45	63.48	78.20	-14.72	55.19	6.95	34.51	33.17	100	360	Peak	VERTICAL
7 5860.00	49.55	54.00	-4.45	41.24	6.97	34.52	33.18	100	360	Average	VERTICAL
8 5861.74	61.54	74.00	-12.46	53.23	6.97	34.52	33.18	100	360	Peak	VERTICAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 165**


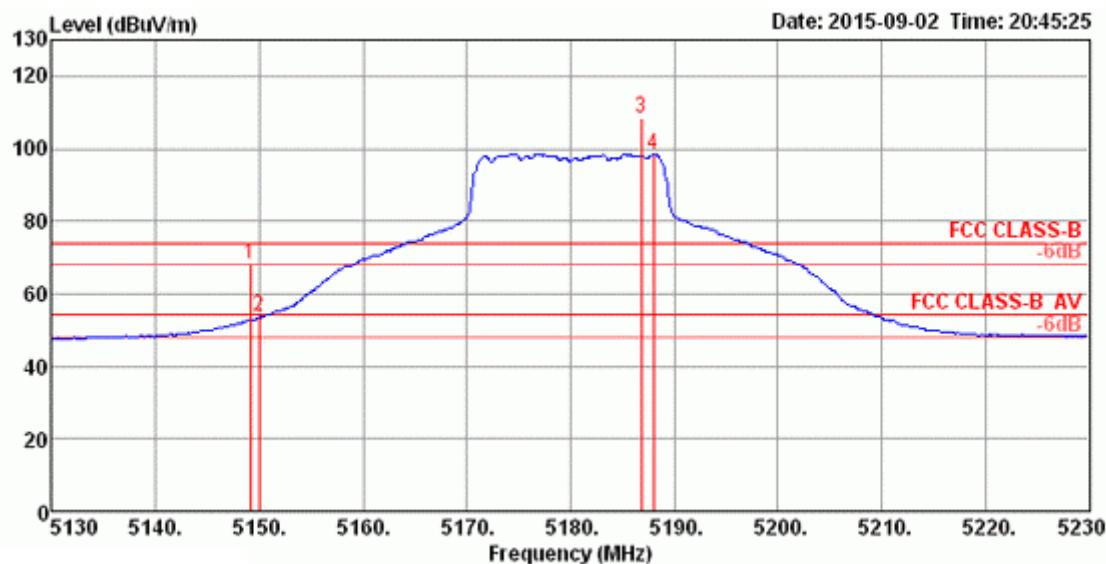
Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit						
MHz	dBuV/m	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	deg	
1	5817.91	101.09				92.84	6.92	34.49	33.16	100	360	Average VERTICAL
2	5819.93	111.30				103.04	6.92	34.50	33.16	100	360	Peak VERTICAL
3	5850.00	77.42	78.20	-0.78	69.13	6.95	34.51	33.17	100	360	Peak VERTICAL	
4	5860.00	53.89	54.00	-0.11	45.58	6.97	34.52	33.18	100	360	Average VERTICAL	
5	5860.14	66.70	74.00	-7.30	58.39	6.97	34.52	33.18	100	360	Peak VERTICAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36, 40, 48 / Chain 9

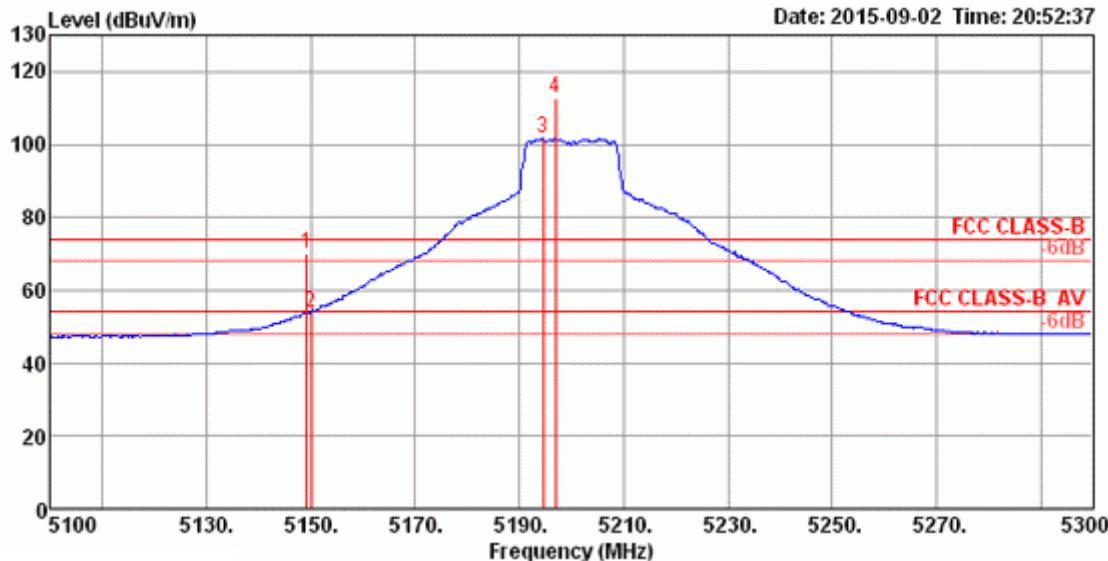
## Channel 36



Freq	Level	Limit Line	Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
					dB	dBuV	dB						
MHz	dBuV/m	dBuV/m	dB	dBuV									
1 5149.13	68.20	74.00	-5.80	61.30	6.21	33.74	33.05	100	21	Peak		VERTICAL	
2 5150.00	53.76	54.00	-0.24	46.86	6.21	33.74	33.05	100	21	Average		VERTICAL	
3 5186.80	108.61			101.63	6.24	33.79	33.05	100	21	Peak		VERTICAL	
4 5187.96	98.36			91.38	6.24	33.79	33.05	100	21	Average		VERTICAL	

