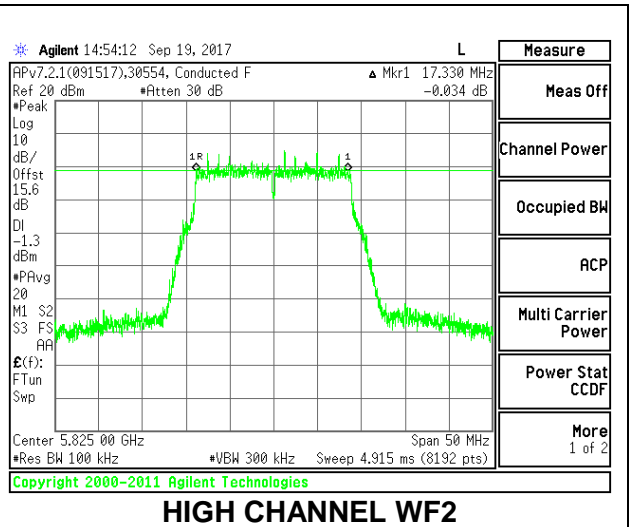
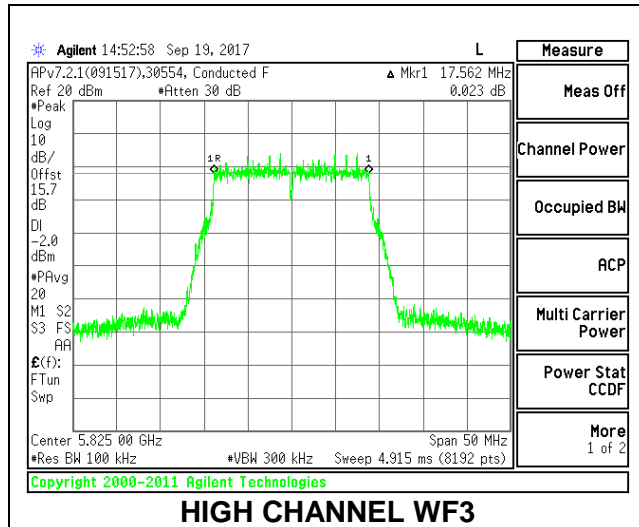
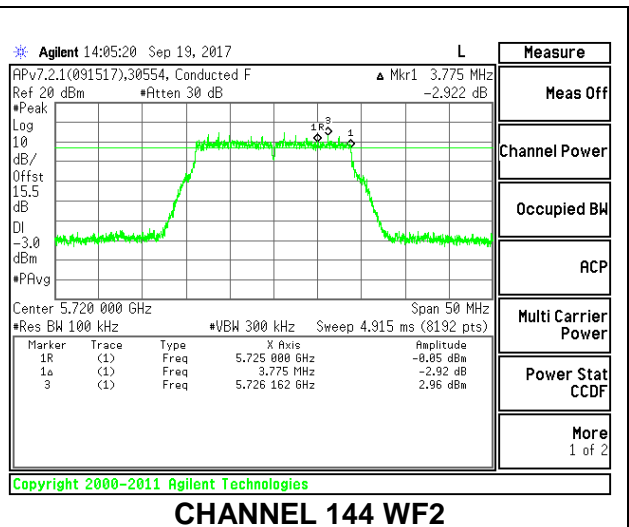
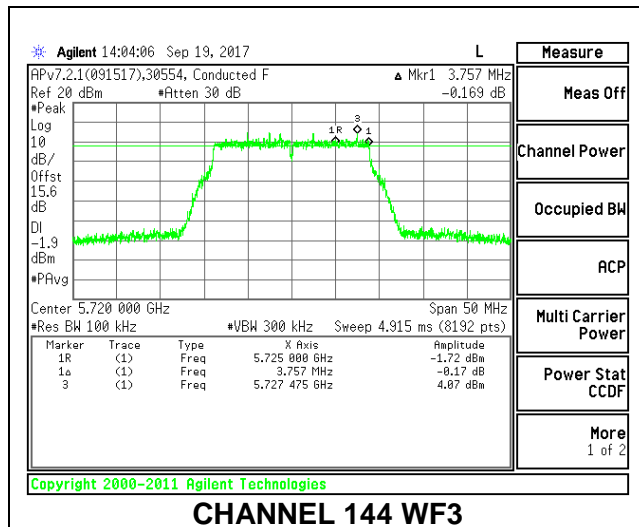


### HIGH CHANNEL



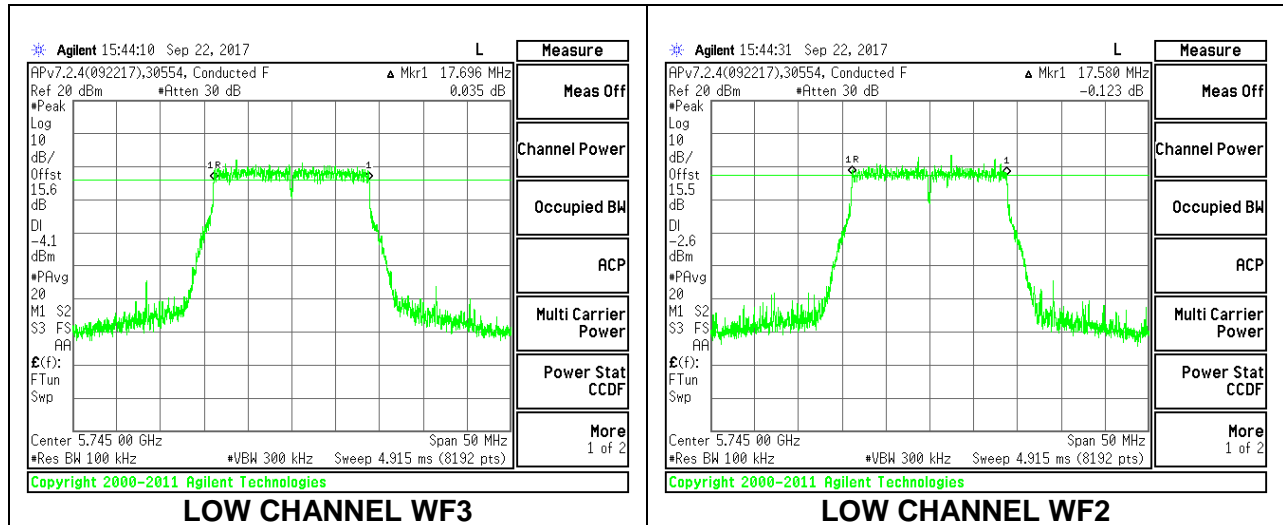
### CHANNEL 144



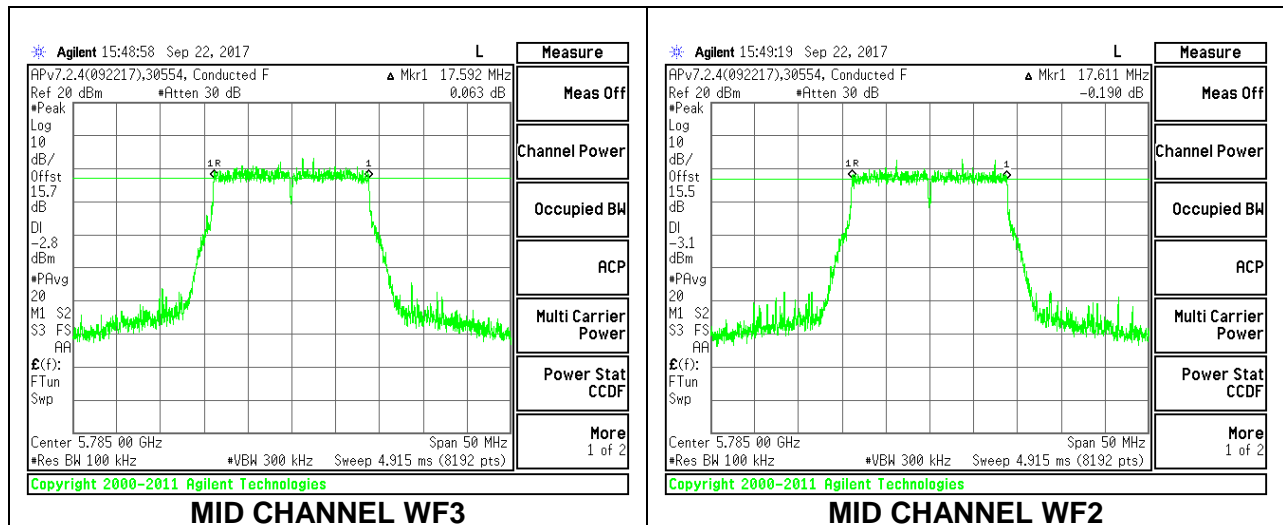
**2TX Antenna WF3 + Antenna WF2 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5745	17.696	17.580	0.5
Mid	5785	17.592	17.611	0.5
High	5825	17.617	17.678	0.5
144	5720	3.732	3.830	0.5

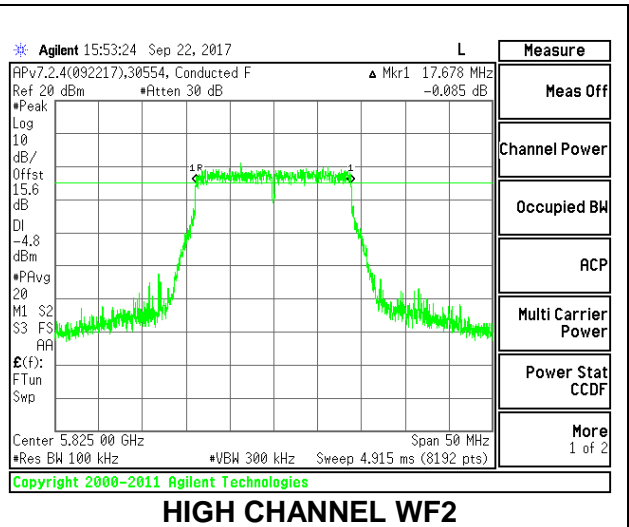
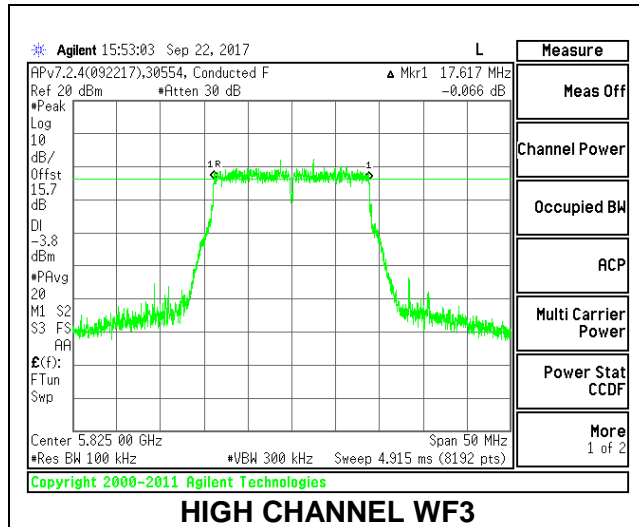
**LOW CHANNEL**



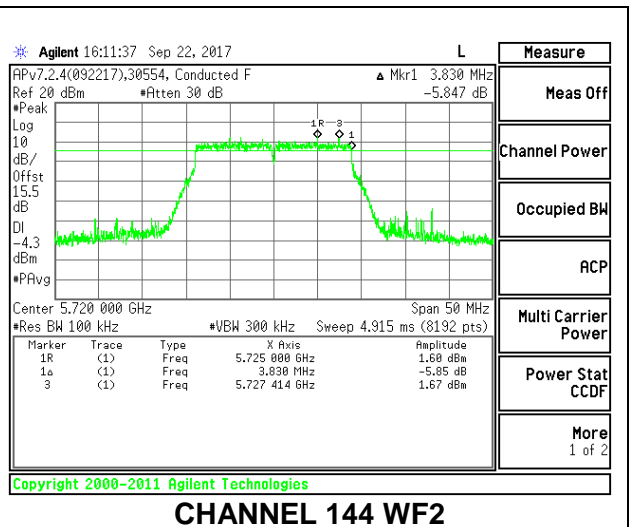
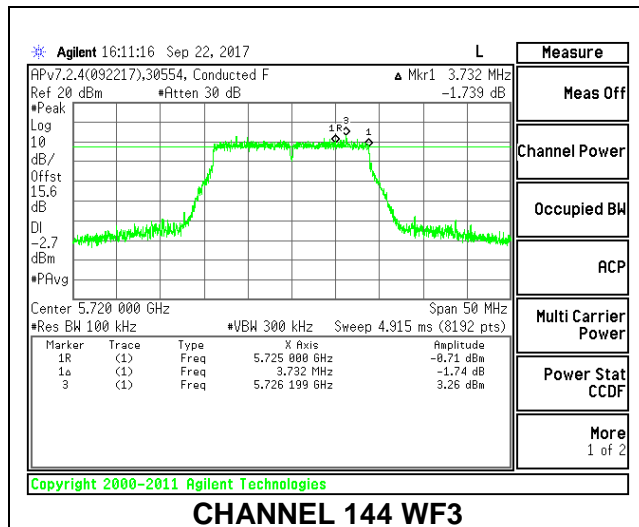
**MID CHANNEL**



### HIGH CHANNEL



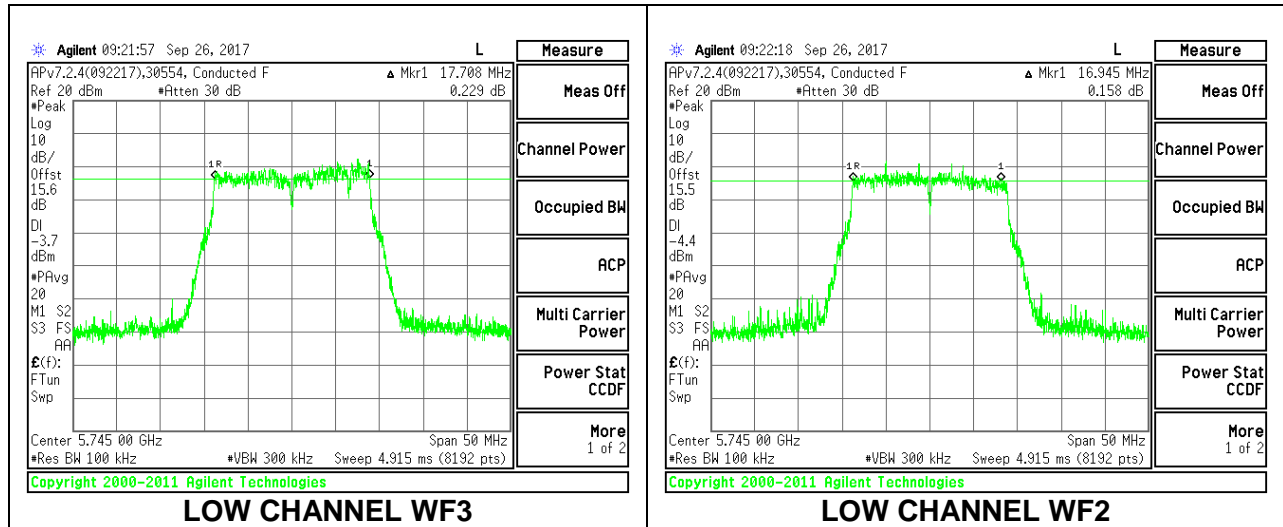
### CHANNEL 144



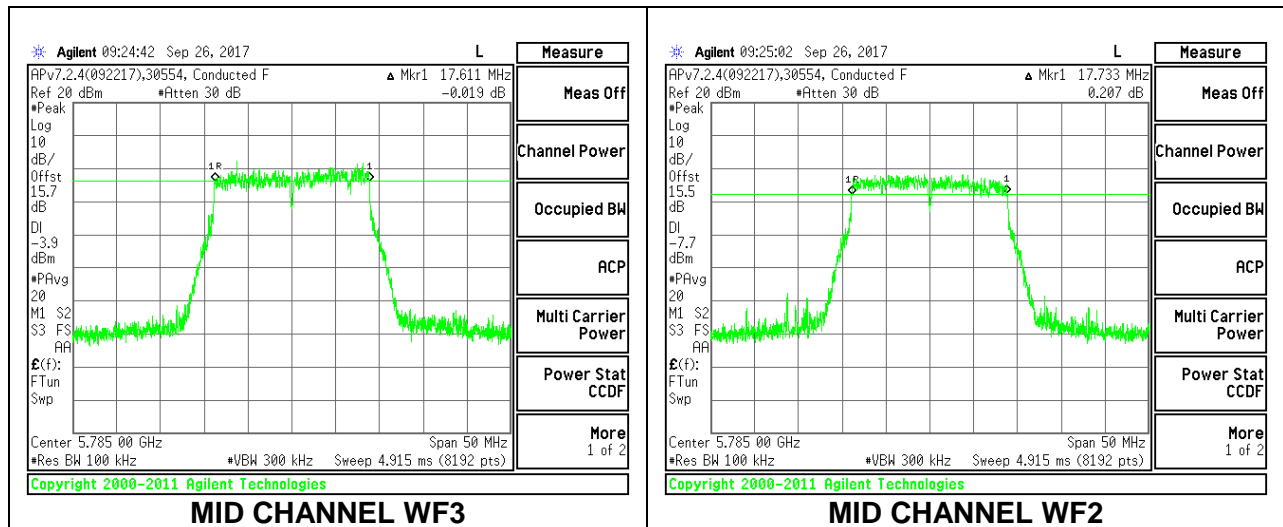
**2TX Antenna WF3 + Antenna WF2 BF Mode**

Channel	Frequency (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5745	17.708	16.945	0.5
Mid	5785	17.611	17.733	0.5
High	5825	17.592	17.623	0.5
144	5720	3.885	3.818	0.5

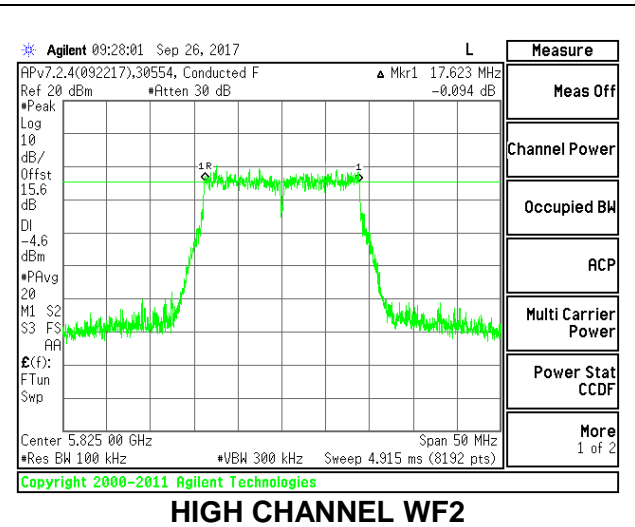
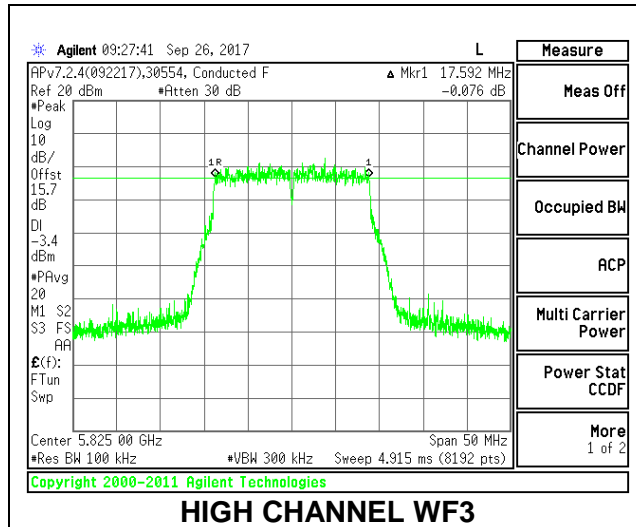
**LOW CHANNEL**



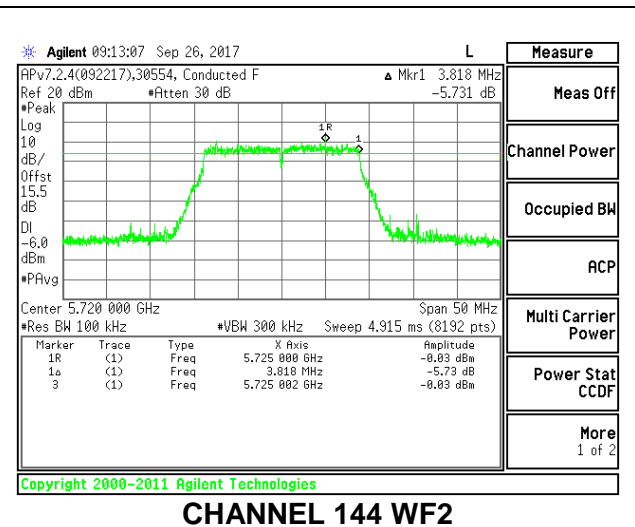
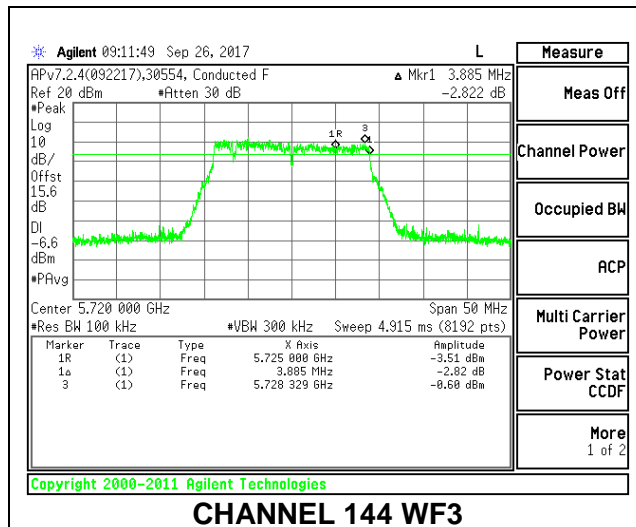
**MID CHANNEL**



**HIGH CHANNEL**



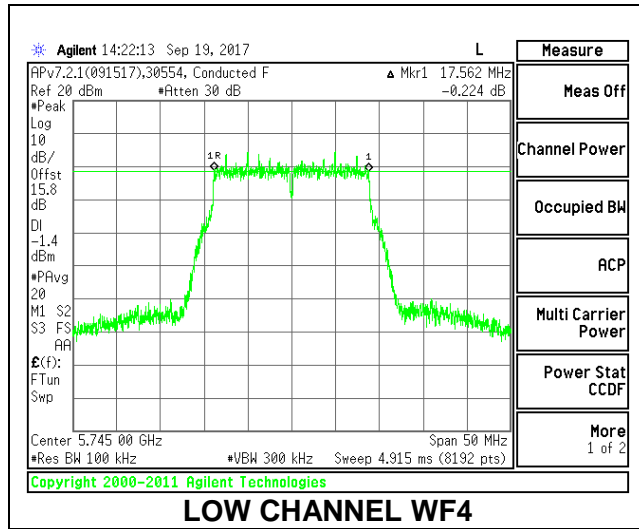
**CHANNEL 144**



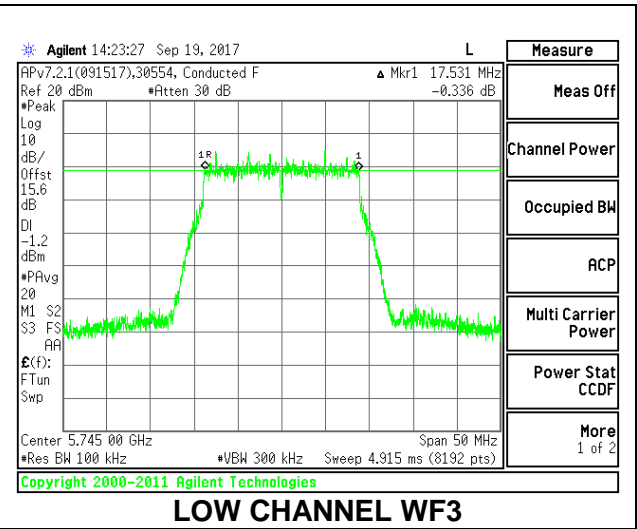
**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 CDD Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5745	17.562	17.531	17.568	0.5
Mid	5785	17.562	17.580	17.562	0.5
High	5825	17.544	17.574	17.318	0.5
144	5720	3.818	3.726	3.787	0.5

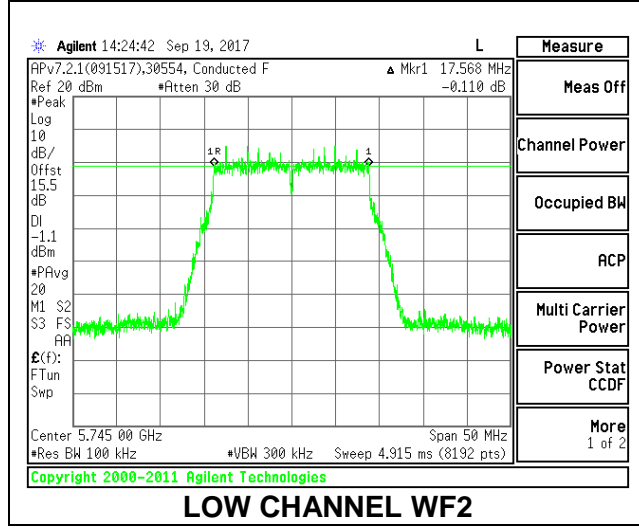
**LOW CHANNEL**



**LOW CHANNEL WF4**

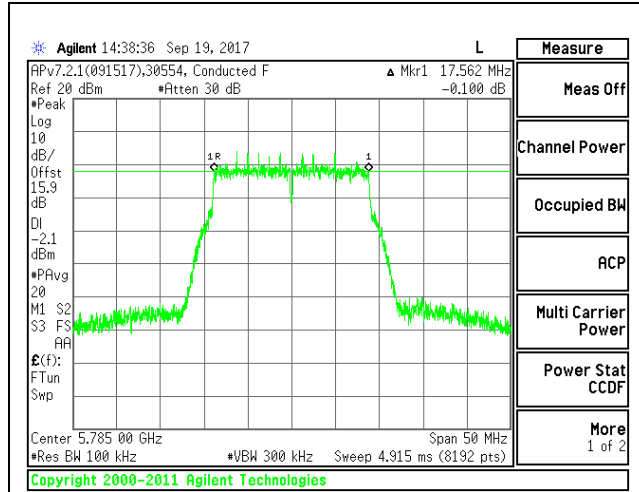


**LOW CHANNEL WF3**

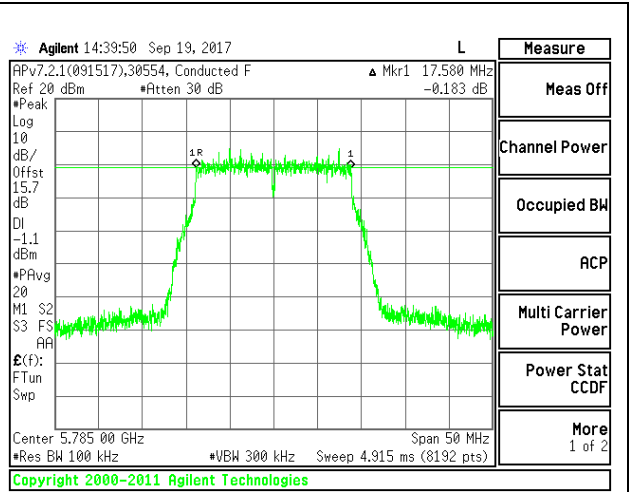


**LOW CHANNEL WF2**

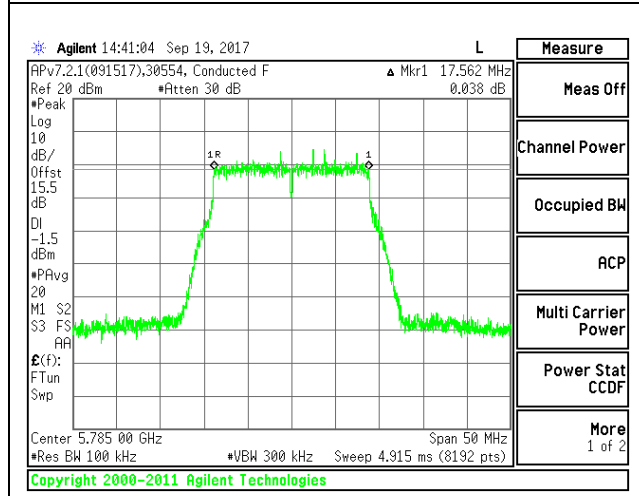
**MID CHANNEL**



**MID CHANNEL WF4**

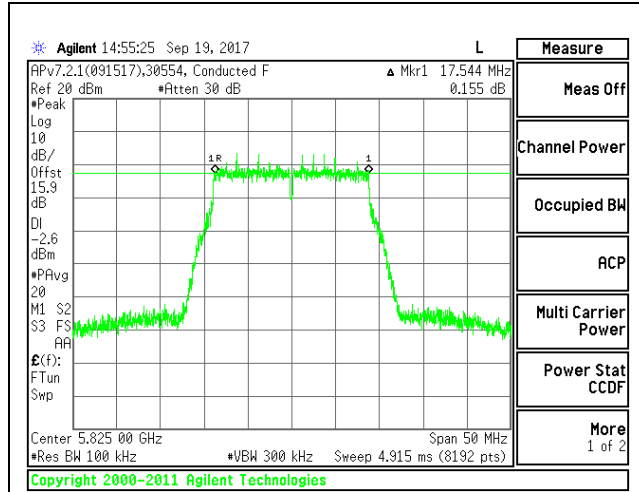


**MID CHANNEL WF3**

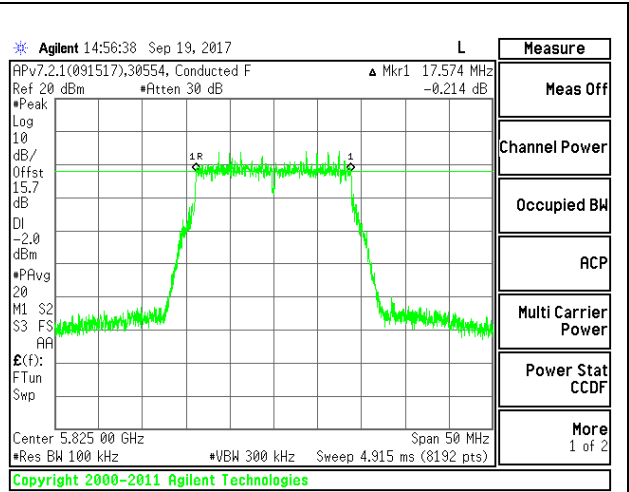


**MID CHANNEL WF2**

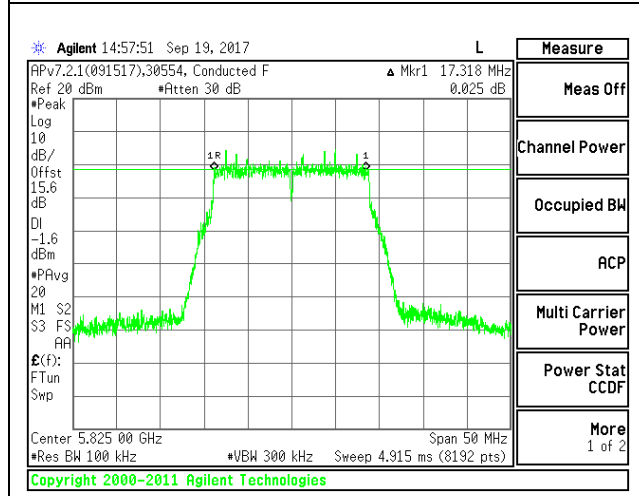
**HIGH CHANNEL**



**HIGH CHANNEL WF4**



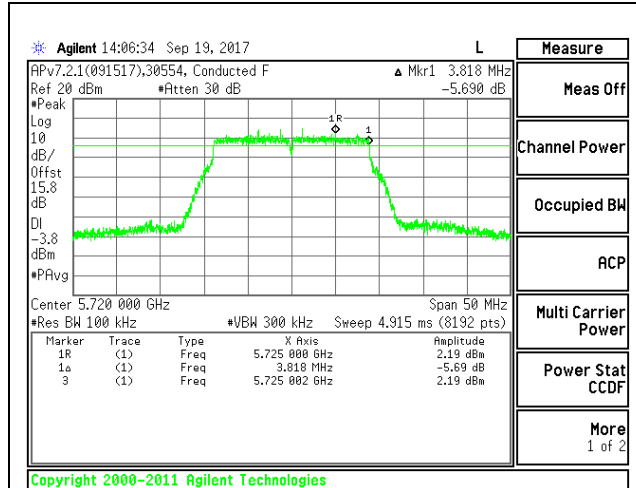
**HIGH CHANNEL WF3**



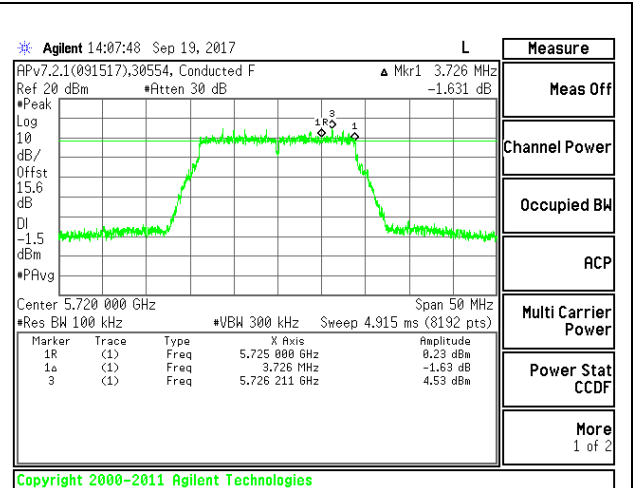
**HIGH CHANNEL WF2**



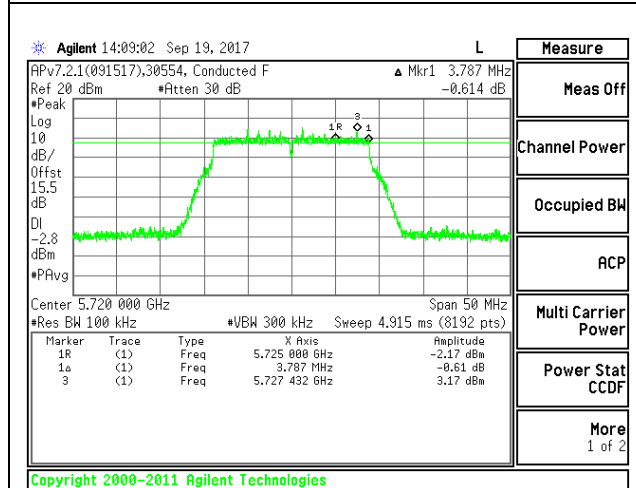
**CHANNEL 144**



**CHANNEL 144 WF4**



**CHANNEL 144 WF3**

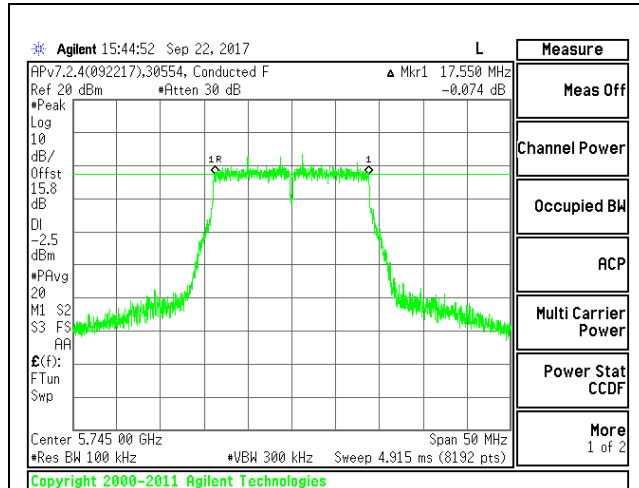


**CHANNEL 144 WF2**

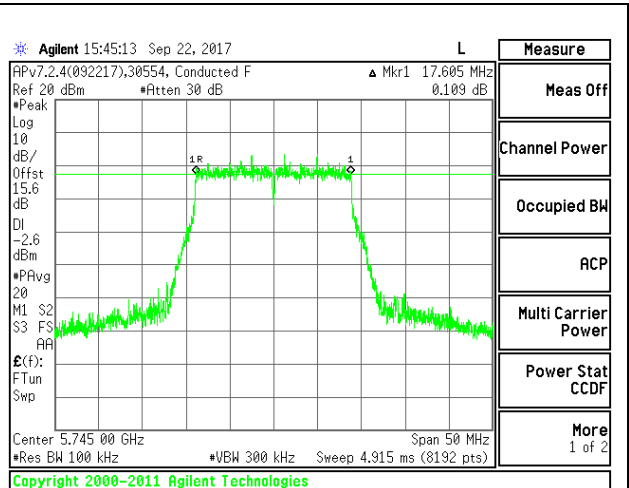
**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5745	17.550	17.605	17.641	0.5
Mid	5785	17.623	17.623	17.623	0.5
High	5825	17.574	17.605	17.623	0.5
144	5720	3.769	3.836	3.812	0.5

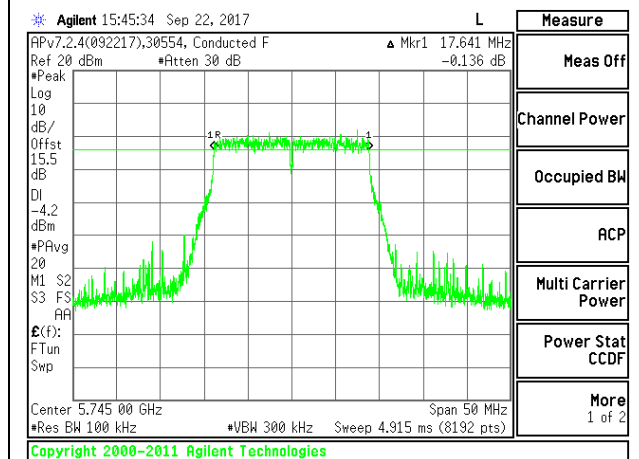
**LOW CHANNEL**



**LOW CHANNEL WF4**

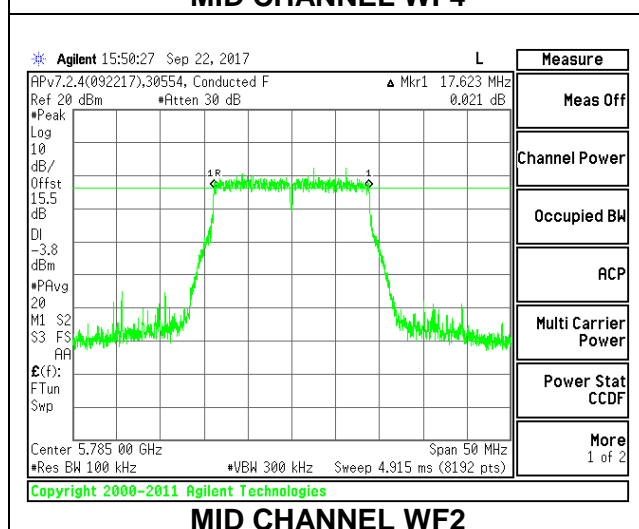
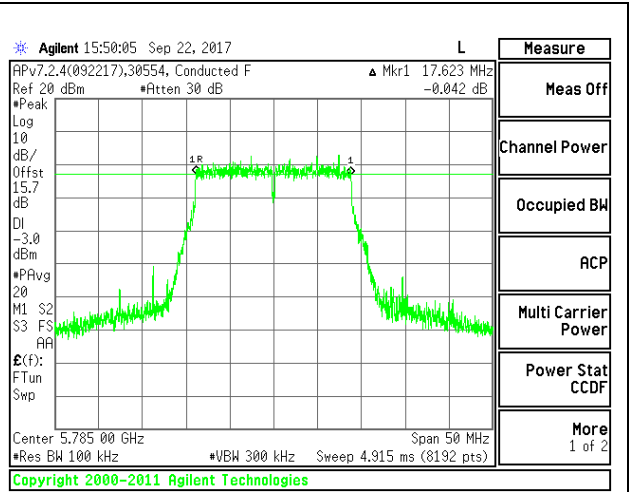
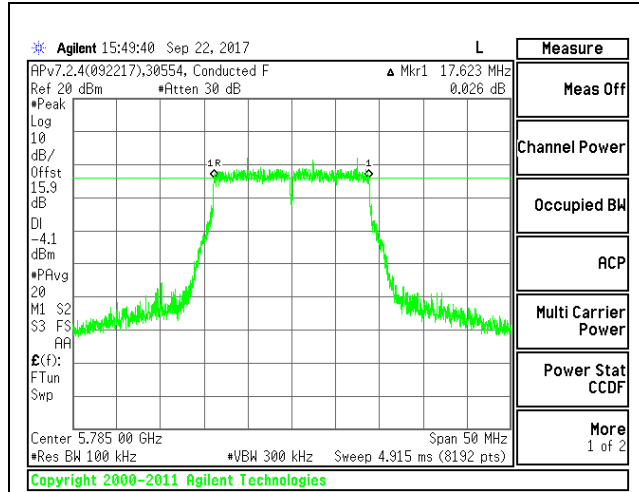


