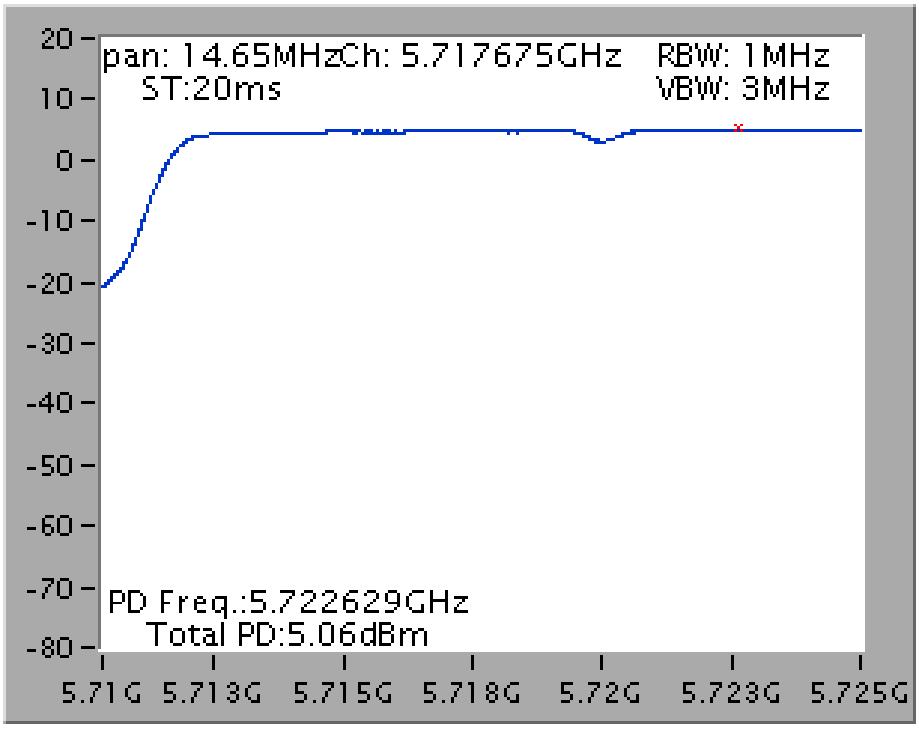
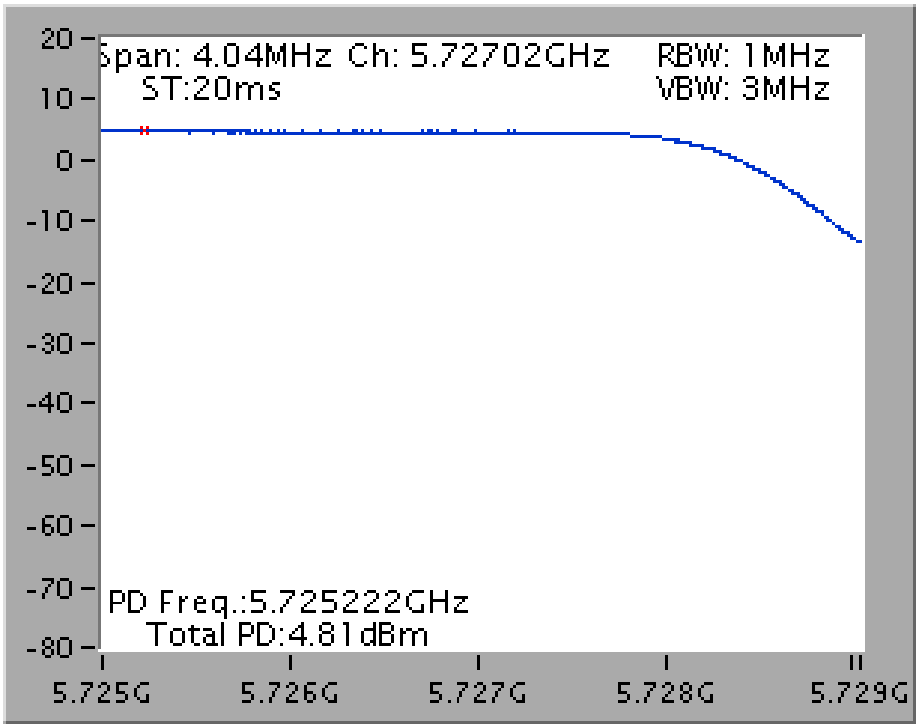
Straddle Channel

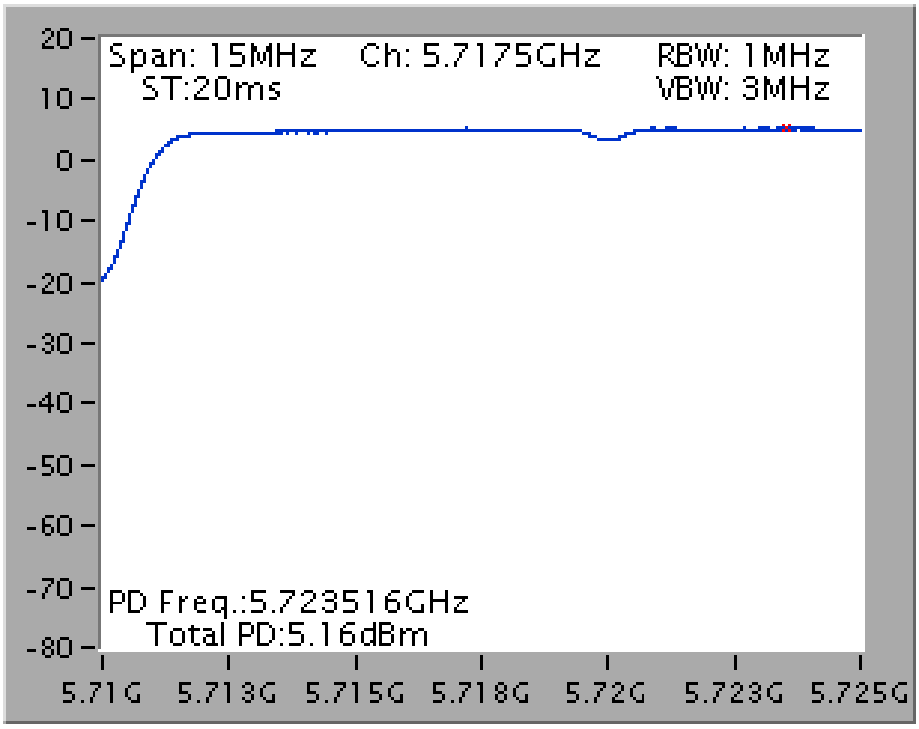
Power Density Plot on Configuration IEEE 802.11a / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 2C)



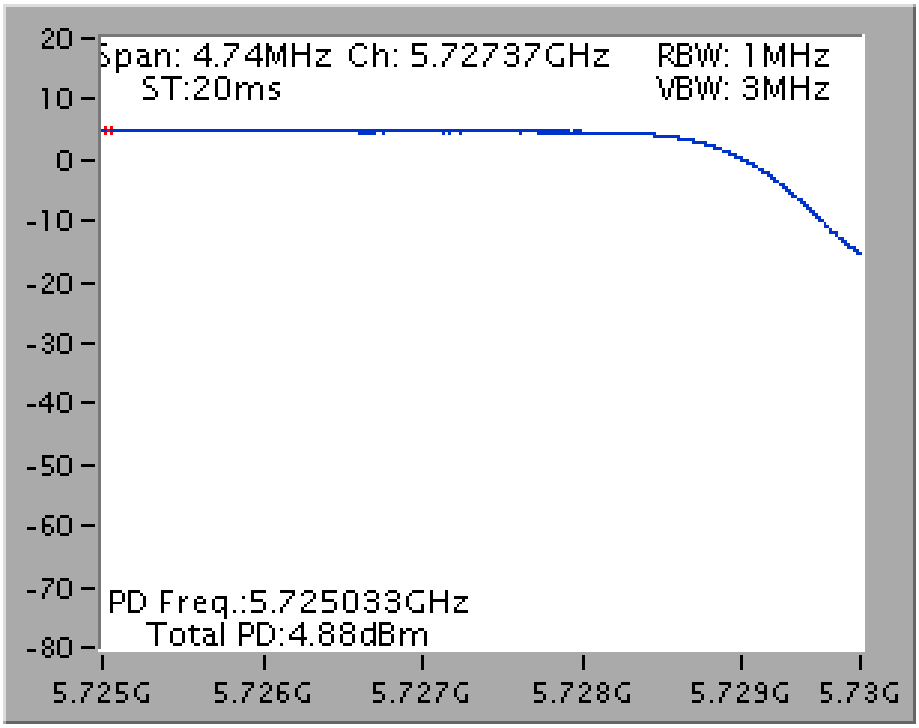
Power Density Plot on Configuration IEEE 802.11a / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 3)



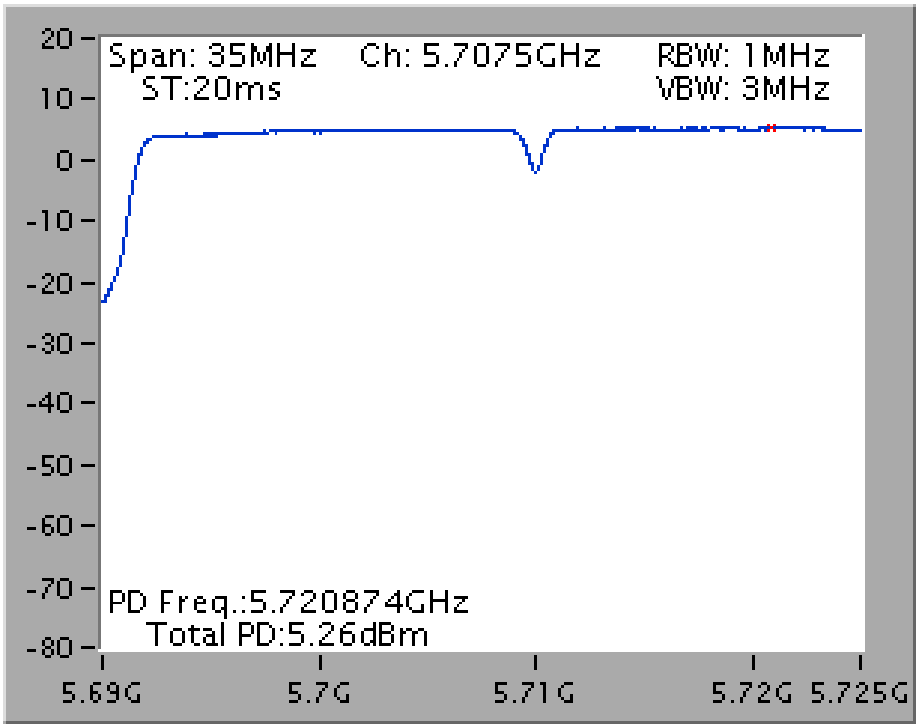
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 2C)



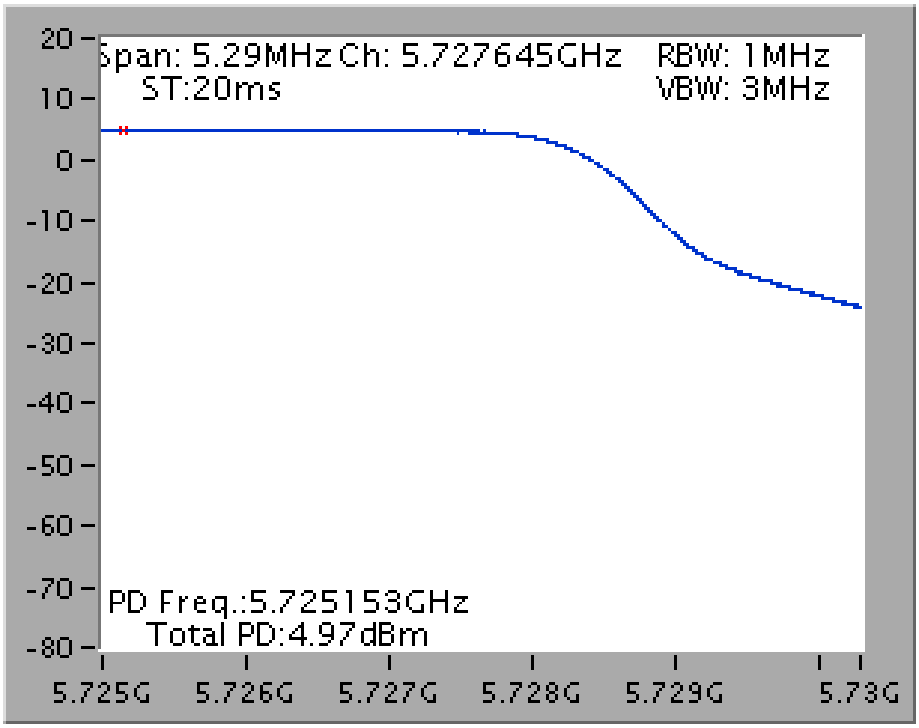
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 3)



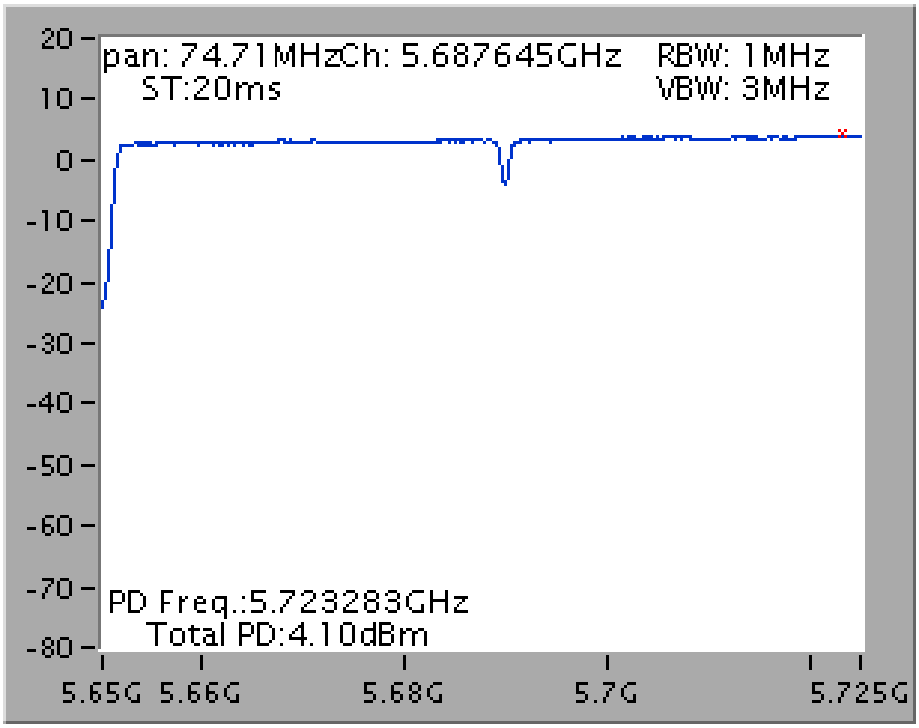
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5710 MHz (UNII 2C)



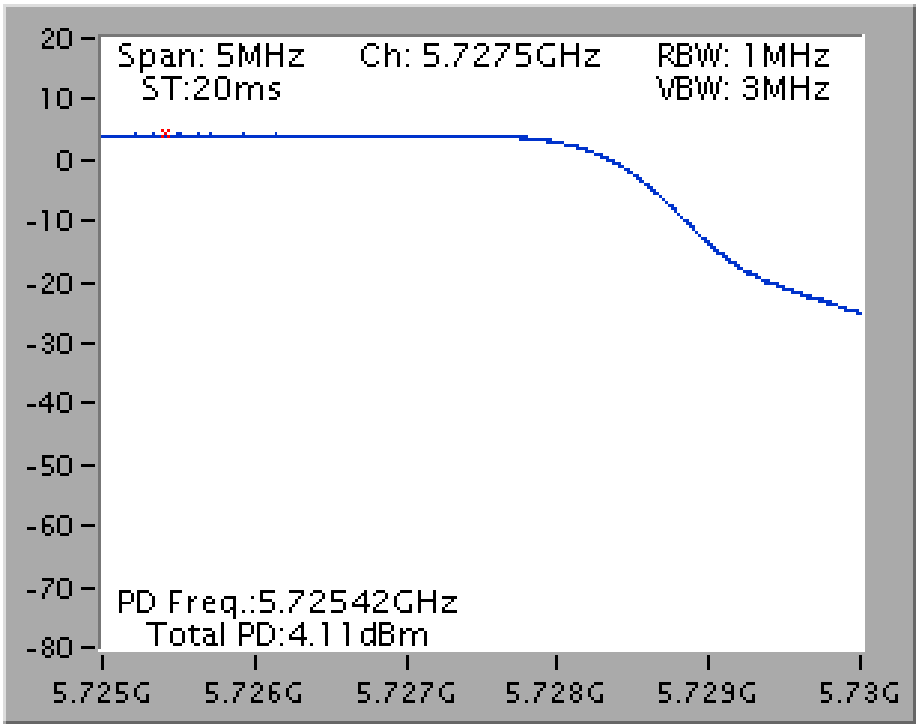
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5710 MHz (UNII 3)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5690 MHz (UNII 2C)



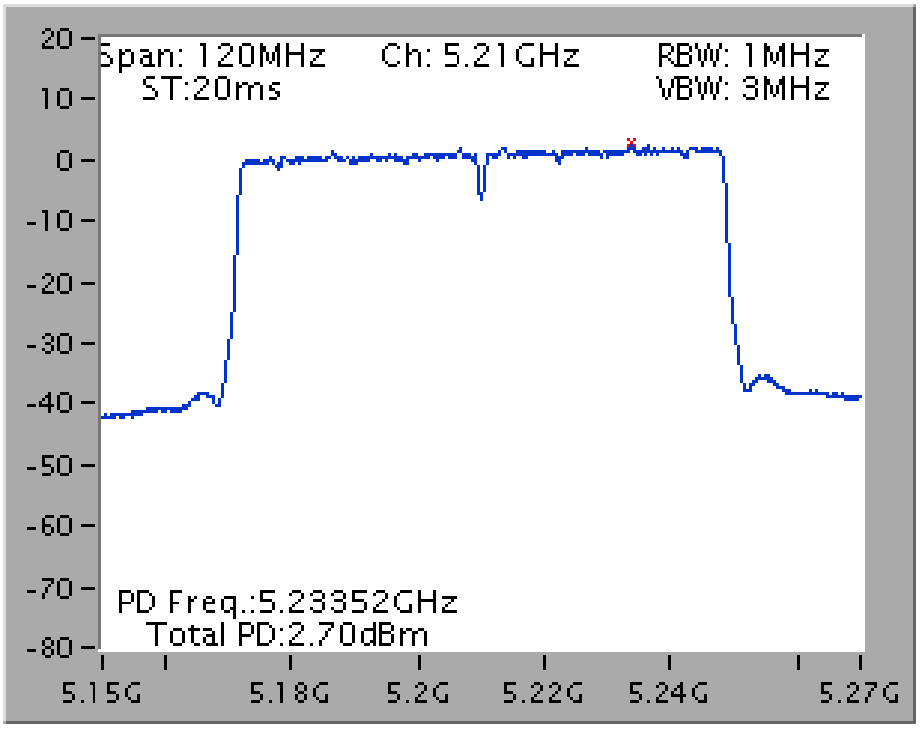
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5690 MHz (UNII 3)



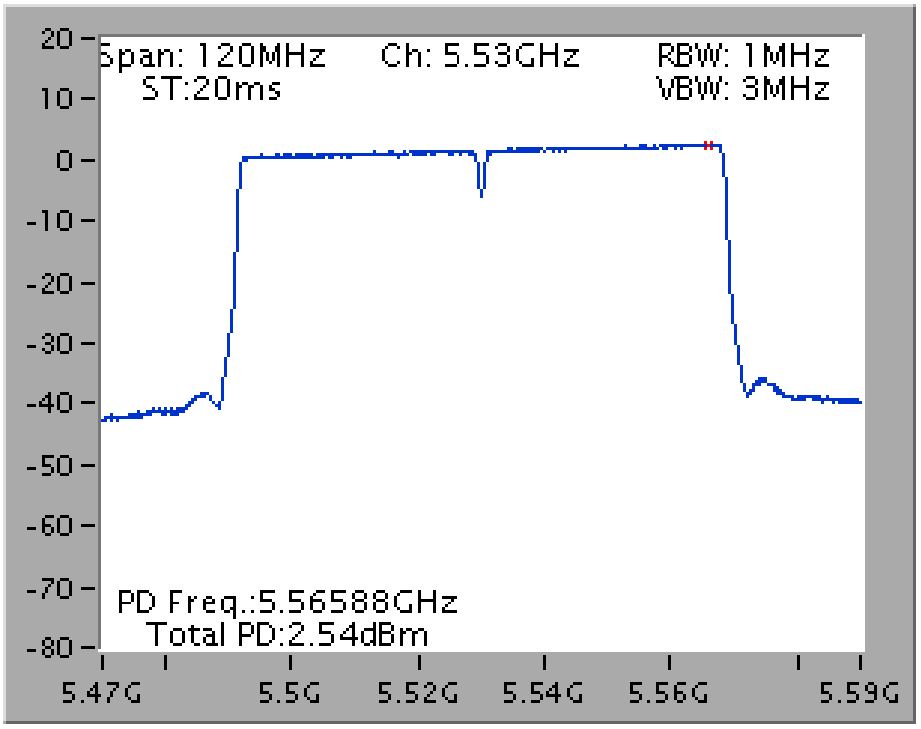
802.11ac MCS0/Nss2 VHT80+80

Type 1

Power Density Plot on Chain 6 + Chain 7 / 5210 MHz

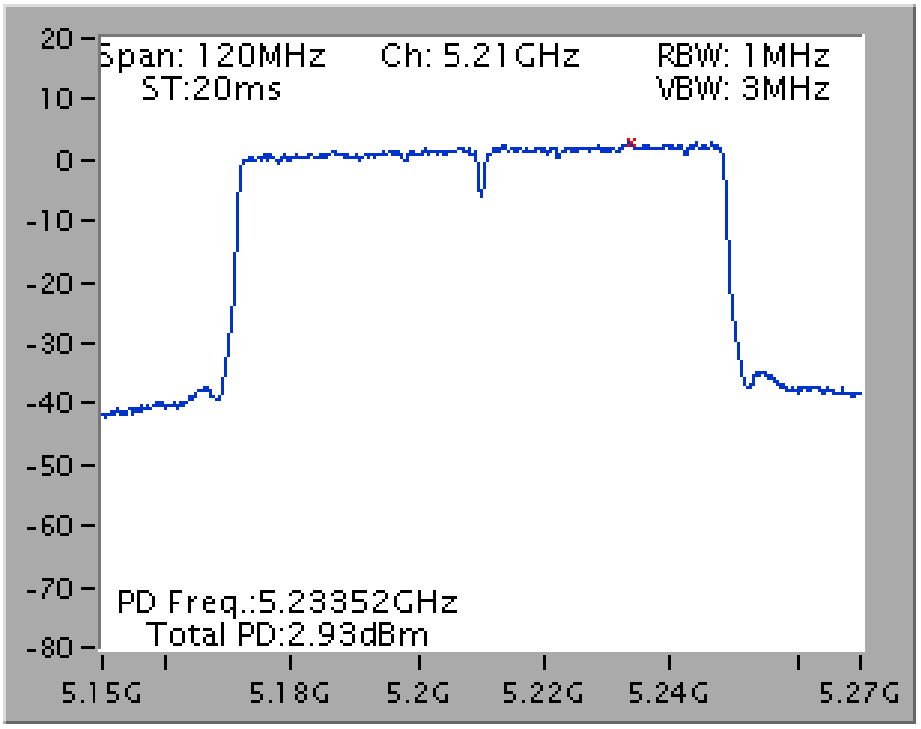


Power Density Plot on Chain 5 + Chain 8 / 5530 MHz

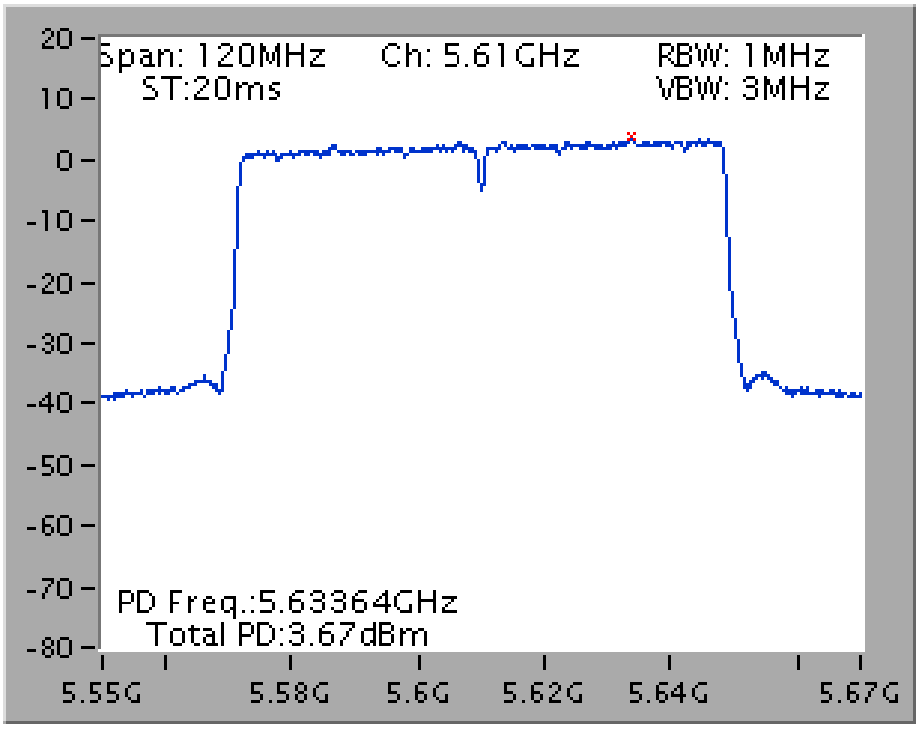


Type 2

Power Density Plot on Chain 6 + Chain 7 / 5210 MHz

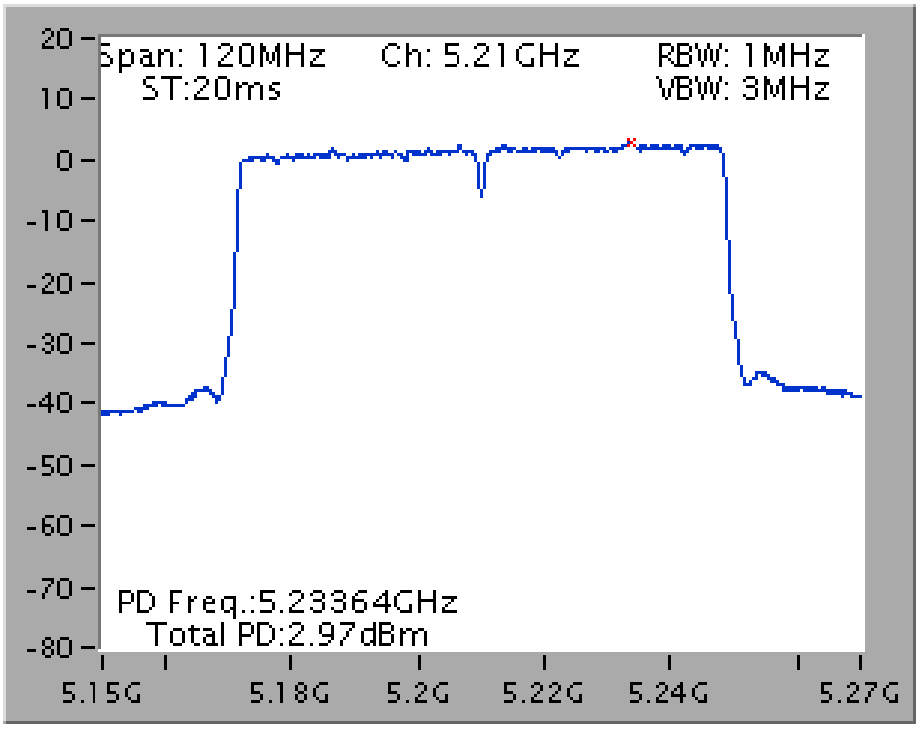


Power Density Plot on Chain 5 + Chain 8 / 5610 MHz

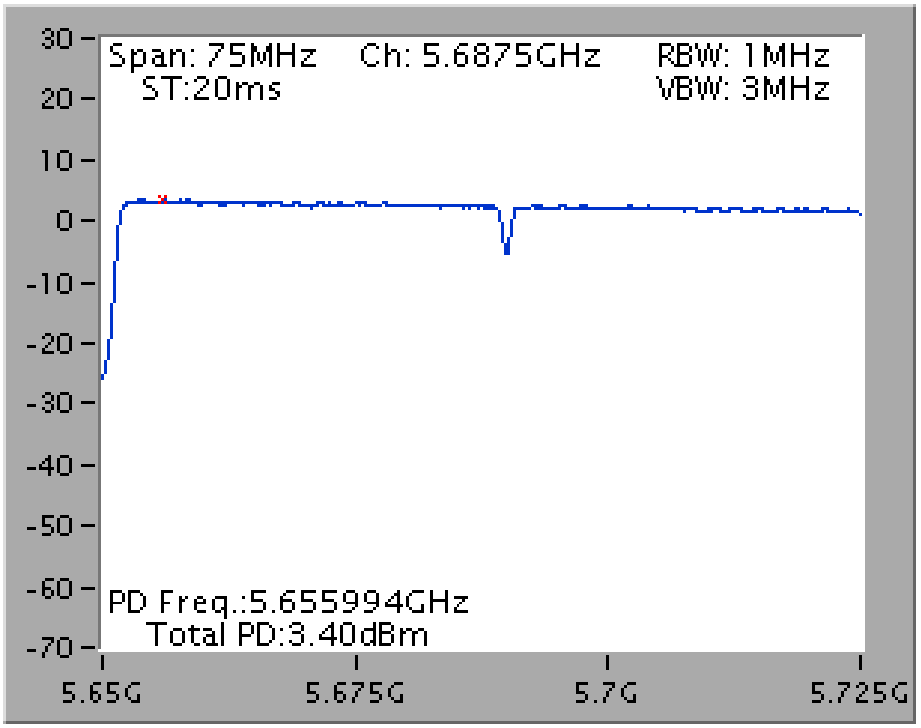


Type 3

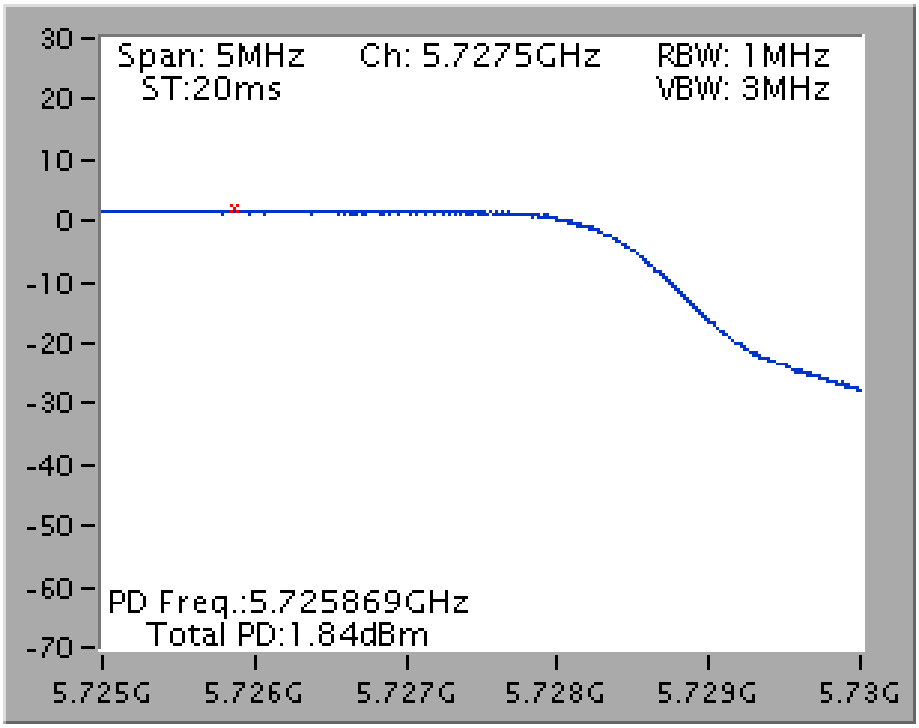
Power Density Plot on Chain 6 + Chain 7 / 5210 MHz



Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 2C)

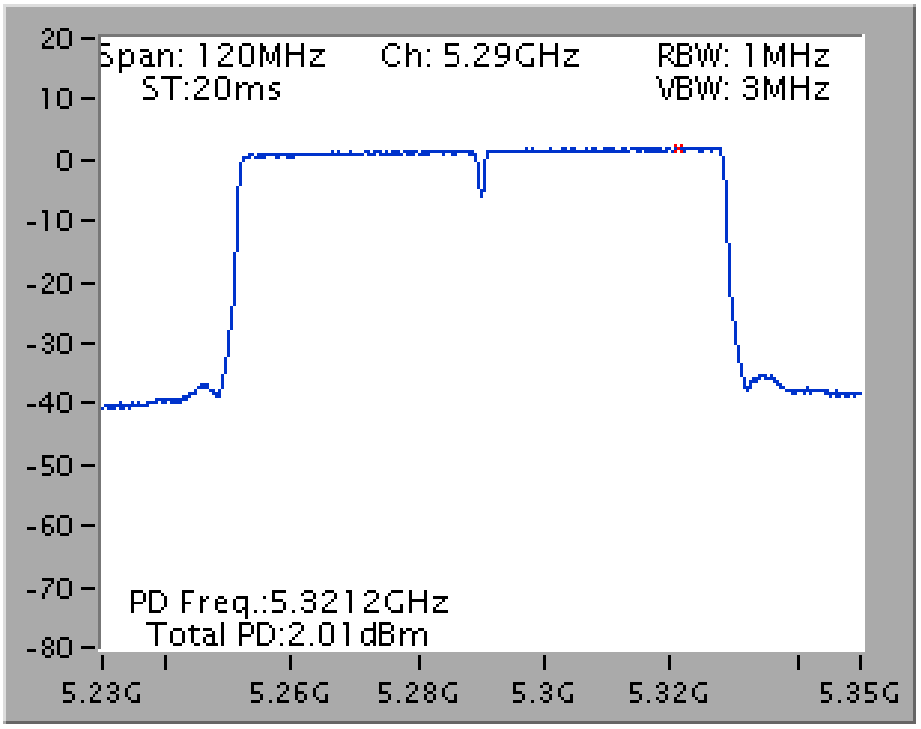


Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)

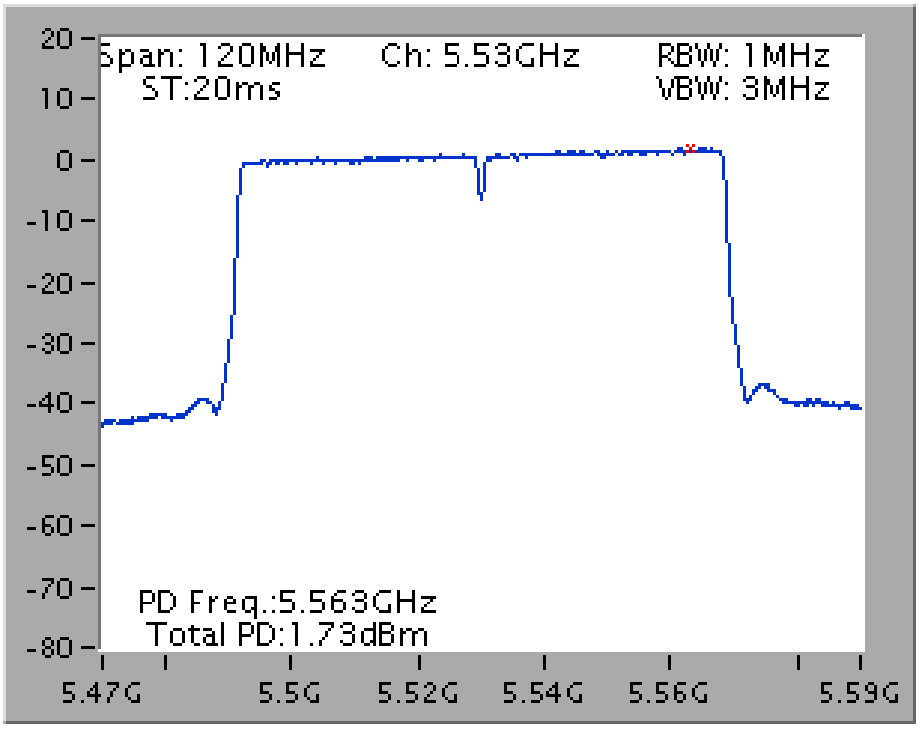


Type 4

Power Density Plot on Chain 6 + Chain 7 / 5290 MHz

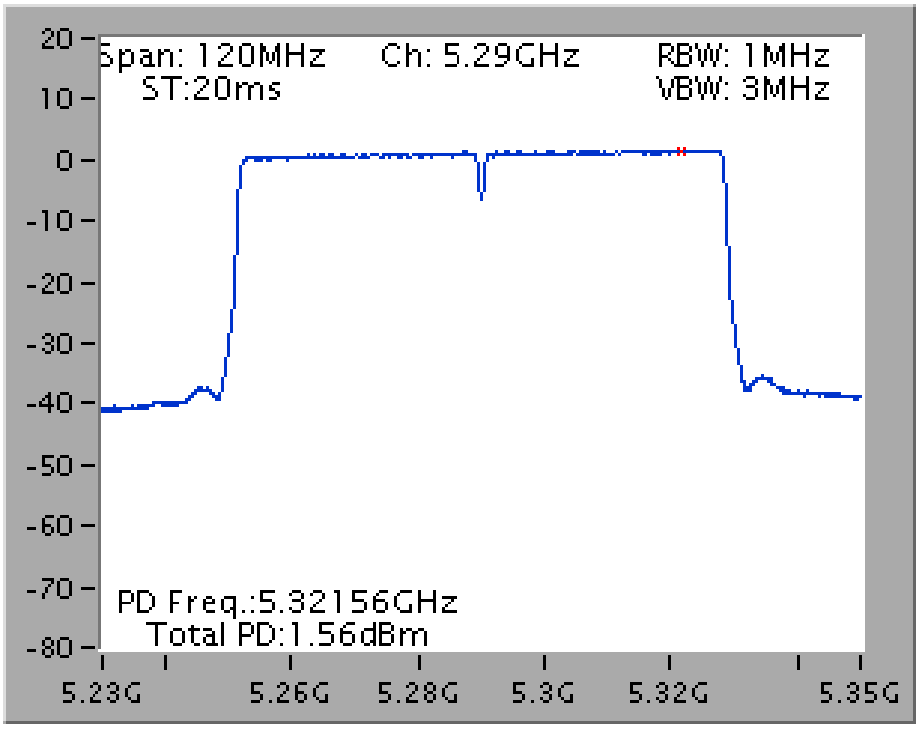


Power Density Plot on Chain 5 + Chain 8 / 5530 MHz

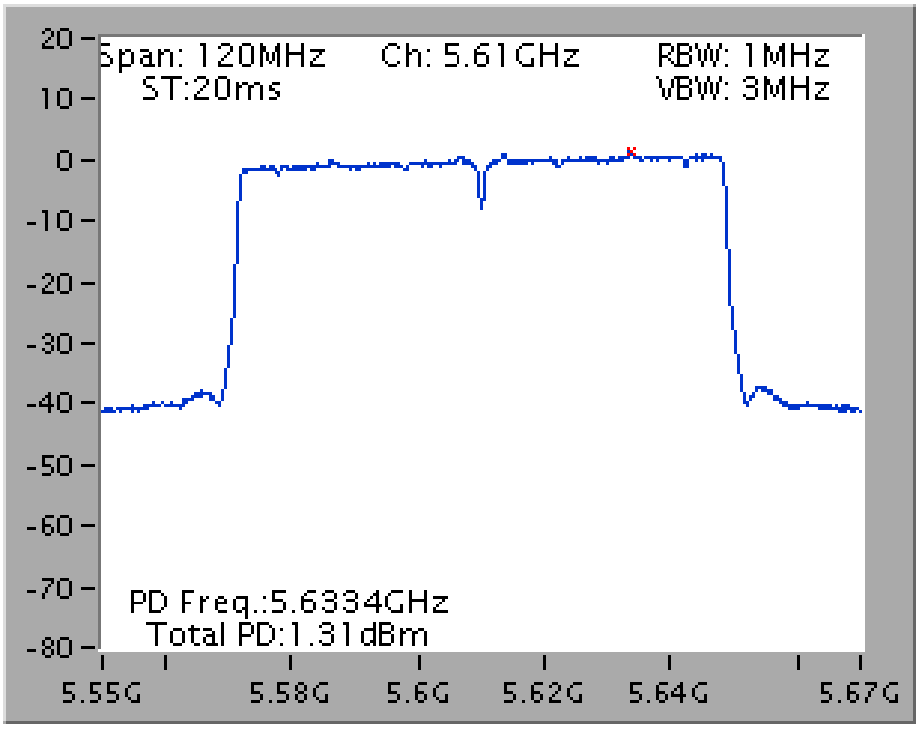


Type 5

Power Density Plot on Chain 6 + Chain 7 / 5290 MHz

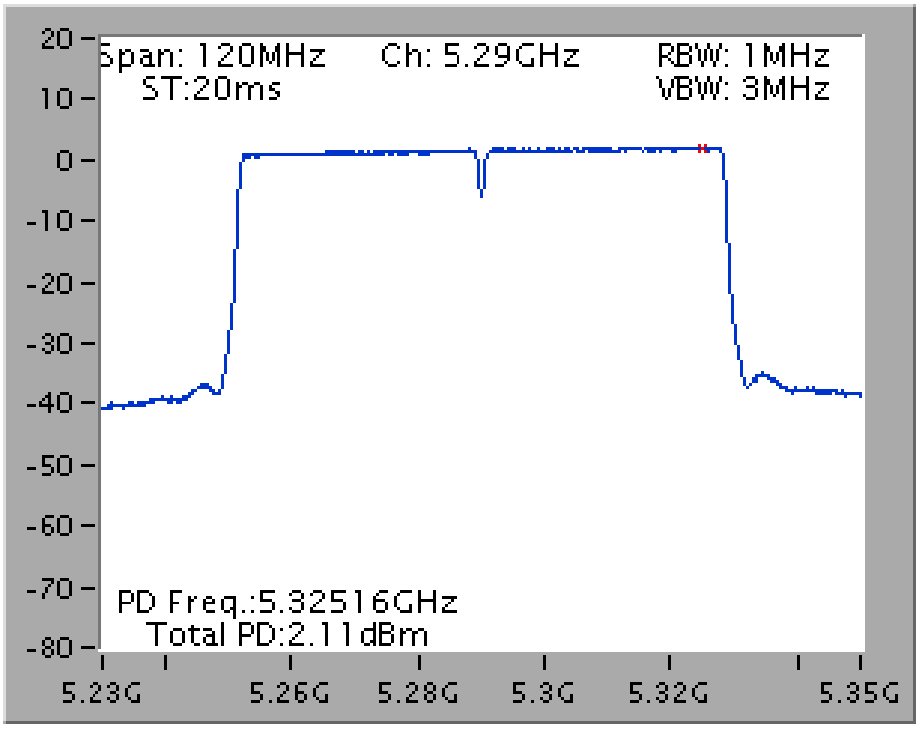


Power Density Plot on Chain 5 + Chain 8 / 5610 MHz

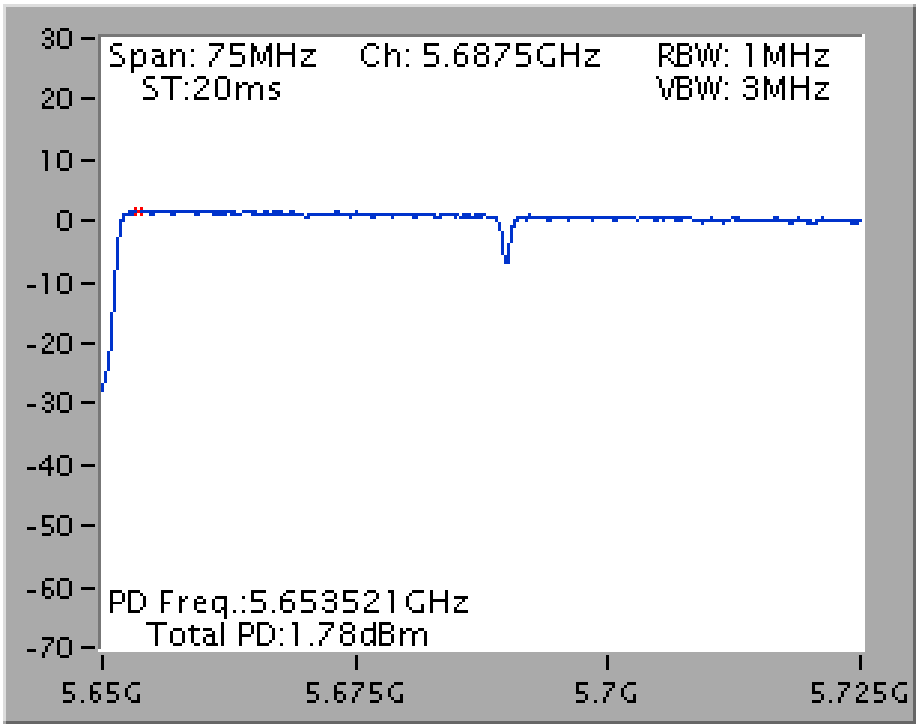


Type 6

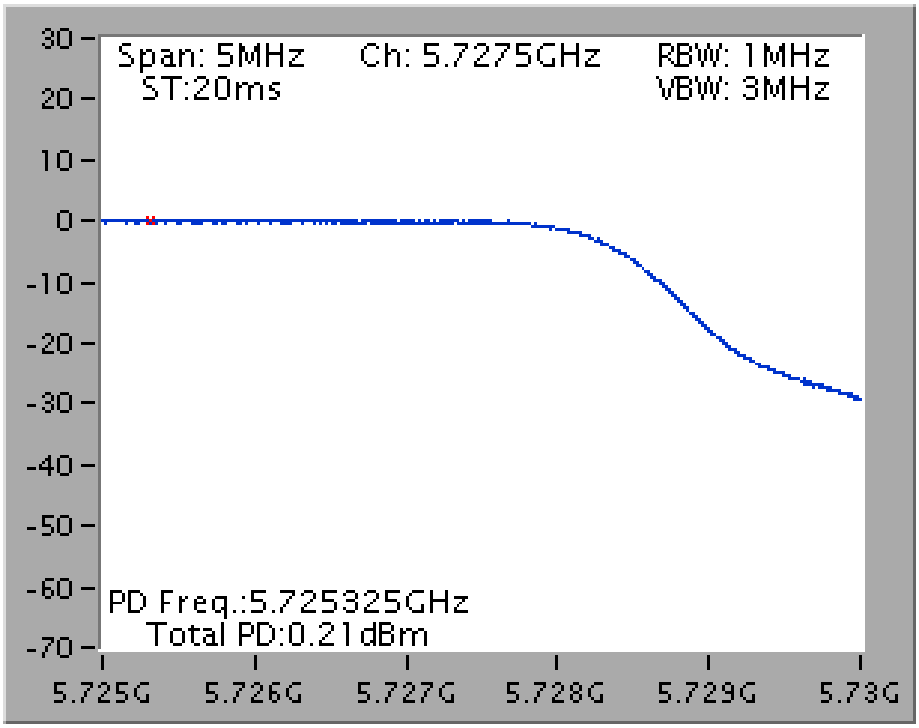
Power Density Plot on Chain 6 + Chain 7 / 5290 MHz



Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 2C)

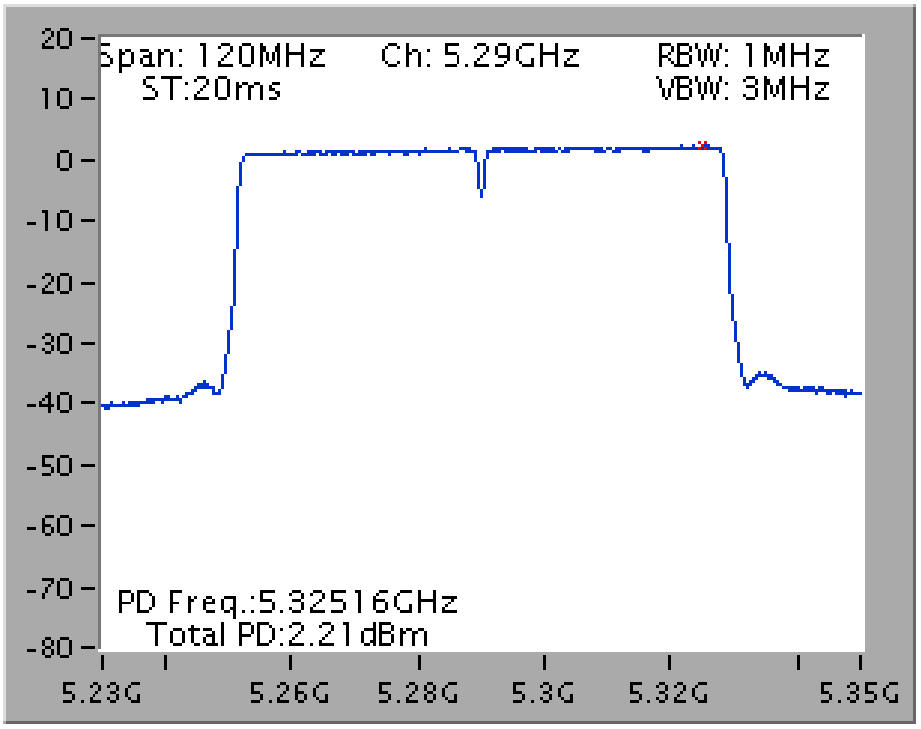


Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)

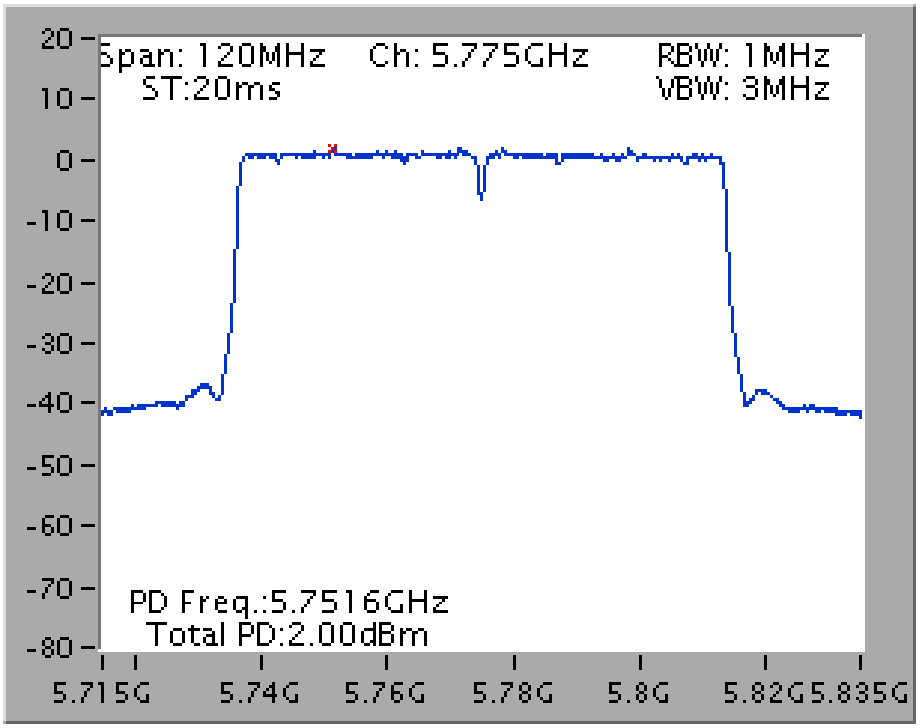


Type 7

Power Density Plot on Chain 6 + Chain 7 / 5290 MHz

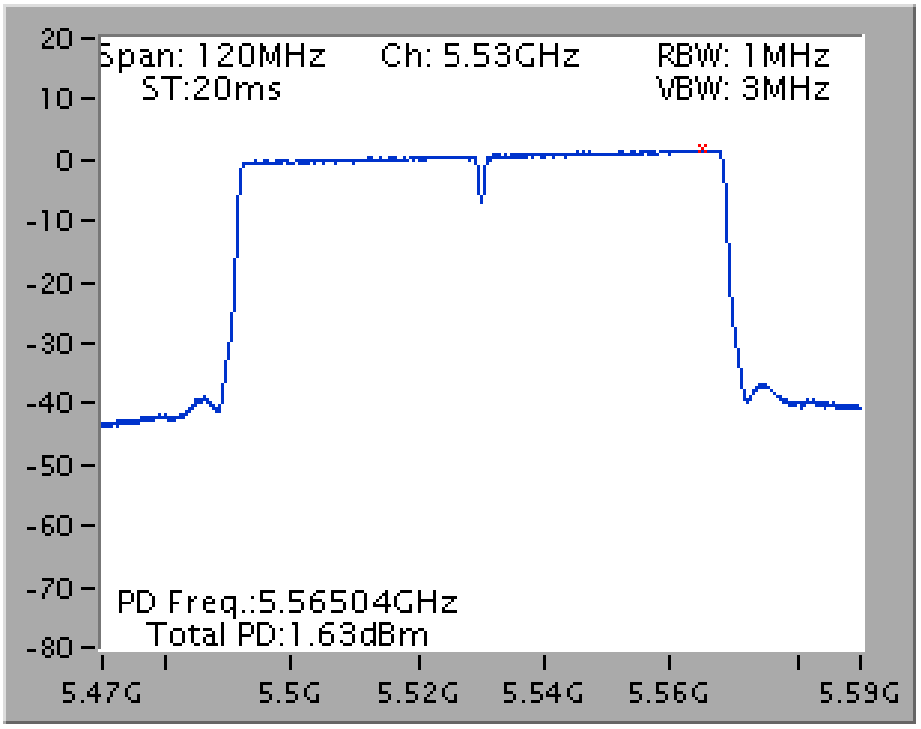


Power Density Plot on Chain 5 + Chain 8 / 5775 MHz

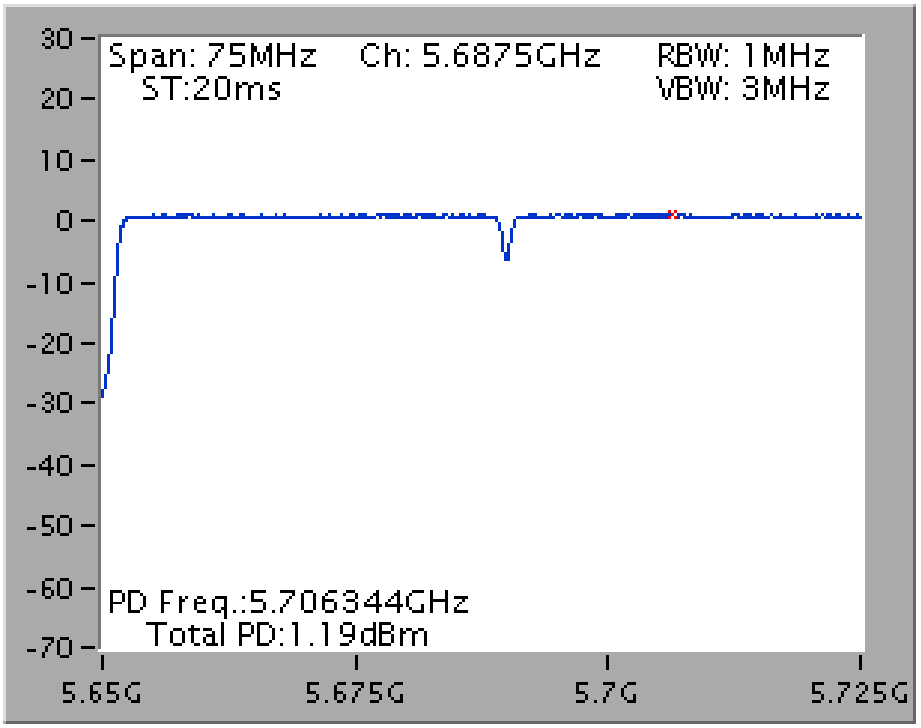


Type 8

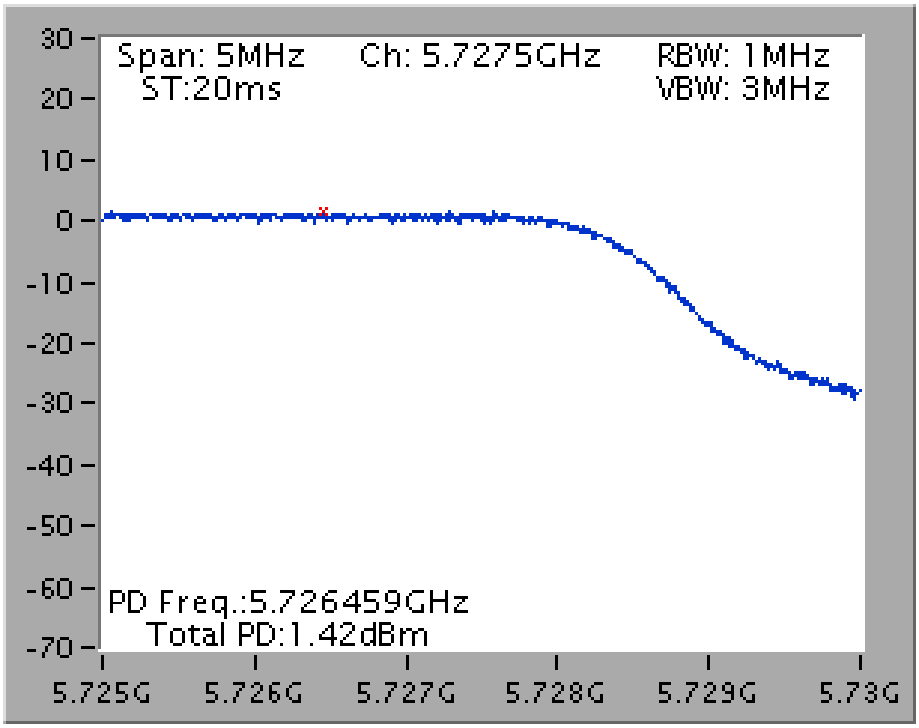
Power Density Plot on Chain 6 + Chain 7 / 5530 MHz



Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 2C)

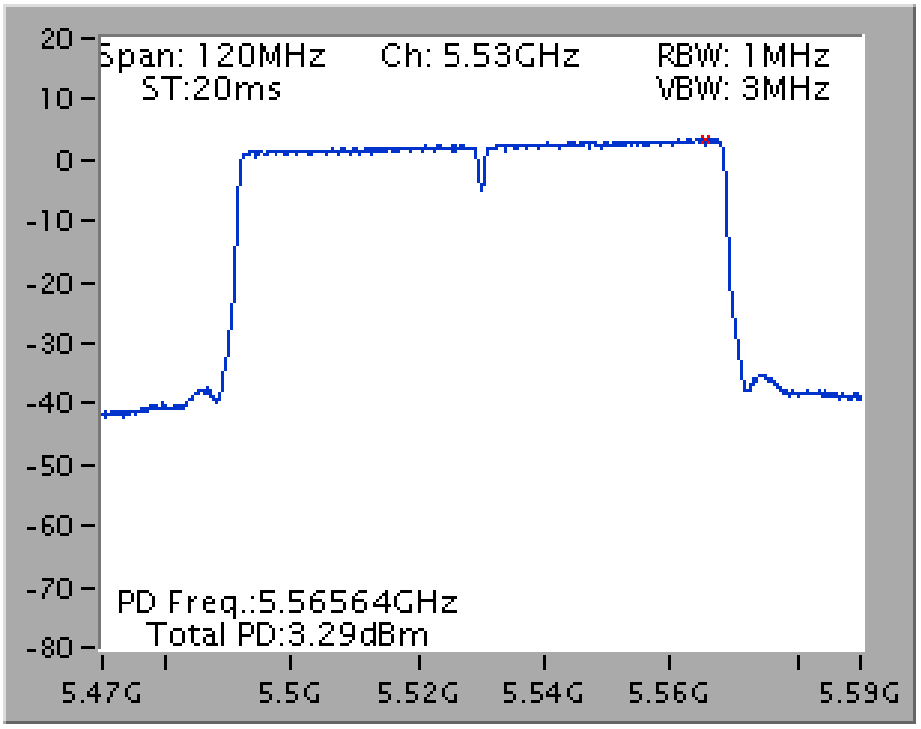


Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)

