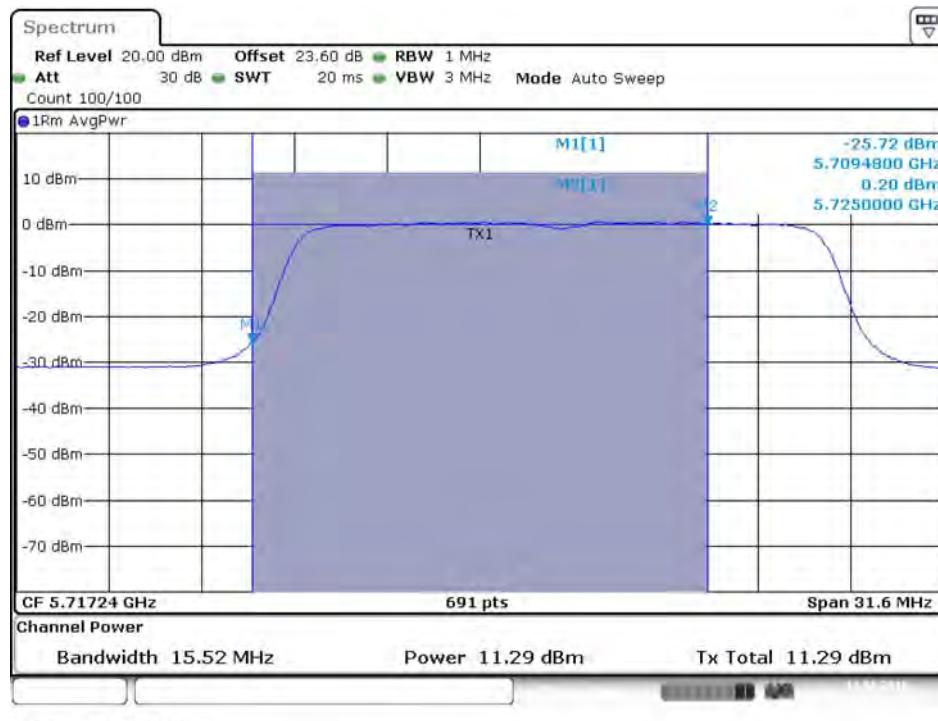


**<For Beamforming Mode>**

**Straddle Channel**

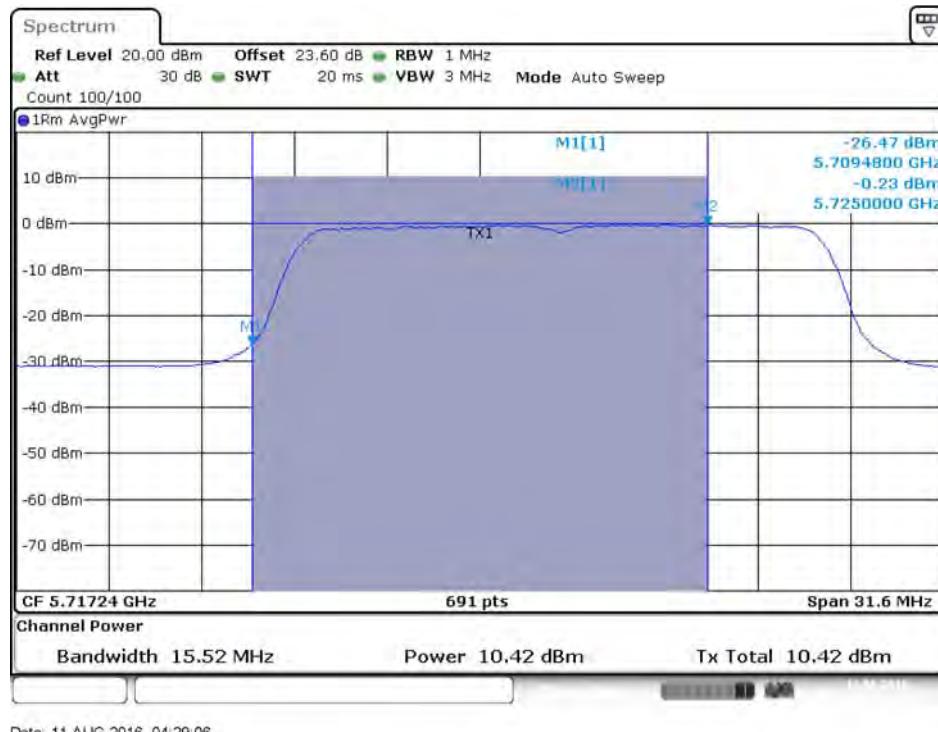
**Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5720 MHz  
(UNII 2C)**



**Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 6 / 5720 MHz  
(UNII 2C)**



### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 7 / 5720 MHz (UNII 2C)



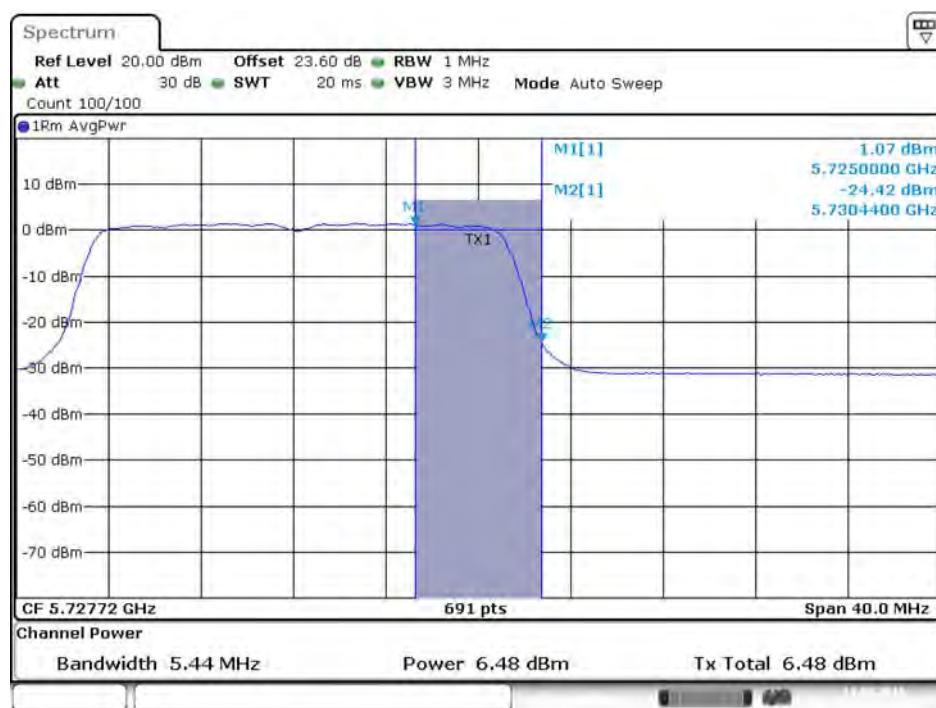
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 8 / 5720 MHz (UNII 2C)



### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 / 5720 MHz (UNII 3)



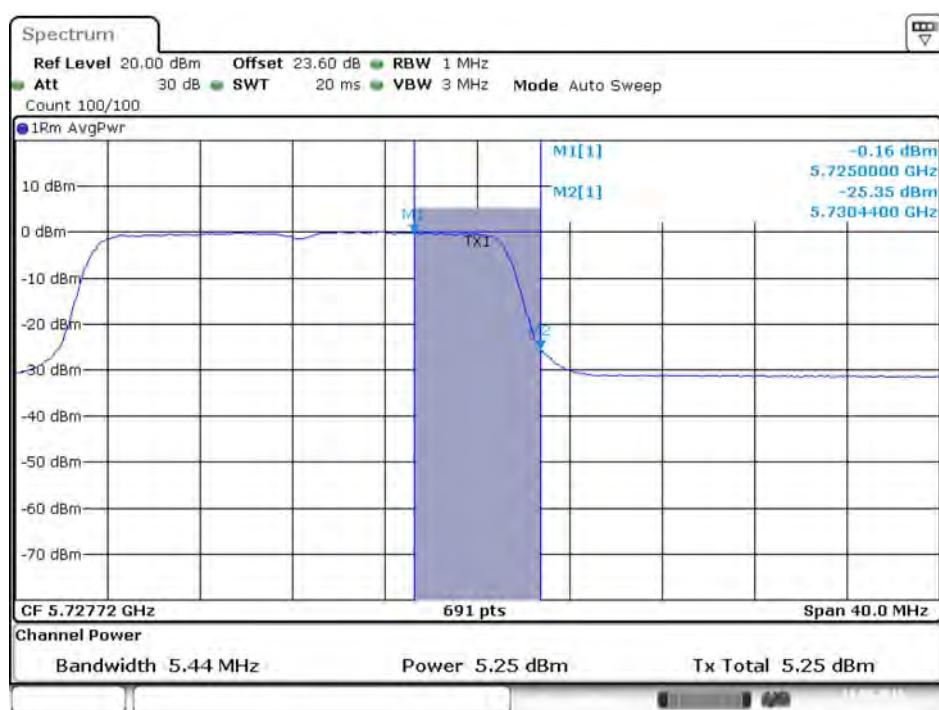
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 6 / 5720 MHz (UNII 3)



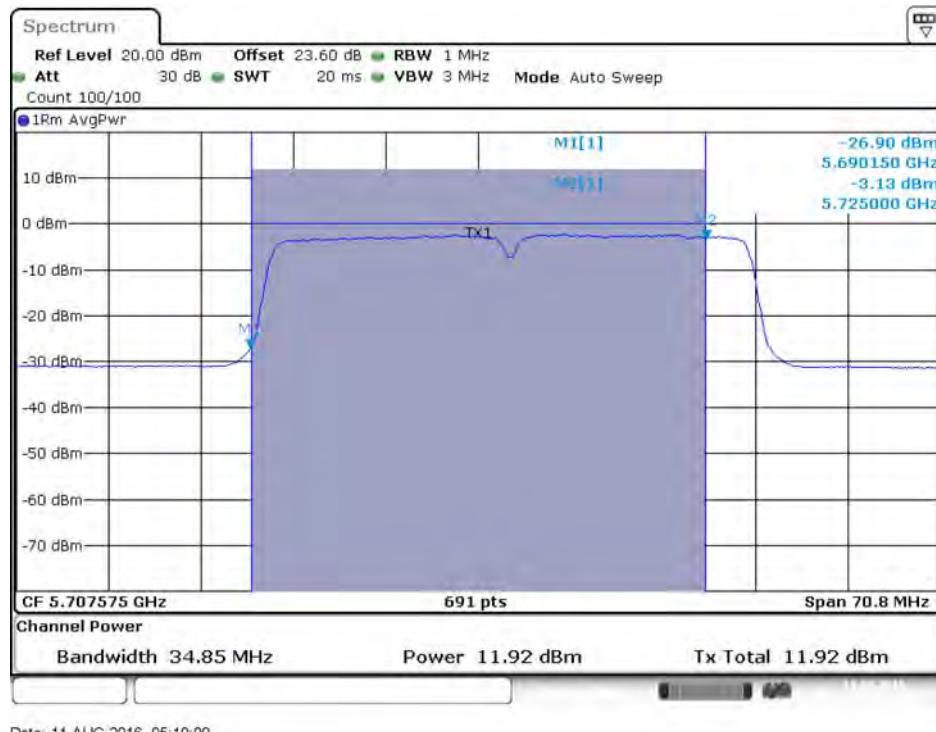
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 7 / 5720 MHz (UNII 3)



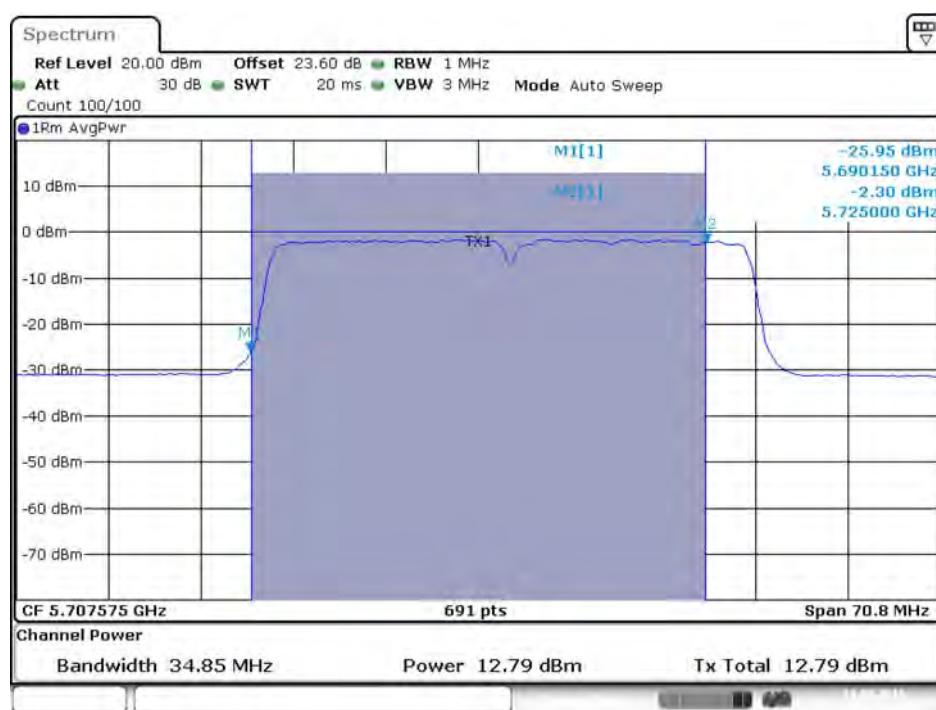
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 8 / 5720 MHz (UNII 3)



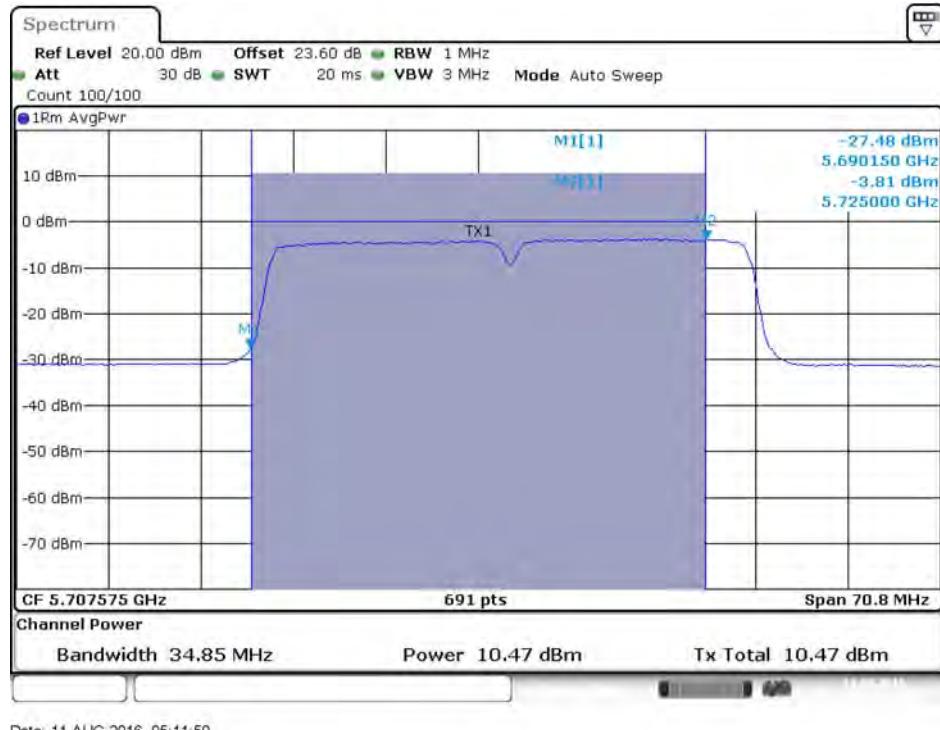
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5710 MHz (UNII 2C)



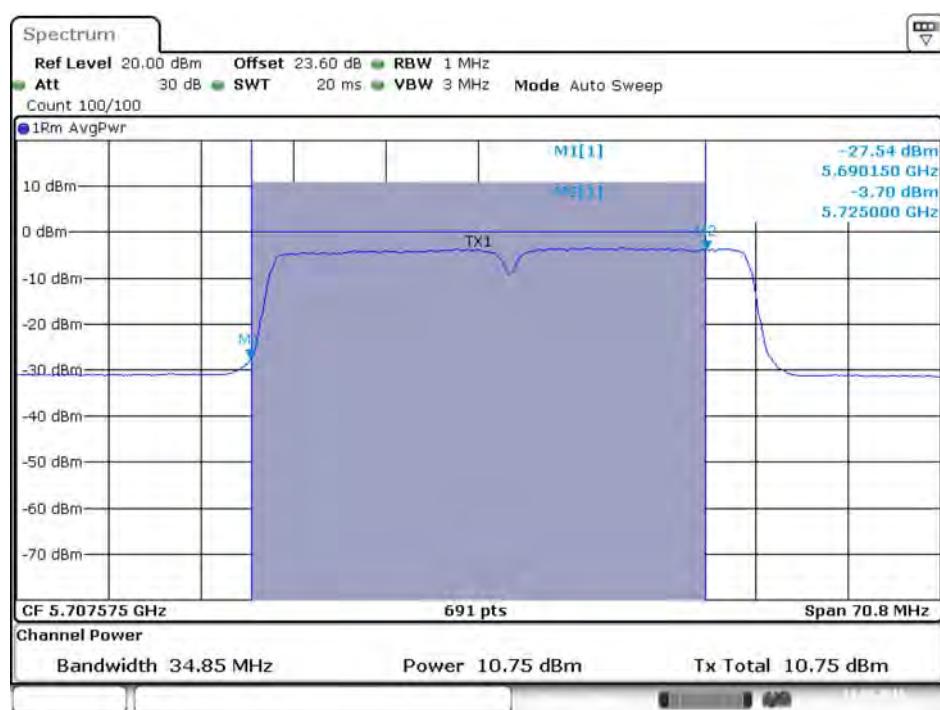
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 6 / 5710 MHz (UNII 2C)



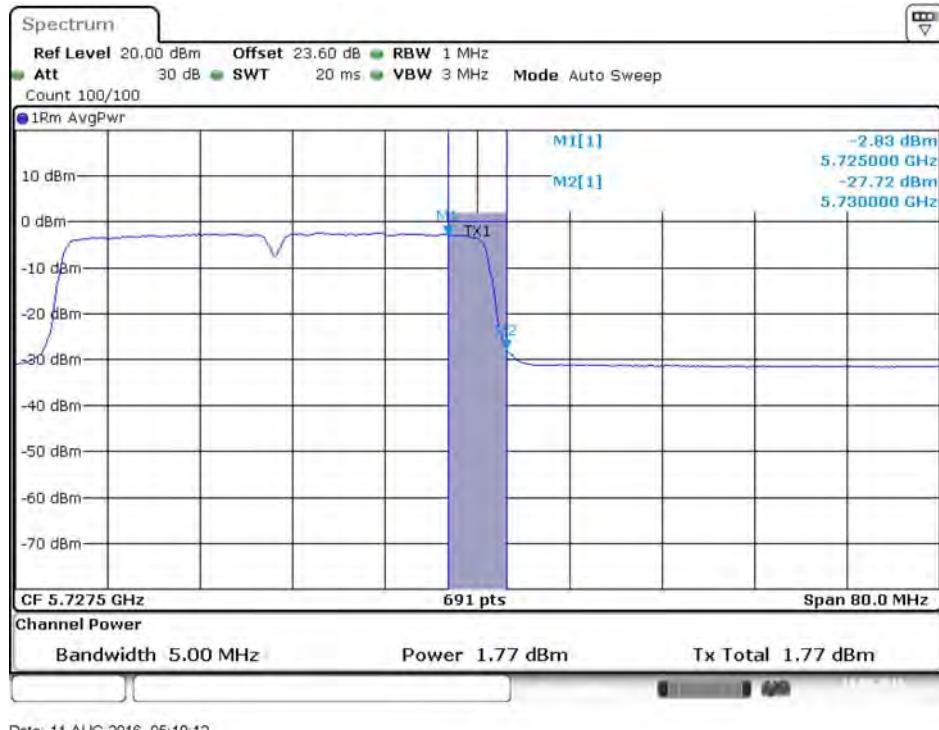
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 7 / 5710 MHz (UNII 2C)



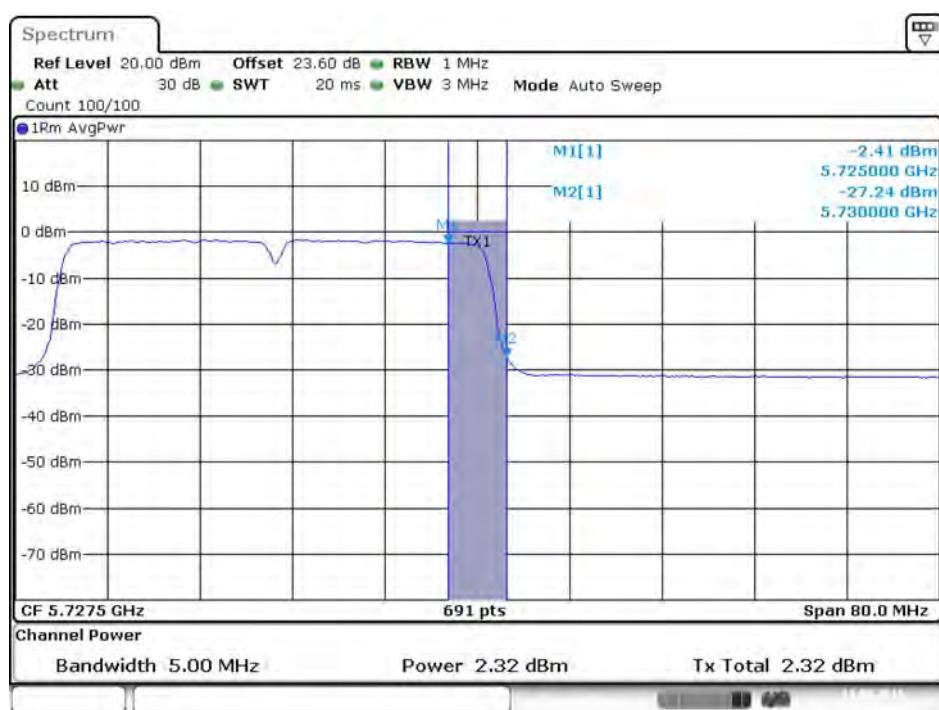
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 8 / 5710 MHz (UNII 2C)



### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 / 5710 MHz (UNII 3)



### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 6 / 5710 MHz (UNII 3)



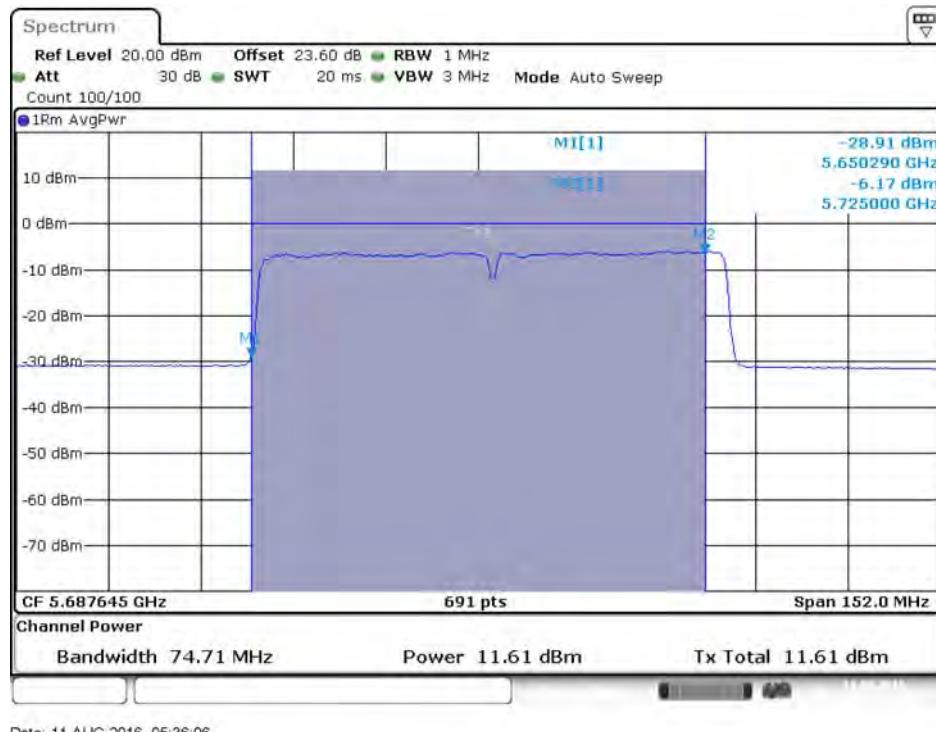
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 7 / 5710 MHz (UNII 3)



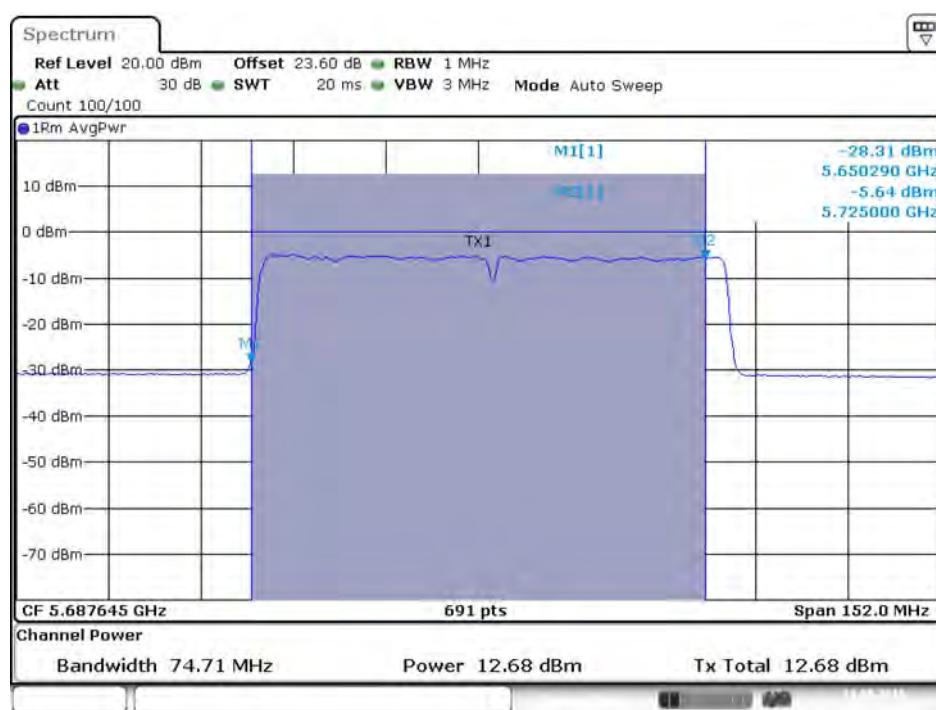
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 8 / 5710 MHz (UNII 3)



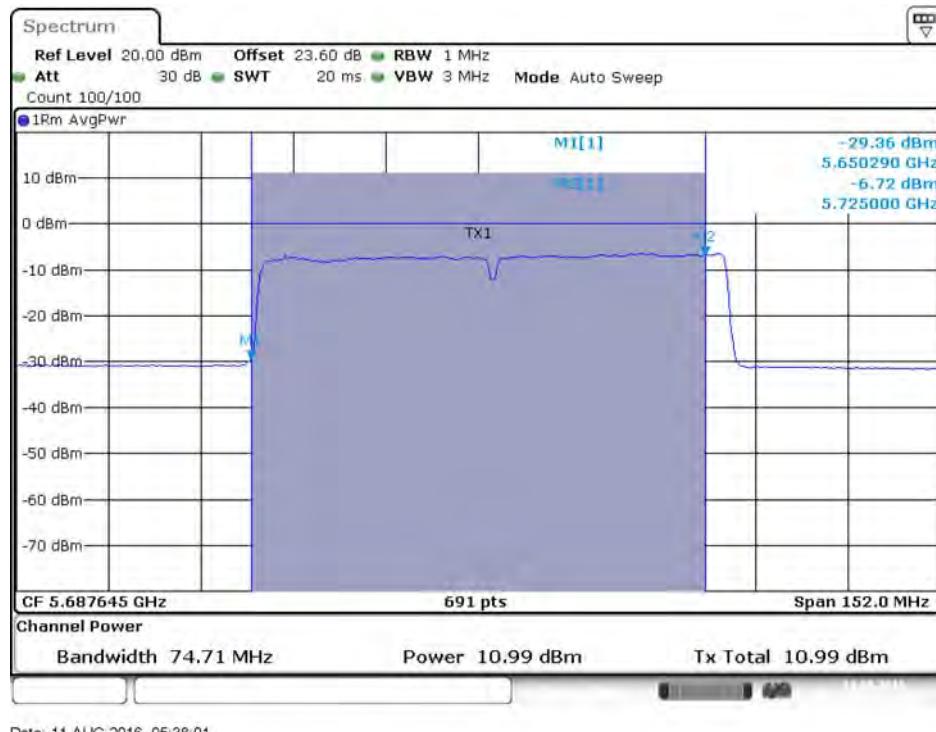
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 / 5690 MHz (UNII 2C)



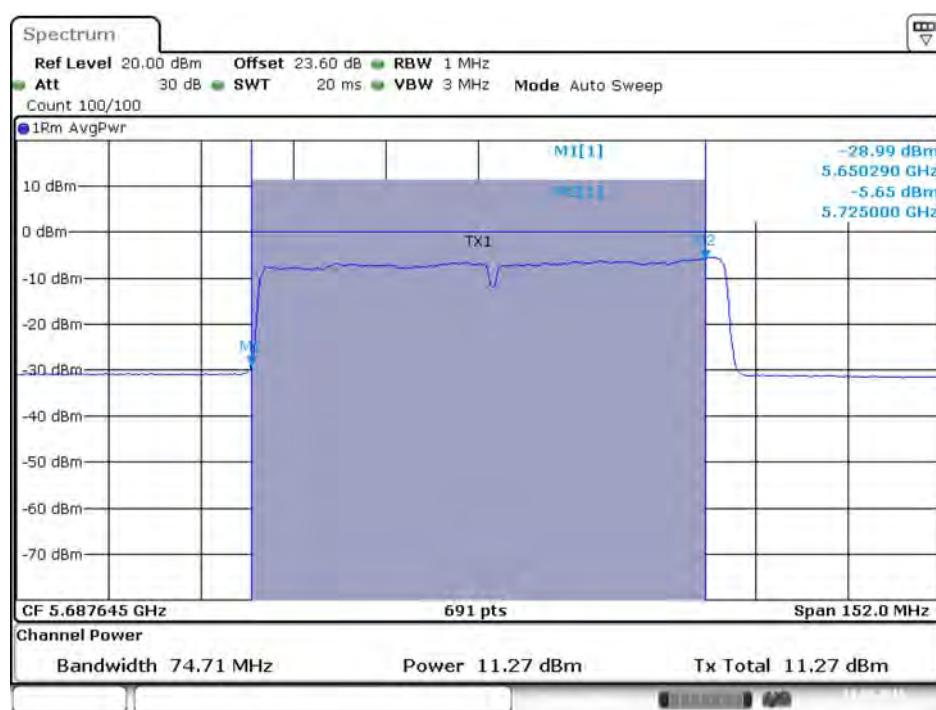
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 6 / 5690 MHz (UNII 2C)



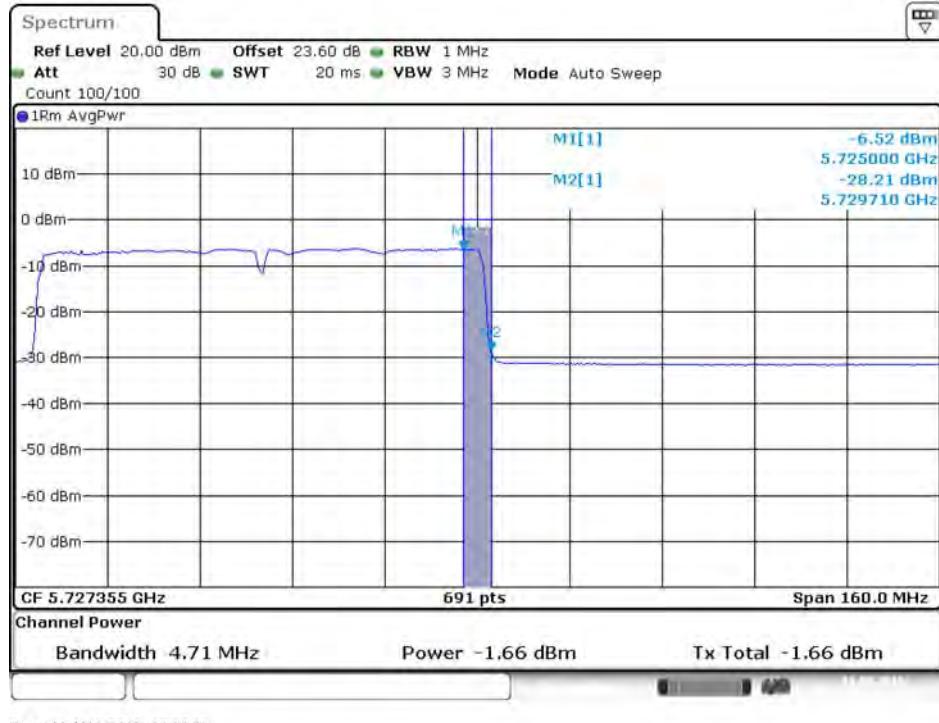
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 7 / 5690 MHz (UNII 2C)



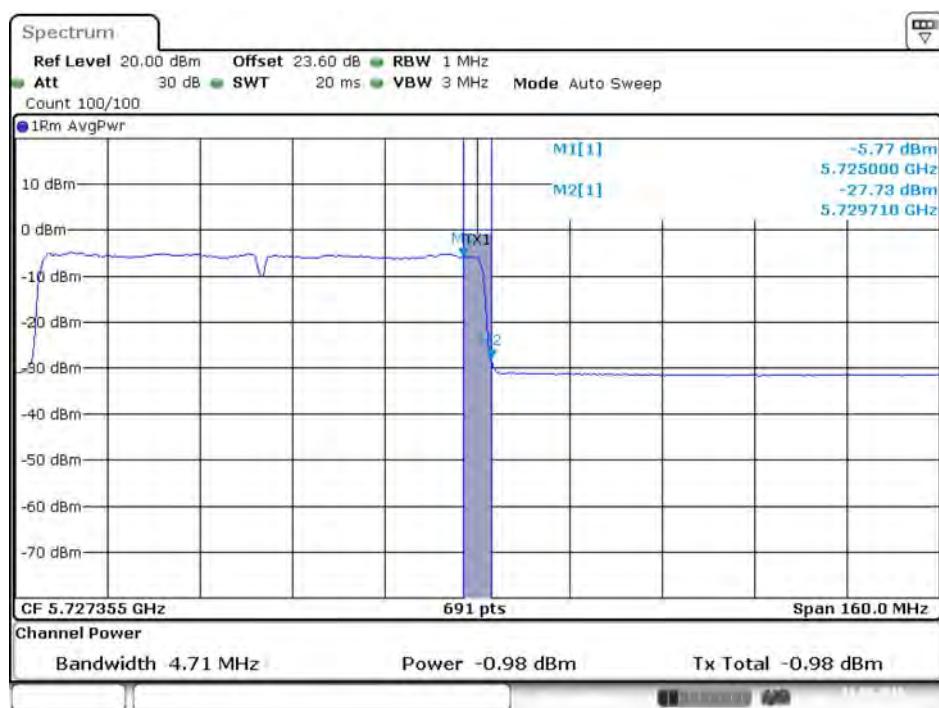
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 8 / 5690 MHz (UNII 2C)



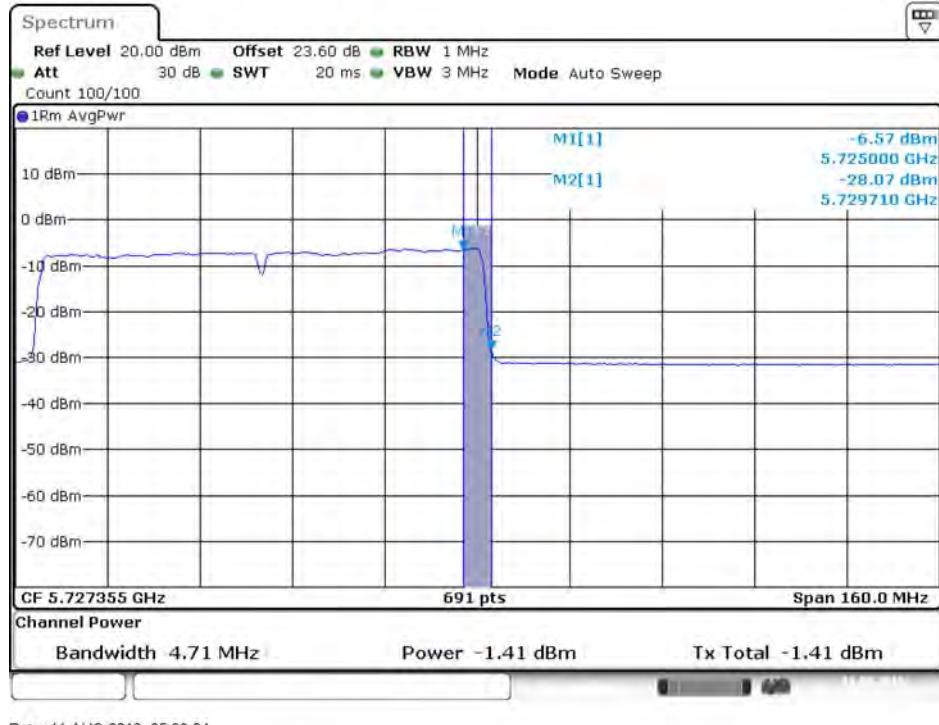
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 / 5690 MHz (UNII 3)



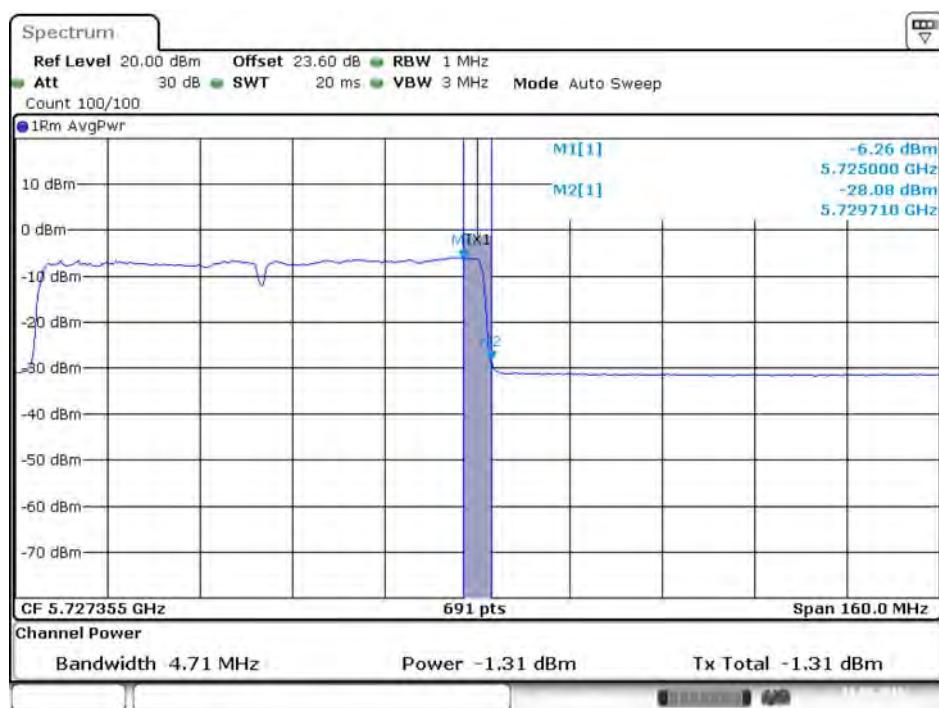
### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 6 / 5690 MHz (UNII 3)



### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 7 / 5690 MHz (UNII 3)



### Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 8 / 5690 MHz (UNII 3)

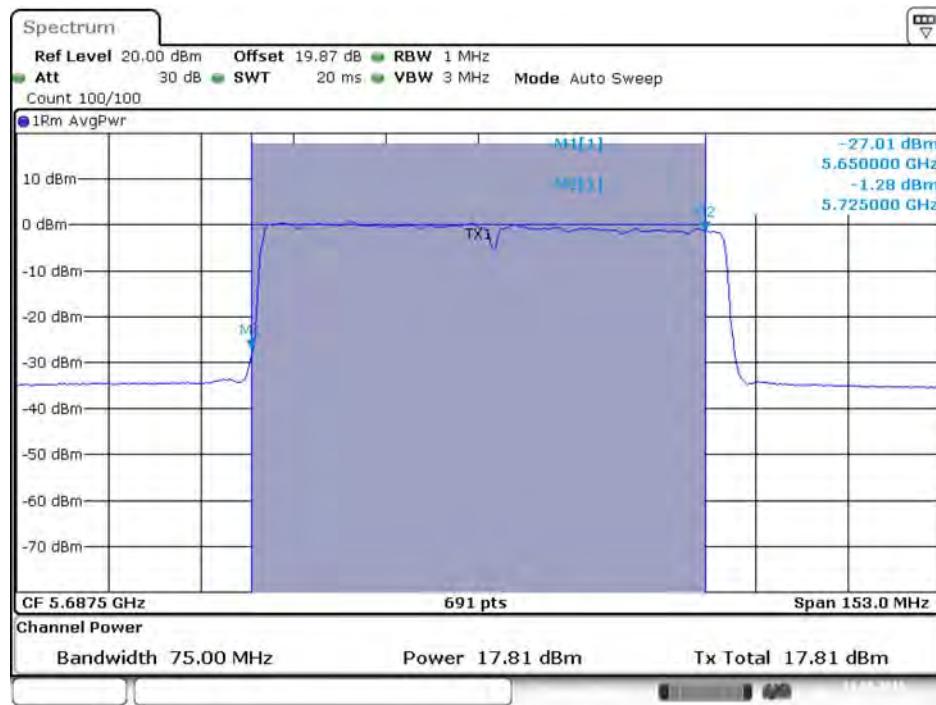


## 802.11ac MCS0/Nss2 VHT80+80

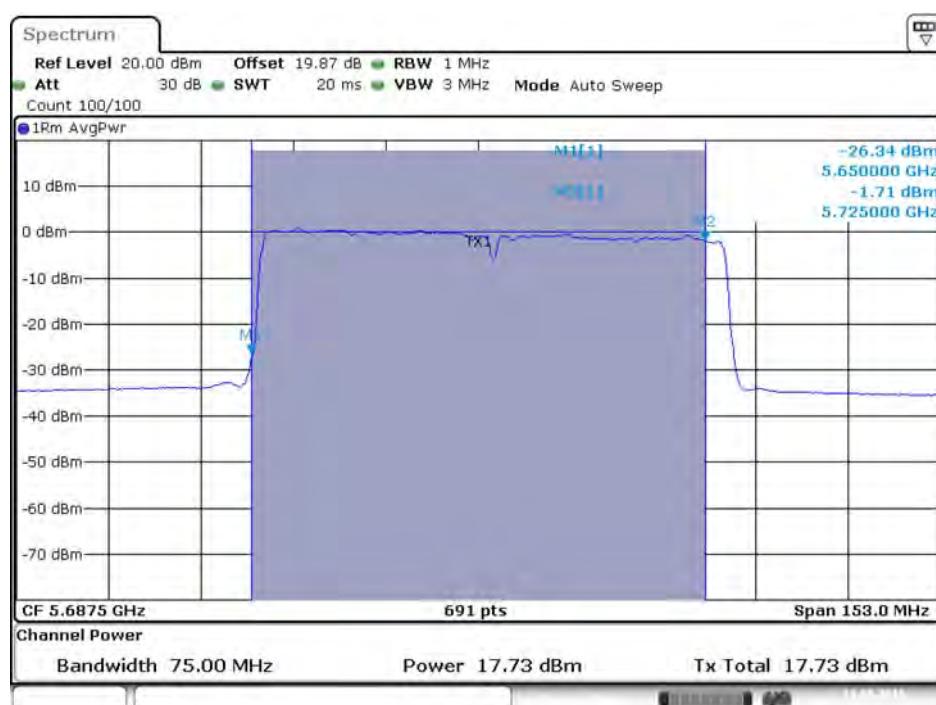
### Straddle Channel

#### Type 3

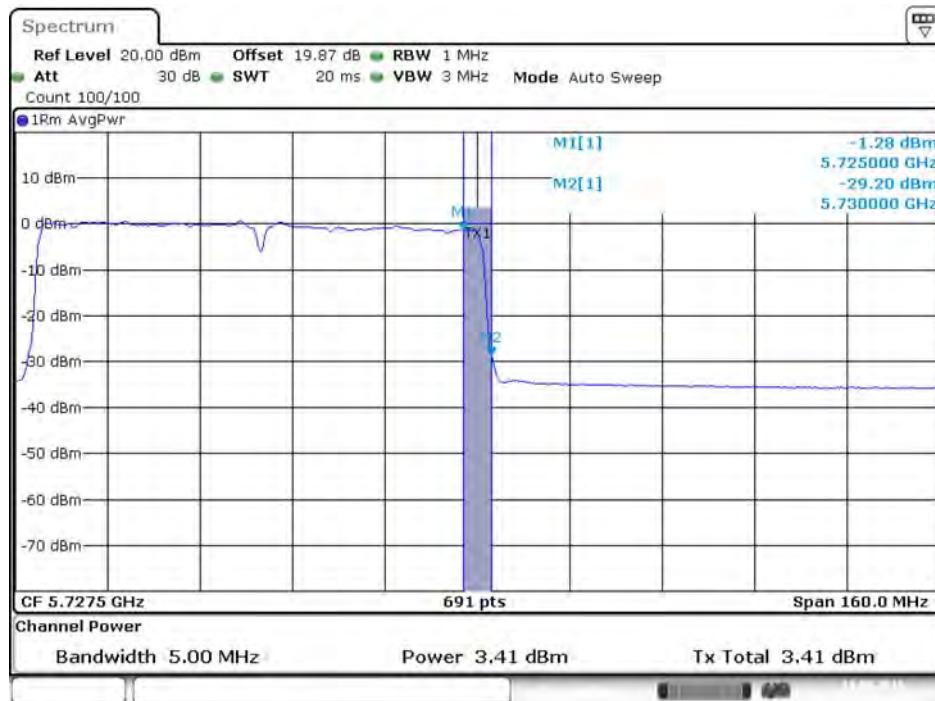
##### Conducted Output Power Plot on Chain 5 / 5690 MHz (UNII 2C)



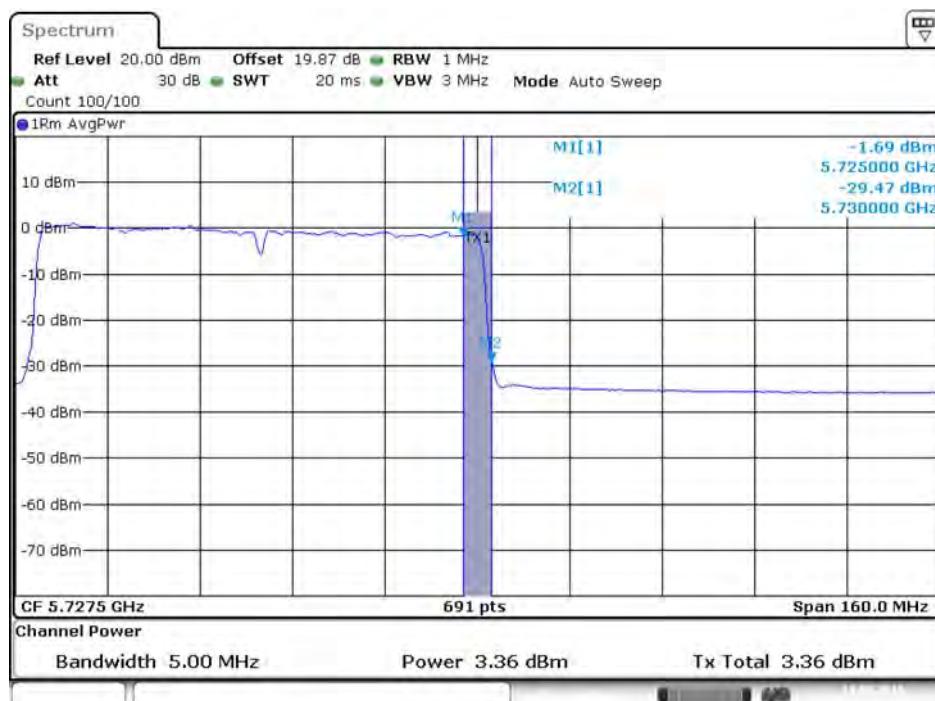
##### Conducted Output Power Plot on Chain 8 / 5690 MHz (UNII 2C)



### Conducted Output Power Plot on Chain 5 / 5690 MHz (UNII 3)

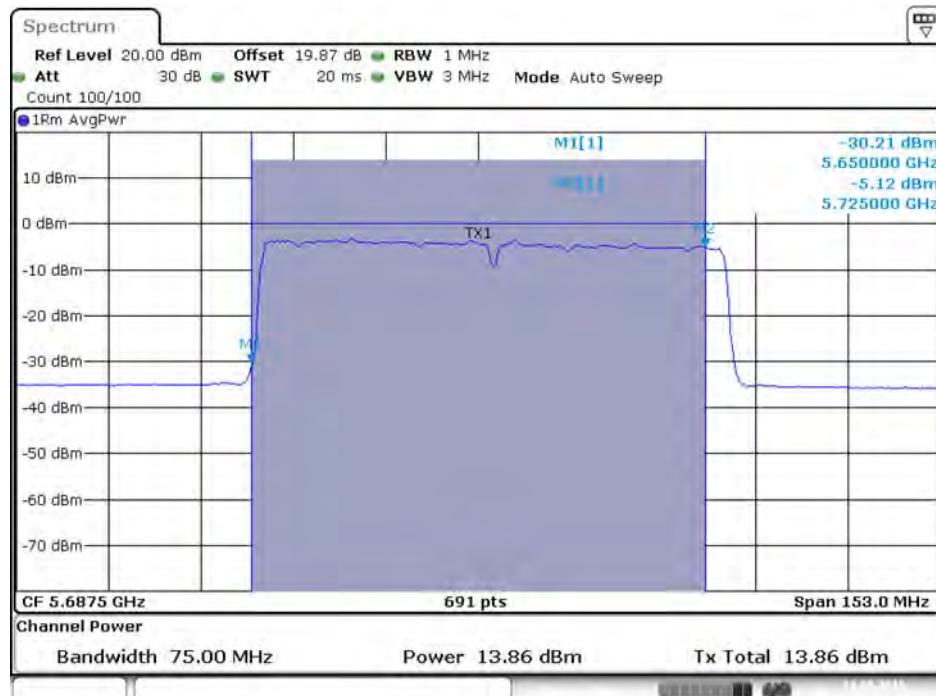


### Conducted Output Power Plot on Chain 8 / 5690 MHz (UNII 3)

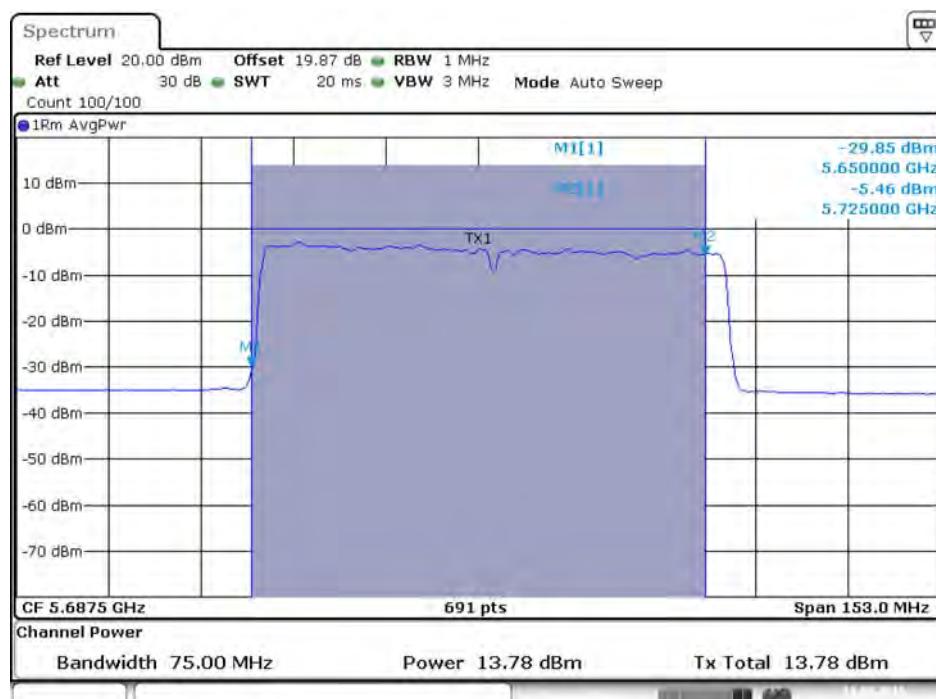


### Type 6

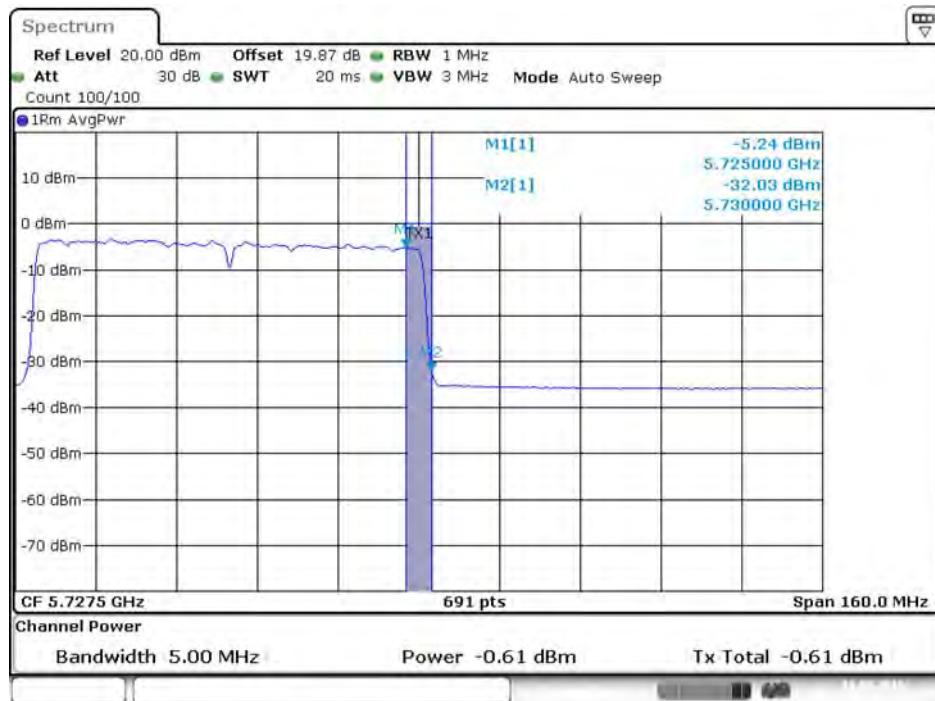
#### Conducted Output Power Plot on Chain 5 / 5690 MHz (UNII 2C)



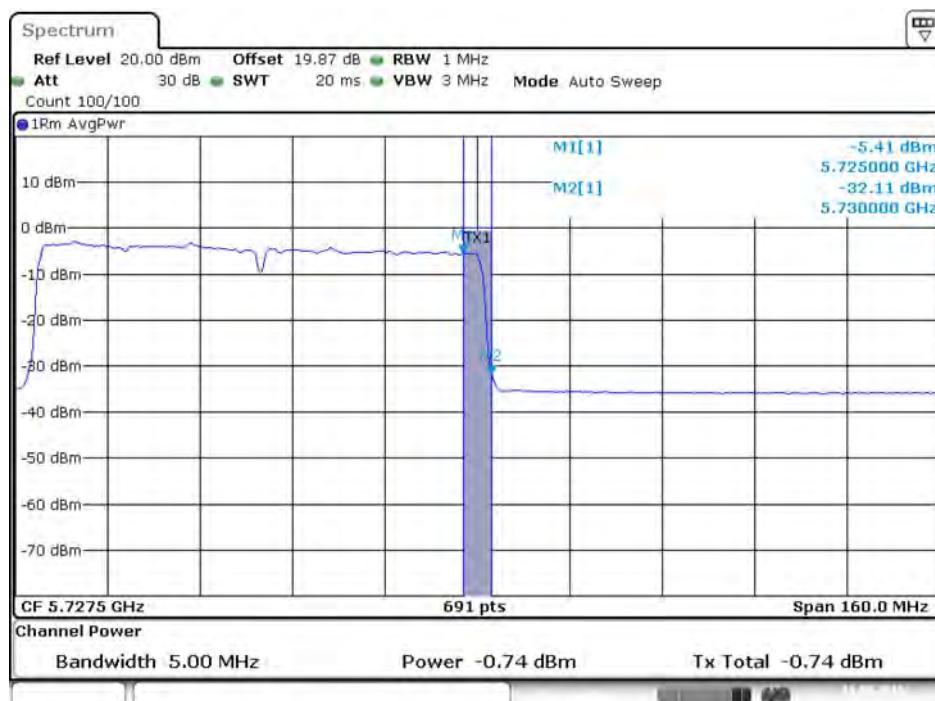
#### Conducted Output Power Plot on Chain 8 / 5690 MHz (UNII 2C)



### Conducted Output Power Plot on Chain 5 / 5690 MHz (UNII 3)

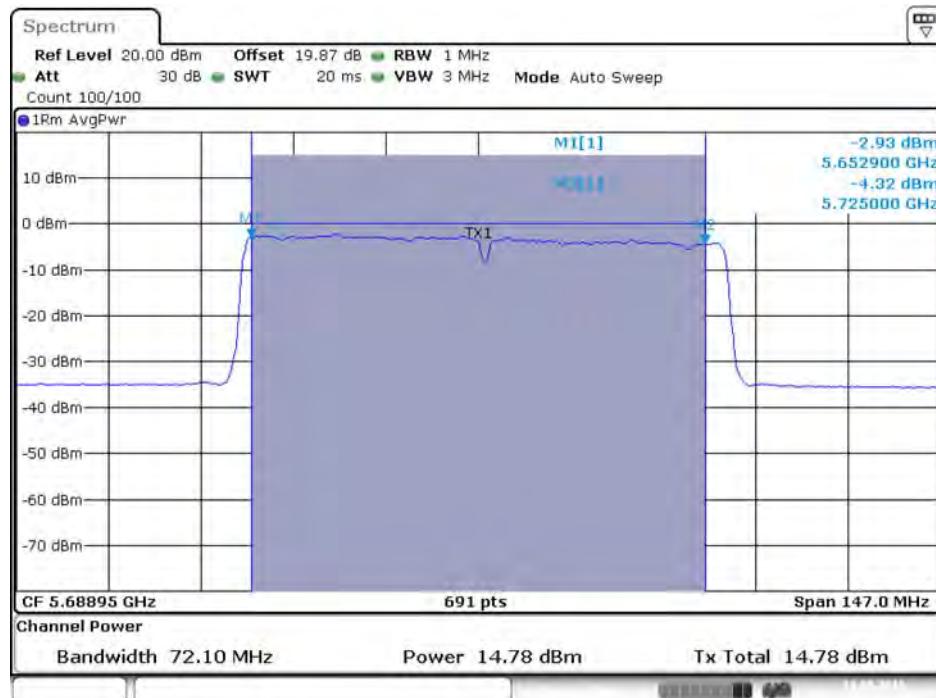


### Conducted Output Power Plot on Chain 8 / 5690 MHz (UNII 3)

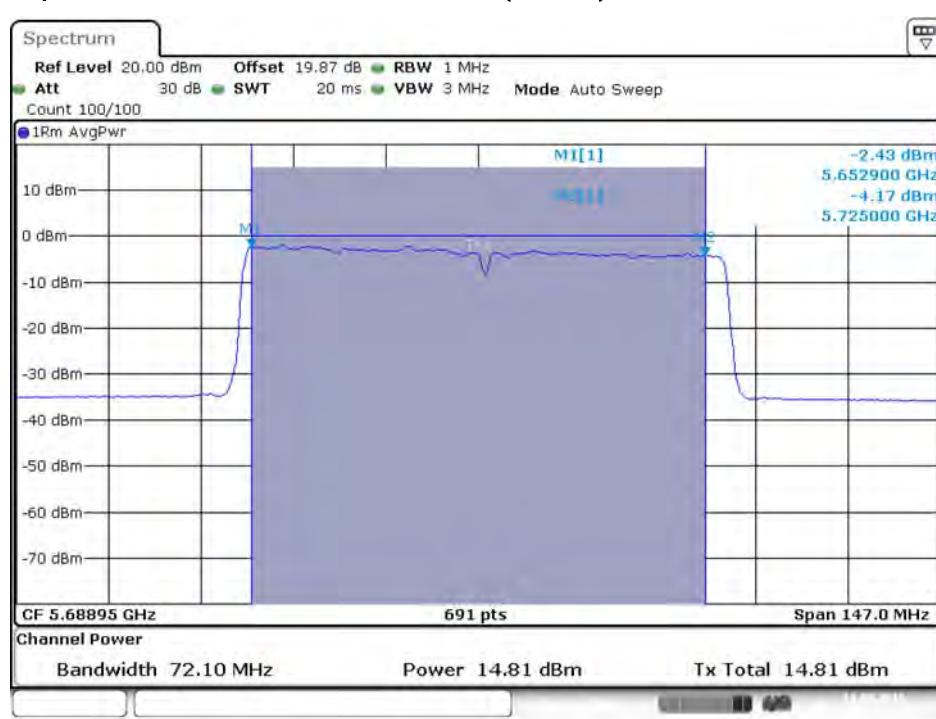


### Type 8

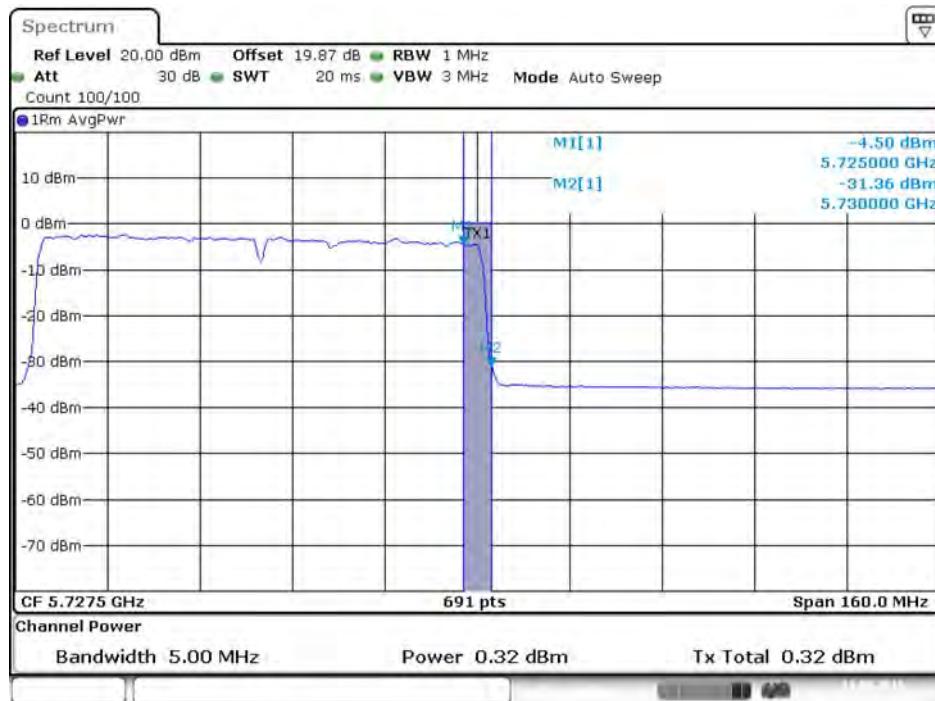
#### Conducted Output Power Plot on Chain 5 / 5690 MHz (UNII 2C)



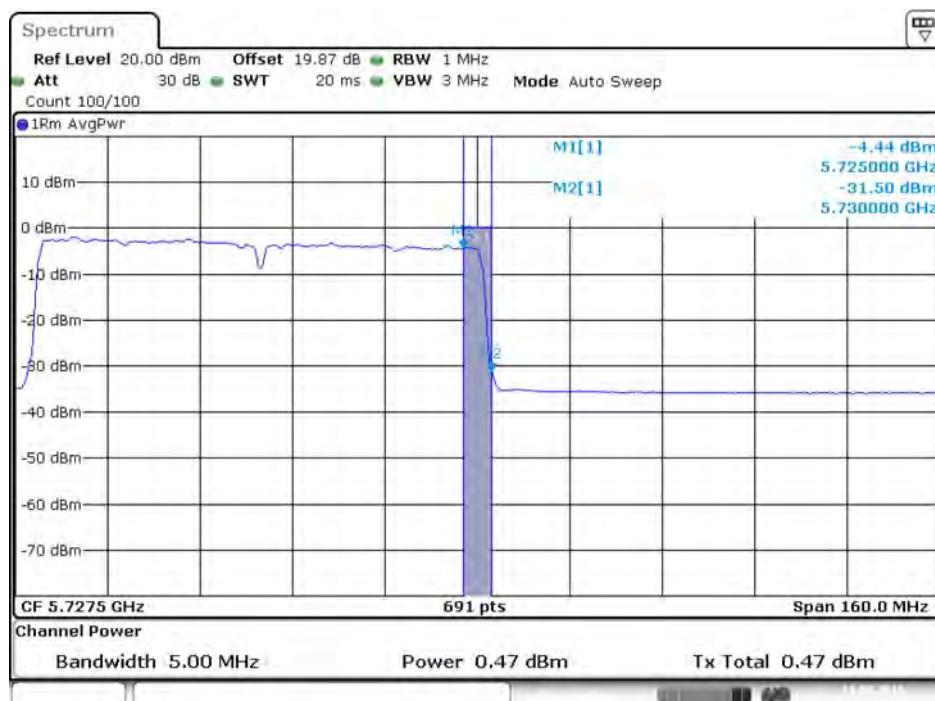
#### Conducted Output Power Plot on Chain 8 / 5690 MHz (UNII 2C)



### Conducted Output Power Plot on Chain 5 / 5690 MHz (UNII 3)

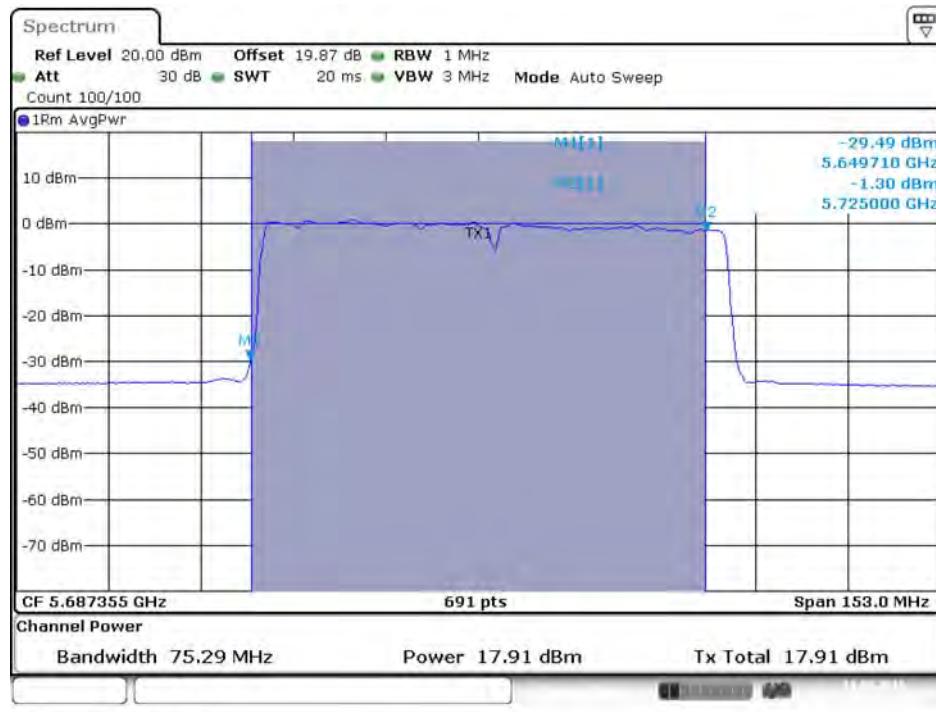


### Conducted Output Power Plot on Chain 8 / 5690 MHz (UNII 3)

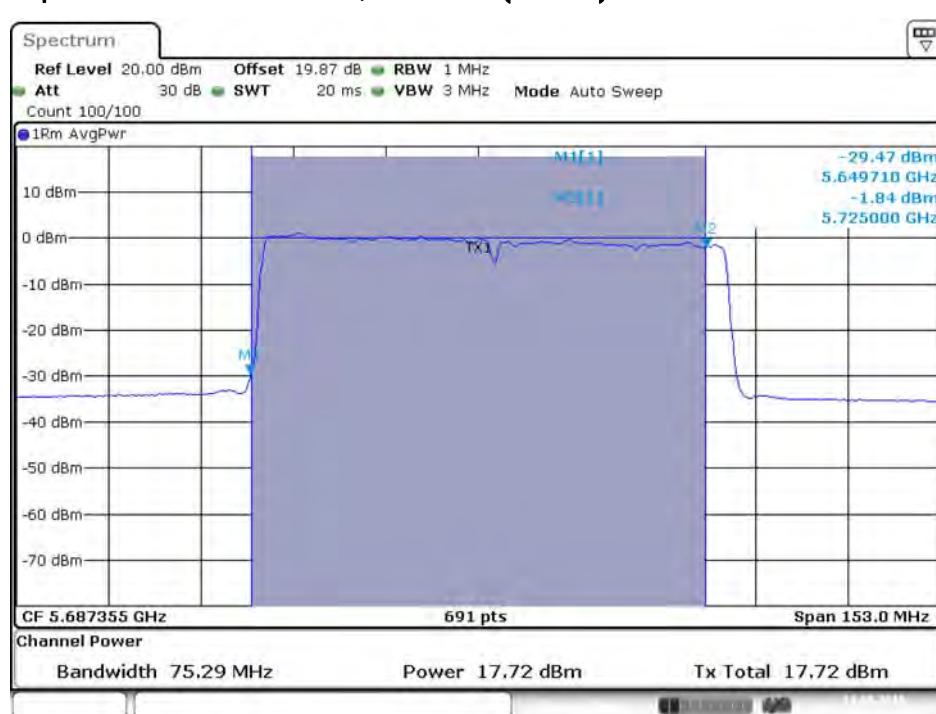


### Type 11

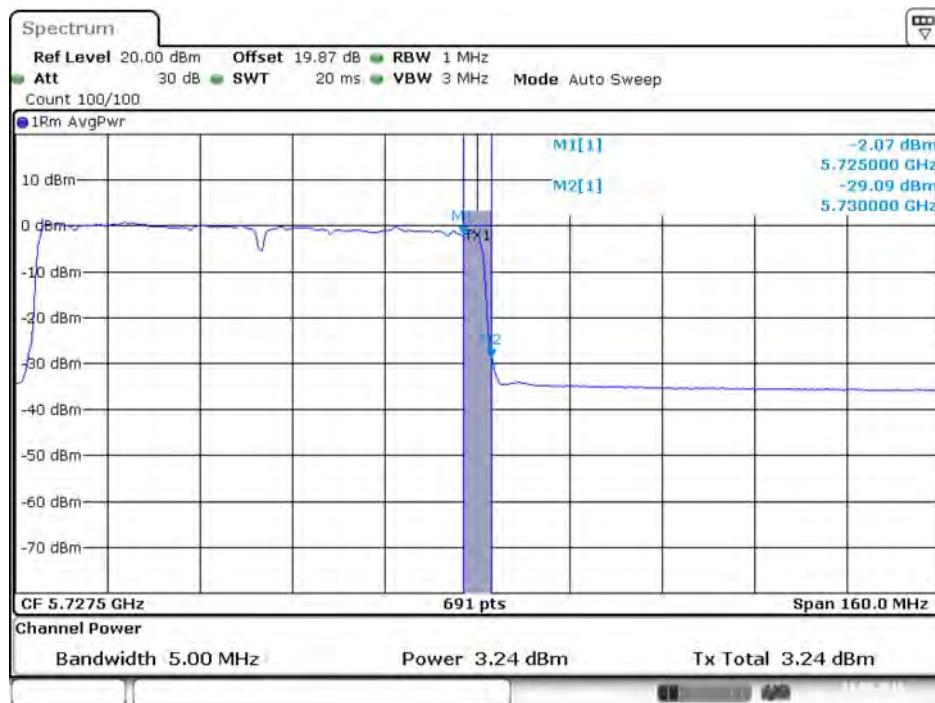
#### Conducted Output Power Plot on Chain 6 / 5690 MHz (UNII 2C)



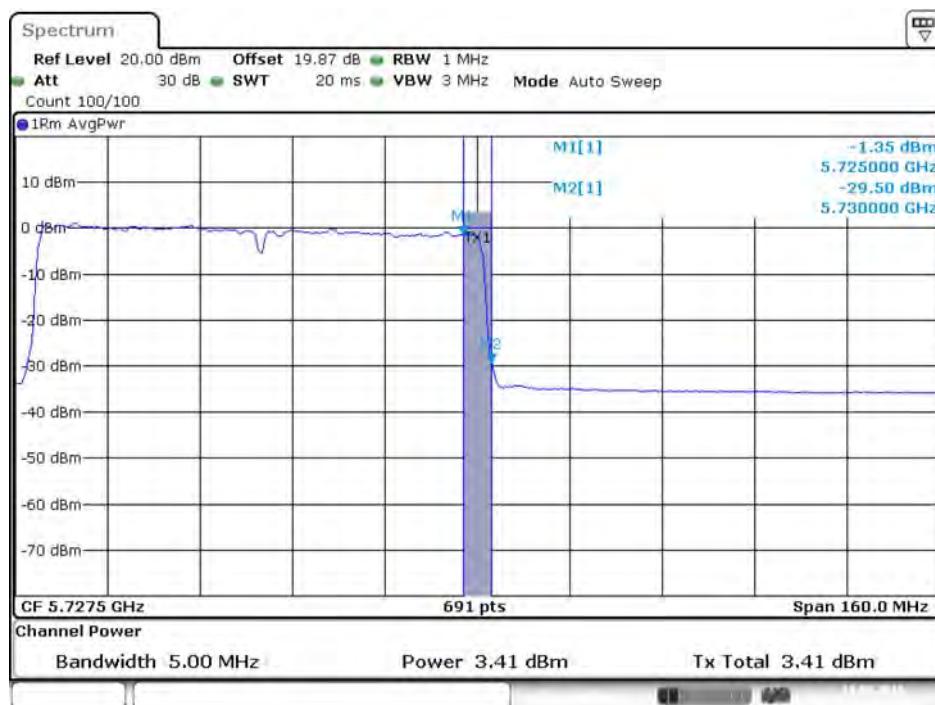
#### Conducted Output Power Plot on Chain 7 / 5690 MHz (UNII 2C)



### Conducted Output Power Plot on Chain 6 / 5690 MHz (UNII 3)



### Conducted Output Power Plot on Chain 7 / 5690 MHz (UNII 3)



## 4.4. Power Spectral Density Measurement

### 4.4.1. Limit

The following table is power spectral density limits and decrease power density limit rule refer to section 4.3.1.

Frequency Band	Limit
<input checked="" type="checkbox"/> 5.15~5.25 GHz	
Operating Mode	
<input type="checkbox"/> Outdoor access point	17 dBm/MHz
<input checked="" type="checkbox"/> Indoor access point	17 dBm/MHz
<input type="checkbox"/> Fixed point-to-point access points	17 dBm/MHz
<input type="checkbox"/> Mobile and portable client devices	11 dBm/MHz
<input checked="" type="checkbox"/> 5.25-5.35 GHz	11 dBm/MHz
<input checked="" type="checkbox"/> 5.470-5.725 GHz	11 dBm/MHz
<input checked="" type="checkbox"/> 5.725~5.85 GHz	30 dBm/500kHz

### 4.4.2. Measuring Instruments and Setting

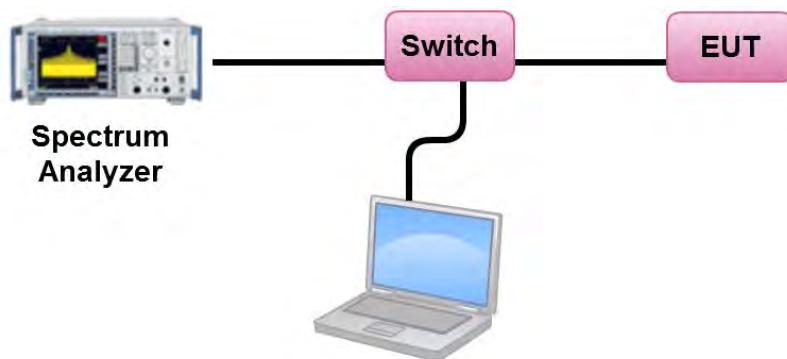
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

Spectrum Parameter	Setting
Attenuation	Auto
Span Frequency	Encompass the entire emissions bandwidth (EBW) of the signal
RBW	1000 kHz
VBW	3000 kHz
Detector	RMS
Trace	AVERAGE
Sweep Time	Auto
Trace Average	100 times
Note: If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10\log(500\text{kHz}/\text{RBW})$ to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.	

#### 4.4.3. Test Procedures

1. The transmitter output (antenna port) was connected RF switch to the spectrum analyzer.
2. Test was performed in accordance with KDB789033 D02 v01r04 for Compliance Testing of Unlicensed National Information Infrastructure (U-NII) Devices - section (F) Maximum Power Spectral Density (PSD).
3. Multiple antenna systems was performed in accordance KDB662911 D01 v02r01 in-Band Power Spectral Density (PSD) Measurements and sum the spectra across the outputs.
4. For 5.725~5.85 GHz, the measured result of PSD level must add  $10\log(500\text{kHz}/\text{RBW})$  and the final result should  $\leq 30 \text{ dBm}$ .

#### 4.4.4. Test Setup Layout



#### 4.4.5. Test Deviation

There is no deviation with the original standard.

#### 4.4.6. EUT Operation during Test

The EUT was programmed to be in continuously transmitting mode.

#### 4.4.7. Test Result of Power Spectral Density

Temperature	24°C	Humidity	60%
Test Engineer	Clemens Fang	Test Date	May 03, 2016 ~ Aug. 25, 2016

Radio 2

<For Non-beamforming Mode>

Configuration IEEE 802.11a / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260 MHz	5.16	5.30	Complies
60	5300 MHz	5.26	5.30	Complies
64	5320 MHz	5.24	5.30	Complies
100	5500 MHz	5.28	5.30	Complies
116	5580 MHz	5.14	5.30	Complies
140	5700 MHz	5.11	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit=11-(11.70-6)=5.30dBm/MHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260 MHz	5.20	5.30	Complies
60	5300 MHz	5.07	5.30	Complies
64	5320 MHz	5.13	5.30	Complies
100	5500 MHz	5.14	5.30	Complies
116	5580 MHz	5.02	5.30	Complies
140	5700 MHz	5.10	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit=11-(11.70-6)=5.30dBm/MHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270 MHz	5.18	5.30	Complies
62	5310 MHz	5.07	5.30	Complies
102	5510 MHz	5.16	5.30	Complies
110	5550 MHz	5.18	5.30	Complies
134	5670 MHz	5.07	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit=11-(11.70-6)=5.30dBm/MHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
58	5290 MHz	0.35	5.30	Complies
106	5530 MHz	2.09	5.30	Complies
122	5610 MHz	4.51	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit=11-(11.70-6)=5.30dBm/MHz.

