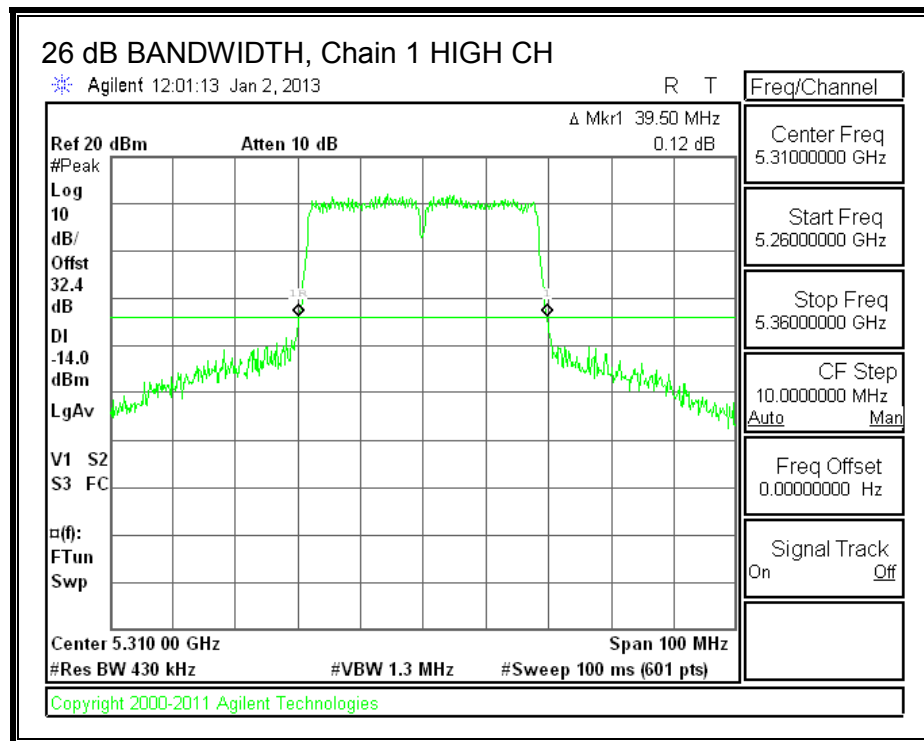
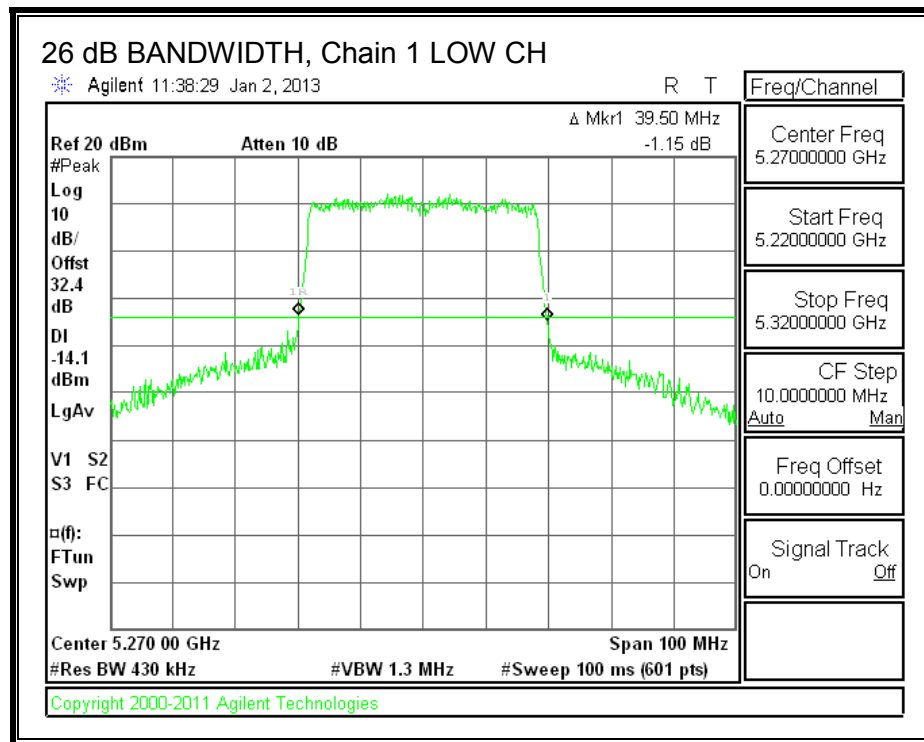


26 dB BANDWIDTH, Chain 1



8.30.2. 99% BANDWIDTH

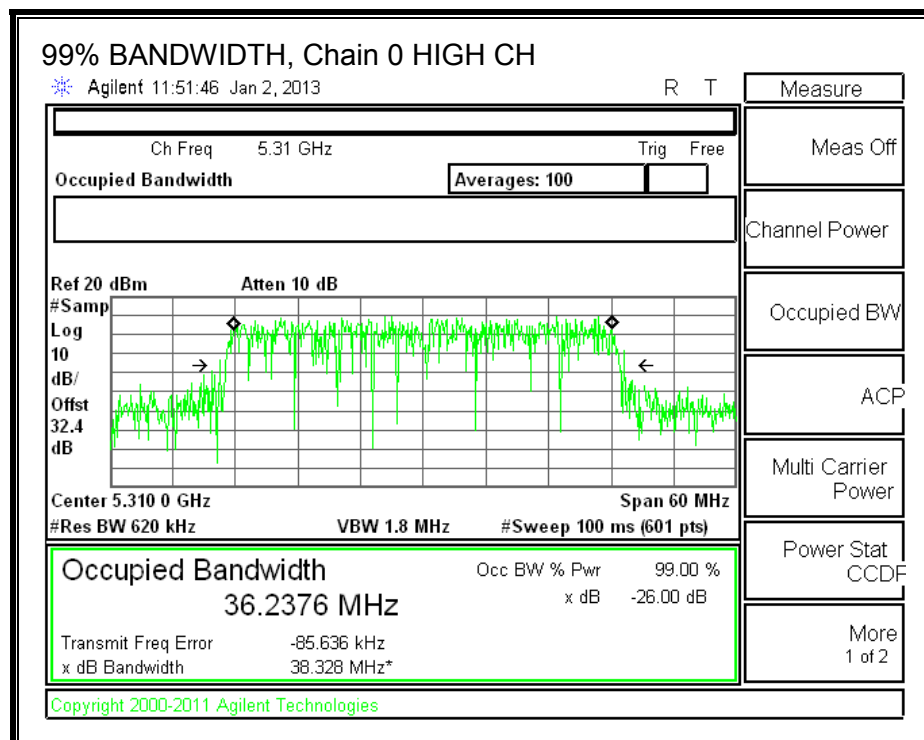
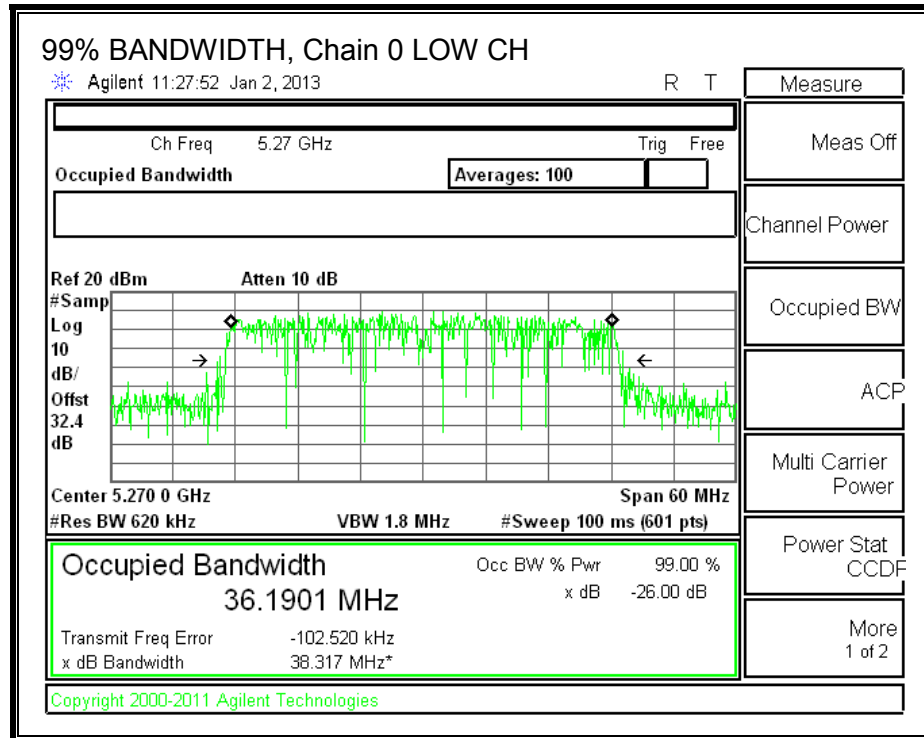
LIMITS

None; for reporting purposes only.

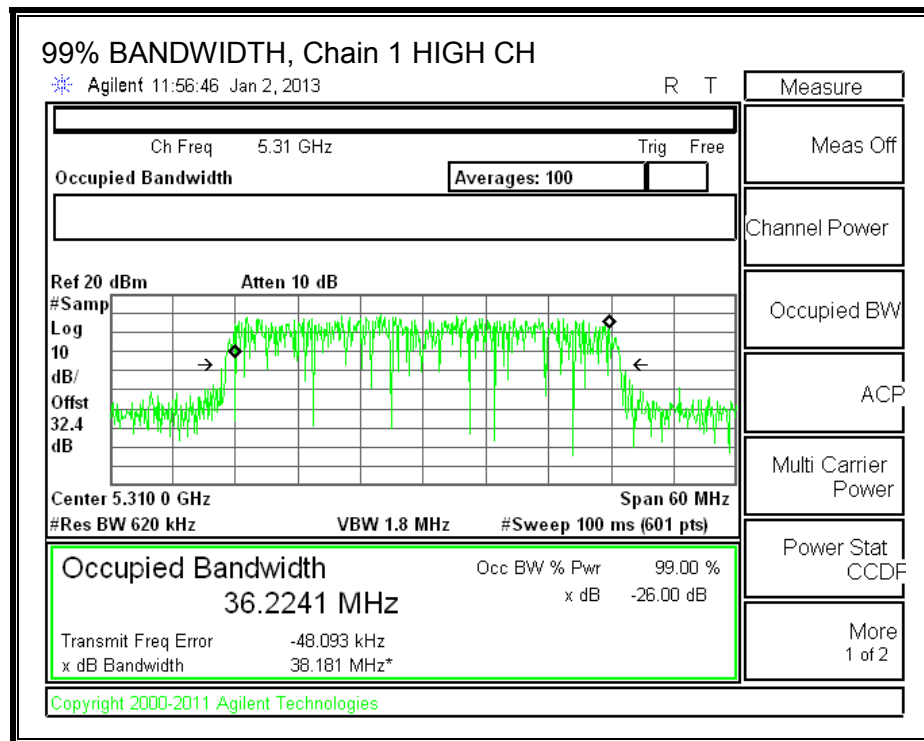
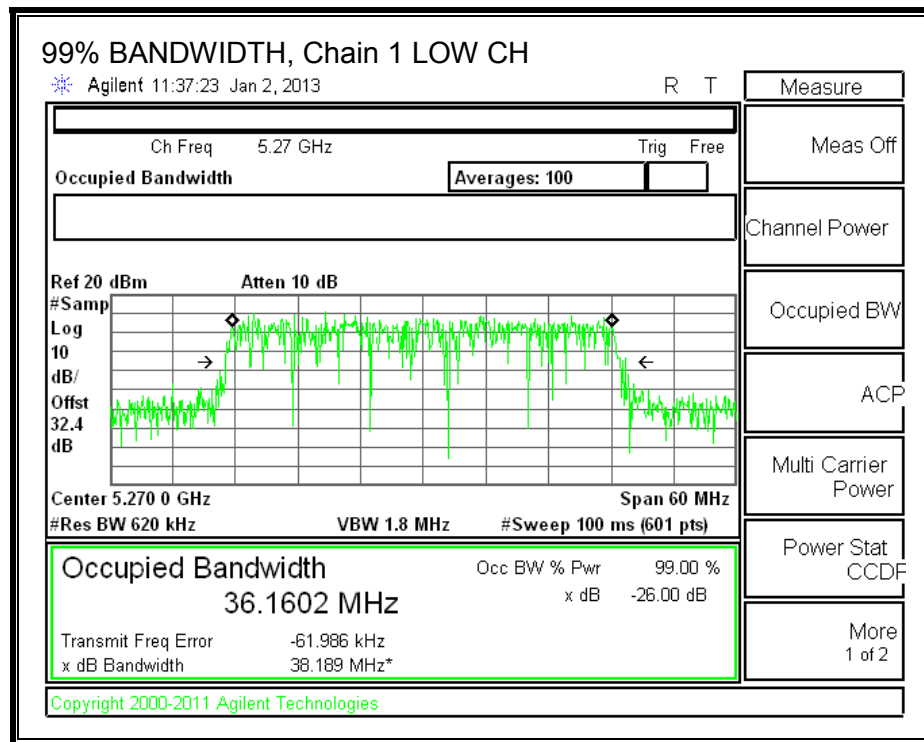
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5270	36.1901	36.1602
High	5310	36.2376	36.2241

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



8.30.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

For output power, the two chains are considered uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.40	2.30	2.88

For PSD, the two chains are considered correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.40	2.30	5.88

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)	Uncorrelated Directional Gain (dBi)
Low	5270	39.50	36.1602	5.88	2.88
High	5310	39.50	36.2241	5.88	2.88

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5270	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5310	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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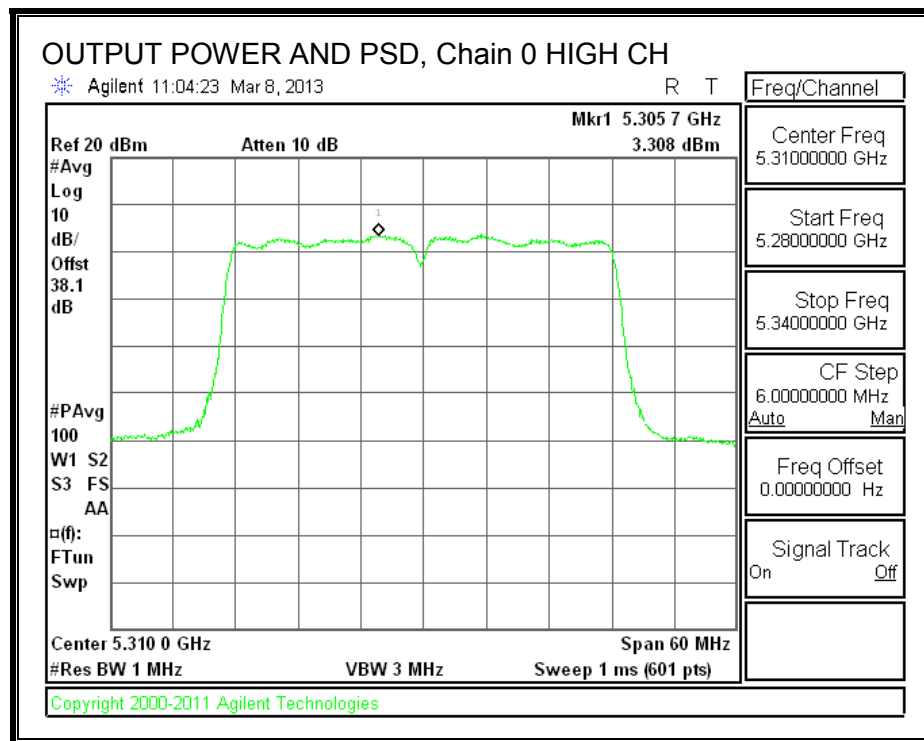
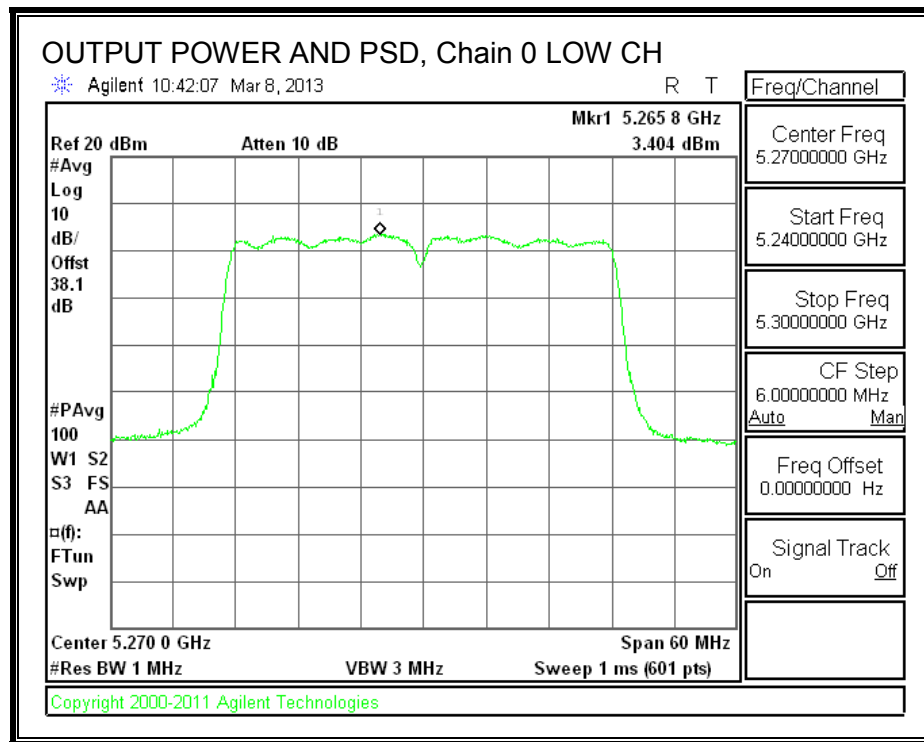
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	17.30	17.30	20.31	24.00	-3.69
High	5310	15.65	15.50	18.59	24.00	-5.41

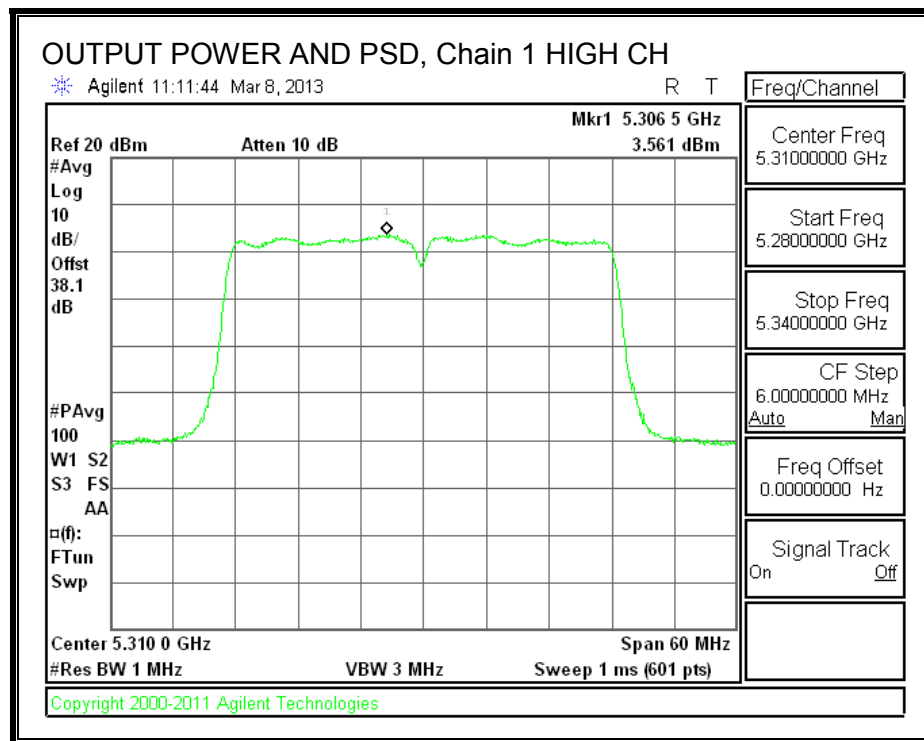
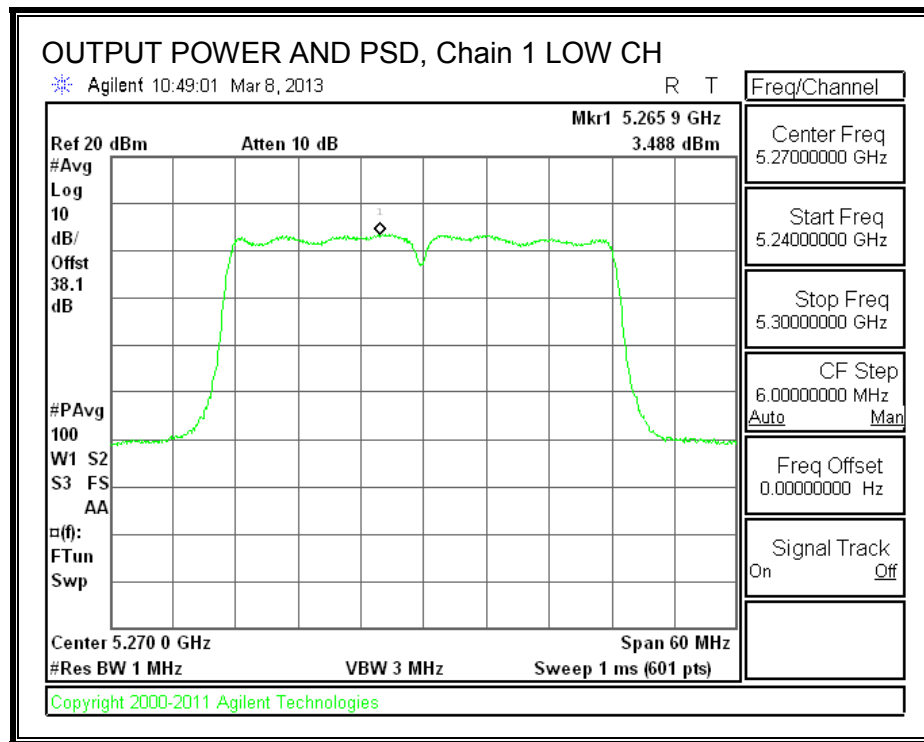
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5270	3.404	3.488	6.46	11.00	-4.54
High	5310	3.308	3.561	6.45	11.00	-4.55

OUTPUT POWER AND PSD, Chain 0



OUTPUT POWER AND PSD, Chain 1



8.30.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (2)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.31. 802.11n HT40 BF 2TX MODE IN THE 5.3 GHz BAND

Covered by testing HT40 CDD 2TX mode, the power per chain used for HT40 CDD 2TX mode is the same power per chain that will be used for HT40 BF 2TX mode. However, since BF is correlated and CDD is uncorrelated for output power, the section below for output power using correlated AG for this BF mode shows it is still compliant.

8.31.1. OUTPUT AVERAGE POWER

LIMITS

FCC §15.407 (a) (1)

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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

For output power, the two chains are considered correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.40	2.30	5.88

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)
Low	5270	39.50	36.1602	5.88
High	5310	39.50	36.2241	5.88

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Low	5270	24.00	24.00	30.00	24.00
High	5310	24.00	24.00	30.00	24.00

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	17.30	17.30	20.31	24.00	-3.69
High	5310	15.65	15.50	18.59	24.00	-5.41

8.32. 802.11n HT40 STBC 2TX MODE IN THE 5.3 GHz BAND

8.32.1. 26 dB BANDWIDTH

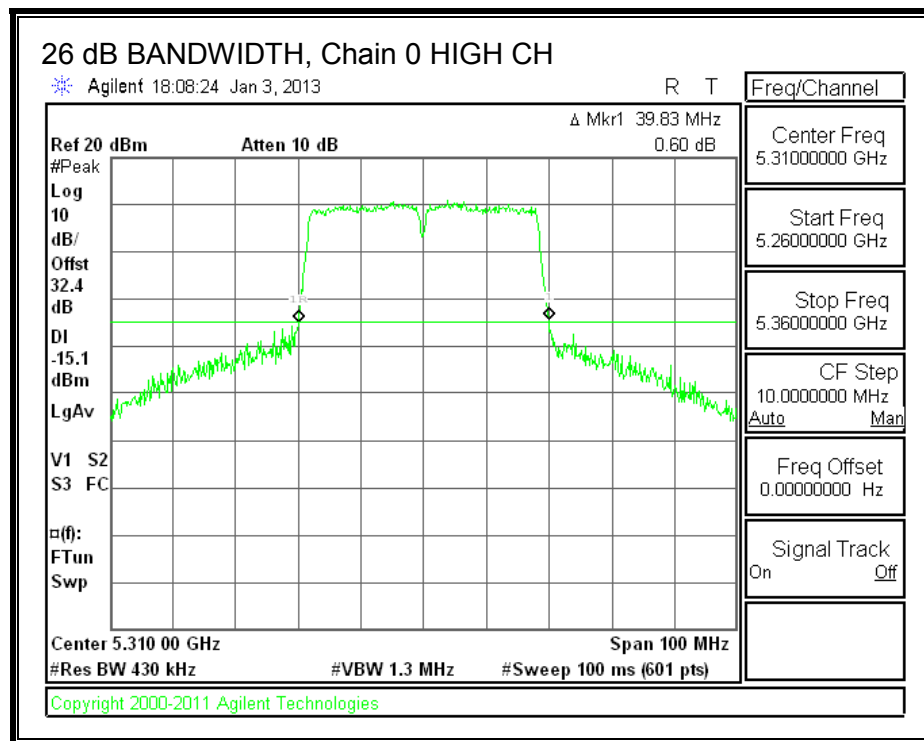
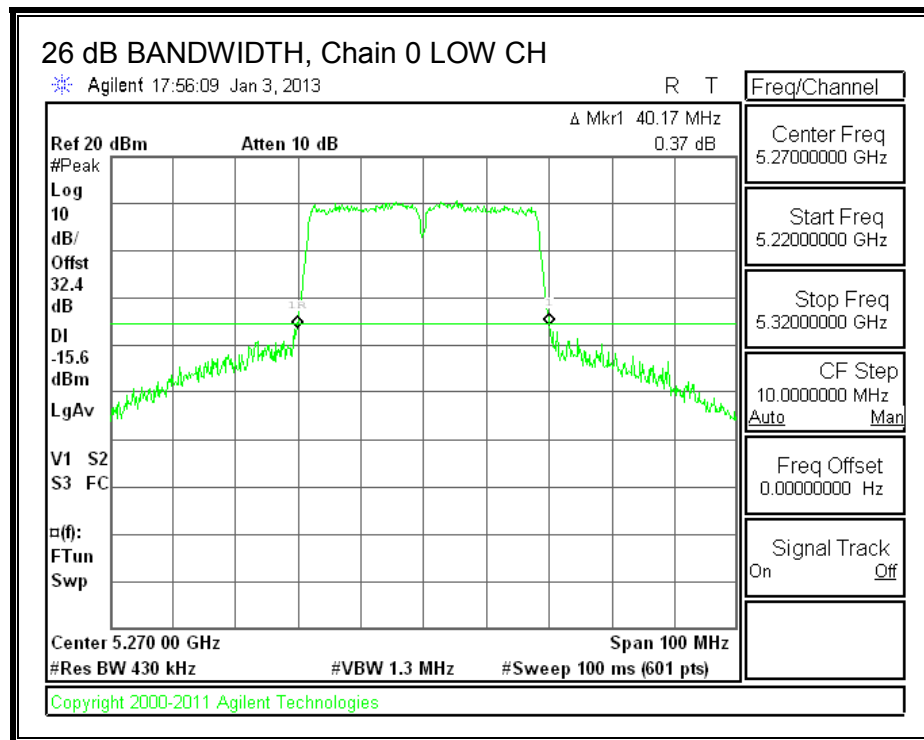
LIMITS

None; for reporting purposes only.

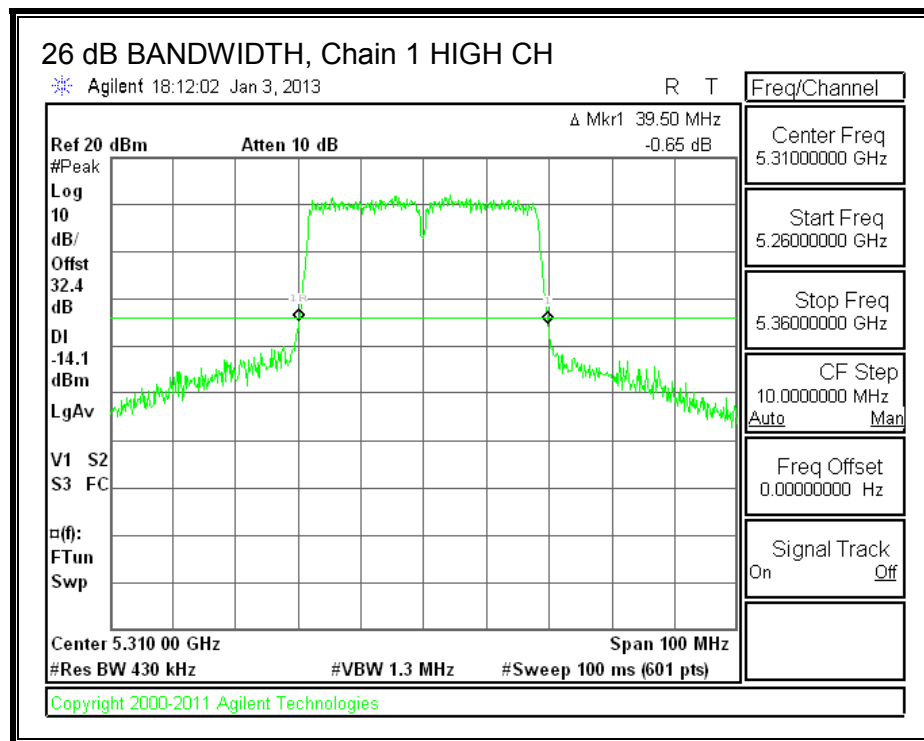
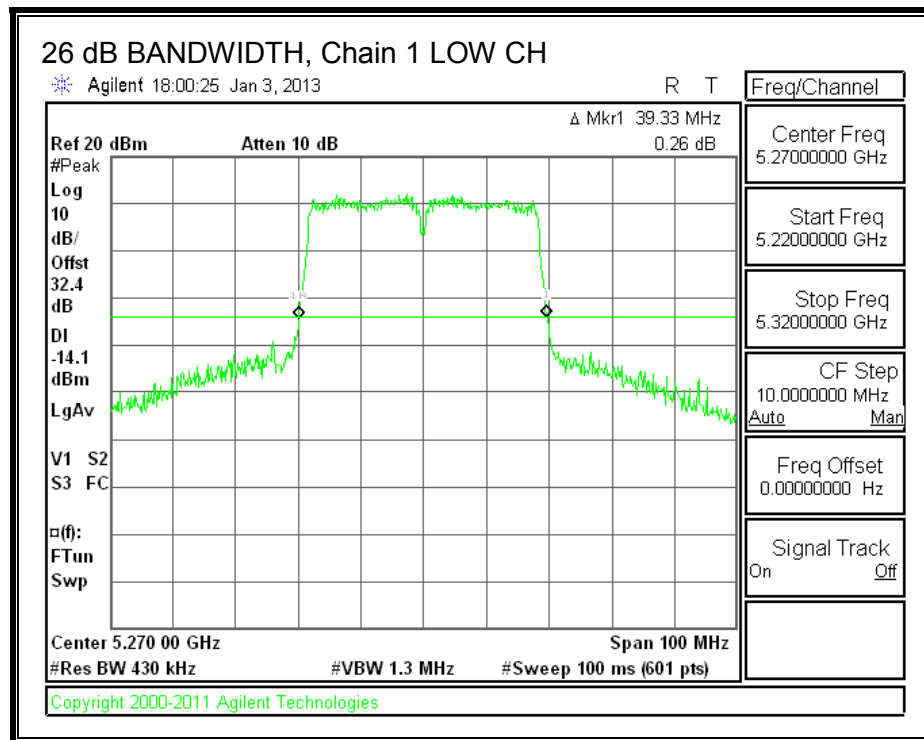
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5270	40.17	39.33
High	5310	39.83	39.50

26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



8.32.2. 99% BANDWIDTH

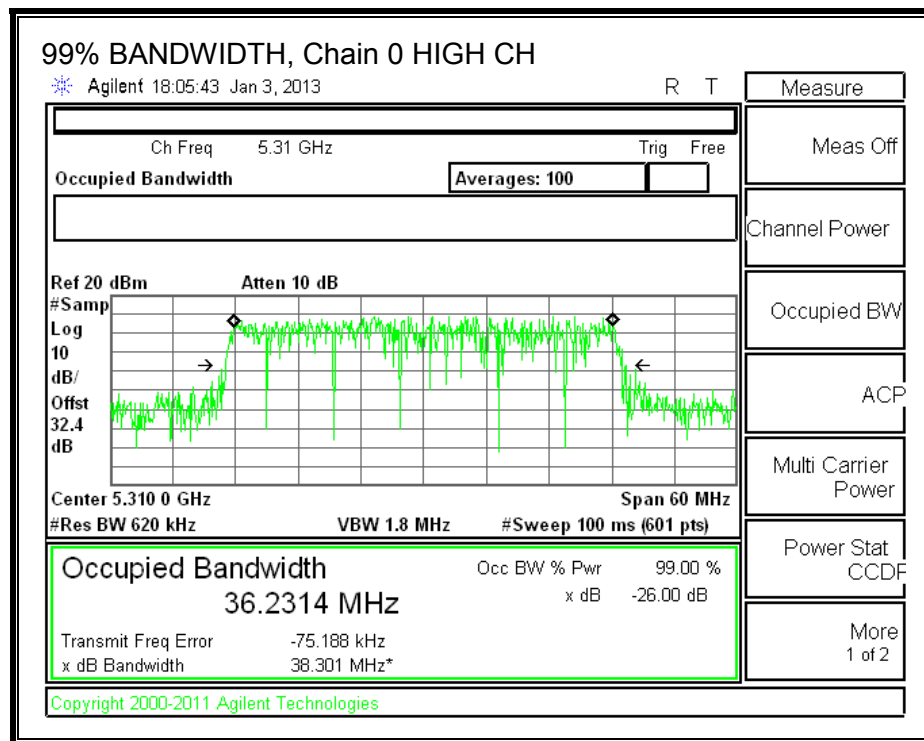
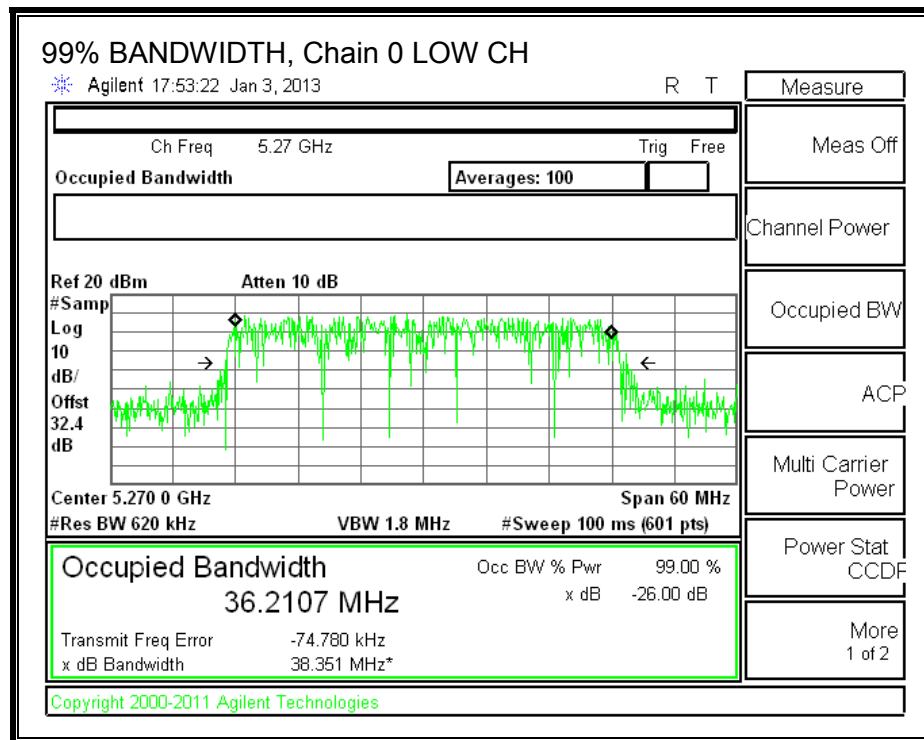
LIMITS

None; for reporting purposes only.

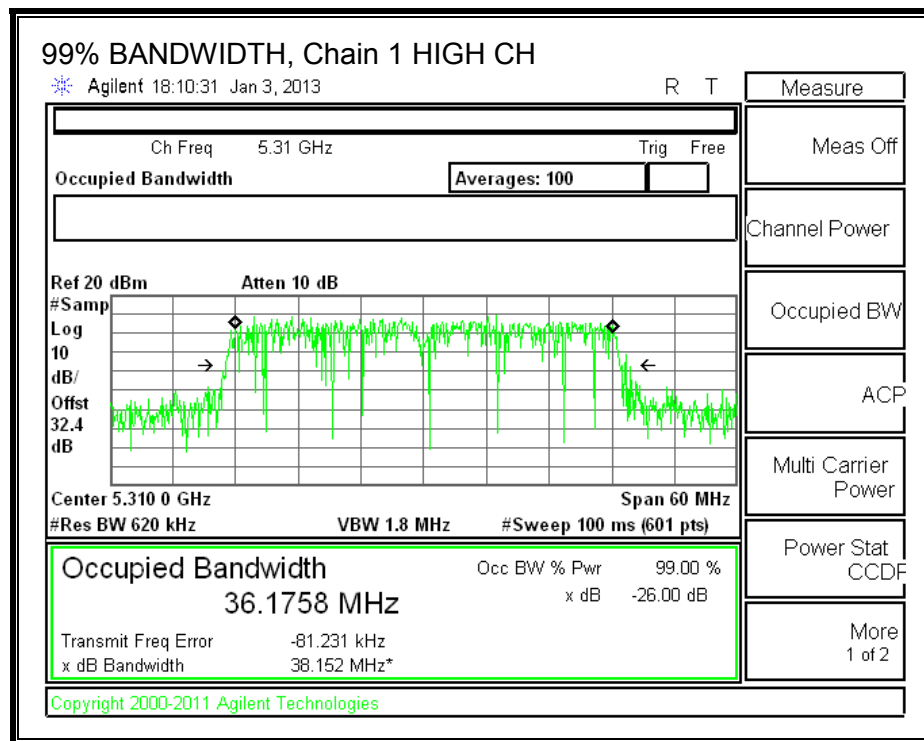
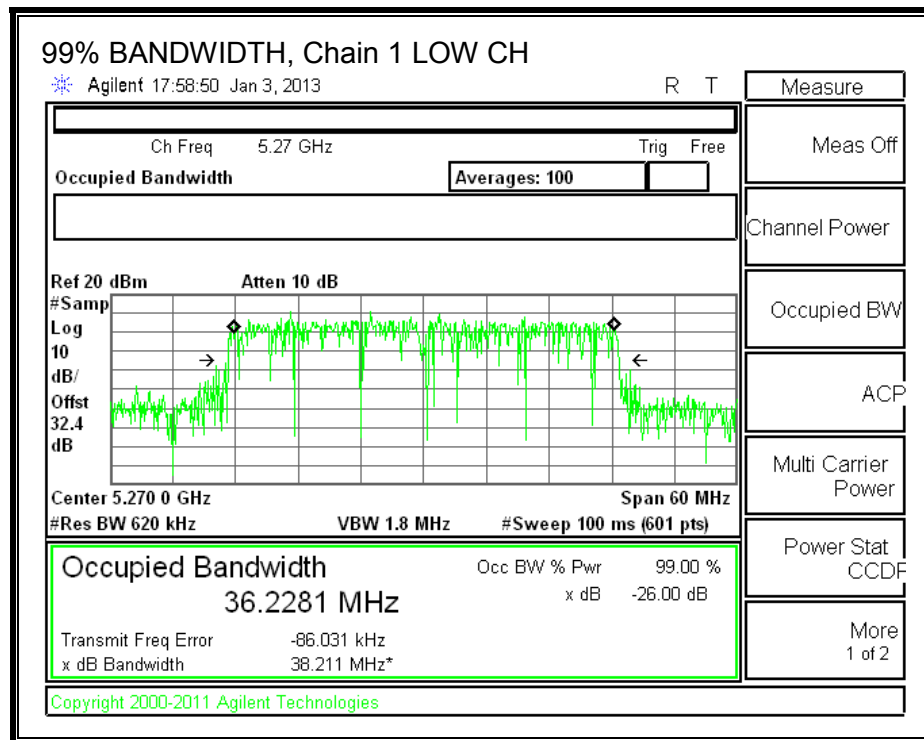
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5270	36.2107	36.2281
High	5310	36.2314	36.1758

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



8.32.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.40	2.30	2.88

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5270	39.33	36.2107	2.88
High	5310	39.50	36.1758	2.88

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5270	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5310	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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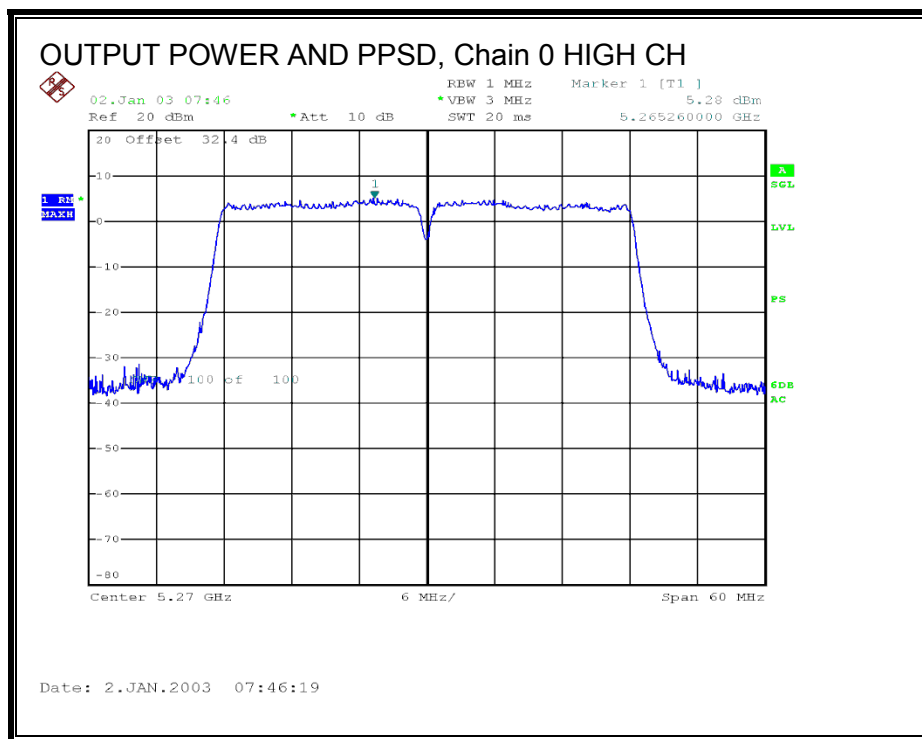
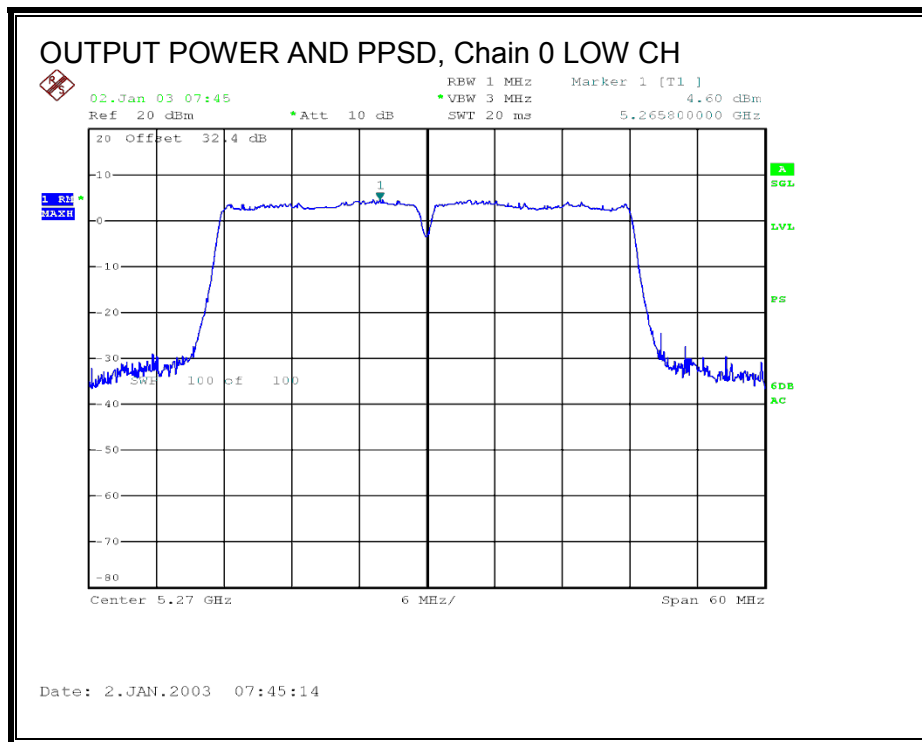
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	17.30	17.20	20.26	24.00	-3.74
High	5310	15.65	15.50	18.59	24.00	-5.41

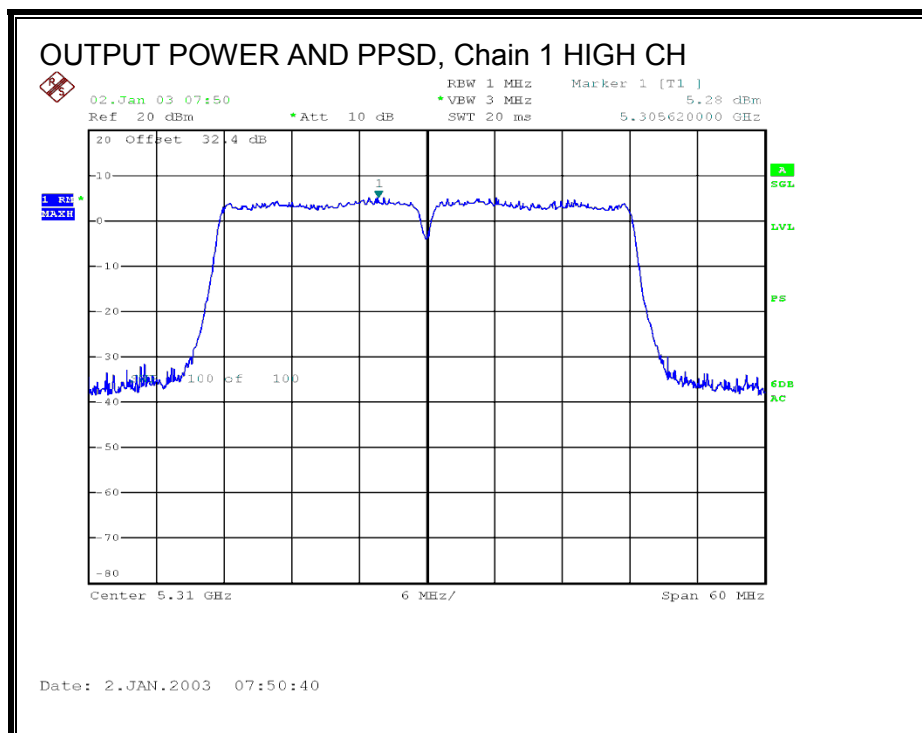
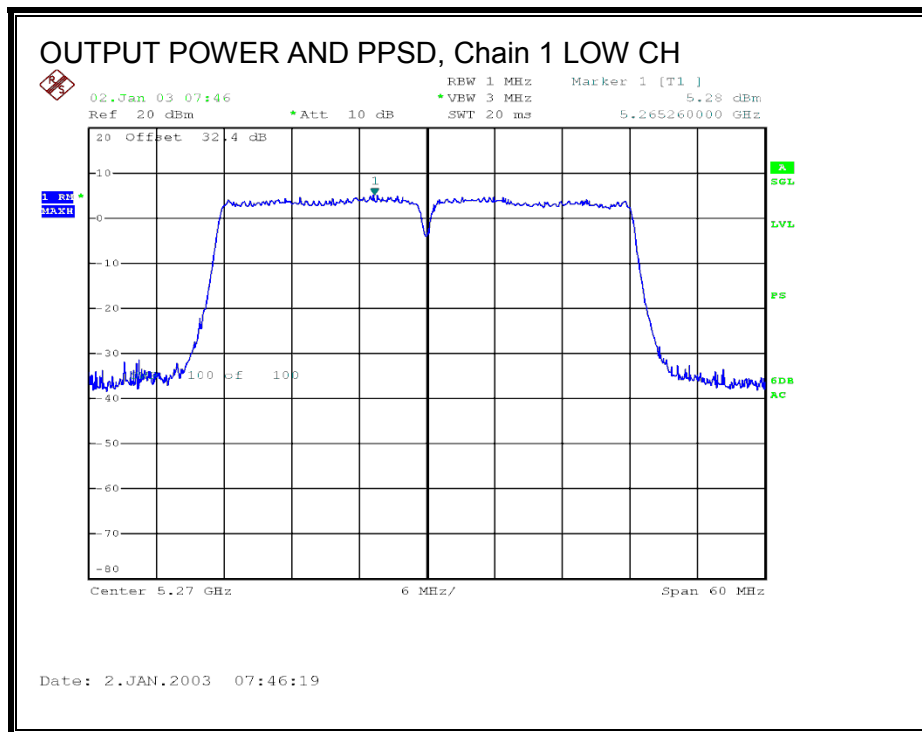
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5270	4.60	5.28	7.96	11.00	-3.04
High	5310	5.28	5.28	8.29	11.00	-2.71

OUTPUT POWER AND PPSD, Chain 0



OUTPUT POWER AND PPSD, Chain 1



8.32.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (2)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.33. 802.11n HT40 CDD 3TX MODE IN THE 5.3 GHz BAND

8.33.1. 26 dB BANDWIDTH

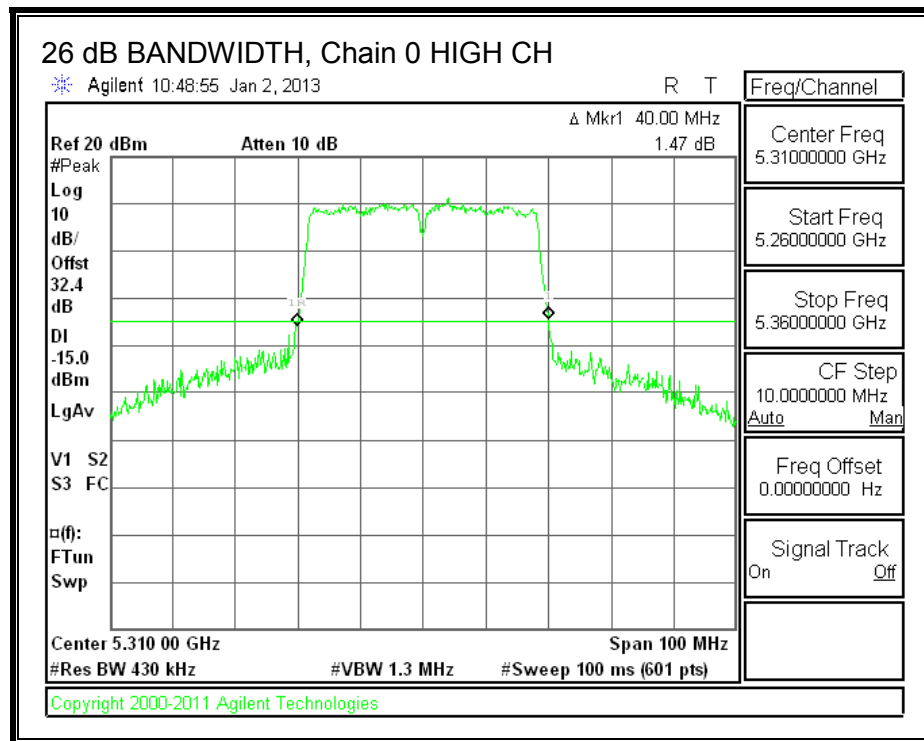
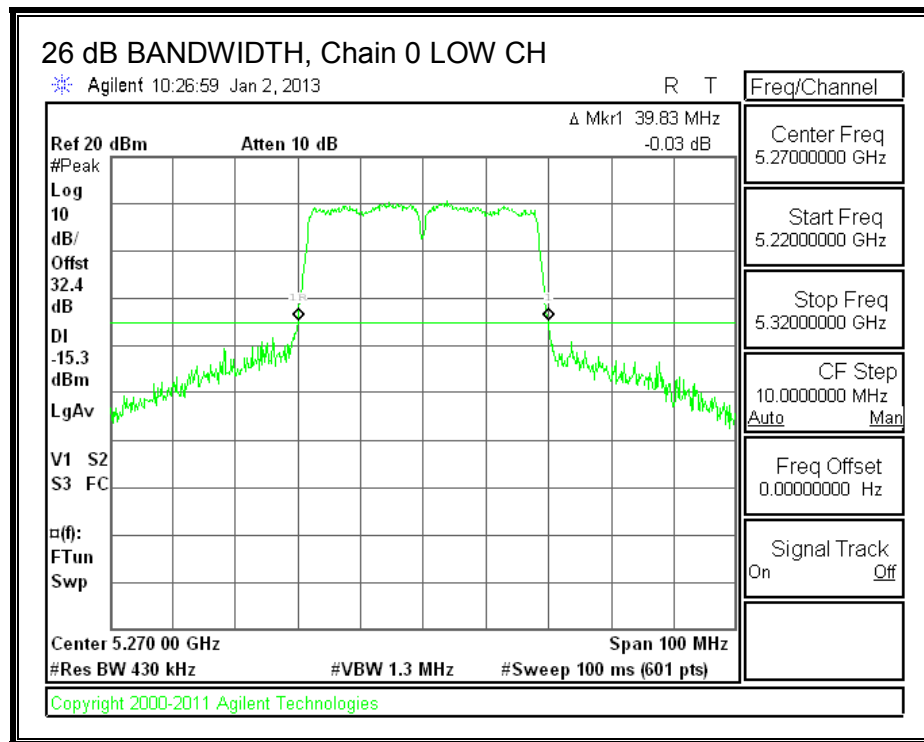
LIMITS

None; for reporting purposes only.

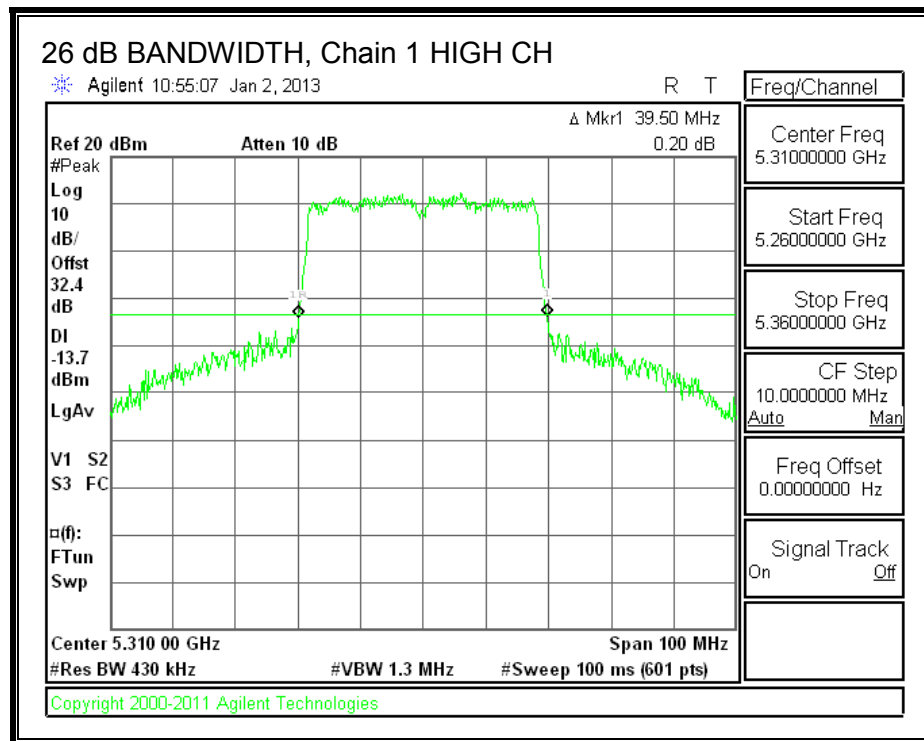
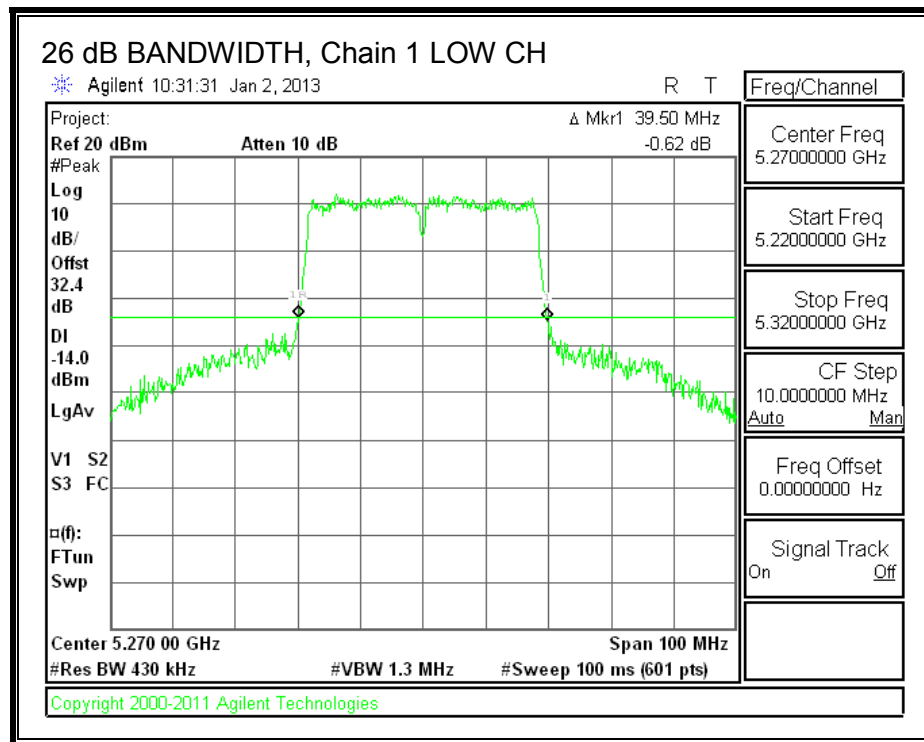
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Low	5270	39.83	39.50	39.50
High	5310	40.00	39.50	39.50

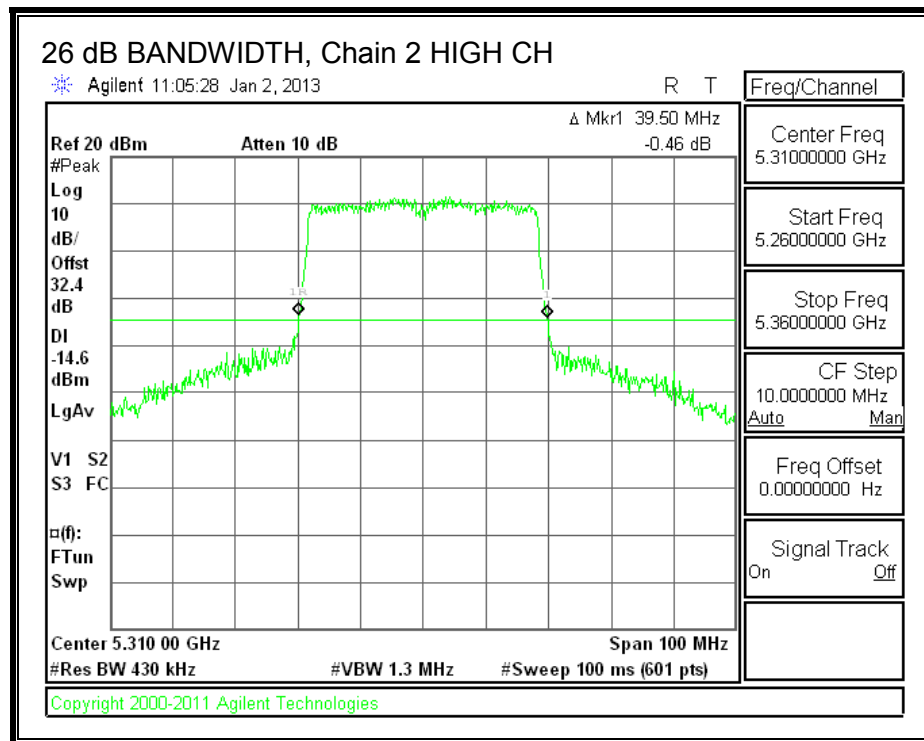
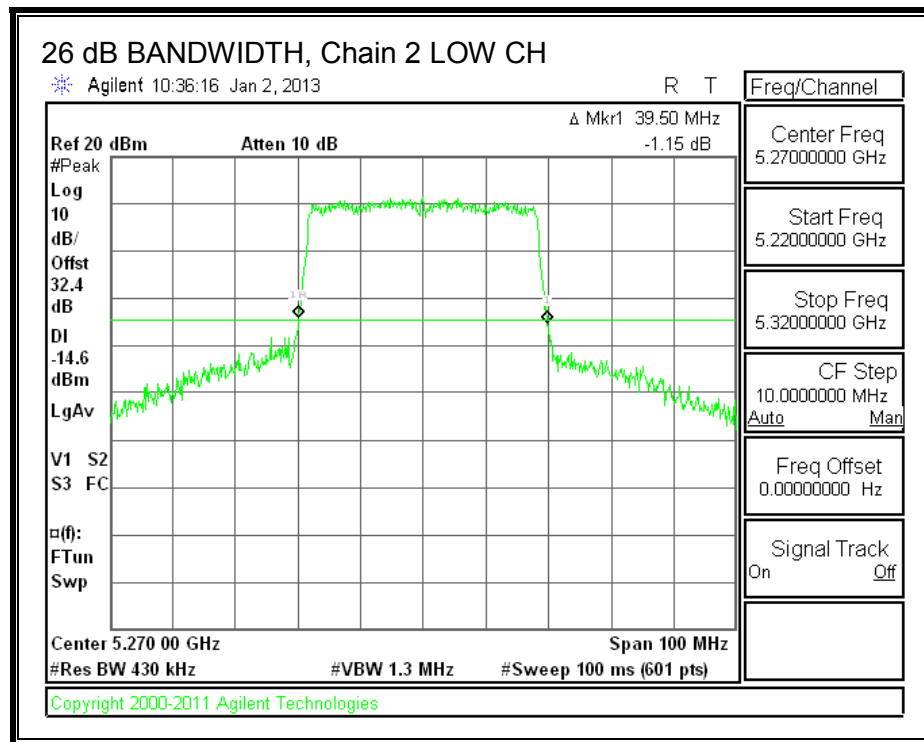
26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



8.33.2. 99% BANDWIDTH

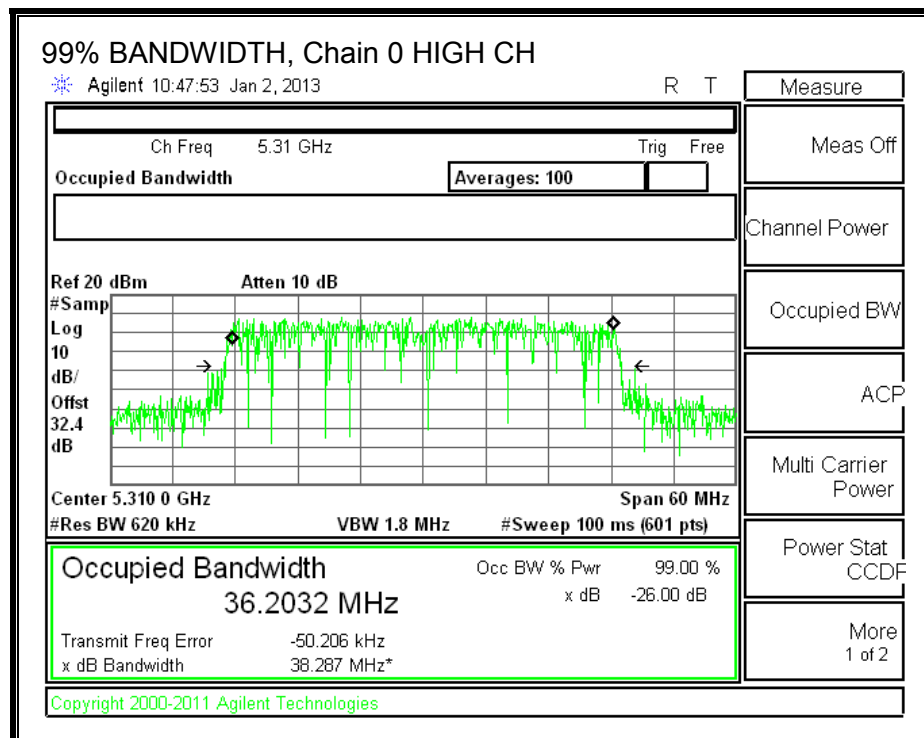
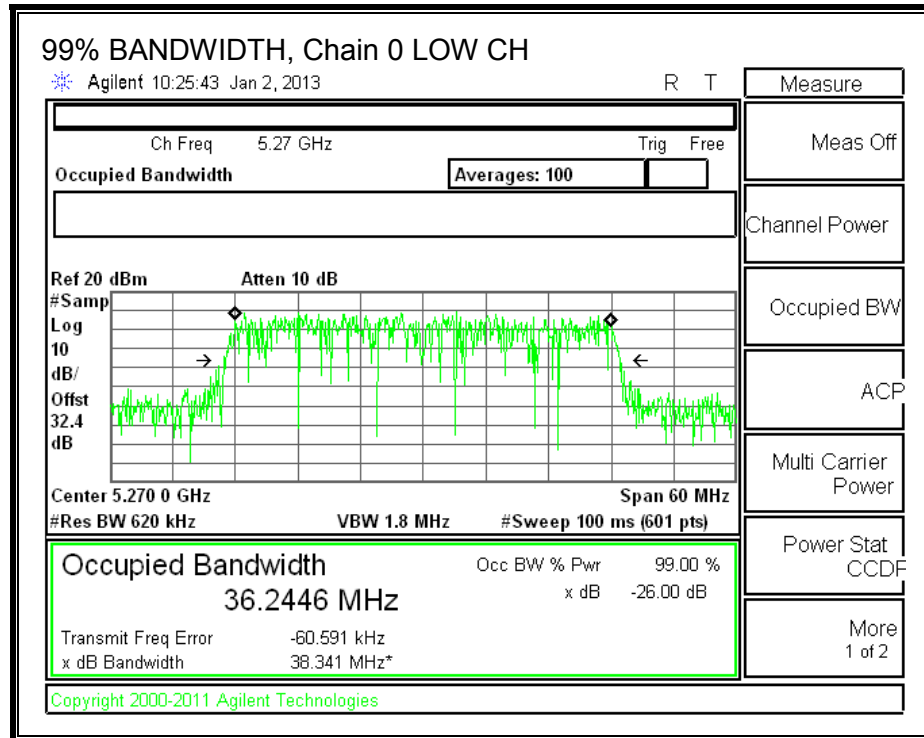
LIMITS

None; for reporting purposes only.

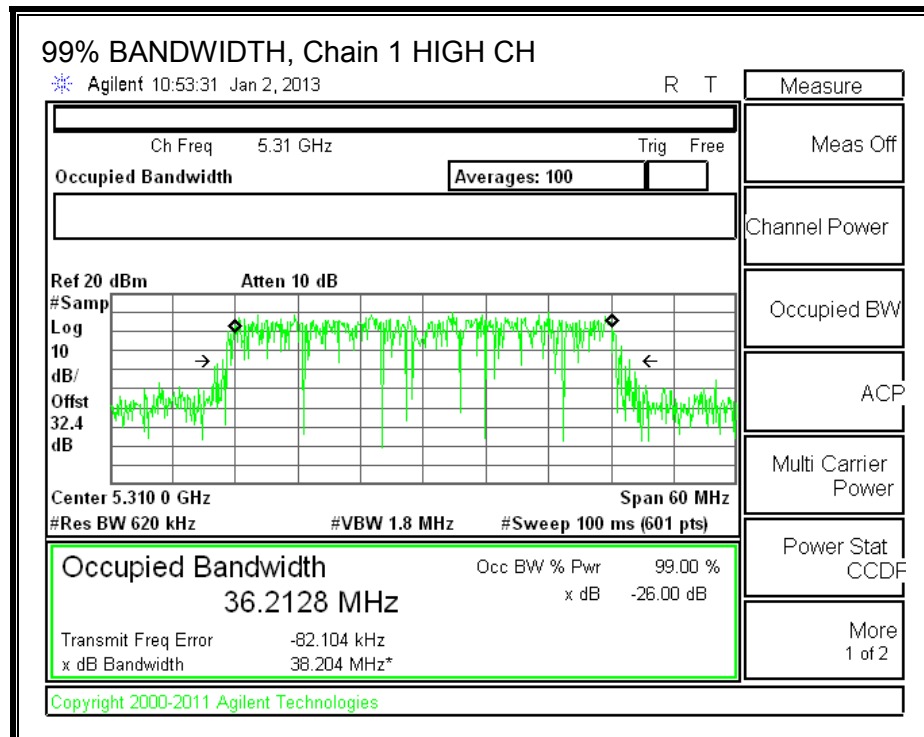
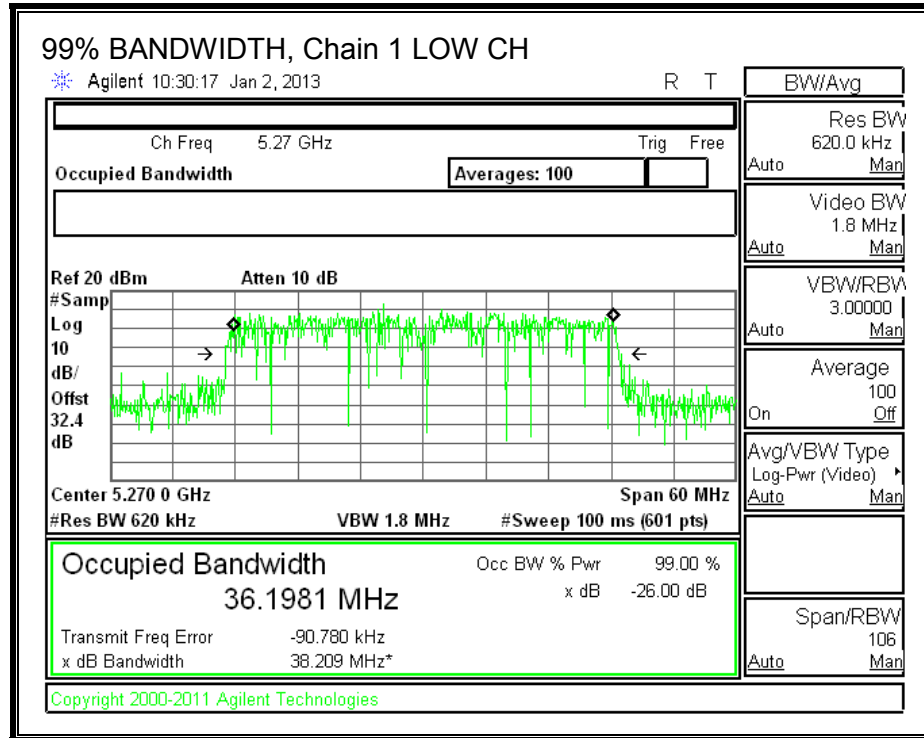
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	5270	36.2446	36.1981	36.2265
High	5310	36.2032	36.2128	36.2170

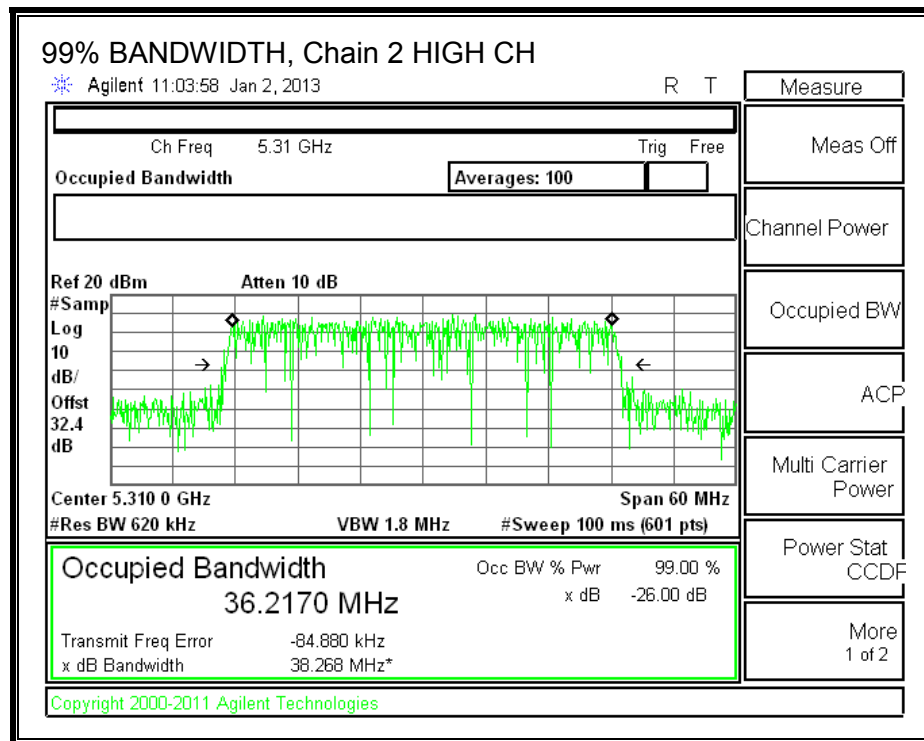
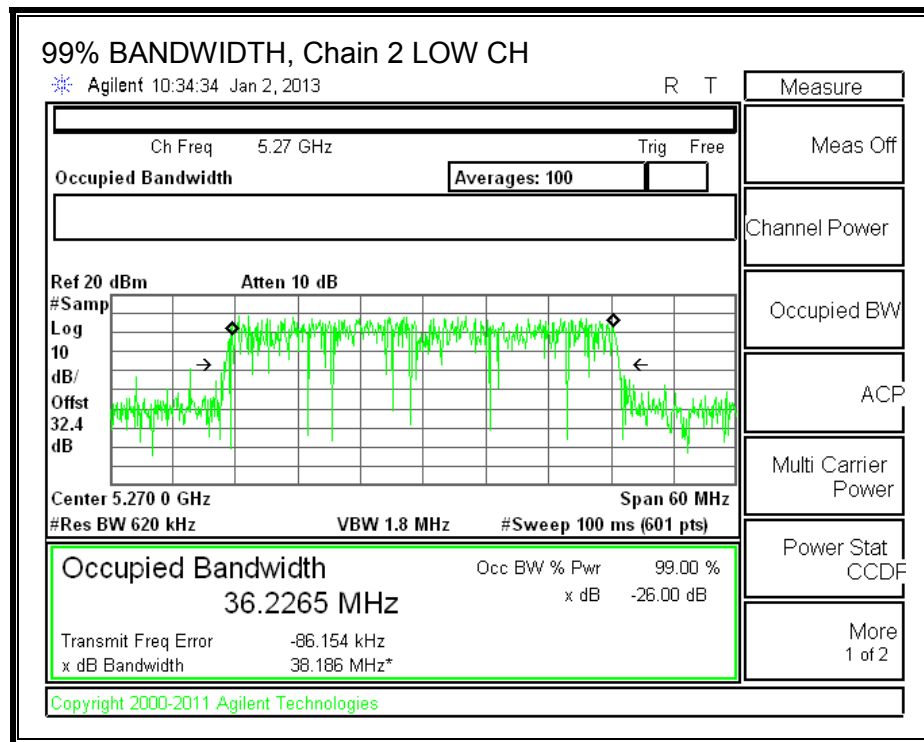
99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



99% BANDWIDTH, Chain 2



8.33.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.40	1.60	2.30	2.50

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.40	1.60	2.30	7.24

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)	Uncorrelated Directional Gain (dBi)
Low	5270	39.50	36.1981	7.24	2.50
High	5310	39.50	36.2032	7.24	2.50

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5270	24.00	24.00	30.00	24.00	9.76	11.00	9.76
High	5310	24.00	24.00	30.00	24.00	9.76	11.00	9.76

Duty Cycle CF (dB)	0.00	
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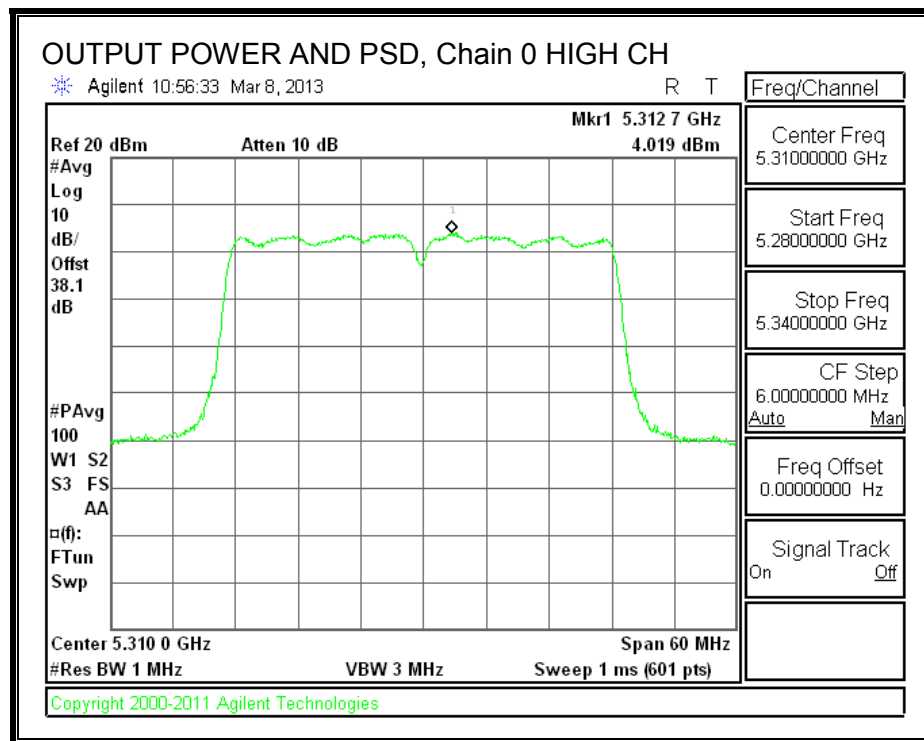
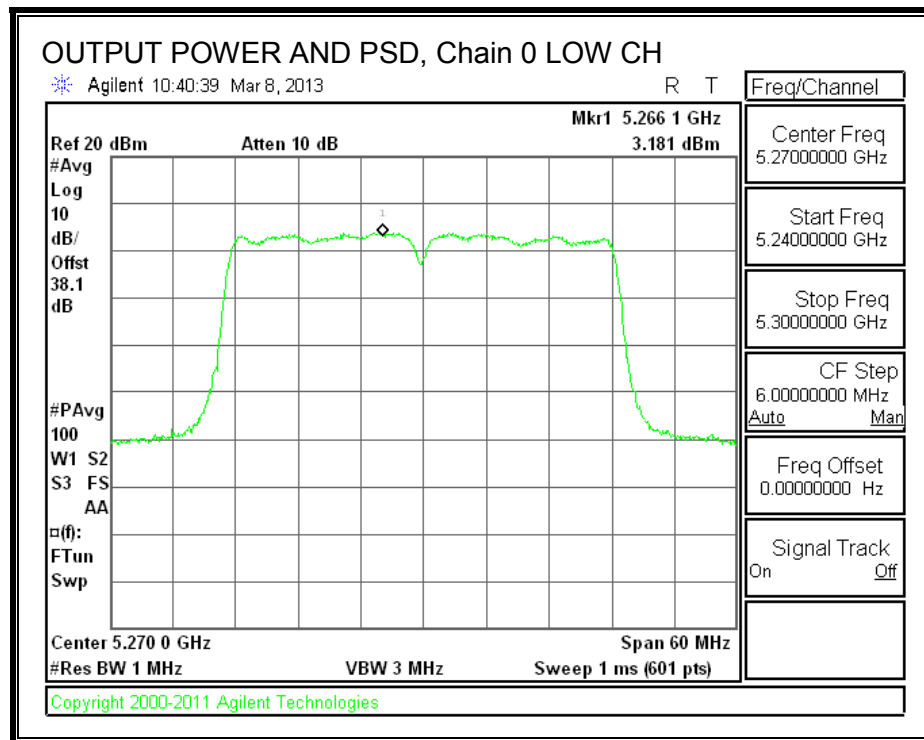
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	16.00	16.30	16.10	20.91	24.00	-3.09
High	5310	14.50	14.65	14.60	19.35	24.00	-4.65

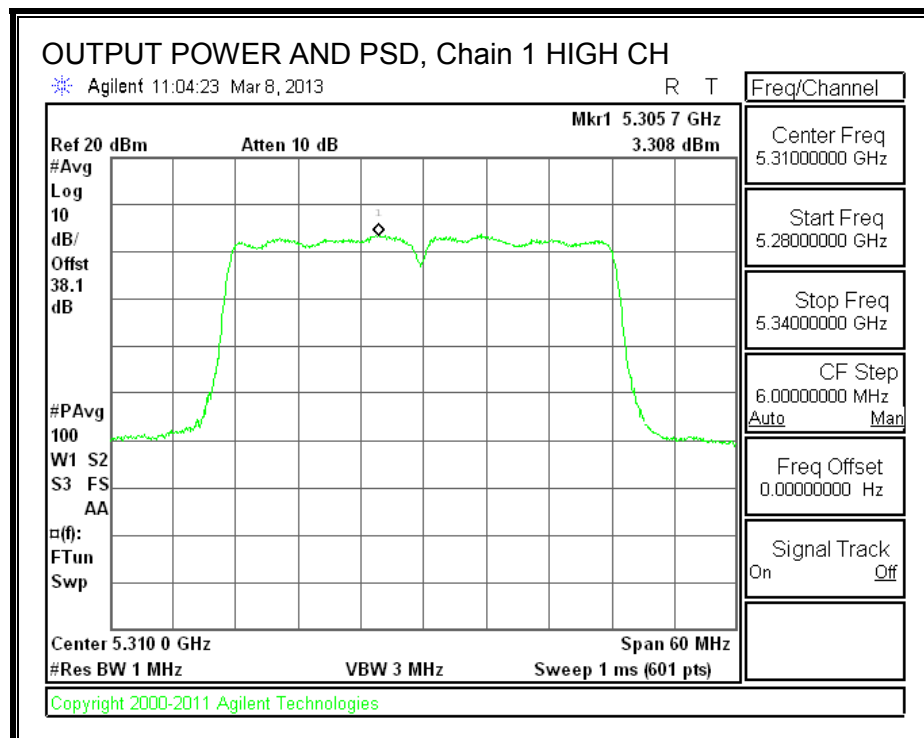
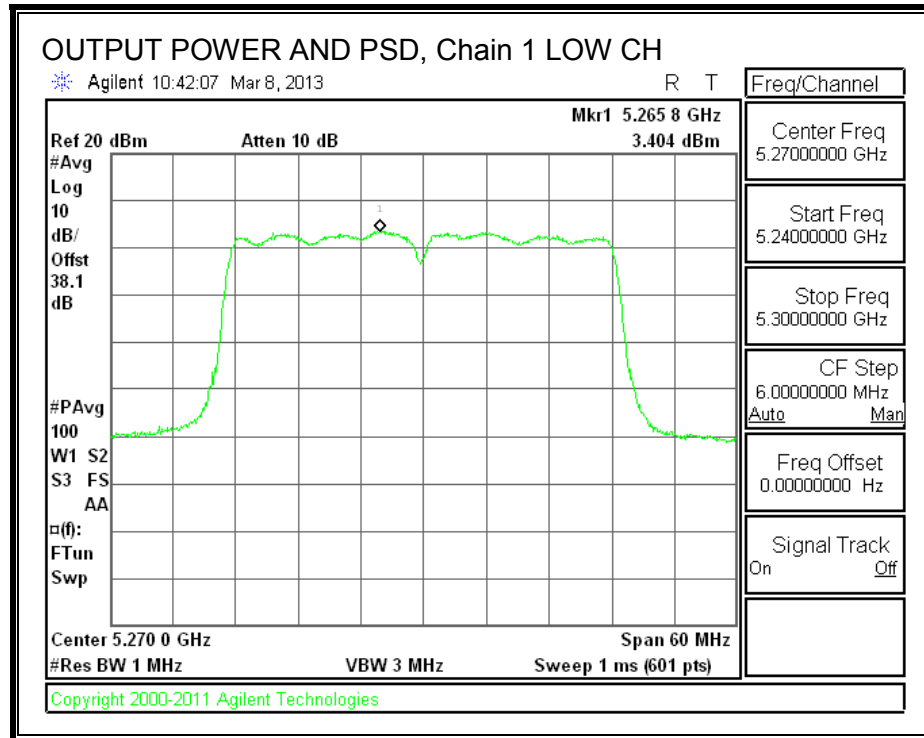
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5270	3.181	3.404	3.488	8.13	9.76	-1.63
High	5310	4.019	3.308	3.561	8.41	9.76	-1.35

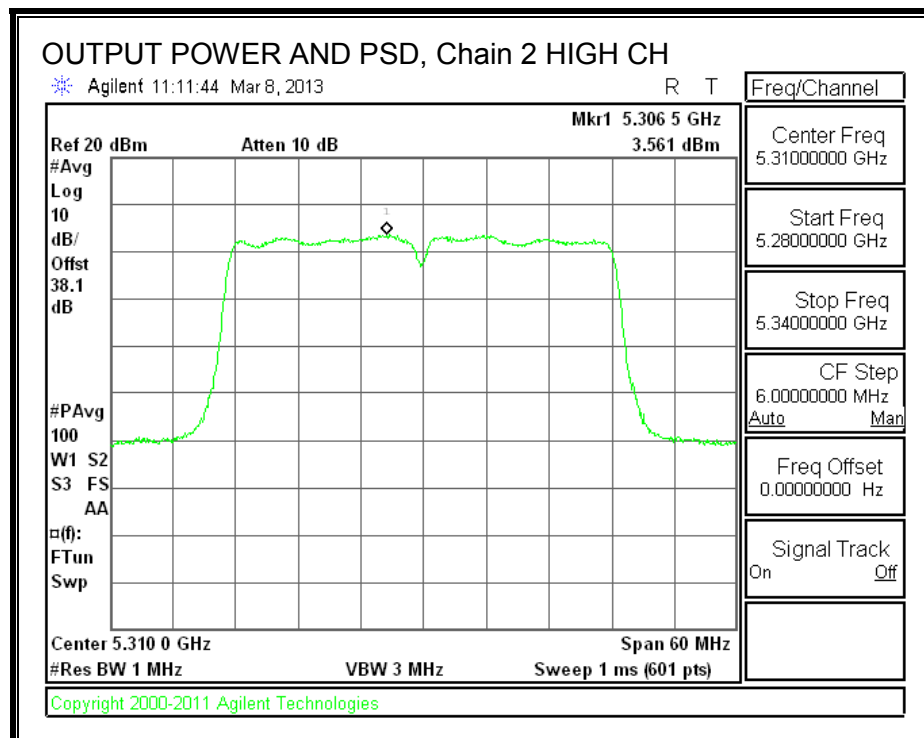
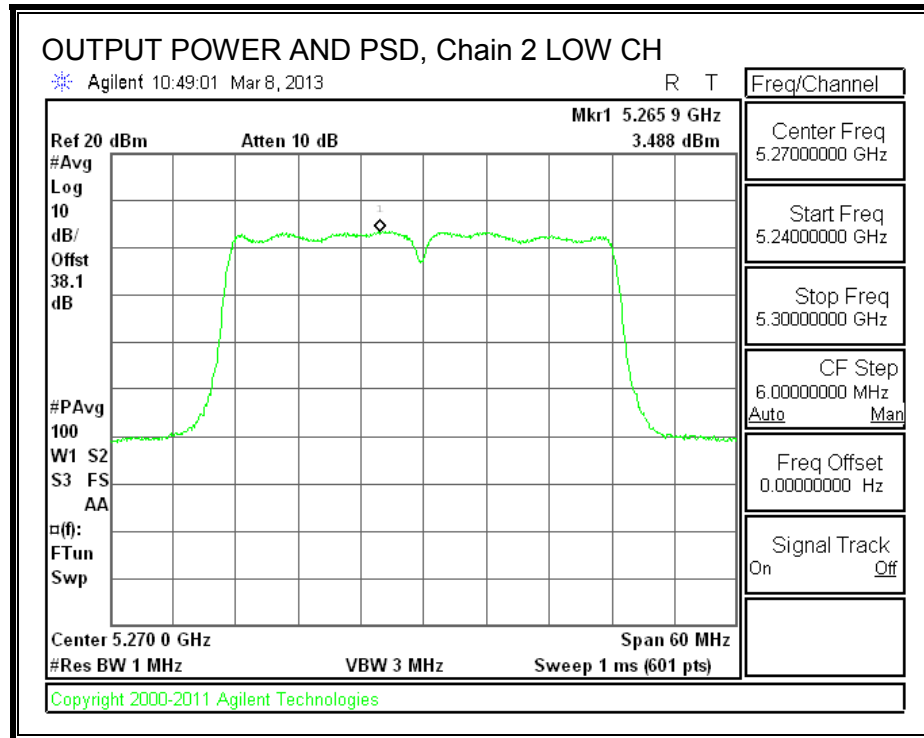
OUTPUT POWER AND PSD, Chain 0



OUTPUT POWER AND PSD, Chain 1



OUTPUT POWER AND PSD, Chain 2



8.33.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (2)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.34. 802.11n HT40 BF 3TX MODE IN THE 5.3 GHz BAND

Covered by testing HT40 CDD 3TX mode, the power per chain used for HT40 CDD 3TX mode is the same power per chain that will be used for HT40 BF 3TX mode. However, since BF is correlated and CDD is uncorrelated for output power, the section below for output power using correlated AG for this BF mode shows it is still compliant.

8.34.1. OUTPUT AVERAGE POWER

LIMITS

FCC §15.407 (a) (1)

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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.40	1.60	2.30	7.24

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)
Low	5270	39.50	36.1981	7.24
High	5310	39.50	36.2032	7.24

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Low	5270	22.76	24.00	30.00	22.76
High	5310	22.76	24.00	30.00	22.76

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	16.00	16.30	16.10	20.91	22.76	-1.85
High	5310	14.50	14.80	14.60	19.41	22.76	-3.35

8.35. 802.11n HT40 STBC 3TX MODE IN THE 5.3 GHz BAND

8.35.1. 26 dB BANDWIDTH

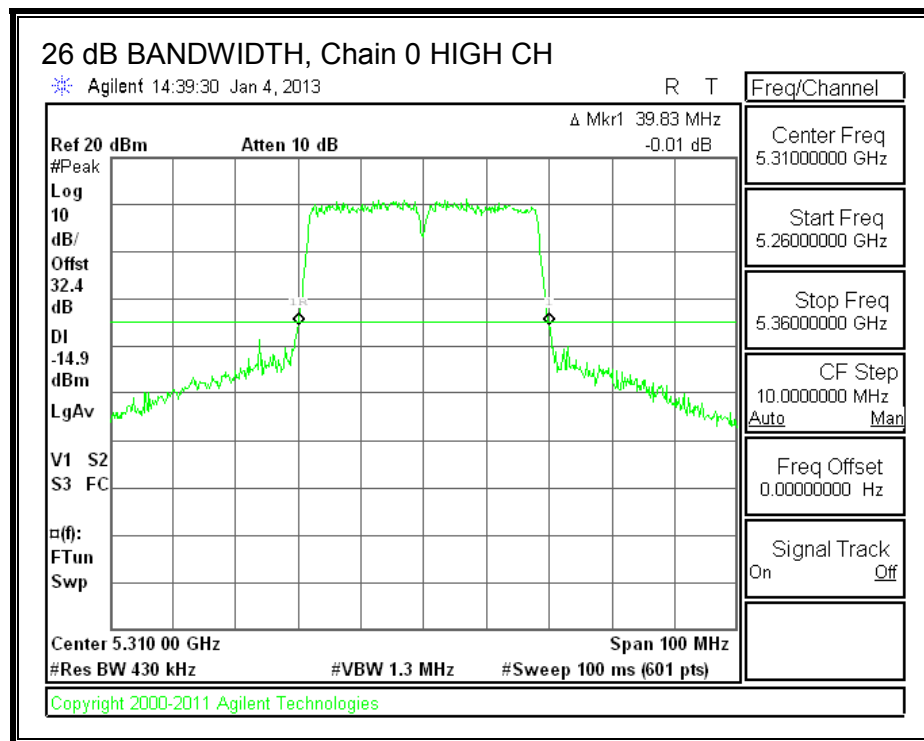
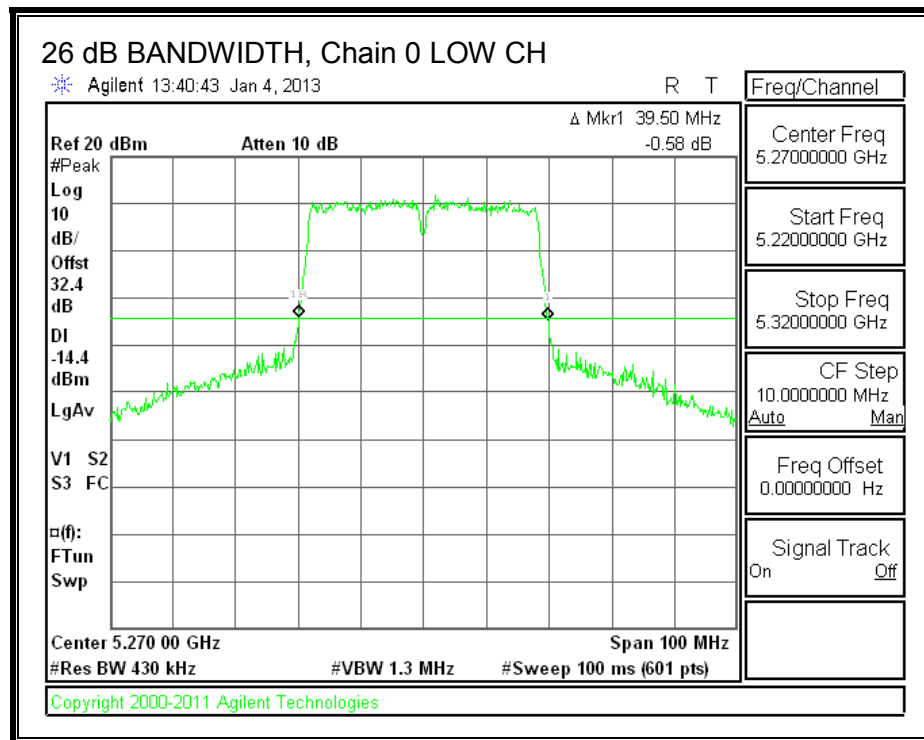
LIMITS

None; for reporting purposes only.