**LOW CHANNEL WF3**

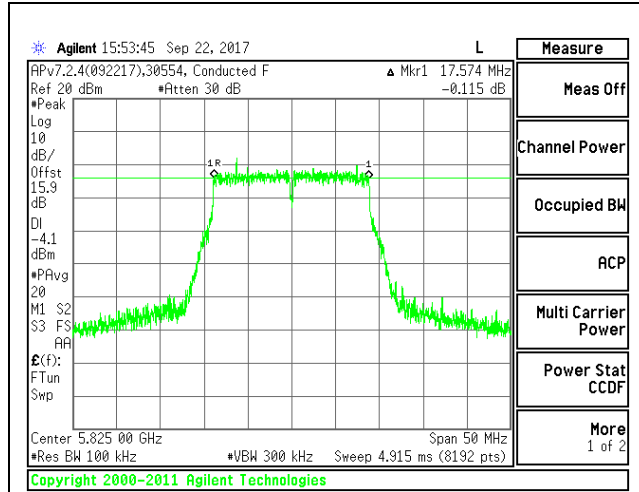


**LOW CHANNEL WF2**

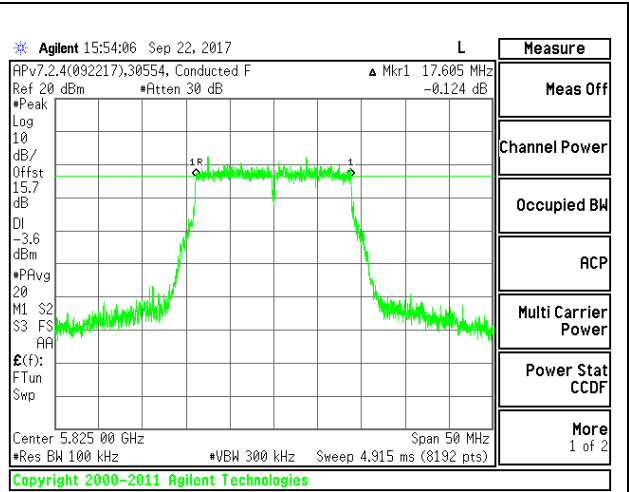
**MID CHANNEL**



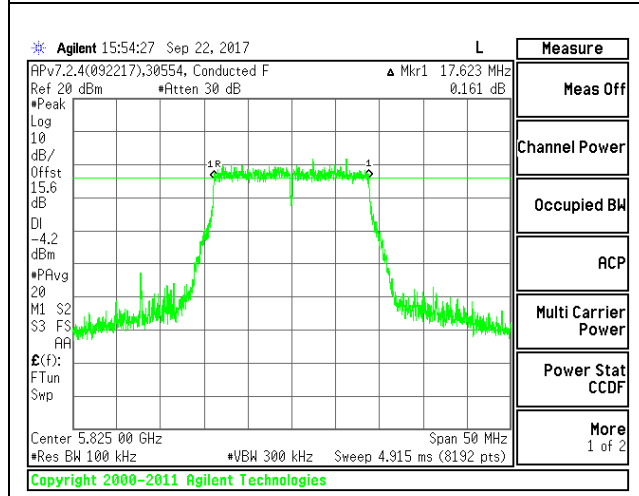
**HIGH CHANNEL**



**HIGH CHANNEL WF4**

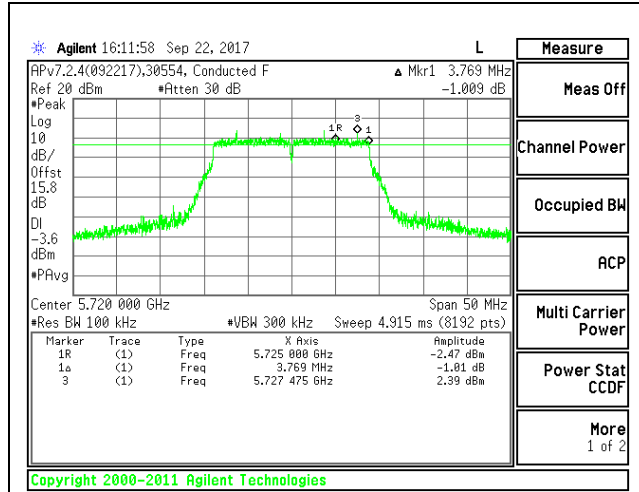


**HIGH CHANNEL WF3**

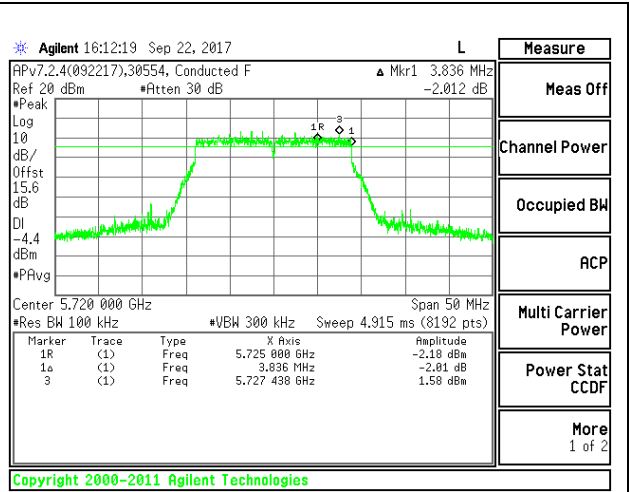


**HIGH CHANNEL WF2**

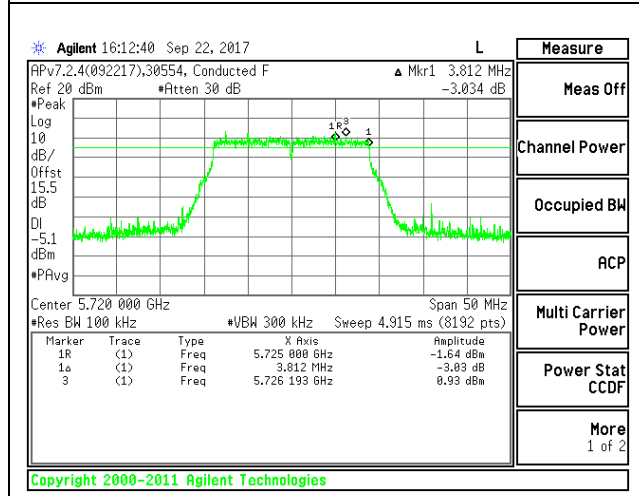
**CHANNEL 144**



**CHANNEL 144 WF4**



**CHANNEL 144 WF3**

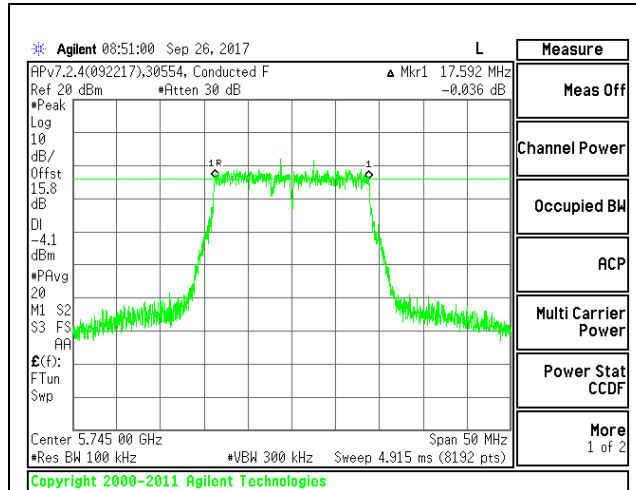


**CHANNEL 144 WF2**

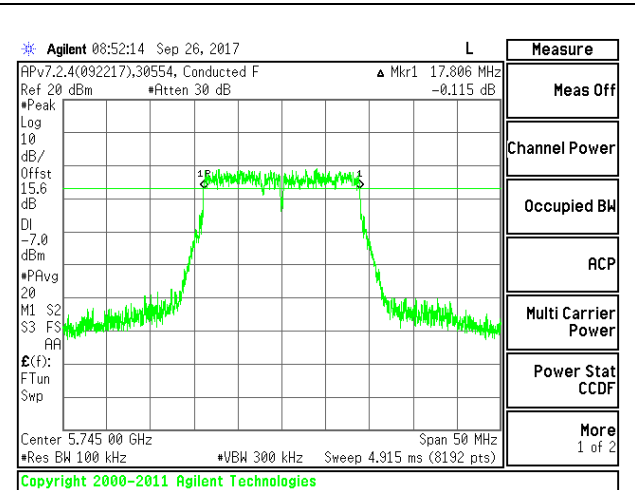
**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 BF Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5745	17.592	17.806	17.605	0.5
Mid	5785	17.629	17.696	17.592	0.5
High	5825	17.696	17.629	17.776	0.5
144	5720	3.866	3.873	3.891	0.5

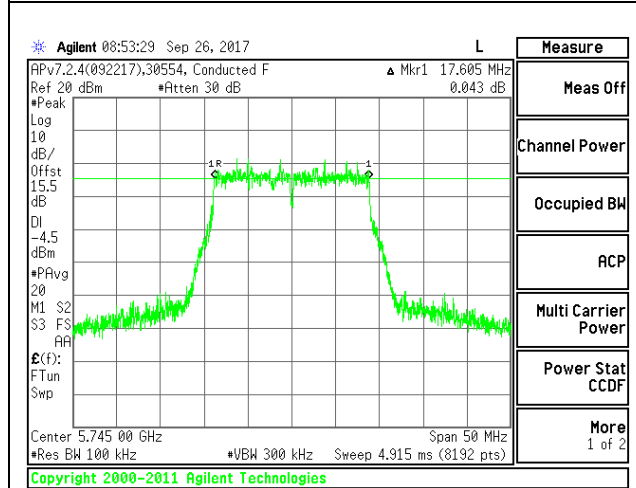
**LOW CHANNEL**



**LOW CHANNEL WF4**

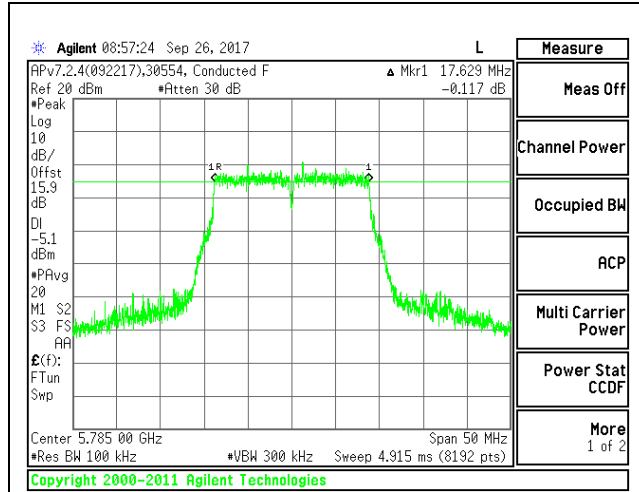


**LOW CHANNEL WF3**

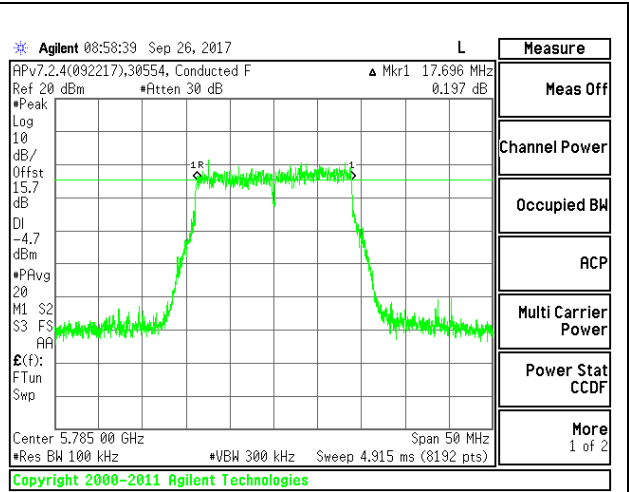


**LOW CHANNEL WF2**

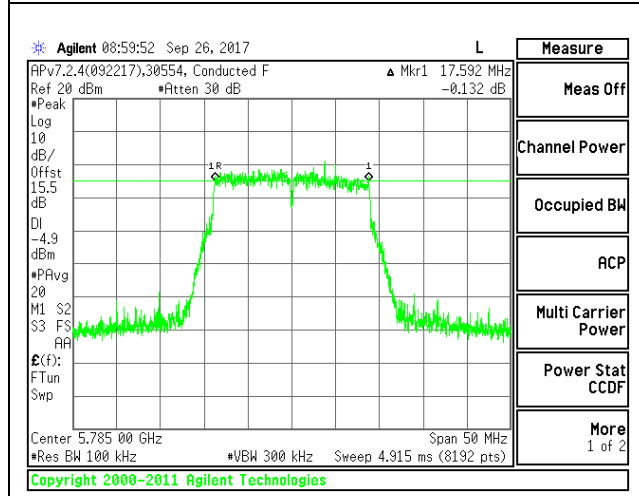
**MID CHANNEL**



**MID CHANNEL WF4**

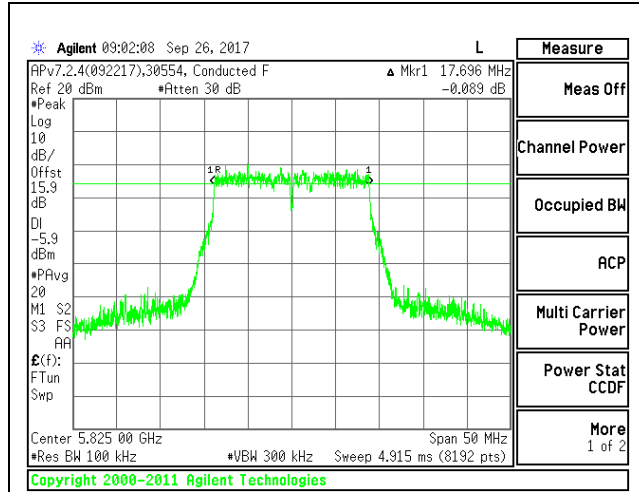


**MID CHANNEL WF3**

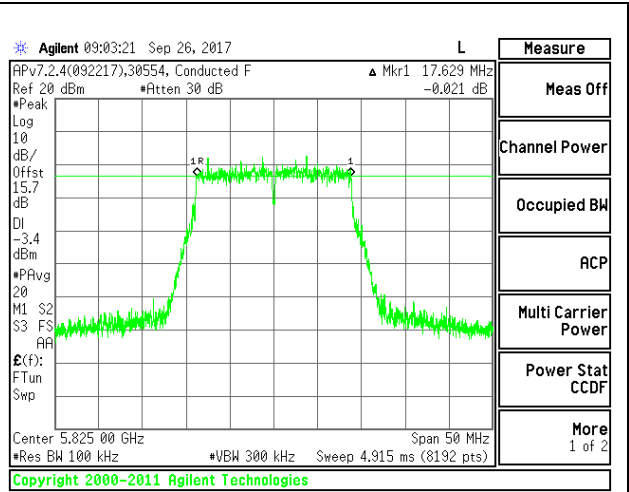


**MID CHANNEL WF2**

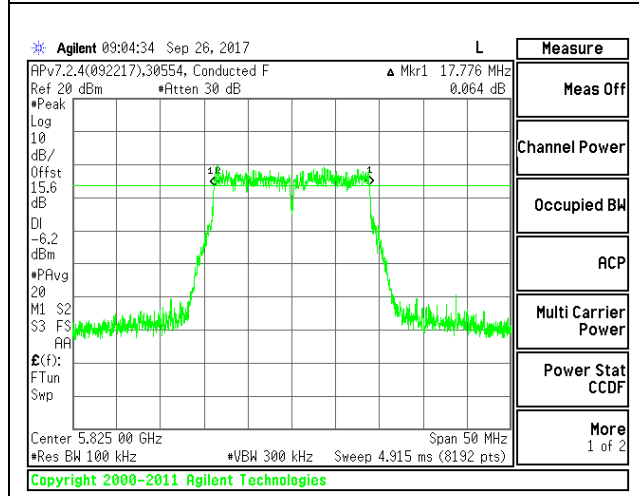
**HIGH CHANNEL**



**HIGH CHANNEL WF4**



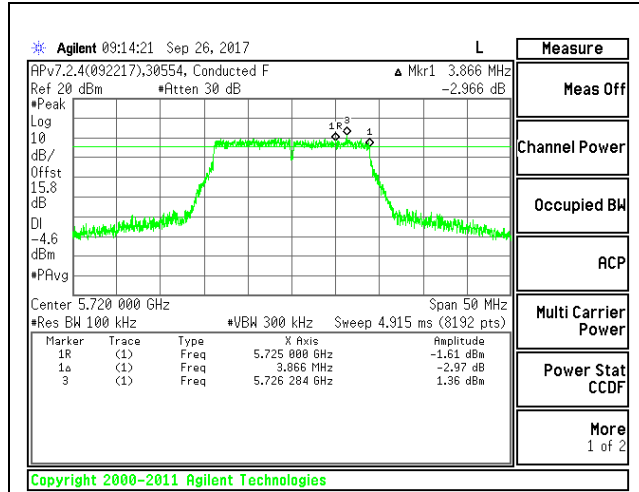
**HIGH CHANNEL WF3**



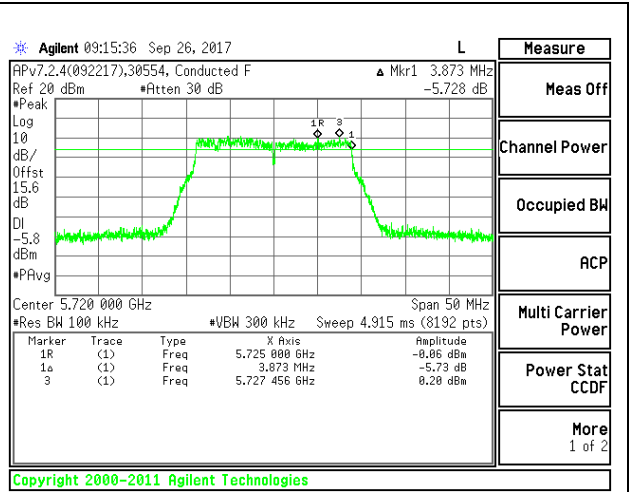
**HIGH CHANNEL WF2**



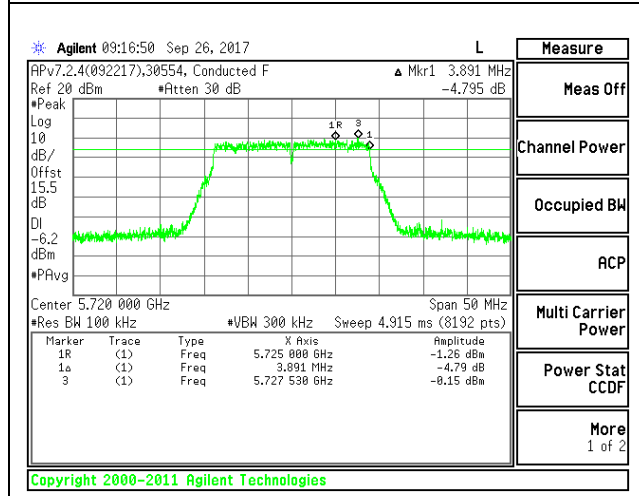
**CHANNEL 144**



**CHANNEL 144 WF4**



**CHANNEL 144 WF3**

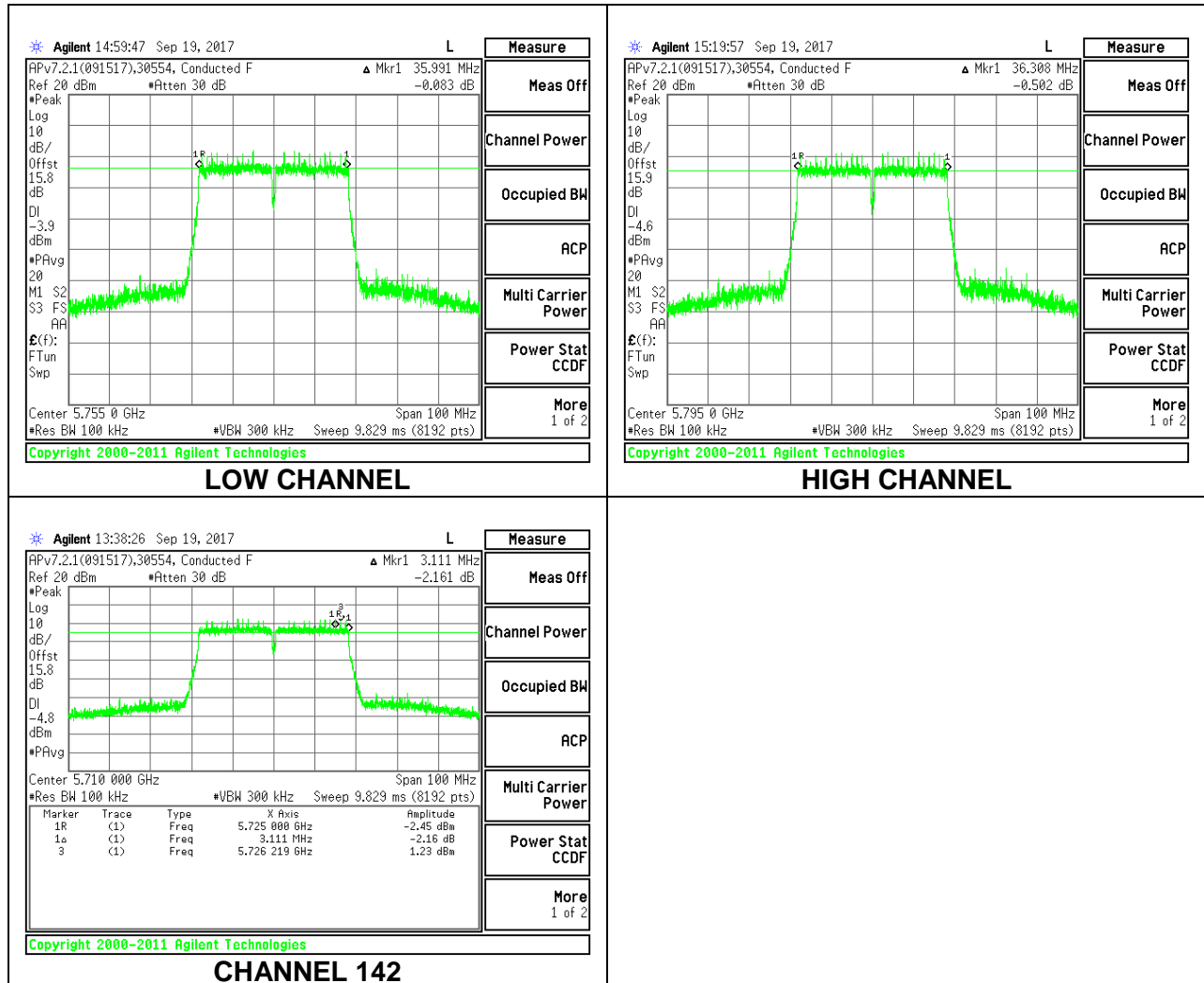


**CHANNEL 144 WF2**

### 4.4.2. 802.11n HT40 MODE IN THE 5.8 GHz BAND

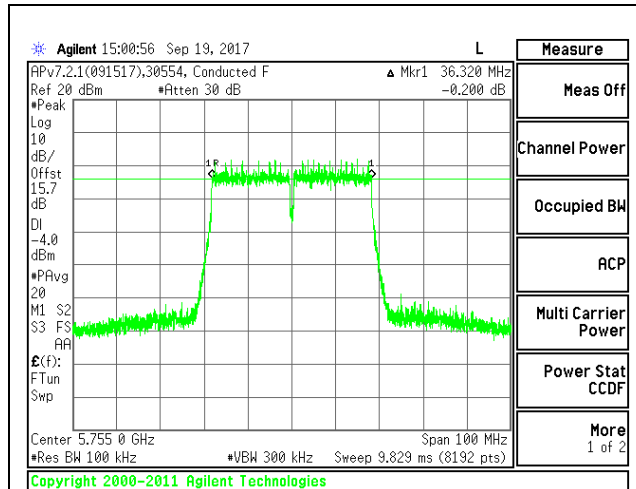
#### 1TX Antenna WF4

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.991	0.5
High	5795	36.308	0.5
142	5710	3.111	0.5

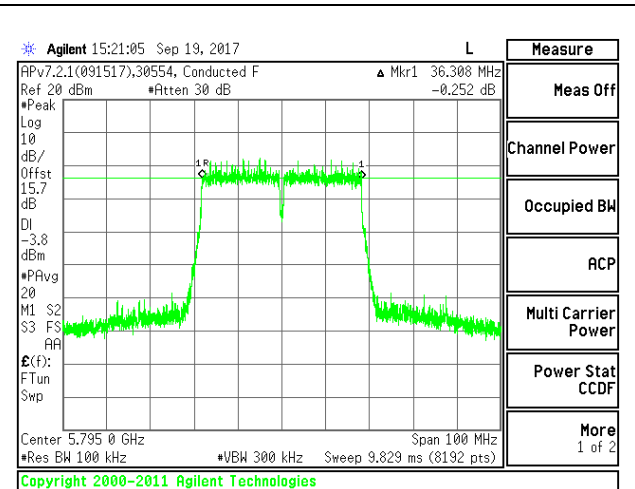


**1TX Antenna WF3**

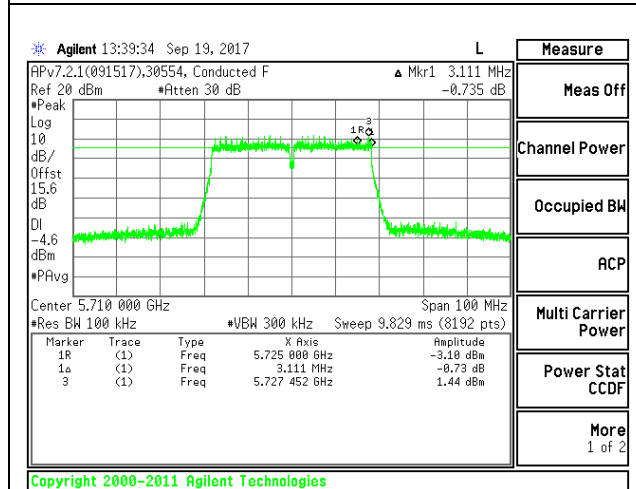
Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
Low	5755	36.320	0.5
High	5795	36.308	0.5
142	5710	3.111	0.5



**LOW CHANNEL**



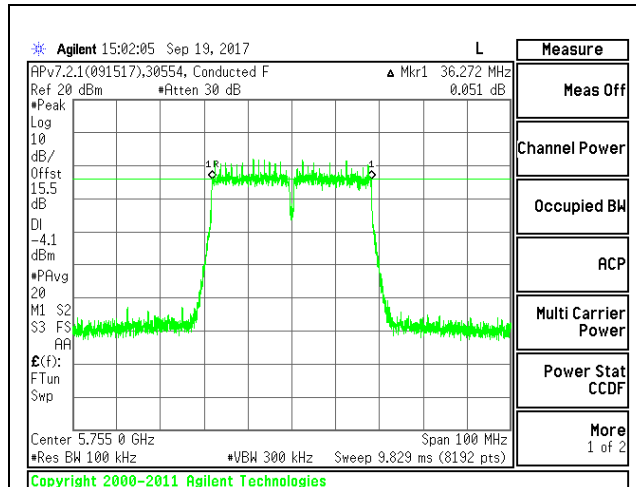
**HIGH CHANNEL**



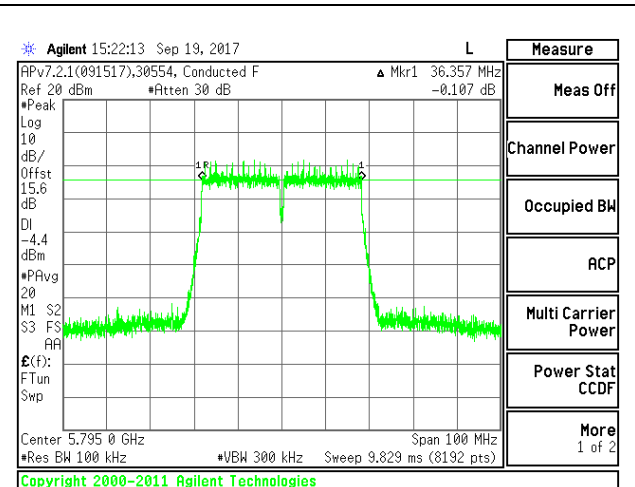
**CHANNEL 142**

**1TX Antenna WF2**

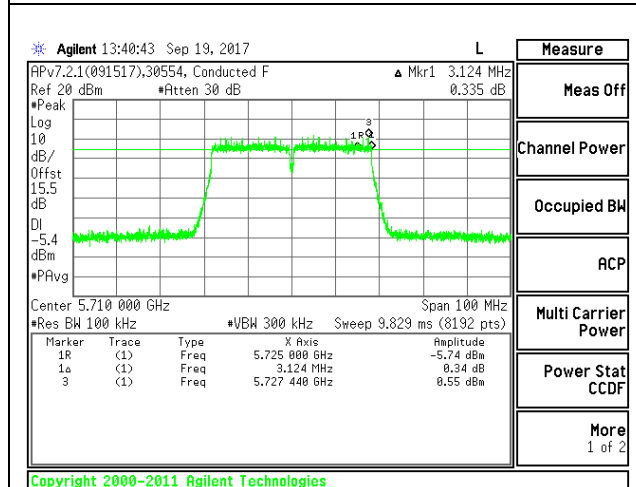
Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
Low	5755	36.272	0.5
High	5795	36.357	0.5
142	5710	3.124	0.5



**LOW CHANNEL**



**HIGH CHANNEL**

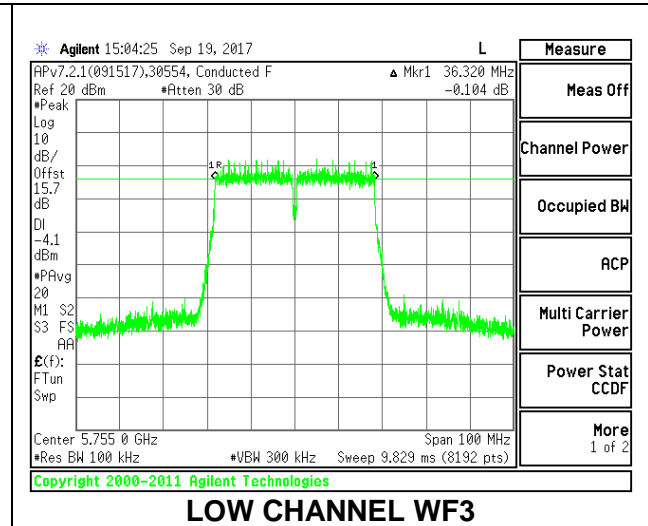
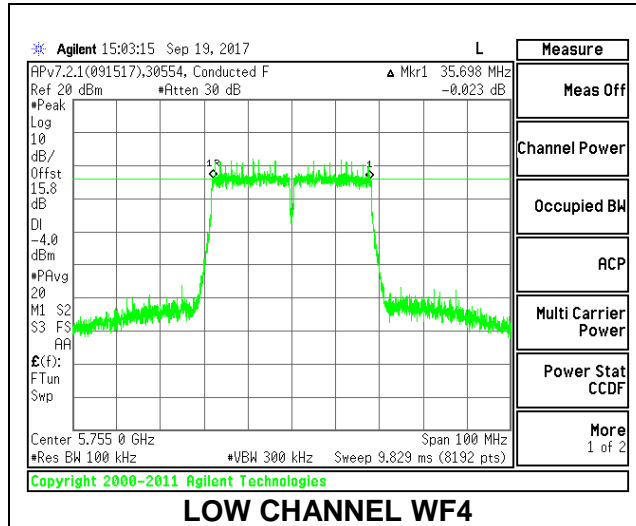


**CHANNEL 142**

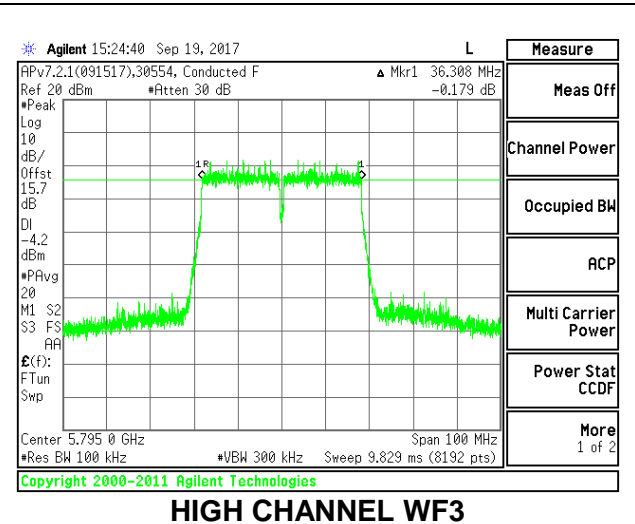
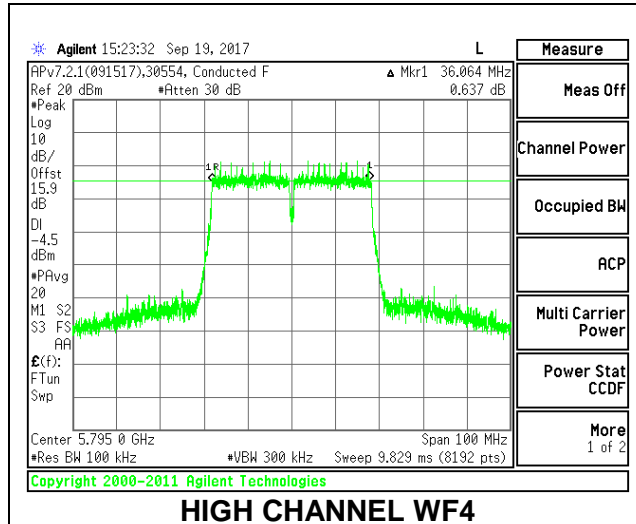
**2TX Antenna WF4 + Antenna WF3 CDD Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	Minimum Limit (MHz)
Low	5755	35.6980	36.3200	0.5
High	5795	36.0640	36.3080	0.5
142	5710	3.1110	3.1480	0.5

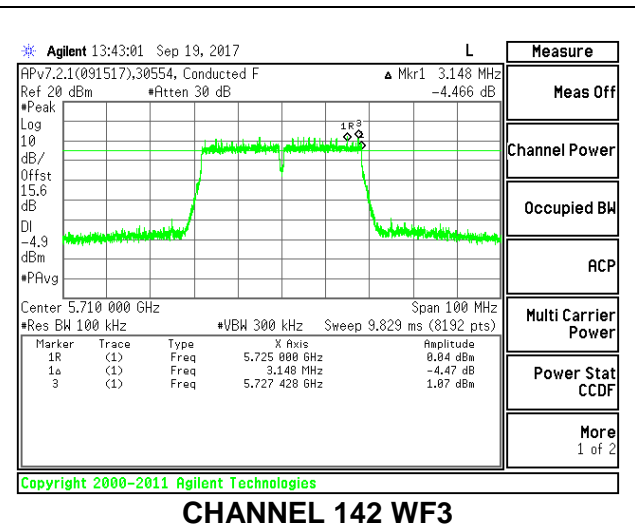
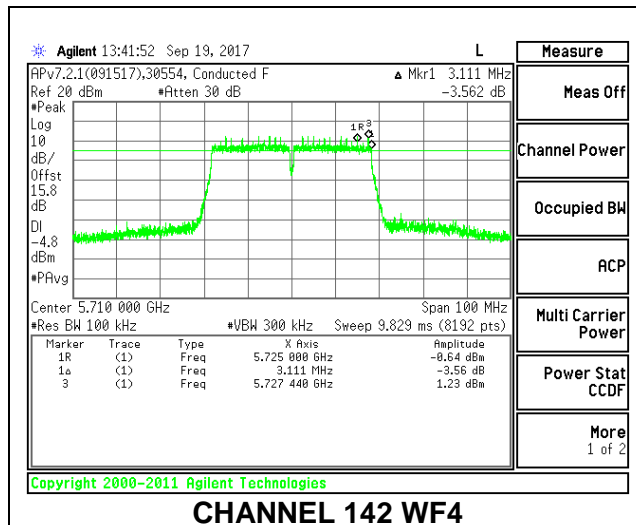
**LOW CHANNEL**



### HIGH CHANNEL



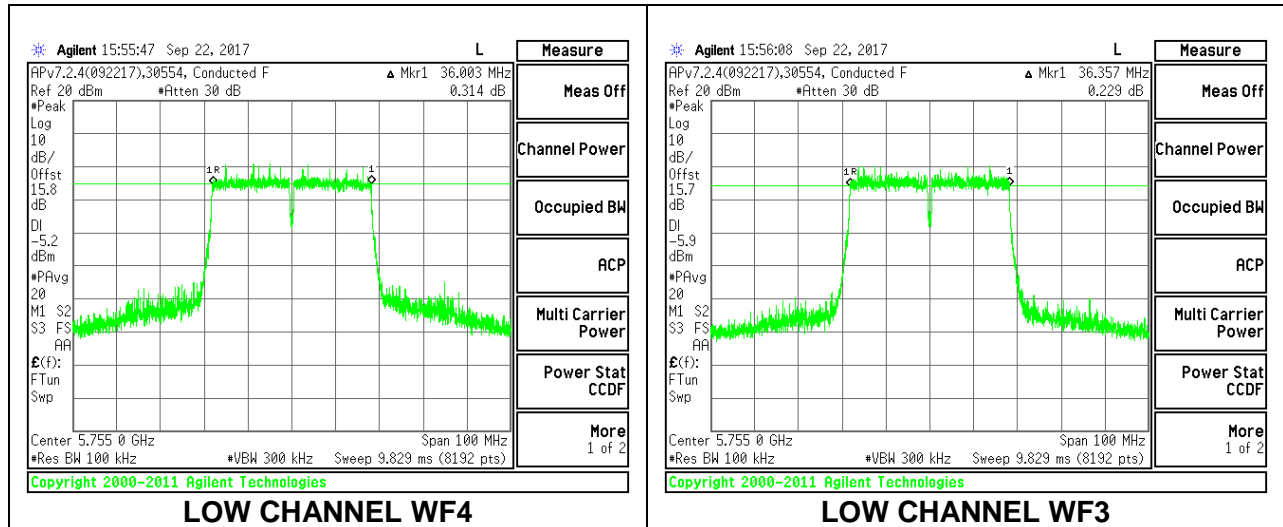
### CHANNEL 142



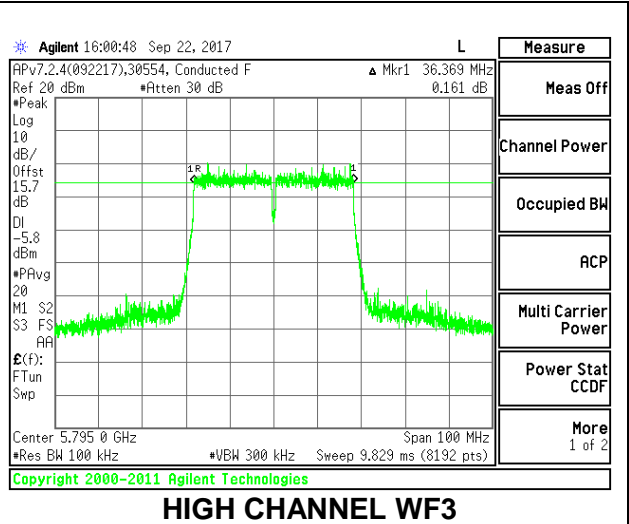
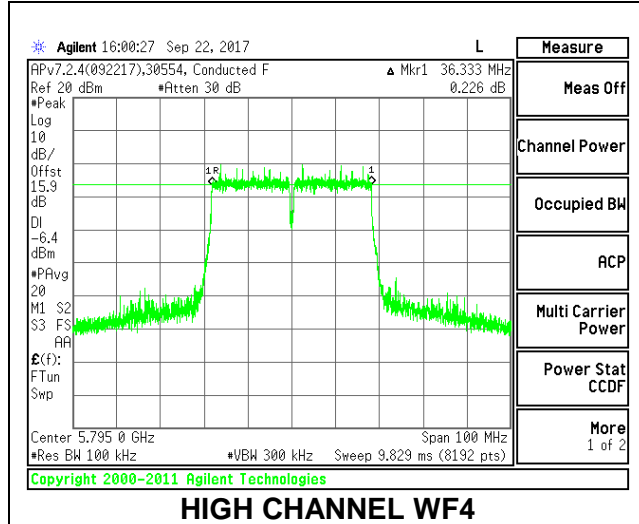
**2TX Antenna WF4 + Antenna WF3 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	Minimum Limit (MHz)
Low	5755	36.003	36.357	0.5
High	5795	36.333	36.369	0.5
142	5710	3.221	3.111	0.5

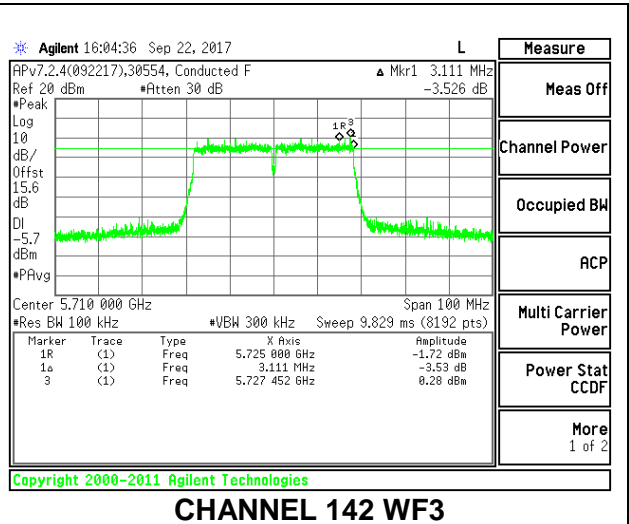
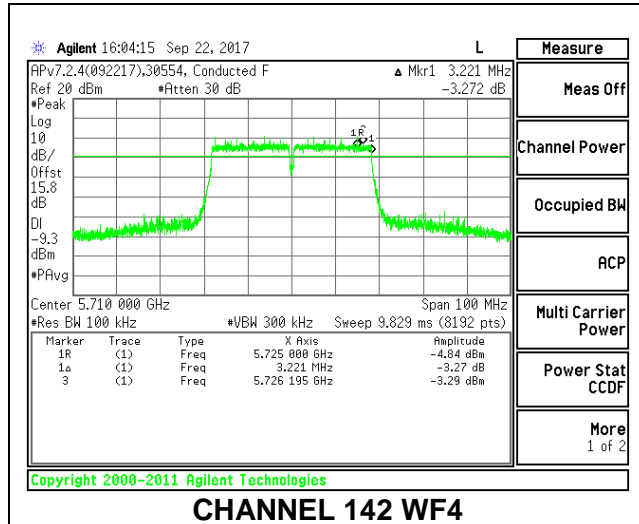
**LOW CHANNEL**



### HIGH CHANNEL



### CHANNEL 142

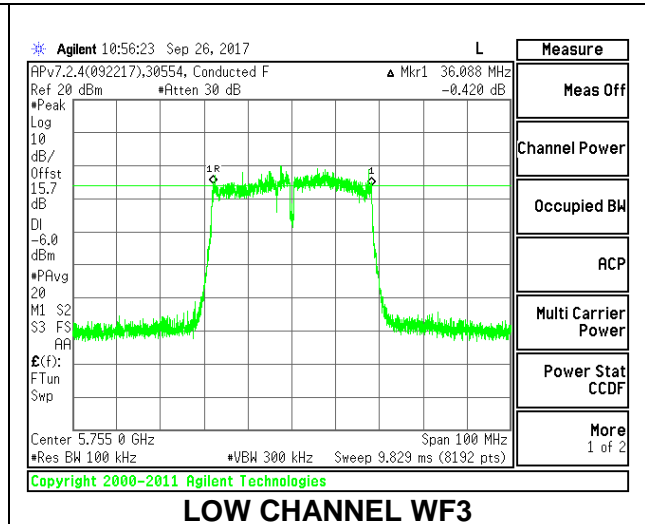
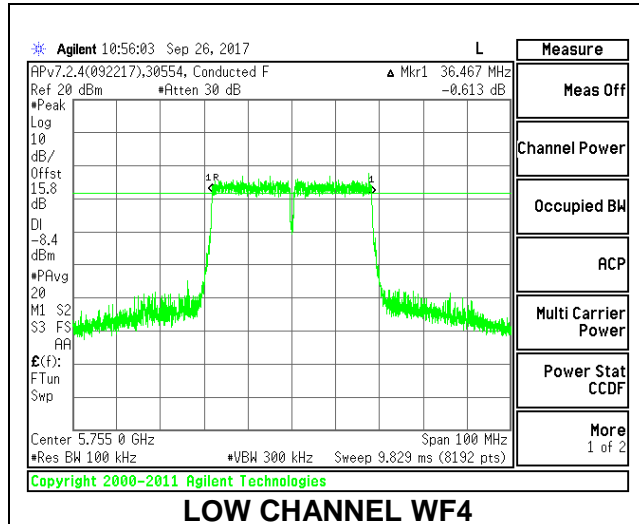




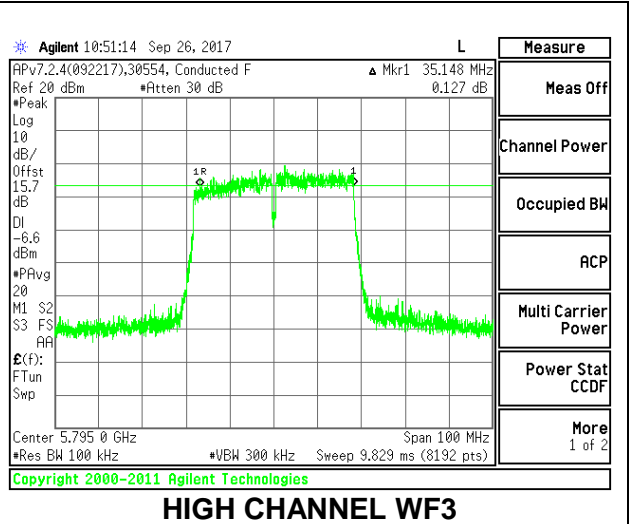
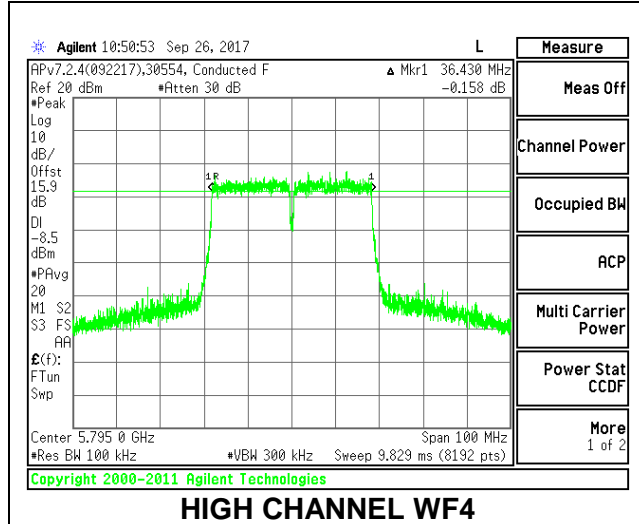
**2TX Antenna WF4 + Antenna WF3 BF Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	Minimum Limit (MHz)
Low	5755	36.467	36.088	0.5
High	5795	36.430	35.148	0.5
142	5710	3.294	3.258	0.5

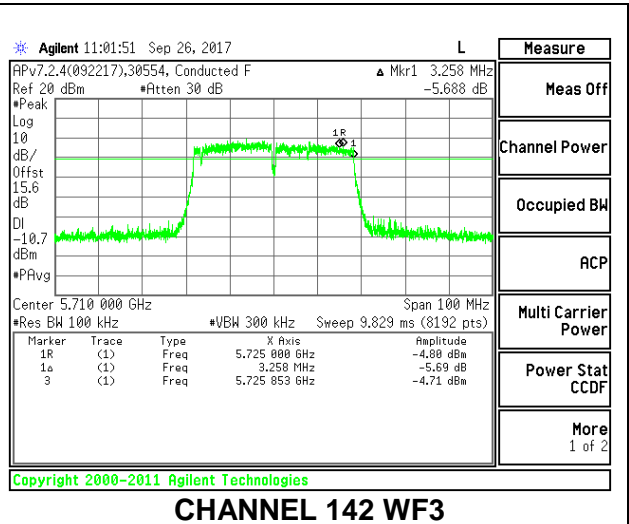
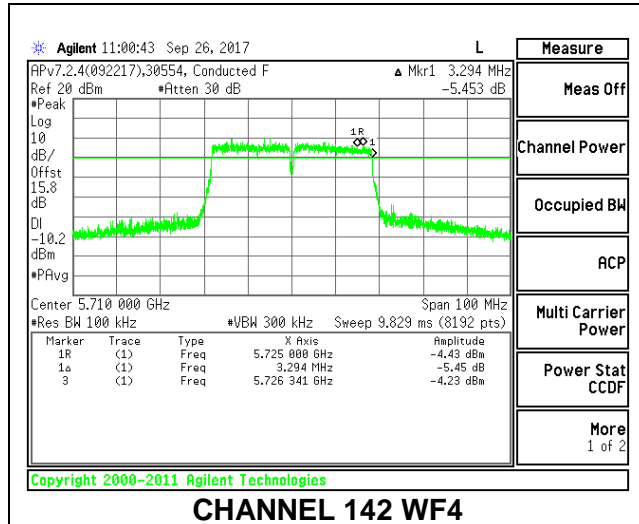
**LOW CHANNEL**