**Straddle Channel**
**Configuration IEEE 802.11a / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	5.06	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $11 - (11.70 - 6) = 5.30 \text{ dBm/MHz}$ .

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
144	5720 MHz (UNII 3)	4.81	-3.01	1.80	24.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $30 - (11.67 - 6) = 24.30 \text{ dBm/500kHz}$ .

**Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	5.16	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $11 - (11.70 - 6) = 5.30 \text{ dBm/MHz}$ .

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
144	5720 MHz (UNII 3)	4.88	-3.01	1.87	24.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $30 - (11.67 - 6) = 24.30 \text{ dBm/500kHz}$ .

**Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
142	5710 MHz (UNII 2C)	5.26	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $11 - (11.70 - 6) = 5.30 \text{ dBm/MHz}$ .

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
142	5710 MHz (UNII 3)	4.97	-3.01	1.96	24.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $30 - (11.67 - 6) = 24.30 \text{ dBm/500kHz}$ .

**Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
138	5690 MHz (UNII 2C)	4.10	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $11 - (11.70 - 6) = 5.30 \text{ dBm/MHz}$ .

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
138	5690 MHz (UNII 3)	4.11	-3.01	1.10	24.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $30 - (11.67 - 6) = 24.30 \text{ dBm/500kHz}$ .

**802.11ac MCS0/Nss2 VHT80+80**

Type	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Max. Limit (dBm/MHz)	Result
1	5210 MHz	2.70				14.31	Complies
	5530 MHz	2.54				8.31	Complies
2	5210 MHz	2.93				14.31	Complies
	5610 MHz	3.67				8.31	Complies
3	5210 MHz	2.97				14.31	Complies
	5690 MHz (UNII 2C)	3.40				8.31	Complies
	5690 MHz (UNII 3)	1.84		-3.01	-1.17	27.31	-
4	5290 MHz	2.01				8.31	Complies
	5530 MHz	1.73				8.31	Complies
5	5290 MHz	1.56				8.31	Complies
	5610 MHz	1.31				8.31	Complies
6	5290 MHz	2.11				8.31	Complies
	5690 MHz (UNII 2C)	1.78				8.31	Complies
	5690 MHz (UNII 3)	0.21		-3.01	-2.80	27.31	-
7	5290 MHz	2.21				8.31	Complies
	5775 MHz	2.00		-3.01	-1.01	27.31	-
8	5530 MHz	1.63				8.31	Complies
	5690 MHz (UNII 2C)	1.19				8.31	Complies
	5690 MHz (UNII 3)	1.42		-3.01	-1.59	27.31	-
9	5530 MHz	3.29				8.31	Complies
	5775 MHz	3.51		-3.01	0.50	27.31	-
10	5610 MHz	3.61				8.31	Complies
	5775 MHz	3.50		-3.01	0.49	27.31	-

11	5690 MHz (UNII 2C)	2.94	-			8.31	Complies
	5690 MHz (UNII 3)	2.88	-3.01	-0.13	27.31	-	Complies
	5775 MHz	3.59	-3.01	0.58	27.31	-	Complies

Note:

For 5210MHz:

$$\text{DirectionalGain} = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.69 \text{dBi} > 6 \text{dBi}, \text{ so limit} = 17 - (8.69 - 6) = 14.31 \text{dBm}.$$

For (UNII 2C):

$$\text{DirectionalGain} = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.69 \text{dBi} > 6 \text{dBi}, \text{ so limit} = 11 - (8.69 - 6) = 8.31 \text{dBm}.$$

For (UNII 3):

$$\text{DirectionalGain} = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.69 \text{dBi} > 6 \text{dBi}, \text{ so limit} = 30 - (8.69 - 6) = 27.31 \text{dBm}/500\text{kHz}.$$

**<For Beamforming Mode>**
**Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260 MHz	4.83	5.30	Complies
60	5300 MHz	5.21	5.30	Complies
64	5320 MHz	5.03	5.30	Complies
100	5500 MHz	5.09	5.30	Complies
116	5580 MHz	5.05	5.30	Complies
140	5700 MHz	5.12	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit=11-(11.70-6)=5.30dBm/MHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270 MHz	1.93	5.30	Complies
62	5310 MHz	2.07	5.30	Complies
102	5510 MHz	1.98	5.30	Complies
110	5550 MHz	2.21	5.30	Complies
134	5670 MHz	1.91	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit=11-(11.70-6)=5.30dBm/MHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
58	5290 MHz	-1.00	5.30	Complies
106	5530 MHz	-0.92	5.30	Complies
122	5610 MHz	-0.78	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $11 - (11.70 - 6) = 5.30 \text{ dBm/MHz}$ .

**Straddle Channel**
**Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	5.18	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $11 - (11.70 - 6) = 5.30 \text{ dBm/MHz}$ .

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
144	5720 MHz (UNII 3)	4.95	-3.01	1.94	24.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $30 - (11.70 - 6) = 24.30 \text{ dBm/500kHz}$ .

**Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
142	5710 MHz (UNII 2C)	1.99	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $11 - (11.70 - 6) = 5.30 \text{ dBm/MHz}$ .

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
142	5710 MHz (UNII 3)	1.84	-3.01	-1.17	24.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $30 - (11.70 - 6) = 24.30 \text{ dBm/500kHz}$ .

**Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
138	5690 MHz (UNII 2C)	-0.99	5.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $11 - (11.70 - 6) = 5.30 \text{ dBm/MHz}$ .

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
138	5690 MHz (UNII 3)	-0.79	-3.01	-3.80	24.30	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 11.70$ , so limit =  $30 - (11.70 - 6) = 24.30 \text{ dBm/500kHz}$ .

**802.11ac MCS0/Nss2 VHT80+80**

Type	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Max. Limit (dBm/MHz)	Result
1	5210 MHz	1.31				14.31	Complies
	5530 MHz	0.74				8.31	Complies
2	5210 MHz	2.24				14.31	Complies
	5610 MHz	2.12				8.31	Complies
3	5210 MHz	2.59				14.31	Complies
	5690 MHz (UNII 2C)	1.98				8.31	Complies
	5690 MHz (UNII 3)	0.40		-3.01	-2.61	27.31	-
4	5290 MHz	-1.29				8.31	Complies
	5530 MHz	-2.47				8.31	Complies
5	5290 MHz	-1.30				8.31	Complies
	5610 MHz	-1.93				8.31	Complies
6	5290 MHz	-1.27				8.31	Complies
	5690 MHz (UNII 2C)	-1.86				8.31	Complies
	5690 MHz (UNII 3)	-3.58		-3.01	-6.59	27.31	-
7	5290 MHz	-1.19				8.31	Complies
	5775 MHz	-2.13		-3.01	-5.14	27.31	-
8	5530 MHz	-1.05				8.31	Complies
	5690 MHz (UNII 2C)	-0.68				8.31	Complies
	5690 MHz (UNII 3)	-2.49		-3.01	-5.50	27.31	-
9	5530 MHz	1.90				8.31	Complies
	5775 MHz	1.15		-3.01	-1.86	27.31	-
10	5610 MHz	1.90				8.31	Complies
	5775 MHz	1.11		-3.01	-1.90	27.31	-

11	5690 MHz (UNII 2C)	2.18	-			8.31	Complies
	5690 MHz (UNII 3)	0.33	-3.01	-2.68	27.31	-	Complies
	5775 MHz	2.15	-3.01	-0.86	27.31	-	Complies

Note:

For 5210MHz:

$$\text{DirectionalGain} = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.69 \text{dBi} > 6 \text{dBi}, \text{ so limit} = 17 - (8.69 - 6) = 14.31 \text{dBm}.$$

For (UNII 2C):

$$\text{DirectionalGain} = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.69 \text{dBi} > 6 \text{dBi}, \text{ so limit} = 11 - (8.69 - 6) = 8.31 \text{dBm}.$$

For (UNII 3):

$$\text{DirectionalGain} = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.69 \text{dBi} > 6 \text{dBi}, \text{ so limit} = 30 - (8.69 - 6) = 27.31 \text{dBm}/500\text{kHz}.$$

### Radio 3

#### Configuration IEEE 802.11a / Chain 9 + Chain 10

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260 MHz	7.91	8.23	Complies
60	5300 MHz	7.96	8.23	Complies
64	5320 MHz	8.00	8.23	Complies
100	5500 MHz	7.96	8.23	Complies
116	5580 MHz	7.87	8.23	Complies
140	5700 MHz	7.89	8.23	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.77$ , so limit=11-(8.77-6)=8.23dBm/MHz.

#### Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 9 + Chain 10

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
52	5260 MHz	7.98	8.23	Complies
60	5300 MHz	7.84	8.23	Complies
64	5320 MHz	7.84	8.23	Complies
100	5500 MHz	7.76	8.23	Complies
116	5580 MHz	7.85	8.23	Complies
140	5700 MHz	7.91	8.23	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.77$ , so limit=11-(8.77-6)=8.23dBm/MHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 9 + Chain 10**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
54	5270 MHz	7.69	8.23	Complies
62	5310 MHz	4.39	8.23	Complies
102	5510 MHz	4.69	8.23	Complies
110	5550 MHz	7.70	8.23	Complies
134	5670 MHz	6.13	8.23	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.77$ , so limit =  $11 - (8.77 - 6) = 8.23$  dBm/MHz.

**Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 9 + Chain 10**

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
58	5290 MHz	-1.11	8.23	Complies
106	5530 MHz	0.32	8.23	Complies
122	5610 MHz	1.89	8.23	Complies

Note:  $DirectionalGain = 10 \cdot \log \left[ \frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right] = 8.77$ , so limit =  $11 - (8.77 - 6) = 8.23$  dBm/MHz.

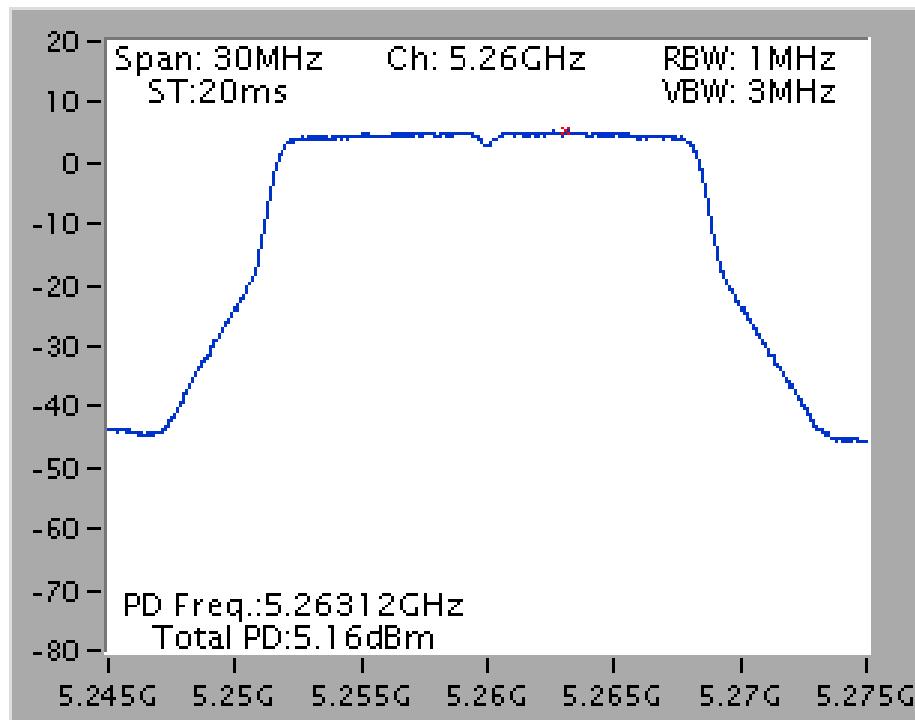
Note: All the test values were listed in the report.

For plots, only the channel with worse result was shown.

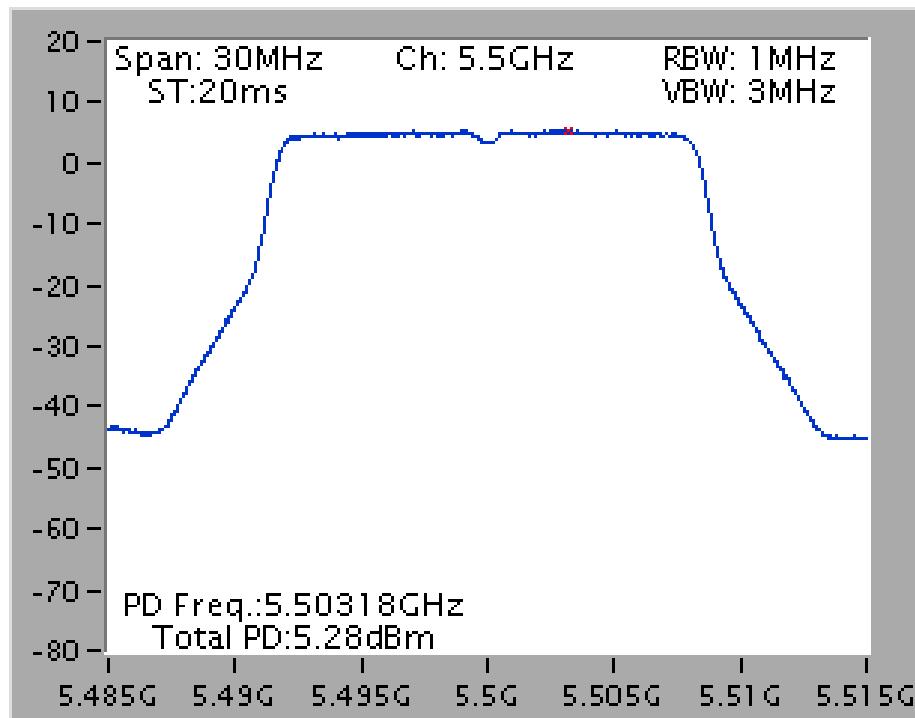
**Radio 2**

**<For Non-beamforming Mode>**

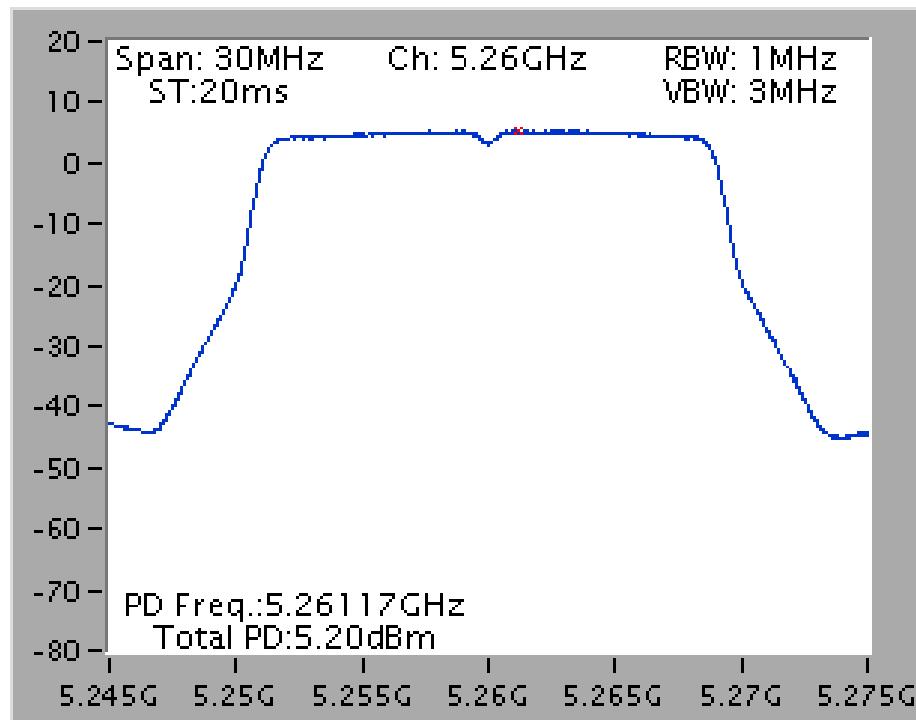
**Power Density Plot on Configuration IEEE 802.11a / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5260 MHz**



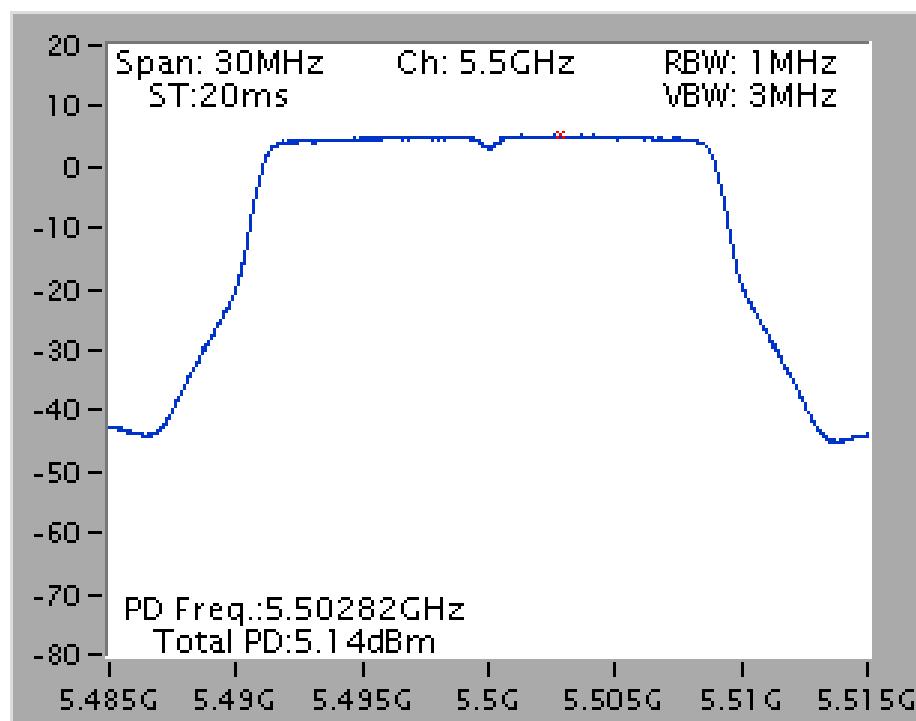
**Power Density Plot on Configuration IEEE 802.11a / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5500 MHz**



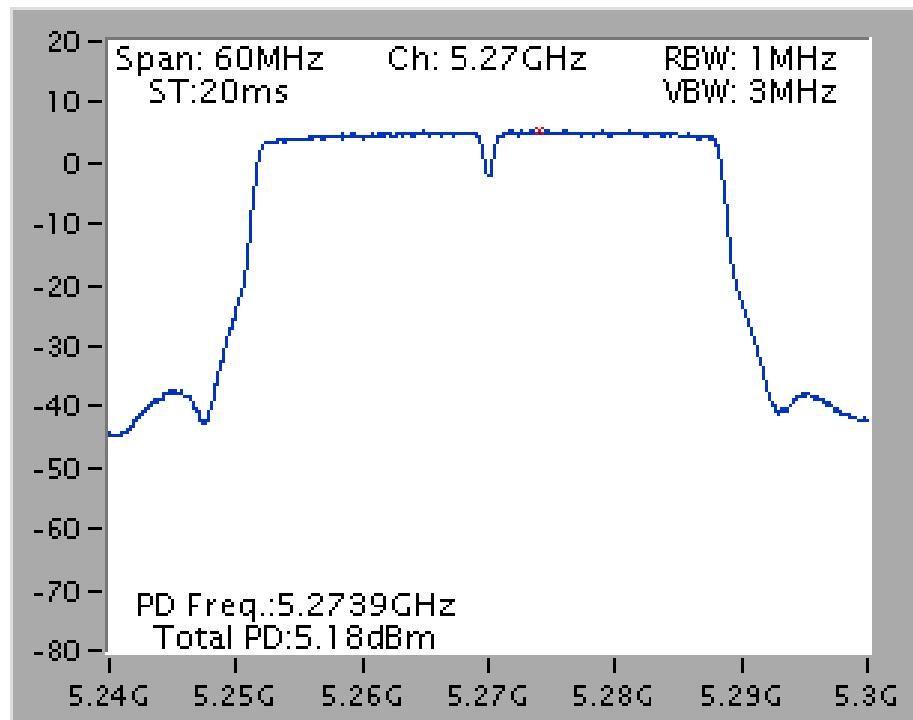
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5260 MHz**



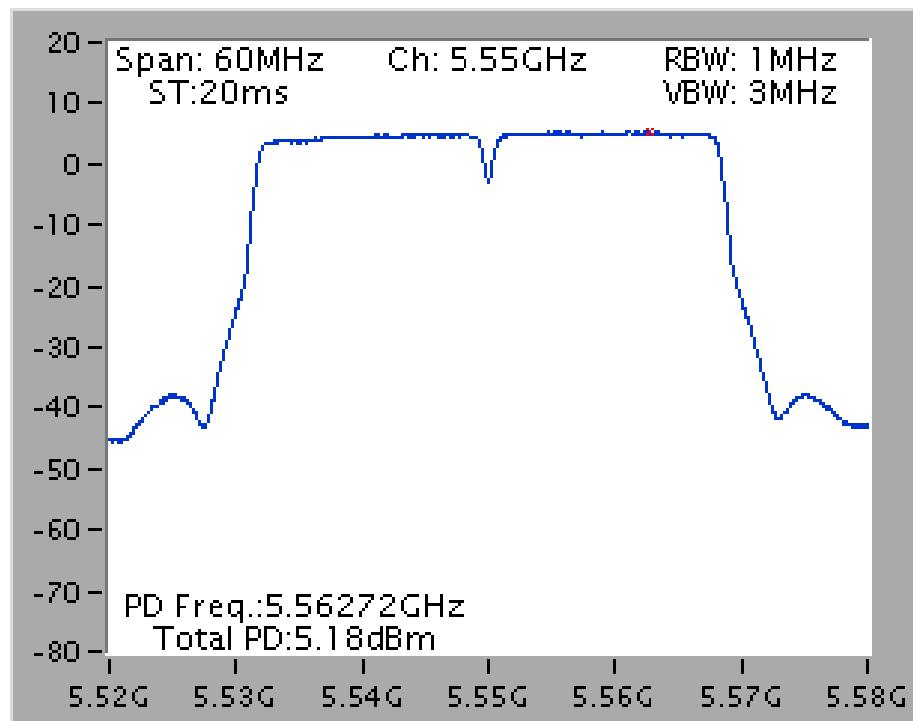
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5500 MHz**



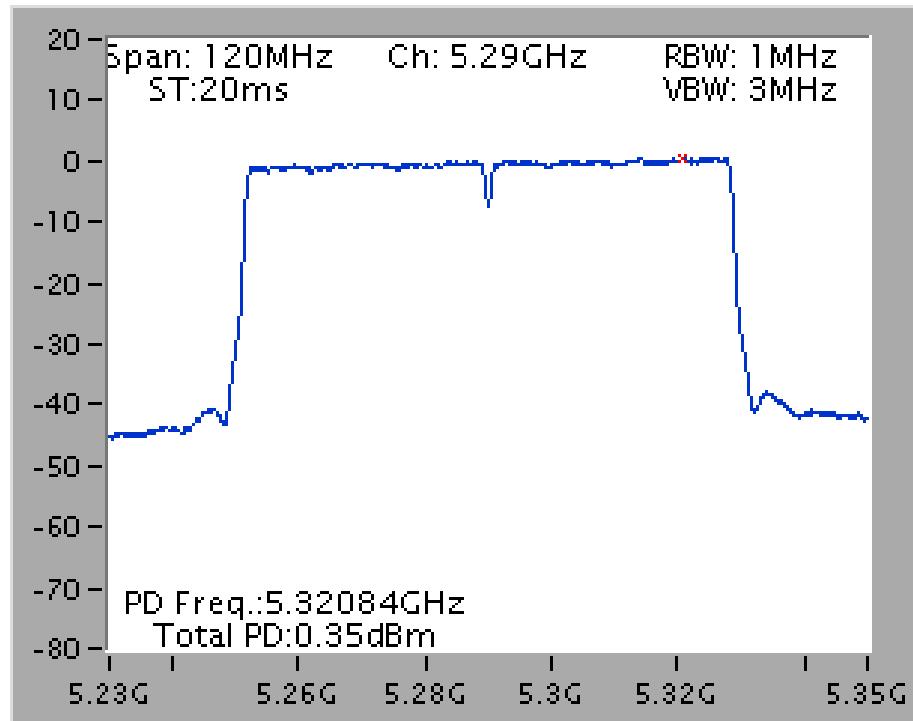
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5270 MHz**



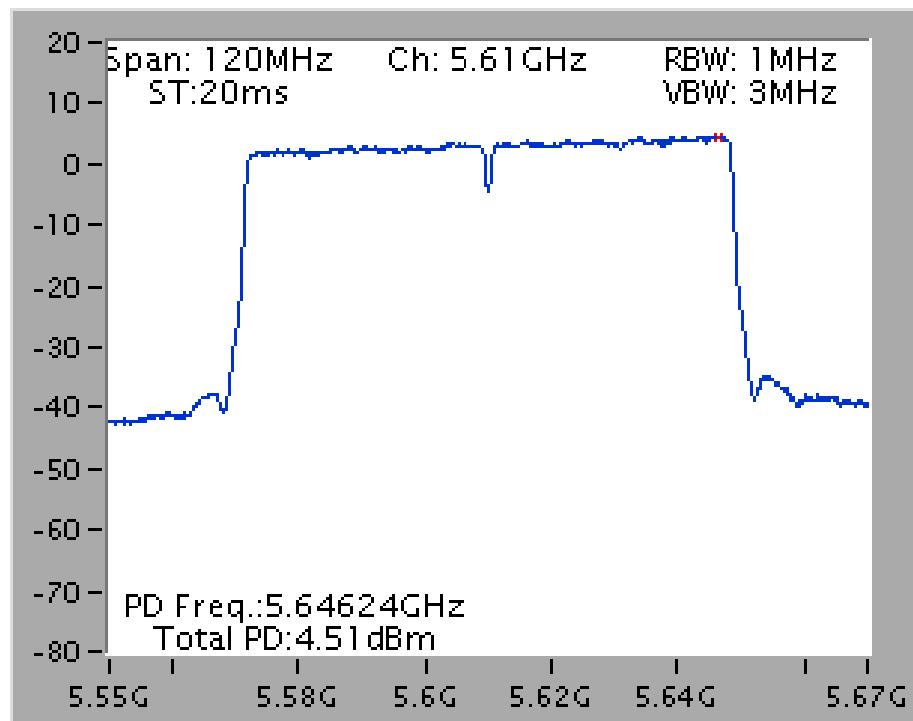
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5550 MHz**



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

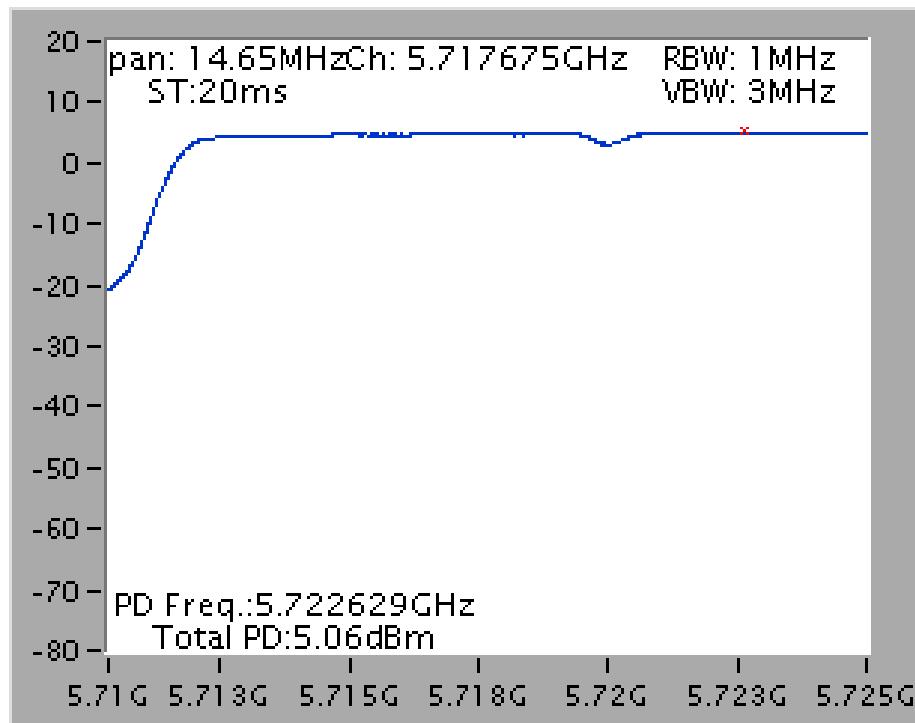


**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5610 MHz**

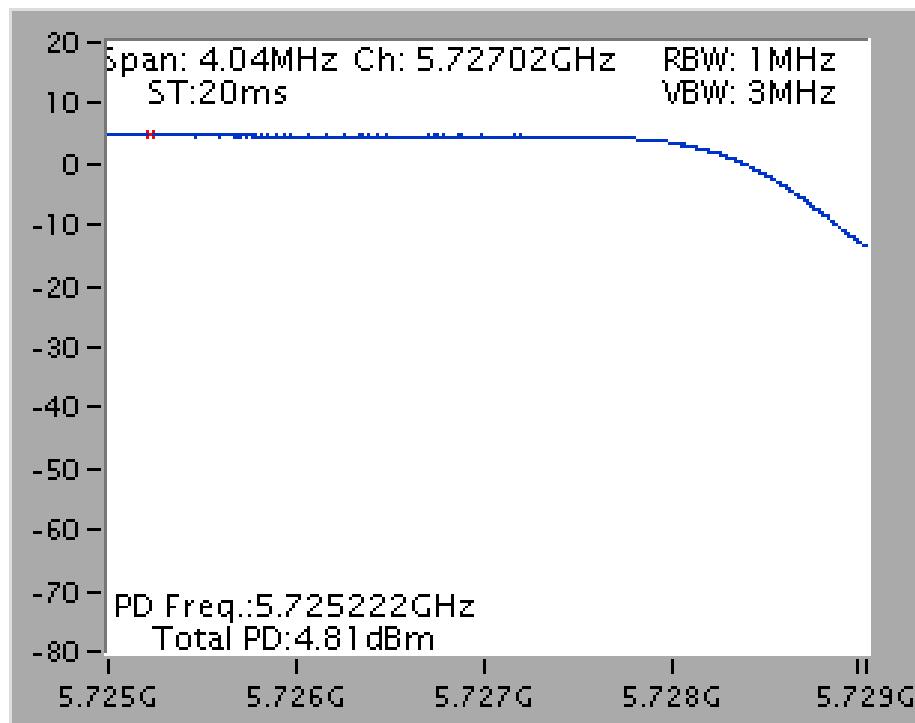


### Straddle Channel

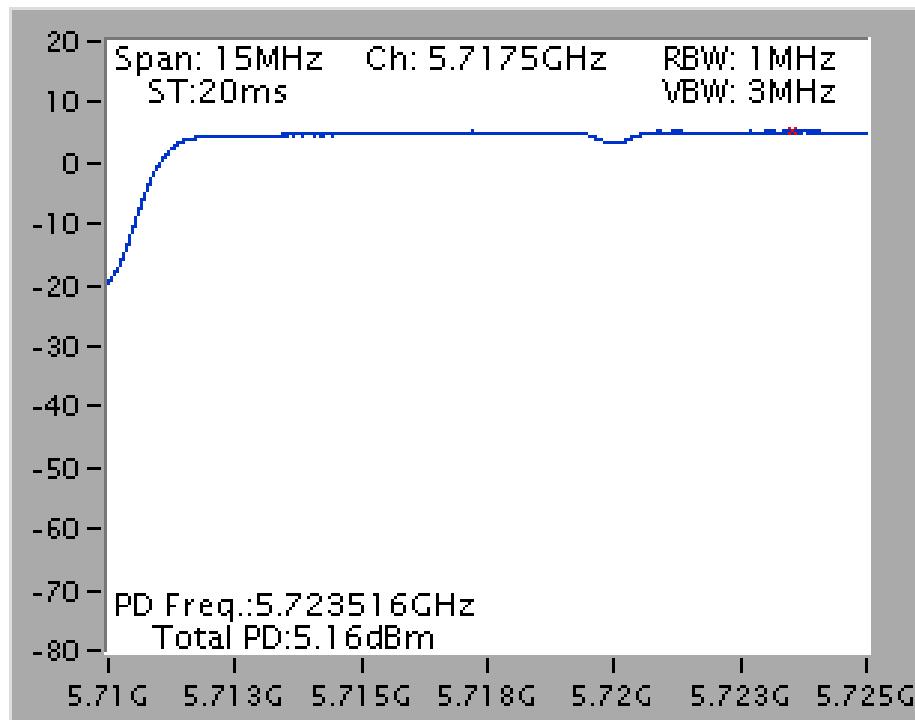
**Power Density Plot on Configuration IEEE 802.11a / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 2C)**



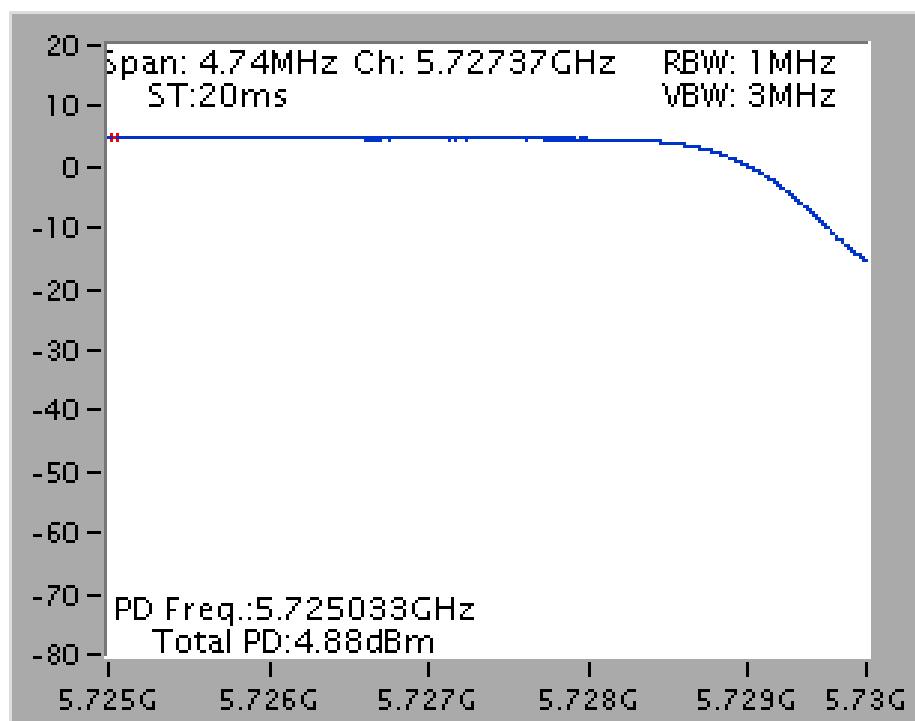
**Power Density Plot on Configuration IEEE 802.11a / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 3)**



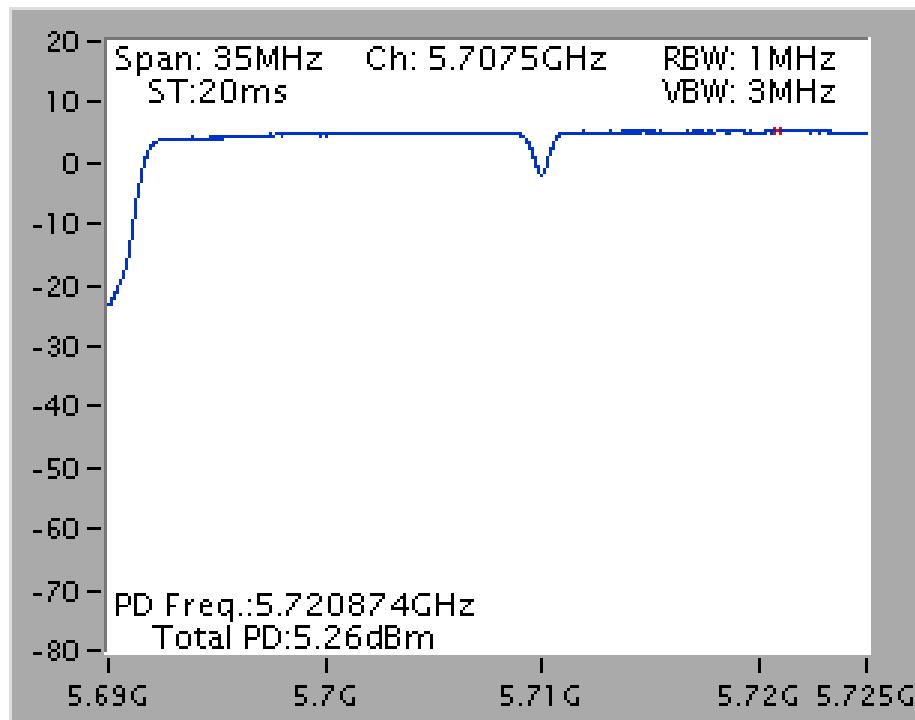
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 2C)**



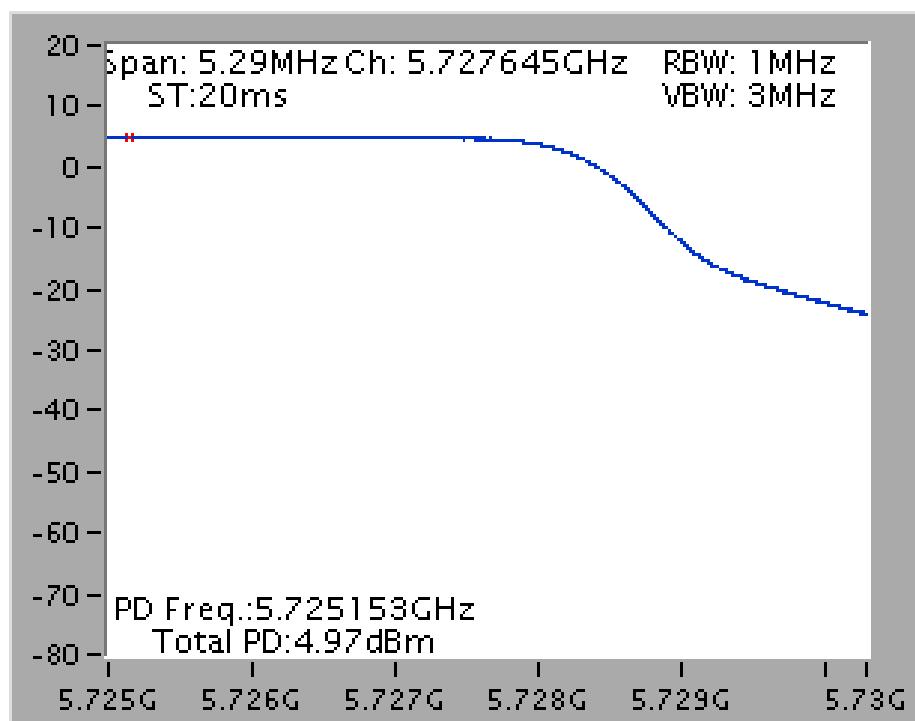
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 3)**



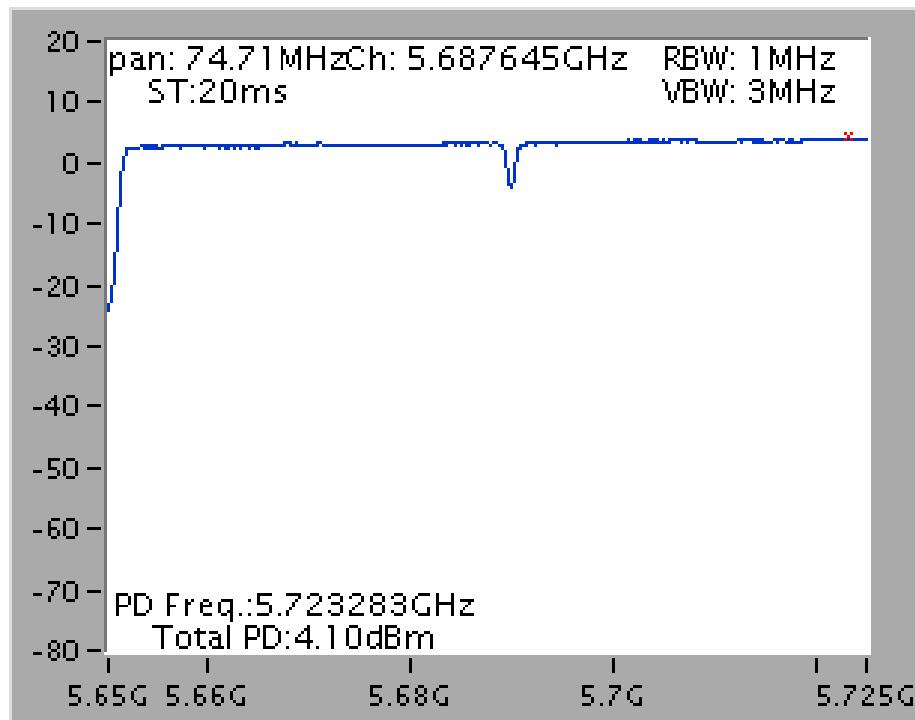
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5710 MHz (UNII 2C)**



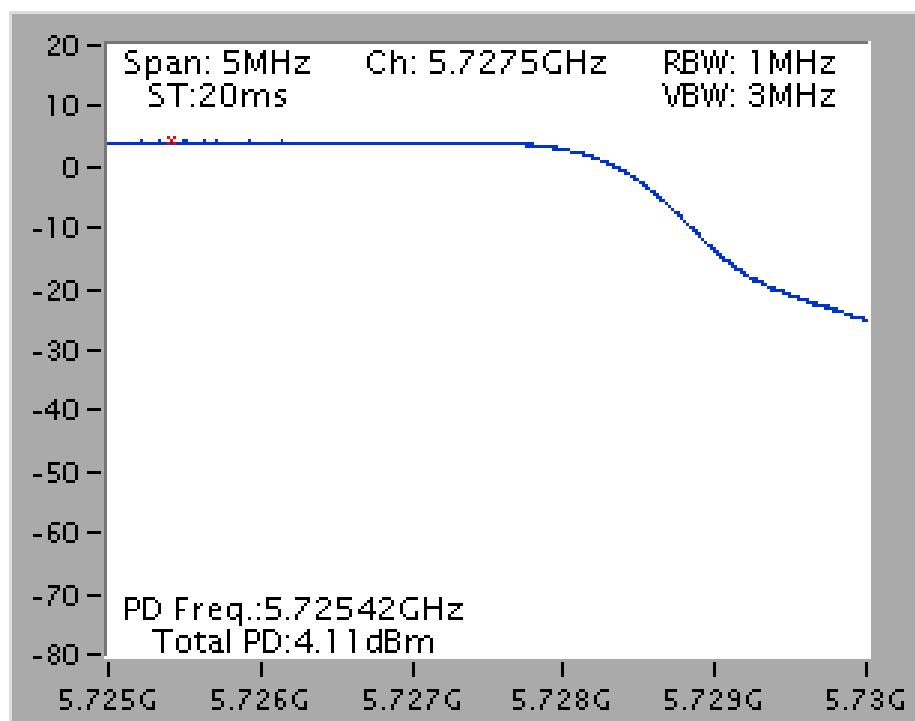
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5710 MHz (UNII 3)**



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



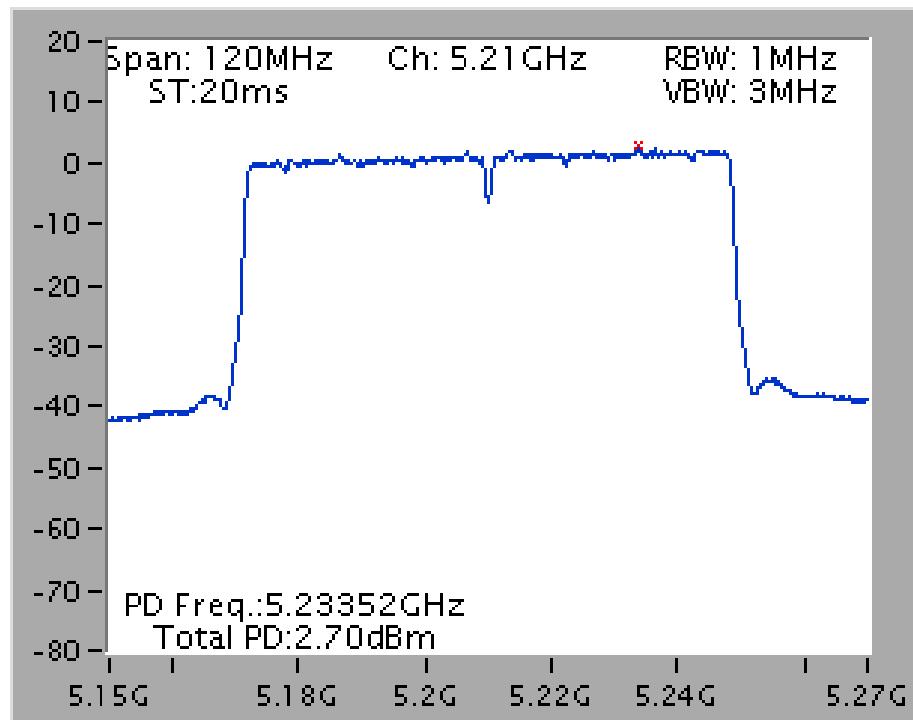
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5690 MHz (UNII 3)**



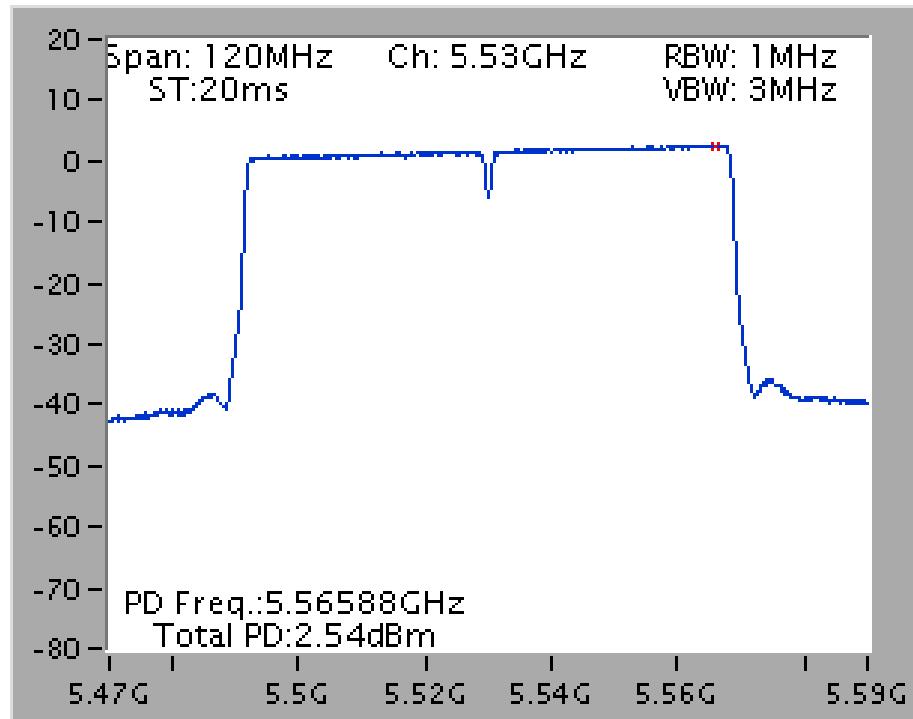
**802.11ac MCS0/Nss2 VHT80+80**

**Type 1**

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

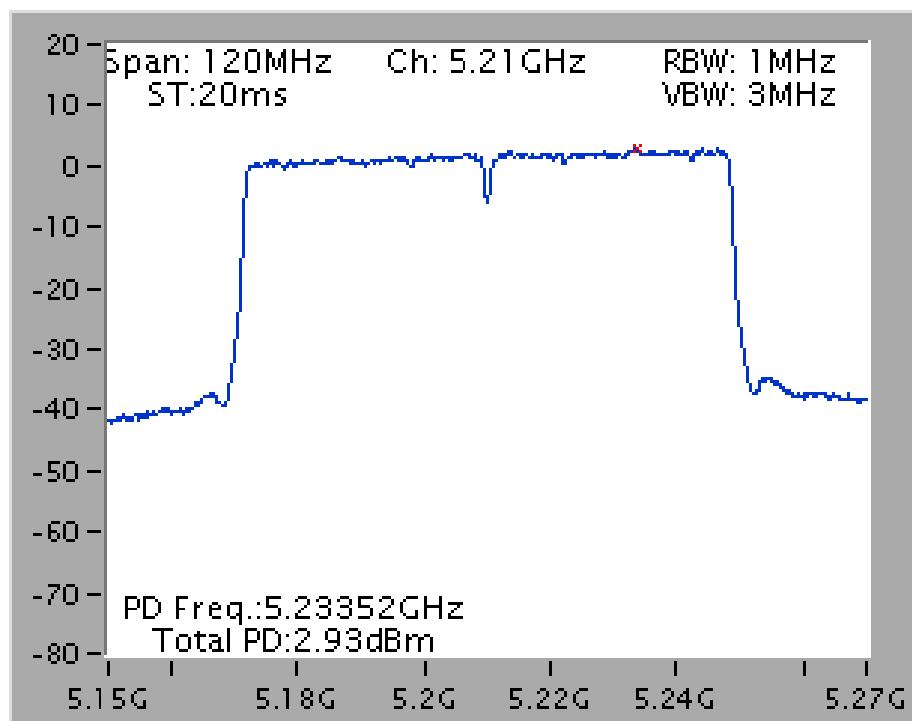


**Power Density Plot on Chain 5 + Chain 8 / 5530 MHz**

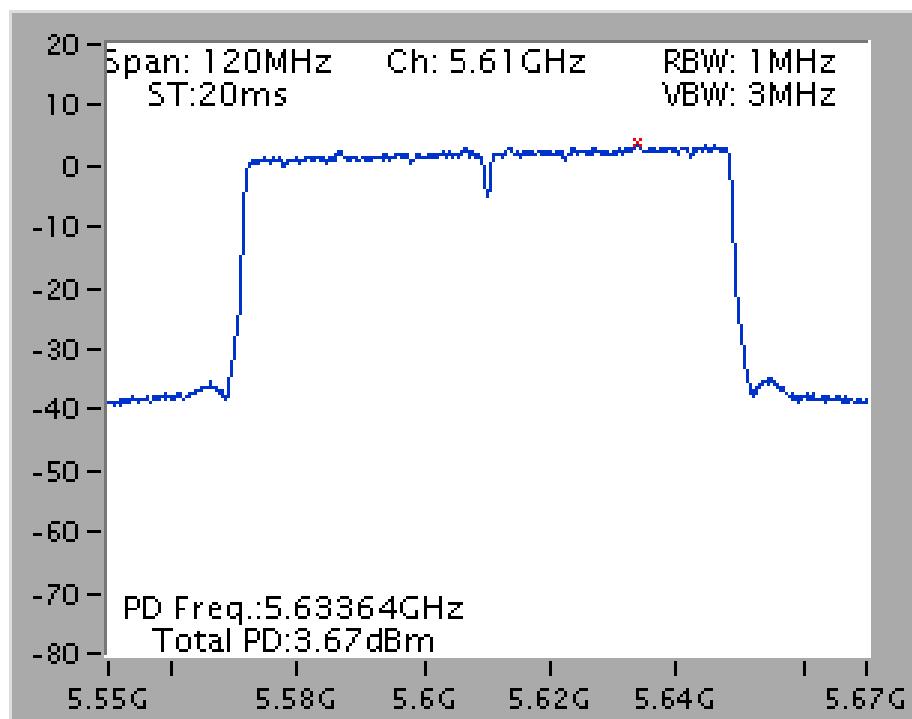


**Type 2**

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

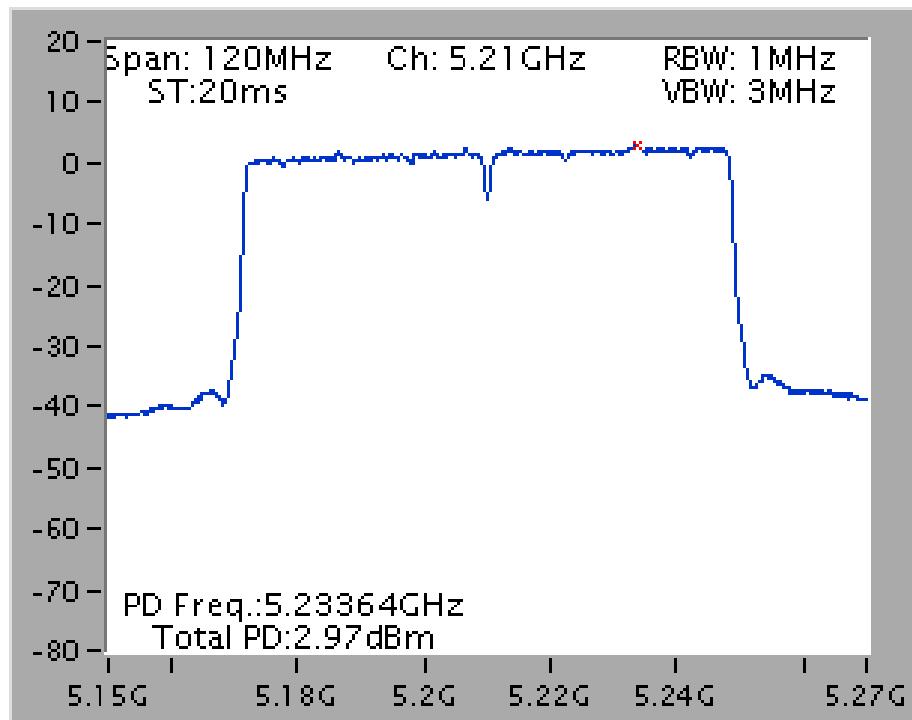


**Power Density Plot on Chain 5 + Chain 8 / 5610 MHz**

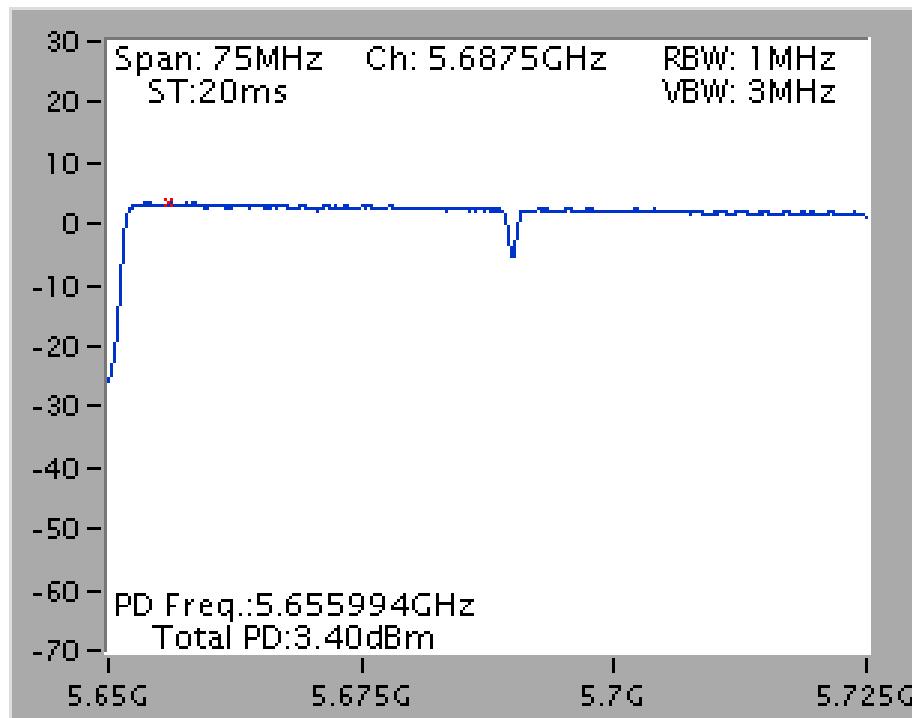


**Type 3**

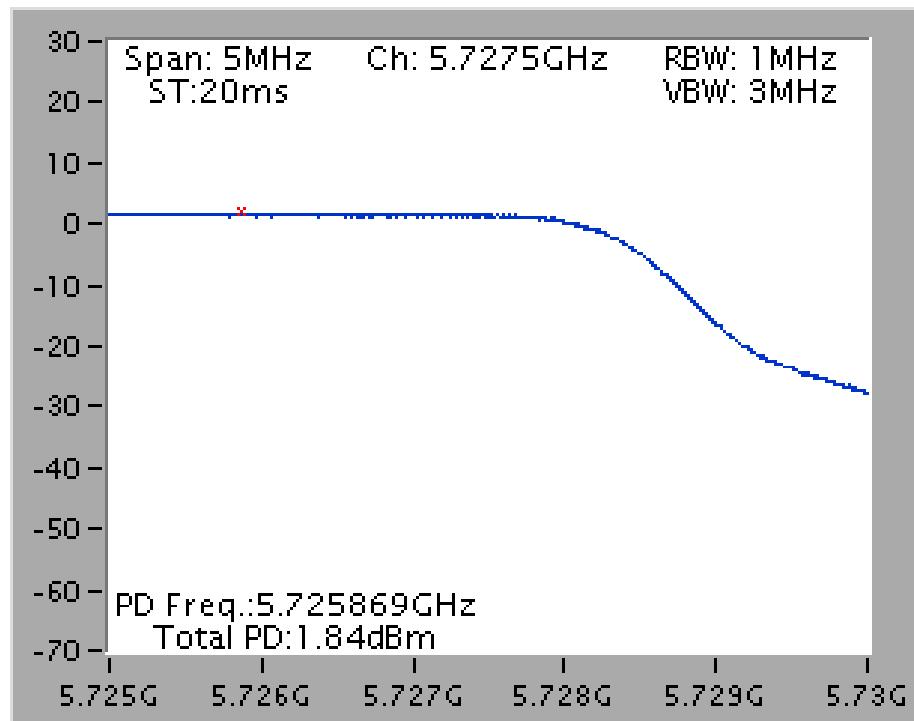
**Power Density Plot on Chain 6 + Chain 7 / 5210 MHz**



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

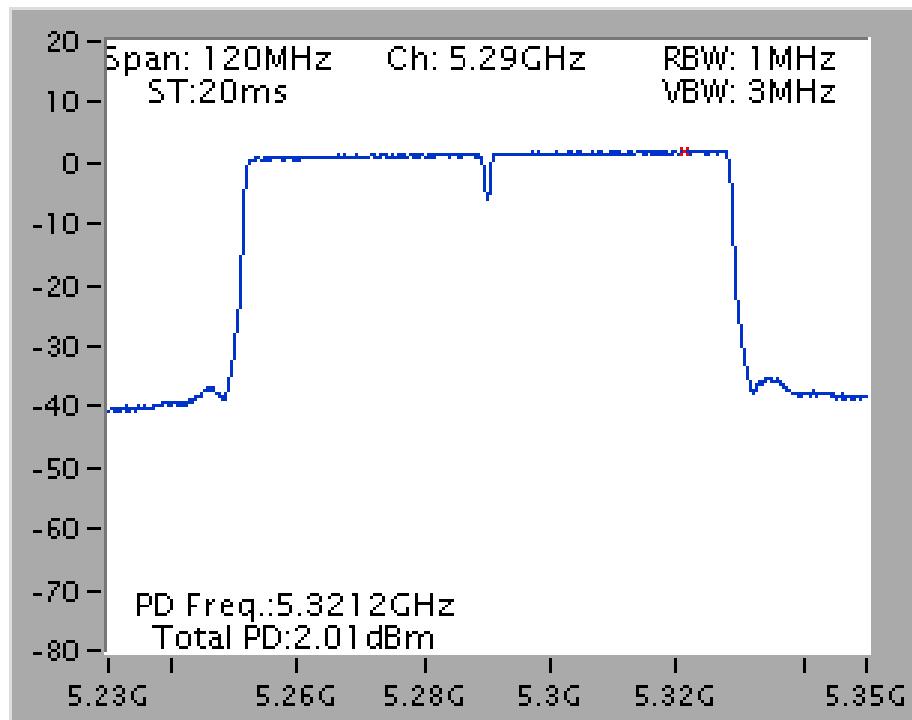


**Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)**

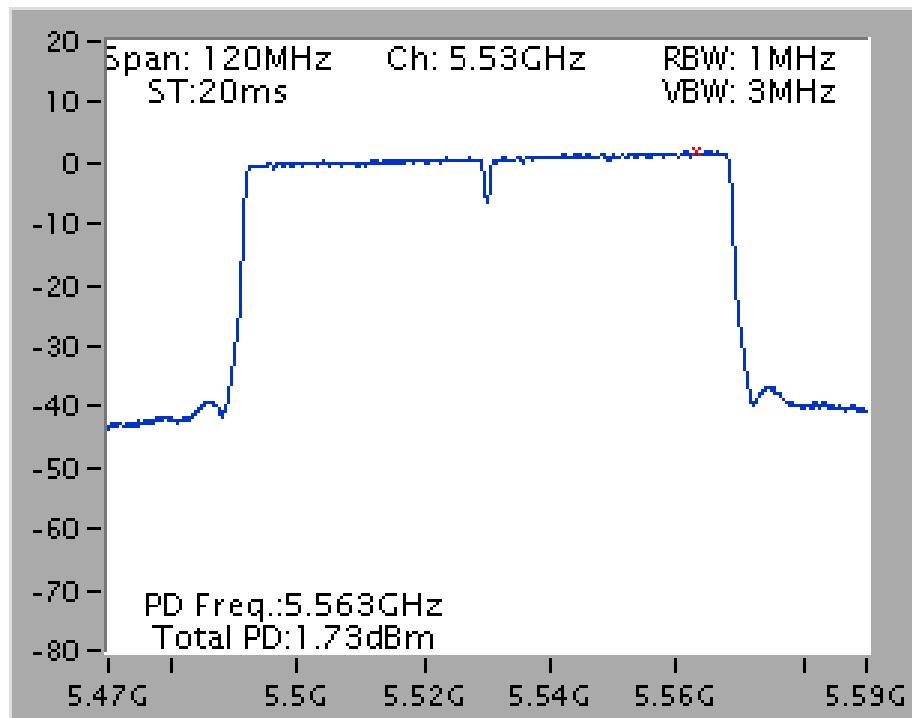


**Type 4**

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

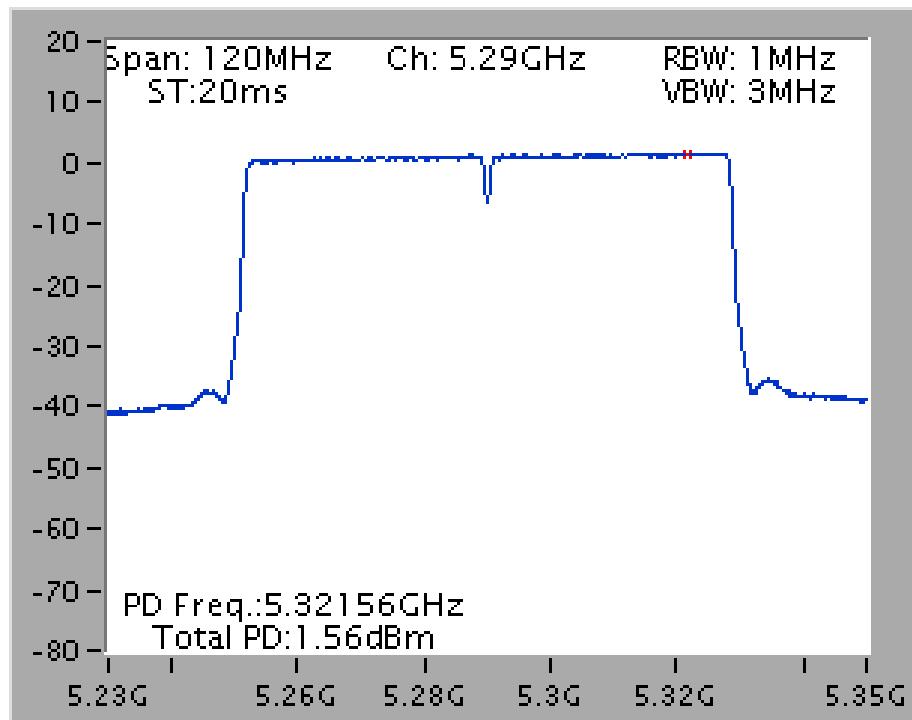


**Power Density Plot on Chain 5 + Chain 8 / 5530 MHz**

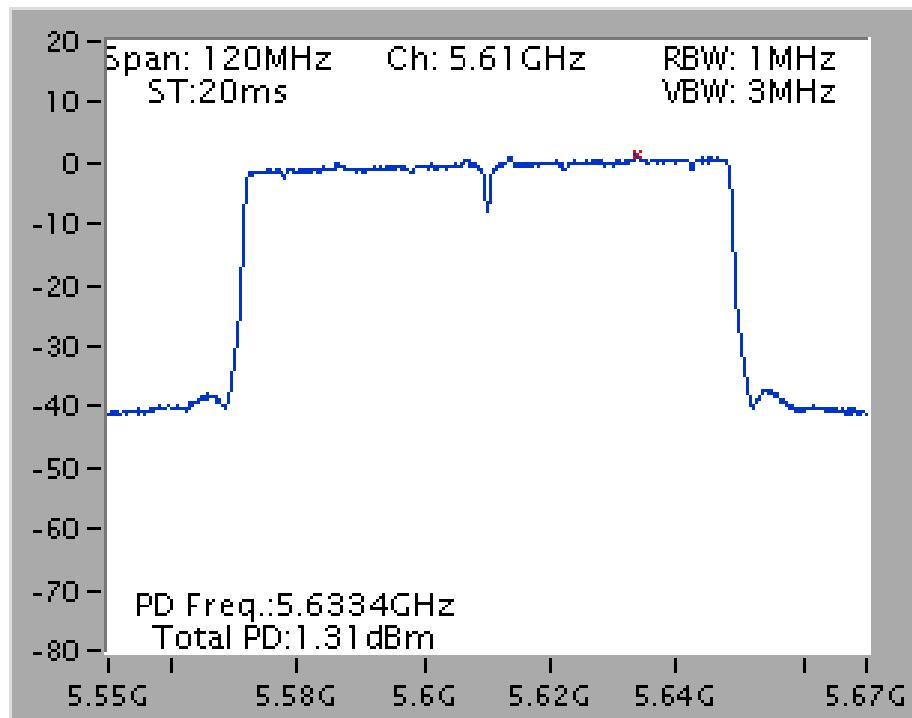


**Type 5**

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

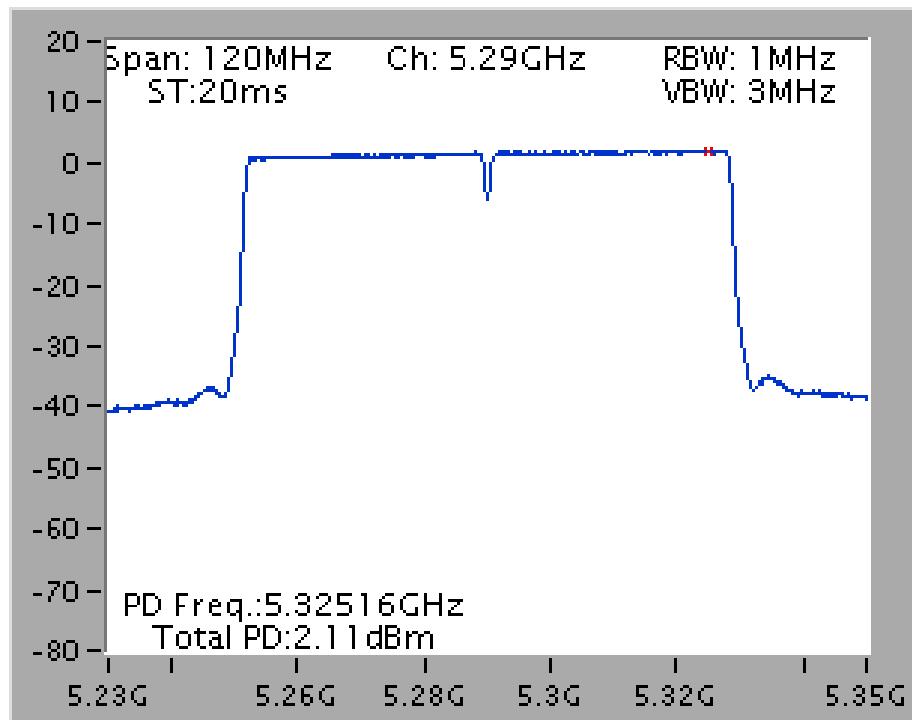


**Power Density Plot on Chain 5 + Chain 8 / 5610 MHz**

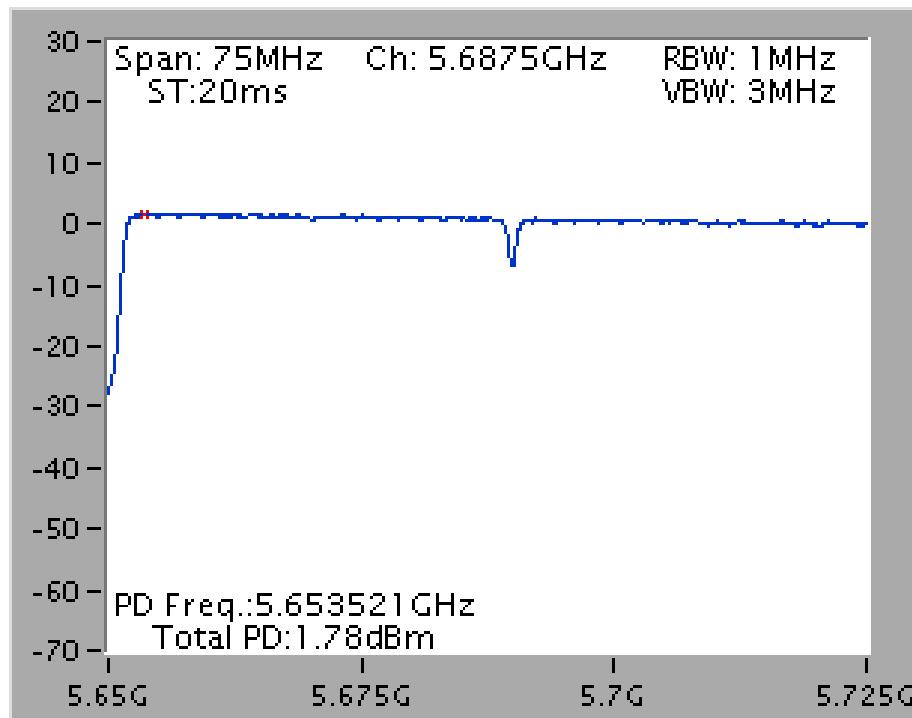


**Type 6**

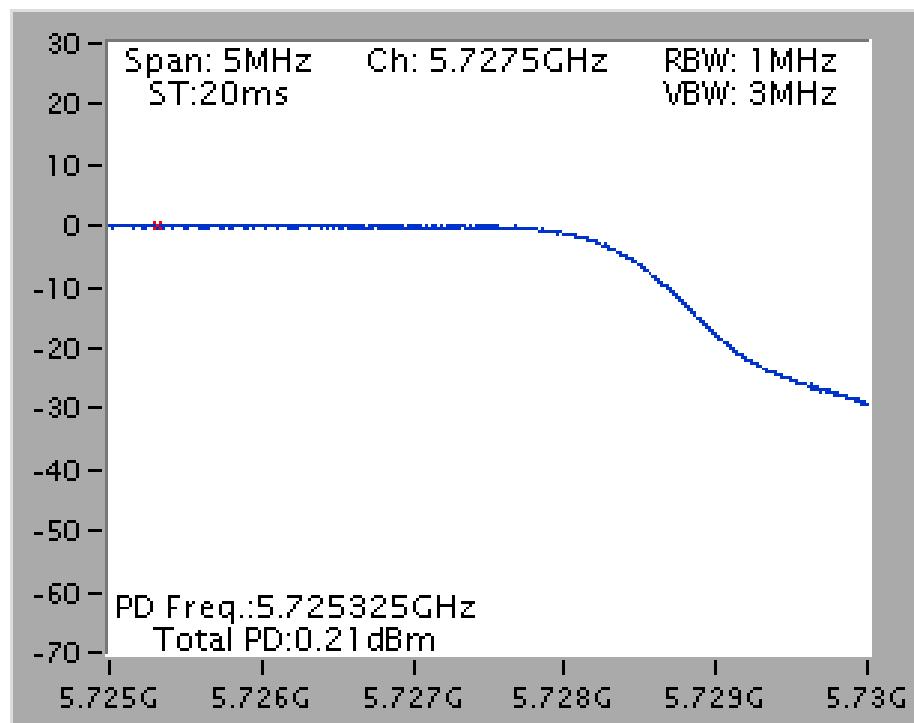
**Power Density Plot on Chain 6 + Chain 7 / 5290 MHz**



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

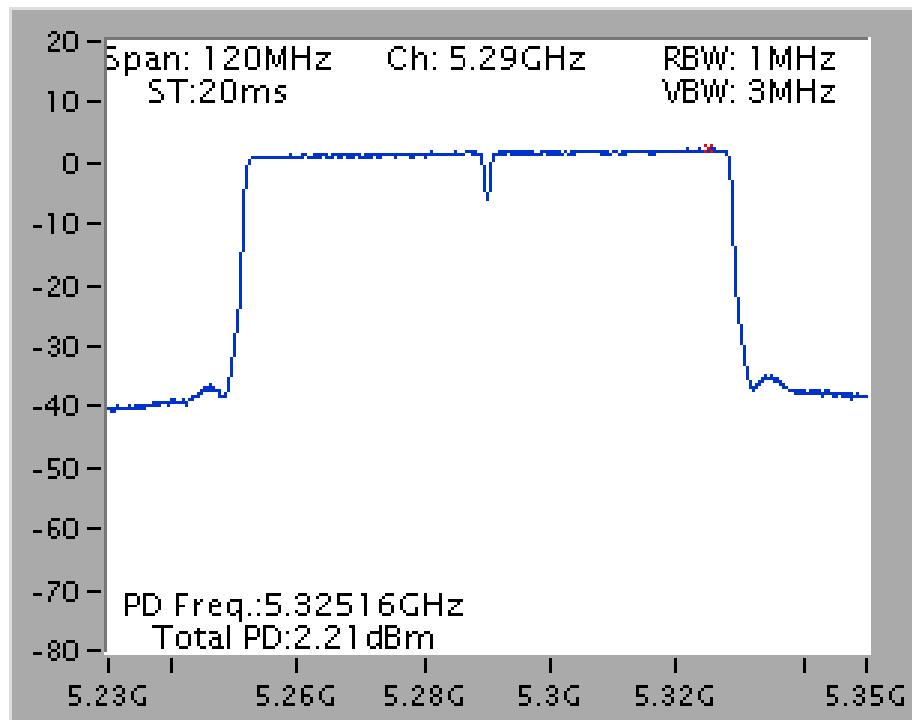


**Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)**

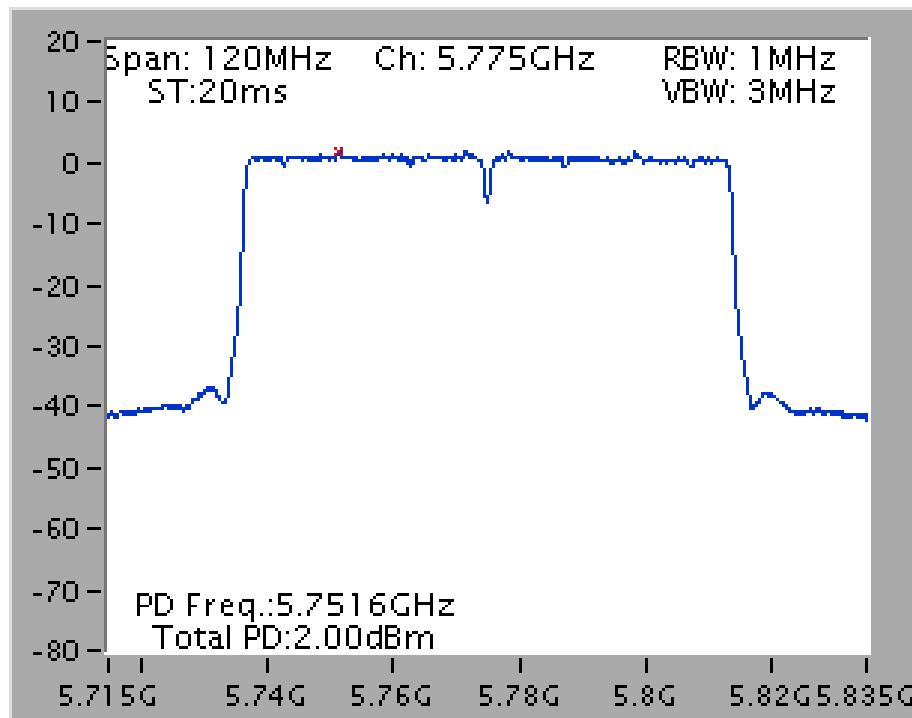


**Type 7**

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

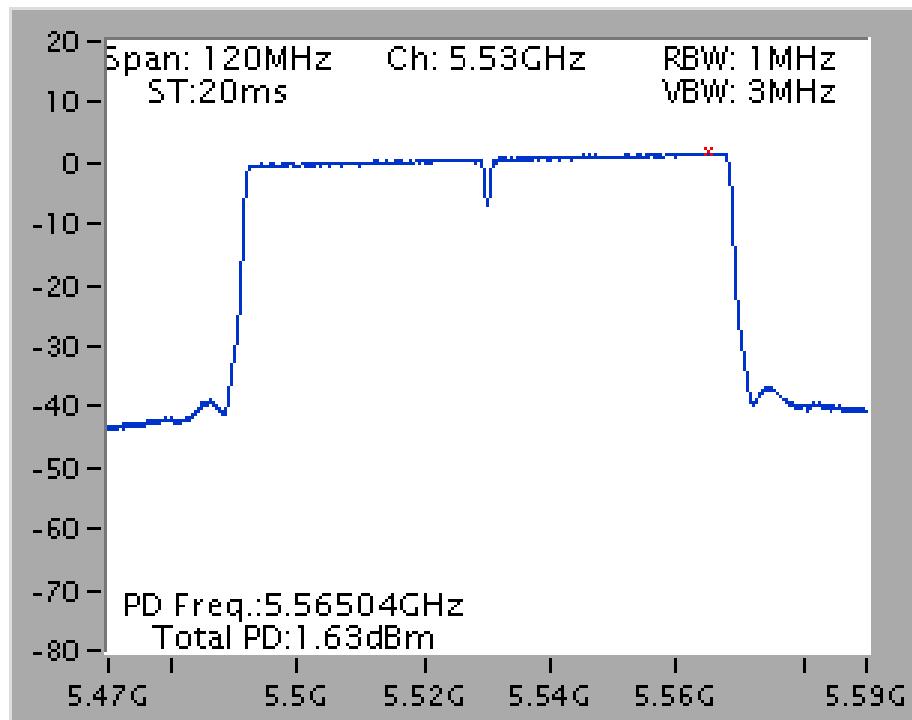


**Power Density Plot on Chain 5 + Chain 8 / 5775 MHz**

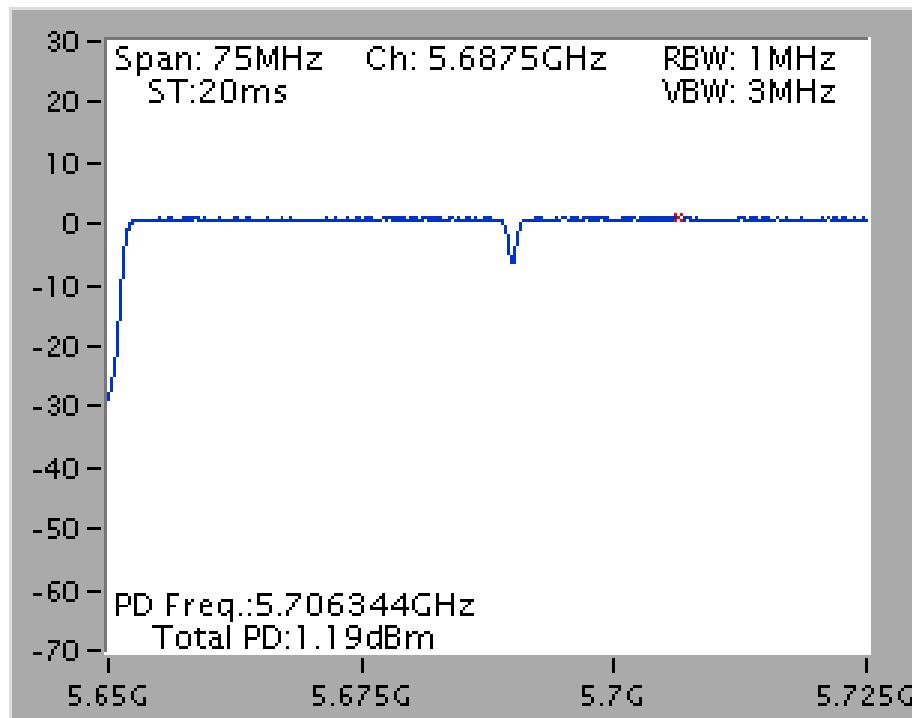


**Type 8**

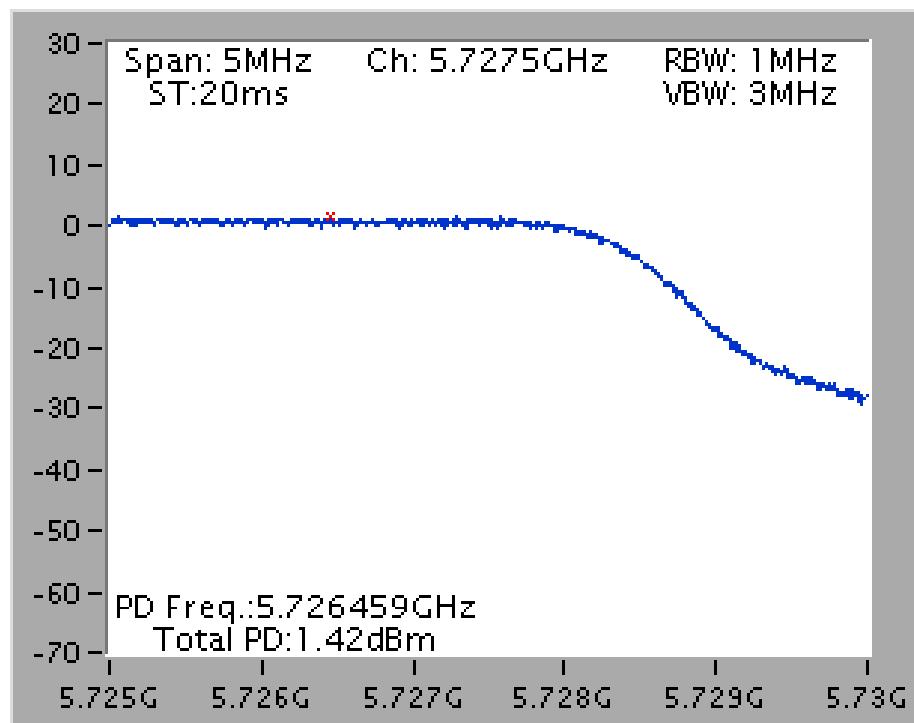
**Power Density Plot on Chain 6 + Chain 7 / 5530 MHz**