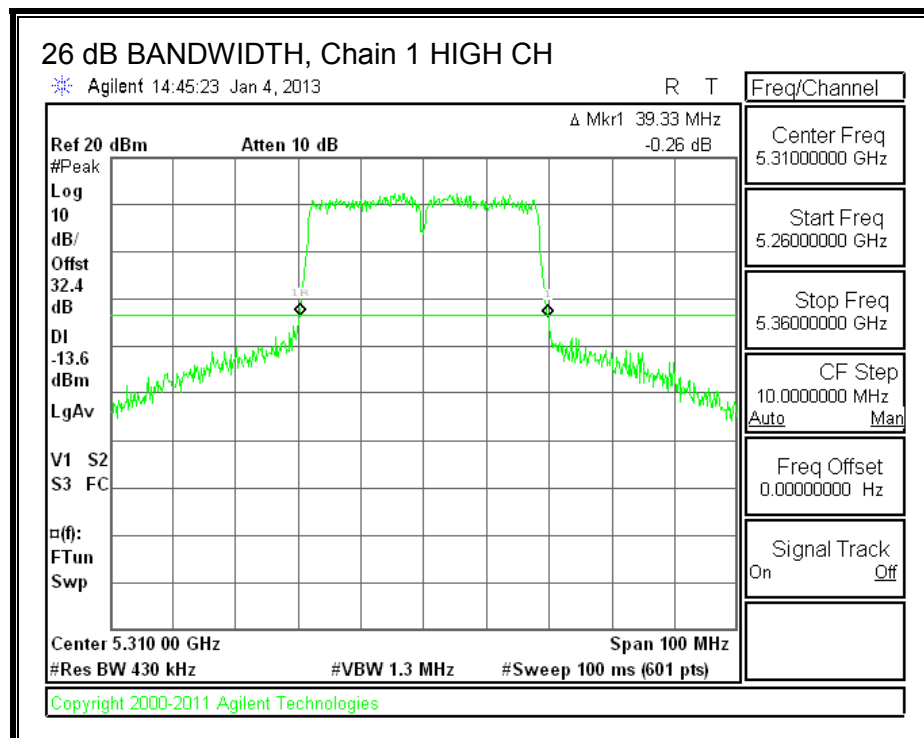
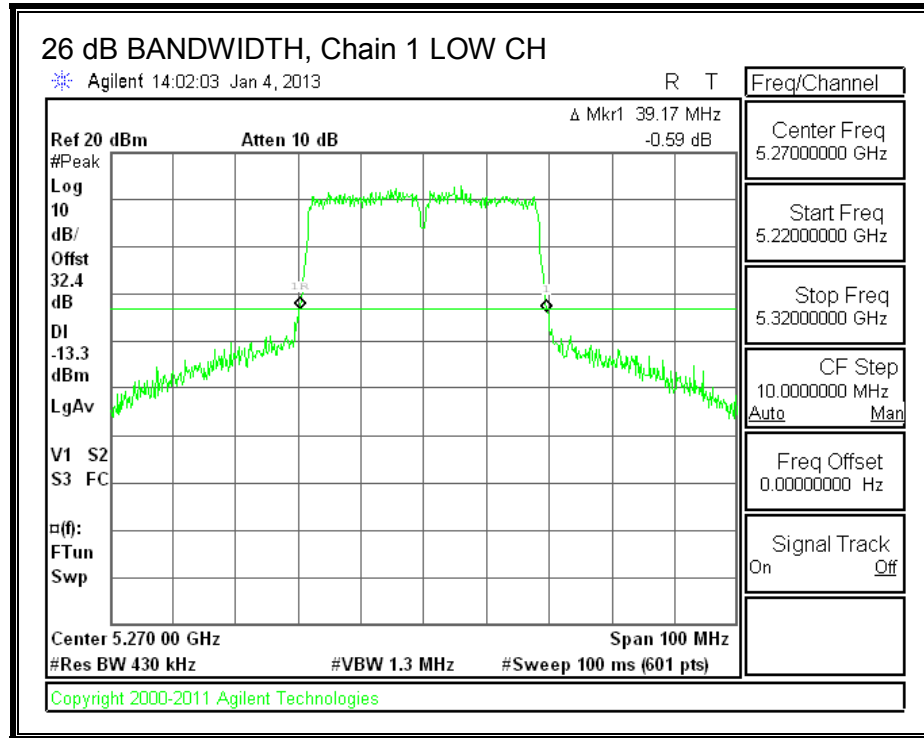
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Low	5270	39.50	39.17	39.67
High	5310	39.83	39.33	39.67

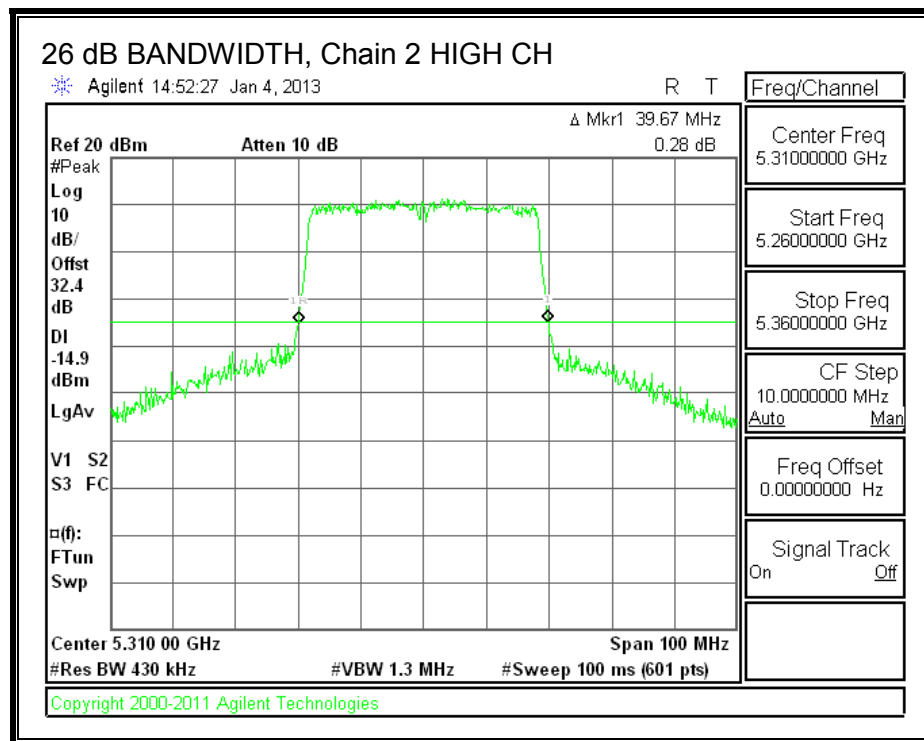
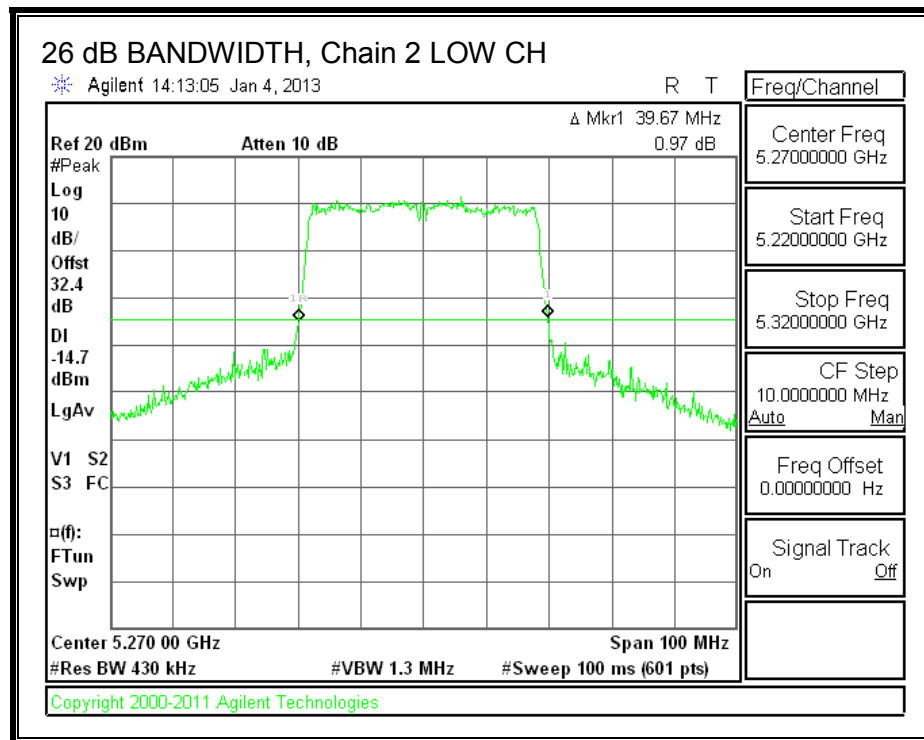
26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



8.35.2. 99% BANDWIDTH

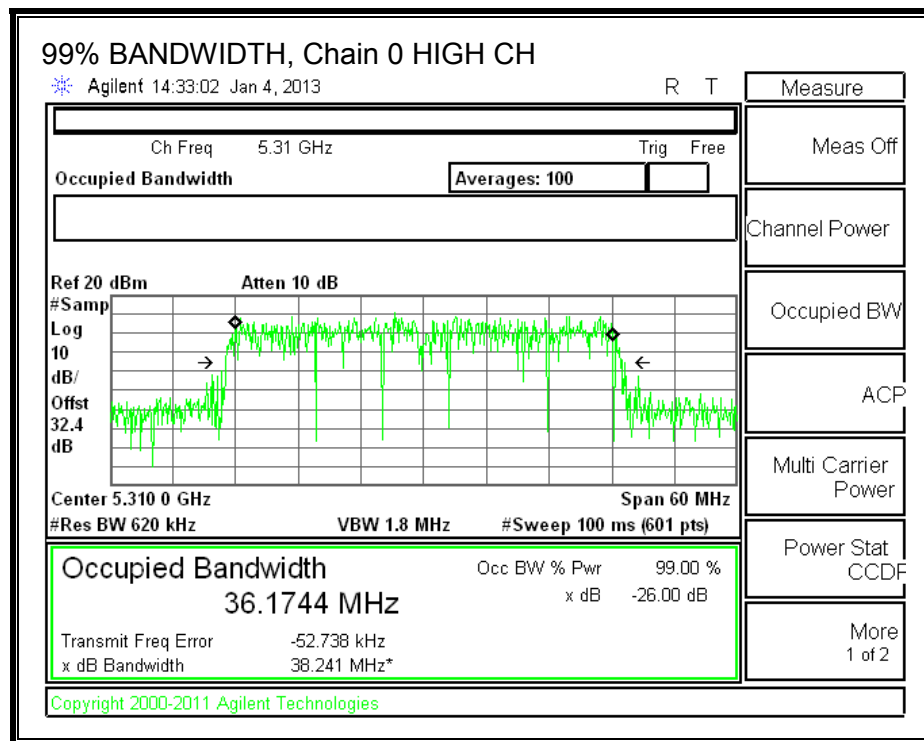
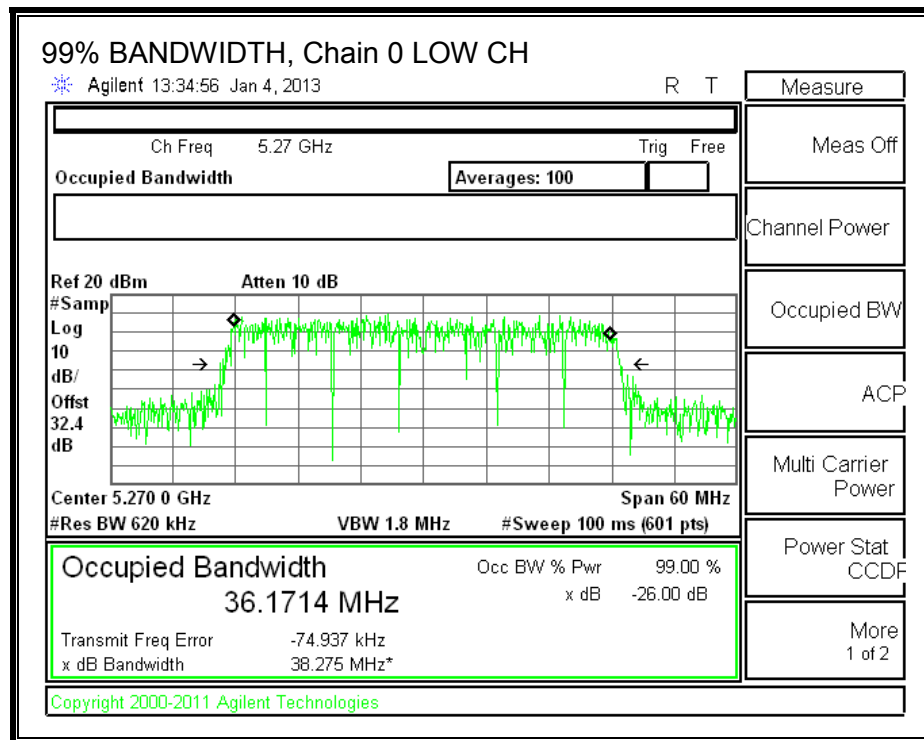
LIMITS

None; for reporting purposes only.

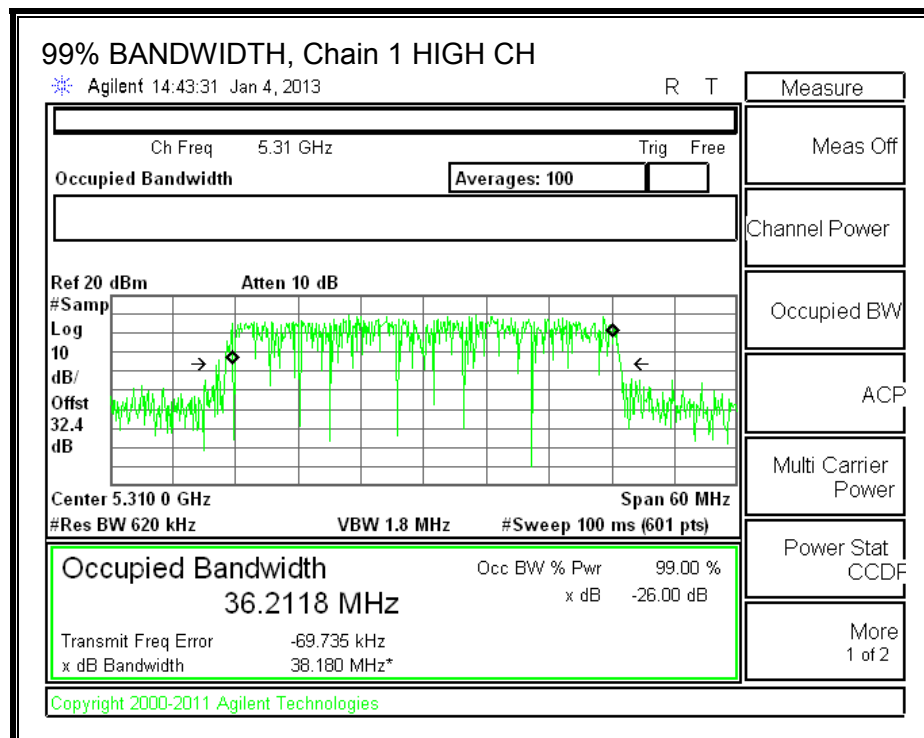
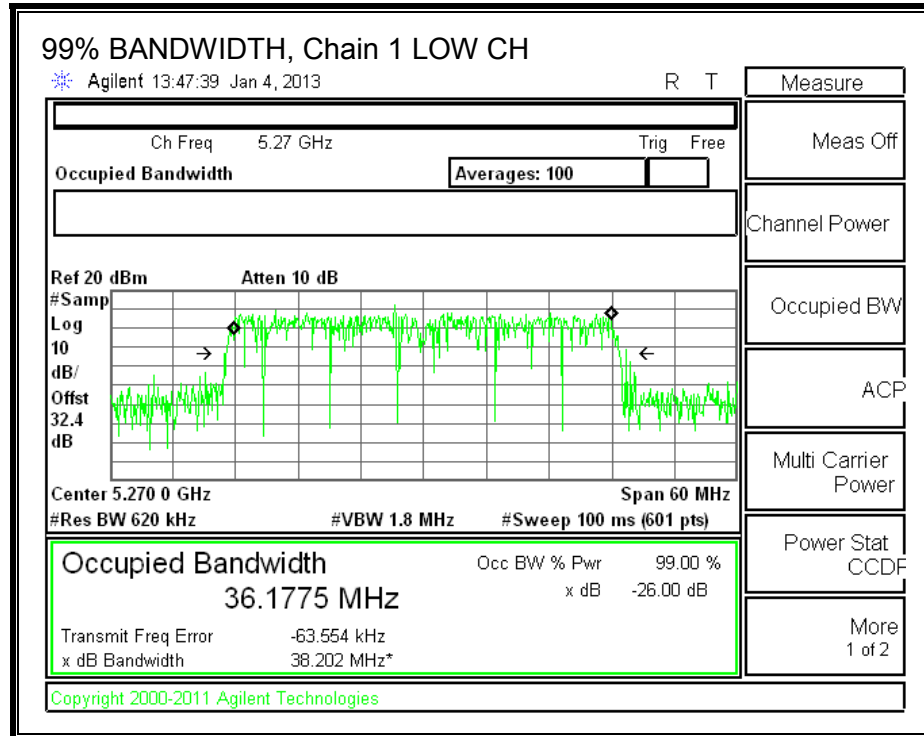
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	5270	36.1714	36.1775	36.1869
High	5310	36.1744	36.2118	36.1699

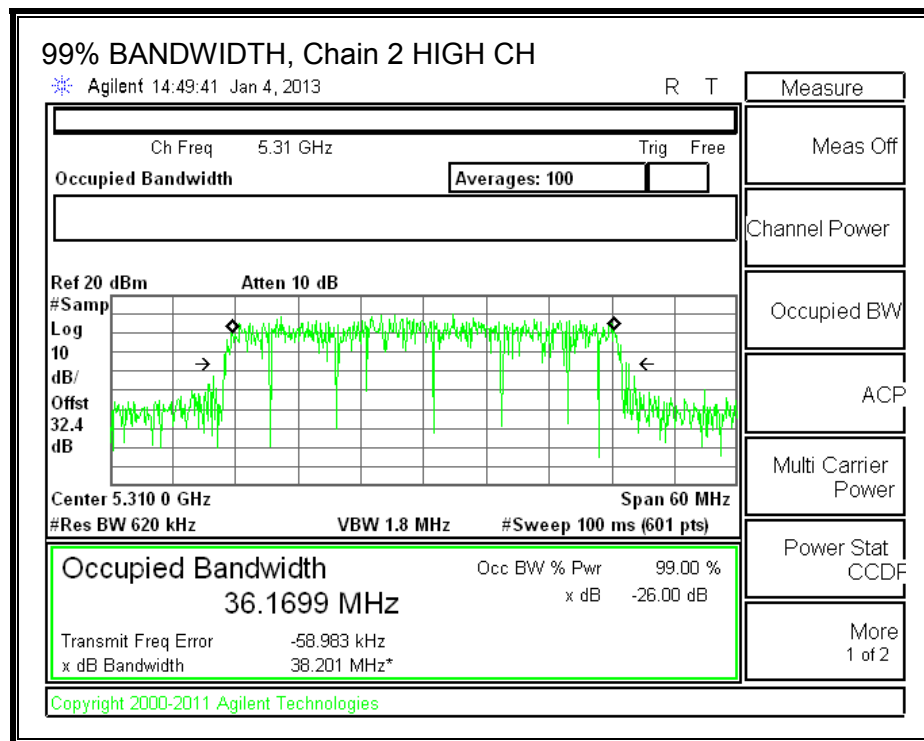
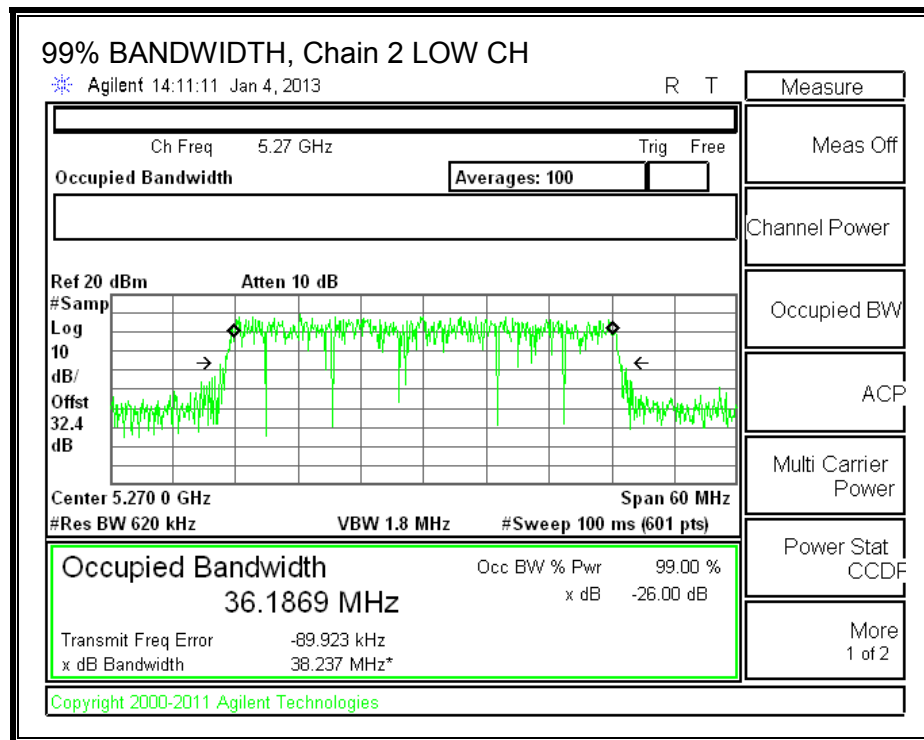
99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



99% BANDWIDTH, Chain 2



8.35.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.40	1.60	2.30	2.50

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5270	39.17	36.1714	2.50
High	5310	39.33	36.1699	2.50

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5270	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5310	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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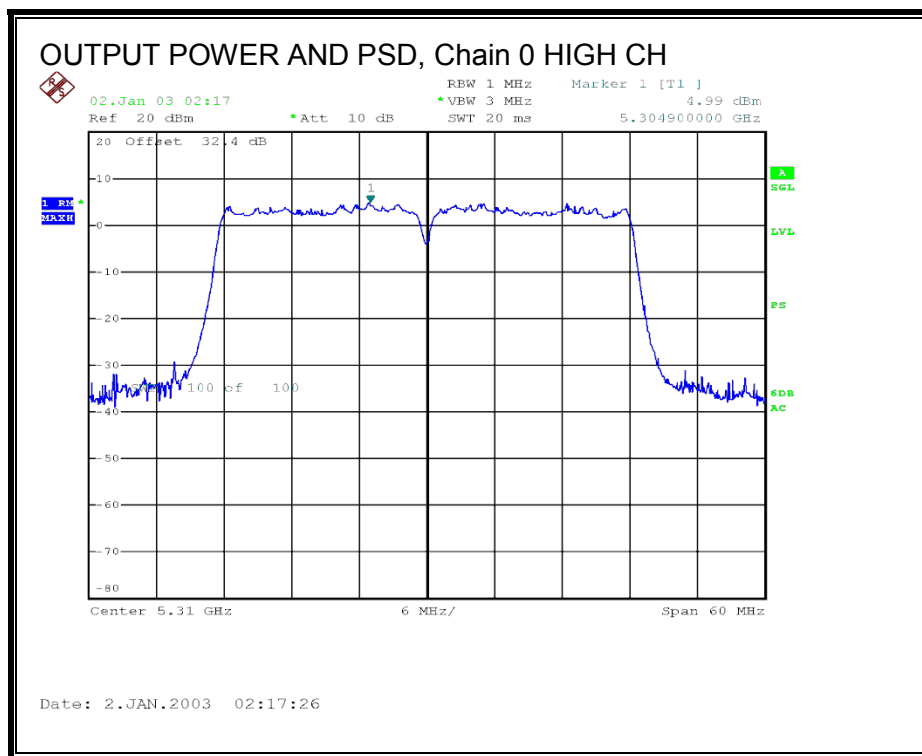
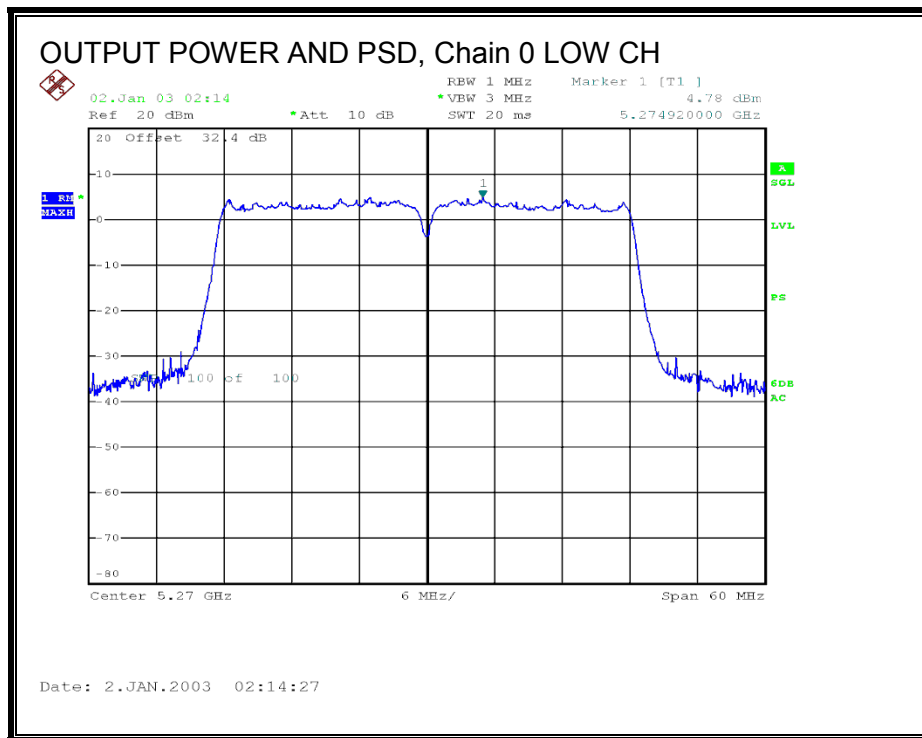
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	16.00	16.30	16.10	20.91	24.00	-3.09
High	5310	14.50	14.80	14.65	19.42	24.00	-4.58

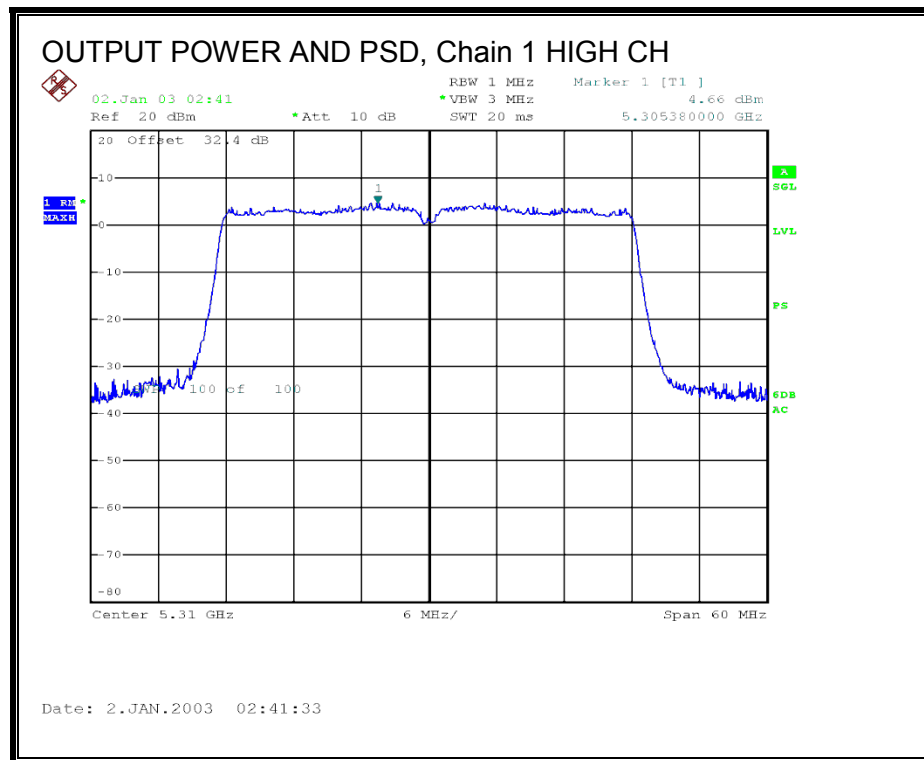
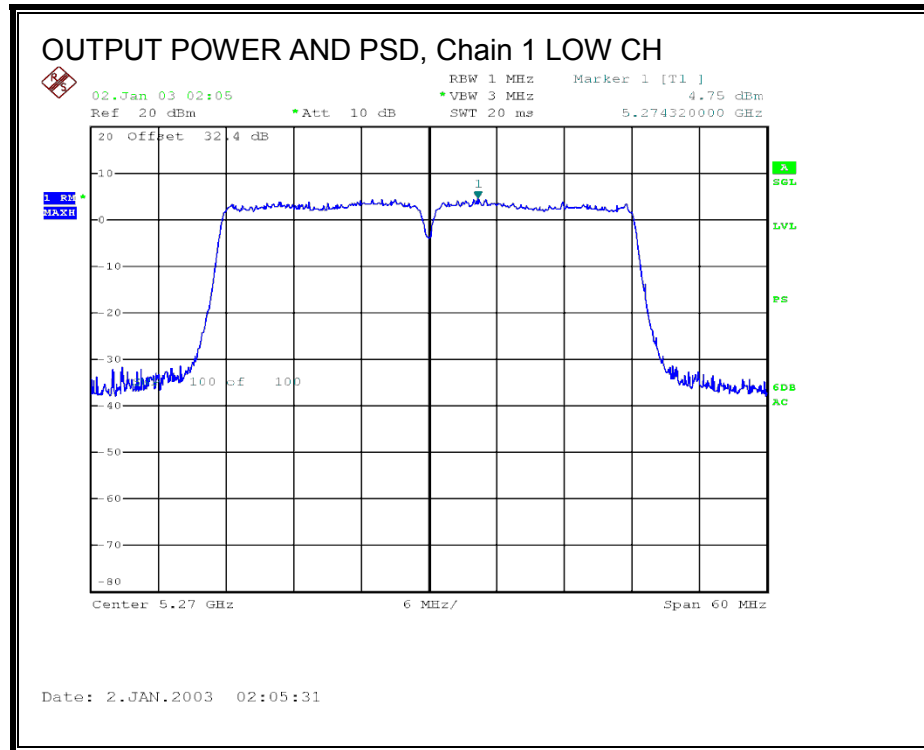
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5270	4.78	4.75	4.65	9.50	11.00	-1.50
High	5310	4.99	4.66	4.16	9.39	11.00	-1.61

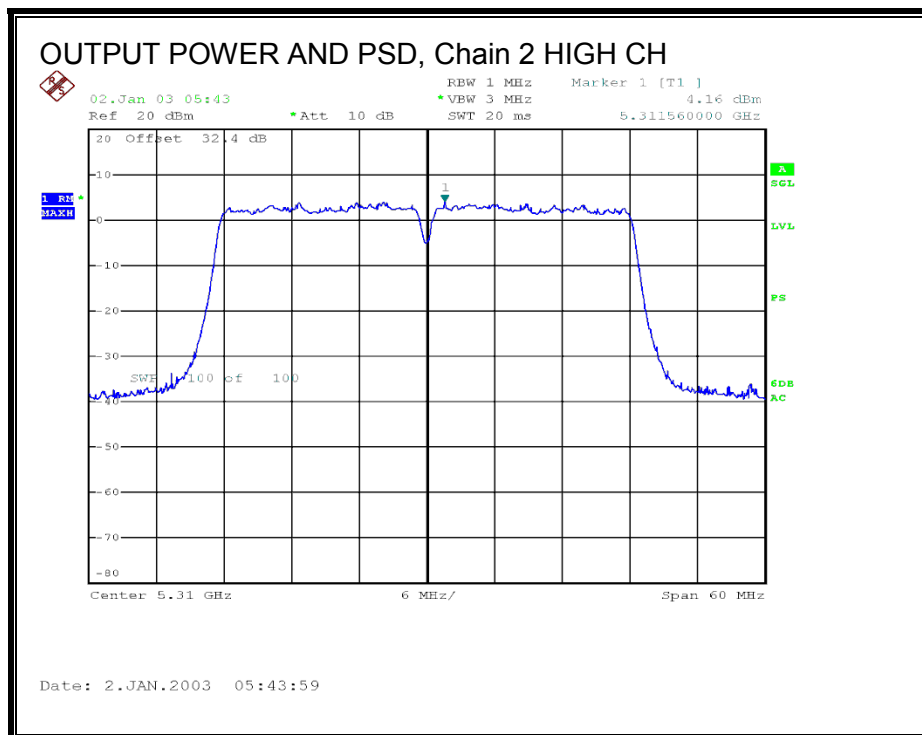
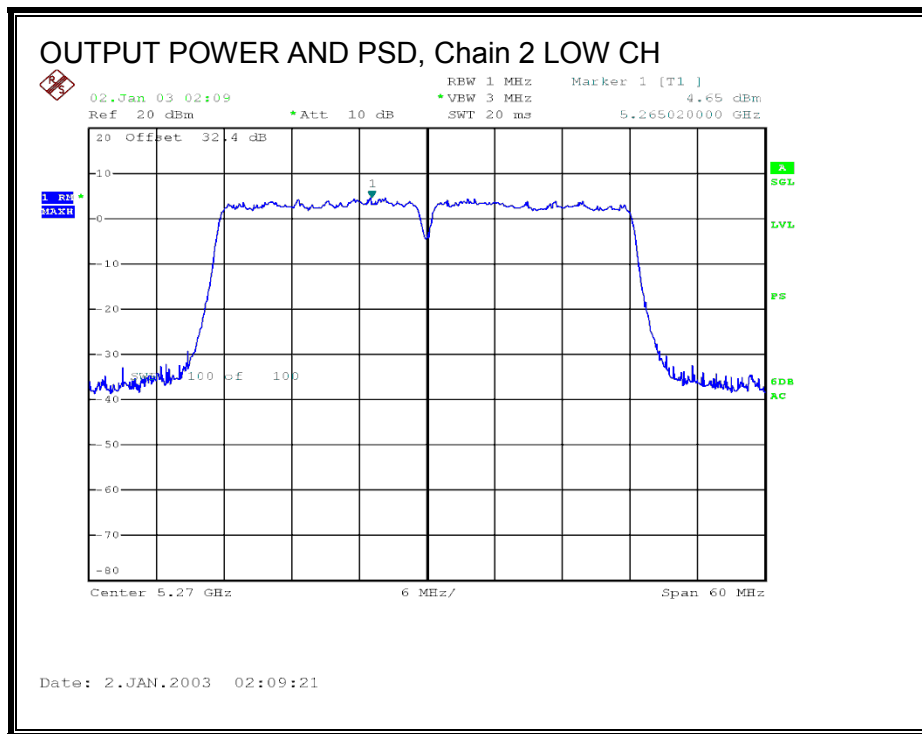
OUTPUT POWER AND PSD, Chain 0



OUTPUT POWER AND PSD, Chain 1



OUTPUT POWER AND PSD, Chain 2



8.35.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (2)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.36. 802.11ac VHT80 1X MODE IN THE 5.3 GHz BAND

8.36.1. 26 dB BANDWIDTH

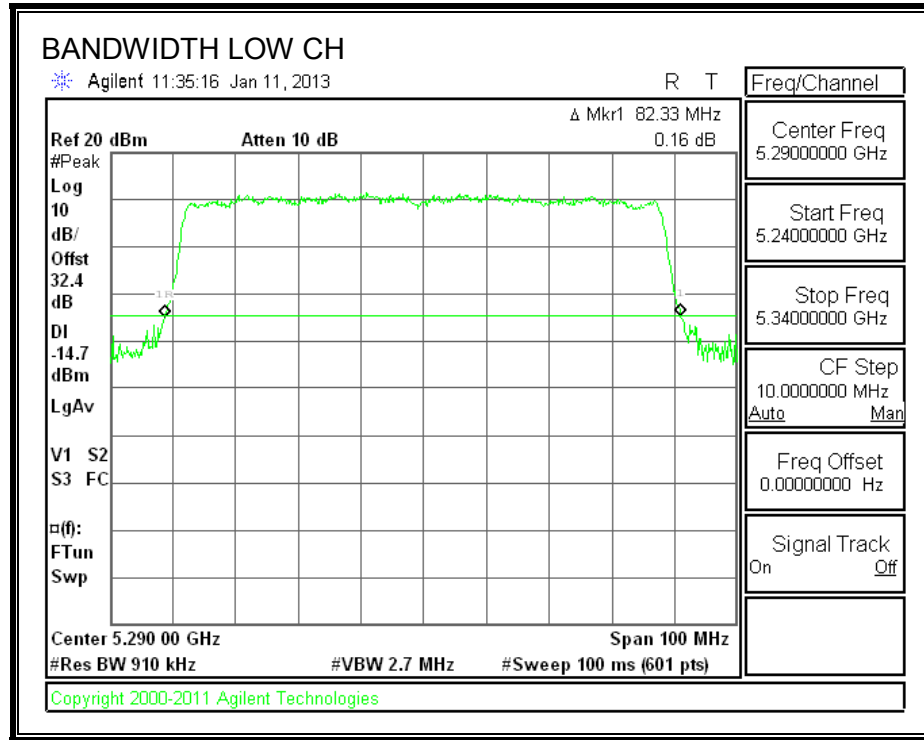
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5290	82.33

26 dB BANDWIDTH



8.36.2. 99% BANDWIDTH

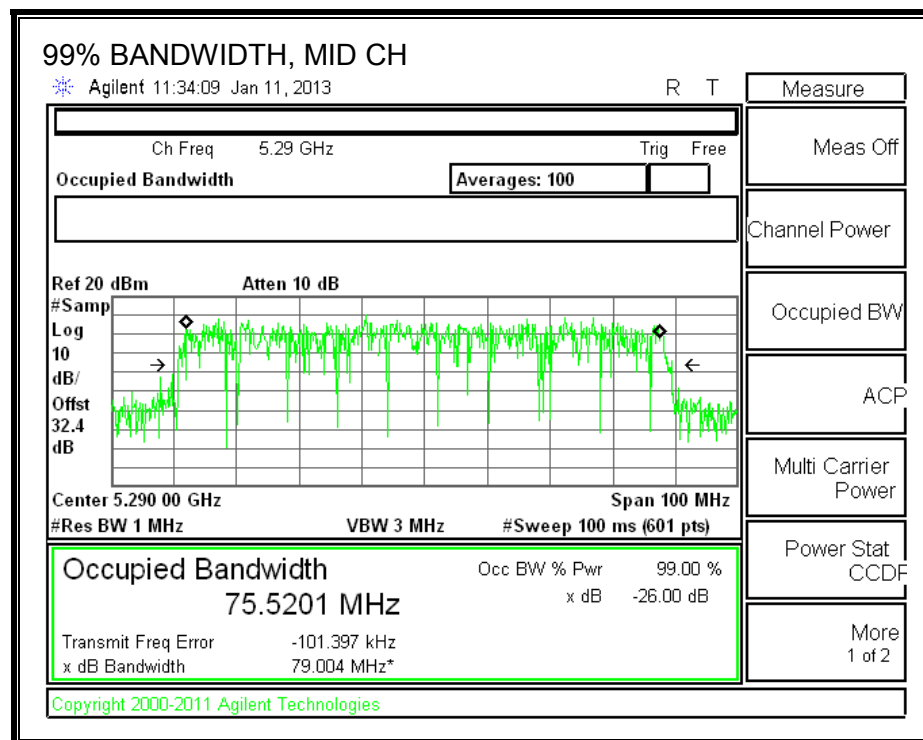
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5290	75.5201

99% BANDWIDTH



8.36.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or 4 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Mid	5290	82.33	75.5201	3.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5290	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.10	
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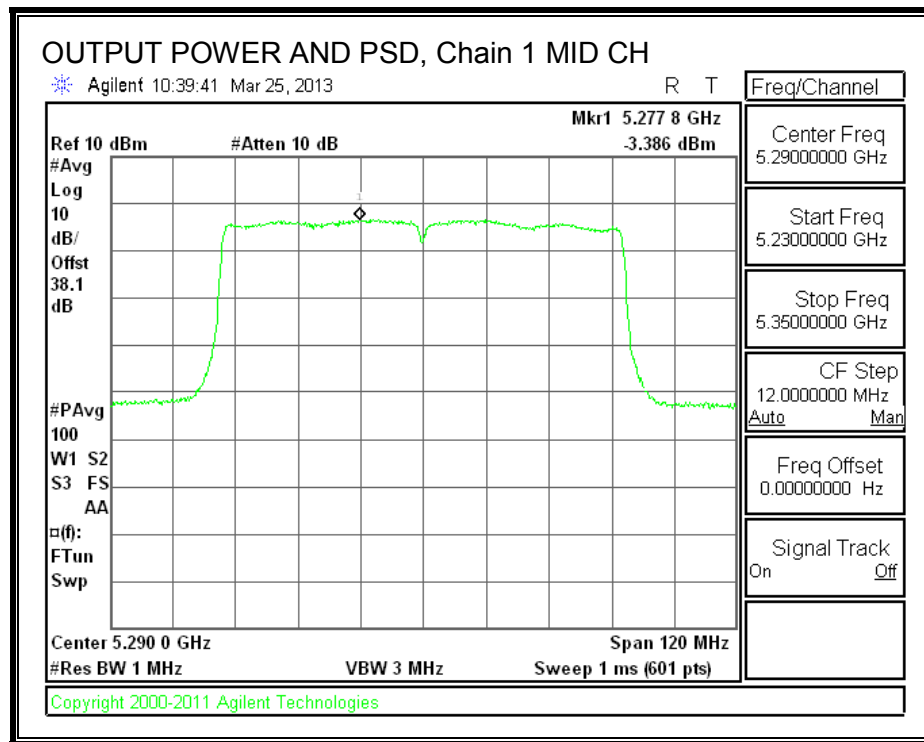
Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	13.50	13.50	24.00	-10.50

PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5290	-3.386	-3.286	11.00	-14.29

OUTPUT POWER AND PSD, Chain 1



8.36.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.37. 802.11ac VHT80 CDD 2TX MODE IN THE 5.3 GHz BAND

8.37.1. 26 dB BANDWIDTH

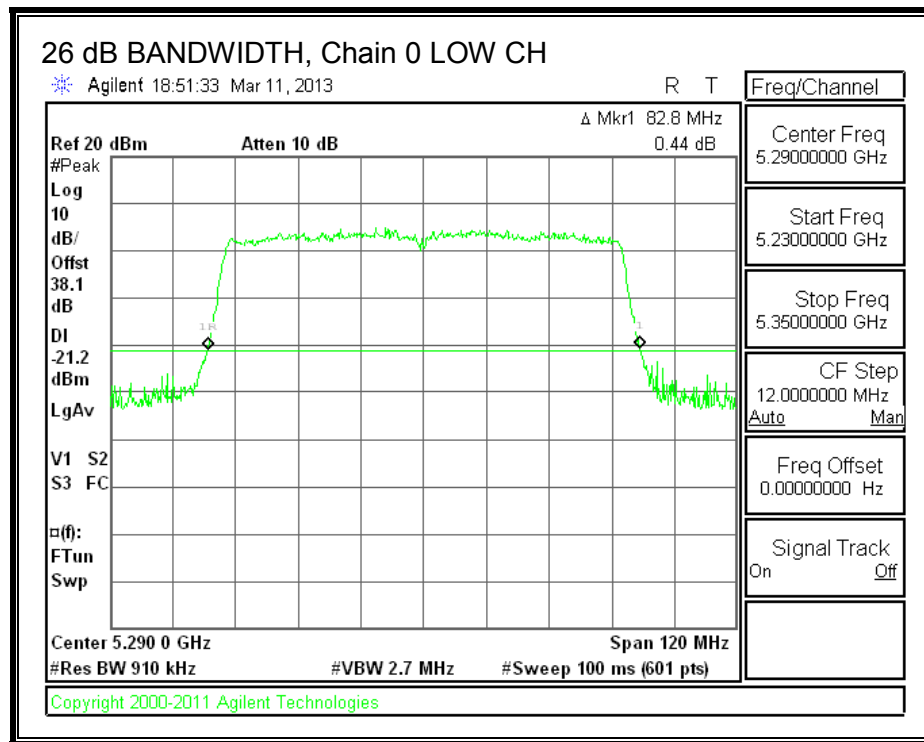
LIMITS

None; for reporting purposes only.

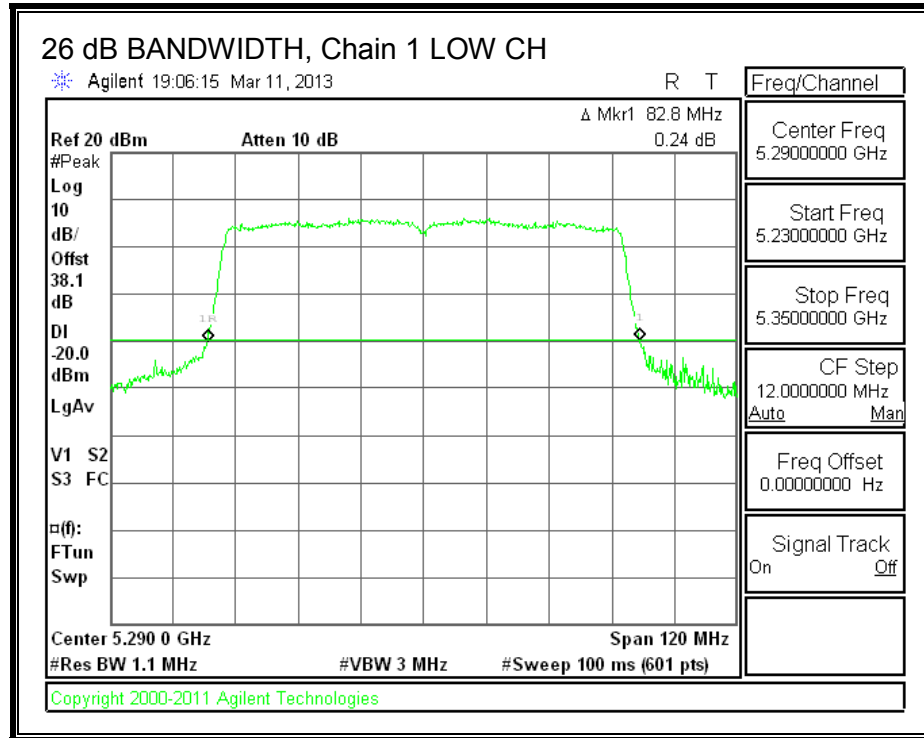
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Mid	5290	82.80	82.80

26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



8.37.2. 99% BANDWIDTH

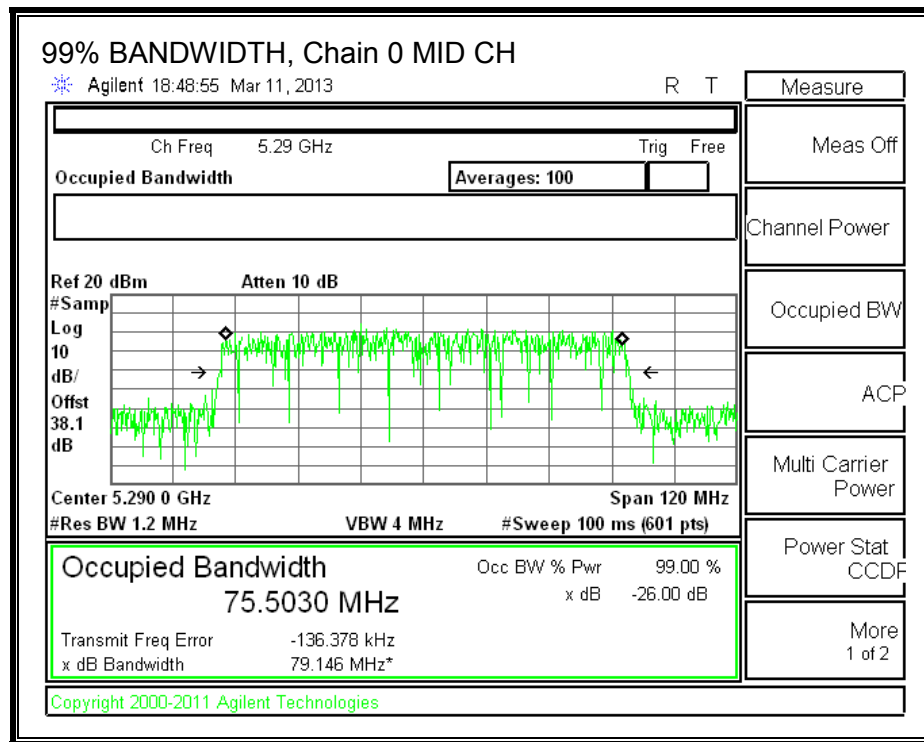
LIMITS

None; for reporting purposes only.

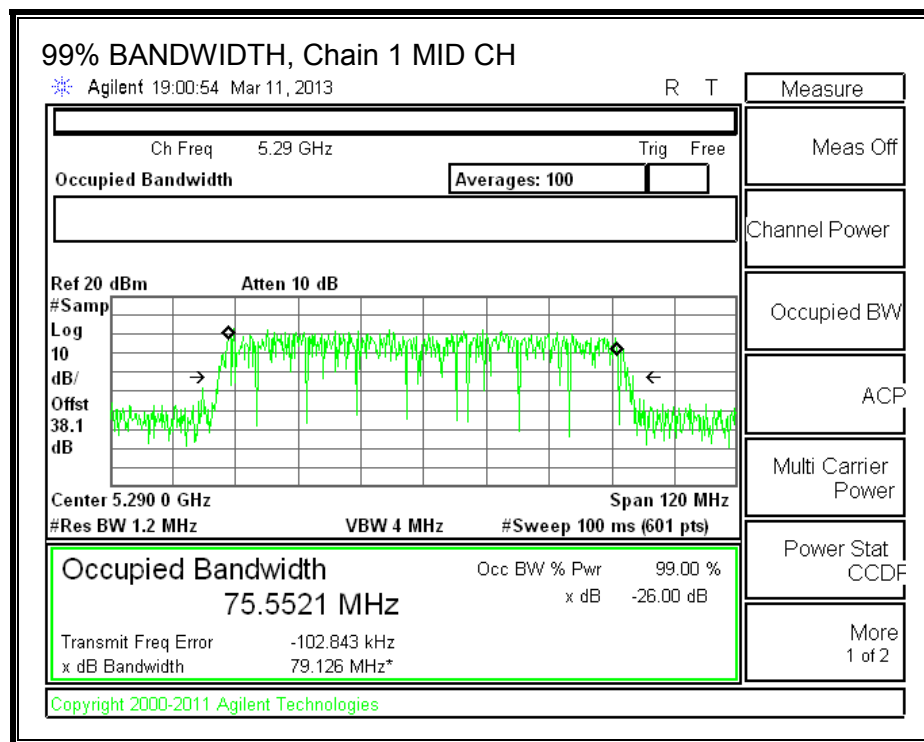
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Mid	5290	70.5030	75.5521

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



8.37.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or 4 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

For output power, the two chains are considered uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.40	2.30	2.88

For PSD, the two chains are considered correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.40	2.30	5.88

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)	Uncorrelated Directional Gain (dBi)
Mid	5290	82.80	70.5030	5.88	2.88

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5290	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.09	
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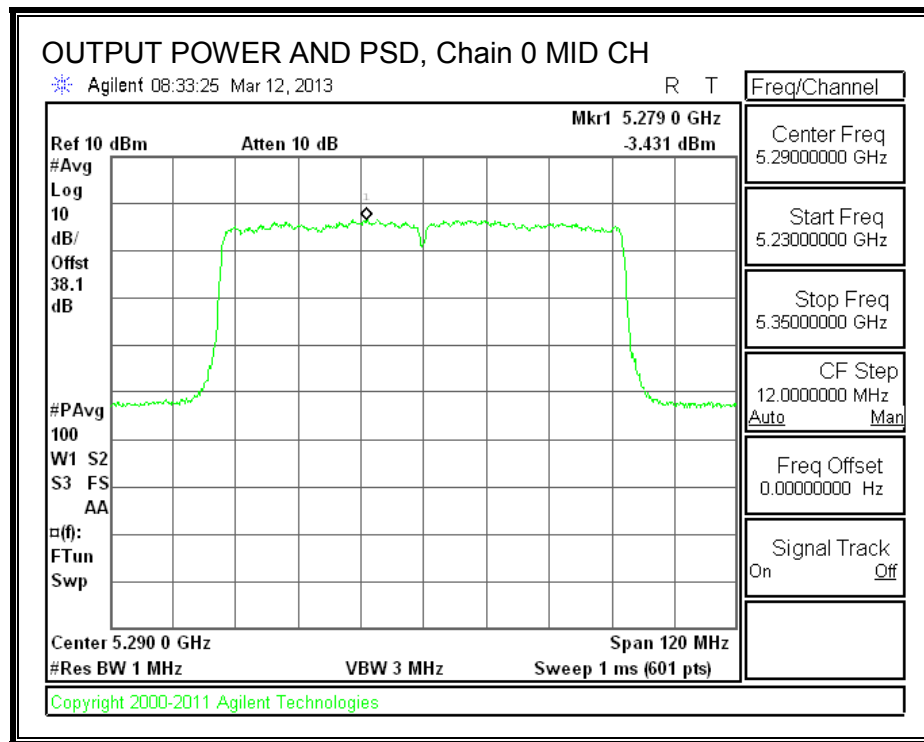
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	13.10	13.00	16.06	24.00	-7.94

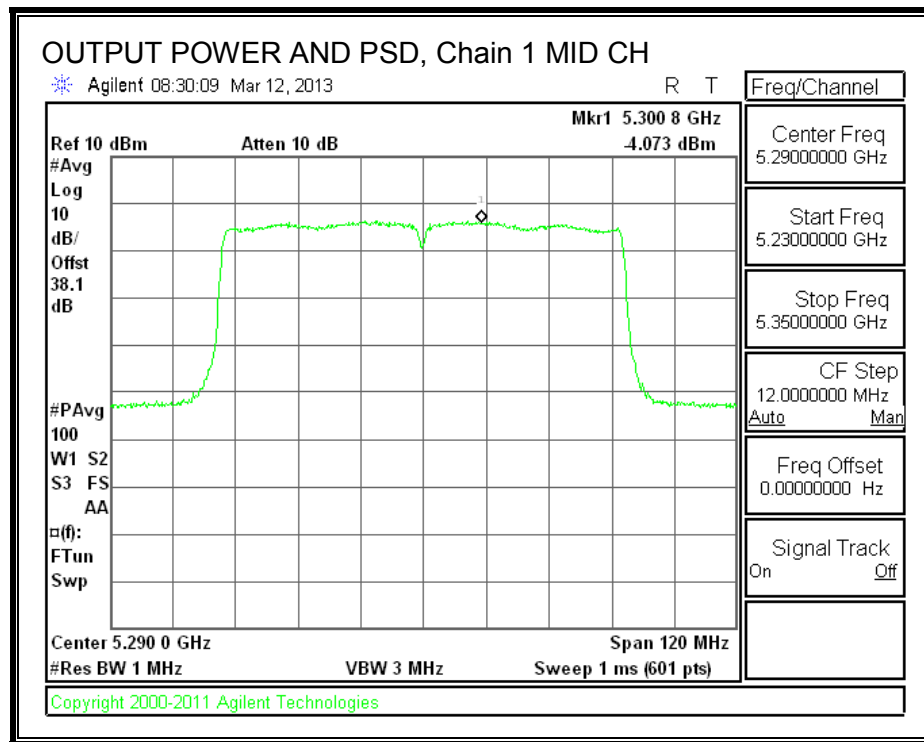
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5290	-3.431	-4.073	-0.64	11.00	-11.64

OUTPUT POWER AND PSD, Chain 0



OUTPUT POWER AND PSD, Chain 1



8.37.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.38. 802.11ac VHT80 BF 2TX MODE IN THE 5.3 GHz BAND

Covered by testing 11ac VHT80 CDD 2TX mode, the power per chain used for 11ac VHT80 CDD 2TX mode is the same power per chain that will be used for 11ac VHT80 BF 2TX mode. However, since BF is correlated and CDD is uncorrelated for output power, the section below for output power using correlated AG for this BF mode shows it is still compliant.

8.38.1. OUTPUT AVERAGE POWER

LIMITS

FCC §15.407 (a) (1)

For the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or $4 \text{ dBm} + 10 \log B$, where B is the 26-dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

For output power, the two chains are considered correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.40	2.30	5.88

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)
Mid	5290	82.80	70.5030	5.88

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Mid	5290	24.00	24.00	30.00	24.00

Duty Cycle CF (dB)	0.09	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	13.10	13.00	16.06	24.00	-7.94

8.39. 802.11ac VHT80 2TX STBC MODE IN THE 5.3 GHz BAND

Covered by testing 11ac VHT80 CDD 2TX mode, the power per chain used for 11ac VHT80 CDD 2TX mode is the same power per chain that will be used for 11ac VHT80 STBC 2TX mode.

8.40. 802.11n HT80 CDD 3TX MODE IN THE 5.3 GHz BAND

8.40.1. 26 dB BANDWIDTH

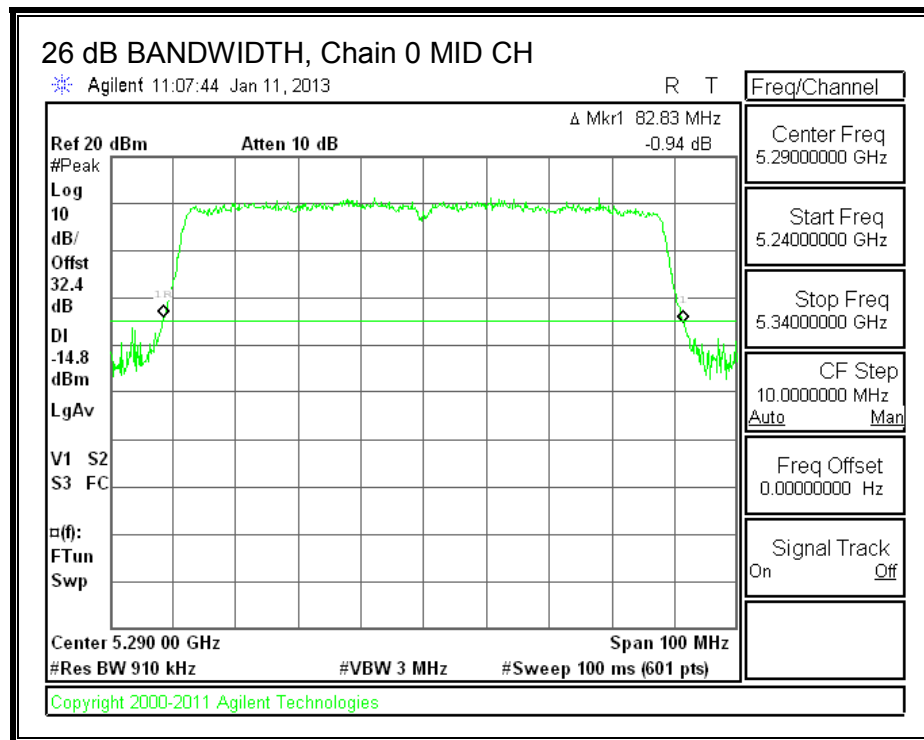
LIMITS

None; for reporting purposes only.

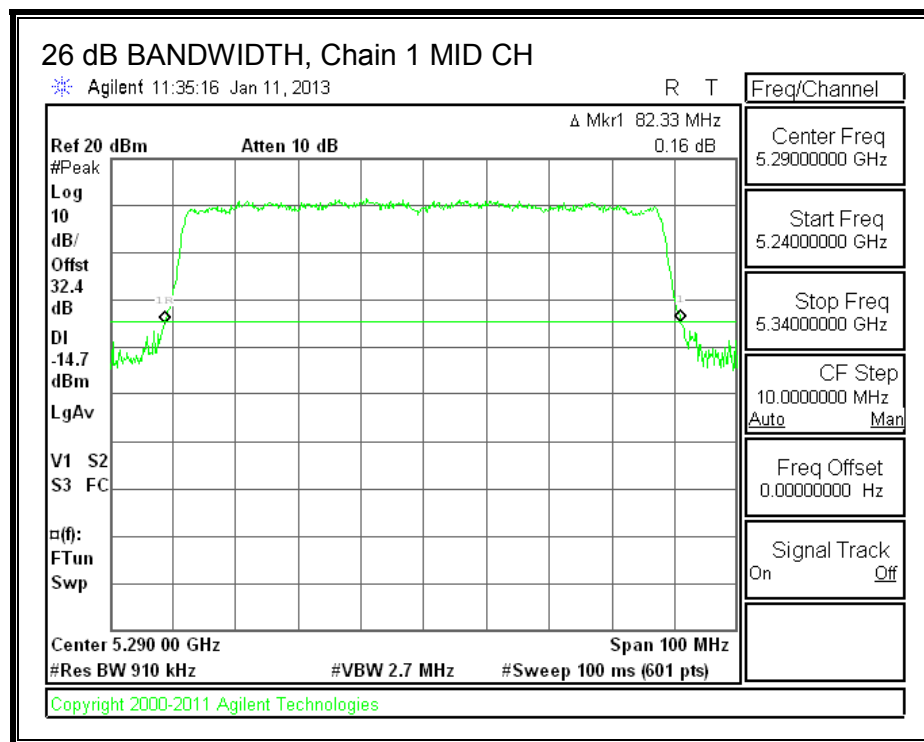
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Mid	5290	82.83	82.33	82.00

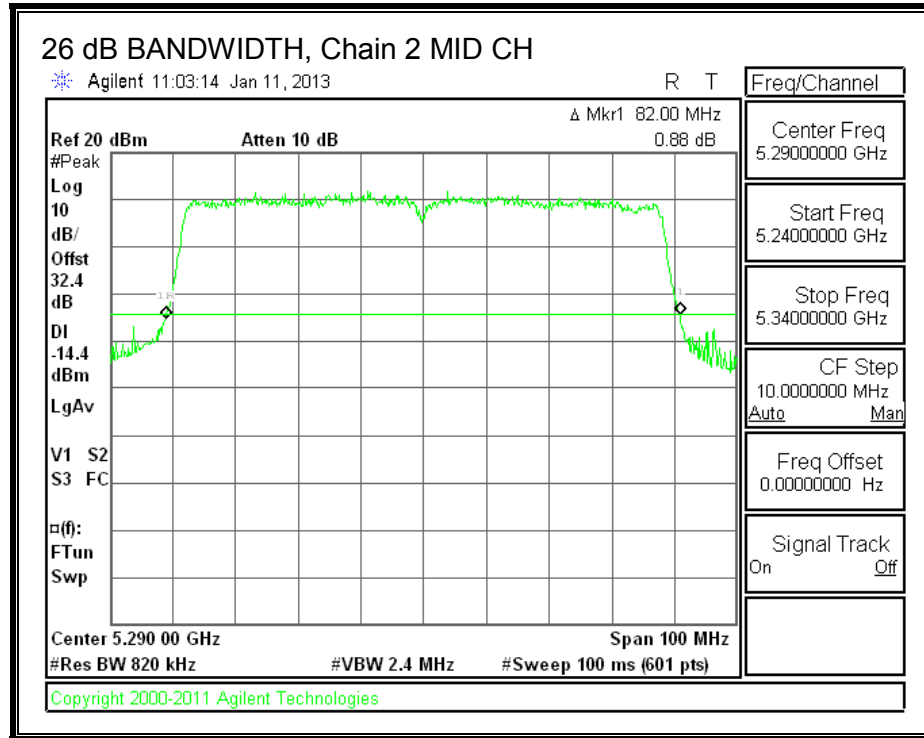
26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



8.40.2. 99% BANDWIDTH

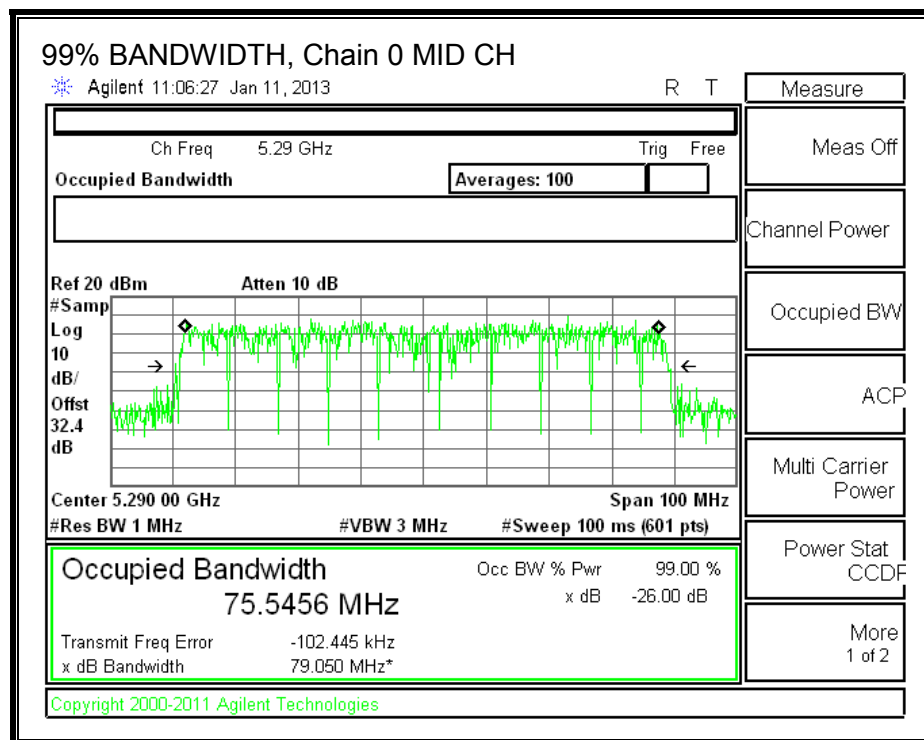
LIMITS

None; for reporting purposes only.

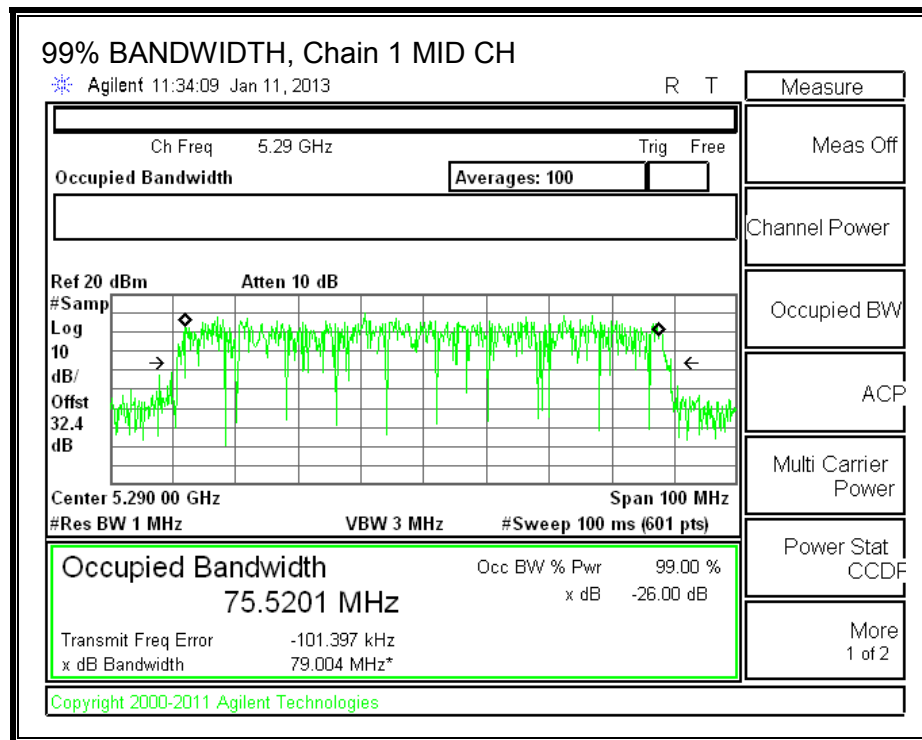
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Mid	5290	75.5456	75.5201	75.5049

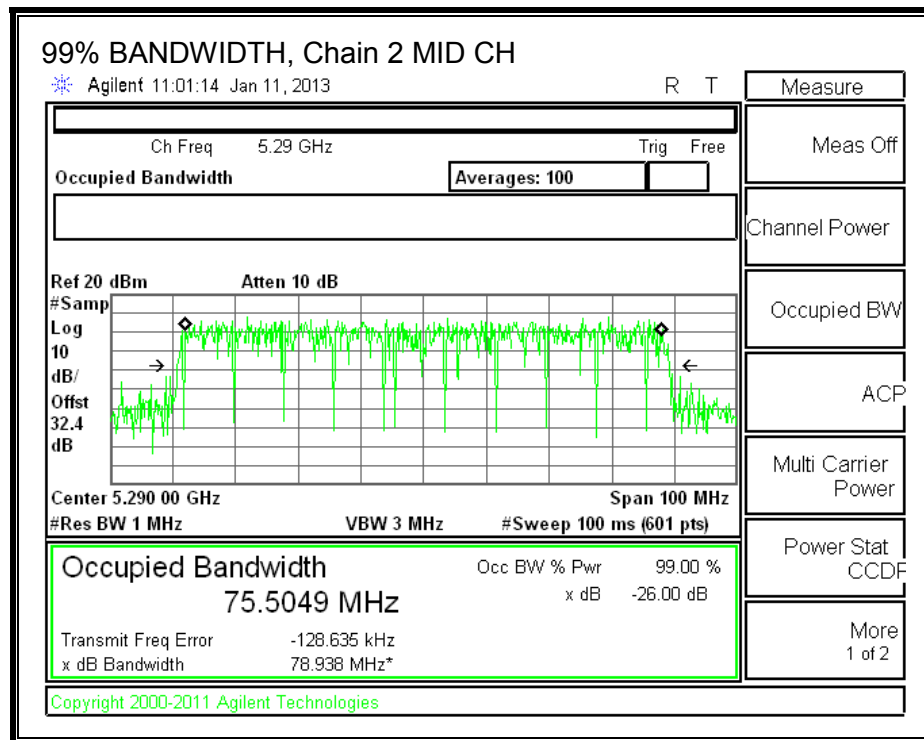
99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



99% BANDWIDTH, Chain 2



8.40.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or $4 \text{ dBm} + 10 \log B$, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.40	1.60	2.30	2.50

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.40	1.60	2.30	7.24

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)	Uncorrelated Directional Gain (dBi)
Mid	5290	82.00	75.5049	7.24	2.50

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5290	24.00	24.00	30.00	24.00	9.76	11.00	9.76

Duty Cycle CF (dB)	0.09
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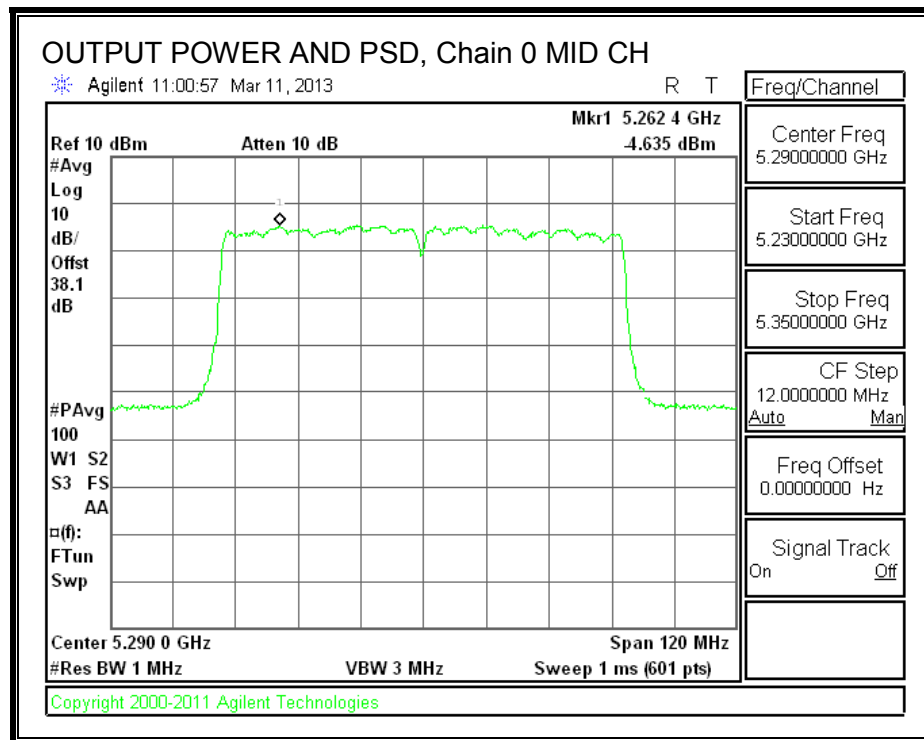
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	12.12	12.00	12.00	16.81	24.00	-7.19

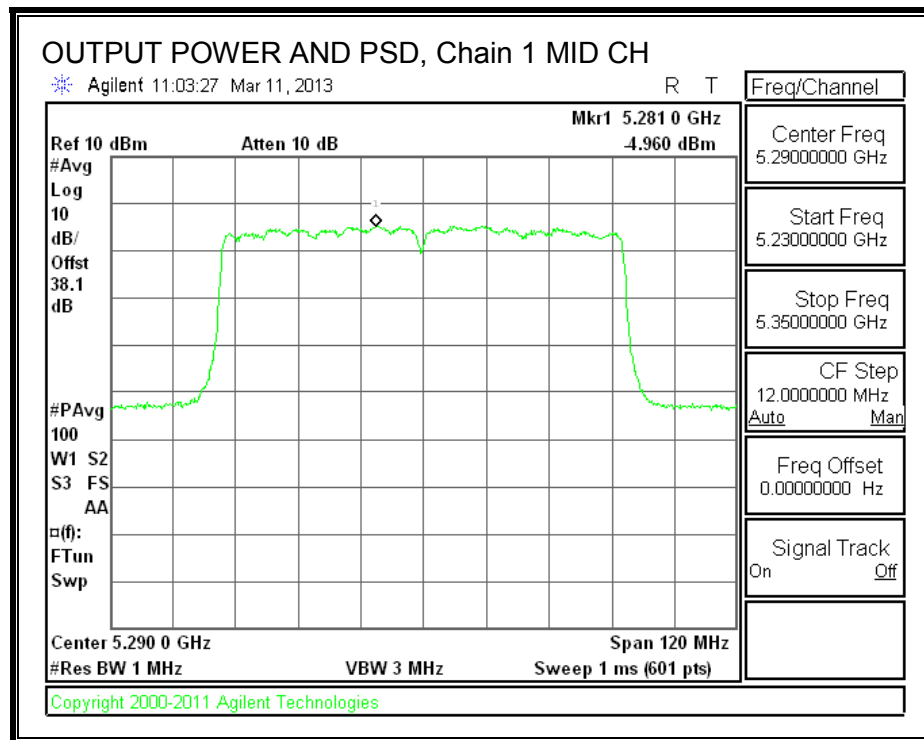
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5290	-4.635	-4.960	-4.906	0.03	9.76	-9.73

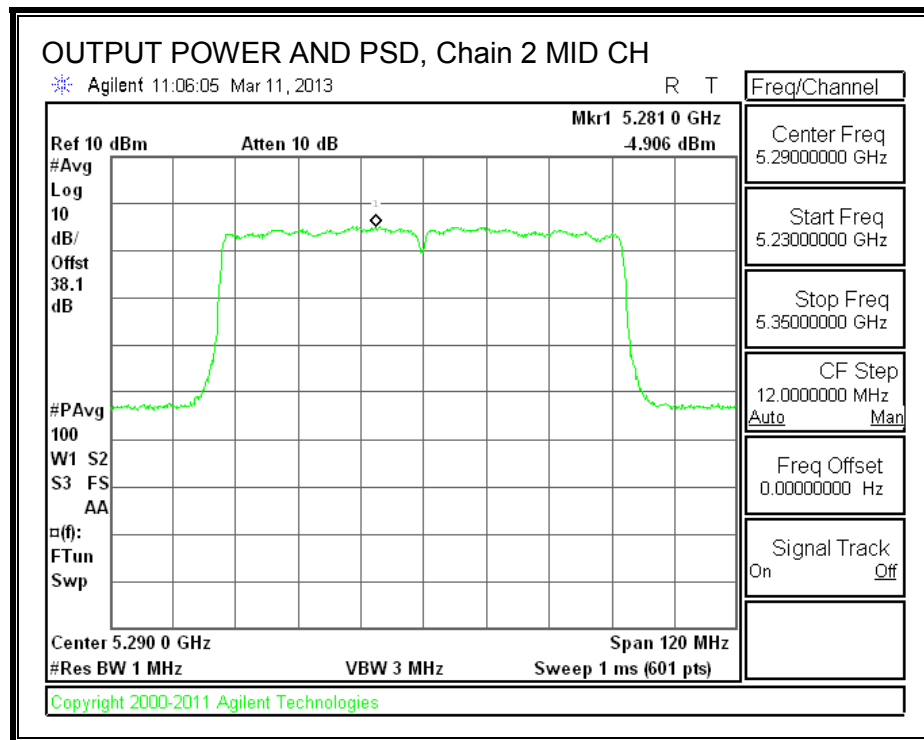
OUTPUT POWER AND PSD, Chain 0



OUTPUT POWER AND PSD, Chain 1



OUTPUT POWER AND PSD, Chain 2



8.40.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.41. 802.11n HT80 BF 3TX MODE IN THE 5.3 GHz BAND

Covered by testing 11ac VHT80 CDD 3TX mode, the power per chain used for 11ac VHT80 CDD 3TX mode is the same power per chain that will be used for 11ac VHT80 BF 3TX mode. However, since BF is correlated and CDD is uncorrelated for output power, the section below for output power using correlated AG for this BF mode shows it is still compliant.

8.41.1. OUTPUT AVERAGE POWER

LIMITS

FCC §15.407 (a) (1)

For the band 5.15–5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 50 mW or $4 \text{ dBm} + 10 \log B$, where B is the 26-dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.40	1.60	2.30	7.24

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)
Mid	5290	82.00	75.5049	7.24

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Mid	5290	22.76	24.00	30.00	22.76

Duty Cycle CF (dB)	0.09	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	12.12	12.00	12.00	16.81	22.76	-5.95

8.42. 802.11ac VHT80 3TX STBC MODE IN THE 5.3 GHz BAND

Covered by testing 11ac VHT80 CDD 3TX mode, the power per chain used for 11ac VHT80 CDD 3TX mode is the same power per chain that will be used for 11ac VHT80 STBC 3TX mode.

8.43. 802.11a 1TX MODE IN THE 5.6 GHz BAND

8.43.1. 26 dB BANDWIDTH

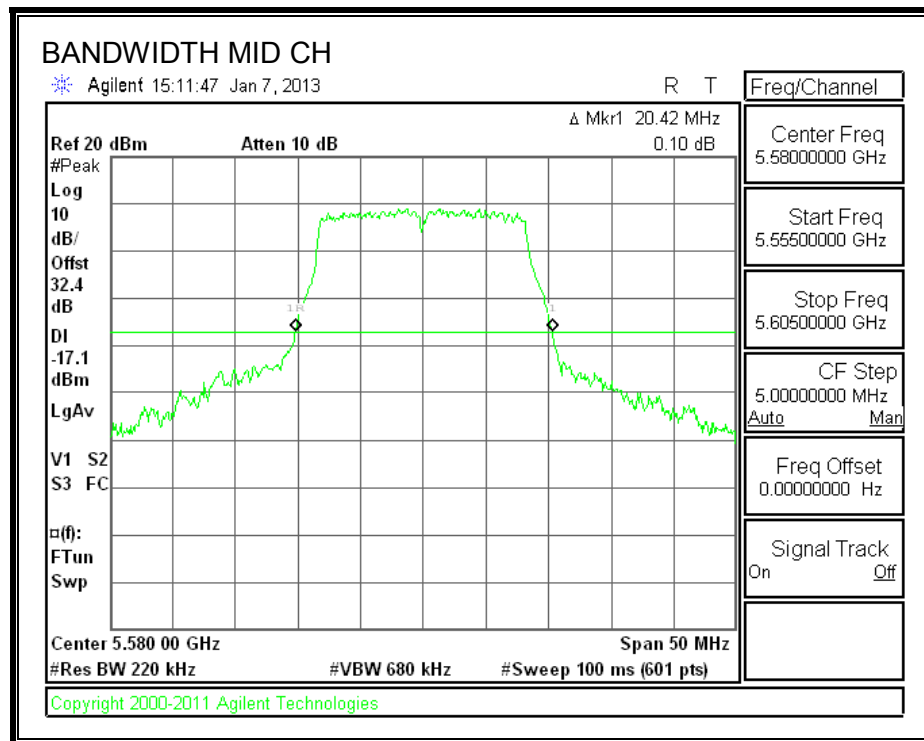
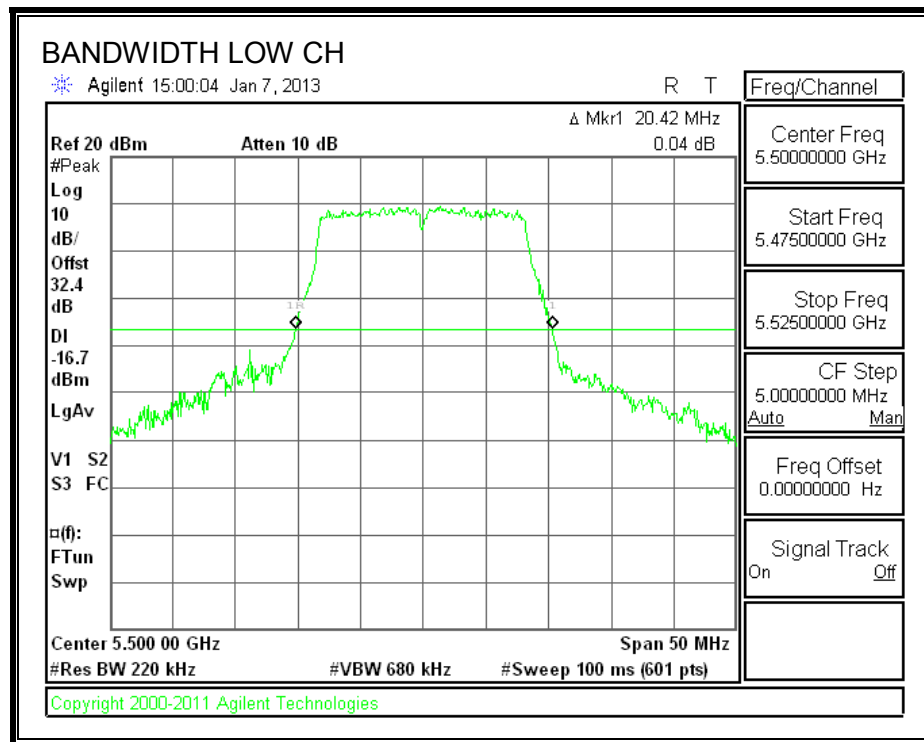
LIMITS

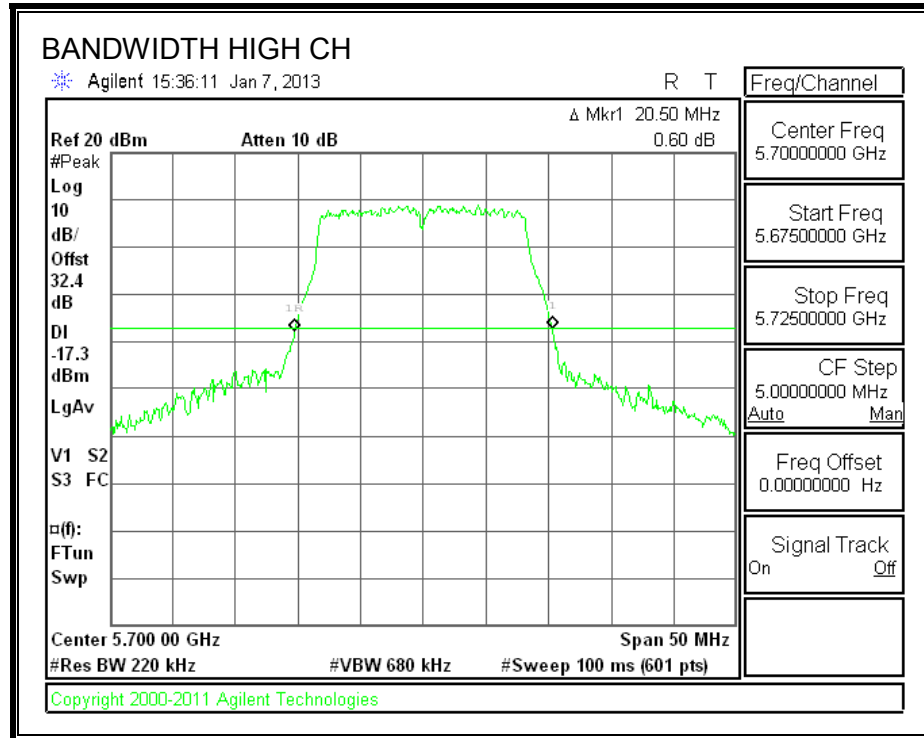
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	20.42
Mid	5580	20.42
High	5700	20.50

26 dB BANDWIDTH





8.43.2. 99% BANDWIDTH

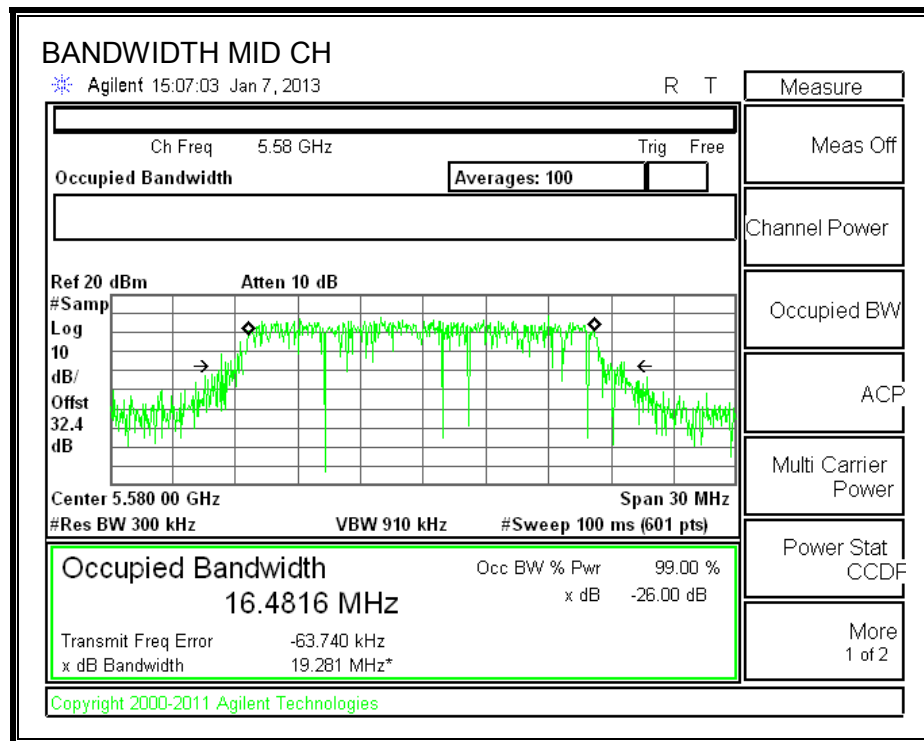
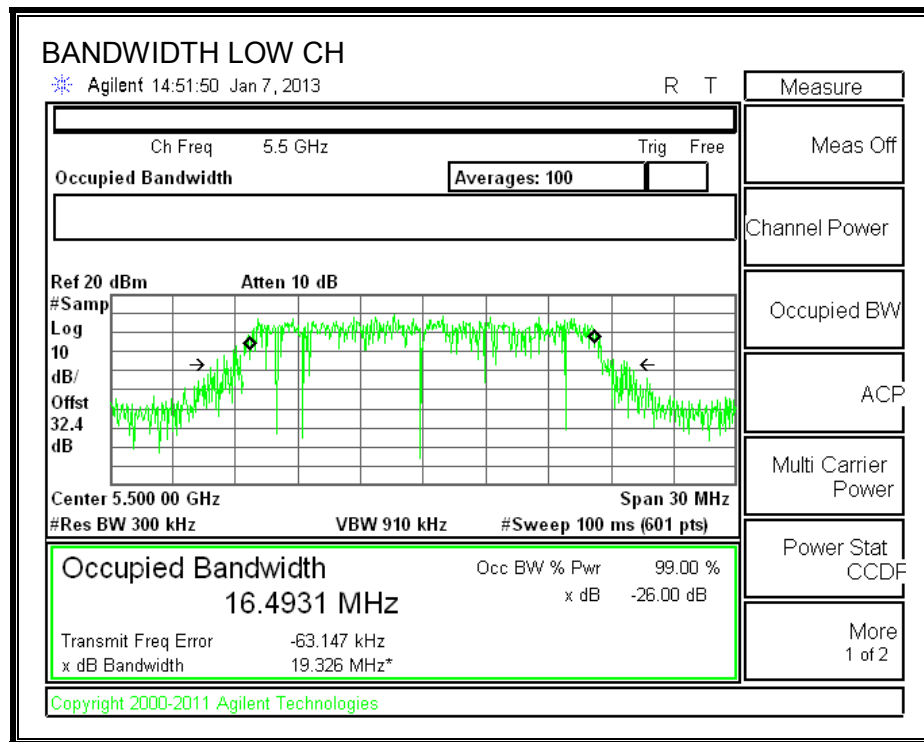
LIMITS

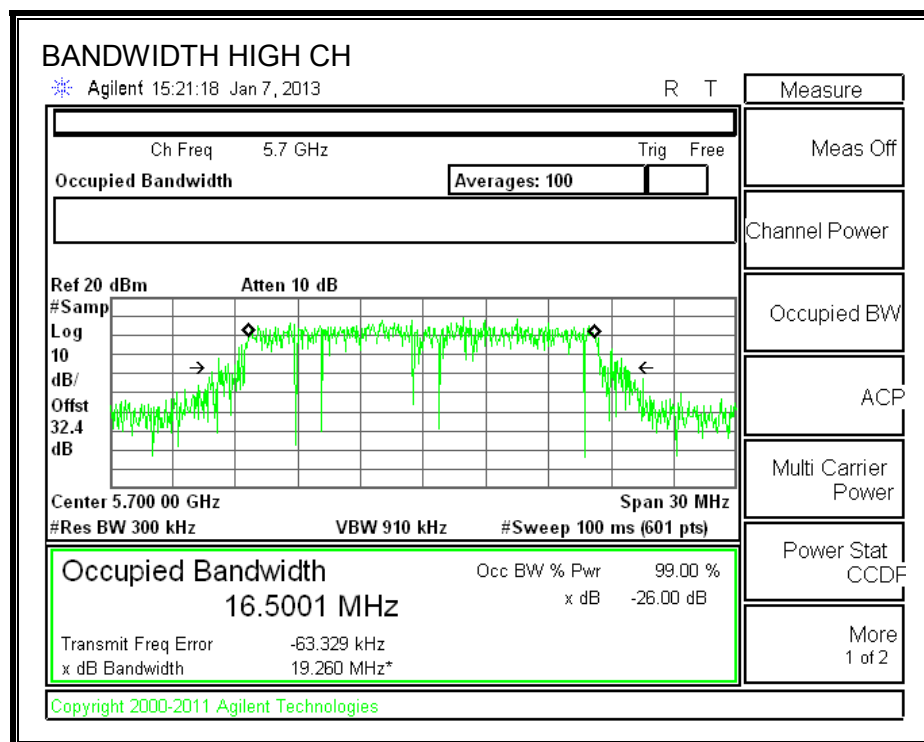
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	16.4931
Mid	5580	16.4816
High	5700	16.5001

99% BANDWIDTH





8.43.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	20.42	16.4931	3.80
Mid	5580	20.42	16.4816	3.80
High	5700	20.50	16.5001	3.80

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5500	24.00	23.17	29.17	23.17	11.00	11.00	11.00
Mid	5580	24.00	23.17	29.17	23.17	11.00	11.00	11.00
High	5700	24.00	23.17	29.17	23.17	11.00	11.00	11.00

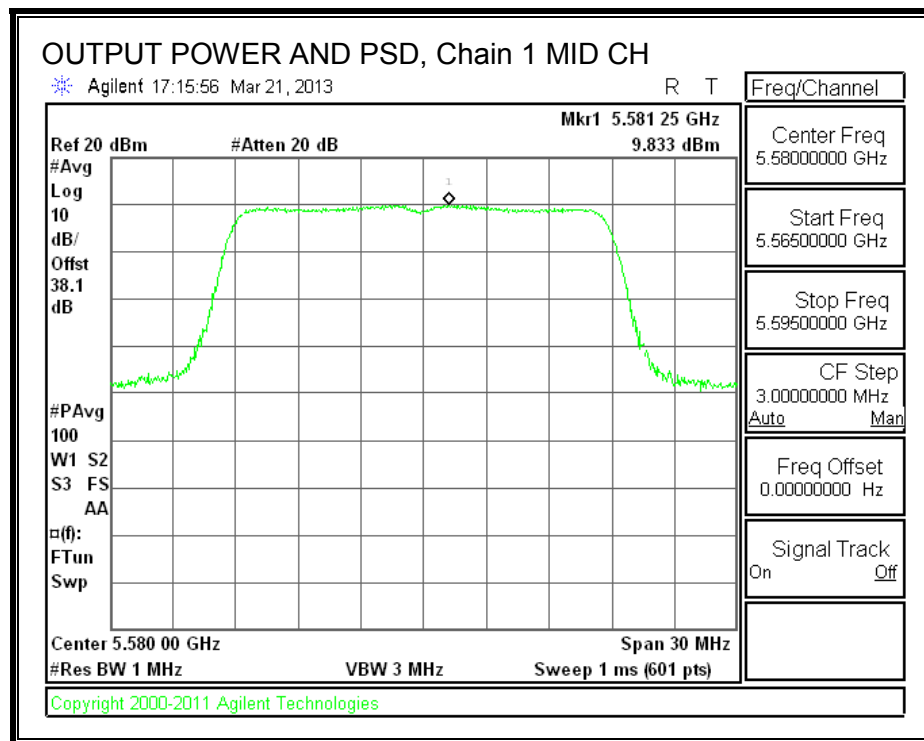
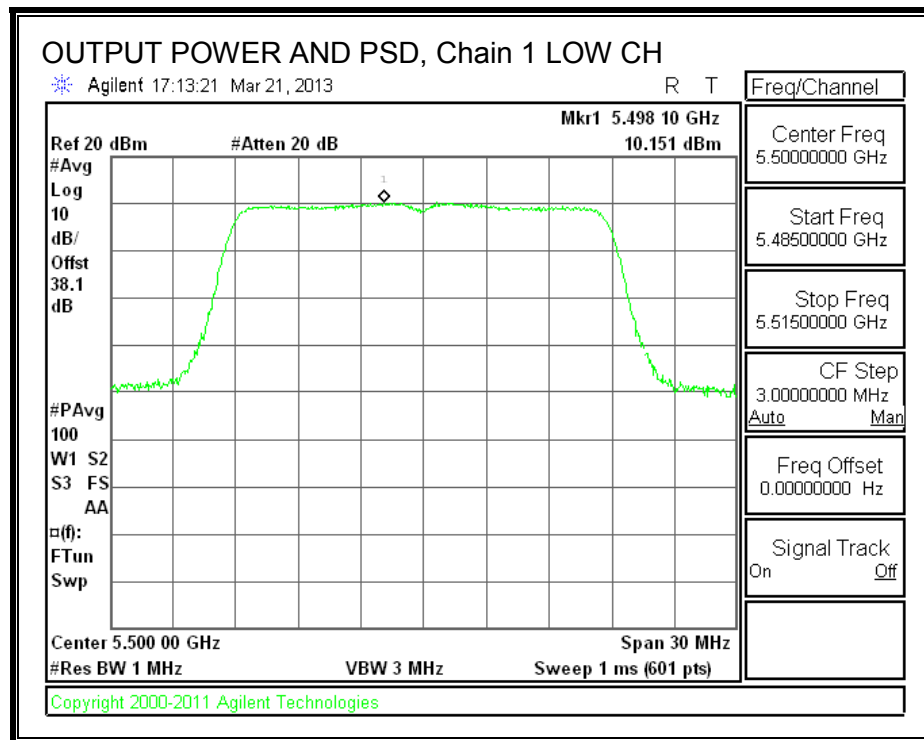
Output Power Results

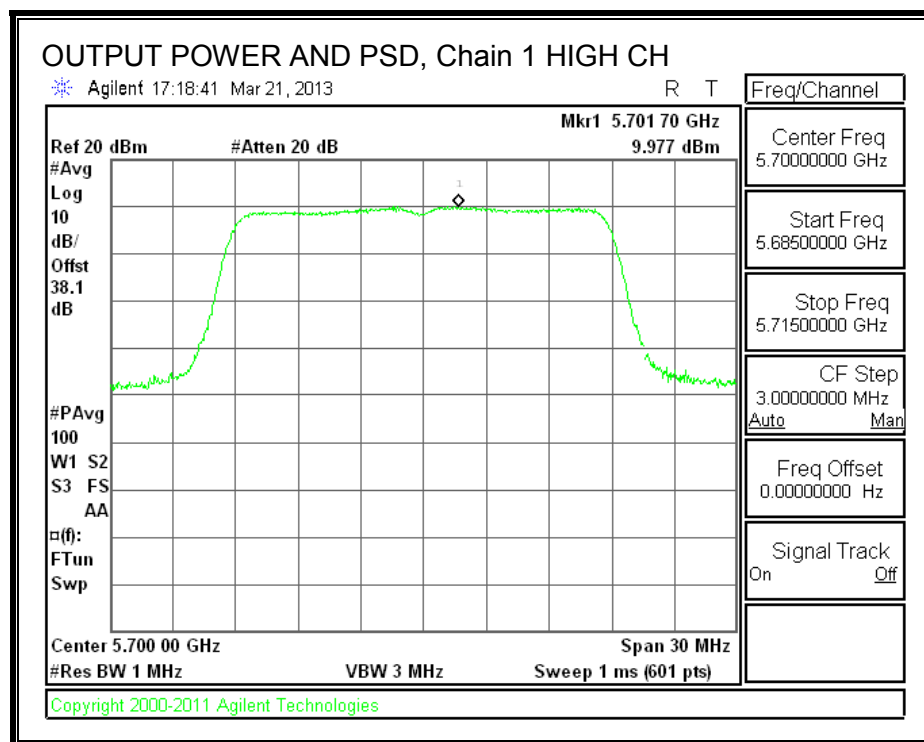
Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low 1	5500	15.00	15.00	23.17	-8.17
Low 2	5520	15.50	15.50	23.17	-7.67
Mid	5580	20.50	20.50	23.17	-2.67
High 2	5680	20.50	20.50	23.17	-2.67
High 1	5700	19.00	19.00	23.17	-4.17

PPSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	10.151	10.151	11.00	-0.85
Mid	5580	9.833	9.833	11.00	-1.17
High	5700	9.977	9.977	11.00	-1.02

OUTPUT POWER AND PSD, Chain 1





8.43.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.44. 802.11n HT20 CDD 2TX MODE IN THE 5.6 GHz BAND

8.44.1. 26 dB BANDWIDTH

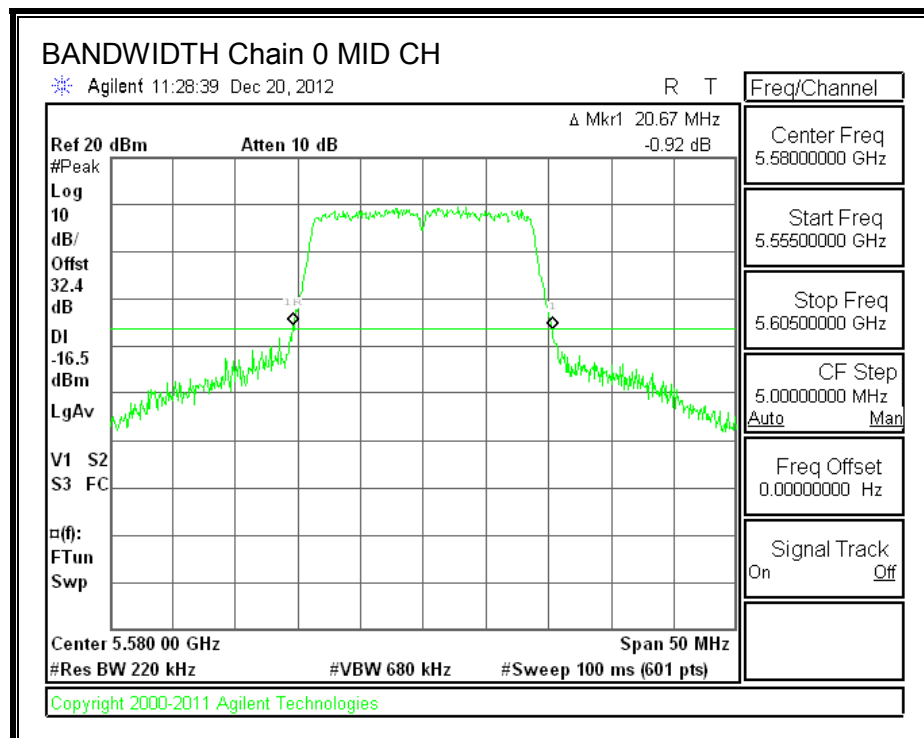
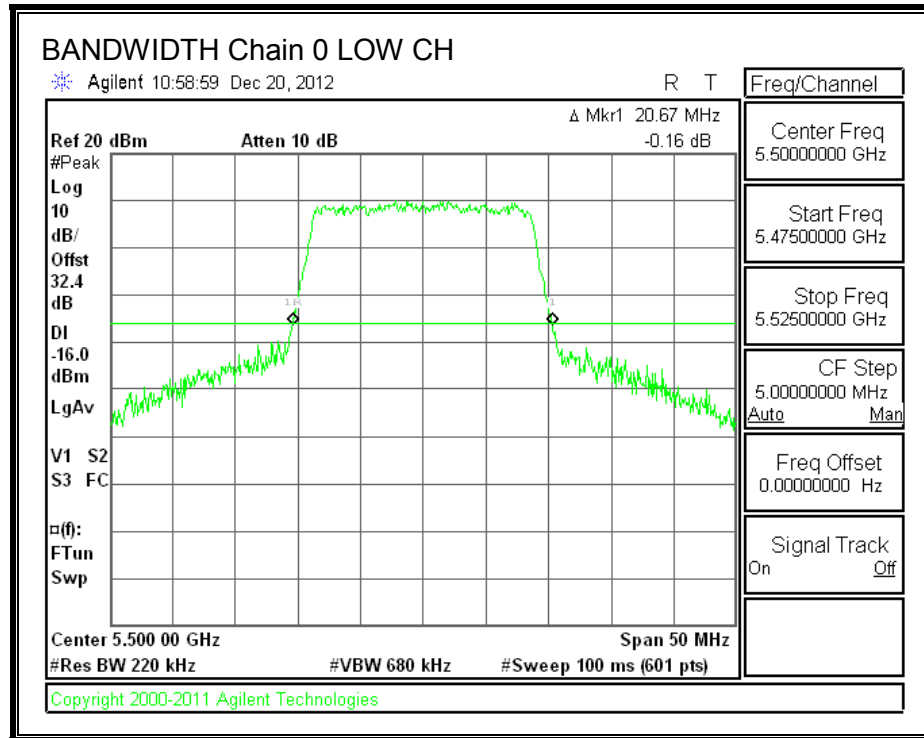
LIMITS

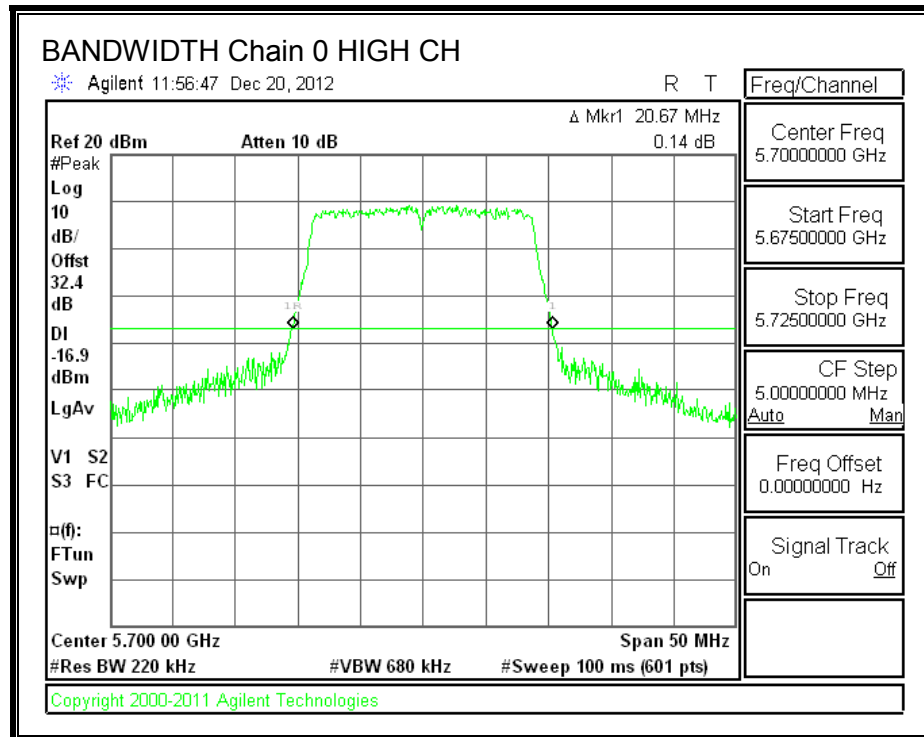
None; for reporting purposes only.

