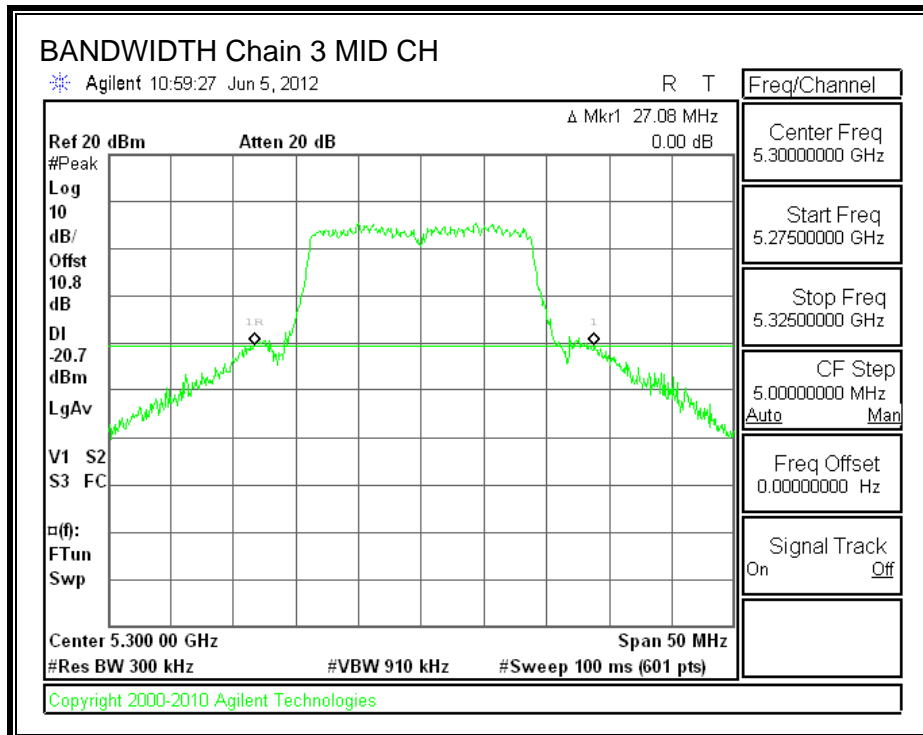
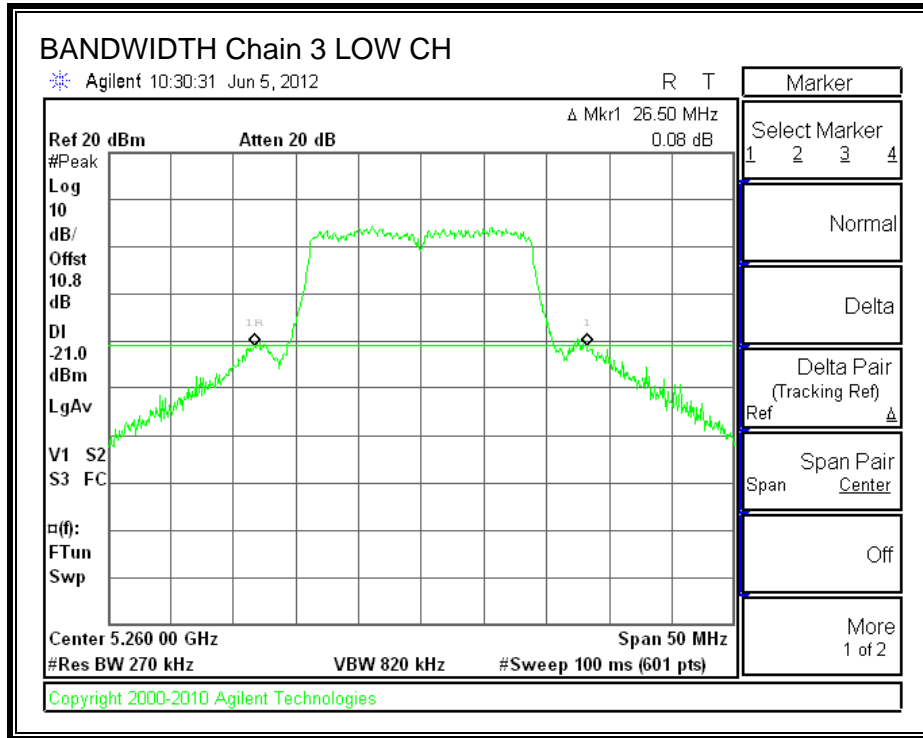
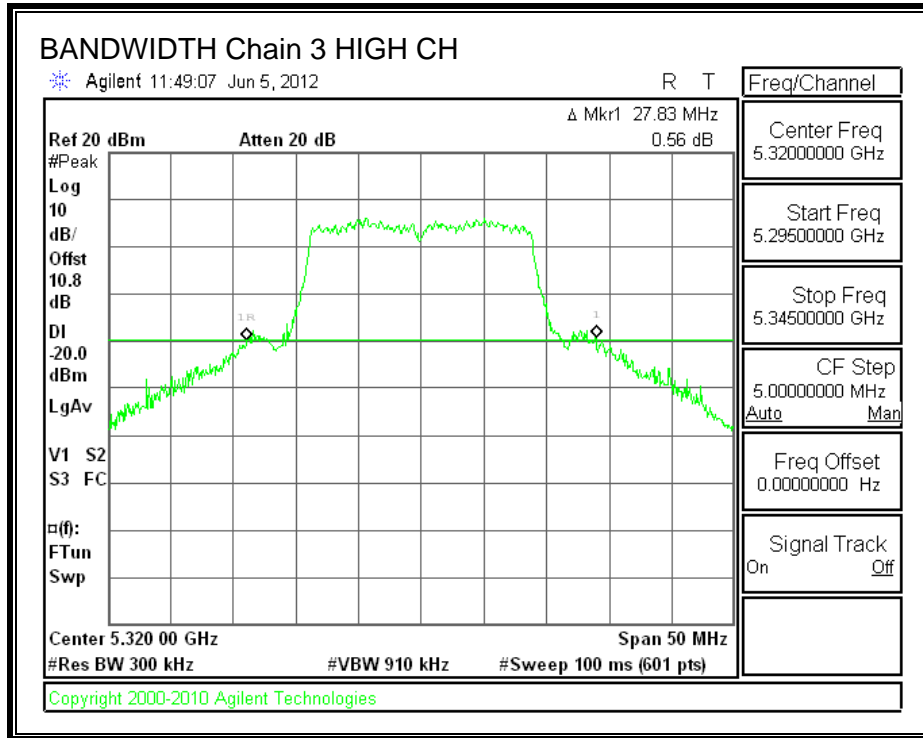


26 dB BANDWIDTH, Chain 3





8.10.2. 99% BANDWIDTH

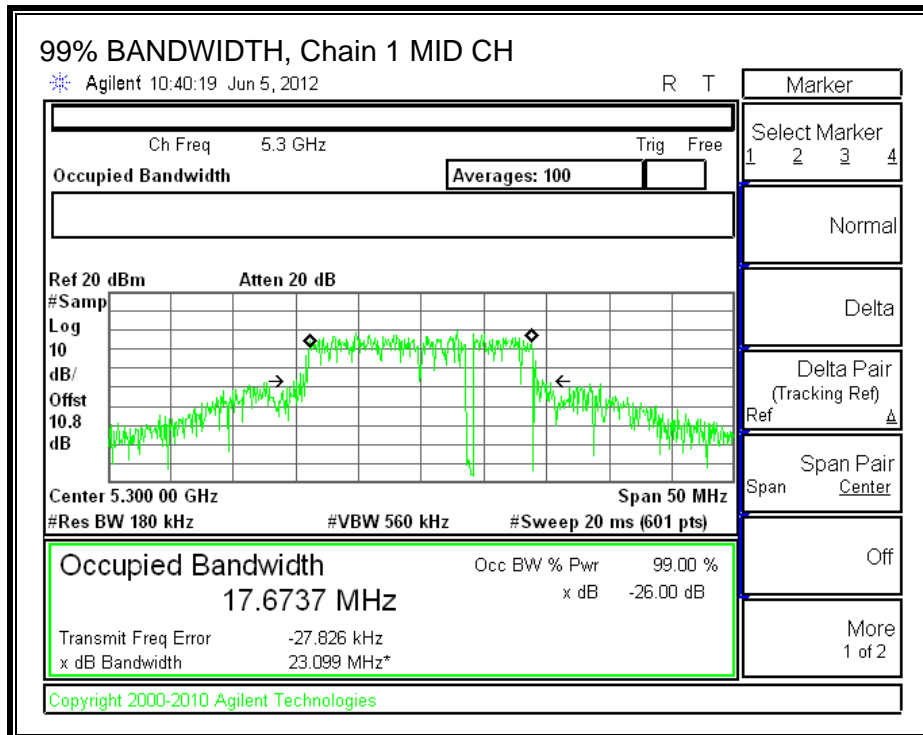
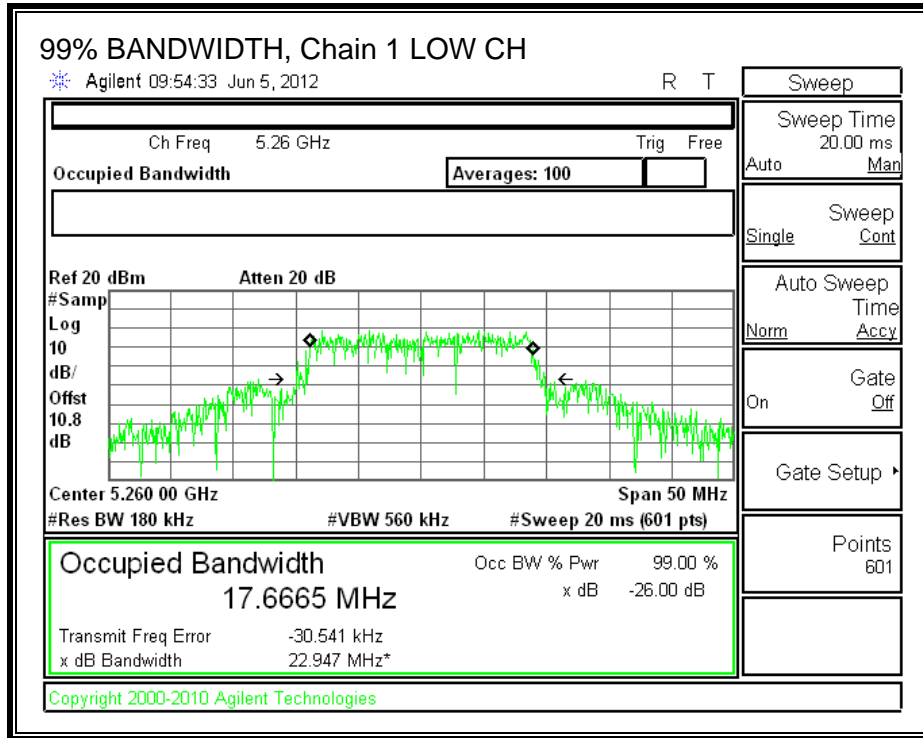
LIMITS

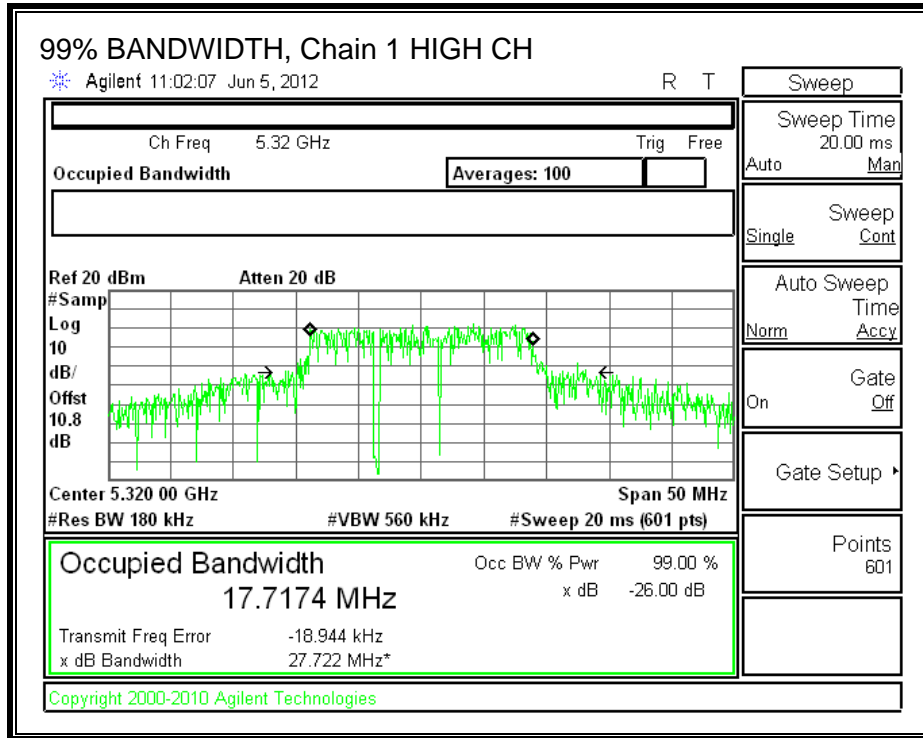
None; for reporting purposes only.

RESULTS

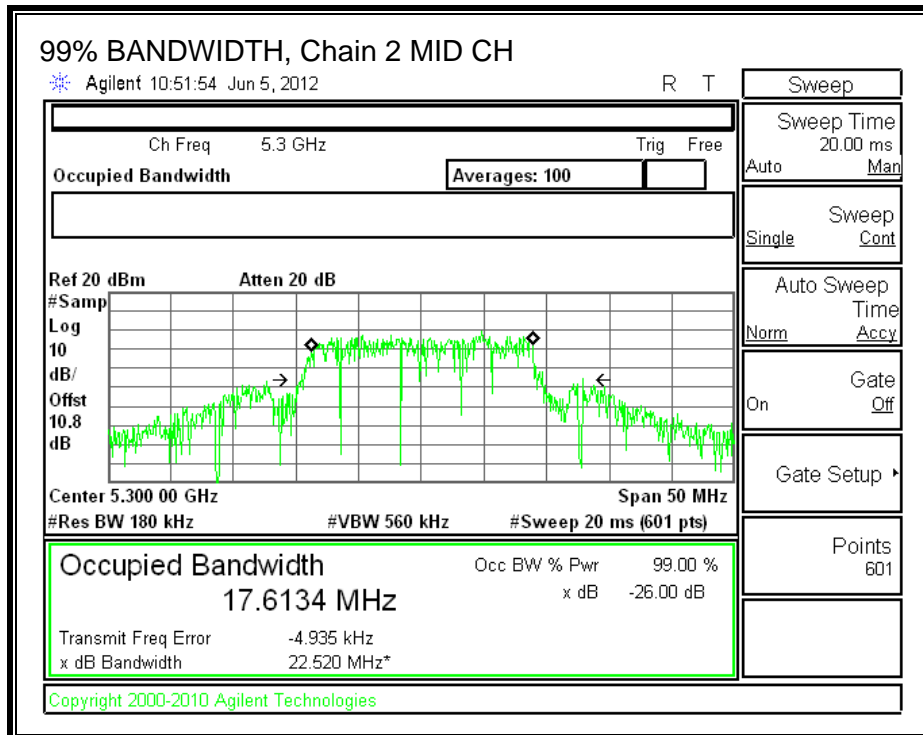
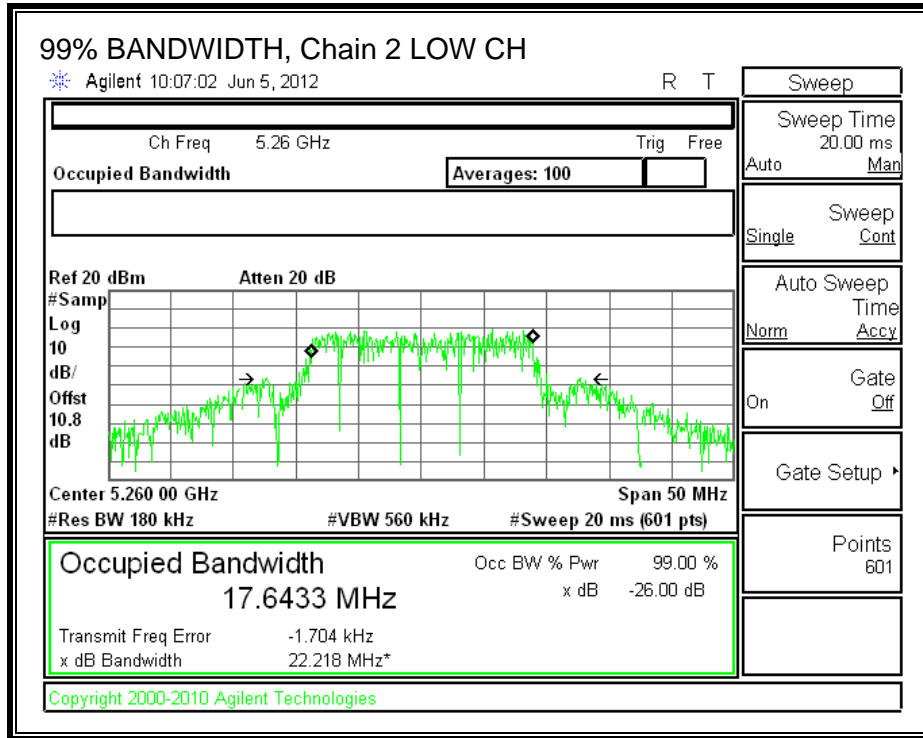
Channel	Frequency (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)	99% BW Chain 3 (MHz)
Low	5260	17.6665	17.6433	17.6552
Mid	5300	17.6737	17.6134	17.6554
High	5320	17.7174	17.6219	17.7725

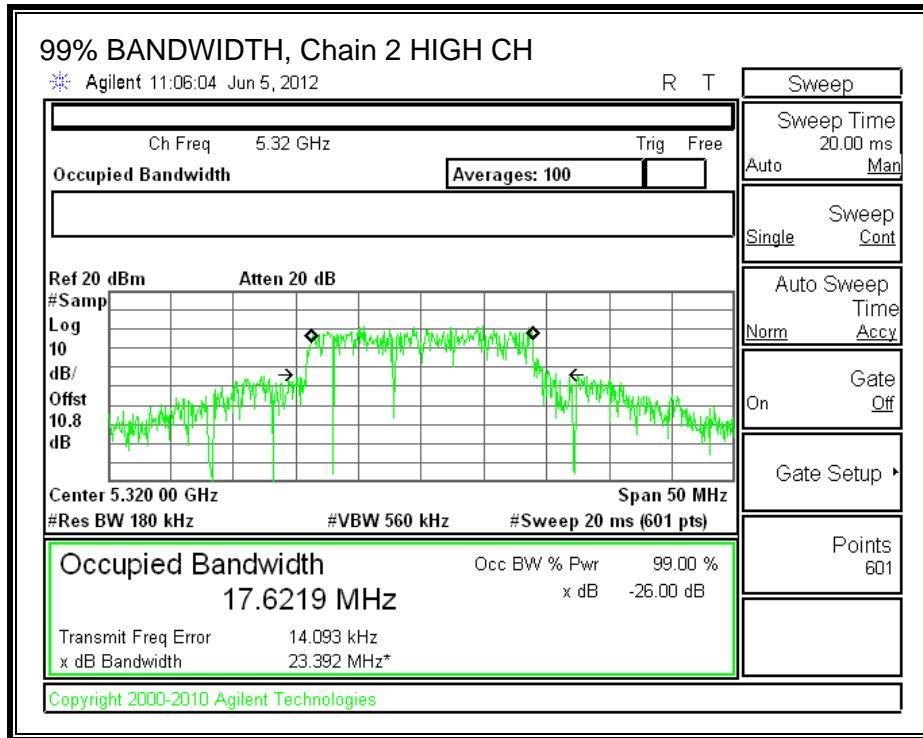
99% BANDWIDTH, Chain 1



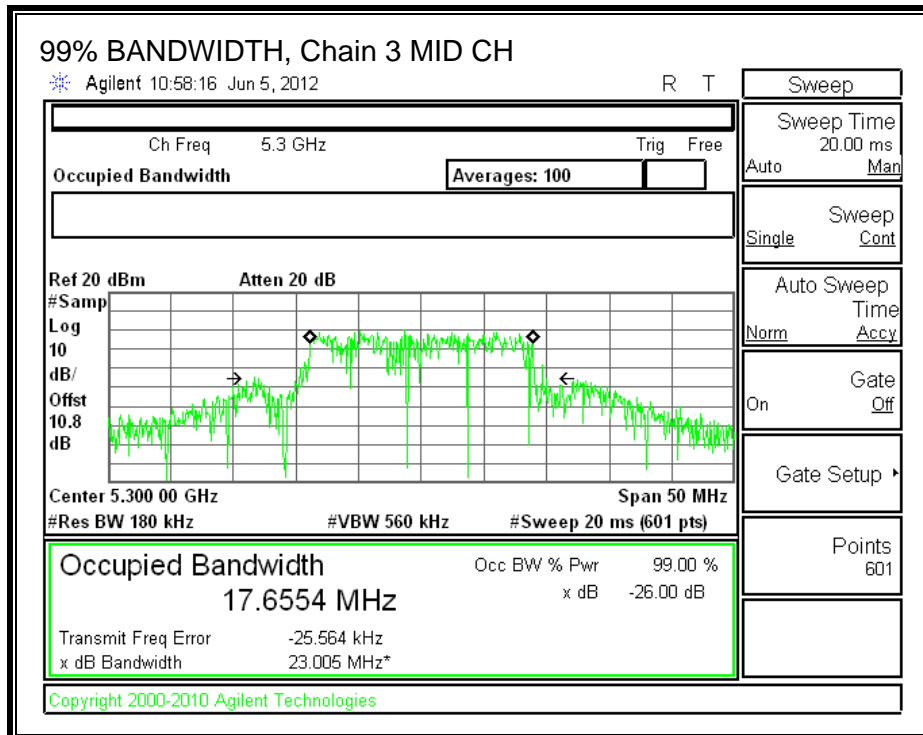
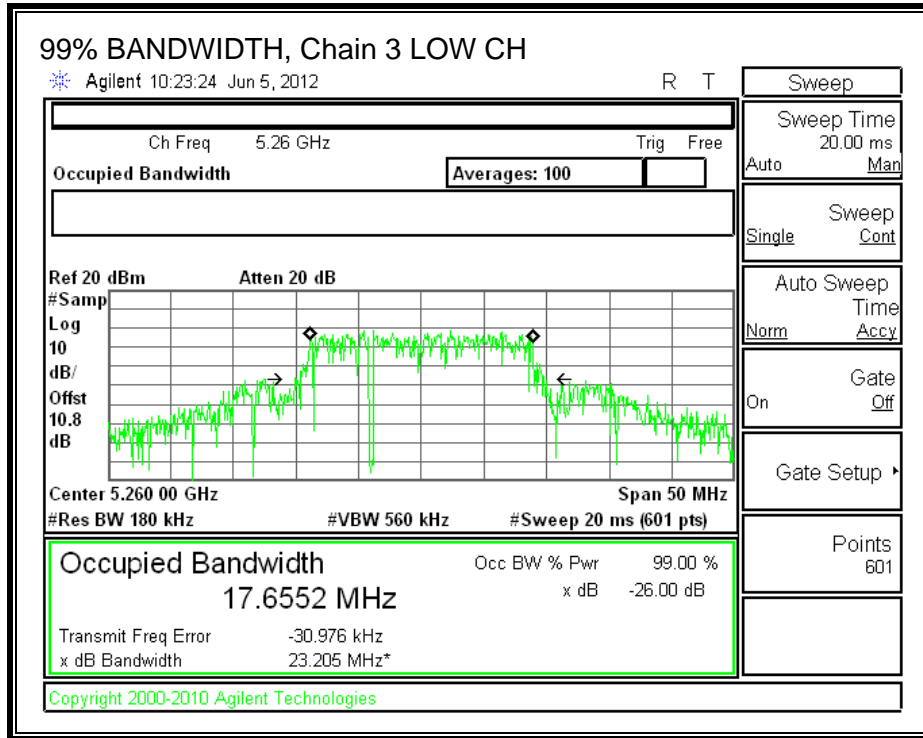


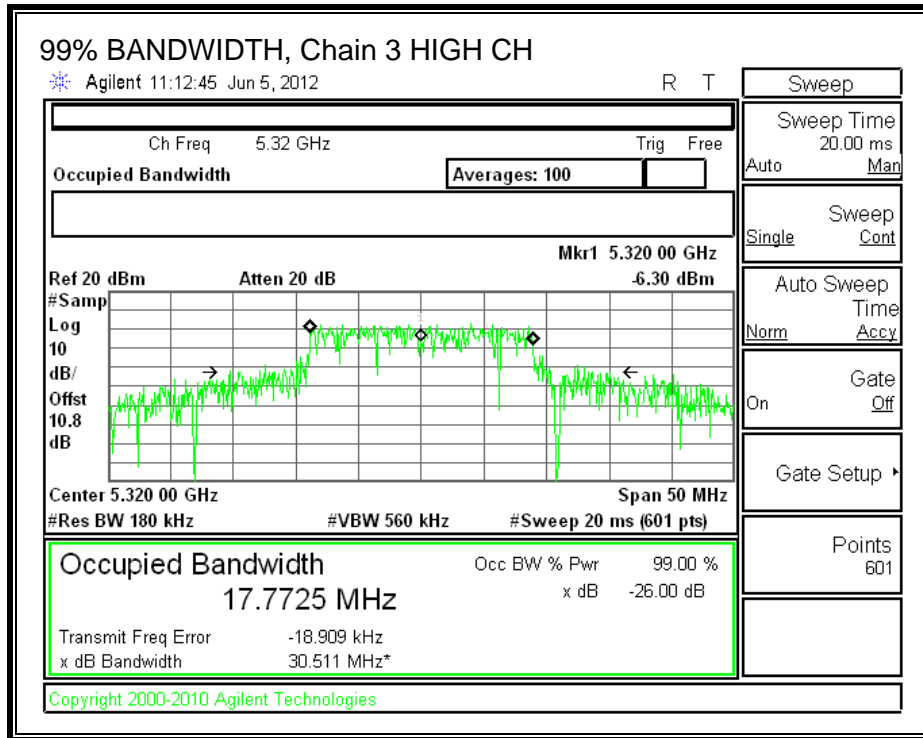
99% BANDWIDTH, Chain 2





99% BANDWIDTH, Chain 3





8.10.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.8 dB (including 10 dB pad and 0.80 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Chain 3 Power (dBm)	Total Power (dBm)
Low	5260	12.20	13.10	12.45	17.37
Mid	5300	12.30	12.20	13.10	17.32
High	5320	12.25	11.90	13.50	17.38

8.10.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

IC RSS-210 A9.2 (2)

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands 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 megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density 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 and the antenna gain is unequal among the chains. The directional gain is:

Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Chain 3 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.00	3.81	5.61	9.28

RESULTS

Limits

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B Limit (dBm)	Directional Gain (dBi)	Power Limit (dBm)	PPSD Limit (dBm)
Low	5260	24	25.67	25.09	9.28	20.72	7.72
Mid	5300	24	26.33	25.20	9.28	20.72	7.72
High	5320	24	26.08	25.16	9.28	20.72	7.72

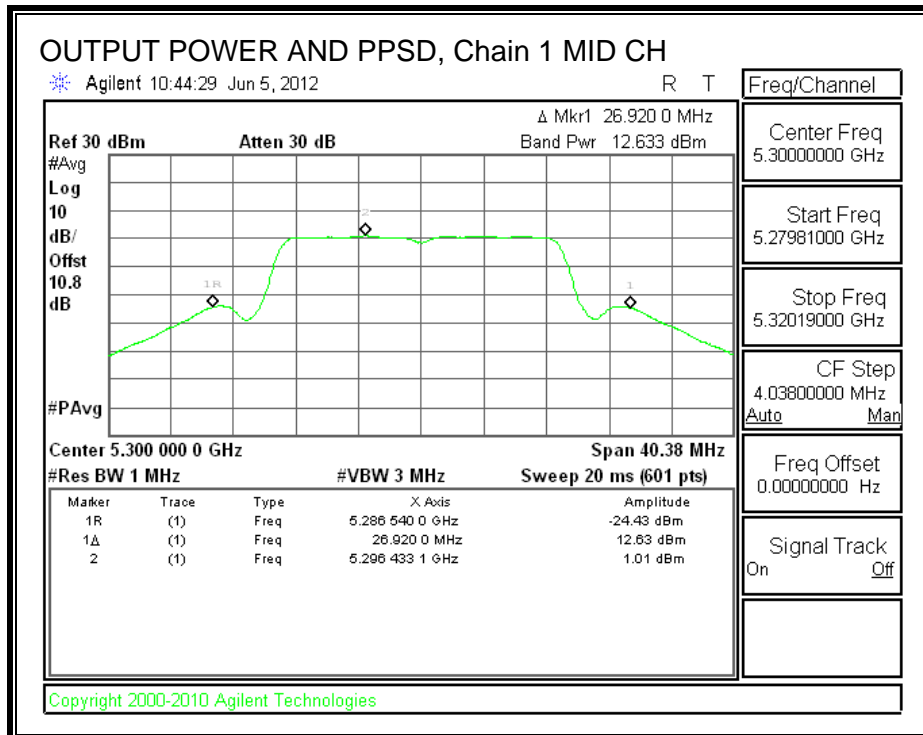
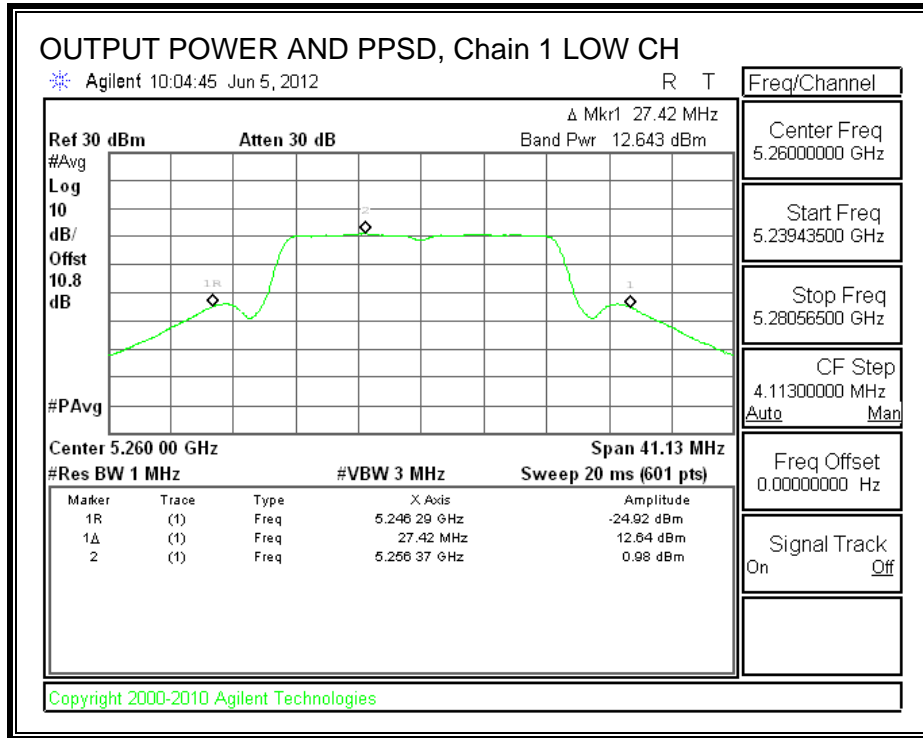
Output Power Results

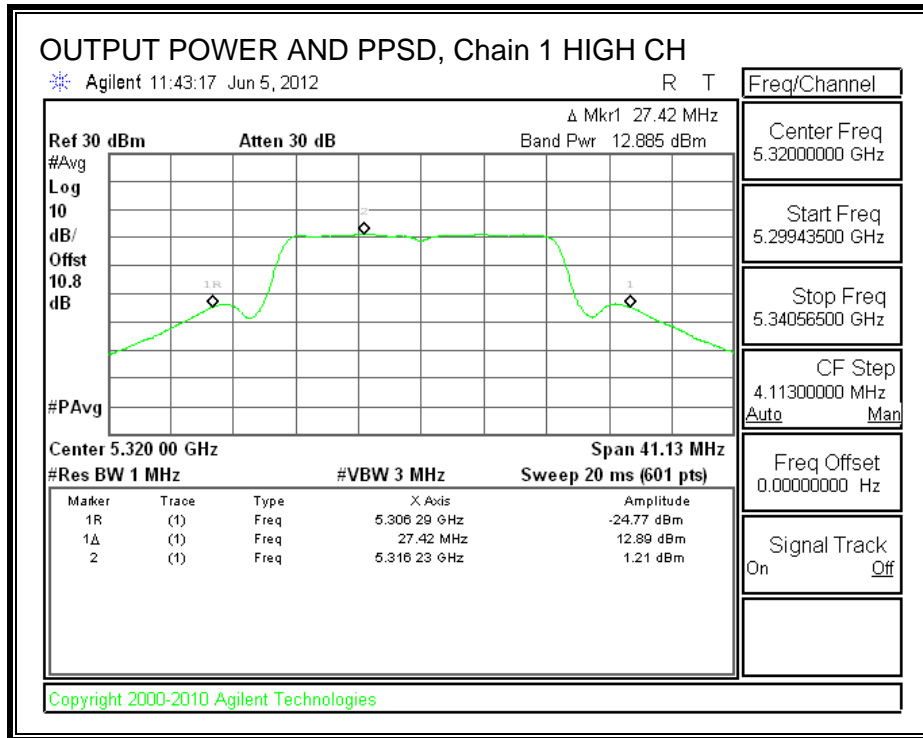
Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	12.643	13.342	12.978	17.768	20.72	-2.952
Mid	5300	12.633	12.287	13.396	17.568	20.72	-3.152
High	5320	12.885	12.055	13.889	17.779	20.72	-2.941

PPSD Results

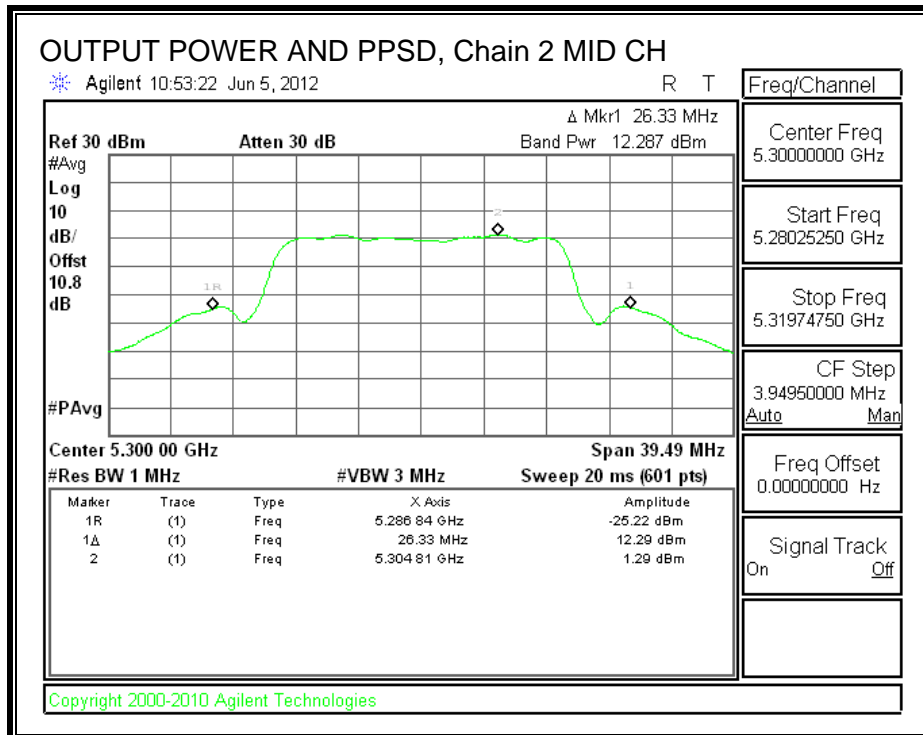
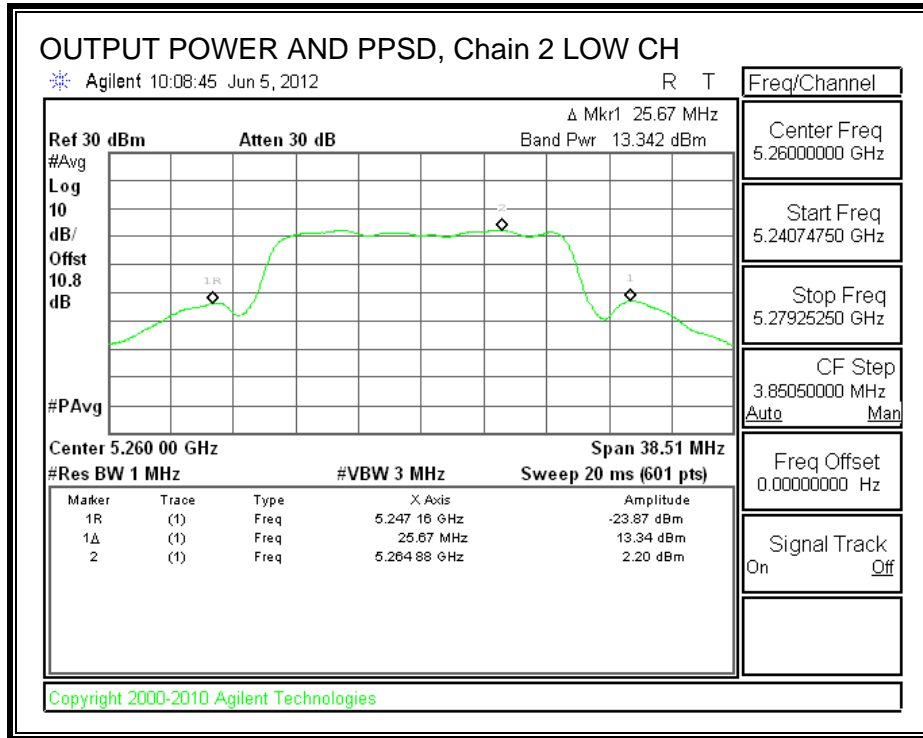
Channel	Frequency (MHz)	Chain 1 Meas PPSD (dBm)	Chain 2 Meas PPSD (dBm)	Chain 3 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	0.98	2.20	1.38	6.32	7.72	-1.40
Mid	5300	1.01	1.29	1.91	6.19	7.72	-1.53
High	5320	1.21	1.32	2.49	6.48	7.72	-1.24

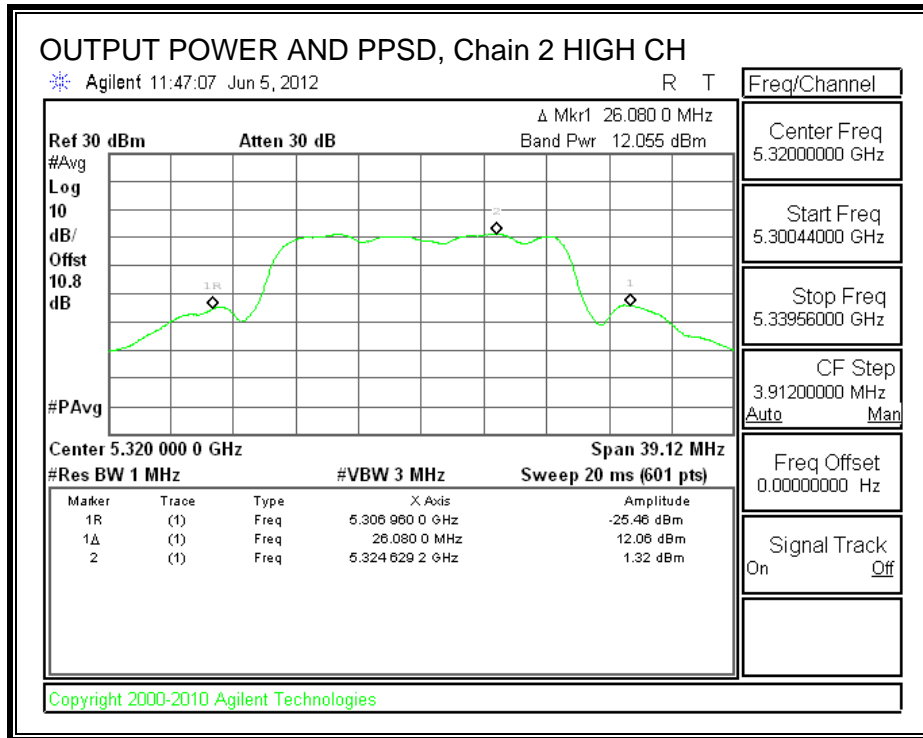
OUTPUT POWER AND PPSD, Chain 1



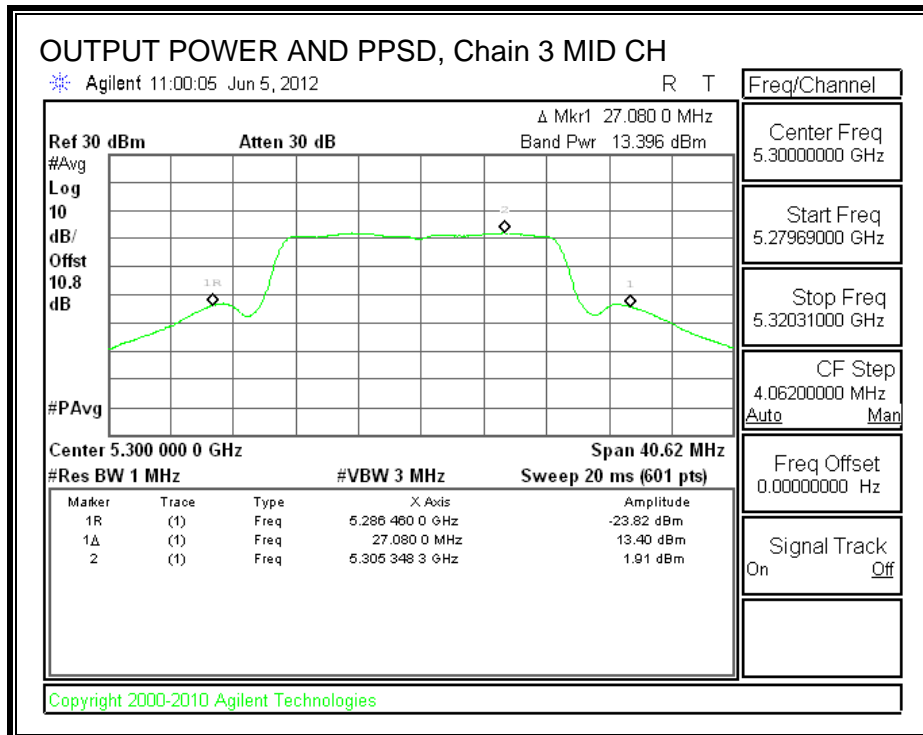
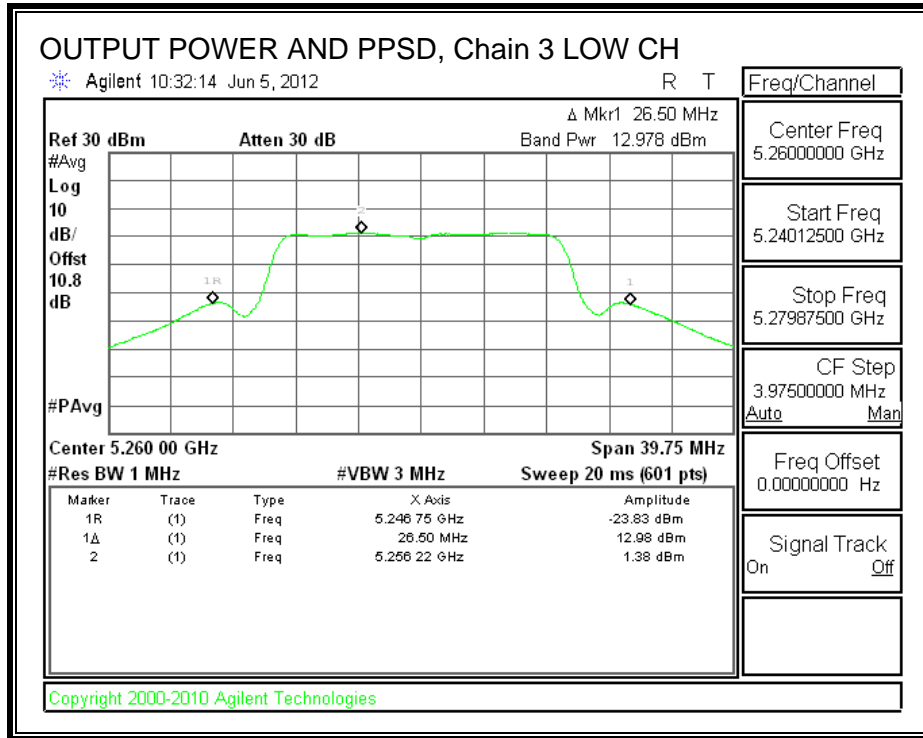


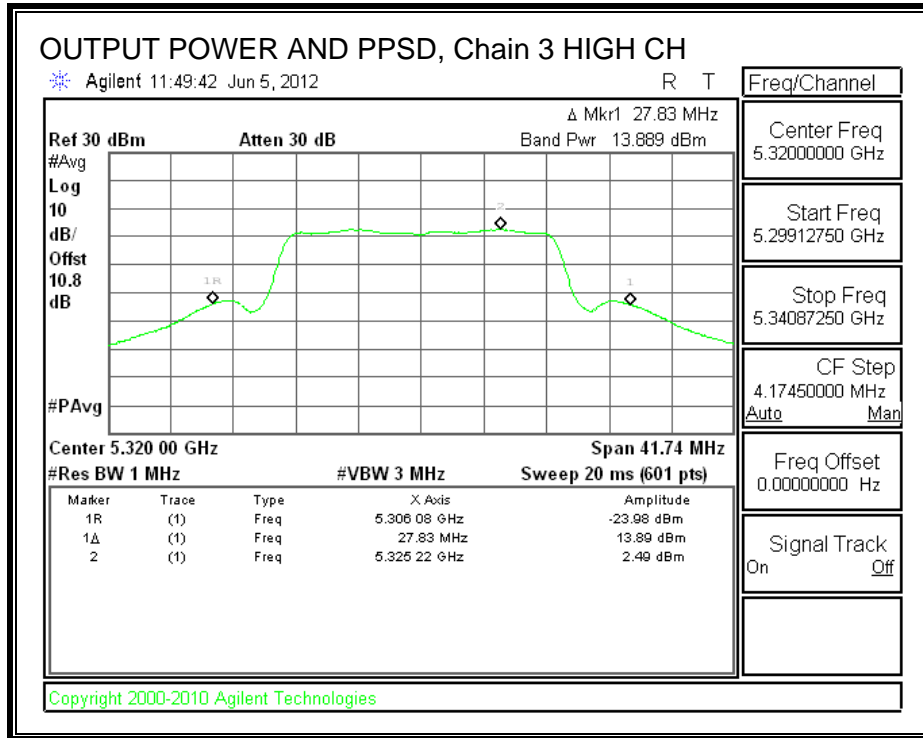
OUTPUT POWER AND PPSD, Chain 2





OUTPUT POWER AND PPSD, Chain 3





8.10.5. PEAK EXCURSION

LIMITS

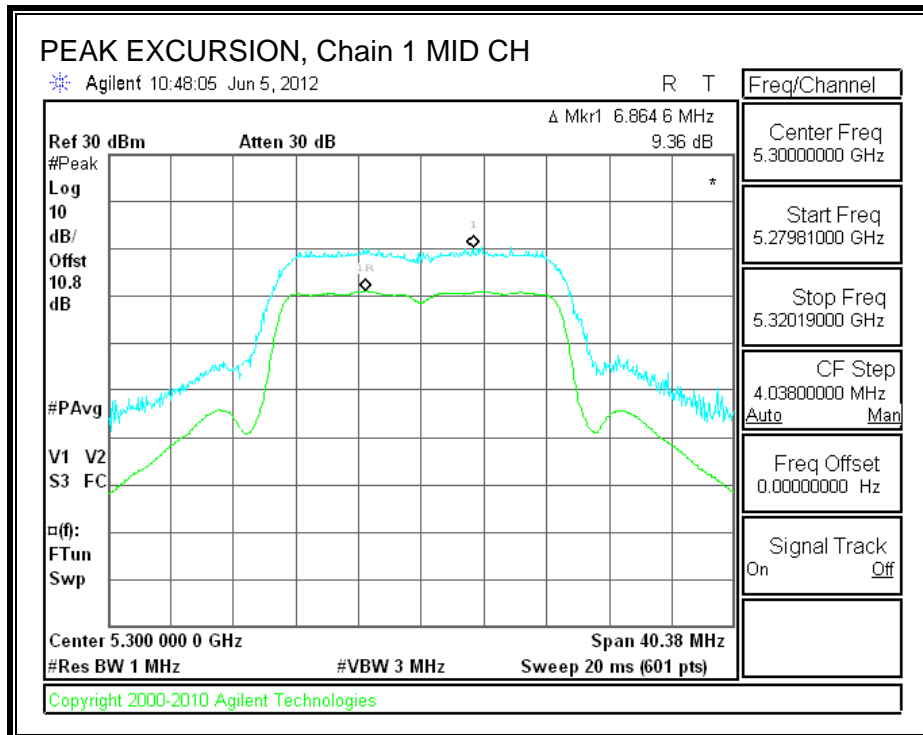
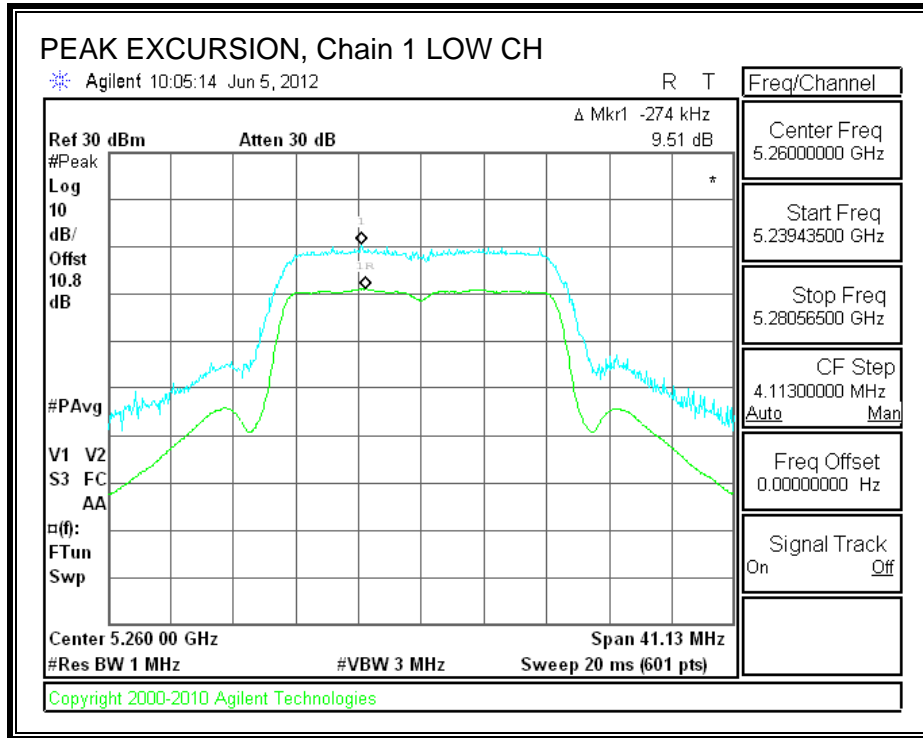
FCC §15.407 (a) (6)

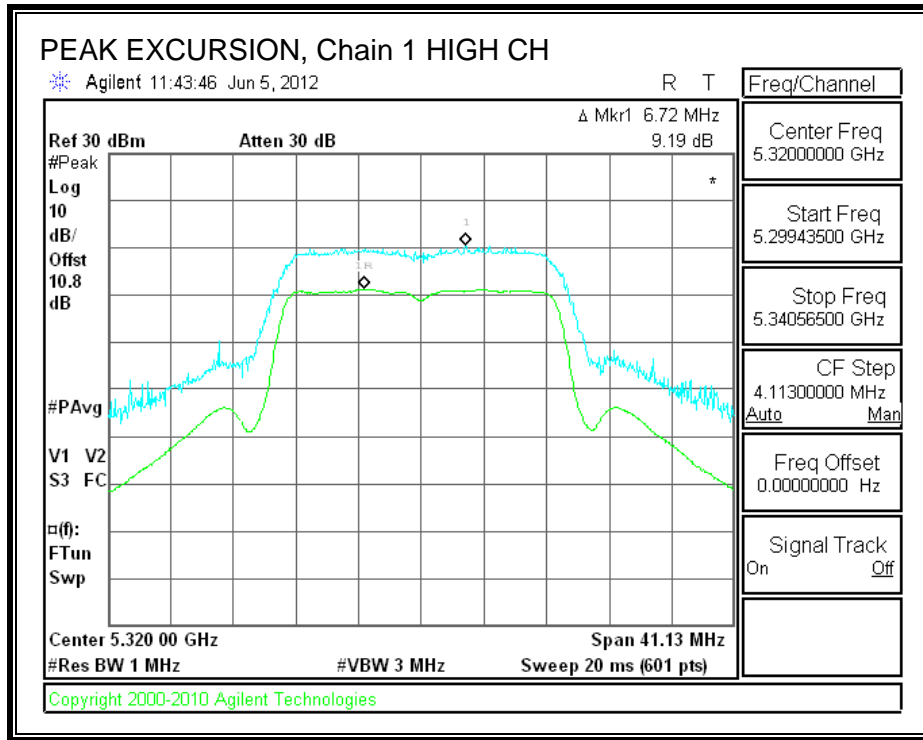
The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

