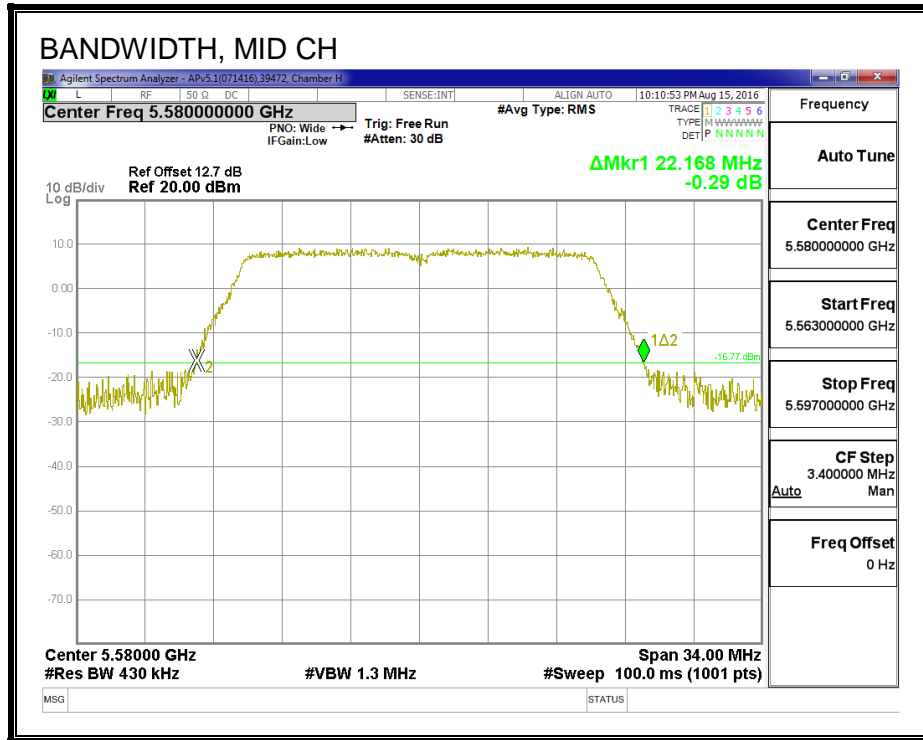
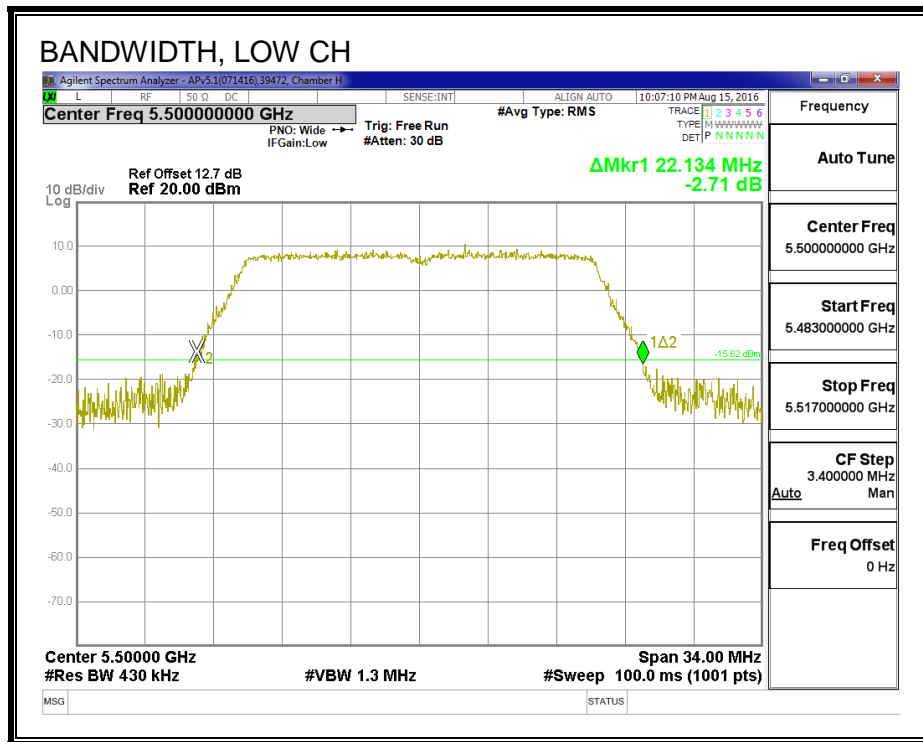
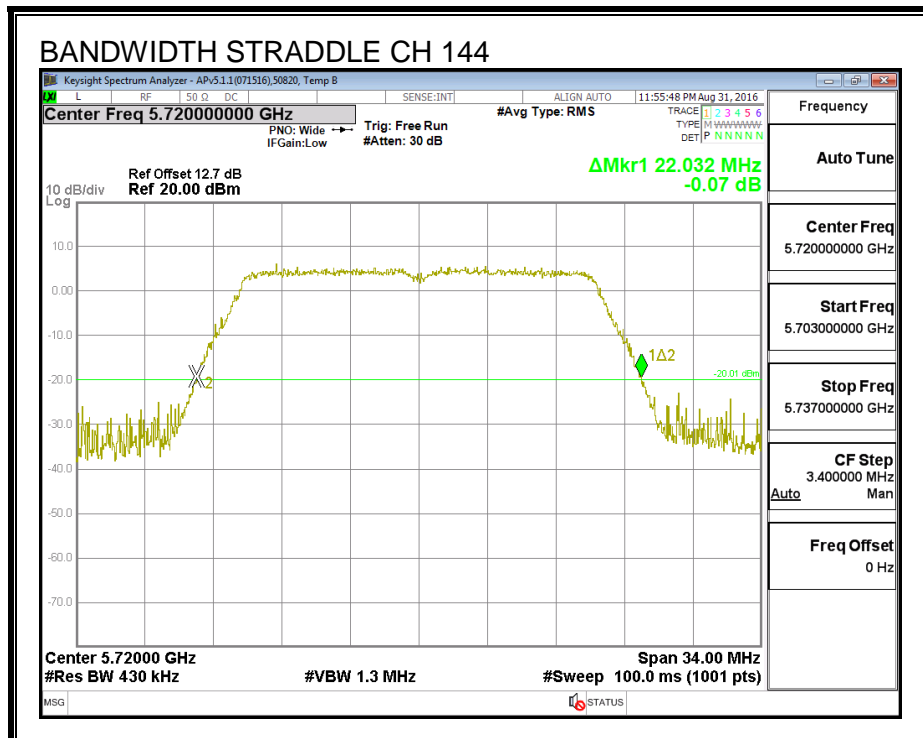
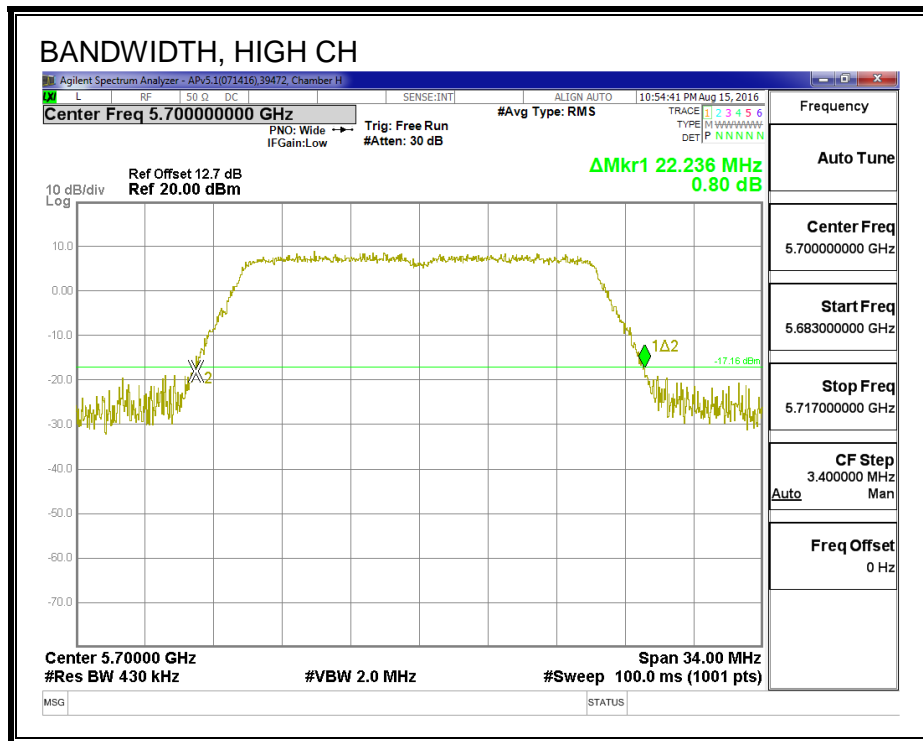


26 dB BANDWIDTH





8.7.2. 99% BANDWIDTH

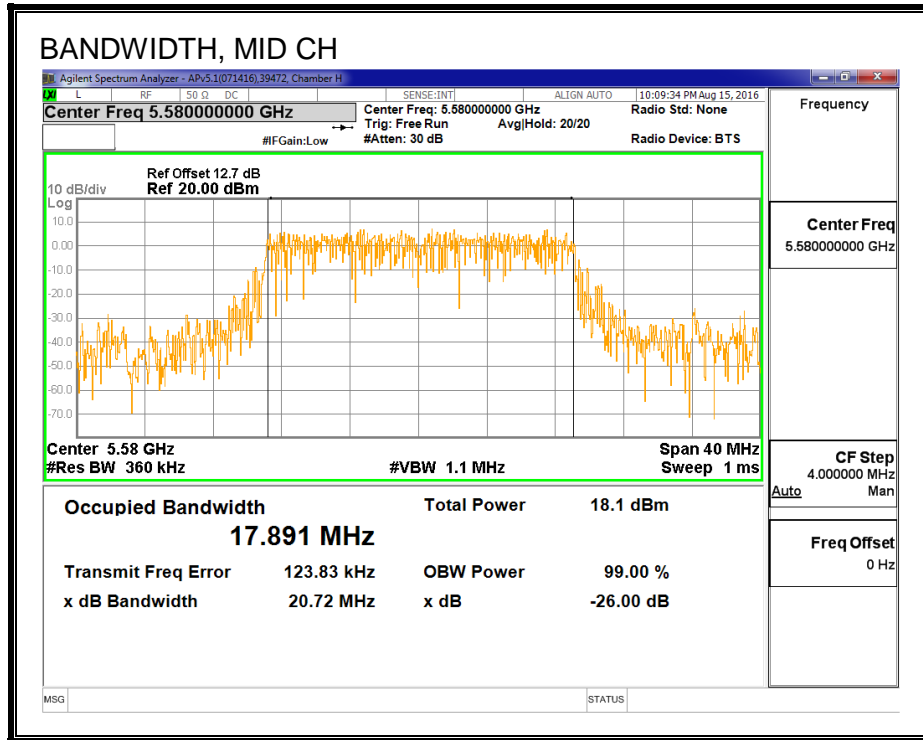
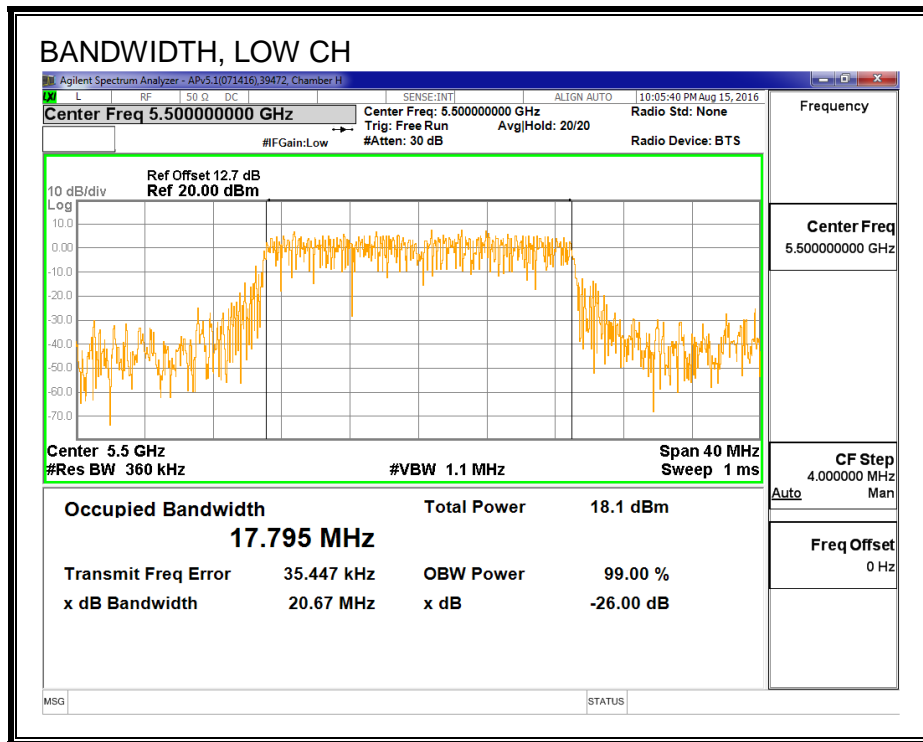
LIMITS

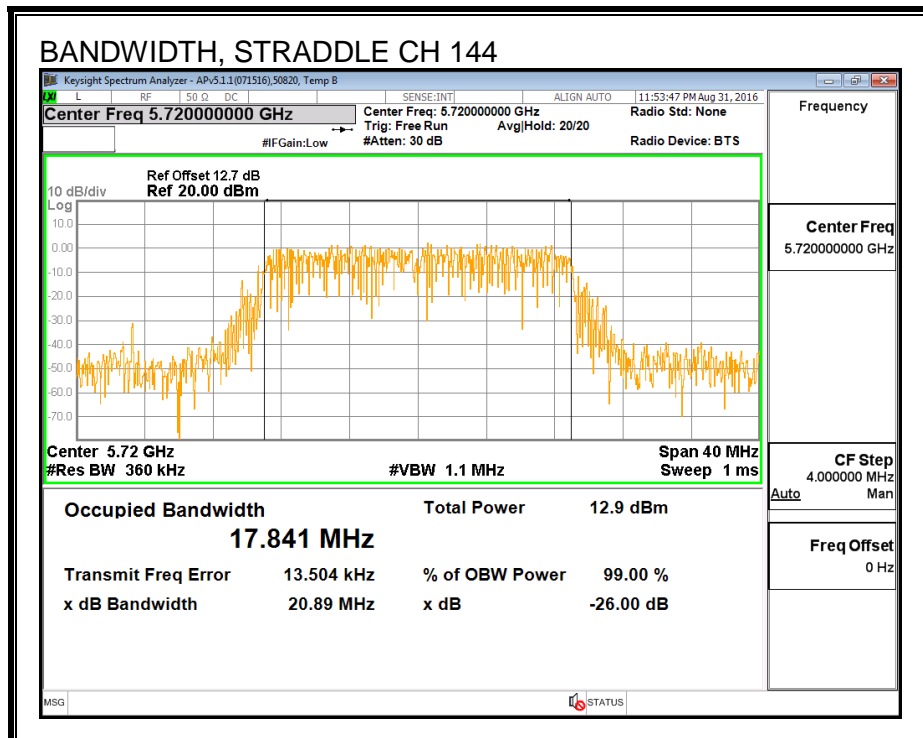
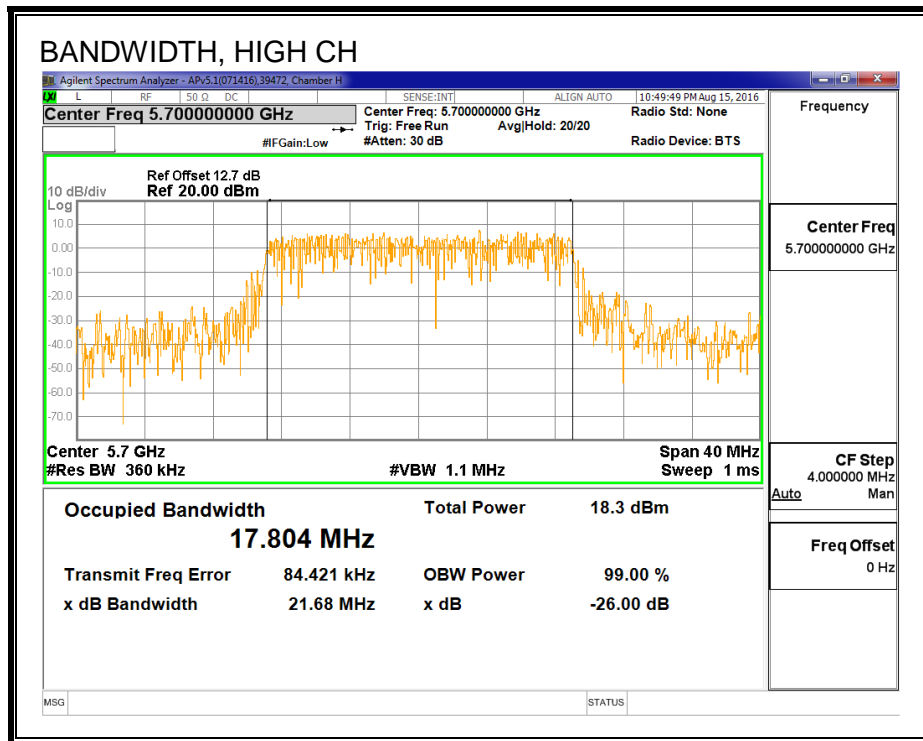
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	17.795
Mid	5580	17.891
High	5700	17.804
144	5720	17.841

99% BANDWIDTH





8.7.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	30554	Date:	9/12/16
------------	-------	--------------	---------

Channel	Frequency (MHz)	Power (dBm)
Low	5500	12.17
Mid	5580	12.13
High	5700	12.05
144	5720	12.09

8.7.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

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

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

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

Straddle channel power is measured using PXA spectrum analyzer, duty cycle correction factor is required.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	30554	Date:	9/12/16
------------	-------	--------------	---------

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5500	22.13	17.795	5.20	23.50	11.00
Mid	5580	22.17	17.891	5.20	23.53	11.00
High	5700	22.24	17.804	5.20	23.51	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
---------------------------	------	-----------------------------------------------

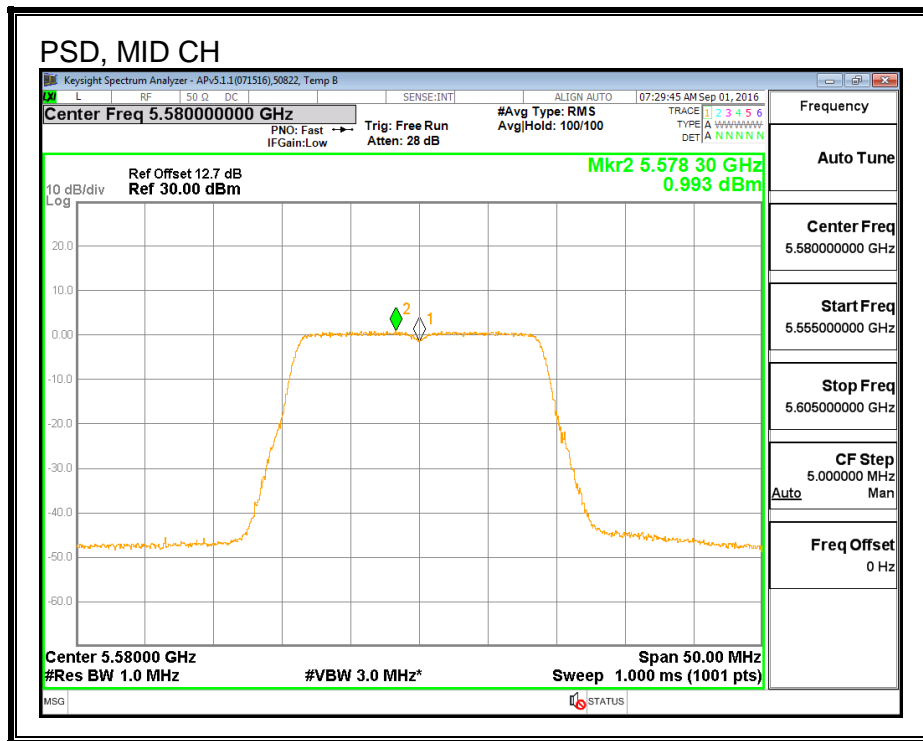
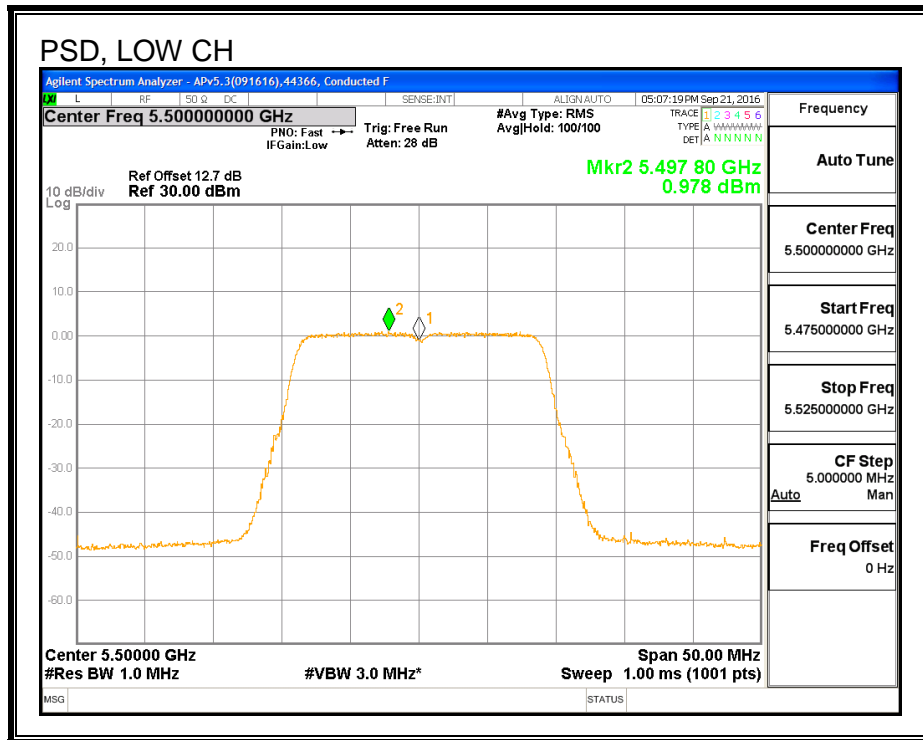
Output Power Results

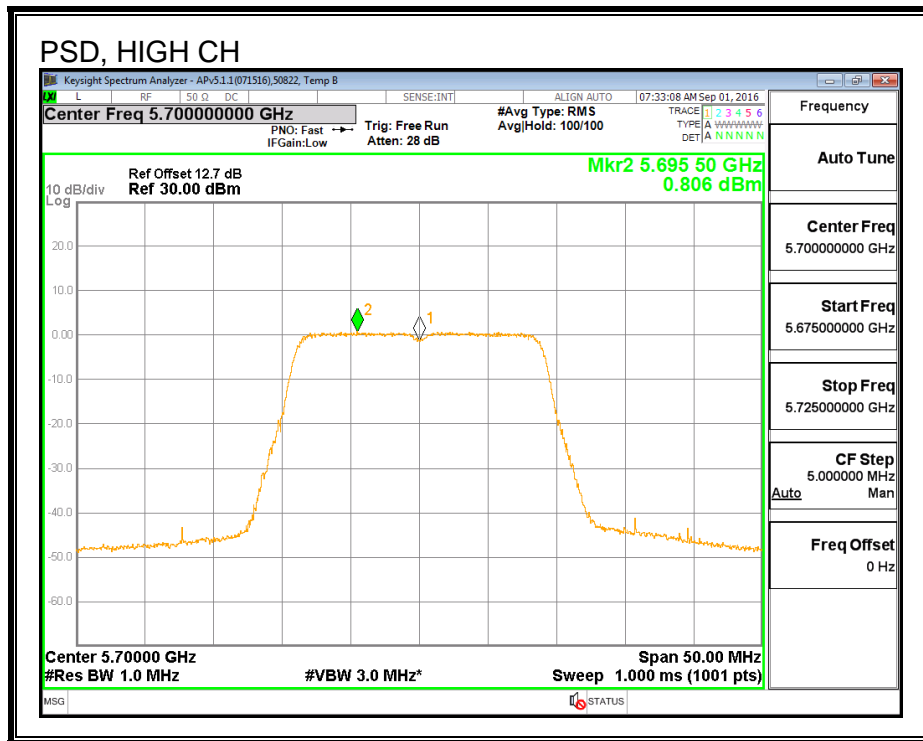
Channel	Frequency (MHz)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	12.17	12.17	23.50	-11.33
Mid	5580	12.13	12.13	23.53	-11.40
High	5700	12.05	12.05	23.51	-11.46

PSD Results

Channel	Frequency (MHz)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	0.98	0.98	11.00	-10.02
Mid	5580	0.99	0.99	11.00	-10.01
High	5700	0.81	0.81	11.00	-10.19

PSD





8.8. 802.11ac VHT20 CHAIN 2 STRADDLE CHANNEL 144 RESULTS (FCC)

8.8.1. OUTPUT POWER AND PSD

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	16.01	5.20	5.20	23.04	11.00

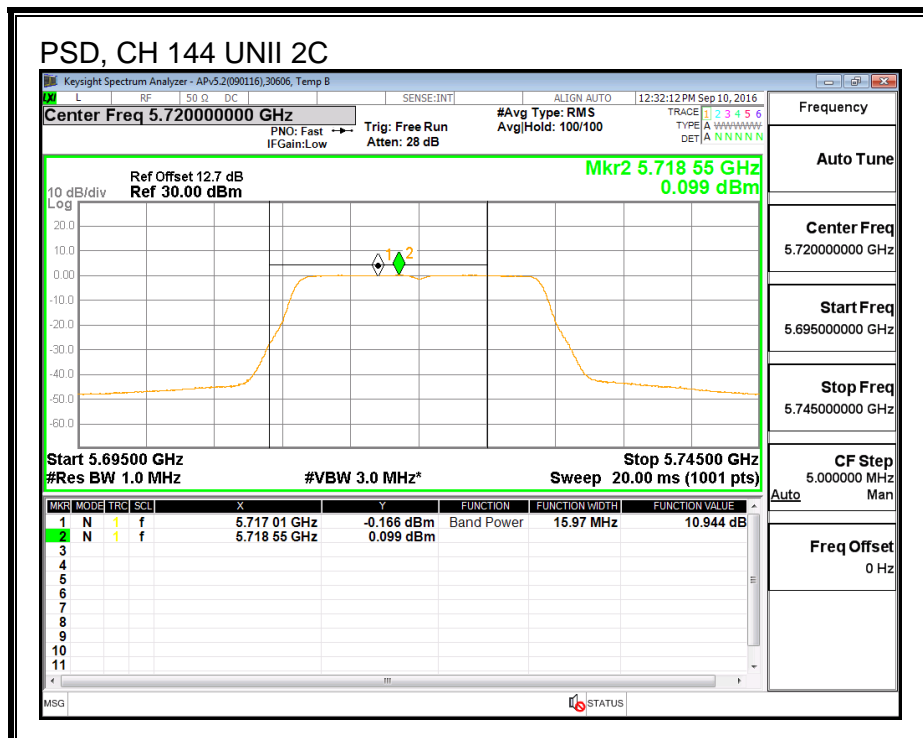
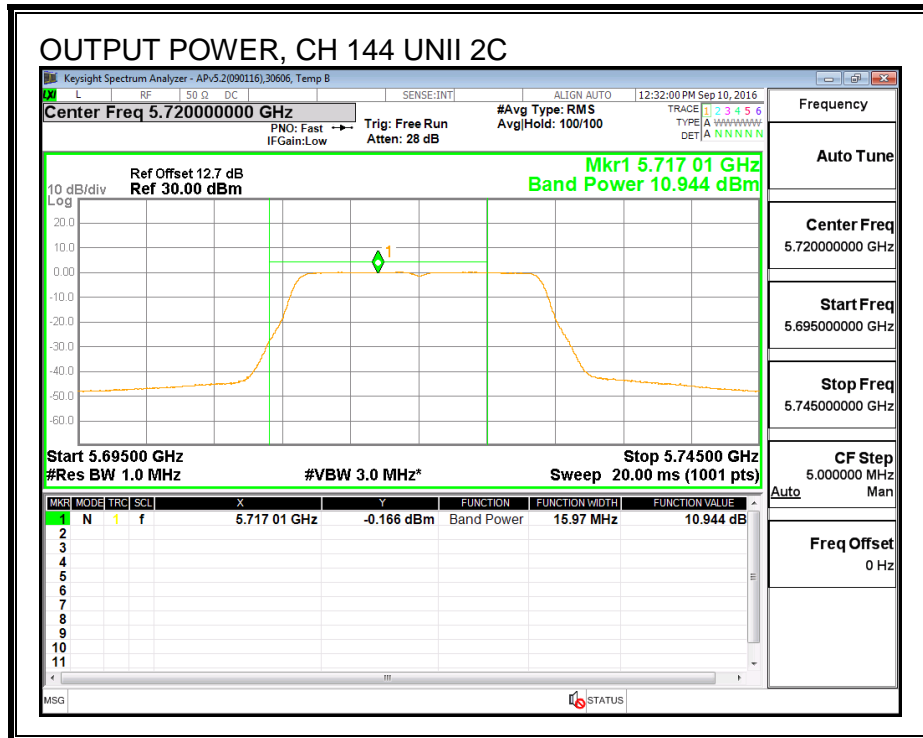
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

