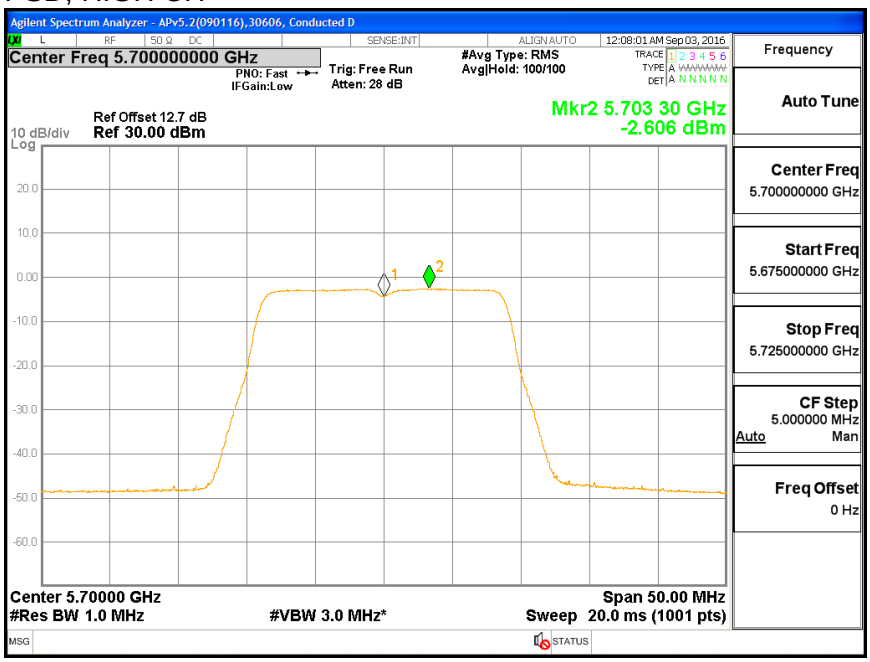
PSD, HIGH CH



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8.38. 802.11ac VHT20 3Tx CDD STRADDLE CHANNEL 144 RESULTS (FCC)

8.38.1. 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	15.87	5.98	10.68	23.01	6.32

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)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	8.24	8.34	8.28	13.06	23.01	-9.95

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-2.156	-2.108	-1.967	2.69	6.32	-3.63

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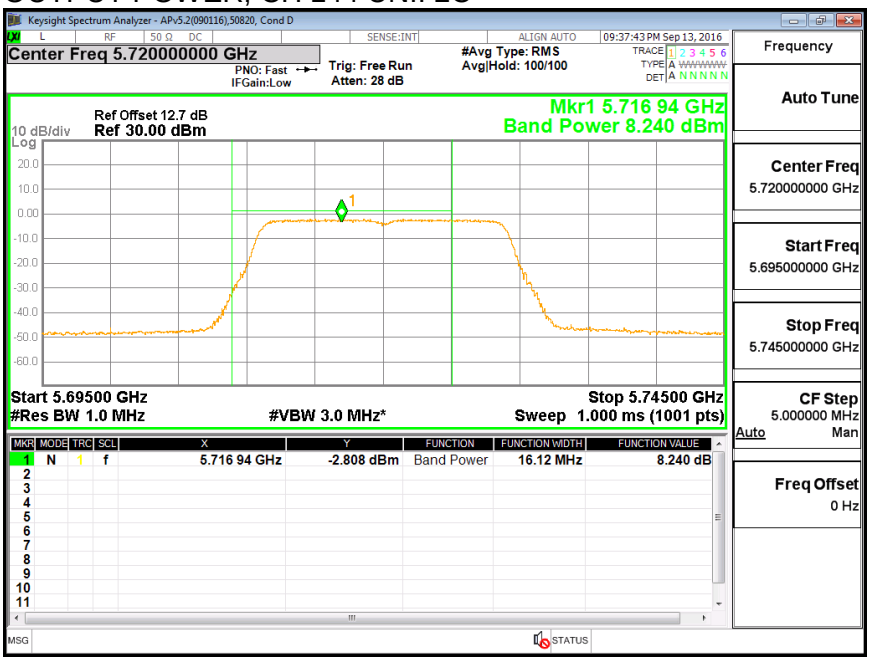
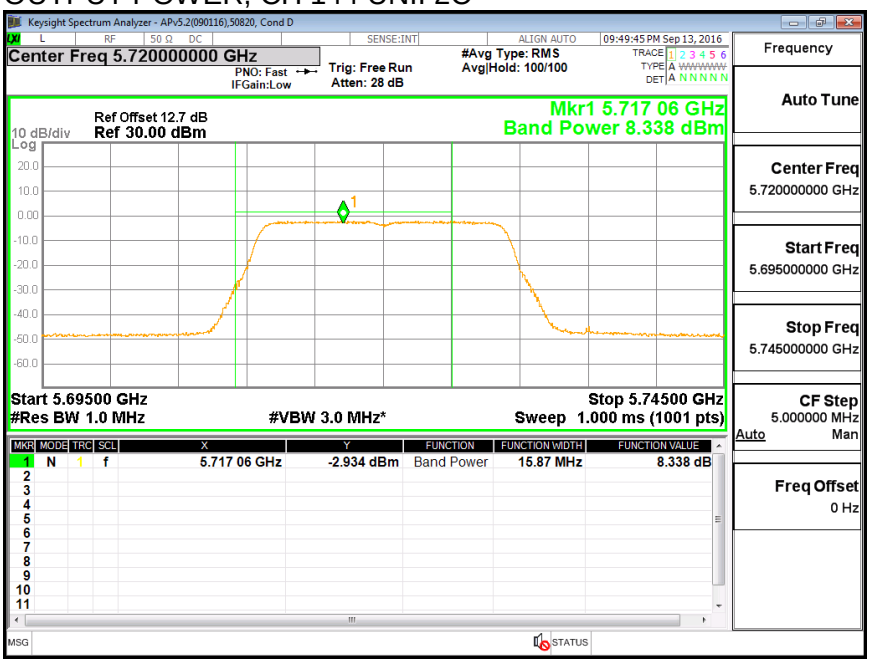
OUTPUT POWER, CHAIN 0

OUTPUT POWER, CH 144 UNII 2C



OUTPUT POWER, CHAIN 1

OUTPUT POWER, CH 144 UNII 2C



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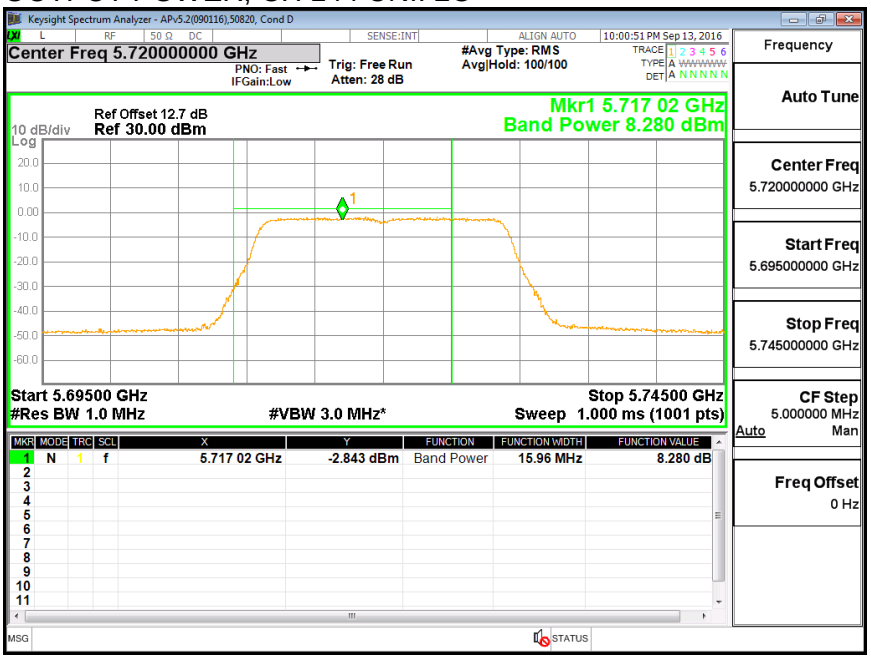
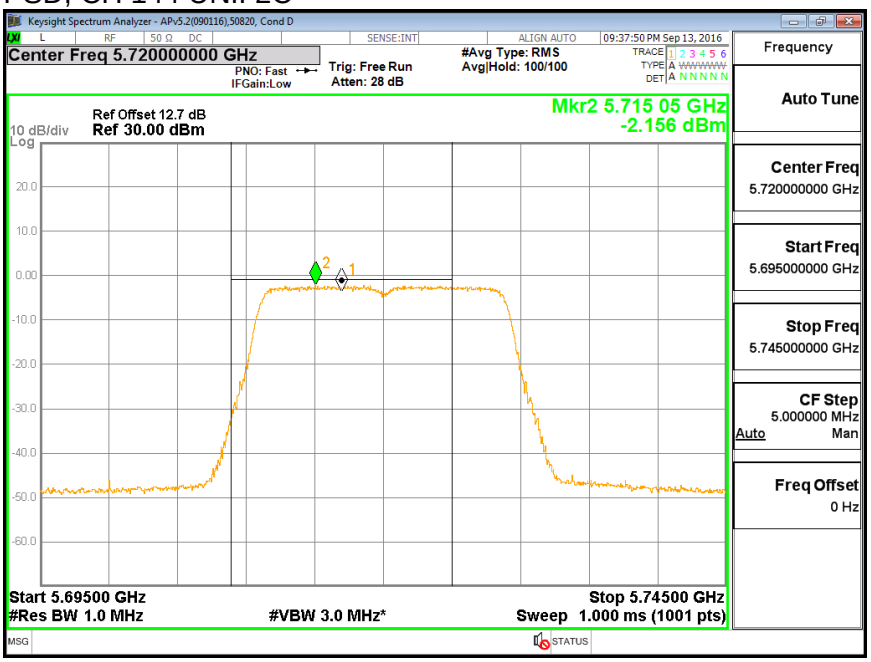
OUTPUT POWER, CHAIN 2

OUTPUT POWER, CH 144 UNII 2C



PSD, CHAIN 0

PSD, CH 144 UNII 2C



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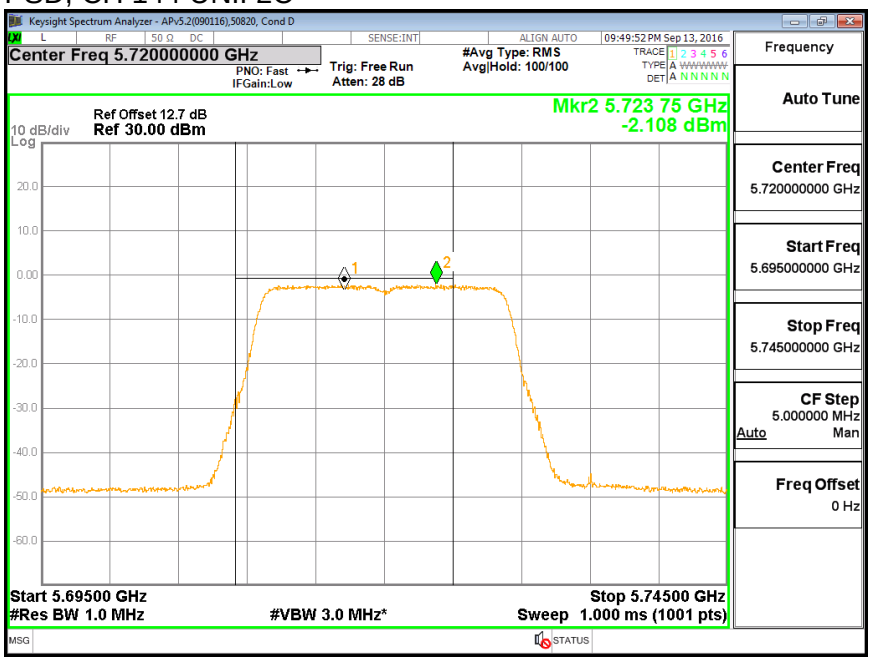
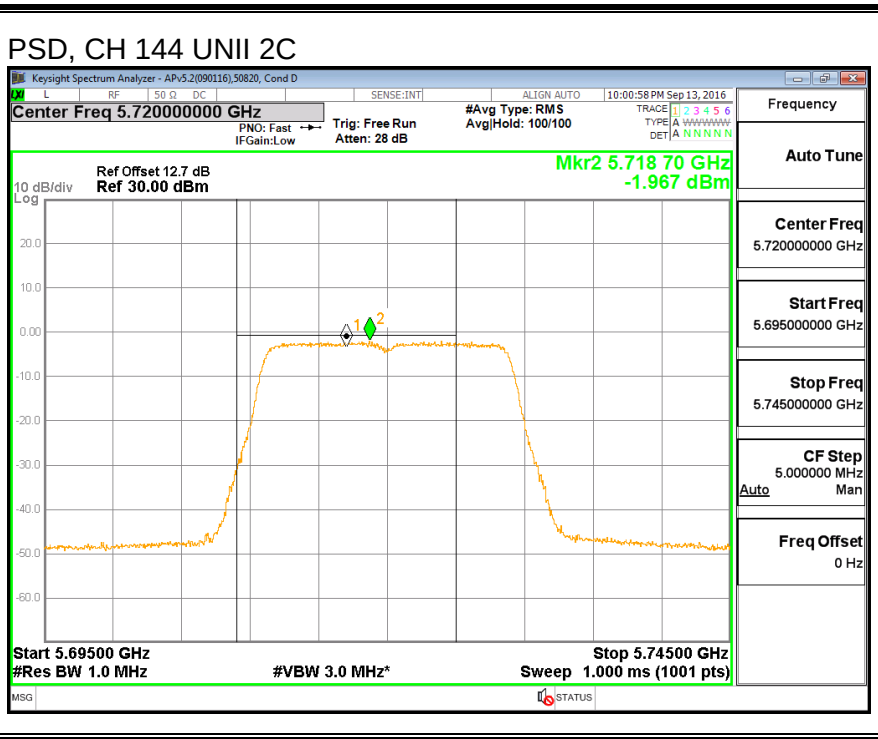
PSD, CHAIN 1

PSD, CH 144 UNII 2C



PSD, CHAIN 2

PSD, CH 144 UNII 2C



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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	5.87	5.98	10.68	30.00	25.32

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)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	2.71	2.75	2.71	7.50	30.00	-22.50

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-5.15	-5.42	-5.76	-0.66	25.32	-25.98

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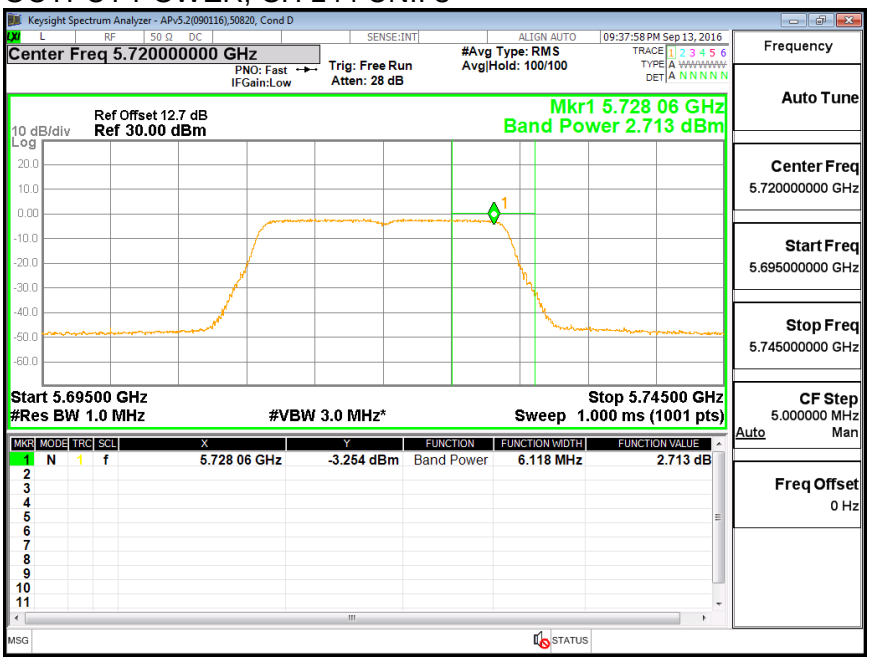
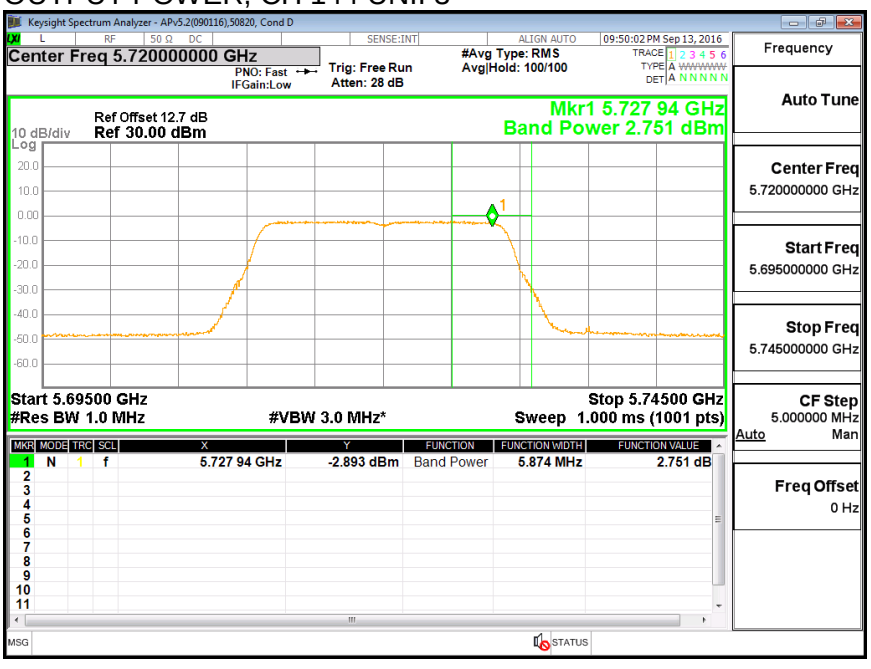
OUTPUT POWER, CHAIN 0