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

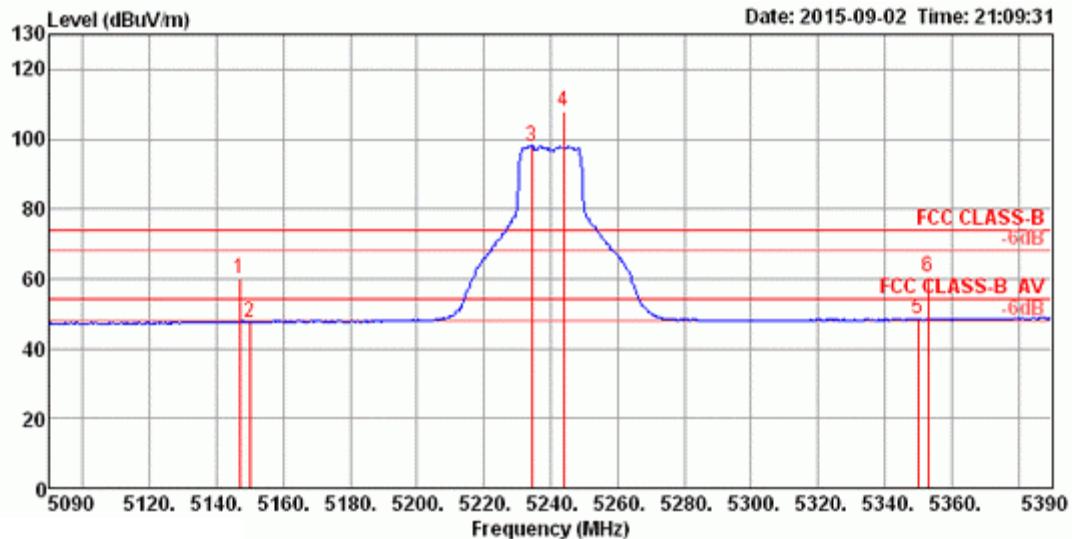
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 40**


Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit						
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1 5149.13	69.82	74.00	-4.18	62.92	6.21	33.74	33.05	100	21	Peak	VERTICAL	
2 5150.00	53.90	54.00	-0.10	47.00	6.21	33.74	33.05	100	21	Average	VERTICAL	
3 5194.50	101.56			94.55	6.24	33.82	33.05	100	21	Average	VERTICAL	
4 5196.82	112.75			105.71	6.27	33.82	33.05	100	21	Peak	VERTICAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 48**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5146.96	59.89	74.00	-14.11	52.99	6.21	33.74	33.05	100	16 Peak	VERTICAL
2	5150.00	47.49	54.00	-6.51	40.59	6.21	33.74	33.05	100	16 Average	VERTICAL
3	5234.36	98.08			90.96	6.30	33.87	33.05	100	16 Average	VERTICAL
4	5243.91	107.98			100.83	6.30	33.90	33.05	100	16 Peak	VERTICAL
5	5350.00	48.56	54.00	-5.44	41.09	6.47	34.06	33.06	100	16 Average	VERTICAL
6	5353.04	60.38	74.00	-13.62	52.91	6.47	34.06	33.06	100	16 Peak	VERTICAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

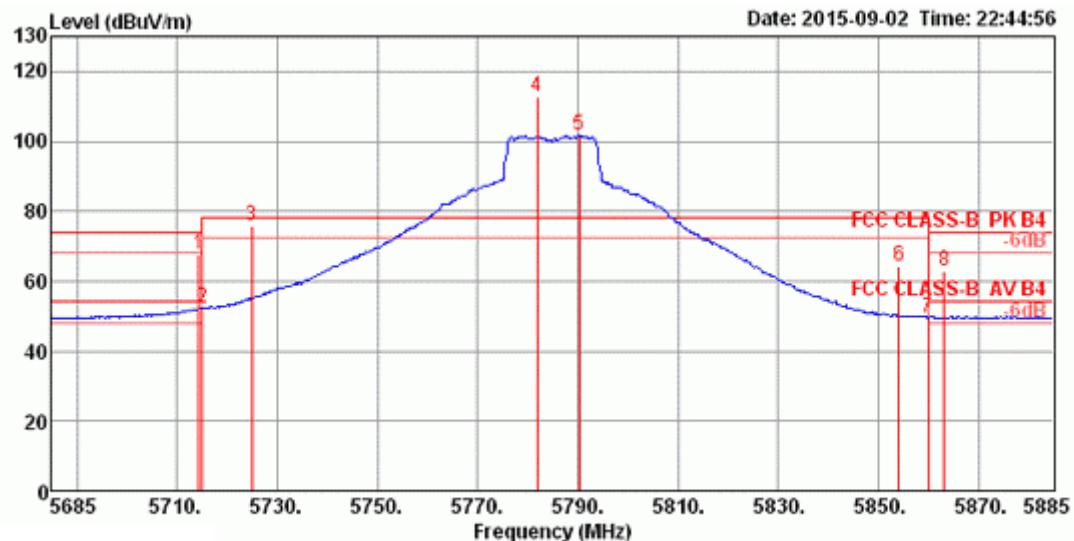
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149, 157, 165 / Chain 9

**Channel 149**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit	Level						
MHz	dBuV/m	dBuV/m		dB	dBuV		dB	dB/m	dB	cm	deg		
1	5714.28	65.81	74.00	-8.19	57.69	6.83	34.42	33.13	100	4	Peak		VERTICAL
2	5715.00	52.68	54.00	-1.32	44.56	6.83	34.42	33.13	100	4	Average		VERTICAL
3	5724.13	78.01	78.20	-0.19	69.88	6.83	34.43	33.13	100	4	Peak		VERTICAL
4	5739.65	97.86			89.70	6.86	34.44	33.14	100	4	Average		VERTICAL
5	5741.38	107.87			99.71	6.86	34.44	33.14	100	4	Peak		VERTICAL

