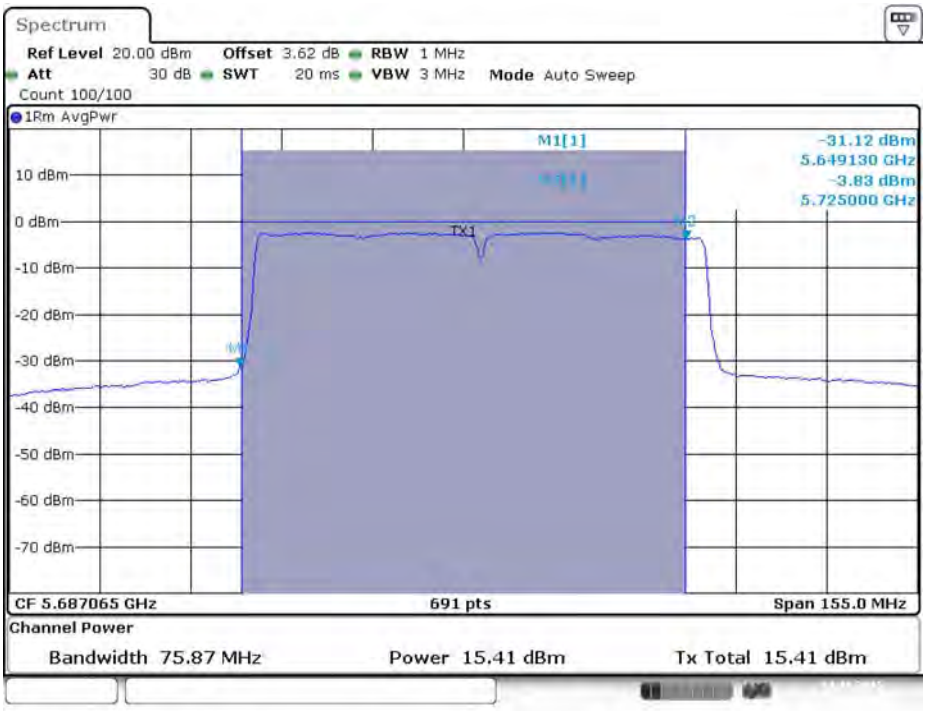
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 3)

Date: 14.OCT.2015 20:34:12

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 2 / 5710 MHz (UNII 3)

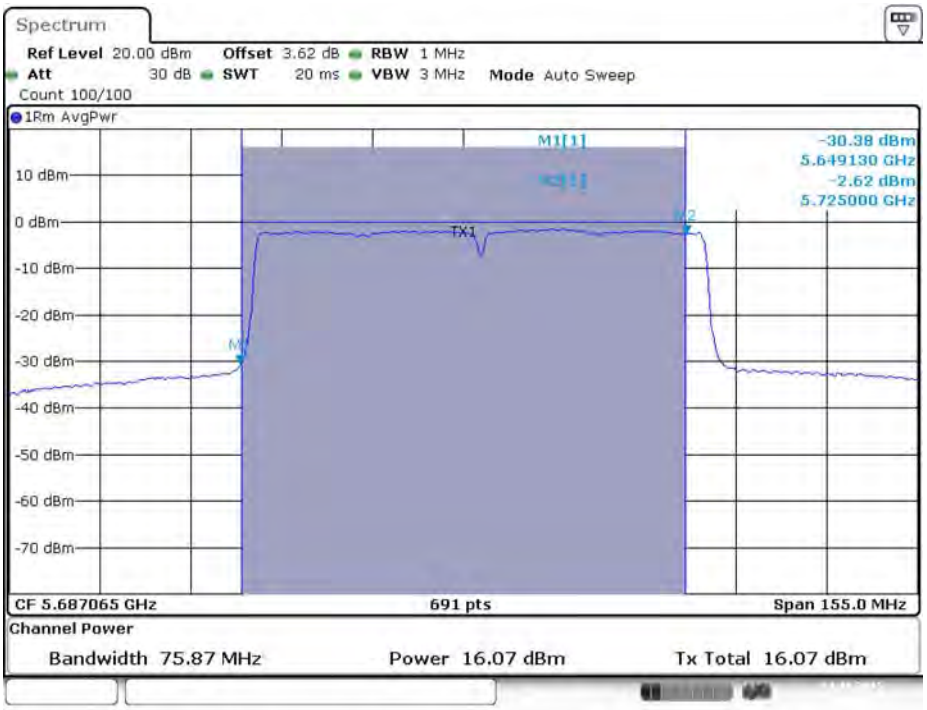
Date: 14.OCT.2015 20:34:20

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 2C)



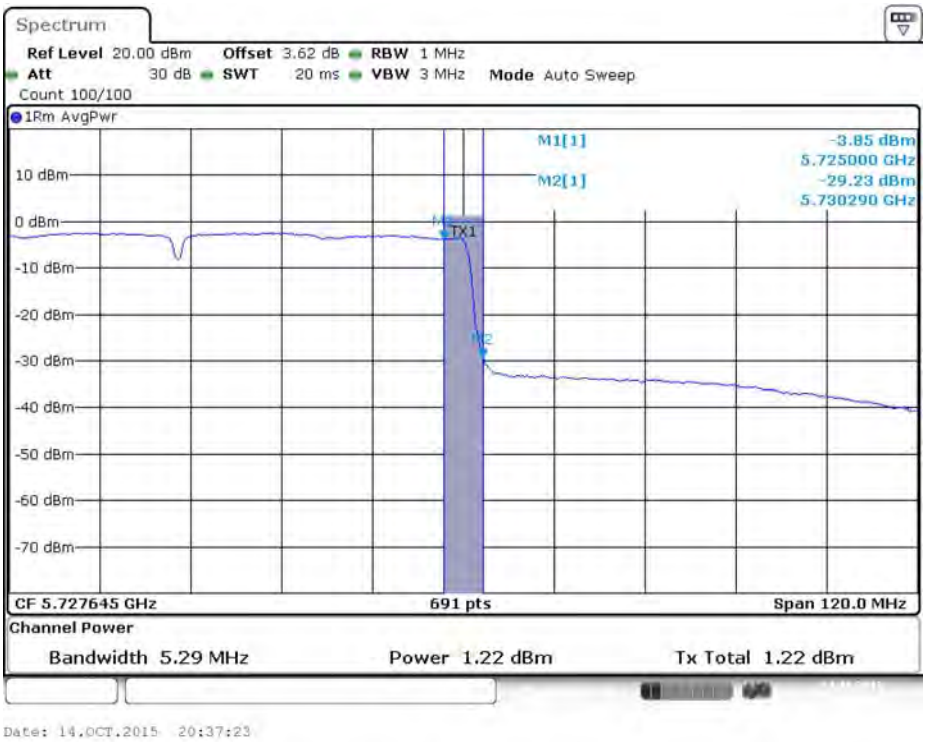
Date: 14.OCT.2015 20:37:19

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

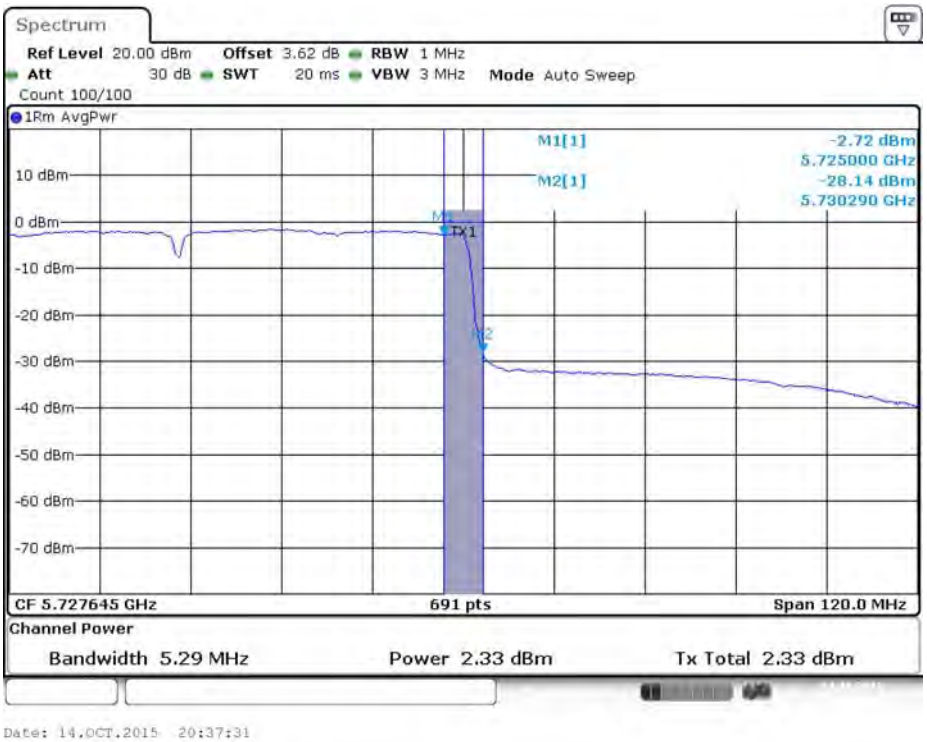


Date: 14.OCT.2015 20:37:27

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 3)

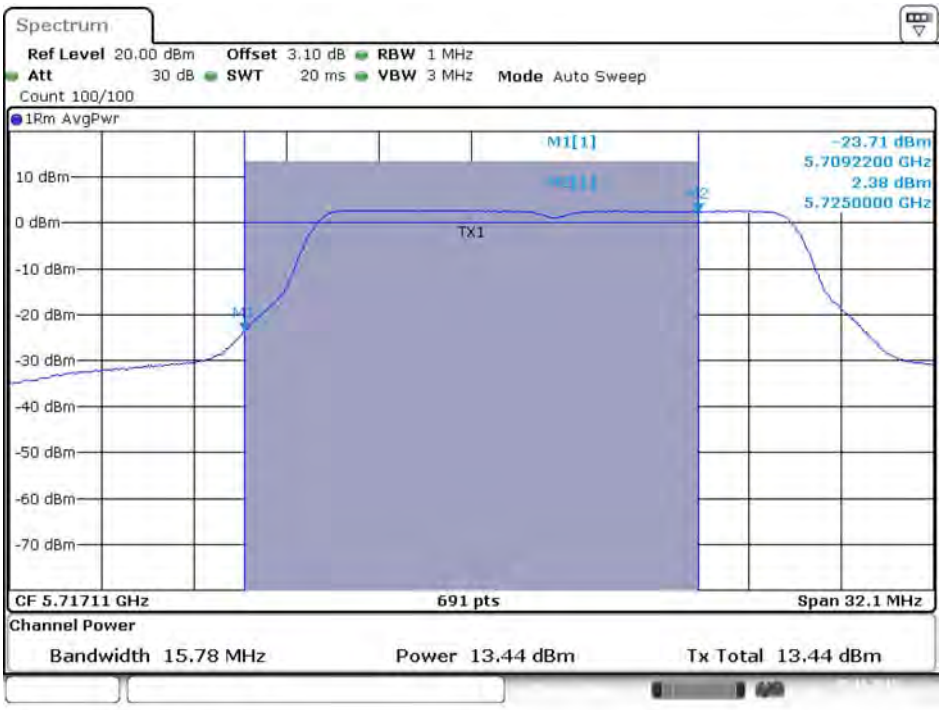


Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 2 / 5690 MHz (UNII 3)



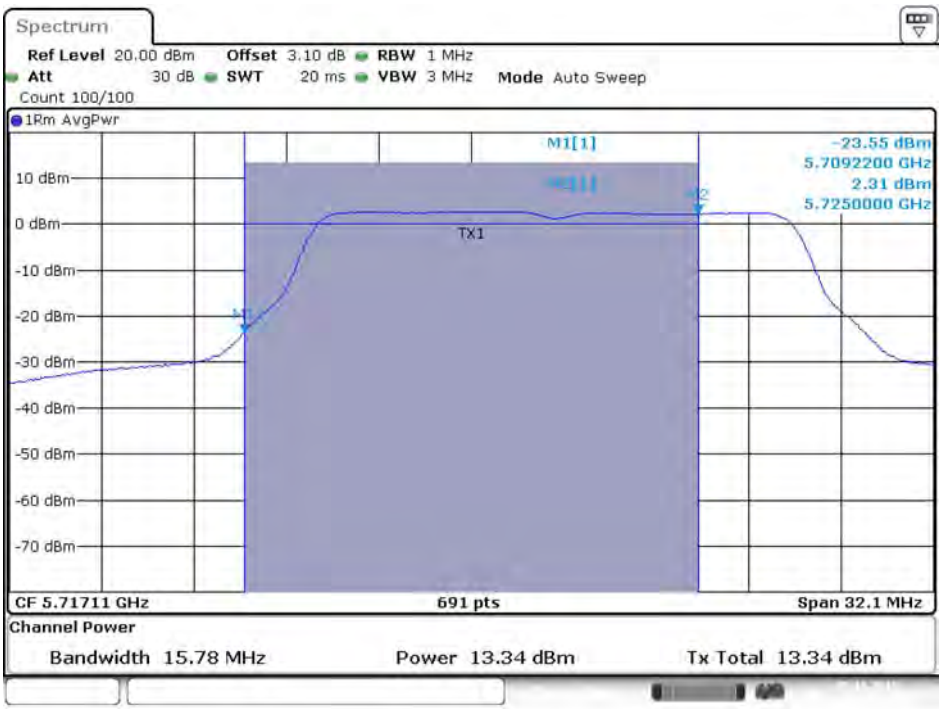
Chain 1: 5.9dBi, Chain 2: 5.4dBi, Chain 3: 5.9dBi / 3TX

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 1 / 5720 MHz (UNII 2C)



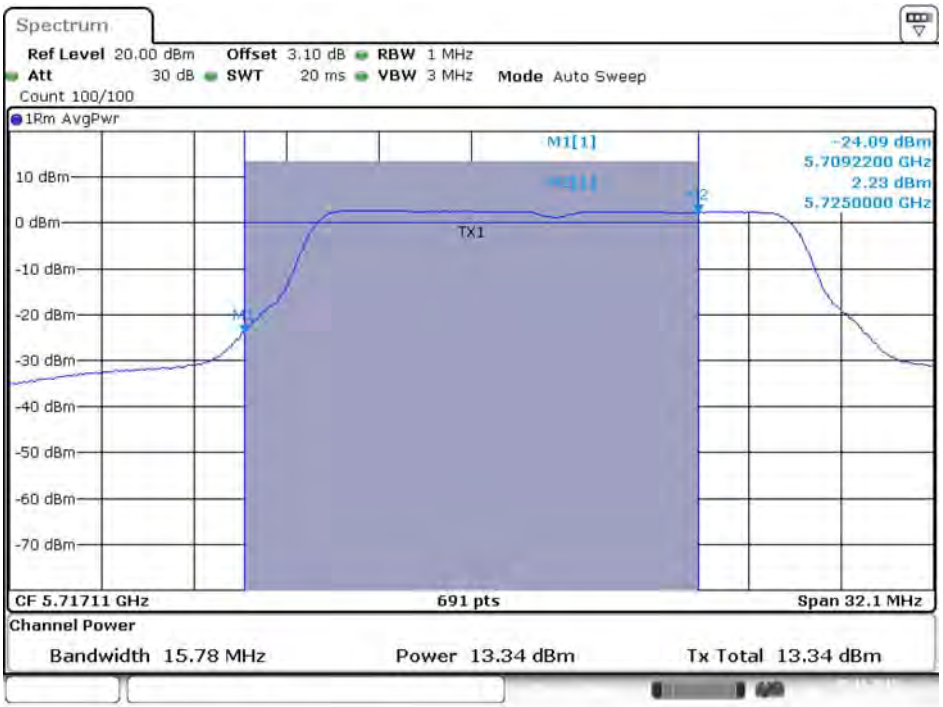
Date: 5.NOV.2015 20:51:48

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 2 / 5720 MHz (UNII 2C)



Date: 5.NOV.2015 20:51:55

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 3 / 5720 MHz (UNII 2C)

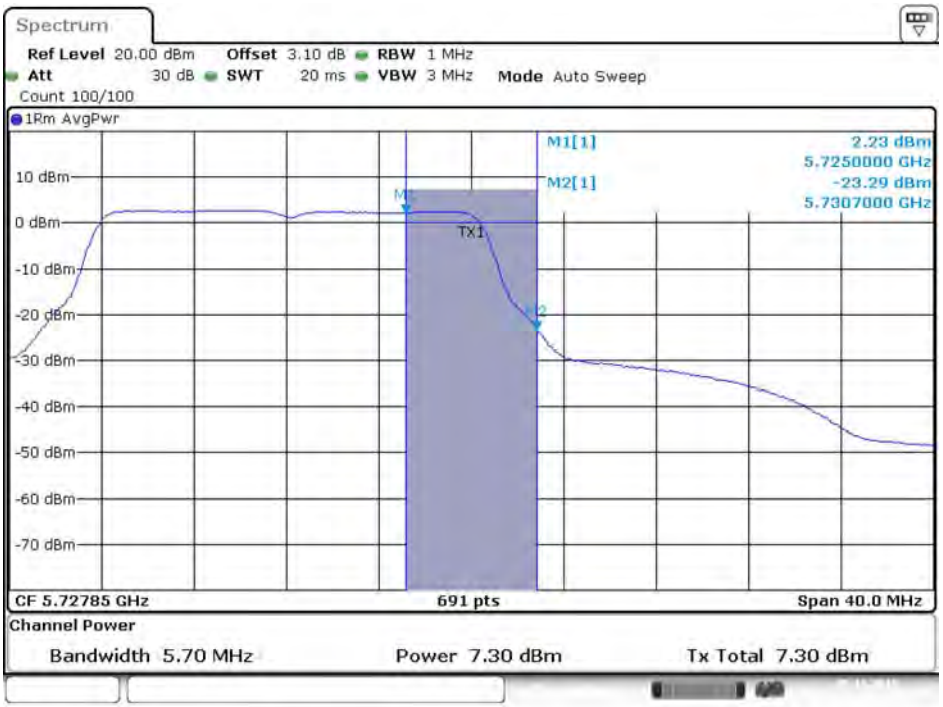


Date: 5.NOV.2015 20:52:02

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 1 / 5720 MHz (UNII 3)

Date: 5.NOV.2015 20:51:51

Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 2 / 5720 MHz (UNII 3)

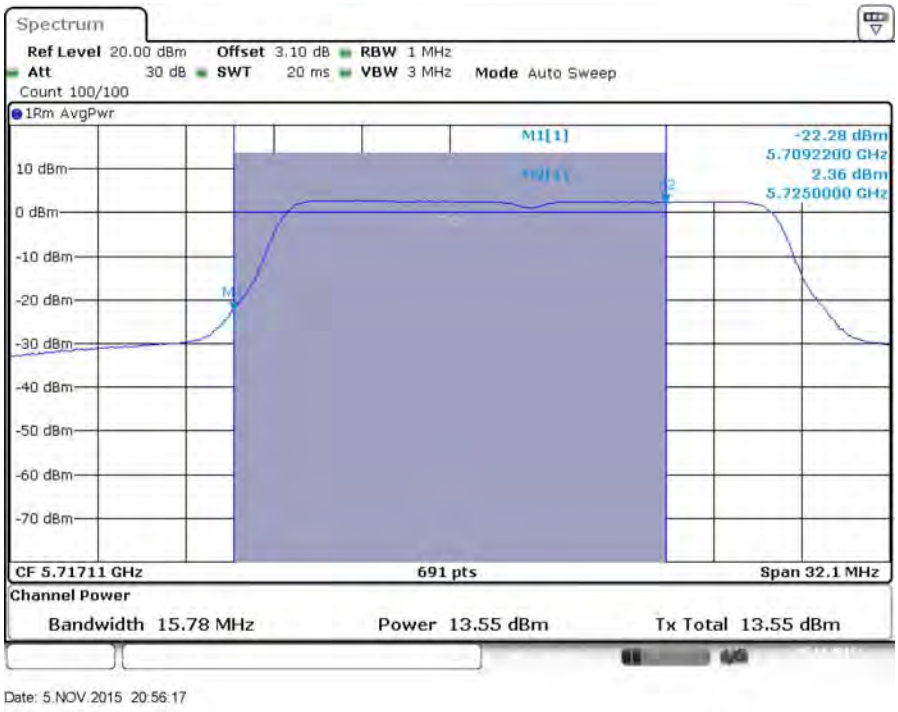


Date: 5.NOV.2015 20:51:58

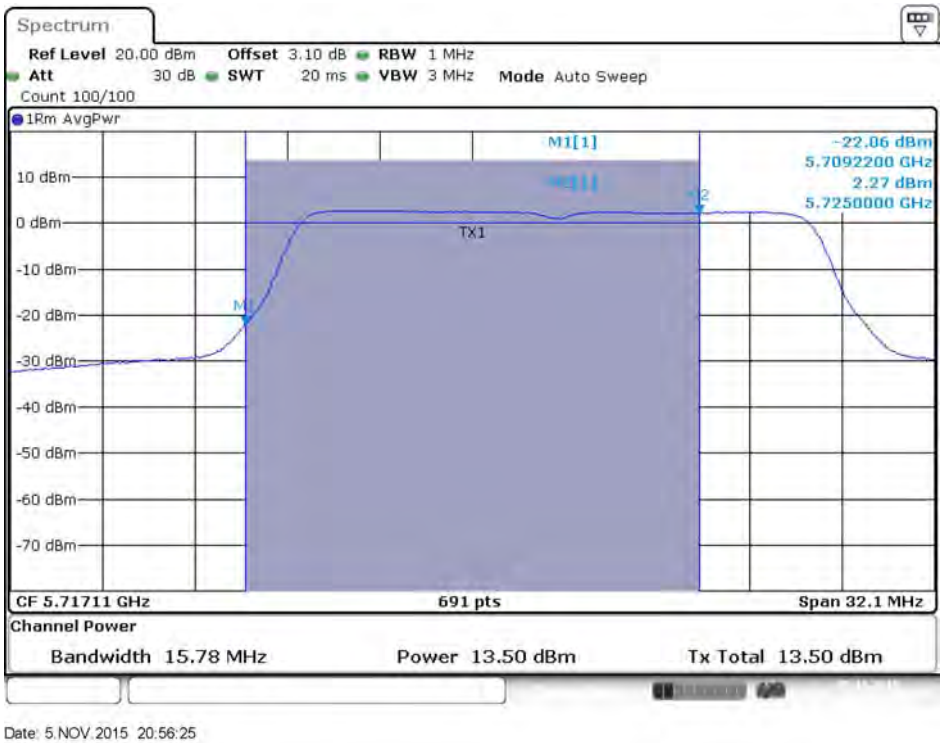
Conducted Output Power Plot on Configuration IEEE 802.11a / Chain 3 / 5720 MHz (UNII 3)

Date: 5.NOV.2015 20:52:05

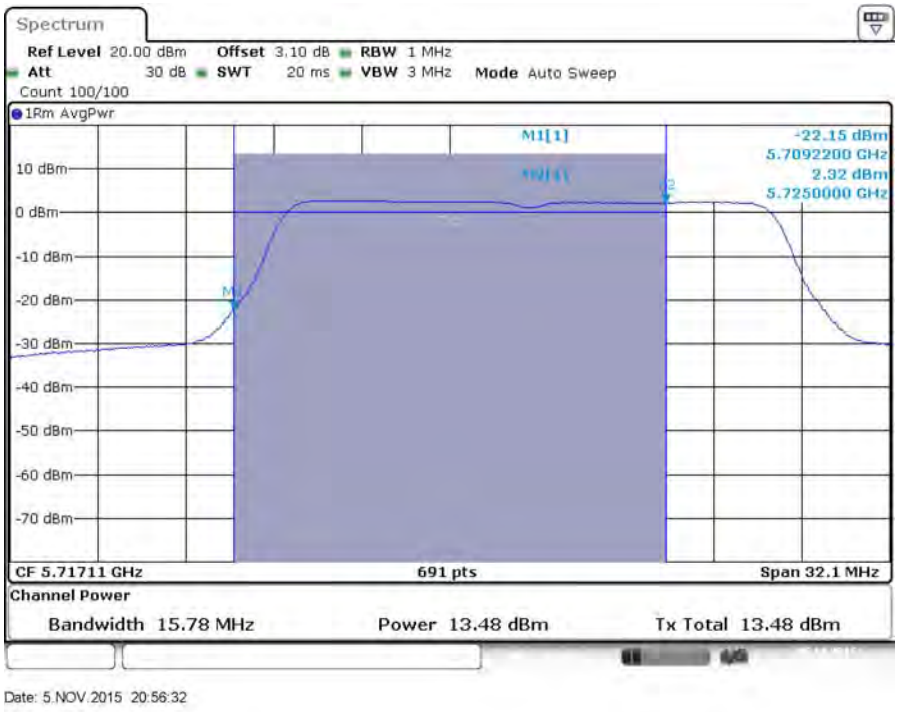
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 2C)



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

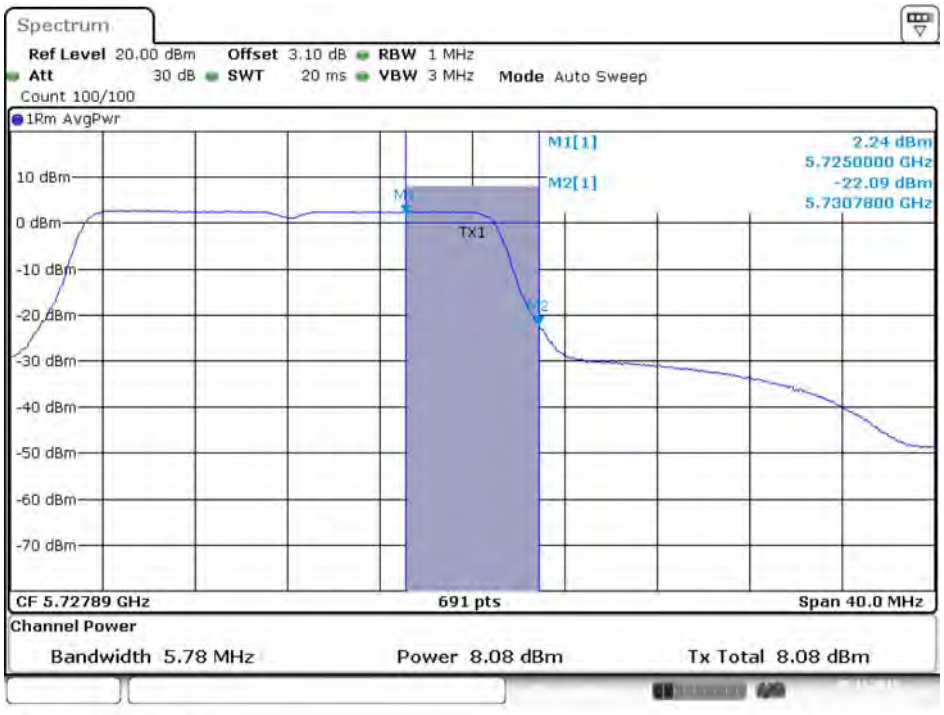


Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 3 / 5720 MHz (UNII 2C)



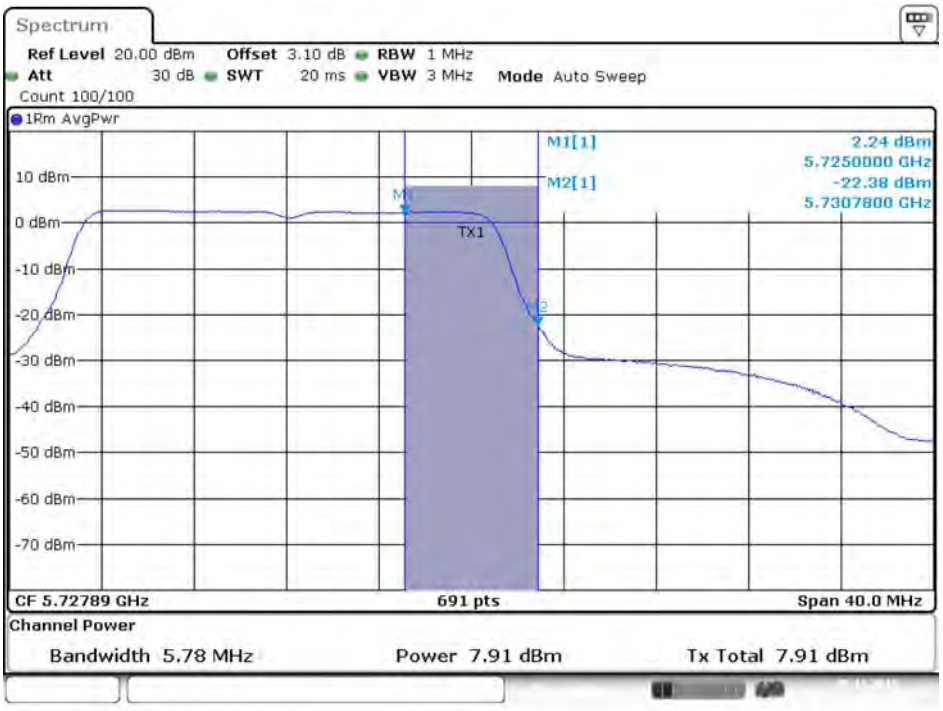
Date: 5.NOV.2015 20:56:32

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 3)



Date: 5.NOV.2015 20:56:21

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 2 / 5720 MHz (UNII 3)

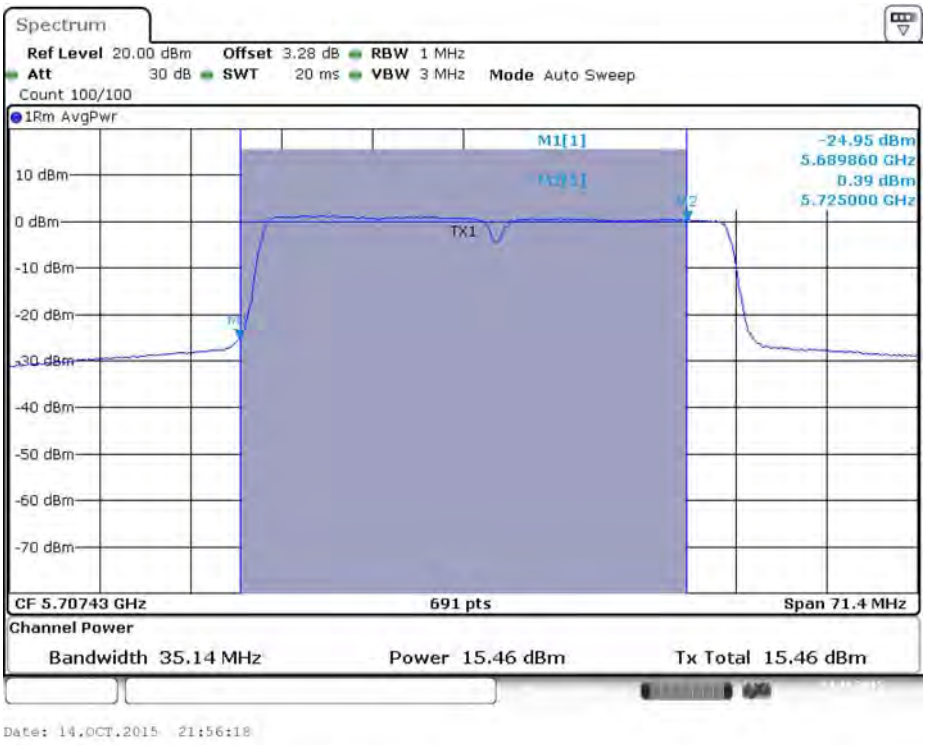


Date: 5.NOV.2015 20:56:28

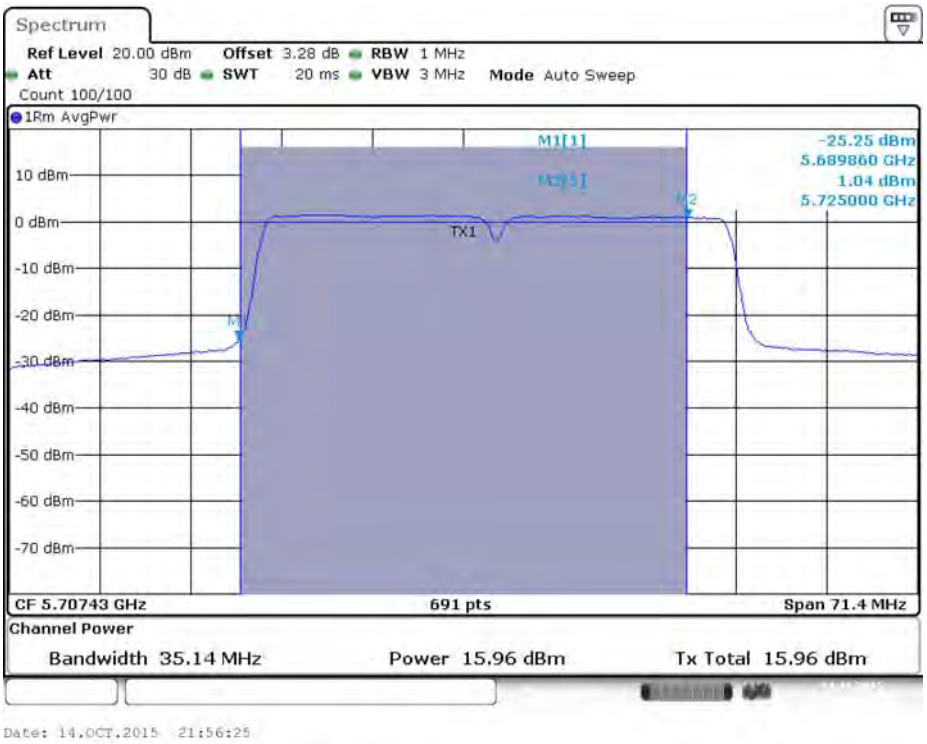
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 3 / 5720 MHz (UNII 3)

Date: 5.NOV.2015 20:56:35

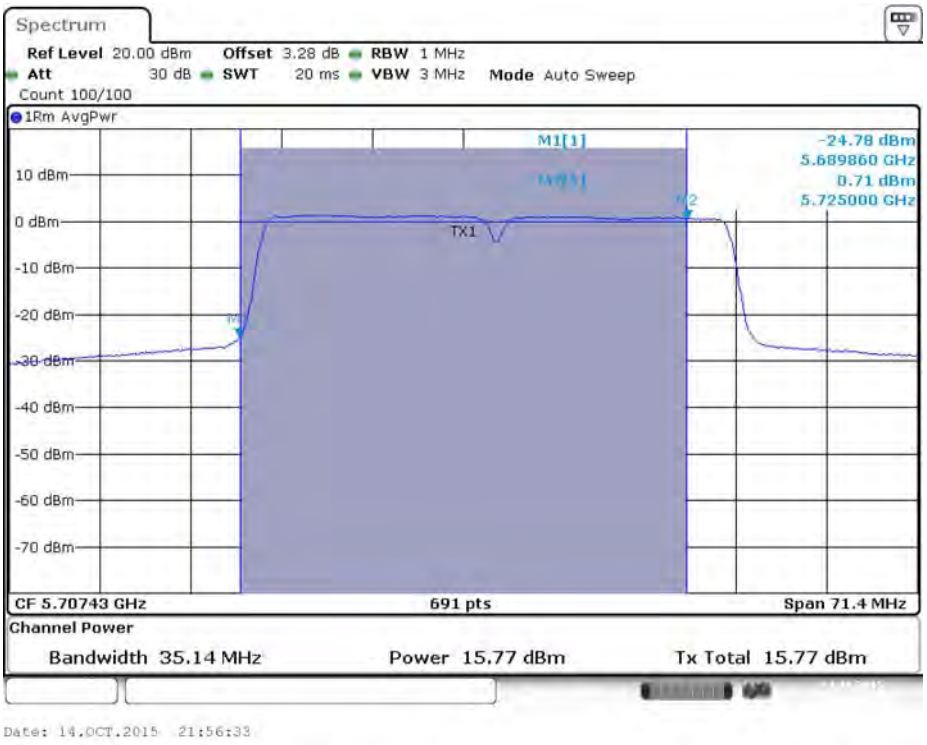
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 2C)



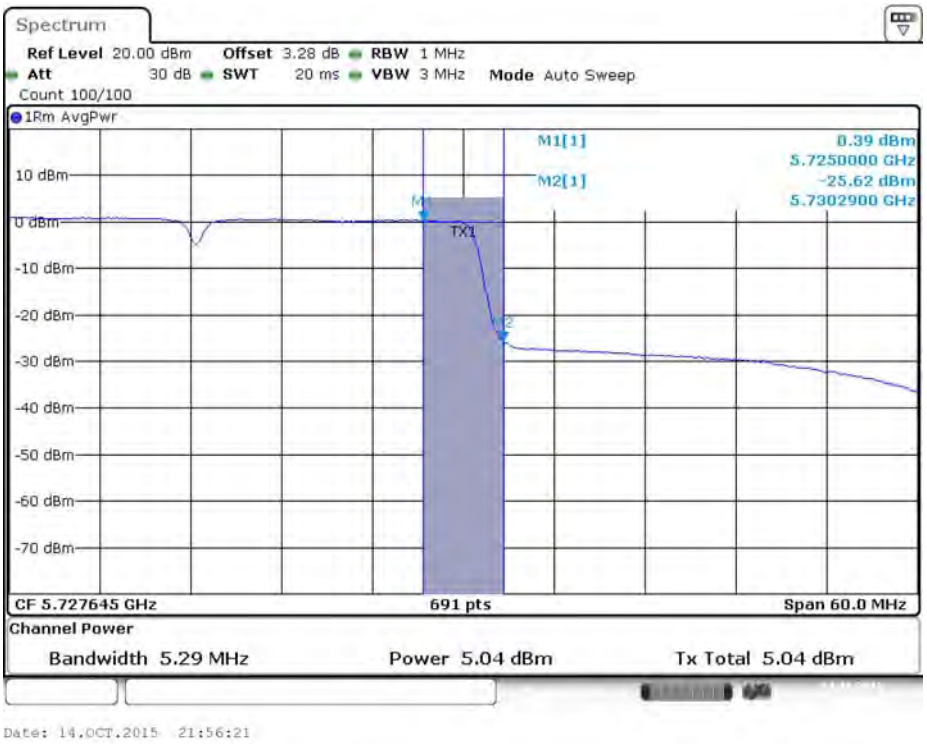
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 2 / 5710 MHz (UNII 2C)



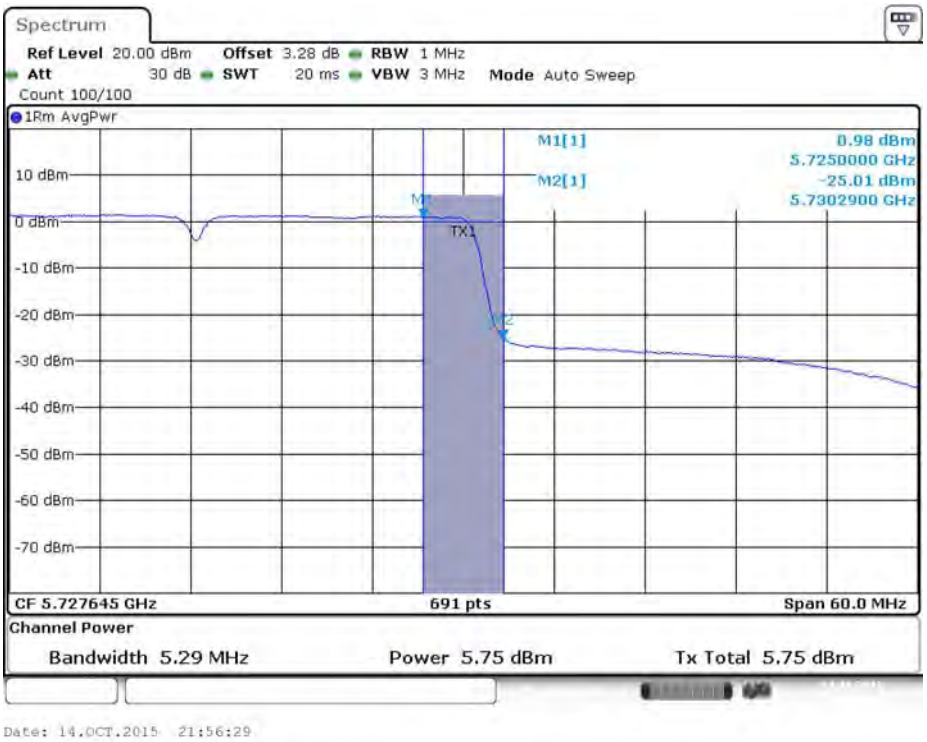
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 3 / 5710 MHz (UNII 2C)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 3)

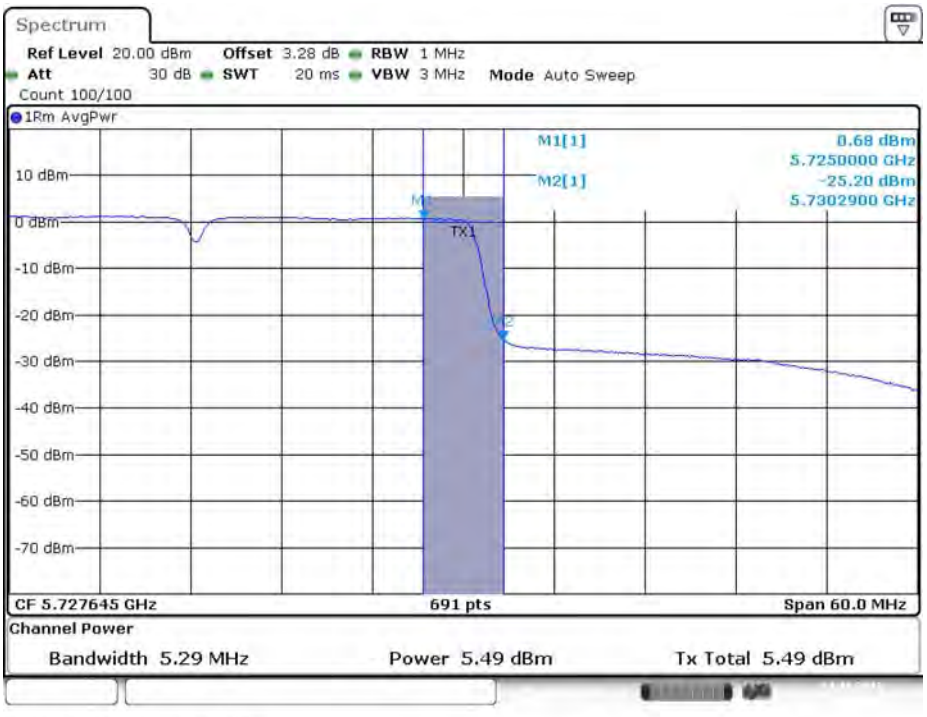


Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 2 / 5710 MHz (UNII 3)