RESULTS

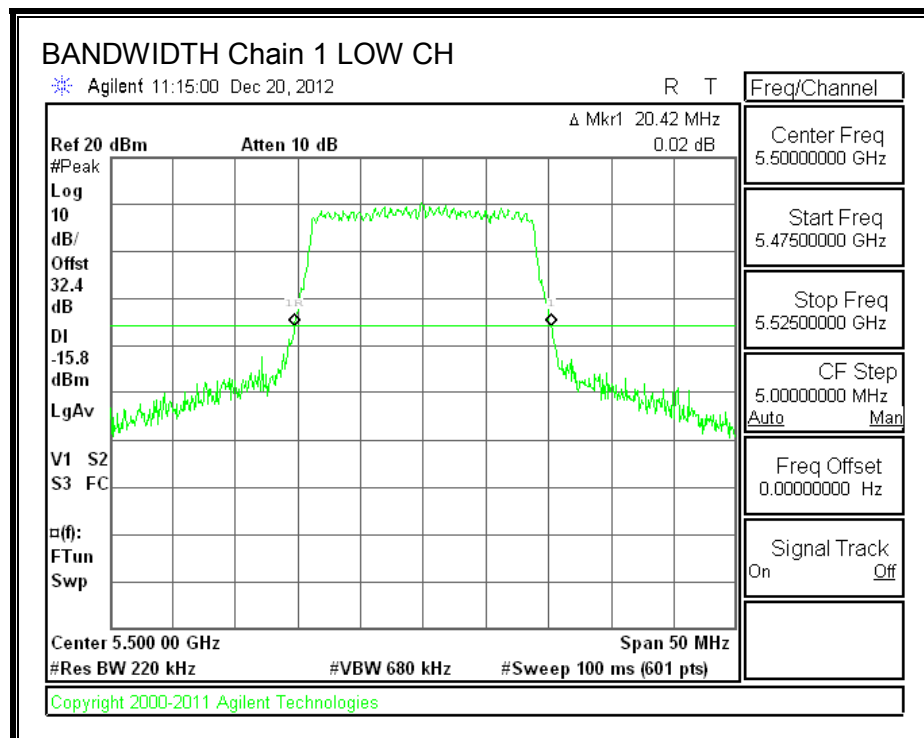
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5500	20.67	20.42
Mid	5580	20.67	20.50
High	5700	20.67	20.58

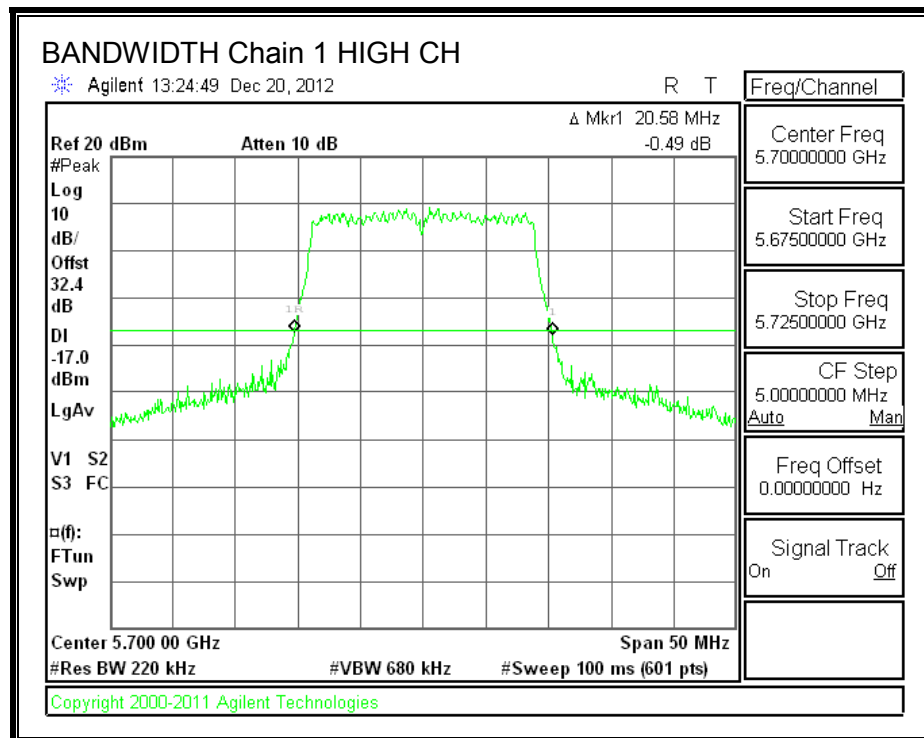
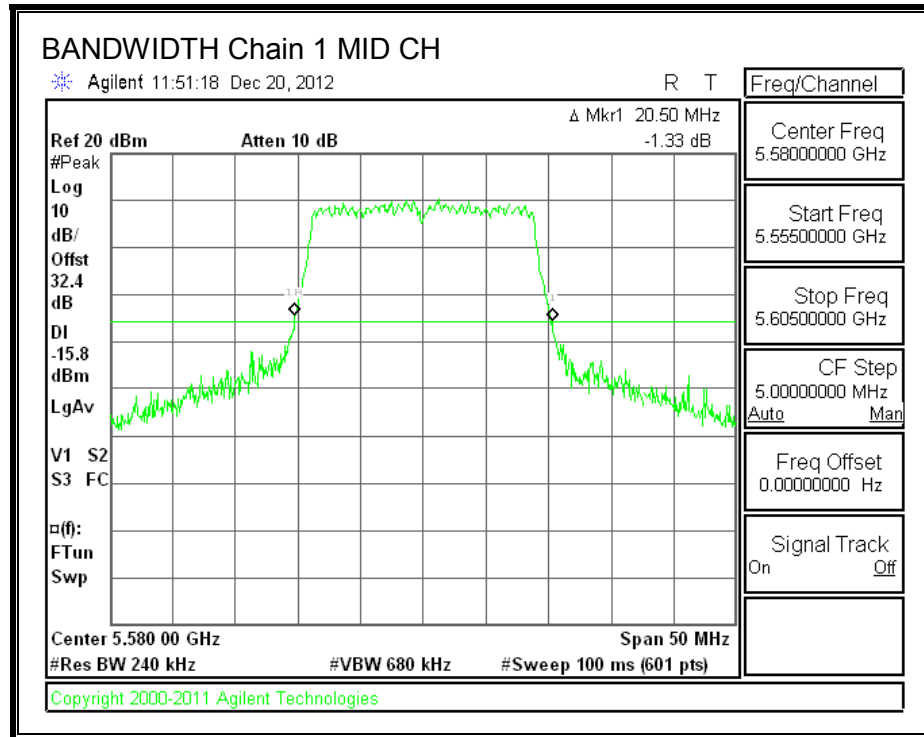
26 dB BANDWIDTH, Chain 0





26 dB BANDWIDTH, Chain 1





8.44.2. 99% BANDWIDTH

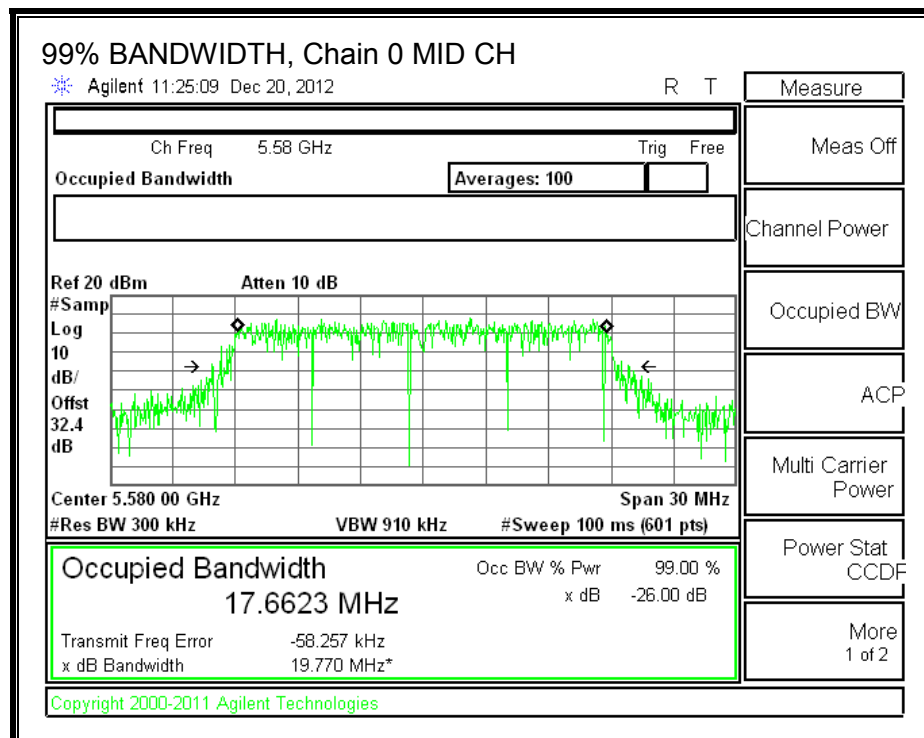
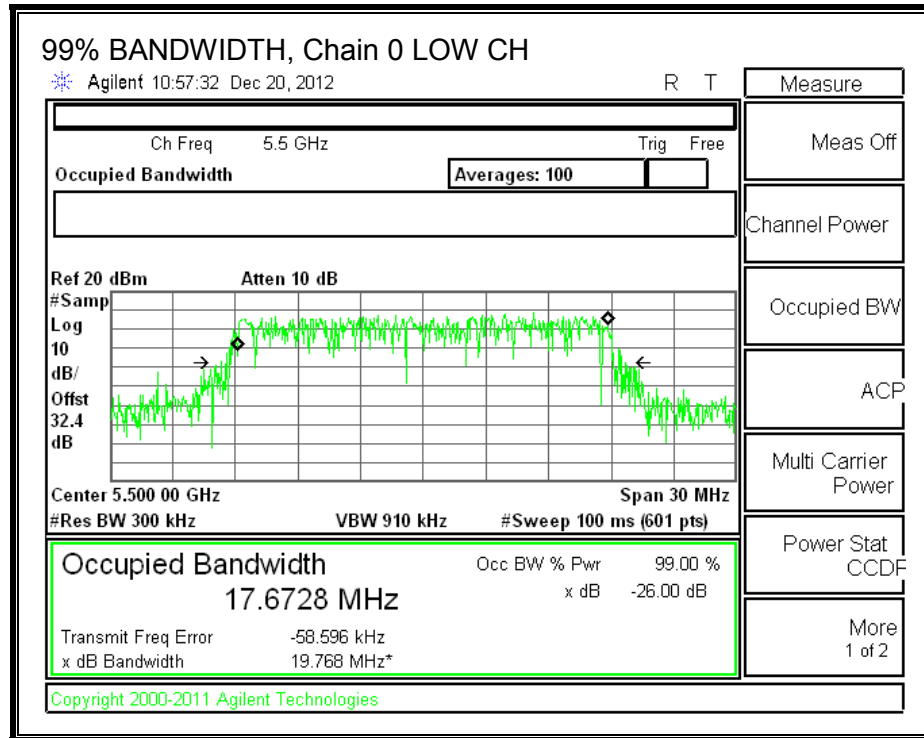
LIMITS

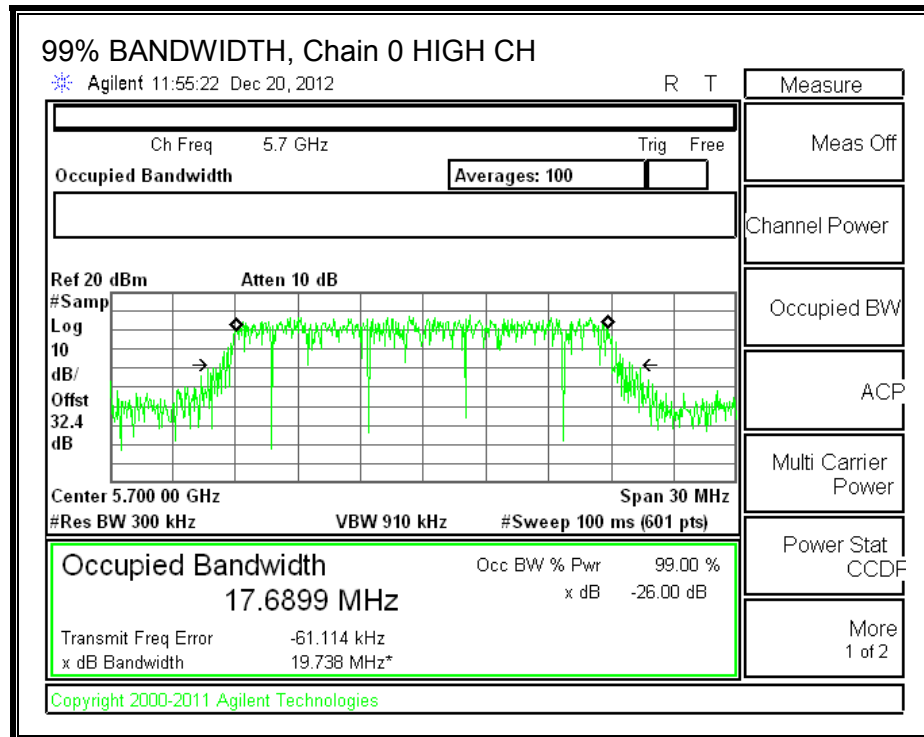
None; for reporting purposes only.

RESULTS

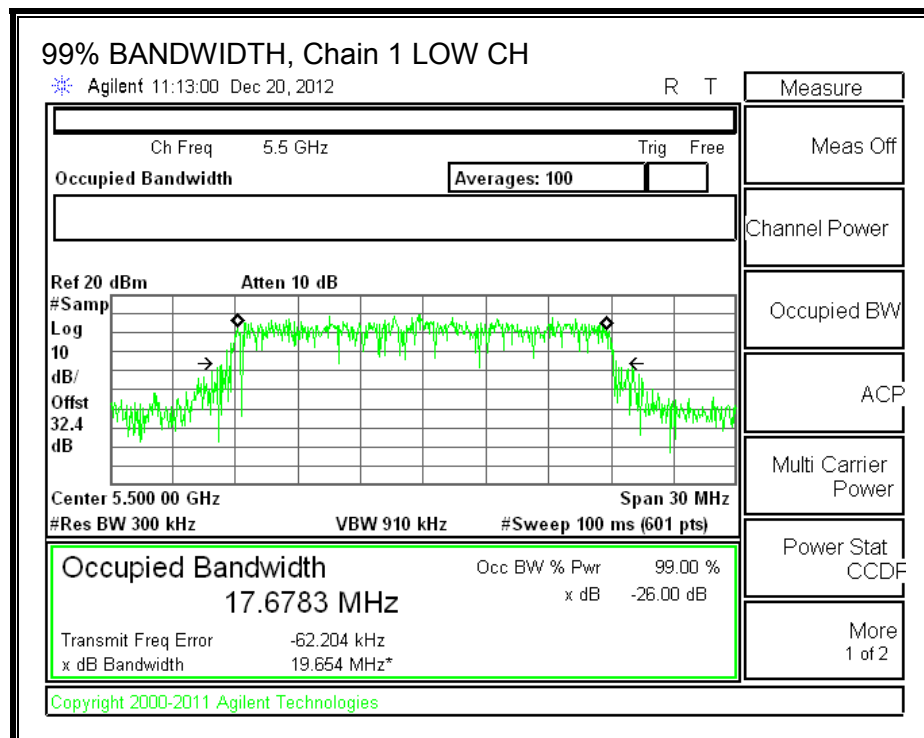
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5500	17.6728	17.6783
Mid	5580	17.6623	17.7147
High	5700	17.6899	17.7074

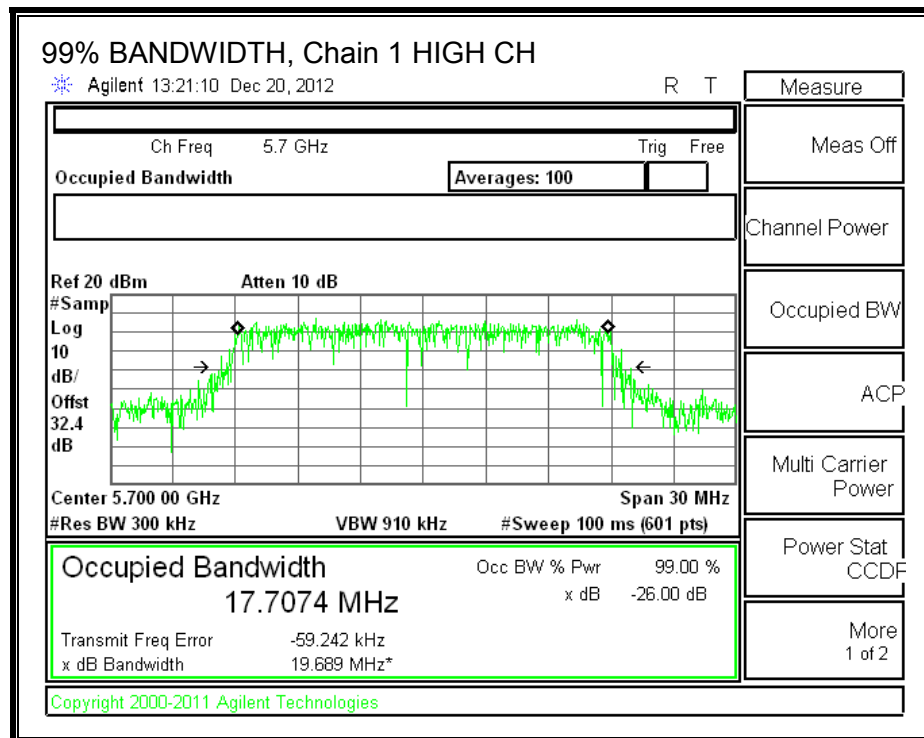
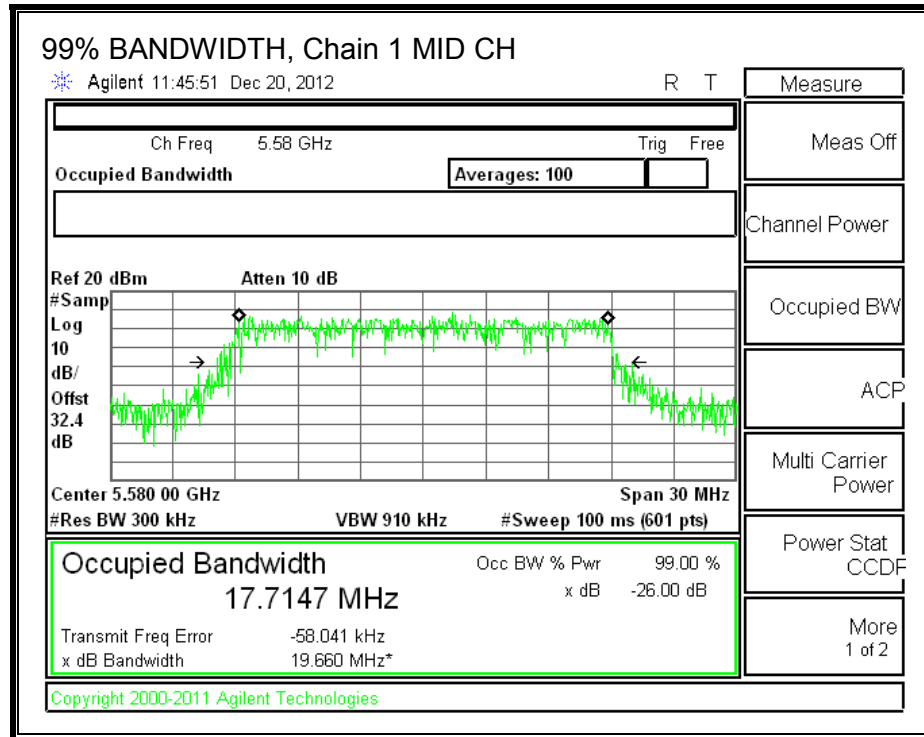
99% BANDWIDTH, Chain 0





99% BANDWIDTH, Chain 1





8.44.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

For output power, the two chains are considered uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	3.80	3.42

For PSD, the two chains are considered correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	3.80	6.42

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)	Uncorrelated Directional Gain (dBi)
Low	5500	20.42	17.6728	6.42	3.42
Mid	5580	20.50	17.6623	6.42	3.42
High	5700	20.58	17.6899	6.42	3.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5500	24.00	23.47	29.47	23.47	10.58	11.00	10.58
Mid	5580	24.00	23.47	29.47	23.47	10.58	11.00	10.58
High	5700	24.00	23.48	29.48	23.48	10.58	11.00	10.58

Duty Cycle CF (dB)	0.00
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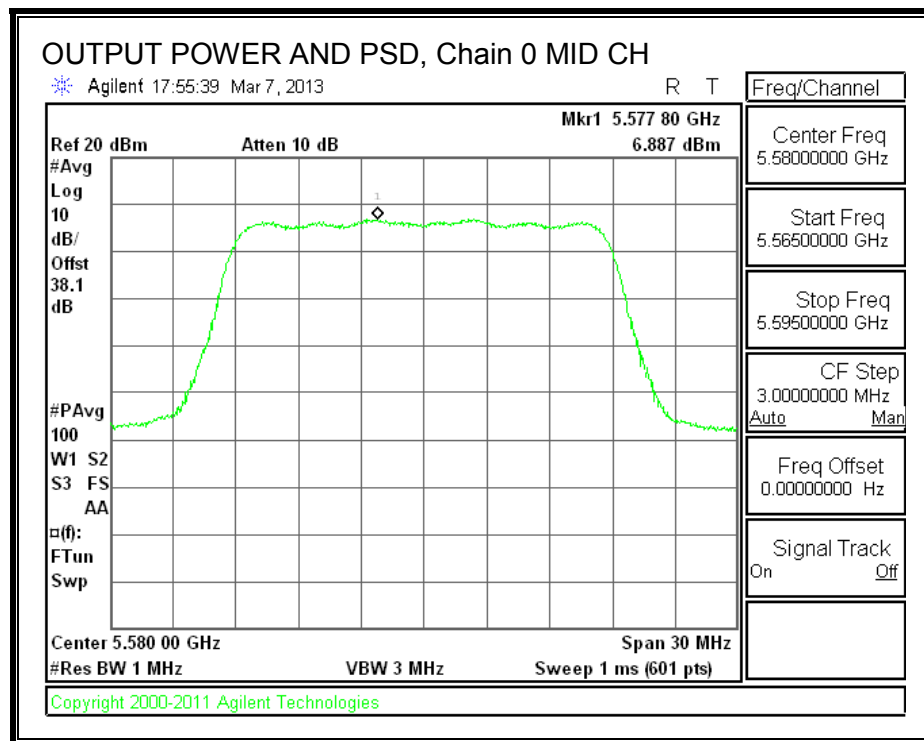
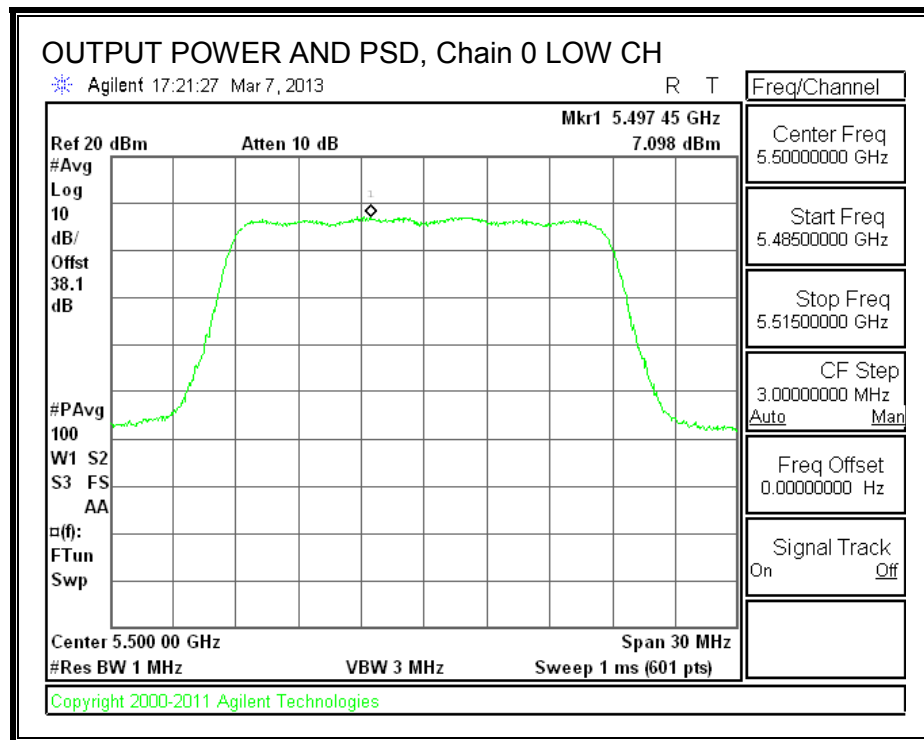
Output Power Results

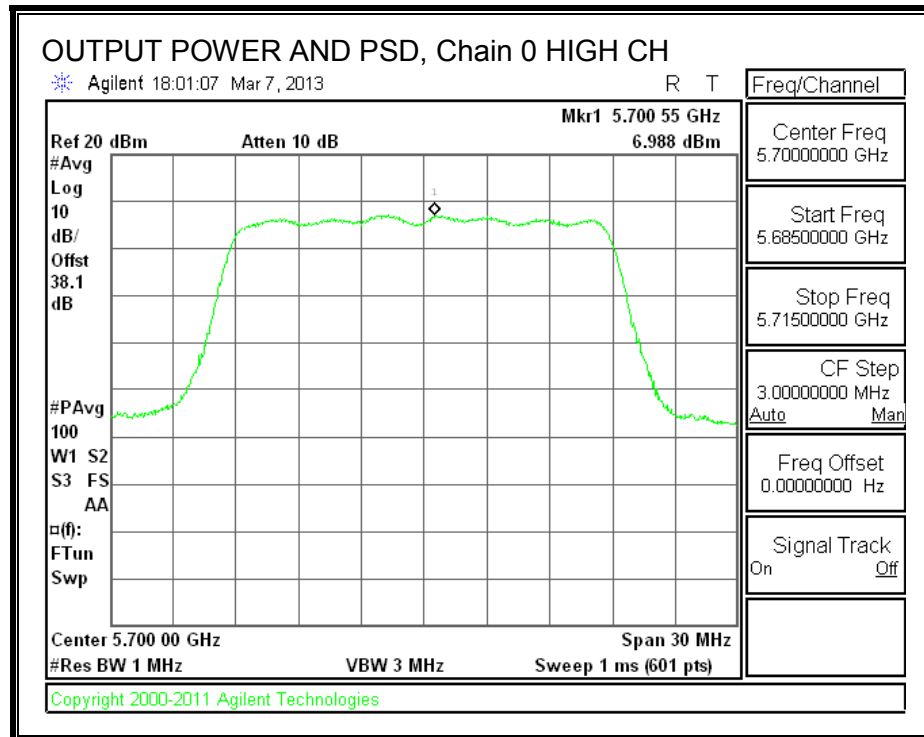
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low 1	5500	14.00	14.20	17.11	23.47	-6.36
Low 2	5520	14.50	14.50	17.51	23.47	-5.96
Mid	5580	16.60	16.50	19.56	23.47	-3.91
High 2	5680	16.70	16.60	19.66	23.47	-3.81
High 1	5700	16.70	16.60	19.66	23.48	-3.82

PSD Results

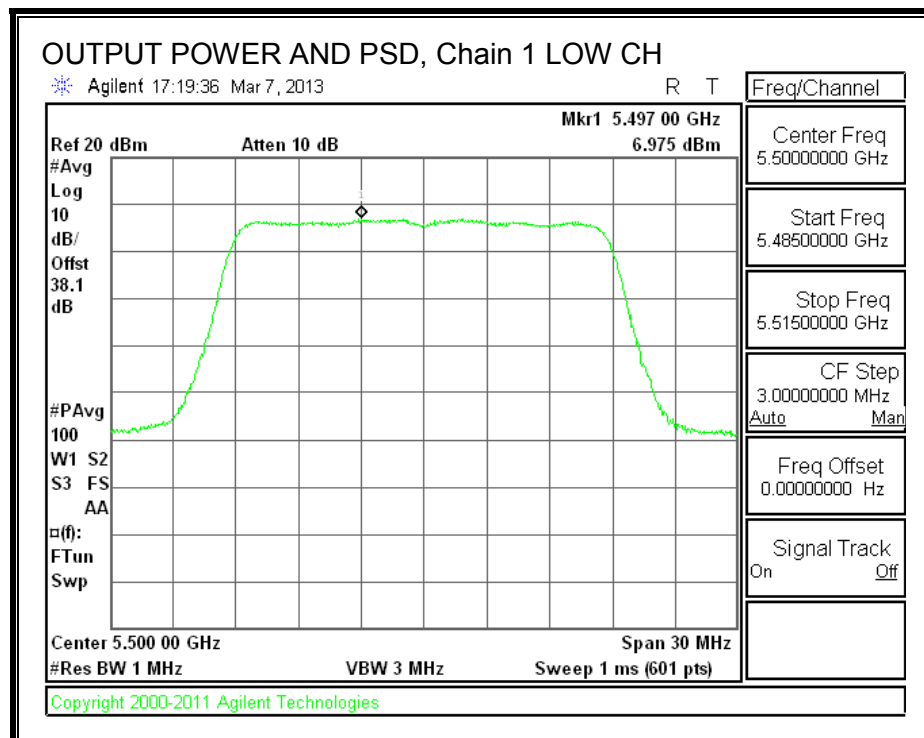
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	7.098	6.975	10.05	10.58	-0.53
Mid	5580	6.887	6.872	9.89	10.58	-0.69
High	5700	6.988	7.634	10.33	10.58	-0.25

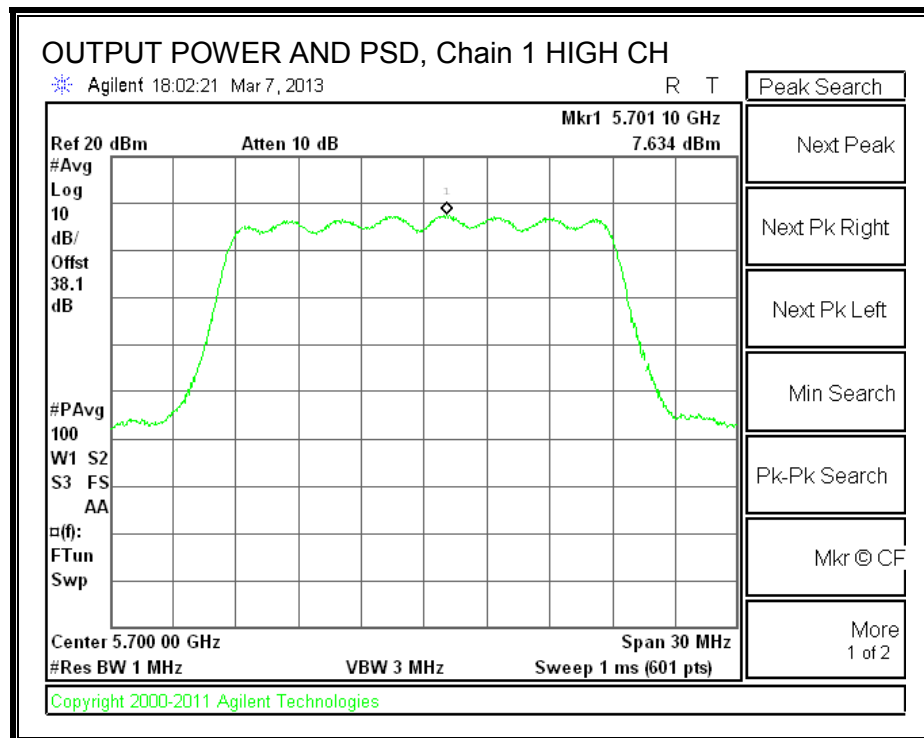
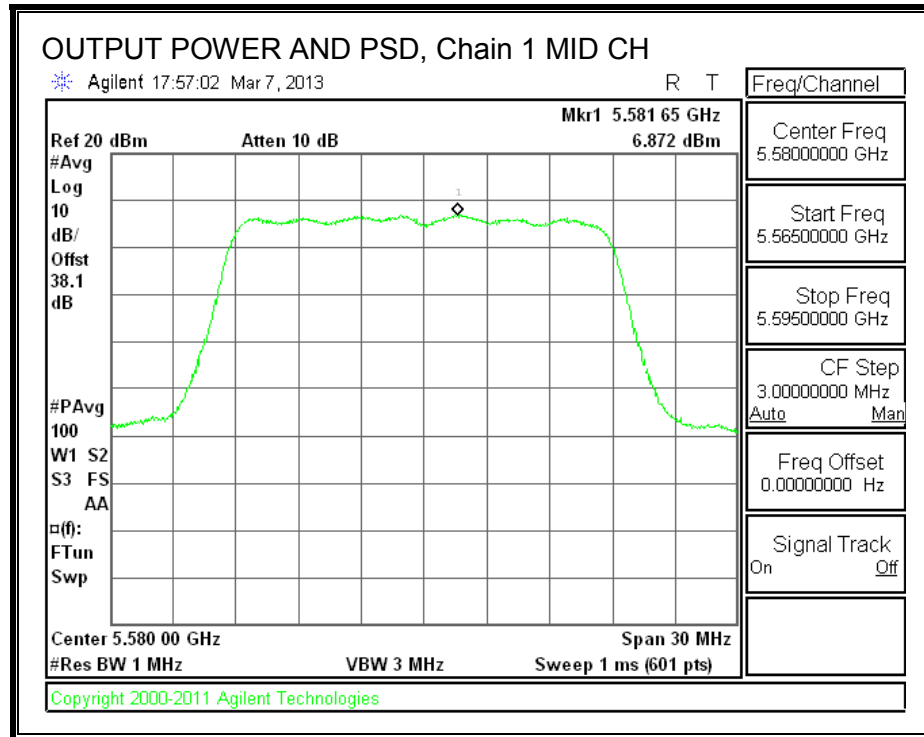
OUTPUT POWER AND PSD, Chain 0





OUTPUT POWER AND PSD, Chain 1





8.44.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.45. 802.11n HT20 BF 2TX MODE IN THE 5.6 GHz BAND

Covered by testing HT20 CDD 2TX mode, the power per chain used for HT20 CDD 2TX mode is the same power per chain that will be used for HT20 BF 2TX mode. However, since BF is correlated and CDD is uncorrelated for output power, the section below for output power using correlated AG for this BF mode shows it is still compliant.

8.45.1. OUTPUT AVERAGE POWER

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

For output power, the two chains are considered correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	3.80	6.42

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)
Low	5500	20.42	17.6728	6.42
Mid	5580	20.50	17.6623	6.42
High	5700	20.58	17.6899	6.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Low	5500	23.58	23.47	29.47	23.05
Mid	5580	23.58	23.47	29.47	23.05
High	5700	23.58	23.48	29.48	23.06

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low 1	5500	14.00	14.20	17.11	23.05	-5.94
Low 2	5520	14.50	14.50	17.51	23.05	-5.54
Mid	5580	16.60	16.50	19.56	23.05	-3.49
High 2	5680	16.70	16.60	19.66	23.05	-3.39
High 1	5700	16.70	16.60	19.66	23.06	-3.40

8.46. 802.11n HT20 STBC 2TX MODE IN THE 5.6 GHz BAND

8.46.1. 26 dB BANDWIDTH

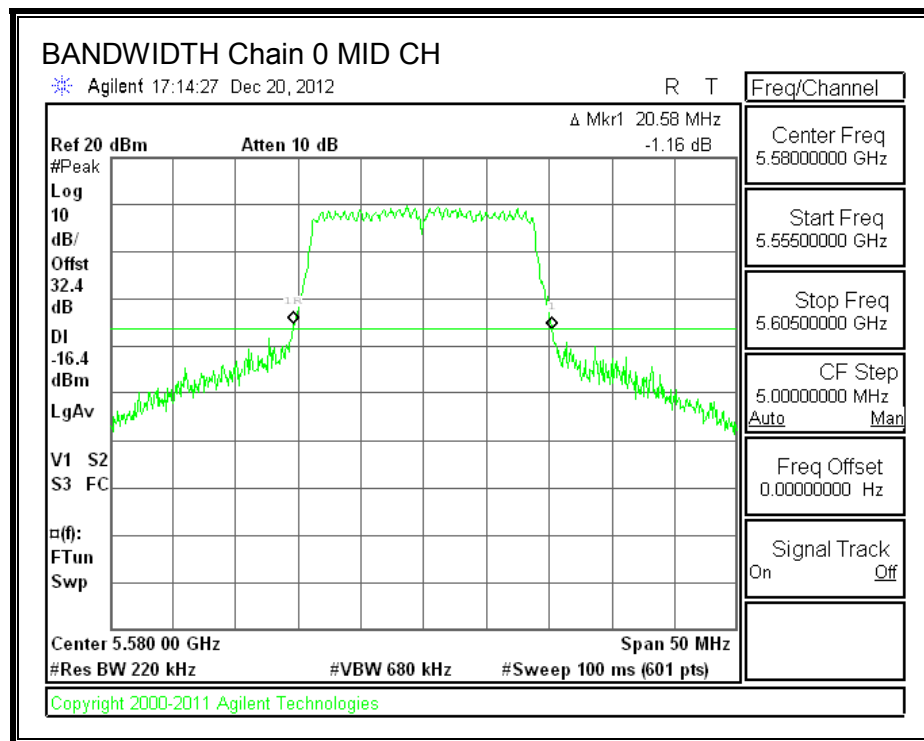
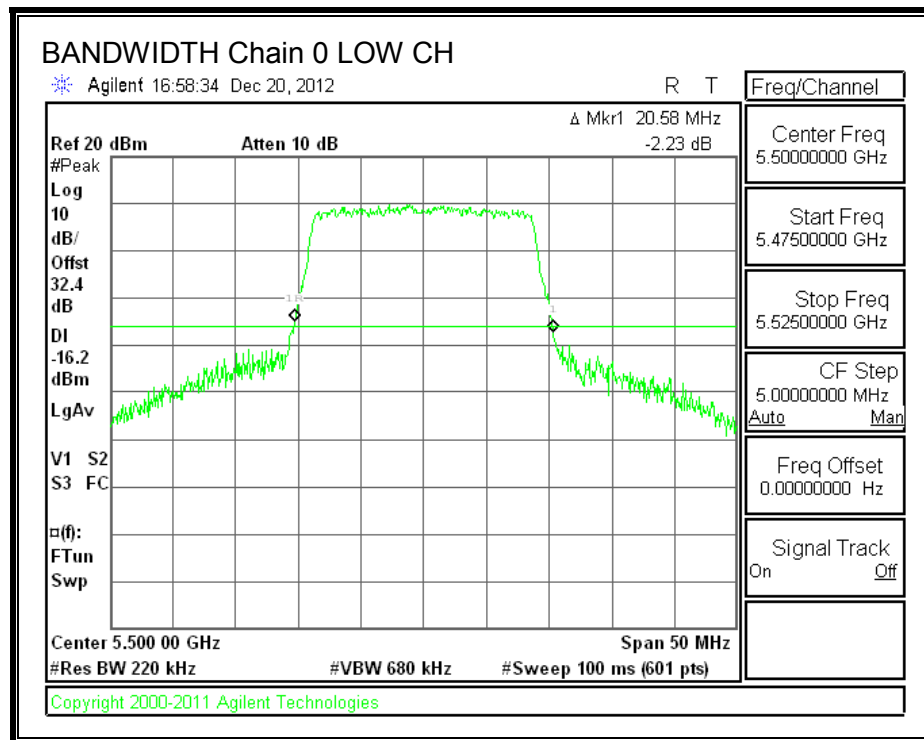
LIMITS

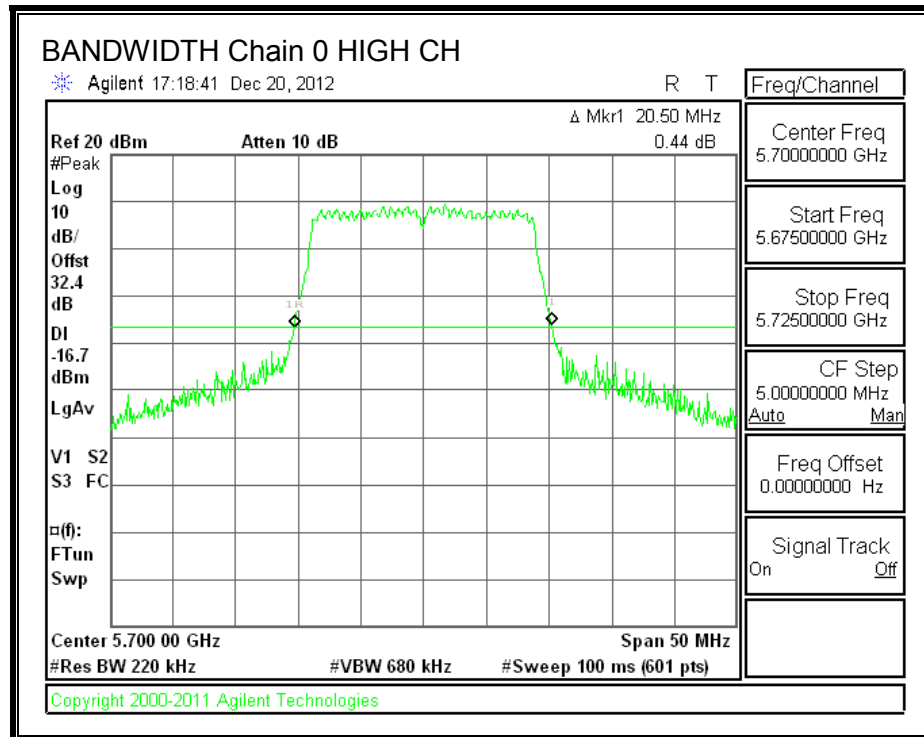
None; for reporting purposes only.

RESULTS

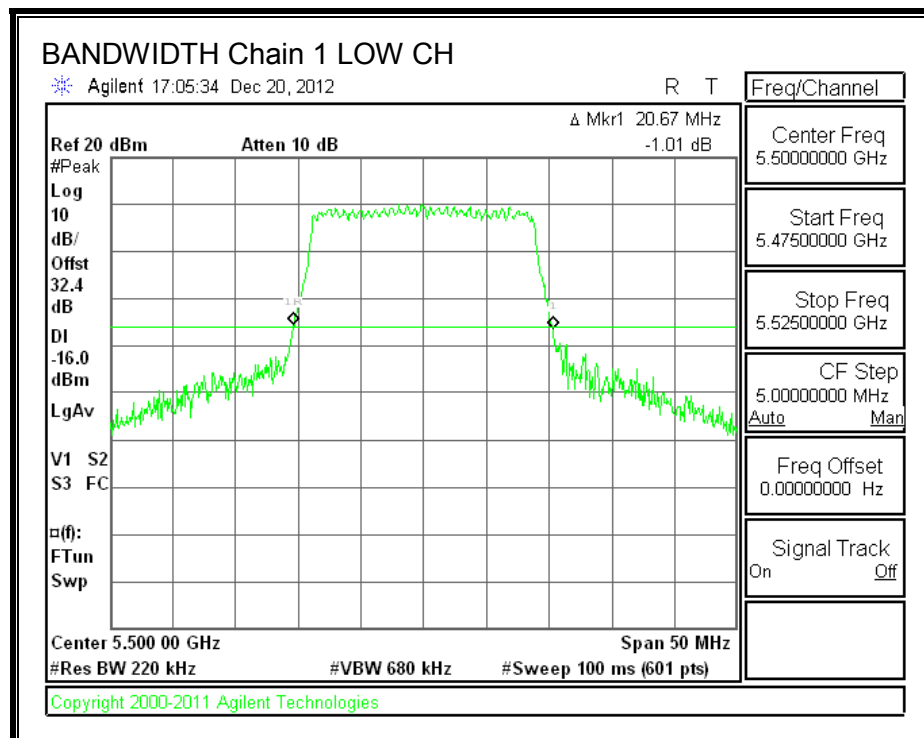
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5500	20.58	20.67
Mid	5580	20.58	20.33
High	5700	20.50	20.33

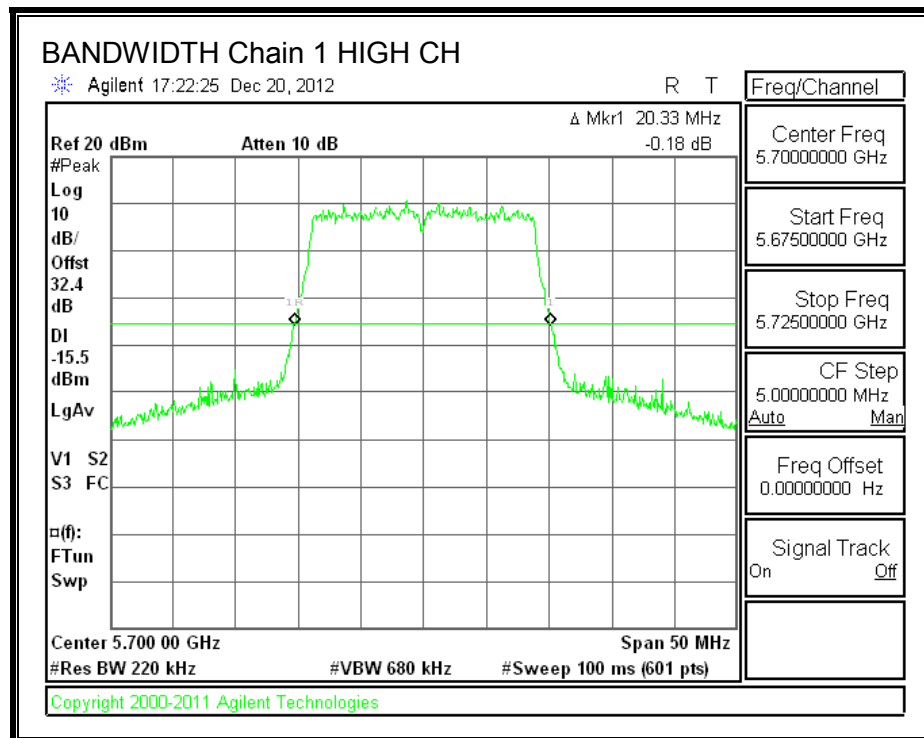
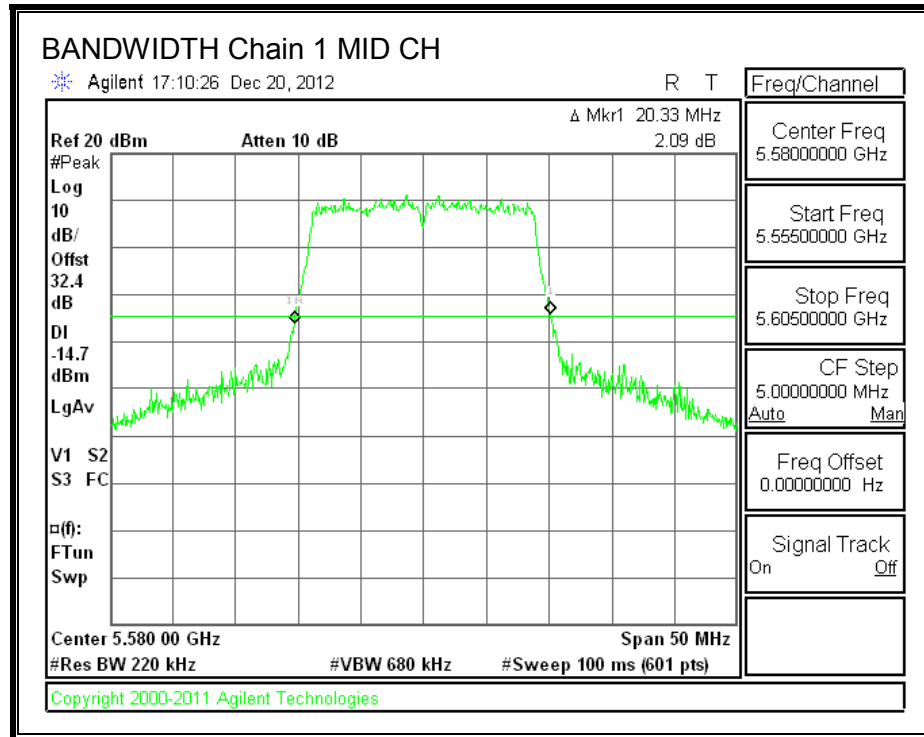
26 dB BANDWIDTH, Chain 0





26 dB BANDWIDTH, Chain 1





8.46.2. 99% BANDWIDTH

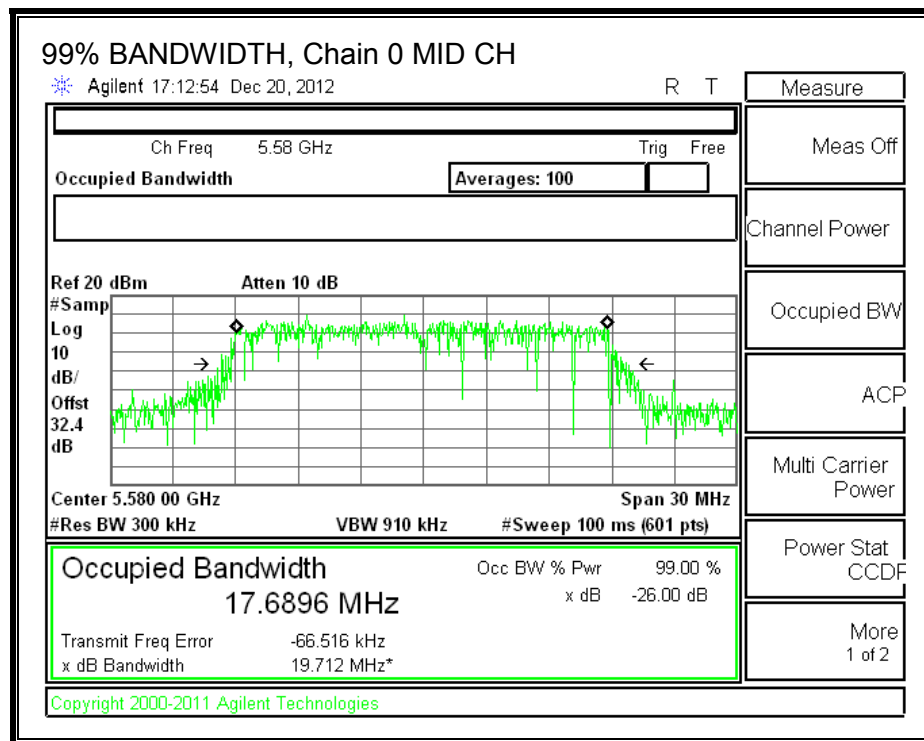
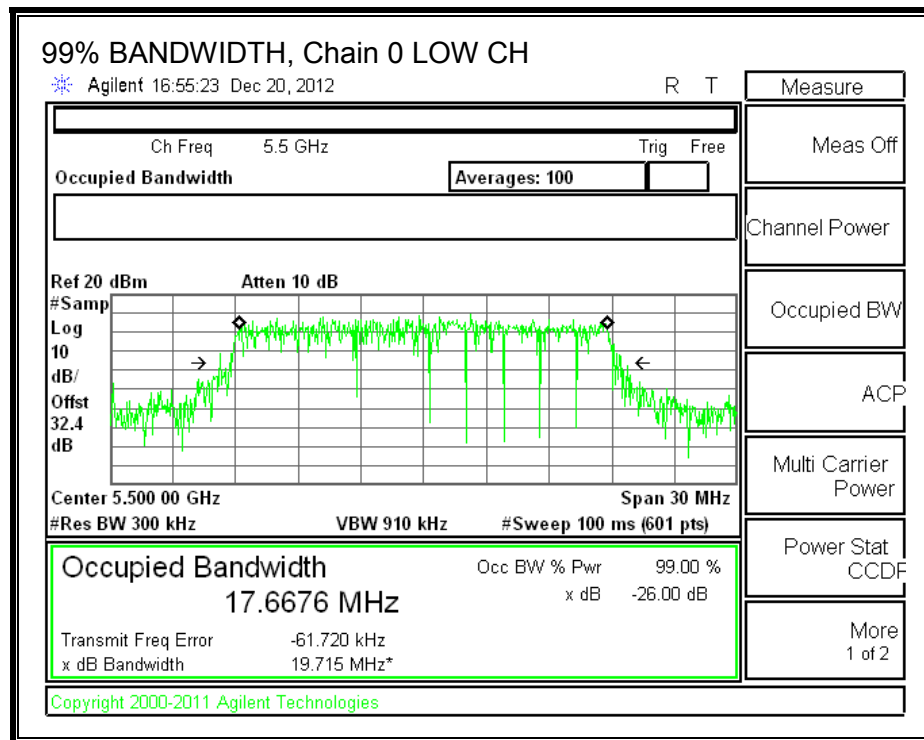
LIMITS

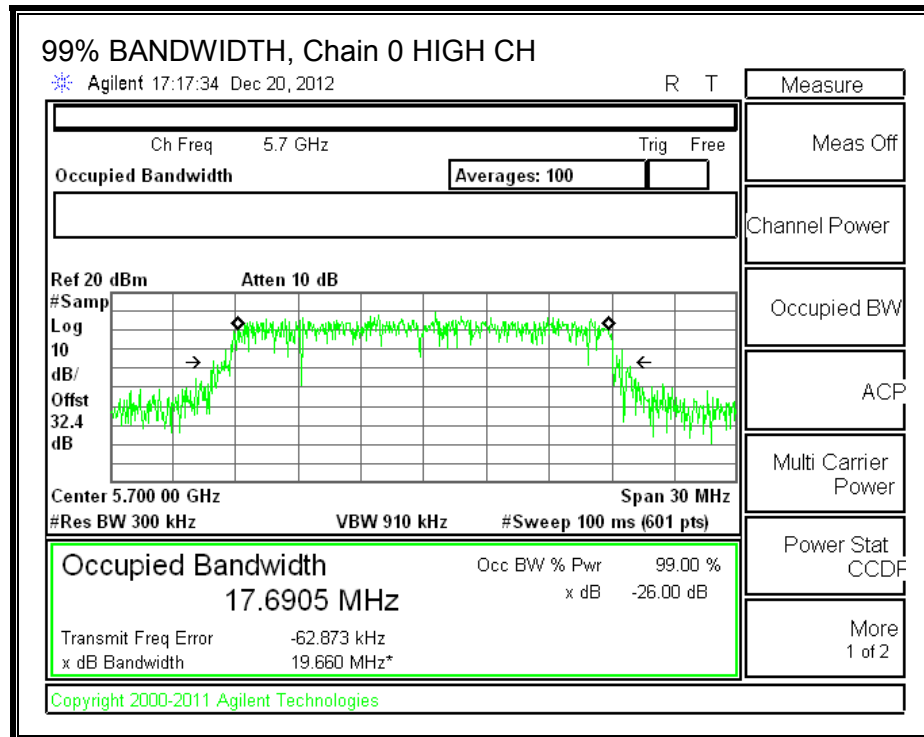
None; for reporting purposes only.

RESULTS

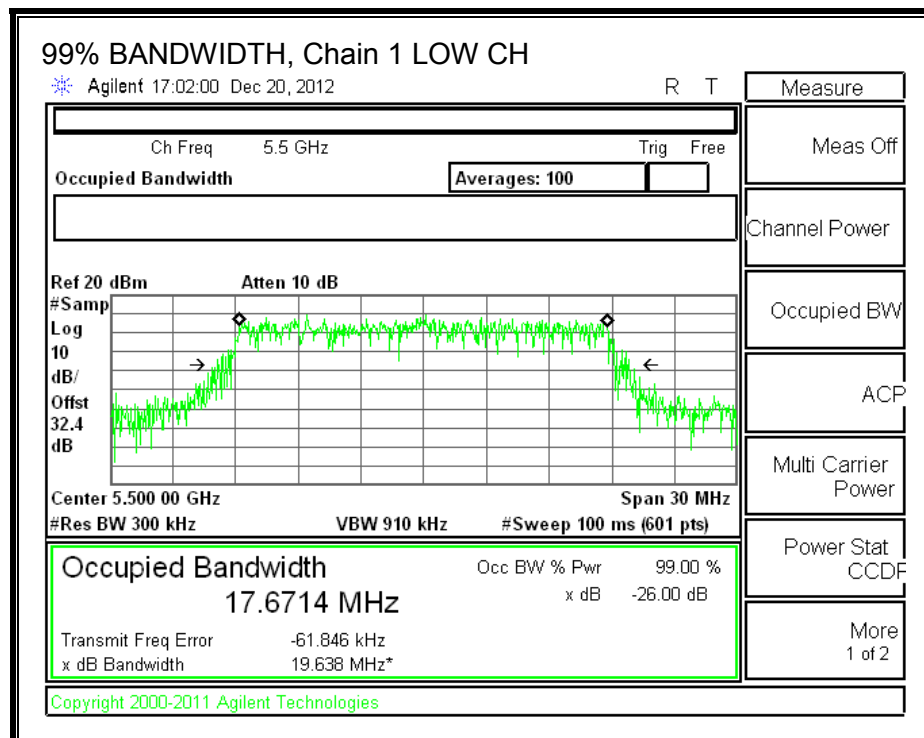
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5500	17.6676	17.6714
Mid	5580	17.6896	17.6621
High	5700	17.6905	17.6544

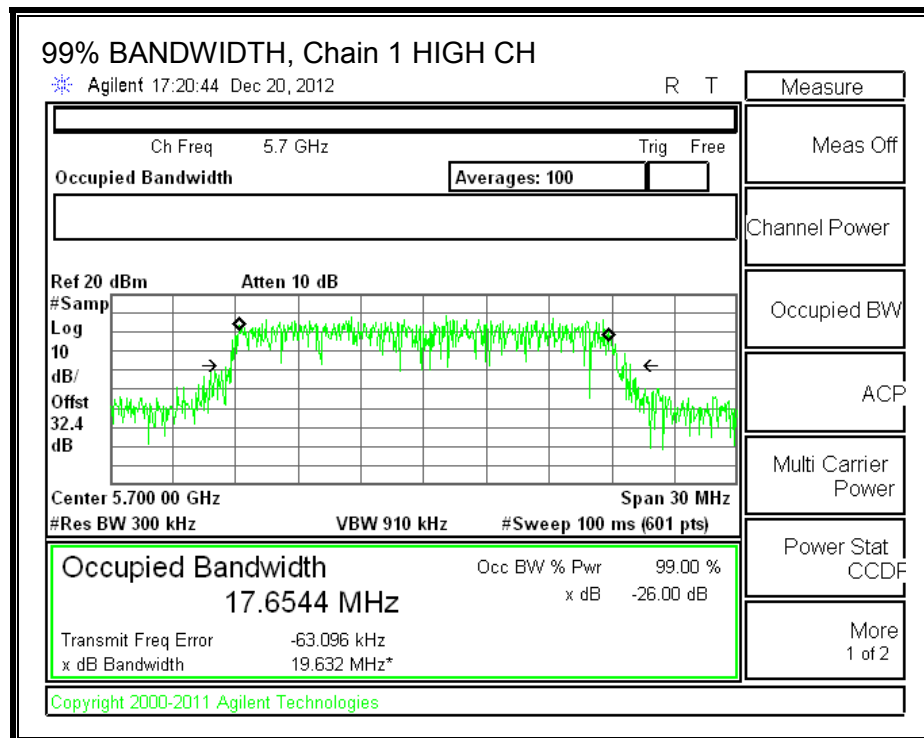
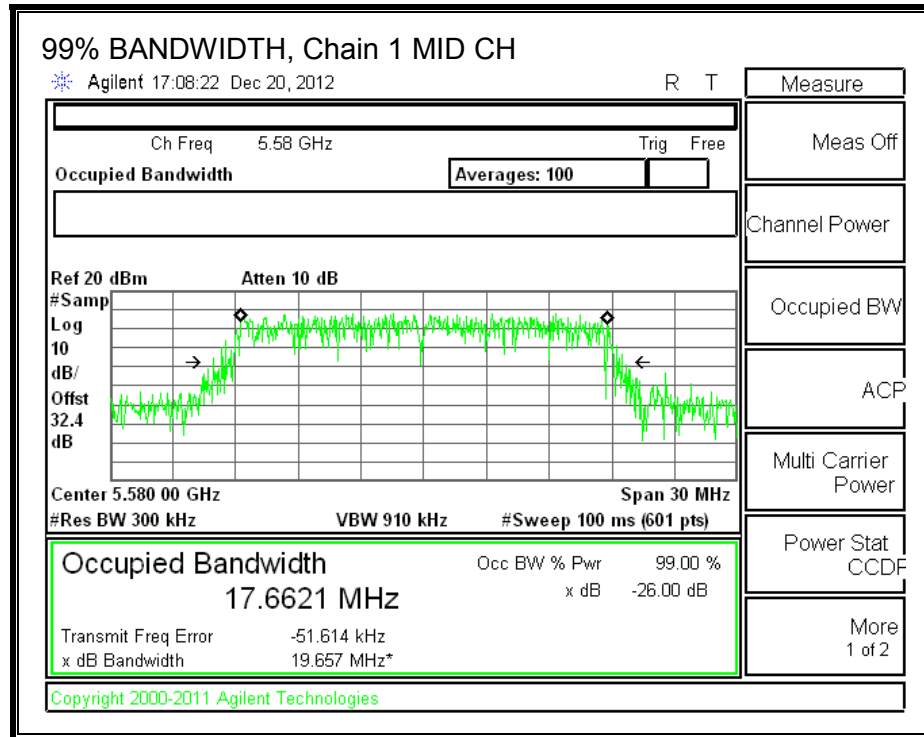
99% BANDWIDTH, Chain 0





99% BANDWIDTH, Chain 1





8.46.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	3.80	3.42

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	20.58	17.6676	3.42
Mid	5580	20.33	17.6621	3.42
High	5700	20.33	17.6544	3.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5500	24.00	23.47	29.47	23.47	11.00	11.00	11.00
Mid	5580	24.00	23.47	29.47	23.47	11.00	11.00	11.00
High	5700	24.00	23.47	29.47	23.47	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00
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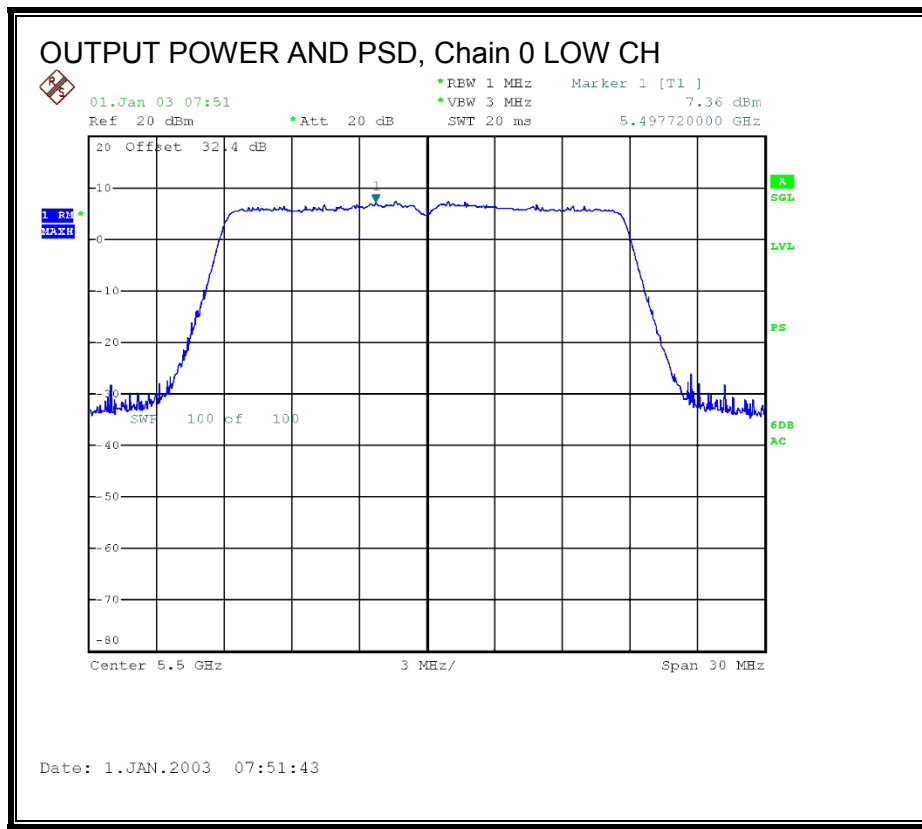
Output Power Results

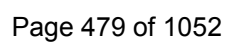
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low 1	5500	14.20	14.00	17.11	23.47	-6.36
Low 2	5520	14.65	14.50	17.59	23.47	-5.88
Mid	5580	18.20	18.00	21.11	23.47	-2.36
High 2	5680	18.20	18.00	21.11	23.47	-2.36
High 1	5700	18.20	18.10	21.16	23.47	-2.31

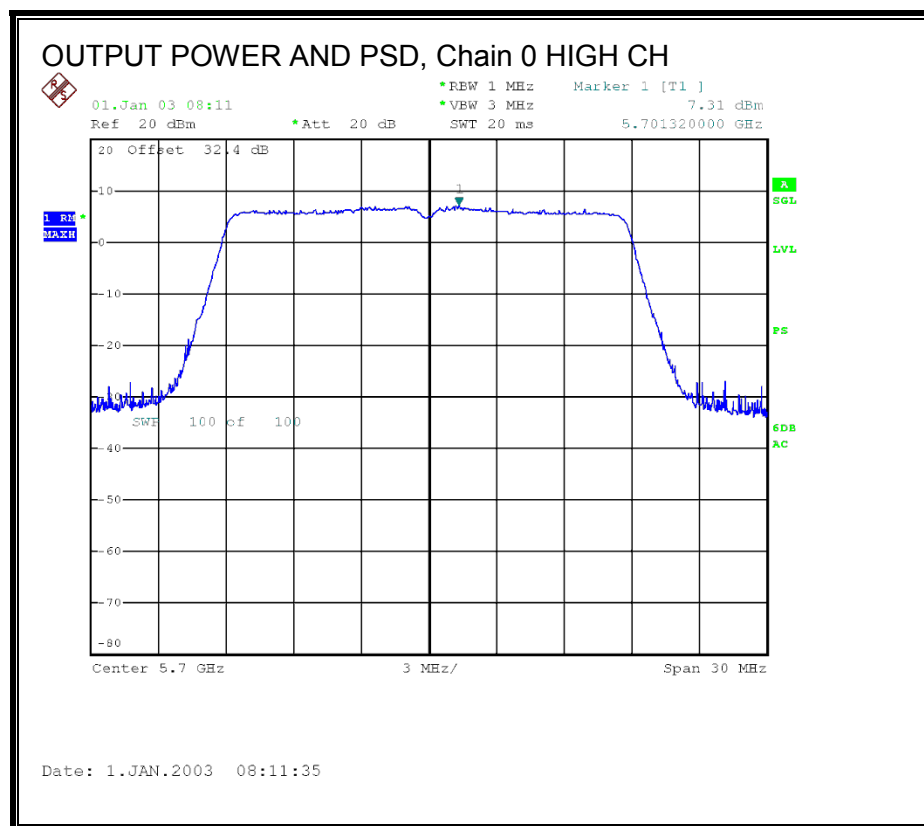
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	7.36	7.99	10.70	11.00	-0.30
Mid	5580	6.95	7.91	10.47	11.00	-0.53
High	5700	7.31	7.18	10.26	11.00	-0.74

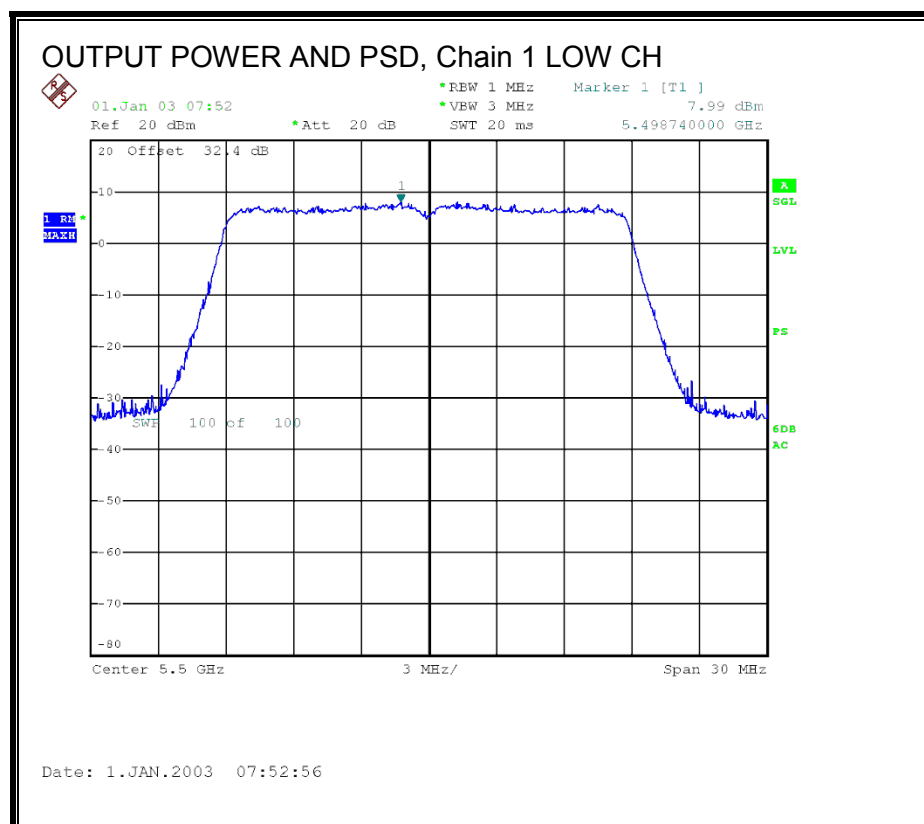
OUTPUT POWER AND PSD, Chain 0

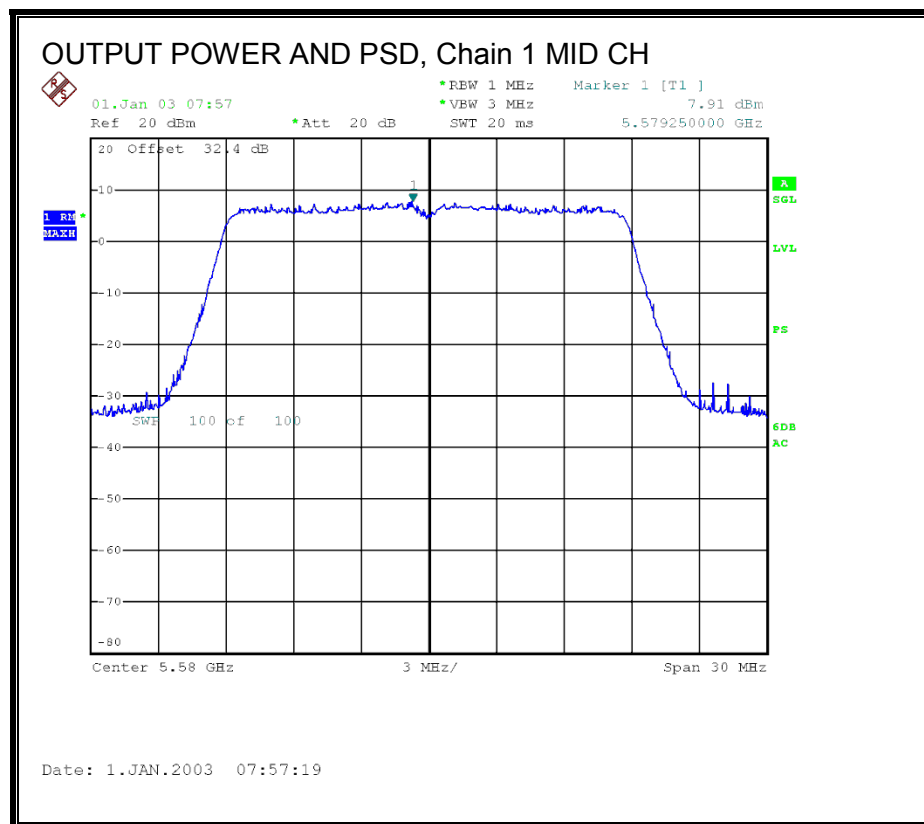


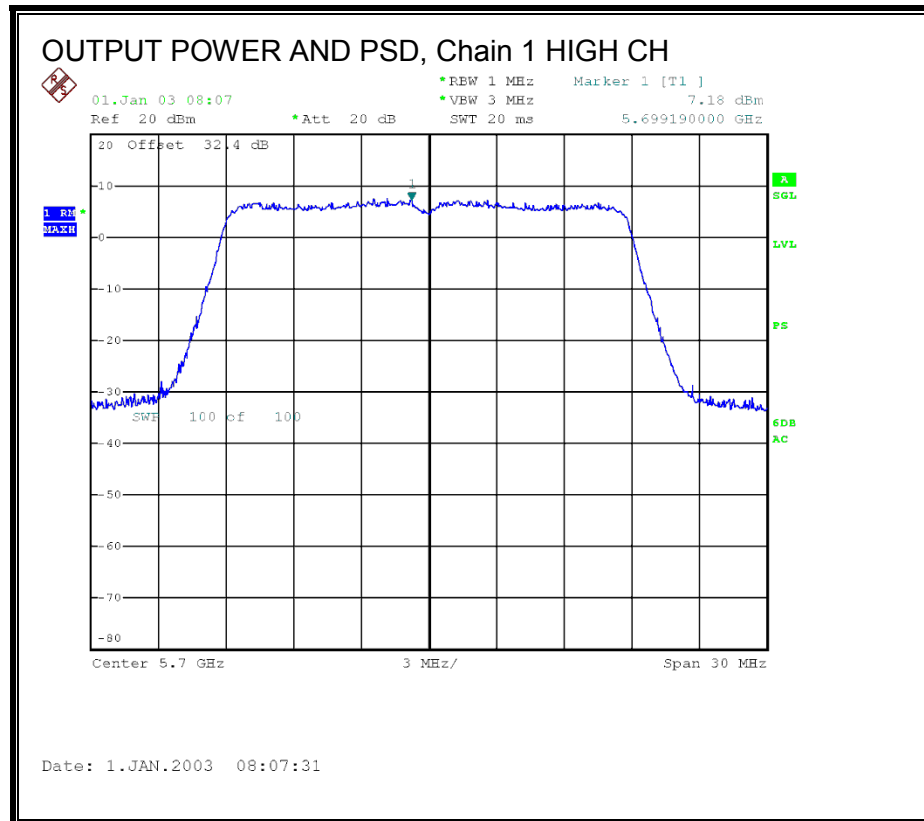




OUTPUT POWER AND PSD, Chain 1







8.46.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.48. 802.11n HT20 CDD 3TX MODE IN THE 5.6 GHz BAND

8.48.1. 26 dB BANDWIDTH

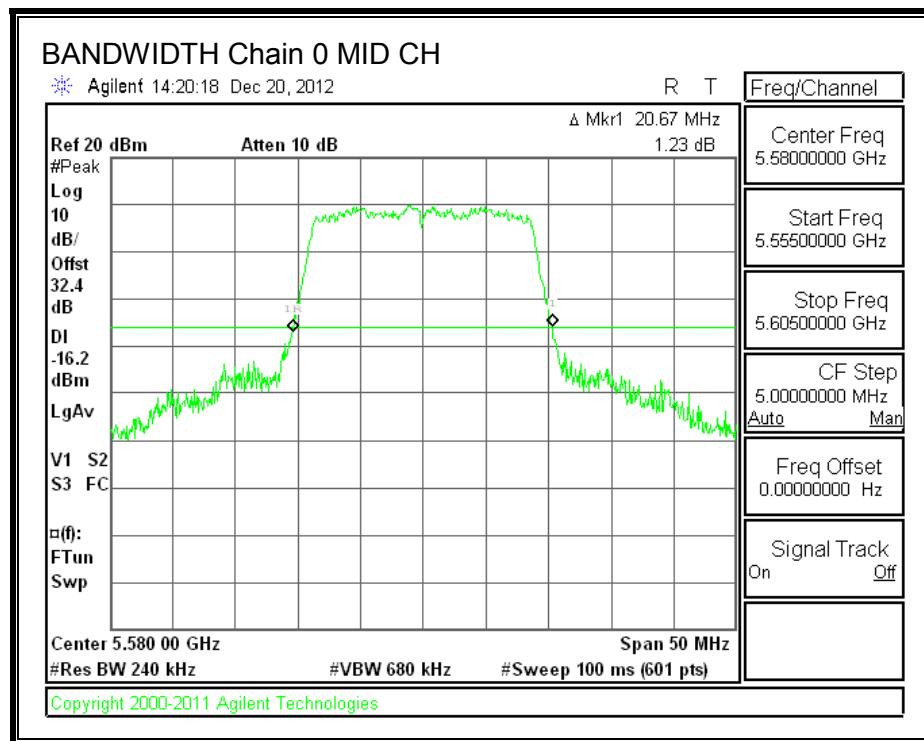
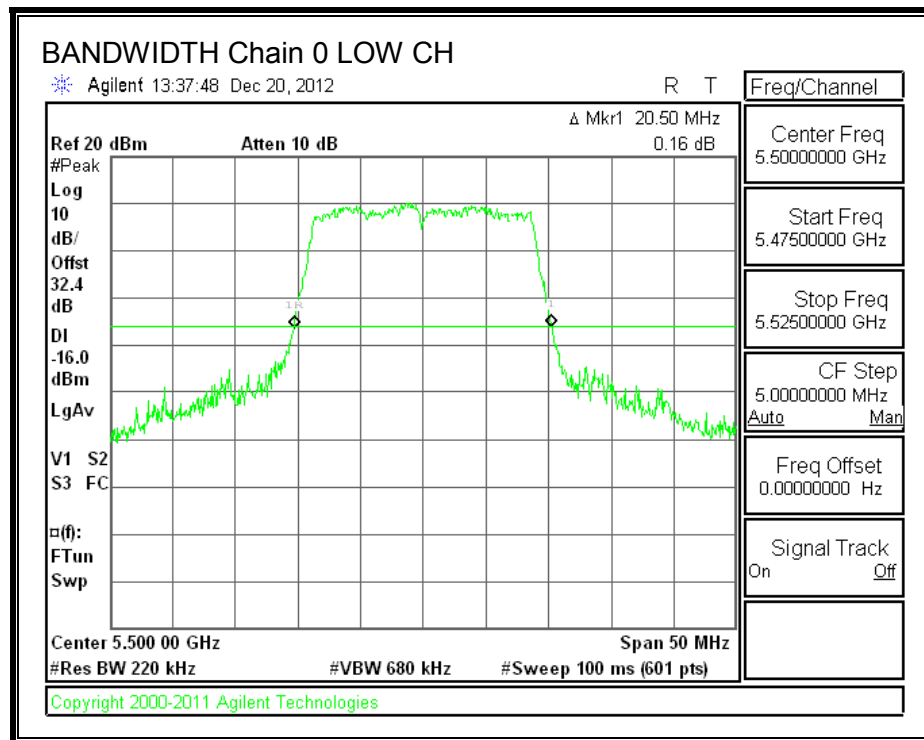
LIMITS

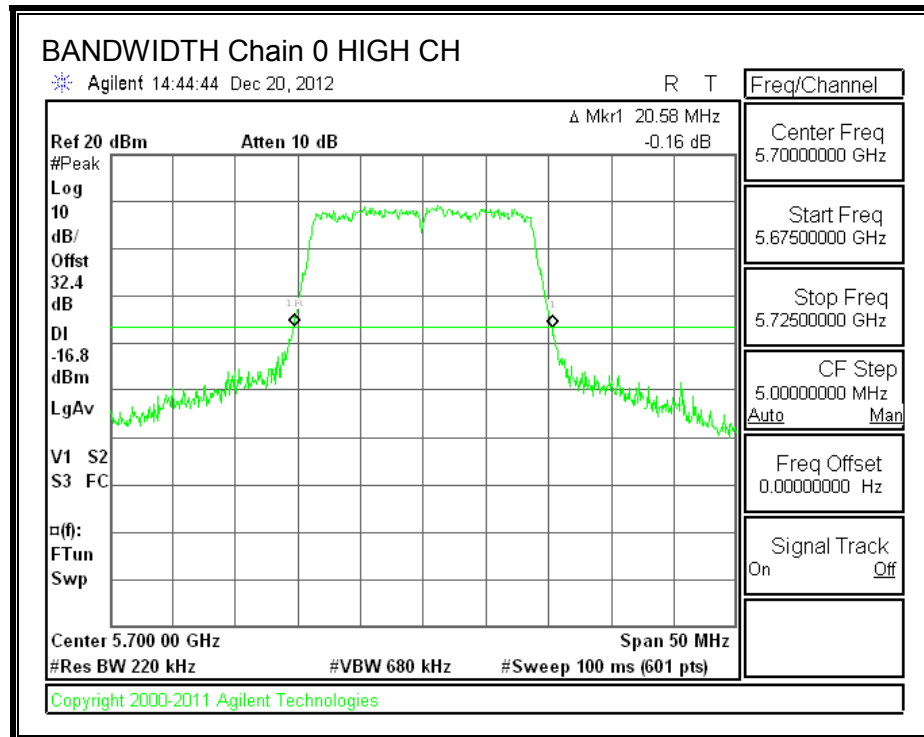
None; for reporting purposes only.

RESULTS

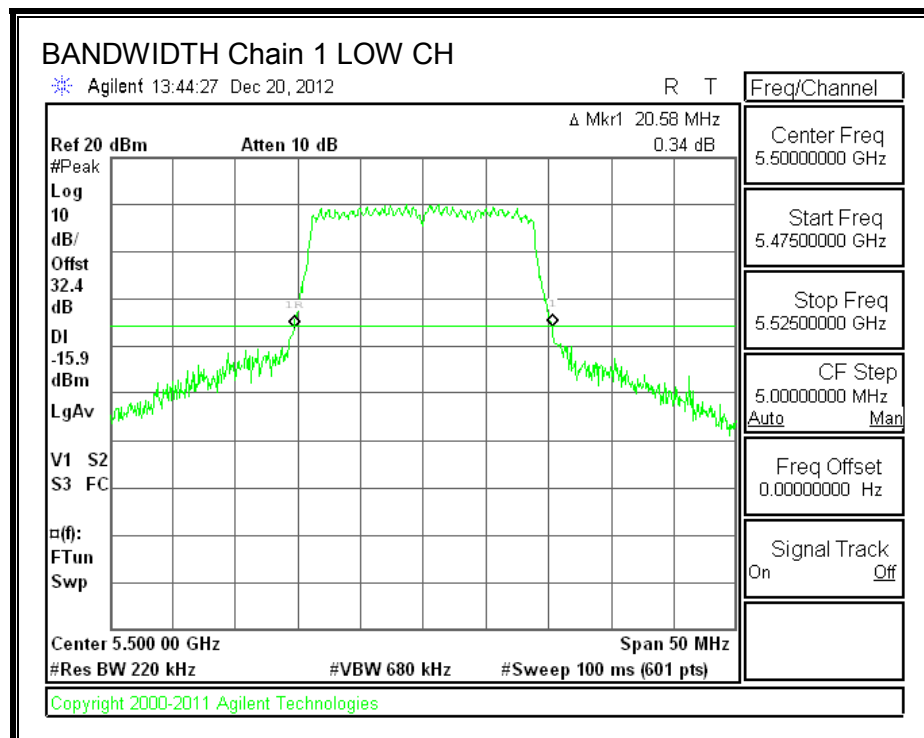
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Low	5500	20.50	20.58	20.83
Mid	5580	20.67	20.67	20.42
High	5700	20.58	20.50	20.58

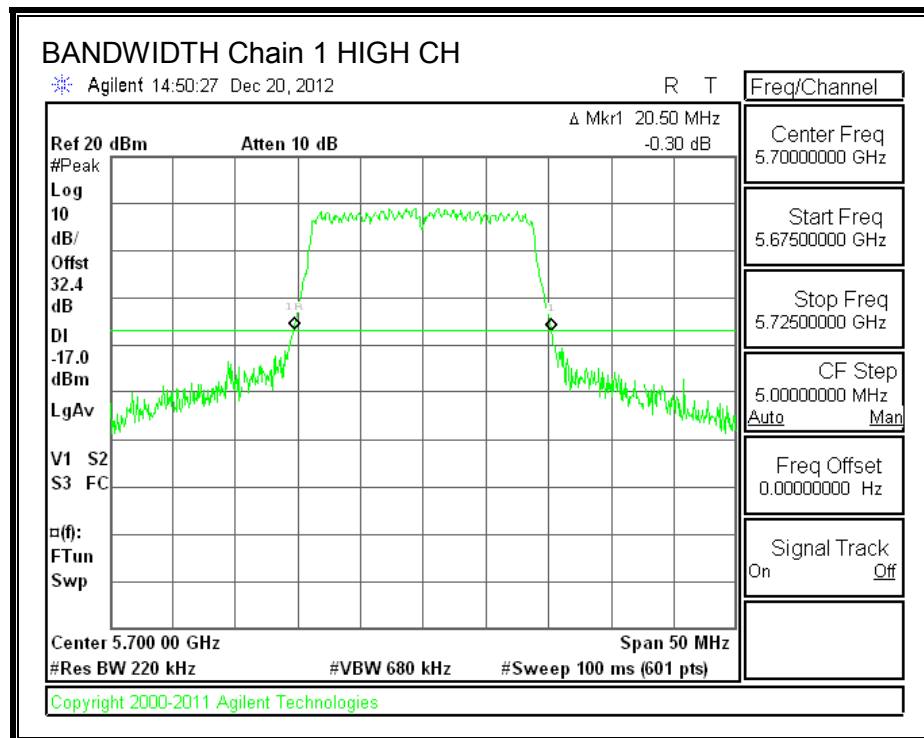
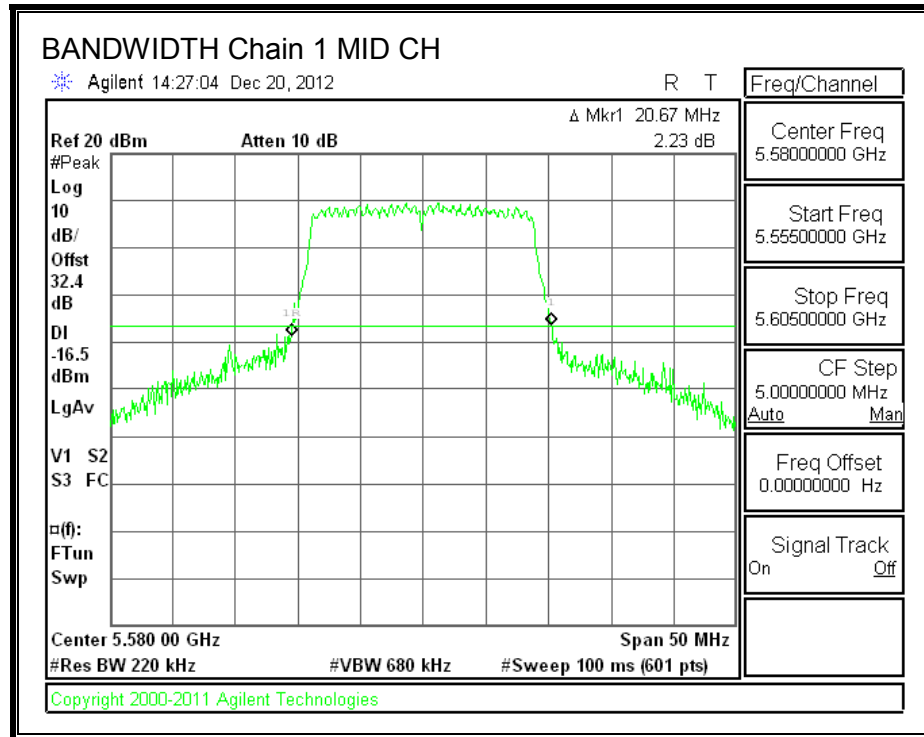
26 dB BANDWIDTH, Chain 0



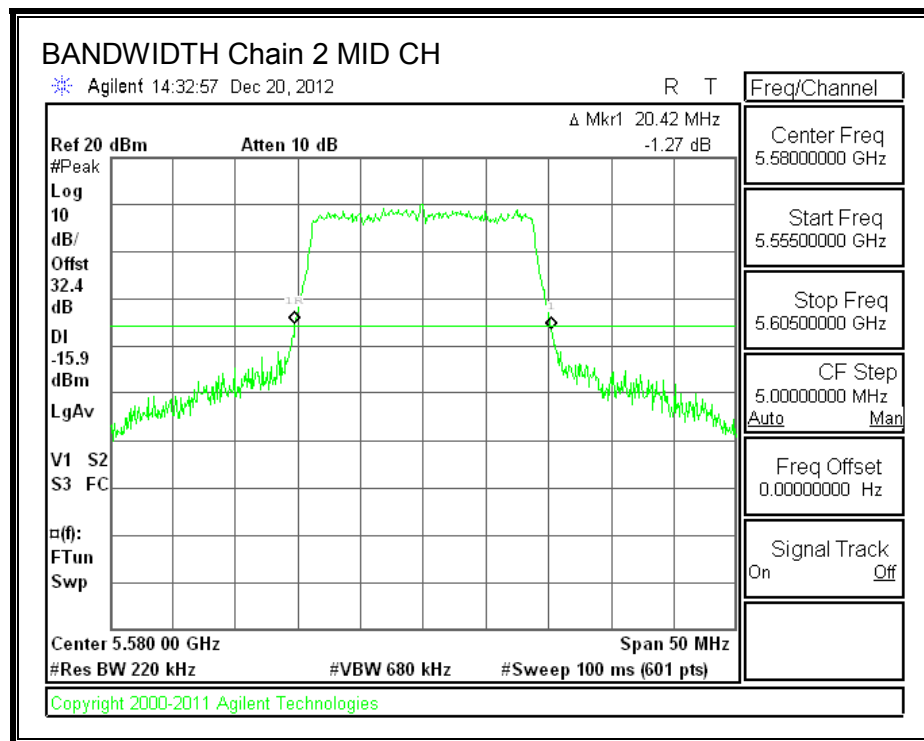
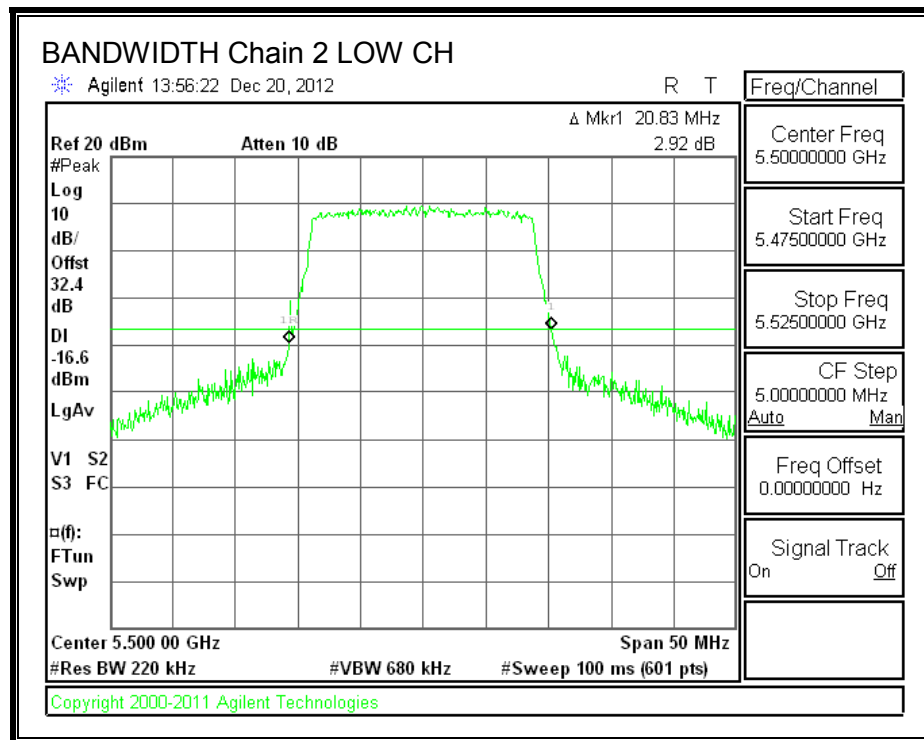


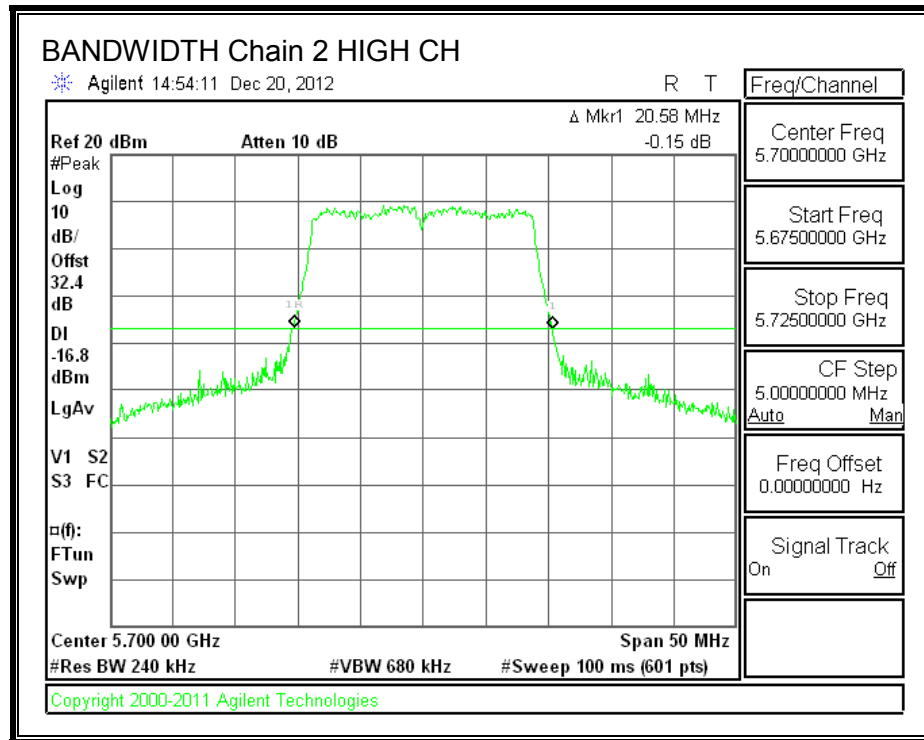
26 dB BANDWIDTH, Chain 1





26 dB BANDWIDTH, Chain 2





8.48.2. 99% BANDWIDTH

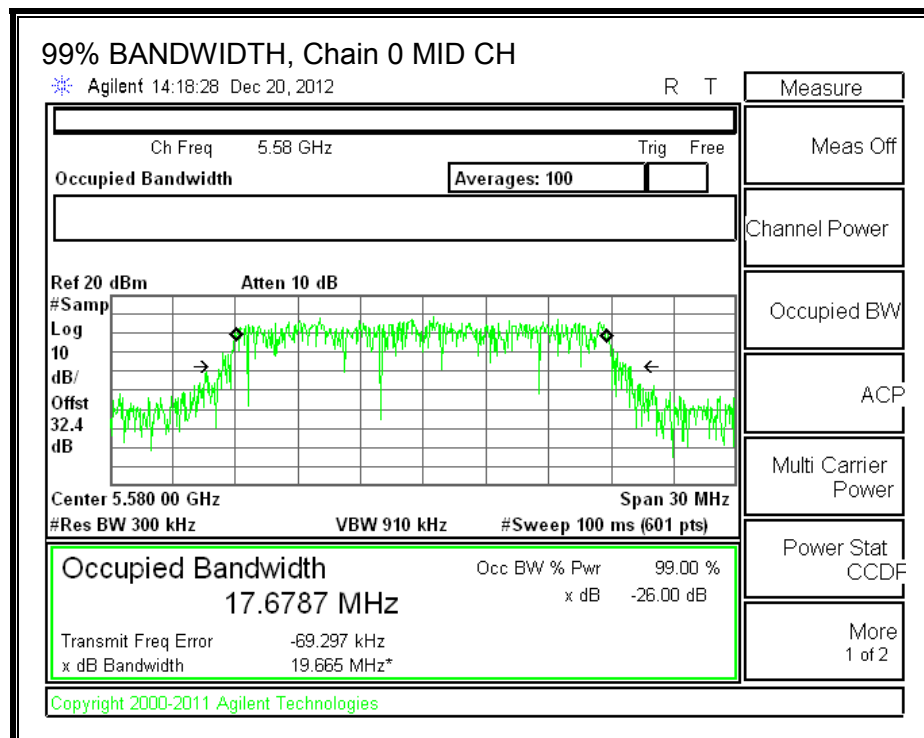
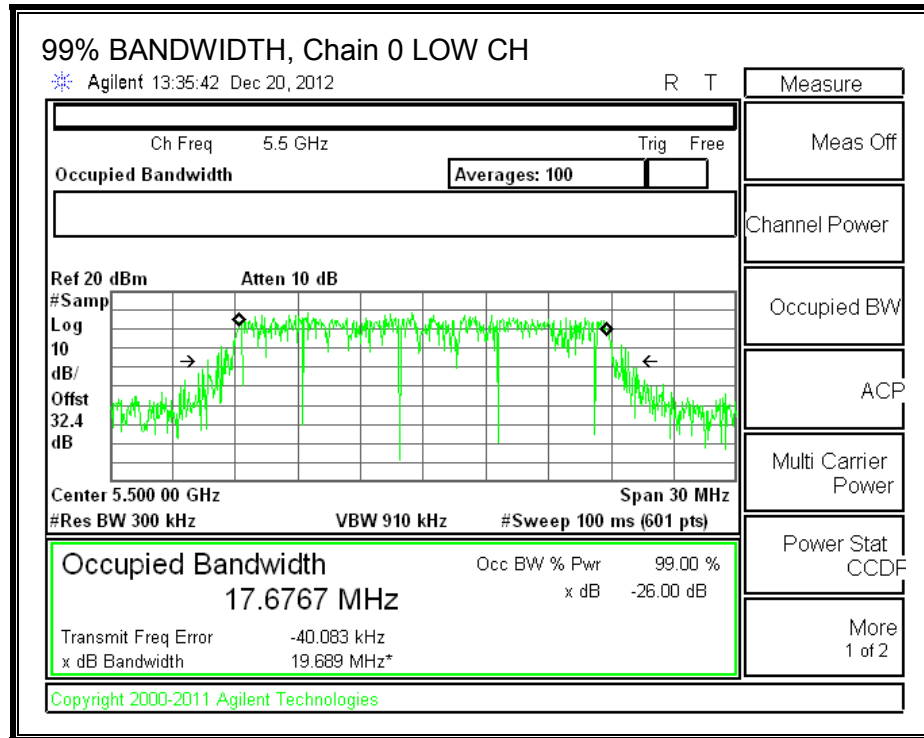
LIMITS

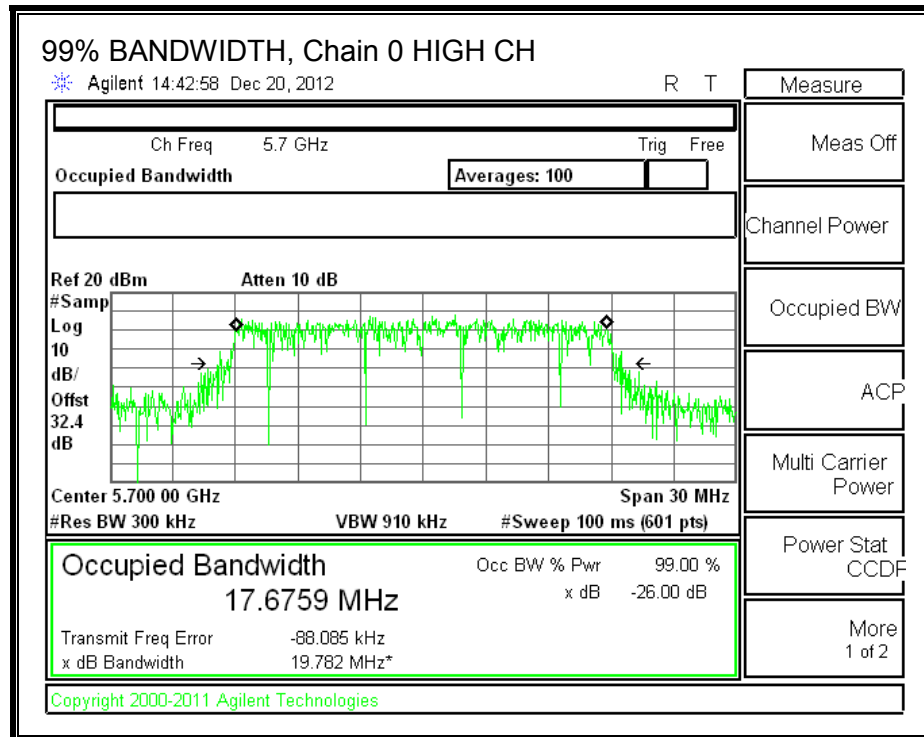
None; for reporting purposes only.