### HIGH CHANNEL



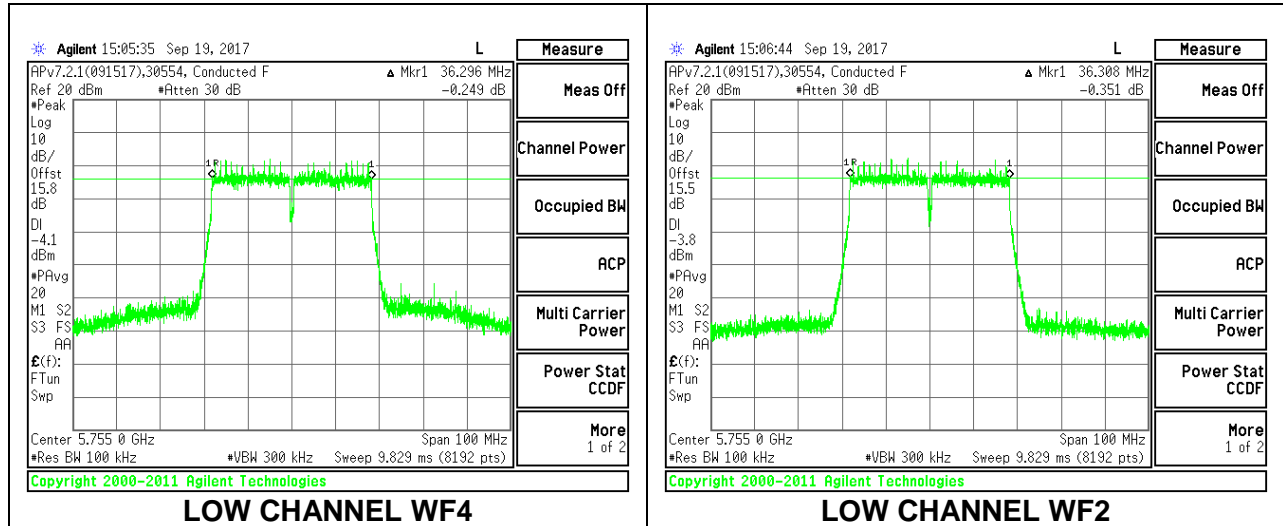
### CHANNEL 142



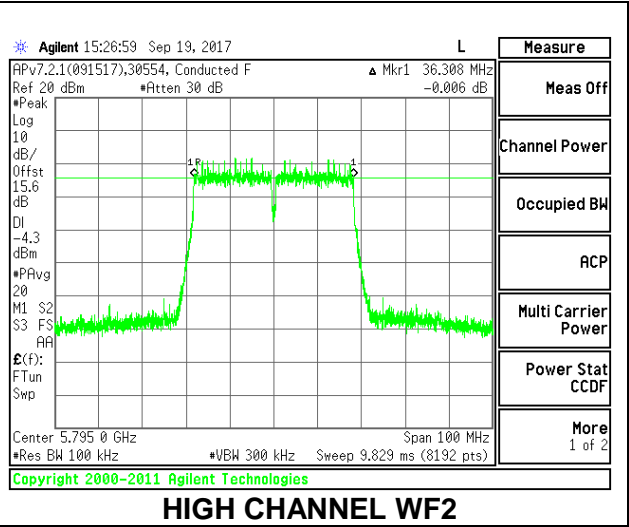
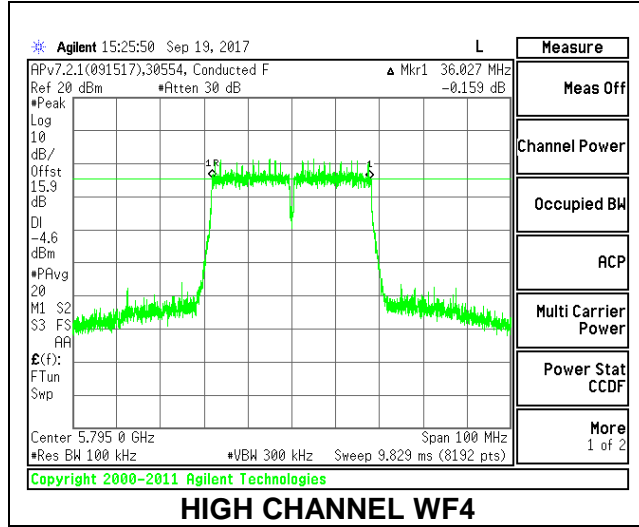
**2TX Antenna WF4 + Antenna WF2 CDD Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5755	36.296	36.308	0.5
High	5795	36.027	36.308	0.5
142	5710	3.111	3.148	0.5

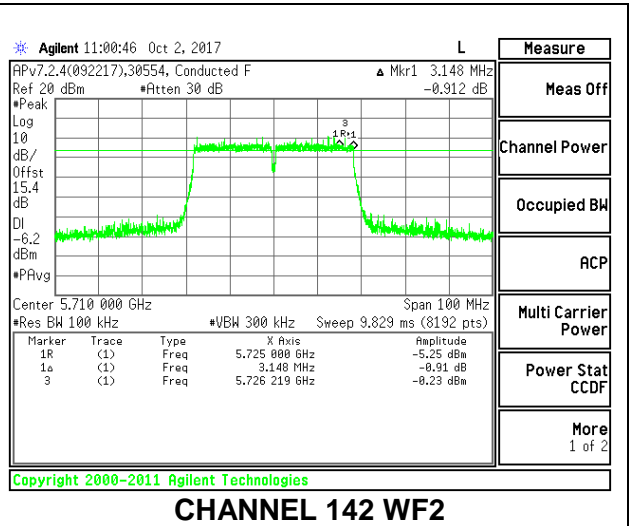
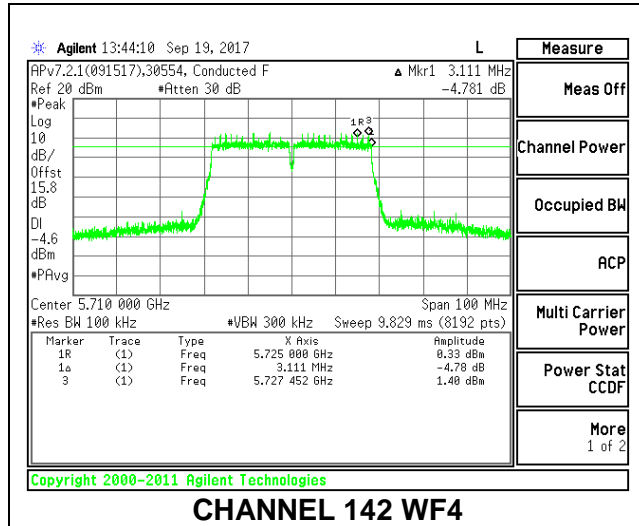
**LOW CHANNEL**



### HIGH CHANNEL



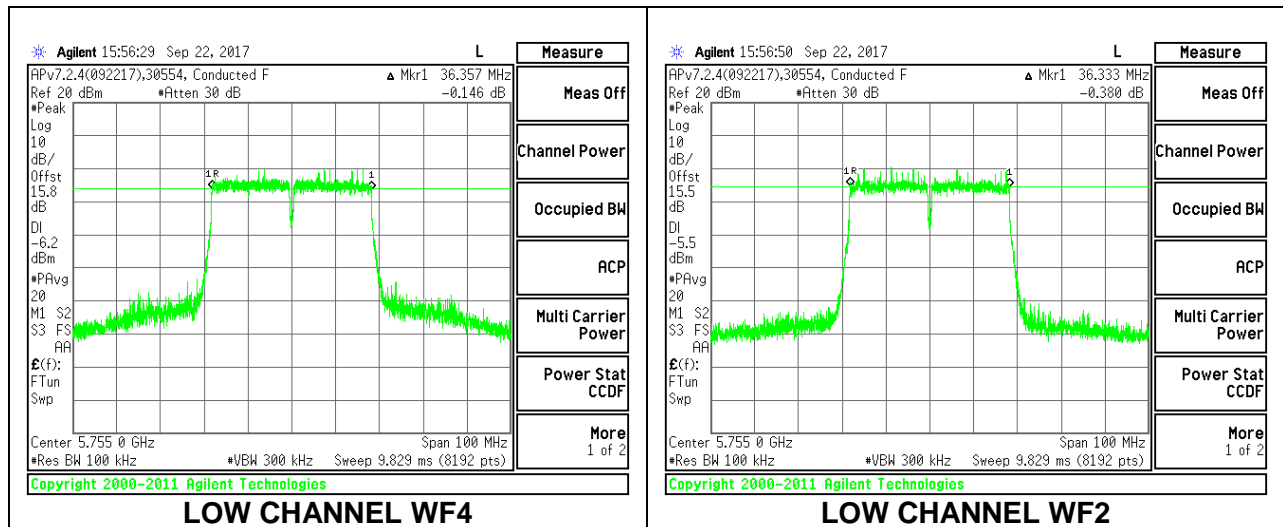
### CHANNEL 142



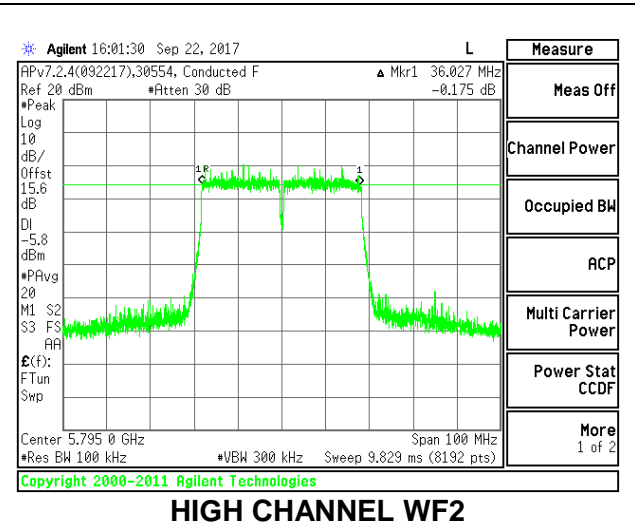
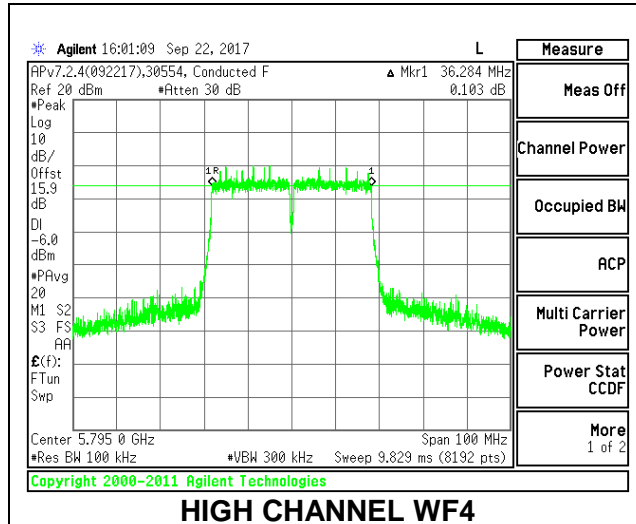
**2TX Antenna WF4 + Antenna WF2 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5755	36.357	36.333	0.5
High	5795	36.284	36.027	0.5
142	5710	3.221	3.124	0.5

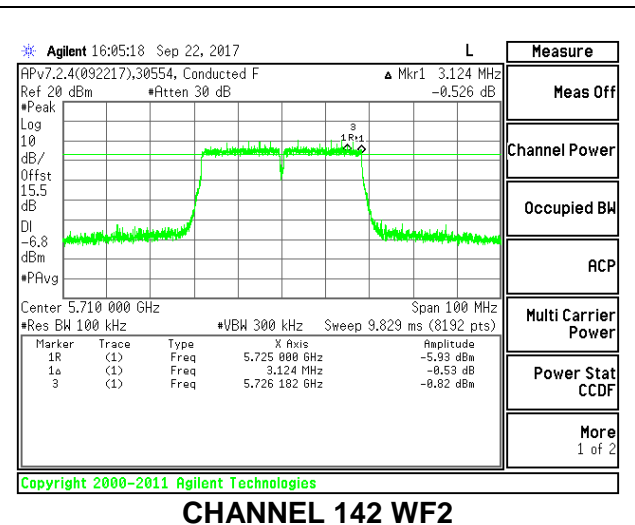
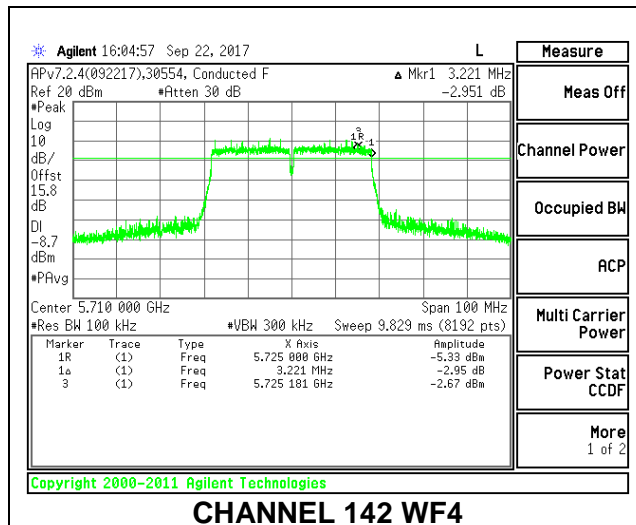
**LOW CHANNEL**



### HIGH CHANNEL



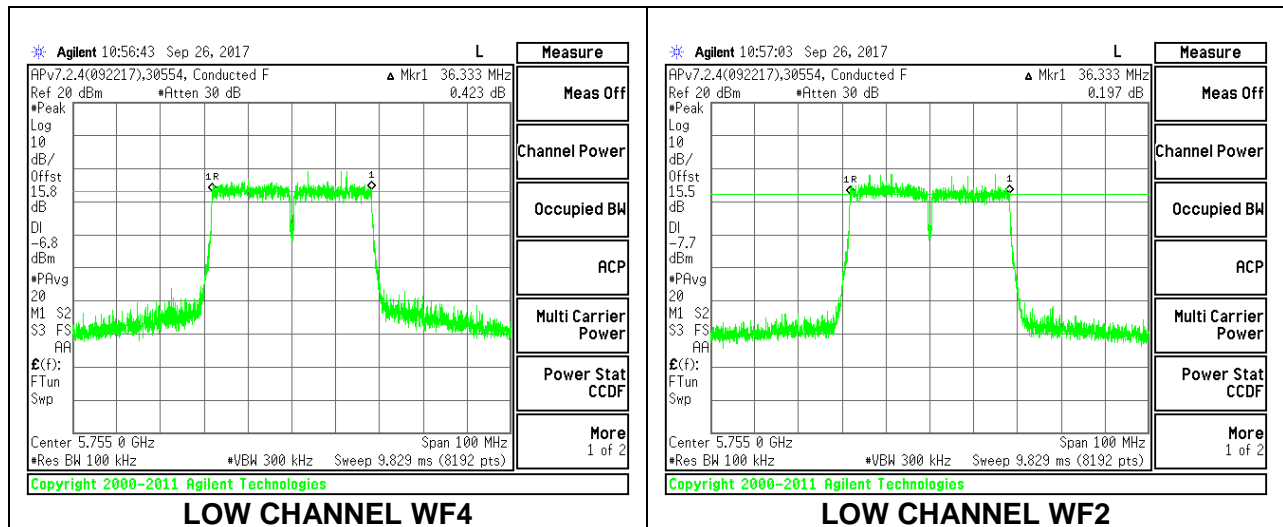
### CHANNEL 142



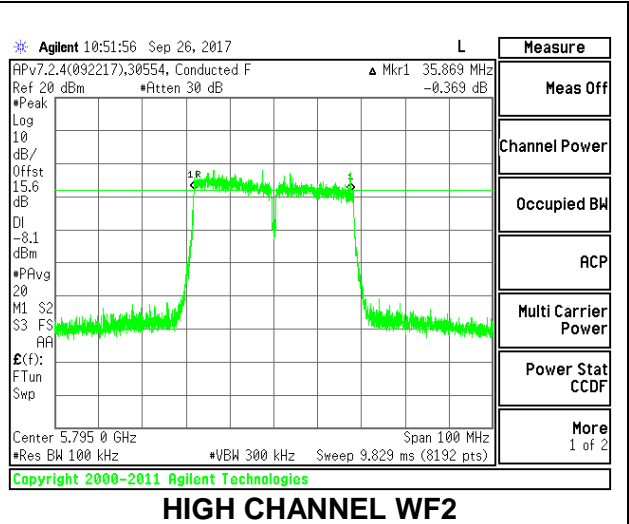
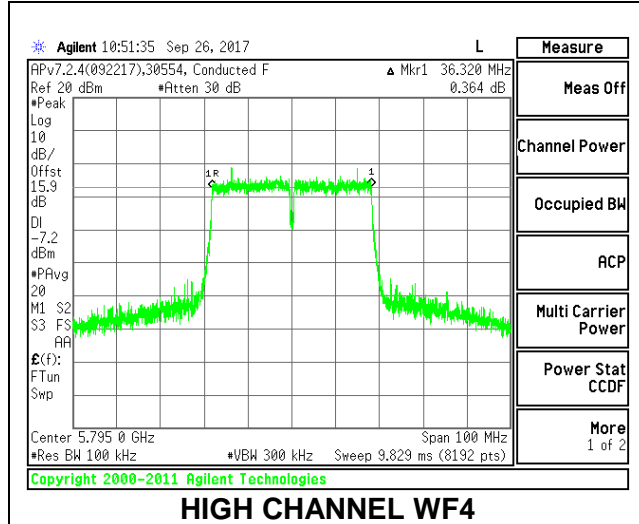
**2TX Antenna WF4 + Antenna WF2 BF Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5755	36.3330	36.3330	0.5
High	5795	36.3200	35.8690	0.5
142	5710	3.1600	3.1970	0.5

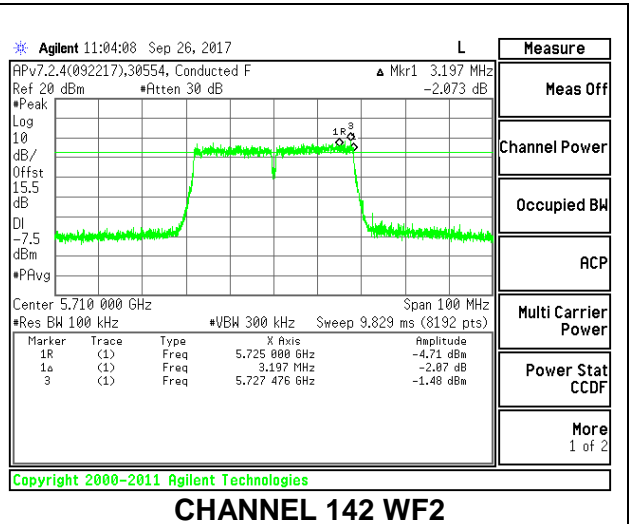
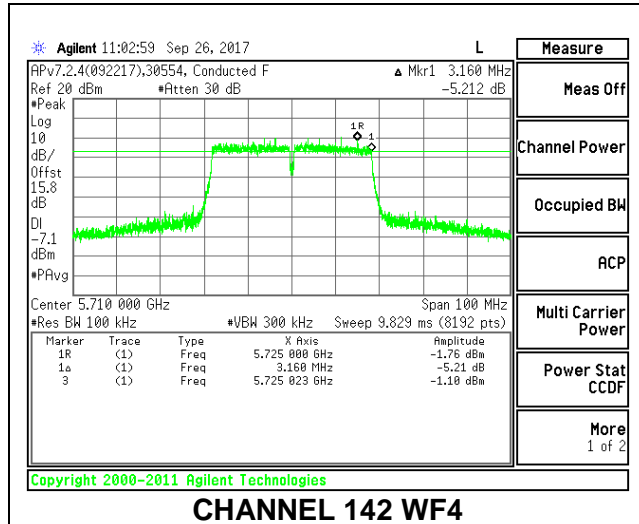
**LOW CHANNEL**



### HIGH CHANNEL



### CHANNEL 142

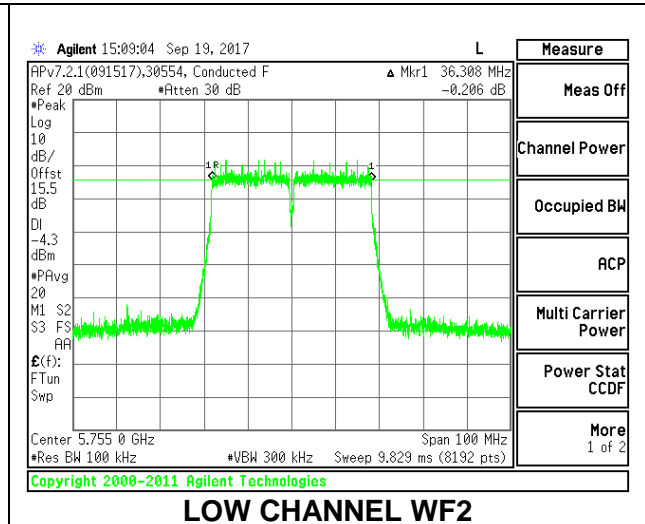
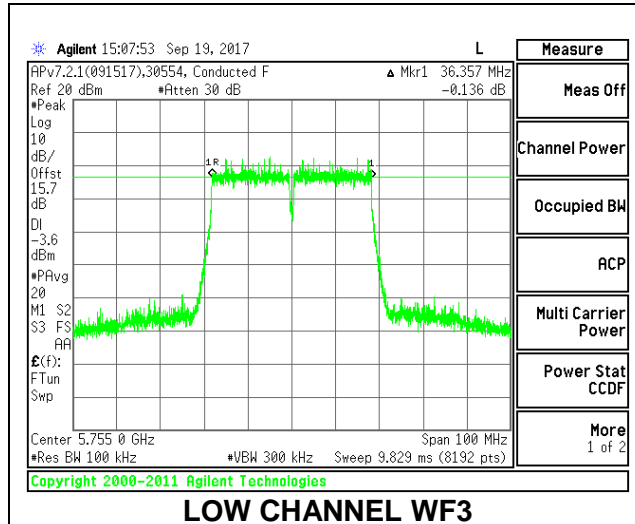




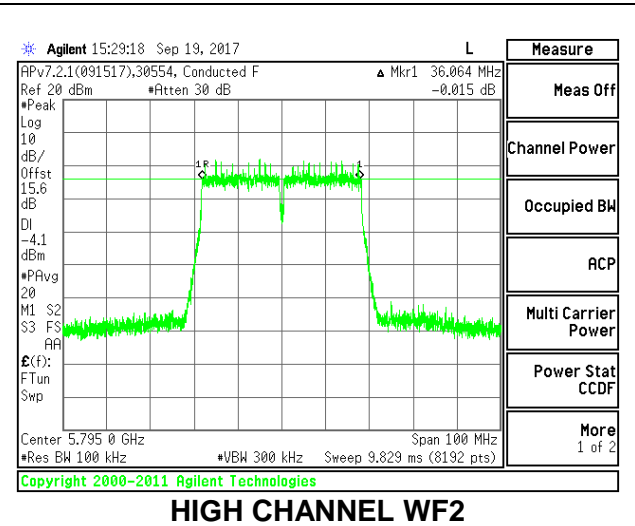
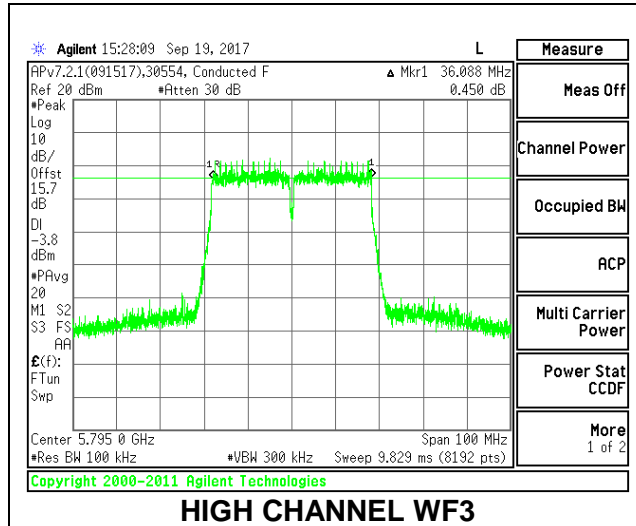
**2TX Antenna WF3 + Antenna WF2 CDD Mode**

Channel	Frequency (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5755	36.3570	36.3080	0.5
High	5795	36.0880	36.0640	0.5
142	5710	3.2090	3.1240	0.5

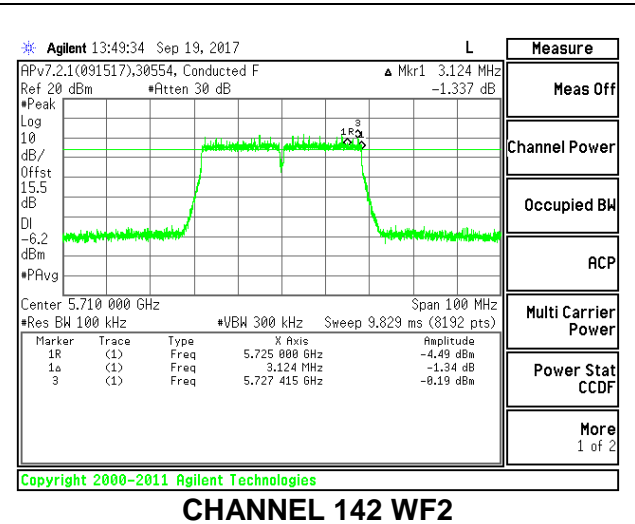
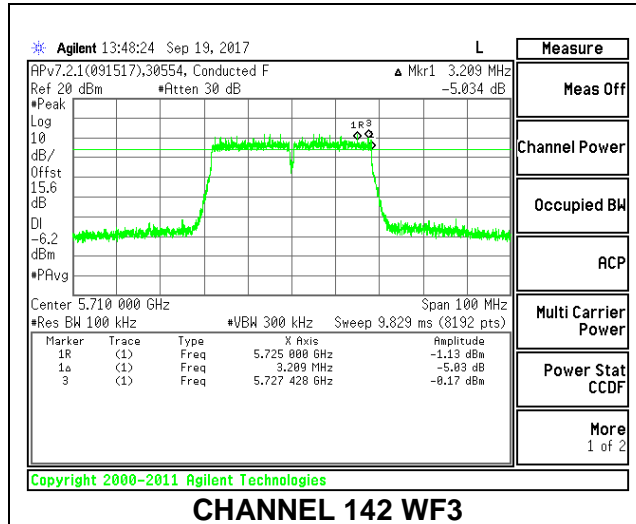
**LOW CHANNEL**



### HIGH CHANNEL



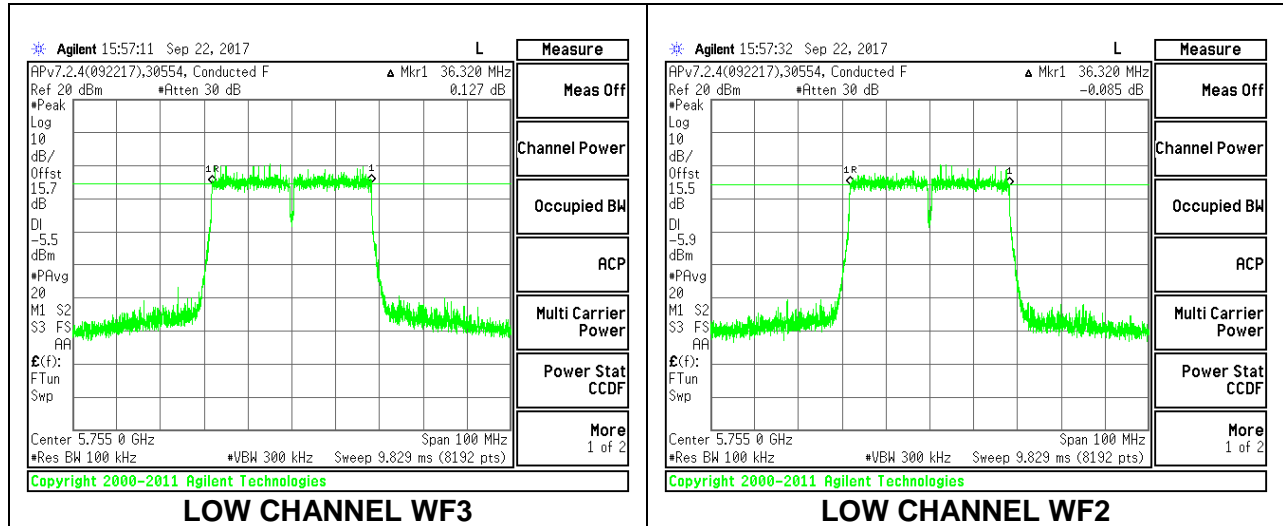
### CHANNEL 142



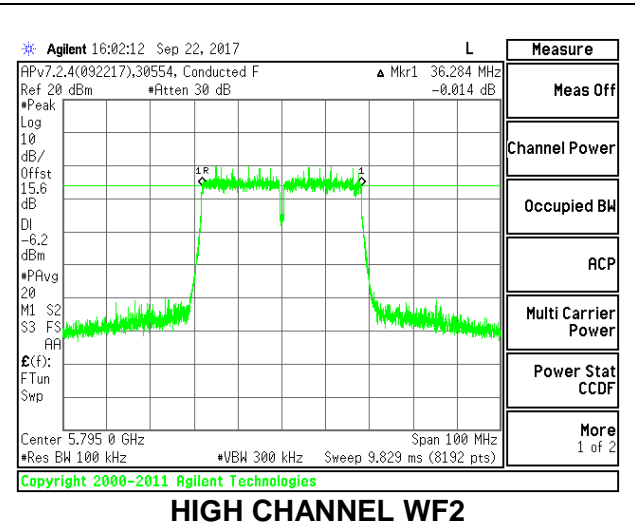
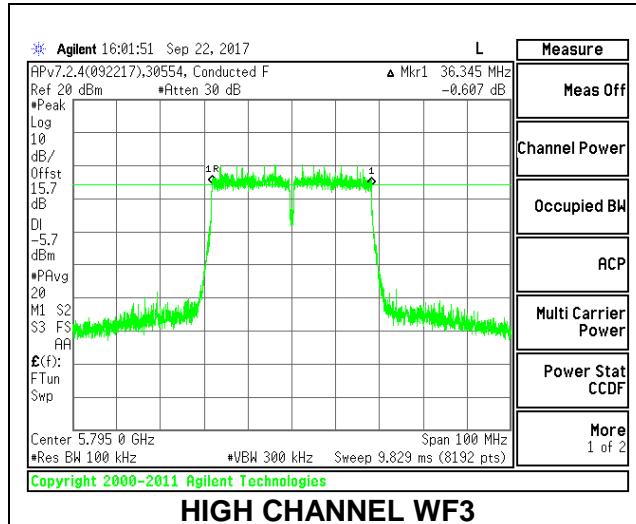
**2TX Antenna WF3 + Antenna WF2 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5755	36.3200	36.3200	0.5
High	5795	36.3450	36.2840	0.5
142	5710	3.2330	3.2210	0.5

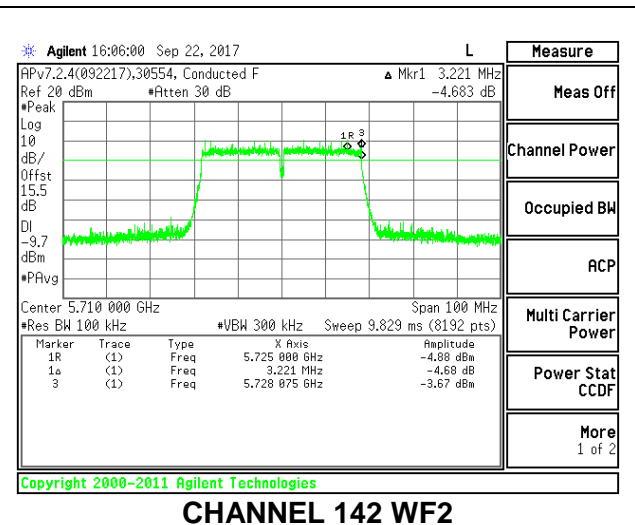
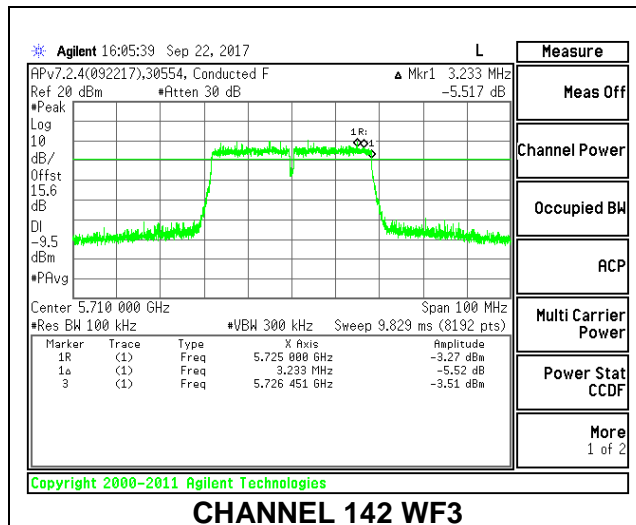
**LOW CHANNEL**



### HIGH CHANNEL



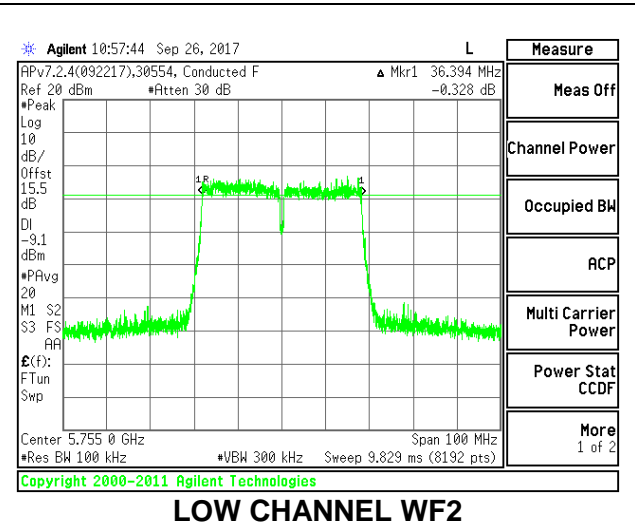
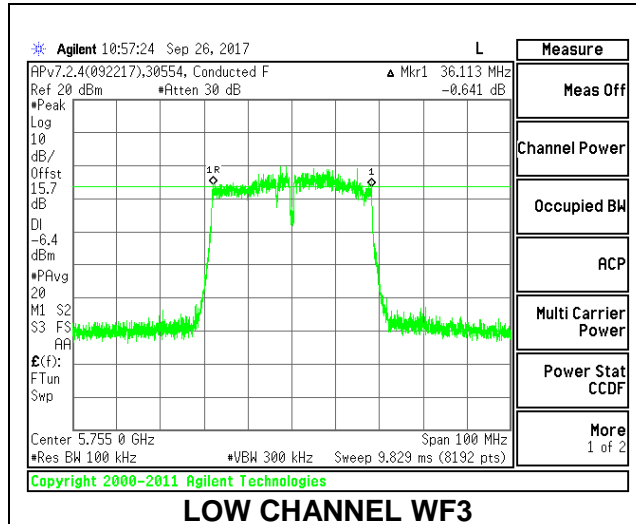
### CHANNEL 142



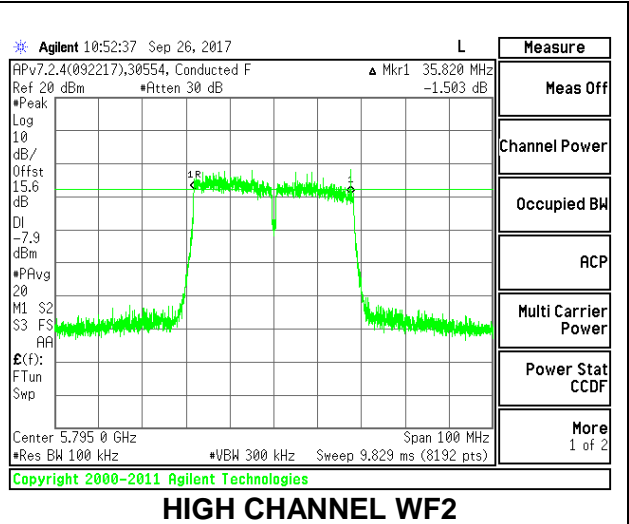
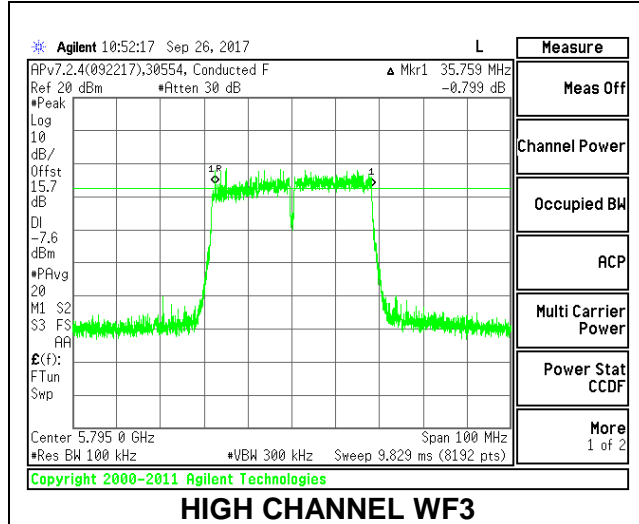
**2TX Antenna WF3 + Antenna WF2 BF Mode**

Channel	Frequency (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5755	36.1130	36.3940	0.5
High	5795	35.7590	35.8200	0.5
142	5710	3.2210	3.2700	0.5

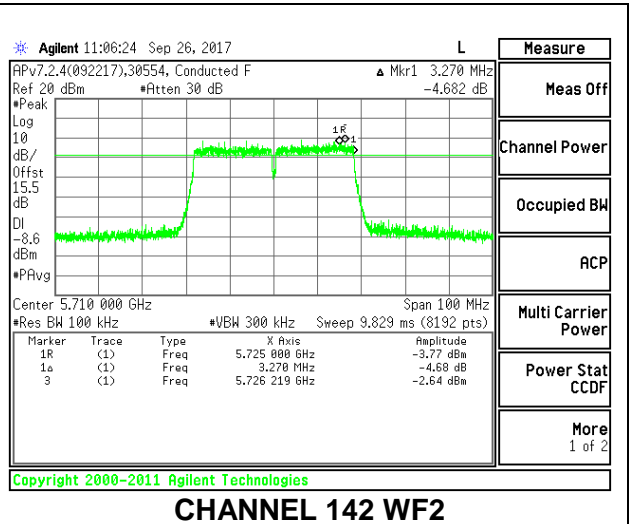
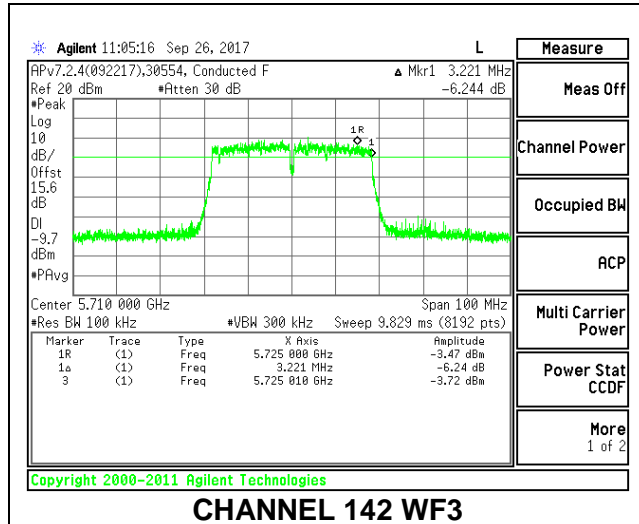
**LOW CHANNEL**



### HIGH CHANNEL



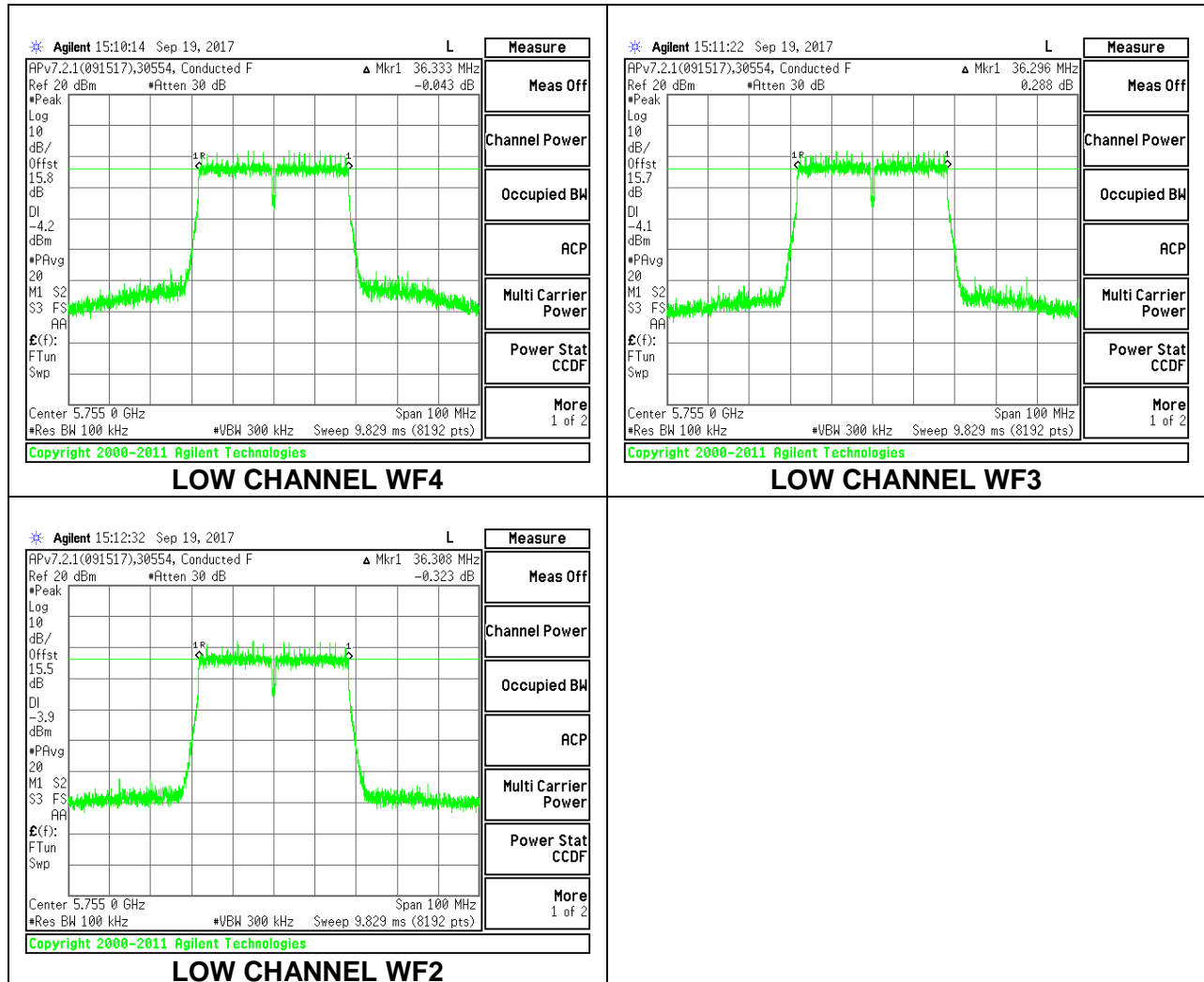
### CHANNEL 142



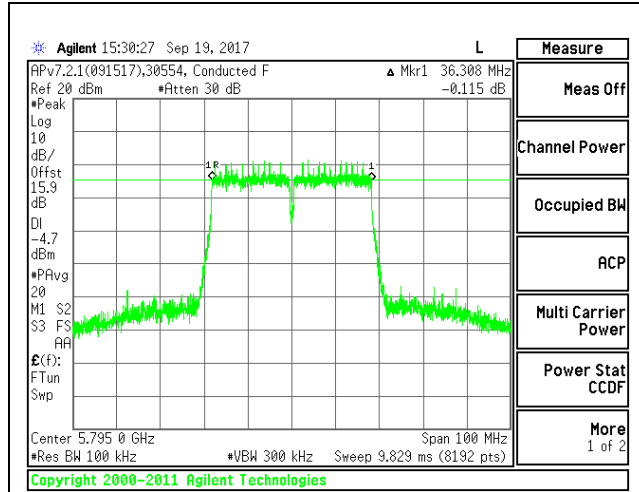
**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 CDD Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5755	36.3330	36.2960	36.3080	0.5
High	5795	36.3080	36.3570	36.2960	0.5
142	5710	3.1240	3.1480	3.1110	0.5