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

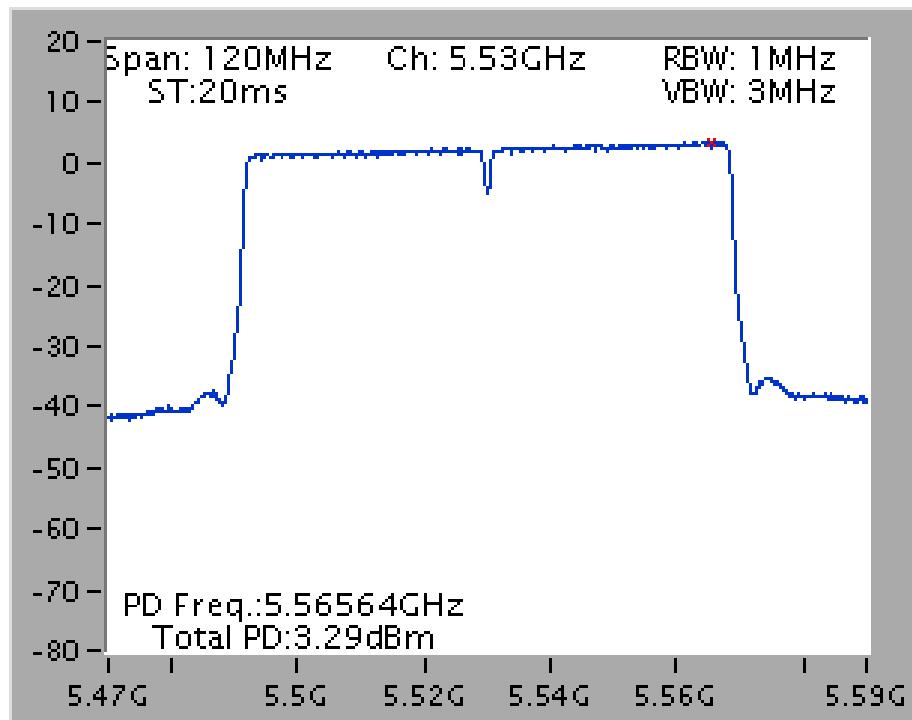


**Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)**

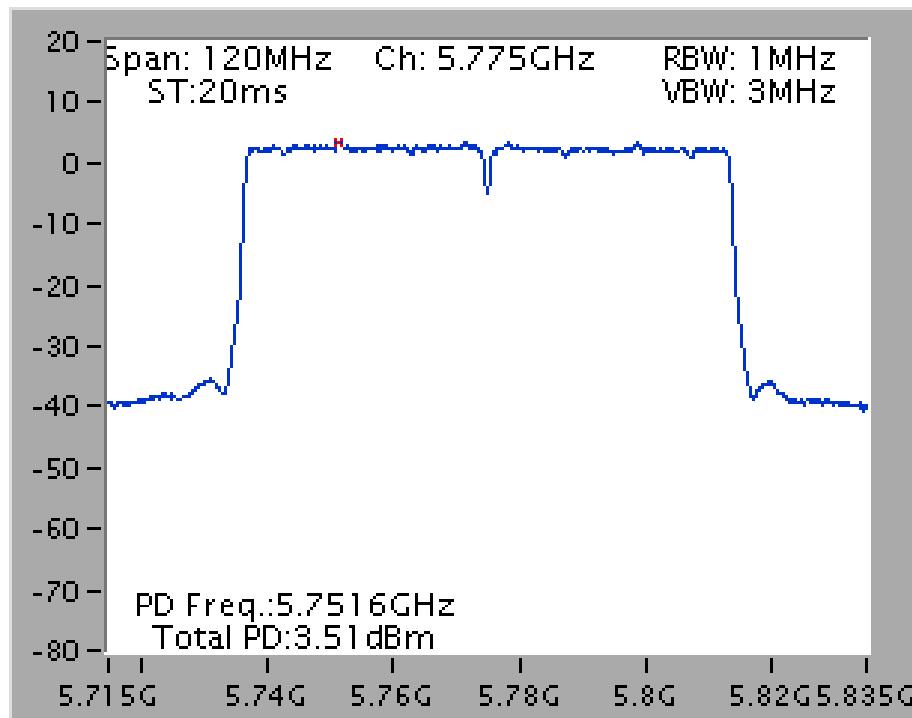


**Type 9**

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

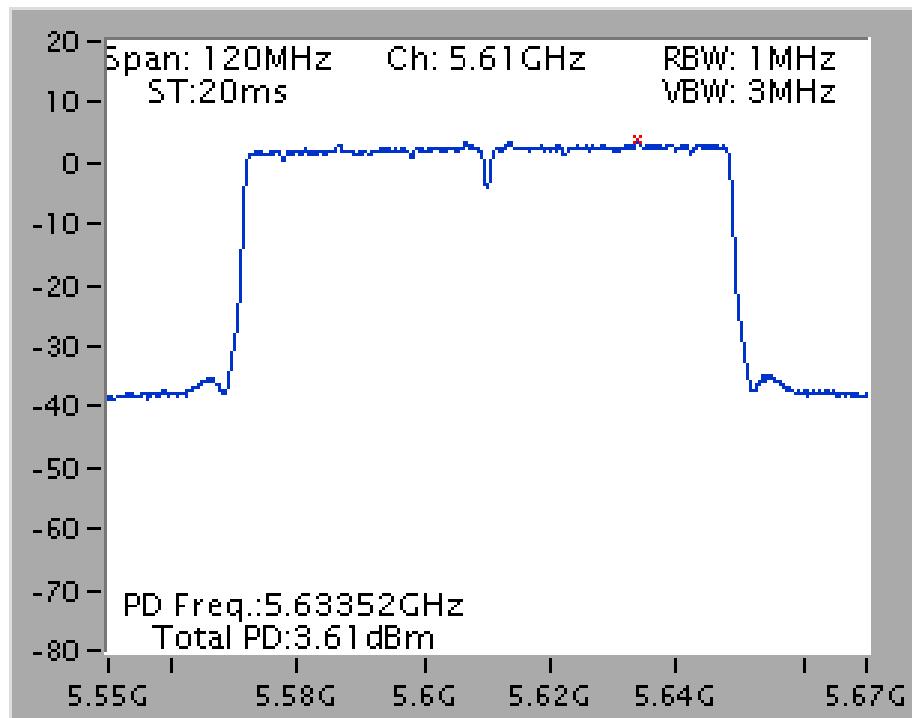


**Power Density Plot on Chain 5 + Chain 8 / 5775 MHz**

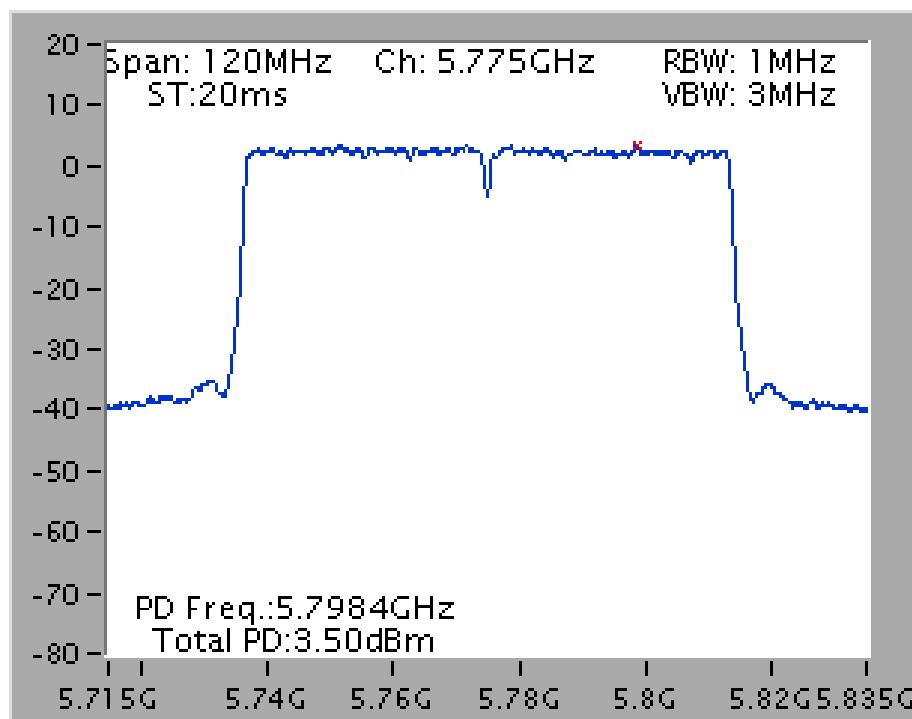


**Type 10**

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

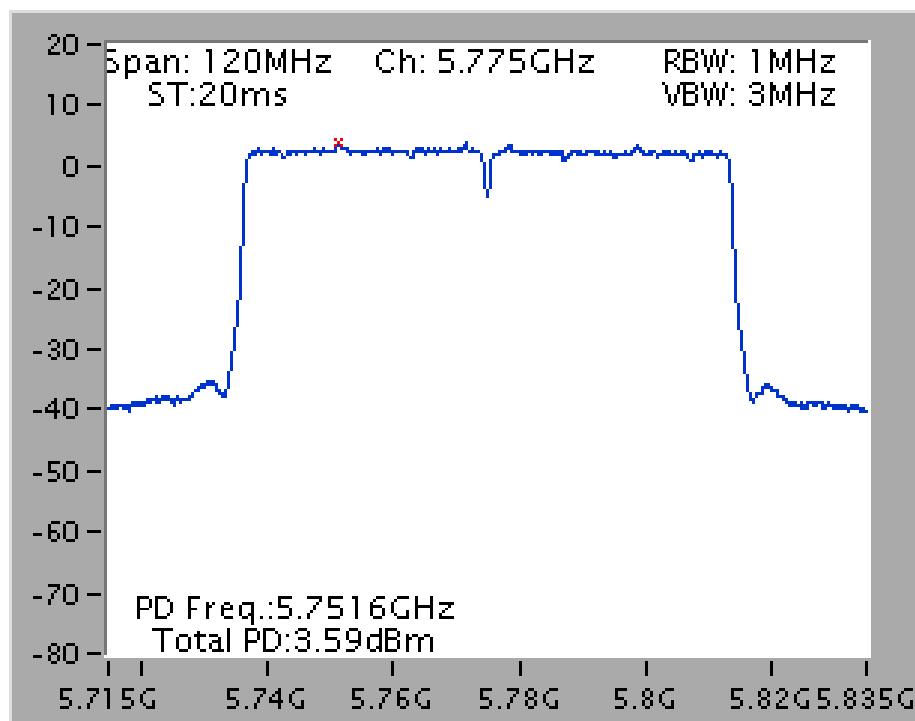


**Power Density Plot on Chain 5 + Chain 8 / 5775 MHz**

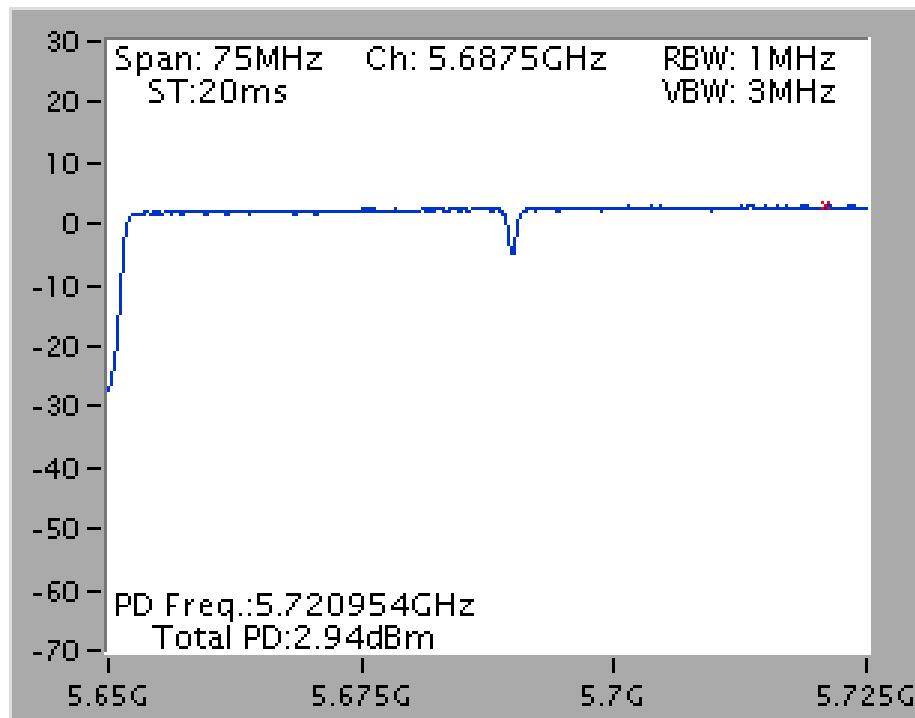


**Type 11**

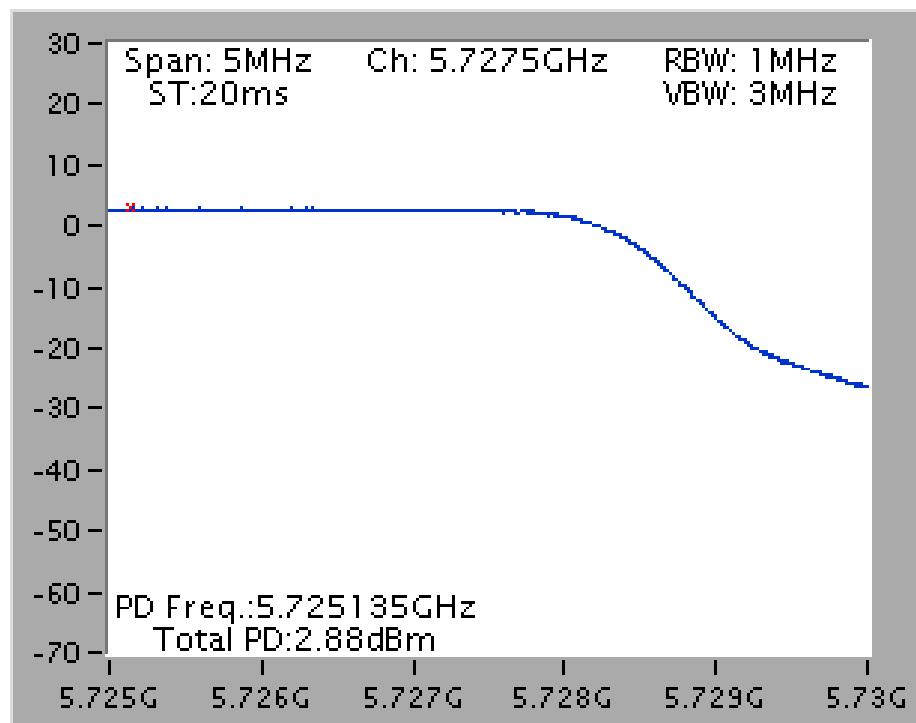
**Power Density Plot on Chain 5 + Chain 8 / 5775 MHz**



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

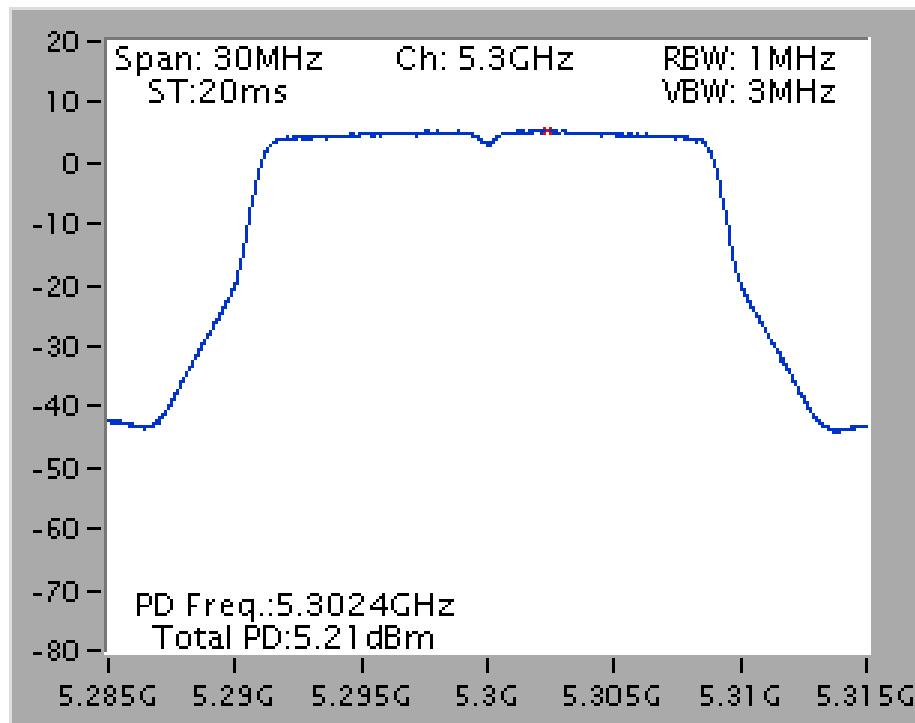


**Power Density Plot on Chain 6 + Chain 7 / 5690 MHz (UNII 3)**

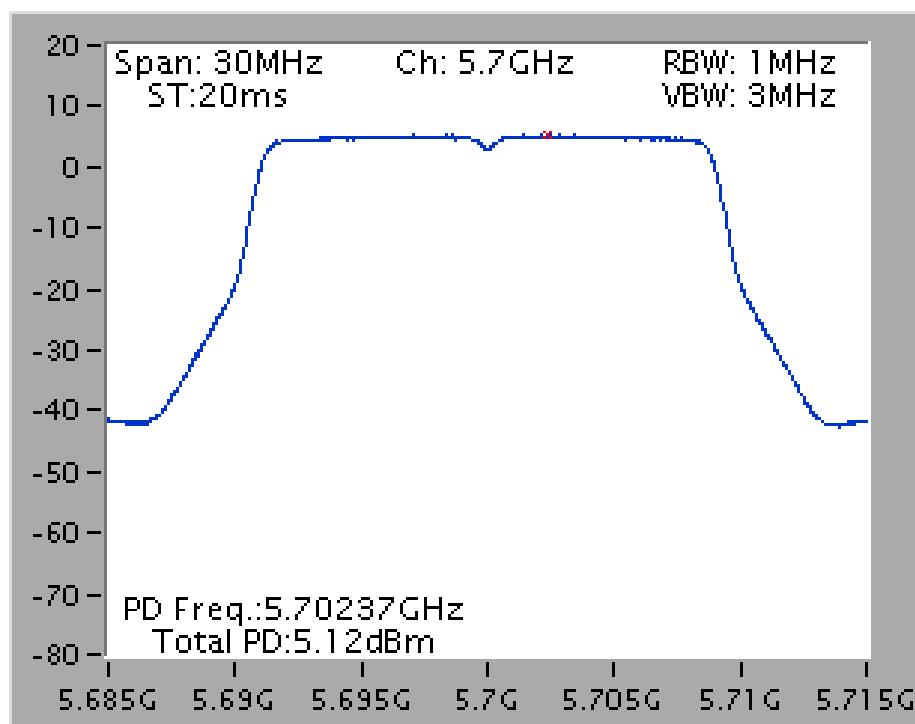


<For Beamforming Mode>

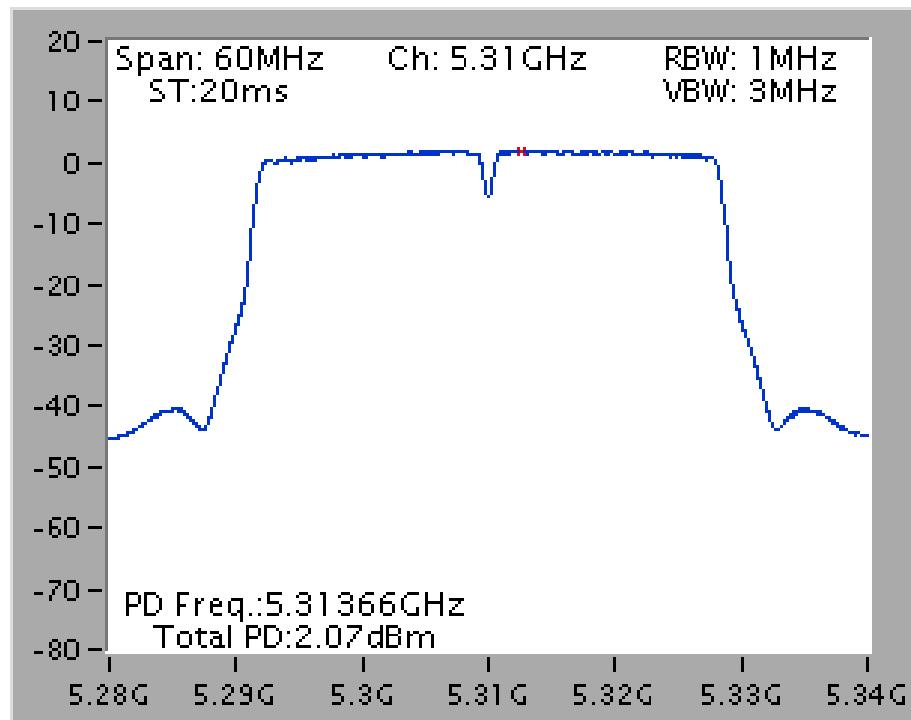
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5300 MHz



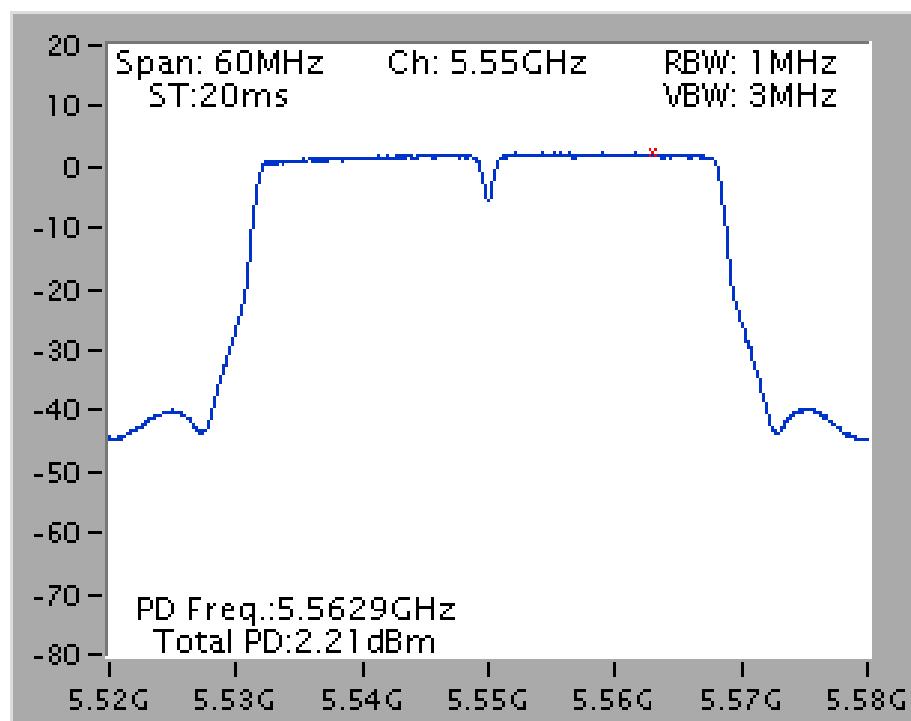
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5700 MHz



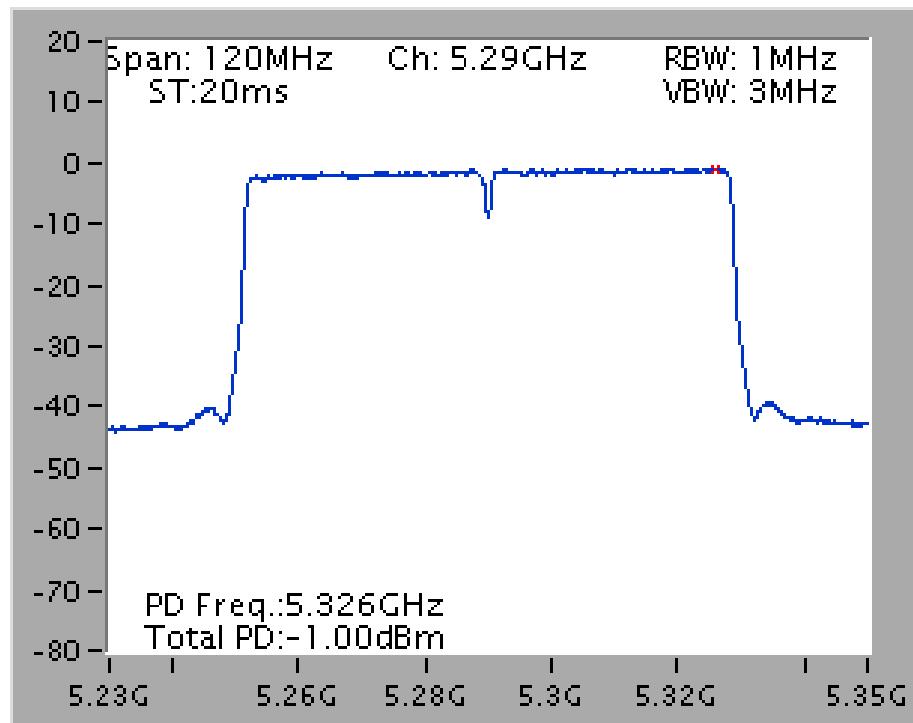
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5310 MHz**



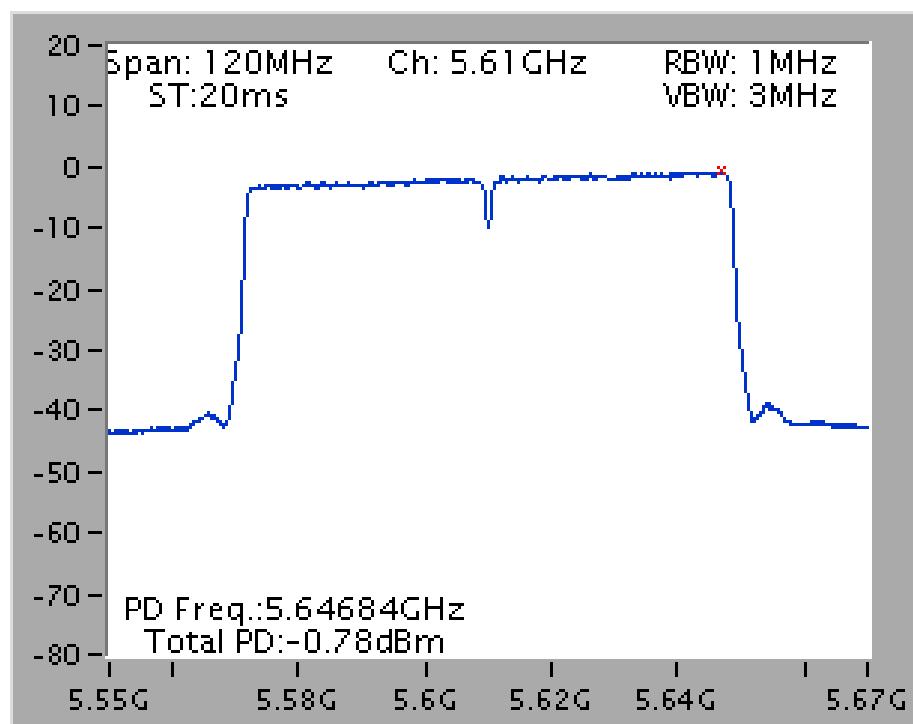
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5550 MHz**



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

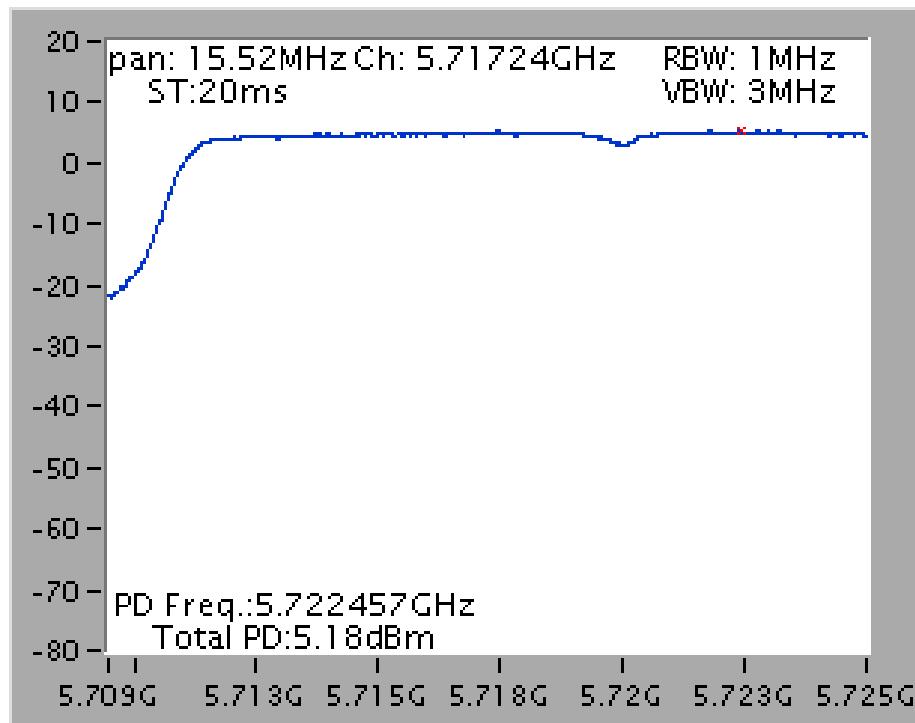


**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5610 MHz**

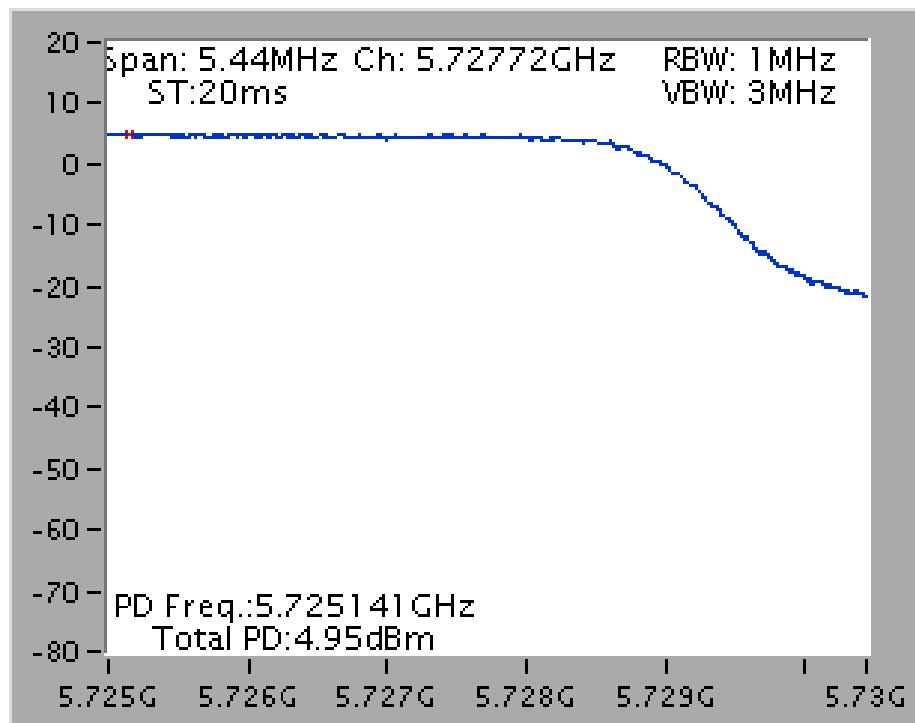


**Straddle Channel**

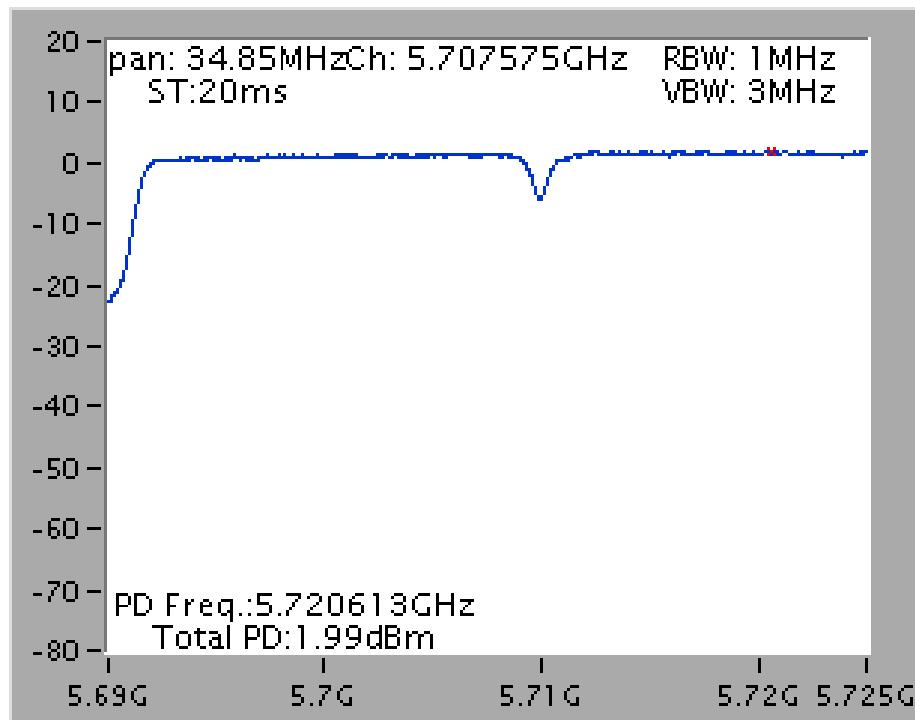
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 2C)**



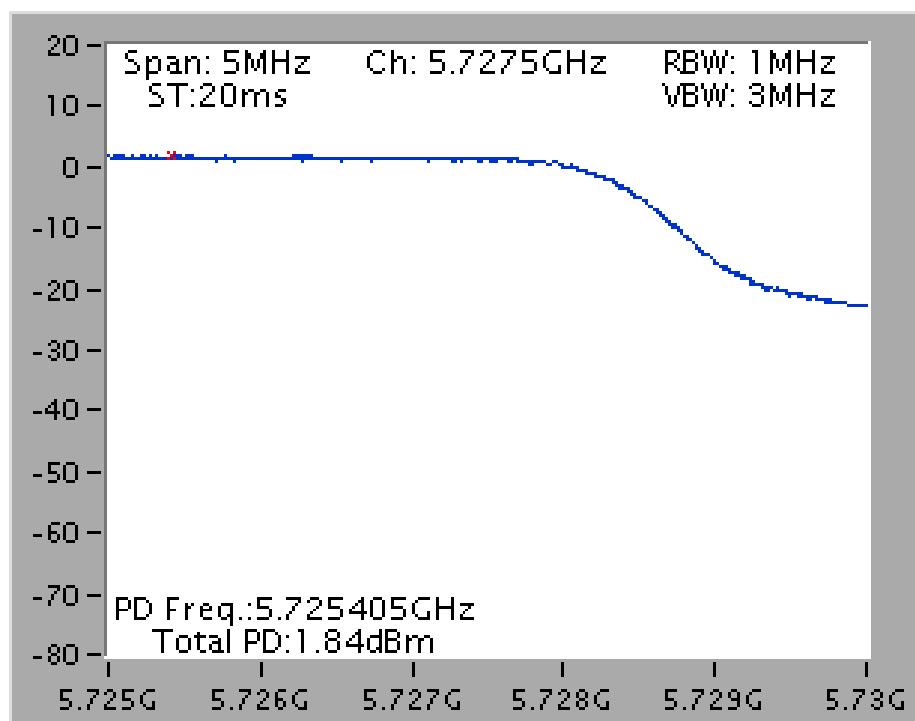
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5720 MHz (UNII 3)**



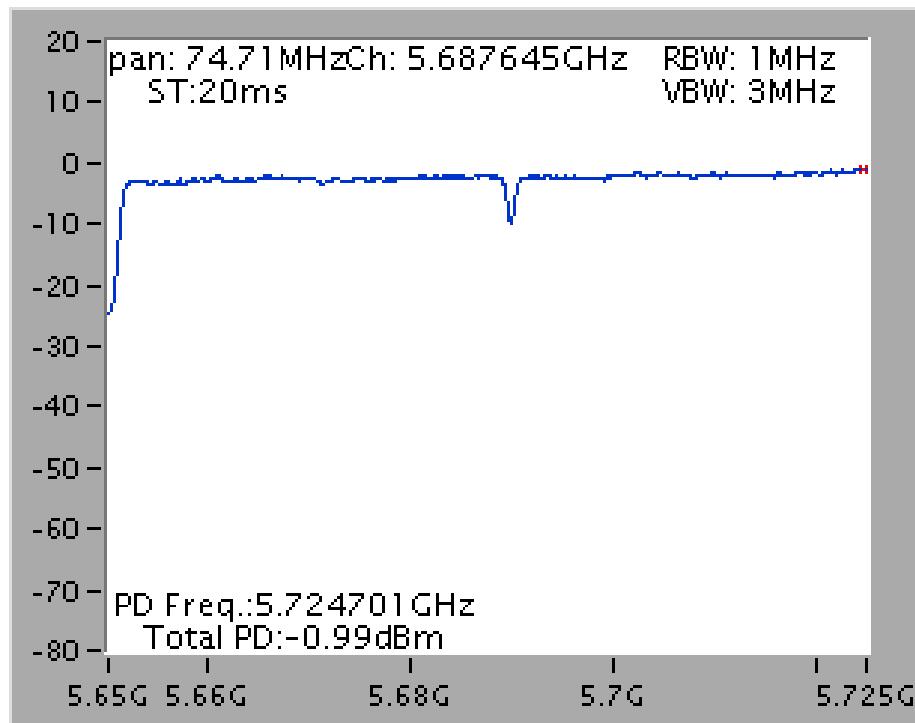
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5710 MHz (UNII 2C)**



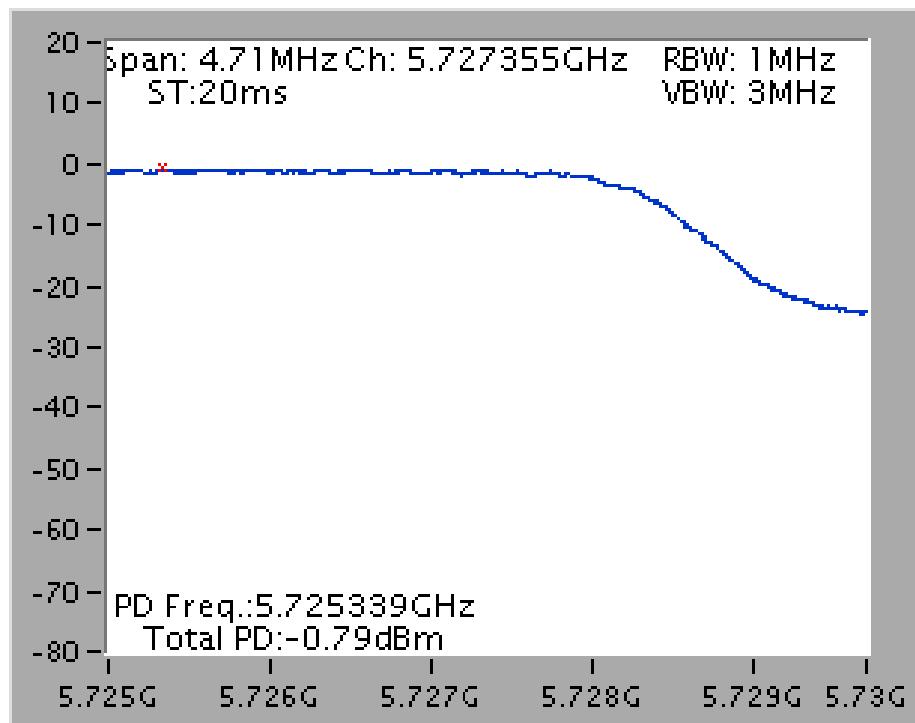
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5710 MHz (UNII 3)**



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



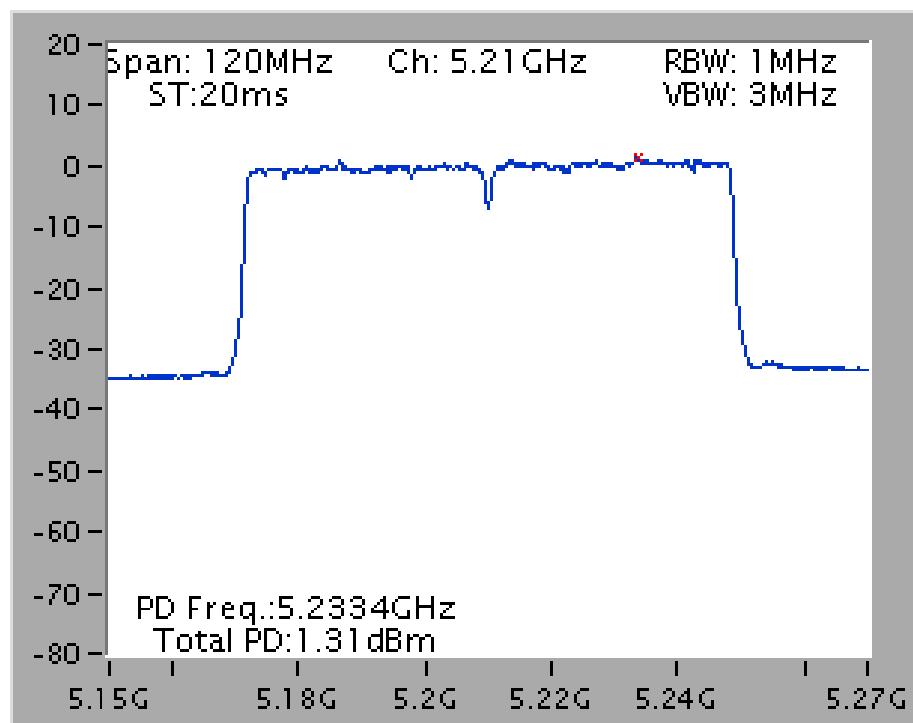
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 5 + Chain 6 + Chain 7 + Chain 8 / 5690 MHz (UNII 3)**



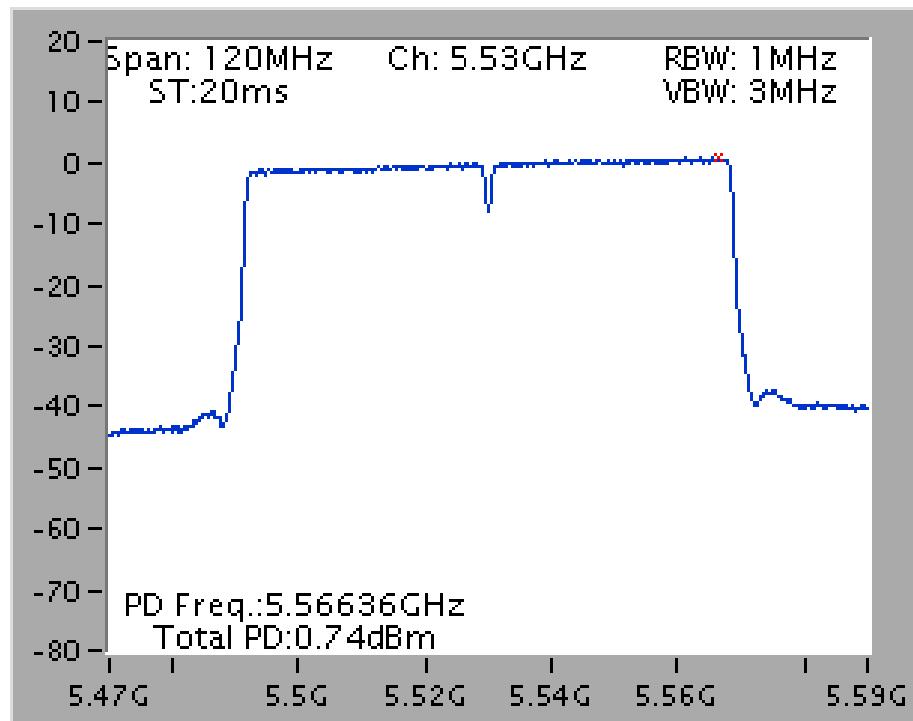
**802.11ac MCS0/Nss2 VHT80+80**

**Type 1**

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

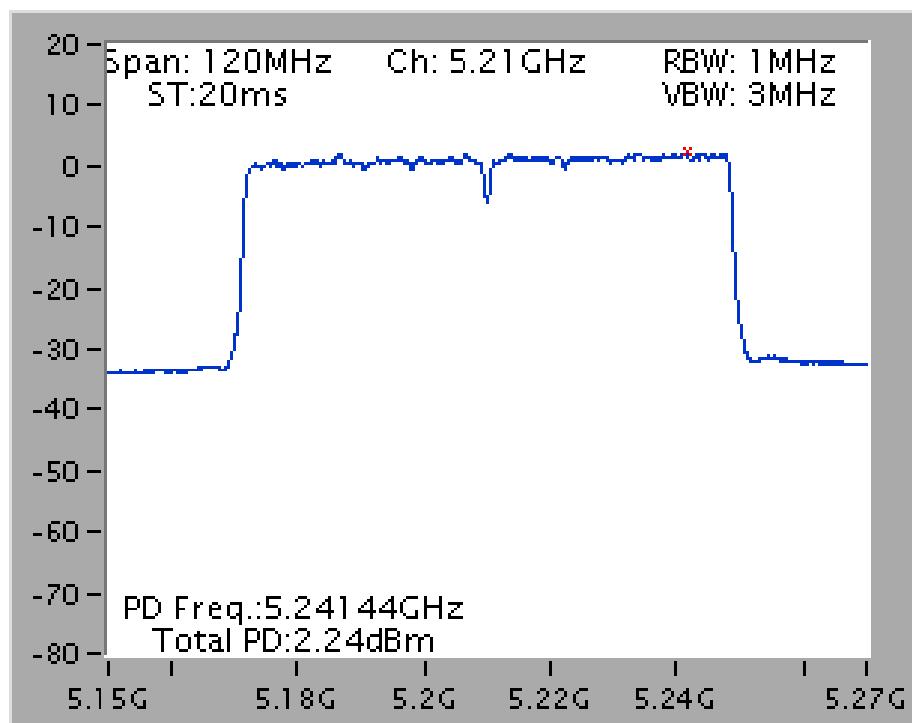


**Power Density Plot on Chain 5 + Chain 8 / 5530 MHz**

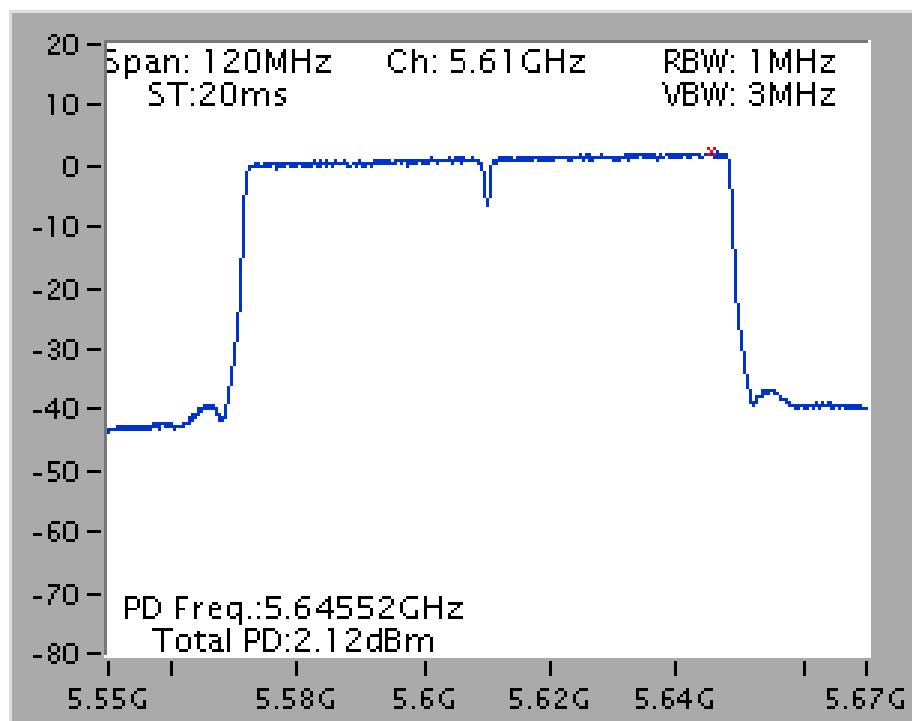


**Type 2**

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

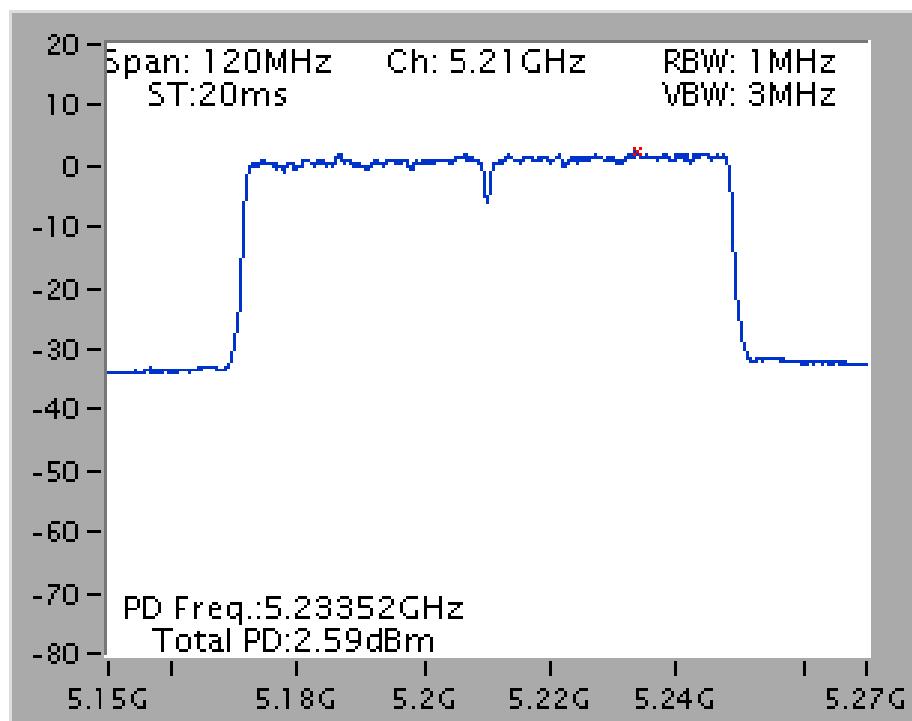


**Power Density Plot on Chain 5 + Chain 8 / 5610 MHz**

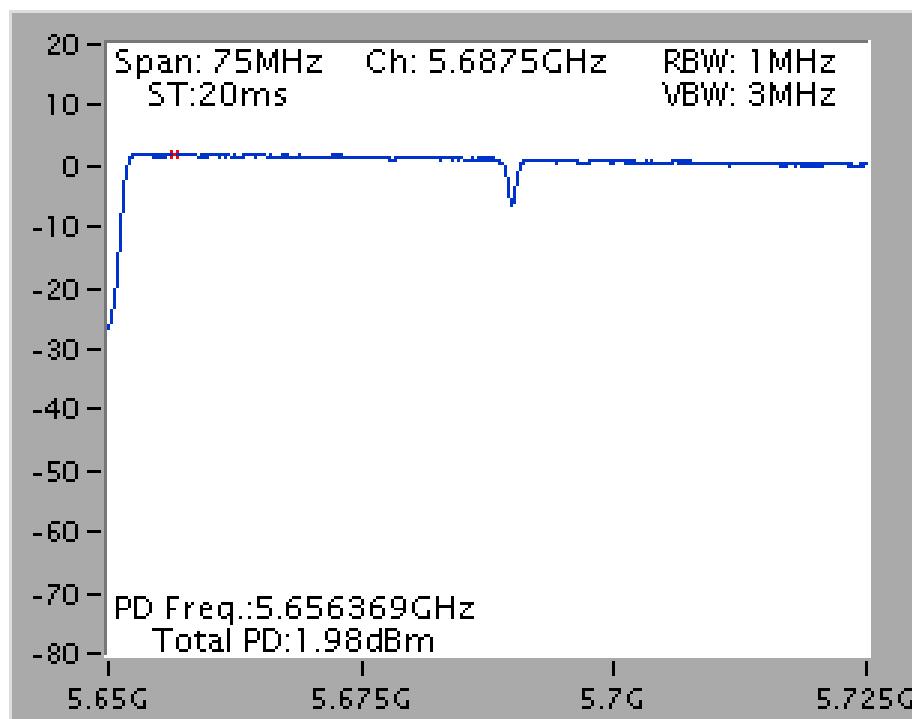


**Type 3**

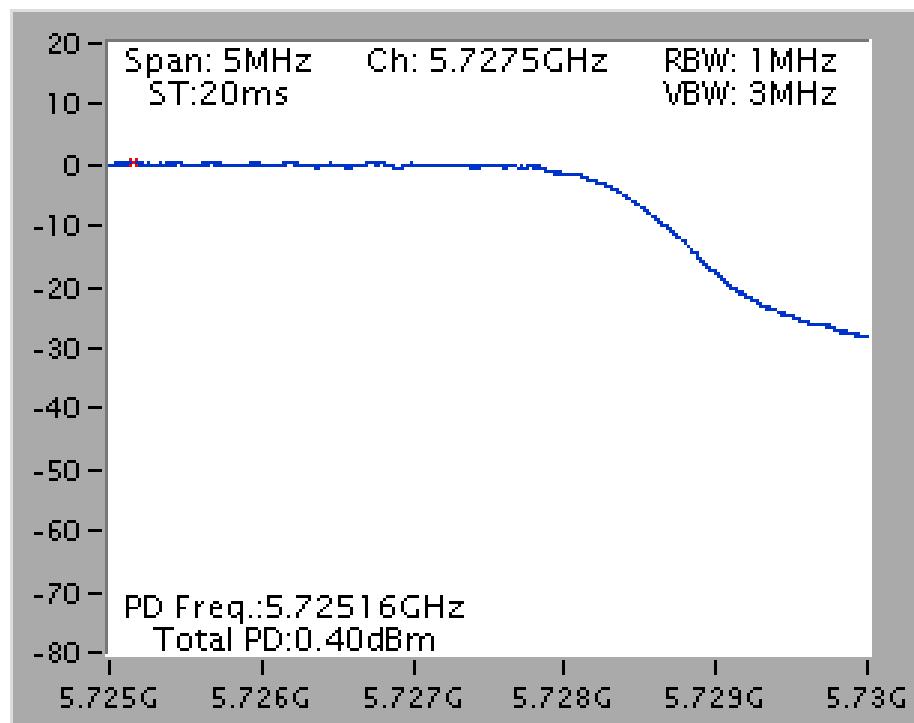
**Power Density Plot on Chain 6 + Chain 7 / 5210 MHz**



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

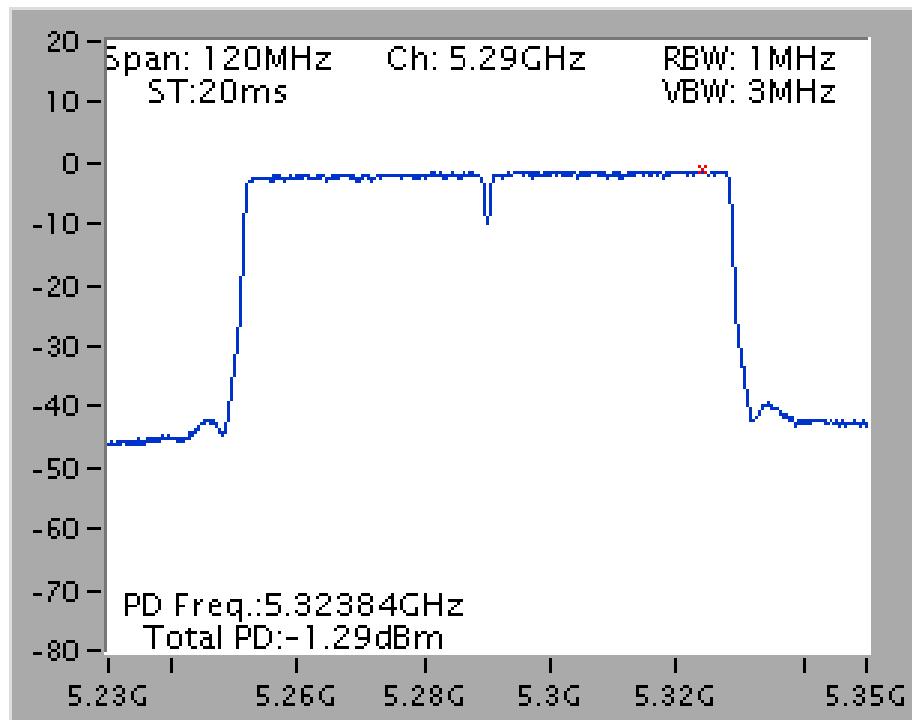


**Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)**

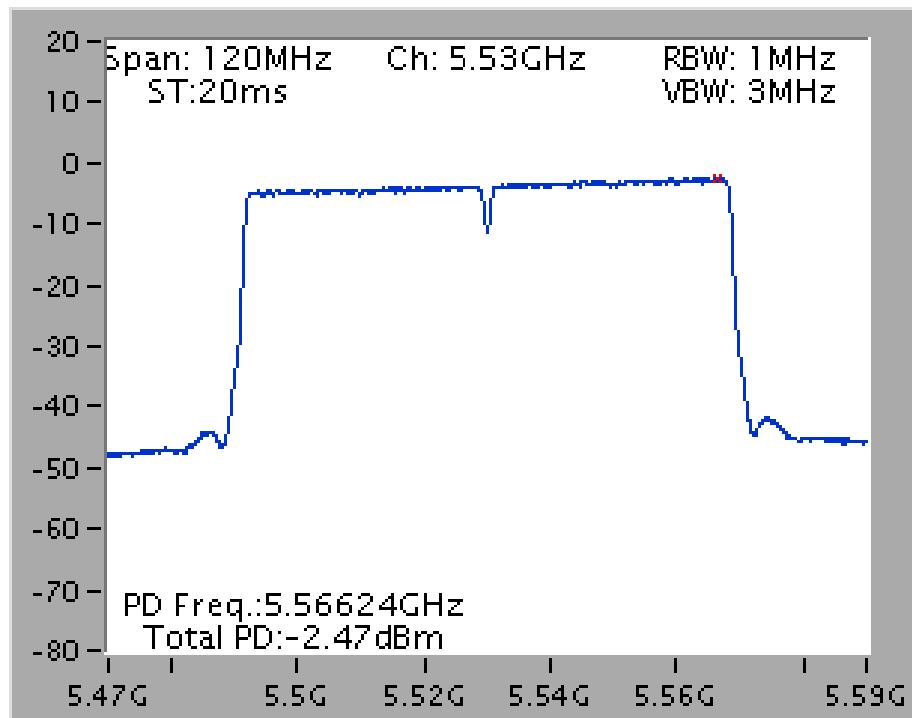


**Type 4**

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

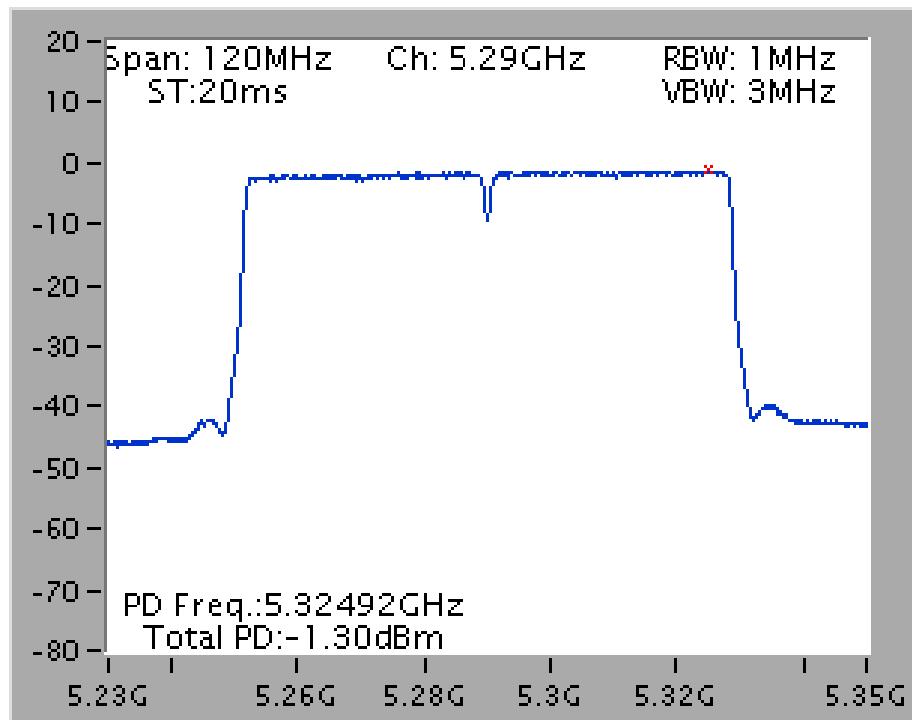


**Power Density Plot on Chain 5 + Chain 8 / 5530 MHz**

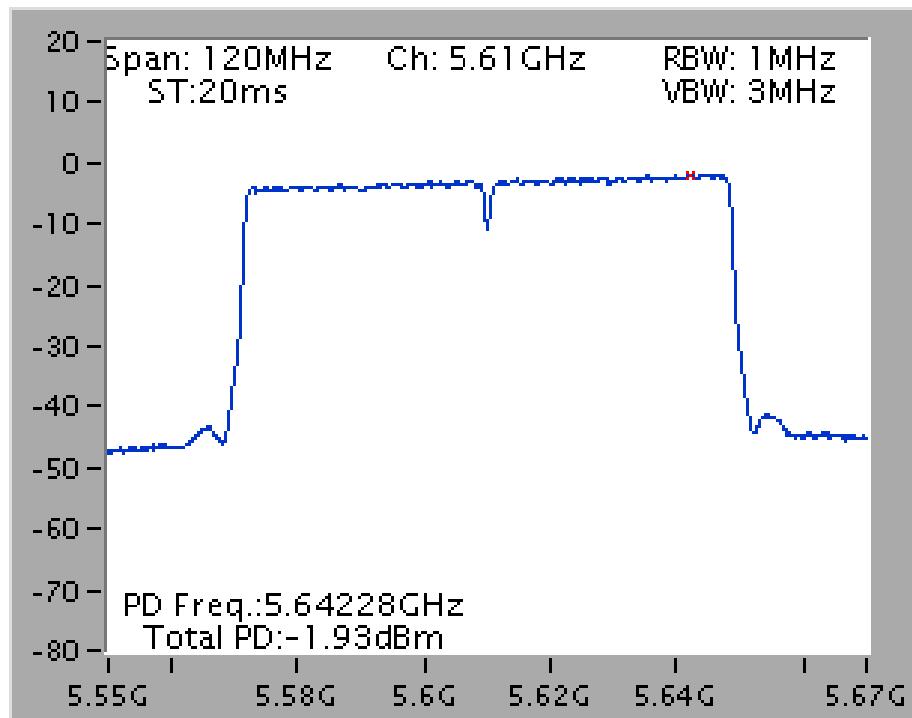


**Type 5**

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

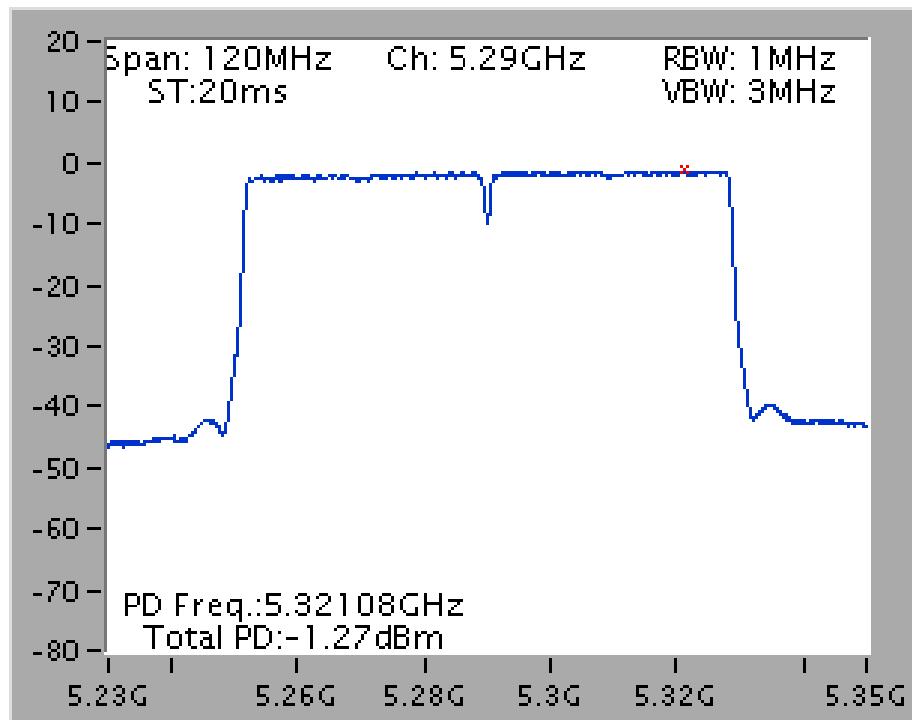


**Power Density Plot on Chain 5 + Chain 8 / 5610 MHz**

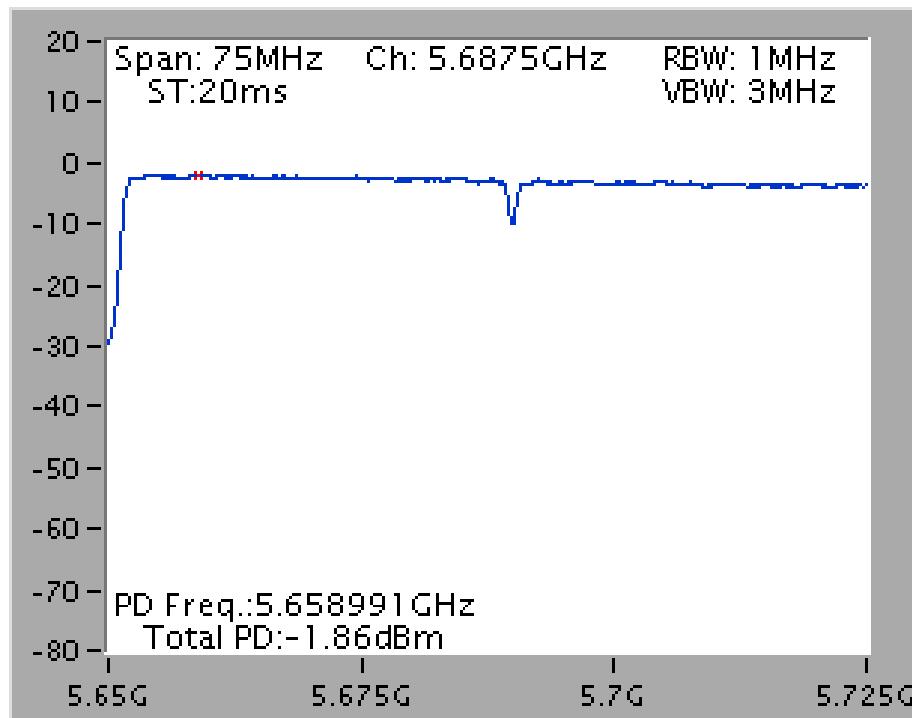


**Type 6**

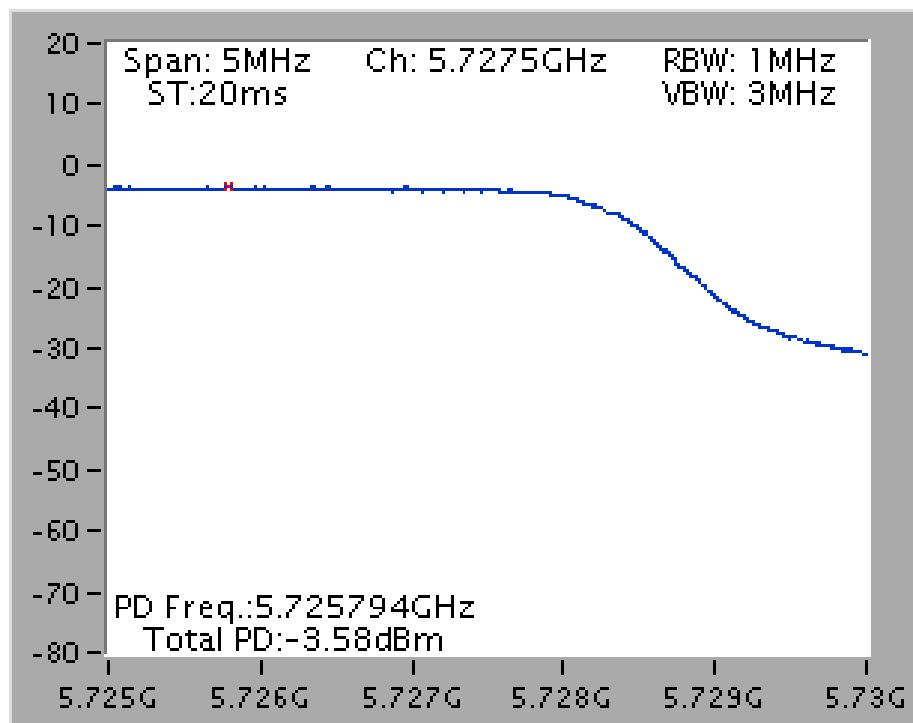
**Power Density Plot on Chain 6 + Chain 7 / 5290 MHz**



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

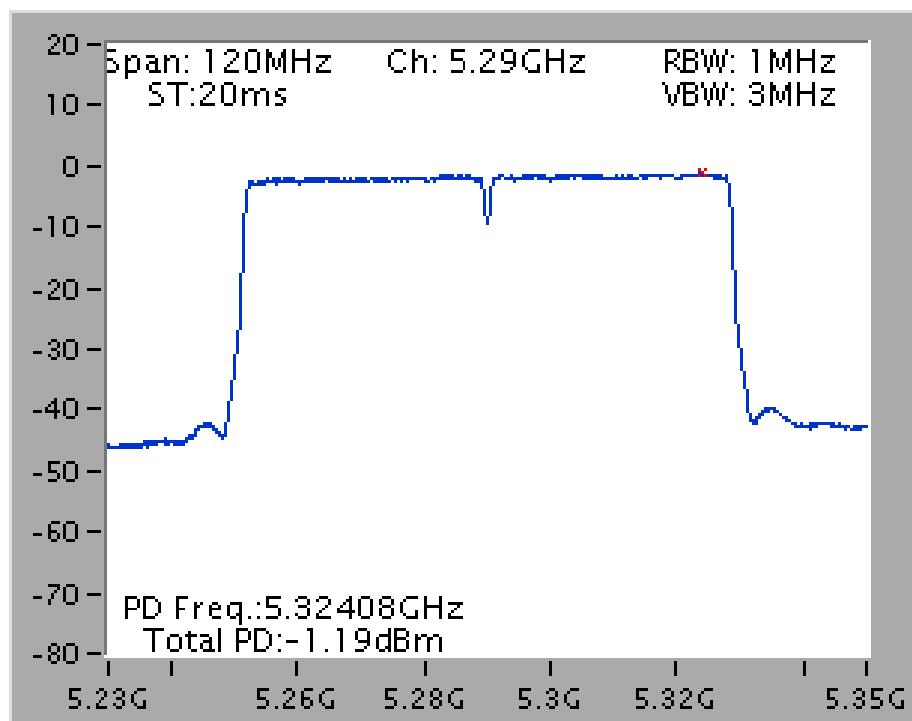


**Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)**

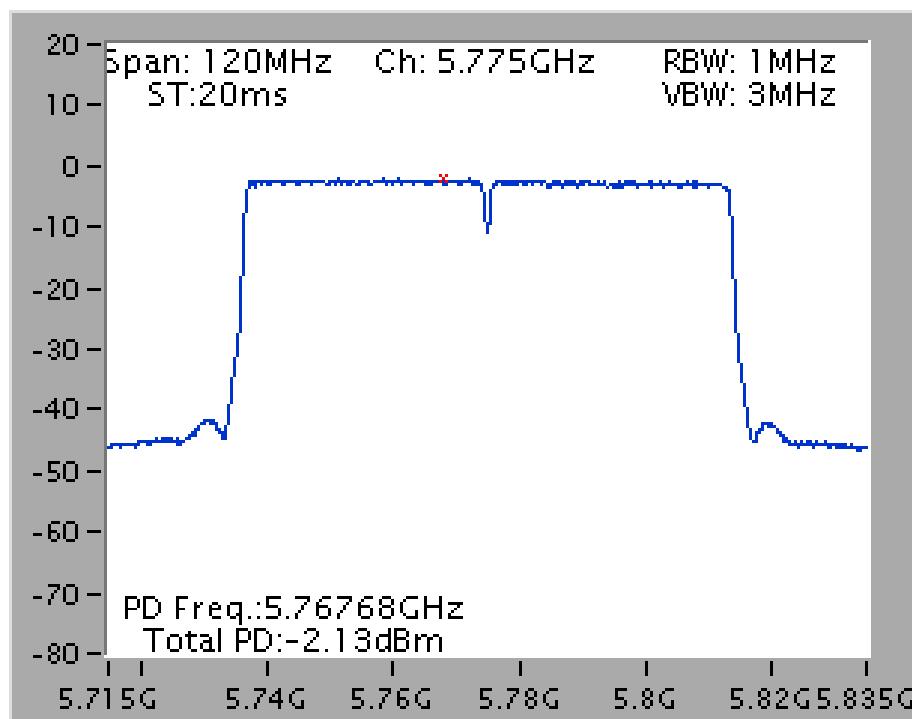


**Type 7**

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

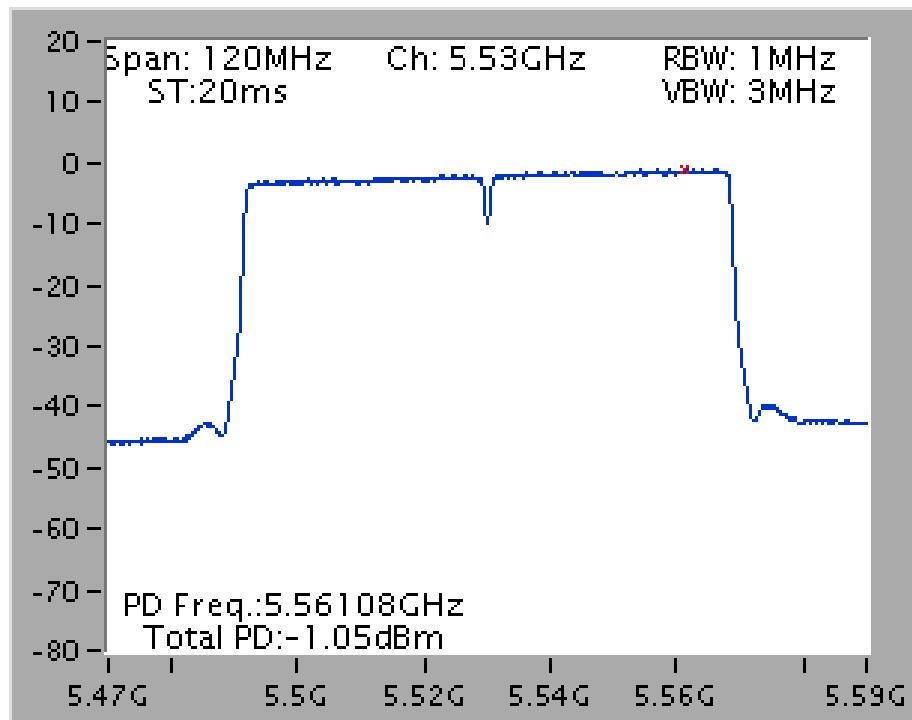


**Power Density Plot on Chain 5 + Chain 8 / 5775 MHz**

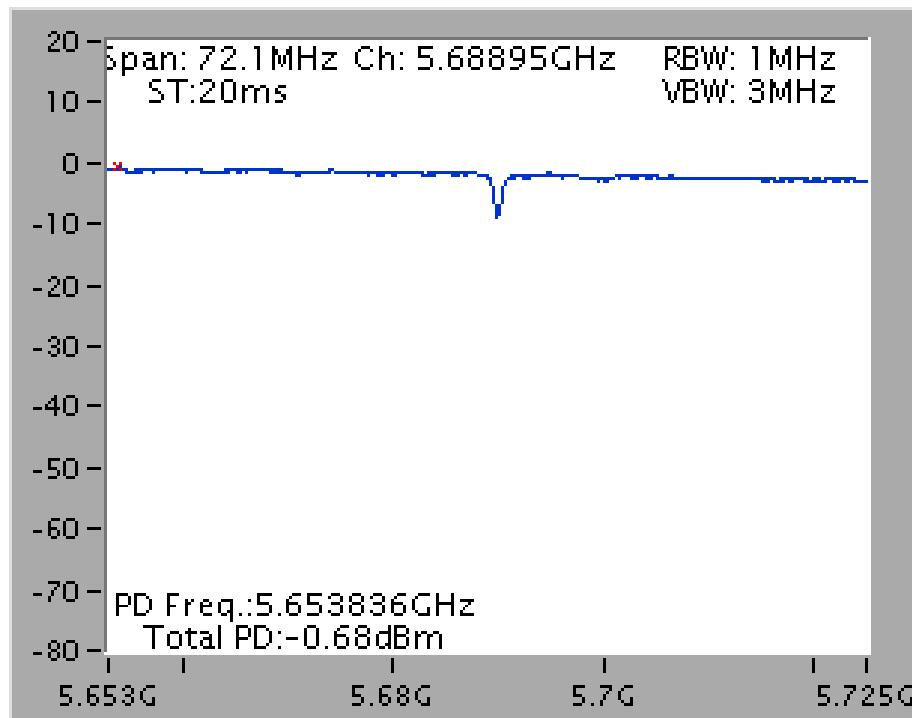


**Type 8**

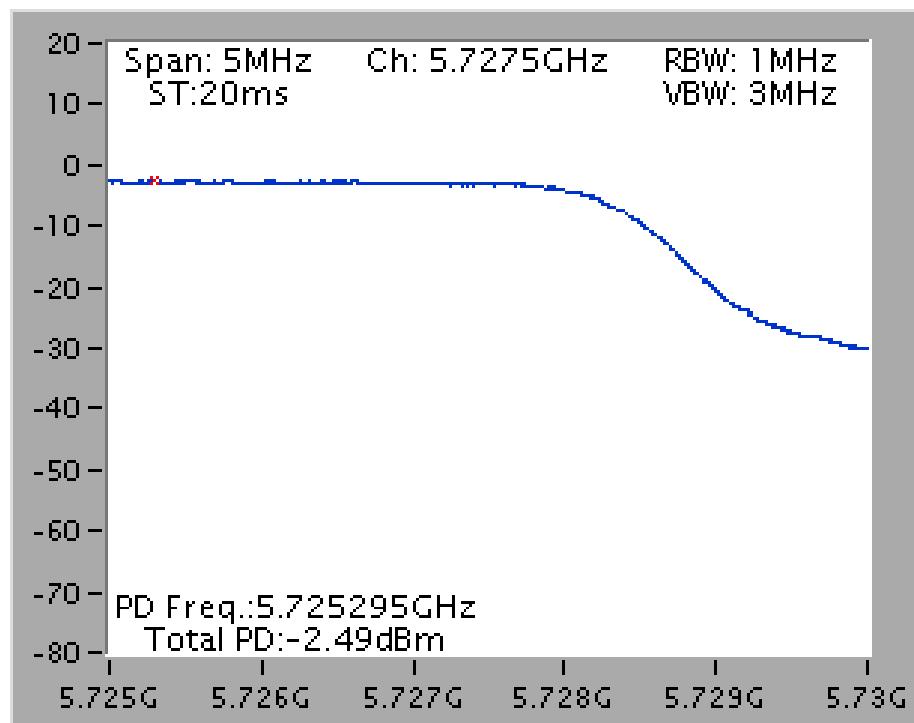
**Power Density Plot on Chain 6 + Chain 7 / 5530 MHz**