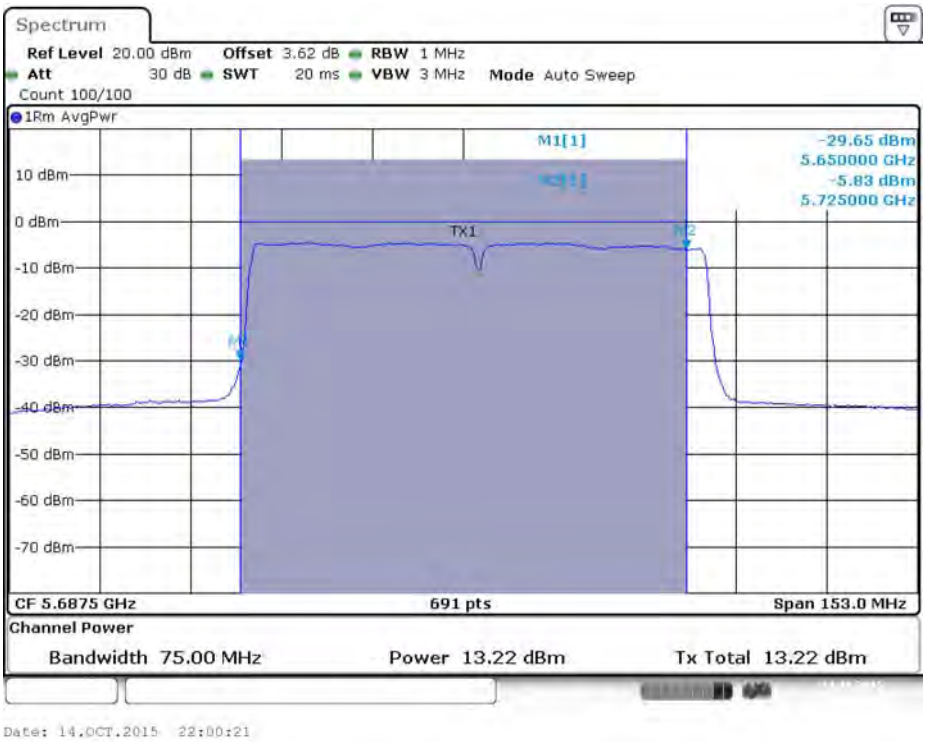
Date: 14.OCT.2015 21:56:29

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

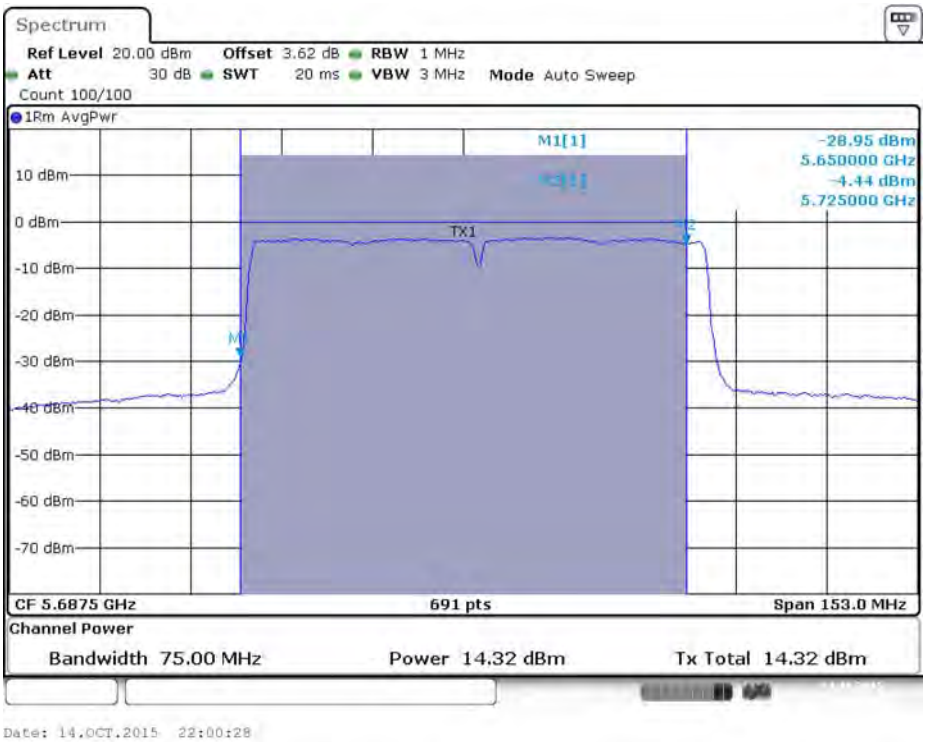


Date: 14.OCT.2015 21:56:36

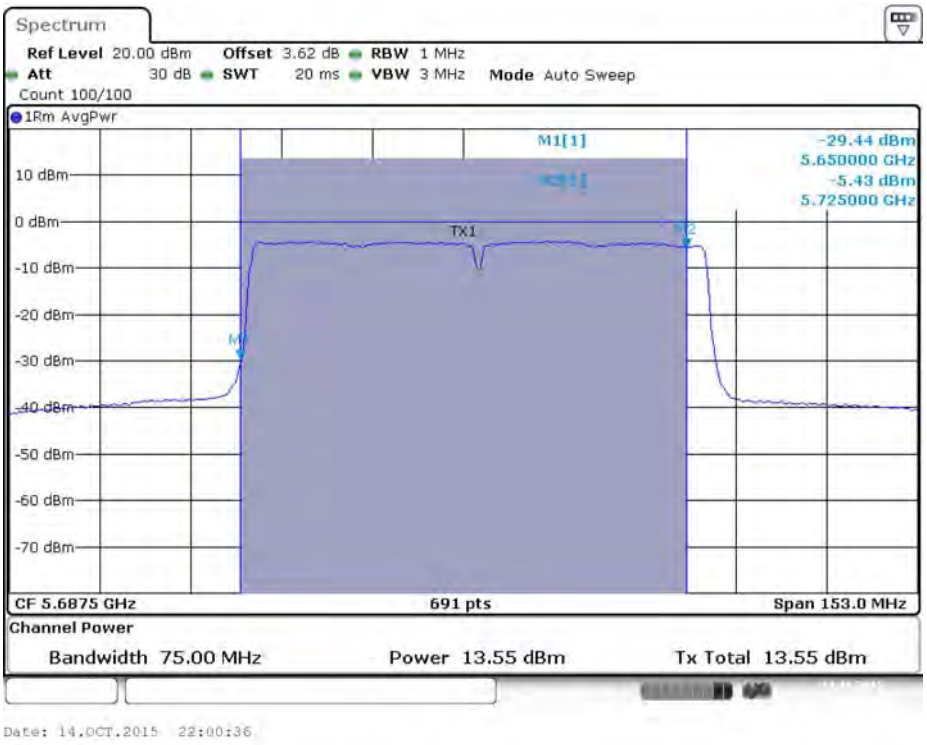
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 2C)



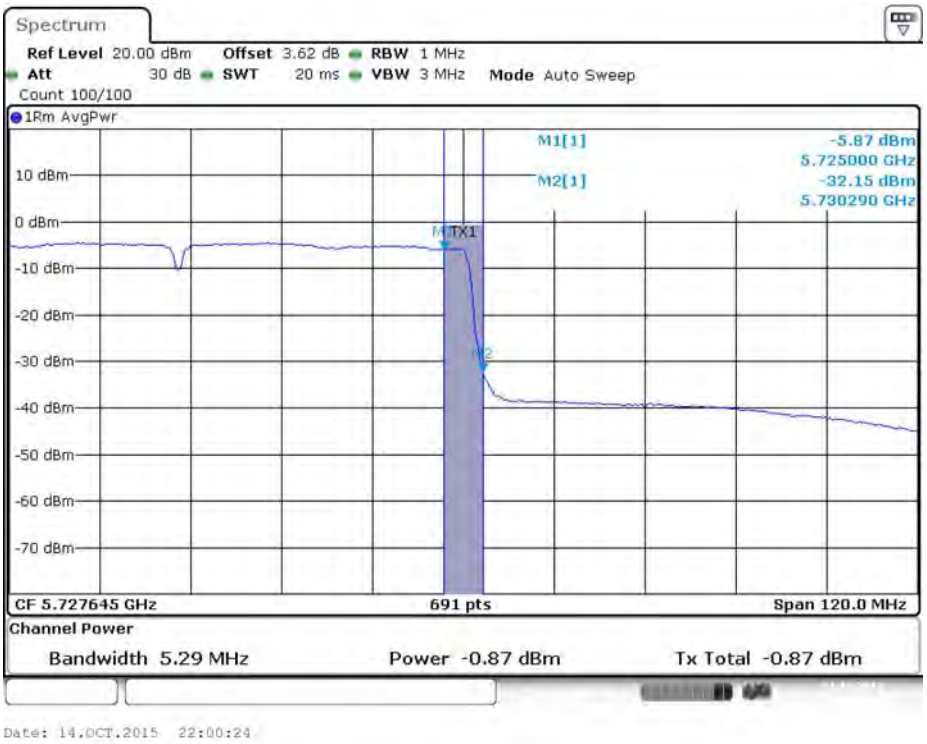
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 2 / 5690 MHz (UNII 2C)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 3 / 5690 MHz (UNII 2C)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 3)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 2 / 5690 MHz (UNII 3)

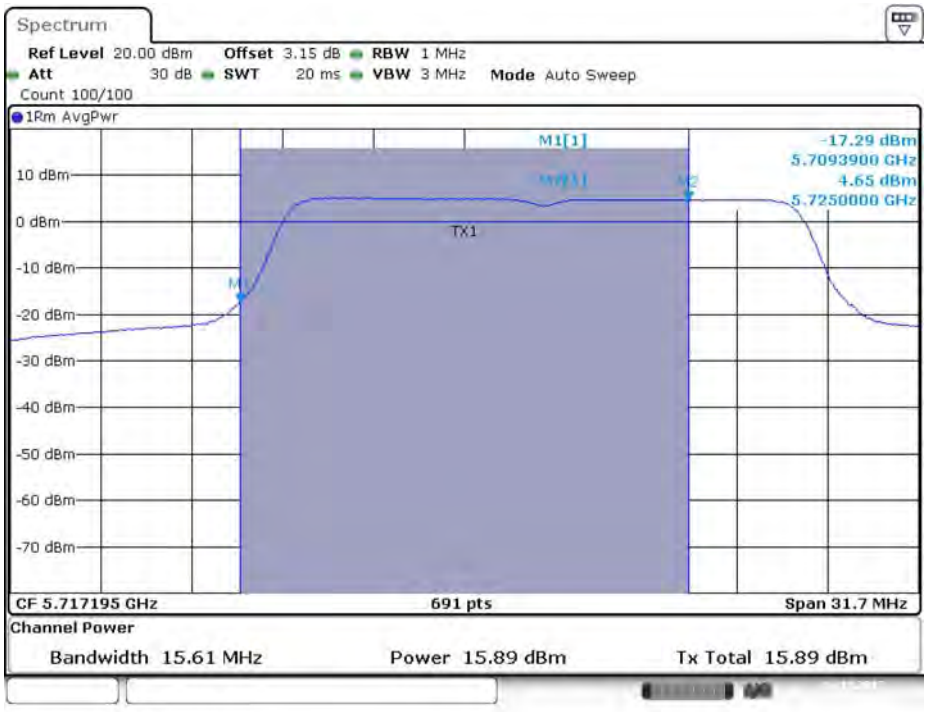
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 3 / 5690 MHz (UNII 3)

For Beamforming Mode / Straddle Channel

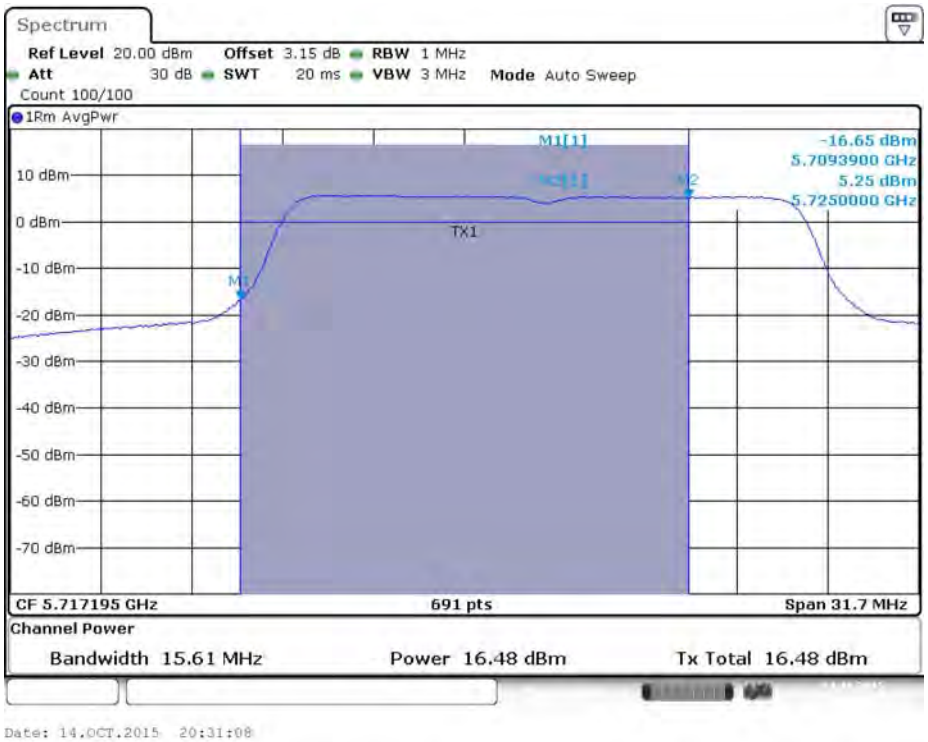
For B1 indoor / B2-B4 indoor, outdoor use

Chain 1: 5.9dBi, Chain 2: 5.4dBi / 2TX

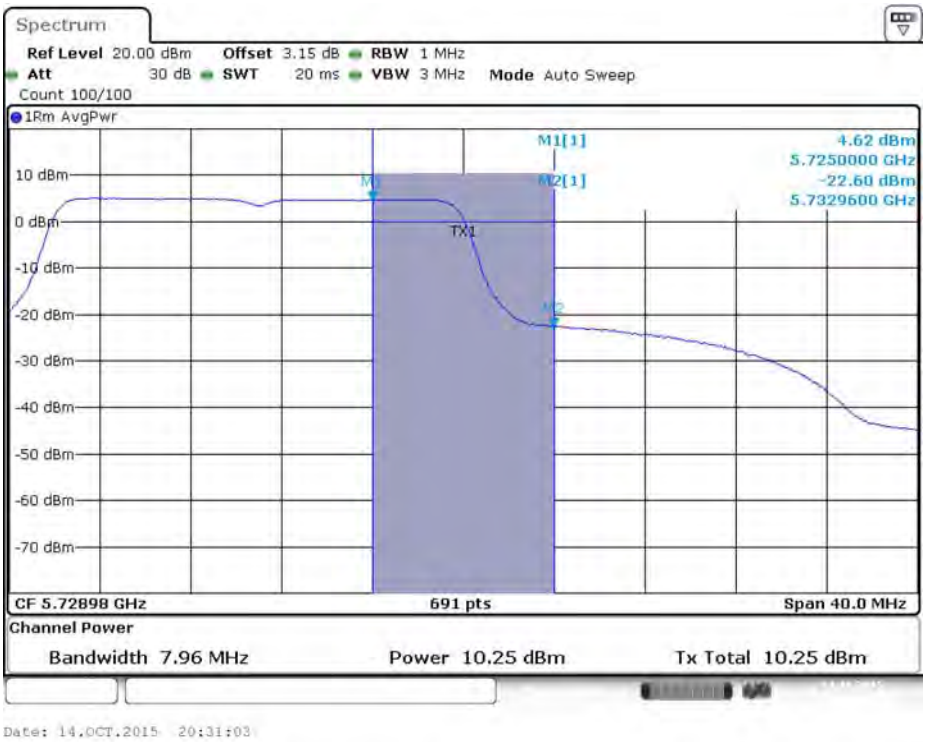
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 2C)



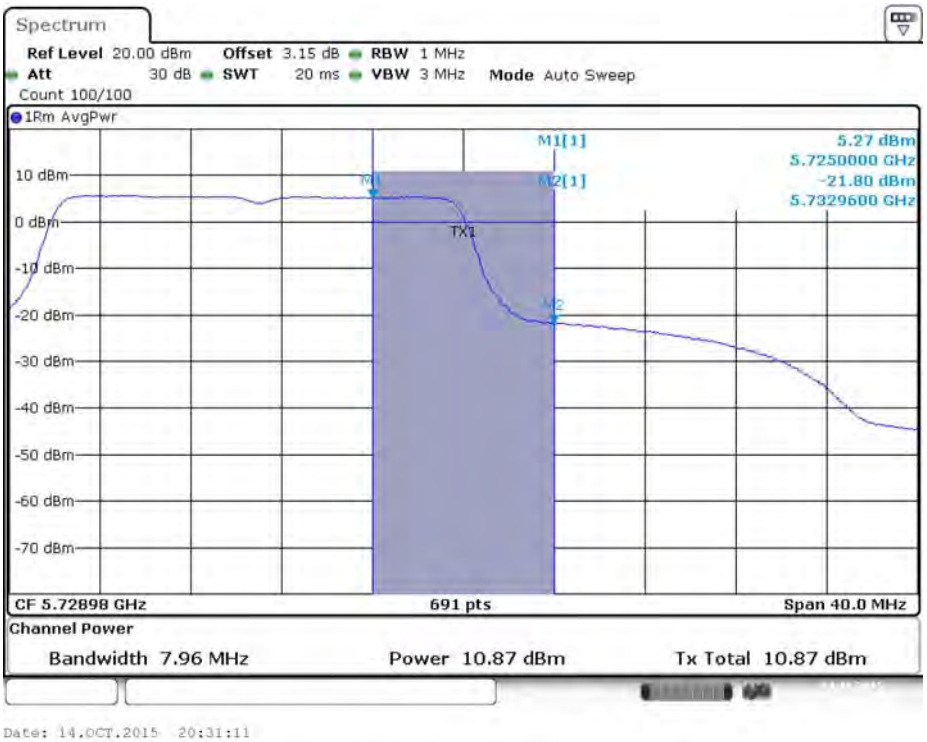
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 2 / 5720 MHz (UNII 2C)



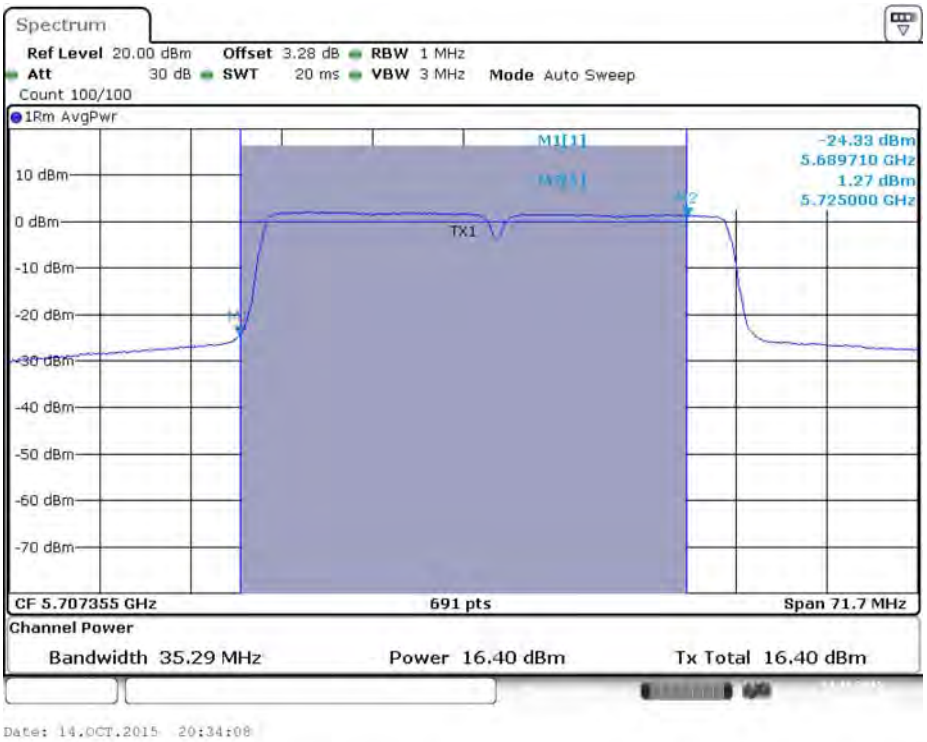
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 3)



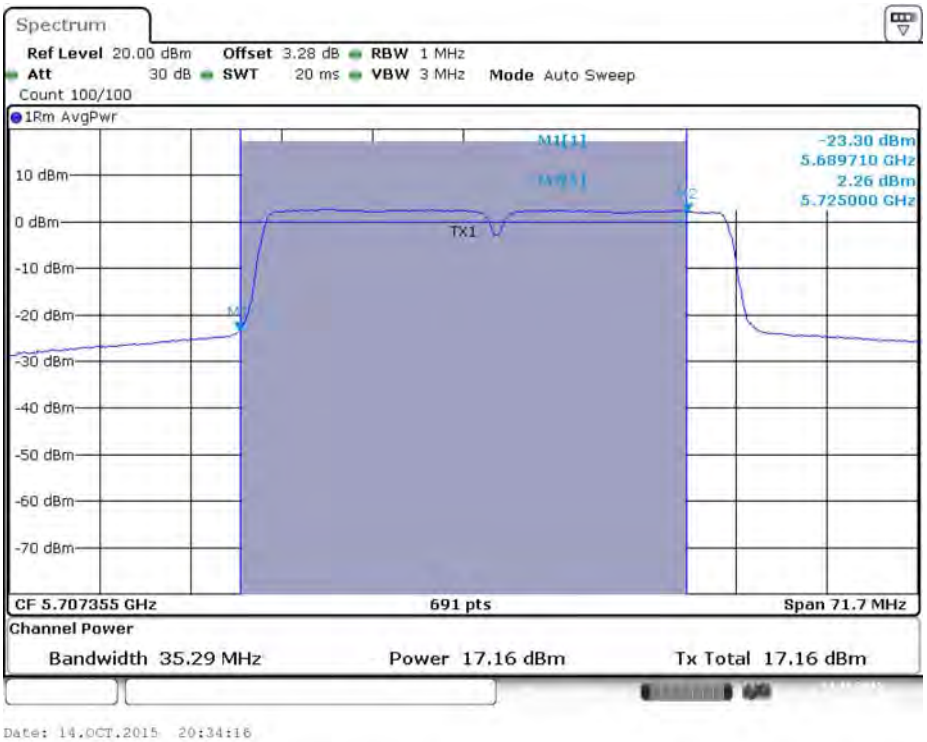
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 2 / 5720 MHz (UNII 3)



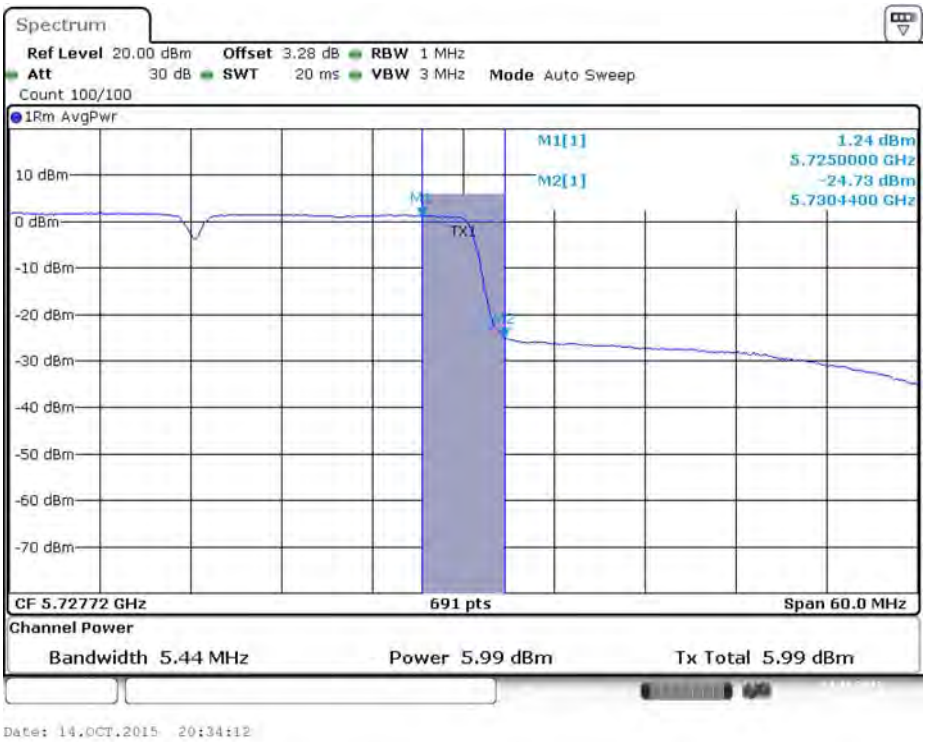
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 2C)



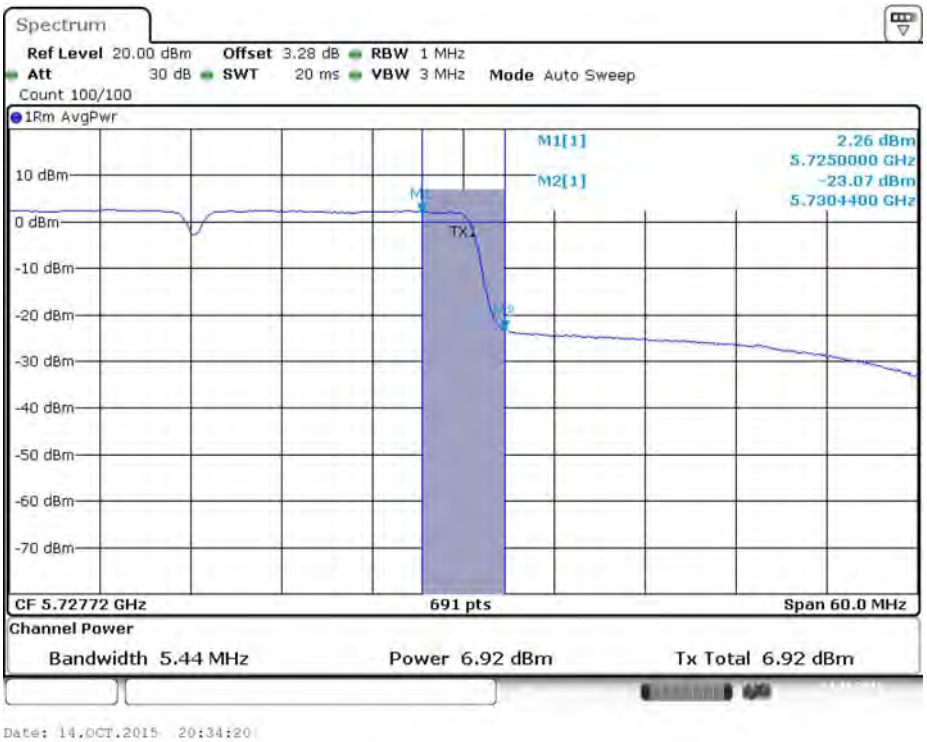
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 2 / 5710 MHz (UNII 2C)



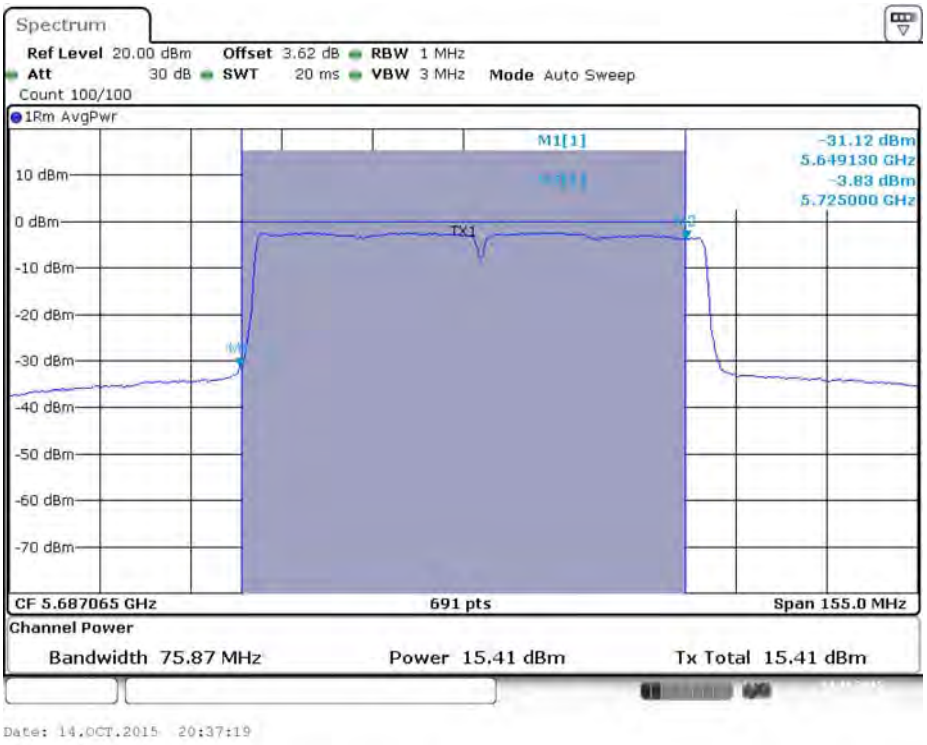
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 3)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 2 / 5710 MHz (UNII 3)

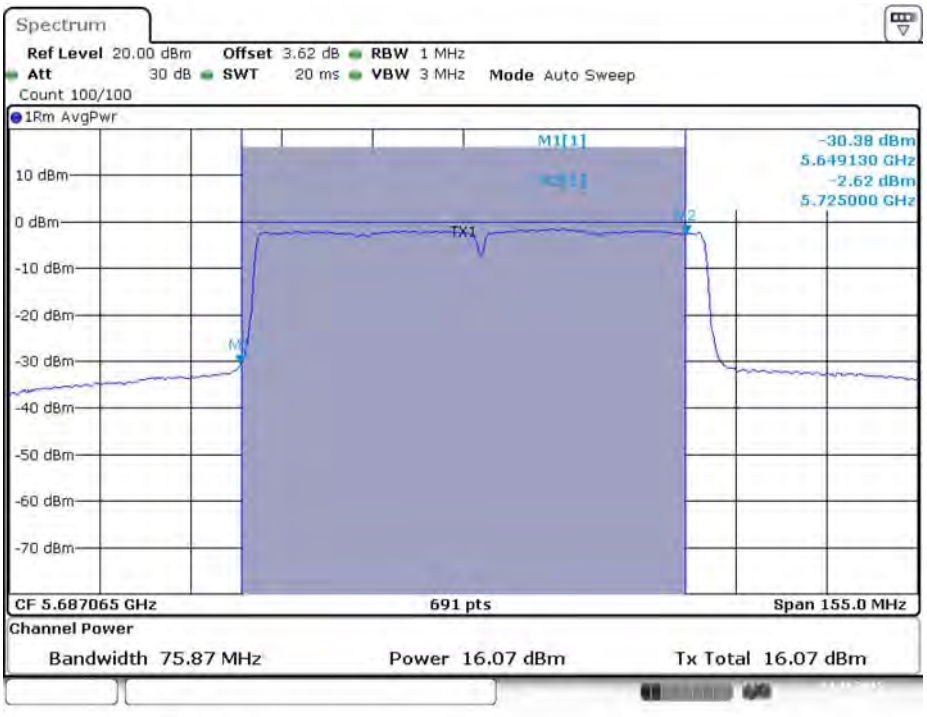


Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 2C)



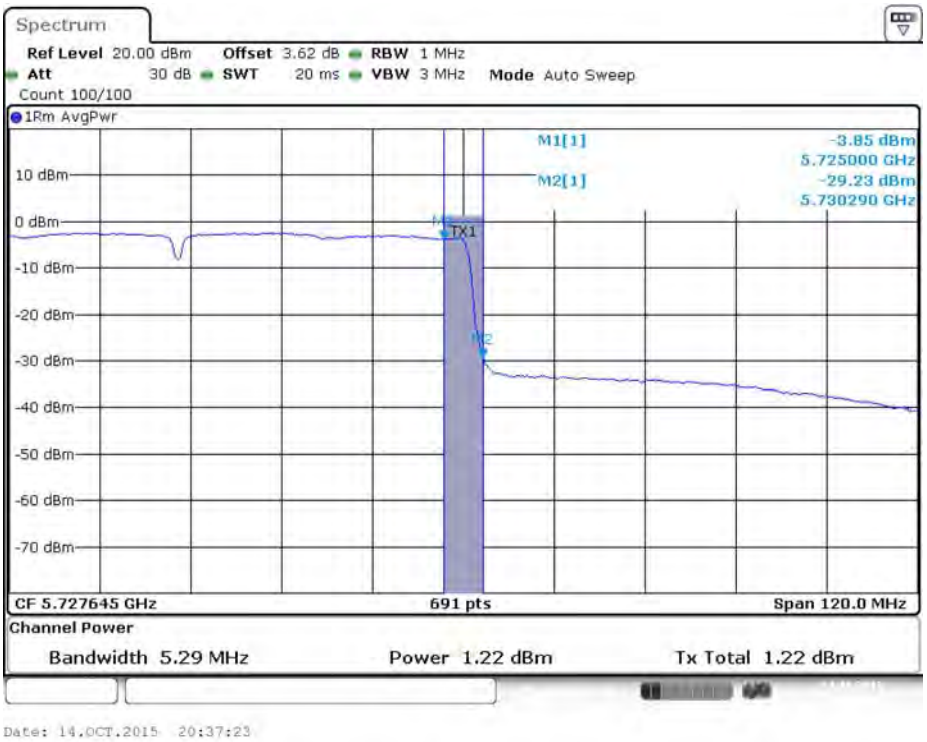
Date: 14.OCT.2015 20:37:19

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

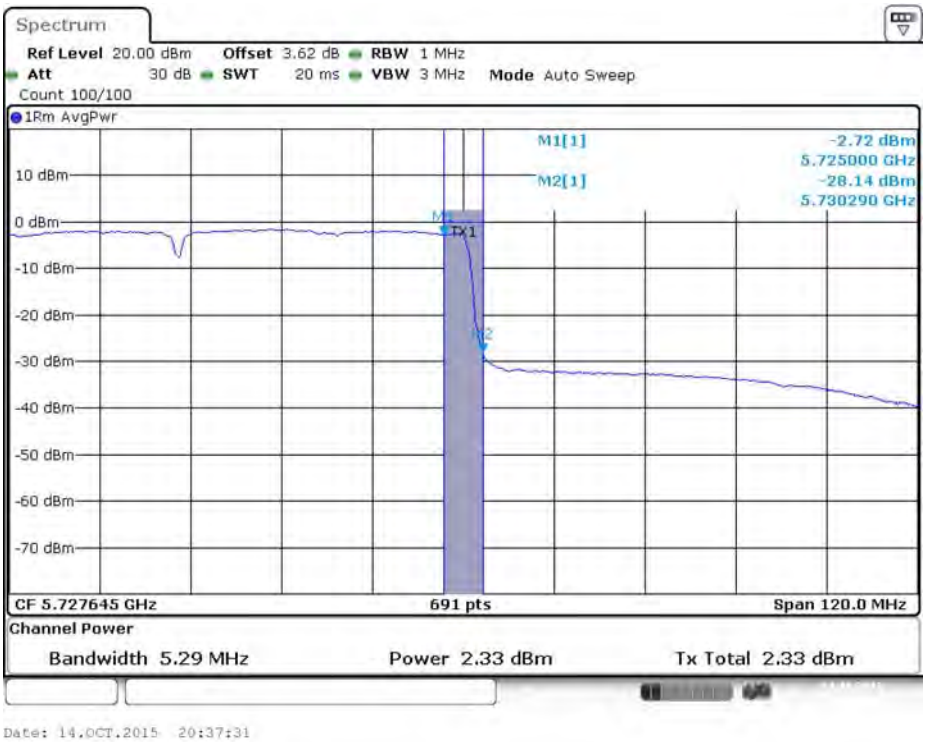


Date: 14.OCT.2015 20:37:27

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 3)

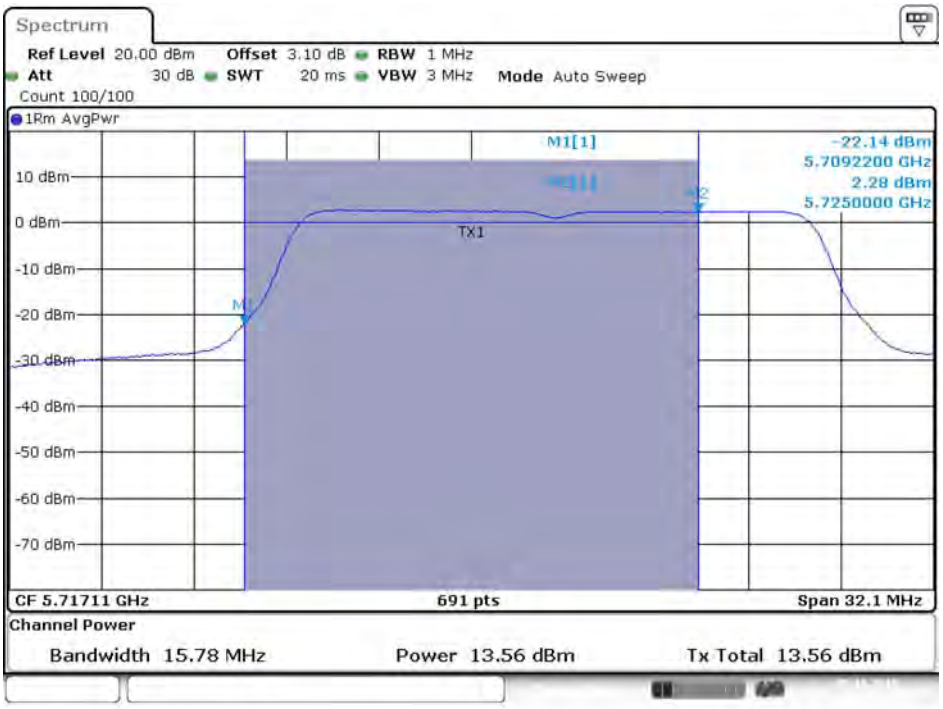


Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 2 / 5690 MHz (UNII 3)



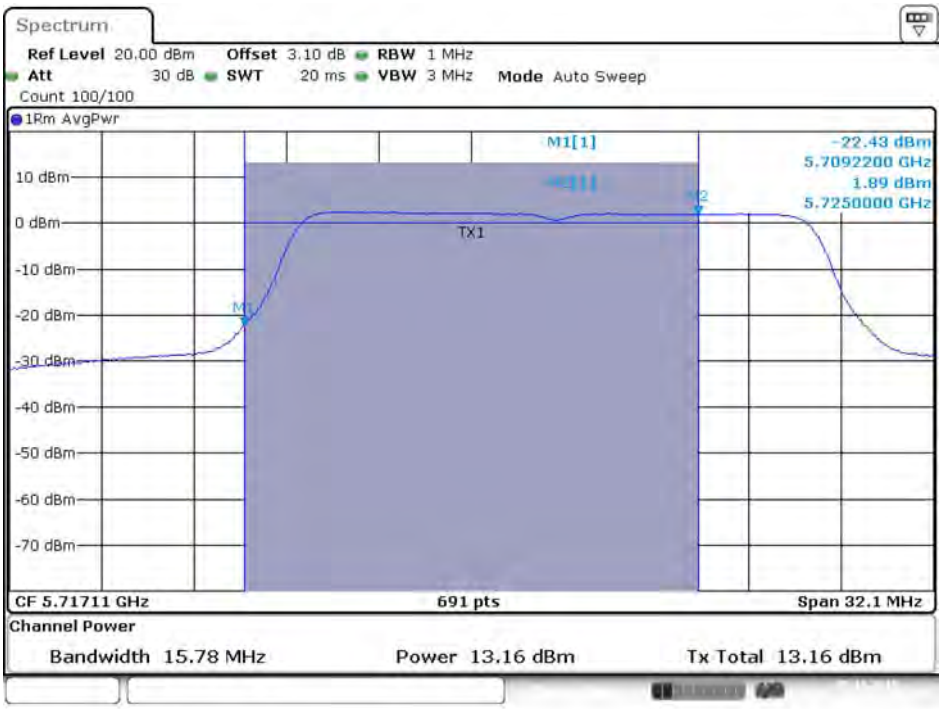
Chain 1: 5.9dBi, Chain 2: 5.4dBi, Chain 3: 5.9dBi / 3TX

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 2C)



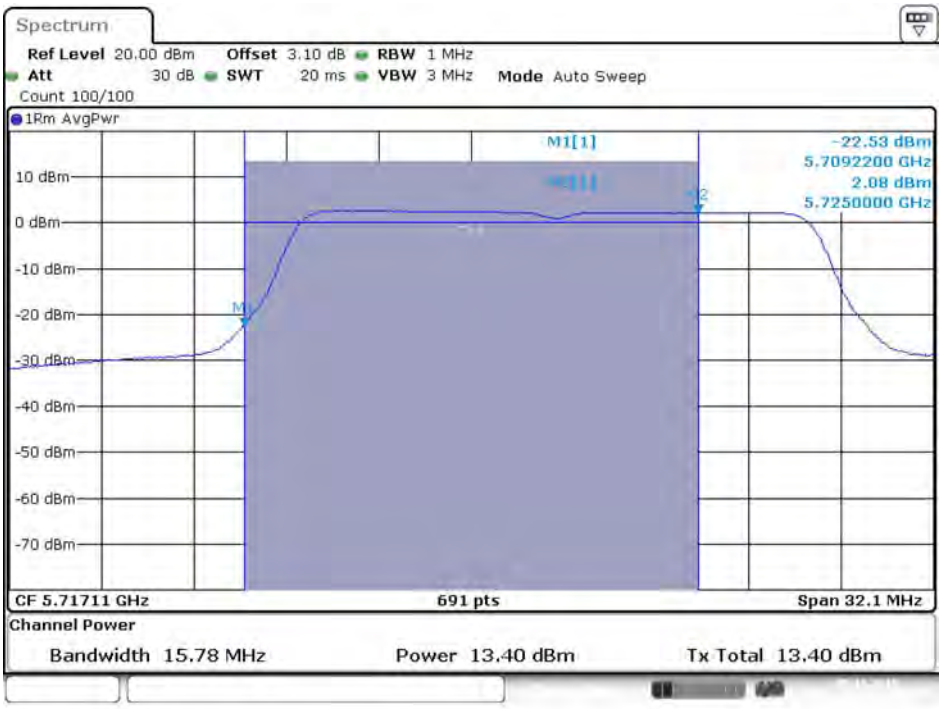
Date: 5.NOV.2015 21:37:55

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



Date: 5.NOV.2015 21:38:02

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 3 / 5720 MHz (UNII 2C)



Date: 5.NOV.2015 21:38:09

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 3)

Date: 5.NOV.2015 21:37:58

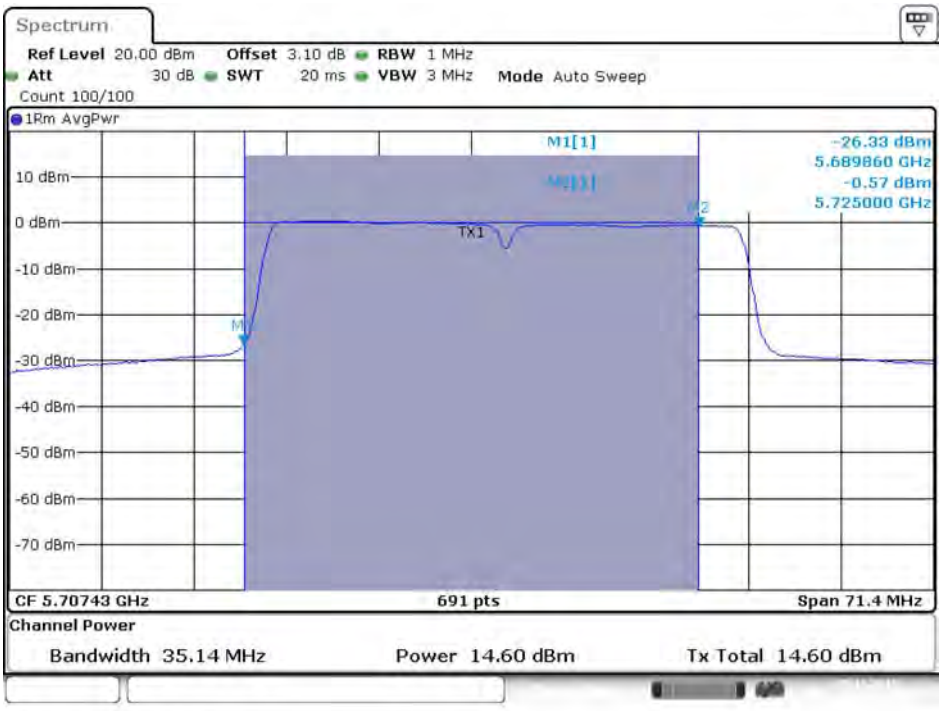
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 2 / 5720 MHz (UNII 3)

Date: 5.NOV.2015 21:38:05

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

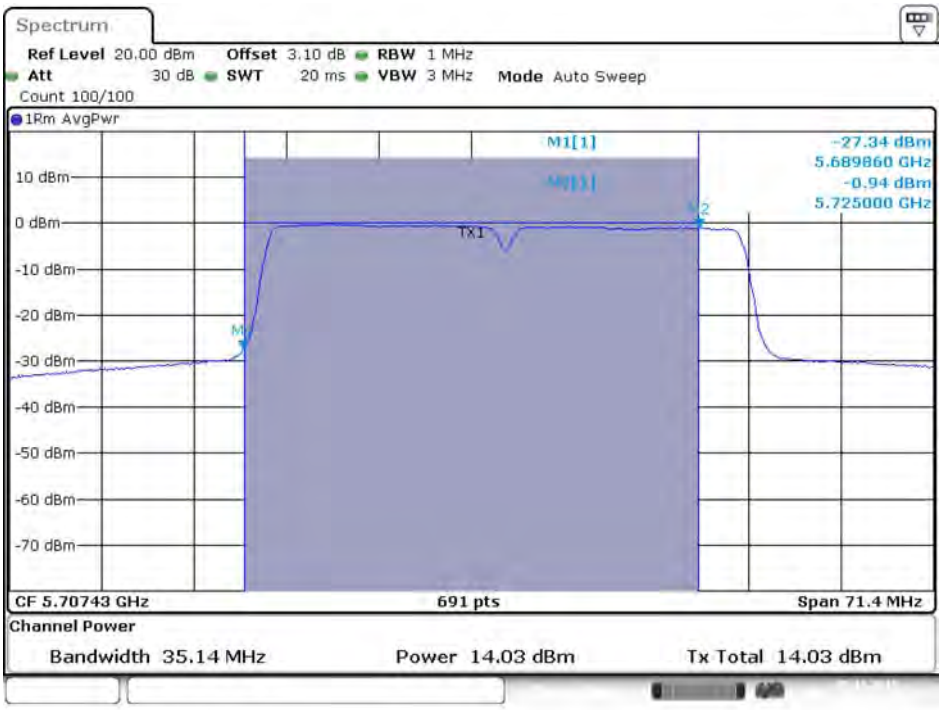
Date: 5.NOV.2015 21:38:12

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 2C)