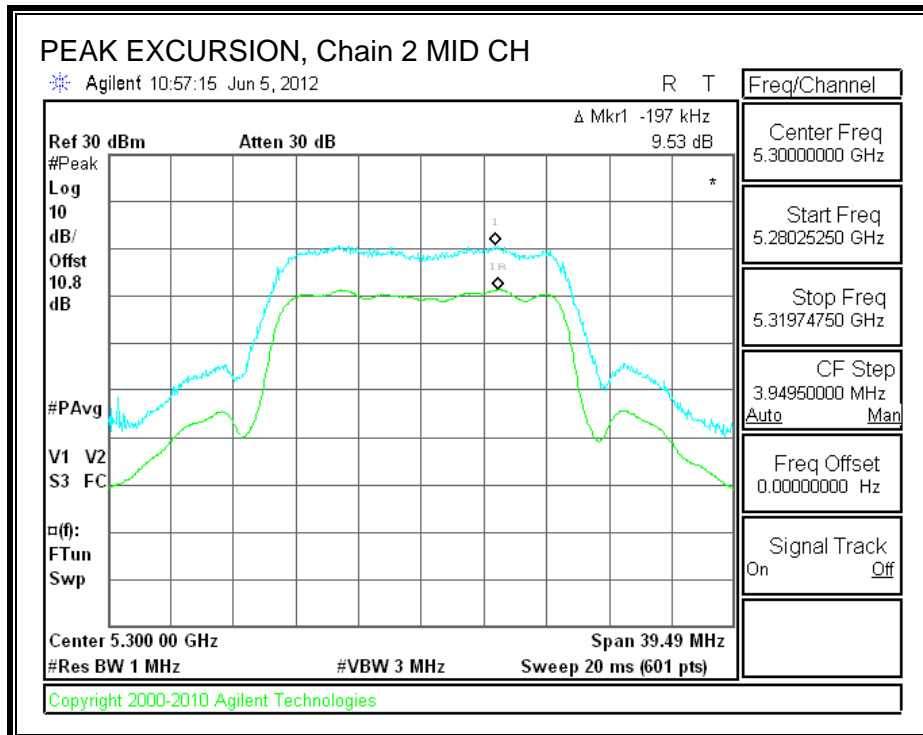
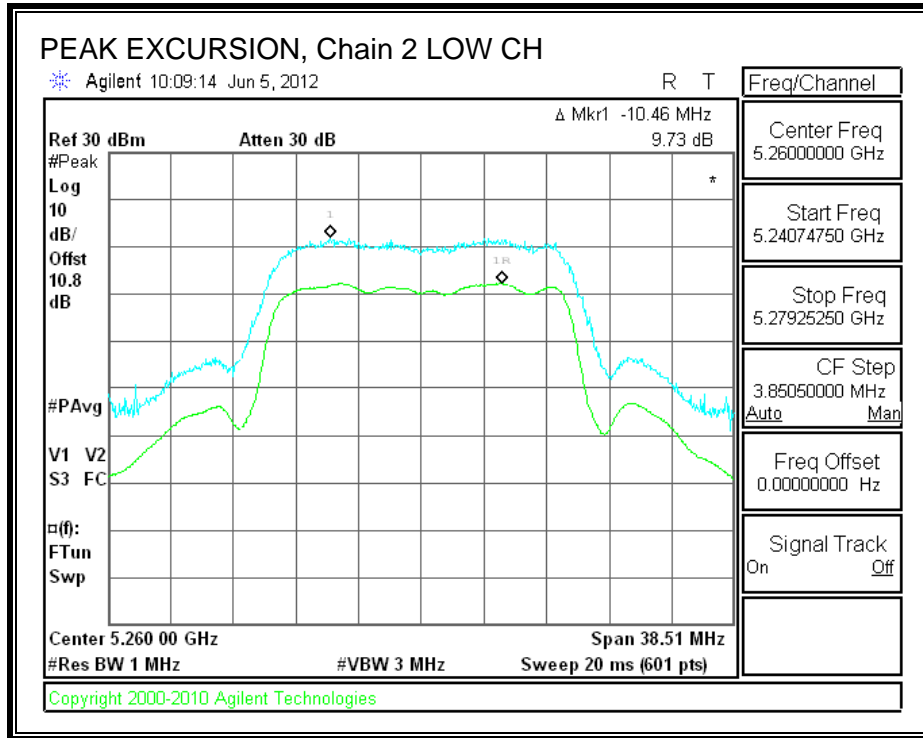
Channel	Frequency (MHz)	Pk Exc Chain 1 (dB)	Pk Exc Chain 2 (dB)	Pk Exc Chain 3 (dB)	Limit (dB)	Worst-Case Margin (dB)
Low	5260	9.51	9.73	10.61	13	-2.4
Mid	5300	9.36	9.53	9.97	13	-3.0
High	5320	9.19	9.83	9.88	13	-3.1

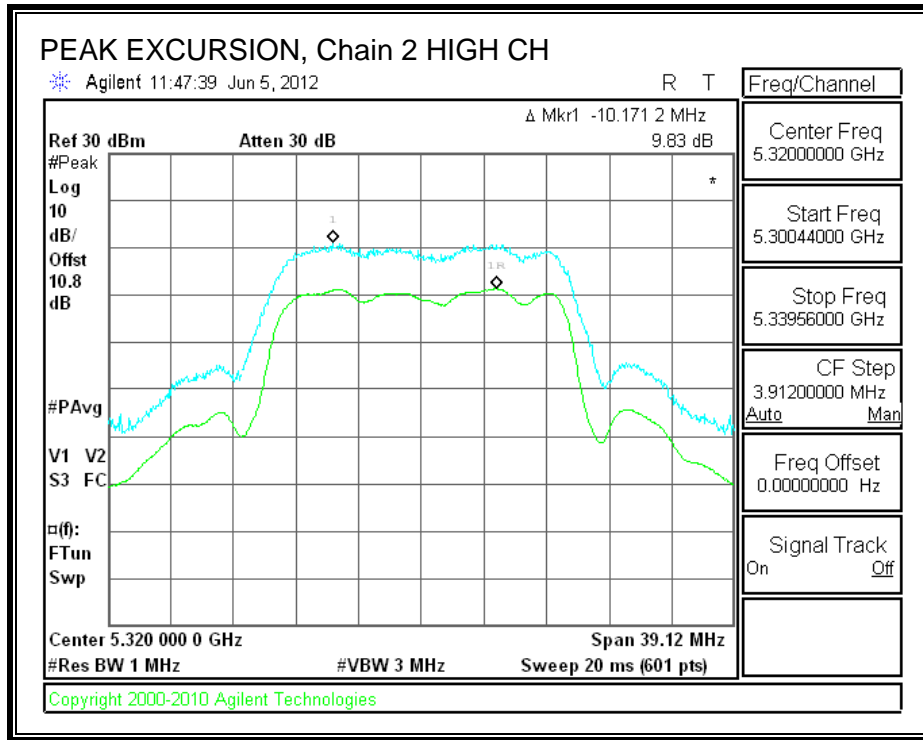
PEAK EXCURSION, Chain 1



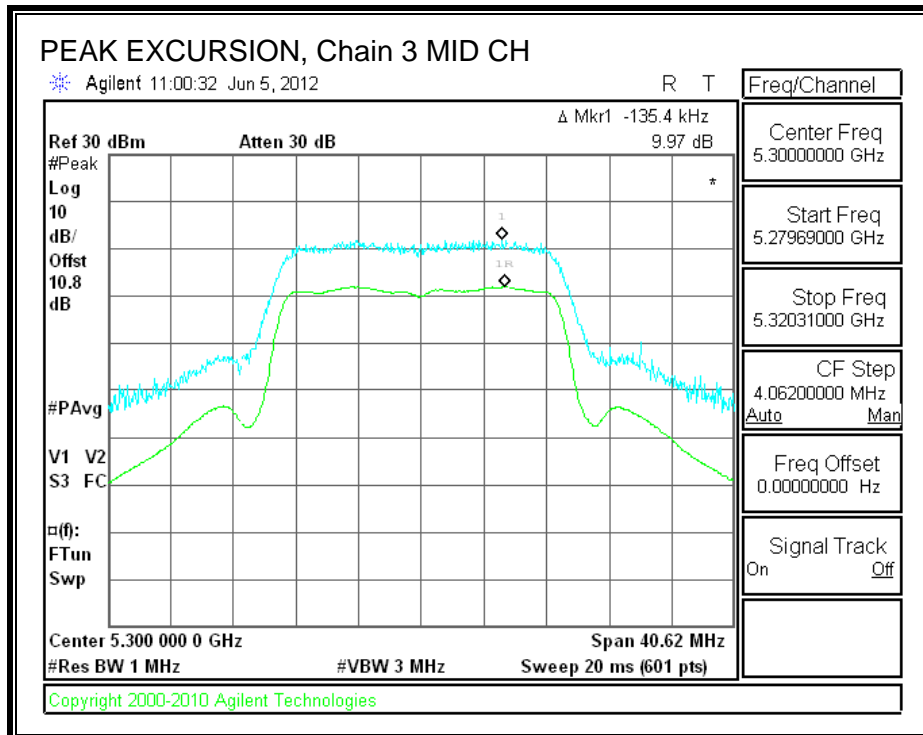
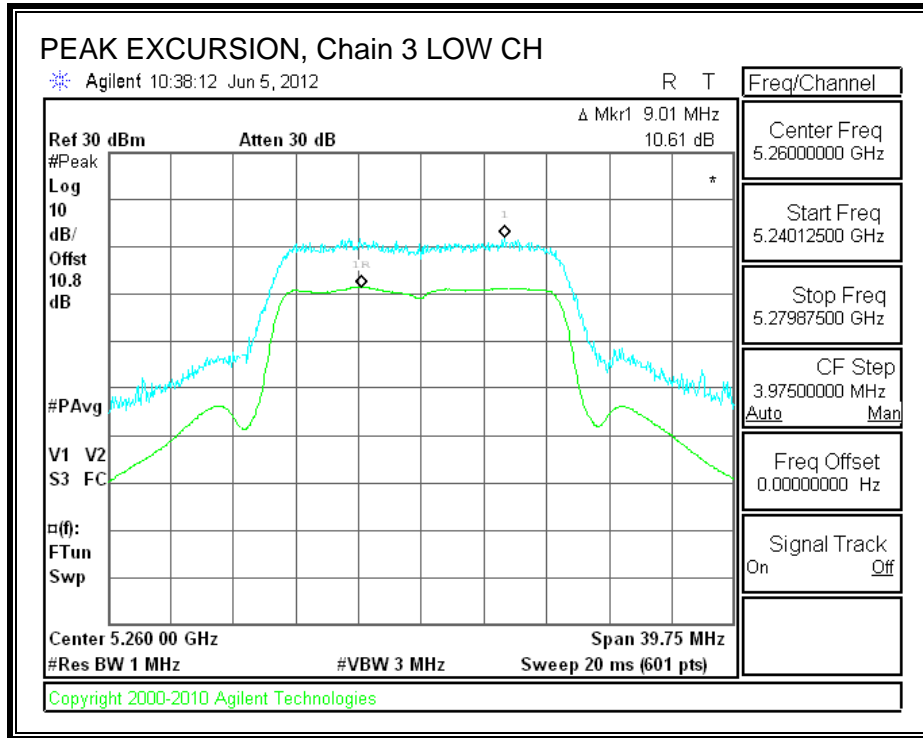


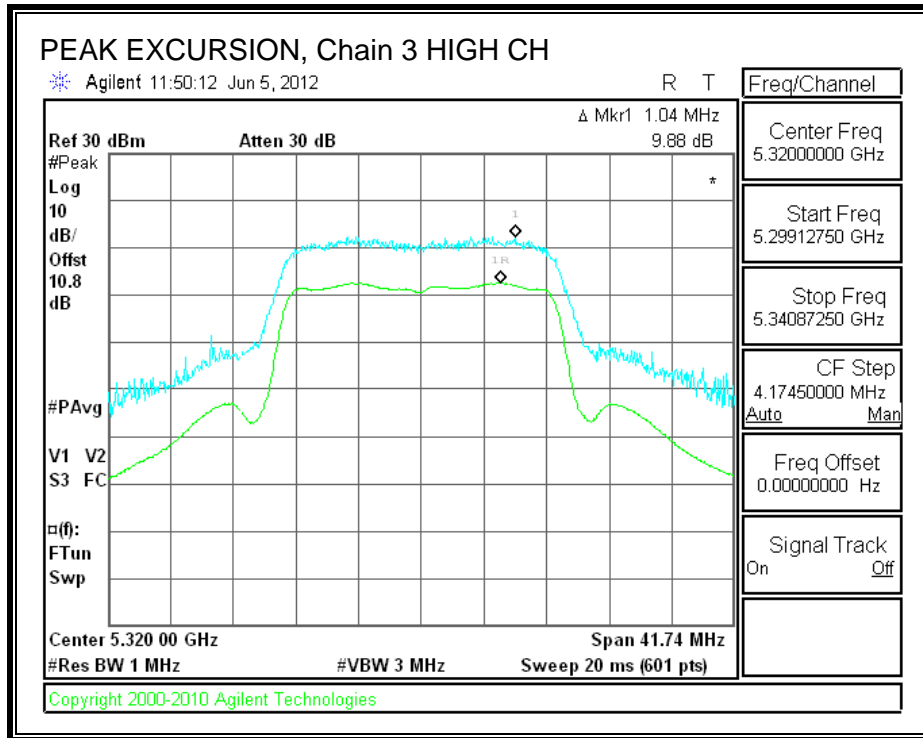
PEAK EXCURSION, Chain 2





PEAK EXCURSION, Chain 3





8.11. 802.11n HT20 SDM MCS21, 3TX, 5.3 GHz BAND

8.11.1. 26 dB BANDWIDTH

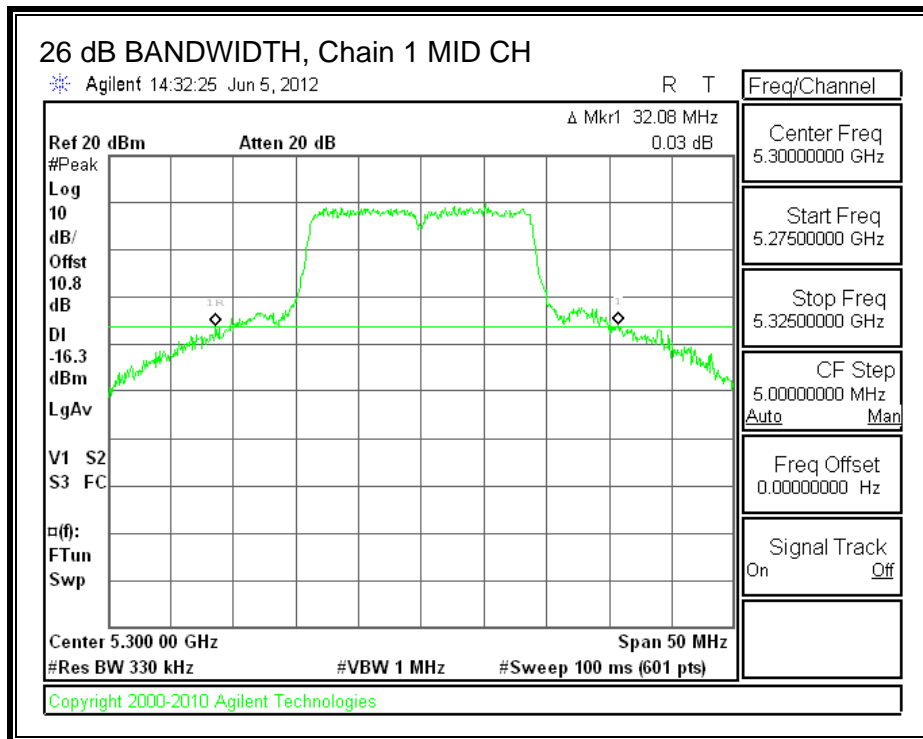
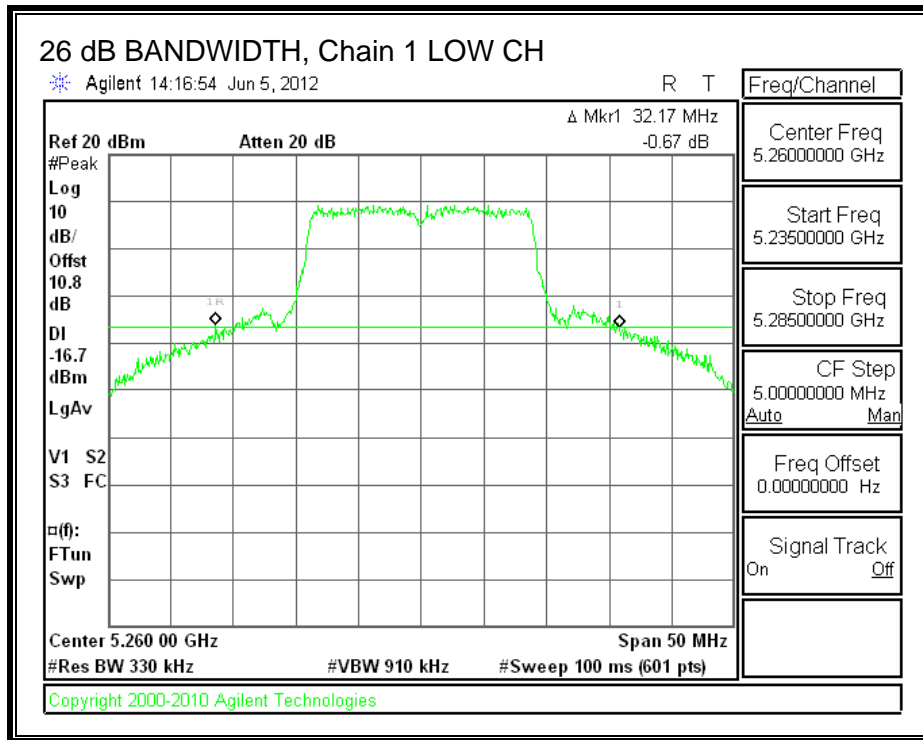
LIMITS

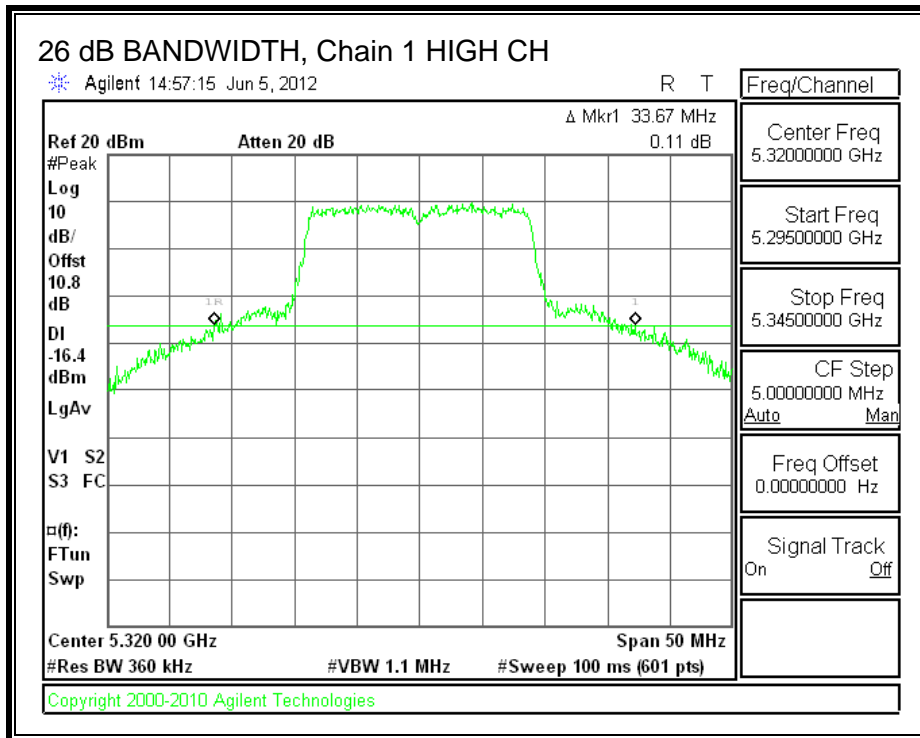
None; for reporting purposes only.

RESULTS

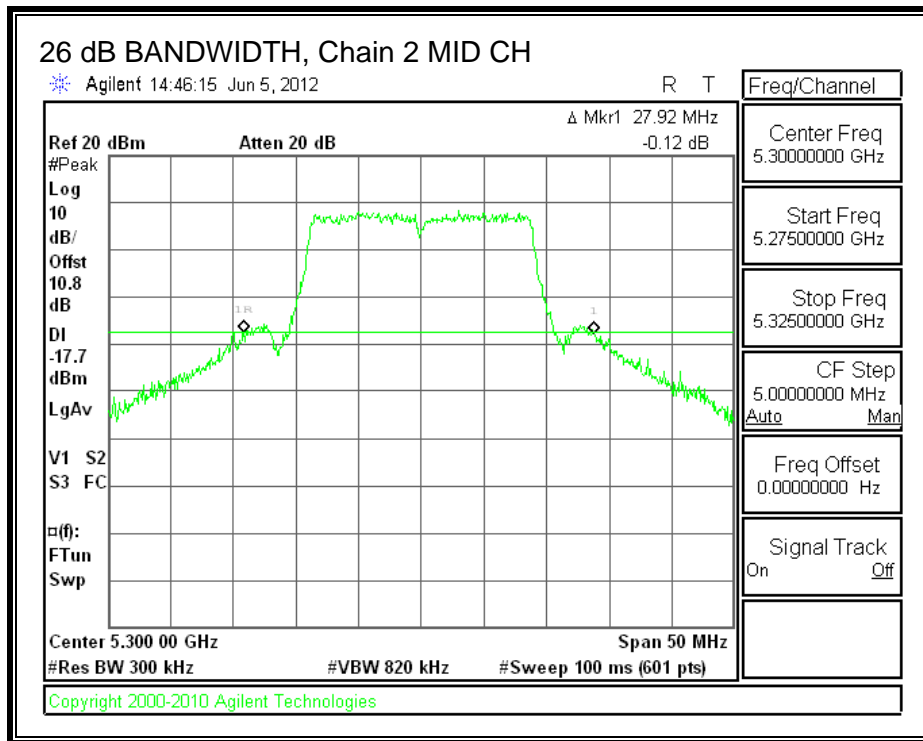
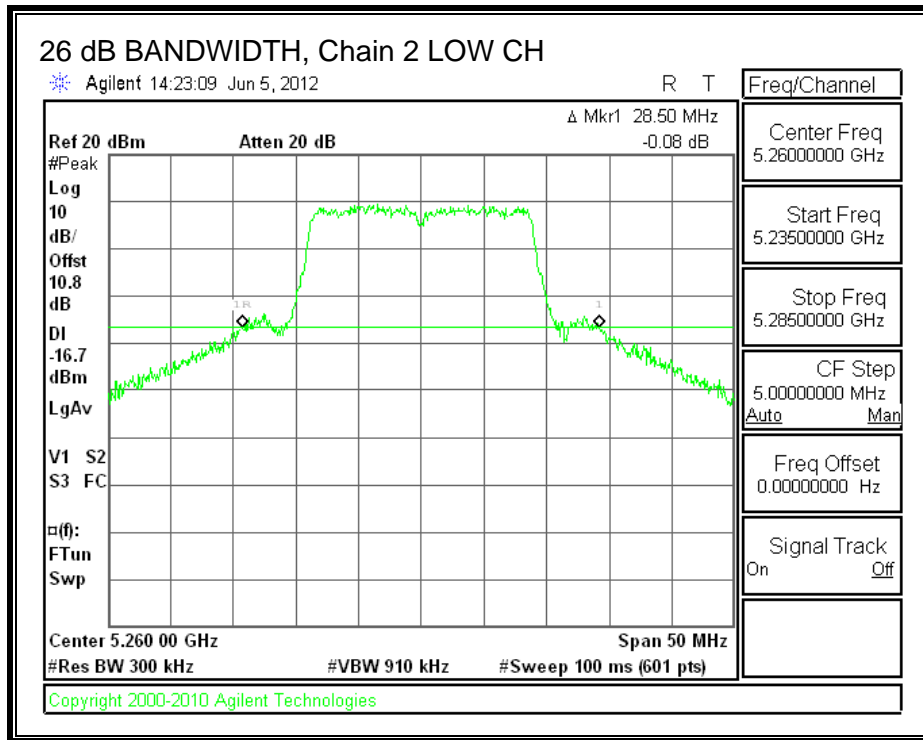
Channel	Frequency (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5260	32.17	28.50	32.50
Mid	5300	32.08	27.92	35.83
High	5320	33.67	28.67	36.00

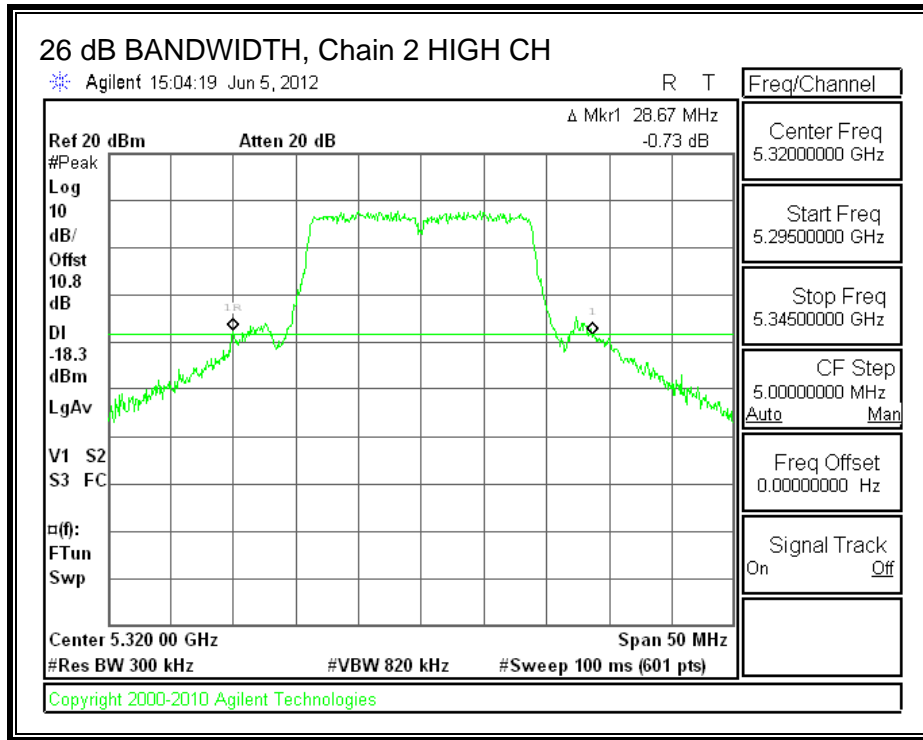
26 dB BANDWIDTH, Chain 1



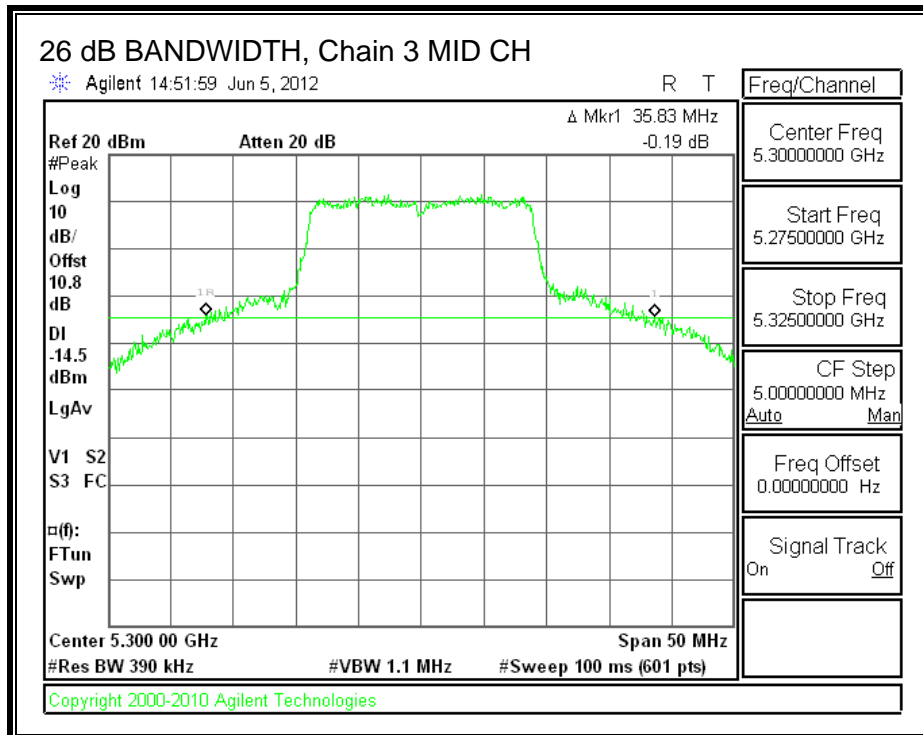
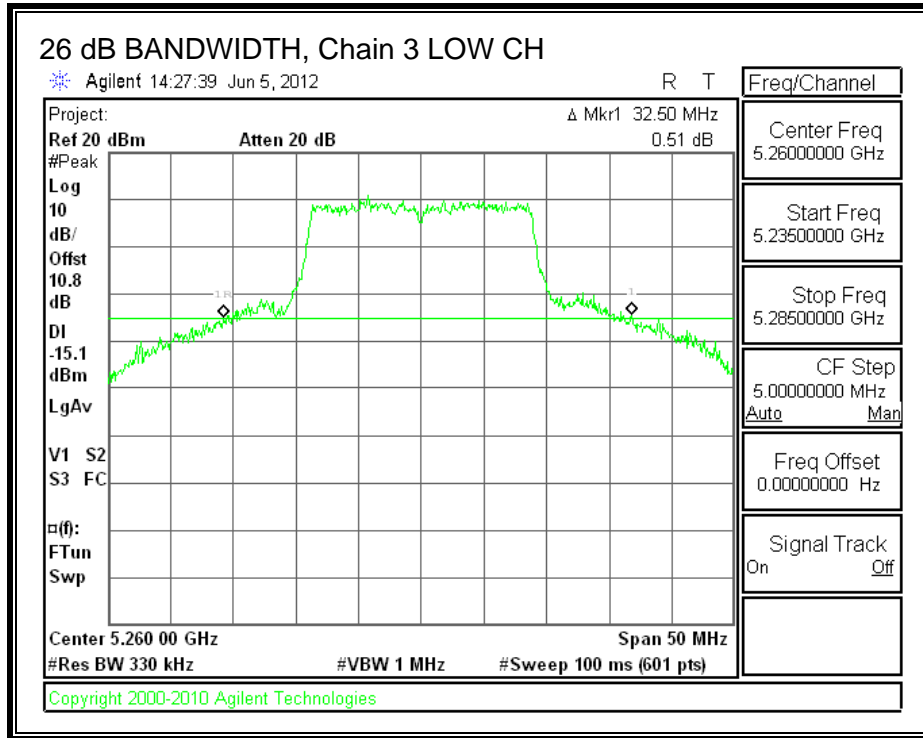


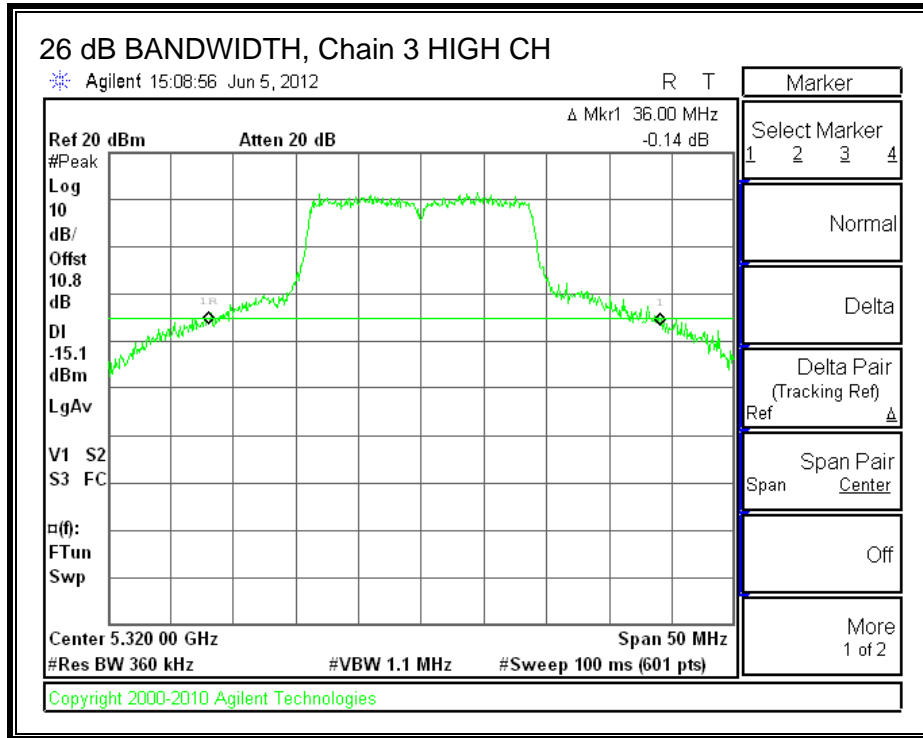
26 dB BANDWIDTH, Chain 2





26 dB BANDWIDTH, Chain 3





8.11.2. 99% BANDWIDTH

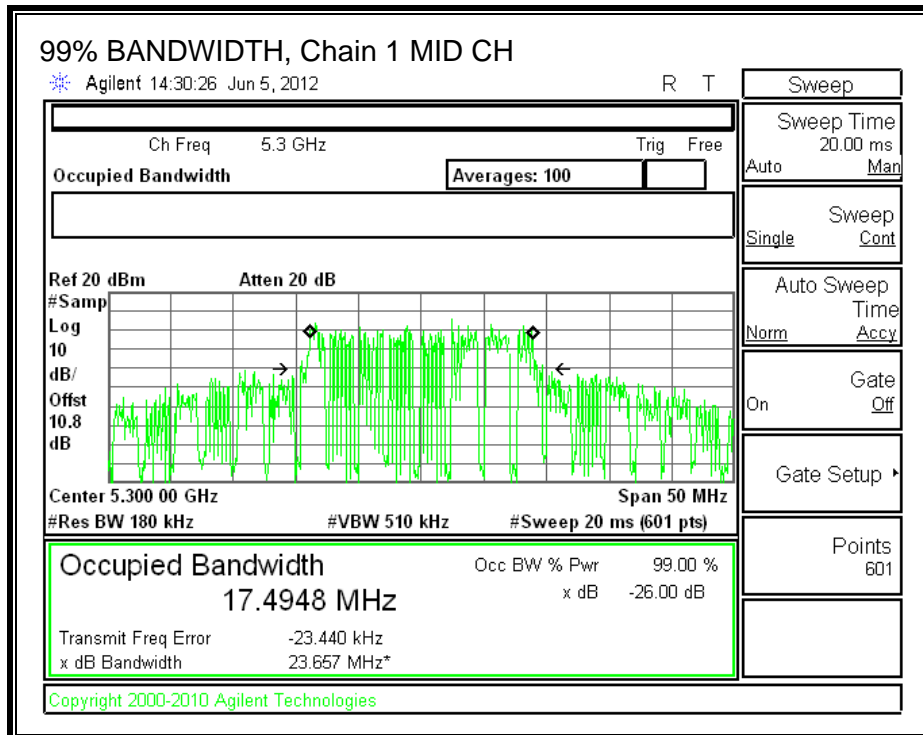
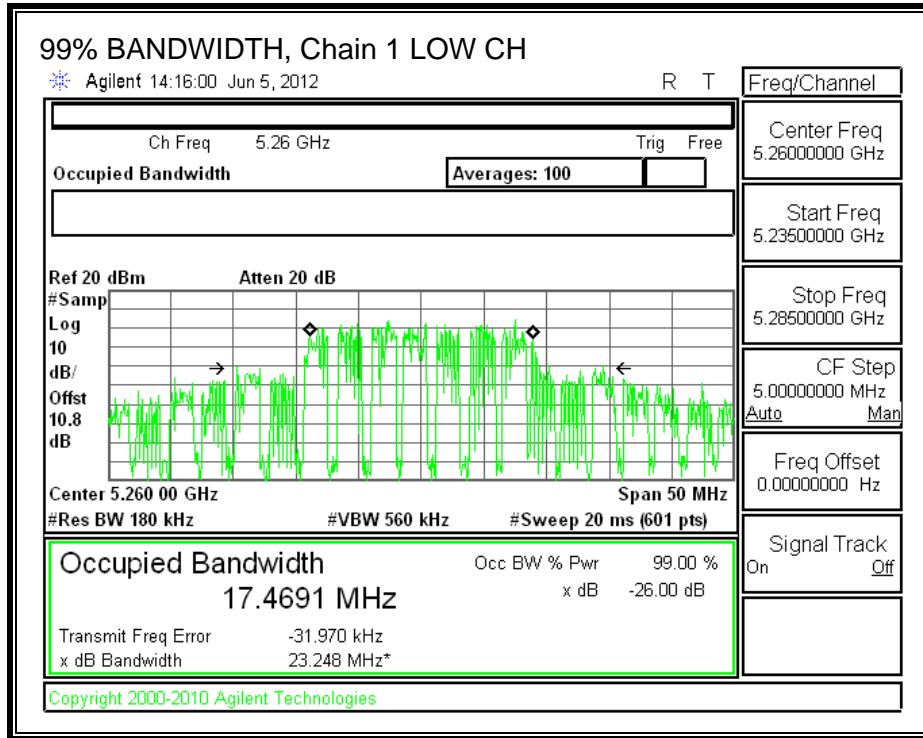
LIMITS

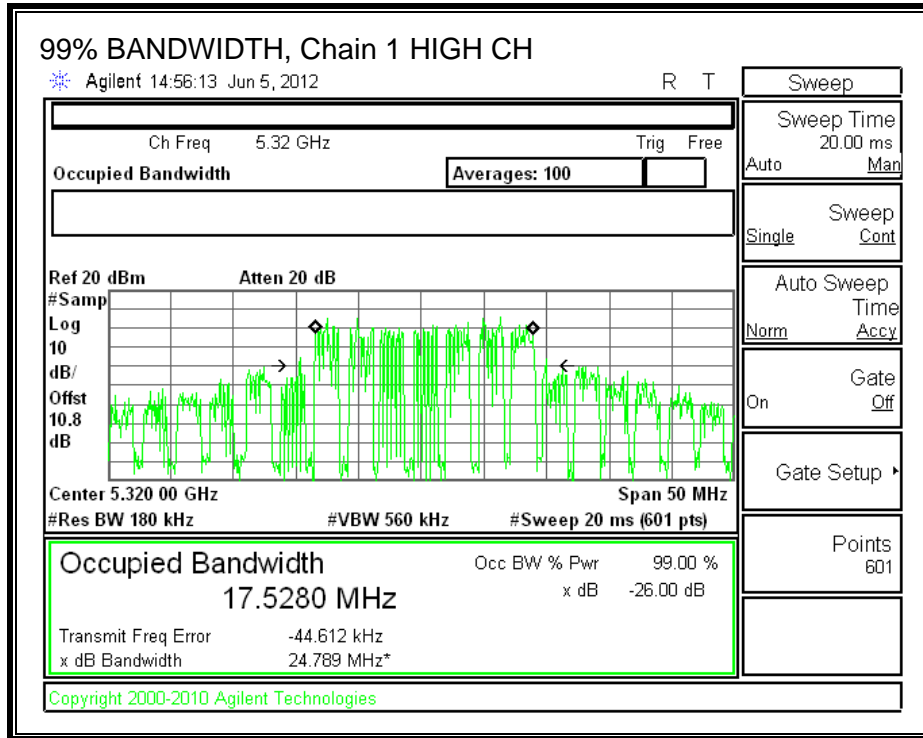
None; for reporting purposes only.

RESULTS

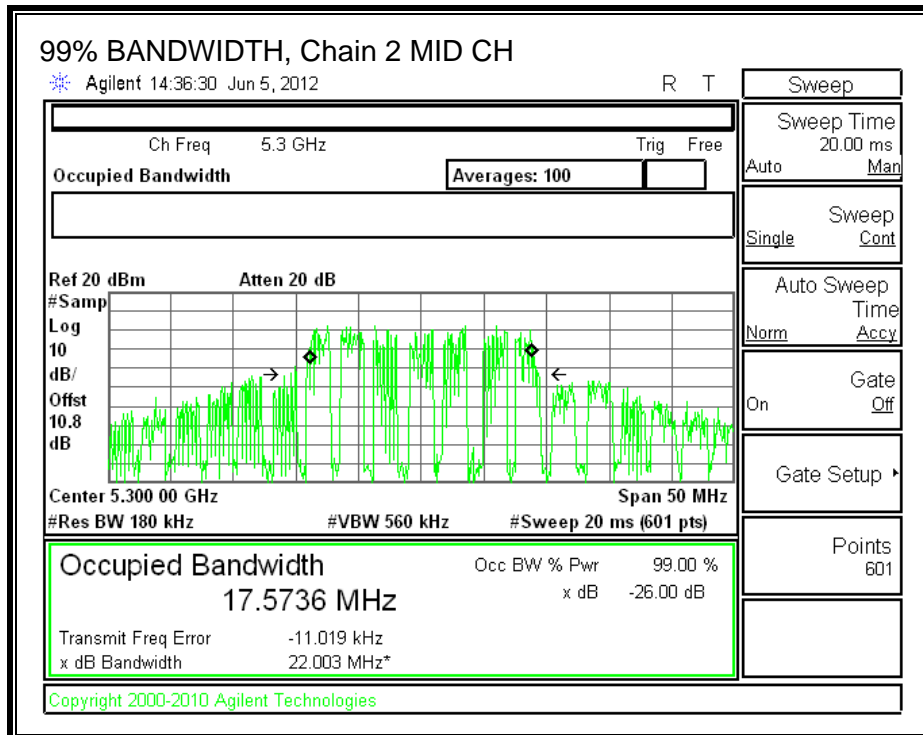
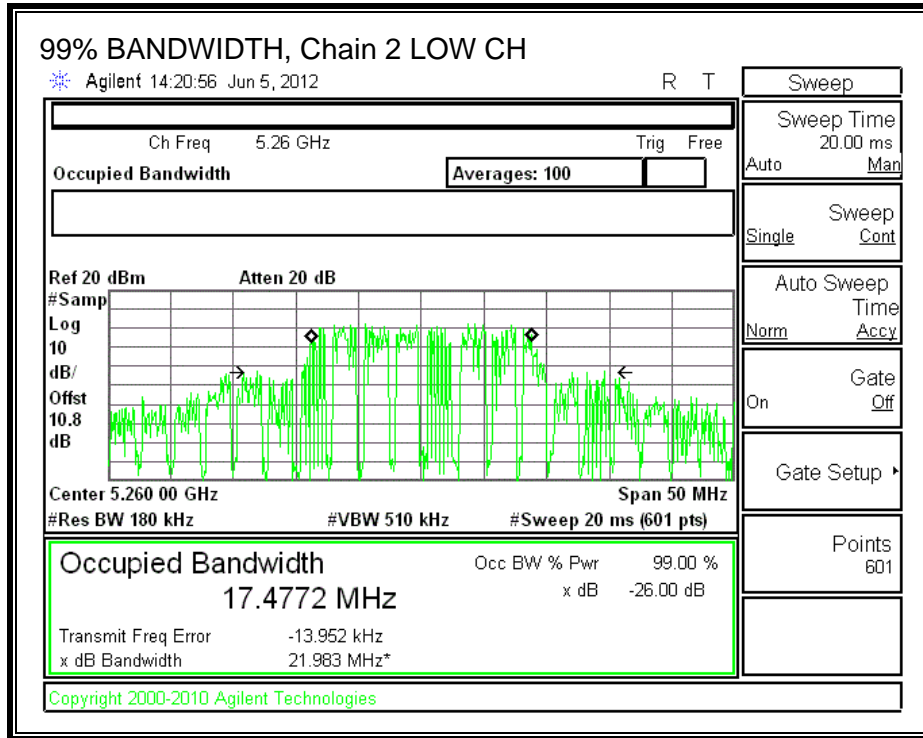
Channel	Frequency (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)	99% BW Chain 3 (MHz)
Low	5260	17.4691	17.4772	17.6075
Mid	5300	17.4948	17.5736	17.6068
High	5320	17.5280	17.5429	17.6481

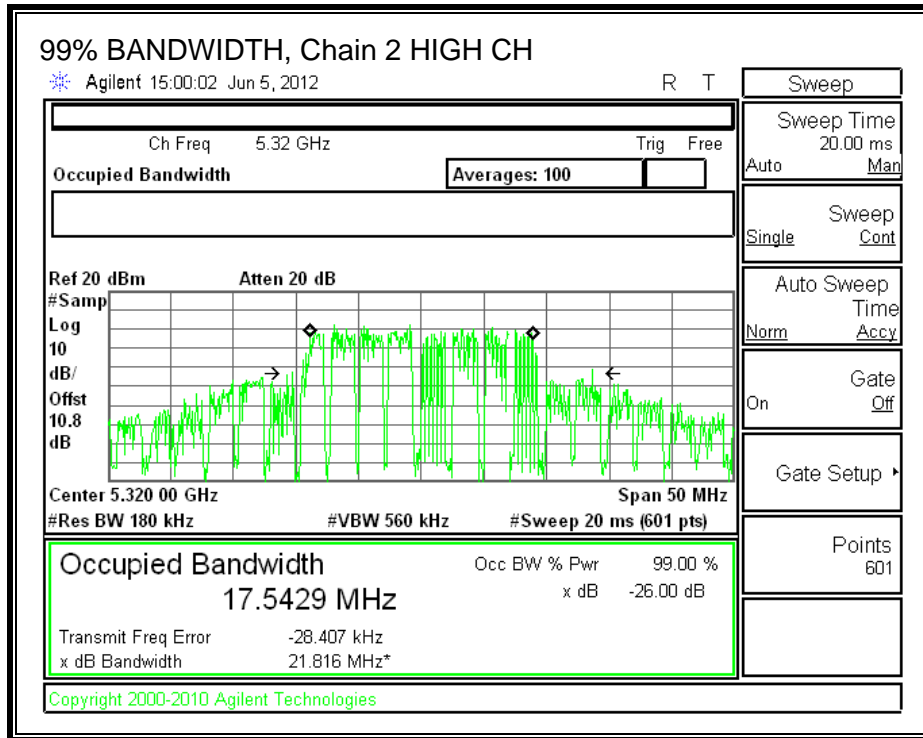
99% BANDWIDTH, Chain 1



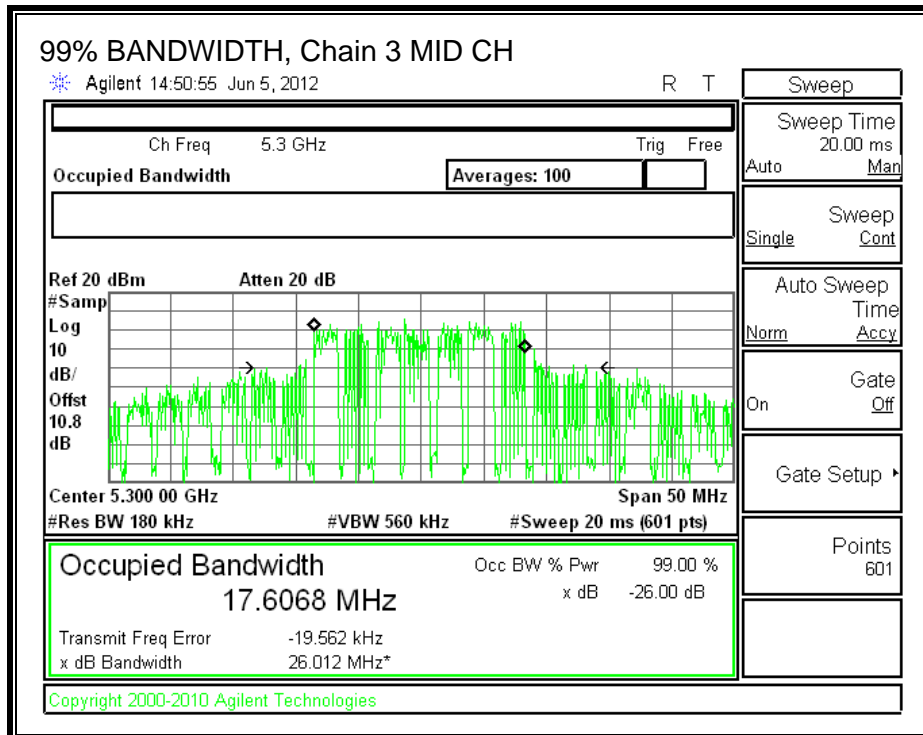
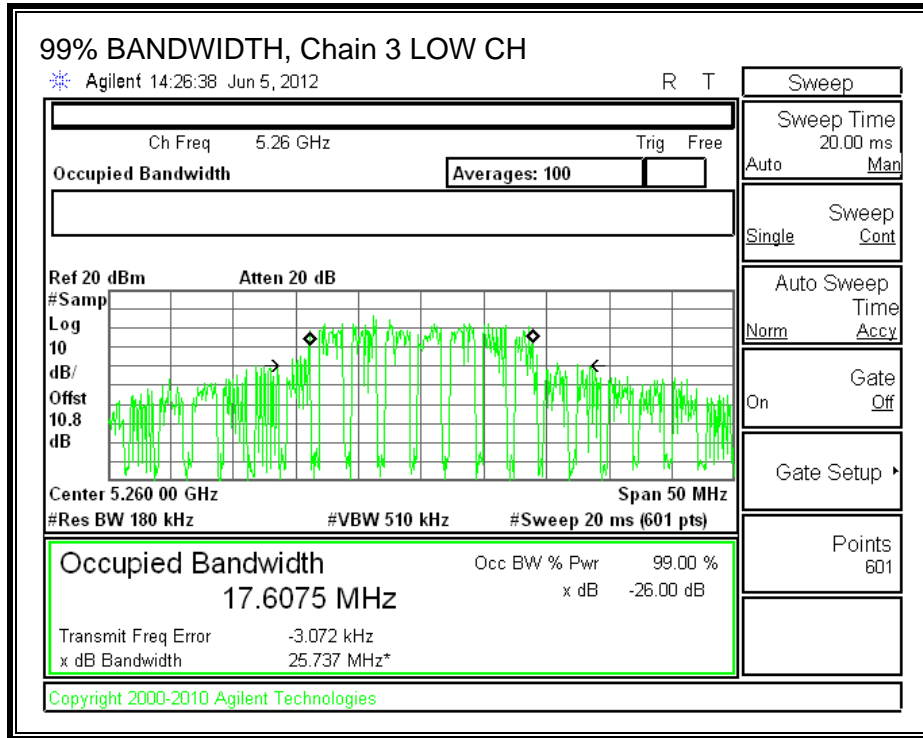


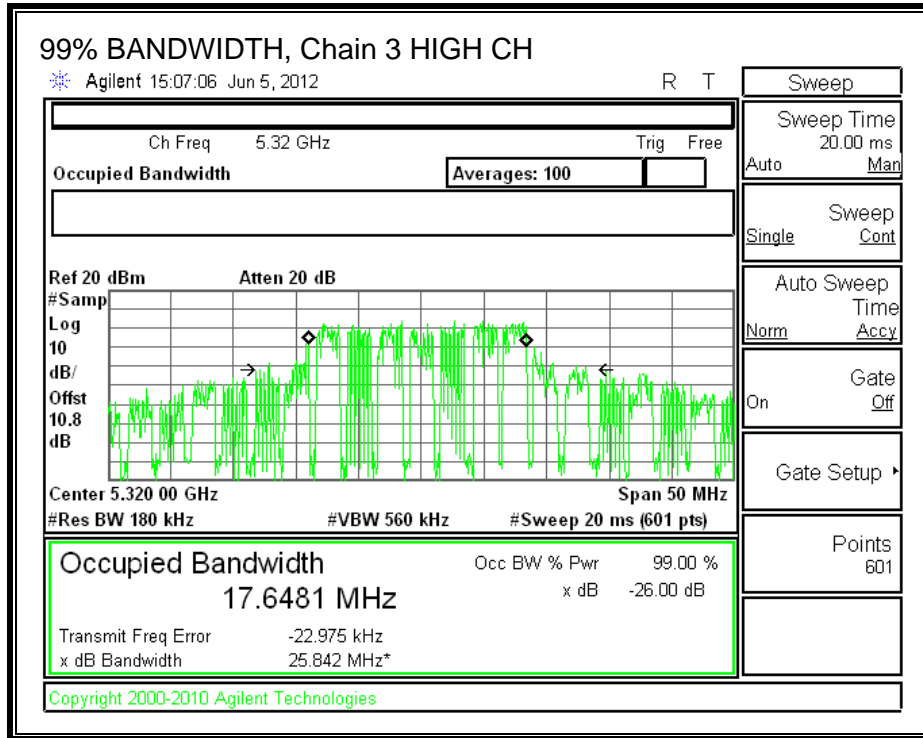
99% BANDWIDTH, Chain 2





99% BANDWIDTH, Chain 3





8.11.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.8 dB (including 10 dB pad and 0.80 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Chain 3 Power (dBm)	Total Power (dBm)
Low	5260	16.450	16.450	16.800	21.34
Mid	5300	16.500	15.700	17.400	21.36
High	5320	16.500	15.500	17.600	21.39

8.11.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

IC RSS-210 A9.2 (2)

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands 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 megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density 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 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Chain 3 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.00	3.81	5.61	4.55

RESULTS

Limits

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B (dBm)	Directional Gain (dBi)	Power Limit (dBm)	PPSD Limit (dBm)
Low	5260	24	28.50	25.55	4.55	24.00	11.00
Mid	5300	24	27.92	25.46	4.55	24.00	11.00
High	5320	24	28.67	25.57	4.55	24.00	11.00

Duty Cycle CF (dB)	1.921	Included in Calculations of Corr'd Power & PPSD
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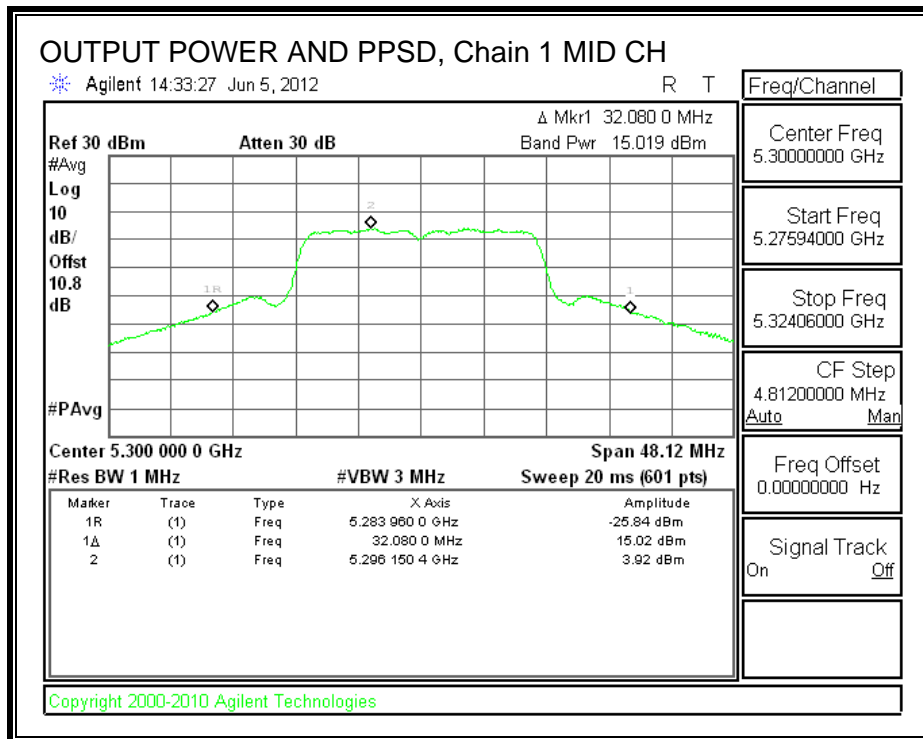
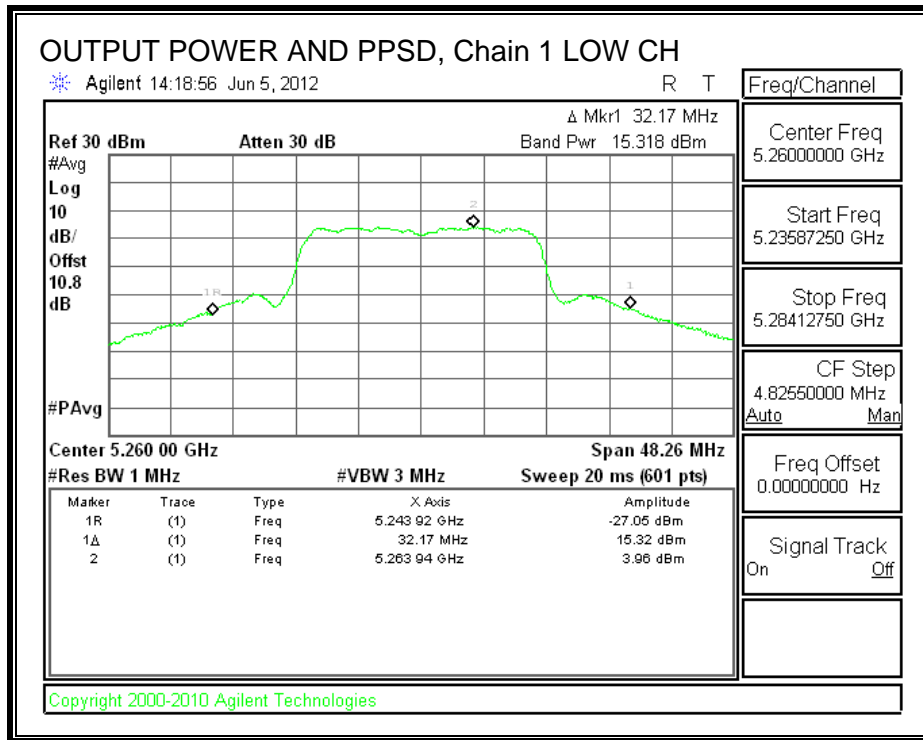
Output Power Results