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

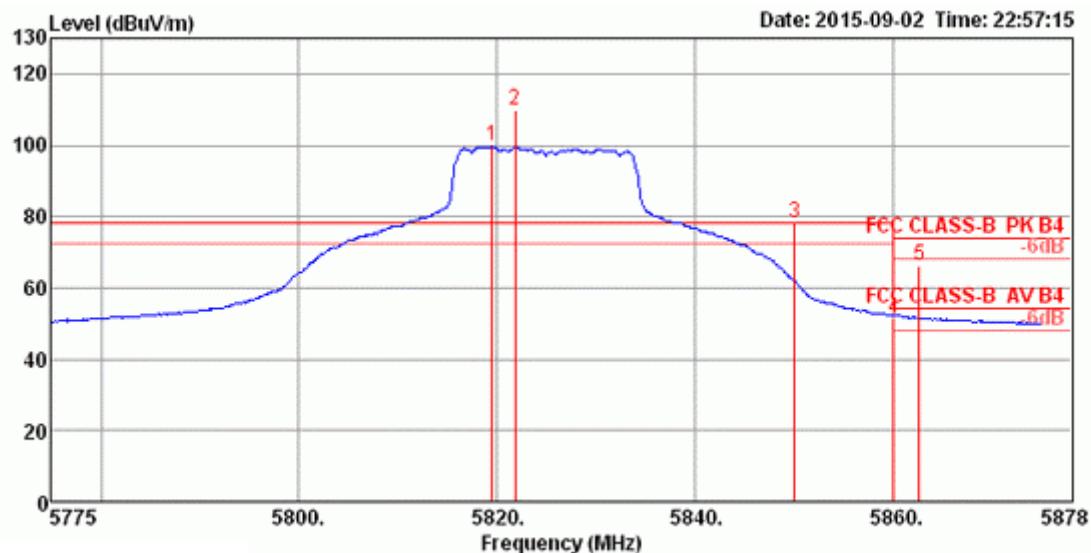
Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 157**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1 5714.42	67.40	74.00	-6.60	59.28	6.83	34.42	33.13	101	360	Peak	VERTICAL
2 5715.00	52.15	54.00	-1.85	44.03	6.83	34.42	33.13	101	360	Average	VERTICAL
3 5725.00	75.89	78.20	-2.31	67.76	6.83	34.43	33.13	101	360	Peak	VERTICAL
4 5781.82	112.70			104.49	6.90	34.47	33.16	101	360	Peak	VERTICAL
5 5790.21	101.61			93.39	6.90	34.48	33.16	101	360	Average	VERTICAL
6 5854.05	64.37	78.20	-13.83	56.07	6.95	34.52	33.17	101	360	Peak	VERTICAL
7 5860.00	49.55	54.00	-4.45	41.24	6.97	34.52	33.18	101	360	Average	VERTICAL
8 5863.18	62.89	74.00	-11.11	54.58	6.97	34.52	33.18	101	360	Peak	VERTICAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

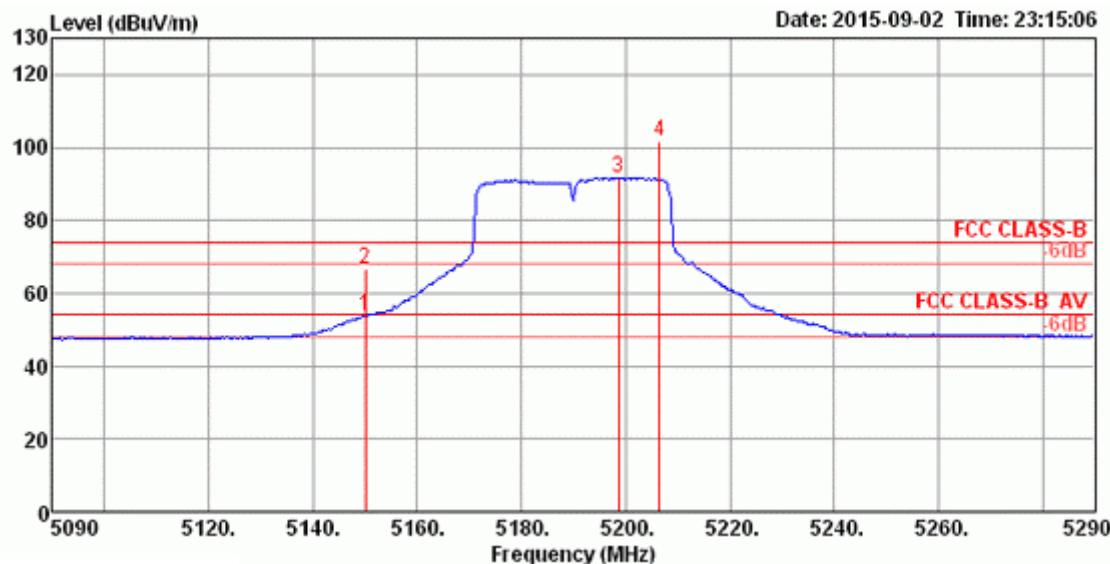
**Channel 165**


Freq	Level	Limit	Over	Read	Cable		Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit						
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	5819.50	99.55				91.29	6.92	34.50	33.16	100	2	Average VERTICAL
2	5821.82	109.99				101.73	6.92	34.50	33.16	100	2	Peak VERTICAL
3	5850.00	78.18	78.20	-0.02	69.89	6.95	34.51	33.17	100	2	Peak VERTICAL	
4	5860.00	51.42	54.00	-2.58	43.11	6.97	34.52	33.18	100	2	Average VERTICAL	
5	5862.60	66.16	74.00	-7.84	57.85	6.97	34.52	33.18	100	2	Peak VERTICAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

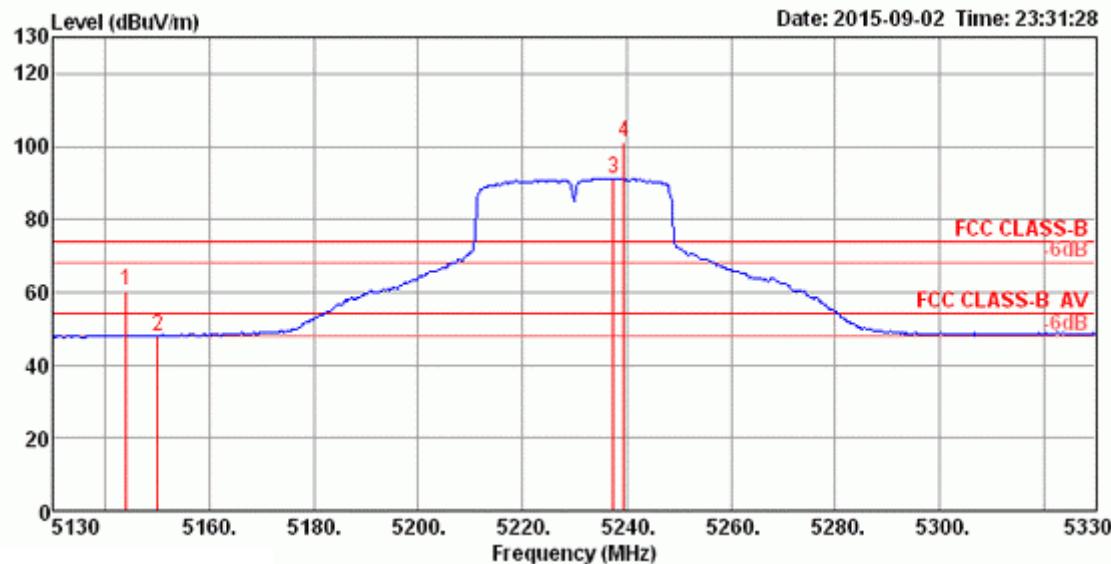
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38, 46 / Chain 9