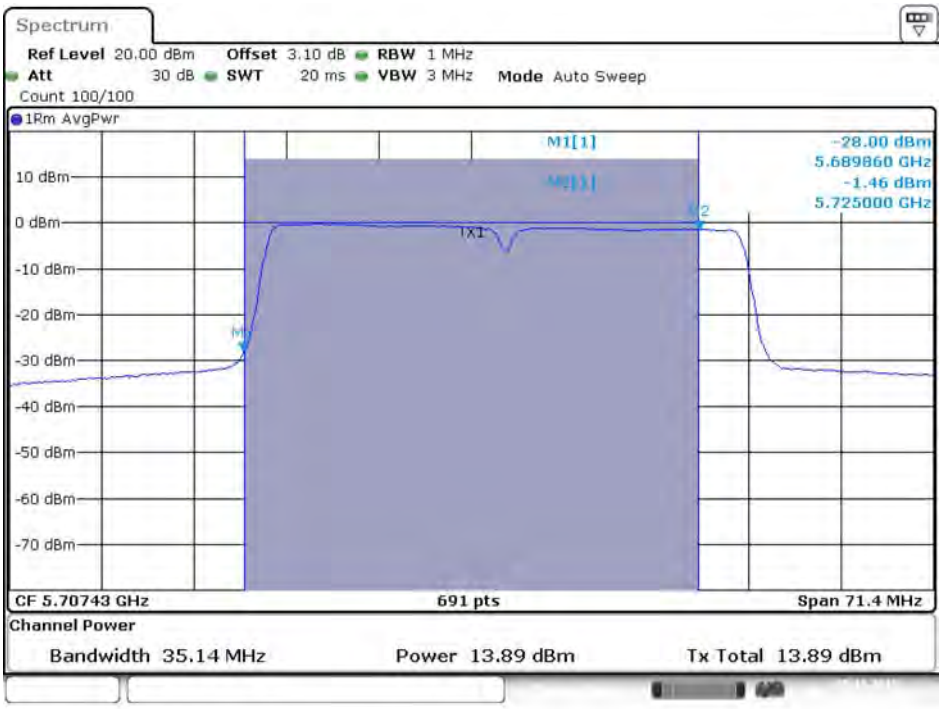
Date: 5.NOV.2015 21:32:49

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



Date: 5.NOV.2015 21:32:56

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 3 / 5710 MHz (UNII 2C)



Date: 5.NOV.2015 21:33:03

Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 3)

Date: 5.NOV.2015 21:32:53

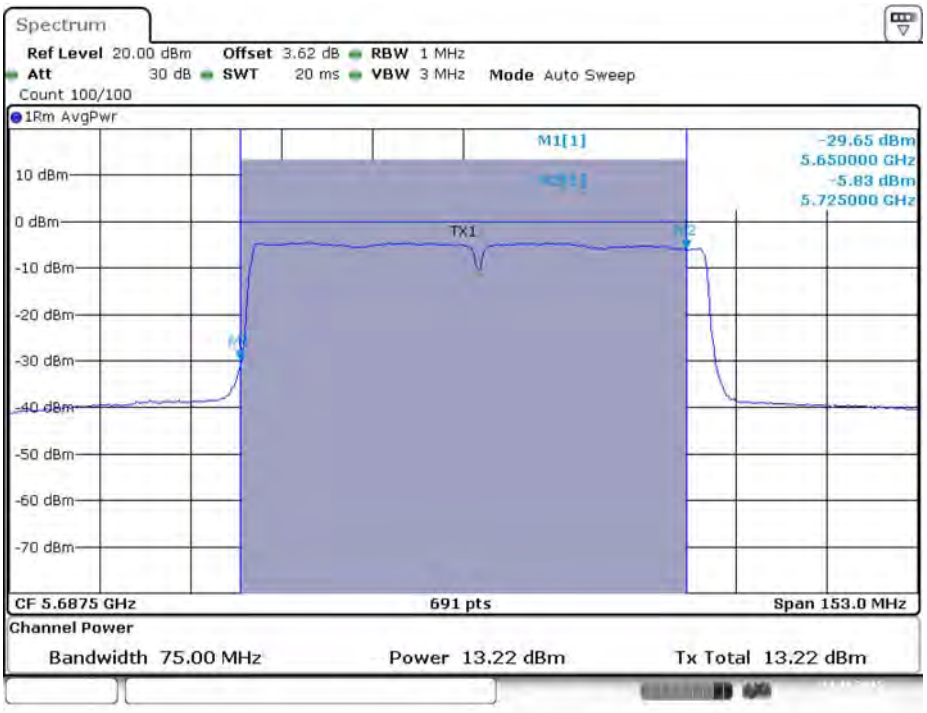
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 2 / 5710 MHz (UNII 3)

Date: 5.NOV.2015 21:33:00

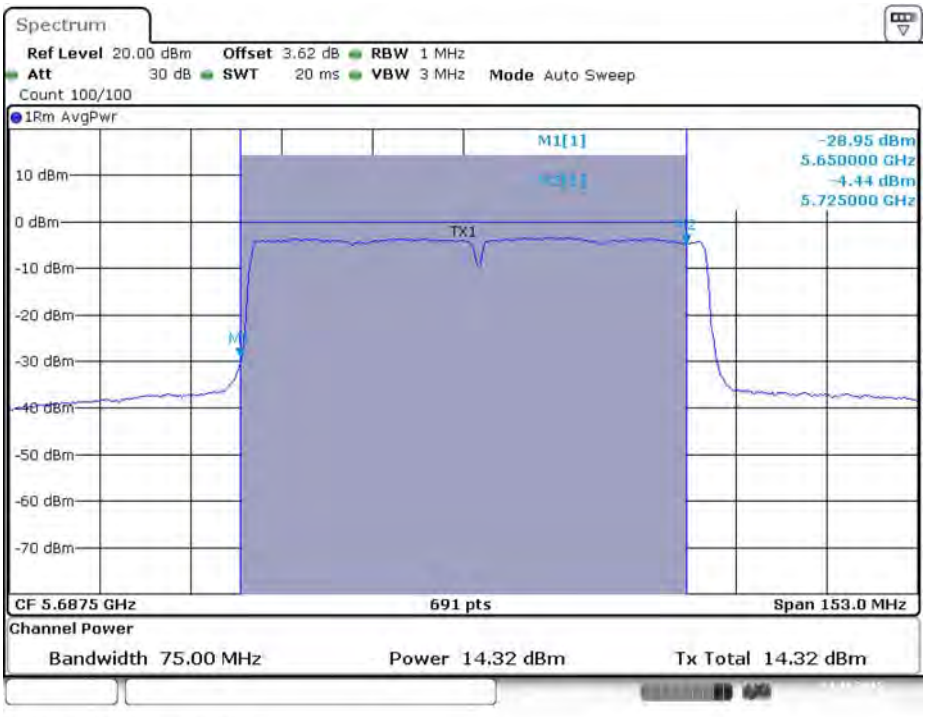
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 3 / 5710 MHz (UNII 3)

Date: 5.NOV.2015 21:33:07

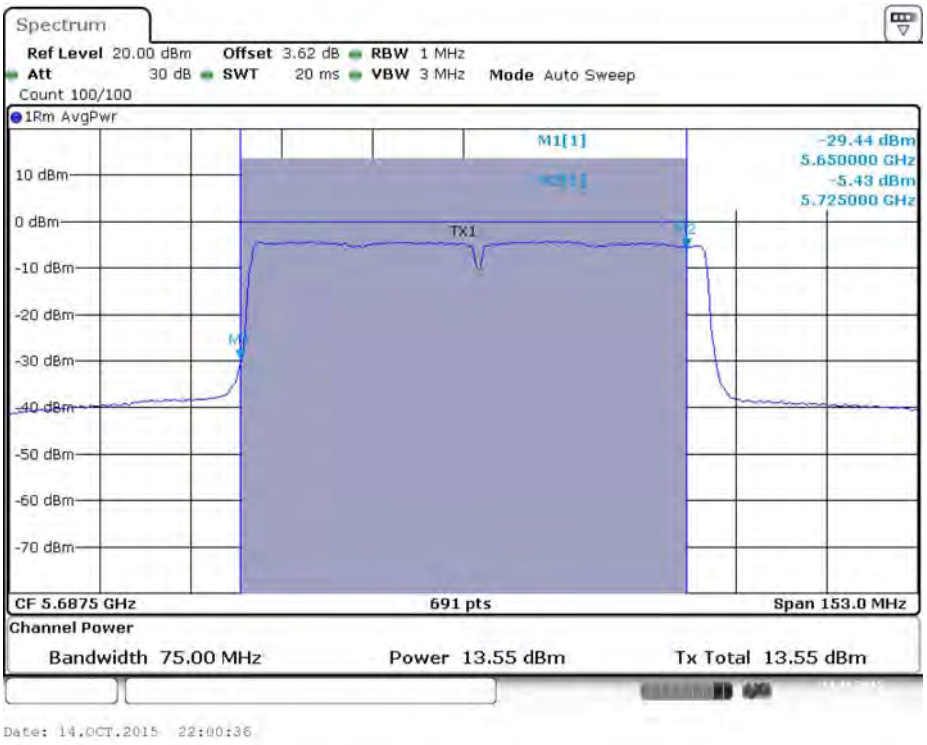
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 2C)



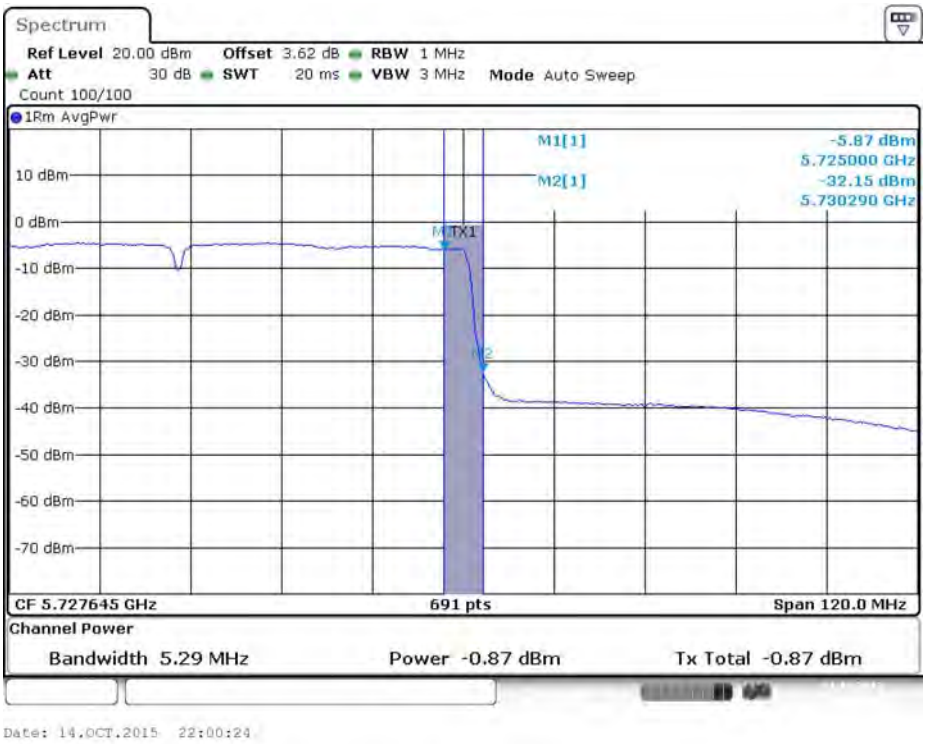
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 2 / 5690 MHz (UNII 2C)



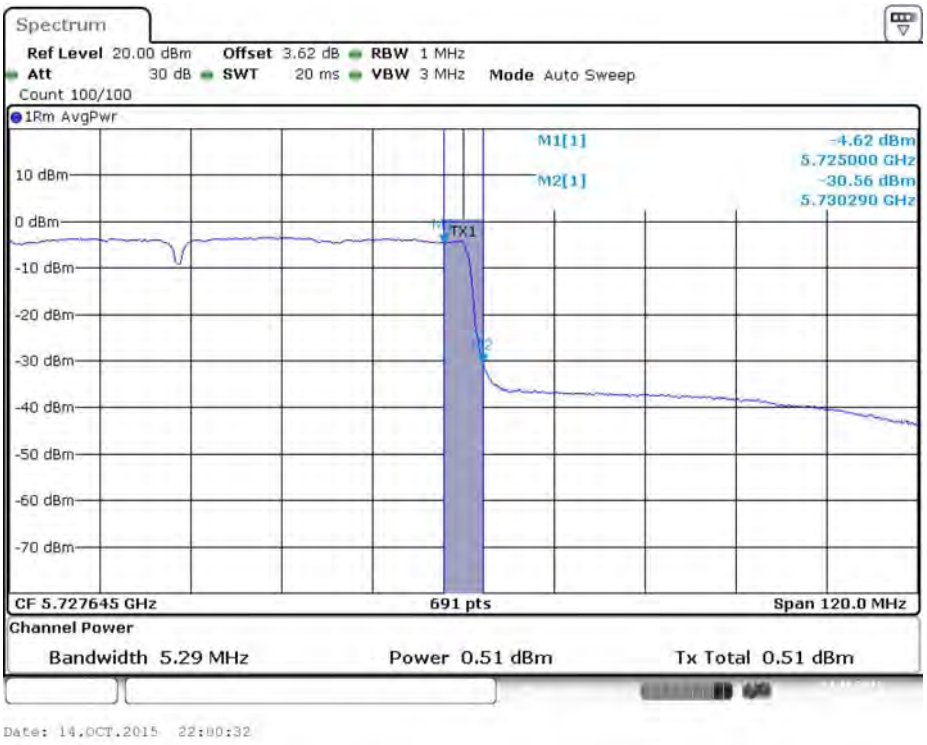
Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 3 / 5690 MHz (UNII 2C)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 3)



Conducted Output Power Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 2 / 5690 MHz (UNII 3)



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

4.5. Power Spectral Density Measurement

4.5.1. Limit

The following table is power spectral density limits and decrease power density limit rule refer to section 4.4.1.

Frequency Band			Limit
☒	5.15~5.25 GHz		
	Operating Mode		
	☒	Outdoor access point	17 dBm/MHz
	☒	Indoor access point	17 dBm/MHz
	☐	Fixed point-to-point access points	17 dBm/MHz
	☐	Mobile and portable client devices	11 dBm/MHz
☒	5.25-5.35 GHz		11 dBm/MHz
☒	5.470-5.725 GHz		11 dBm/MHz
☒	5.725~5.85 GHz		30 dBm/500kHz

4.5.2. Measuring Instruments and Setting

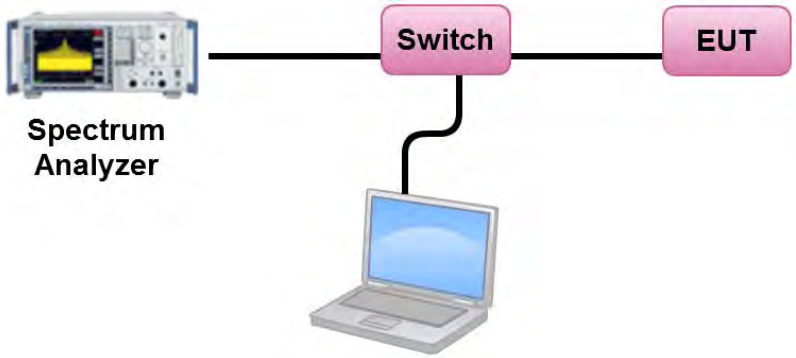
Please refer to section 5 of equipments list in this report. The following table is the setting of the spectrum analyzer.

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 10log(500kHz/RBW) to the measured result, whereas RBW (< 500 kHz) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.	

4.5.3. 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 v01r01 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 (a) Measure and sum the spectra across the outputs.
4. When measuring first spectral bin of output 1 is summed with that in the first spectral bin of output 2 and that from the first spectral bin of output 3 and so on up to the Nth output to obtain the value for the first frequency bin of the summed spectrum. The summed spectrum value for each of the other frequency bins is computed in the same way.
5. For 5.725~5.85 GHz, the measured result of PSD level must add 10log(500kHz/RBW) and the final result should ≤ 30 dBm.

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

The EUT was programmed to be in continuously transmitting mode.

4.5.7. Test Result of Power Spectral Density

For Non-Beamforming Mode

Temperature	24°C	Humidity	65%
Test Engineer	Roki Liu	Test Date	Oct. 14, 2015
Configurations	Chain 1: 5.9dBi / 1TX		

For indoor / outdoor use

Configuration IEEE 802.11a / Chain 1

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	5.96	17.00	Complies
40	5200 MHz	5.48	17.00	Complies
48	5240 MHz	6.14	17.00	Complies
52	5260 MHz	6.28	11.00	Complies
60	5300 MHz	6.41	11.00	Complies
64	5320 MHz	6.10	11.00	Complies
100	5500 MHz	6.59	11.00	Complies
116	5580 MHz	6.47	11.00	Complies
140	5700 MHz	6.56	11.00	Complies

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	4.31	-3.01	1.30	30.00	Complies
157	5785 MHz	6.04	-3.01	3.03	30.00	Complies
165	5825 MHz	6.28	-3.01	3.27	30.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	4.52	17.00	Complies
40	5200 MHz	5.48	17.00	Complies
48	5240 MHz	5.59	17.00	Complies
52	5260 MHz	5.18	11.00	Complies
60	5300 MHz	5.52	11.00	Complies
64	5320 MHz	5.08	11.00	Complies
100	5500 MHz	5.73	11.00	Complies
116	5580 MHz	4.95	11.00	Complies
140	5700 MHz	3.31	11.00	Complies

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	3.06	-3.01	0.05	30.00	Complies
157	5785 MHz	4.77	-3.01	1.76	30.00	Complies
165	5825 MHz	4.82	-3.01	1.81	30.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	-1.62	17.00	Complies
46	5230 MHz	2.12	17.00	Complies
54	5270 MHz	2.12	11.00	Complies
62	5310 MHz	-2.37	11.00	Complies
102	5510 MHz	-2.33	11.00	Complies
110	5550 MHz	1.75	11.00	Complies
134	5670 MHz	2.45	11.00	Complies

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	-1.36	-3.01	-4.37	30.00	Complies
159	5795 MHz	2.06	-3.01	-0.95	30.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-4.50	17.00	Complies
58	5290 MHz	-6.08	11.00	Complies
106	5530 MHz	-6.05	11.00	Complies
122	5610 MHz	-1.06	11.00	Complies

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	-4.04	-3.01	-7.05	30.00	Complies

Straddle Channel

Configuration IEEE 802.11a / Chain 1

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	5.10	11.00	Complies

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)	5.01	-3.01	2.00	30.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	4.45	11.00	Complies

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)	4.33	-3.01	1.32	30.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
142	5710 MHz (UNII 2C)	1.66	11.00	Complies

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)	1.40	-3.01	-1.61	30.00	Complies

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
138	5690 MHz (UNII 2C)	-2.94	11.00	Complies

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)	-3.54	-3.01	-6.55	30.00	Complies

Temperature	24°C	Humidity	65%
Test Engineer	Roki Liu	Test Date	Oct. 14, 2015
Configurations	Chain 1: 5.9dBi, Chain 2: 5.4dBi / 2TX		

Configuration IEEE 802.11a / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	8.70	14.34	Complies
40	5200 MHz	8.01	14.34	Complies
48	5240 MHz	8.50	14.34	Complies
52	5260 MHz	8.27	8.34	Complies
60	5300 MHz	8.29	8.34	Complies
64	5320 MHz	8.20	8.34	Complies
100	5500 MHz	6.40	8.34	Complies
116	5580 MHz	8.14	8.34	Complies
140	5700 MHz	8.18	8.34	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B1 limit 17-(8.66-6)=14.34dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B2 B3 limit 11-(8.66-6)=8.34dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	6.95	-3.01	3.94	27.34	Complies
157	5785 MHz	8.94	-3.01	5.93	27.34	Complies
165	5825 MHz	8.88	-3.01	5.87	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B4 limit 30-(8.66-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	7.97	14.34	Complies
40	5200 MHz	8.35	14.34	Complies
48	5240 MHz	8.55	14.34	Complies
52	5260 MHz	7.69	8.34	Complies
60	5300 MHz	7.78	8.34	Complies
64	5320 MHz	8.09	8.34	Complies
100	5500 MHz	6.76	8.34	Complies
116	5580 MHz	8.31	8.34	Complies
140	5700 MHz	6.42	8.34	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B1 limit 17-(8.66-6)=14.34dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B2 B3 limit 11-(8.66-6)=8.34dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	6.39	-3.01	3.38	27.34	Complies
157	5785 MHz	8.83	-3.01	5.82	27.34	Complies
165	5825 MHz	8.33	-3.01	5.32	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B4 limit 30-(8.66-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	1.02	14.34	Complies
46	5230 MHz	4.78	14.34	Complies
54	5270 MHz	4.77	8.34	Complies
62	5310 MHz	-0.21	8.34	Complies
102	5510 MHz	0.42	8.34	Complies
110	5550 MHz	5.10	8.34	Complies
134	5670 MHz	5.04	8.34	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B1 limit 17-(8.66-6)=14.34dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B2 B3 limit 11-(8.66-6)=8.34dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	1.37	-3.01	-1.64	27.34	Complies
159	5795 MHz	5.14	-3.01	2.13	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B4 limit 30-(8.66-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-3.28	14.34	Complies
58	5290 MHz	-4.57	8.34	Complies
106	5530 MHz	-4.70	8.34	Complies
122	5610 MHz	1.71	8.34	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B1 limit 17-(8.66-6)=14.34dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B2 B3 limit 11-(8.66-6)=8.34dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	-3.08	-3.01	-6.09	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B4 limit 30-(8.66-6)=27.34dBm/500kHz.

Straddle Channel

Configuration IEEE 802.11a / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	7.30	8.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 11-(8.66-6)=8.34dBm/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)	6.97	-3.01	3.96	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 30-(8.66-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	6.83	8.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 11-(8.66-6)=8.34dBm/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)	6.78	-3.01	3.77	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 30-(8.66-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
142	5710 MHz (UNII 2C)	3.81	8.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 11-(8.66-6)=8.34dBm/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)	3.24	-3.01	0.23	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 30-(8.66-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
138	5690 MHz (UNII 2C)	-0.50	8.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 11-(8.66-6)=8.34dBm/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)	-1.27	-3.01	-4.28	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 30-(8.66-6)=27.34dBm/500kHz.

Temperature	24°C	Humidity	65%
Test Engineer	Roki Liu	Test Date	Oct. 14, 2015
Configurations	Chain 1: 5.9dBi, Chain 2: 5.4dBi, Chain 3: 5.9dBi / 3TX		

Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	9.78	12.49	Complies
40	5200 MHz	9.84	12.49	Complies
48	5240 MHz	9.62	12.49	Complies
52	5260 MHz	6.34	6.49	Complies
60	5300 MHz	6.45	6.49	Complies
64	5320 MHz	6.29	6.49	Complies
100	5500 MHz	6.44	6.49	Complies
116	5580 MHz	6.42	6.49	Complies
140	5700 MHz	6.02	6.49	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B1 limit 17-(10.51-6)=12.49dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B2 B3 limit 11-(10.51-6)=6.49dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	6.87	-3.01	3.86	25.49	Complies
157	5785 MHz	10.45	-3.01	7.44	25.49	Complies
165	5825 MHz	10.15	-3.01	7.14	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B4 limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	9.53	12.49	Complies
40	5200 MHz	9.25	12.49	Complies
48	5240 MHz	8.96	12.49	Complies
52	5260 MHz	6.34	6.49	Complies
60	5300 MHz	6.28	6.49	Complies
64	5320 MHz	6.13	6.49	Complies
100	5500 MHz	6.28	6.49	Complies
116	5580 MHz	6.08	6.49	Complies
140	5700 MHz	6.12	6.49	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B1 limit 17-(10.51-6)=12.49dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B2 B3 limit 11-(10.51-6)=6.49dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	5.26	-3.01	2.25	25.49	Complies
157	5785 MHz	9.56	-3.01	6.55	25.49	Complies
165	5825 MHz	7.44	-3.01	4.43	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B4 limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	0.50	12.49	Complies
46	5230 MHz	3.52	12.49	Complies
54	5270 MHz	6.00	6.49	Complies
62	5310 MHz	-0.73	6.49	Complies
102	5510 MHz	0.11	6.49	Complies
110	5550 MHz	3.83	6.49	Complies
134	5670 MHz	6.39	6.49	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B1 limit 17-(10.51-6)=12.49dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B2 B3 limit 11-(10.51-6)=6.49dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	-0.60	-3.01	-3.61	25.49	Complies
159	5795 MHz	6.22	-3.01	3.21	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B4 limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-4.00	12.49	Complies
58	5290 MHz	-5.39	6.49	Complies
106	5530 MHz	-5.47	6.49	Complies
122	5610 MHz	1.44	6.49	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B1 limit 17-(10.51-6)=12.49dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B2 B3 limit 11-(10.51-6)=6.49dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	-3.93	-3.01	-6.94	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B4 limit 30-(10.51-6)=25.49dBm/500kHz.

Straddle Channel

Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	6.07	6.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 11-(10.51-6)=6.49dBm/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)	5.81	-3.01	2.80	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	6.10	6.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 11-(10.51-6)=6.49dBm/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)	5.77	-3.01	2.76	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
142	5710 MHz (UNII 2C)	4.79	6.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 11-(10.51-6)=6.49dBm/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)	4.04	-3.01	1.03	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
138	5690 MHz (UNII 2C)	-0.82	6.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 11-(10.51-6)=6.49dBm/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)	-1.38	-3.01	-4.39	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 30-(10.51-6)=25.49dBm/500kHz.

For Beamforming Mode

Temperature	24°C	Humidity	65%
Test Engineer	Roki Liu	Test Date	Oct. 23, 2015
Configurations	Chain 1: 5.9dBi, Chain 2: 5.4dBi / 2TX		

For indoor / outdoor use

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	7.97	14.34	Complies
40	5200 MHz	8.35	14.34	Complies
48	5240 MHz	8.55	14.34	Complies
52	5260 MHz	7.69	8.34	Complies
60	5300 MHz	7.78	8.34	Complies
64	5320 MHz	8.11	8.34	Complies
100	5500 MHz	6.76	8.34	Complies
116	5580 MHz	7.90	8.34	Complies
140	5700 MHz	6.42	8.34	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B1 limit 17-(8.66-6)=14.34dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B2 B3 limit 11-(8.66-6)=8.34dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	5.59	-3.01	2.58	27.34	Complies
157	5785 MHz	8.83	-3.01	5.82	27.34	Complies
165	5825 MHz	7.85	-3.01	4.84	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B4 limit 30-(8.66-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	1.02	14.34	Complies
46	5230 MHz	4.78	14.34	Complies
54	5270 MHz	4.77	8.34	Complies
62	5310 MHz	-0.21	8.34	Complies
102	5510 MHz	0.42	8.34	Complies
110	5550 MHz	5.10	8.34	Complies
134	5670 MHz	5.04	8.34	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B1 limit 17-(8.66-6)=14.34dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B2 B3 limit 11-(8.66-6)=8.34dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	1.37	-3.01	-1.64	27.34	Complies
159	5795 MHz	5.14	-3.01	2.13	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B4 limit 30-(8.6-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-3.28	14.34	Complies
58	5290 MHz	-4.57	8.34	Complies
106	5530 MHz	-4.70	8.34	Complies
122	5610 MHz	1.71	8.34	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B1 limit 17-(8.66-6)=14.34dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B2 B3 limit 11-(8.66-6)=8.34dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	-3.08	-3.01	-6.09	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so B4 limit 30-(8.66-6)=27.34dBm/500kHz.

Straddle Channel

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	6.83	8.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 11-(8.66-6)=8.34dBm/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)	6.78	-3.01	3.77	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 30-(8.66-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
142	5710 MHz (UNII 2C)	3.81	8.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 11-(8.66-6)=8.34dBm/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)	3.24	-3.01	0.23	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 30-(8.66-6)=27.34dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
138	5690 MHz (UNII 2C)	-0.50	8.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 11-(8.66-6)=8.34dBm/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)	-1.27	-3.01	-4.28	27.34	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =8.66dBi >6dBi, so limit 30-(8.66-6)=27.34dBm/500kHz.

Temperature	24°C	Humidity	65%
Test Engineer	Roki Liu	Test Date	Oct. 23, 2015
Configurations	Chain 1: 5.9dBi, Chain 2: 5.4dBi, Chain 3: 5.9dBi / 3TX		

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
36	5180 MHz	9.53	12.49	Complies
40	5200 MHz	9.25	12.49	Complies
48	5240 MHz	8.96	12.49	Complies
52	5260 MHz	6.34	6.49	Complies
60	5300 MHz	6.28	6.49	Complies
64	5320 MHz	6.43	6.49	Complies
100	5500 MHz	6.28	6.49	Complies
116	5580 MHz	5.66	6.49	Complies
140	5700 MHz	6.12	6.49	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B1 limit 17-(10.51-6)=12.49dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B2 B3 limit 11-(10.51-6)=6.49dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
149	5745 MHz	5.26	-3.01	2.25	25.49	Complies
157	5785 MHz	9.56	-3.01	6.55	25.49	Complies
165	5825 MHz	7.44	-3.01	4.43	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B4 limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
38	5190 MHz	0.50	12.49	Complies
46	5230 MHz	6.03	12.49	Complies
54	5270 MHz	3.59	6.49	Complies
62	5310 MHz	0.27	6.49	Complies
102	5510 MHz	1.83	6.49	Complies
110	5550 MHz	3.60	6.49	Complies
134	5670 MHz	3.37	6.49	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B1 limit 17-(10.51-6)=12.49dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B2 B3 limit 11-(10.51-6)=6.49dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
151	5755 MHz	-0.60	-3.01	-3.61	25.49	Complies
159	5795 MHz	5.63	-3.01	2.62	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B4 limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
42	5210 MHz	-2.81	12.49	Complies
58	5290 MHz	-5.39	6.49	Complies
106	5530 MHz	-4.57	6.49	Complies
122	5610 MHz	0.62	6.49	Complies

Note1: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B1 limit 17-(10.51-6)=12.49dBm/MHz.

Note2: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B2 B3 limit 11-(10.51-6)=6.49dBm/MHz.

Channel	Frequency	Power Density (dBm/MHz)	10log(500kHz/RBW) Factor (dB)	Power Density (dBm/500kHz)	Power Density Limit (dBm/500kHz)	Result
155	5775 MHz	-3.93	-3.01	-6.94	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so B4 limit 30-(10.51-6)=25.49dBm/500kHz.

Straddle Channel

Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
144	5720 MHz (UNII 2C)	5.97	6.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 11-(10.51-6)=6.49dBm/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)	5.61	-3.01	2.60	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
142	5710 MHz (UNII 2C)	3.43	6.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 11-(10.51-6)=6.49dBm/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)	2.50	-3.01	-0.51	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 30-(10.51-6)=25.49dBm/500kHz.

Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3

Channel	Frequency	Power Density (dBm/MHz)	Max. Limit (dBm/MHz)	Result
138	5690 MHz (UNII 2C)	-0.82	6.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 11-(10.51-6)=6.49dBm/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)	-1.38	-3.01	-4.39	25.49	Complies

Note: $Directiona\,lGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$ =10.51dBi >6dBi, so limit 30-(10.51-6)=25.49dBm/500kHz.

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

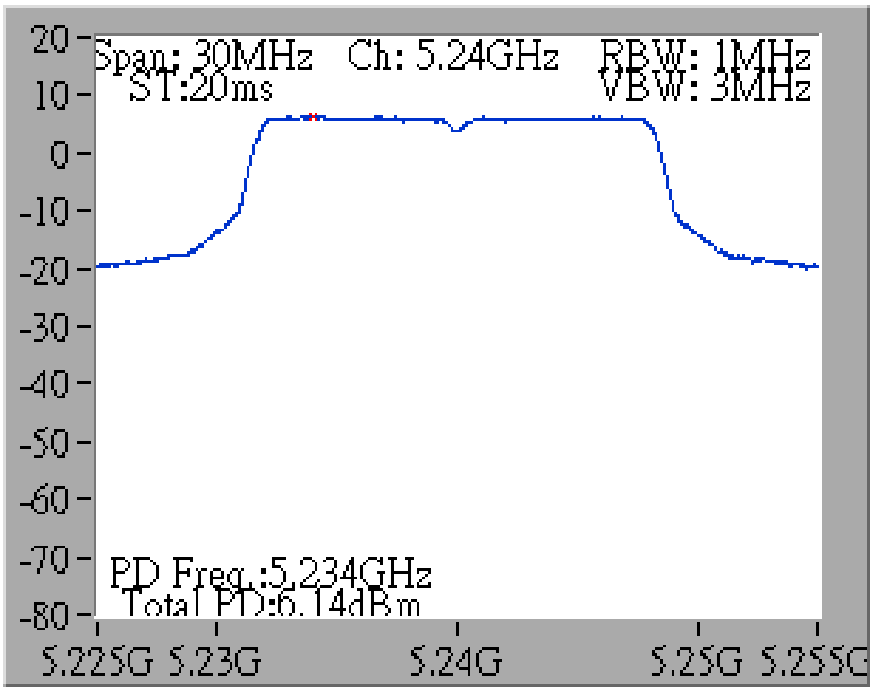
For plots, only the channel with worse result was shown.

For Non-Beamforming Mode

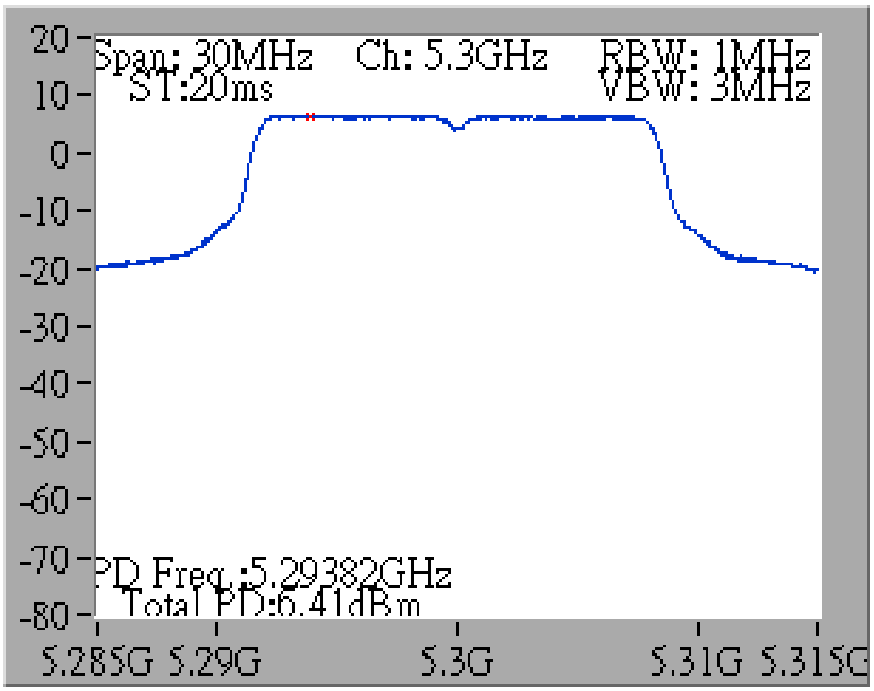
For indoor / outdoor use

Chain 1: 5.9dBi / 1TX

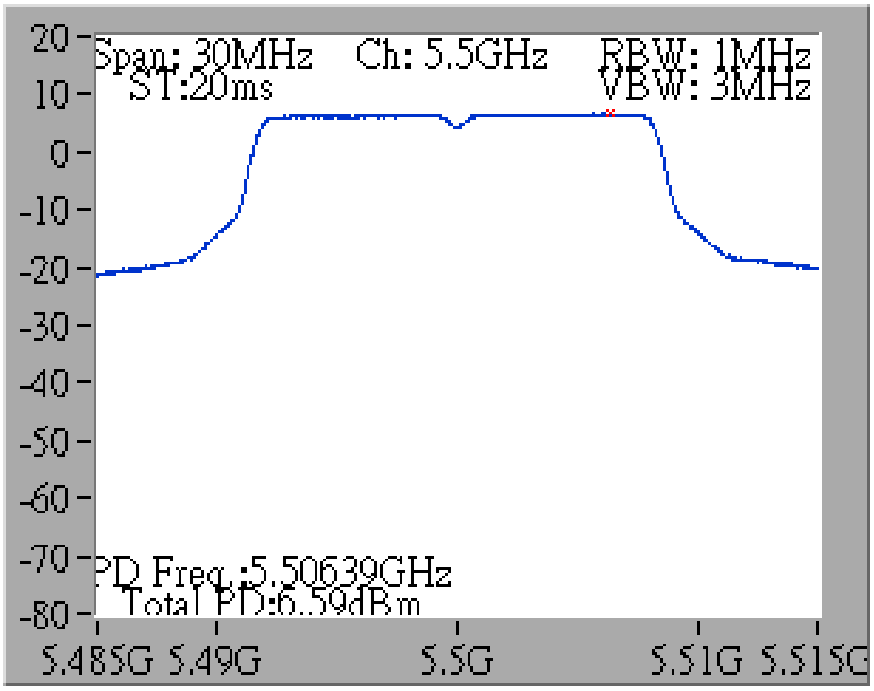
Power Density Plot on Configuration IEEE 802.11a / Chain 1 / 5240 MHz



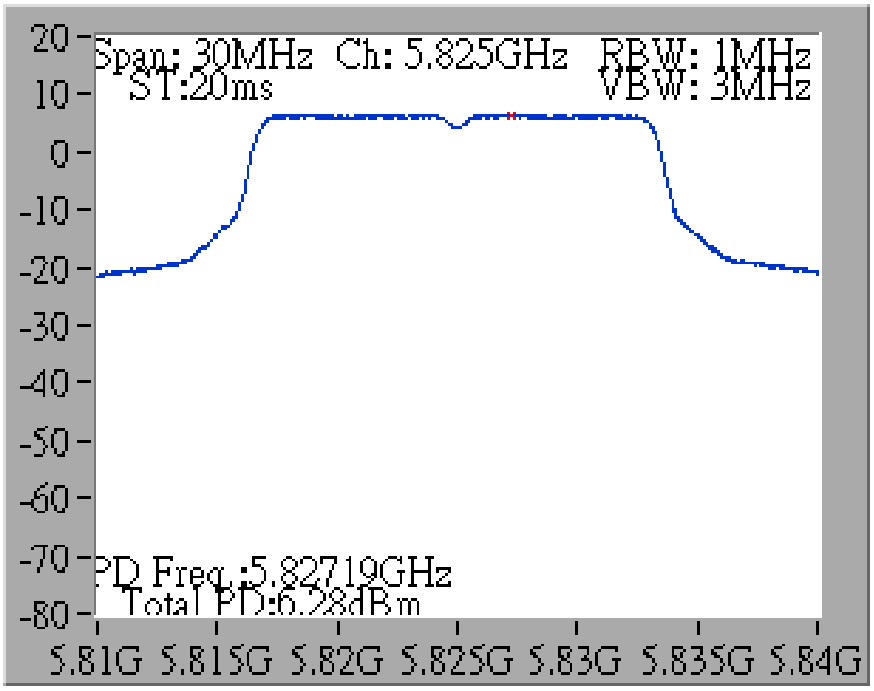
Power Density Plot on Configuration IEEE 802.11a / Chain 1 / 5300 MHz



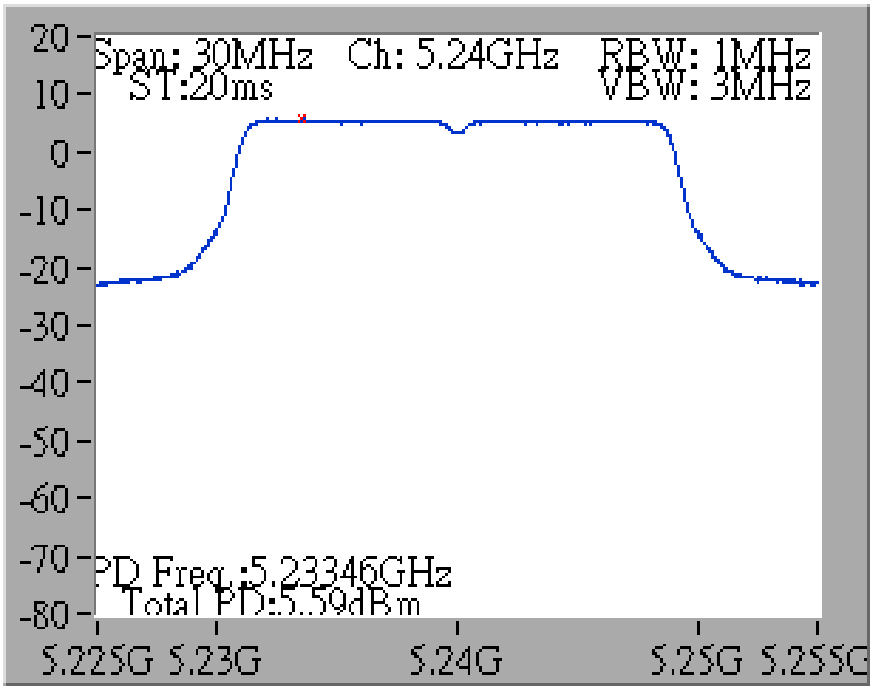
Power Density Plot on Configuration IEEE 802.11a / Chain 1 / 5500 MHz



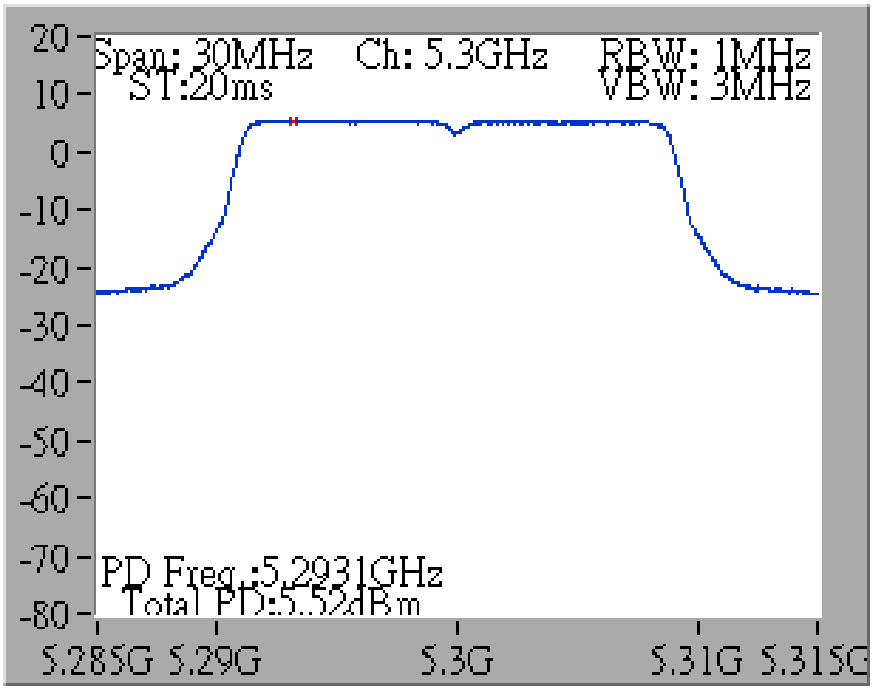
Power Density Plot on Configuration IEEE 802.11a / Chain 1 / 5825 MHz



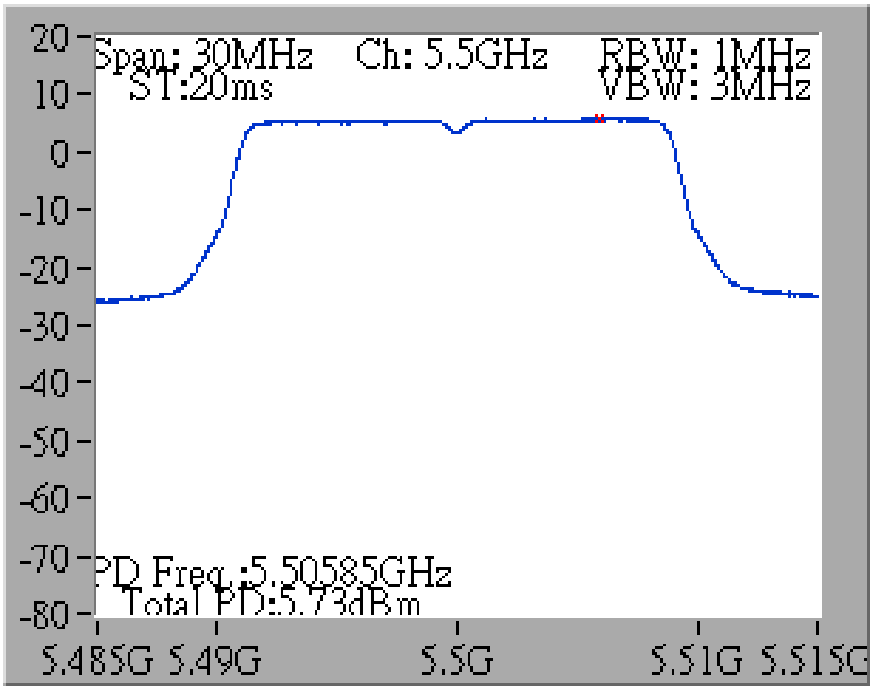
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5240 MHz