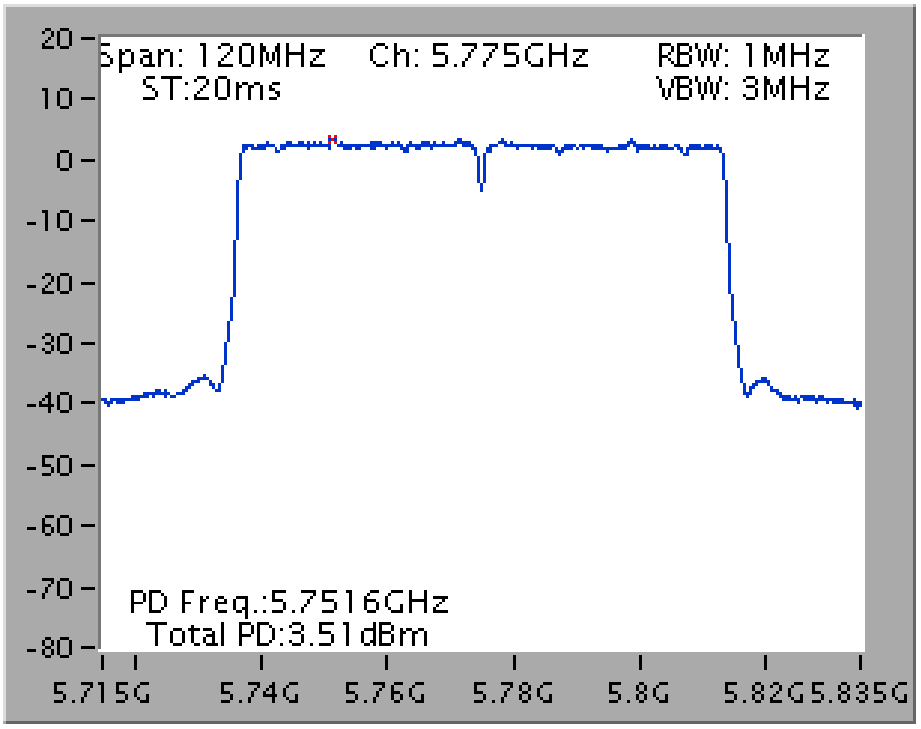


Type 9

Power Density Plot on Chain 6 + Chain 7 / 5530 MHz

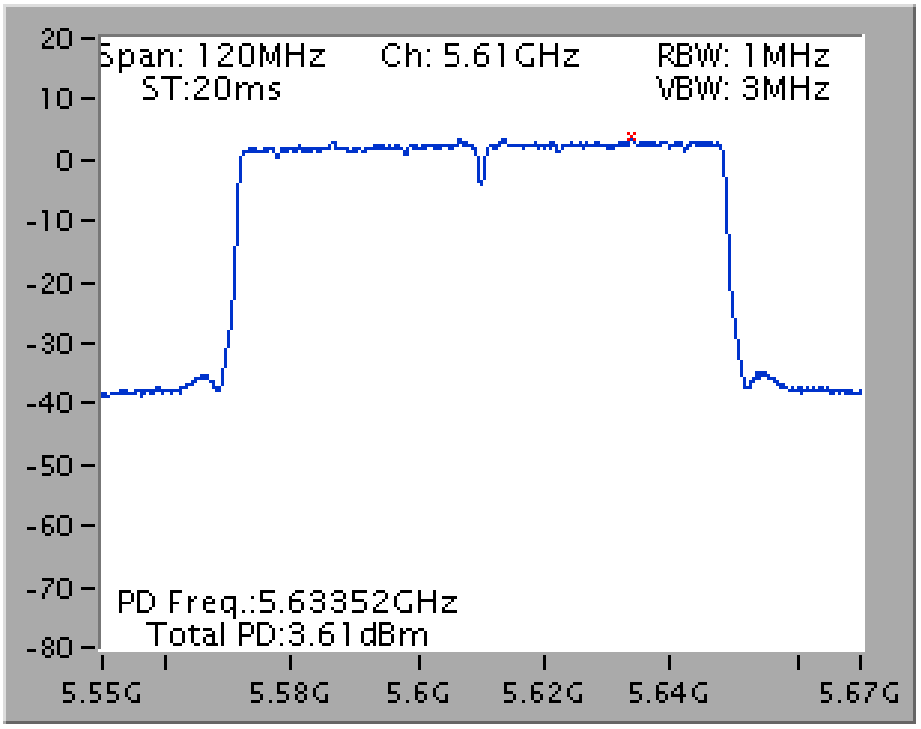


Power Density Plot on Chain 5 + Chain 8 / 5775 MHz

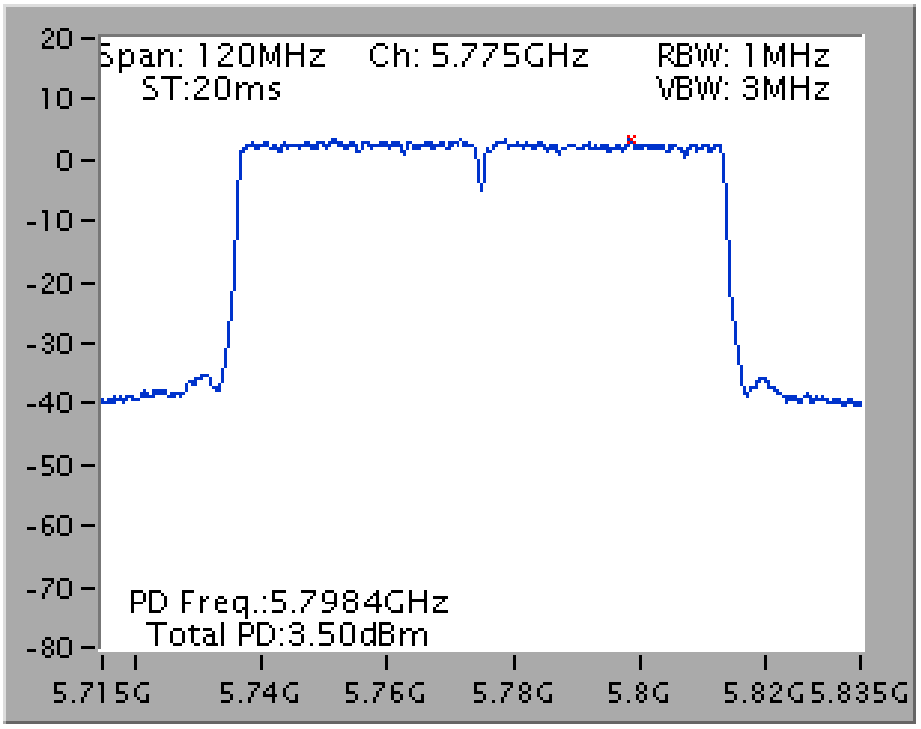


Type 10

Power Density Plot on Chain 6 + Chain 7 / 5610 MHz

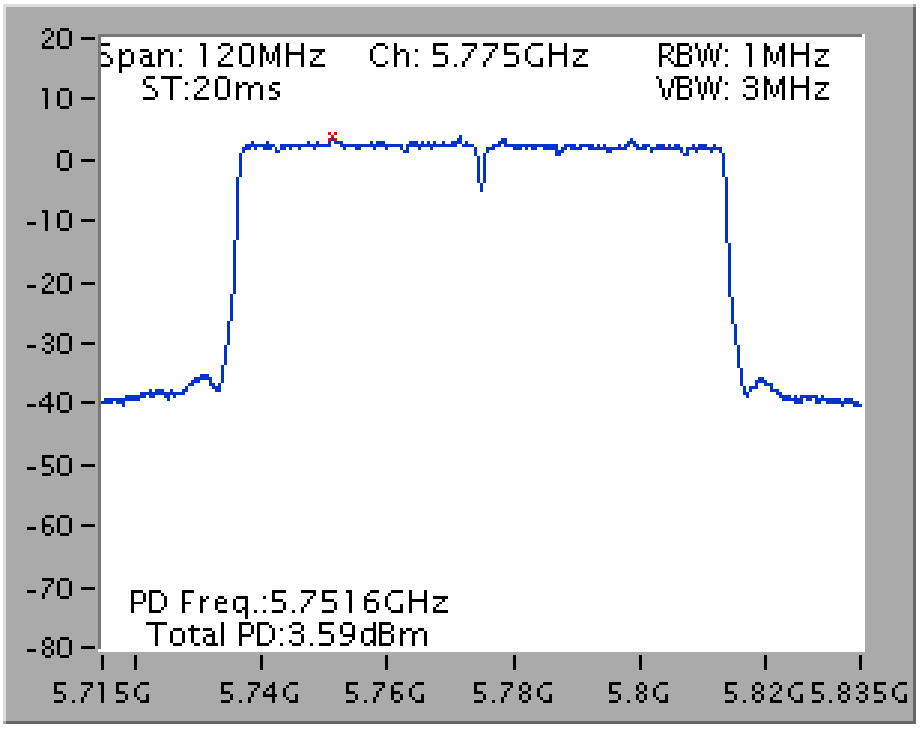


Power Density Plot on Chain 5 + Chain 8 / 5775 MHz

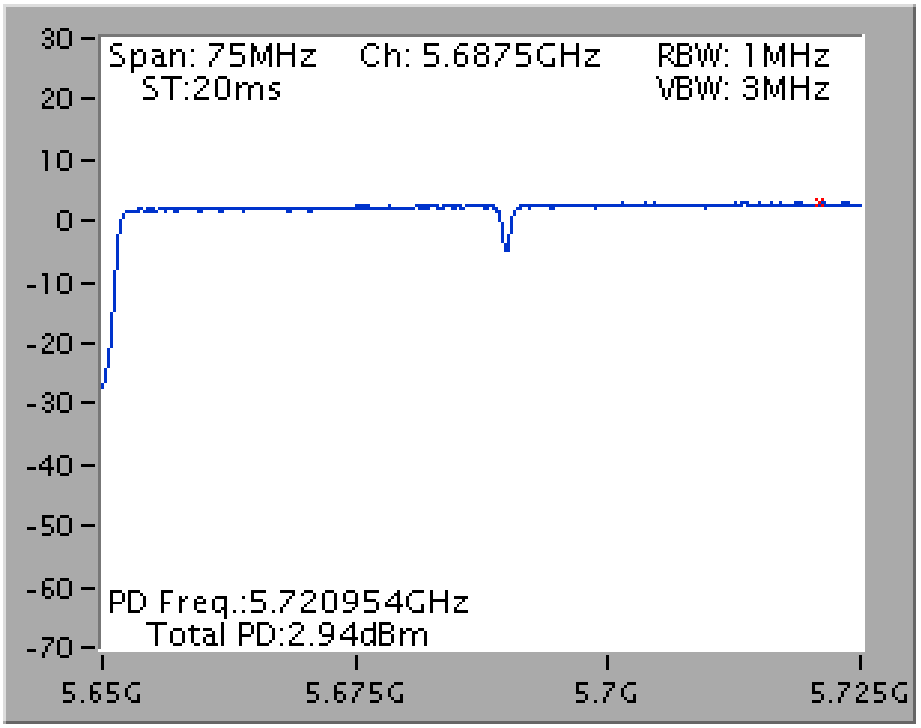


Type 11

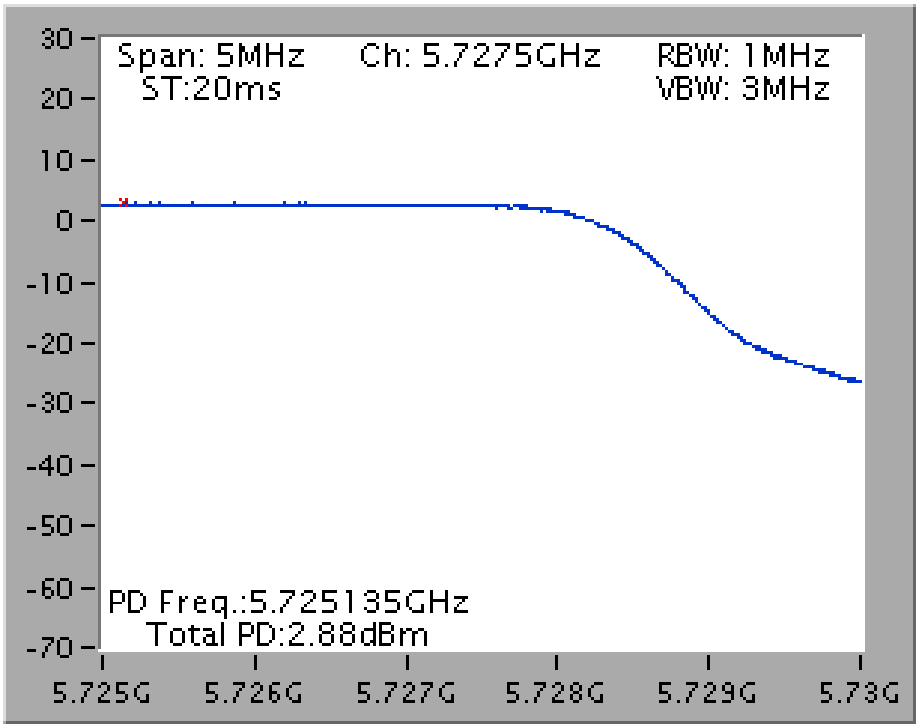
Power Density Plot on Chain 5 + Chain 8 / 5775 MHz



Power Density Plot on Chain 6 + Chain 7 / 5690 MHz (UNII 2C)

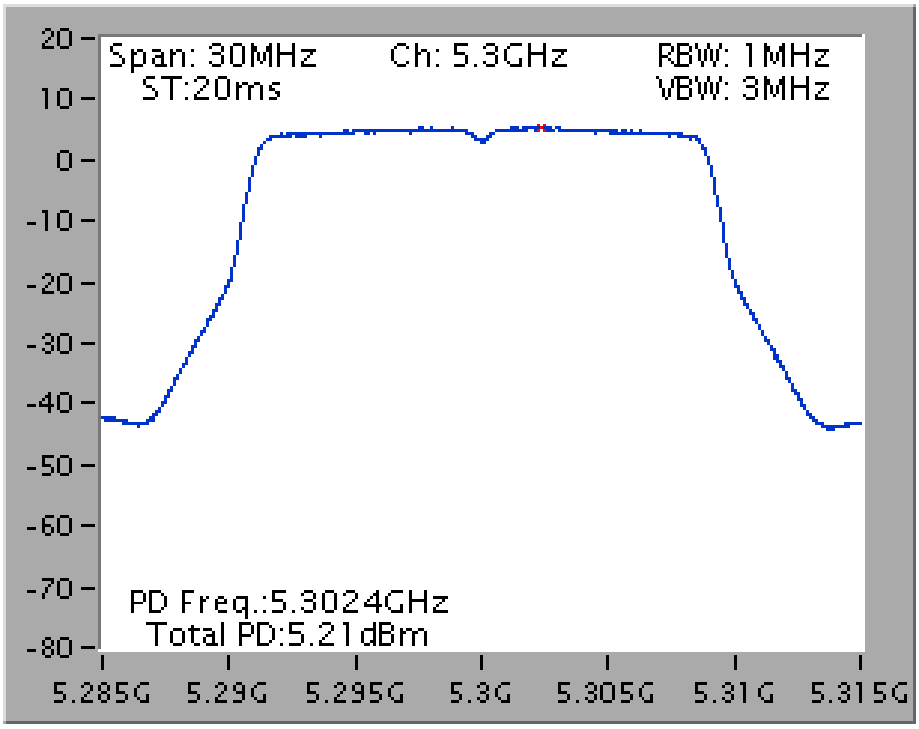


Power Density Plot on Chain 6 + Chain 7 / 5690 MHz (UNII 3)

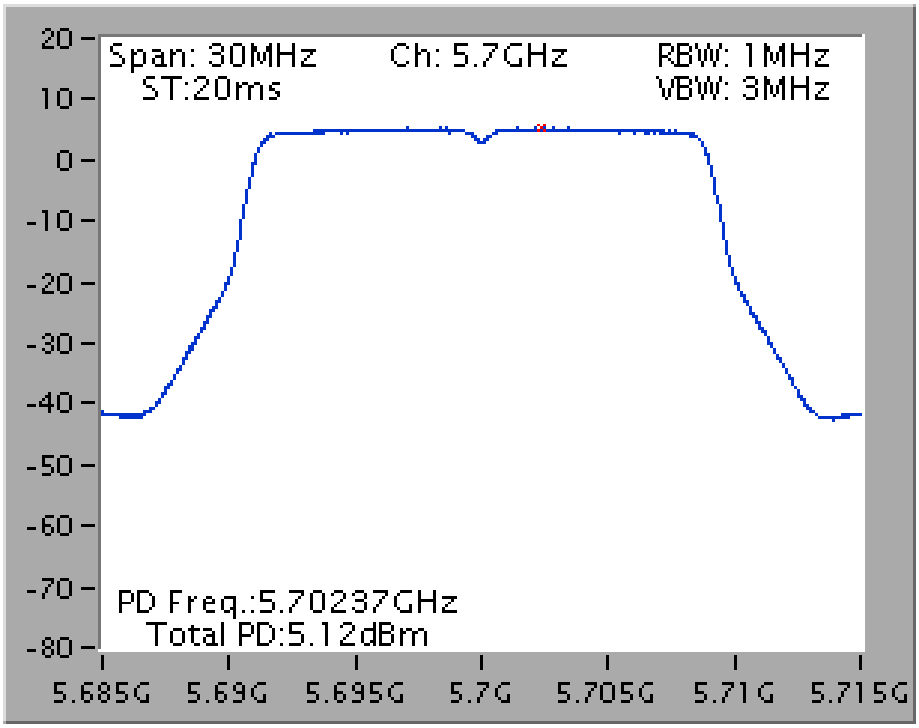


<For Beamforming Mode>

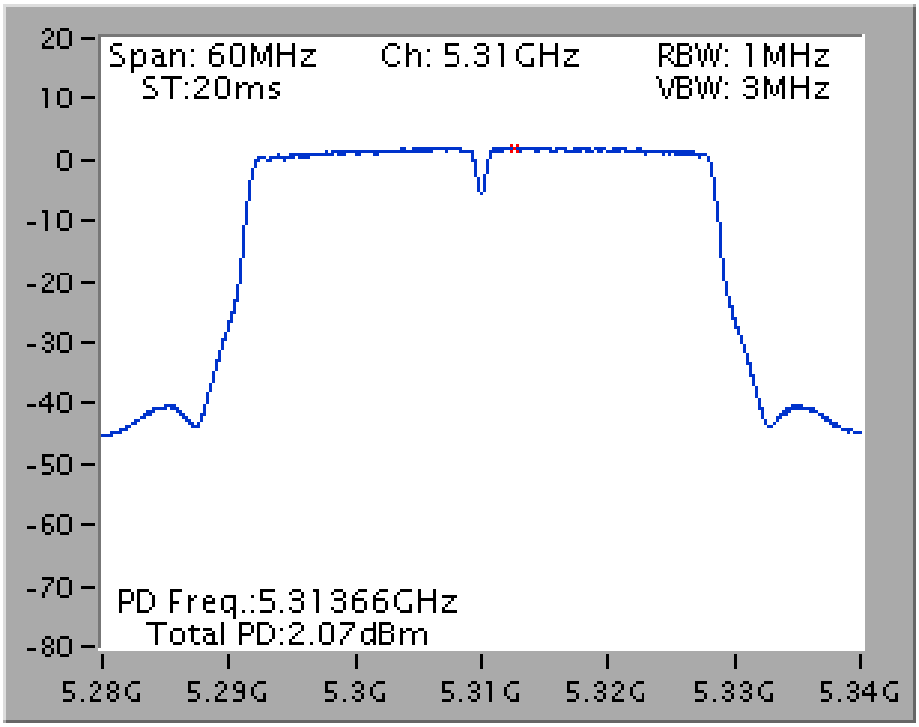
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5300 MHz



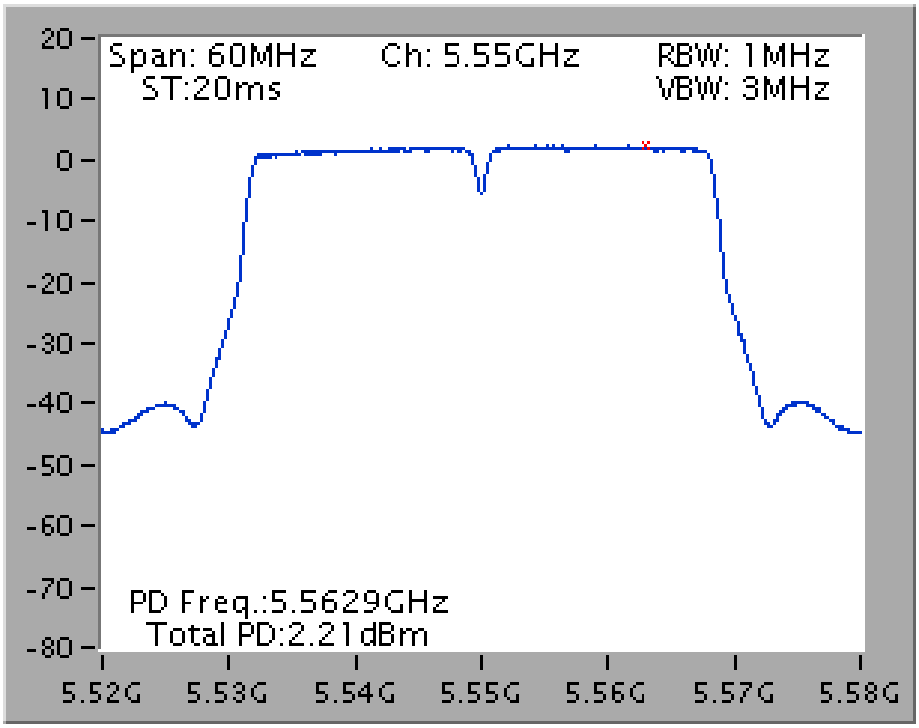
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5700 MHz



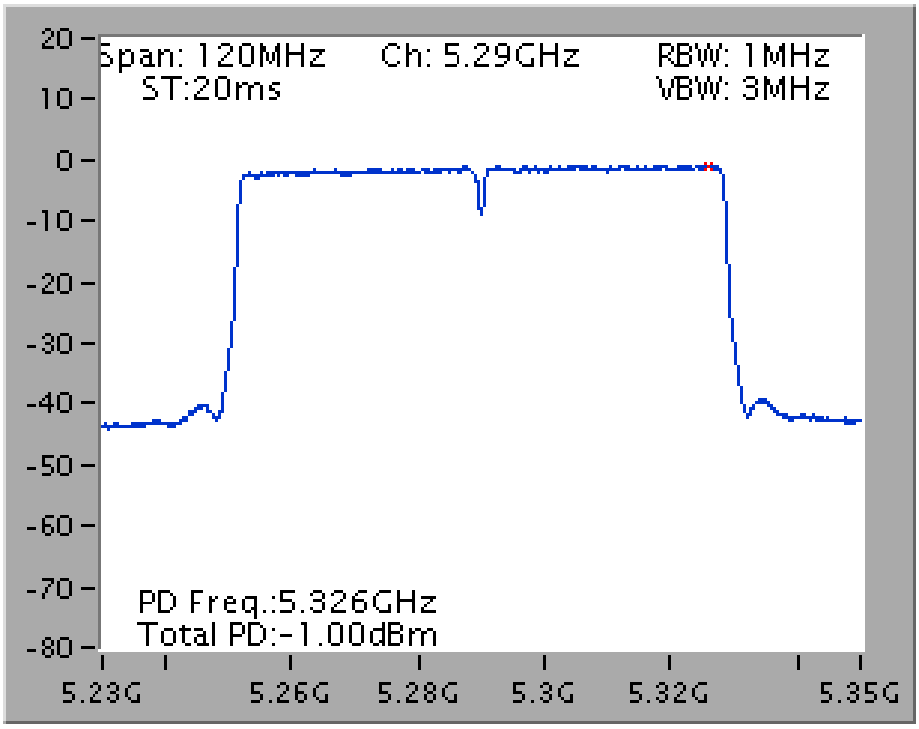
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5310 MHz



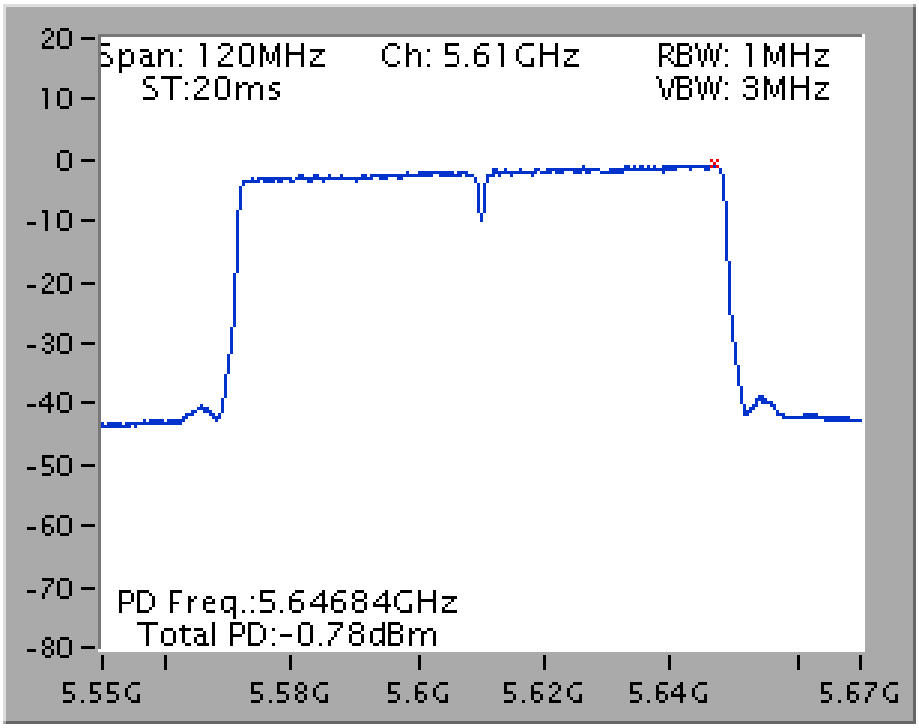
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5550 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5290 MHz

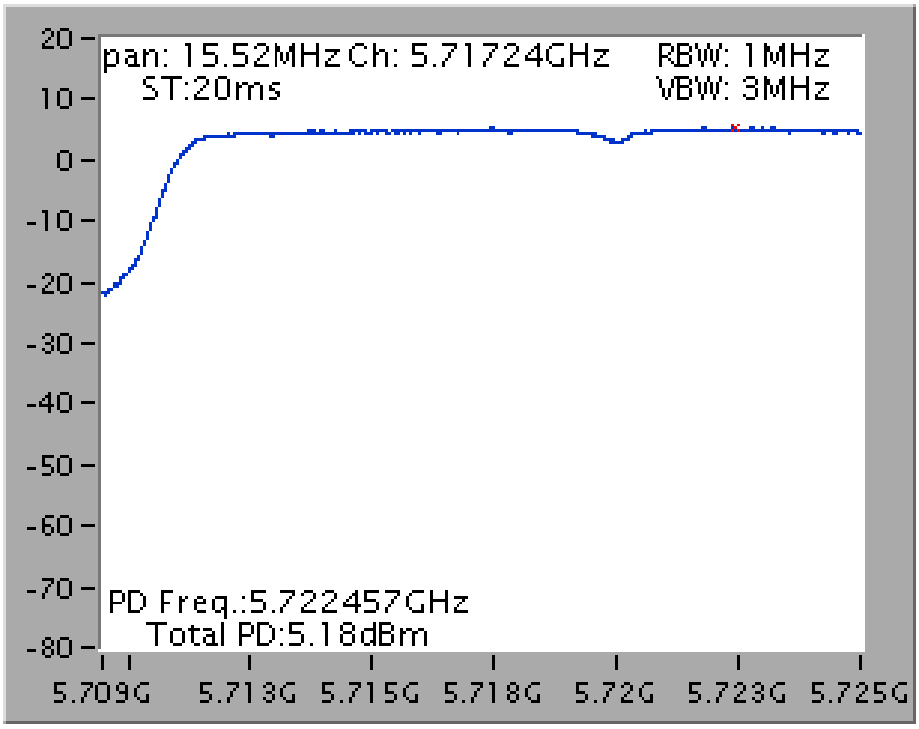


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5610 MHz

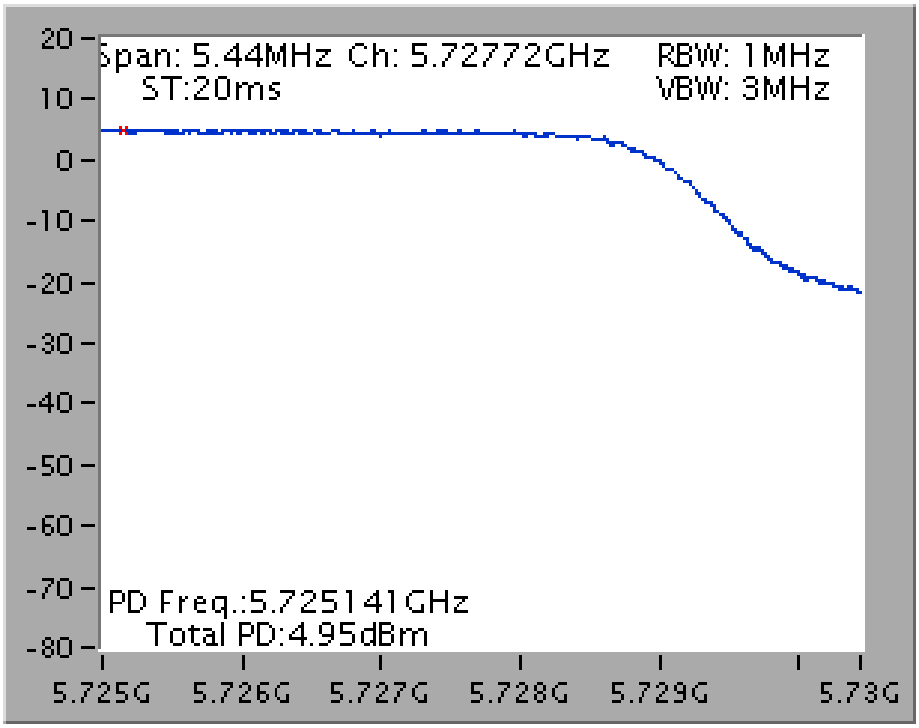


Straddle Channel

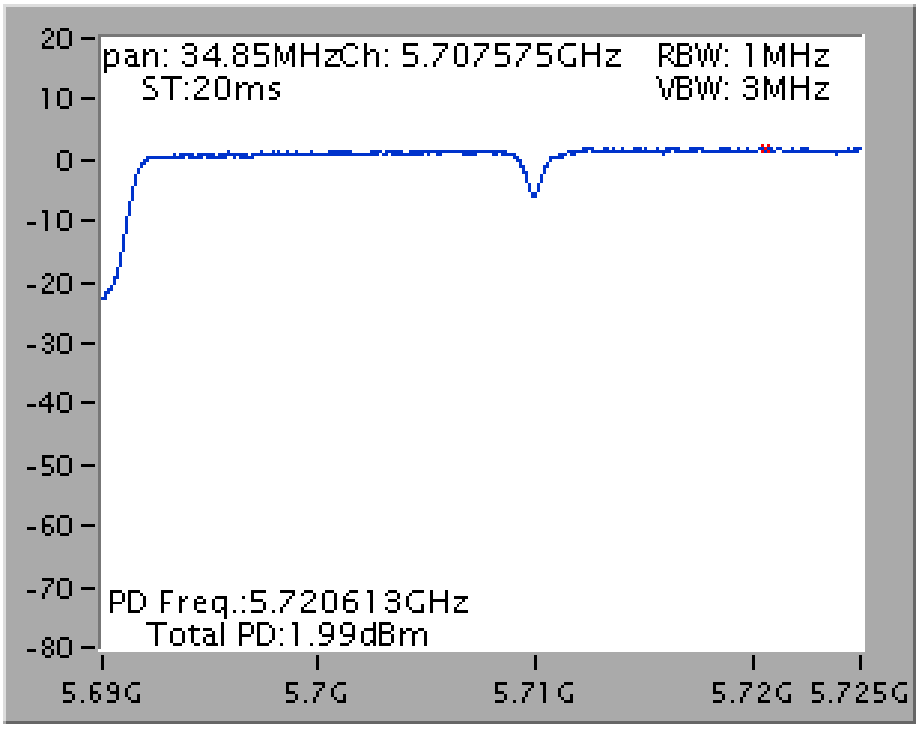
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 2C)



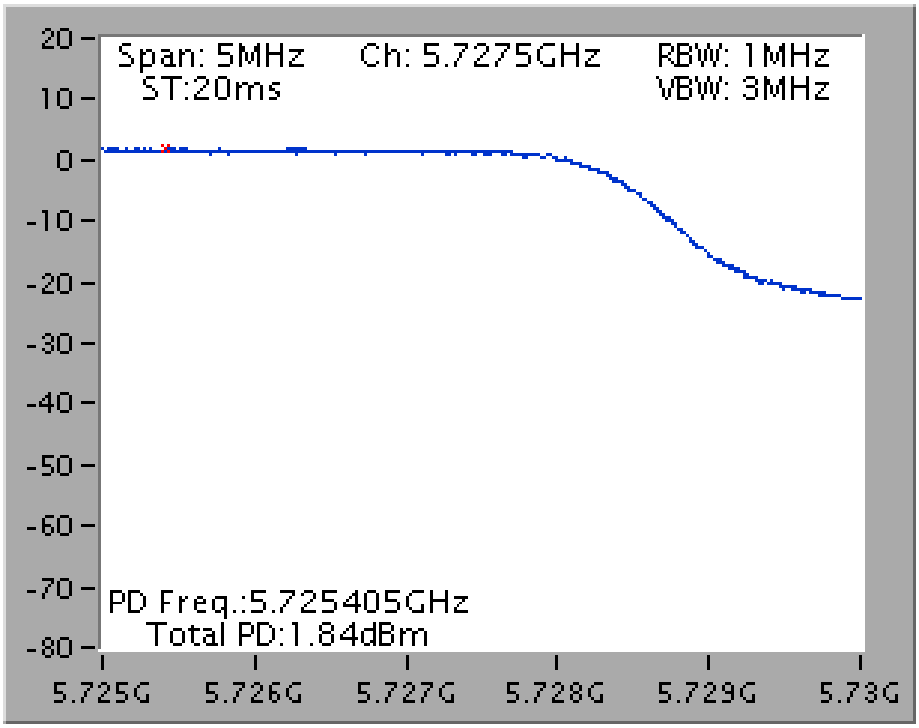
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 3)



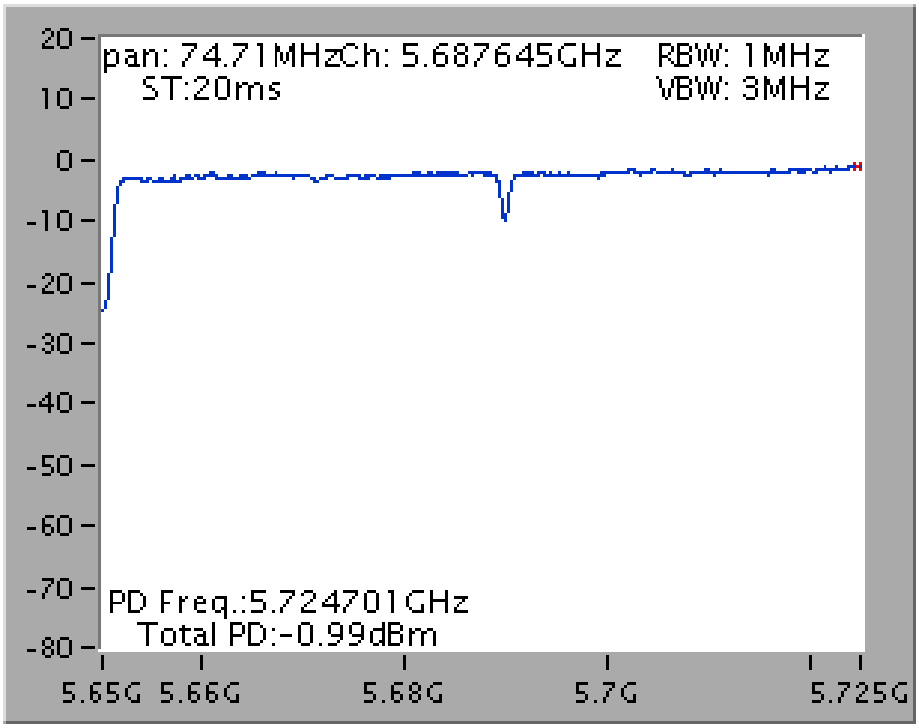
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5710 MHz (UNII 2C)



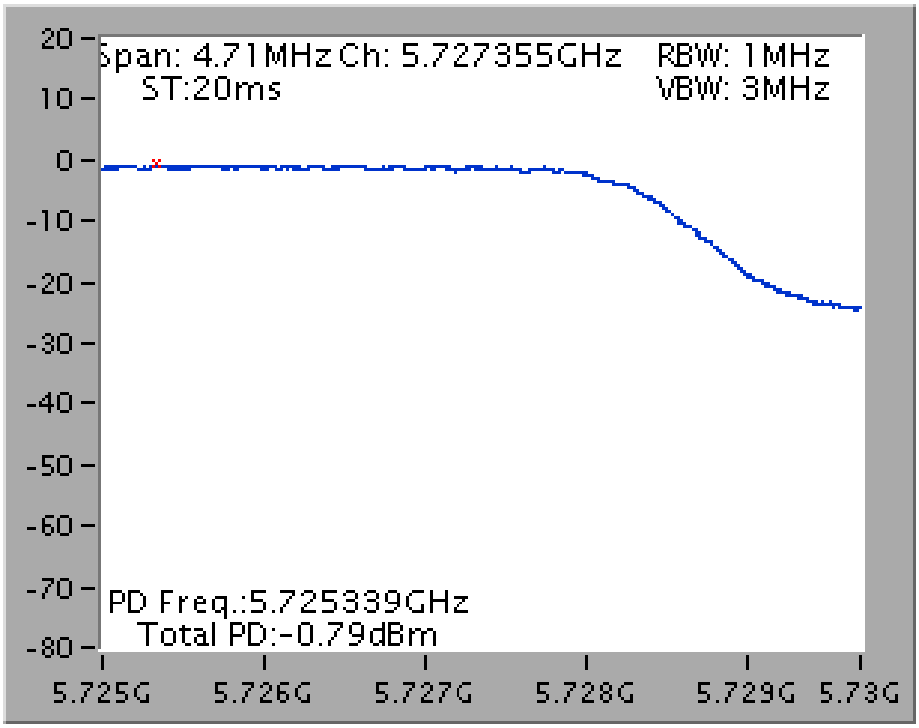
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5710 MHz (UNII 3)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5690 MHz (UNII 2C)



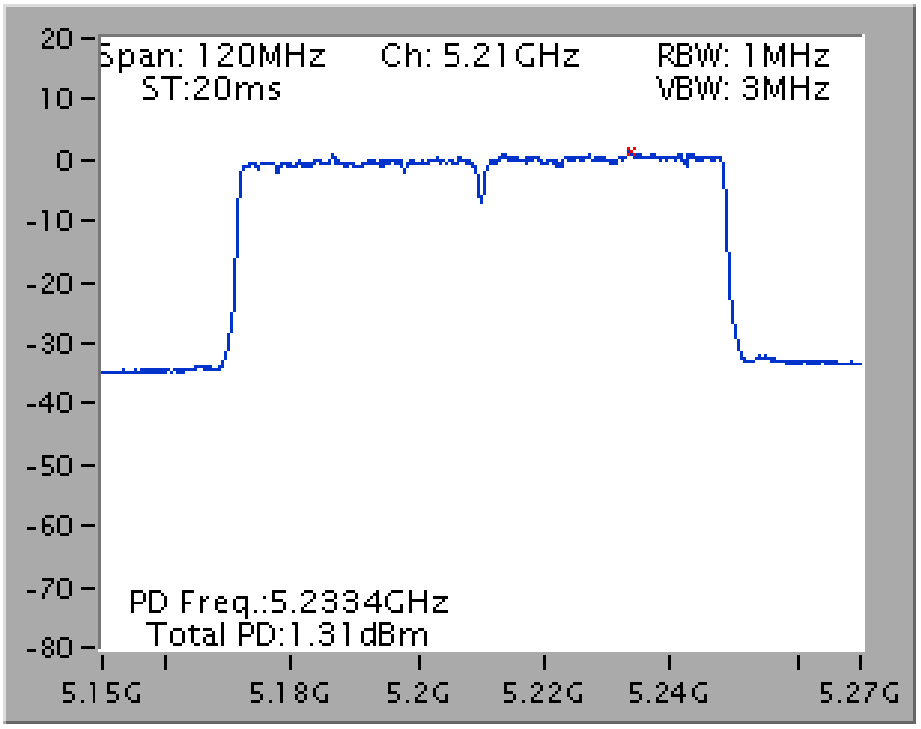
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5690 MHz (UNII 3)



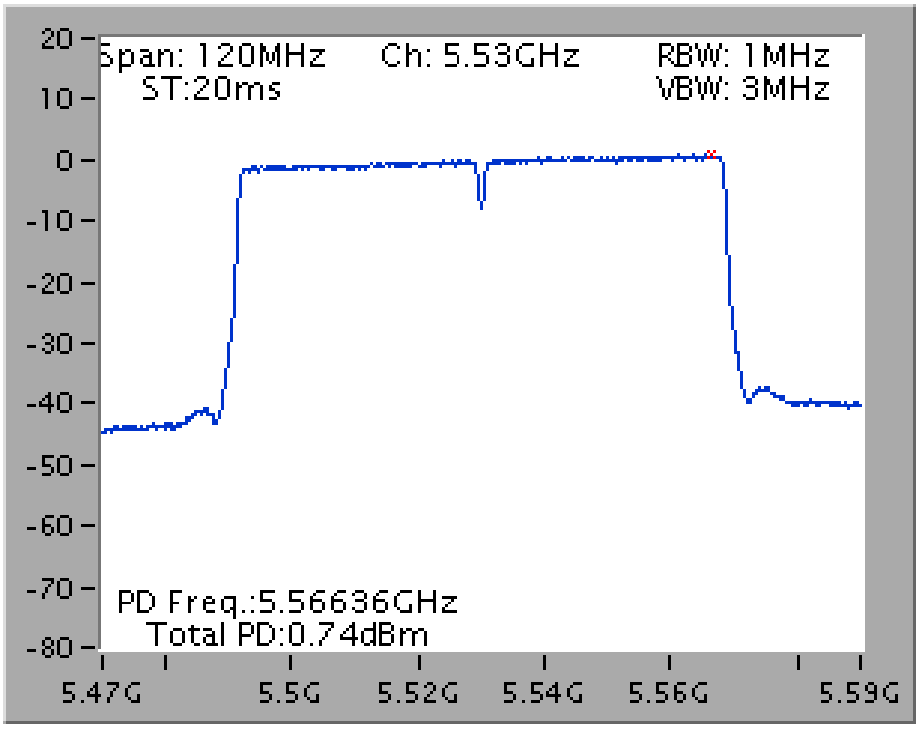
802.11ac MCS0/Nss2 VHT80+80

Type 1

Power Density Plot on Chain 6 + Chain 7 / 5210 MHz

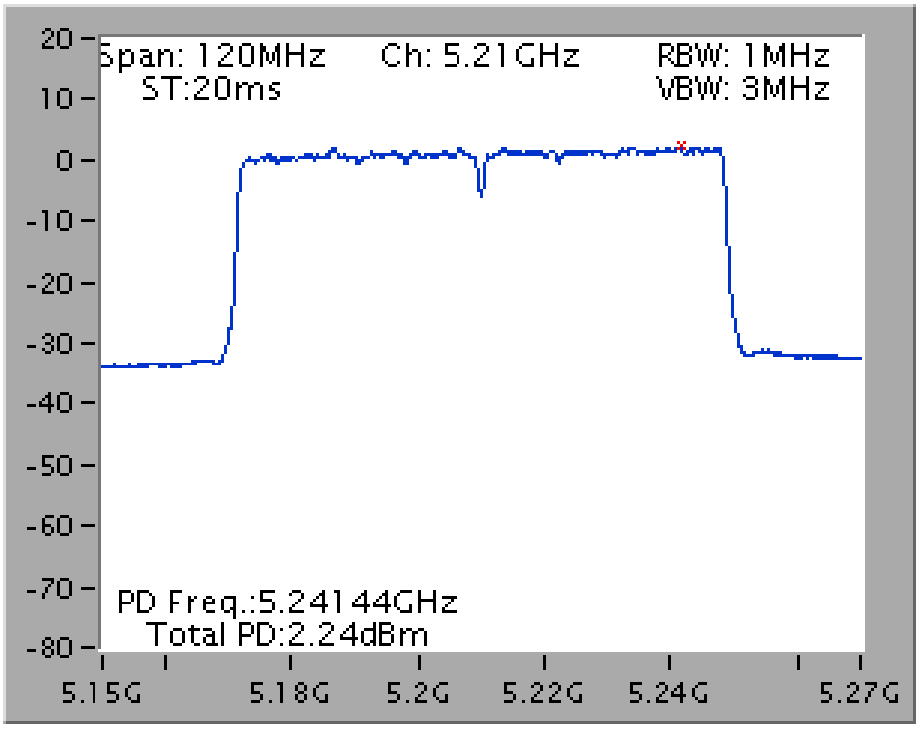


Power Density Plot on Chain 5 + Chain 8 / 5530 MHz

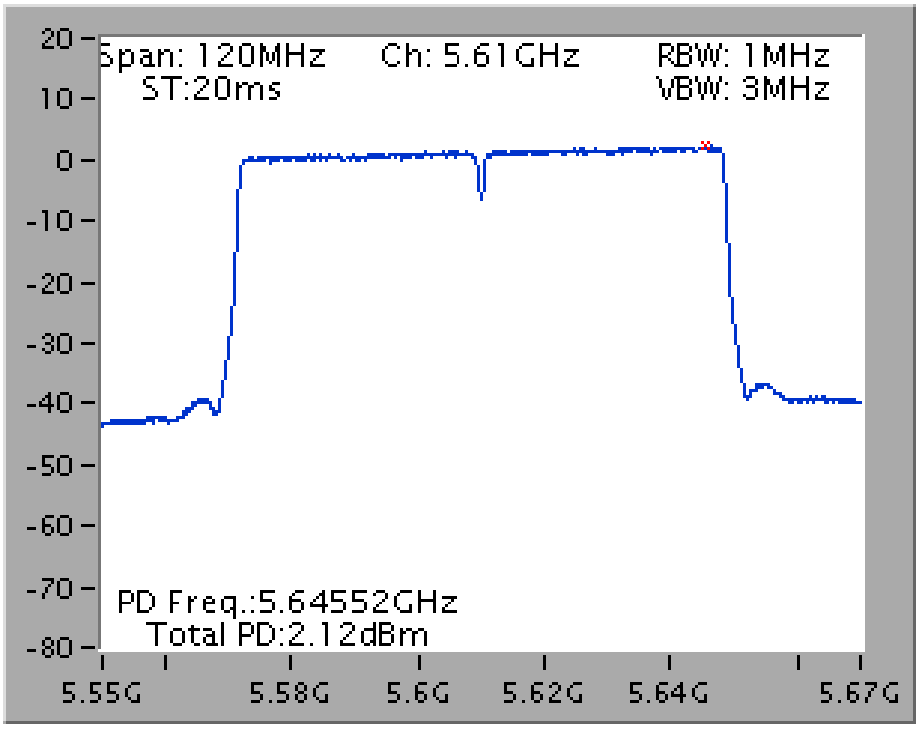


Type 2

Power Density Plot on Chain 6 + Chain 7 / 5210 MHz

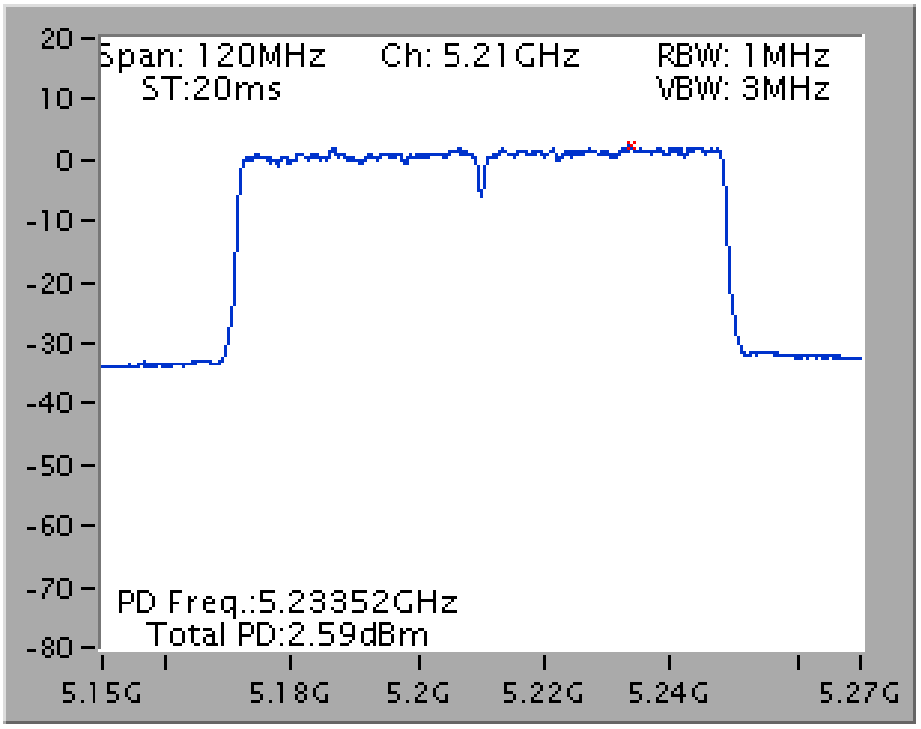


Power Density Plot on Chain 5 + Chain 8 / 5610 MHz

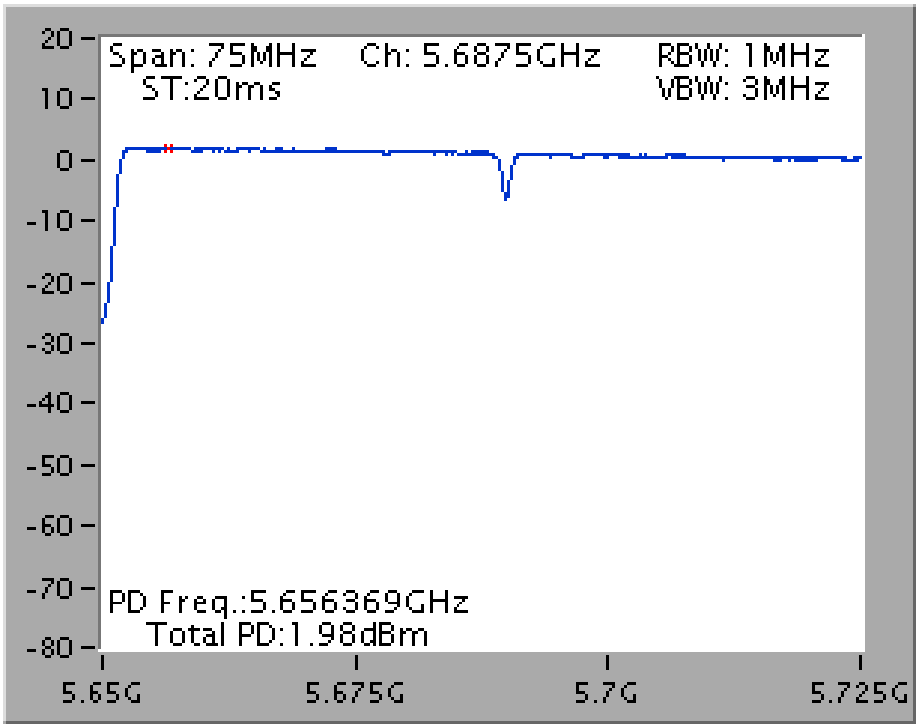


Type 3

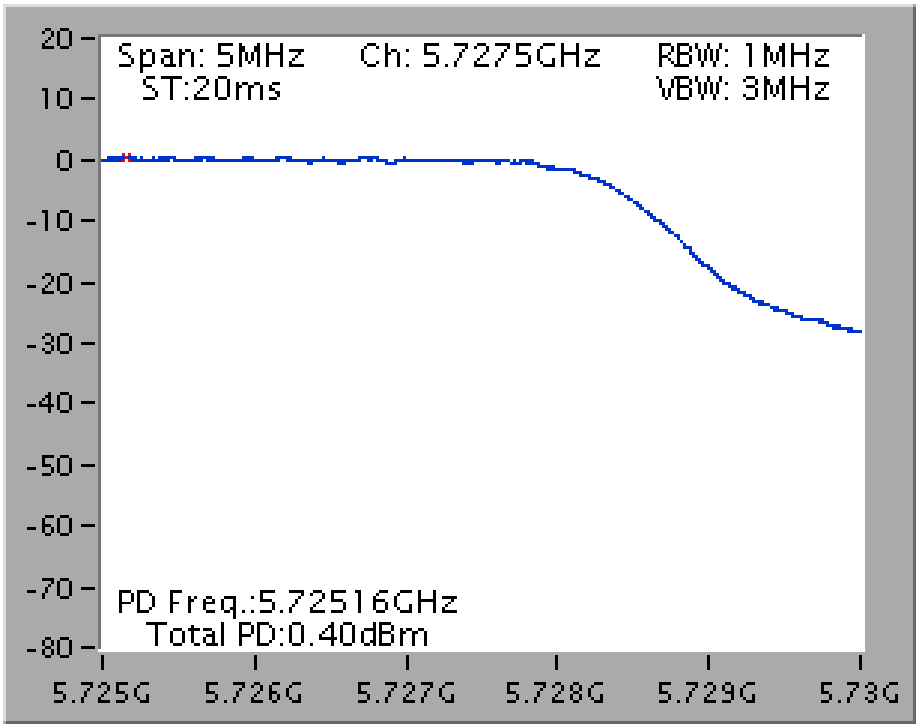
Power Density Plot on Chain 6 + Chain 7 / 5210 MHz



Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 2C)

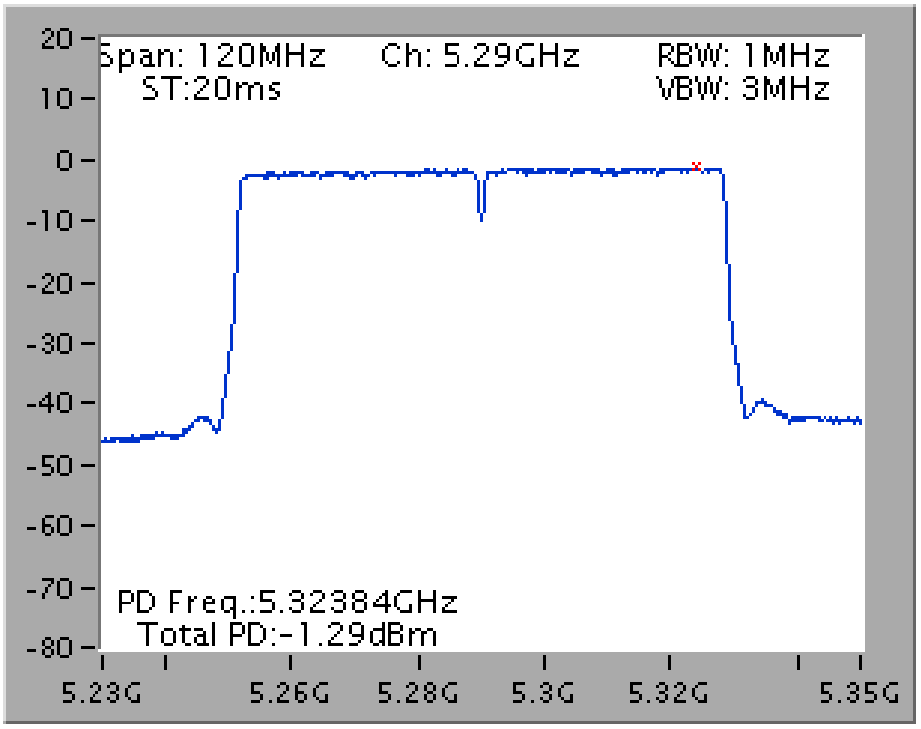


Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)

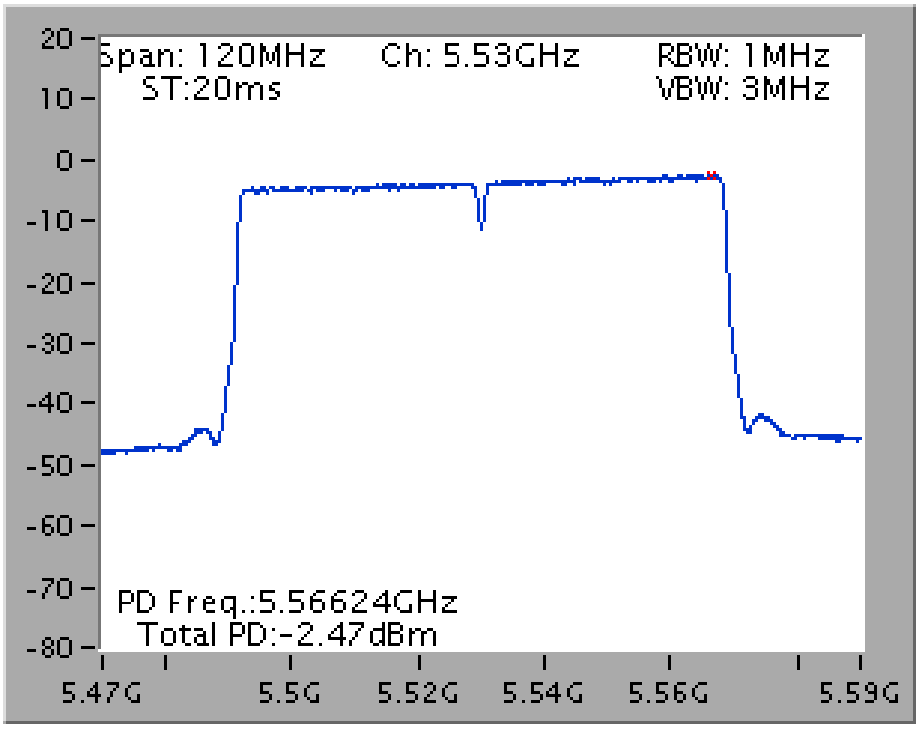


Type 4

Power Density Plot on Chain 6 + Chain 7 / 5290 MHz

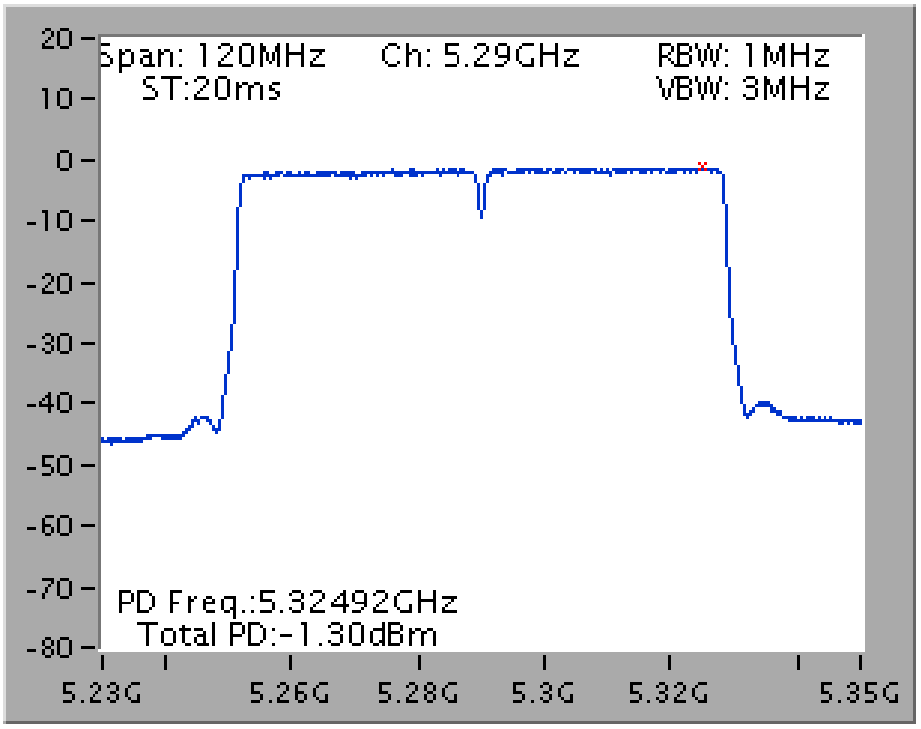


Power Density Plot on Chain 5 + Chain 8 / 5530 MHz

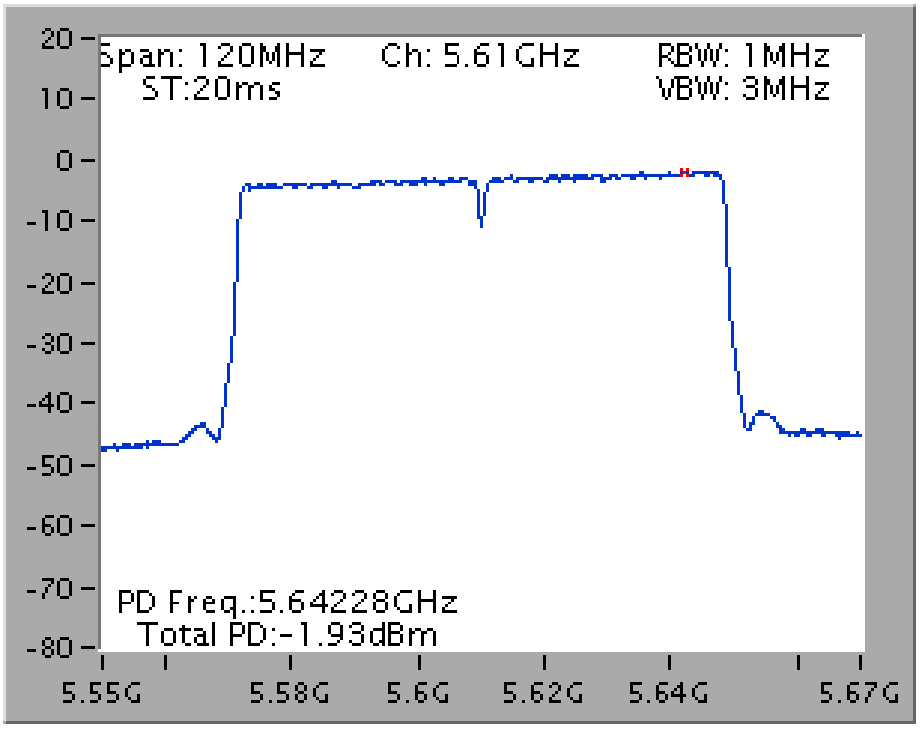


Type 5

Power Density Plot on Chain 6 + Chain 7 / 5290 MHz

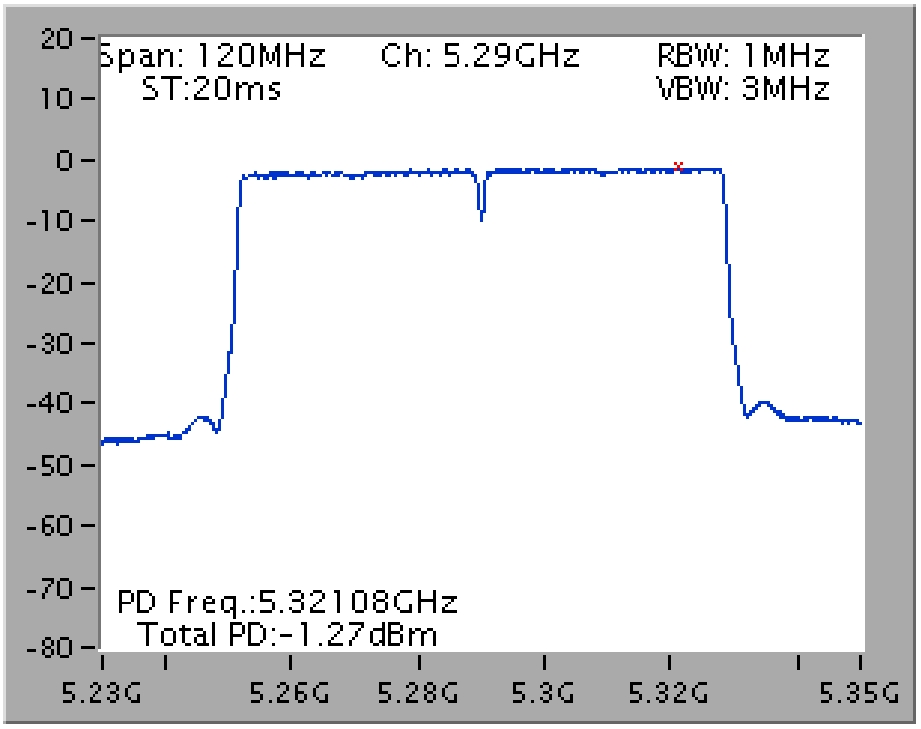


Power Density Plot on Chain 5 + Chain 8 / 5610 MHz

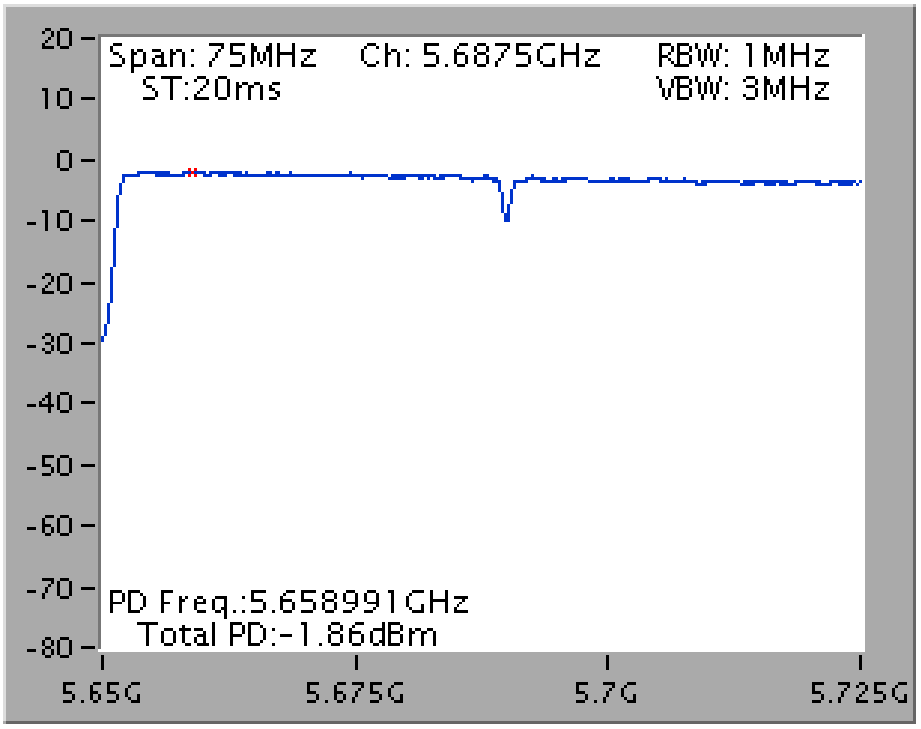


Type 6

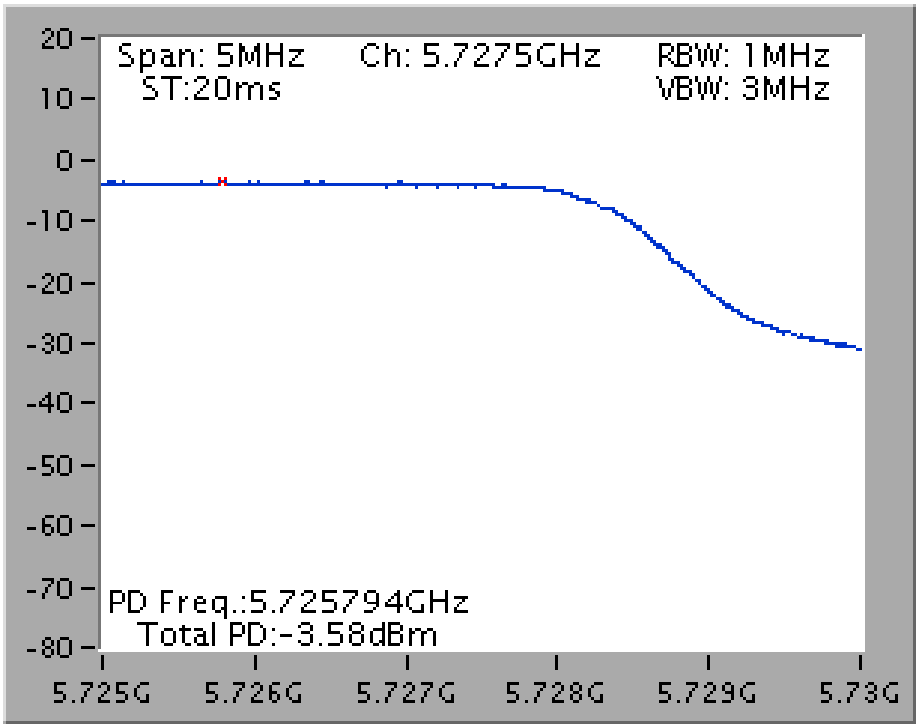
Power Density Plot on Chain 6 + Chain 7 / 5290 MHz



Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 2C)

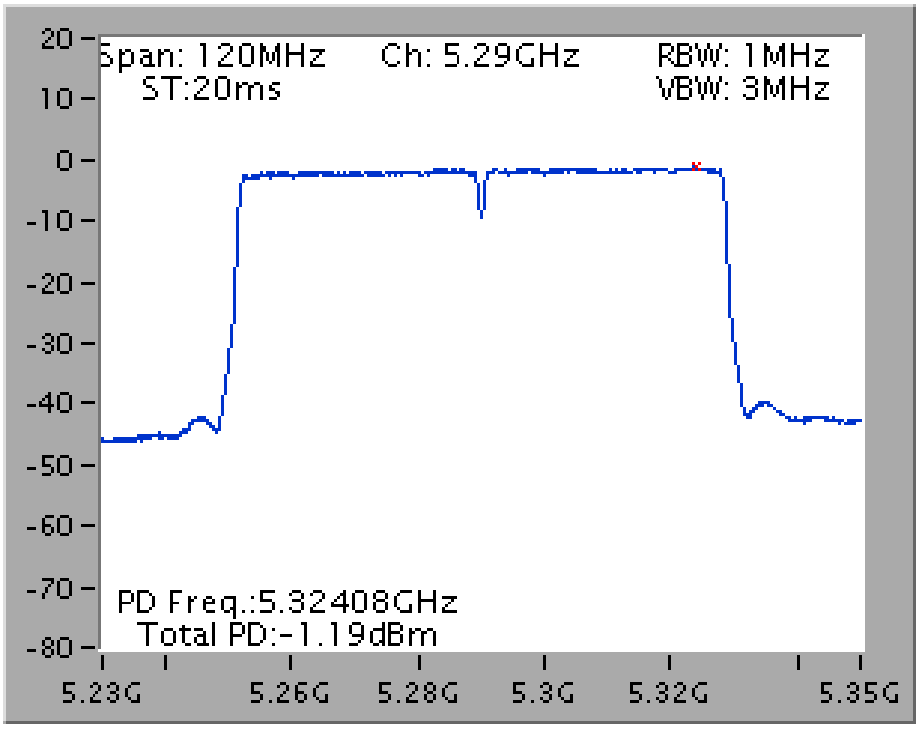


Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)

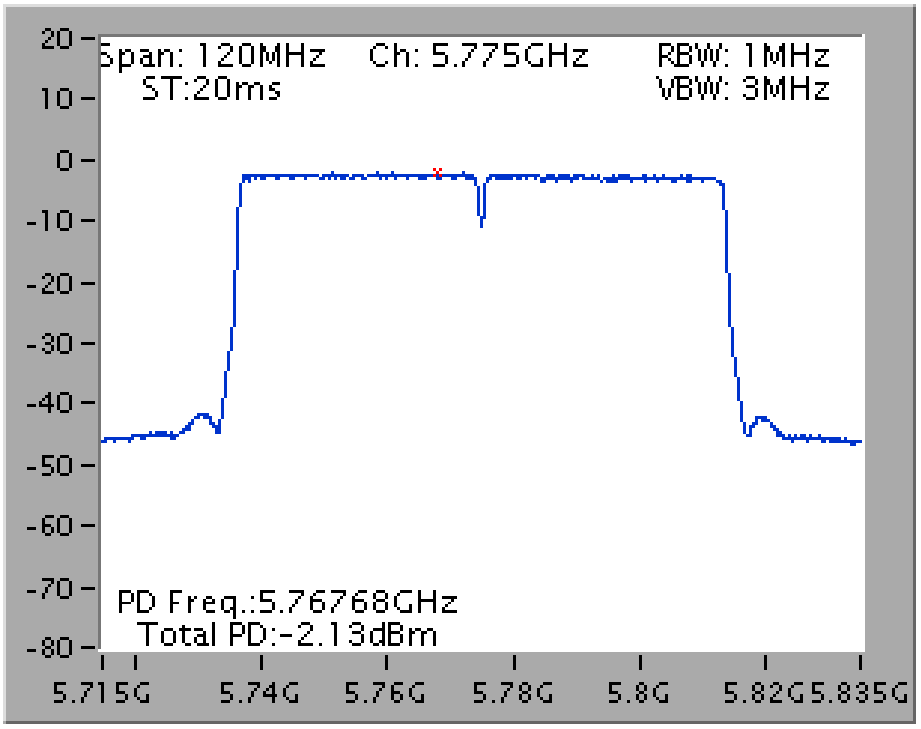


Type 7

Power Density Plot on Chain 6 + Chain 7 / 5290 MHz

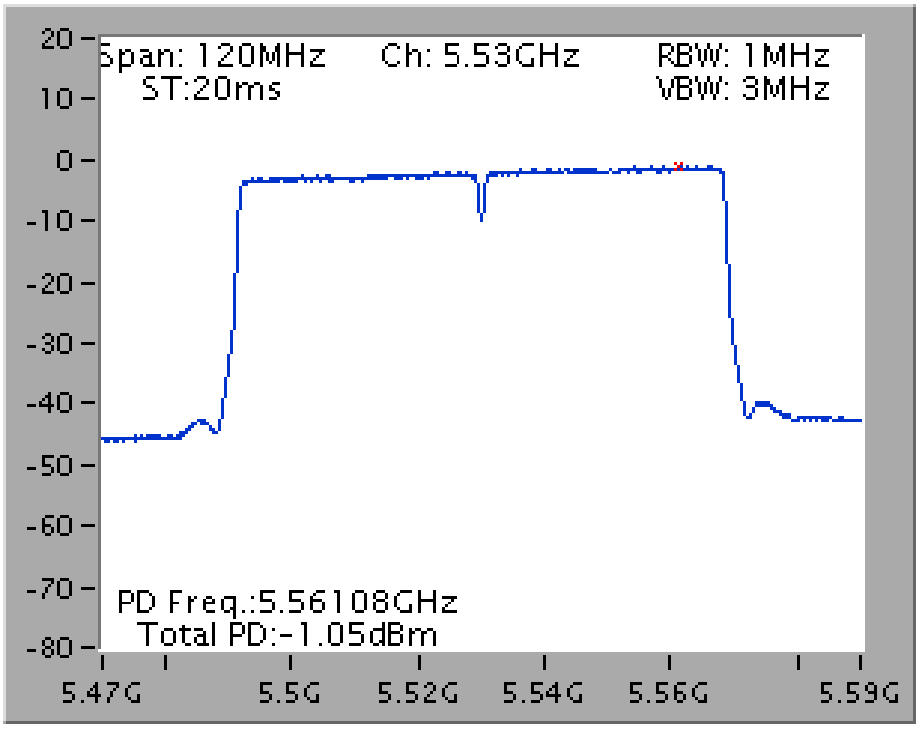


Power Density Plot on Chain 5 + Chain 8 / 5775 MHz

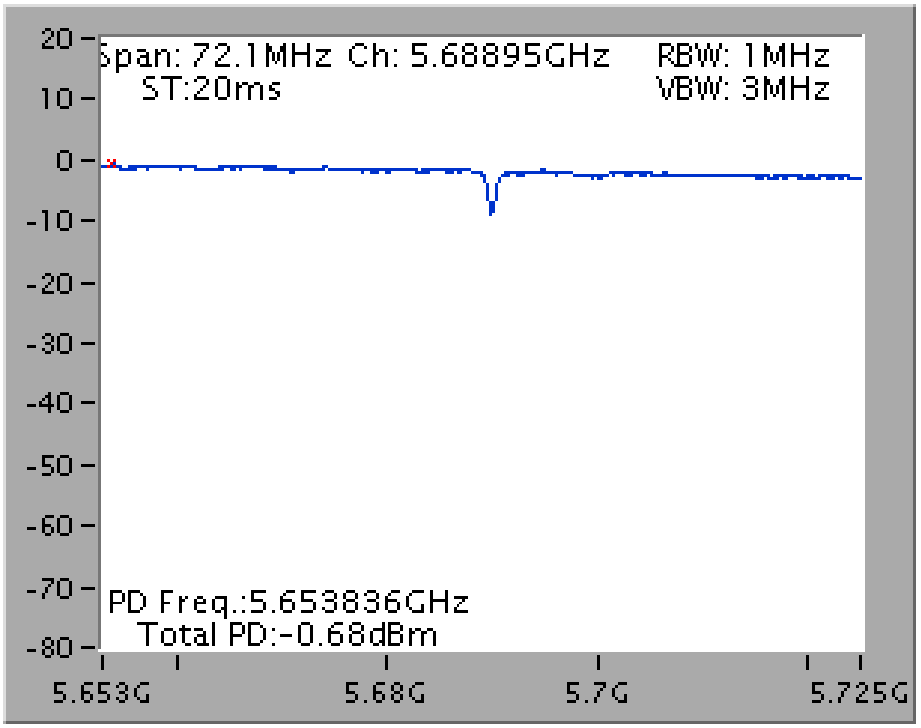


Type 8

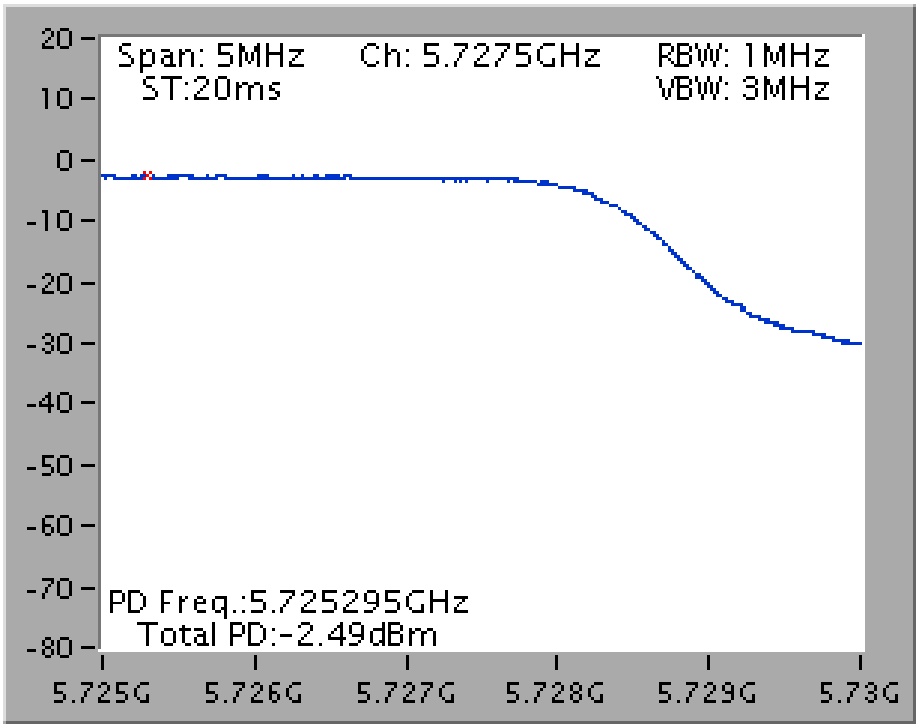
Power Density Plot on Chain 6 + Chain 7 / 5530 MHz



Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 2C)

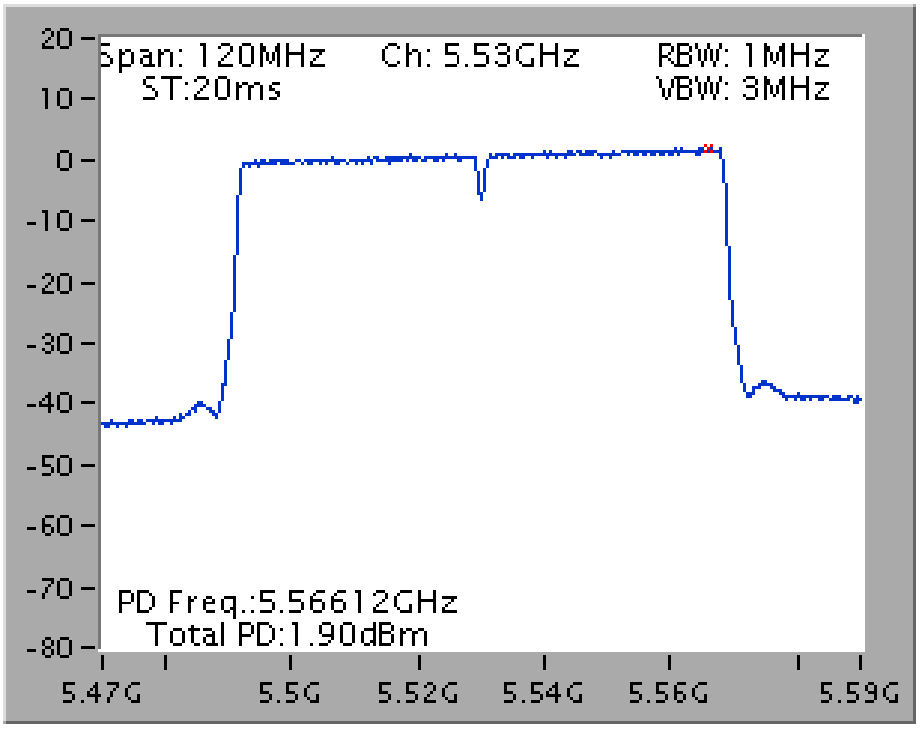


Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)

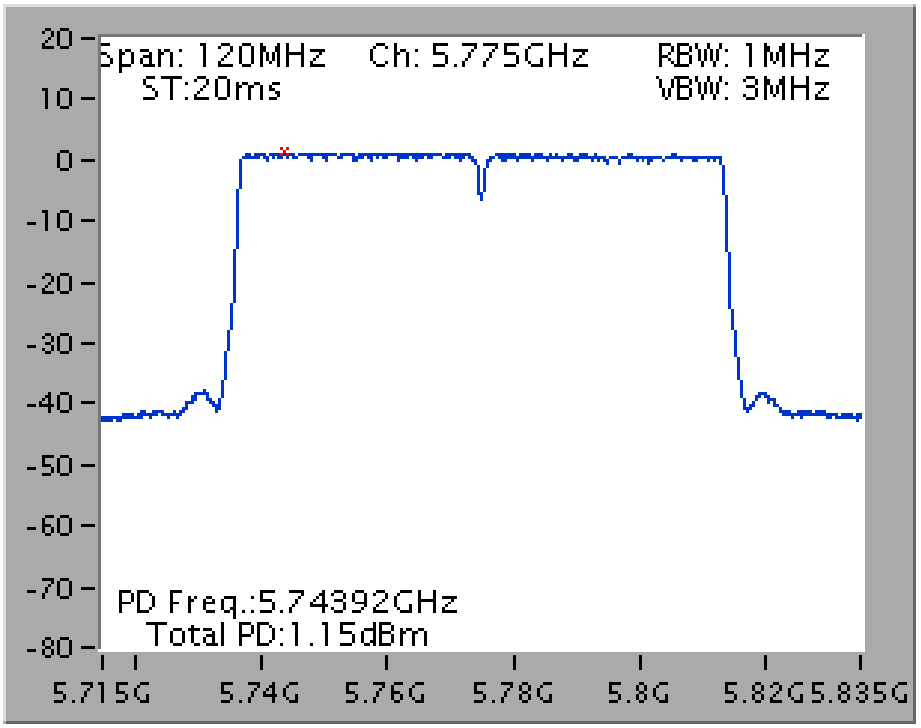


Type 9

Power Density Plot on Chain 6 + Chain 7 / 5530 MHz

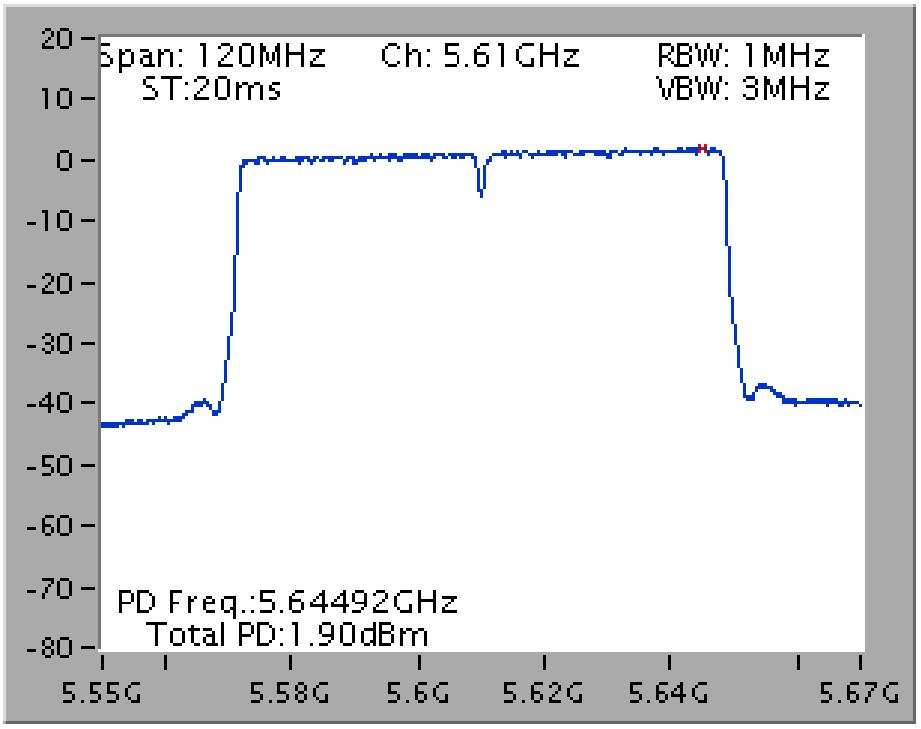


Power Density Plot on Chain 5 + Chain 8 / 5775 MHz

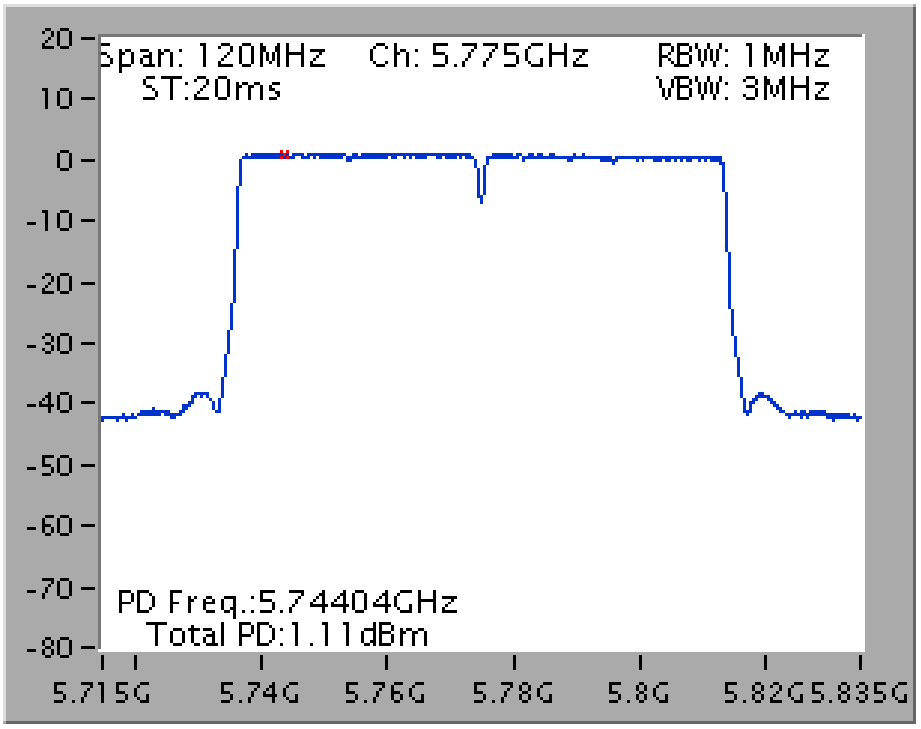


Type 10

Power Density Plot on Chain 6 + Chain 7 / 5610 MHz

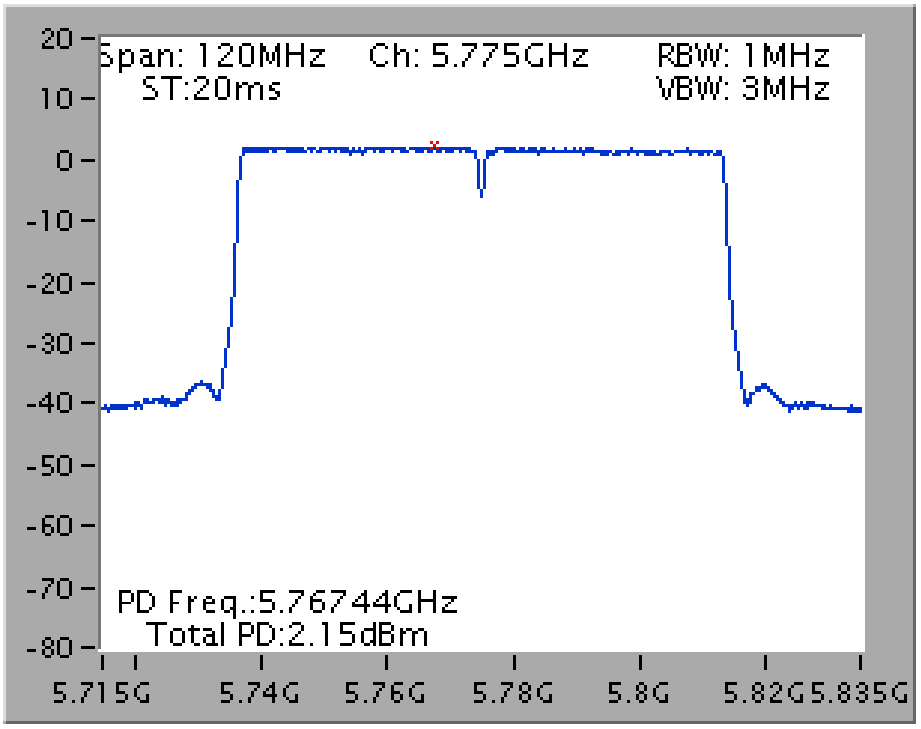


Power Density Plot on Chain 5 + Chain 8 / 5775 MHz

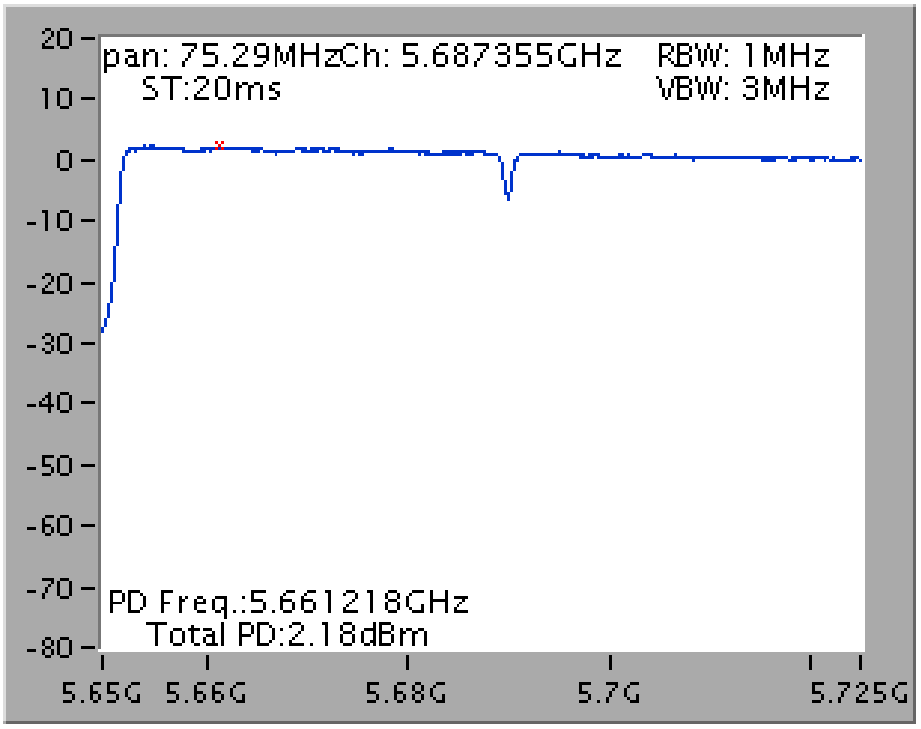


Type 11

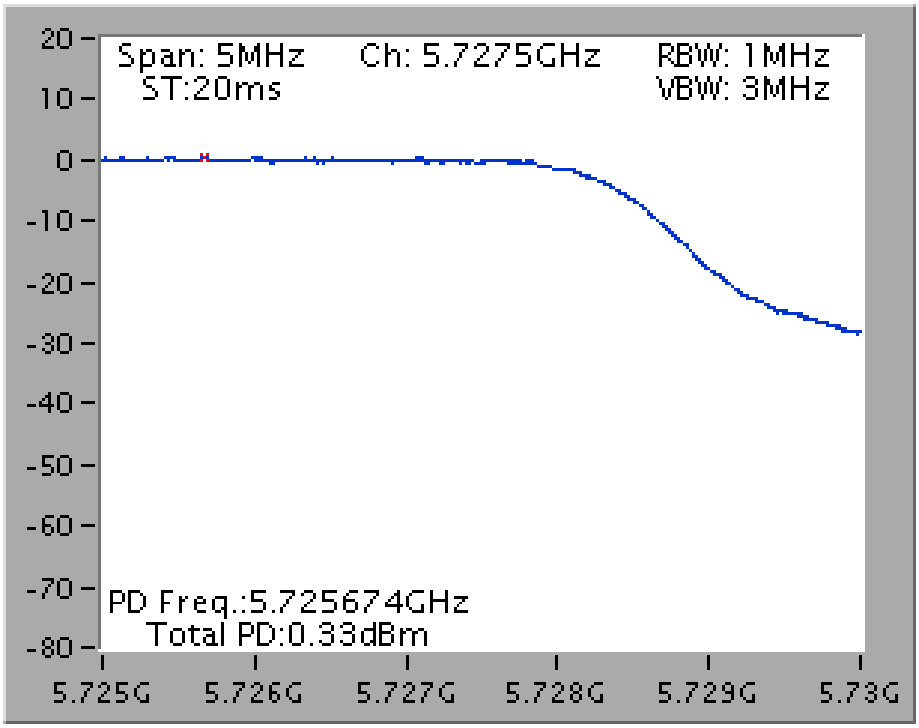
Power Density Plot on Chain 5 + Chain 8 / 5775 MHz



Power Density Plot on Chain 6 + Chain 7 / 5690 MHz (UNII 2C)



Power Density Plot on Chain 6 + Chain 7 / 5690 MHz (UNII 3)



4.5. Radiated Emissions Measurement

4.5.1. Limit

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

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

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

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

4.5.2. Measuring Instruments and Setting

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

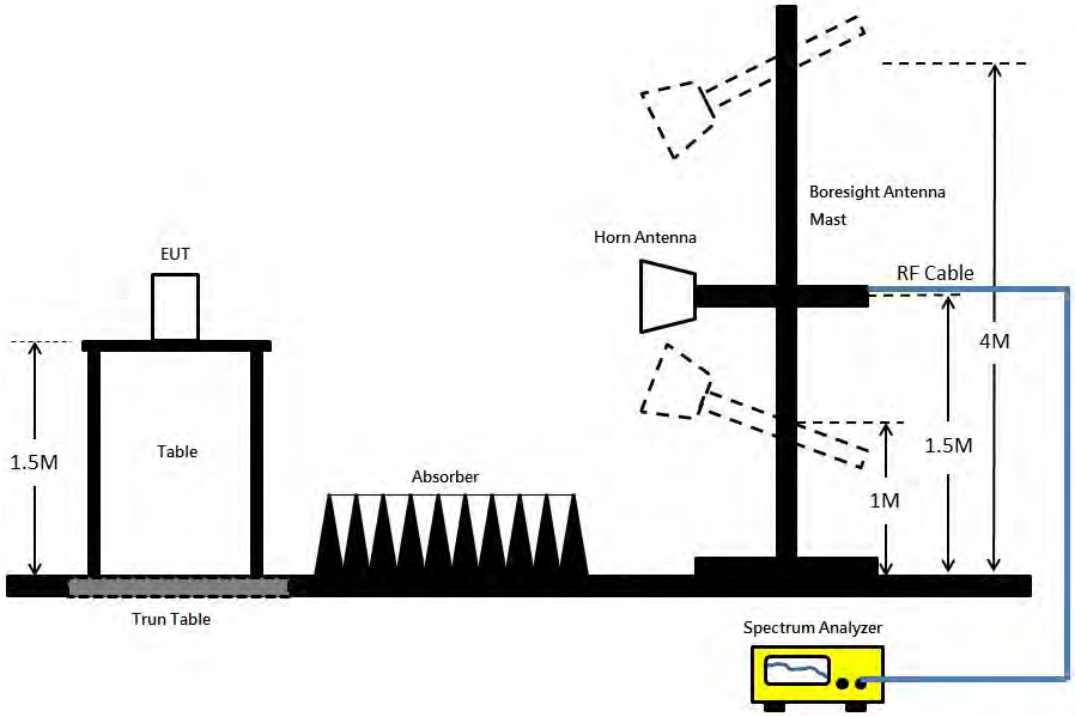
Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, 1MHz / 1/T for Average
RBW / VBW (Emission in non-restricted band)	1MHz / 3MHz for peak

Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RBW 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RBW 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RBW 120kHz for QP

4.5.3. Test Procedures

1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 1m & 3m far away from the turntable.
2. Power on the EUT and all the supporting units. The turntable was rotated by 360 degrees to determine the position of the highest radiation.
3. The height of the broadband receiving antenna was varied between one meter and four meters above ground to find the maximum emissions field strength of both horizontal and vertical polarization.
4. For each suspected emissions, the antenna tower was scan (from 1 M to 4 M) and then the turntable was rotated (from 0 degree to 360 degrees) to find the maximum reading.
5. Set the test-receiver system to Peak or CISPR quasi-peak Detect Function with specified bandwidth under Maximum Hold Mode.
6. For emissions above 1GHz, use 1MHz VBW and 3MHz RBW for peak reading. Then 1MHz RBW and 1/T VBW for average reading in spectrum analyzer.
7. If the emissions level of the EUT in peak mode was 3 dB lower than the average limit specified, then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions which do not have 3 dB margin will be repeated one by one using the quasi-peak method for below 1GHz.
8. For testing above 1GHz, the emissions level of the EUT in peak mode was lower than average limit (that means the emissions level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.
9. In case the emission is lower than 30MHz, loop antenna has to be used for measurement and the recorded data should be QP measured by receiver. High – Low scan is not required in this case.

4.5.4. Test Setup Layout



4.5.5. Test Deviation

There is no deviation with the original standard.

4.5.6. 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.

4.5.7. Results for Radiated Emissions (1GHz~40GHz)

<For Non-beamforming Mode>

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 52 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15782.13	59.09	74.00	-14.91	43.17	13.39	37.92	35.39	153	119	Peak	HORIZONTAL
2	15782.34	45.28	54.00	-8.72	29.36	13.39	37.92	35.39	153	119	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15780.95	45.83	54.00	-8.17	29.88	13.37	37.97	35.39	130	59	Average	VERTICAL
2	15782.26	59.93	74.00	-14.07	44.01	13.39	37.92	35.39	130	59	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 60 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10598.60	58.71	74.00	-15.29	42.83	10.96	39.88	34.96	206	174	Peak	HORIZONTAL
2	10601.38	44.11	54.00	-9.89	28.23	10.96	39.88	34.96	206	174	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10600.06	44.21	54.00	-9.79	28.33	10.96	39.88	34.96	181	91	Average	VERTICAL
2	10601.58	58.68	74.00	-15.32	42.80	10.96	39.88	34.96	181	91	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 64 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10640.00	44.69	54.00	-9.31	28.80	10.98	39.90	34.99	184	155	Average	HORIZONTAL
2	10641.85	58.46	74.00	-15.54	42.57	10.98	39.90	34.99	184	155	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10639.41	57.93	74.00	-16.07	42.04	10.98	39.90	34.99	191	135	Peak	VERTICAL
2	10642.47	44.97	54.00	-9.03	29.08	10.98	39.90	34.99	191	135	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 100 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10998.97	58.24	74.00	-15.76	41.96	11.25	40.20	35.17	182	172	Peak	HORIZONTAL
2	11000.34	44.24	54.00	-9.76	27.96	11.25	40.20	35.17	182	172	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11000.33	58.42	74.00	-15.58	42.14	11.25	40.20	35.17	182	172	Peak	VERTICAL
2	11001.18	45.10	54.00	-8.90	28.82	11.25	40.20	35.17	182	172	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 116 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11160.53	58.65	74.00	-15.35	42.34	11.37	40.13	35.19	186	118	Peak	HORIZONTAL
2	11162.01	45.34	54.00	-8.66	29.03	11.37	40.13	35.19	186	118	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11158.00	58.97	74.00	-15.03	42.66	11.37	40.13	35.19	180	152	Peak	VERTICAL
2	11160.90	46.23	54.00	-7.77	29.92	11.37	40.13	35.19	180	152	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 140 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11399.20	45.28	54.00	-8.72	28.93	11.53	40.04	35.22	206	139	Average	HORIZONTAL
2	11399.88	58.78	74.00	-15.22	42.43	11.53	40.04	35.22	206	139	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11398.96	45.34	54.00	-8.66	28.99	11.53	40.04	35.22	212	143	Average	VERTICAL
2	11402.18	58.62	74.00	-15.38	42.27	11.53	40.04	35.22	212	143	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15779.65	46.06	54.00	-7.94	30.11	13.37	37.97	35.39	186	157	Average	HORIZONTAL
2	15779.69	59.77	74.00	-14.23	43.82	13.37	37.97	35.39	186	157	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15778.11	46.29	54.00	-7.71	30.34	13.37	37.97	35.39	200	157	Average	VERTICAL
2	15779.74	59.99	74.00	-14.01	44.04	13.37	37.97	35.39	200	157	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 60 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10601.79	44.99	54.00	-9.01	29.11	10.96	39.88	34.96	240	239	Average	HORIZONTAL
2	10601.93	58.42	74.00	-15.58	42.54	10.96	39.88	34.96	240	239	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10599.43	58.74	74.00	-15.26	42.86	10.96	39.88	34.96	226	279	Peak	VERTICAL
2	10600.90	44.82	54.00	-9.18	28.94	10.96	39.88	34.96	226	279	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 64 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10639.83	45.48	54.00	-8.52	29.59	10.98	39.90	34.99	211	196	Average	HORIZONTAL
2	10639.94	58.99	74.00	-15.01	43.10	10.98	39.90	34.99	211	196	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10641.29	44.85	54.00	-9.15	28.96	10.98	39.90	34.99	213	244	Average	VERTICAL
2	10641.29	58.68	74.00	-15.32	42.79	10.98	39.90	34.99	213	244	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11000.80	44.79	54.00	-9.21	28.51	11.25	40.20	35.17	205	112	Average	HORIZONTAL
2	11001.93	58.29	74.00	-15.71	42.01	11.25	40.20	35.17	205	112	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10997.55	44.85	54.00	-9.15	28.57	11.25	40.20	35.17	201	134	Average	VERTICAL
2	10999.88	58.08	74.00	-15.92	41.80	11.25	40.20	35.17	201	134	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 116 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11160.00	44.78	54.00	-9.22	28.47	11.37	40.13	35.19	195	137	Average	HORIZONTAL
2	11160.00	56.07	74.00	-17.93	39.76	11.37	40.13	35.19	195	137	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11158.98	59.16	74.00	-14.84	42.85	11.37	40.13	35.19	193	121	Peak	VERTICAL
2	11161.43	45.37	54.00	-8.63	29.06	11.37	40.13	35.19	193	121	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 140 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11400.56	58.57	74.00	-15.43	42.22	11.53	40.04	35.22	208	126	Peak	HORIZONTAL
2	11402.06	45.31	54.00	-8.69	28.96	11.53	40.04	35.22	208	126	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11399.48	45.23	54.00	-8.77	28.88	11.53	40.04	35.22	228	125	Average	VERTICAL
2	11402.03	58.62	74.00	-15.38	42.27	11.53	40.04	35.22	228	125	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15808.94	46.09	54.00	-7.91	30.17	13.39	37.92	35.39	185	116	Average	HORIZONTAL
2	15809.90	59.46	74.00	-14.54	43.54	13.39	37.92	35.39	185	116	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15808.41	46.19	54.00	-7.81	30.27	13.39	37.92	35.39	188	170	Average	VERTICAL
2	15810.04	59.26	74.00	-14.74	43.34	13.39	37.92	35.39	188	170	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 62 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10618.26	58.02	74.00	-15.98	42.15	10.96	39.88	34.97	243	238	Peak	HORIZONTAL
2	10620.01	44.83	54.00	-9.17	28.96	10.96	39.88	34.97	243	238	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10619.93	44.93	54.00	-9.07	29.06	10.96	39.88	34.97	182	136	Average	VERTICAL
2	10621.23	57.76	74.00	-16.24	41.89	10.96	39.88	34.97	182	136	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11020.00	45.01	54.00	-8.99	28.73	11.25	40.20	35.17	194	138	Average	HORIZONTAL
2	11020.00	58.64	74.00	-15.36	42.36	11.25	40.20	35.17	194	138	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11020.00	45.13	54.00	-8.87	28.85	11.25	40.20	35.17	241	205	Average	VERTICAL
2	11020.00	59.25	74.00	-14.75	42.97	11.25	40.20	35.17	241	205	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 110 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11098.05	45.42	54.00	-8.58	29.12	11.32	40.16	35.18	199	140	Average	HORIZONTAL
2	11100.28	58.71	74.00	-15.29	42.41	11.32	40.16	35.18	199	140	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11100.78	59.40	74.00	-14.60	43.10	11.32	40.16	35.18	192	86	Peak	VERTICAL
2	11101.56	45.48	54.00	-8.52	29.18	11.32	40.16	35.18	192	86	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 134 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11339.04	44.91	54.00	-9.09	28.57	11.48	40.07	35.21	216	154	Average	HORIZONTAL
2	11340.03	58.82	74.00	-15.18	42.48	11.48	40.07	35.21	216	154	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11338.05	45.50	54.00	-8.50	29.16	11.48	40.07	35.21	230	184	Average	VERTICAL
2	11339.75	58.89	74.00	-15.11	42.55	11.48	40.07	35.21	230	184	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15871.24	46.05	54.00	-7.95	30.18	13.41	37.86	35.40	224	256	Average	HORIZONTAL
2	15872.18	59.85	74.00	-14.15	43.98	13.41	37.86	35.40	224	256	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15868.44	46.17	54.00	-7.83	30.30	13.41	37.86	35.40	229	196	Average	VERTICAL
2	15871.75	59.61	74.00	-14.39	43.74	13.41	37.86	35.40	229	196	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11058.11	58.36	74.00	-15.64	42.06	11.28	40.19	35.17	207	161	Peak	HORIZONTAL
2	11059.52	45.28	54.00	-8.72	28.98	11.28	40.19	35.17	207	161	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11058.15	45.09	54.00	-8.91	28.79	11.28	40.19	35.17	209	197	Average	VERTICAL
2	11059.62	58.97	74.00	-15.03	42.67	11.28	40.19	35.17	209	197	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 122 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11219.67	44.86	54.00	-9.14	28.55	11.39	40.12	35.20	178	90	Average	HORIZONTAL
2	11221.14	57.88	74.00	-16.12	41.56	11.41	40.11	35.20	178	90	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11217.53	59.20	74.00	-14.80	42.89	11.39	40.12	35.20	210	184	Peak	VERTICAL
2	11221.68	45.03	54.00	-8.97	28.71	11.41	40.11	35.20	210	184	Average	VERTICAL

Straddle Channel

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 144 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11438.63	58.37	74.00	-15.63	42.02	11.55	40.03	35.23	232	154	Peak	HORIZONTAL
2	11440.81	44.82	54.00	-9.18	28.47	11.55	40.03	35.23	232	154	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11438.34	57.78	74.00	-16.22	41.43	11.55	40.03	35.23	229	171	Peak	VERTICAL
2	11442.20	44.92	54.00	-9.08	28.57	11.55	40.03	35.23	229	171	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11438.43	44.82	54.00	-9.18	28.47	11.55	40.03	35.23	226	116	Average	HORIZONTAL
2	11440.17	58.43	74.00	-15.57	42.08	11.55	40.03	35.23	226	116	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11437.59	44.97	54.00	-9.03	28.62	11.55	40.03	35.23	218	181	Average	VERTICAL
2	11438.27	57.74	74.00	-16.26	41.39	11.55	40.03	35.23	218	181	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11418.88	45.14	54.00	-8.86	28.78	11.55	40.03	35.22	237	170	Average	HORIZONTAL
2	11422.01	58.79	74.00	-15.21	42.43	11.55	40.03	35.22	237	170	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11417.81	45.32	54.00	-8.68	28.96	11.55	40.03	35.22	232	218	Average	VERTICAL
2	11421.53	59.06	74.00	-14.94	42.70	11.55	40.03	35.22	232	218	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Apr. 30, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11378.24	58.20	74.00	-15.80	41.86	11.51	40.05	35.22	211	84	Peak	HORIZONTAL
2	11379.72	45.37	54.00	-8.63	29.03	11.51	40.05	35.22	211	84	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11377.84	58.82	74.00	-15.18	42.48	11.51	40.05	35.22	189	150	Peak	VERTICAL
2	11378.53	45.47	54.00	-8.53	29.13	11.51	40.05	35.22	189	150	Average	VERTICAL

802.11ac MCS0/Nss2 VHT80+80

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 1 / CH 42+106 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 03, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11060.00	45.57	54.00	-8.43	29.27	11.28	40.19	35.17	240	346	Average	HORIZONTAL
2	11060.00	59.40	74.00	-14.60	43.10	11.28	40.19	35.17	240	346	Peak	HORIZONTAL
3	15630.00	46.68	54.00	-7.32	30.59	13.31	38.14	35.36	228	294	Average	HORIZONTAL
4	15630.00	59.68	74.00	-14.32	43.59	13.31	38.14	35.36	228	294	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11060.00	45.97	54.00	-8.03	29.67	11.28	40.19	35.17	190	302	Average	VERTICAL
2	11060.00	58.57	74.00	-15.43	42.27	11.28	40.19	35.17	190	302	Peak	VERTICAL
3	15627.09	59.54	74.00	-14.46	43.45	13.31	38.14	35.36	175	258	Peak	VERTICAL
4	15630.46	46.76	54.00	-7.24	30.67	13.31	38.14	35.36	175	258	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 2 / CH 42+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 03, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11220.00	45.52	54.00	-8.48	29.21	11.39	40.12	35.20	205	328	Average	HORIZONTAL
2	11220.00	58.98	74.00	-15.02	42.67	11.39	40.12	35.20	205	328	Peak	HORIZONTAL
3	15630.00	46.48	54.00	-7.52	30.39	13.31	38.14	35.36	186	294	Average	HORIZONTAL
4	15630.00	60.38	74.00	-13.62	44.29	13.31	38.14	35.36	186	294	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11220.00	45.70	54.00	-8.30	29.39	11.39	40.12	35.20	214	248	Average	VERTICAL
2	11220.00	58.57	74.00	-15.43	42.26	11.39	40.12	35.20	214	248	Peak	VERTICAL
3	15630.00	46.50	54.00	-7.50	30.41	13.31	38.14	35.36	194	279	Average	VERTICAL
4	15630.00	59.95	74.00	-14.05	43.86	13.31	38.14	35.36	194	279	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 3 / CH 42+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 03, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11380.00	45.80	54.00	-8.20	29.46	11.51	40.05	35.22	243	200	Average	HORIZONTAL
2	11380.00	59.49	74.00	-14.51	43.15	11.51	40.05	35.22	243	200	Peak	HORIZONTAL
3	15630.00	46.50	54.00	-7.50	30.41	13.31	38.14	35.36	258	247	Average	HORIZONTAL
4	15630.00	60.33	74.00	-13.67	44.24	13.31	38.14	35.36	258	247	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11381.00	45.56	54.00	-8.44	29.22	11.51	40.05	35.22	221	293	Average	VERTICAL
2	11381.00	59.59	74.00	-14.41	43.25	11.51	40.05	35.22	221	293	Peak	VERTICAL
3	15630.00	46.46	54.00	-7.54	30.37	13.31	38.14	35.36	243	304	Average	VERTICAL
4	15630.00	60.30	74.00	-13.70	44.21	13.31	38.14	35.36	243	304	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 4 / CH 58+106 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 04, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11057.87	58.70	74.00	-15.30	42.40	11.28	40.19	35.17	222	240	Peak	HORIZONTAL
2	11059.73	47.01	54.00	-6.99	30.71	11.28	40.19	35.17	222	240	Average	HORIZONTAL
3	15869.78	46.86	54.00	-7.14	30.99	13.41	37.86	35.40	241	199	Average	HORIZONTAL
4	15873.93	57.59	74.00	-16.41	41.74	13.44	37.81	35.40	241	199	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11058.38	57.58	74.00	-16.42	41.28	11.28	40.19	35.17	173	165	Peak	VERTICAL
2	11059.43	46.60	54.00	-7.40	30.30	11.28	40.19	35.17	173	165	Average	VERTICAL
3	15866.95	58.11	74.00	-15.89	42.24	13.41	37.86	35.40	205	189	Peak	VERTICAL
4	15869.07	47.31	54.00	-6.69	31.44	13.41	37.86	35.40	205	189	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 5 / CH 58+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 04, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11220.27	58.24	74.00	-15.76	41.93	11.39	40.12	35.20	230	185	Peak	HORIZONTAL
2	11222.88	46.90	54.00	-7.10	30.58	11.41	40.11	35.20	230	185	Average	HORIZONTAL
3	15871.42	46.43	54.00	-7.57	30.56	13.41	37.86	35.40	187	142	Average	HORIZONTAL
4	15872.41	57.84	74.00	-16.16	41.97	13.41	37.86	35.40	187	142	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11215.01	58.55	74.00	-15.45	42.24	11.39	40.12	35.20	255	206	Peak	VERTICAL
2	11220.33	46.62	54.00	-7.38	30.31	11.39	40.12	35.20	255	206	Average	VERTICAL
3	15866.88	47.33	54.00	-6.67	31.46	13.41	37.86	35.40	212	195	Average	VERTICAL
4	15873.35	57.98	74.00	-16.02	42.13	13.44	37.81	35.40	212	195	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 6 / CH 58+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 04, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11379.45	46.68	54.00	-7.32	30.34	11.51	40.05	35.22	210	150	Average	HORIZONTAL
2	11381.03	57.32	74.00	-16.68	40.98	11.51	40.05	35.22	210	150	Peak	HORIZONTAL
3	15865.04	46.71	54.00	-7.29	30.84	13.41	37.86	35.40	241	175	Average	HORIZONTAL
4	15867.57	57.36	74.00	-16.64	41.49	13.41	37.86	35.40	241	175	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11375.96	58.25	74.00	-15.75	41.91	11.51	40.05	35.22	186	77	Peak	VERTICAL
2	11377.03	46.30	54.00	-7.70	29.96	11.51	40.05	35.22	186	77	Average	VERTICAL
3	15865.87	58.23	74.00	-15.77	42.36	13.41	37.86	35.40	201	135	Peak	VERTICAL
4	15867.56	47.29	54.00	-6.71	31.42	13.41	37.86	35.40	201	135	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 7 / CH 58+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 04, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11552.31	57.80	74.00	-16.20	41.52	11.64	39.87	35.23	177	215	Peak	HORIZONTAL
2	11554.62	46.30	54.00	-7.70	30.02	11.64	39.87	35.23	177	215	Average	HORIZONTAL
3	15871.18	46.50	54.00	-7.50	30.63	13.41	37.86	35.40	202	115	Average	HORIZONTAL
4	15873.00	58.10	74.00	-15.90	42.23	13.41	37.86	35.40	202	115	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11551.39	45.64	54.00	-8.36	29.36	11.64	39.87	35.23	225	290	Average	VERTICAL
2	11552.64	57.26	74.00	-16.74	40.98	11.64	39.87	35.23	225	290	Peak	VERTICAL
3	15866.50	47.23	54.00	-6.77	31.36	13.41	37.86	35.40	234	335	Average	VERTICAL
4	15871.88	58.19	74.00	-15.81	42.32	13.41	37.86	35.40	234	335	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 8 / CH 106+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 04, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11057.11	57.61	74.00	-16.39	41.31	11.28	40.19	35.17	242	91	Peak	HORIZONTAL
2	11058.94	45.83	54.00	-8.17	29.53	11.28	40.19	35.17	242	91	Average	HORIZONTAL
3	11377.66	46.47	54.00	-7.53	30.13	11.51	40.05	35.22	192	224	Average	HORIZONTAL
4	11379.69	57.26	74.00	-16.74	40.92	11.51	40.05	35.22	192	224	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11056.41	57.60	74.00	-16.40	41.30	11.28	40.19	35.17	195	165	Peak	VERTICAL
2	11058.70	46.38	54.00	-7.62	30.08	11.28	40.19	35.17	195	165	Average	VERTICAL
3	11375.99	57.00	74.00	-17.00	40.66	11.51	40.05	35.22	217	186	Peak	VERTICAL
4	11381.33	45.69	54.00	-8.31	29.35	11.51	40.05	35.22	217	186	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 9 / CH 106+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 04, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11057.15	44.67	54.00	-9.33	28.37	11.28	40.19	35.17	222	248	Average	HORIZONTAL
2	11063.65	56.70	74.00	-17.30	40.40	11.30	40.17	35.17	222	248	Peak	HORIZONTAL
3	11547.56	46.26	54.00	-7.74	29.94	11.62	39.93	35.23	188	52	Average	HORIZONTAL
4	11550.27	58.43	74.00	-15.57	42.15	11.64	39.87	35.23	188	52	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11056.36	58.71	74.00	-15.29	42.41	11.28	40.19	35.17	208	150	Peak	VERTICAL
2	11064.68	46.84	54.00	-7.16	30.54	11.30	40.17	35.17	208	150	Average	VERTICAL
3	11545.81	45.61	54.00	-8.39	29.29	11.62	39.93	35.23	264	178	Average	VERTICAL
4	11549.03	57.70	74.00	-16.30	41.38	11.62	39.93	35.23	264	178	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 10 / CH 122+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 04, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11215.01	45.92	54.00	-8.08	29.61	11.39	40.12	35.20	290	251	Average	HORIZONTAL
2	11217.97	57.36	74.00	-16.64	41.05	11.39	40.12	35.20	290	251	Peak	HORIZONTAL
3	11546.97	57.90	74.00	-16.10	41.58	11.62	39.93	35.23	186	115	Peak	HORIZONTAL
4	11549.48	46.18	54.00	-7.82	29.86	11.62	39.93	35.23	186	115	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11218.94	46.49	54.00	-7.51	30.18	11.39	40.12	35.20	274	305	Average	VERTICAL
2	11219.09	57.49	74.00	-16.51	41.18	11.39	40.12	35.20	274	305	Peak	VERTICAL
3	11551.55	55.79	74.00	-18.21	39.51	11.64	39.87	35.23	211	237	Peak	VERTICAL
4	11554.86	46.04	54.00	-7.96	29.76	11.64	39.87	35.23	211	237	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 11 / CH 138+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	May 04, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11375.59	56.84	74.00	-17.16	40.50	11.51	40.05	35.22	268	224	Peak	HORIZONTAL
2	11376.77	45.52	54.00	-8.48	29.18	11.51	40.05	35.22	268	224	Average	HORIZONTAL
3	11553.92	46.12	54.00	-7.88	29.84	11.64	39.87	35.23	176	128	Average	HORIZONTAL
4	11554.63	56.12	74.00	-17.88	39.84	11.64	39.87	35.23	176	128	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11380.49	56.61	74.00	-17.39	40.27	11.51	40.05	35.22	212	77	Peak	VERTICAL
2	11383.14	45.56	54.00	-8.44	29.22	11.51	40.05	35.22	212	77	Average	VERTICAL
3	11548.73	45.36	54.00	-8.64	29.04	11.62	39.93	35.23	254	158	Average	VERTICAL
4	11550.52	57.04	74.00	-16.96	40.76	11.64	39.87	35.23	254	158	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.

<For Beamforming Mode>

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15776.04	59.38	74.00	-14.62	44.46	11.29	38.48	34.85	219	297	Peak	HORIZONTAL
2	15782.30	45.44	54.00	-8.56	30.44	11.30	38.55	34.85	219	297	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15775.00	45.49	54.00	-8.51	30.57	11.29	38.48	34.85	233	215	Average	VERTICAL
2	15782.30	59.45	74.00	-14.55	44.45	11.30	38.55	34.85	233	215	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 60 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10615.00	41.18	54.00	-12.82	27.87	9.74	38.50	34.93	281	218	Average	HORIZONTAL
2	10617.64	55.39	74.00	-18.61	42.08	9.74	38.50	34.93	281	218	Peak	HORIZONTAL
3	15944.28	47.23	54.00	-6.77	32.14	11.33	38.74	34.98	259	216	Average	HORIZONTAL
4	15944.52	61.17	74.00	-12.83	46.08	11.33	38.74	34.98	259	216	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10622.82	54.75	74.00	-19.25	41.45	9.73	38.50	34.93	214	256	Peak	VERTICAL
2	10625.00	41.14	54.00	-12.86	27.84	9.73	38.50	34.93	214	256	Average	VERTICAL
3	15935.74	61.72	74.00	-12.28	46.63	11.33	38.74	34.98	260	244	Peak	VERTICAL
4	15944.52	47.05	54.00	-6.95	31.96	11.33	38.74	34.98	260	244	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 64 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10638.58	55.19	74.00	-18.81	41.86	9.73	38.50	34.90	286	183	Peak	HORIZONTAL
2	10645.00	40.69	54.00	-13.31	27.36	9.73	38.50	34.90	286	183	Average	HORIZONTAL
3	15955.98	61.10	74.00	-12.90	46.01	11.33	38.74	34.98	248	135	Peak	HORIZONTAL
4	15956.30	47.24	54.00	-6.76	32.15	11.33	38.74	34.98	248	135	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10635.00	40.89	54.00	-13.11	27.59	9.73	38.50	34.93	245	352	Average	VERTICAL
2	10636.06	53.84	74.00	-20.16	40.54	9.73	38.50	34.93	245	352	Peak	VERTICAL
3	15955.00	46.87	54.00	-7.13	31.78	11.33	38.74	34.98	220	153	Average	VERTICAL
4	15956.30	61.12	74.00	-12.88	46.03	11.33	38.74	34.98	220	153	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10996.28	41.11	54.00	-12.89	27.58	9.69	38.50	34.66	225	146	Average	HORIZONTAL
2	10996.64	55.49	74.00	-18.51	41.97	9.68	38.50	34.66	225	146	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10996.64	41.05	54.00	-12.95	27.53	9.68	38.50	34.66	228	182	Average	VERTICAL
2	10996.70	55.00	74.00	-19.00	41.48	9.68	38.50	34.66	228	182	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 116 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11161.50	40.99	54.00	-13.01	27.48	9.66	38.50	34.65	279	193	Average	HORIZONTAL
2	11164.50	54.44	74.00	-19.56	40.93	9.66	38.50	34.65	279	193	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11155.00	41.25	54.00	-12.75	27.74	9.66	38.50	34.65	282	223	Average	VERTICAL
2	11161.50	57.57	74.00	-16.43	44.06	9.66	38.50	34.65	282	223	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 140 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11395.00	41.55	54.00	-12.45	28.05	9.63	38.50	34.63	245	216	Average	HORIZONTAL
2	11397.20	55.18	74.00	-18.82	41.68	9.63	38.50	34.63	245	216	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11397.20	41.82	54.00	-12.18	28.32	9.63	38.50	34.63	248	221	Average	VERTICAL
2	11400.38	55.67	74.00	-18.33	42.17	9.63	38.50	34.63	248	221	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15809.88	46.04	54.00	-7.96	31.04	11.30	38.55	34.85	241	164	Average	HORIZONTAL
2	15812.98	59.52	74.00	-14.48	44.52	11.30	38.55	34.85	241	164	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15805.00	45.84	54.00	-8.16	30.84	11.30	38.55	34.85	244	186	Average	VERTICAL
2	15809.88	59.53	74.00	-14.47	44.53	11.30	38.55	34.85	244	186	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 62 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10620.50	55.50	74.00	-18.50	42.19	9.74	38.50	34.93	239	326	Peak	HORIZONTAL
2	10625.00	41.85	54.00	-12.15	28.55	9.73	38.50	34.93	239	326	Average	HORIZONTAL
3	15925.90	46.83	54.00	-7.17	31.74	11.33	38.74	34.98	240	147	Average	HORIZONTAL
4	15934.64	60.66	74.00	-13.34	45.57	11.33	38.74	34.98	240	147	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	10615.20	55.35	74.00	-18.65	42.04	9.74	38.50	34.93	244	241	Peak	VERTICAL
2	10620.50	41.52	54.00	-12.48	28.21	9.74	38.50	34.93	244	241	Average	VERTICAL
3	15933.14	61.40	74.00	-12.60	46.31	11.33	38.74	34.98	240	147	Peak	VERTICAL
4	15934.64	46.64	54.00	-7.36	31.55	11.33	38.74	34.98	240	147	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11019.04	54.42	74.00	-19.58	40.90	9.68	38.50	34.66	248	97	Peak	HORIZONTAL
2	11019.16	40.88	54.00	-13.12	27.36	9.68	38.50	34.66	248	97	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11015.00	40.84	54.00	-13.16	27.32	9.68	38.50	34.66	246	113	Average	VERTICAL
2	11019.16	55.34	74.00	-18.66	41.82	9.68	38.50	34.66	246	113	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 110 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11099.26	40.99	54.00	-13.01	27.47	9.67	38.50	34.65	248	173	Average	HORIZONTAL
2	11100.68	54.84	74.00	-19.16	41.32	9.67	38.50	34.65	248	173	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11100.68	40.51	54.00	-13.49	26.99	9.67	38.50	34.65	254	157	Average	VERTICAL
2	11101.42	54.79	74.00	-19.21	41.27	9.67	38.50	34.65	254	157	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 134 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11338.04	55.26	74.00	-18.74	41.75	9.64	38.50	34.63	248	150	Peak	HORIZONTAL
2	11344.56	41.34	54.00	-12.66	27.83	9.64	38.50	34.63	248	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11342.36	41.88	54.00	-12.12	28.37	9.64	38.50	34.63	273	216	Average	VERTICAL
2	11344.56	55.37	74.00	-18.63	41.86	9.64	38.50	34.63	273	216	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15865.34	60.57	74.00	-13.43	45.54	11.31	38.61	34.89	249	233	Peak	HORIZONTAL
2	15868.42	46.60	54.00	-7.40	31.62	11.31	38.61	34.94	249	233	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15869.46	46.82	54.00	-7.18	31.84	11.31	38.61	34.94	294	204	Average	VERTICAL
2	15873.86	60.22	74.00	-13.78	45.17	11.32	38.67	34.94	294	204	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11055.48	41.09	54.00	-12.91	27.57	9.68	38.50	34.66	226	202	Average	HORIZONTAL
2	11063.36	54.21	74.00	-19.79	40.70	9.67	38.50	34.66	226	202	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11057.50	54.86	74.00	-19.14	41.34	9.68	38.50	34.66	232	221	Peak	VERTICAL
2	11060.34	41.21	54.00	-12.79	27.70	9.67	38.50	34.66	232	221	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 122 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 07, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11220.86	53.60	74.00	-20.40	40.08	9.66	38.50	34.64	243	289	Peak	HORIZONTAL
2	11222.54	40.66	54.00	-13.34	27.15	9.65	38.50	34.64	243	289	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11219.52	40.92	54.00	-13.08	27.40	9.66	38.50	34.64	243	260	Average	VERTICAL
2	11220.10	54.07	74.00	-19.93	40.55	9.66	38.50	34.64	243	260	Peak	VERTICAL

Straddle Channel

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 08, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11438.62	51.69	74.00	-22.31	38.18	9.63	38.50	34.62	165	117	Peak	HORIZONTAL
2	11440.03	38.71	54.00	-15.29	25.20	9.63	38.50	34.62	165	117	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11439.96	39.12	54.00	-14.88	25.61	9.63	38.50	34.62	157	330	Average	VERTICAL
2	11441.34	51.68	74.00	-22.32	38.17	9.63	38.50	34.62	157	330	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 08, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11418.45	42.29	54.00	-11.71	28.79	9.63	38.50	34.63	164	167	Average	HORIZONTAL
2	11418.94	55.84	74.00	-18.16	42.34	9.63	38.50	34.63	164	167	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11418.41	42.31	54.00	-11.69	28.81	9.63	38.50	34.63	168	126	Average	VERTICAL
2	11418.45	55.18	74.00	-18.82	41.68	9.63	38.50	34.63	168	126	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 08, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11375.00	42.02	54.00	-11.98	28.52	9.63	38.50	34.63	167	271	Average	HORIZONTAL
2	11377.16	56.27	74.00	-17.73	42.77	9.63	38.50	34.63	167	271	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11375.04	42.41	54.00	-11.59	28.91	9.63	38.50	34.63	159	331	Average	VERTICAL
2	11380.58	54.73	74.00	-19.27	41.23	9.63	38.50	34.63	159	331	Peak	VERTICAL

802.11ac MCS0/Nss2 VHT80+80

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 1 / CH 42+106 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11059.72	57.11	74.00	-16.89	41.98	10.67	39.14	34.68	154	192	Peak	HORIZONTAL
2	11060.76	43.08	54.00	-10.92	27.91	10.67	39.18	34.68	154	192	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11060.51	55.85	74.00	-18.15	40.68	10.67	39.18	34.68	188	251	Peak	VERTICAL
2	11060.63	43.26	54.00	-10.74	28.09	10.67	39.18	34.68	188	251	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 2 / CH 42+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15630.39	60.14	74.00	-13.86	43.61	13.38	38.34	35.19	216	332	Peak	HORIZONTAL
2	15630.43	46.64	54.00	-7.36	30.11	13.38	38.34	35.19	216	332	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15630.77	46.74	54.00	-7.26	30.21	13.38	38.34	35.19	174	236	Average	VERTICAL
2	15630.90	60.29	74.00	-13.71	43.76	13.38	38.34	35.19	174	236	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 3 / CH 42+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15630.24	46.63	54.00	-7.37	30.10	13.38	38.34	35.19	198	112	Average	HORIZONTAL
2	15630.57	59.75	74.00	-14.25	43.22	13.38	38.34	35.19	198	112	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15630.88	59.50	74.00	-14.50	42.97	13.38	38.34	35.19	143	259	Peak	VERTICAL
2	15630.96	46.67	54.00	-7.33	30.14	13.38	38.34	35.19	143	259	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 4 / CH 58+106 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15869.79	46.24	54.00	-7.76	30.10	13.39	38.06	35.31	141	285	Average	HORIZONTAL
2	15870.86	59.25	74.00	-14.75	43.11	13.39	38.06	35.31	141	285	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15870.10	46.54	54.00	-7.46	30.40	13.39	38.06	35.31	168	211	Average	VERTICAL
2	15870.93	59.18	74.00	-14.82	43.04	13.39	38.06	35.31	168	211	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 5 / CH 58+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15869.89	59.40	74.00	-14.60	43.26	13.39	38.06	35.31	243	192	Peak	HORIZONTAL
2	15870.25	46.14	54.00	-7.86	30.00	13.39	38.06	35.31	243	192	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15869.83	49.23	74.00	-24.77	33.09	13.39	38.06	35.31	142	209	Peak	VERTICAL
2	15870.15	46.18	54.00	-7.82	30.04	13.39	38.06	35.31	142	209	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 6 / CH 58+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15870.07	46.06	54.00	-7.94	29.92	13.39	38.06	35.31	125	188	Average	HORIZONTAL
2	15870.49	59.63	74.00	-14.37	43.49	13.39	38.06	35.31	125	188	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15870.07	46.39	54.00	-7.61	30.25	13.39	38.06	35.31	166	258	Average	VERTICAL
2	15870.26	59.26	74.00	-14.74	43.12	13.39	38.06	35.31	166	258	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 7 / CH 58+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15869.78	59.75	74.00	-14.25	43.61	13.39	38.06	35.31	236	45	Peak	HORIZONTAL
2	15870.12	46.76	54.00	-7.24	30.62	13.39	38.06	35.31	236	45	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	15869.96	46.63	54.00	-7.37	30.49	13.39	38.06	35.31	157	355	Average	VERTICAL
2	15870.59	60.28	74.00	-13.72	44.14	13.39	38.06	35.31	157	355	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 8 / CH 106+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11059.28	56.75	74.00	-17.25	41.62	10.67	39.14	34.68	149	246	Peak	HORIZONTAL
2	11060.94	43.27	54.00	-10.73	28.10	10.67	39.18	34.68	149	246	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11060.20	56.59	74.00	-17.41	41.42	10.67	39.18	34.68	151	217	Peak	VERTICAL
2	11060.85	43.37	54.00	-10.63	28.20	10.67	39.18	34.68	151	217	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 9 / CH 106+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11060.28	56.47	74.00	-17.53	41.30	10.67	39.18	34.68	114	278	Peak	HORIZONTAL
2	11060.78	43.15	54.00	-10.85	27.98	10.67	39.18	34.68	114	278	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11059.70	43.42	54.00	-10.58	28.29	10.67	39.14	34.68	196	243	Average	VERTICAL
2	11059.83	56.40	74.00	-17.60	41.27	10.67	39.14	34.68	196	243	Peak	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 10 / CH 122+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11219.02	42.78	54.00	-11.22	27.44	10.70	39.34	34.70	189	272	Average	HORIZONTAL
2	11220.20	56.06	74.00	-17.94	40.72	10.70	39.34	34.70	189	272	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11219.02	56.58	74.00	-17.42	41.24	10.70	39.34	34.70	126	33	Peak	VERTICAL
2	11219.20	43.04	54.00	-10.96	27.70	10.70	39.34	34.70	126	33	Average	VERTICAL

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 11 / CH 138+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8
Test Date	Aug. 10, 2016		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11379.16	56.72	74.00	-17.28	41.19	10.72	39.54	34.73	179	258	Peak	HORIZONTAL
2	11379.59	43.43	54.00	-10.57	27.90	10.72	39.54	34.73	179	258	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	11379.17	43.46	54.00	-10.54	27.93	10.72	39.54	34.73	129	225	Average	VERTICAL
2	11379.30	57.18	74.00	-16.82	41.65	10.72	39.54	34.73	129	225	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.