**Channel 38**


Freq	Level	Limit Line	Over Limit	Read Level	Cable			Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
					Loss	Factor	Factor							
					MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg
1	5150.00	53.76	54.00	-0.24	46.86	6.21	33.74	33.05	100	18	Average	VERTICAL		
2	5150.00	66.66	74.00	-7.34	59.76	6.21	33.74	33.05	100	18	Peak	VERTICAL		
3	5198.68	91.61			84.57	6.27	33.82	33.05	100	18	Average	VERTICAL		
4	5206.50	101.63	.....	.....	94.59	6.27	33.82	33.05	100	18	Peak	VERTICAL		

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

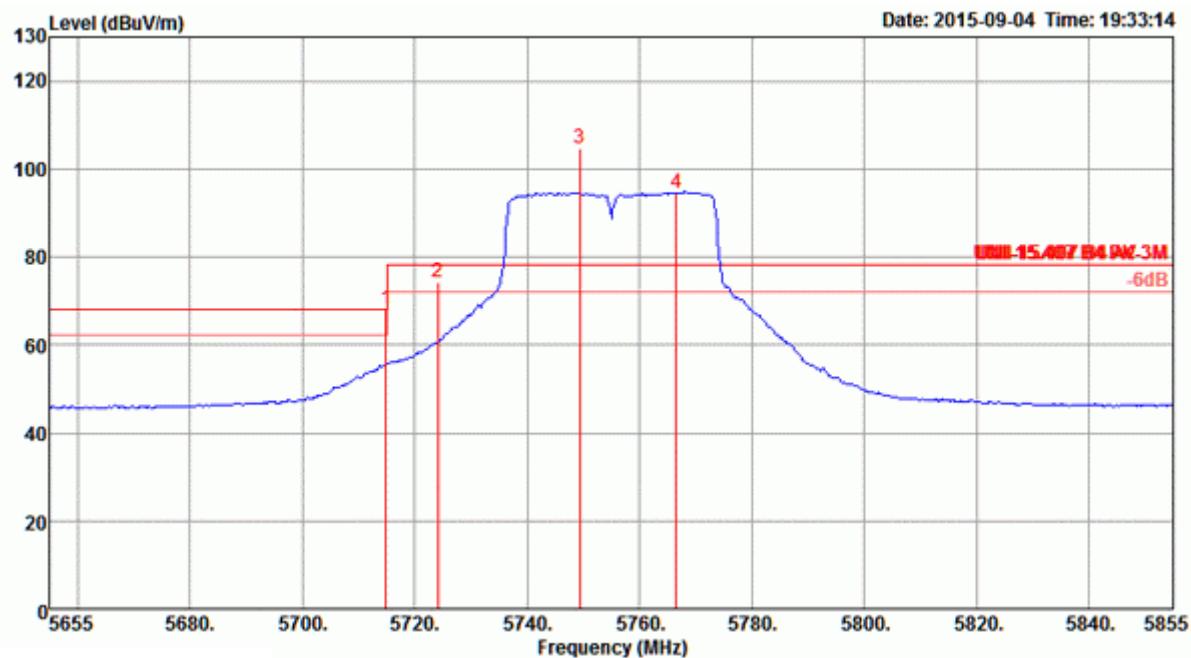
**Channel 46**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit	Level						
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg			
1 5143.92	60.57	74.00	-13.43	53.67	6.21	33.74	33.05	100	68	Peak			HORIZONTAL
2 5150.00	48.05	54.00	-5.95	41.15	6.21	33.74	33.05	100	68	Average			HORIZONTAL
3 5237.53	91.30			84.18	6.30	33.87	33.05	100	68	Average			HORIZONTAL
4 5239.55	101.05			93.93	6.30	33.87	33.05	100	68	Peak			HORIZONTAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

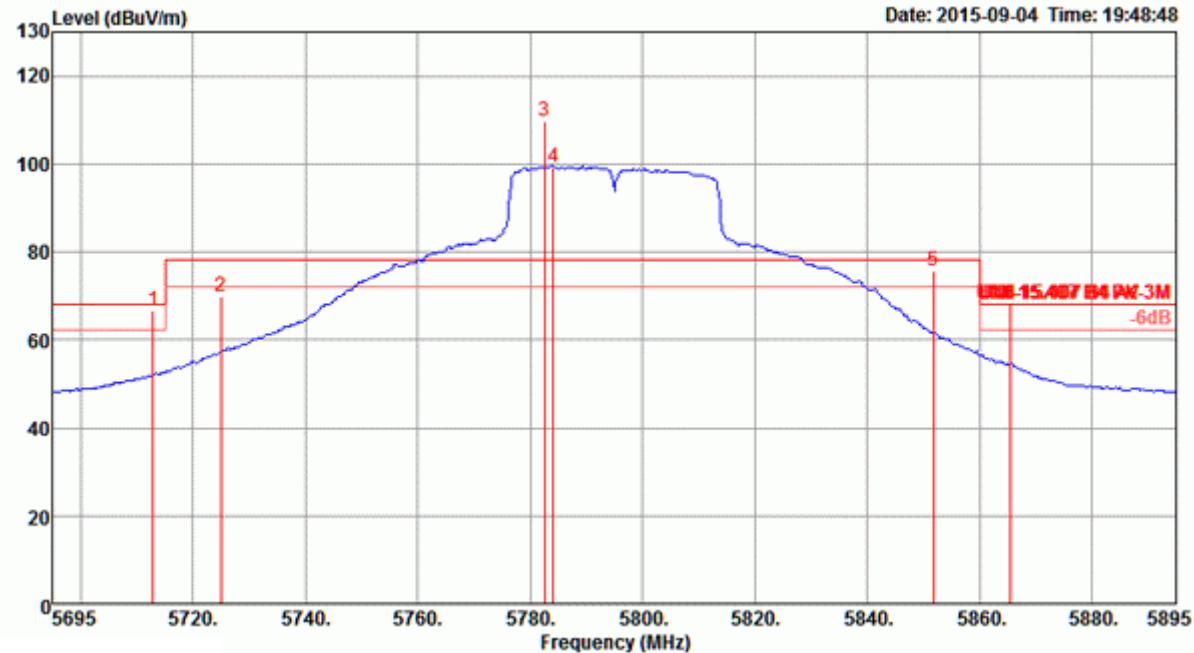
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 151, 159 / Chain 9