OUTPUT POWER, CH 144 UNII 3



OUTPUT POWER, CHAIN 1

OUTPUT POWER, CH 144 UNII 3



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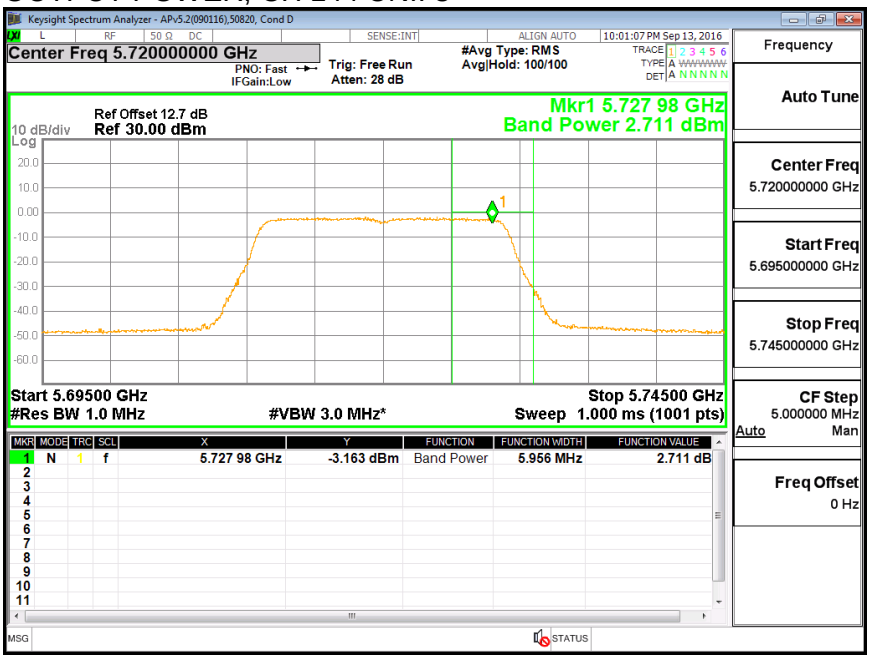
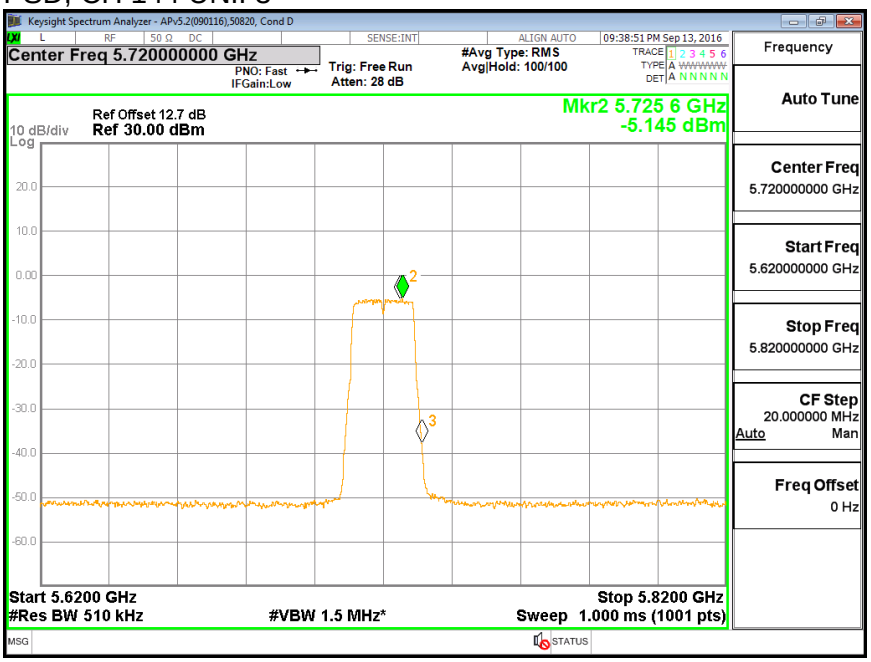
OUTPUT POWER, CHAIN 2

OUTPUT POWER, CH 144 UNII 3



PSD, CHAIN 0

PSD, CH 144 UNII 3



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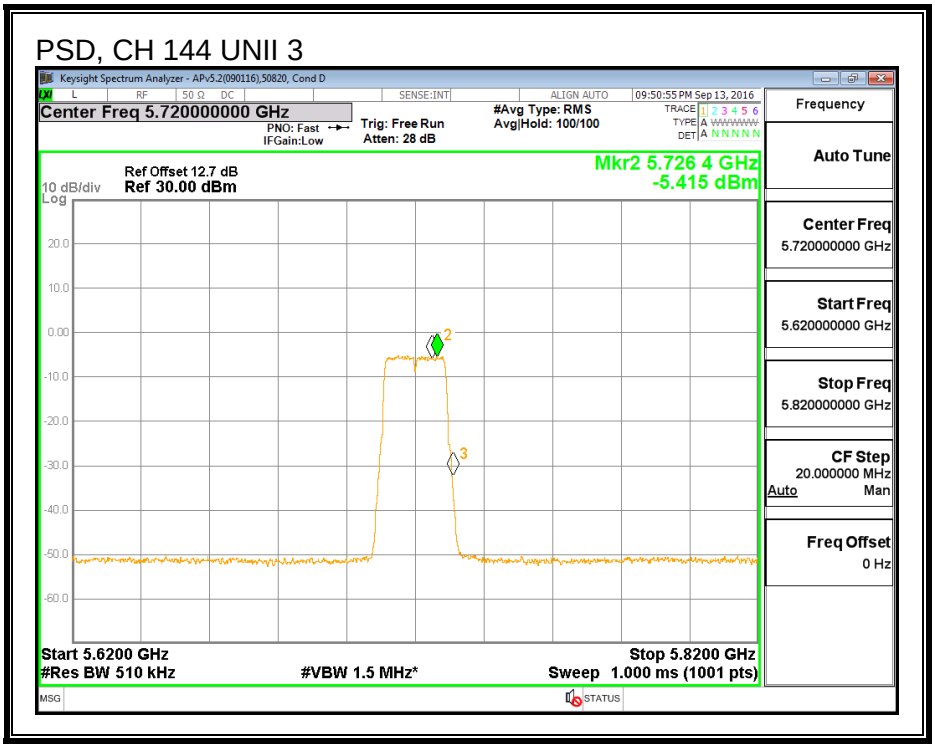
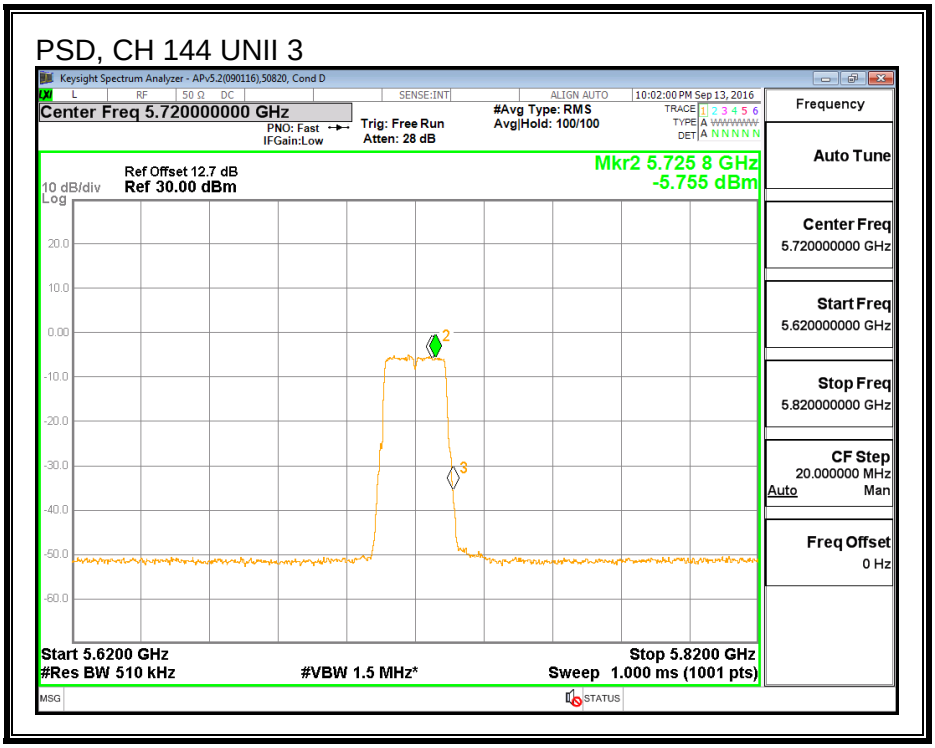
PSD, CHAIN 1



PSD, CHAIN 2



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8.39. 802.11ac VHT20 3Tx CDD STRADDLE CHANNEL 144 RESULTS (IC)

8.39.1. 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	13.830	5.98	10.68	22.41	6.32

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)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	8.17	8.07	8.15	12.90	22.41	-9.51

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-2.14	-2.11	-2.26	2.60	6.32	-3.72

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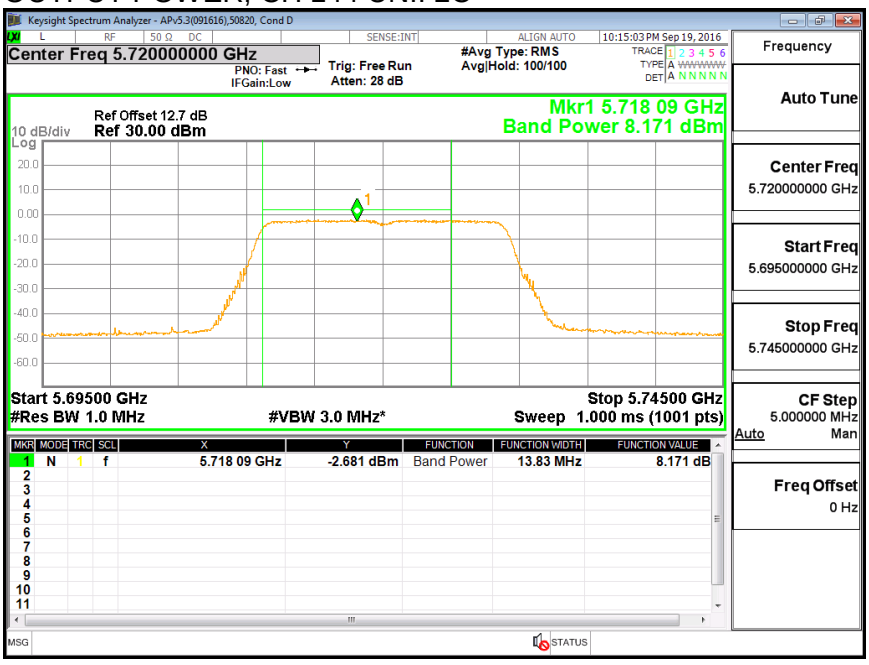
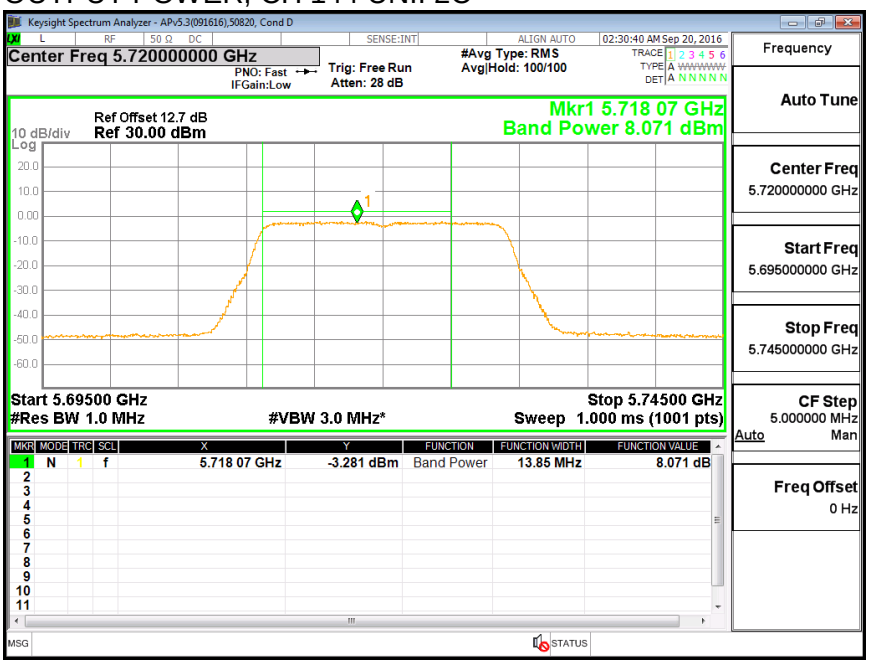
OUTPUT POWER, CHAIN 0

OUTPUT POWER, CH 144 UNII 2C



OUTPUT POWER, CHAIN 1

OUTPUT POWER, CH 144 UNII 2C



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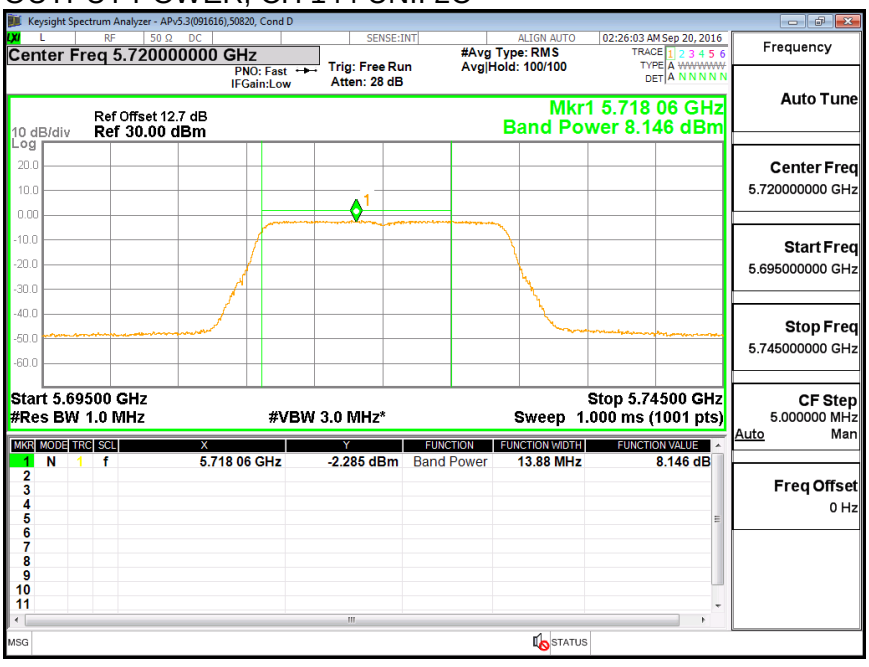
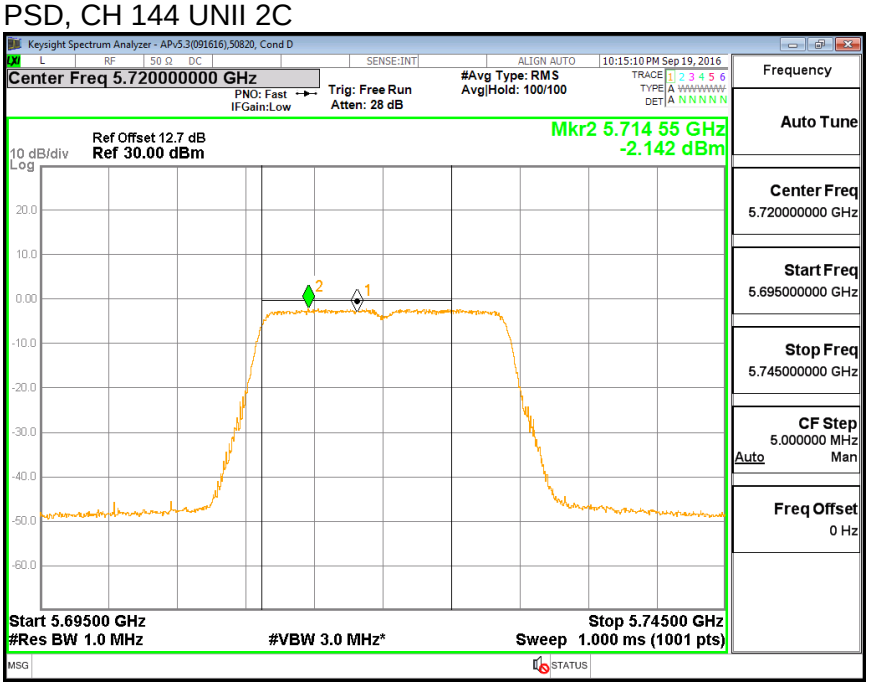
OUTPUT POWER, CHAIN 2

OUTPUT POWER, CH 144 UNII 2C



PSD, CHAIN 0

PSD, CH 144 UNII 2C



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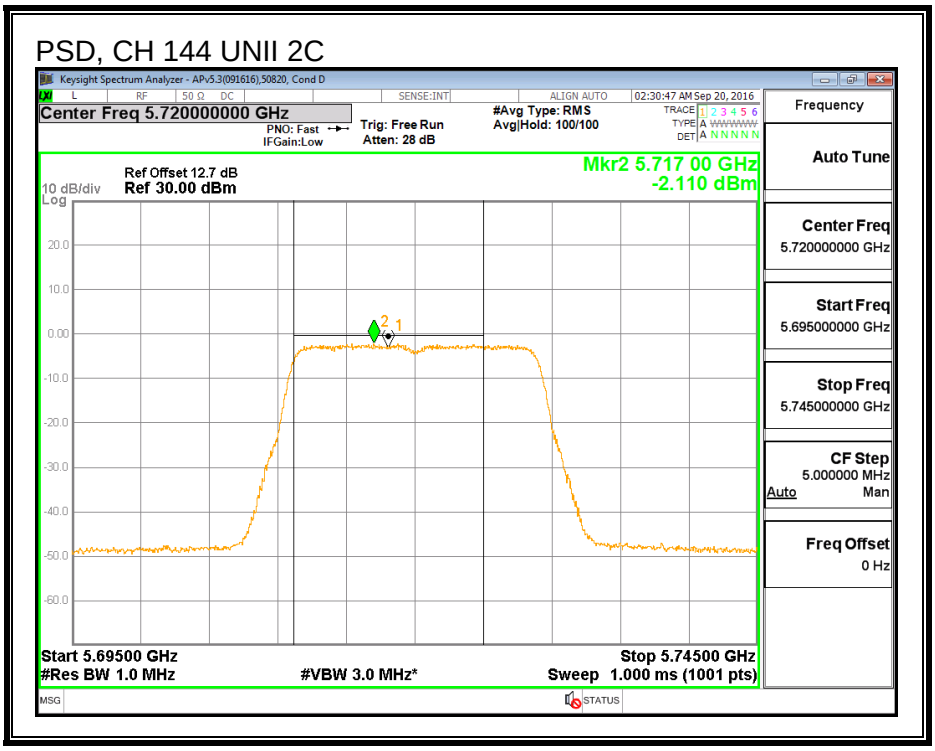
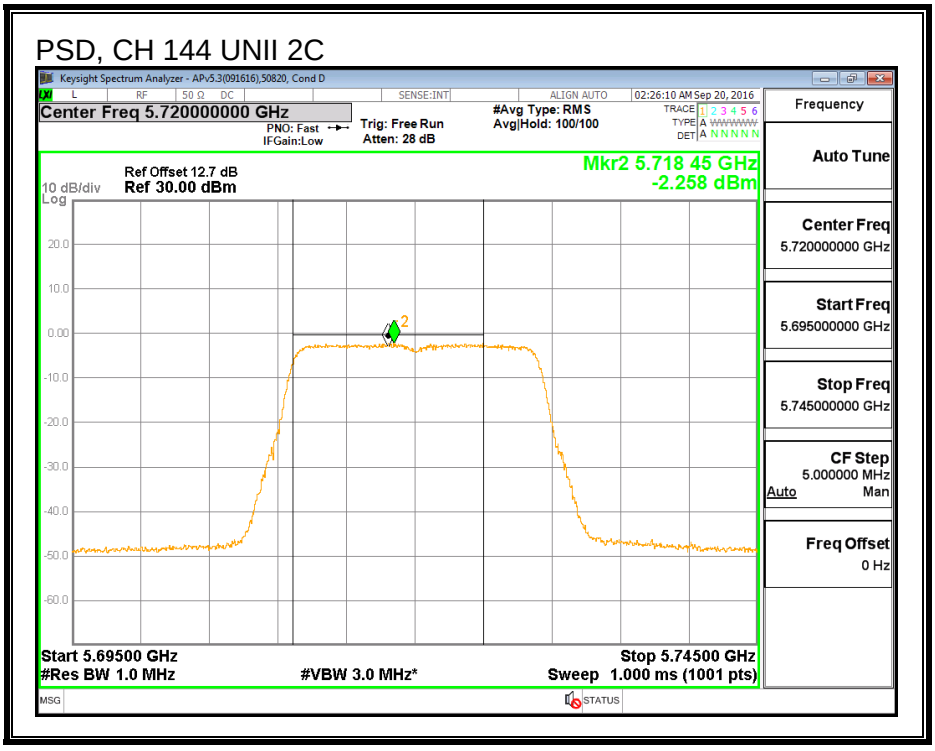
PSD, CHAIN 1