RESULTS

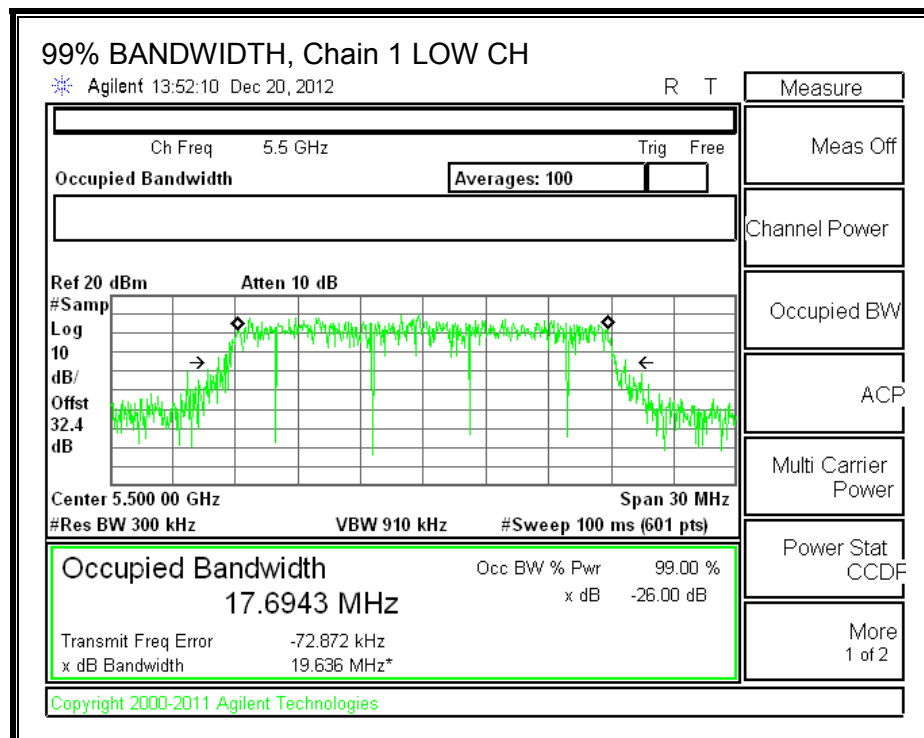
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	5500	17.6767	17.6943	17.6943
Mid	5580	17.6787	17.6785	17.6947
High	5700	17.6759	17.6913	17.6913

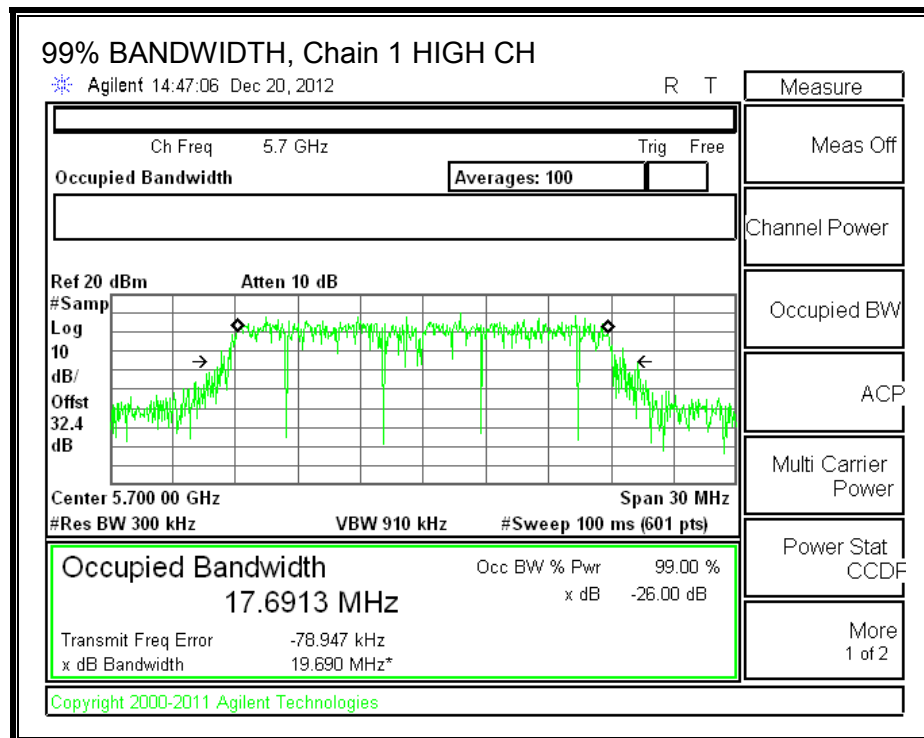
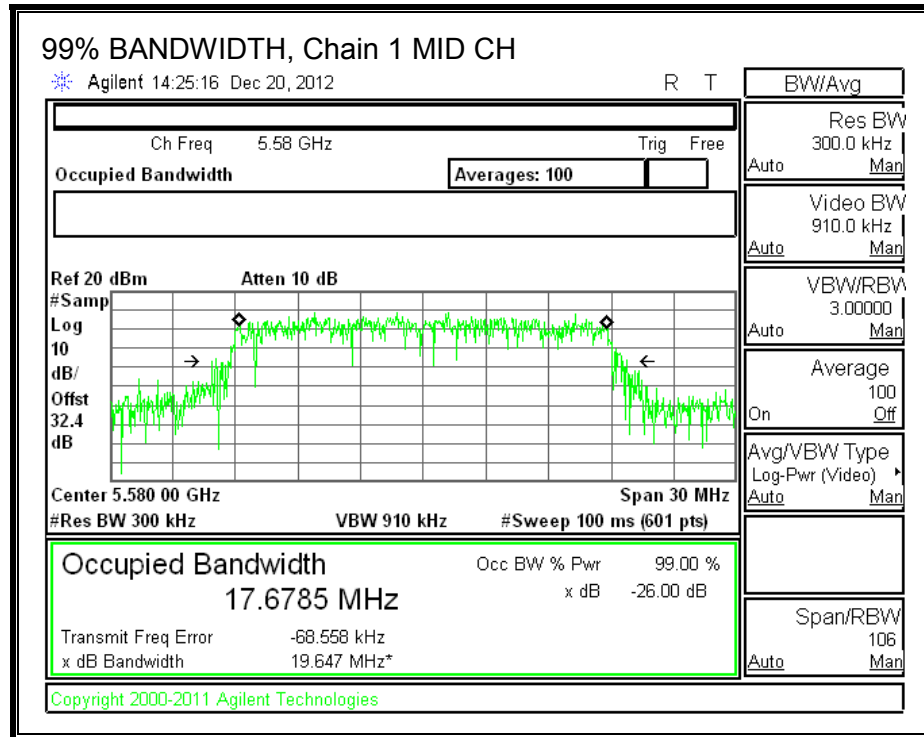
99% BANDWIDTH, Chain 0



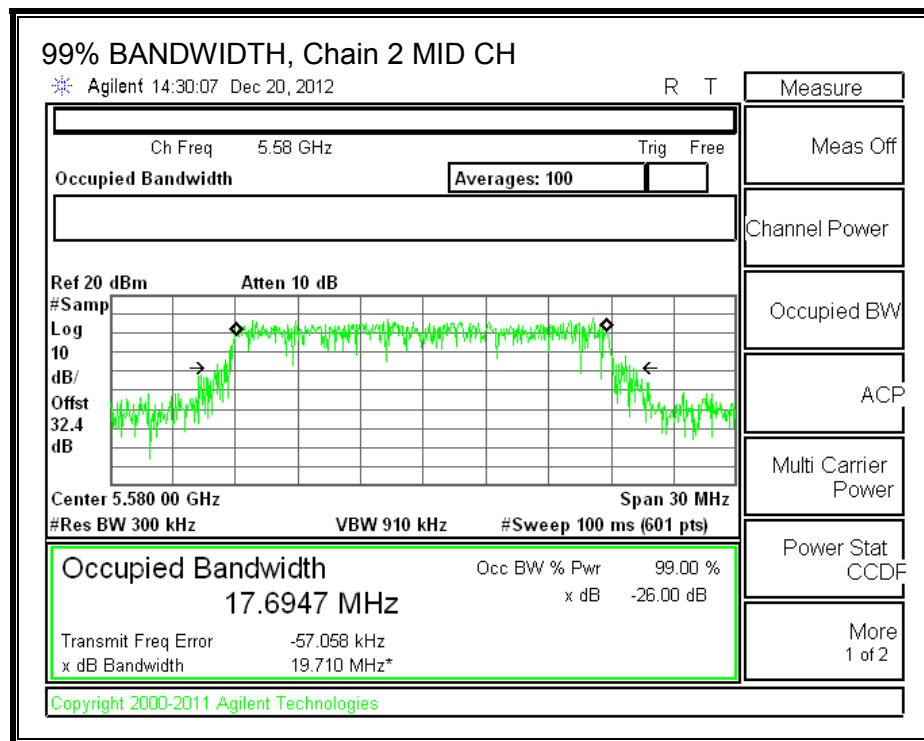
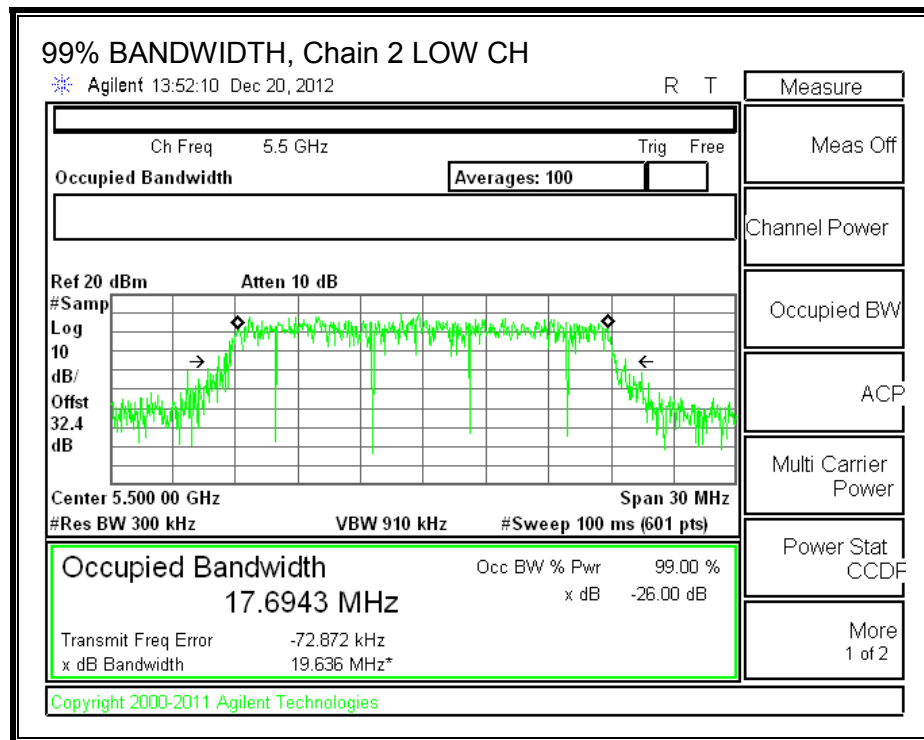


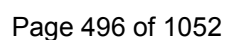
99% BANDWIDTH, Chain 1





99% BANDWIDTH, Chain 2





8.48.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	1.70	3.80	2.92

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	1.70	3.80	7.65

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)	Uncorrelated Directional Gain (dBi)
Low	5500	20.50	17.6767	7.65	2.92
Mid	5580	20.42	17.6785	7.65	2.92
High	5700	20.50	17.6759	7.65	2.92

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5500	24.00	23.47	29.47	23.47	9.35	11.00	9.35
Mid	5580	24.00	23.47	29.47	23.47	9.35	11.00	9.35
High	5700	24.00	23.47	29.47	23.47	9.35	11.00	9.35

Duty Cycle CF (dB)	0.00
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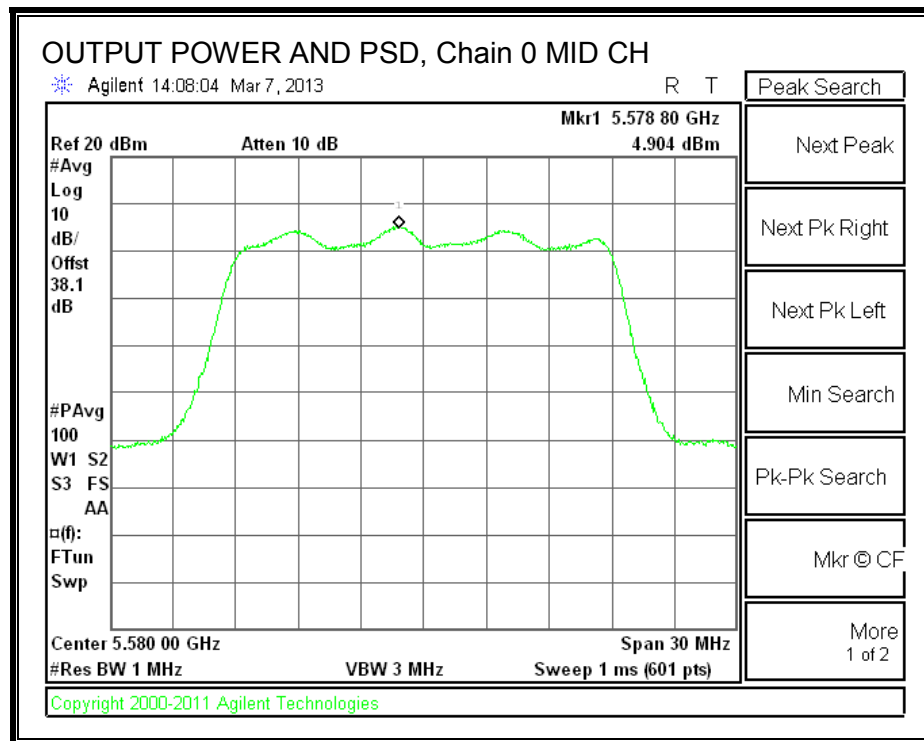
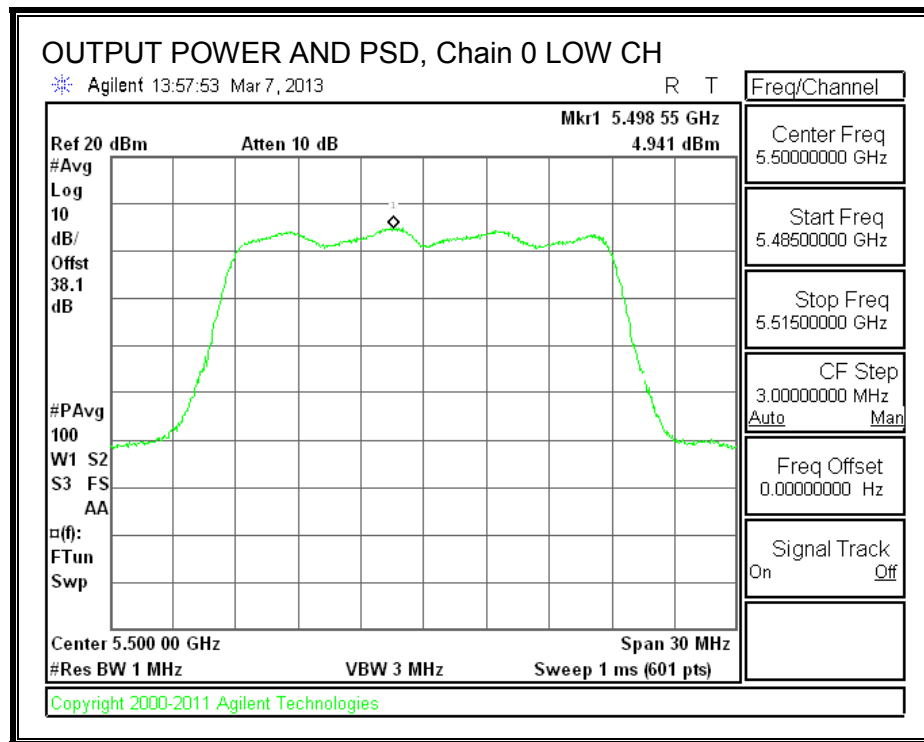
Output Power Results

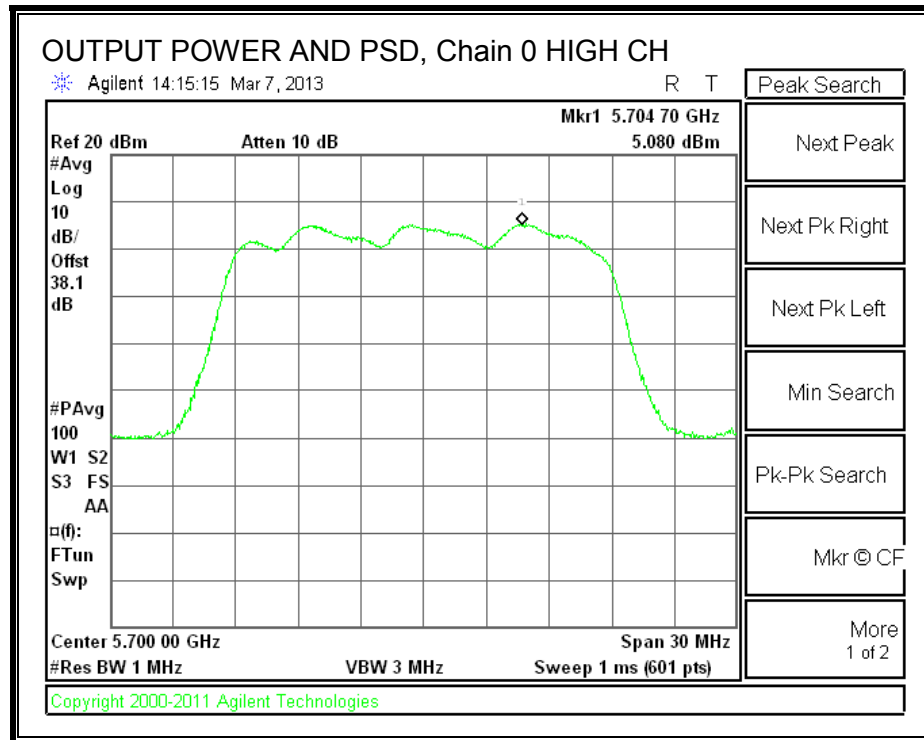
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low 1	5500	13.00	13.20	13.40	17.97	23.47	-5.50
Low 2	5520	13.50	13.70	13.60	18.37	23.47	-5.10
Mid	5580	13.50	13.65	13.60	18.35	23.47	-5.12
High 2	5680	13.50	13.75	13.60	18.39	23.47	-5.09
High 1	5700	13.50	13.60	13.50	18.30	23.47	-5.17

PSD Results

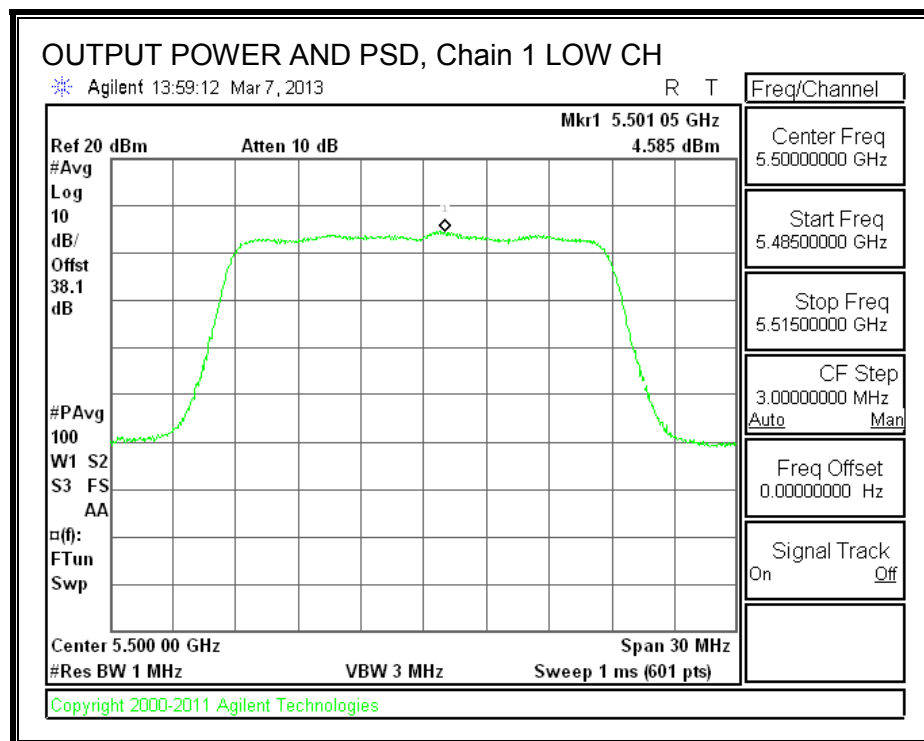
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	4.941	4.585	4.053	9.31	9.35	-0.04
Mid	5580	4.904	4.069	3.774	9.05	9.35	-0.30
High	5700	5.080	3.860	4.577	9.31	9.35	-0.04

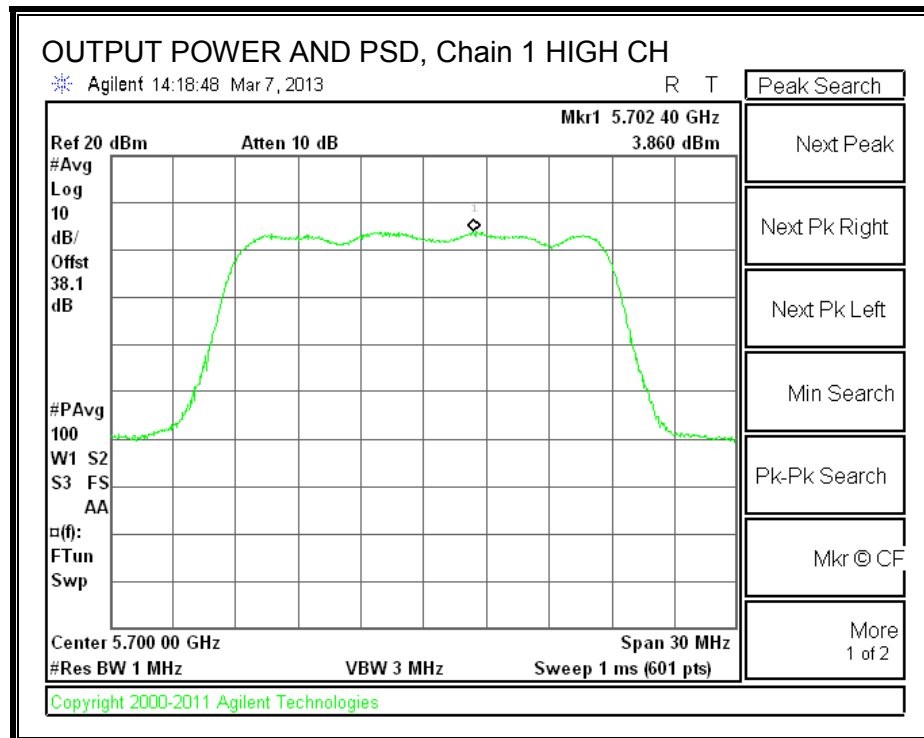
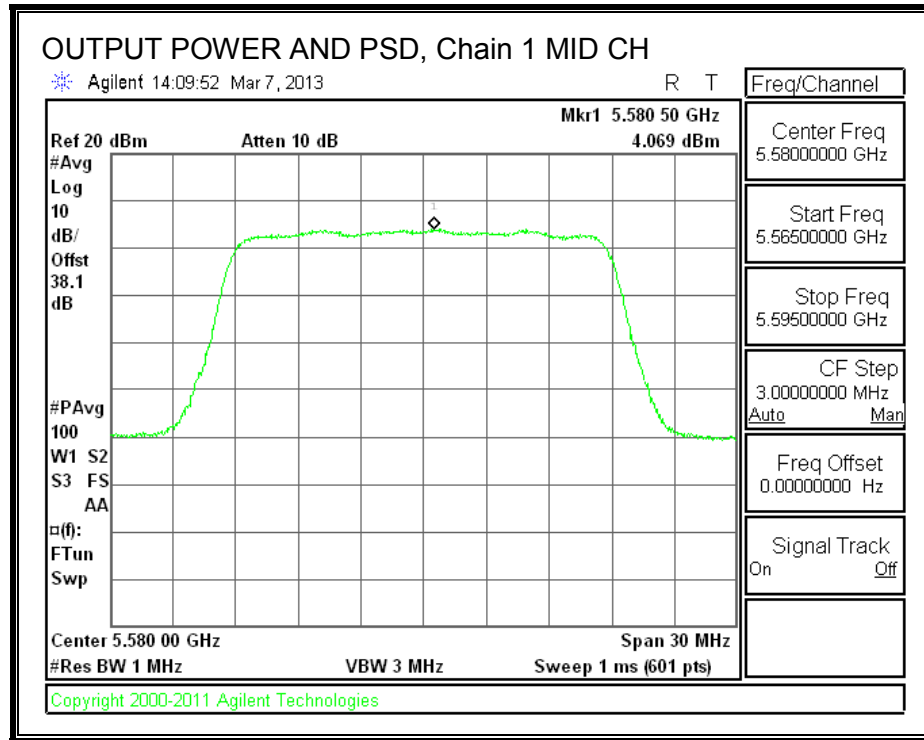
OUTPUT POWER AND PSD, Chain 0



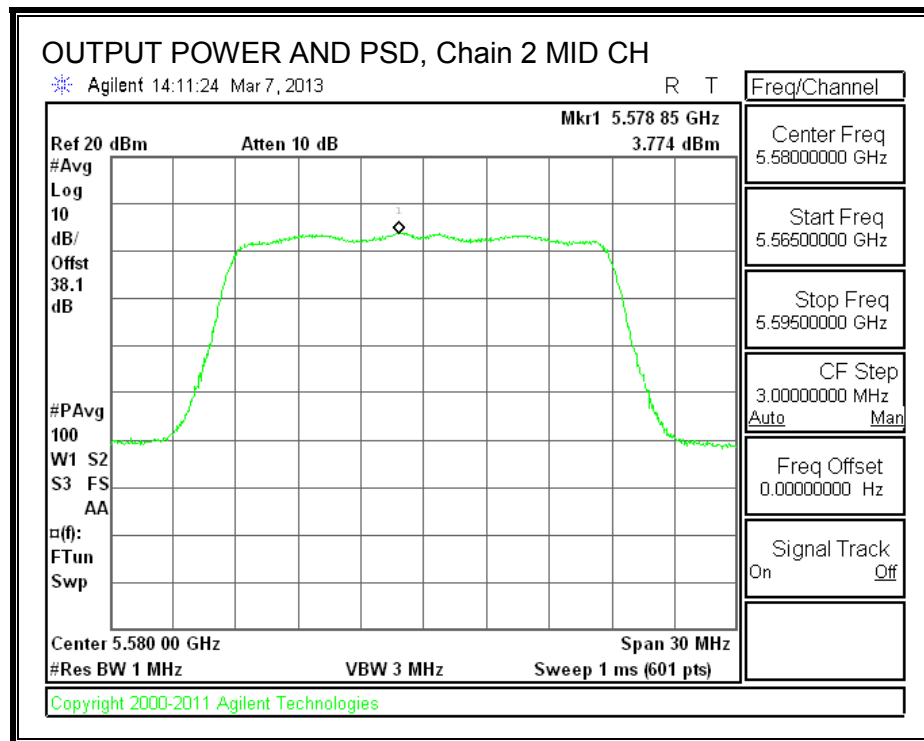
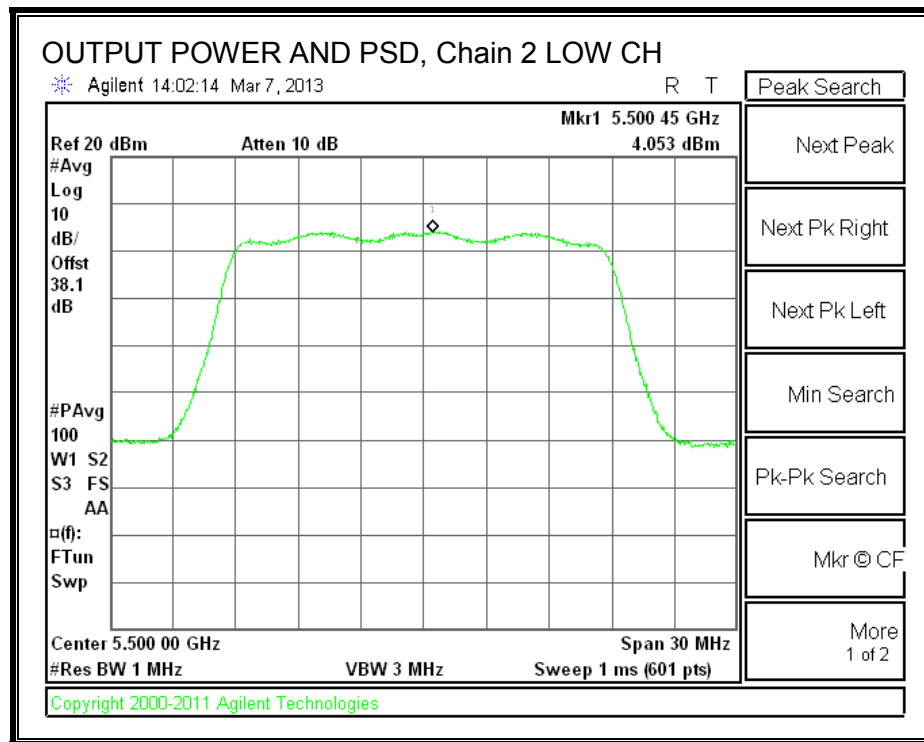


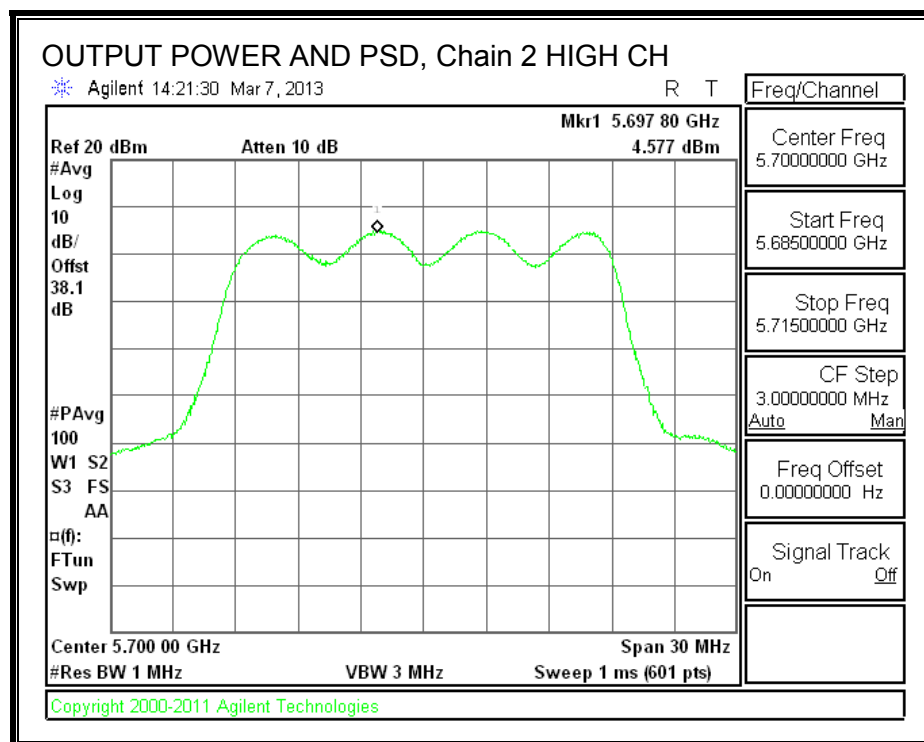
OUTPUT POWER AND PSD, Chain 1





OUTPUT POWER AND PSD, Chain 2





8.48.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.49. 802.11n HT20 BF 3TX MODE IN THE 5.6 GHz BAND

Covered by testing HT20 CDD 3TX mode, the power per chain used for HT20 CDD 3TX mode is the same power per chain that will be used for HT20 BF 3TX mode. However, since BF is correlated and CDD is uncorrelated for output power, the section below for output power using correlated AG for this BF mode shows it is still compliant.

8.49.1. OUTPUT AVERAGE POWER

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	1.70	3.80	7.65

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)
Low	5500	20.50	17.6767	7.65
Mid	5580	20.42	17.6785	7.65
High	5700	20.50	17.6759	7.65

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Low	5500	22.35	23.47	29.47	21.82
Mid	5580	22.35	23.47	29.47	21.82
High	5700	22.35	23.47	29.47	21.82

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low 1	5500	13.00	13.20	13.40	17.97	21.82	-3.85
Low 2	5520	13.50	13.70	13.60	18.37	21.82	-3.45
Mid	5580	13.50	13.65	13.60	18.35	21.82	-3.47
High 2	5680	13.50	13.75	13.60	18.39	21.82	-3.44
High 1	5700	13.50	13.60	13.50	18.30	21.82	-3.52

8.50. 802.11n HT20 STBC 3TX MODE IN THE 5.6 GHz BAND

8.50.1. 26 dB BANDWIDTH

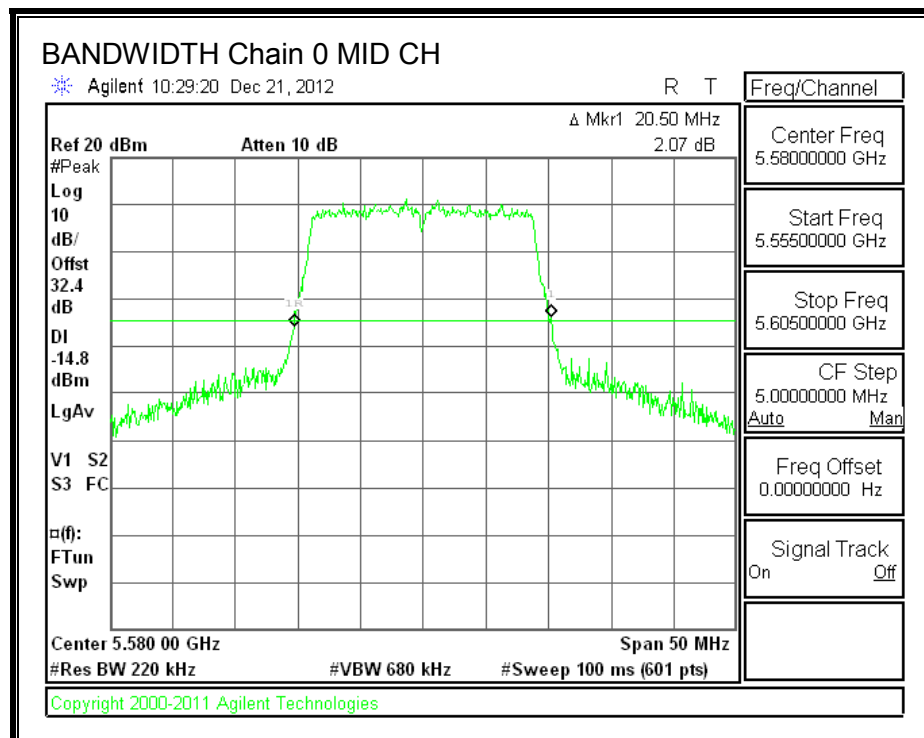
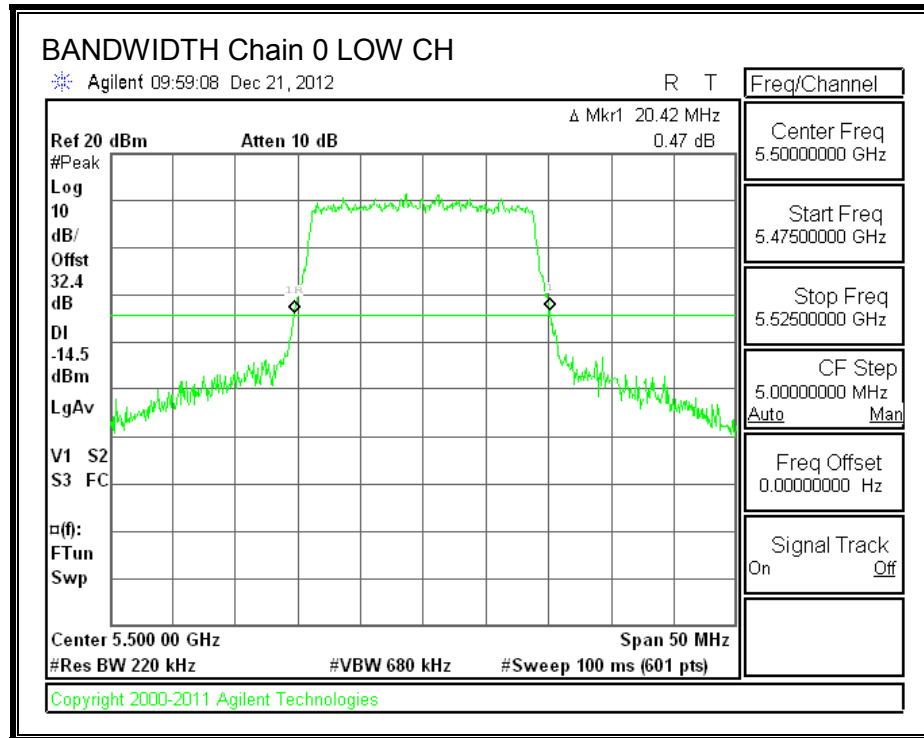
LIMITS

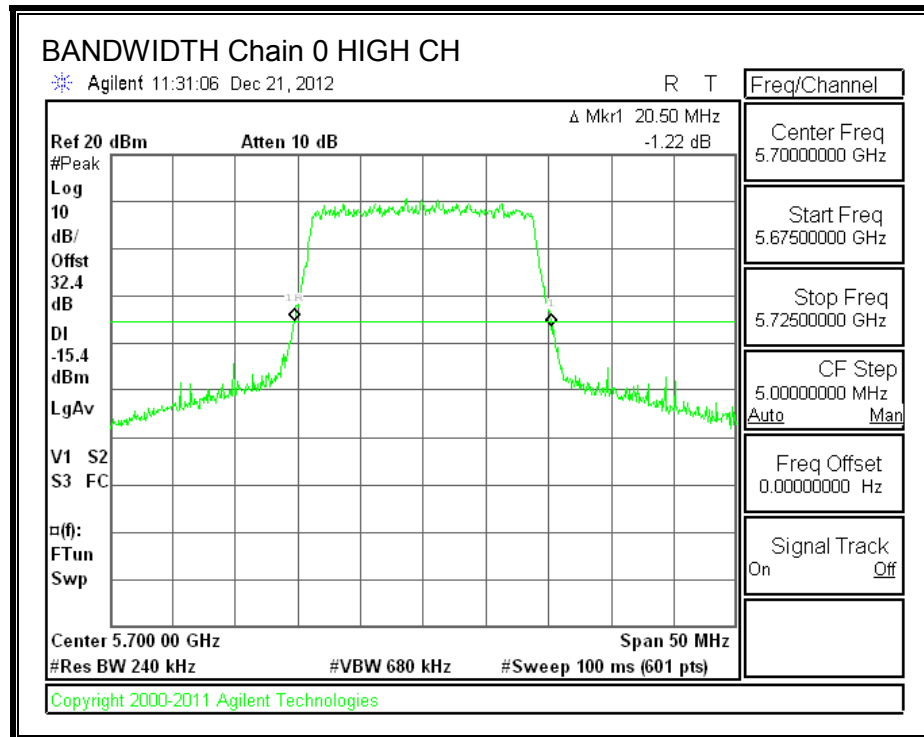
None; for reporting purposes only.

RESULTS

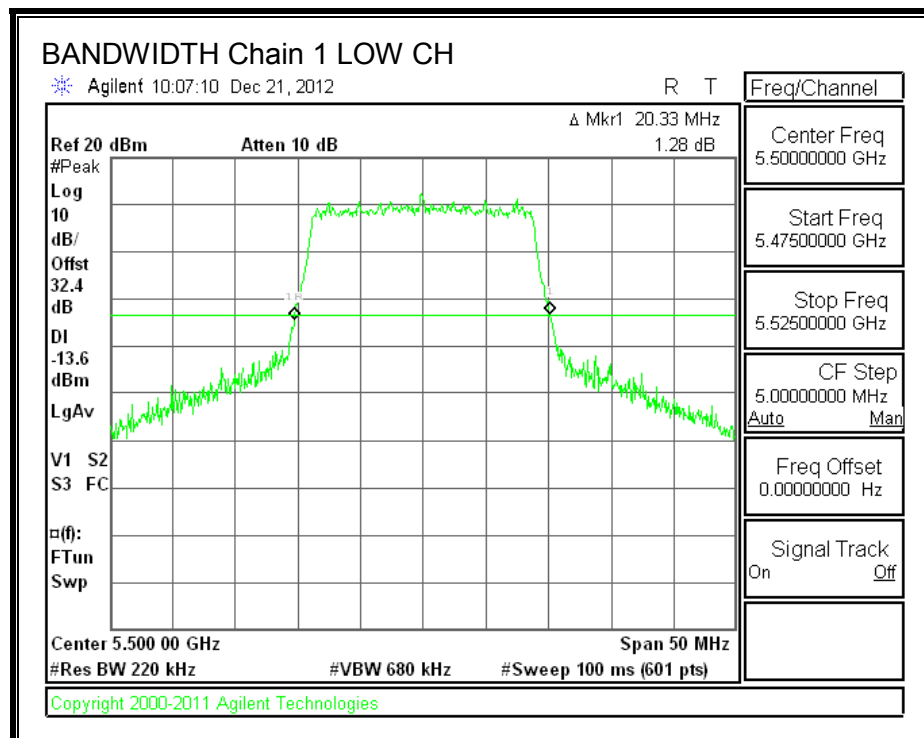
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Low	5500	20.42	20.33	21.17
Mid	5580	20.50	20.42	21.25
High	5700	20.50	20.42	20.67

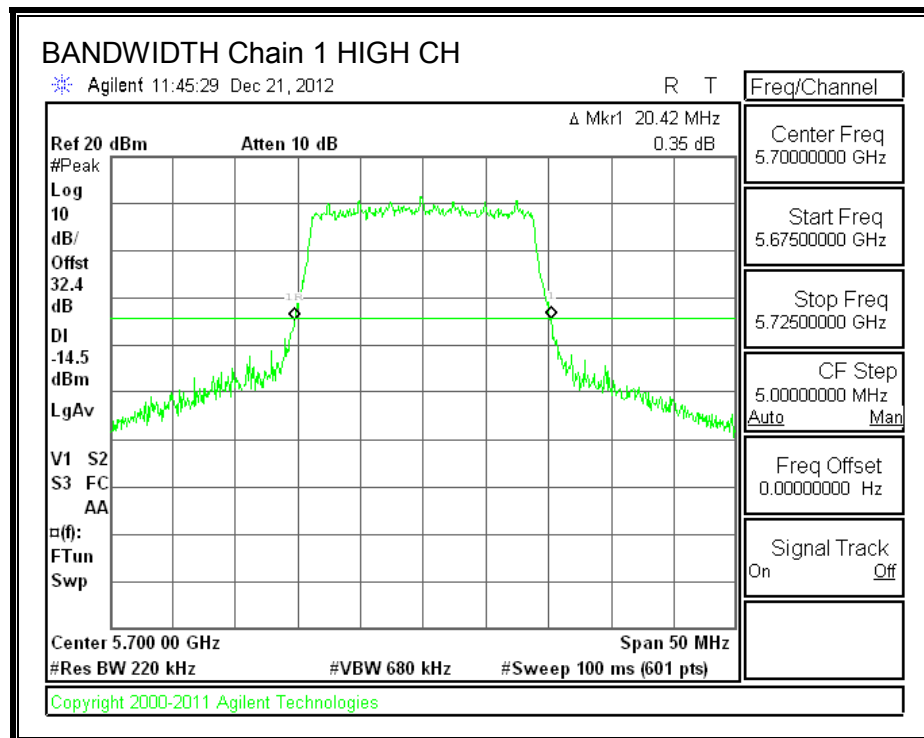
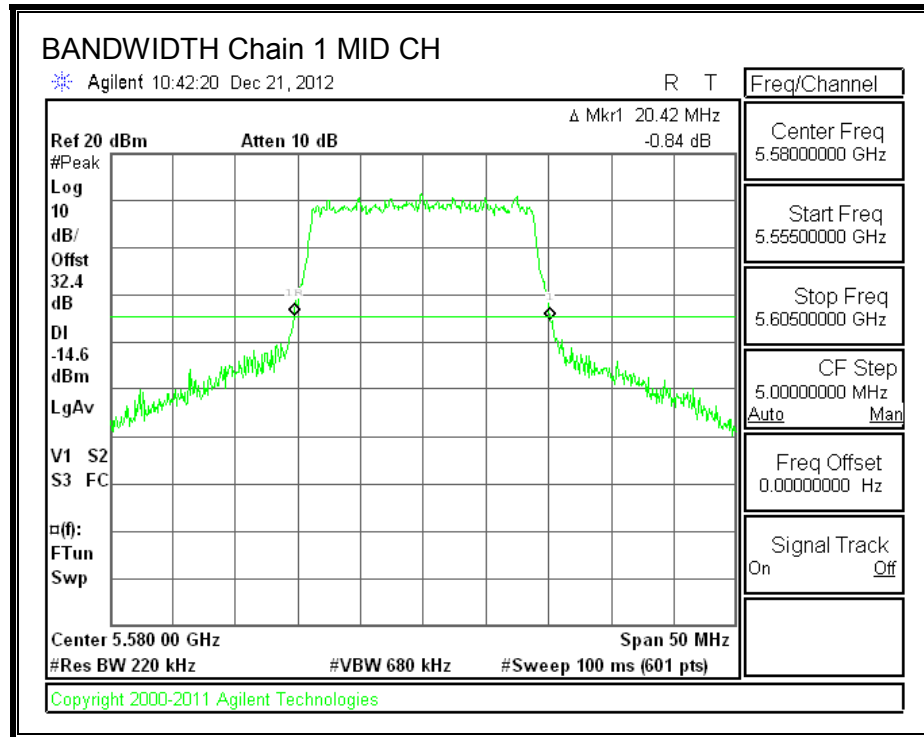
26 dB BANDWIDTH, Chain 0



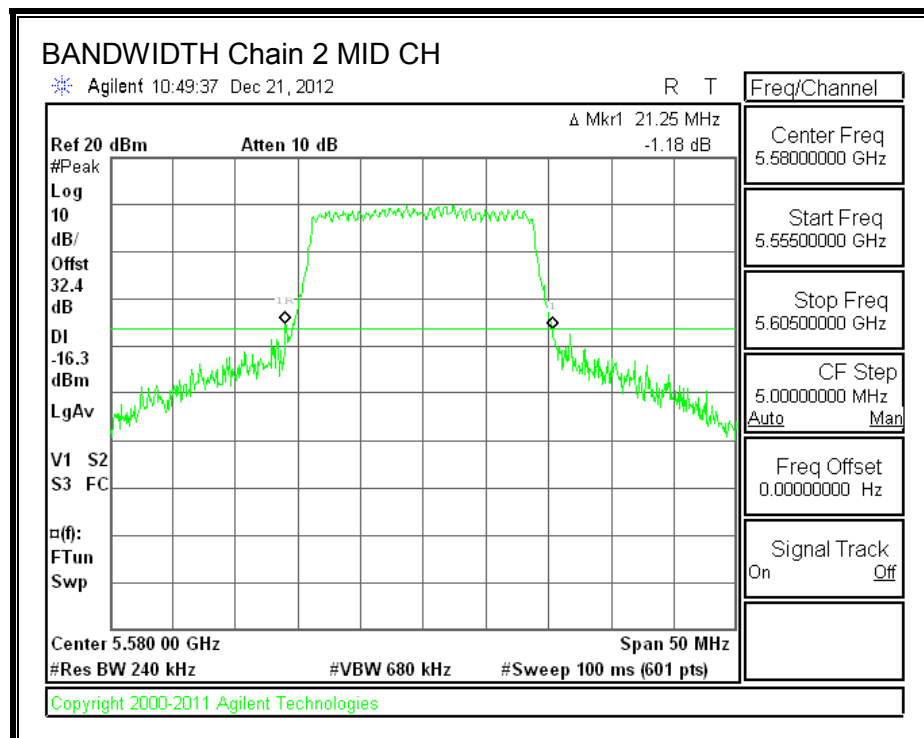
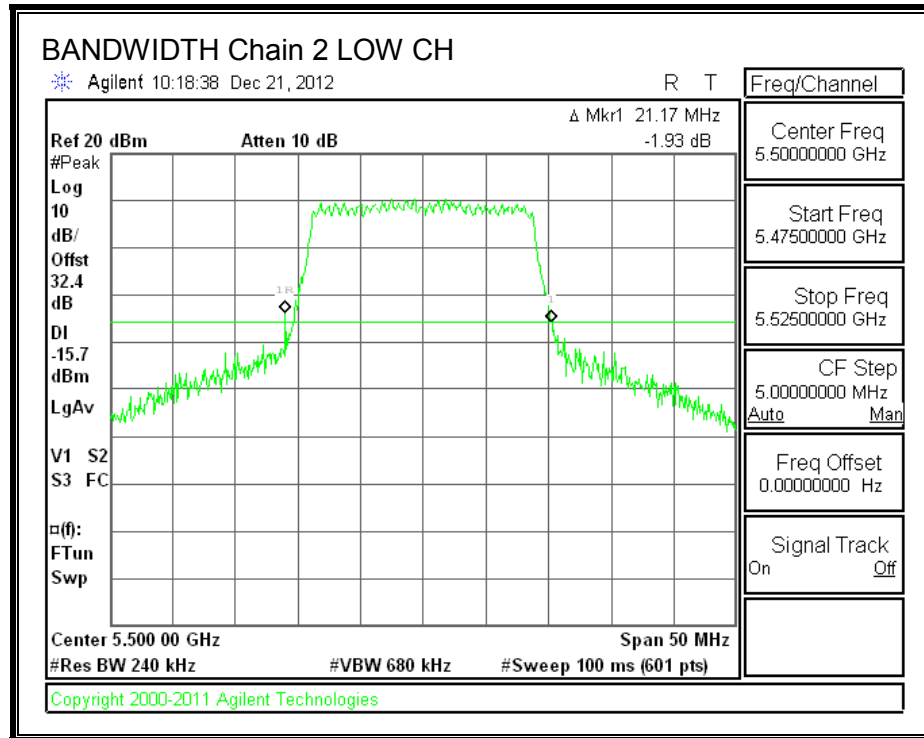


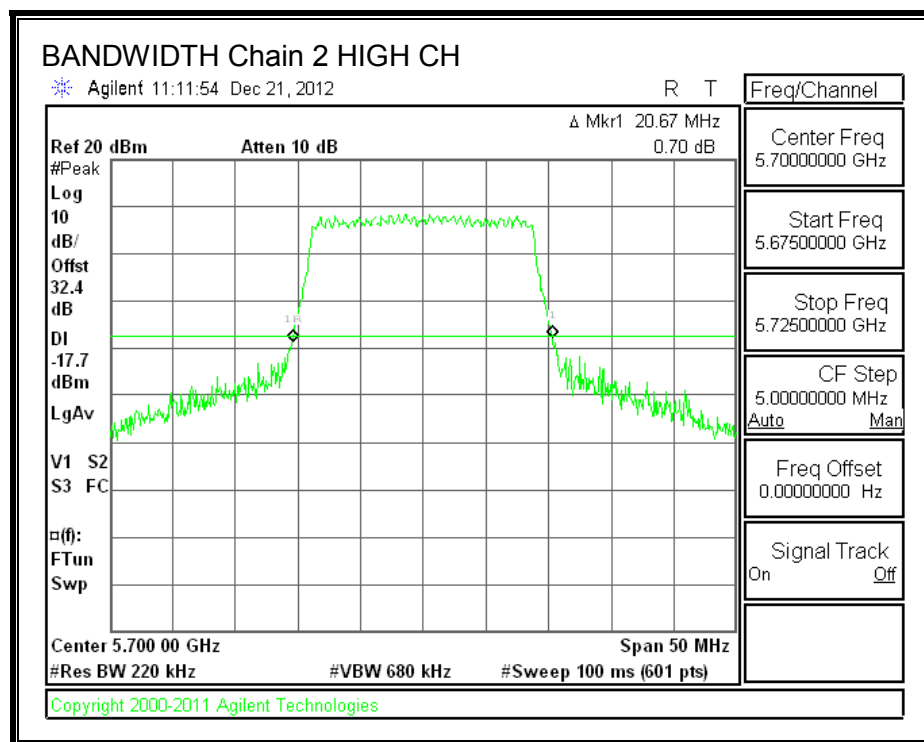
26 dB BANDWIDTH, Chain 1





26 dB BANDWIDTH, Chain 2





8.50.2. 99% BANDWIDTH

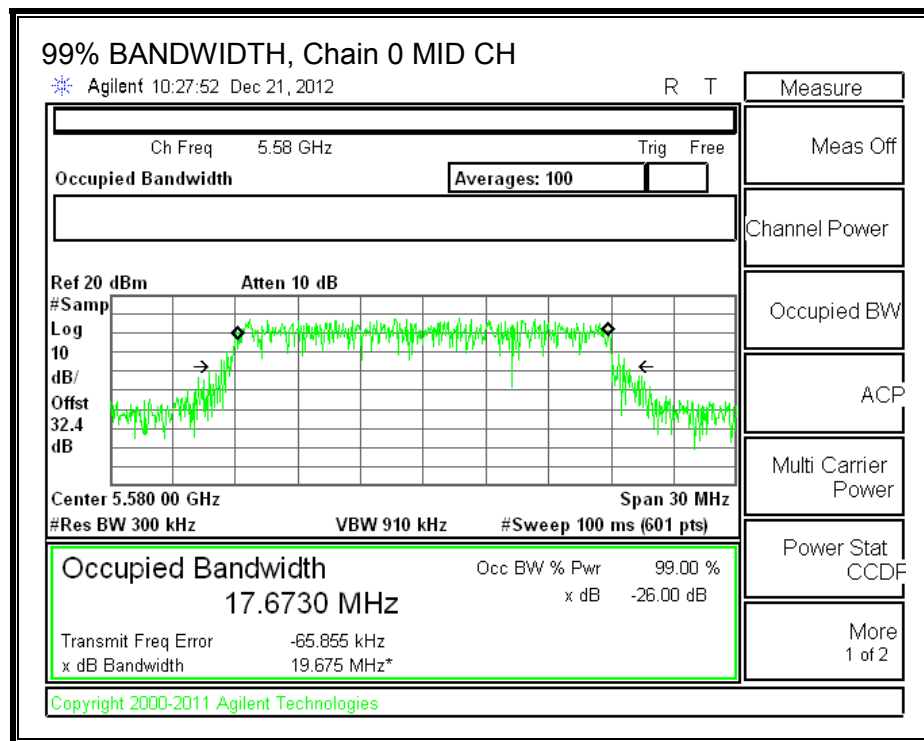
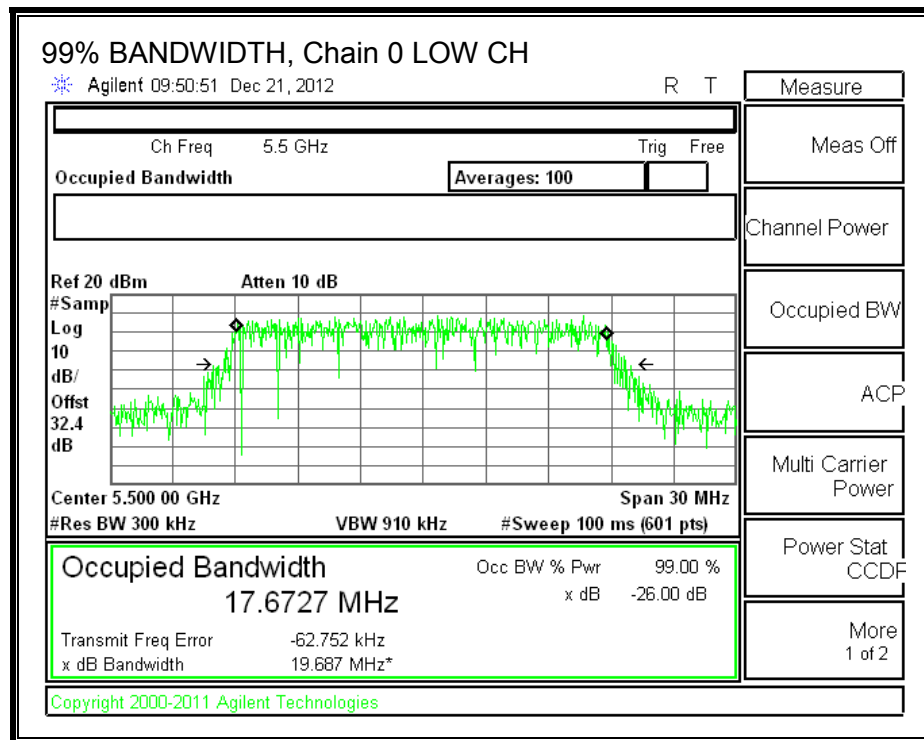
LIMITS

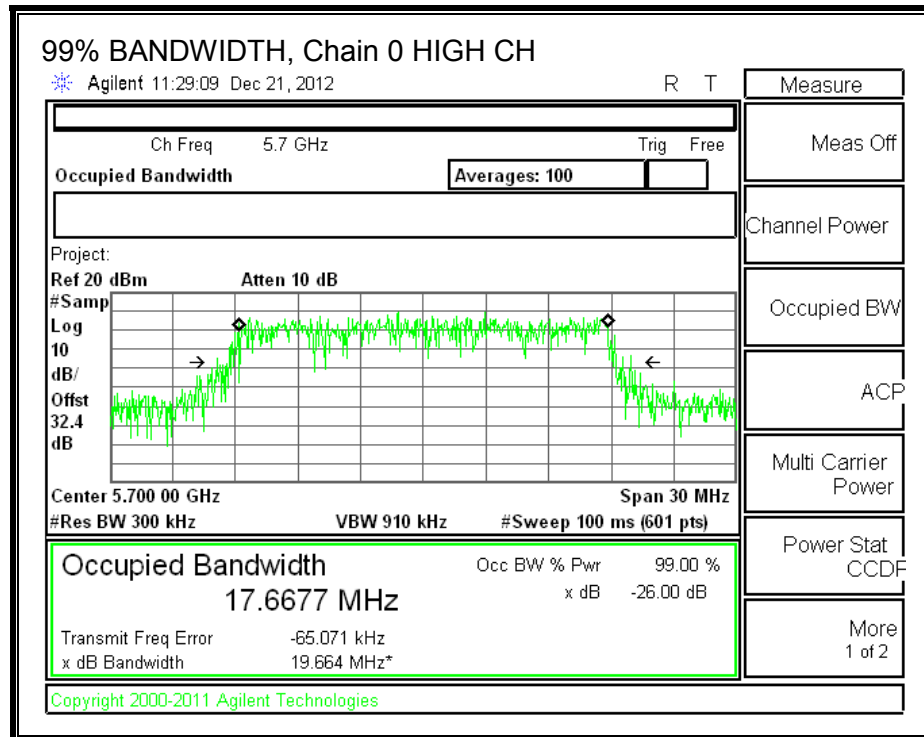
None; for reporting purposes only.

RESULTS

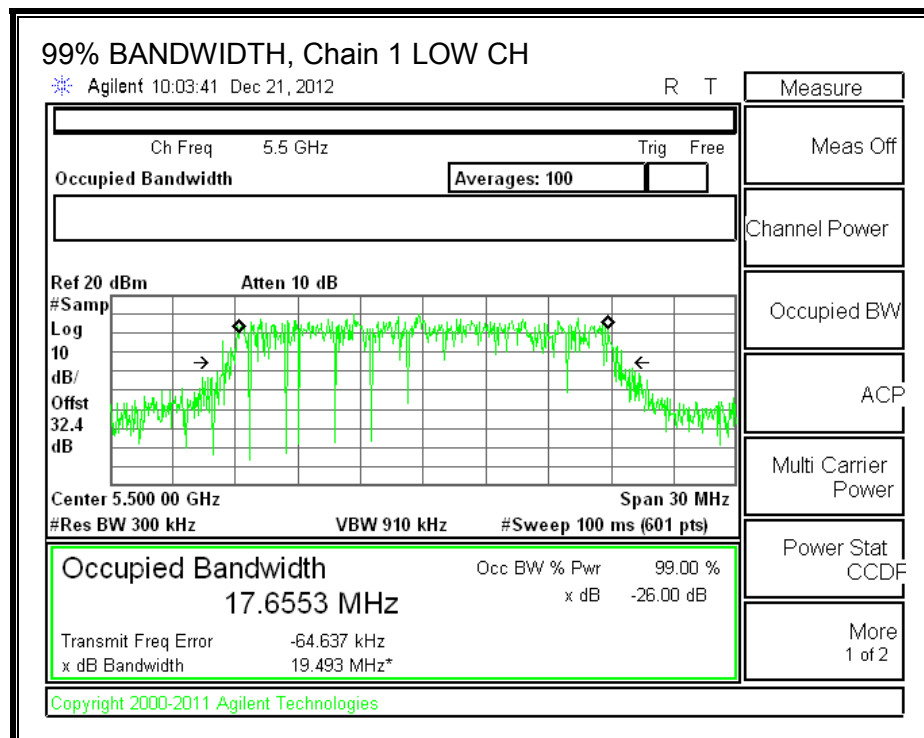
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	5500	17.6727	17.6553	17.6848
Mid	5580	17.6730	17.6737	17.6786
High	5700	17.6677	17.6630	17.6677

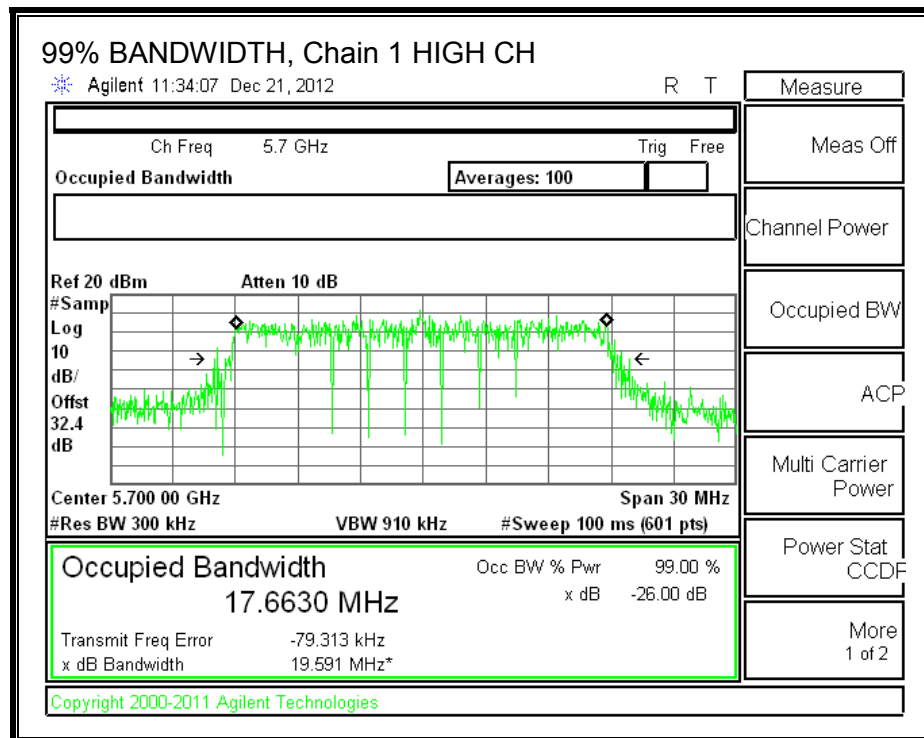
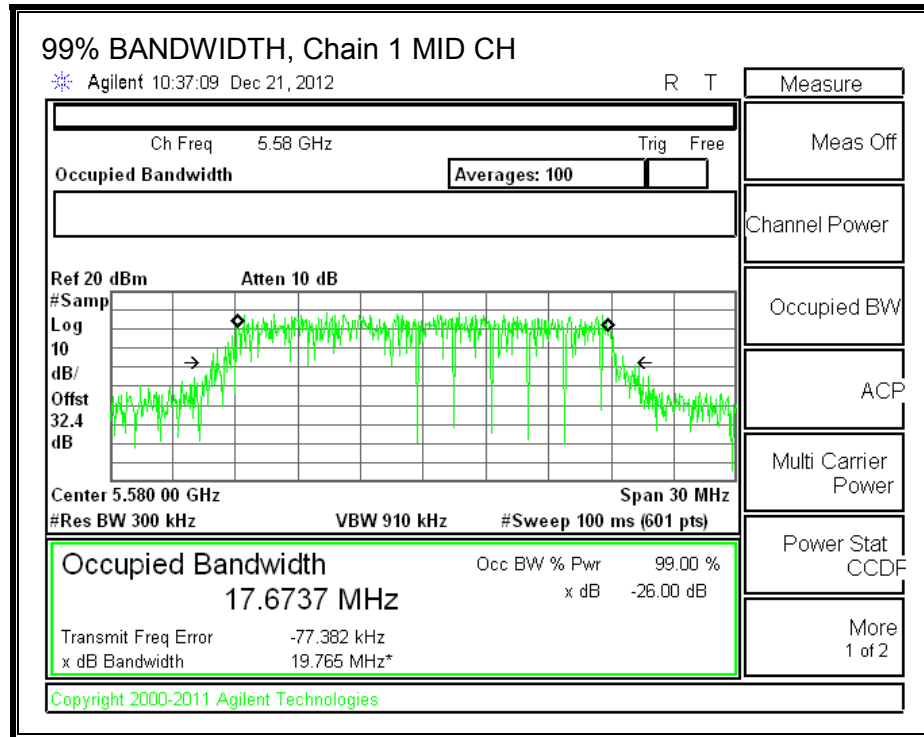
99% BANDWIDTH, Chain 0



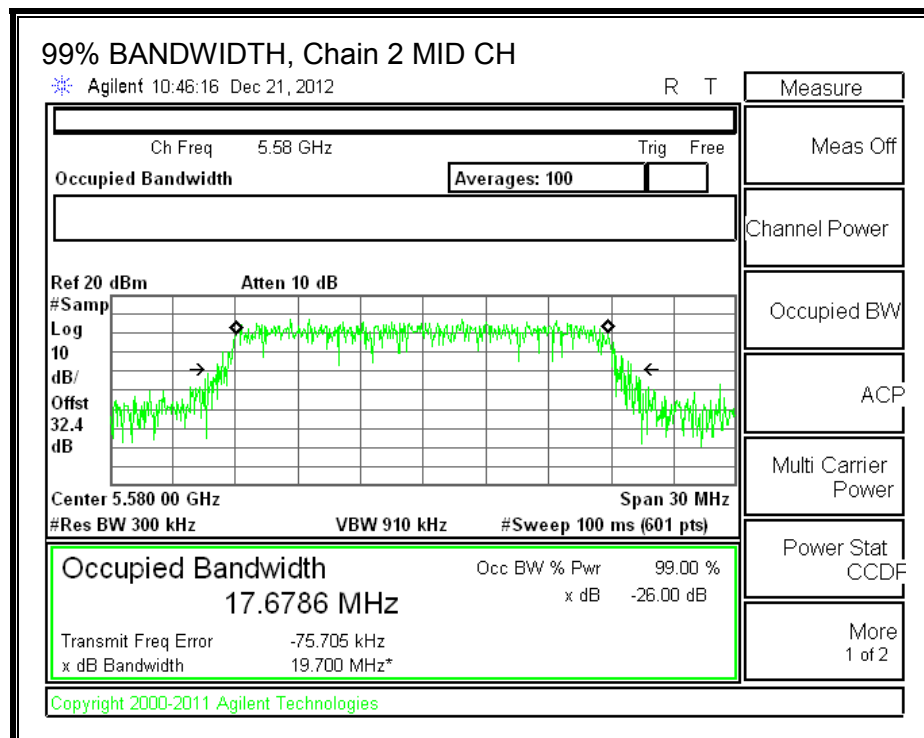
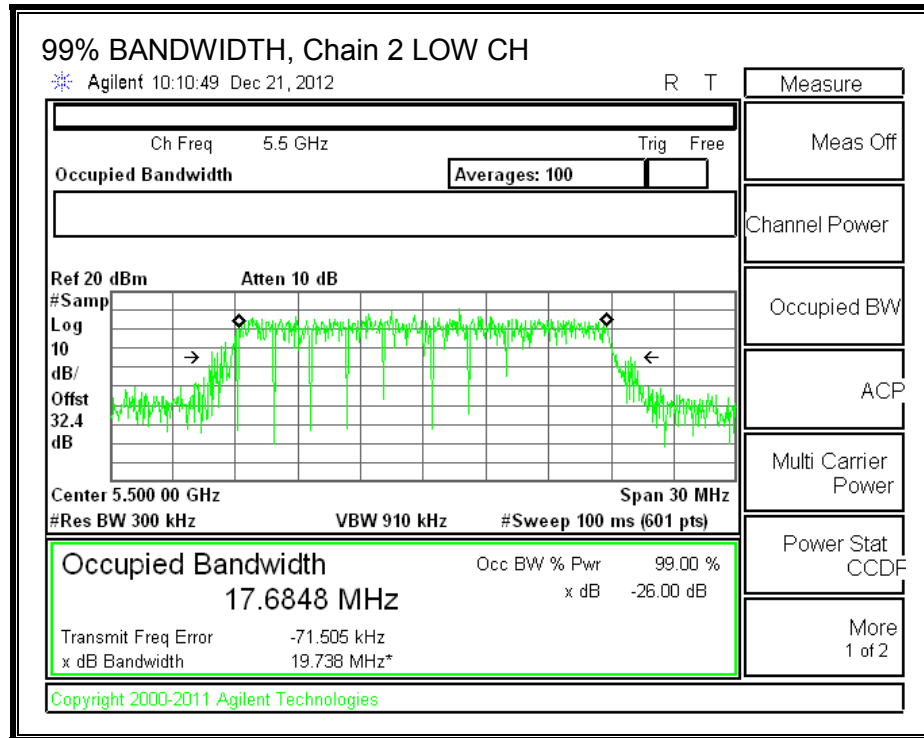


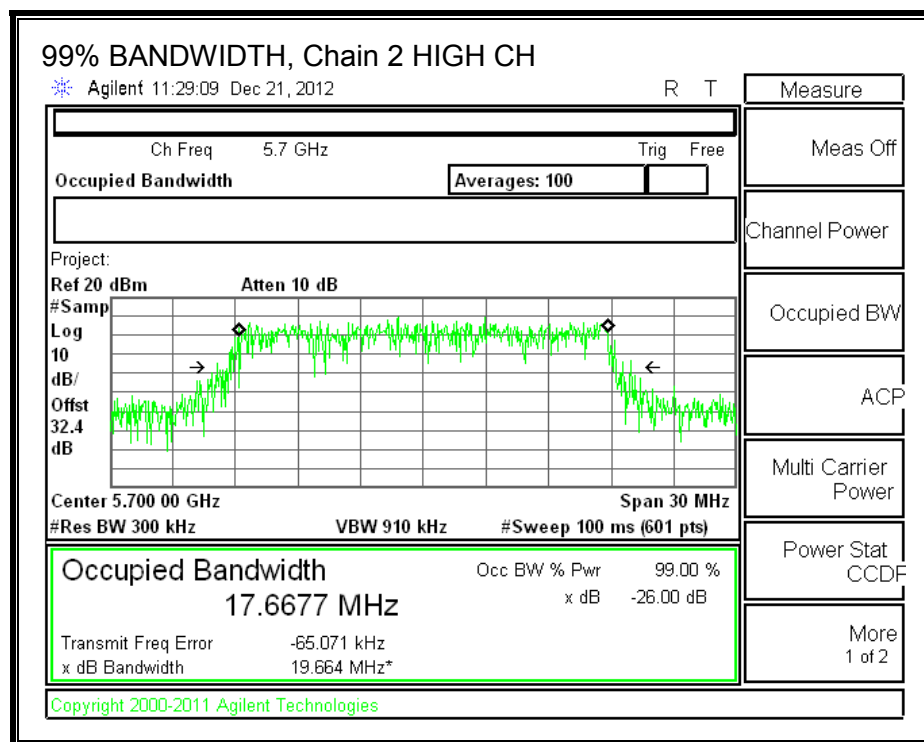
99% BANDWIDTH, Chain 1





99% BANDWIDTH, Chain 2





8.50.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	1.70	3.80	2.92

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	20.33	17.6553	2.92
Mid	5580	20.42	17.6730	2.92
High	5700	20.42	17.6630	2.92

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5500	24.00	23.47	29.47	23.47	11.00	11.00	11.00
Mid	5580	24.00	23.47	29.47	23.47	11.00	11.00	11.00
High	5700	24.00	23.47	29.47	23.47	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00
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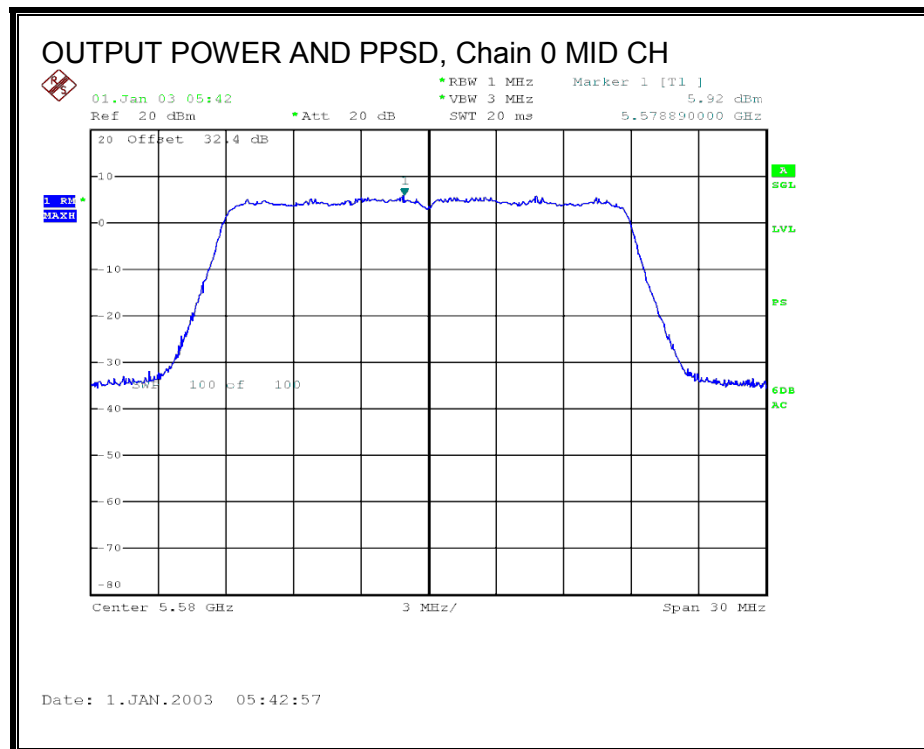
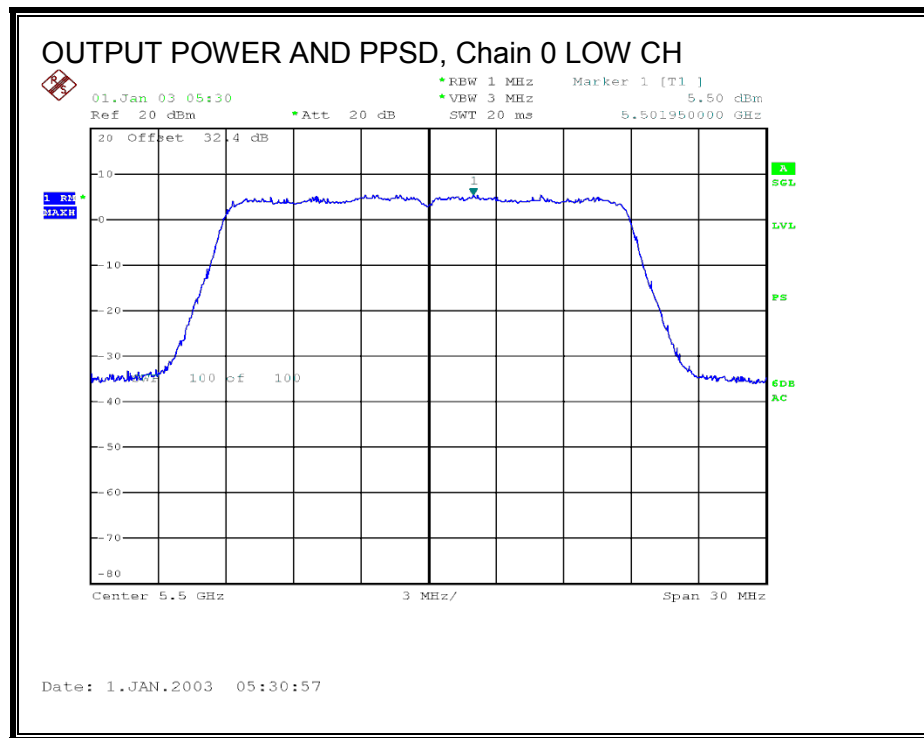
Output Power Results

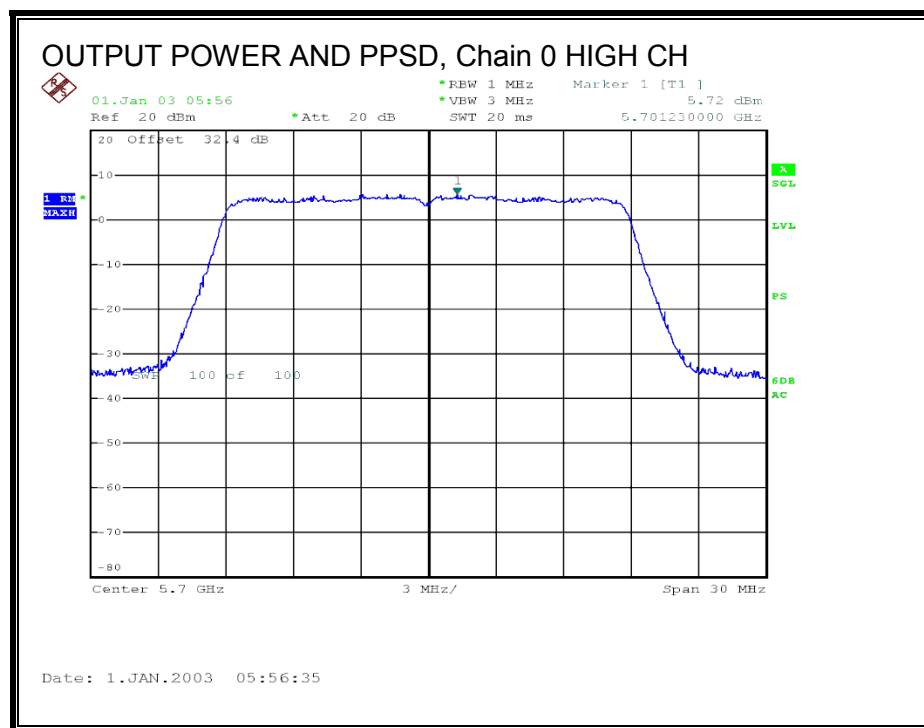
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low 1	5500	13.00	13.35	13.20	17.96	23.47	-5.51
Low 2	5520	13.50	13.65	13.60	18.35	23.47	-5.12
Mid	5580	16.00	16.20	16.10	20.87	23.47	-2.60
High 2	5680	16.00	16.30	16.20	20.94	23.47	-2.53
High 1	5700	15.90	16.20	16.00	20.81	23.47	-2.66

PSD Results

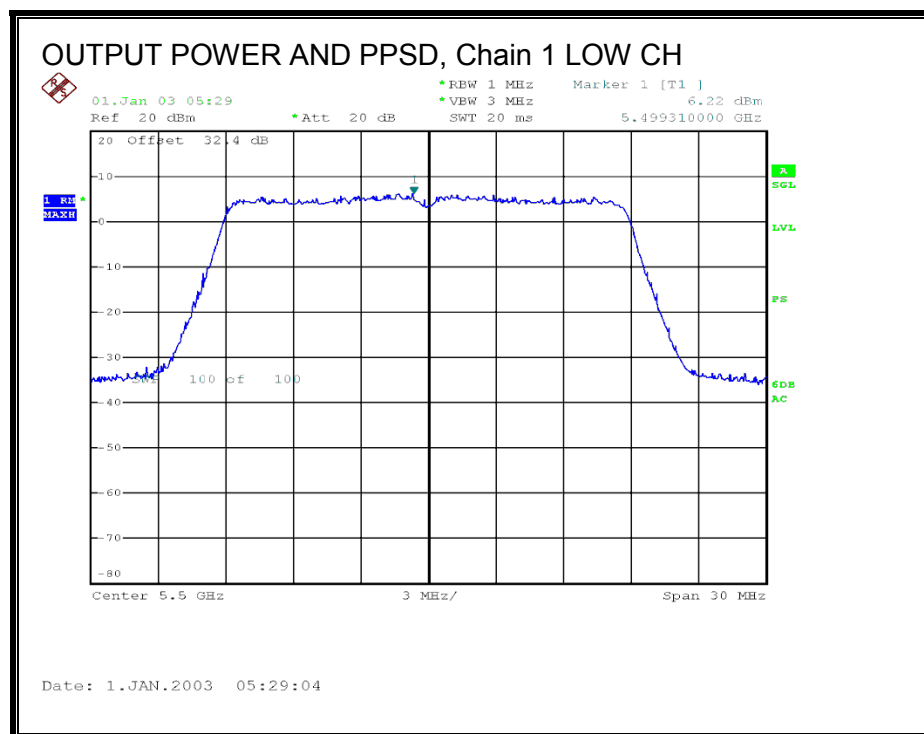
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	5.50	6.22	6.19	10.75	11.00	-0.25
Mid	5580	5.92	6.36	6.26	10.96	11.00	-0.04
High	5700	5.72	6.32	6.29	10.89	11.00	-0.11

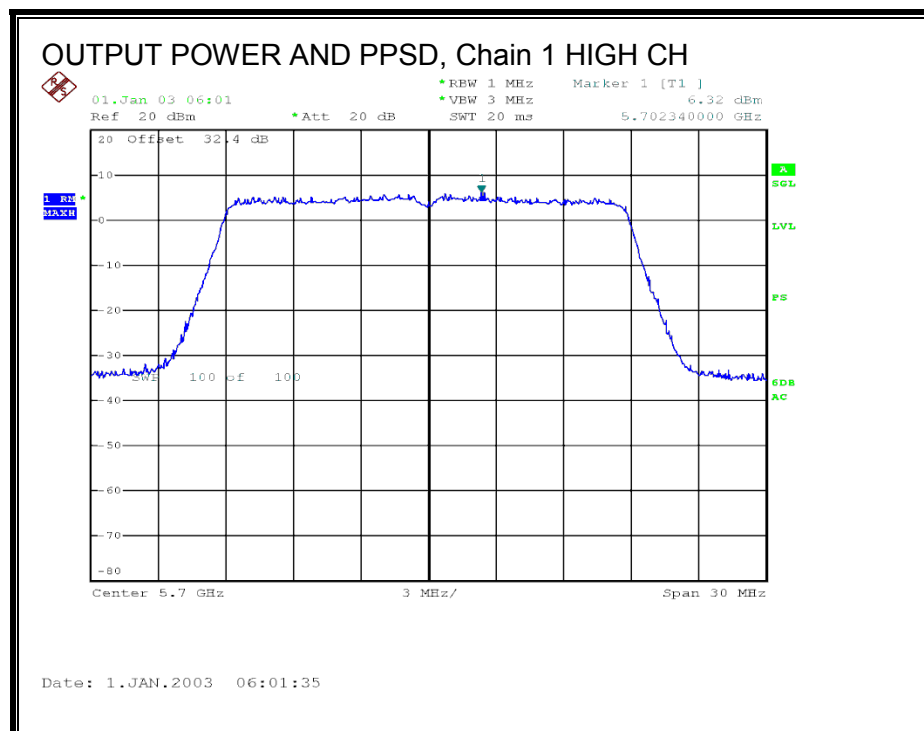
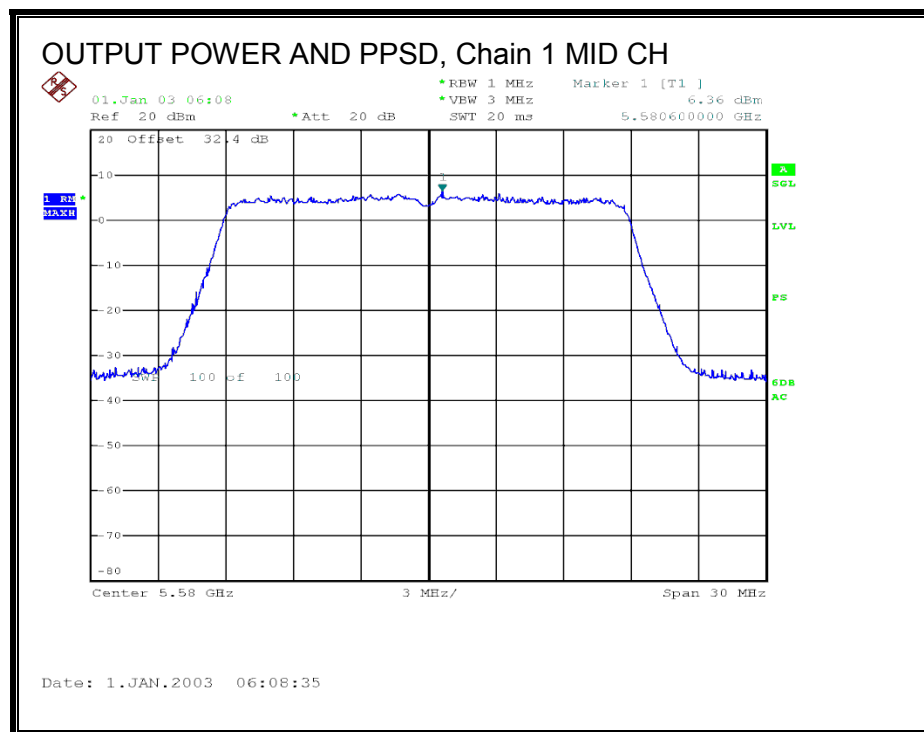
OUTPUT POWER AND PPSD, Chain 0

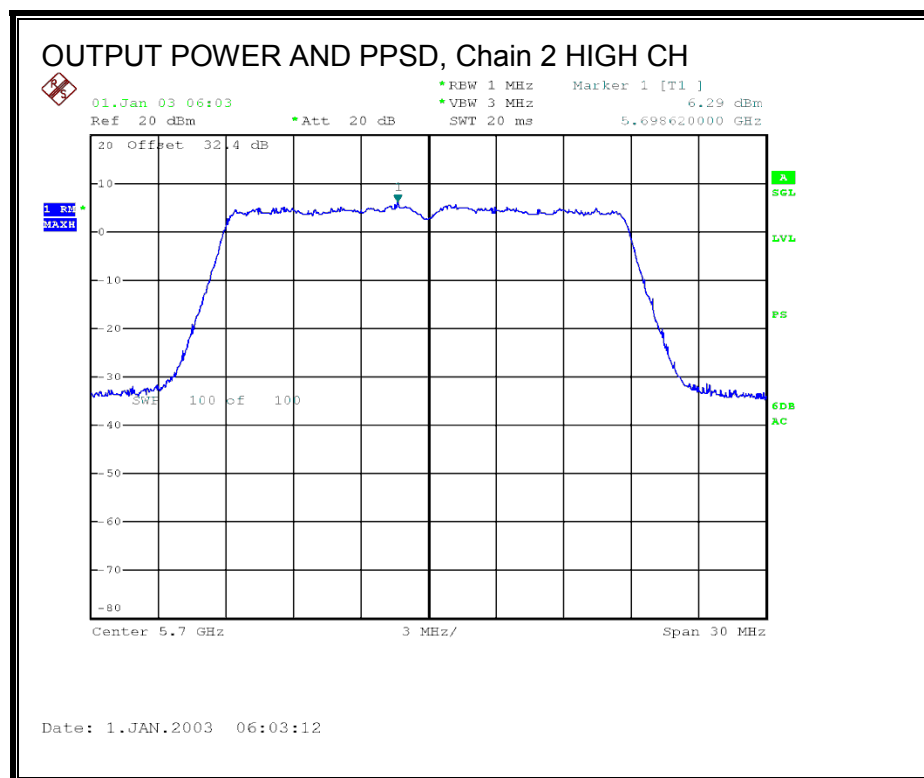




OUTPUT POWER AND PPSD, Chain 1







8.50.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.51. 802.11a 1TX MODE, CH 144 (5720 MHz), 5.6 GHz BAND

8.51.1.26 dB BANDWIDTH

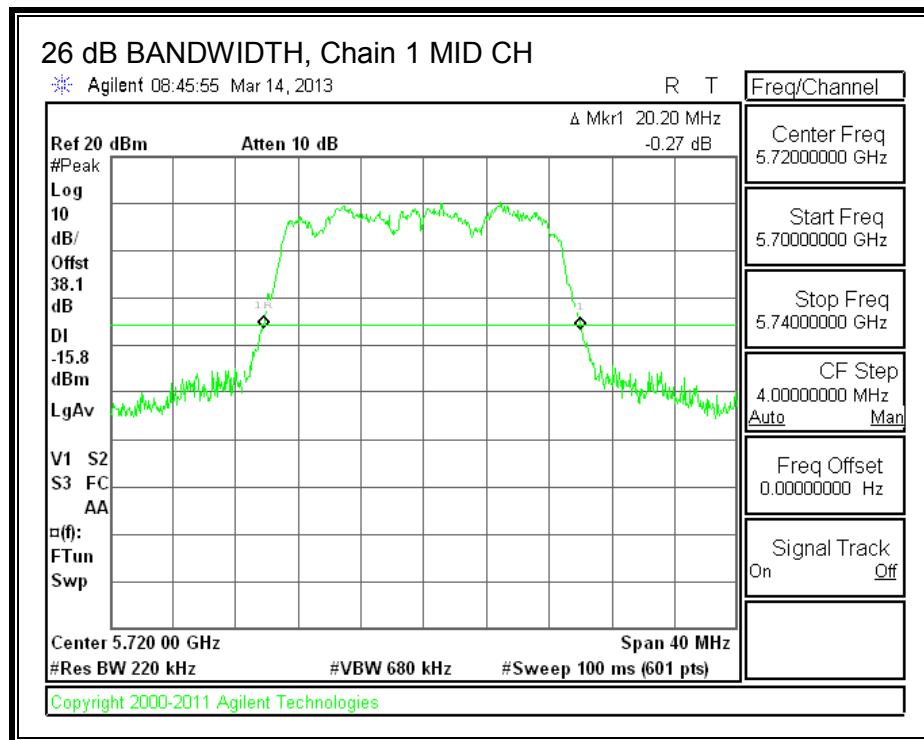
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 1 (MHz)
Mid	5720	20.20

26 dB BANDWIDTH, Chain 1



8.51.2.99% BANDWIDTH

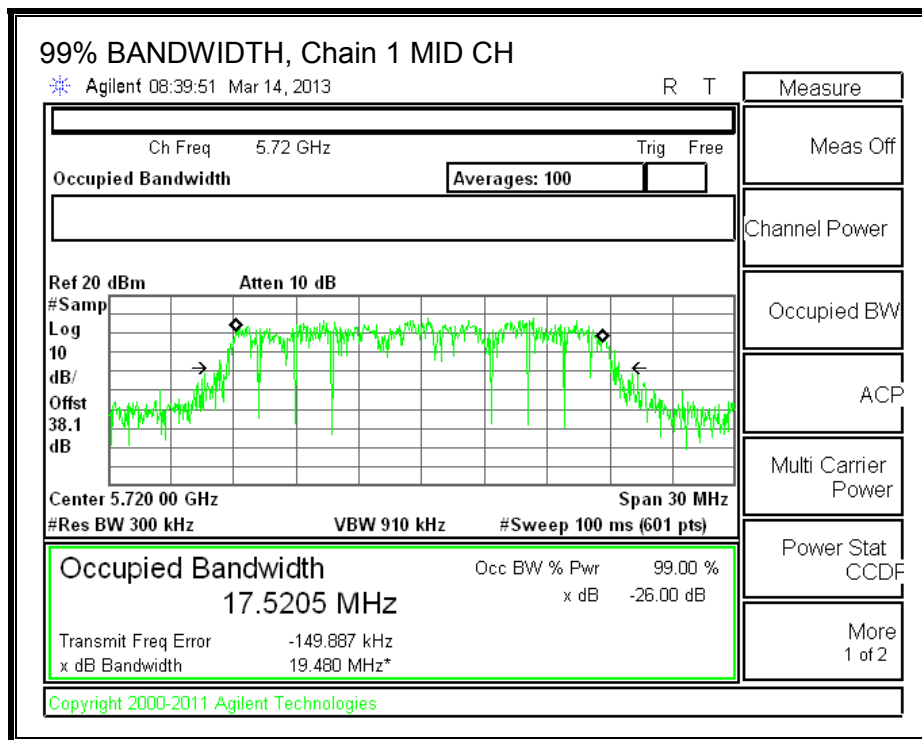
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% BW Chain 1 (MHz)
Mid	5720	17.5205

99% BANDWIDTH, Chain 1



8.51.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Antenna Gain (dBi)
Mid	5720	15.1	13.7603	4.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	22.79	22.39	28.39	22.39	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	20.29	20.29	22.39	-2.10

PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	9.706	9.706	11.00	-1.29

Limits (FCC), portion in 5.8 GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Antenna Gain (dBi)
Mid	5720	5.1	3.7603	4.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	18.08	16.75	22.75	16.75	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00
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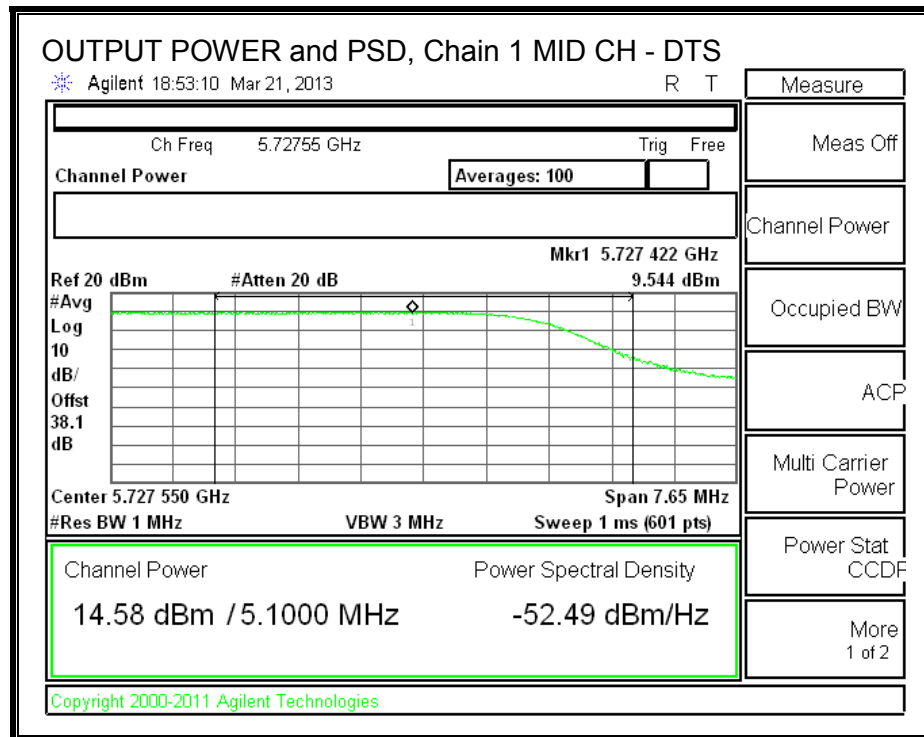
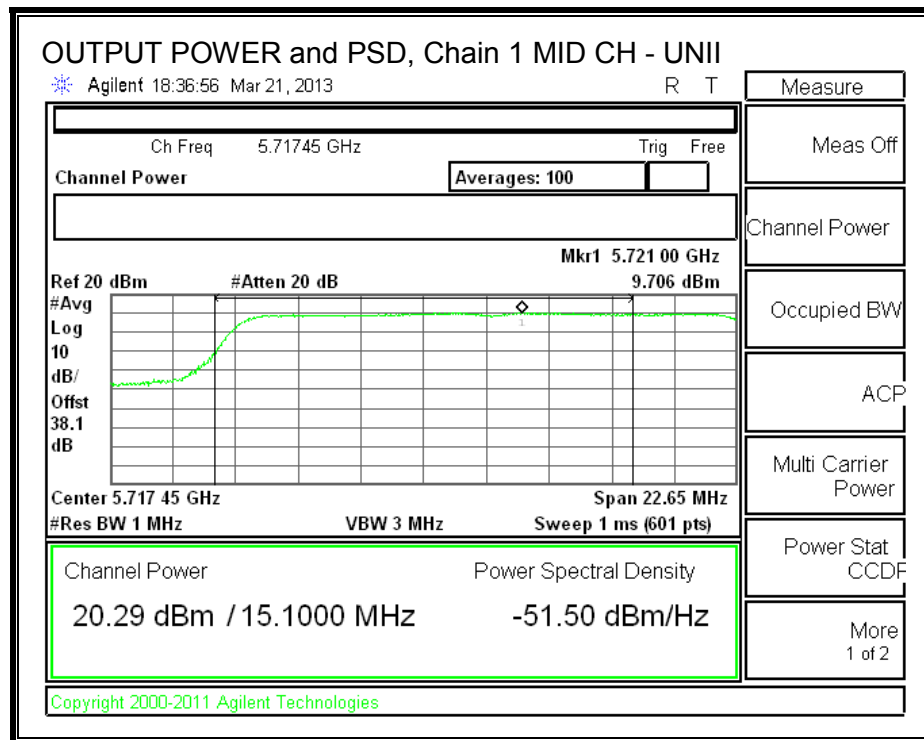
Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	14.58	14.58	16.75	-2.17

PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	9.544	9.544	11.00	-1.46

OUTPUT POWER and PSD, Chain 1



8.51.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.52. 802.11n HT20 CDD 2TX MODE, CH 144 (5720 MHz), 5.6 GHz BAND

8.52.1.26 dB BANDWIDTH

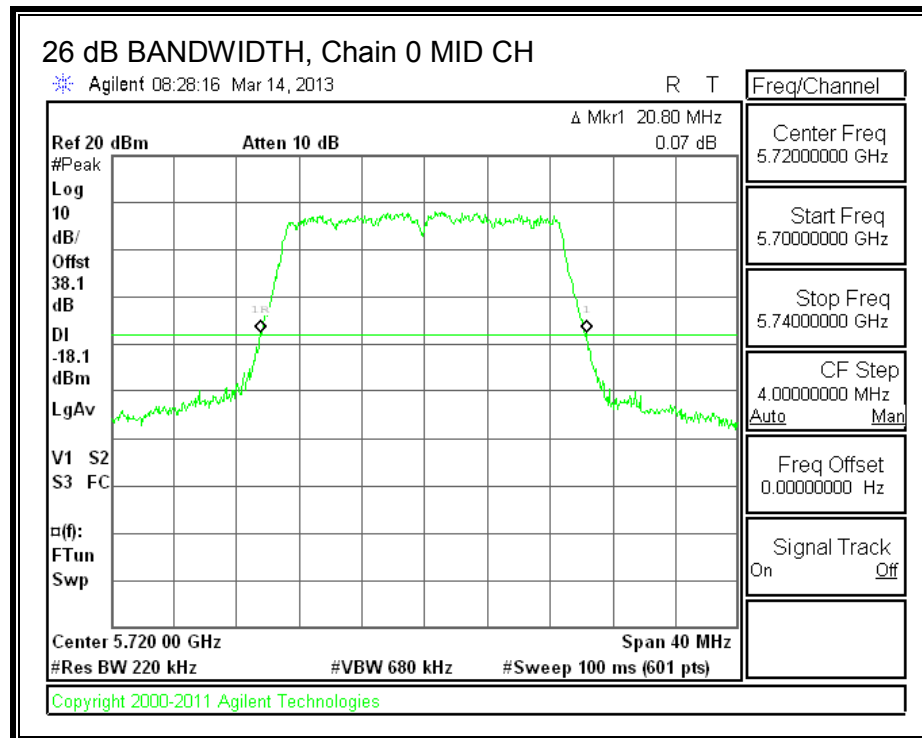
LIMITS

None; for reporting purposes only.