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

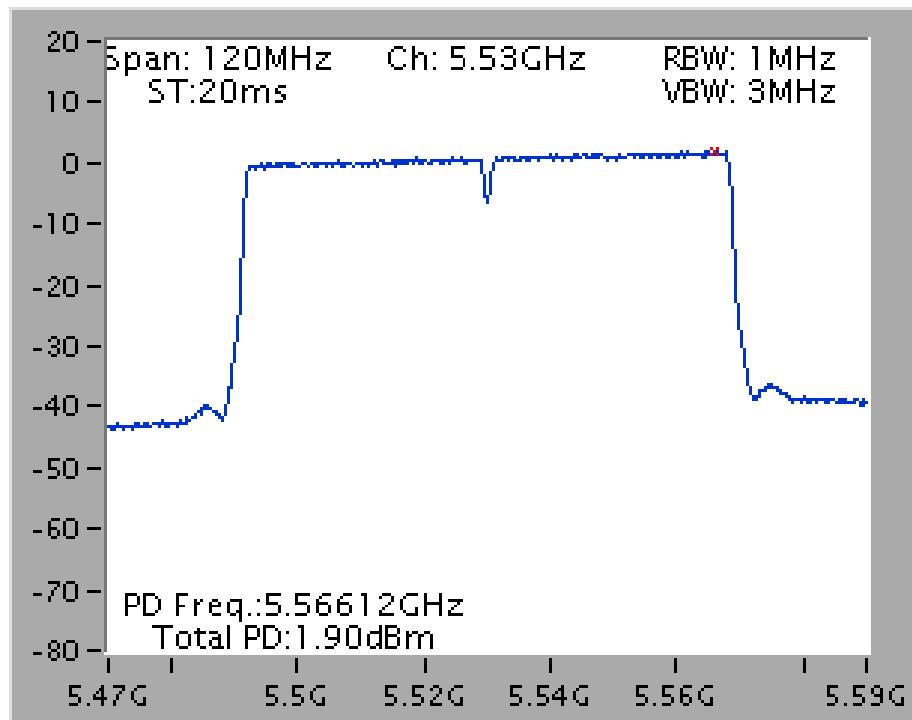


**Power Density Plot on Chain 5 + Chain 8 / 5690 MHz (UNII 3)**

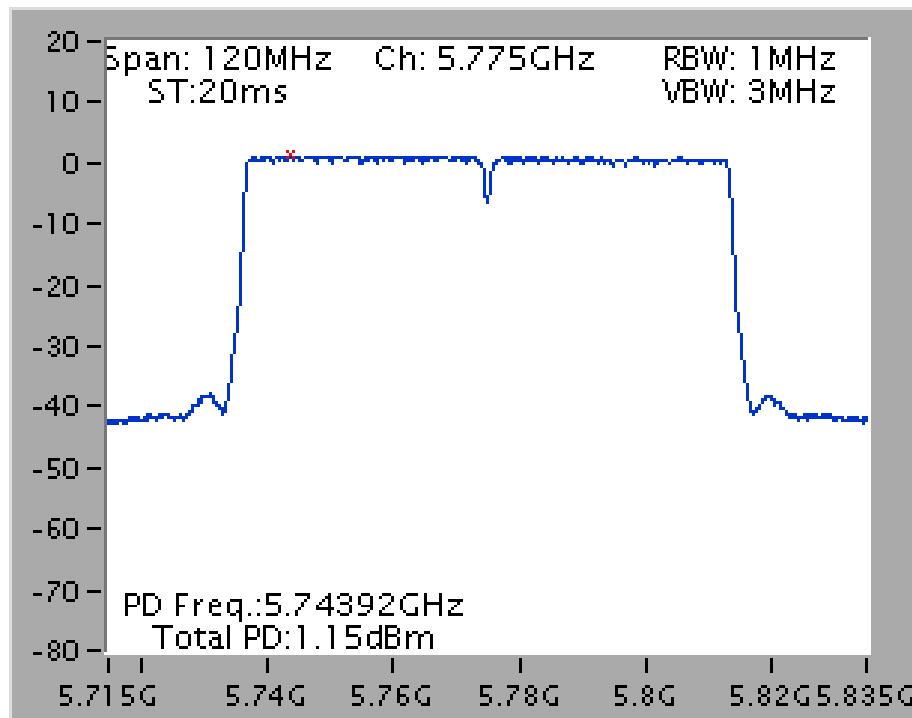


**Type 9**

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

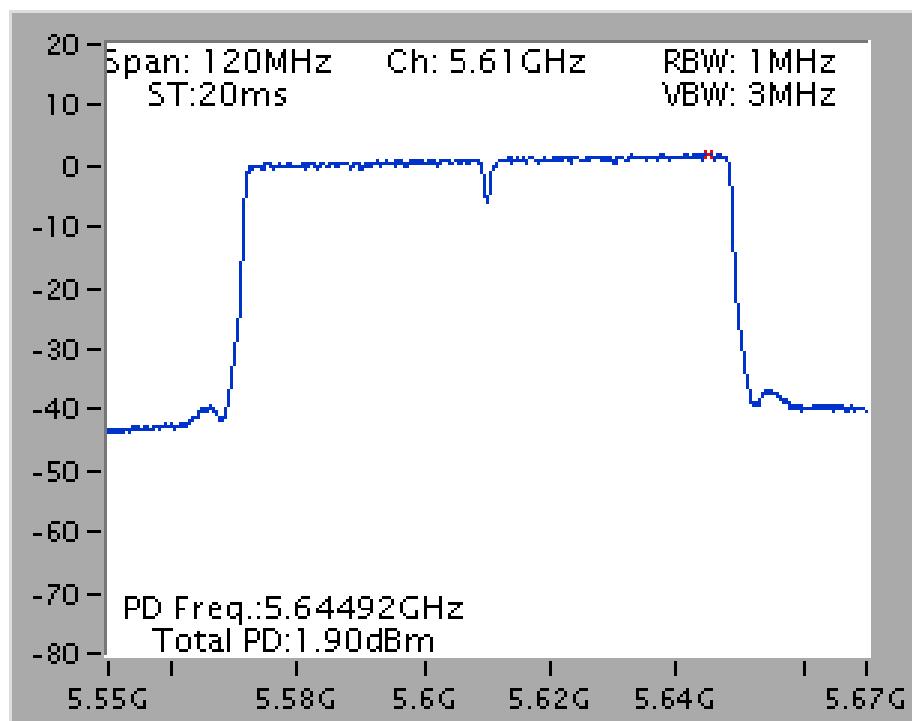


**Power Density Plot on Chain 5 + Chain 8 / 5775 MHz**

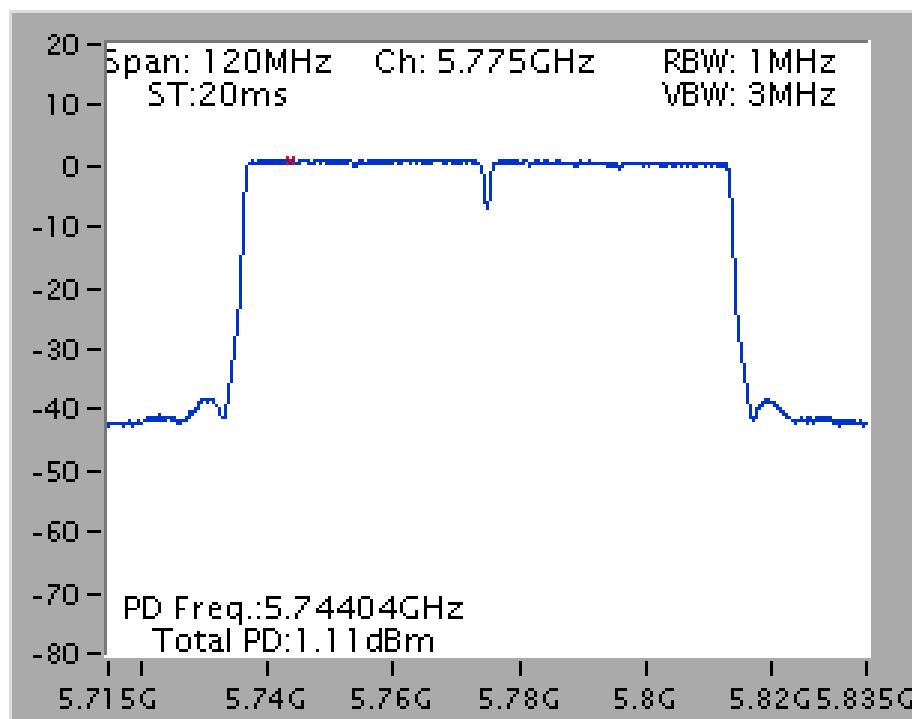


**Type 10**

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

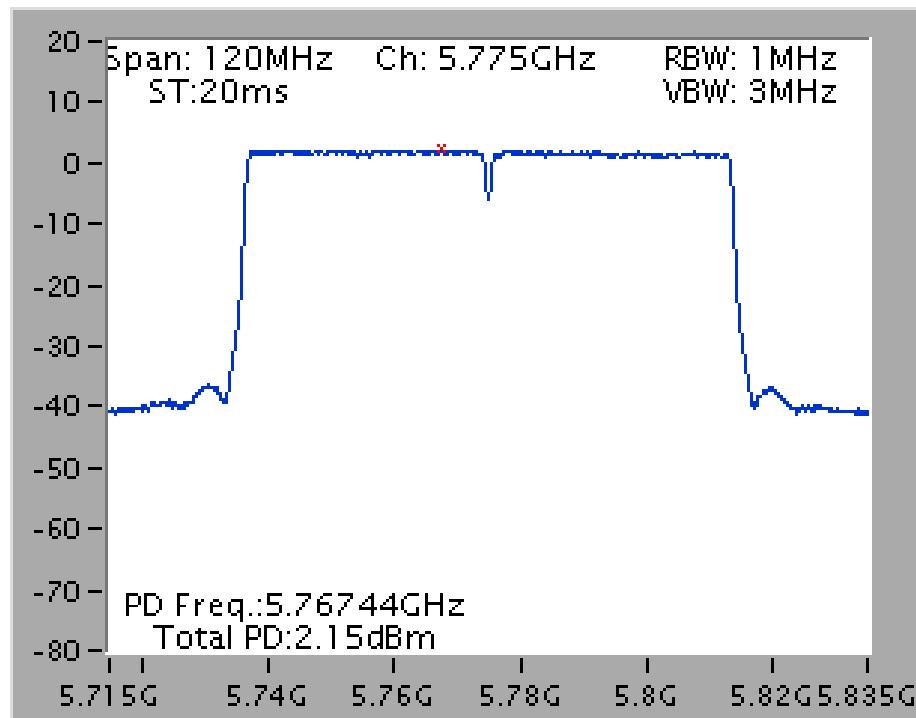


**Power Density Plot on Chain 5 + Chain 8 / 5775 MHz**

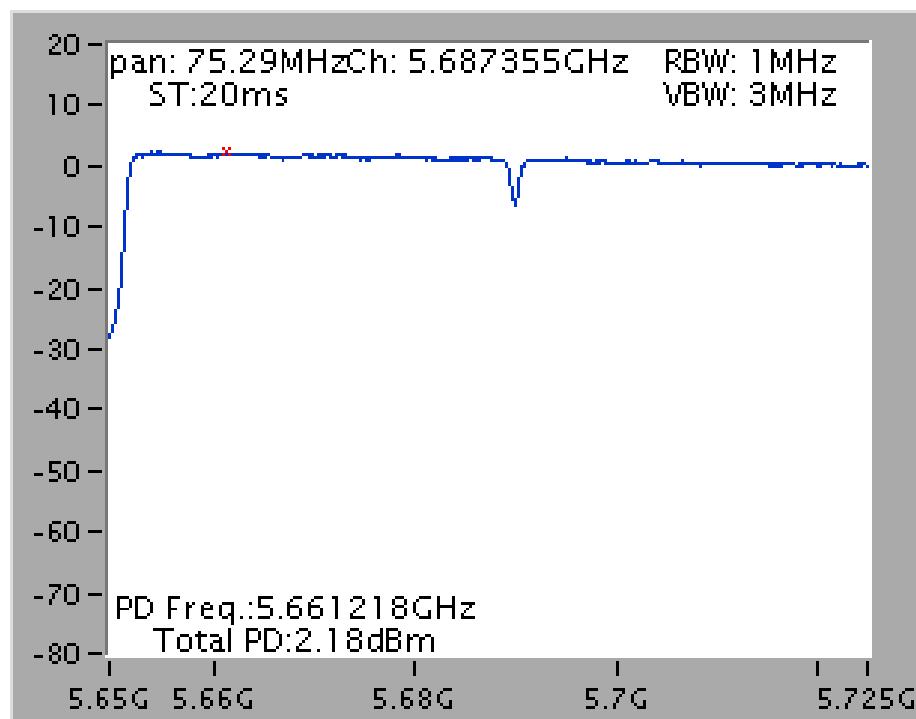


**Type 11**

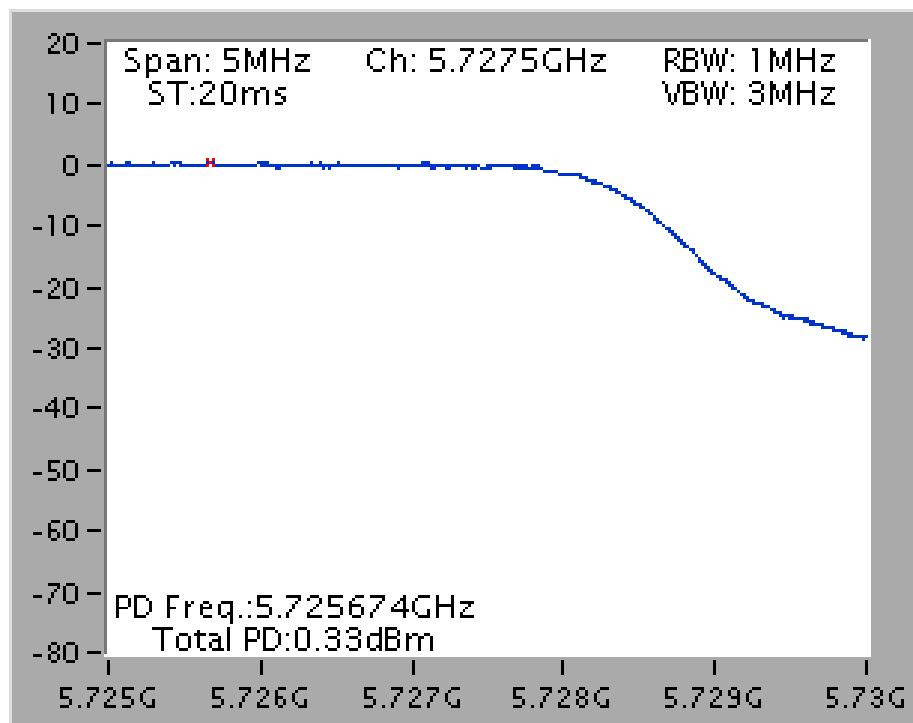
**Power Density Plot on Chain 5 + Chain 8 / 5775 MHz**



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

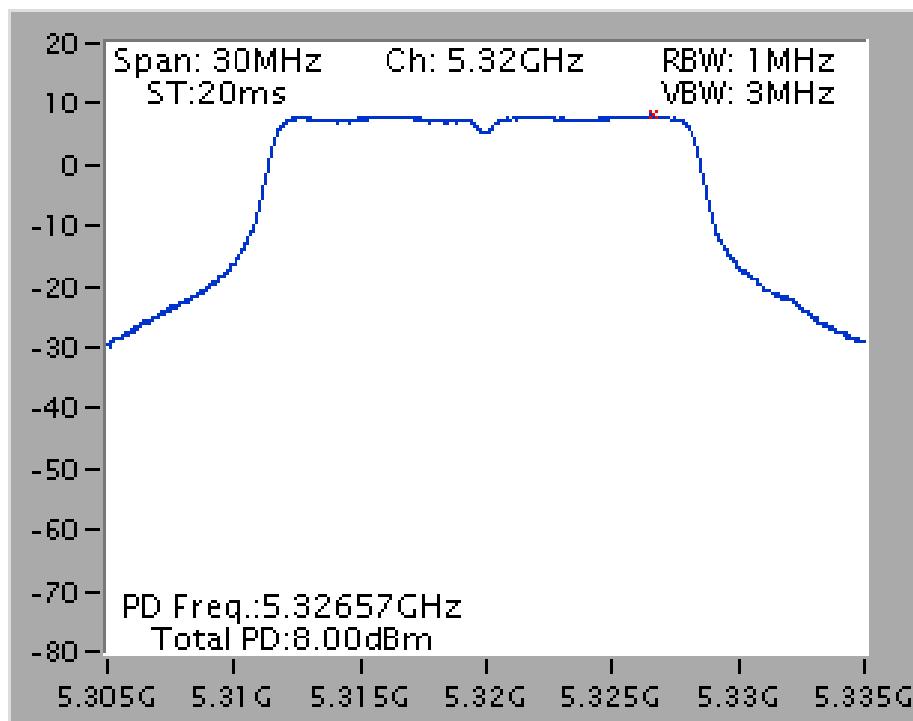


**Power Density Plot on Chain 6 + Chain 7 / 5690 MHz (UNII 3)**

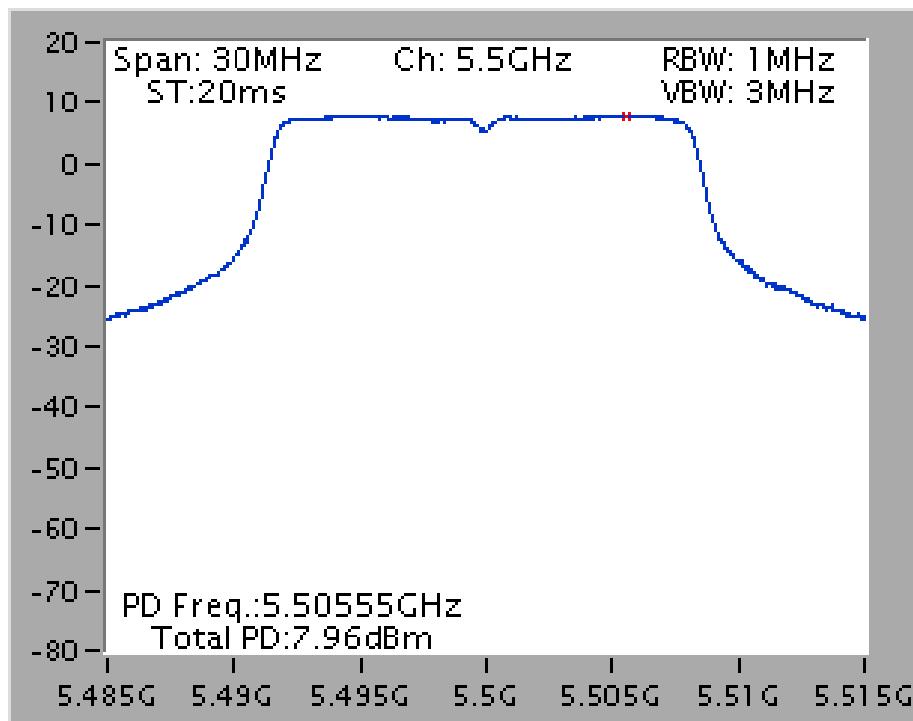


### Radio 3

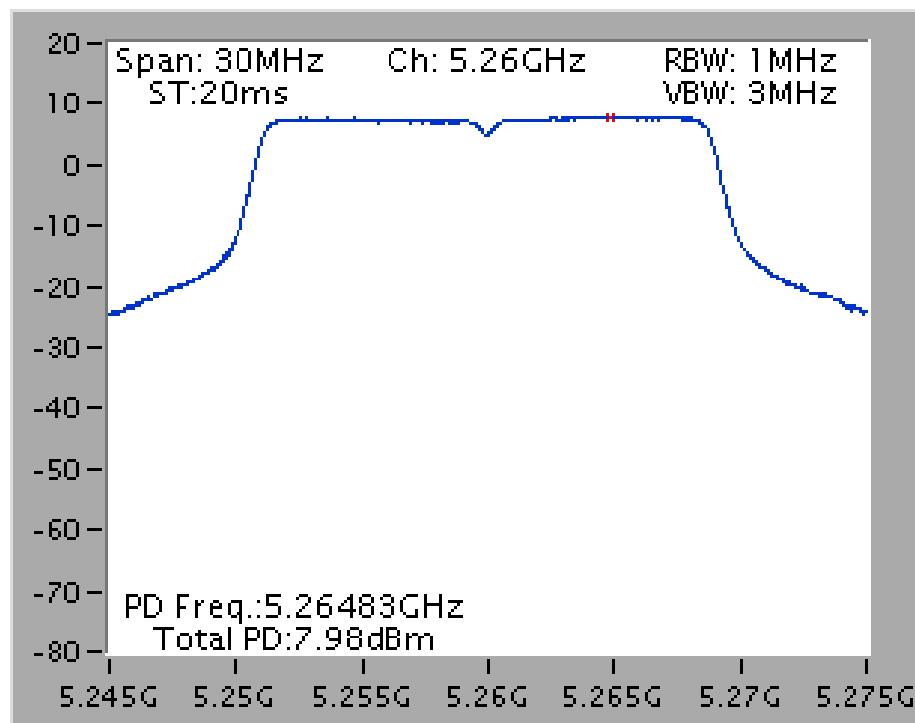
#### Power Density Plot on Configuration IEEE 802.11a / Chain 9 + Chain 10 / 5320 MHz



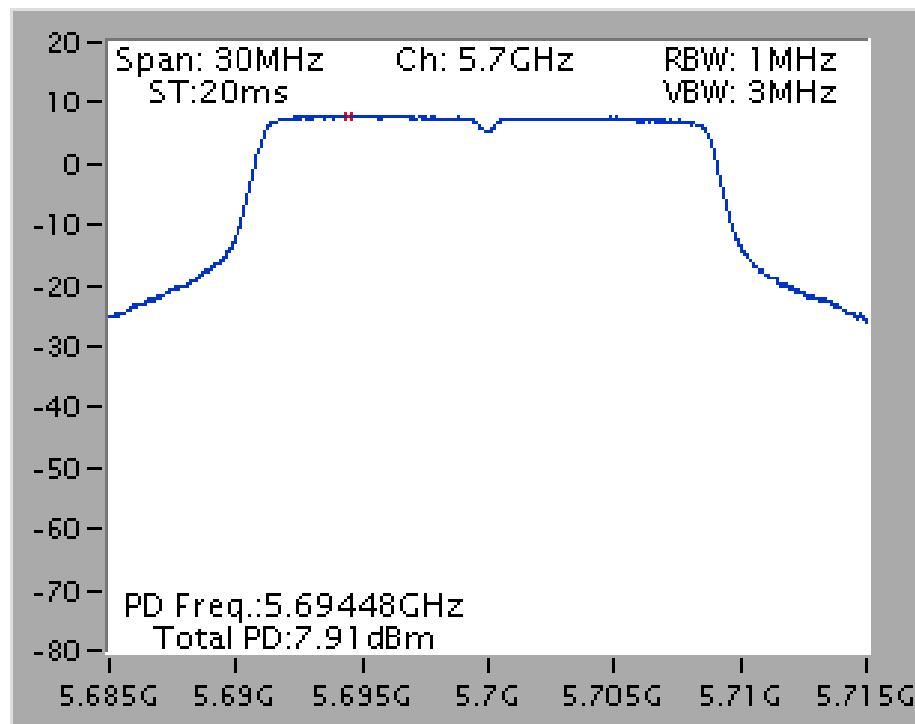
#### Power Density Plot on Configuration IEEE 802.11a / Chain 9 + Chain 10 / 5500 MHz



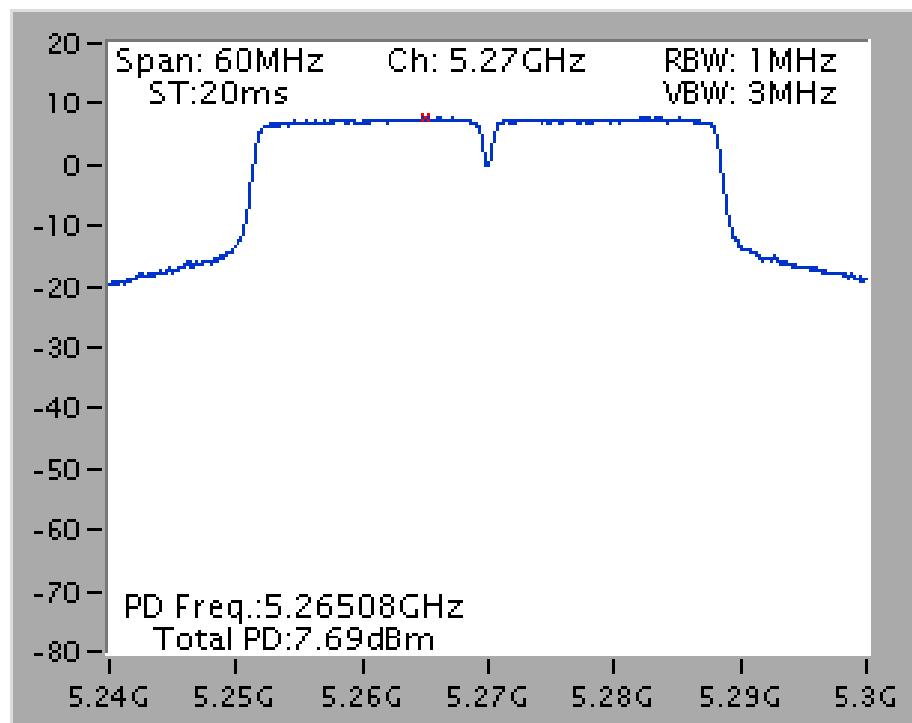
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 9 + Chain 10 / 5260 MHz**



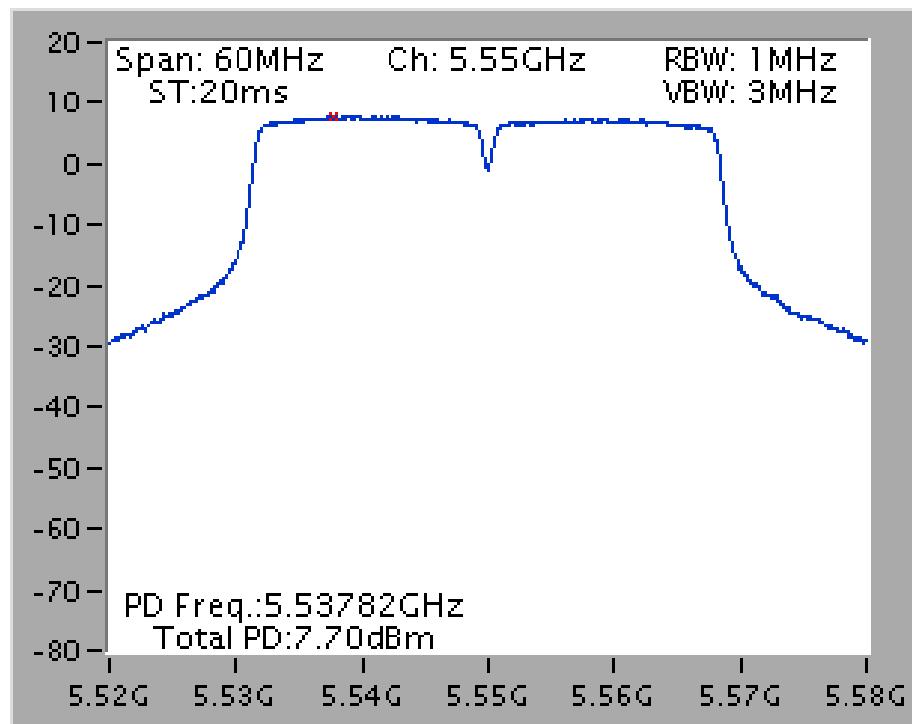
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 9 + Chain 10 / 5700 MHz**



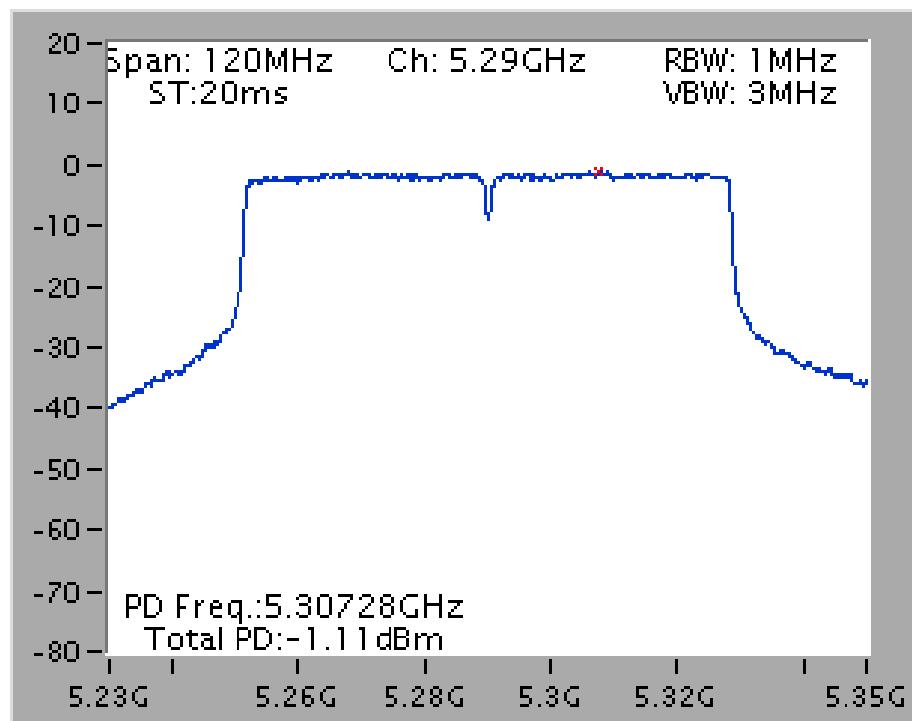
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 9 + Chain 10 / 5270 MHz**



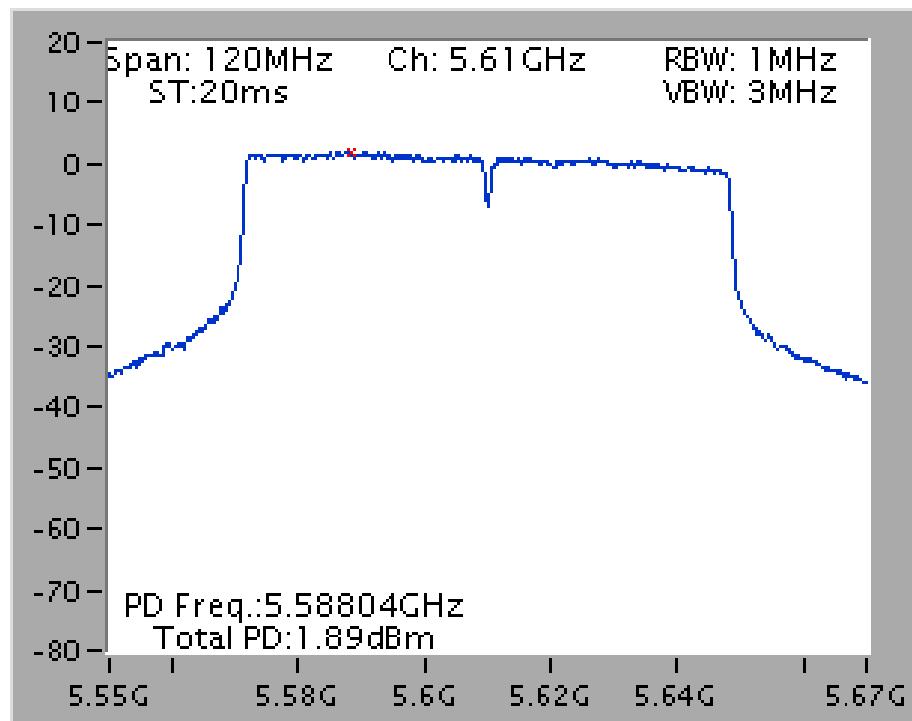
**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 9 + Chain 10 / 5550 MHz**



**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 9 + Chain 10 / 5290 MHz**



**Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 9 + Chain 10 / 5610 MHz**



## 4.5. Radiated Emissions Measurement

### 4.5.1. Limit

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

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

For transmitters operating in the 5.725-5.85 GHz band: all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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.

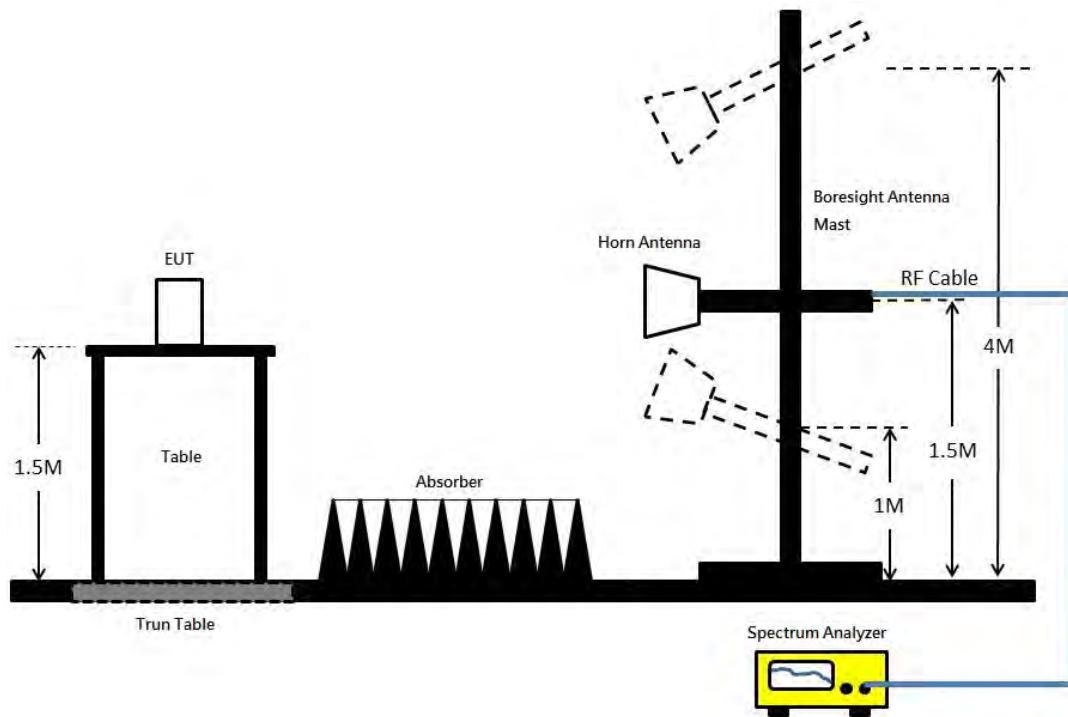
Spectrum Parameter	Setting
Attenuation	Auto
Start Frequency	1000 MHz
Stop Frequency	40 GHz
RBW / VBW (Emission in restricted band)	1MHz / 3MHz for Peak, 1MHz / 1/T for Average
RBW / VBW (Emission in non-restricted band)	1MHz / 3MHz for peak

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)

##### Radio 2

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

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

###### *Horizontal*

	Freq	Limit Level	Over Line	Read Limit	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	Limit Level	Over Line	Read Limit	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
MHz	dBuV/m	dBuV/m	—	dB	dBuV	dB	dB/m	—	—	—	—
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
MHz	dBuV/m	dBuV/m	—	dB	dBuV	dB	dB/m	—	—	—	—
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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		Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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

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

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB									
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dB	dB	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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m	dB	cm		
MHz	dBuV/m	dBuV/m	dB	dB	dB	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

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

**Horizontal**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.



## &lt;For Beamforming Mode&gt;

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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
1	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
1	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
1	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
1	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		Over Line	Read Limit	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			dB	dBuV	dB	dB/m	dB	cm	
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		Over Line	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	m			dB	dBuV	dB	dB/m	dB	cm	
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m		
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m		
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor	cm	deg		
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m		
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	dB	dB/m		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
1	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
1	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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		Over Line	Read Limit	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
		Line	m			dB	dBuV	dB	dB/m	dB	cm	deg	
MHz	dBuV/m	dBuV/m											
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		Over Line	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
		Line	m			dB	dBuV	dB	dB/m	dB	cm	deg	
MHz	dBuV/m	dBuV/m											
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	



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

**Horizontal**

Freq	Level	Limit		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
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		Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor	cm	deg		
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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
2	15868.42	46.60	54.00	-7.40	31.62	11.31	38.61	34.94	249	233	Average
											HORIZONTAL
											HORIZONTAL

**Vertical**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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
2	15873.86	60.22	74.00	-13.78	45.17	11.32	38.67	34.94	294	204	Peak
											VERTICAL
											VERTICAL



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

**Horizontal**

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

**Vertical**

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



## 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		Over Line	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		dBuV/m	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
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		Over Line	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		dBuV/m	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
1	15630.24	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
1	15630.88	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



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

**Horizontal**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m				
1	15869.79	46.24	54.00	-7.76	30.10	13.39	38.06	35.31	141	285	Average
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m				
1	15870.10	46.54	54.00	-7.46	30.40	13.39	38.06	35.31	168	211	Average
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		Over Line	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		dBuV/m	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
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		Over Line	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		dBuV/m	dBuV/m			dB	dBuV	dB	dB/m	dB	cm	
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	dB	cm		
	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	dB	cm		
	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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
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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor				
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
2	11060.78	43.15	54.00	-10.85	27.98	10.67	39.18	34.68	114	278	Average
											HORIZONTAL
											HORIZONTAL

**Vertical**

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



## Radio 3

Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11a CH 52 / Chain 9 + Chain 10
Test Date	Aug. 23, 2016		

*Horizontal*

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	7013.19	55.59	68.20	-12.61	45.44	8.03	36.83	34.71	225	287	Peak	HORIZONTAL
2	15779.80	45.47	54.00	-8.53	30.55	11.29	38.48	34.85	205	152	Average	HORIZONTAL
3	15780.74	59.58	74.00	-14.42	44.66	11.29	38.48	34.85	205	152	Peak	HORIZONTAL

*Vertical*

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	7013.28	59.51	68.20	-8.69	49.36	8.03	36.83	34.71	242	39	Peak	VERTICAL
2	15779.02	45.62	54.00	-8.38	30.70	11.29	38.48	34.85	204	184	Average	VERTICAL
3	15779.25	59.54	74.00	-14.46	44.62	11.29	38.48	34.85	204	184	Peak	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11a CH 60 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	10599.14	41.97	54.00	-12.03	28.68	9.74	38.50	34.95	109	314	Average	HORIZONTAL
2	10599.15	56.28	74.00	-17.72	42.99	9.74	38.50	34.95	109	314	Peak	HORIZONTAL
3	15899.06	59.93	74.00	-14.07	44.88	11.32	38.67	34.94	108	319	Peak	HORIZONTAL
4	15900.34	46.47	54.00	-7.53	31.42	11.32	38.67	34.94	108	319	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	10599.16	44.04	54.00	-9.96	30.75	9.74	38.50	34.95	177	82	Average	VERTICAL
2	10600.56	58.24	74.00	-15.76	44.95	9.74	38.50	34.95	177	82	Peak	VERTICAL
3	15900.34	46.84	54.00	-7.16	31.79	11.32	38.67	34.94	186	135	Average	VERTICAL
4	15900.70	61.29	74.00	-12.71	46.24	11.32	38.67	34.94	186	135	Peak	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11a CH 64 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	10639.77	42.08	54.00	-11.92	28.75	9.73	38.50	34.90	103	298	Average	HORIZONTAL
2	10640.97	56.06	74.00	-17.94	42.73	9.73	38.50	34.90	103	298	Peak	HORIZONTAL
3	15960.88	59.88	74.00	-14.12	44.79	11.33	38.74	34.98	104	306	Peak	HORIZONTAL
4	15960.95	46.67	54.00	-7.33	31.58	11.33	38.74	34.98	104	306	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	10639.46	54.52	74.00	-19.48	41.19	9.73	38.50	34.90	107	324	Peak	VERTICAL
2	10640.38	41.27	54.00	-12.73	27.94	9.73	38.50	34.90	107	324	Average	VERTICAL
3	15960.54	46.52	54.00	-7.48	31.43	11.33	38.74	34.98	106	317	Average	VERTICAL
4	15960.60	59.83	74.00	-14.17	44.74	11.33	38.74	34.98	106	317	Peak	VERTICAL

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Nyle Chang	<b>Configurations</b>	IEEE 802.11a CH 100 / Chain 9 + Chain 10
<b>Test Date</b>	Aug. 23, 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	7333.06	54.16	74.00	-19.84	43.23	8.49	37.20	34.76	240	101	Peak	HORIZONTAL
2	7333.22	41.68	54.00	-12.32	30.75	8.49	37.20	34.76	240	101	Average	HORIZONTAL
3	10997.14	55.63	74.00	-18.37	42.11	9.68	38.50	34.66	142	135	Peak	HORIZONTAL
4	11003.42	41.30	54.00	-12.70	27.78	9.68	38.50	34.66	142	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	7333.24	46.41	54.00	-7.59	35.48	8.49	37.20	34.76	212	304	Average	VERTICAL
2	7333.42	55.31	74.00	-18.69	44.38	8.49	37.20	34.76	212	304	Peak	VERTICAL
3	10999.76	41.35	54.00	-12.65	27.83	9.68	38.50	34.66	206	240	Average	VERTICAL
4	11000.78	54.72	74.00	-19.28	41.20	9.68	38.50	34.66	206	240	Peak	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11a CH 116 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	11157.12	41.24	54.00	-12.76	27.73	9.66	38.50	34.65	155	251	Average	HORIZONTAL
2	11160.92	55.02	74.00	-18.98	41.51	9.66	38.50	34.65	155	251	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	11160.32	52.73	74.00	-21.27	39.22	9.66	38.50	34.65	175	217	Peak	VERTICAL
2	11160.32	41.63	54.00	-12.37	28.12	9.66	38.50	34.65	175	217	Average	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11a CH 140 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	11391.12	54.63	74.00	-19.37	41.13	9.63	38.50	34.63	134	194	Peak	HORIZONTAL
2	11410.00	40.47	54.00	-13.53	26.97	9.63	38.50	34.63	134	194	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	11401.56	53.68	74.00	-20.32	40.18	9.63	38.50	34.63	177	153	Peak	VERTICAL
2	11401.56	40.83	54.00	-13.17	27.33	9.63	38.50	34.63	177	153	Average	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52 / Chain 9 + Chain 10
Test Date	Aug. 23, 2016		

**Horizontal**

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	cm	deg		
1	7013.24	57.81	68.20	-10.39	47.66	8.03	36.83	34.71	234	270	Average	HORIZONTAL
2	15770.84	45.50	54.00	-8.50	30.58	11.29	38.48	34.85	126	83	Average	HORIZONTAL
3	15774.16	58.72	74.00	-15.28	43.80	11.29	38.48	34.85	126	83	Peak	HORIZONTAL

**Vertical**

	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
			Line	Limit	Level	Loss	Factor	Factor	cm	deg		
1	7013.29	57.54	68.20	-10.66	47.39	8.03	36.83	34.71	244	268	Average	VERTICAL
2	15780.33	59.38	74.00	-14.62	44.46	11.29	38.48	34.85	149	133	Peak	VERTICAL
3	15780.36	45.29	54.00	-8.71	30.37	11.29	38.48	34.85	149	133	Average	VERTICAL

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Nyle Chang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 60 / Chain 9 + Chain 10
<b>Test Date</b>	Aug. 23, 2016		

**Horizontal**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	10600.74	41.98	54.00	-12.02	28.69	9.74	38.50	34.95	134	177 Average	HORIZONTAL
2	10600.92	55.34	74.00	-18.66	42.05	9.74	38.50	34.95	134	177 Peak	HORIZONTAL
3	15899.83	46.24	54.00	-7.76	31.19	11.32	38.67	34.94	148	153 Average	HORIZONTAL
4	15900.16	60.53	74.00	-13.47	45.48	11.32	38.67	34.94	148	153 Peak	HORIZONTAL

**Vertical**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	10600.65	55.35	74.00	-18.65	42.06	9.74	38.50	34.95	114	272 Peak	VERTICAL
2	10600.83	42.46	54.00	-11.54	29.17	9.74	38.50	34.95	114	272 Average	VERTICAL
3	15899.55	46.90	54.00	-7.10	31.85	11.32	38.67	34.94	141	203 Average	VERTICAL
4	15899.76	60.77	74.00	-13.23	45.72	11.32	38.67	34.94	141	203 Peak	VERTICAL

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Nyle Chang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 64 / Chain 9 + Chain 10
<b>Test Date</b>	Aug. 23, 2016		

**Horizontal**

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dB	dB/m	cm	deg			
1 10611.64	41.83	54.00	-12.17	28.52	9.74	38.50	34.93	157	206	Average	HORIZONTAL	
2 10618.08	56.12	74.00	-17.88	42.81	9.74	38.50	34.93	157	206	Peak	HORIZONTAL	
3 15911.84	46.27	54.00	-7.73	31.22	11.32	38.67	34.94	147	221	Average	HORIZONTAL	
4 15917.76	59.58	74.00	-14.42	44.53	11.32	38.67	34.94	147	221	Peak	HORIZONTAL	

**Vertical**

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dB	dB/m	cm	deg			
1 10611.72	42.04	54.00	-11.96	28.73	9.74	38.50	34.93	164	190	Average	VERTICAL	
2 10627.28	56.16	74.00	-17.84	42.86	9.73	38.50	34.93	164	190	Peak	VERTICAL	
3 15914.60	46.17	54.00	-7.83	31.12	11.32	38.67	34.94	130	226	Average	VERTICAL	
4 15921.60	59.62	74.00	-14.38	44.53	11.33	38.74	34.98	130	226	Peak	VERTICAL	



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100 / Chain 9 + Chain 10
Test Date	Aug. 23, 2016		

**Horizontal**

Freq MHz	Level dBuV/m	Limit		Over Line Limit	Read Level dBuV	Cable Loss dB	Antenna Factor dB/m	Preamp Factor dB	A/Pos cm	T/Pos deg	Remark	Pol/Phase
		Freq MHz	Level dBuV/m									
1	7333.32	40.89	54.00	-13.11	29.96	8.49	37.20	34.76	206	292	Average	HORIZONTAL
2	7338.72	52.31	74.00	-21.69	41.45	8.39	37.23	34.76	206	292	Peak	HORIZONTAL
3	11000.32	40.65	54.00	-13.35	27.13	9.68	38.50	34.66	138	153	Average	HORIZONTAL
4	11009.24	54.11	74.00	-19.89	40.59	9.68	38.50	34.66	138	153	Peak	HORIZONTAL
5	16501.04	61.61	74.00	-12.39	45.03	11.68	39.60	34.70	162	171	Peak	HORIZONTAL
6	16508.76	47.80	54.00	-6.20	31.13	11.68	39.60	34.61	162	171	Average	HORIZONTAL

**Vertical**

Freq MHz	Level dBuV/m	Limit		Over Line Limit	Read Level dBuV	Cable Loss dB	Antenna Factor dB/m	Preamp Factor dB	A/Pos cm	T/Pos deg	Remark	Pol/Phase
		Freq MHz	Level dBuV/m									
1	7333.12	55.54	74.00	-18.46	44.61	8.49	37.20	34.76	242	242	Peak	VERTICAL
2	7333.24	47.92	54.00	-6.08	36.99	8.49	37.20	34.76	242	242	Average	VERTICAL
3	11003.60	40.91	54.00	-13.09	27.39	9.68	38.50	34.66	195	236	Average	VERTICAL
4	11008.80	54.70	74.00	-19.30	41.18	9.68	38.50	34.66	195	236	Peak	VERTICAL
5	16502.16	46.99	54.00	-7.01	30.41	11.68	39.60	34.70	178	198	Average	VERTICAL
6	16504.52	61.10	74.00	-12.90	44.43	11.68	39.60	34.61	178	198	Peak	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 116 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	11154.20	40.97	54.00	-13.03	27.46	9.66	38.50	34.65	186	257	Average	HORIZONTAL
2	11161.36	54.22	74.00	-19.78	40.71	9.66	38.50	34.65	186	257	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	11159.84	54.16	74.00	-19.84	40.65	9.66	38.50	34.65	176	286	Peak	VERTICAL
2	11160.24	40.79	54.00	-13.21	27.28	9.66	38.50	34.65	176	286	Average	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 140 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	11391.56	40.56	54.00	-13.44	27.06	9.63	38.50	34.63	142	215	Average	HORIZONTAL
2	11398.16	54.22	74.00	-19.78	40.72	9.63	38.50	34.63	142	215	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	11397.48	40.59	54.00	-13.41	27.09	9.63	38.50	34.63	128	189	Average	VERTICAL
2	11397.68	53.91	74.00	-20.09	40.41	9.63	38.50	34.63	128	189	Peak	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	15813.96	59.62	74.00	-14.38	44.62	11.30	38.55	34.85	136	187	Peak	HORIZONTAL
2	15819.44	46.33	54.00	-7.67	31.37	11.30	38.55	34.89	136	187	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	15814.60	59.51	74.00	-14.49	44.51	11.30	38.55	34.85	130	293	Peak	VERTICAL
2	15816.24	45.82	54.00	-8.18	30.86	11.30	38.55	34.89	130	293	Average	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 62 / Chain 9 + Chain 10
Test Date	Aug. 23, 2016		

**Horizontal**

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level dBuV	Cable Loss	Antenna Factor	Preamp Factor	A/Pos cm	T/Pos deg	Remark	Pol/Phase
		Line dB	Line dBuV/m			dB	dB/m	dB	cm	deg		
1 10612.40	41.89	54.00	-12.11	28.58	9.74	38.50	34.93	148	175	Average	HORIZONTAL	
2 10624.76	55.70	74.00	-18.30	42.40	9.73	38.50	34.93	148	175	Peak	HORIZONTAL	
3 15931.84	46.06	54.00	-7.94	30.97	11.33	38.74	34.98	196	219	Average	HORIZONTAL	
4 15935.32	59.81	74.00	-14.19	44.72	11.33	38.74	34.98	196	219	Peak	HORIZONTAL	

**Vertical**

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level dBuV	Cable Loss	Antenna Factor	Preamp Factor	A/Pos cm	T/Pos deg	Remark	Pol/Phase
		Line dB	Line dBuV/m			dB	dB/m	dB	cm	deg		
1 10611.96	41.84	54.00	-12.16	28.53	9.74	38.50	34.93	156	180	Average	VERTICAL	
2 10619.24	55.18	74.00	-18.82	41.87	9.74	38.50	34.93	156	180	Peak	VERTICAL	
3 15926.48	60.00	74.00	-14.00	44.91	11.33	38.74	34.98	167	252	Peak	VERTICAL	
4 15933.96	46.19	54.00	-7.81	31.10	11.33	38.74	34.98	167	252	Average	VERTICAL	



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	11025.58	54.73	74.00	-19.27	41.21	9.68	38.50	34.66	124	237	Peak	HORIZONTAL
2	11026.32	40.69	54.00	-13.31	27.17	9.68	38.50	34.66	124	237	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	11014.71	54.74	74.00	-19.26	41.22	9.68	38.50	34.66	132	197	Peak	VERTICAL
2	11018.94	40.77	54.00	-13.23	27.25	9.68	38.50	34.66	132	197	Average	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 110 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	11058.33	54.87	74.00	-19.13	41.35	9.68	38.50	34.66	156	100	Peak	HORIZONTAL
2	11060.35	40.89	54.00	-13.11	27.38	9.67	38.50	34.66	156	100	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	11053.01	54.92	74.00	-19.08	41.40	9.68	38.50	34.66	160	165	Peak	VERTICAL
2	11055.86	40.65	54.00	-13.35	27.13	9.68	38.50	34.66	160	165	Average	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 134 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	11185.42	40.86	54.00	-13.14	27.34	9.66	38.50	34.64	188	223	Average	HORIZONTAL
2	11185.44	54.43	74.00	-19.57	40.91	9.66	38.50	34.64	188	223	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	11179.75	40.73	54.00	-13.27	27.21	9.66	38.50	34.64	163	173	Average	VERTICAL
2	11185.53	54.52	74.00	-19.48	41.00	9.66	38.50	34.64	163	173	Peak	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	15877.92	46.24	54.00	-7.76	31.19	11.32	38.67	34.94	138	276	Average	HORIZONTAL
2	15879.92	59.32	74.00	-14.68	44.27	11.32	38.67	34.94	138	276	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	15871.12	59.93	74.00	-14.07	44.95	11.31	38.61	34.94	172	257	Peak	VERTICAL
2	15877.00	46.20	54.00	-7.80	31.15	11.32	38.67	34.94	172	257	Average	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106 / Chain 9 + Chain 10
Test Date	Aug. 23, 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	11052.32	55.23	74.00	-18.77	41.71	9.68	38.50	34.66	224	256	Peak	HORIZONTAL
2	11057.56	40.88	54.00	-13.12	27.36	9.68	38.50	34.66	224	256	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	11051.48	54.28	74.00	-19.72	40.76	9.68	38.50	34.66	217	192	Peak	VERTICAL
2	11066.20	40.90	54.00	-13.10	27.38	9.67	38.50	34.65	217	192	Average	VERTICAL



Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 122 / Chain 9 + Chain 10
Test Date	Aug. 23, 2016		

**Horizontal**

	Freq	Level	Limit	Line	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	11543.48	54.73	74.00	-19.27	41.24	9.61	38.51	34.63	175	255	Peak	HORIZONTAL	
2	11549.40	40.44	54.00	-13.56	26.97	9.61	38.51	34.65	175	255	Average	HORIZONTAL	

**Vertical**

	Freq	Level	Limit	Line	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	11546.72	54.15	74.00	-19.85	40.68	9.61	38.51	34.65	157	271	Peak	VERTICAL	
2	11546.72	40.55	54.00	-13.45	27.08	9.61	38.51	34.65	157	271	Average	VERTICAL	

**Note:**

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

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

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

## 4.6. Band Edge Emissions Measurement

### 4.6.1. Limit

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

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

For transmitters operating in the 5.725-5.85 GHz band: all emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

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 (microvolt/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



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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

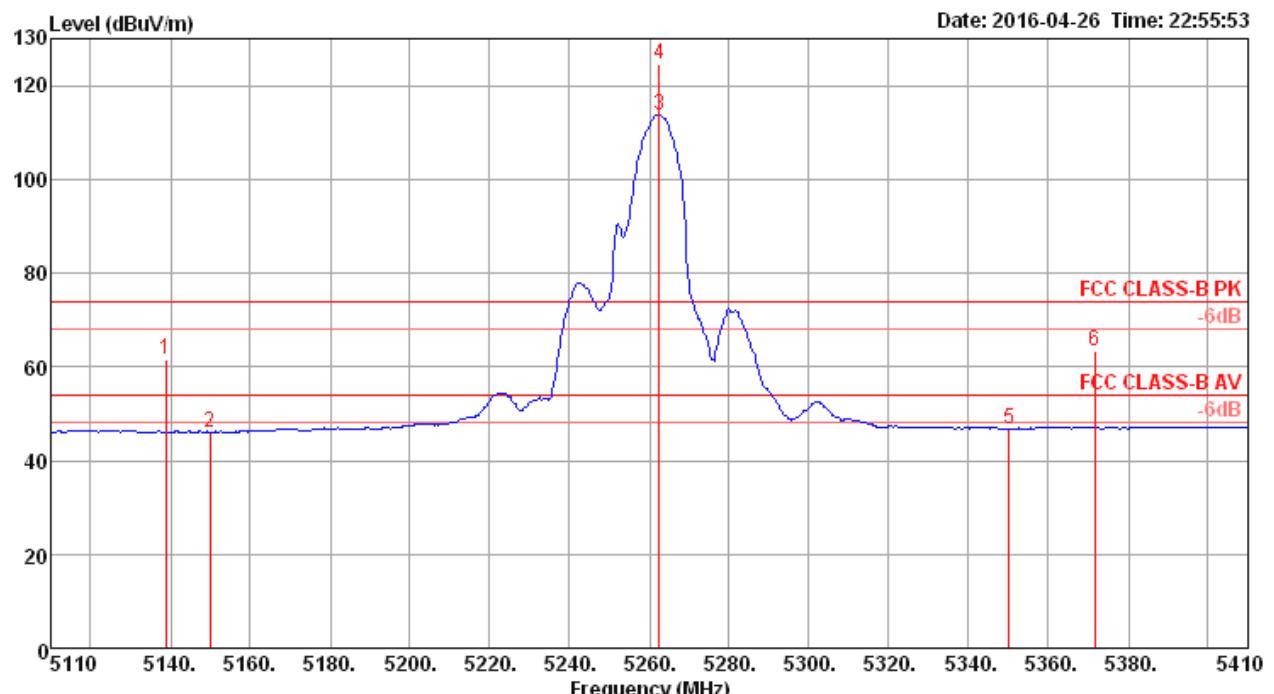
Radio 2

**<For Non-beamforming Mode>**

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

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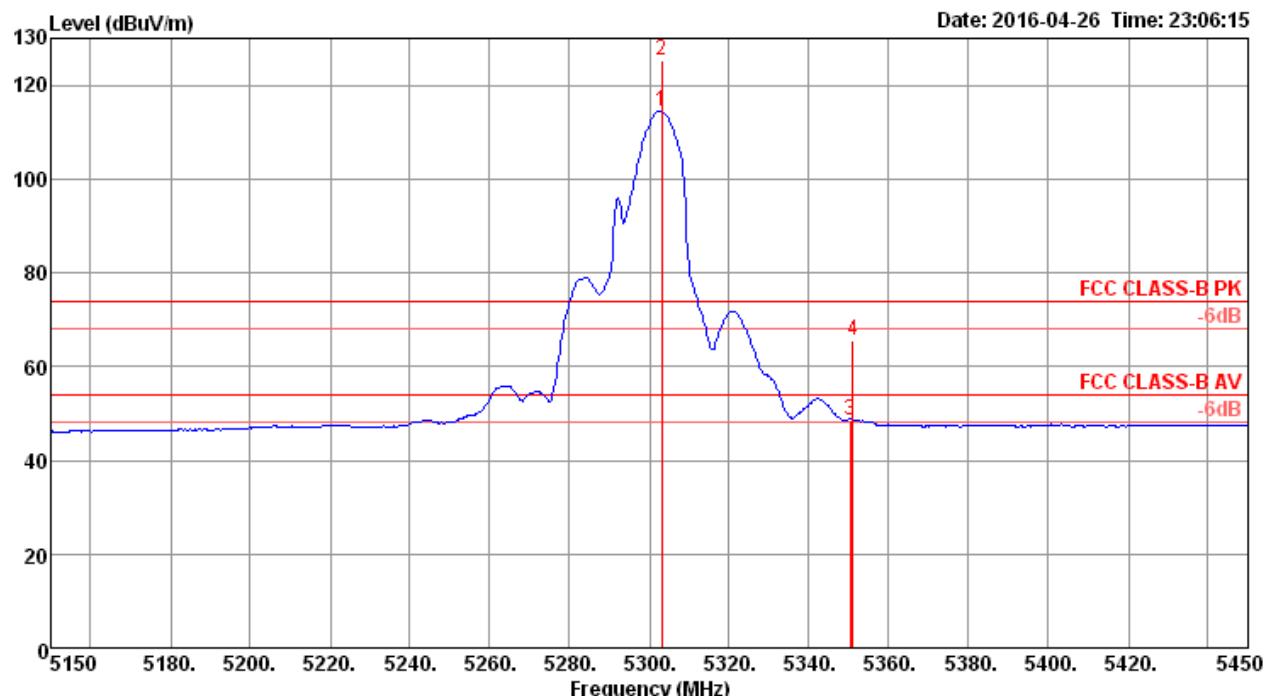
Channel 52



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB			
1	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.

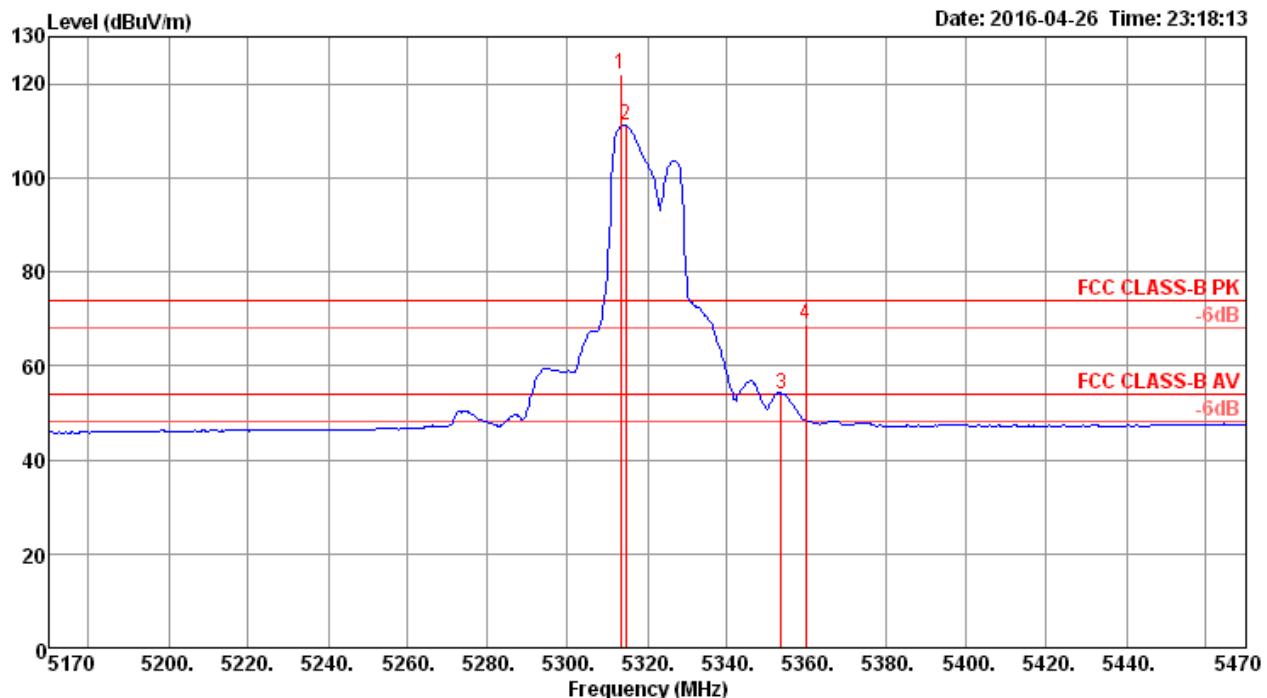
### Channel 60



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
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.

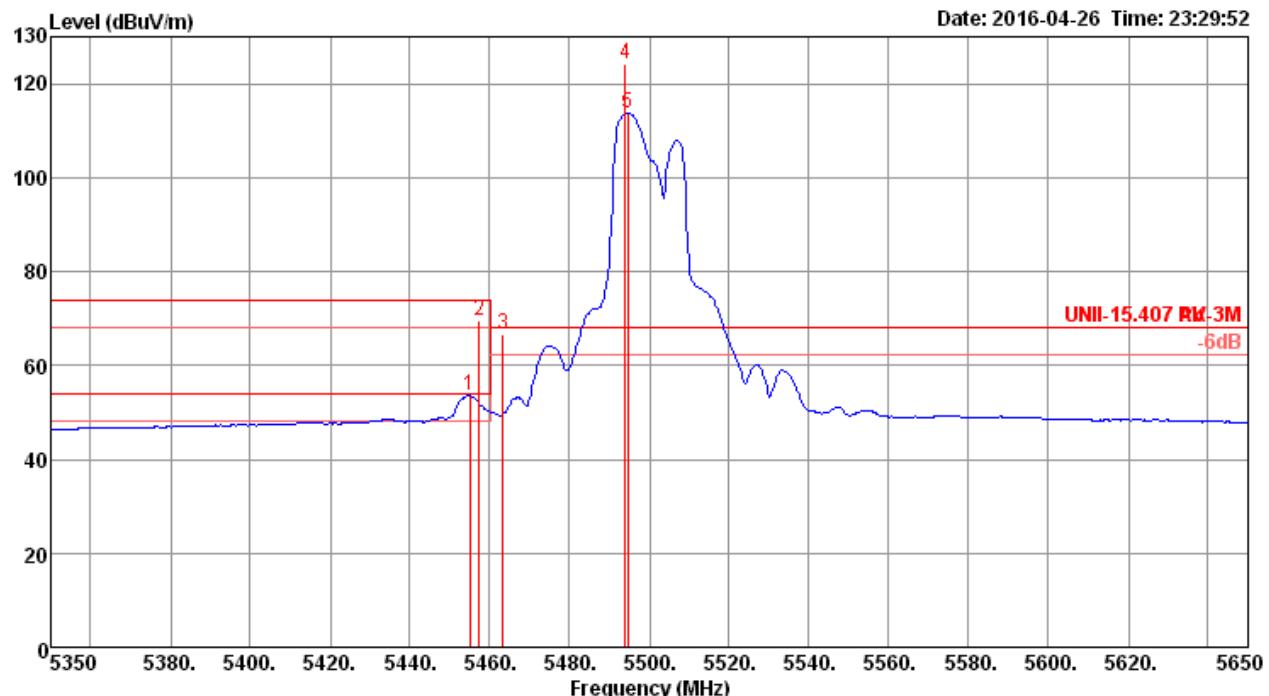
### Channel 64



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.

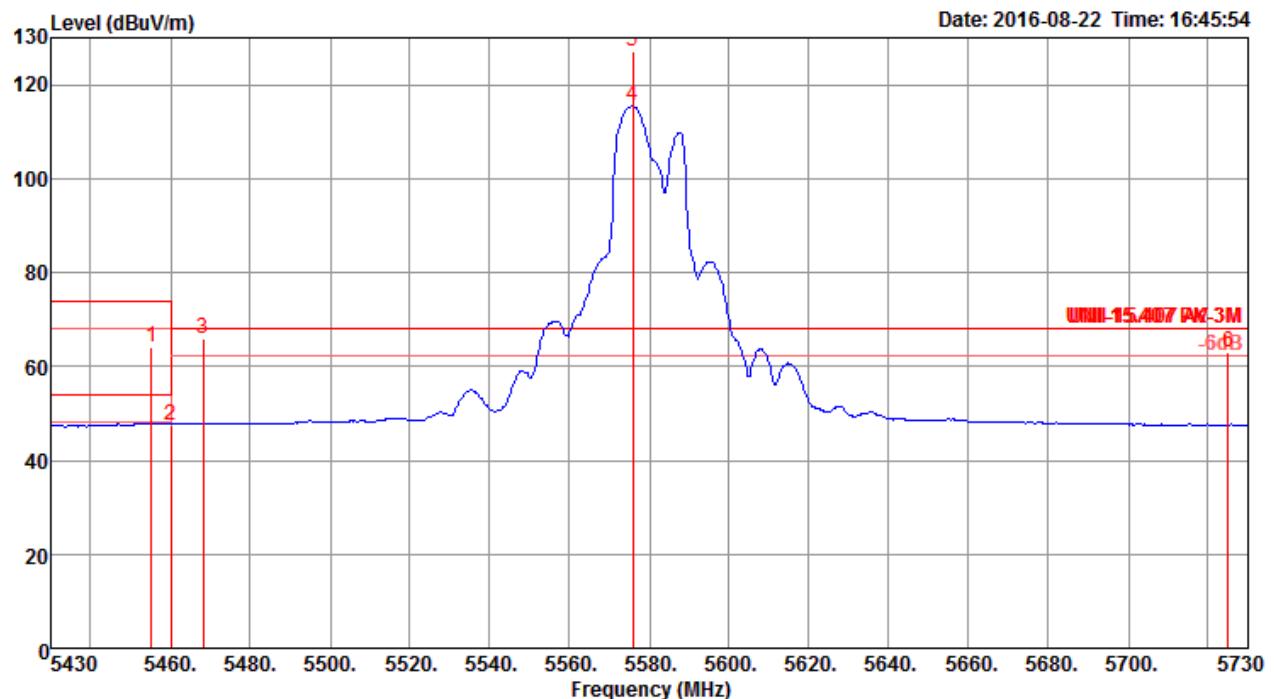
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11a CH 100, 116, 140 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 100**


Freq	Level	Limit		Over Limit	Read Level	Cable Antenna			Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB					
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	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.

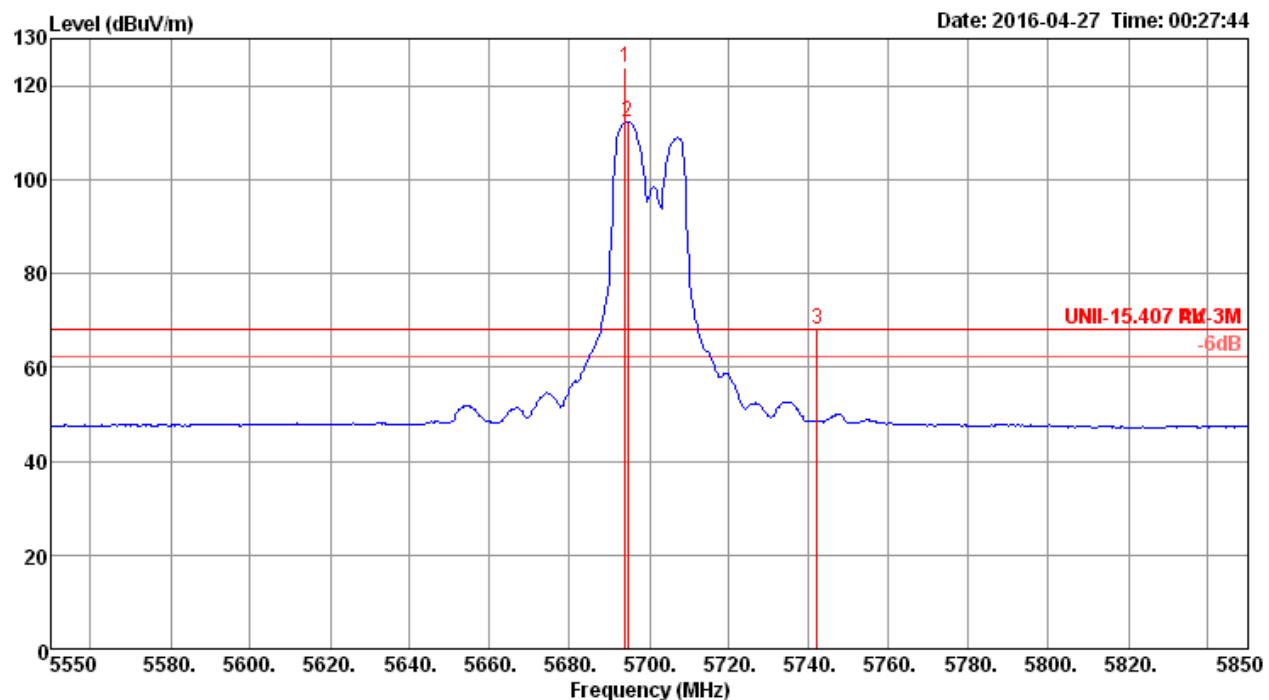
## Channel 116



Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB						
MHz	dBuV/m	dBuV/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.

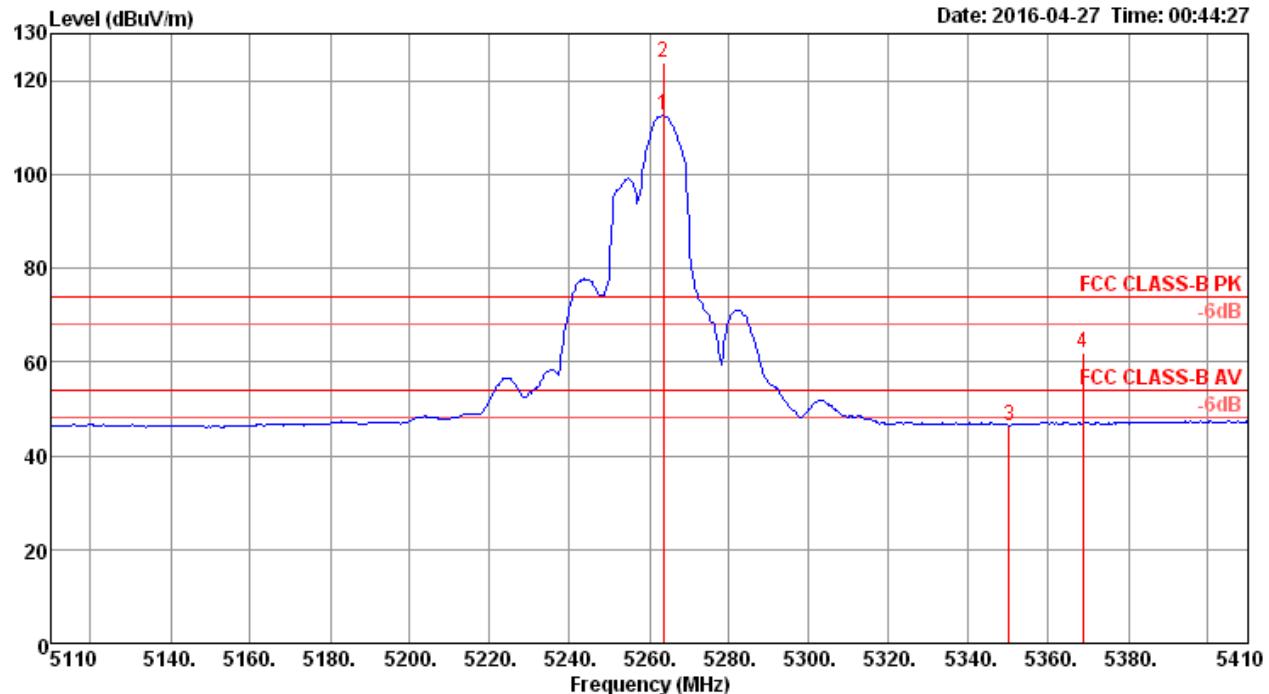
## Channel 140



Freq	Level	Limit	Over	Read	Cable			Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit	Level					
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg		
1	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.