PSD, CHAIN 2



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UNII-3 BAND

Gain and Limit

Frequency (MHz)	Min 99% BW (MHz)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
5720	3.830	5.98	10.68	30.00	25.32

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

ɔwer Results

Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
5720	2.51	2.36	2.37	7.18	30.00	-22.82

ılts

Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
5720	-5.34	-5.44	-5.18	-0.55	25.32	-25.87

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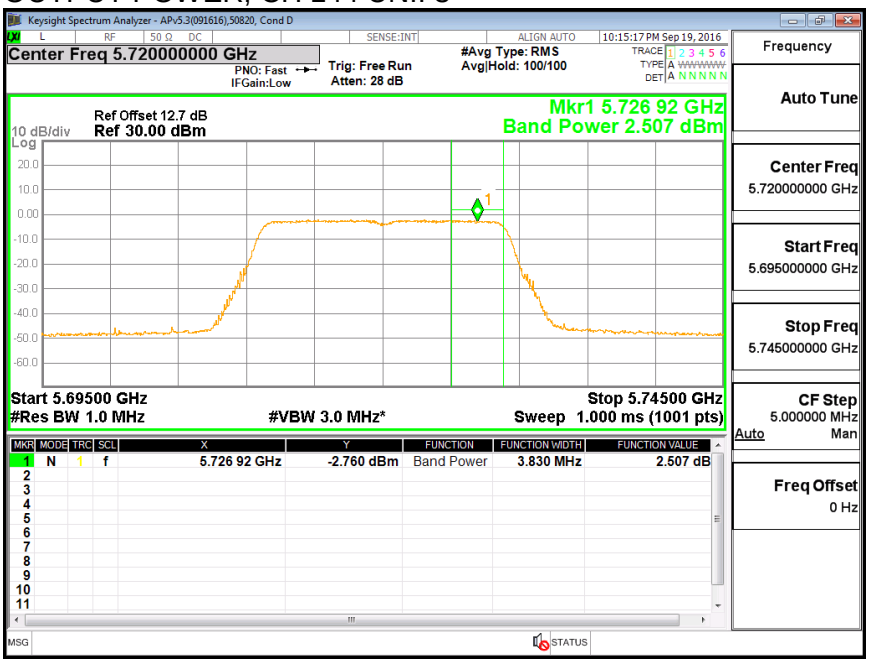
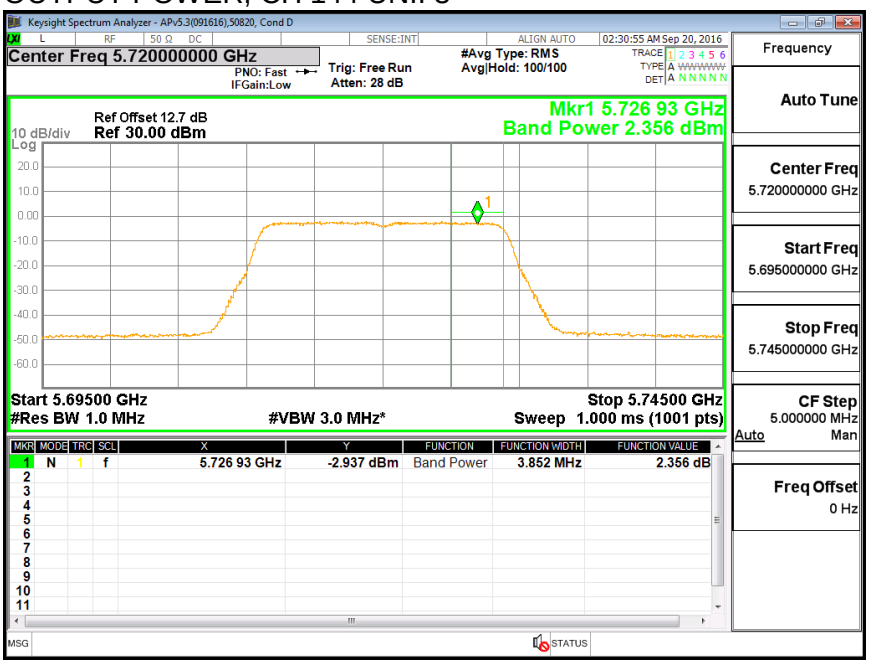
OUTPUT POWER, CHAIN 0

OUTPUT POWER, CH 144 UNII 3



OUTPUT POWER, CHAIN 1

OUTPUT POWER, CH 144 UNII 3



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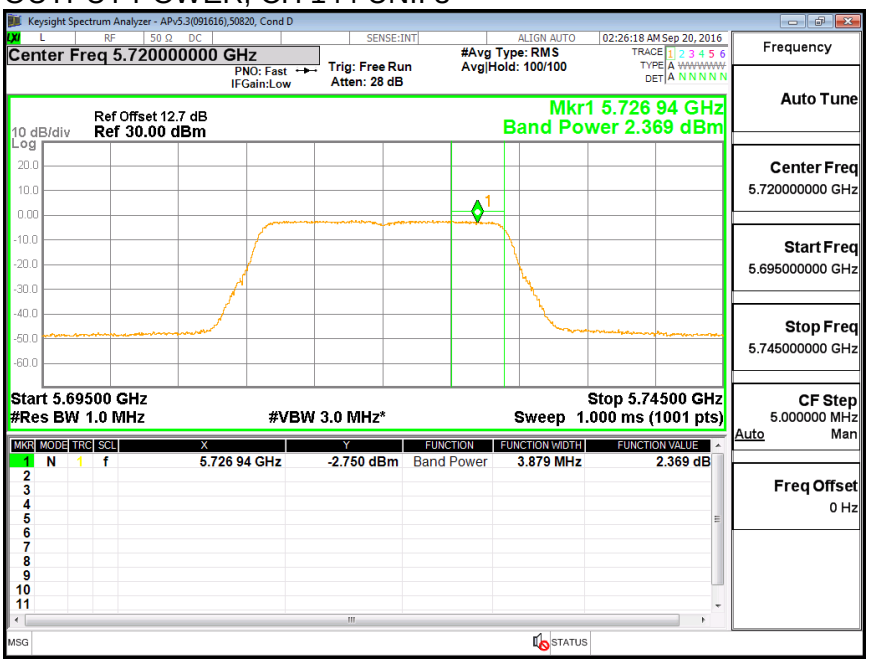
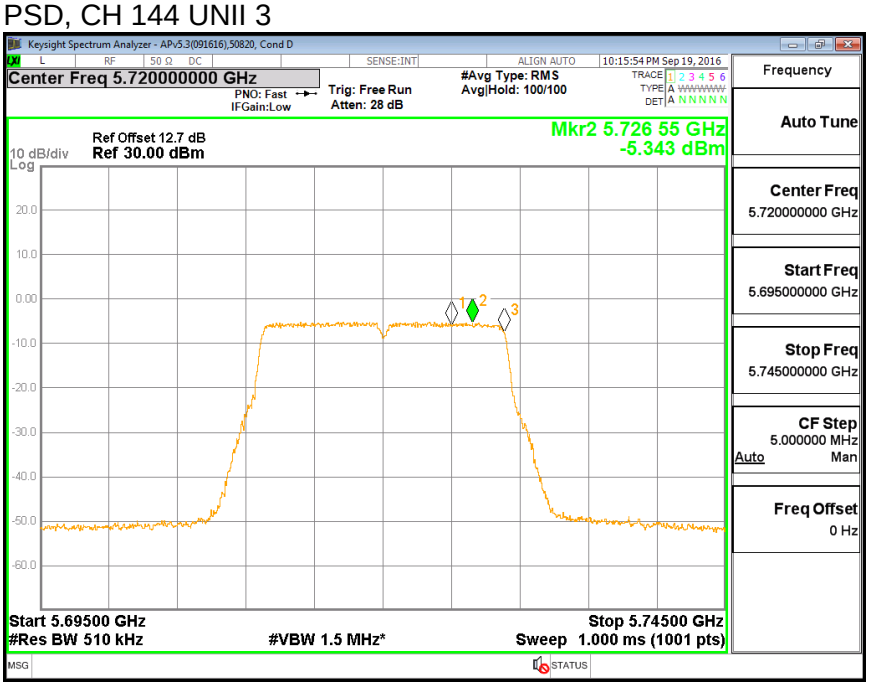
OUTPUT POWER, CHAIN 2

OUTPUT POWER, CH 144 UNII 3



PSD, CHAIN 0

PSD, CH 144 UNII 3



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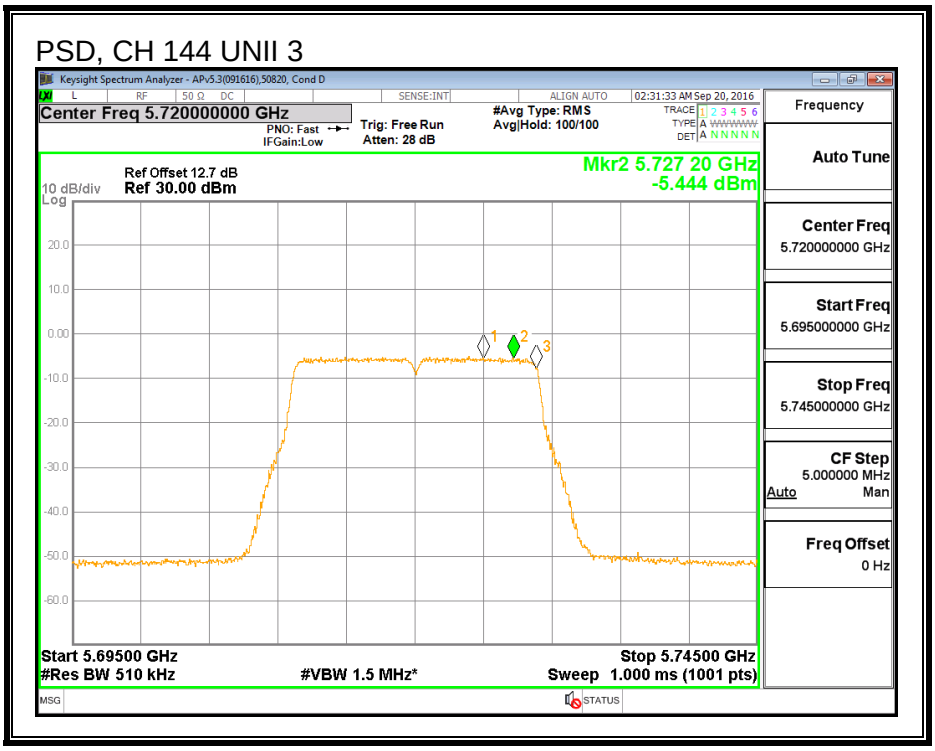
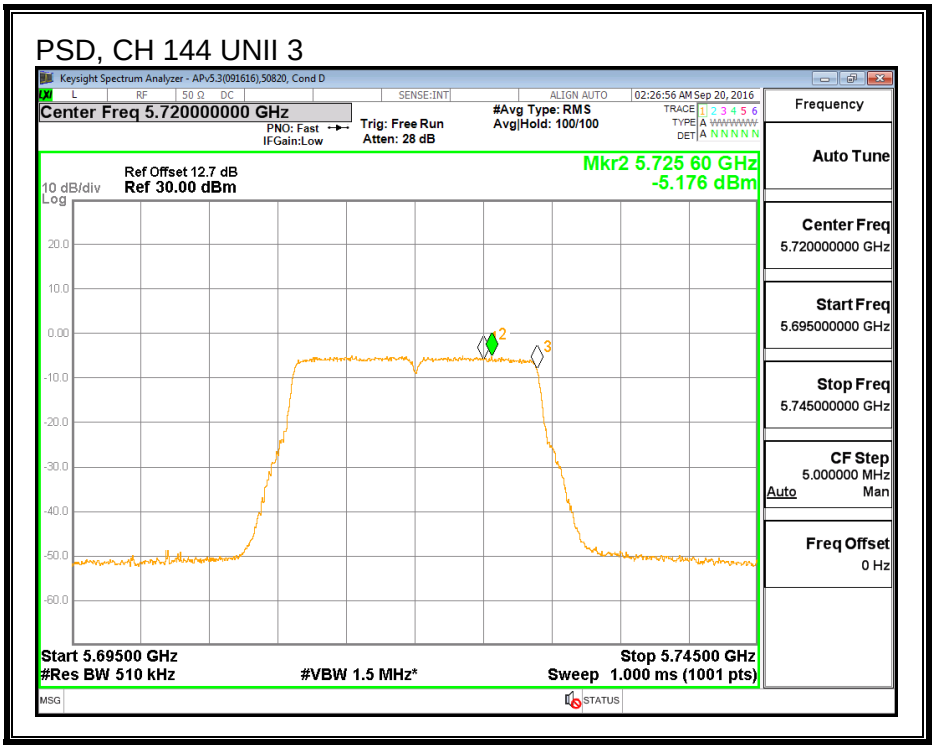
PSD, CHAIN 1



PSD, CHAIN 2



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8.39.2. **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)	6 dB BW Chain 2 (MHz)
144	5720	3.942	3.834	3.969

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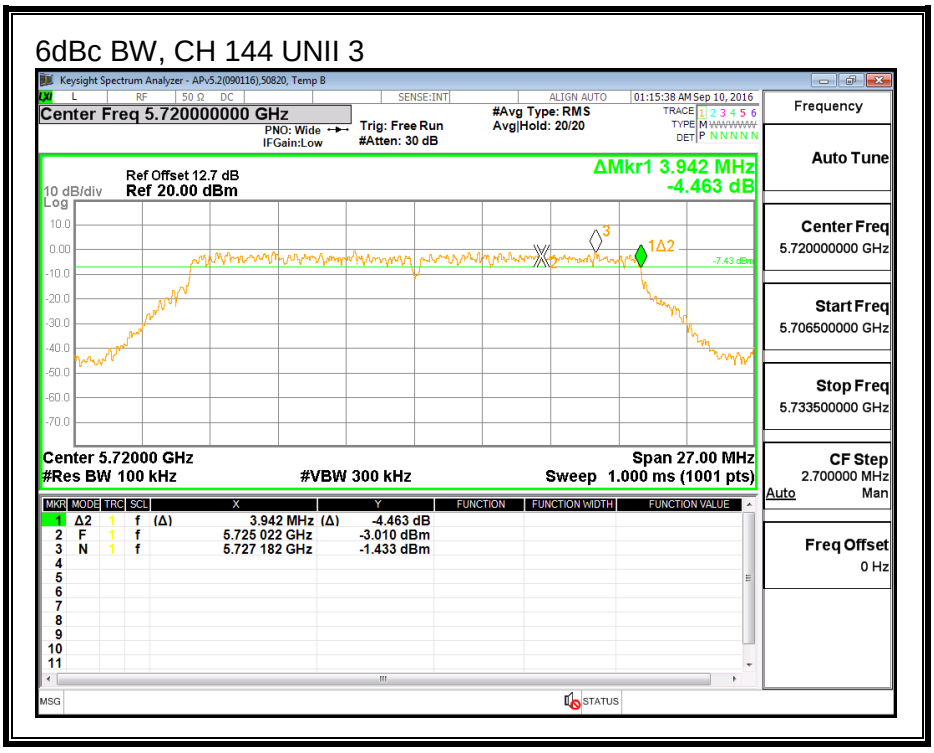
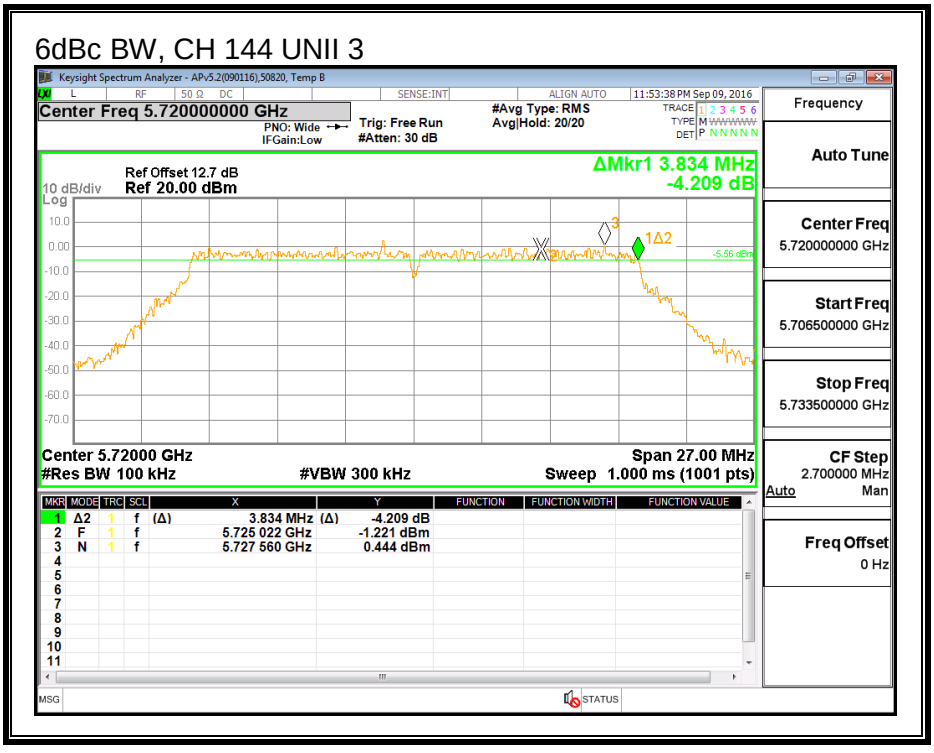
CHAIN 0