4.6. Band Edge Emissions Measurement

4.6.1. Limit

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

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

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

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

4.6.2. Measuring Instruments and Setting

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

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

4.6.3. Test Procedures

The test procedure is the same as section 4.5.3.

4.6.4. Test Setup Layout

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

4.6.5. Test Deviation

There is no deviation with the original standard.

4.6.6. EUT Operation during Test

For Non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

For beamforming mode:

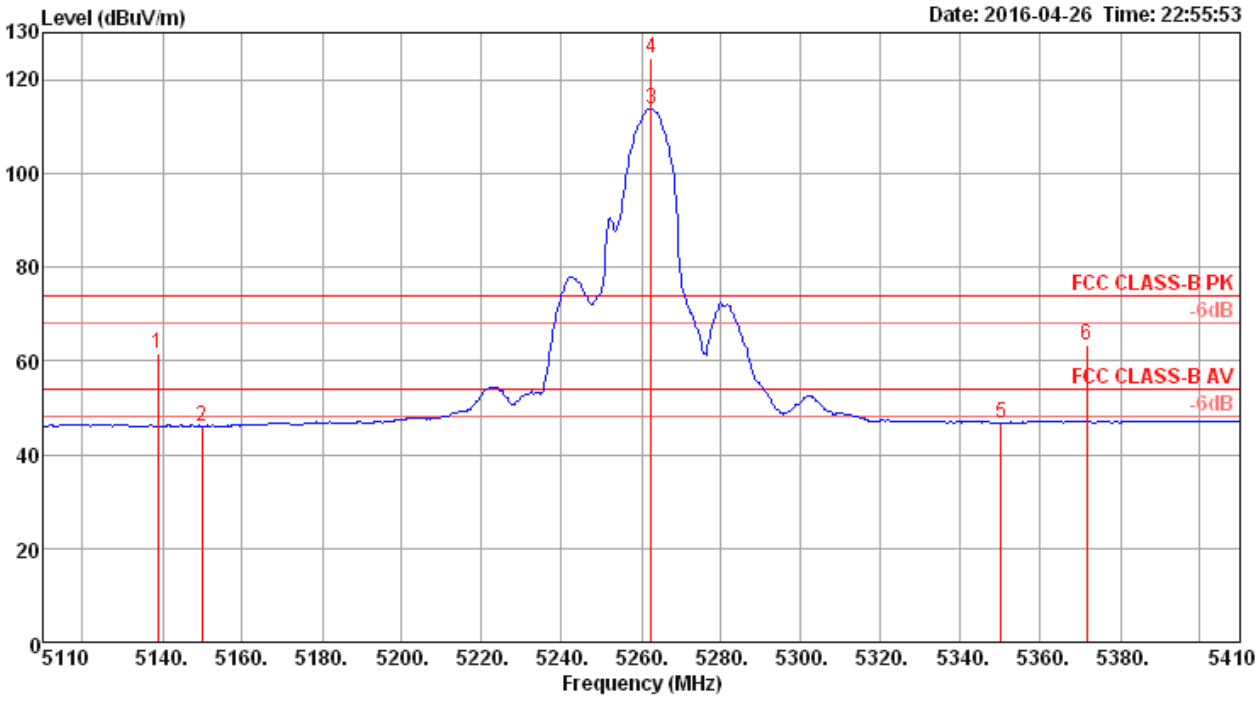
The EUT was programmed to be in beamforming transmitting mode.

4.6.7. Test Result of Band Edge and Fundamental Emissions

<For Non-beamforming Mode>

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 52, 60, 64 / Chain 5 + Chain 6 + Chain 7 + Chain 8

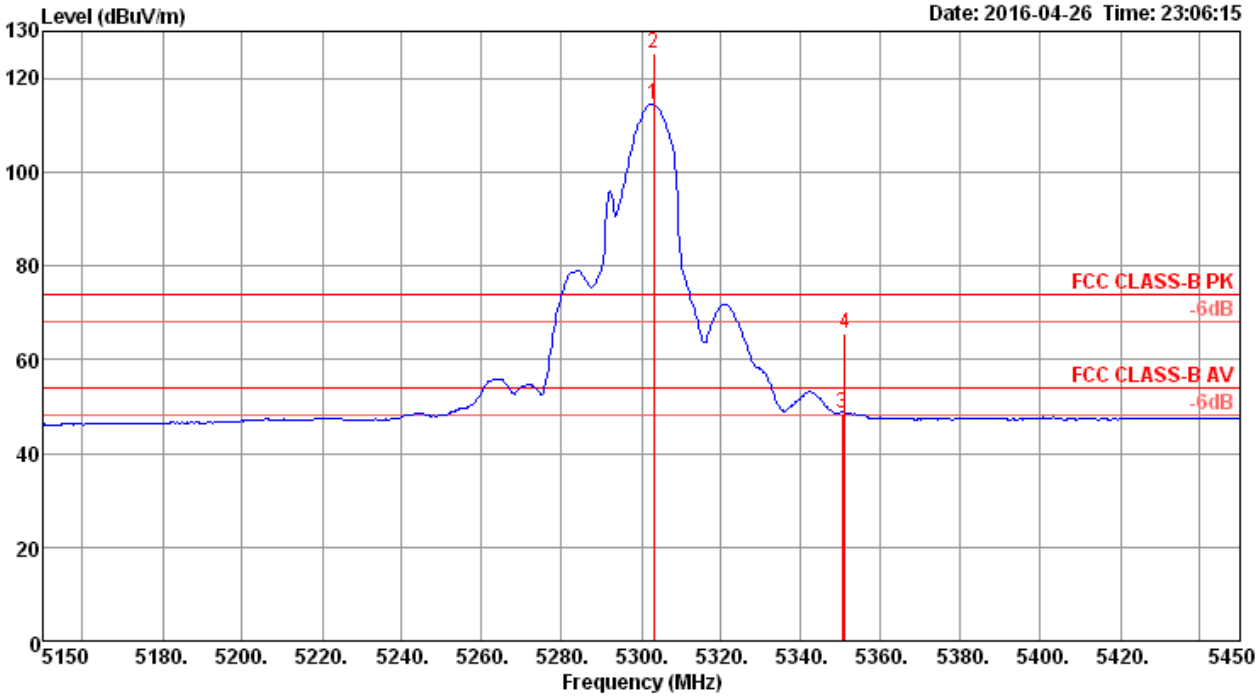
Channel 52



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5138.80	61.62	74.00	-12.38	55.29	7.94	31.44	33.05	281	127	Peak	VERTICAL
2	5150.00	46.14	54.00	-7.86	39.78	7.96	31.45	33.05	281	127	Average	VERTICAL
3	5262.40	113.84			107.27	8.06	31.57	33.06	281	127	Average	VERTICAL
4	5262.40	124.51			117.94	8.06	31.57	33.06	281	127	Peak	VERTICAL
5	5350.00	46.72	54.00	-7.28	39.99	8.14	31.65	33.06	281	127	Average	VERTICAL
6	5371.60	63.43	74.00	-10.57	56.64	8.17	31.68	33.06	281	127	Peak	VERTICAL

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

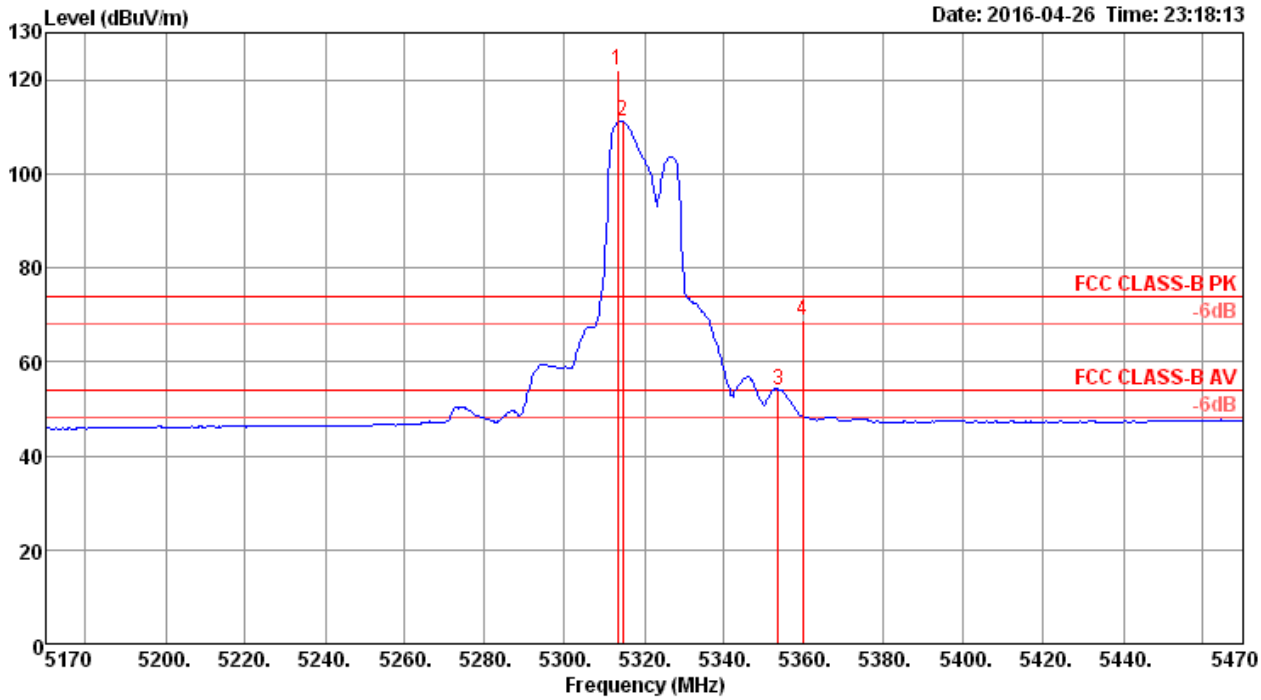
Channel 60



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5303.00	114.31			107.68	8.09	31.60	33.06	274	127	Average	VERTICAL
2	5303.00	125.19			118.56	8.09	31.60	33.06	274	127	Peak	VERTICAL
3	5350.40	48.68	54.00	-5.32	41.95	8.14	31.65	33.06	274	127	Average	VERTICAL
4	5351.00	65.45	74.00	-8.55	58.72	8.14	31.65	33.06	274	127	Peak	VERTICAL

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

Channel 64

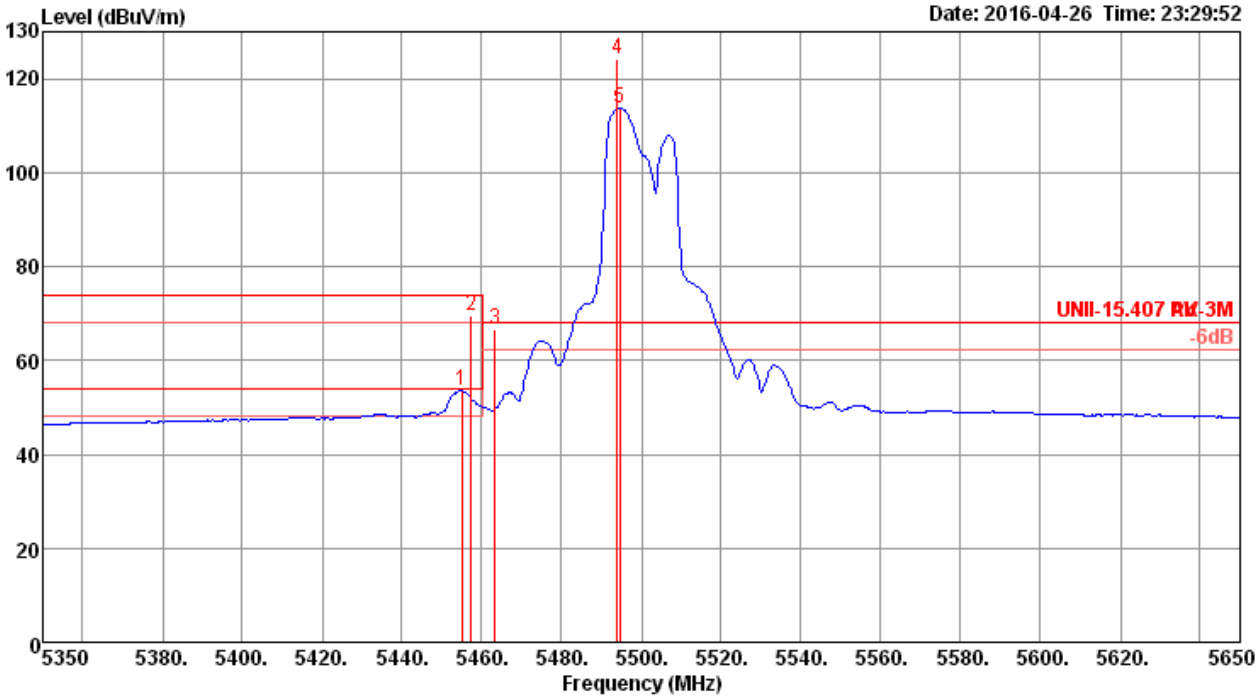


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5313.40	121.91			115.24	8.11	31.62	33.06	276	158	Peak	VERTICAL
2	5314.60	111.18			104.51	8.11	31.62	33.06	276	158	Average	VERTICAL
3	5353.60	53.95	54.00	-0.05	47.22	8.14	31.65	33.06	276	158	Average	VERTICAL
4	5359.60	68.63	74.00	-5.37	61.88	8.15	31.66	33.06	276	158	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 100, 116, 140 / Chain 5 + Chain 6 + Chain 7 + Chain 8

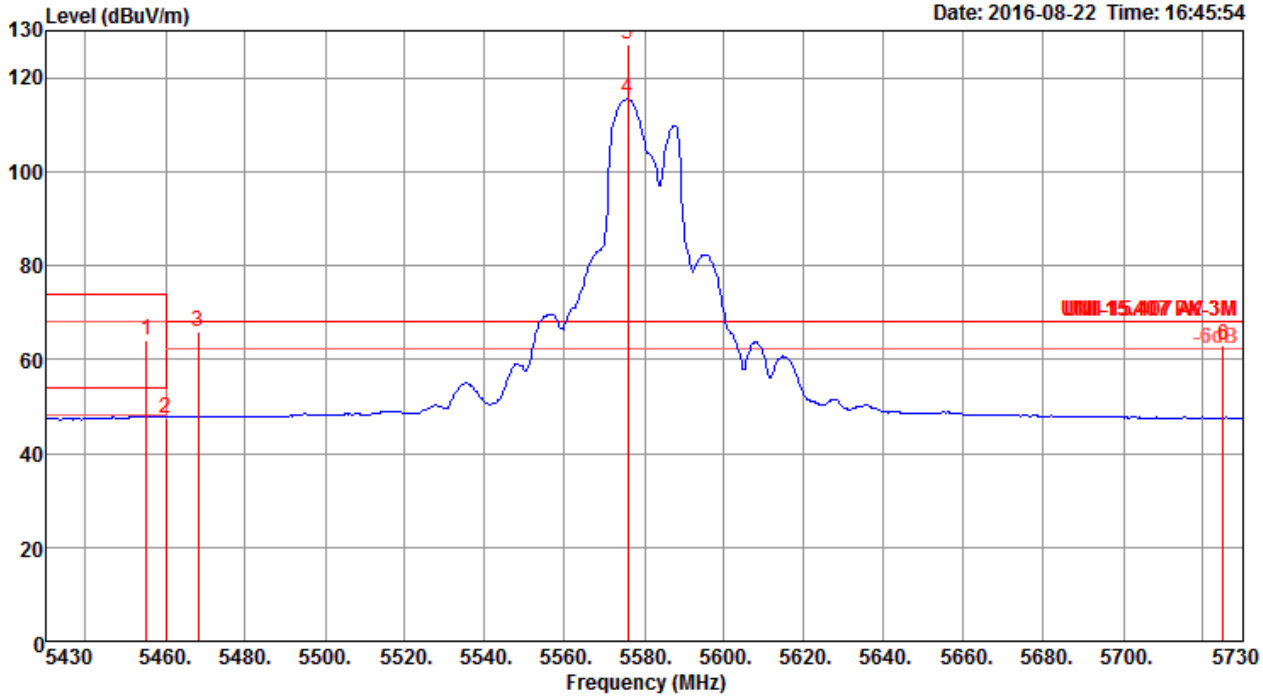
Channel 100



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.00	53.60	54.00	-0.40	46.70	8.21	31.75	33.06	275	159	Average	VERTICAL
2	5457.40	69.46	74.00	-4.54	62.56	8.21	31.75	33.06	275	159	Peak	VERTICAL
3	5463.40	66.71	68.20	-1.49	59.81	8.21	31.75	33.06	275	159	Peak	VERTICAL
4	5494.00	124.33			117.38	8.23	31.78	33.06	275	159	Peak	VERTICAL
5	5494.60	113.73			106.78	8.23	31.78	33.06	275	159	Average	VERTICAL

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

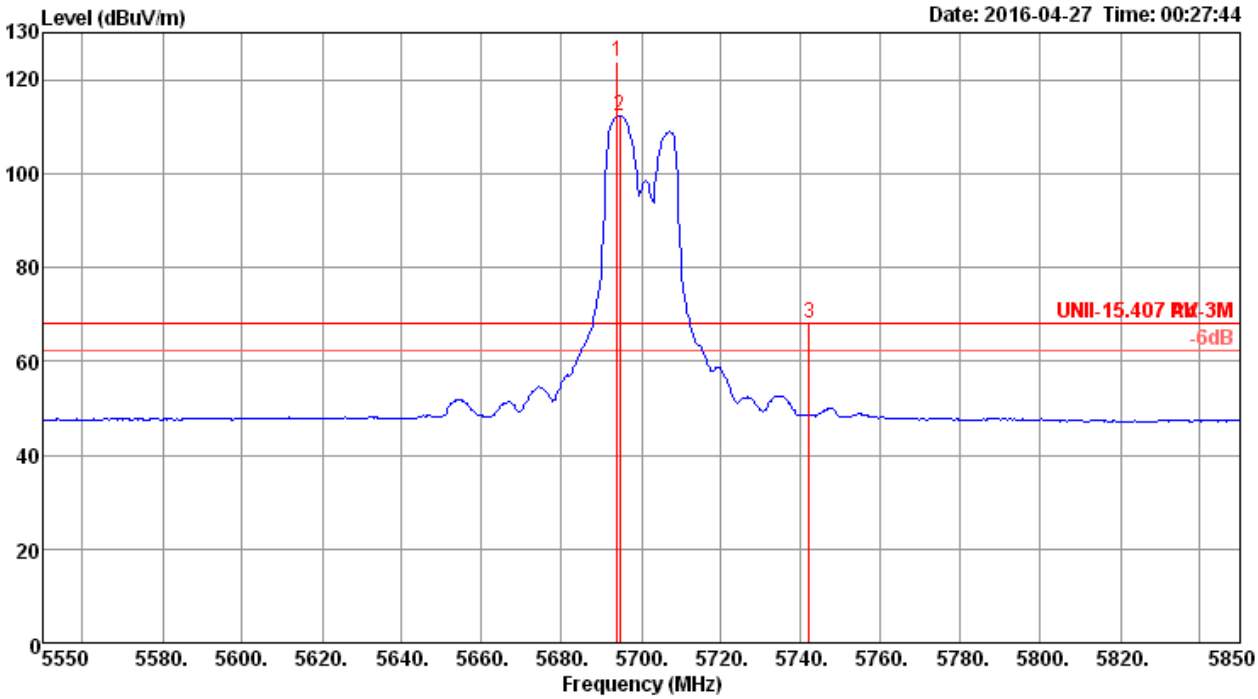
Channel 116



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.20	64.23	74.00	-9.77	56.38	6.68	34.23	33.06	277	311	Peak	VERTICAL
2	5460.00	47.53	54.00	-6.47	39.68	6.68	34.23	33.06	277	311	Average	VERTICAL
3	5468.20	65.96	68.20	-2.24	58.08	6.69	34.25	33.06	277	311	Peak	VERTICAL
4	5575.80	115.41			107.40	6.74	34.35	33.08	277	311	Average	VERTICAL
5	5575.80	126.97			118.96	6.74	34.35	33.08	277	311	Peak	VERTICAL
6	5725.00	63.09	68.20	-5.11	54.90	6.88	34.44	33.13	277	311	Peak	VERTICAL

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

Channel 140

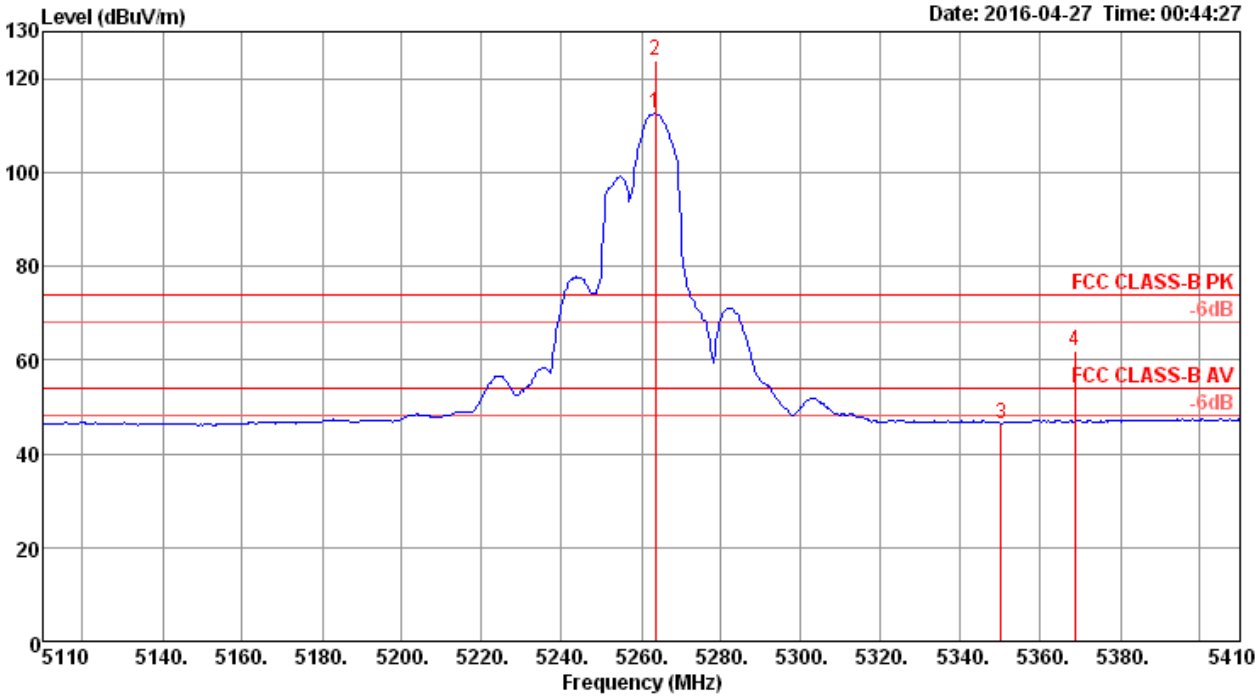


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5694.00	123.81			116.56	8.34	32.04	33.13	266	158	Peak	VERTICAL
2	5694.60	112.33			105.08	8.34	32.04	33.13	266	158	Average	VERTICAL
3	5742.00	67.90	68.20	-0.30	60.57	8.37	32.10	33.14	266	158	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 5 + Chain 6 + Chain 7 + Chain 8

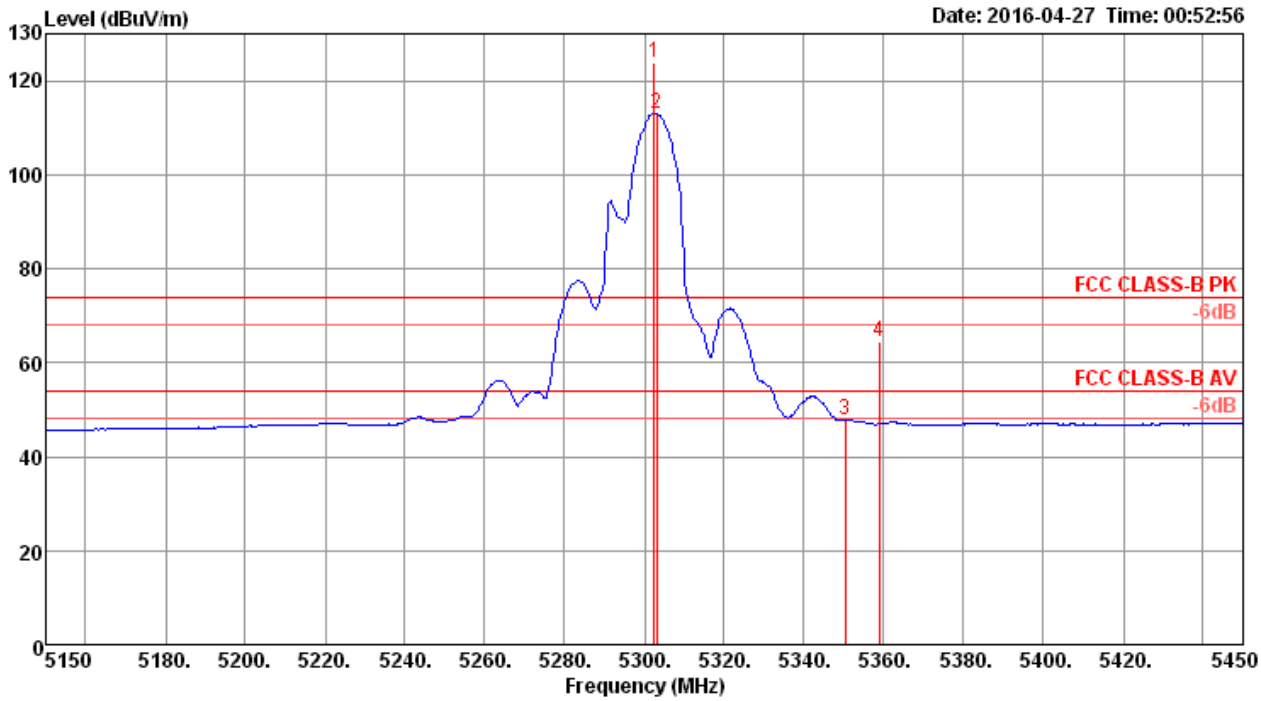
Channel 52



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5263.60	112.49			105.92	8.06	31.57	33.06	285	124	Average	VERTICAL
2	5263.60	123.71			117.14	8.06	31.57	33.06	285	124	Peak	VERTICAL
3	5350.00	46.46	54.00	-7.54	39.73	8.14	31.65	33.06	285	124	Average	VERTICAL
4	5368.60	61.96	74.00	-12.04	55.21	8.15	31.66	33.06	285	124	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5260 MHz.

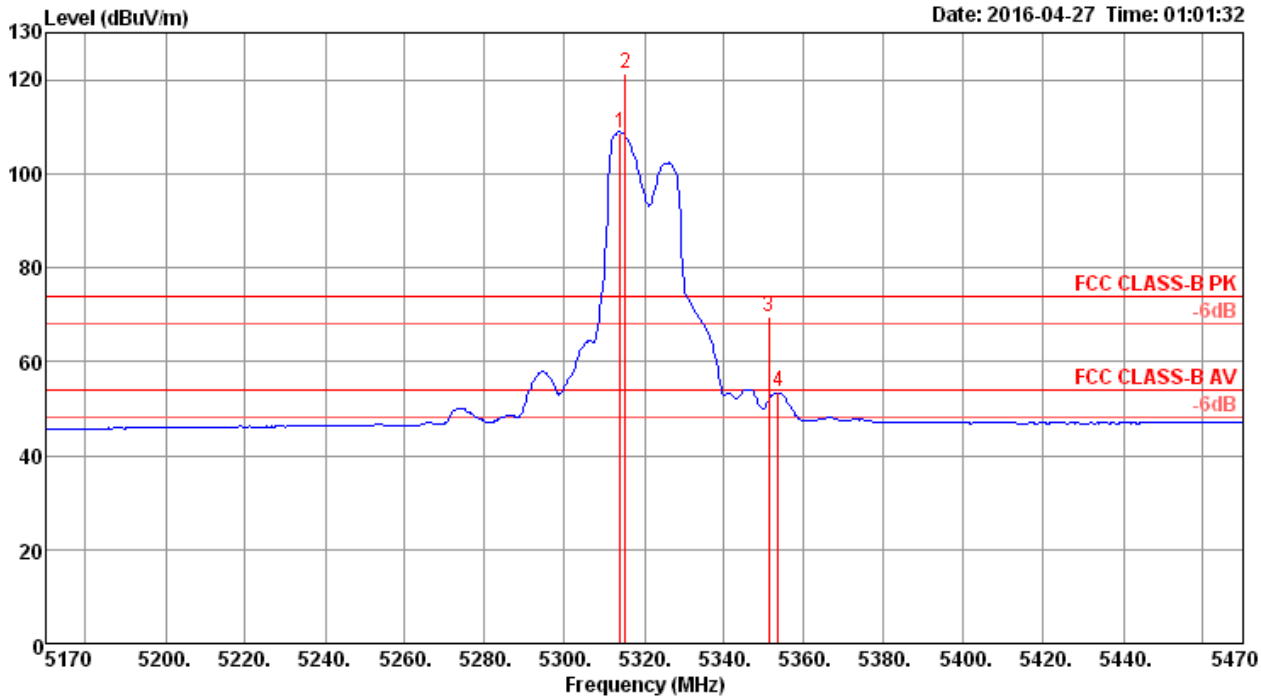
Channel 60



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5302.40	123.77			117.14	8.09	31.60	33.06	298	121	Peak	VERTICAL
2	5303.00	112.97			106.34	8.09	31.60	33.06	298	121	Average	VERTICAL
3	5350.40	47.83	54.00	-6.17	41.10	8.14	31.65	33.06	298	121	Average	VERTICAL
4	5358.80	64.52	74.00	-9.48	57.77	8.15	31.66	33.06	298	121	Peak	VERTICAL

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

Channel 64

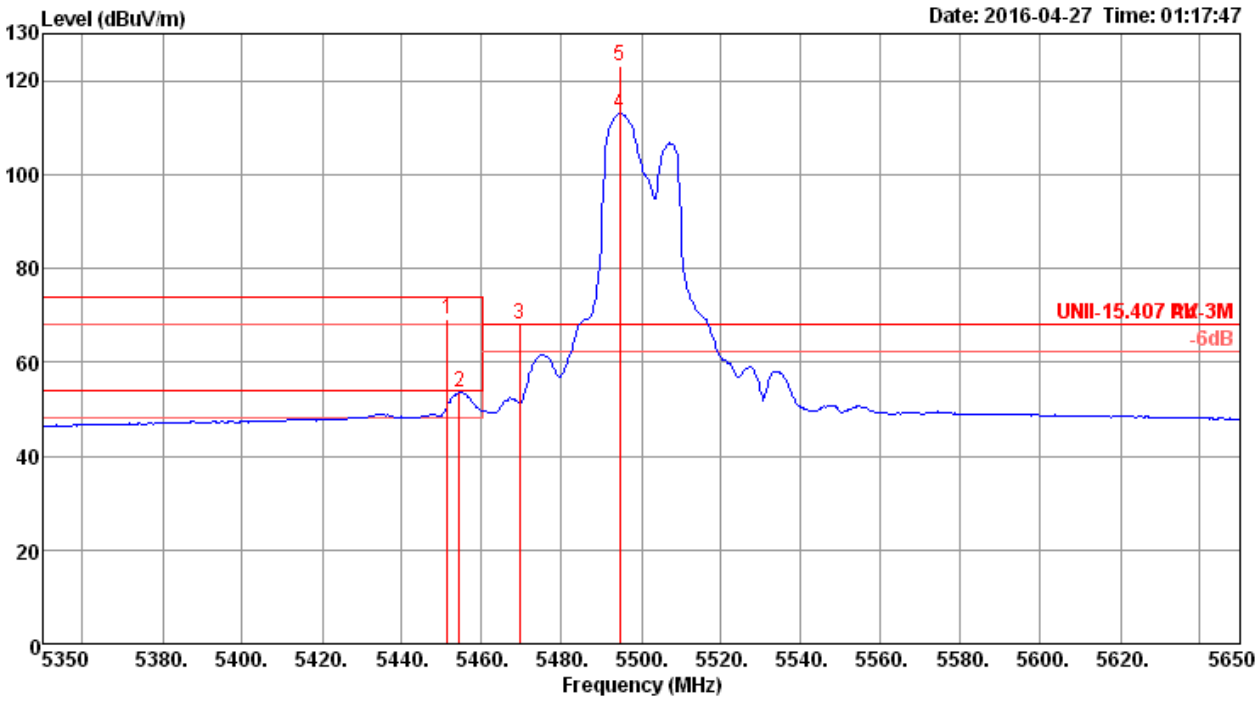


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5314.00	108.81			102.14	8.11	31.62	33.06	286	4	Average	VERTICAL
2	5315.20	121.13			114.46	8.11	31.62	33.06	286	4	Peak	VERTICAL
3	5351.20	69.50	74.00	-4.50	62.77	8.14	31.65	33.06	286	4	Peak	VERTICAL
4	5353.60	53.51	54.00	-0.49	46.78	8.14	31.65	33.06	286	4	Average	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 5 + Chain 6 + Chain 7 + Chain 8

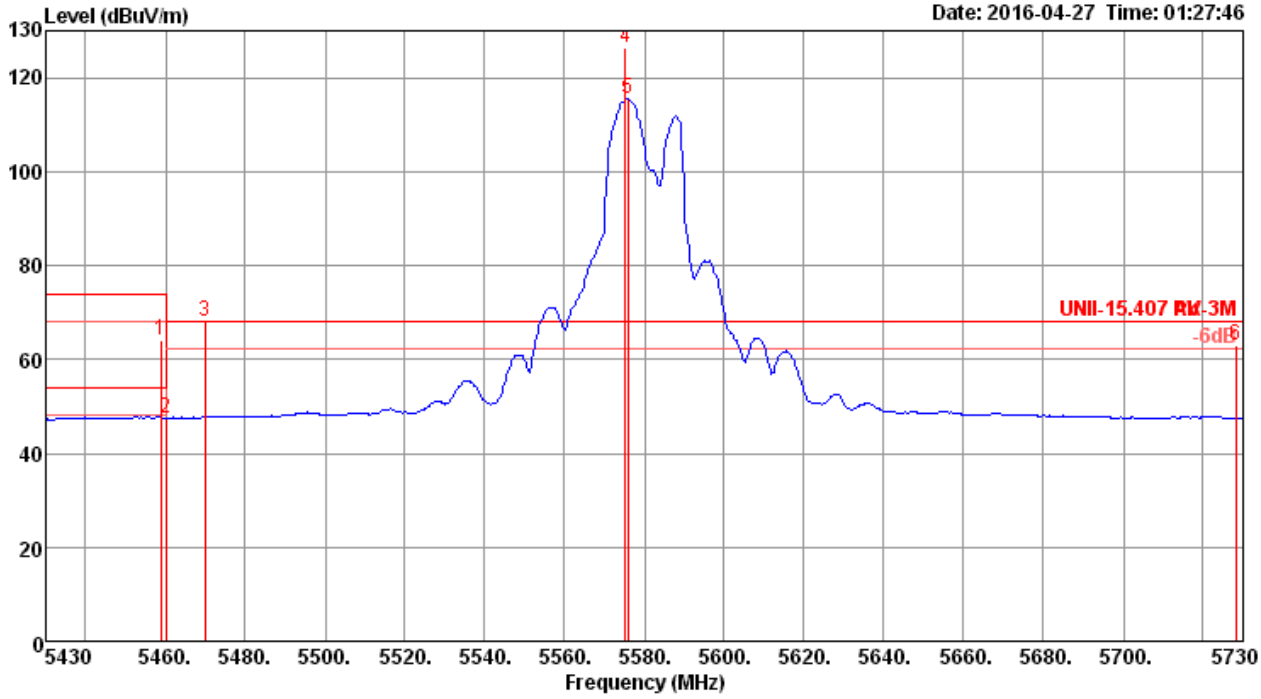
Channel 100



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5451.40	69.06	74.00	-4.94	62.16	8.21	31.75	33.06	262	157	Peak	VERTICAL
2	5454.40	53.62	54.00	-0.38	46.72	8.21	31.75	33.06	262	157	Average	VERTICAL
3	5469.40	68.12	68.20	-0.08	61.19	8.22	31.77	33.06	262	157	Peak	VERTICAL
4	5494.60	112.95			106.00	8.23	31.78	33.06	262	157	Average	VERTICAL
5	5494.60	123.13			116.18	8.23	31.78	33.06	262	157	Peak	VERTICAL

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

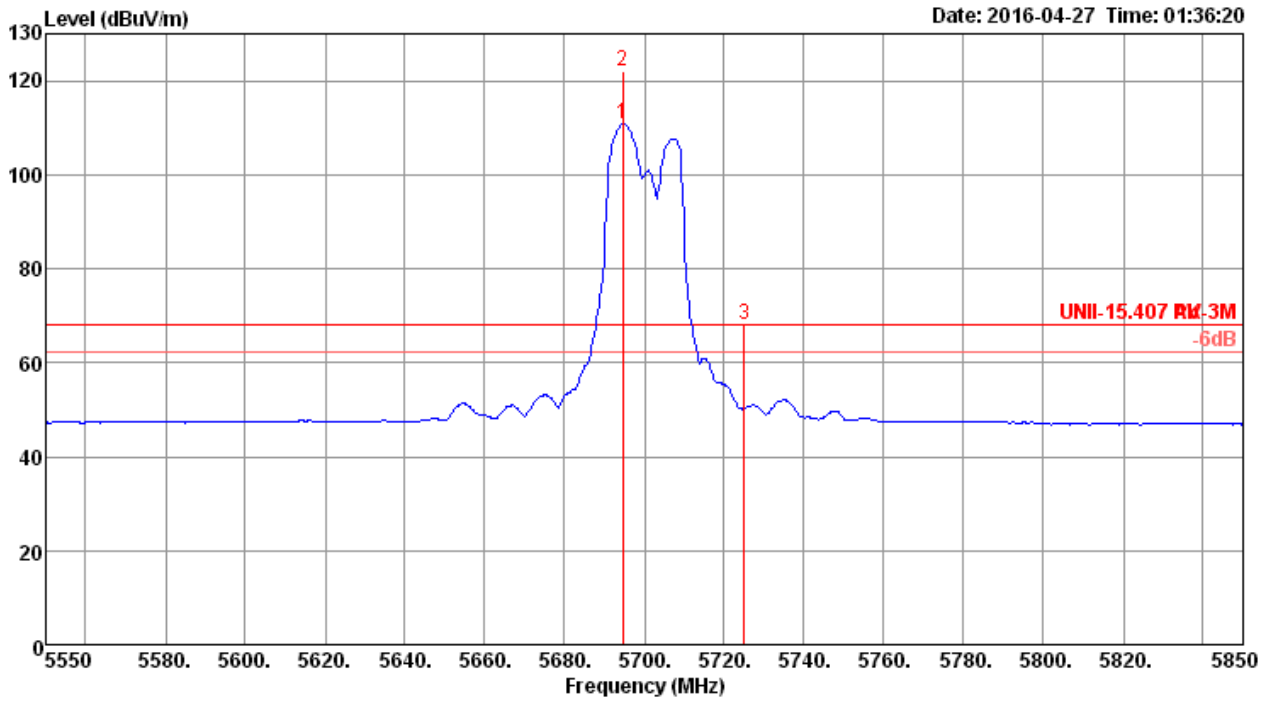
Channel 116



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.80	64.07	74.00	-9.93	57.17	8.21	31.75	33.06	248	157	Peak	VERTICAL
2	5460.00	47.55	54.00	-6.45	40.65	8.21	31.75	33.06	248	157	Average	VERTICAL
3	5470.00	68.00	68.20	-0.20	61.07	8.22	31.77	33.06	248	157	Peak	VERTICAL
4	5575.20	126.49			119.39	8.28	31.90	33.08	248	157	Peak	VERTICAL
5	5575.80	115.52			108.42	8.28	31.90	33.08	248	157	Average	VERTICAL
6	5728.20	63.18	68.20	-5.02	55.88	8.36	32.08	33.14	248	157	Peak	VERTICAL

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

Channel 140

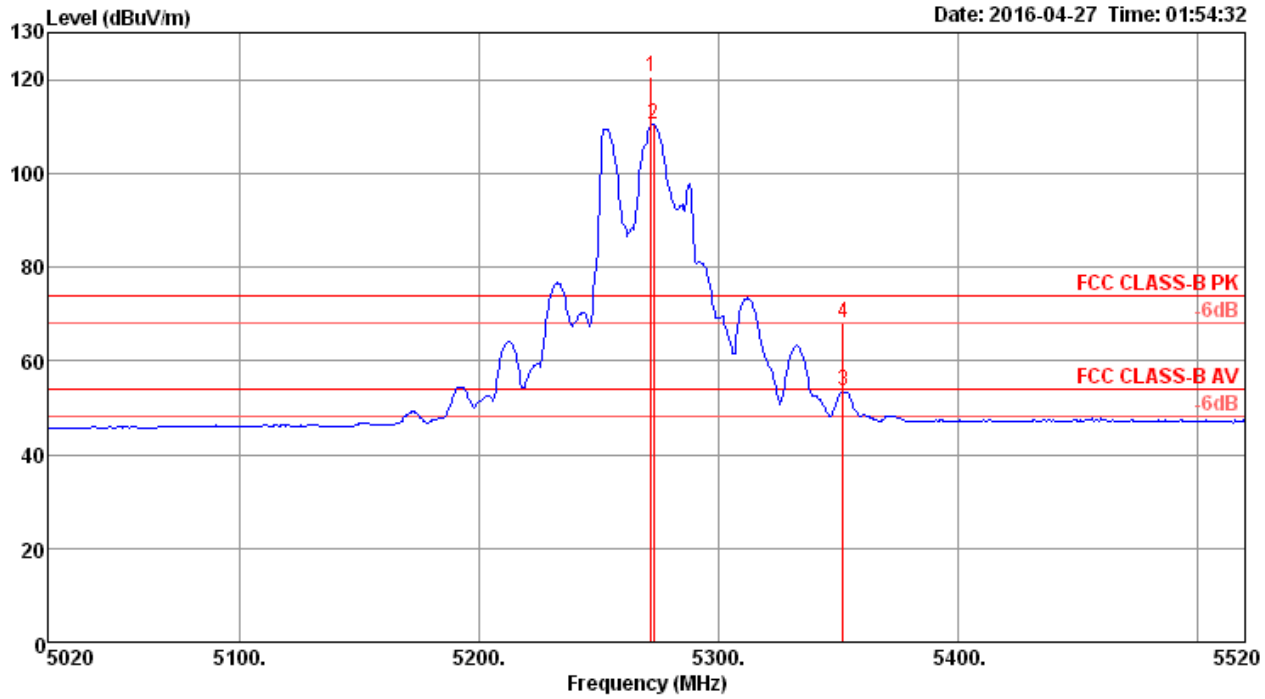


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5694.60	110.76			103.51	8.34	32.04	33.13	234	158	Average	VERTICAL
2	5694.60	122.16			114.91	8.34	32.04	33.13	234	158	Peak	VERTICAL
3	5725.00	68.04	68.20	-0.16	60.73	8.36	32.08	33.13	234	158	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 5 + Chain 6 + Chain 7 + Chain 8

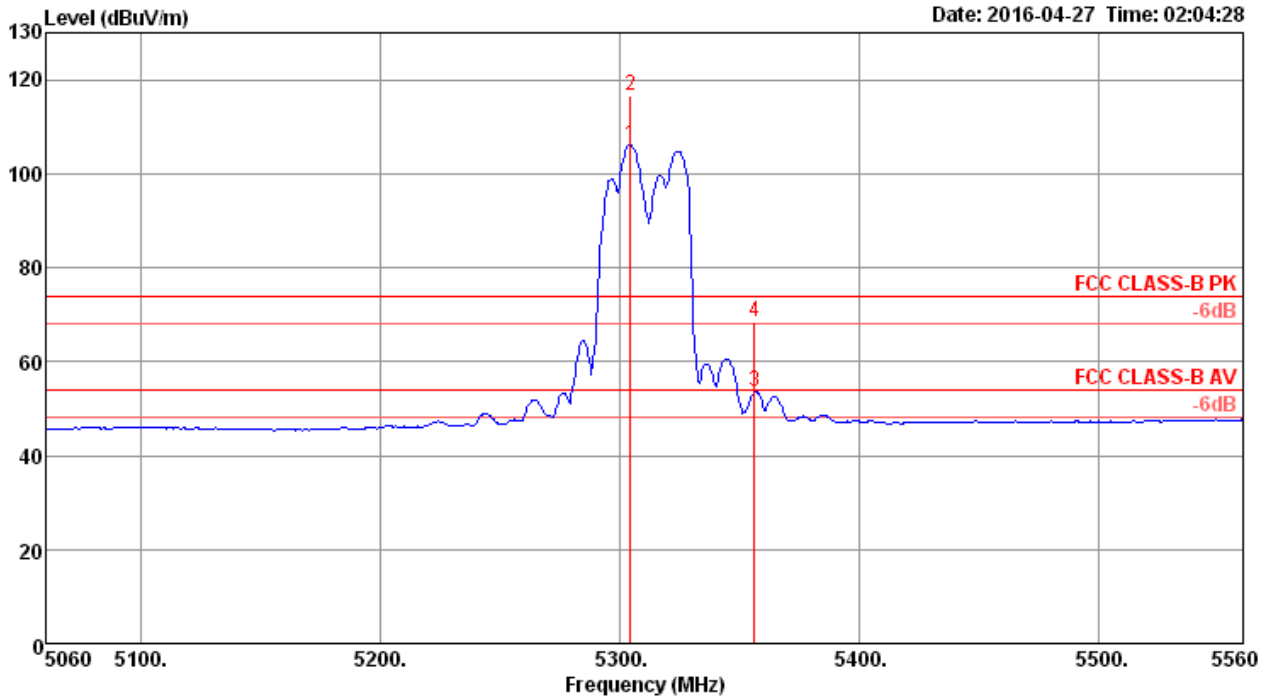
Channel 54



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5272.00	120.70			114.13	8.06	31.57	33.06	298	121	Peak	VERTICAL
2	5273.00	110.48			103.91	8.06	31.57	33.06	298	121	Average	VERTICAL
3	5352.00	53.71	54.00	-0.29	46.98	8.14	31.65	33.06	298	121	Average	VERTICAL
4	5352.00	68.02	74.00	-5.98	61.29	8.14	31.65	33.06	298	121	Peak	VERTICAL

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

Channel 62

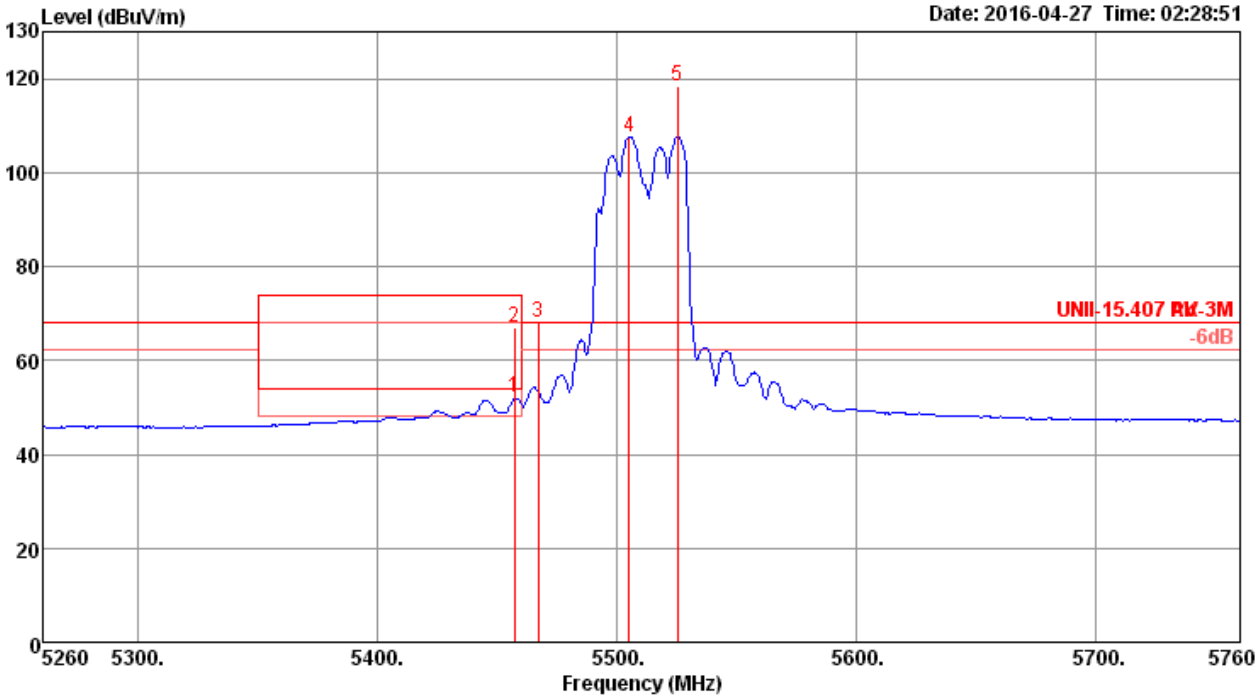


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5304.00	106.20			99.57	8.09	31.60	33.06	270	155	Average	VERTICAL
2	5304.00	116.66			110.03	8.09	31.60	33.06	270	155	Peak	VERTICAL
3	5356.00	53.61	54.00	-0.39	46.86	8.15	31.66	33.06	270	155	Average	VERTICAL
4	5356.00	68.31	74.00	-5.69	61.56	8.15	31.66	33.06	270	155	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 5 + Chain 6 + Chain 7 + Chain 8

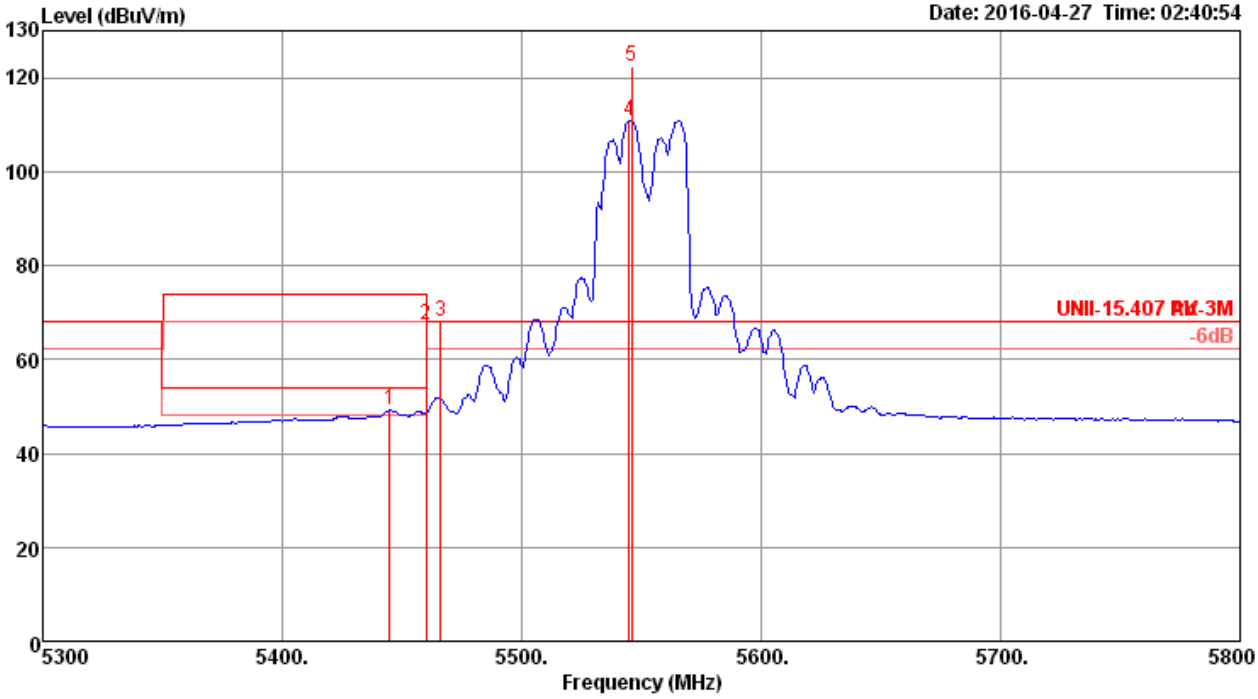
Channel 102



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5457.00	52.01	54.00	-1.99	45.11	8.21	31.75	33.06	229	156	Average	VERTICAL
2	5457.00	67.14	74.00	-6.86	60.24	8.21	31.75	33.06	229	156	Peak	VERTICAL
3	5467.00	67.99	68.20	-0.21	61.06	8.22	31.77	33.06	229	156	Peak	VERTICAL
4	5505.00	107.52			100.54	8.24	31.80	33.06	229	156	Average	VERTICAL
5	5525.00	118.48			111.48	8.25	31.82	33.07	229	156	Peak	VERTICAL

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

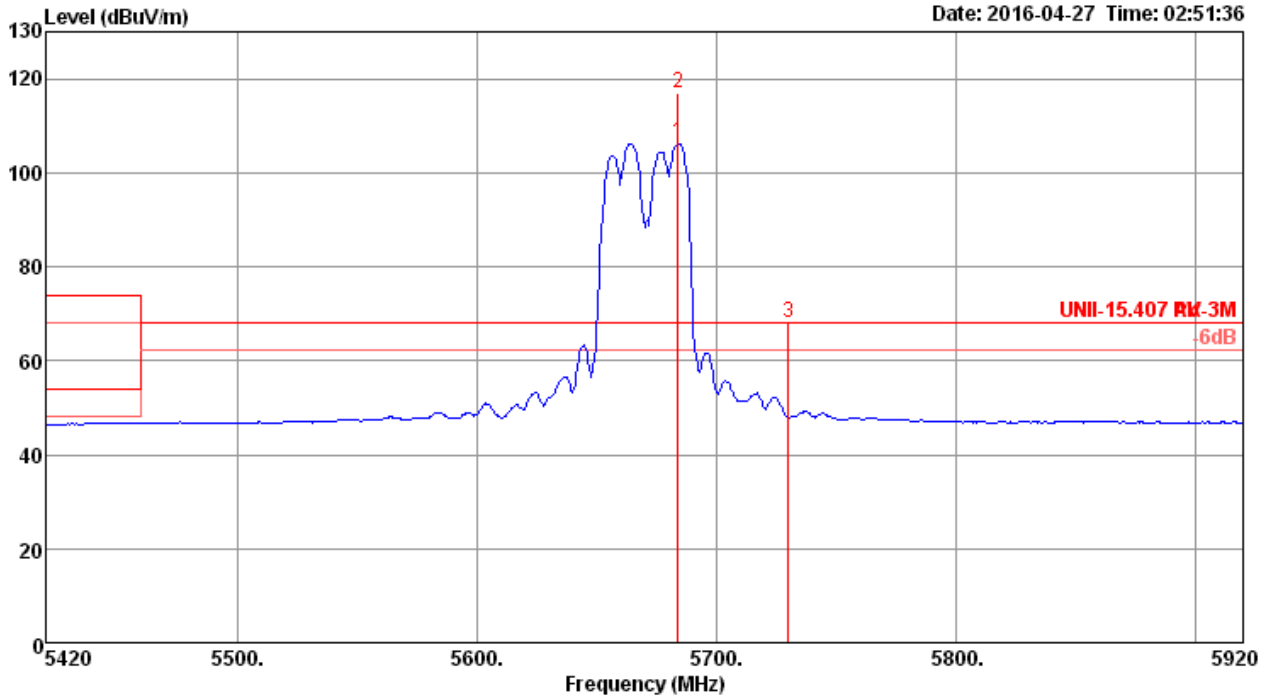
Channel 110



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5445.00	49.14	54.00	-4.86	42.25	8.21	31.74	33.06	239	4	Average	VERTICAL
2	5460.00	67.24	74.00	-6.76	60.34	8.21	31.75	33.06	239	4	Peak	VERTICAL
3	5466.00	67.97	68.20	-0.23	61.04	8.22	31.77	33.06	239	4	Peak	VERTICAL
4	5545.00	110.97			103.93	8.26	31.86	33.08	239	4	Average	VERTICAL
5	5546.00	122.22			115.18	8.26	31.86	33.08	239	4	Peak	VERTICAL

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

Channel 134

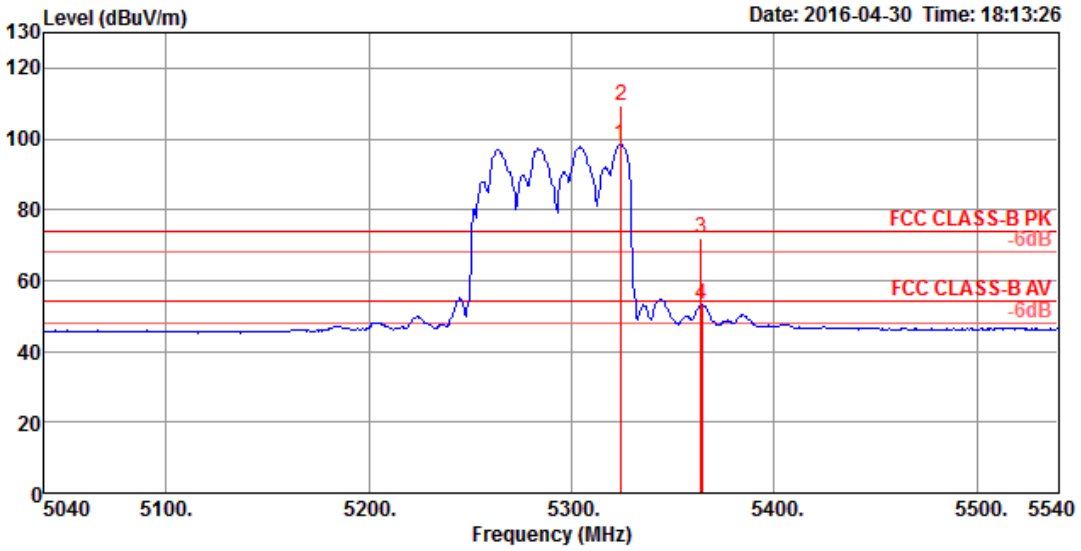


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5684.00	106.36			99.12	8.34	32.02	33.12	247	156	Average	VERTICAL
2	5684.00	117.12			109.88	8.34	32.02	33.12	247	156	Peak	VERTICAL
3	5730.00	67.92	68.20	-0.28	60.62	8.36	32.08	33.14	247	156	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 58

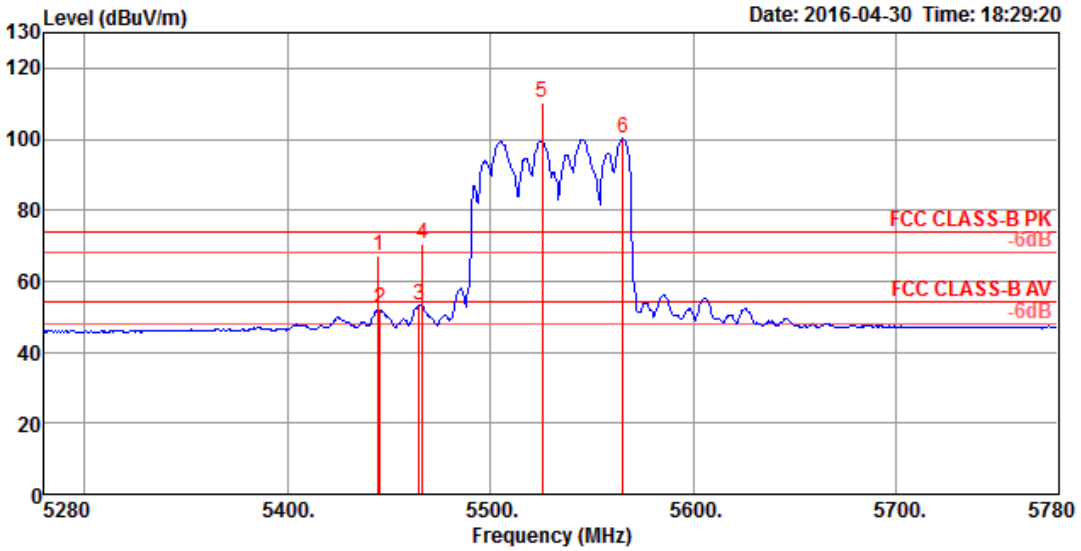


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1 0	5324.01	98.55			92.45	7.36	31.67	32.93	243	42	Average	VERTICAL
2 0	5324.73	109.21			103.11	7.36	31.67	32.93	243	42	Peak	VERTICAL
3	5363.75	72.05	74.00	-1.95	65.91	7.38	31.69	32.93	243	42	Peak	VERTICAL
4	5364.47	53.08	54.00	-0.92	46.94	7.38	31.69	32.93	243	42	Average	VERTICAL