Output Power Results

Channel	Frequency (MHz)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	10.94	10.94	23.04	-12.10

PSD Results

Channel	Frequency (MHz)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.10	0.10	11.00	-10.90



UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	5.97	5.20	30.00	30.00

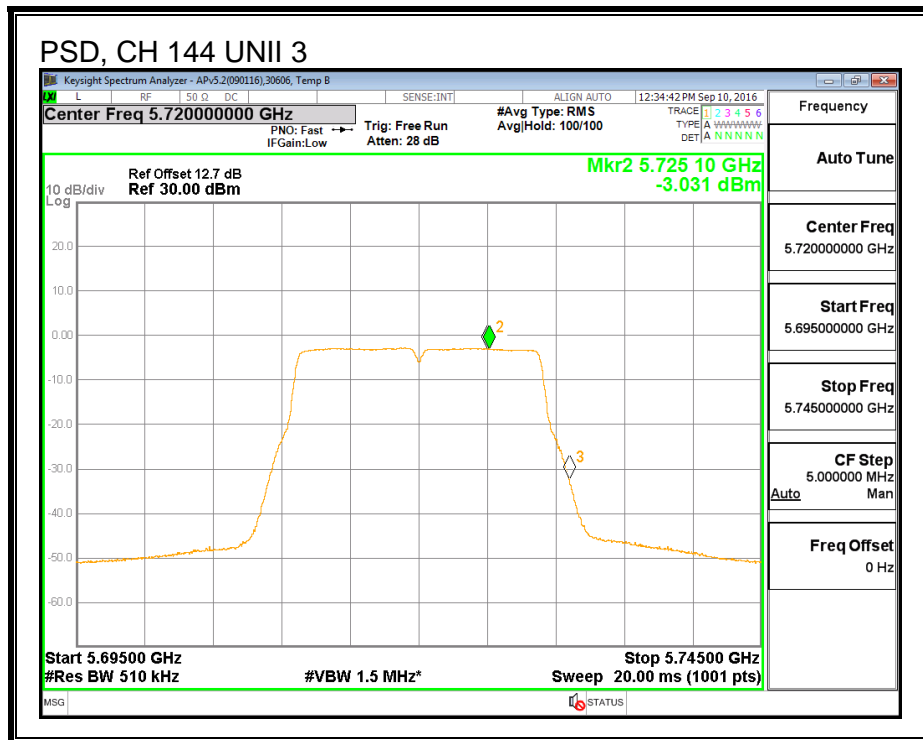
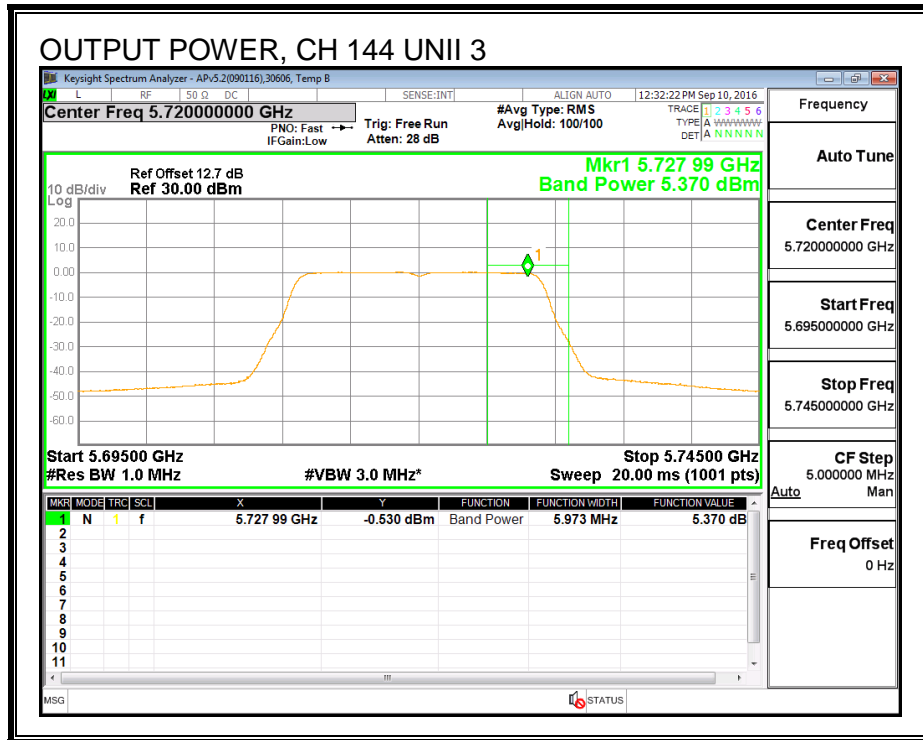
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

Output Power Results

Channel	Frequency (MHz)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	5.37	5.37	30.00	-24.63

PSD Results

Channel	Frequency (MHz)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-3.03	-3.03	30.00	-33.03



8.9. 802.11ac VHT20 CHAIN 2 STRADDLE CHANNEL 144 RESULTS (IC)

8.9.1. OUTPUT POWER AND PSD

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	13.920	5.20	5.20	22.44	11.00

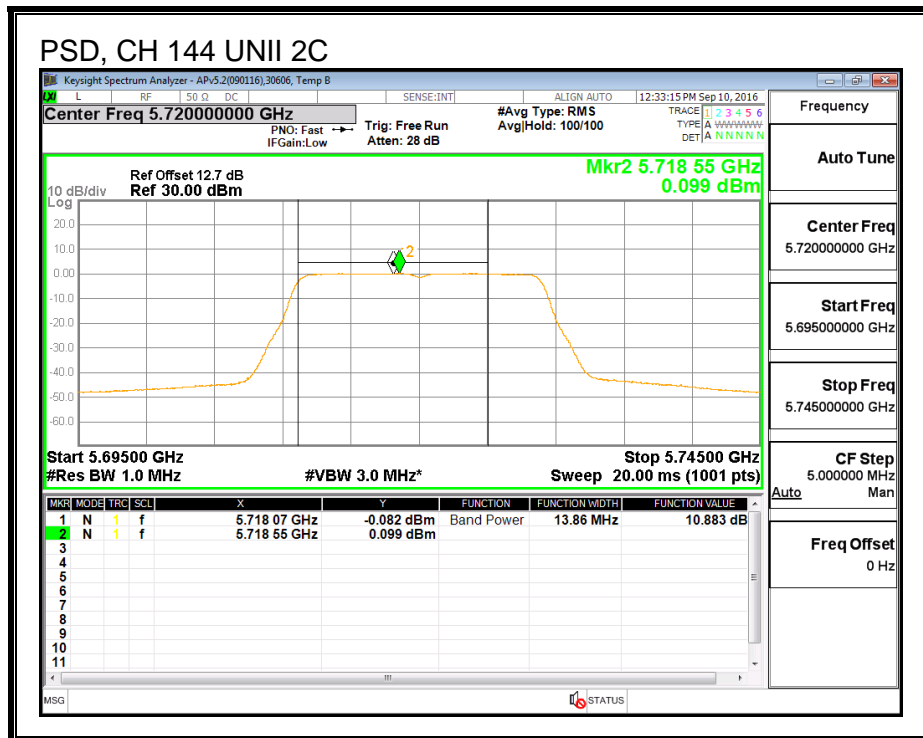
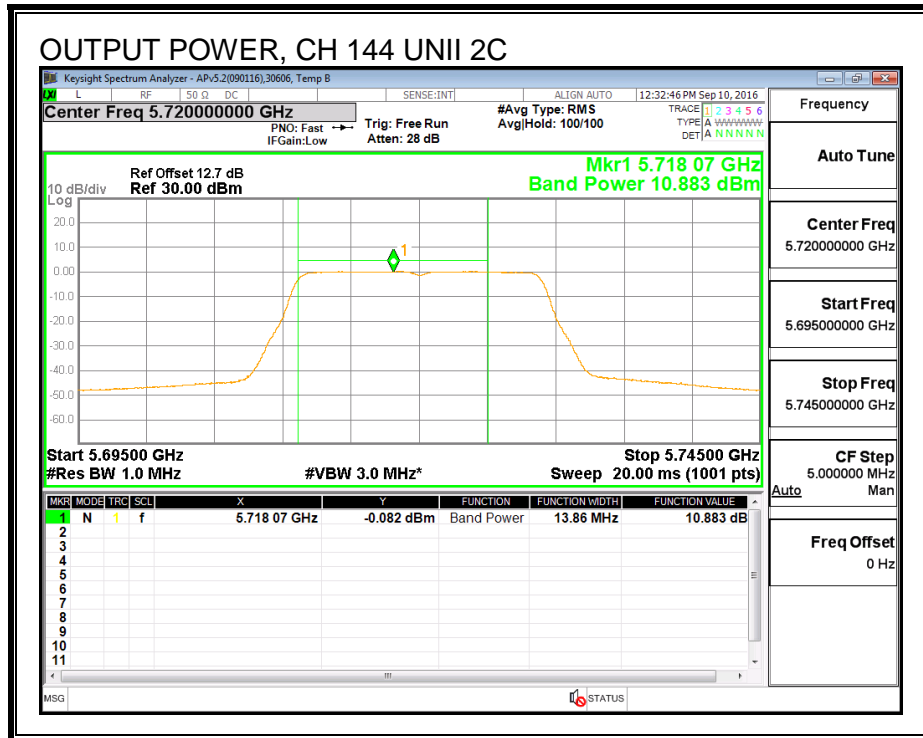
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

Output Power Results

Channel	Frequency (MHz)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	10.88	10.88	22.44	-11.55

PSD Results

Channel	Frequency (MHz)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.099	0.10	11.00	-10.90



UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	3.857	5.20	30.00	30.00

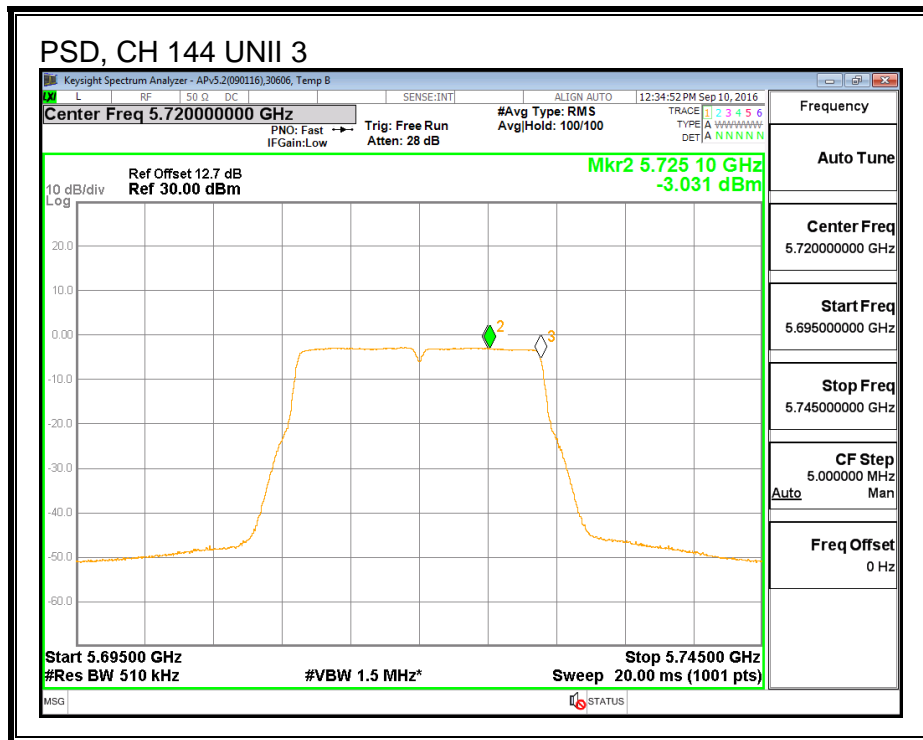
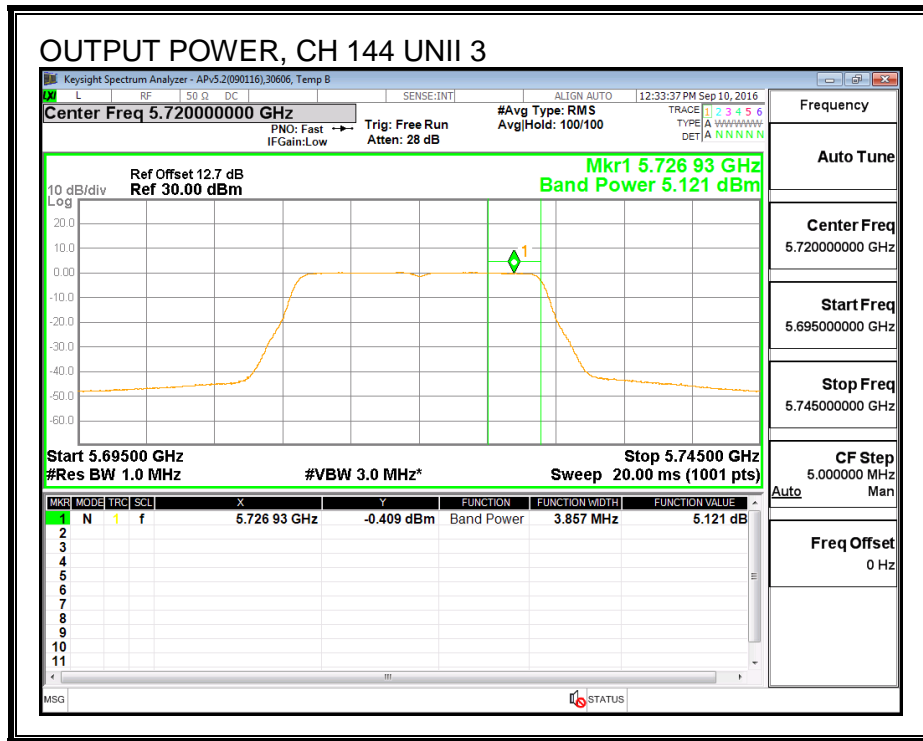
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

Output Power Results

Channel	Frequency (MHz)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	5.12	5.12	30.00	-24.88

PSD Results

Channel	Frequency (MHz)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-3.03	-3.03	30.00	-33.03



8.9.2. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

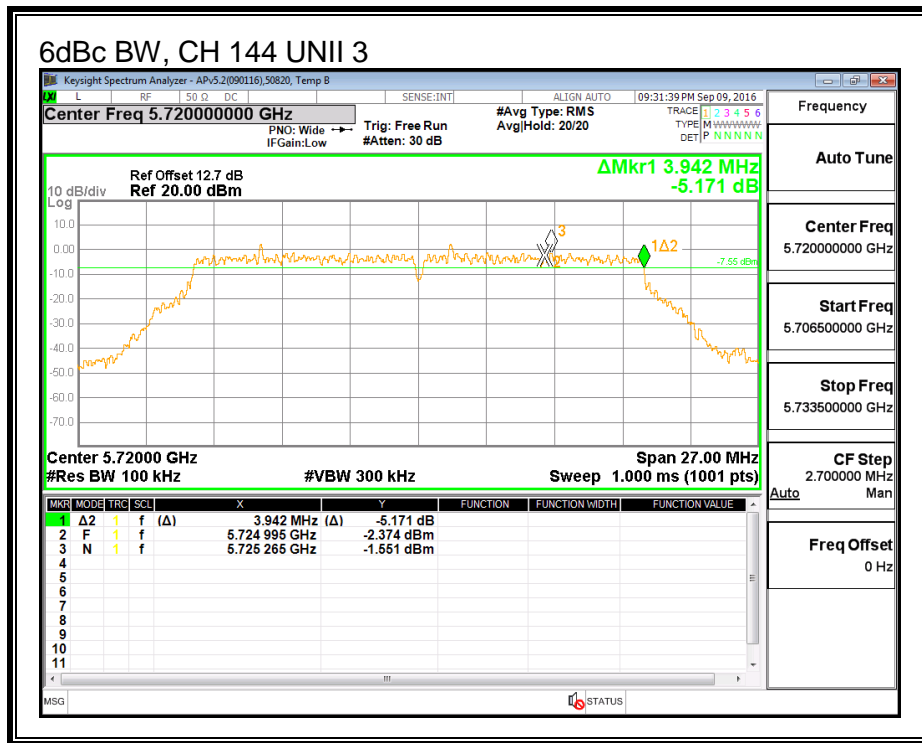
IC RSS-247 (6.2.4) (1)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)
144	5720	3.94

6 dB BANDWIDTH



8.10. 802.11n HT20 2Tx (CHAIN 0 + CHAIN 1) CDD MODE IN THE 5.6 GHz BAND

8.10.1. 26 dB BANDWIDTH

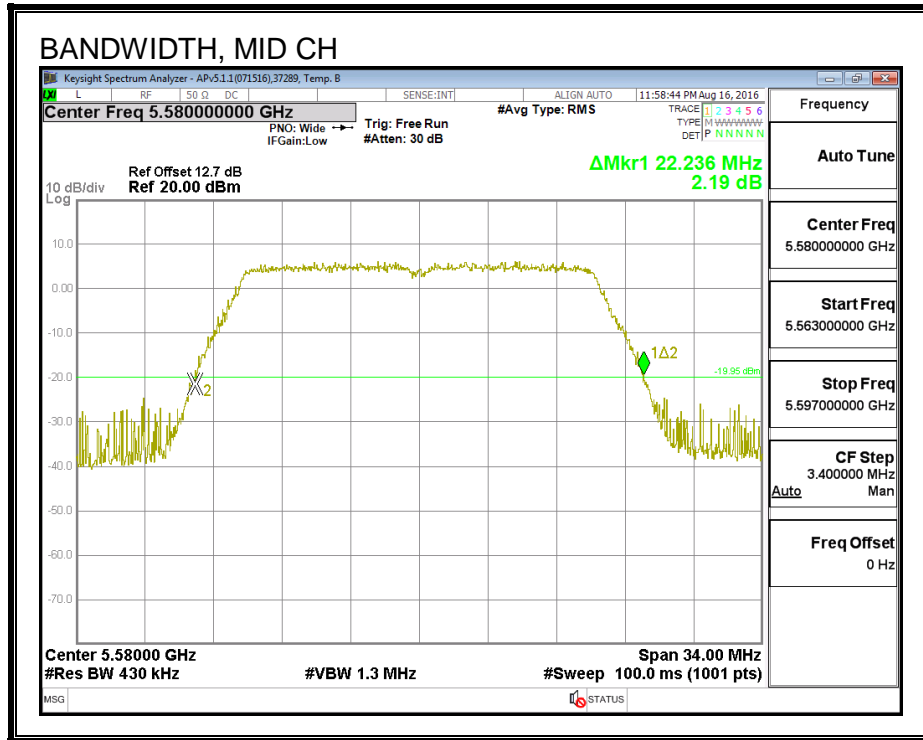
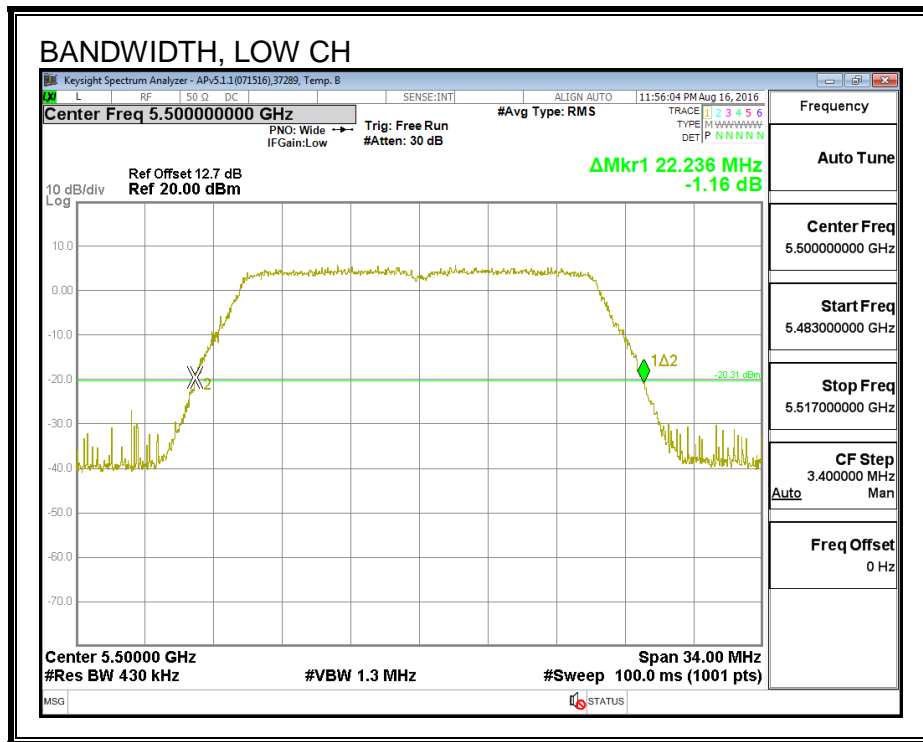
LIMITS

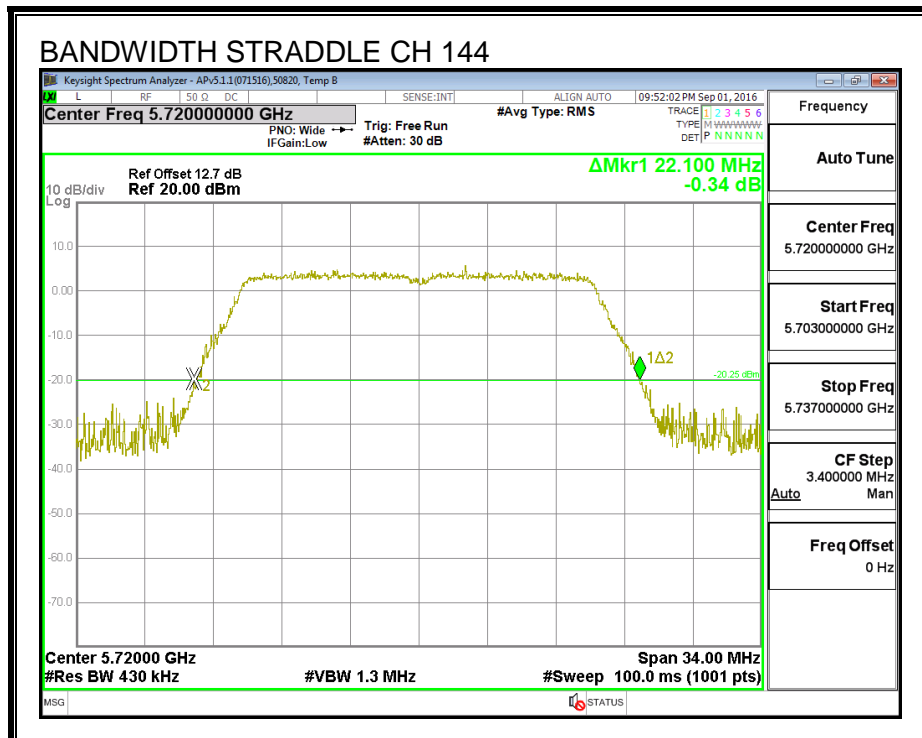
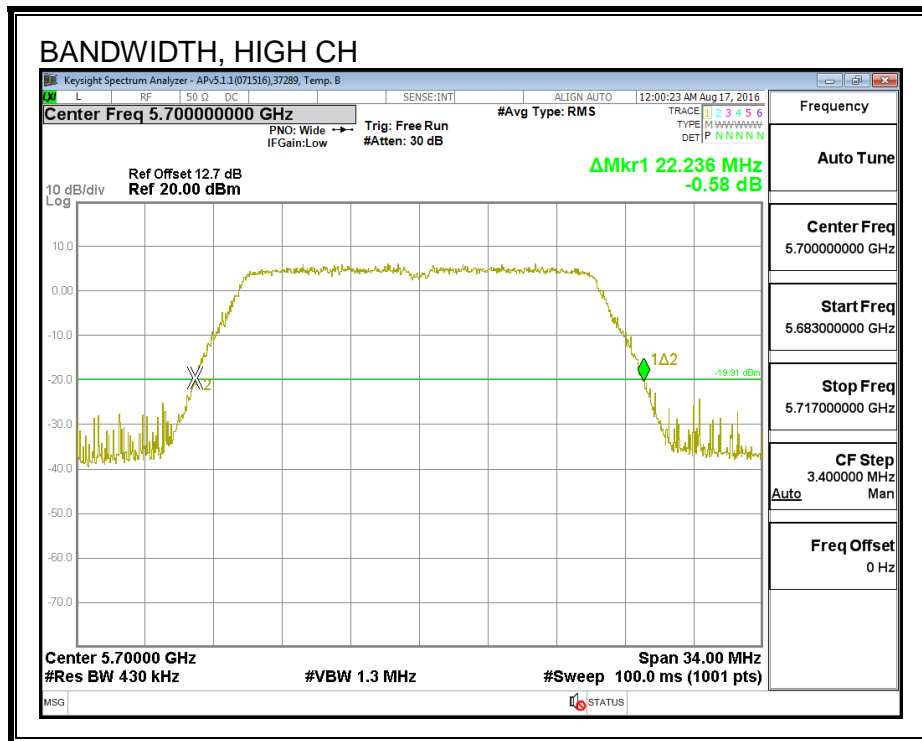
None; for reporting purposes only.