CHAIN 1



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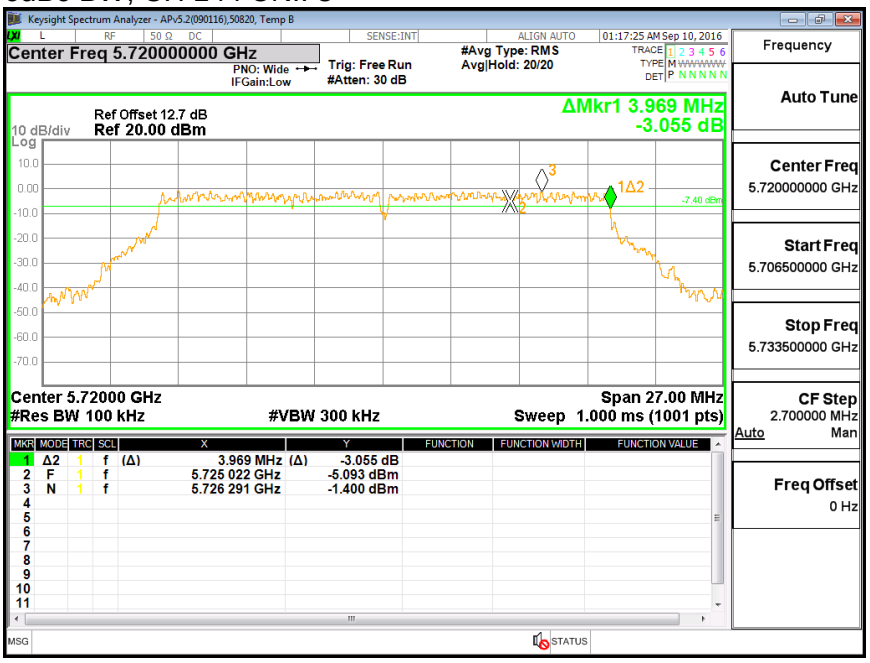
CHAIN 2

6dBc BW, CH 144 UNII 3



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8.40. 802.11n HT20 3Tx STBC MODE IN THE 5.6 GHz BAND

8.40.1. **26 dB BANDWIDTH**

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Low	5500	22.236	21.846	21.780
Mid	5580	22.168	21.714	21.978
High	5700	22.202	21.747	21.912
144	5720	21.879	21.912	22.077

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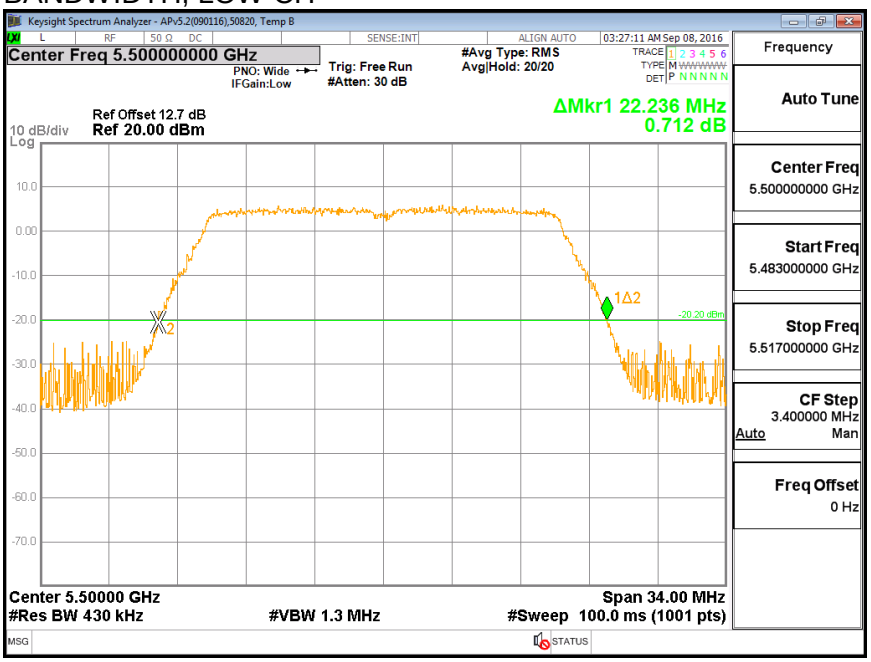
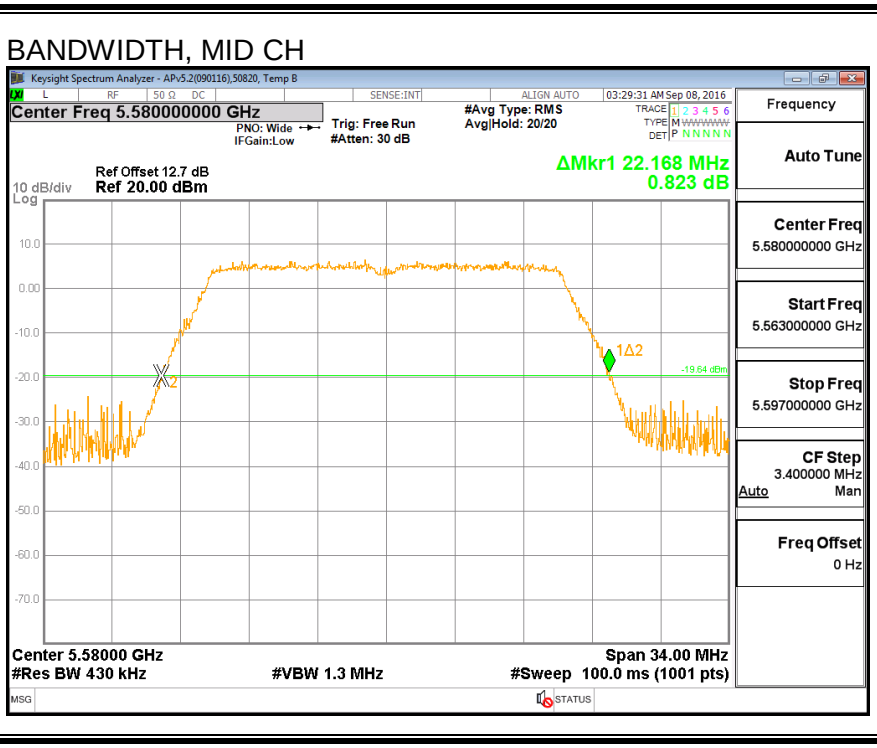
26 dB BANDWIDTH, CHAIN 0

BANDWIDTH, LOW CH



BANDWIDTH, MID CH



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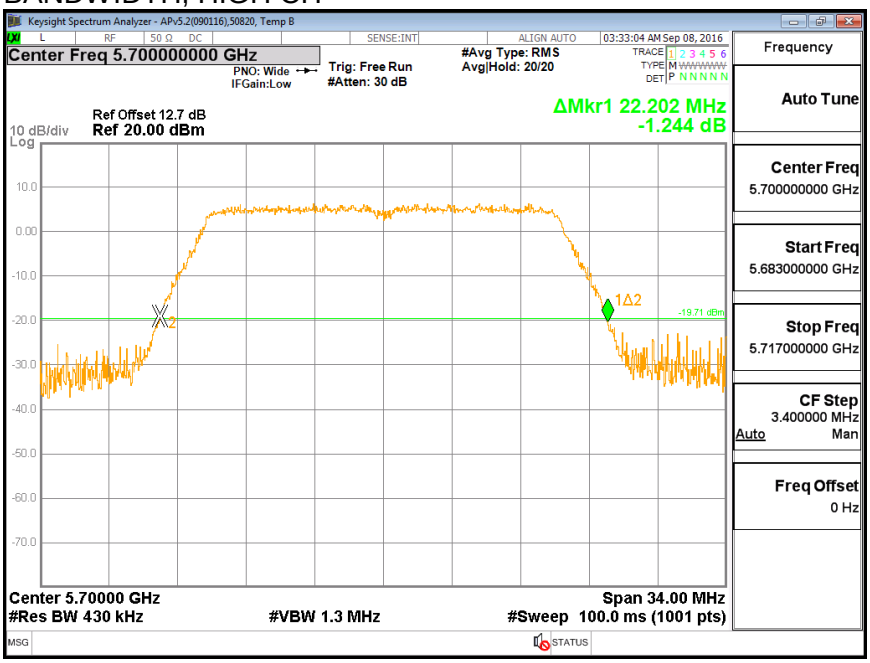
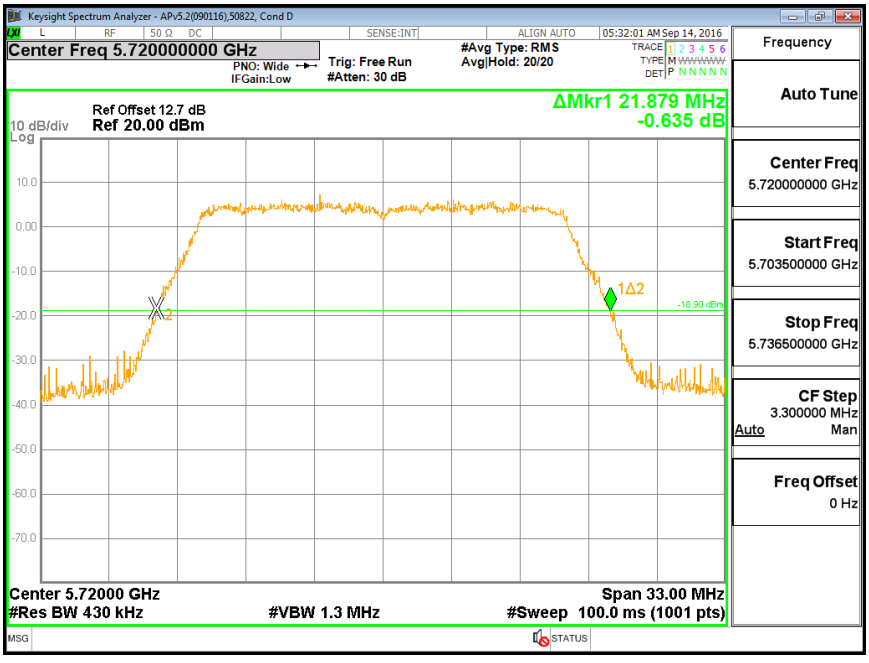
BANDWIDTH, HIGH CH



BANDWIDTH STRADDLE CH 144



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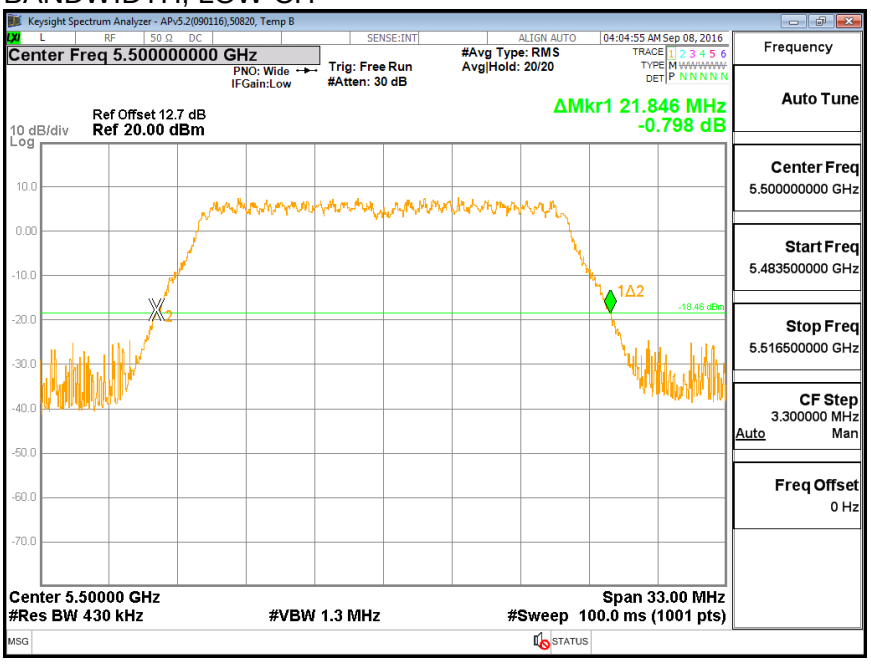
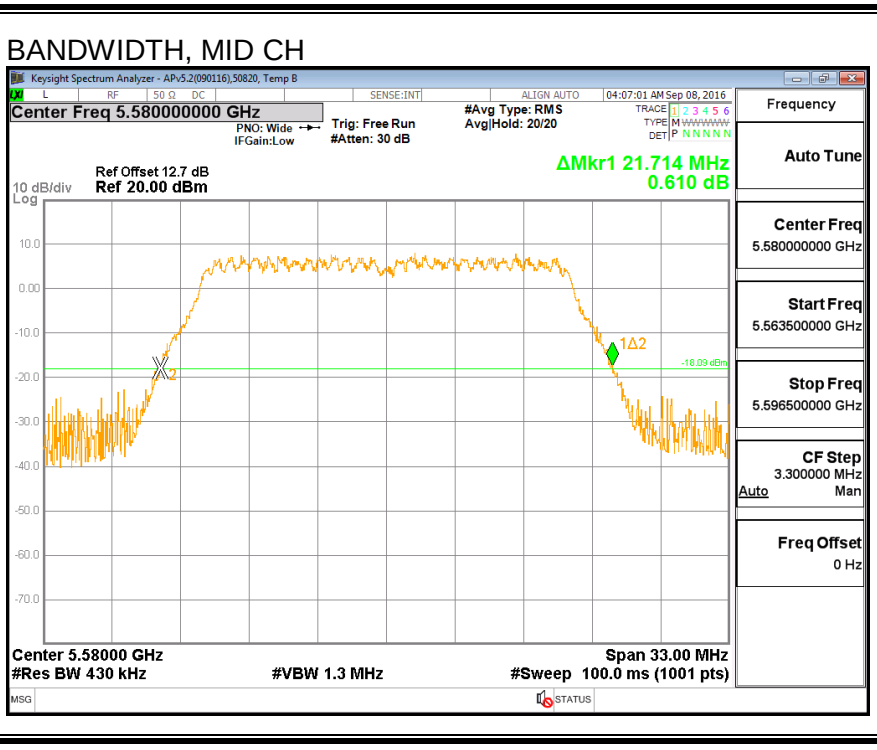
26 dB BANDWIDTH, CHAIN 1

BANDWIDTH, LOW CH



BANDWIDTH, MID CH



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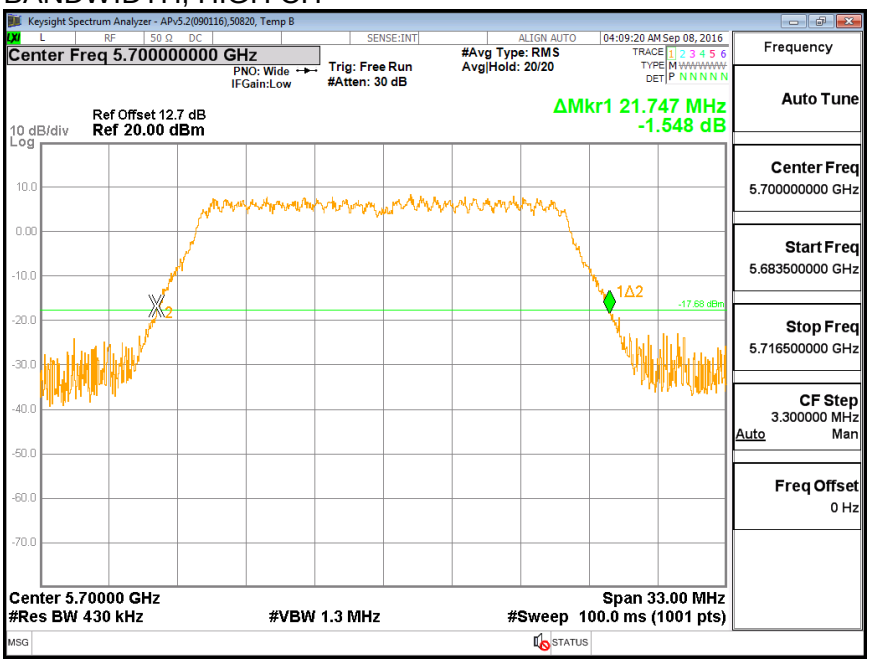
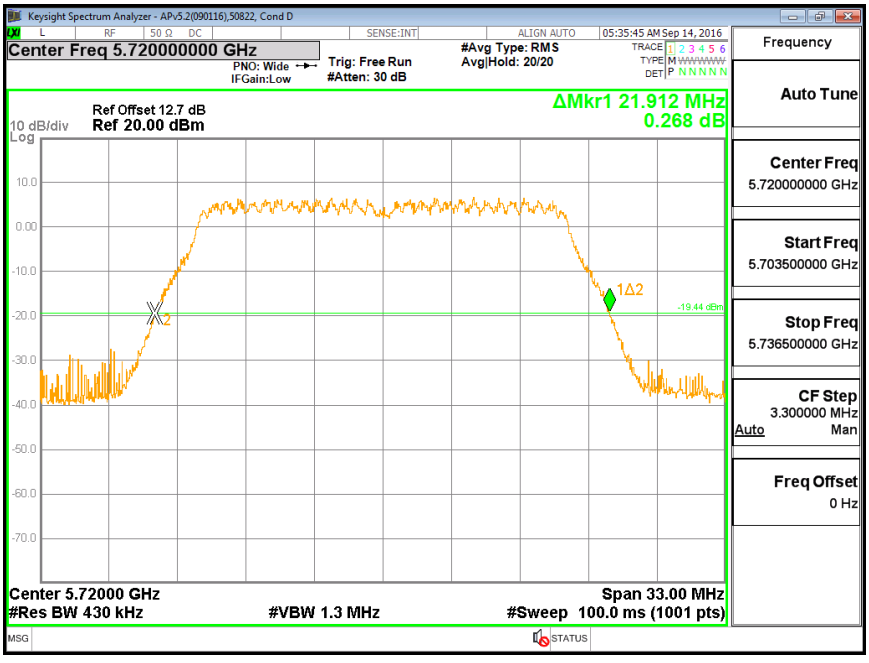
BANDWIDTH, HIGH CH