Item 1, 2 are the fundamental frequency at 5290 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

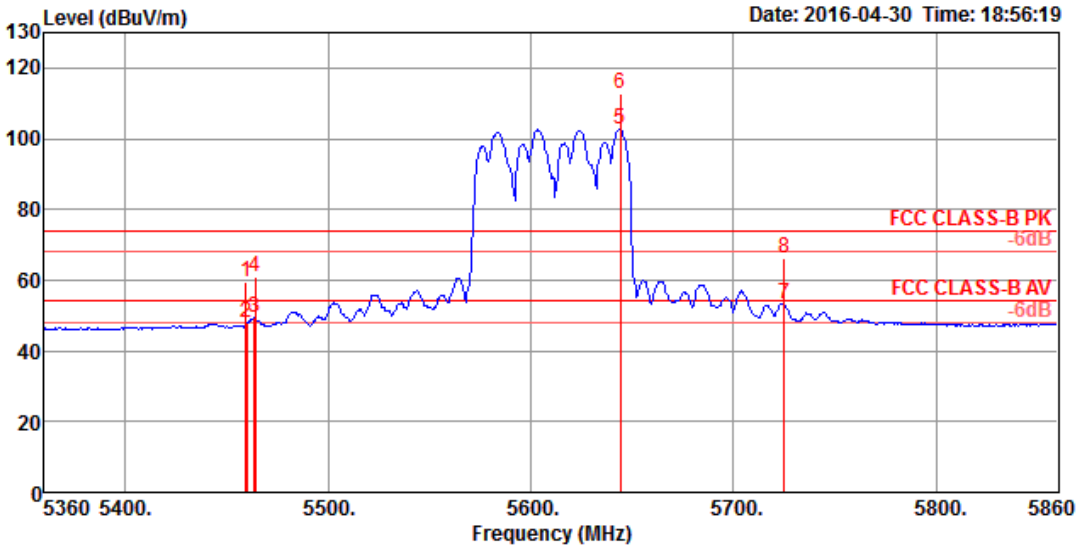
Channel 106



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5444.80	67.01	74.00	-6.99	60.73	7.45	31.75	32.92	254	45	Peak	VERTICAL
2	5445.53	52.23	54.00	-1.77	45.95	7.45	31.75	32.92	254	45	Average	VERTICAL
3	5464.93	53.11	54.00	-0.89	46.77	7.48	31.78	32.92	254	45	Average	VERTICAL
4	5466.38	70.40	74.00	-3.60	64.06	7.48	31.78	32.92	254	45	Peak	VERTICAL
5 0	5525.66	110.48			104.07	7.52	31.82	32.93	254	45	Peak	VERTICAL
6 0	5565.46	100.15			93.65	7.57	31.88	32.95	254	45	Average	VERTICAL

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

Channel 122



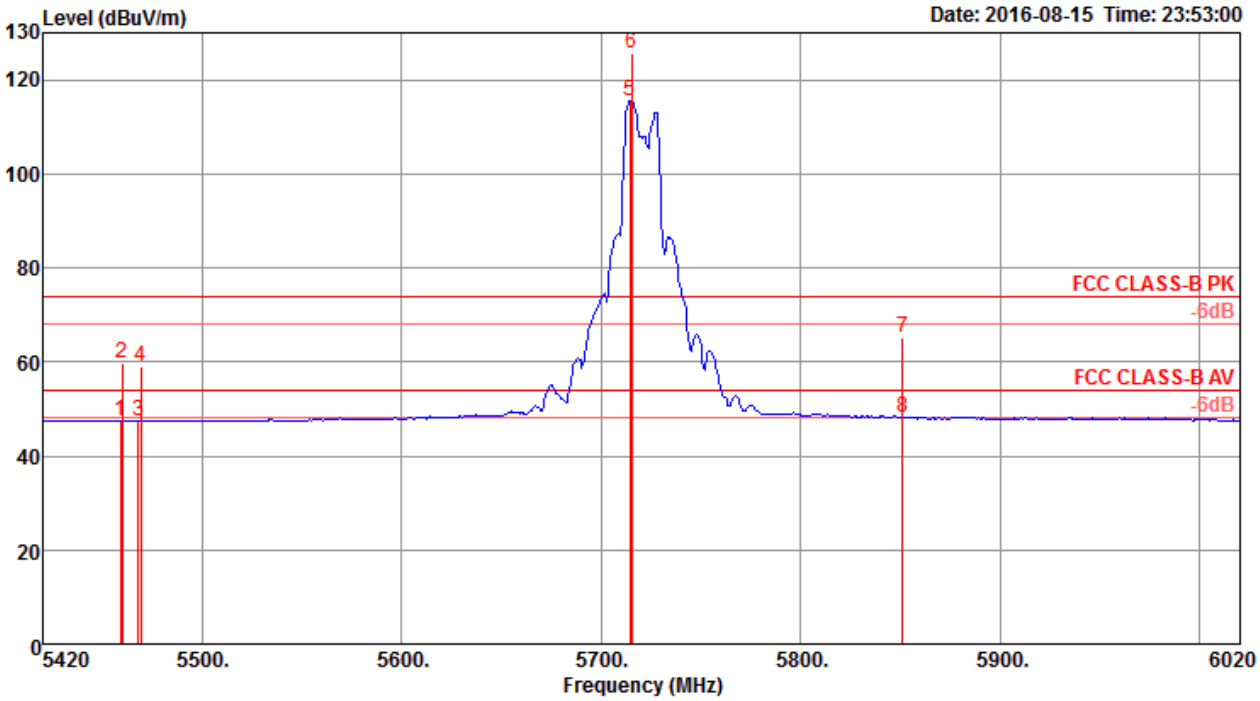
		Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1		5459.28	59.47	74.00	-14.53	53.17	7.46	31.76	32.92	255	44	Peak	VERTICAL
2		5460.00	47.77	54.00	-6.23	41.47	7.46	31.76	32.92	255	44	Average	VERTICAL
3		5463.49	49.47	54.00	-4.53	43.17	7.46	31.76	32.92	255	44	Average	VERTICAL
4		5464.21	60.81	74.00	-13.19	54.47	7.48	31.78	32.92	255	44	Peak	VERTICAL
5	0	5644.01	102.59			95.95	7.64	31.98	32.98	255	44	Average	VERTICAL
6	0	5644.01	112.60			105.96	7.64	31.98	32.98	255	44	Peak	VERTICAL
7		5725.00	53.02	54.00	-0.98	46.23	7.71	32.08	33.00	255	44	Average	VERTICAL
8		5725.00	66.29	74.00	-7.71	59.50	7.71	32.08	33.00	255	44	Peak	VERTICAL

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

Straddle Channel

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 144 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 144

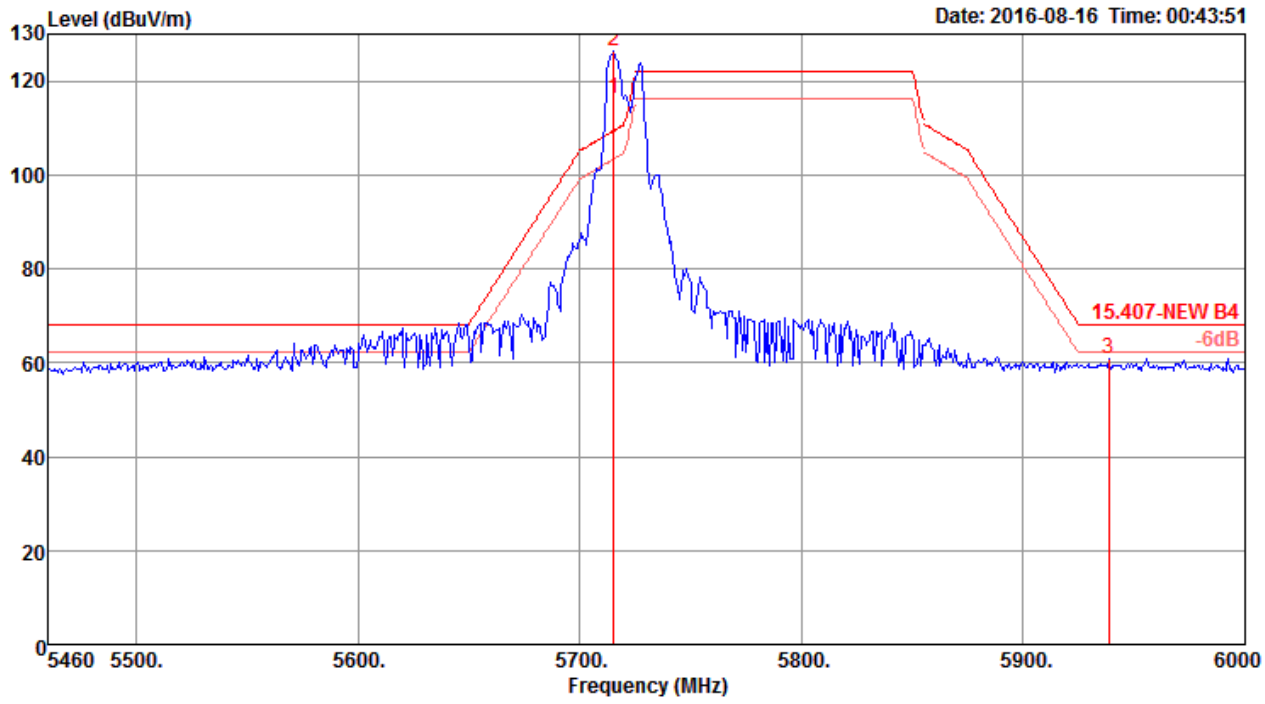


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5459.00	47.45	54.00	-6.55	39.47	6.68	34.23	32.93	241	50	Average	VERTICAL
2	5460.00	59.57	74.00	-14.43	51.59	6.68	34.23	32.93	241	50	Peak	VERTICAL
3	5468.00	47.47	54.00	-6.53	39.46	6.69	34.25	32.93	241	50	Average	VERTICAL
4	5469.04	58.92	74.00	-15.08	50.91	6.69	34.25	32.93	241	50	Peak	VERTICAL
5	5714.23	115.37			107.06	6.87	34.43	32.99	241	50	Average	VERTICAL
6	5715.19	125.75			117.44	6.87	34.43	32.99	241	50	Peak	VERTICAL
7	5850.77	65.21	74.00	-8.79	56.76	6.96	34.51	33.02	241	50	Peak	VERTICAL
8	5850.96	48.26	54.00	-5.74	39.81	6.96	34.51	33.02	241	50	Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5720 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11a CH 144 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 144

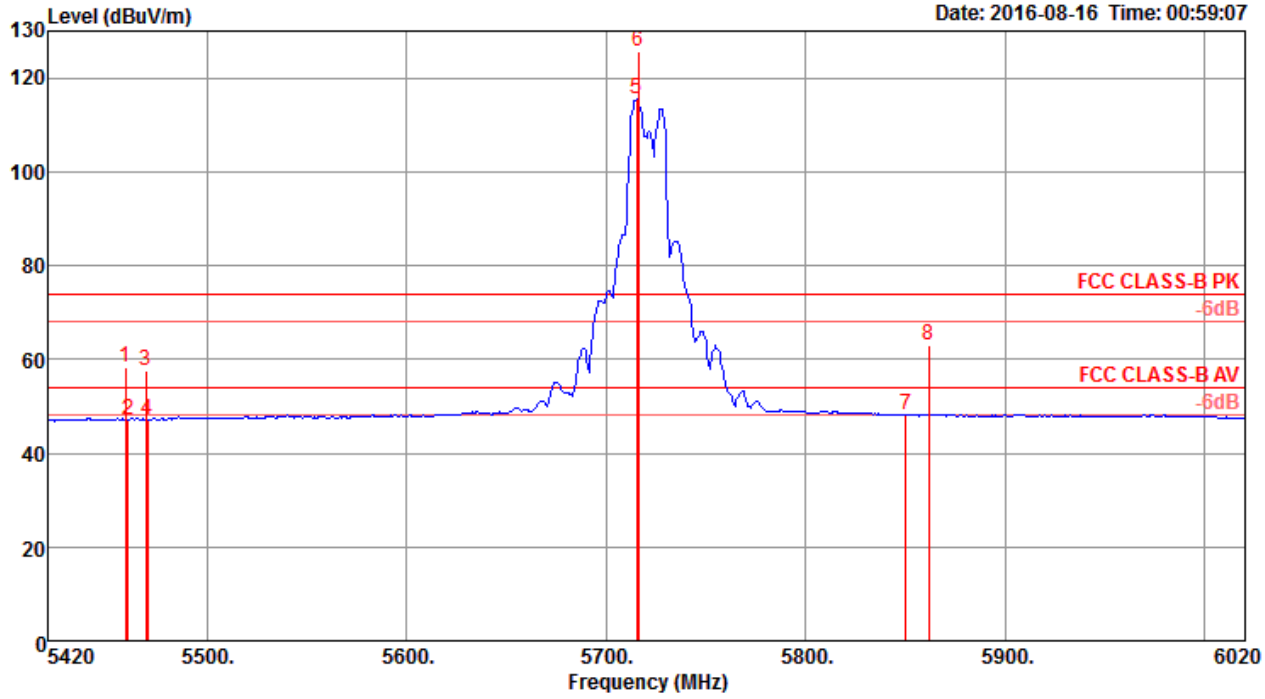


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5715.29	116.19			107.88	6.87	34.43	32.99	241	49	Average	VERTICAL
2	5715.42	126.51			118.20	6.87	34.43	32.99	241	49	Peak	VERTICAL
3	5938.44	60.78	68.20	-7.42	52.29	6.98	34.56	33.05	241	49	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 144

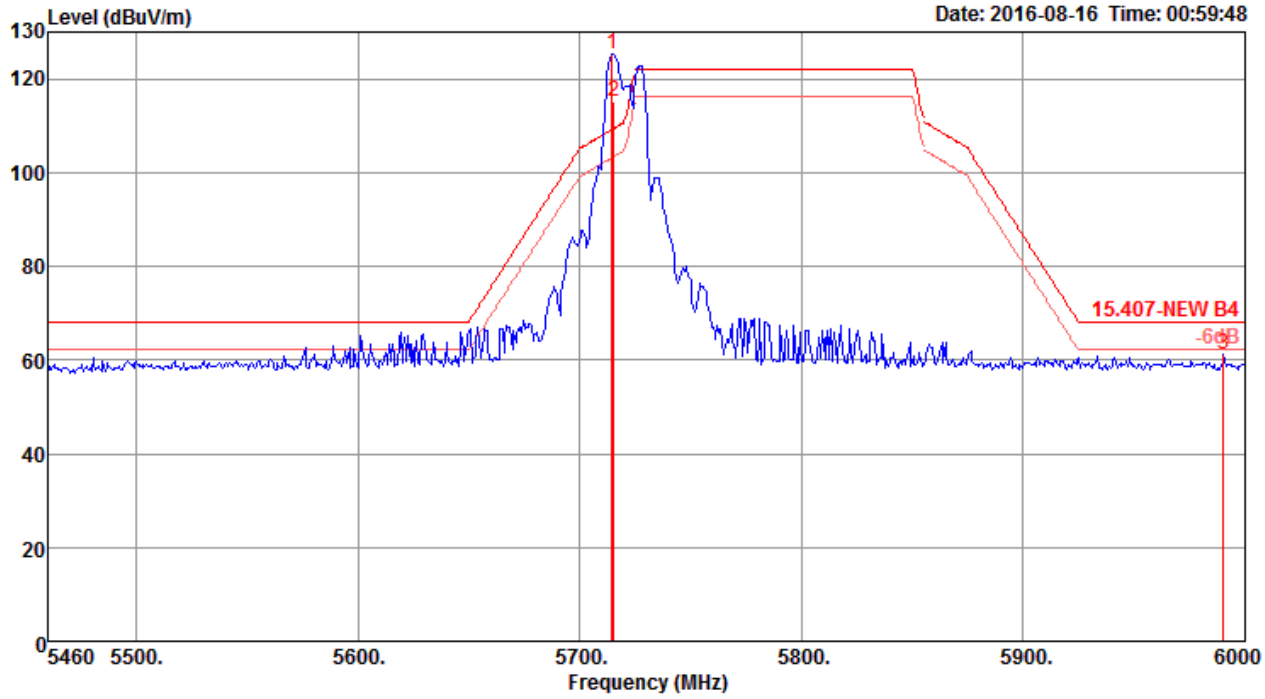


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5459.04	58.25	74.00	-15.75	50.27	6.68	34.23	32.93	223	50	Peak	VERTICAL
2	5460.20	47.16	54.00	-6.84	39.18	6.68	34.23	32.93	223	50	Average	VERTICAL
3	5469.04	57.73	74.00	-16.27	49.72	6.69	34.25	32.93	223	50	Peak	VERTICAL
4	5470.00	47.17	54.00	-6.83	39.16	6.69	34.25	32.93	223	50	Average	VERTICAL
5	5715.19	115.36			107.05	6.87	34.43	32.99	223	50	Average	VERTICAL
6	5716.15	125.50			117.19	6.87	34.43	32.99	223	50	Peak	VERTICAL
7	5850.00	48.06	54.00	-5.94	39.61	6.96	34.51	33.02	223	50	Average	VERTICAL
8	5861.35	62.96	74.00	-11.04	54.50	6.97	34.52	33.03	223	50	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5720 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 144

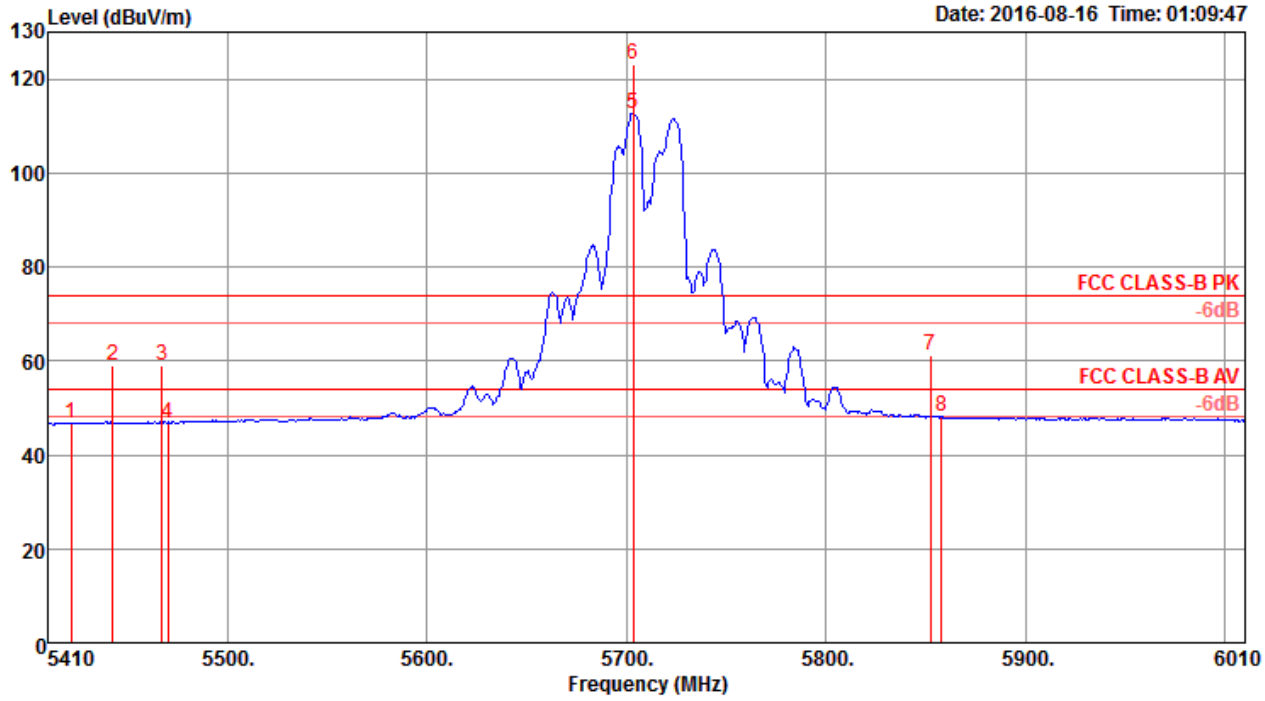


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5714.34	125.27			116.96	6.87	34.43	32.99	223	50	Peak	VERTICAL
2	5715.29	115.20			106.89	6.87	34.43	32.99	223	50	Average	VERTICAL
3	5990.28	61.14	68.20	-7.06	52.61	7.00	34.59	33.06	223	50	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 142

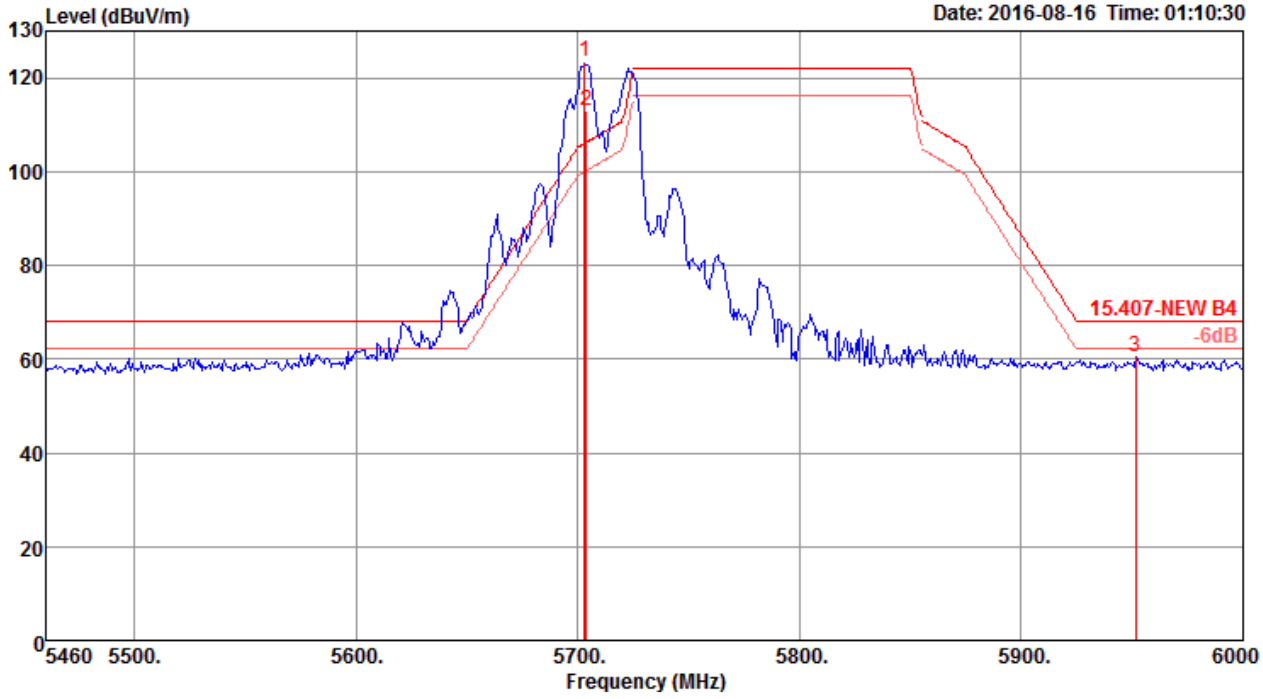


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5421.54	46.80	54.00	-7.20	38.88	6.67	34.18	32.93	232	77	Average	VERTICAL
2	5442.69	58.85	74.00	-15.15	50.91	6.67	34.20	32.93	232	77	Peak	VERTICAL
3	5467.12	59.02	74.00	-14.98	51.01	6.69	34.25	32.93	232	77	Peak	VERTICAL
4	5470.00	46.72	54.00	-7.28	38.71	6.69	34.25	32.93	232	77	Average	VERTICAL
5	5703.27	112.58			104.29	6.85	34.42	32.98	232	77	Average	VERTICAL
6	5703.27	123.21			114.92	6.85	34.42	32.98	232	77	Peak	VERTICAL
7	5852.31	61.29	74.00	-12.71	52.84	6.96	34.51	33.02	232	77	Peak	VERTICAL
8	5858.08	48.28	54.00	-5.72	39.81	6.97	34.52	33.02	232	77	Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5710 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 142

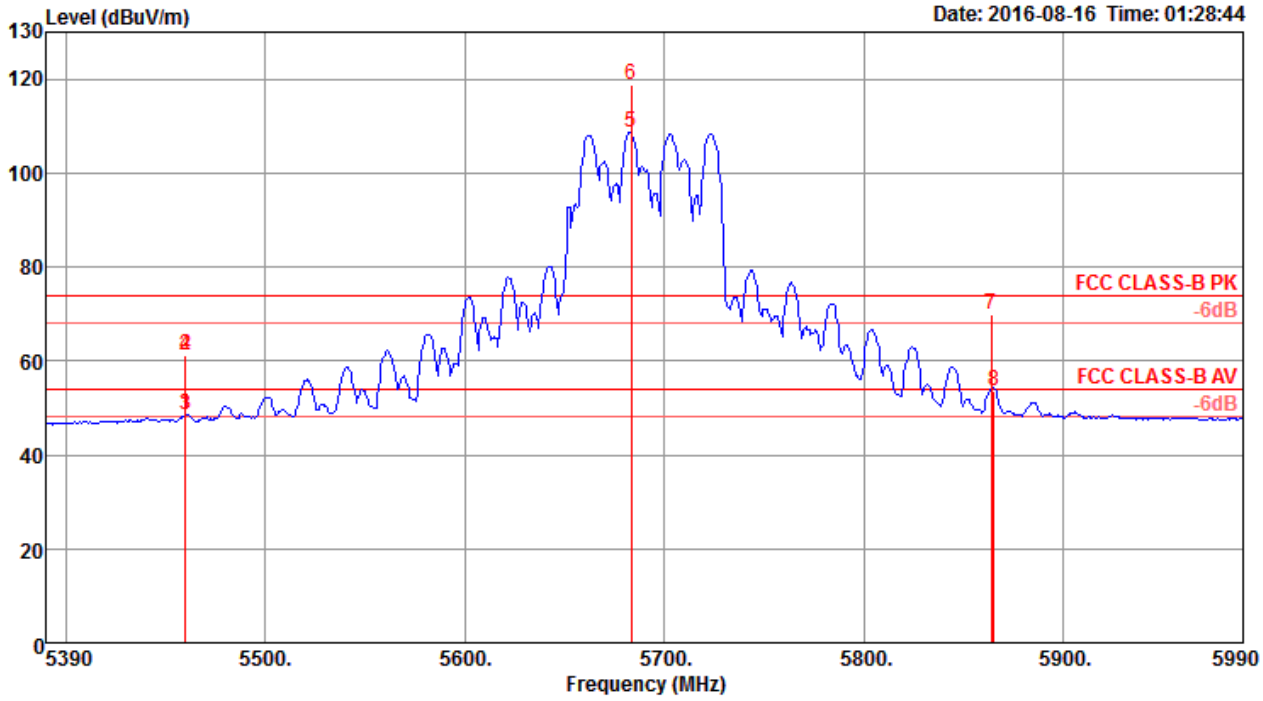


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5703.00	123.60			115.31	6.85	34.42	32.98	232	78	Peak	VERTICAL
2	5703.59	112.96			104.67	6.85	34.42	32.98	232	78	Average	VERTICAL
3	5951.40	60.30	68.20	-7.90	51.79	6.99	34.57	33.05	232	78	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 138

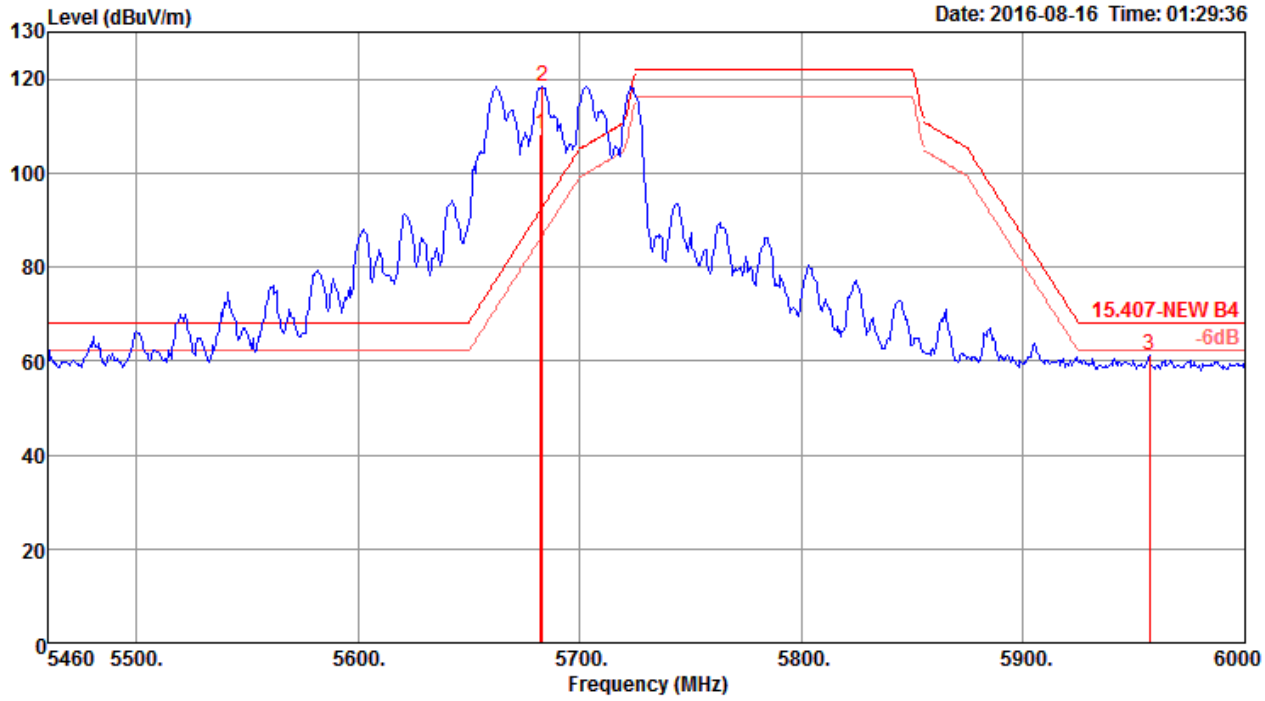


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5460.00	48.37	54.00	-5.63	40.39	6.68	34.23	32.93	248	83	Average	VERTICAL
2	5460.00	61.11	74.00	-12.89	53.13	6.68	34.23	32.93	248	83	Peak	VERTICAL
3	5460.19	48.37	54.00	-5.63	40.39	6.68	34.23	32.93	248	83	Average	VERTICAL
4	5460.19	61.11	74.00	-12.89	53.13	6.68	34.23	32.93	248	83	Peak	VERTICAL
5	5683.27	108.73			100.47	6.83	34.41	32.98	248	83	Average	VERTICAL
6	5683.27	118.80			110.54	6.83	34.41	32.98	248	83	Peak	VERTICAL
7	5864.04	69.74	74.00	-4.26	61.28	6.97	34.52	33.03	248	83	Peak	VERTICAL
8	5865.00	53.63	54.00	-0.37	45.17	6.97	34.52	33.03	248	83	Average	VERTICAL

Item 5, 6 are the fundamental frequency at 5690 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 138



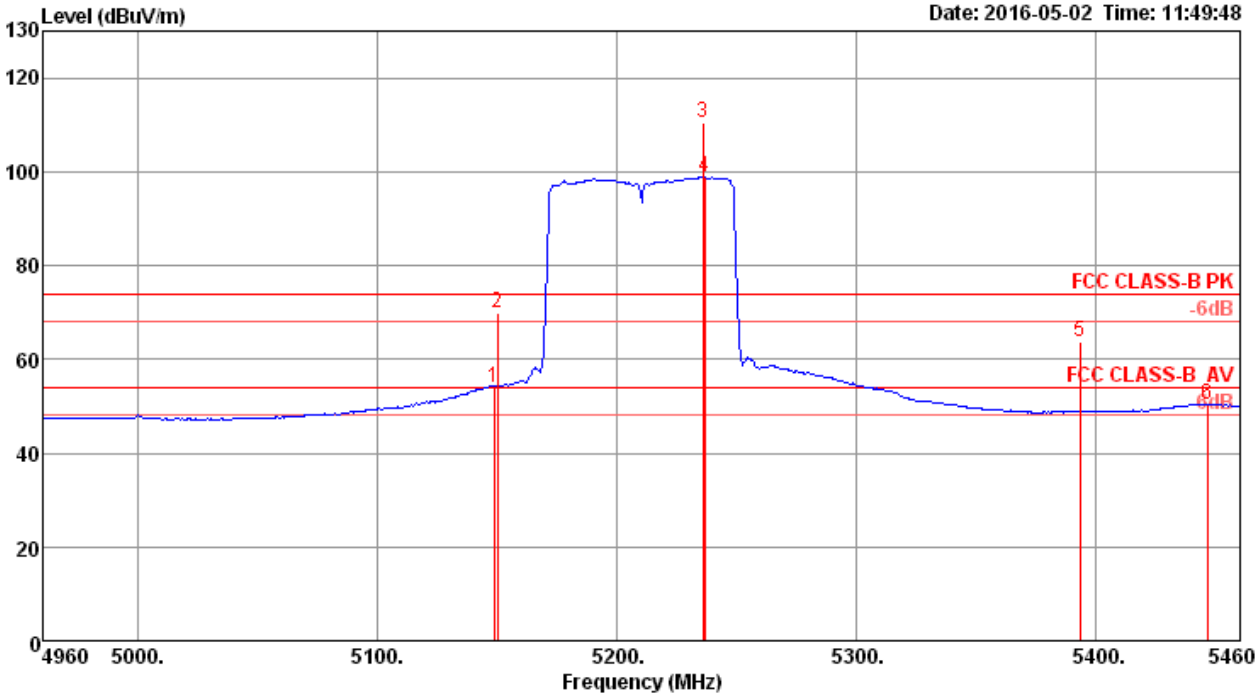
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5682.40	108.34			100.08	6.83	34.41	32.98	248	84	Average	VERTICAL
2	5683.02	118.45			110.19	6.83	34.41	32.98	248	84	Peak	VERTICAL
3	5956.80	61.25	68.20	-6.95	52.74	6.99	34.57	33.05	248	84	Peak	VERTICAL

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

802.11ac MCS0/Nss2 VHT80+80

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 1 / CH 42+106 / Chain 5 + Chain 6 + Chain 7 + Chain 8

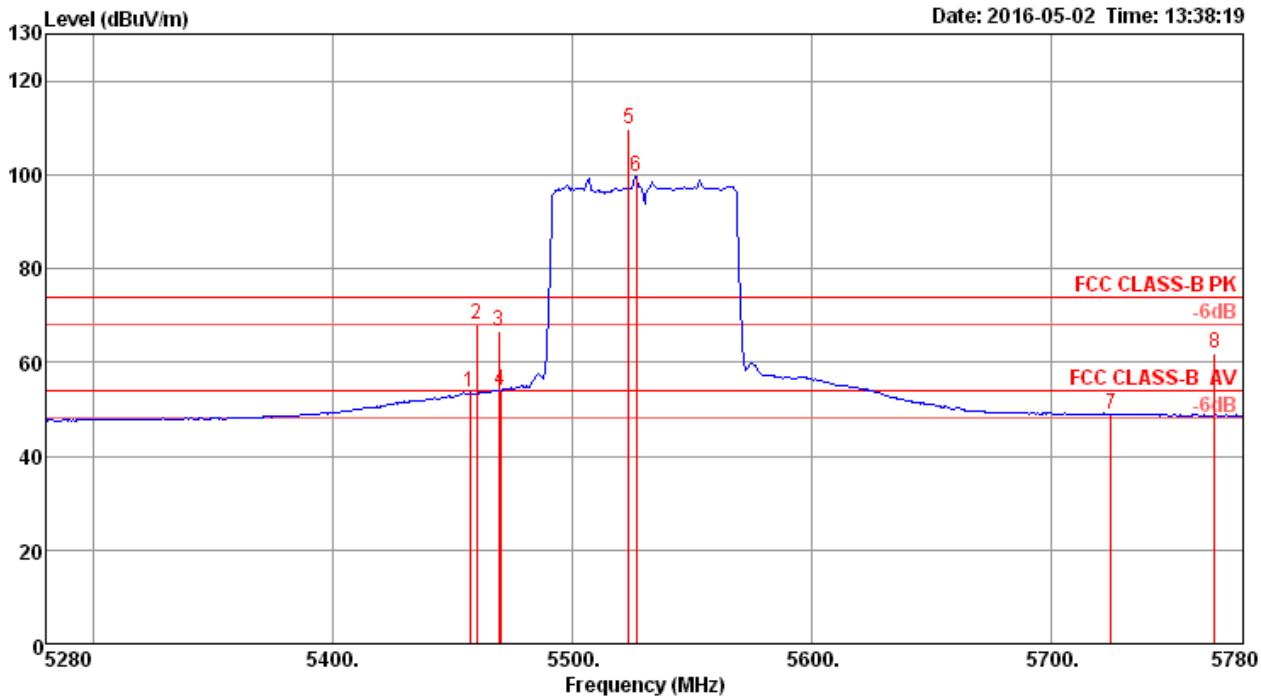
Channel 42



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5148.30	53.95	54.00	-0.05	45.30	7.96	33.74	33.05	300	233	Average	VERTICAL
2	5150.00	69.74	74.00	-4.26	61.09	7.96	33.74	33.05	300	233	Peak	VERTICAL
3	5235.64	110.38			101.51	8.03	33.89	33.05	300	233	Peak	VERTICAL
4	5236.44	98.77			89.90	8.03	33.89	33.05	300	233	Average	VERTICAL
5	5393.27	63.70	74.00	-10.30	54.45	8.18	34.13	33.06	300	233	Peak	VERTICAL
6	5446.38	50.43	54.00	-3.57	41.08	8.21	34.20	33.06	300	233	Average	VERTICAL

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

Channel 106

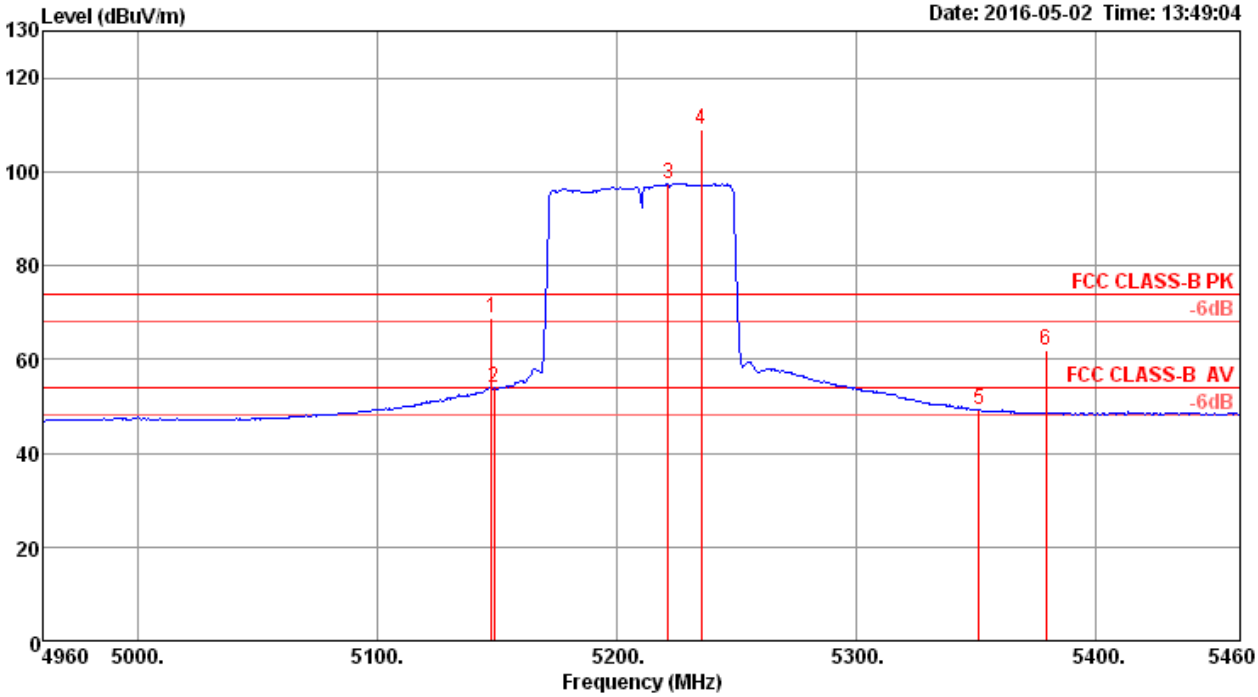


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5457.08	53.46	54.00	-0.54	44.08	8.21	34.23	33.06	268	83	Average	VERTICAL
2	5460.00	68.07	74.00	-5.93	58.69	8.21	34.23	33.06	268	83	Peak	VERTICAL
3	5469.20	66.69	74.00	-7.31	57.28	8.22	34.25	33.06	268	83	Peak	VERTICAL
4	5470.00	53.82	54.00	-0.18	44.41	8.22	34.25	33.06	268	83	Average	VERTICAL
5	5523.59	109.88			100.39	8.25	34.31	33.07	268	83	Peak	VERTICAL
6	5526.80	99.50			90.01	8.25	34.31	33.07	268	83	Average	VERTICAL
7	5725.00	48.91	54.00	-5.09	39.24	8.36	34.44	33.13	268	83	Average	VERTICAL
8	5767.98	61.89	74.00	-12.11	52.20	8.38	34.46	33.15	268	83	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 2 / CH 42+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

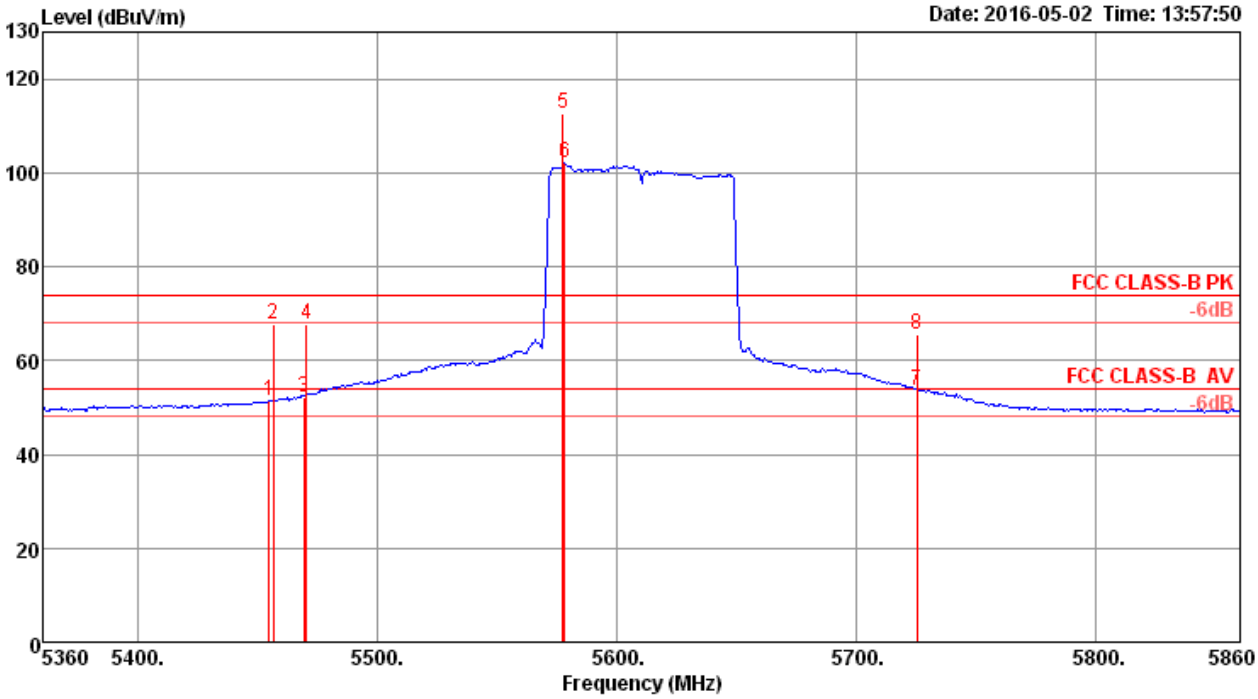
Channel 42



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.50	68.66	74.00	-5.34	60.01	7.96	33.74	33.05	250	232	Peak	VERTICAL
2	5148.30	53.85	54.00	-0.15	45.20	7.96	33.74	33.05	250	232	Average	VERTICAL
3	5221.22	97.41			88.58	8.02	33.86	33.05	250	232	Average	VERTICAL
4	5234.84	109.05			100.18	8.03	33.89	33.05	250	232	Peak	VERTICAL
5	5351.03	49.13	54.00	-4.87	39.99	8.14	34.06	33.06	250	232	Average	VERTICAL
6	5379.07	61.78	74.00	-12.22	52.56	8.17	34.11	33.06	250	232	Peak	VERTICAL

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

Channel 122

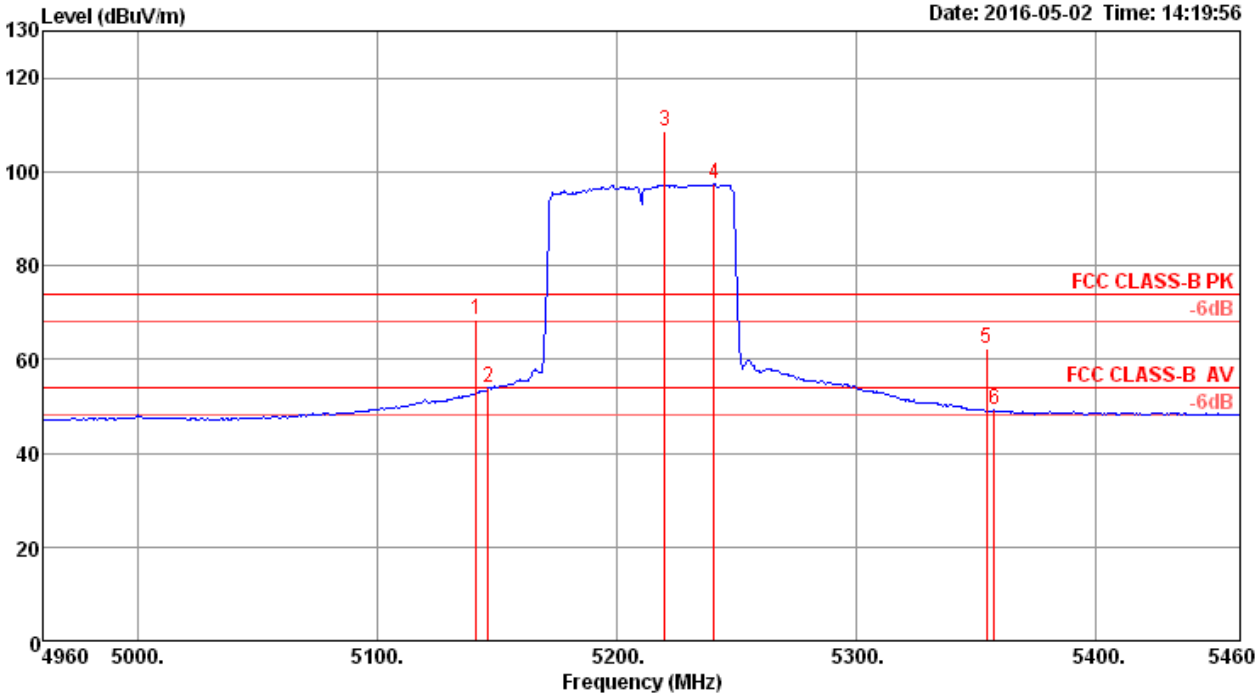


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5454.55	51.51	54.00	-2.49	42.13	8.21	34.23	33.06	237	49	Average	VERTICAL
2	5456.15	67.81	74.00	-6.19	58.43	8.21	34.23	33.06	237	49	Peak	VERTICAL
3	5468.97	52.30	54.00	-1.70	42.89	8.22	34.25	33.06	237	49	Average	VERTICAL
4	5470.00	67.56	74.00	-6.44	58.15	8.22	34.25	33.06	237	49	Peak	VERTICAL
5	5577.15	112.74			103.19	8.28	34.35	33.08	237	49	Peak	VERTICAL
6	5577.95	102.00			92.45	8.28	34.35	33.08	237	49	Average	VERTICAL
7	5725.00	53.64	54.00	-0.36	43.97	8.36	34.44	33.13	237	49	Average	VERTICAL
8	5725.00	65.44	74.00	-8.56	55.77	8.36	34.44	33.13	237	49	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 3 / CH 42+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8

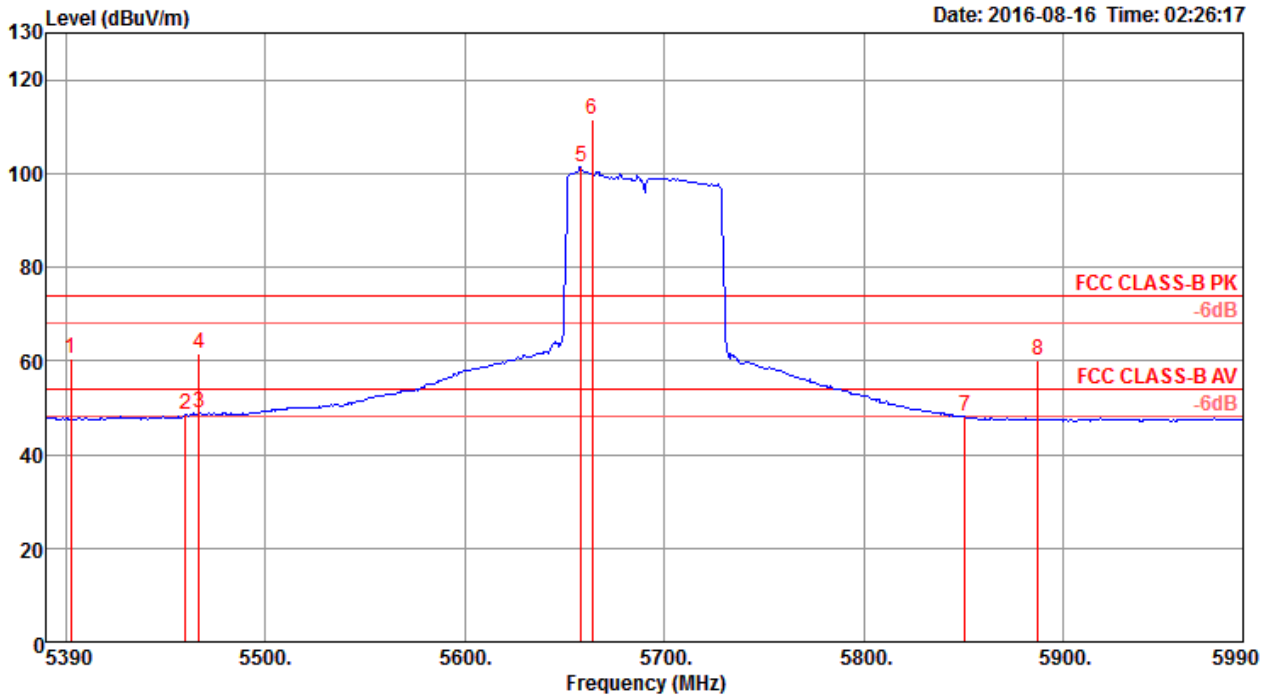
Channel 42



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5141.09	68.27	74.00	-5.73	59.66	7.94	33.72	33.05	267	231	Peak	VERTICAL
2	5145.90	53.97	54.00	-0.03	45.32	7.96	33.74	33.05	267	231	Average	VERTICAL
3	5219.62	108.49			99.66	8.02	33.86	33.05	267	231	Peak	VERTICAL
4	5240.45	97.38			88.51	8.03	33.89	33.05	267	231	Average	VERTICAL
5	5354.23	62.43	74.00	-11.57	53.26	8.15	34.08	33.06	267	231	Peak	VERTICAL
6	5357.44	49.12	54.00	-4.88	39.95	8.15	34.08	33.06	267	231	Average	VERTICAL

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

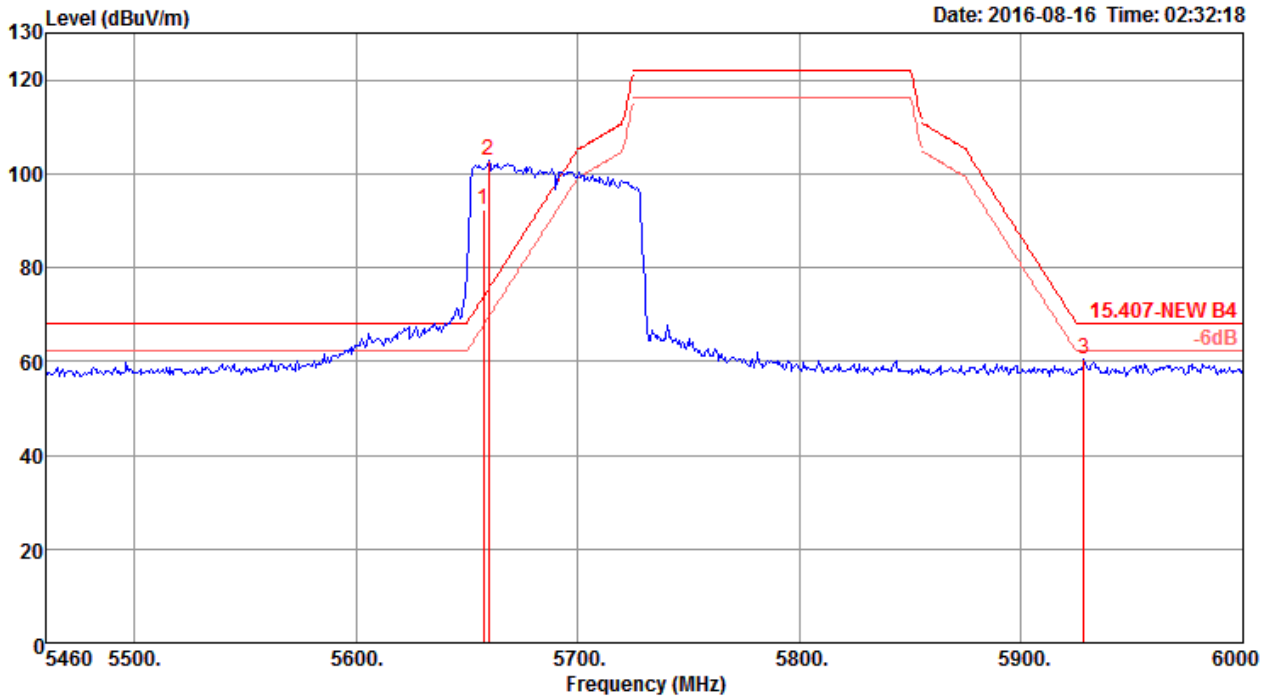
Channel 138 (UNII 2C)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5402.50	60.32	74.00	-13.68	52.44	6.66	34.15	32.93	261	44	Peak	VERTICAL
2	5460.00	48.65	54.00	-5.35	40.67	6.68	34.23	32.93	261	44	Average	VERTICAL
3	5466.92	48.88	54.00	-5.12	40.87	6.69	34.25	32.93	261	44	Average	VERTICAL
4	5466.92	61.42	74.00	-12.58	53.41	6.69	34.25	32.93	261	44	Peak	VERTICAL
5	5658.27	101.24			92.99	6.82	34.40	32.97	261	44	Average	VERTICAL
6	5664.04	111.64			103.39	6.82	34.40	32.97	261	44	Peak	VERTICAL
7	5850.58	48.02	54.00	-5.98	39.57	6.96	34.51	33.02	261	44	Average	VERTICAL
8	5887.12	60.00	74.00	-14.00	51.53	6.97	34.53	33.03	261	44	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5690 MHz.