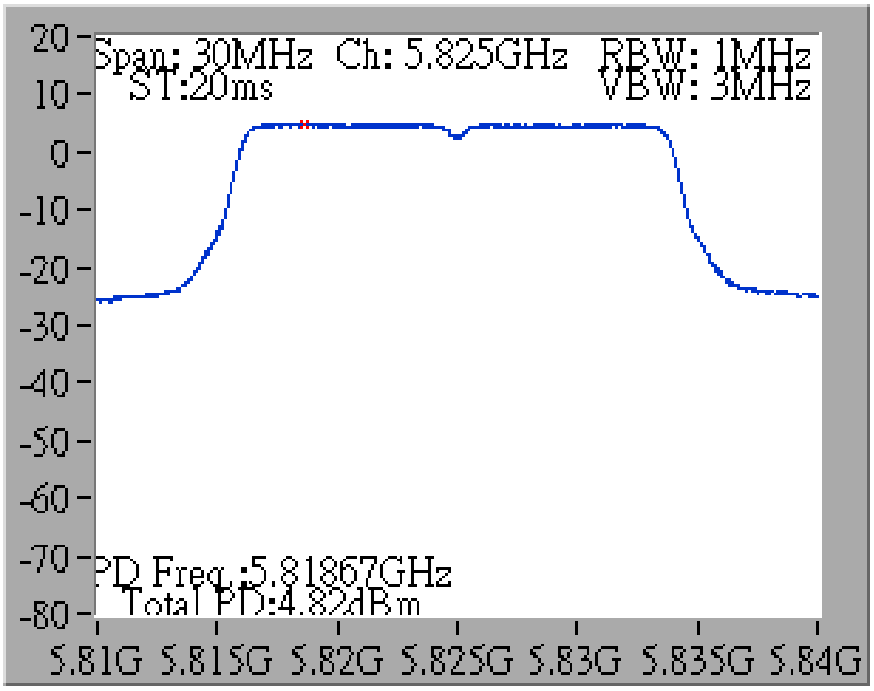
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5300 MHz



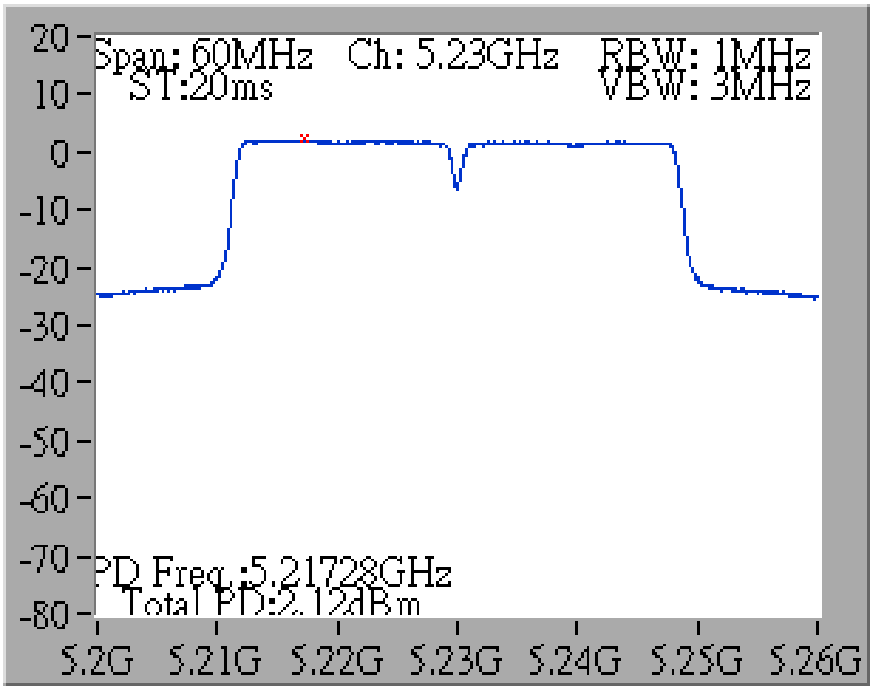
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5500 MHz



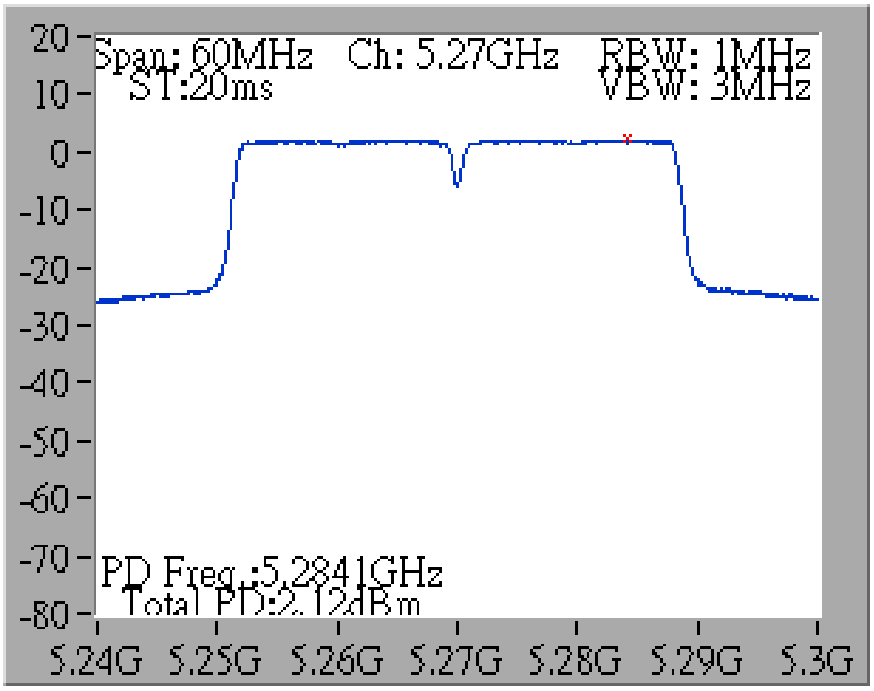
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5825 MHz



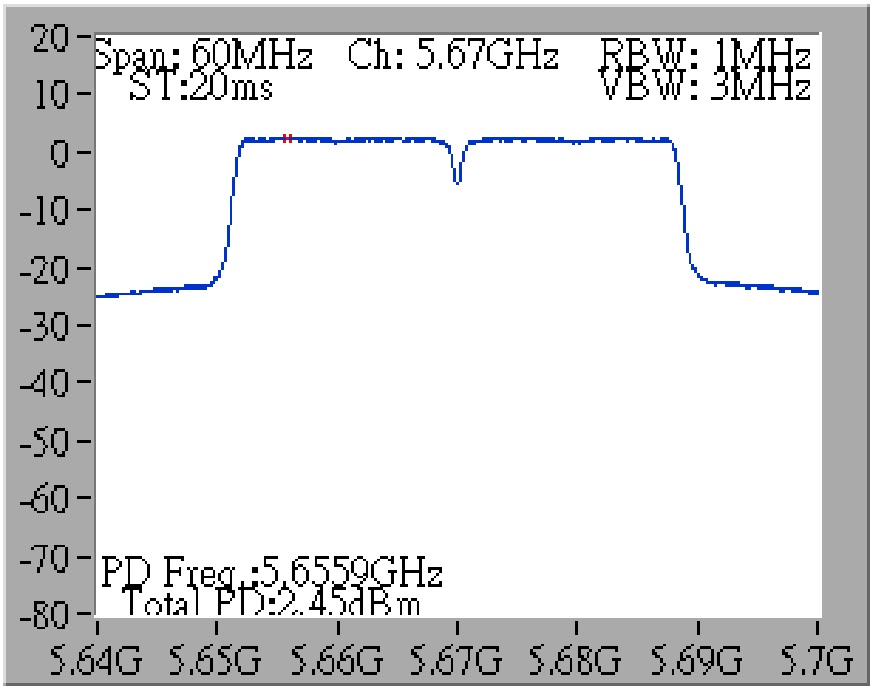
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5230 MHz



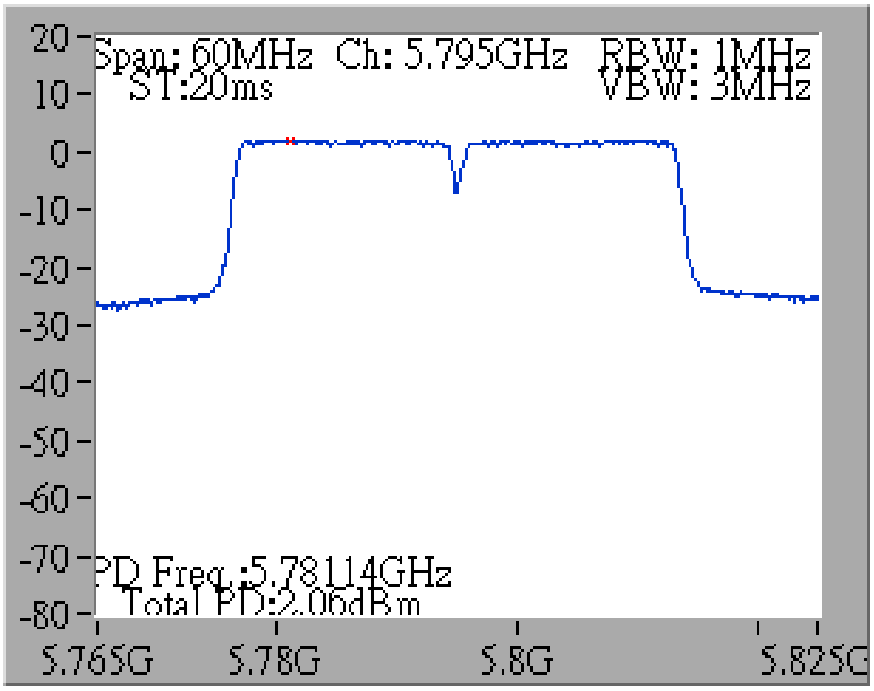
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5270 MHz



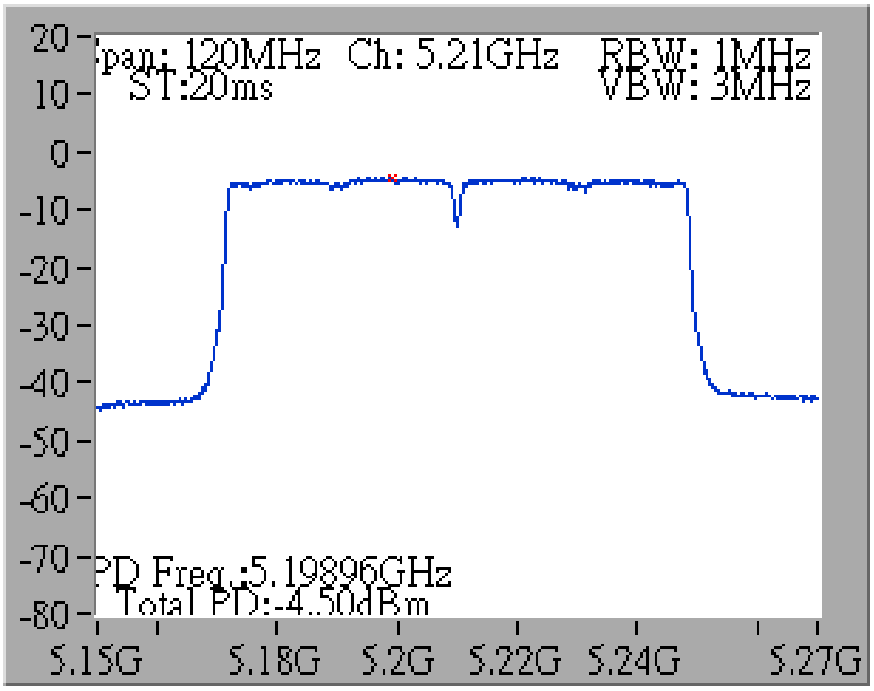
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5670 MHz



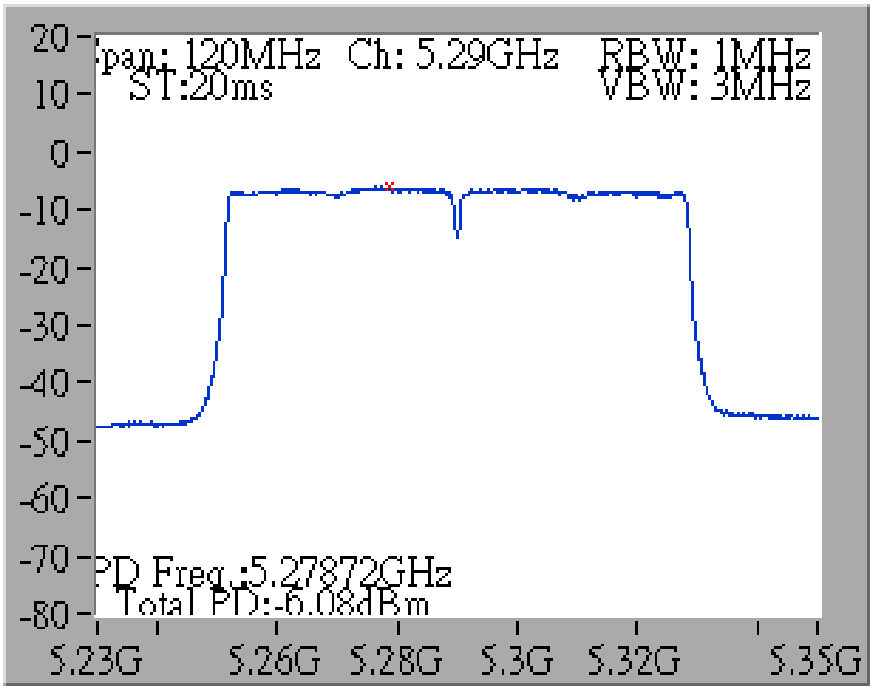
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5795 MHz



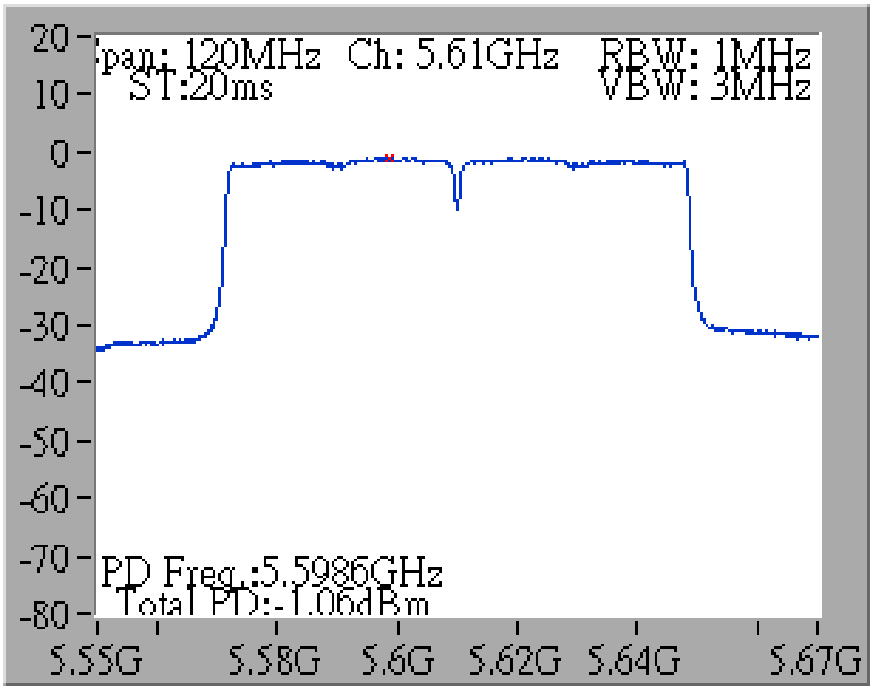
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5210 MHz



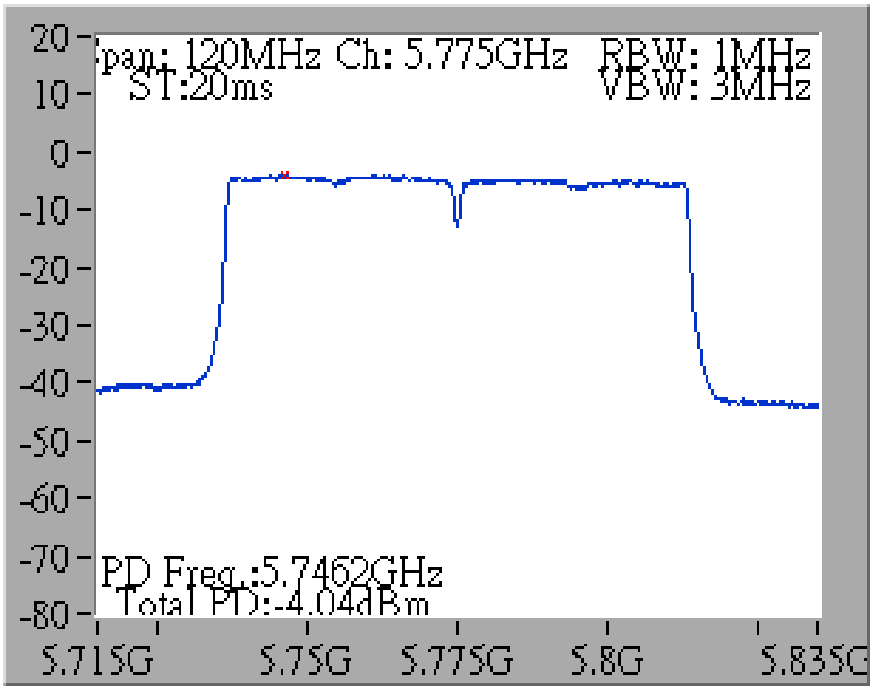
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5290 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5610 MHz

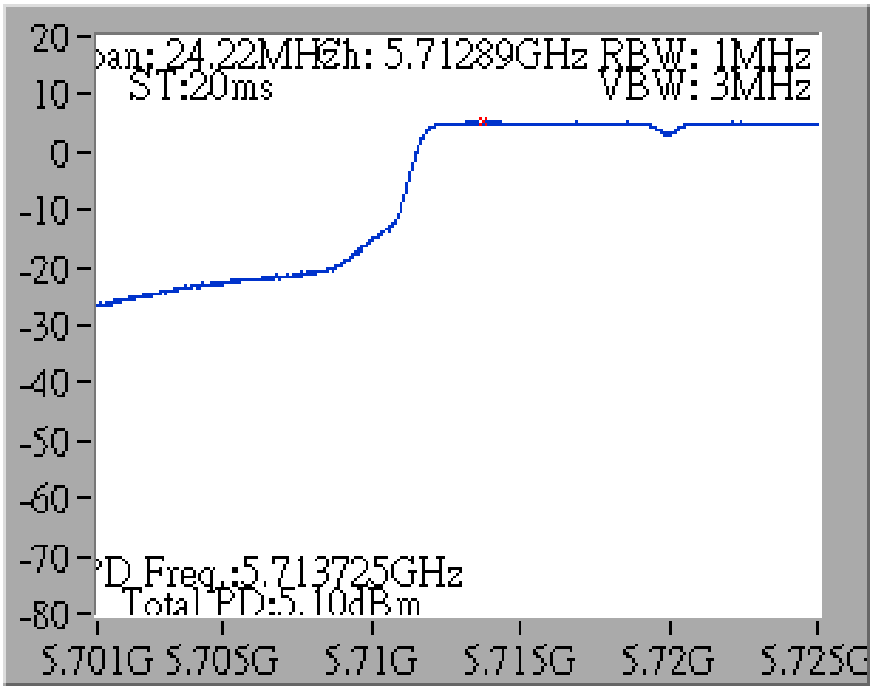


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5775 MHz

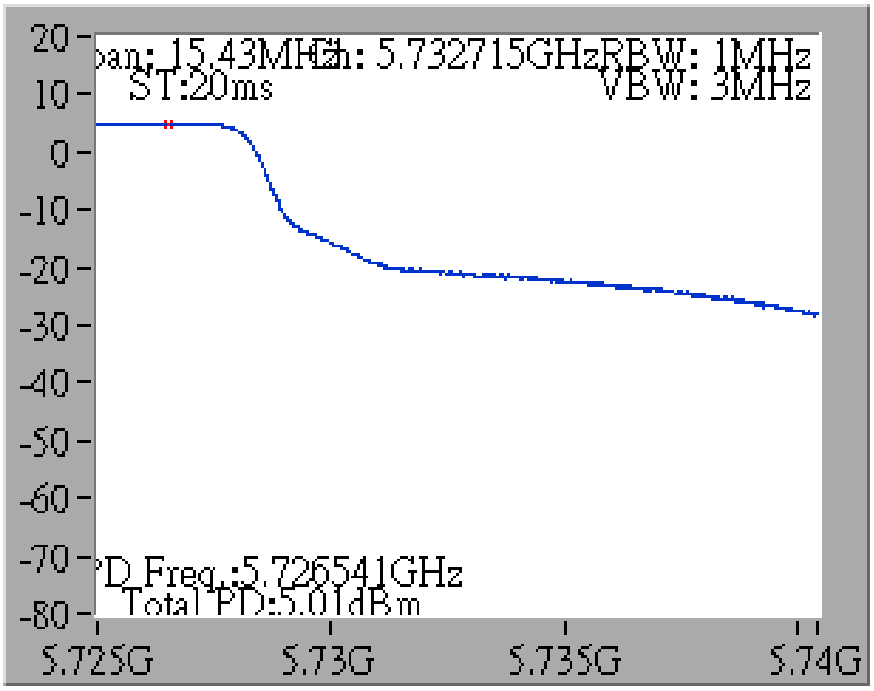


Straddle Channel

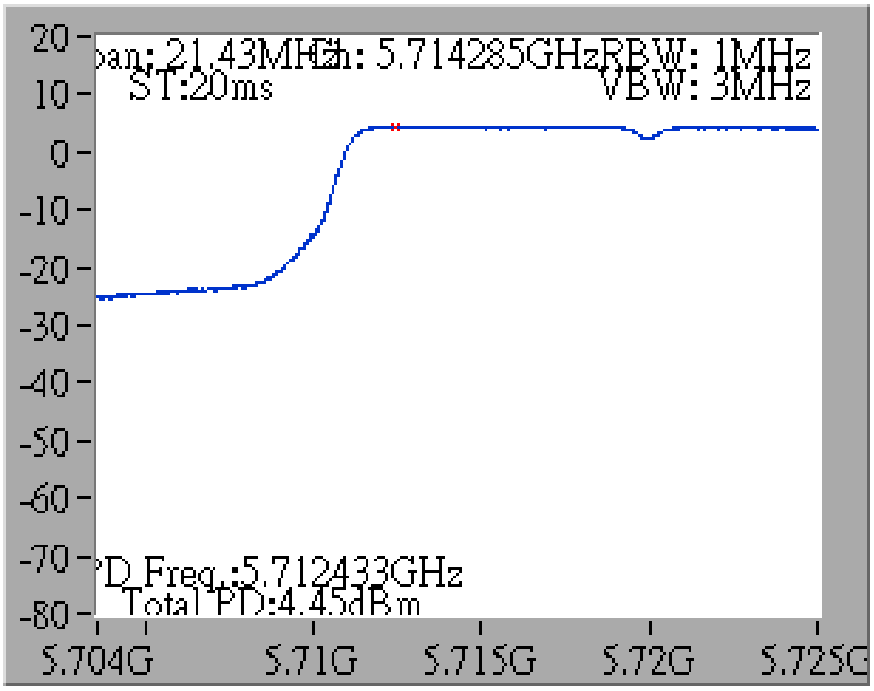
Power Density Plot on Configuration IEEE 802.11a / Chain 1 / 5720 MHz (UNII 2C)



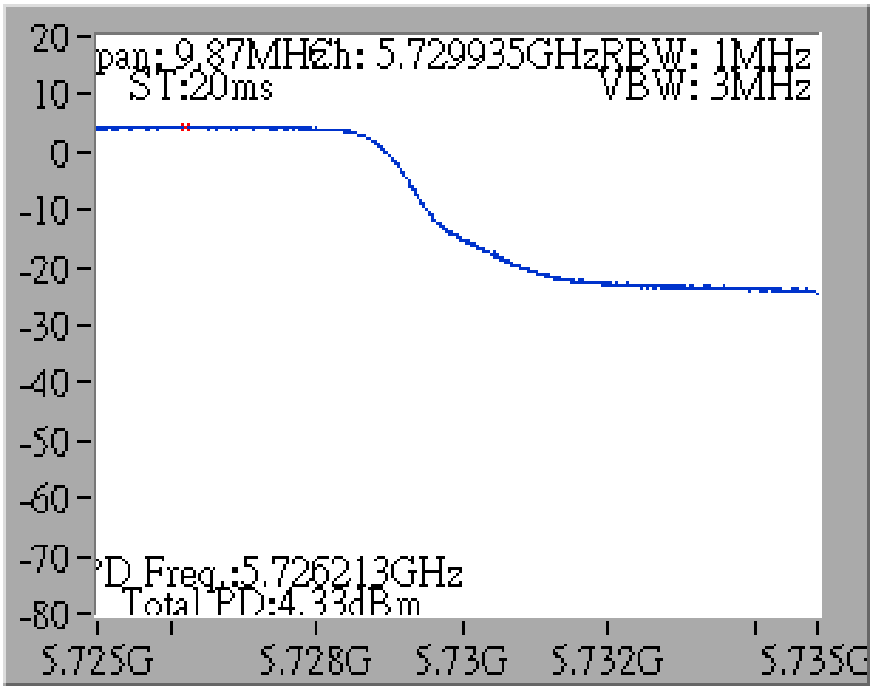
Power Density Plot on Configuration IEEE 802.11a / Chain 1 / 5720 MHz (UNII 3)



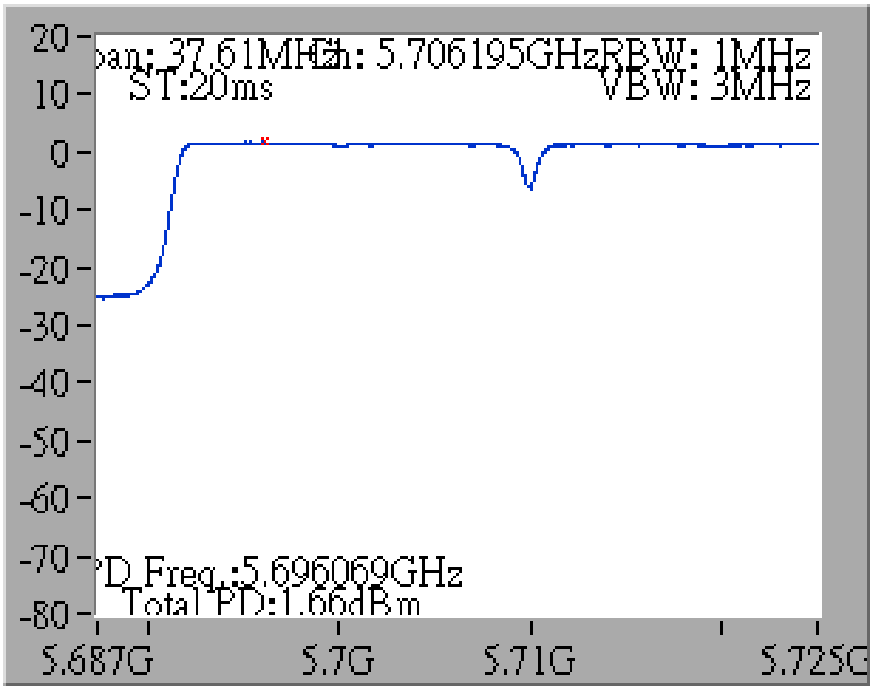
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 2C)



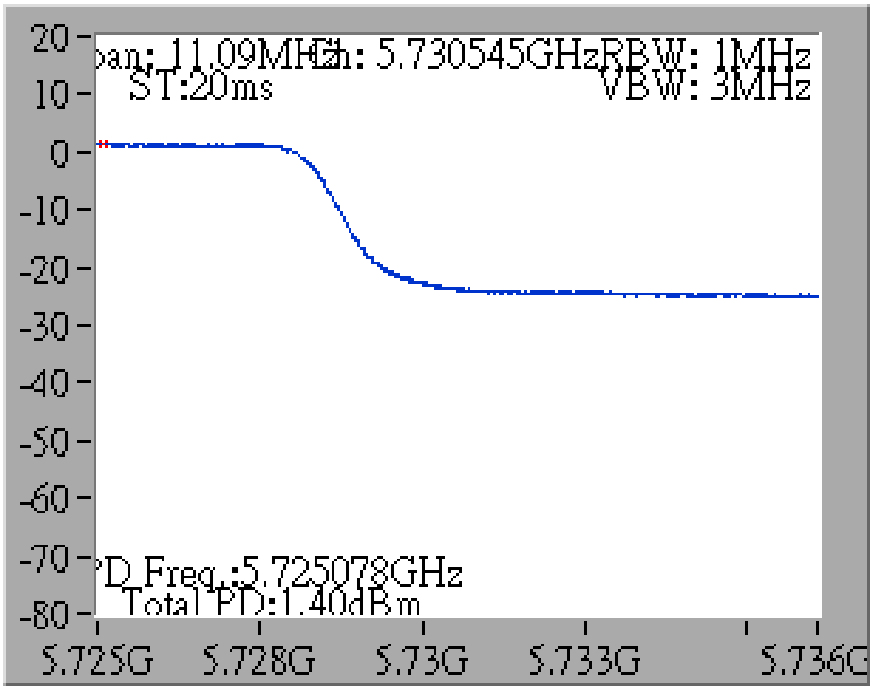
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 / 5720 MHz (UNII 3)



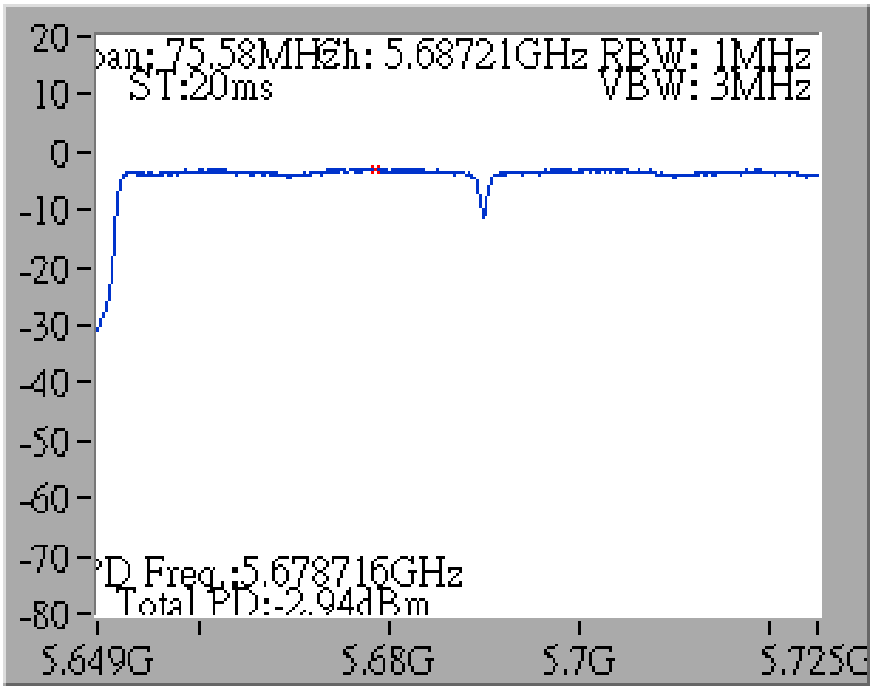
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 2C)



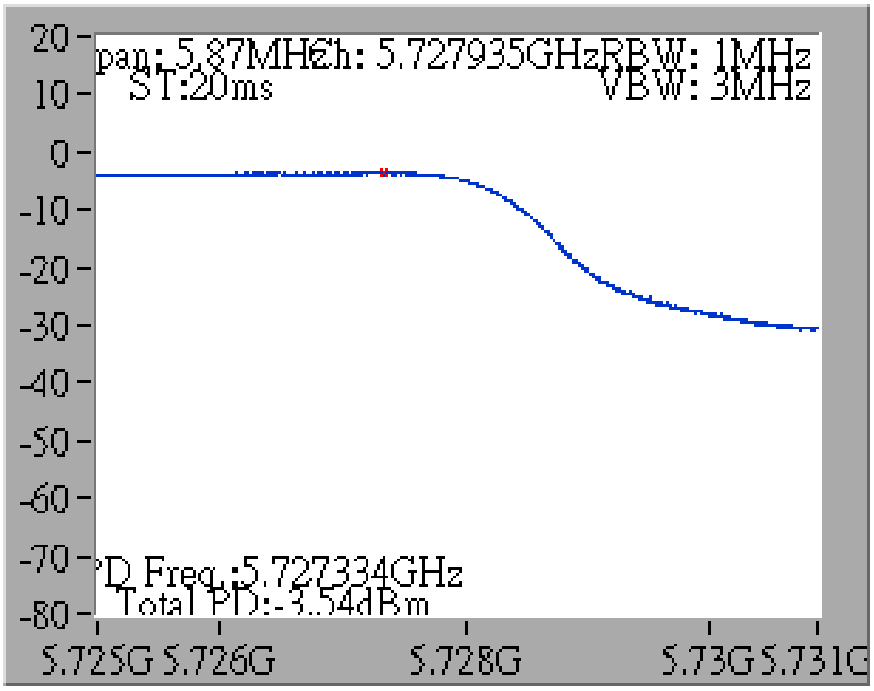
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 / 5710 MHz (UNII 3)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 2C)

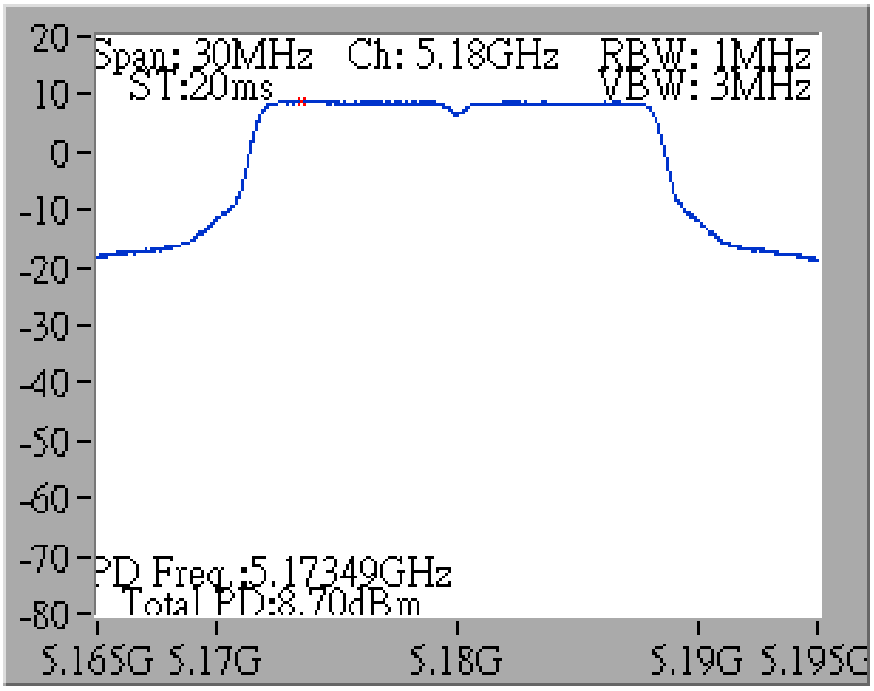


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 / 5690 MHz (UNII 3)

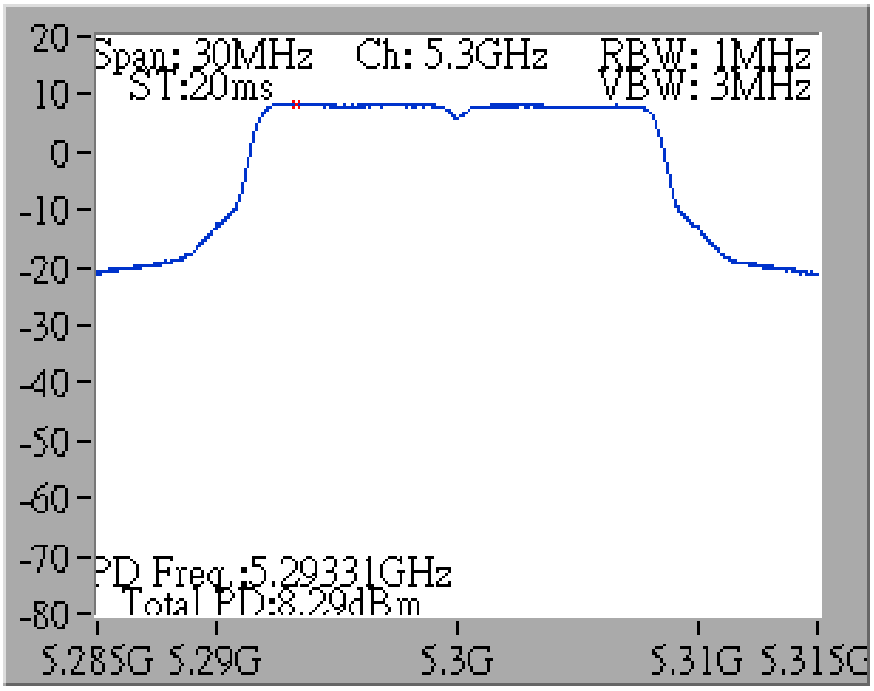


Chain 1: 5.9dBi, Chain 2: 5.4dBi / 2TX

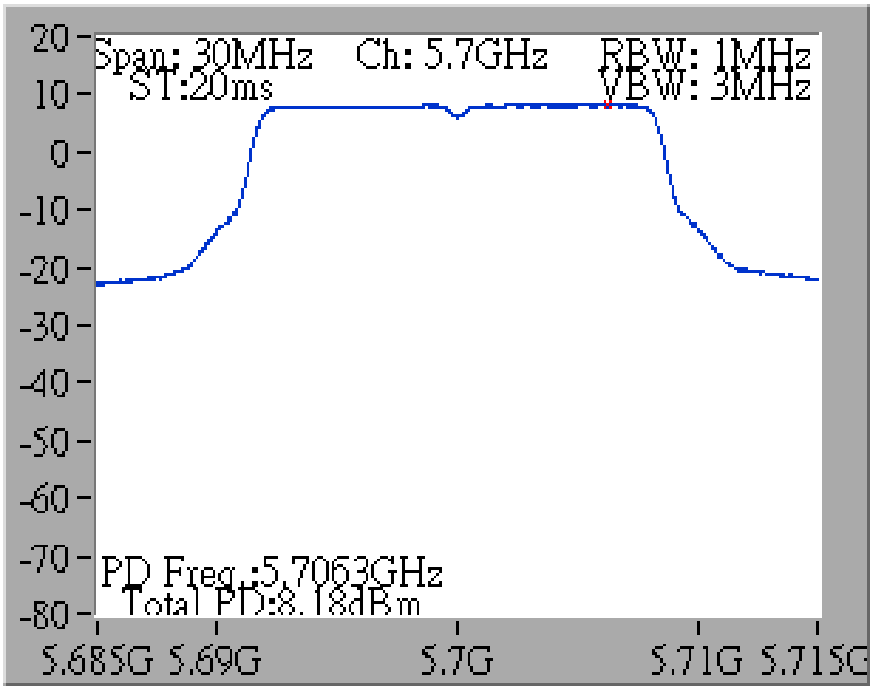
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5180 MHz



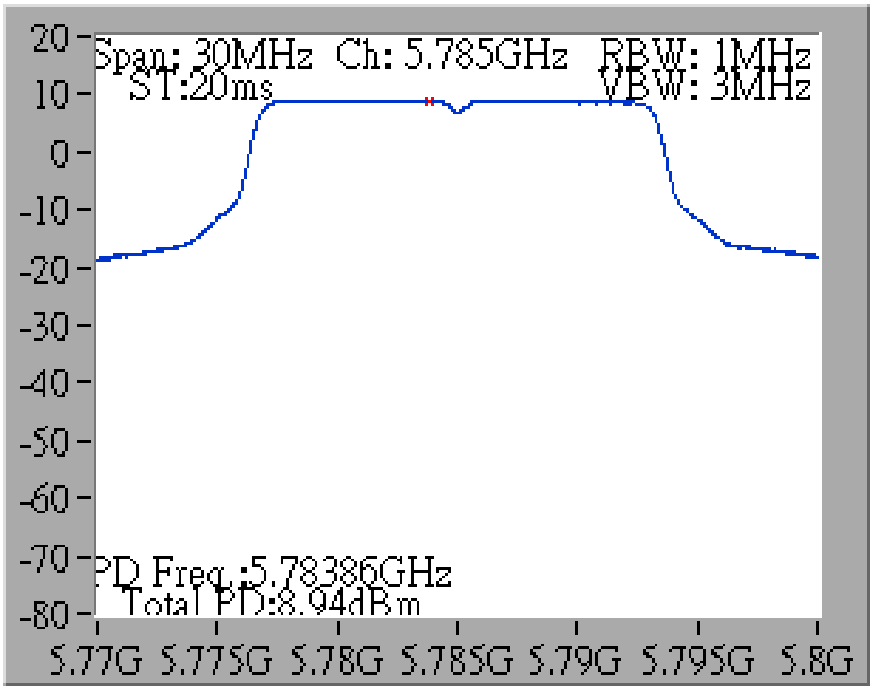
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5300 MHz



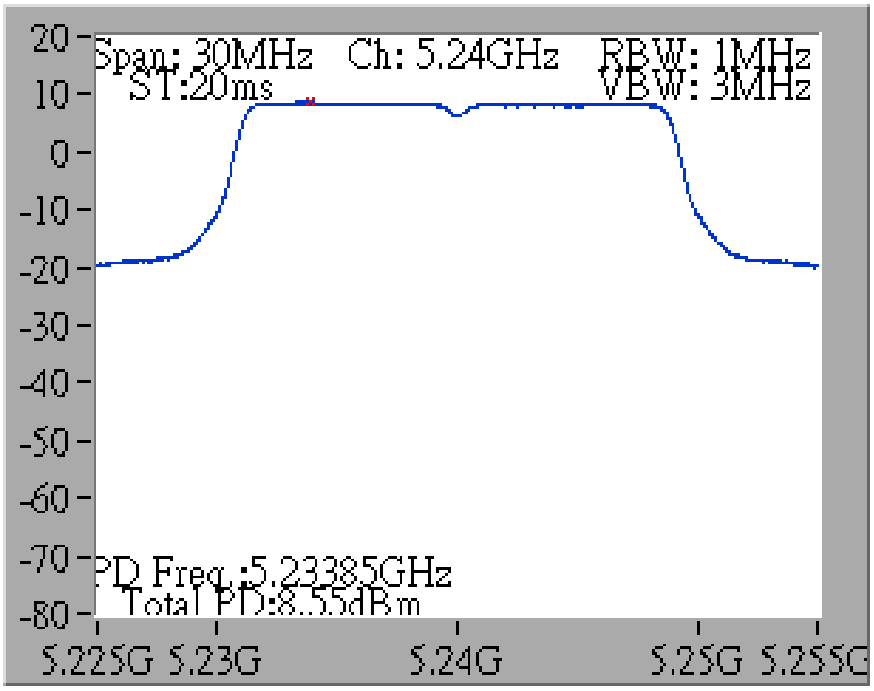
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5700 MHz



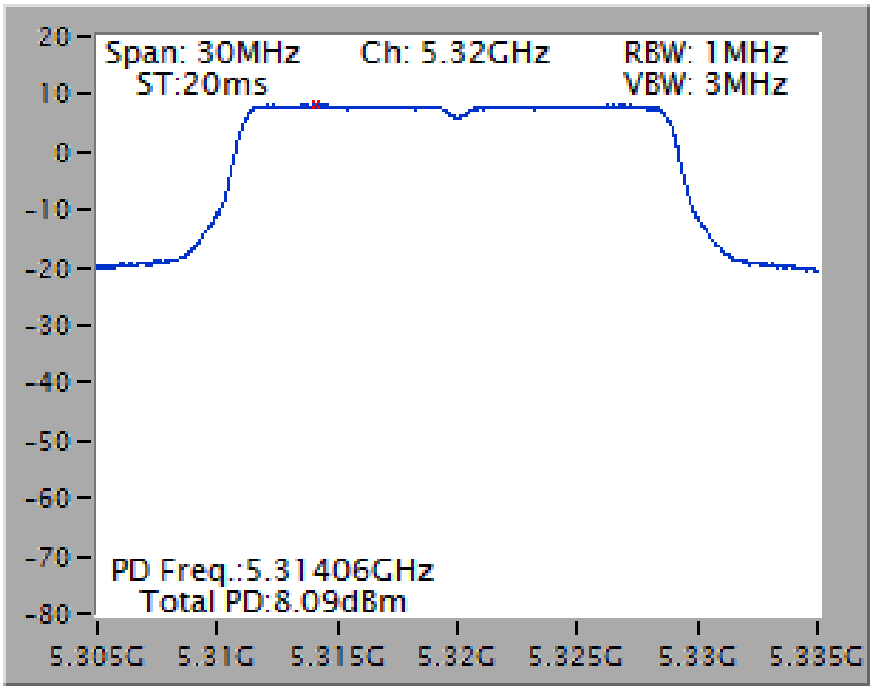
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5785 MHz