BANDWIDTH STRADDLE CH 144



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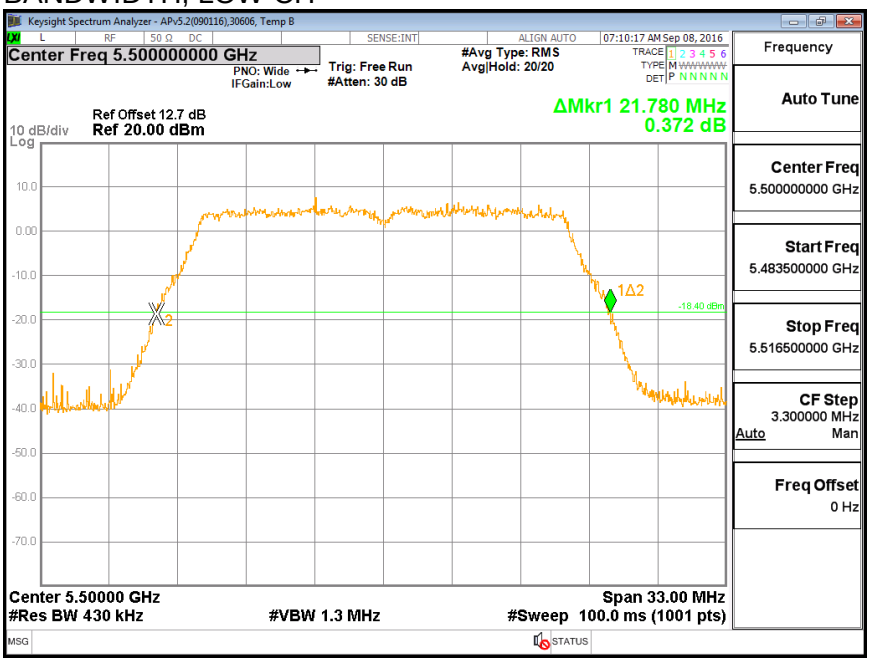
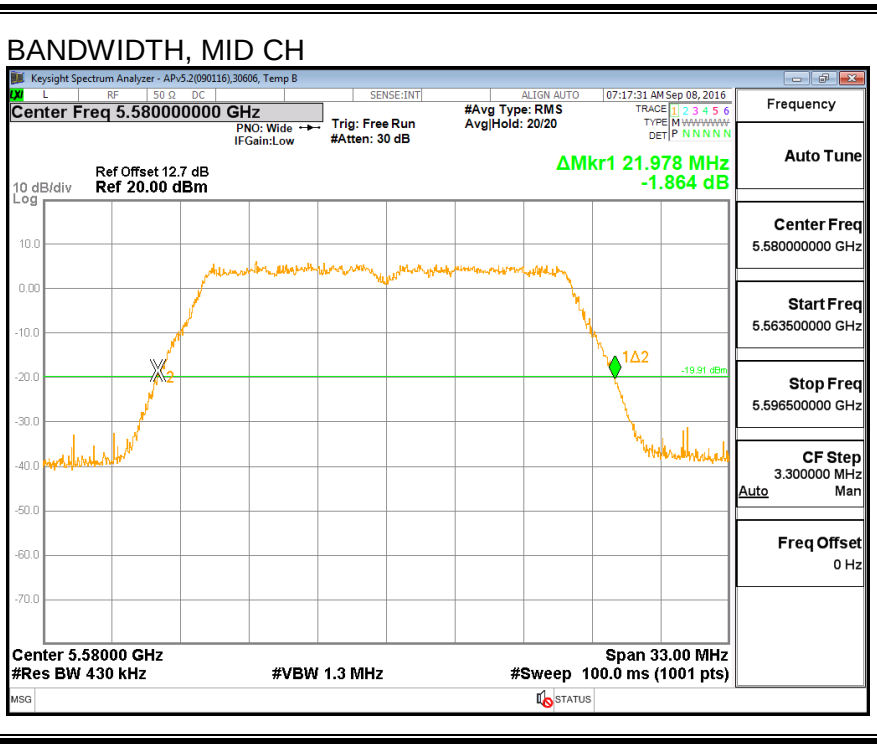
26 dB BANDWIDTH, CHAIN 2

BANDWIDTH, LOW CH



BANDWIDTH, MID CH



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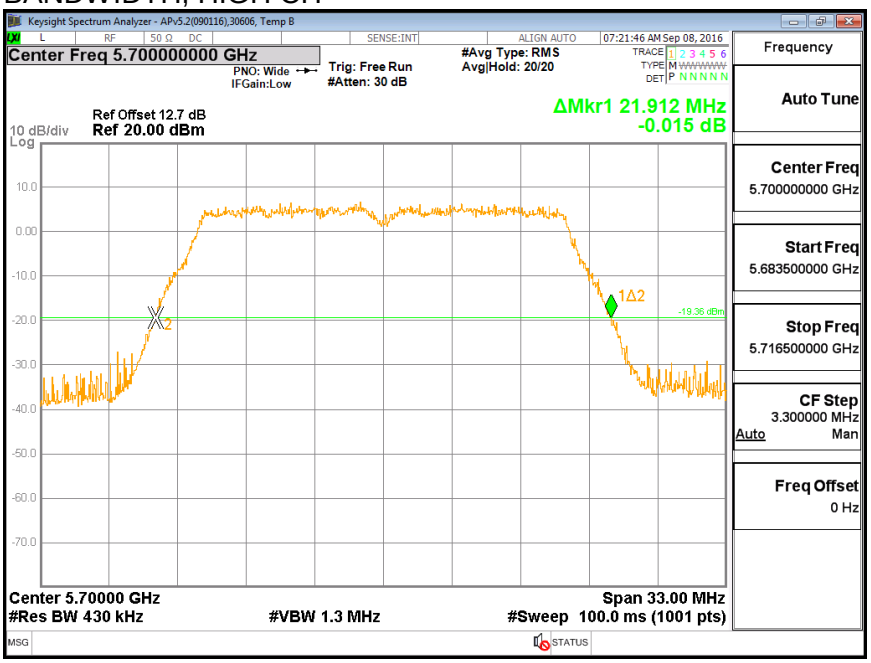
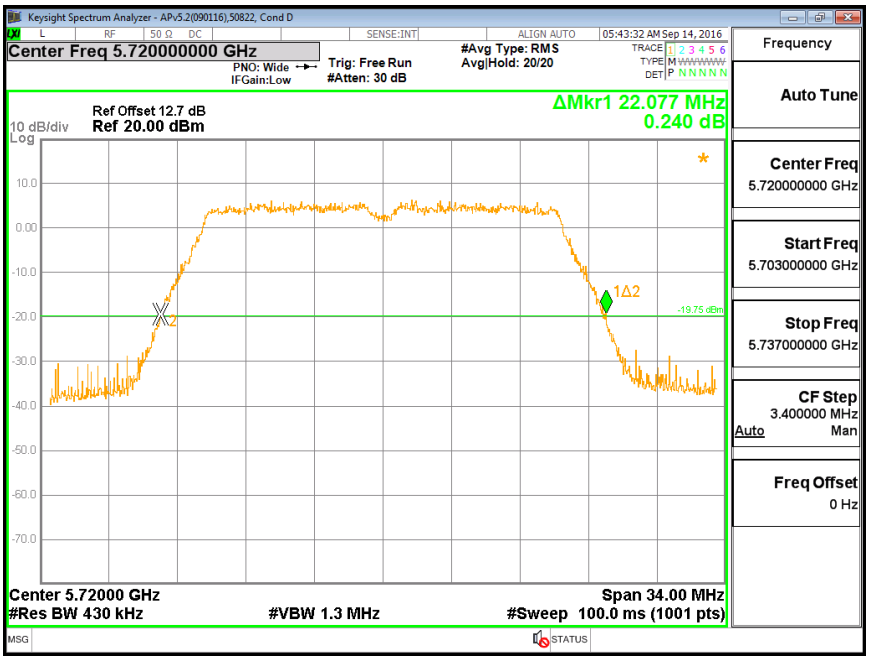
BANDWIDTH, HIGH CH



BANDWIDTH STRADDLE CH 144



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8.40.2. **99% BANDWIDTH**

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	5500	17.745	17.730	17.814
Mid	5580	17.799	17.802	17.661
High	5700	17.794	17.700	17.594
144	5720	17.640	17.784	17.880

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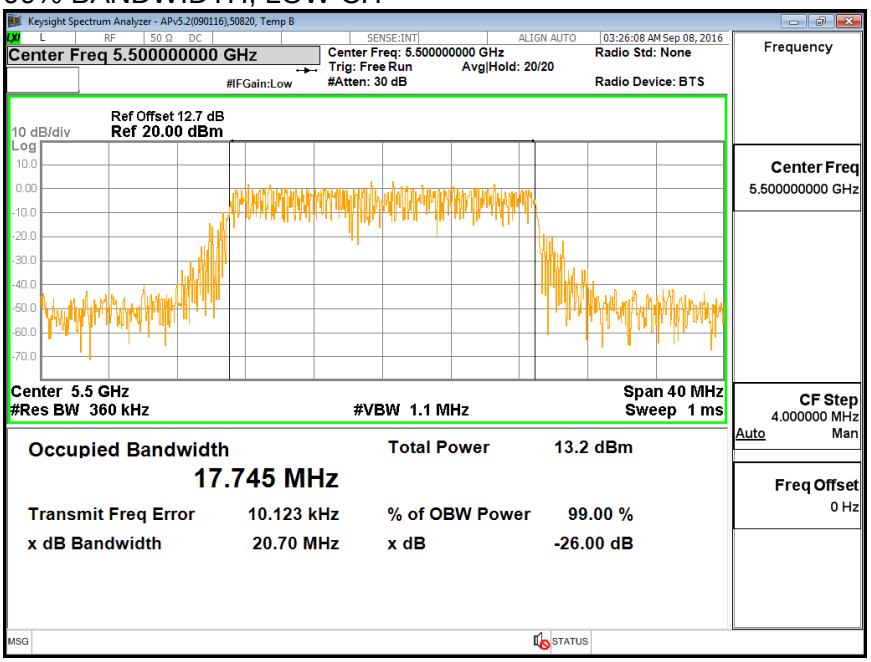
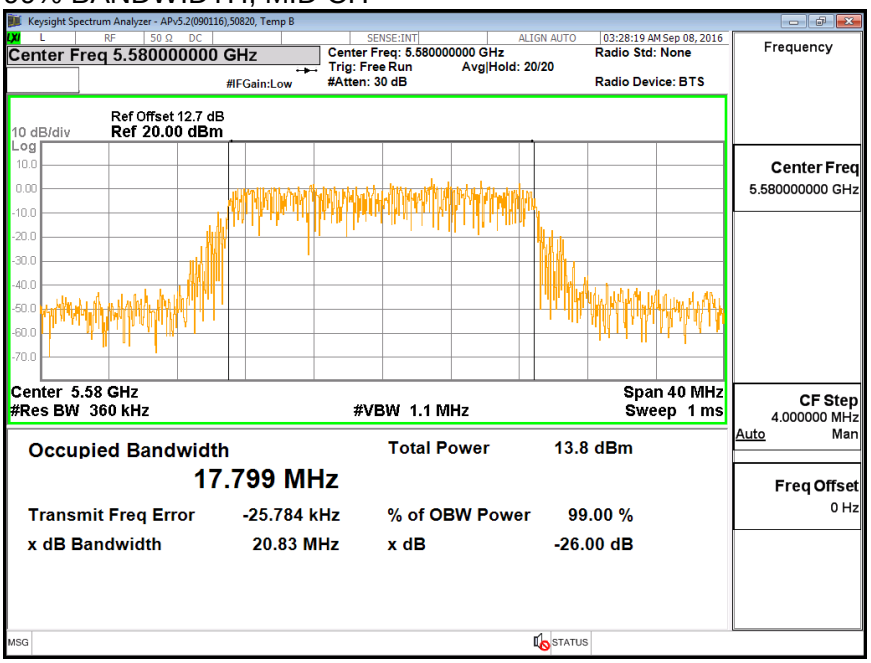
99% BANDWIDTH, CHAIN 0

99% BANDWIDTH, LOW CH



99% BANDWIDTH, MID CH



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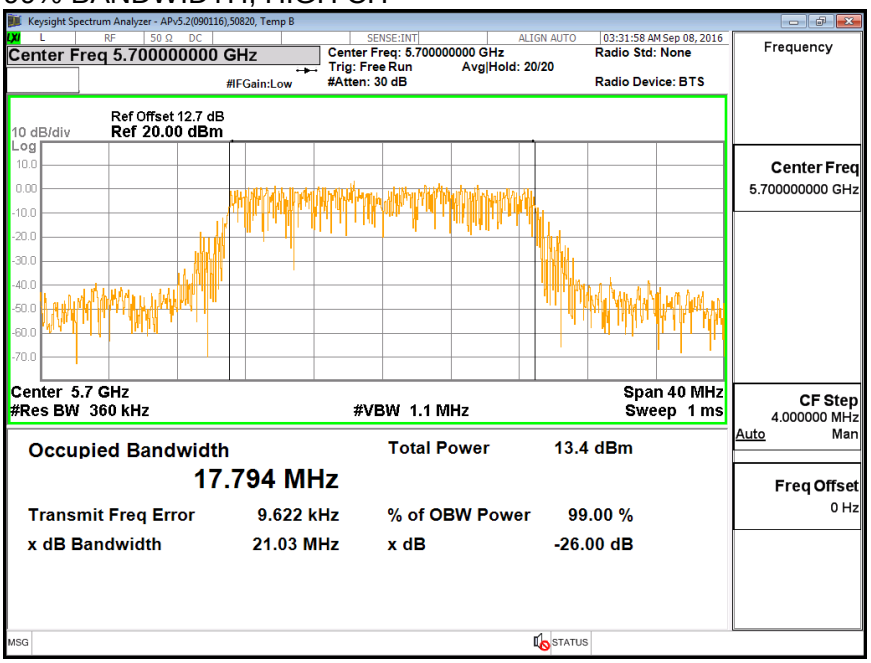
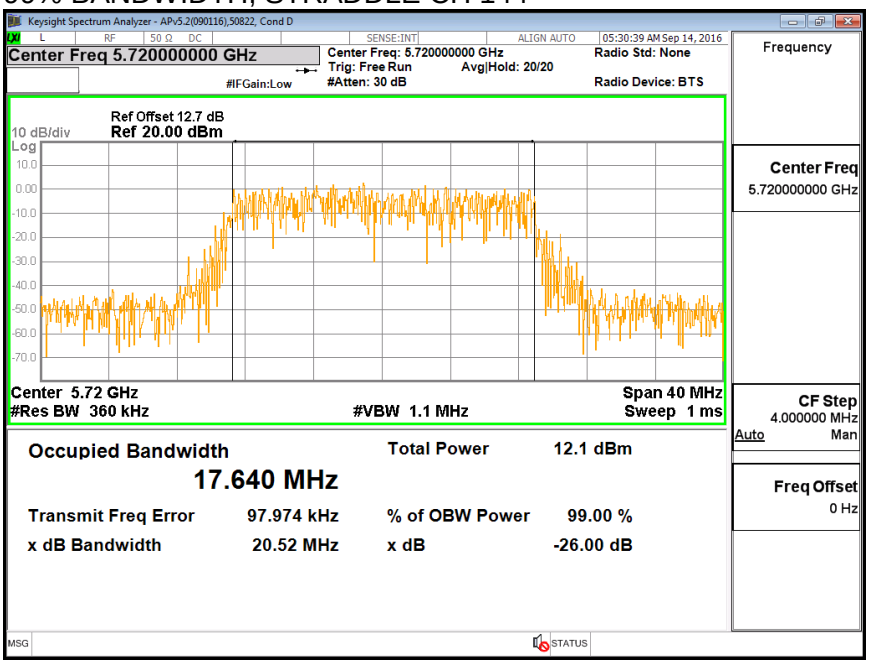
99% BANDWIDTH, HIGH CH



99% BANDWIDTH, STRADDLE CH 144



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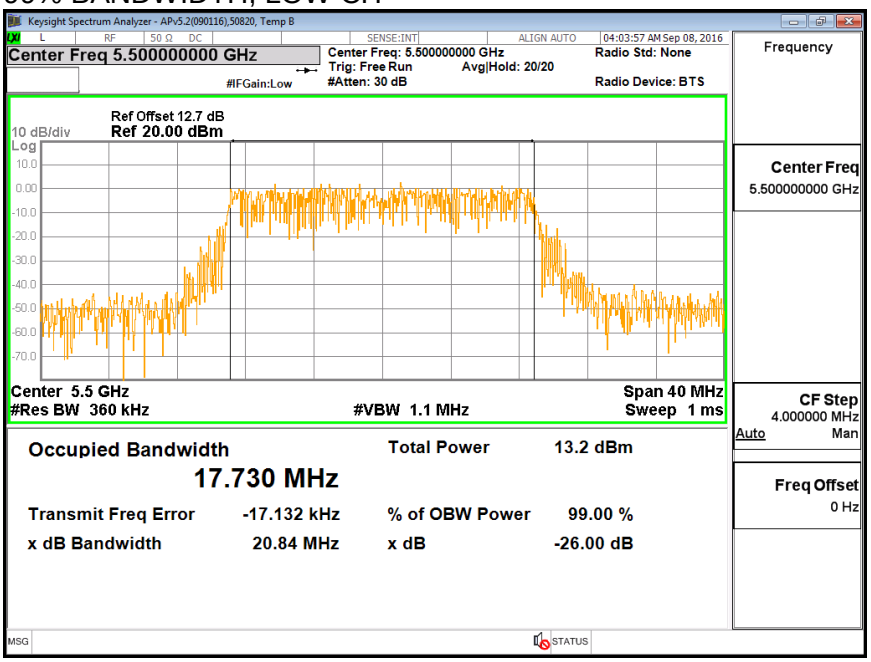
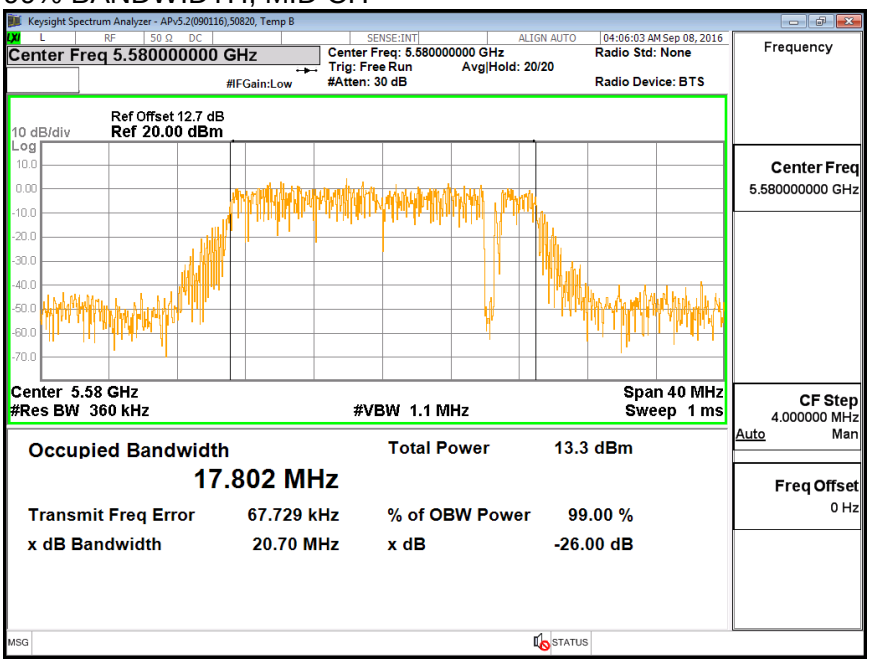
99% BANDWIDTH, CHAIN 1