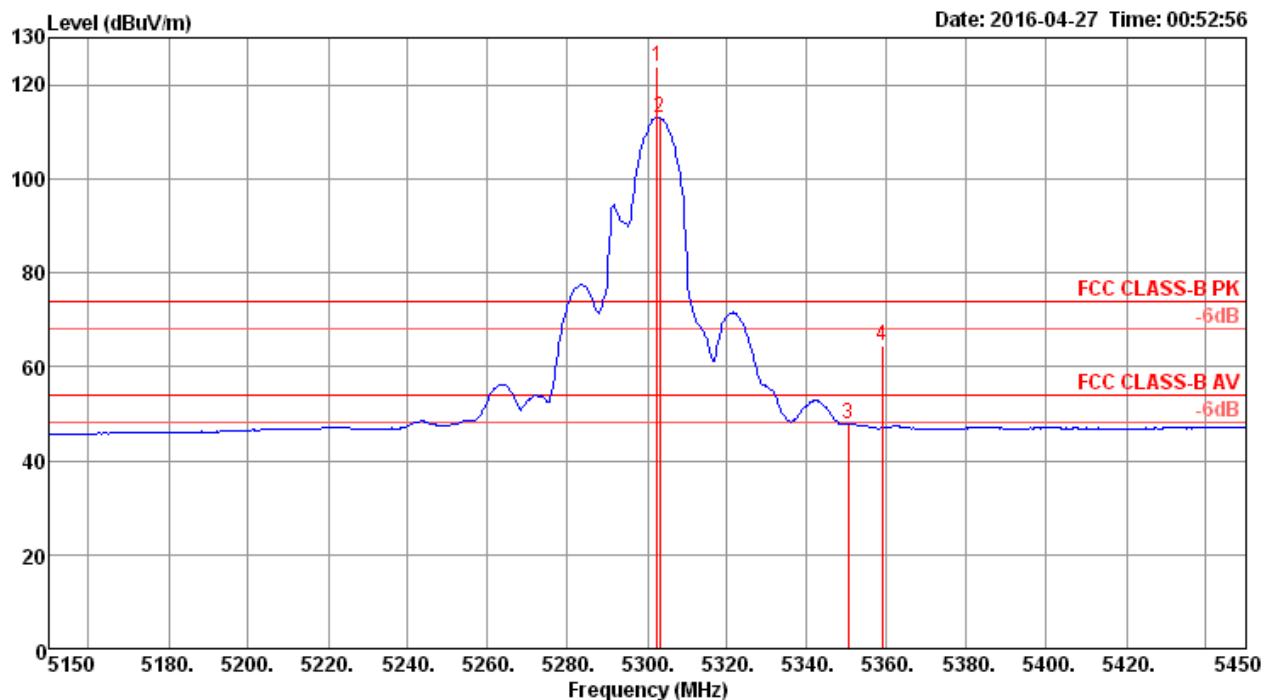
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 52**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.

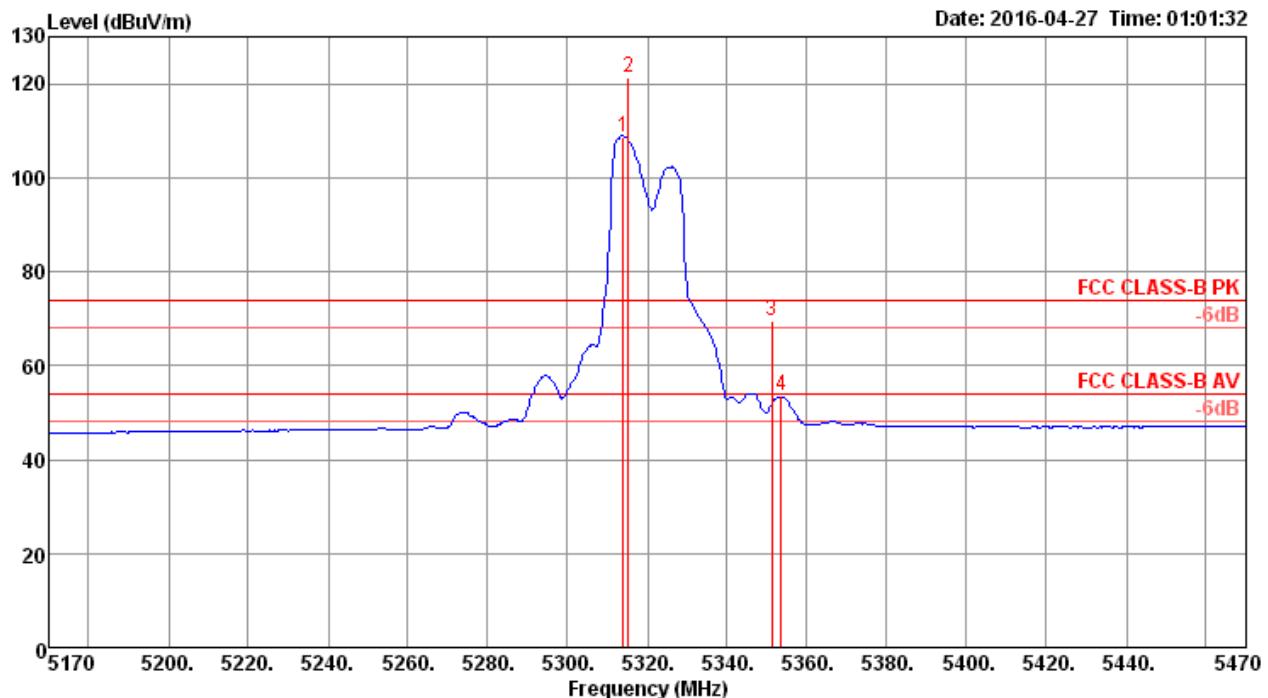
### Channel 60



Freq	Level	Limit	Over	Read	Cable Antenna Preamp			A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit	Level				
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	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.

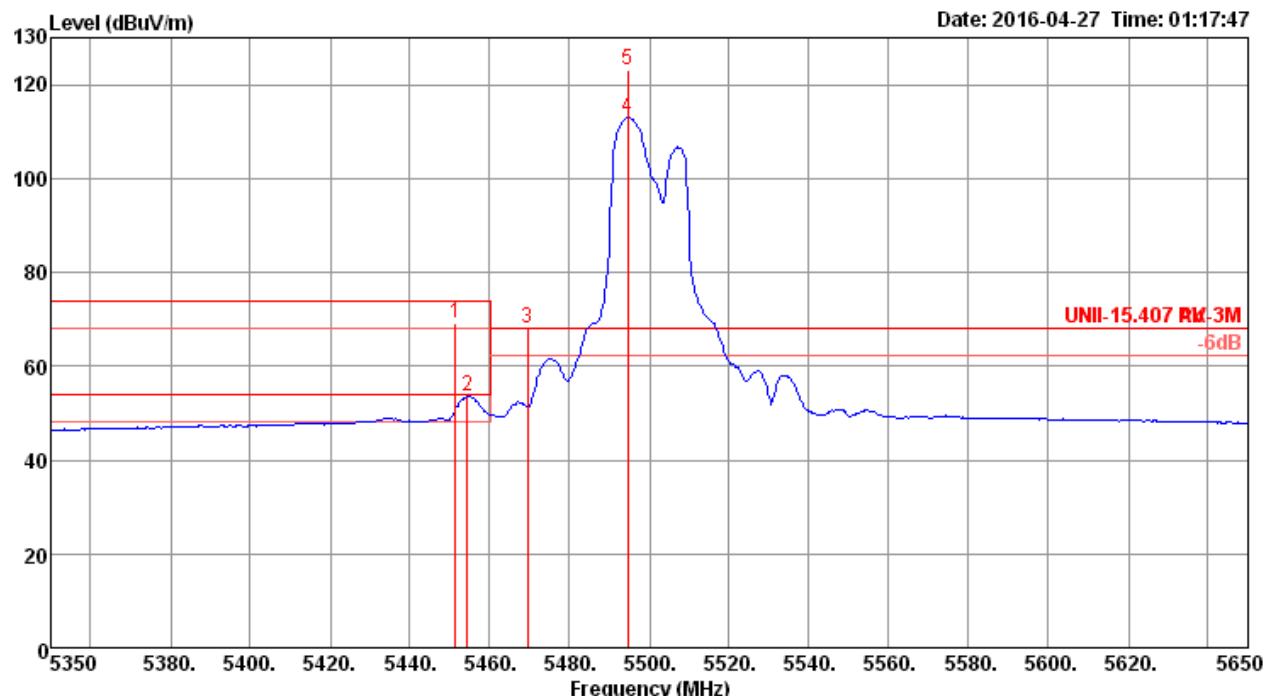
### Channel 64



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Loss	Factor	Factor	cm		
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.

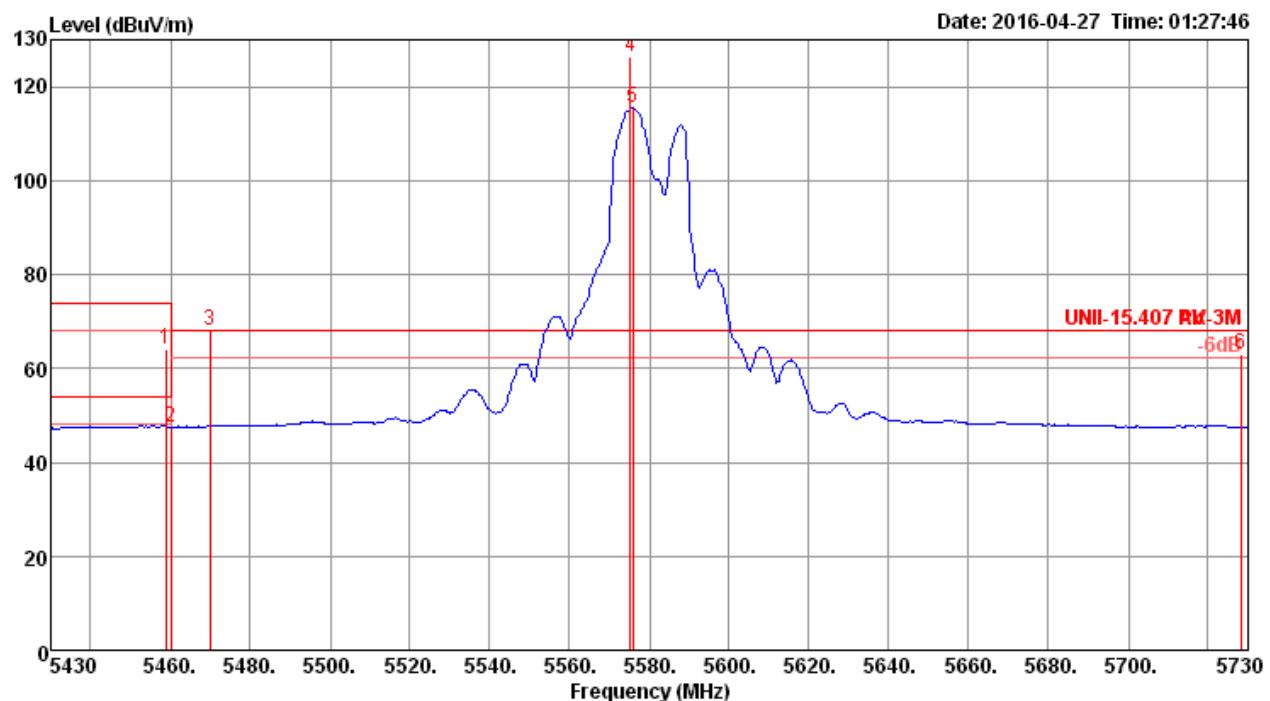
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 100**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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.

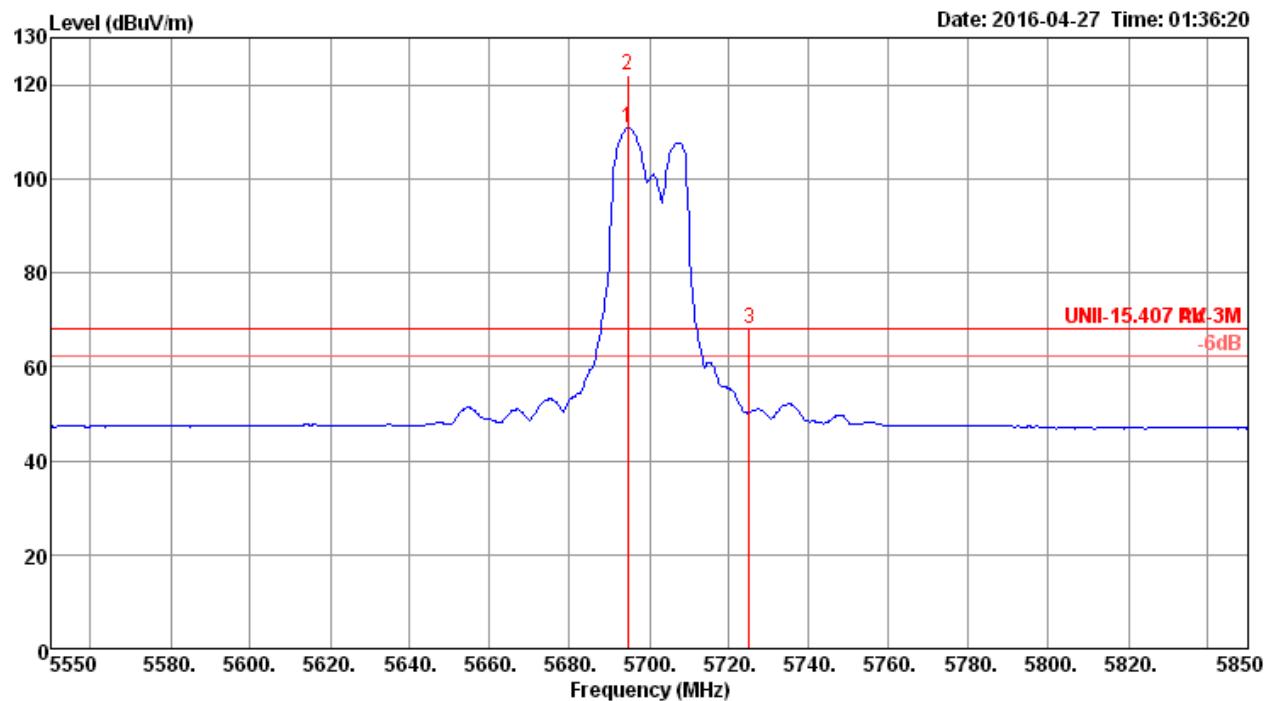
## Channel 116



Freq	Level	Limit Line	Over Limit	Read Level	Cable Antenna			Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor					
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.

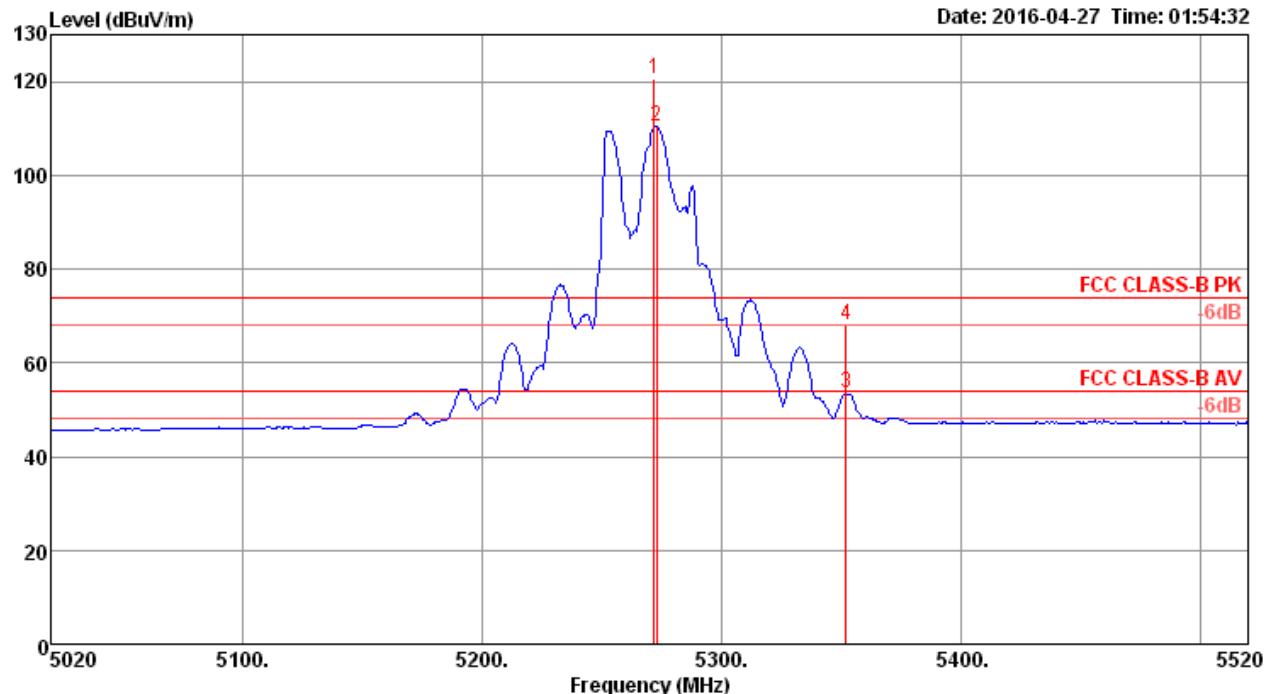
## Channel 140



Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit	Level						
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg			
1	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	

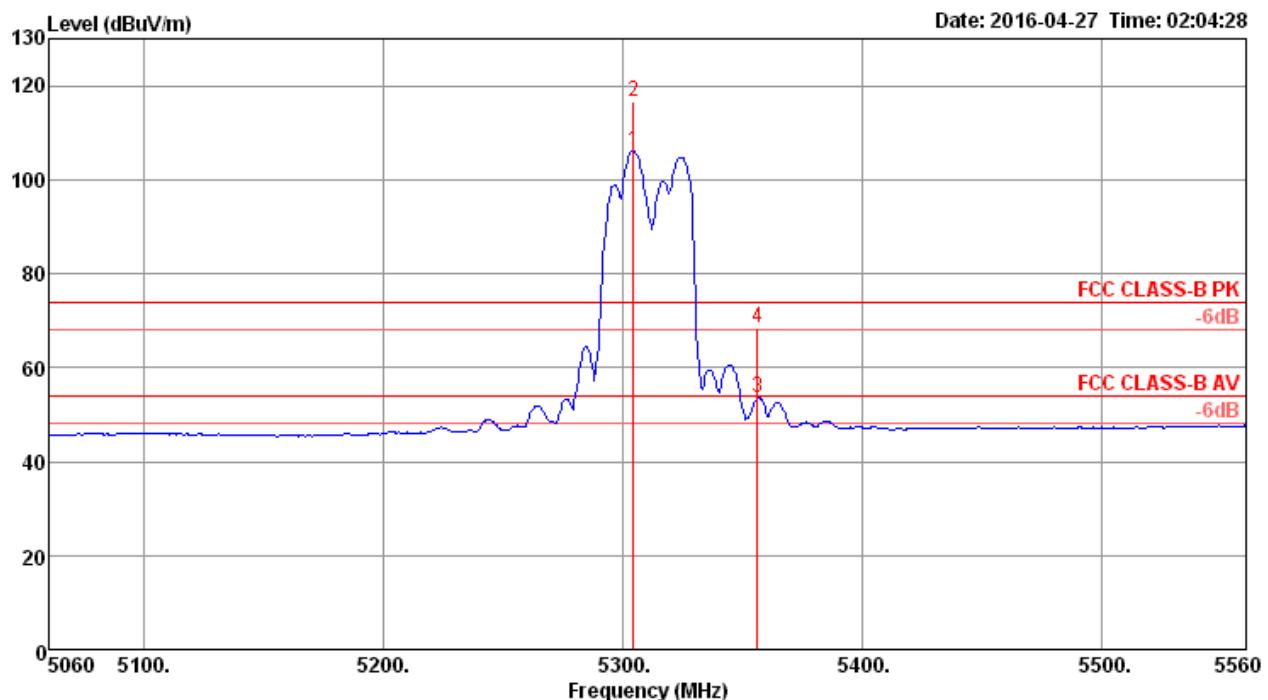
Item 1, 2 are the fundamental frequency at 5700 MHz.

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	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 Antenna Preamp			A/Pos	T/Pos	Remark	Pol/Phase
					Cable Loss	Antenna Factor	Preamp Factor				
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**

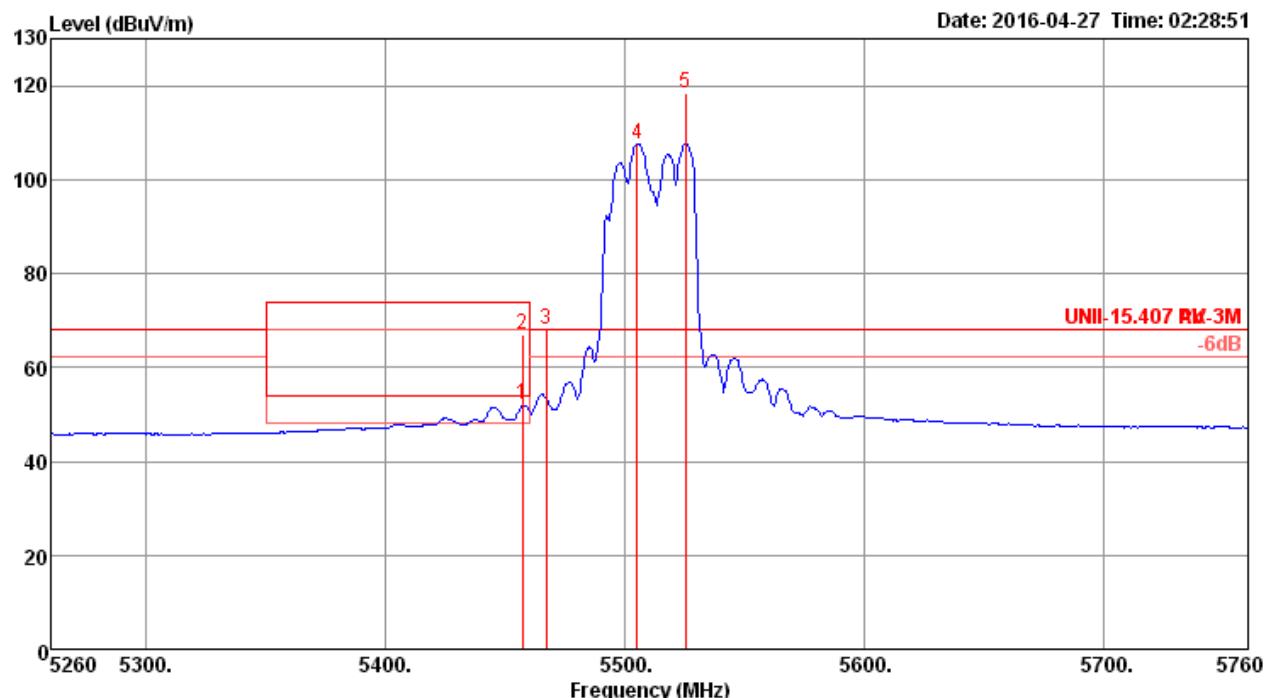
Freq MHz	Level dBuV/m	Limit Line dB	Over Limit dB	Read Level dBuV	Cable Loss dB	Antenna Factor dB/m	Preamp Factor dB	A/Pos cm	T/Pos deg	Remark	Pol/Phase	
1	5304.00	106.20		99.57	8.09	31.60	33.06	270	155	Average	VERTICAL	
2	5304.00	116.66		110.03	8.09	31.60	33.06	270	155	Peak	VERTICAL	
3	5356.00	53.61	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.



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

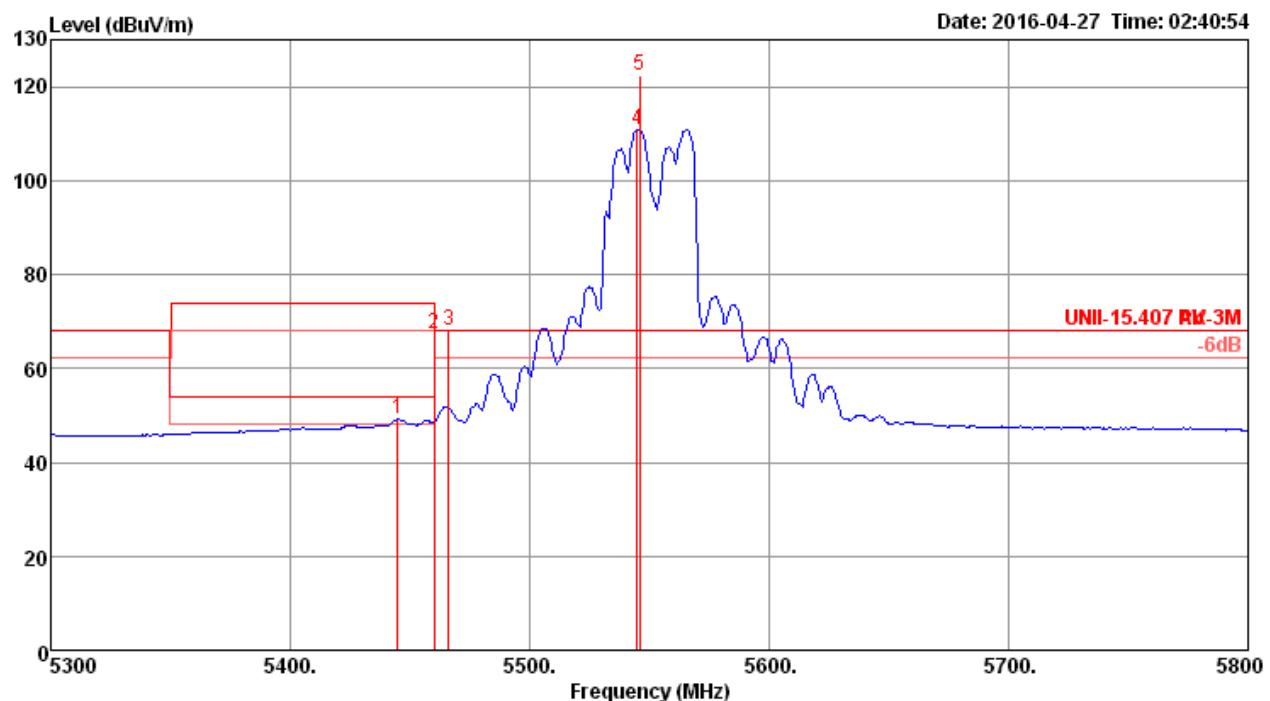
Channel 102



Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Factor	Factor				
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

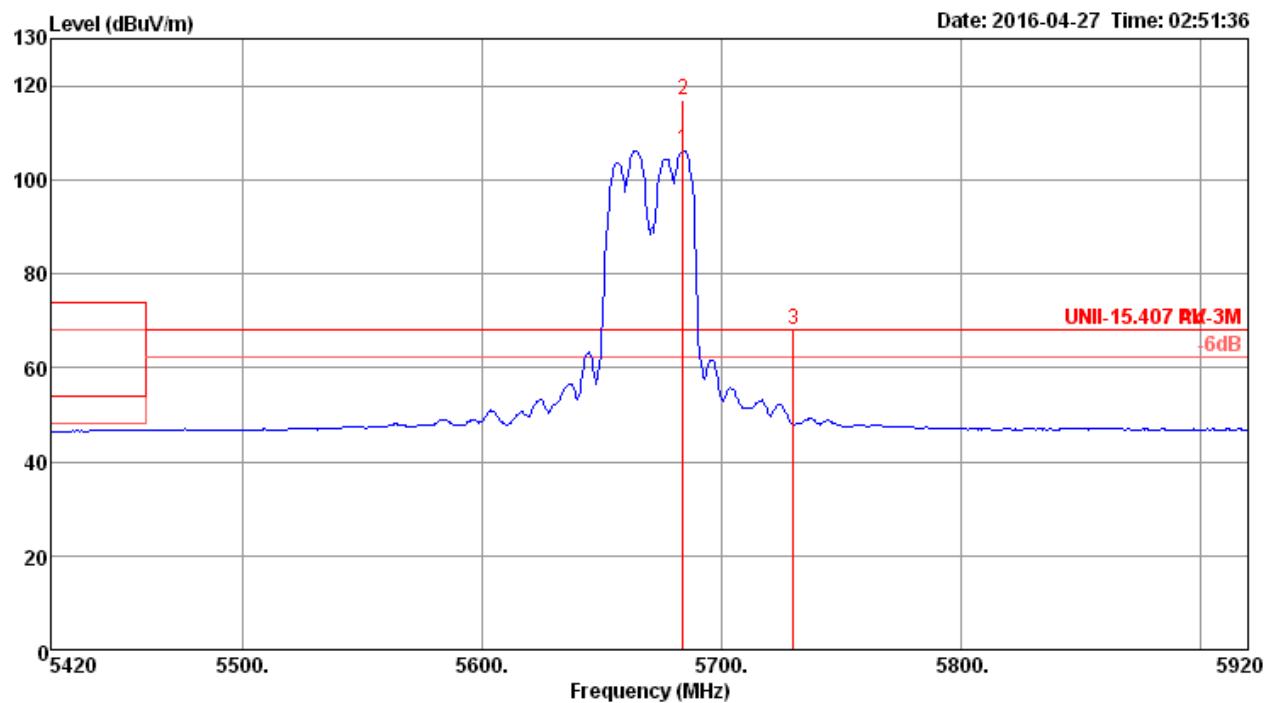
Item 4, 5 are the fundamental frequency at 5510 MHz.

## Channel 110



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
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

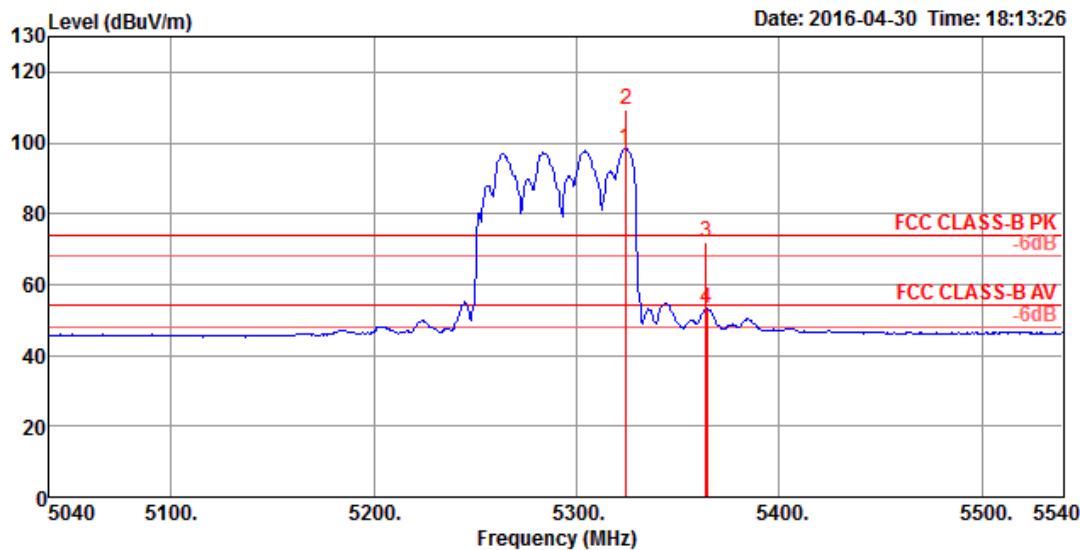
Item 4, 5 are the fundamental frequency at 5550 MHz.

**Channel 134**

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
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.

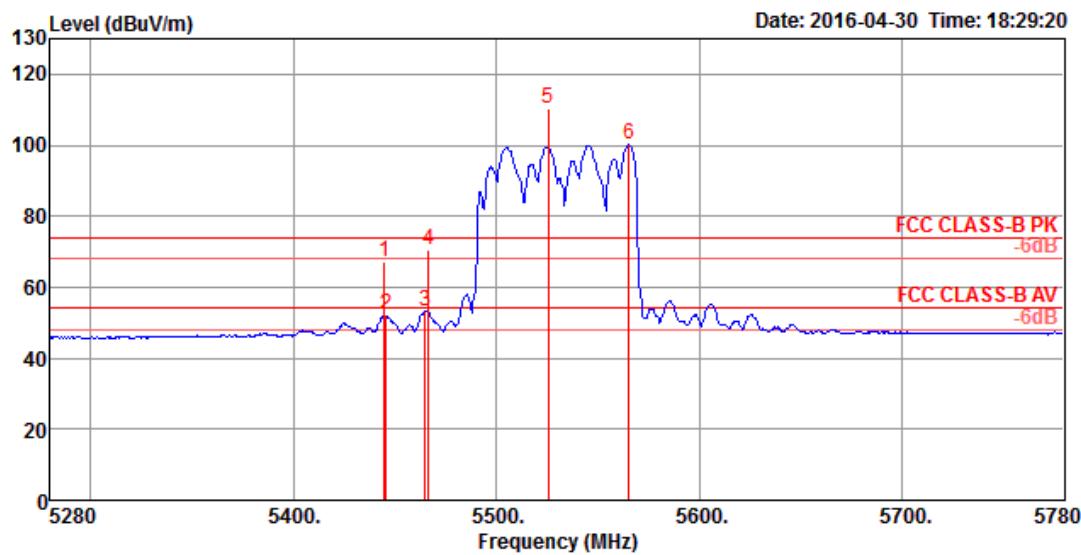
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 58**

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
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.

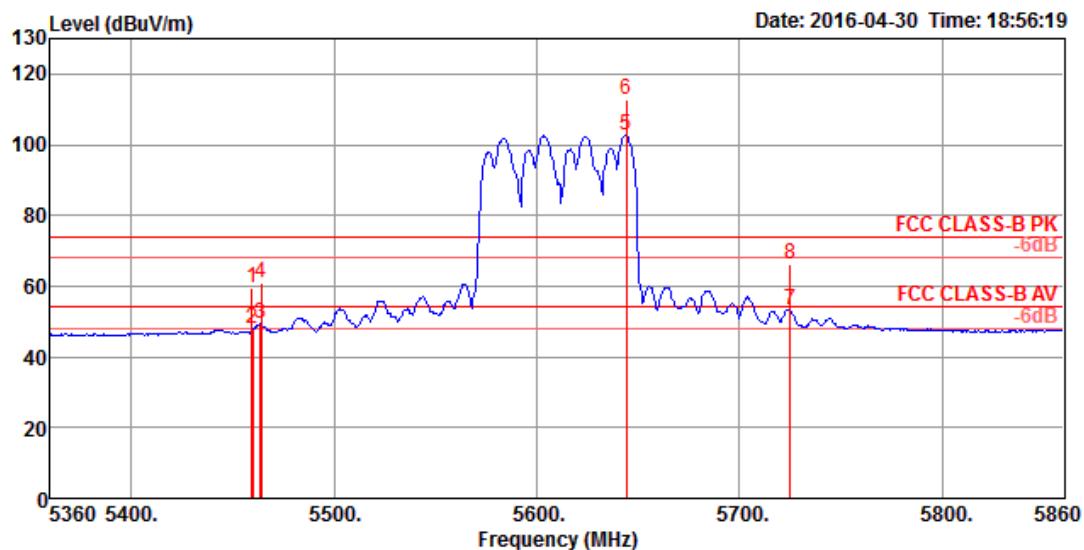
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 106**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	dB	cm		
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

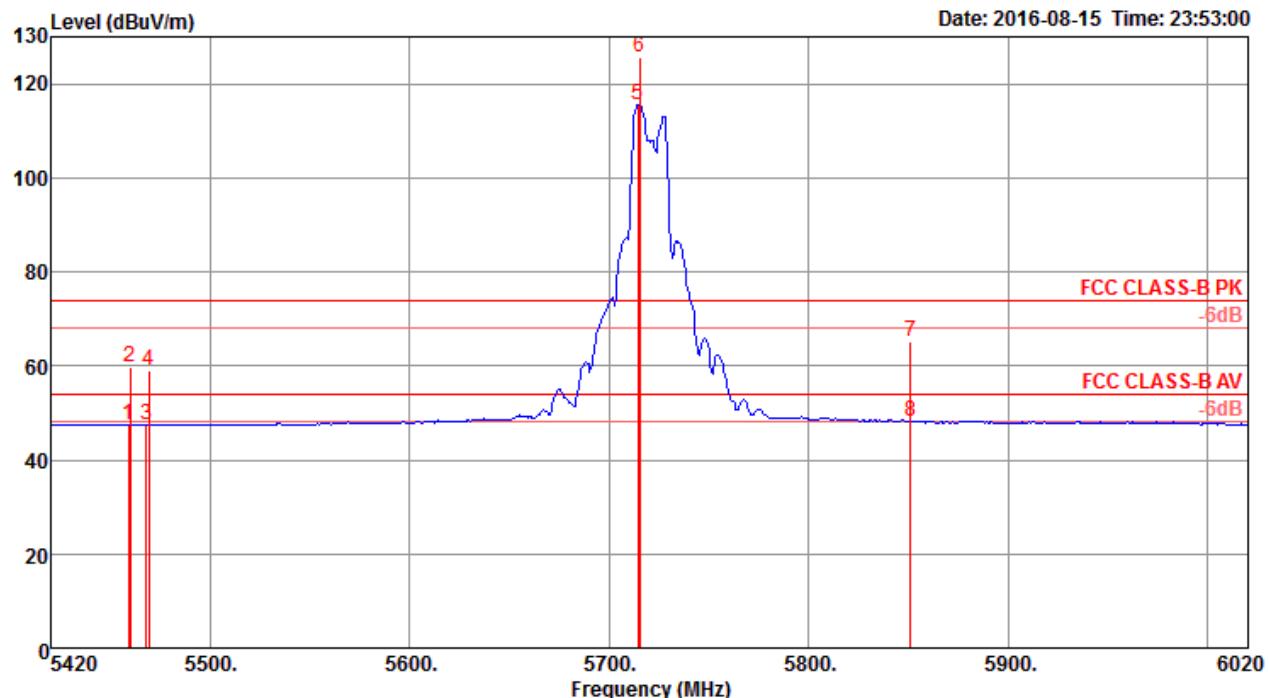


Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg	
1	5459.28	59.47	74.00	-14.53	53.17	7.46	31.76	32.92	255	44	Peak VERTICAL
2	5460.00	47.77	54.00	-6.23	41.47	7.46	31.76	32.92	255	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	5644.01	102.59			95.95	7.64	31.98	32.98	255	44	Average VERTICAL
6	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**

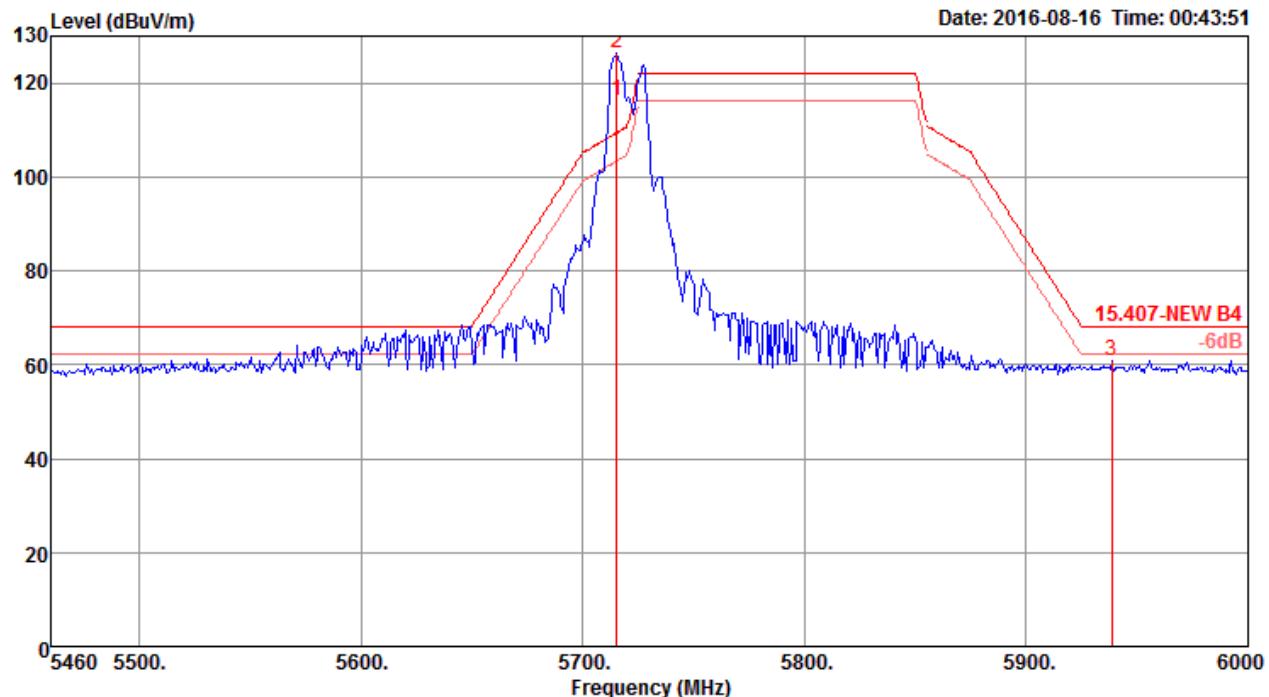
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11a CH 144 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 144**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.

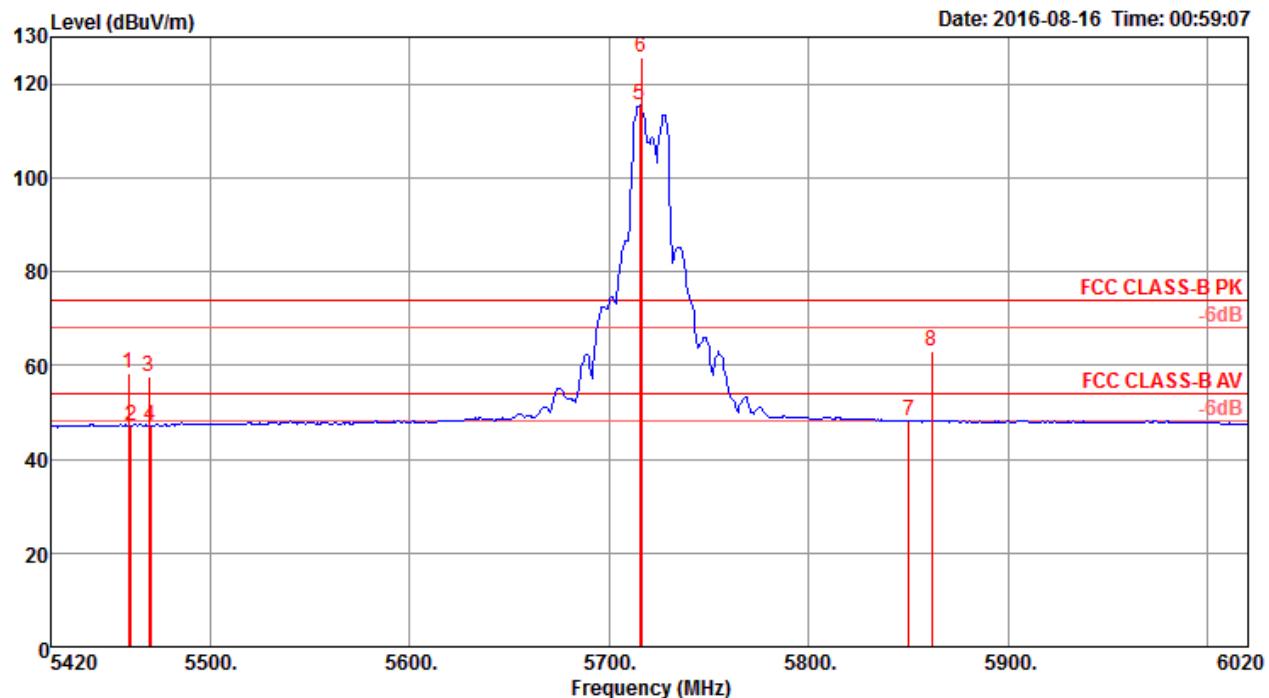
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11a CH 144 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 144**

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm		
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.

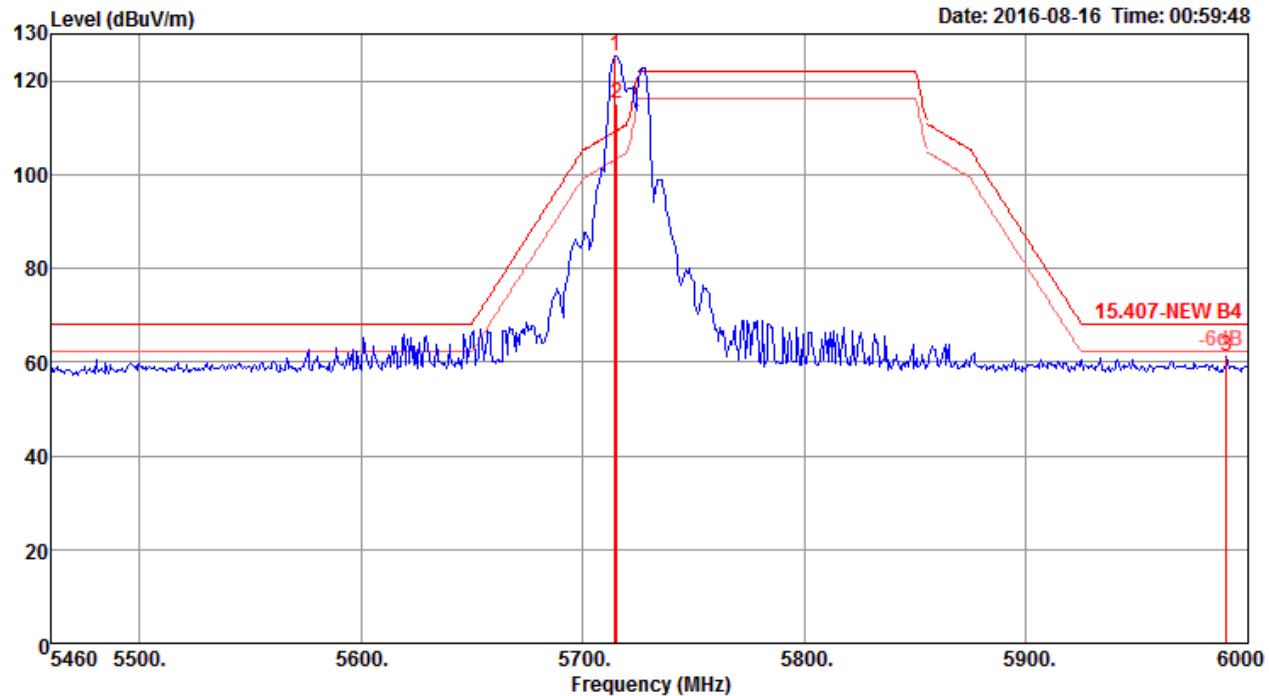
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 144**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	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.

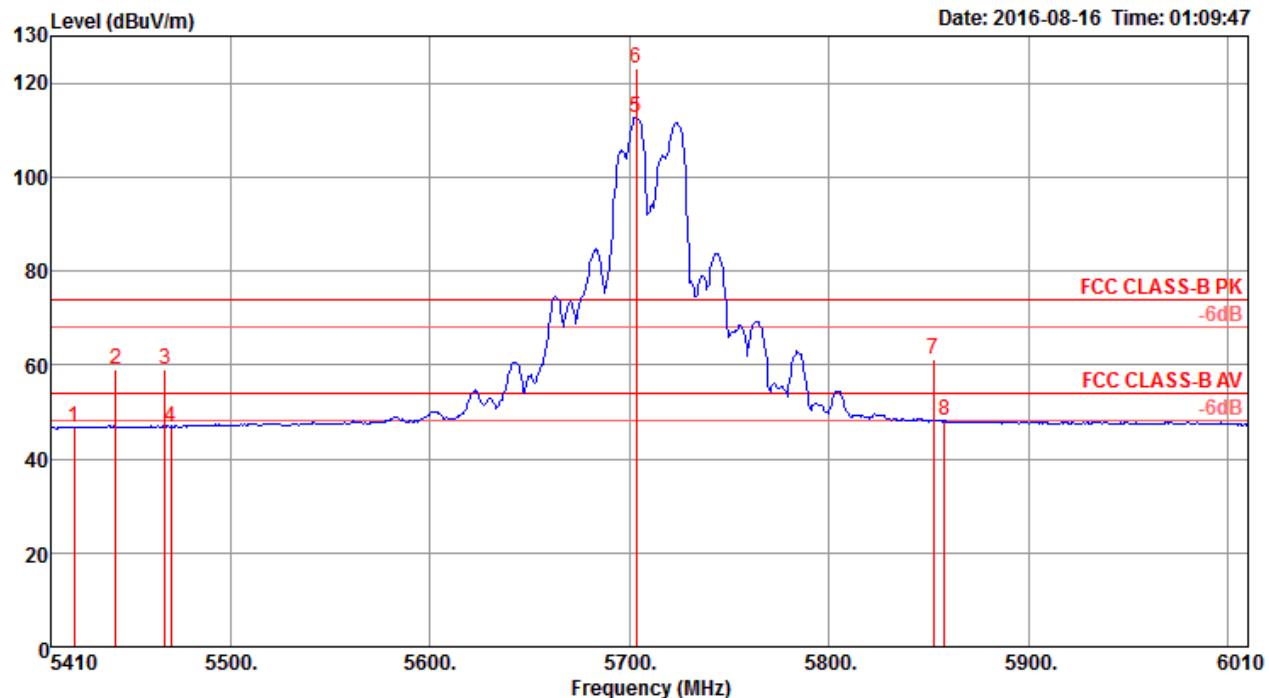
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 144**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	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.

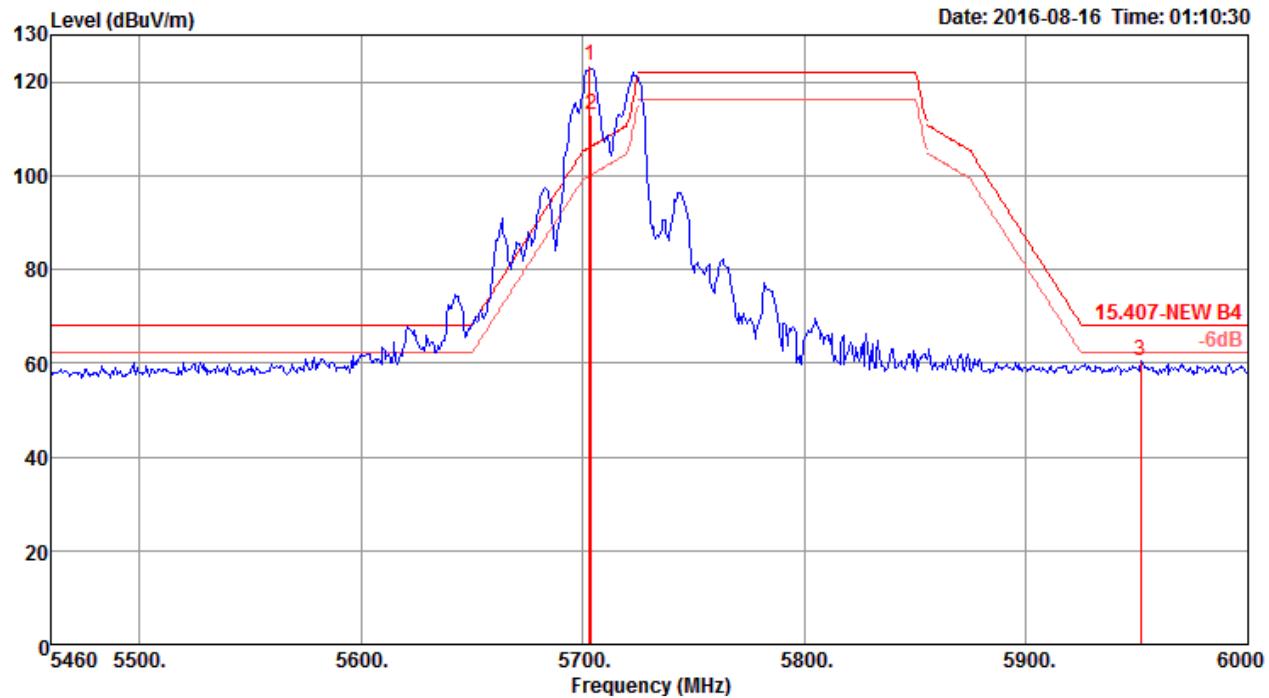
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 142**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	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.

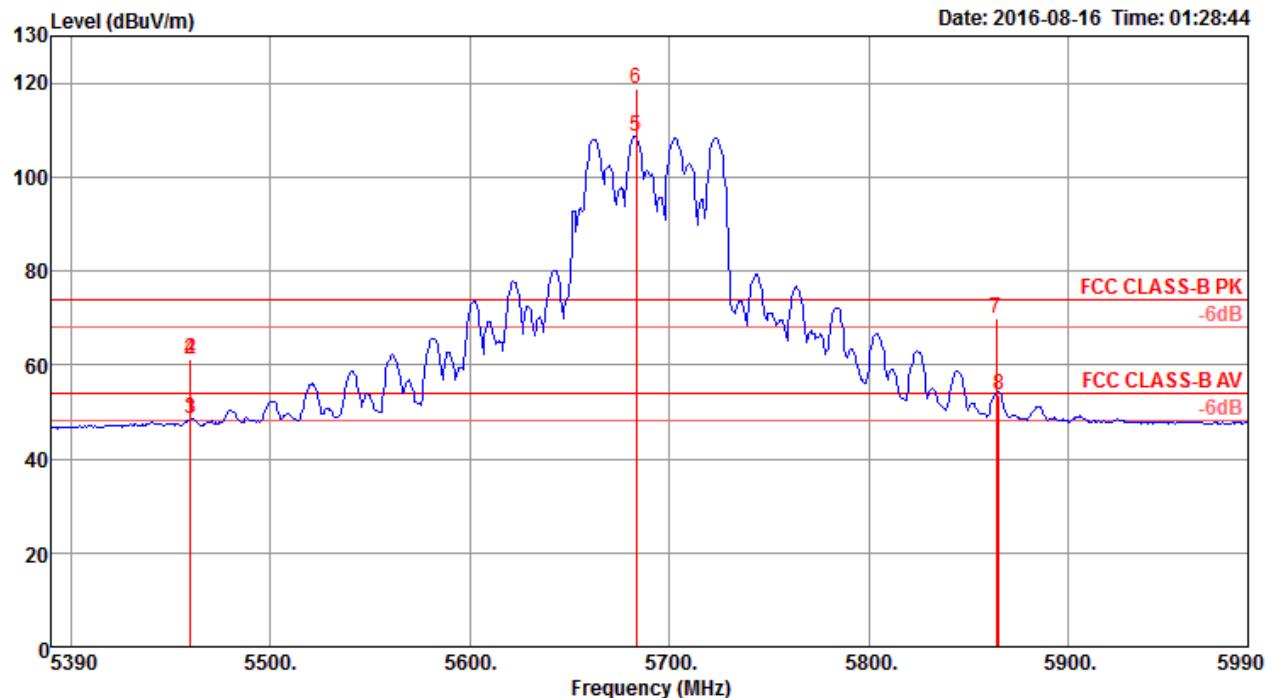
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 142**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	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.

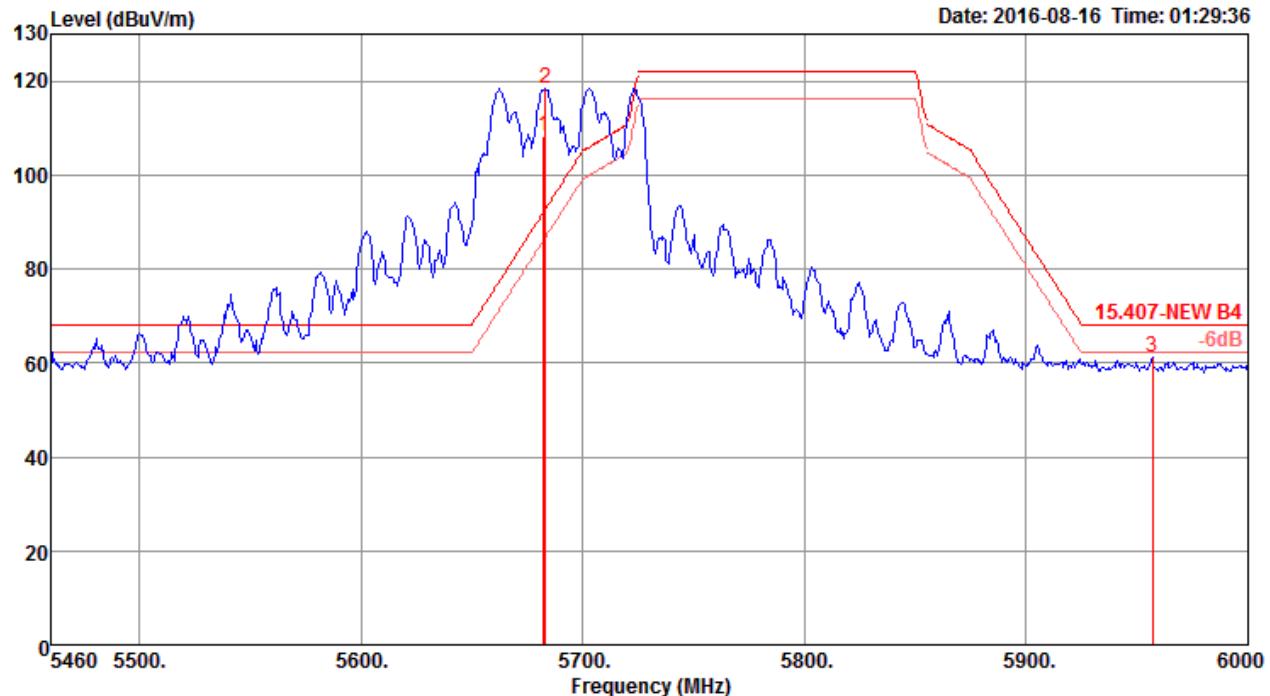
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 138**


Freq	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	Line	dBuV/m									
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	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.

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

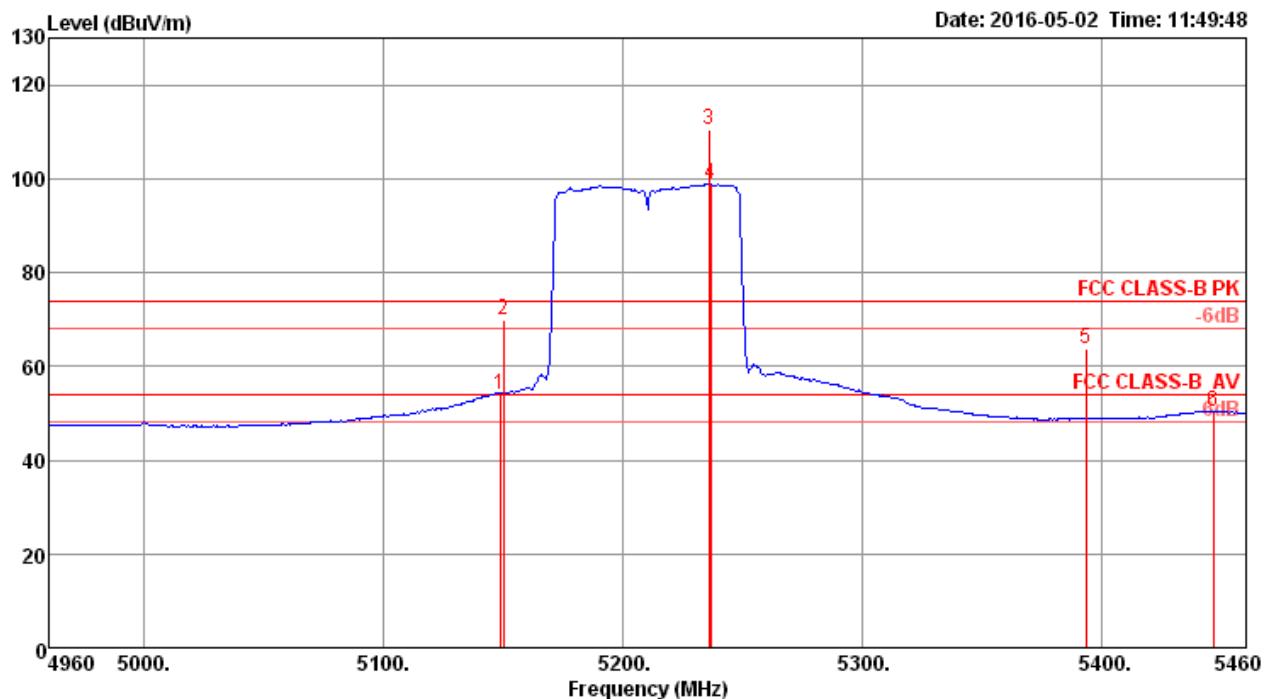
**Channel 138**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
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**

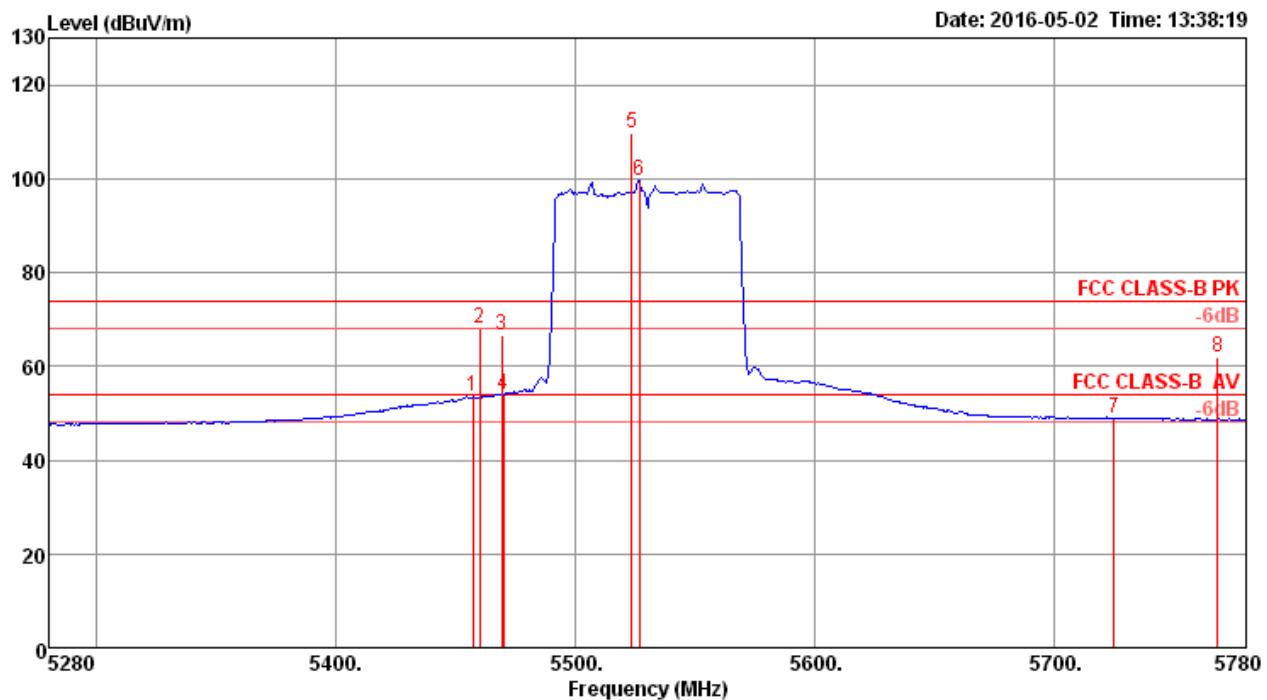
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 1 / CH 42+106 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m									
MHz	MHz	dB	dB	dB	dB	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.

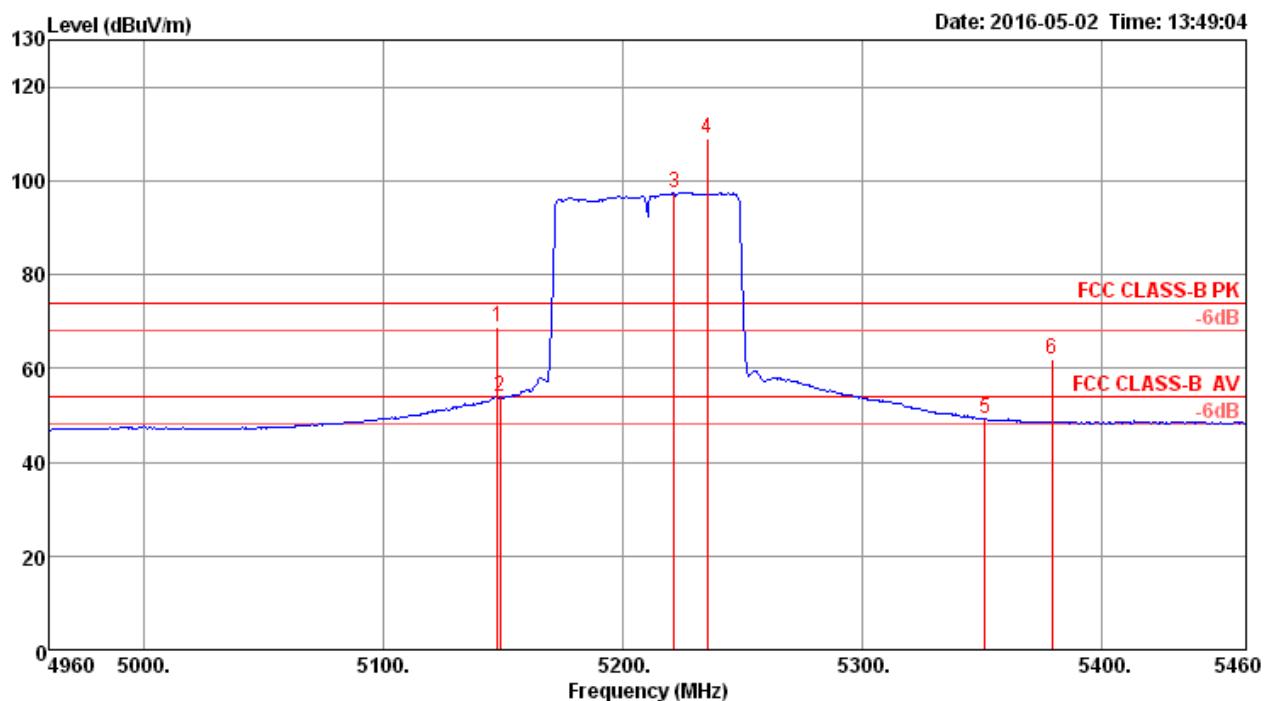
## Channel 106



Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			Loss	Factor	Factor				
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.

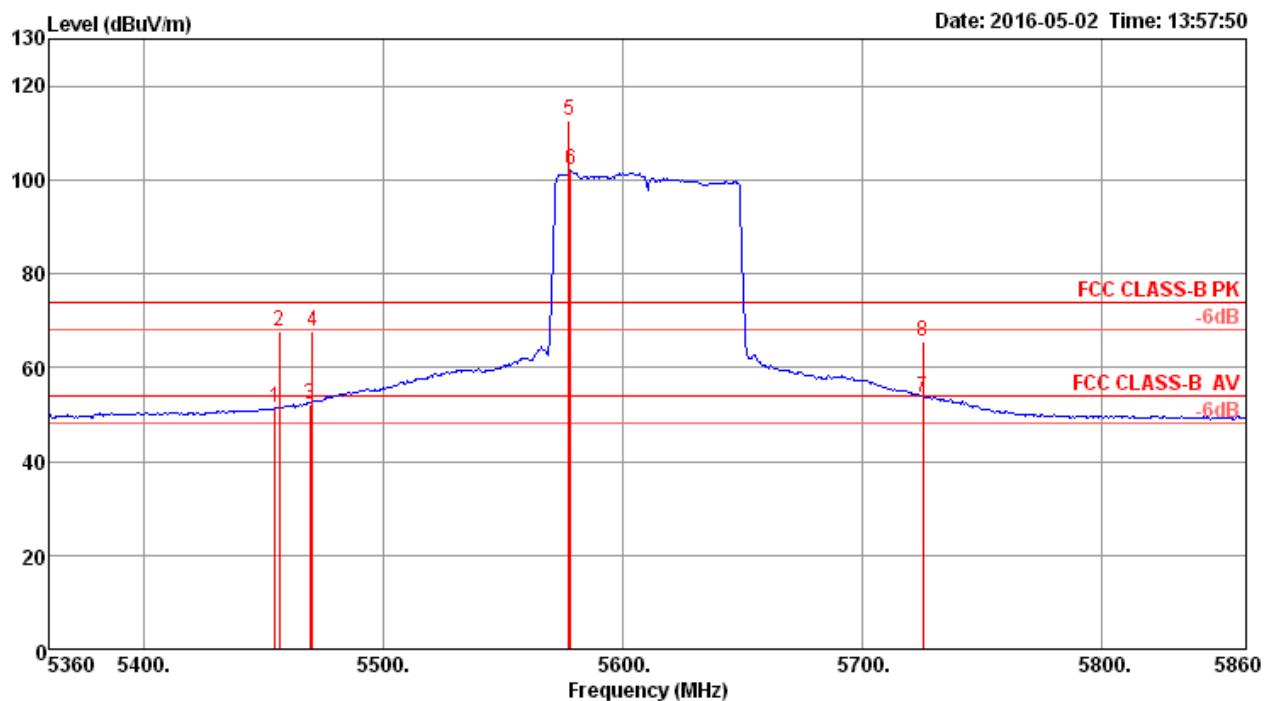
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 2 / CH 42+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	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.

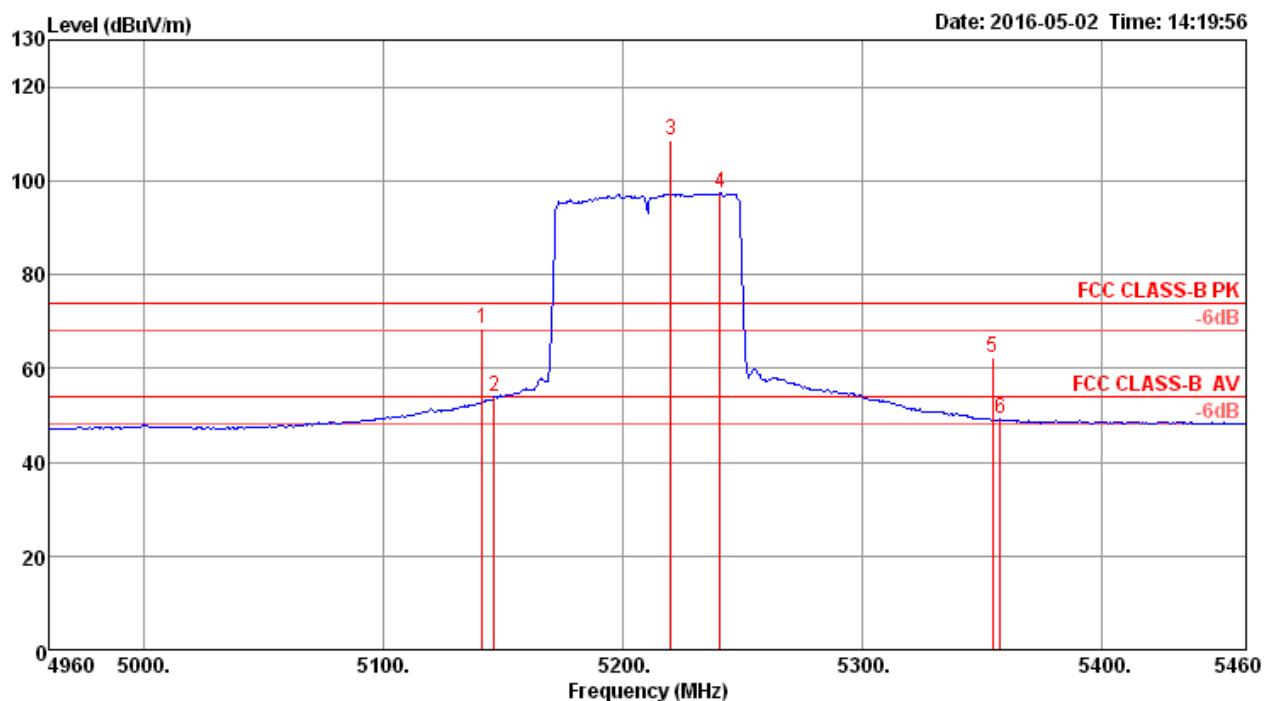
### Channel 122



Freq	Level	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB	dB/m				
MHz	dBuV/m	dBuV/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.

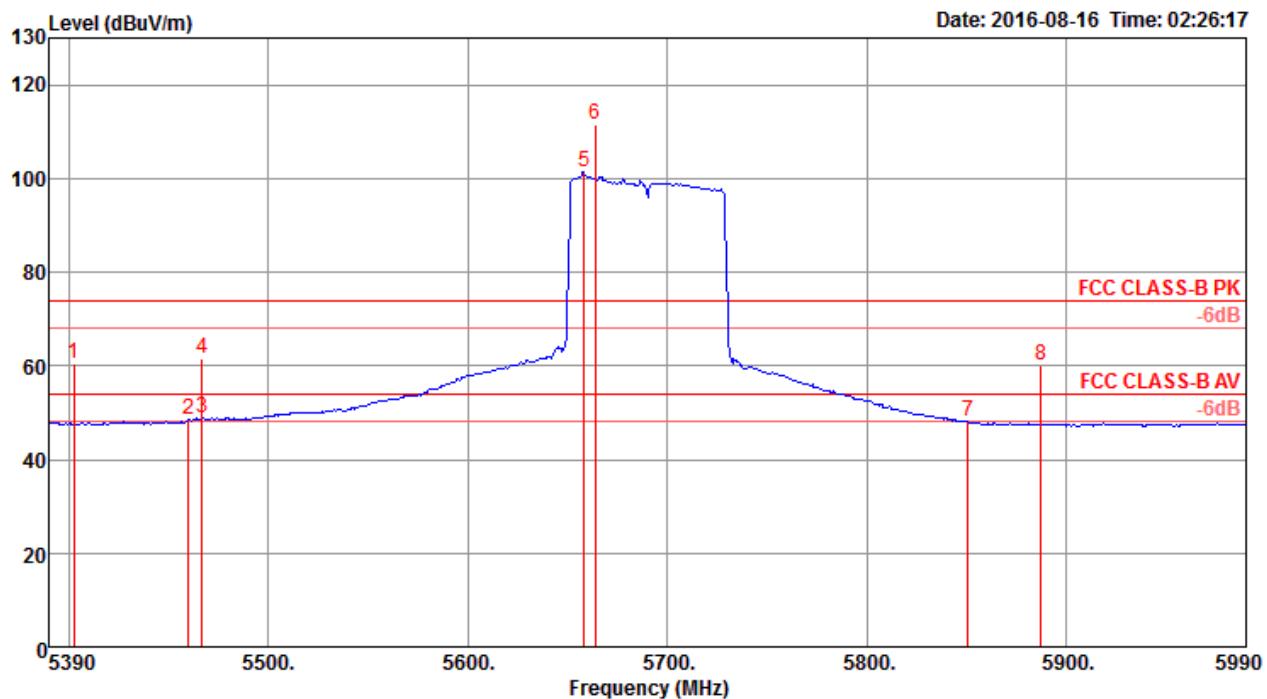
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 3 / CH 42+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**

Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	deg	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	

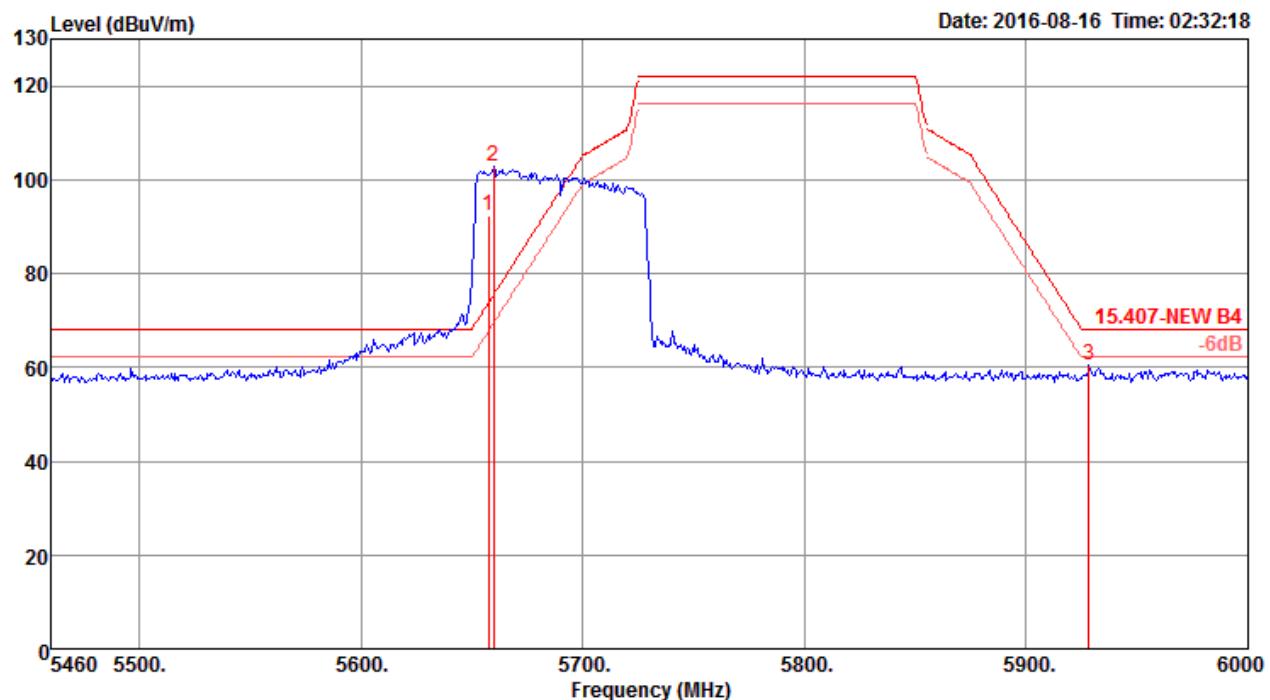
Item 3, 4 are the fundamental frequency at 5210 MHz.

## Channel 138 (UNII 2C)



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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

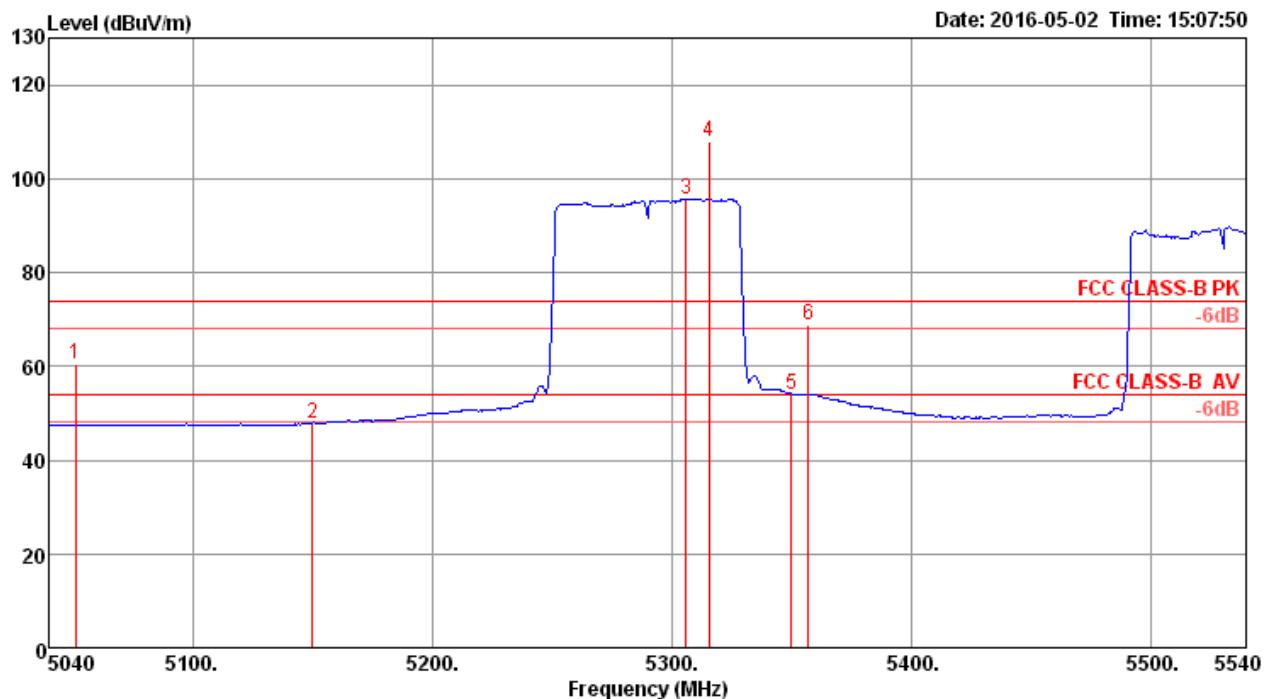
Item 5, 6 are the fundamental frequency at 5690 MHz.