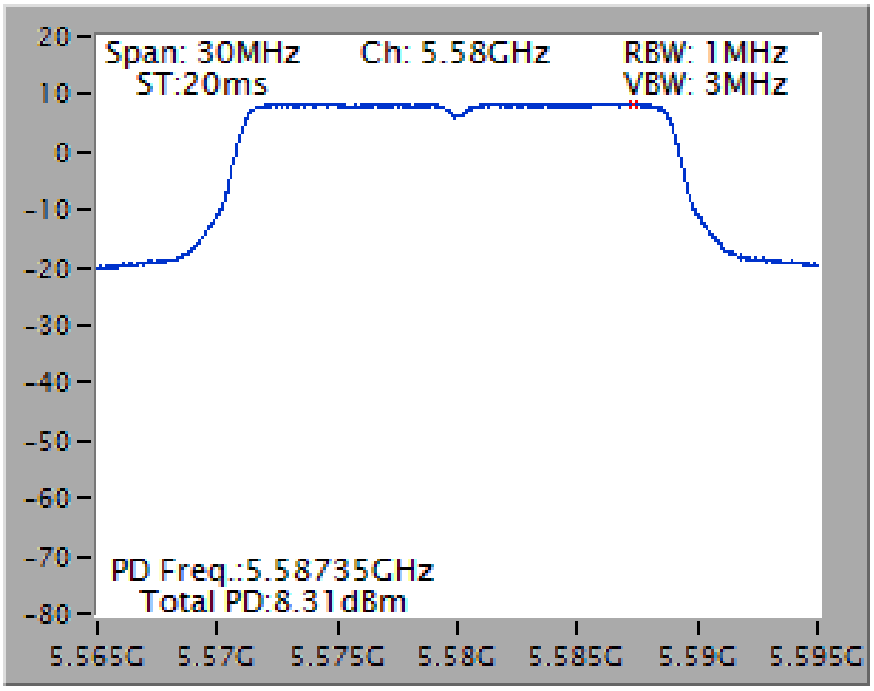
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5240 MHz



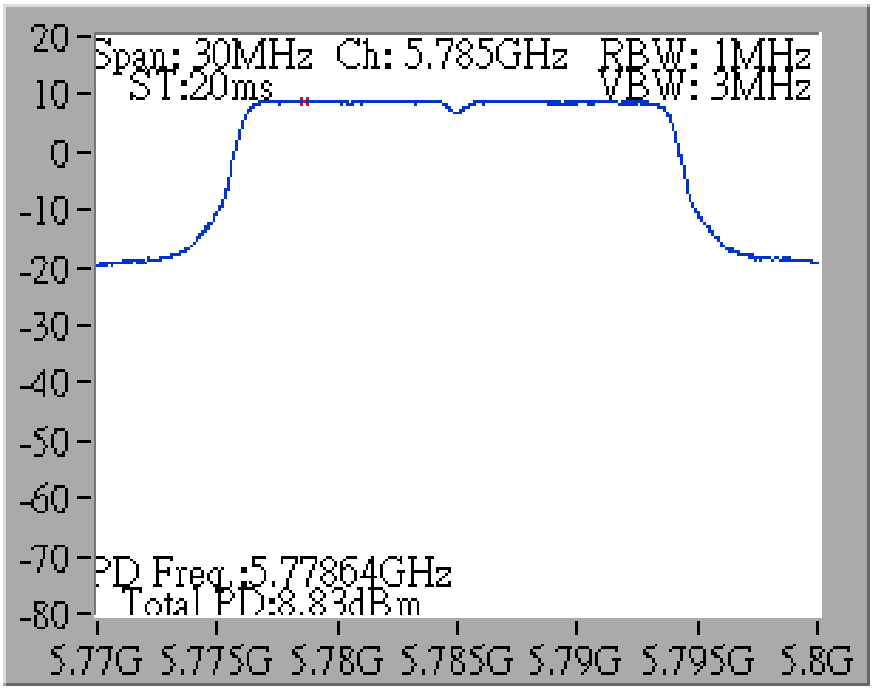
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5320 MHz



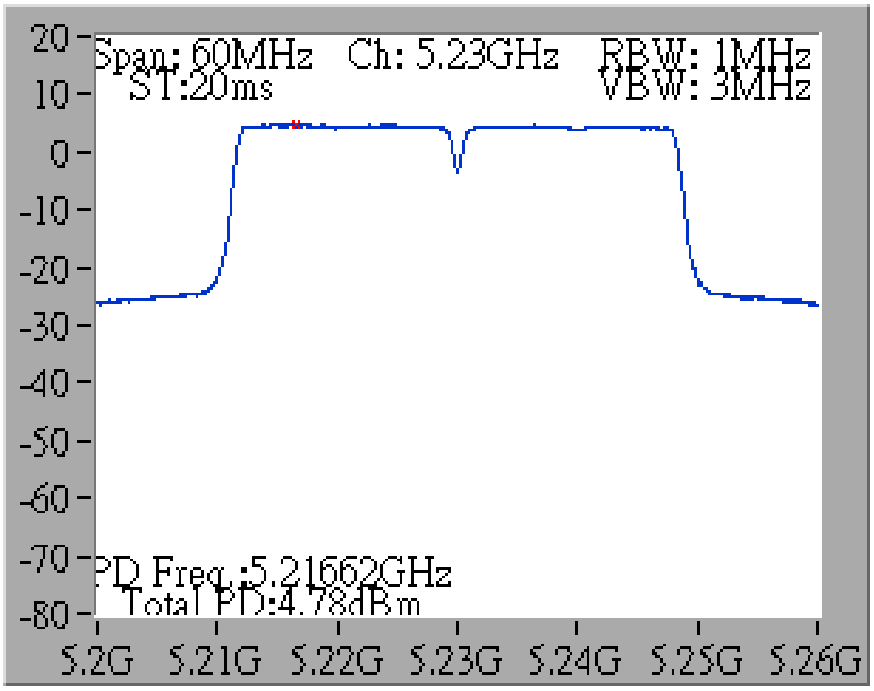
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5580 MHz



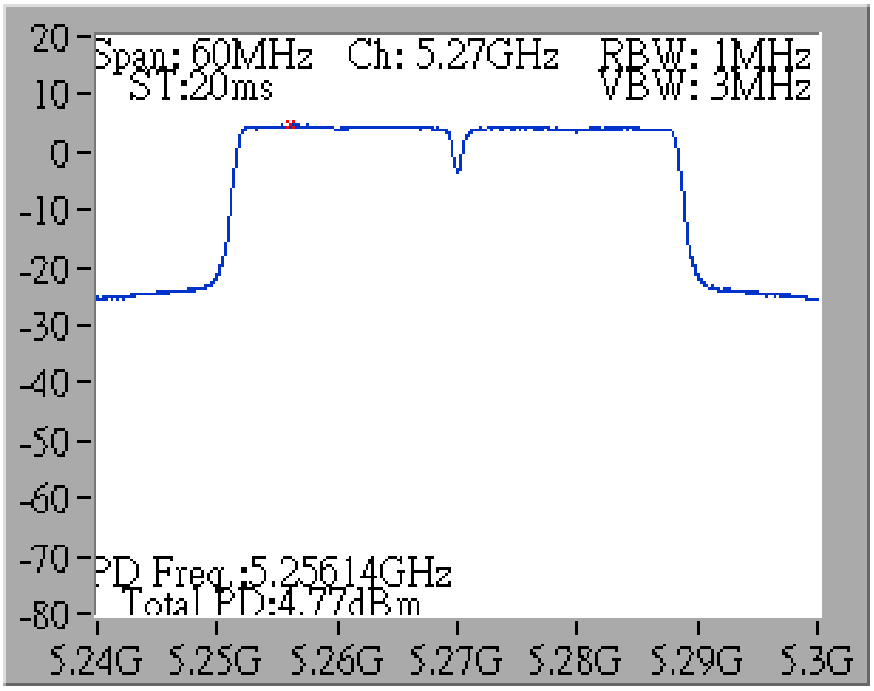
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5785 MHz



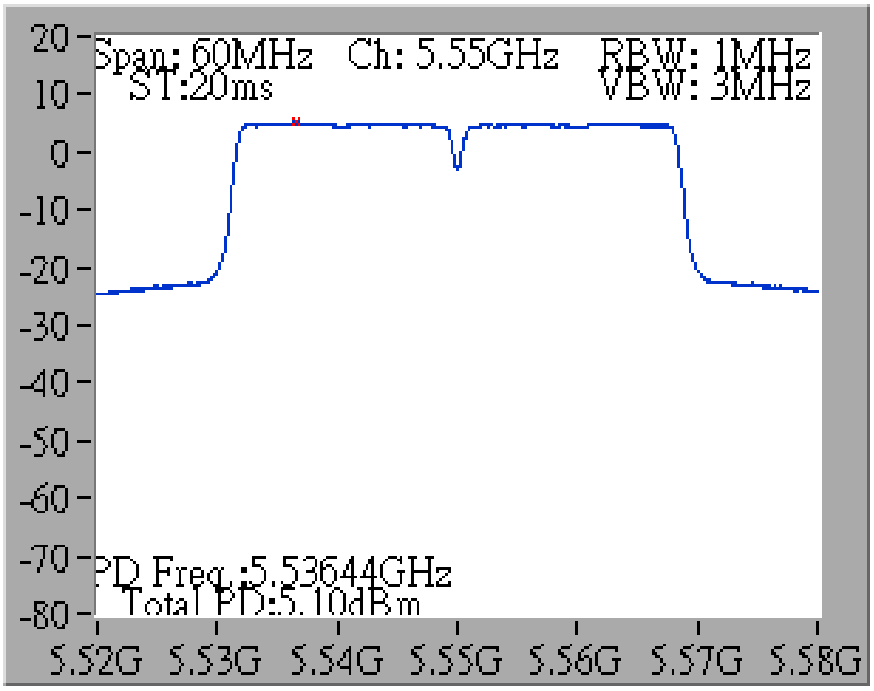
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5230 MHz



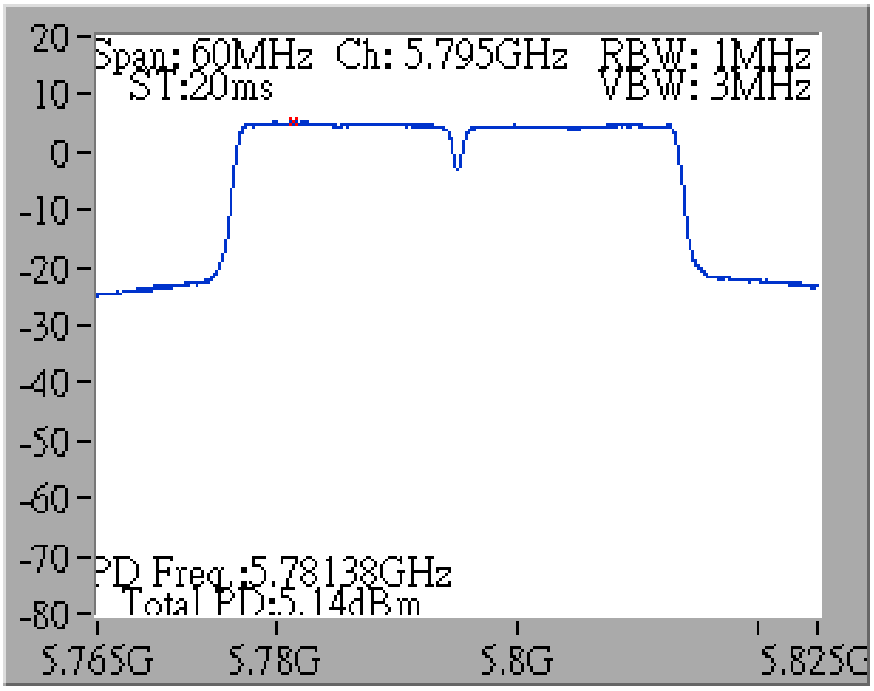
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5270 MHz



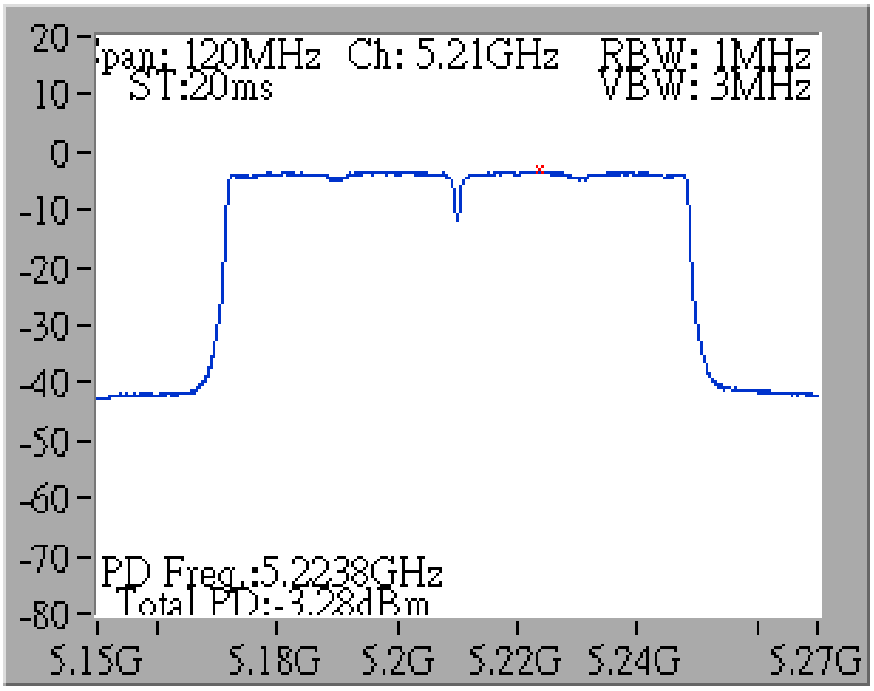
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5550 MHz



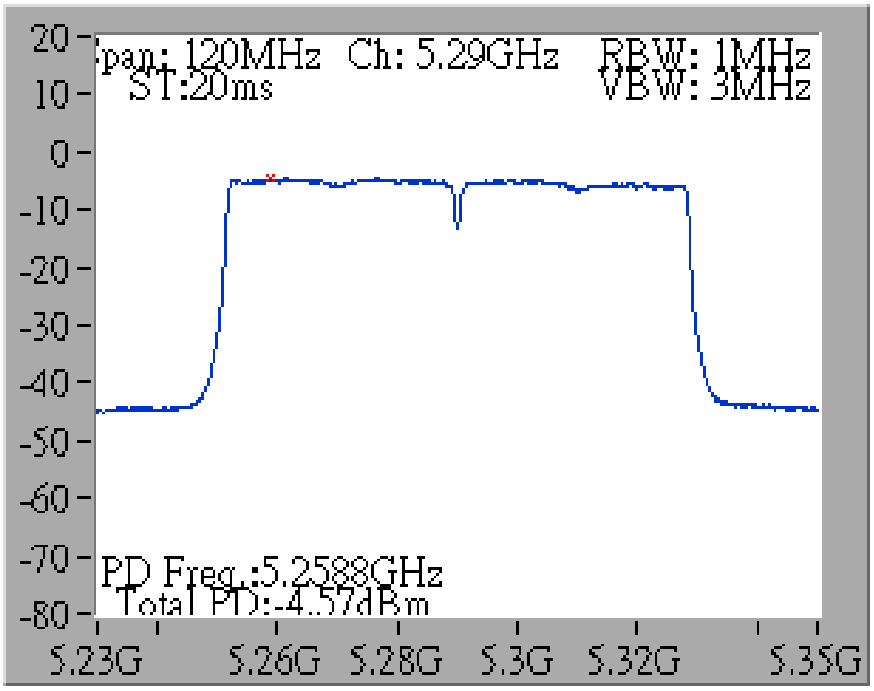
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5795 MHz



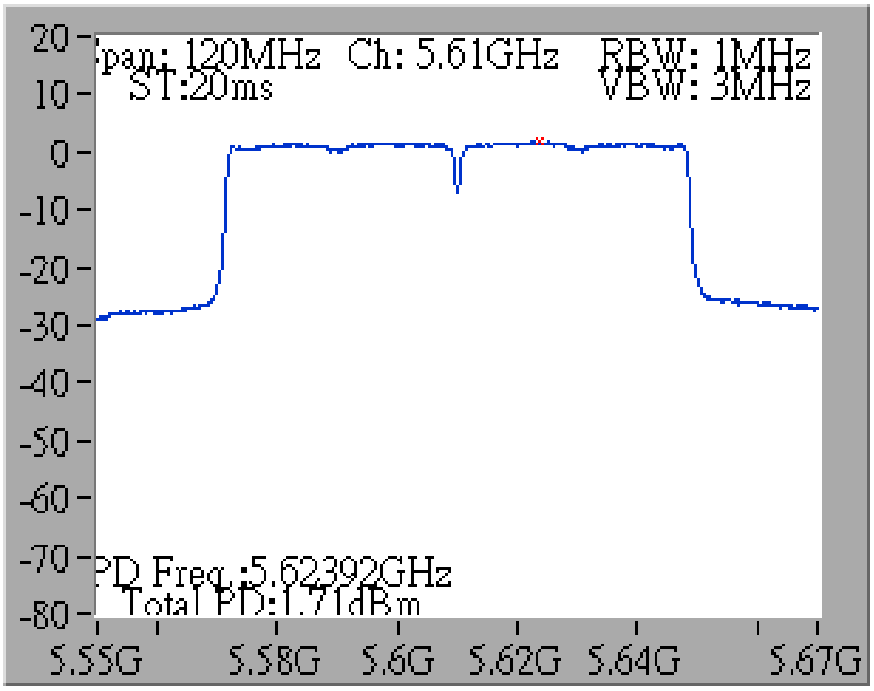
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5210 MHz



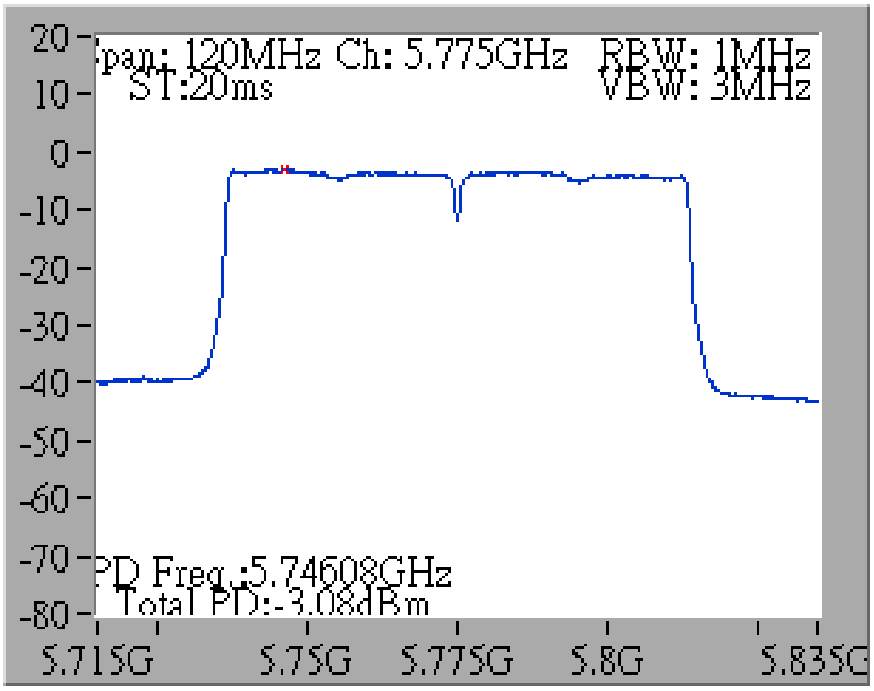
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5290 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5610 MHz

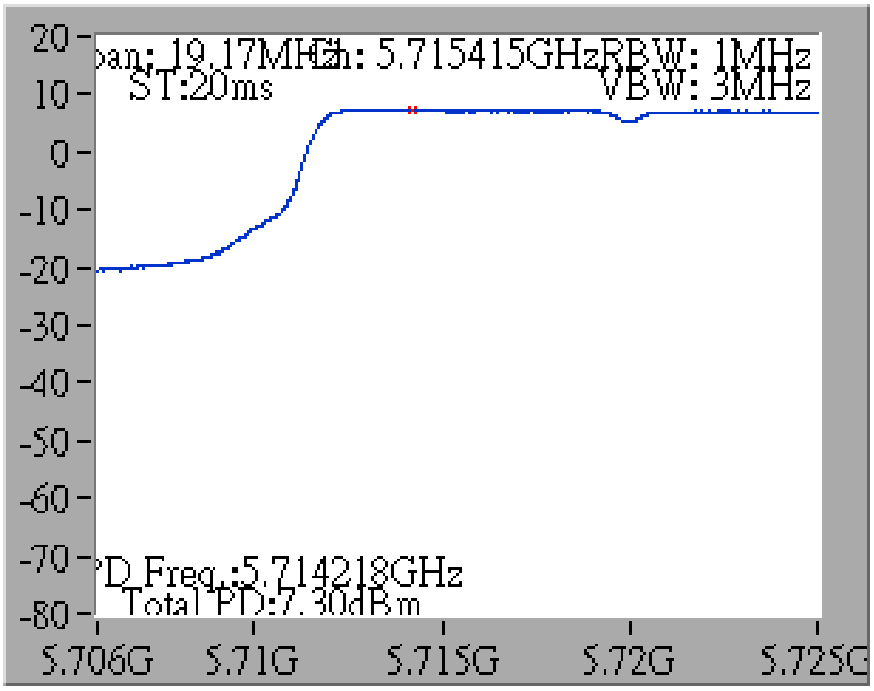


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5775 MHz

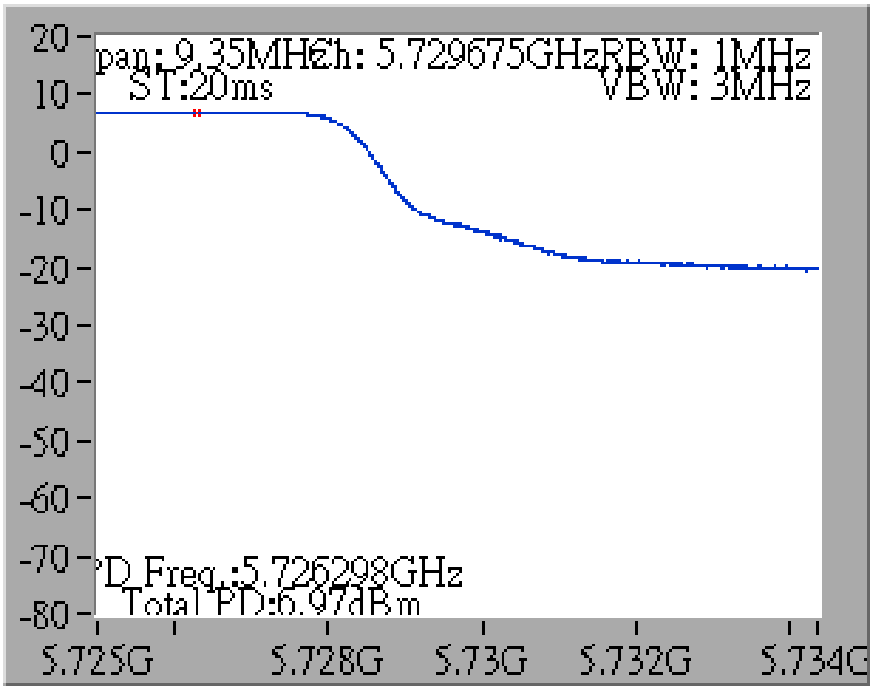


Straddle Channel

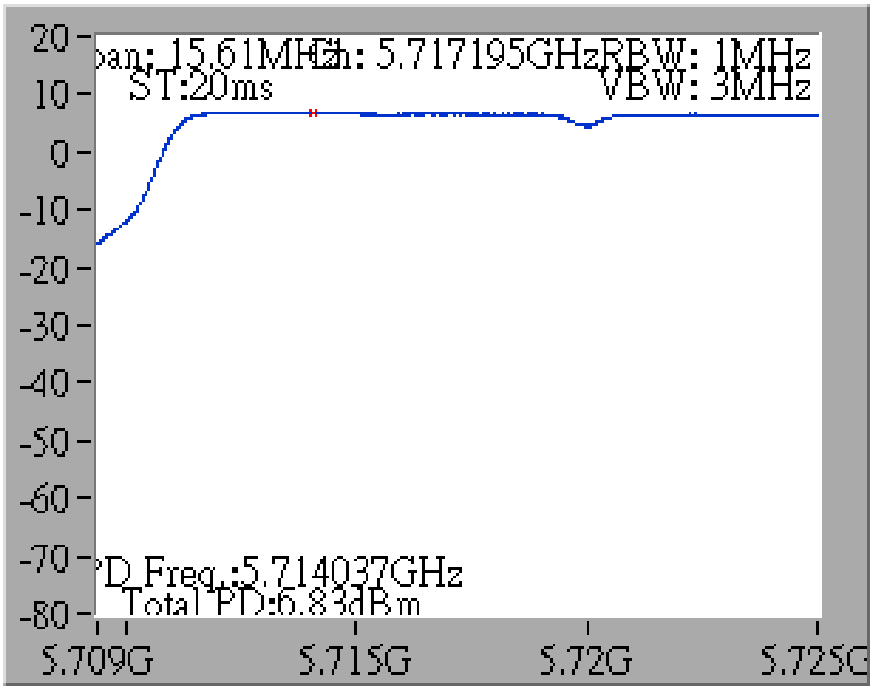
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5720 MHz (UNII 2C)



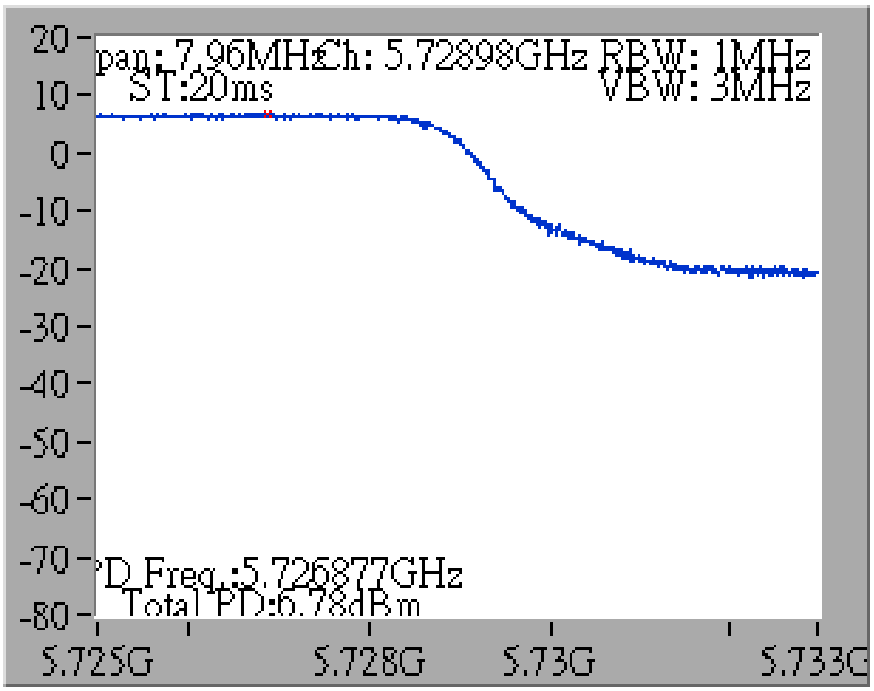
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 / 5720 MHz (UNII 3)



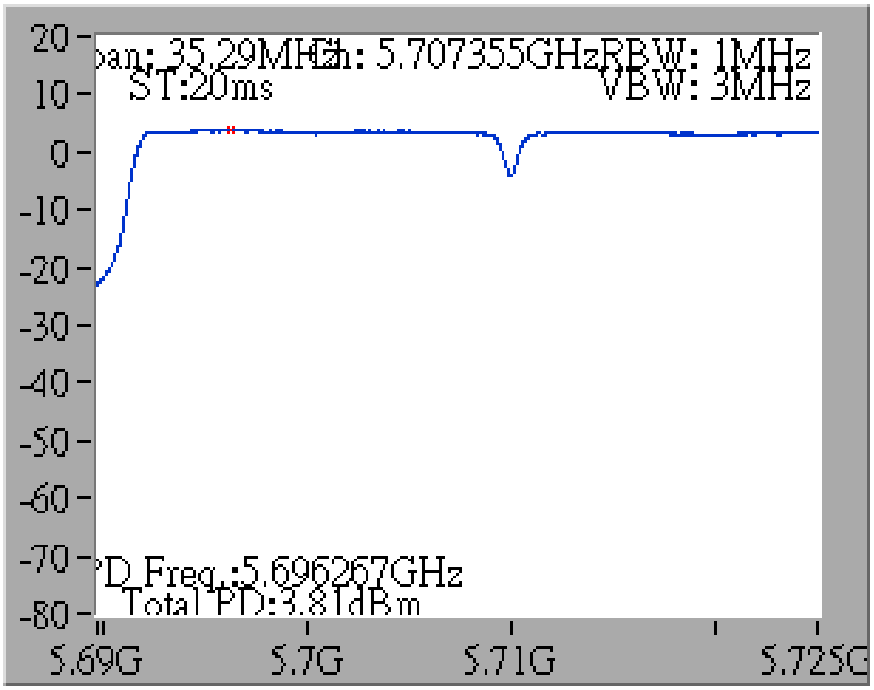
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5720 MHz (UNII 2C)



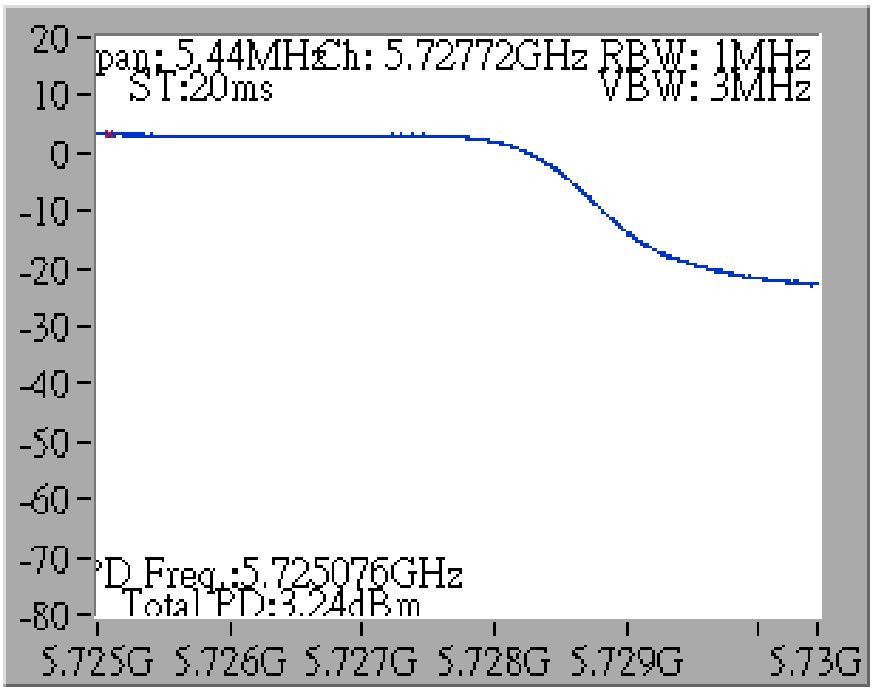
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5720 MHz (UNII 3)



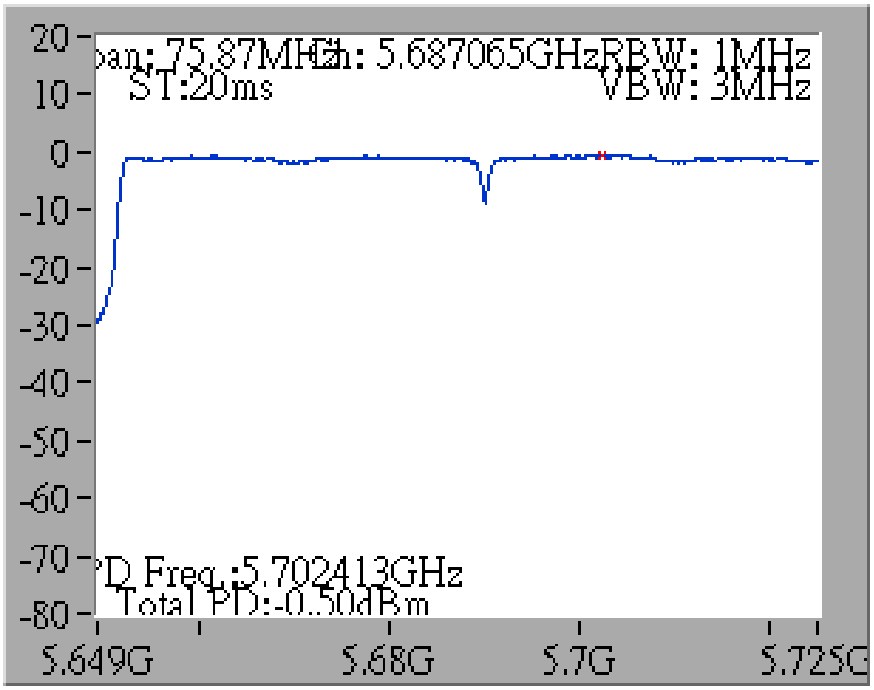
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5710 MHz (UNII 2C)



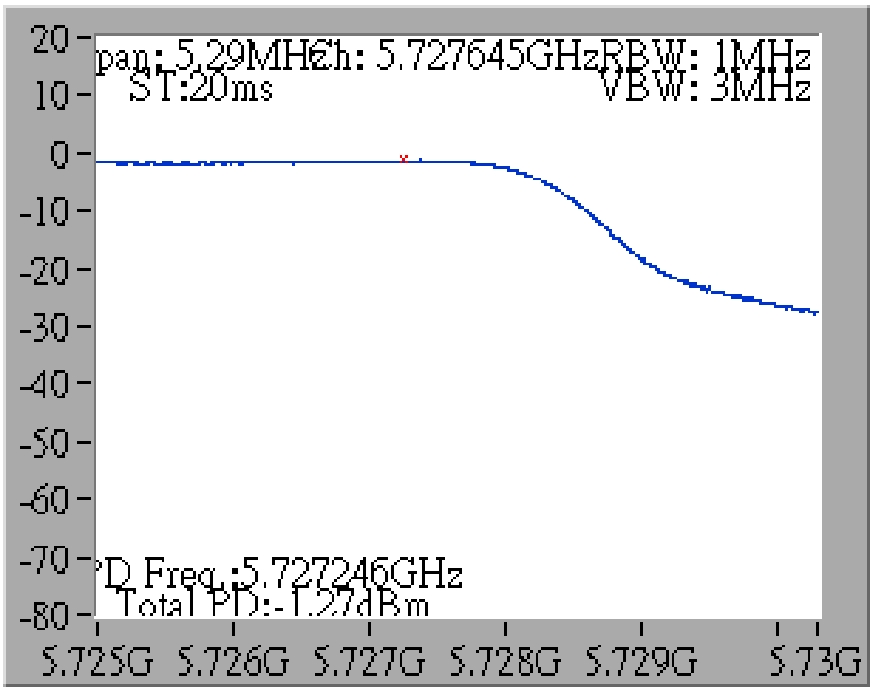
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5710 MHz (UNII 3)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5690 MHz (UNII 2C)

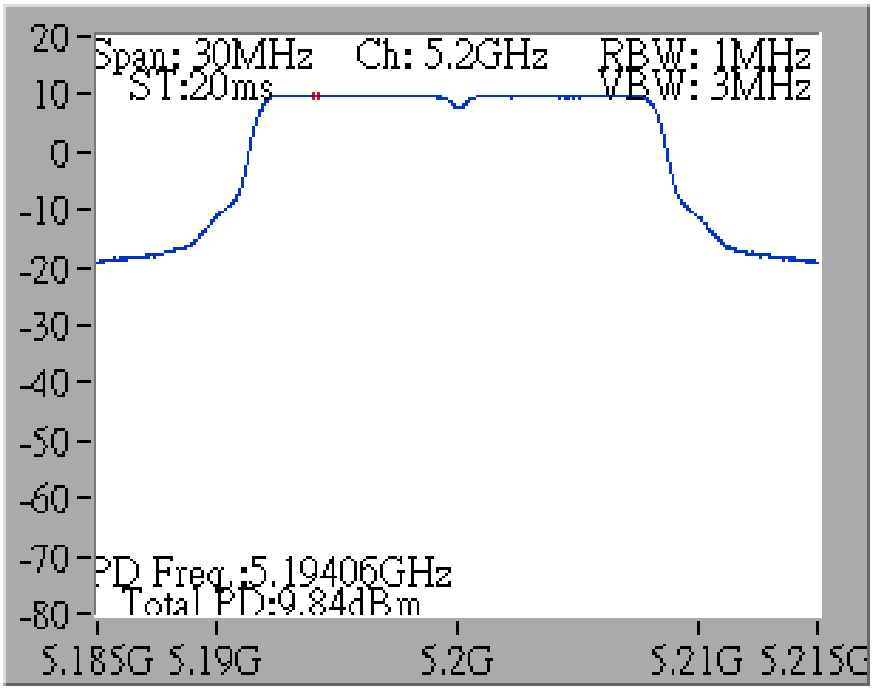


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5690 MHz (UNII 3)

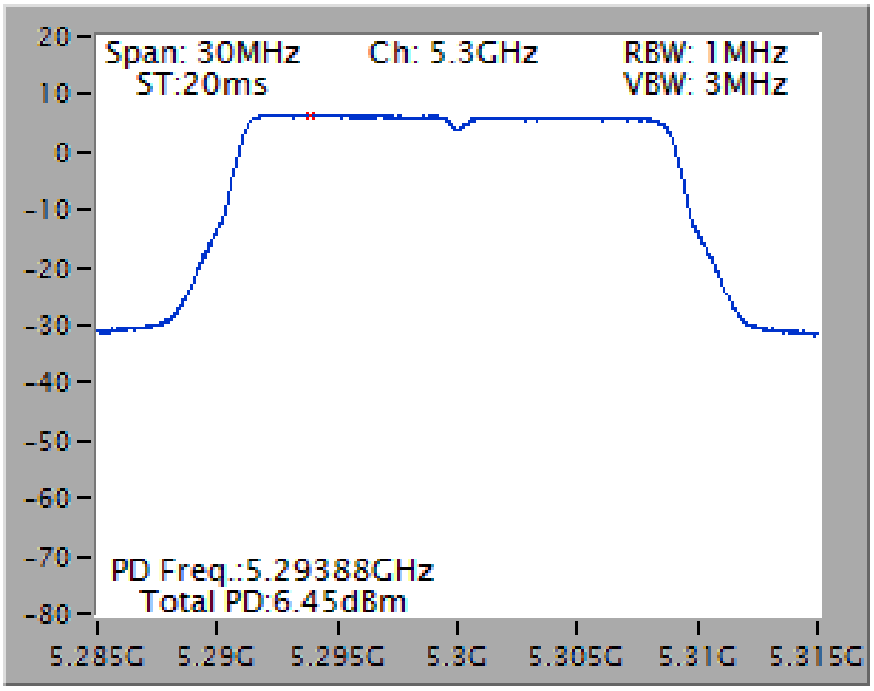


Chain 1: 5.9dBi, Chain 2: 5.4dBi, Chain 3: 5.9dBi / 3TX

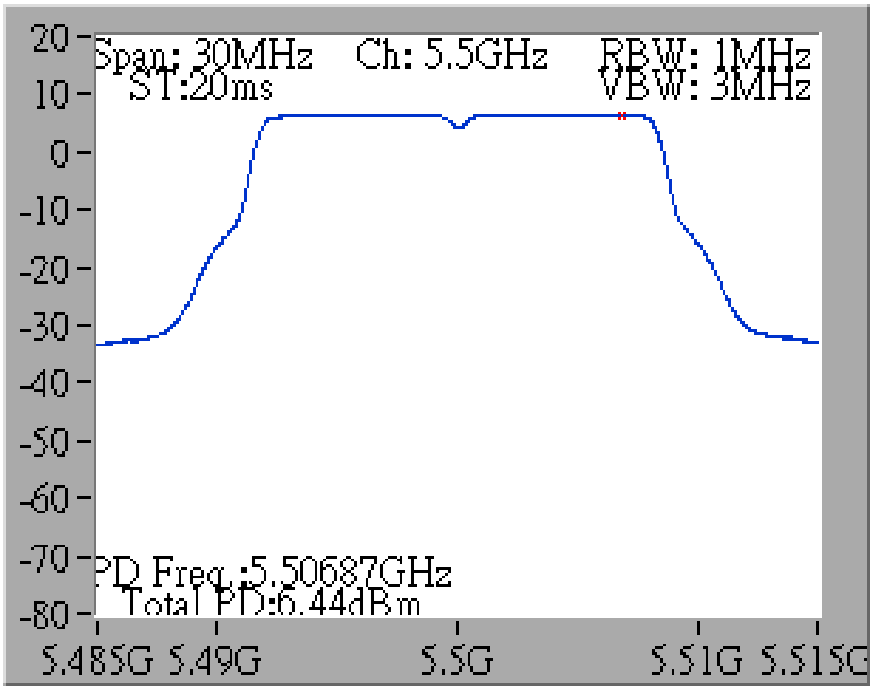
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5200 MHz



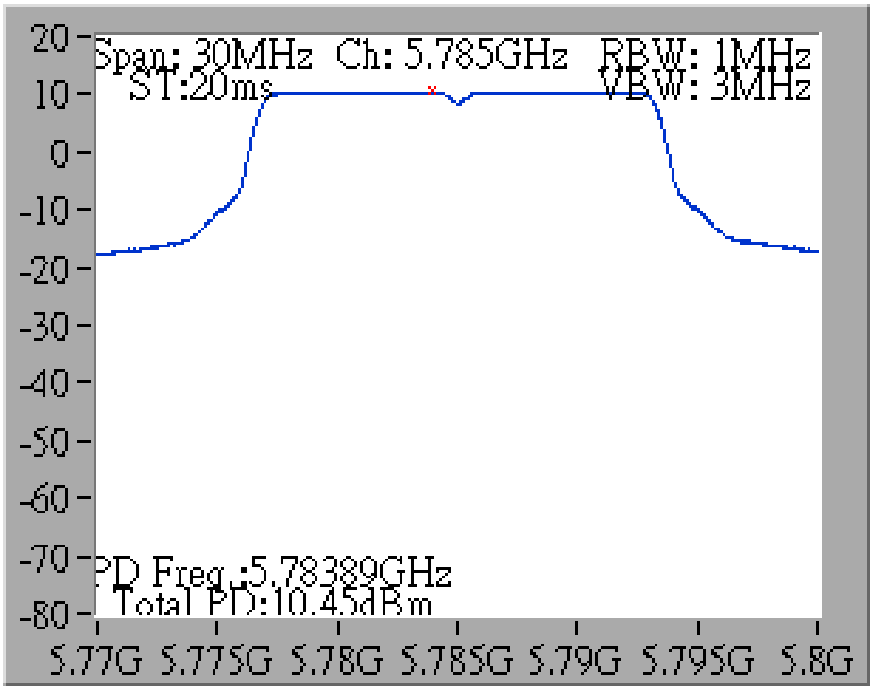
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5300 MHz



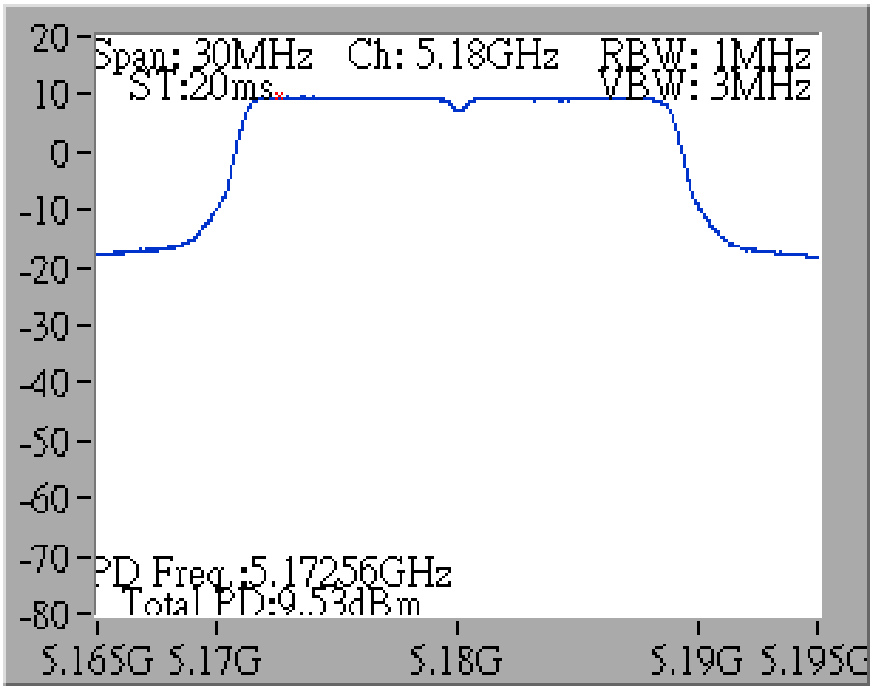
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5500 MHz