99% BANDWIDTH, LOW CH



99% BANDWIDTH, MID CH



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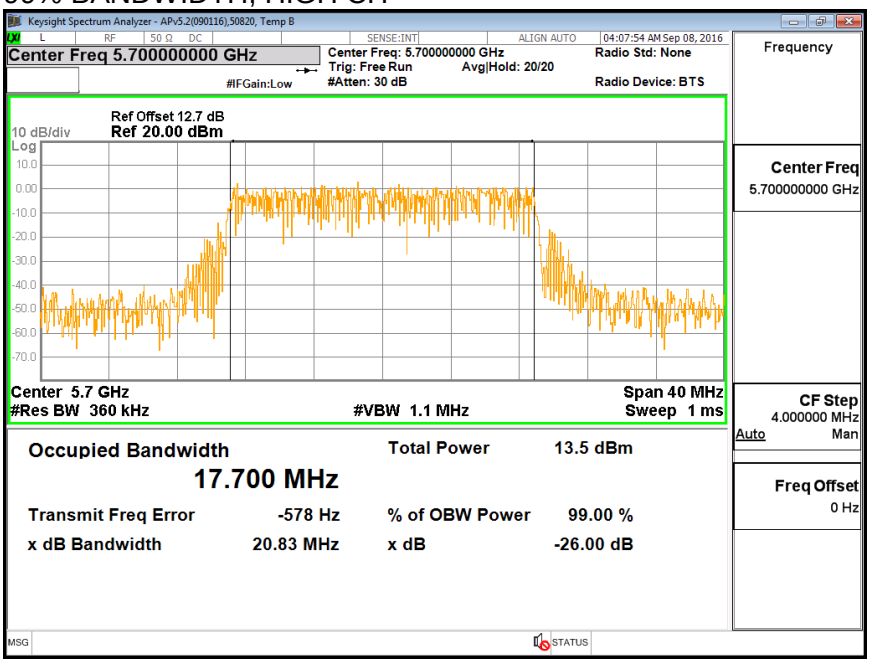
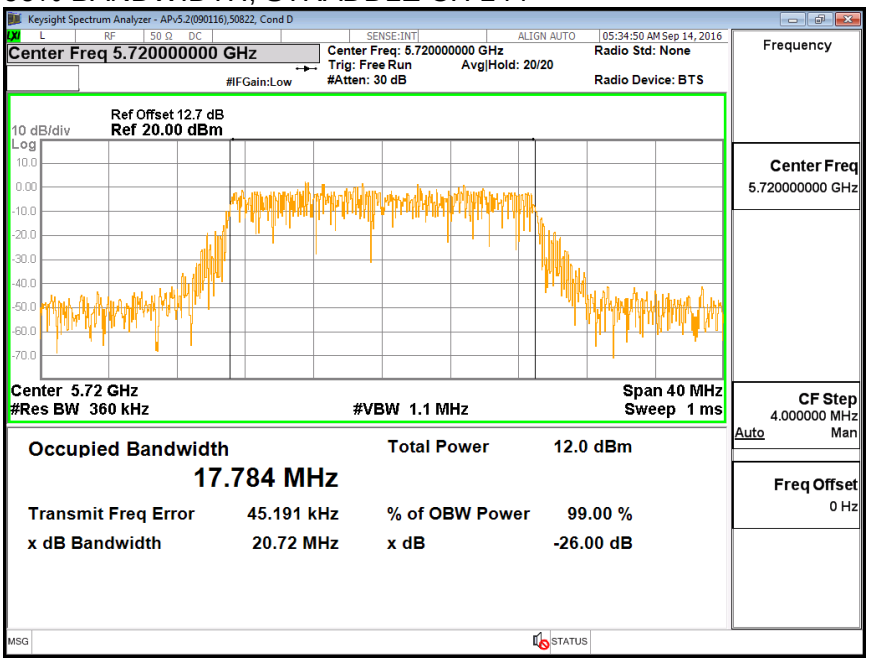
99% BANDWIDTH, HIGH CH



99% BANDWIDTH, STRADDLE CH 144



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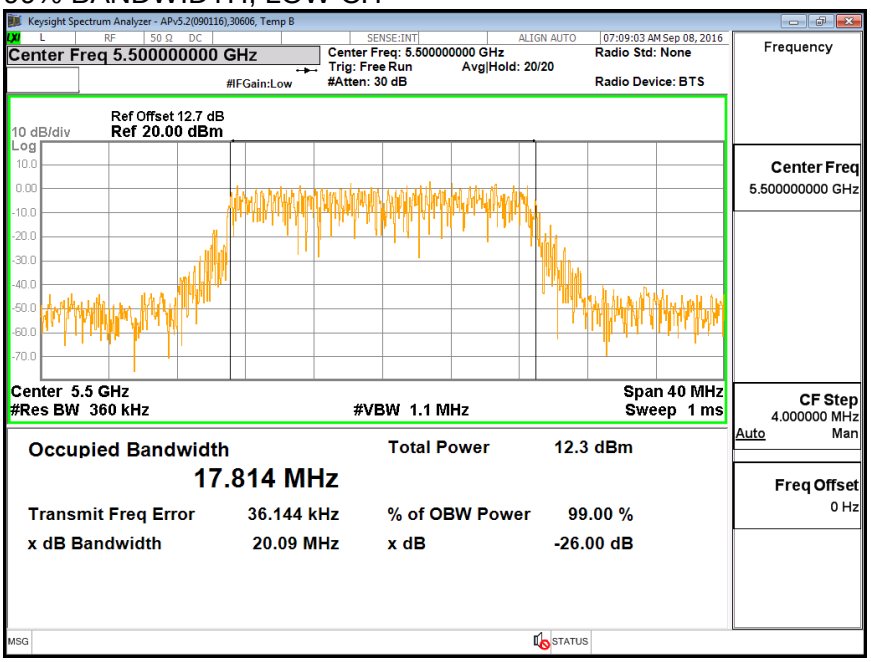
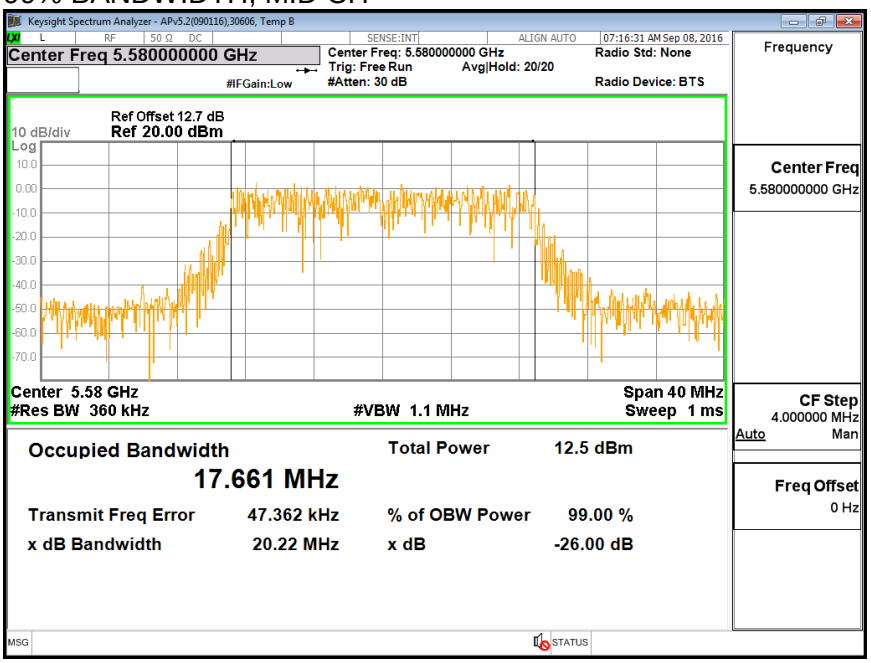
99% BANDWIDTH, CHAIN 2

99% BANDWIDTH, LOW CH



99% BANDWIDTH, MID CH



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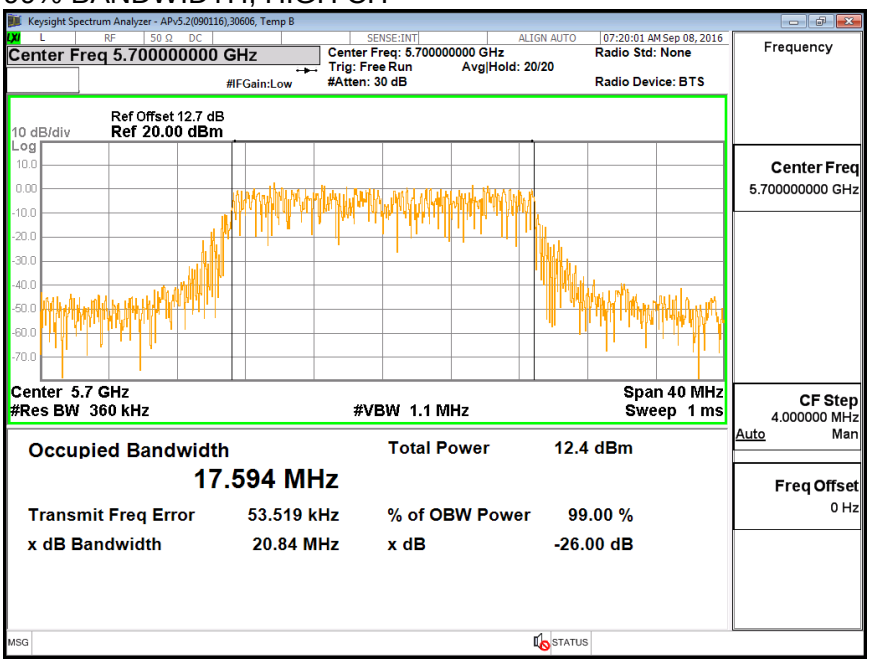
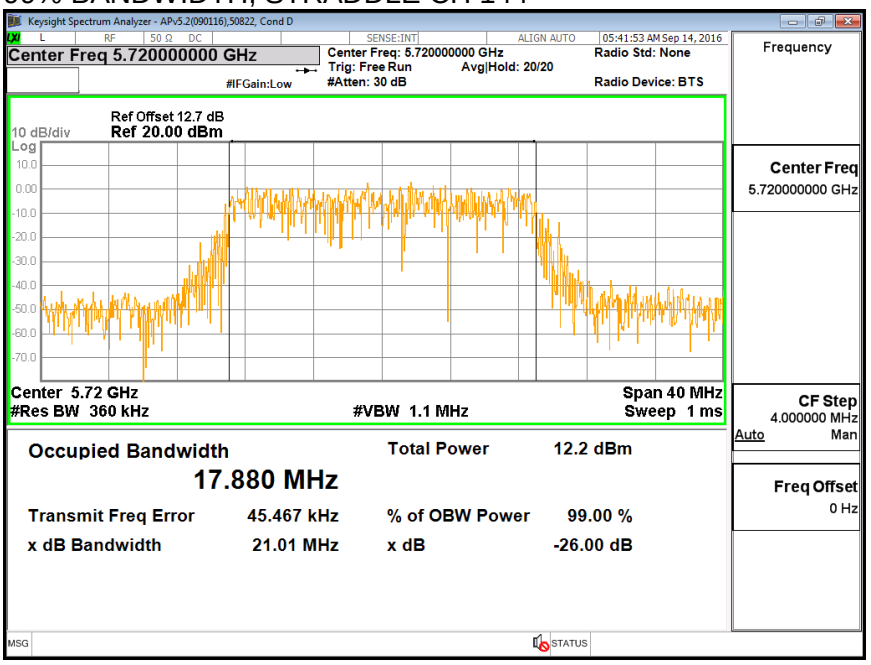
99% BANDWIDTH, HIGH CH



99% BANDWIDTH, STRADDLE CH 144



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8.40.3. **AVERAGE POWER**

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	30606	Date:	9/1/16

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Total Power (dBm)
Low	5500	12.23	12.25	12.22	17.00
Mid	5580	12.24	12.20	12.20	16.98
High	5700	11.99	12.12	12.24	16.89
144	5720	12.24	12.25	12.17	16.99

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8.40.4. 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 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 log10B, 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 log10B, 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.

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DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
4.90	7.40	5.20	5.98

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RESULTS

ID:	30606	Date:	9/1/16

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	17.73	5.98	5.98	23.49	11.00
Mid	5580	21.71	17.661	5.98	5.98	23.47	11.00
High	5700	21.75	17.594	5.98	5.98	23.45	11.00

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)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	12.23	12.25	12.22	17.00	23.49	-6.48
Mid	5580	12.24	12.2	12.2	16.98	23.47	-6.49
High	5700	11.99	12.12	12.24	16.89	23.45	-6.56

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	1.165	0.975	1.268	5.91	11.00	-5.09
Mid	5580	1.208	0.931	0.971	5.81	11.00	-5.19
High	5700	1.017	0.809	0.798	5.65	11.00	-5.35

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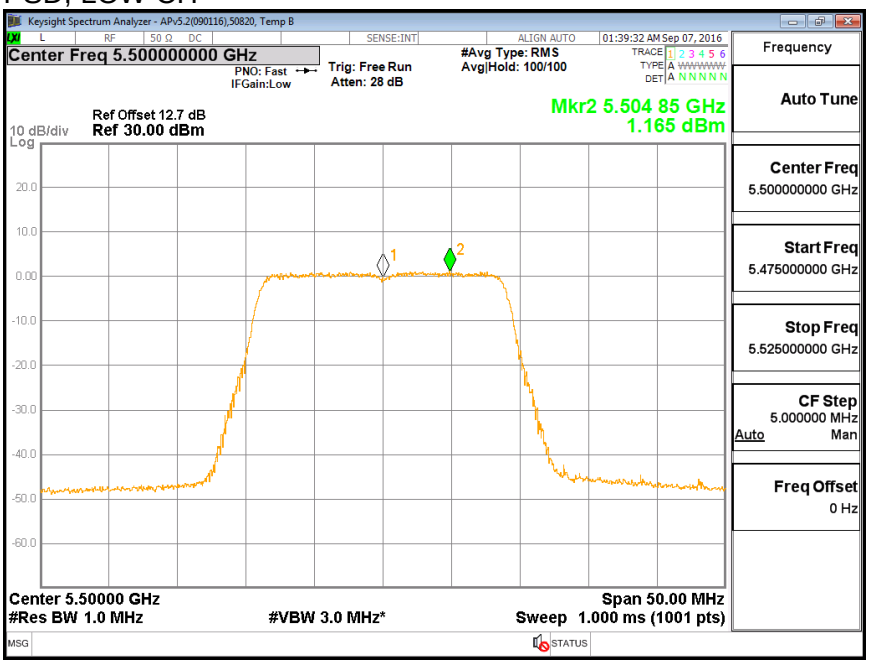
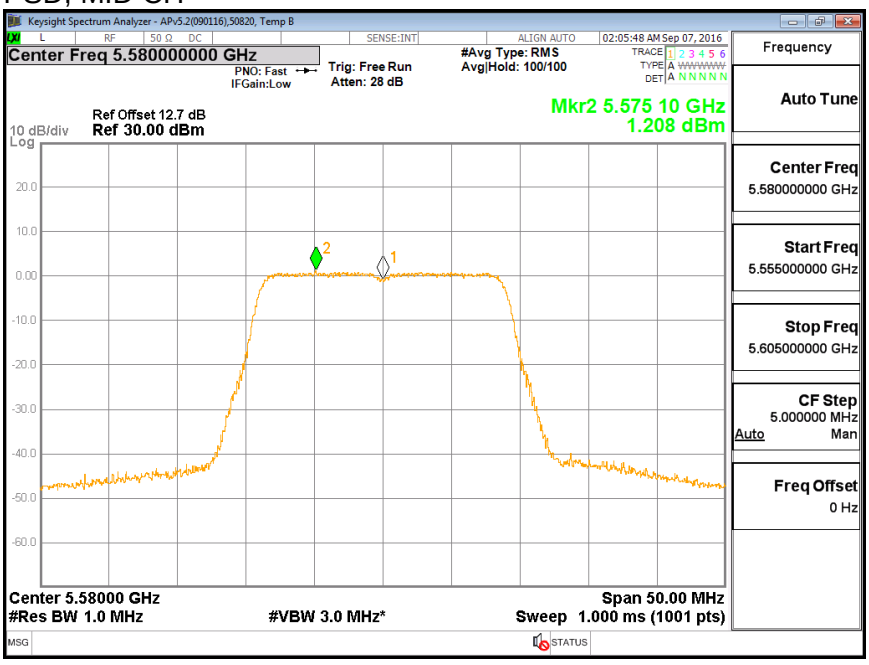
PSD, CHAIN 0

PSD, LOW CH



PSD, MID CH



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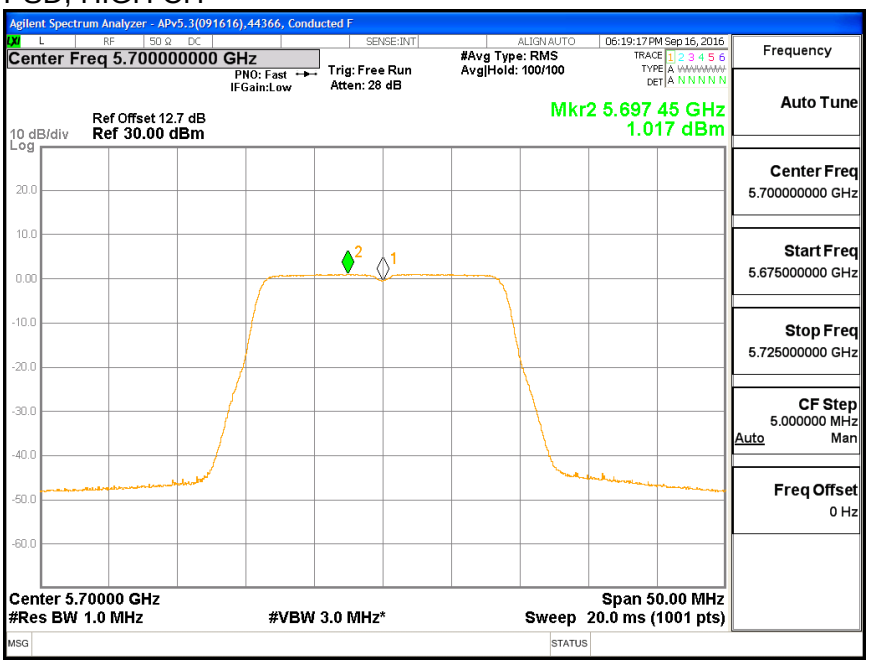
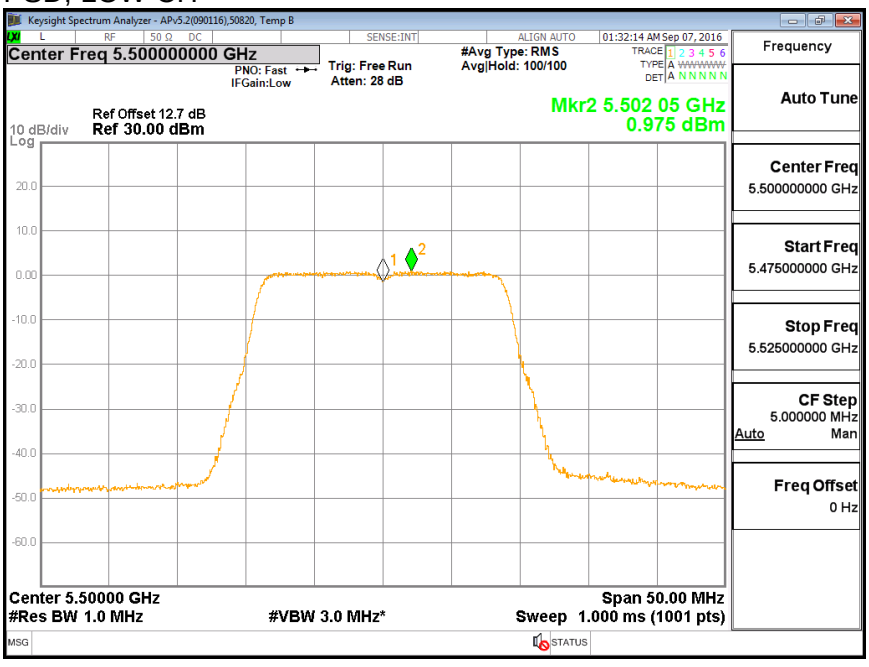
PSD, HIGH CH