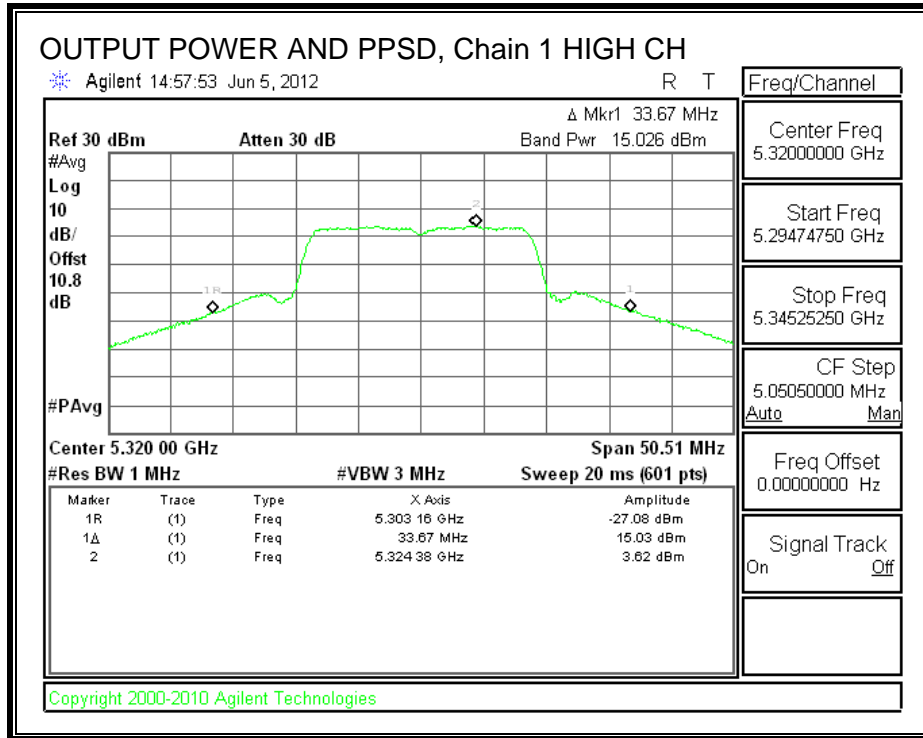
Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	15.318	15.416	15.712	22.177	24.00	-1.823
Mid	5300	15.019	14.441	15.987	21.889	24.00	-2.111
High	5320	15.026	14.004	16.326	21.915	24.00	-2.085

PPSD Results

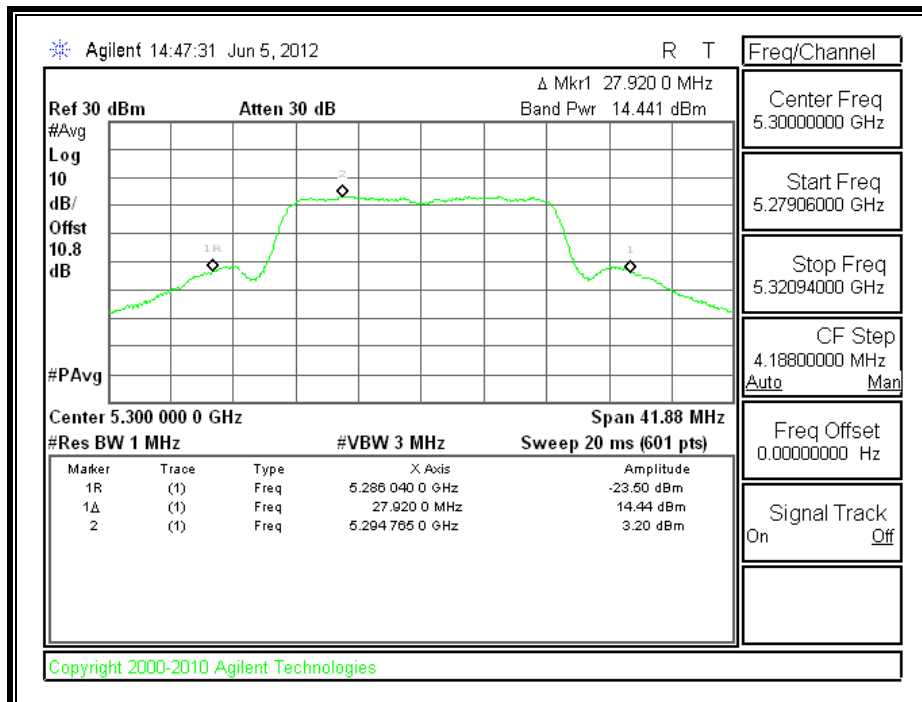
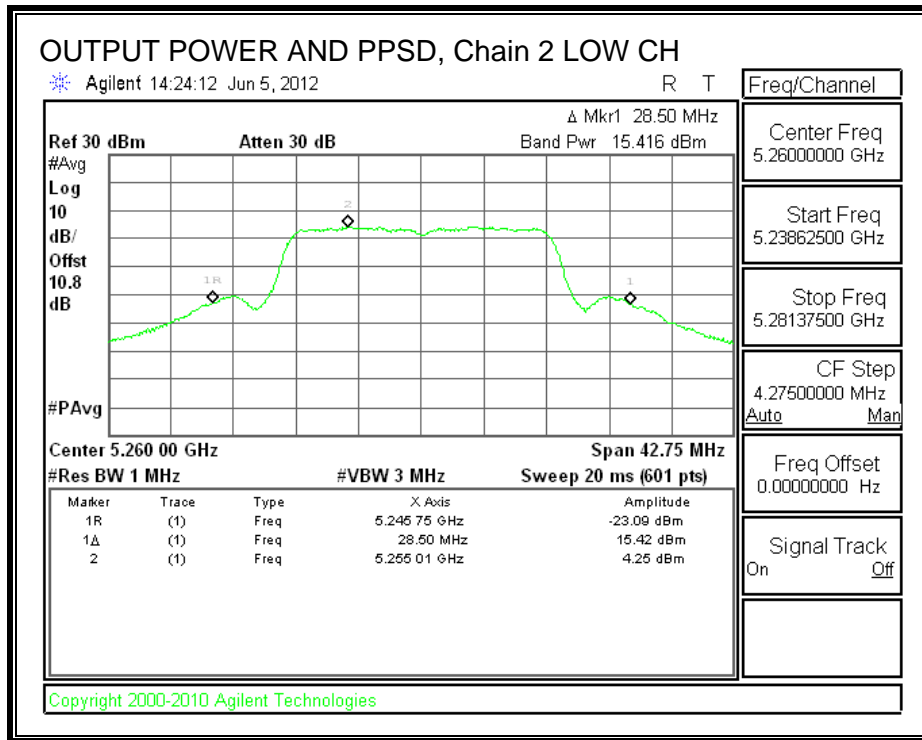
Channel	Frequency (MHz)	Chain 1 Meas PPSD (dBm)	Chain 2 Meas PPSD (dBm)	Chain 3 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	3.95	4.25	4.41	10.90	11.00	-0.10
Mid	5300	3.92	3.20	4.74	10.69	11.00	-0.31
High	5320	3.62	2.95	4.96	10.62	11.00	-0.38

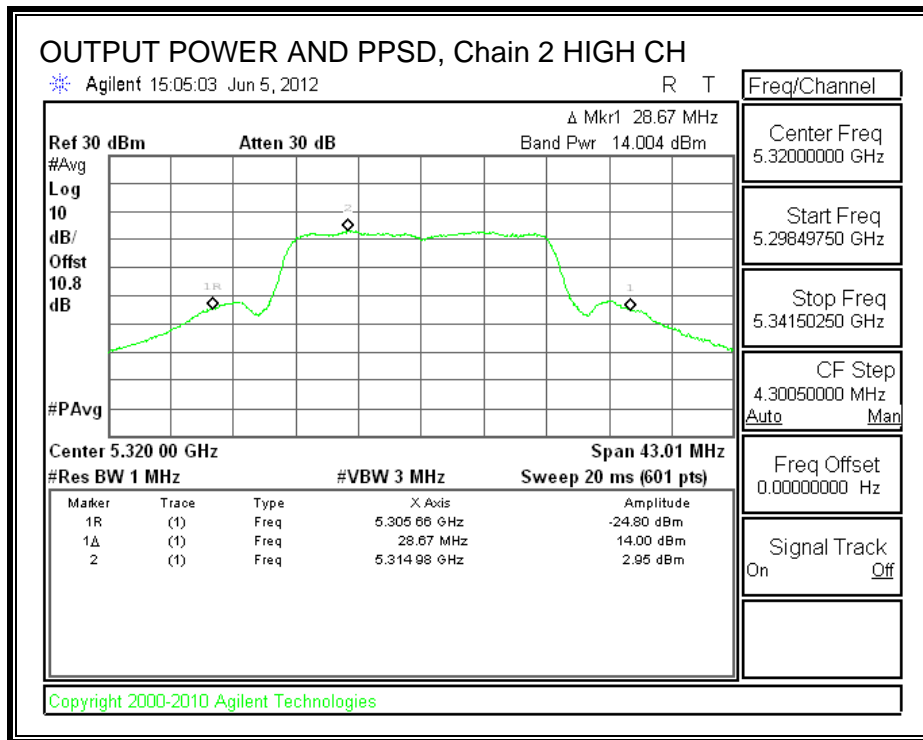
OUTPUT POWER AND PPSD, Chain 1



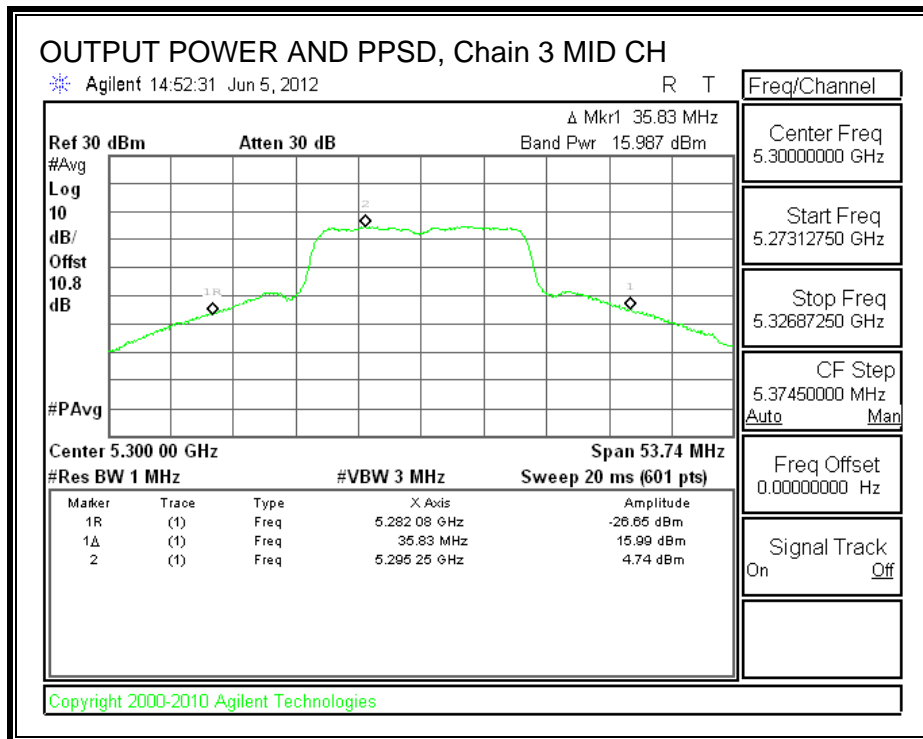
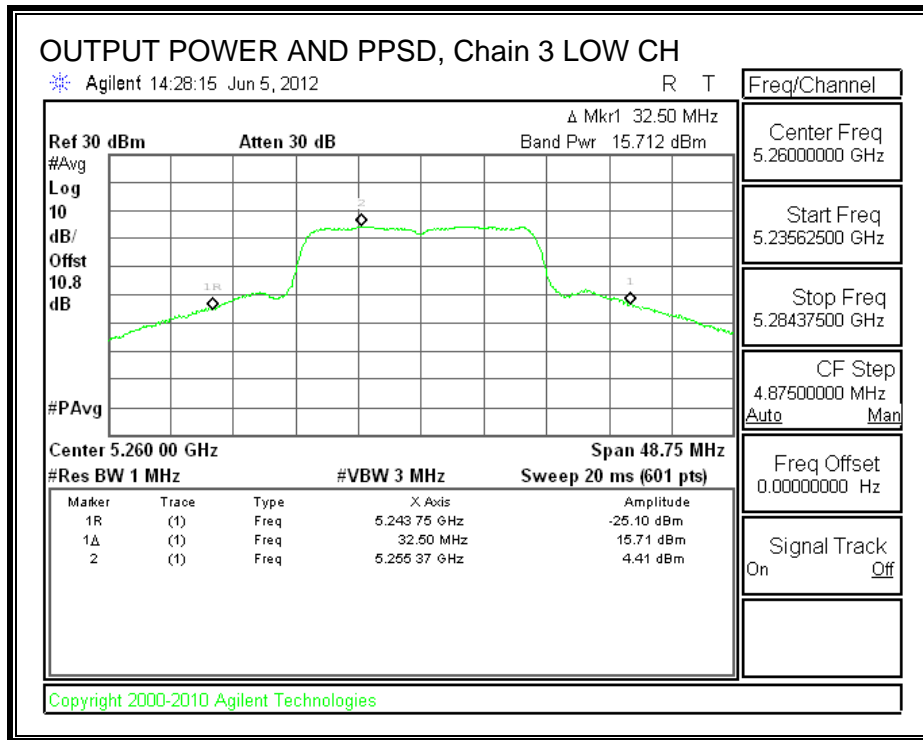


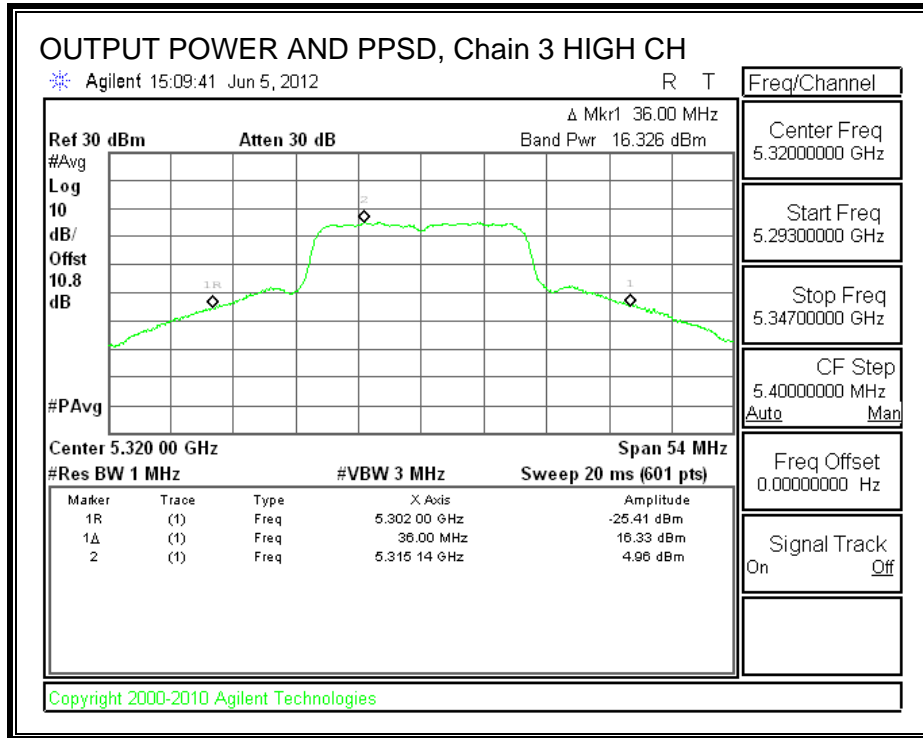
OUTPUT POWER AND PPSD, Chain 2





OUTPUT POWER AND PPSD, Chain 3





8.11.5. PEAK EXCURSION

LIMITS

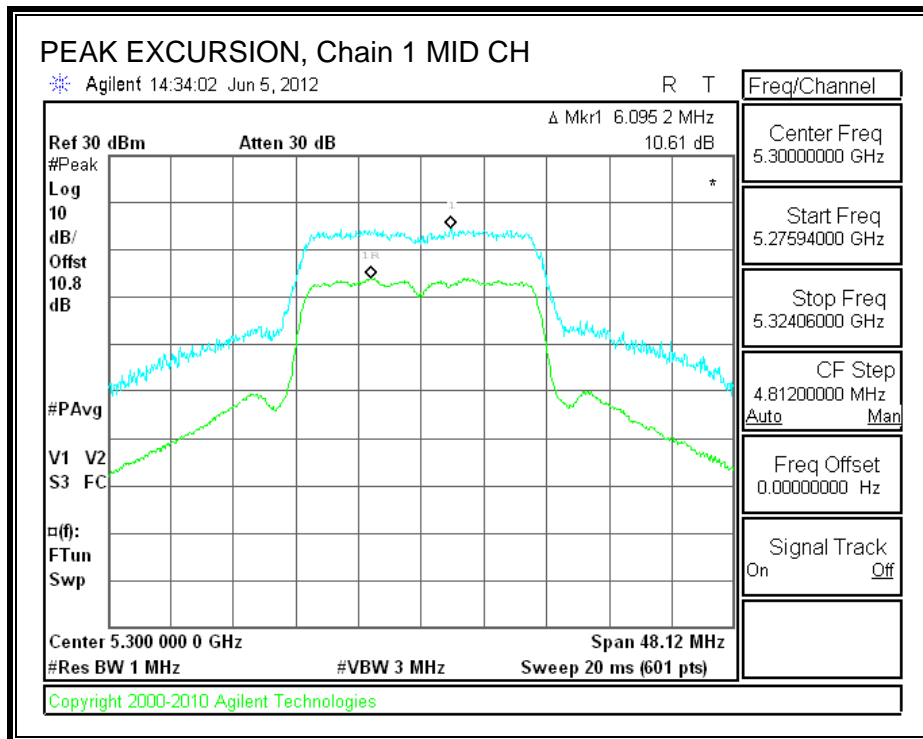
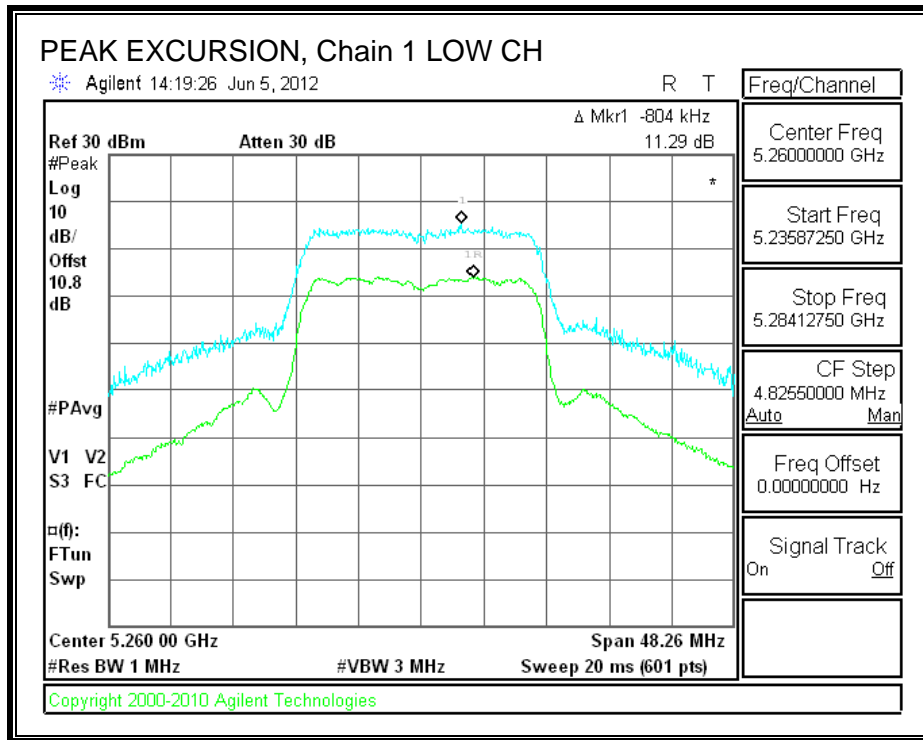
FCC §15.407 (a) (6)

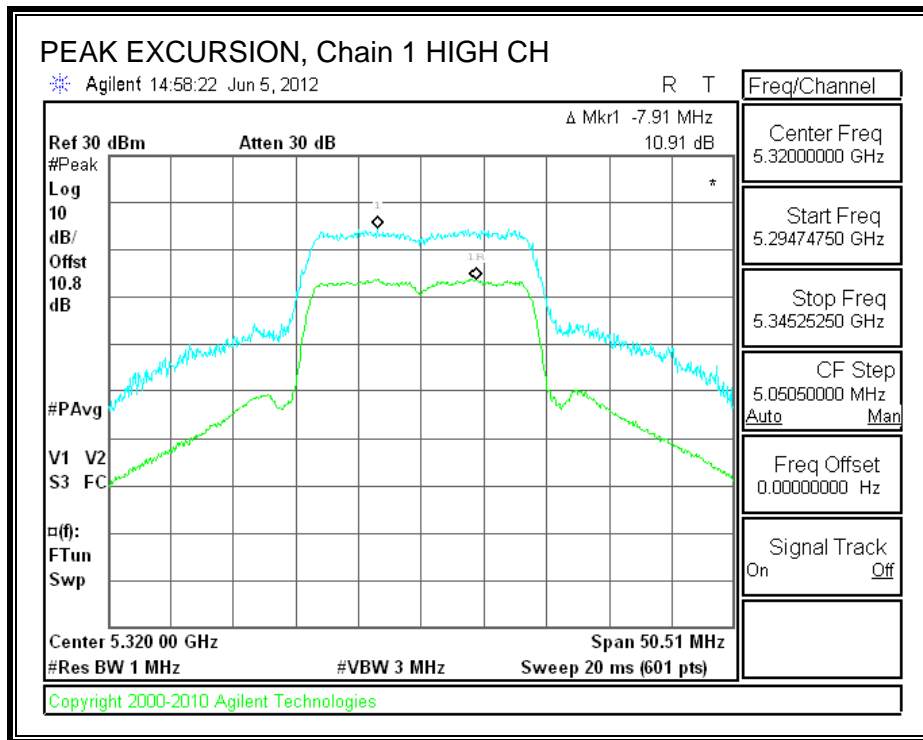
The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

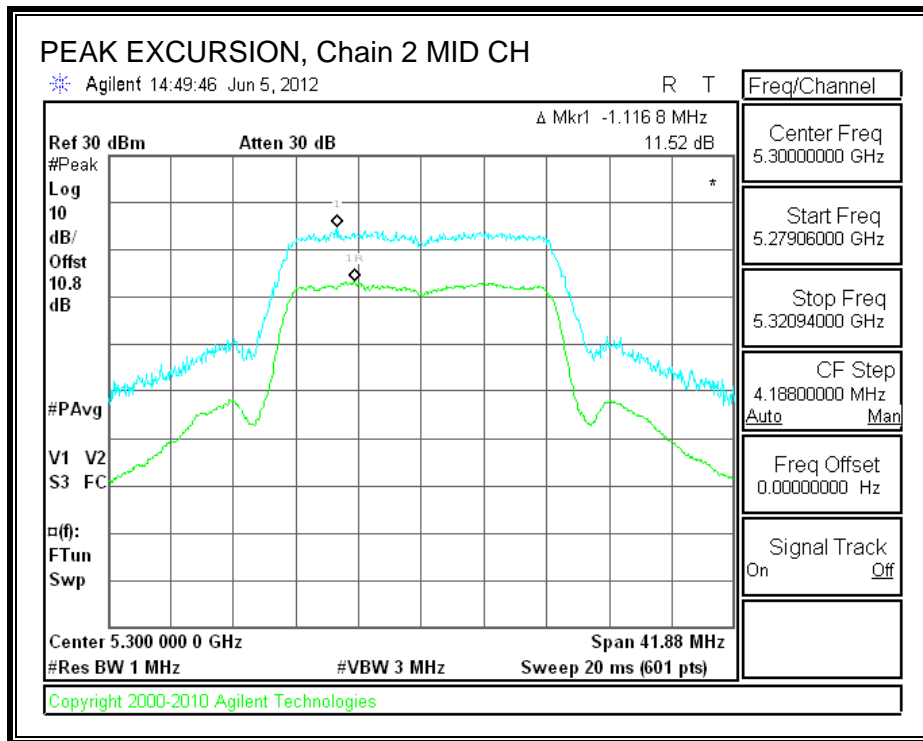
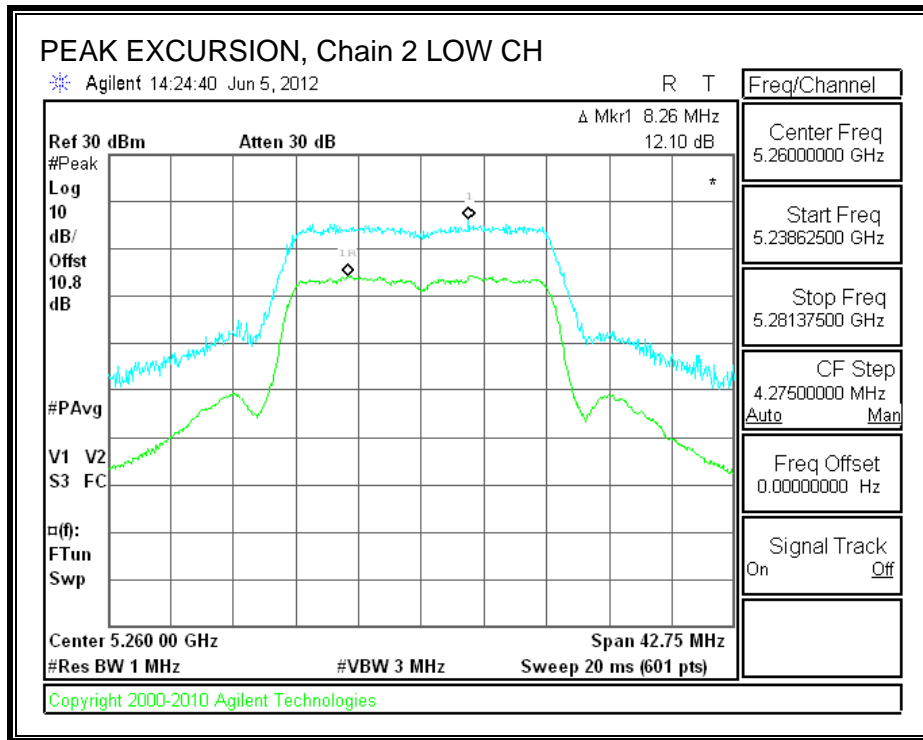
Channel	Frequency (MHz)	Pk Exc Chain 1 (dB)	Pk Exc Chain 2 (dB)	Pk Exc Chain 3 (dB)	Limit (dB)	Worst-Case Margin (dB)
Low	5260	11.29	12.10	10.91	13	-0.90
Mid	5300	10.61	11.52	11.19	13	-1.48
High	5320	10.91	10.65	10.77	13	-2.09

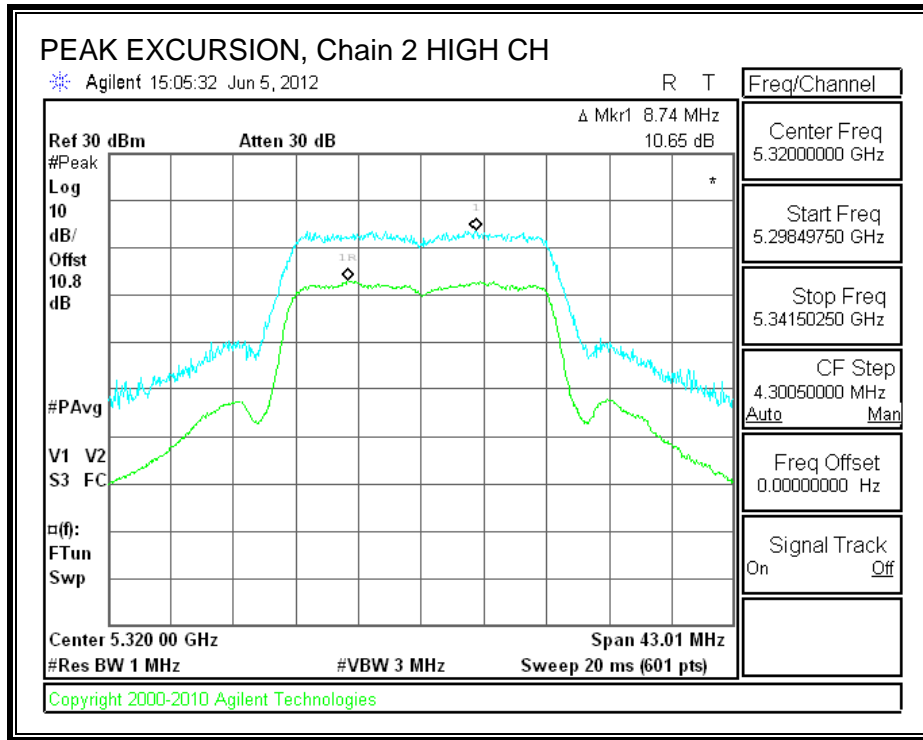
PEAK EXCURSION, Chain 1



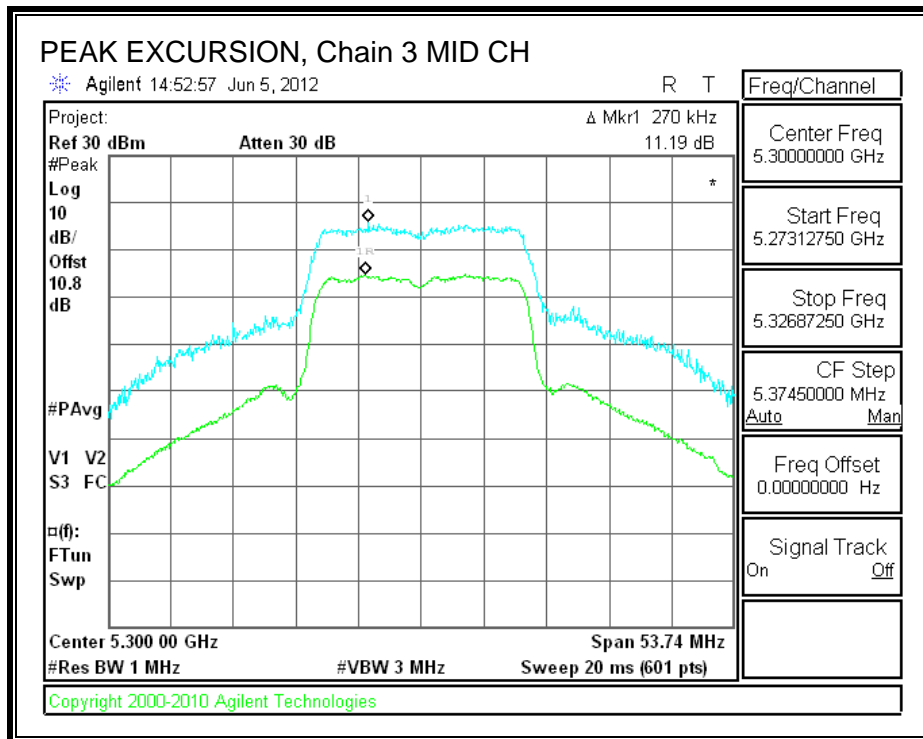
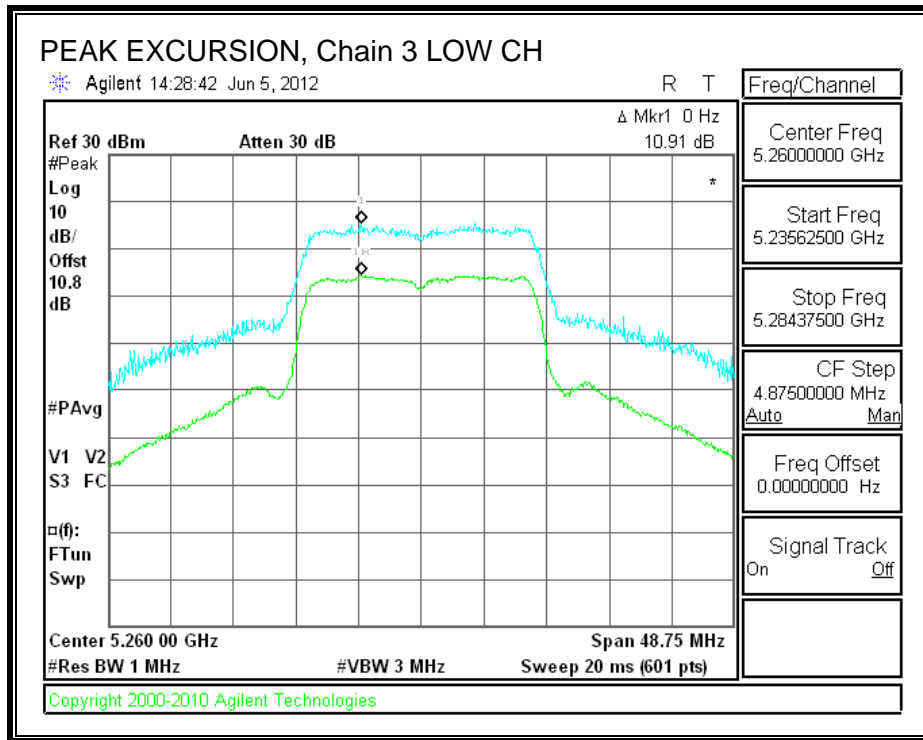


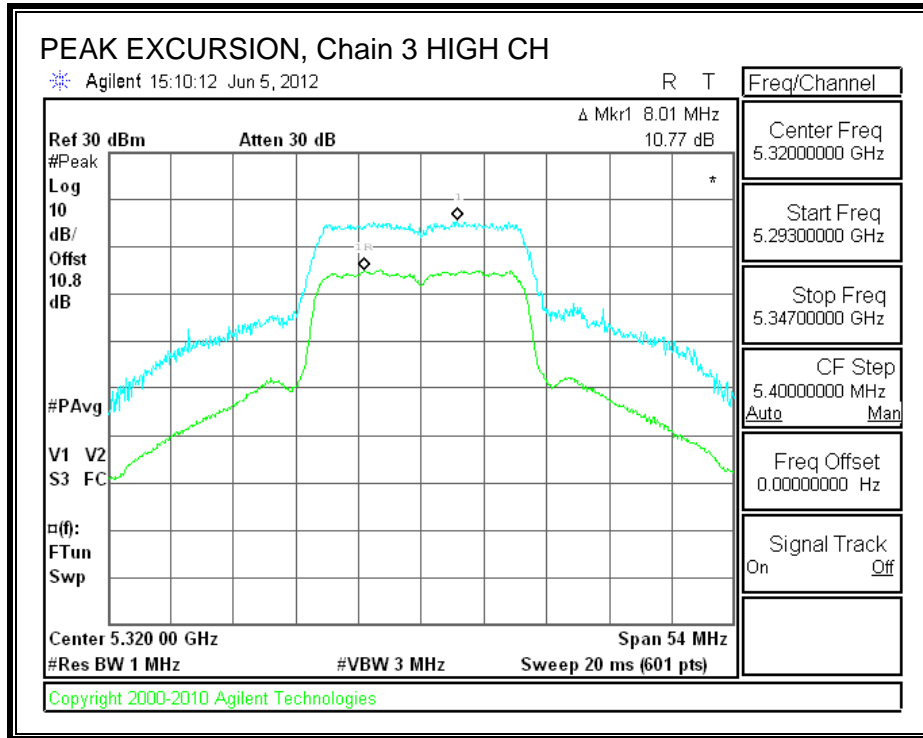
PEAK EXCURSION, Chain 2





PEAK EXCURSION, Chain 3





8.12. 802.11n HT40, CDD MCS0, 1TX, IN 5.3 GHz BAND

8.12.1. 26 dB BANDWIDTH

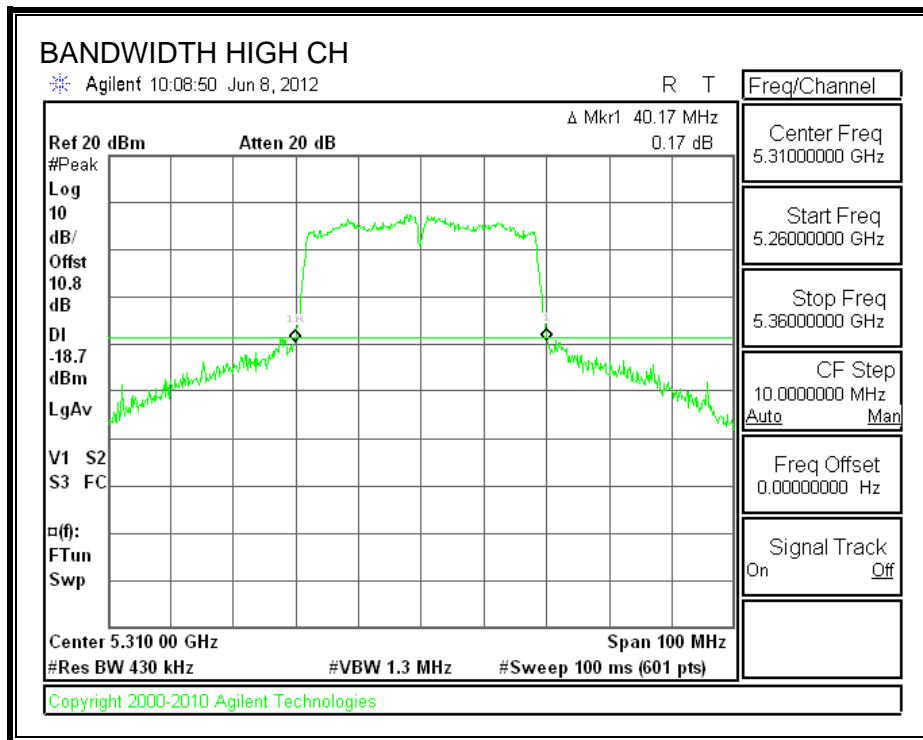
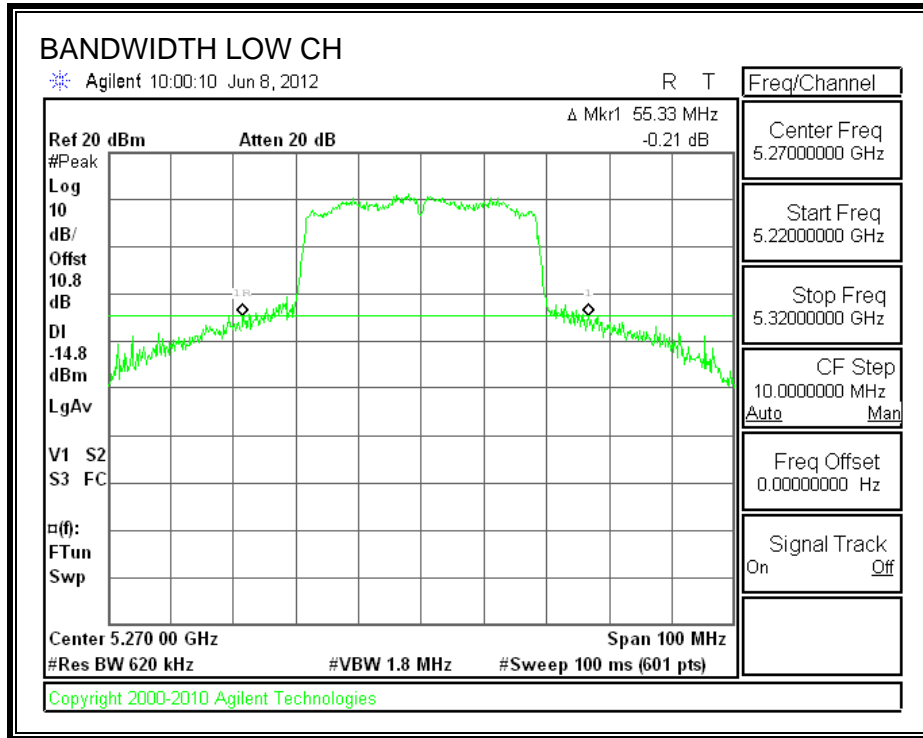
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5270	55.33
High	5310	40.17

26 dB BANDWIDTH



8.12.2. 99% BANDWIDTH

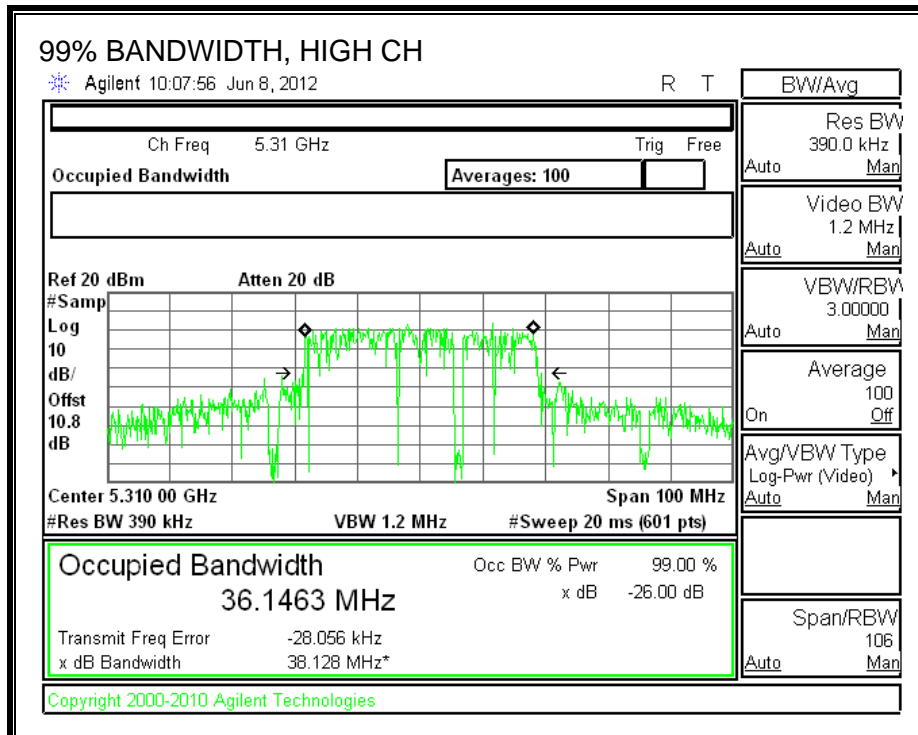
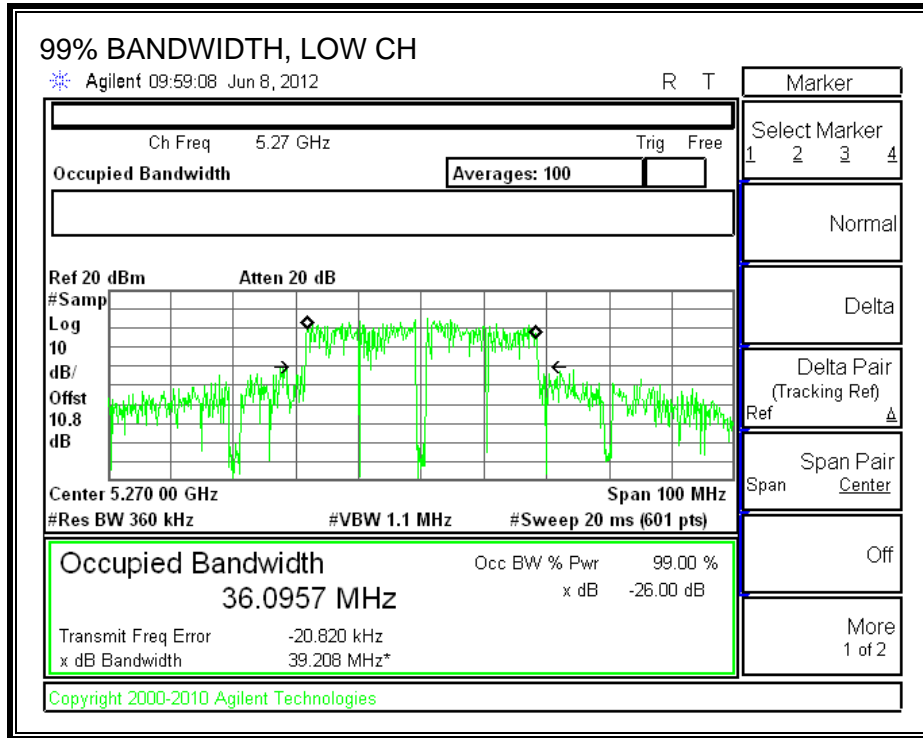
LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5270	36.0957
High	5310	36.1463

99% BANDWIDTH



8.12.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.8 dB (including 10 dB pad and 0.80 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5270	18.0
High	5310	16.1

8.12.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

IC RSS-210 A9.2 (2)

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands 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 megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density 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

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B Limit (dBm)	Directional Gain (dBi)	Power Limit (dBm)	PPSD Limit (dBm)
Low	5270	24	55.33	28.43	5.61	24.00	11.00
High	5310	24	40.17	27.04	5.61	24.00	11.00

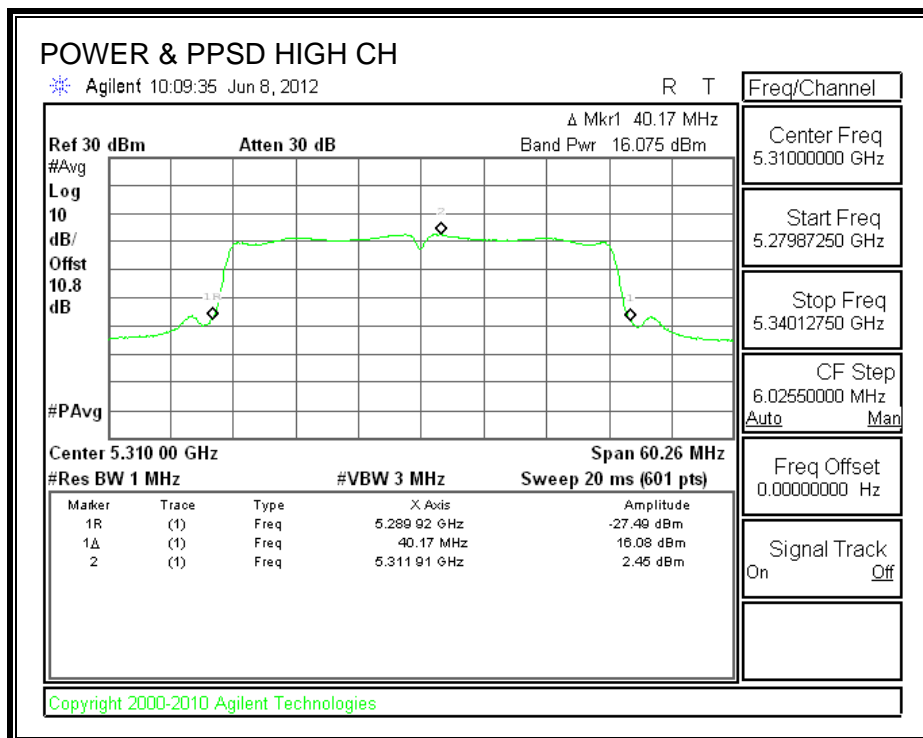
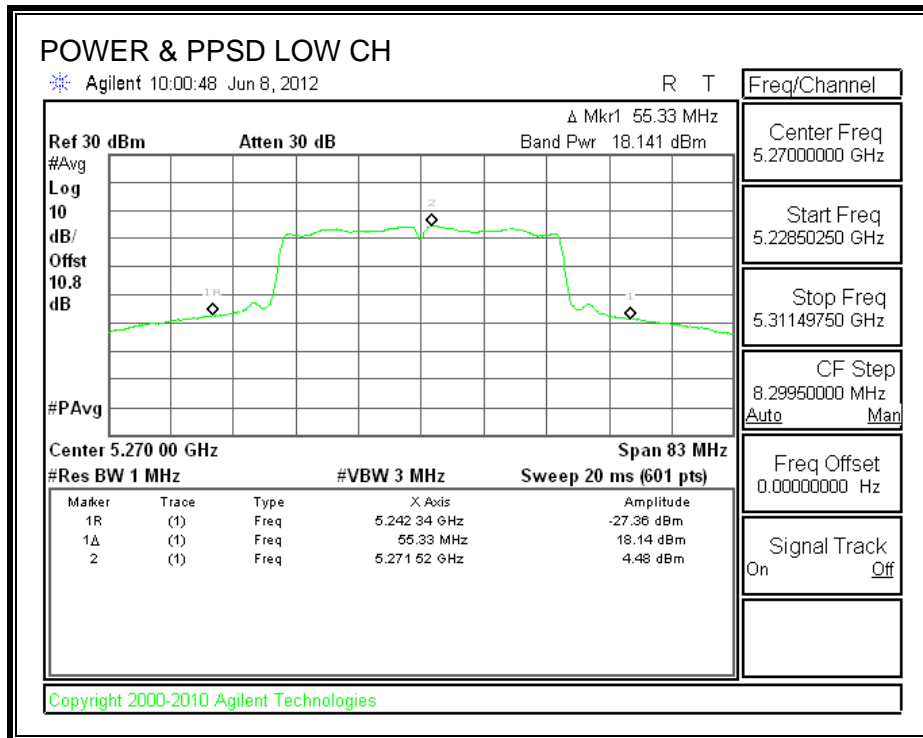
Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	18.141	18.141	24.00	-5.859
High	5310	16.075	16.075	24.00	-7.925

PPSD Results

Channel	Frequency (MHz)	Meas PPSD (dBm)	Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5270	4.48	4.48	11.00	-6.52
High	5310	2.45	2.45	11.00	-8.55

OUTPUT POWER AND PPSD



8.12.5. PEAK EXCURSION

LIMITS

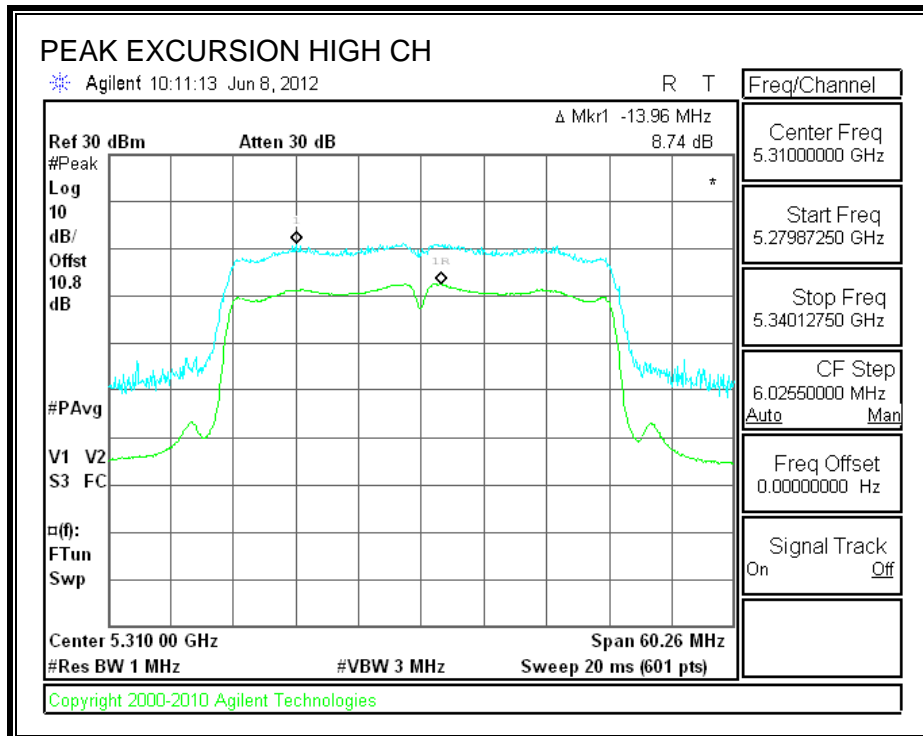
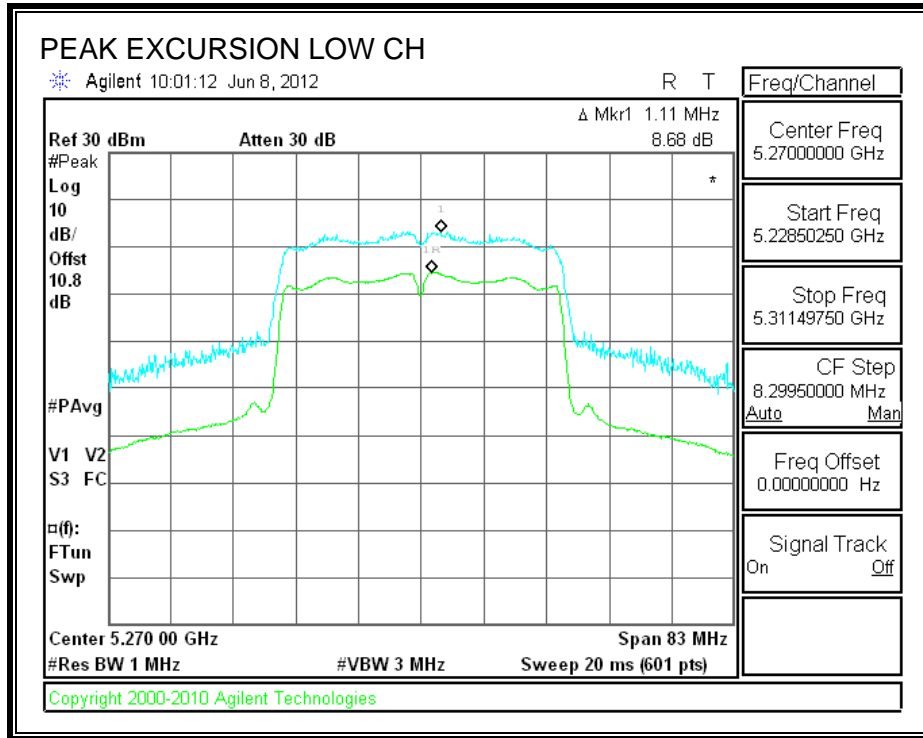
FCC §15.407 (a) (6)

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

Channel	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Low	5270	8.68	13	-4.32
High	5310	8.74	13	-4.26

PEAK EXCURSION



8.13. 802.11n HT40, CDD MCS0, 2TX, 5.3 GHz BAND

8.13.1. 26 dB BANDWIDTH

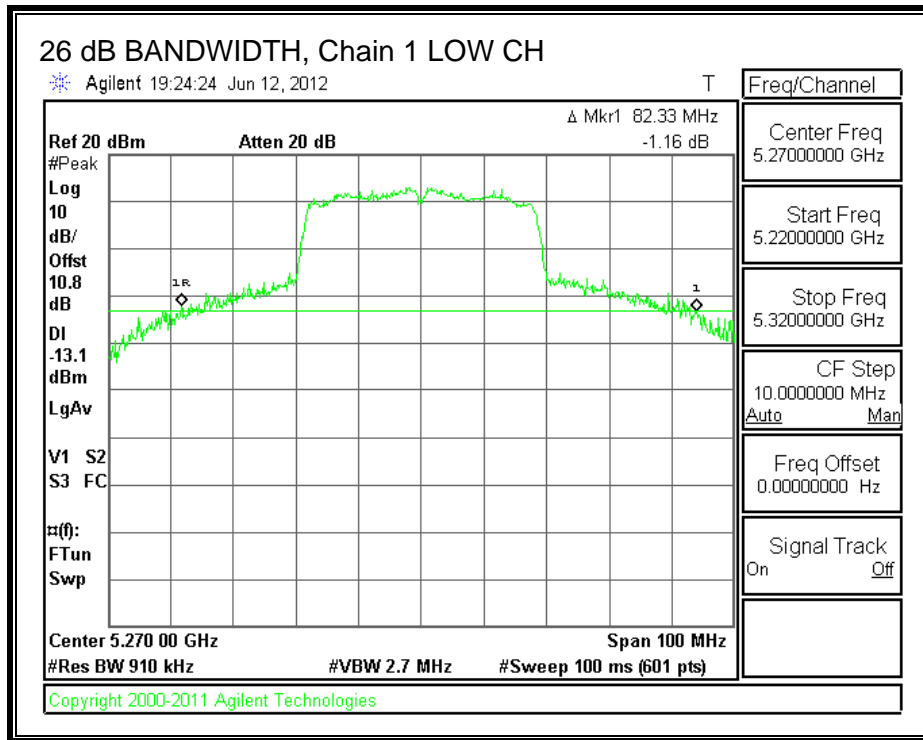
LIMITS

None; for reporting purposes only.