**Channel 138 (UNII 3)**

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

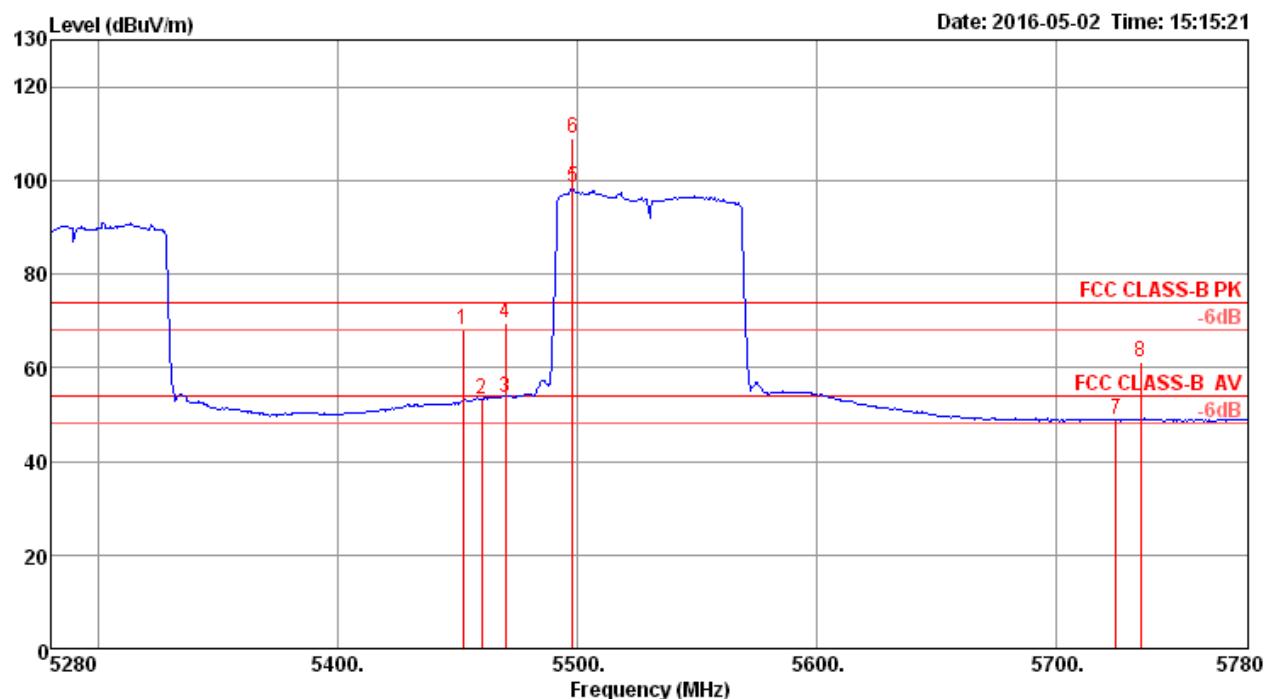
Item 1, 2 are the fundamental frequency at 5690 MHz.

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	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		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	

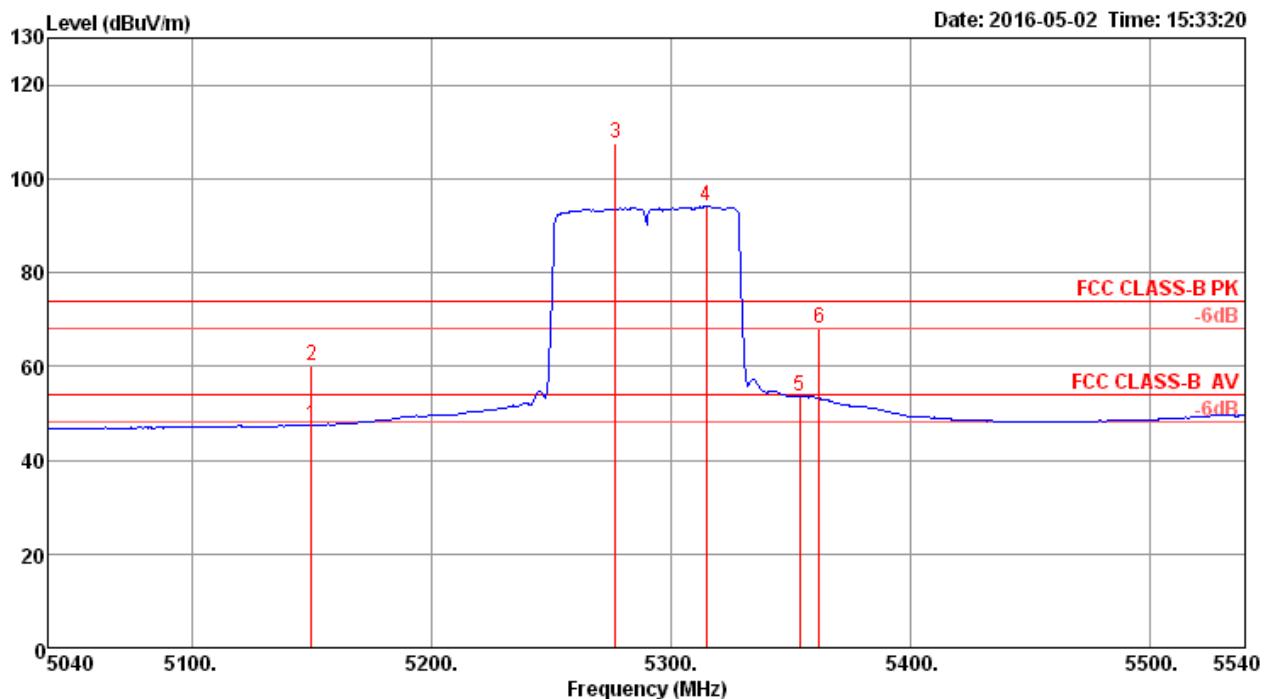
Item 3, 4 are the fundamental frequency at 5290 MHz.

**Channel 106**

Freq	Level	Limit Line	Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	dBuV						
	MHz	dBuV/m	dBuV/m		dB		dB	dB	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.

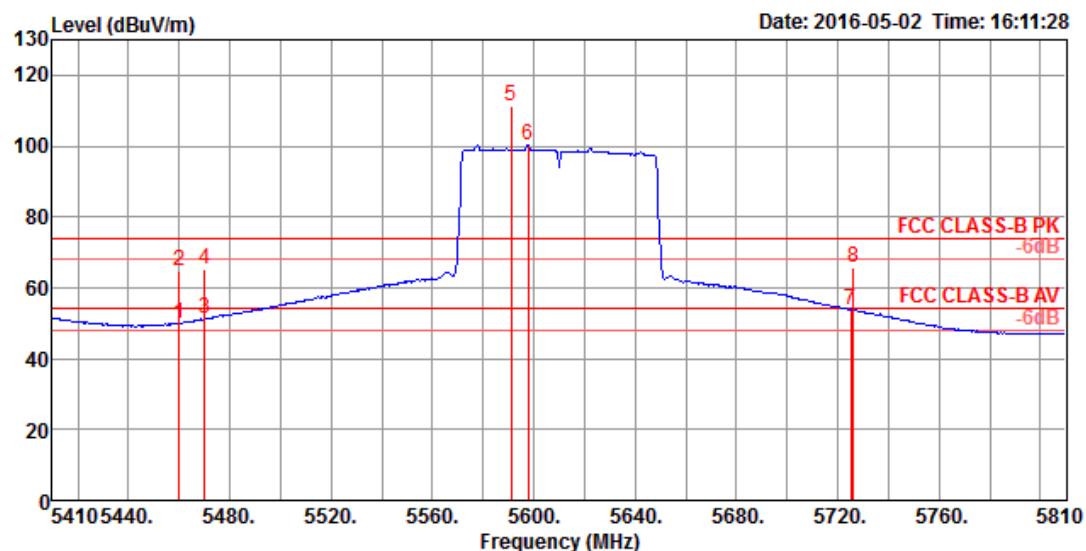
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 5 / CH 58+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 58**

Freq	Level	Limit Line	Over Limit	Read Level	Cable			Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	dB						
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.

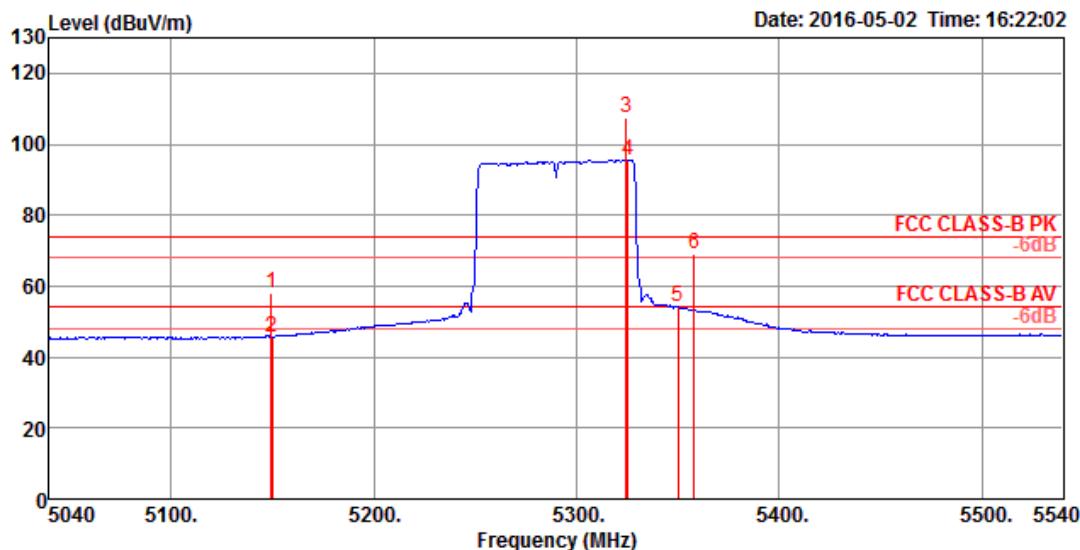
## Channel 122



Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	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	

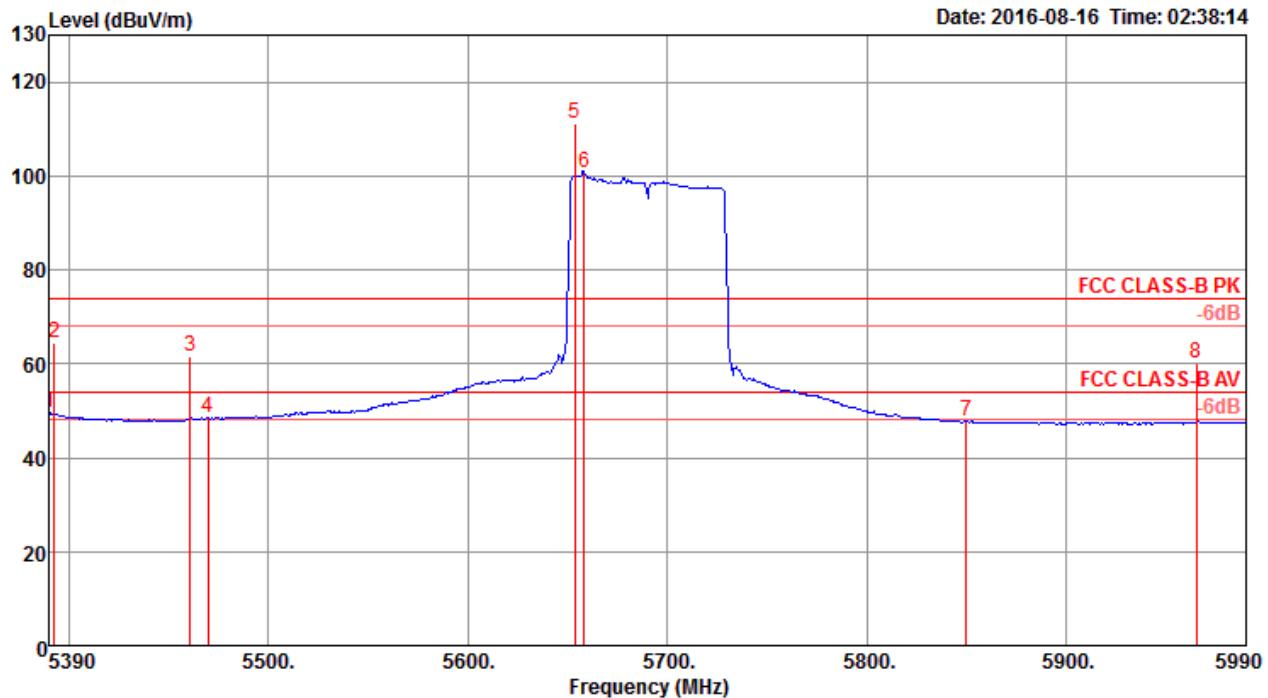
Item 5, 6 are the fundamental frequency at 5610 MHz.

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	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		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV			dB	cm	deg	
MHz	dBuV/m	dBuV/m	dB	dB	dBuV	dB	dB/m	dB	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	5324.73	107.56			101.46	7.36	31.67	32.93	234	222	Peak		VERTICAL
4	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

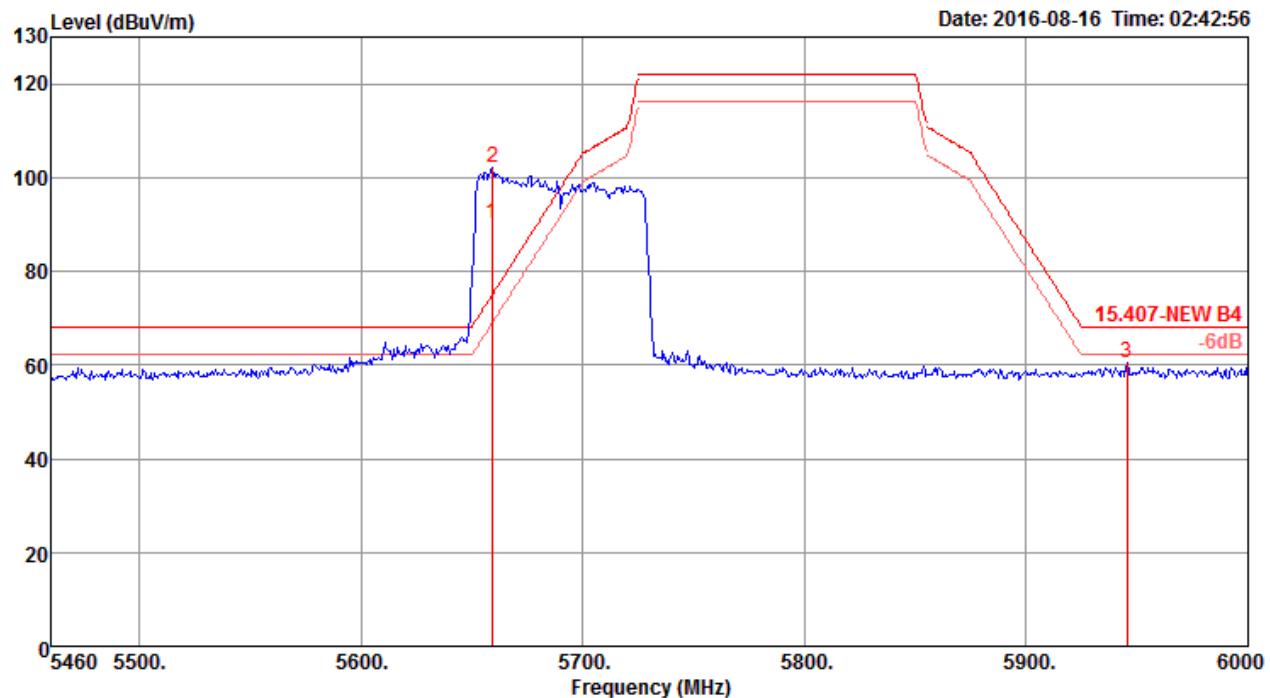
Item 3, 4 are the fundamental frequency at 5290 MHz.

**Channel 138 (UNII 2C)**


Freq	Level	Limit		Over Limit	Read Level	Cable Antenna			A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			Loss	Antenna Factor	Preamp Factor				
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.

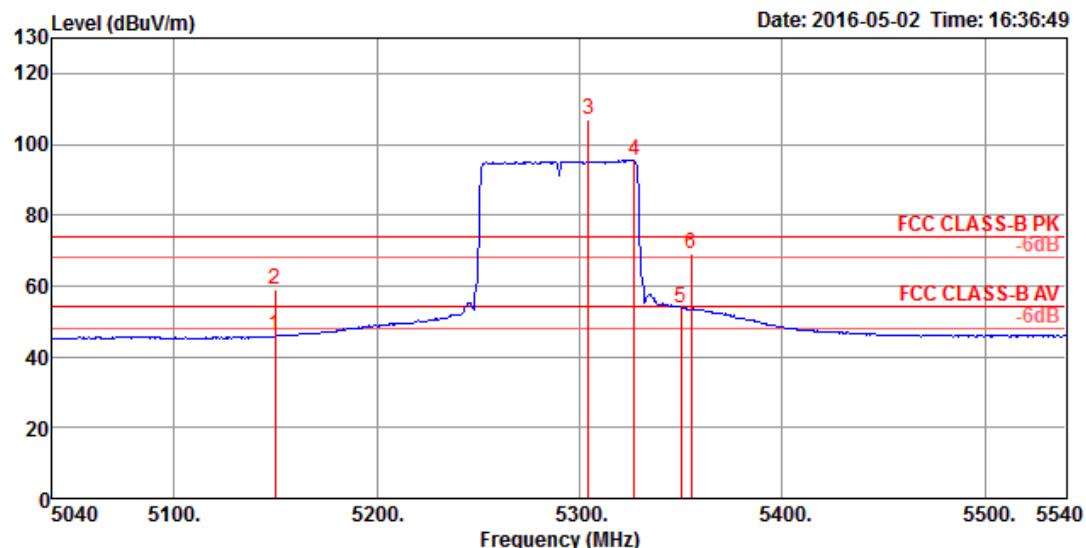
## Channel 138 (UNII 3)



Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB			cm	deg		
MHz	dBuV/m	dBuV/m	dB				dB	dB/m					
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.

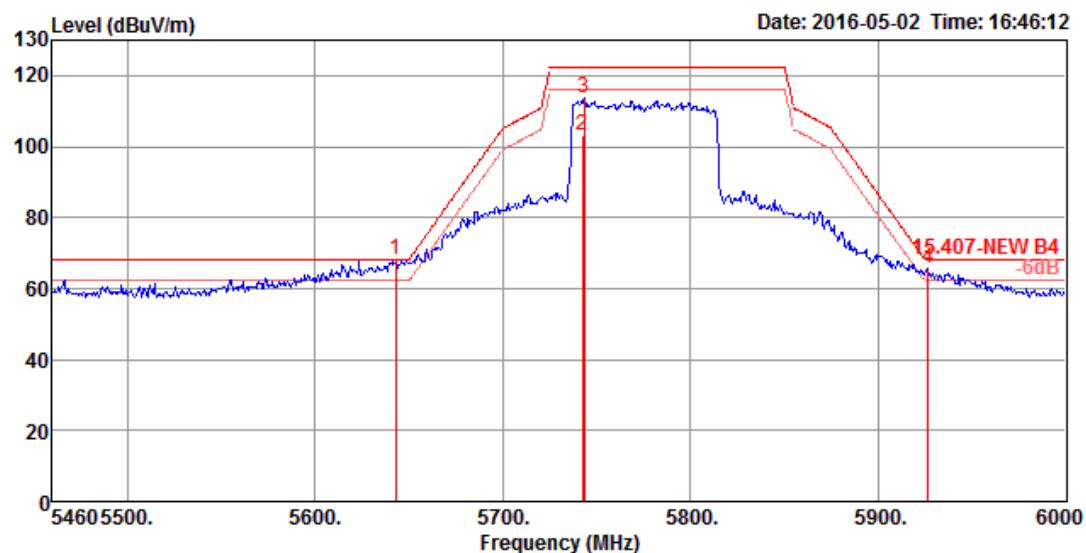
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 7 / CH 58+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 58**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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	5304.47	107.13			101.08	7.34	31.64	32.93	249	222 Peak	VERTICAL
4	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.

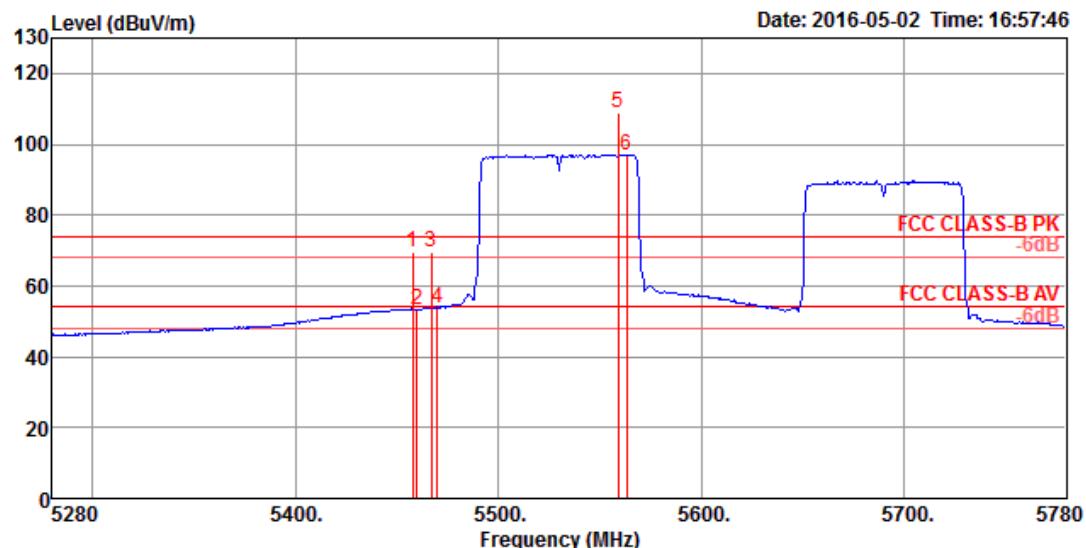
## Channel 155



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.

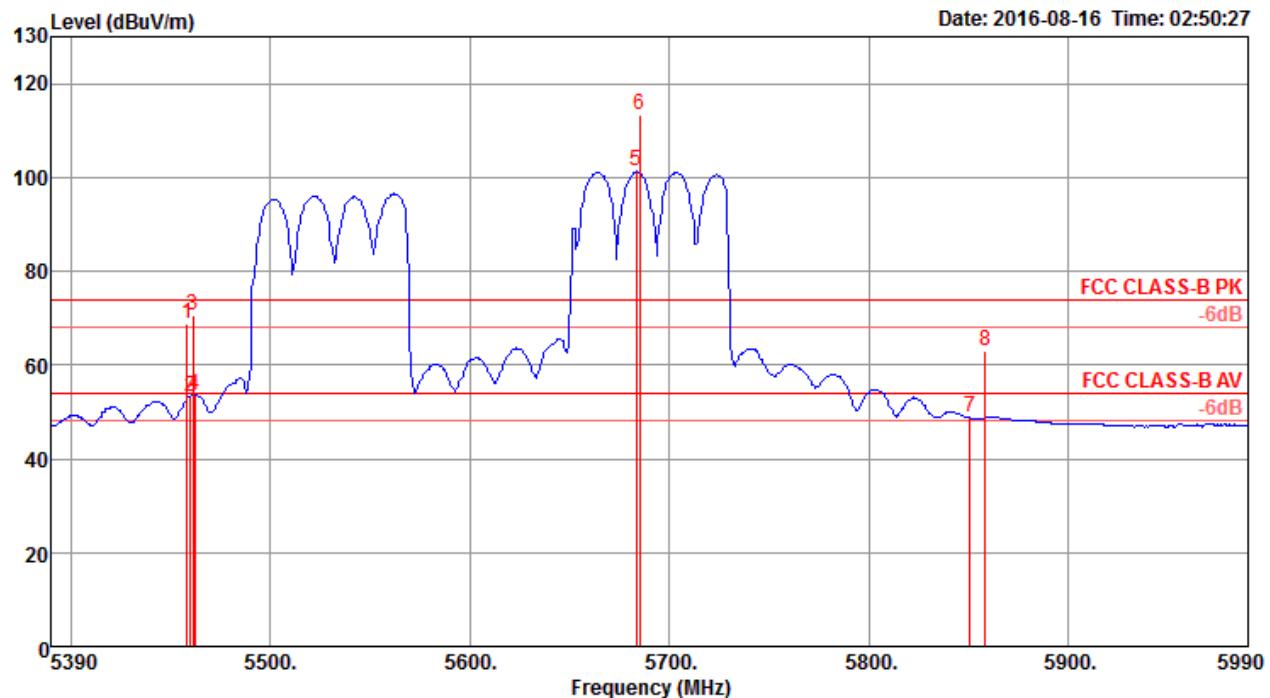
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 8 / CH 106+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 106**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	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.

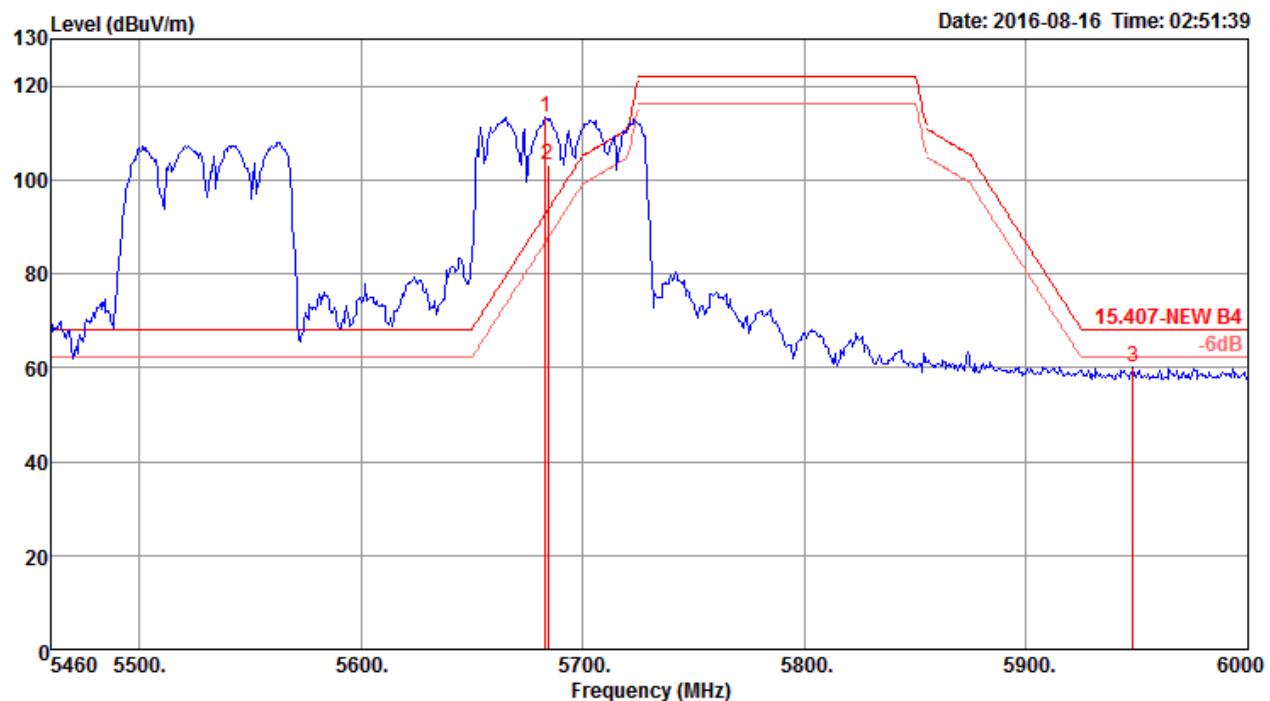
### Channel 138 (UNII 2C)



Freq	Level	Limit		Over Limit	Read Level	Cable Antenna			Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dBuV/m			dB	dBuV	dB					
MHz										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.

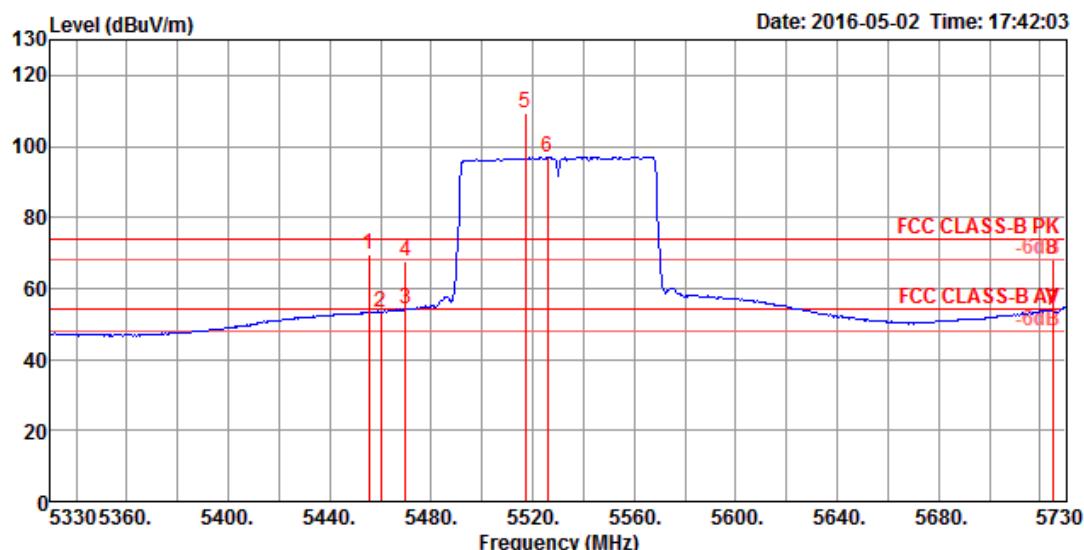
## Channel 138 (UNII 3)



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
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.

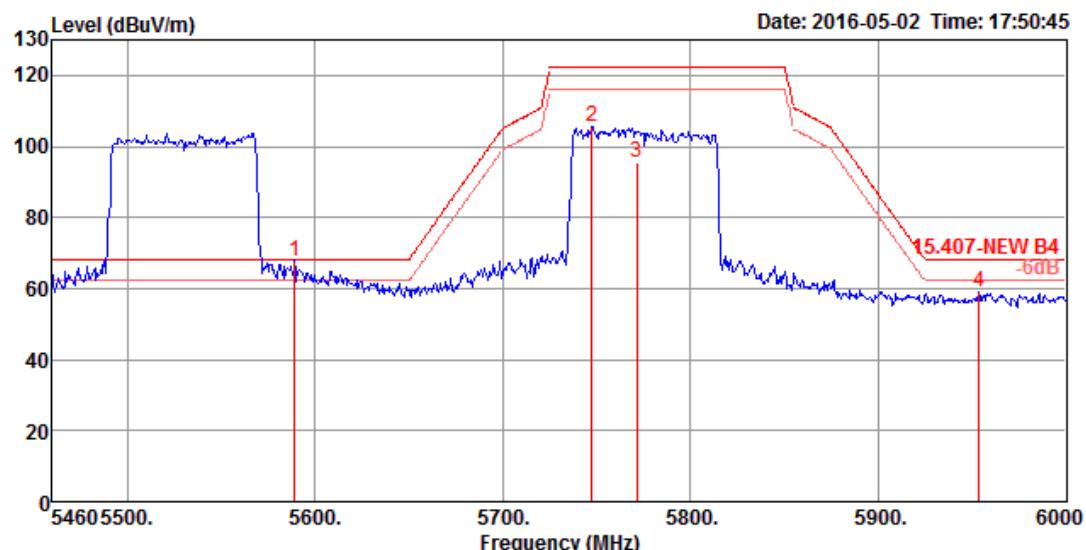
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 9 / CH 106+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 106**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	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.

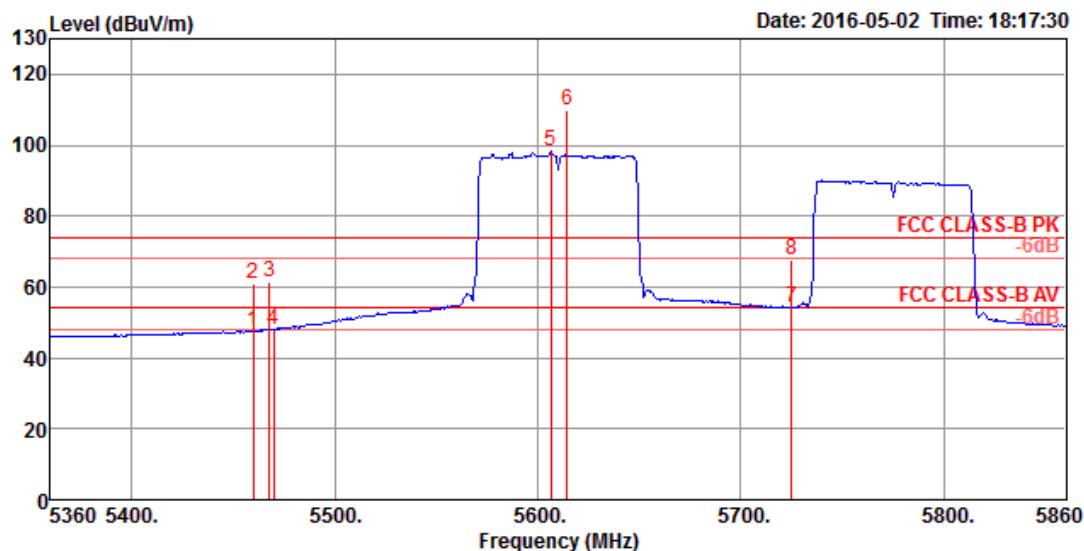
### Channel 155



Freq	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	Level	Line									
	MHz	dBuV/m	dBuV/m								
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.

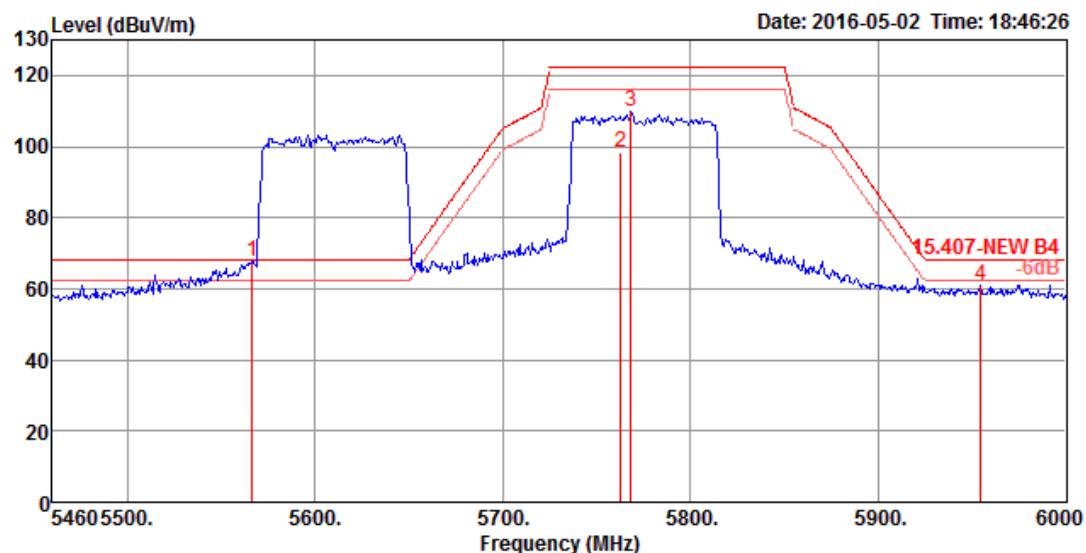
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 10 / CH 122+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 122**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
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	5606.38	98.18			91.62	7.60	31.92	32.96	273	213	Average	VERTICAL
6	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.

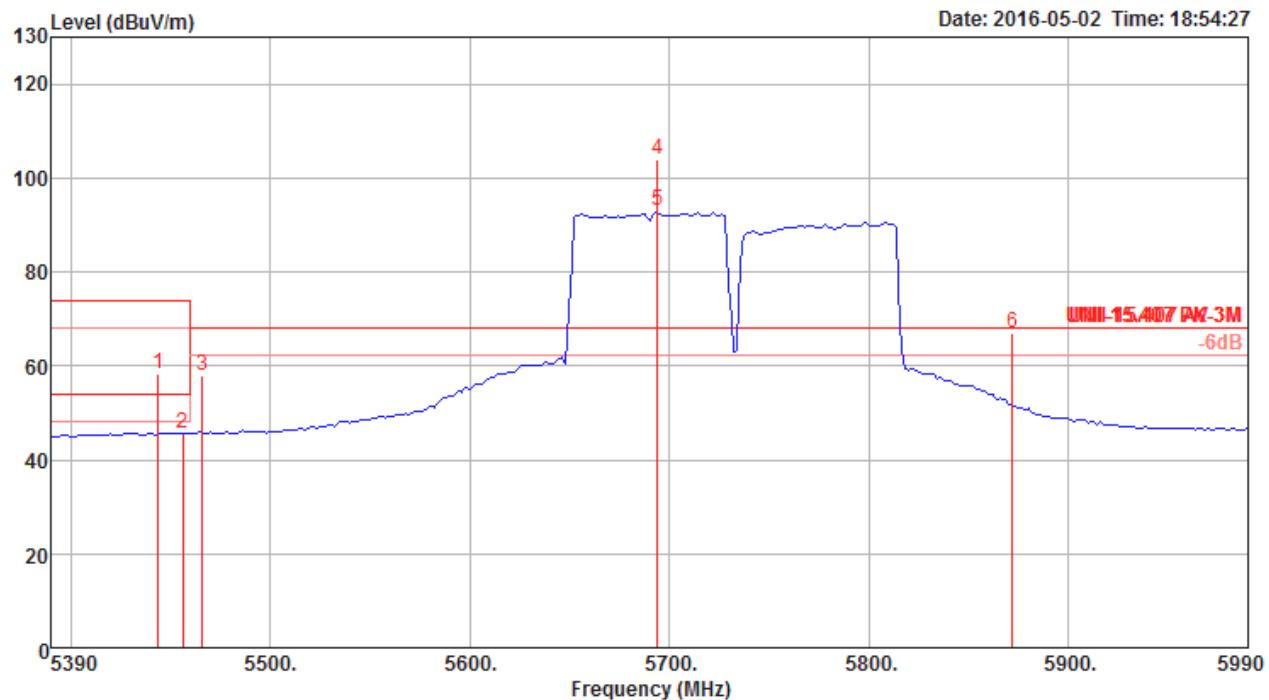
### Channel 155



Freq	Level	Limit		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

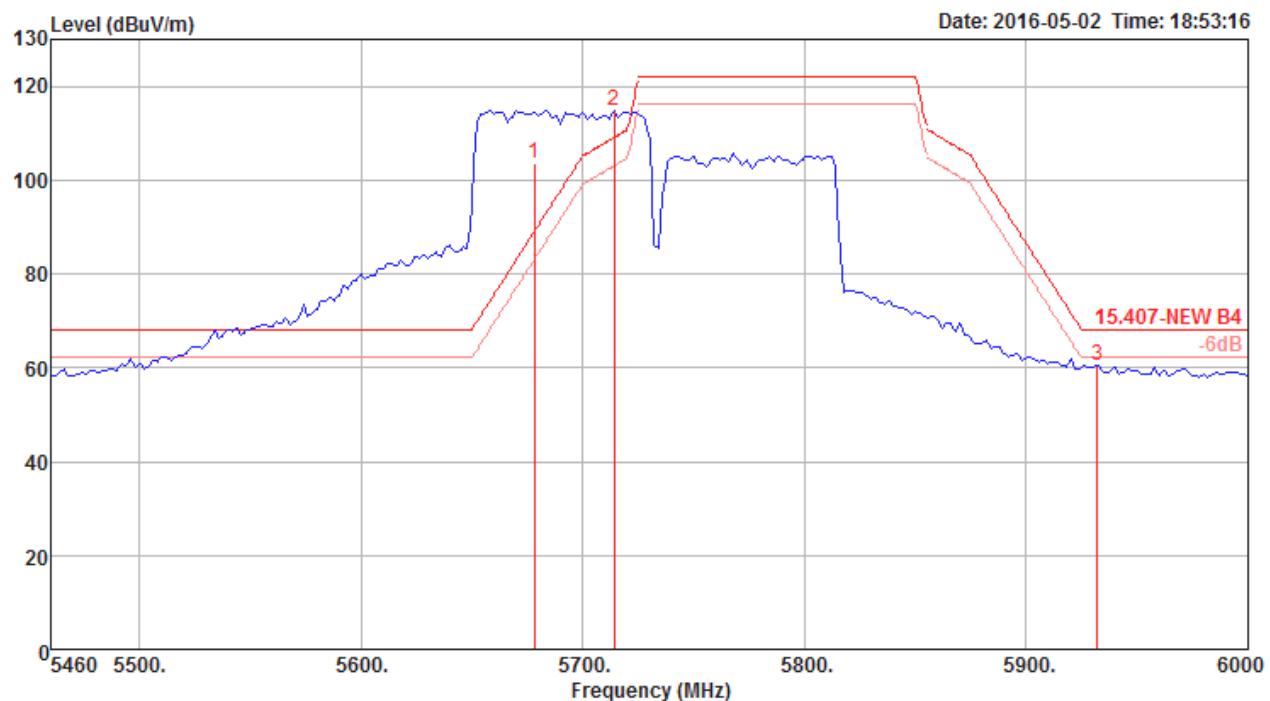
Item 2, 3 are the fundamental frequency at 5775 MHz.

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	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 MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable	Antenna	Preamp	A/Pos cm	T/Pos deg	Remark	Pol/Phase
					Loss	Factor	Factor				
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

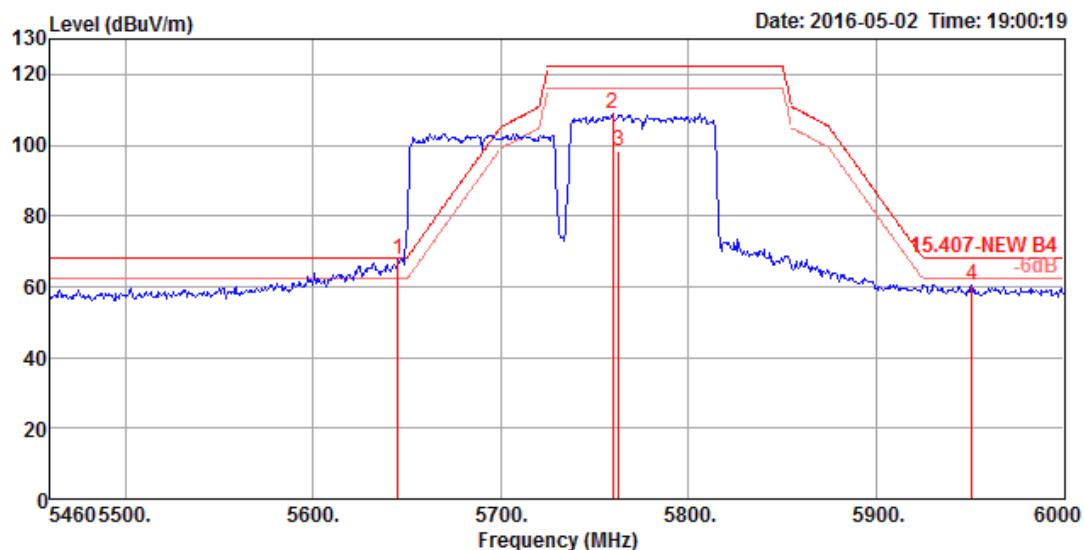
Item 4, 5 are the fundamental frequency at 5690 MHz.

**Channel 138 (UNII 3)**


	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	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	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	Level	Line									
	MHz	dBuV/m	dBuV/m								
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.

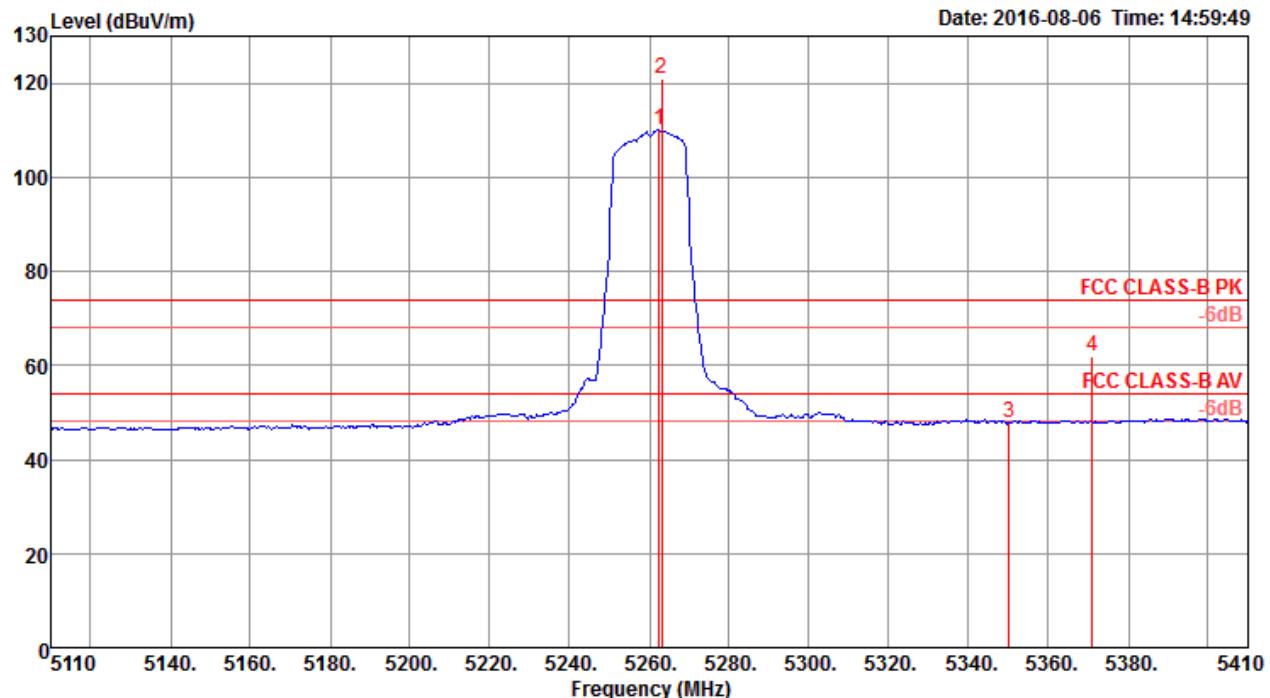
#### Note:

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

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

## &lt;For Beamforming Mode&gt;

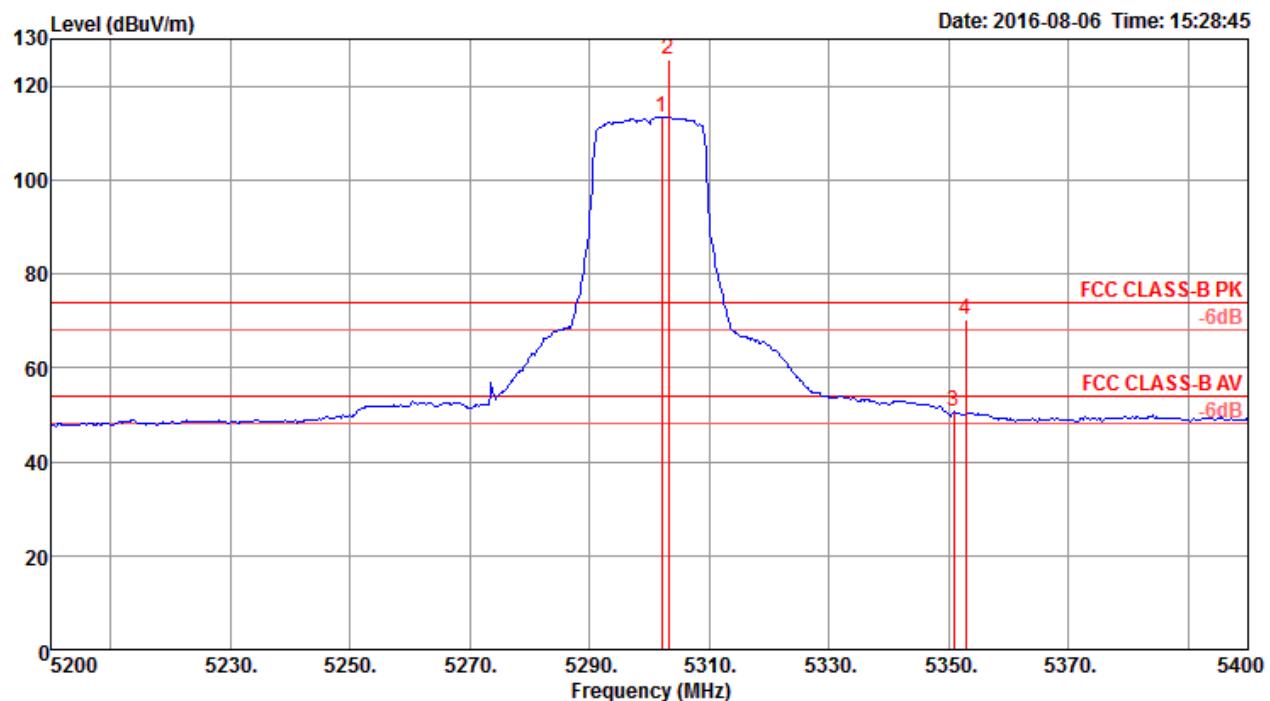
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 52**

Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit	Level						
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.

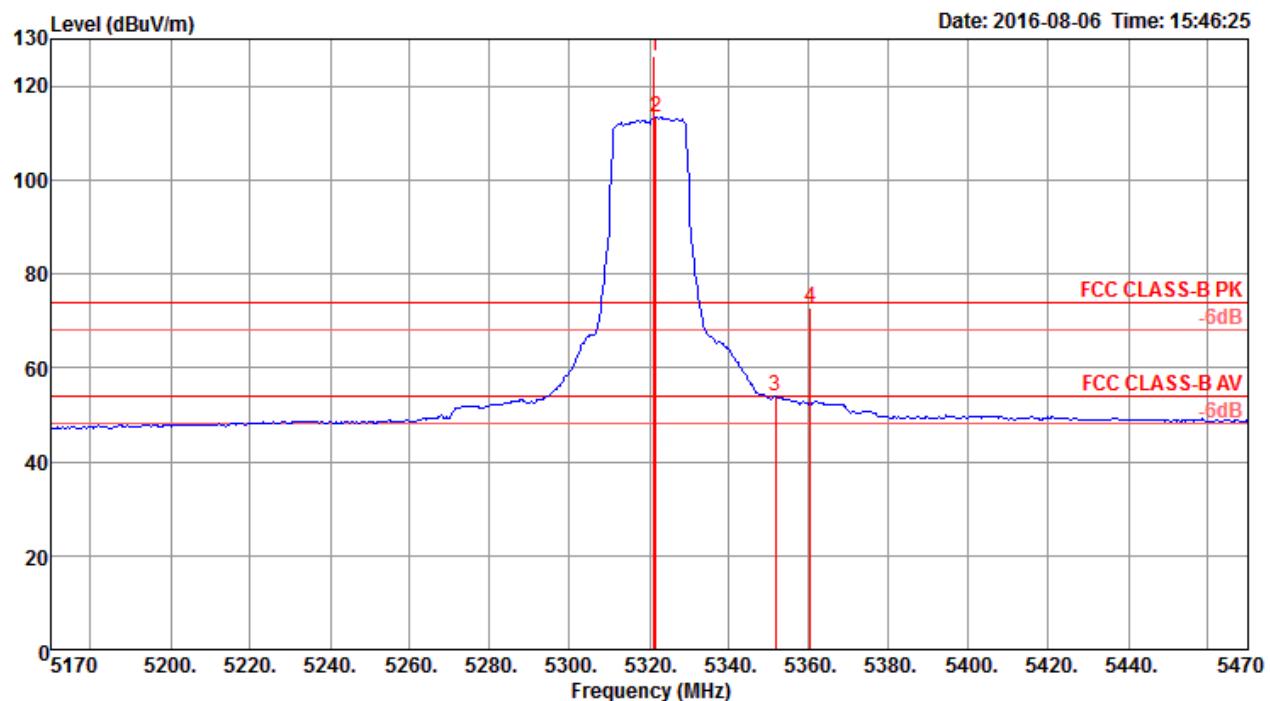
### Channel 60



Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable	Antenna	Preamp	A/Pos cm	T/Pos deg	Remark	Pol/Phase
					Loss	Factor	Factor				
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.

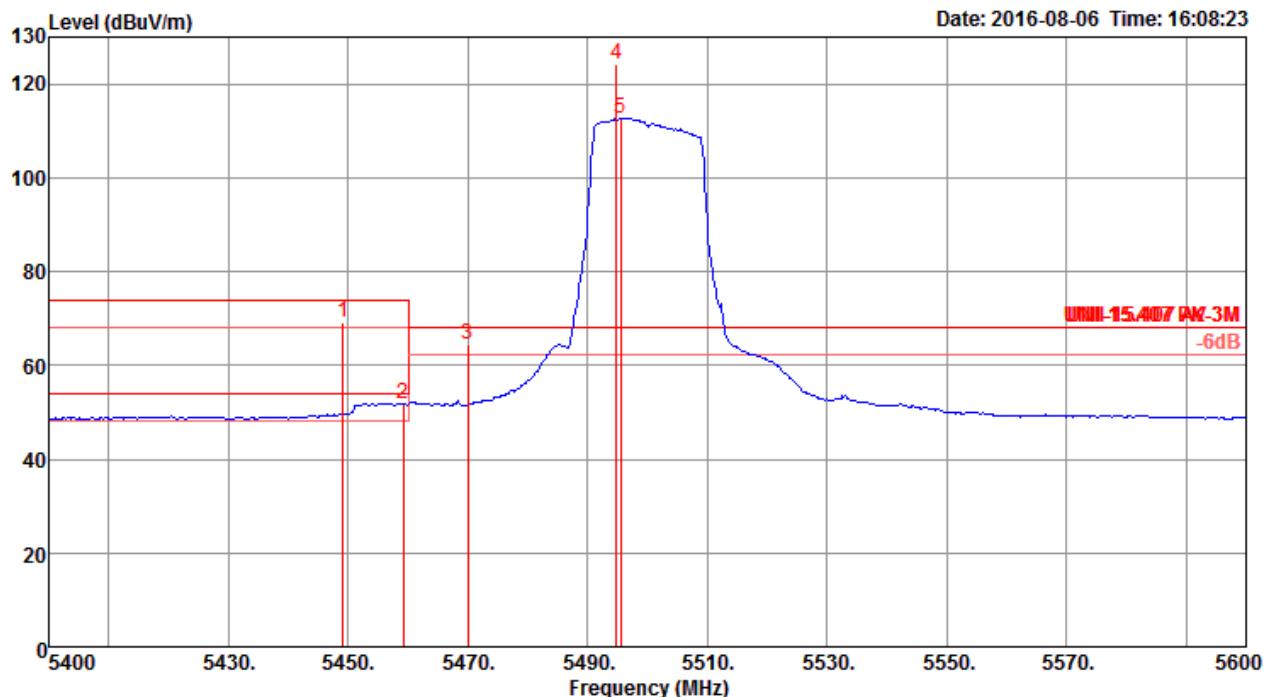
### Channel 64



Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable	Antenna	Preamp	A/Pos cm	T/Pos deg	Remark	Pol/Phase
					Loss	Factor	Factor				
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.

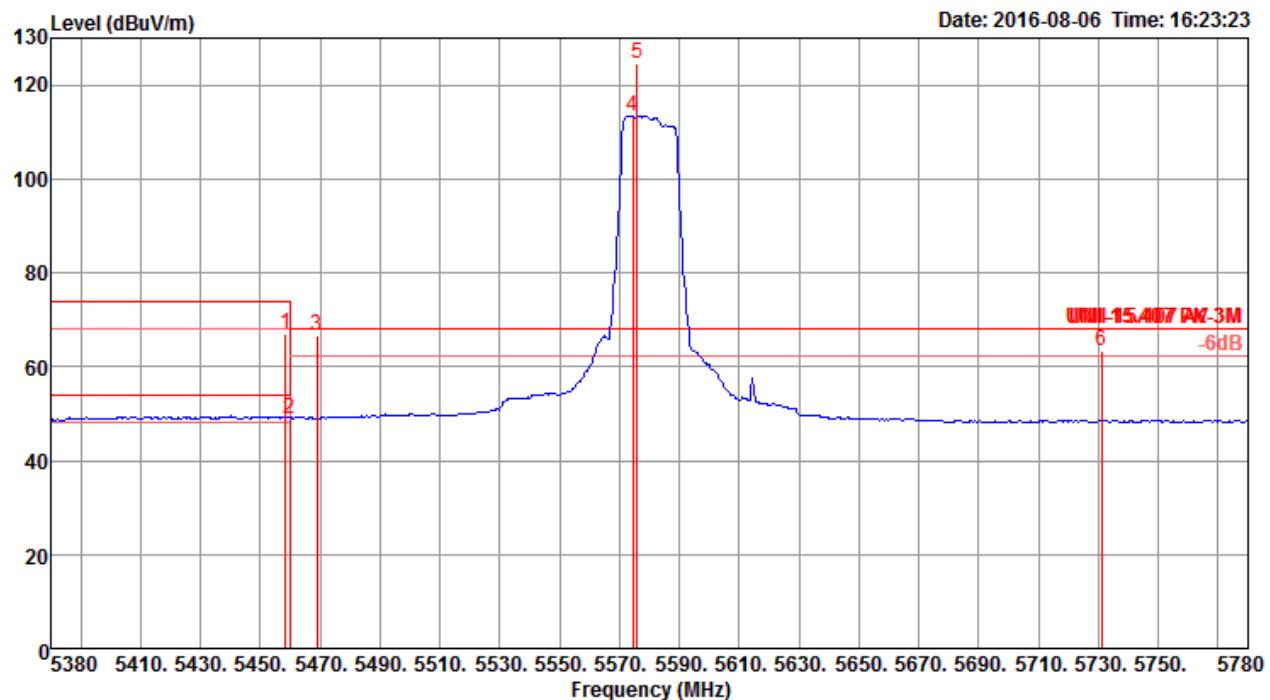
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 100**

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Antenna			A/Pos cm	T/Pos deg	Remark	Pol/Phase
					Cable Loss dB	Antenna Factor dB/m	Preamp Factor dB				
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.

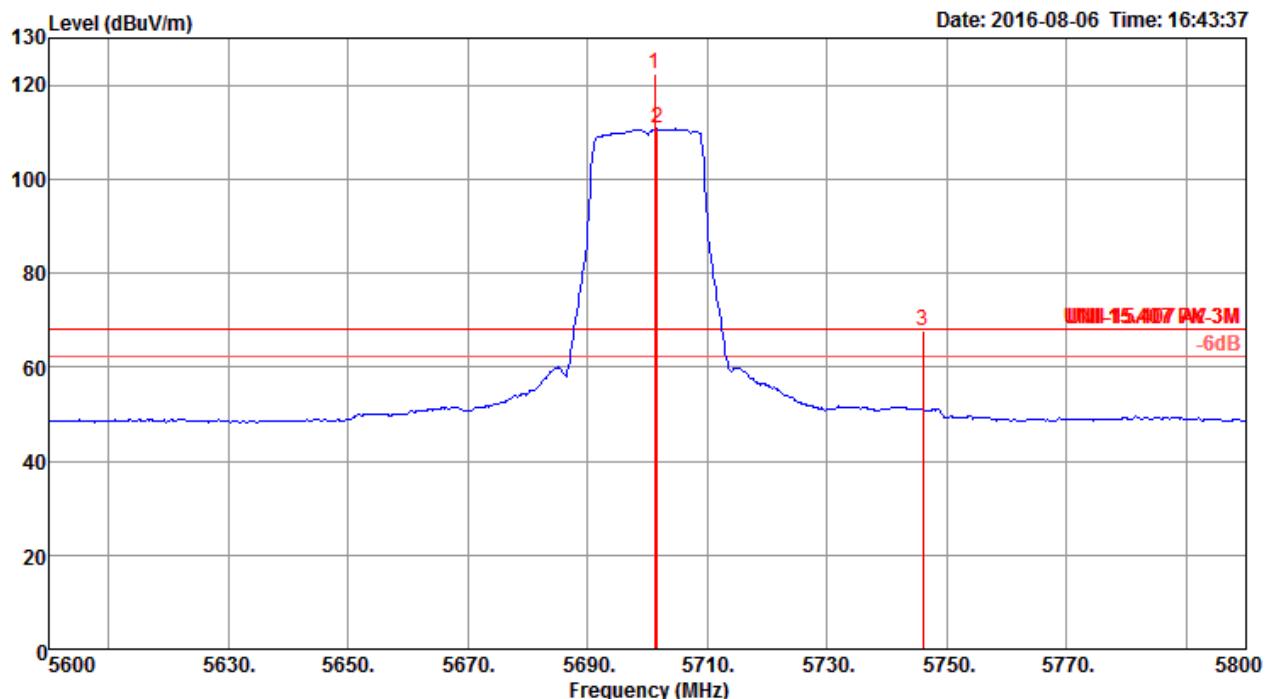
## Channel 116



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
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.

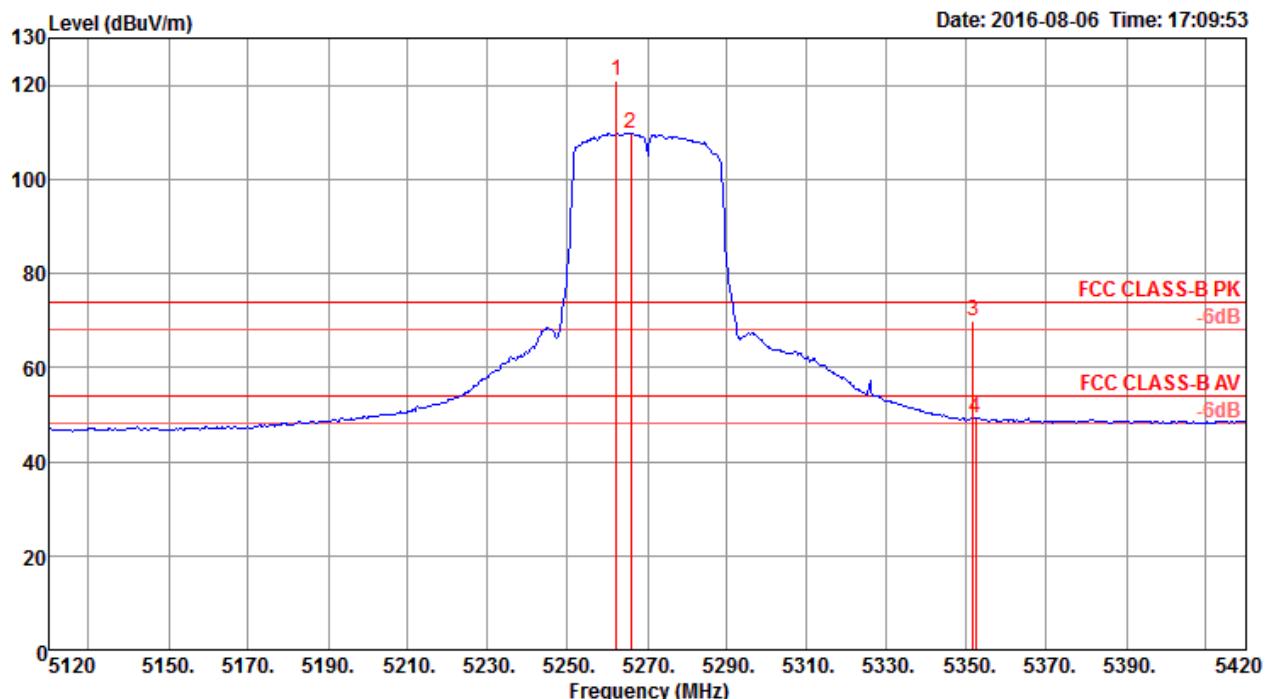
## Channel 140



	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamplifier	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.

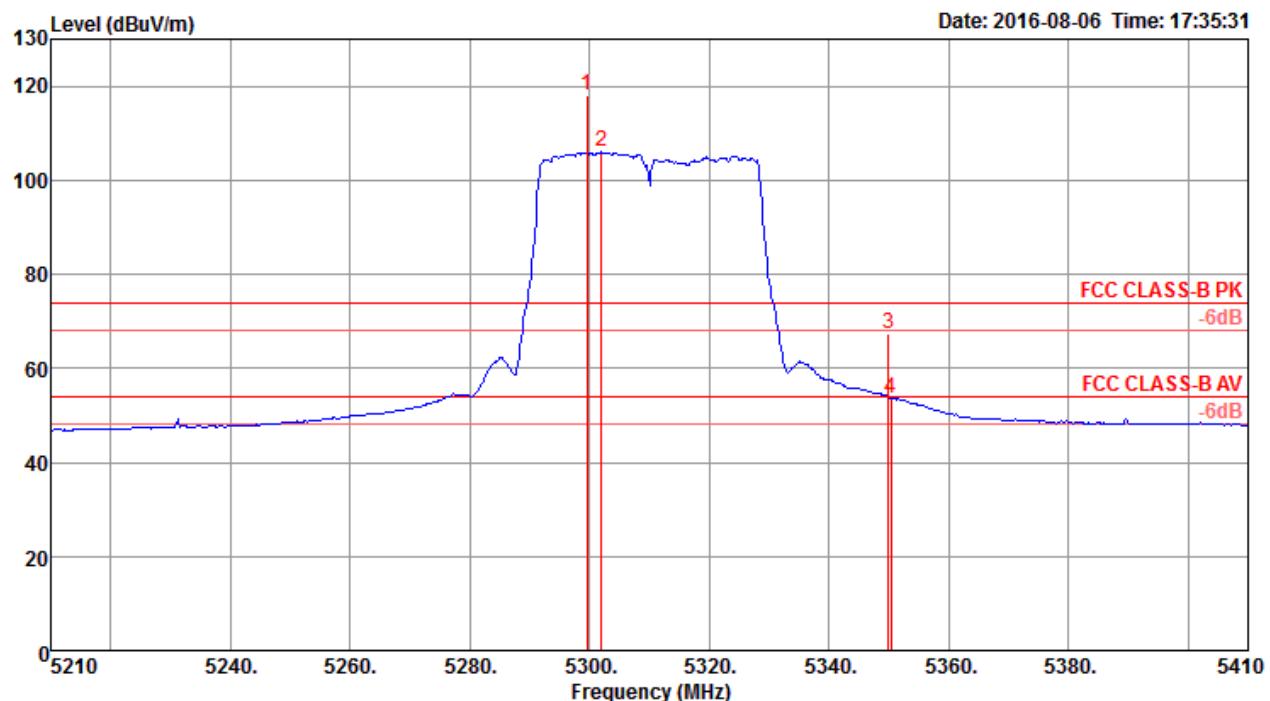
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 54**

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss			Antenna Factor dB	Preamplifier Factor dB	A/Pos cm	T/Pos deg	Remark	Pol/Phase
					dB/m	dB	dB/m						
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.

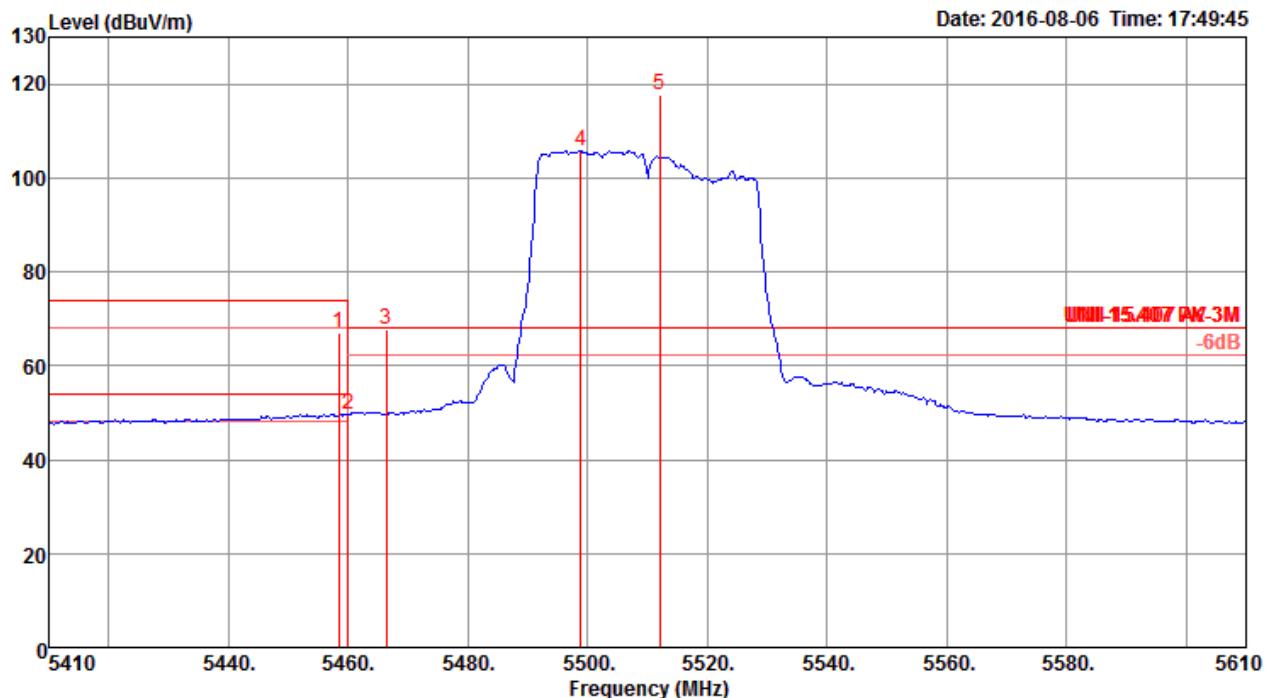
## Channel 62



Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable			Antenna Loss dB	Preamp Factor dB	A/Pos cm	T/Pos deg	Remark	Pol/Phase
					Loss	Antenna Factor dB/m	Preamp Factor dB						
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.

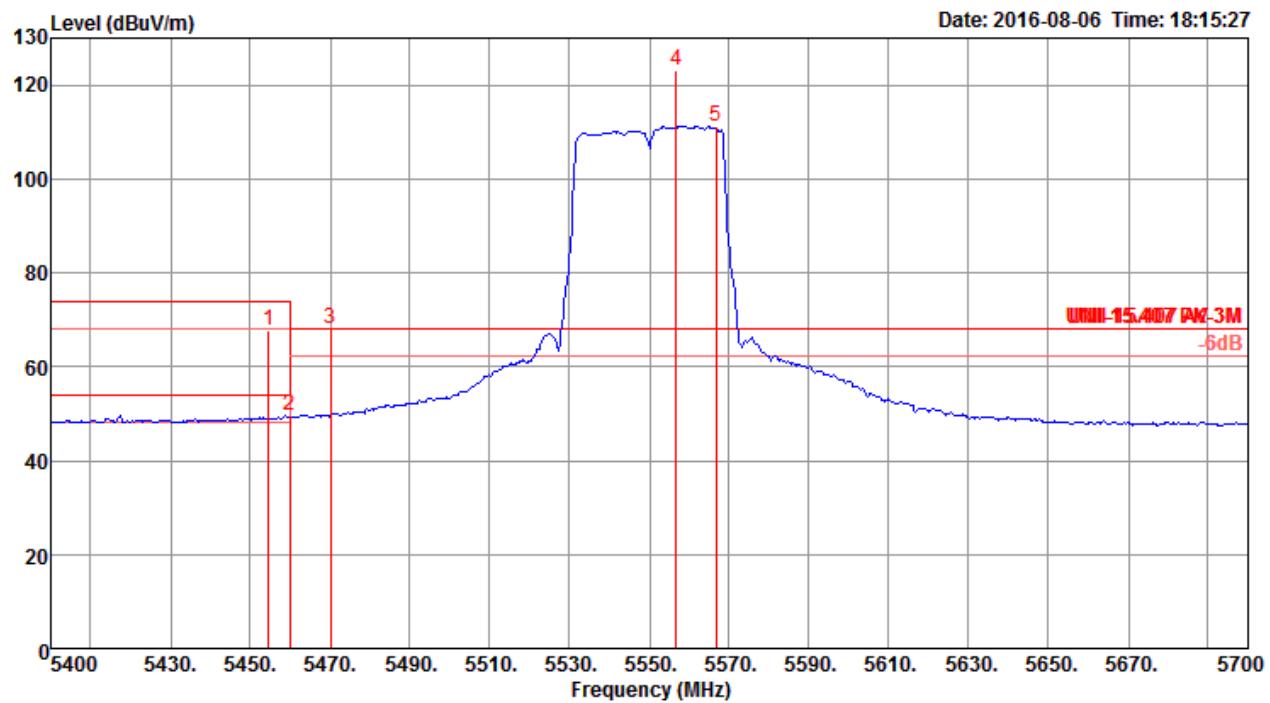
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 102**

Freq	Level	Limit Line	Over Limit	Read Level	Cable Antenna			A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Preamp Factor				
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.

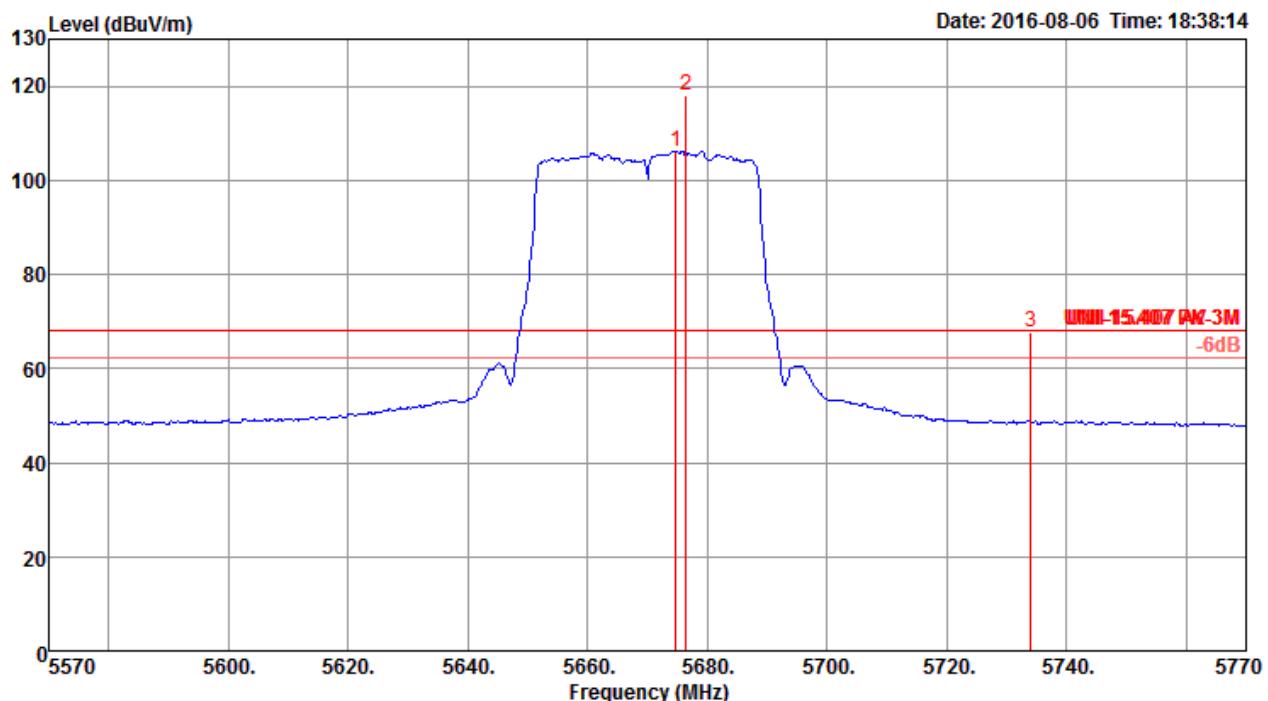
## Channel 110



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
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.

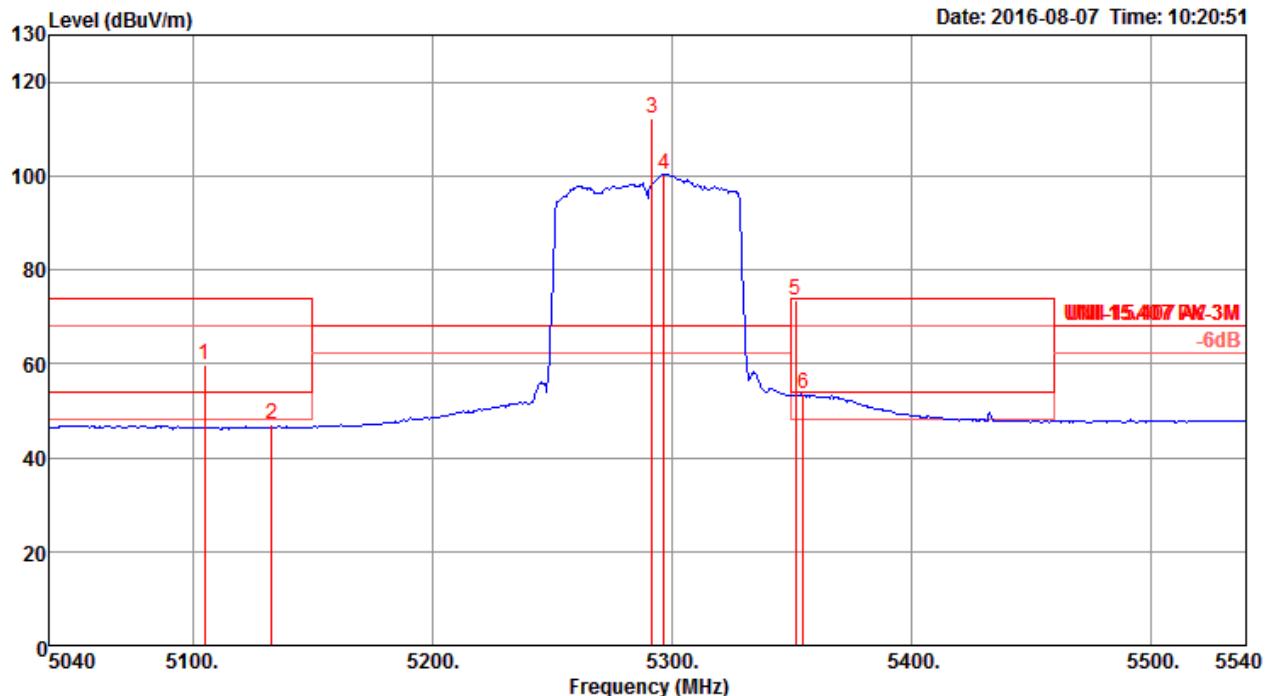
### Channel 134



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamplifier 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.