RESULTS

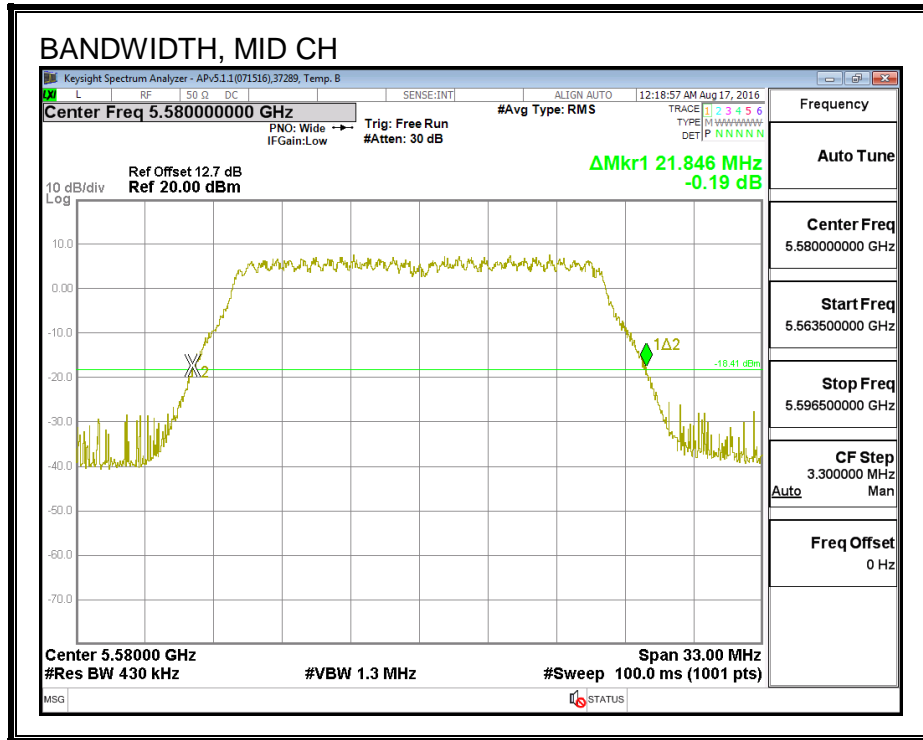
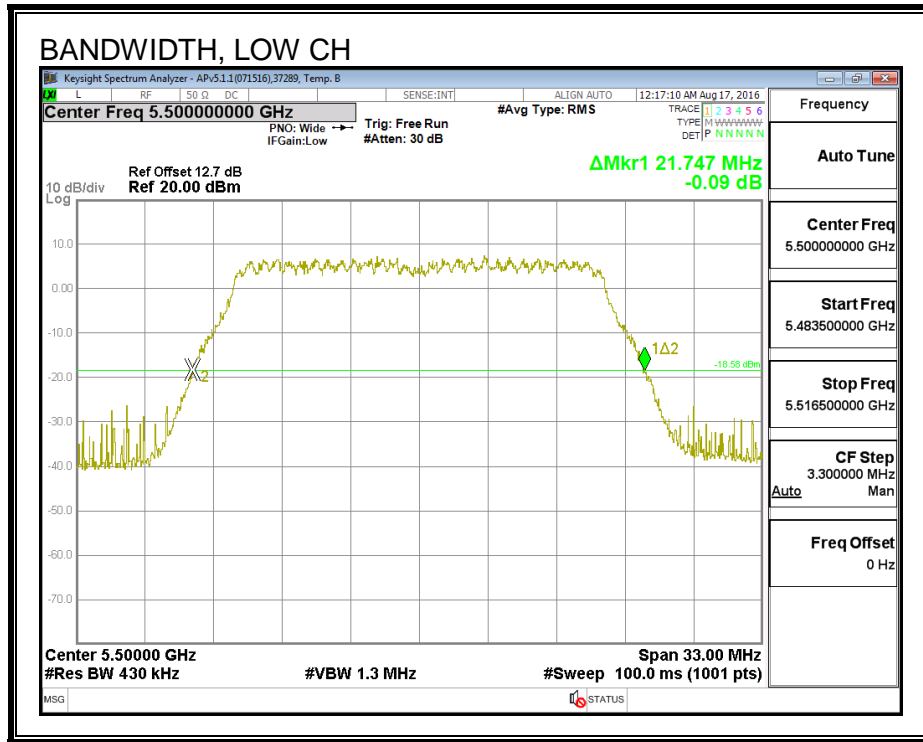
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5500	22.236	21.747
Mid	5580	22.236	21.846
High	5700	22.236	21.780
144	5720	22.100	21.780

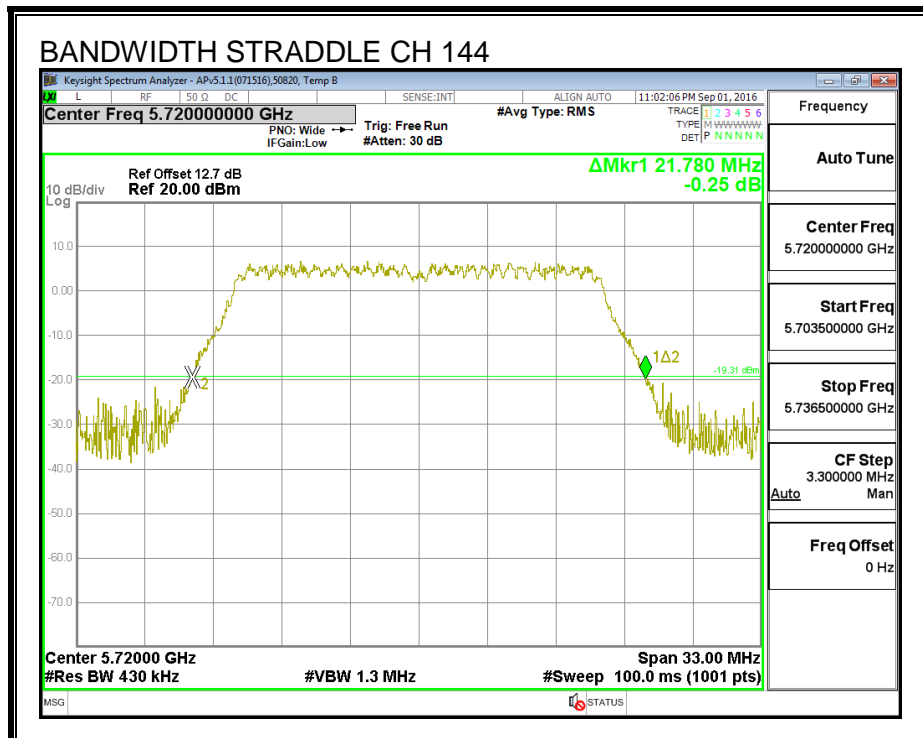
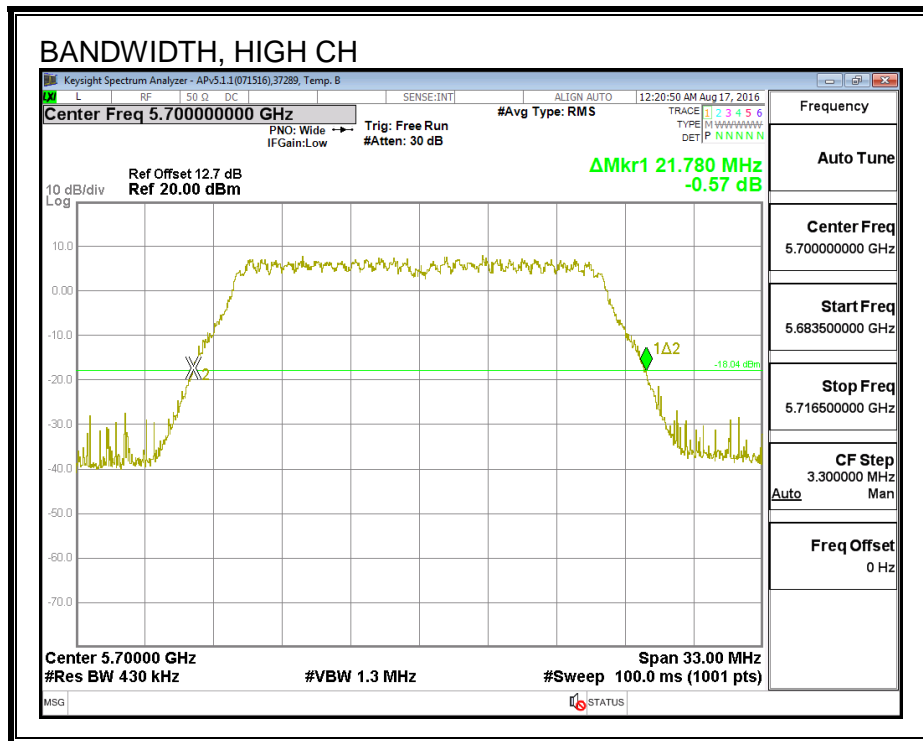
26 dB BANDWIDTH, CHAIN 0





26 dB BANDWIDTH, CHAIN 1





8.10.2. 99% BANDWIDTH

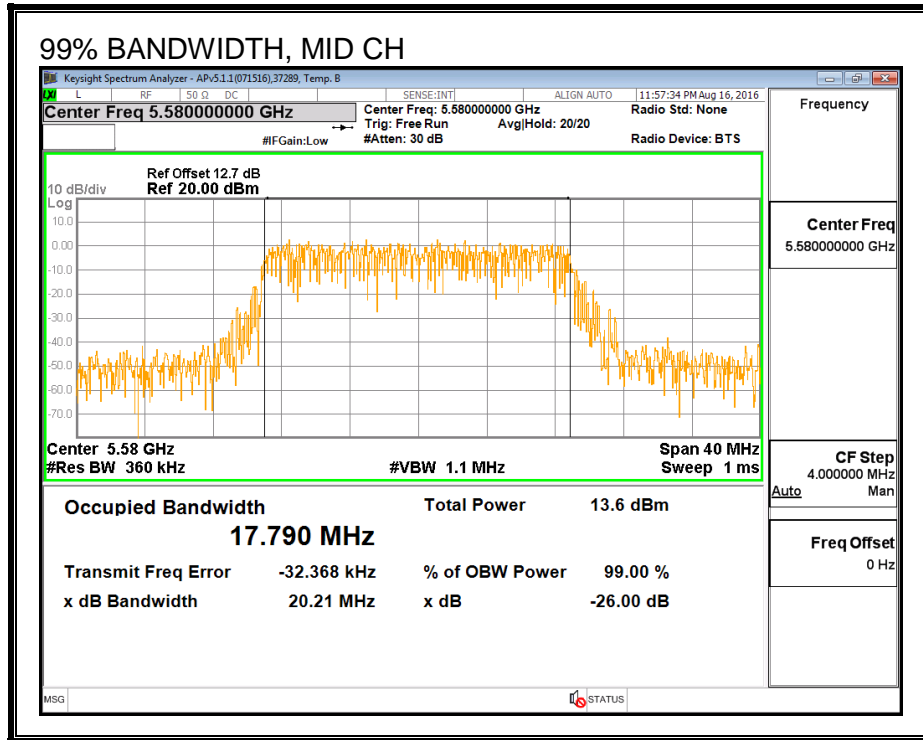
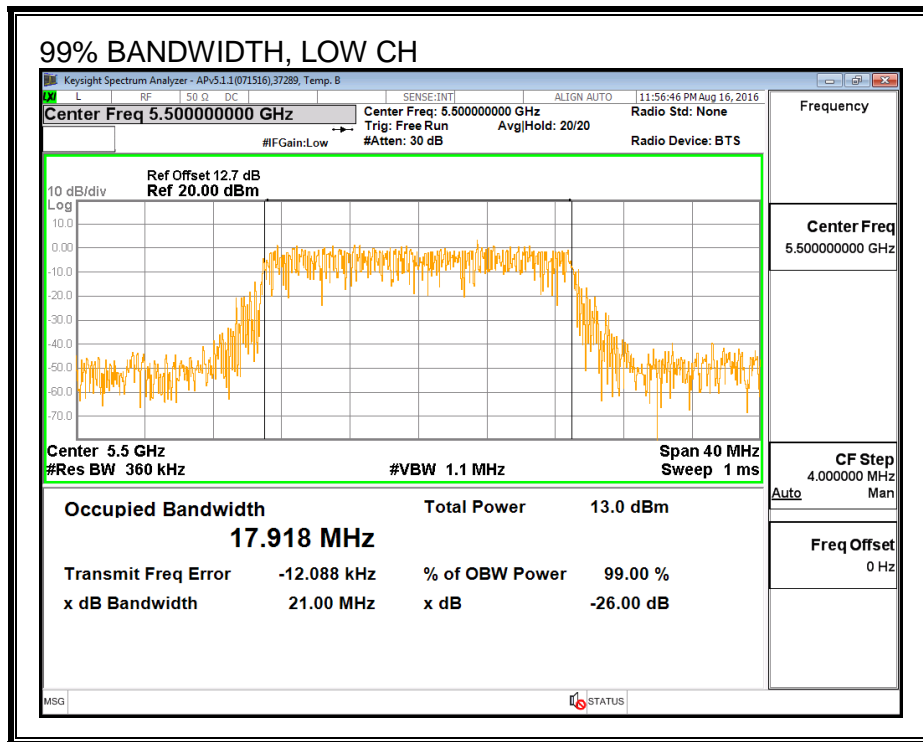
LIMITS

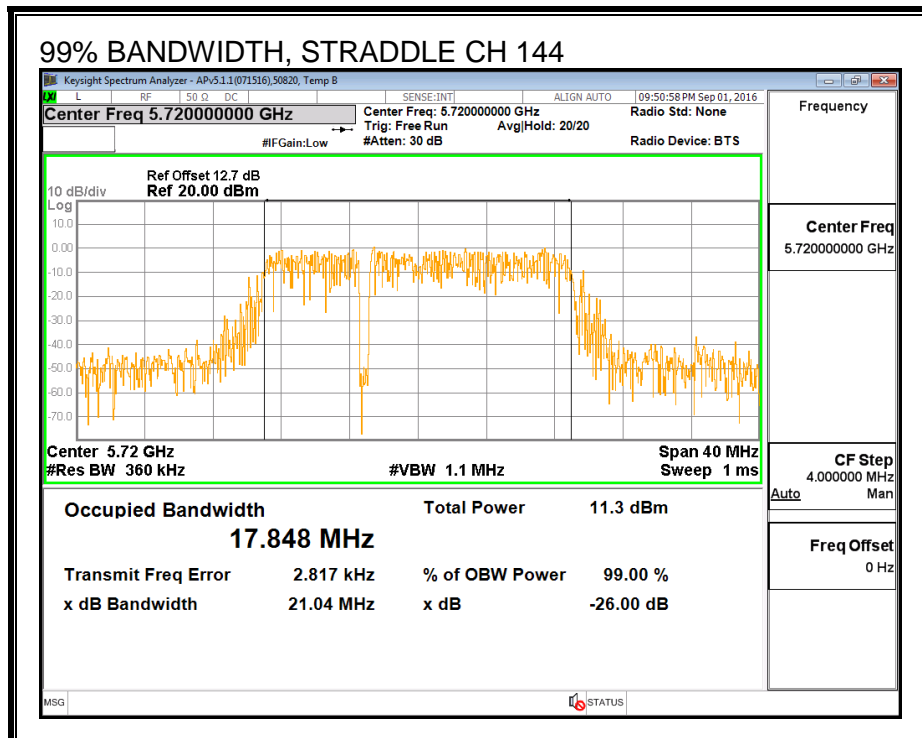
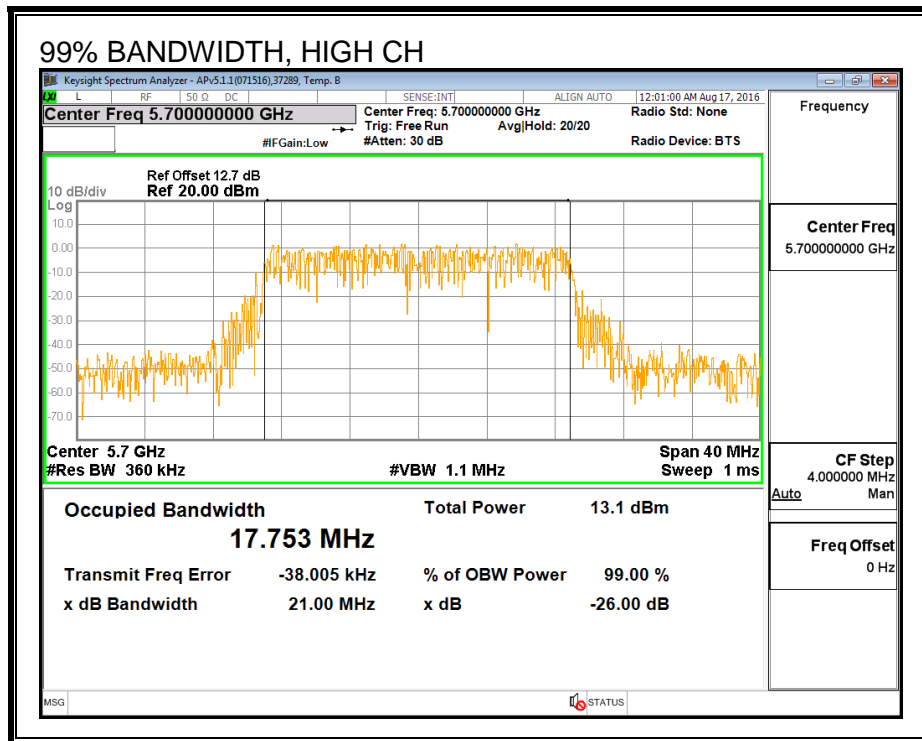
None; for reporting purposes only.

RESULTS

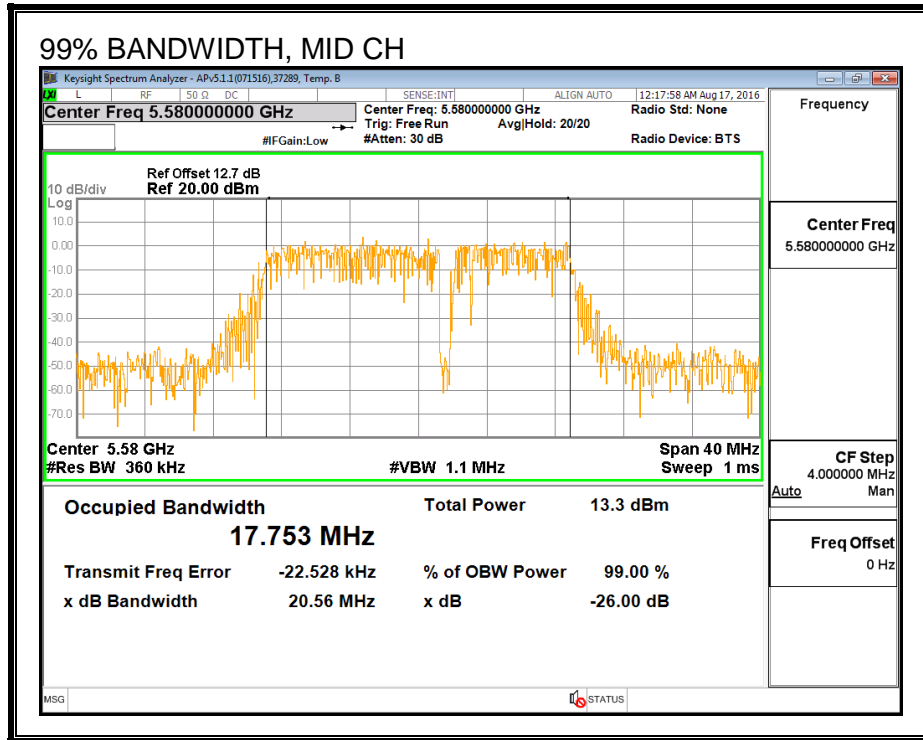
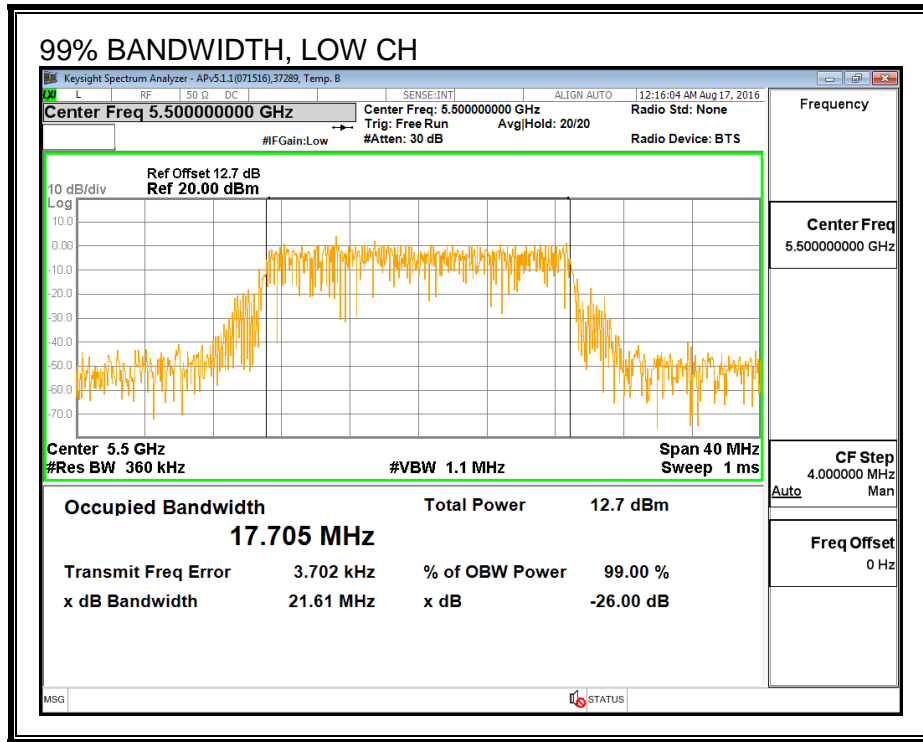
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5500	17.918	17.705
Mid	5580	17.790	17.753
High	5700	17.753	17.822
144	5720	17.848	17.775

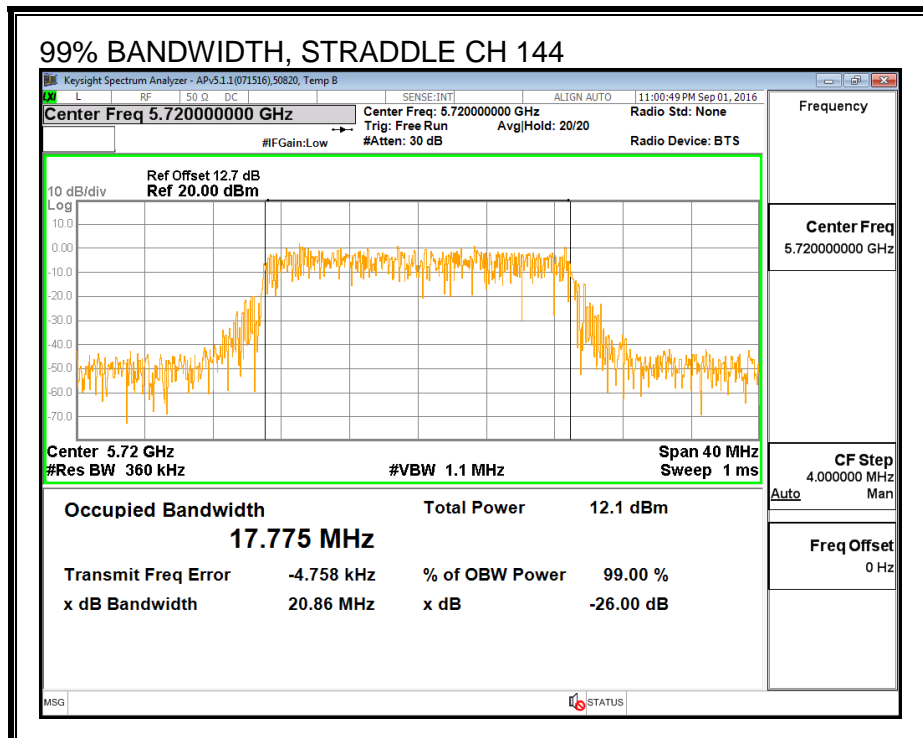
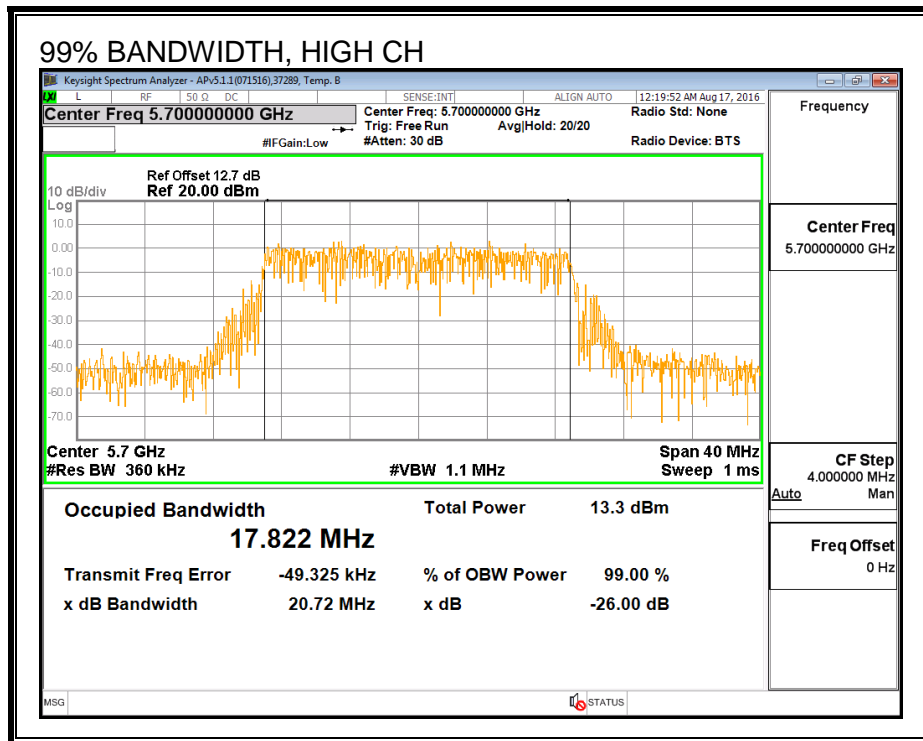
99% BANDWIDTH, CHAIN 0





99% BANDWIDTH, CHAIN 1





8.10.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	43573	Date:	9/7/16
------------	-------	--------------	--------

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5500	11.87	11.95	14.92
Mid	5580	11.86	11.97	14.93
High	5700	11.99	11.98	15.00
144	5720	11.99	12.00	15.01

8.10.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

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

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

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

Straddle channel power is measured using PXA spectrum analyzer, duty cycle correction factor is required.