**Channel 151**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level	Loss	Factor			
MHz	dBuV/m	dBuV/m		dB			dBuV	dB	dB/m	dB	deg	cm
1	5715.00	68.09	68.20	-0.11	63.59	4.49	34.52	34.51	358	107	Peak	VERTICAL
2	5724.20	74.41	78.20	-3.79	69.85	4.50	34.57	34.51	358	107	Peak	VERTICAL
3	5749.40	104.79			100.19	4.50	34.62	34.52	358	107	Peak	VERTICAL
4	5766.60	94.62			89.96	4.51	34.68	34.53	358	107	Average	VERTICAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

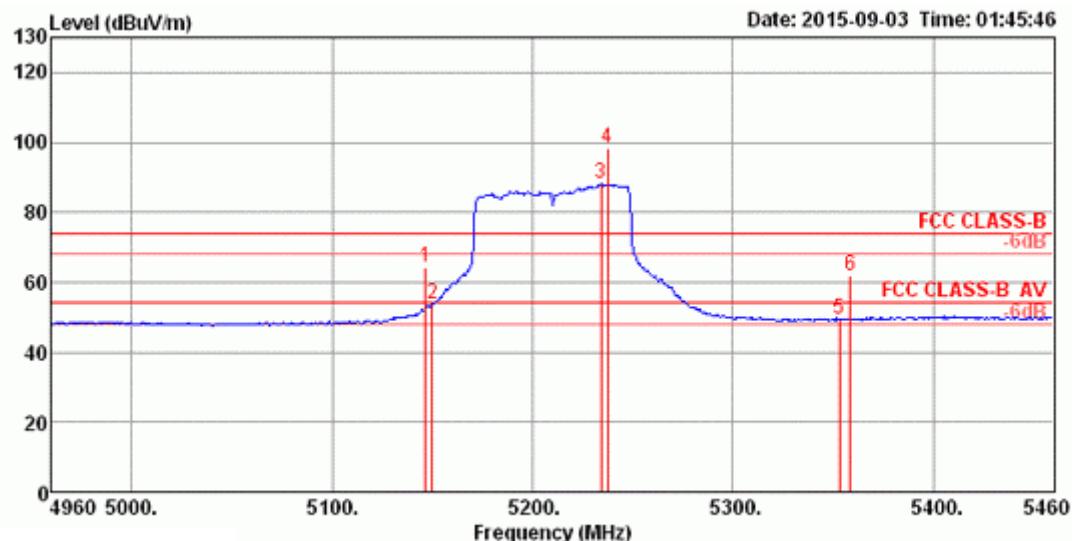
**Channel 159**


Freq	Level	Limit	Over	Read	Cable			Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	dB	dBuV	dB	dB/m	dB	deg
1	5713.00	66.53	68.20	-1.67	62.03	4.49	34.52	34.51	1	115	Peak	VERTICAL
2	5725.00	69.90	78.20	-8.30	65.34	4.50	34.57	34.51	1	115	Peak	VERTICAL
3	5782.60	109.88			105.16	4.52	34.73	34.53	1	115	Peak	VERTICAL
4	5784.20	99.38			94.66	4.52	34.73	34.53	1	115	Average	VERTICAL
5	5851.80	75.55	78.20	-2.65	70.62	4.54	34.93	34.54	1	115	Peak	VERTICAL
6	5865.40	68.00	68.20	-0.20	63.00	4.55	34.99	34.54	1	115	Peak	VERTICAL

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

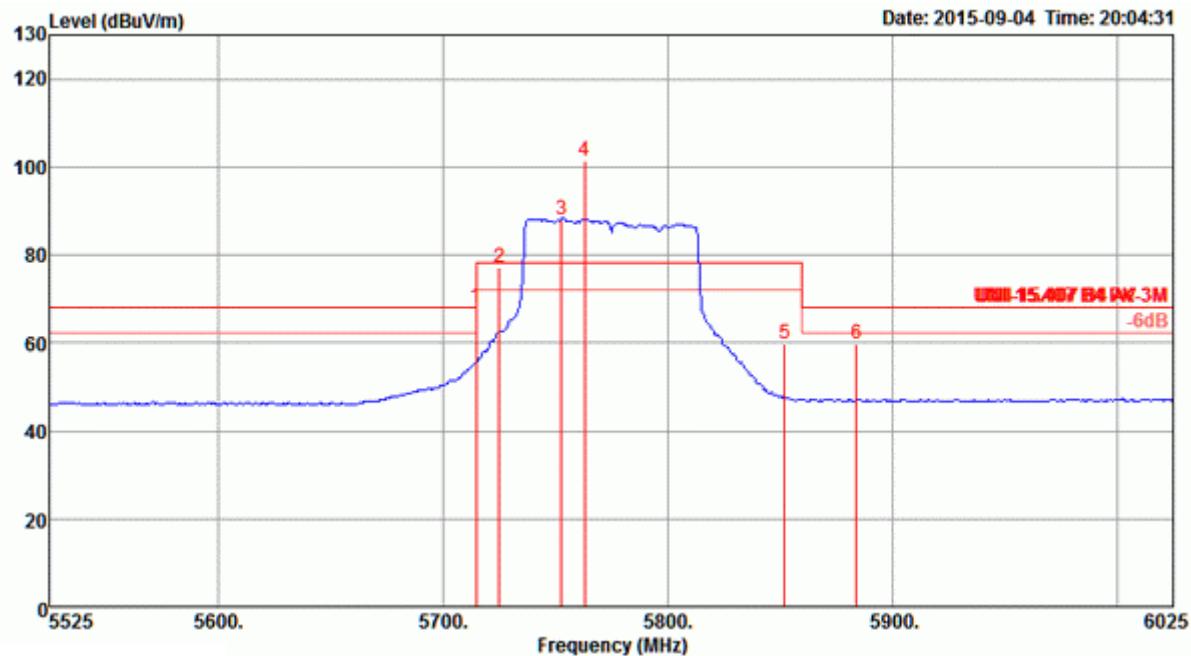
Temperature	26°C	Humidity	57%
Test Engineer	Roki Liu	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 42, 155 / Chain 9