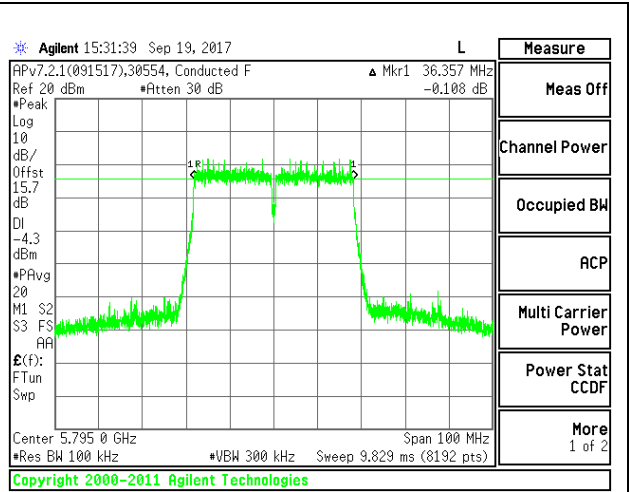
**LOW CHANNEL**



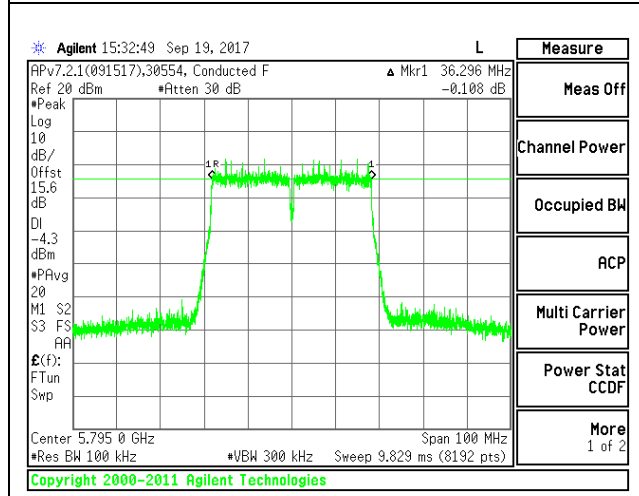
**HIGH CHANNEL**



**HIGH CHANNEL WF4**



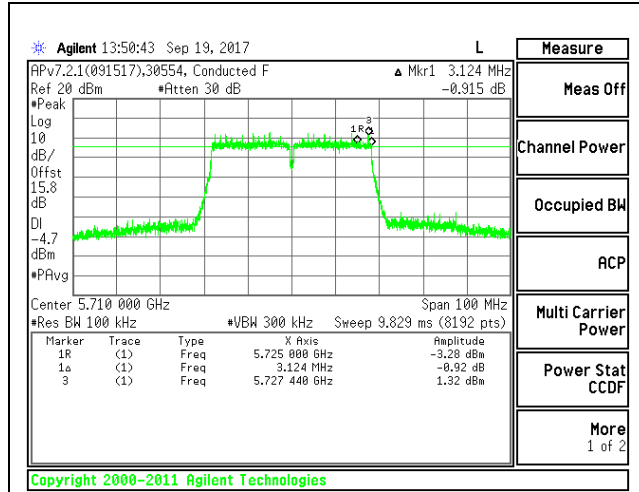
**HIGH CHANNEL WF3**



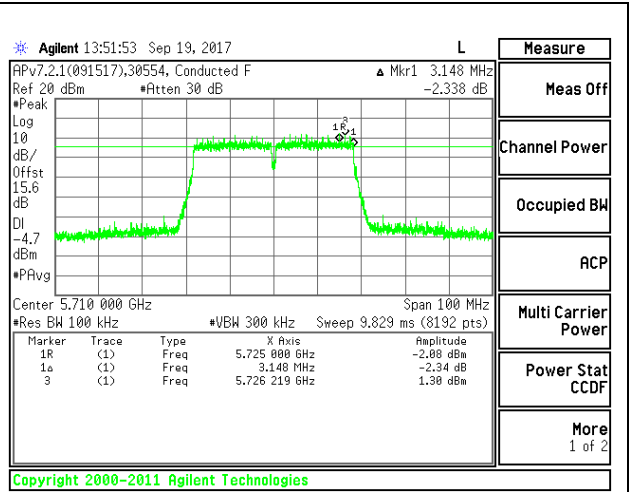
**HIGH CHANNEL WF2**



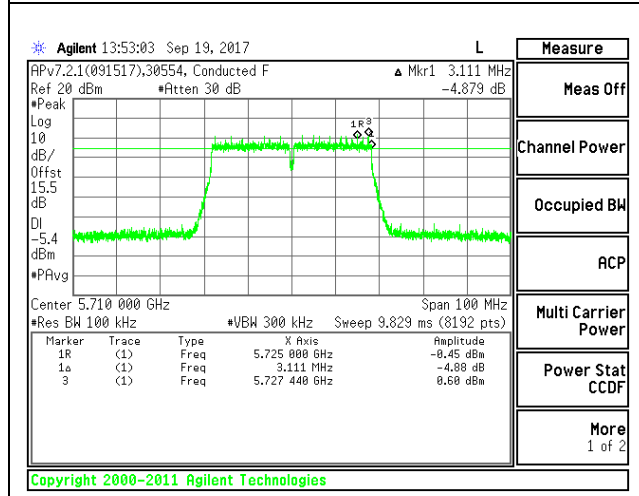
### CHANNEL 142



**CHANNEL 142 WF4**



**CHANNEL 142 WF3**

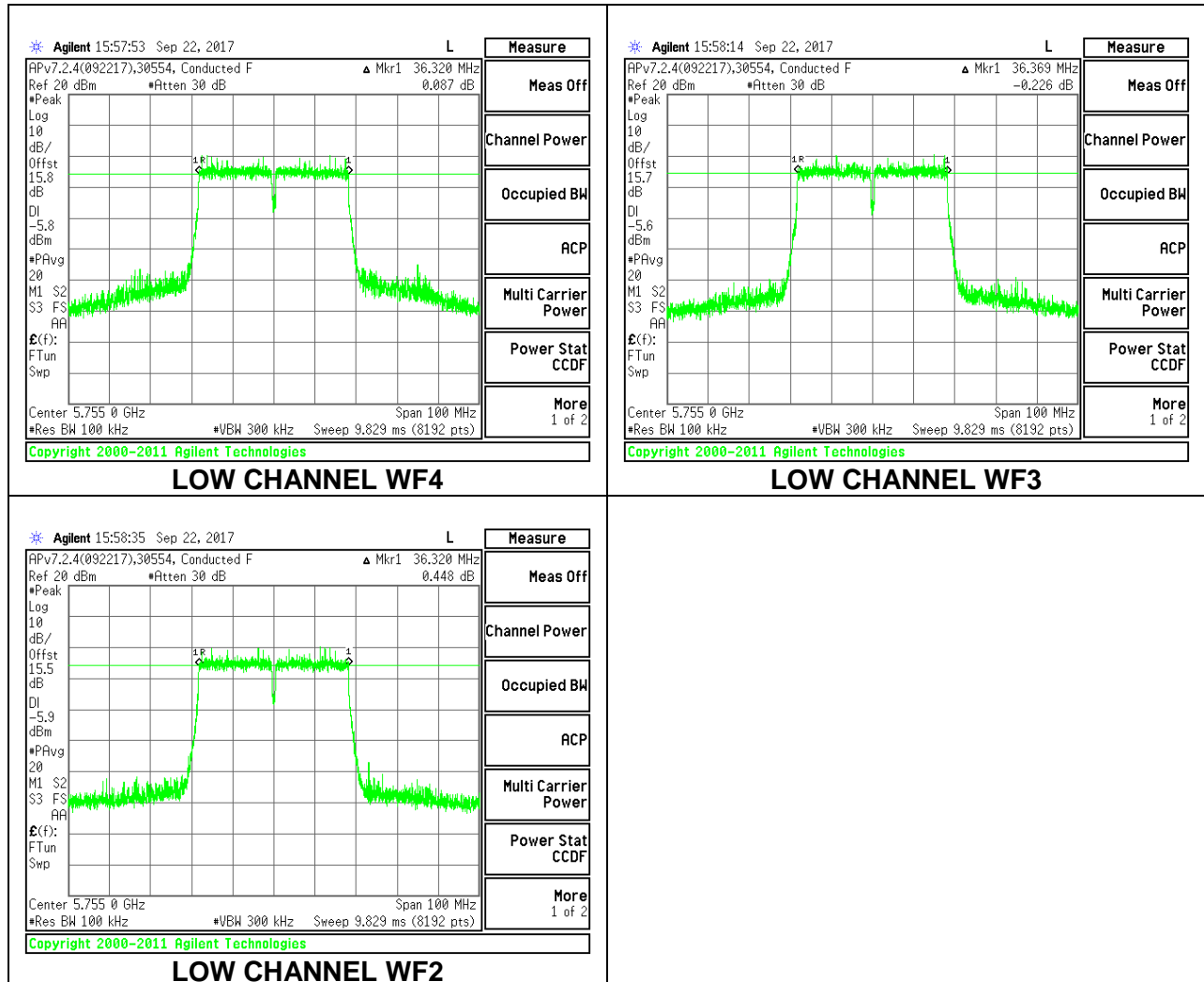


**CHANNEL 142 WF2**

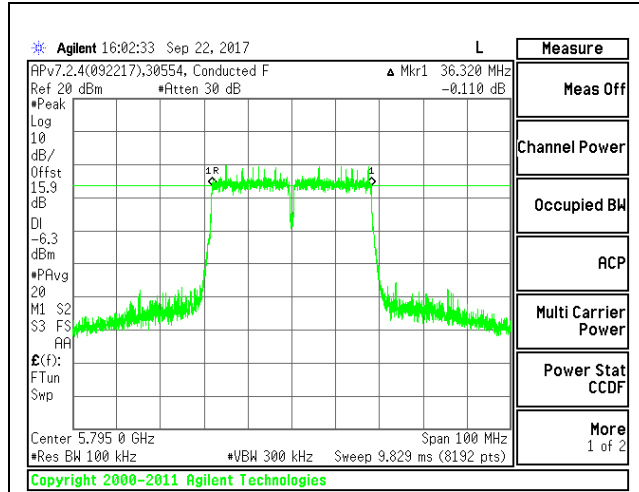
**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5755	36.3200	36.3690	36.3200	0.5
High	5795	36.3200	36.3450	36.3200	0.5
142	5710	3.1110	3.1110	3.1480	0.5

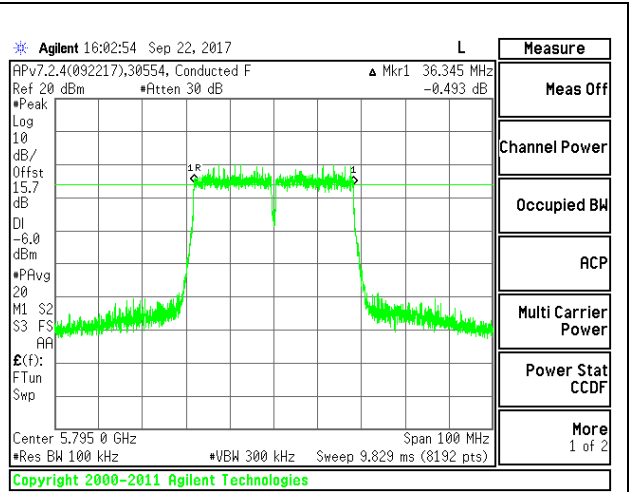
**LOW CHANNEL**



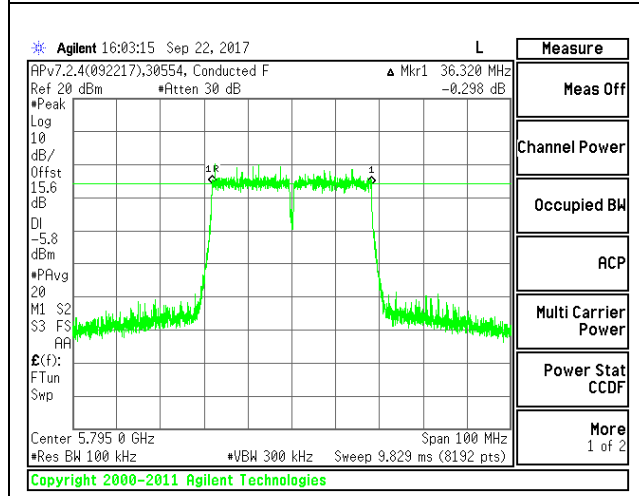
**HIGH CHANNEL**



**HIGH CHANNEL WF4**

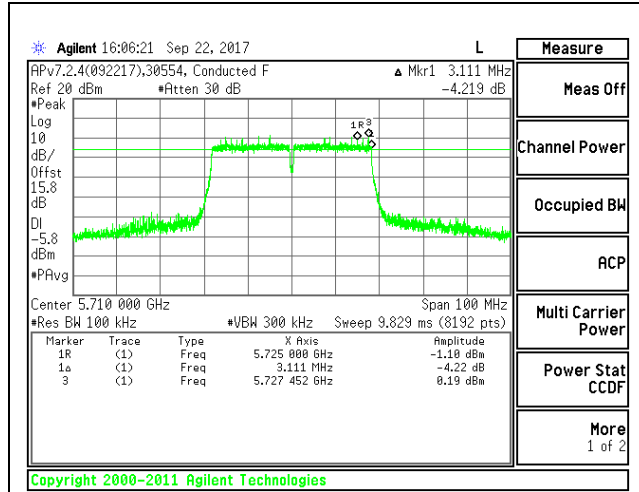


**HIGH CHANNEL WF3**

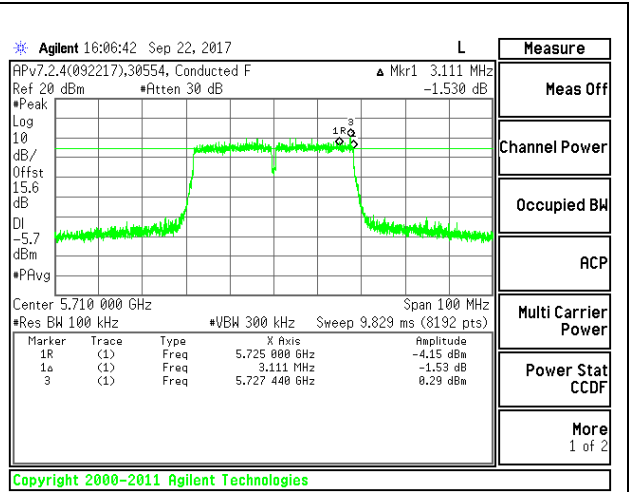


**HIGH CHANNEL WF2**

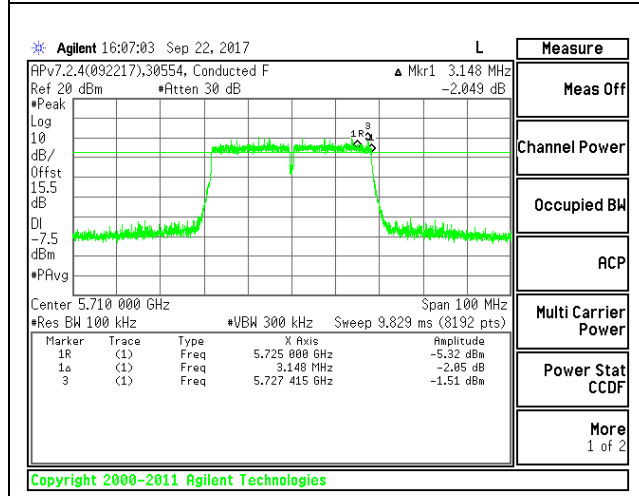
**CHANNEL 142**



**CHANNEL 142 WF4**



**CHANNEL 142 WF3**

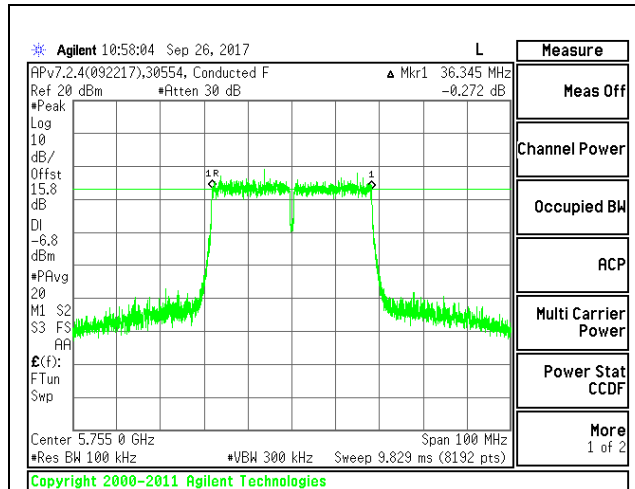


**CHANNEL 142 WF2**

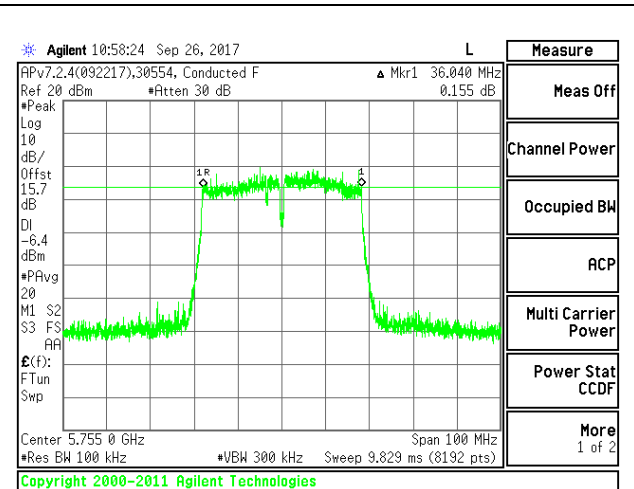
**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 BF Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Low	5755	36.3450	36.0400	36.4300	0.5
High	5795	36.3940	34.7700	35.7340	0.5
142	5710	3.2700	3.1850	3.2330	0.5

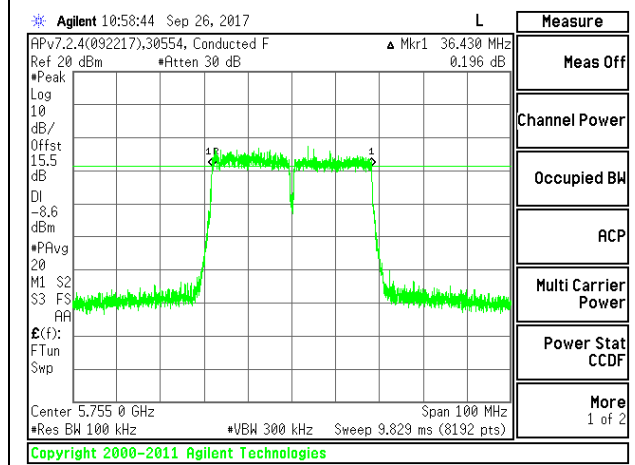
**LOW CHANNEL**



**LOW CHANNEL WF4**

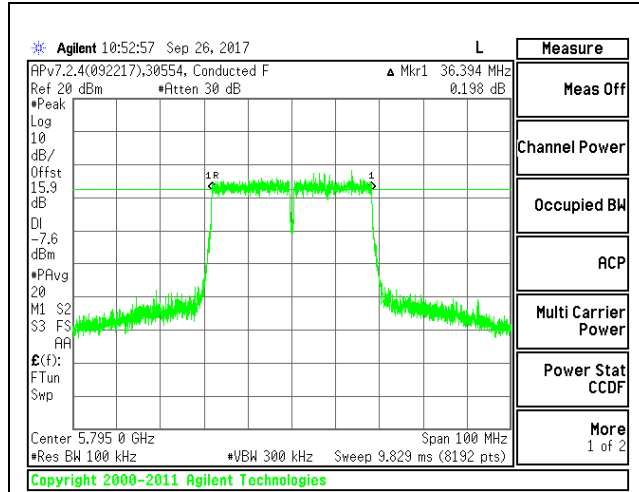


**LOW CHANNEL WF3**

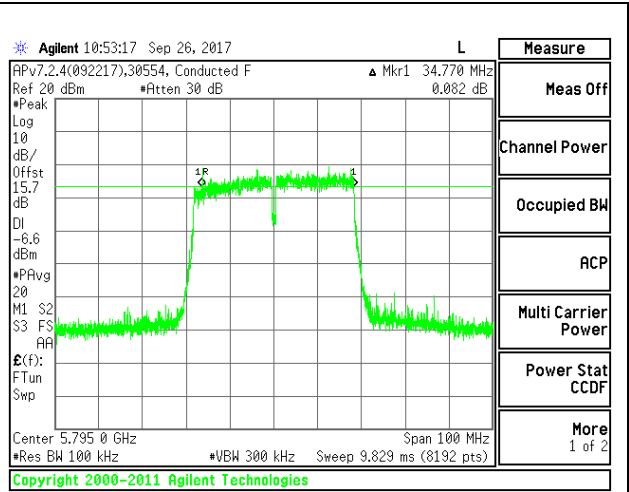


**LOW CHANNEL WF2**

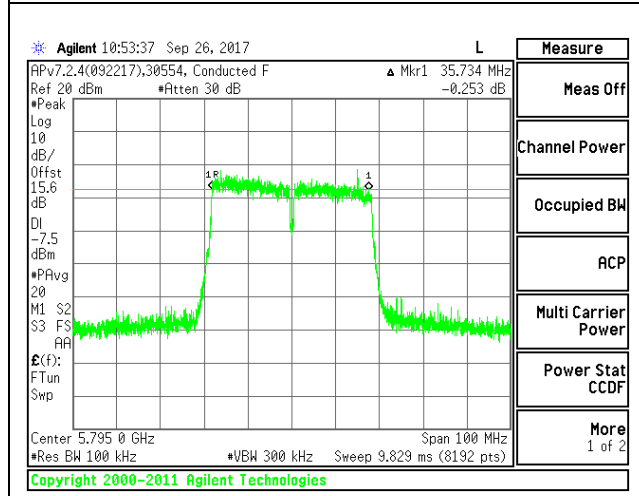
**HIGH CHANNEL**



**HIGH CHANNEL WF4**

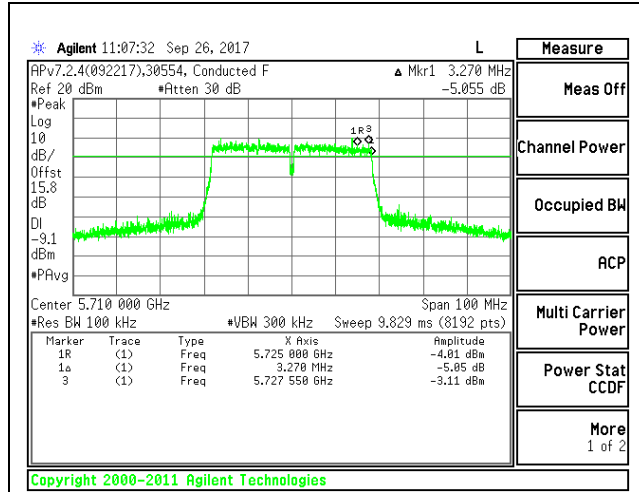


**HIGH CHANNEL WF3**

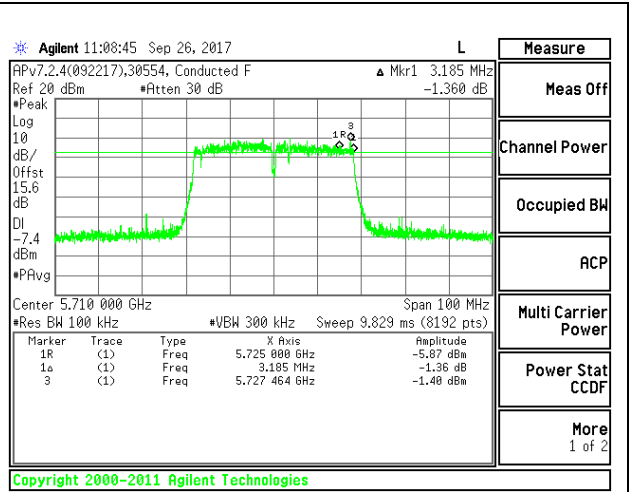


**HIGH CHANNEL WF2**

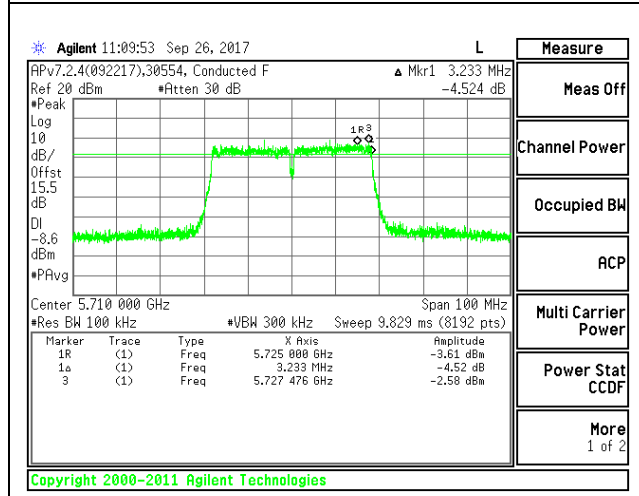
**CHANNEL 142**



**CHANNEL 142 WF4**



**CHANNEL 142 WF3**

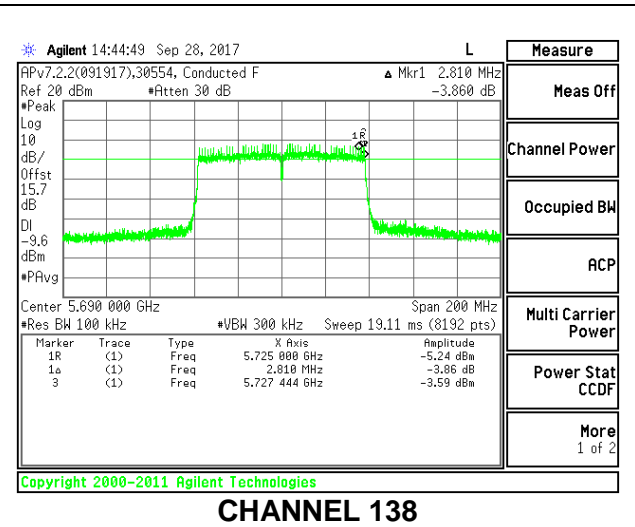
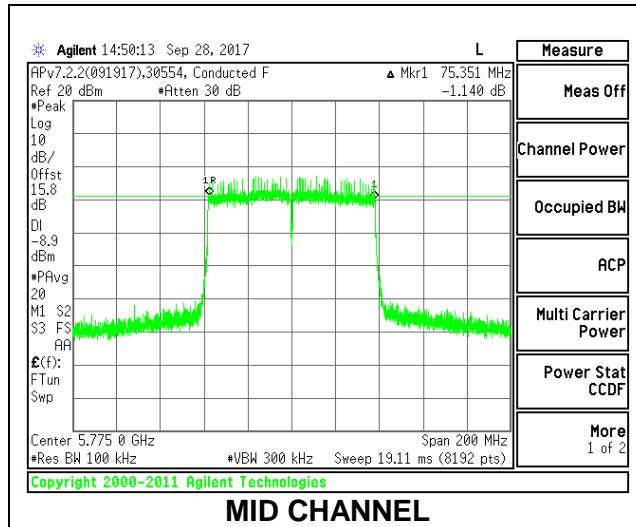


**CHANNEL 142 WF2**

**4.4.3. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND**

**1TX Antenna WF4**

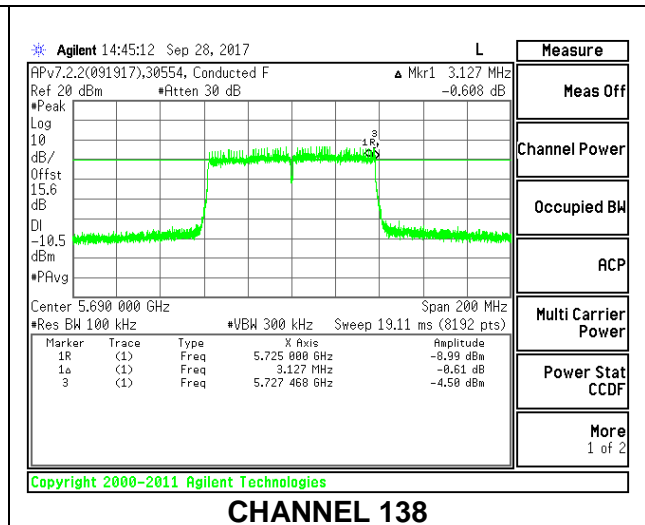
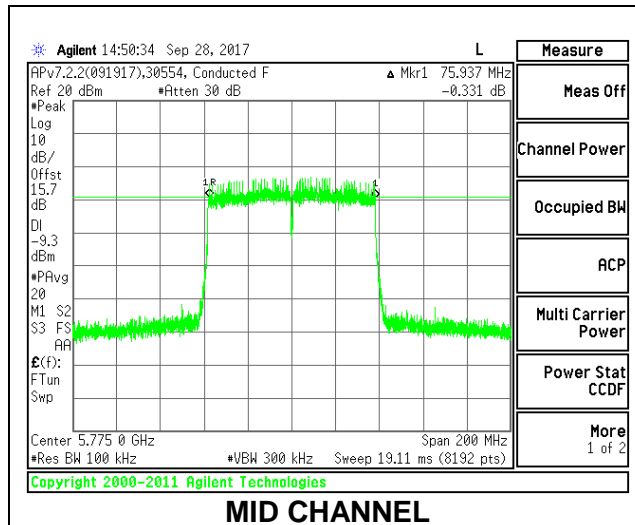
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	75.3510	0.5
138	5690	2.8100	0.5





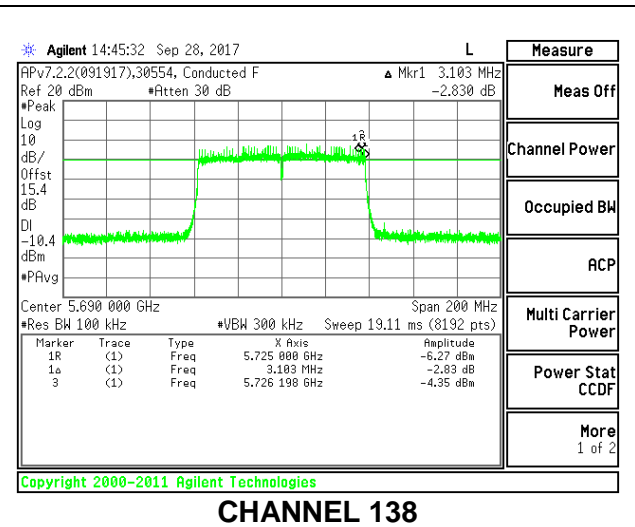
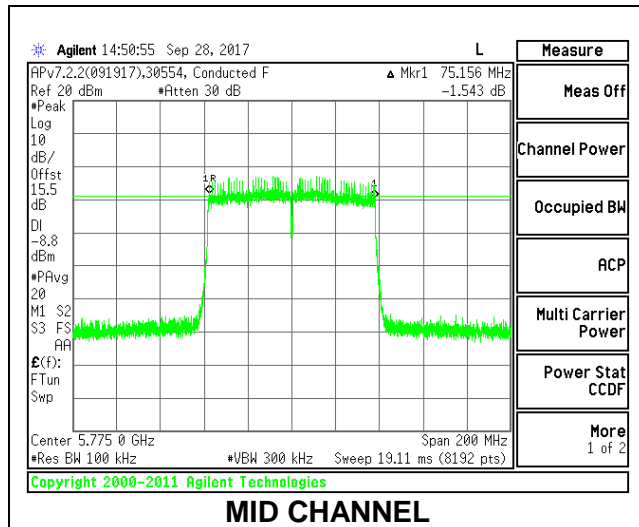
**1TX Antenna WF3**

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	75.9370	0.5
138	5690	3.1270	0.5



**1TX Antenna WF2**

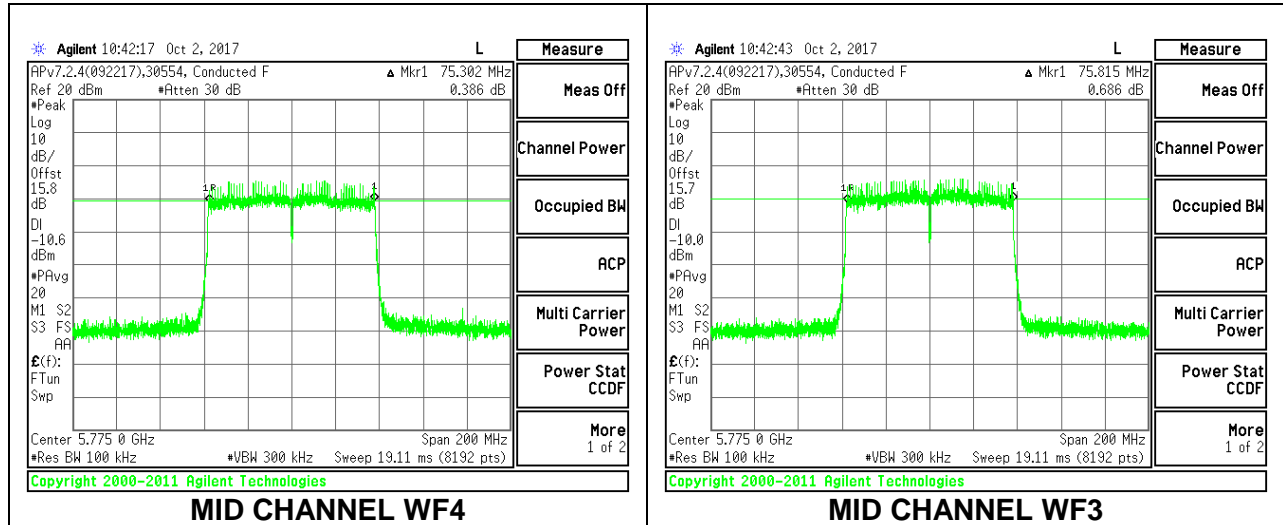
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	75.1560	0.5
138	5690	3.1030	0.5



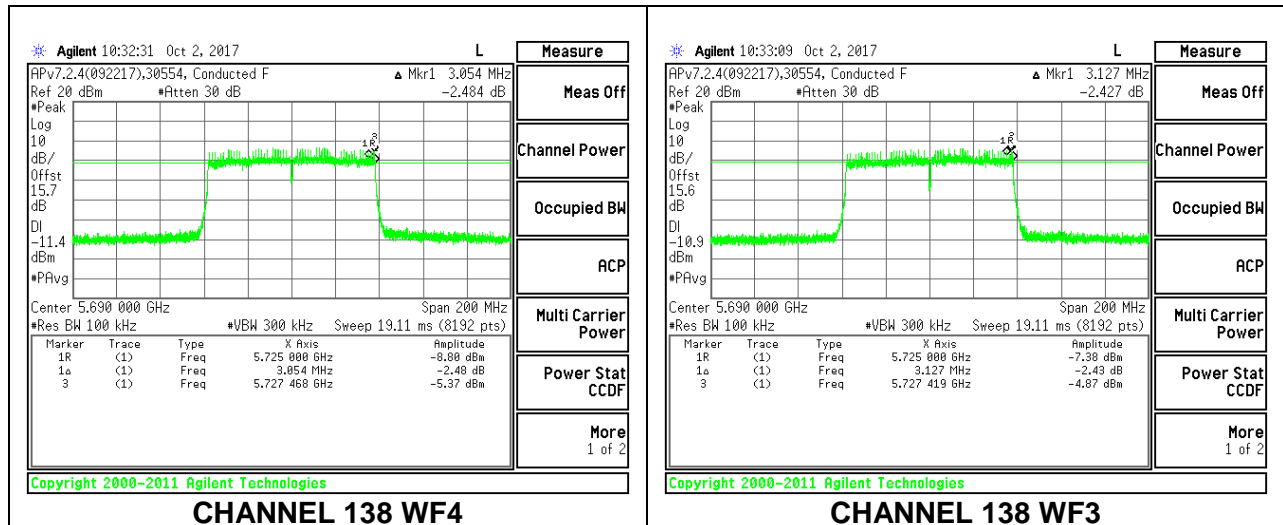
**2TX Antenna WF4 + Antenna WF3 CDD Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	Minimum Limit (MHz)
Mid	5775	75.3020	75.8150	0.5
138	5690	3.0540	3.1270	0.5

**MID CHANNEL**



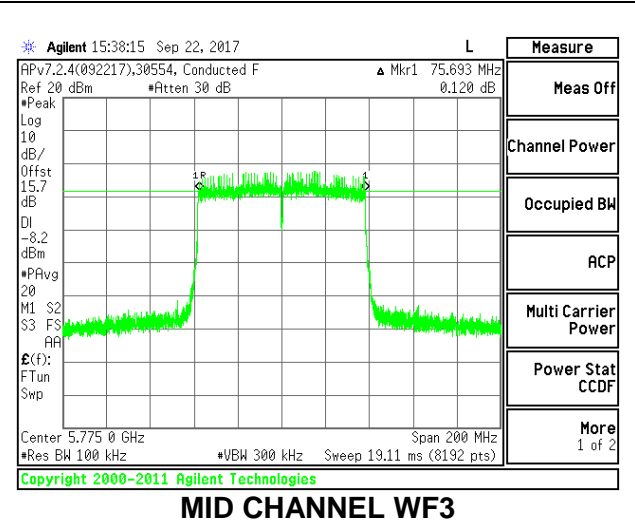
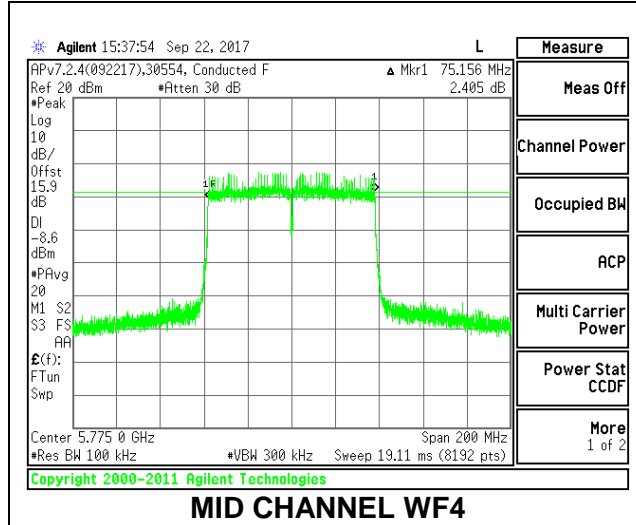
**CHANNEL 138**



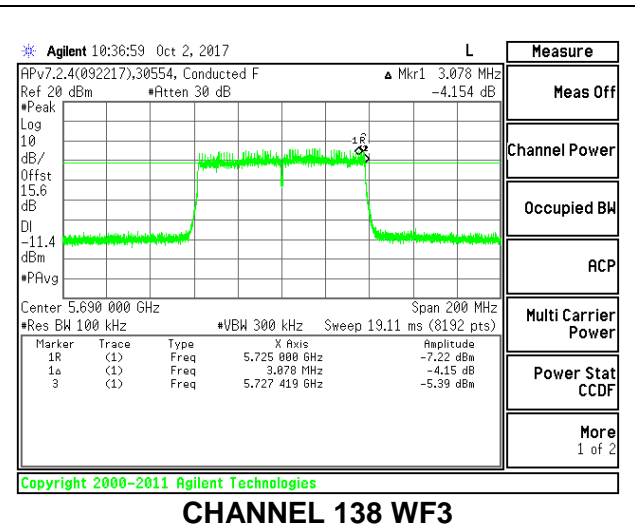
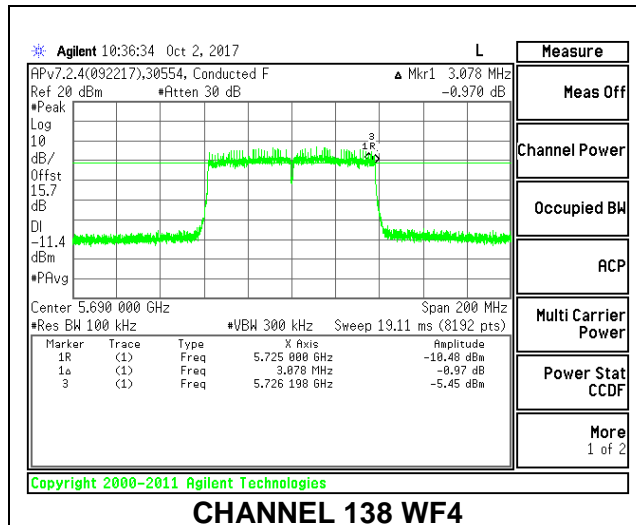
**2TX Antenna WF4 + Antenna WF3 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	Minimum Limit (MHz)
Mid	5775	75.1560	75.6930	0.5
138	5690	3.0780	3.0780	0.5

**MID CHANNEL**



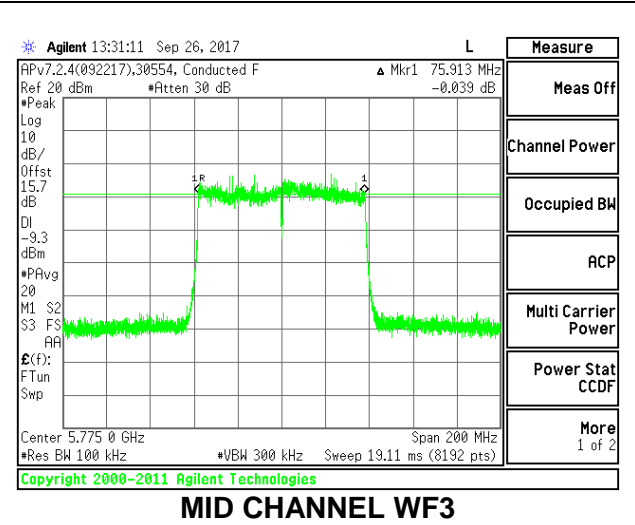
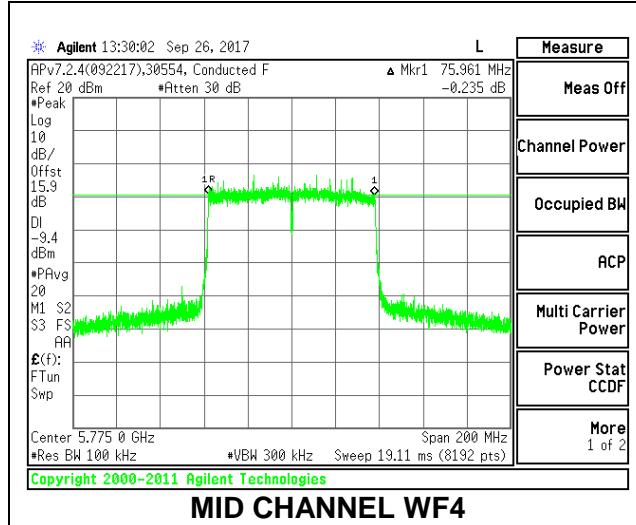
**CHANNEL 138**



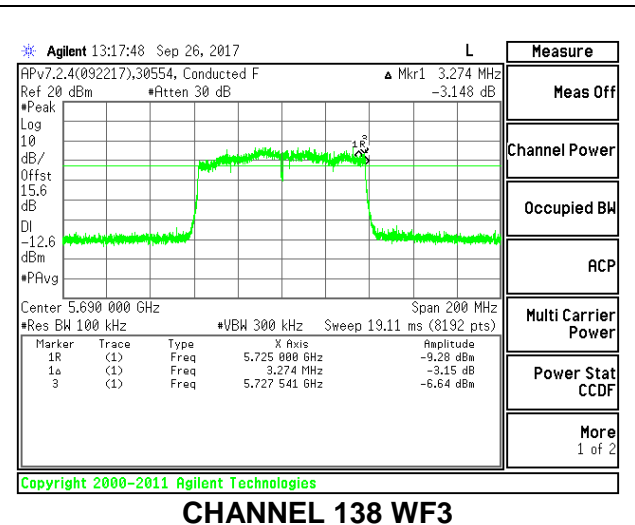
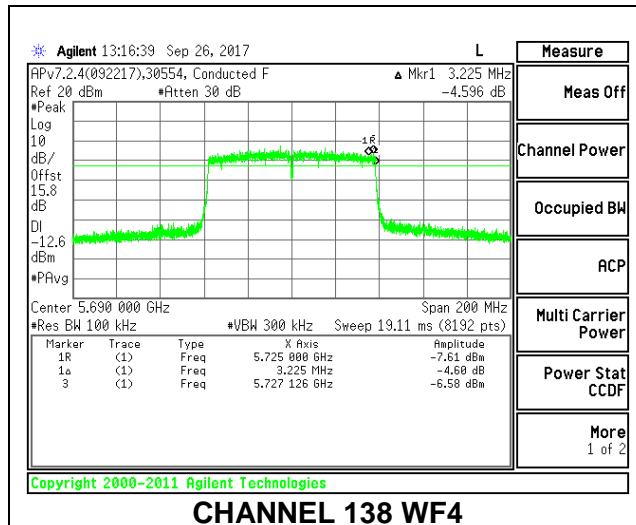
**2TX Antenna WF4 + Antenna WF3 BF Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	Minimum Limit (MHz)
Mid	5775	75.9610	75.9130	0.5
138	5690	3.2250	3.2740	0.5