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)
4.90	7.40	6.33

The TX chains are 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)
4.90	7.40	9.25

RESULTS

ID:	43573	Date:	9/7/16
------------	-------	--------------	--------

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5500	21.75	17.705	6.33	9.25	23.15	7.75
Mid	5580	21.85	17.753	6.33	9.25	23.16	7.75
High	5700	21.78	17.753	6.33	9.25	23.16	7.75

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
---------------------------	------	-----------------------------------------------

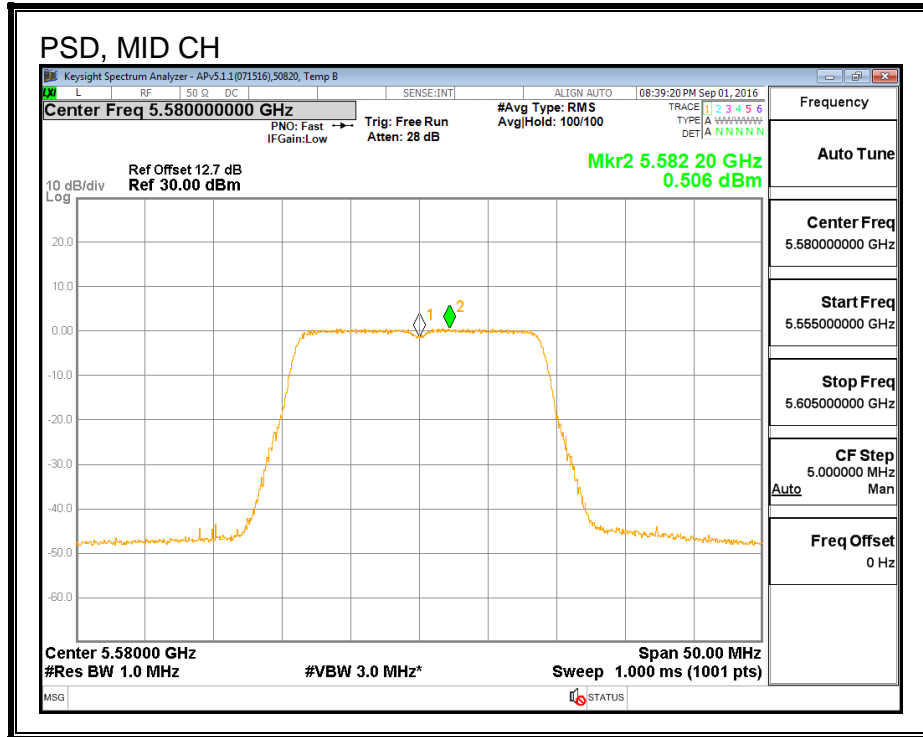
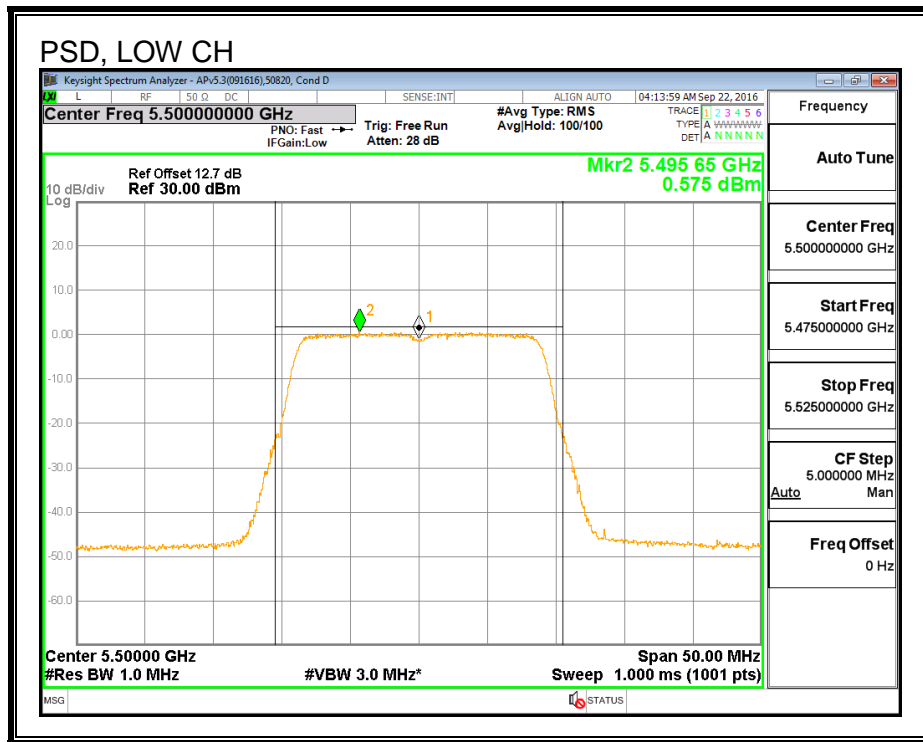
Output Power Results

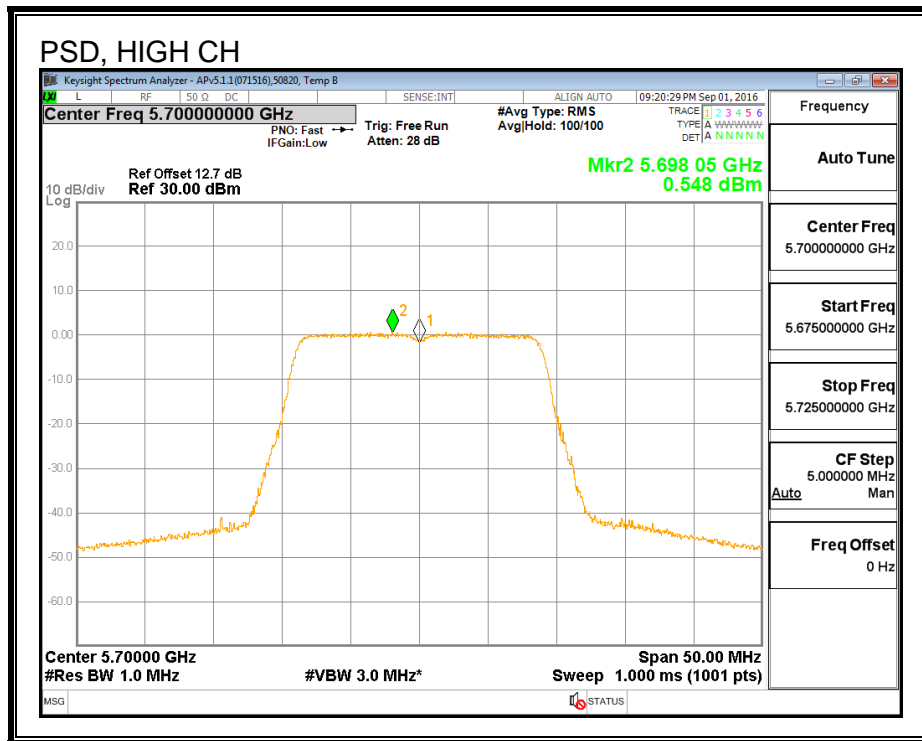
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	11.87	11.95	14.92	23.15	-8.23
Mid	5580	11.86	11.97	14.93	23.16	-8.24
High	5700	11.99	11.98	15.00	23.16	-8.17

PSD Results

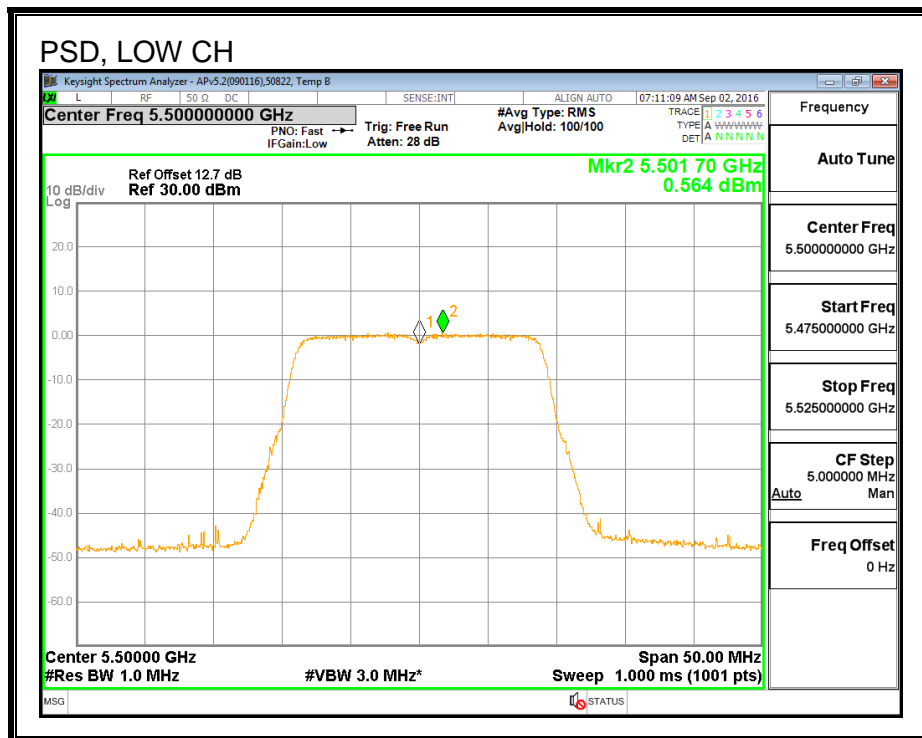
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	0.575	0.564	3.58	7.75	-4.17
Mid	5580	0.506	0.593	3.56	7.75	-4.19
High	5700	0.548	0.544	3.56	7.75	-4.19

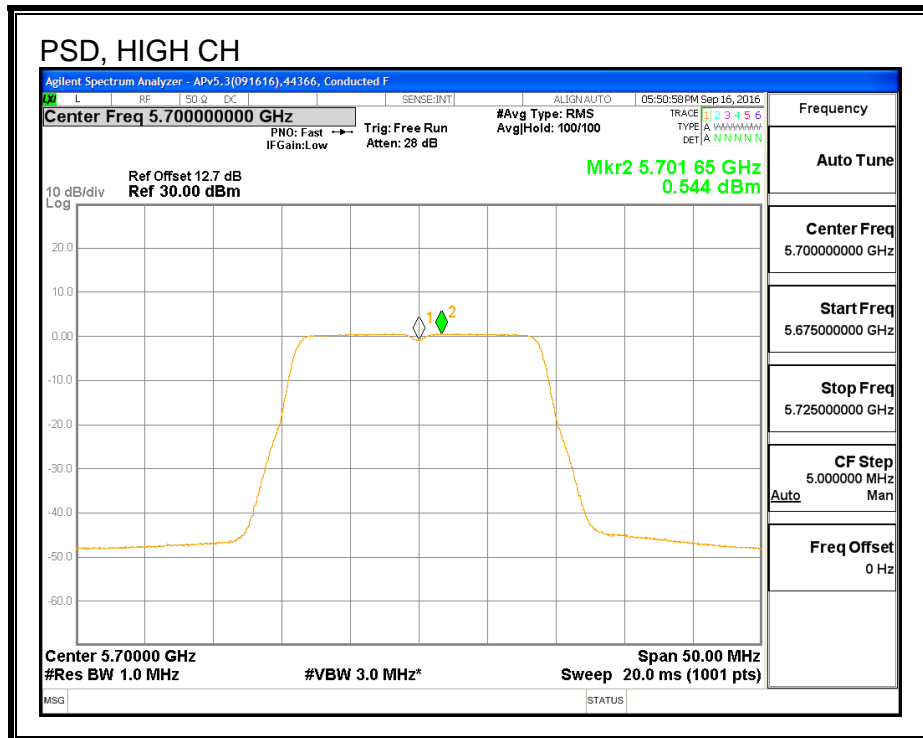
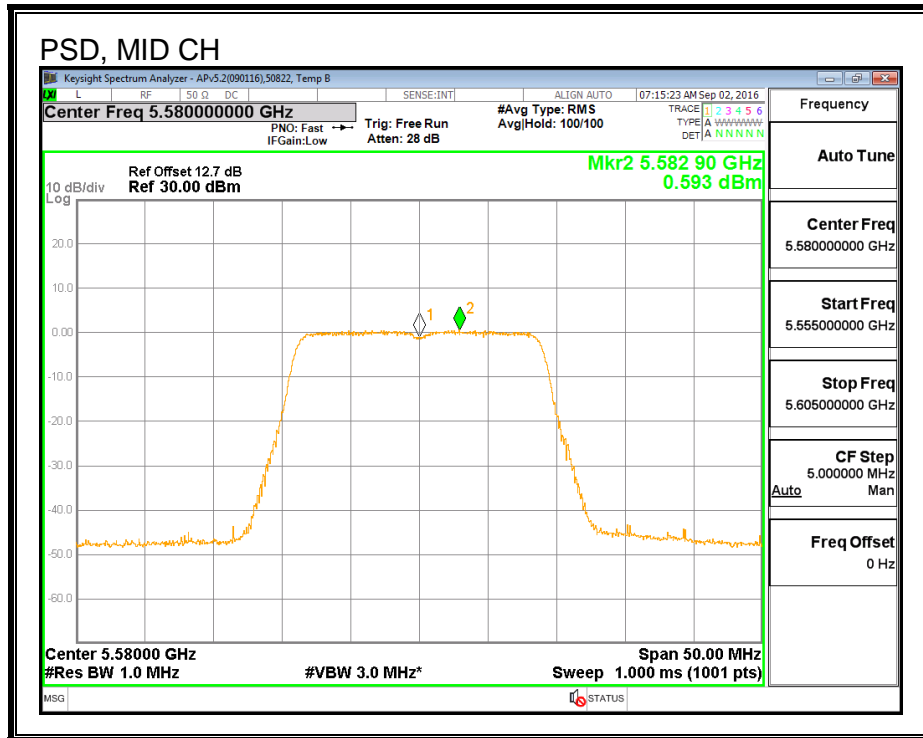
PSD, CHAIN 0





PSD, CHAIN 1





8.11. 802.11ac VHT20 2Tx (CHAIN 0 + CHAIN 1) CDD STRADDLE CHANNEL 144 RESULTS (FCC)

8.11.1. OUTPUT POWER AND PSD

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	15.89	6.33	9.25	22.68	7.75

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

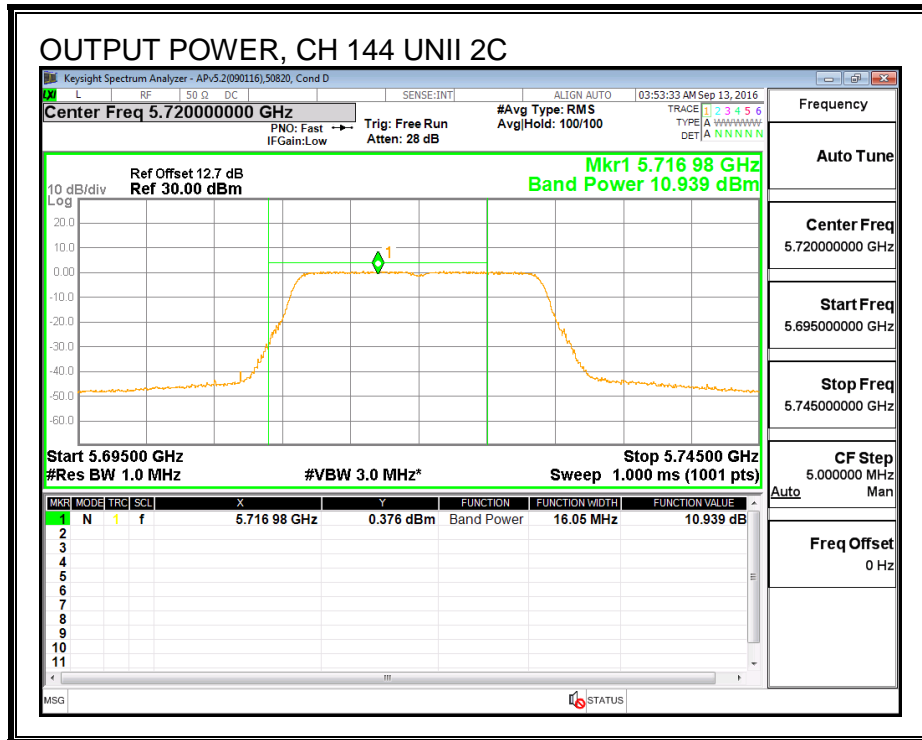
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	10.94	10.92	13.94	22.68	-8.74

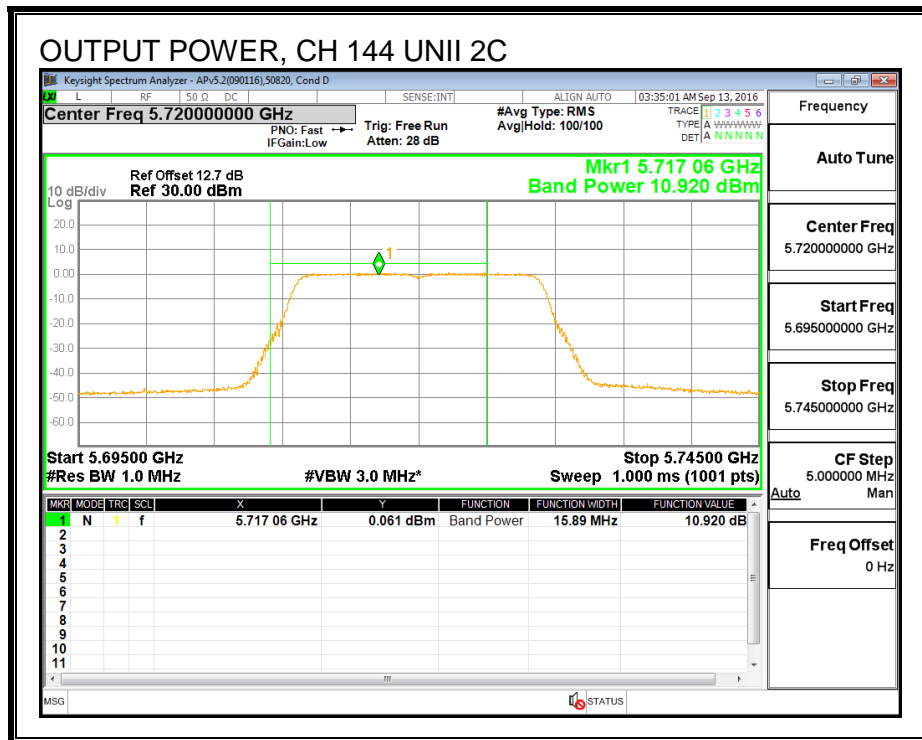
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.469	0.46	3.47	7.75	-4.28

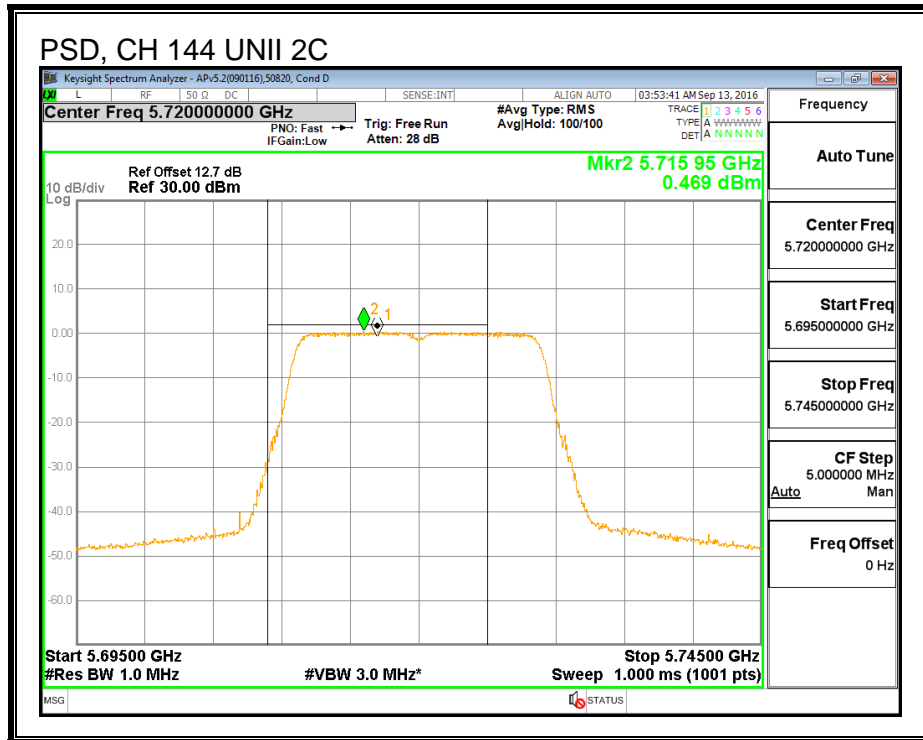
OUTPUT POWER, CHAIN 0



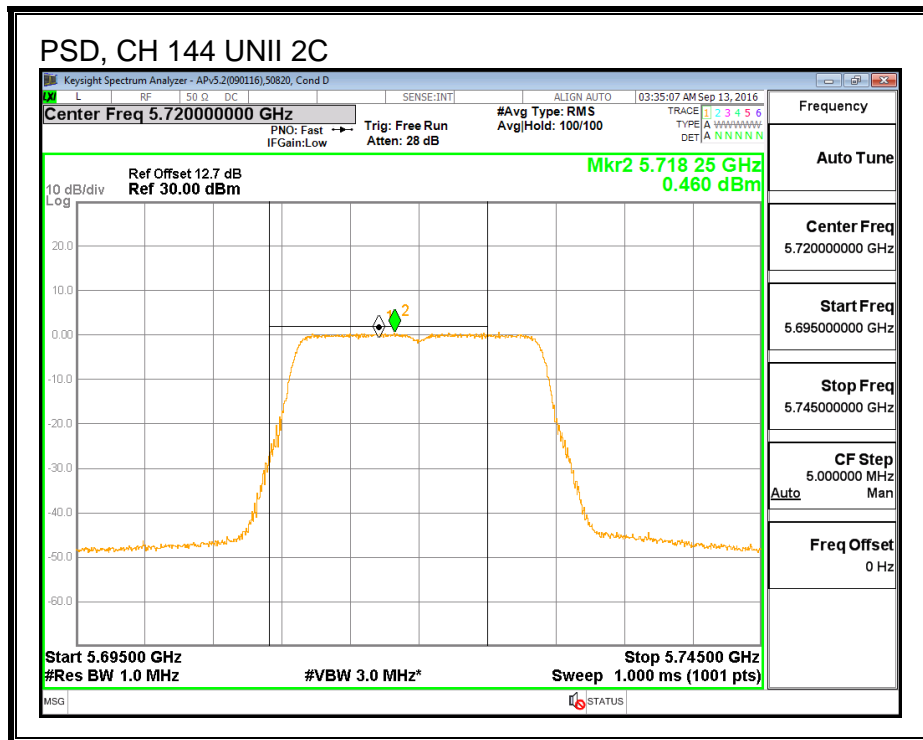
OUTPUT POWER, CHAIN 1



PSD, CHAIN 0



PSD, CHAIN 1



UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	5.31	6.33	9.25	29.67	26.75

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

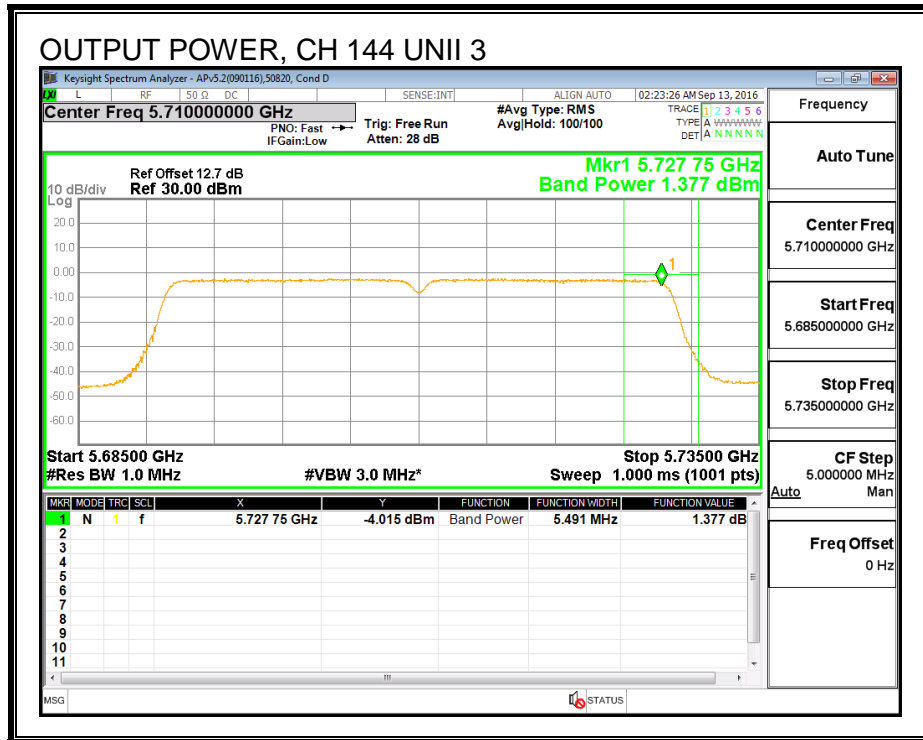
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	5.32	5.41	8.37	29.67	-21.30

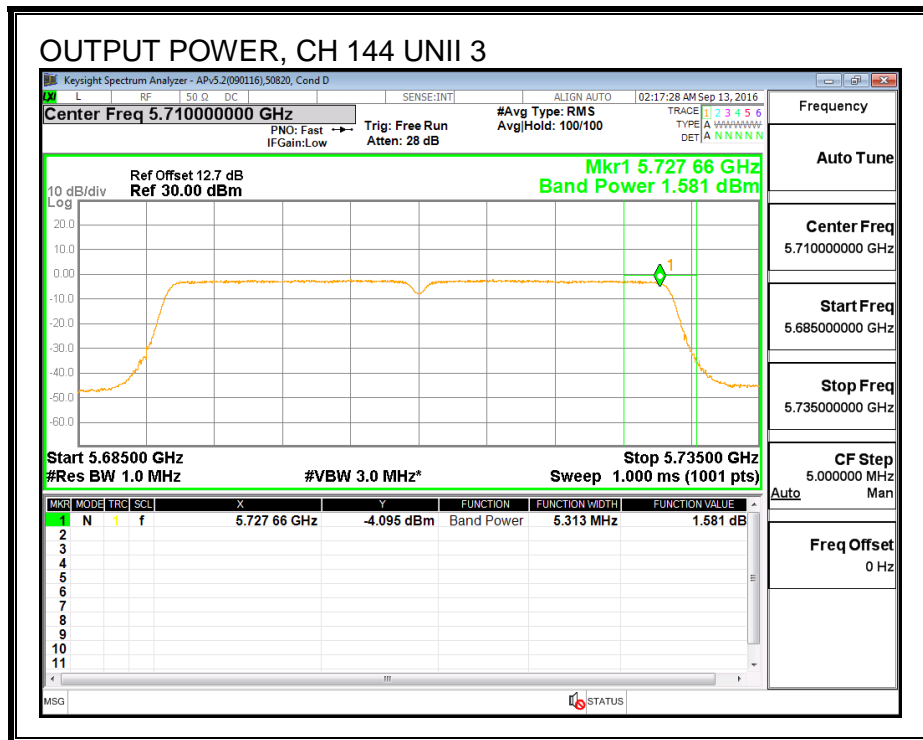
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-2.68	-2.59	0.37	26.75	-26.38