**Channel 42**


Freq	Level	Limit Line	Over Limit	Read Level	Cable			Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor						
1	5146.38	64.45	74.00	-9.55	57.55	6.21	33.74	33.05	100	21	Peak	VERTICAL	
2	5150.00	53.81	54.00	-0.19	46.91	6.21	33.74	33.05	100	21	Average	VERTICAL	
3	5235.88	88.03			80.91	6.30	33.87	33.05	100	21	Average	VERTICAL	
4	5237.50	98.20			91.08	6.30	33.87	33.05	100	21	Peak	VERTICAL	
5	5352.89	49.39	54.00	-4.61	41.92	6.47	34.06	33.06	100	21	Average	VERTICAL	
6	5358.68	61.94	74.00	-12.06	54.47	6.47	34.06	33.06	100	21	Peak	VERTICAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

**Channel 155**


Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	T/Pos	A/Pos	Remark	Pol/Phase
					Line	Limit	Level						
1	5715.00	68.08	68.20	-0.12	63.58	4.49	34.52	34.51	18	100	Peak	VERTICAL	
2	5725.00	77.05	78.20	-1.15	72.49	4.50	34.57	34.51	18	100	Peak	VERTICAL	
3	5753.00	88.10			83.43	4.51	34.68	34.52	18	100	Average	VERTICAL	
4	5763.00	101.42			96.76	4.51	34.68	34.53	18	100	Peak	VERTICAL	
5	5852.00	59.73	78.20	-18.47	54.80	4.54	34.93	34.54	18	100	Peak	VERTICAL	
6	5884.00	59.82	68.20	-8.38	54.78	4.55	35.04	34.55	18	100	Peak	VERTICAL	

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

Note: Both antenna polarizations have been tested and only the worst case was recorded in test report.

Note:

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

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

## 4.8. Frequency Stability Measurement

### 4.8.1. Limit

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

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

### 4.8.2. Measuring Instruments and Setting

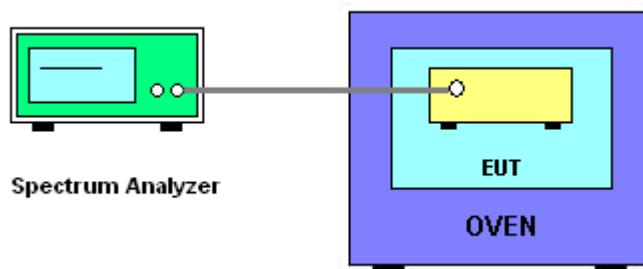
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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

### 4.8.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5.  $f_c$  is declaring of channel frequency. Then the frequency error formula is  $(f_c-f)/f_c \times 10^6$  ppm and the limit is less than  $\pm 20$  ppm (IEEE 802.11n specification).
6. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
7. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
8. Extreme temperature is  $0^\circ\text{C} \sim 40^\circ\text{C}$ .

### 4.8.4. Test Setup Layout



#### 4.8.5. Test Deviation

There is no deviation with the original standard.

#### 4.8.6. EUT Operation during Test

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

#### 4.8.7. Test Result of Frequency Stability

Temperature	25°C	Humidity	45%
Test Engineer	Mars Lin	Test Date	Sep. 04, 2015 ~ Dec. 22, 2015

##### For Radio 2

Mode: 20 MHz / Chain 6

##### Voltage vs. Frequency Stability

Voltage (V)	Measurement Frequency (MHz)			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5199.9946	5199.9935	5199.9920	5199.9900
110.00	5199.9934	5199.9921	5199.9905	5199.9886
93.50	5199.9920	5199.9911	5199.9897	5199.9879
Max. Deviation (MHz)	0.0080	0.0089	0.0103	0.0121
Max. Deviation (ppm)	1.53	1.71	1.97	2.32
Result	Complies			

##### Temperature vs. Frequency Stability

Temperature (°C)	Measurement Frequency (MHz)			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5199.9959	5199.9945	5199.9926	5199.9904
10	5199.9946	5199.9933	5199.9918	5199.9900
20	5199.9934	5199.9921	5199.9905	5199.9886
30	5199.9920	5199.9909	5199.9895	5199.9879
40	5199.9905	5199.9892	5199.9876	5199.9857
Max. Deviation (MHz)	0.0112	0.0124	0.0139	0.0162
Max. Deviation (ppm)	2.15	2.38	2.67	3.11
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage		Measurement Frequency (MHz)			
(V)		5785 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
126.50	5784.9951	5784.9940	5784.9925	5784.9905	
110.00	5784.9939	5784.9926	5784.9910	5784.9891	
93.50	5784.9925	5784.9916	5784.9902	5784.9884	
Max. Deviation (MHz)	0.0075	0.0084	0.0098	0.0116	
Max. Deviation (ppm)	1.29	1.45	1.69	2.00	
Result	Complies				

**Temperature vs. Frequency Stability**

Temperature		Measurement Frequency (MHz)			
( $^{\circ}$ C)		5785 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
0	5784.9964	5784.9950	5784.9931	5784.9909	
10	5784.9951	5784.9938	5784.9923	5784.9905	
20	5784.9939	5784.9926	5784.9910	5784.9891	
30	5784.9925	5784.9914	5784.9900	5784.9884	
40	5784.9910	5784.9897	5784.9881	5784.9862	
Max. Deviation (MHz)	0.0107	0.0119	0.0134	0.0157	
Max. Deviation (ppm)	1.85	2.05	2.31	2.71	
Result	Complies				

**Mode: 40 MHz / Chain 6**
**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5189.9964	5189.9953	5189.9938	5189.9918
110.00	5189.9952	5189.9939	5189.9923	5189.9904
93.50	5189.9938	5189.9929	5189.9915	5189.9897
Max. Deviation (MHz)	0.0062	0.0071	0.0085	0.0103
Max. Deviation (ppm)	1.19	1.36	1.63	1.98
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
( $^{\circ}$ C)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5189.9977	5189.9963	5189.9944	5189.9922
10	5189.9964	5189.9951	5189.9936	5189.9918
20	5189.9952	5189.9939	5189.9923	5189.9904
30	5189.9938	5189.9927	5189.9913	5189.9897
40	5189.9923	5189.9910	5189.9894	5189.9875
Max. Deviation (MHz)	0.0094	0.0106	0.0121	0.0144
Max. Deviation (ppm)	1.81	2.04	2.33	2.77
Result	Complies			