Channel 138 (UNII 3)

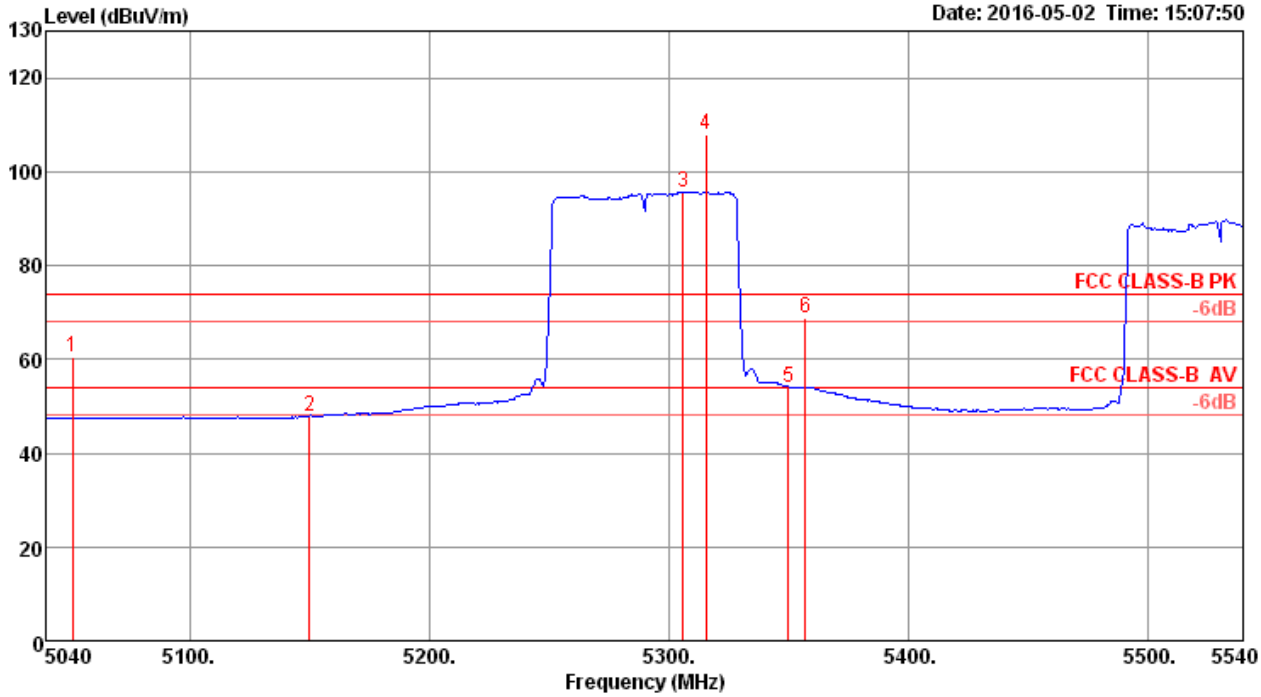


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5657.31	92.18			83.93	6.82	34.40	32.97	277	164	Average	HORIZONTAL
2	5659.80	102.77			94.52	6.82	34.40	32.97	277	164	Peak	HORIZONTAL
3	5928.18	60.62	68.20	-7.58	52.12	6.98	34.56	33.04	277	164	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 4 / CH 58+106 / Chain 5 + Chain 6 + Chain 7 + Chain 8

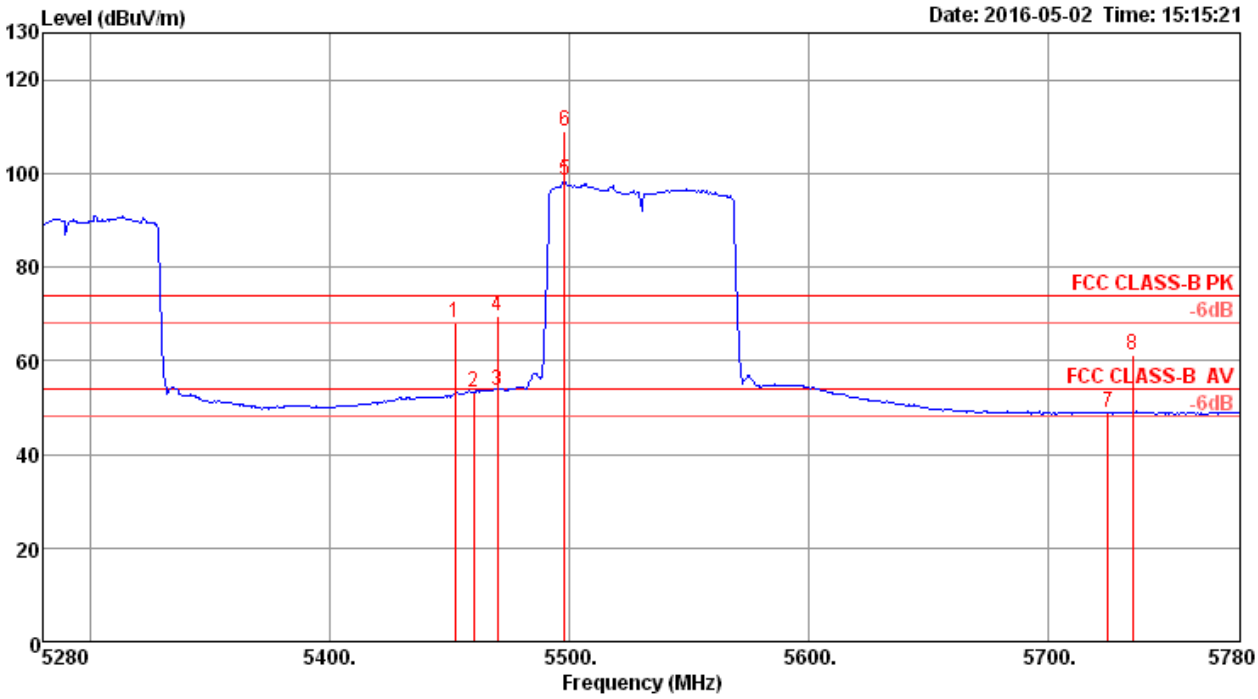
Channel 58



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5051.22	60.37	74.00	-13.63	51.98	7.87	33.57	33.05	241	231	Peak	VERTICAL
2	5150.00	47.81	54.00	-6.19	39.16	7.96	33.74	33.05	241	231	Average	VERTICAL
3	5306.03	95.71			86.70	8.09	33.98	33.06	241	231	Average	VERTICAL
4	5315.64	107.90			98.84	8.11	34.01	33.06	241	231	Peak	VERTICAL
5	5350.00	53.98	54.00	-0.02	44.84	8.14	34.06	33.06	241	231	Average	VERTICAL
6	5357.21	68.78	74.00	-5.22	59.61	8.15	34.08	33.06	241	231	Peak	VERTICAL

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

Channel 106

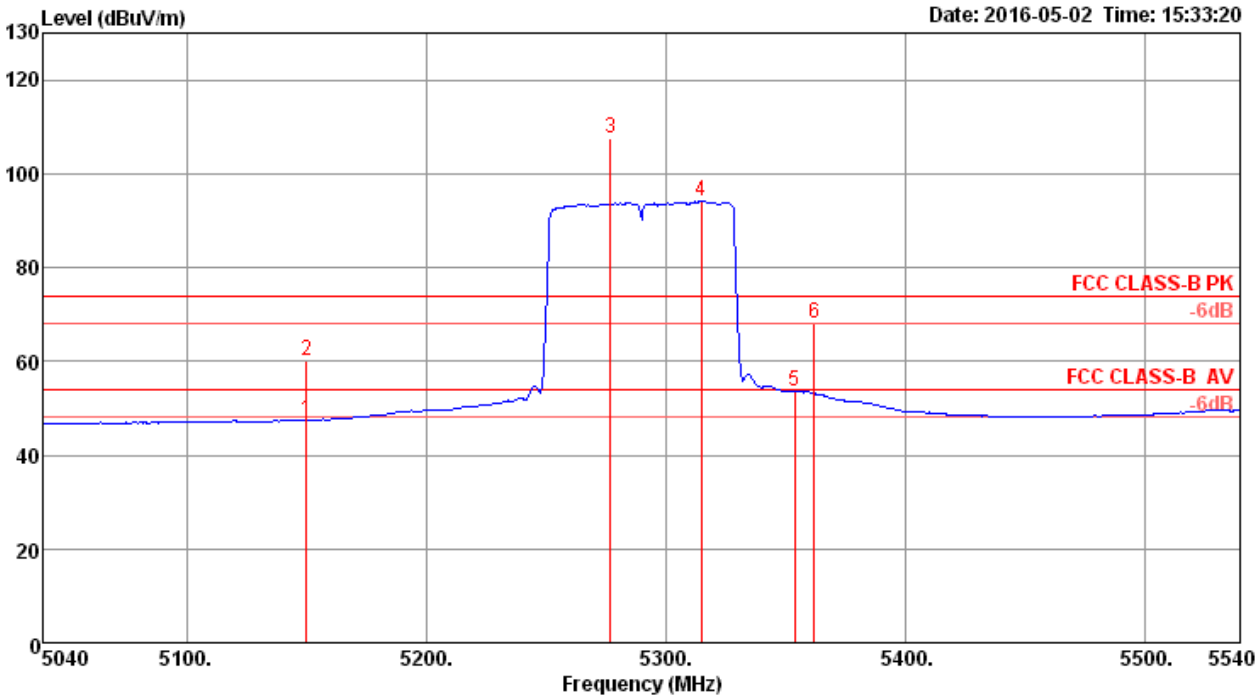


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5451.99	68.11	74.00	-5.89	58.73	8.21	34.23	33.06	255	48	Peak	VERTICAL
2	5460.00	53.30	54.00	-0.70	43.92	8.21	34.23	33.06	255	48	Average	VERTICAL
3	5470.00	53.74	54.00	-0.26	44.33	8.22	34.25	33.06	255	48	Average	VERTICAL
4	5470.00	69.44	74.00	-4.56	60.03	8.22	34.25	33.06	255	48	Peak	VERTICAL
5	5497.95	98.46			88.98	8.24	34.30	33.06	255	48	Average	VERTICAL
6	5497.95	108.83			99.35	8.24	34.30	33.06	255	48	Peak	VERTICAL
7	5725.00	48.89	54.00	-5.11	39.22	8.36	34.44	33.13	255	48	Average	VERTICAL
8	5735.13	61.29	74.00	-12.71	51.63	8.36	34.44	33.14	255	48	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 5 / CH 58+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

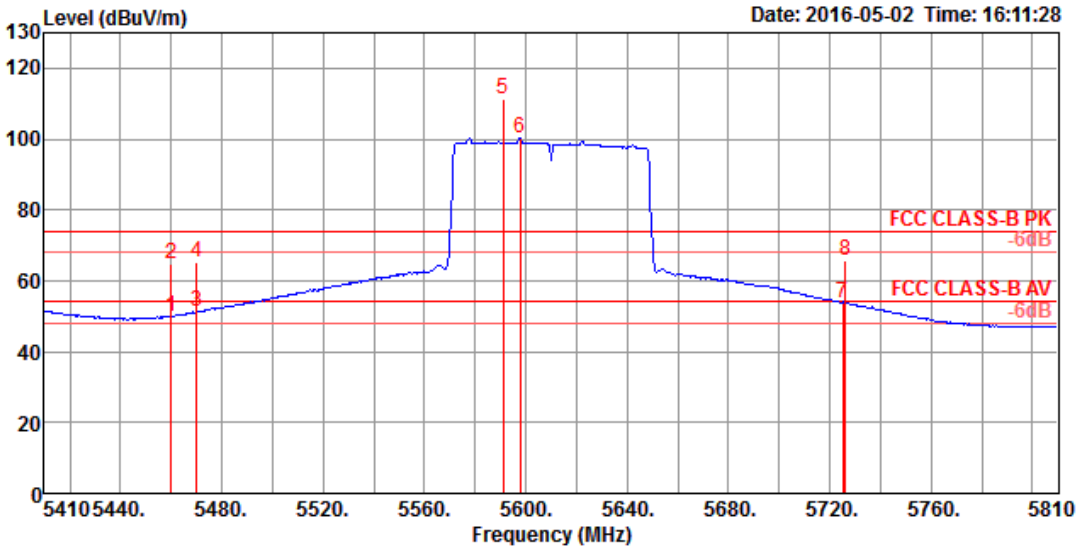
Channel 58



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5150.00	47.54	54.00	-6.46	38.89	7.96	33.74	33.05	300	231	Average	VERTICAL
2	5150.00	60.26	74.00	-13.74	51.61	7.96	33.74	33.05	300	231	Peak	VERTICAL
3	5277.18	107.38			98.44	8.06	33.94	33.06	300	231	Peak	VERTICAL
4	5314.84	94.11			85.05	8.11	34.01	33.06	300	231	Average	VERTICAL
5	5354.10	53.65	54.00	-0.35	44.48	8.15	34.08	33.06	300	231	Average	VERTICAL
6	5362.12	67.91	74.00	-6.09	58.74	8.15	34.08	33.06	300	231	Peak	VERTICAL

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

Channel 122

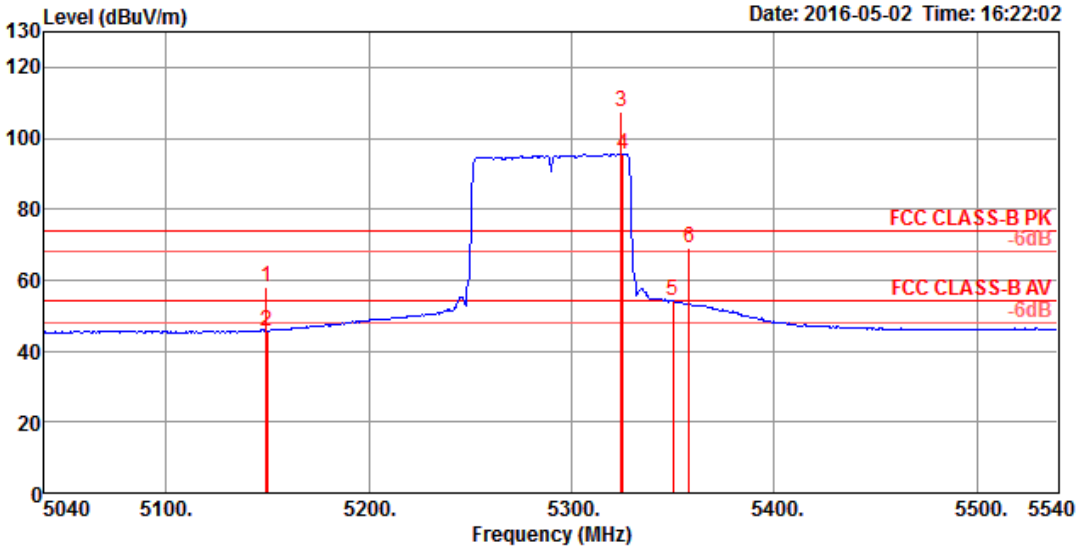


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5460.00	49.96	54.00	-4.04	43.66	7.46	31.76	32.92	255	124	Average	VERTICAL
2	5460.00	64.84	74.00	-9.16	58.54	7.46	31.76	32.92	255	124	Peak	VERTICAL
3	5470.00	51.11	54.00	-2.89	44.77	7.48	31.78	32.92	255	124	Average	VERTICAL
4	5470.00	65.37	74.00	-8.63	59.03	7.48	31.78	32.92	255	124	Peak	VERTICAL
5 0	5590.90	111.16			104.64	7.58	31.90	32.96	255	124	Peak	VERTICAL
6 0	5597.84	100.37			93.81	7.60	31.92	32.96	255	124	Average	VERTICAL
7	5725.00	53.73	54.00	-0.27	46.94	7.71	32.08	33.00	255	124	Average	VERTICAL
8	5726.16	65.69	74.00	-8.31	58.90	7.71	32.08	33.00	255	124	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 6 / CH 58+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8

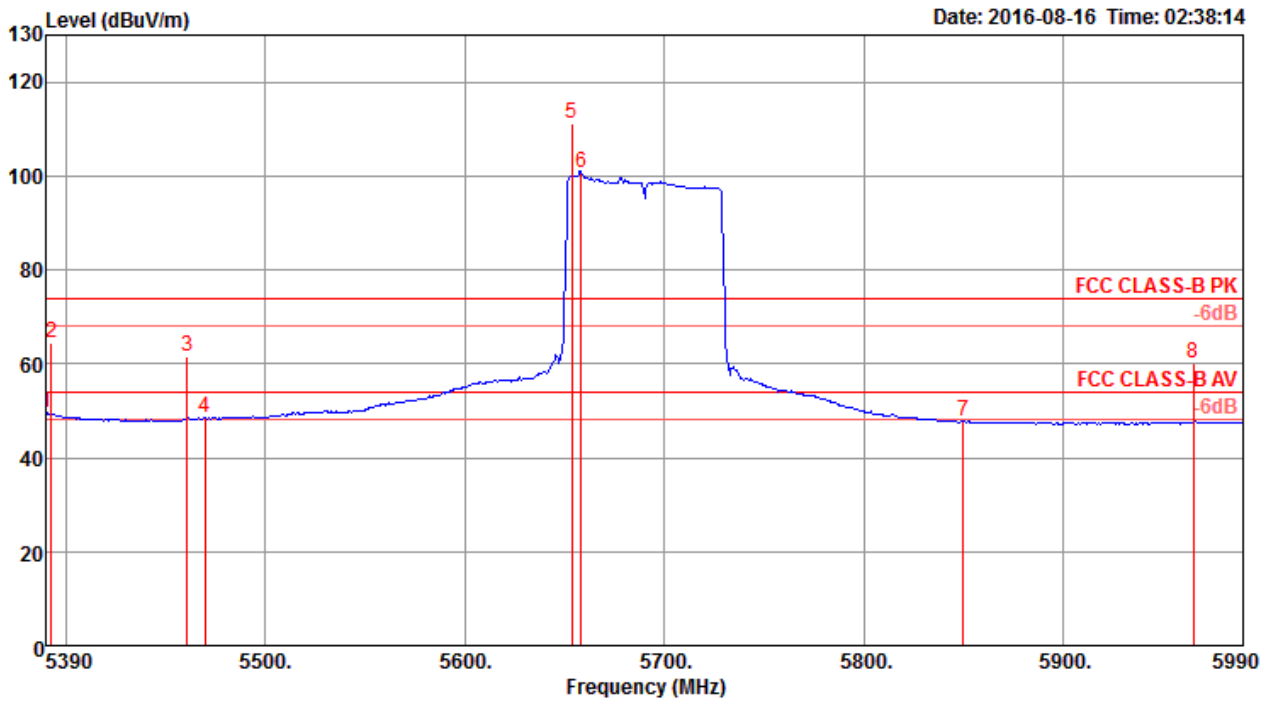
Channel 58



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5149.28	57.91	74.00	-16.09	52.10	7.23	31.52	32.94	234	222	Peak	VERTICAL
2	5150.00	45.78	54.00	-8.22	39.97	7.23	31.52	32.94	234	222	Average	VERTICAL
3 0	5324.73	107.56			101.46	7.36	31.67	32.93	234	222	Peak	VERTICAL
4 0	5325.46	95.56			89.46	7.36	31.67	32.93	234	222	Average	VERTICAL
5	5350.00	53.98	54.00	-0.02	47.86	7.37	31.68	32.93	234	222	Average	VERTICAL
6	5357.96	68.98	74.00	-5.02	62.84	7.38	31.69	32.93	234	222	Peak	VERTICAL

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

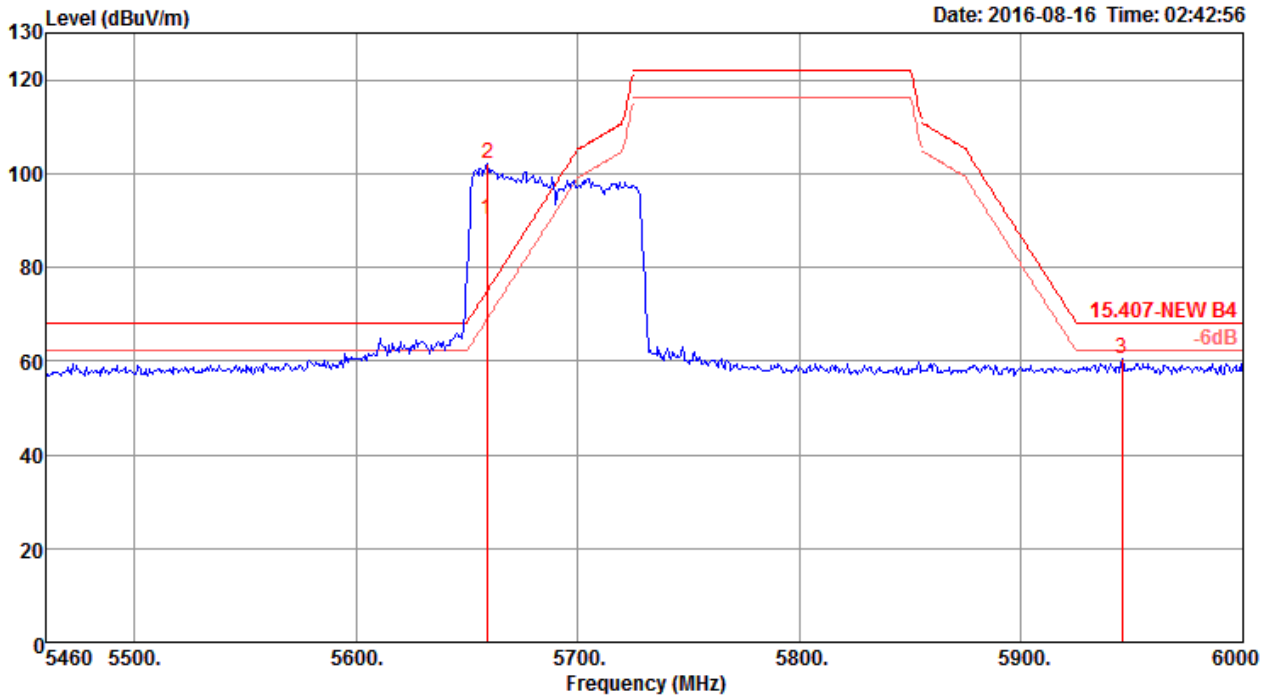
Channel 138 (UNII 2C)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5390.00	49.58	54.00	-4.42	41.73	6.65	34.13	32.93	236	46	Average	VERTICAL
2	5392.89	64.40	74.00	-9.60	56.55	6.65	34.13	32.93	236	46	Peak	VERTICAL
3	5460.96	61.40	74.00	-12.60	53.42	6.68	34.23	32.93	236	46	Peak	VERTICAL
4	5470.00	48.39	54.00	-5.61	40.38	6.69	34.25	32.93	236	46	Average	VERTICAL
5	5653.46	111.14			102.92	6.80	34.39	32.97	236	46	Peak	VERTICAL
6	5658.27	100.63			92.38	6.82	34.40	32.97	236	46	Average	VERTICAL
7	5850.00	47.64	54.00	-6.36	39.19	6.96	34.51	33.02	236	46	Average	VERTICAL
8	5965.00	59.99	74.00	-14.01	51.47	6.99	34.58	33.05	236	46	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5690 MHz.

Channel 138 (UNII 3)

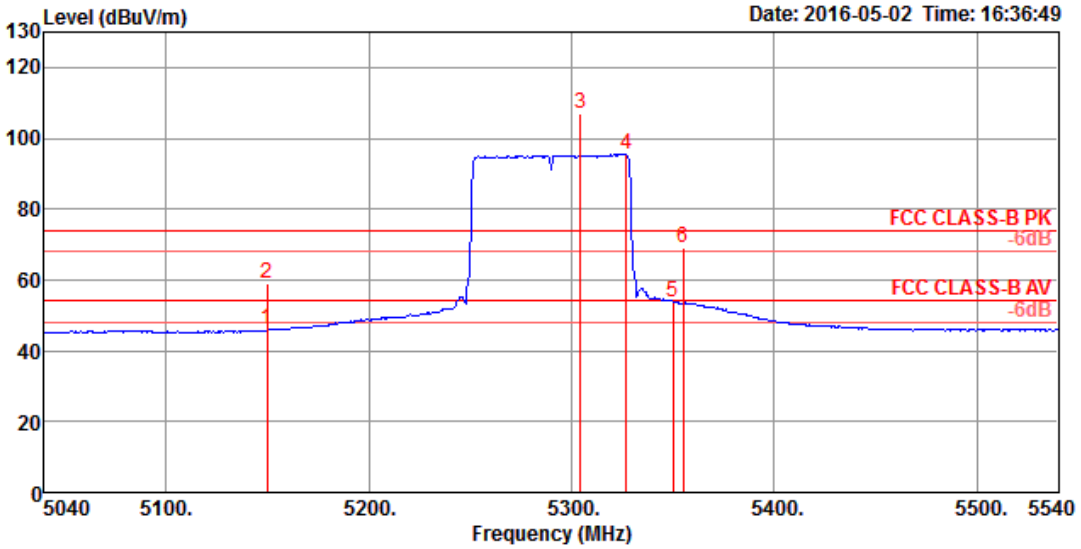


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5659.04	90.31			82.06	6.82	34.40	32.97	267	314	Average	HORIZONTAL
2	5659.26	101.96			93.71	6.82	34.40	32.97	267	314	Peak	HORIZONTAL
3	5945.46	60.36	68.20	-7.84	51.85	6.99	34.57	33.05	267	314	Peak	HORIZONTAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 7 / CH 58+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

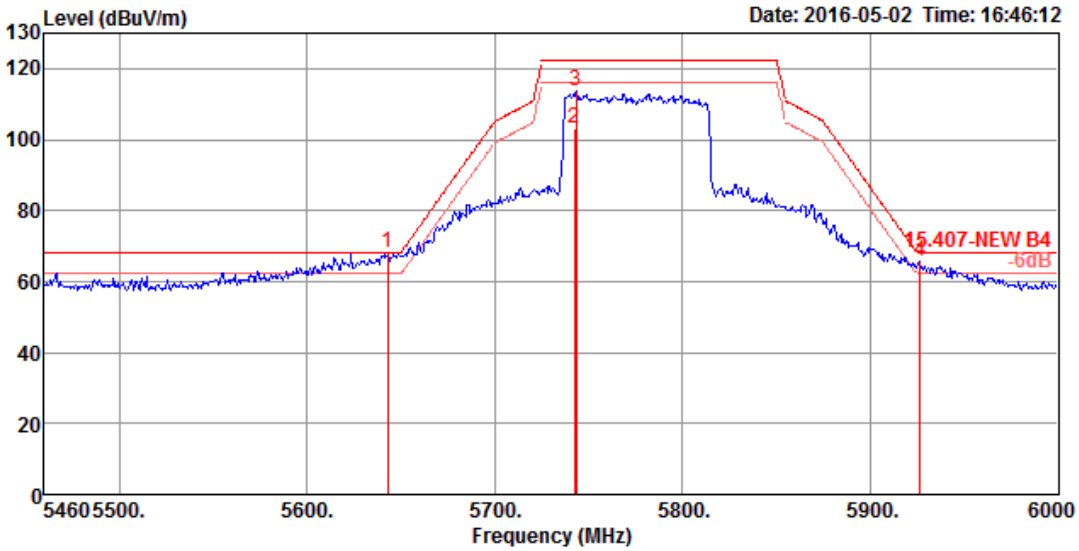
Channel 58



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5150.00	45.89	54.00	-8.11	40.08	7.23	31.52	32.94	249	222	Average	VERTICAL
2	5150.00	59.13	74.00	-14.87	53.32	7.23	31.52	32.94	249	222	Peak	VERTICAL
3 0	5304.47	107.13			101.08	7.34	31.64	32.93	249	222	Peak	VERTICAL
4 0	5326.90	95.68			89.58	7.36	31.67	32.93	249	222	Average	VERTICAL
5	5350.00	53.85	54.00	-0.15	47.73	7.37	31.68	32.93	249	222	Average	VERTICAL
6	5355.07	69.32	74.00	-4.68	63.18	7.38	31.69	32.93	249	222	Peak	VERTICAL

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

Channel 155

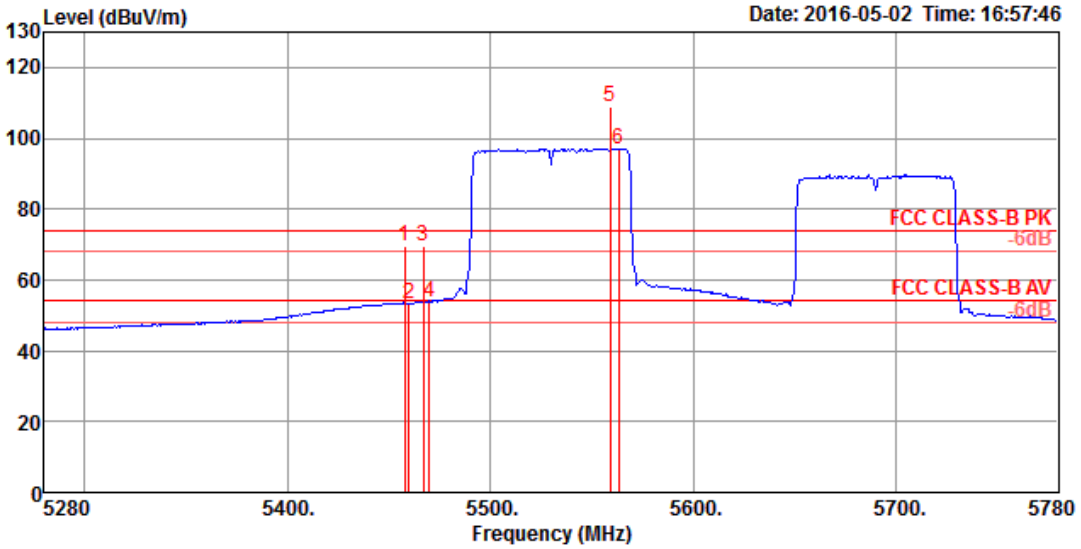


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5643.06	68.07	68.20	-0.13	61.43	7.64	31.98	32.98	229	43	Peak	VERTICAL
2	5742.50	103.18			96.36	7.73	32.10	33.01	229	43	Average	VERTICAL
3	5743.50	113.59			106.77	7.73	32.10	33.01	229	43	Peak	VERTICAL
4	5926.56	65.55	68.20	-2.65	58.49	7.82	32.32	33.08	229	43	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5775 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 8 / CH 106+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8

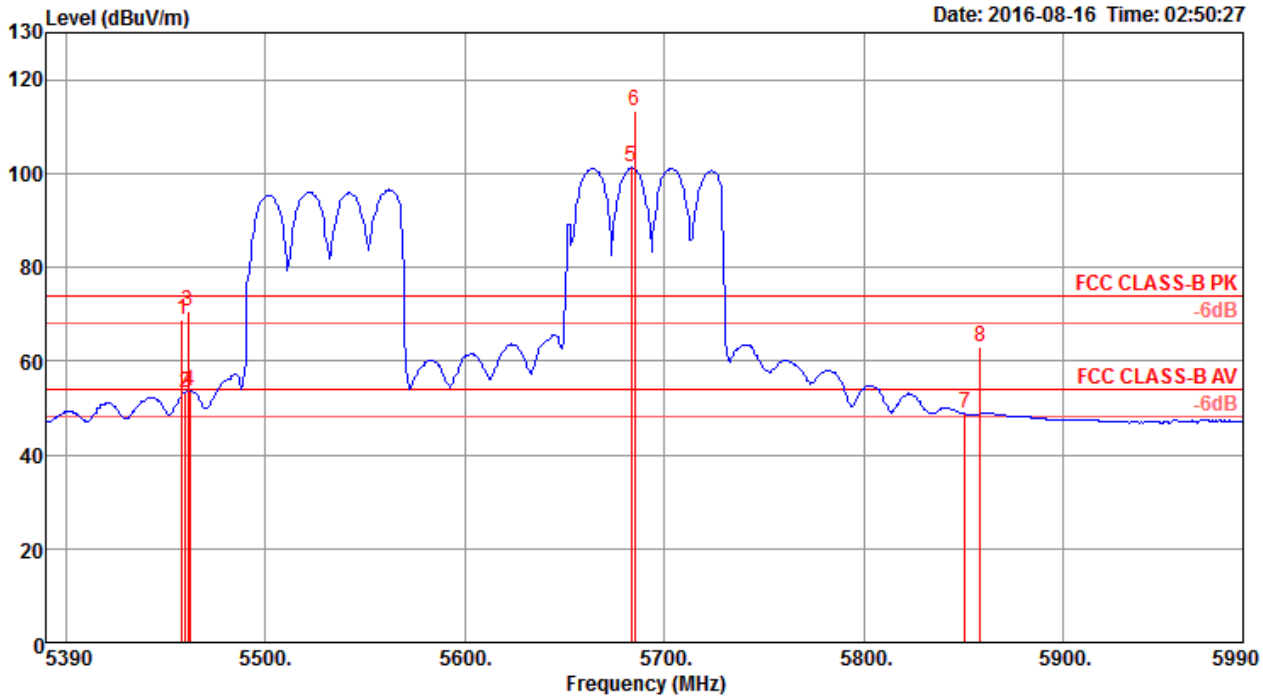
Channel 106



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5457.86	69.59	74.00	-4.41	63.29	7.46	31.76	32.92	281	218	Peak	VERTICAL
2	5460.00	53.37	54.00	-0.63	47.07	7.46	31.76	32.92	281	218	Average	VERTICAL
3	5467.11	69.61	74.00	-4.39	63.27	7.48	31.78	32.92	281	218	Peak	VERTICAL
4	5470.00	53.96	54.00	-0.04	47.62	7.48	31.78	32.92	281	218	Average	VERTICAL
5 0	5558.94	108.70			102.23	7.55	31.86	32.94	281	218	Peak	VERTICAL
6 0	5563.29	97.09			90.59	7.57	31.88	32.95	281	218	Average	VERTICAL

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

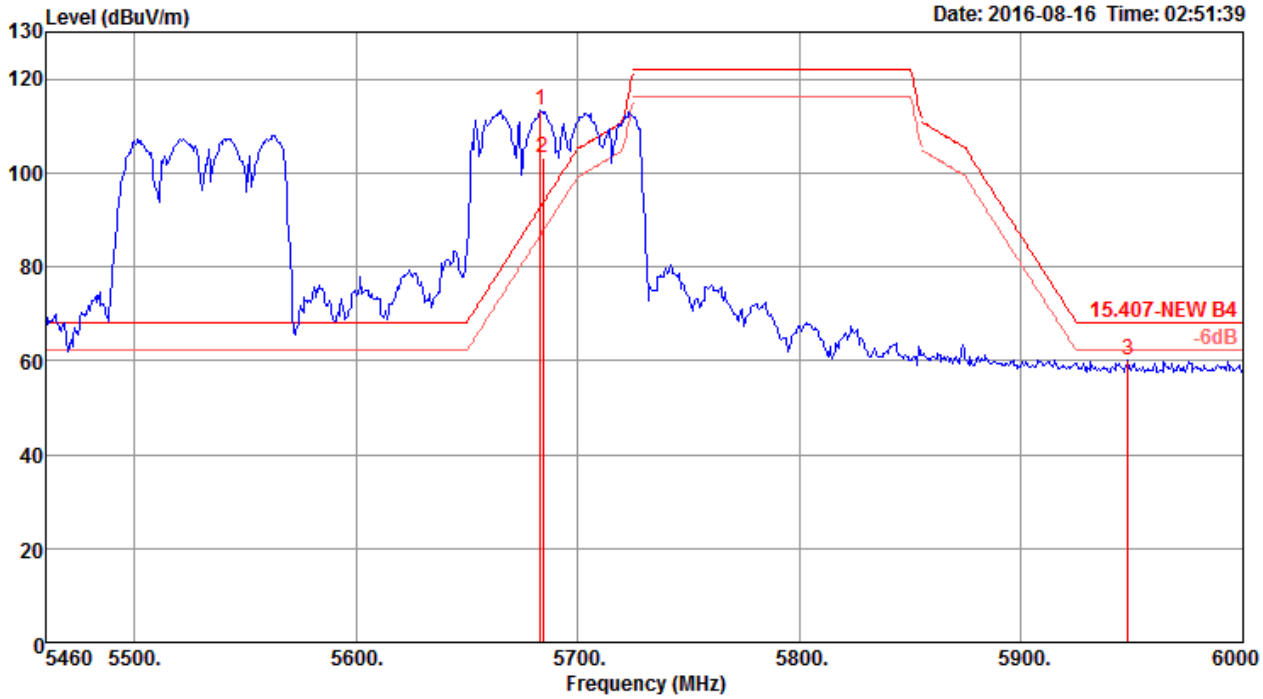
Channel 138 (UNII 2C)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.27	68.94	74.00	-5.06	60.96	6.68	34.23	32.93	224	44	Peak	VERTICAL
2	5460.00	53.36	54.00	-0.64	45.38	6.68	34.23	32.93	224	44	Average	VERTICAL
3	5461.15	70.45	74.00	-3.55	62.47	6.68	34.23	32.93	224	44	Peak	VERTICAL
4	5461.92	53.70	54.00	-0.30	45.72	6.68	34.23	32.93	224	44	Average	VERTICAL
5	5683.27	101.21			92.95	6.83	34.41	32.98	224	44	Average	VERTICAL
6	5685.19	113.38			105.12	6.83	34.41	32.98	224	44	Peak	VERTICAL
7	5850.58	48.93	54.00	-5.07	40.48	6.96	34.51	33.02	224	44	Average	VERTICAL
8	5858.27	63.03	74.00	-10.97	54.56	6.97	34.52	33.02	224	44	Peak	VERTICAL

Item 5, 6 are the fundamental frequency at 5690 MHz.

Channel 138 (UNII 3)

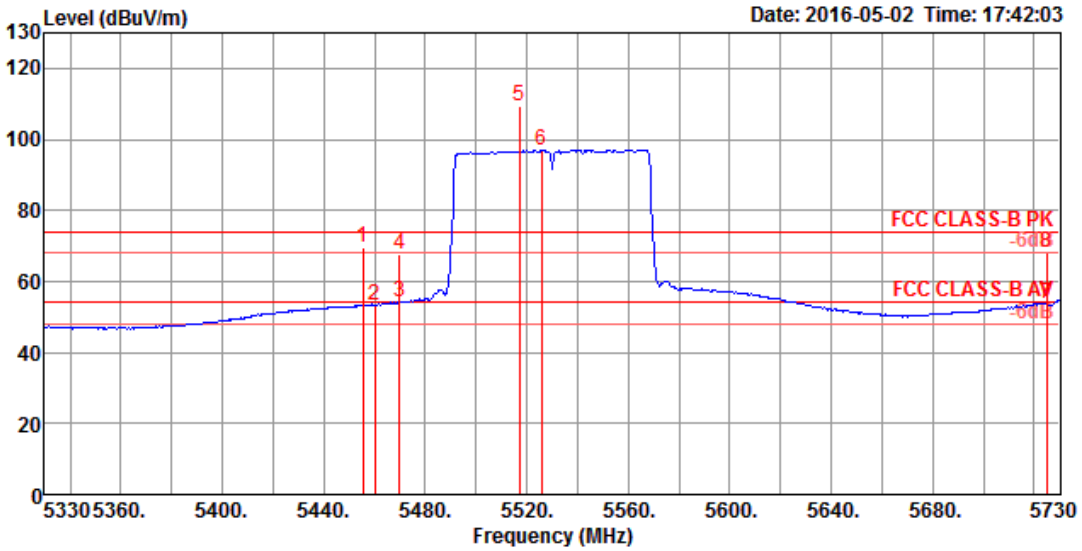


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5683.02	113.28			105.02	6.83	34.41	32.98	224	44	Peak	VERTICAL
2	5684.14	103.10			94.84	6.83	34.41	32.98	224	44	Average	VERTICAL
3	5948.16	60.07	68.20	-8.13	51.56	6.99	34.57	33.05	224	44	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 9 / CH 106+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

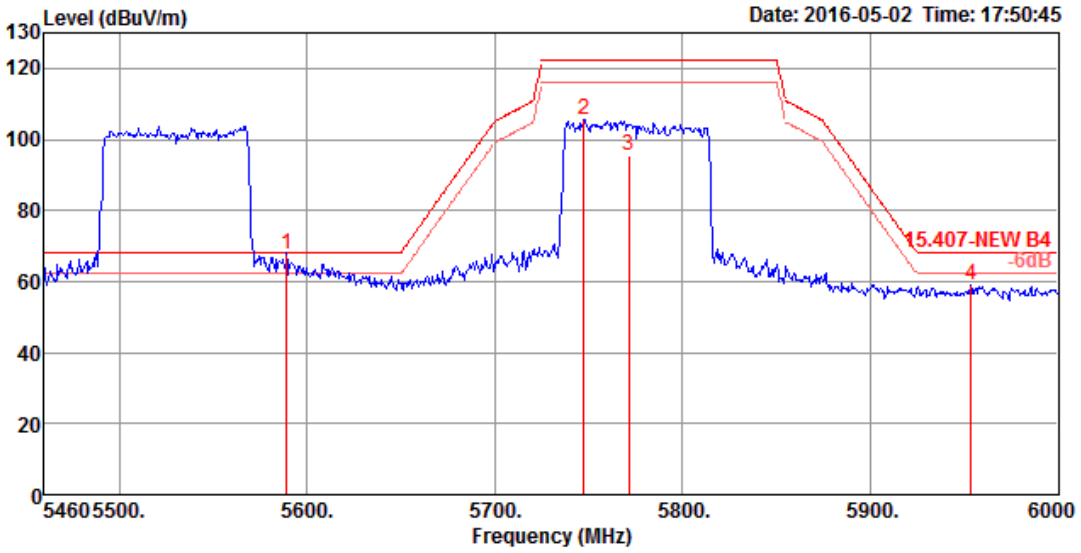
Channel 106



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.37	69.50	74.00	-4.50	63.20	7.46	31.76	32.92	270	216	Peak	VERTICAL
2	5460.00	53.34	54.00	-0.66	47.04	7.46	31.76	32.92	270	216	Average	VERTICAL
3	5470.00	53.98	54.00	-0.02	47.64	7.48	31.78	32.92	270	216	Average	VERTICAL
4	5470.00	67.84	74.00	-6.16	61.50	7.48	31.78	32.92	270	216	Peak	VERTICAL
5 0	5517.26	109.22			102.81	7.52	31.82	32.93	270	216	Peak	VERTICAL
6 0	5525.95	97.10			90.69	7.52	31.82	32.93	270	216	Average	VERTICAL
7	5725.00	53.51	54.00	-0.49	46.72	7.71	32.08	33.00	270	216	Average	VERTICAL
8	5725.00	68.09	74.00	-5.91	61.30	7.71	32.08	33.00	270	216	Peak	VERTICAL

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

Channel 155

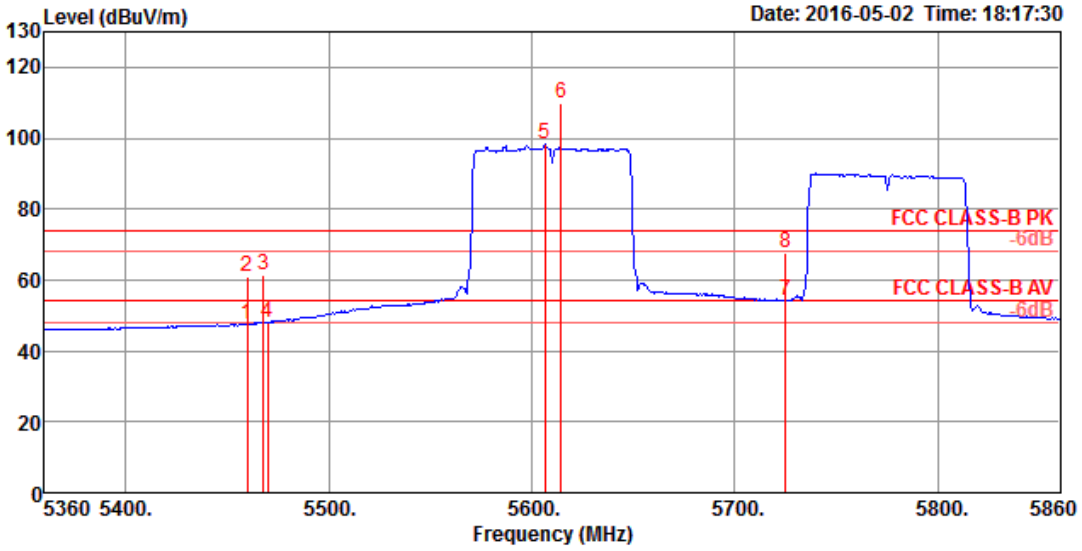


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5589.06	67.83	68.20	-0.37	61.31	7.58	31.90	32.96	299	318	Peak	VERTICAL
2	5747.28	105.48			98.67	7.73	32.10	33.02	299	318	Peak	VERTICAL
3	5771.42	95.30			88.47	7.74	32.12	33.03	299	318	Average	VERTICAL
4	5953.56	59.15	68.20	-9.05	52.08	7.82	32.34	33.09	299	318	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5775 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 10 / CH 122+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

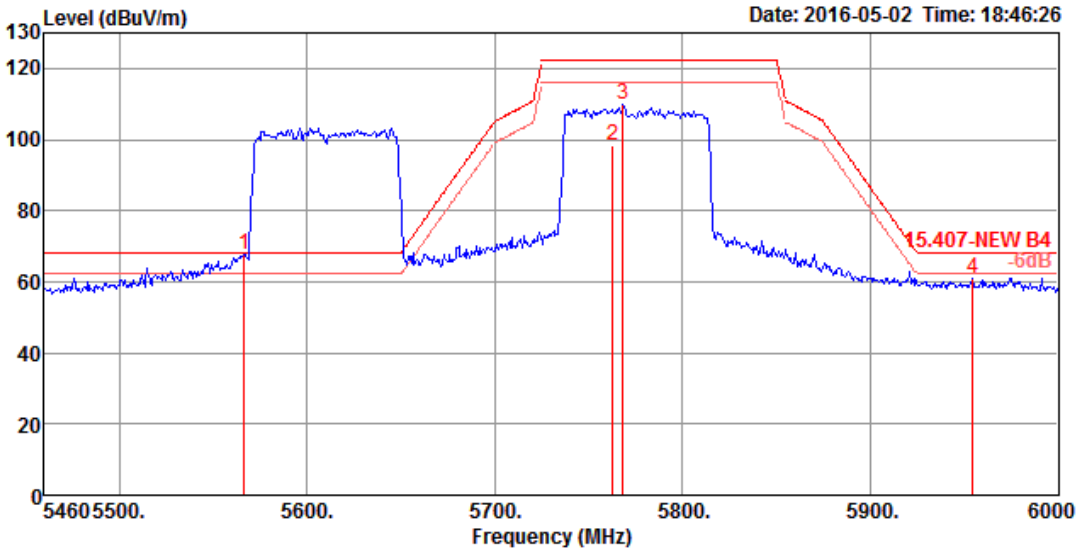
Channel 122



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5460.00	47.49	54.00	-6.51	41.19	7.46	31.76	32.92	273	213	Average	VERTICAL
2	5460.00	60.81	74.00	-13.19	54.51	7.46	31.76	32.92	277	210	Peak	VERTICAL
3	5467.83	61.25	74.00	-12.75	54.91	7.48	31.78	32.92	273	213	Peak	VERTICAL
4	5470.00	48.05	54.00	-5.95	41.71	7.48	31.78	32.92	273	213	Average	VERTICAL
5 0	5606.38	98.18			91.62	7.60	31.92	32.96	273	213	Average	VERTICAL
6 0	5614.34	109.67			103.08	7.61	31.94	32.96	273	213	Peak	VERTICAL
7	5725.00	53.97	54.00	-0.03	47.18	7.71	32.08	33.00	273	213	Average	VERTICAL
8	5725.00	67.82	74.00	-6.18	61.03	7.71	32.08	33.00	273	213	Peak	VERTICAL

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

Channel 155

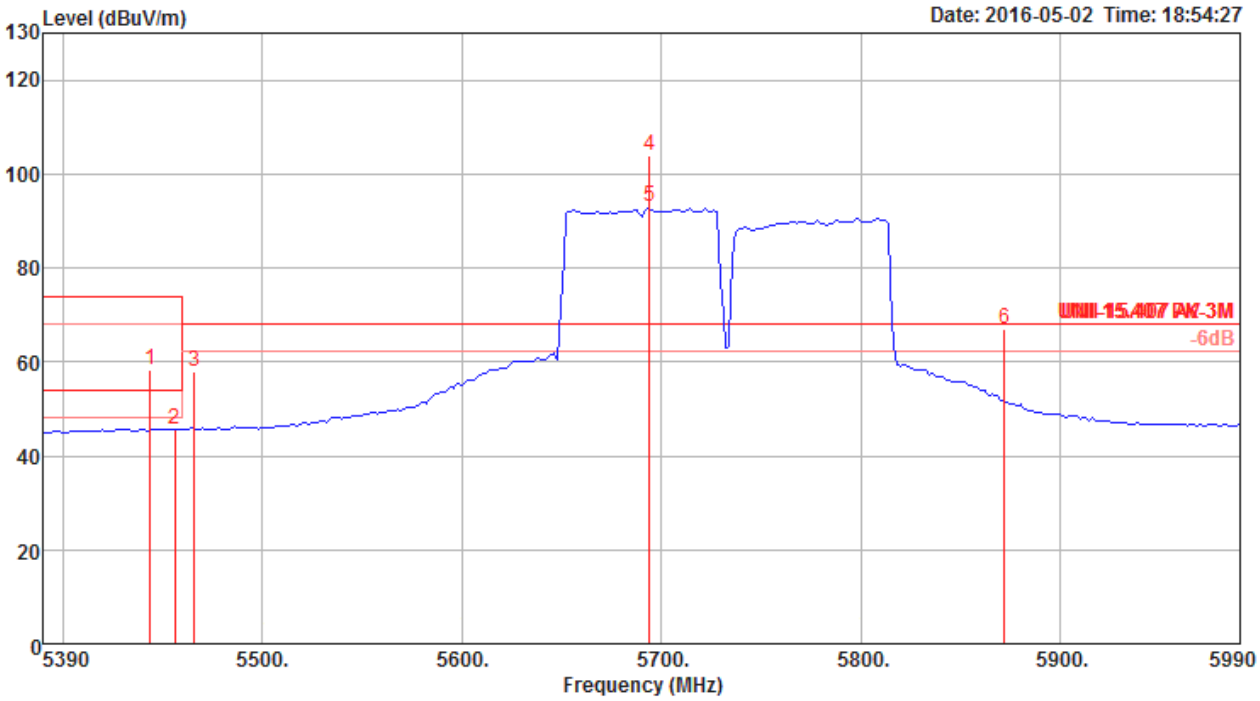


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5566.38	67.87	68.20	-0.33	61.37	7.57	31.88	32.95	254	45	Peak	VERTICAL
2	5762.82	98.15			91.31	7.74	32.12	33.02	254	45	Average	VERTICAL
3	5768.34	109.93			103.10	7.74	32.12	33.03	254	45	Peak	VERTICAL
4	5954.64	60.81	68.20	-7.39	53.74	7.82	32.34	33.09	254	45	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5775 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 11 / CH 138+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

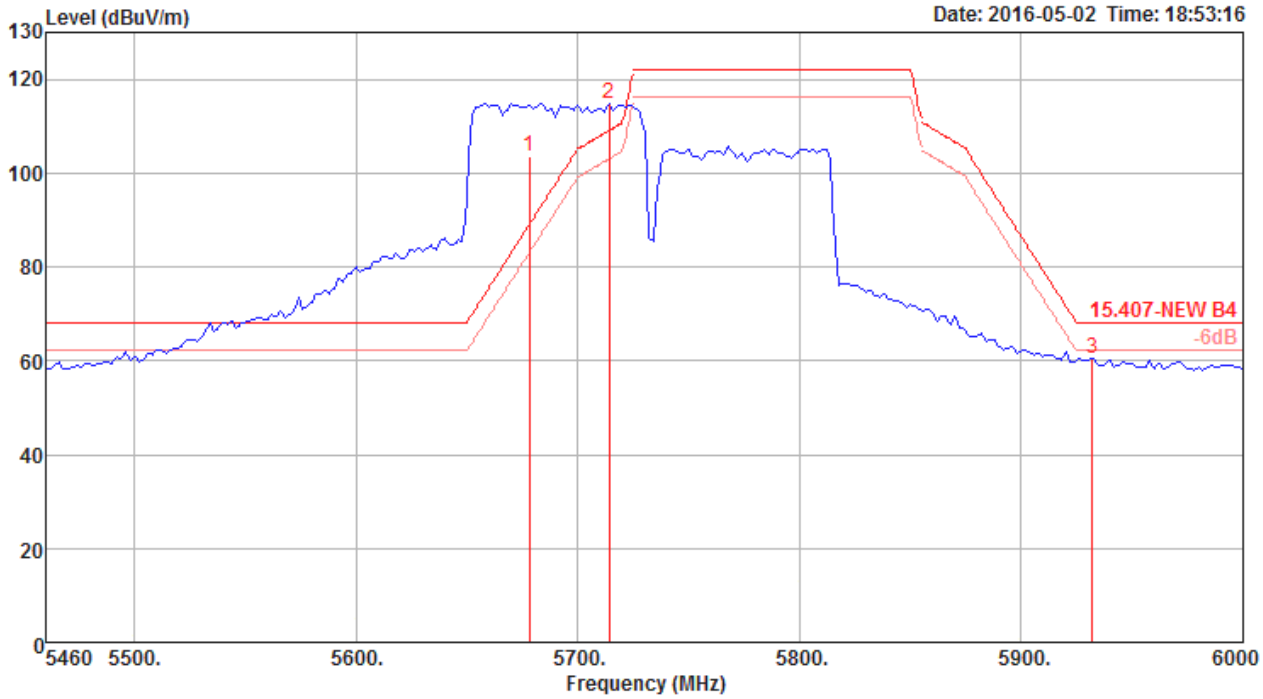
Channel 138 (UNII 2C)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5444.00	58.33	74.00	-15.67	52.81	6.27	33.72	34.47	270	210	Peak	HORIZONTAL
2	5456.00	45.77	54.00	-8.23	40.22	6.28	33.74	34.47	270	210	Average	HORIZONTAL
3	5466.00	58.11	68.20	-10.09	52.52	6.30	33.76	34.47	270	210	Peak	HORIZONTAL
4	5694.00	104.07			97.74	6.44	34.40	34.51	270	210	Peak	HORIZONTAL
5	5694.00	92.89			86.56	6.44	34.40	34.51	270	210	Average	HORIZONTAL
6	5872.00	67.15	68.20	-1.05	60.32	6.47	34.90	34.54	270	210	Peak	HORIZONTAL

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

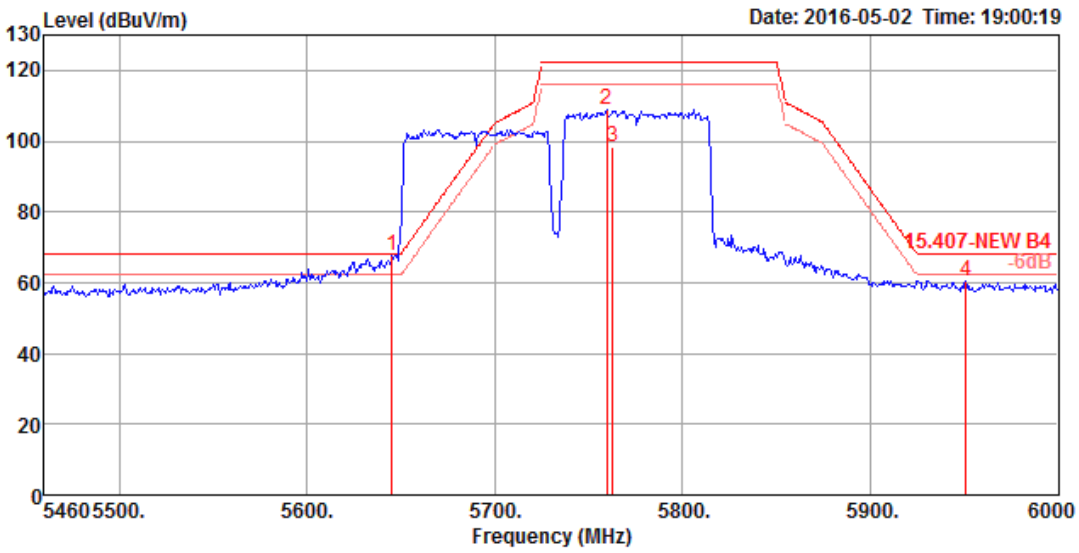
Channel 138 (UNII 3)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5678.00	103.66			97.38	6.44	34.35	34.51	247	209	Average	VERTICAL
2	5714.00	114.95			108.57	6.44	34.45	34.51	247	209	Peak	VERTICAL
3	5932.00	60.61	68.20	-7.59	53.58	6.49	35.10	34.56	247	209	Peak	VERTICAL

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

Channel 155



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5645.22	67.74	68.20	-0.46	61.10	7.64	31.98	32.98	252	42	Peak	VERTICAL
2	5759.70	108.90			102.06	7.74	32.12	33.02	252	42	Peak	VERTICAL
3	5762.82	98.32			91.48	7.74	32.12	33.02	252	42	Average	VERTICAL
4	5950.86	60.38	68.20	-7.82	53.31	7.82	32.34	33.09	252	42	Peak	VERTICAL

Item 2, 3 are the fundamental frequency at 5775 MHz.

Note:

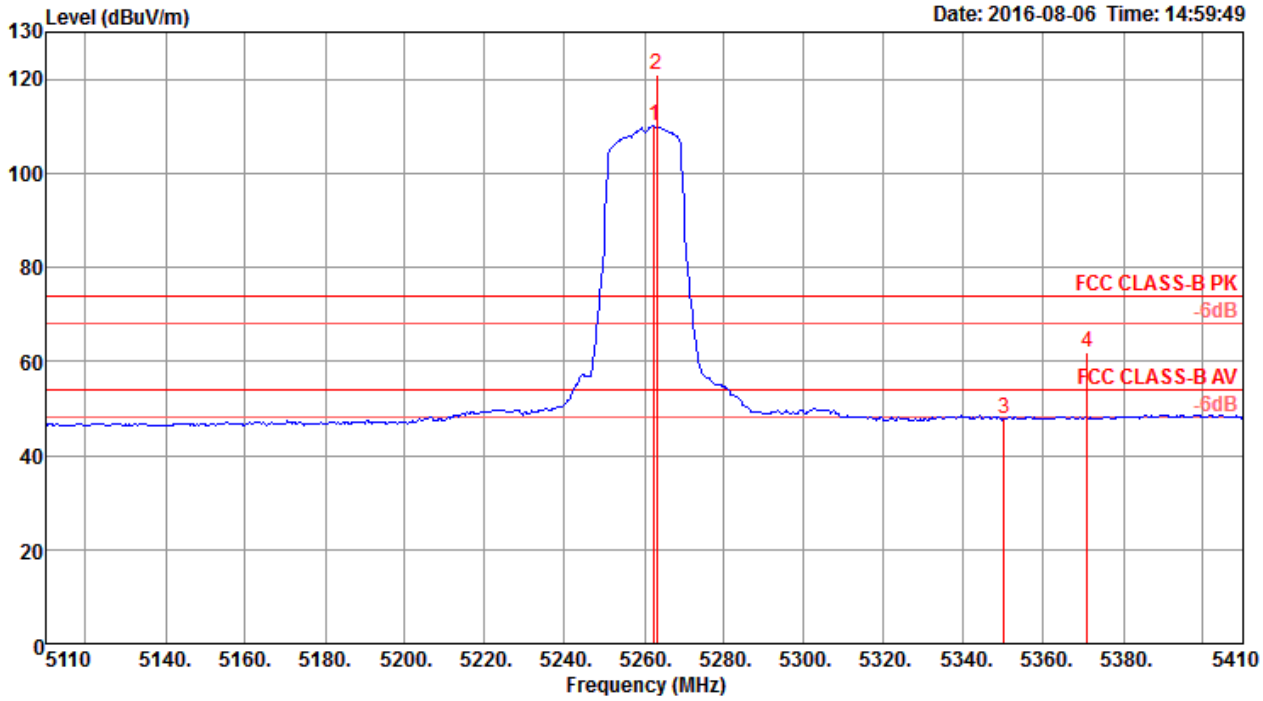
Emission level (dBuV/m) = 20 log Emission level (uV/m)

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

<For Beamforming Mode>

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 5 + Chain 6 + Chain 7 + Chain 8

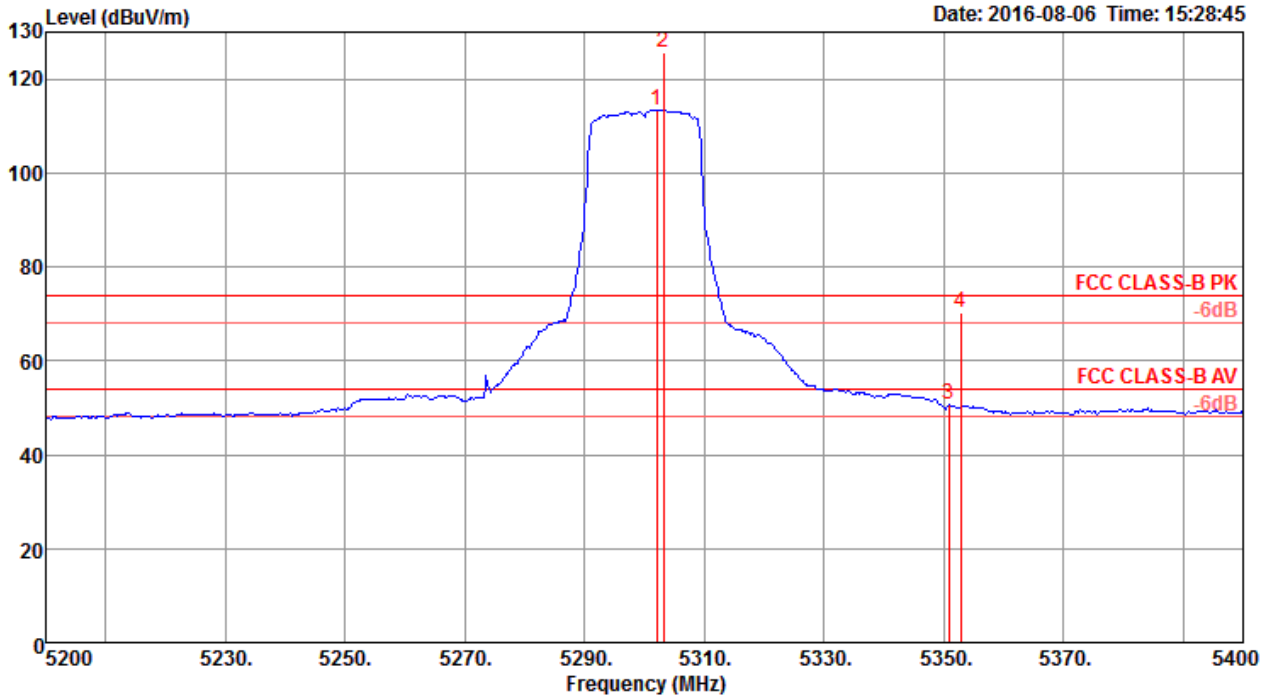
Channel 52



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5262.40	110.11			103.17	7.93	33.48	34.47	268	154	Average	VERTICAL
2	5263.00	120.84			113.90	7.93	33.48	34.47	268	154	Peak	VERTICAL
3	5350.00	47.83	54.00	-6.17	40.82	7.89	33.59	34.47	268	154	Average	VERTICAL
4	5371.00	61.76	74.00	-12.24	54.73	7.87	33.63	34.47	268	154	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5260 MHz.