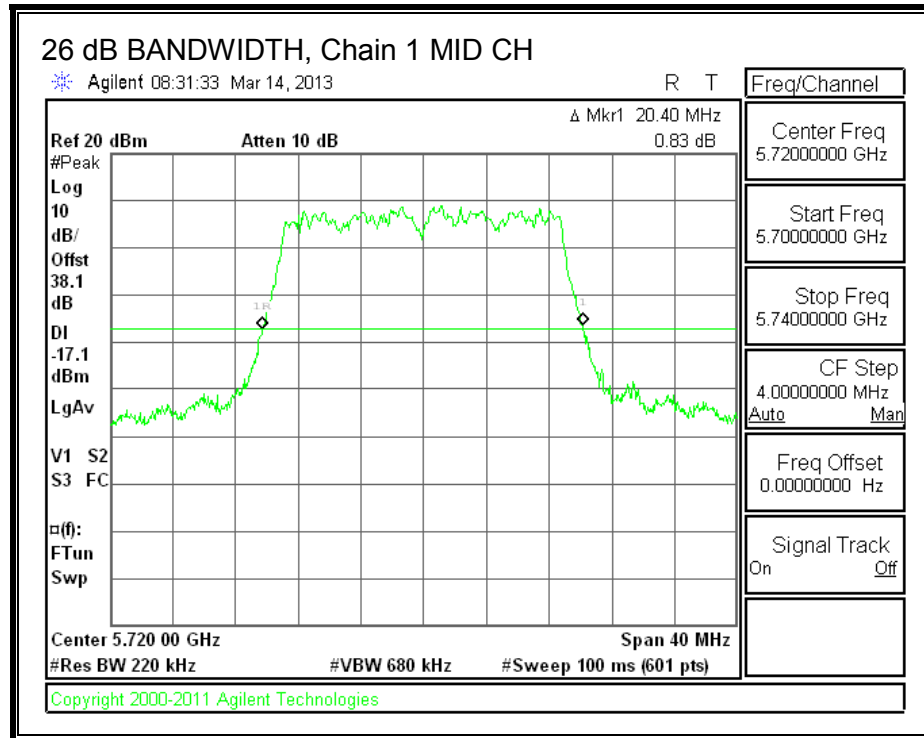
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Mid	5720	20.80	20.40

26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



8.52.2.99% BANDWIDTH

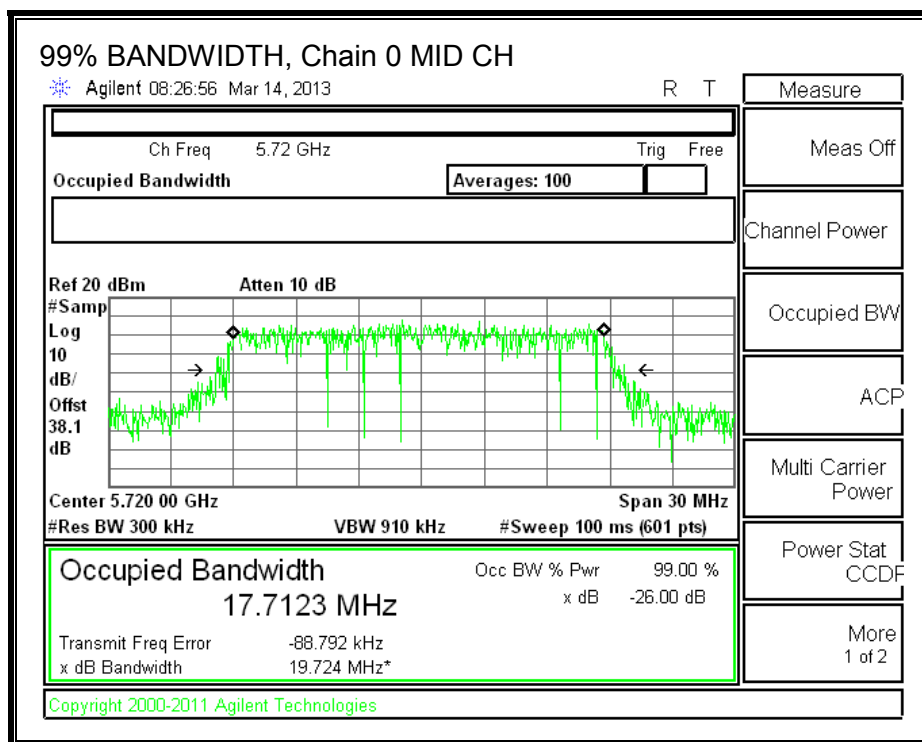
LIMITS

None; for reporting purposes only.

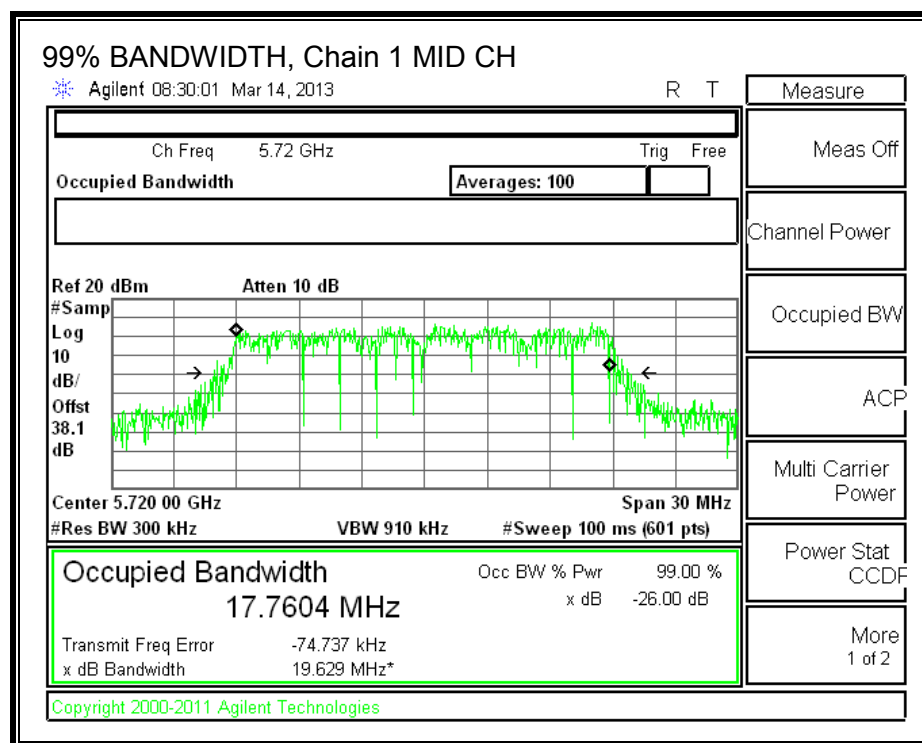
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Mid	5720	17.7123	17.7604

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



8.52.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.70	4.40	4.44

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
2.70	4.40	4.81

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)	Uncorrelated Gain (dBi)
Mid	5720	15.20	13.8020	4.81	4.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	22.82	22.40	28.40	22.40	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	16.15	16.23	19.20	22.40	-3.20

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	6.126	6.332	9.24	11.00	-1.76

Limits (FCC), portion in 5.8 GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)	Uncorrelated Gain (dBi)
Mid	5720	5.20	3.8020	4.81	4.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	18.16	16.80	22.80	16.80	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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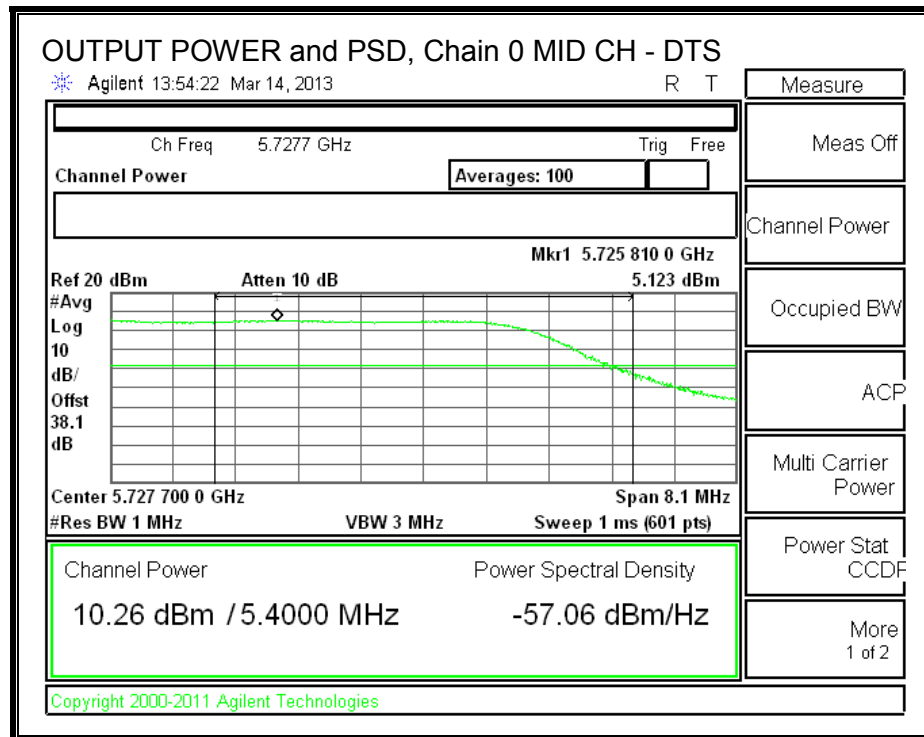
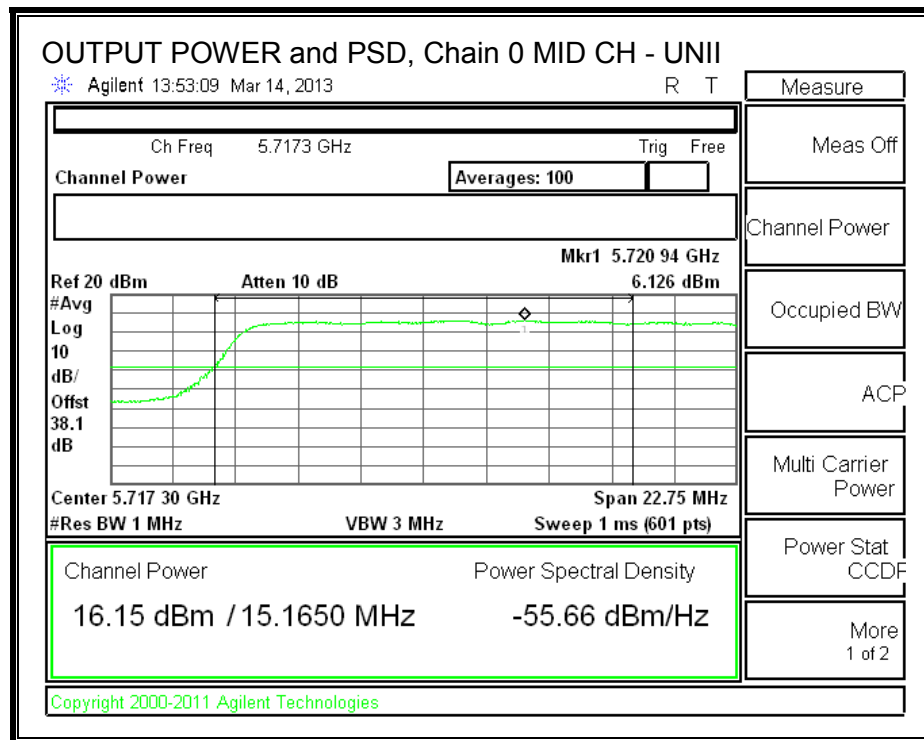
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	10.26	10.30	13.29	16.80	-3.51

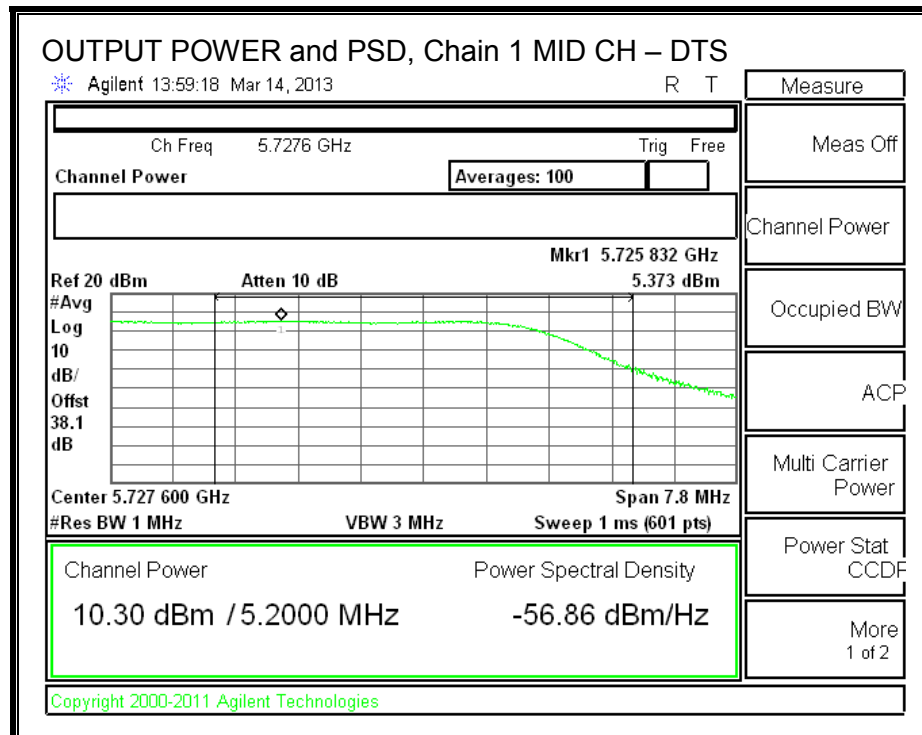
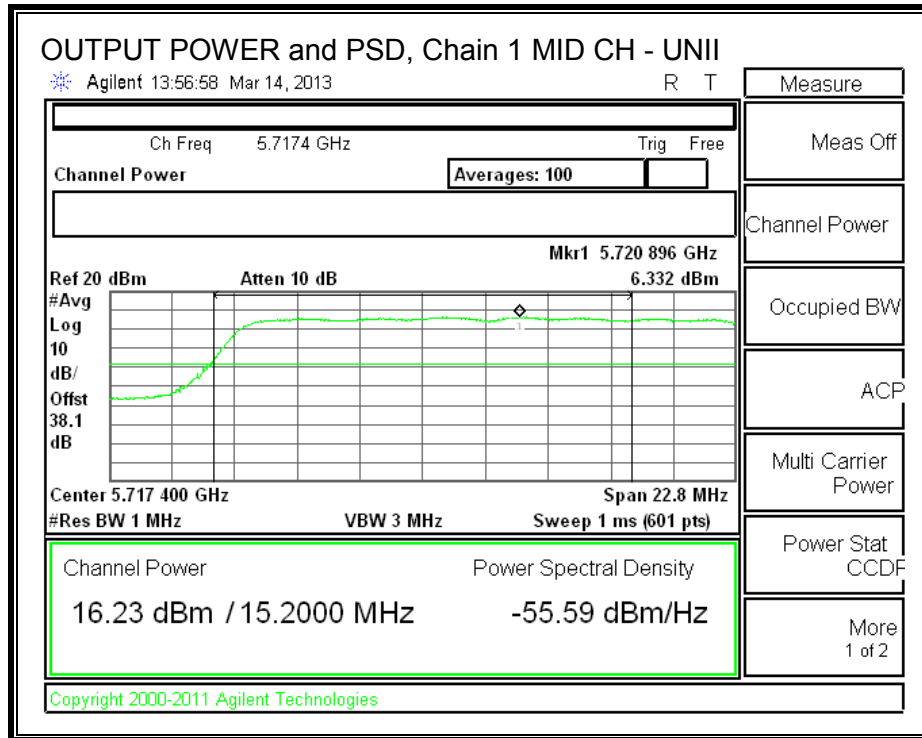
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	5.123	5.373	8.26	11.00	-2.74

OUTPUT POWER and PSD, Chain 0



OUTPUT POWER and PSD, Chain 1



8.52.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.53. 802.11n HT20 STBC 2TX MODE, CH 144 (5720 MHz), 5.6 GHz BAND

8.53.1.26 dB BANDWIDTH

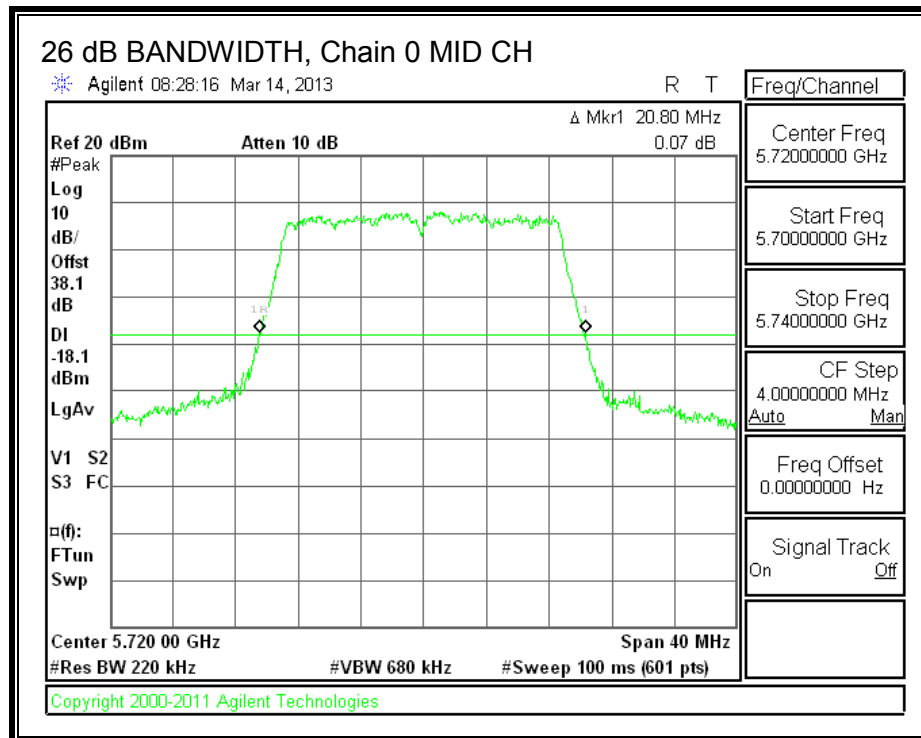
LIMITS

None; for reporting purposes only.

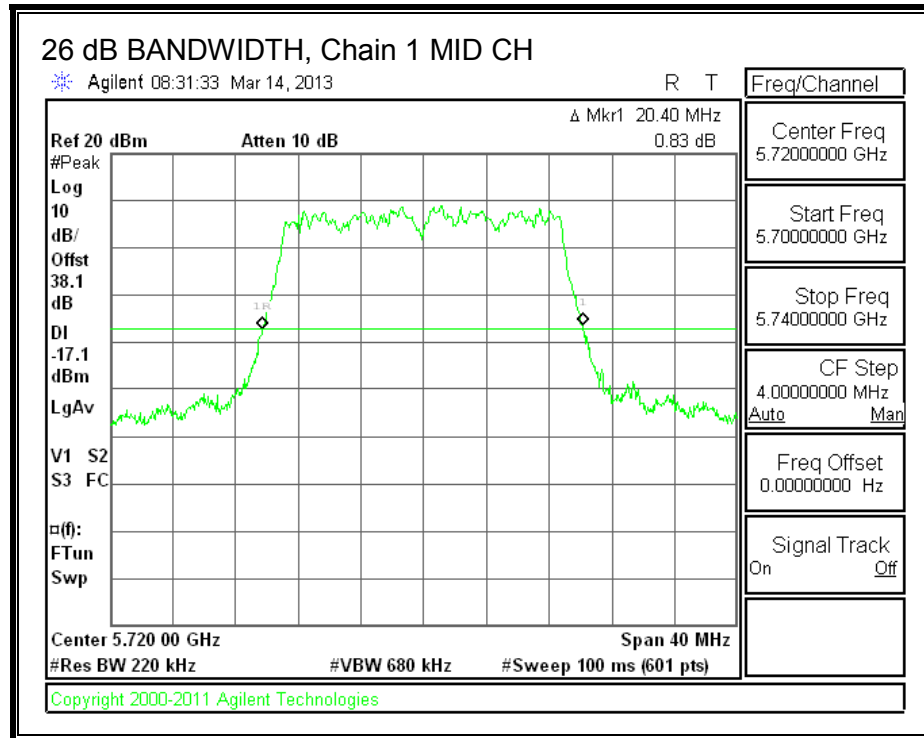
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Mid	5720	20.80	20.40

26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



8.53.2.99% BANDWIDTH

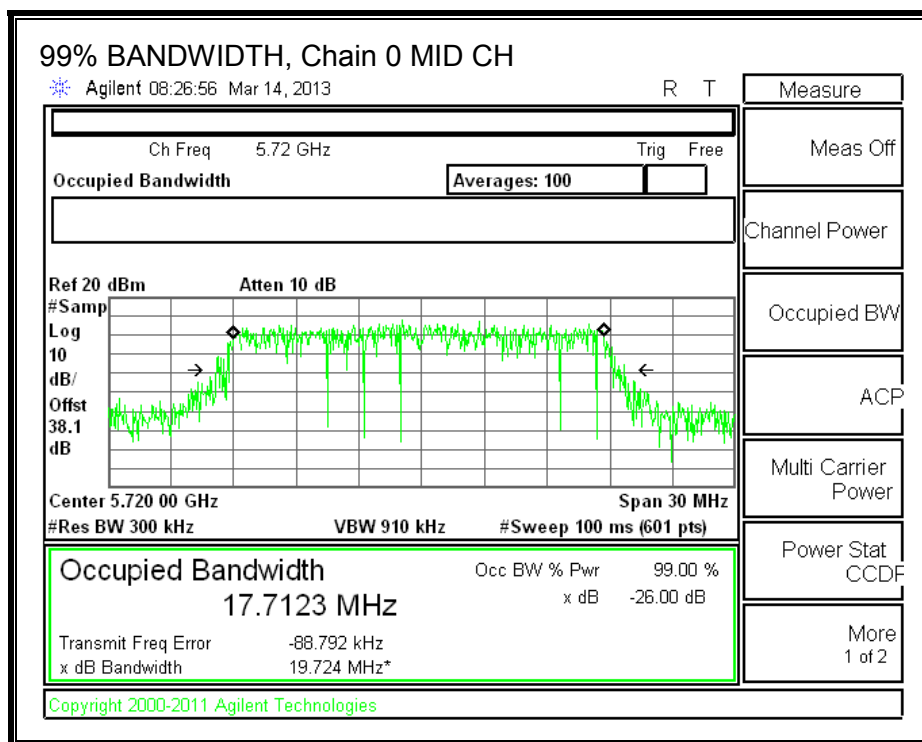
LIMITS

None; for reporting purposes only.

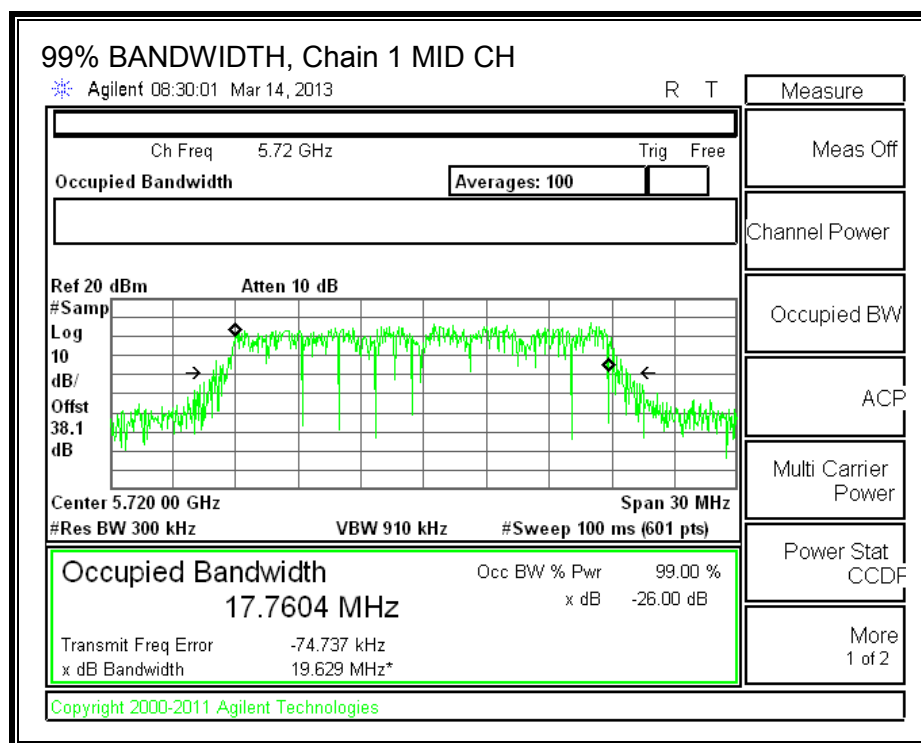
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Mid	5720	17.7123	17.7604

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



8.53.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.70	4.40	4.44

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)		Uncorrelated Gain (dBi)
Mid	5720	15.20	13.8020		4.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	22.82	22.40	28.40	22.40	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	18.09	18.27	21.19	22.40	-1.21

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	7.641	7.418	10.54	11.00	-0.46

Limits (FCC), portion in 5.8GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)		Uncorrelated Gain (dBi)
Mid	5720	5.20	3.8020		4.44

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	18.16	16.80	22.80	16.80	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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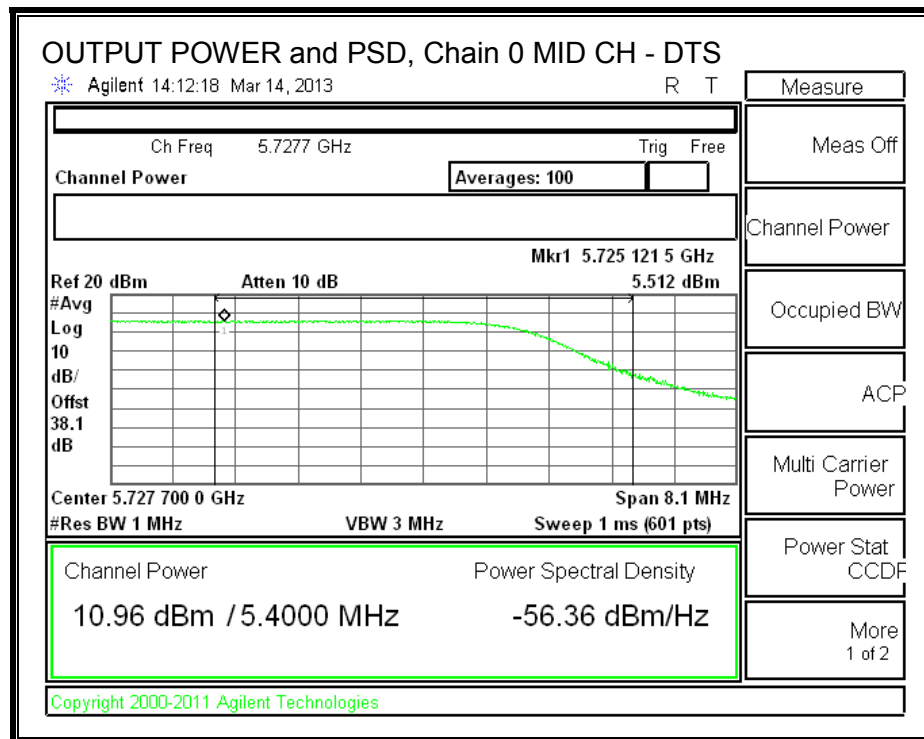
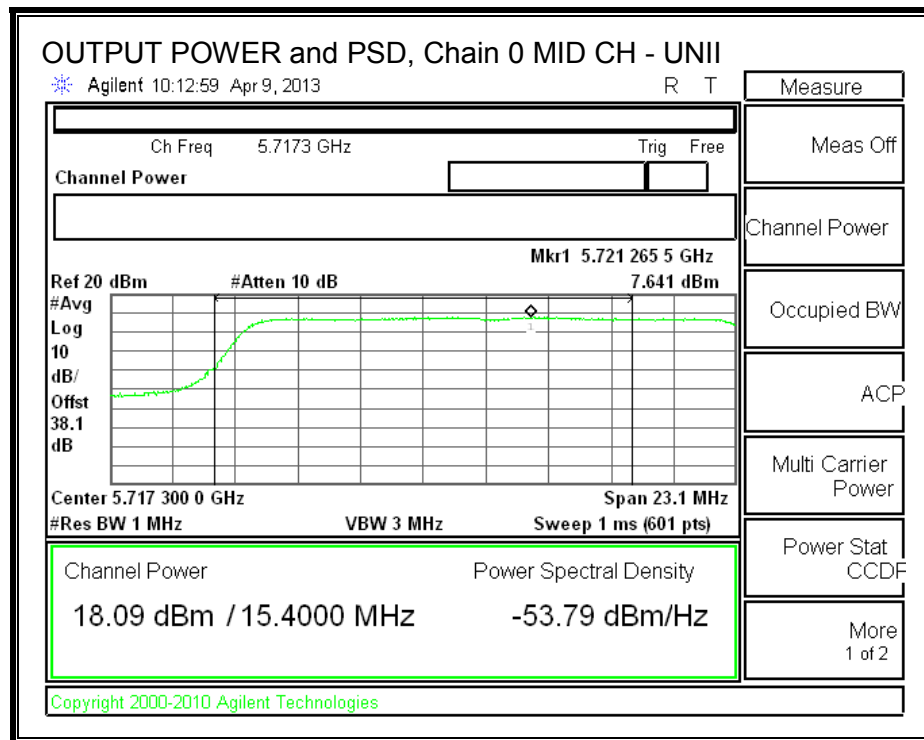
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	10.96	11.12	14.05	16.80	-2.75

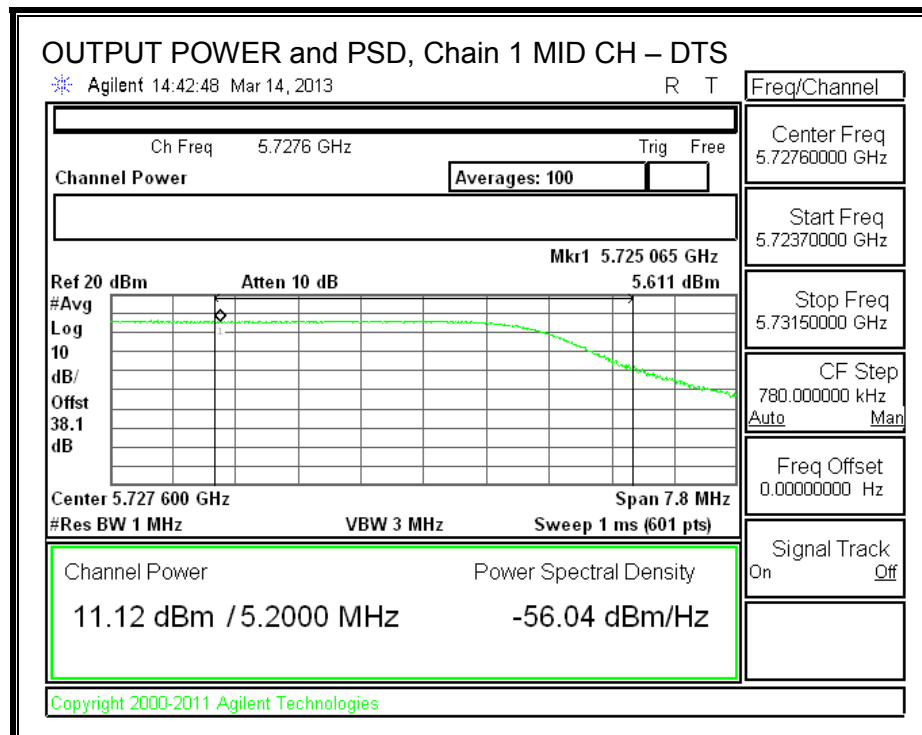
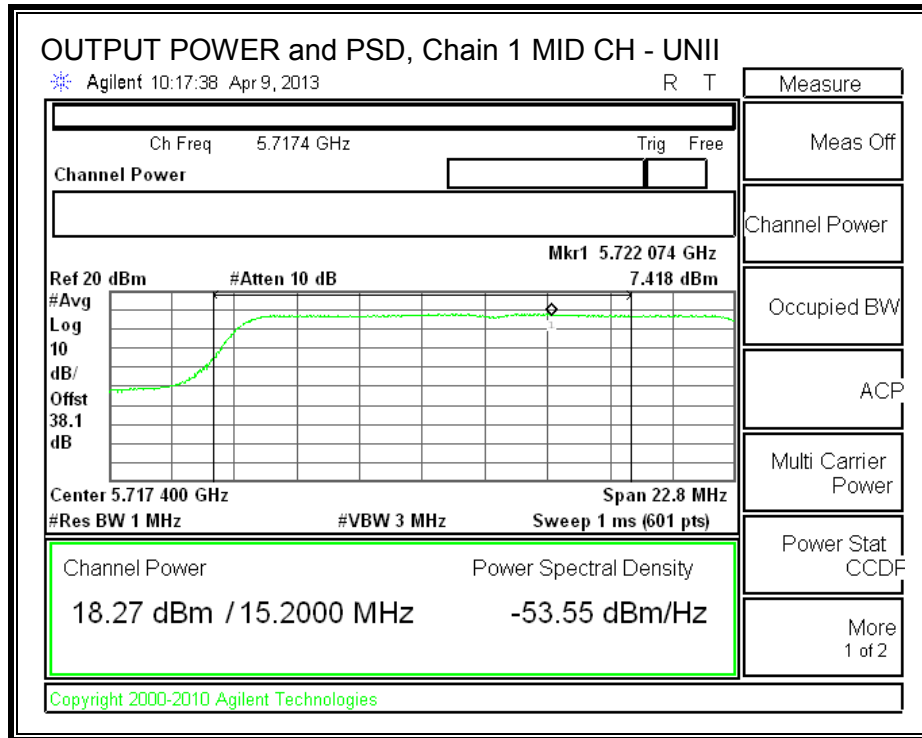
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	5.512	5.611	8.57	11.00	-2.43

OUTPUT POWER and PSD, Chain 0



OUTPUT POWER and PSD, Chain 1



8.53.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.54. 802.11n HT20 CDD 3TX MODE, CH 144 (5720 MHz), 5.6 GHz BAND

8.54.1.26 dB BANDWIDTH

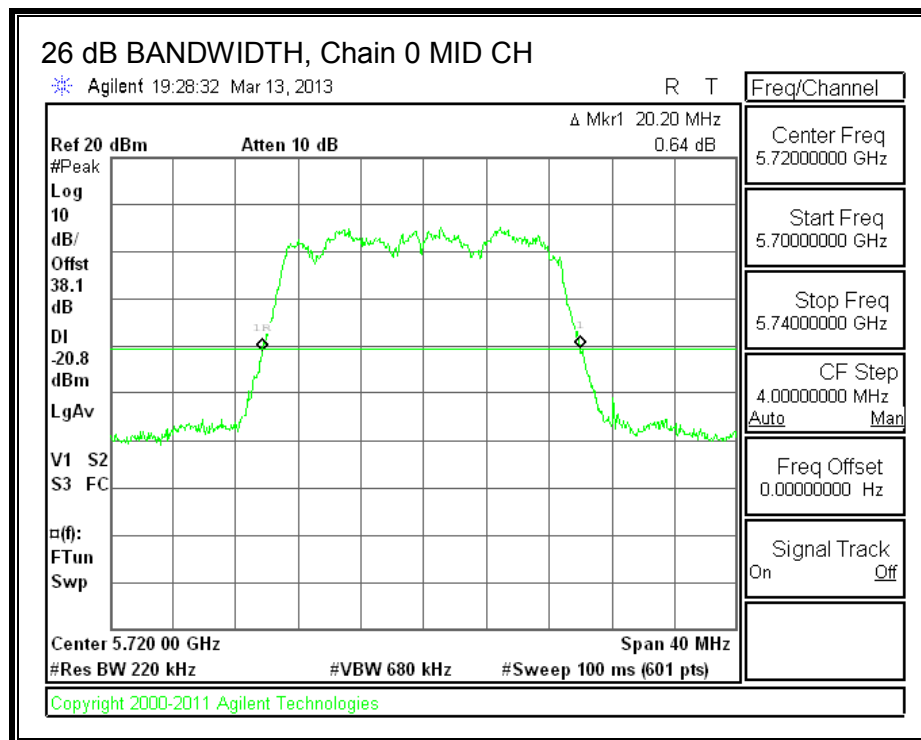
LIMITS

None; for reporting purposes only.

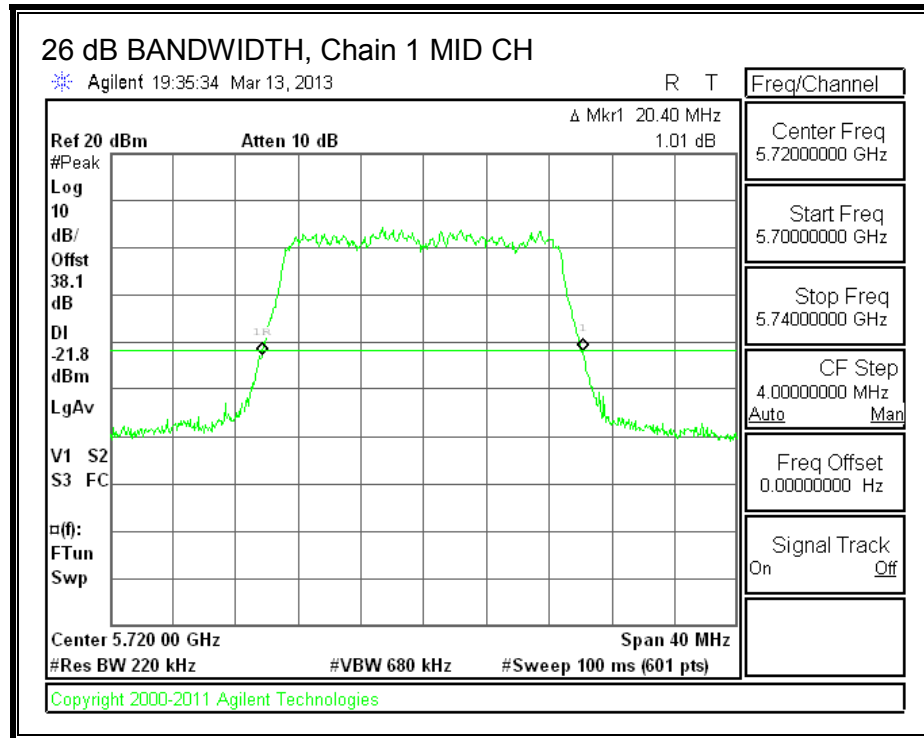
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Mid	5720	20.20	20.40	20.33

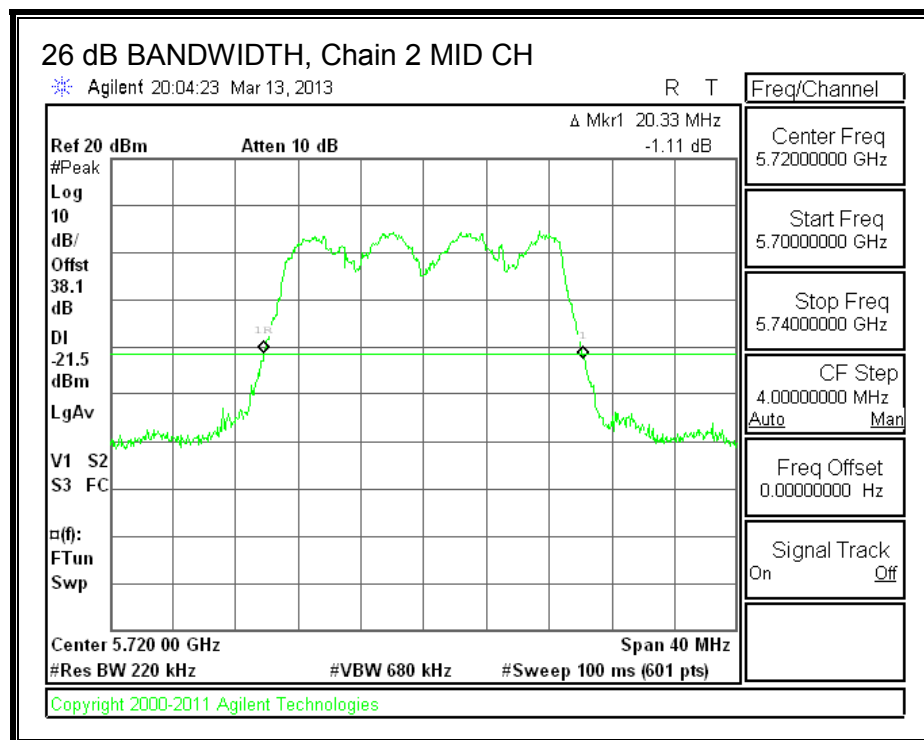
26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



8.54.2.99% BANDWIDTH

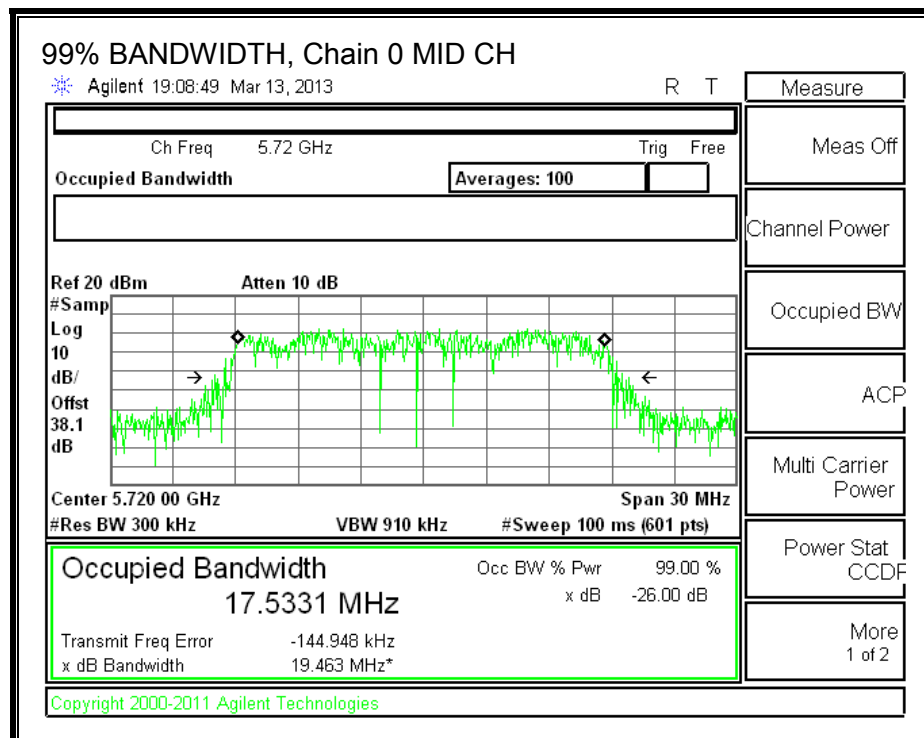
LIMITS

None; for reporting purposes only.

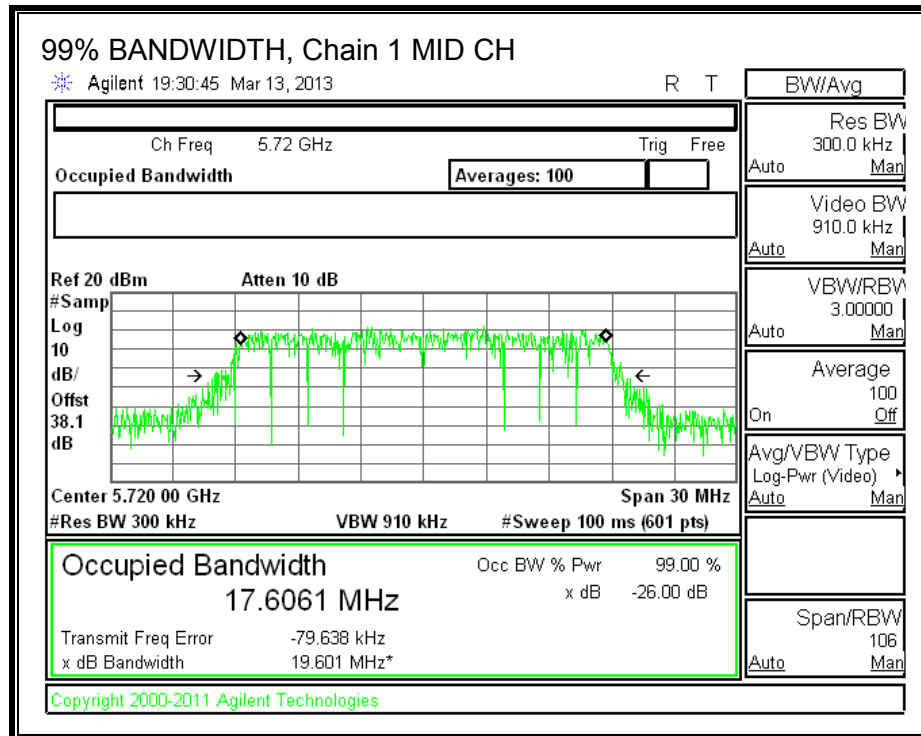
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Mid	5720	17.5331	17.6061	17.5956

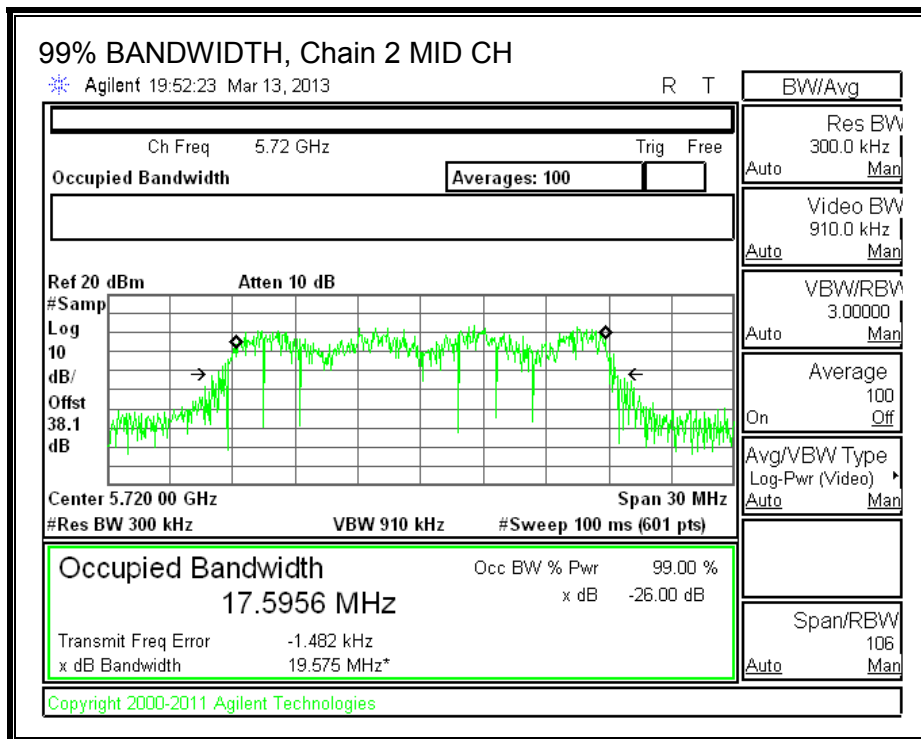
99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



99% BANDWIDTH, Chain 2



8.54.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.70	1.90	4.40	3.13

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
2.70	1.90	4.40	7.83

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)	Uncorrelated Gain (dBi)
Mid	5720	15.10	13.7666	7.83	3.13

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	20.96	22.39	28.39	20.96	9.17	11.00	9.17

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	13.86	13.74	13.54	18.49	20.96	-2.47

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	3.779	3.207	3.263	8.20	9.17	-0.97

Limits (FCC), portion in 5.8 GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)	Uncorrelated Gain (dBi)
Mid	5720	5.10	13.7666	7.83	3.13

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	18.08	22.39	28.39	18.08	9.17	11.00	9.17

Duty Cycle CF (dB)	0.00	
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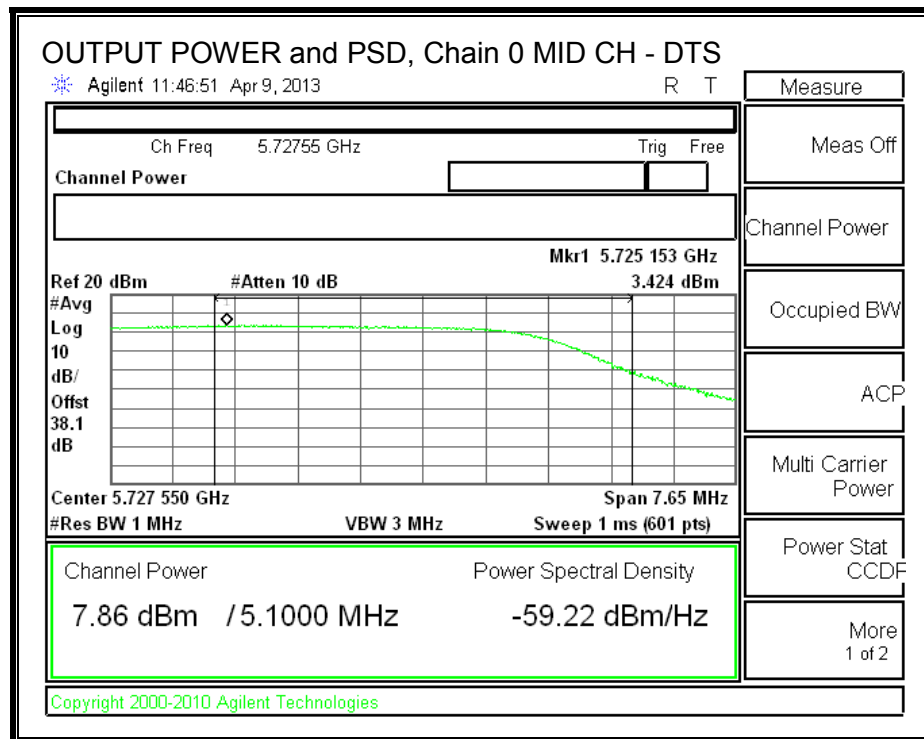
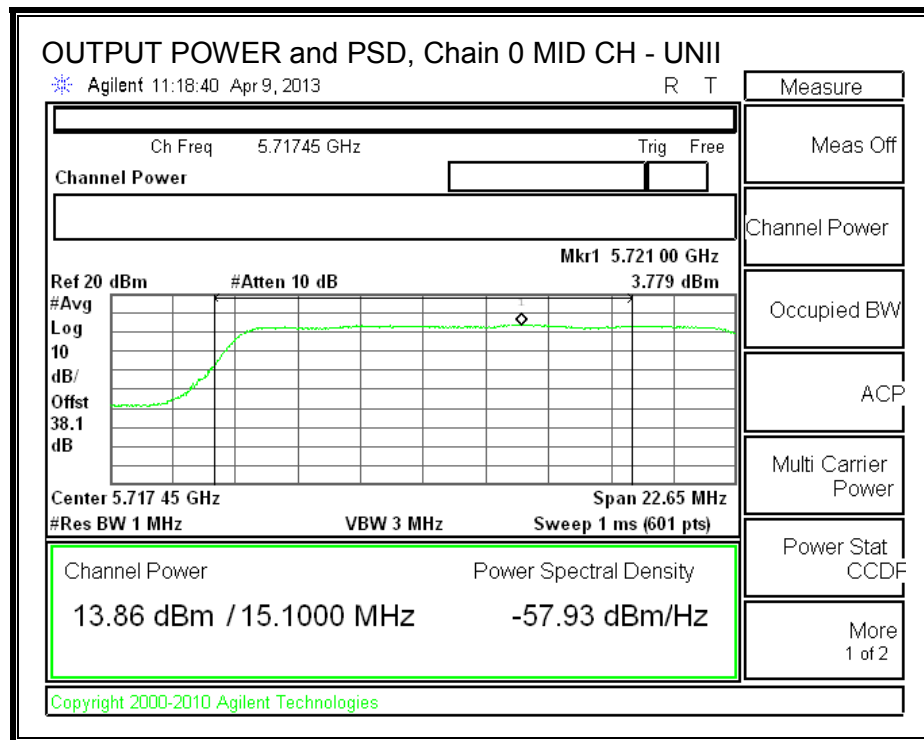
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	7.86	7.71	7.95	12.61	18.08	-5.46

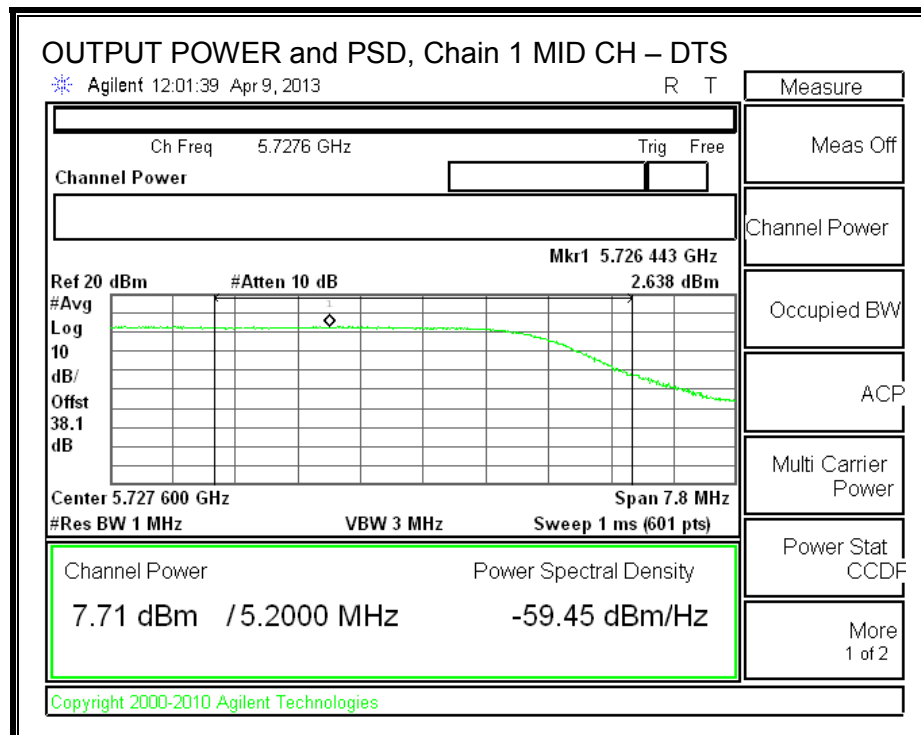
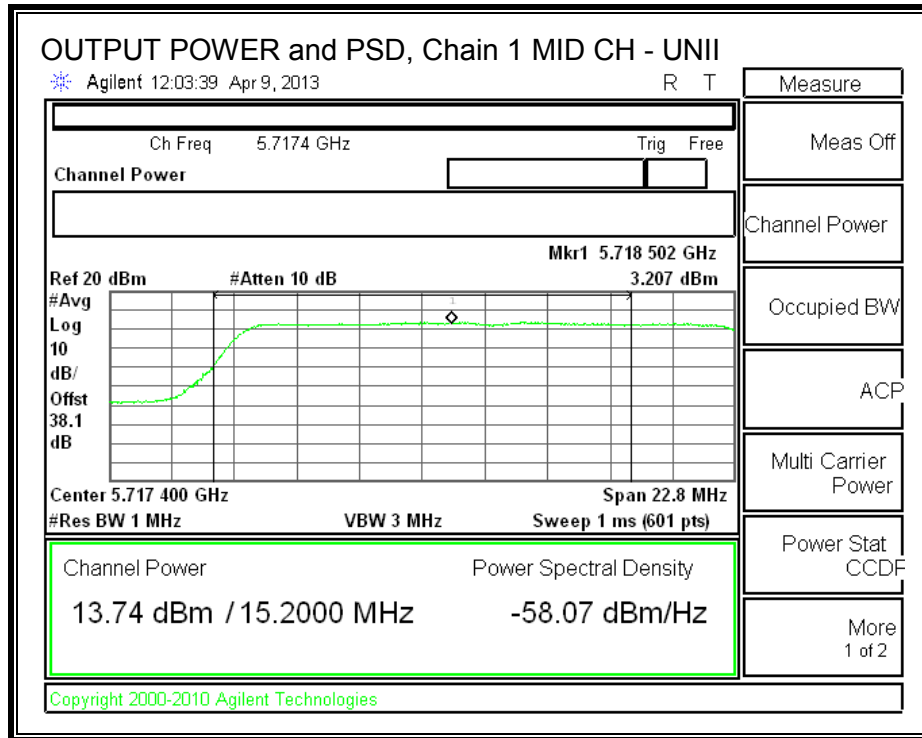
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	3.424	2.638	1.968	7.49	9.17	-1.68

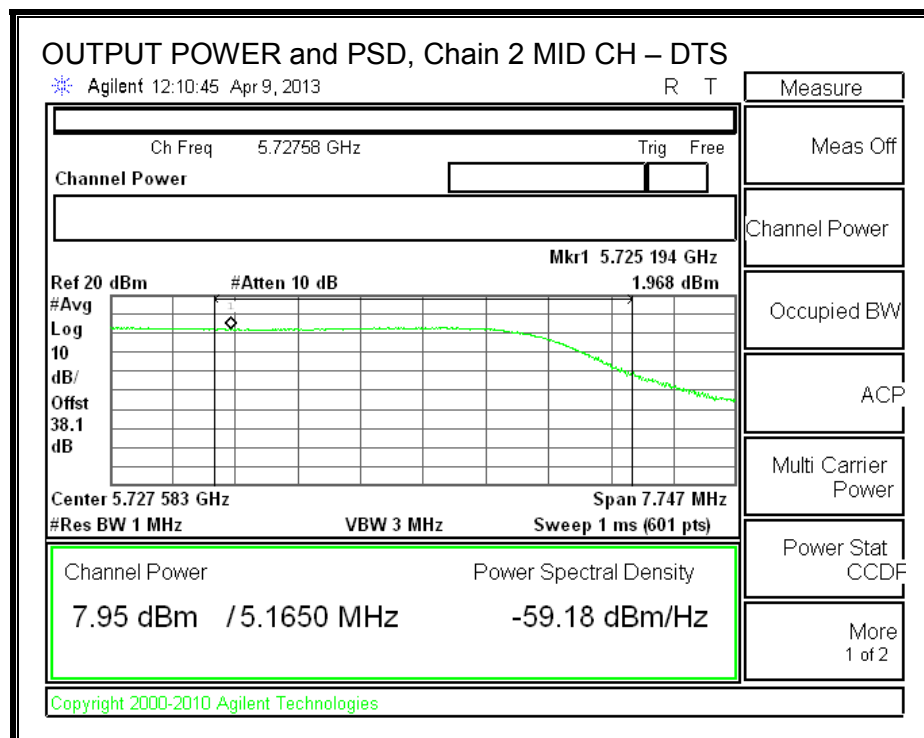
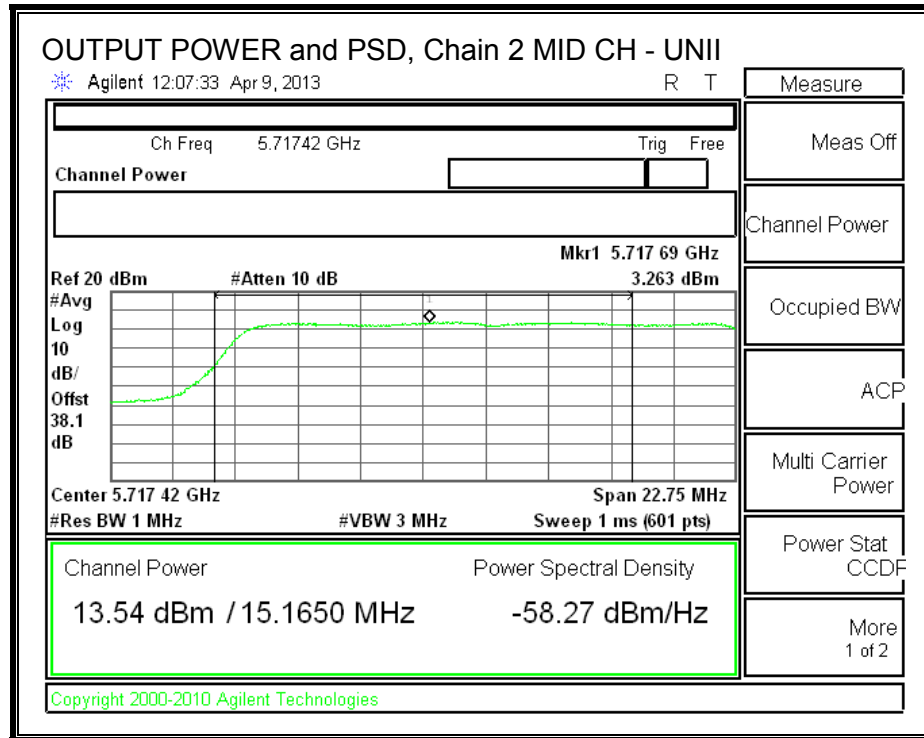
OUTPUT POWER and PSD, Chain 0



OUTPUT POWER and PSD, Chain 1



OUTPUT POWER and PSD, Chain 2



8.54.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.55. 802.11n HT20 STBC 3TX MODE, CH 144 (5720 MHz), 5.6 GHz BAND

8.55.1.26 dB BANDWIDTH

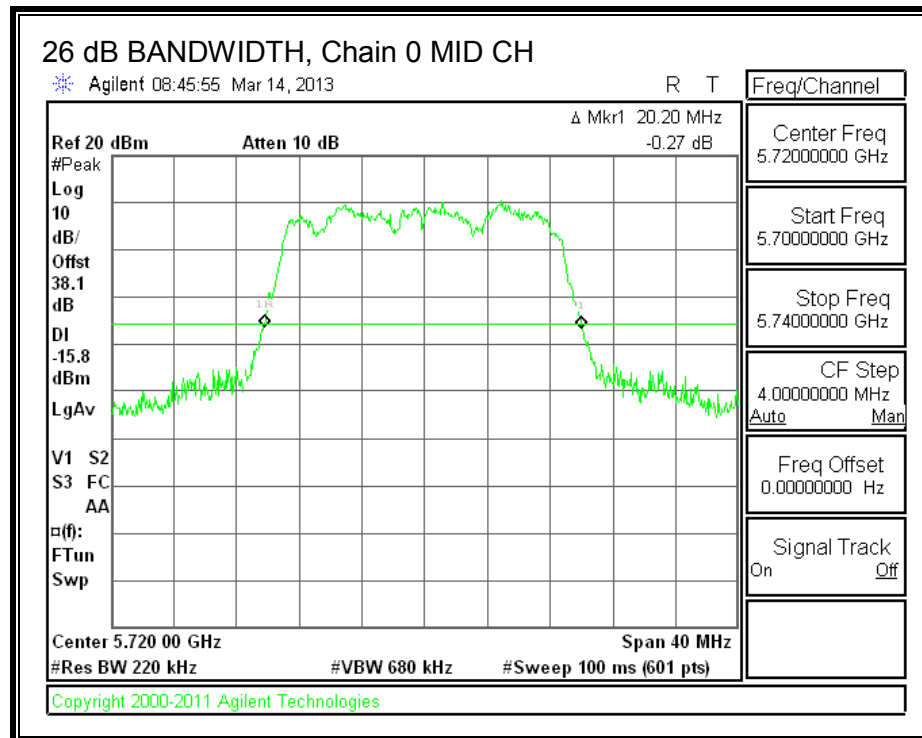
LIMITS

None; for reporting purposes only.

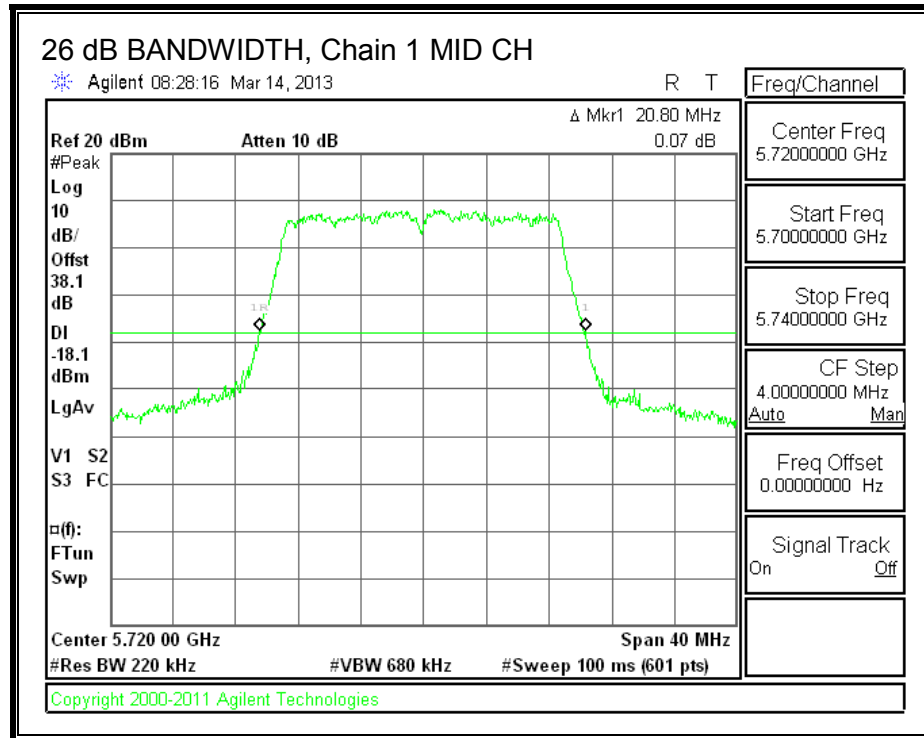
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Mid	5720	20.20	20.80	20.40

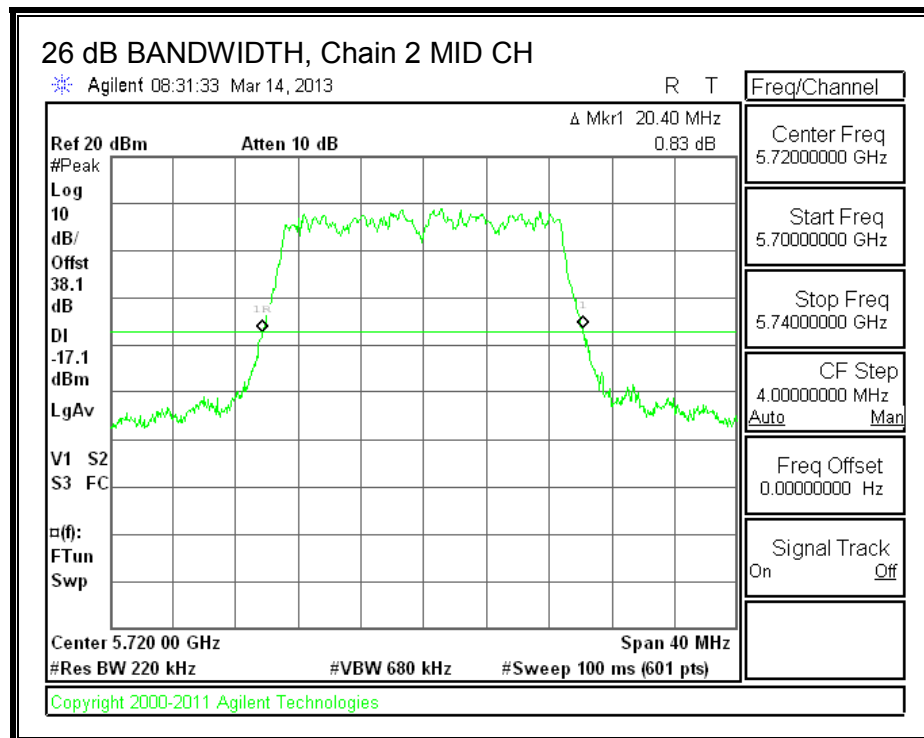
26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



8.55.2.99% BANDWIDTH

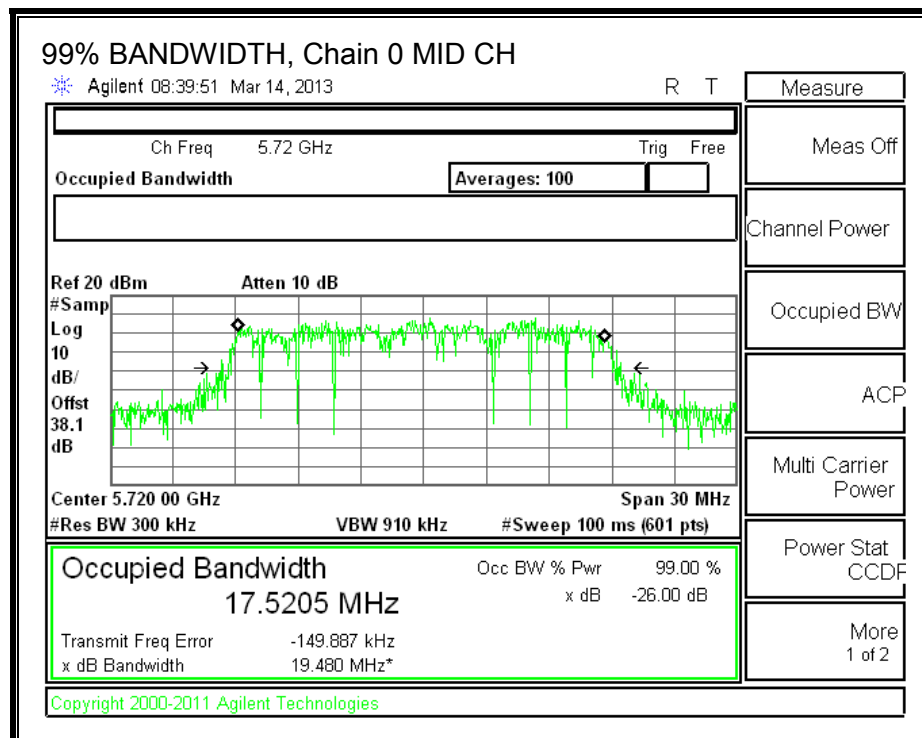
LIMITS

None; for reporting purposes only.

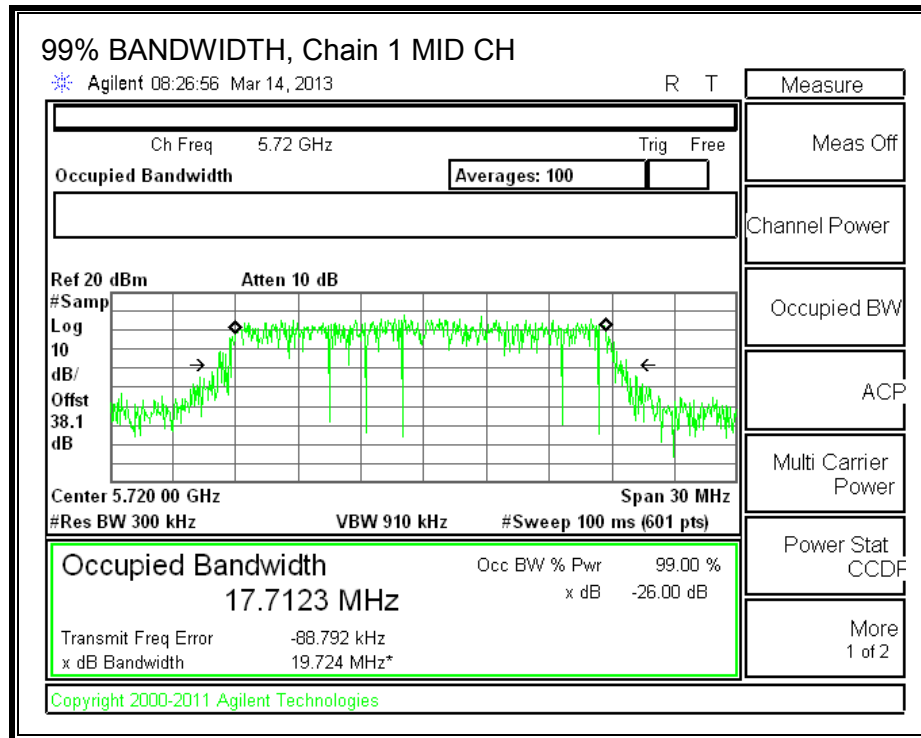
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Mid	5720	17.5205	17.7123	17.7604

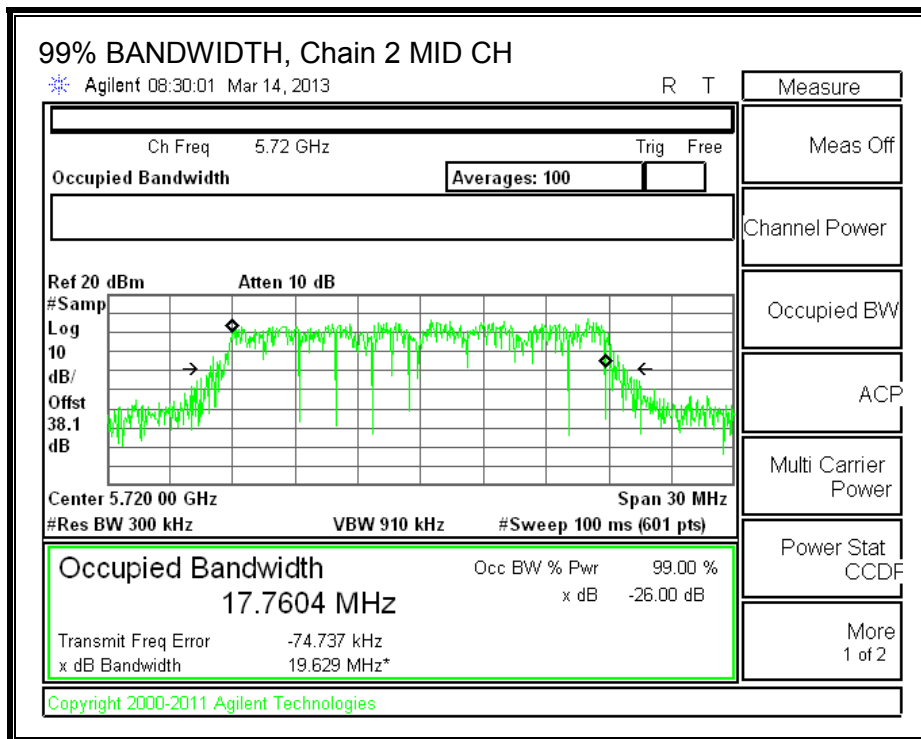
99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



99% BANDWIDTH, Chain 2



8.55.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated for output power and PSD; the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.70	1.90	4.40	3.13

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)		Uncorrelated Gain (dBi)
Mid	5720	15.1	13.7666		3.13

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	22.79	22.39	28.39	22.39	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	16.57	15.95	16.30	21.05	22.39	-1.34

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	5.809	5.004	5.596	10.25	11.00	-0.75

Limits (FCC), portion in 5.8 GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)		Uncorrelated Gain (dBi)
Mid	5720	5.1	3.7666		3.13

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5720	18.08	16.76	22.76	16.76	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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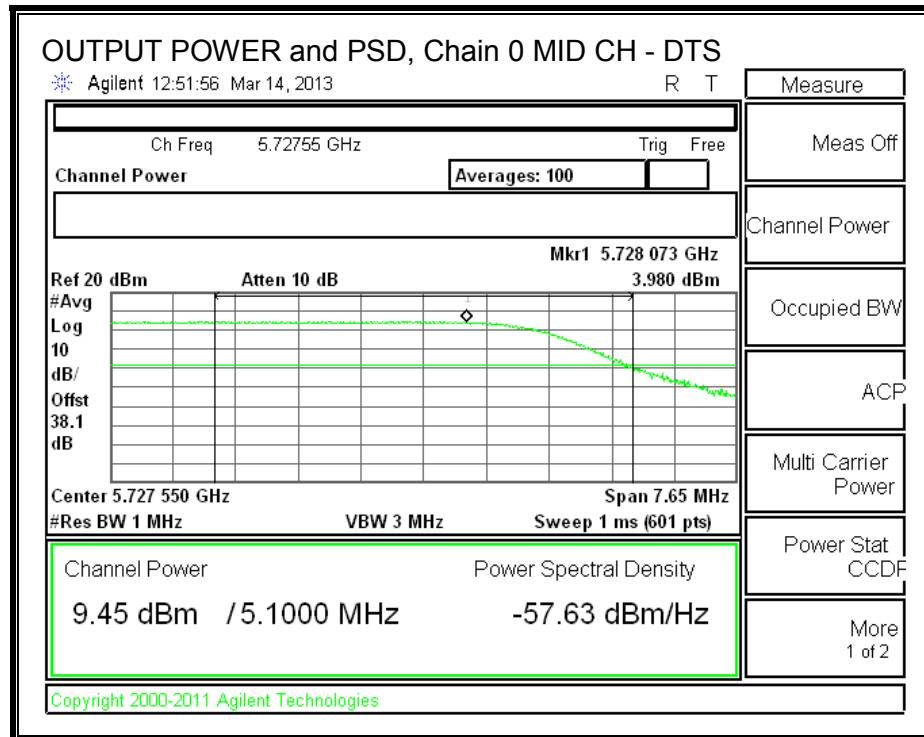
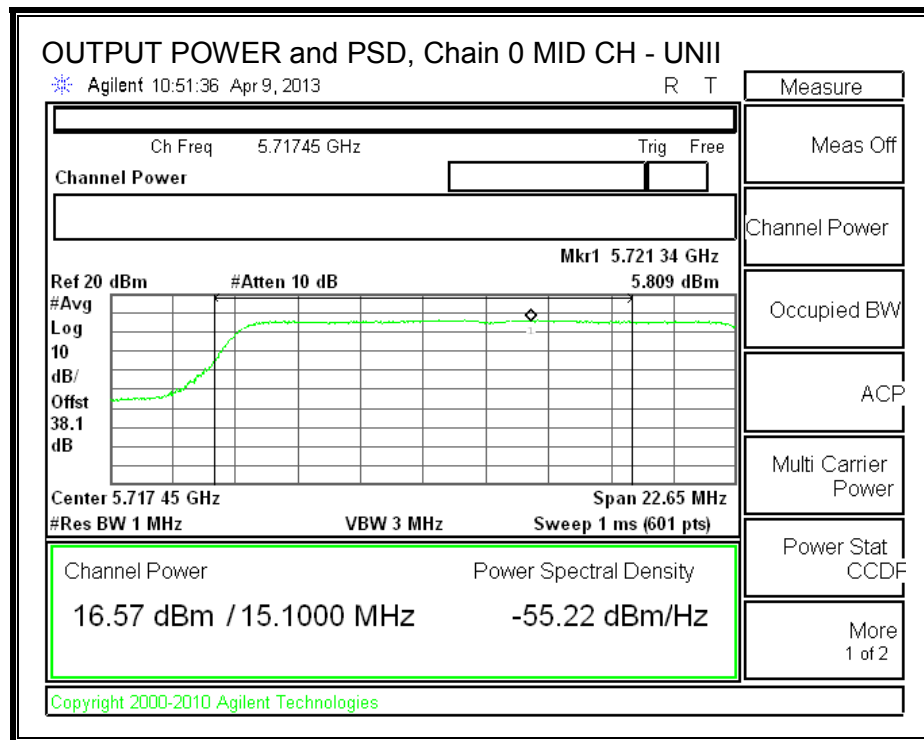
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5720	9.45	8.85	9.14	13.92	16.76	-2.83

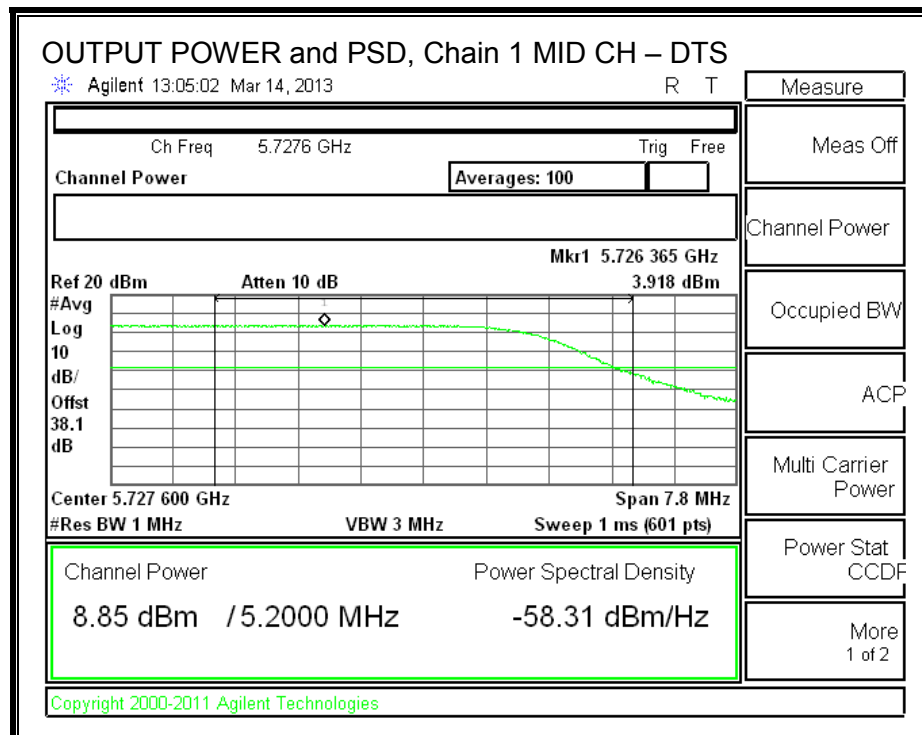
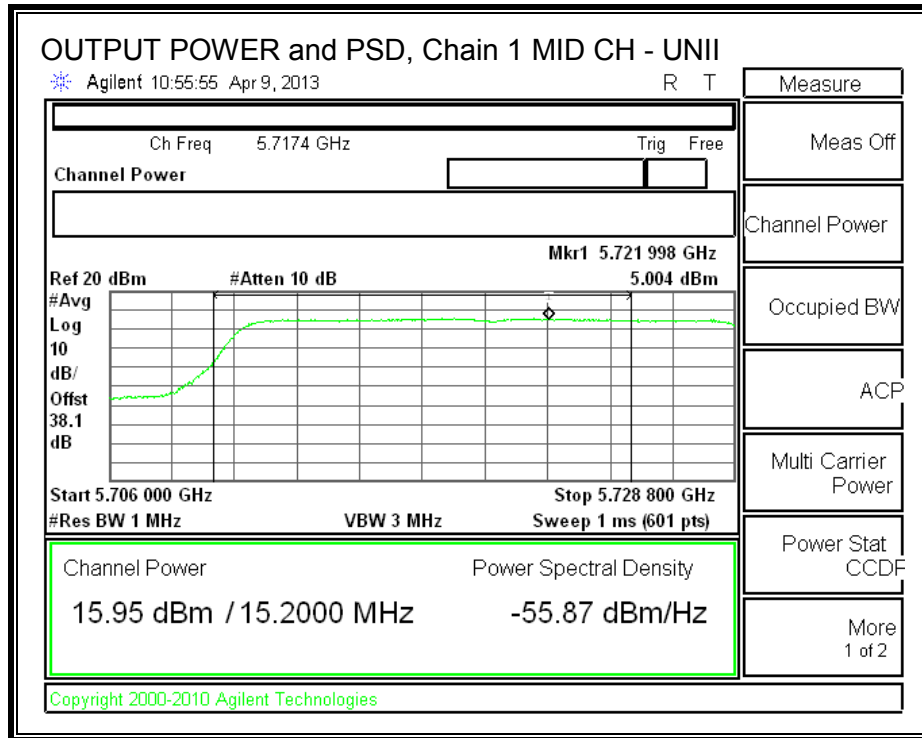
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5720	3.980	3.918	4.337	8.85	11.00	-2.15

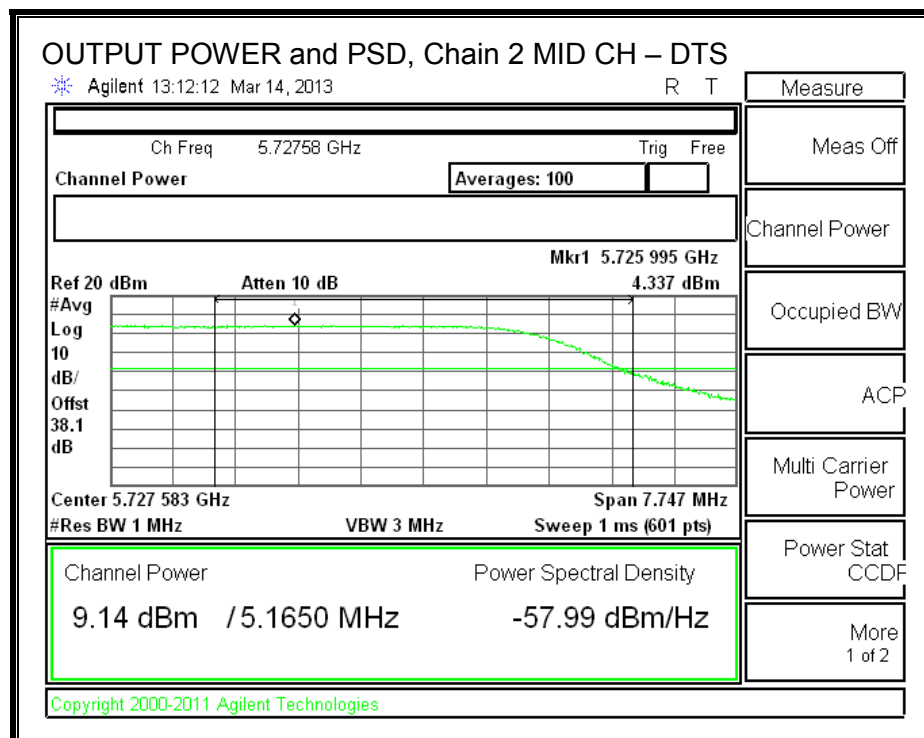
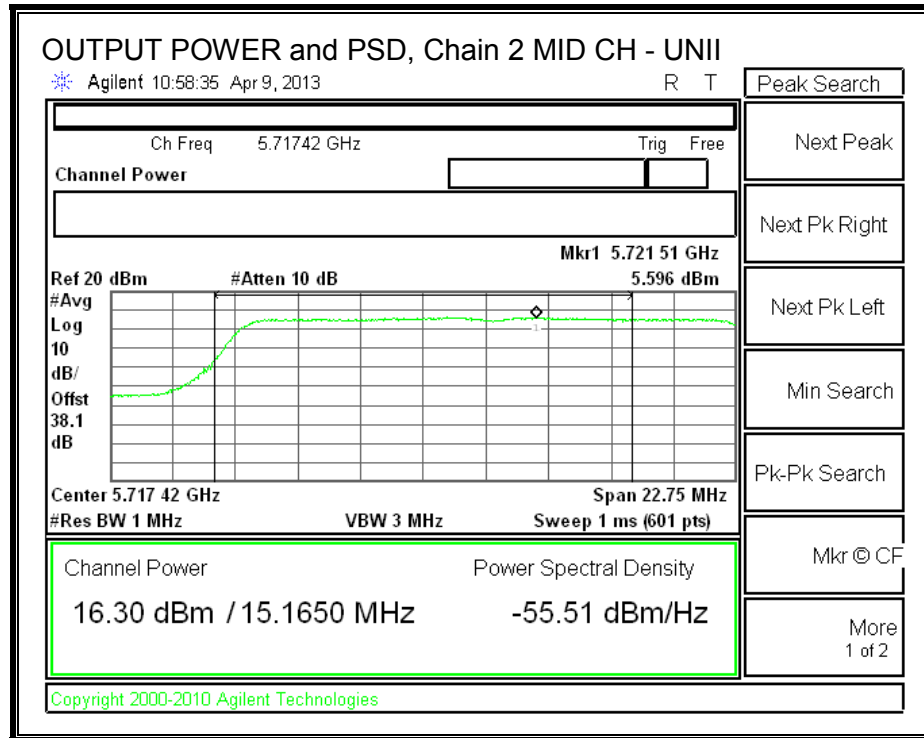
OUTPUT POWER and PSD, Chain 0