## Voltage vs. Frequency Stability

Voltage		Measurement Frequency (MHz)			
(V)		5755 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
126.50	5754.9951	5754.9940	5754.9925	5754.9905	
110.00	5754.9939	5754.9926	5754.9910	5754.9891	
93.50	5754.9925	5754.9916	5754.9902	5754.9884	
Max. Deviation (MHz)	0.0075	0.0084	0.0098	0.0116	
Max. Deviation (ppm)	1.30	1.46	1.70	2.01	
Result	Complies				

## Temperature vs. Frequency Stability

Temperature		Measurement Frequency (MHz)			
( $^{\circ}$ C)		5755 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
0	5754.9964	5754.9950	5754.9931	5754.9909	
10	5754.9951	5754.9938	5754.9923	5754.9905	
20	5754.9939	5754.9926	5754.9910	5754.9891	
30	5754.9925	5754.9914	5754.9900	5754.9884	
40	5754.9910	5754.9897	5754.9881	5754.9862	
Max. Deviation (MHz)	0.0107	0.0119	0.0134	0.0157	
Max. Deviation (ppm)	1.86	2.06	2.32	2.72	
Result	Complies				

Mode: 80 MHz / Chain 6

## Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5209.9956	5209.9945	5209.9930	5209.9910
110.00	5209.9944	5209.9931	5209.9915	5209.9896
93.50	5209.9930	5209.9921	5209.9907	5209.9889
Max. Deviation (MHz)	0.0070	0.0079	0.0093	0.0111
Max. Deviation (ppm)	1.35	1.52	1.79	2.14
Result	Complies			

## Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5209.9969	5209.9955	5209.9936	5209.9914
10	5209.9956	5209.9943	5209.9928	5209.9910
20	5209.9944	5209.9931	5209.9915	5209.9896
30	5209.9930	5209.9919	5209.9905	5209.9889
40	5209.9915	5209.9902	5209.9886	5209.9867
Max. Deviation (MHz)	0.0102	0.0114	0.0129	0.0152
Max. Deviation (ppm)	1.97	2.20	2.48	2.93
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage		Measurement Frequency (MHz)			
(V)		5775 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
126.50	5774.9948	5774.9937	5774.9922	5774.9902	5774.9888
110.00	5774.9936	5774.9923	5774.9907	5774.9888	5774.9881
93.50	5774.9922	5774.9913	5774.9899	5774.9881	5774.9881
Max. Deviation (MHz)	0.0078	0.0087	0.0101	0.0119	0.0119
Max. Deviation (ppm)	1.35	1.50	1.75	2.06	2.06
Result	Complies				

**Temperature vs. Frequency Stability**

Temperature		Measurement Frequency (MHz)			
( $^{\circ}$ C)		5775 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
0	5774.9961	5774.9947	5774.9928	5774.9906	5774.9888
10	5774.9948	5774.9935	5774.9920	5774.9902	5774.9888
20	5774.9936	5774.9923	5774.9907	5774.9888	5774.9881
30	5774.9922	5774.9911	5774.9897	5774.9881	5774.9881
40	5774.9907	5774.9894	5774.9878	5774.9859	5774.9859
Max. Deviation (MHz)	0.0110	0.0122	0.0137	0.0160	0.0160
Max. Deviation (ppm)	1.90	2.11	2.37	2.77	2.77
Result	Complies				

**For Radio 3**
**Mode: 20 MHz / Chain 9**
**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5200.0055	5200.0054	5200.0043	5200.0031
110.00	5200.0048	5200.0040	5200.0031	5200.0021
93.50	5200.0044	5200.0039	5200.0033	5200.0026
Max. Deviation (MHz)	<b>0.0055</b>	<b>0.0054</b>	<b>0.0043</b>	<b>0.0031</b>
Max. Deviation (ppm)	<b>1.06</b>	<b>1.04</b>	<b>0.83</b>	<b>0.60</b>
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5200 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5200.0055	5200.0042	5200.0026	5200.0007
10	5200.0051	5200.0038	5200.0022	5200.0003
20	5200.0048	5200.0044	5200.0036	5200.0024
30	5200.0046	5200.0033	5200.0017	5199.9998
40	5200.0043	5200.0030	5200.0014	5199.9995
Max. Deviation (MHz)	<b>0.0055</b>	<b>0.0044</b>	<b>0.0036</b>	<b>0.0024</b>
Max. Deviation (ppm)	<b>1.06</b>	<b>0.85</b>	<b>0.69</b>	<b>0.46</b>
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage		Measurement Frequency (MHz)			
(V)		5785 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
126.50	5785.0049	5785.0048	5785.0037	5785.0025	
110.00	5785.0042	5785.0034	5785.0025	5785.0015	
93.50	5785.0038	5785.0033	5785.0027	5785.0020	
Max. Deviation (MHz)	0.0049	0.0048	0.0037	0.0025	
Max. Deviation (ppm)	0.85	0.83	0.64	0.43	
Result	Complies				

**Temperature vs. Frequency Stability**

Temperature		Measurement Frequency (MHz)			
( $^{\circ}$ C)		5785 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
0	5785.0049	5785.0036	5785.0020	5785.0001	
10	5785.0045	5785.0032	5785.0016	5784.9997	
20	5785.0042	5785.0038	5785.0030	5785.0018	
30	5785.0040	5785.0027	5785.0011	5784.9992	
40	5785.0037	5785.0024	5785.0008	5784.9989	
Max. Deviation (MHz)	0.0049	0.0038	0.0030	0.0018	
Max. Deviation (ppm)	0.85	0.66	0.52	0.31	
Result	Complies				

**Mode: 40 MHz / Chain 9**
**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5190.0099	5190.0098	5190.0087	5190.0075
110.00	5190.0092	5190.0084	5190.0075	5190.0065
93.50	5190.0088	5190.0083	5190.0077	5190.0070
Max. Deviation (MHz)	0.0099	0.0098	0.0087	0.0075
Max. Deviation (ppm)	1.91	1.89	1.68	1.45
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5190 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5190.0101	5190.0088	5190.0072	5190.0053
10	5190.0096	5190.0083	5190.0067	5190.0048
20	5190.0092	5190.0088	5190.0080	5190.0068
30	5190.0089	5190.0076	5190.0060	5190.0041
40	5190.0085	5190.0072	5190.0056	5190.0037
Max. Deviation (MHz)	0.0101	0.0088	0.0080	0.0068
Max. Deviation (ppm)	1.95	1.70	1.54	1.31
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage		Measurement Frequency (MHz)			
(V)		5755 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
126.50	5755.0061	5755.0060	5755.0049	5755.0037	
110.00	5755.0054	5755.0046	5755.0037	5755.0027	
93.50	5755.0050	5755.0045	5755.0039	5755.0032	
Max. Deviation (MHz)	<b>0.0061</b>	<b>0.0060</b>	<b>0.0049</b>	<b>0.0037</b>	
Max. Deviation (ppm)	<b>1.06</b>	<b>1.04</b>	<b>0.85</b>	<b>0.64</b>	
Result	Complies				