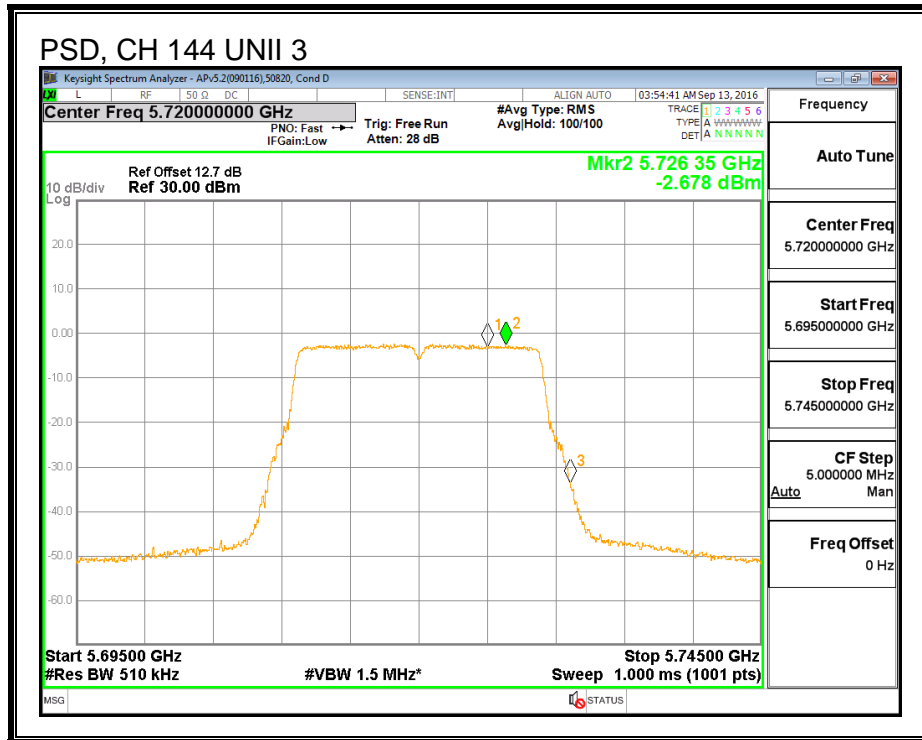
OUTPUT POWER, CHAIN 0



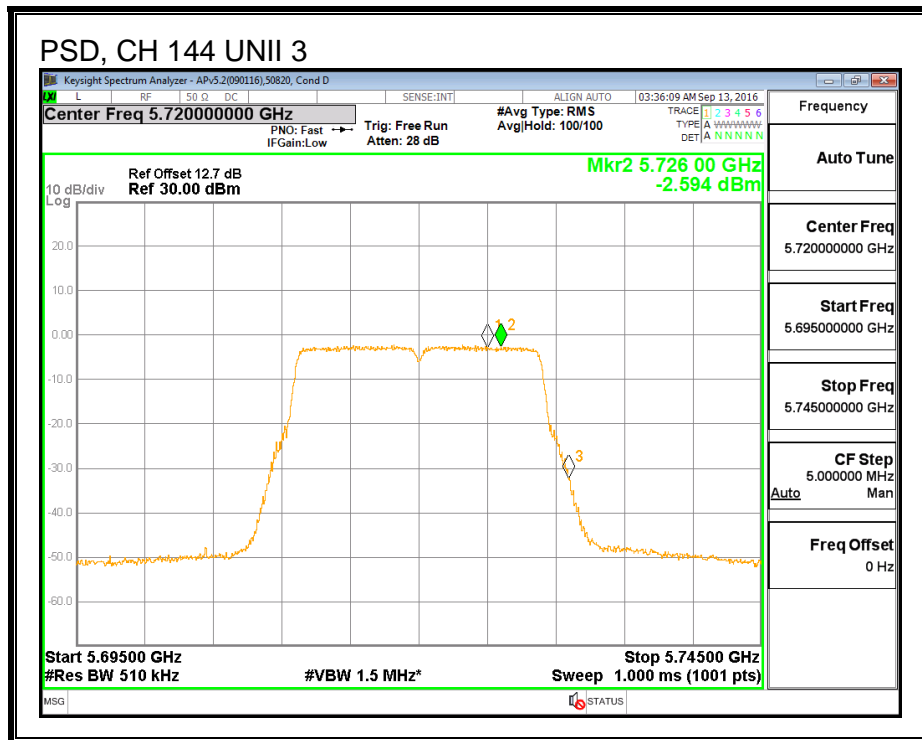
OUTPUT POWER, CHAIN 1



PSD, CHAIN 0



PSD, CHAIN 1



8.12. 802.11ac VHT20 2Tx (CHAIN 0 + CHAIN 1) CDD STRADDLE CHANNEL 144 RESULTS (IC)

8.12.1. OUTPUT POWER AND PSD

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	13.890	6.33	9.25	22.10	7.75

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
--------------------	------	------------------------------------------------

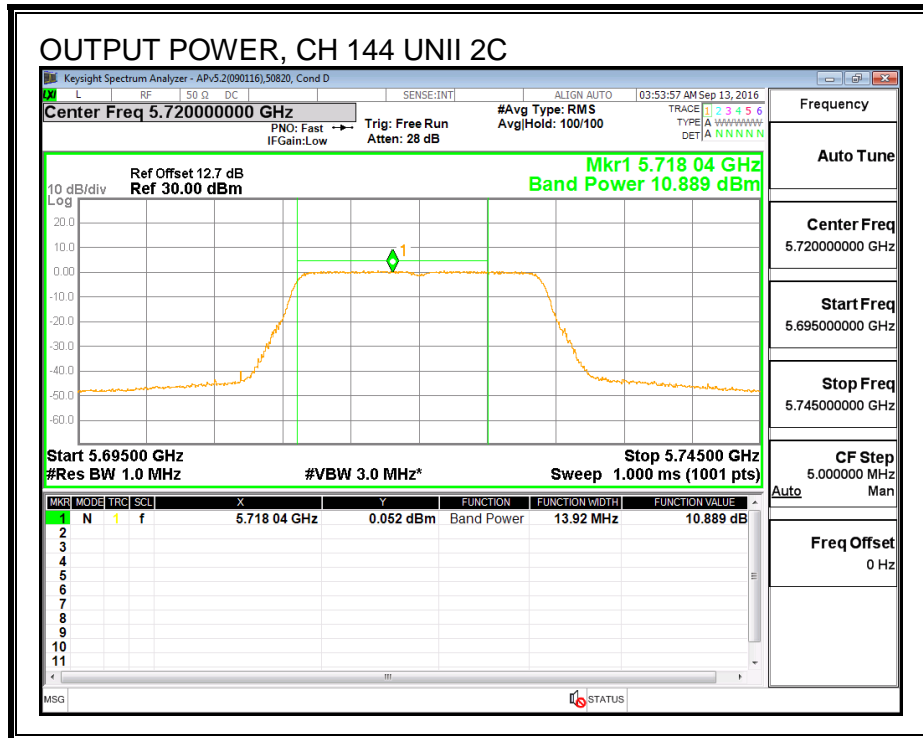
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	10.89	10.86	13.89	22.10	-8.21

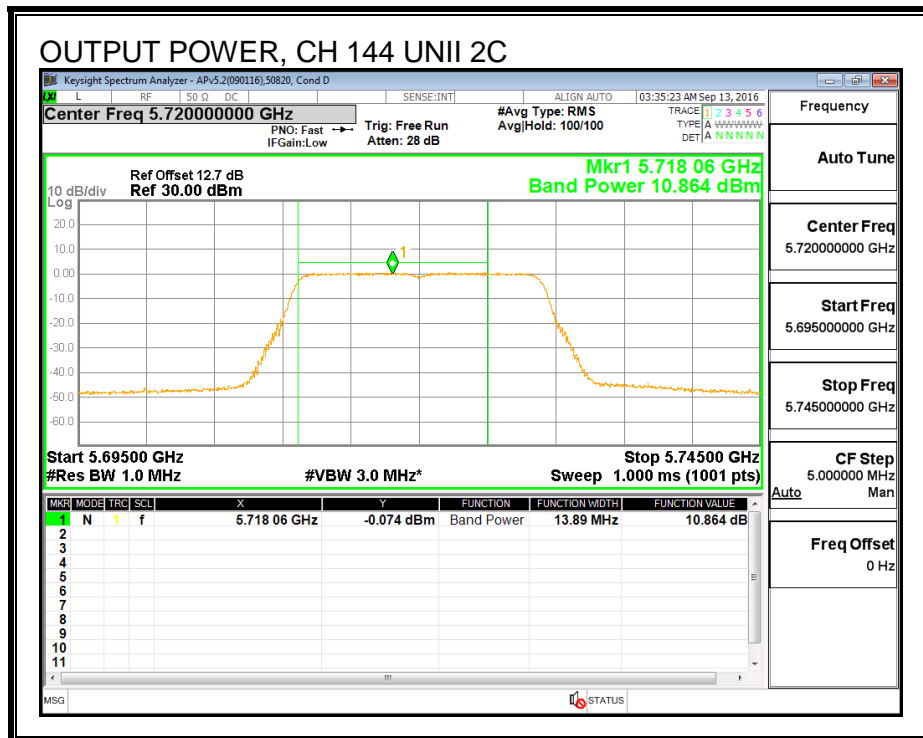
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.47	0.46	3.47	7.75	-4.28

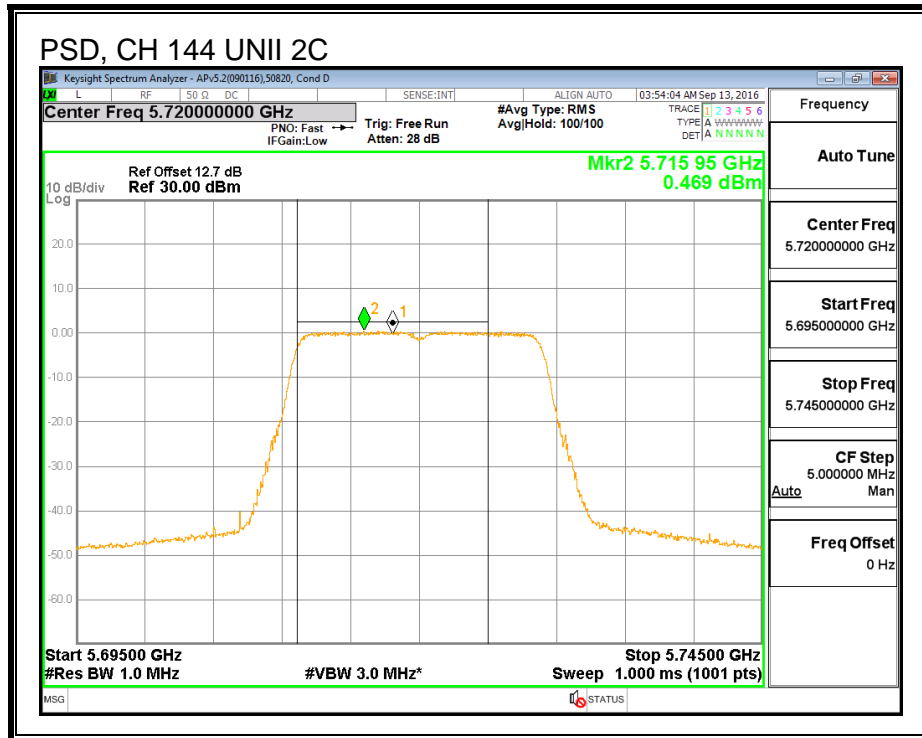
OUTPUT POWER, CHAIN 0



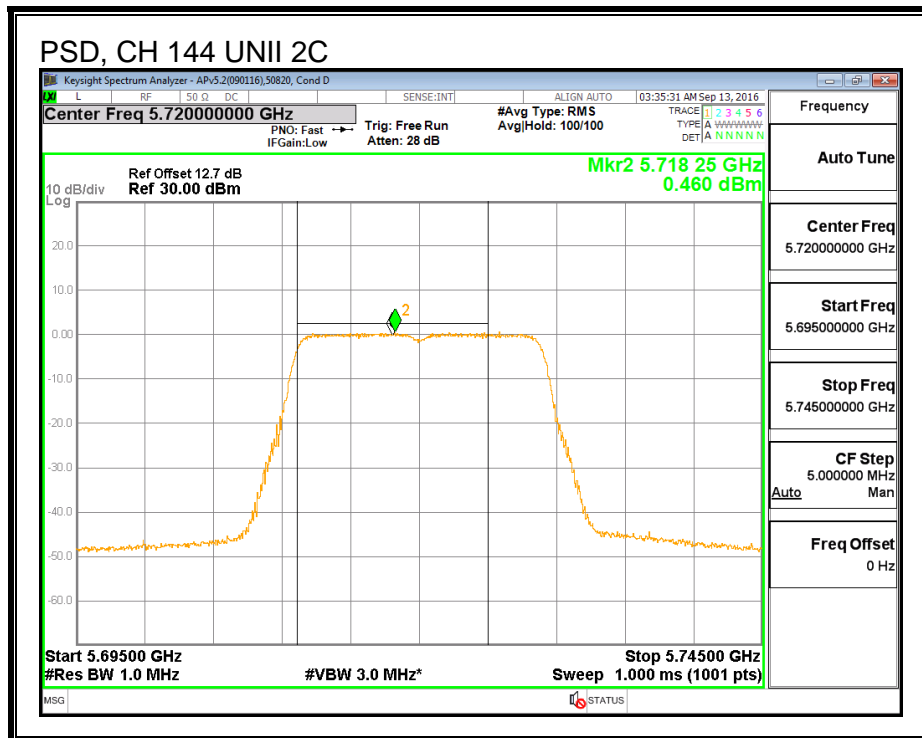
OUTPUT POWER, CHAIN 1



PSD, CHAIN 0



PSD, CHAIN 1



UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	3.885	6.33	9.25	29.67	26.75

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

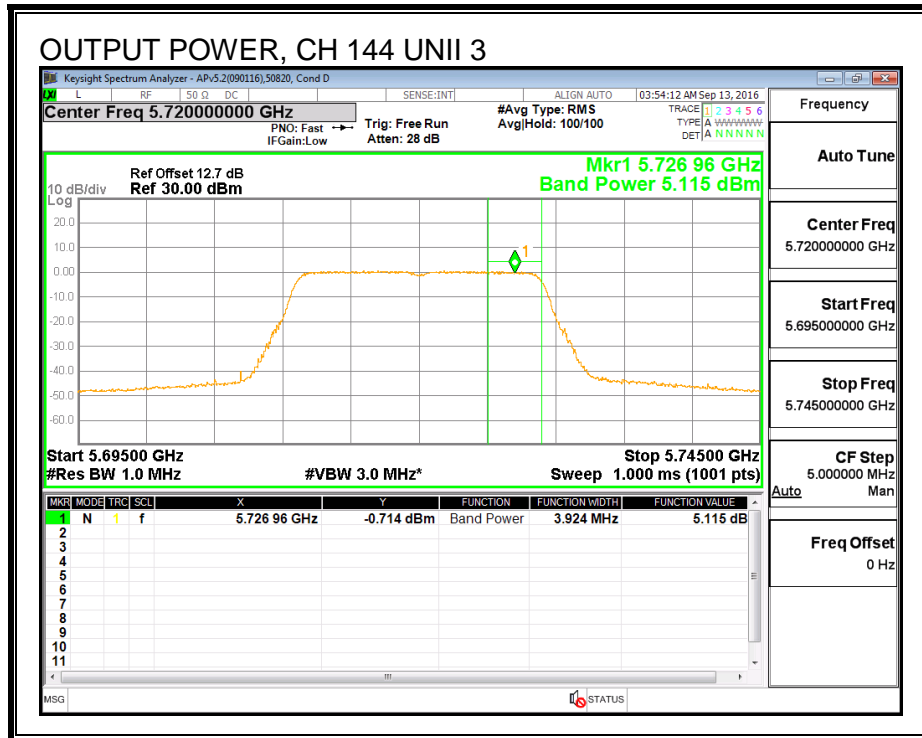
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	5.12	5.18	8.16	29.67	-21.51

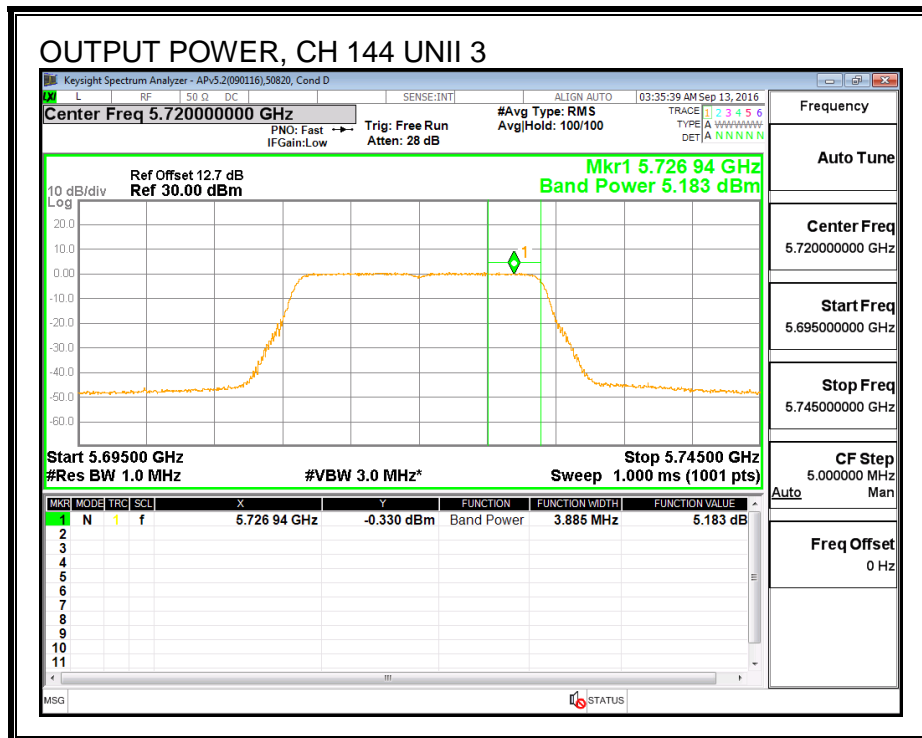
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-2.68	-2.59	0.37	26.75	-26.38

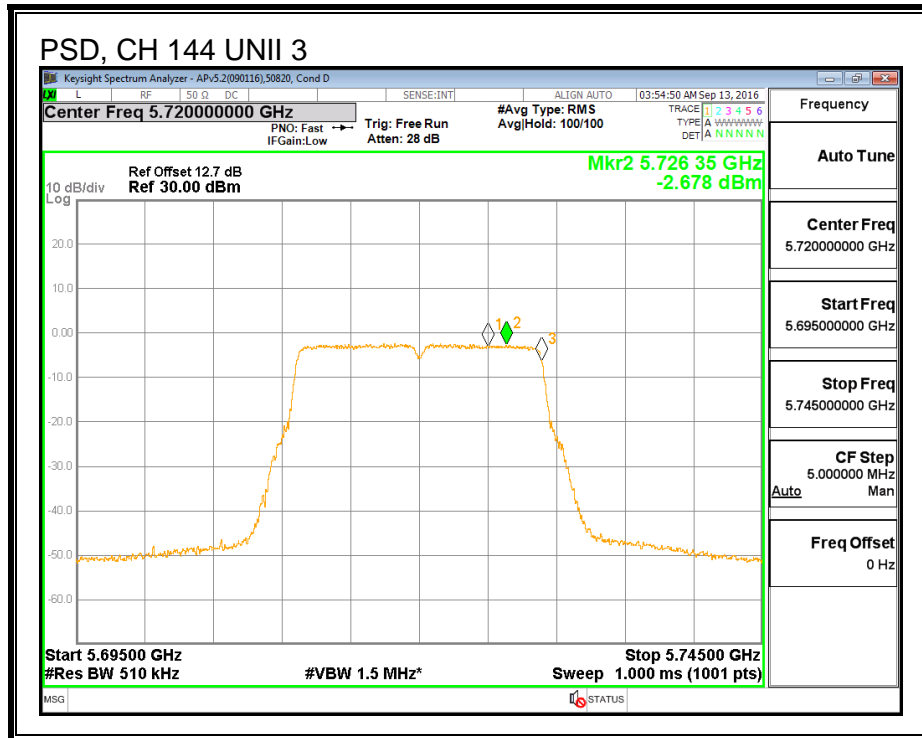
OUTPUT POWER, CHAIN 0



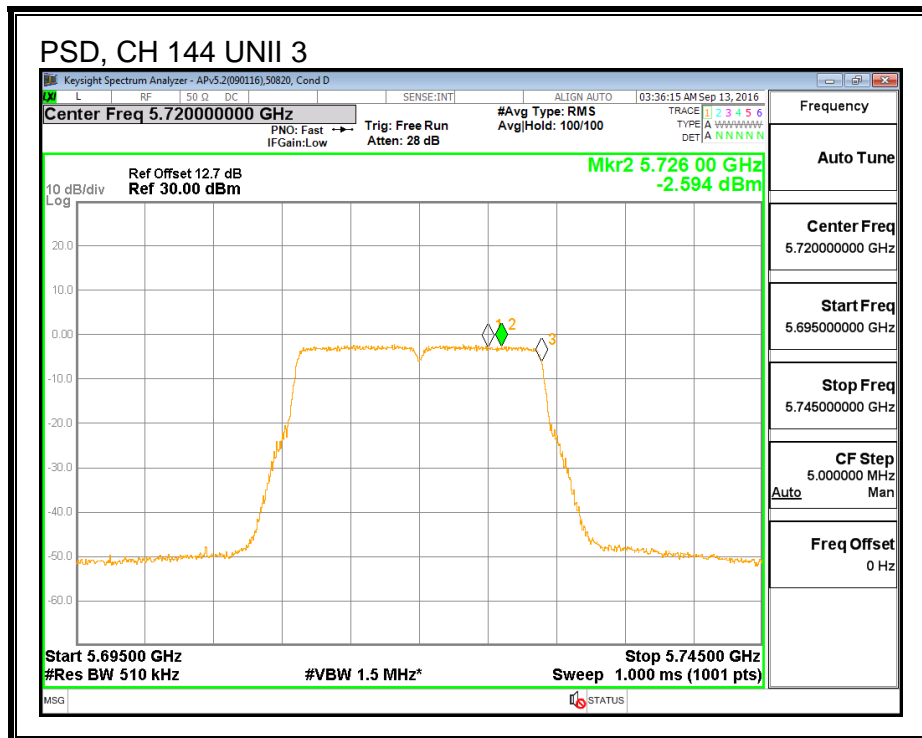
OUTPUT POWER, CHAIN 1



PSD, CHAIN 0



PSD, CHAIN 1



8.12.2. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

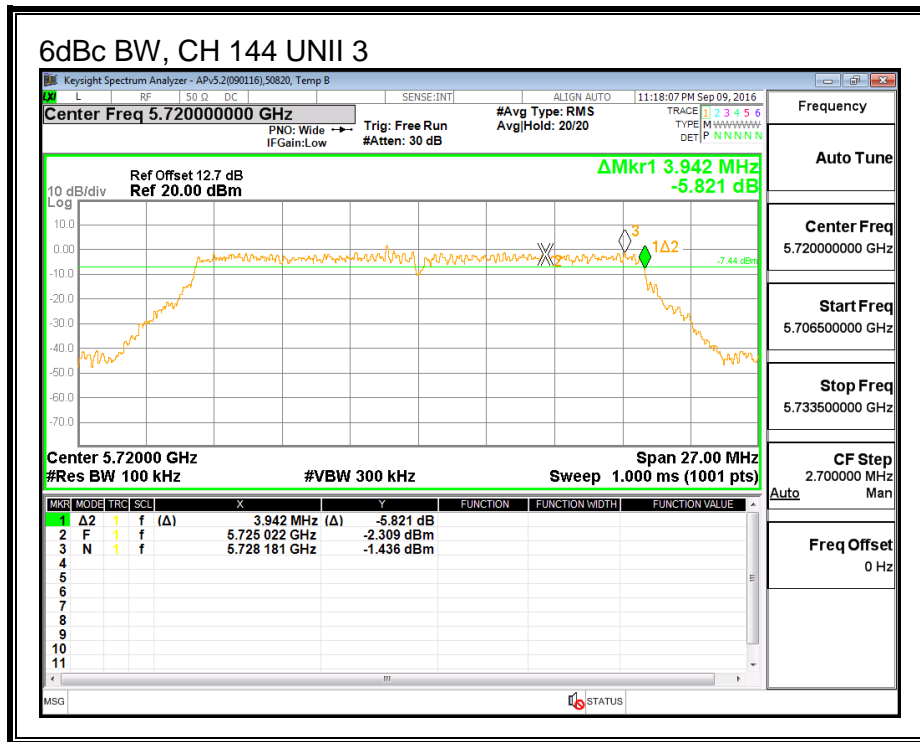
IC RSS-247 (6.2.4) (1)

The minimum 6 dB bandwidth shall be at least 500 kHz.

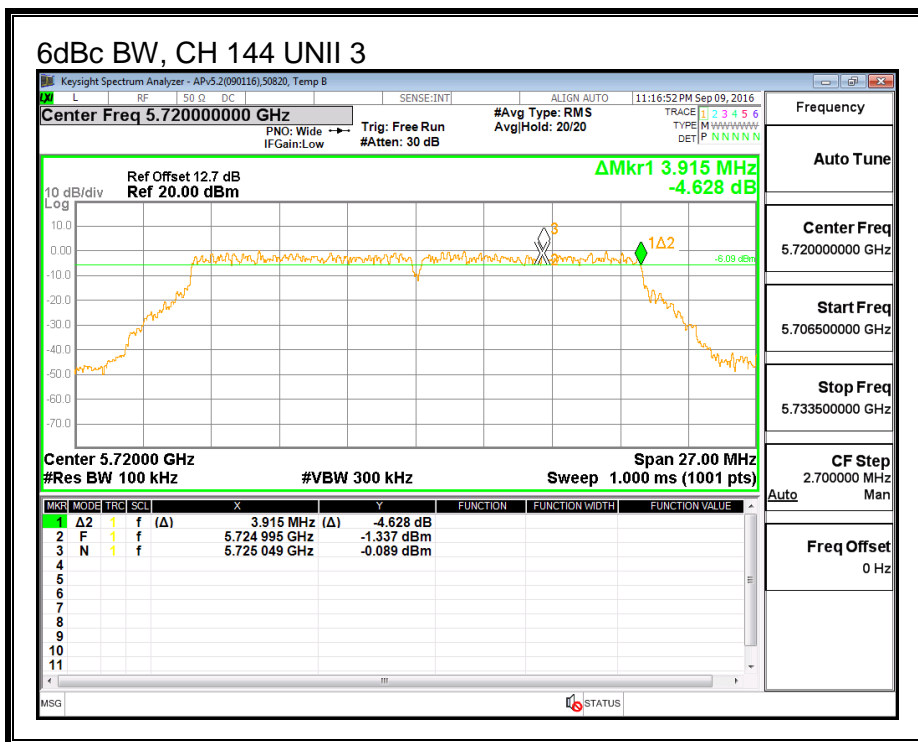
RESULTS

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)
144	5720	3.942	3.915

CHAIN 0



CHAIN 1



8.13. 802.11n HT20 2Tx (CHAIN 0 + CHAIN 2) CDD MODE IN THE 5.6 GHz BAND

8.13.1. 26 dB BANDWIDTH

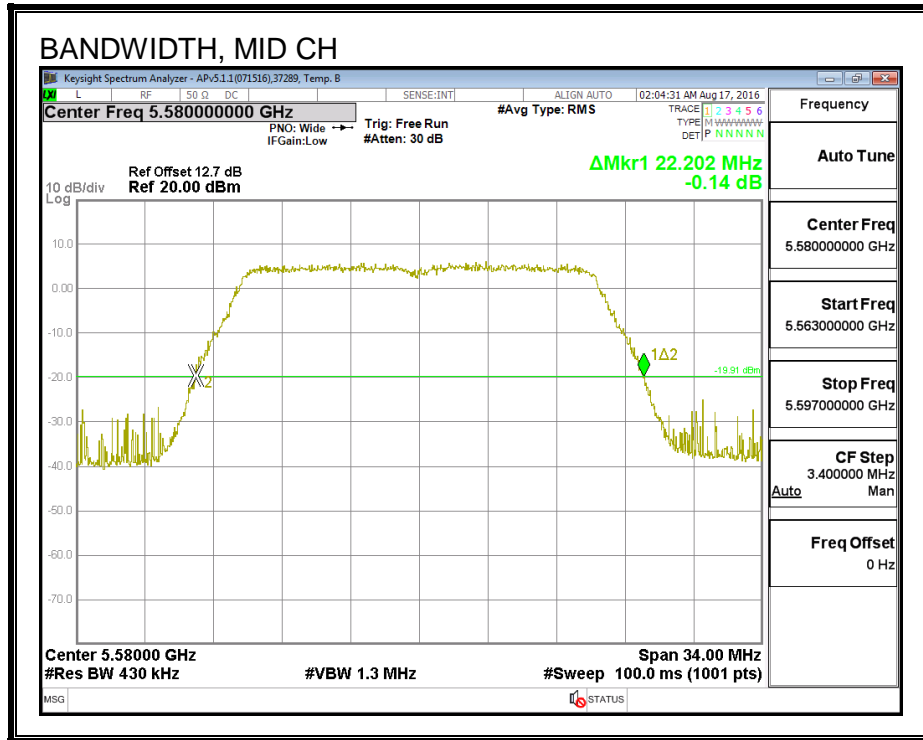
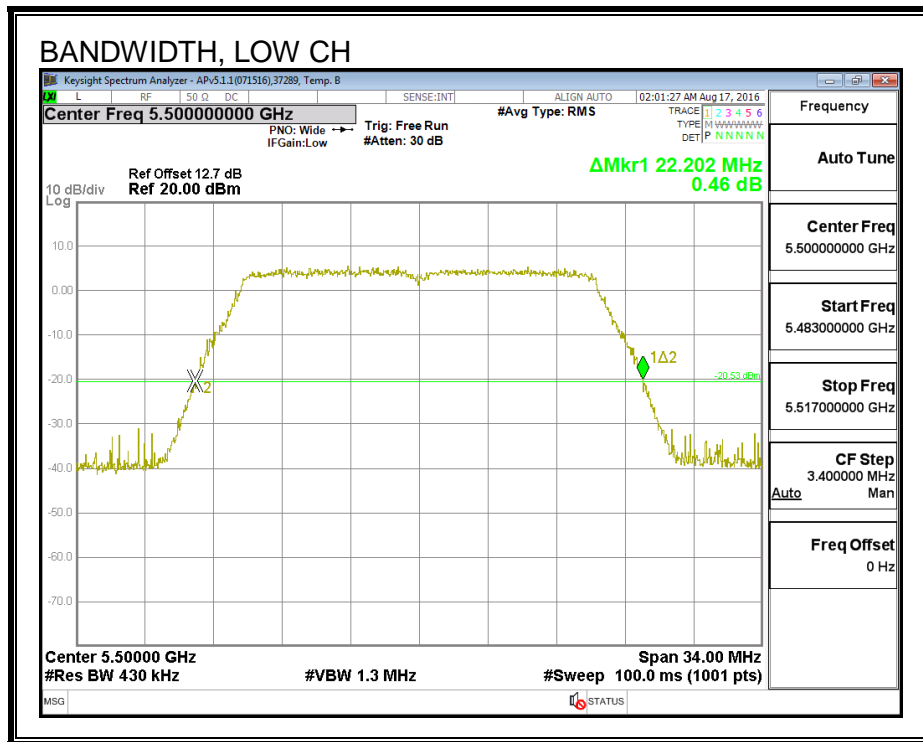
LIMITS