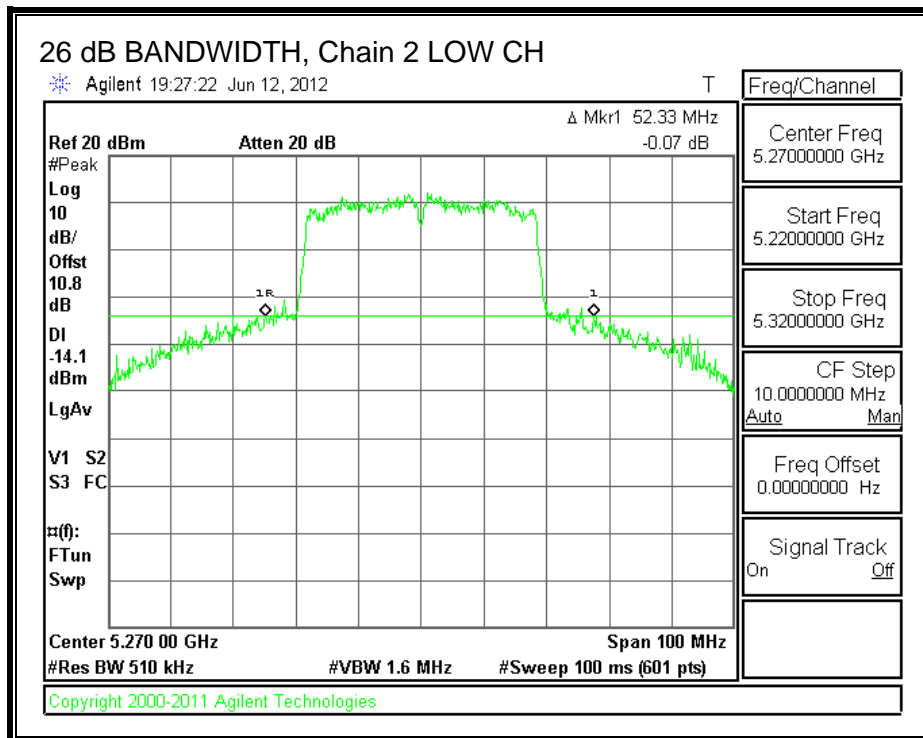
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Low	5270	82.33	52.33

26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



8.13.2. 99% BANDWIDTH

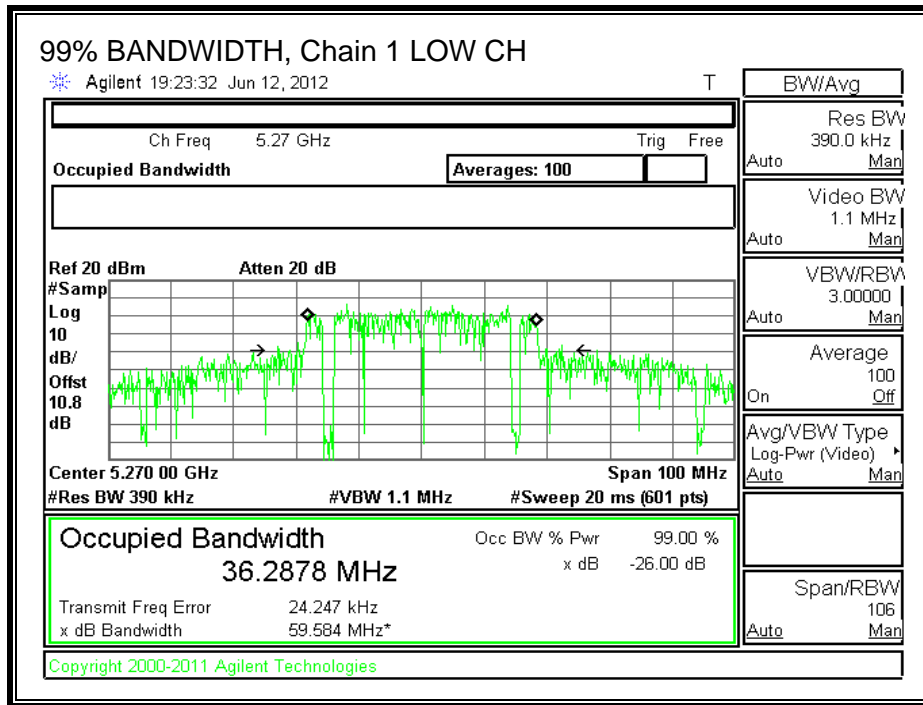
LIMITS

None; for reporting purposes only.

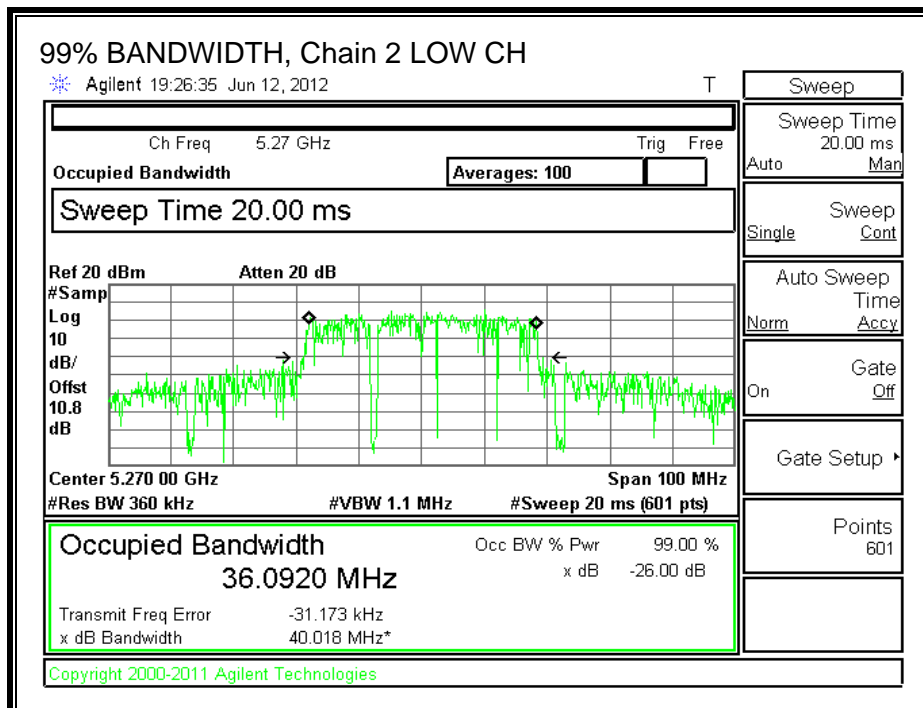
RESULTS

Channel	Frequency (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	5270	32.2878	36.0920

99% BANDWIDTH, Chain 1



99% BANDWIDTH, Chain 2



8.13.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.8 dB (including 10 dB pad and 0.80 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Total Power (dBm)
Low	5270	17.60	17.55	20.59

8.13.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

IC RSS-210 A9.2 (2)

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands 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 megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density 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 and the antenna gain is unequal among the chains. The directional gain is:

Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.00	5.61	7.85

RESULTS

Limits

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B Limit (dBm)	Directional Gain (dBi)	Power Limit (dBm)	PPSD Limit (dBm)
Low	5270	24	52.33	28.19	7.85	22.15	9.15

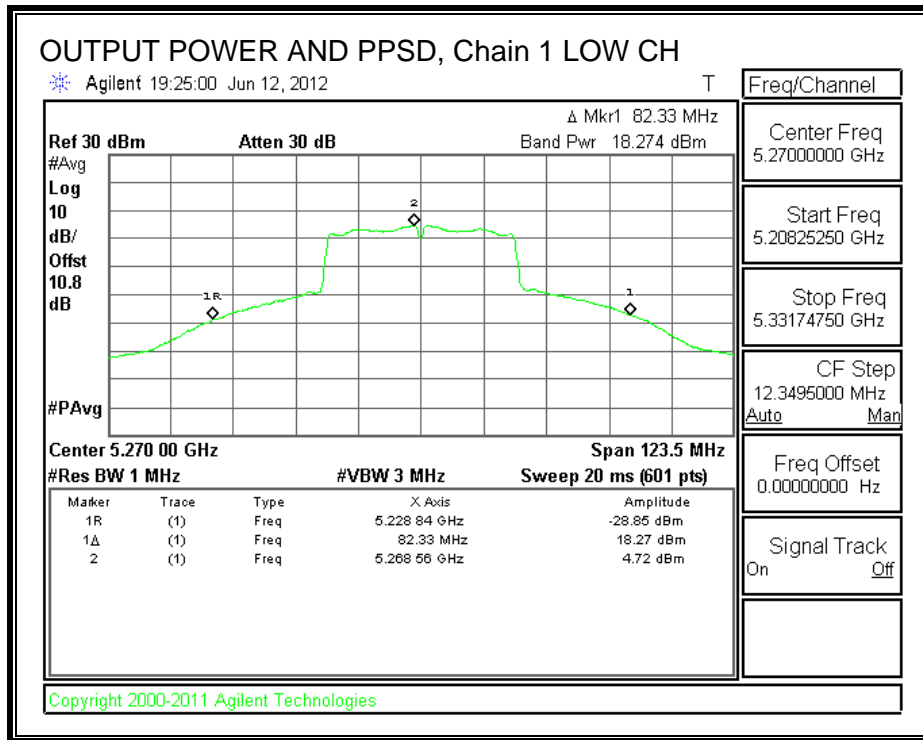
Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	18.274	18.260	21.277	22.15	-0.873

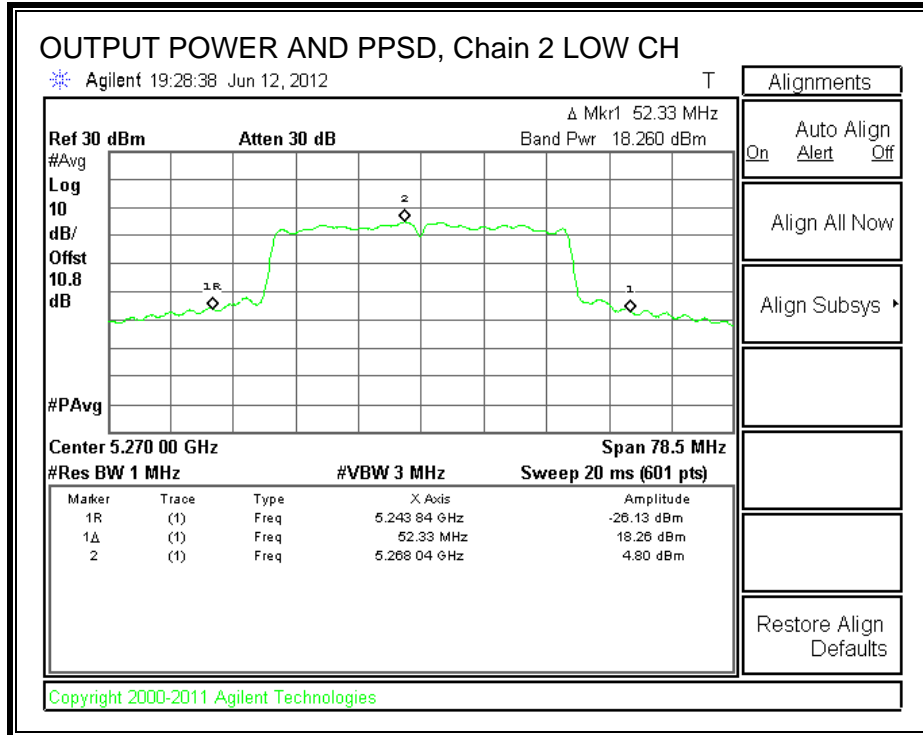
PPSD Results

Channel	Frequency (MHz)	Chain 1 Meas PPSD (dBm)	Chain 2 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5270	4.72	4.80	7.77	9.15	-1.38

OUTPUT POWER AND PPSD, Chain 1



OUTPUT POWER AND PPSD, Chain 2



8.13.5. PEAK EXCURSION

LIMITS

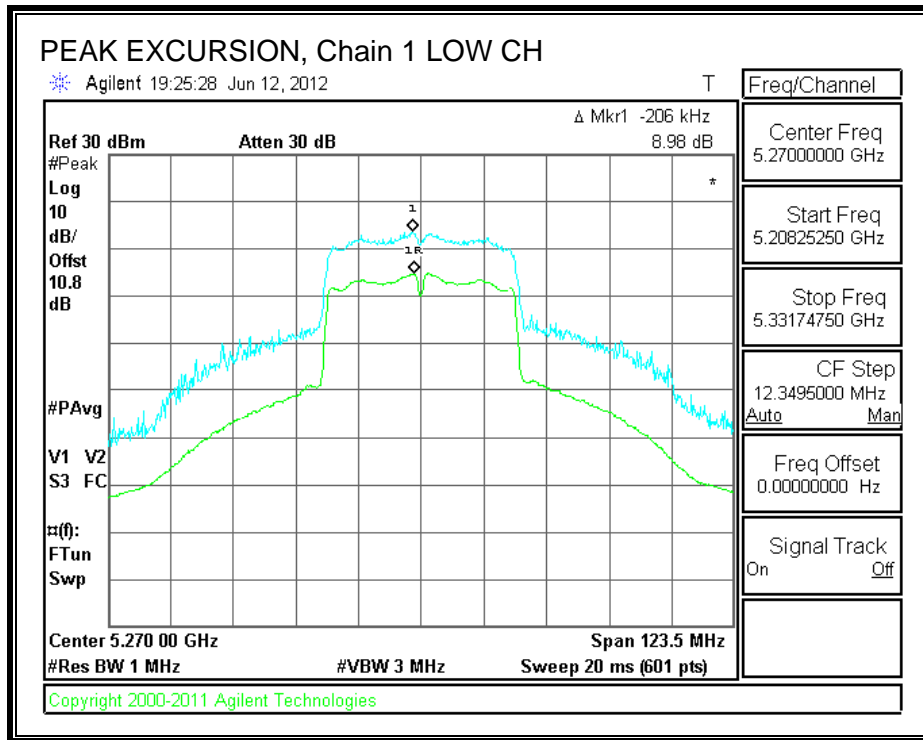
FCC §15.407 (a) (6)

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

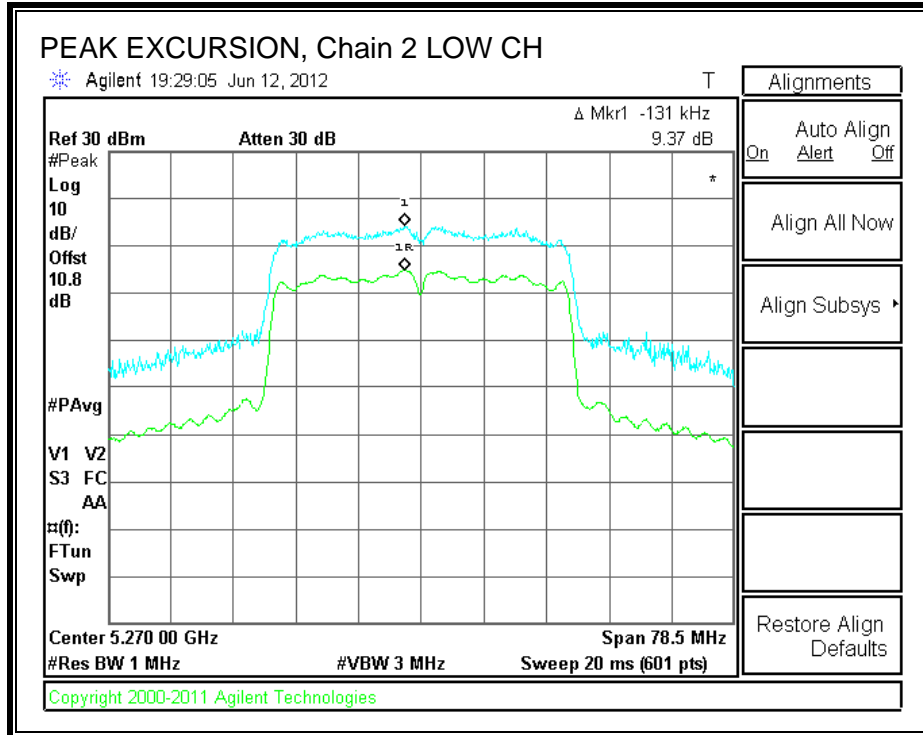
RESULTS

Channel	Frequency (MHz)	Pk Exc Chain 1 (dB)	Pk Exc Chain 2 (dB)	Limit (dB)	Worst-Case Margin (dB)
Low	5190	8.98	9.37	13	-3.6

PEAK EXCURSION, Chain 1



PEAK EXCURSION, Chain 2



8.14. 802.11n HT40, CDD MCS0, 3TX, 5.3 GHz BAND

8.14.1. 26 dB BANDWIDTH

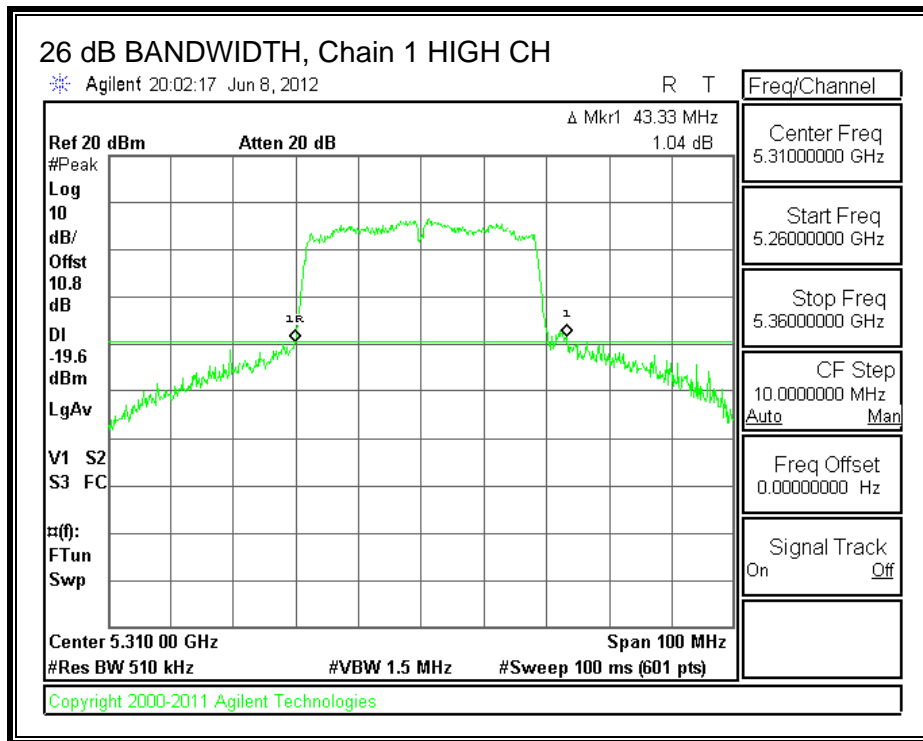
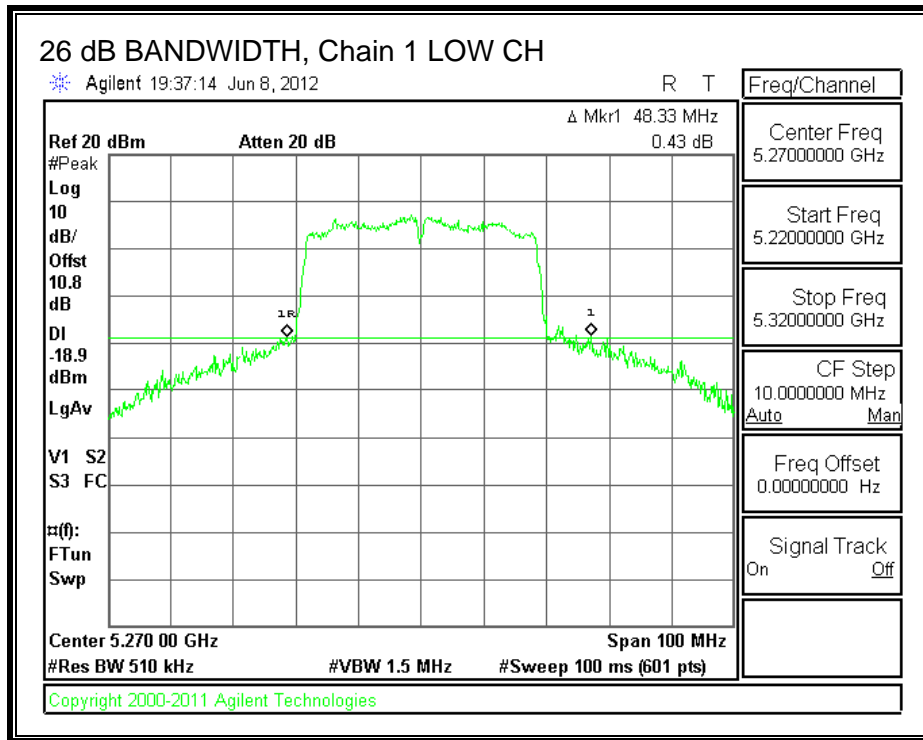
LIMITS

None; for reporting purposes only.

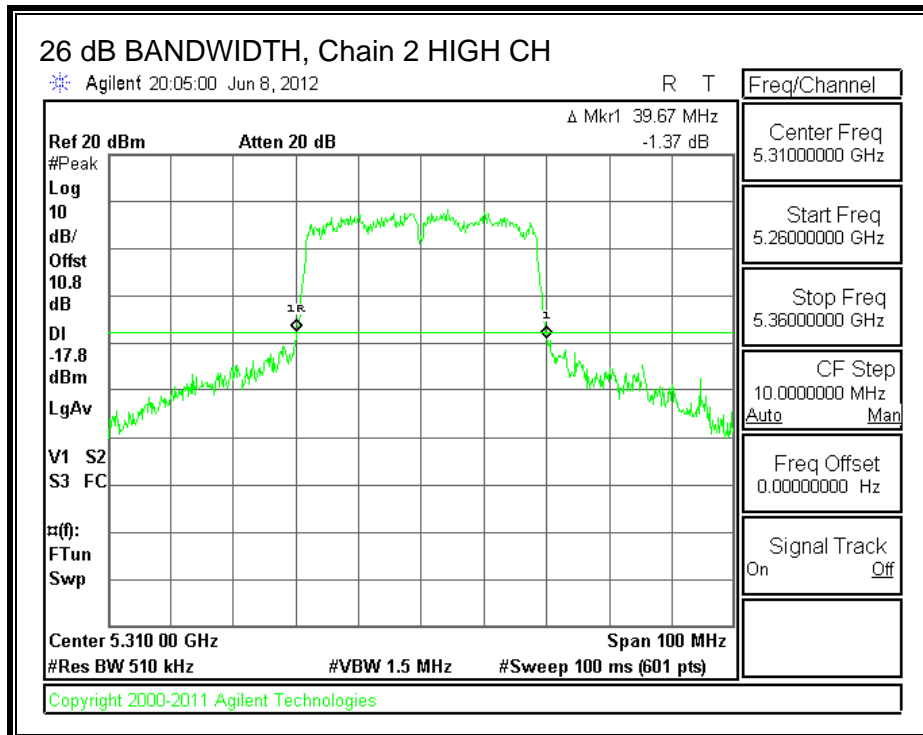
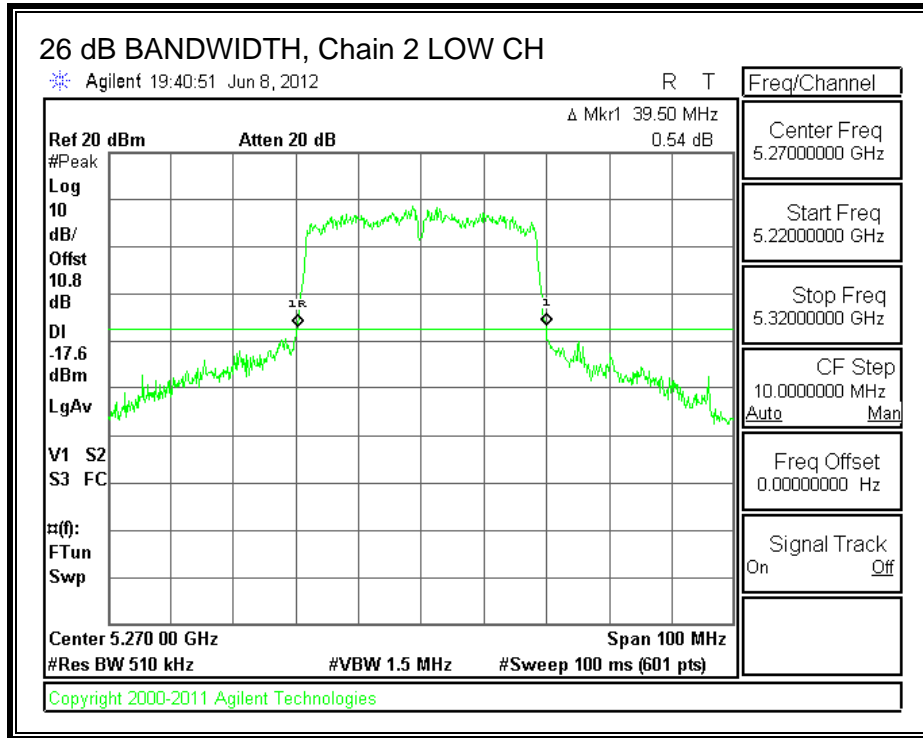
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5270	48.33	39.50	50.00
High	5310	43.33	39.67	41.83

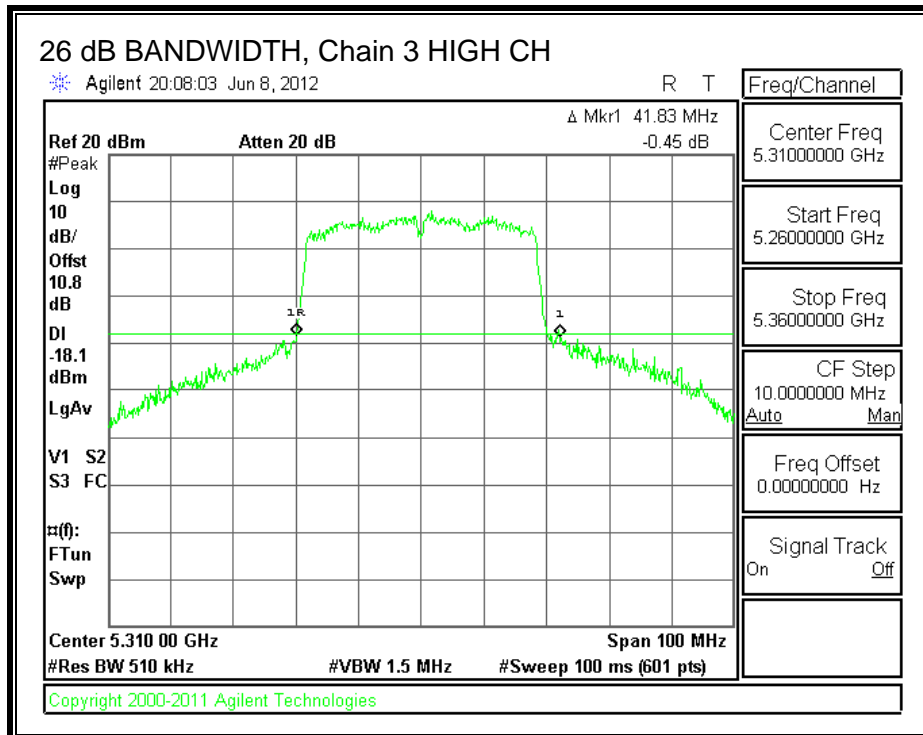
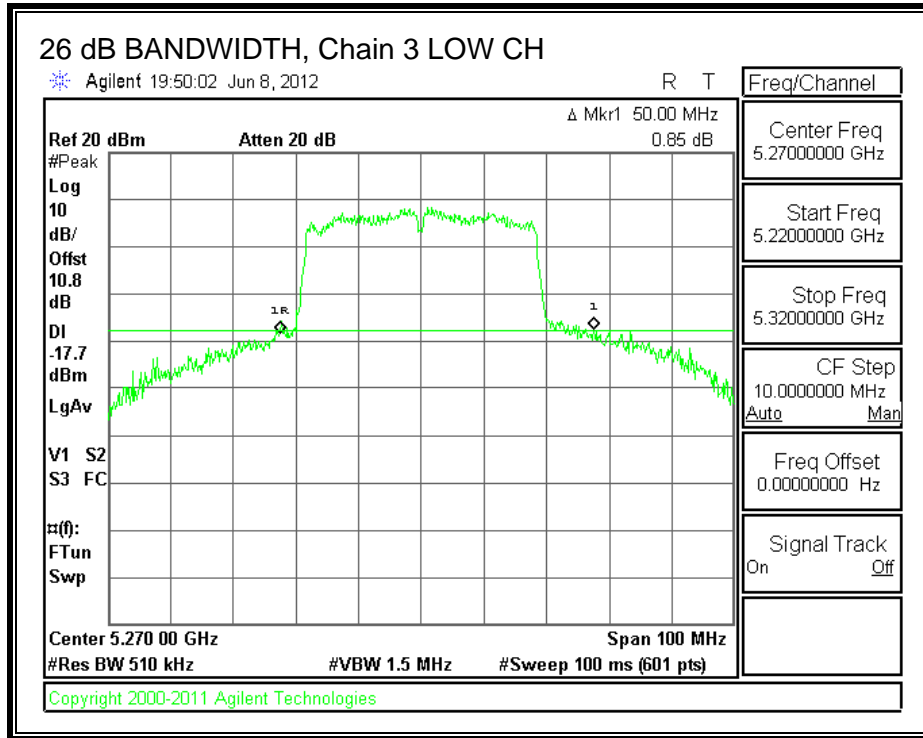
26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



26 dB BANDWIDTH, Chain 3



8.14.2. 99% BANDWIDTH

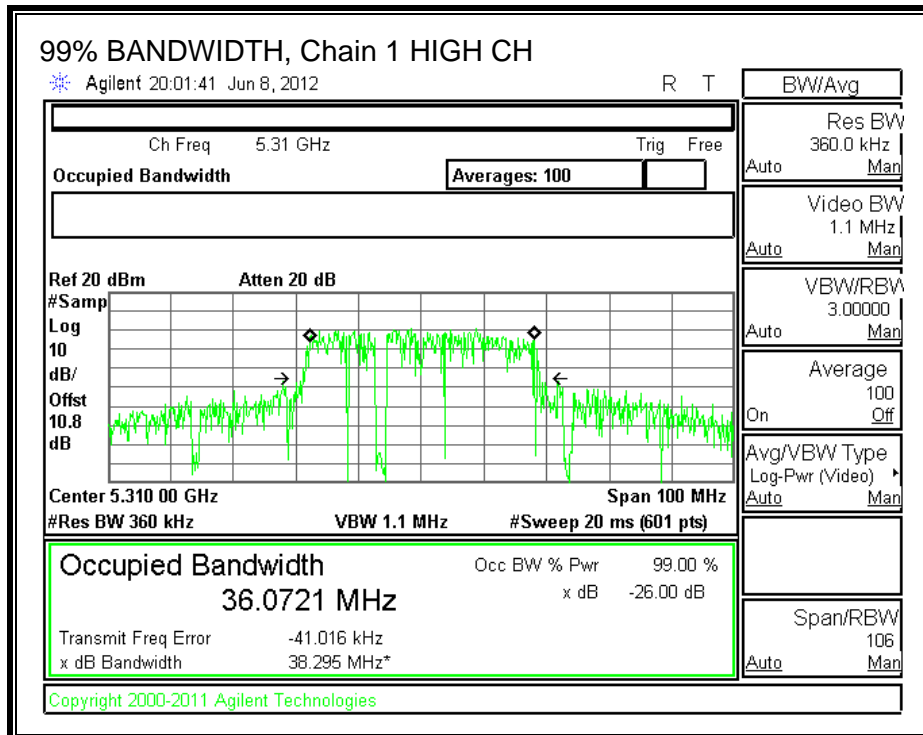
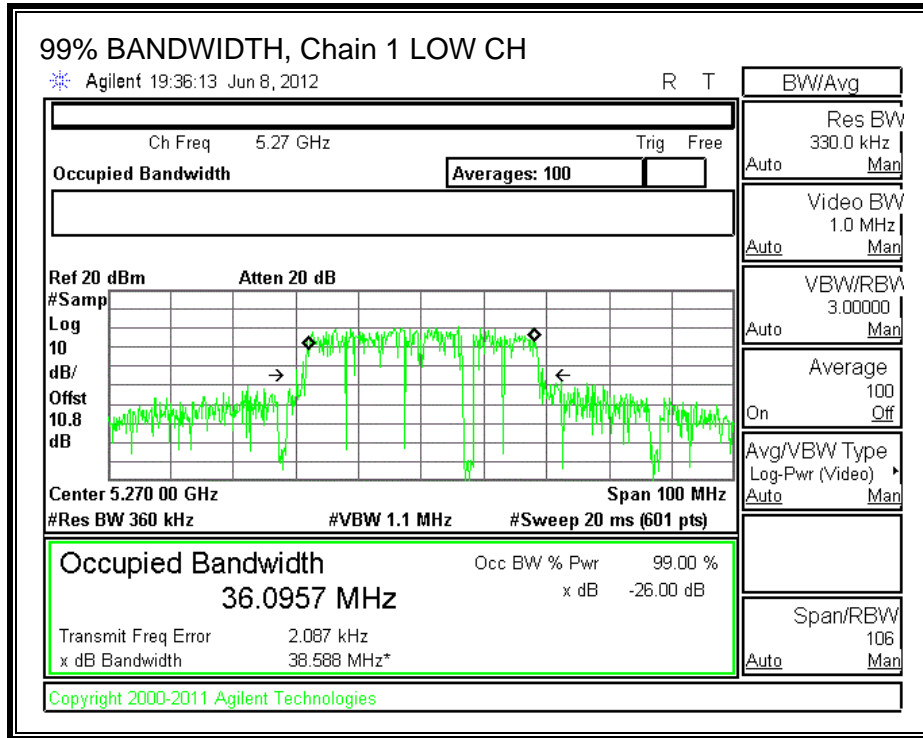
LIMITS

None; for reporting purposes only.

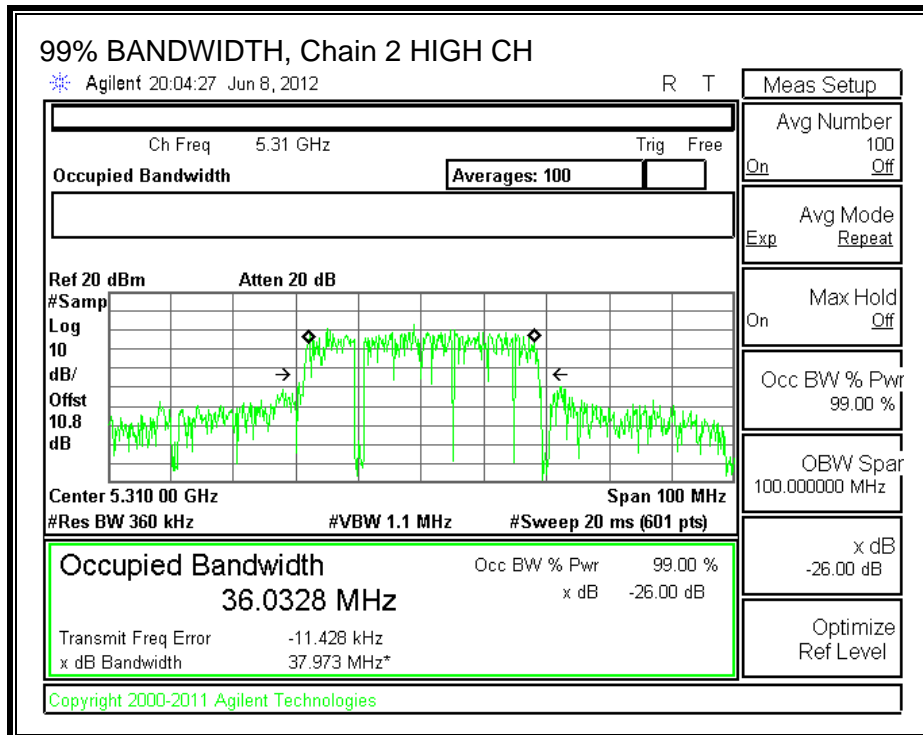
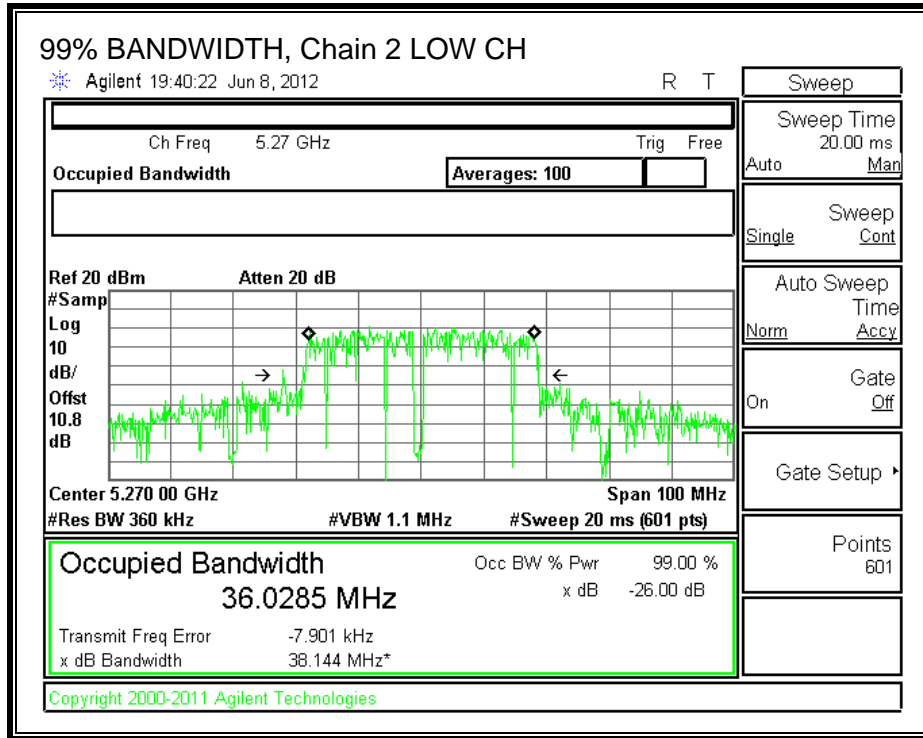
RESULTS

Channel	Frequency (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)	99% BW Chain 3 (MHz)
Low	5270	36.0957	36.0285	36.1176
High	5310	36.0721	36.0328	36.0694

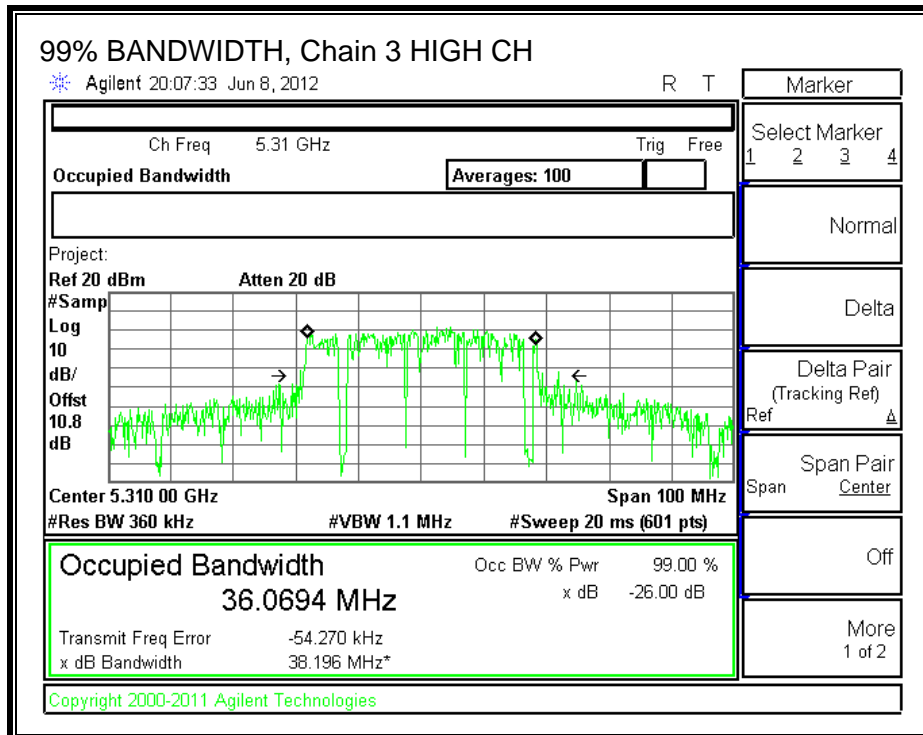
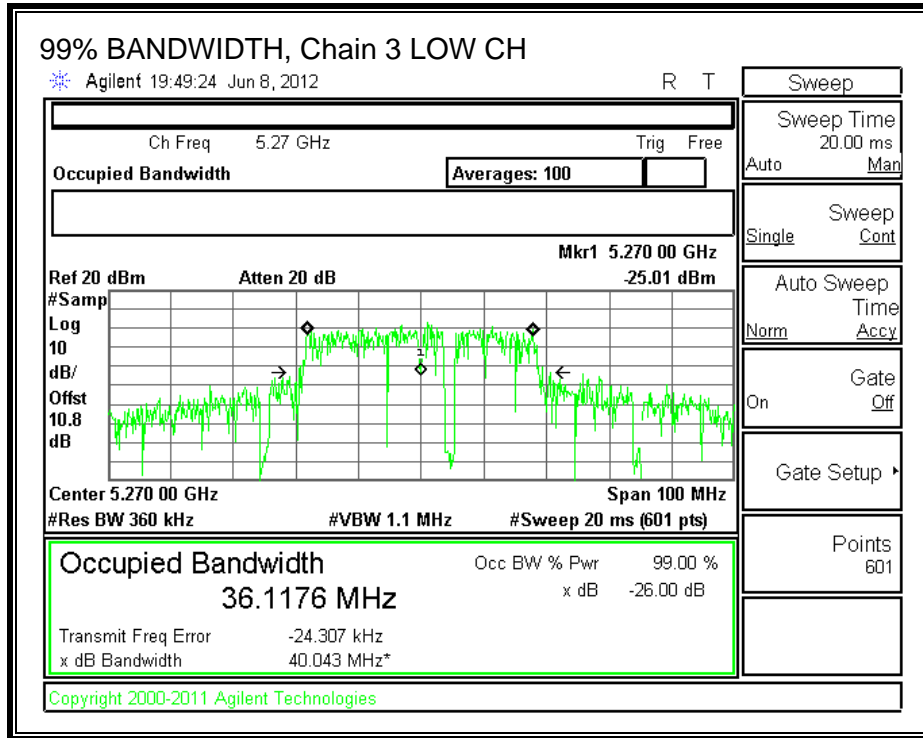
99% BANDWIDTH, Chain 1



99% BANDWIDTH, Chain 2



99% BANDWIDTH, Chain 3



8.14.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.8 dB (including 10 dB pad and 0.80 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Chain 3 Power (dBm)	Total Power (dBm)
Low	5270	15.00	15.10	15.20	19.87
High	5310	14.10	14.10	14.20	18.90

8.14.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

IC RSS-210 A9.2 (2)

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands 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 megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density 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 and the antenna gain is unequal among the chains. The directional gain is:

Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Chain 3 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.00	3.81	5.61	9.28

RESULTS

Limits

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B Limit (dBm)	Directional Gain (dBi)	Power Limit (dBm)	PPSD Limit (dBm)
Low	5270	24	39.50	26.97	9.28	20.72	7.72
High	5310	24	39.67	26.98	9.28	20.72	7.72

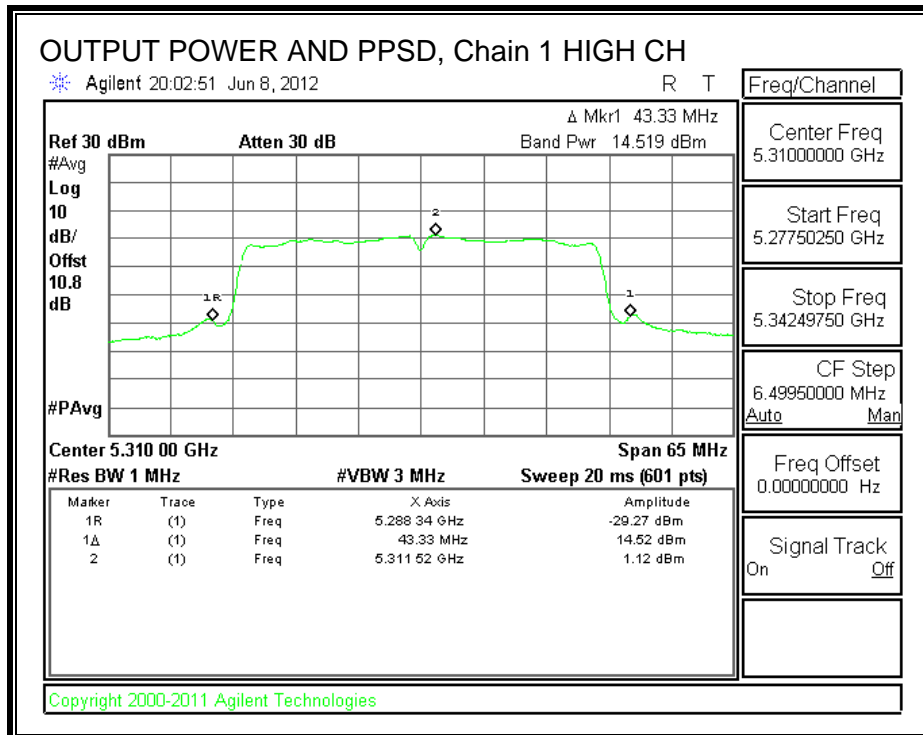
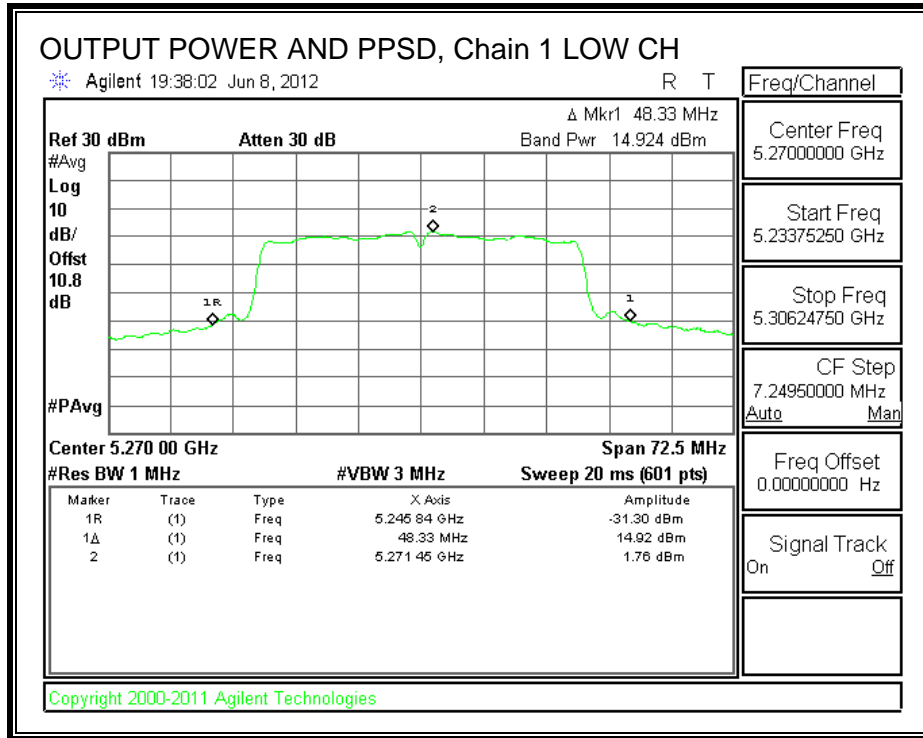
Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	14.924	15.562	15.376	20.067	20.72	-0.653
High	5310	14.519	14.328	14.412	19.192	20.72	-1.528

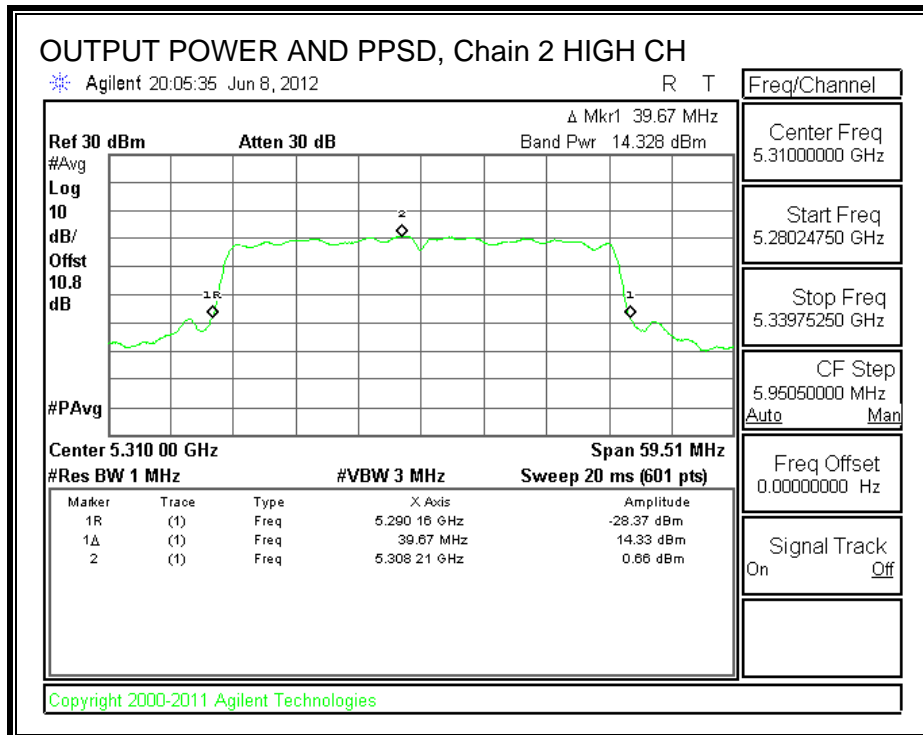
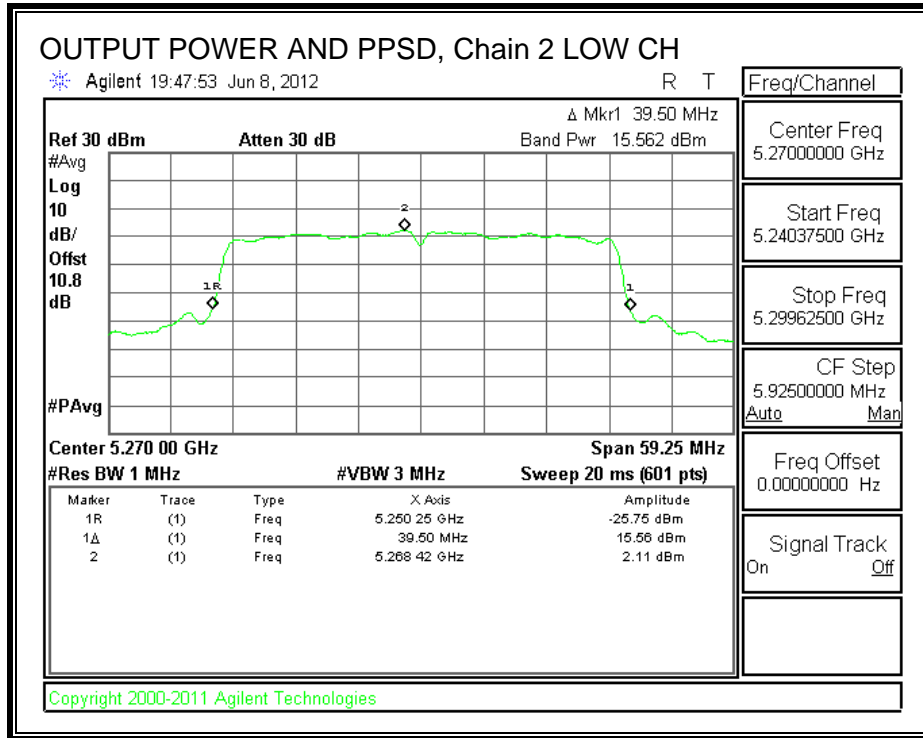
PPSD Results