OUTPUT POWER and PSD, Chain 1



OUTPUT POWER and PSD, Chain 2



8.55.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.56. 802.11n HT40 1TX MODE IN THE 5.6 GHz BAND

8.56.1. 26 dB BANDWIDTH

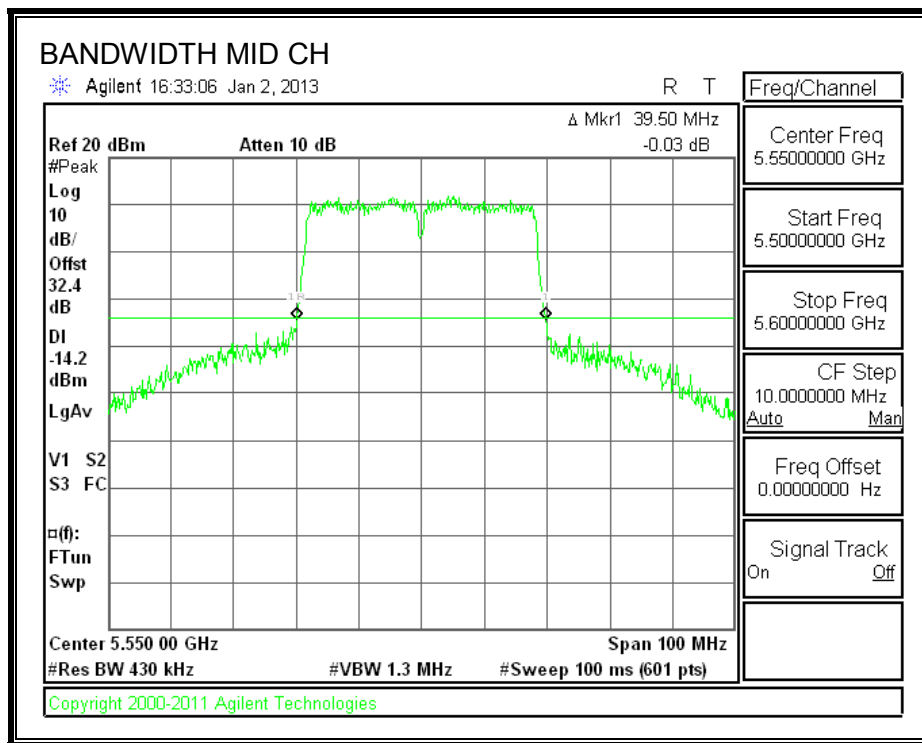
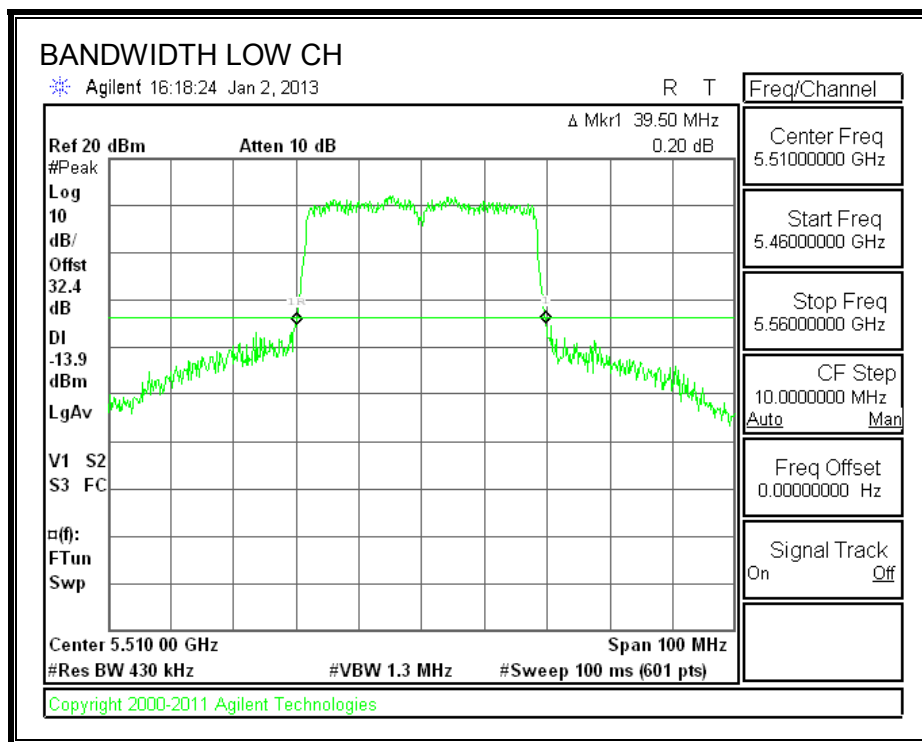
LIMITS

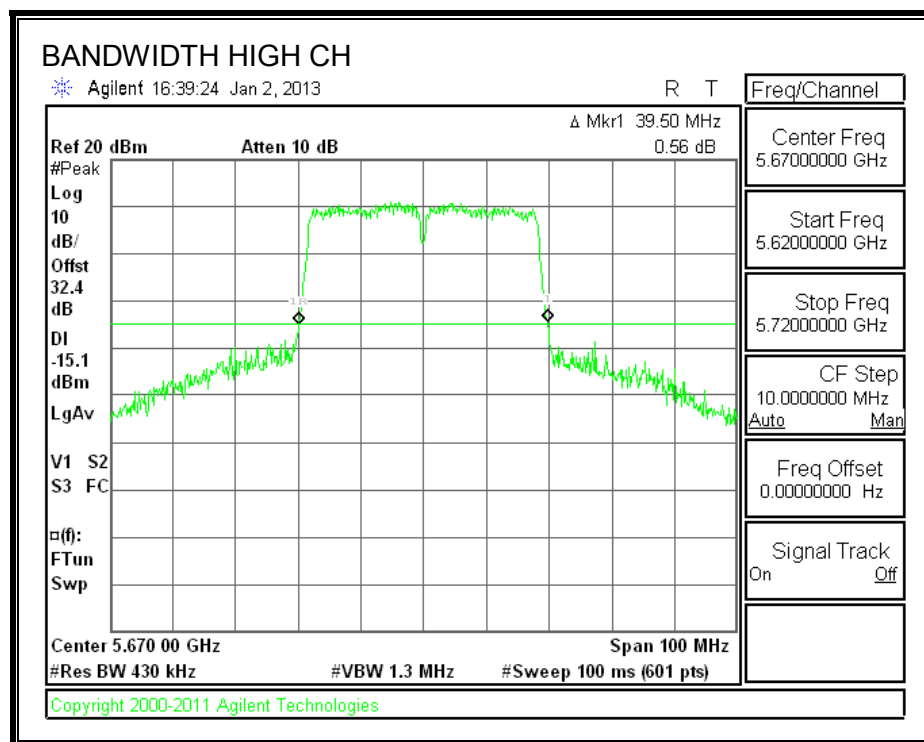
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	39.50
Mid	5550	39.50
High	5670	39.50

26 dB BANDWIDTH





8.56.2. 99% BANDWIDTH

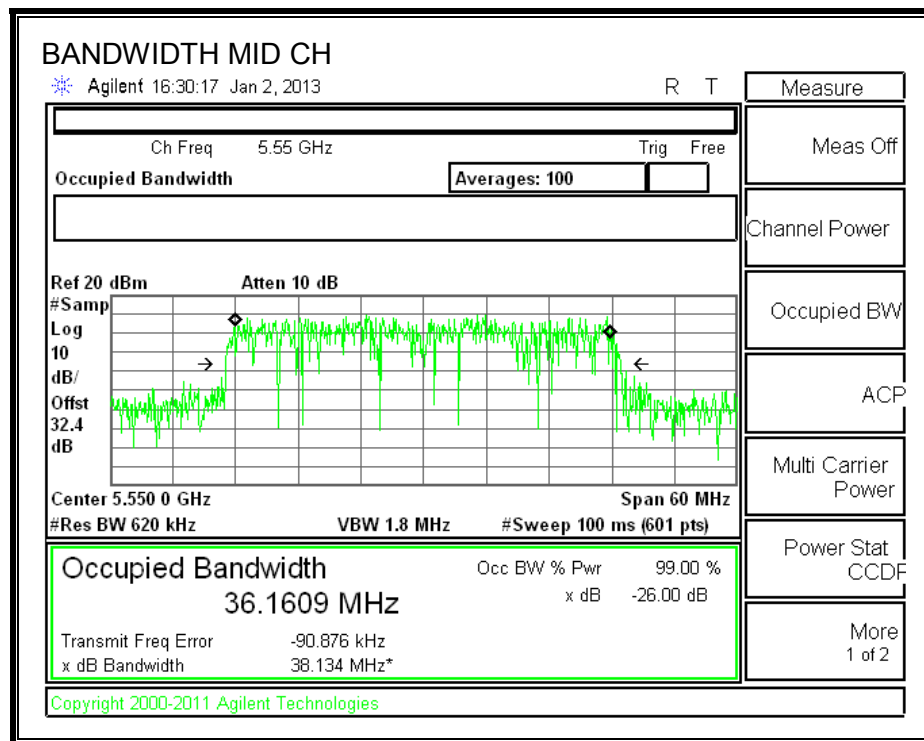
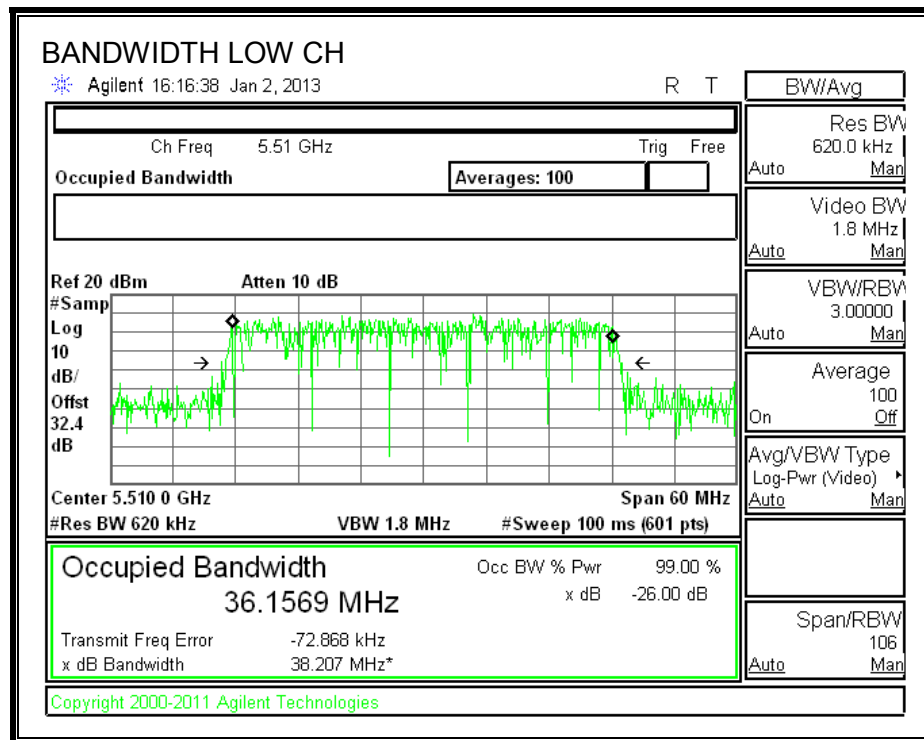
LIMITS

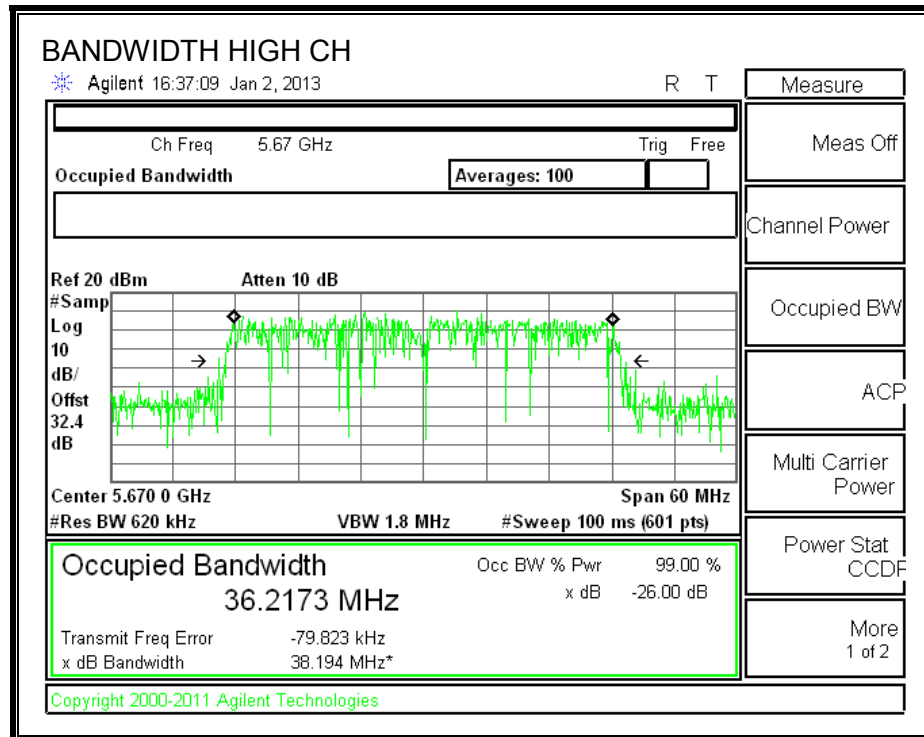
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5510	36.1569
Mid	5550	36.1609
High	5670	36.2173

99% BANDWIDTH





8.56.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5510	39.50	36.1569	3.80
Mid	5550	39.50	36.1609	3.80
High	5670	39.50	36.2173	3.80

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5550	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5670	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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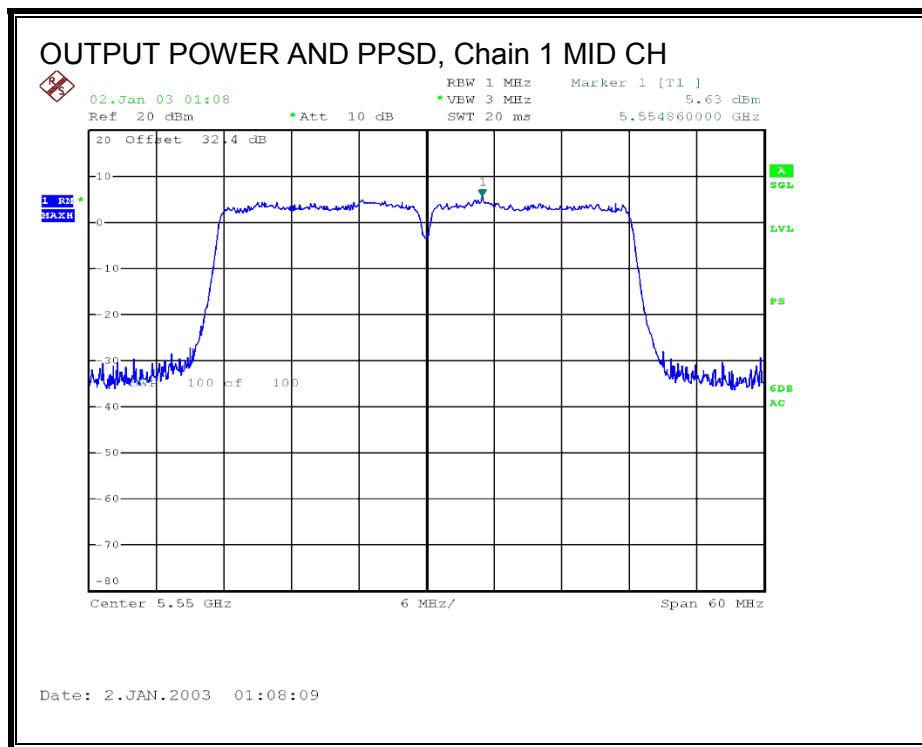
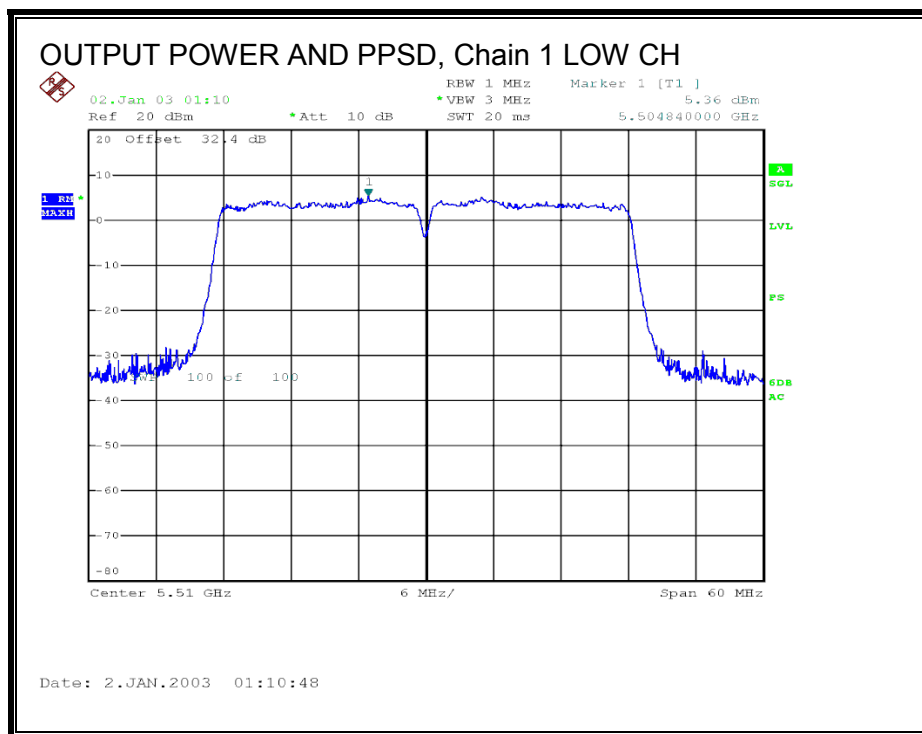
Output Power Results

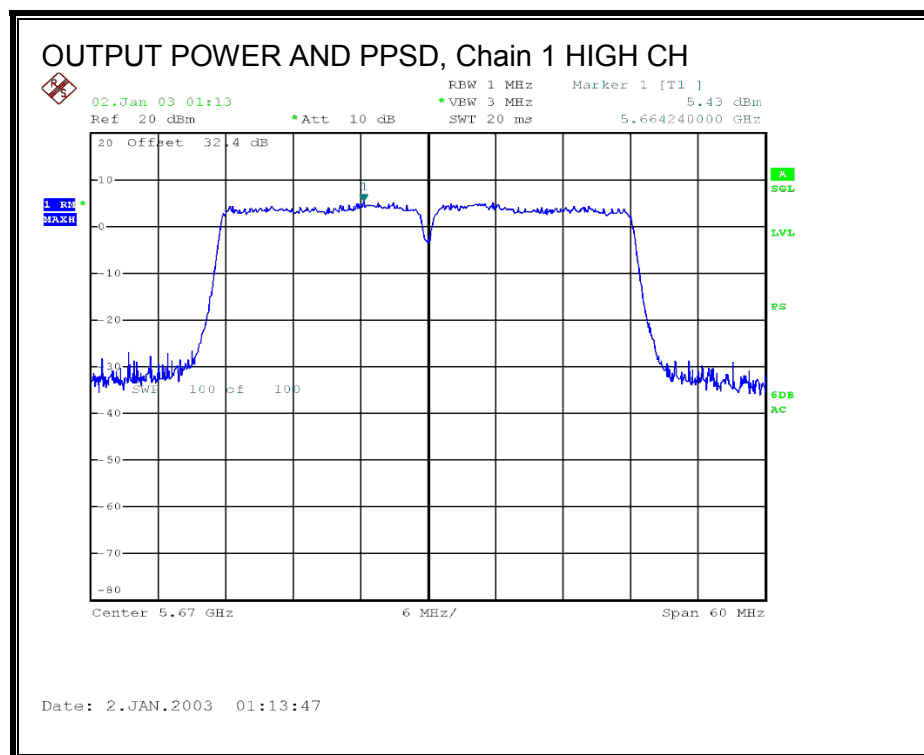
Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	16.00	16.00	24.00	-8.00
Mid	5550	18.00	18.00	24.00	-6.00
High	5670	19.50	19.50	24.00	-4.50

PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	5.36	5.36	11.00	-5.64
Mid	5550	5.63	5.63	11.00	-5.37
High	5670	5.43	5.43	11.00	-5.57

OUTPUT POWER AND PPSD, Chain 1





8.56.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.57. 802.11n HT40 CDD 2TX MODE IN THE 5.6 GHz BAND

8.57.1. 26 dB BANDWIDTH

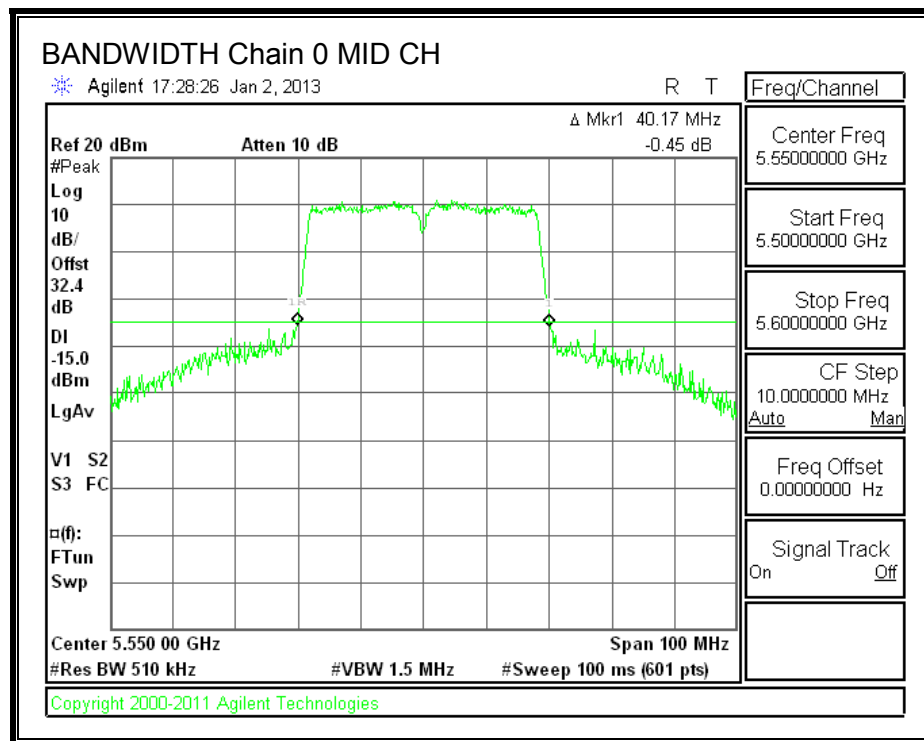
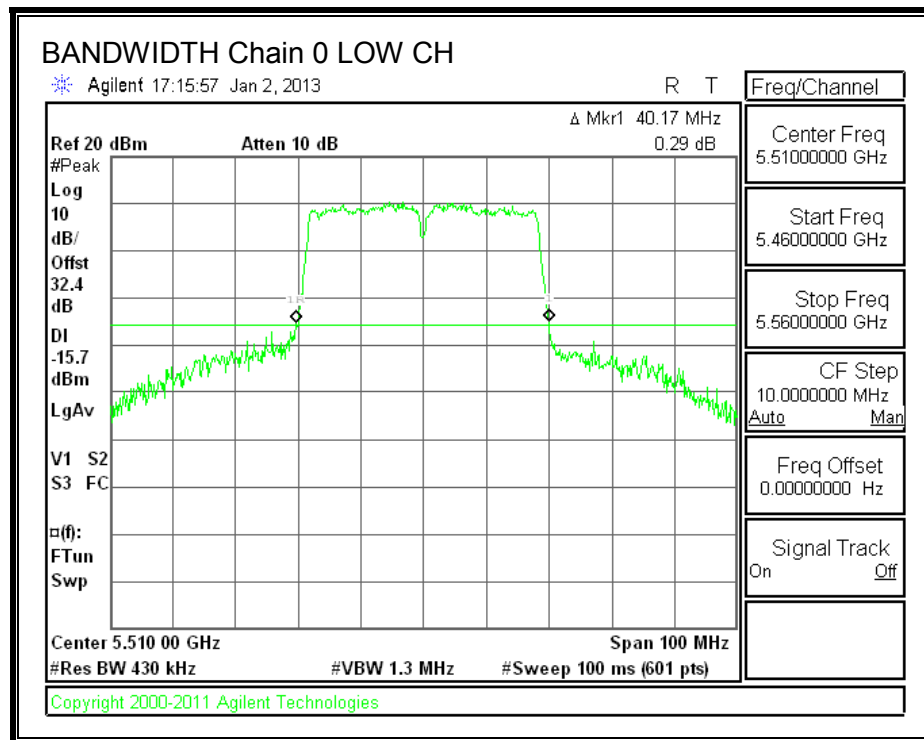
LIMITS

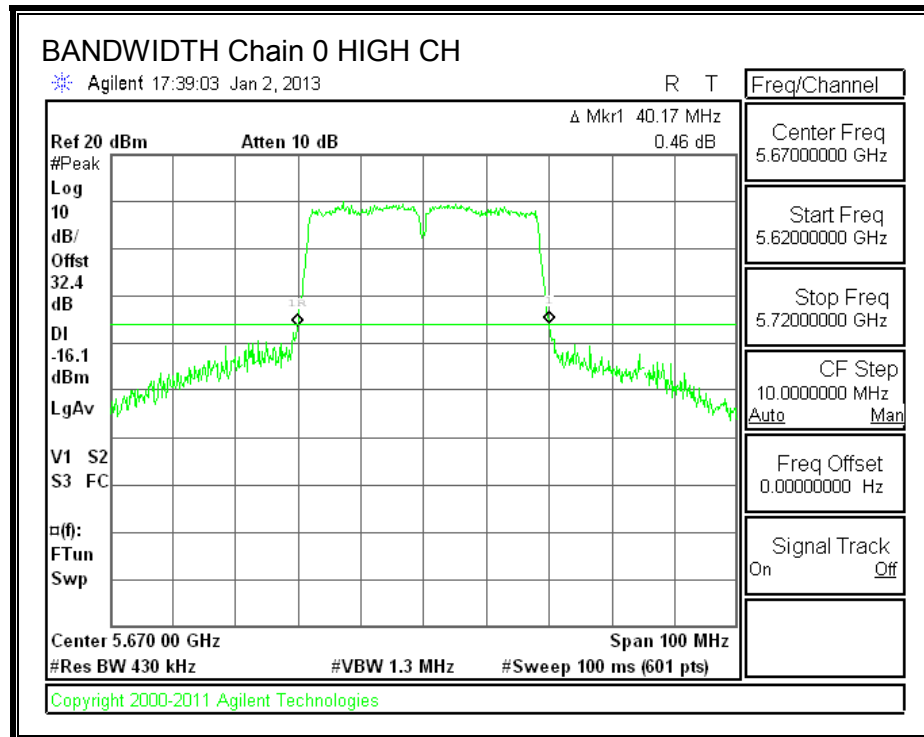
None; for reporting purposes only.

RESULTS

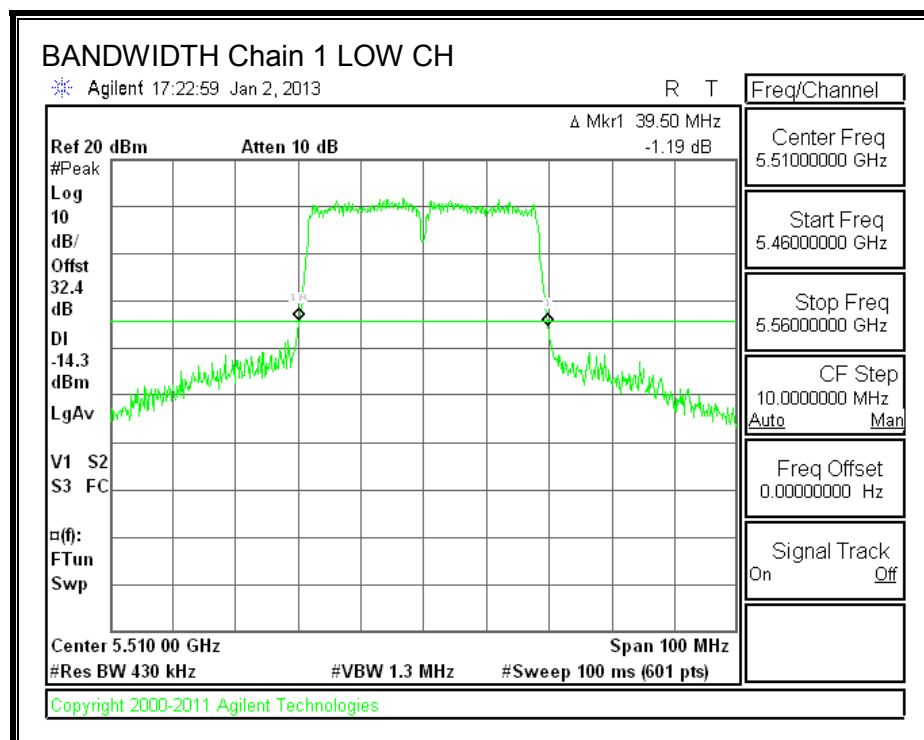
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5510	40.17	39.50
Mid	5550	40.17	39.50
High	5670	40.17	39.50

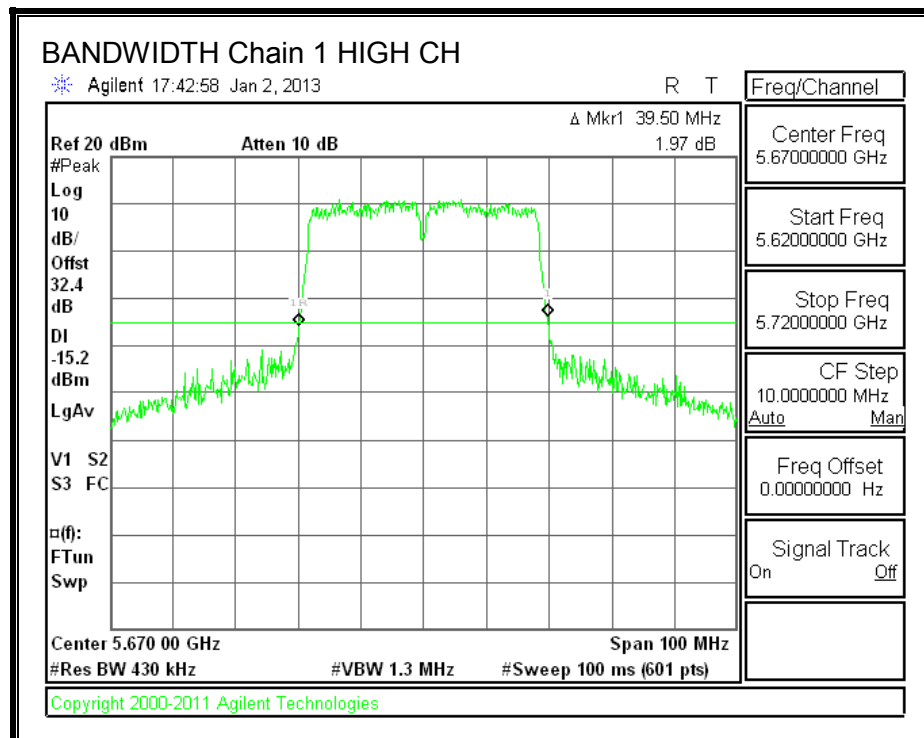
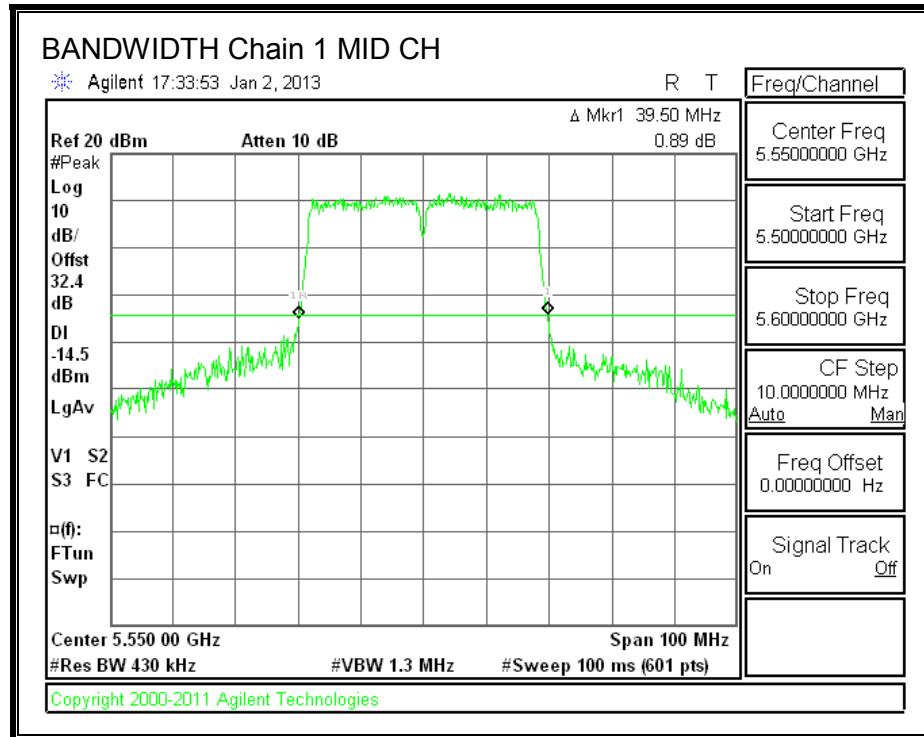
26 dB BANDWIDTH, Chain 0





26 dB BANDWIDTH, Chain 1





8.57.2. 99% BANDWIDTH

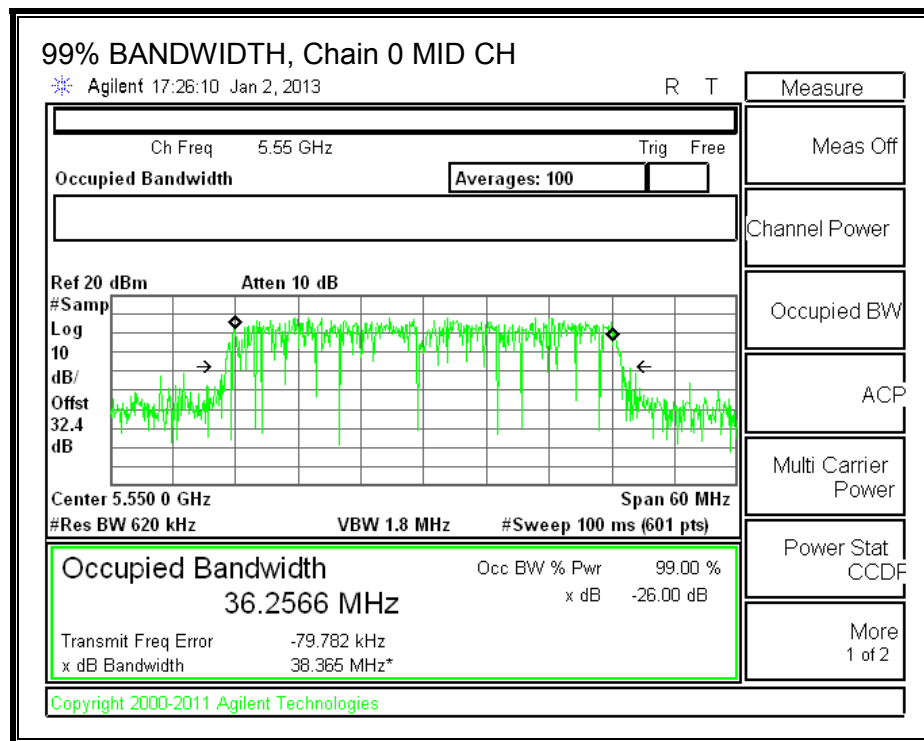
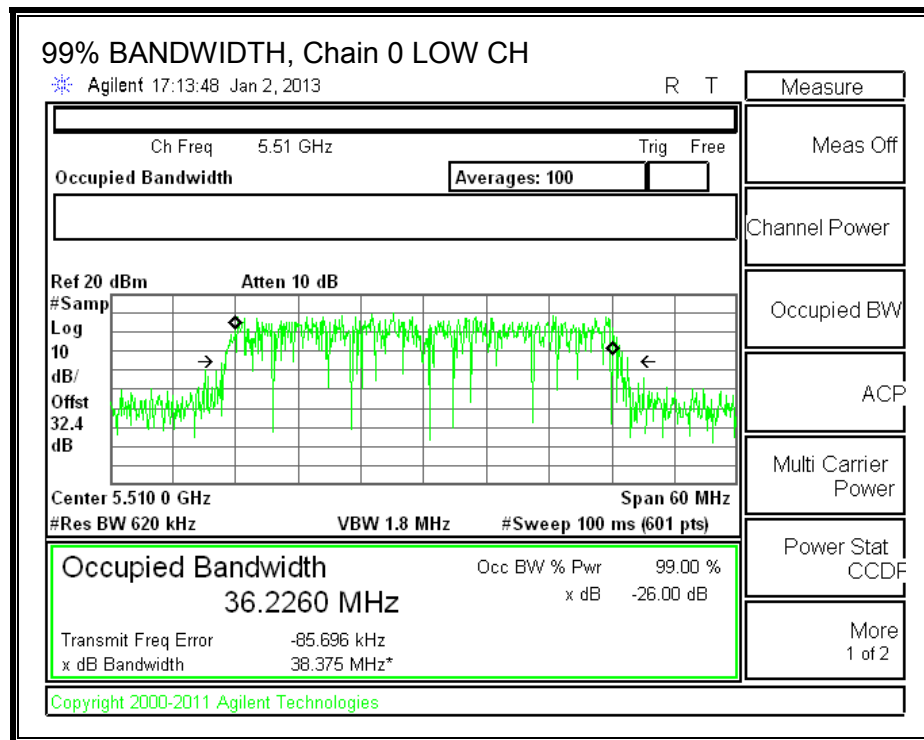
LIMITS

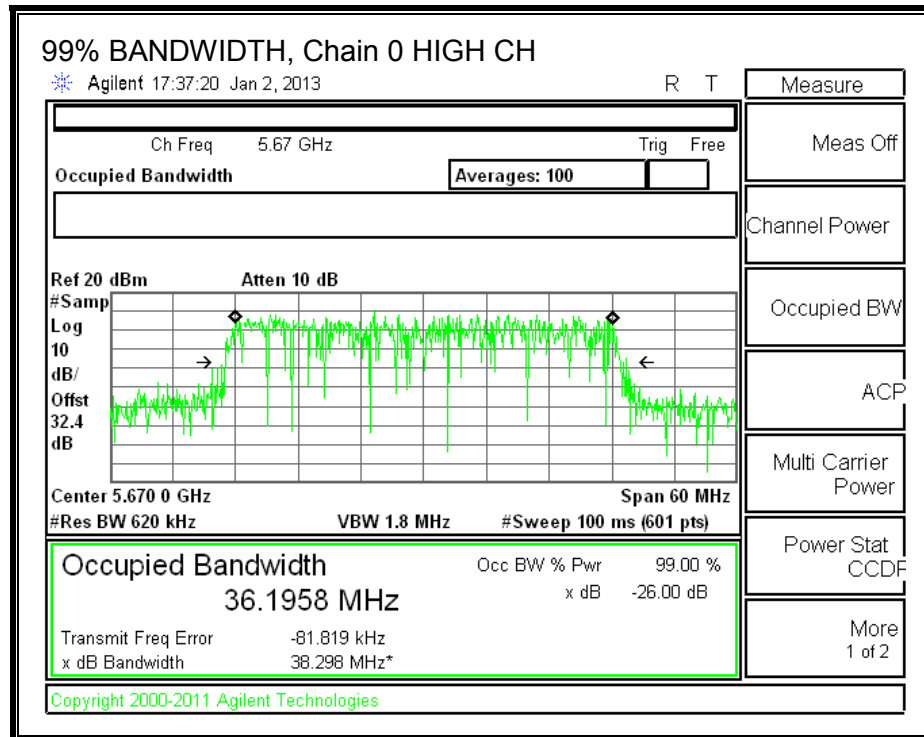
None; for reporting purposes only.

RESULTS

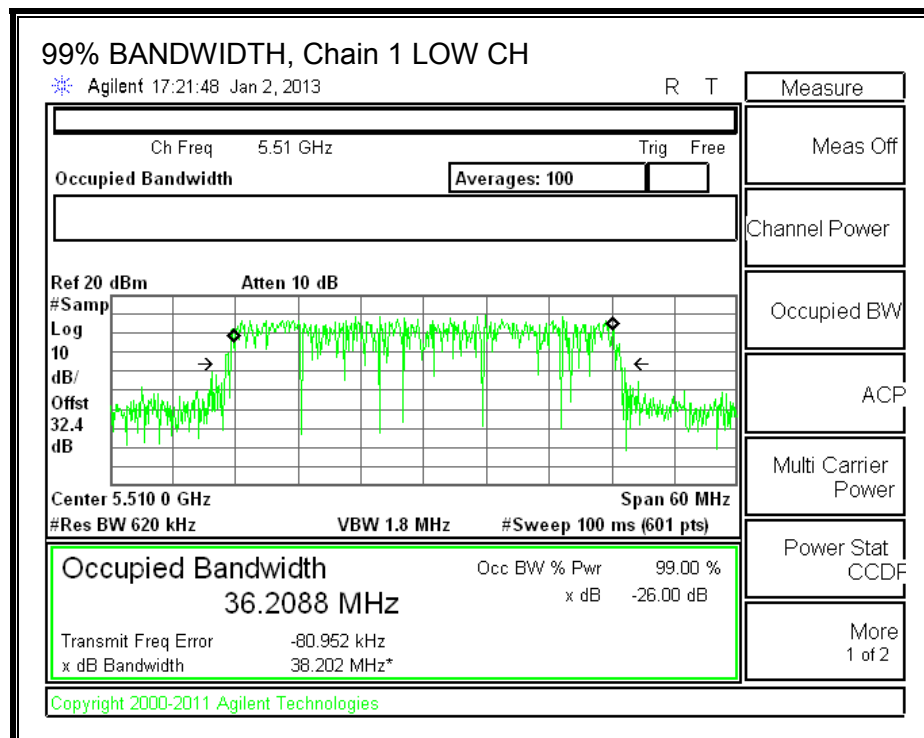
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5510	36.2260	36.2088
Mid	5550	36.2566	36.2186
High	5670	36.1958	36.1904

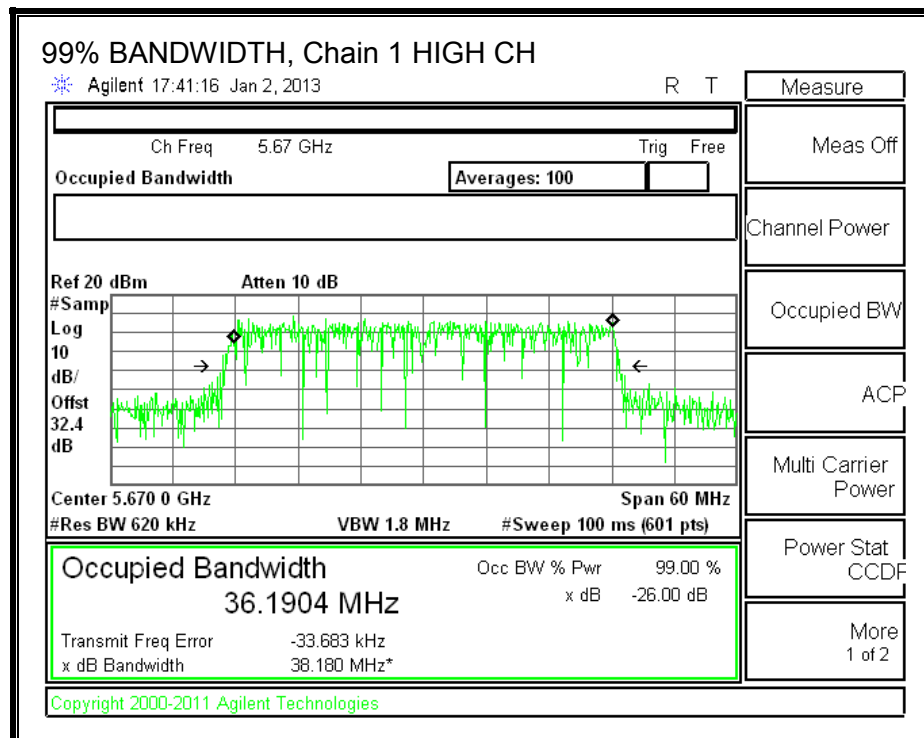
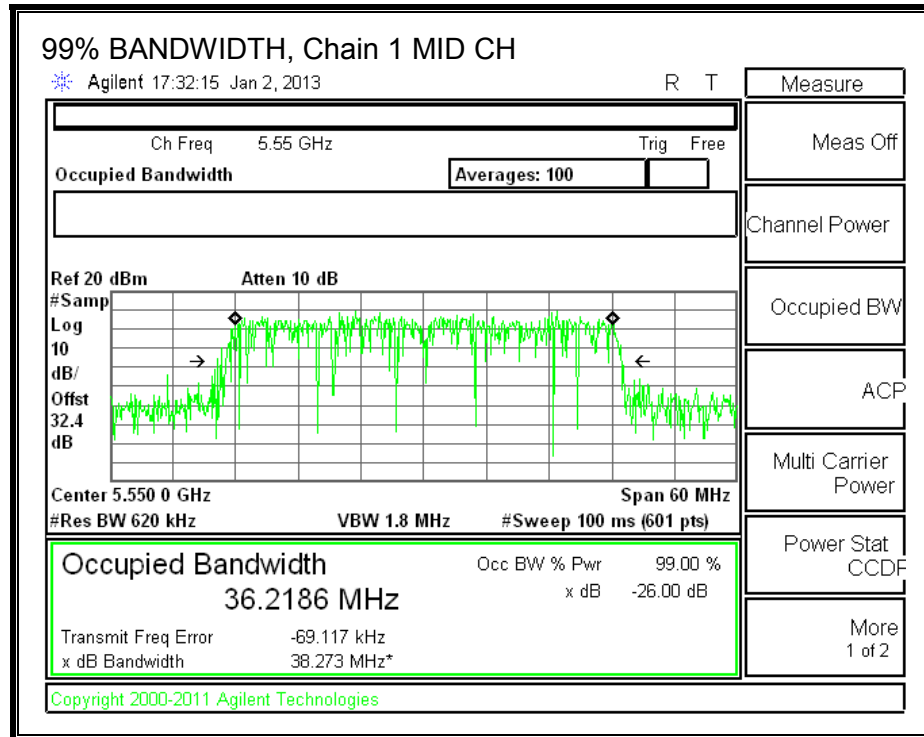
99% BANDWIDTH, Chain 0





99% BANDWIDTH, Chain 1





8.57.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

For output power, the two chains are considered uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	3.80	3.42

For PSD, the two chains are considered correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	3.80	6.42

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)	Uncorrelated Directional Gain (dBi)
Low	5510	39.50	36.2088	6.42	3.42
Mid	5550	39.50	36.2186	6.42	3.42
High	5670	39.50	36.1904	6.42	3.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	10.58	11.00	10.58
Mid	5550	24.00	24.00	30.00	24.00	10.58	11.00	10.58
High	5670	24.00	24.00	30.00	24.00	10.58	11.00	10.58

Duty Cycle CF (dB)	0.00
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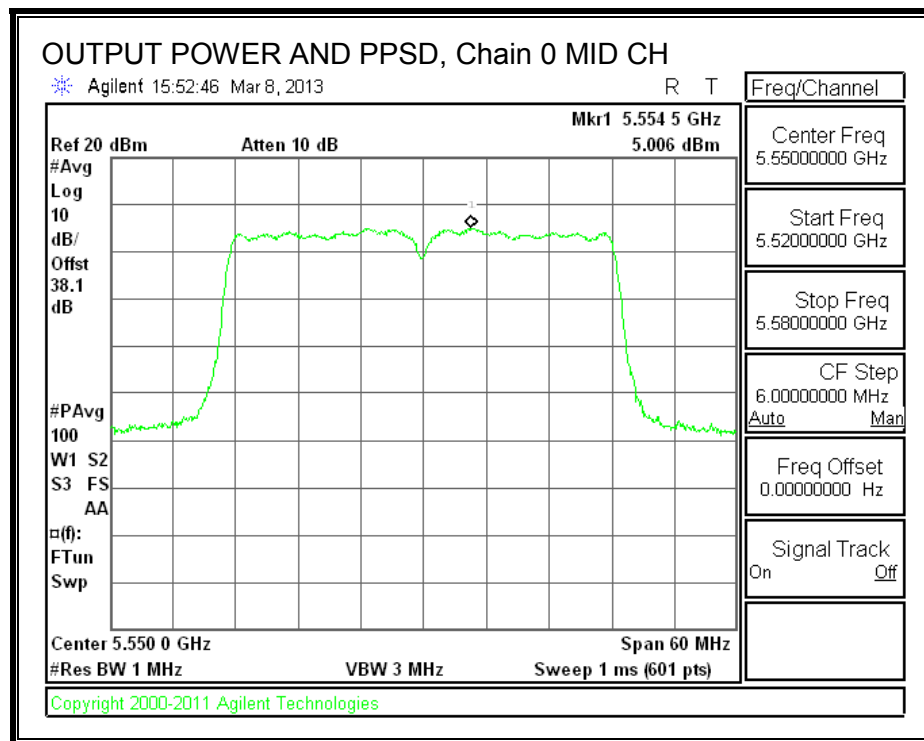
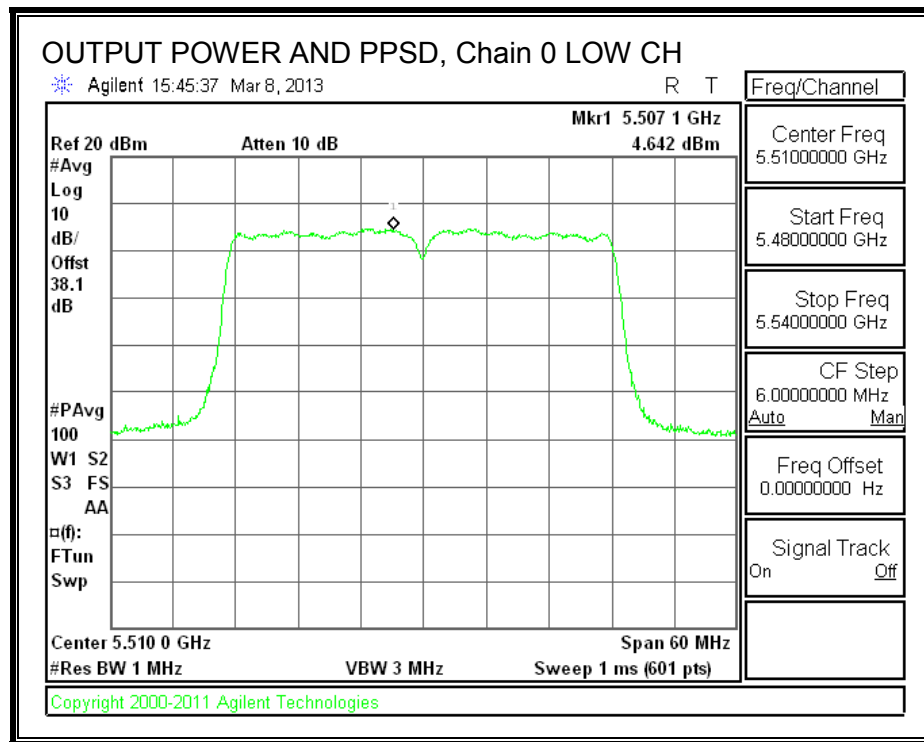
Output Power Results

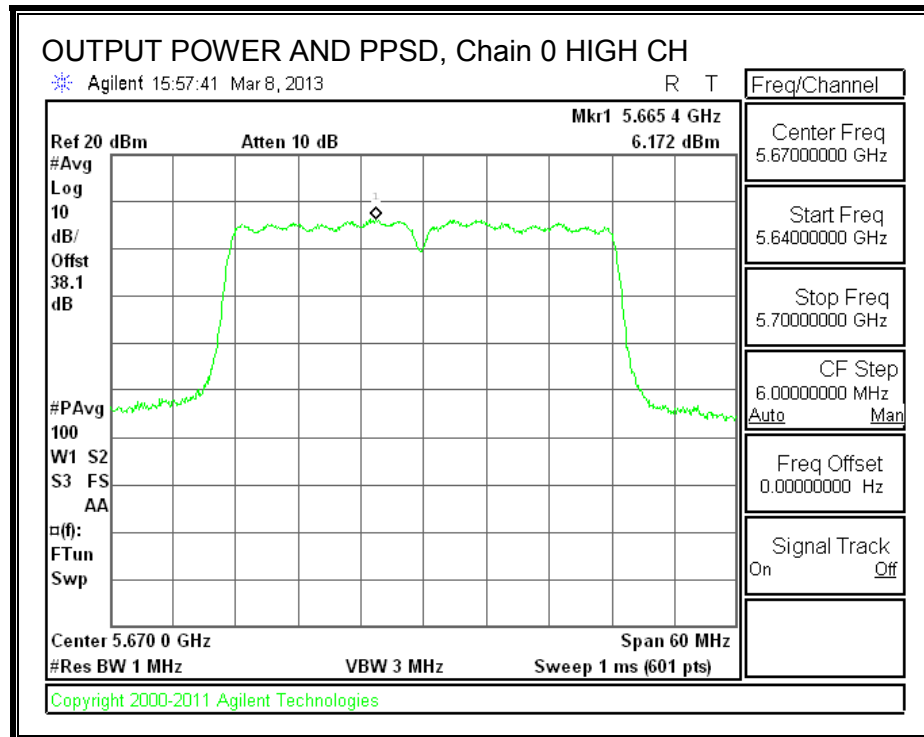
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	15.30	15.10	18.21	24.00	-5.79
Mid	5550	16.50	16.60	19.56	24.00	-4.44
High	5670	18.20	18.10	21.16	24.00	-2.84

PSD Results

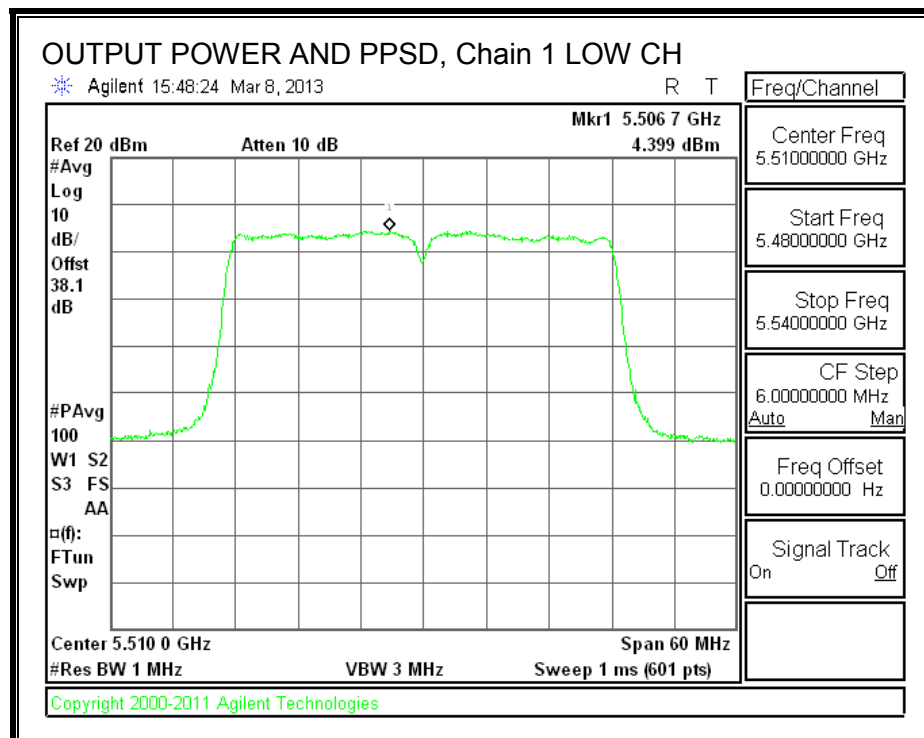
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	4.642	4.399	7.53	10.58	-3.05
Mid	5550	5.006	4.611	7.82	10.58	-2.76
High	5670	6.172	6.201	9.20	10.58	-1.38

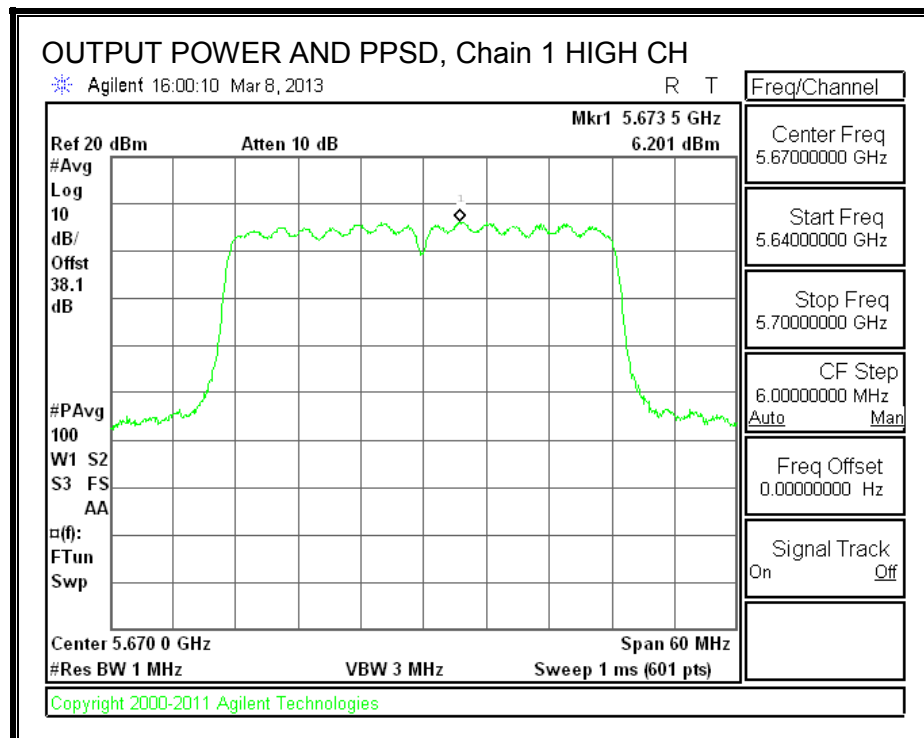
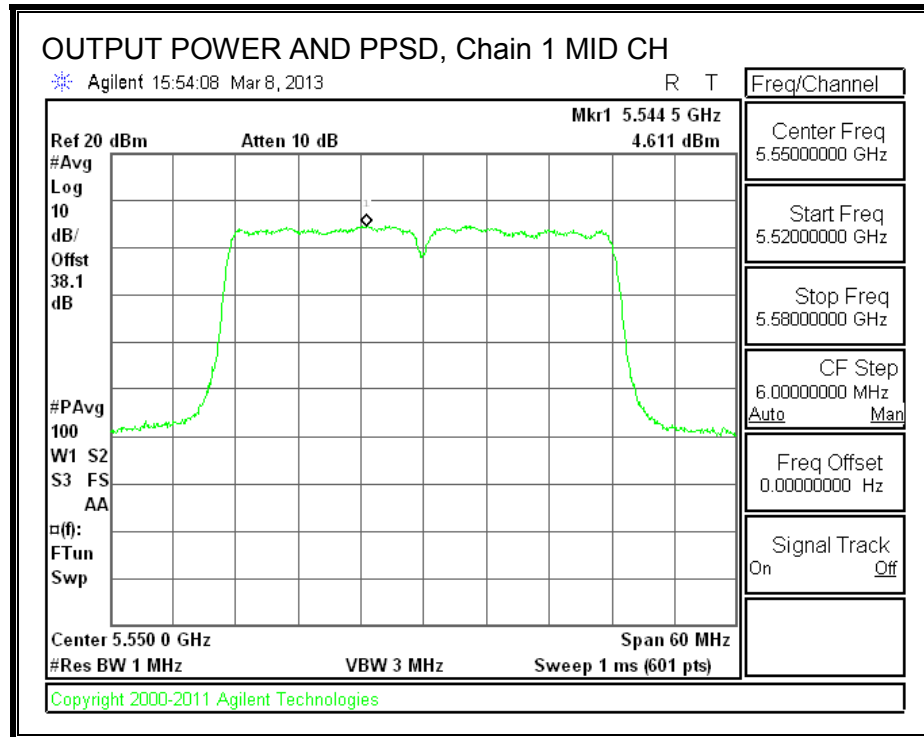
OUTPUT POWER AND PSD, Chain 0





OUTPUT POWER AND PPSD, Chain 1





8.57.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.58. 802.11n HT40 BF 2TX MODE IN THE 5.6 GHz BAND

Covered by testing HT40 CDD 2TX mode, the power per chain used for HT40 CDD 2TX mode is the same power per chain that will be used for HT40 BF 2TX mode. However, since BF is correlated and CDD is uncorrelated for output power, the section below for output power using correlated AG for this BF mode shows it is still compliant.

8.58.1. OUTPUT AVERAGE POWER

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

For output power, the two chains are considered correlated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	3.80	6.42

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)
Low	5510	39.50	36.2088	6.42
Mid	5550	39.50	36.2186	6.42
High	5670	39.50	36.1904	6.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Low	5510	23.58	24.00	30.00	23.58
Mid	5550	23.58	24.00	30.00	23.58
High	5670	23.58	24.00	30.00	23.58

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	15.30	15.10	18.21	23.58	-5.37
Mid	5550	16.50	16.60	19.56	23.58	-4.02
High	5670	18.20	18.10	21.16	23.58	-2.42

8.59. 802.11n HT40 STBC 2TX MODE IN THE 5.6 GHz BAND

8.59.1. 26 dB BANDWIDTH

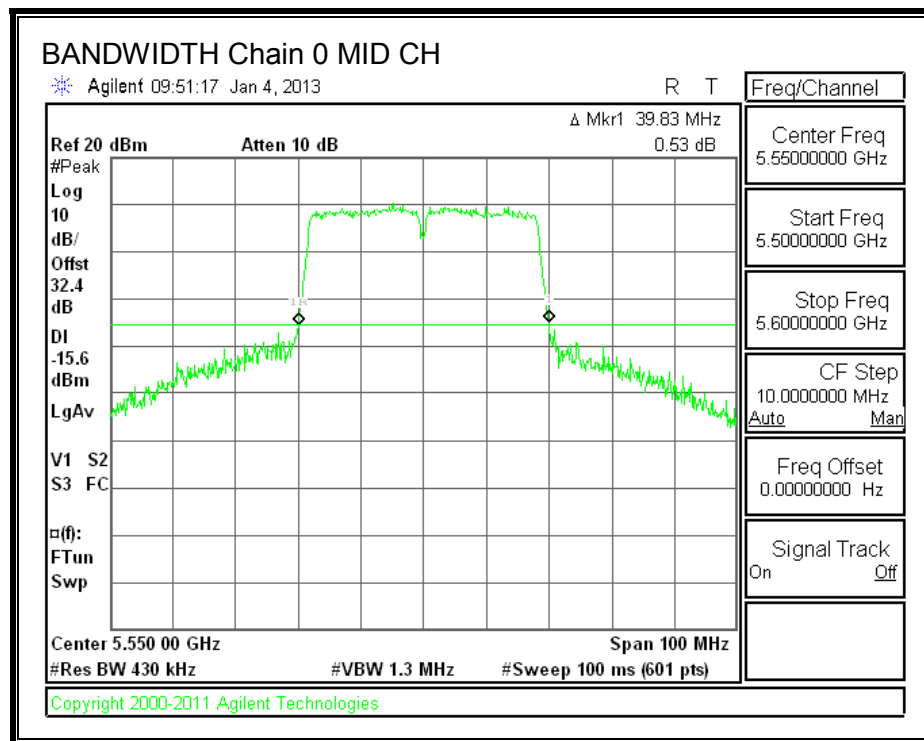
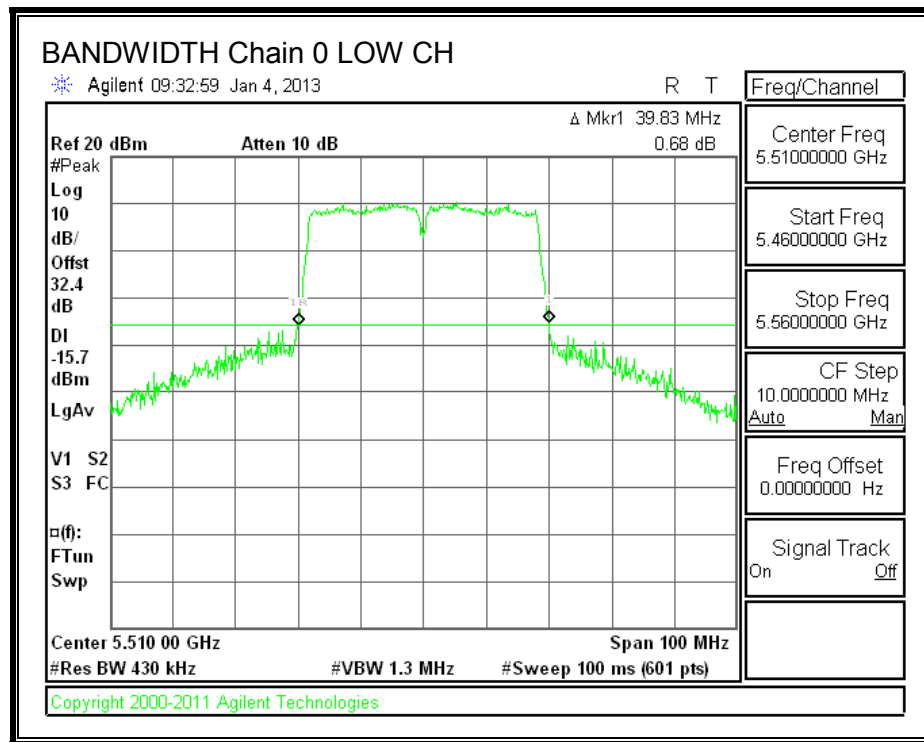
LIMITS

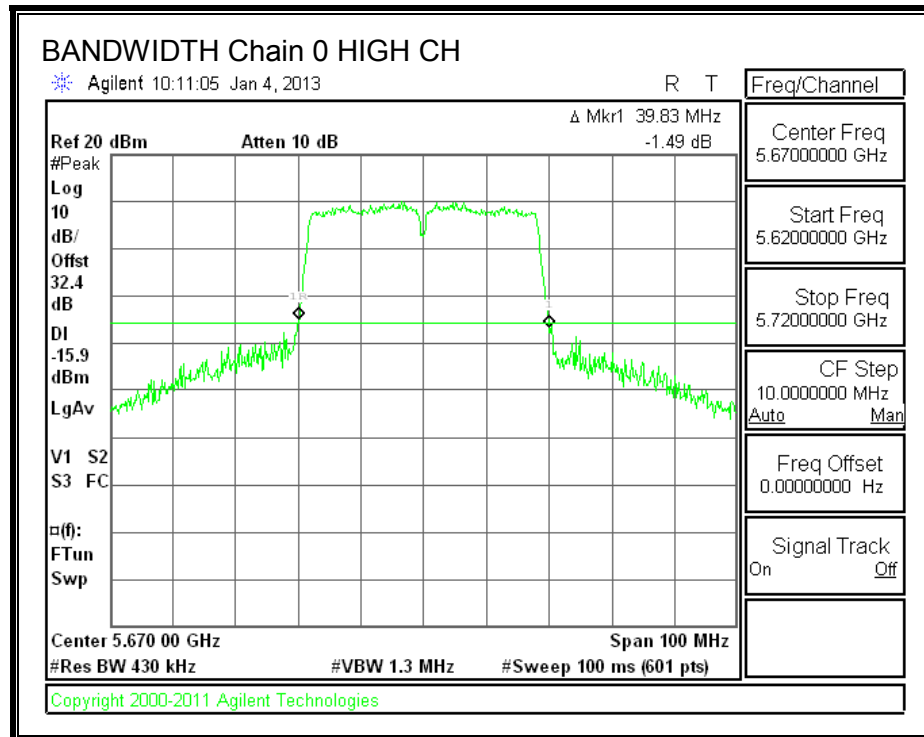
None; for reporting purposes only.

RESULTS

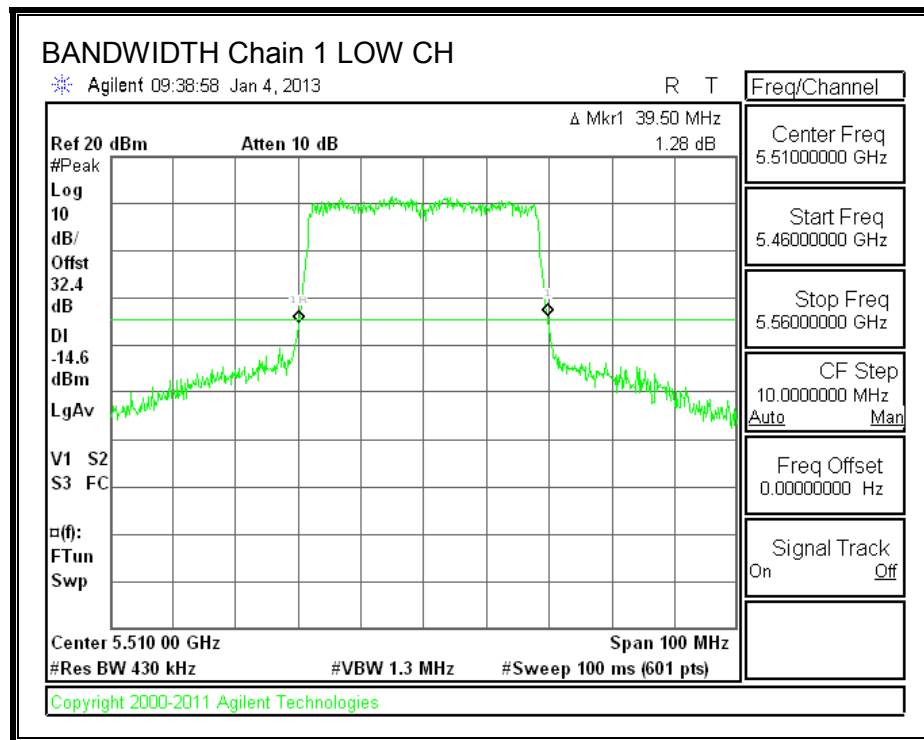
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5510	39.83	39.50
Mid	5550	39.83	39.67
High	5670	39.83	39.50

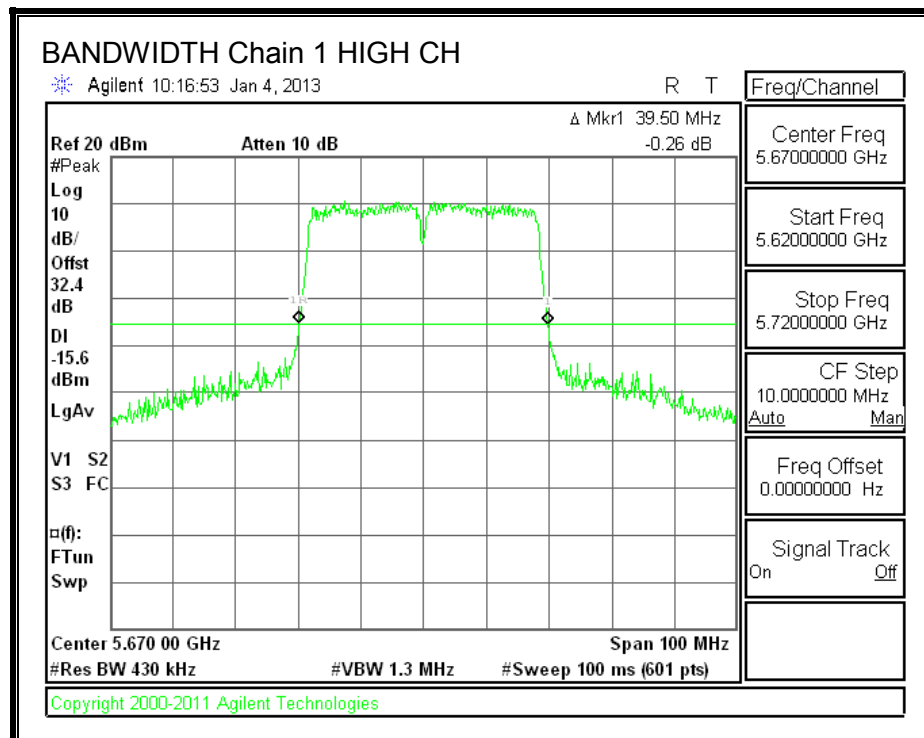
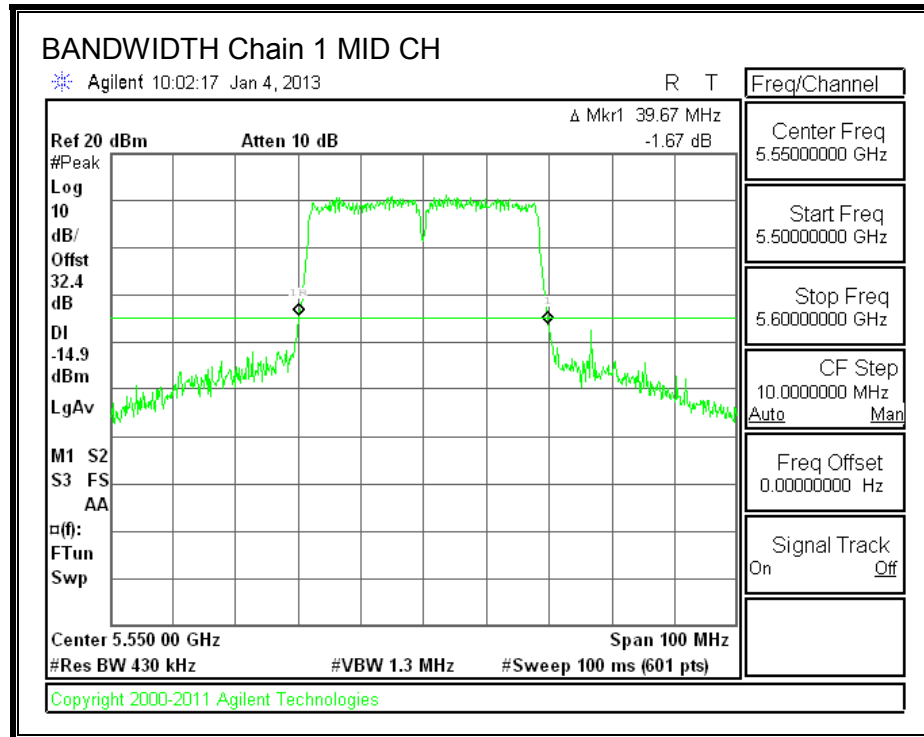
26 dB BANDWIDTH, Chain 0





26 dB BANDWIDTH, Chain 1





8.59.2. 99% BANDWIDTH

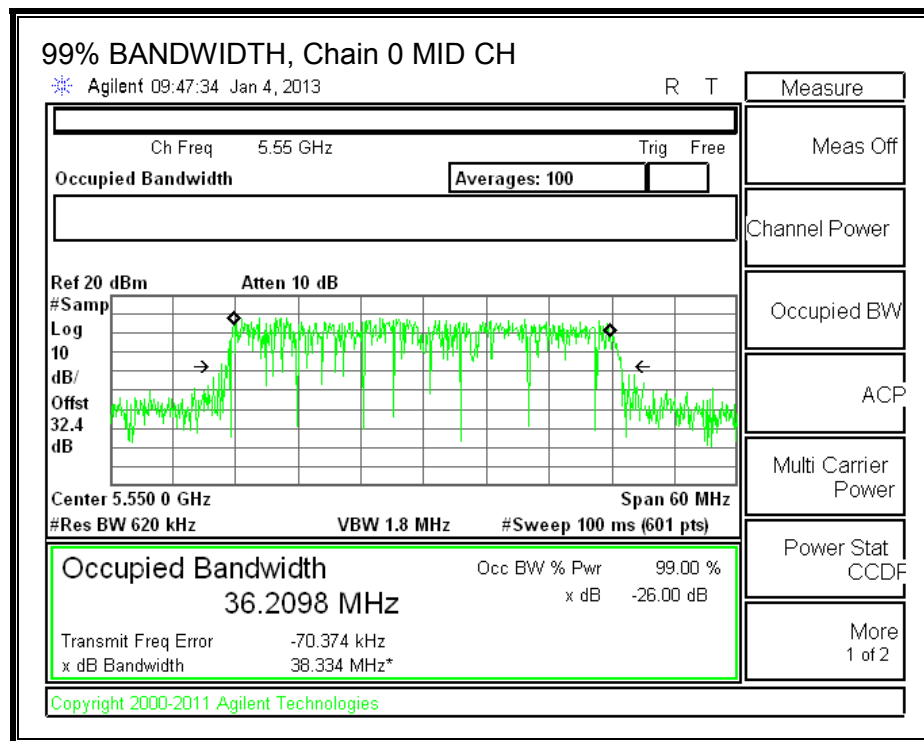
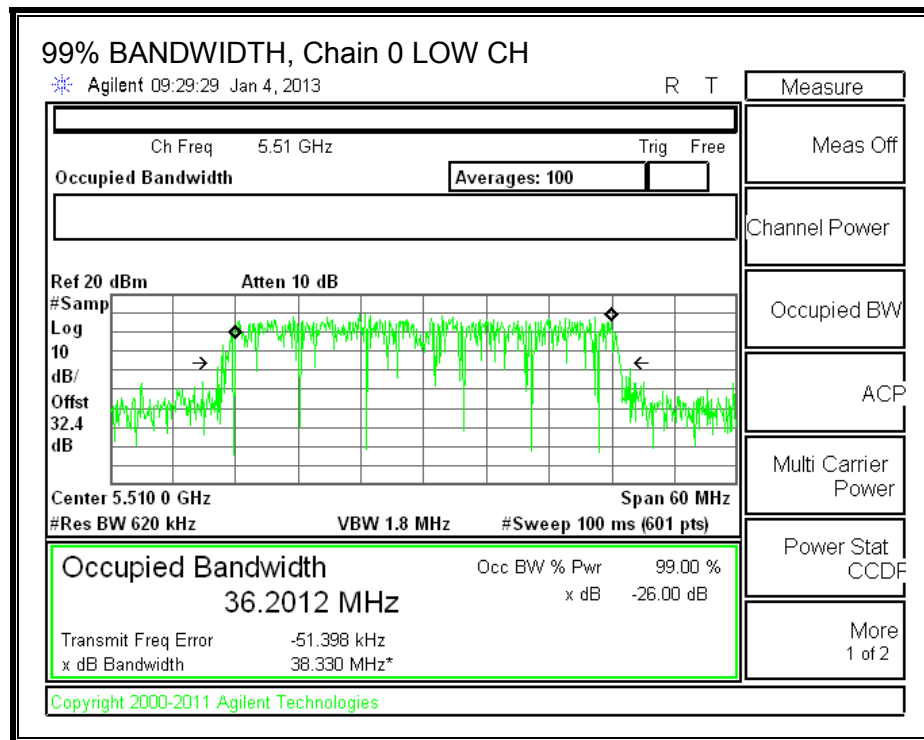
LIMITS

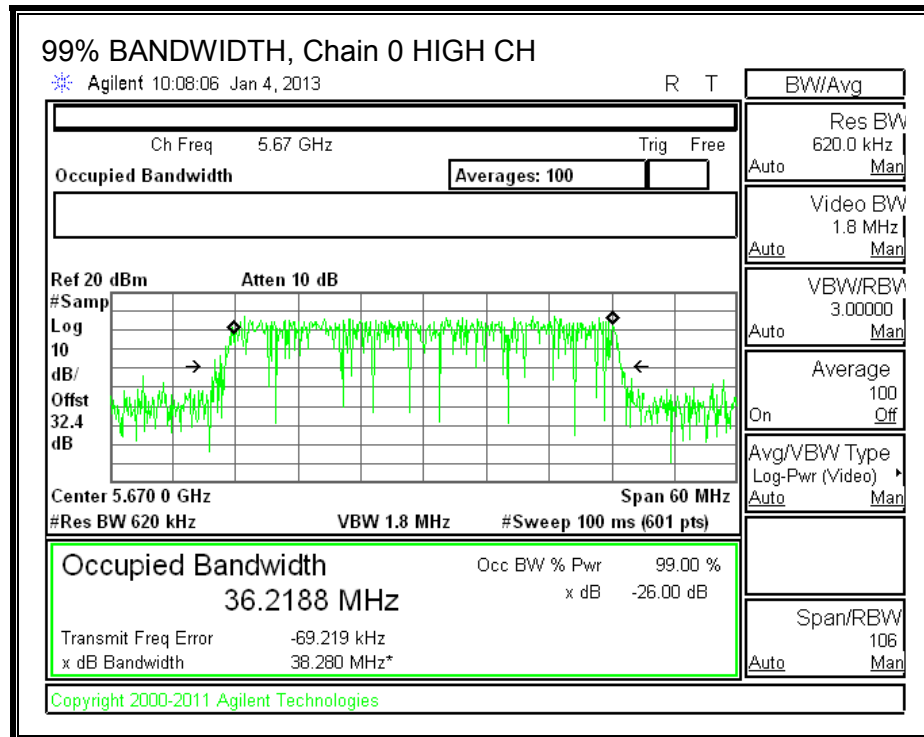
None; for reporting purposes only.

RESULTS

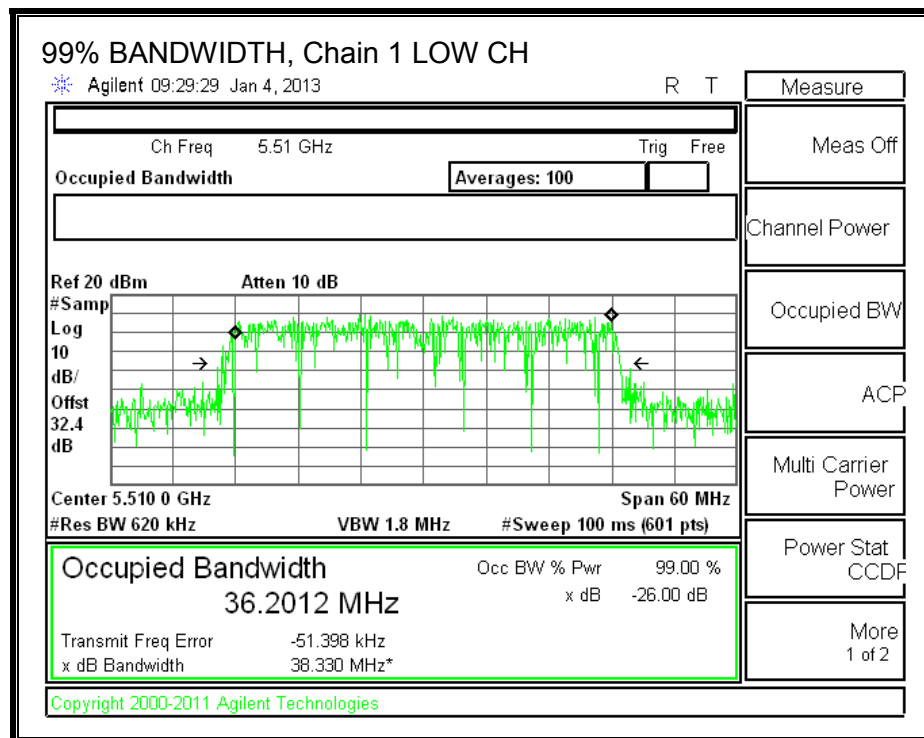
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5510	36.2012	36.2012
Mid	5550	36.2098	36.2328
High	5670	36.2188	36.1962

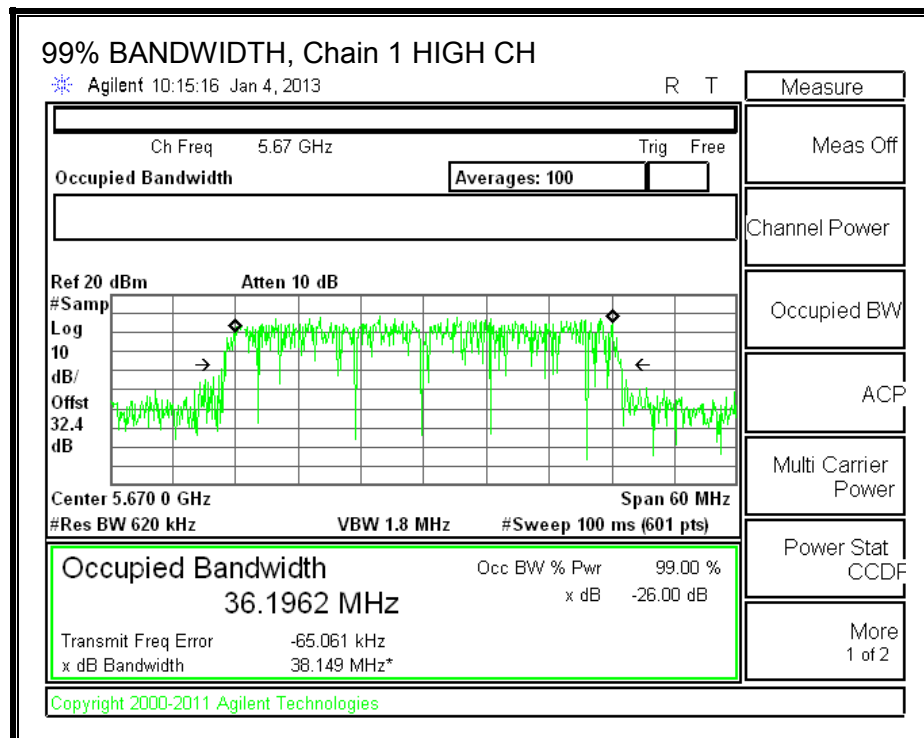
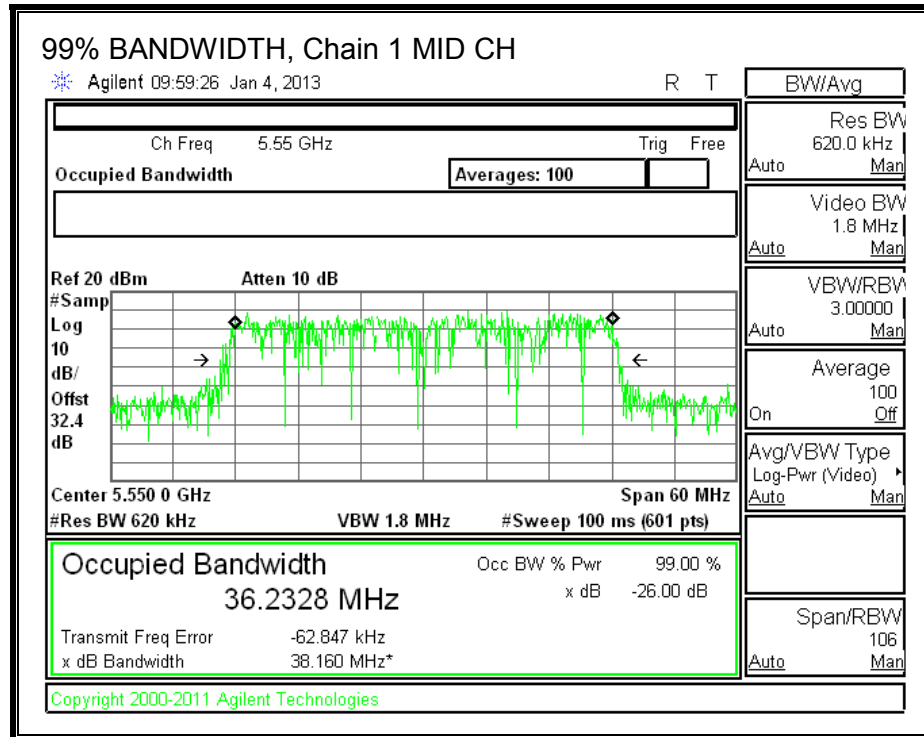
99% BANDWIDTH, Chain 0





99% BANDWIDTH, Chain 1





8.59.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	3.80	3.42

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5510	39.50	36.2012	3.42
Mid	5550	39.67	36.2098	3.42
High	5670	39.50	36.1962	3.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5550	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5670	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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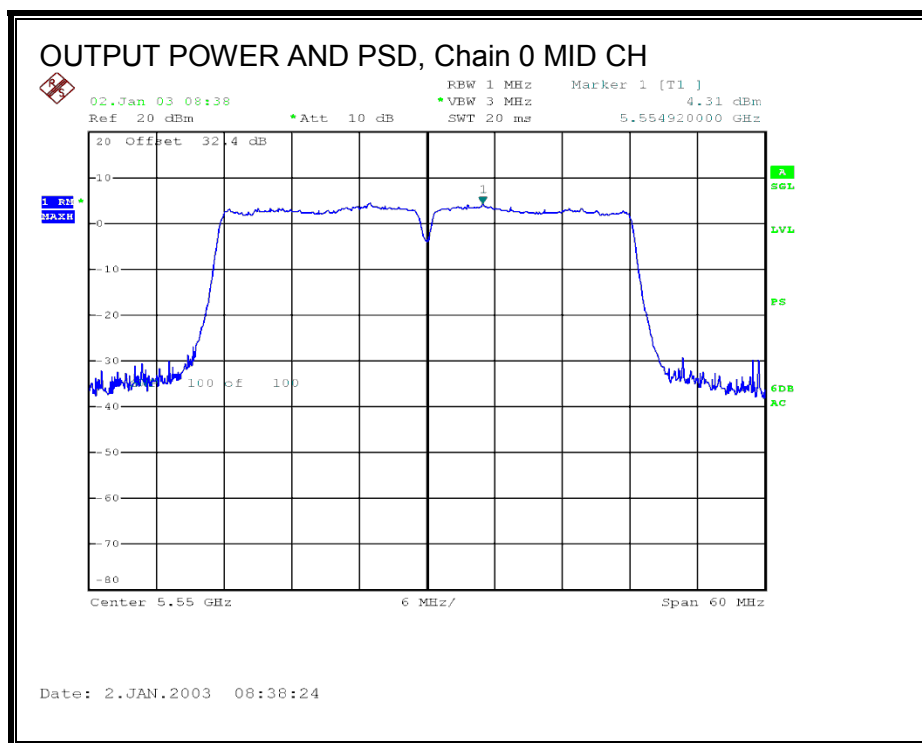
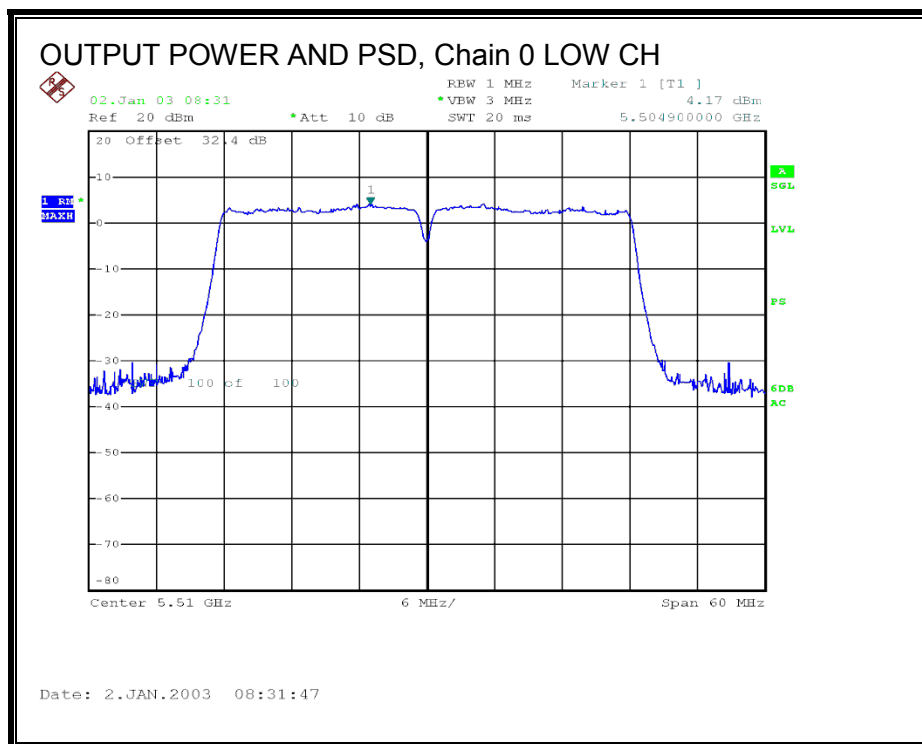
Output Power Results

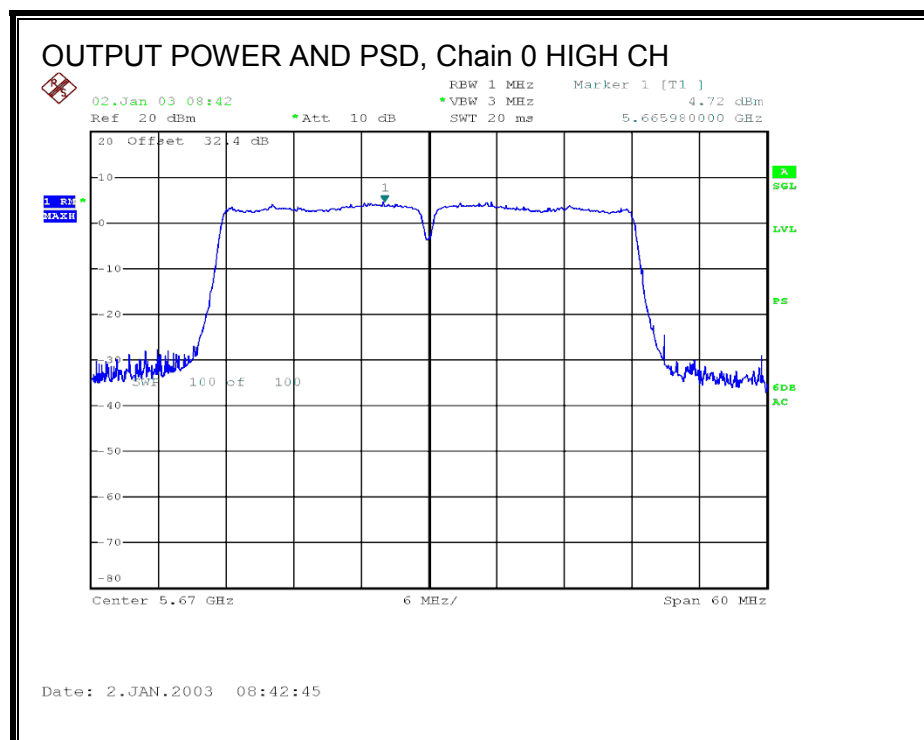
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	15.00	15.20	18.11	24.00	-5.89
Mid	5550	16.50	16.60	19.56	24.00	-4.44
High	5670	18.10	18.00	21.06	24.00	-2.94

PSD Results

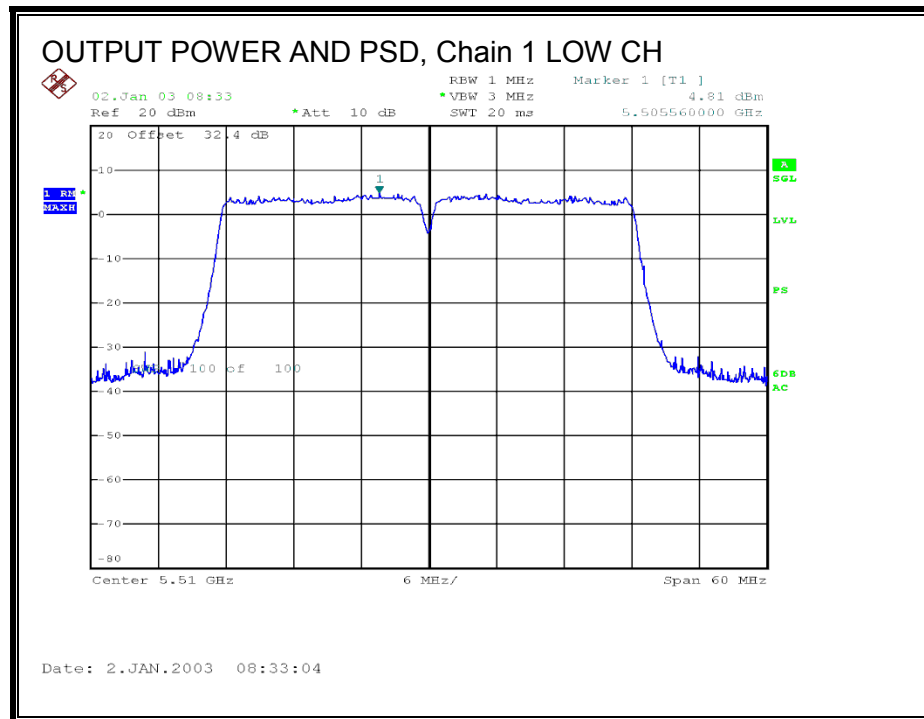
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	4.17	4.81	7.51	11.00	-3.49
Mid	5550	4.31	4.73	7.54	11.00	-3.46
High	5670	4.72	5.06	7.90	11.00	-3.10

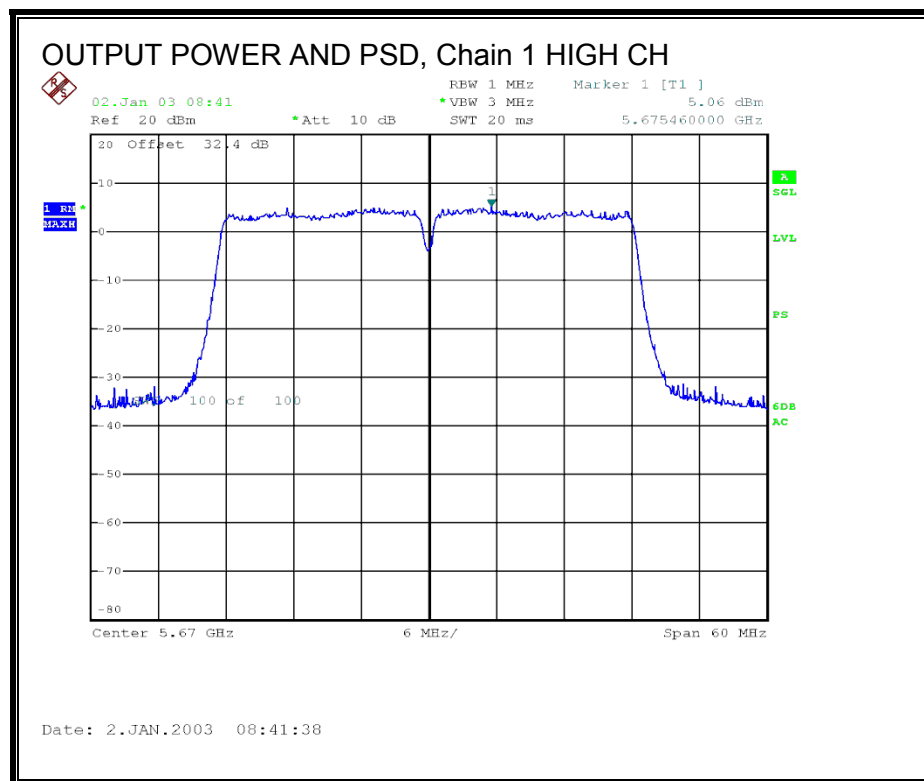
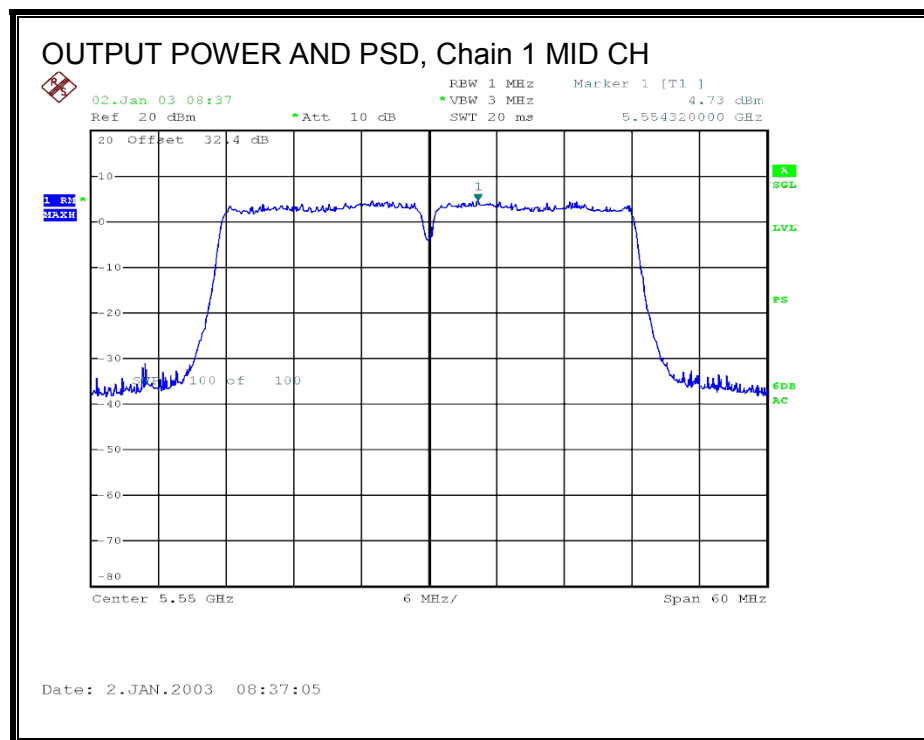
OUTPUT POWER AND PSD, Chain 0





OUTPUT POWER AND PSD, Chain 1





8.59.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.60. 802.11n HT40 CDD 3TX MODE IN THE 5.6 GHz BAND

8.60.1. 26 dB BANDWIDTH

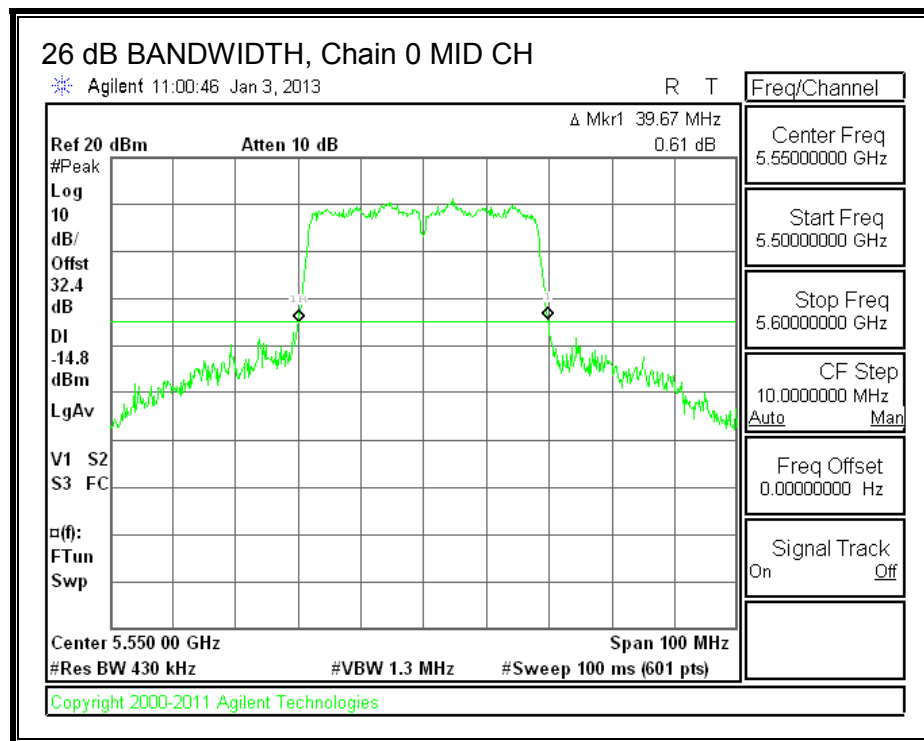
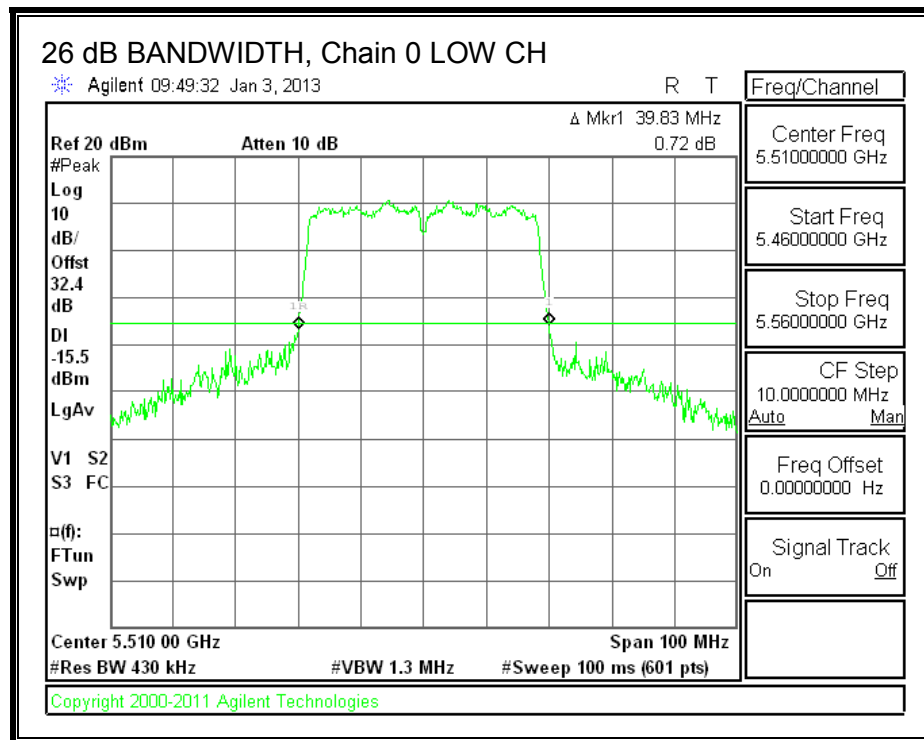
LIMITS

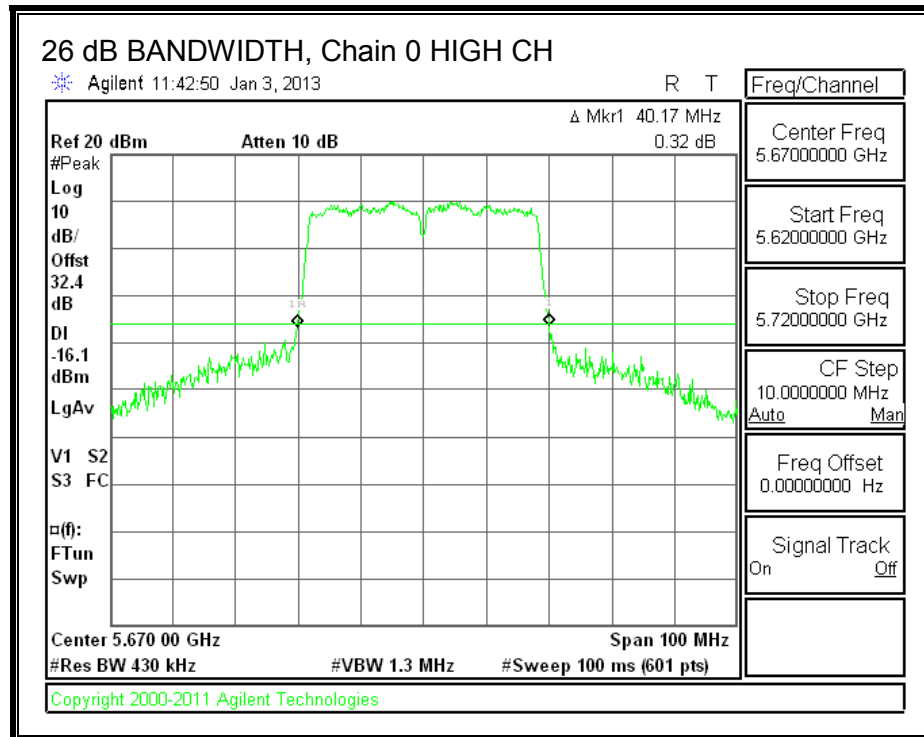
None; for reporting purposes only.