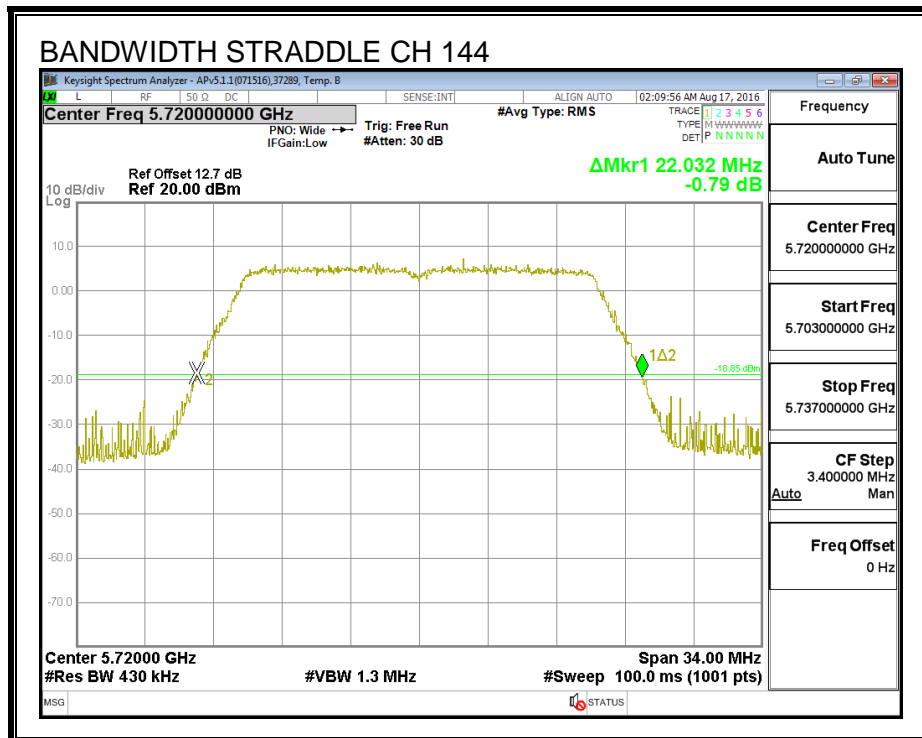
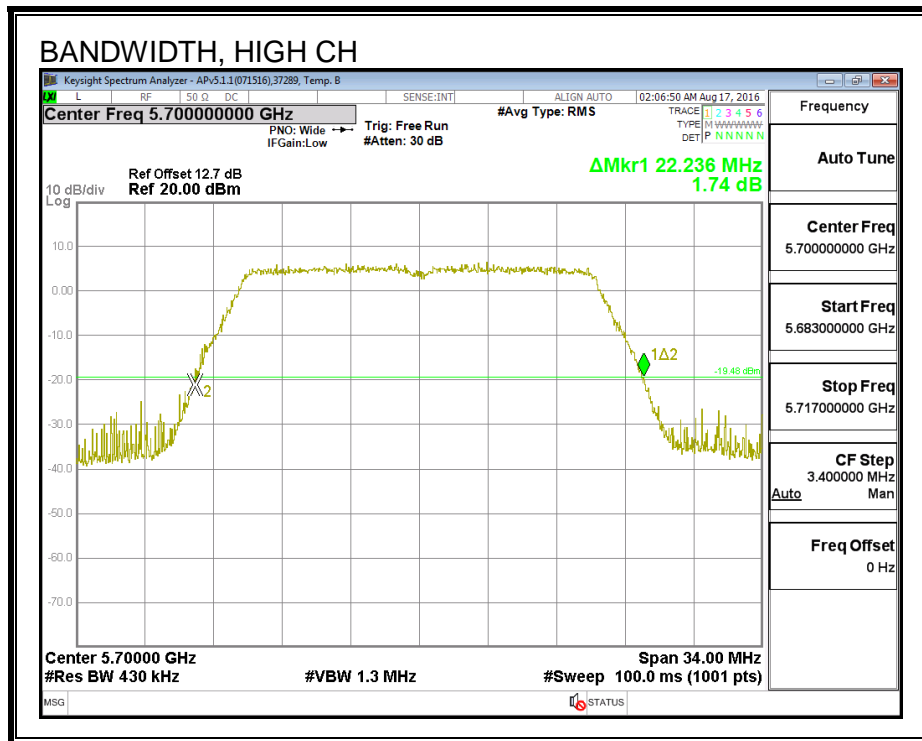
None; for reporting purposes only.

RESULTS

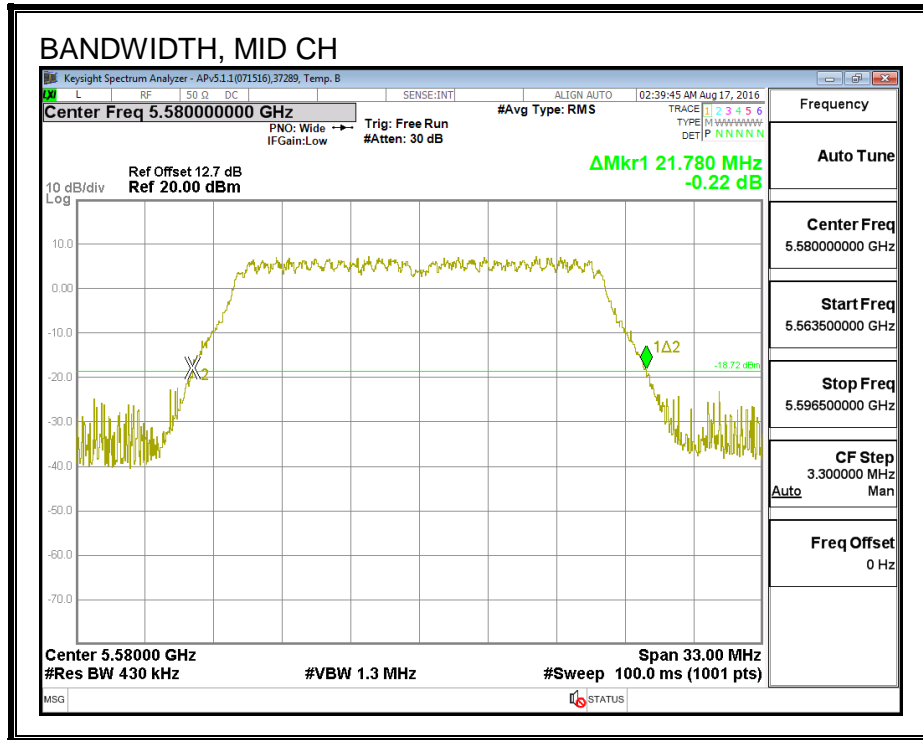
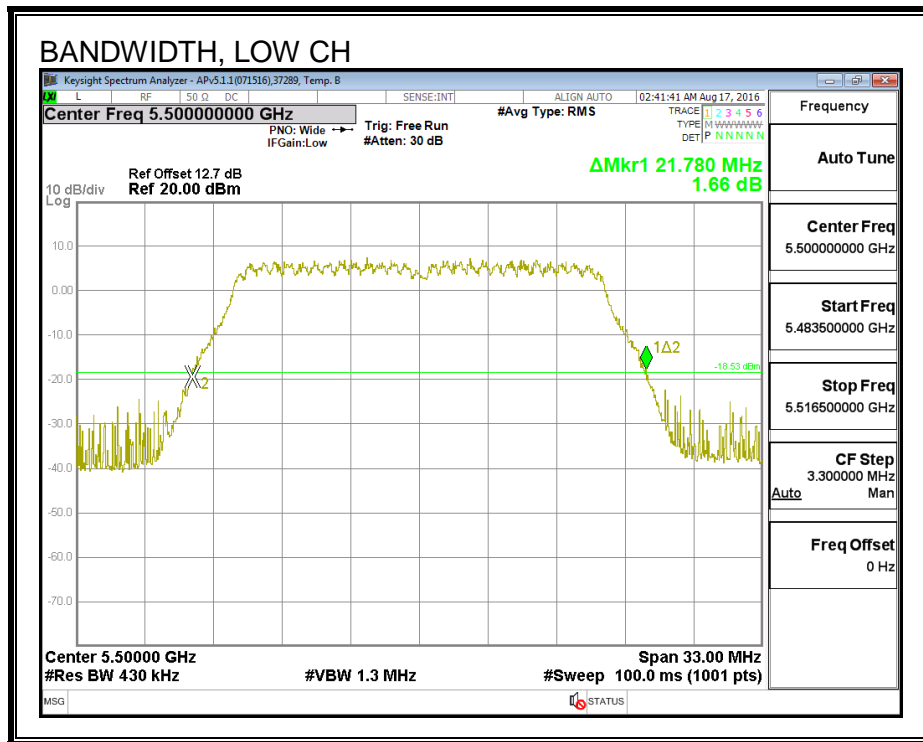
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 2 (MHz)
Low	5500	22.202	21.780
Mid	5580	22.202	21.780
High	5700	22.236	21.912
144	5720	22.032	21.912

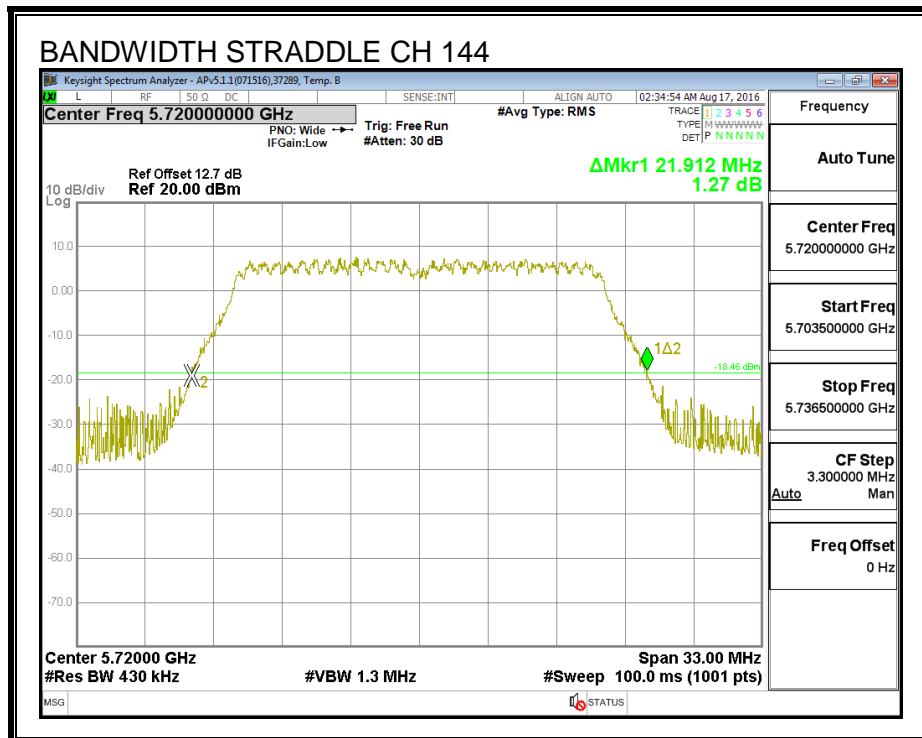
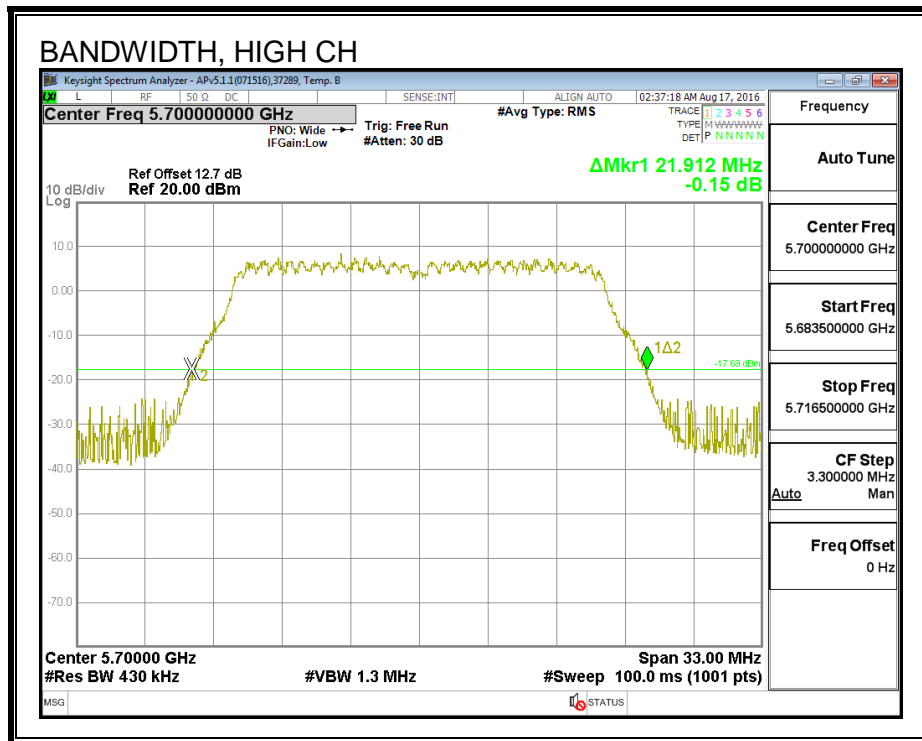
26 dB BANDWIDTH, CHAIN 0





26 dB BANDWIDTH, CHAIN 2





8.13.2. 99% BANDWIDTH

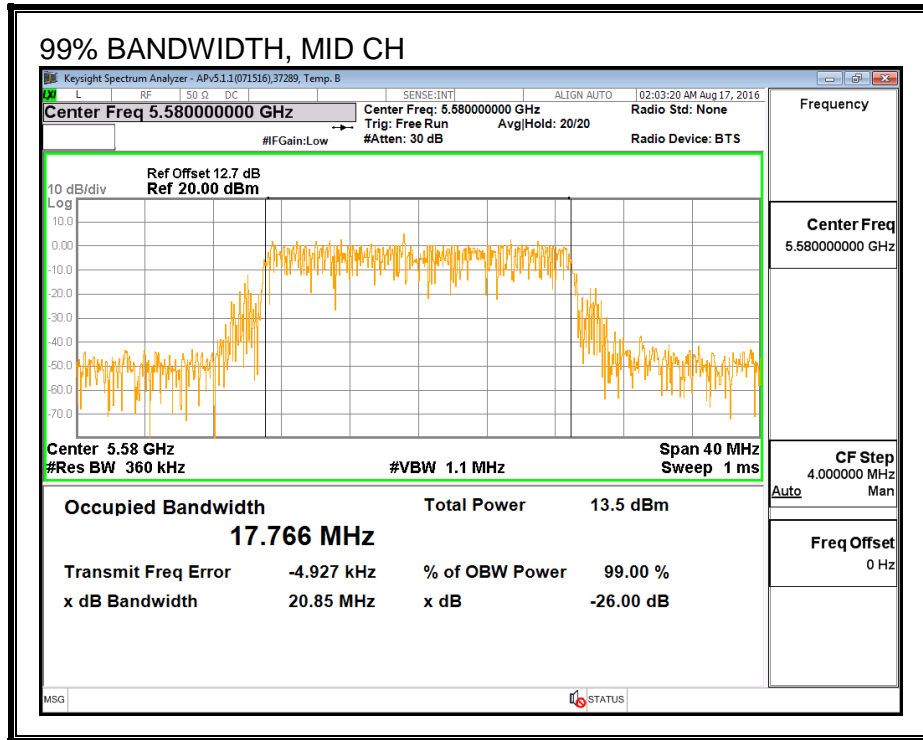
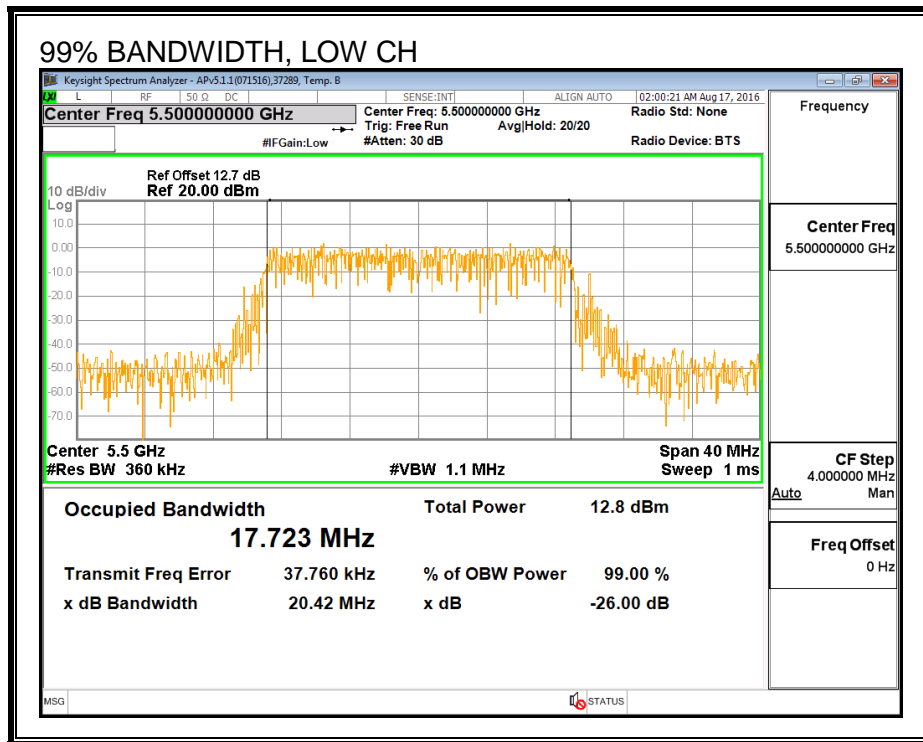
LIMITS

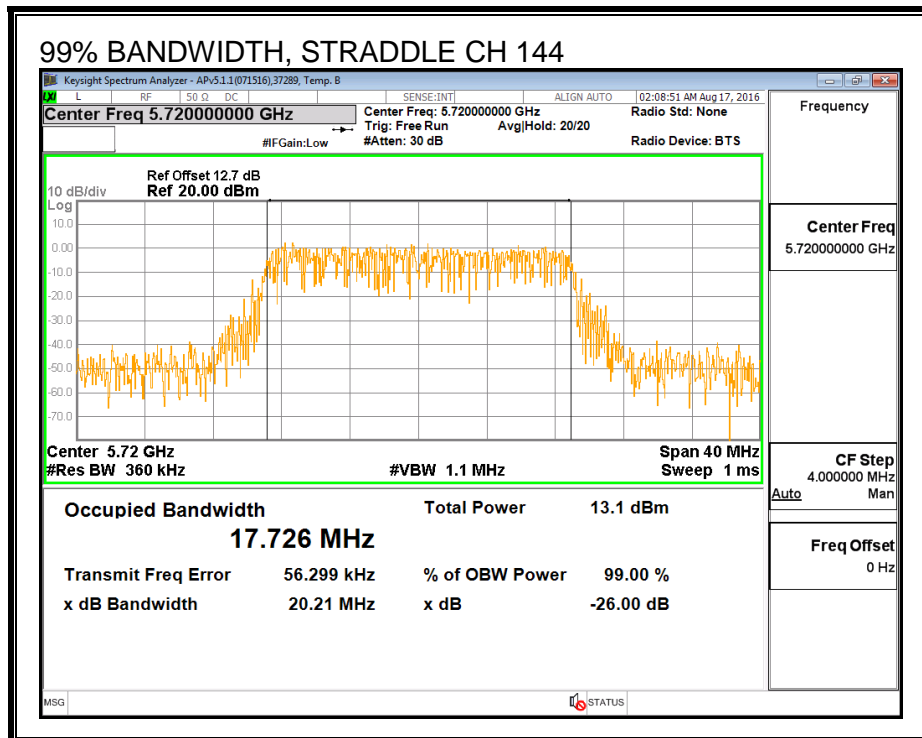
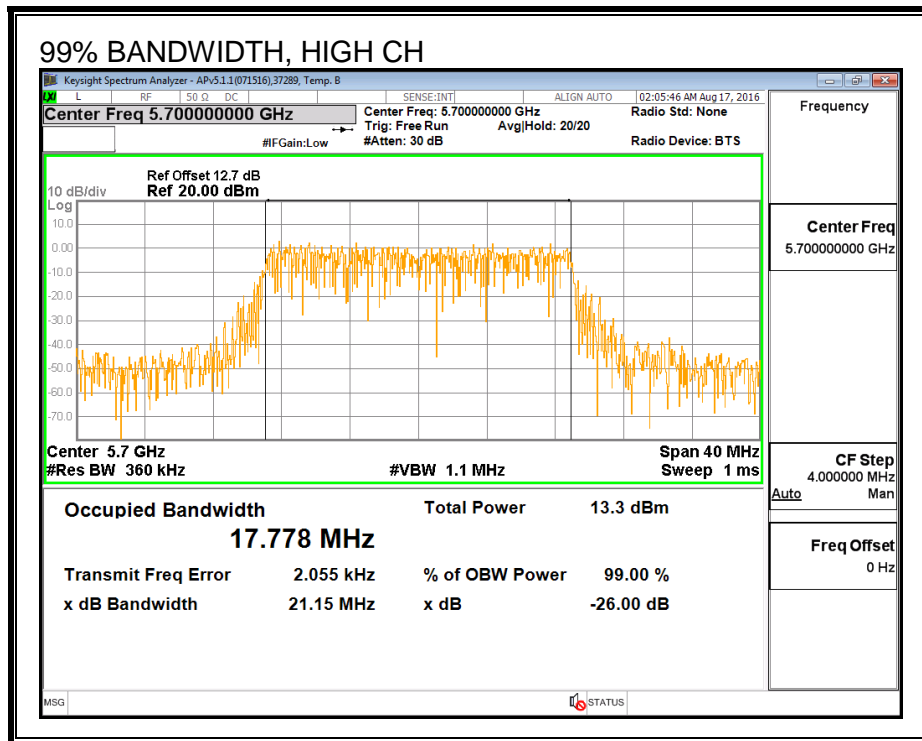
None; for reporting purposes only.

RESULTS

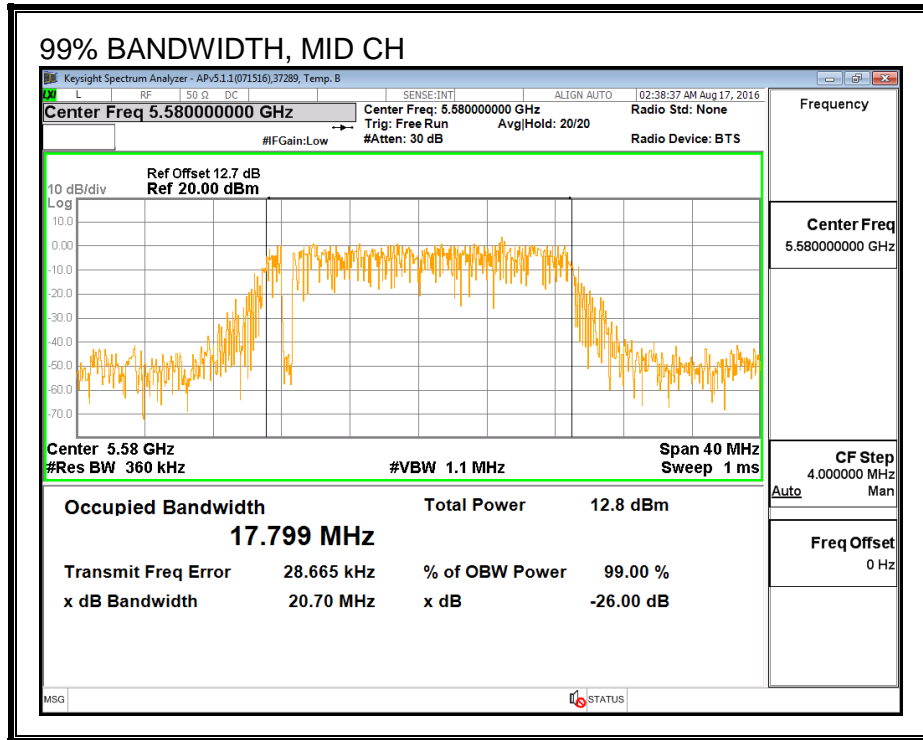
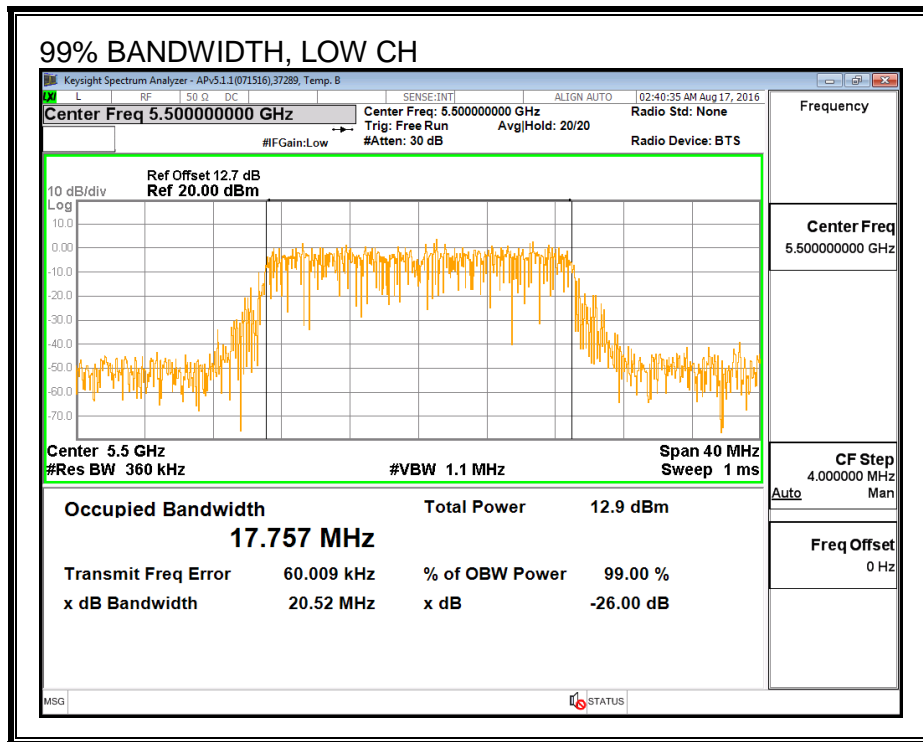
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 2 (MHz)
Low	5500	17.723	17.757
Mid	5580	17.766	17.799
High	5700	17.778	17.781
144	5720	17.726	17.742