**MID CHANNEL**



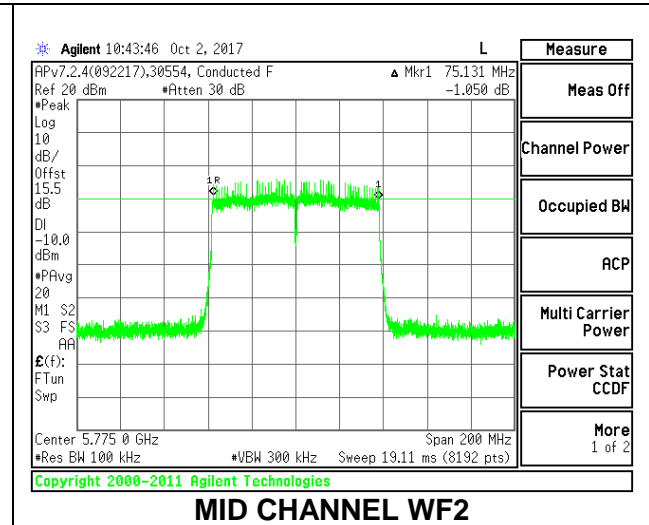
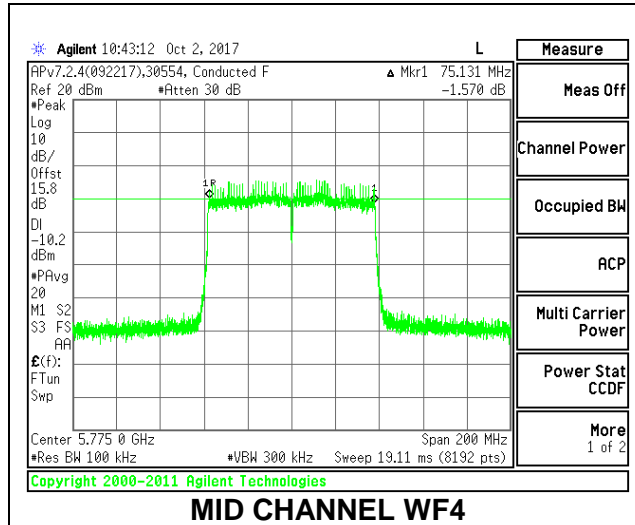
**CHANNEL 138**



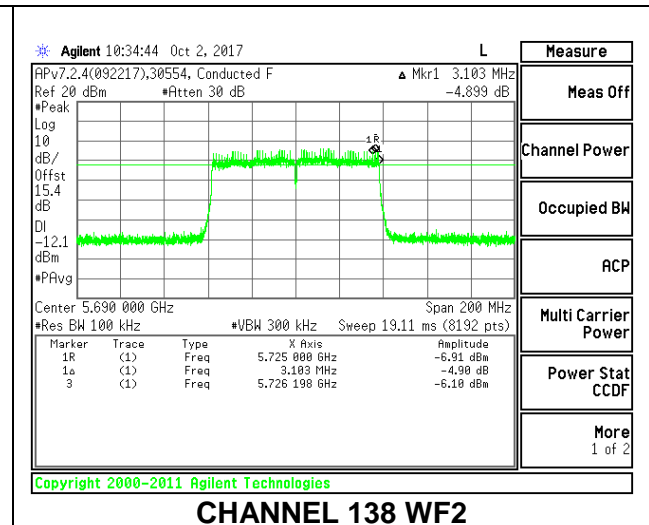
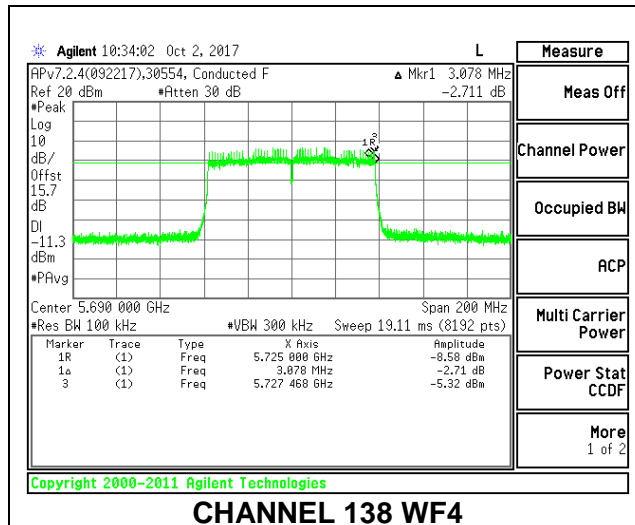
**2TX Antenna WF4 + Antenna WF2 CDD Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Mid	5775	75.131	75.131	0.5
138	5690	3.078	3.103	0.5

**MID CHANNEL**



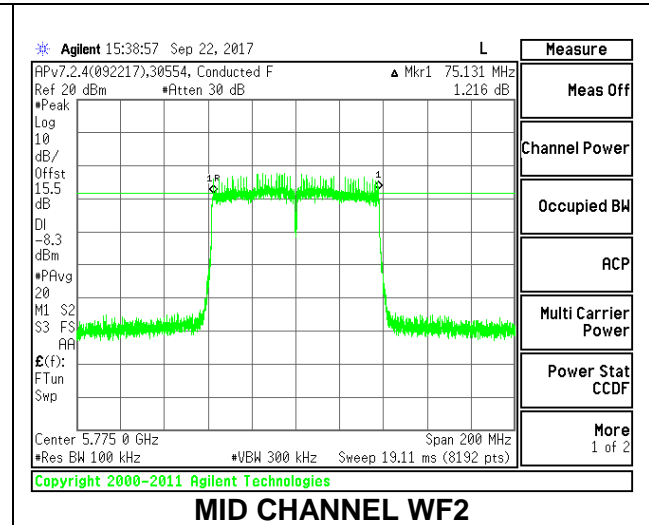
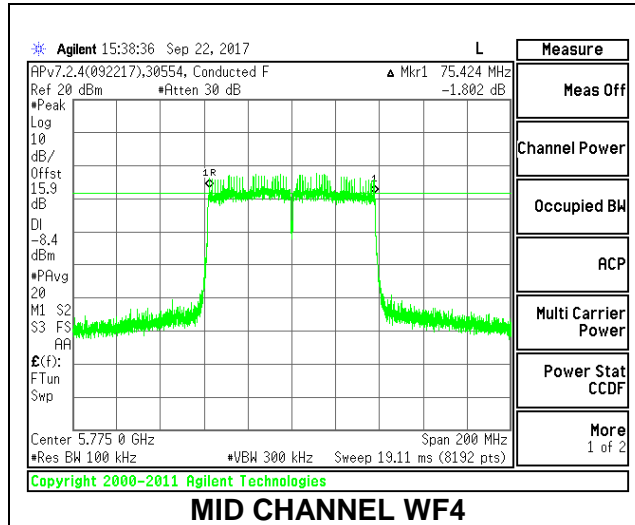
**CHANNEL 138**



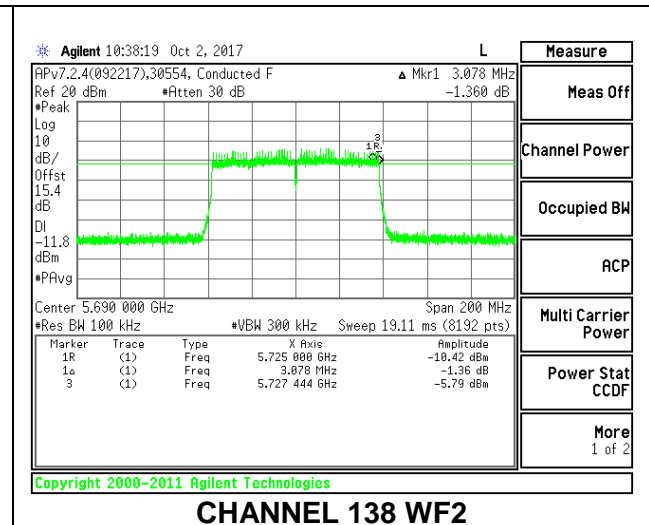
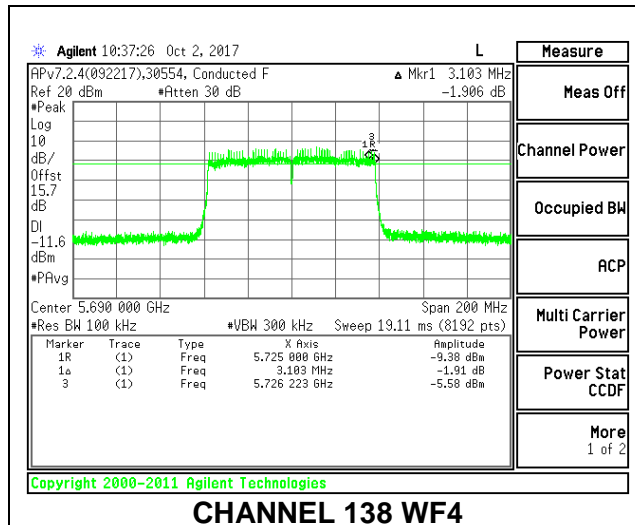
**2TX Antenna WF4 + Antenna WF2 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Mid	5775	75.424	75.131	0.5
138	5690	3.103	3.078	0.5

**MID CHANNEL**



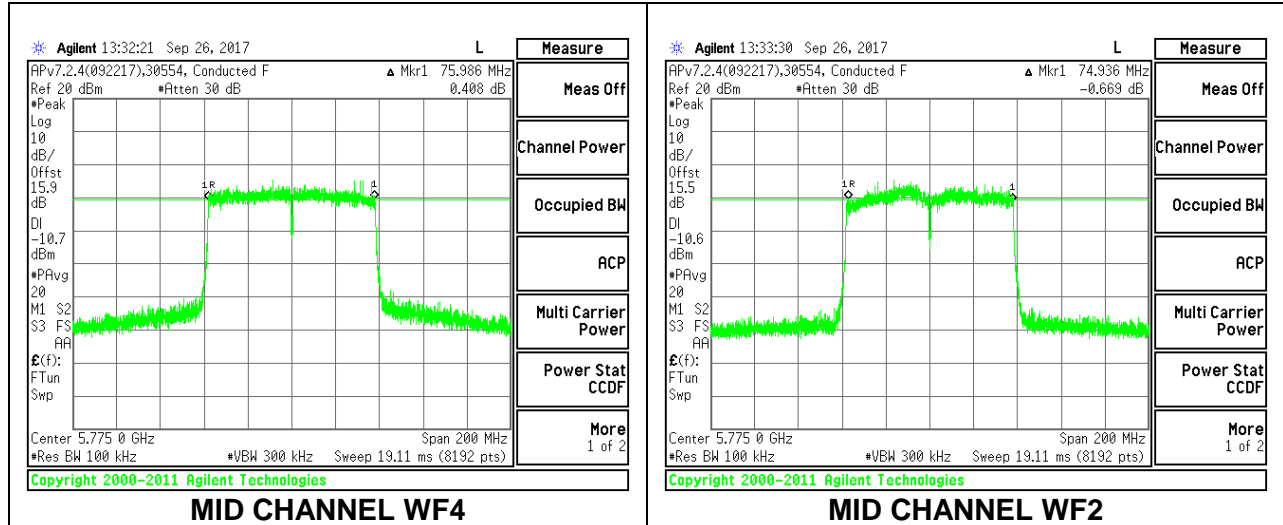
**CHANNEL 138**



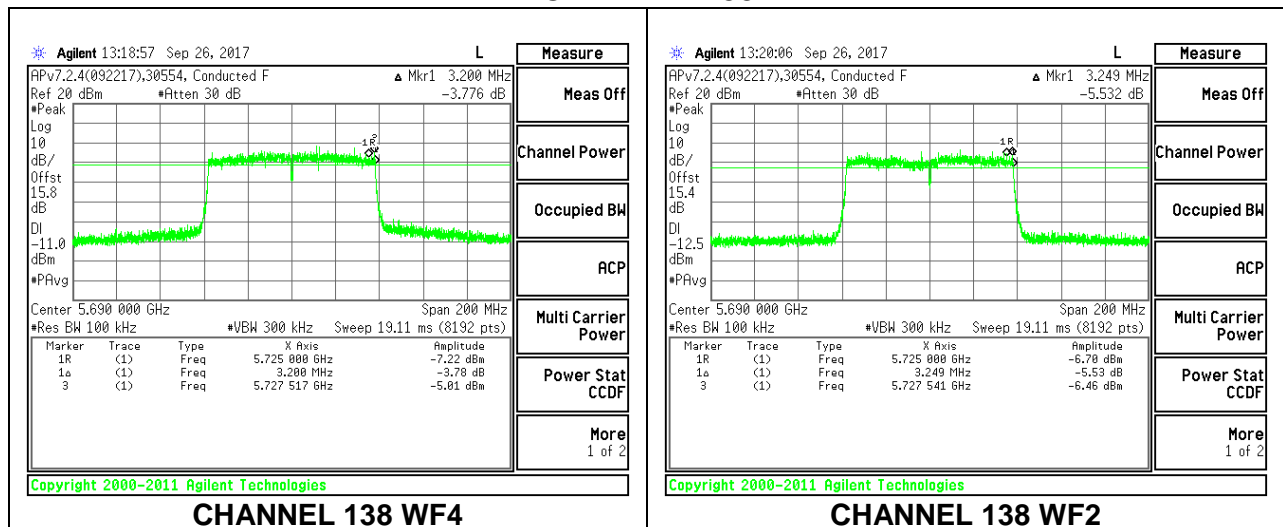
**2TX Antenna WF4 + Antenna WF2 BF Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Mid	5775	75.986	74.936	0.5
138	5690	3.200	3.249	0.5

**MID CHANNEL**



**CHANNEL 138**

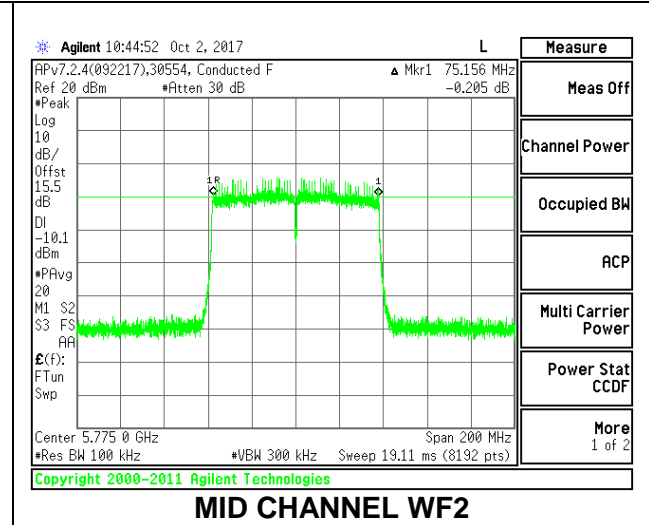
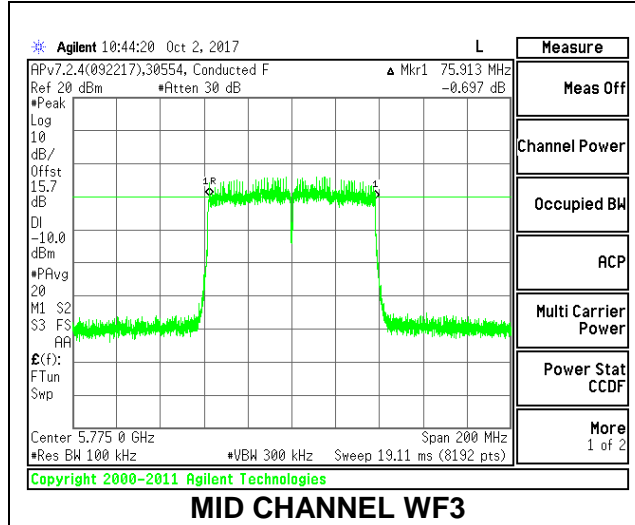




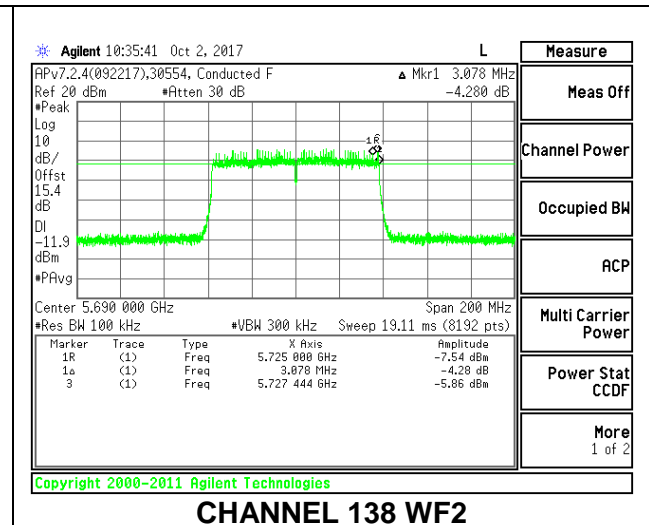
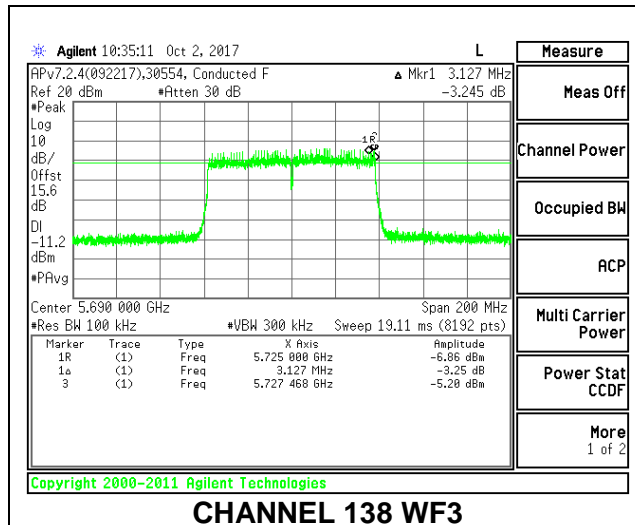
**2TX Antenna WF3 + Antenna WF2 CDD Mode**

Channel	Frequency (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Mid	5775	75.913	75.156	0.5
138	5690	3.127	3.078	0.5

**MID CHANNEL**



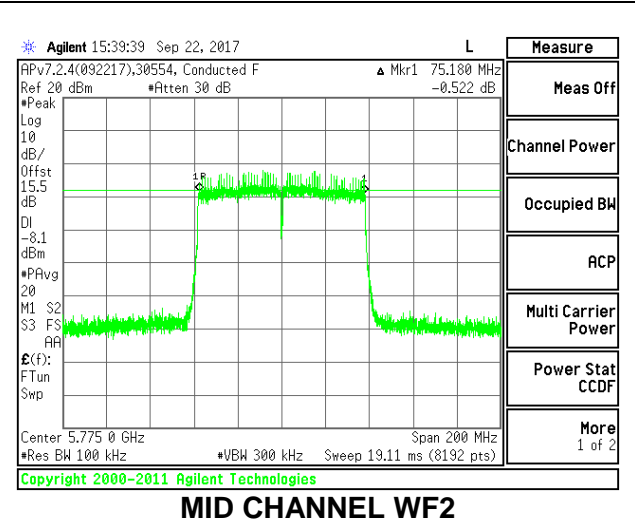
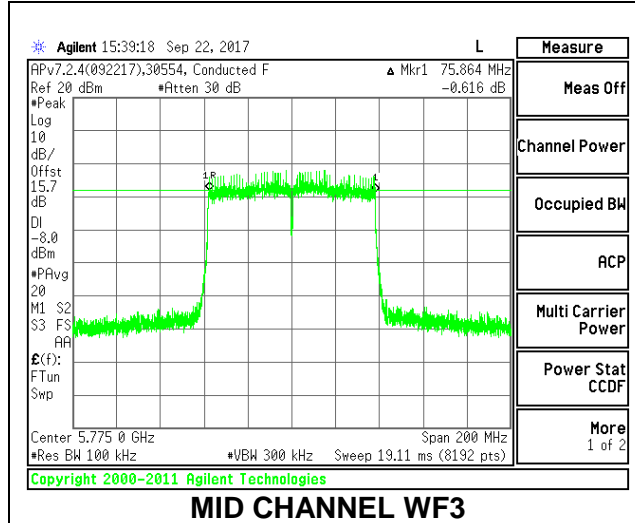
**CHANNEL 138**



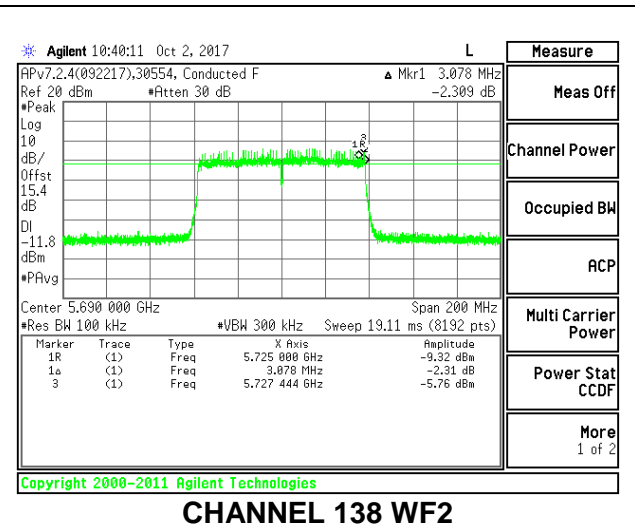
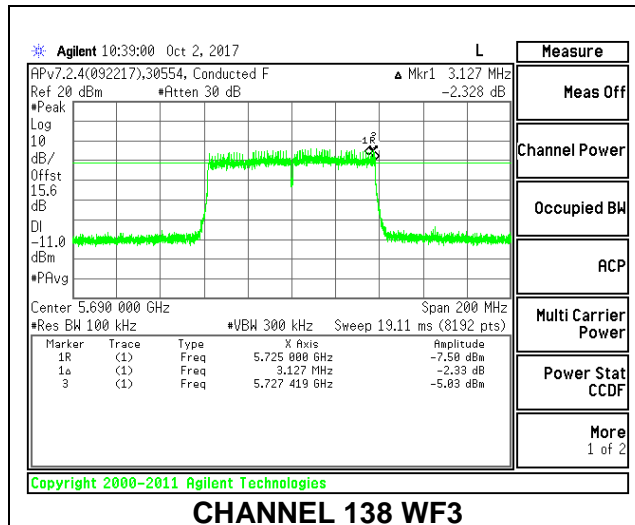
**2TX Antenna WF3 + Antenna WF2 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Mid	5775	75.864	75.180	0.5
138	5690	3.127	3.078	0.5

**MID CHANNEL**



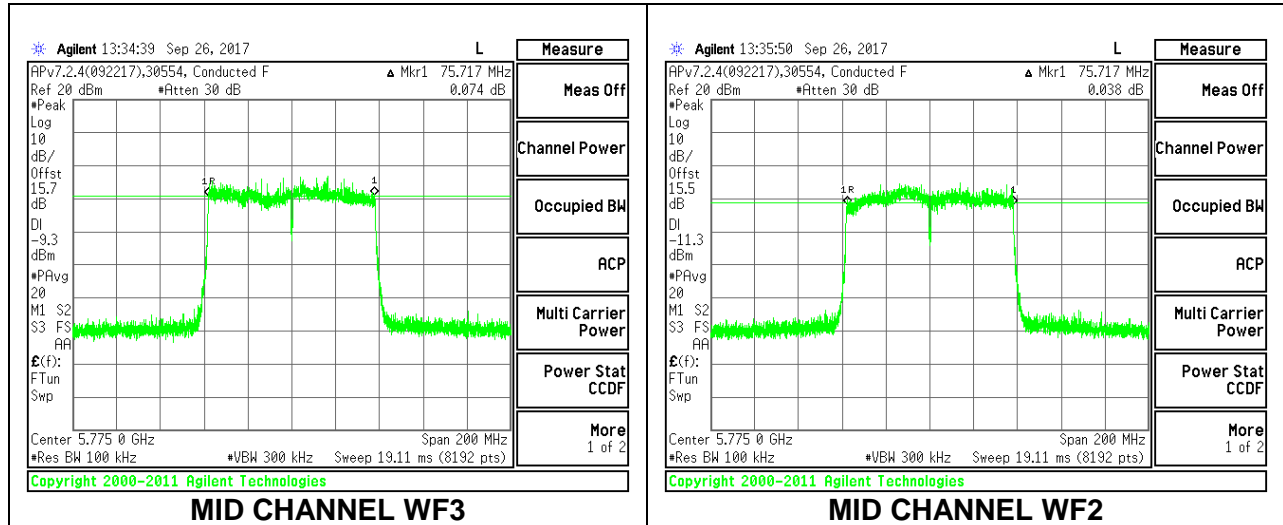
**CHANNEL 138**



**2TX Antenna WF3 + Antenna WF2 BF Mode**

Channel	Frequency (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Mid	5775	75.717	75.717	0.5
138	5690	3.176	3.225	0.5

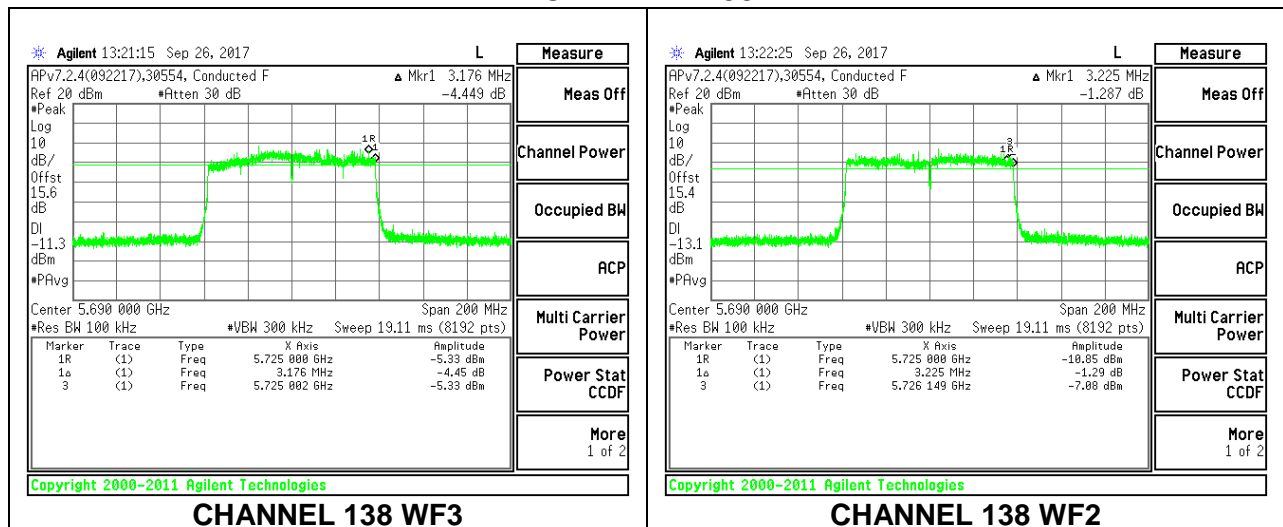
**MID CHANNEL**



**MID CHANNEL WF3**

**MID CHANNEL WF2**

**CHANNEL 138**



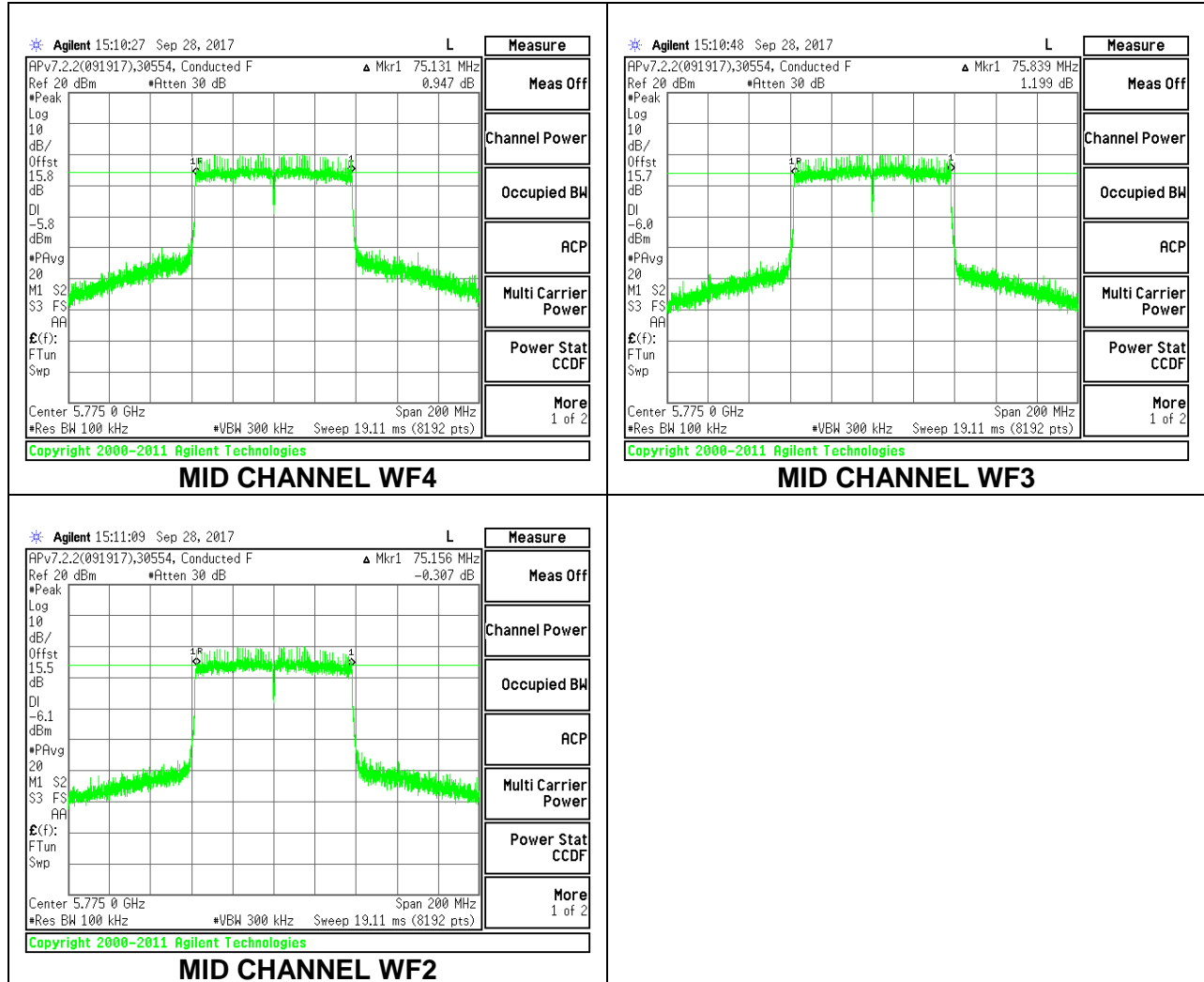
**CHANNEL 138 WF3**

**CHANNEL 138 WF2**

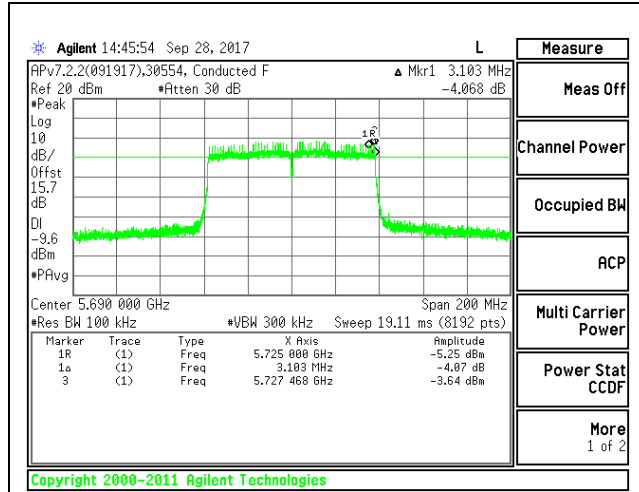
**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 CDD Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Mid	5775	75.131	75.839	75.156	0.5
138	5690	3.103	3.103	3.127	0.5

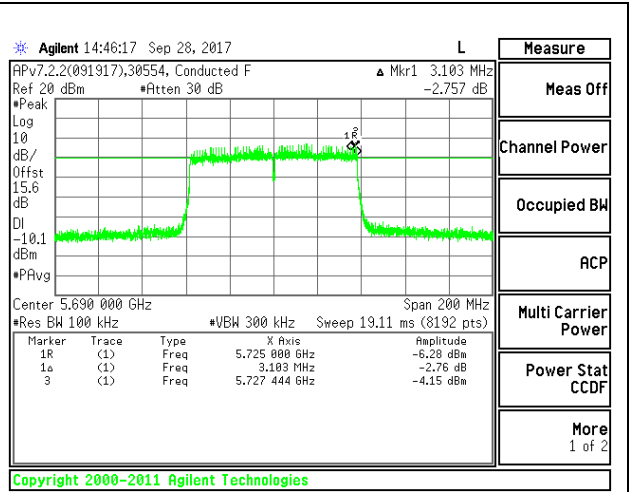
**MID CHANNEL**



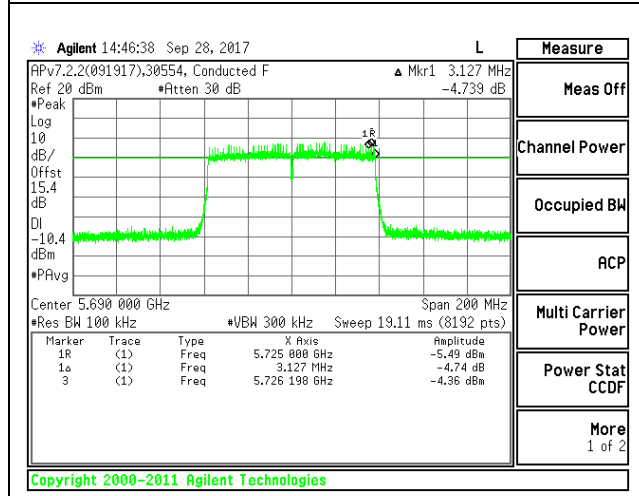
**CHANNEL 138**



**CHANNEL 138 WF4**



**CHANNEL 138 WF3**

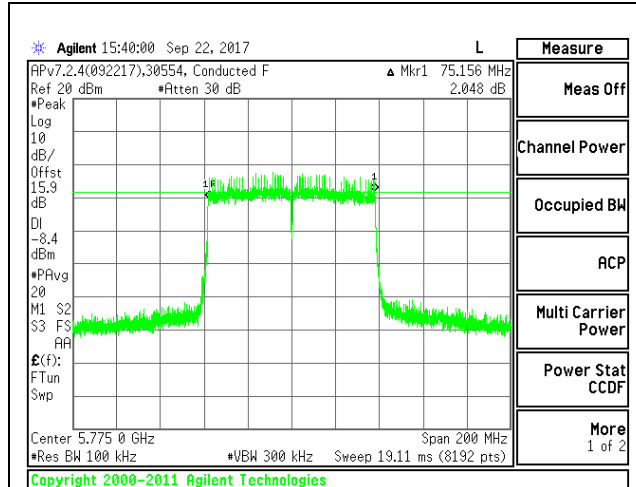


**CHANNEL 138 WF2**

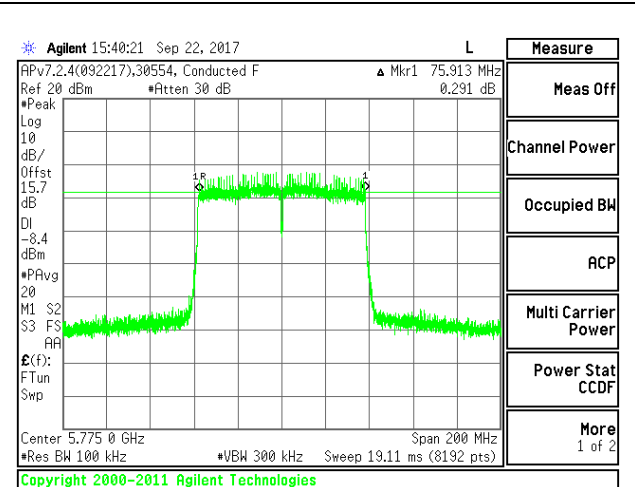
**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 SDM Mode**

Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Mid	5775	75.156	75.913	75.180	0.5
138	5690	3.078	3.127	3.127	0.5

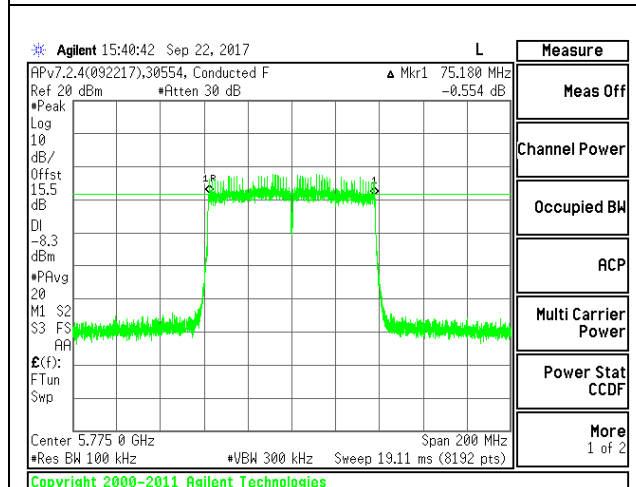
**MID CHANNEL**



**MID CHANNEL WF4**

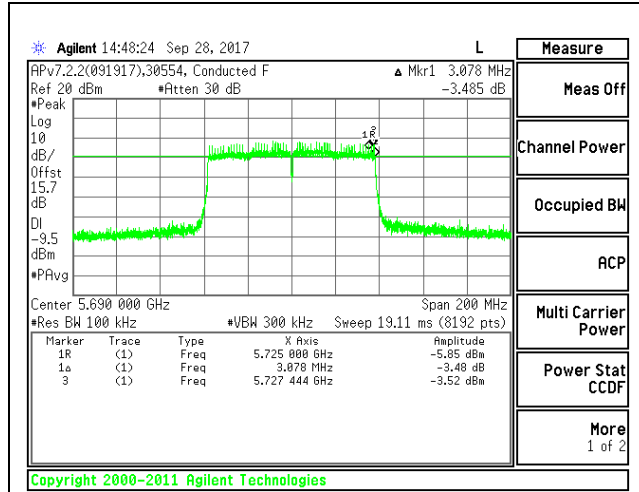


**MID CHANNEL WF3**

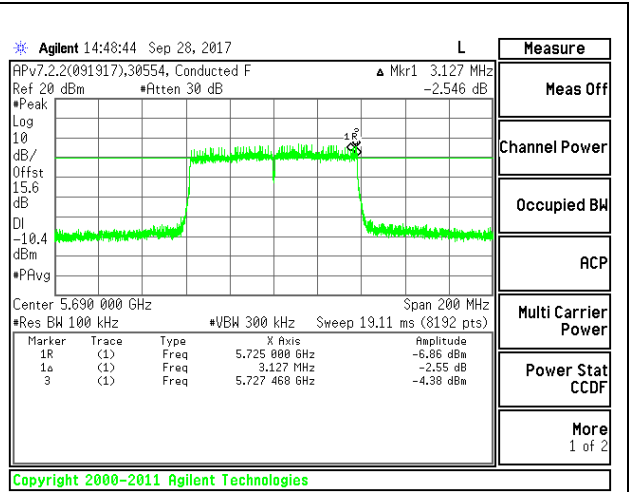


**MID CHANNEL WF2**

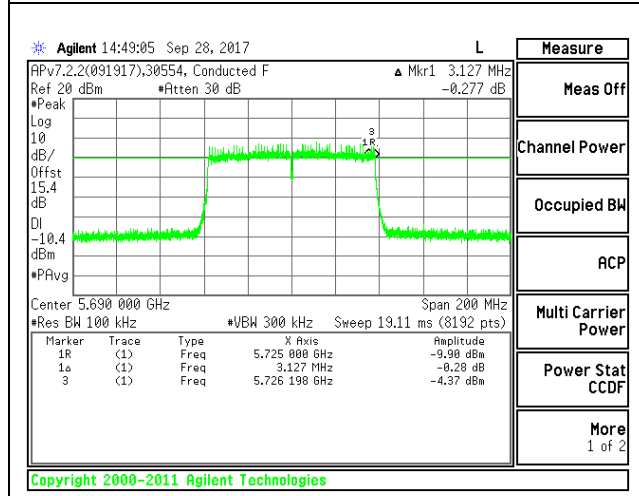
**CHANNEL 138**



**CHANNEL 138 WF4**



**CHANNEL 138 WF3**

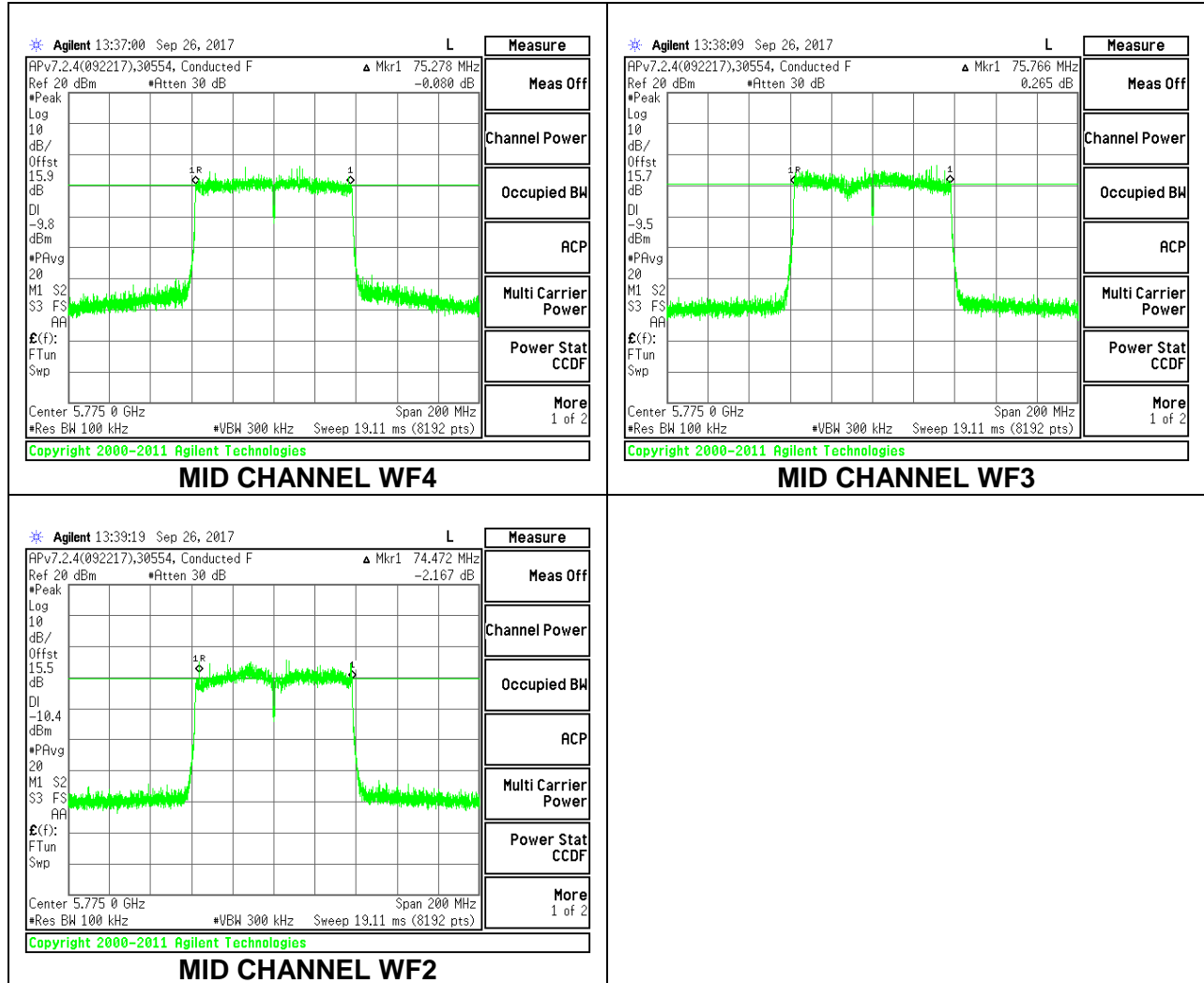


**CHANNEL 138 WF2**

**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 BF Mode**

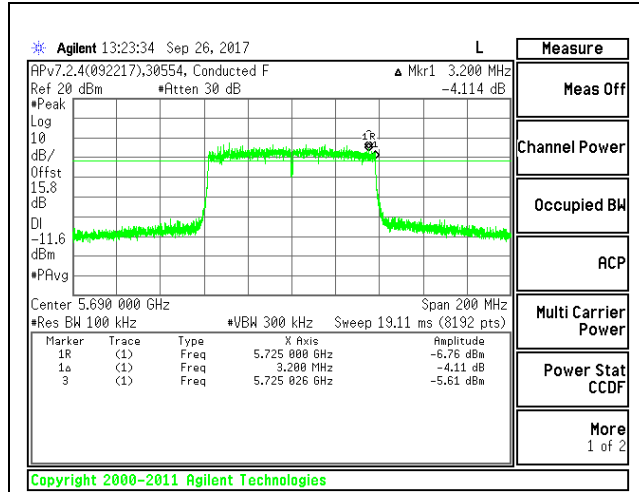
Channel	Frequency (MHz)	6 dB BW WF4 (MHz)	6 dB BW WF3 (MHz)	6 dB BW WF2 (MHz)	Minimum Limit (MHz)
Mid	5775	75.278	75.766	74.472	0.5
138	5690	3.200	3.274	3.274	0.5

**MID CHANNEL**

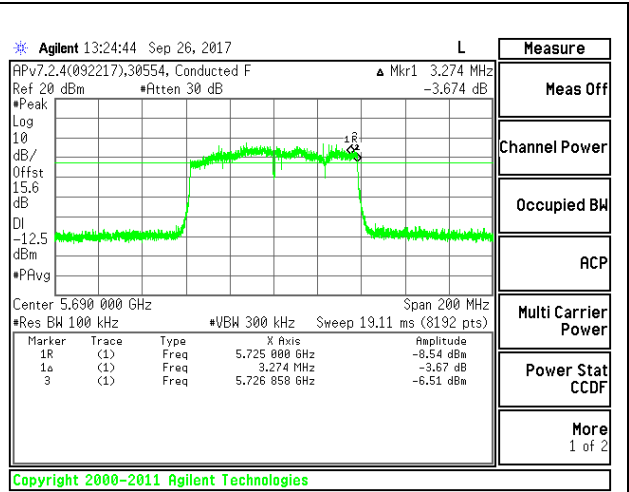




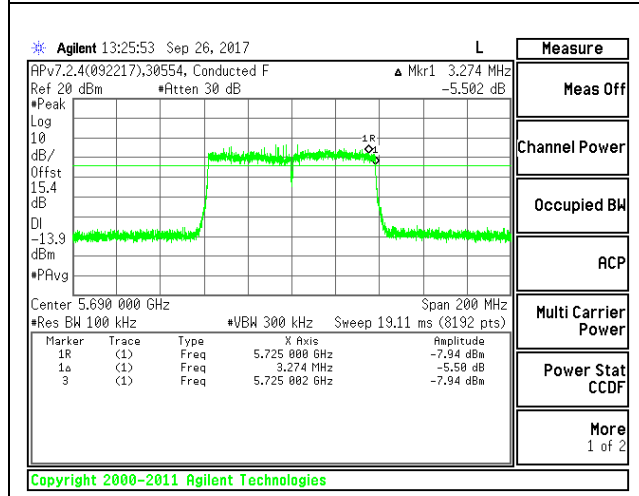
**CHANNEL 138**



**CHANNEL 138 WF4**



**CHANNEL 138 WF3**



**CHANNEL 138 WF2**

## 4.5. OUTPUT POWER AND PSD

### LIMITS

#### FCC §15.407 (a) (1)

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

#### FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26-dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1-MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or  $11 \text{ dBm} + 10 \log B$ , where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

FCC §15.407 (a) (3)

For the band 5.725–5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

**TEST PROCEDURE**

Measurements perform using a wideband gated RF power meter provided that the gate parameters are adjusted such that the power is measured only when the EUT is transmitting at its maximum power control level. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.