**Temperature vs. Frequency Stability**

Temperature		Measurement Frequency (MHz)			
( $^{\circ}$ C)		5755 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
0	5755.0061	5755.0048	5755.0032	5755.0013	
10	5755.0057	5755.0044	5755.0028	5755.0009	
20	5755.0054	5755.0050	5755.0042	5755.0030	
30	5755.0052	5755.0039	5755.0023	5755.0004	
40	5755.0049	5755.0036	5755.0020	5755.0001	
Max. Deviation (MHz)	<b>0.0061</b>	<b>0.0050</b>	<b>0.0042</b>	<b>0.0030</b>	
Max. Deviation (ppm)	<b>1.06</b>	<b>0.87</b>	<b>0.73</b>	<b>0.52</b>	
Result	Complies				

Mode: 80 MHz / Chain 9

## Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5210.0061	5210.0060	5210.0049	5210.0037
110.00	5210.0054	5210.0046	5210.0037	5210.0027
93.50	5210.0050	5210.0045	5210.0039	5210.0032
Max. Deviation (MHz)	0.0061	0.0060	0.0049	0.0037
Max. Deviation (ppm)	1.17	1.15	0.94	0.71
Result	Complies			

## Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5210 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
0	5210.0061	5210.0048	5210.0032	5210.0013
10	5210.0057	5210.0044	5210.0028	5210.0009
20	5210.0054	5210.0050	5210.0042	5210.0030
30	5210.0052	5210.0039	5210.0023	5210.0004
40	5210.0049	5210.0036	5210.0020	5210.0001
Max. Deviation (MHz)	0.0061	0.0050	0.0042	0.0030
Max. Deviation (ppm)	1.17	0.96	0.81	0.58
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage		Measurement Frequency (MHz)			
(V)		5775 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
126.50	5775.0069	5775.0068	5775.0057	5775.0045	
110.00	5775.0062	5775.0054	5775.0045	5775.0035	
93.50	5775.0058	5775.0053	5775.0047	5775.0040	
Max. Deviation (MHz)	0.0069	0.0068	0.0057	0.0045	
Max. Deviation (ppm)	1.19	1.18	0.99	0.78	
Result	Complies				

**Temperature vs. Frequency Stability**

Temperature		Measurement Frequency (MHz)			
( $^{\circ}$ C)		5775 MHz			
		0 Minute	2 Minute	5 Minute	10 Minute
0	5775.0059	5775.0046	5775.0030	5775.0011	
10	5775.0055	5775.0042	5775.0026	5775.0007	
20	5775.0052	5775.0048	5775.0040	5775.0028	
30	5775.0050	5775.0037	5775.0021	5775.0002	
40	5775.0047	5775.0034	5775.0018	5774.9999	
Max. Deviation (MHz)	0.0059	0.0048	0.0040	0.0028	
Max. Deviation (ppm)	1.02	0.83	0.69	0.48	
Result	Complies				

## 4.9. Antenna Requirements

### 4.9.1. Limit

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

### 4.9.2. Antenna Connector Construction

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

## 5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
EMI Test Receiver	R&S	ESCS 30	100355	9kHz ~ 2.75GHz	Apr. 22, 2015	Conduction (CO01-CB)
LISN	F.C.C.	FCC-LISN-50-16-2	04083	150kHz ~ 100MHz	Dec. 02, 2014	Conduction (CO01-CB)
LISN	Schwarzbeck	NSLK 8127	8127647	9kHz ~ 30MHz	Dec. 02, 2014	Conduction (CO01-CB)
COND Cable	Woken	Cable	01	150kHz ~ 30MHz	Dec. 03, 2014	Conduction (CO01-CB)
Software	Audix	E3	6.120210n	-	N.C.R.	Conduction (CO01-CB)
BILOG ANTENNA	Schaffner	CBL6112D&ATT-06	220218&SP-01	20MHz ~ 2GHz	Nov. 18, 2015	Radiation (03CH01-CB)
Loop Antenna	Teseq	HLA 6120	24155	9kHz - 30 MHz	Mar. 12, 2015*	Radiation (03CH01-CB)
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 28, 2014	Radiation (03CH01-CB)
Horn Antenna	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	8447D	2944A10991	0.1MHz ~ 1.3GHz	Feb. 24, 2015	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 12, 2015	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Feb. 10, 2015	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Nov. 06, 2014	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Oct. 27, 2015	Radiation (03CH01-CB)
EMI Receiver	Agilent	N9038A	MY52260123	9kHz ~ 8.4GHz	Jan. 21, 2015	Radiation (03CH01-CB)
RF Cable-low	Woken	Low Cable-1	N/A	30 MHz ~ 1 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Nov. 15, 2014	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. 15, 2014	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	1 GHz ~ 40 GHz	Nov. 15, 2014	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	1 GHz ~ 40 GHz	Nov. 15, 2014	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSP40	100979	9kHz~40GHz	Dec. 12, 2014	Conducted (TH01-CB)
Spectrum Analyzer	R&S	FSP40	100142	9kHz~40GHz	Oct. 13, 2015	Conducted (TH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 12, 2014	Conducted (TH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 09, 2015	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 02, 2015	Conducted (TH01-CB)

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
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.

“\*” Calibration Interval of instruments listed above is two years.

N.C.R means Non-Calibration required.

## 6. MEASUREMENT UNCERTAINTY

Test Items	Uncertainty	Remark
Conducted Emission (150kHz ~ 30MHz)	3.2 dB	Confidence levels of 95%
Radiated Emission (30MHz ~ 1,000MHz)	3.6 dB	Confidence levels of 95%
Radiated Emission (1GHz ~ 18GHz)	3.7 dB	Confidence levels of 95%
Radiated Emission (18GHz ~ 40GHz)	3.5 dB	Confidence levels of 95%
Conducted Emission	1.7 dB	Confidence levels of 95%