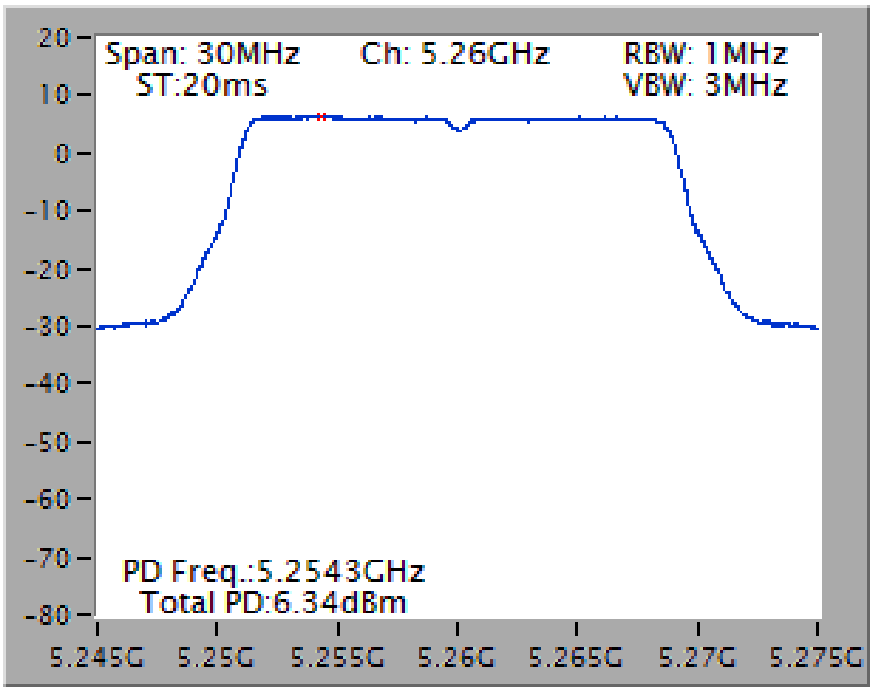
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5785 MHz



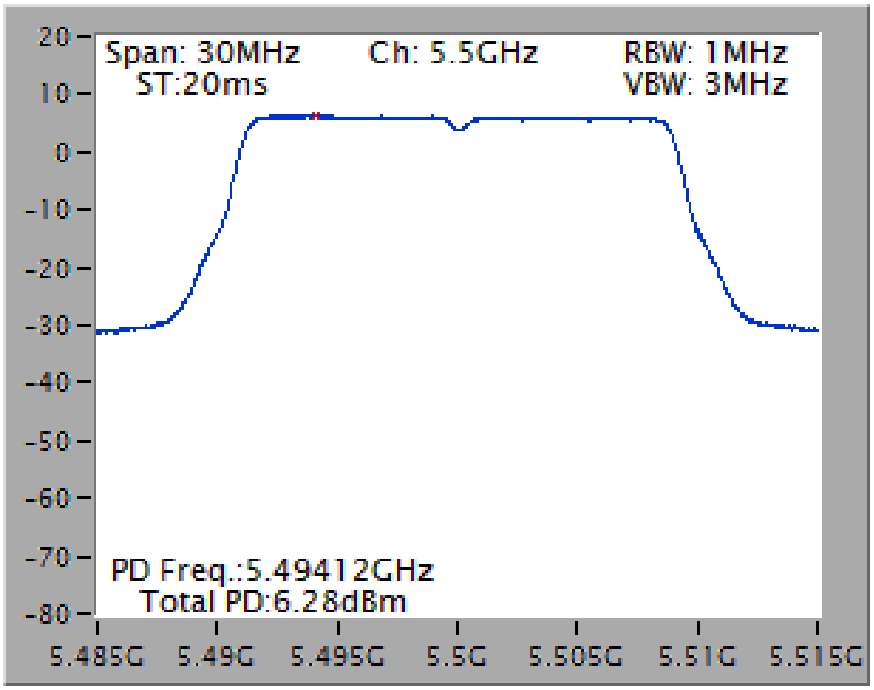
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



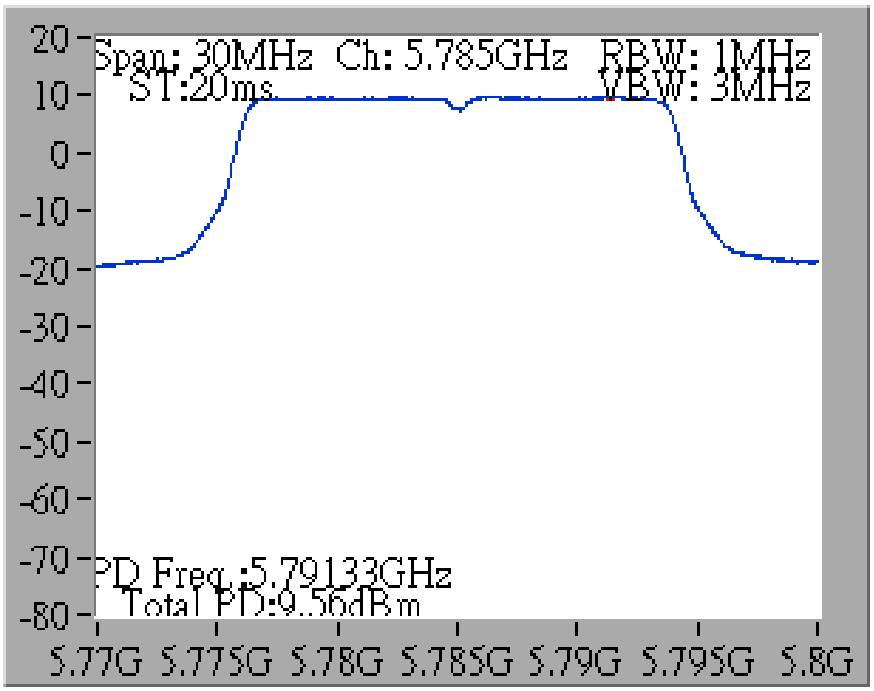
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5260 MHz



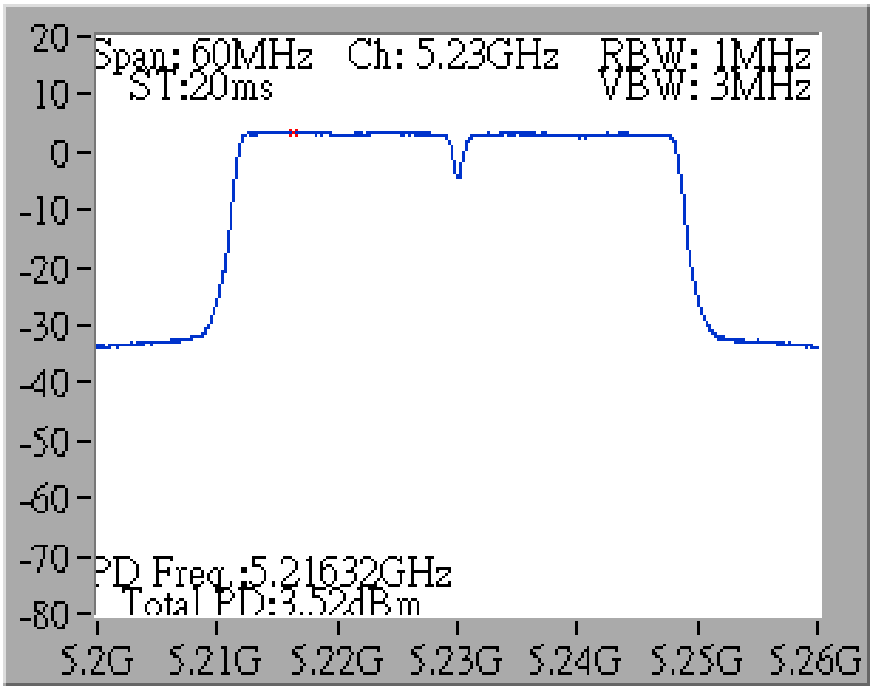
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5500 MHz



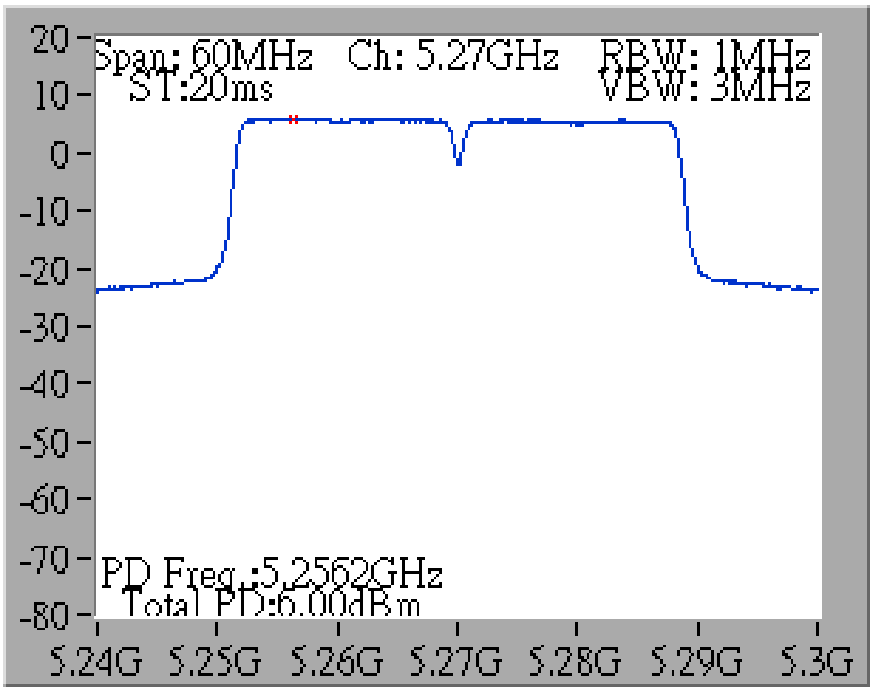
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5785 MHz



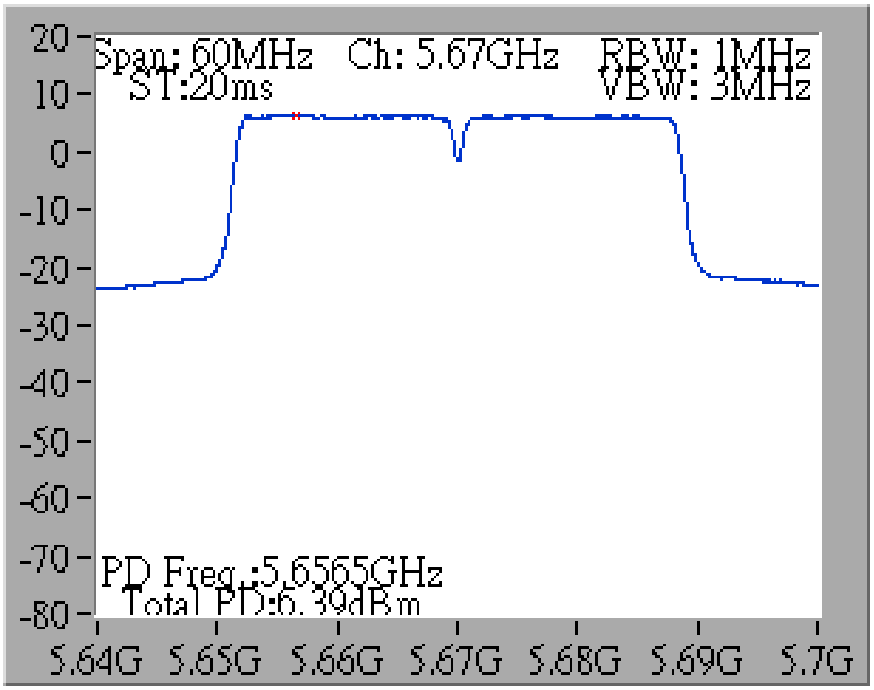
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



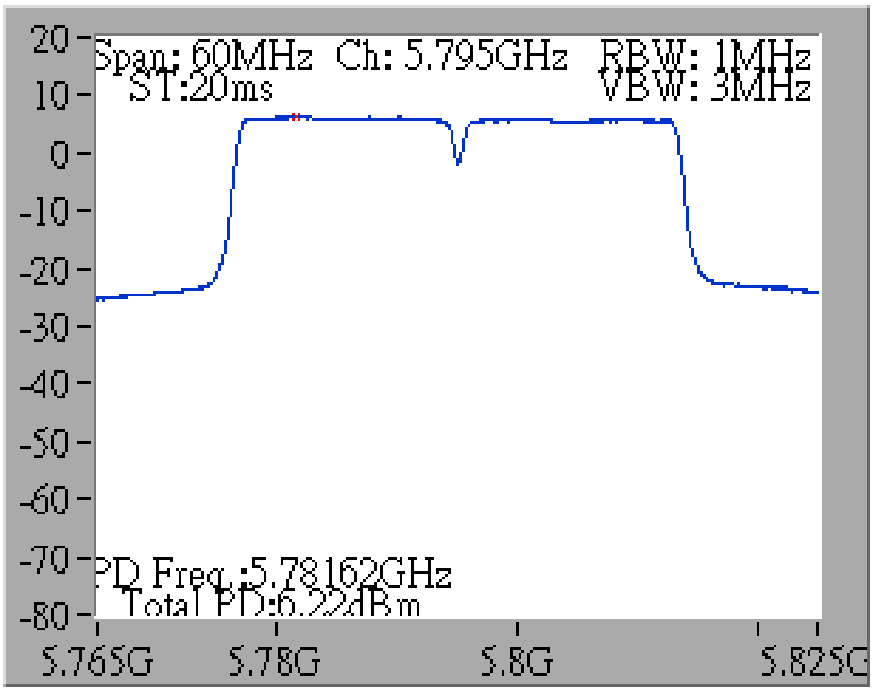
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5270 MHz



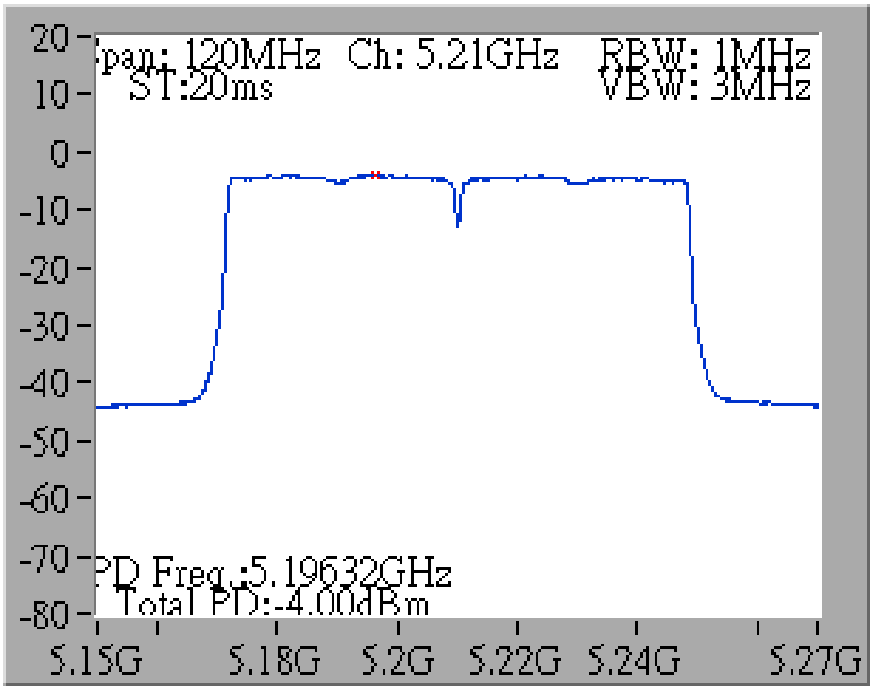
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5670 MHz



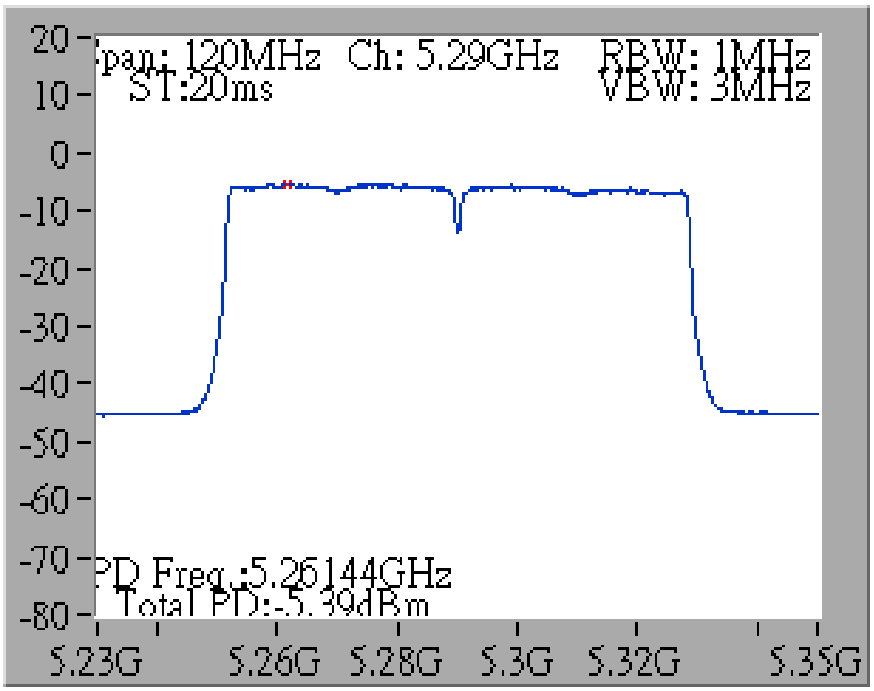
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5795 MHz



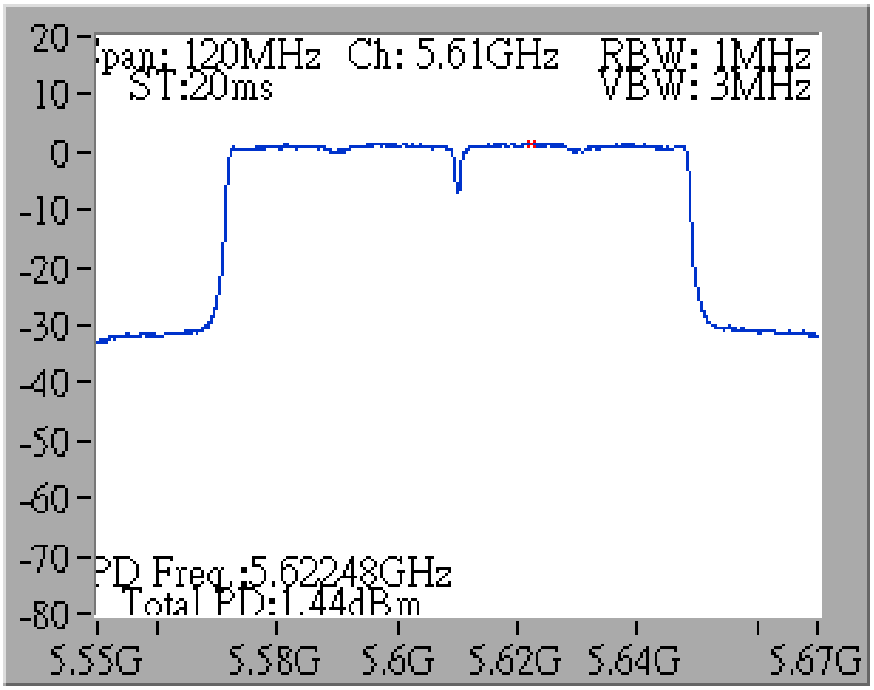
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



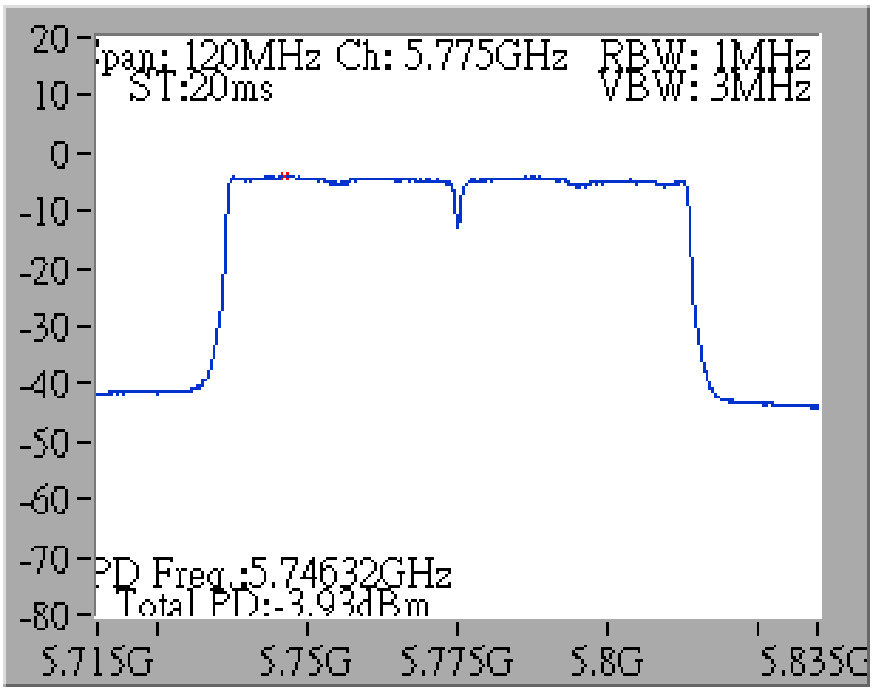
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5290 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5610 MHz

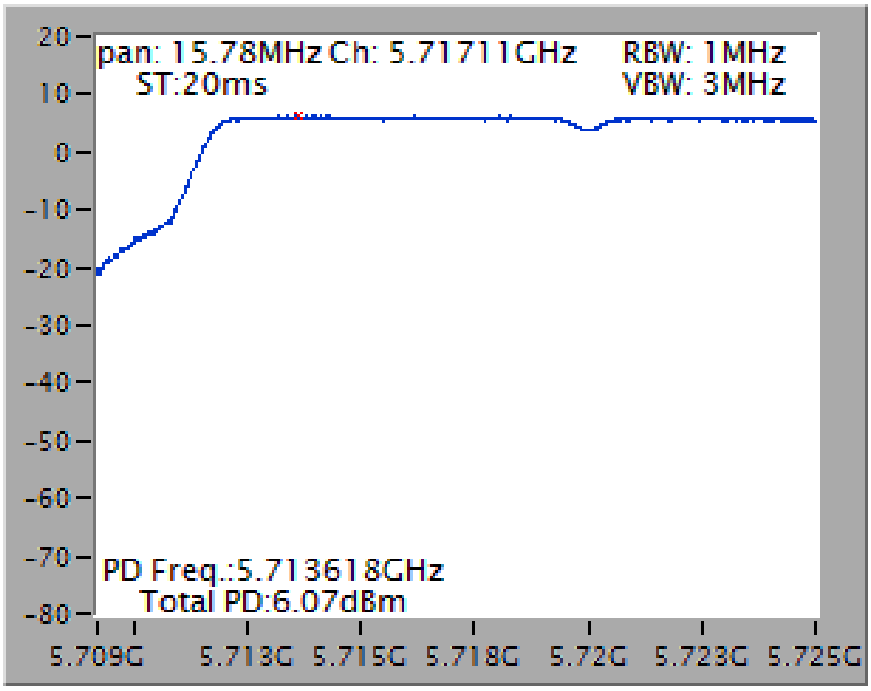


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5775 MHz

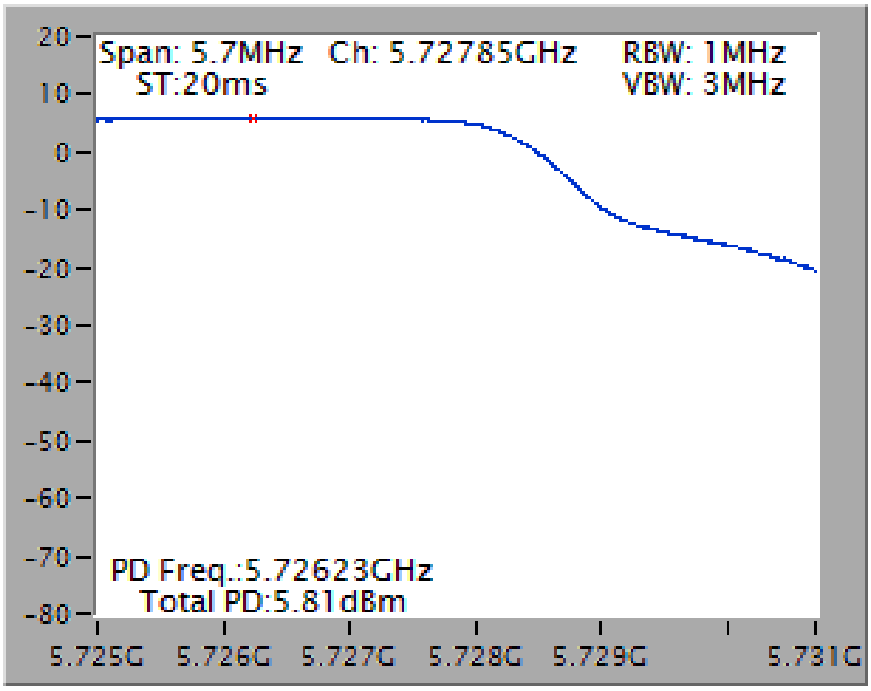


Straddle Channel

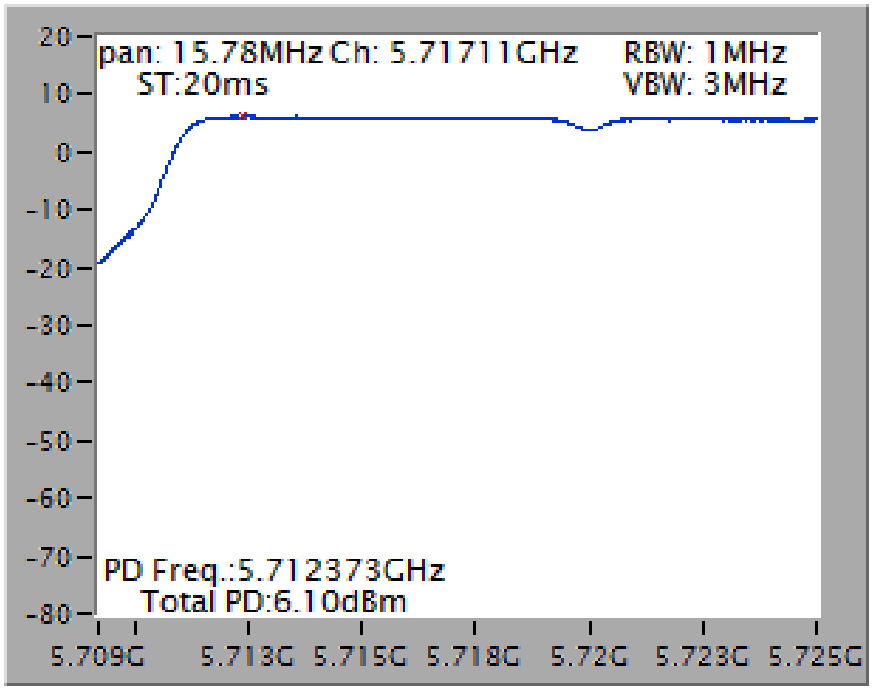
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5720 MHz (UNII 2C)



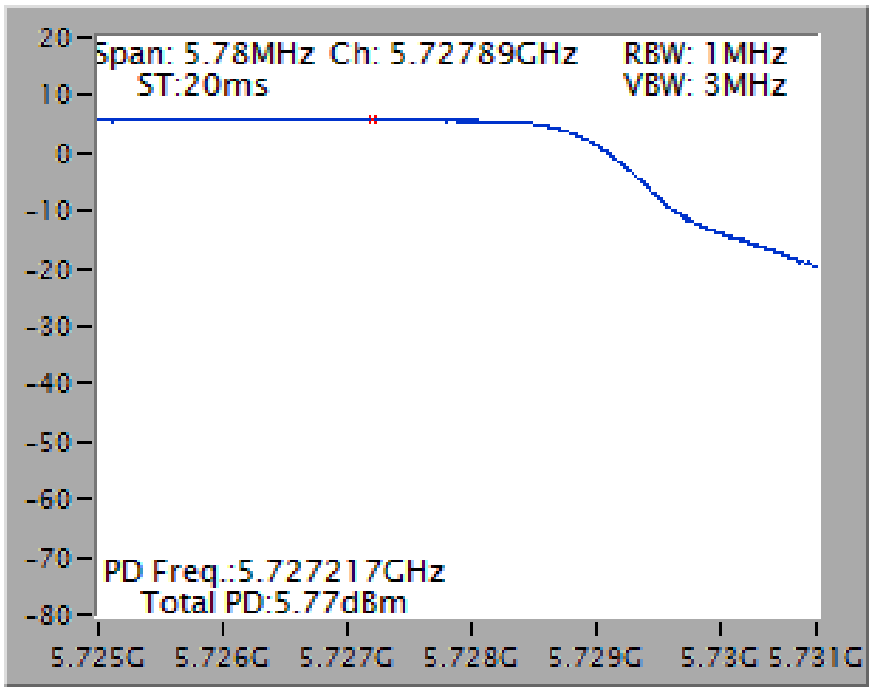
Power Density Plot on Configuration IEEE 802.11a / Chain 1 + Chain 2 + Chain 3 / 5720 MHz (UNII 3)



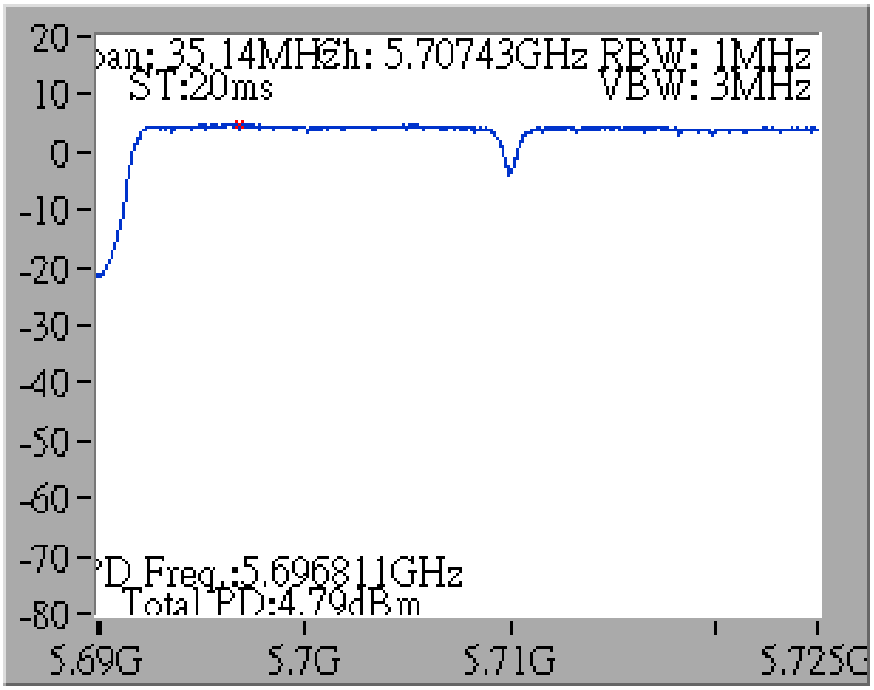
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5720 MHz (UNII 2C)



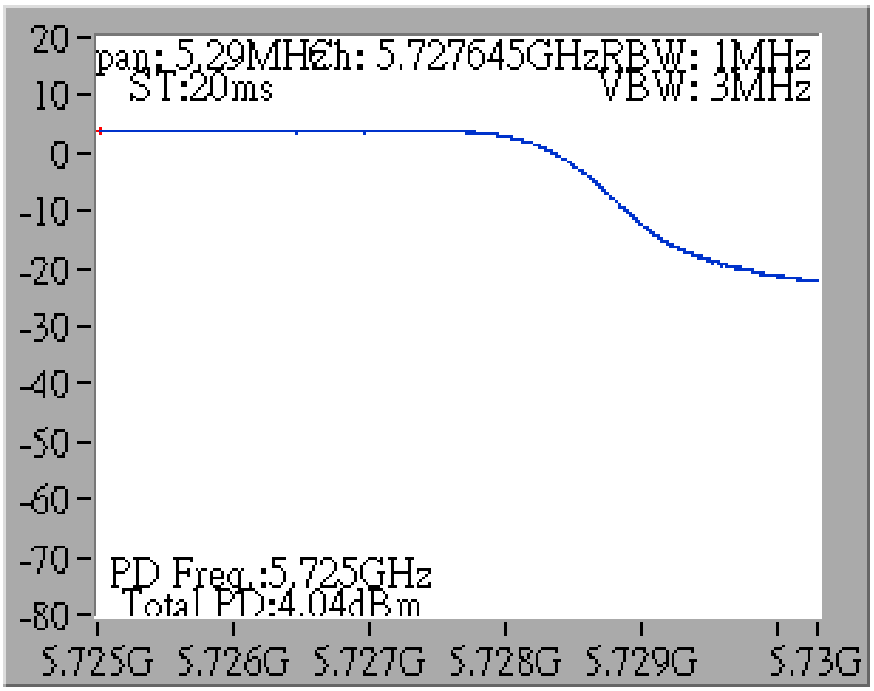
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5720 MHz (UNII 3)



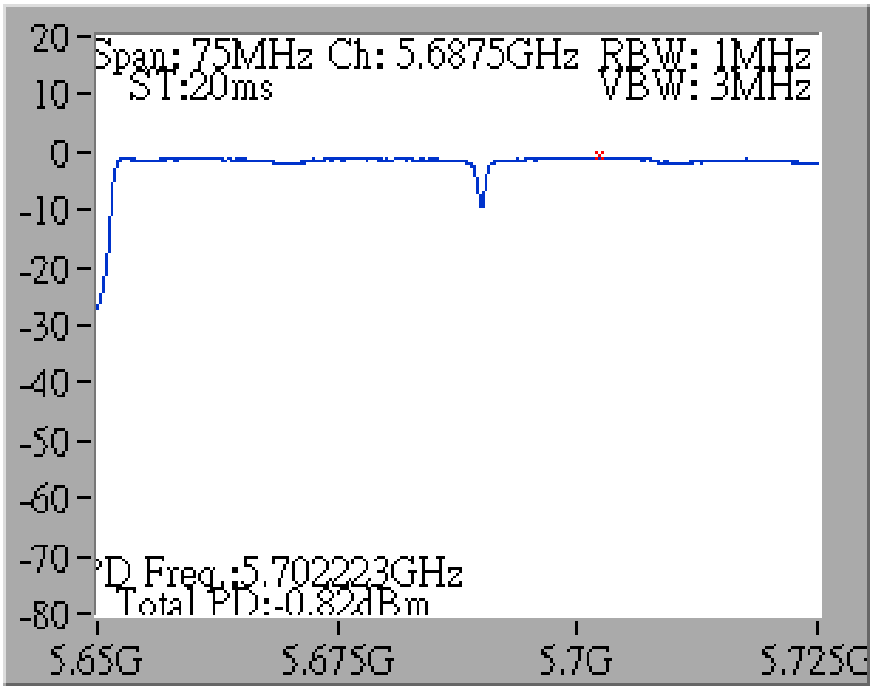
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5710 MHz (UNII 2C)



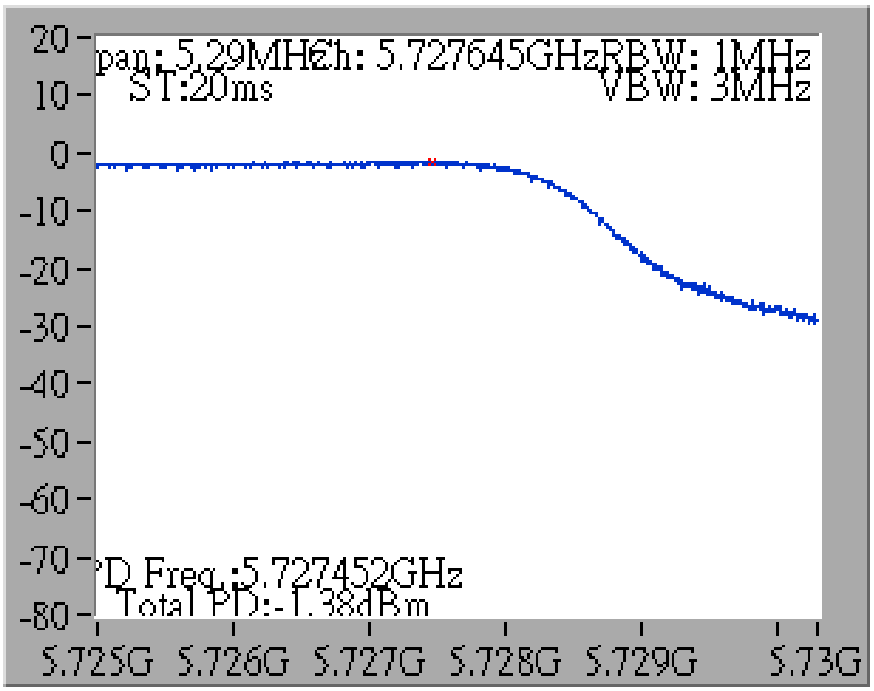
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5710 MHz (UNII 3)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5690 MHz (UNII 2C)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5690 MHz (UNII 3)

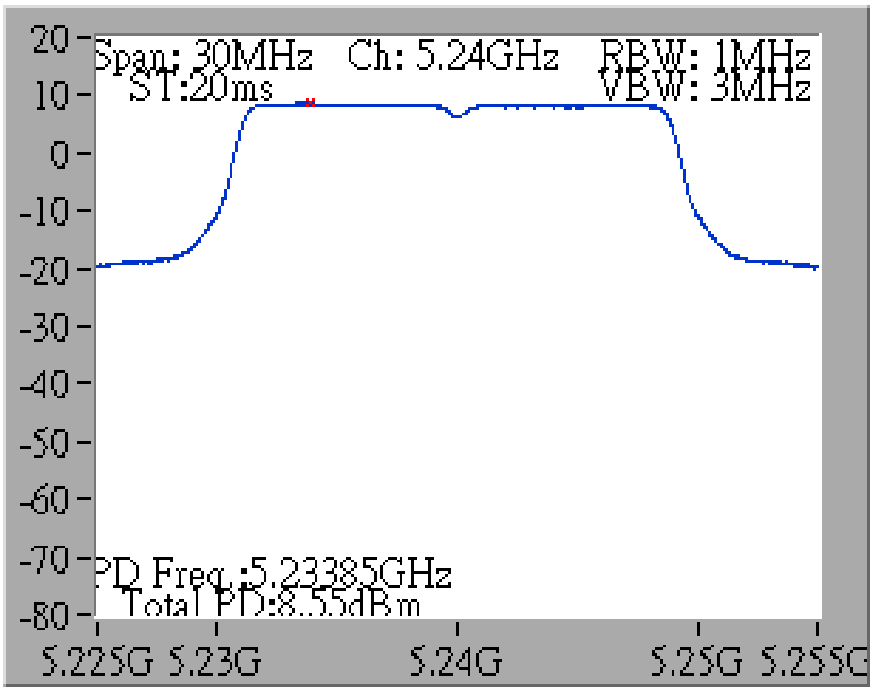


For Beamforming Mode

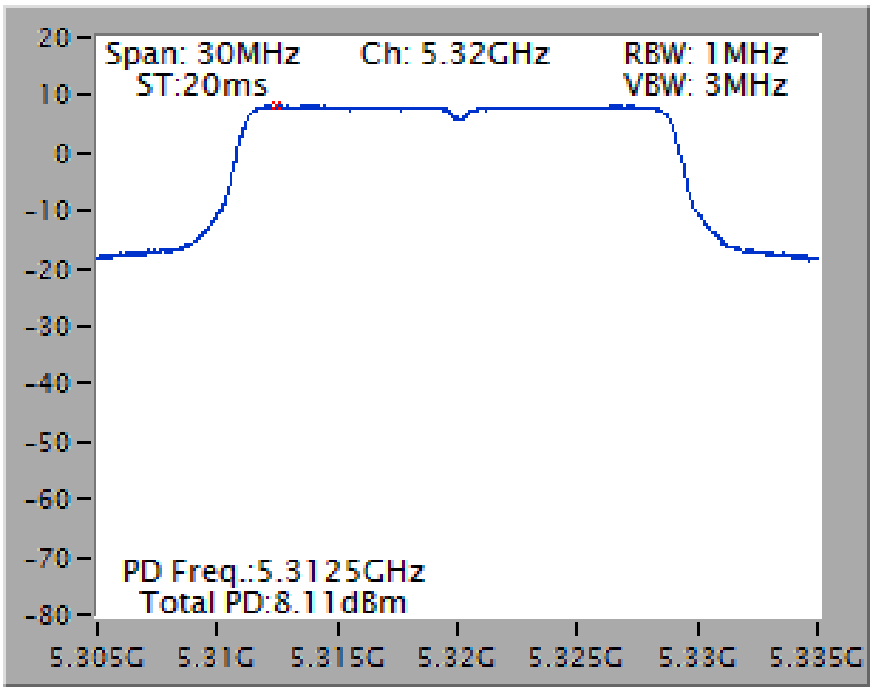
For indoor / outdoor use

Chain 1: 5.9dBi, Chain 2: 5.4dBi / 2TX

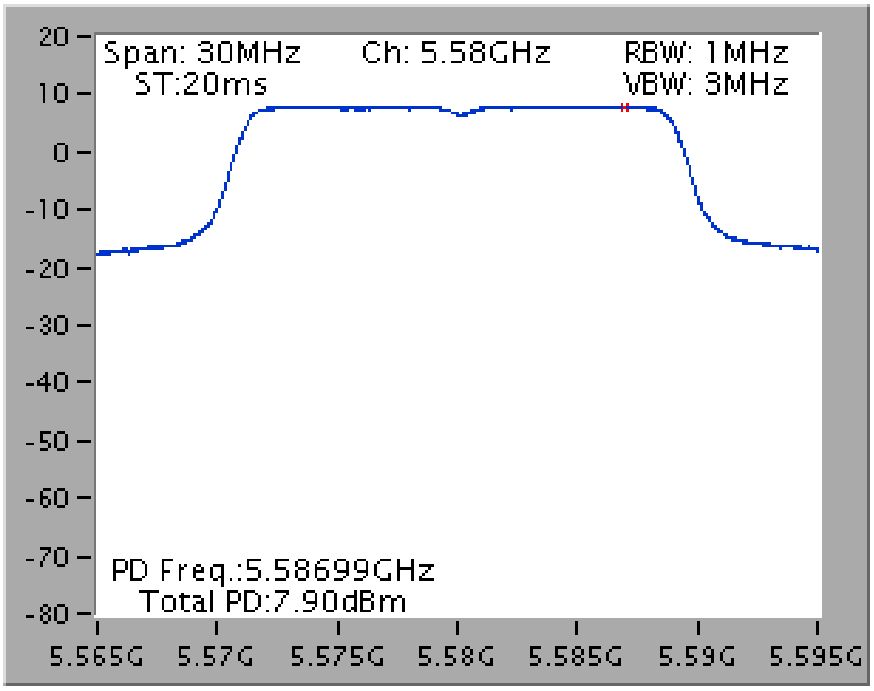
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5240 MHz



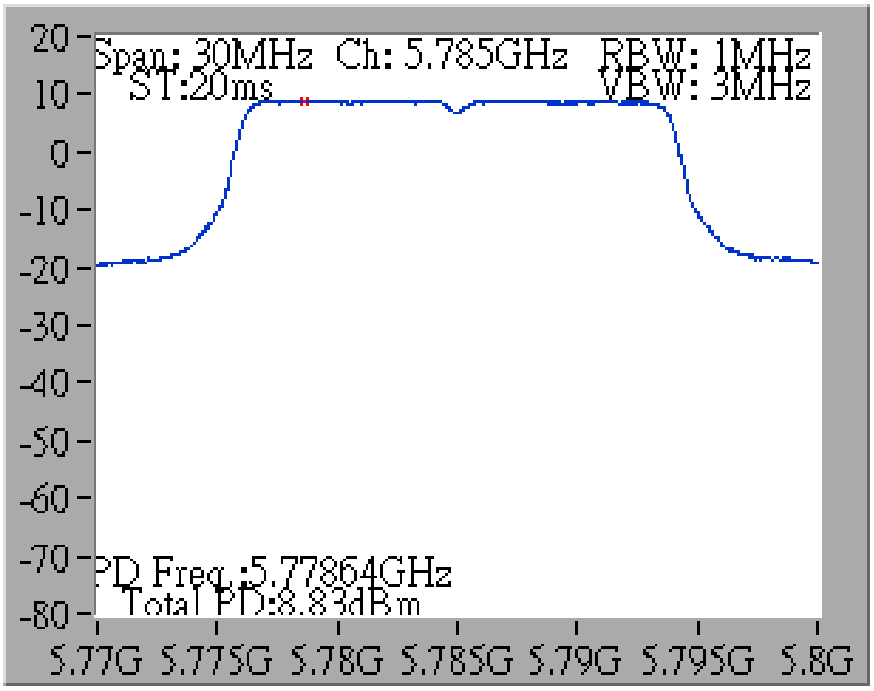
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5320 MHz