Channel	Frequency (MHz)	Chain 1 Meas PPSD (dBm)	Chain 2 Meas PPSD (dBm)	Chain 3 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5270	1.76	2.11	2.14	6.78	7.72	-0.94
High	5310	1.12	0.66	1.15	5.75	7.72	-1.97

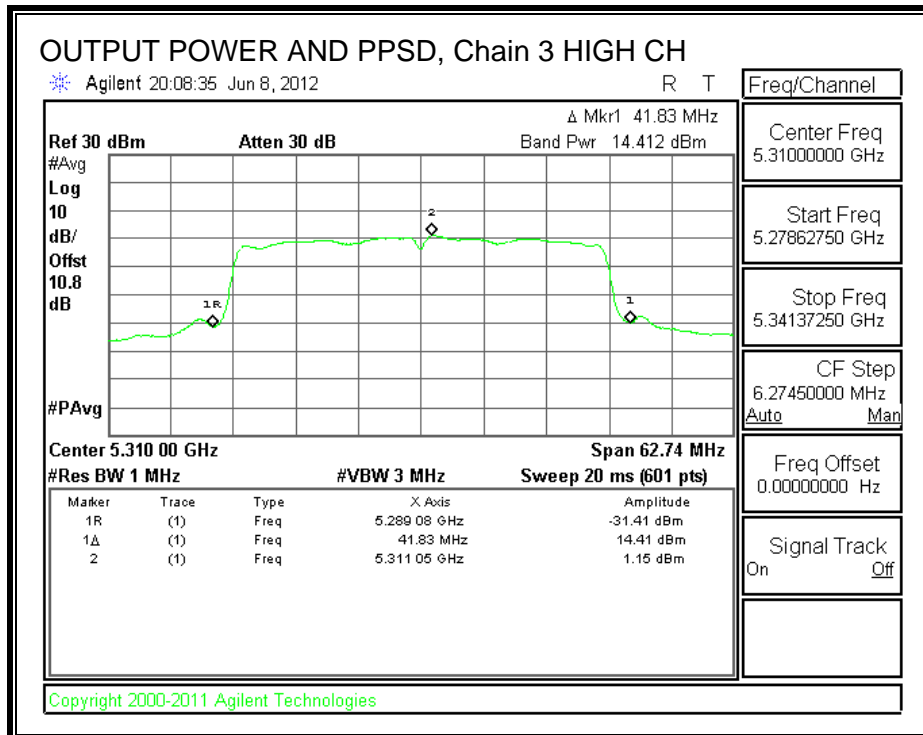
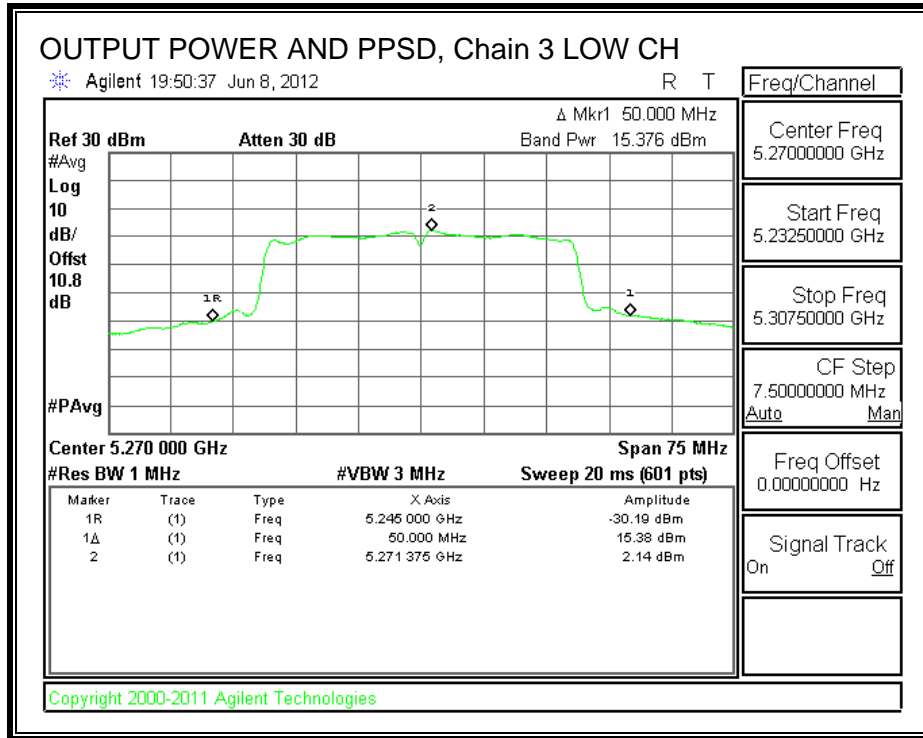
OUTPUT POWER AND PPSD, Chain 1



OUTPUT POWER AND PPSD, Chain 2



OUTPUT POWER AND PPSD, Chain 3



8.14.5. PEAK EXCURSION

LIMITS

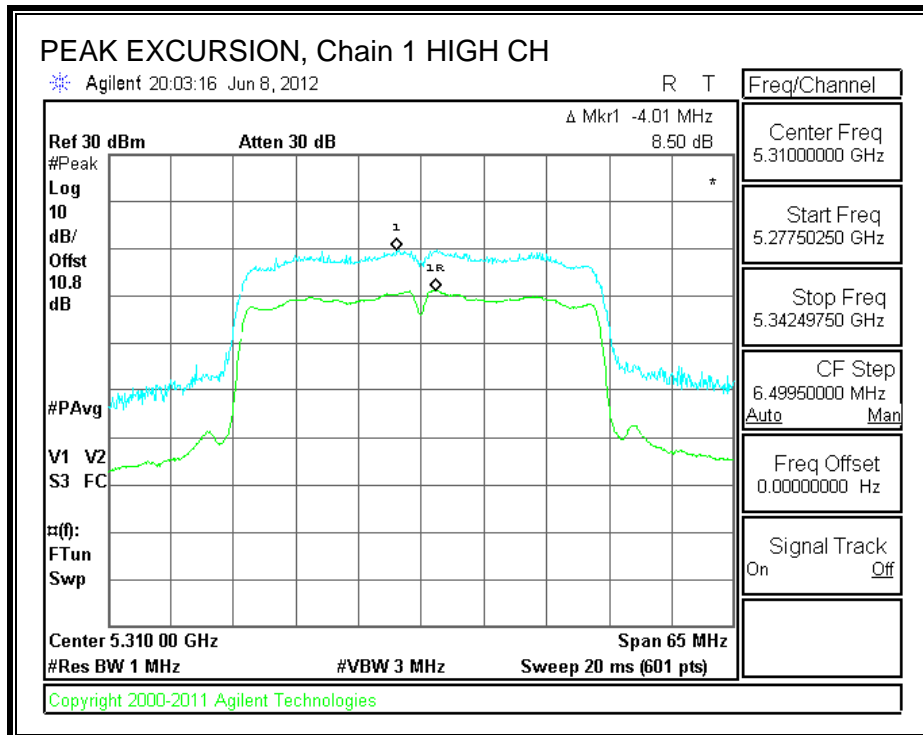
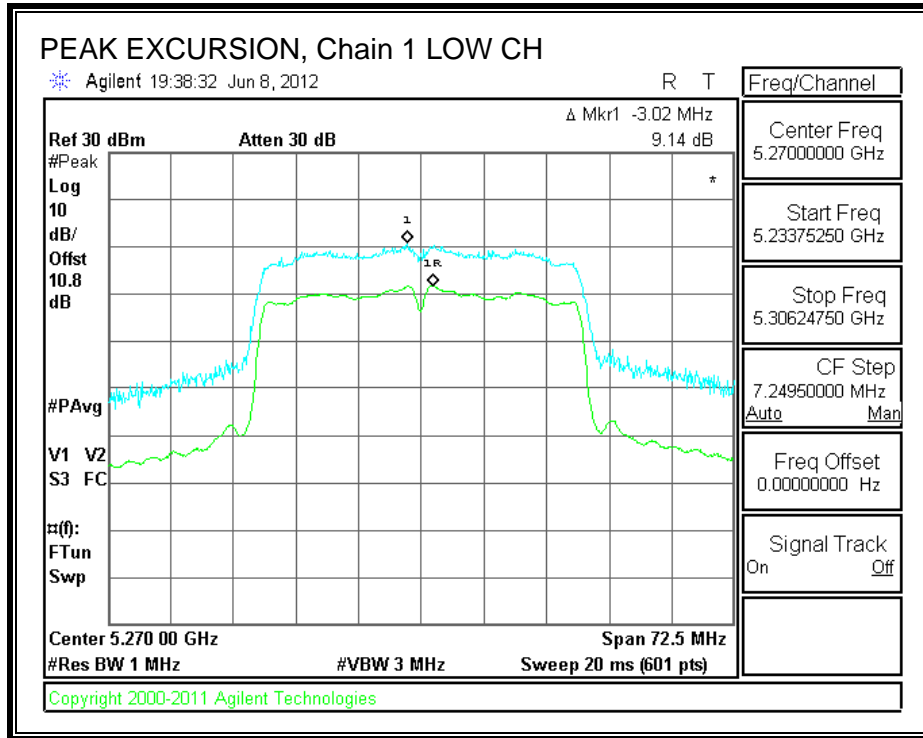
FCC §15.407 (a) (6)

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

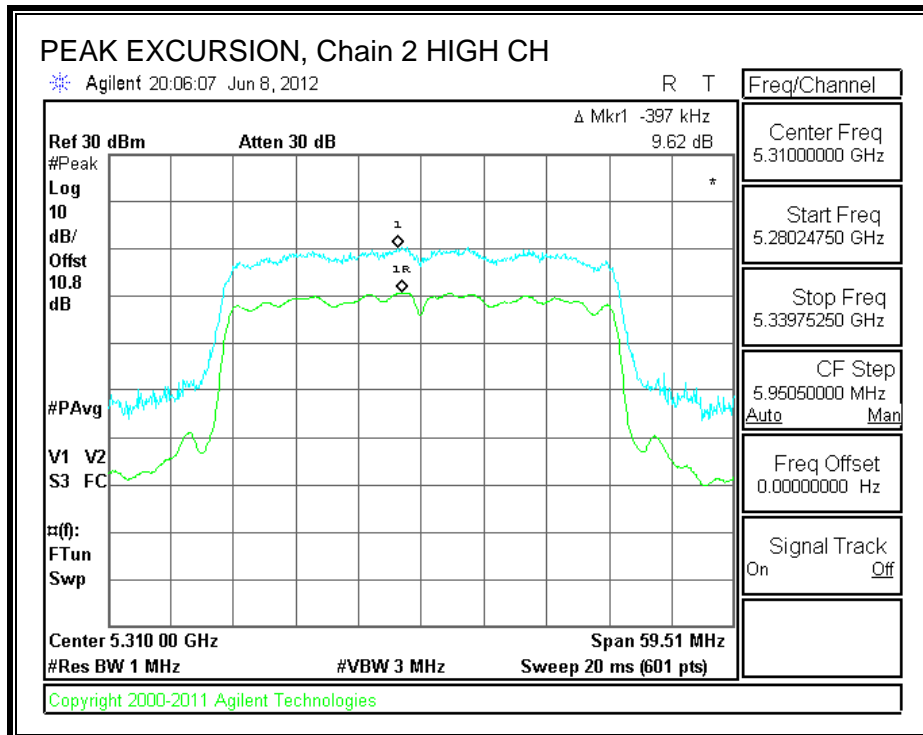
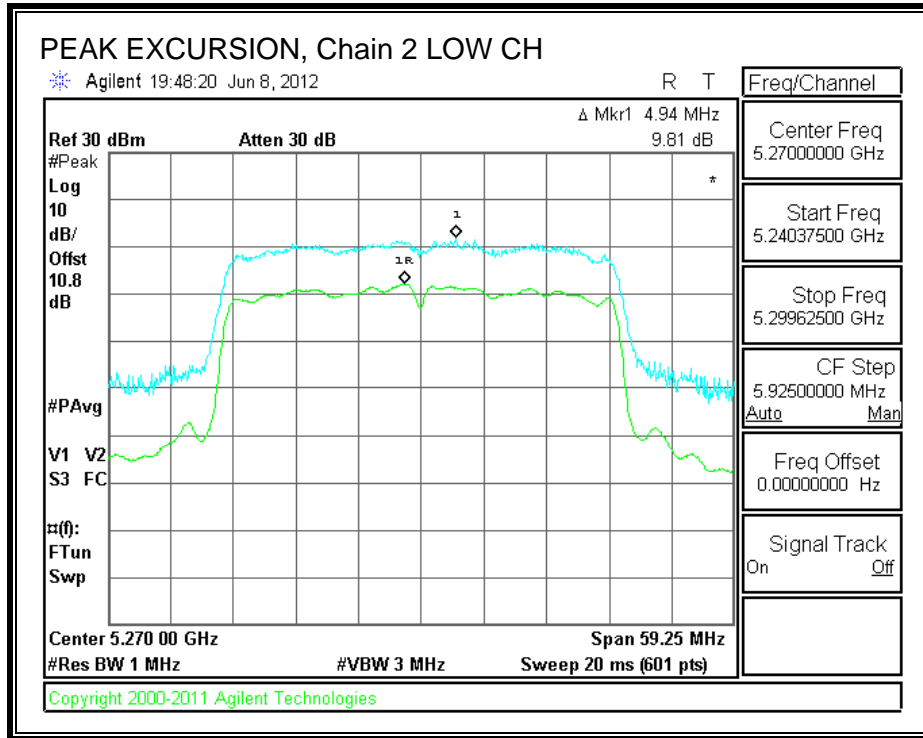
RESULTS

Channel	Frequency (MHz)	Pk Exc Chain 1 (dB)	Pk Exc Chain 2 (dB)	Pk Exc Chain 3 (dB)	Limit (dB)	Worst-Case Margin (dB)
Low	5270	9.14	9.81	9.53	13	-3.19
High	5310	8.50	9.62	10.53	13	-2.47

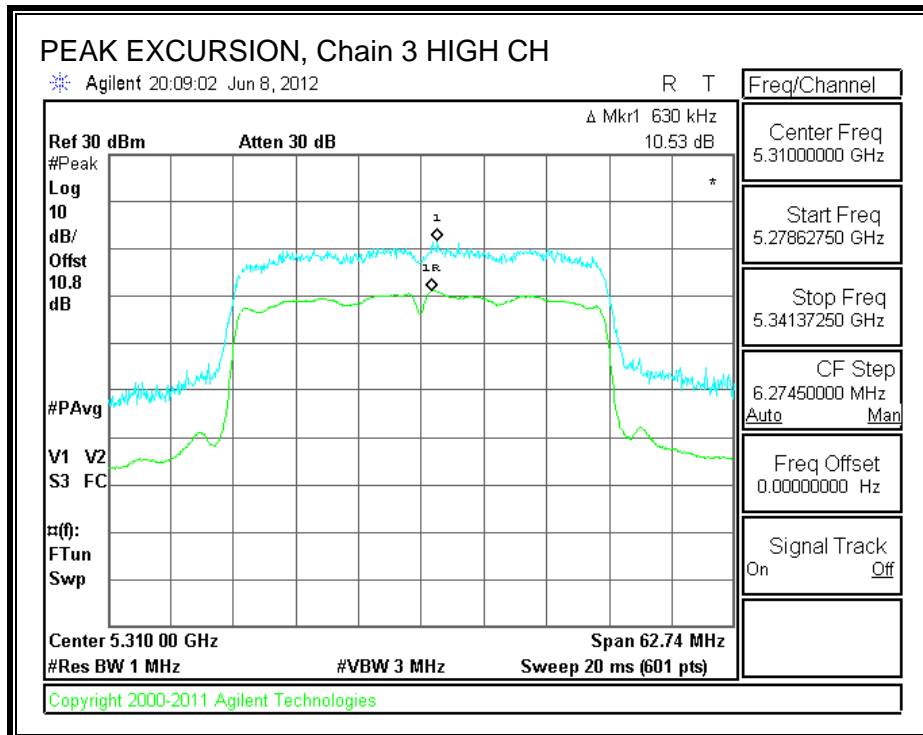
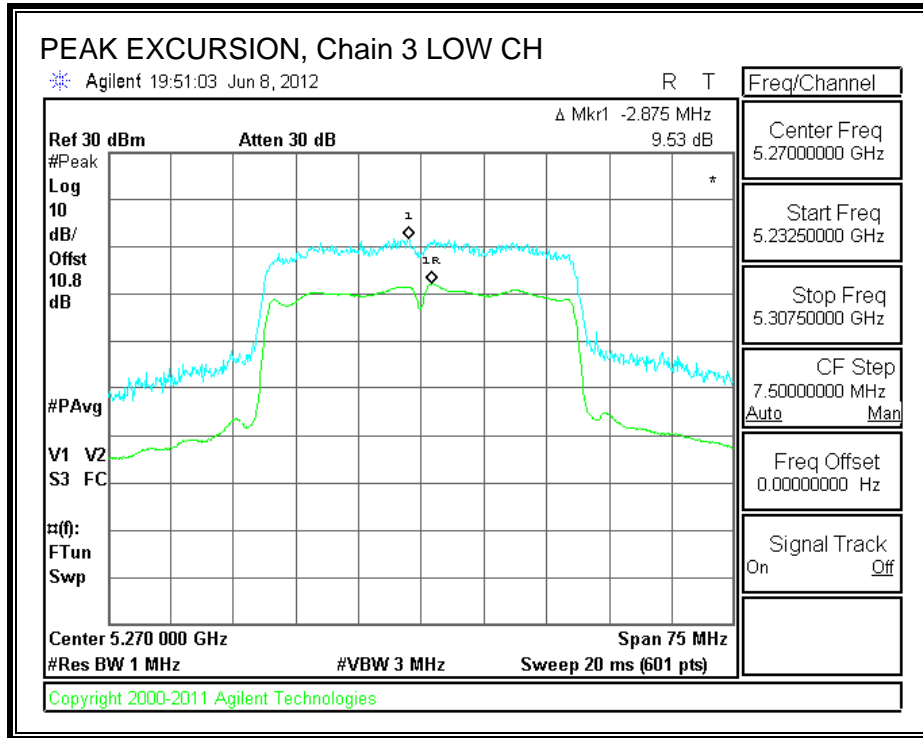
PEAK EXCURSION, Chain 1



PEAK EXCURSION, Chain 2



PEAK EXCURSION, Chain 3



8.15. 802.11n HT40, SDM MCS21, 3TX, 5.3 GHz BAND

8.15.1. 26 dB BANDWIDTH

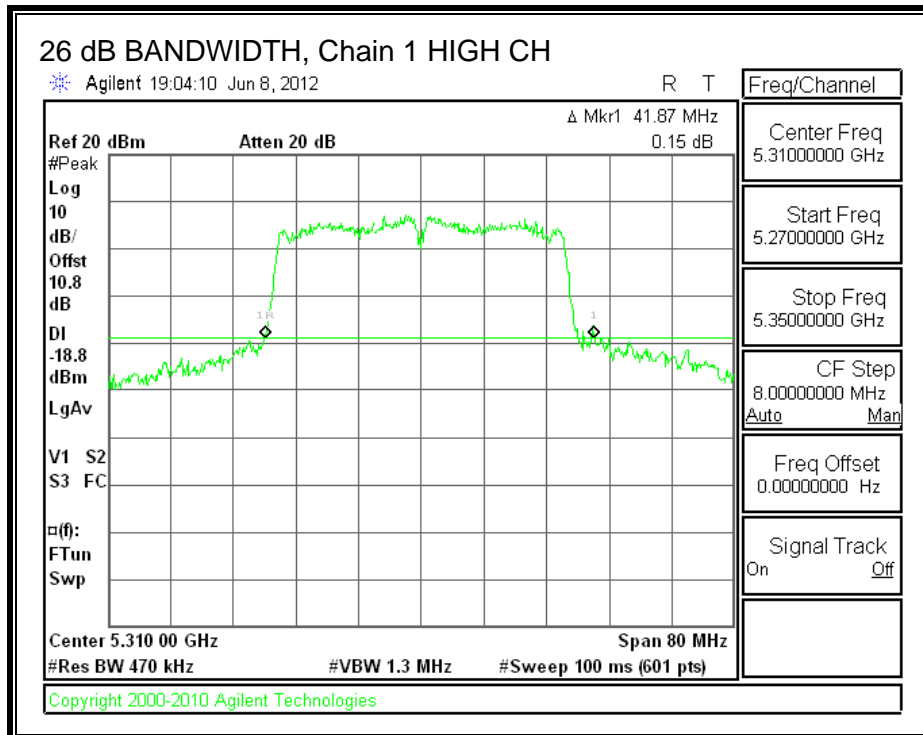
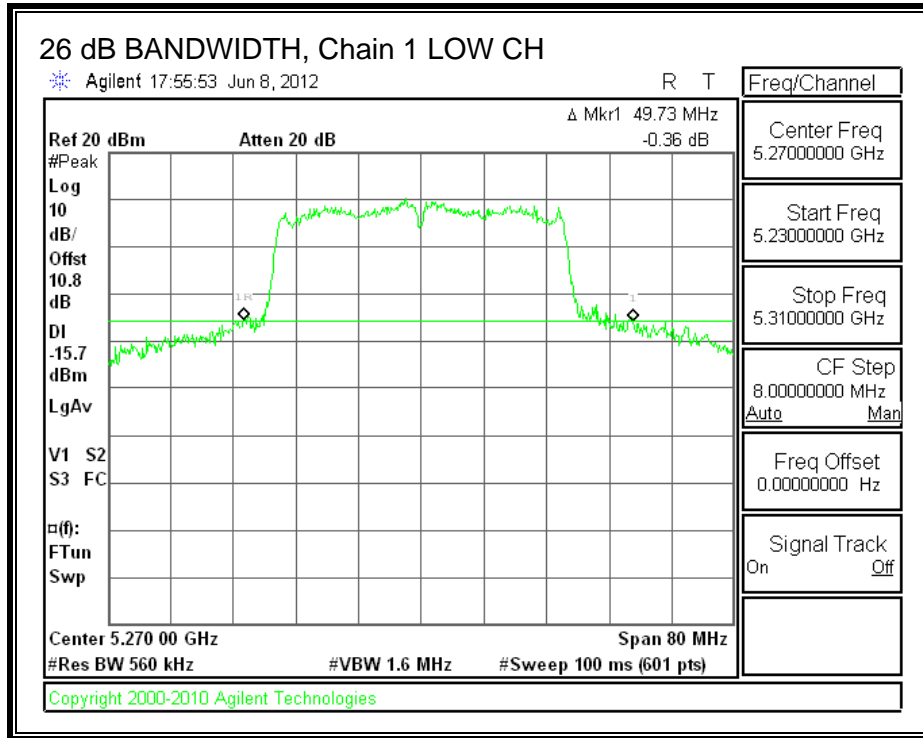
LIMITS

None; for reporting purposes only.

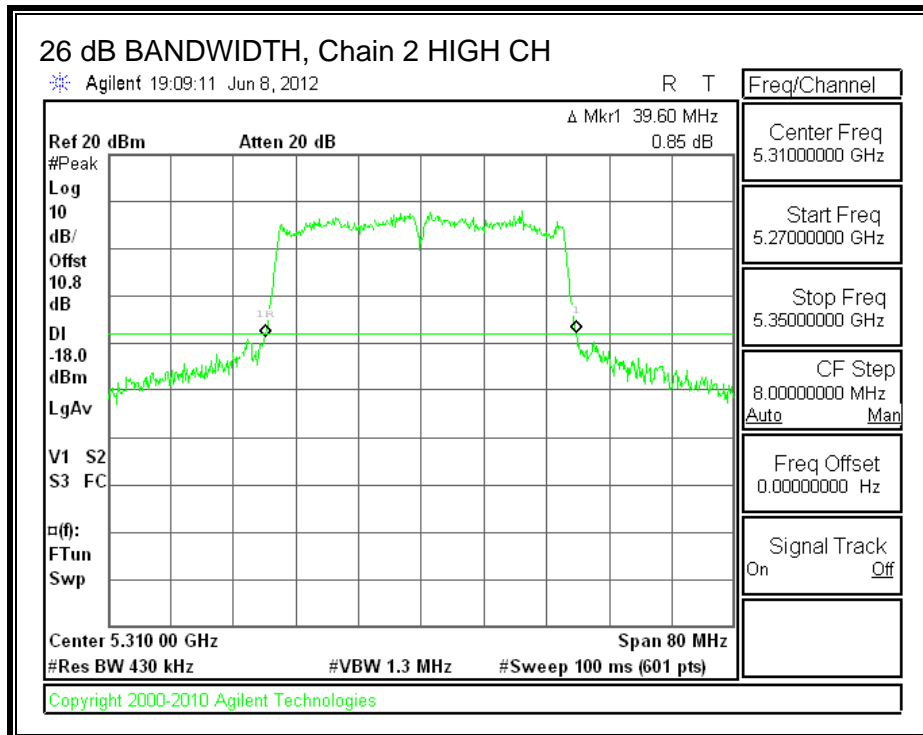
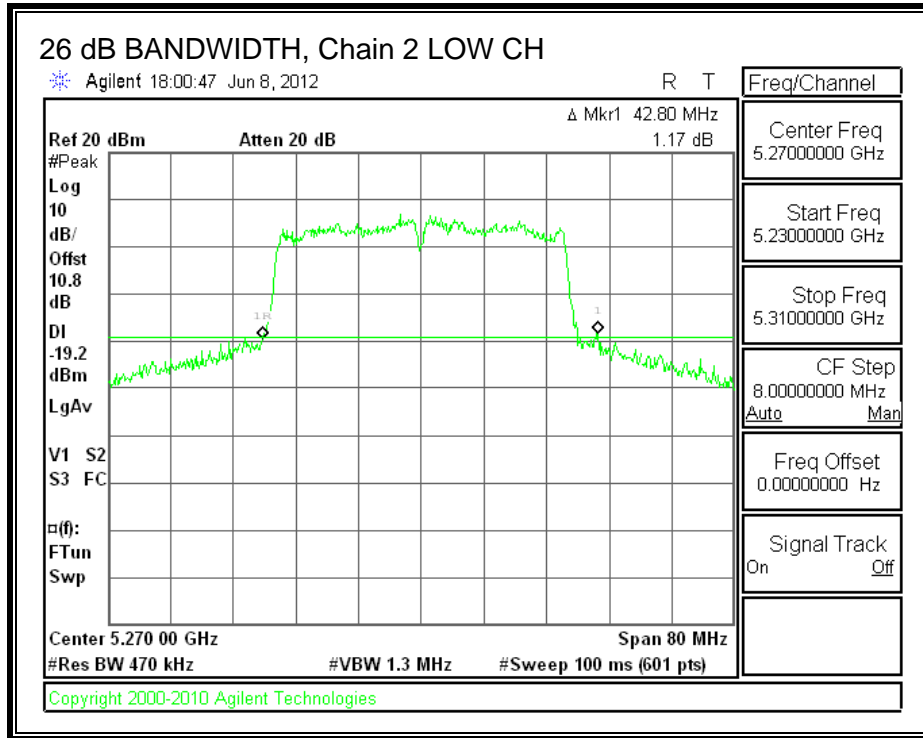
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5270	49.73	42.80	53.73
High	5310	41.87	39.60	40.67

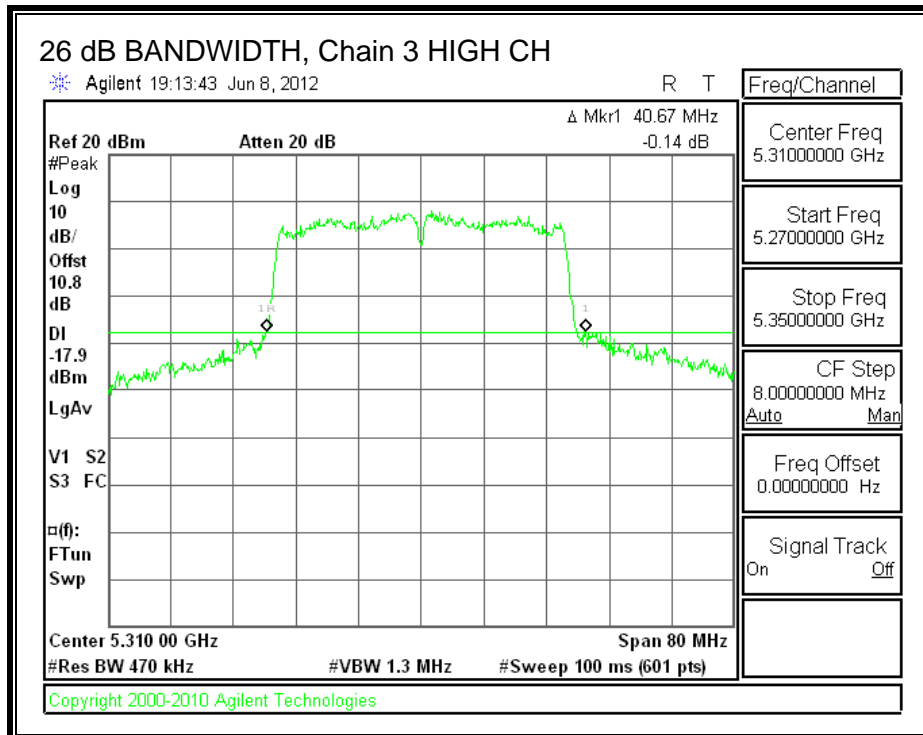
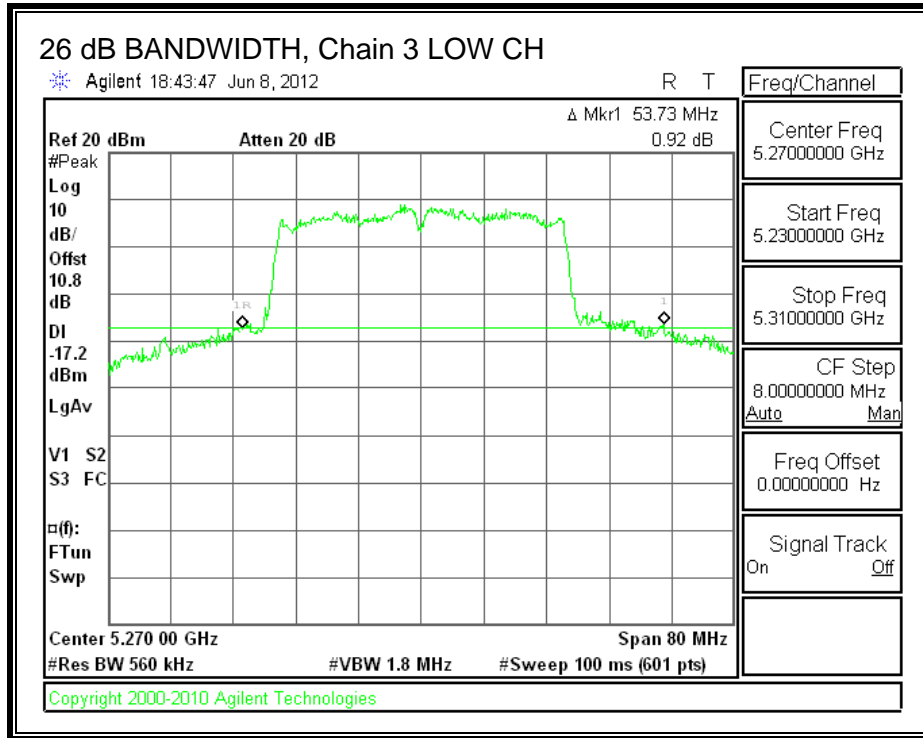
26 dB BANDWIDTH, Chain 1



26 dB BANDWIDTH, Chain 2



26 dB BANDWIDTH, Chain 3



8.15.2. 99% BANDWIDTH

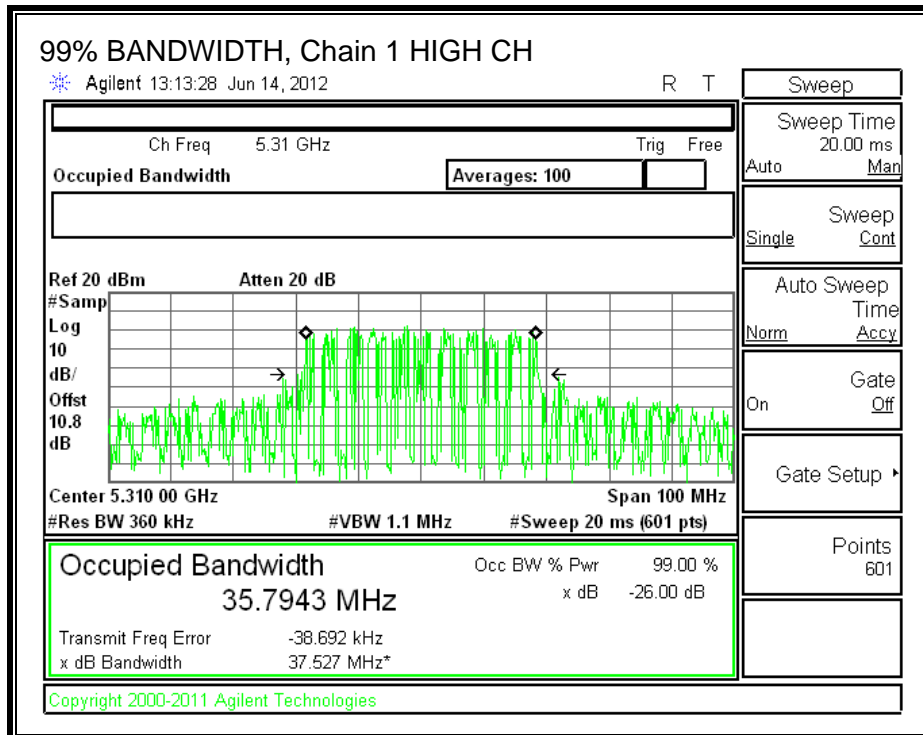
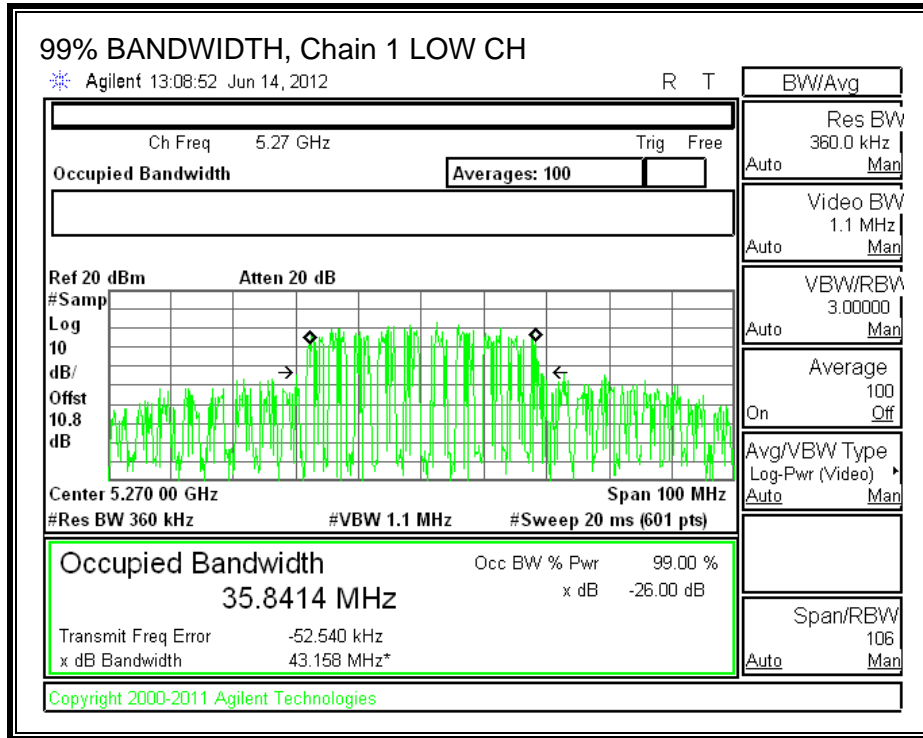
LIMITS

None; for reporting purposes only.

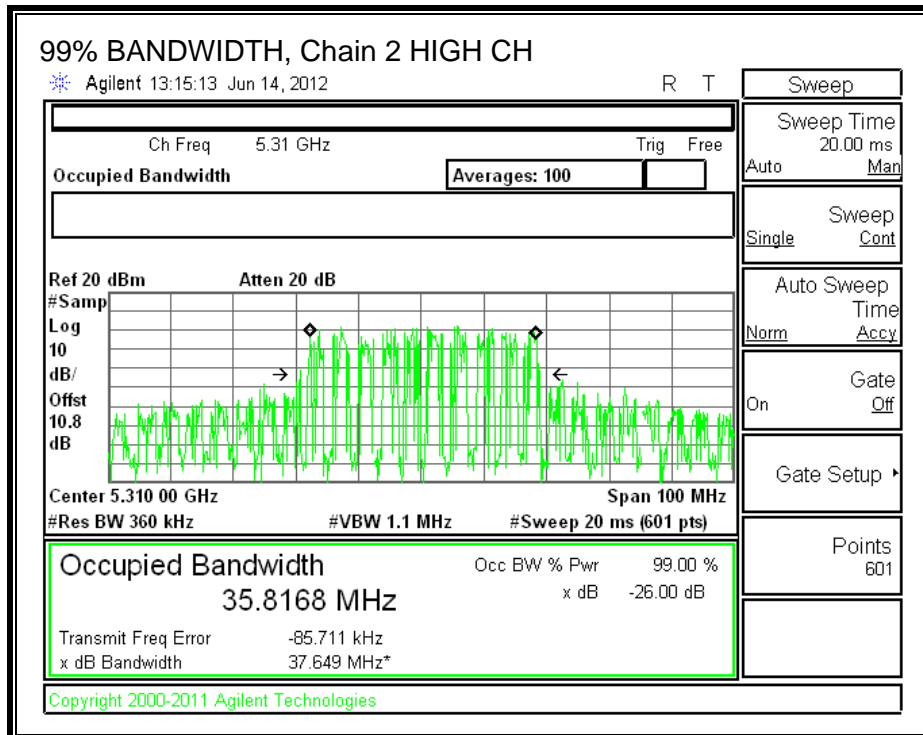
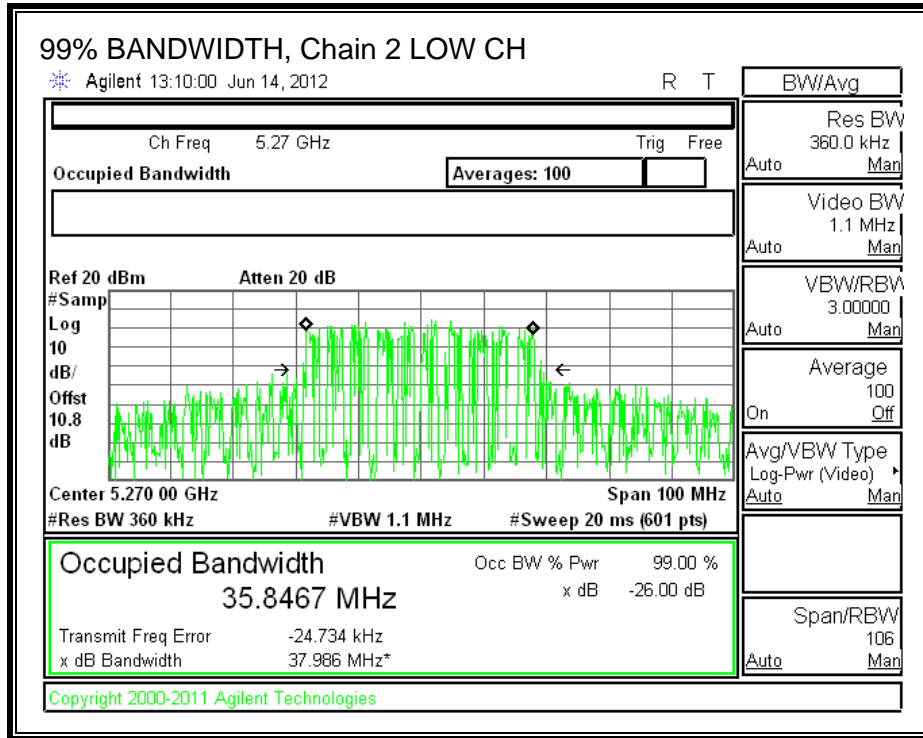
RESULTS

Channel	Frequency (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)	99% BW Chain 3 (MHz)
Low	5270	35.8414	35.8467	35.8966
High	5310	35.7943	35.8168	35.8624

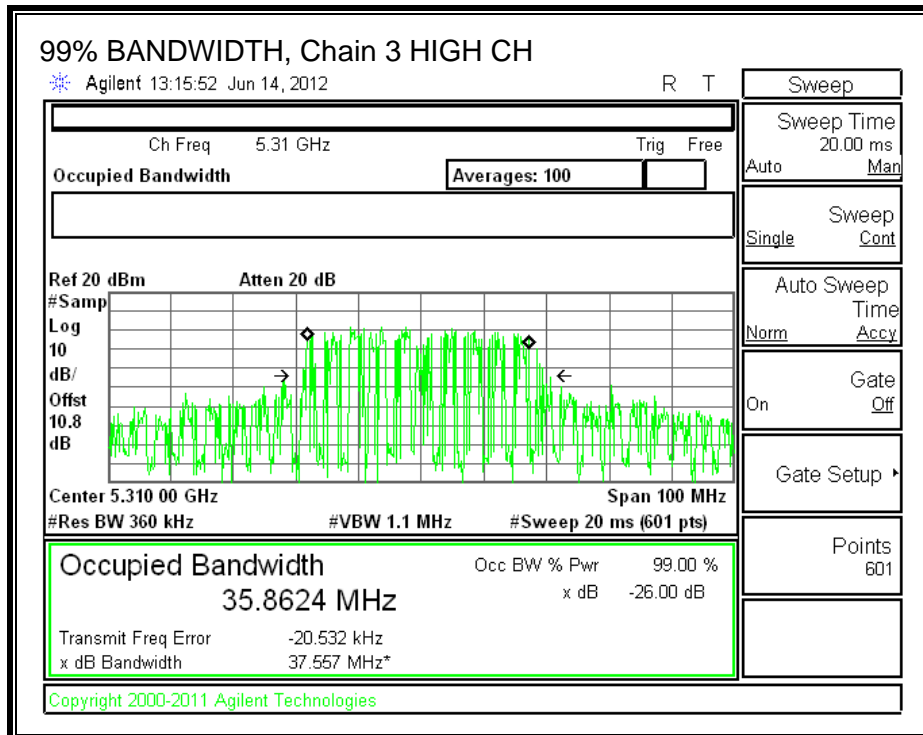
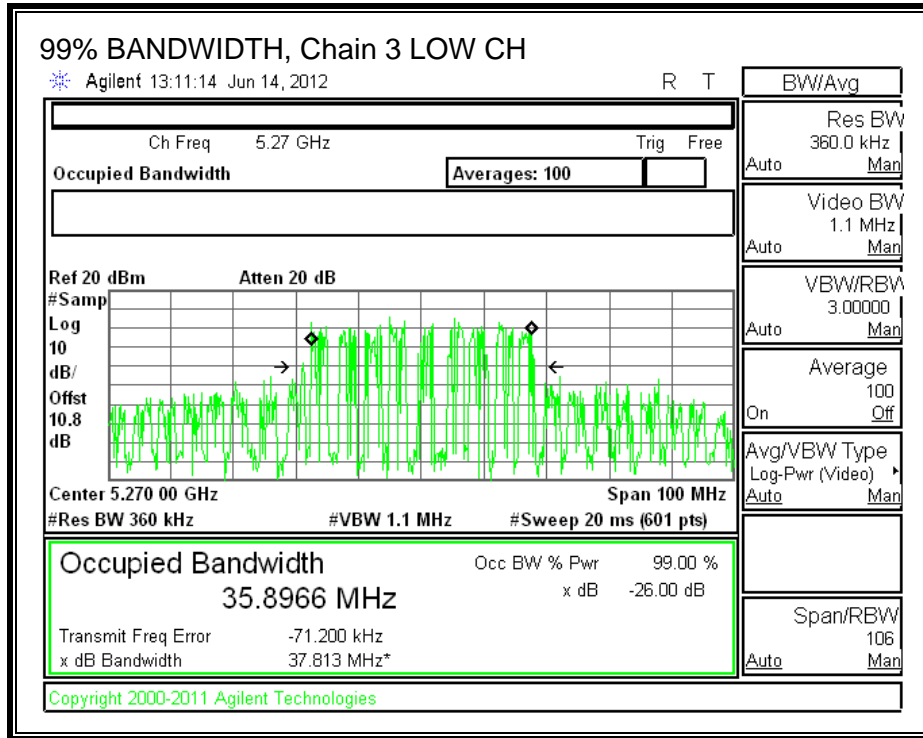
99% BANDWIDTH, Chain 1



99% BANDWIDTH, Chain 2



99% BANDWIDTH, Chain 3



8.15.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.8 dB (including 10 dB pad and 0.80 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Chain 3 Power (dBm)	Total Power (dBm)
Low	5270	16.60	16.50	16.50	21.30
High	5310	15.50	15.50	15.60	20.30

8.15.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

IC RSS-210 A9.2 (2)

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands 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 megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density 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 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Chain 3 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.00	3.81	5.61	4.55

RESULTS

Limits

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B Limit (dBm)	Directional Gain (dBi)	Power Limit (dBm)	PPSD Limit (dBm)
Low	5270	24	42.80	27.31	4.55	24.00	11.00
High	5310	24	39.60	26.98	4.55	24.00	11.00

Duty Cycle CF (dB)	2.042	Included in Calculations of Corr'd Power & PPSD
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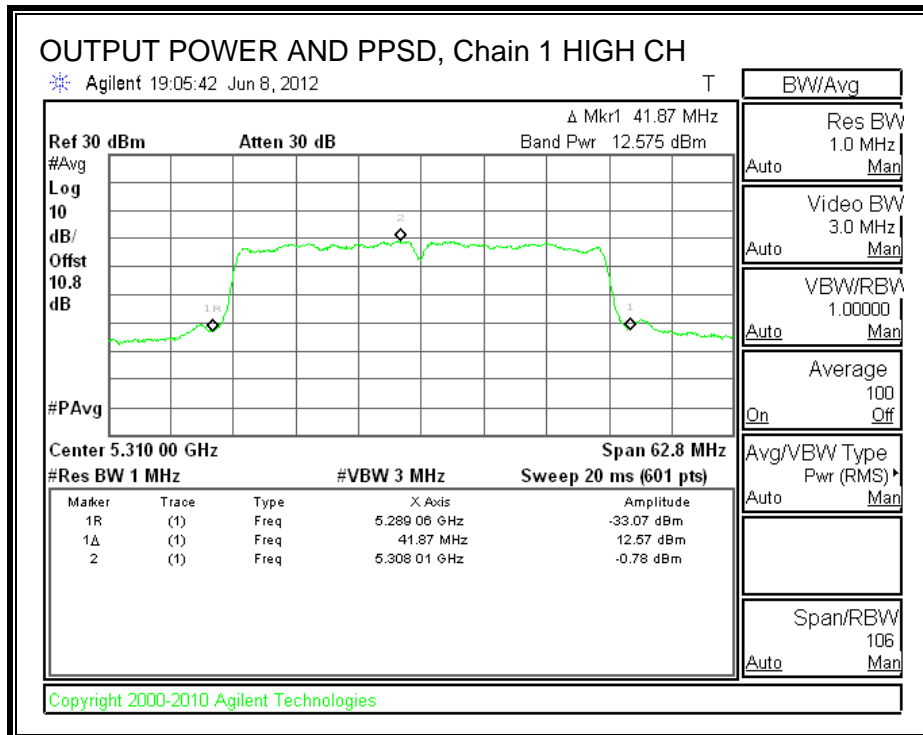
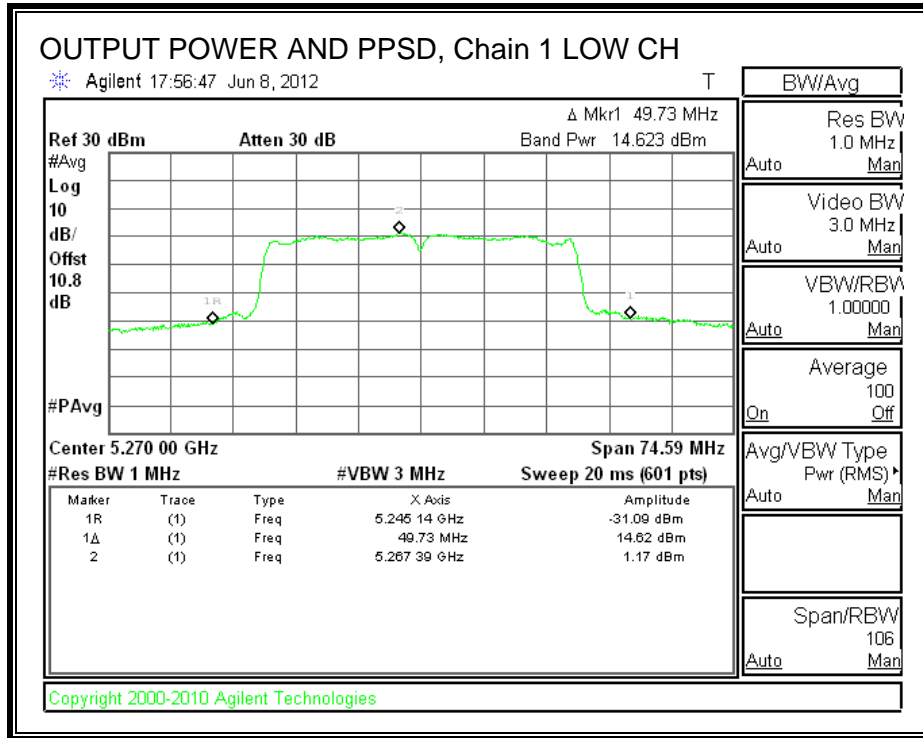
Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	14.623	14.357	13.590	21.025	24.00	-2.975
High	5310	12.575	13.633	13.363	20.026	24.00	-3.974

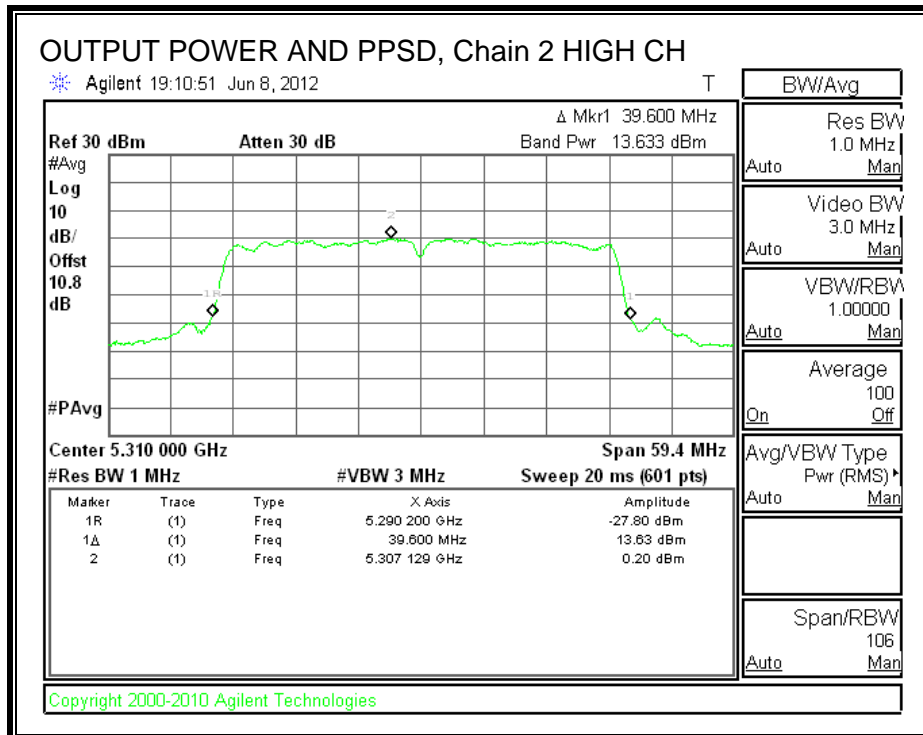
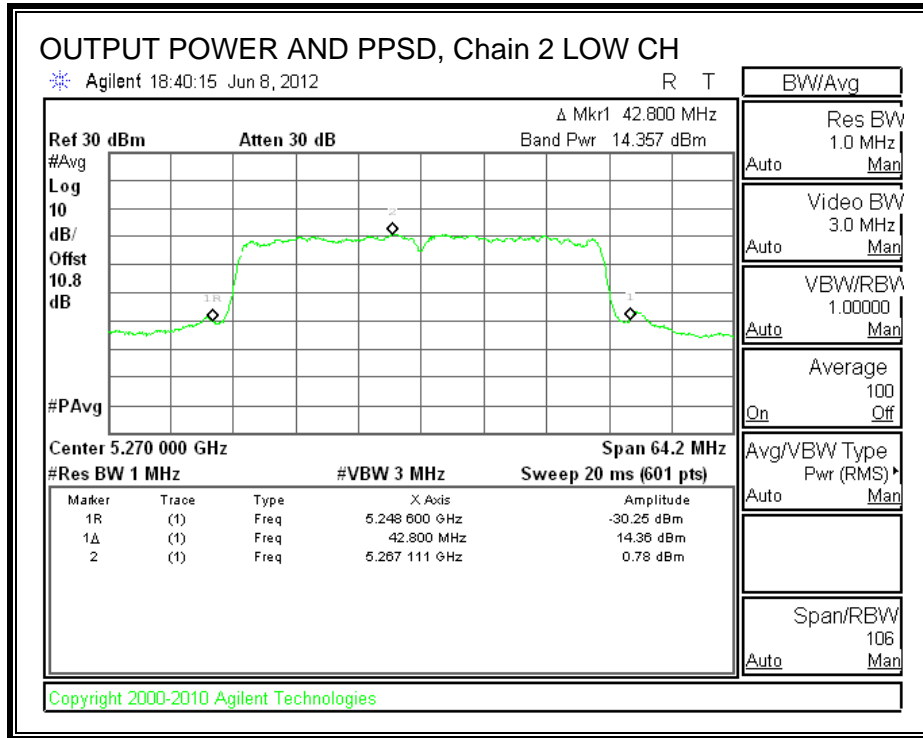
PPSD Results