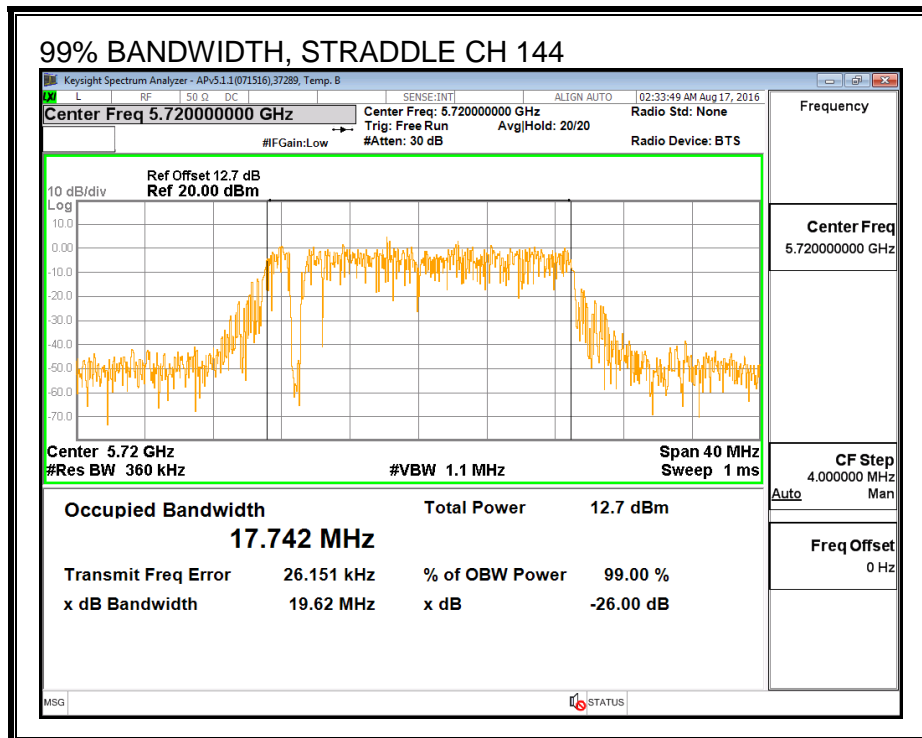
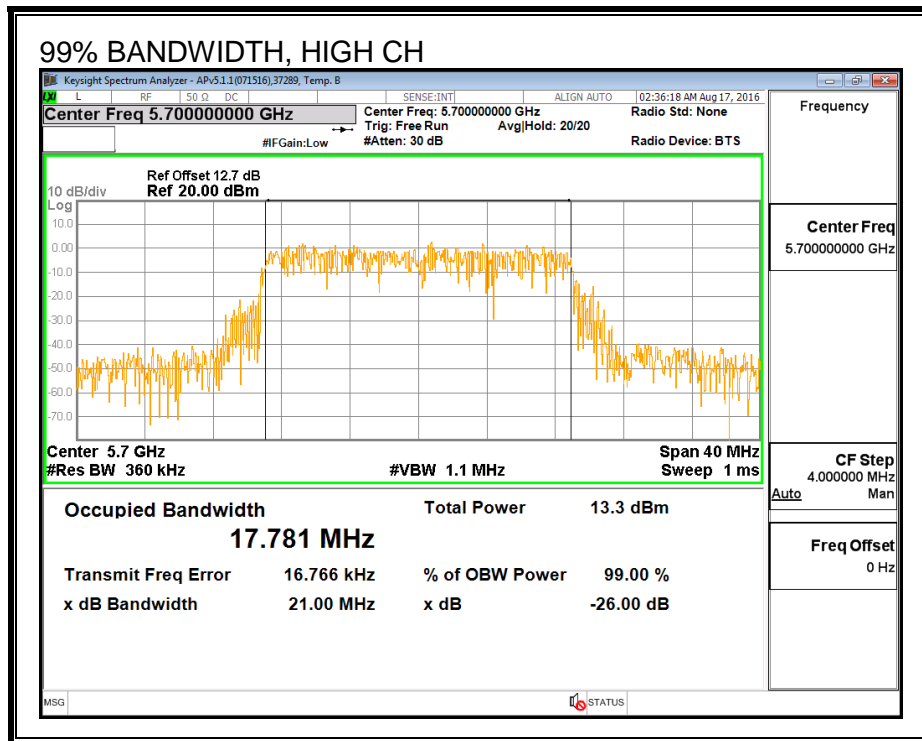
99% BANDWIDTH, CHAIN 0





99% BANDWIDTH, CHAIN 2





8.13.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	43573	Date:	9/7/16
------------	-------	--------------	--------

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 2 Power (dBm)	Total Power (dBm)
Low	5500	11.83	11.90	14.88
Mid	5580	11.95	11.87	14.92
High	5700	11.88	11.95	14.93
144	5720	11.91	11.93	14.93

8.13.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407 (a) (2)

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

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or $11 + 10 \log_{10} B$, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or $17 + 10 \log_{10} B$, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

TEST PROCEDURE

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

Straddle channel power is measured using PXA spectrum analyzer, duty cycle correction factor is required.

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 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.90	5.20	5.05

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

Chain 0 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	5.20	8.06

RESULTS

ID:	43573	Date:	9/7/16
------------	-------	--------------	--------

Bandwidth, Antenna Gain and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5500	21.78	17.723	5.05	8.06	23.49	8.94
Mid	5580	21.78	17.766	5.05	8.06	23.50	8.94
High	5700	21.91	17.778	5.05	8.06	23.50	8.94

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
---------------------------	------	-----------------------------------------------

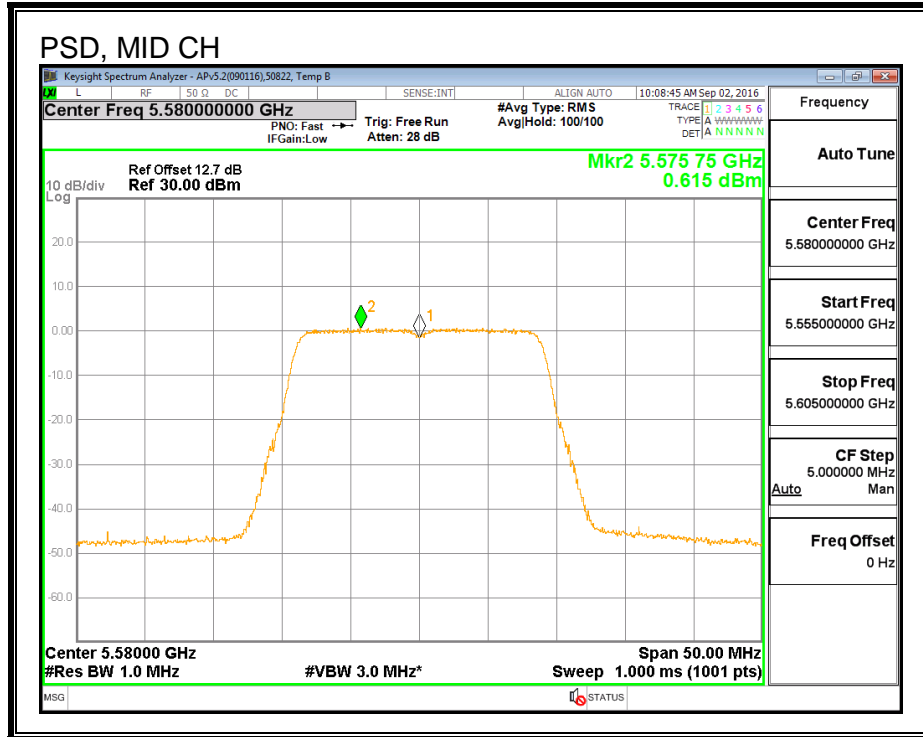
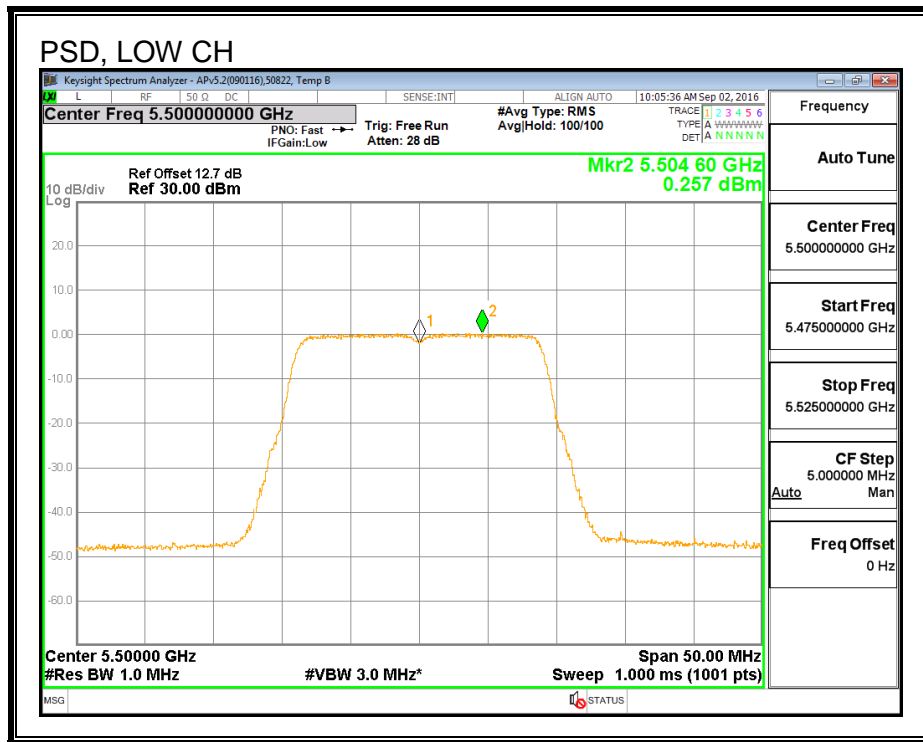
Output Power Results

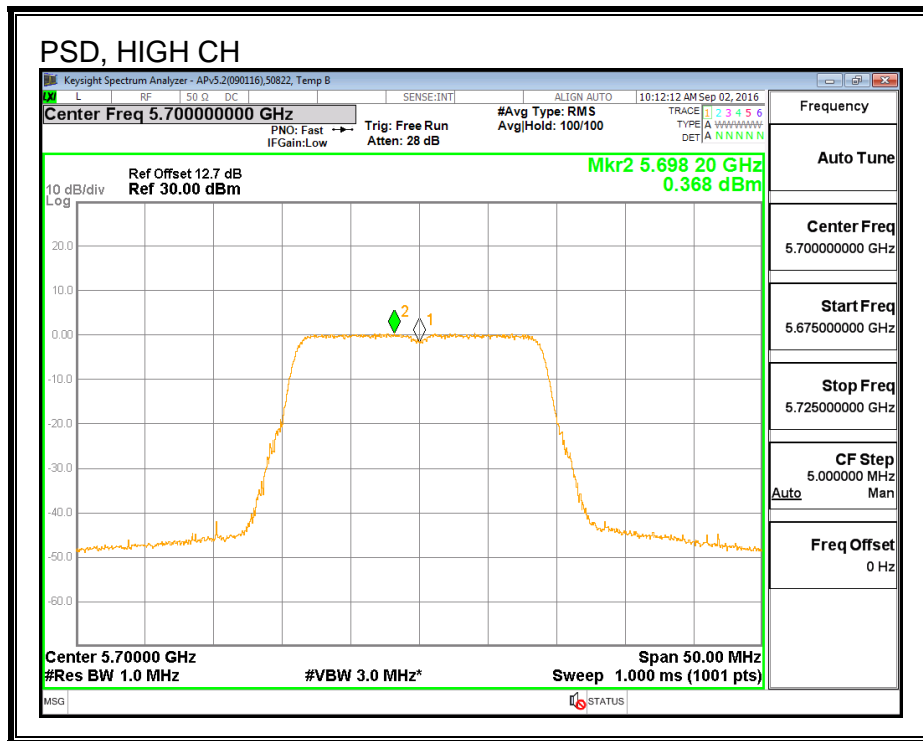
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	11.83	11.9	14.88	23.49	-8.61
Mid	5580	11.95	11.87	14.92	23.50	-8.58
High	5700	11.88	11.95	14.93	23.50	-8.57

PSD Results

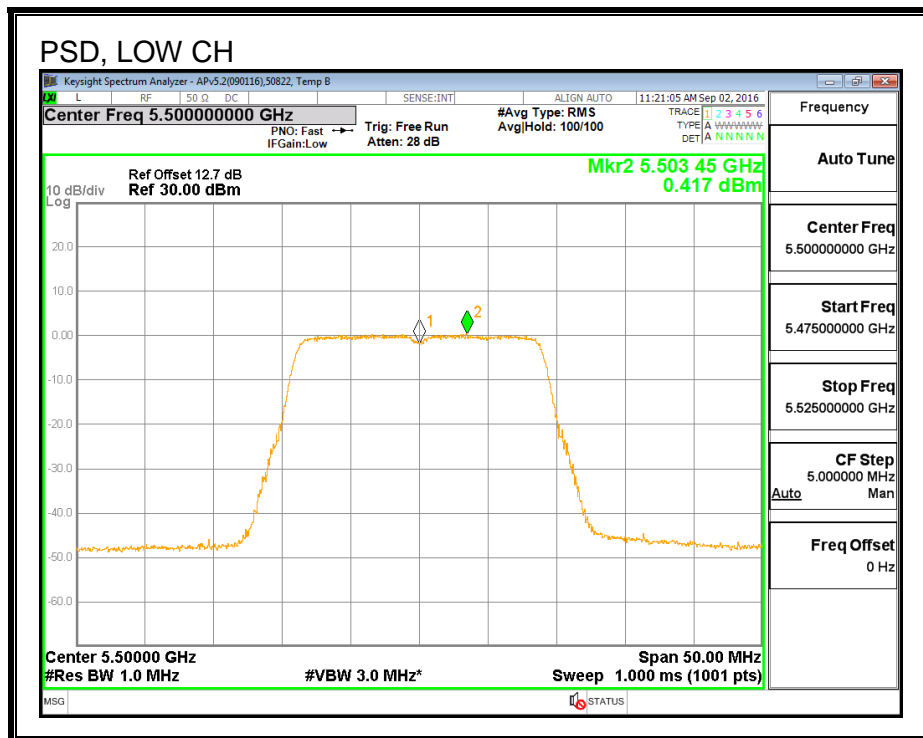
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	0.257	0.417	3.35	8.94	-5.59
Mid	5580	0.615	0.665	3.65	8.94	-5.29
High	5700	0.368	0.531	3.46	8.94	-5.48

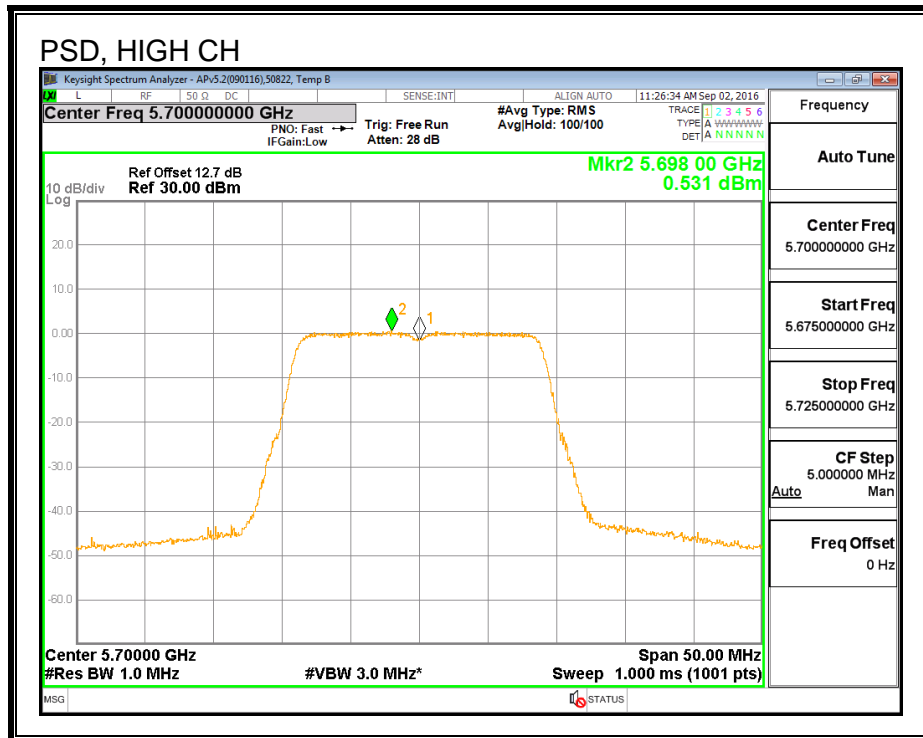
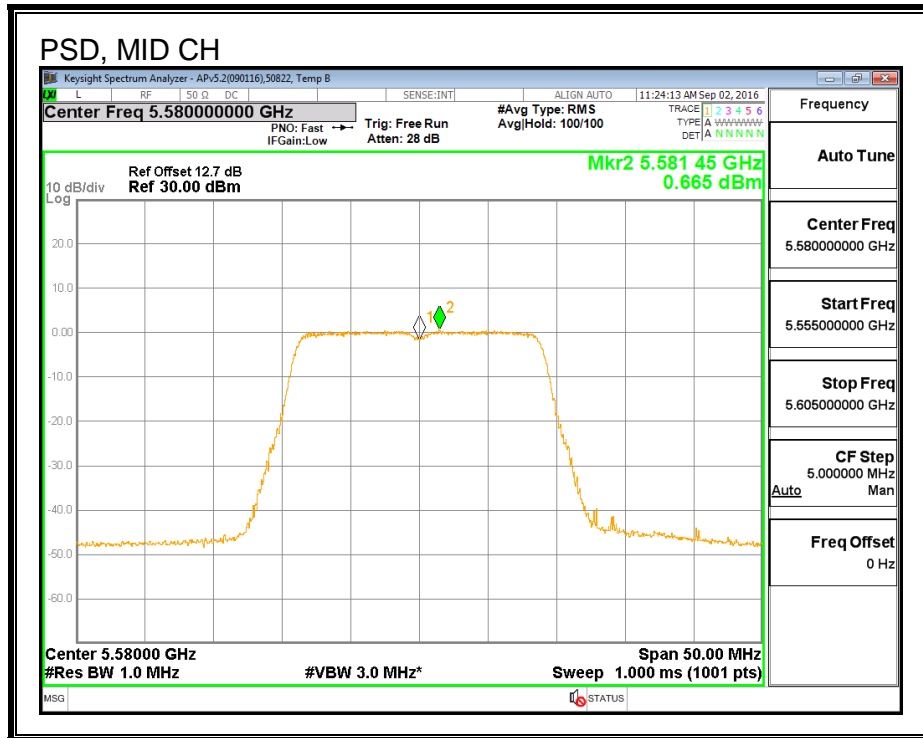
PSD, CHAIN 0





PSD, CHAIN 2





8.14. 802.11ac VHT20 2Tx (CHAIN 0 + CHAIN 2) CDD STRADDLE CHANNEL 144 RESULTS (FCC)

8.14.1. OUTPUT POWER AND PSD

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	15.96	5.05	8.06	23.03	8.94

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

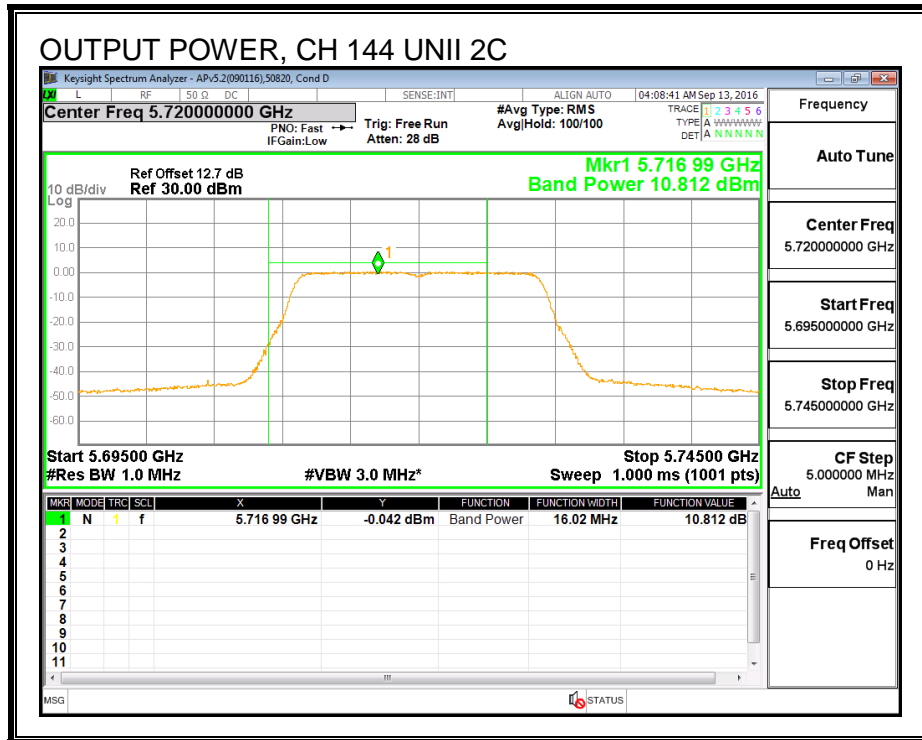
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	10.81	10.82	13.83	23.03	-9.20

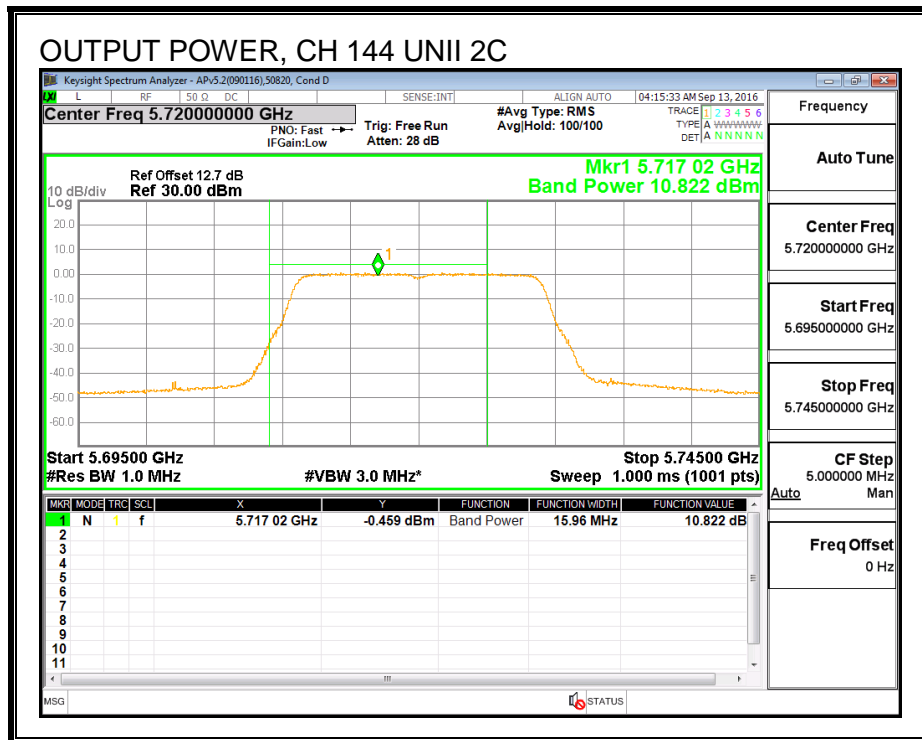
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.332	0.408	3.38	8.94	-5.56

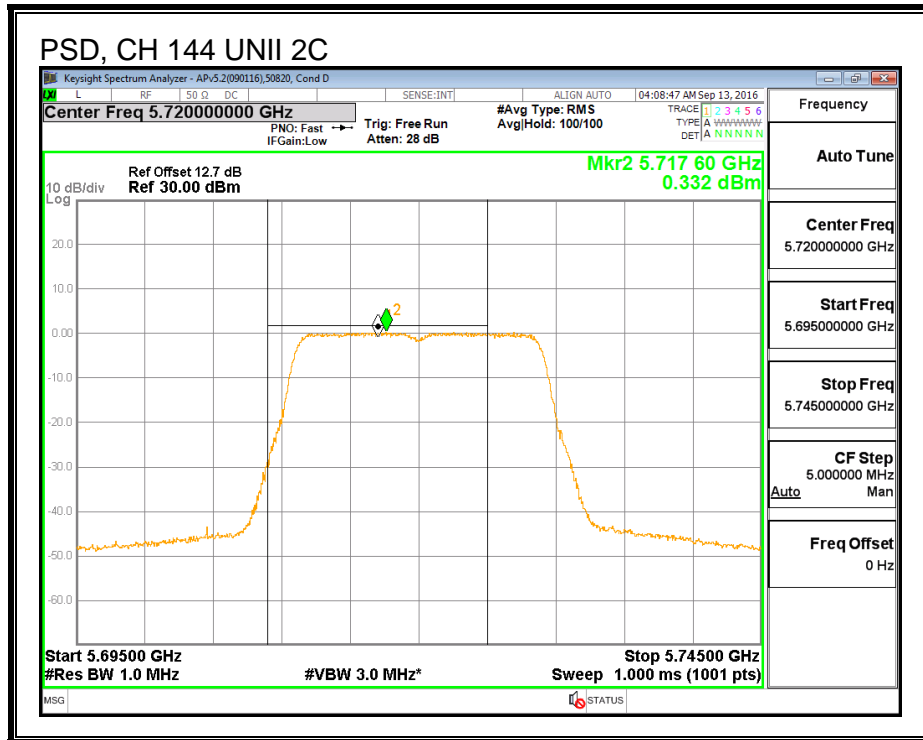
OUTPUT POWER, CHAIN 0



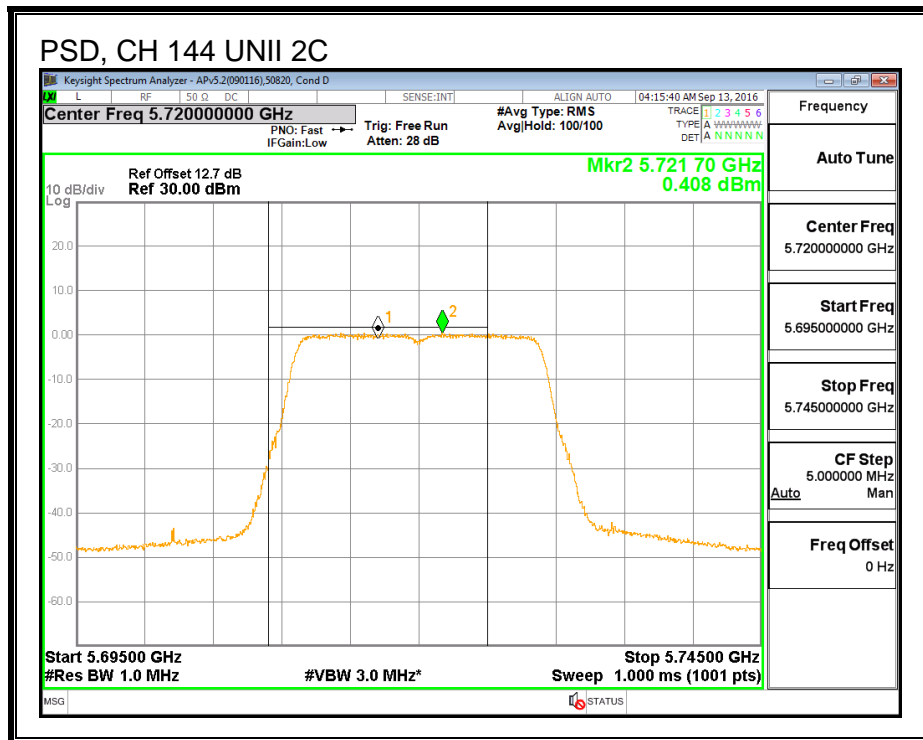
OUTPUT POWER, CHAIN 2



PSD, CHAIN 0



PSD, CHAIN 2



UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	5.96	5.05	8.06	30.00	27.94