PSD, CHAIN 1

PSD, LOW CH



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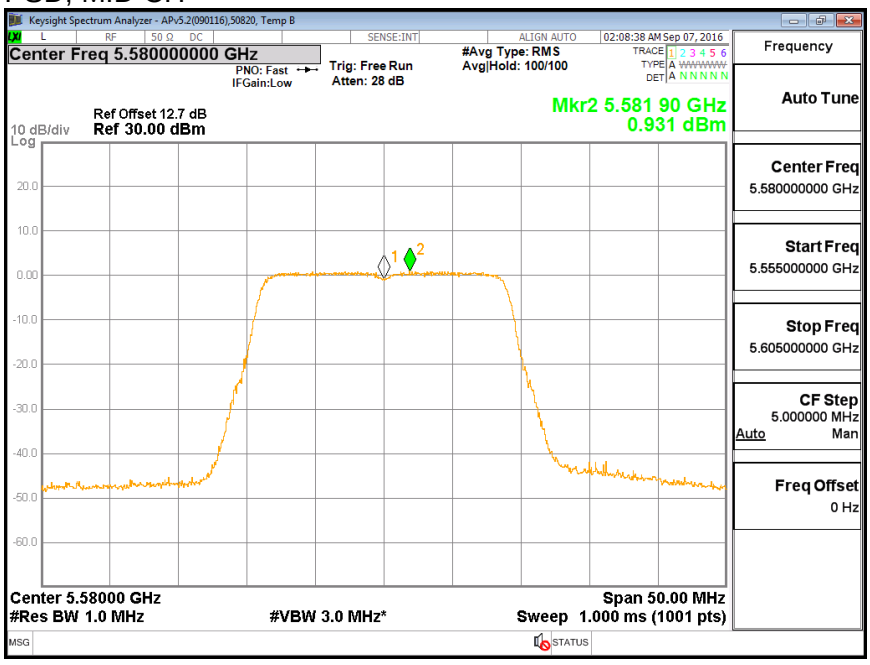
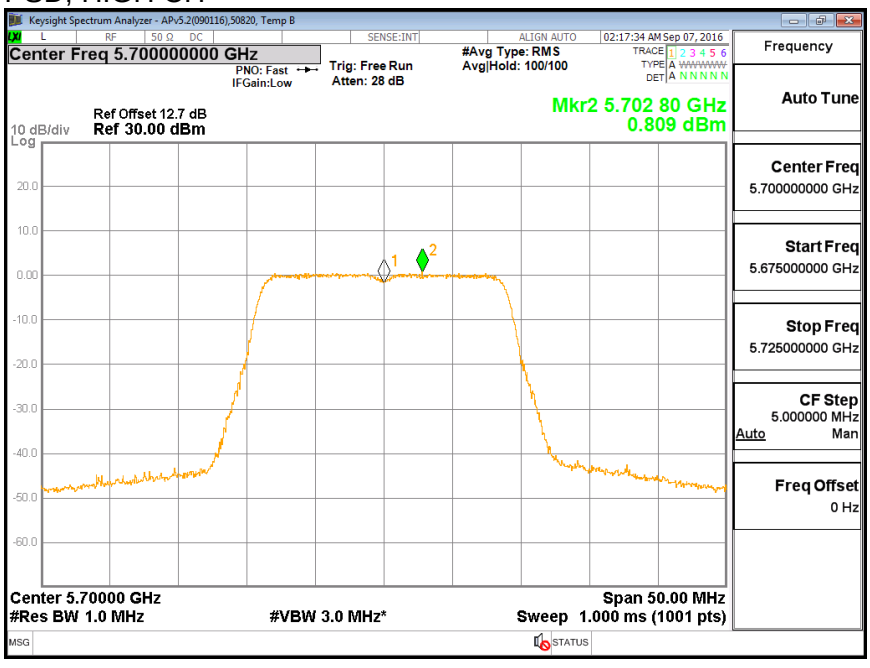
PSD, MID CH



PSD, HIGH CH



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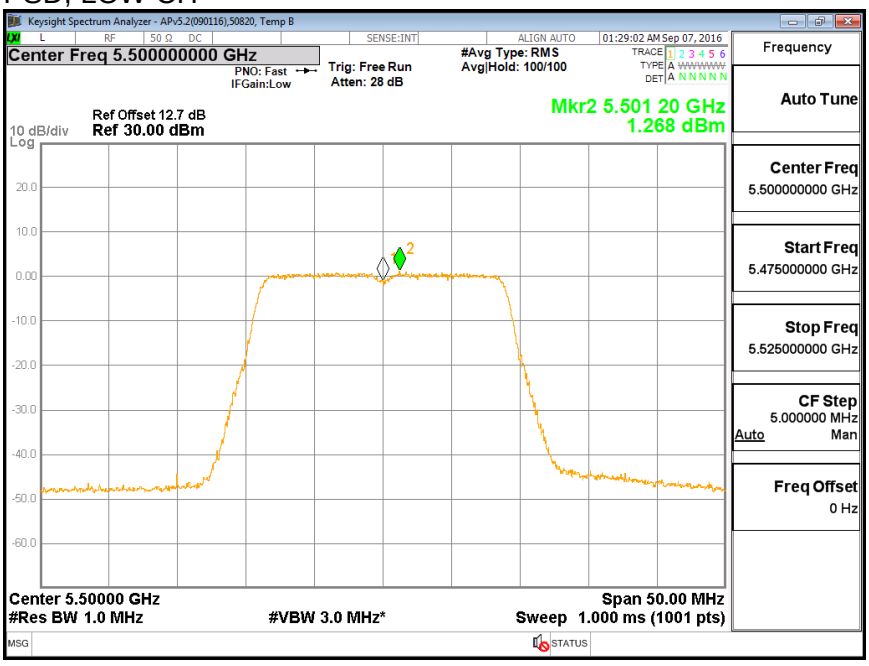
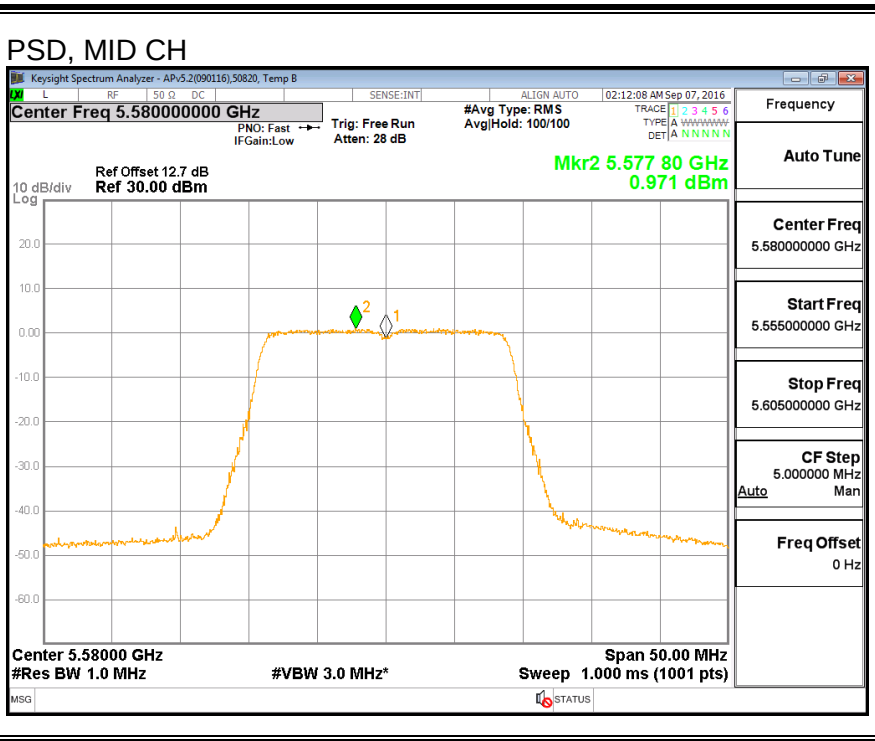
PSD, CHAIN 2

PSD, LOW CH



PSD, MID CH



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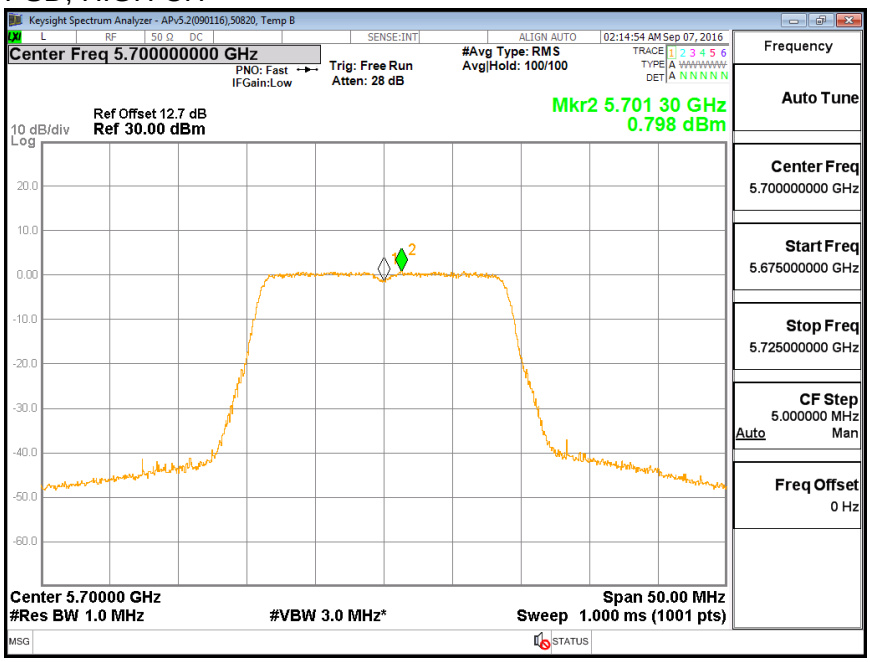
PSD, HIGH CH



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8.41. 802.11ac VHT20 3Tx STBC STRADDLE CHANNEL 144 RESULTS (FCC)

8.41.1. 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	15.94	5.98	5.98	23.02	11.00

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)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	11.15	11.16	11.02	15.88	23.02	-7.14

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.871	0.695	0.539	5.47	11.00	-5.53

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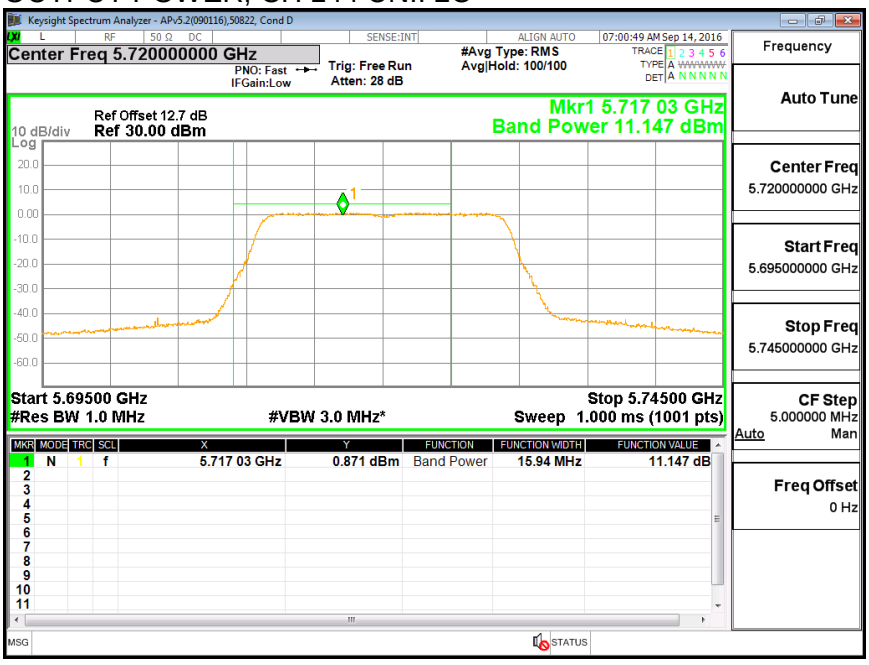
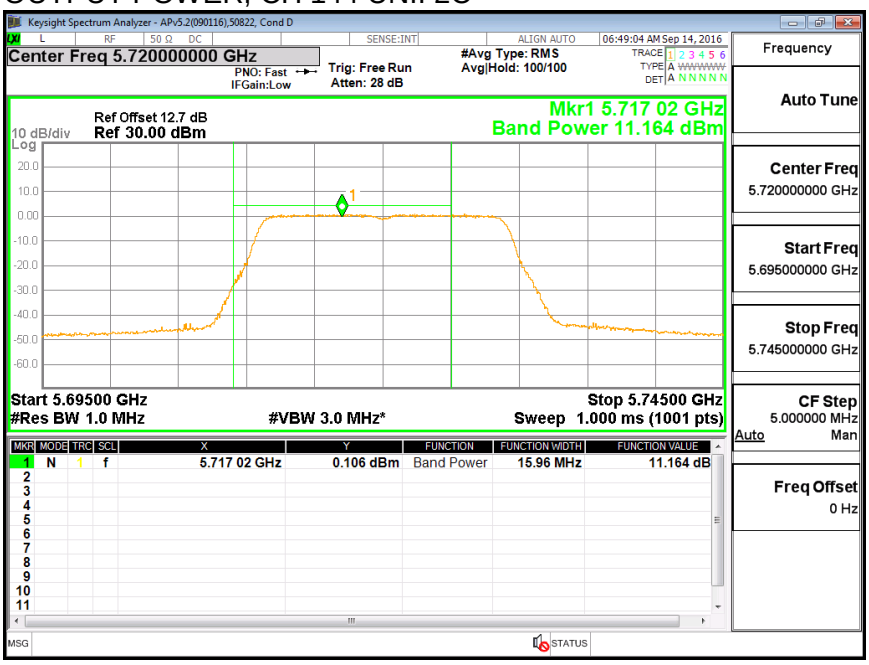
OUTPUT POWER, CHAIN 0

OUTPUT POWER, CH 144 UNII 2C



OUTPUT POWER, CHAIN 1

OUTPUT POWER, CH 144 UNII 2C



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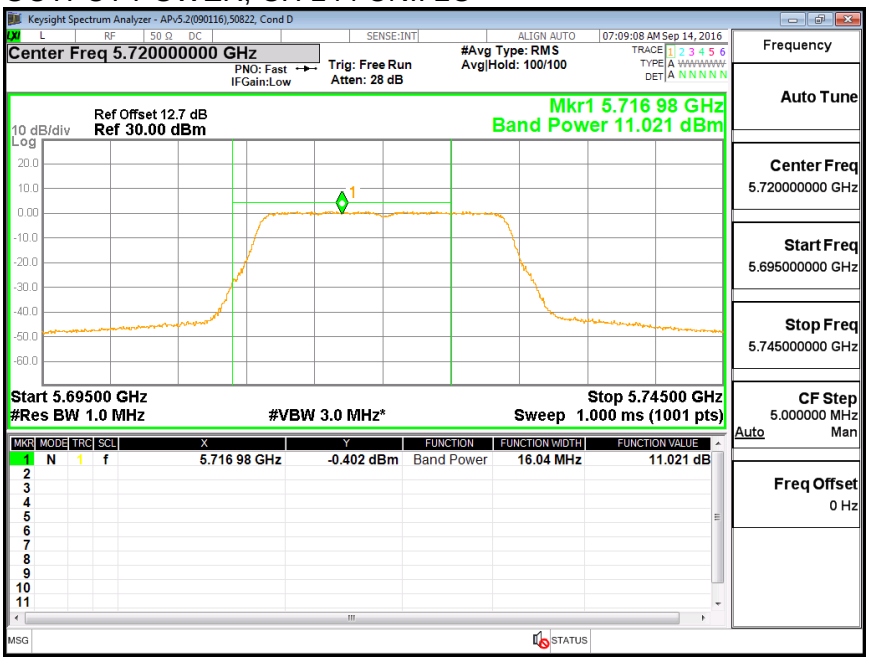
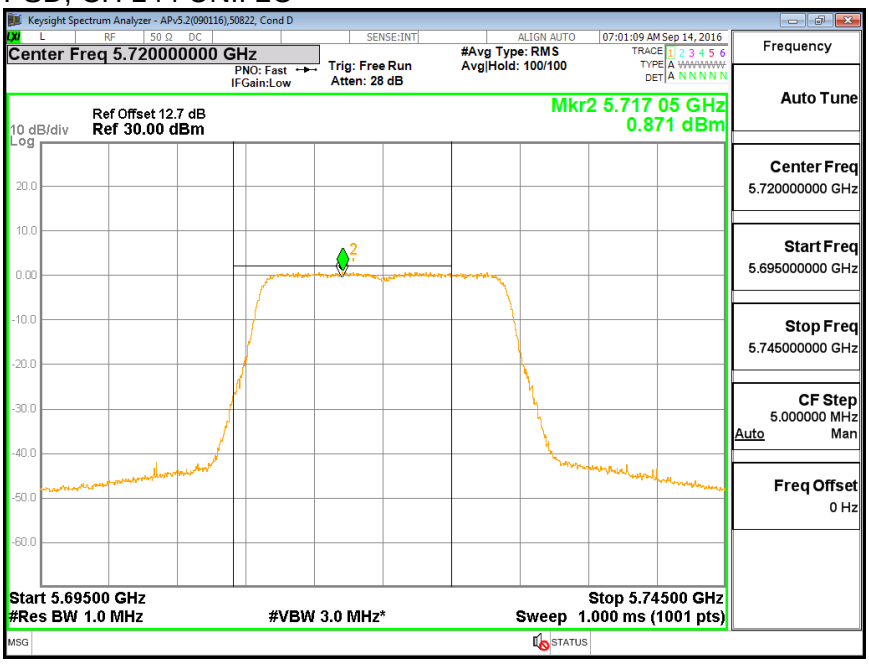
OUTPUT POWER, CHAIN 2