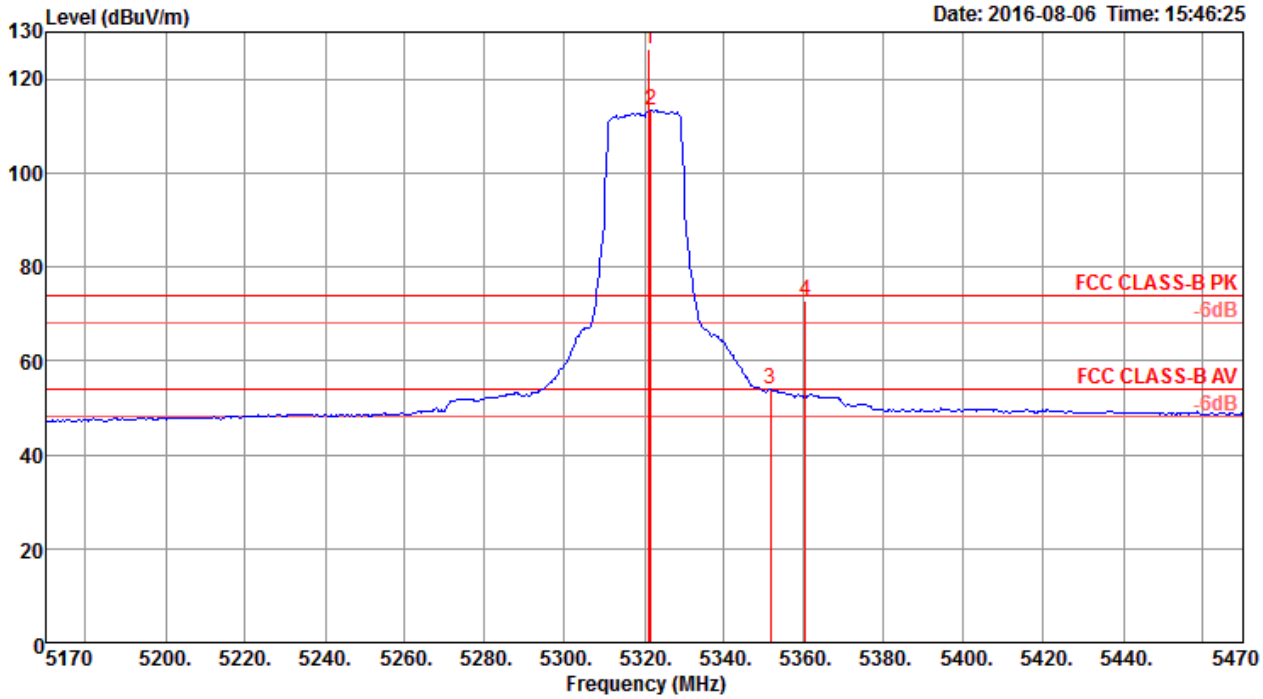
Channel 60



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5302.00	113.49			106.53	7.91	33.52	34.47	249	316	Average	VERTICAL
2	5303.20	125.50			118.54	7.91	33.52	34.47	249	316	Peak	VERTICAL
3	5350.80	50.62	54.00	-3.38	43.61	7.89	33.59	34.47	249	316	Average	VERTICAL
4	5352.80	70.32	74.00	-3.68	63.31	7.89	33.59	34.47	249	316	Peak	VERTICAL

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

Channel 64

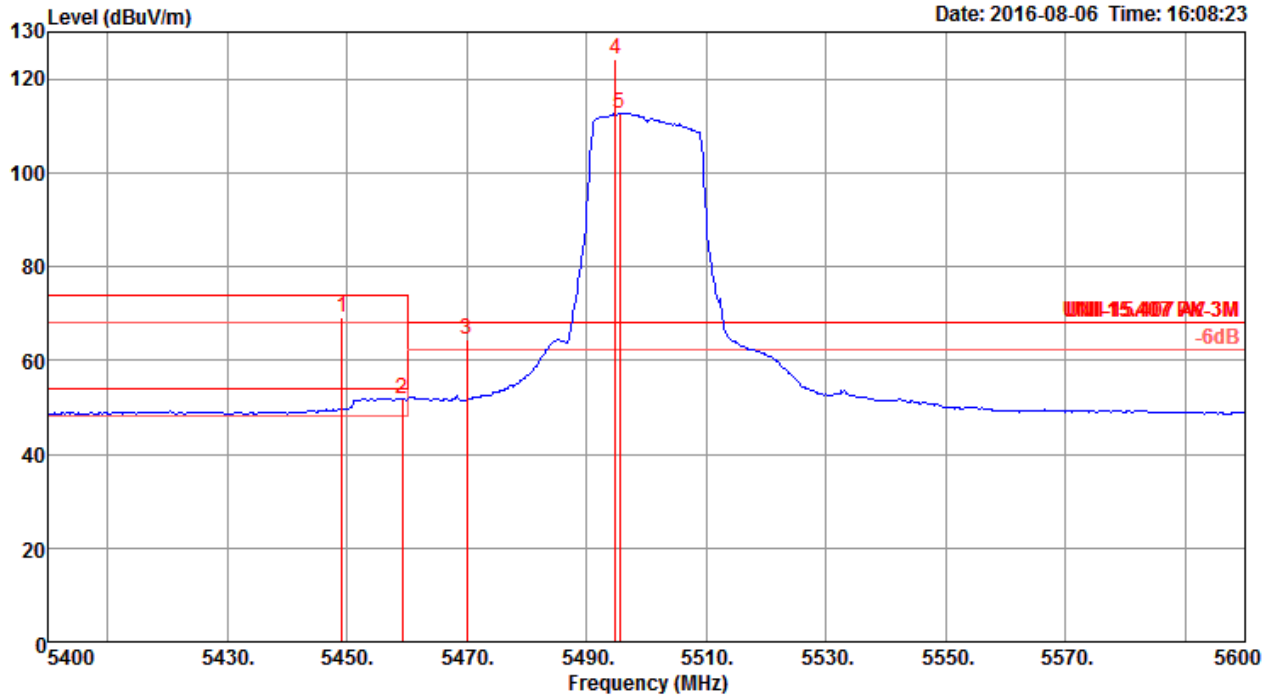


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5321.20	126.56			119.57	7.91	33.55	34.47	235	315	Peak	VERTICAL
2	5321.60	113.20			106.21	7.91	33.55	34.47	235	315	Average	VERTICAL
3	5351.60	53.87	54.00	-0.13	46.86	7.89	33.59	34.47	235	315	Average	VERTICAL
4	5360.40	72.90	74.00	-1.10	65.88	7.88	33.61	34.47	235	315	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 5 + Chain 6 + Chain 7 + Chain 8

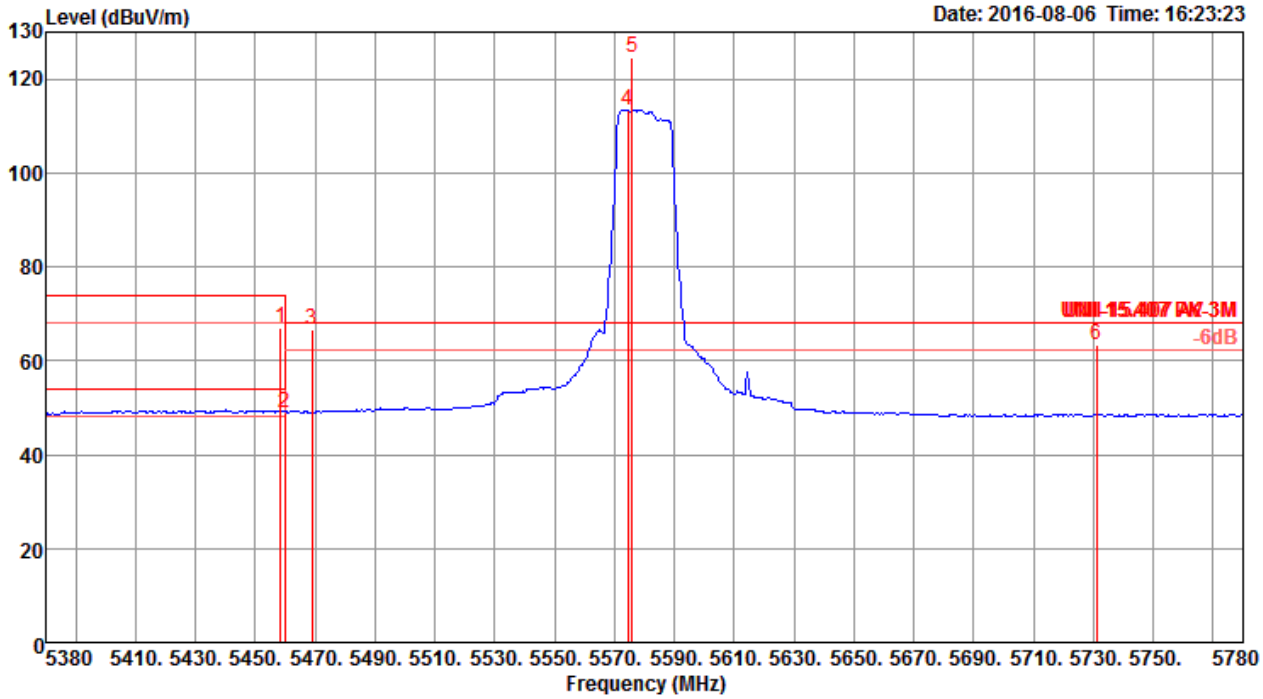
Channel 100



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5449.20	69.11	74.00	-4.89	61.95	7.89	33.74	34.47	251	360	Peak	VERTICAL
2	5459.20	51.88	54.00	-2.12	44.72	7.89	33.74	34.47	251	360	Average	VERTICAL
3	5470.00	64.38	68.20	-3.82	57.19	7.90	33.76	34.47	251	360	Peak	VERTICAL
4	5494.80	124.05			116.84	7.90	33.78	34.47	251	360	Peak	VERTICAL
5	5495.60	112.66			105.42	7.91	33.80	34.47	251	360	Average	VERTICAL

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

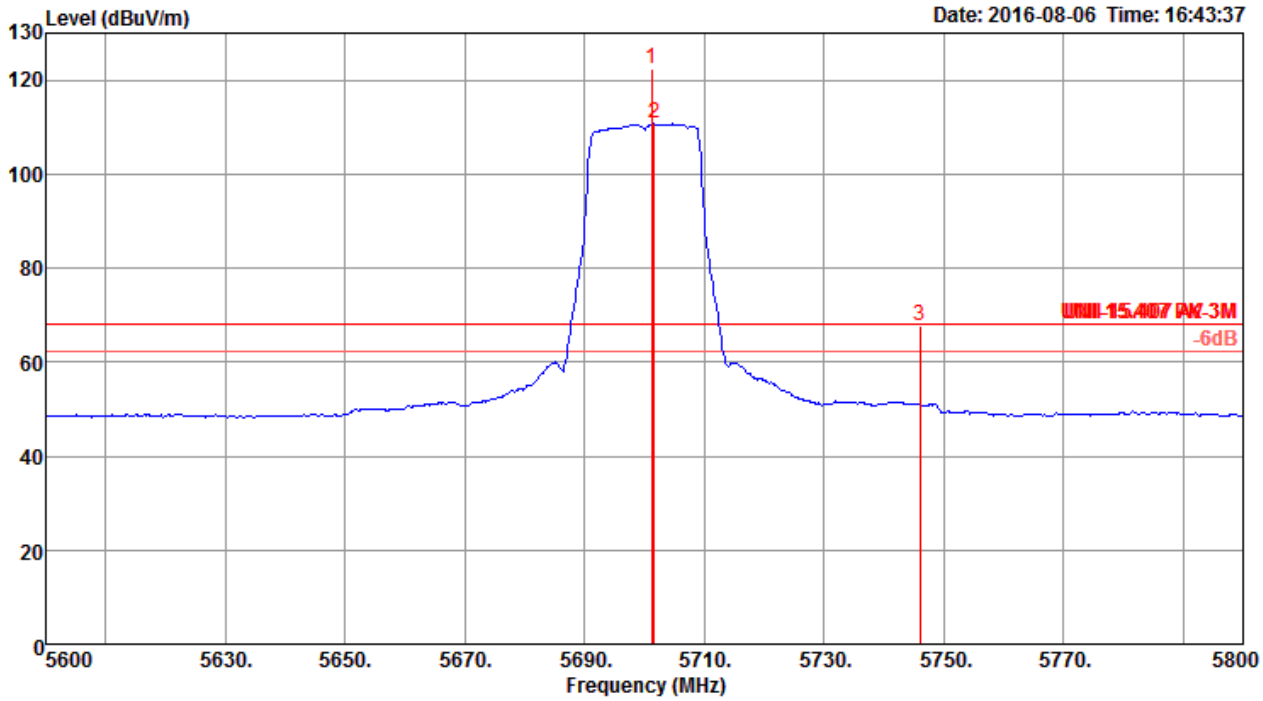
Channel 116



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.40	67.05	74.00	-6.95	59.89	7.89	33.74	34.47	242	99	Peak	VERTICAL
2	5460.00	48.97	54.00	-5.03	41.81	7.89	33.74	34.47	242	99	Average	VERTICAL
3	5468.80	66.77	68.20	-1.43	59.58	7.90	33.76	34.47	242	99	Peak	VERTICAL
4	5574.40	113.39			105.93	7.94	34.00	34.48	242	99	Average	VERTICAL
5	5576.00	124.72			117.21	7.94	34.05	34.48	242	99	Peak	VERTICAL
6	5731.20	63.43	68.20	-4.77	55.58	7.87	34.50	34.52	242	99	Peak	VERTICAL

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

Channel 140

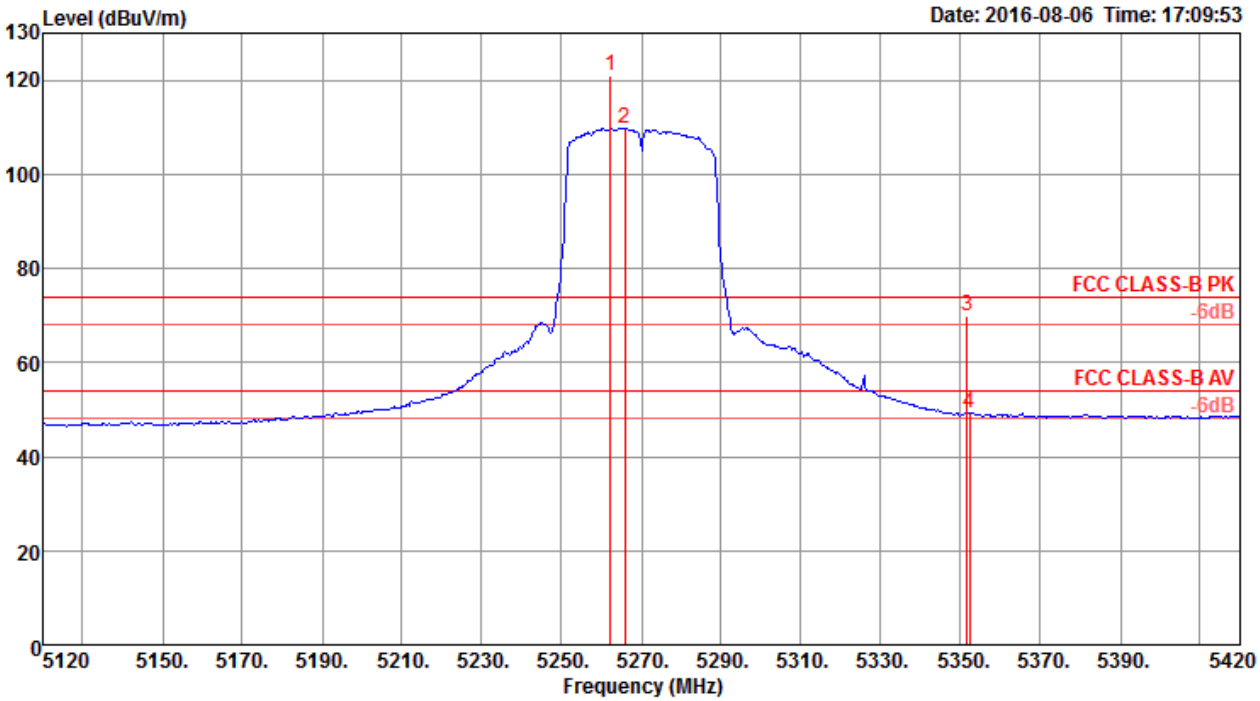


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5701.20	122.51			114.73	7.89	34.40	34.51	228	43	Peak	VERTICAL
2	5701.60	110.71			102.93	7.89	34.40	34.51	228	43	Average	VERTICAL
3	5746.00	67.89	68.20	-0.31	60.00	7.86	34.55	34.52	228	43	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 5 + Chain 6 + Chain 7 + Chain 8

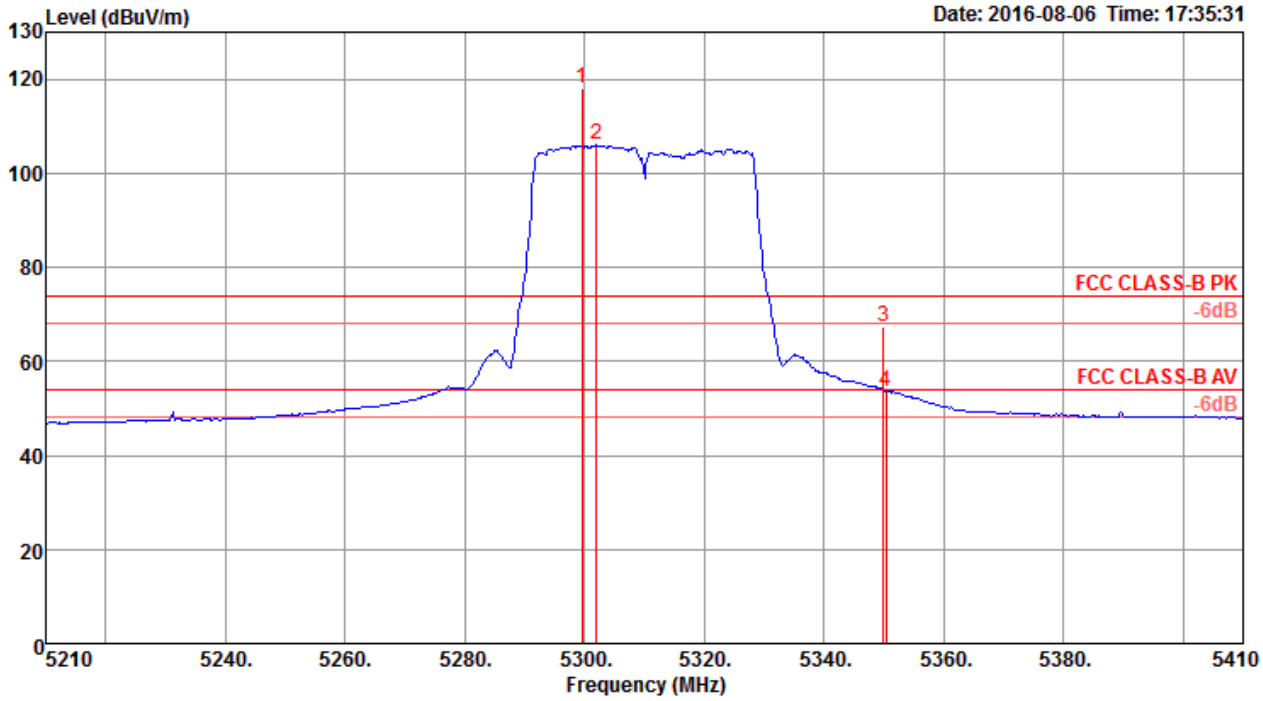
Channel 54



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5262.20	120.98			114.04	7.93	33.48	34.47	237	227	Peak	VERTICAL
2	5265.80	109.79			102.85	7.93	33.48	34.47	237	227	Average	VERTICAL
3	5351.60	69.76	74.00	-4.24	62.75	7.89	33.59	34.47	237	227	Peak	VERTICAL
4	5352.20	49.35	54.00	-4.65	42.34	7.89	33.59	34.47	237	227	Average	VERTICAL

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

Channel 62

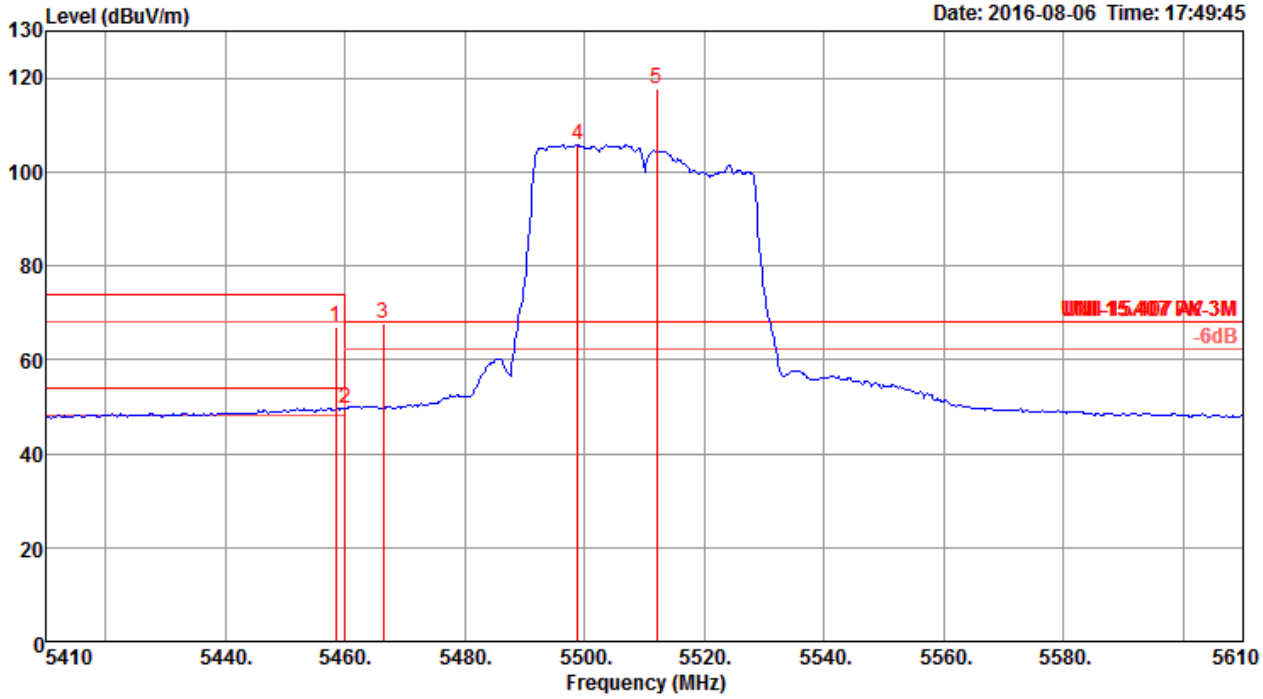


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5299.60	118.16			111.20	7.91	33.52	34.47	234	315	Peak	VERTICAL
2	5302.00	105.92			98.96	7.91	33.52	34.47	234	315	Average	VERTICAL
3	5350.00	67.48	74.00	-6.52	60.47	7.89	33.59	34.47	234	315	Peak	VERTICAL
4	5350.40	53.76	54.00	-0.24	46.75	7.89	33.59	34.47	234	315	Average	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 5 + Chain 6 + Chain 7 + Chain 8

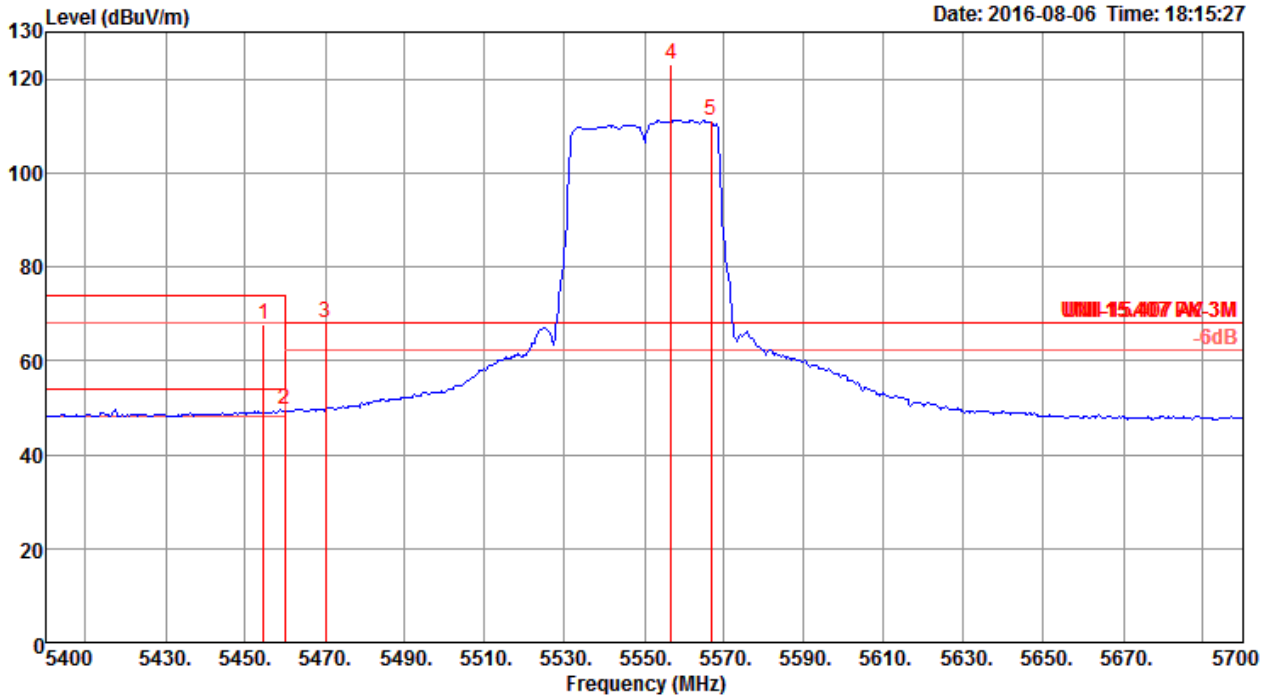
Channel 102



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.40	67.04	74.00	-6.96	59.88	7.89	33.74	34.47	236	8	Peak	VERTICAL
2	5460.00	49.67	54.00	-4.33	42.51	7.89	33.74	34.47	236	8	Average	VERTICAL
3	5466.40	67.88	68.20	-0.32	60.69	7.90	33.76	34.47	236	8	Peak	VERTICAL
4	5498.80	105.73			98.49	7.91	33.80	34.47	236	8	Average	VERTICAL
5	5512.00	117.60			110.30	7.92	33.85	34.47	236	8	Peak	VERTICAL

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

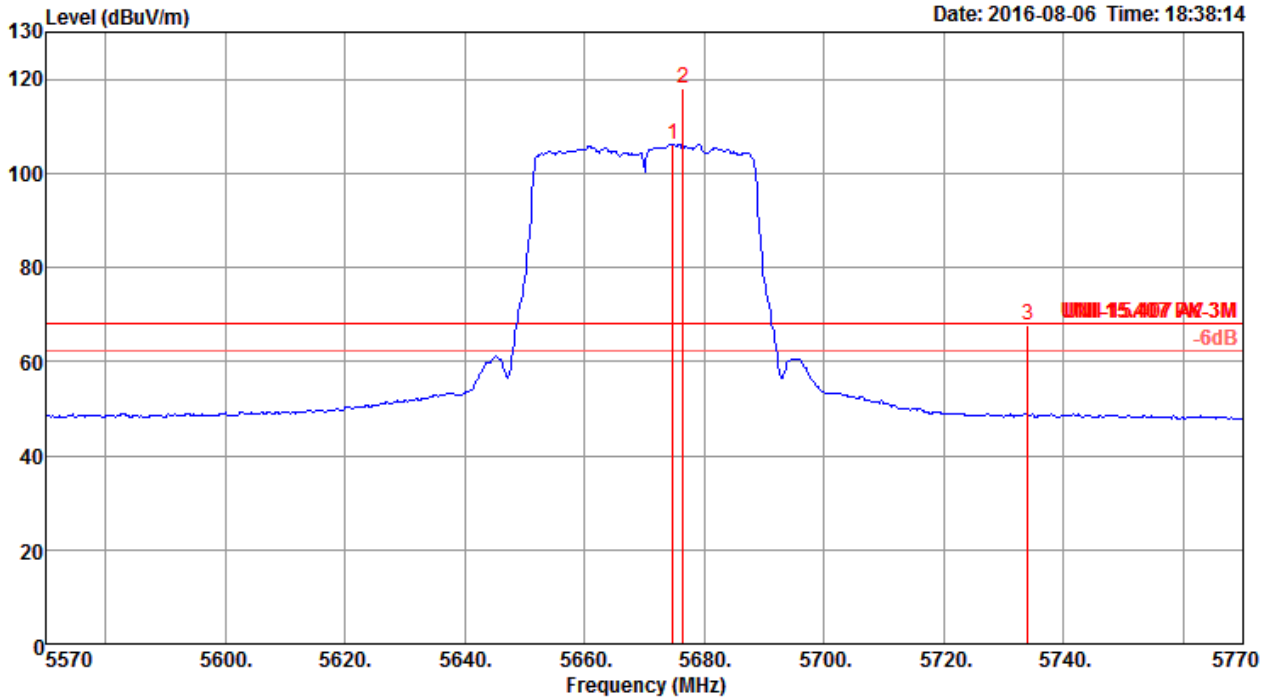
Channel 110



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5454.60	67.79	74.00	-6.21	60.63	7.89	33.74	34.47	245	44	Peak	VERTICAL
2	5460.00	49.54	54.00	-4.46	42.38	7.89	33.74	34.47	245	44	Average	VERTICAL
3	5470.00	68.05	68.20	-0.15	60.86	7.90	33.76	34.47	245	44	Peak	VERTICAL
4	5556.60	123.23			115.83	7.93	33.95	34.48	245	44	Peak	VERTICAL
5	5566.80	111.32			103.86	7.94	34.00	34.48	245	44	Average	VERTICAL

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

Channel 134

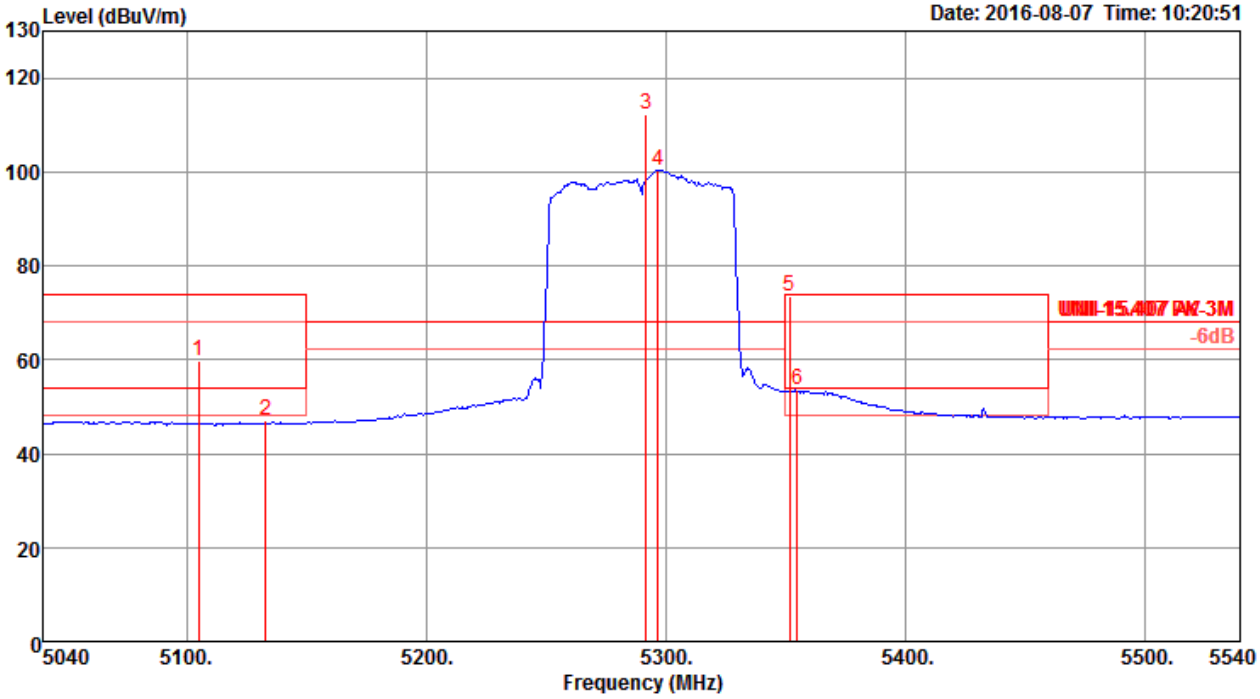


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5674.80	106.18			98.44	7.90	34.35	34.51	247	41	Average	VERTICAL
2	5676.40	118.01			110.27	7.90	34.35	34.51	247	41	Peak	VERTICAL
3	5734.00	67.85	68.20	-0.35	60.00	7.87	34.50	34.52	247	41	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 58

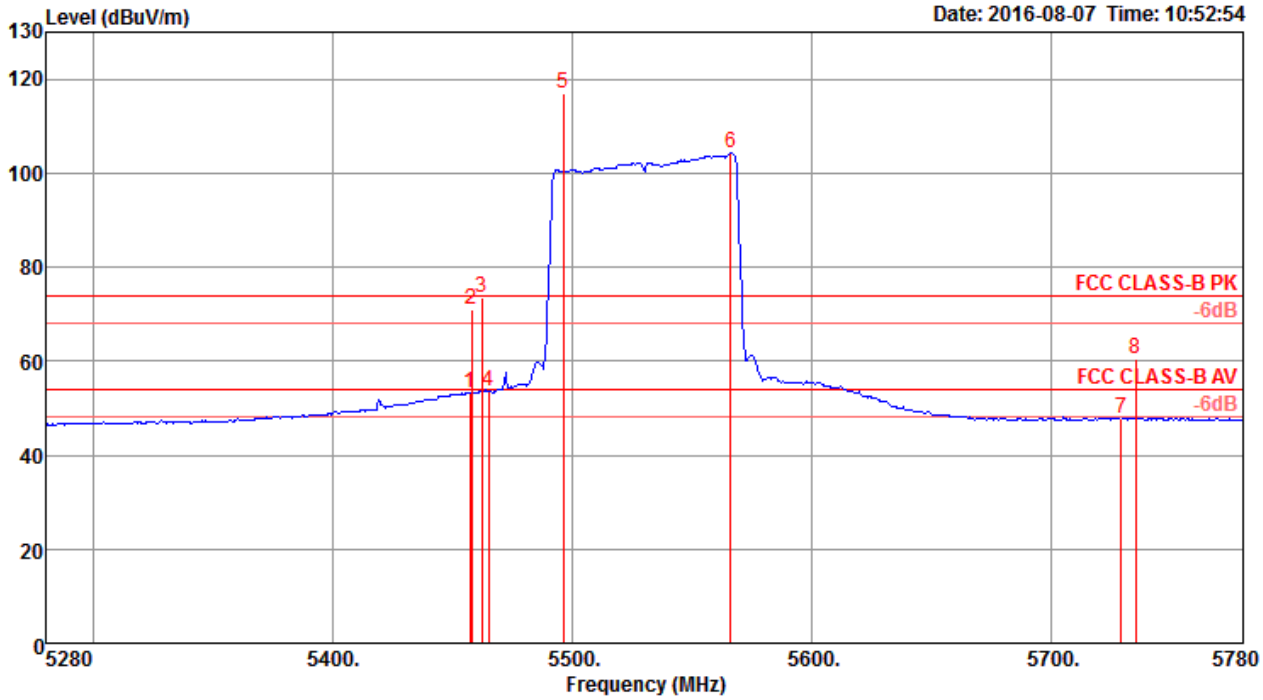


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5105.00	59.82	74.00	-14.18	53.22	7.82	33.25	34.47	263	222	Peak	VERTICAL
2	5133.00	47.15	54.00	-6.85	40.45	7.88	33.29	34.47	263	222	Average	VERTICAL
3	5292.00	112.43			105.48	7.92	33.50	34.47	263	222	Peak	VERTICAL
4	5297.00	100.19			93.23	7.91	33.52	34.47	263	222	Average	VERTICAL
5	5352.00	73.68	74.00	-0.32	66.67	7.89	33.59	34.47	263	222	Peak	VERTICAL
6	5355.00	53.75	54.00	-0.25	46.73	7.88	33.61	34.47	263	222	Average	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

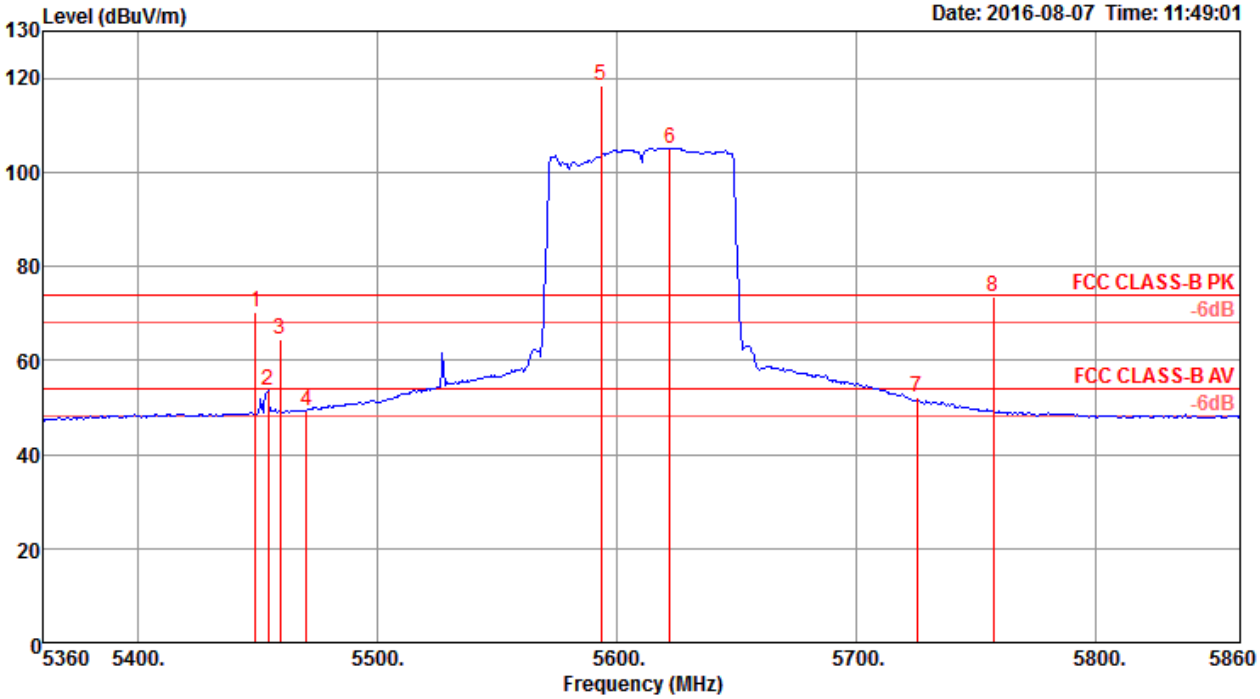
Channel 106



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5457.00	53.33	54.00	-0.67	46.17	7.89	33.74	34.47	231	44	Average	VERTICAL
2	5458.00	71.00	74.00	-3.00	63.84	7.89	33.74	34.47	231	44	Peak	VERTICAL
3	5462.00	73.65	74.00	-0.35	66.49	7.89	33.74	34.47	231	44	Peak	VERTICAL
4	5465.00	53.62	54.00	-0.38	46.43	7.90	33.76	34.47	231	44	Average	VERTICAL
5	5496.00	116.86			109.62	7.91	33.80	34.47	231	44	Peak	VERTICAL
6	5566.00	104.17			96.71	7.94	34.00	34.48	231	44	Average	VERTICAL
7	5729.00	47.81	54.00	-6.19	39.96	7.87	34.50	34.52	231	44	Average	VERTICAL
8	5735.00	60.55	74.00	-13.45	52.70	7.87	34.50	34.52	231	44	Peak	VERTICAL

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

Channel 122



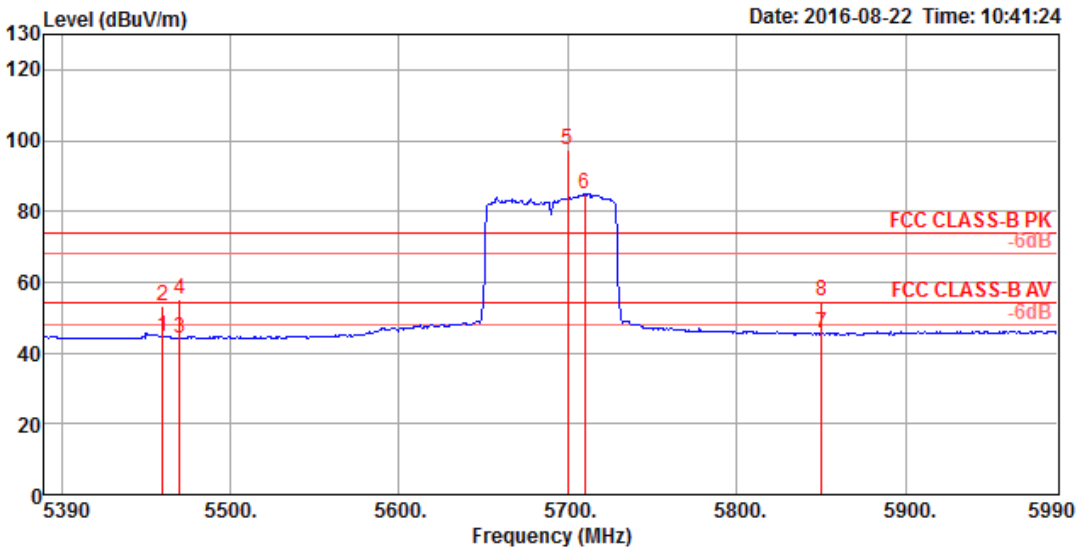
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5449.00	70.15	74.00	-3.85	62.99	7.89	33.74	34.47	244	41	Peak	VERTICAL
2	5454.00	53.60	54.00	-0.40	46.44	7.89	33.74	34.47	244	41	Average	VERTICAL
3	5459.00	64.34	74.00	-9.66	57.18	7.89	33.74	34.47	244	41	Peak	VERTICAL
4	5470.00	49.37	54.00	-4.63	42.18	7.90	33.76	34.47	244	41	Average	VERTICAL
5	5593.00	118.58			111.02	7.95	34.10	34.49	244	41	Peak	VERTICAL
6	5622.00	105.17			97.58	7.94	34.15	34.50	244	41	Average	VERTICAL
7	5725.00	52.05	54.00	-1.95	44.19	7.87	34.50	34.51	244	41	Average	VERTICAL
8	5757.00	73.58	74.00	-0.42	65.65	7.85	34.60	34.52	244	41	Peak	VERTICAL

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

Straddle Channel

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 144

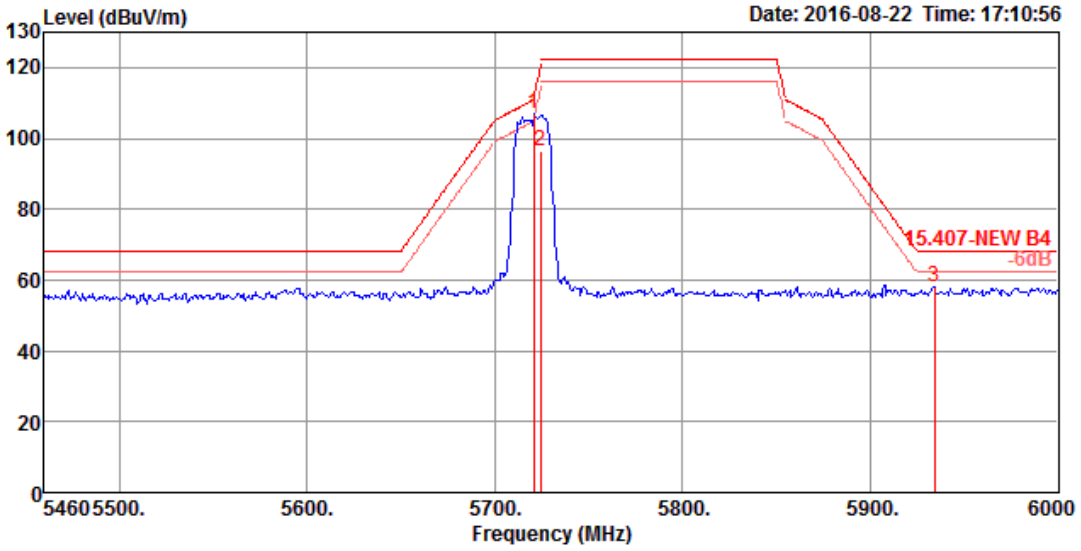


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5460.00	44.72	54.00	-9.28	38.42	7.46	32.92	31.76	VERTICAL	46	218	Average
2	5460.00	53.46	74.00	-20.54	47.16	7.46	32.92	31.76	VERTICAL	46	218	Peak
3	5470.00	44.06	54.00	-9.94	37.72	7.48	32.92	31.78	VERTICAL	46	218	Average
4	5470.00	55.09	74.00	-18.91	48.75	7.48	32.92	31.78	VERTICAL	46	218	Peak
5	5699.66	97.36			90.64	7.68	33.00	32.04	VERTICAL	46	218	Peak
6	5709.97	84.77			78.01	7.70	33.00	32.06	VERTICAL	46	218	Average
7	5850.00	45.49	54.00	-8.51	38.53	7.79	33.05	32.22	VERTICAL	46	218	Average
8	5850.00	54.91	74.00	-19.09	47.95	7.79	33.05	32.22	VERTICAL	46	218	Peak

Item 5, 6 are the fundamental frequency at 5720 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 144

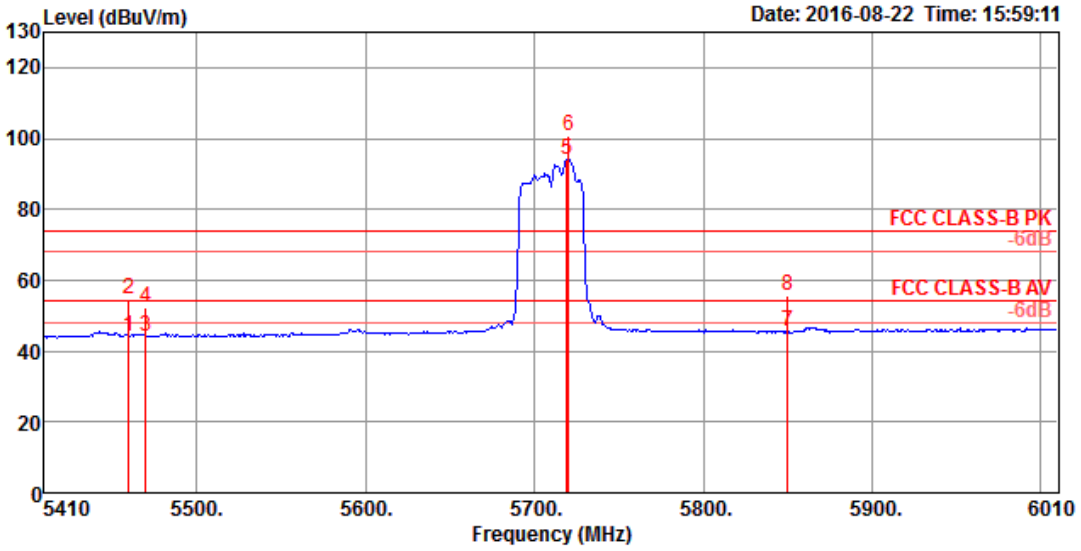


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5720.87	106.85			100.09	7.70	33.00	32.06	VERTICAL	319	231	Peak
2	5724.34	96.32			89.53	7.71	33.00	32.08	VERTICAL	319	231	Average
3	5934.20	58.18	68.20	-10.02	51.12	7.82	33.08	32.32	VERTICAL	319	231	Peak

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 142

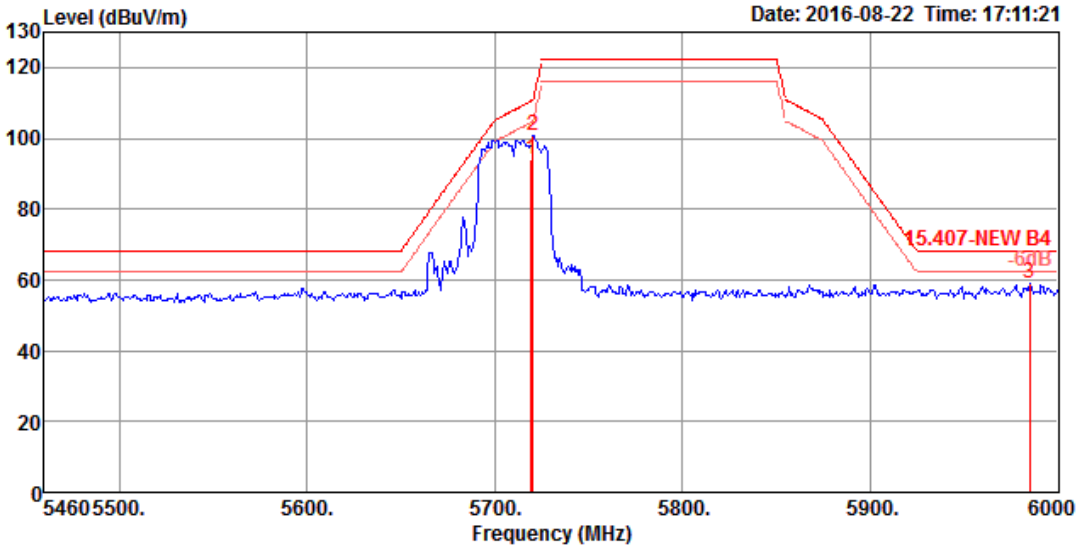


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5460.00	44.30	54.00	-9.70	38.00	7.46	32.92	31.76	VERTICAL	215	320	Average
2	5460.00	54.71	74.00	-19.29	48.41	7.46	32.92	31.76	VERTICAL	215	320	Peak
3	5470.00	44.23	54.00	-9.77	37.89	7.48	32.92	31.78	VERTICAL	215	320	Average
4	5470.00	52.13	74.00	-21.87	45.79	7.48	32.92	31.78	VERTICAL	215	320	Peak
5	5719.55	93.89			87.13	7.70	33.00	32.06	VERTICAL	215	320	Average
6	5720.42	100.85			94.09	7.70	33.00	32.06	VERTICAL	215	320	Peak
7	5850.00	45.46	54.00	-8.54	38.50	7.79	33.05	32.22	VERTICAL	215	320	Average
8	5850.00	55.60	74.00	-18.40	48.64	7.79	33.05	32.22	VERTICAL	215	320	Peak

Item 5, 6 are the fundamental frequency at 5710 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 142

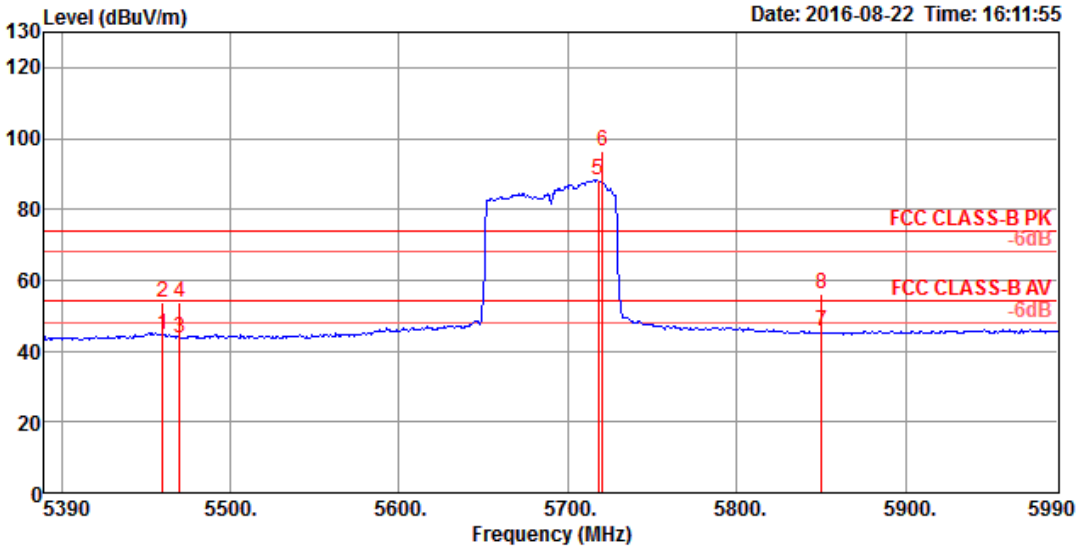


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5719.55	93.89			87.13	7.70	33.00	32.06	VERTICAL	215	320	Average
2	5720.42	100.85			94.09	7.70	33.00	32.06	VERTICAL	215	320	Peak
3	5984.80	59.01	68.20	-9.19	51.90	7.83	33.10	32.38	VERTICAL	215	320	Peak

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 138

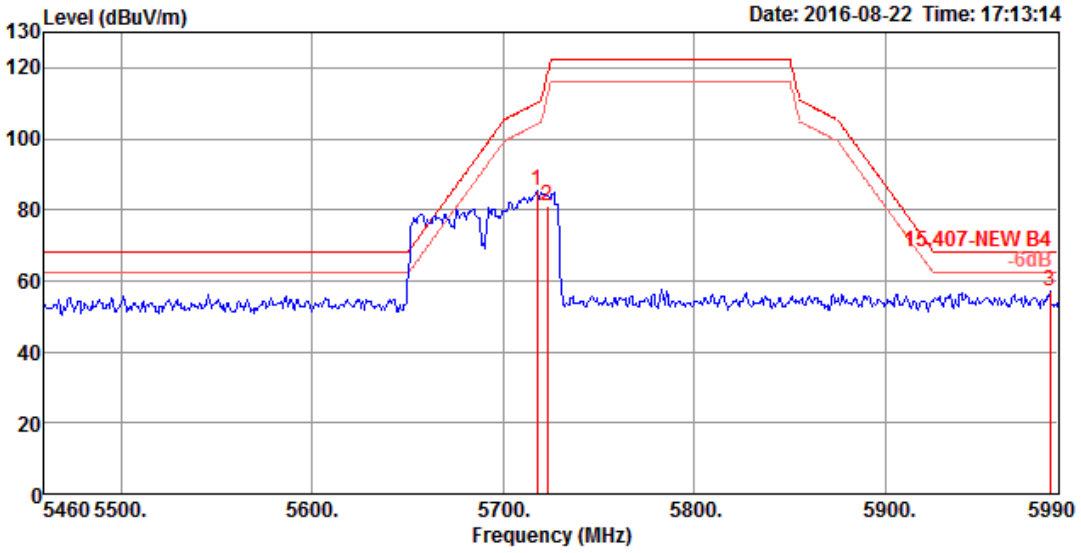


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5460.00	44.71	54.00	-9.29	38.41	7.46	32.92	31.76	VERTICAL	214	276	Average
2	5460.00	53.89	74.00	-20.11	47.59	7.46	32.92	31.76	VERTICAL	214	276	Peak
3	5470.00	43.89	54.00	-10.11	37.55	7.48	32.92	31.78	VERTICAL	214	276	Average
4	5470.00	53.79	74.00	-20.21	47.45	7.48	32.92	31.78	VERTICAL	214	276	Peak
5	5717.79	88.47			81.71	7.70	33.00	32.06	VERTICAL	214	276	Average
6	5720.60	96.44			89.68	7.70	33.00	32.06	VERTICAL	214	276	Peak
7	5850.00	45.46	54.00	-8.54	38.50	7.79	33.05	32.22	VERTICAL	214	276	Average
8	5850.00	56.19	74.00	-17.81	49.23	7.79	33.05	32.22	VERTICAL	214	276	Peak

Item 5, 6 are the fundamental frequency at 5690 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel 138



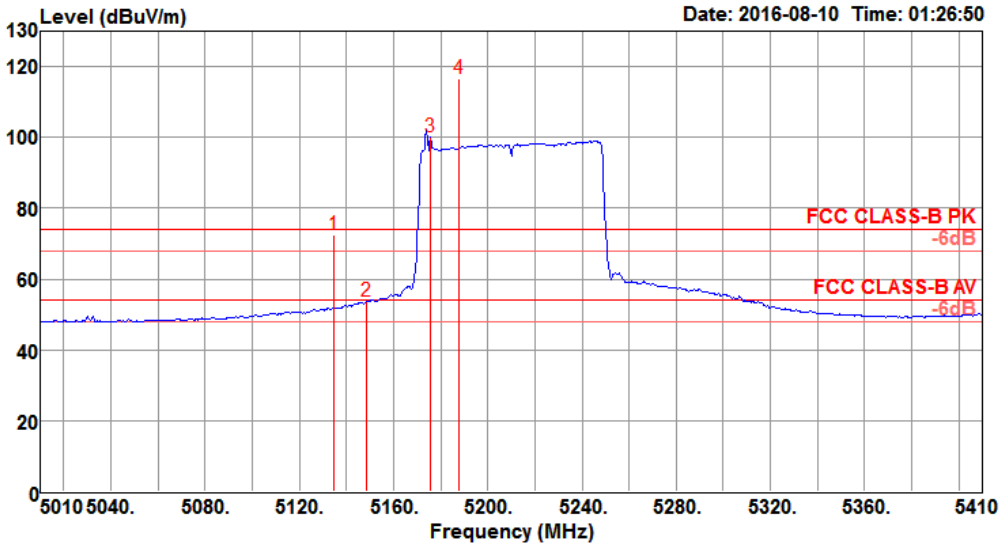
	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5717.60	85.46			78.70	7.70	33.00	32.06	HORIZONTAL	294	316	Peak
2	5723.00	80.91			74.12	7.71	33.00	32.08	HORIZONTAL	294	316	Average
3	5985.80	57.07	68.20	-11.13	49.96	7.83	33.10	32.38	HORIZONTAL	294	316	Peak

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

802.11ac MCS0/Nss2 VHT80+80

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 1 / CH 42+106 / Chain 5 + Chain 6 + Chain 7 + Chain 8

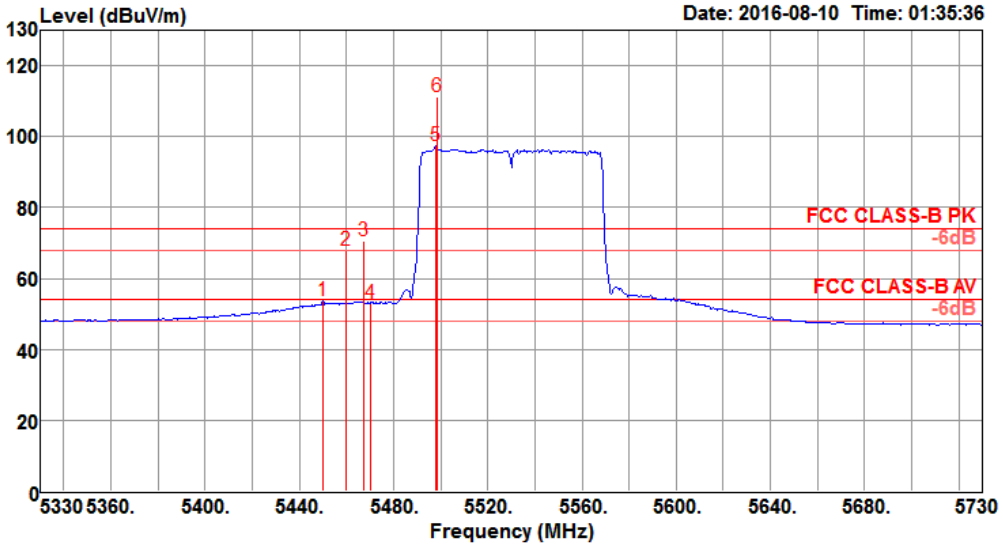
Channel 42



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5134.80	72.64	74.00	-1.36	65.23	7.48	34.84	34.91	300	226	Peak	VERTICAL
2	5148.40	53.54	54.00	-0.46	46.12	7.48	34.85	34.91	300	226	Average	VERTICAL
3	5175.60	100.21			92.76	7.48	34.88	34.91	300	226	Average	VERTICAL
4	5187.60	116.56			109.09	7.48	34.90	34.91	300	226	Peak	VERTICAL

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

Channel 106

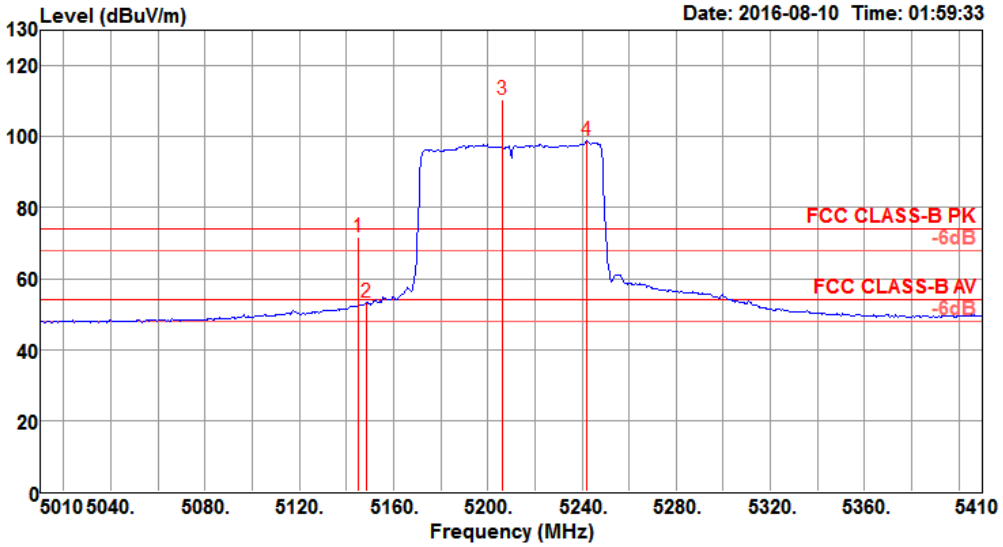


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5450.00	53.86	54.00	-0.14	45.94	7.69	35.15	34.92	265	42	Average	VERTICAL
2	5459.60	67.78	74.00	-6.22	59.86	7.69	35.15	34.92	265	42	Peak	VERTICAL
3	5467.60	70.65	74.00	-3.35	62.68	7.72	35.17	34.92	265	42	Peak	VERTICAL
4	5470.00	52.94	54.00	-1.06	44.97	7.72	35.17	34.92	265	42	Average	VERTICAL
5	5498.00	97.34			89.29	7.77	35.20	34.92	265	42	Average	VERTICAL
6	5498.80	111.37			103.32	7.77	35.20	34.92	265	42	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 2 / CH 42+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

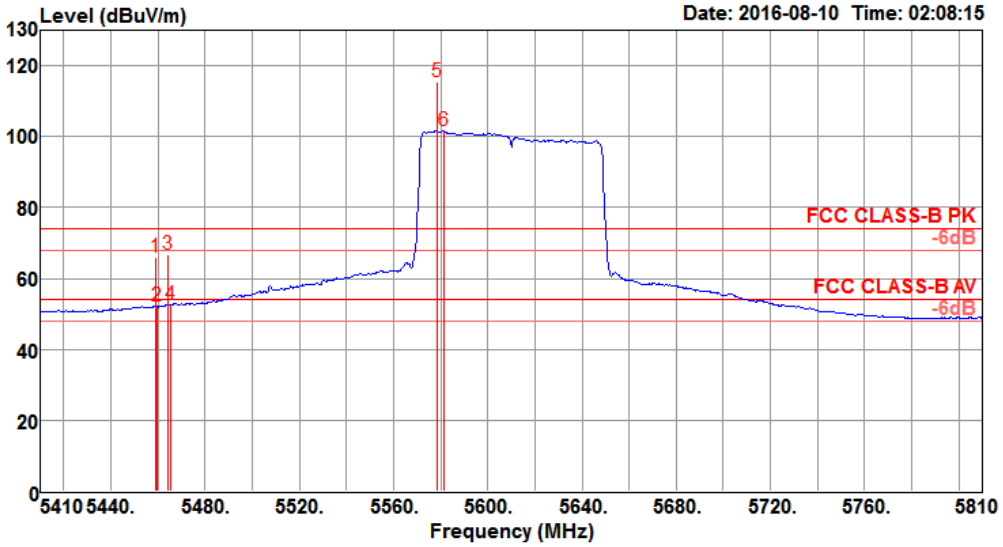
Channel 42



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5145.20	71.72	74.00	-2.28	64.30	7.48	34.85	34.91	272	318	Peak	VERTICAL
2	5148.40	53.42	54.00	-0.58	46.00	7.48	34.85	34.91	272	318	Average	VERTICAL
3	5206.00	110.55			103.06	7.49	34.91	34.91	272	318	Peak	VERTICAL
4	5242.00	98.83			91.30	7.50	34.94	34.91	272	318	Average	VERTICAL

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

Channel 122

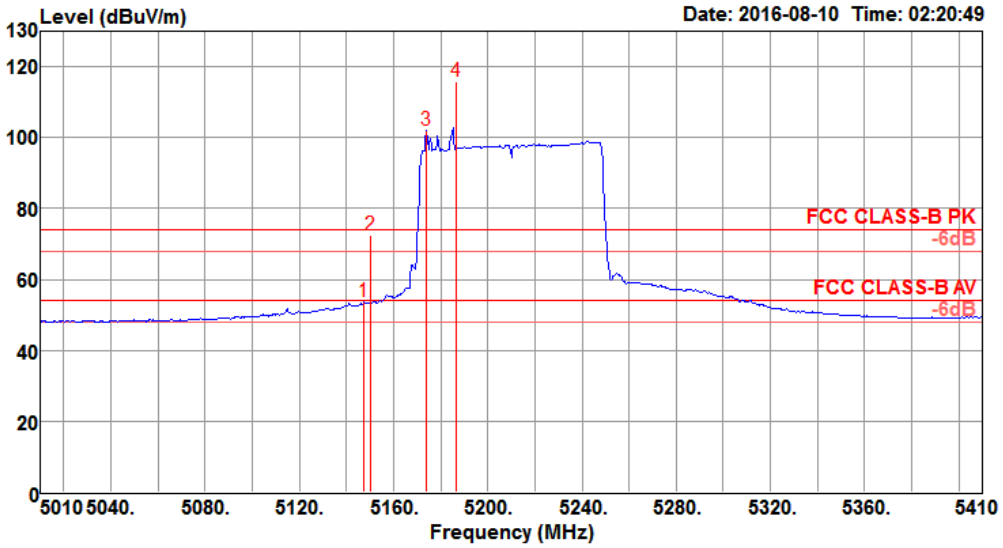


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5458.80	65.99	74.00	-8.01	58.07	7.69	35.15	34.92	267	42	Peak	VERTICAL
2	5459.60	52.09	54.00	-1.91	44.17	7.69	35.15	34.92	267	42	Average	VERTICAL
3	5464.40	66.74	74.00	-7.26	58.77	7.72	35.17	34.92	267	42	Peak	VERTICAL
4	5465.20	52.57	54.00	-1.43	44.60	7.72	35.17	34.92	267	42	Average	VERTICAL
5	5578.80	115.26			107.06	7.91	35.22	34.93	267	42	Peak	VERTICAL
6	5581.20	101.75			93.55	7.91	35.22	34.93	267	42	Average	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 3 / CH 42+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8

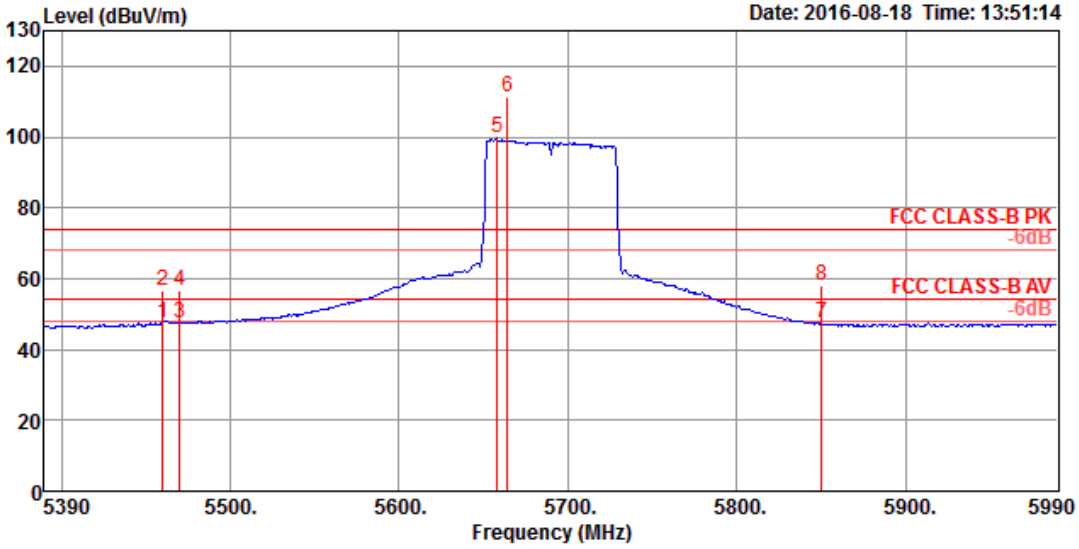
Channel 42



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5147.60	53.54	54.00	-0.46	46.12	7.48	34.85	34.91	300	227	Average	VERTICAL
2	5150.00	72.39	74.00	-1.61	64.97	7.48	34.85	34.91	300	227	Peak	VERTICAL
3	5174.00	102.10			94.65	7.48	34.88	34.91	300	227	Average	VERTICAL
4	5186.80	115.90			108.43	7.48	34.90	34.91	300	227	Peak	VERTICAL

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

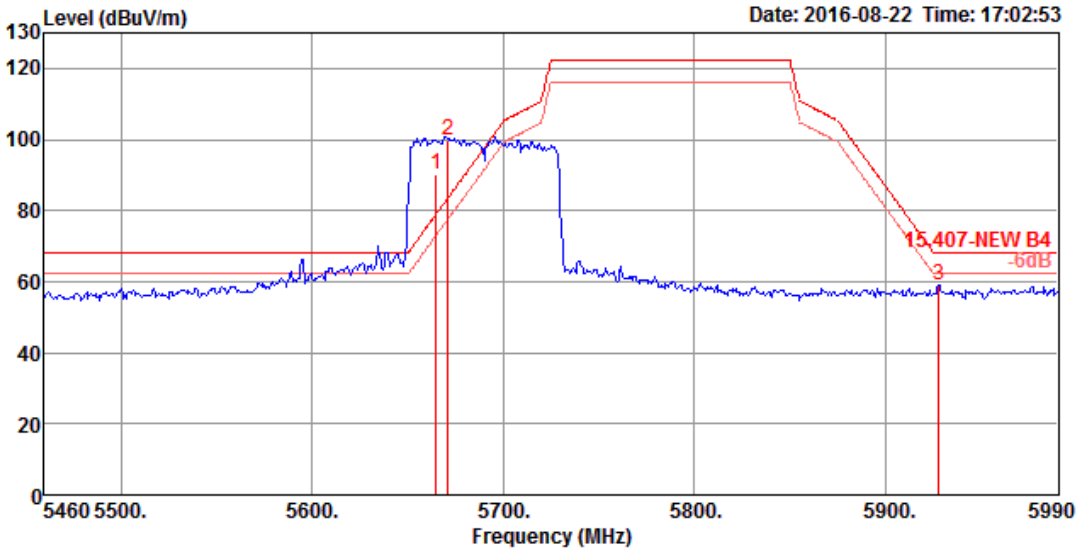
Channel 138 (UNII 2C)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5460.00	47.58	54.00	-6.42	41.28	7.46	32.92	31.76	VERTICAL	48	252	Average
2	5460.00	56.42	74.00	-17.58	50.12	7.46	32.92	31.76	VERTICAL	48	252	Peak
3	5470.00	47.46	54.00	-6.54	41.12	7.48	32.92	31.78	VERTICAL	48	252	Average
4	5470.00	56.58	74.00	-17.42	50.24	7.48	32.92	31.78	VERTICAL	48	252	Peak
5	5657.87	99.69			93.01	7.66	32.98	32.00	VERTICAL	48	252	Average
6	5663.95	111.30			104.62	7.66	32.98	32.00	VERTICAL	48	252	Peak
7	5850.00	47.30	54.00	-6.70	40.34	7.79	33.05	32.22	VERTICAL	48	252	Average
8	5850.00	58.08	74.00	-15.92	51.12	7.79	33.05	32.22	VERTICAL	48	252	Peak

Item 5, 6 are the fundamental frequency at 5690 MHz.