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

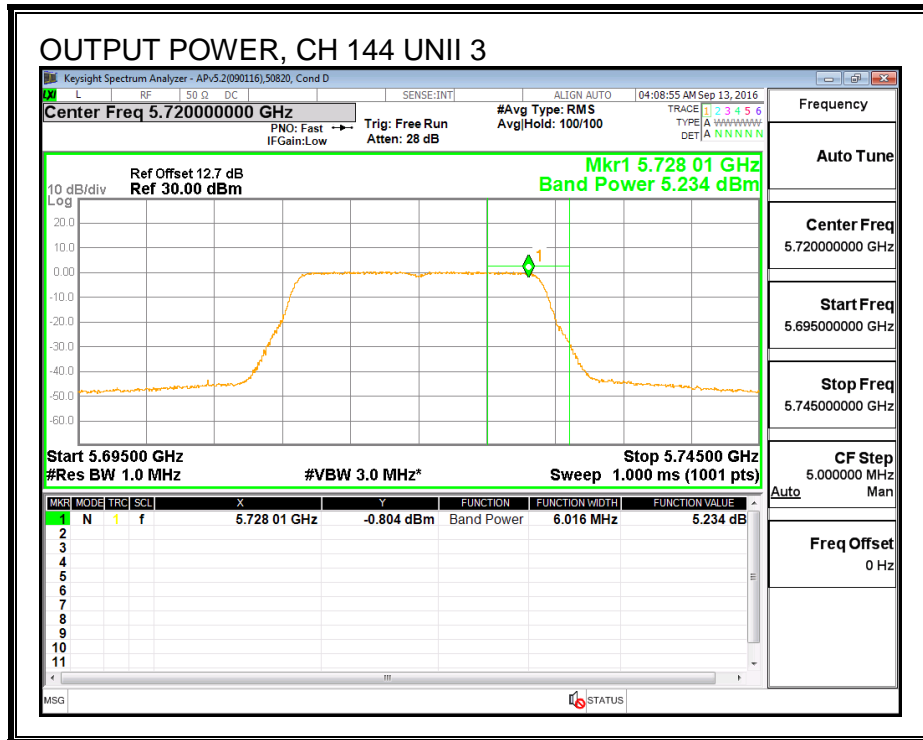
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	5.23	5.22	8.24	30.00	-21.76

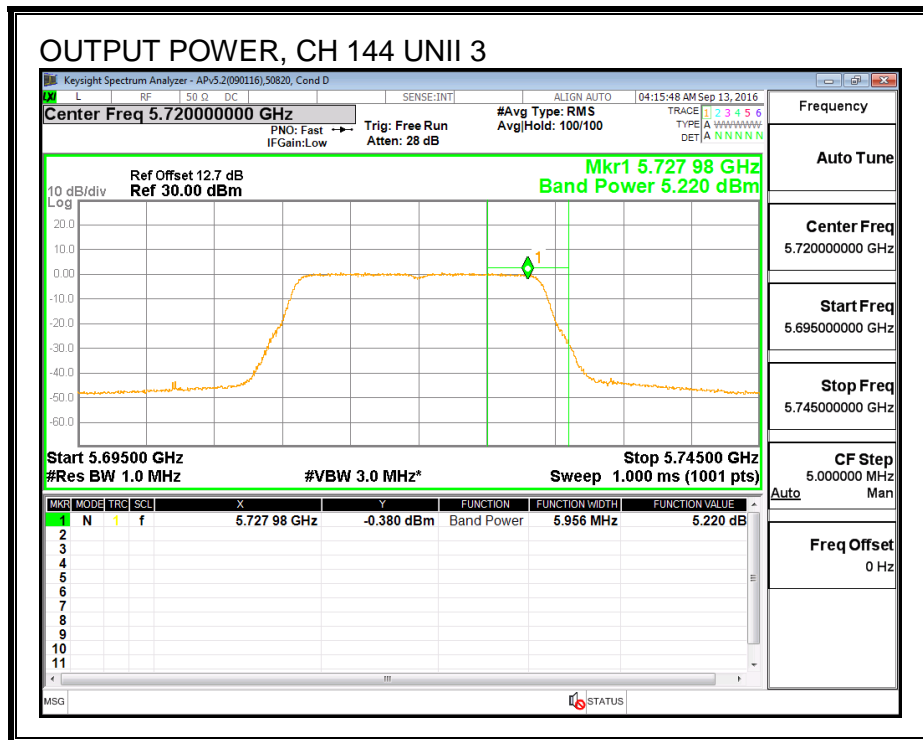
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-2.64	-2.72	0.33	27.94	-27.61

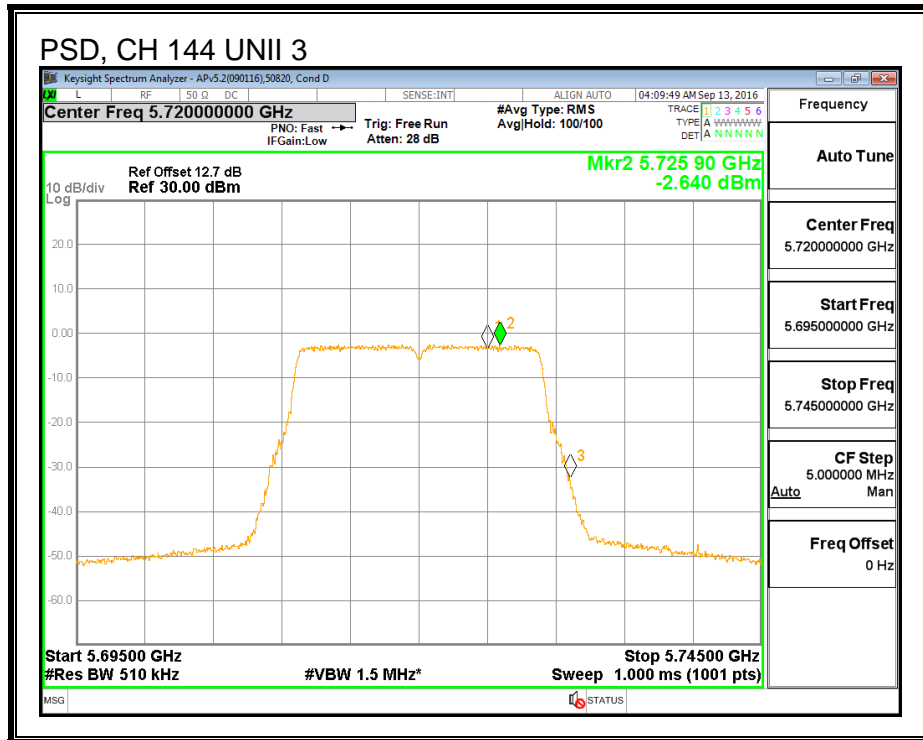
OUTPUT POWER, CHAIN 0



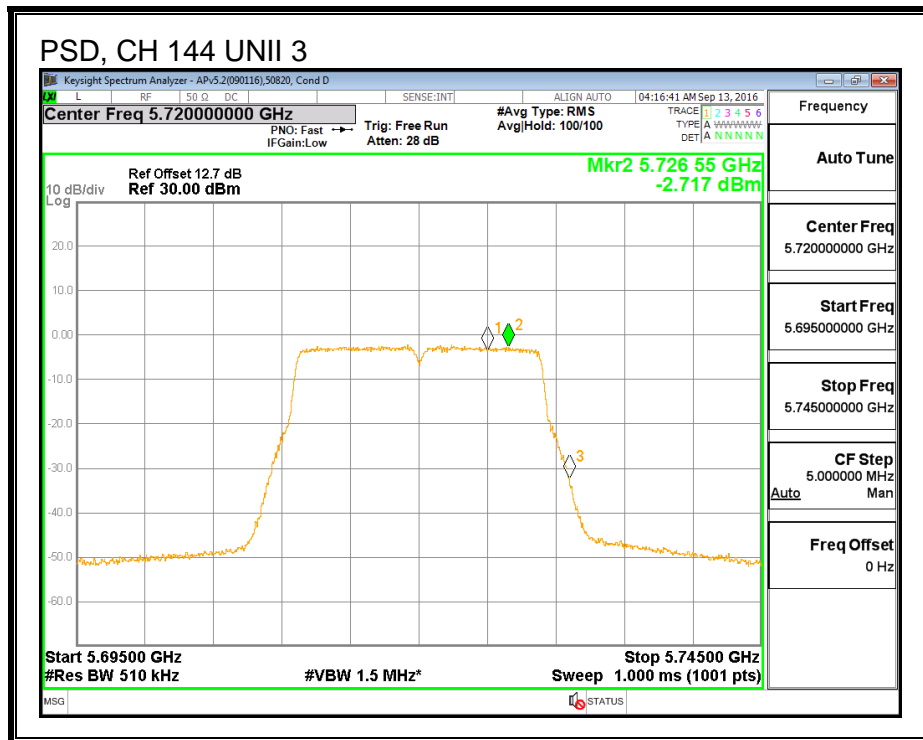
OUTPUT POWER, CHAIN 2



PSD, CHAIN 0



PSD, CHAIN 2



8.15. 802.11ac VHT20 2Tx (CHAIN 0 + CHAIN 2) CDD STRADDLE CHANNEL 144 RESULTS (IC)

8.15.1. OUTPUT POWER AND PSD

UNII-2C BAND

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	13.870	5.05	8.06	22.42	8.94

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

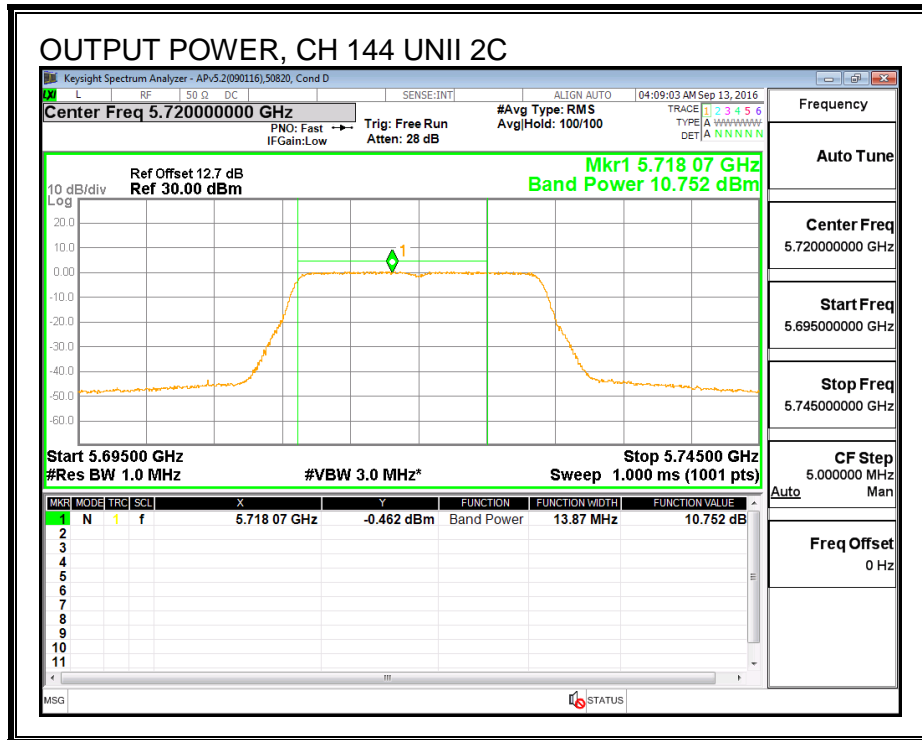
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	10.75	10.76	13.77	22.42	-8.65

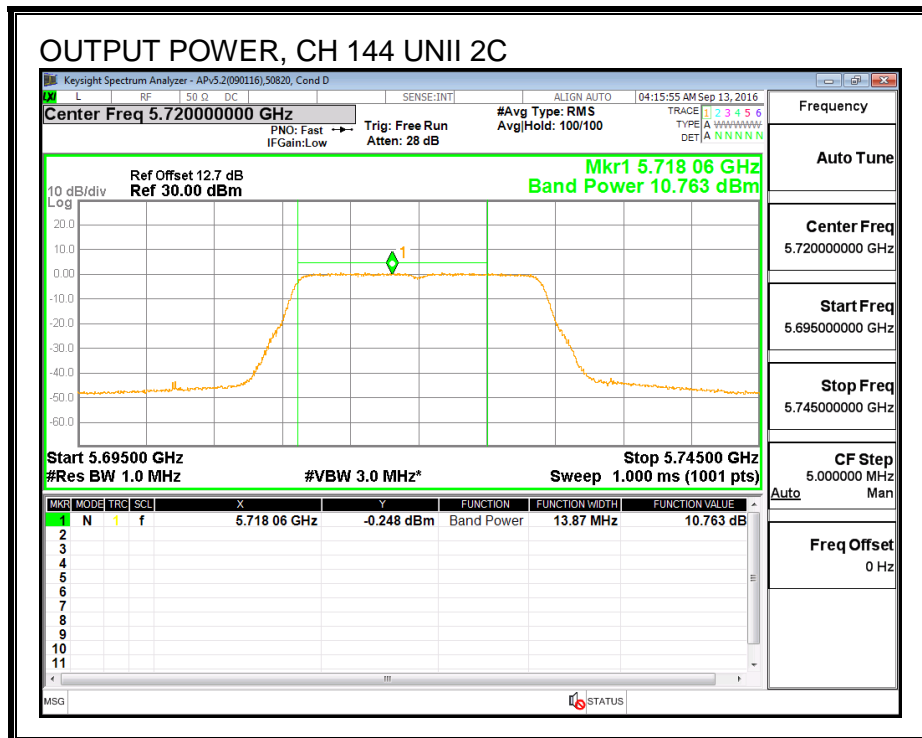
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.33	0.41	3.38	8.94	-5.56

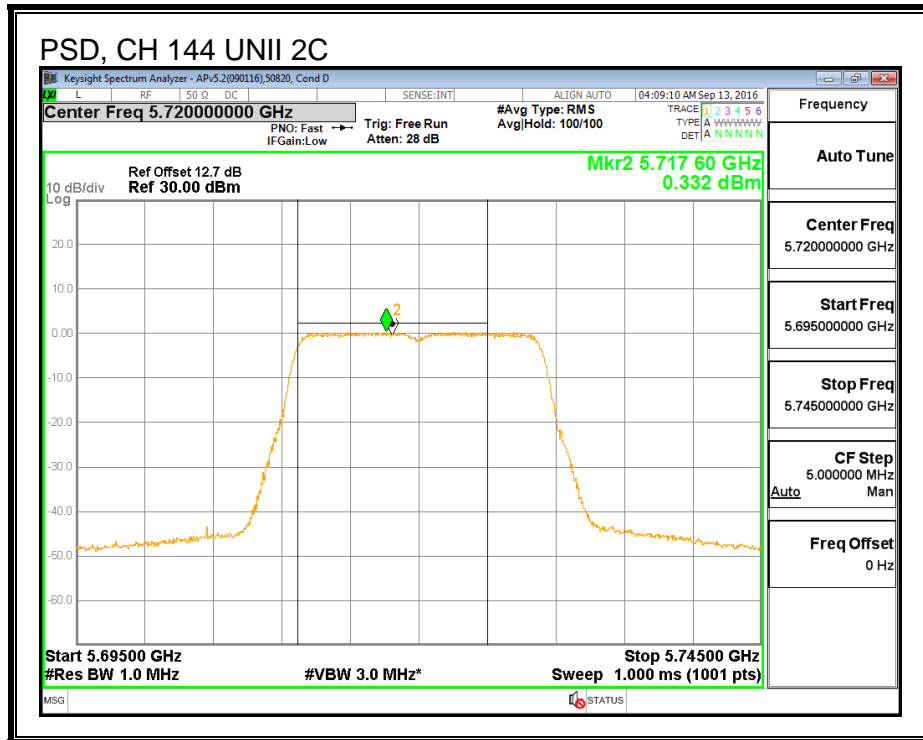
OUTPUT POWER, CHAIN 0



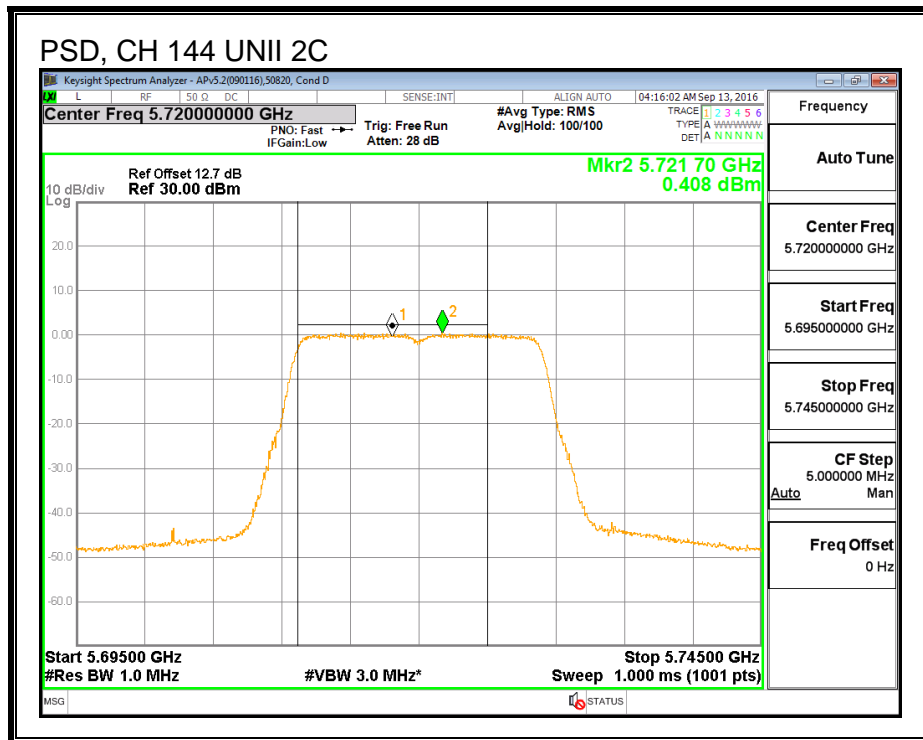
OUTPUT POWER, CHAIN 2



PSD, CHAIN 0



PSD, CHAIN 2



UNII-3 BAND

Antenna Gain and Limit

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
144	5720	3.865	5.05	8.06	30.00	27.94

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
---------------------------	------	-----------------------------------------------------------

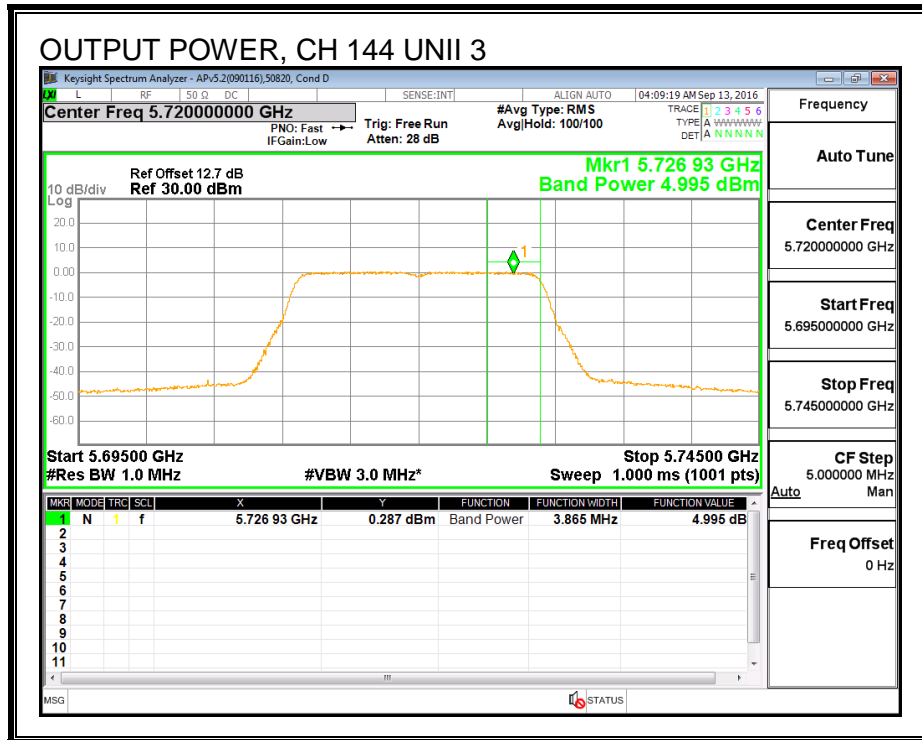
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	5.00	4.98	8.00	30.00	-22.00

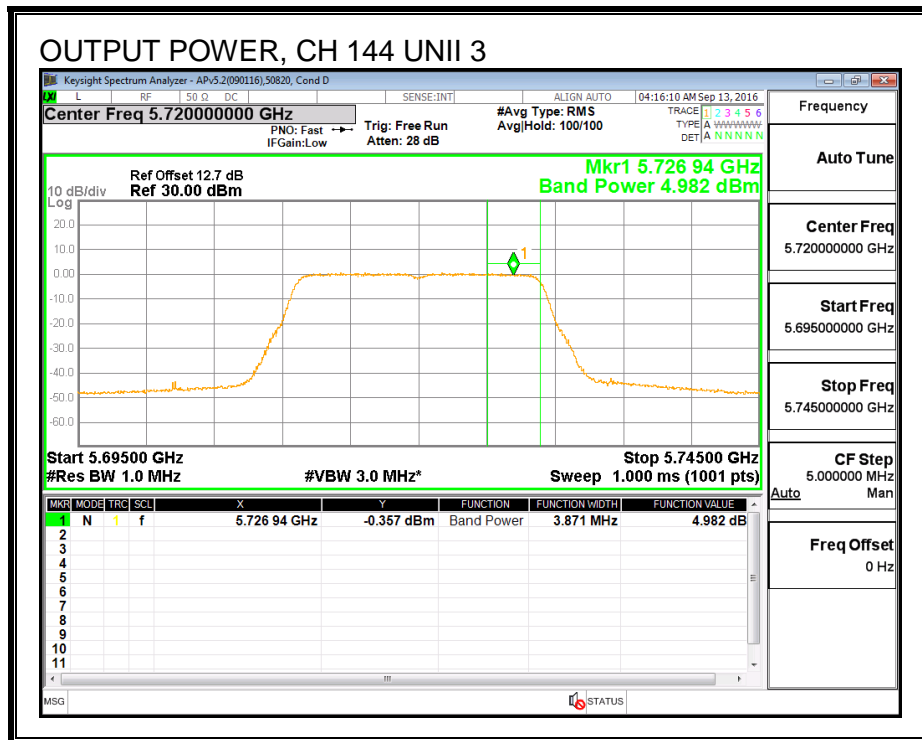
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-2.64	-2.72	0.33	27.94	-27.61

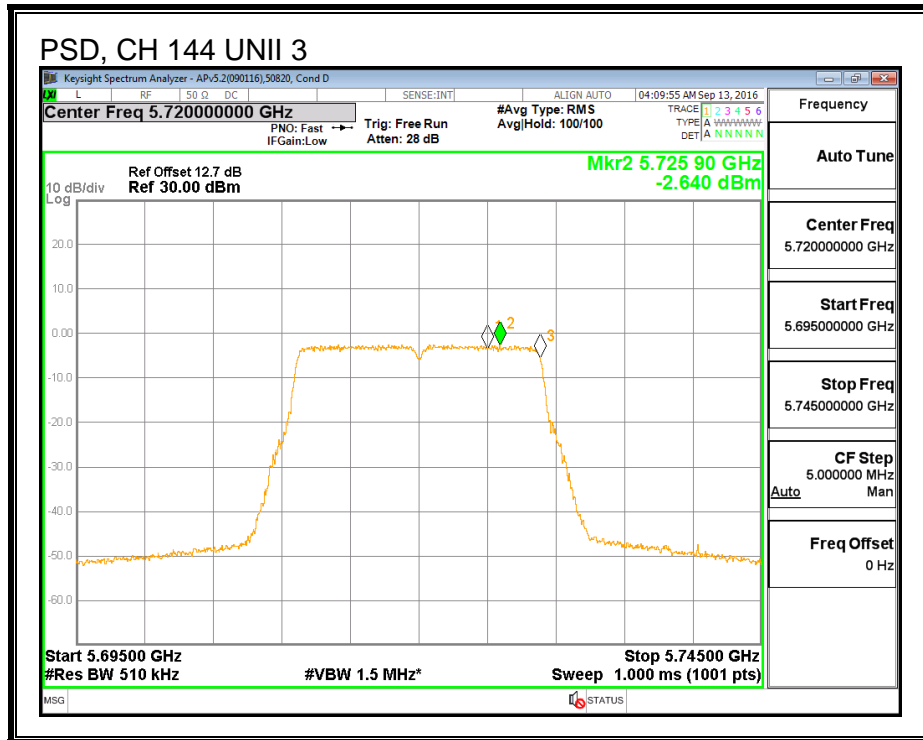
OUTPUT POWER, CHAIN 0



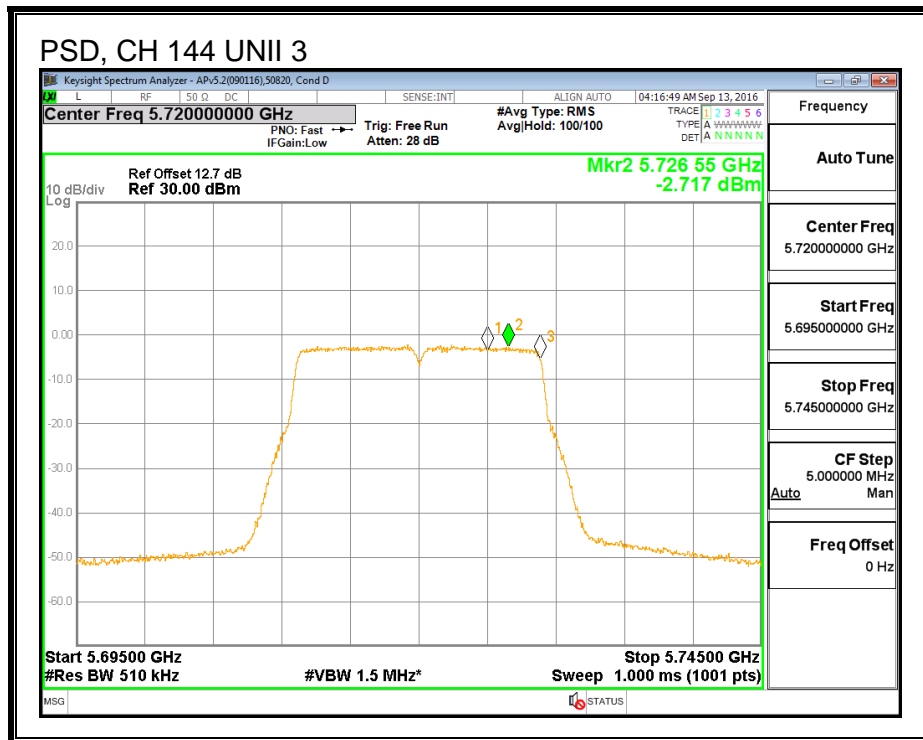
OUTPUT POWER, CHAIN 2



PSD, CHAIN 0



PSD, CHAIN 2



8.15.2. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

IC RSS-247 (6.2.4) (1)

The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 2 (MHz)
144	5720	3.942	3.942