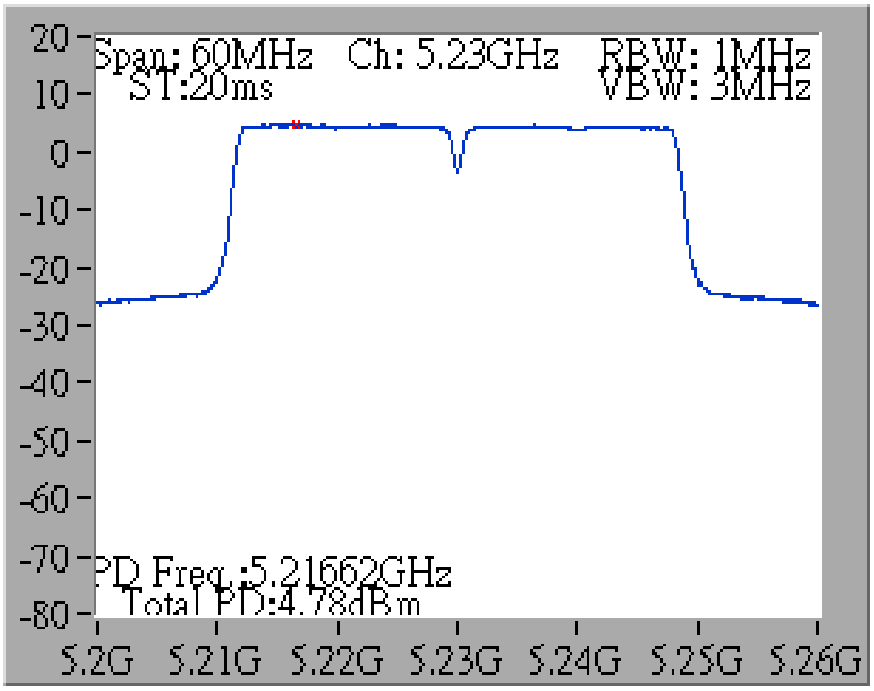
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5580 MHz



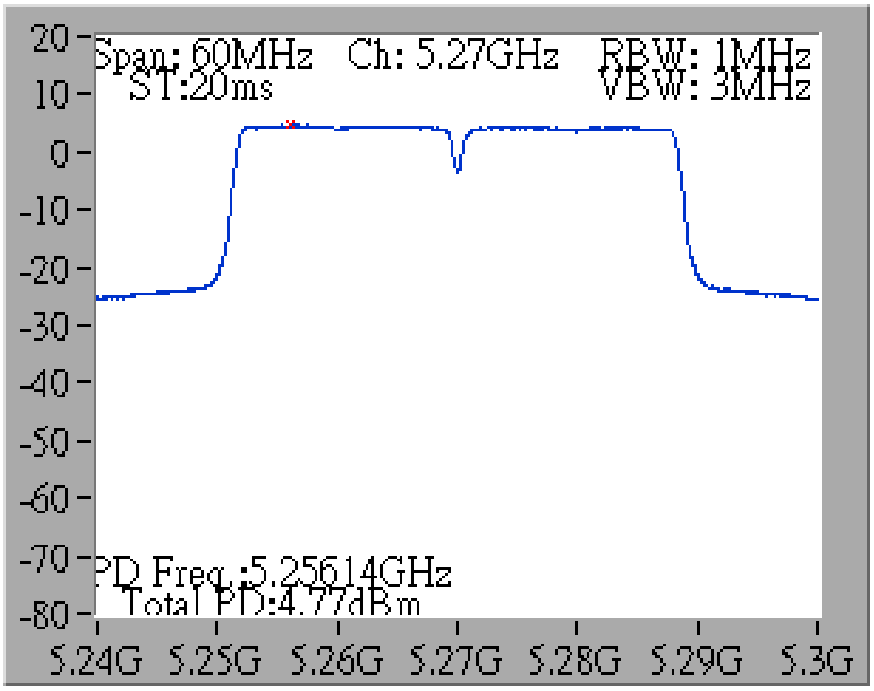
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5785 MHz



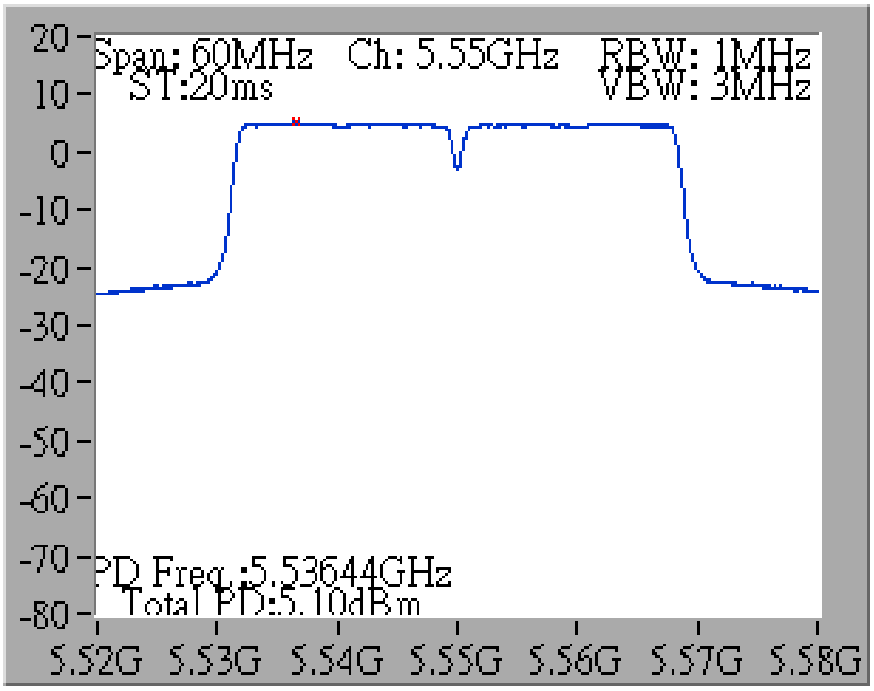
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5230 MHz



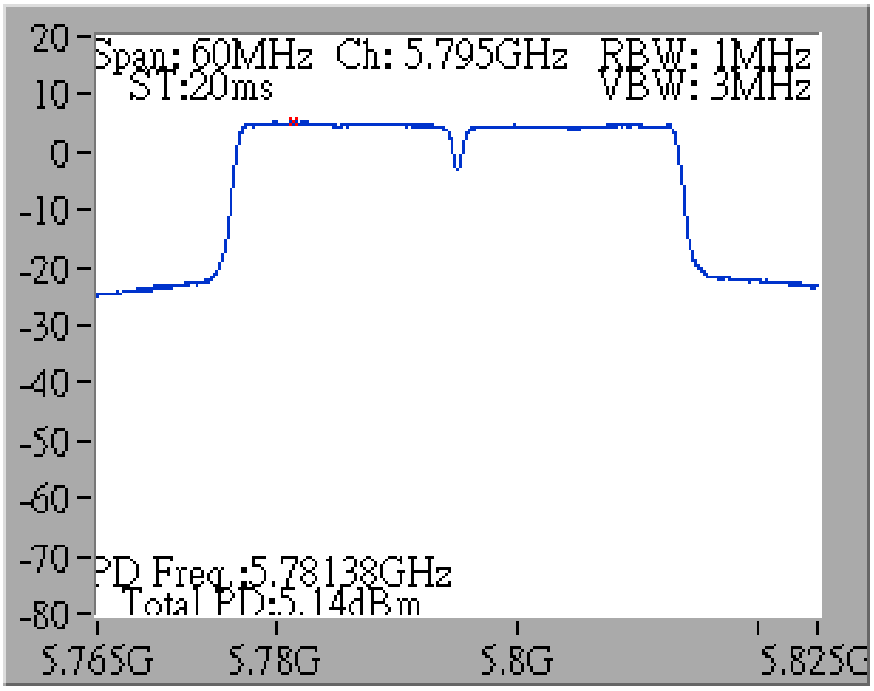
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5270 MHz



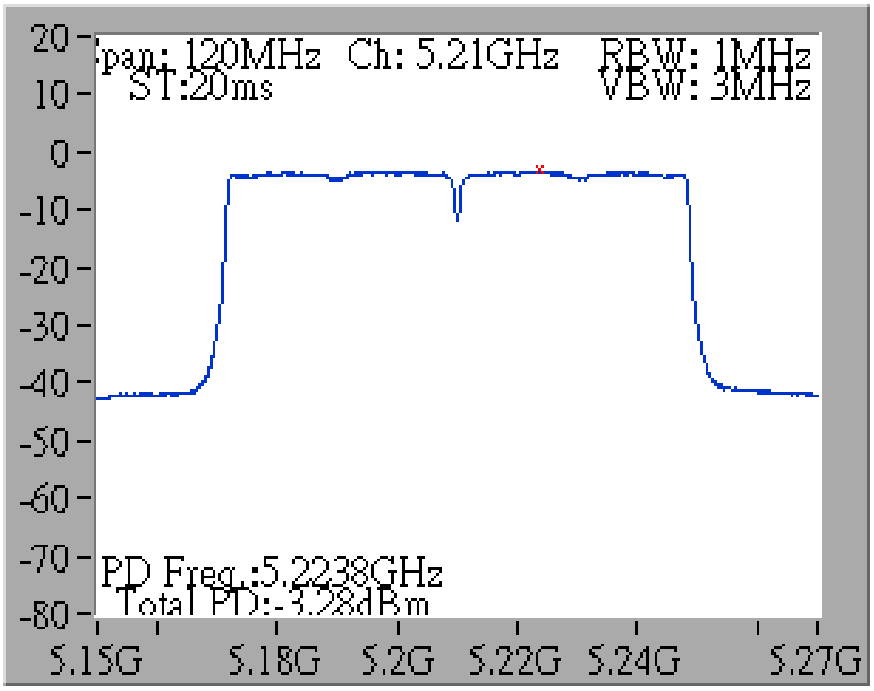
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5550 MHz



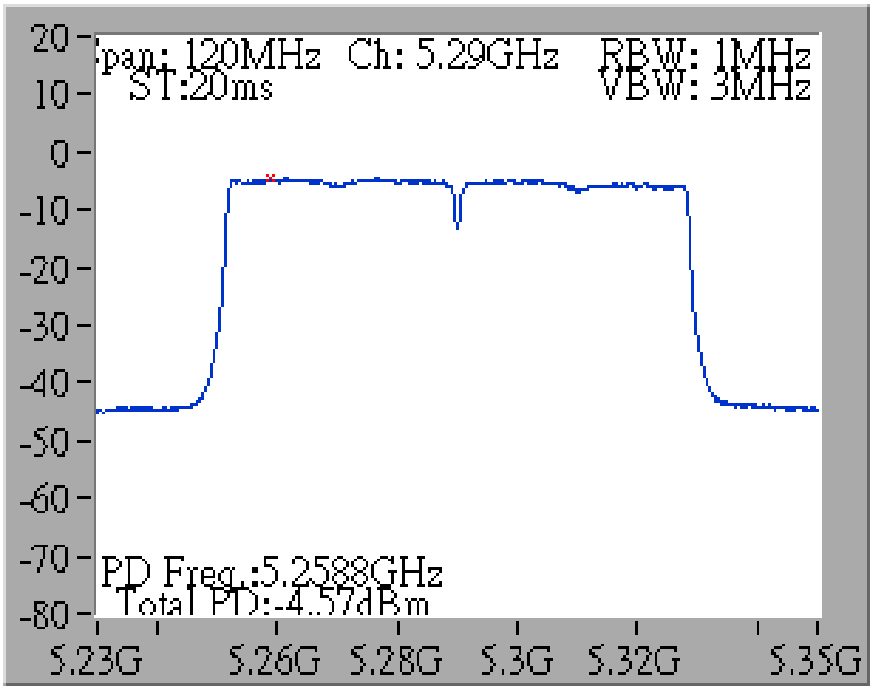
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5795 MHz



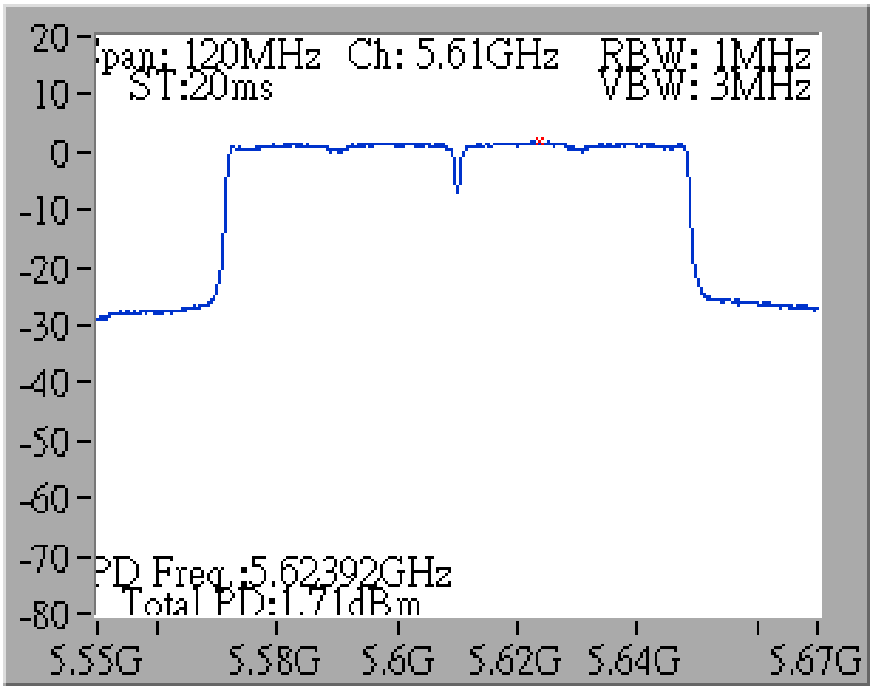
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5210 MHz



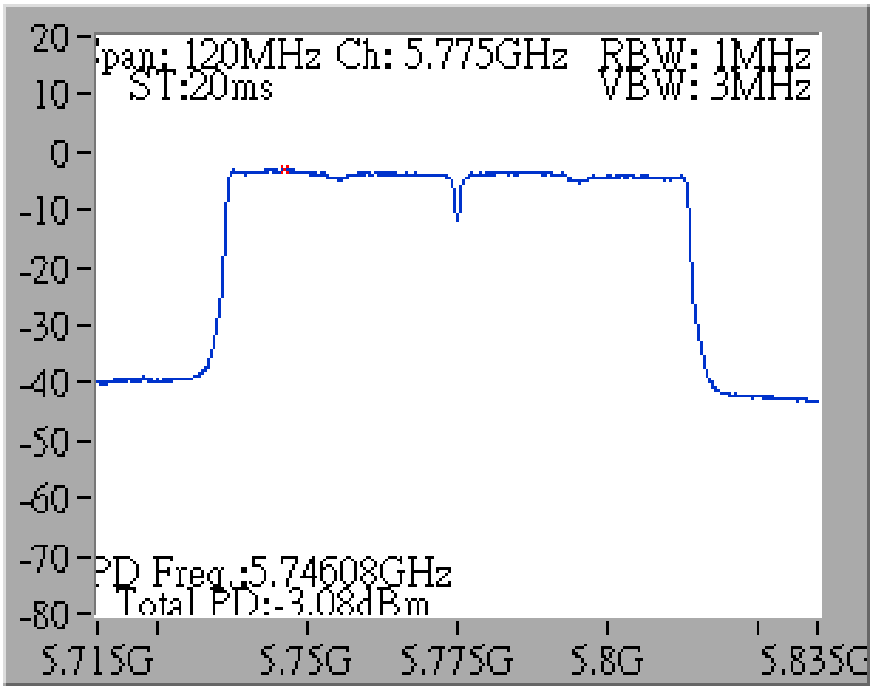
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5290 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5610 MHz

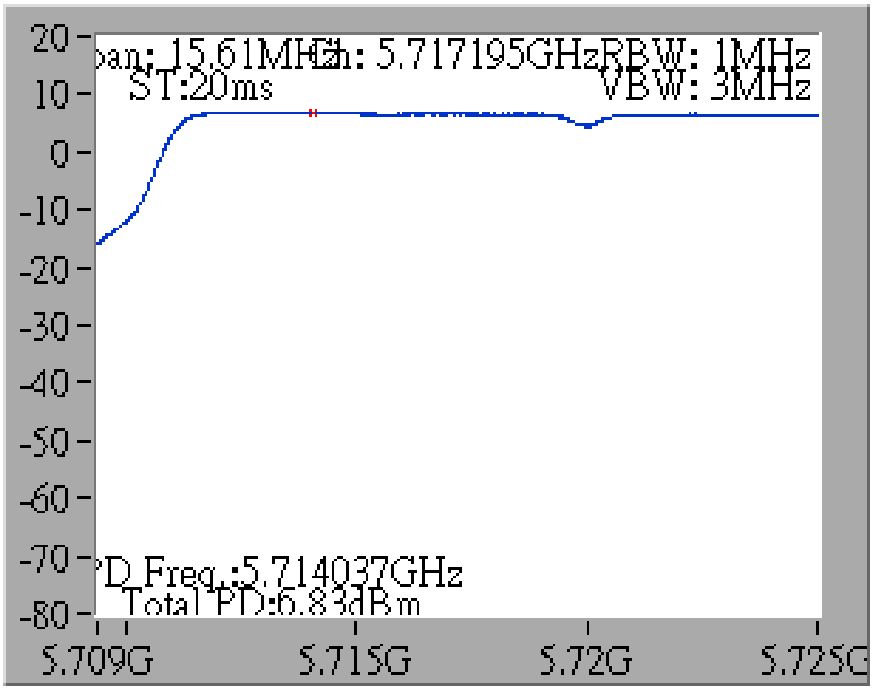


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5775 MHz

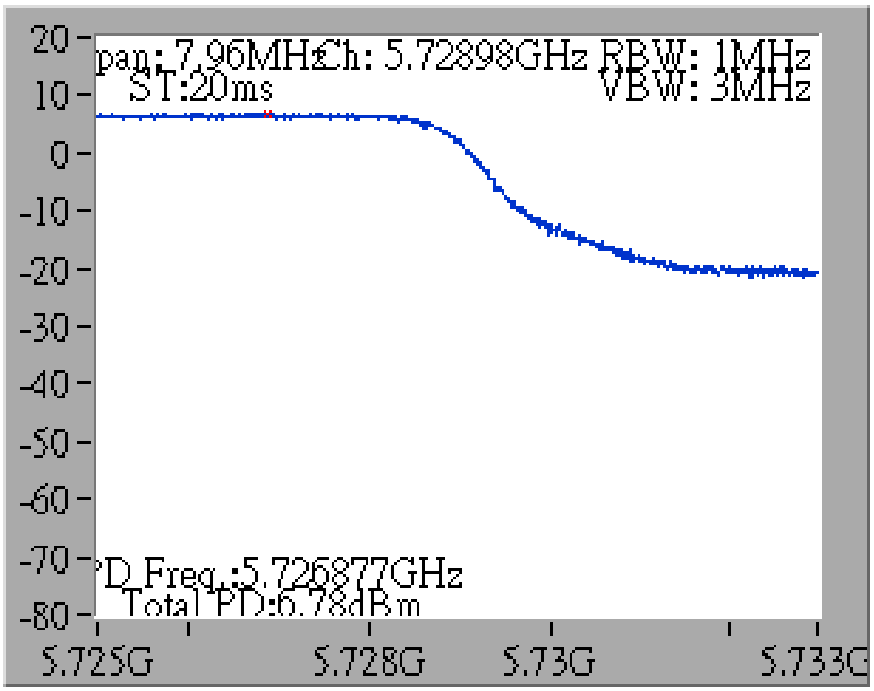


Straddle Channel

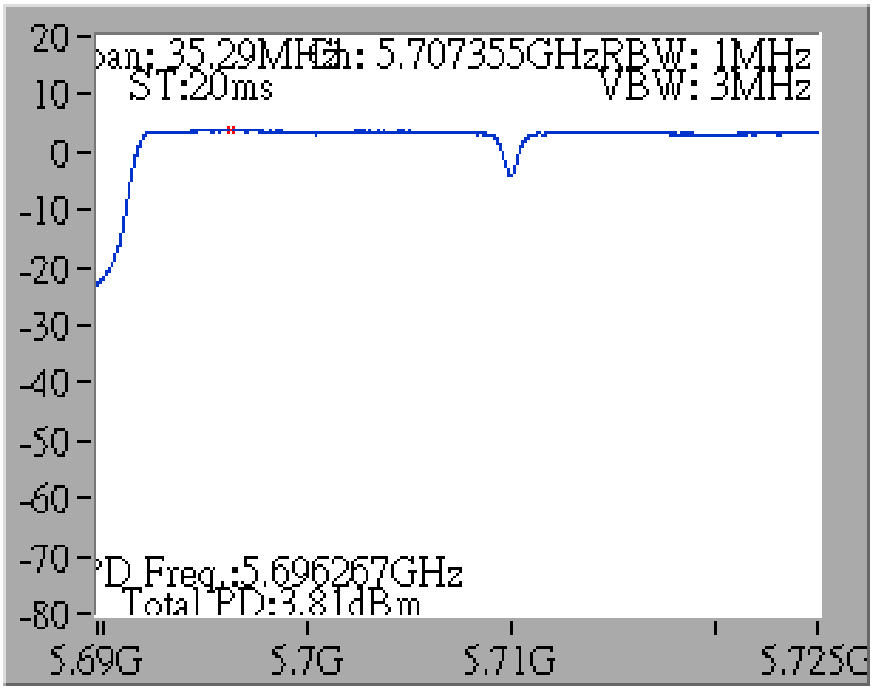
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5720 MHz (UNII 2C)



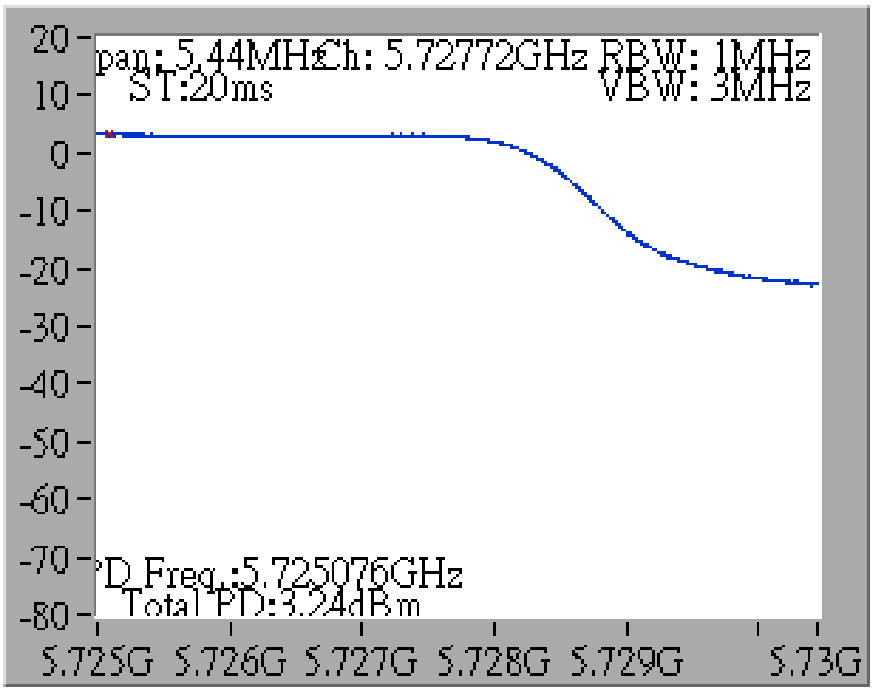
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 / 5720 MHz (UNII 3)



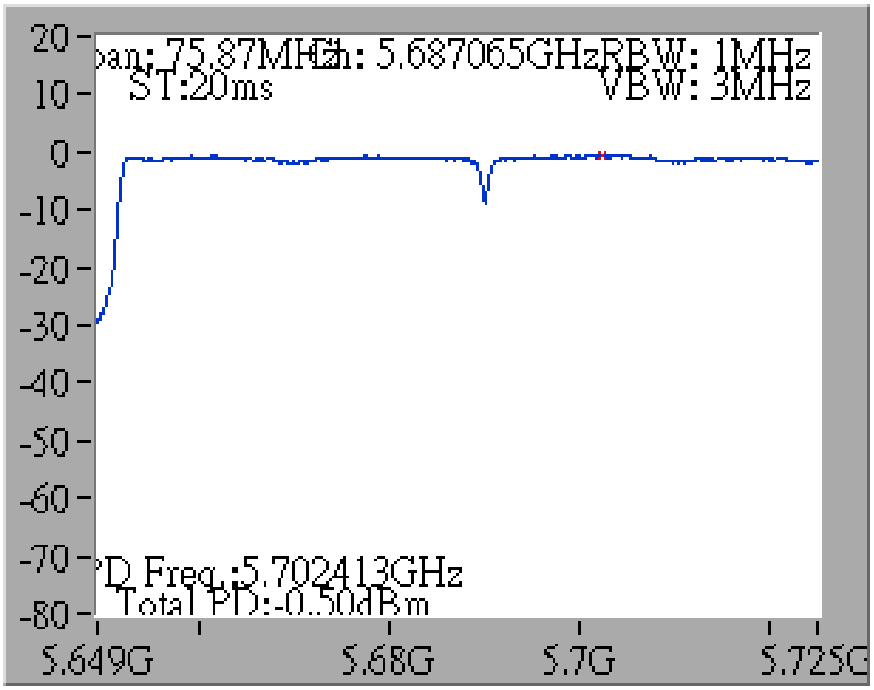
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5710 MHz (UNII 2C)



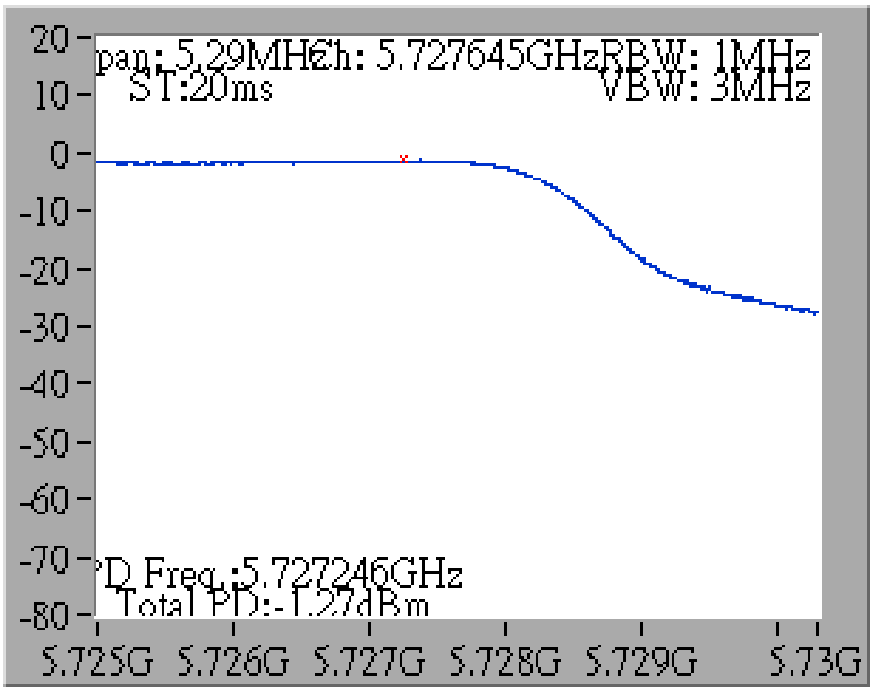
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 / 5710 MHz (UNII 3)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5690 MHz (UNII 2C)

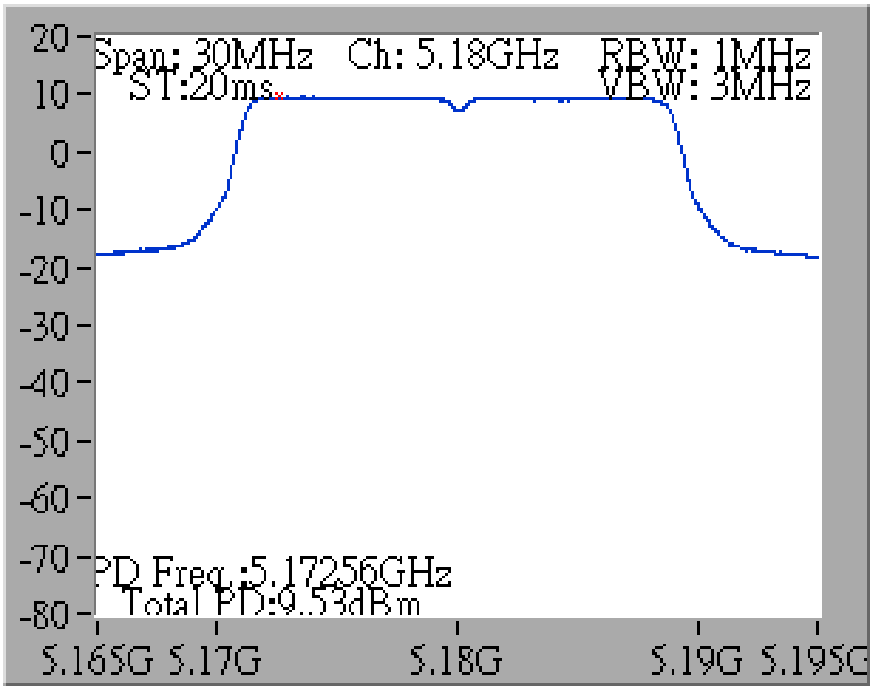


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 / 5690 MHz (UNII 3)

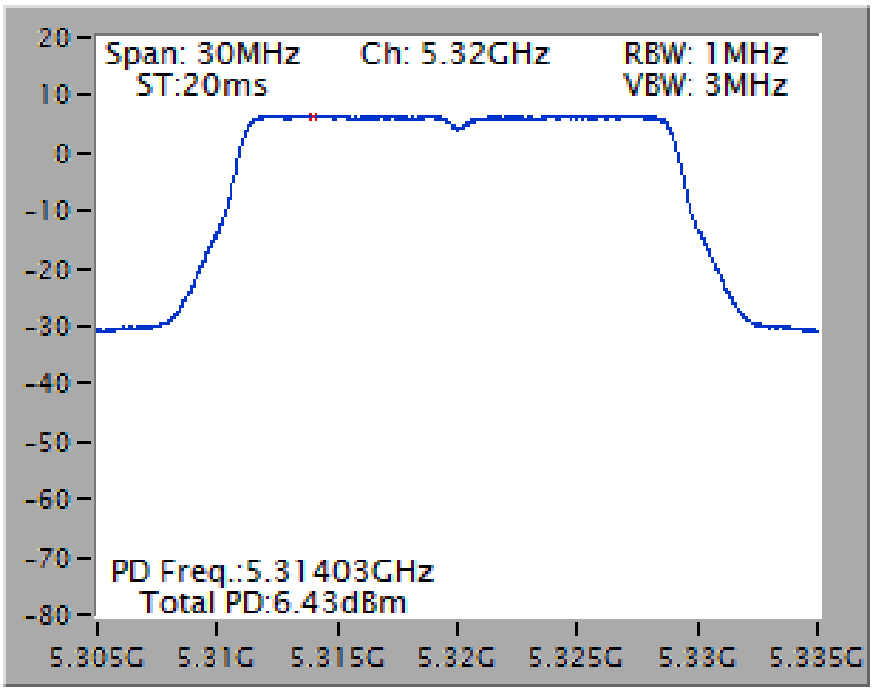


Chain 1: 5.9dBi, Chain 2: 5.4dBi, Chain 3: 5.9dBi / 3TX

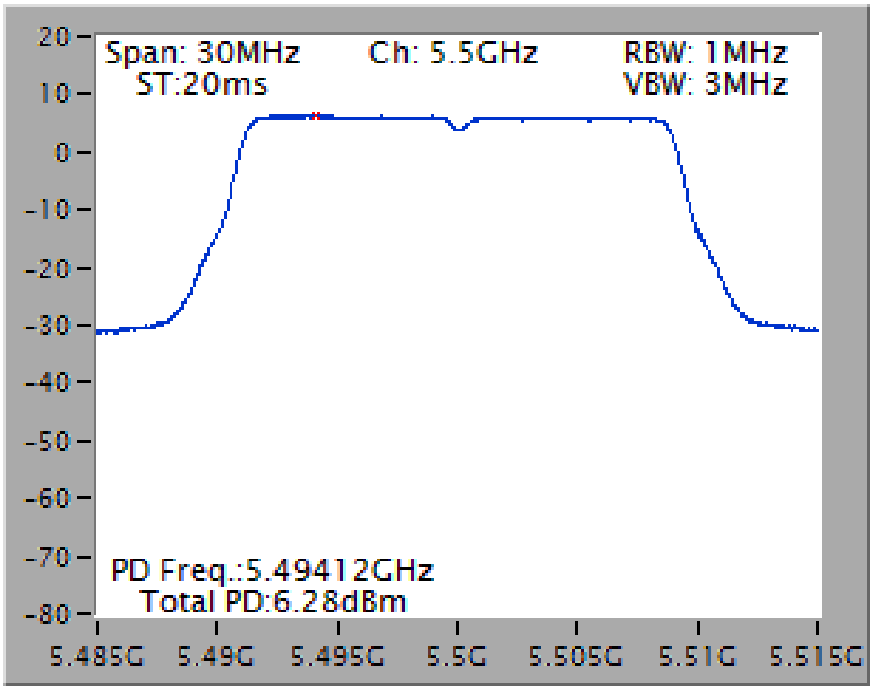
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5180 MHz



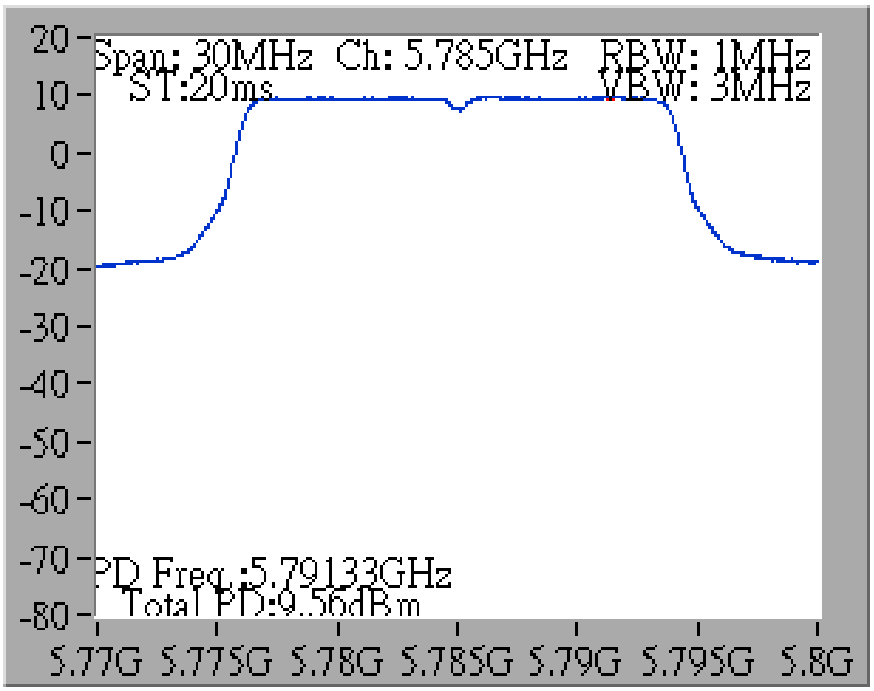
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5320 MHz



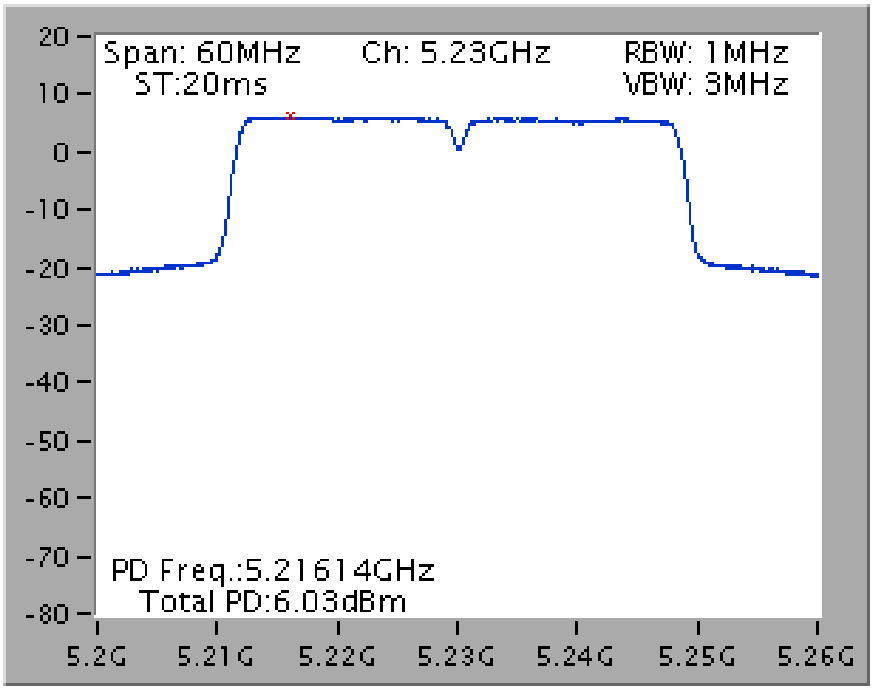
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5500 MHz



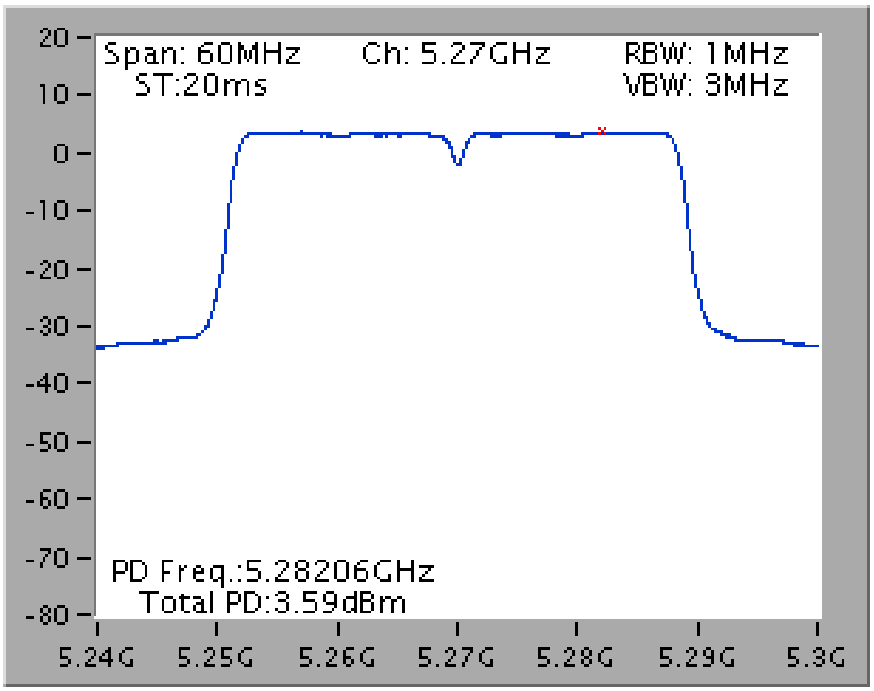
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5785 MHz



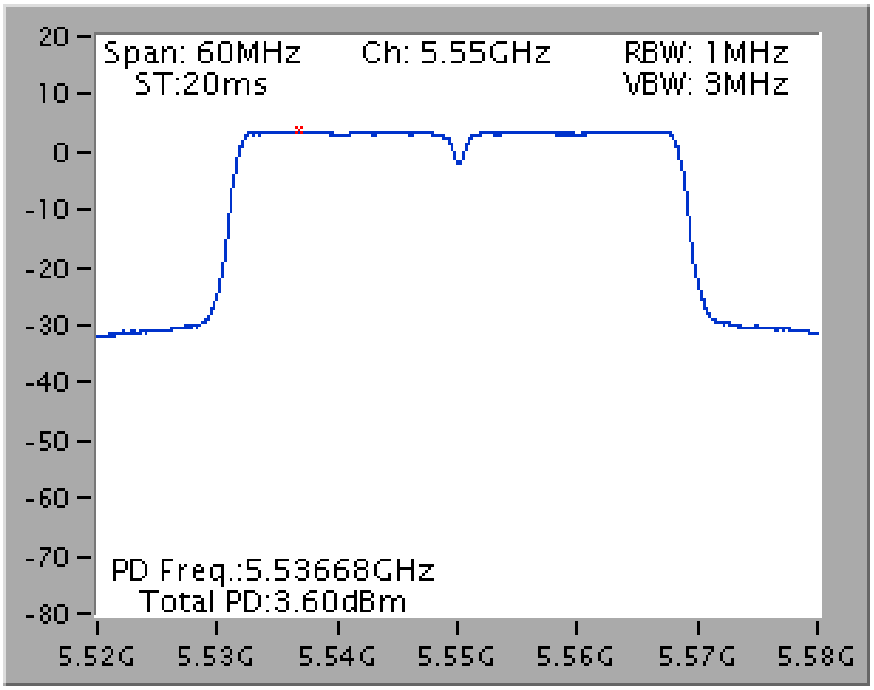
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5230 MHz



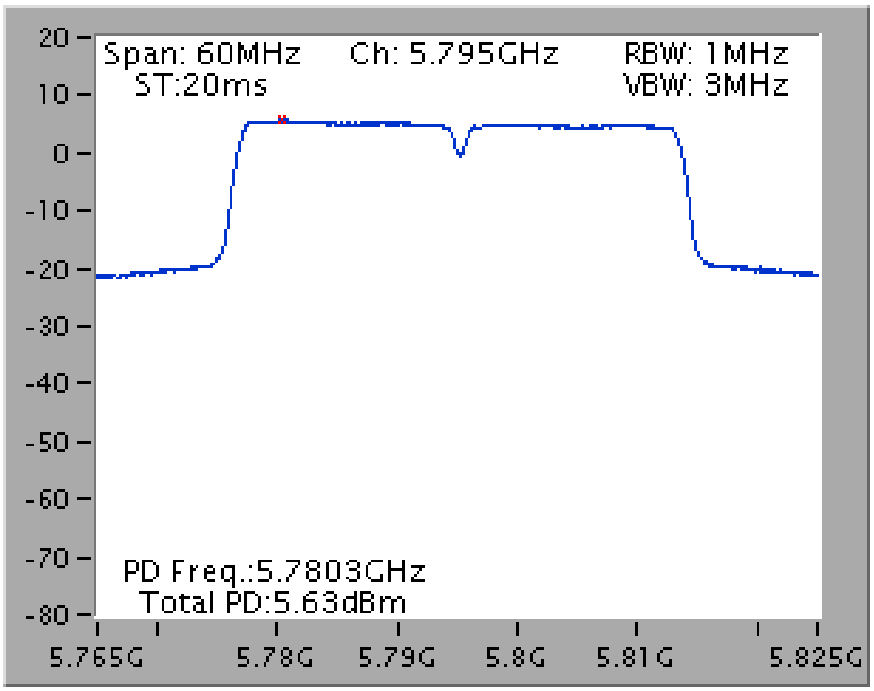
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5270 MHz



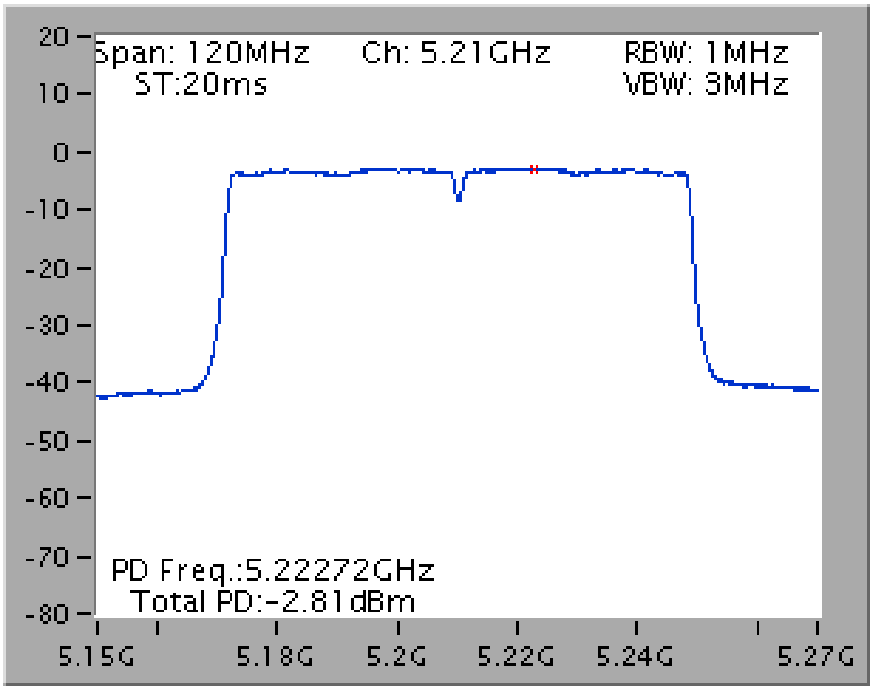
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5550 MHz