**DIRECTIONAL ANTENNA GAIN**

For 1 TX:

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

For 2 TX:

The TX chains are uncorrelated and the antenna gain is the same for each chain. The directional gain is equal to the antenna gain.

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Band (GHz)	WF4 Antenna Gain (dBi)	WF3 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
5.2	2.80	1.80	2.33
5.3	2.20	2.30	2.25
5.6	1.80	1.30	1.56
5.8	1.00	1.40	1.20

Band (GHz)	WF4 Antenna Gain (dBi)	WF2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
5.2	2.80	4.20	3.56
5.3	2.20	3.90	3.13
5.6	1.80	4.20	3.16
5.8	1.00	3.10	2.18

Band (GHz)	WF3 Antenna Gain (dBi)	WF2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
5.2	1.80	4.20	3.16
5.3	2.30	3.90	3.17
5.6	1.30	4.20	2.99
5.8	1.40	3.10	2.33

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

Band (GHz)	WF4 Antenna Gain (dBi)	WF3 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	2.80	1.80	5.32
5.3	2.20	2.30	5.26
5.6	1.80	1.30	4.56
5.8	1.00	1.40	4.21

Band (GHz)	WF4 Antenna Gain (dBi)	WF2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	2.80	4.20	6.54
5.3	2.20	3.90	6.10
5.6	1.80	4.20	6.09
5.8	1.00	3.10	5.12

Band (GHz)	WF3 Antenna Gain (dBi)	WF2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	1.80	4.20	6.09
5.3	2.30	3.90	6.15
5.6	1.30	4.20	5.88
5.8	1.40	3.10	5.30

For 3 TX:

The TX chains are uncorrelated and the antenna gain is the same for each chain. The directional gain is equal to the antenna gain.

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Band (GHz)	WF4 Antenna Gain (dBi)	WF3 Antenna Gain (dBi)	WF2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
5.2	2.80	1.80	4.20	3.05
5.3	2.20	2.30	3.90	2.87
5.6	1.80	1.30	4.20	2.63
5.8	1.00	1.40	3.10	1.93

The TX chains are correlated and the antenna gain is unequal among the chains. The directional gain is:

Band (GHz)	WF4 Antenna Gain (dBi)	WF3 Antenna Gain (dBi)	WF2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	2.80	1.80	4.20	7.76
5.3	2.20	2.30	3.90	7.61
5.6	1.80	1.30	4.20	7.30
5.8	1.00	1.40	3.10	6.65

**RESULTS**

<b>ID:</b>	30554	<b>Date:</b>	9/20/2017
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**4.5.1. 802.11n HT20 MODE IN THE 5.2 GHz BAND**

**1TX Antenna WF4**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	2.80	24.00	11.00
Mid	5200	2.80	24.00	11.00
High	5240	2.80	24.00	11.00

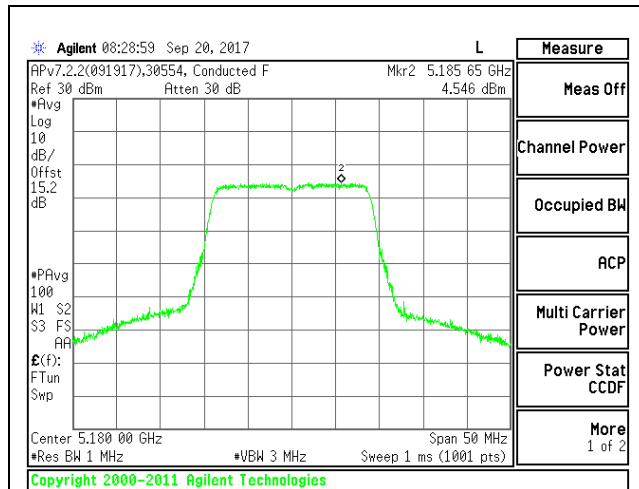
<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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**Output Power Results**

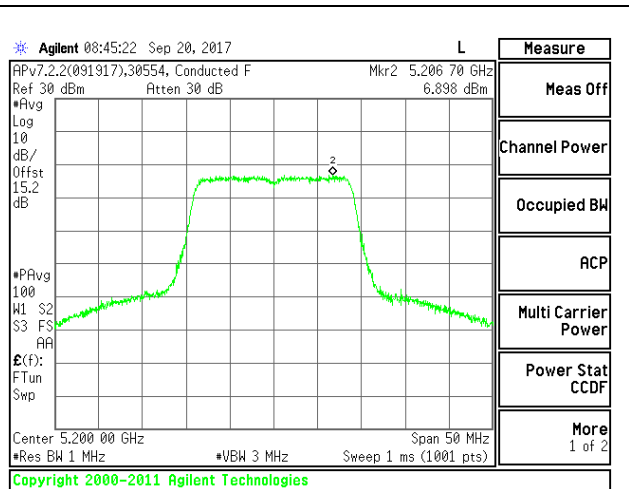
Channel	Frequency (MHz)	WF4 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	15.85	15.85	24.00	-8.15
Mid	5200	17.92	17.92	24.00	-6.08
High	5240	19.78	19.78	24.00	-4.22

**PSD Results**

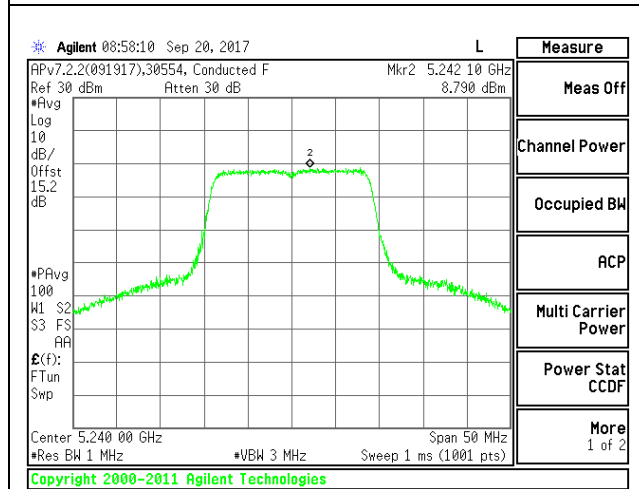
Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	4.55	4.78	11.00	-6.22
Mid	5200	6.90	7.13	11.00	-3.87
High	5240	8.79	9.02	11.00	-1.98



LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



**1TX Antenna WF3**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	1.80	24.00	11.00
Mid	5200	1.80	24.00	11.00
High	5240	1.80	24.00	11.00

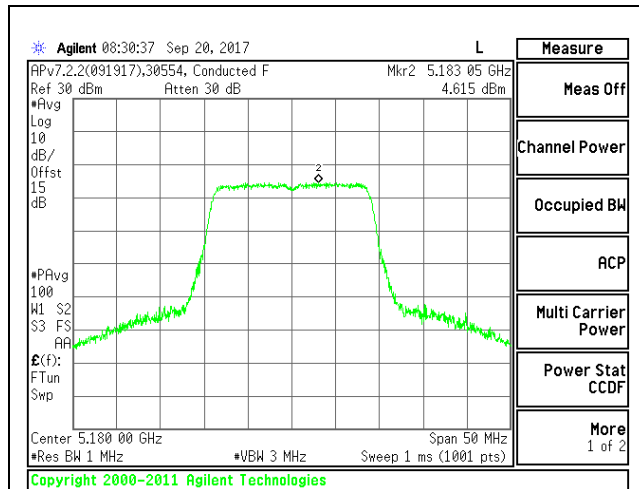
<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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**Output Power Results**

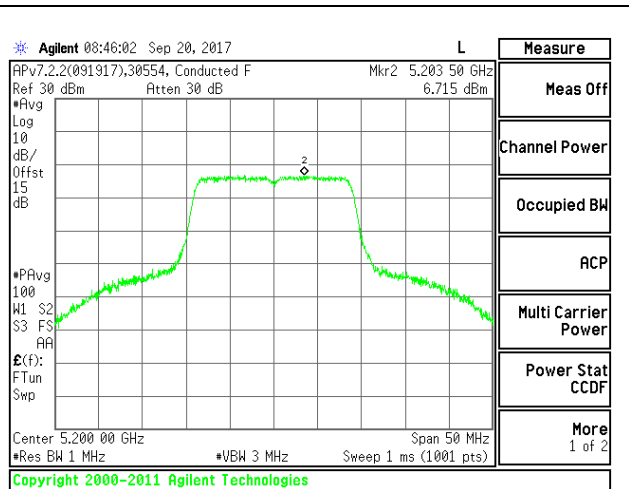
Channel	Frequency (MHz)	WF3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	15.89	15.89	24.00	-8.11
Mid	5200	17.83	17.83	24.00	-6.17
High	5240	19.91	19.91	24.00	-4.09

**PSD Results**

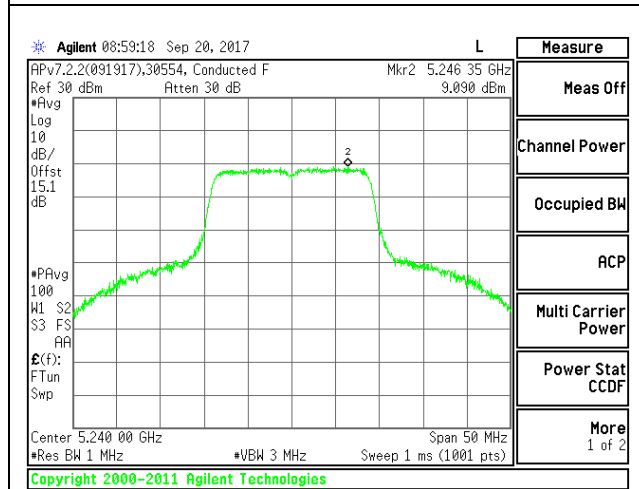
Channel	Frequency (MHz)	WF3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	4.62	4.85	11.00	-6.16
Mid	5200	6.72	6.95	11.00	-4.06
High	5240	9.09	9.32	11.00	-1.68



LOW CHANNEL



MID CHANNEL



HIGH CHANNEL

**1TX Antenna WF2**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	4.20	24.00	11.00
Mid	5200	4.20	24.00	11.00
High	5240	4.20	24.00	11.00

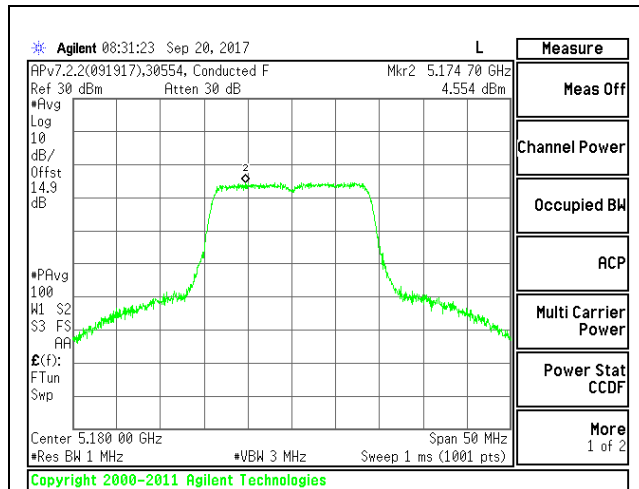
<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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**Output Power Results**

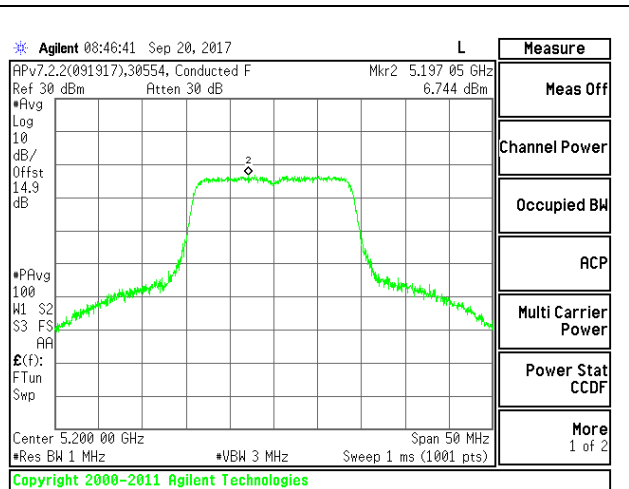
Channel	Frequency (MHz)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	15.89	15.89	24.00	-8.11
Mid	5200	17.84	17.84	24.00	-6.16
High	5240	19.79	19.79	24.00	-4.21

**PSD Results**

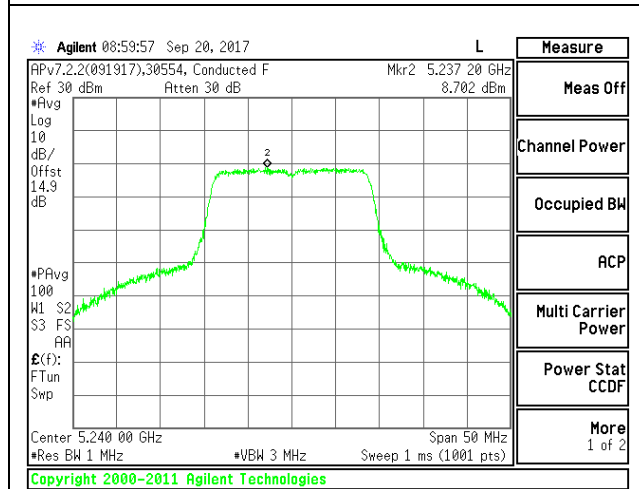
Channel	Frequency (MHz)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	4.55	4.78	11.00	-6.22
Mid	5200	6.74	6.97	11.00	-4.03
High	5240	8.70	8.93	11.00	-2.07



LOW CHANNEL



MID CHANNEL



HIGH CHANNEL

**2TX Antenna WF4 + Antenna WF3 CDD Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	2.33	5.32	24.00	11.00
Mid	5200	2.33	5.32	24.00	11.00
High	5240	2.33	5.32	24.00	11.00

<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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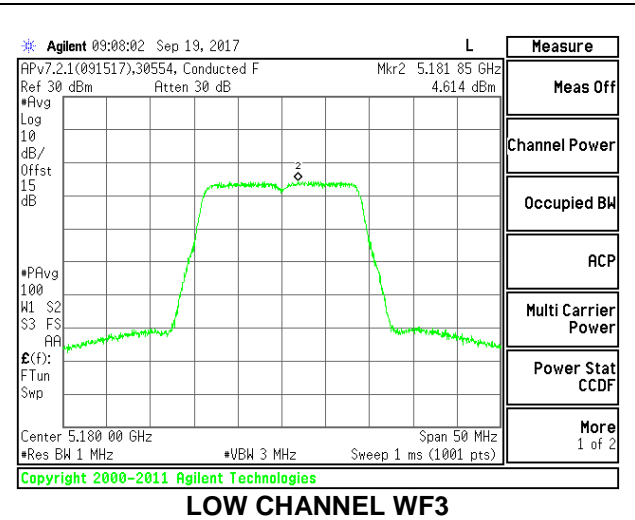
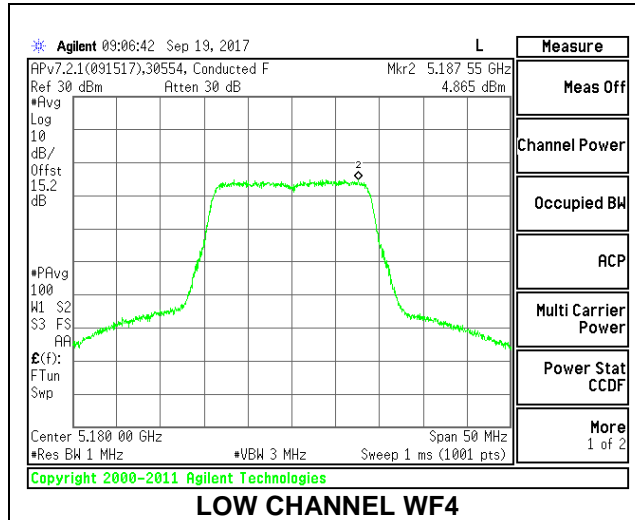
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.94	14.81	17.89	24.00	-6.11
Mid	5200	16.43	16.38	19.42	24.00	-4.58
High	5240	16.48	16.42	19.46	24.00	-4.54

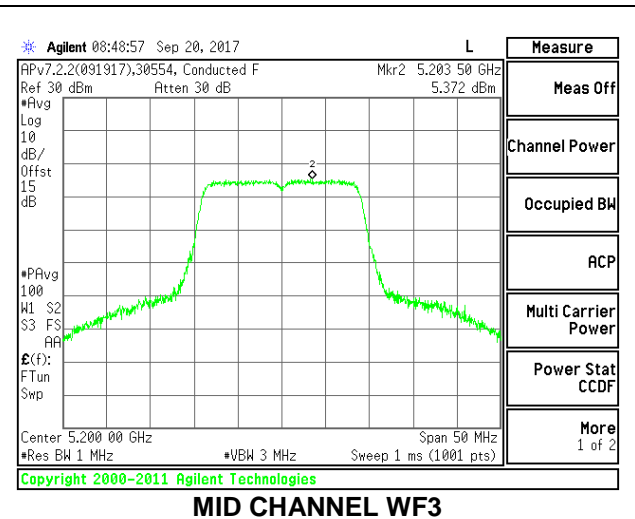
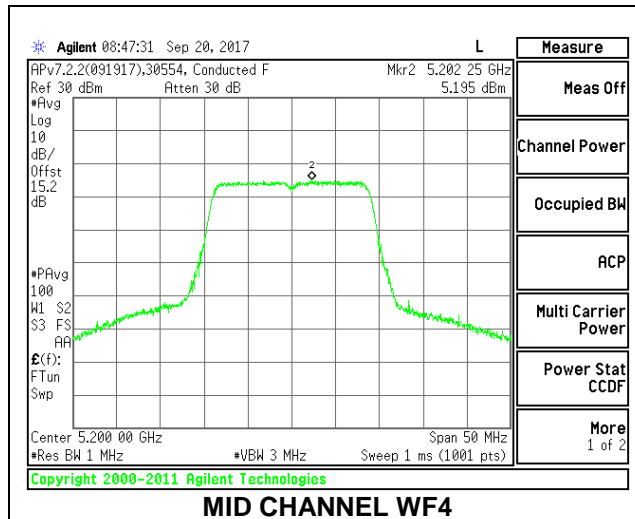
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	4.69	4.61	7.89	11.00	-3.11
Mid	5200	5.20	5.37	8.53	11.00	-2.47
High	5240	5.39	5.38	8.63	11.00	-2.37

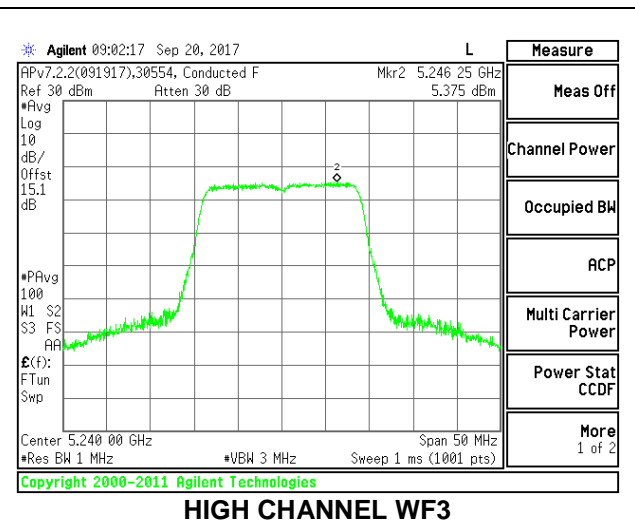
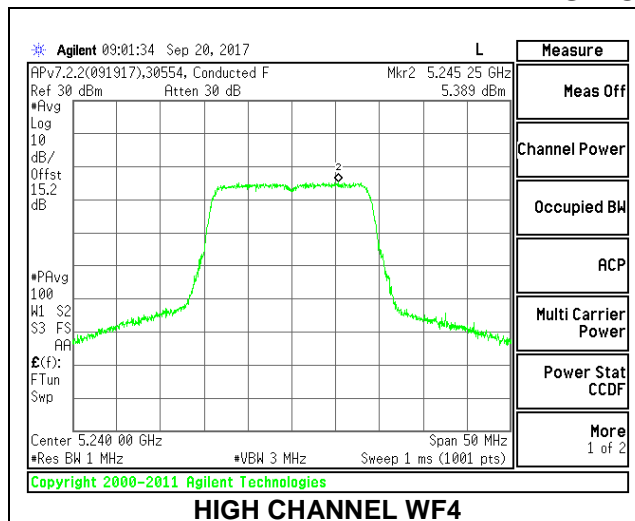
### LOW CHANNEL



### MID CHANNEL



### HIGH CHANNEL



**2TX Antenna WF4 + Antenna WF3 SDM Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	2.33	2.33	24.00	11.00
Mid	5200	2.33	2.33	24.00	11.00
High	5240	2.33	2.33	24.00	11.00

<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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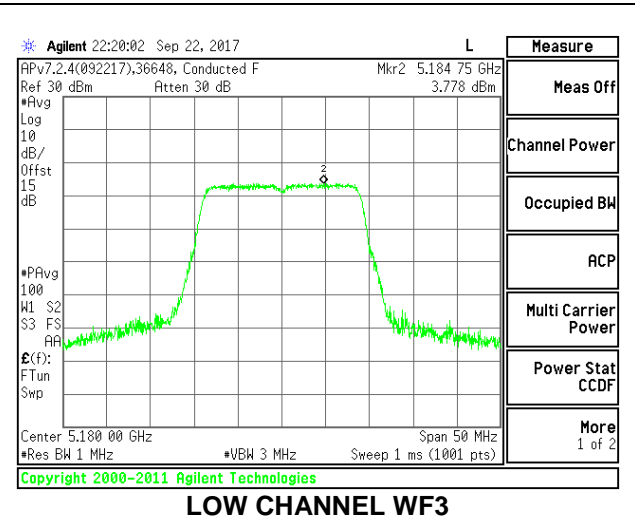
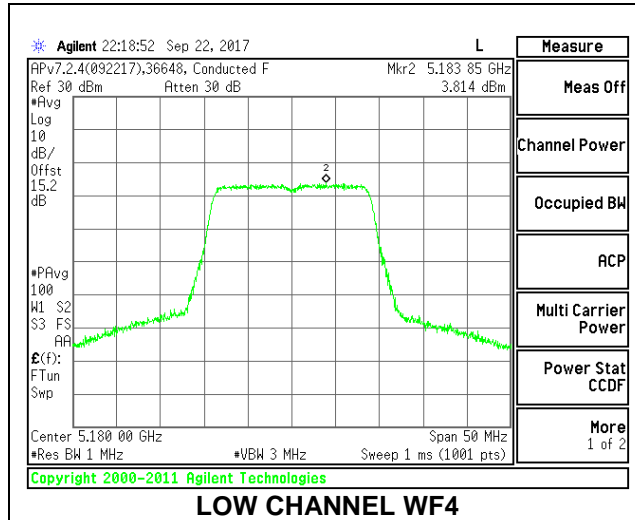
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.89	14.81	17.86	24.00	-6.14
Mid	5200	16.78	16.84	19.82	24.00	-4.18
High	5240	16.84	16.93	19.90	24.00	-4.10

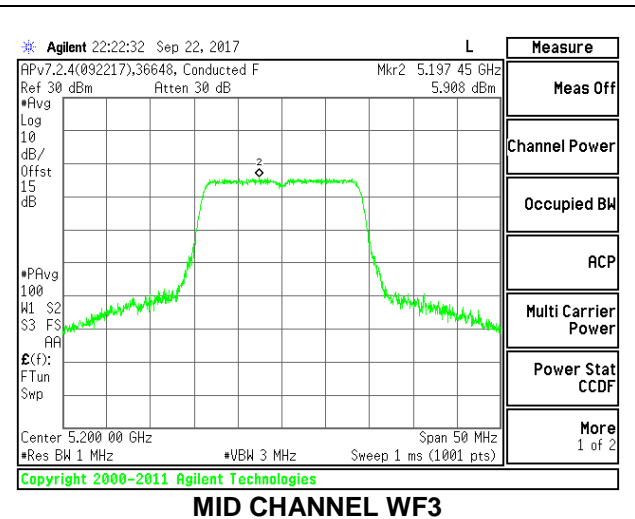
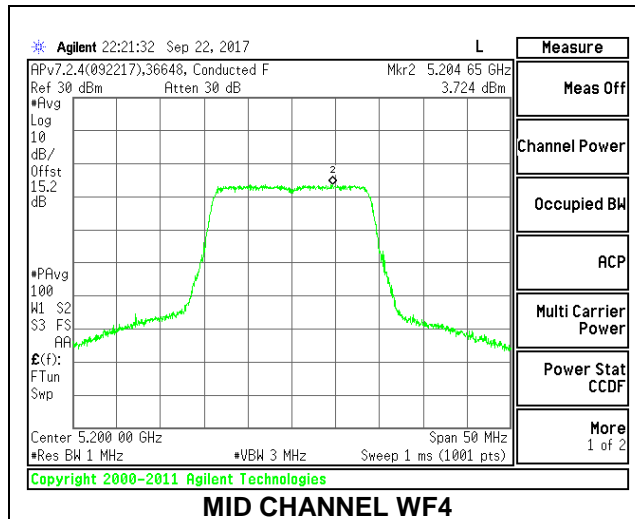
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	3.81	3.78	7.04	11.00	-3.96
Mid	5200	3.72	5.91	8.19	11.00	-2.81
High	5240	5.73	6.01	9.11	11.00	-1.89

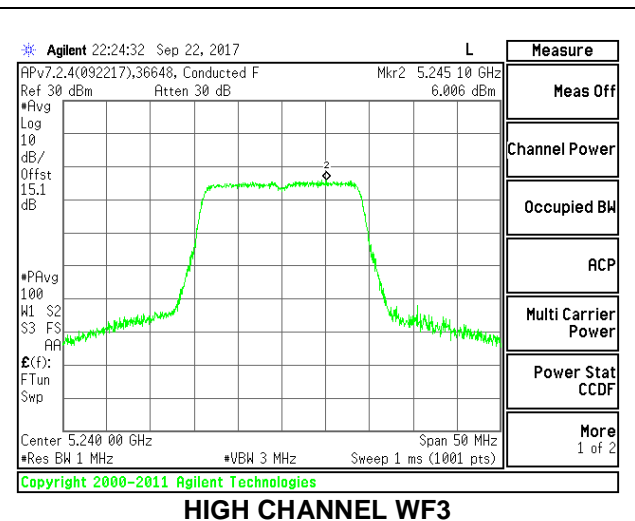
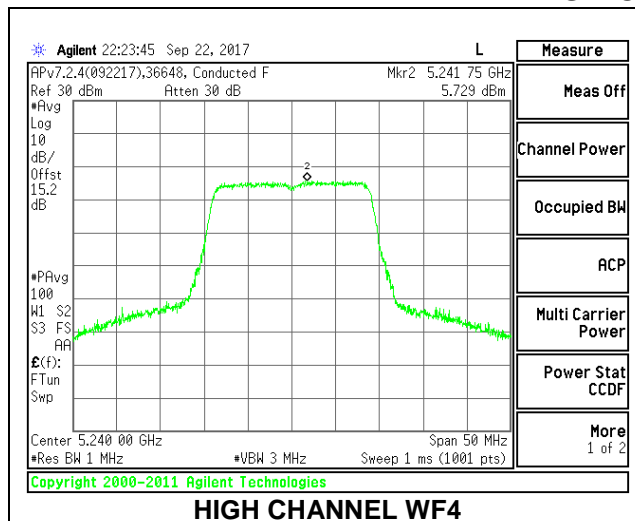
### LOW CHANNEL



### MID CHANNEL



### HIGH CHANNEL





**2TX Antenna WF4 + Antenna WF3 BF Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	5.32	5.32	24.00	11.00
Mid	5200	5.32	5.32	24.00	11.00
High	5240	5.32	5.32	24.00	11.00

<b>Duty Cycle CF (dB)</b>	0.12	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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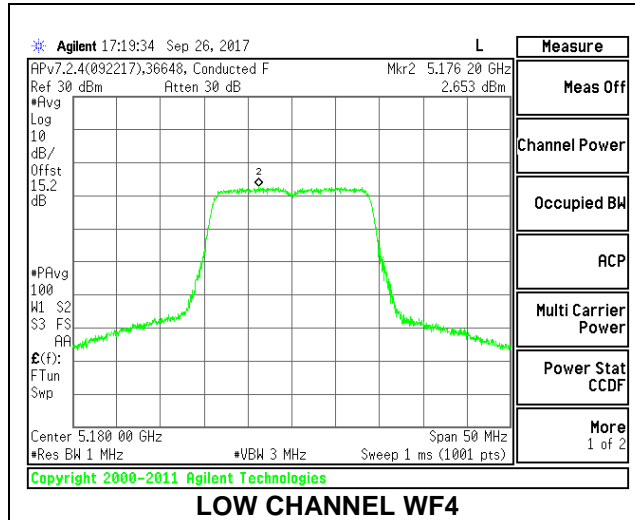
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.39	14.45	17.43	24.00	-6.57
Mid	5200	16.41	16.48	19.46	24.00	-4.54
High	5240	16.42	16.49	19.47	24.00	-4.53

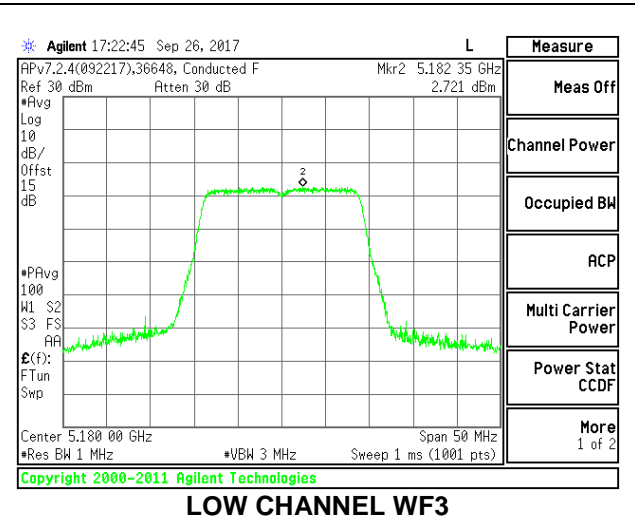
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	2.65	2.72	5.82	11.00	-5.18
Mid	5200	5.24	5.33	8.42	11.00	-2.58
High	5240	3.73	6.06	8.18	11.00	-2.82

### LOW CHANNEL

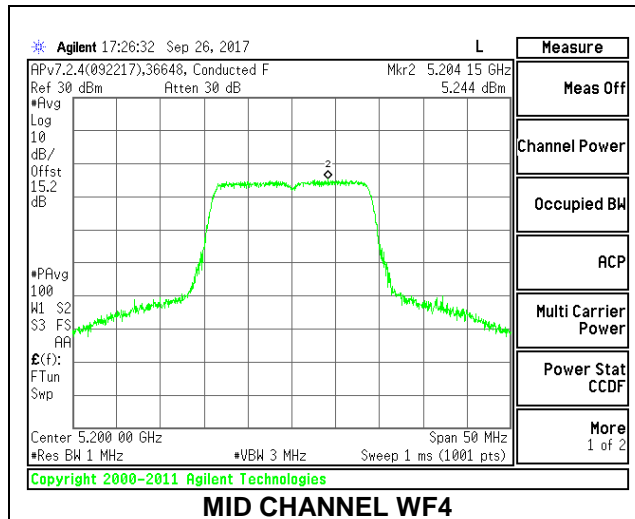


LOW CHANNEL WF4

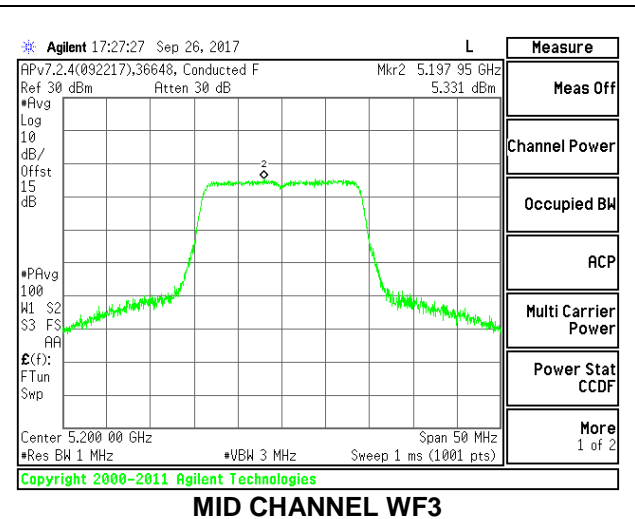


LOW CHANNEL WF3

### MID CHANNEL

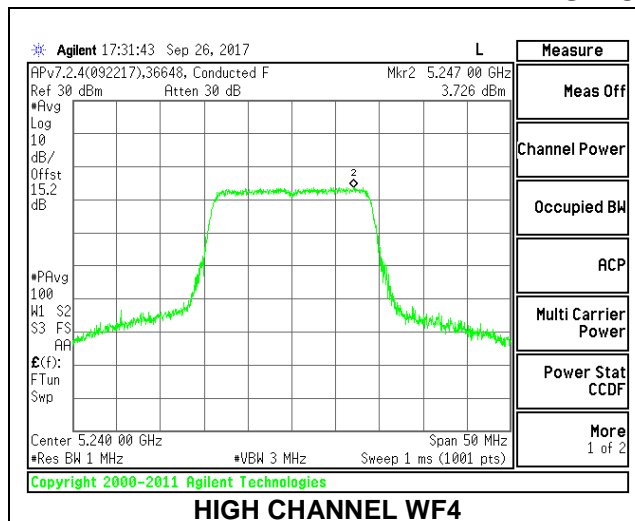


MID CHANNEL WF4

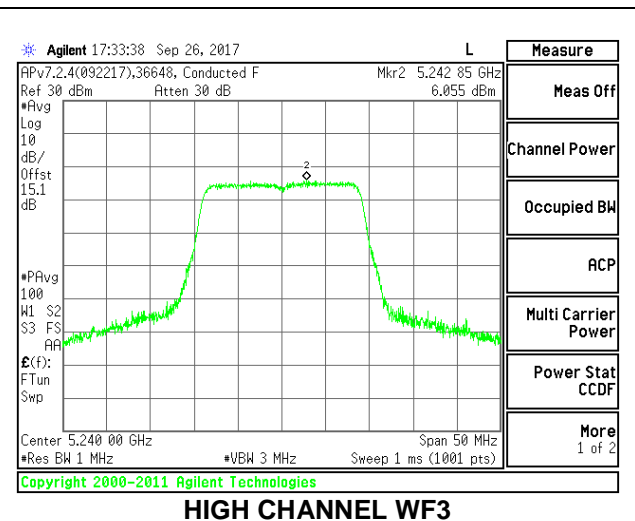


MID CHANNEL WF3

### HIGH CHANNEL



HIGH CHANNEL WF4



HIGH CHANNEL WF3

**2TX Antenna WF4 + Antenna WF2 CDD Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	3.56	6.54	24.00	10.46
Mid	5200	3.56	6.54	24.00	10.46
High	5240	3.56	6.54	24.00	10.46

<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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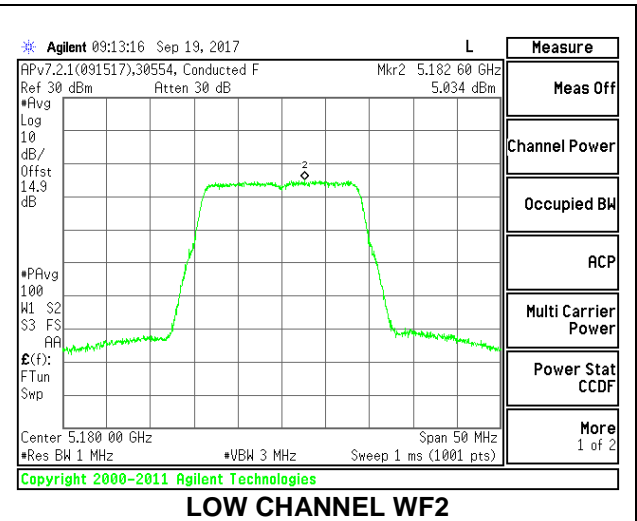
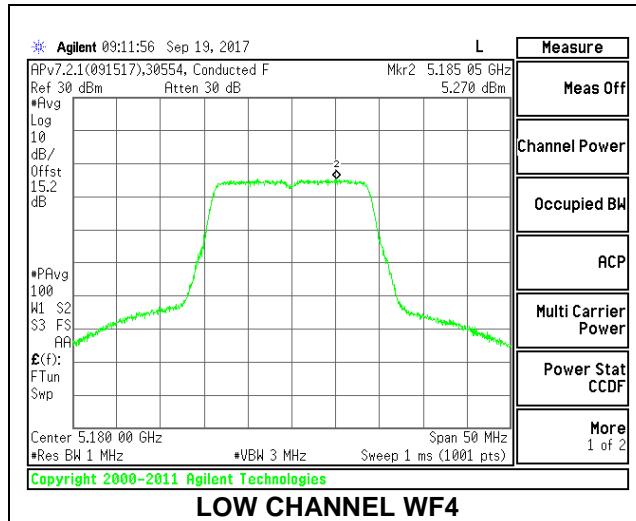
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.41	14.33	17.38	24.00	-6.62
Mid	5200	16.44	16.35	19.41	24.00	-4.59
High	5240	16.46	16.39	19.44	24.00	-4.56

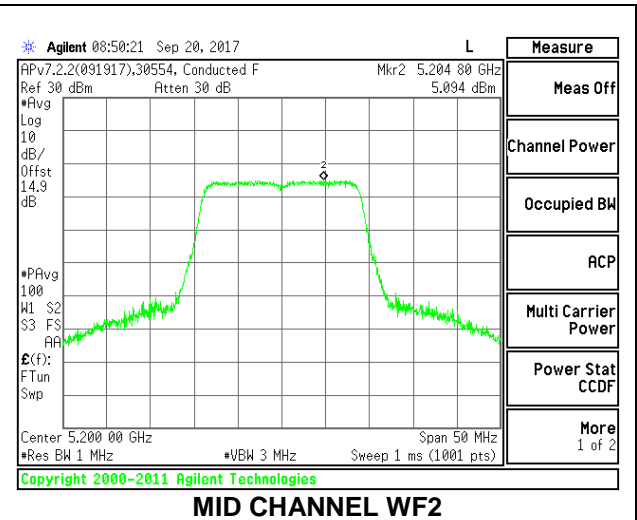
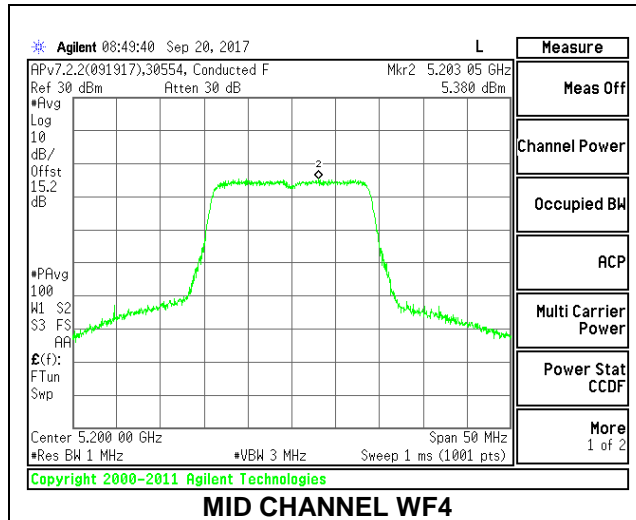
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	5.27	5.03	8.39	10.46	-2.07
Mid	5200	5.38	5.09	8.48	10.46	-1.98
High	5240	5.20	5.26	8.47	10.46	-1.99

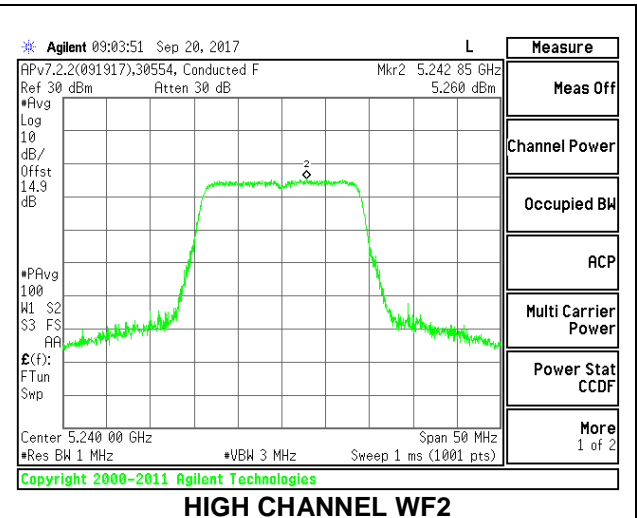
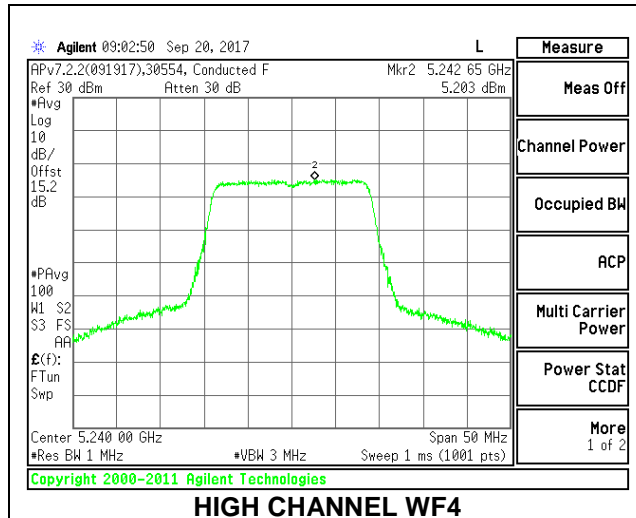
**LOW CHANNEL**