Channel	Frequency (MHz)	Chain 1 Meas PPSD (dBm)	Chain 2 Meas PPSD (dBm)	Chain 3 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5270	1.17	0.78	-0.09	7.46	11.00	-3.54
High	5310	-0.78	0.20	-0.14	6.59	11.00	-4.41

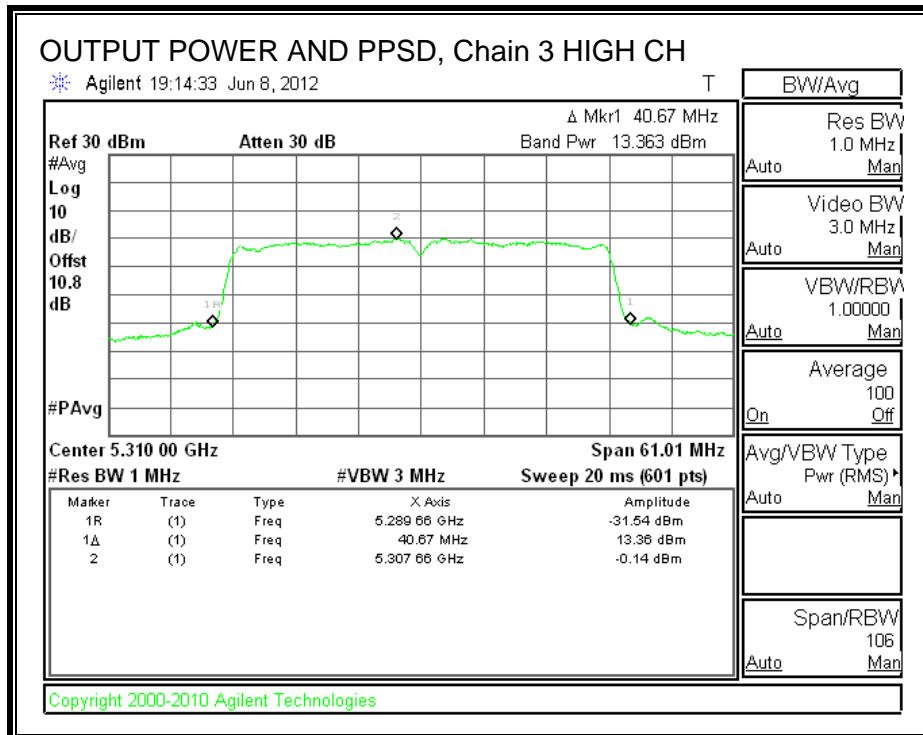
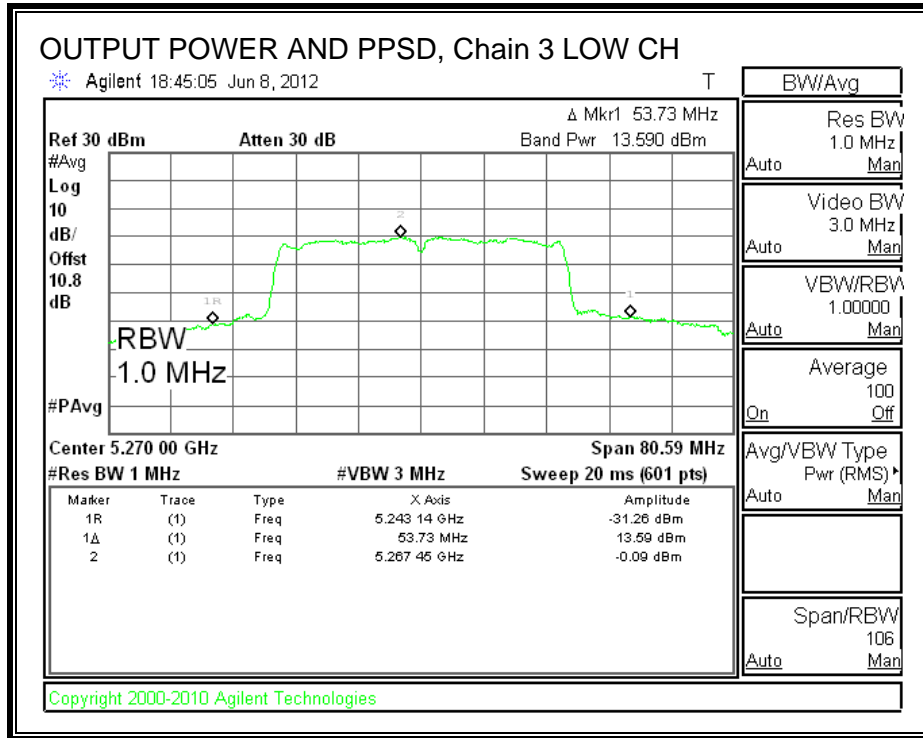
OUTPUT POWER AND PPSD, Chain 1



OUTPUT POWER AND PPSD, Chain 2



OUTPUT POWER AND PPSD, Chain 3



8.15.5. PEAK EXCURSION

LIMITS

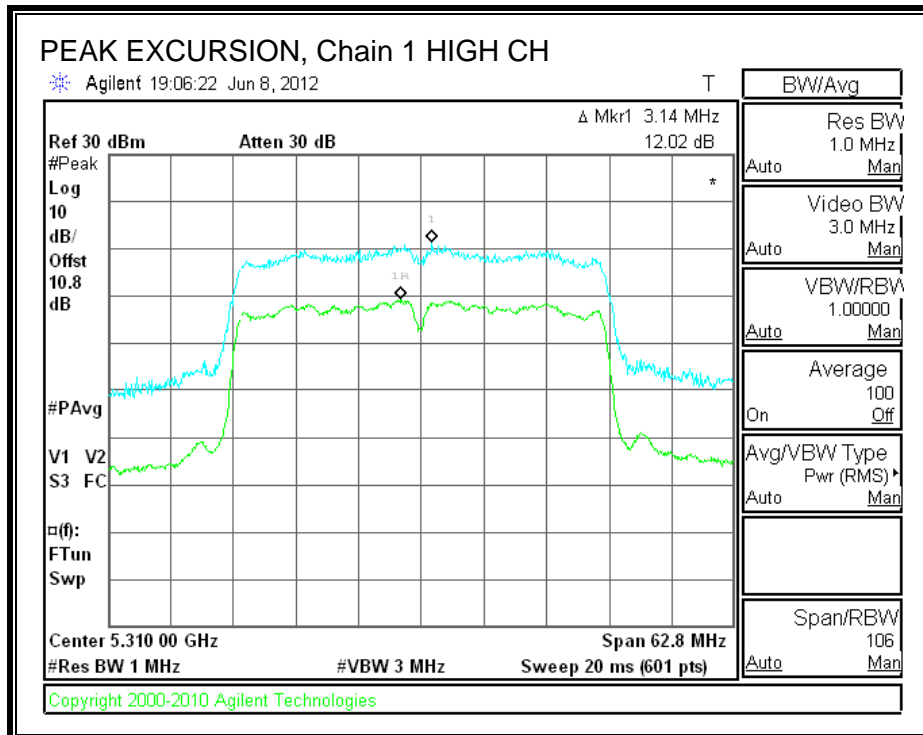
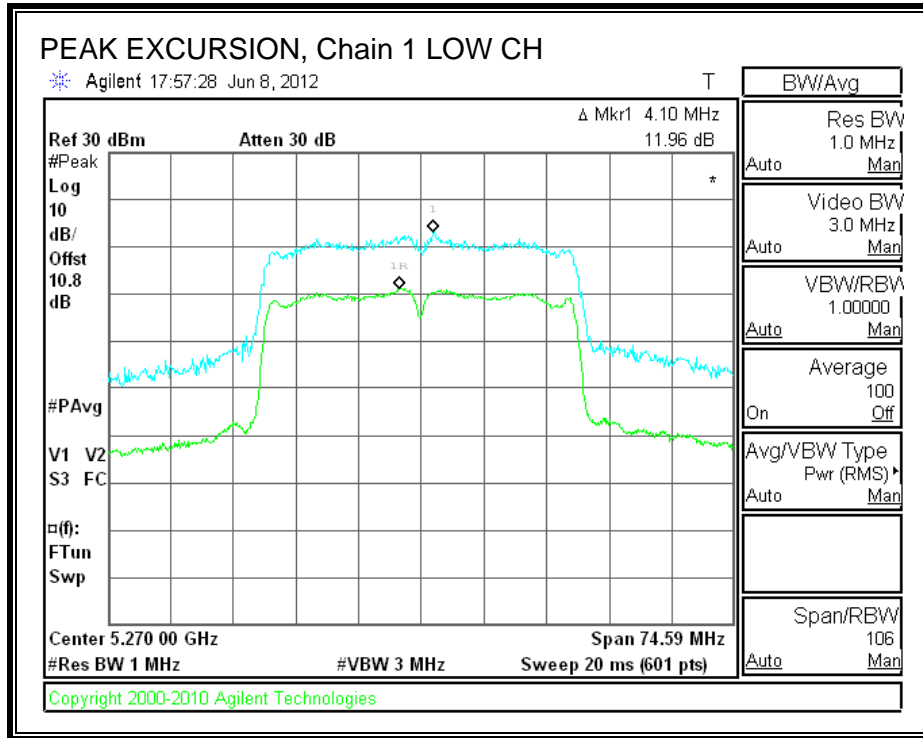
FCC §15.407 (a) (6)

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

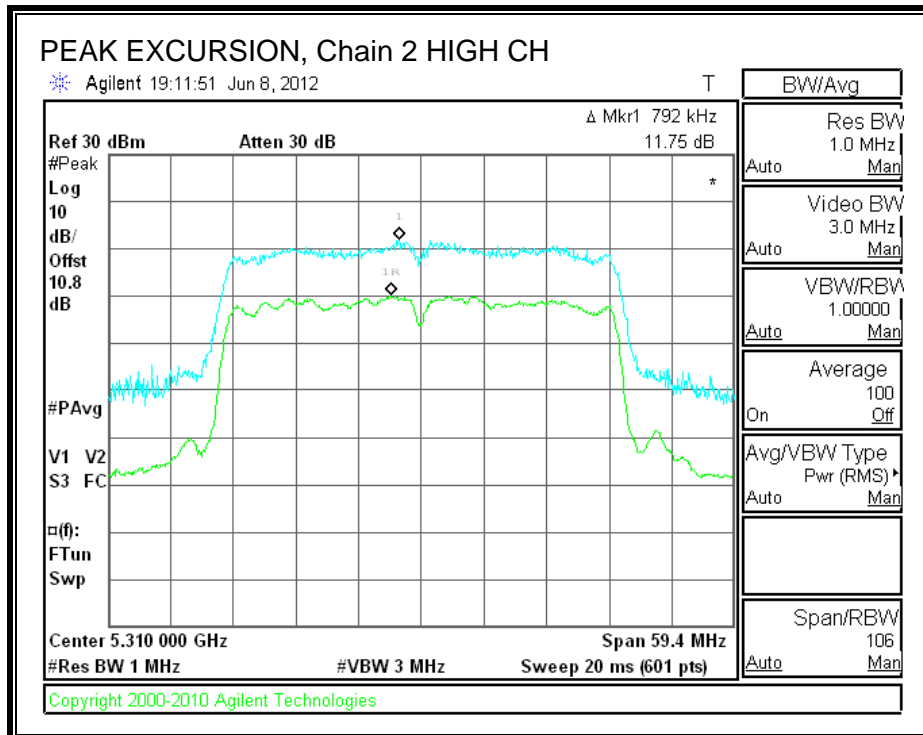
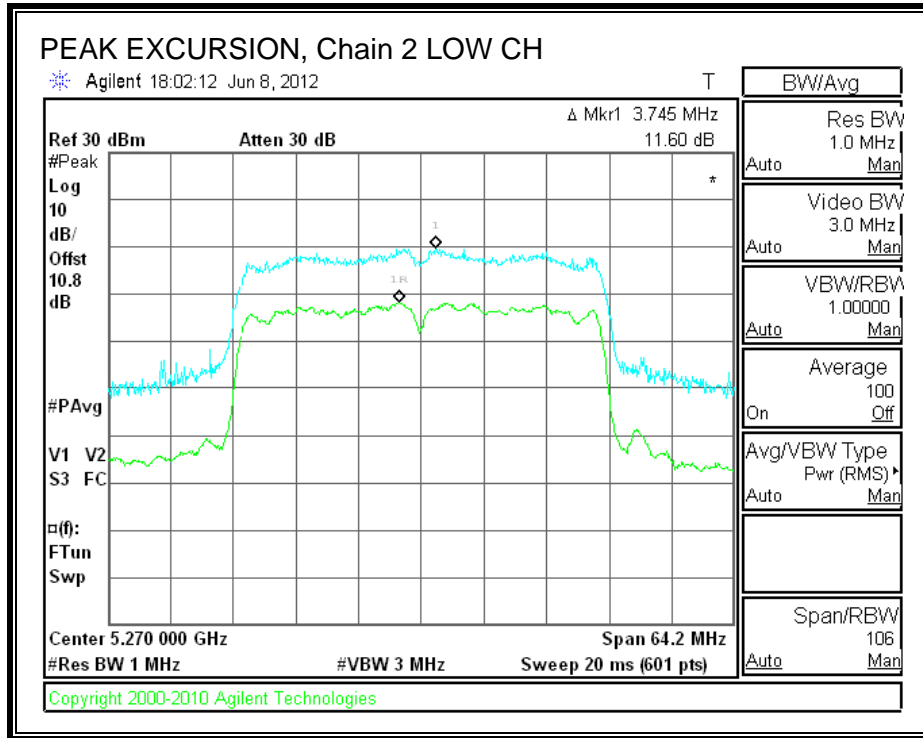
RESULTS

Channel	Frequency (MHz)	Pk Exc Chain 1 (dB)	Pk Exc Chain 2 (dB)	Pk Exc Chain 3 (dB)	Limit (dB)	Worst-Case Margin (dB)
Low	5270	11.96	11.60	11.66	13	-1.04
High	5310	12.02	11.75	11.31	13	-0.98

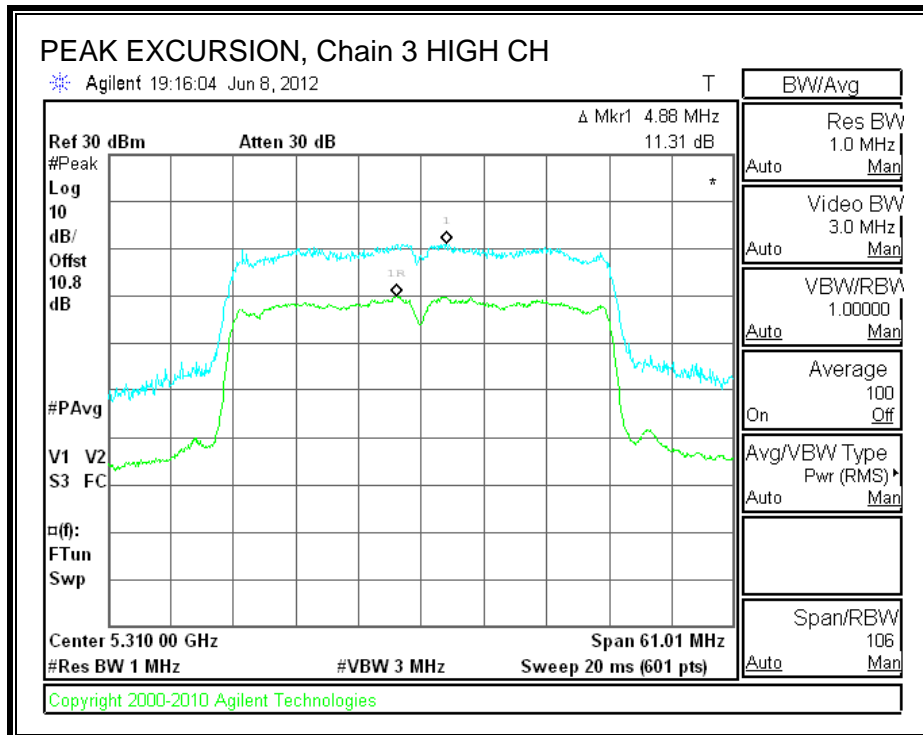
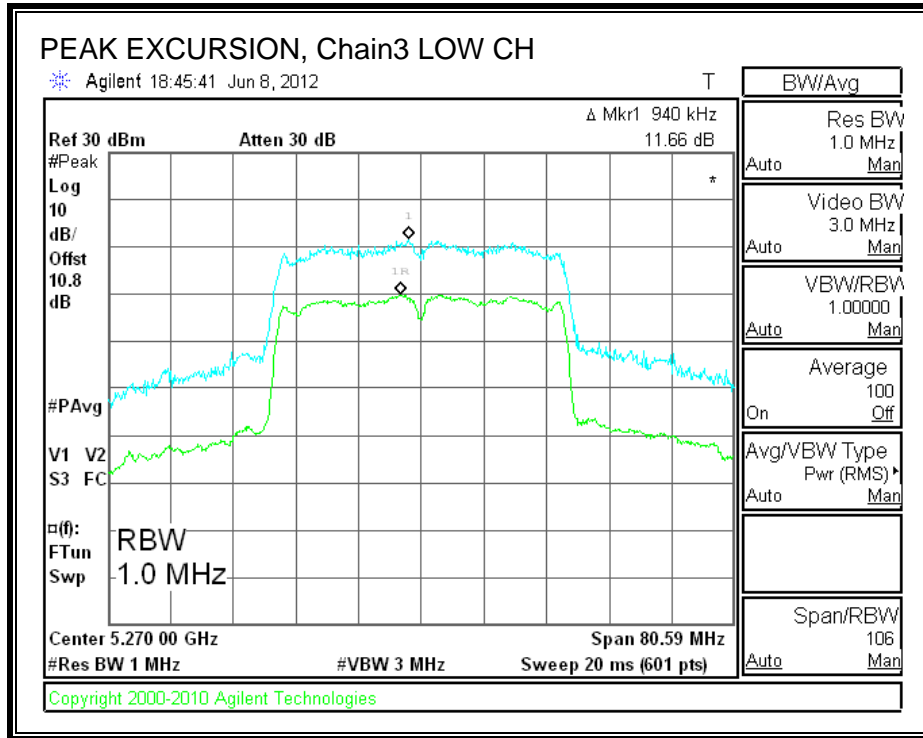
PEAK EXCURSION, Chain 1



PEAK EXCURSION, Chain 2



PEAK EXCURSION, Chain 3



8.16. 802.11a, Legacy, 1TX, 5.6 GHz BAND

8.16.1. 26 dB BANDWIDTH

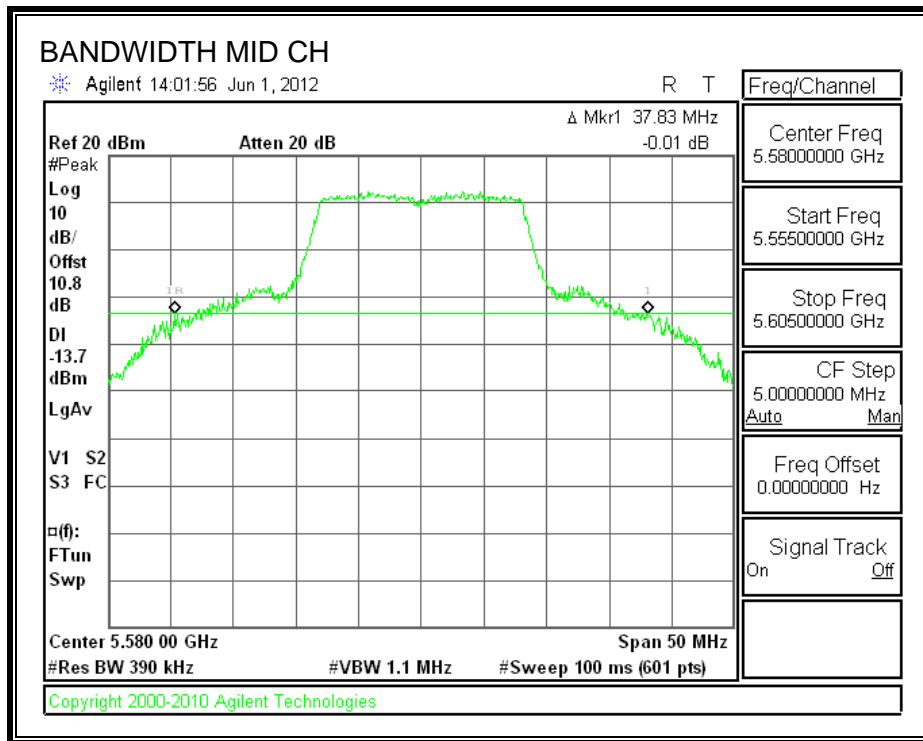
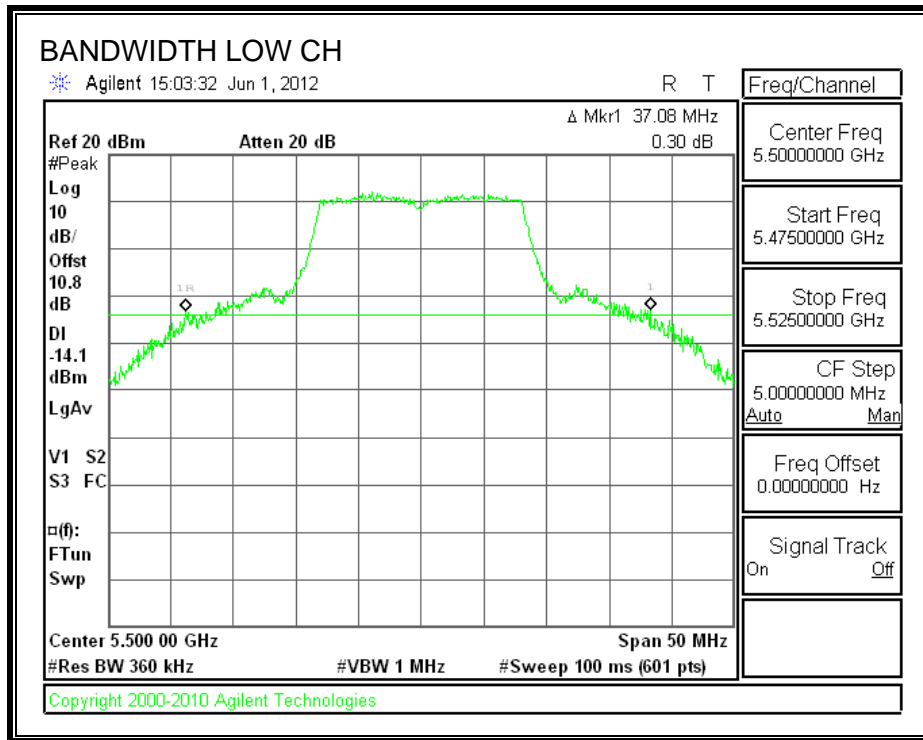
LIMITS

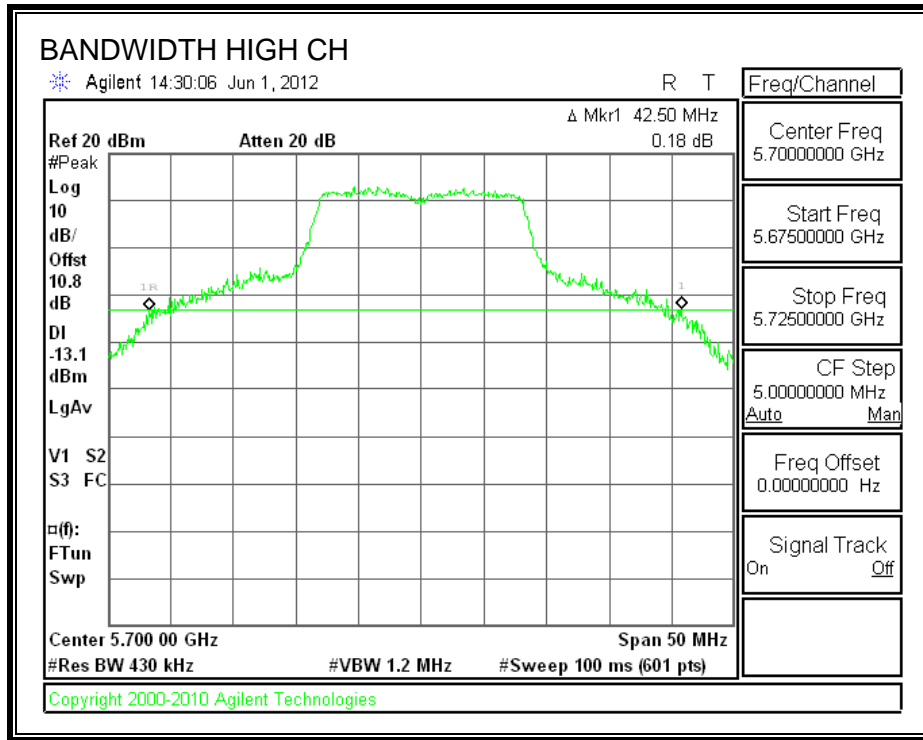
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	37.08
Mid	5580	37.83
High	5700	42.50

26 dB BANDWIDTH





8.16.2. 99% BANDWIDTH

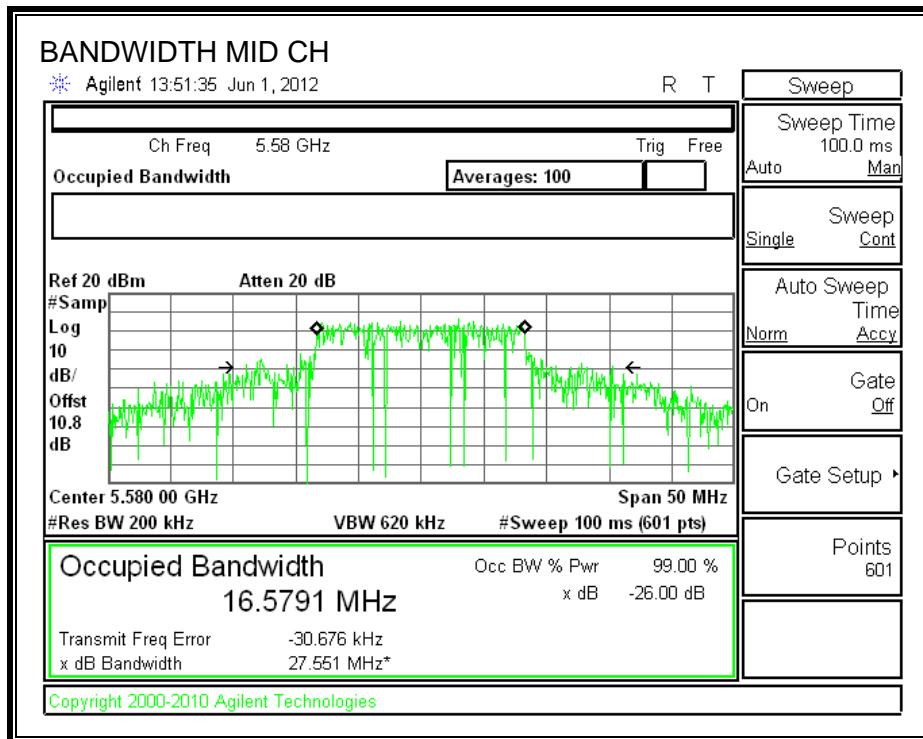
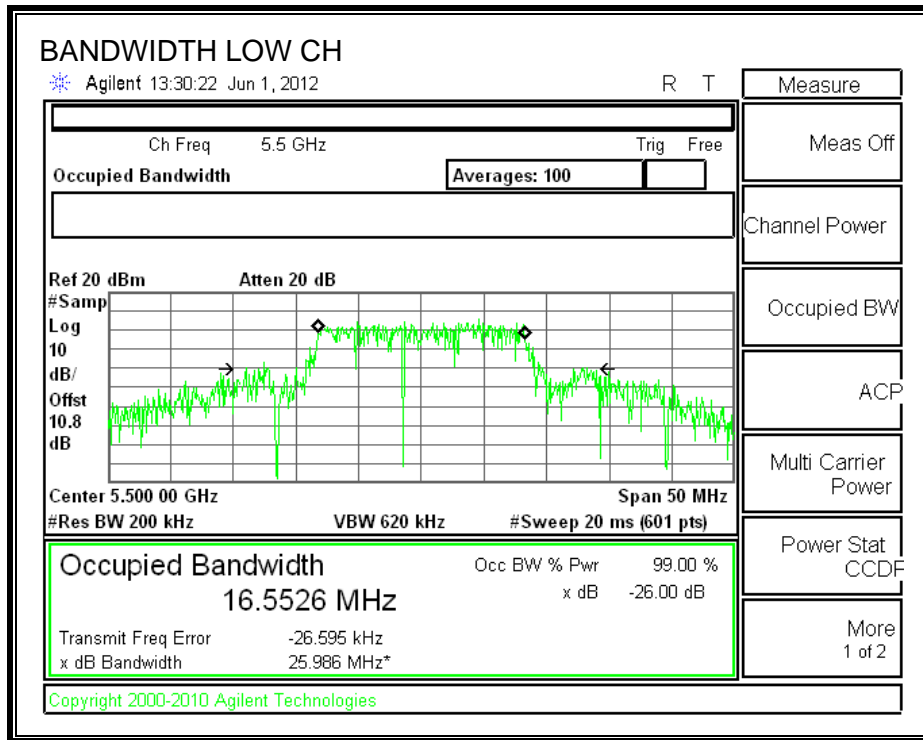
LIMITS

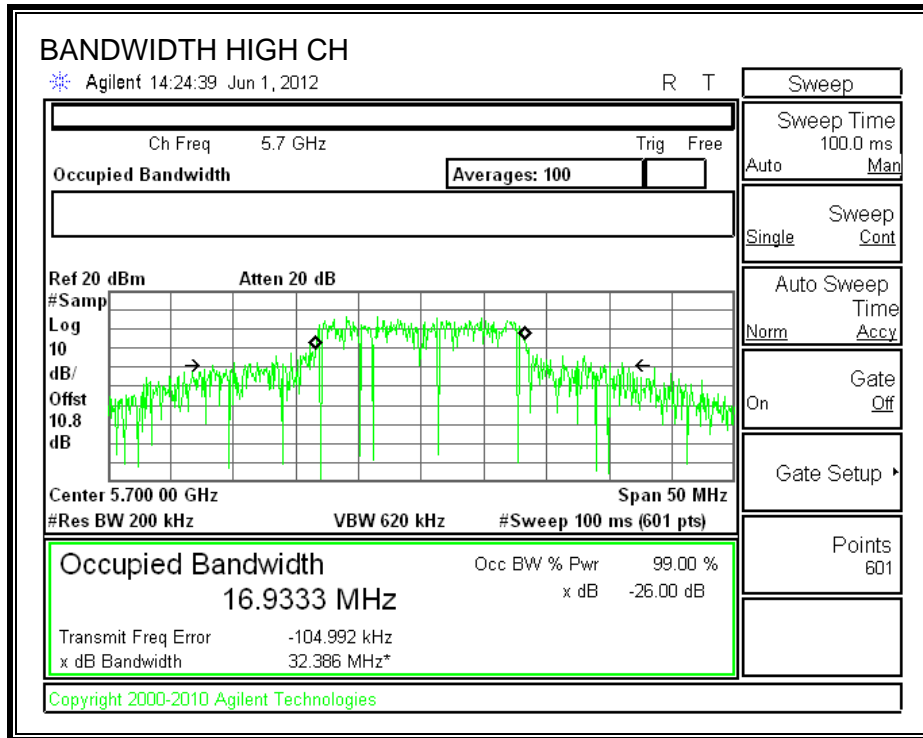
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	16.5526
Mid	5580	16.5791
High	5700	16.9333

99% BANDWIDTH





8.16.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.8 dB (including 10 dB pad and 0.80 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5500	19.2
Mid	5580	19.1
High	5700	19.1

8.16.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

IC RSS-210 A9.2 (3)

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands 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 megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density 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

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B Limit (dBm)	Directional Gain (dBi)	Power Limit (dBm)	PPSD Limit (dBm)
Low	5500	24	37.08	26.69	5.35	24.00	11.00
Mid	5580	24	37.83	26.78	5.35	24.00	11.00
High	5700	24	42.50	27.28	5.35	24.00	11.00

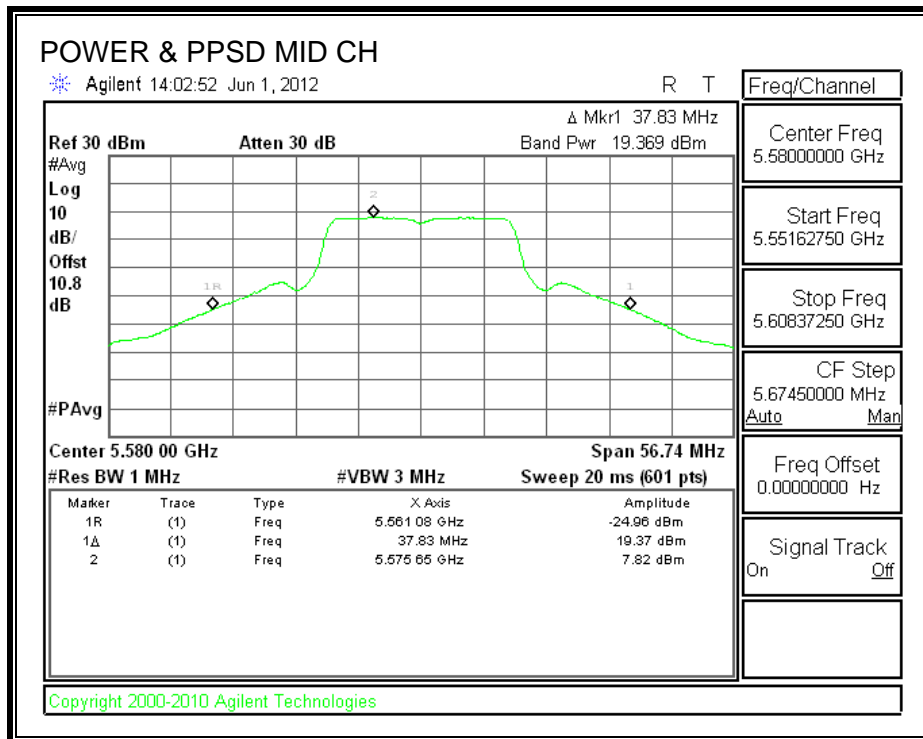
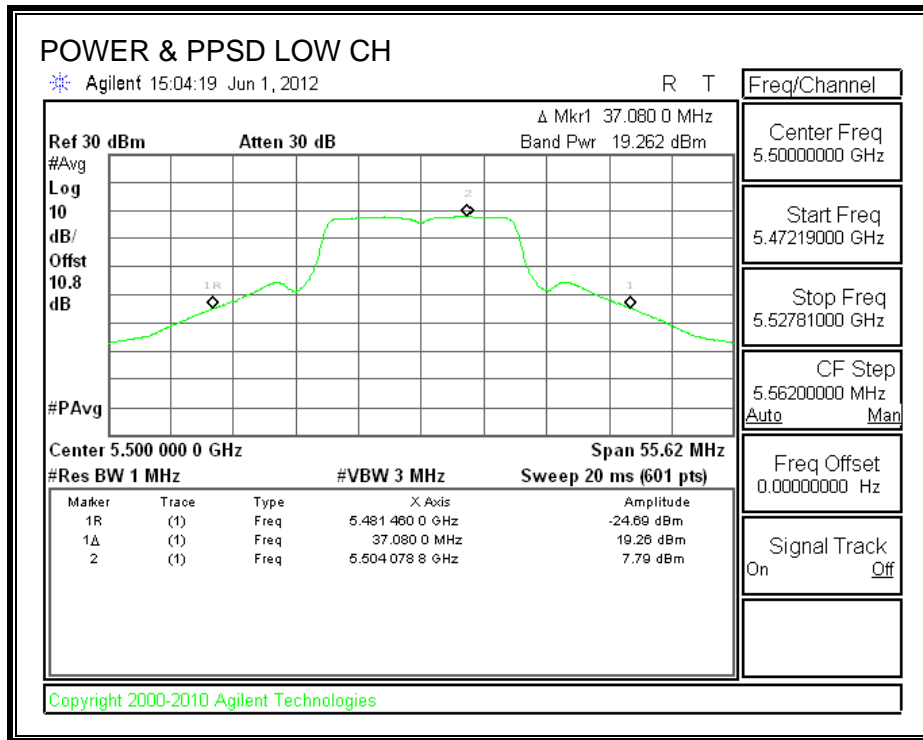
Output Power Results

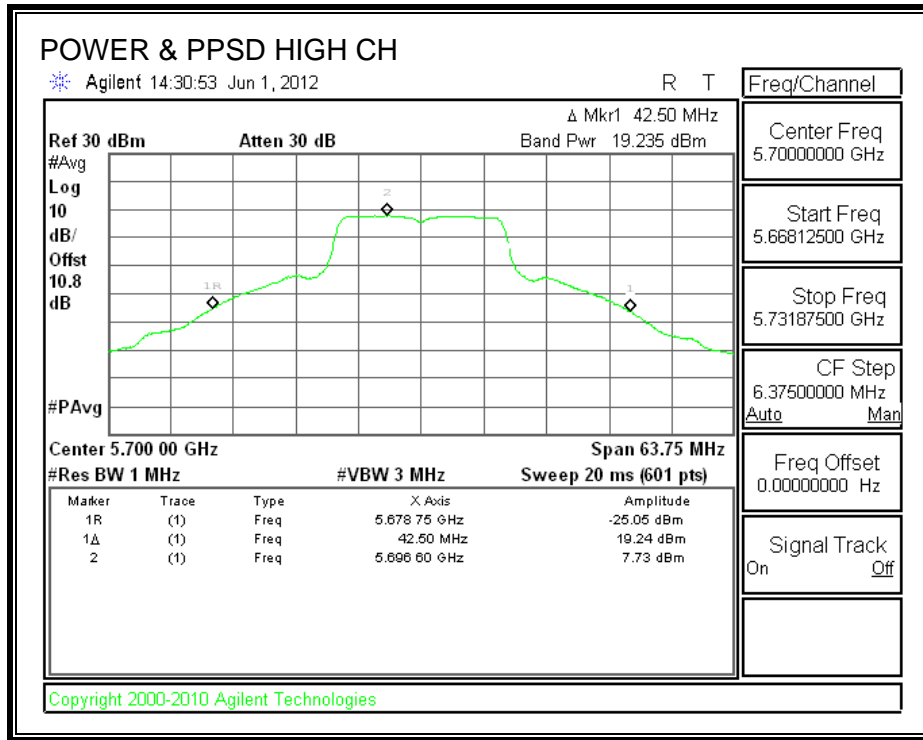
Channel	Frequency (MHz)	Meas Power (dBm)	Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	19.262	19.262	24.00	-4.74
Mid	5580	19.369	19.369	24.00	-4.63
High	5700	19.235	19.235	24.00	-4.77

PPSD Results

Channel	Frequency (MHz)	Meas PPSD (dBm)	Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	7.79	7.79	11.00	-3.21
Mid	5580	7.82	7.82	11.00	-3.18
High	5700	7.73	7.73	11.00	-3.27

OUTPUT POWER AND PPSD





8.16.5. PEAK EXCURSION

LIMITS

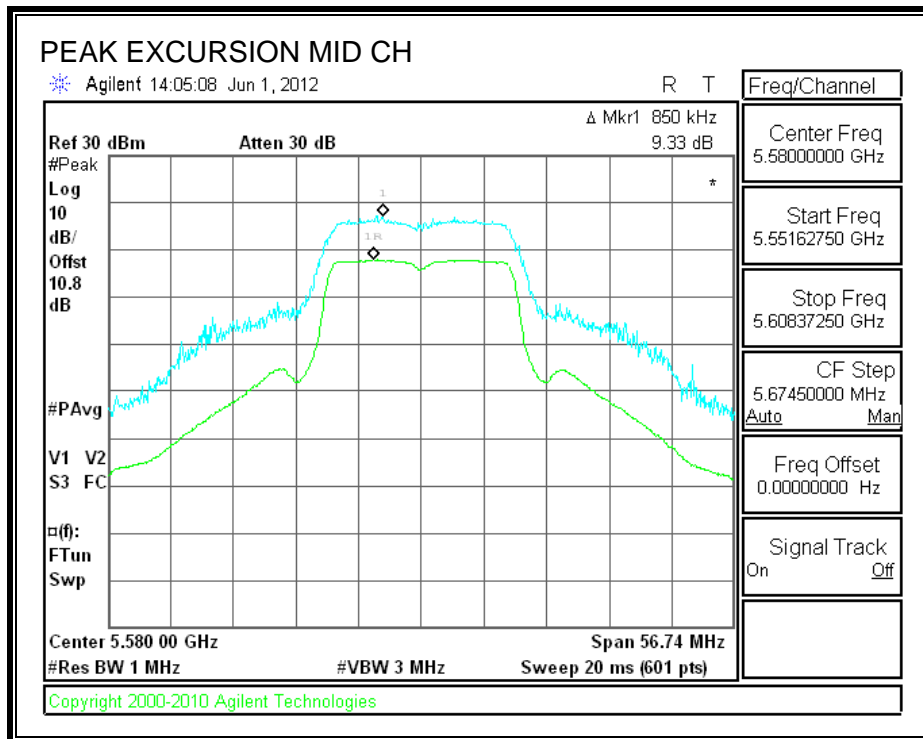
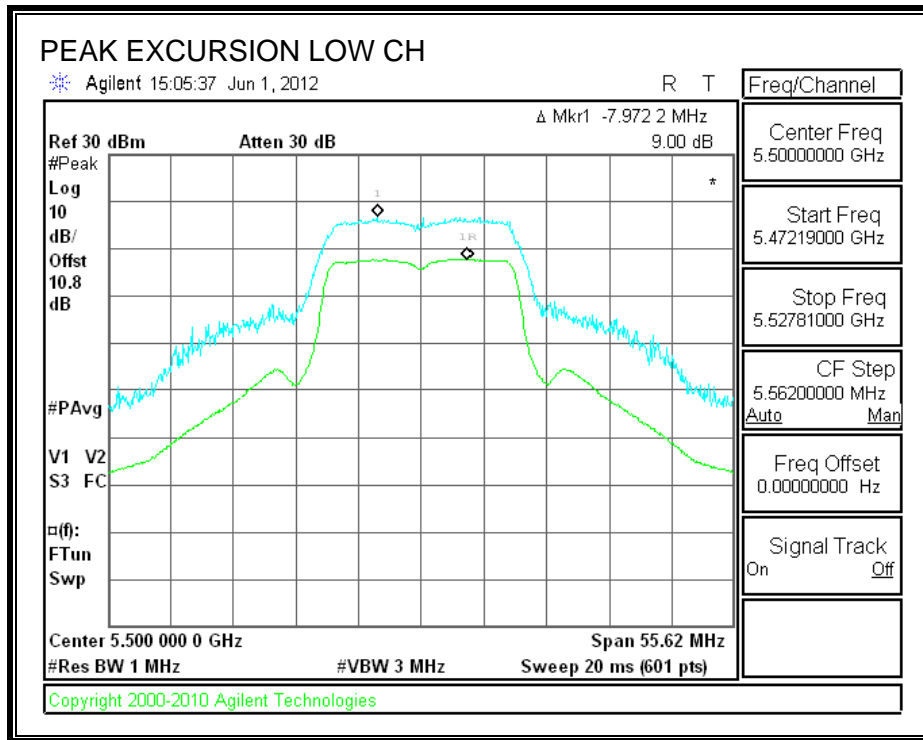
FCC §15.407 (a) (6)

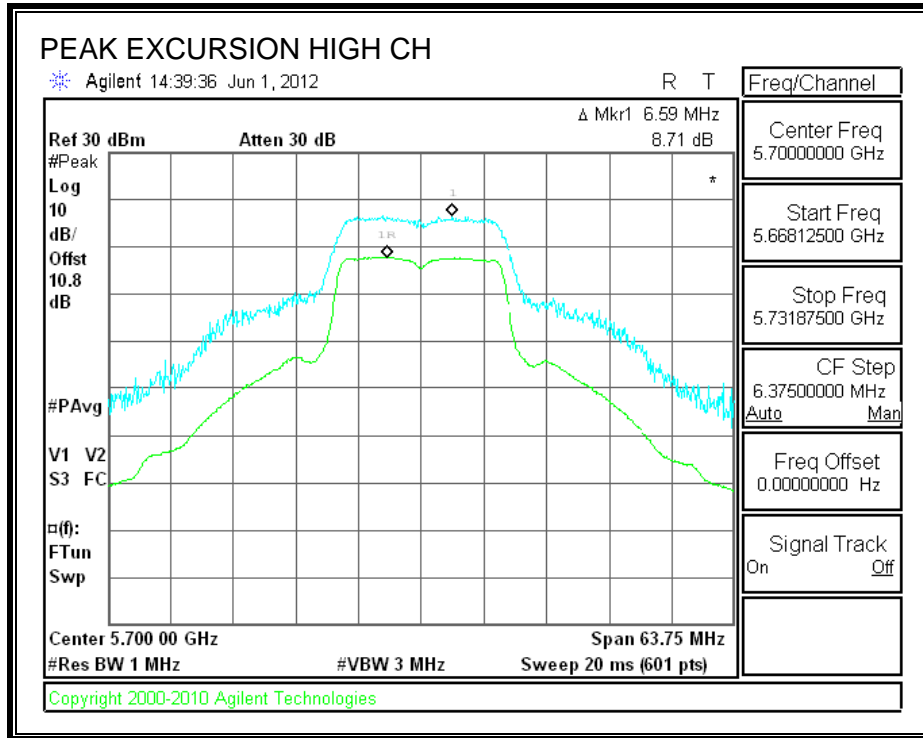
The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

Channel	Frequency (MHz)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Low	5500	9.00	13	-4.0
Mid	5580	9.33	13	-3.7
High	5700	8.71	13	-4.3

PEAK EXCURSION





8.17. 802.11n HT20, CDD MCS0, 3TX, 5.6 GHz BAND

8.17.1. 26 dB BANDWIDTH

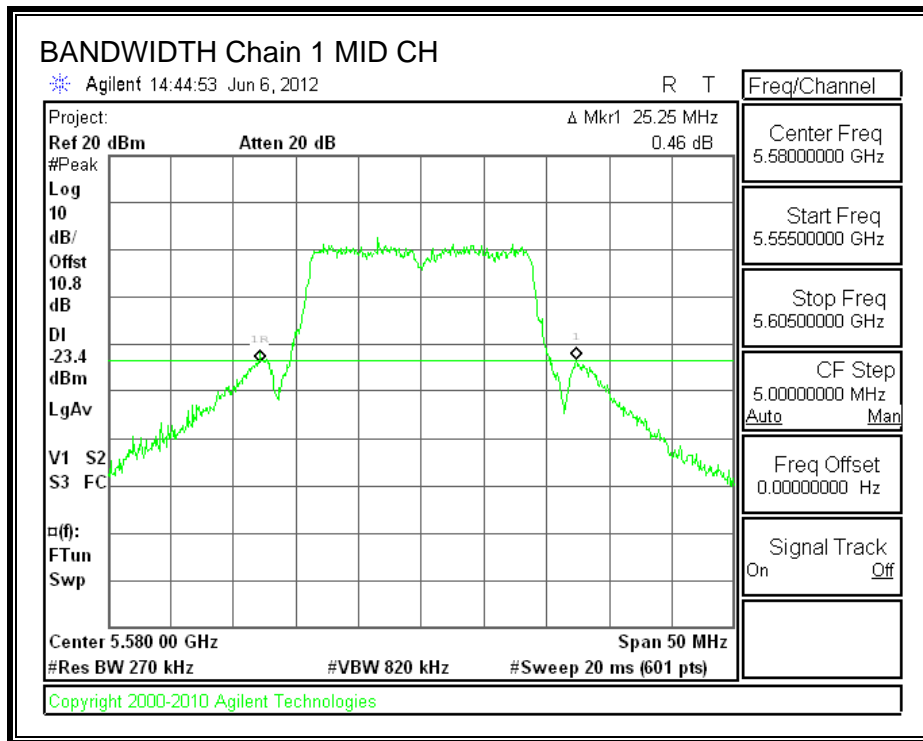
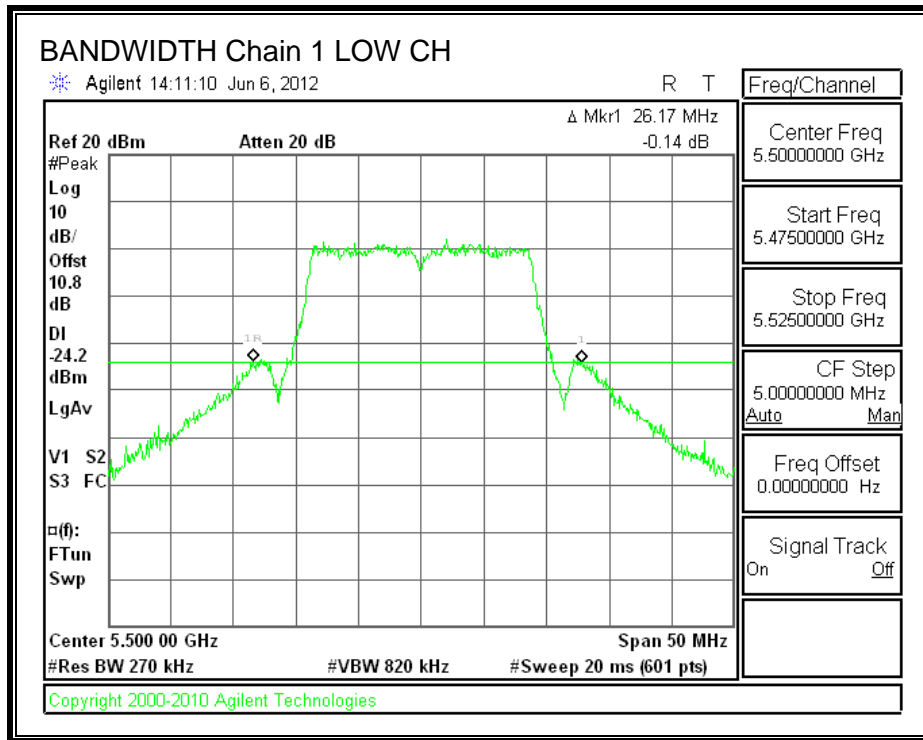
LIMITS

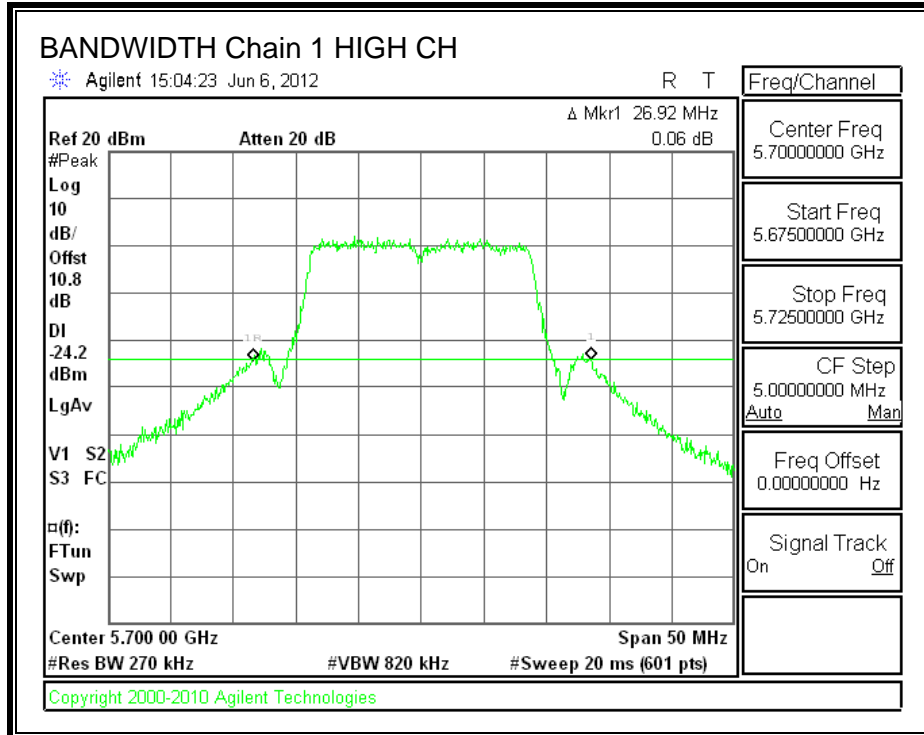
None; for reporting purposes only.