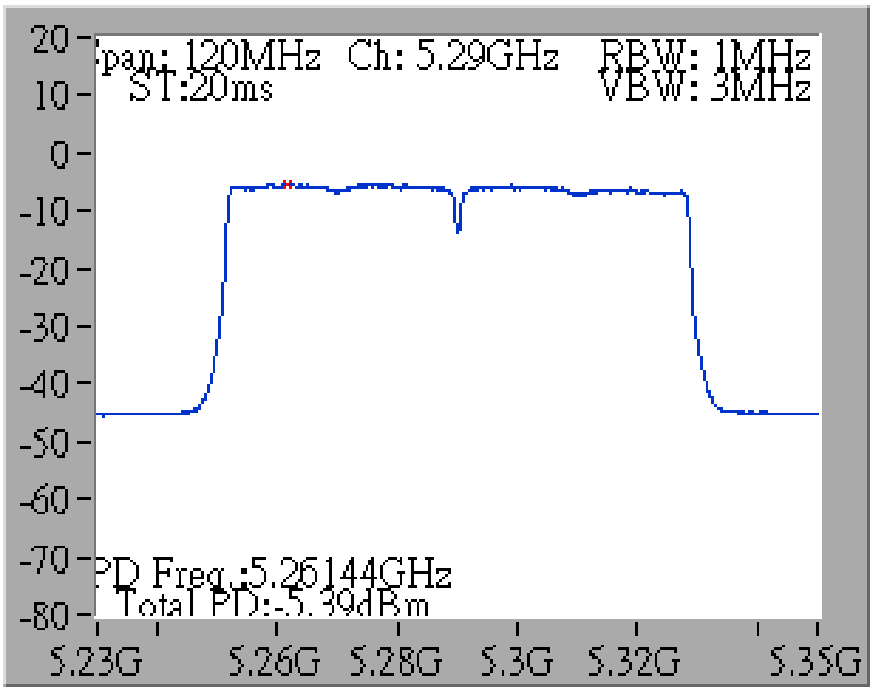
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5795 MHz



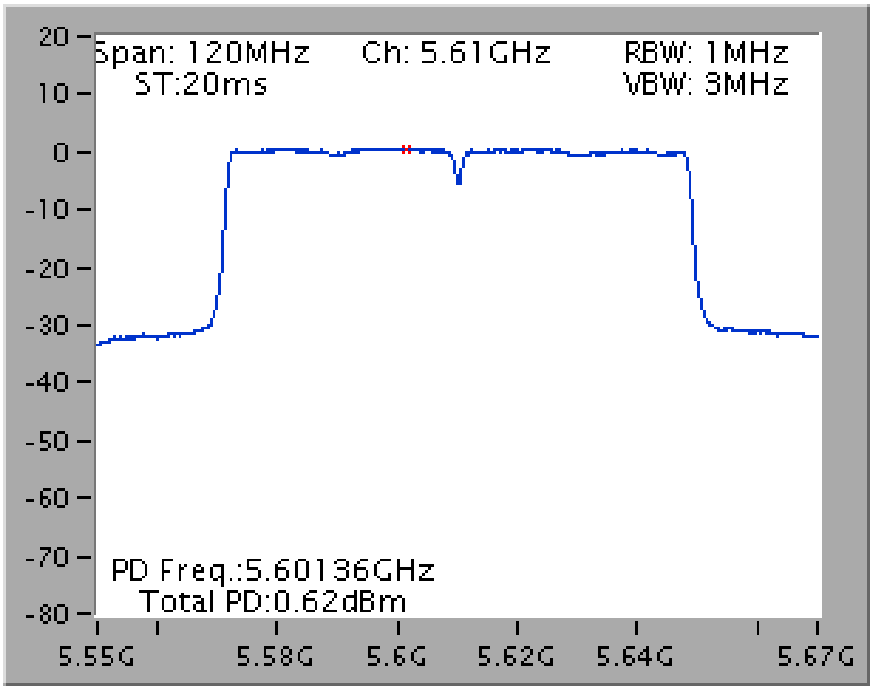
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5210 MHz



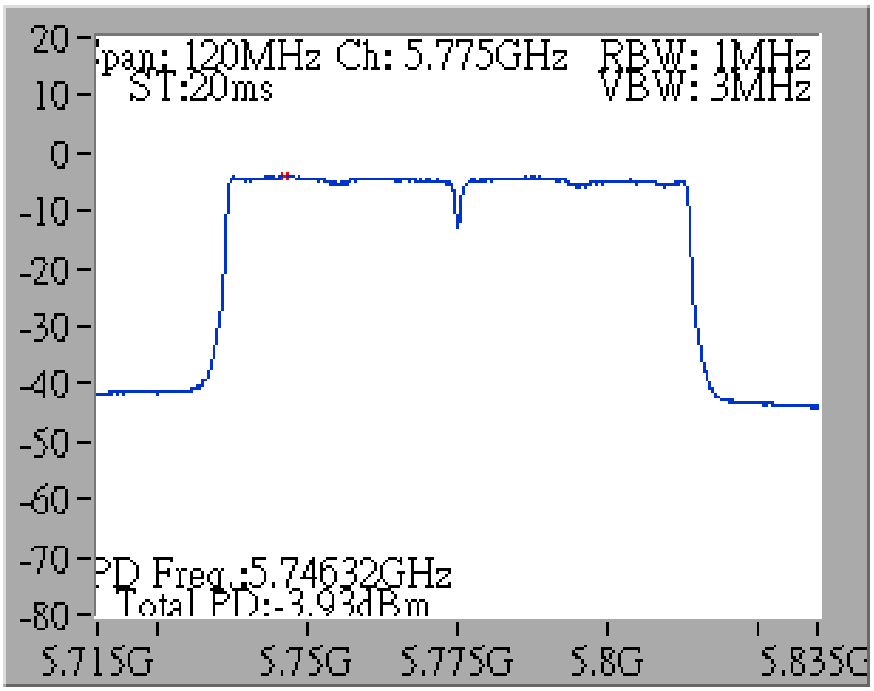
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5290 MHz



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5610 MHz

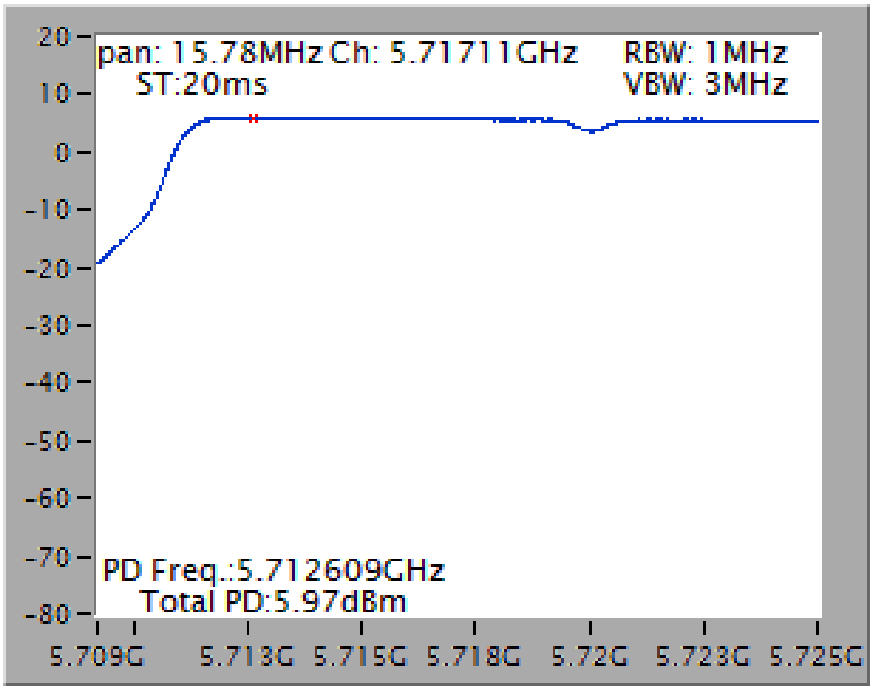


Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5775 MHz

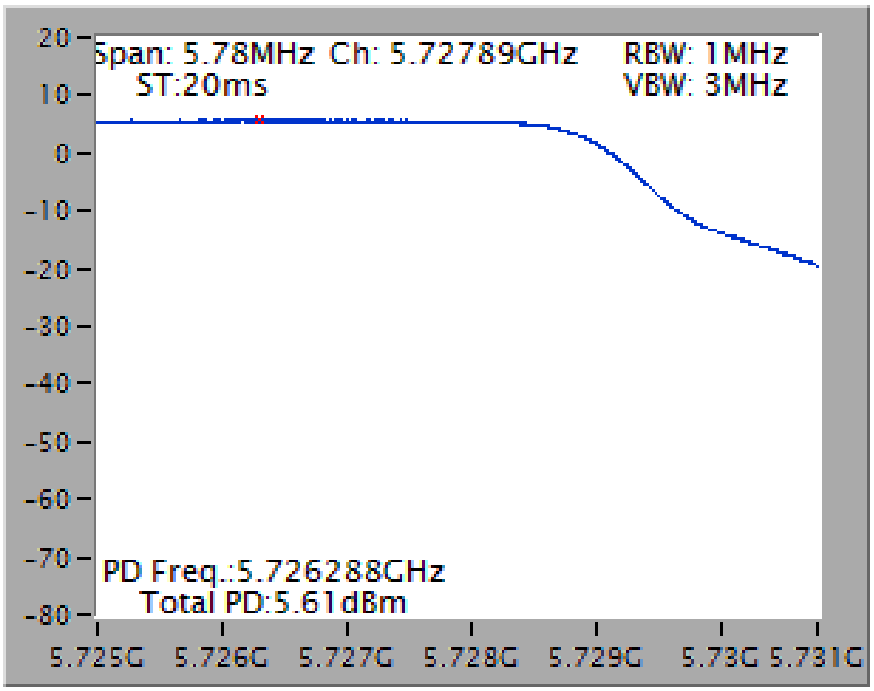


Straddle Channel

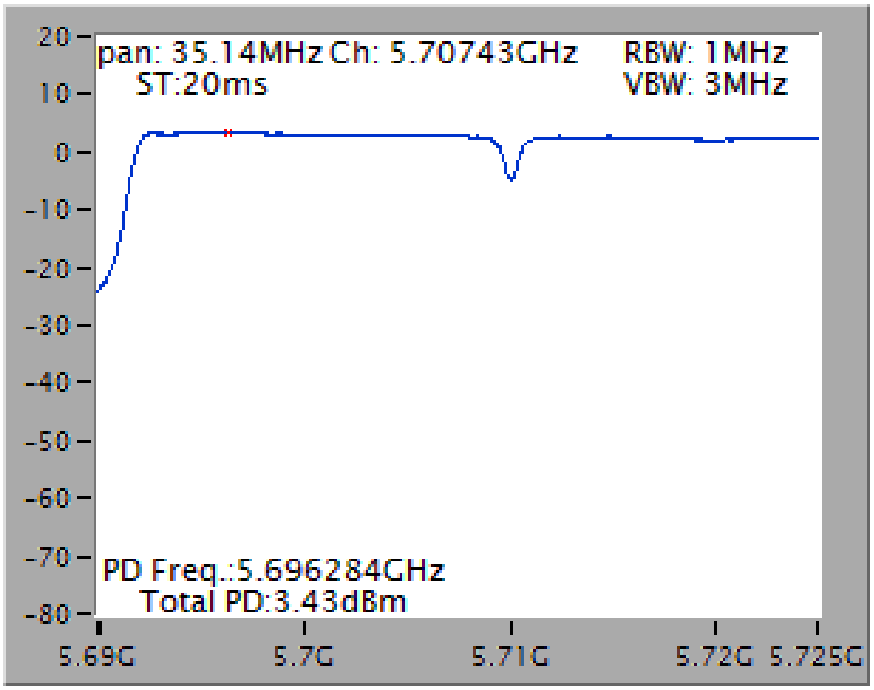
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5720 MHz (UNII 2C)



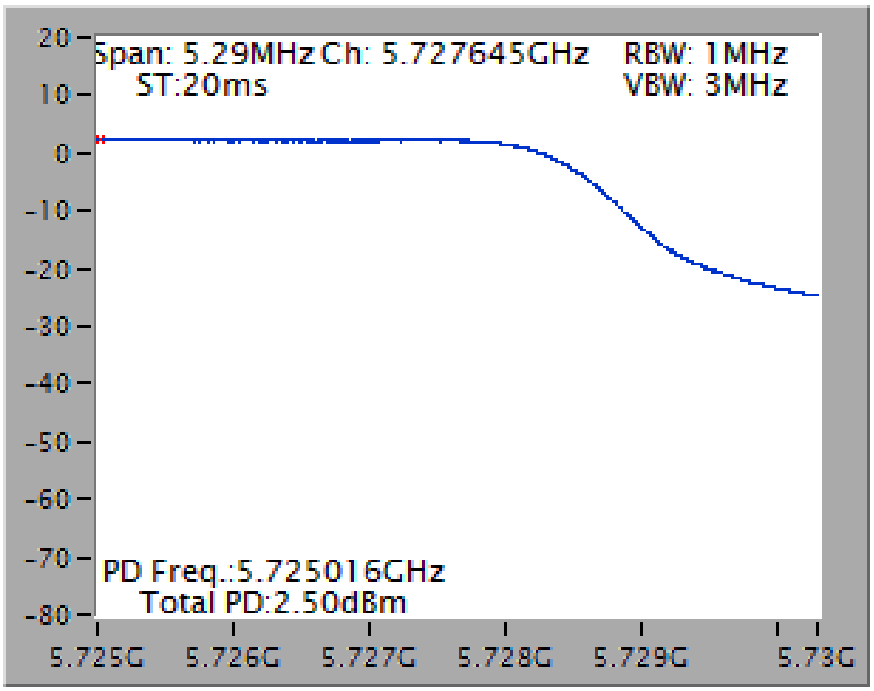
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT20 / Chain 1 + Chain 2 + Chain 3 / 5720 MHz (UNII 3)



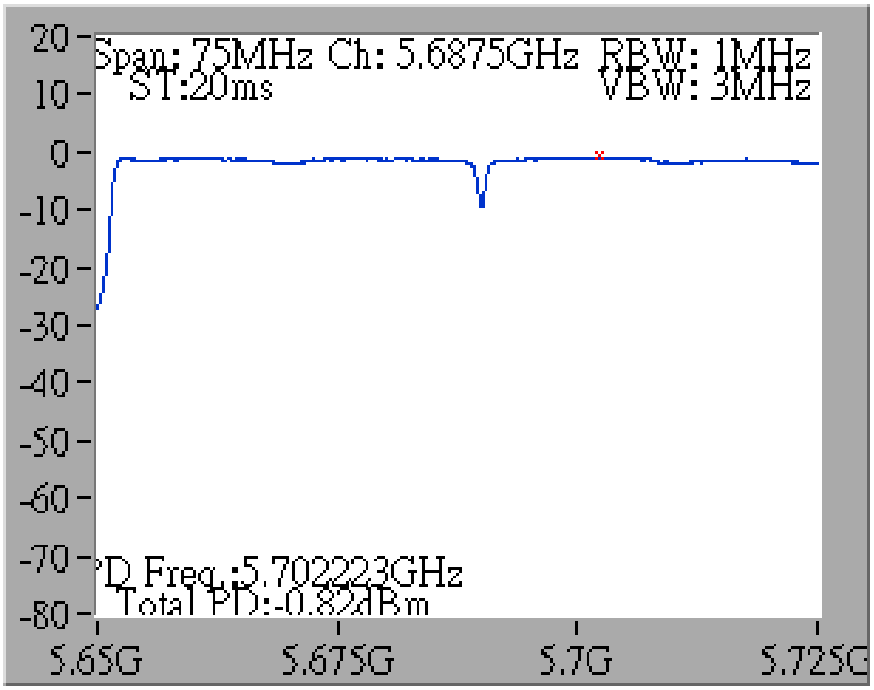
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5710 MHz (UNII 2C)



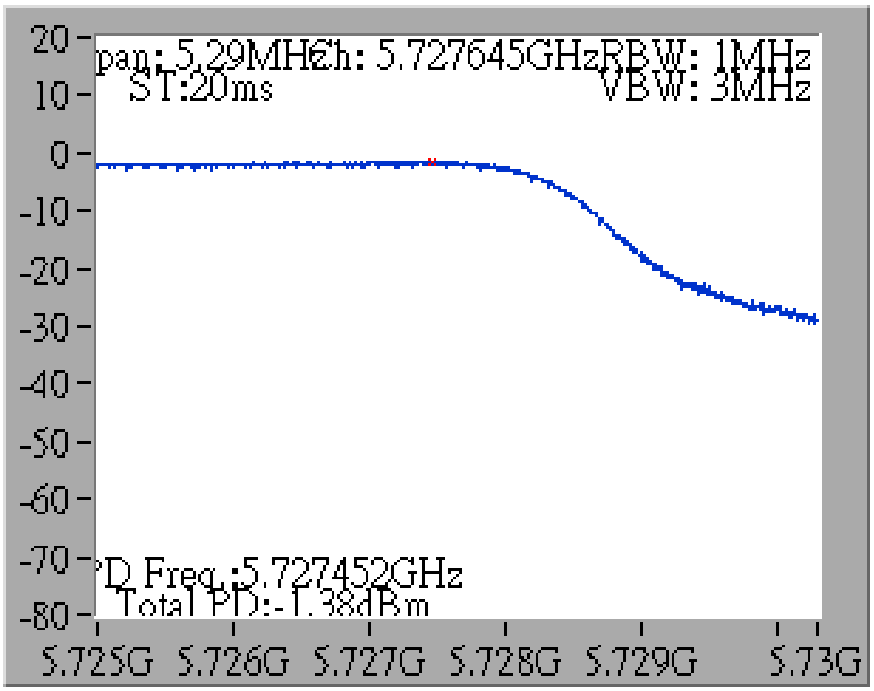
Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT40 / Chain 1 + Chain 2 + Chain 3 / 5710 MHz (UNII 3)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5690 MHz (UNII 2C)



Power Density Plot on Configuration IEEE 802.11ac MCS0/Nss1 VHT80 / Chain 1 + Chain 2 + Chain 3 / 5690 MHz (UNII 3)



4.6. Radiated 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 within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an e.i.r.p. of −17 dBm/MHz; for frequencies 10 MHz or greater above or below the band edge, emissions shall not exceed an e.i.r.p. of −27 dBm/MHz.

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

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

4.6.2. 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

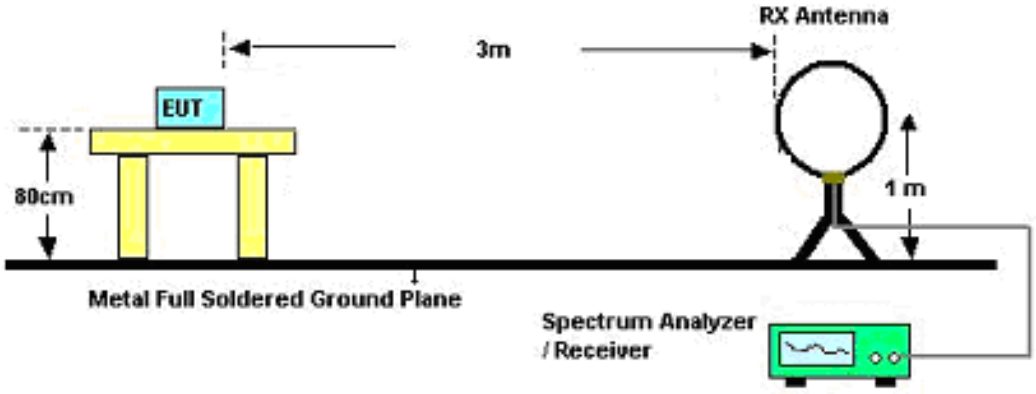
Receiver Parameter	Setting
Attenuation	Auto
Start ~ Stop Frequency	9kHz~150kHz / RBW 200Hz for QP
Start ~ Stop Frequency	150kHz~30MHz / RBW 9kHz for QP
Start ~ Stop Frequency	30MHz~1000MHz / RBW 120kHz for QP

4.6.3. Test Procedures

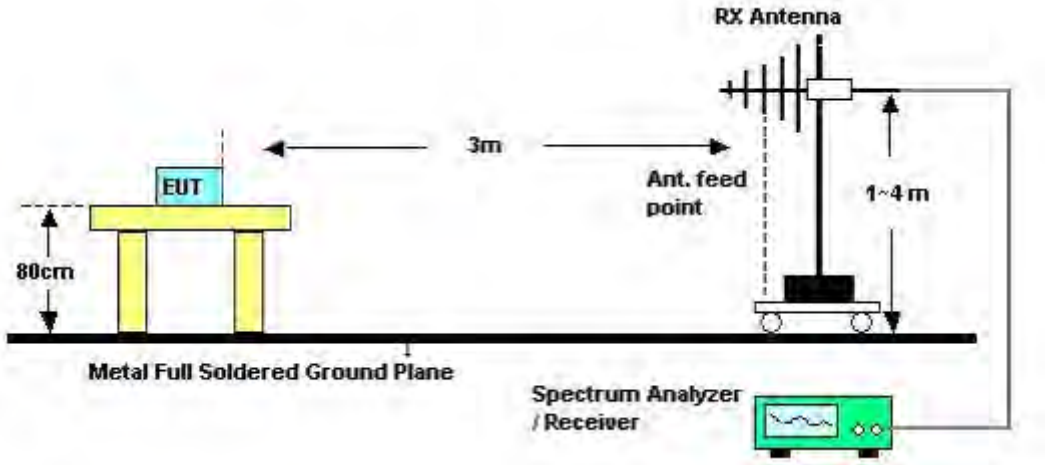
1. Configure the EUT according to ANSI C63.10. The EUT was placed on the top of the turntable 1.5 meter above ground. The phase center of the receiving antenna mounted on the top of a height-variable antenna tower was placed 1m & 3m far away from the turntable.
2. Power on the EUT and all the supporting 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.

4.6.4. Test Setup Layout

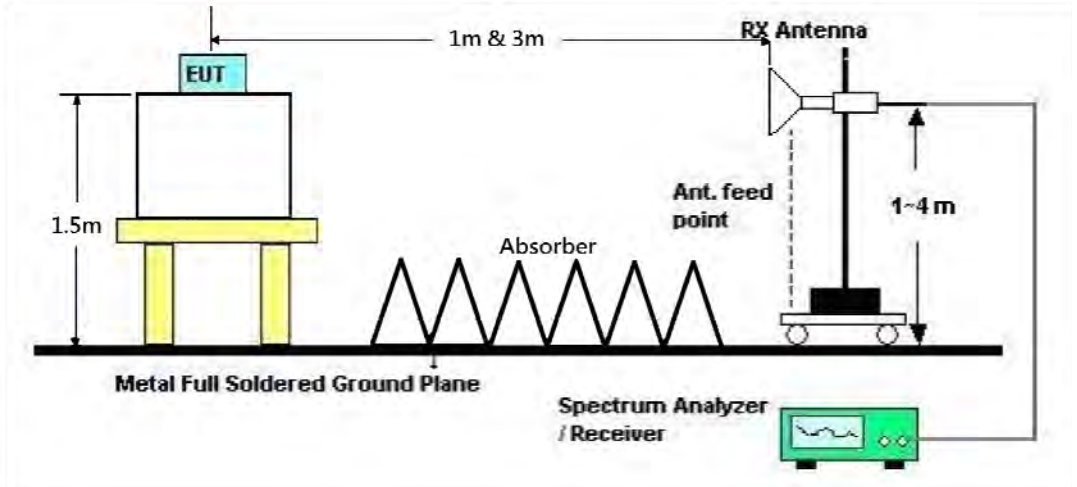
For Radiated Emissions: 9kHz ~30MHz



For Radiated Emissions: 30MHz~1GHz



For Radiated Emissions: Above 1GHz



4.6.5. Test Deviation

There is no deviation with the original standard.

4.6.6. EUT Operation during Test

For Non-beamforming mode:

The EUT was programmed to be in continuously transmitting mode.

For beamforming mode:

The EUT was programmed to be in beamforming transmitting mode.

4.6.7. Results of Radiated Emissions (9kHz~30MHz)

Temperature	24°C	Humidity	65%
Test Engineer	Gino Huang	Configurations	CTX
Test Date	Oct. 12, 2015	Test Mode	Mode 2

Freq. (MHz)	Level (dBuV)	Over Limit (dB)	Limit Line (dBuV)	Remark
-	-	-	-	See Note

Note:

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

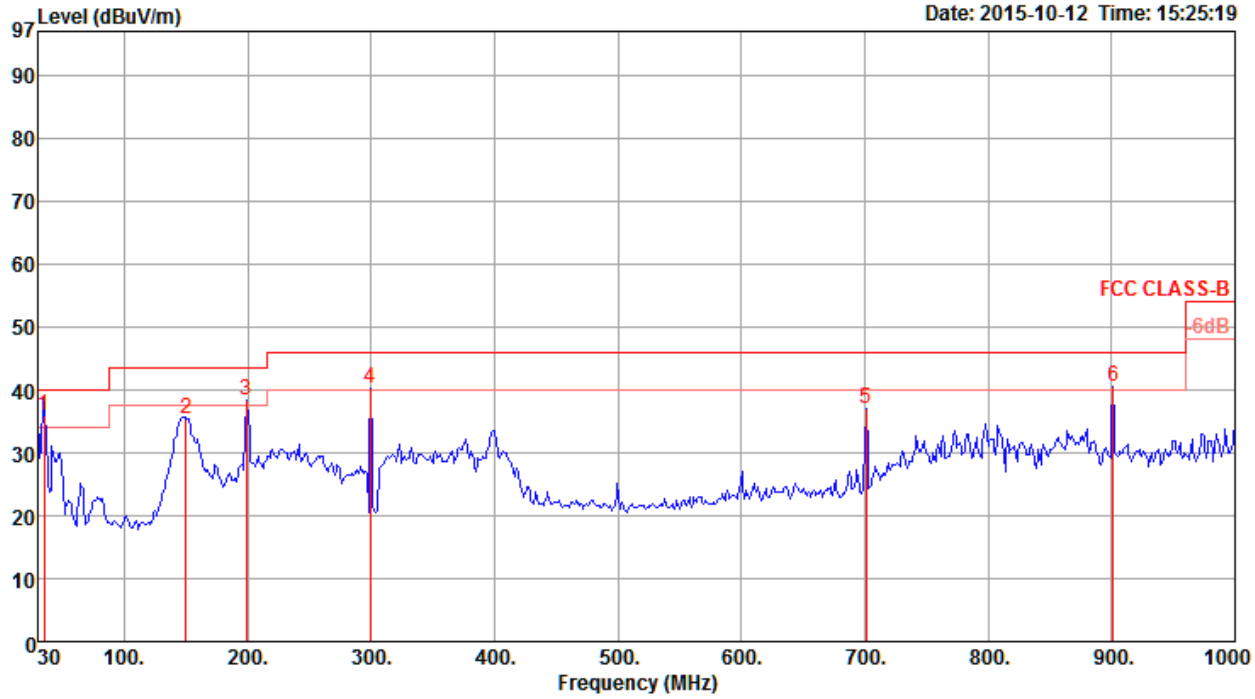
Distance extrapolation factor = 40 log (specific distance / test distance) (dB);

Limit line = specific limits (dBuV) + distance extrapolation factor.

4.6.8. Results of Radiated Emissions (30MHz~1GHz)

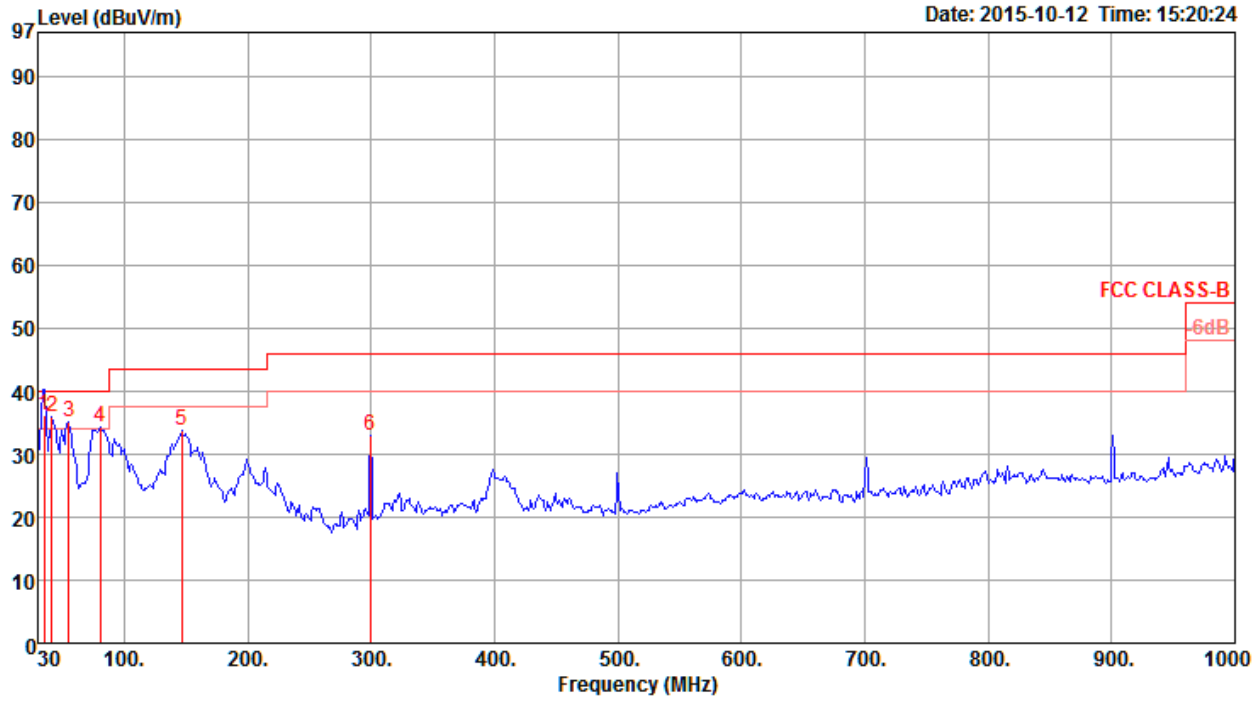
Temperature	24°C	Humidity	65%
Test Engineer	Gino Huang	Configurations	CTX
Test Mode	Mode 2		

Horizontal



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	34.85	35.92	40.00	-4.08	48.01	0.61	16.80	29.50	312	156	QP	HORIZONTAL
2	150.28	35.53	43.50	-7.97	52.35	1.03	11.20	29.05	360	100	Peak	HORIZONTAL
3	198.78	38.33	43.50	-5.17	55.56	1.17	10.43	28.83	360	100	Peak	HORIZONTAL
4	299.66	40.24	46.00	-5.76	53.27	1.40	13.90	28.33	360	100	Peak	HORIZONTAL
5	701.24	36.97	46.00	-9.03	44.05	2.12	19.71	28.91	360	100	Peak	HORIZONTAL
6	901.06	40.40	46.00	-5.60	44.47	2.40	21.51	27.98	360	100	Peak	HORIZONTAL

Vertical



	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	34.85	36.18	40.00	-3.82	48.27	0.61	16.80	29.50	351	122	QP	VERTICAL
2	41.64	35.94	40.00	-4.06	52.25	0.59	12.58	29.48	360	100	Peak	VERTICAL
3	55.22	35.06	40.00	-4.94	55.93	0.67	7.90	29.44	360	100	Peak	VERTICAL
4	80.44	34.31	40.00	-5.69	55.49	0.76	7.40	29.34	360	100	Peak	VERTICAL
5	146.40	33.64	43.50	-9.86	50.16	1.02	11.53	29.07	360	100	Peak	VERTICAL
6	299.66	32.92	46.00	-13.08	45.95	1.40	13.90	28.33	360	100	Peak	VERTICAL

Note:

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

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

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

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

For Non-Beamforming Mode

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 36 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15536.64	44.59	54.00	-9.41	31.29	9.76	38.16	34.62	125	150	Average	HORIZONTAL
2	15541.77	57.79	74.00	-16.21	44.49	9.76	38.16	34.62	125	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15540.38	57.79	74.00	-16.21	44.49	9.76	38.16	34.62	45	150	Peak	VERTICAL
2	15549.23	43.68	54.00	-10.32	30.36	9.77	38.19	34.64	45	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 40 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15601.56	44.57	54.00	-9.43	31.16	9.81	38.29	34.69	156	150	Average	HORIZONTAL
2	15603.59	58.36	74.00	-15.64	44.95	9.81	38.29	34.69	156	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15599.33	58.12	74.00	-15.88	44.71	9.81	38.29	34.69	212	150	Peak	VERTICAL
2	15605.24	44.17	54.00	-9.83	30.76	9.81	38.29	34.69	212	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 48 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15710.56	59.68	74.00	-14.32	46.12	9.87	38.47	34.78	66	150	Peak	HORIZONTAL
2	15724.40	45.96	54.00	-8.04	32.36	9.88	38.50	34.78	66	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15724.43	45.83	54.00	-8.17	32.23	9.88	38.50	34.78	137	150	Average	VERTICAL
2	15728.74	58.89	74.00	-15.11	45.31	9.88	38.50	34.80	137	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 52 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15776.15	46.12	54.00	-7.88	32.42	9.92	38.60	34.82	250	150	Average	HORIZONTAL
2	15786.71	59.01	74.00	-14.99	45.29	9.93	38.63	34.84	250	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15777.13	45.62	54.00	-8.38	31.92	9.92	38.60	34.82	298	150	Average	VERTICAL
2	15779.13	58.89	74.00	-15.11	45.21	9.92	38.60	34.84	298	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 60 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15890.33	45.82	54.00	-8.18	31.95	9.99	38.81	34.93	165	150	Average	HORIZONTAL
2	15897.42	58.57	74.00	-15.43	44.70	9.99	38.81	34.93	165	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15890.91	45.23	54.00	-8.77	31.36	9.99	38.81	34.93	215	150	Average	VERTICAL
2	15905.21	58.72	74.00	-15.28	44.83	10.00	38.84	34.95	215	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 64 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15953.40	45.38	54.00	-8.62	31.38	10.04	38.94	34.98	128	150	Average	HORIZONTAL
2	15960.61	57.87	74.00	-16.13	43.89	10.04	38.94	35.00	128	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15957.02	58.35	74.00	-15.65	44.37	10.04	38.94	35.00	146	150	Peak	VERTICAL
2	15969.72	44.71	54.00	-9.29	30.69	10.05	38.97	35.00	146	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 100 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11000.72	41.39	54.00	-12.61	29.65	7.70	38.70	34.66	150	150	Average	HORIZONTAL
2	11009.12	54.21	74.00	-19.79	42.48	7.69	38.70	34.66	150	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11006.95	41.03	54.00	-12.97	29.30	7.69	38.70	34.66	203	150	Average	VERTICAL
2	11009.00	54.55	74.00	-19.45	42.82	7.69	38.70	34.66	203	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 116 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11150.22	41.86	54.00	-12.14	30.22	7.59	38.70	34.65	144	150	Average	HORIZONTAL
2	11161.97	54.49	74.00	-19.51	42.86	7.58	38.70	34.65	144	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11158.32	41.62	54.00	-12.38	29.99	7.58	38.70	34.65	179	150	Average	VERTICAL
2	11166.05	54.74	74.00	-19.26	43.11	7.58	38.70	34.65	179	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 140 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11403.56	41.26	54.00	-12.74	29.79	7.40	38.70	34.63	126	150	Average	HORIZONTAL
2	11406.74	53.92	74.00	-20.08	42.45	7.40	38.70	34.63	126	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11395.77	40.99	54.00	-13.01	29.52	7.40	38.70	34.63	108	150	Average	VERTICAL
2	11396.84	54.17	74.00	-19.83	42.70	7.40	38.70	34.63	108	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 149 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11485.31	53.63	74.00	-20.37	42.21	7.34	38.70	34.62	168	150	Peak	HORIZONTAL
2	11486.41	40.72	54.00	-13.28	29.30	7.34	38.70	34.62	168	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11481.55	40.19	54.00	-13.81	28.77	7.34	38.70	34.62	97	150	Average	VERTICAL
2	11495.36	53.36	74.00	-20.64	41.94	7.34	38.70	34.62	97	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 157 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11562.71	42.03	54.00	-11.97	30.57	7.39	38.71	34.64	280	150	Average	HORIZONTAL
2	11570.35	54.80	74.00	-19.20	43.33	7.41	38.71	34.65	280	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11568.90	41.72	54.00	-12.28	30.24	7.41	38.71	34.64	232	150	Average	VERTICAL
2	11577.99	54.68	74.00	-19.32	43.21	7.41	38.71	34.65	232	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11a CH 165 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11640.04	42.23	54.00	-11.77	30.67	7.50	38.73	34.67	271	150	Average	HORIZONTAL
2	11656.02	54.58	74.00	-19.42	43.01	7.52	38.73	34.68	271	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11642.65	54.62	74.00	-19.38	43.06	7.50	38.73	34.67	311	150	Peak	VERTICAL
2	11652.75	41.07	54.00	-12.93	29.50	7.52	38.73	34.68	311	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 36 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15534.70	57.05	74.00	-16.95	43.75	9.76	38.16	34.62	185	150	Peak	HORIZONTAL
2	15535.17	44.39	54.00	-9.61	31.09	9.76	38.16	34.62	185	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15544.05	57.43	74.00	-16.57	44.09	9.77	38.19	34.62	226	150	Peak	VERTICAL
2	15544.40	44.05	54.00	-9.95	30.71	9.77	38.19	34.62	226	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 40 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15601.68	58.01	74.00	-15.99	44.60	9.81	38.29	34.69	205	150	Peak	HORIZONTAL
2	15609.12	44.54	54.00	-9.46	31.13	9.81	38.29	34.69	205	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15592.33	57.42	74.00	-16.58	44.03	9.80	38.26	34.67	157	150	Peak	VERTICAL
2	15608.16	44.20	54.00	-9.80	30.79	9.81	38.29	34.69	157	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 48 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15710.13	58.43	74.00	-15.57	44.87	9.87	38.47	34.78	198	150	Peak	HORIZONTAL
2	15717.16	45.89	54.00	-8.11	32.29	9.88	38.50	34.78	198	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15726.45	59.05	74.00	-14.95	45.47	9.88	38.50	34.80	255	150	Peak	VERTICAL
2	15729.61	45.58	54.00	-8.42	32.00	9.88	38.50	34.80	255	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 52 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15773.58	45.86	54.00	-8.14	32.16	9.92	38.60	34.82	84	150	Average	HORIZONTAL
2	15778.15	58.69	74.00	-15.31	45.01	9.92	38.60	34.84	84	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15770.36	45.55	54.00	-8.45	31.85	9.92	38.60	34.82	158	150	Average	VERTICAL
2	15786.08	58.93	74.00	-15.07	45.21	9.93	38.63	34.84	158	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 60 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15891.23	45.55	54.00	-8.45	31.68	9.99	38.81	34.93	168	150	Average	HORIZONTAL
2	15904.20	58.34	74.00	-15.66	44.43	10.00	38.84	34.93	168	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15893.03	58.53	74.00	-15.47	44.66	9.99	38.81	34.93	135	150	Peak	VERTICAL
2	15901.42	45.56	54.00	-8.44	31.65	10.00	38.84	34.93	135	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 64 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15958.75	57.79	74.00	-16.21	43.81	10.04	38.94	35.00	252	150	Peak	HORIZONTAL
2	15961.19	45.17	54.00	-8.83	31.19	10.04	38.94	35.00	252	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15954.53	59.50	74.00	-14.50	45.50	10.04	38.94	34.98	200	150	Peak	VERTICAL
2	15963.53	44.98	54.00	-9.02	31.00	10.04	38.94	35.00	200	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 100 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11005.82	41.17	54.00	-12.83	29.44	7.69	38.70	34.66	242	150	Average	HORIZONTAL
2	11008.92	54.03	74.00	-19.97	42.30	7.69	38.70	34.66	242	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	10993.95	53.95	74.00	-20.05	42.21	7.70	38.70	34.66	289	150	Peak	VERTICAL
2	11009.96	40.84	54.00	-13.16	29.11	7.69	38.70	34.66	289	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 116 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11157.66	41.63	54.00	-12.37	30.00	7.58	38.70	34.65	250	150	Average	HORIZONTAL
2	11159.28	54.93	74.00	-19.07	43.30	7.58	38.70	34.65	250	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11161.71	55.42	74.00	-18.58	43.79	7.58	38.70	34.65	213	150	Peak	VERTICAL
2	11161.71	41.41	54.00	-12.59	29.78	7.58	38.70	34.65	213	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 140 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11398.93	41.14	54.00	-12.86	29.67	7.40	38.70	34.63	123	150	Average	HORIZONTAL
2	11401.65	54.67	74.00	-19.33	43.20	7.40	38.70	34.63	123	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11397.60	53.73	74.00	-20.27	42.26	7.40	38.70	34.63	188	150	Peak	VERTICAL
2	11404.08	40.80	54.00	-13.20	29.33	7.40	38.70	34.63	188	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 149 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11480.28	40.55	54.00	-13.45	29.12	7.35	38.70	34.62	278	150	Average	HORIZONTAL
2	11489.80	53.37	74.00	-20.63	41.95	7.34	38.70	34.62	278	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11483.14	40.20	54.00	-13.80	28.78	7.34	38.70	34.62	218	150	Average	VERTICAL
2	11495.24	53.30	74.00	-20.70	41.88	7.34	38.70	34.62	218	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 157 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11568.75	54.96	74.00	-19.04	43.48	7.41	38.71	34.64	279	150	Peak	HORIZONTAL
2	11571.07	41.84	54.00	-12.16	30.37	7.41	38.71	34.65	279	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11577.06	40.98	54.00	-13.02	29.51	7.41	38.71	34.65	339	150	Average	VERTICAL
2	11579.44	54.49	74.00	-19.51	43.02	7.41	38.71	34.65	339	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT20 CH 165 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11640.42	55.20	74.00	-18.80	43.64	7.50	38.73	34.67	215	150	Peak	HORIZONTAL
2	11646.18	42.12	54.00	-11.88	30.56	7.50	38.73	34.67	215	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11642.97	54.43	74.00	-19.57	42.87	7.50	38.73	34.67	249	150	Peak	VERTICAL
2	11643.43	41.14	54.00	-12.86	29.58	7.50	38.73	34.67	249	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 38 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15563.48	45.31	54.00	-8.69	31.95	9.78	38.22	34.64	214	150	Average	HORIZONTAL
2	15566.72	58.71	74.00	-15.29	45.35	9.78	38.22	34.64	214	150	Peak	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15565.64	45.40	54.00	-8.60	32.04	9.78	38.22	34.64	257	150	Average	VERTICAL
2	15567.40	58.81	74.00	-15.19	45.45	9.78	38.22	34.64	257	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 46 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15683.32	57.77	74.00	-16.23	44.22	9.86	38.44	34.75	202	150	Peak	HORIZONTAL
2	15690.80	44.68	54.00	-9.32	31.13	9.86	38.44	34.75	202	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15696.36	44.56	54.00	-9.44	31.01	9.86	38.44	34.75	151	150	Average	VERTICAL
2	15698.84	57.57	74.00	-16.43	43.98	9.87	38.47	34.75	151	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 54 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15813.40	58.46	74.00	-15.54	44.73	9.94	38.66	34.87	197	150	Peak	HORIZONTAL
2	15814.24	45.67	54.00	-8.33	31.94	9.94	38.66	34.87	197	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	15814.20	45.68	54.00	-8.32	31.95	9.94	38.66	34.87	148	150	Average	VERTICAL
2	15816.92	59.18	74.00	-14.82	45.41	9.95	38.69	34.87	148	150	Peak	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 62 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	10611.68	53.07	74.00	-20.93	41.40	7.82	38.78	34.93	183	150	Peak	HORIZONTAL
2	10625.68	40.12	54.00	-13.88	28.46	7.81	38.78	34.93	183	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	10623.28	52.98	74.00	-21.02	41.32	7.81	38.78	34.93	110	150	Peak	VERTICAL
2	10625.68	40.32	54.00	-13.68	28.66	7.81	38.78	34.93	110	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 102 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11012.40	53.24	74.00	-20.76	41.51	7.69	38.70	34.66	183	150	Peak	HORIZONTAL
2	11029.60	39.90	54.00	-14.10	28.18	7.68	38.70	34.66	183	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11022.04	52.83	74.00	-21.17	41.11	7.68	38.70	34.66	136	150	Peak	VERTICAL
2	11026.48	39.94	54.00	-14.06	28.22	7.68	38.70	34.66	136	150	Average	VERTICAL

Temperature	24°C	Humidity	65%
Test Engineer	Brian Sun	Configurations	IEEE 802.11ac MCS0/Nss1 VHT40 CH 110 / Chain 1 + Chain 2 + Chain 3 / 3TX
Test Date	Oct. 09, 2015		

Horizontal

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11092.56	53.39	74.00	-20.61	41.71	7.63	38.70	34.65	168	150	Peak	HORIZONTAL
2	11106.92	39.63	54.00	-14.37	27.97	7.61	38.70	34.65	168	150	Average	HORIZONTAL

Vertical

	Freq	Level	Limit Line	Over Limit	Read Level	Cable Loss	Antenna Factor	Preamp Factor	T/Pos	A/Pos	Remark	Pol/Phase
	MHz	dBuV/m	dBuV/m	dB	dBuV	dB	dB/m	dB	deg	cm		
1	11092.80	39.68	54.00	-14.32	28.00	7.63	38.70	34.65	228	150	Average	VERTICAL
2	11100.20	52.55	74.00	-21.45	40.87	7.63	38.70	34.65	228	150	Peak	VERTICAL