**MID CHANNEL**



**HIGH CHANNEL**



**2TX Antenna WF4 + Antenna WF2 SDM Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	3.56	3.56	24.00	11.00
Mid	5200	3.56	3.56	24.00	11.00
High	5240	3.56	3.56	24.00	11.00

<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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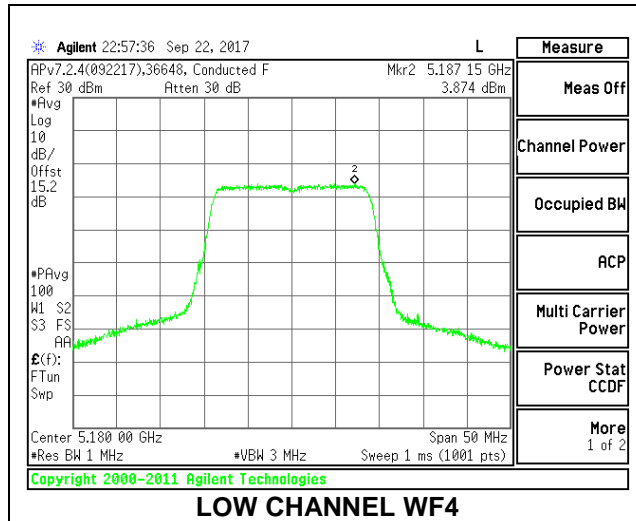
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.98	14.92	17.96	24.00	-6.04
Mid	5200	16.89	16.76	19.84	24.00	-4.16
High	5240	16.91	16.83	19.88	24.00	-4.12

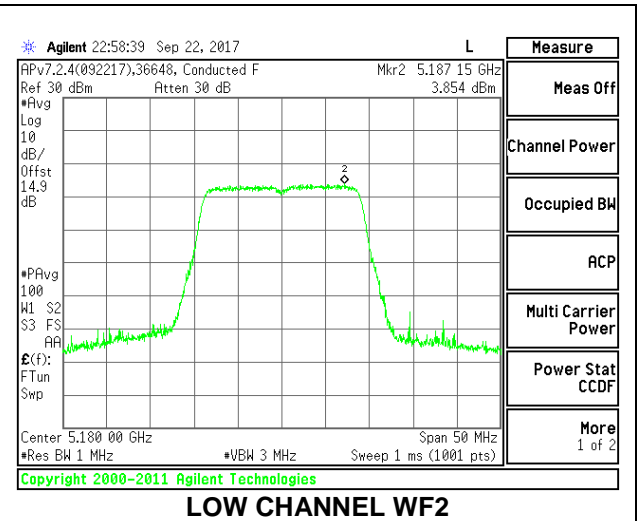
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	3.87	3.85	7.10	11.00	-3.90
Mid	5200	5.56	5.97	9.01	11.00	-1.99
High	5240	5.57	6.37	9.23	11.00	-1.77

**LOW CHANNEL**

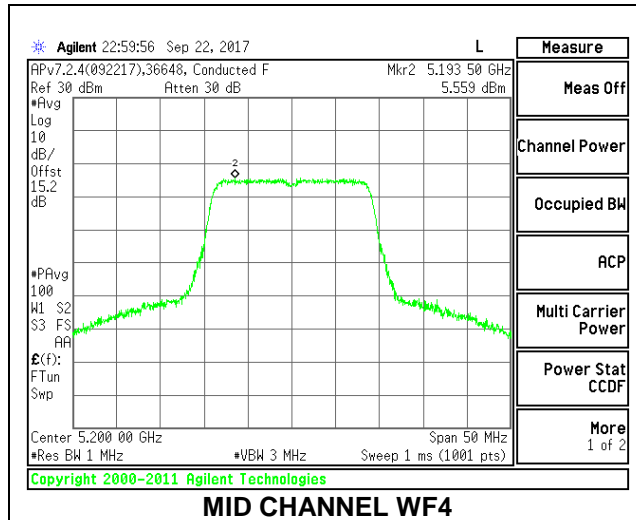


**LOW CHANNEL WF4**

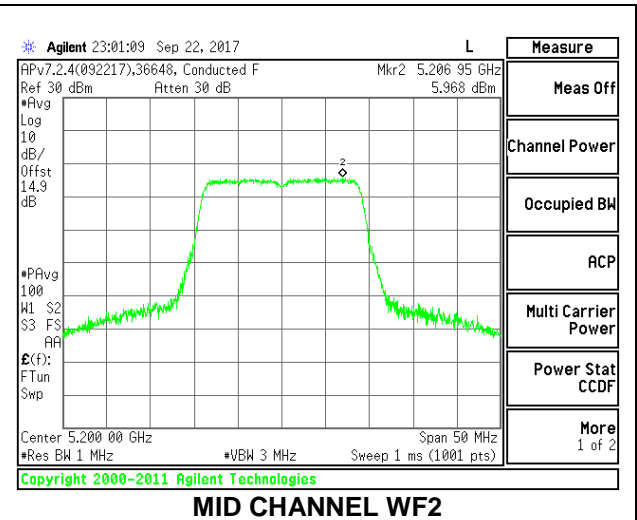


**LOW CHANNEL WF2**

**MID CHANNEL**

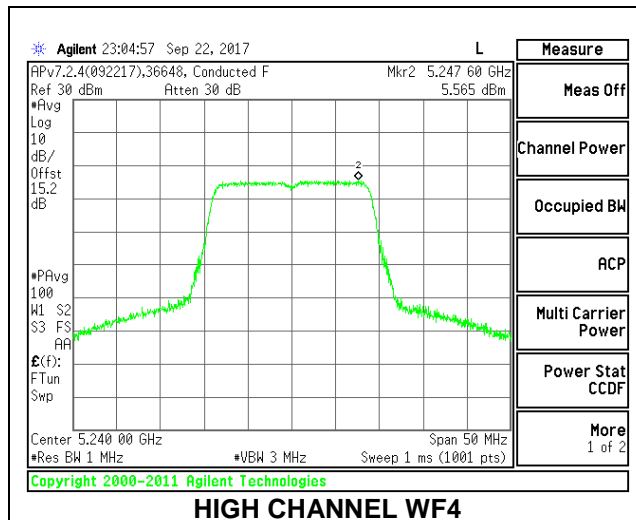


**MID CHANNEL WF4**

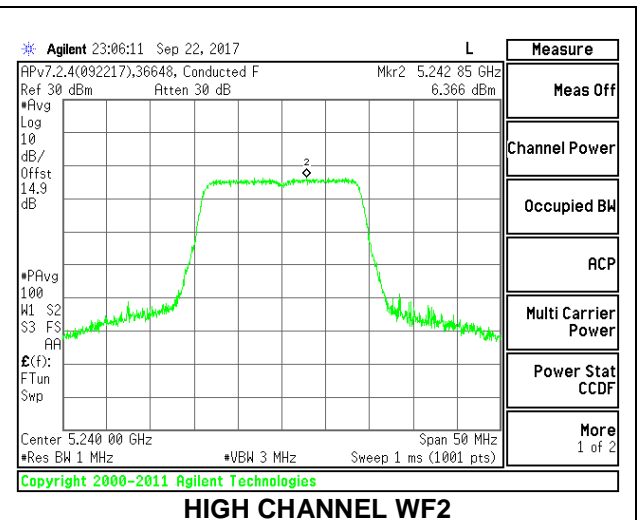


**MID CHANNEL WF2**

**HIGH CHANNEL**



**HIGH CHANNEL WF4**



**HIGH CHANNEL WF2**

**2TX Antenna WF4 + Antenna WF2 BF Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	6.54	6.54	23.46	10.46
Mid	5200	6.54	6.54	23.46	10.46
High	5240	6.54	6.54	23.46	10.46

<b>Duty Cycle CF (dB)</b>	0.12	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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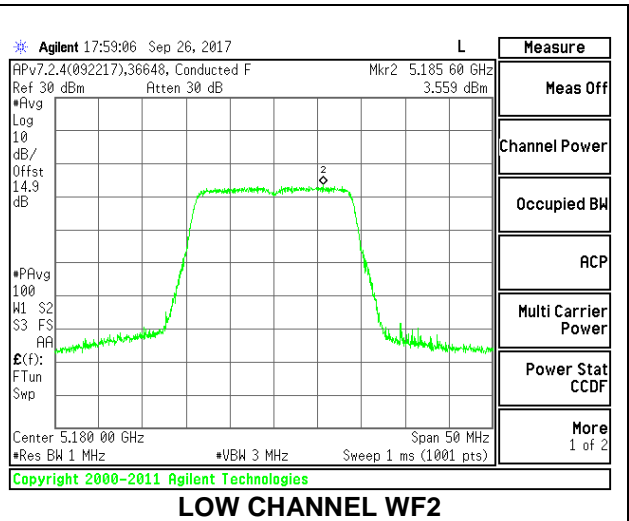
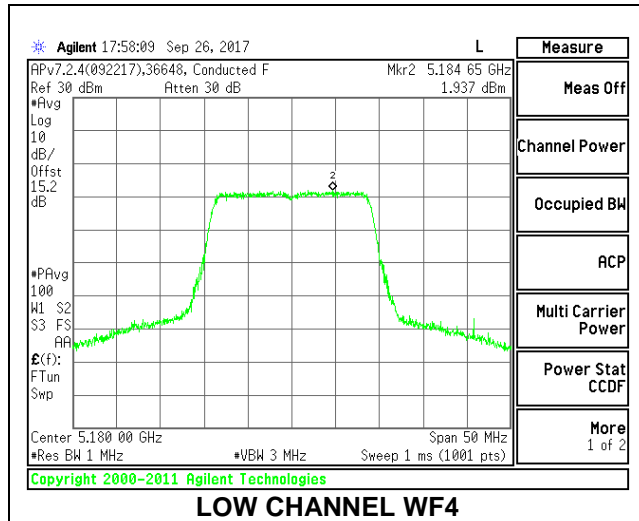
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.43	14.32	17.39	23.46	-6.07
Mid	5200	16.41	16.43	19.43	23.46	-4.03
High	5240	16.48	16.42	19.46	23.46	-4.00

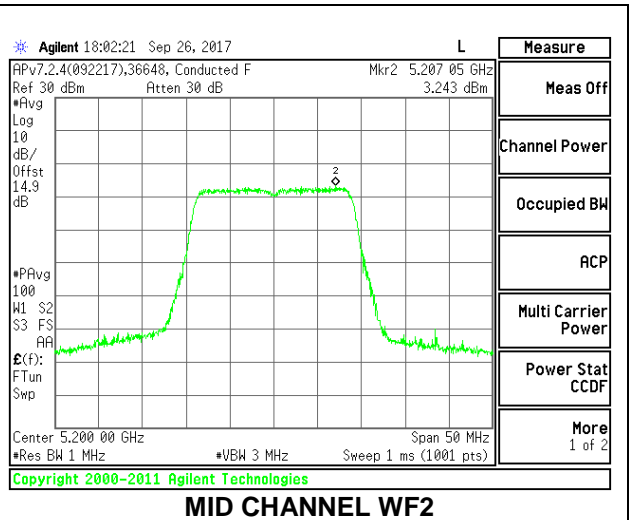
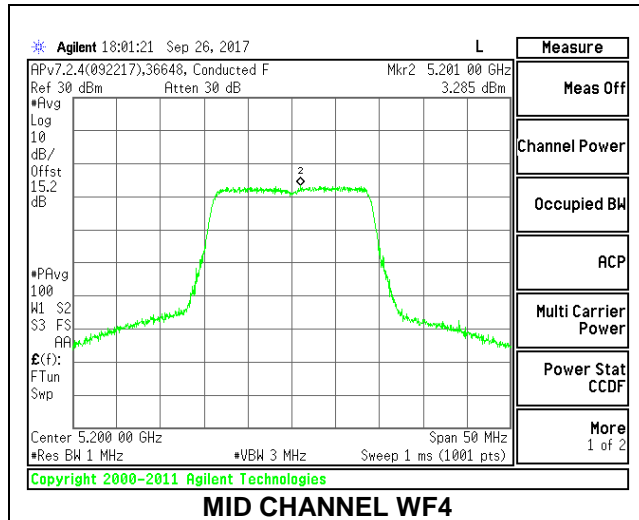
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	1.94	3.56	5.96	10.46	-4.50
Mid	5200	3.29	3.24	6.40	10.46	-4.06
High	5240	5.32	5.38	8.48	10.46	-1.98

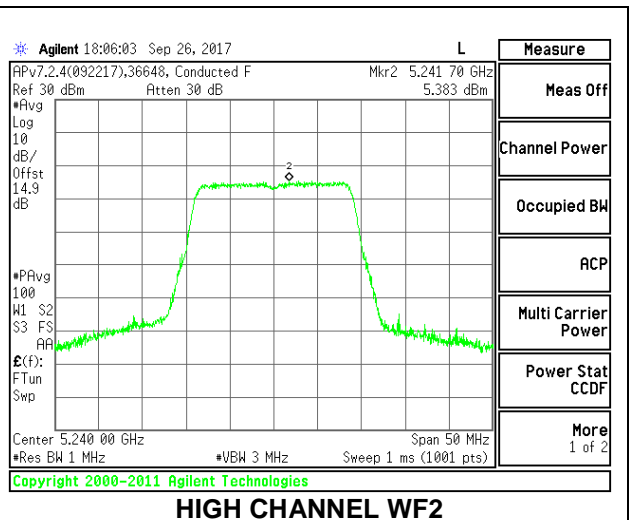
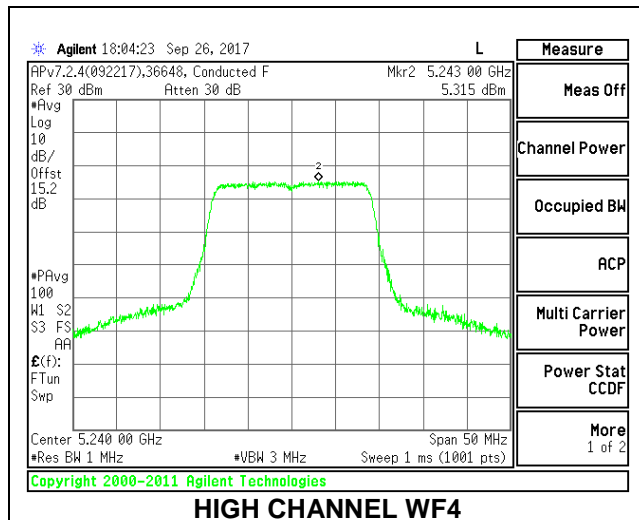
**LOW CHANNEL**



**MID CHANNEL**



**HIGH CHANNEL**





**2TX Antenna WF3 + Antenna WF2 CDD Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	3.16	6.09	24.00	10.91
Mid	5200	3.16	6.09	24.00	10.91
High	5240	3.16	6.09	24.00	10.91

<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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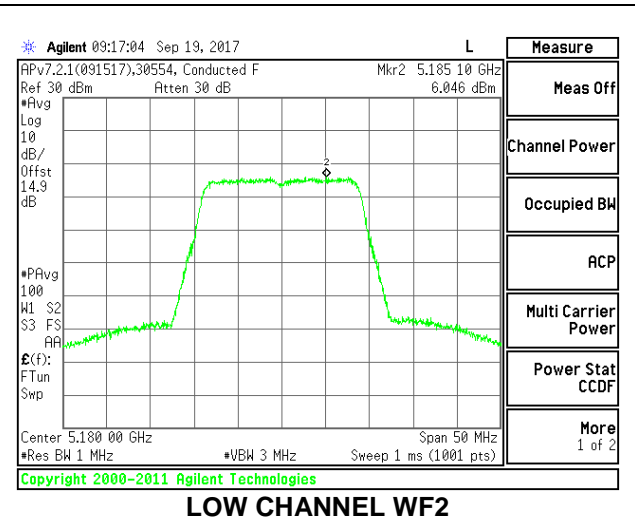
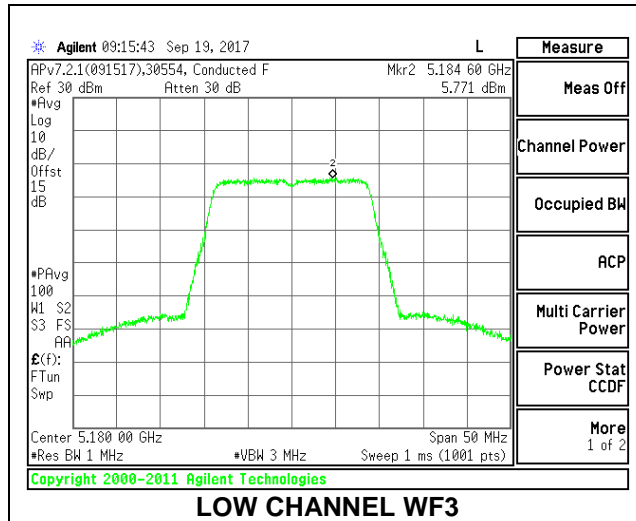
**Output Power Results**

Channel	Frequency (MHz)	WF3 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.84	14.79	17.83	24.00	-6.17
Mid	5200	16.39	16.32	19.37	24.00	-4.63
High	5240	16.41	16.36	19.40	24.00	-4.60

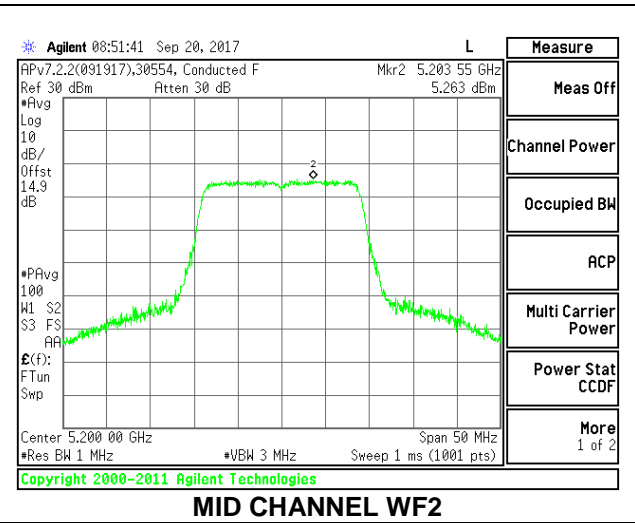
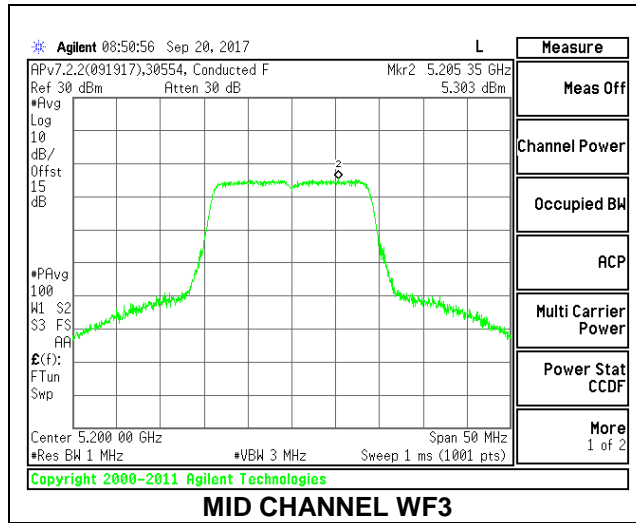
**PSD Results**

Channel	Frequency (MHz)	WF3 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	5.77	6.05	9.15	10.91	-1.76
Mid	5200	5.30	5.26	8.52	10.91	-2.39
High	5240	5.27	5.36	8.56	10.91	-2.35

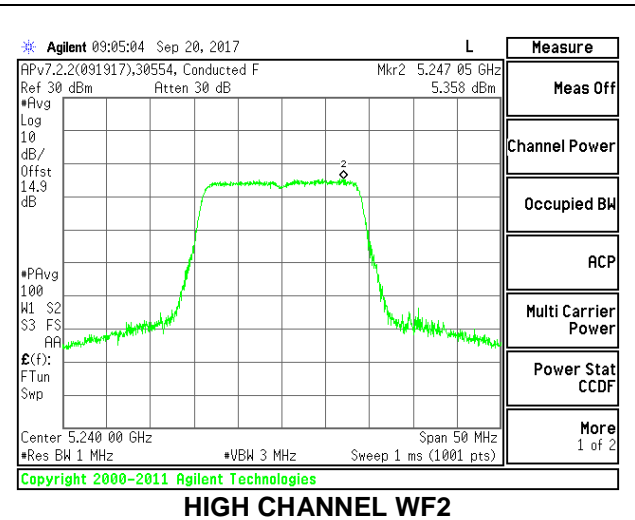
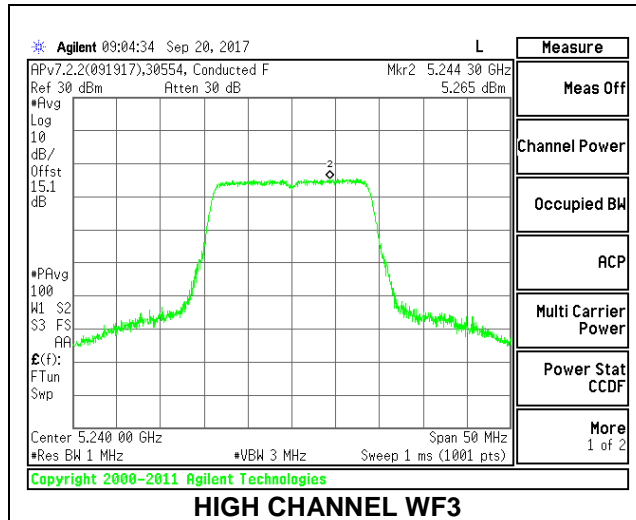
**LOW CHANNEL**



**MID CHANNEL**



**HIGH CHANNEL**



**2TX Antenna WF3 + Antenna WF2 SDM Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	3.16	3.16	24.00	11.00
Mid	5200	3.16	3.16	24.00	11.00
High	5240	3.16	3.16	24.00	11.00

<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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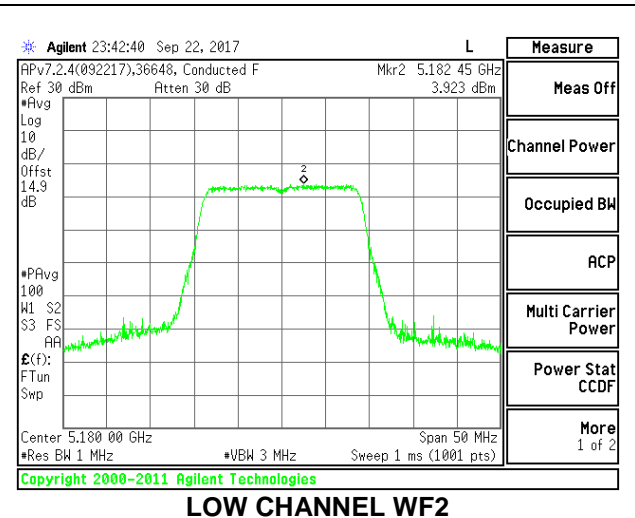
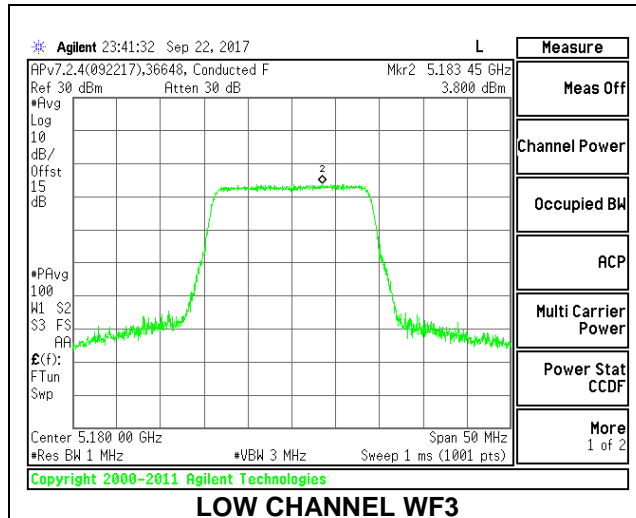
**Output Power Results**

Channel	Frequency (MHz)	WF3 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.91	14.96	17.95	24.00	-6.05
Mid	5200	16.84	16.88	19.87	24.00	-4.13
High	5240	16.85	16.91	19.89	24.00	-4.11

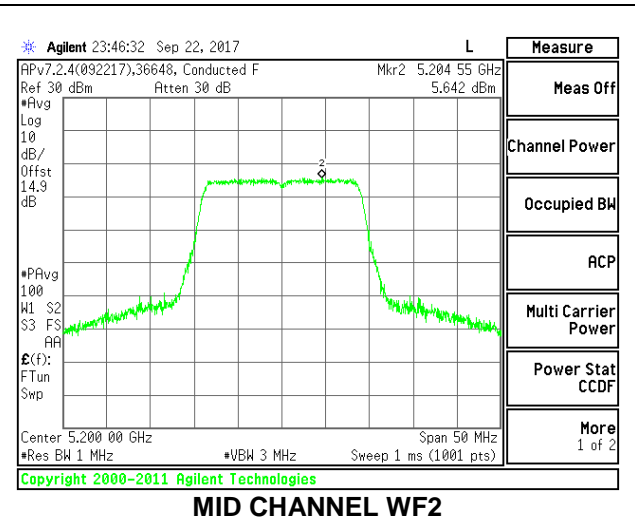
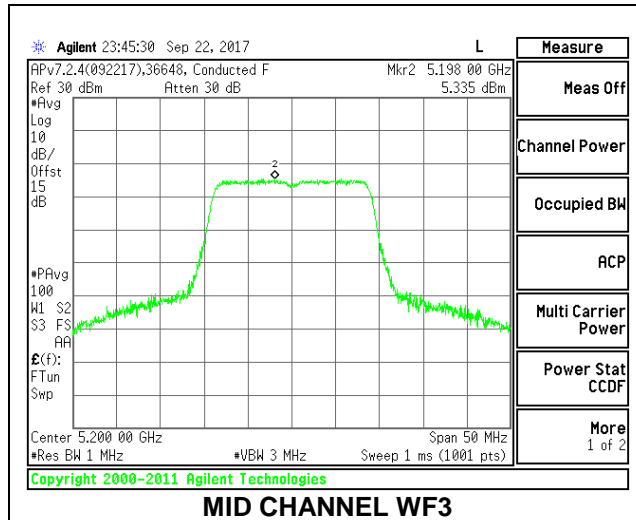
**PSD Results**

Channel	Frequency (MHz)	WF3 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	3.80	3.92	7.10	11.00	-3.90
Mid	5200	5.34	5.64	8.73	11.00	-2.27
High	5240	6.01	5.93	9.21	11.00	-1.79

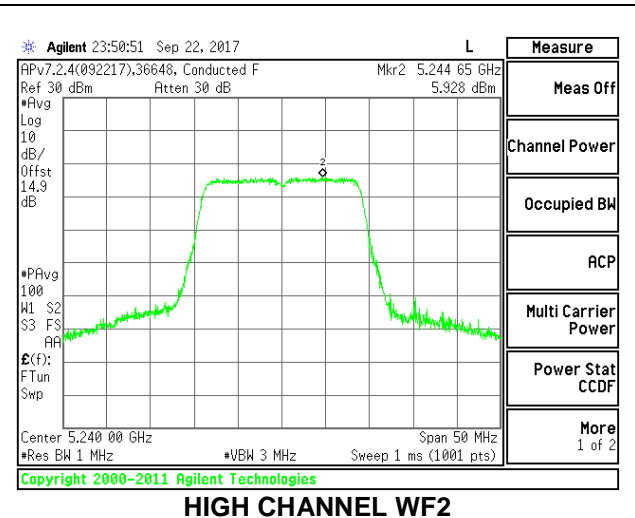
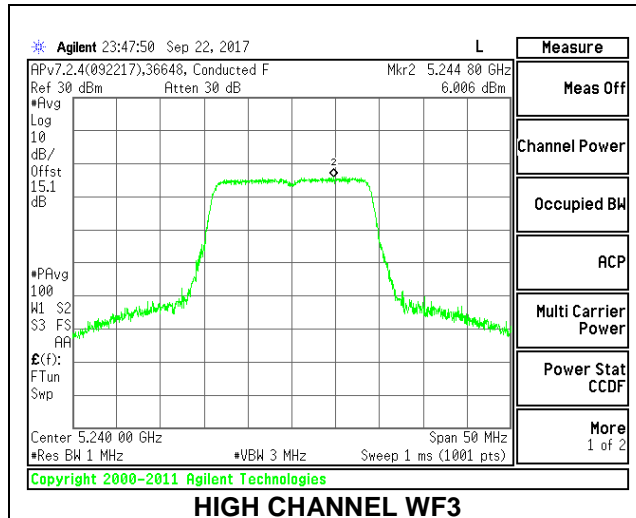
**LOW CHANNEL**



**MID CHANNEL**



**HIGH CHANNEL**



**2TX Antenna WF3 + Antenna WF2 BF Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	6.09	6.09	23.91	10.91
Mid	5200	6.09	6.09	23.91	10.91
High	5240	6.09	6.09	23.91	10.91

<b>Duty Cycle CF (dB)</b>	0.12	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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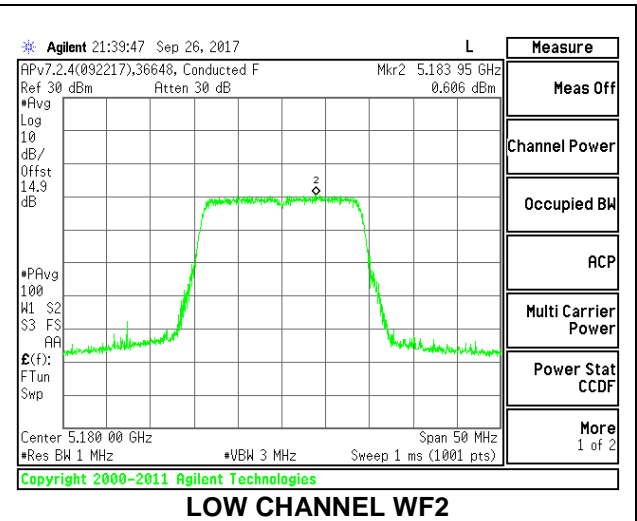
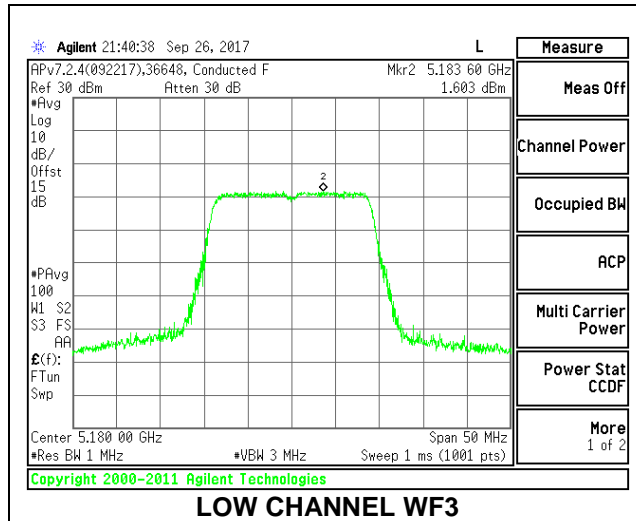
**Output Power Results**

Channel	Frequency (MHz)	WF3 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.43	14.46	17.46	23.91	-6.45
Mid	5200	16.36	16.42	19.40	23.91	-4.51
High	5240	16.41	16.48	19.46	23.91	-4.45

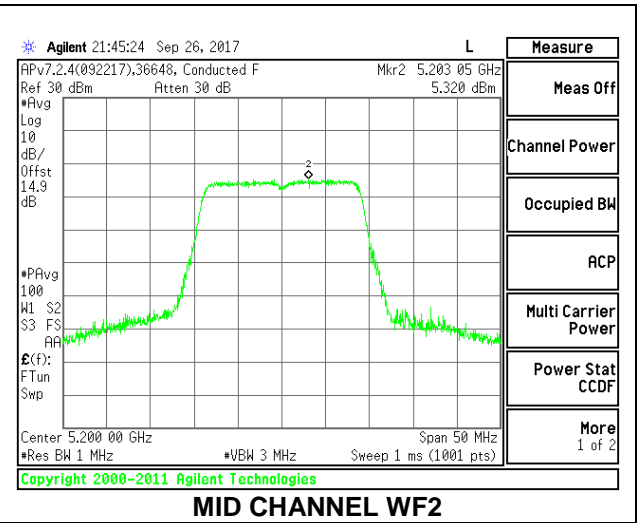
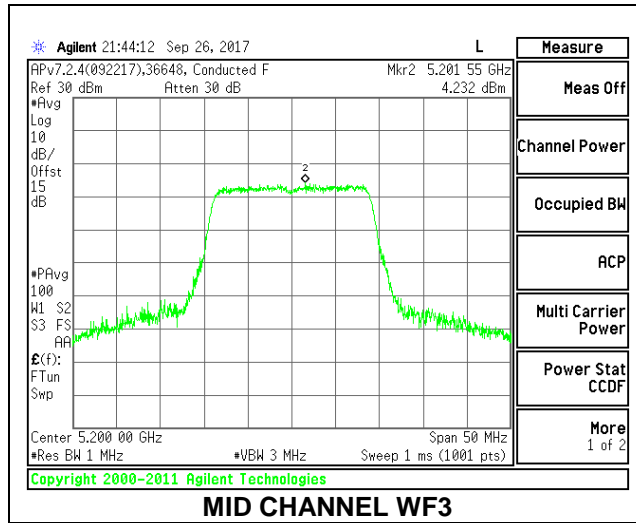
**PSD Results**

Channel	Frequency (MHz)	WF3 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	1.60	0.61	4.26	10.91	-6.65
Mid	5200	0.23	5.32	6.61	10.91	-4.30
High	5240	3.43	4.68	7.23	10.91	-3.68

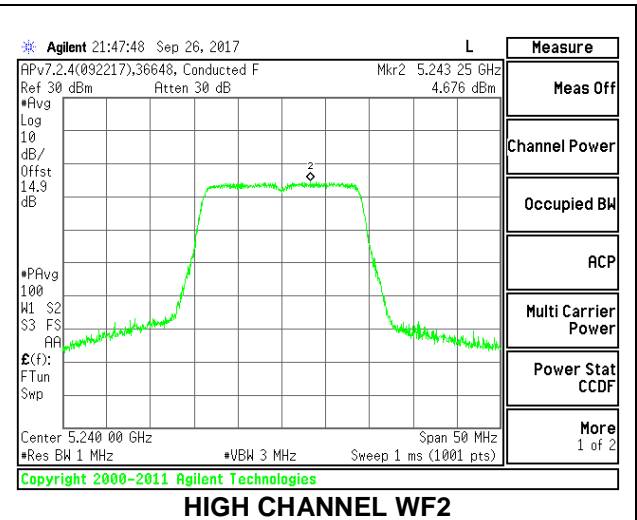
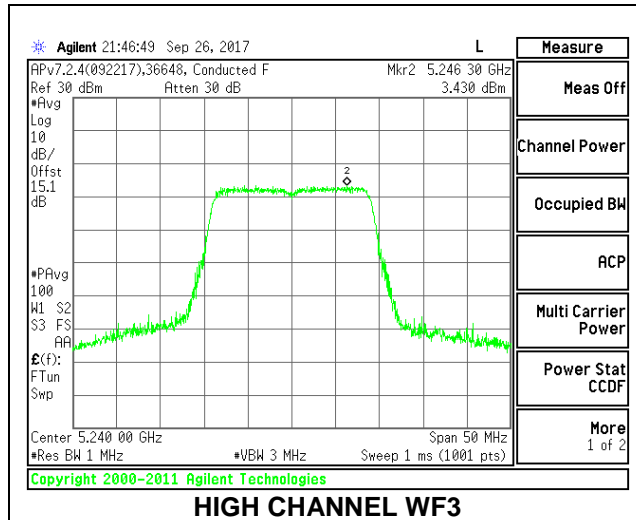
**LOW CHANNEL**



**MID CHANNEL**



**HIGH CHANNEL**



**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 CDD Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	3.05	7.76	24.00	9.24
Mid	5200	3.05	7.76	24.00	9.24
High	5240	3.05	7.76	24.00	9.24

<b>Duty Cycle CF (dB)</b>	0.23	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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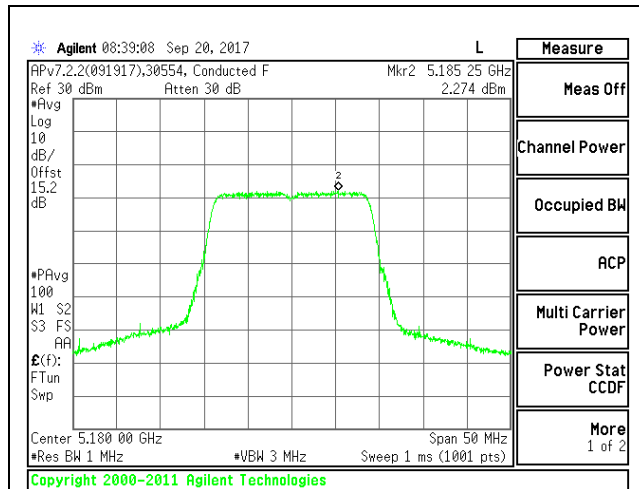
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF3 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	13.42	13.36	13.44	18.18	24.00	-5.82
Mid	5200	13.38	13.32	13.41	18.14	24.00	-5.86
High	5240	13.68	13.59	13.71	18.43	24.00	-5.57

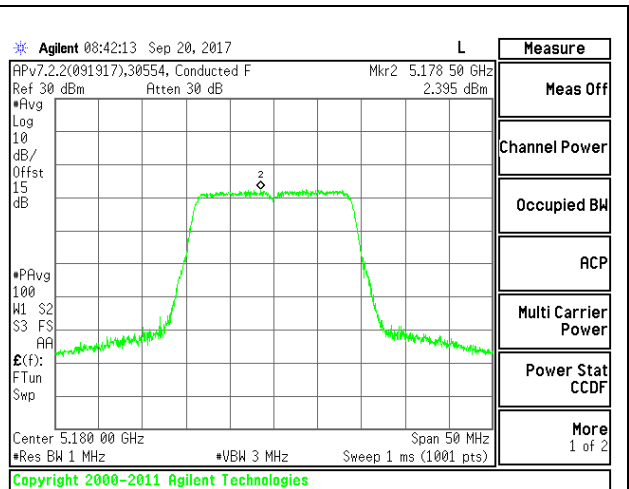
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF3 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	2.27	2.40	2.16	7.28	9.24	-1.96
Mid	5200	2.34	2.51	2.24	7.37	9.24	-1.87
High	5240	2.56	2.64	2.59	7.60	9.24	-1.64

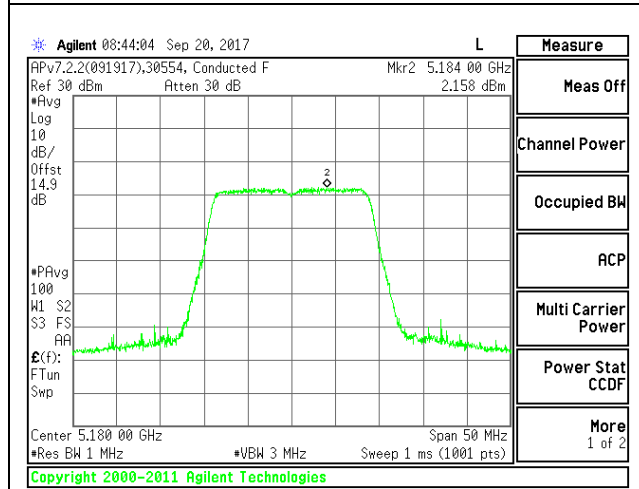
### LOW CHANNEL



**LOW CHANNEL WF4**



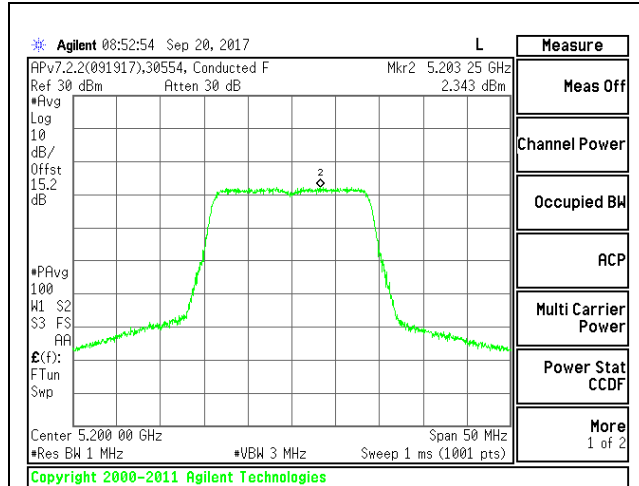
**LOW CHANNEL WF3**



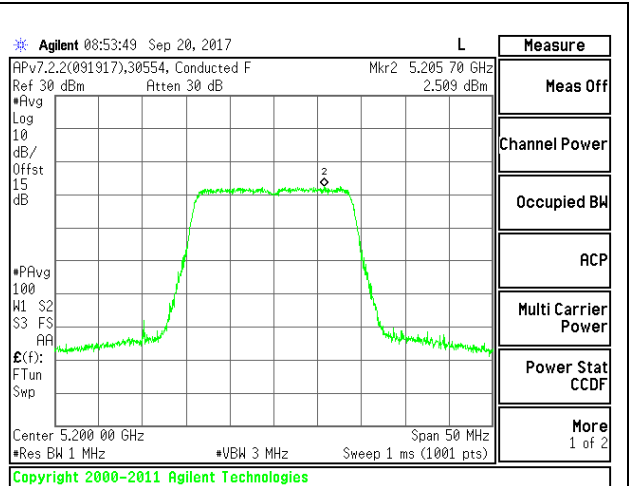
**LOW CHANNEL WF2**



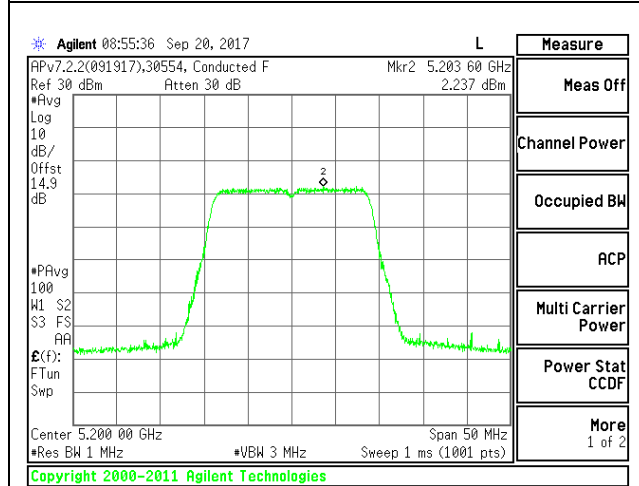
**MID CHANNEL**



**MID CHANNEL WF4**

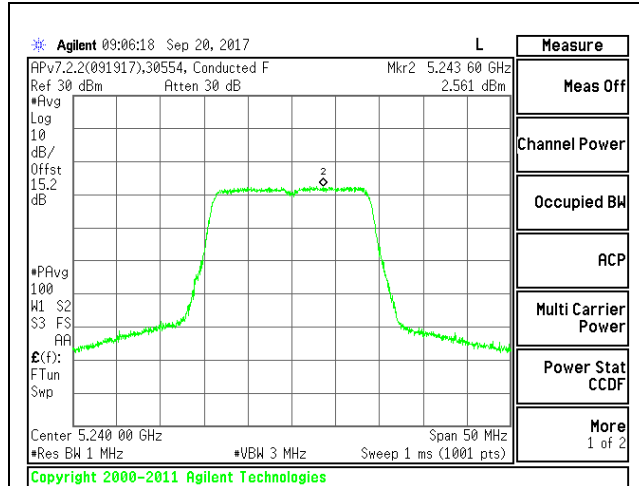


**MID CHANNEL WF3**

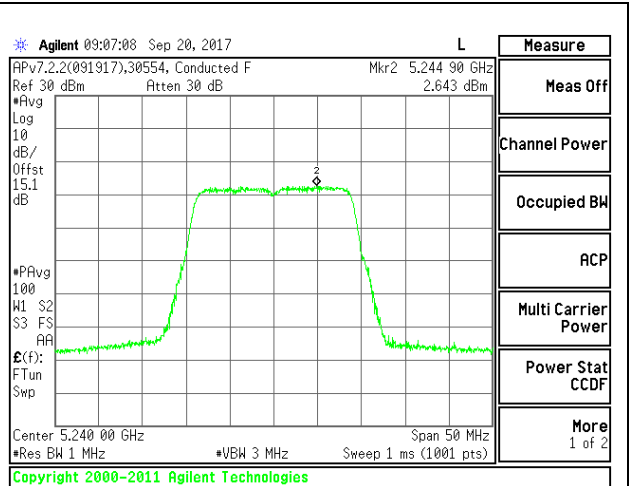


**MID CHANNEL WF2**

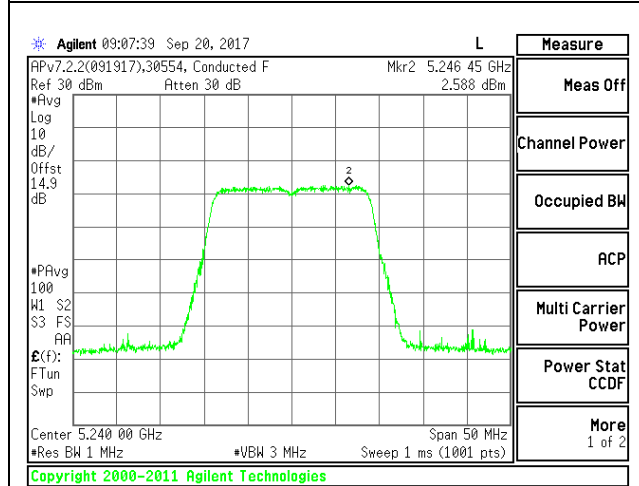
### HIGH CHANNEL



**HIGH CHANNEL WF4**



**HIGH CHANNEL WF3**



**HIGH CHANNEL WF2**

**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 SDM Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	3.05	3.05	24.00	11.00
Mid	5200	3.05	3.05	24.00	11.00
High	5240	3.05	3.05	24.00	11.00