RESULTS

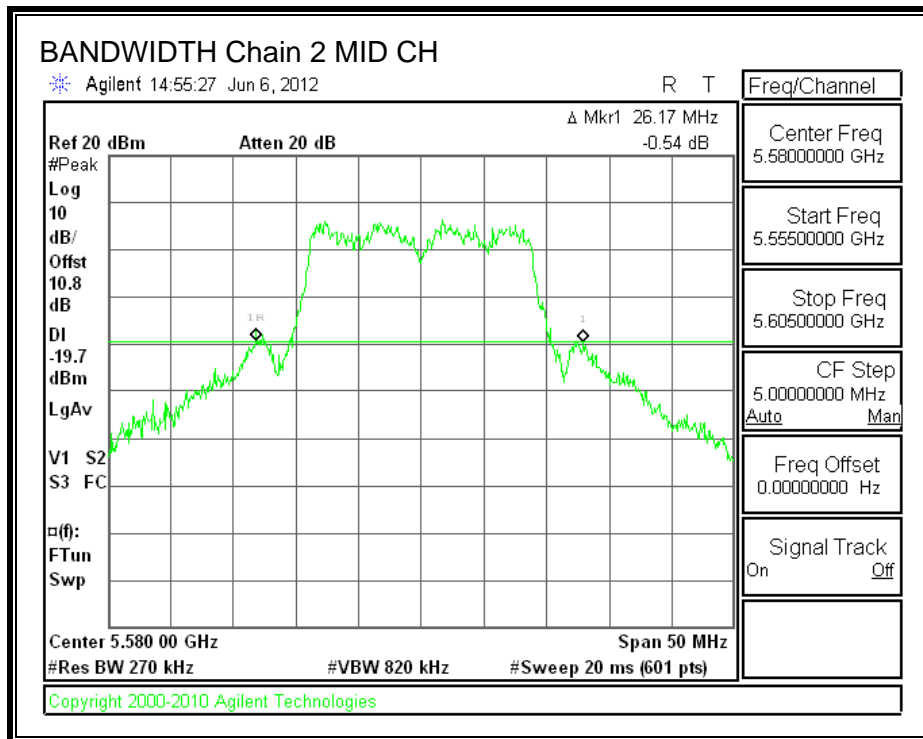
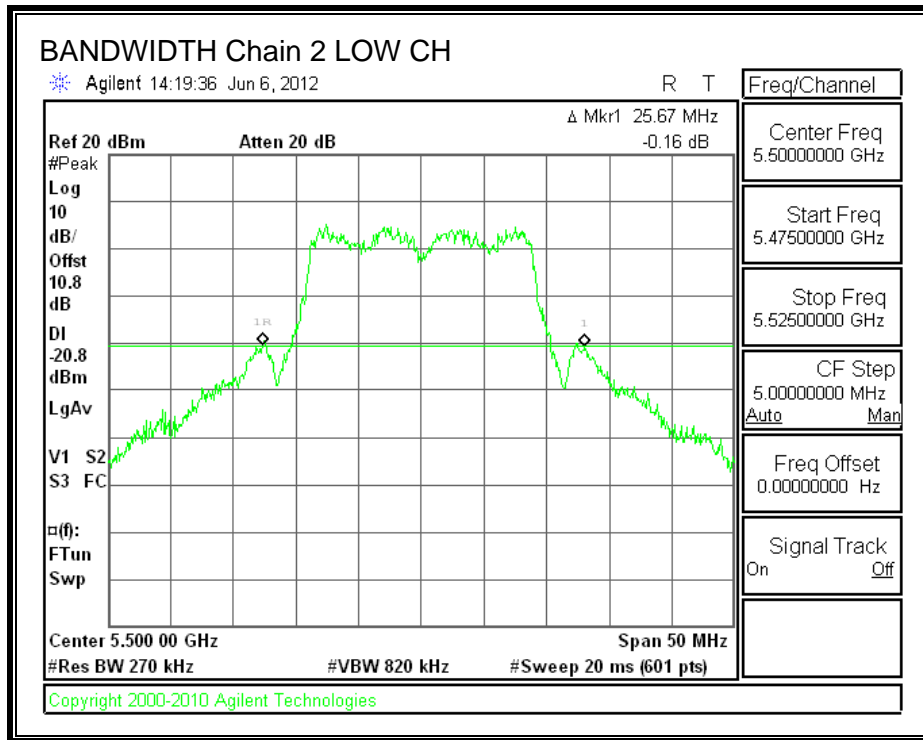
Channel	Frequency (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5500	26.17	25.67	23.67
Mid	5580	25.25	26.17	26.92
High	5700	26.92	26.17	26.25

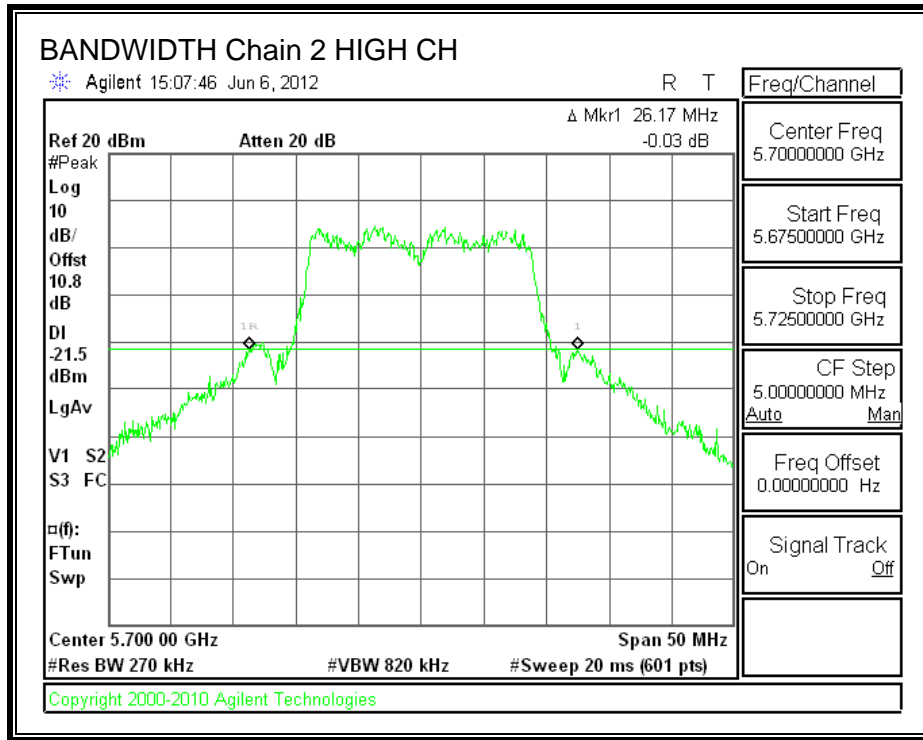
26 dB BANDWIDTH, Chain 1



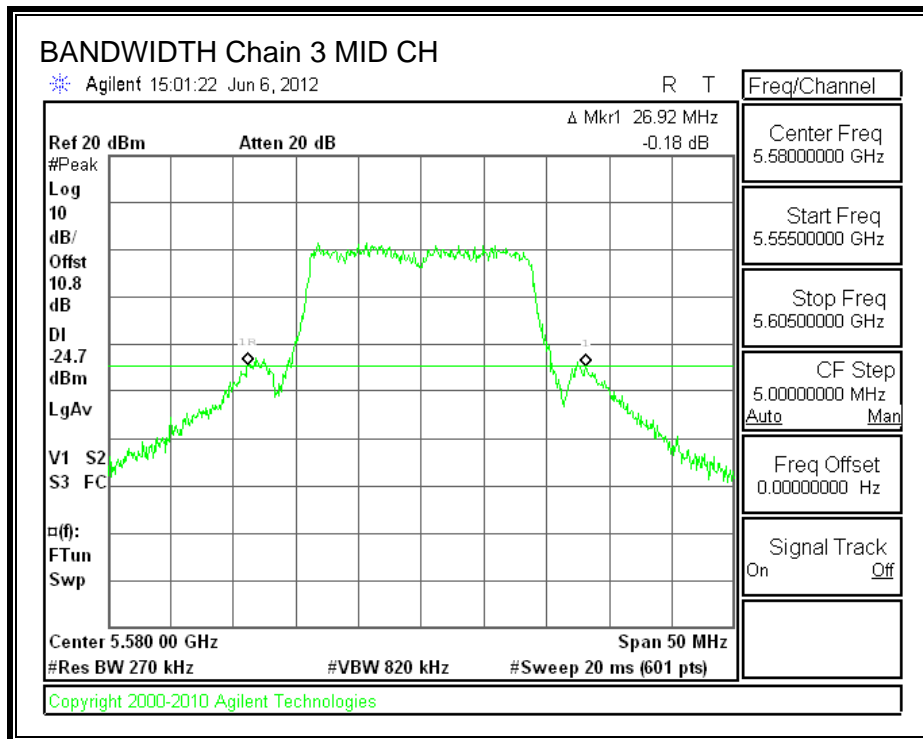
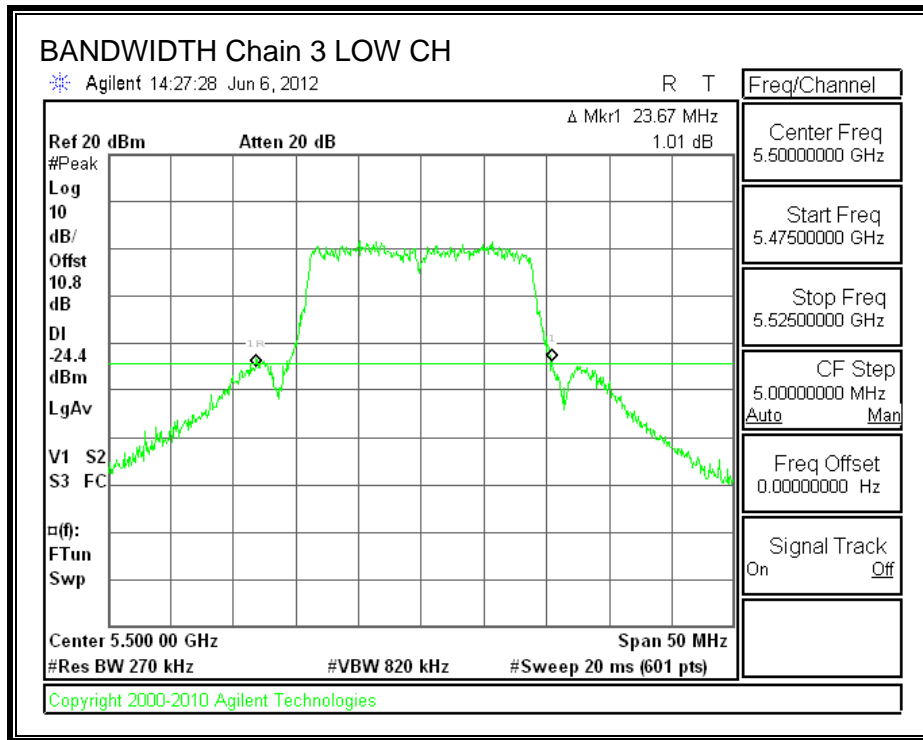


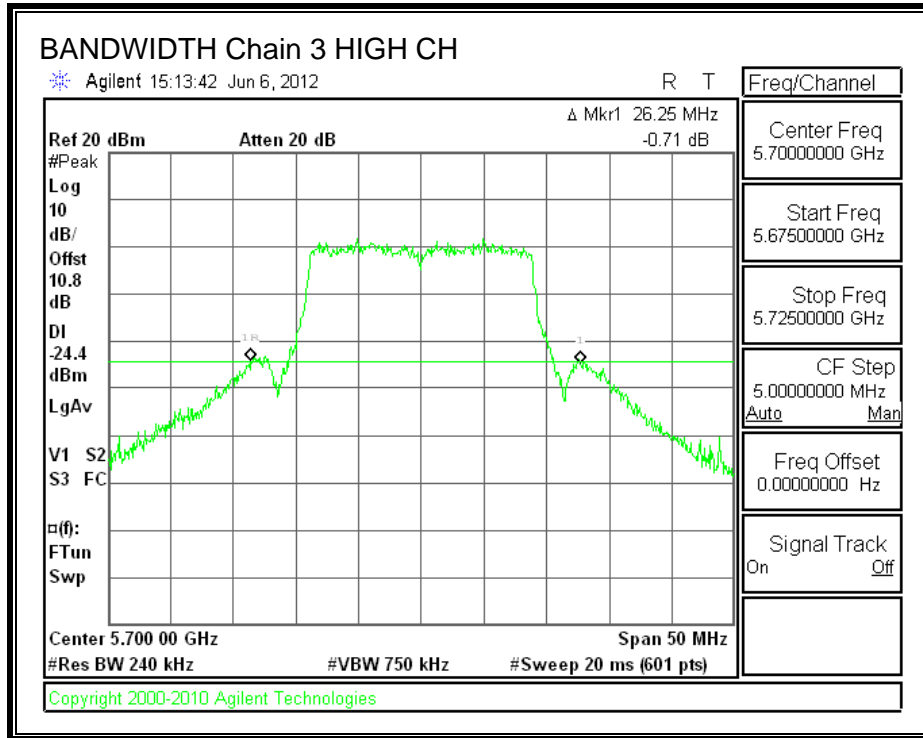
26 dB BANDWIDTH, Chain 2





26 dB BANDWIDTH, Chain 3





8.17.2. 99% BANDWIDTH

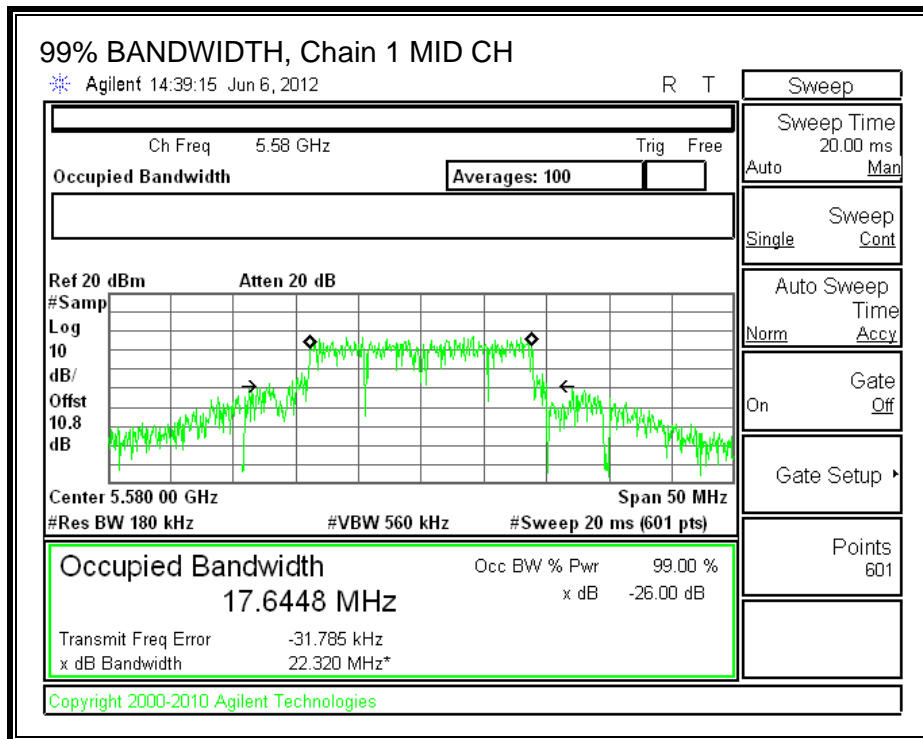
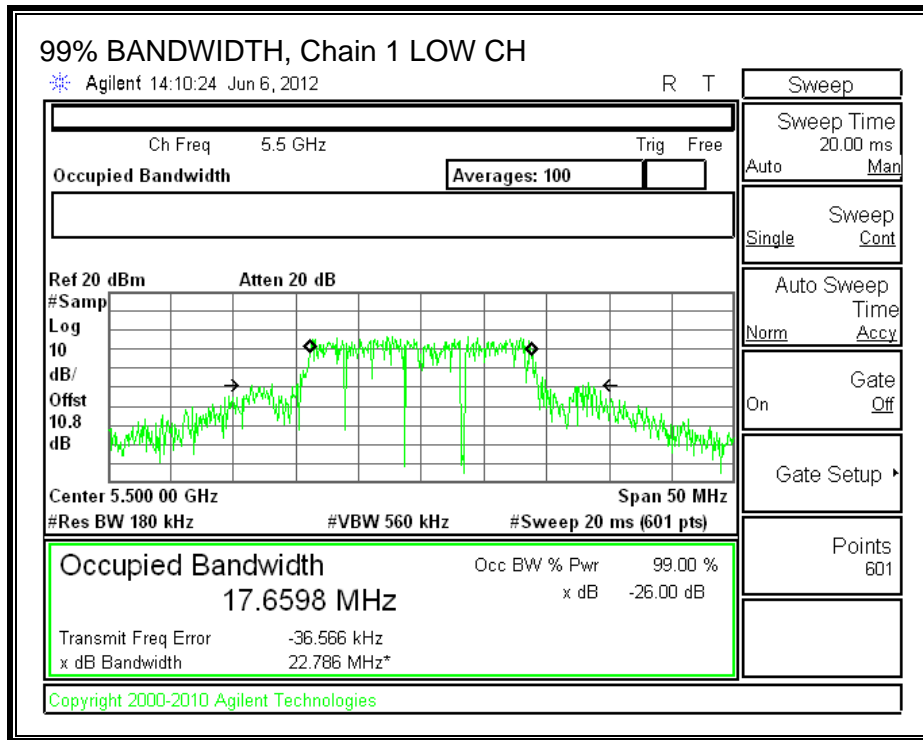
LIMITS

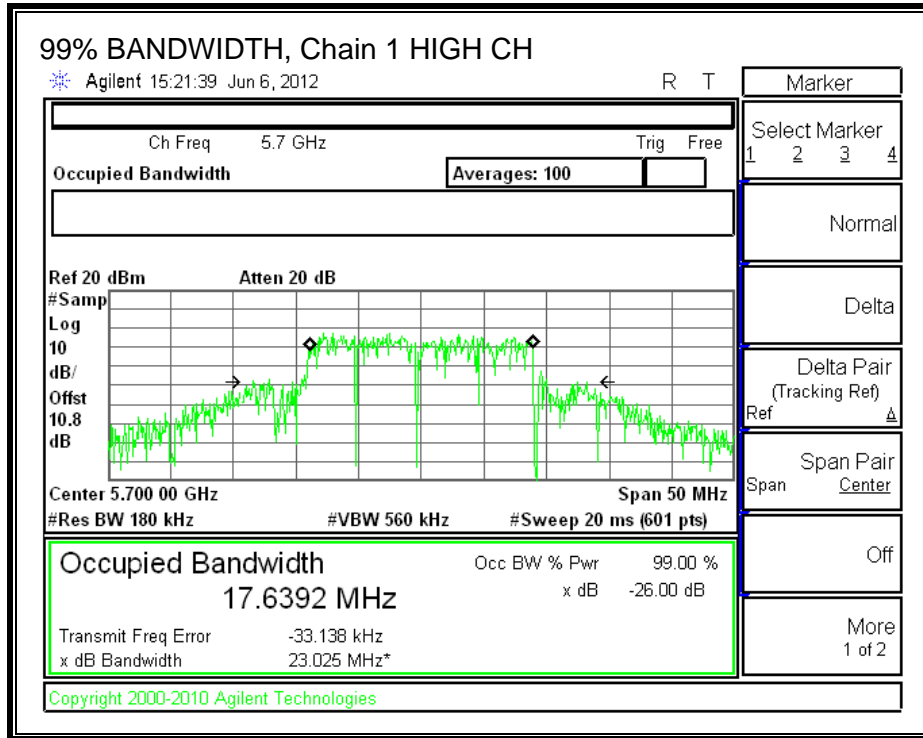
None; for reporting purposes only.

RESULTS

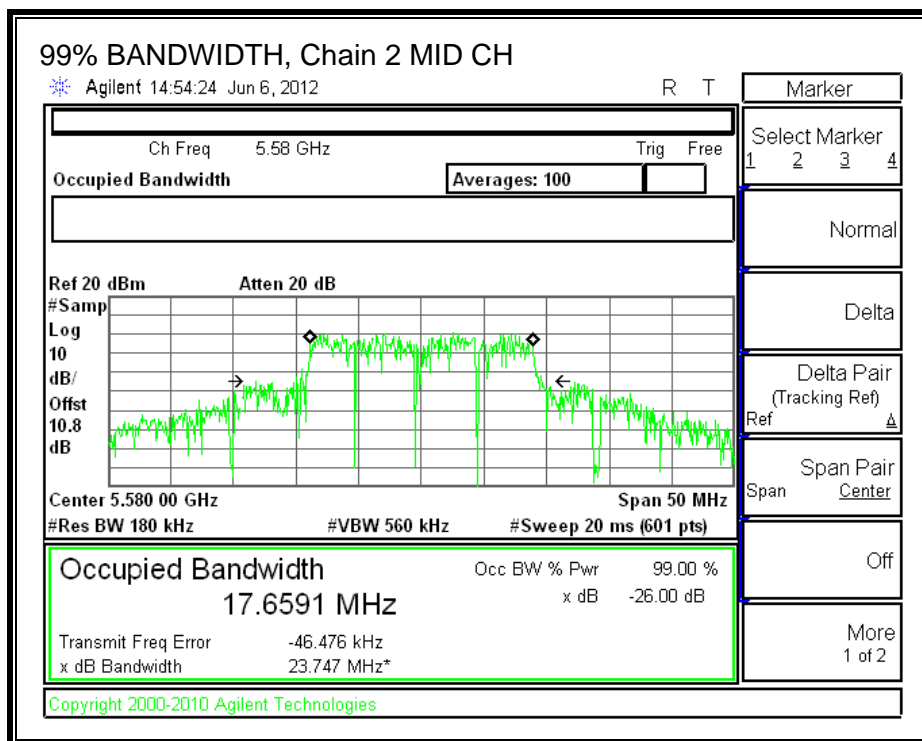
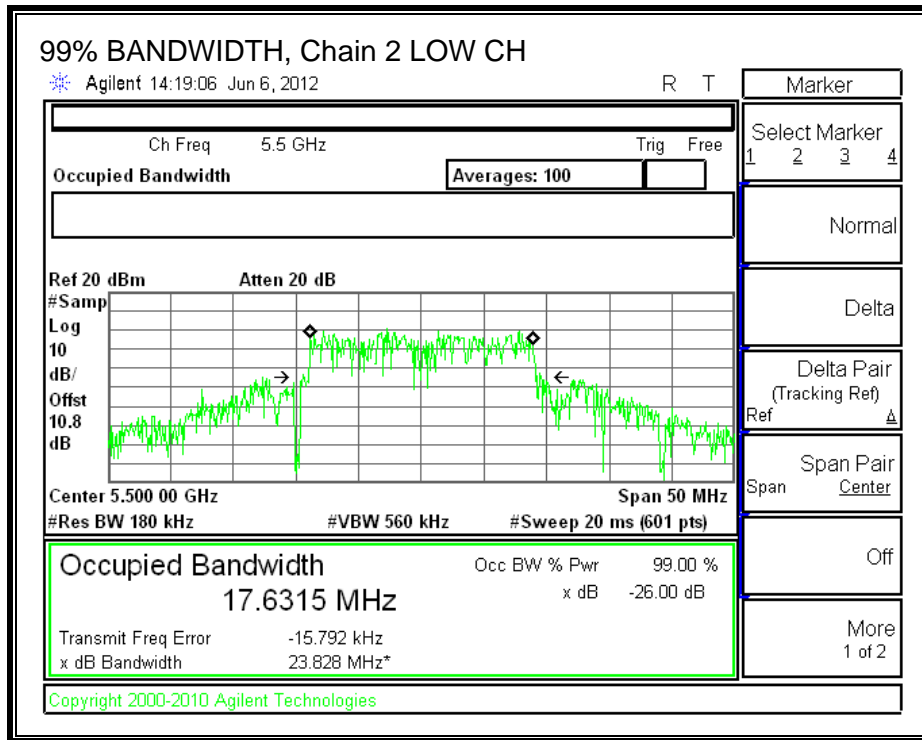
Channel	Frequency (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)	99% BW Chain 3 (MHz)
Low	5500	17.6598	17.6315	17.6589
Mid	5580	17.6448	17.6591	17.6499
High	5700	17.6392	17.6853	17.6645

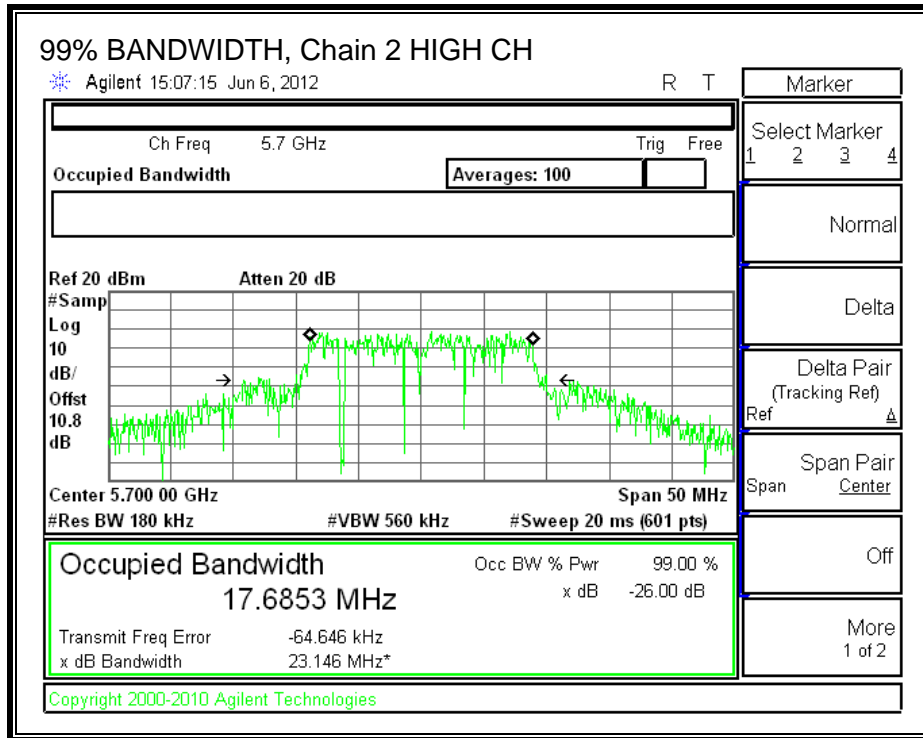
99% BANDWIDTH, Chain 1



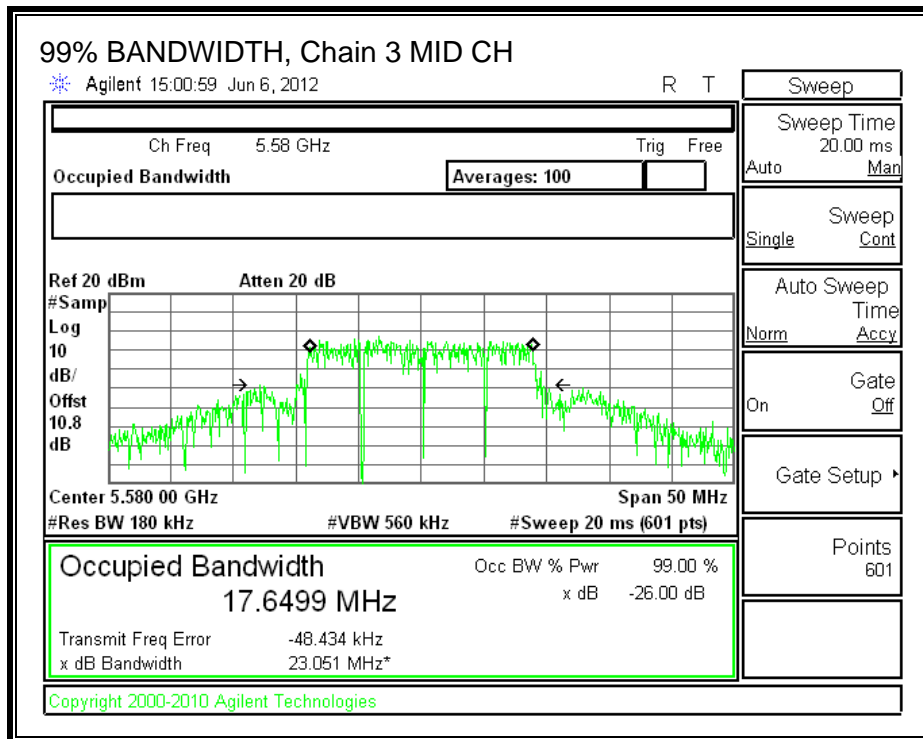
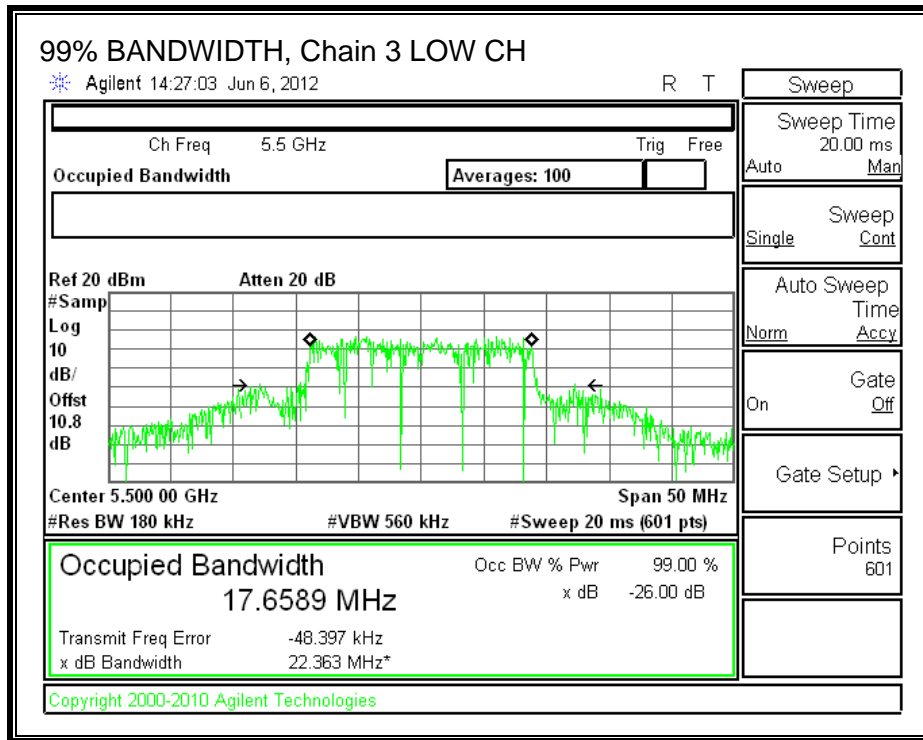


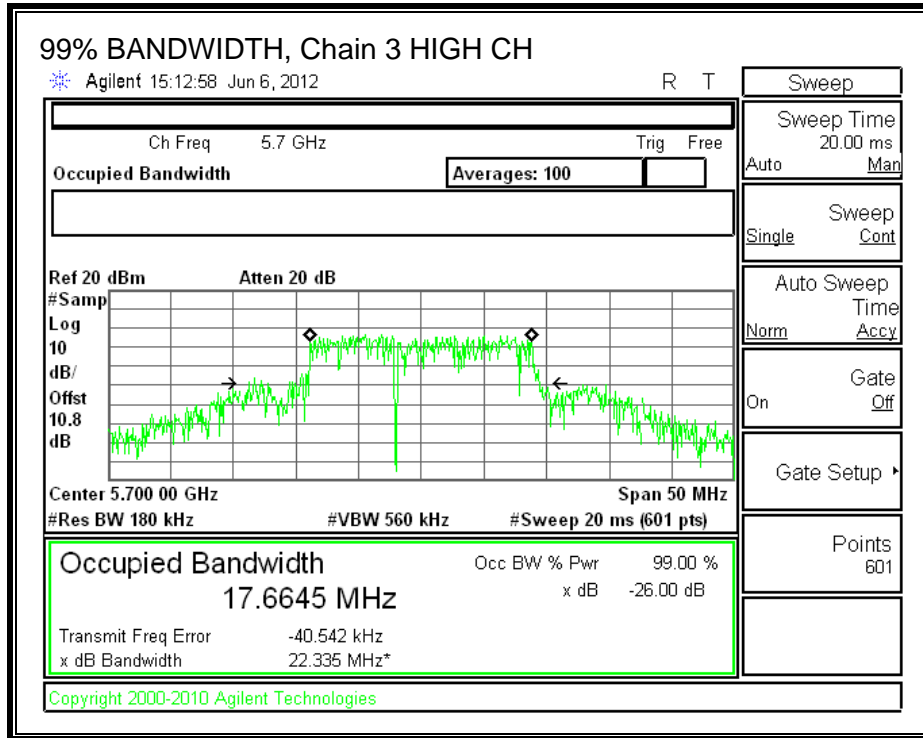
99% BANDWIDTH, Chain 2





99% BANDWIDTH, Chain 3





8.17.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.8 dB (including 10 dB pad and 0.80 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Chain 3 Power (dBm)	Total Power (dBm)
Low	5500	10.90	12.80	10.60	16.32
Mid	5580	10.50	13.60	10.10	16.47
High	5700	10.90	12.50	11.00	16.30

8.17.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

IC RSS-210 A9.2 (3)

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands 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 megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density 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 and the antenna gain is unequal among the chains. The directional gain is:

Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Chain 3 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
2.92	4.71	5.35	9.16

RESULTS

Limits

Channel	Frequency (MHz)	Fixed Limit (dBm)	B (MHz)	11 + 10 Log B Limit (dBm)	Directional Gain (dBi)	Power Limit (dBm)	PPSD Limit (dBm)
Low	5500	24	23.67	24.74	9.16	20.84	7.84
Mid	5580	24	25.25	25.02	9.16	20.84	7.84
High	5700	24	26.17	25.18	9.16	20.84	7.84

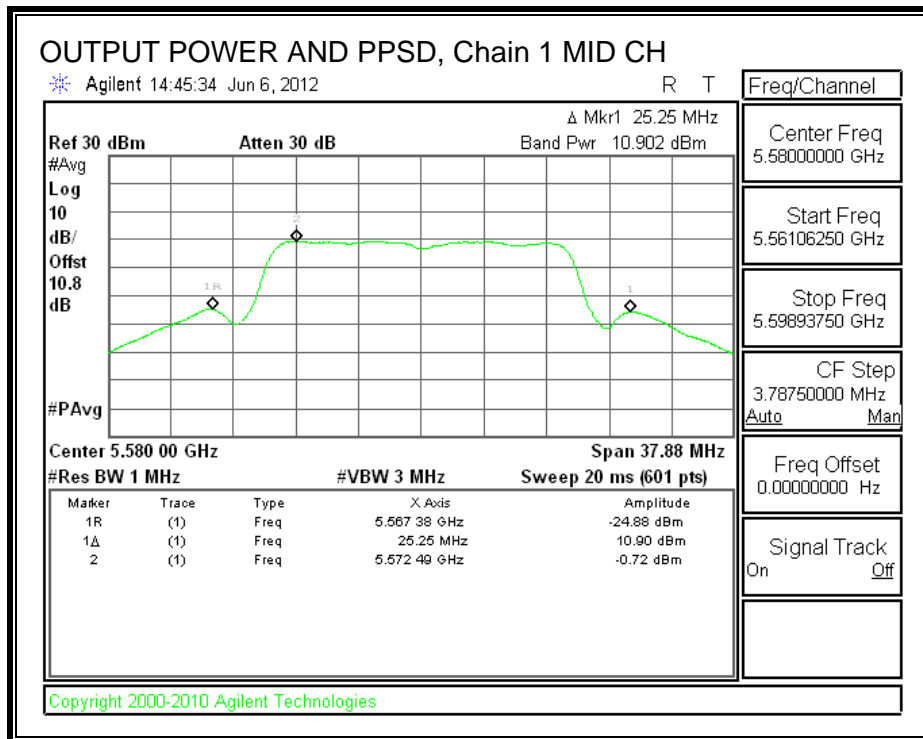
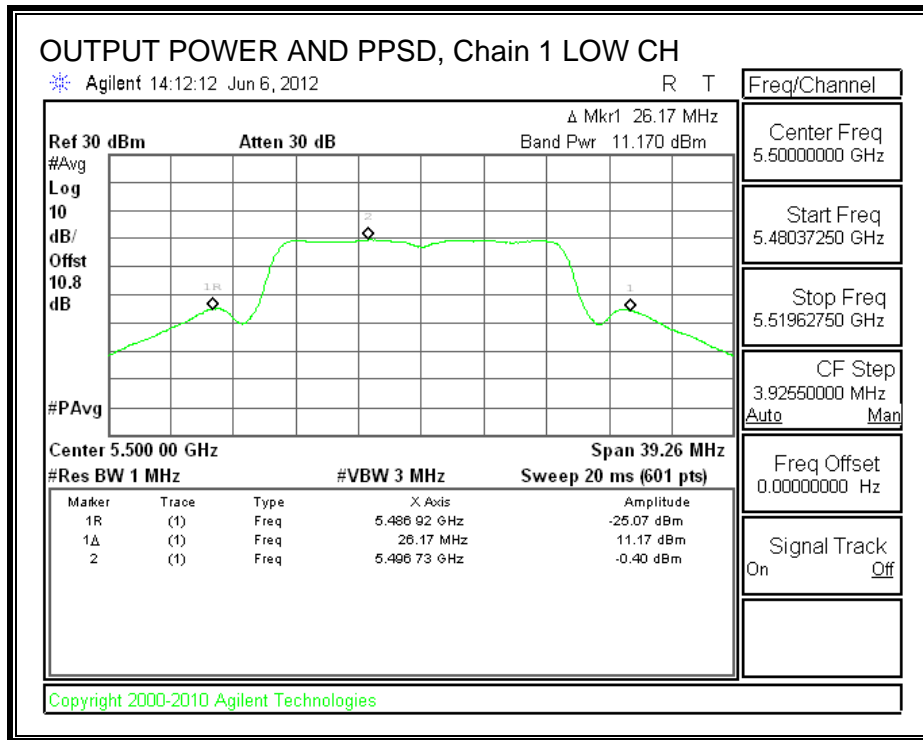
Output Power Results

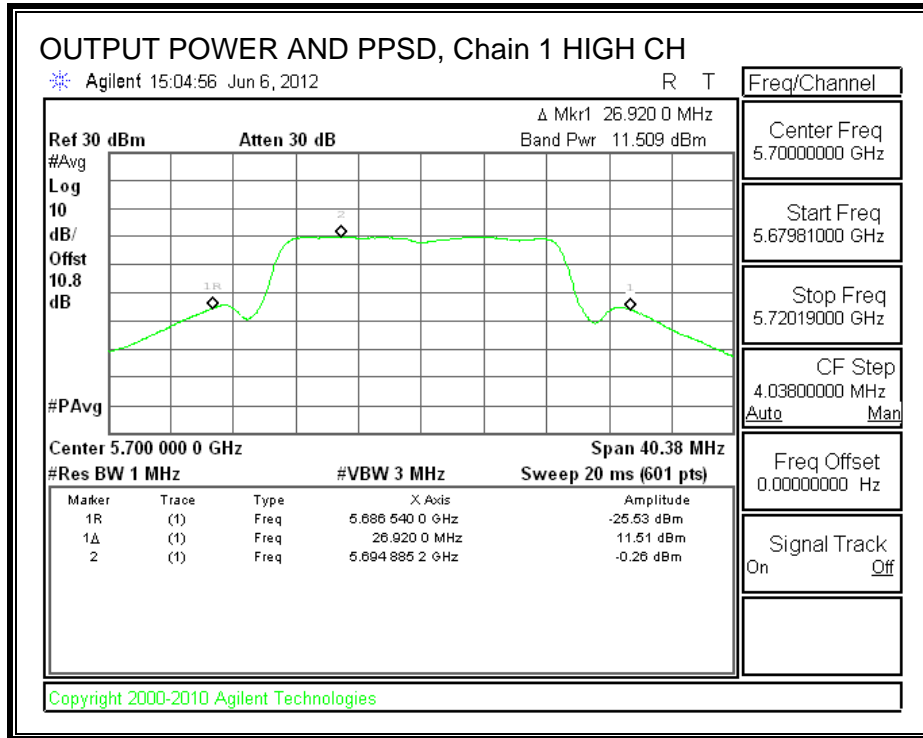
Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	11.170	13.416	10.699	16.702	20.84	-4.138
Mid	5580	10.902	14.345	10.592	17.073	20.84	-3.767
High	5700	11.509	12.992	11.493	16.828	20.84	-4.012

PPSD Results

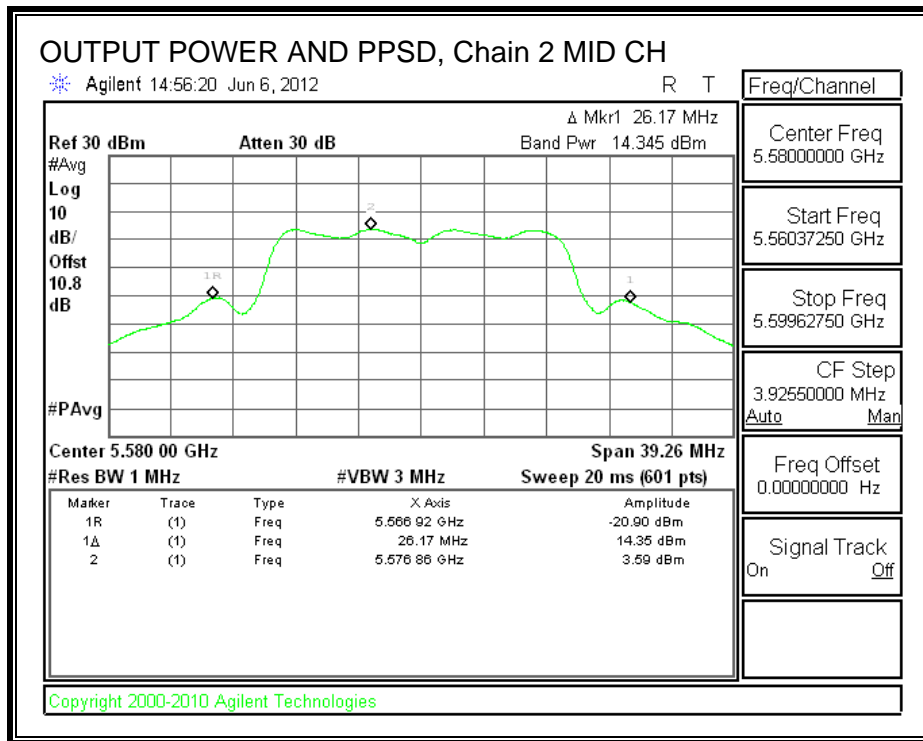
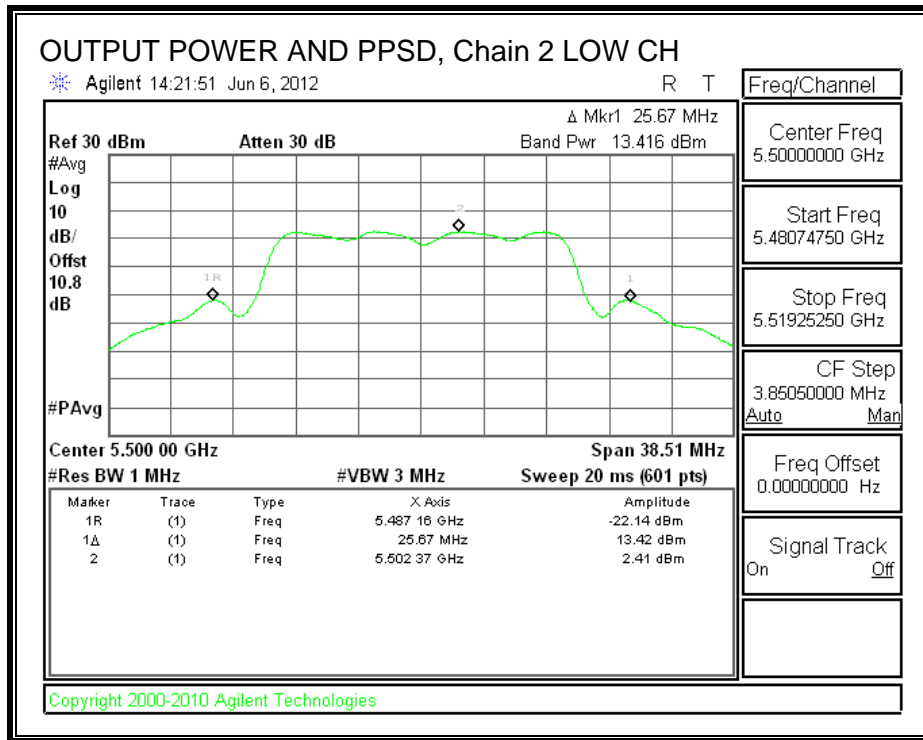
Channel	Frequency (MHz)	Chain 1 Meas PPSD (dBm)	Chain 2 Meas PPSD (dBm)	Chain 3 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	-0.40	2.41	-0.50	5.50	7.84	-2.34
Mid	5580	-0.72	3.59	-0.71	6.00	7.84	-1.84
High	5700	-0.26	2.58	0.07	5.76	7.84	-2.08

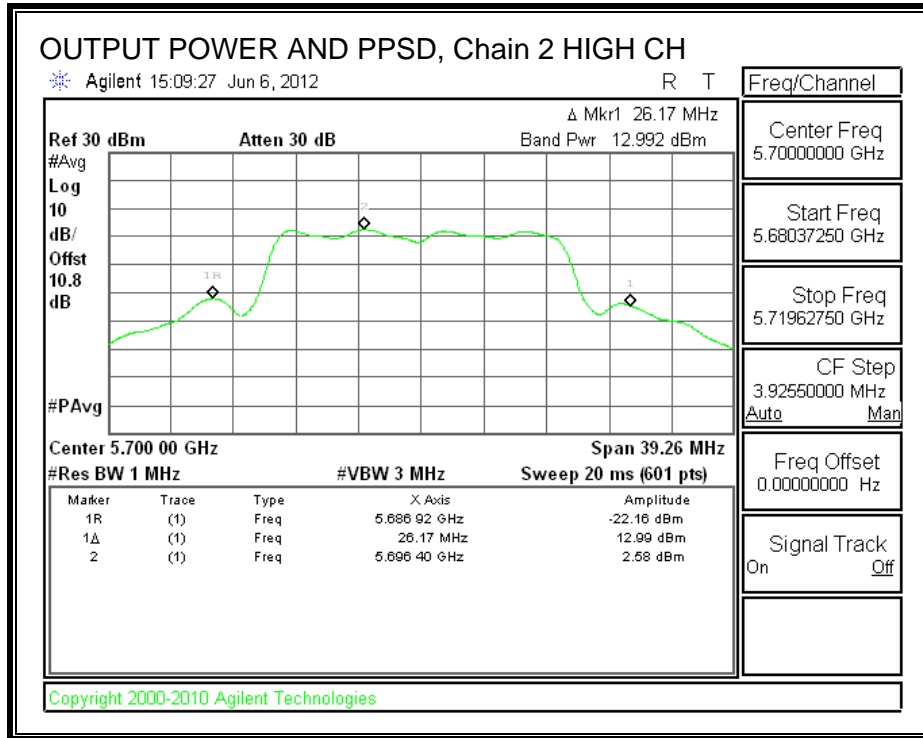
OUTPUT POWER AND PPSD, Chain 1



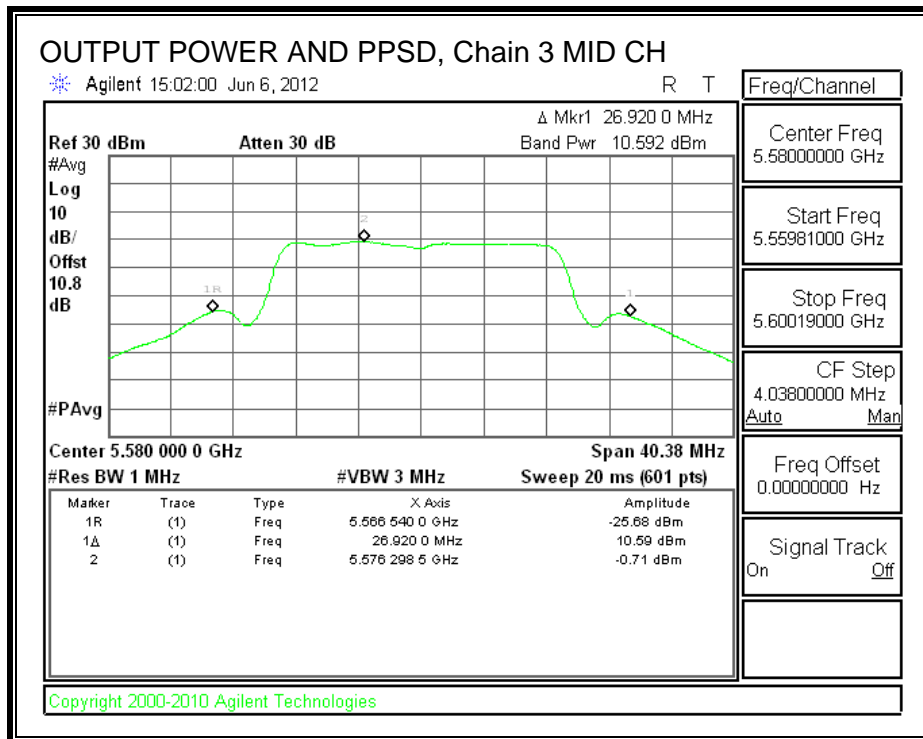
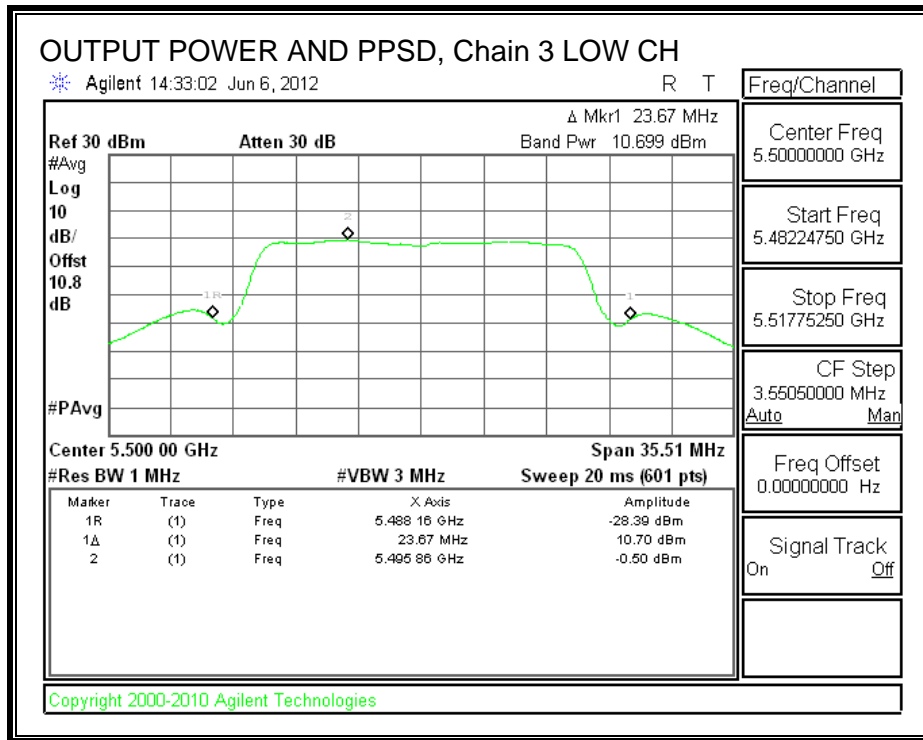


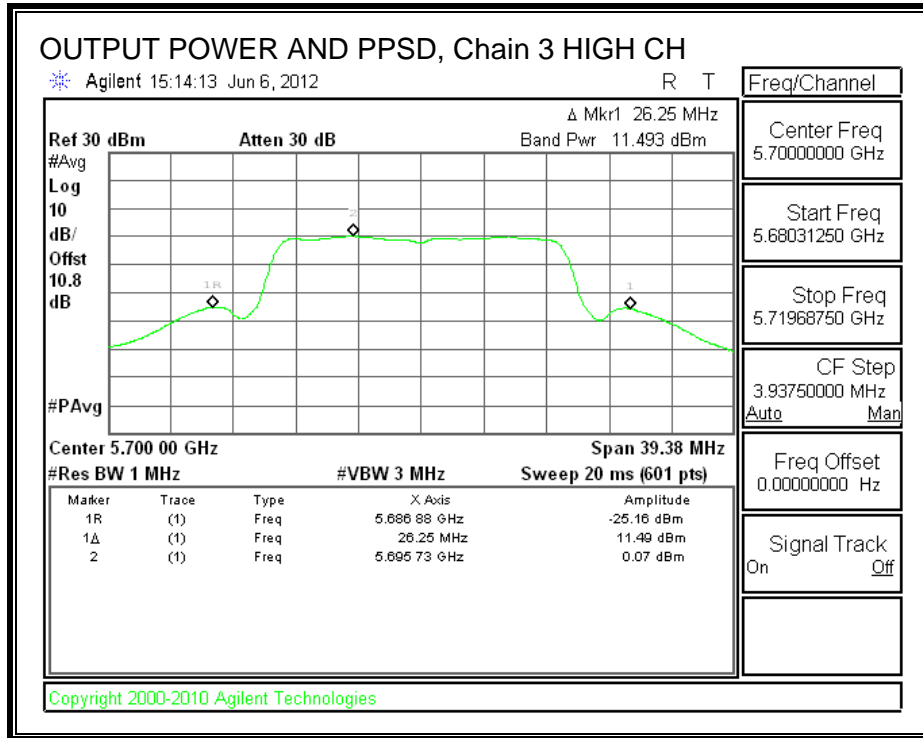
OUTPUT POWER AND PPSD, Chain 2





OUTPUT POWER AND PPSD, Chain 3





8.17.5. PEAK EXCURSION

LIMITS

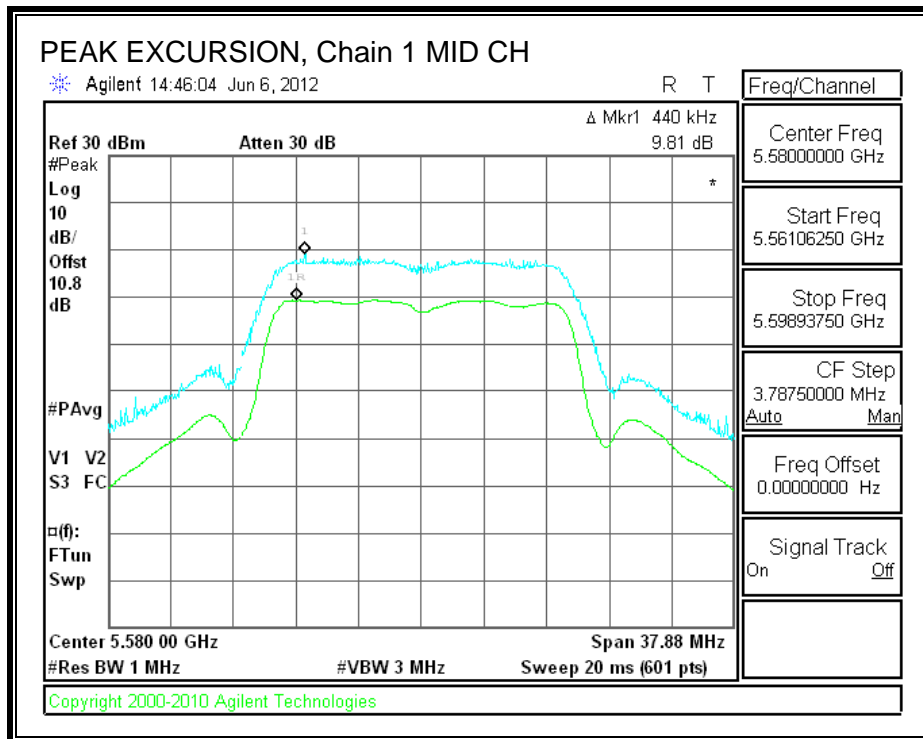
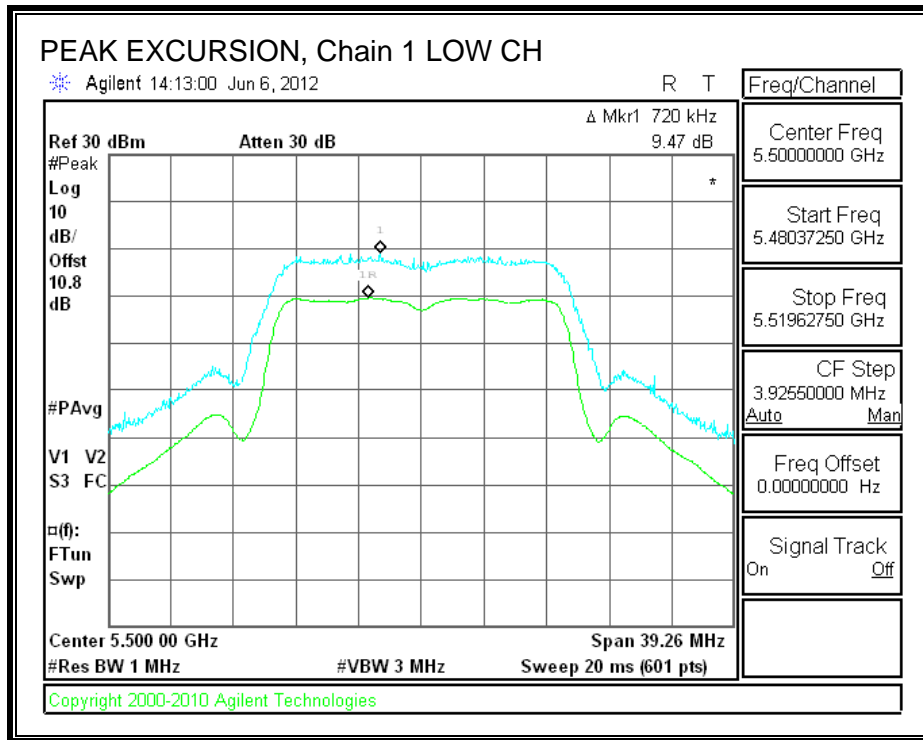
FCC §15.407 (a) (6)