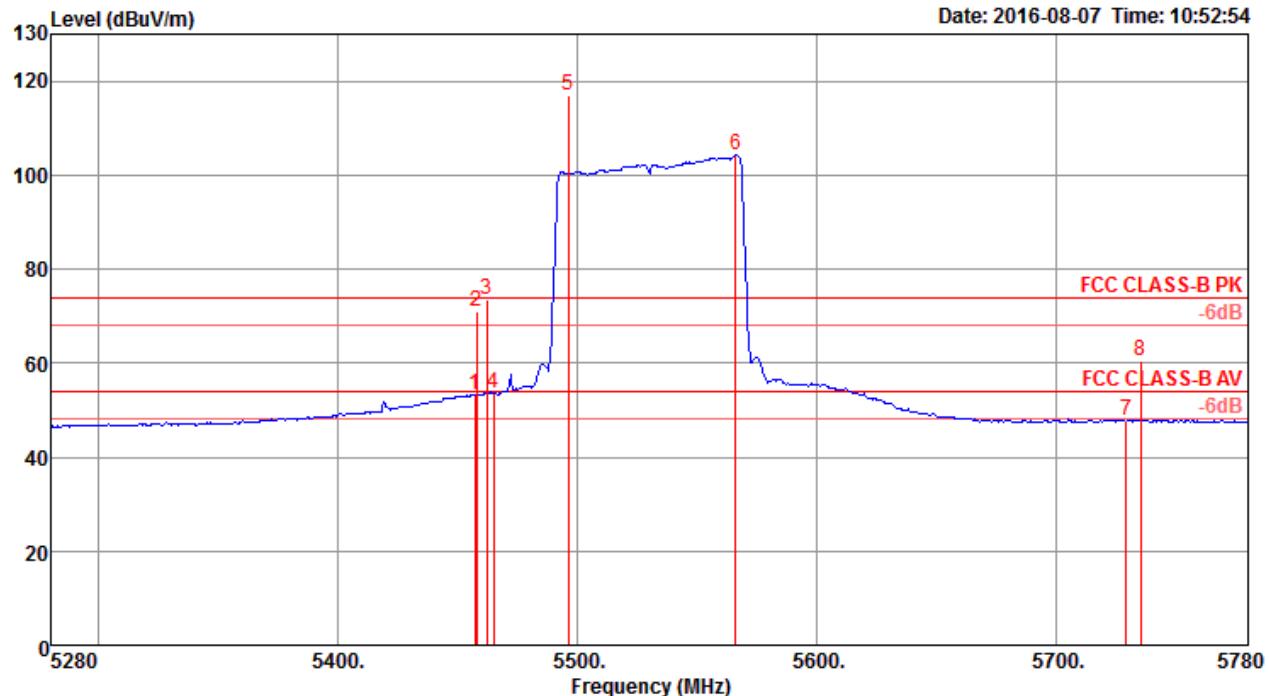
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 58**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.

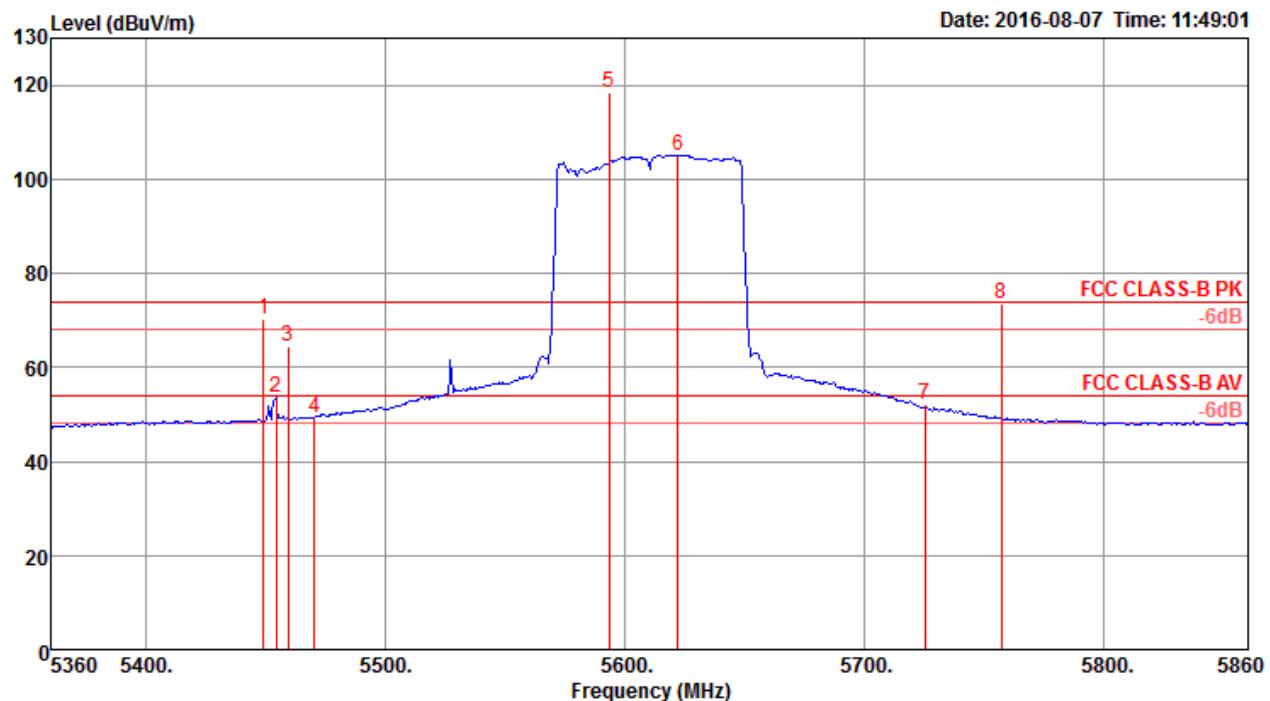
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 106**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Loss	Factor	Factor	cm		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
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



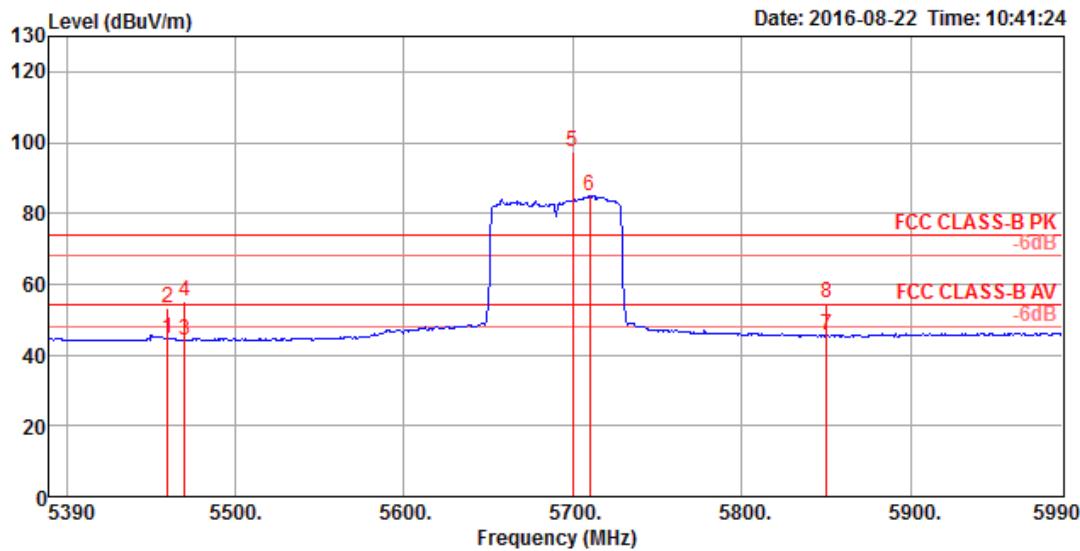
Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase	
					MHz	dBuV/m	dBuV/m	dB	dBuV	dB		
1	5449.00	70.15	74.00	-3.85	62.99	7.89	33.74	34.47	244	41	Peak	VERTICAL
2	5454.00	53.60	54.00	-0.40	46.44	7.89	33.74	34.47	244	41	Average	VERTICAL
3	5459.00	64.34	74.00	-9.66	57.18	7.89	33.74	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

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

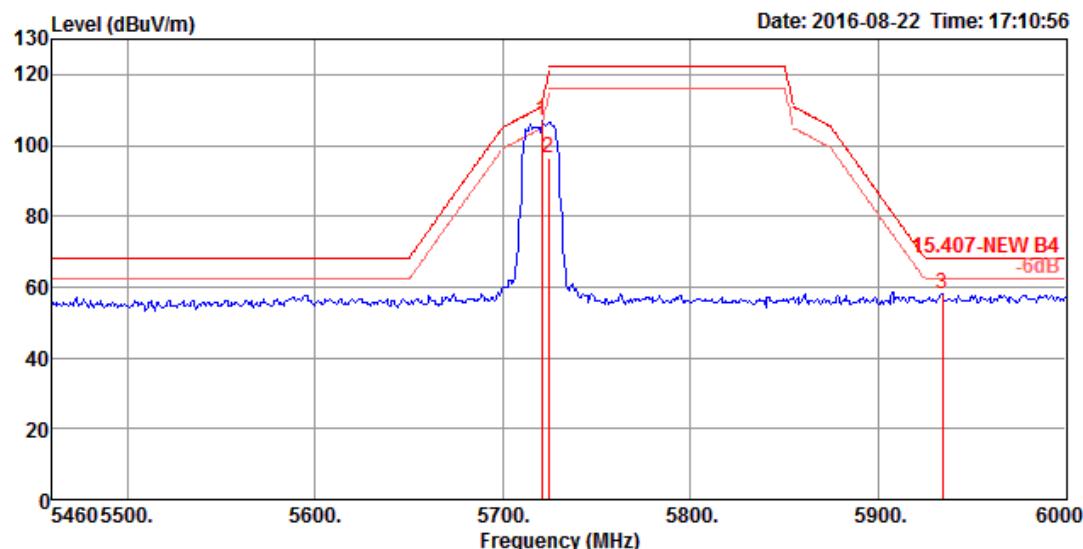
## Channel 144



Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark
		Line	Limit	Level	Loss	Factor	Factor	Pol/Phase	deg	
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m			
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.

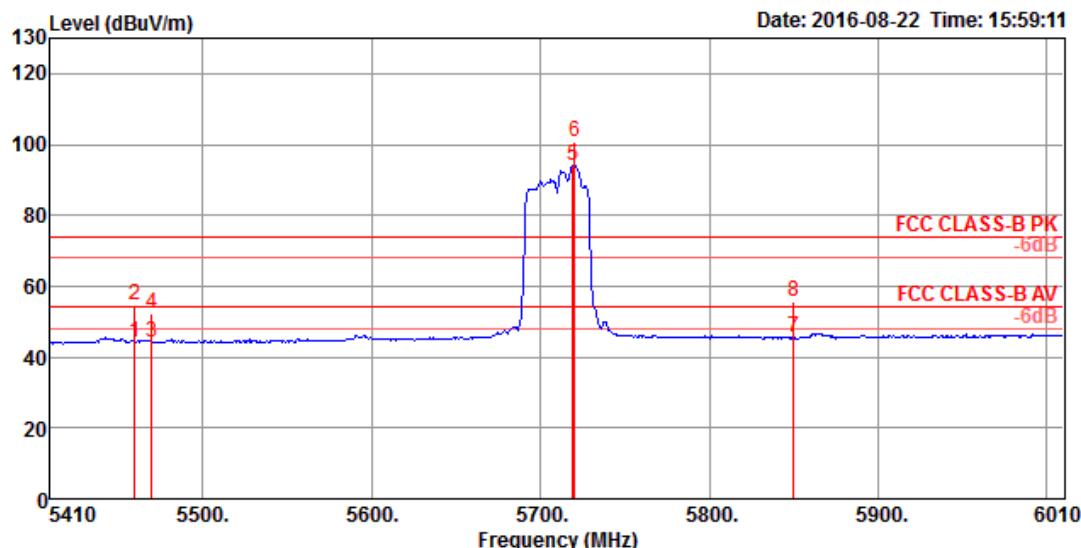
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 144 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 144**

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	
					Loss	Factor	Factor				
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.

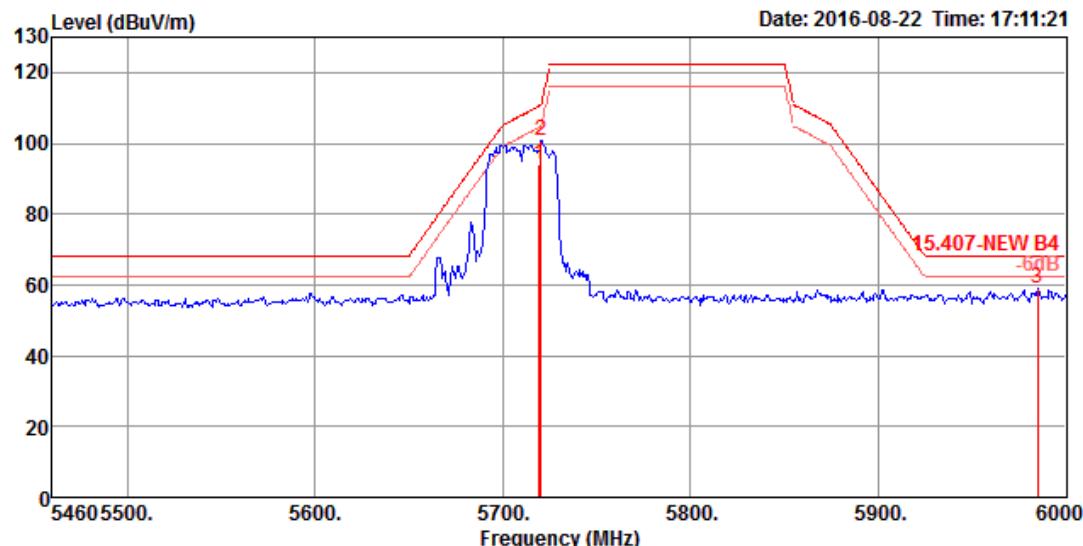
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 142**


Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark
		Line	Limit	Level	Loss	Factor	Factor	Pol/Phase	deg	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		
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.

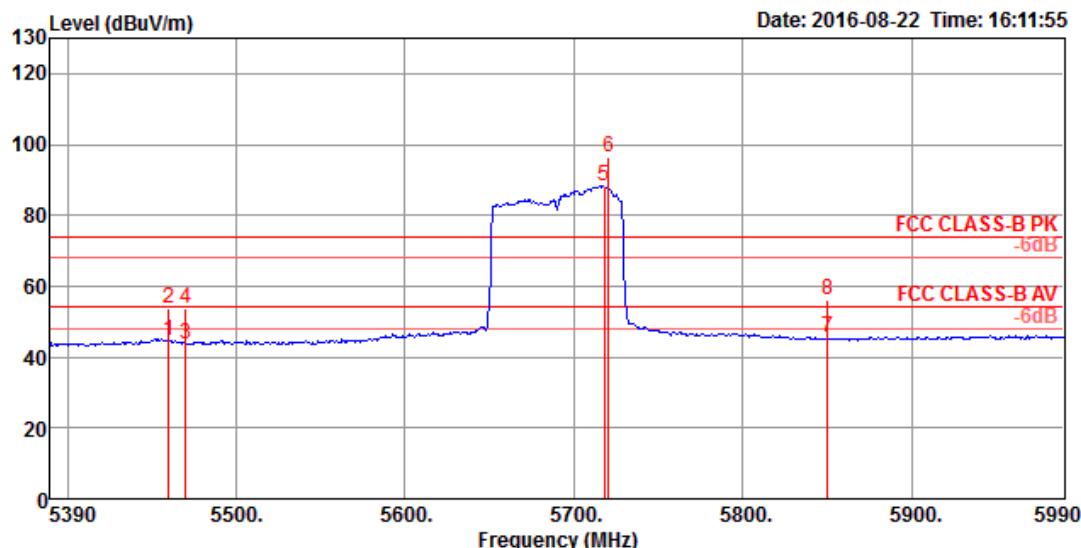
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT40 CH 142 (UNII 3) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 142**


Freq	Level	Limit Line	Over Limit	Read Level	Cable PreampAntenna				T/Pos	A/Pos	Remark
					Loss	Factor	Factor	Pol/Phase			
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.

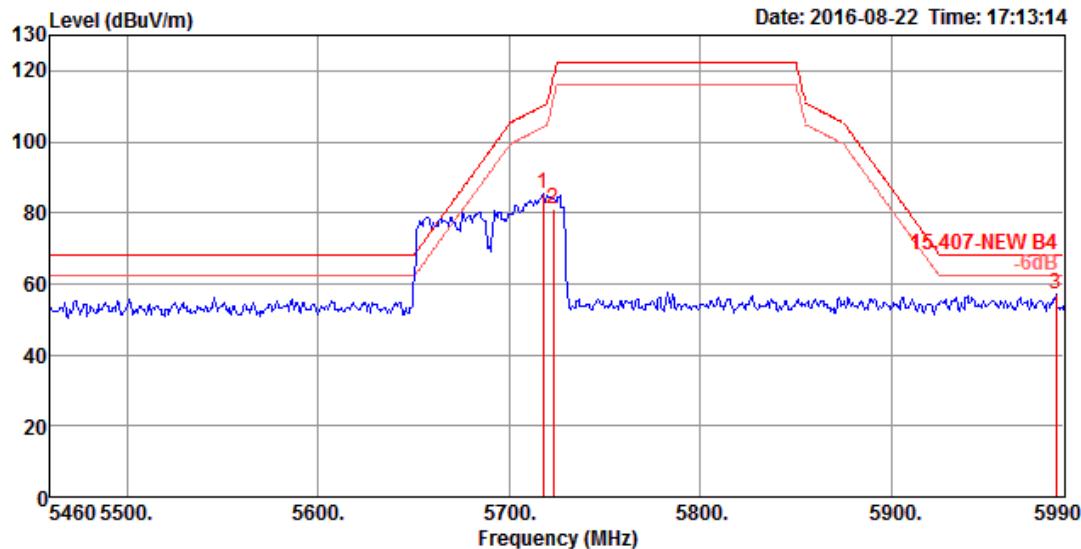
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 138 (UNII 2C) / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 138**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark
		Line	Limit	Level	Loss	Factor	Factor	Pol/Phase	deg	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		
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.

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

**Channel 138**


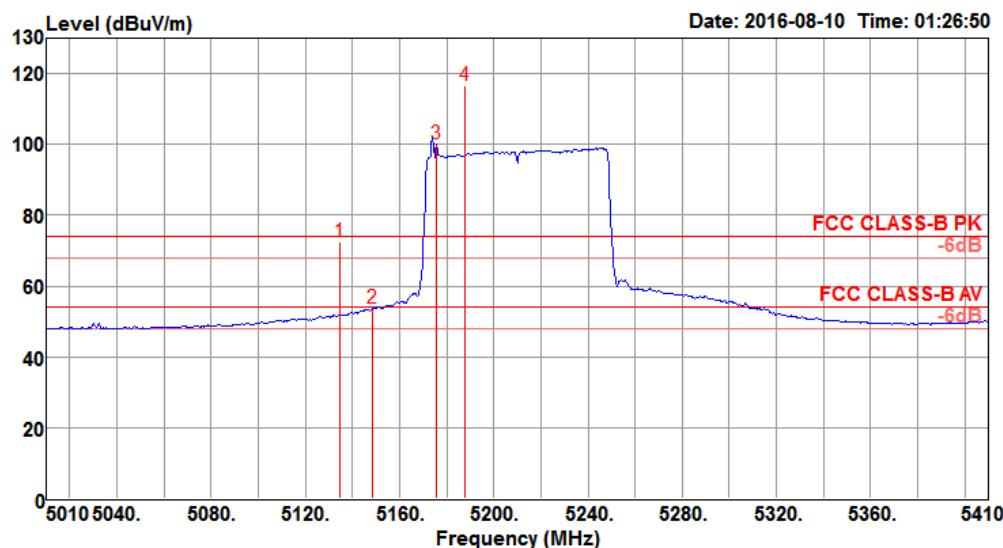
Freq	Level	Limit Line	Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark
					Loss	Factor	Pol/Phase			
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB	dB/m	deg	cm
1	5717.60	85.46			78.70	7.70	33.00	32.06	HORIZONTAL	294
2	5723.00	80.91			74.12	7.71	33.00	32.08	HORIZONTAL	294
3	5985.80	57.07	68.20	-11.13	49.96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

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

## 802.11ac MCS0/Nss2 VHT80+80

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

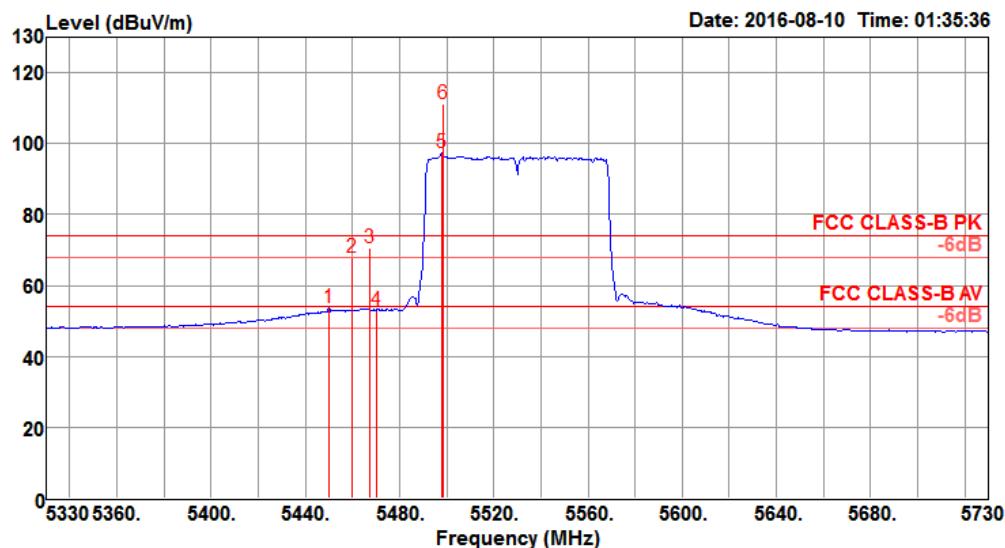
## Channel 42



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.

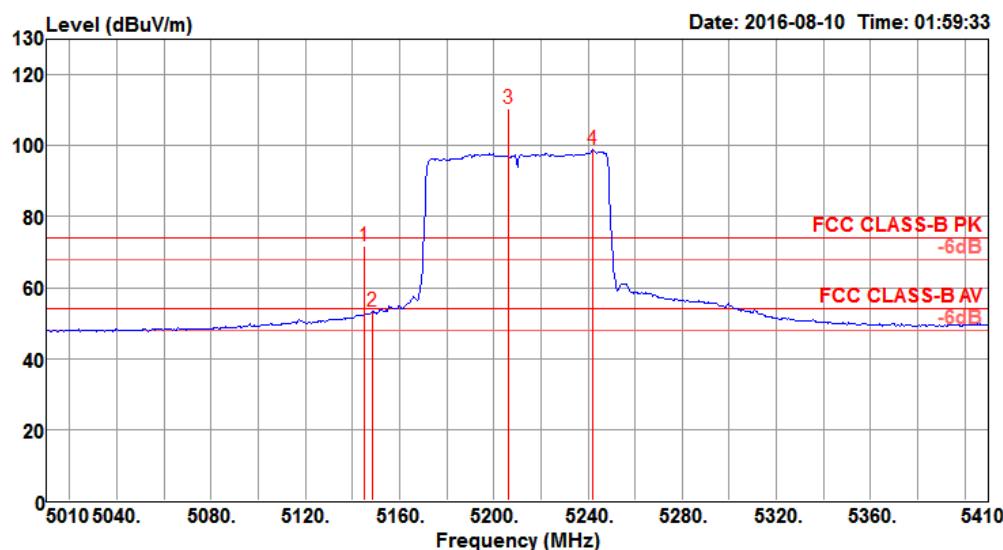
### Channel 106



Freq	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	Level	Line									
	MHz	dBuV/m	dBuV/m								
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.

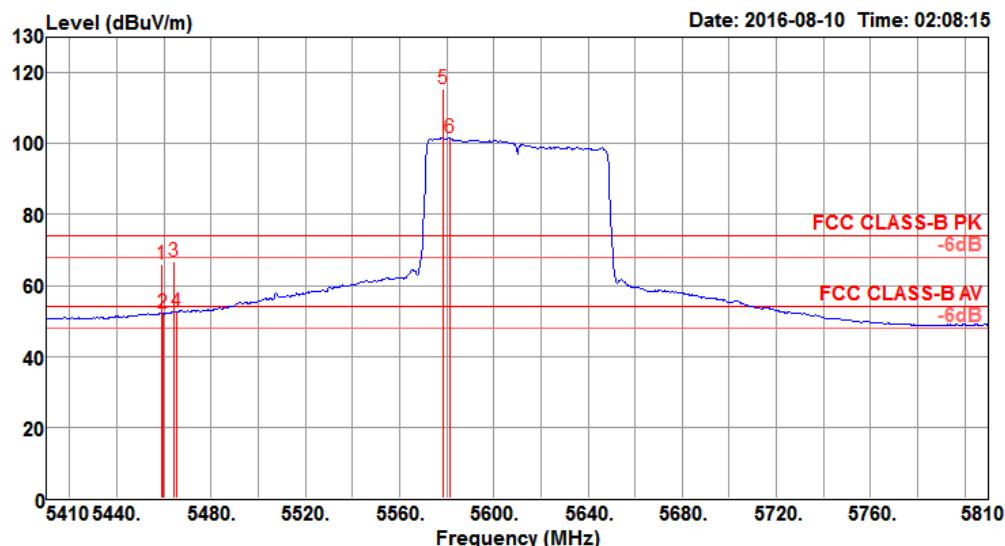
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 2 / CH 42+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 42**

Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.

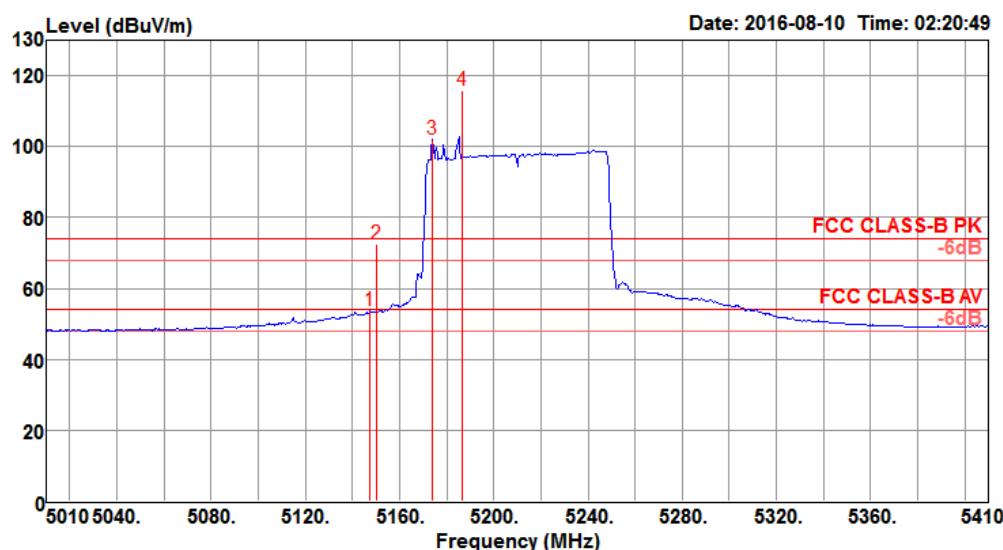
### Channel 122



	Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	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

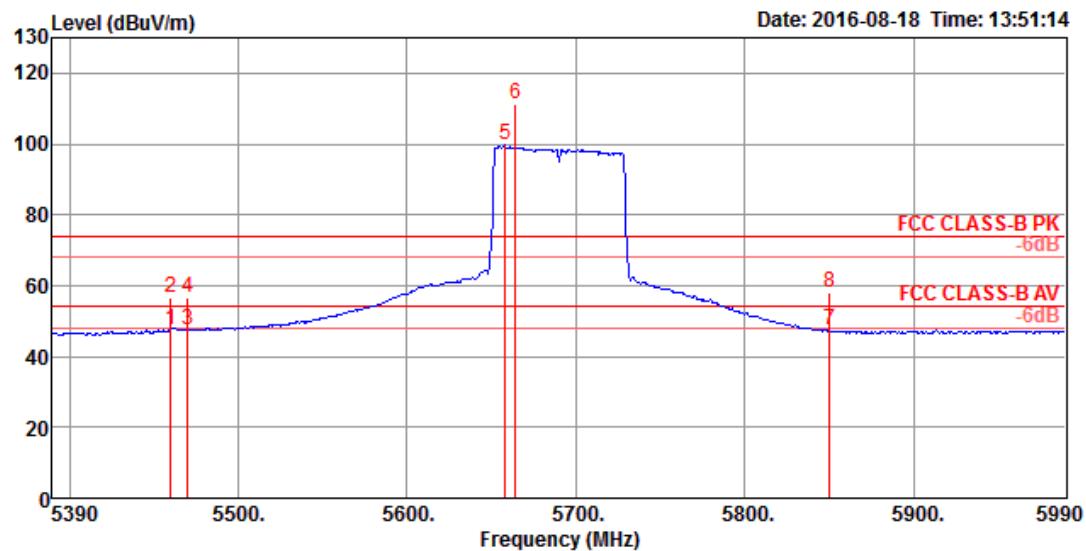
Item 5, 6 are the fundamental frequency at 5610 MHz.

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

**Channel 42**


Freq	Limit		Over Limit	Read Level	Cable Antenna Preamp			A/Pos	T/Pos	Remark	Pol/Phase
	Level	Line			Loss	Factor	Factor				
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

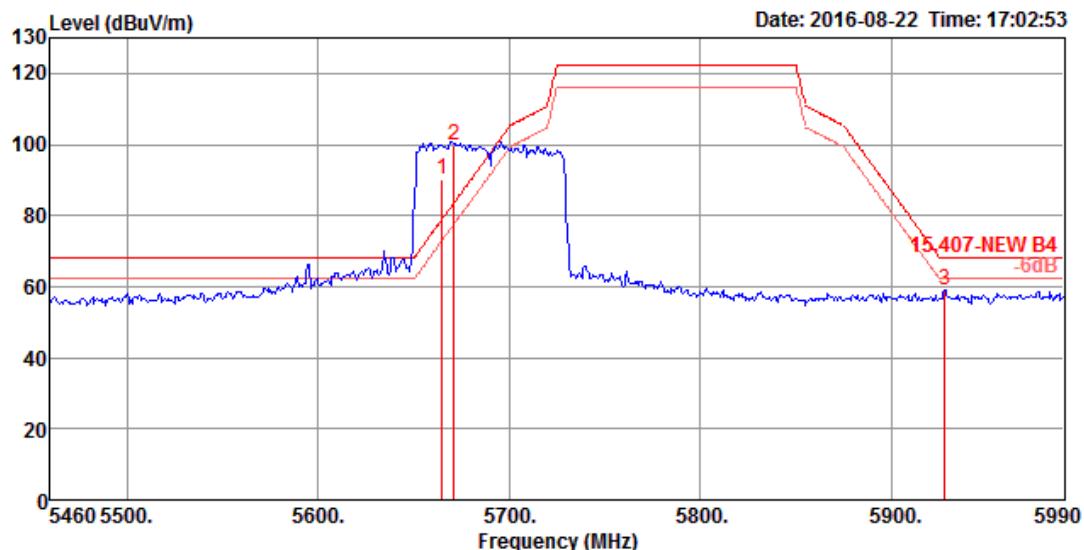
Item 3, 4 are the fundamental frequency at 5210 MHz.

**Channel 138 (UNII 2C)**

Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark
		Line	Limit	Level	Loss	Factor	Factor	Pol/Phase	deg	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		
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.

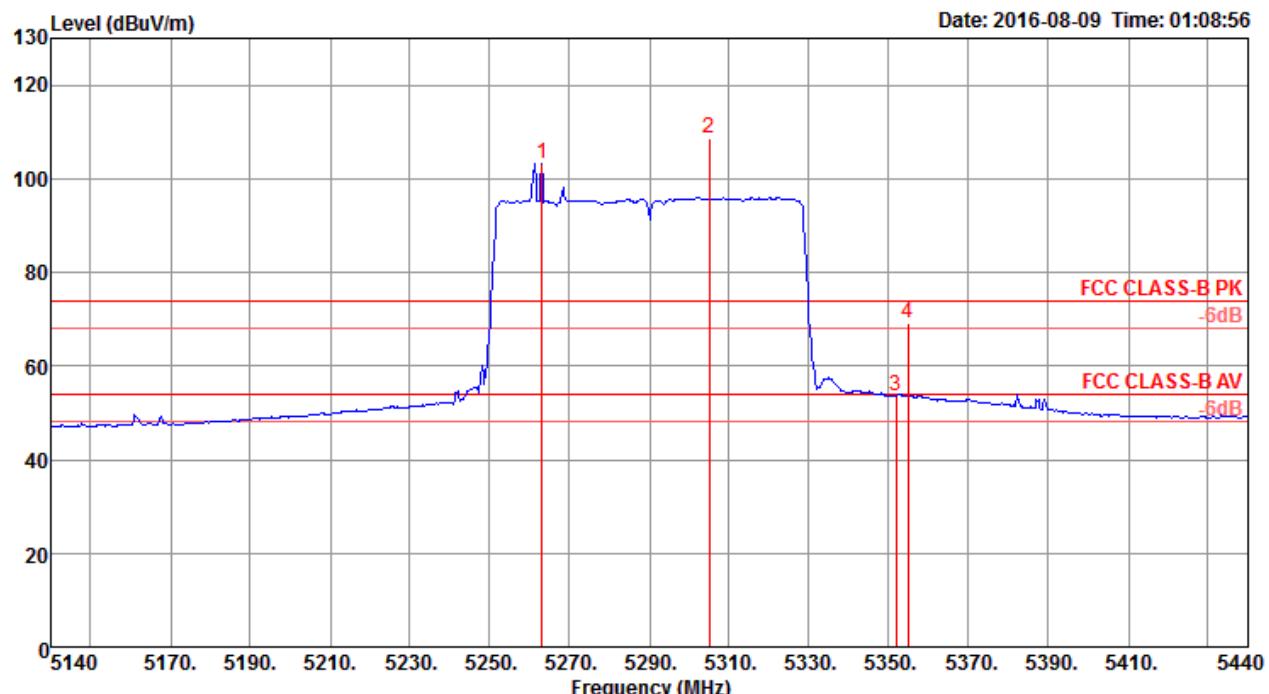
### Channel 138 (UNII 3)



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	
					Loss	Factor	Pol/Phase				
	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

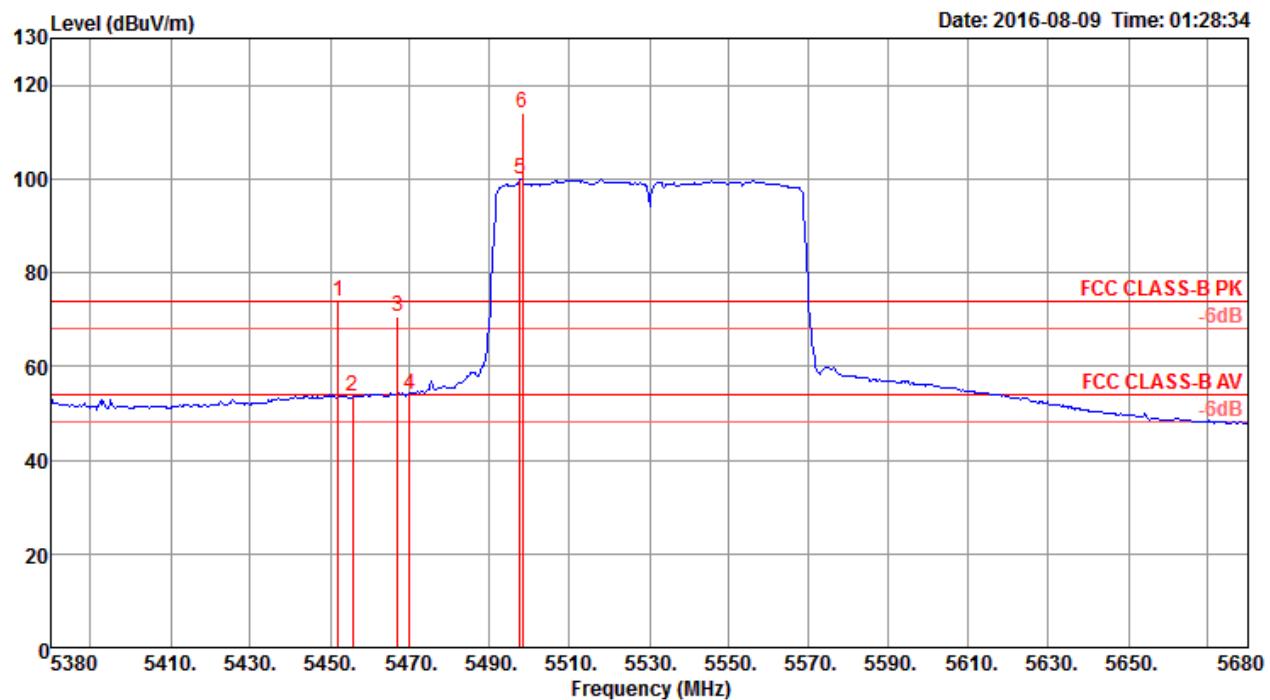
Item 1, 2 are the fundamental frequency at 5690 MHz.

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Loss	Factor	Factor	cm		
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
2	5305.00	108.77			101.81	7.91	33.52	34.47	234	239	Peak
3	5351.80	53.72	54.00	-0.28	46.71	7.89	33.59	34.47	234	239	Average
4	5354.80	69.04	74.00	-4.96	62.02	7.88	33.61	34.47	234	239	Peak

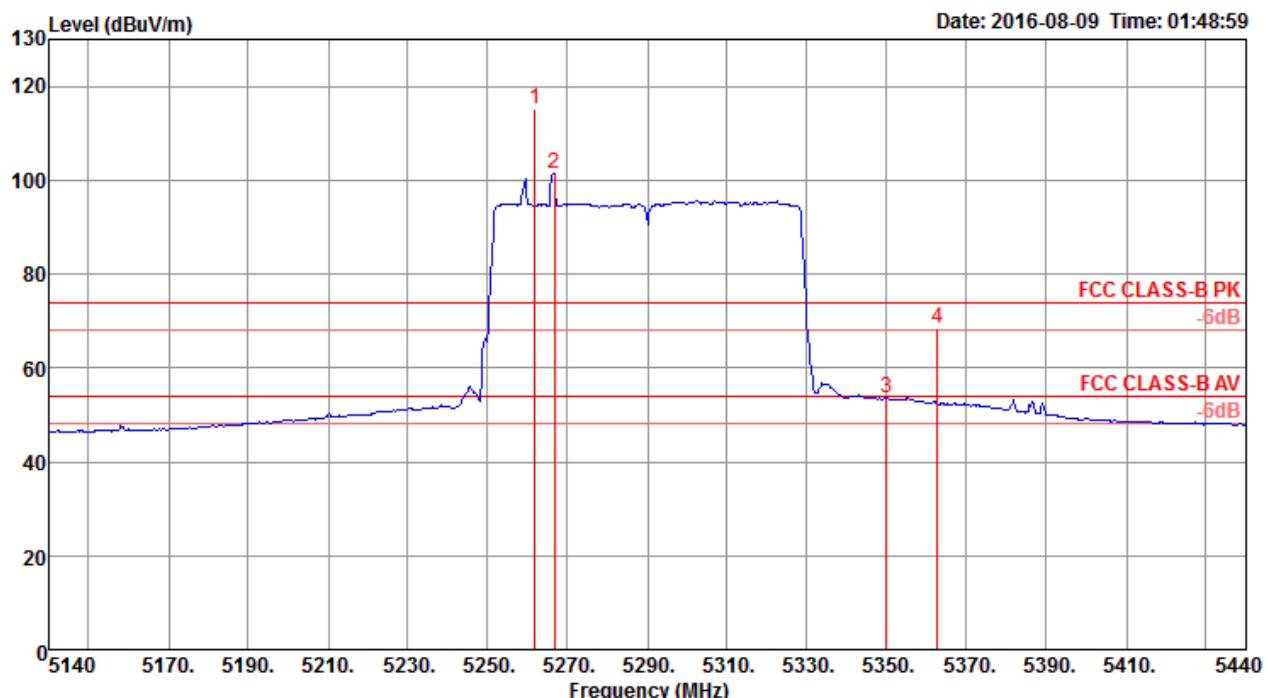
Item 1, 2 are the fundamental frequency at 5290 MHz.

**Channel 106**

Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Antenna Preamp			A/Pos cm	T/Pos deg	Remark	Pol/Phase
					Cable Loss	Antenna Factor	Preamp Factor				
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.

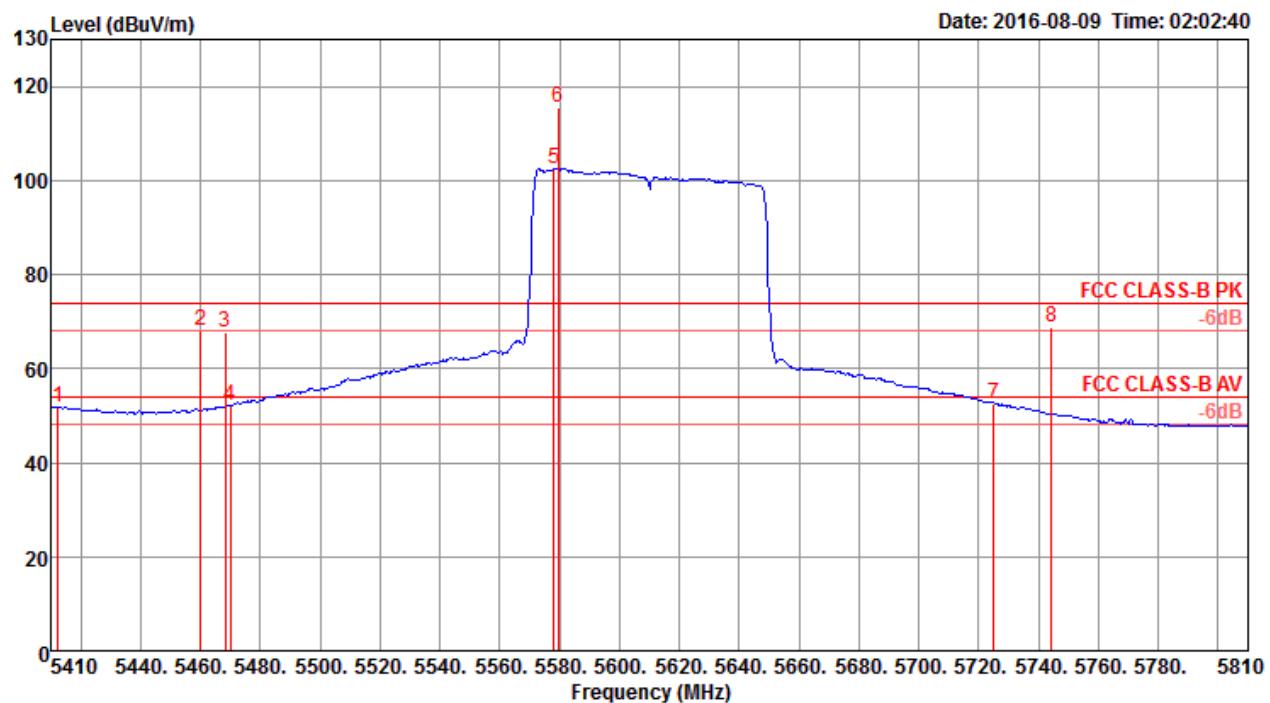
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 5 / CH 58+122 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 58**

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	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.

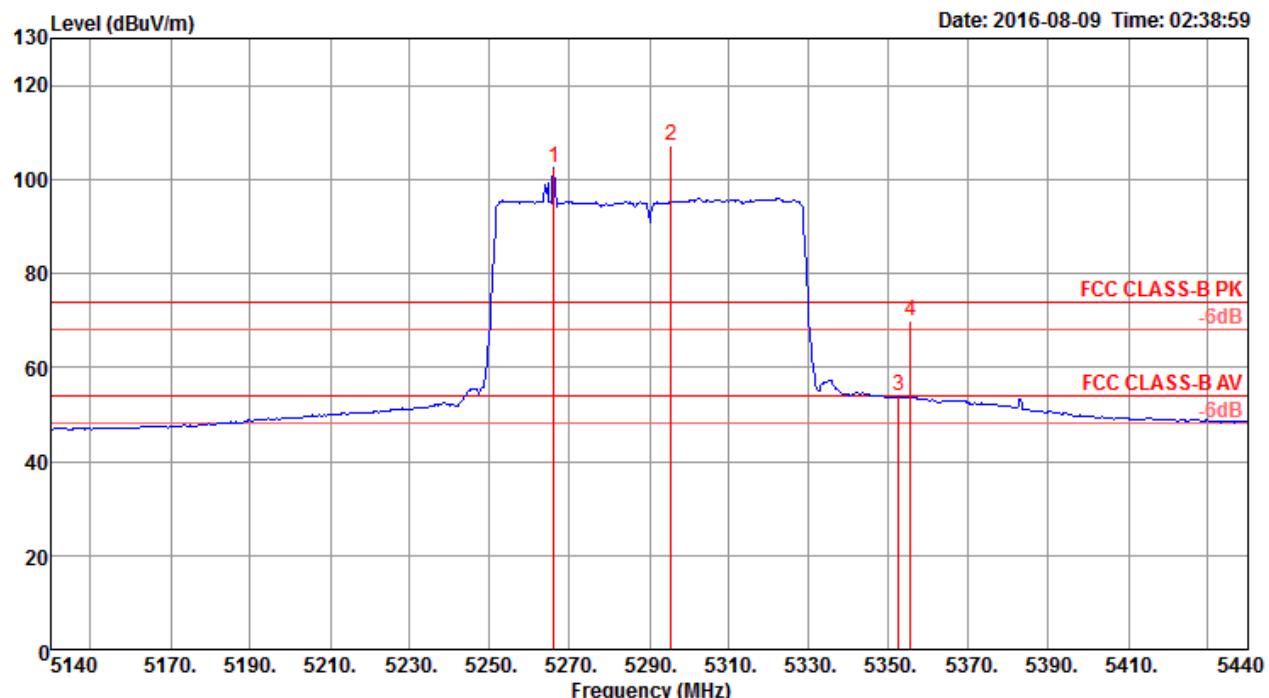
## Channel 122



Freq MHz	Level dBuV/m	Limit Line dBuV/m	Over Limit dB	Read Level dBuV	Cable Loss Factor			A/Pos cm	T/Pos deg	Remark	Pol/Phase
					Cable dB	Antenna dB	Preamp dB				
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.

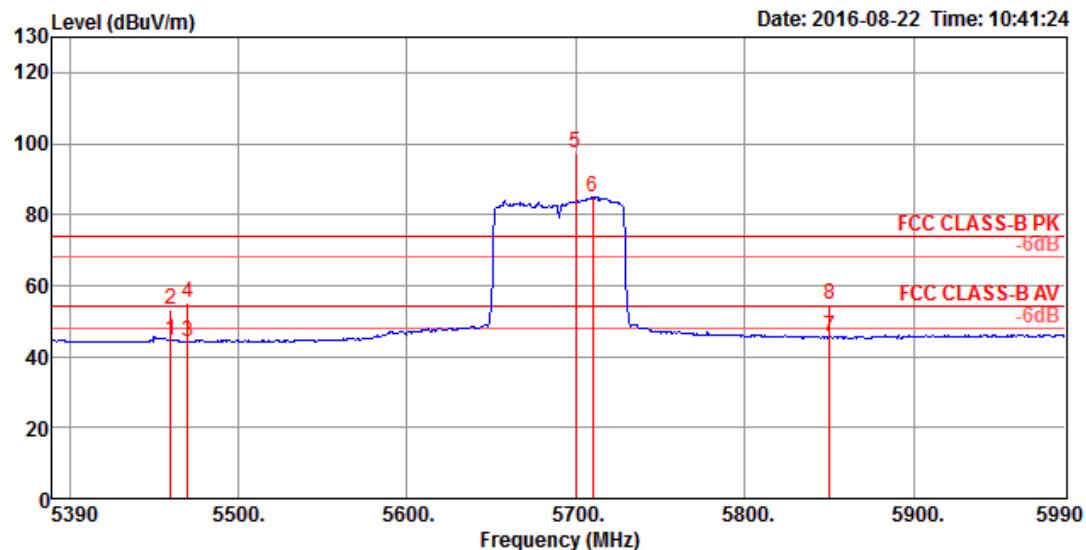
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 6 / CH 58+138 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 58**

Freq MHz	Level dBuV/m	Limit Line dB	Over Limit dB	Read Level dBuV	Cable	Antenna	Preamp	A/Pos dB	T/Pos cm	Remark	Pol/Phase
					Loss	Factor	Factor	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.

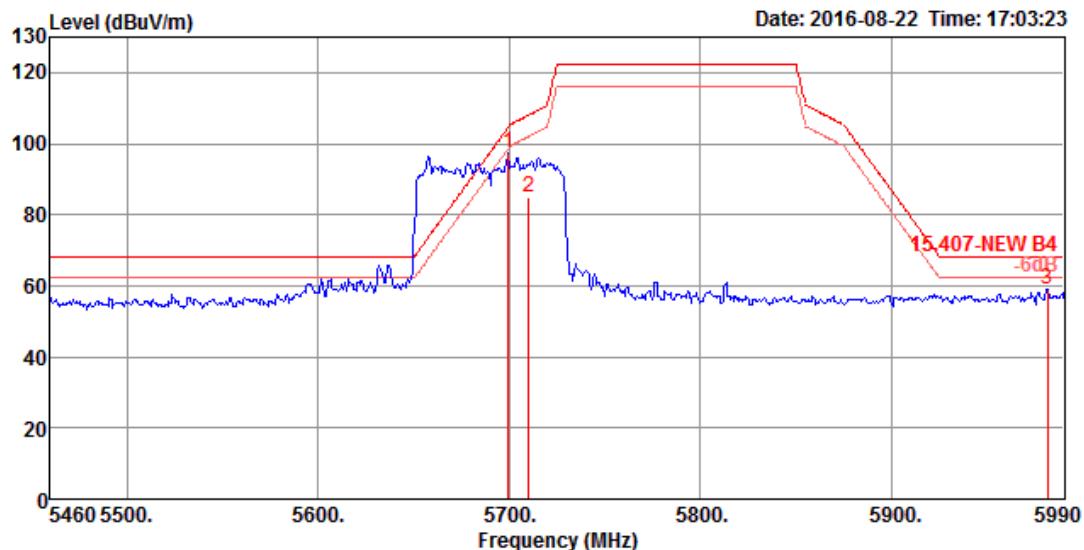
### Channel 138 (UNII 2C)



Freq	Level	Limit	Over	Read	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark
		Line	Limit	Level	Loss	Factor	Pol/Phase	deg	cm	
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	dB/m		
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.

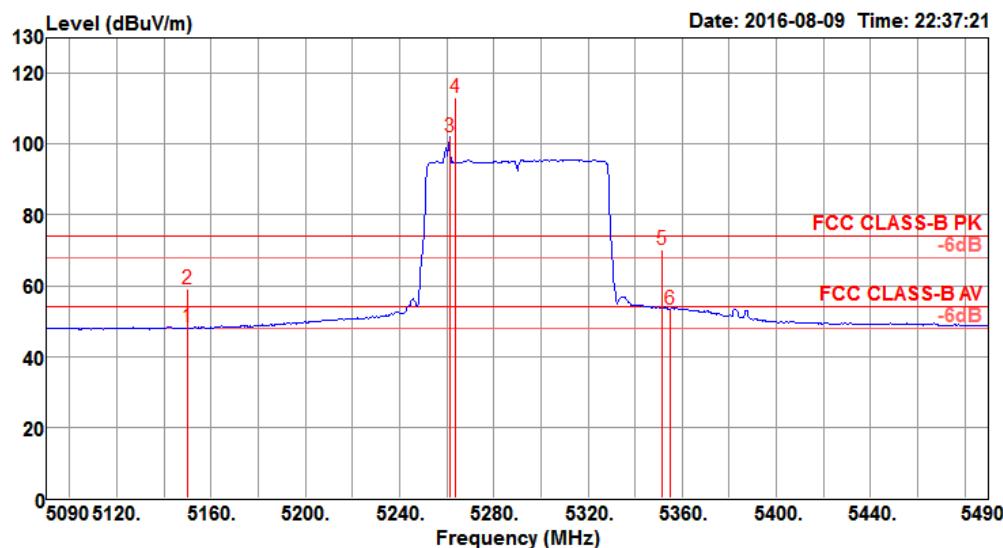
## Channel 138 (UNII 3)



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	
					Loss	Factor	Pol/Phase				
	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.

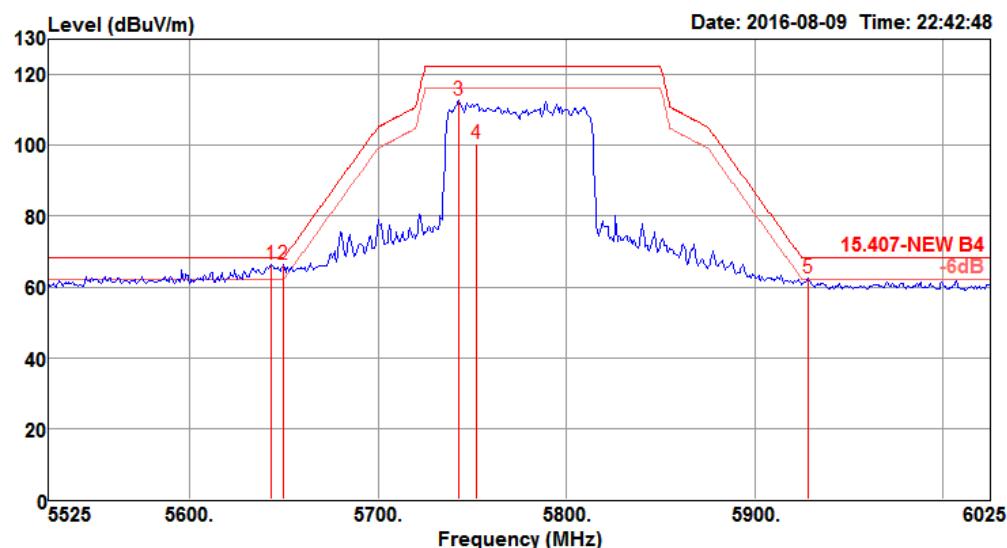
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 7 / CH 58+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 58**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.

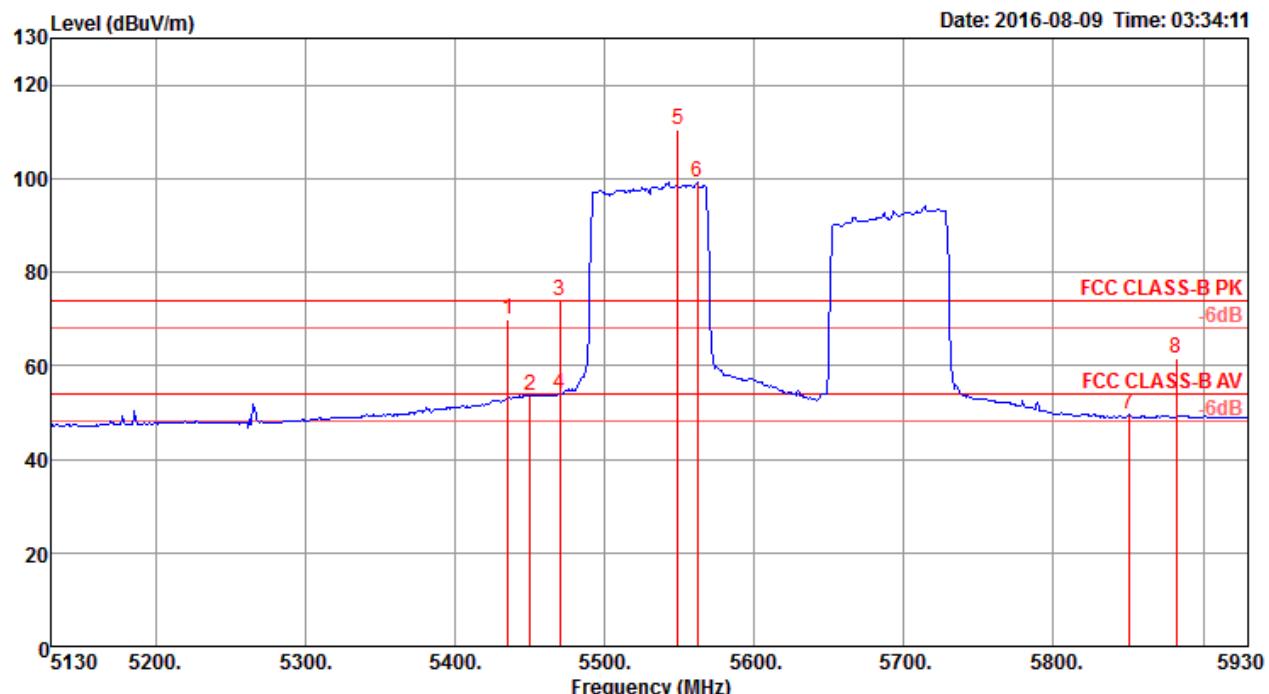
### Channel 155



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB			
1 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

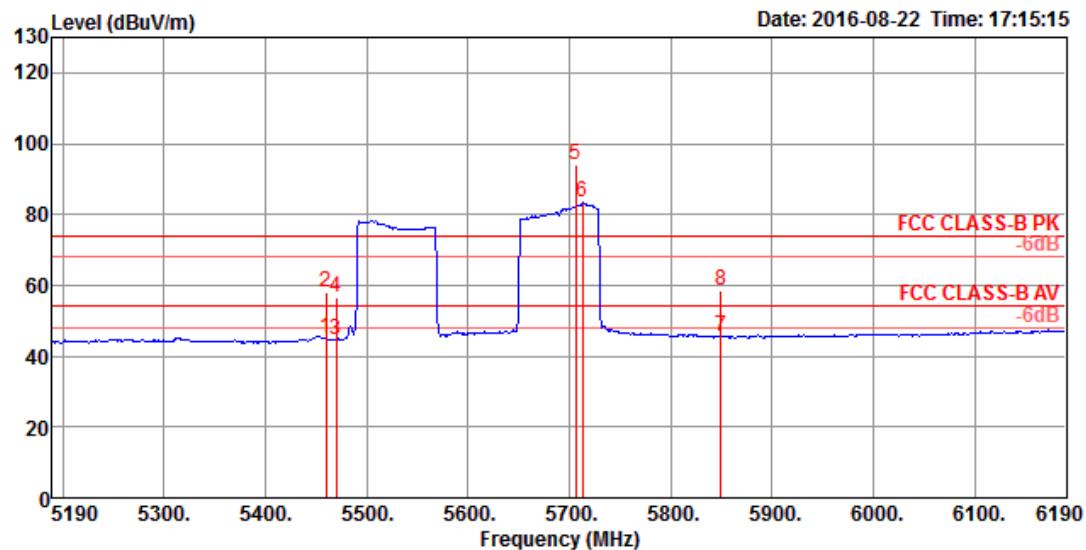
Item 3, 4 are the fundamental frequency at 5775 MHz.

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

**Channel 106**

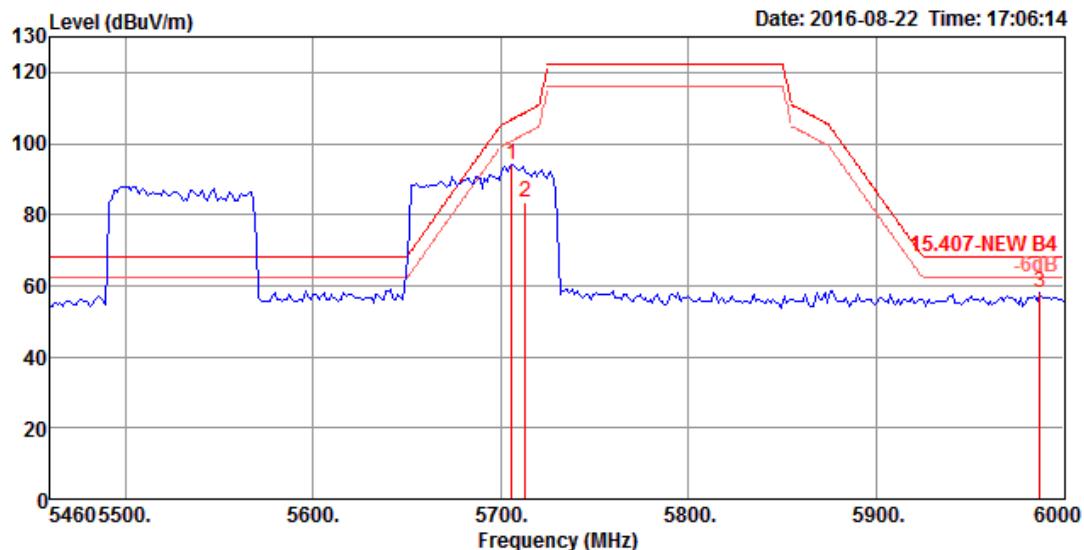
Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
1 5435.60	69.86	74.00	-4.14	62.73	7.88	33.72	34.47	255	222	Peak	VERTICAL
2 5450.00	53.76	54.00	-0.24	46.60	7.89	33.74	34.47	255	222	Average	VERTICAL
3 5470.00	73.85	74.00	-0.15	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	Preamp	Antenna	T/Pos	A/Pos	Remark
					Loss	Factor	Pol/Phase			
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB	deg	cm	
1	5460.00	44.92	54.00	-9.08	38.62	7.46	32.92	31.76	VERTICAL	288
2	5460.00	57.92	74.00	-16.08	51.62	7.46	32.92	31.76	VERTICAL	288
3	5470.00	44.69	54.00	-9.31	38.35	7.48	32.92	31.78	VERTICAL	288
4	5470.00	56.69	74.00	-17.31	50.35	7.48	32.92	31.78	VERTICAL	288
5	5706.00	93.92			87.16	7.70	33.00	32.06	VERTICAL	288
6	5713.20	83.64			76.88	7.70	33.00	32.06	VERTICAL	288
7	5850.00	45.36	54.00	-8.64	38.40	7.79	33.05	32.22	VERTICAL	288
8	5850.00	58.37	74.00	-15.63	51.41	7.79	33.05	32.22	VERTICAL	288

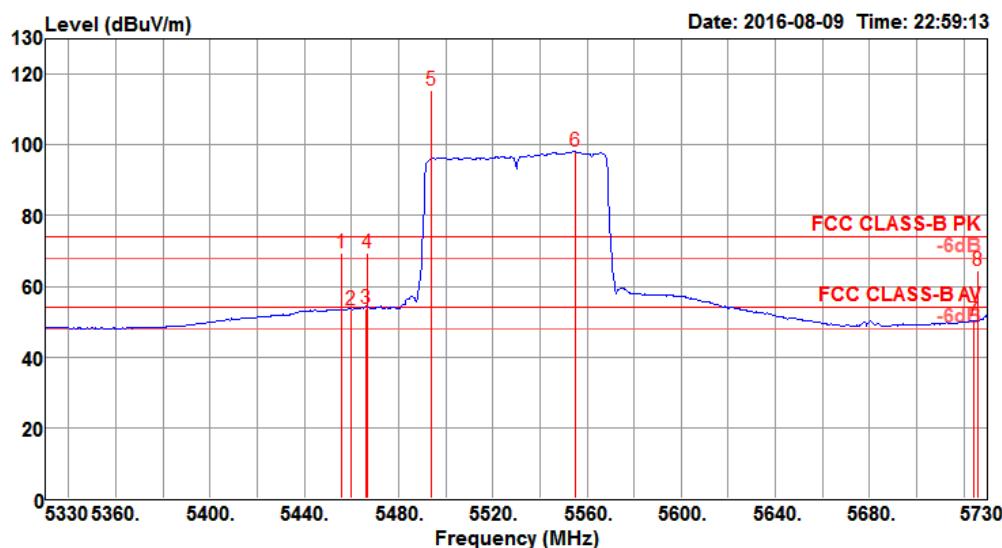
Item 5, 6 are the fundamental frequency at 5690 MHz.

**Channel 138 (UNII 3)**

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	
					Loss	Factor	Factor				
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.

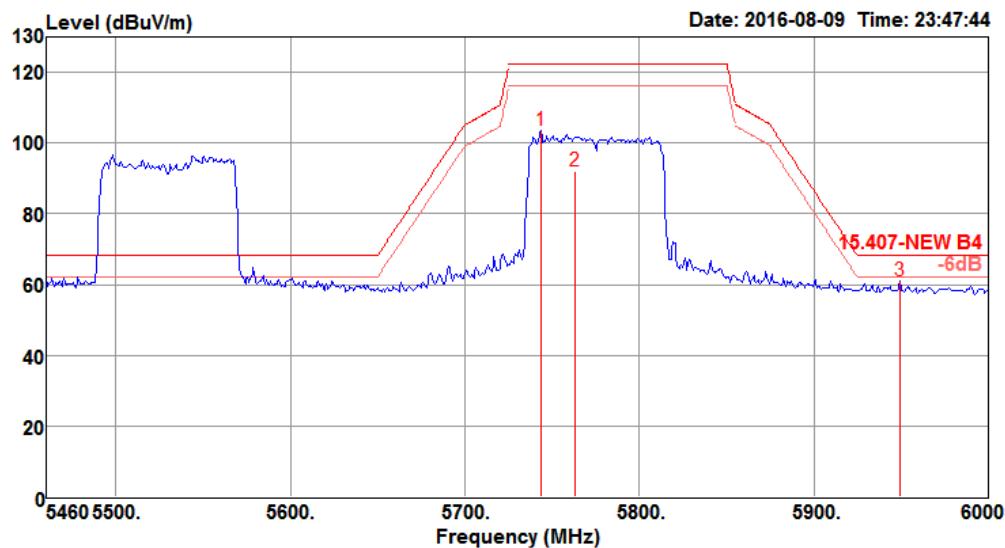
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 9 / CH 106+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 106**


Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
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.

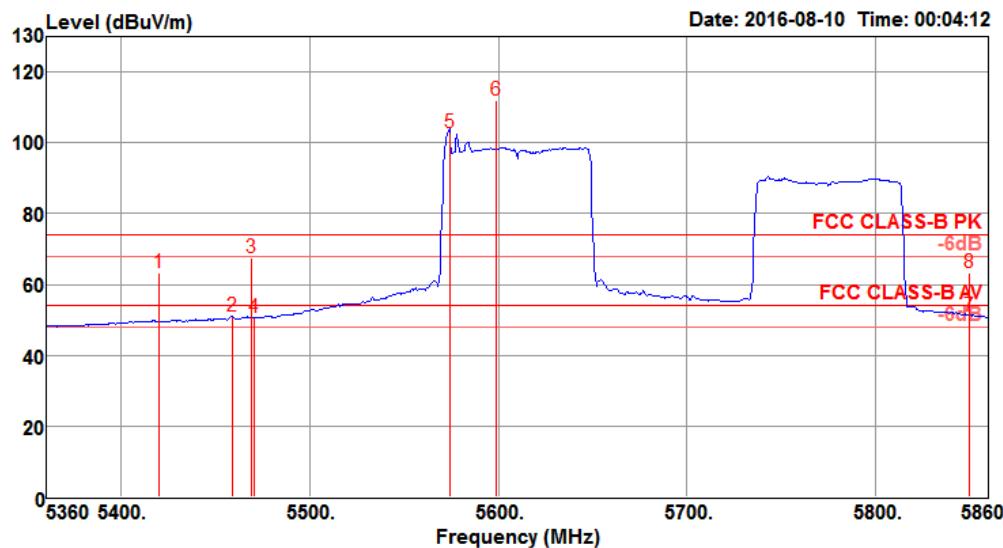
### Channel 155



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
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.

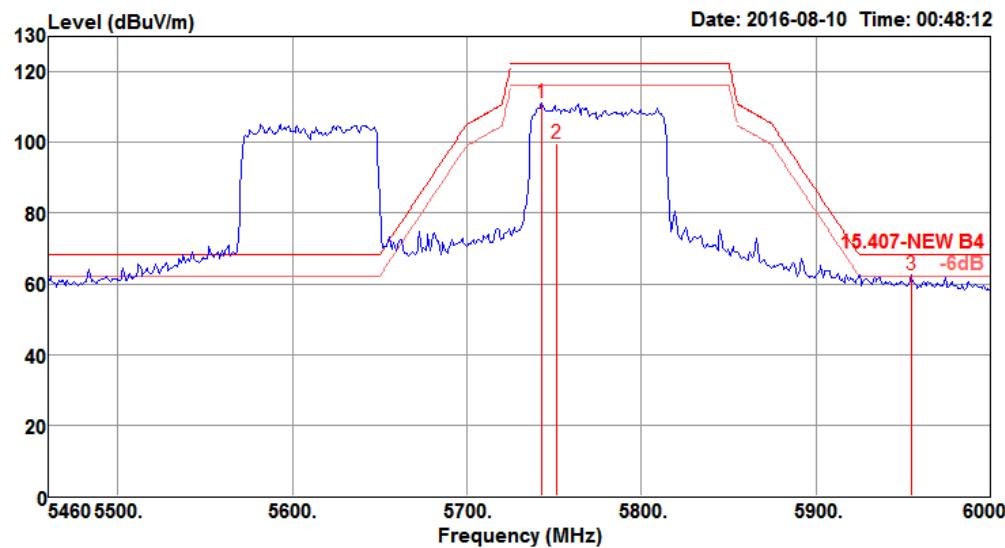
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 10 / CH 122+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 122**


Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	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.

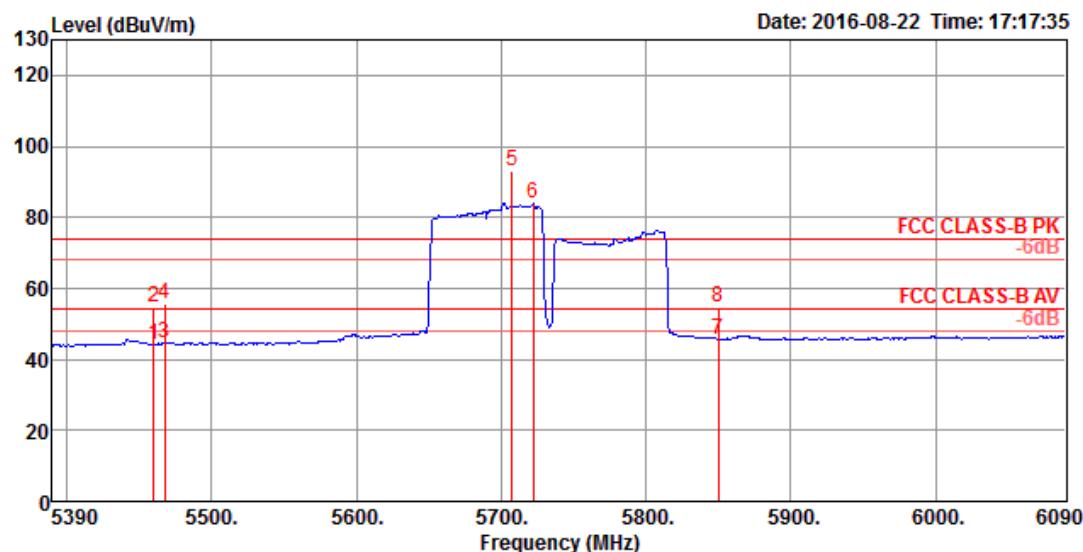
### Channel 155



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dB	dB/m	dB				
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.

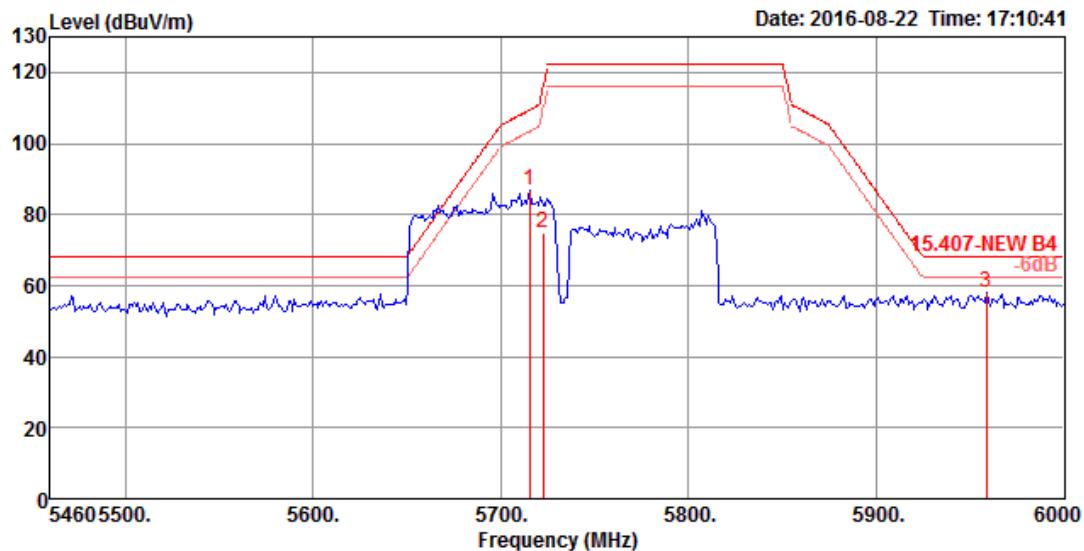
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Brian Sun & Andy Tsai & DK Chang & Gary Chu & Ron Huang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss2 VHT80+80 Type 11 / CH 138+155 / Chain 5 + Chain 6 + Chain 7 + Chain 8

**Channel 138 (UNII 2C)**


Freq	Level	Limit Line	Over Limit	Read Level	Cable			Preamp Factor	Antenna Factor	Pol/Phase	T/Pos	A/Pos	Remark
					Loss	dB	dBuV						
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.