RESULTS

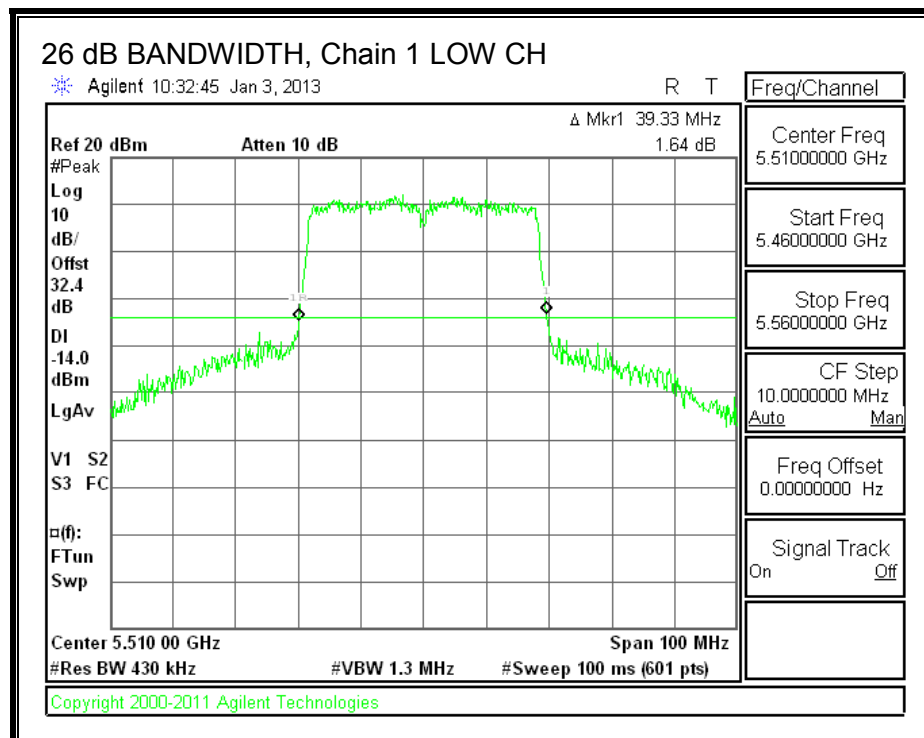
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Low	5510	39.83	39.33	39.50
Mid	5550	39.67	39.67	39.50
High	5670	40.17	39.50	39.83

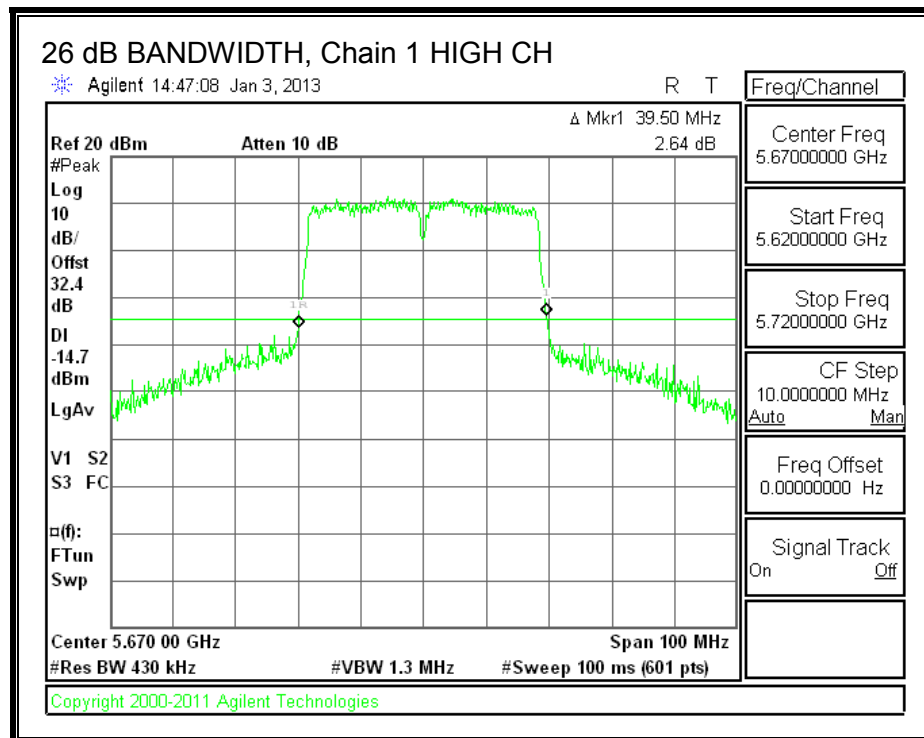
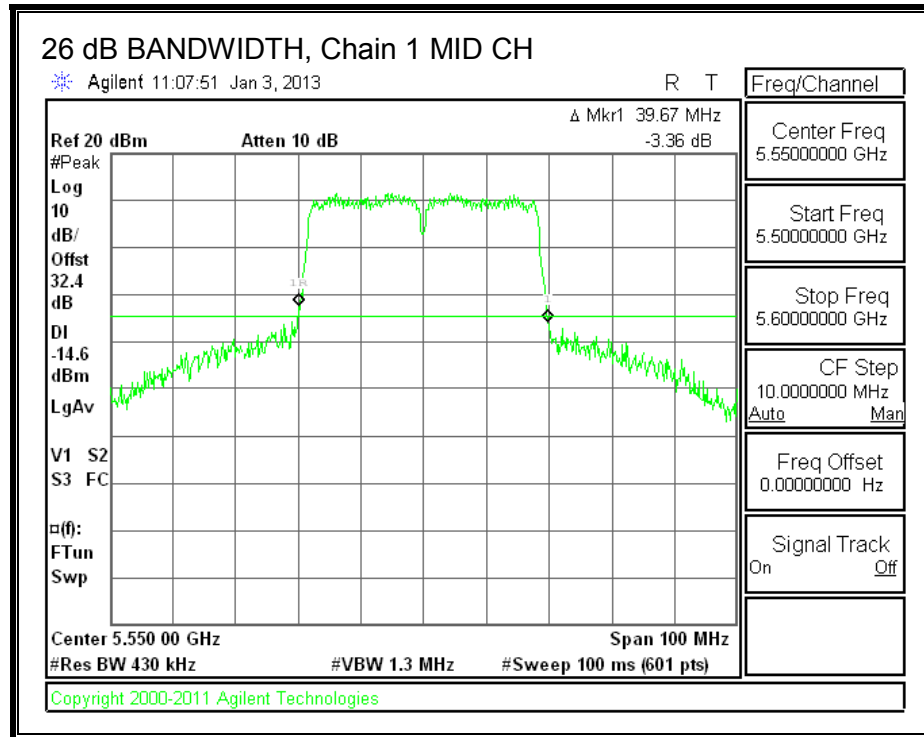
26 dB BANDWIDTH, Chain 0



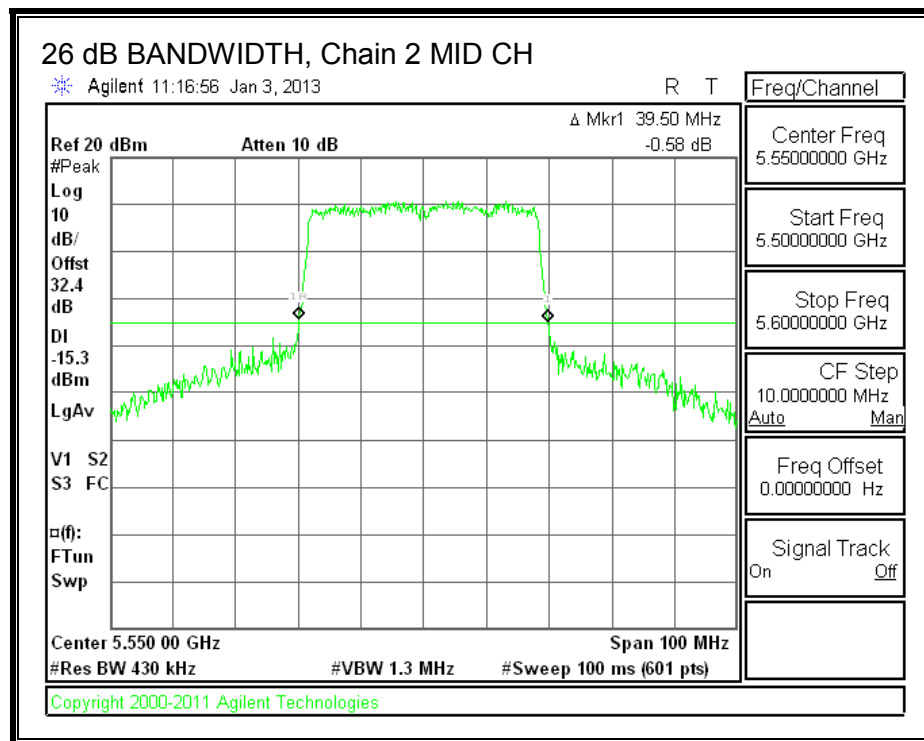
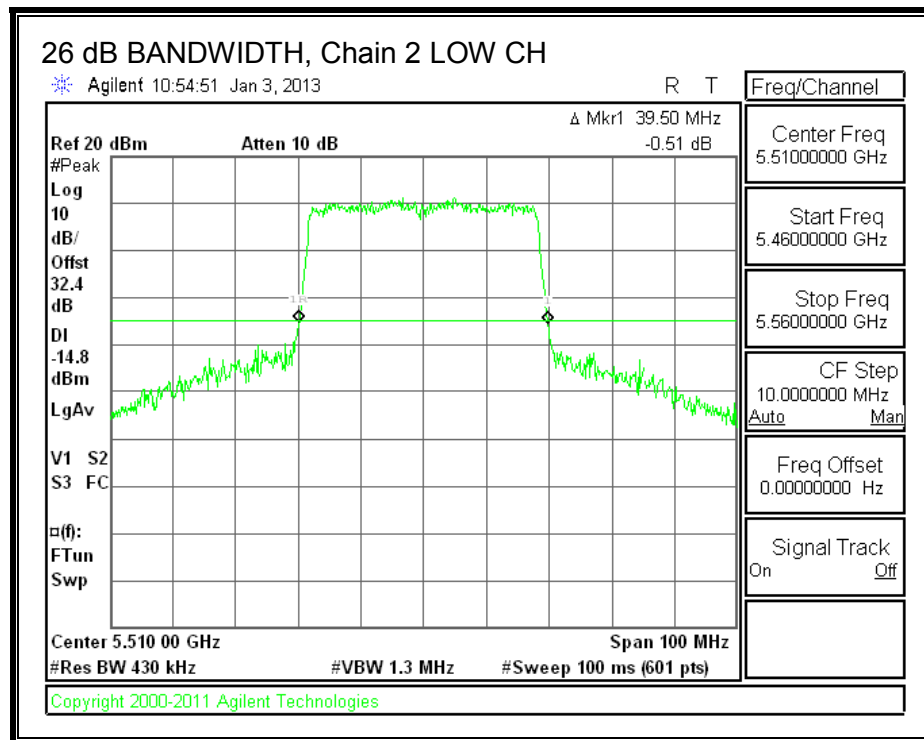


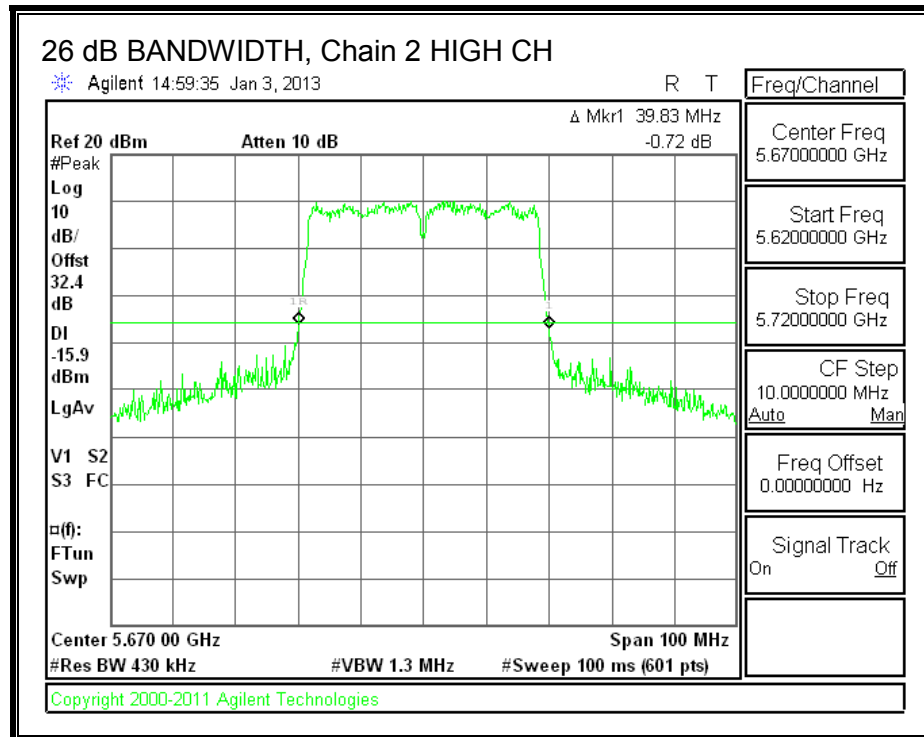
26 dB BANDWIDTH, Chain 1





26 dB BANDWIDTH, Chain 2





8.60.2. 99% BANDWIDTH

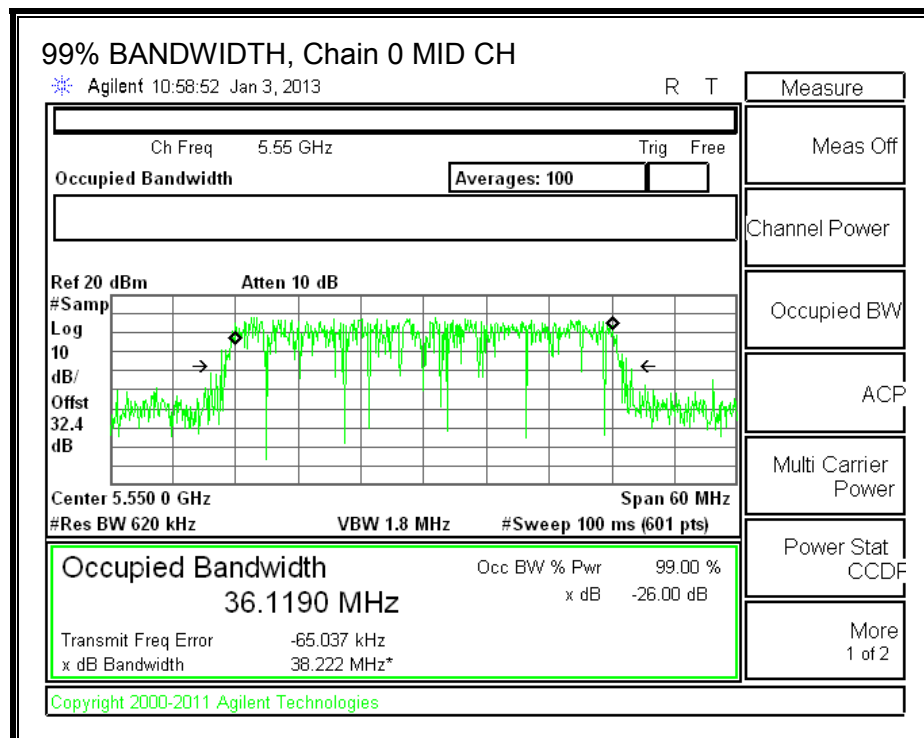
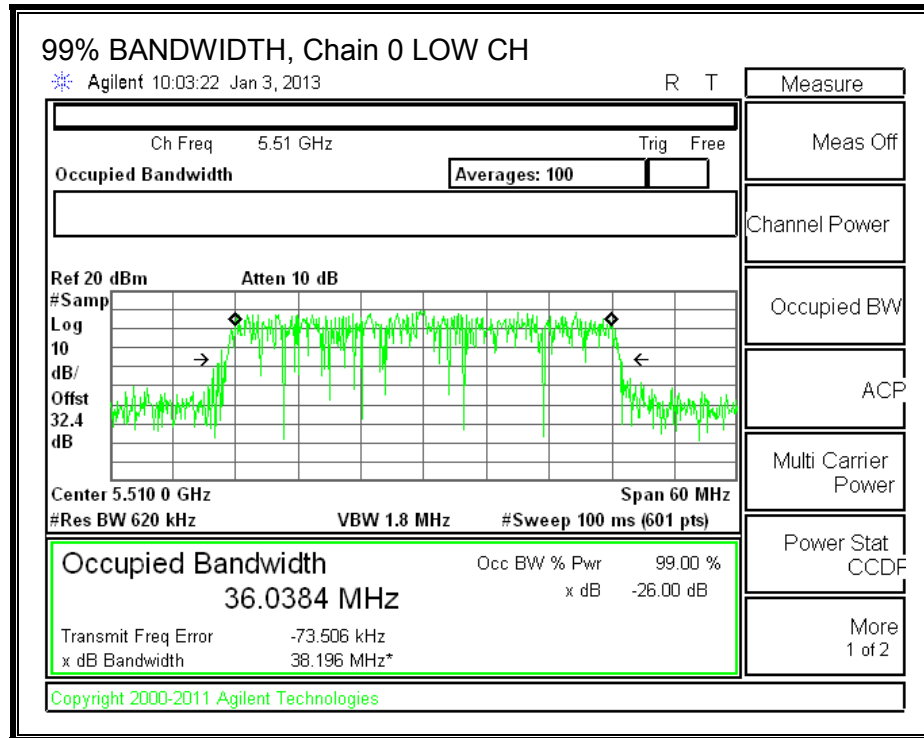
LIMITS

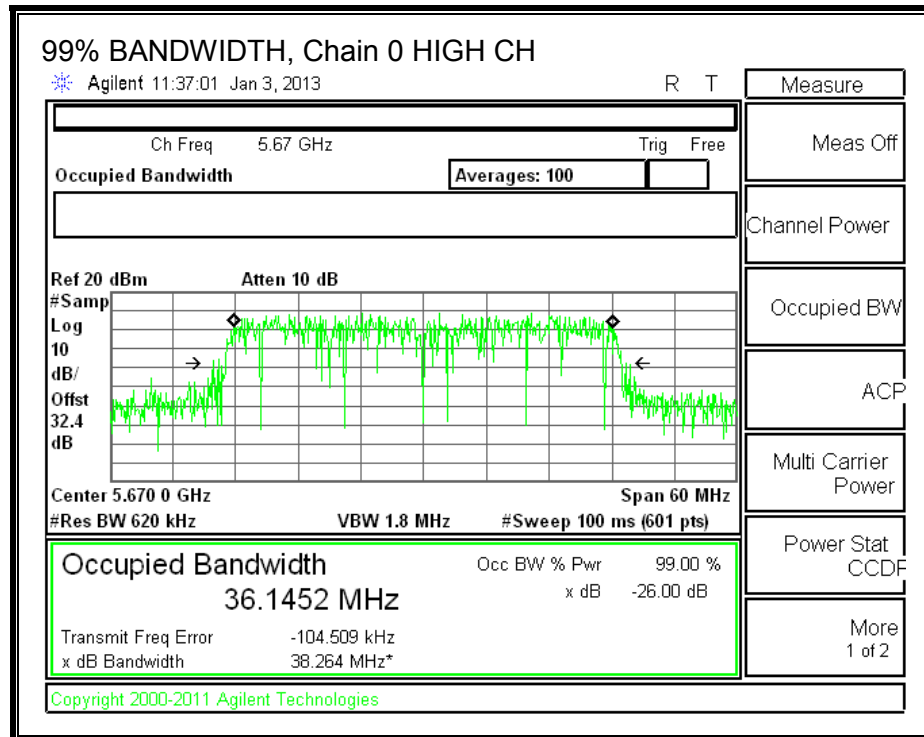
None; for reporting purposes only.

RESULTS

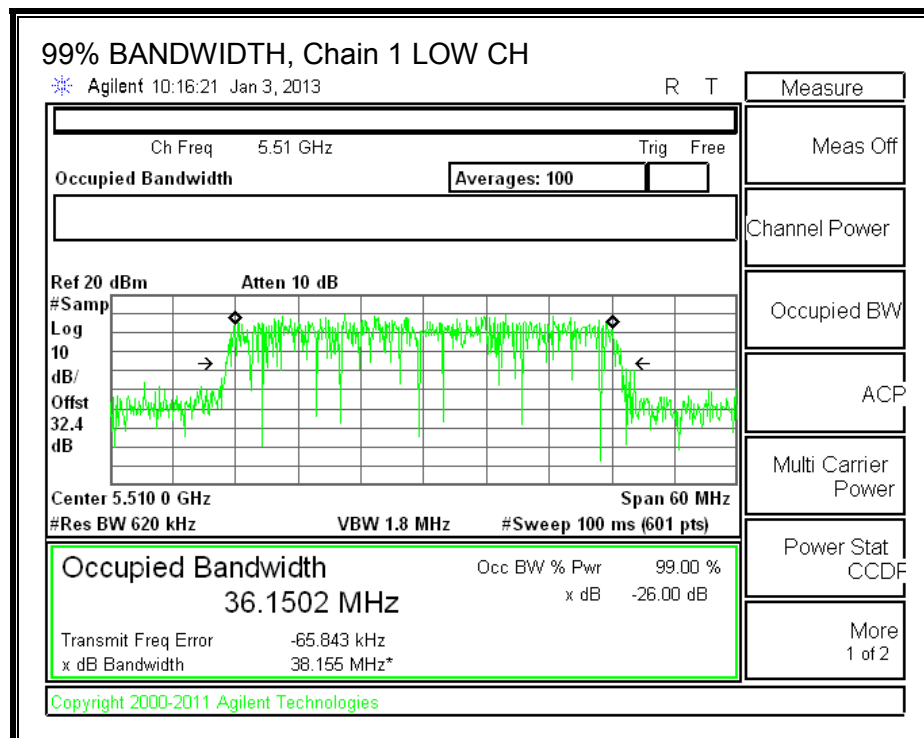
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	5510	36.0384	36.1502	36.1682
Mid	5550	36.1190	36.1868	36.1649
High	5670	36.1452	36.1882	36.2750

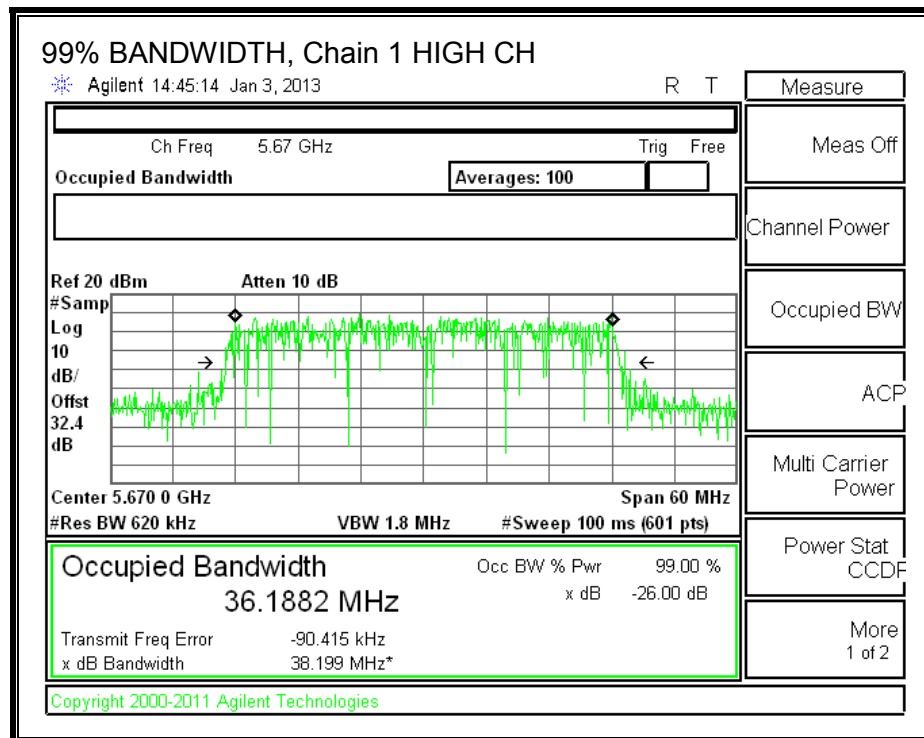
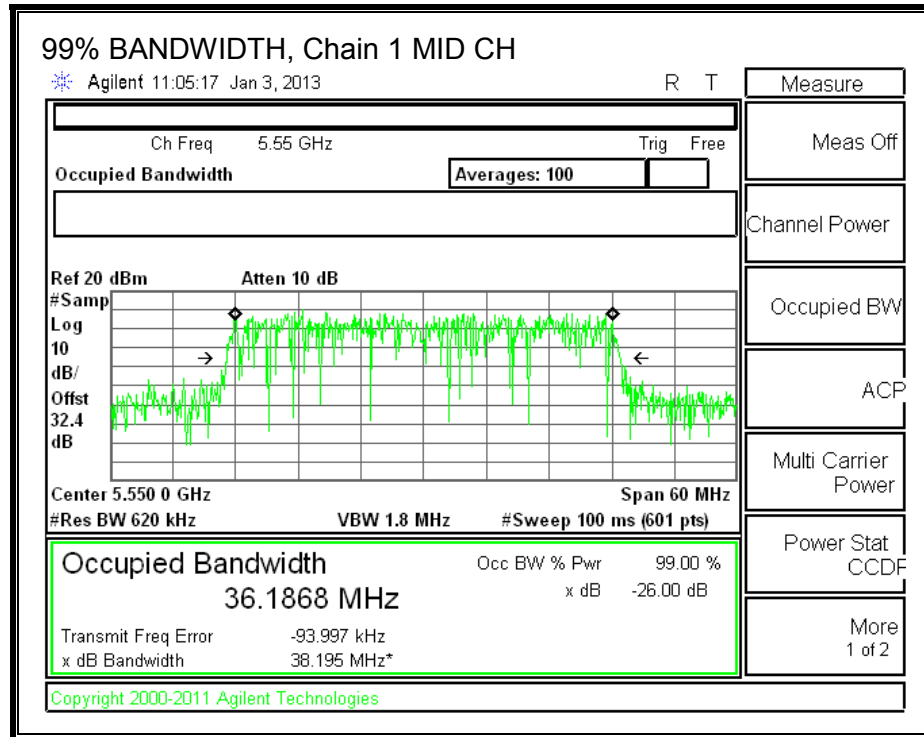
99% BANDWIDTH, Chain 0



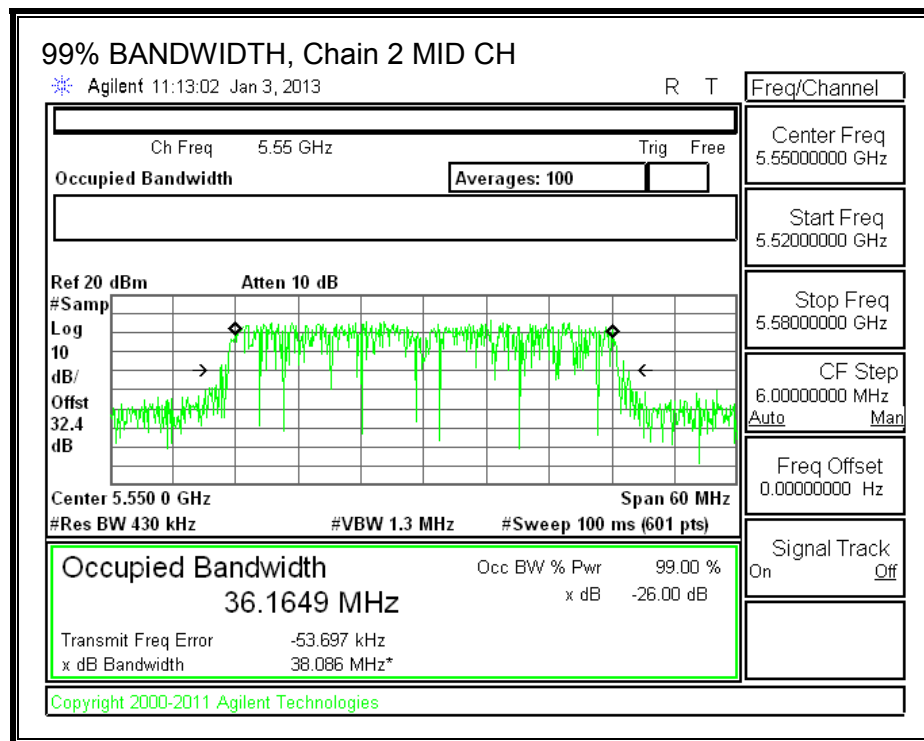
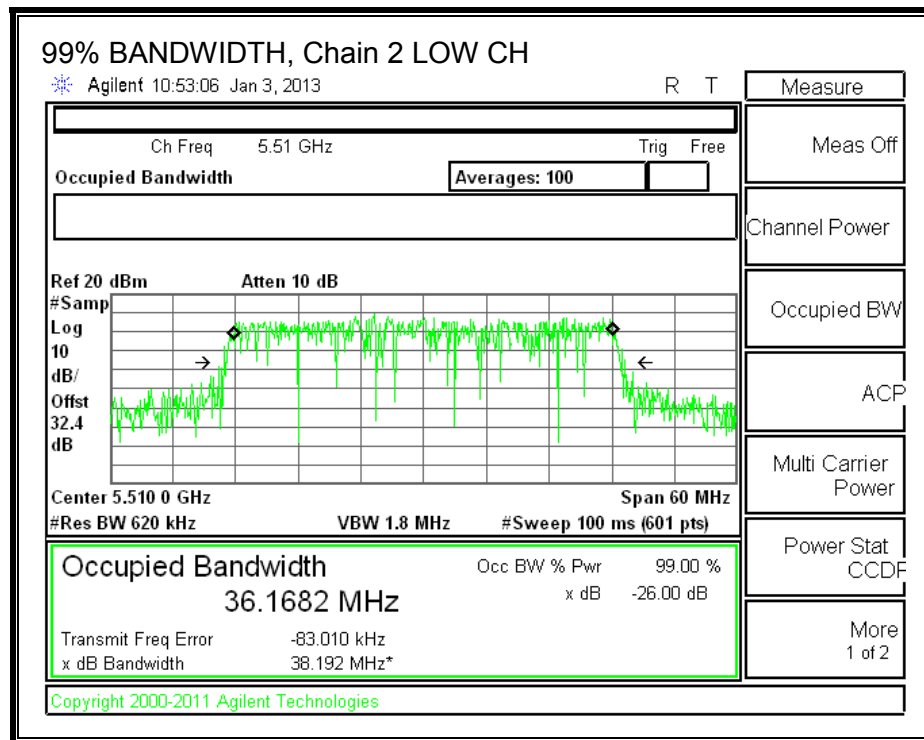


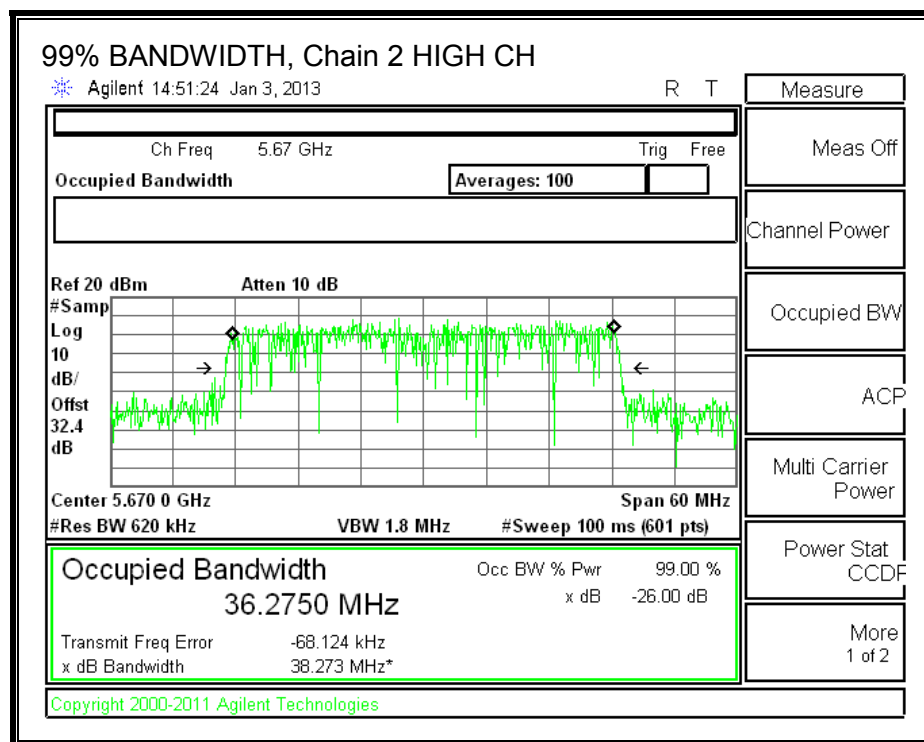
99% BANDWIDTH, Chain 1





99% BANDWIDTH, Chain 2





8.60.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	1.70	3.80	2.92

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	1.70	3.80	7.65

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)	Uncorrelated Directional Gain (dBi)
Low	5510	39.33	36.0384	7.65	2.92
Mid	5550	39.50	36.1190	7.65	2.92
High	5670	39.50	36.1452	7.65	2.92

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	9.35	11.00	9.35
Mid	5550	24.00	24.00	30.00	24.00	9.35	11.00	9.35
High	5670	24.00	24.00	30.00	24.00	9.35	11.00	9.35

Duty Cycle CF (dB)	0.00
--------------------	------

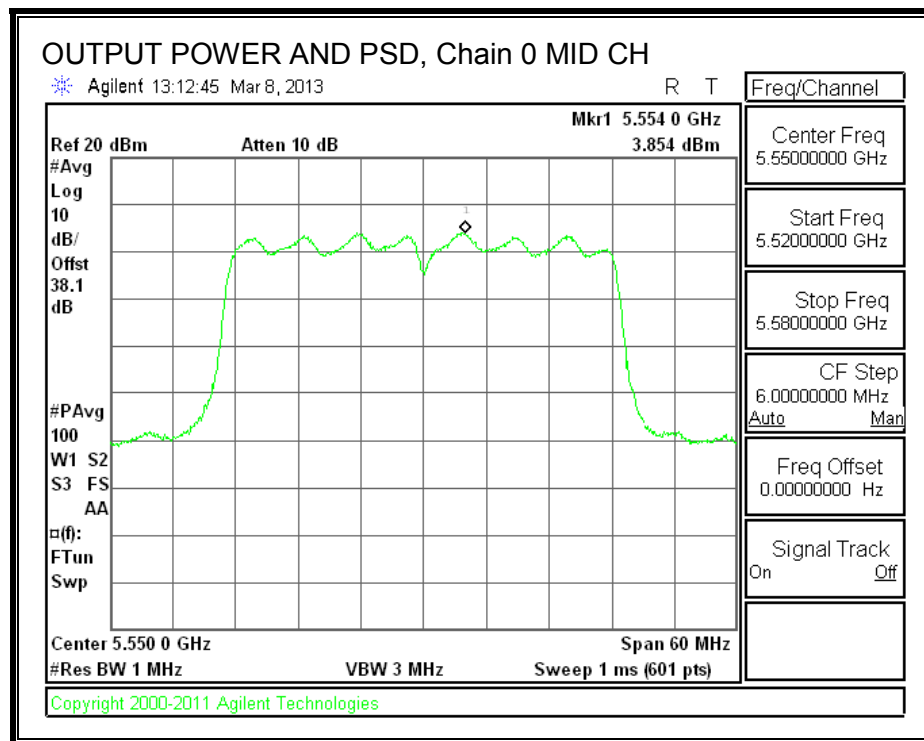
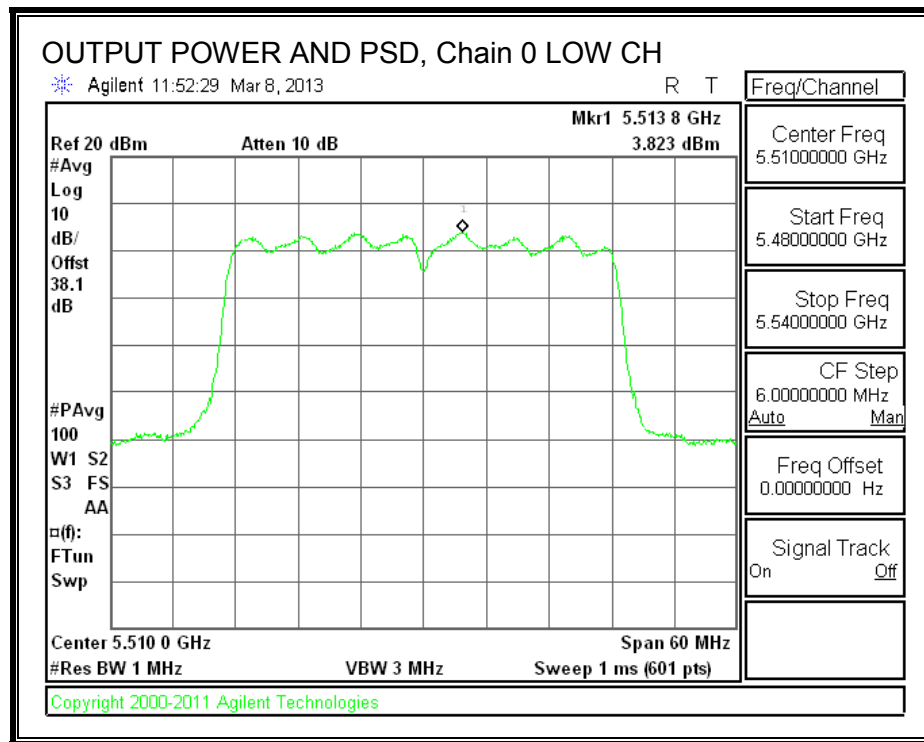
Output Power Results

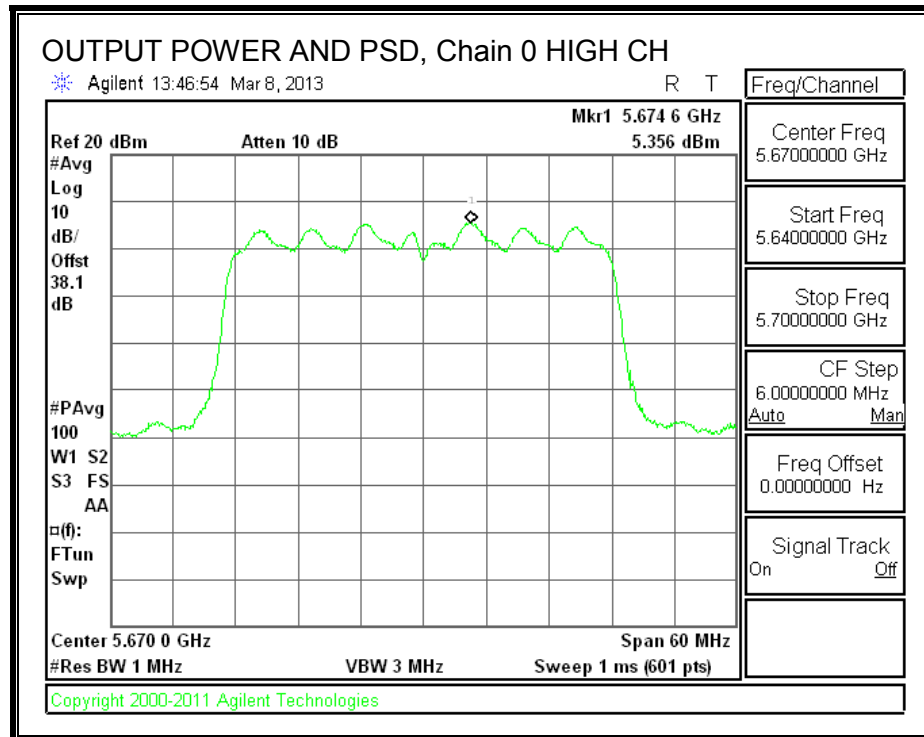
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	14.50	14.80	14.60	19.41	24.00	-4.59
Mid	5550	16.00	16.20	16.10	20.87	24.00	-3.13
High	5670	16.00	16.25	16.10	20.89	24.00	-3.11

PSD Results

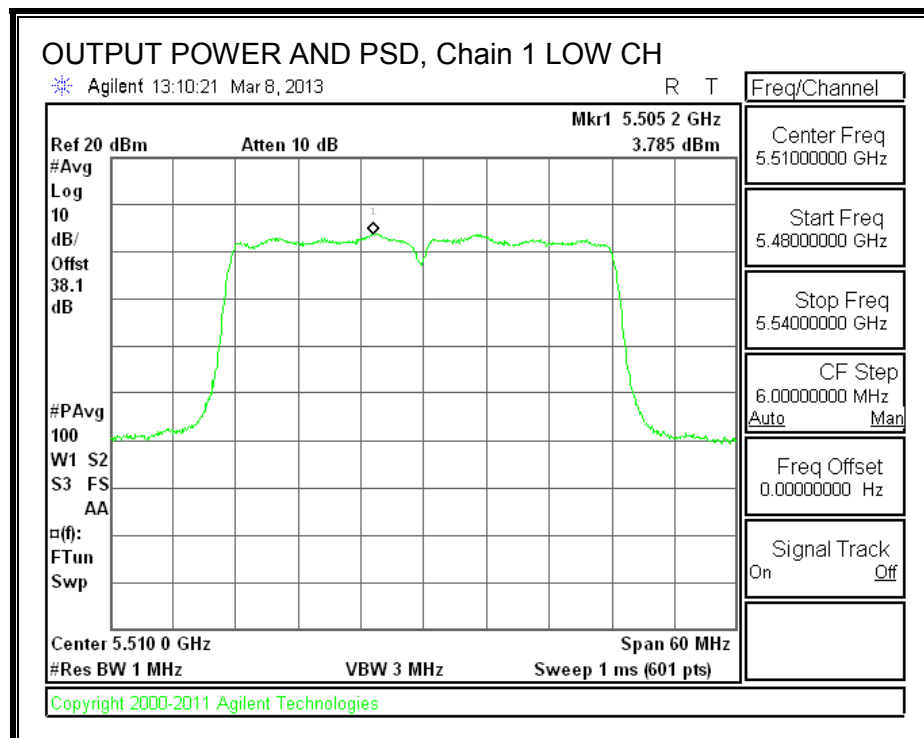
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	3.823	3.785	3.561	8.50	9.35	-0.85
Mid	5550	3.854	3.886	3.816	8.62	9.35	-0.73
High	5670	5.356	4.108	3.638	9.20	9.35	-0.15

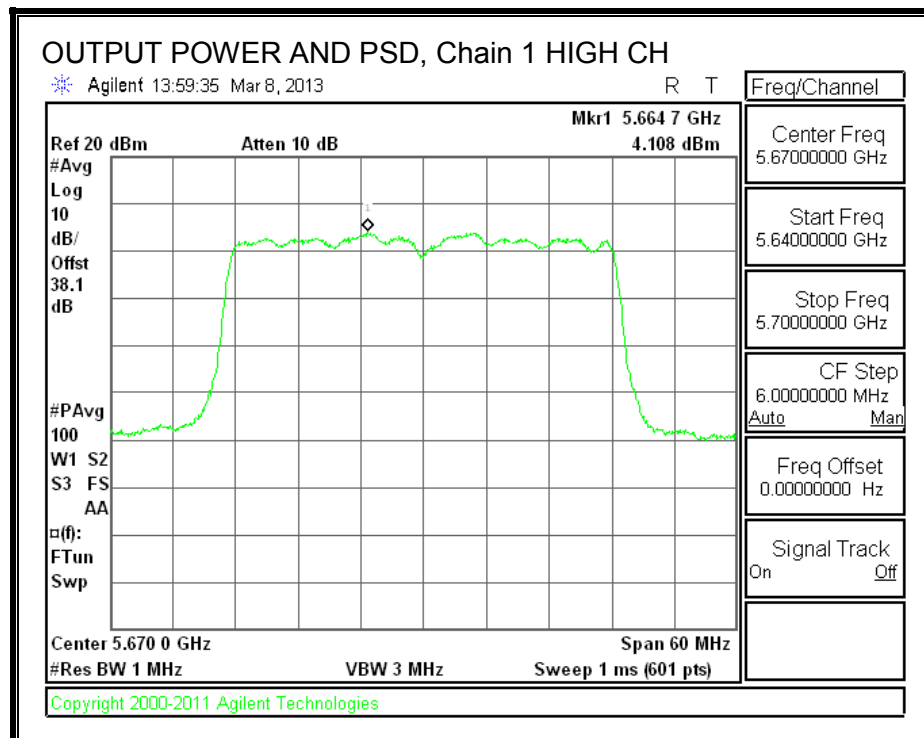
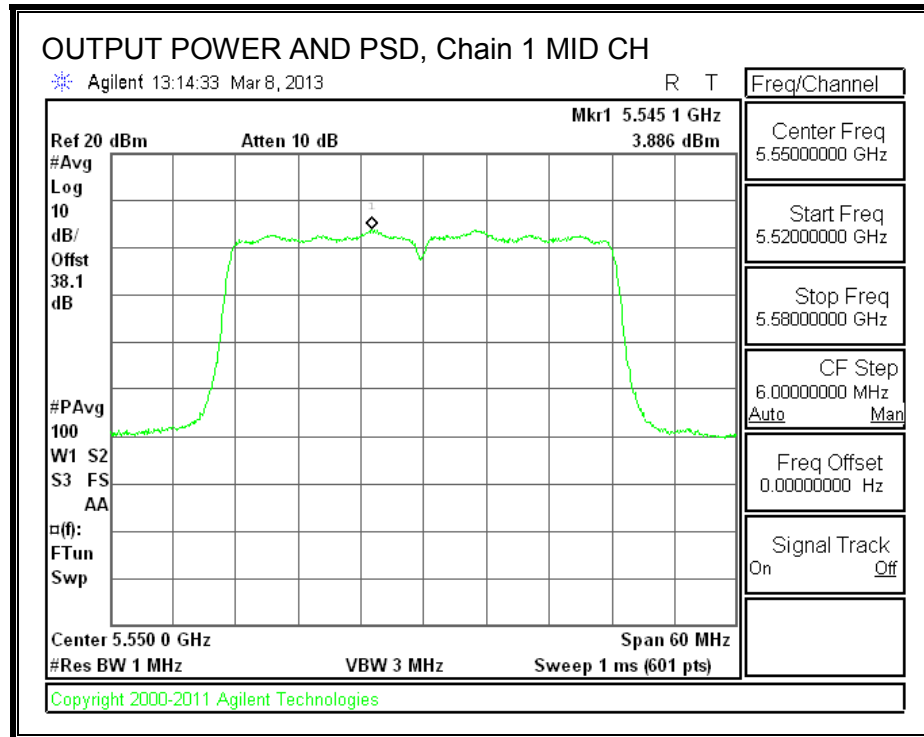
OUTPUT POWER AND PSD, Chain 0



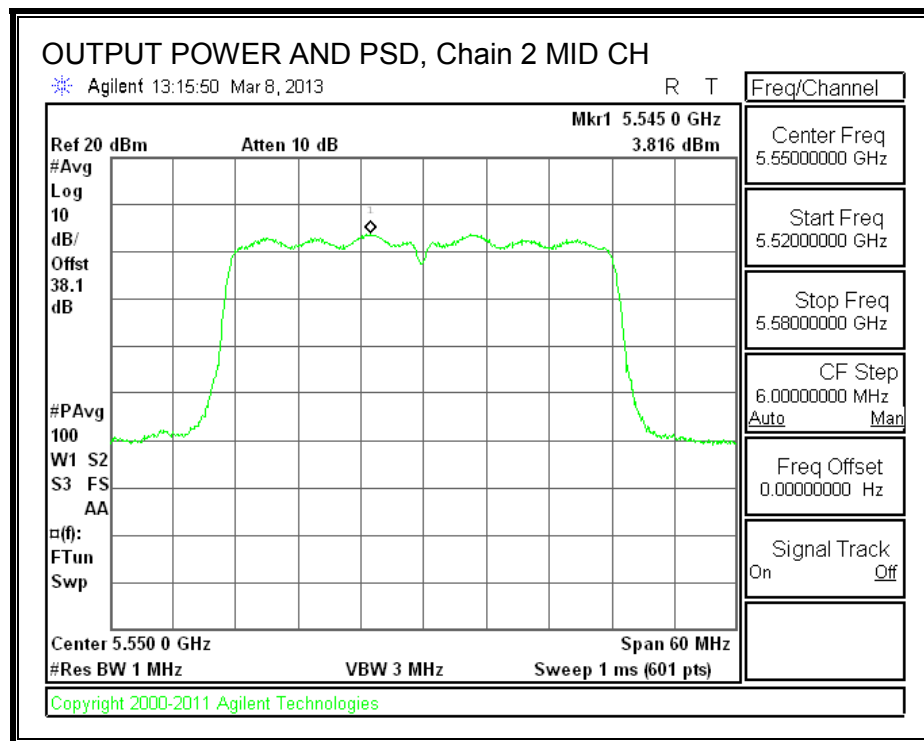
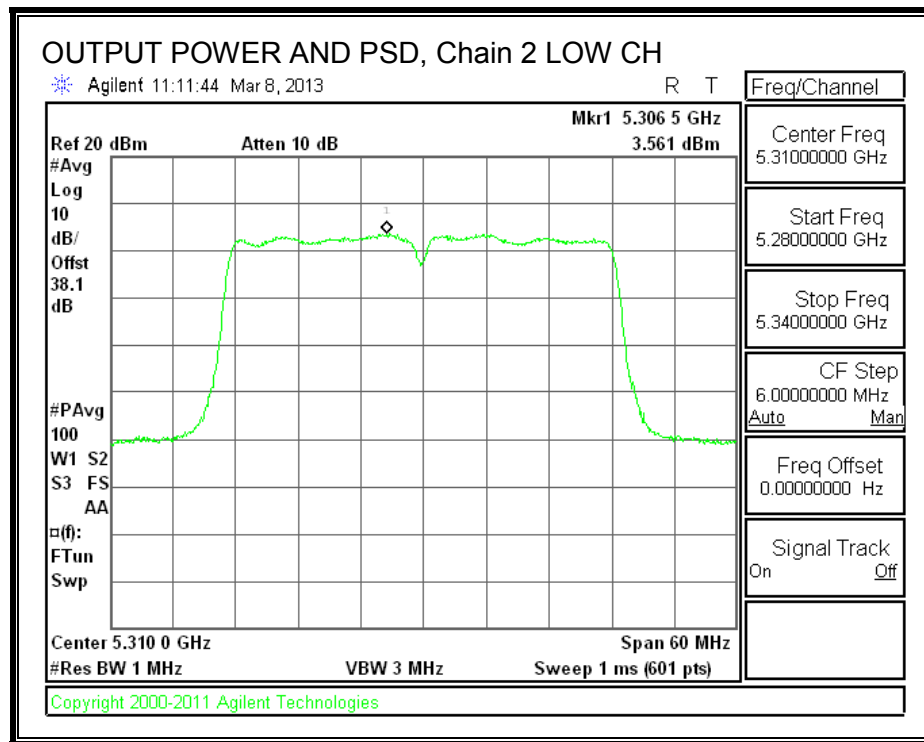


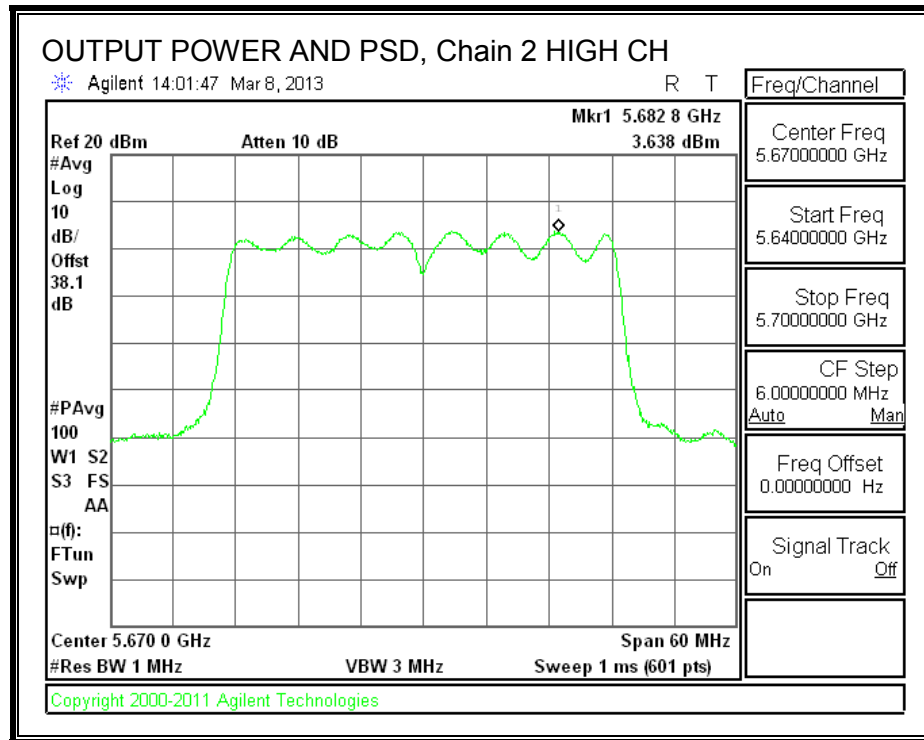
OUTPUT POWER AND PSD, Chain 1





OUTPUT POWER AND PSD, Chain 2





8.60.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.61. 802.11n HT40 BF 3TX MODE IN THE 5.6 GHz BAND

Covered by testing HT40 CDD 3TX mode, the power per chain used for HT40 CDD 3TX mode is the same power per chain that will be used for HT40 BF 3TX mode. However, since BF is correlated and CDD is uncorrelated for output power, the section below for output power using correlated AG for this BF mode shows it is still compliant.

8.61.1. OUTPUT AVERAGE POWER

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 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 peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	1.70	3.80	7.65

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Directional Gain (dBi)
Low	5510	39.33	36.0384	7.65
Mid	5550	39.50	36.1190	7.65
High	5670	39.50	36.1452	7.65

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Low	5510	22.35	24.00	30.00	22.35
Mid	5550	22.35	24.00	30.00	22.35
High	5670	22.35	24.00	30.00	22.35

Duty Cycle CF (dB)	0.00
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	14.50	14.80	14.60	19.41	22.35	-2.94
Mid	5550	16.00	16.20	16.10	20.87	22.35	-1.48
High	5670	16.00	16.25	16.10	20.89	22.35	-1.46

8.62. 802.11n HT40 STBC 3TX MODE IN THE 5.6 GHz BAND

8.62.1. 26 dB BANDWIDTH

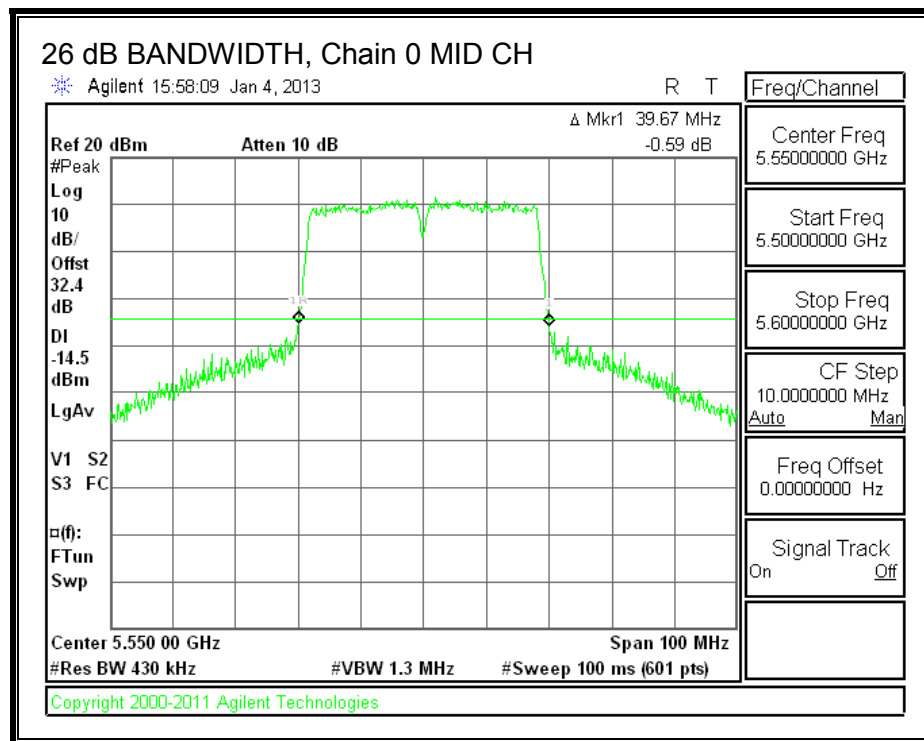
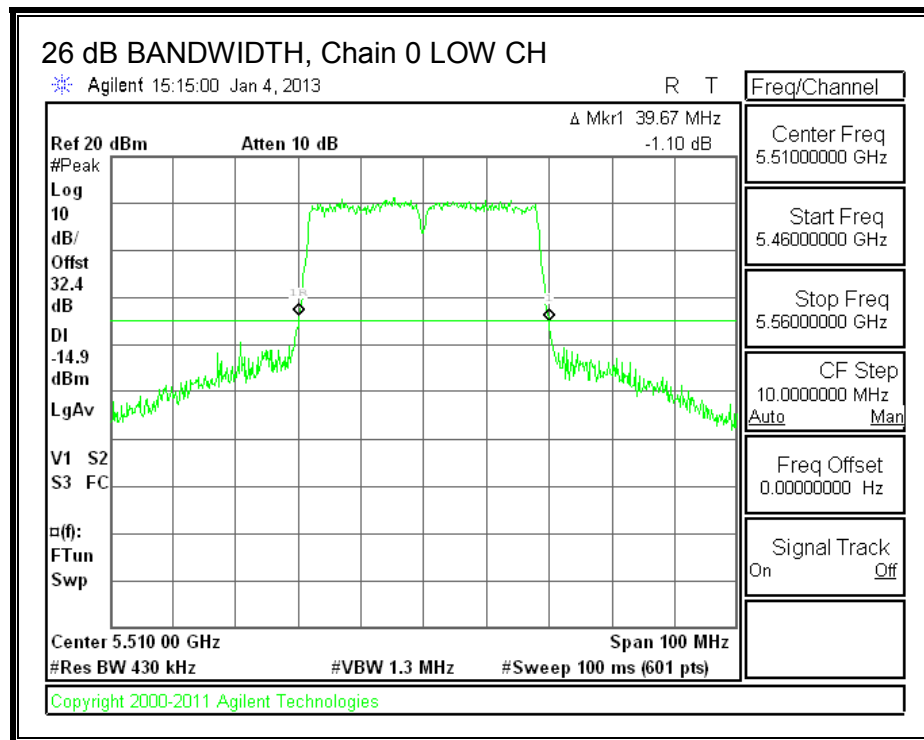
LIMITS

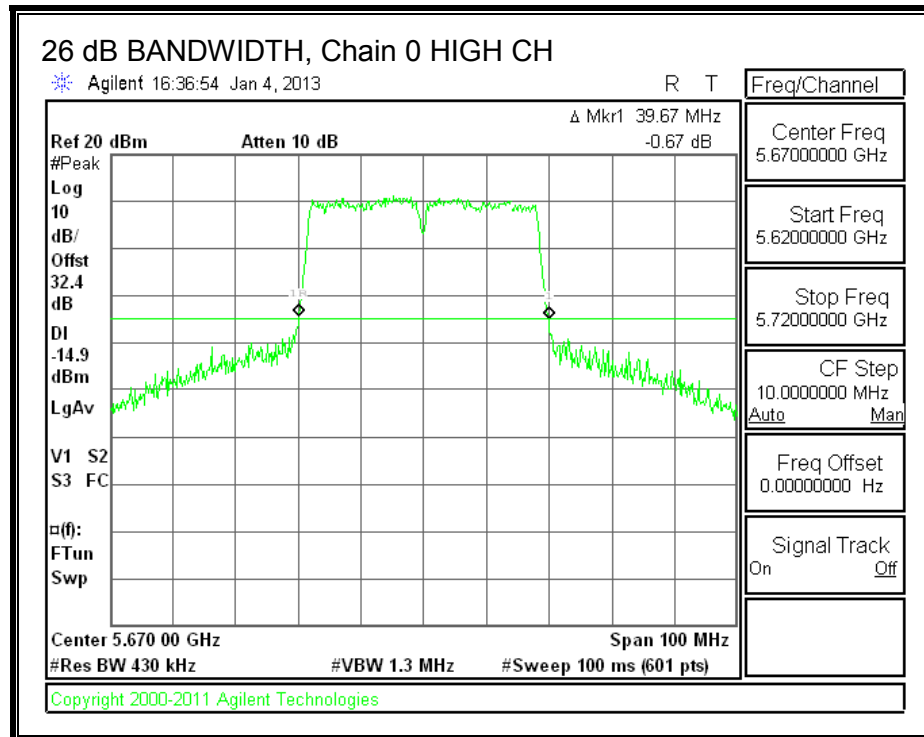
None; for reporting purposes only.

RESULTS

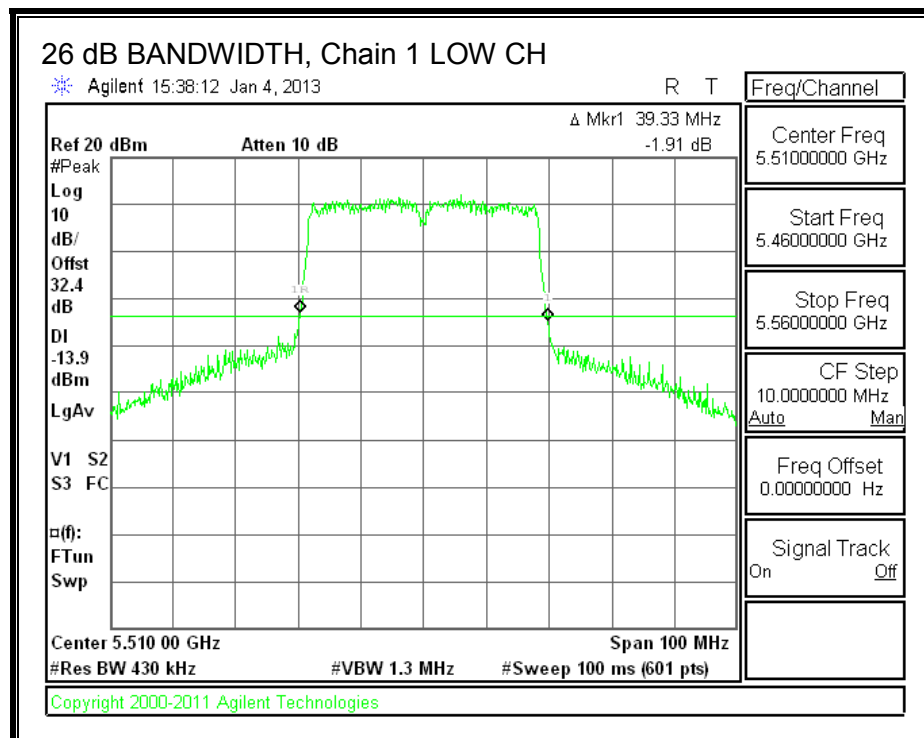
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Low	5510	39.67	39.33	39.83
Mid	5550	39.67	39.67	39.67
High	5670	39.67	39.50	39.67

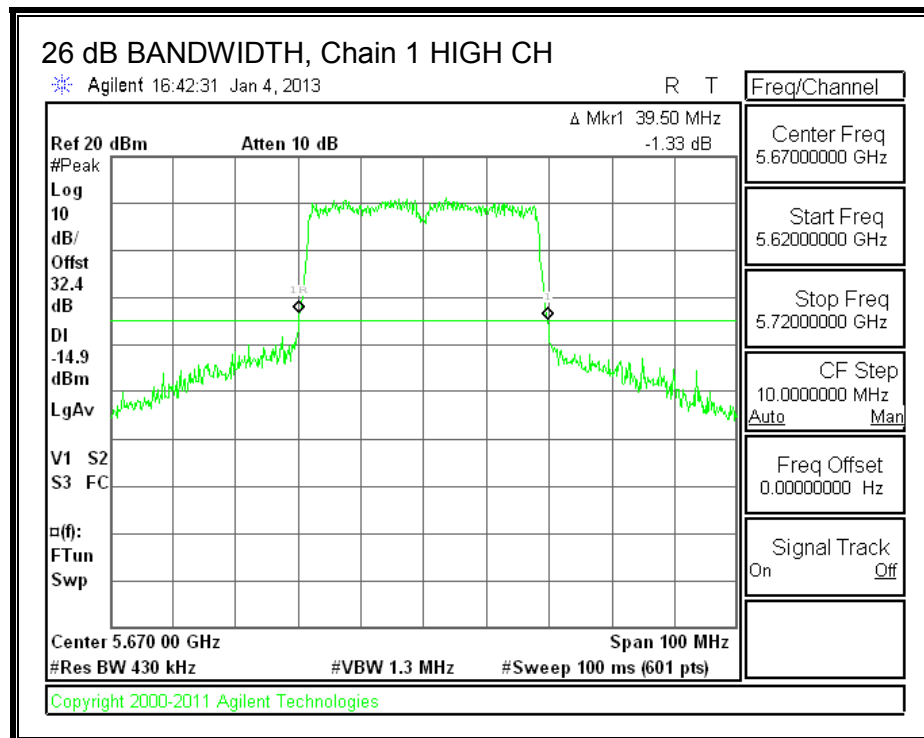
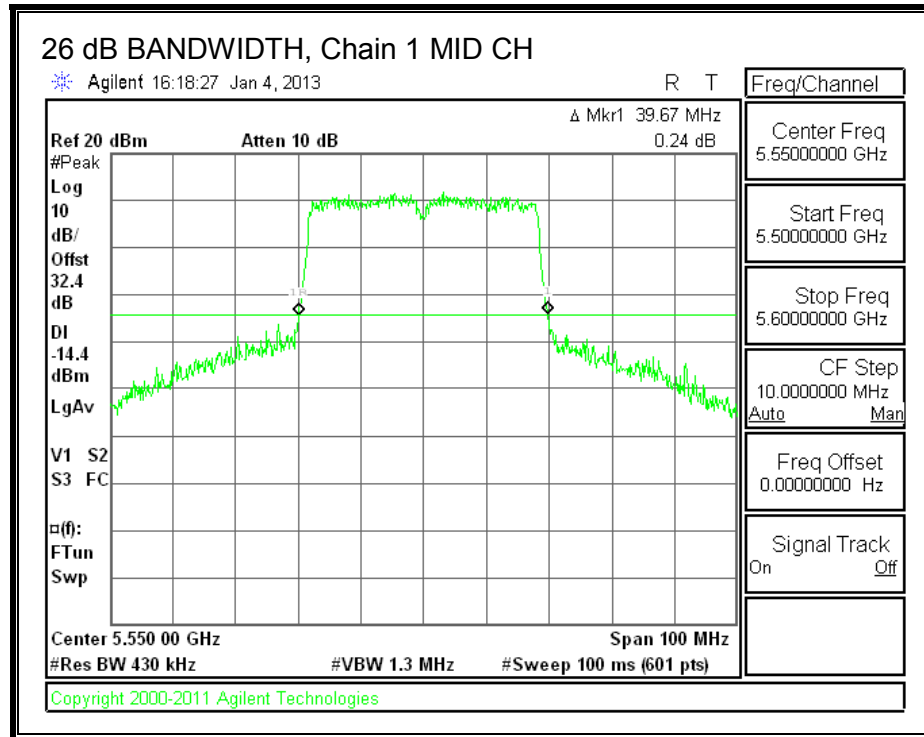
26 dB BANDWIDTH, Chain 0



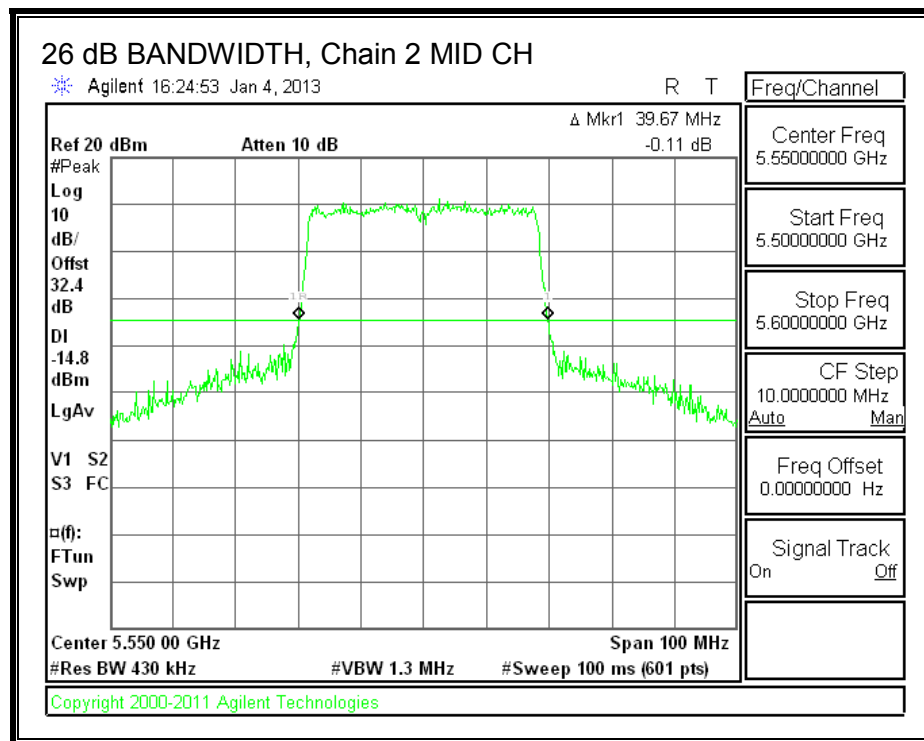
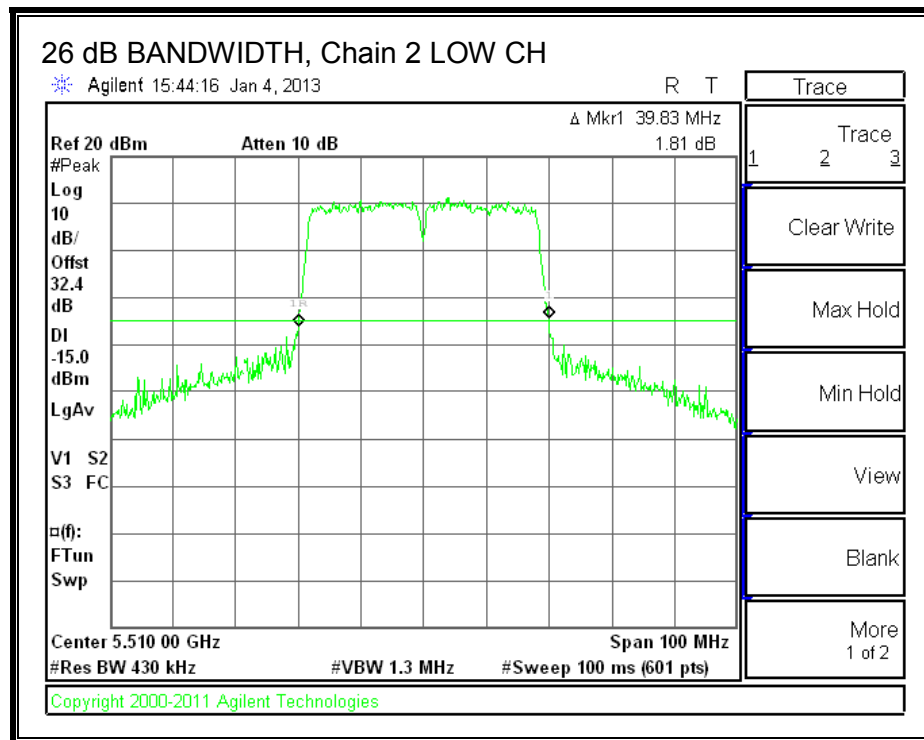


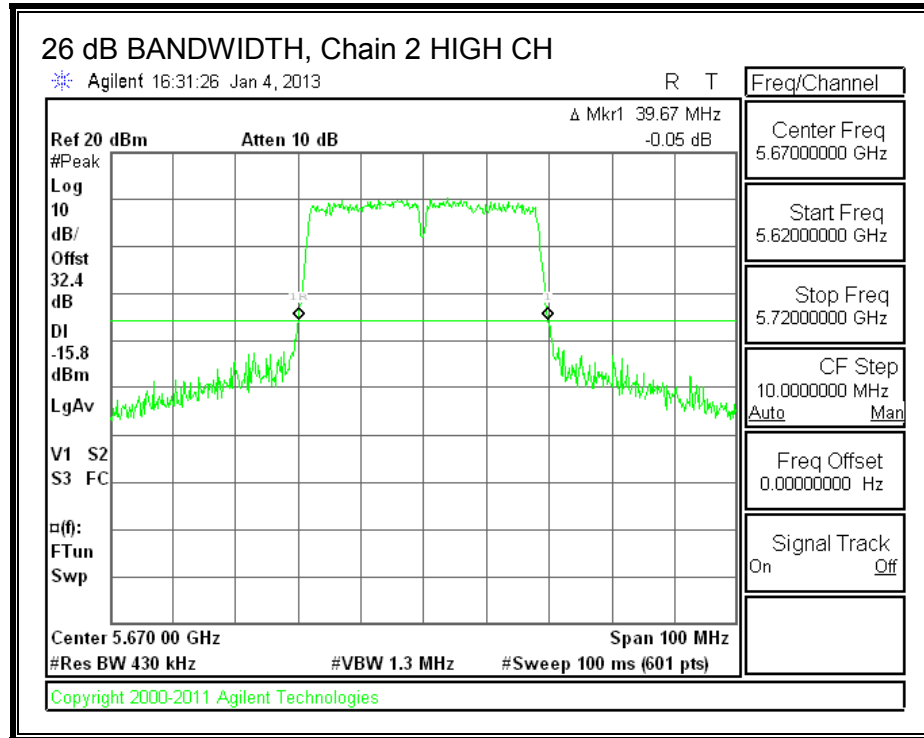
26 dB BANDWIDTH, Chain 1





26 dB BANDWIDTH, Chain 2





8.62.2. 99% BANDWIDTH

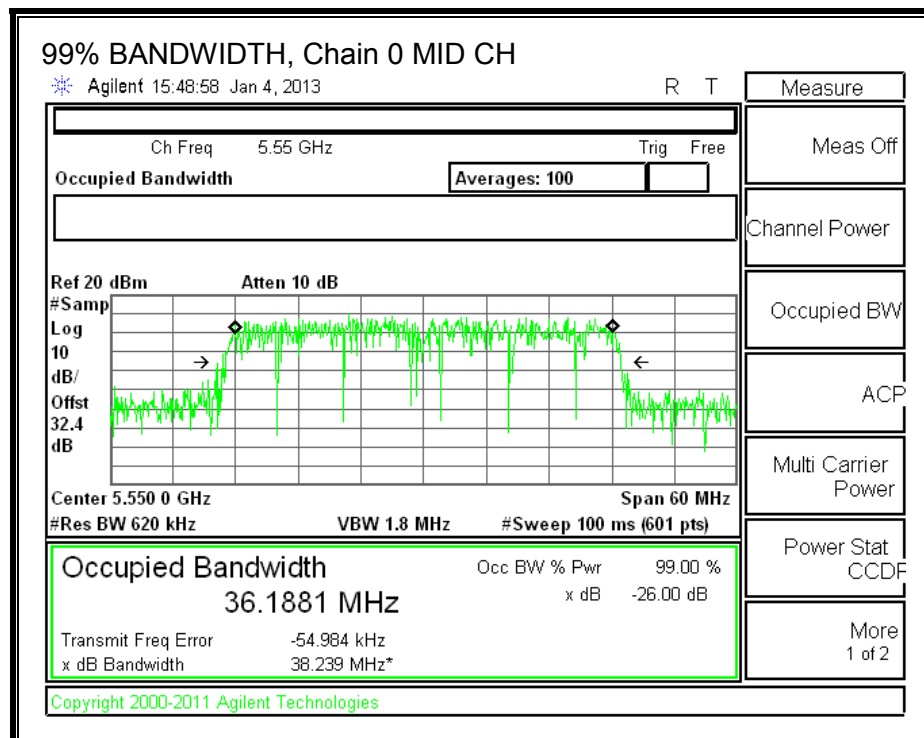
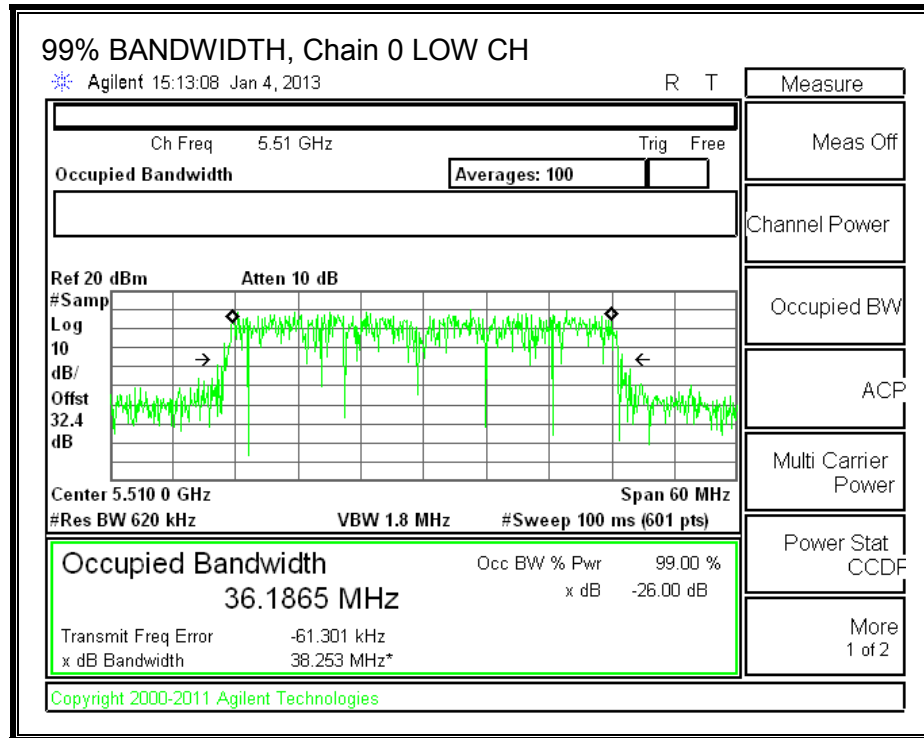
LIMITS

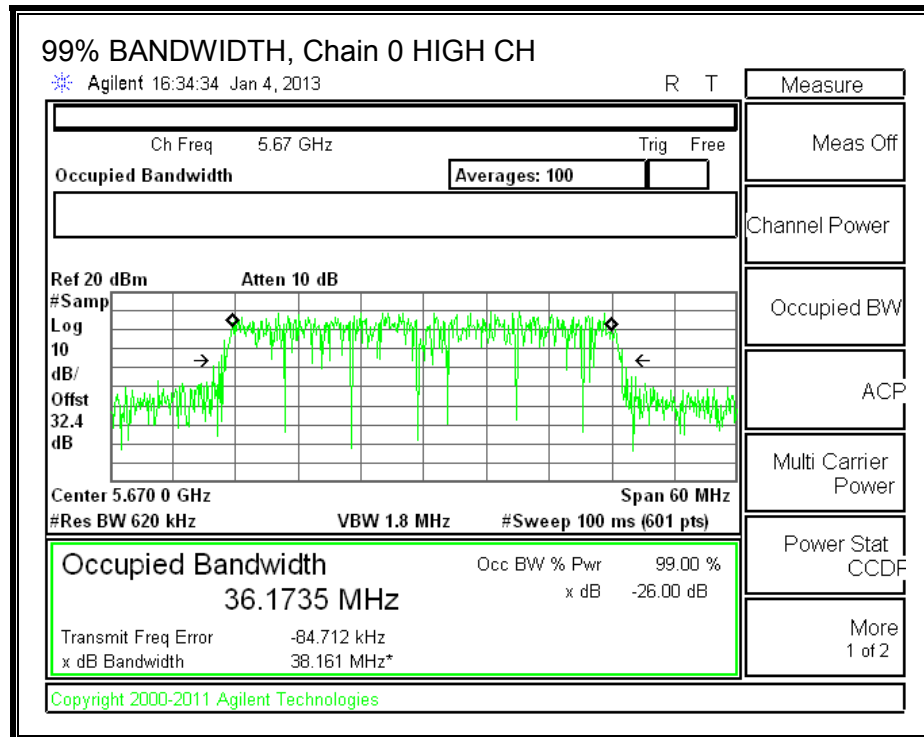
None; for reporting purposes only.