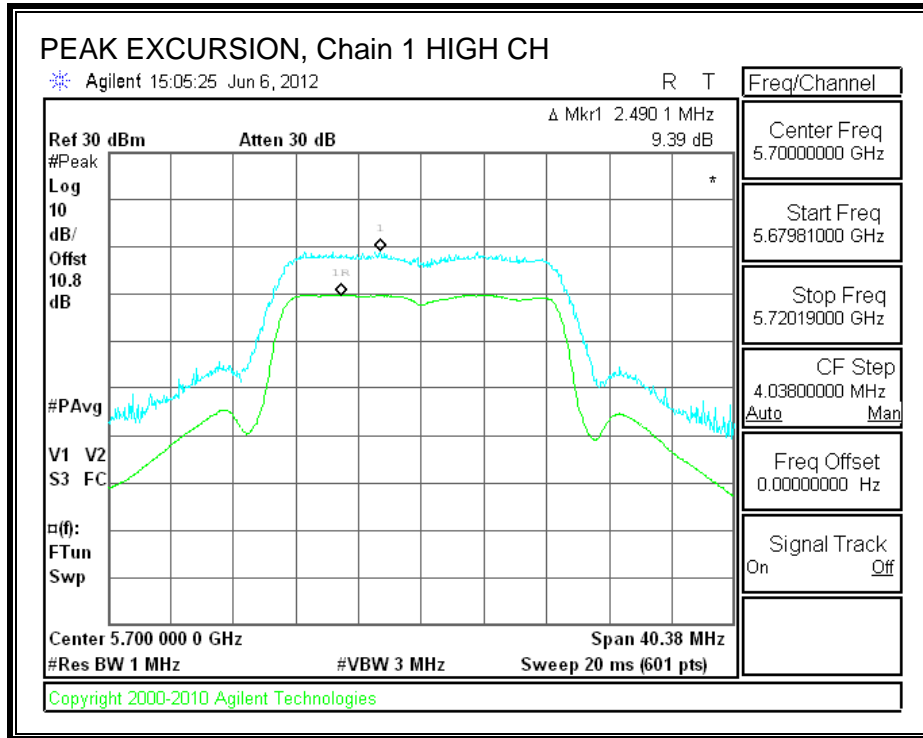
The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

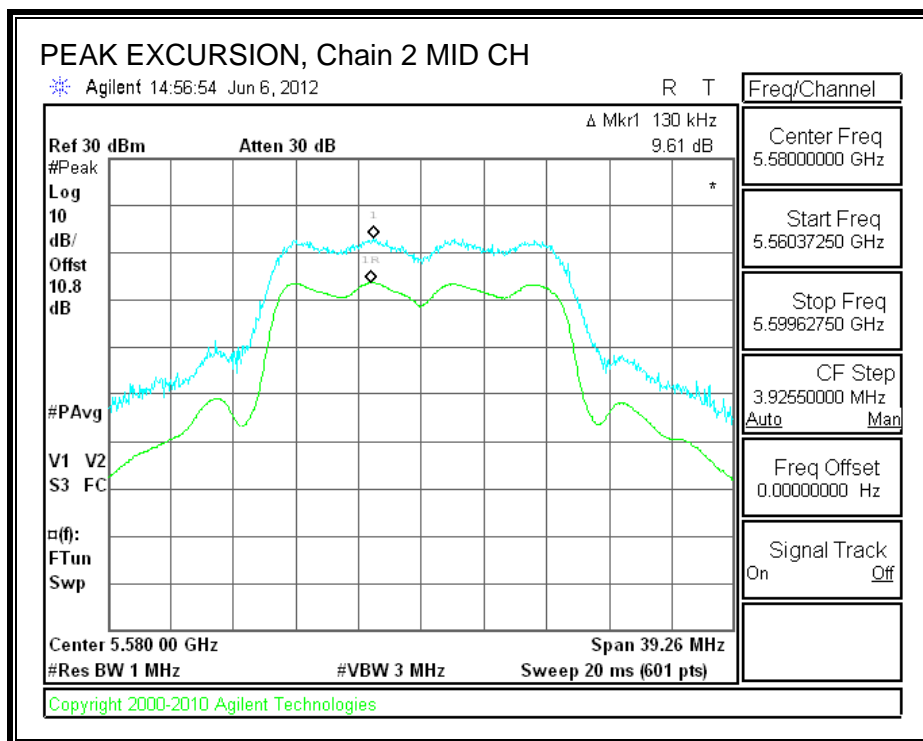
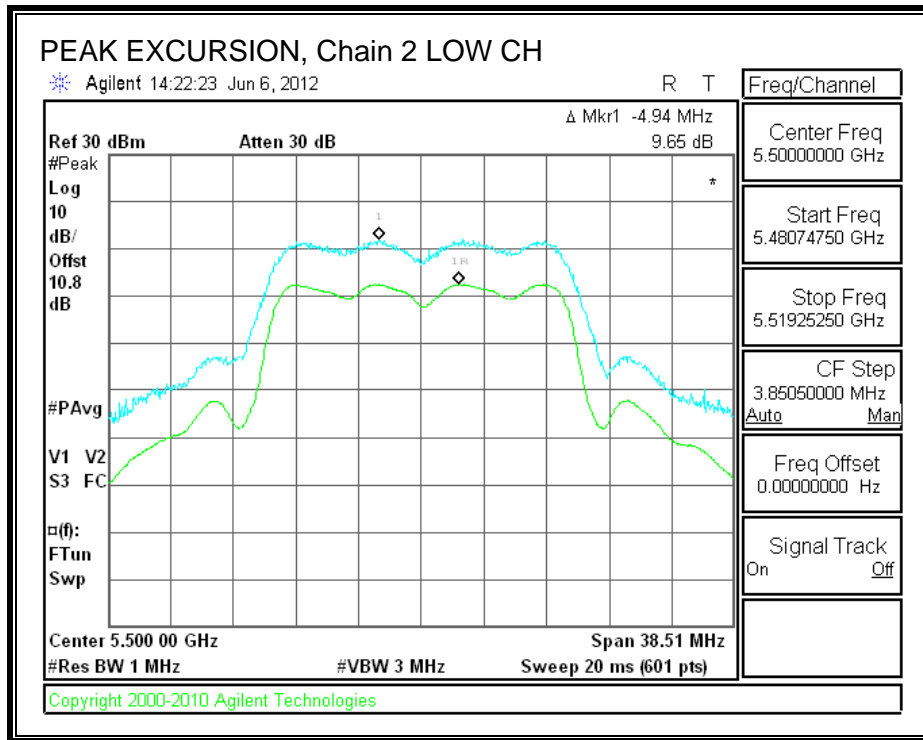
Channel	Frequency (MHz)	Pk Exc Chain 1 (dB)	Pk Exc Chain 2 (dB)	Pk Exc Chain 3 (dB)	Limit (dB)	Worst-Case Margin (dB)
Low	5500	9.47	9.65	10.32	13	-2.68
Mid	5580	9.81	9.61	10.08	13	-2.92
High	5700	9.39	9.21	10.25	13	-2.75

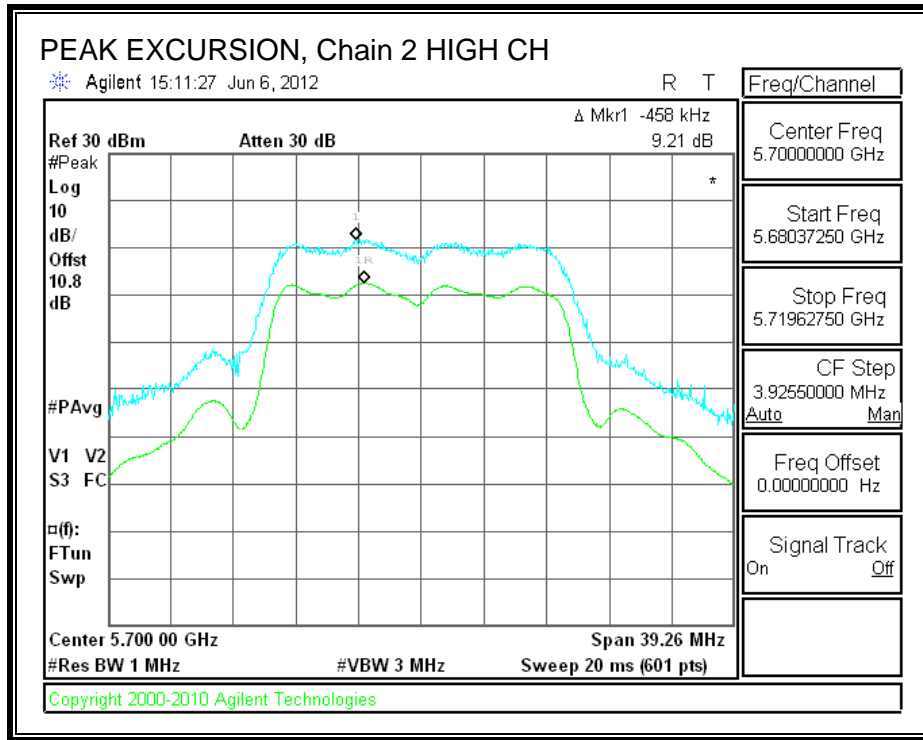
PEAK EXCURSION, Chain 1



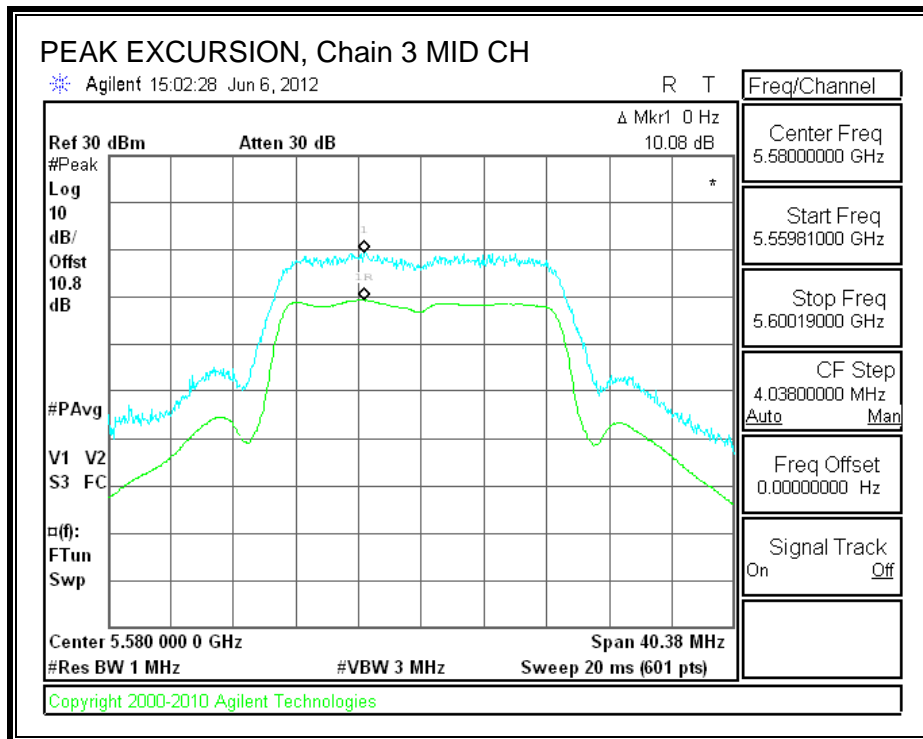
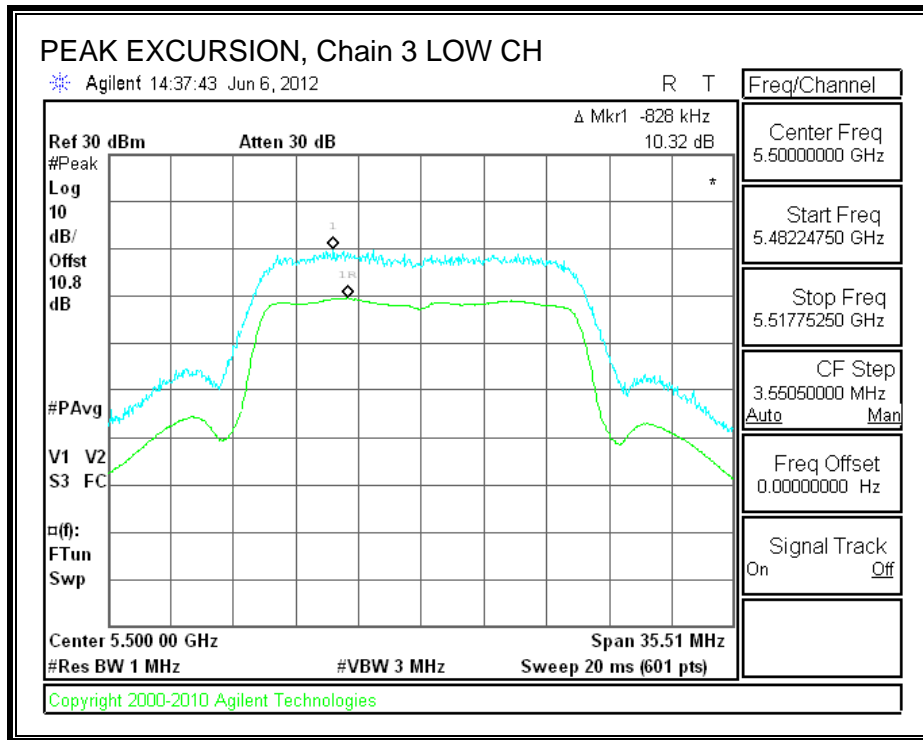


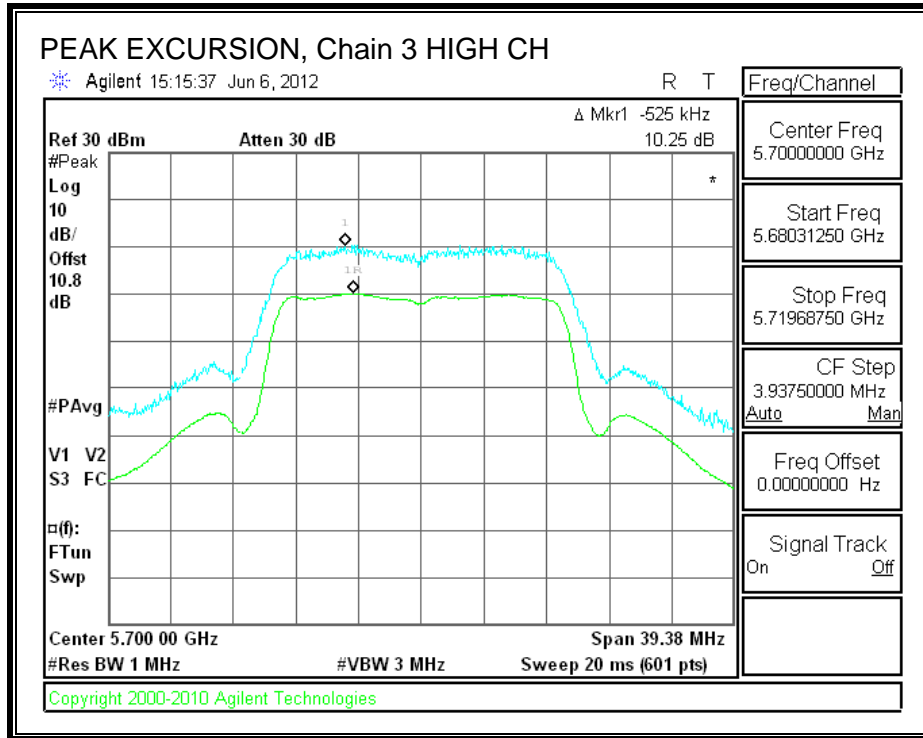
PEAK EXCURSION, Chain 2





PEAK EXCURSION, Chain 3





8.18. 802.11n HT20, SDM MCS21, 3TX, 5.6 GHz BAND

8.18.1. 26 dB BANDWIDTH

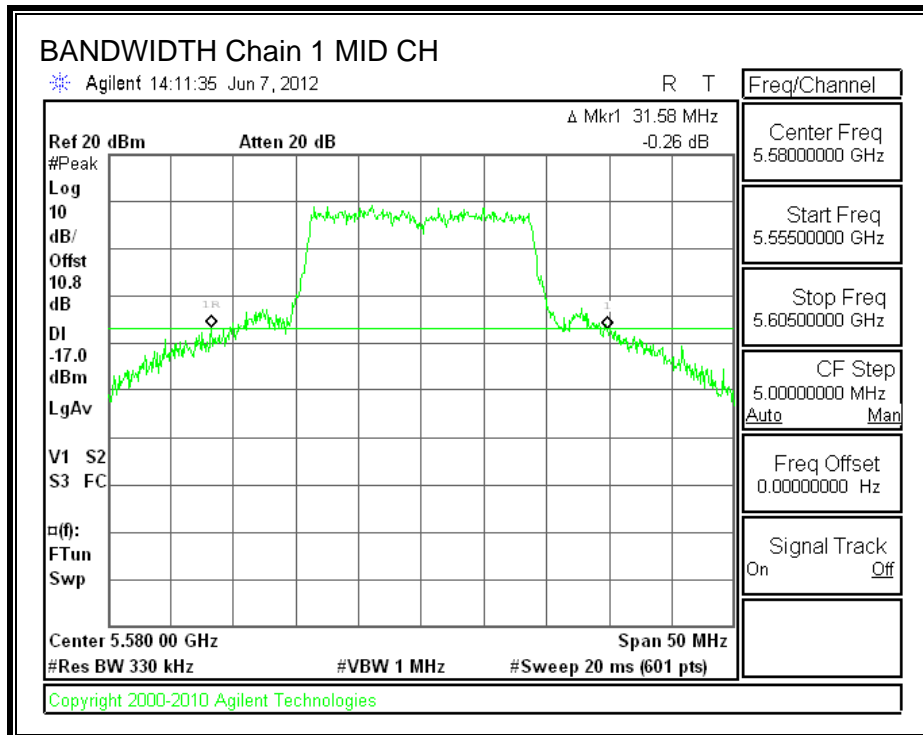
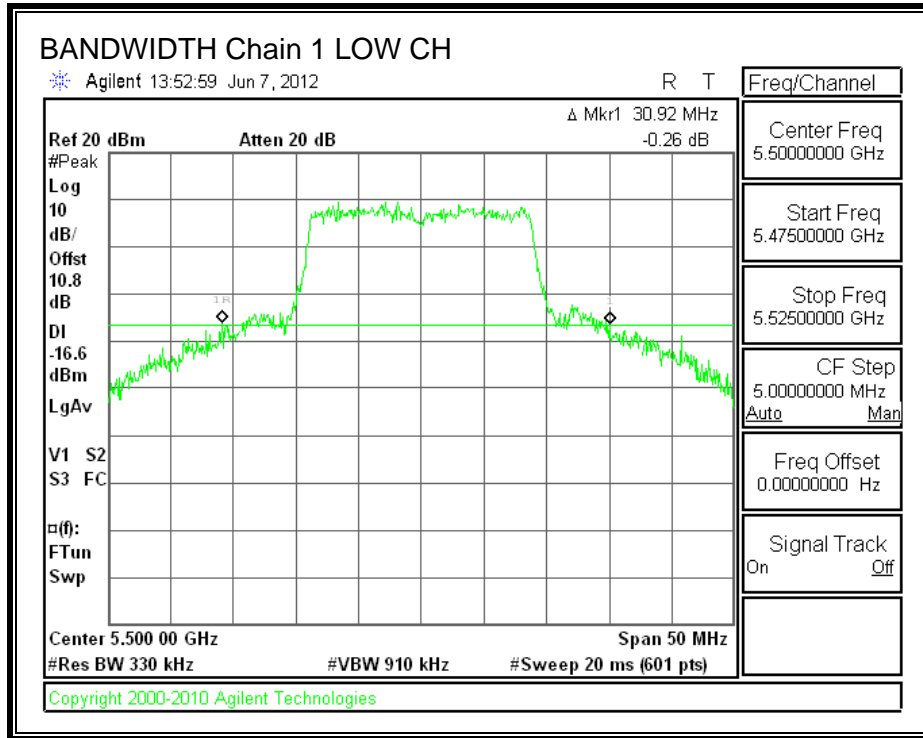
LIMITS

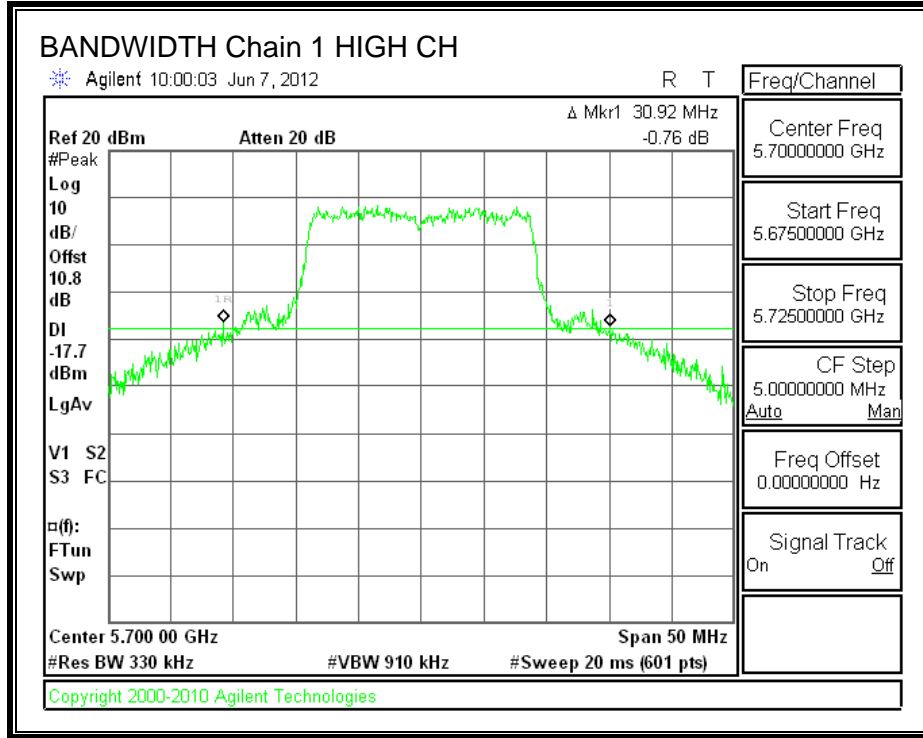
None; for reporting purposes only.

RESULTS

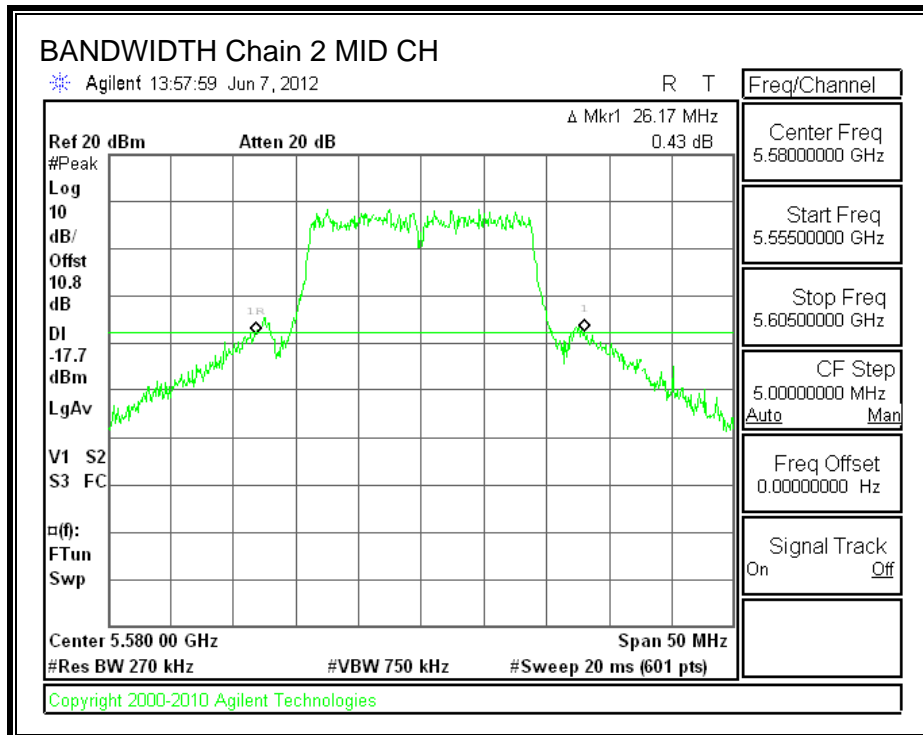
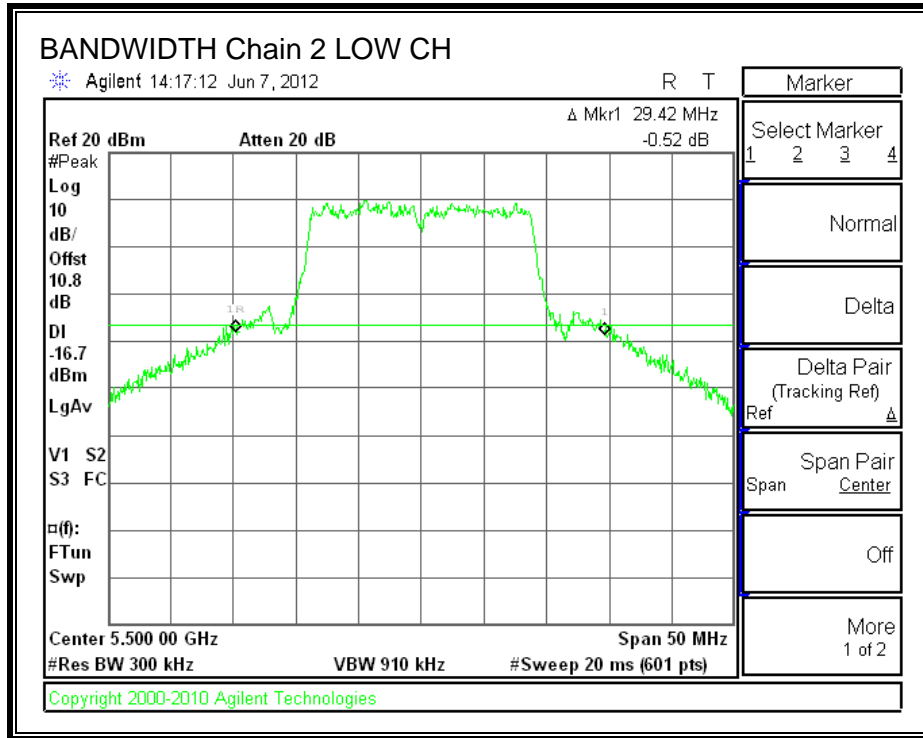
Channel	Frequency (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)	26 dB BW Chain 3 (MHz)
Low	5500	30.92	29.42	29.75
Mid	5580	31.58	26.17	29.33
High	5700	30.92	32.17	28.75

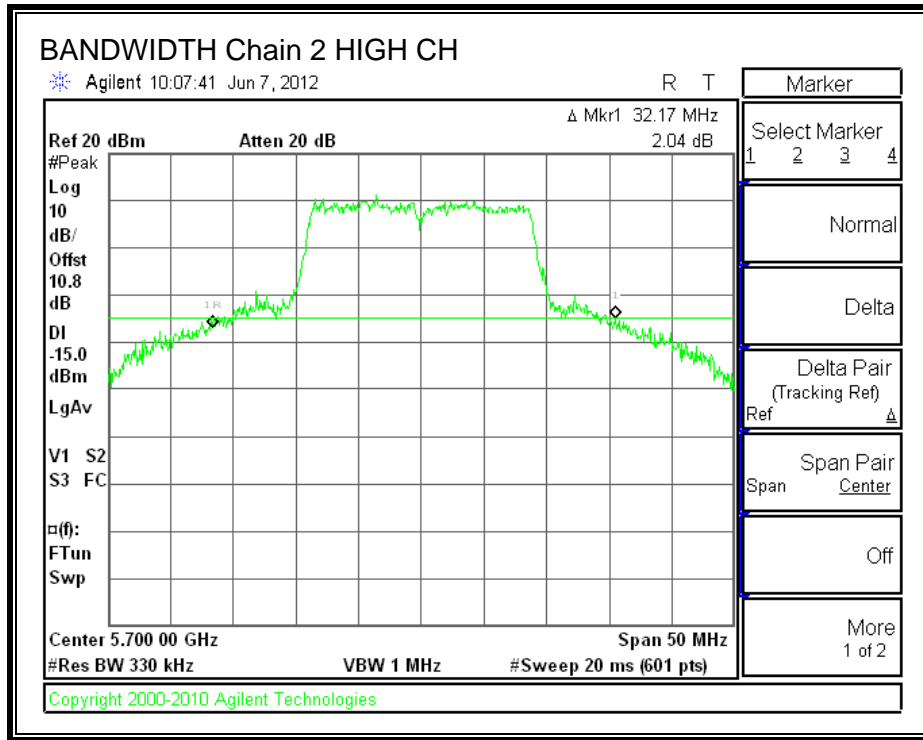
26 dB BANDWIDTH, Chain 1



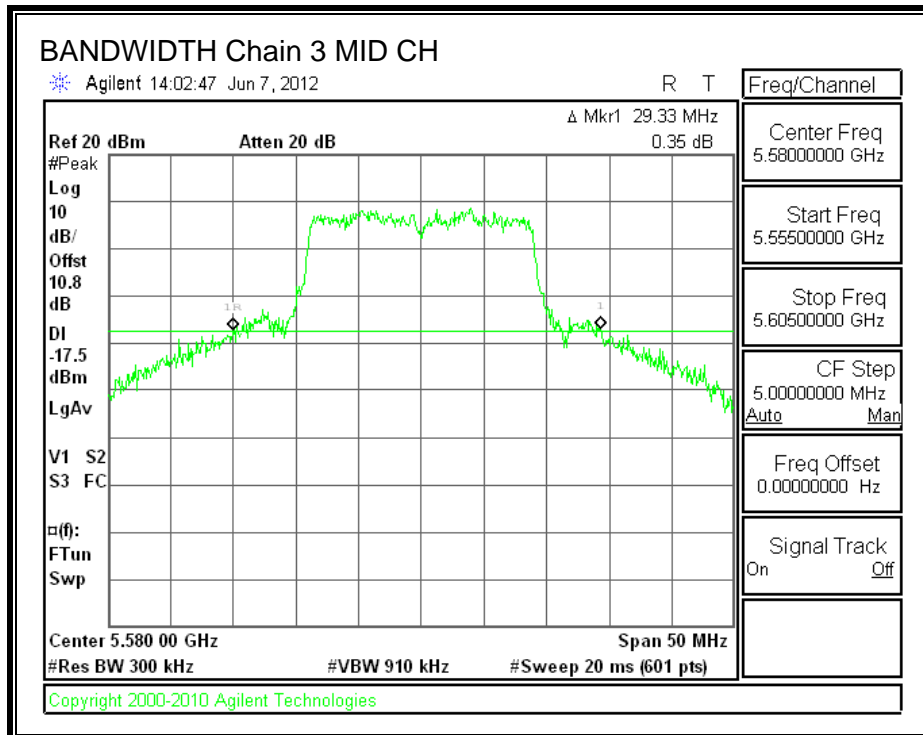
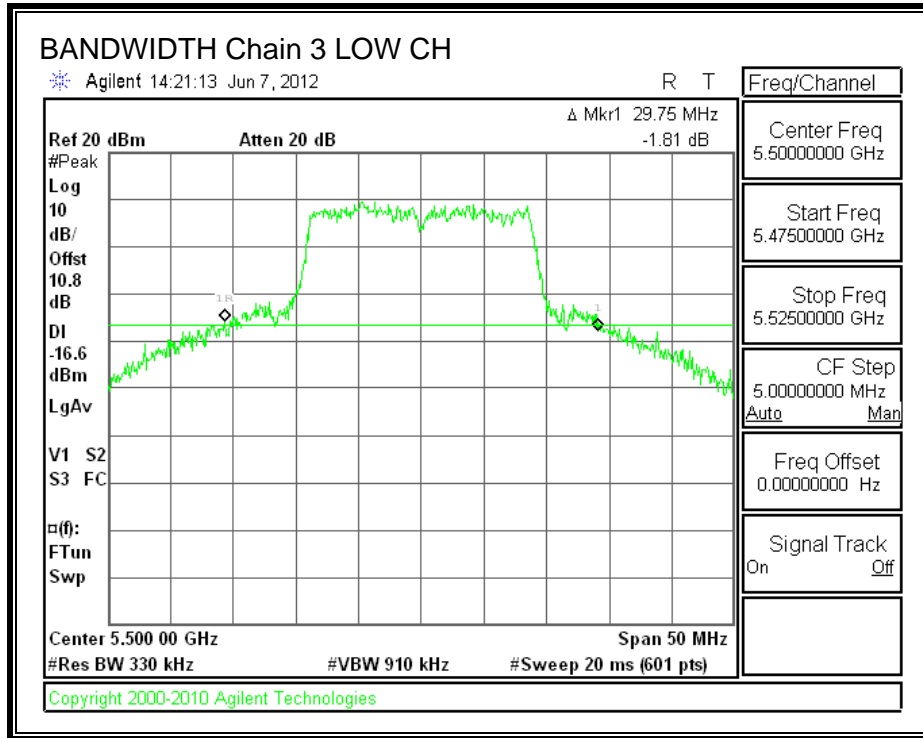


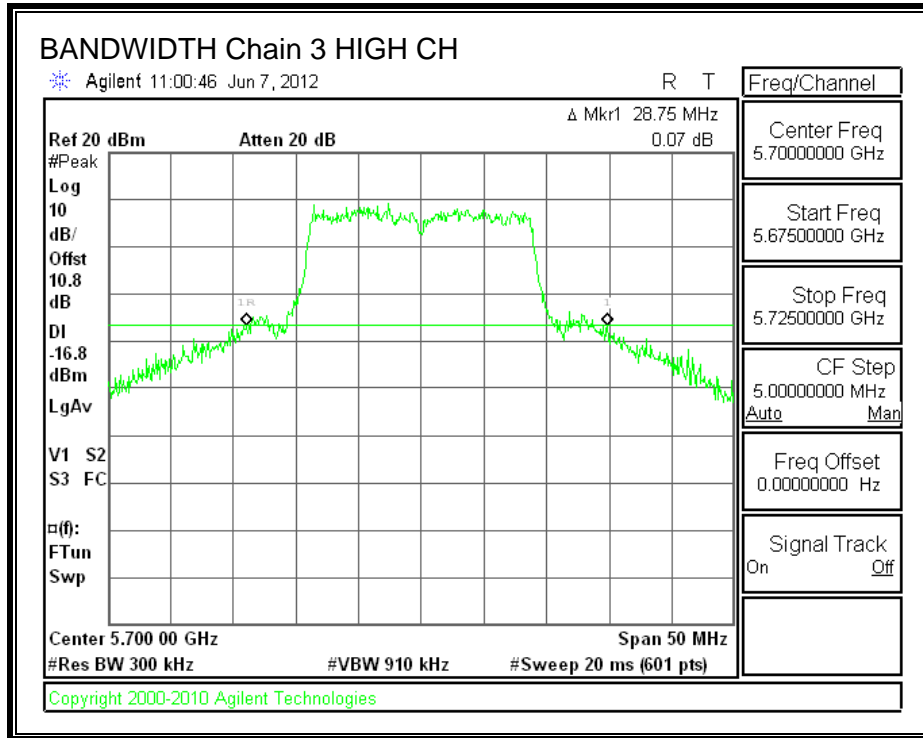
26 dB BANDWIDTH, Chain 2





26 dB BANDWIDTH, Chain 3





8.18.2. 99% BANDWIDTH

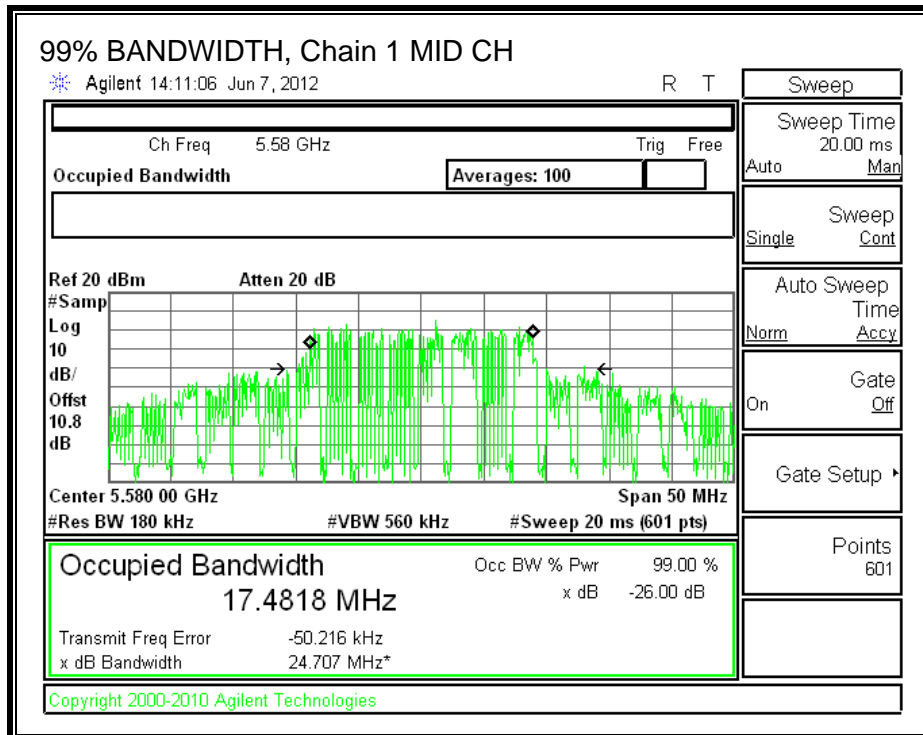
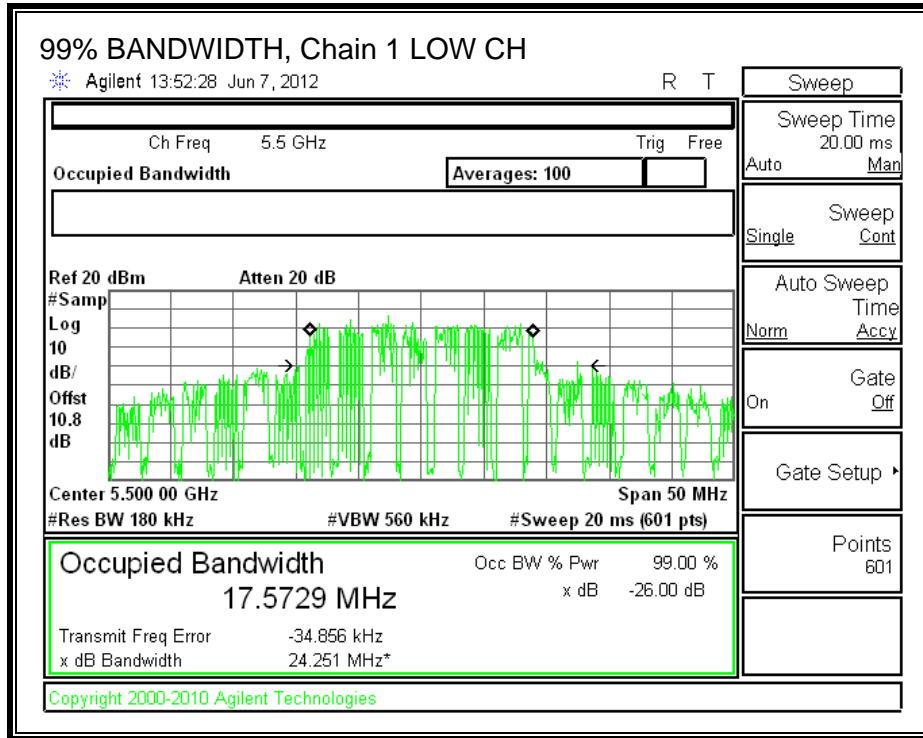
LIMITS

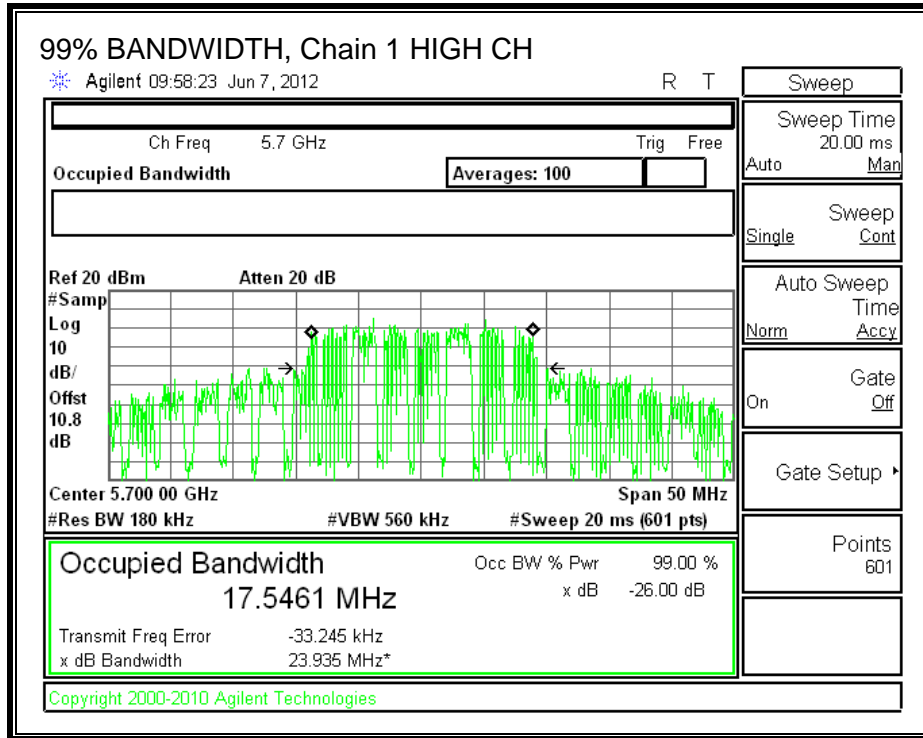
None; for reporting purposes only.

RESULTS

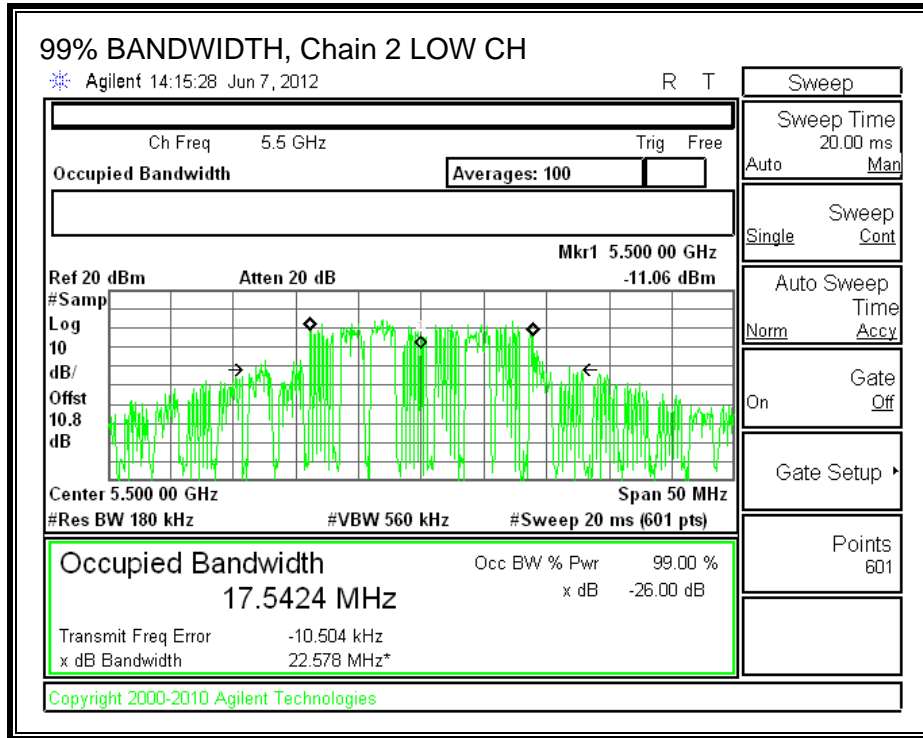
Channel	Frequency (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)	99% BW Chain 3 (MHz)
Low	5500	17.5729	17.5424	17.5169
Mid	5580	17.4818	17.4745	17.5079
High	5700	17.5461	17.6007	17.5092

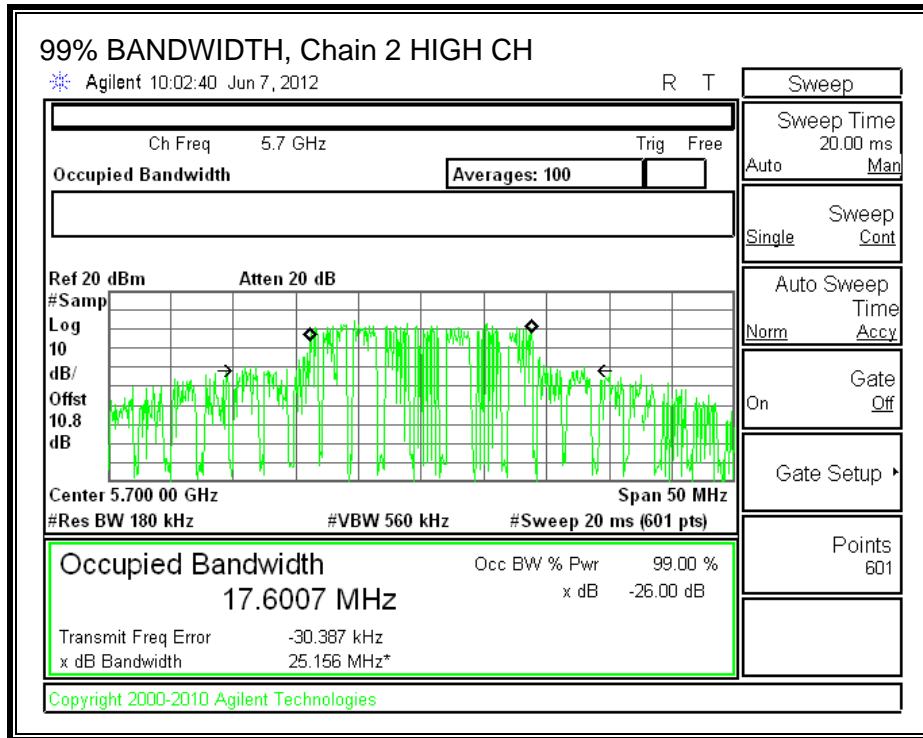
99% BANDWIDTH, Chain 1



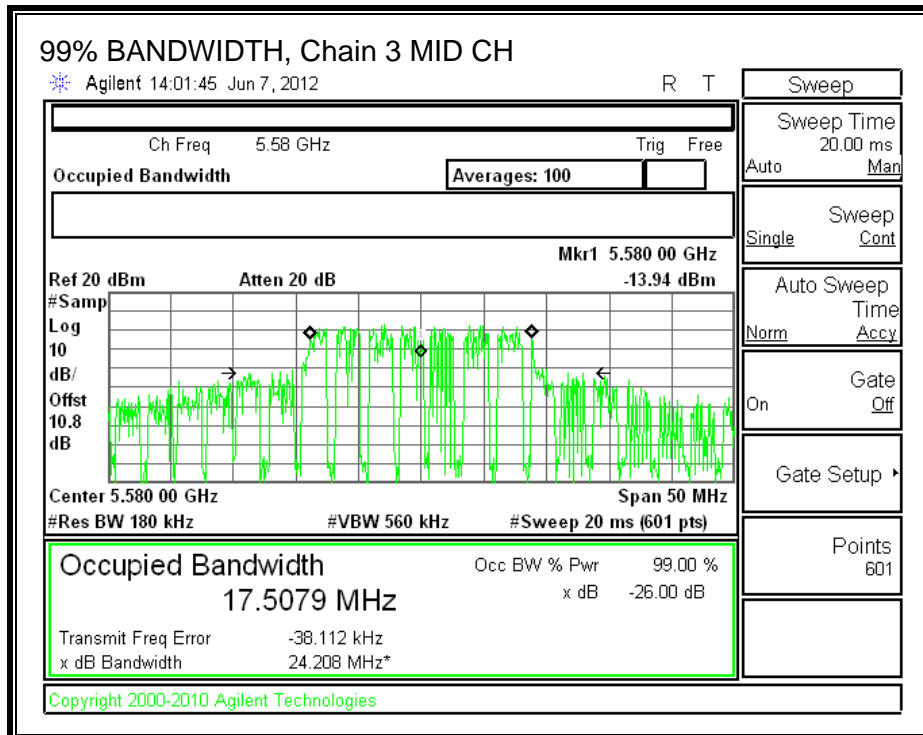
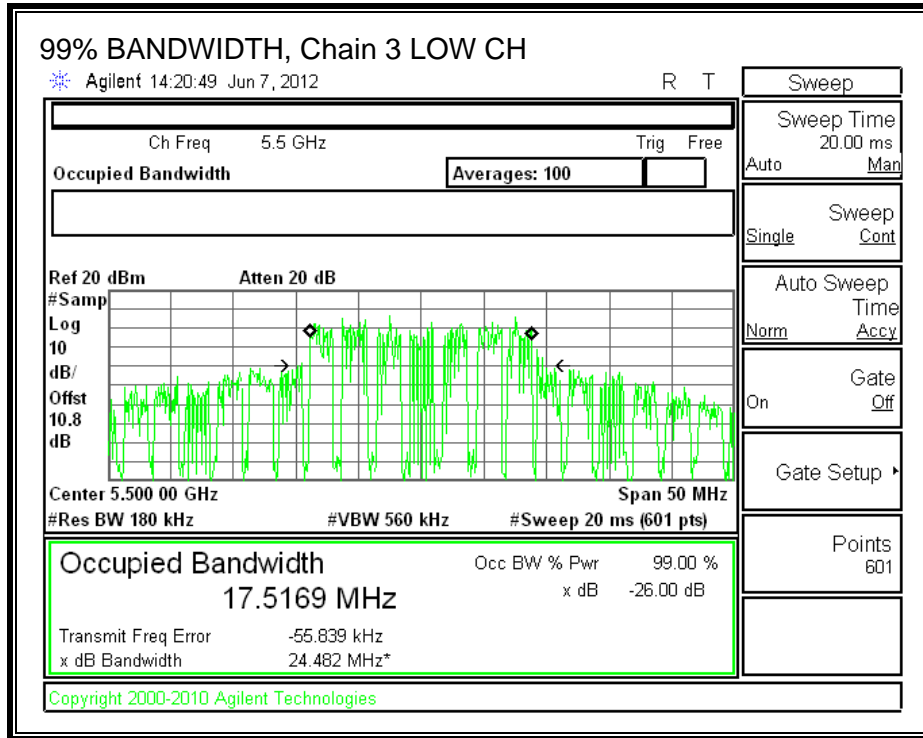


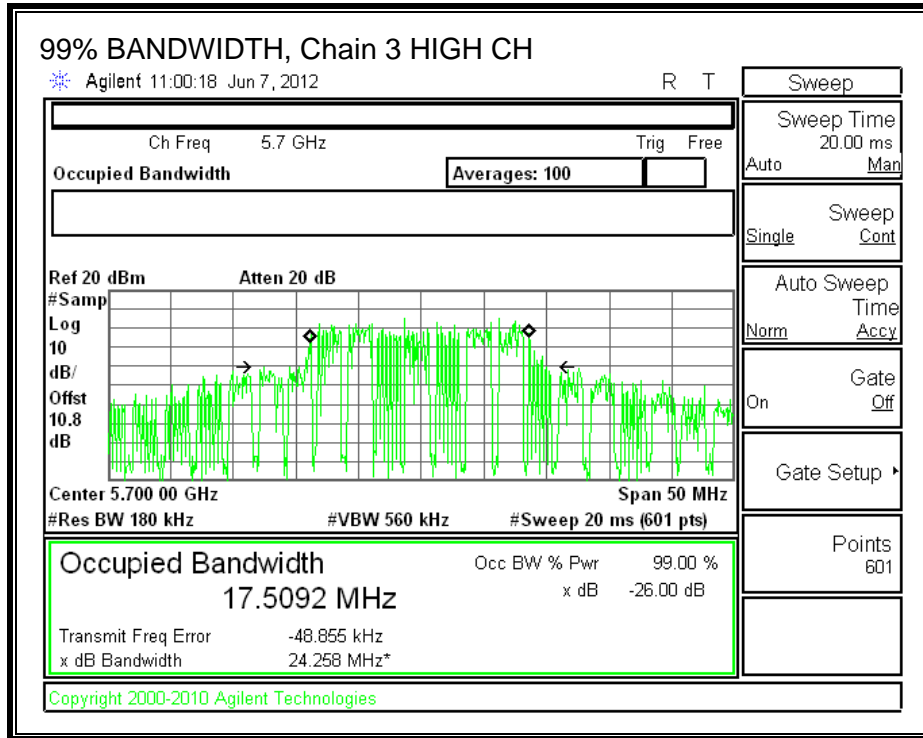
99% BANDWIDTH, Chain 2





99% BANDWIDTH, Chain 3





8.18.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 10.8 dB (including 10 dB pad and 0.80 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Chain 3 Power (dBm)	Total Power (dBm)
Low	5500	16.66	16.65	16.50	21.38
Mid	5580	16.60	16.60	16.60	21.37
High	5700	16.50	16.60	16.60	21.34

8.18.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

IC RSS-210 A9.2 (3)

For the 5.25–5.35 GHz and 5.47–5.725 GHz bands, the maximum conducted output power over the frequency bands 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 megahertz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density 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 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Chain 3 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.92	4.71	5.35	4.44