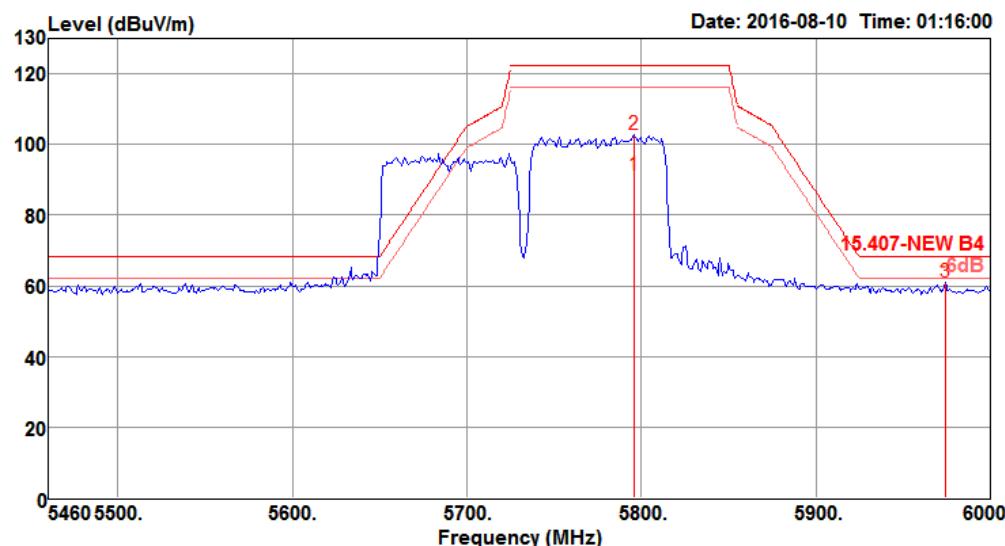
## Channel 138 (UNII 3)



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Preamp	Antenna	T/Pos	A/Pos	Remark	
					Loss	Factor	Factor				
	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	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	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:

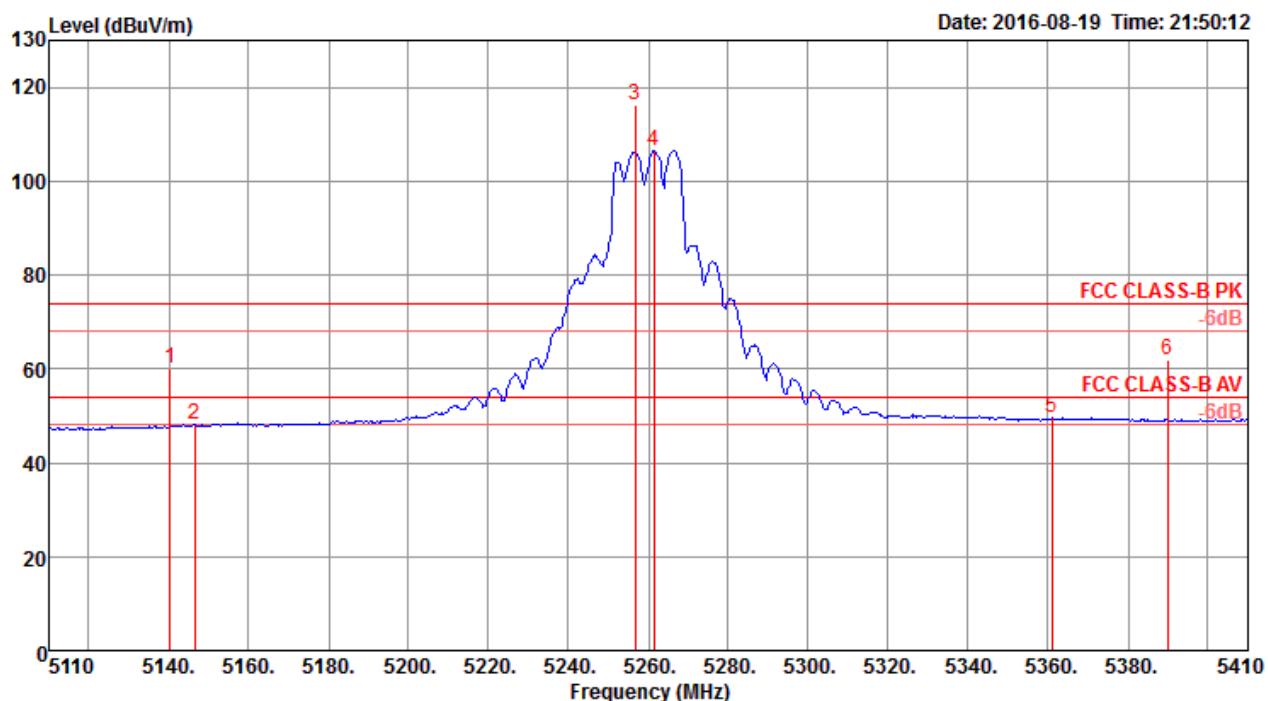
Emission level (dBuV/m) = 20 log Emission level (uV/m)

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

### Radio 3

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Nyle Chang	<b>Configurations</b>	IEEE 802.11a CH 52, 60, 64 / Chain 9 + Chain 10

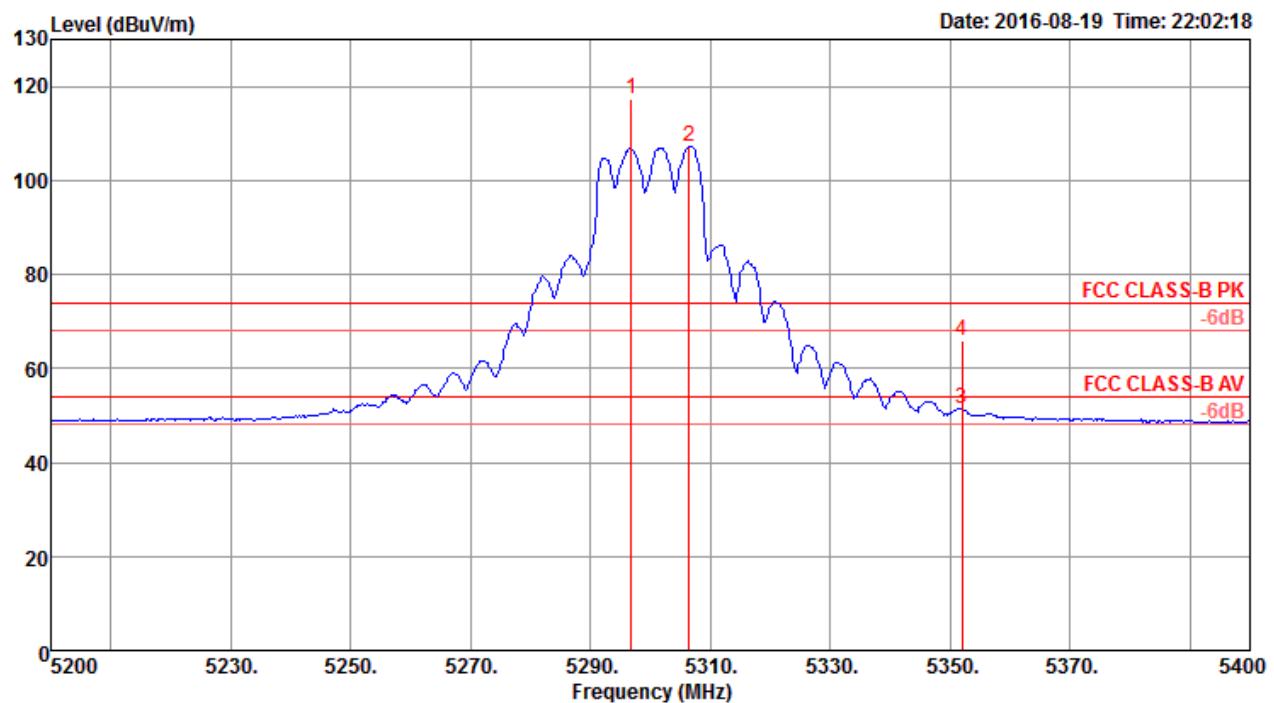
### Channel 52



Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	cm	deg				
1	5140.29	60.01	74.00	-13.99	52.78	6.43	33.72	32.92	234	135	Peak	VERTICAL
2	5146.54	48.04	54.00	-5.96	40.78	6.44	33.74	32.92	234	135	Average	VERTICAL
3	5256.64	116.25			108.73	6.53	33.91	32.92	234	135	Peak	VERTICAL
4	5261.44	106.49			98.97	6.53	33.91	32.92	234	135	Average	VERTICAL
5	5360.96	49.47	54.00	-4.53	41.69	6.62	34.08	32.92	234	135	Average	VERTICAL
6	5389.81	61.76	74.00	-12.24	53.91	6.65	34.13	32.93	234	135	Peak	VERTICAL

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

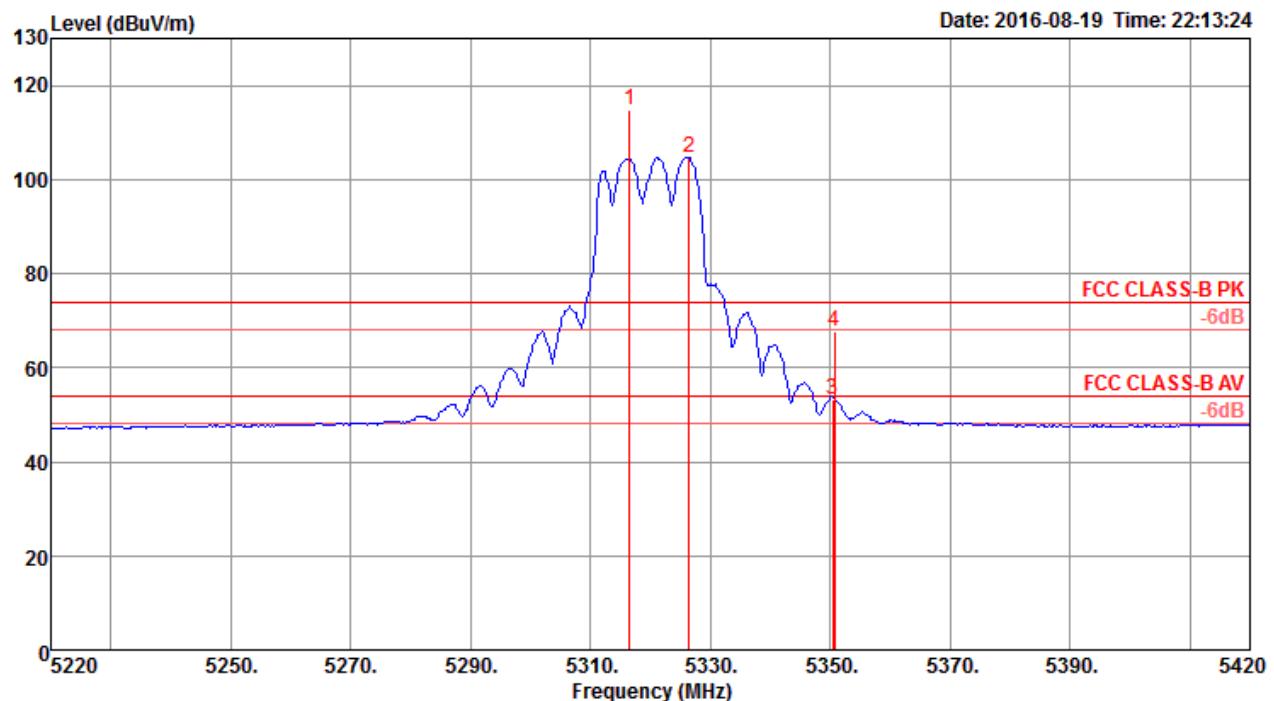
### Channel 60



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5296.80	117.38			109.75	6.57	33.98	32.92	229	43 Peak	VERTICAL
2	5306.41	107.04			99.41	6.57	33.98	32.92	229	43 Average	VERTICAL
3	5351.92	51.55	54.00	-2.45	43.80	6.61	34.06	32.92	229	43 Average	VERTICAL
4	5351.92	65.86	74.00	-8.14	58.11	6.61	34.06	32.92	229	43 Peak	VERTICAL

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

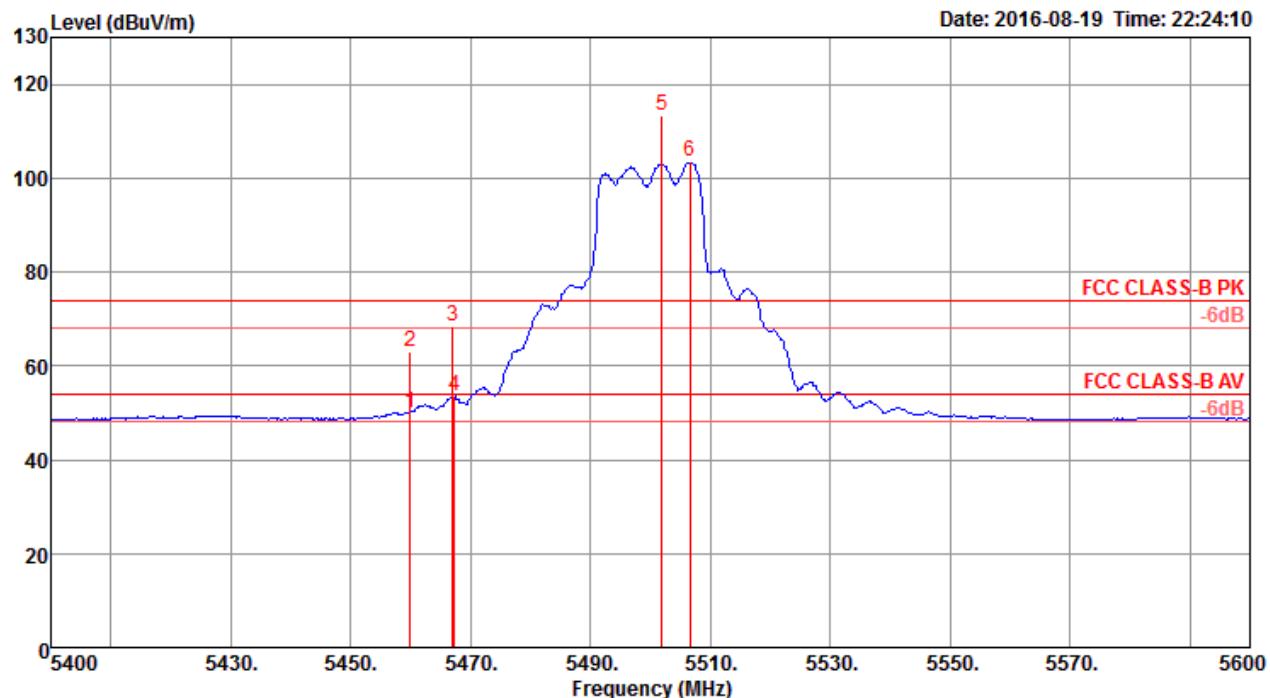
## Channel 64



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit	Level	Loss Factor	Factor		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	5316.47	114.62				106.95	6.58	34.01	32.92	244	45 Peak VERTICAL
2	5326.41	104.65				96.94	6.60	34.03	32.92	244	45 Average VERTICAL
3	5350.45	53.30	54.00	-0.70	45.55	6.61	34.06	32.92	244	45 Average VERTICAL	
4	5350.77	67.57	74.00	-6.43	59.82	6.61	34.06	32.92	244	45 Peak VERTICAL	

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

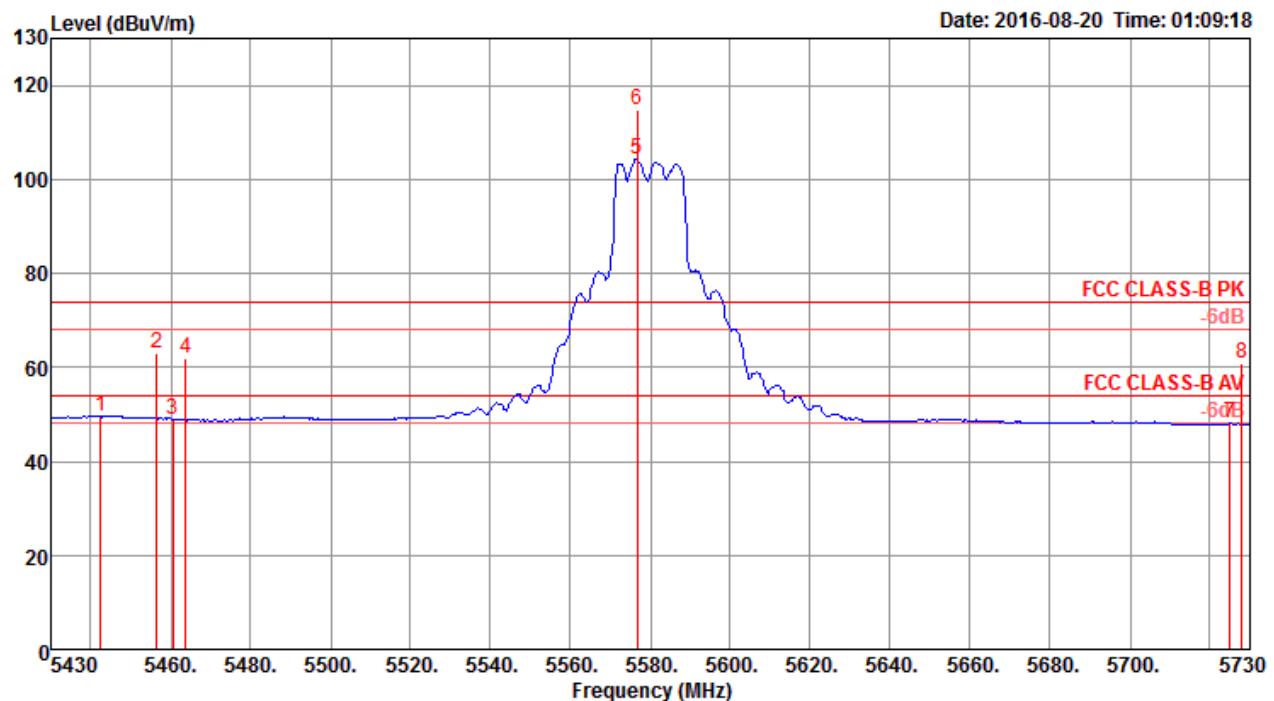
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Nyle Chang	<b>Configurations</b>	IEEE 802.11a CH 100, 116, 140 / Chain 9 + Chain 10

**Channel 100**


Freq	Limit		Over Limit	Read Level	Cable		Antenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
	Level	Line			dB	dBuV						
	MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	5460.00	50.10	54.00	-3.90	42.12	6.68	34.23	32.93	224	133	Average	VERTICAL
2	5460.00	62.99	74.00	-11.01	55.01	6.68	34.23	32.93	224	133	Peak	VERTICAL
3	5466.99	68.32	74.00	-5.68	60.31	6.69	34.25	32.93	224	133	Peak	VERTICAL
4	5467.31	53.65	54.00	-0.35	45.64	6.69	34.25	32.93	224	133	Average	VERTICAL
5	5501.92	113.52			105.45	6.70	34.30	32.93	224	133	Peak	VERTICAL
6	5506.57	103.40			95.33	6.70	34.30	32.93	224	133	Average	VERTICAL

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

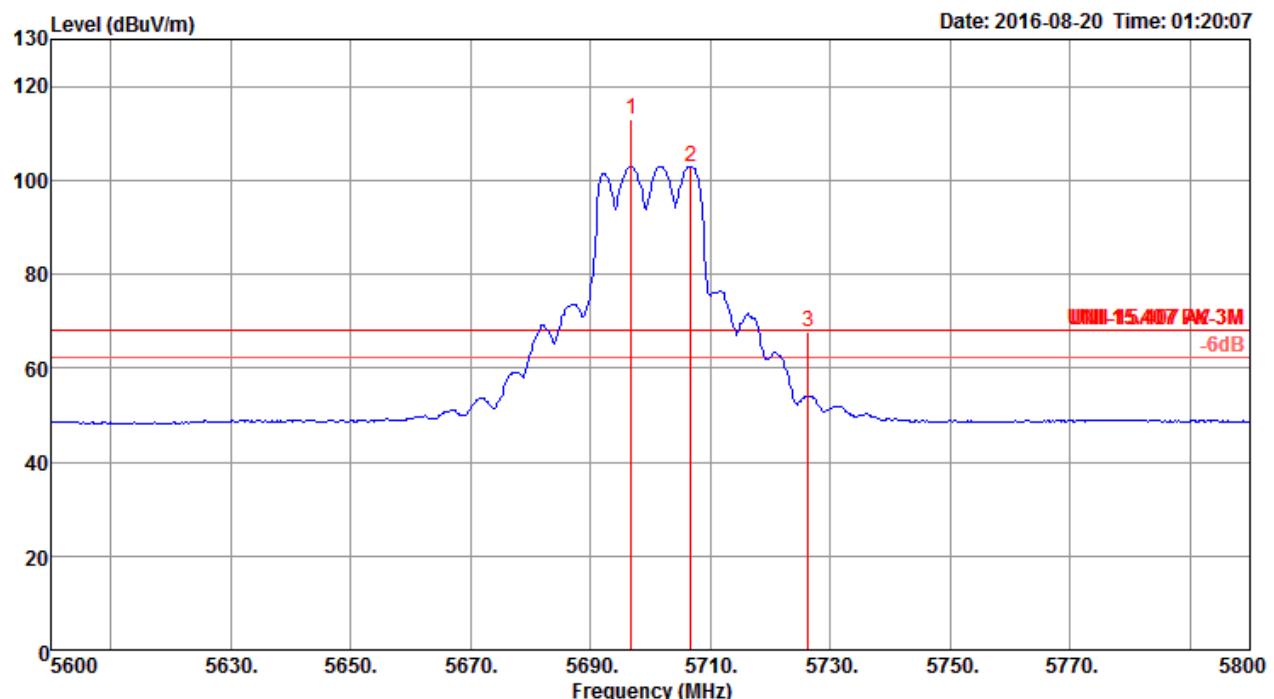
## Channel 116



Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	dB	cm	deg		
1	5442.50	49.73	54.00	-4.27	41.79	6.67	34.20	32.93	204	132	Average	VERTICAL
2	5456.44	62.83	74.00	-11.17	54.85	6.68	34.23	32.93	204	132	Peak	VERTICAL
3	5460.48	48.95	54.00	-5.05	40.97	6.68	34.23	32.93	204	132	Average	VERTICAL
4	5463.75	61.78	74.00	-12.22	53.77	6.69	34.25	32.93	204	132	Peak	VERTICAL
5	5576.64	104.41			96.27	6.74	34.35	32.95	204	132	Average	VERTICAL
6	5576.64	114.76			106.62	6.74	34.35	32.95	204	132	Peak	VERTICAL
7	5725.00	48.09	54.00	-5.91	39.76	6.88	34.44	32.99	204	132	Average	VERTICAL
8	5728.08	60.99	74.00	-13.01	52.66	6.88	34.44	32.99	204	132	Peak	VERTICAL

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

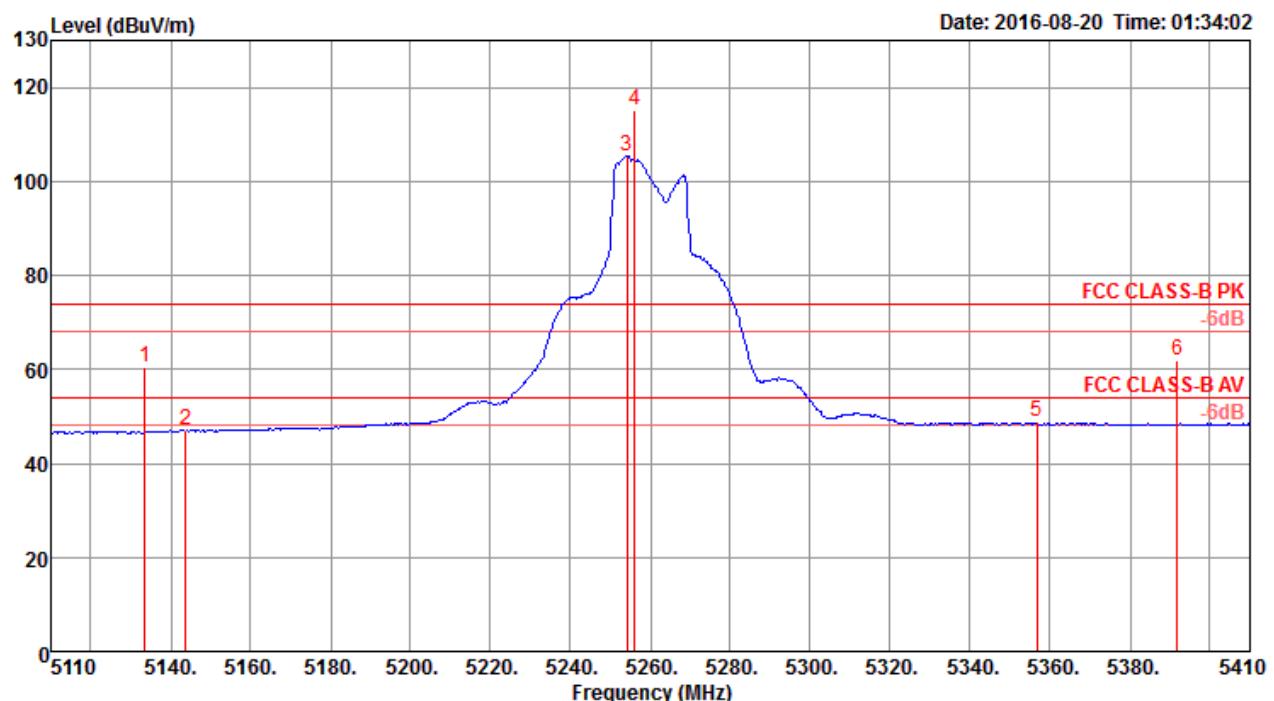
## Channel 140



Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit	dB						
MHz	dBuV/m	dBuV/m											
1	5696.80	113.06					104.77	6.85	34.42	32.98	260	210	Peak VERTICAL
2	5706.73	102.94					94.62	6.87	34.43	32.98	260	210	Average VERTICAL
3	5726.28	67.80	68.20	-0.40	59.47		6.88	34.44	32.99		260	210	Peak VERTICAL

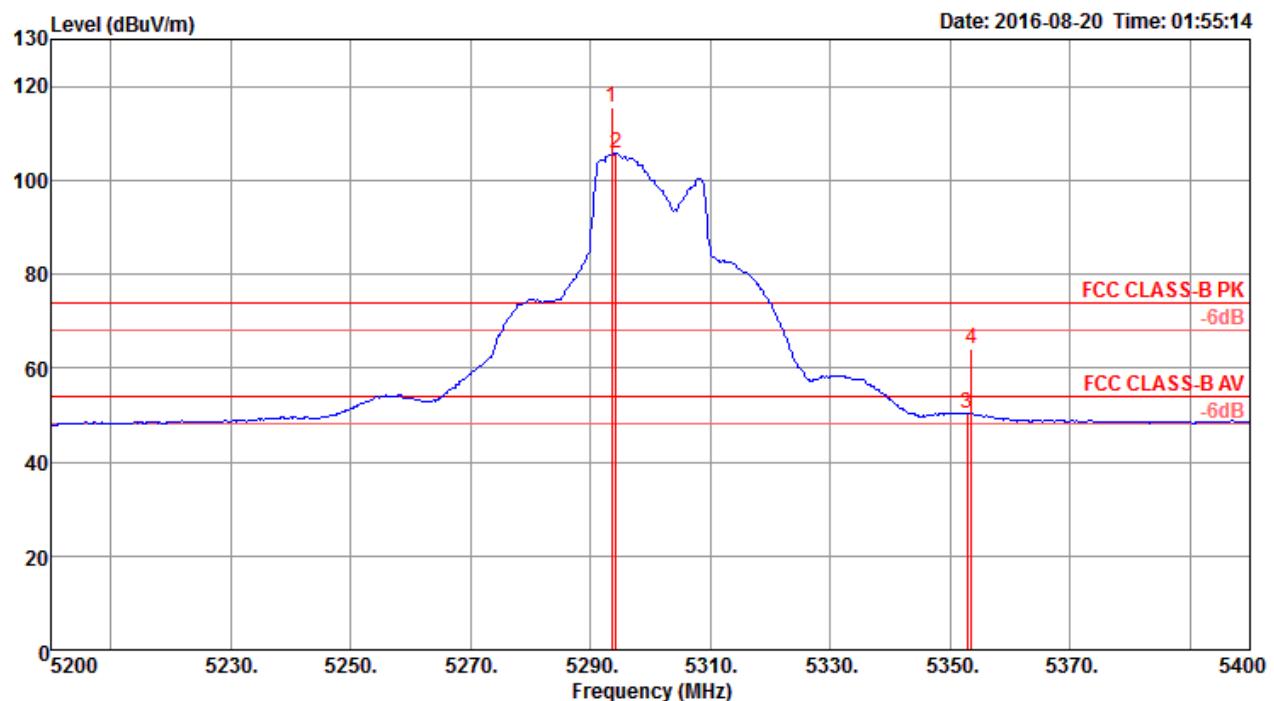
Item 1, 2 are the fundamental frequency at 5700 MHz.

<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Nyle Chang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52, 60, 64 / Chain 9 + Chain 10

**Channel 52**

Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB						
MHz	dBuV/m	dBuV/m	dB				dB	dB/m	dB	cm	deg		
1	5133.56	60.59	74.00	-13.41	53.36	6.43	33.72	32.92	254	136	Peak	VERTICAL	
2	5143.65	47.08	54.00	-6.92	39.82	6.44	33.74	32.92	254	136	Average	VERTICAL	
3	5254.23	105.30			97.78	6.53	33.91	32.92	254	136	Average	VERTICAL	
4	5256.15	115.04			107.52	6.53	33.91	32.92	254	136	Peak	VERTICAL	
5	5356.64	48.71	54.00	-5.29	40.93	6.62	34.08	32.92	254	136	Average	VERTICAL	
6	5391.73	62.00	74.00	-12.00	54.15	6.65	34.13	32.93	254	136	Peak	VERTICAL	

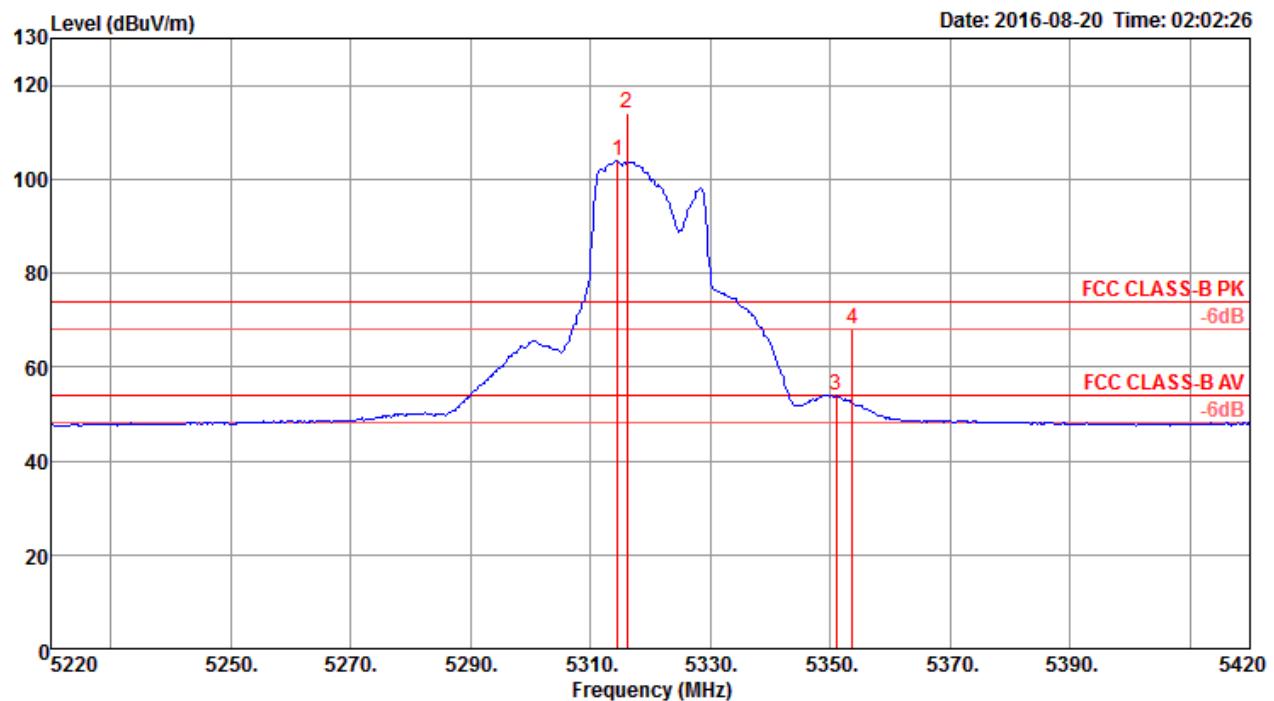
Item 3, 4 are the fundamental frequency at 5260 MHz.

**Channel 60**

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB				
1	5293.59	115.51			107.88	6.57	33.98	32.92	247	135 Peak	VERTICAL
2	5294.23	105.68			98.05	6.57	33.98	32.92	247	135 Average	VERTICAL
3	5352.89	50.38	54.00	-3.62	42.63	6.61	34.06	32.92	247	135 Average	VERTICAL
4	5353.53	64.06	74.00	-9.94	56.31	6.61	34.06	32.92	247	135 Peak	VERTICAL

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

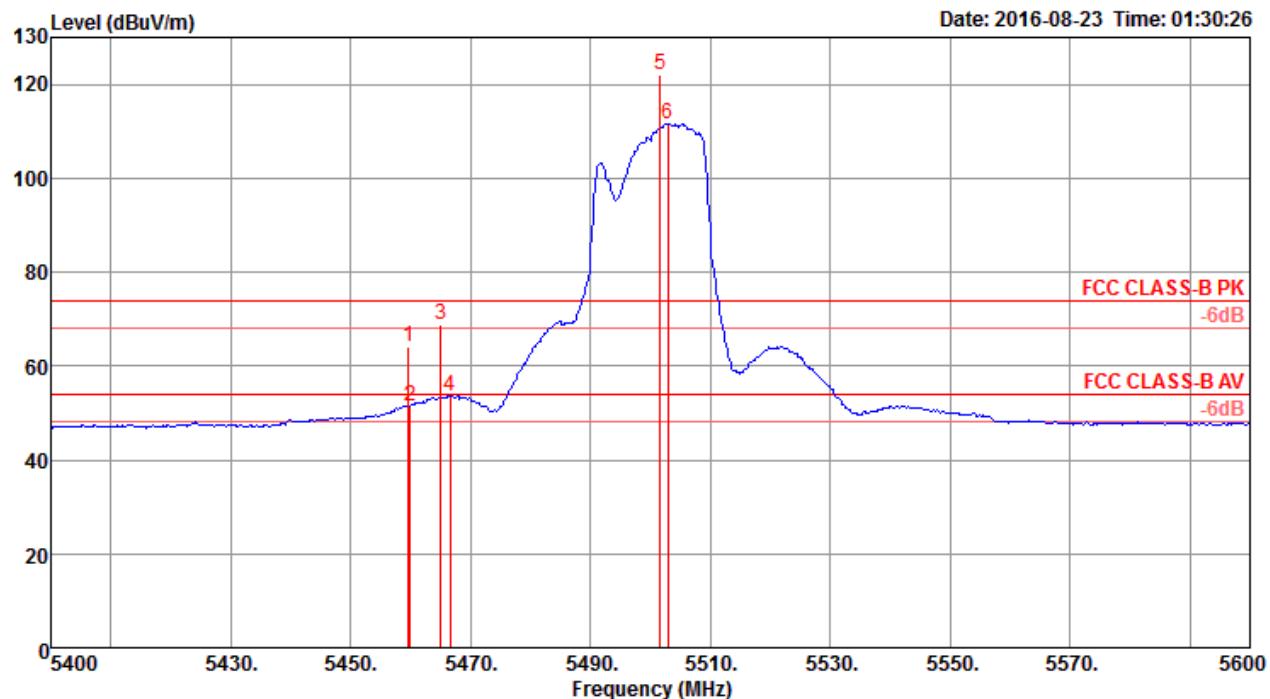
## Channel 64



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
1	5314.55	103.85			96.18	6.58	34.01	32.92	240	46 Average	VERTICAL
2	5316.15	114.12			106.45	6.58	34.01	32.92	240	46 Peak	VERTICAL
3	5351.00	53.86	54.00	-0.14	46.11	6.61	34.06	32.92	240	46 Average	VERTICAL
4	5353.65	67.91	74.00	-6.09	60.16	6.61	34.06	32.92	240	46 Peak	VERTICAL

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

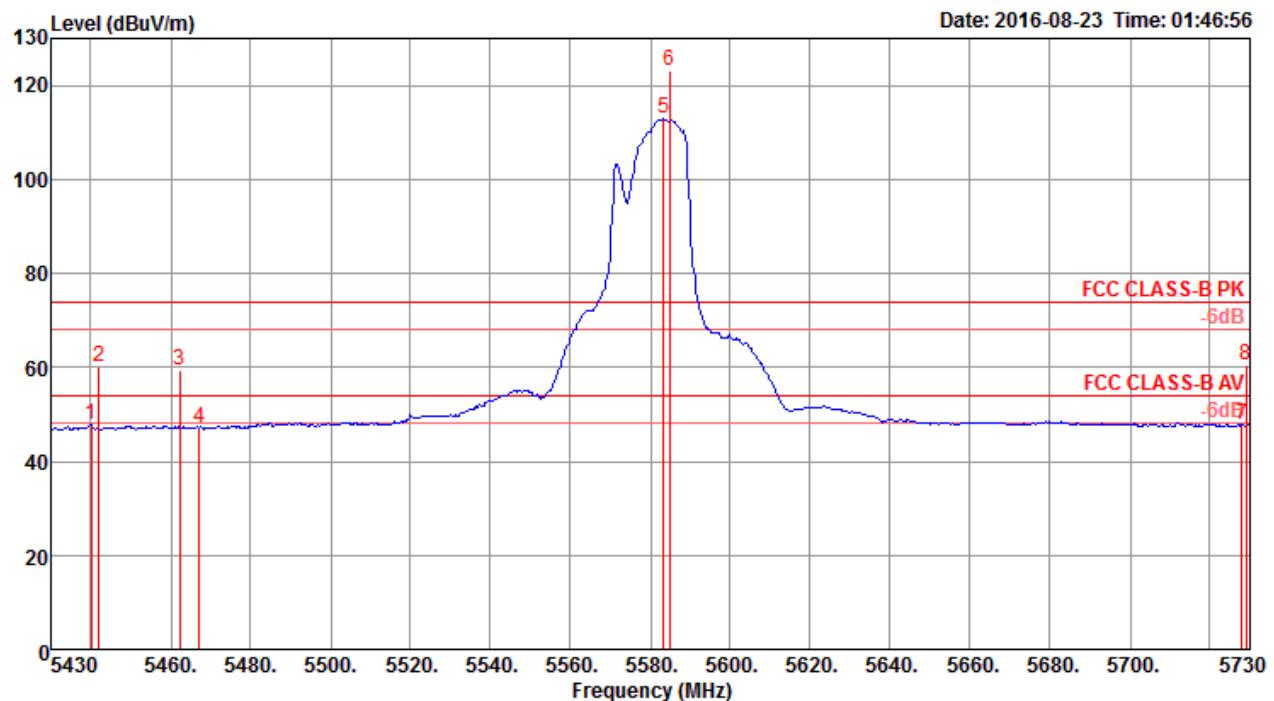
Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100, 116, 140 / Chain 9 + Chain 10

**Channel 100**

Freq MHz	Level dBuV/m	Limit		Over Limit	Read Level dBuV	Cable Loss dB	Antenna Factor dB/m	Preamp Factor dB	A/Pos cm	T/Pos deg	Remark	Pol/Phase
		Line dBuV/m	Limit dBuV/m									
1 5459.62	64.15	74.00	-9.85	56.17	6.68	34.23	32.93	279	141	Peak	VERTICAL	
2 5460.00	51.42	54.00	-2.58	43.44	6.68	34.23	32.93	279	141	Average	VERTICAL	
3 5465.06	68.85	74.00	-5.15	60.84	6.69	34.25	32.93	279	141	Peak	VERTICAL	
4 5466.60	53.55	54.00	-0.45	45.54	6.69	34.25	32.93	279	141	Average	VERTICAL	
5 5501.60	122.06			113.99	6.70	34.30	32.93	279	141	Peak	VERTICAL	
6 5502.89	111.68			103.61	6.70	34.30	32.93	279	141	Average	VERTICAL	

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

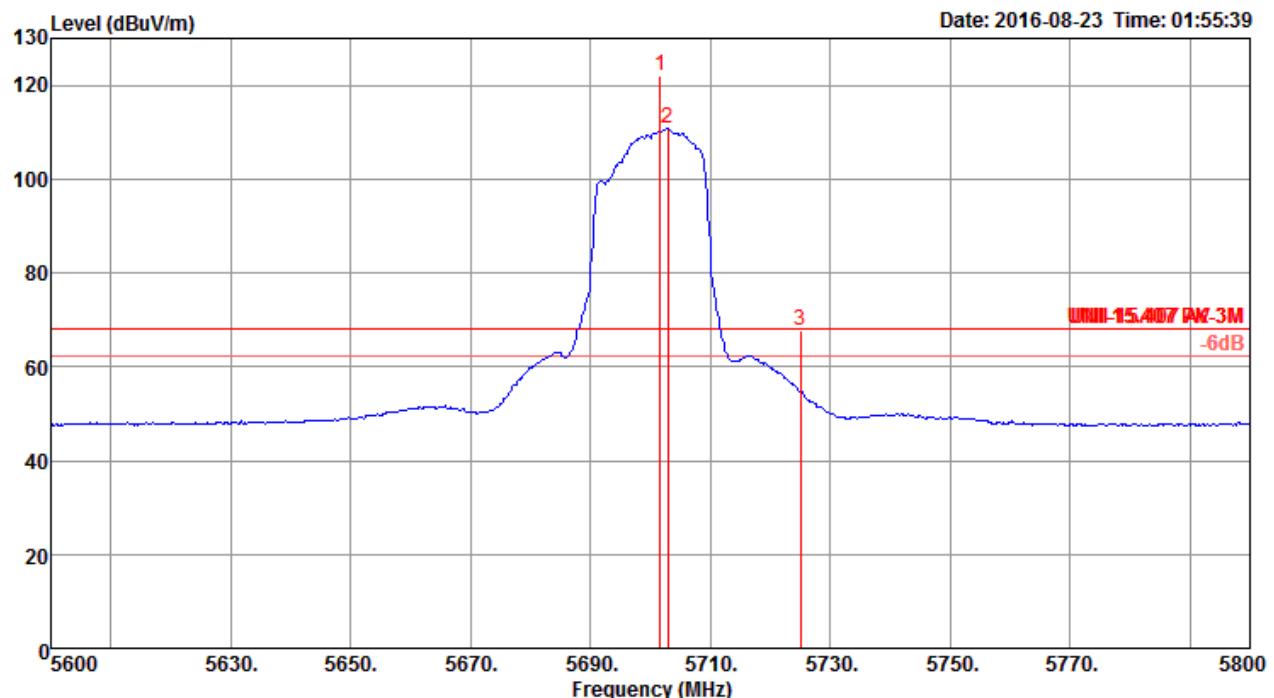
## Channel 116



Freq	Level	Limit		Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB									
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg			
1	5440.10	47.85	54.00	-6.15	39.91	6.67	34.20	32.93	278	145	Average	VERTICAL
2	5442.02	60.23	74.00	-13.77	52.29	6.67	34.20	32.93	278	145	Peak	VERTICAL
3	5462.31	59.35	74.00	-14.65	51.37	6.68	34.23	32.93	278	145	Peak	VERTICAL
4	5467.12	47.23	54.00	-6.77	39.22	6.69	34.25	32.93	278	145	Average	VERTICAL
5	5583.37	112.96			104.82	6.74	34.35	32.95	278	145	Average	VERTICAL
6	5584.81	123.25			115.11	6.74	34.35	32.95	278	145	Peak	VERTICAL
7	5728.08	47.82	54.00	-6.18	39.49	6.88	34.44	32.99	278	145	Average	VERTICAL
8	5729.04	60.50	74.00	-13.50	52.17	6.88	34.44	32.99	278	145	Peak	VERTICAL

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

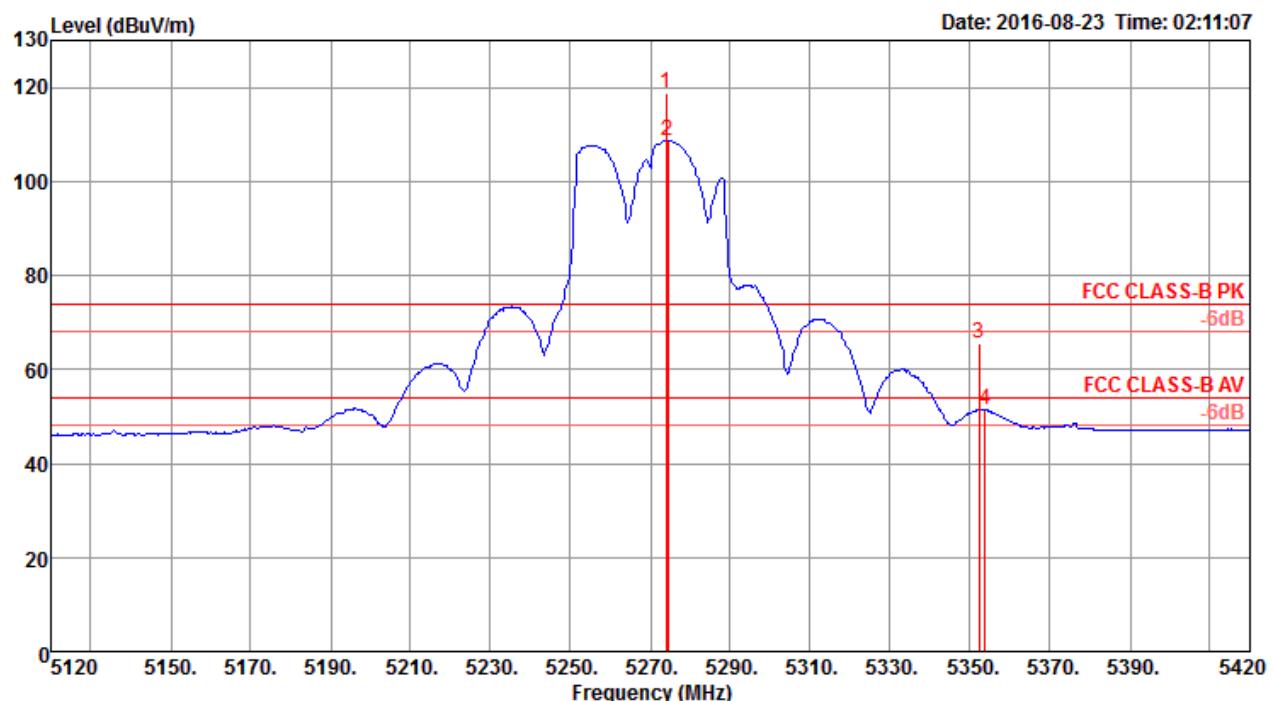
## Channel 140



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor				
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	5701.60	121.86			113.57	6.85	34.42	32.98	248	142	Peak VERTICAL
2	5702.89	110.68			102.39	6.85	34.42	32.98	248	142	Average VERTICAL
3	5725.00	67.71	68.20	-0.49	59.38	6.88	34.44	32.99	248	142	Peak VERTICAL

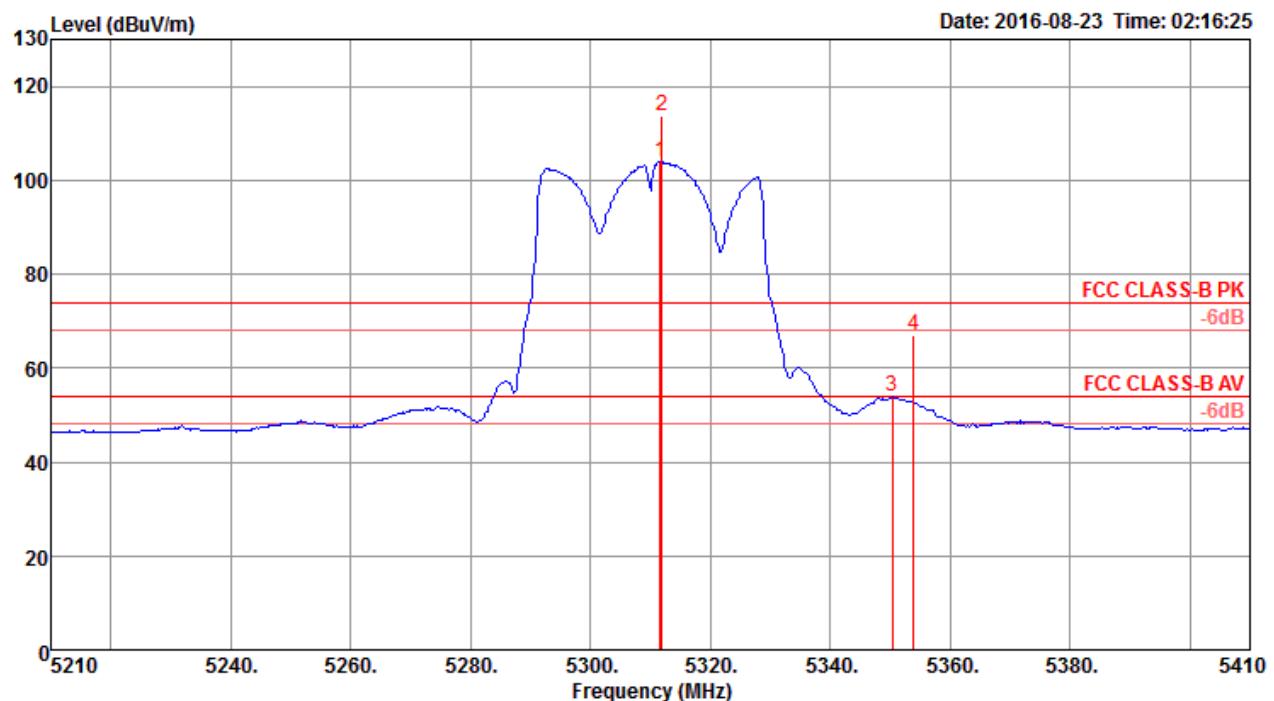
Item 1, 2 are the fundamental frequency at 5700 MHz.

Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54, 62 / Chain 9 + Chain 10

**Channel 54**

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m		dB	dBuV	dB	dB/m	dB	cm	deg	
1	5273.85	118.75			111.18	6.55	33.94	32.92	278	145	Peak VERTICAL
2	5274.33	108.76			101.19	6.55	33.94	32.92	278	145	Average VERTICAL
3	5352.21	65.58	74.00	-8.42	57.83	6.61	34.06	32.92	278	145	Peak VERTICAL
4	5353.65	51.43	54.00	-2.57	43.68	6.61	34.06	32.92	278	145	Average VERTICAL

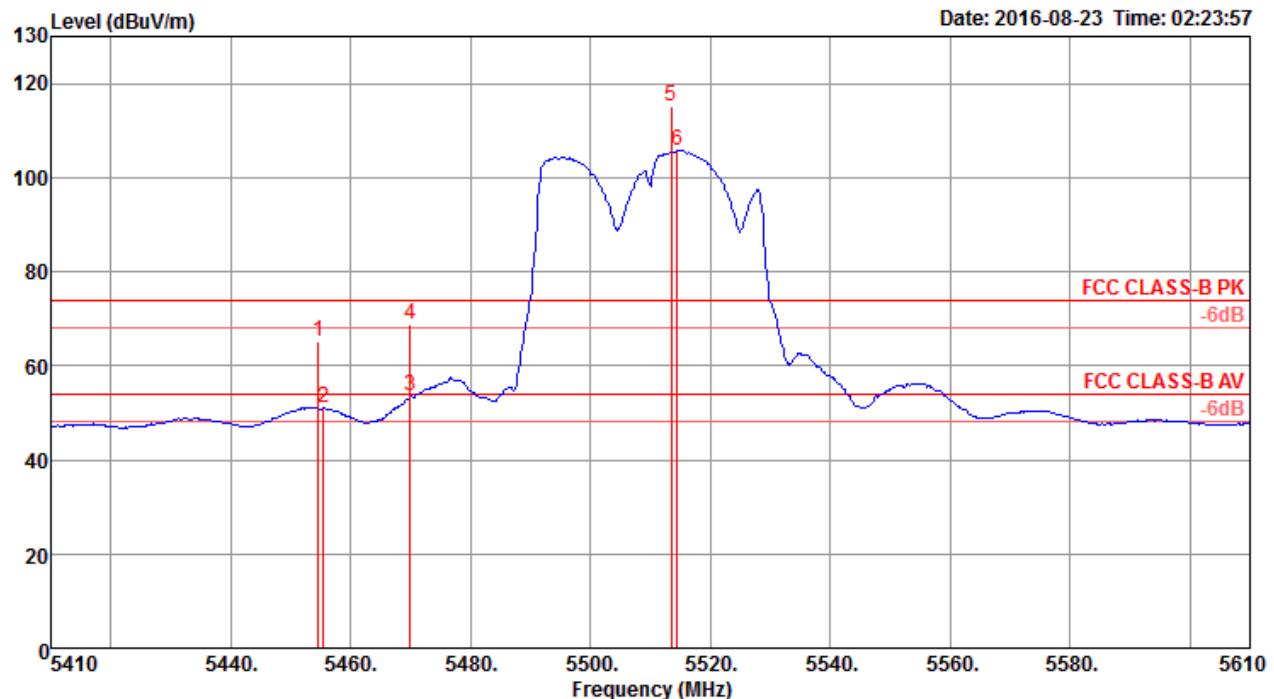
Item 1, 2 are the fundamental frequency at 5270 MHz.

**Channel 62**

Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1 5311.60	104.08				96.41	6.58	34.01	32.92	262	140 Average	VERTICAL
2 5311.92	113.67				106.00	6.58	34.01	32.92	262	140 Peak	VERTICAL
3 5350.39	53.82	54.00	-0.18	46.07	6.61	34.06	32.92	262	140 Average	VERTICAL	
4 5353.91	67.09	74.00	-6.91	59.34	6.61	34.06	32.92	262	140 Peak	VERTICAL	

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

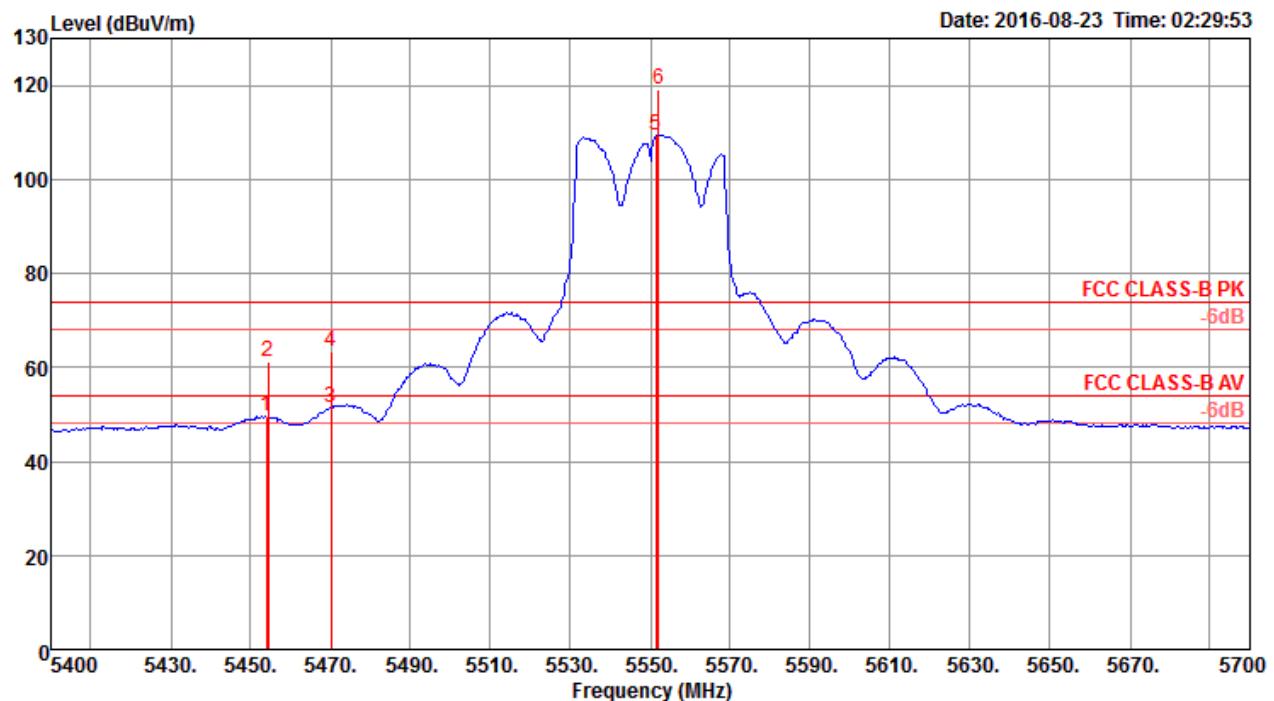
Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102, 110, 134 / Chain 9 + Chain 10

**Channel 102**

Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB			cm	deg		
MHz	dBuV/m	dBuV/m	dB										
1	5454.55	65.01	74.00	-8.99	57.03	6.68	34.23	32.93	266	143	Peak		VERTICAL
2	5455.51	51.08	54.00	-2.92	43.10	6.68	34.23	32.93	266	143	Average		VERTICAL
3	5470.00	53.52	54.00	-0.48	45.51	6.69	34.25	32.93	266	143	Average		VERTICAL
4	5470.00	68.64	74.00	-5.36	60.63	6.69	34.25	32.93	266	143	Peak		VERTICAL
5	5513.53	115.04			106.95	6.71	34.31	32.93	266	143	Peak		VERTICAL
6	5514.49	105.76			97.67	6.71	34.31	32.93	266	143	Average		VERTICAL

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

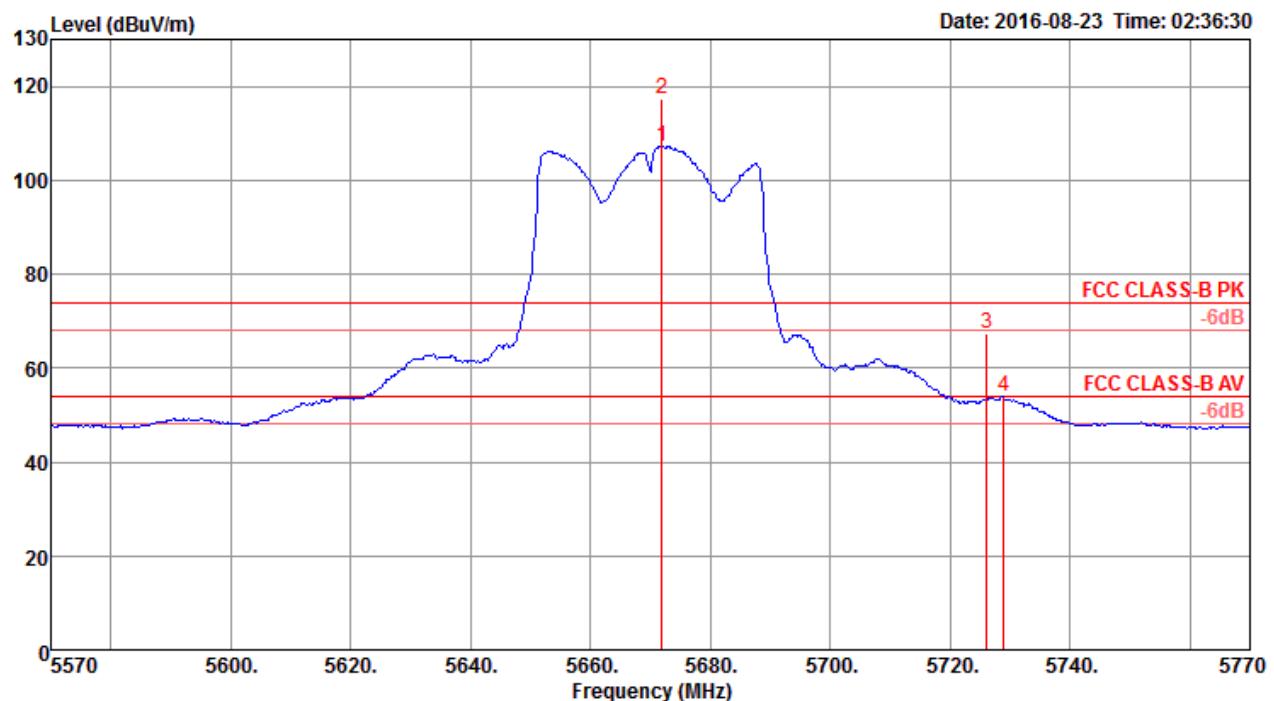
## Channel 110



Freq	Level	Limit	Over	Read	Cable	Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
		Line	Limit	Level	Loss	Factor	Factor	cm	deg		
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg		
1	5453.85	49.48	54.00	-4.52	41.50	6.68	34.23	32.93	261	146 Average	VERTICAL
2	5454.33	61.18	74.00	-12.82	53.20	6.68	34.23	32.93	261	146 Peak	VERTICAL
3	5470.00	51.37	54.00	-2.63	43.36	6.69	34.25	32.93	261	146 Average	VERTICAL
4	5470.00	63.29	74.00	-10.71	55.28	6.69	34.25	32.93	261	146 Peak	VERTICAL
5	5551.44	109.48			101.36	6.73	34.33	32.94	261	146 Average	VERTICAL
6	5551.92	119.14			111.02	6.73	34.33	32.94	261	146 Peak	VERTICAL

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

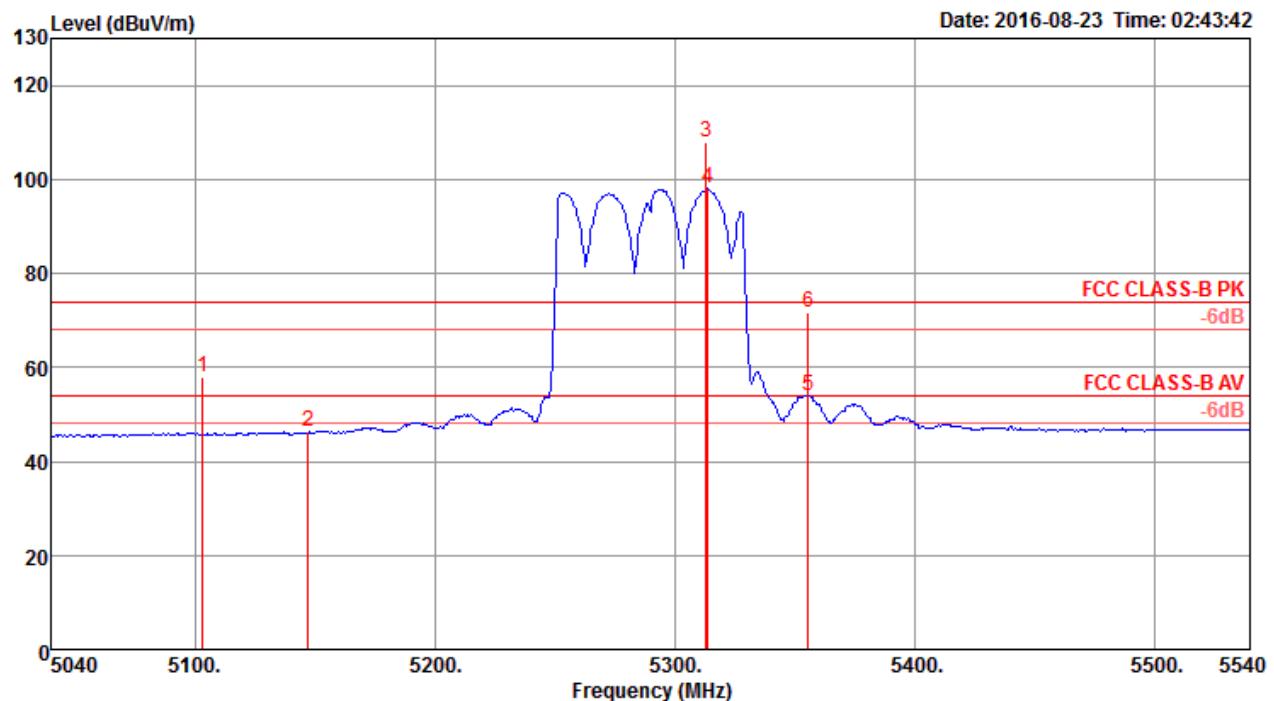
## Channel 134



Freq	Level	Limit Line	Over Limit	Read Level	Cable	Antenna	Preamplifier	A/Pos	T/Pos	Remark	Pol/Phase
					Loss	Factor	Factor	cm	deg		
1	5671.92	107.19			98.95	6.82	34.40	32.98	294	140 Average	VERTICAL
2	5671.92	117.21			108.97	6.82	34.40	32.98	294	140 Peak	VERTICAL
3	5726.09	67.50	74.00	-6.50	59.17	6.88	34.44	32.99	294	140 Peak	VERTICAL
4	5728.97	53.90	54.00	-0.10	45.57	6.88	34.44	32.99	294	140 Average	VERTICAL

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

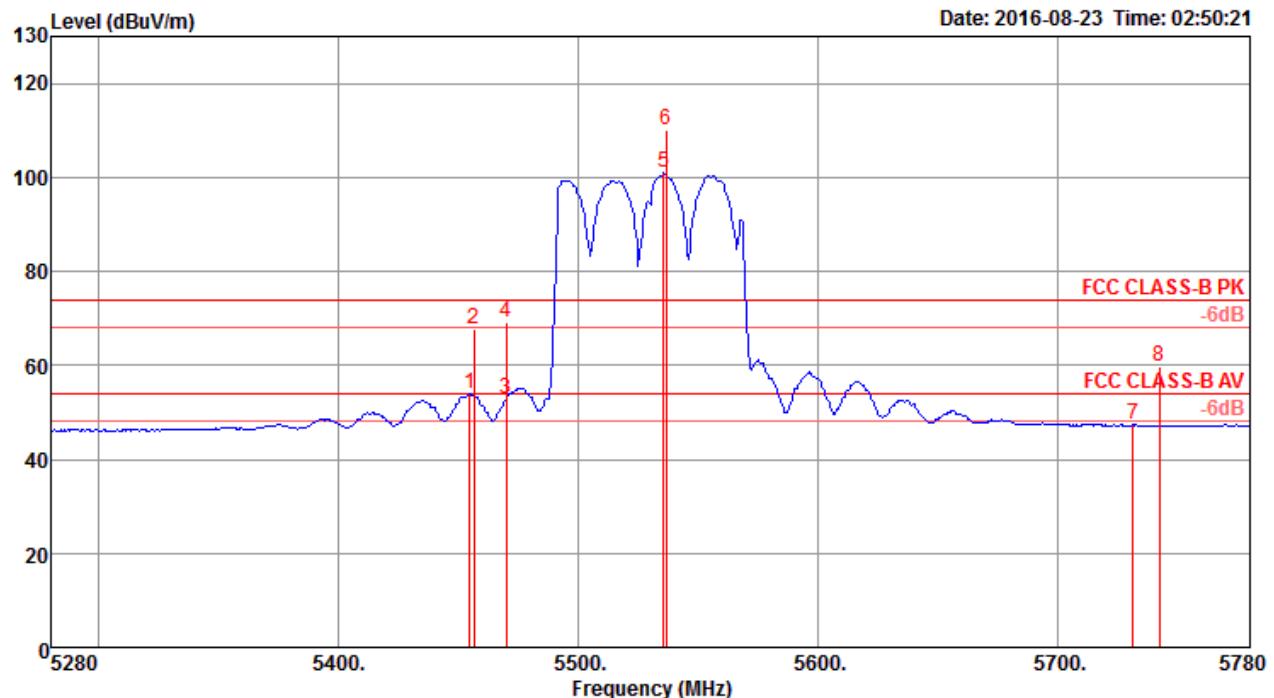
Temperature	23°C	Humidity	55%
Test Engineer	Nyle Chang	Configurations	IEEE 802.11ac MCS0/Nss1 VHT80 CH 58 / Chain 9 + Chain 10

**Channel 58**

Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB			cm	deg		
MHz	dBuV/m	dBuV/m	dB										
1 5103.30	58.11	74.00	-15.89	50.95	6.40	33.67	32.91	295	146	Peak		VERTICAL	
2 5147.37	46.25	54.00	-7.75	38.99	6.44	33.74	32.92	295	146	Average		VERTICAL	
3 5313.24	107.91			100.24	6.58	34.01	32.92	295	146	Peak		VERTICAL	
4 5314.04	98.28			90.61	6.58	34.01	32.92	295	146	Average		VERTICAL	
5 5355.71	53.97	54.00	-0.03	46.19	6.62	34.08	32.92	295	146	Average		VERTICAL	
6 5355.71	71.55	74.00	-2.45	63.77	6.62	34.08	32.92	295	146	Peak		VERTICAL	

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

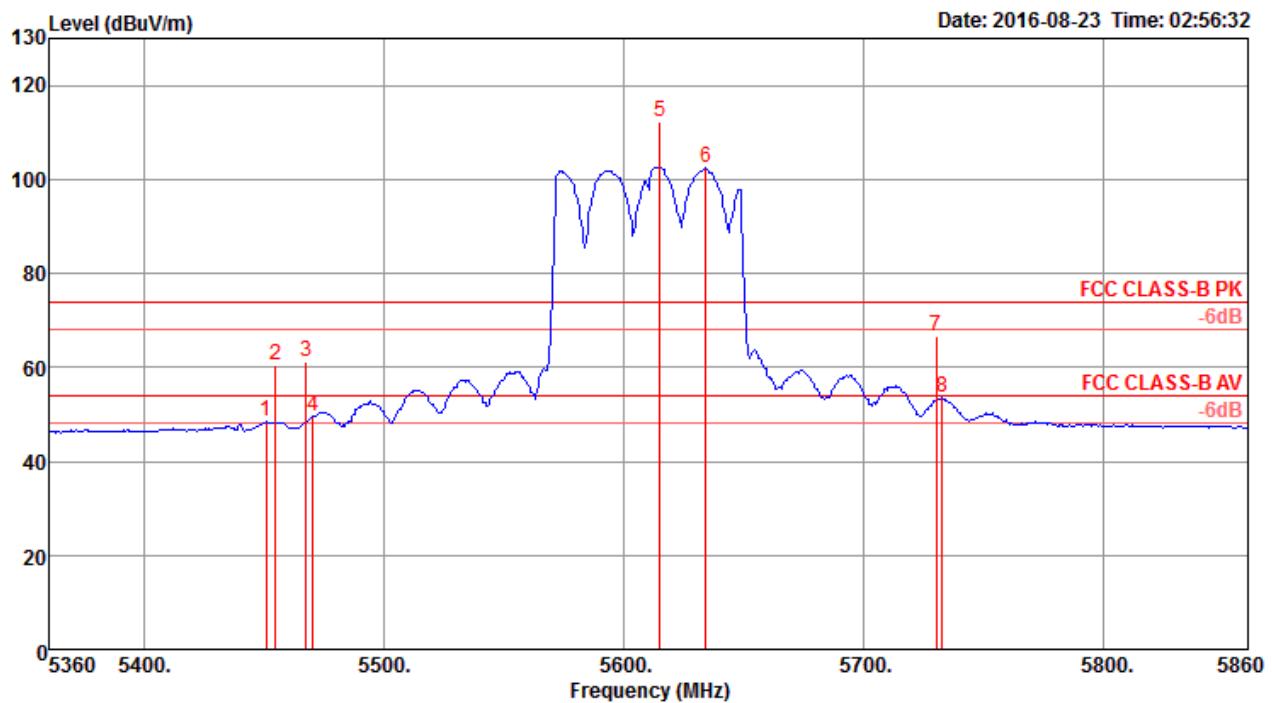
<b>Temperature</b>	23°C	<b>Humidity</b>	55%
<b>Test Engineer</b>	Nyle Chang	<b>Configurations</b>	IEEE 802.11ac MCS0/Nss1 VHT80 CH 106, 122/ Chain 9 + Chain 10

**Channel 106**


Freq	Level	Limit		Over Limit	Read Level	Cable		Antenna Loss Factor	Preamp Factor	A/Pos	T/Pos	Remark	Pol/Phase
		Line	dB			dBuV	dB						
MHz	dBuV/m	dBuV/m	dB							cm	deg		
1	5454.68	53.83	54.00	-0.17	45.85	6.68	34.23	32.93	295	146	Average	VERTICAL	
2	5456.28	67.69	74.00	-6.31	59.71	6.68	34.23	32.93	295	146	Peak	VERTICAL	
3	5470.00	52.93	54.00	-1.07	44.92	6.69	34.25	32.93	295	146	Average	VERTICAL	
4	5470.00	69.07	74.00	-4.93	61.06	6.69	34.25	32.93	295	146	Peak	VERTICAL	
5	5535.61	100.86			92.76	6.72	34.32	32.94	295	146	Average	VERTICAL	
6	5536.41	110.17			102.07	6.72	34.32	32.94	295	146	Peak	VERTICAL	
7	5731.12	47.53	54.00	-6.47	39.20	6.88	34.44	32.99	295	146	Average	VERTICAL	
8	5742.34	59.73	74.00	-14.27	51.37	6.90	34.45	32.99	295	146	Peak	VERTICAL	

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

## Channel 122



Freq	Level	Limit	Over	Read	Cable			Antenna	Preamp	A/Pos	T/Pos	Remark	Pol/Phase
					Line	Limit	Level						
MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	cm	deg				
1	5450.55	48.47	54.00	-5.53	40.49	6.68	34.23	32.93	291	145	Average	VERTICAL	
2	5454.55	60.60	74.00	-13.40	52.62	6.68	34.23	32.93	291	145	Peak	VERTICAL	
3	5467.37	61.24	74.00	-12.76	53.23	6.69	34.25	32.93	291	145	Peak	VERTICAL	
4	5470.00	49.44	54.00	-4.56	41.43	6.69	34.25	32.93	291	145	Average	VERTICAL	
5	5614.81	112.21			104.03	6.77	34.37	32.96	291	145	Peak	VERTICAL	
6	5634.04	102.62			94.43	6.78	34.38	32.97	291	145	Average	VERTICAL	
7	5730.19	66.62	74.00	-7.38	58.29	6.88	34.44	32.99	291	145	Peak	VERTICAL	
8	5732.60	53.55	54.00	-0.45	45.22	6.88	34.44	32.99	291	145	Average	VERTICAL	

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

Note:

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

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

## 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  $\pm 20$  ppm maximum for the 5 GHz band (IEEE 802.11n specification).

### 4.7.2. Measuring Instruments and Setting

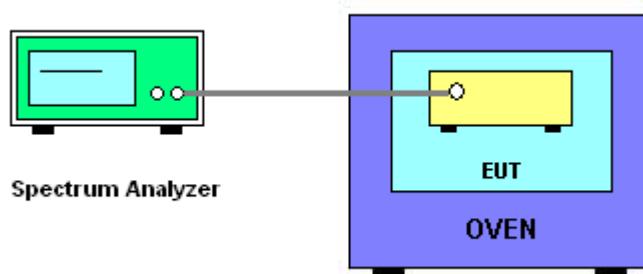
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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  $(fc-f)/fc \times 10^6$  ppm and the limit is less than  $\pm 20$  ppm (IEEE 802.11n specification).
6. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
7. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value
8. Extreme temperature is  $-30^{\circ}\text{C} \sim 50^{\circ}\text{C}$ .

### 4.7.4. Test Setup Layout



#### 4.7.5. Test Deviation

There is no deviation with the original standard.

#### 4.7.6. EUT Operation during Test

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

#### 4.7.7. Test Result of Frequency Stability

<b>Temperature</b>	24°C	<b>Humidity</b>	60%
<b>Test Engineer</b>	Clemens Fang & Serway Li	<b>Test Date</b>	May 03, 2016 ~ Aug. 25, 2016

**Radio 2**

**Mode: 20 MHz / Chain 5**

**Voltage vs. Frequency Stability**

<b>Voltage</b> (V)	<b>Measurement Frequency (MHz)</b>			
	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
<b>Result</b>	Complies			

**Temperature vs. Frequency Stability**

<b>Temperature</b> (°C)	<b>Measurement Frequency (MHz)</b>			
	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
<b>Result</b>	Complies			

**Voltage vs. Frequency Stability**

<b>Voltage</b>	<b>Measurement Frequency (MHz)</b>			
<b>(V)</b>	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
<b>Result</b>	Complies			

**Temperature vs. Frequency Stability**

<b>Temperature</b>	<b>Measurement Frequency (MHz)</b>			
<b>(°C)</b>	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
<b>Result</b>	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)			
( $^{\circ}$ 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**

<b>Voltage</b>	<b>Measurement Frequency (MHz)</b>			
<b>(V)</b>	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
<b>Result</b>	Complies			

**Temperature vs. Frequency Stability**

<b>Temperature</b>	<b>Measurement Frequency (MHz)</b>			
<b>(°C)</b>	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
<b>Result</b>	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**

<b>Voltage</b>	<b>Measurement Frequency (MHz)</b>			
<b>(V)</b>	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
<b>Result</b>	Complies			

**Temperature vs. Frequency Stability**

<b>Temperature</b>	<b>Measurement Frequency (MHz)</b>			
<b>(°C)</b>	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
<b>Result</b>	Complies			

### Radio 3

**Mode: 20 MHz / Chain 9**

#### Voltage vs. Frequency Stability

Voltage	Measurement Frequency (MHz)			
(V)	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5299.9455	5299.9450	5299.9440	5299.9437
110.00	5299.9453	5299.9448	5299.9445	5299.9444
93.50	5299.9446	5299.9439	5299.9431	5299.9424
Max. Deviation (MHz)	0.0554	0.0561	0.0569	0.0576
Max. Deviation (ppm)	10.45	10.58	10.74	10.87
Result	Complies			

#### Temperature vs. Frequency Stability

Temperature	Measurement Frequency (MHz)			
(°C)	5300 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5299.9490	5299.9488	5299.9484	5299.9475
-20	5299.9489	5299.9479	5299.9472	5299.9462
-10	5299.9480	5299.9478	5299.9471	5299.9468
0	5299.9476	5299.9475	5299.9473	5299.9469
10	5299.9460	5299.9456	5299.9446	5299.9441
20	5299.9453	5299.9452	5299.9446	5299.9436
30	5299.9449	5299.9447	5299.9442	5299.9441
40	5299.9431	5299.9428	5299.9419	5299.9412
50	5299.9429	5299.9421	5299.9412	5299.9411
Max. Deviation (MHz)	0.0571	0.0579	0.0588	0.0589
Max. Deviation (ppm)	10.78	10.93	11.10	11.12
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5579.9456	5579.9450	5579.9440	5579.9433
110.00	5579.9453	5579.9448	5579.9443	5579.9442
93.50	5579.9445	5579.9439	5579.9437	5579.9431
Max. Deviation (MHz)	0.0555	0.0561	0.0563	0.0569
Max. Deviation (ppm)	9.95	10.05	10.09	10.20
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5580 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5579.9503	5579.9496	5579.9491	5579.9488
-20	5579.9489	5579.9484	5579.9477	5579.9472
-10	5579.9488	5579.9479	5579.9477	5579.9473
0	5579.9483	5579.9482	5579.9480	5579.9473
10	5579.9473	5579.9464	5579.9454	5579.9451
20	5579.9453	5579.9450	5579.9448	5579.9446
30	5579.9449	5579.9445	5579.9436	5579.9429
40	5579.9432	5579.9426	5579.9418	5579.9413
50	5579.9412	5579.9402	5579.9397	5579.9387
Max. Deviation (MHz)	0.0588	0.0598	0.0603	0.0613
Max. Deviation (ppm)	10.54	10.72	10.81	10.99
Result	Complies			

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

Voltage	Measurement Frequency (MHz)			
(V)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5309.9460	5309.9452	5309.9442	5309.9433
110.00	5309.9453	5309.9452	5309.9443	5309.9436
93.50	5309.9446	5309.9436	5309.9432	5309.9431
Max. Deviation (MHz)	0.0554	0.0564	0.0568	0.0569
Max. Deviation (ppm)	10.43	10.62	10.70	10.72
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
( $^{\circ}$ C)	5310 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5309.9491	5309.9488	5309.9483	5309.9481
-20	5309.9484	5309.9477	5309.9475	5309.9466
-10	5309.9483	5309.9475	5309.9469	5309.9467
0	5309.9464	5309.9460	5309.9452	5309.9451
10	5309.9463	5309.9462	5309.9456	5309.9455
20	5309.9453	5309.9444	5309.9442	5309.9438
30	5309.9449	5309.9439	5309.9433	5309.9431
40	5309.9444	5309.9439	5309.9430	5309.9429
50	5309.9442	5309.9434	5309.9433	5309.9425
Max. Deviation (MHz)	0.0558	0.0566	0.0570	0.0575
Max. Deviation (ppm)	10.52	10.67	10.74	10.84
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5549.9456	5549.9451	5549.9448	5549.9446
110.00	5549.9453	5549.9450	5549.9448	5549.9445
93.50	5549.9447	5549.9446	5549.9436	5549.9431
Max. Deviation (MHz)	0.0553	0.0554	0.0564	0.0569
Max. Deviation (ppm)	9.96	9.98	10.16	10.25
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5550 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5549.9502	5549.9493	5549.9485	5549.9478
-20	5549.9482	5549.9480	5549.9475	5549.9471
-10	5549.9481	5549.9474	5549.9470	5549.9462
0	5549.9466	5549.9464	5549.9455	5549.9445
10	5549.9462	5549.9460	5549.9451	5549.9450
20	5549.9453	5549.9446	5549.9437	5549.9435
30	5549.9449	5549.9442	5549.9433	5549.9424
40	5549.9433	5549.9426	5549.9423	5549.9416
50	5549.9425	5549.9422	5549.9413	5549.9411
Max. Deviation (MHz)	0.0575	0.0578	0.0587	0.0589
Max. Deviation (ppm)	10.37	10.42	10.58	10.62
Result	Complies			

**Mode: 80 MHz / Chain 9****Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5289.9454	5289.9449	5289.9444	5289.9440
110.00	5289.9453	5289.9448	5289.9447	5289.9439
93.50	5289.9445	5289.9438	5289.9435	5289.9430
Max. Deviation (MHz)	0.0555	0.0562	0.0565	0.0570
Max. Deviation (ppm)	10.49	10.62	10.68	10.78
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
( $^{\circ}$ C)	5290 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5289.9504	5289.9499	5289.9494	5289.9485
-20	5289.9496	5289.9489	5289.9485	5289.9483
-10	5289.9492	5289.9488	5289.9478	5289.9471
0	5289.9477	5289.9475	5289.9468	5289.9460
10	5289.9471	5289.9468	5289.9466	5289.9465
20	5289.9453	5289.9444	5289.9437	5289.9436
30	5289.9449	5289.9439	5289.9435	5289.9429
40	5289.9438	5289.9432	5289.9423	5289.9417
50	5289.9430	5289.9427	5289.9420	5289.9411
Max. Deviation (MHz)	0.0570	0.0573	0.0580	0.0589
Max. Deviation (ppm)	10.78	10.84	10.97	11.14
Result	Complies			

**Voltage vs. Frequency Stability**

Voltage	Measurement Frequency (MHz)			
(V)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
126.50	5529.9457	5529.9453	5529.9449	5529.9443
110.00	5529.9453	5529.9443	5529.9435	5529.9431
93.50	5529.9447	5529.9438	5529.9430	5529.9428
Max. Deviation (MHz)	0.0553	0.0562	0.0570	0.0572
Max. Deviation (ppm)	10.00	10.16	10.31	10.34
Result	Complies			

**Temperature vs. Frequency Stability**

Temperature	Measurement Frequency (MHz)			
(°C)	5530 MHz			
	0 Minute	2 Minute	5 Minute	10 Minute
-30	5529.9505	5529.9501	5529.9491	5529.9481
-20	5529.9498	5529.9488	5529.9487	5529.9482
-10	5529.9480	5529.9477	5529.9470	5529.9469
0	5529.9478	5529.9468	5529.9460	5529.9451
10	5529.9458	5529.9455	5529.9448	5529.9447
20	5529.9453	5529.9449	5529.9448	5529.9446
30	5529.9449	5529.9443	5529.9439	5529.9430
40	5529.9446	5529.9437	5529.9429	5529.9426
50	5529.9442	5529.9436	5529.9429	5529.9424
Max. Deviation (MHz)	0.0558	0.0564	0.0571	0.0576
Max. Deviation (ppm)	10.10	10.21	10.33	10.42
Result	Complies			

## 4.8. Antenna Requirements

### 4.8.1. Limit

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

### 4.8.2. Antenna Connector Construction

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

## 5. LIST OF MEASURING EQUIPMENTS

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Remark
Horn Antenna	EMCO	3115	00075790	750MHz ~ 18GHz	Oct. 22, 2015	Radiation (03CH01-CB)
Horn Antenna	Schwarzbeck	BBHA 9170	BBHA9170252	15GHz ~ 40GHz	Jul. 21, 2015	Radiation (03CH01-CB)
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	$9.74 \times 10^{-8}$	Confidence levels of 95%
Frequency Stability	$6.06 \times 10^{-8}$	Confidence levels of 95%