Channel 138 (UNII 3)

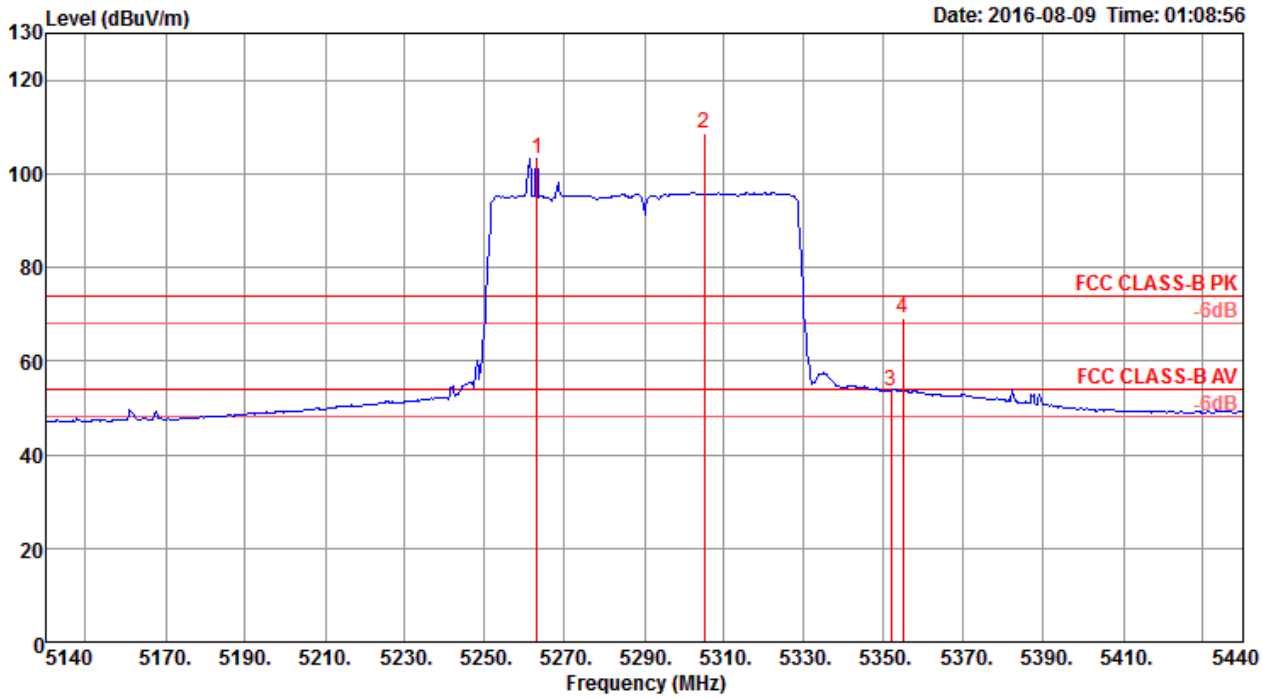


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5664.82	90.31			83.63	7.66	32.98	32.00	HORIZONTAL	56	216	Average
2	5670.90	99.80			93.13	7.66	32.99	32.00	HORIZONTAL	56	216	Peak
3	5927.60	59.21	68.20	-8.99	52.15	7.82	33.08	32.32	HORIZONTAL	56	216	Peak

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 4 / CH 58+106 / Chain 5 + Chain 6 + Chain 7 + Chain 8

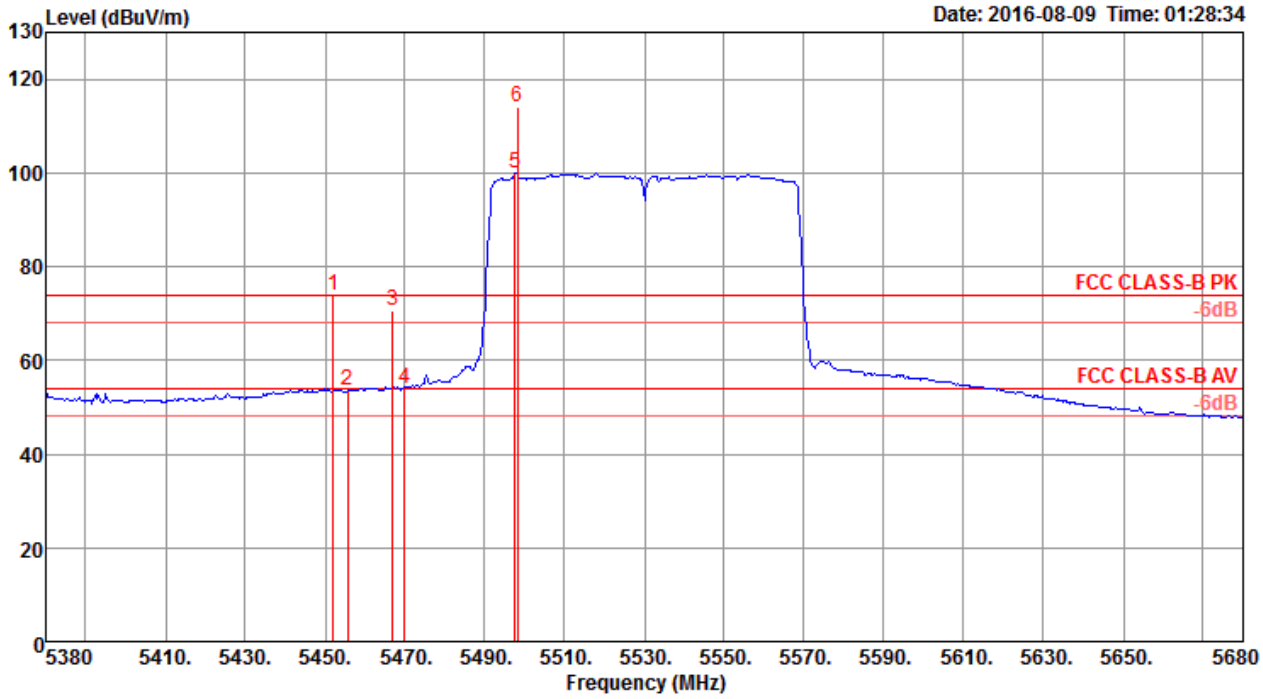
Channel 58



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5263.00	103.08			96.14	7.93	33.48	34.47	234	239	Average	VERTICAL
2	5305.00	108.77			101.81	7.91	33.52	34.47	234	239	Peak	VERTICAL
3	5351.80	53.72	54.00	-0.28	46.71	7.89	33.59	34.47	234	239	Average	VERTICAL
4	5354.80	69.04	74.00	-4.96	62.02	7.88	33.61	34.47	234	239	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5290 MHz.

Channel 106

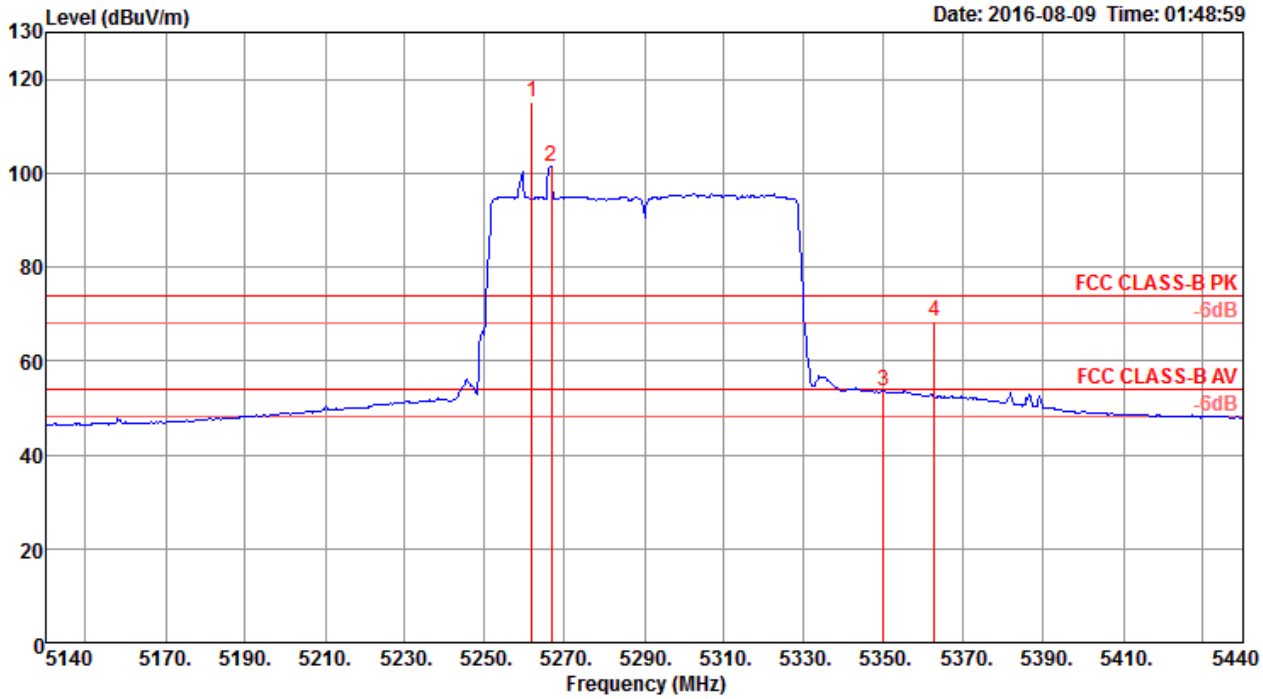


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5452.00	73.71	74.00	-0.29	66.55	7.89	33.74	34.47	258	65	Peak	VERTICAL
2	5455.60	53.76	54.00	-0.24	46.60	7.89	33.74	34.47	258	65	Average	VERTICAL
3	5467.00	70.60	74.00	-3.40	63.41	7.90	33.76	34.47	258	65	Peak	VERTICAL
4	5470.00	53.91	54.00	-0.09	46.72	7.90	33.76	34.47	258	65	Average	VERTICAL
5	5497.60	99.85			92.61	7.91	33.80	34.47	258	65	Average	VERTICAL
6	5498.20	114.03			106.79	7.91	33.80	34.47	258	65	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 5 / CH 58+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

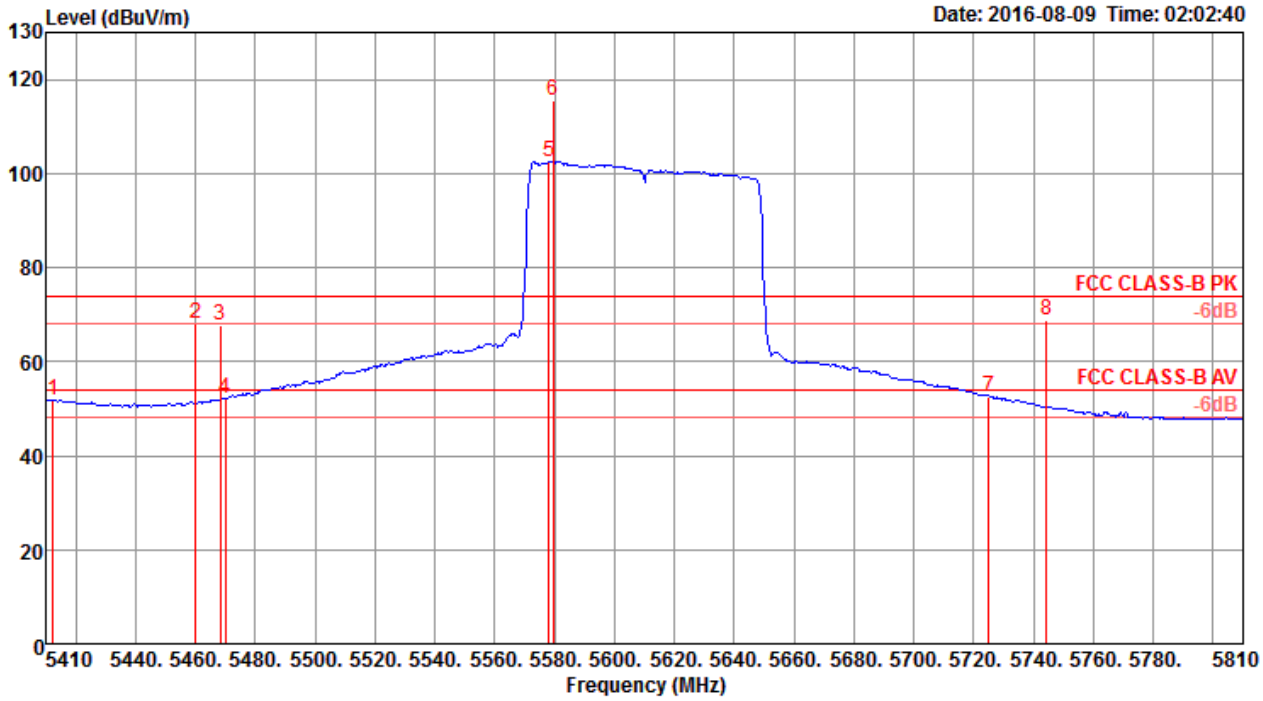
Channel 58



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5261.80	115.08			108.15	7.94	33.46	34.47	259	244	Peak	VERTICAL
2	5266.60	101.54			94.60	7.93	33.48	34.47	259	244	Average	VERTICAL
3	5350.00	53.62	54.00	-0.38	46.61	7.89	33.59	34.47	259	244	Average	VERTICAL
4	5362.60	68.28	74.00	-5.72	61.26	7.88	33.61	34.47	259	244	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5290 MHz.

Channel 122

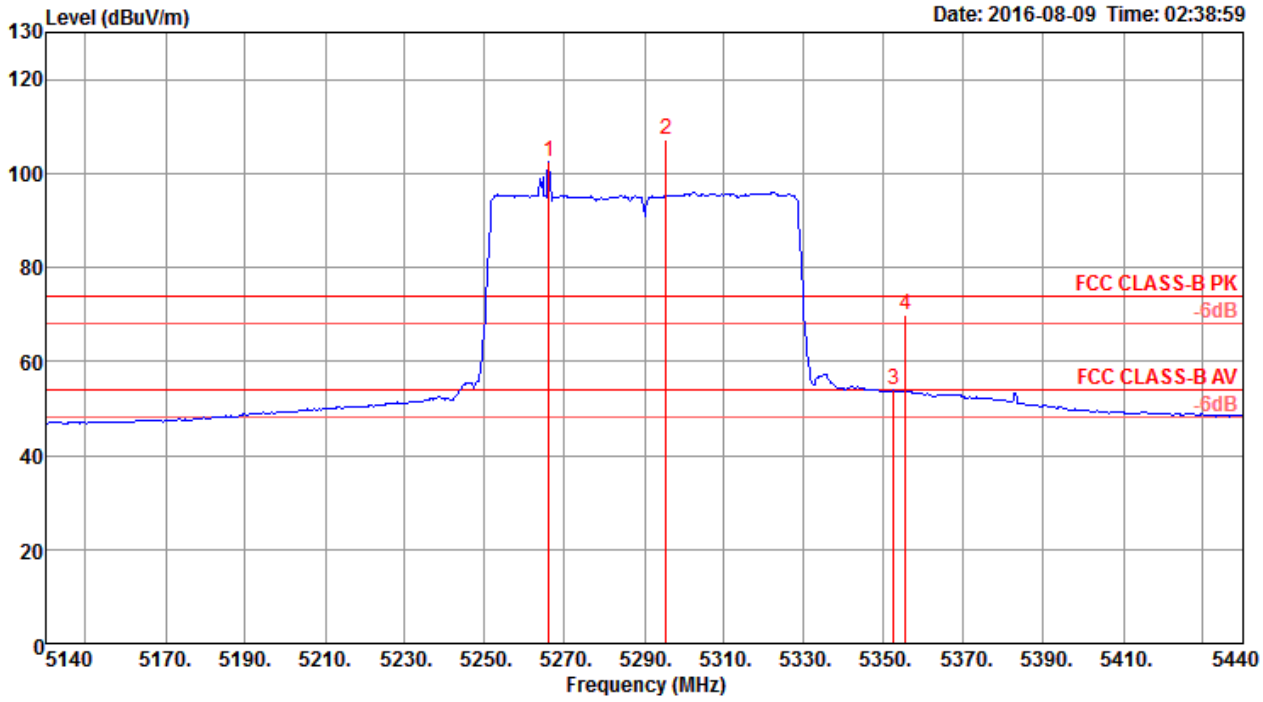


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5412.40	51.92	54.00	-2.08	44.85	7.87	33.67	34.47	245	66	Average	VERTICAL
2	5460.00	68.08	74.00	-5.92	60.92	7.89	33.74	34.47	245	66	Peak	VERTICAL
3	5468.40	67.60	74.00	-6.40	60.41	7.90	33.76	34.47	245	66	Peak	VERTICAL
4	5470.00	52.21	54.00	-1.79	45.02	7.90	33.76	34.47	245	66	Average	VERTICAL
5	5578.00	102.40			94.89	7.94	34.05	34.48	245	66	Average	VERTICAL
6	5579.60	115.46			107.96	7.94	34.05	34.49	245	66	Peak	VERTICAL
7	5725.00	52.68	54.00	-1.32	44.82	7.87	34.50	34.51	245	66	Average	VERTICAL
8	5744.40	68.69	74.00	-5.31	60.80	7.86	34.55	34.52	245	66	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 6 / CH 58+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8

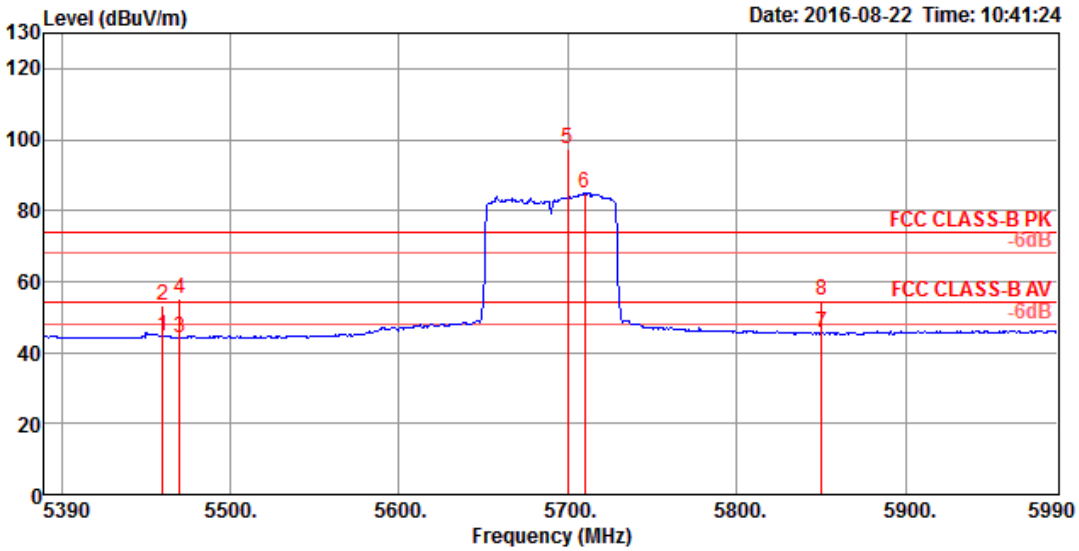
Channel 58



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5266.00	102.53			95.59	7.93	33.48	34.47	257	233	Average	VERTICAL
2	5295.40	107.23			100.27	7.91	33.52	34.47	257	233	Peak	VERTICAL
3	5352.40	53.85	54.00	-0.15	46.84	7.89	33.59	34.47	257	233	Average	VERTICAL
4	5355.40	69.95	74.00	-4.05	62.93	7.88	33.61	34.47	257	233	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5290 MHz.

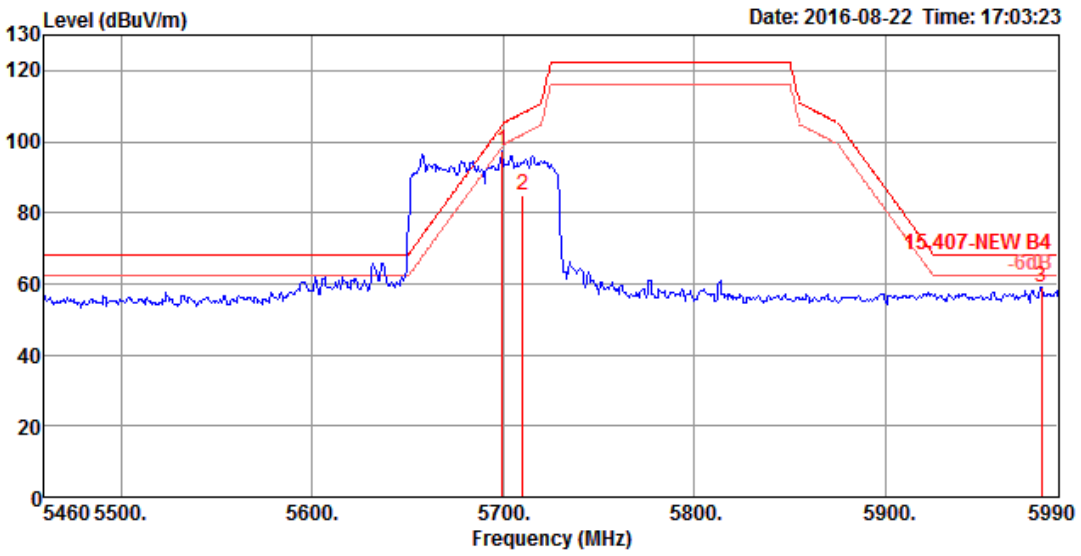
Channel 138 (UNII 2C)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5460.00	44.72	54.00	-9.28	38.42	7.46	32.92	31.76	VERTICAL	46	218	Average
2	5460.00	53.46	74.00	-20.54	47.16	7.46	32.92	31.76	VERTICAL	46	218	Peak
3	5470.00	44.06	54.00	-9.94	37.72	7.48	32.92	31.78	VERTICAL	46	218	Average
4	5470.00	55.09	74.00	-18.91	48.75	7.48	32.92	31.78	VERTICAL	46	218	Peak
5	5699.66	97.36			90.64	7.68	33.00	32.04	VERTICAL	46	218	Peak
6	5709.97	84.77			78.01	7.70	33.00	32.06	VERTICAL	46	218	Average
7	5850.00	45.49	54.00	-8.51	38.53	7.79	33.05	32.22	VERTICAL	46	218	Average
8	5850.00	54.91	74.00	-19.09	47.95	7.79	33.05	32.22	VERTICAL	46	218	Peak

Item 5, 6 are the fundamental frequency at 5690 MHz.

Channel 138 (UNII 3)

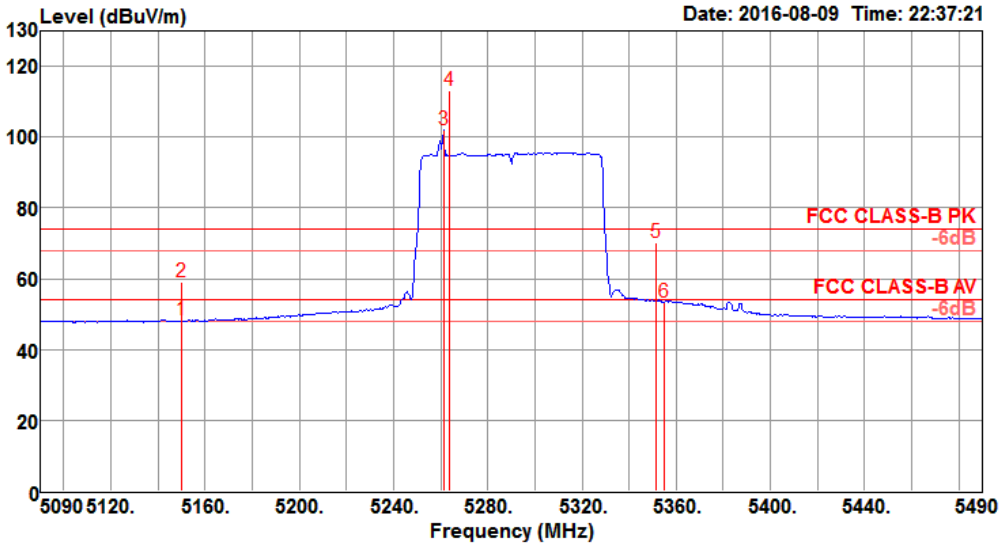


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5699.60	97.36			90.64	7.68	33.00	32.04	VERTICAL	46	218	Peak
2	5709.97	84.77			78.01	7.70	33.00	32.06	VERTICAL	46	218	Average
3	5981.60	59.06	68.20	-9.14	51.95	7.83	33.10	32.38	VERTICAL	46	218	Peak

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 7 / CH 58+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

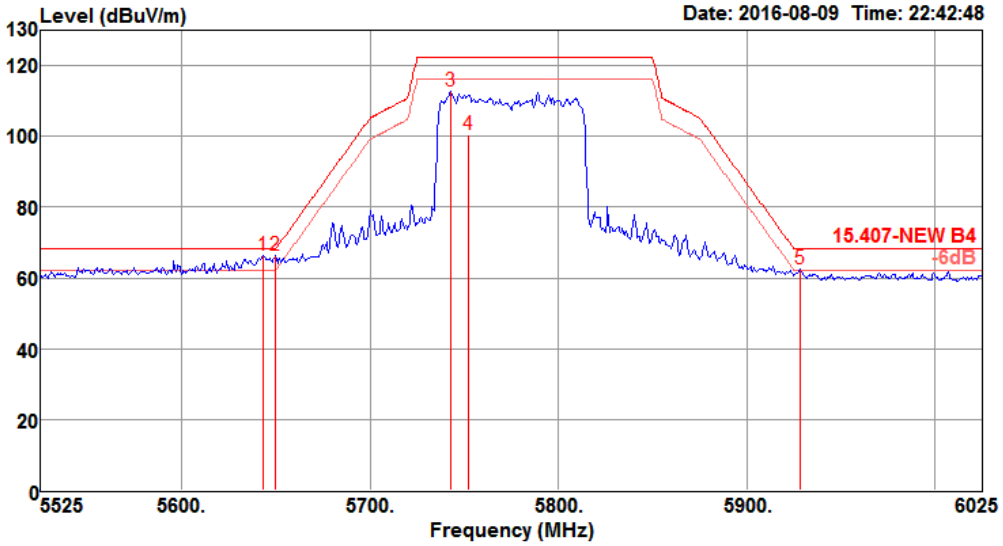
Channel 58



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5150.00	48.19	54.00	-5.81	40.77	7.48	34.85	34.91	300	225	Average	VERTICAL
2	5150.00	58.97	74.00	-15.03	51.55	7.48	34.85	34.91	300	225	Peak	VERTICAL
3	5261.20	102.05			94.49	7.51	34.96	34.91	300	225	Average	VERTICAL
4	5263.60	113.04			105.46	7.52	34.97	34.91	300	225	Peak	VERTICAL
5	5351.60	70.07	74.00	-3.93	62.37	7.56	35.05	34.91	300	225	Peak	VERTICAL
6	5354.80	53.37	54.00	-0.63	45.66	7.56	35.06	34.91	300	225	Average	VERTICAL

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

Channel 155

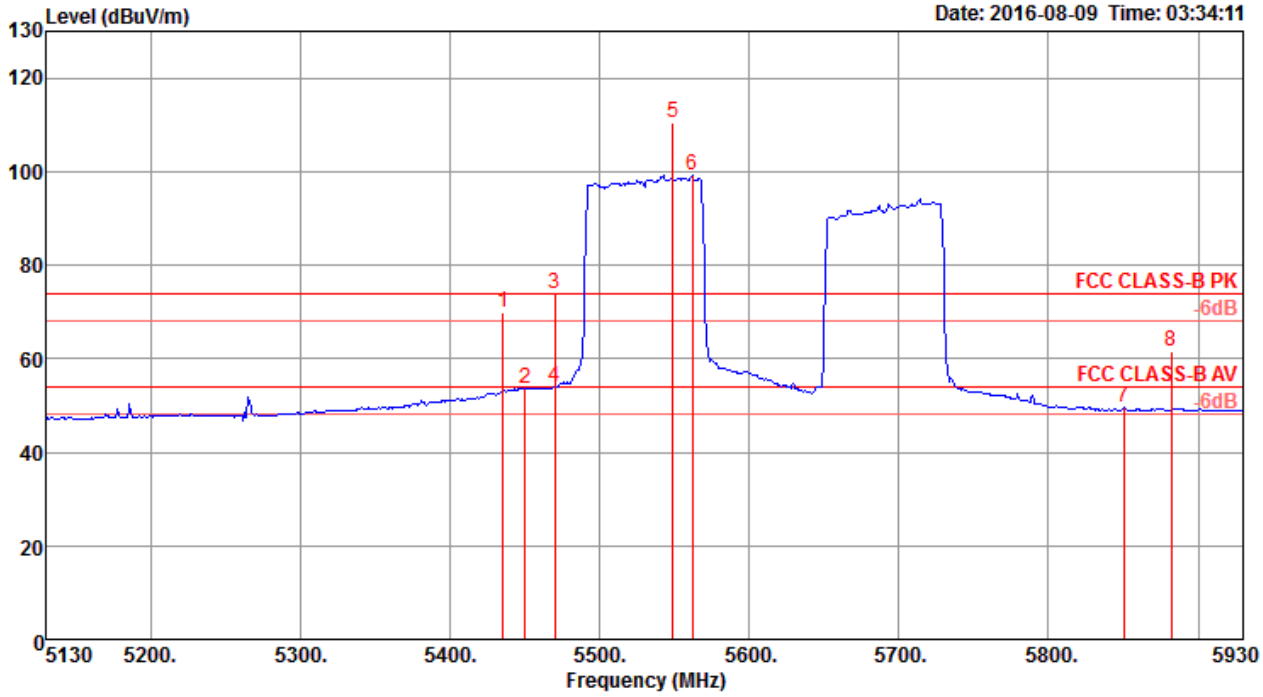


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5643.00	66.17	68.20	-2.03	57.99	7.88	35.23	34.93	263	43	Peak	VERTICAL
2	5650.00	66.39	68.20	-1.81	58.21	7.88	35.23	34.93	263	43	Peak	VERTICAL
3	5743.00	112.77			104.69	7.77	35.25	34.94	263	43	Peak	VERTICAL
4	5752.00	100.46			92.38	7.77	35.25	34.94	263	43	Average	VERTICAL
5	5928.00	62.47	68.20	-5.73	54.20	7.94	35.29	34.96	263	43	Peak	VERTICAL

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 8 / CH 106+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8

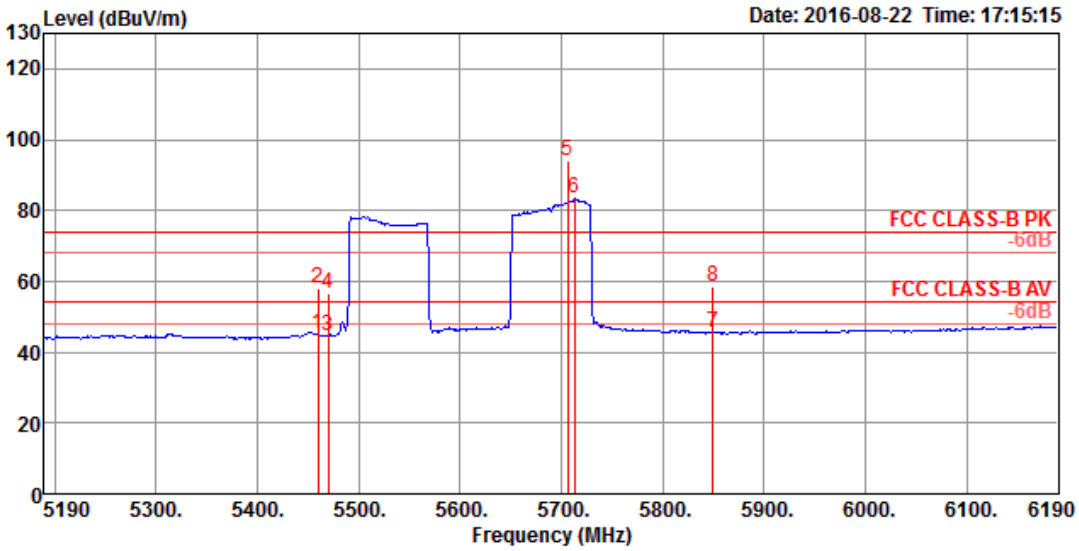
Channel 106



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5435.60	69.86	74.00	-4.14	62.73	7.88	33.72	34.47	255	222	Peak	VERTICAL
2	5450.00	53.76	54.00	-0.24	46.60	7.89	33.74	34.47	255	222	Average	VERTICAL
3	5470.00	73.85	74.00	-0.15	66.66	7.90	33.76	34.47	255	222	Peak	VERTICAL
4	5470.00	53.84	54.00	-0.16	46.65	7.90	33.76	34.47	255	222	Average	VERTICAL
5	5549.20	110.32			102.92	7.93	33.95	34.48	255	222	Peak	VERTICAL
6	5562.00	99.14			91.68	7.94	34.00	34.48	255	222	Average	VERTICAL
7	5850.00	49.49	54.00	-4.51	41.38	7.80	34.85	34.54	255	222	Average	VERTICAL
8	5882.00	61.54	74.00	-12.46	53.36	7.78	34.95	34.55	255	222	Peak	VERTICAL

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

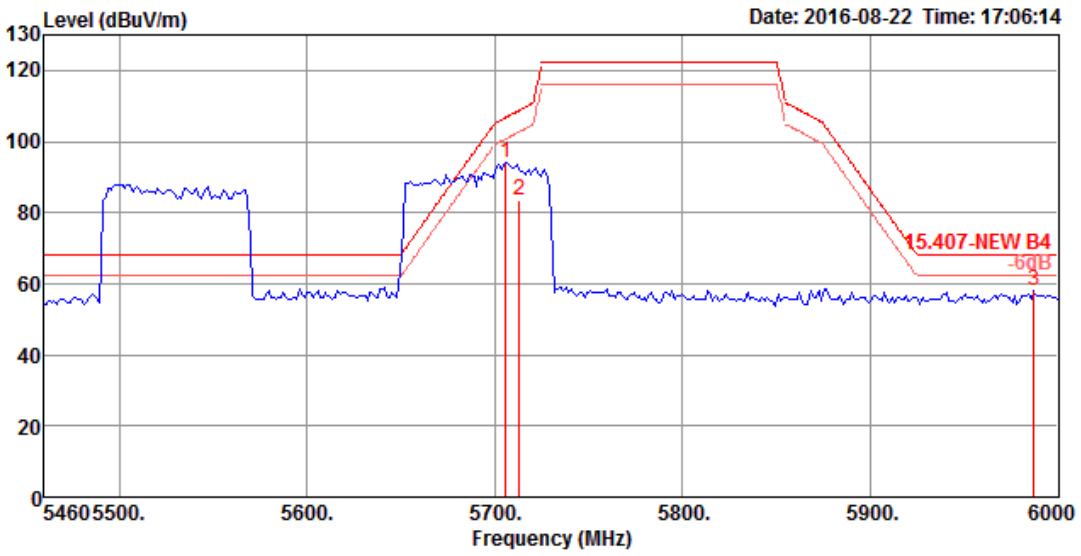
Channel 138 (UNII 2C)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5460.00	44.92	54.00	-9.08	38.62	7.46	32.92	31.76	VERTICAL	288	274	Average
2	5460.00	57.92	74.00	-16.08	51.62	7.46	32.92	31.76	VERTICAL	288	274	Peak
3	5470.00	44.69	54.00	-9.31	38.35	7.48	32.92	31.78	VERTICAL	288	274	Average
4	5470.00	56.69	74.00	-17.31	50.35	7.48	32.92	31.78	VERTICAL	288	274	Peak
5	5706.00	93.92			87.16	7.70	33.00	32.06	VERTICAL	288	274	Peak
6	5713.20	83.64			76.88	7.70	33.00	32.06	VERTICAL	288	274	Average
7	5850.00	45.36	54.00	-8.64	38.40	7.79	33.05	32.22	VERTICAL	288	274	Average
8	5850.00	58.37	74.00	-15.63	51.41	7.79	33.05	32.22	VERTICAL	288	274	Peak

Item 5, 6 are the fundamental frequency at 5690 MHz.

Channel 138 (UNII 3)

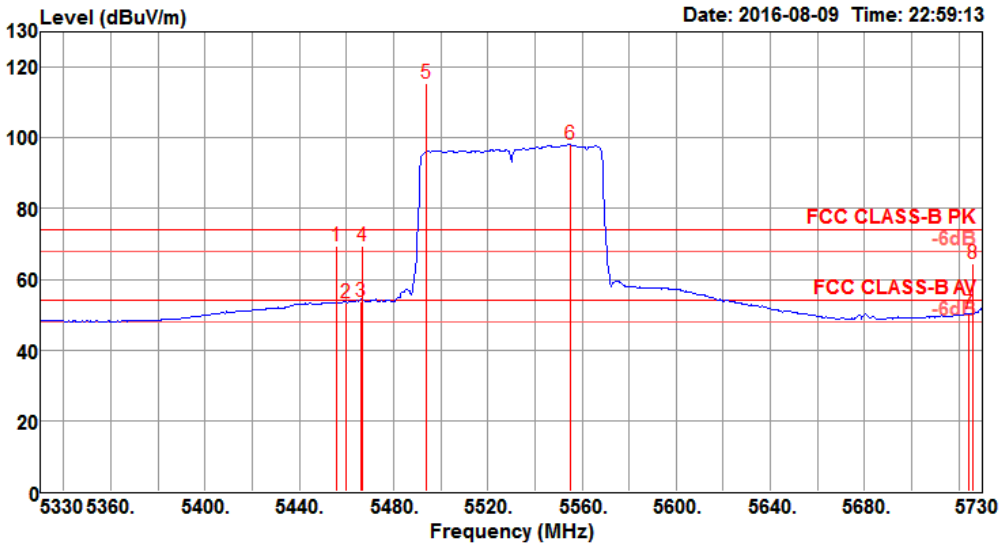


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5706.00	93.92			87.16	7.70	33.00	32.06	VERTICAL	288	274	Peak
2	5713.20	83.64			76.88	7.70	33.00	32.06	VERTICAL	288	274	Average
3	5987.00	57.92	68.20	-10.28	50.81	7.83	33.10	32.38	VERTICAL	288	274	Peak

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

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 9 / CH 106+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

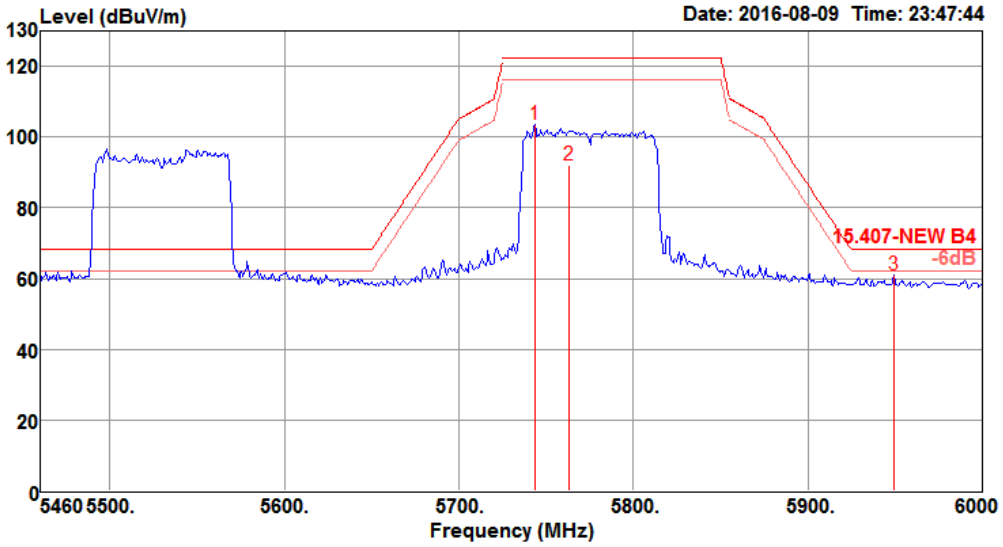
Channel 106



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5455.60	69.24	74.00	-4.76	61.32	7.69	35.15	34.92	299	217	Peak	VERTICAL
2	5460.00	53.42	54.00	-0.58	45.50	7.69	35.15	34.92	299	217	Average	VERTICAL
3	5466.00	53.87	54.00	-0.13	45.90	7.72	35.17	34.92	299	217	Average	VERTICAL
4	5466.80	69.47	74.00	-4.53	61.50	7.72	35.17	34.92	299	217	Peak	VERTICAL
5	5494.00	115.37			107.36	7.75	35.18	34.92	299	217	Peak	VERTICAL
6	5554.80	98.12			89.97	7.86	35.21	34.92	299	217	Average	VERTICAL
7	5724.40	50.28	54.00	-3.72	42.18	7.79	35.25	34.94	299	217	Average	VERTICAL
8	5725.80	64.43	74.00	-9.57	56.33	7.79	35.25	34.94	299	217	Peak	VERTICAL

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

Channel 155

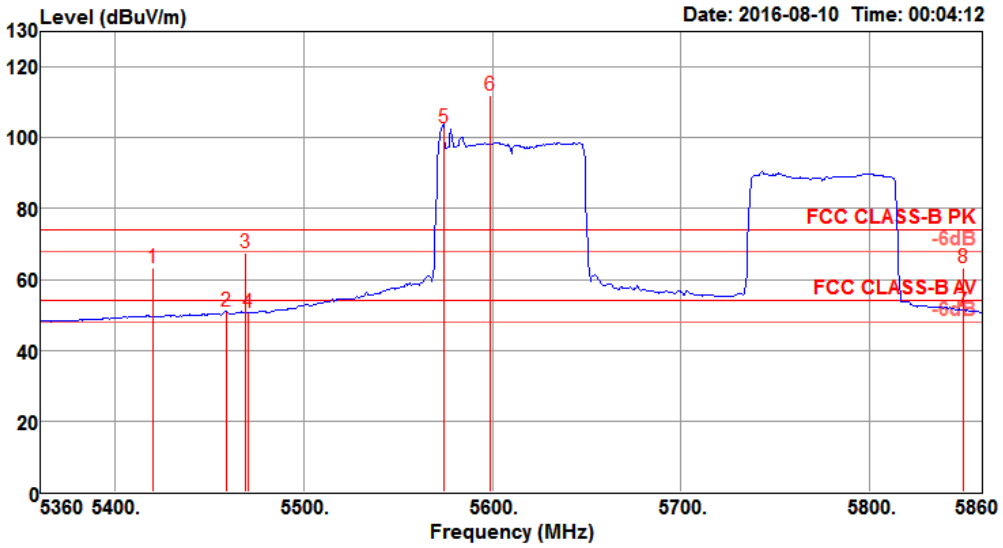


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5743.63	103.49			95.41	7.77	35.25	34.94	242	356	Peak	HORIZONTAL
2	5762.84	92.14			84.09	7.75	35.25	34.95	242	356	Average	HORIZONTAL
3	5949.29	60.89	68.20	-7.31	52.60	7.97	35.29	34.97	242	356	Peak	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5775 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 10 / CH 122+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

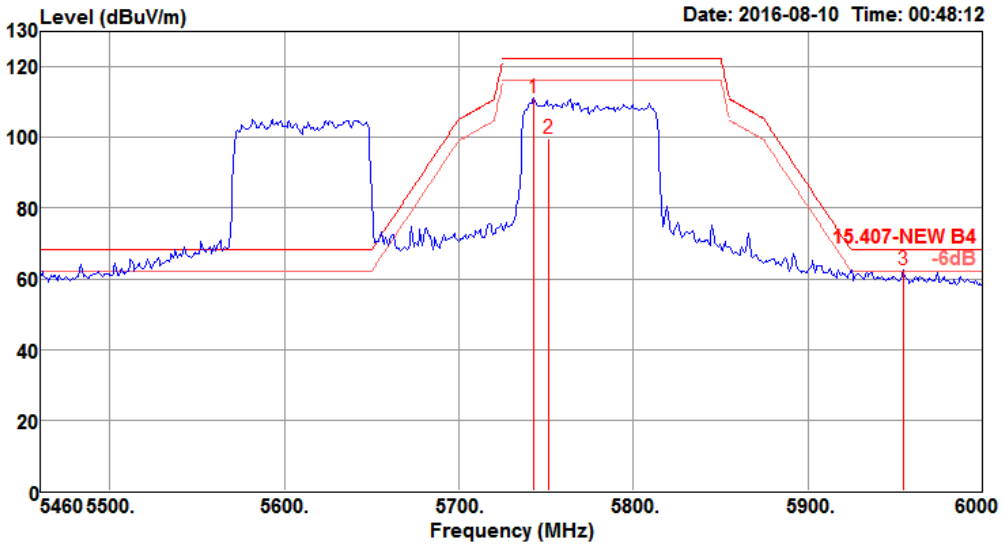
Channel 122



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5420.00	63.42	74.00	-10.58	55.58	7.64	35.12	34.92	300	217	Peak	VERTICAL
2	5459.00	50.92	54.00	-3.08	43.00	7.69	35.15	34.92	300	217	Average	VERTICAL
3	5469.00	67.44	74.00	-6.56	59.47	7.72	35.17	34.92	300	217	Peak	VERTICAL
4	5470.00	50.57	54.00	-3.43	42.60	7.72	35.17	34.92	300	217	Average	VERTICAL
5	5574.00	102.94			94.78	7.88	35.21	34.93	300	217	Average	VERTICAL
6	5599.00	112.01			103.78	7.94	35.22	34.93	300	217	Peak	VERTICAL
7	5850.00	51.13	54.00	-2.87	43.02	7.80	35.27	34.96	300	217	Average	VERTICAL
8	5850.00	63.17	74.00	-10.83	55.06	7.80	35.27	34.96	300	217	Peak	VERTICAL

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

Channel 155

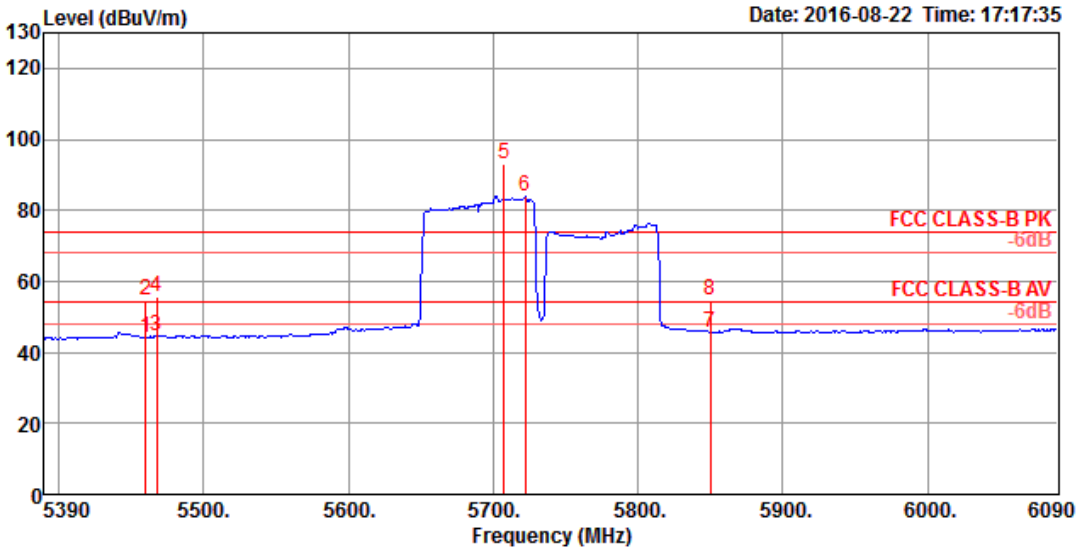


	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5742.90	111.40			103.32	7.77	35.25	34.94	266	42	Peak	VERTICAL
2	5751.51	99.56			91.48	7.77	35.25	34.94	266	42	Average	VERTICAL
3	5954.46	62.54	68.20	-5.66	54.25	7.97	35.29	34.97	266	42	Peak	VERTICAL

Item 1, 2 are the fundamental frequency at 5775 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	Configurations	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 11 / CH 138+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

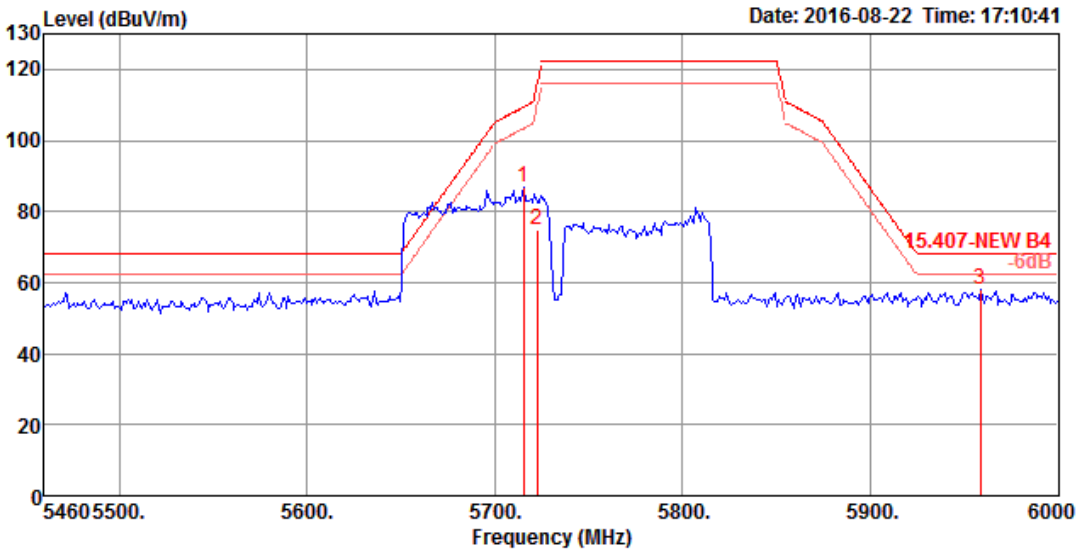
Channel 138 (UNII 2C)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5460.00	44.18	54.00	-9.82	37.88	7.46	32.92	31.76	VERTICAL	202	320	Average
2	5460.00	54.81	74.00	-19.19	48.51	7.46	32.92	31.76	VERTICAL	202	320	Peak
3	5467.70	44.44	54.00	-9.56	38.10	7.48	32.92	31.78	VERTICAL	202	320	Average
4	5467.70	55.87	74.00	-18.13	49.53	7.48	32.92	31.78	VERTICAL	202	320	Peak
5	5707.60	93.24			86.48	7.70	33.00	32.06	VERTICAL	202	320	Peak
6	5722.40	84.06			77.27	7.71	33.00	32.08	VERTICAL	202	320	Average
7	5850.00	45.75	54.00	-8.25	38.79	7.79	33.05	32.22	VERTICAL	202	320	Average
8	5850.00	54.75	74.00	-19.25	47.79	7.79	33.05	32.22	VERTICAL	202	320	Peak

Item 5, 6 are the fundamental frequency at 5690 MHz.

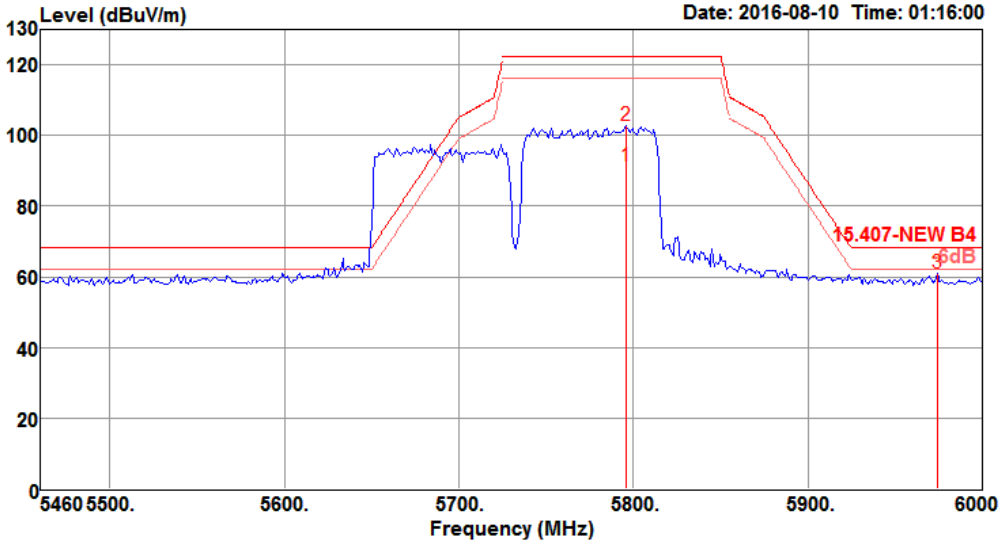
Channel 138 (UNII 3)



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		deg	cm	
1	5715.50	86.84			80.08	7.70	33.00	32.06	HORIZONTAL	212	236	Peak
2	5722.40	75.05			68.26	7.71	33.00	32.08	HORIZONTAL	212	236	Average
3	5958.80	58.18	68.20	-10.02	51.09	7.83	33.10	32.36	HORIZONTAL	212	236	Peak

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

Channel 155



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5795.79	91.27			83.25	7.71	35.26	34.95	238	357	Average	HORIZONTAL
2	5795.79	102.72			94.70	7.71	35.26	34.95	238	357	Peak	HORIZONTAL
3	5974.14	60.88	68.20	-7.32	52.57	7.99	35.29	34.97	238	357	Peak	HORIZONTAL

Item 1, 2 are the fundamental frequency at 5775 MHz.

Note:

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

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

4.7. Frequency Stability Measurement

4.7.1. Limit

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

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

4.7.2. Measuring Instruments and Setting

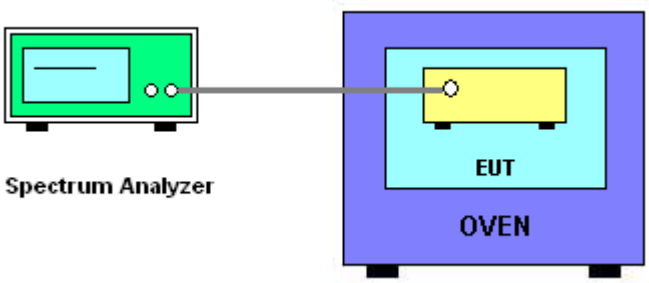
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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

4.7.3. Test Procedures

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
2. EUT have transmitted absence of modulation signal and fixed channelize.
3. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth.
4. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings.
5. fc is declaring of channel frequency. Then the frequency error formula is (fc-f)/fc × 10^6 ppm and the limit is less than ±20ppm (IEEE 802.11nspecification).
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 -30°C~50°C.

4.7.4. Test Setup Layout



4.7.5. Test Deviation

There is no deviation with the original standard.

4.7.6. EUT Operation during Test

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

4.7.7. Test Result of Frequency Stability

Temperature	24°C	Humidity	60%
Test Engineer	Clemens Fang	Test Date	May 03, 2016 ~ Aug. 20, 2016

Mode: 20 MHz / Chain **5**

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5300.0051	5300.0050	5300.0046	5300.0038
110.00	5300.0048	5300.0039	5300.0035	5300.0034
93.50	5300.0041	5300.0040	5300.0032	5300.0028
Max. Deviation (MHz)	0.0051	0.0050	0.0046	0.0038
Max. Deviation (ppm)	0.96	0.94	0.86	0.71
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5299.9976	5299.9973	5299.9972	5299.9968
-20	5299.9993	5299.9986	5299.9985	5299.9982
-10	5300.0008	5300.0003	5299.9999	5299.9998
0	5300.0014	5300.0005	5299.9999	5299.9993
10	5300.0030	5300.0029	5300.0026	5300.0025
20	5300.0048	5300.0039	5300.0031	5300.0022
30	5300.0052	5300.0042	5300.0035	5300.0031
40	5300.0065	5300.0063	5300.0053	5300.0051
50	5300.0072	5300.0068	5300.0062	5300.0057
Max. Deviation (MHz)	0.0072	0.0068	0.0062	0.0057
Max. Deviation (ppm)	1.36	1.28	1.17	1.08
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5580.0053	5580.0047	5580.0043	5580.0036
110.00	5580.0048	5580.0040	5580.0036	5580.0031
93.50	5580.0045	5580.0037	5580.0027	5580.0019
Max. Deviation (MHz)	0.0053	0.0047	0.0043	0.0036
Max. Deviation (ppm)	0.95	0.84	0.77	0.64
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5580.0017	5580.0016	5580.0008	5580.0006
-20	5580.0018	5580.0014	5580.0008	5580.0001
-10	5580.0031	5580.0026	5580.0016	5580.0011
0	5580.0042	5580.0032	5580.0029	5580.0026
10	5580.0045	5580.0043	5580.0036	5580.0027
20	5580.0048	5580.0043	5580.0034	5580.0029
30	5580.0052	5580.0046	5580.0041	5580.0036
40	5580.0072	5580.0065	5580.0058	5580.0048
50	5580.0077	5580.0072	5580.0069	5580.0068
Max. Deviation (MHz)	0.0077	0.0072	0.0069	0.0068
Max. Deviation (ppm)	1.38	1.29	1.24	1.22
Result	Complies			

Mode: 40 MHz / Chain **5**

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5310.0051	5310.0046	5310.0037	5310.0032
110.00	5310.0048	5310.0047	5310.0042	5310.0038
93.50	5310.0046	5310.0040	5310.0033	5310.0032
Max. Deviation (MHz)	0.0051	0.0047	0.0042	0.0038
Max. Deviation (ppm)	0.96	0.88	0.79	0.71
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5310.0002	5309.9995	5309.9987	5309.9982
-20	5310.0010	5310.0004	5310.0003	5309.9994
-10	5310.0019	5310.0013	5310.0007	5309.9999
0	5310.0026	5310.0018	5310.0016	5310.0010
10	5310.0038	5310.0036	5310.0033	5310.0024
20	5310.0048	5310.0041	5310.0034	5310.0030
30	5310.0052	5310.0050	5310.0044	5310.0038
40	5310.0067	5310.0057	5310.0051	5310.0050
50	5310.0078	5310.0077	5310.0067	5310.0062
Max. Deviation (MHz)	0.0078	0.0077	0.0067	0.0062
Max. Deviation (ppm)	1.47	1.45	1.26	1.17
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5550.0053	5550.0051	5550.0041	5550.0038
110.00	5550.0048	5550.0046	5550.0045	5550.0036
93.50	5550.0046	5550.0041	5550.0033	5550.0031
Max. Deviation (MHz)	0.0053	0.0051	0.0045	0.0038
Max. Deviation (ppm)	0.95	0.92	0.81	0.68
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5549.9999	5549.9989	5549.9988	5549.9981
-20	5550.0010	5550.0005	5549.9995	5549.9992
-10	5550.0022	5550.0019	5550.0015	5550.0012
0	5550.0027	5550.0018	5550.0008	5549.9999
10	5550.0046	5550.0038	5550.0030	5550.0027
20	5550.0048	5550.0041	5550.0037	5550.0027
30	5550.0052	5550.0048	5550.0039	5550.0035
40	5550.0059	5550.0053	5550.0047	5550.0039
50	5550.0072	5550.0063	5550.0055	5550.0052
Max. Deviation (MHz)	0.0072	0.0063	0.0055	0.0052
Max. Deviation (ppm)	1.30	1.14	0.99	0.94
Result	Complies			

Mode: 80 MHz / Chain **5**

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5290.0050	5290.0040	5290.0038	5290.0034
110.00	5290.0048	5290.0040	5290.0036	5290.0030
93.50	5290.0047	5290.0044	5290.0037	5290.0032
Max. Deviation (MHz)	0.0050	0.0044	0.0038	0.0034
Max. Deviation (ppm)	0.94	0.83	0.71	0.64
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5290.0009	5290.0008	5290.0004	5289.9996
-20	5290.0021	5290.0019	5290.0012	5290.0002
-10	5290.0027	5290.0023	5290.0020	5290.0013
0	5290.0028	5290.0022	5290.0021	5290.0017
10	5290.0042	5290.0037	5290.0029	5290.0026
20	5290.0048	5290.0046	5290.0040	5290.0031
30	5290.0052	5290.0044	5290.0036	5290.0031
40	5290.0069	5290.0061	5290.0058	5290.0055
50	5290.0081	5290.0080	5290.0074	5290.0065
Max. Deviation (MHz)	0.0081	0.0080	0.0074	0.0065
Max. Deviation (ppm)	1.53	1.51	1.40	1.23
Result	Complies			

Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5530.0052	5530.0049	5530.0044	5530.0036
110.00	5530.0048	5530.0038	5530.0037	5530.0030
93.50	5530.0038	5530.0028	5530.0021	5530.0020
Max. Deviation (MHz)	0.0052	0.0049	0.0044	0.0036
Max. Deviation (ppm)	0.94	0.88	0.79	0.65
Result	Complies			

Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5529.9999	5529.9994	5529.9990	5529.9982
-20	5530.0007	5529.9998	5529.9992	5529.9988
-10	5530.0014	5530.0011	5530.0002	5529.9997
0	5530.0021	5530.0012	5530.0011	5530.0005
10	5530.0034	5530.0025	5530.0015	5530.0014
20	5530.0048	5530.0042	5530.0032	5530.0026
30	5530.0052	5530.0042	5530.0041	5530.0031
40	5530.0062	5530.0059	5530.0049	5530.0043
50	5530.0081	5530.0071	5530.0065	5530.0062
Max. Deviation (MHz)	0.0081	0.0071	0.0065	0.0062
Max. Deviation (ppm)	1.47	1.29	1.18	1.12
Result	Complies			

4.8. Antenna Requirements

4.8.1. Limit

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

4.8.2. Antenna Connector Construction

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

5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 22, 2015	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2015	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 25, 2016	Radiation (03CH01-CB)
Pre-Amplifier	Agilent	8449B	3008A02310	1GHz ~ 26.5GHz	Jan. 18, 2016	Radiation (03CH01-CB)
Pre-Amplifier	WM	TF-130N-R1	923365	26GHz ~ 40GHz	Nov. 13, 2015	Radiation (03CH01-CB)
Spectrum Analyzer	R&S	FSP40	100056	9kHz ~ 40GHz	Oct. 27, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-16	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-17	N/A	1 GHz ~ 18 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-1	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
RF Cable-high	Woken	High Cable-40G-2	N/A	18GHz ~ 40 GHz	Nov. 02, 2015	Radiation (03CH01-CB)
Test Software	Audix	E3	6.2009-I0-7	N/A	N/A	Radiation (03CH01-CB)
Spectrum analyzer	R&S	FSV40	100979	9kHz~40GHz	Dec. 09, 2015	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 02, 2015	Conducted (TH01-CB)
Temp. and Humidity Chamber	Ten Billion	TTH-D3SP	TBN-931011	-30~100 degree	Jun. 03, 2016	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-6	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-7	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-8	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-9	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
RF Cable-high	Woken	RG402	High Cable-10	1 GHz – 26.5 GHz	Nov. 02, 2015	Conducted (TH01-CB)
Power Sensor	Agilent	U2021XA	MY53410001	50MHz~18GHz	Nov. 02, 2015	Conducted (TH01-CB)

Note: Calibration Interval of instruments listed above is one year

6. MEASUREMENT UNCERTAINTY

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