<b>Duty Cycle CF (dB)</b>	0.26	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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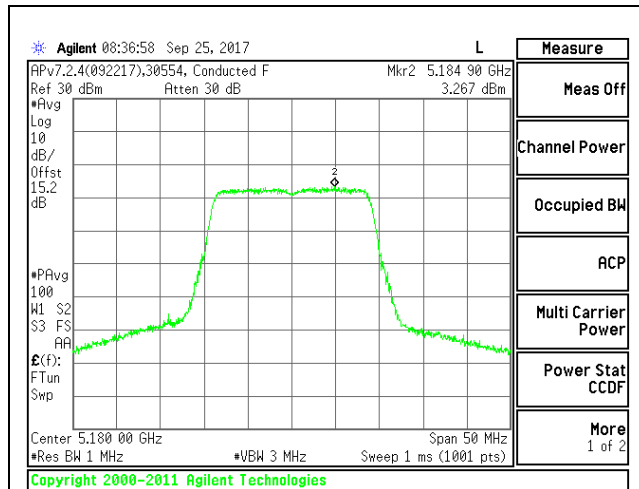
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF3 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.39	14.33	14.42	19.15	24.00	-4.85
Mid	5200	15.21	15.18	15.23	19.98	24.00	-4.02
High	5240	15.22	15.19	15.21	19.98	24.00	-4.02

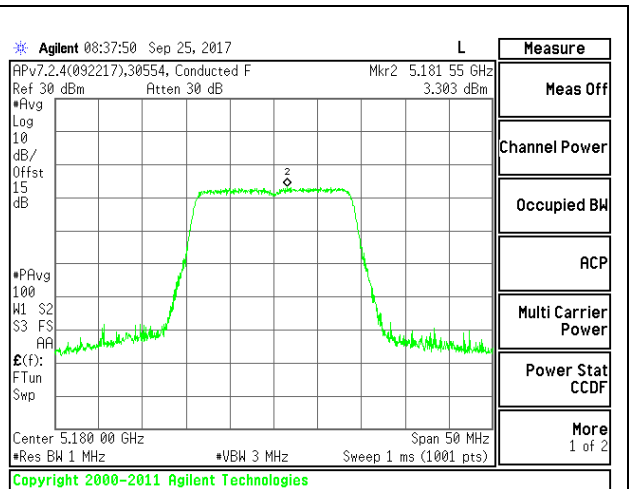
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF3 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	3.27	3.30	3.17	8.28	11.00	-2.72
Mid	5200	4.21	4.09	3.89	9.10	11.00	-1.90
High	5240	3.89	4.26	3.87	9.04	11.00	-1.96

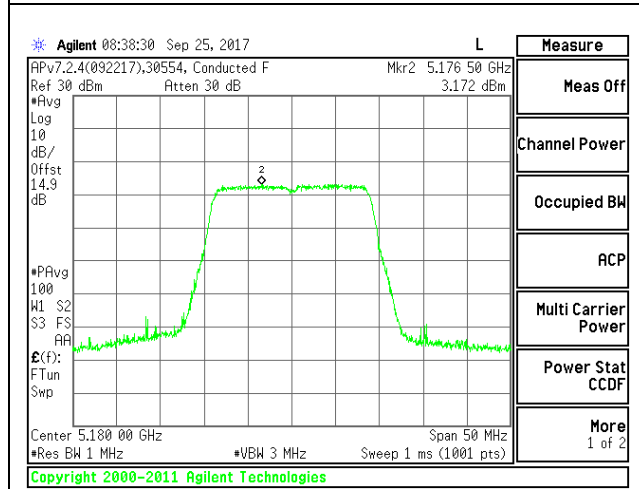
### LOW CHANNEL



**LOW CHANNEL WF4**

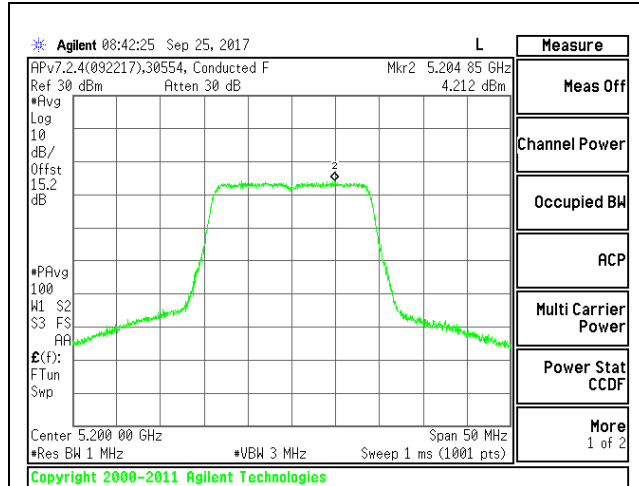


**LOW CHANNEL WF3**

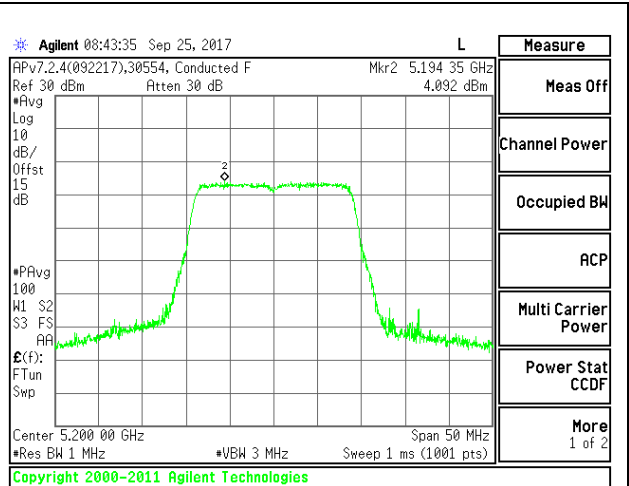


**LOW CHANNEL WF2**

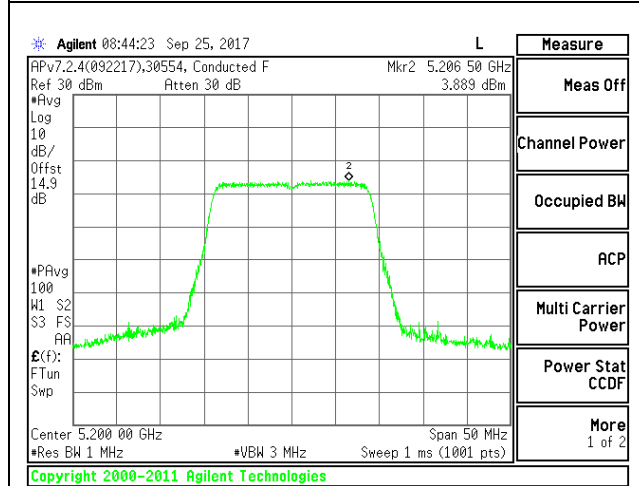
**MID CHANNEL**



**MID CHANNEL WF4**

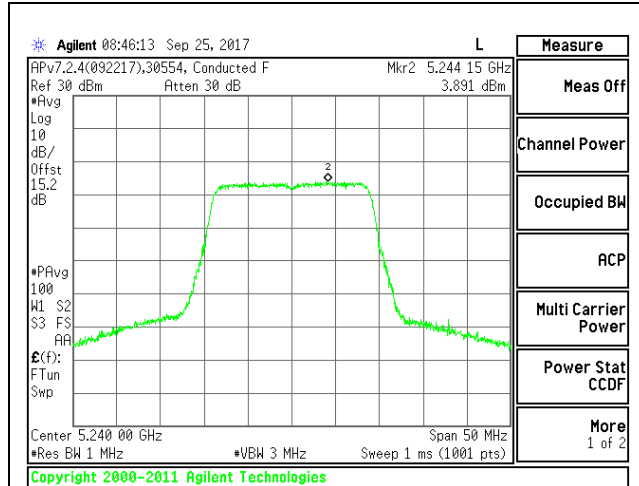


**MID CHANNEL WF3**

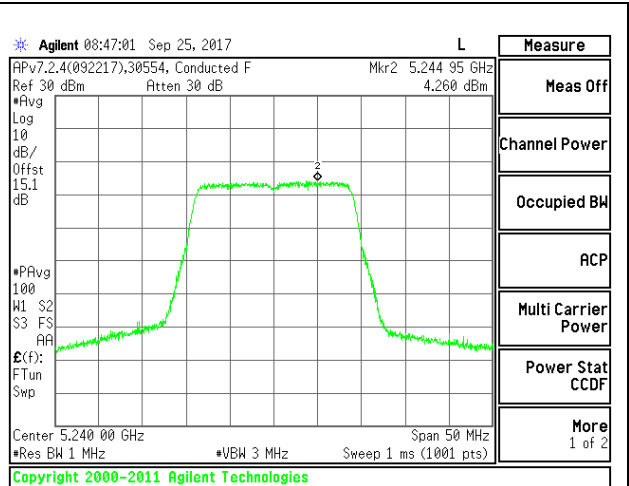


**MID CHANNEL WF2**

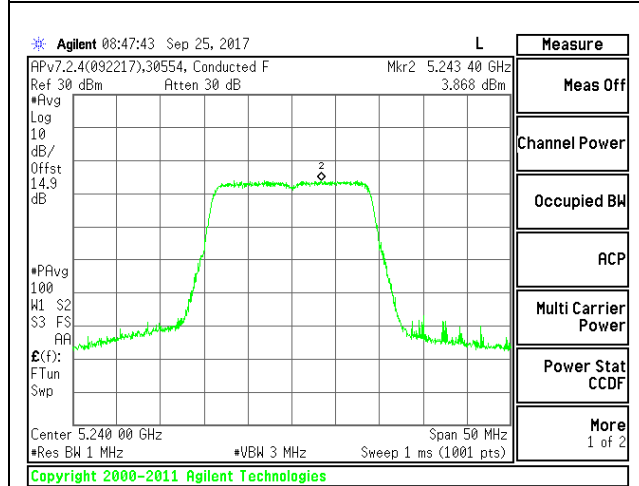
### HIGH CHANNEL



**HIGH CHANNEL WF4**



**HIGH CHANNEL WF3**



**HIGH CHANNEL WF2**

**3TX Antenna WF4 + Antenna WF3 + Antenna WF2 BF Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	7.76	7.76	22.24	9.24
Mid	5200	7.76	7.76	22.24	9.24
High	5240	7.76	7.76	22.24	9.24

<b>Duty Cycle CF (dB)</b>	0.12	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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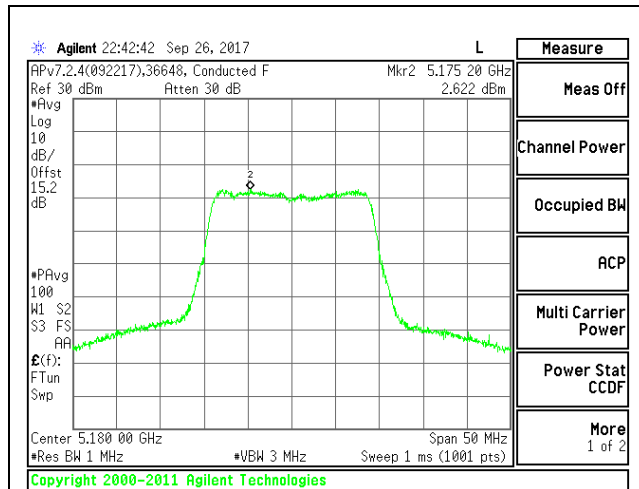
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF3 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	13.45	13.41	13.48	18.22	22.24	-4.02
Mid	5200	13.39	13.37	13.42	18.16	22.24	-4.08
High	5240	13.74	13.68	13.72	18.48	22.24	-3.76

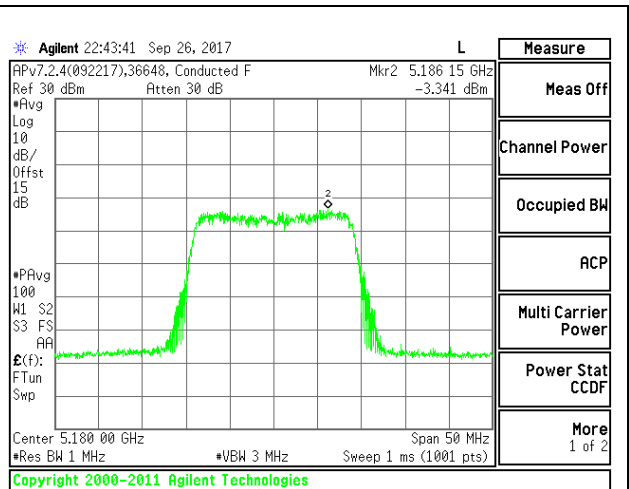
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF3 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	2.62	-3.34	2.67	6.29	9.24	-2.95
Mid	5200	3.19	3.16	1.05	7.47	9.24	-1.77
High	5240	3.97	2.90	2.70	8.12	9.24	-1.12

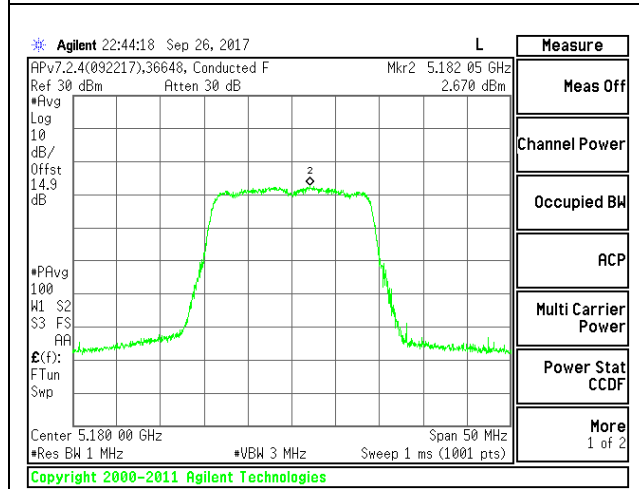
### LOW CHANNEL



**LOW CHANNEL WF4**



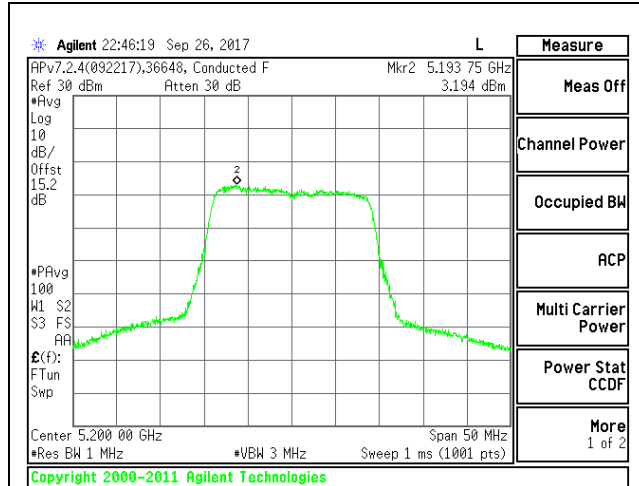
**LOW CHANNEL WF3**



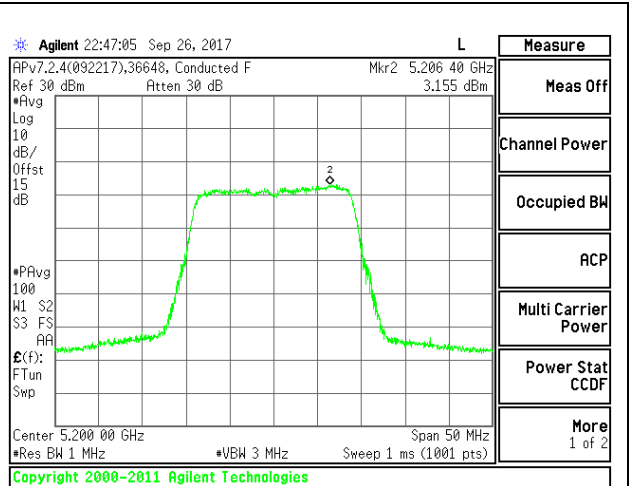
**LOW CHANNEL WF2**



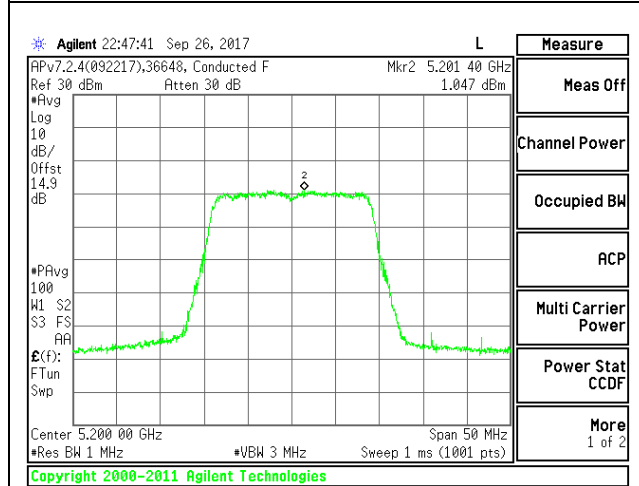
**MID CHANNEL**



**MID CHANNEL WF4**

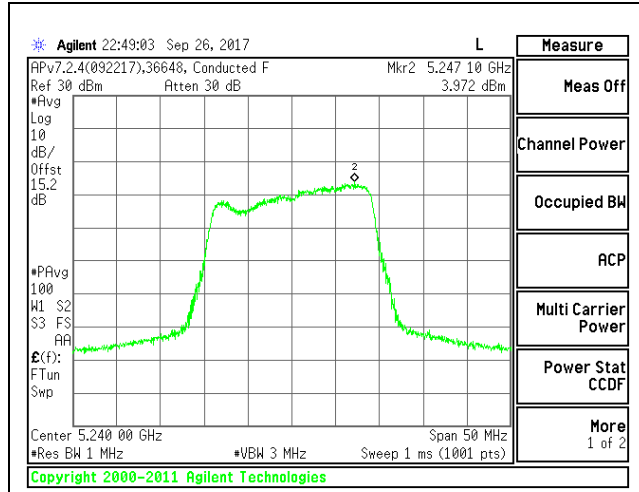


**MID CHANNEL WF3**

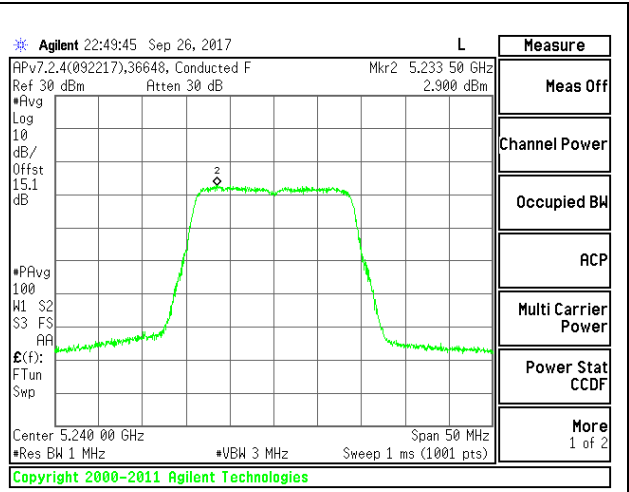


**MID CHANNEL WF2**

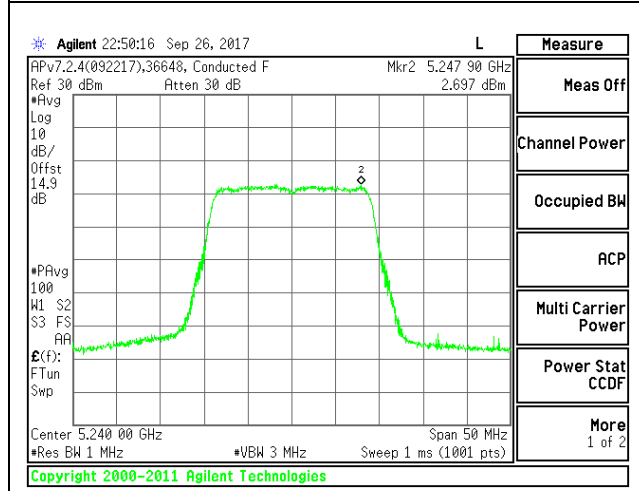
### HIGH CHANNEL



**HIGH CHANNEL WF4**



**HIGH CHANNEL WF3**



**HIGH CHANNEL WF2**

**4.5.2. 802.11n HT40 MODE IN THE 5.2 GHz BAND**

**1TX Antenna WF4**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5190	2.80	24.00	11.00
High	5230	2.80	24.00	11.00

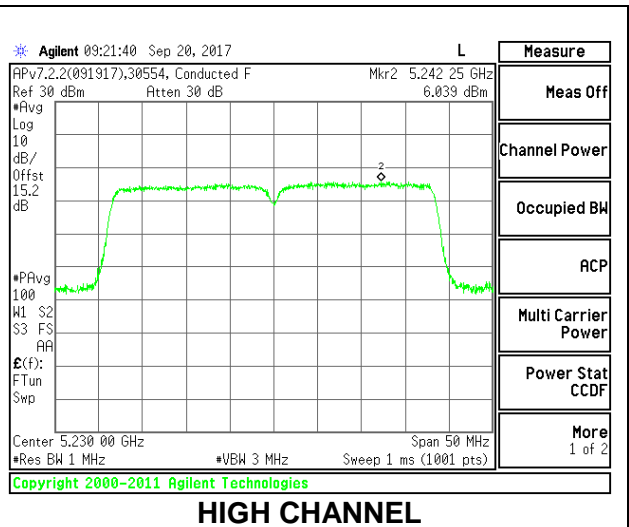
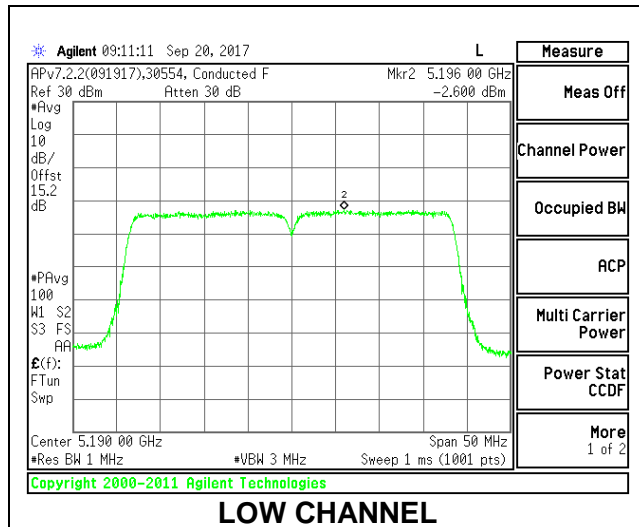
<b>Duty Cycle CF (dB)</b>	0.09	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.40	11.40	24.00	-12.60
High	5230	19.45	19.45	24.00	-4.55

**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5190	-2.60	-2.51	11.00	-13.51
High	5230	6.04	6.13	11.00	-4.87



**1TX Antenna WF3**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5190	1.80	24.00	11.00
High	5230	1.80	24.00	11.00

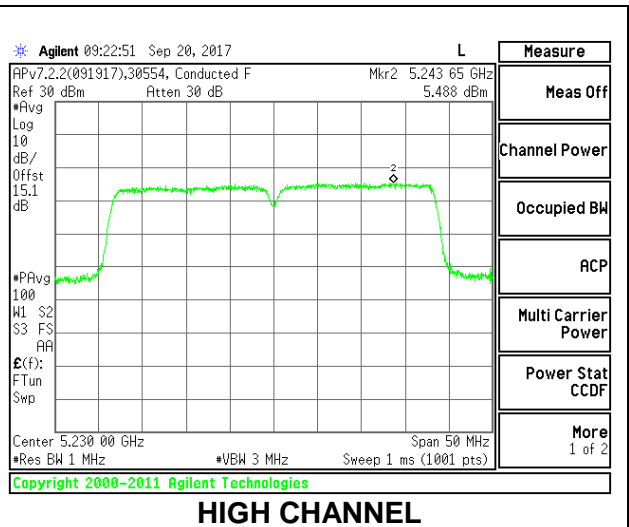
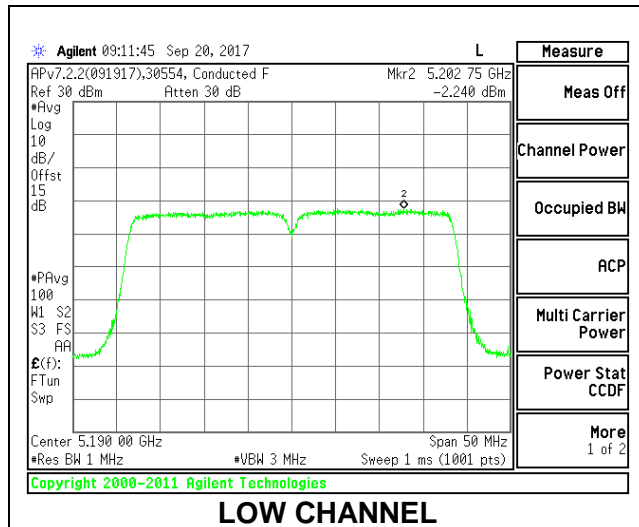
<b>Duty Cycle CF (dB)</b>	0.09	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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**Output Power Results**

Channel	Frequency (MHz)	WF3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.38	11.47	24.00	-12.53
High	5230	19.41	19.50	24.00	-4.50

**PSD Results**

Channel	Frequency (MHz)	WF3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5190	-2.24	-2.15	11.00	-13.15
High	5230	5.49	5.58	11.00	-5.42



**1TX Antenna WF2**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5190	4.20	24.00	11.00
High	5230	4.20	24.00	11.00

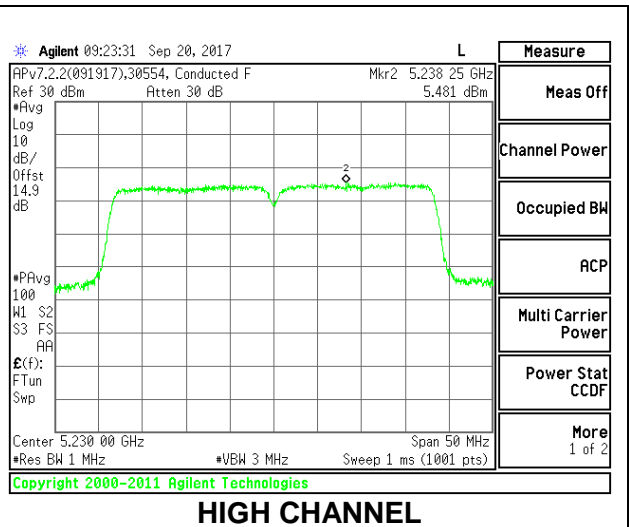
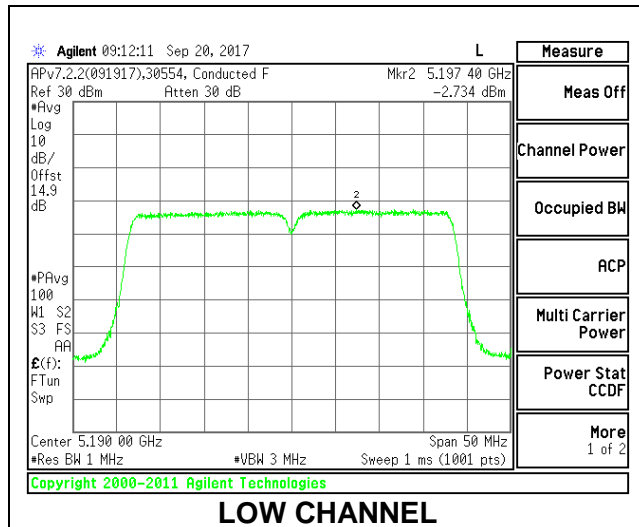
<b>Duty Cycle CF (dB)</b>	0.09	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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**Output Power Results**

Channel	Frequency (MHz)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.46	11.46	24.00	-12.54
High	5230	19.42	19.42	24.00	-4.58

**PSD Results**

Channel	Frequency (MHz)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5190	-2.73	-2.64	11.00	-13.64
High	5230	5.48	5.57	11.00	-5.43





**2TX Antenna WF4 + Antenna WF3 CDD Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5190	2.33	5.32	24.00	11.00
High	5230	2.33	5.32	24.00	11.00

<b>Duty Cycle CF (dB)</b>	0.29	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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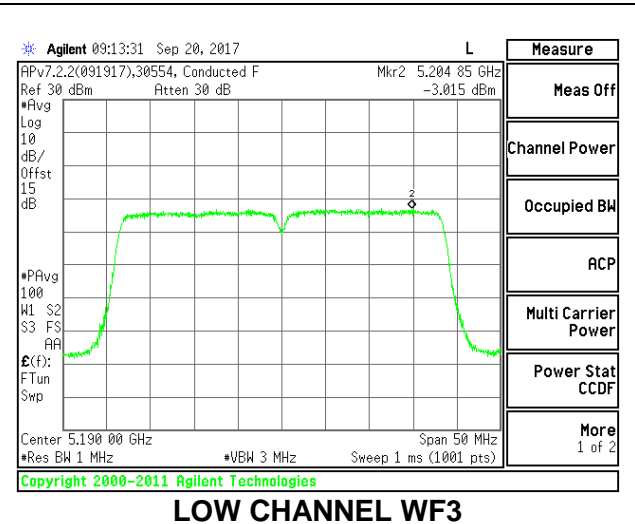
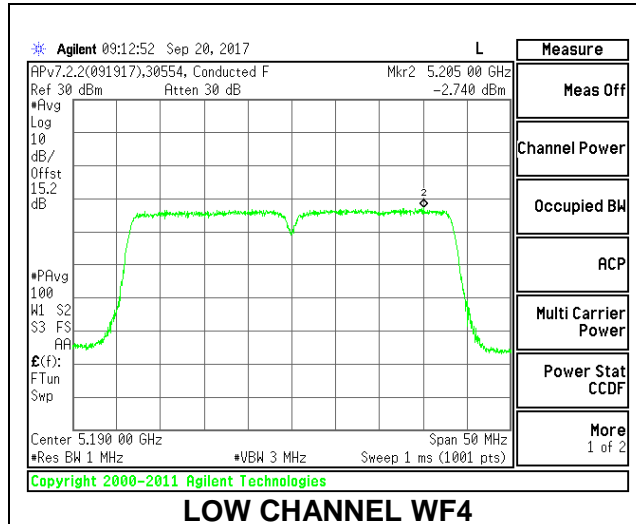
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	10.81	10.76	13.80	24.00	-10.20
High	5230	17.88	17.84	20.87	24.00	-3.13

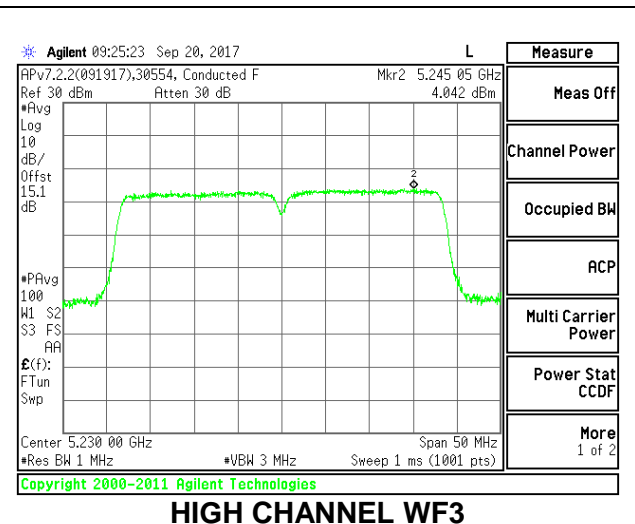
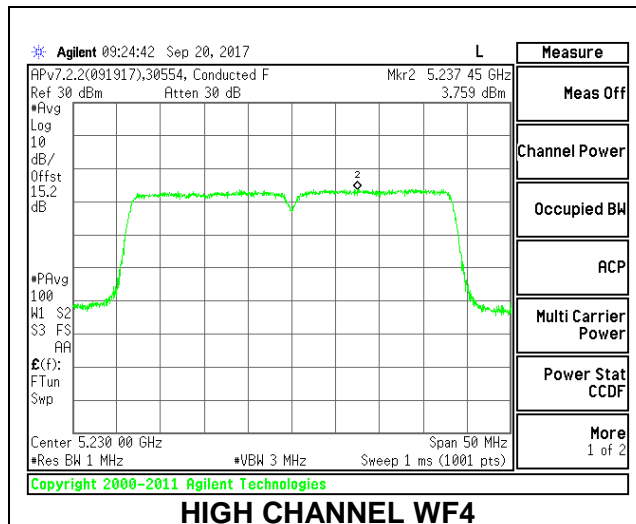
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5190	-2.74	-3.02	0.42	11.00	-10.58
High	5230	3.76	4.04	7.20	11.00	-3.80

### LOW CHANNEL



### HIGH CHANNEL



**2TX Antenna WF4 + Antenna WF3 SDM Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5190	2.33	2.33	24.00	11.00
High	5230	2.33	2.33	24.00	11.00

<b>Duty Cycle CF (dB)</b>	0.29	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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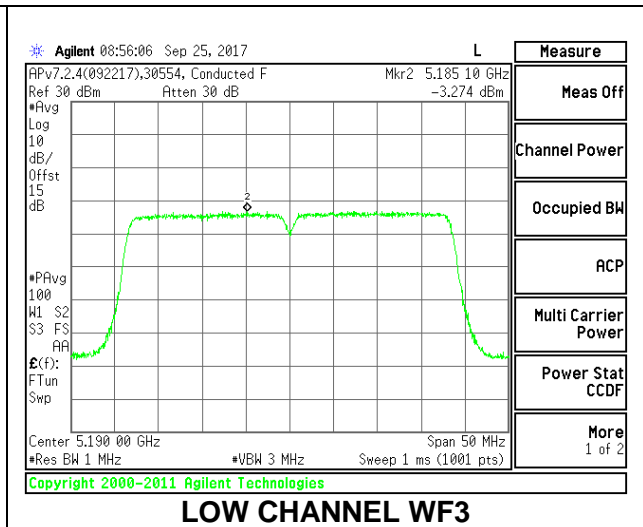
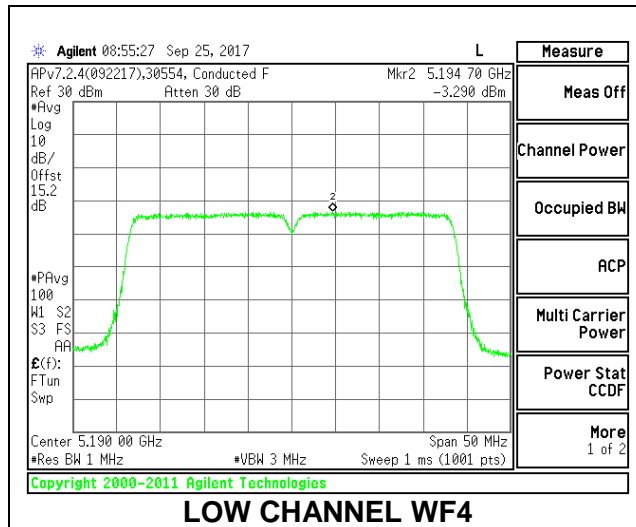
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	10.81	10.76	13.80	24.00	-10.20
High	5230	17.88	17.84	20.87	24.00	-3.13

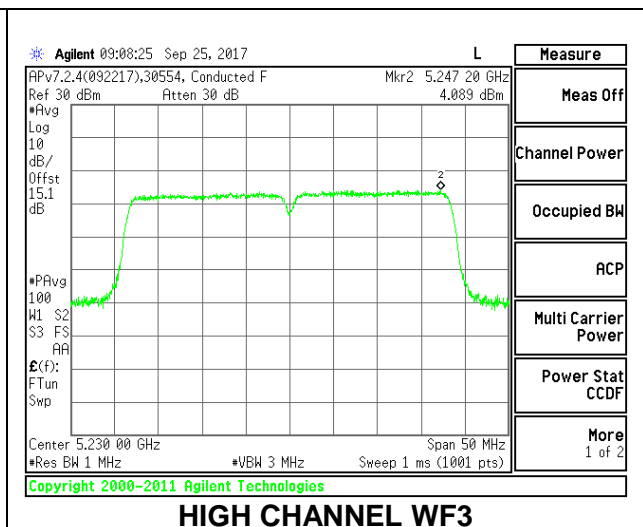
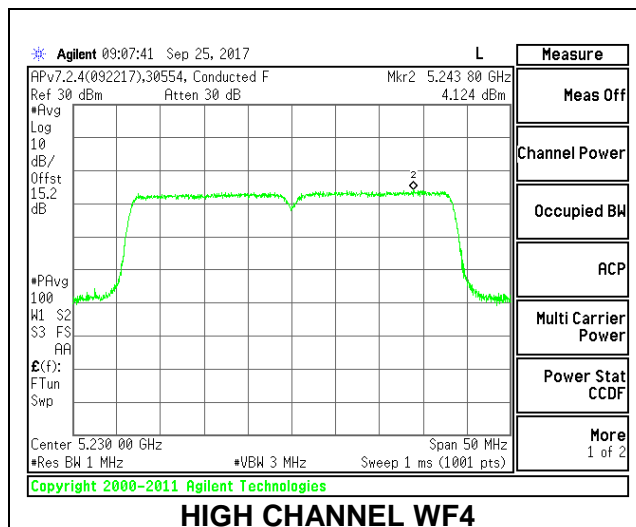
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5190	-3.27	-3.27	0.03	11.00	-10.97
High	5230	4.12	4.09	7.41	11.00	-3.59

### LOW CHANNEL



### HIGH CHANNEL



**2TX Antenna WF4 + Antenna WF3 BF Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5190	5.32	5.32	24.00	11.00
High	5230	5.32	5.32	24.00	11.00

<b>Duty Cycle CF (dB)</b>	0.11	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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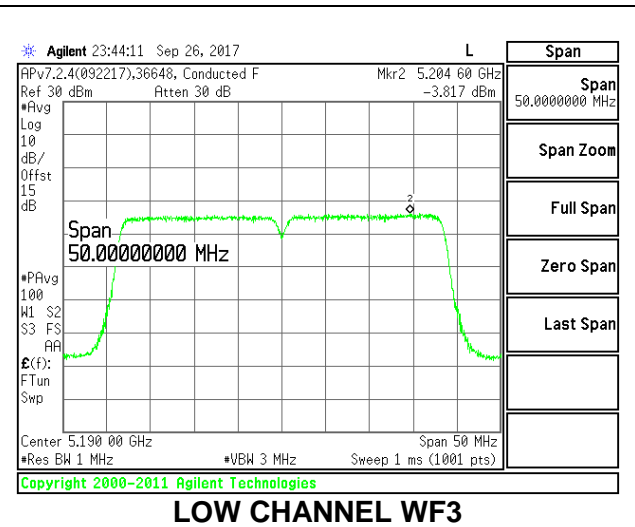
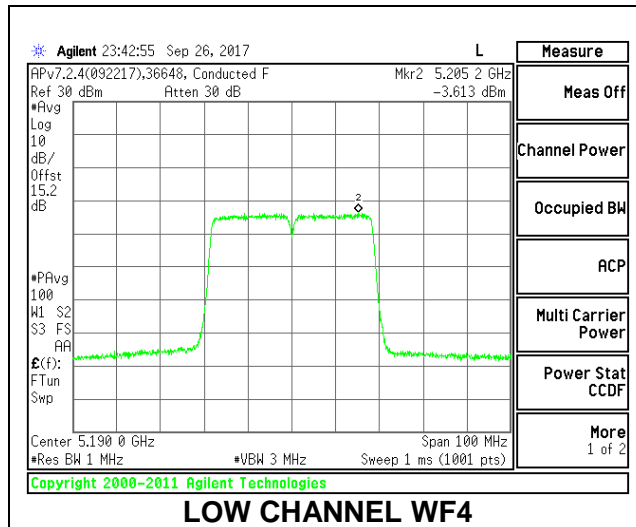
**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	10.42	10.36	13.40	24.00	-10.60
High	5230	17.85	17.79	20.83	24.00	-3.17

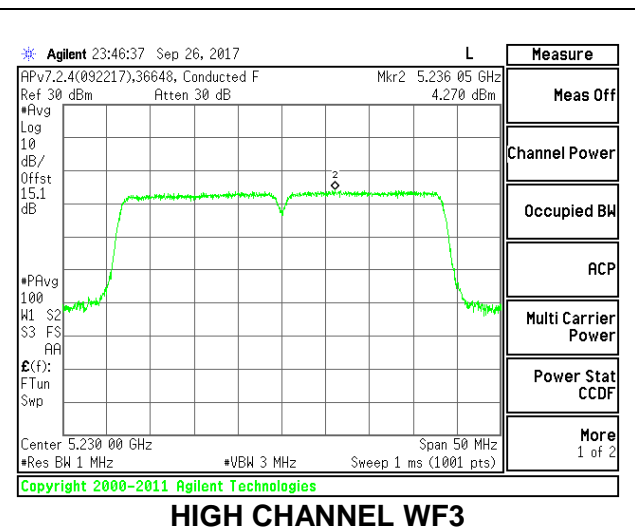
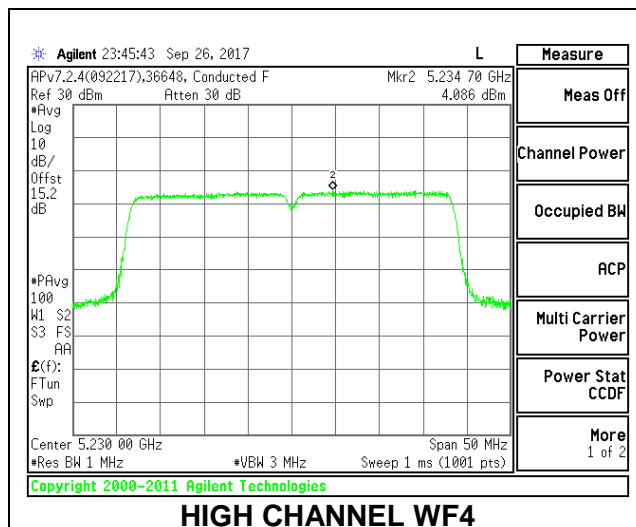
**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5190	-3.61	-3.82	-0.59	11.00	-11.59
High	5230	4.09	4.27	7.30	11.00	-3.70

### LOW CHANNEL



### HIGH CHANNEL



**2TX Antenna WF4 + Antenna WF2 CDD Mode**

**Antenna Gain and Limits**

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5190	3.56	6.54	24.00	10.46
High	5230	3.56	6.54	24.00	10.46

<b>Duty Cycle CF (dB)</b>	0.18	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
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**Output Power Results**

Channel	Frequency (MHz)	WF4 Meas Power (dBm)	WF2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	10.80	10.79	13.81	24.00	-10.19
High	5230	17.89	17.86	20.89	24.00	-3.11

**PSD Results**

Channel	Frequency (MHz)	WF4 Meas PSD (dBm)	WF2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5190	-3.01	-3.01	0.18	10.46	-10.28
High	5230	4.37	4.30	7.52	10.46	-2.94