RESULTS

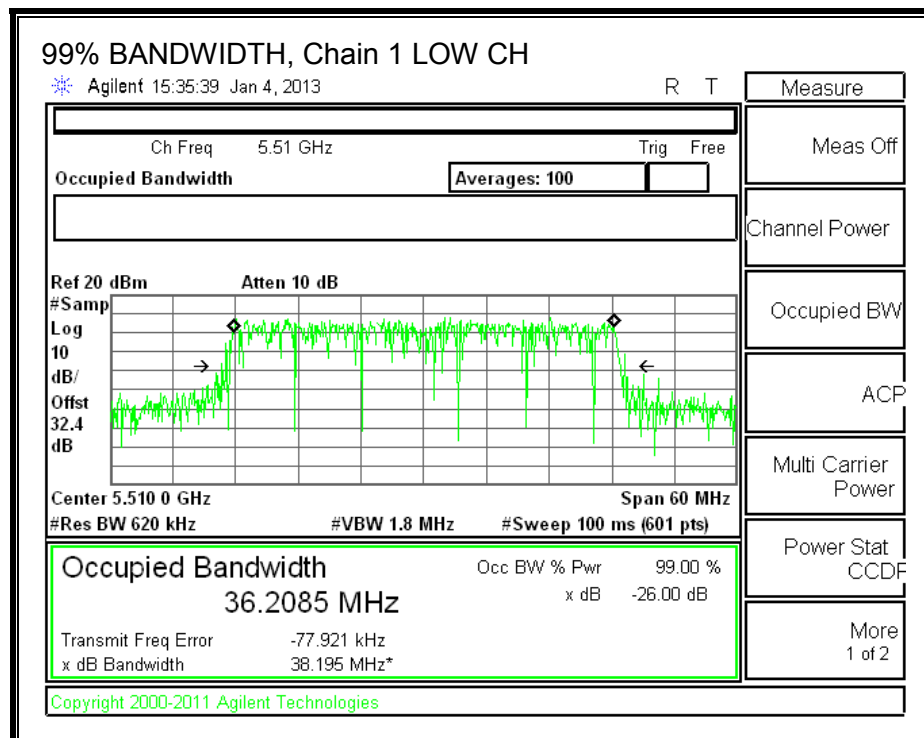
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	5510	36.1865	36.2085	36.2081
Mid	5550	36.1881	36.2459	36.2254
High	5670	36.1735	36.1821	36.2296

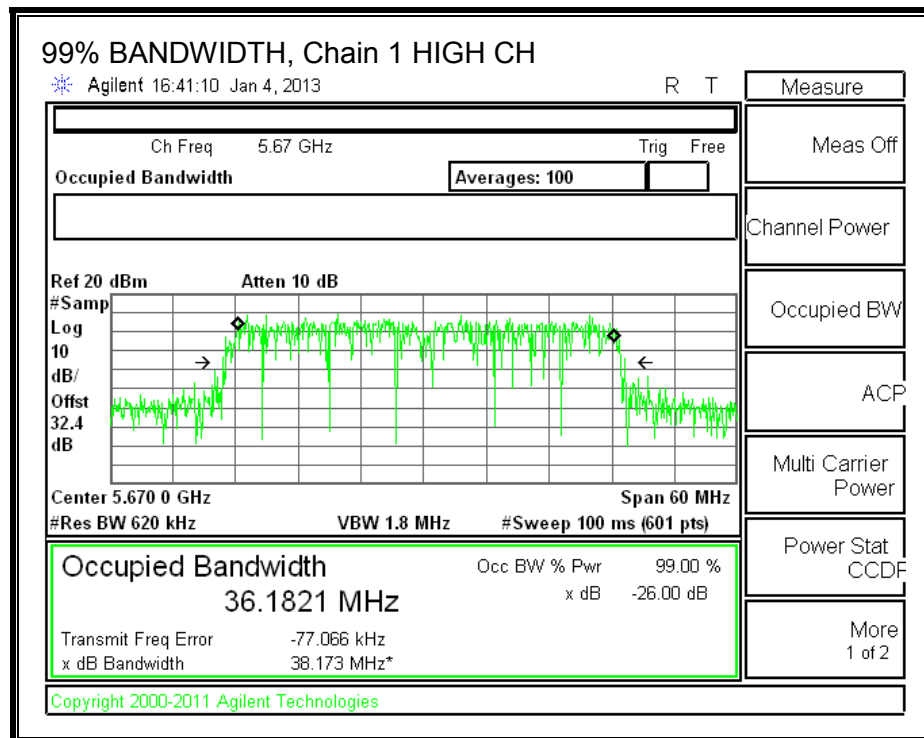
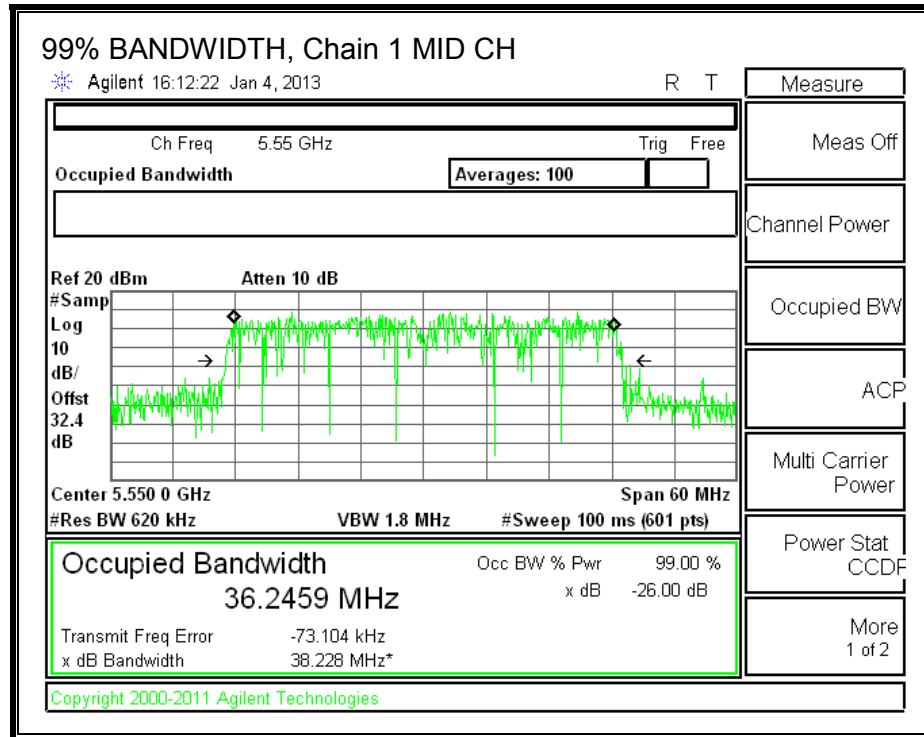
99% BANDWIDTH, Chain 0



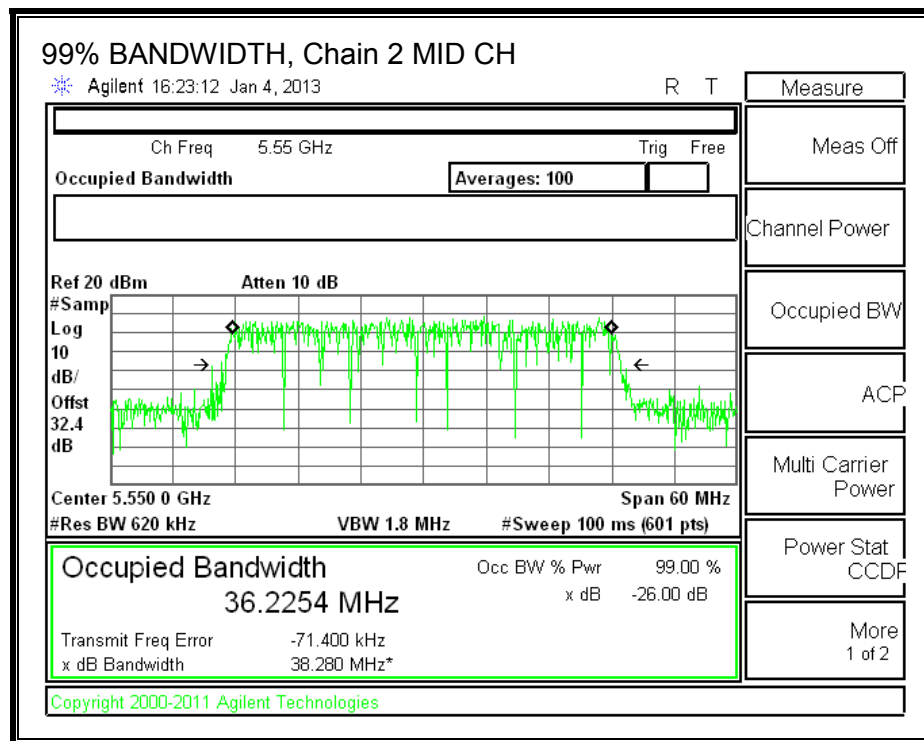
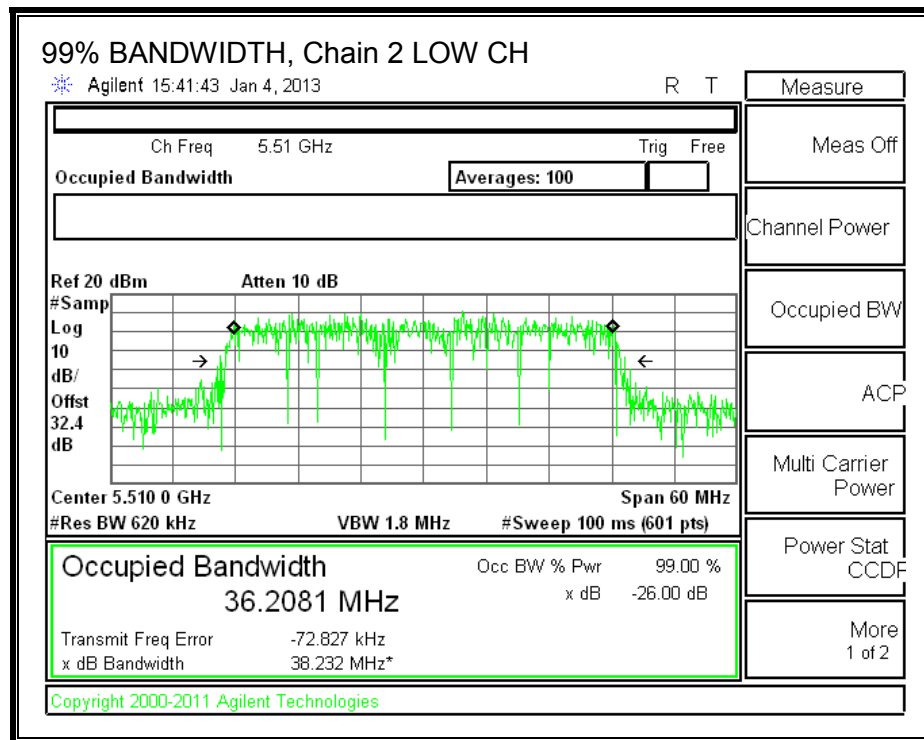


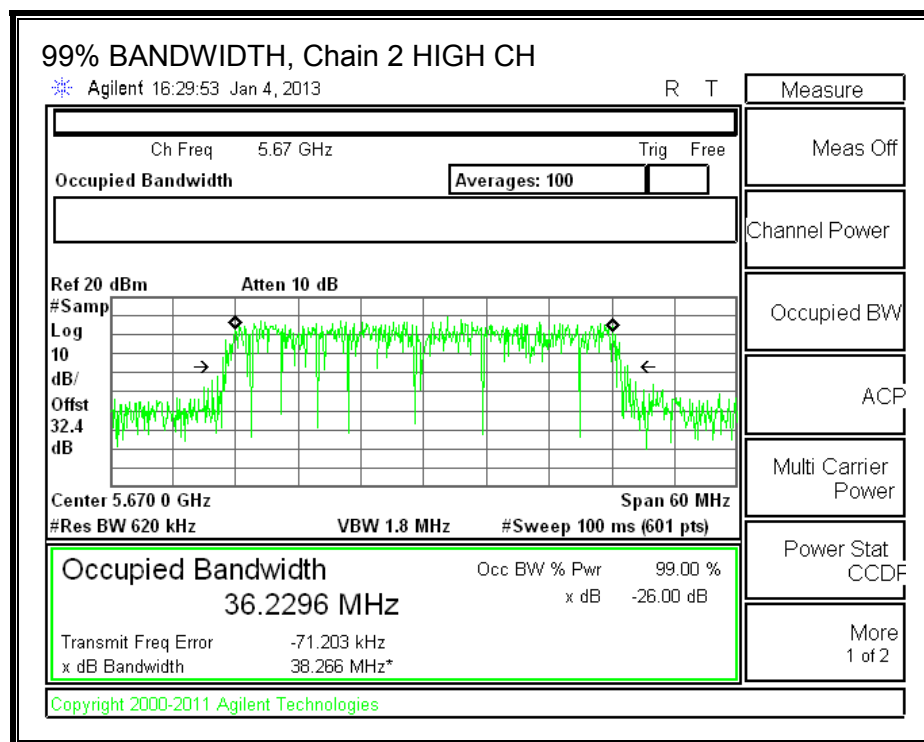
99% BANDWIDTH, Chain 1





99% BANDWIDTH, Chain 2





8.62.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak 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.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log₁₀ B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	1.70	3.80	2.92

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5510	39.33	36.1865	2.92
Mid	5550	39.67	36.1881	2.92
High	5670	39.50	36.1735	2.92

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5550	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5670	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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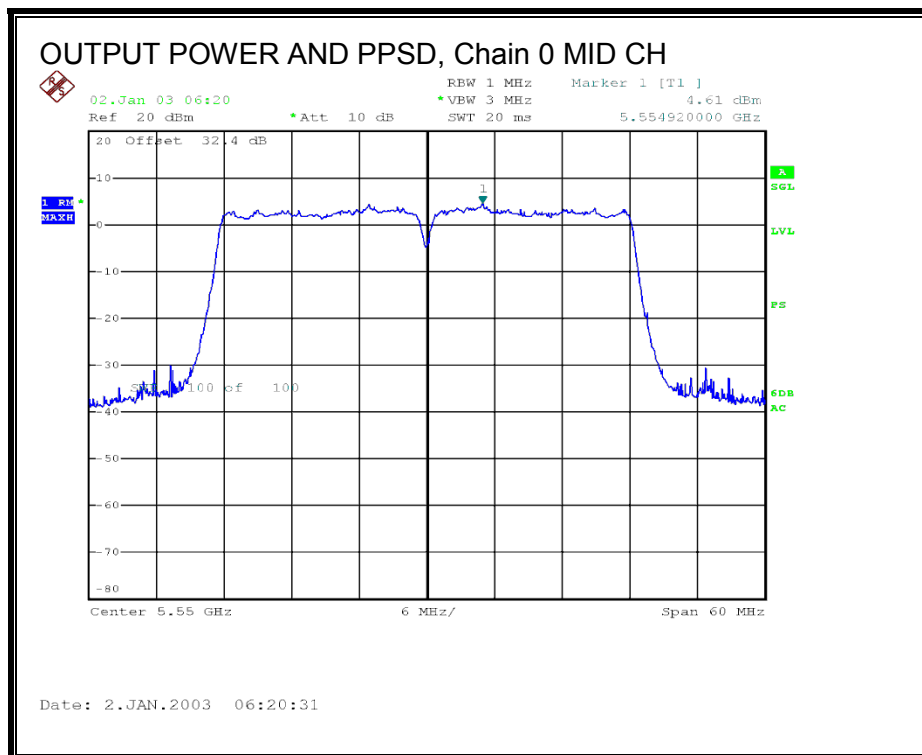
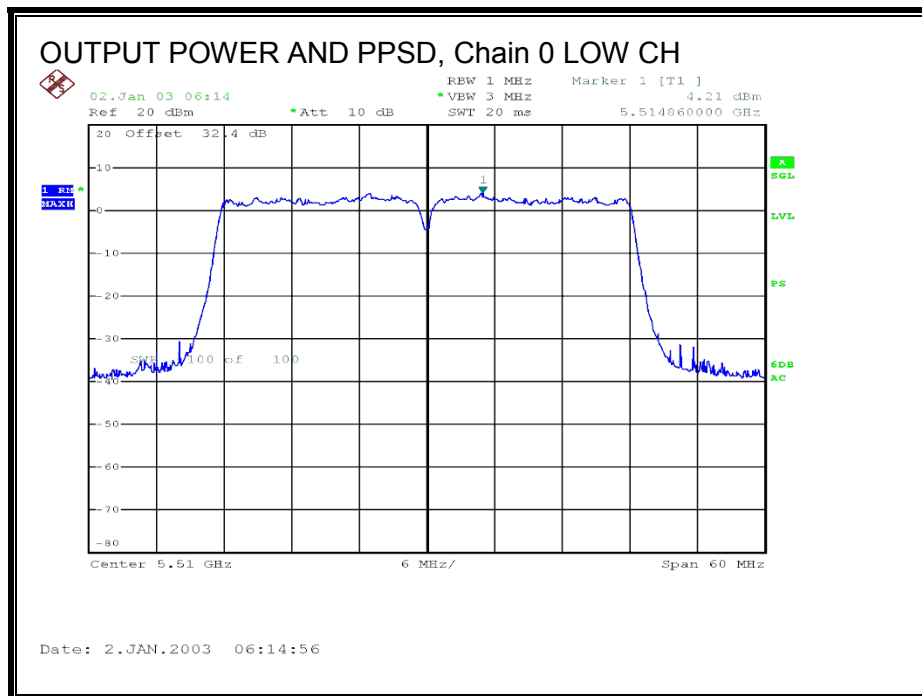
Output Power Results

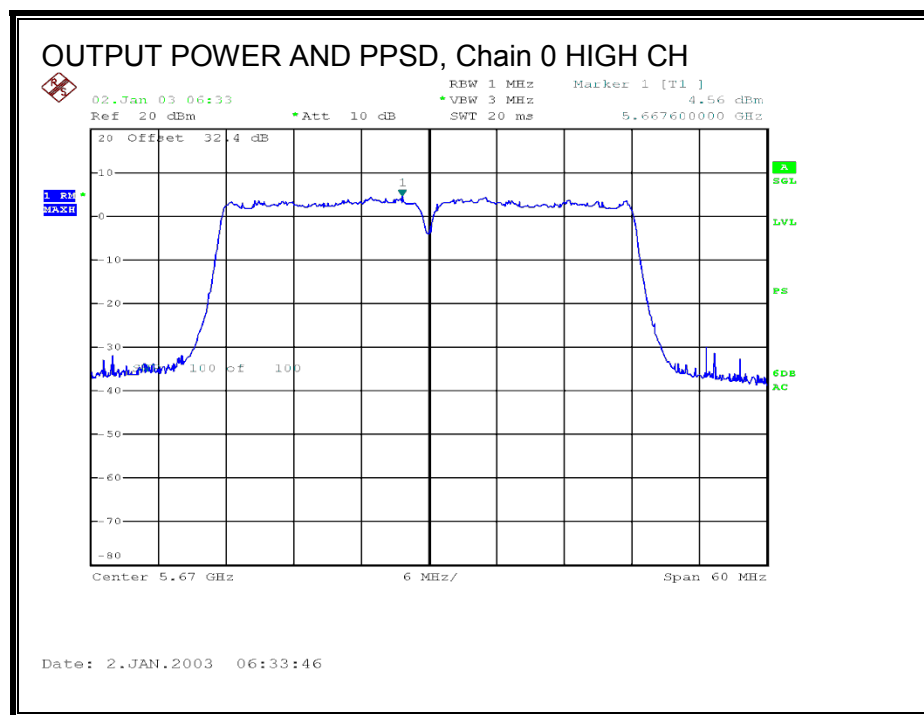
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	14.50	14.60	14.55	19.32	24.00	-4.68
Mid	5550	16.00	16.20	16.10	20.87	24.00	-3.13
High	5670	16.00	16.30	16.10	20.91	24.00	-3.09

PSD Results

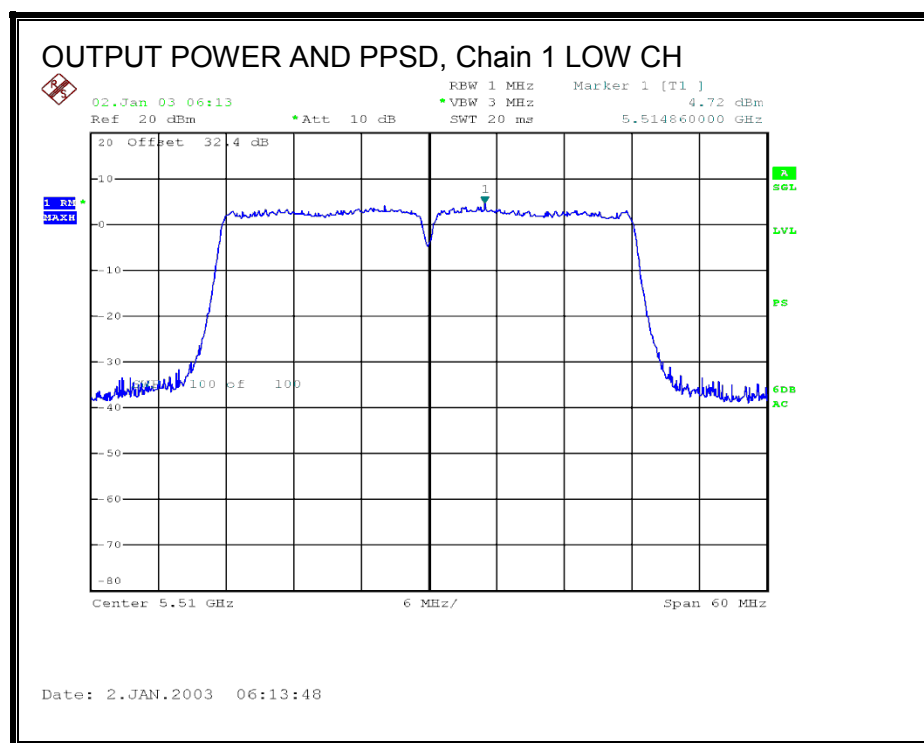
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5510	4.21	4.72	4.05	9.11	11.00	-1.89
Mid	5550	4.61	4.65	4.15	9.25	11.00	-1.75
High	5670	4.56	4.47	4.22	9.19	11.00	-1.81

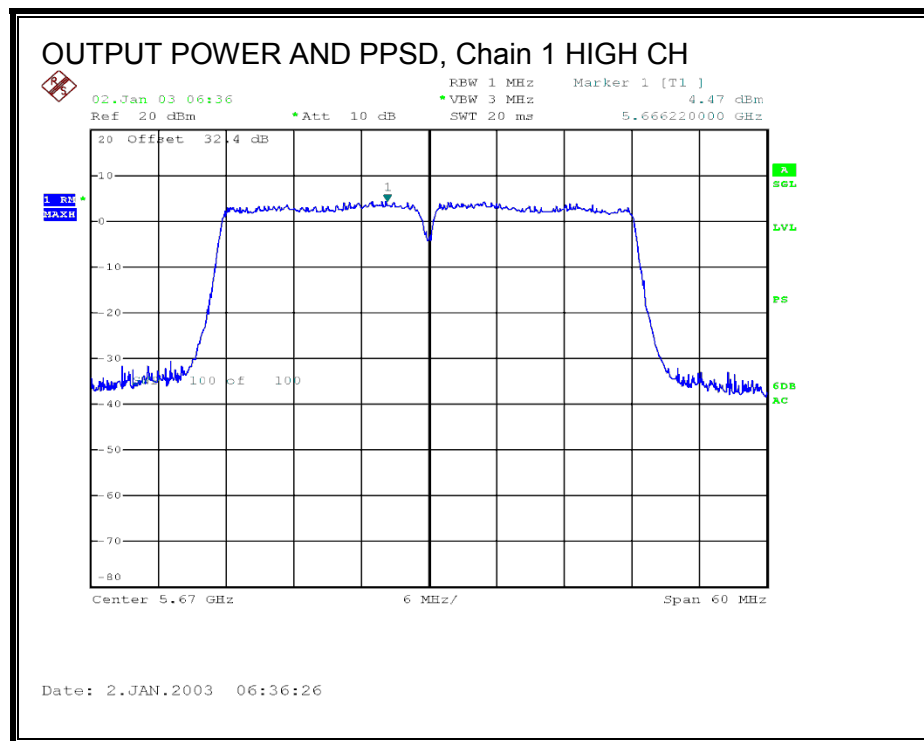
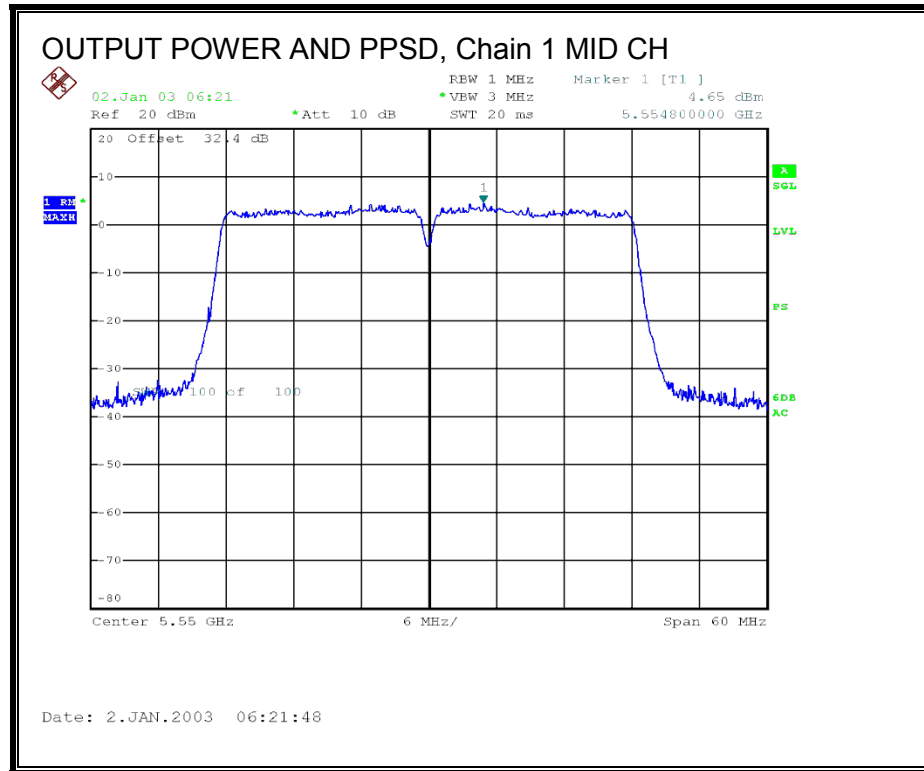
OUTPUT POWER AND PPSD, Chain 0



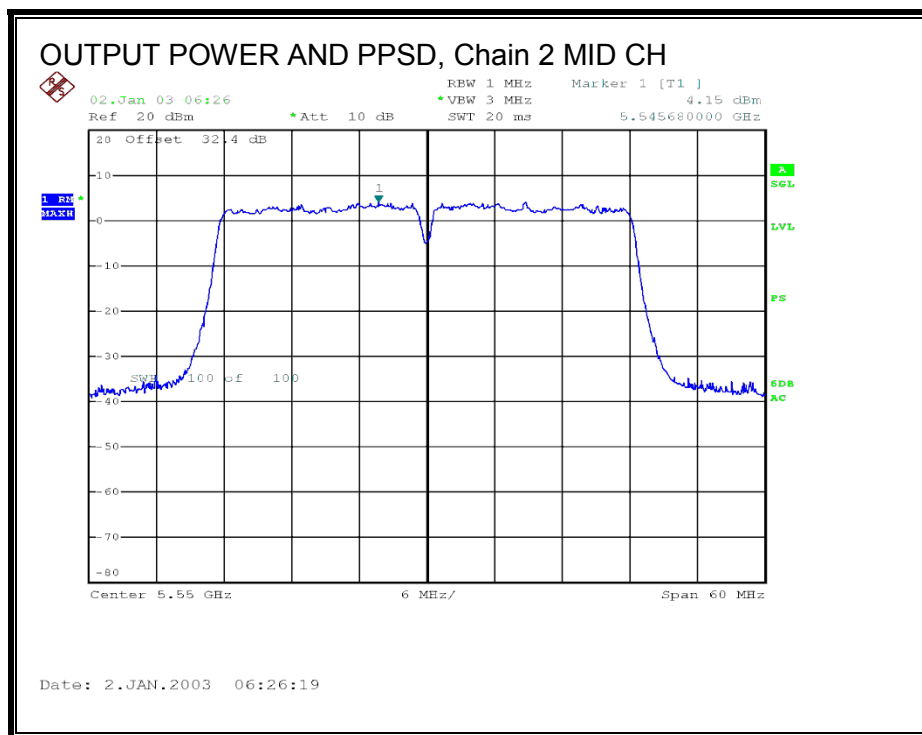
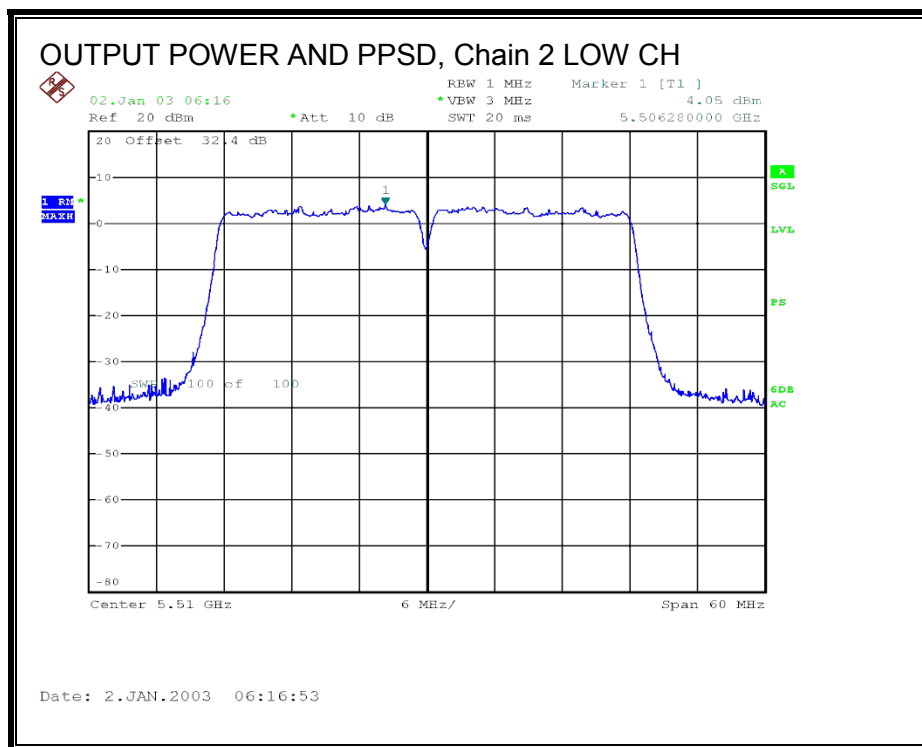


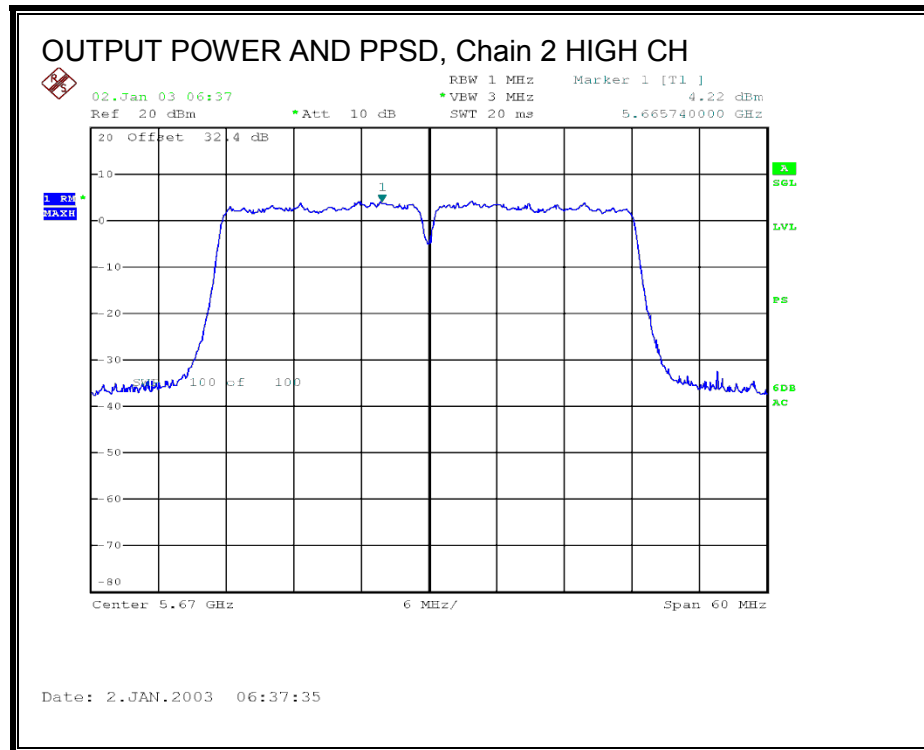
OUTPUT POWER AND PPSD, Chain 1





OUTPUT POWER AND PPSD, Chain 2





8.62.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.63. 802.11n HT40 1TX MODE, CH 142 (5710 MHz), 5.6 GHz BAND

8.63.1.26 dB BANDWIDTH

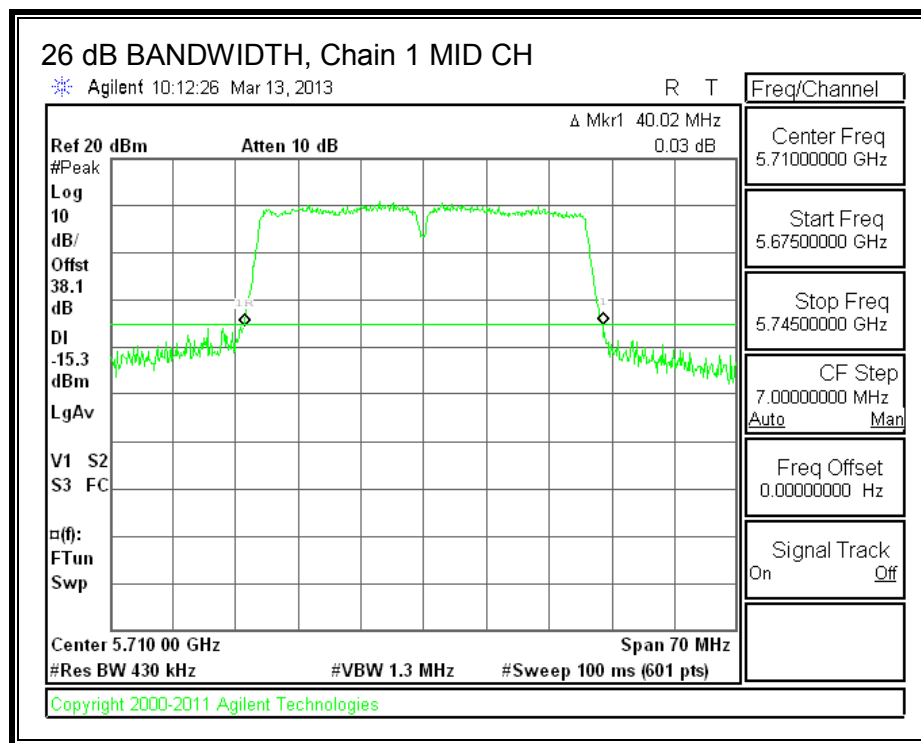
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 1 (MHz)
Mid	5710	40.02

26 dB BANDWIDTH, Chain 1



8.63.2.99% BANDWIDTH

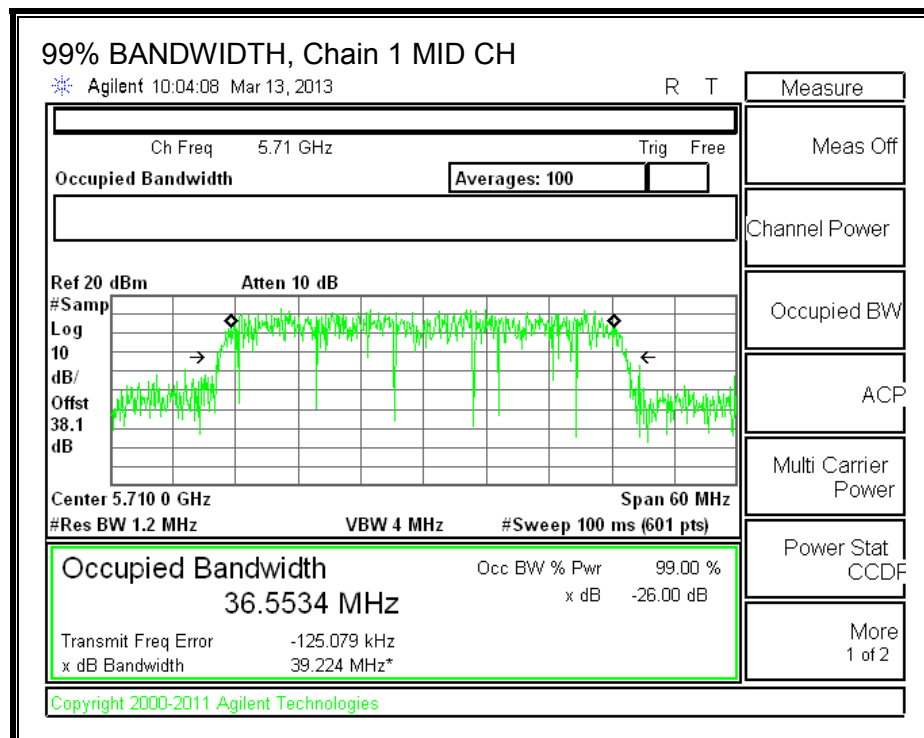
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% BW Chain 1 (MHz)
Mid	5710	36.5534

99% BANDWIDTH, Chain 1



8.63.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Antenna Gain (dBi)
Mid	5710	34.7	33.1038	4.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5710	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	23.12	23.12	24.00	-0.88

PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5710	9.091	9.091	11.00	-1.91

Limits (FCC), portion in 5.8 GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Antenna Gain (dBi)
Mid	5710	4.7	3.1851	4.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5710	17.68	16.03	22.03	16.03	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00
--------------------	------

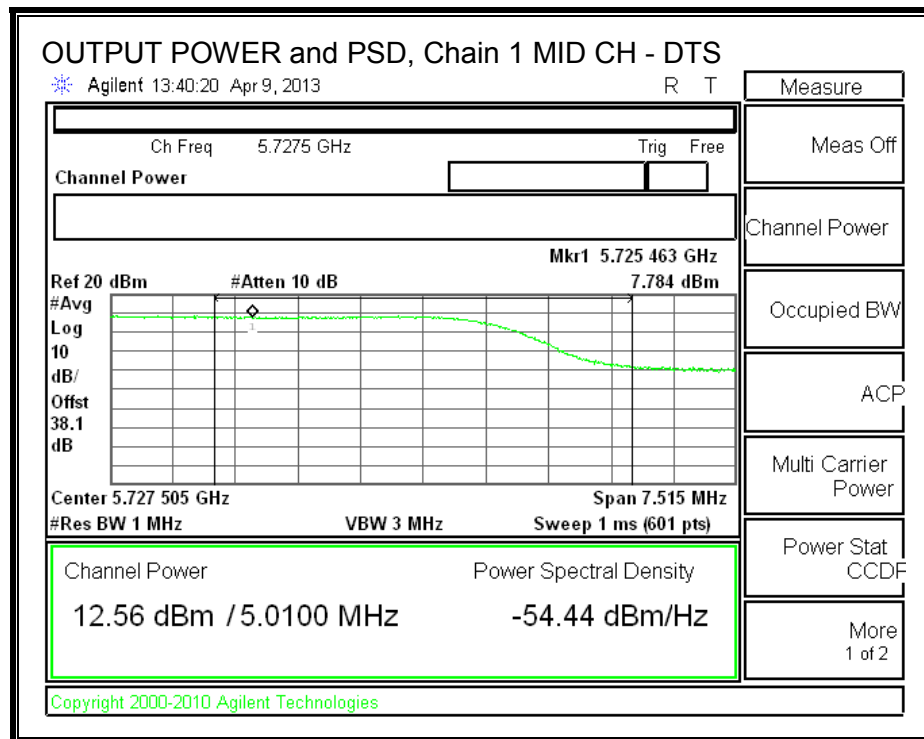
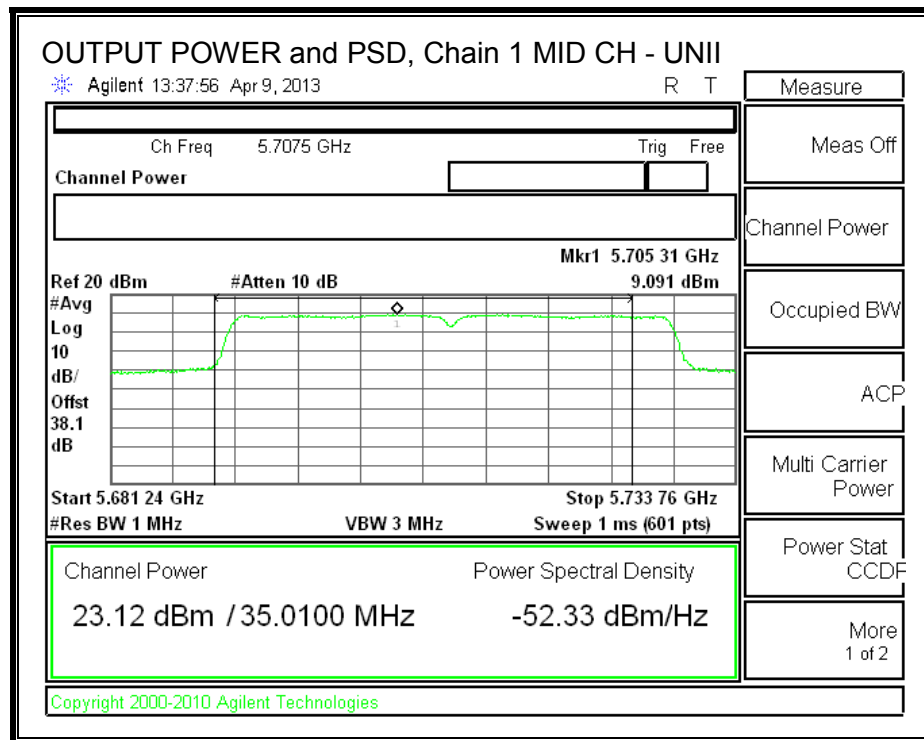
Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	12.56	12.56	16.03	-3.47

PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5710	7.784	7.784	11.00	-3.22

OUTPUT POWER and PSD, Chain 1



8.63.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (2)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

EIRP is less than the threshold value of 500 mW; therefore, TPC is not required.

8.64. 802.11n HT40 CDD 2TX MODE, CH 142 (5710 MHz), 5.6 GHz BAND

8.64.1.26 dB BANDWIDTH

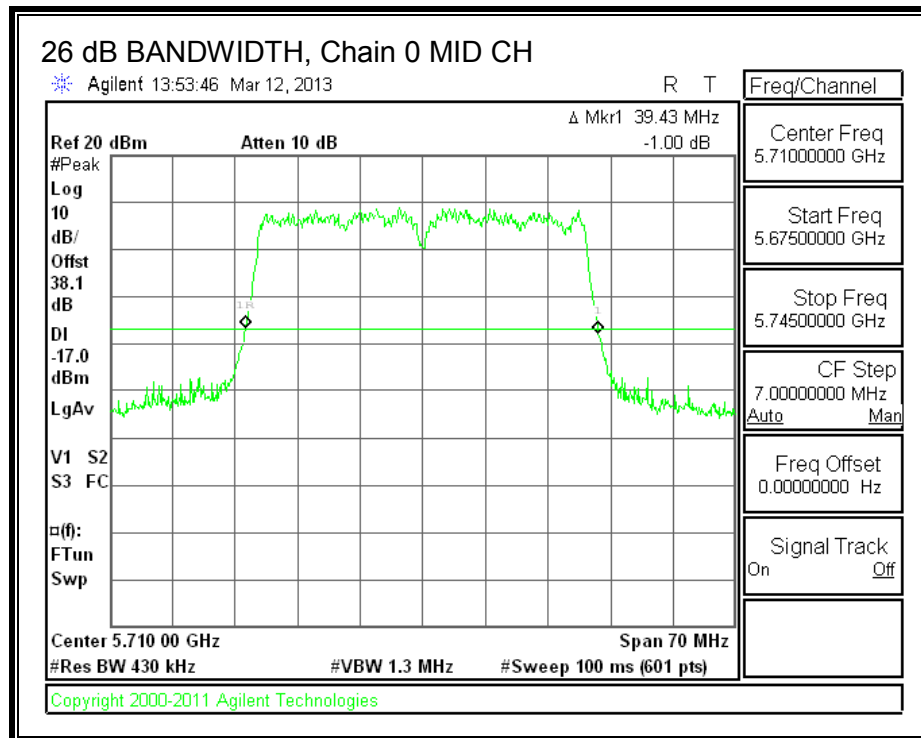
LIMITS

None; for reporting purposes only.

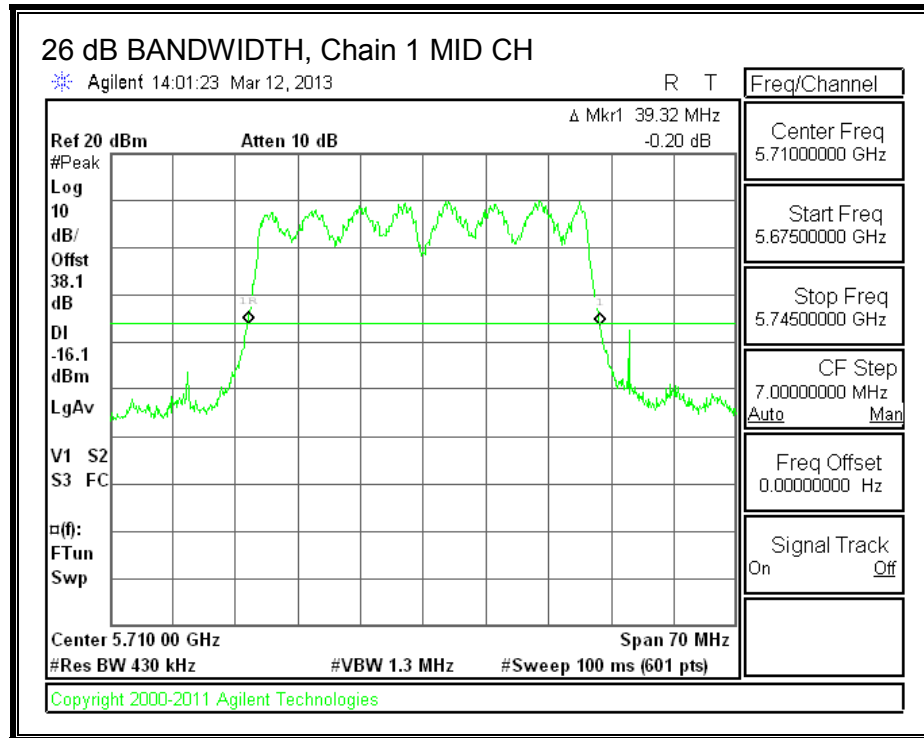
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Mid	5710	39.43	39.32

26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



8.64.2.99% BANDWIDTH

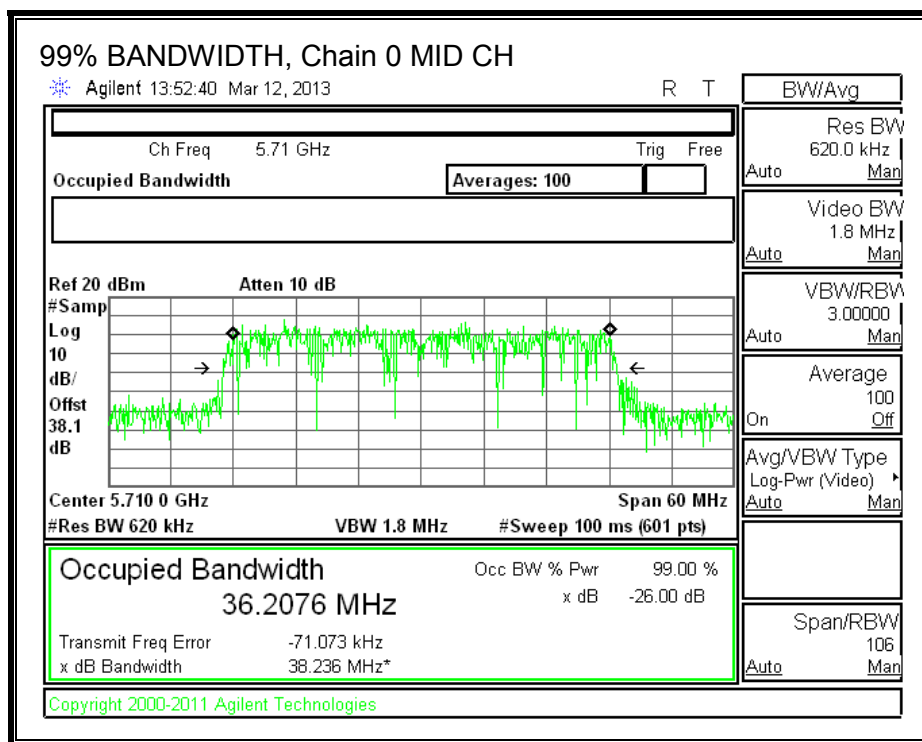
LIMITS

None; for reporting purposes only.

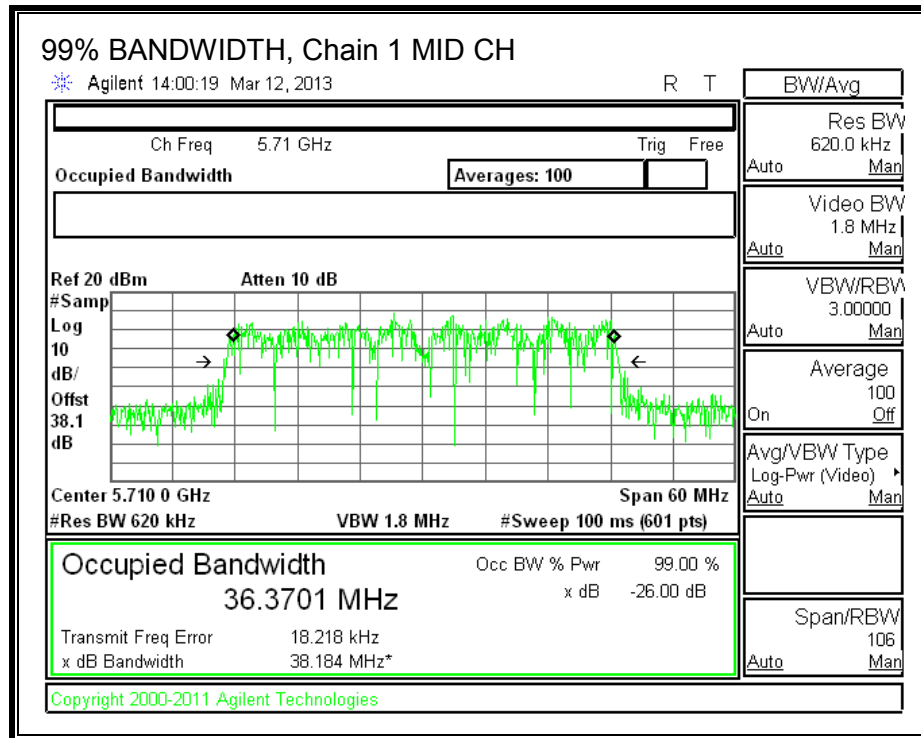
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Mid	5710	36.2076	36.3701

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



8.64.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	3.80	3.42

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	3.80	6.42

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)	Uncorrelated Gain (dBi)
Mid	5710	34.7	33.1038	6.42	3.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5710	24.00	24.00	30.00	24.00	10.58	11.00	10.58

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	19.35	19.15	22.26	24.00	-1.74

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5710	5.865	6.226	9.06	10.58	-1.52

Limits (FCC), portion in 5.8 GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)	Uncorrelated Gain (dBi)
Mid	5710	4.7	3.1851	6.42	3.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5710	17.68	16.03	22.03	16.03	10.58	11.00	10.58

Duty Cycle CF (dB)	0.00	
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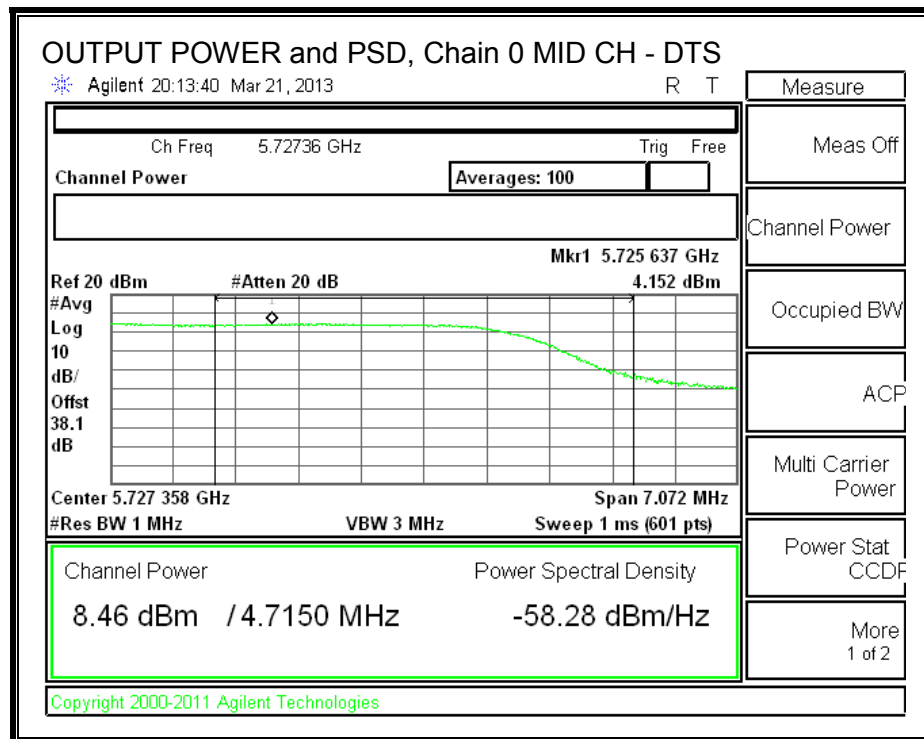
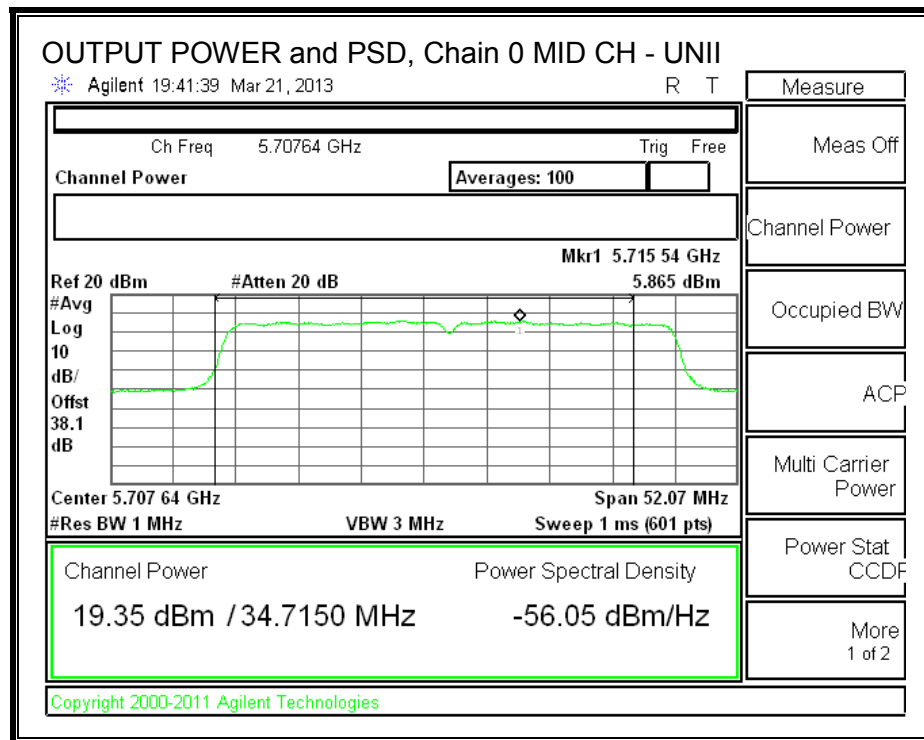
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	8.46	9.40	11.97	16.03	-4.07

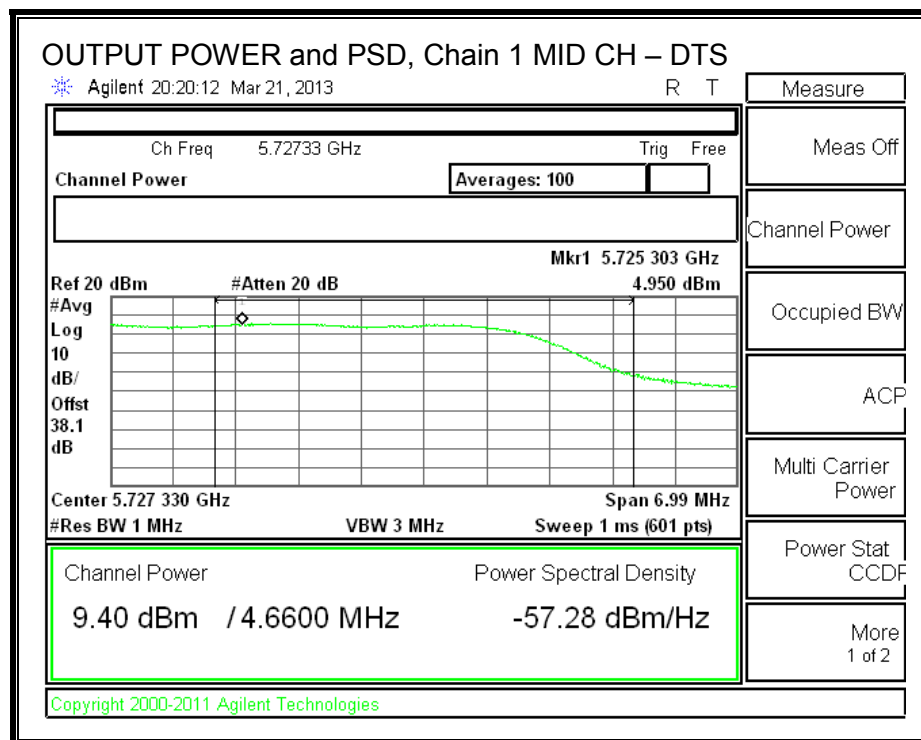
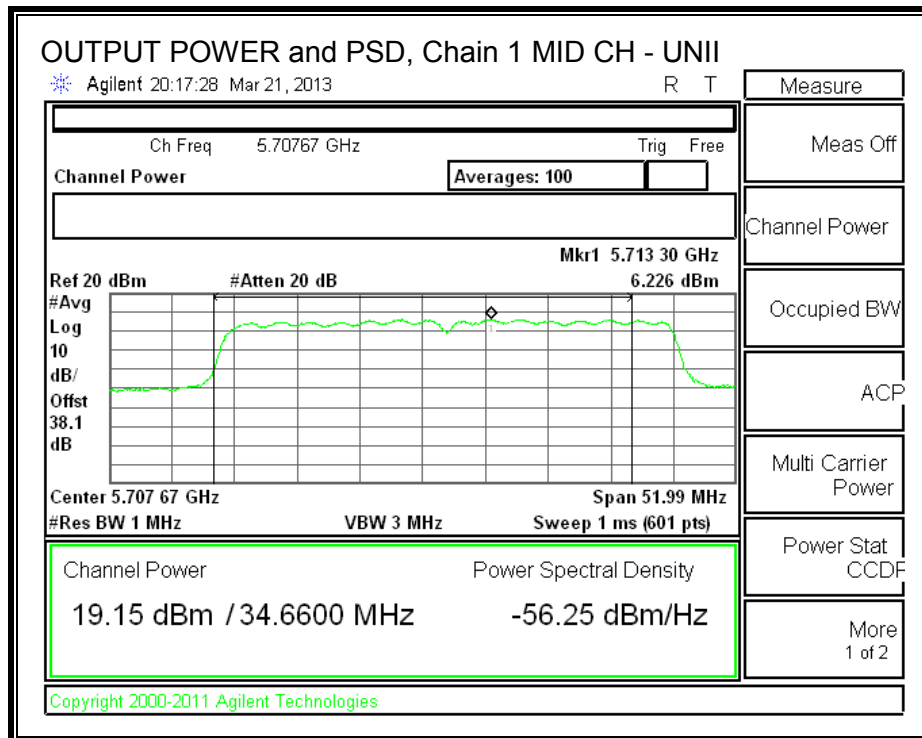
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5710	4.152	4.950	7.58	10.58	-3.00

OUTPUT POWER and PSD, Chain 0



OUTPUT POWER and PSD, Chain 1



8.64.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.65. 802.11n HT40 BF 2TX MODE, CH142 (5710 MHz), 5.6 GHz BAND

Covered by testing HT40 CDD 2TX mode, the power per chain used for HT40 CDD 2TX mode is the same power per chain that will be used for HT40 BF 2TX mode. However, since BF is correlated and CDD is uncorrelated for output power, the section below for output power using correlated AG for this BF mode shows it is still compliant.

8.65.1. OUTPUT AVERAGE POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	3.80	6.42

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)
Mid	5710	34.7	33.1038	6.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Mid	5710	23.58	24.00	30.00	23.58

Duty Cycle CF (dB)	0.00
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	19.36	19.15	22.27	23.58	-1.31

Limits (FCC), portion in 5.8 GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)
Mid	5710	4.7	3.1851	6.42

Limits

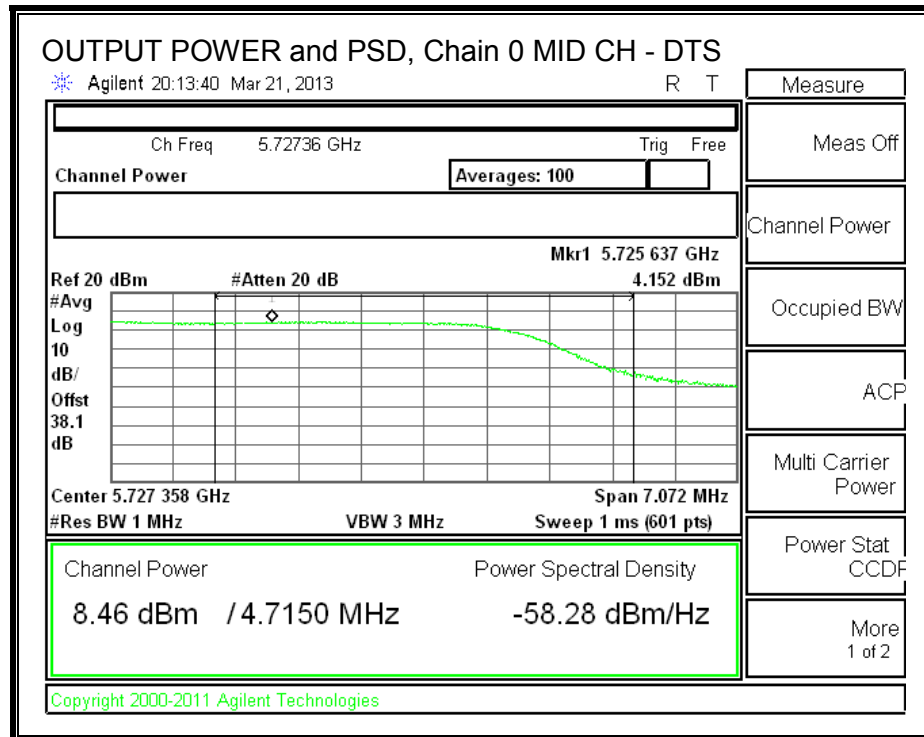
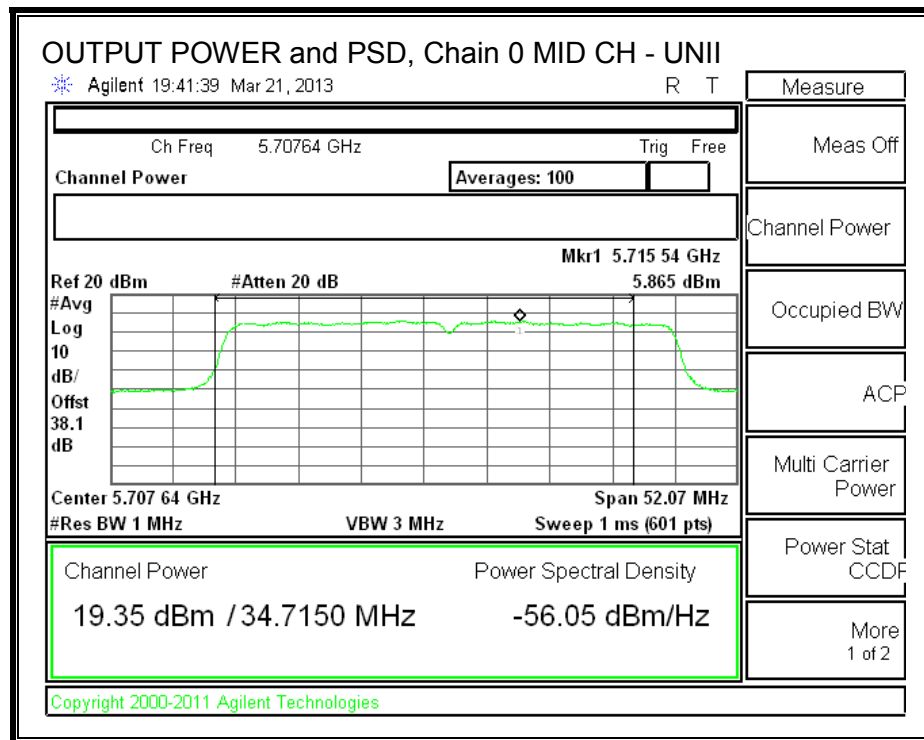
Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)
Mid	5710	17.26	16.03	22.03	15.61

Duty Cycle CF (dB)	0.00
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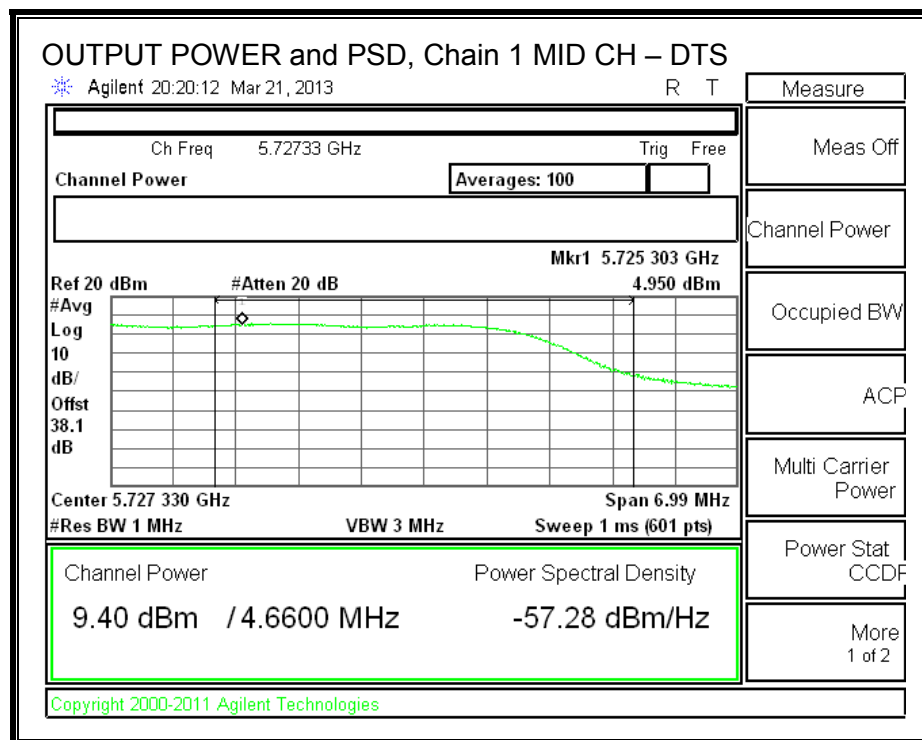
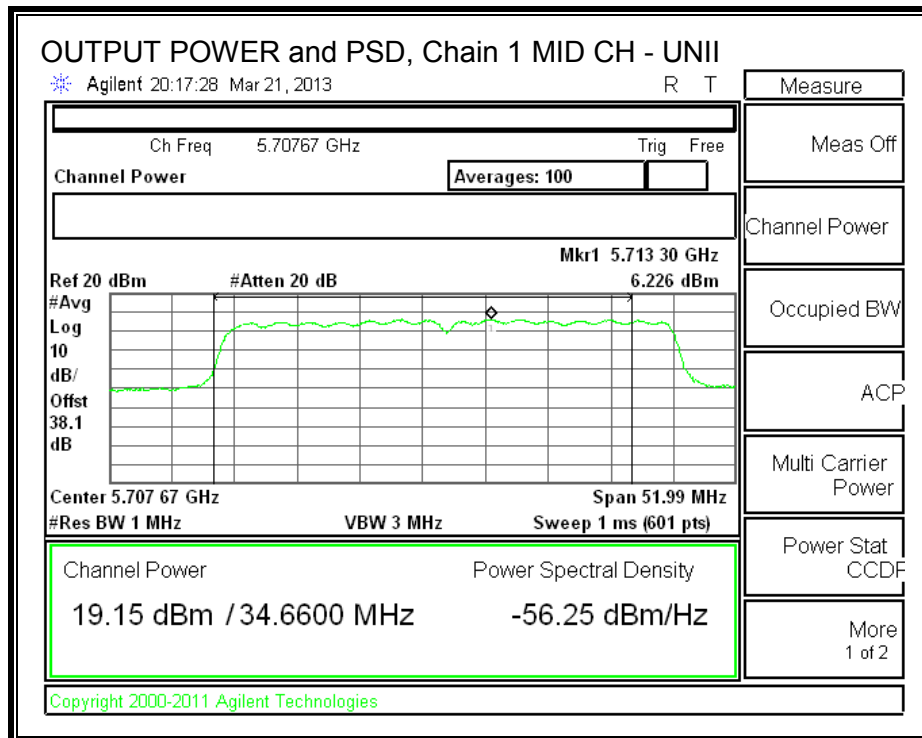
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	8.46	9.40	11.97	15.61	-3.65

OUTPUT POWER and PSD, Chain 0



OUTPUT POWER and PSD, Chain 1



8.66. 802.11n HT40 STBC 2TX MODE, CH142 (5710 MHz), 5.6 GHz BAND

8.66.1.26 dB BANDWIDTH

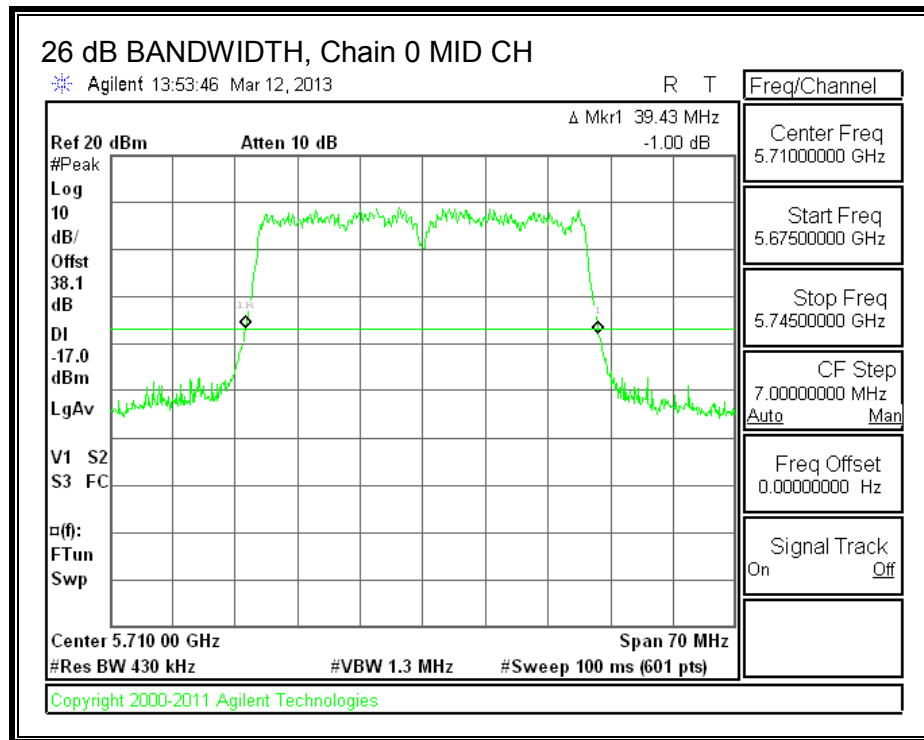
LIMITS

None; for reporting purposes only.

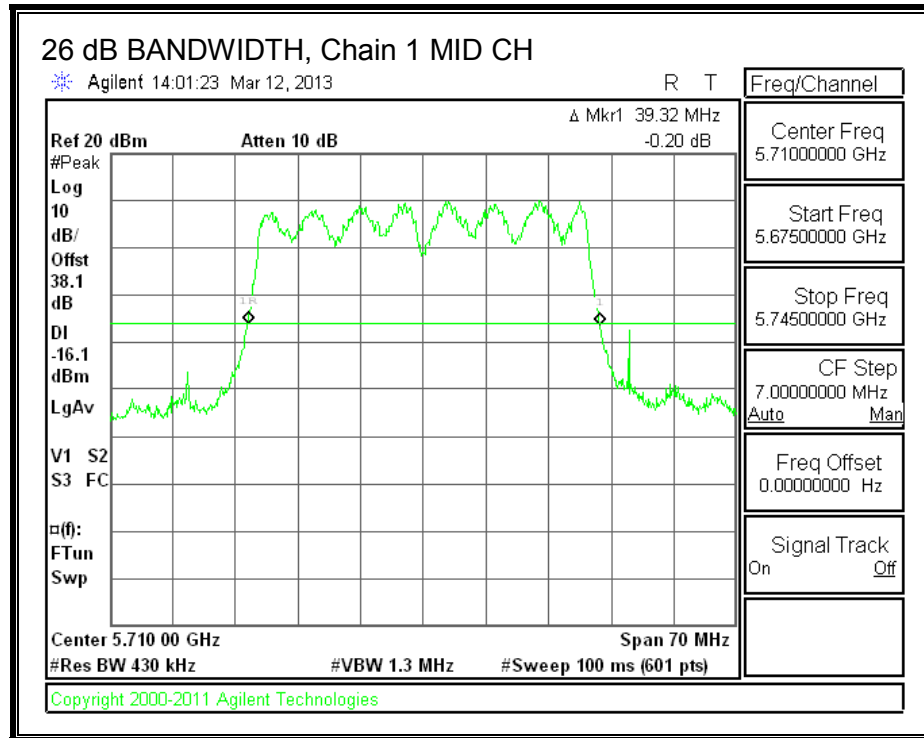
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Mid	5710	39.43	39.32

26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



8.66.2.99% BANDWIDTH

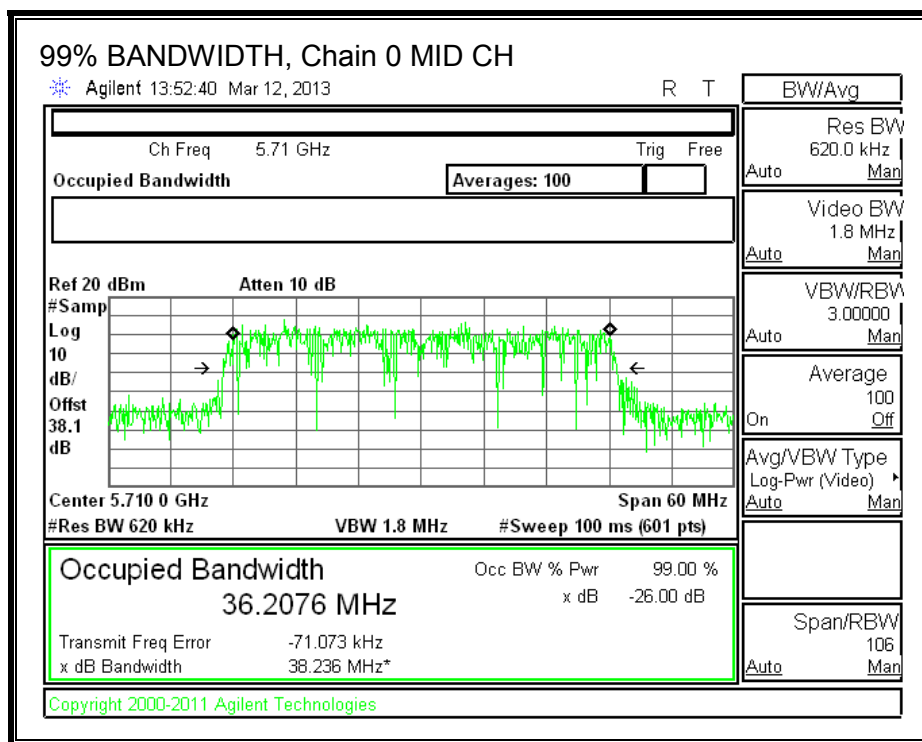
LIMITS

None; for reporting purposes only.

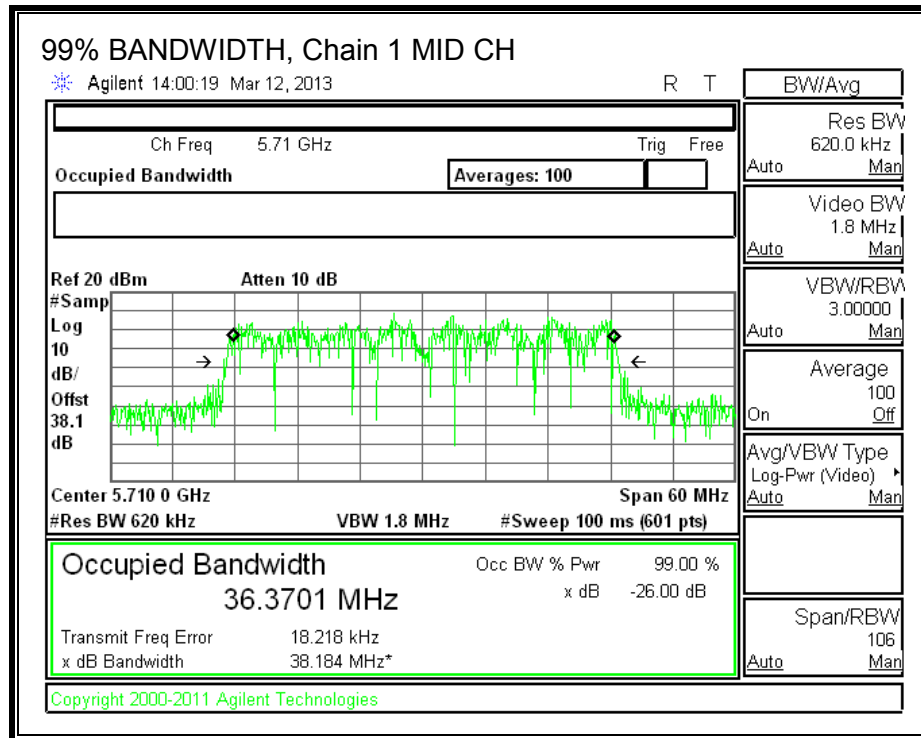
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Mid	5710	36.2076	36.3701

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



8.66.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	3.80	3.42

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)		Uncorrelated Gain (dBi)
Mid	5710	34.7	33.1038		3.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5710	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	20.36	20.68	23.53	24.00	-0.47

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5710	5.024	7.424	9.40	11.00	-1.60

Limits (FCC), portion in 5.8 GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)		Uncorrelated Gain (dBi)
Mid	5710	4.7	3.1851		3.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5710	17.68	16.03	22.03	16.03	11.00	11.00	11.00

Duty Cycle CF (dB)	0.00	
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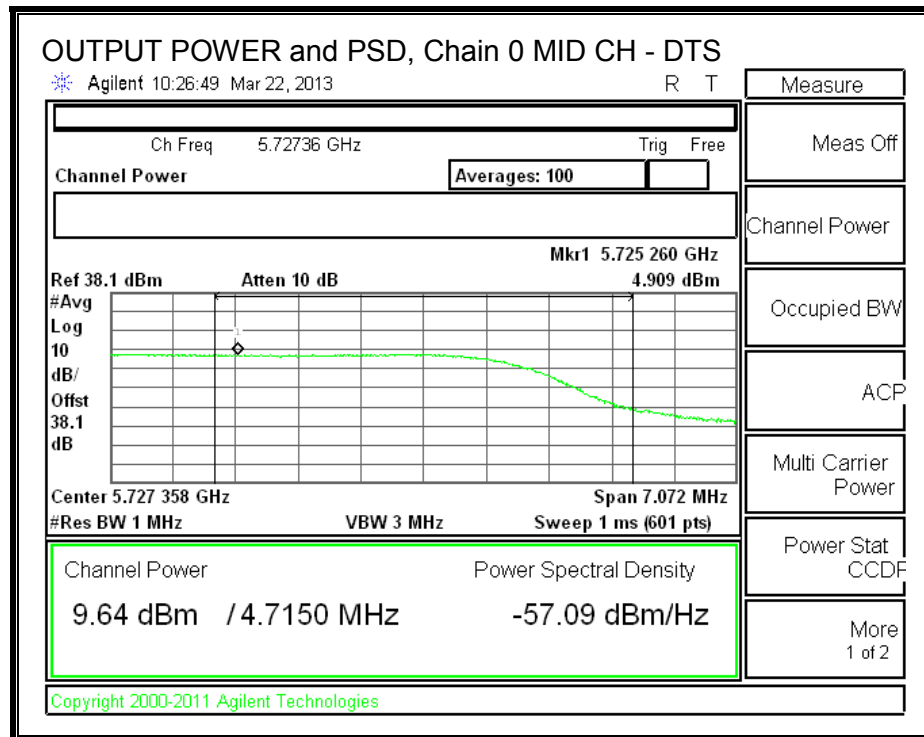
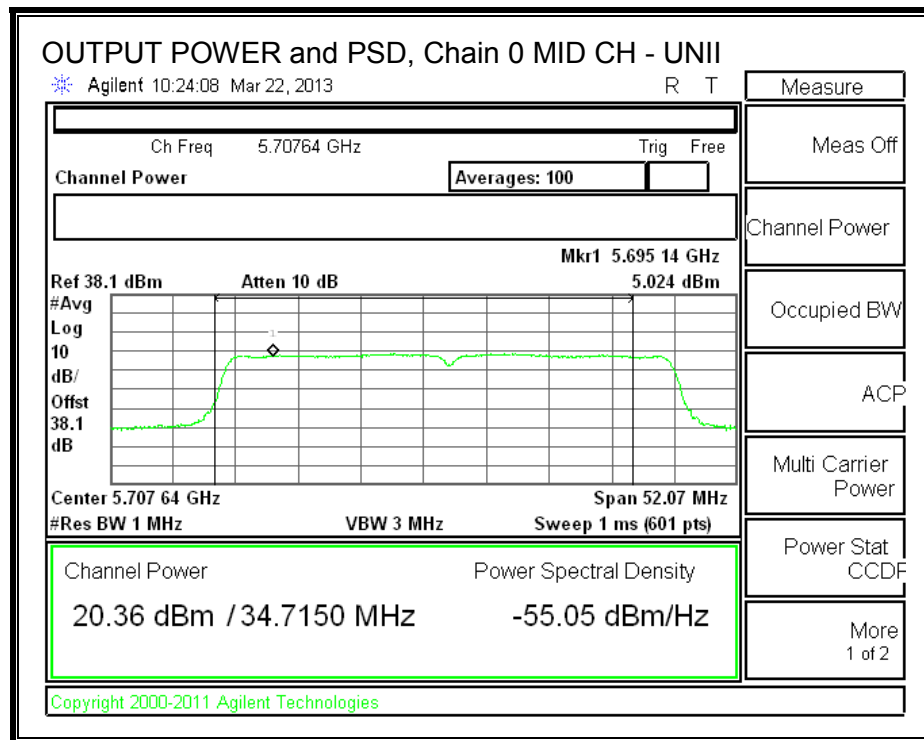
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	9.64	10.41	13.05	16.03	-2.98

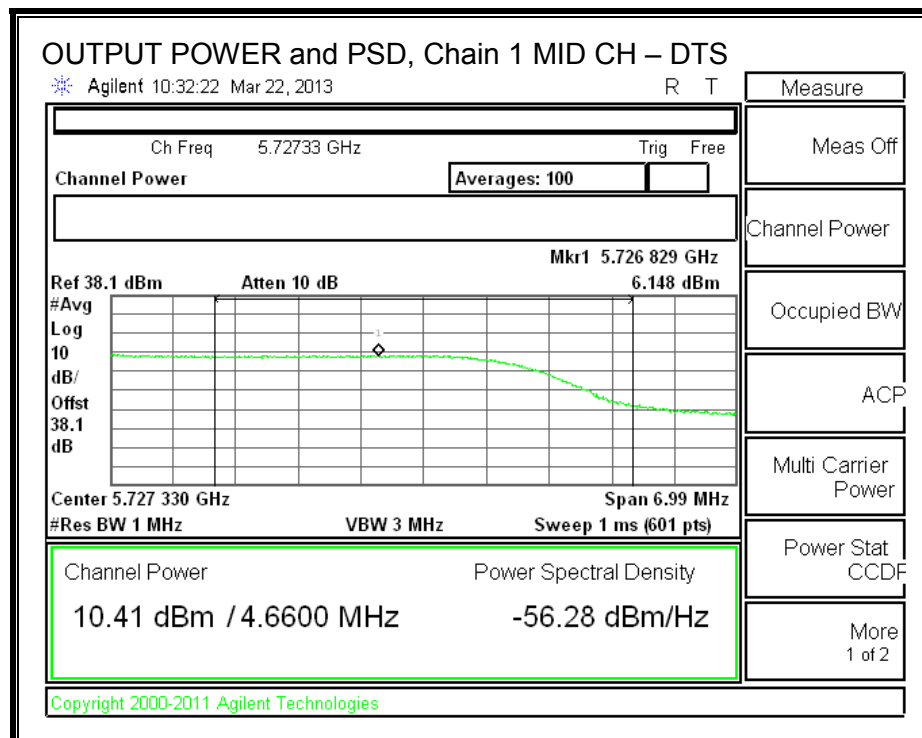
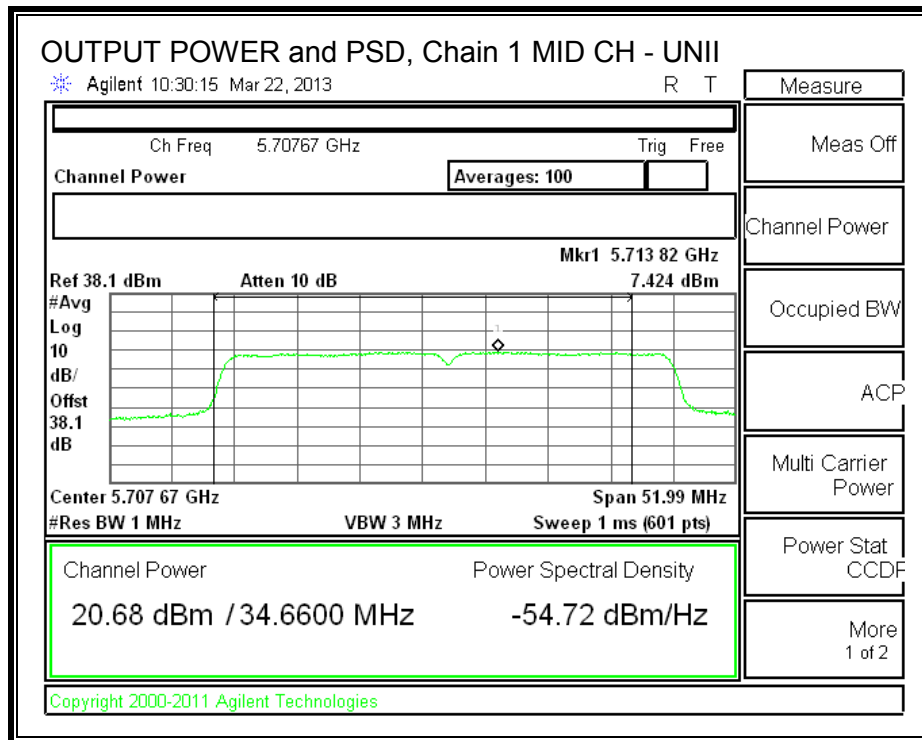
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5710	4.909	6.148	8.58	11.00	-2.42

OUTPUT POWER and PSD, Chain 0



OUTPUT POWER and PSD, Chain 1



8.66.4. TPC POWER

LIMITS

FCC §15.407 (h) (1)

IC RSS-210 A9.2 (3)

Transmit power control (TPC). U-NII devices operating in the 5.25–5.35 GHz band and the 5.47–5.725 GHz band shall employ a TPC mechanism. The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm. A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

RESULTS

The maximum EIRP is less than 500 mW; therefore, TPC is not required.

8.67. 802.11n HT40 CDD 3TX MODE, CH142 (5710 MHz), 5.6 GHz BAND

8.67.1.26 dB BANDWIDTH

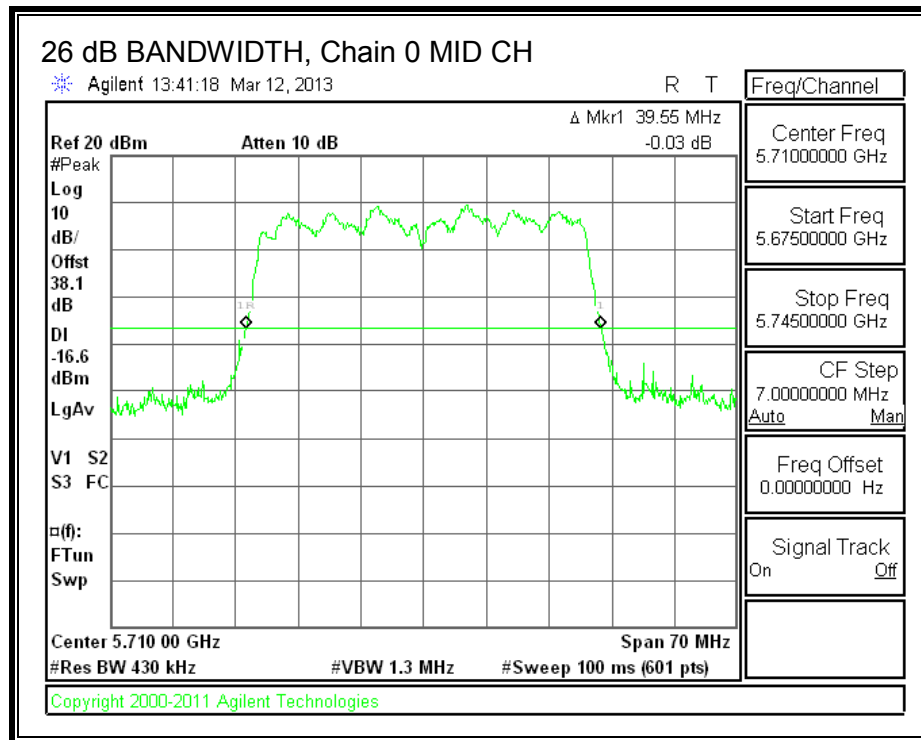
LIMITS

None; for reporting purposes only.

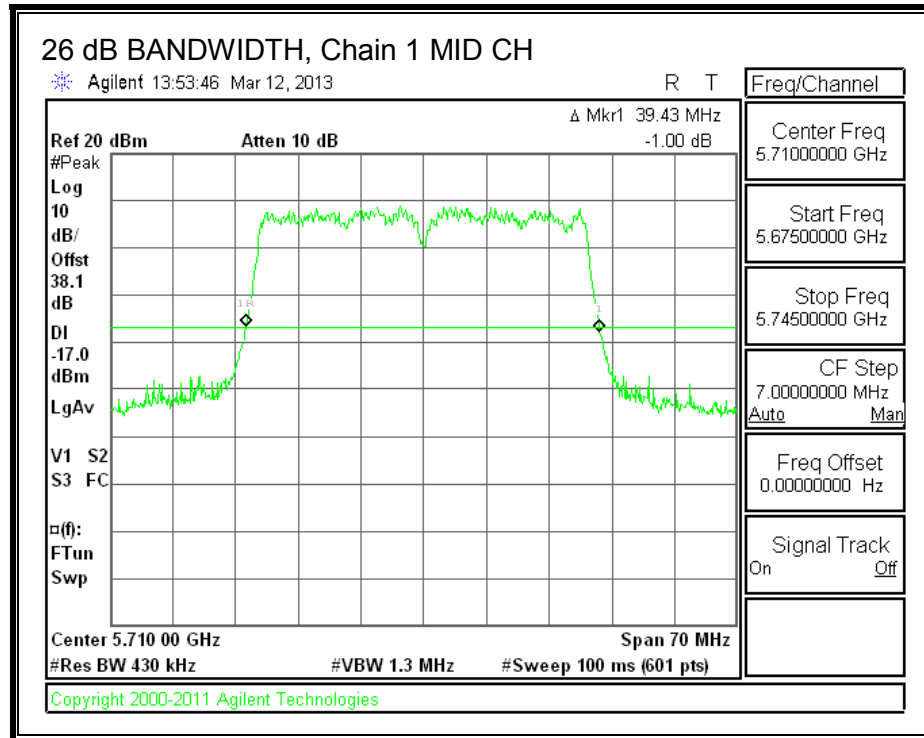
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Mid	5710	39.55	39.43	39.32

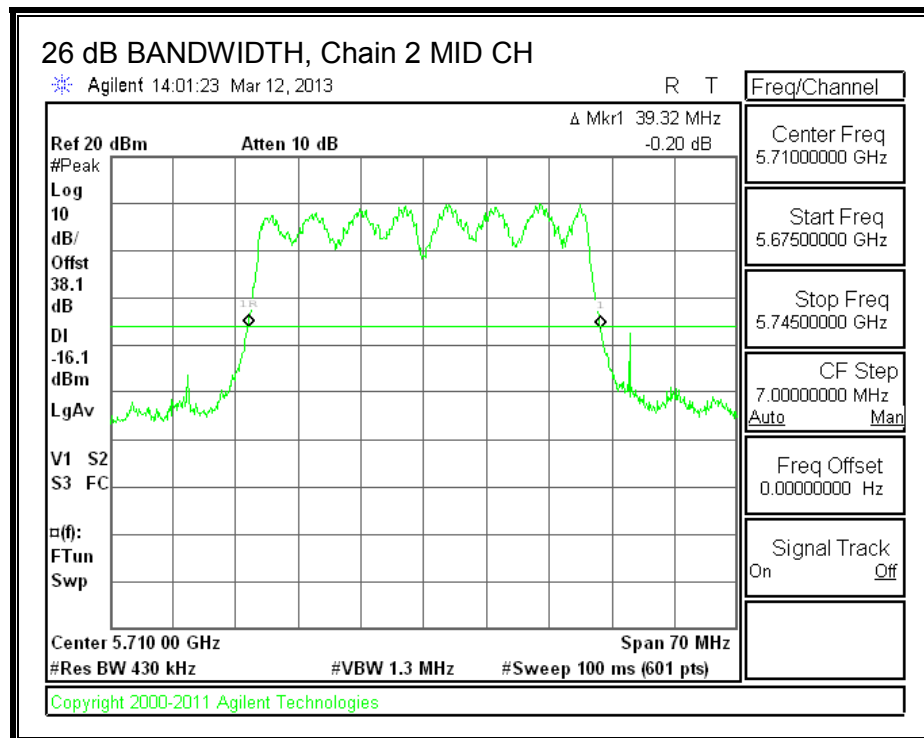
26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



8.67.2.99% BANDWIDTH

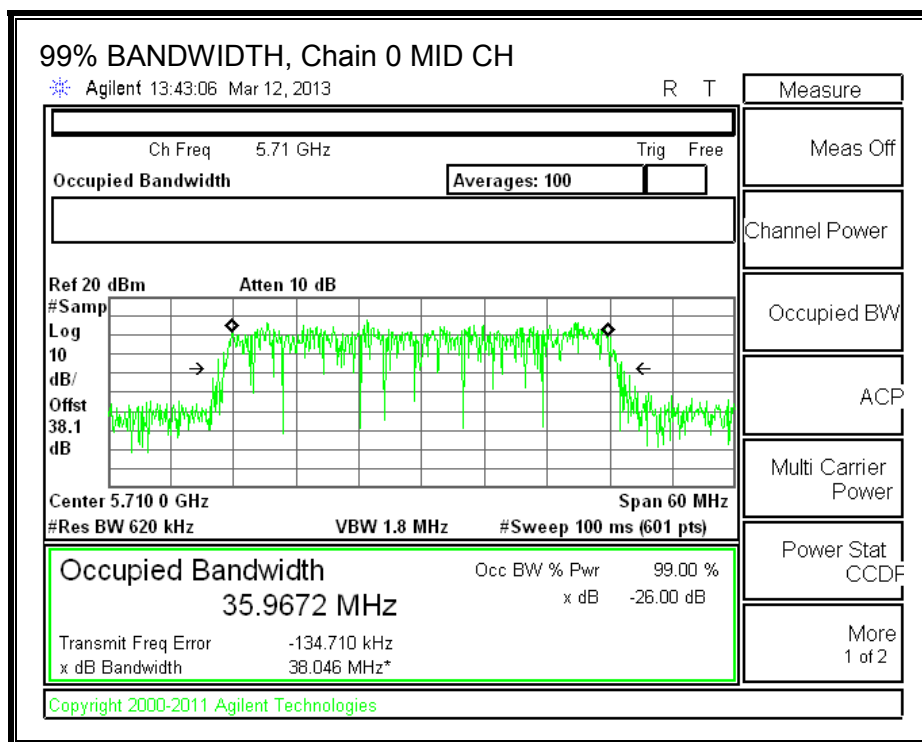
LIMITS

None; for reporting purposes only.

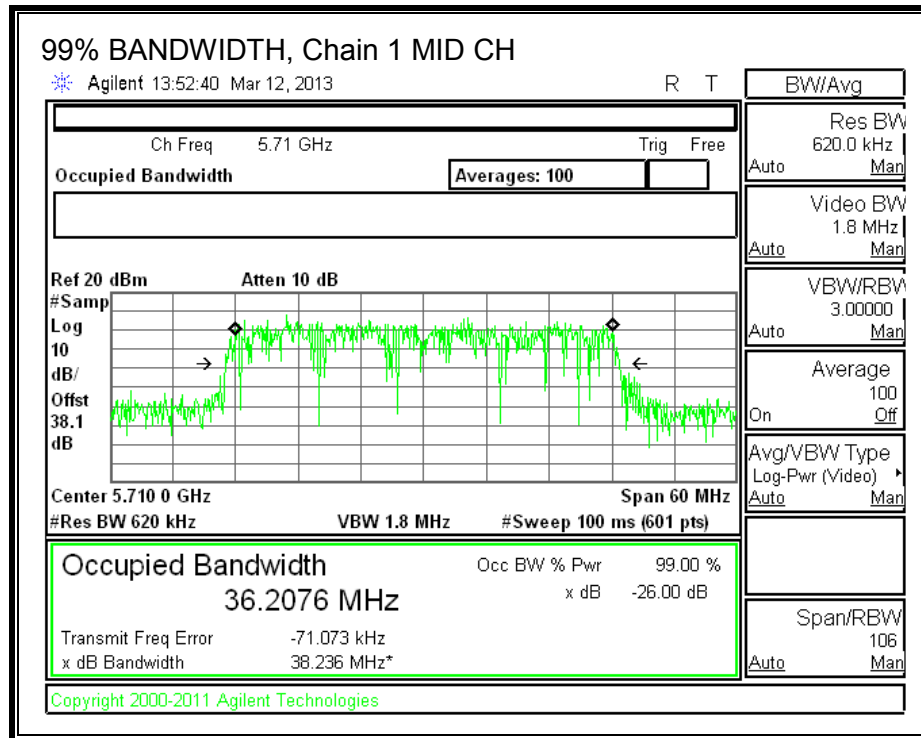
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Mid	5710	35.9672	36.2076	36.3701

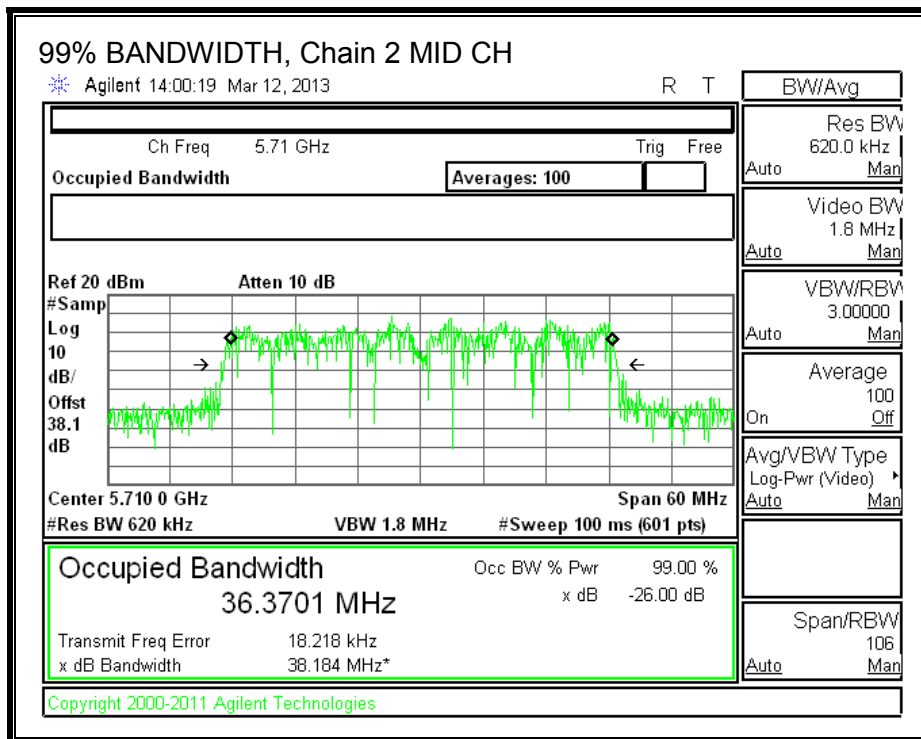
99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



99% BANDWIDTH, Chain 2



8.67.3. OUTPUT AVERAGE POWER AND PSD

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
3.00	1.70	3.80	2.92

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
3.00	1.70	3.80	7.65

RESULTS

Limits (FCC), portion in UNII 2 ext band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)	Uncorrelated Gain (dBi)
Mid	5710	34.7	32.9836	7.65	2.92

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5710	24.00	24.00	30.00	24.00	9.35	11.00	9.35

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	15.82	16.63	15.92	20.91	24.00	-3.09

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Mid	5710	4.057	3.200	3.743	8.45	9.35	-0.90

Limits (FCC), portion in 5.8 GHz UNII band

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Correlated Gain (dBi)	Uncorrelated Gain (dBi)
Mid	5710	4.7	2.9836	7.65	2.92

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm)	IC PSD Limit (dBm)	PSD Limit (dBm)
Mid	5710	17.68	15.75	21.75	15.75	9.35	11.00	9.35

Duty Cycle CF (dB)	0.00	
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5710	5.86	5.89	6.25	10.77	15.75	-4.97

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPD (dBm)	Chain 1 Meas PPD (dBm)	Chain 2 Meas PPD (dBm)	Total Corr'd PPD (dBm)	PPD Limit (dBm)	PPD Margin (dB)
Mid	5710	3.030	2.274	3.982	7.92	9.35	-1.43

OUTPUT POWER and PSD, Chain 0