OUTPUT POWER, CH 144 UNII 2C



PSD, CHAIN 0

PSD, CH 144 UNII 2C



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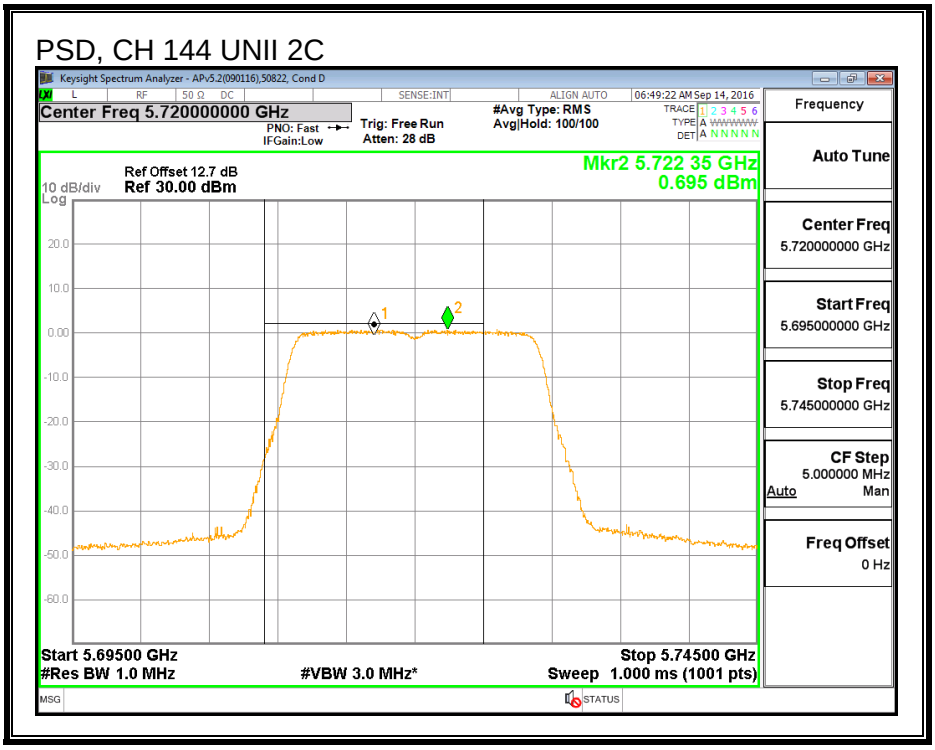
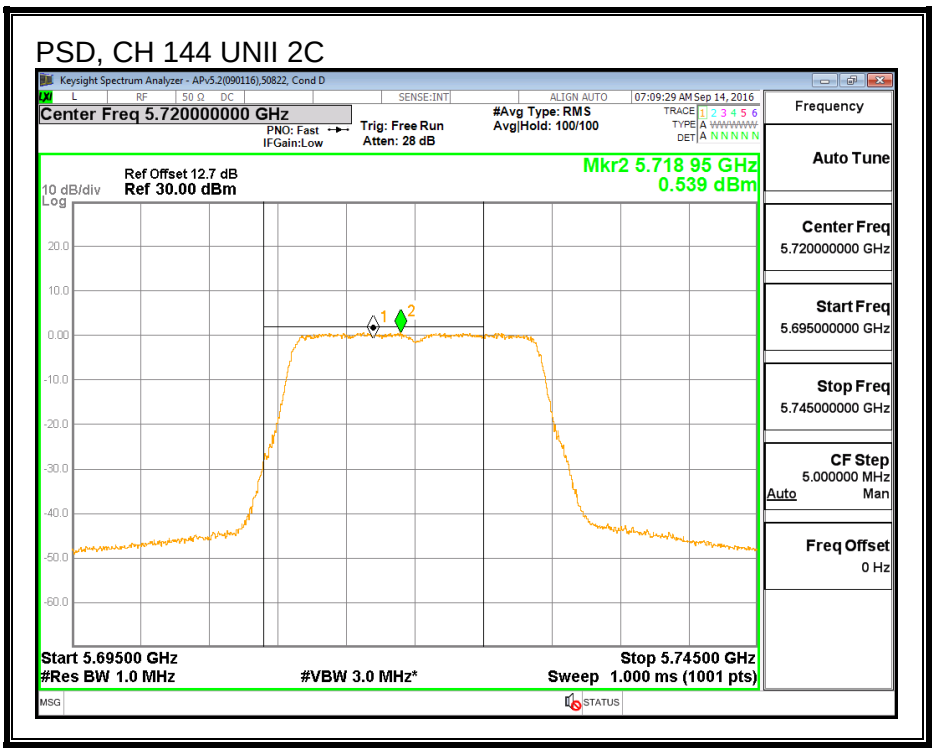
PSD, CHAIN 1



PSD, CHAIN 2



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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	5.94	5.98	5.98	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 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	5.67	5.66	5.54	10.39	30.00	-19.61

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-2.04	-2.41	-2.38	2.50	30.00	-27.50

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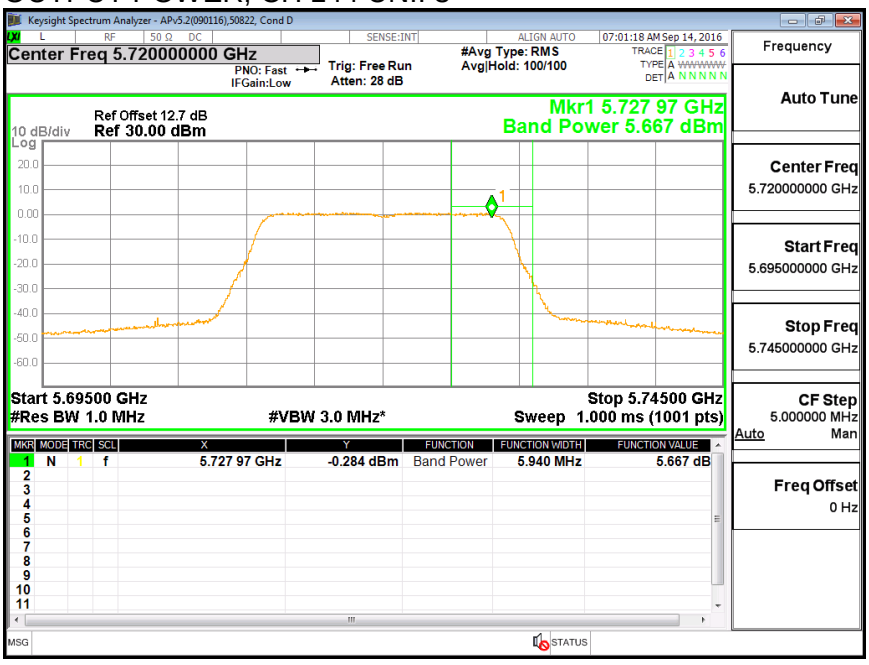
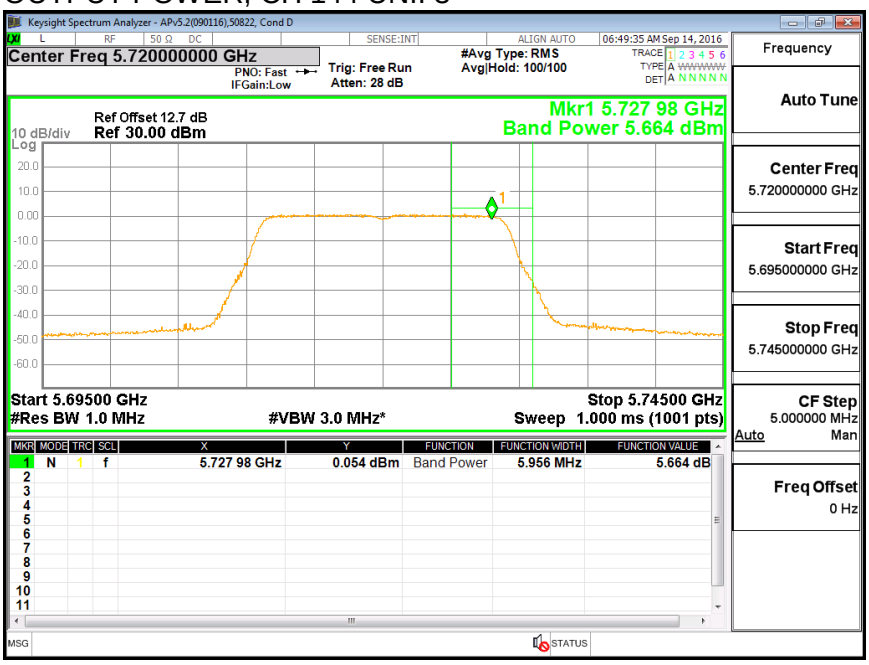
OUTPUT POWER, CHAIN 0

OUTPUT POWER, CH 144 UNII 3



OUTPUT POWER, CHAIN 1

OUTPUT POWER, CH 144 UNII 3



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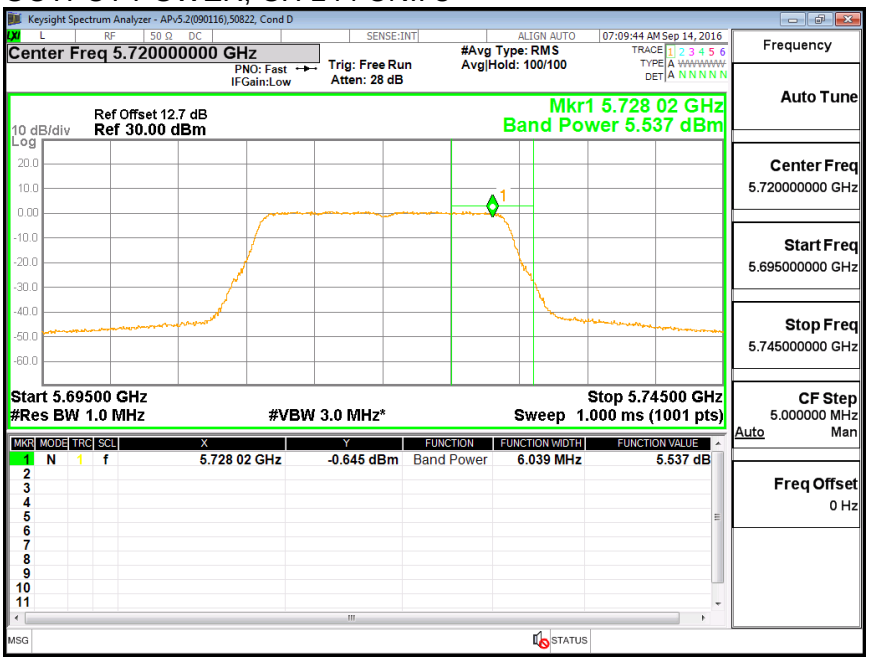
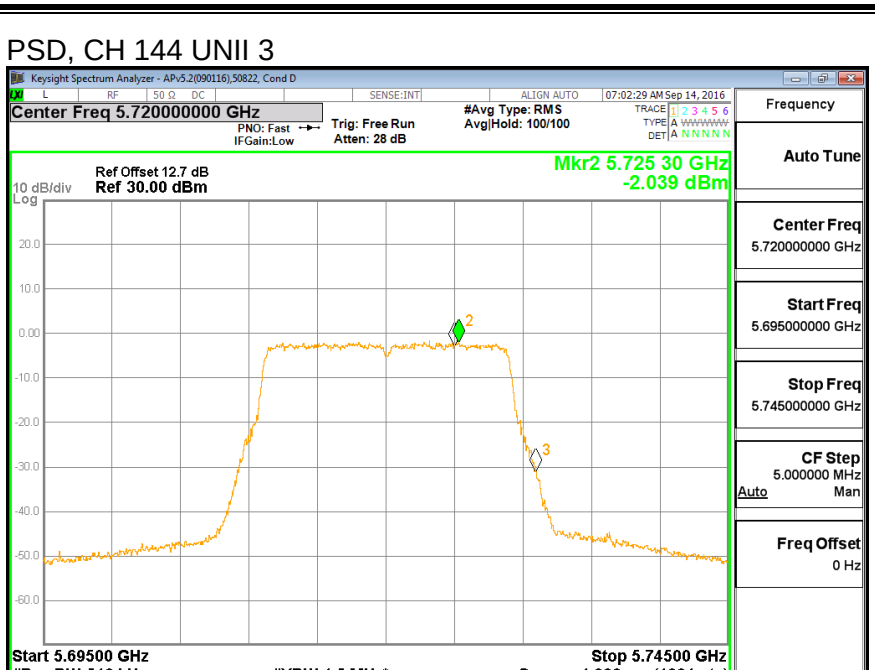
OUTPUT POWER, CHAIN 2

OUTPUT POWER, CH 144 UNII 3



PSD, CHAIN 0

PSD, CH 144 UNII 3



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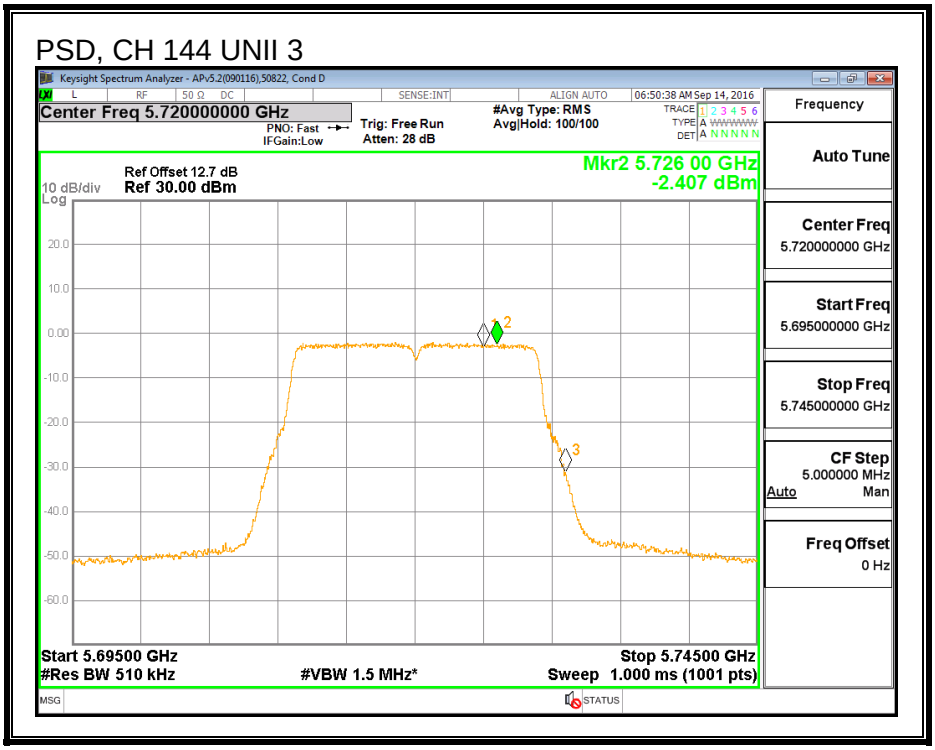
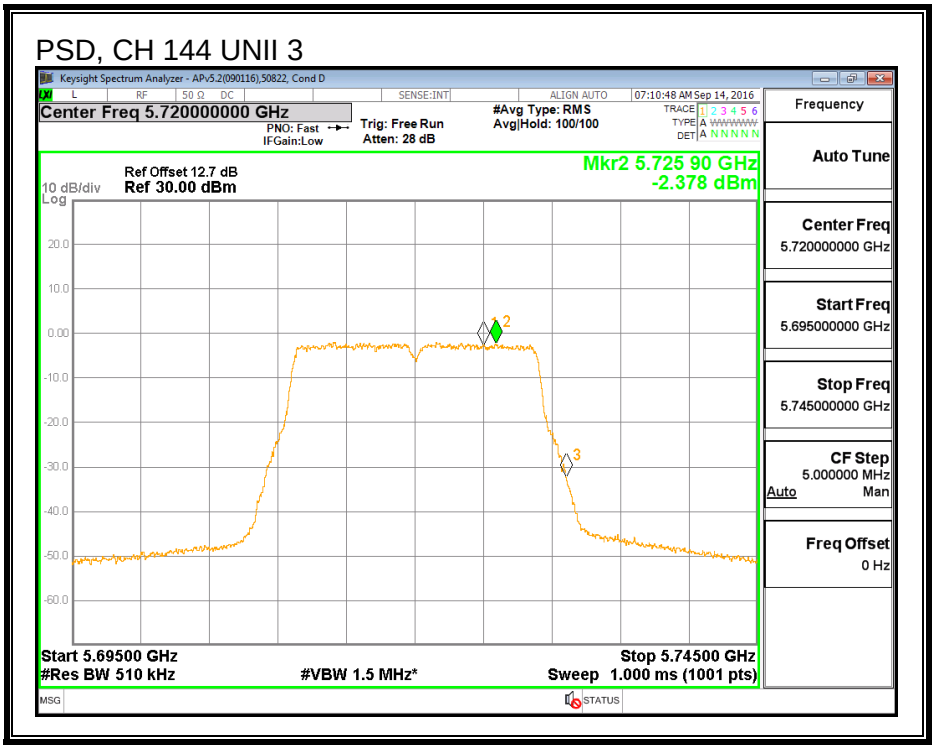
PSD, CHAIN 1



PSD, CHAIN 2



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8.42. 802.11ac VHT20 3Tx STBC STRADDLE CHANNEL 144 RESULTS (IC)

8.42.1. 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	13.820	5.98	5.98	22.41	11.00

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)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	11.09	11.12	10.98	15.83	22.41	-6.57

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	0.87	0.70	0.54	5.47	11.00	-5.53

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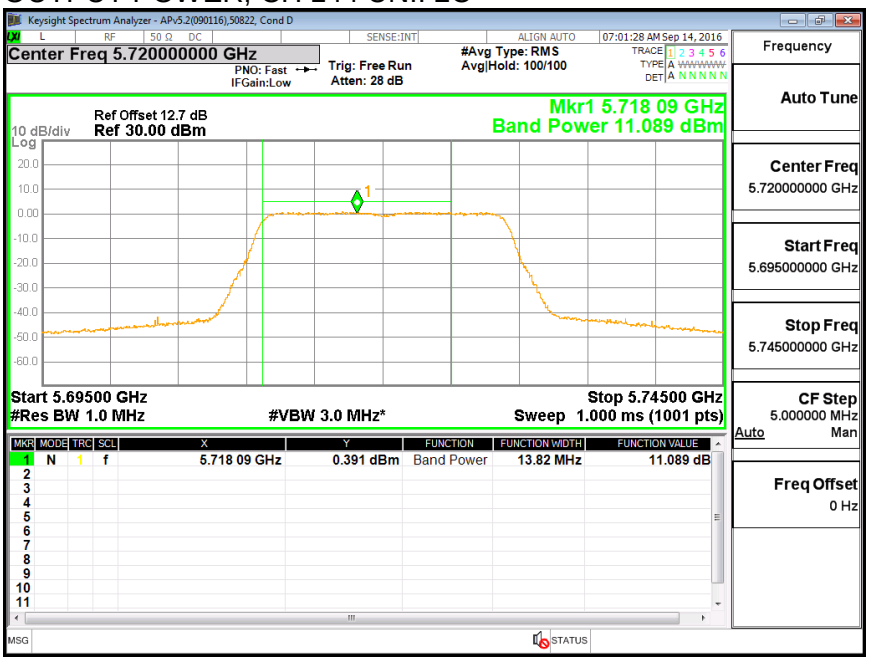
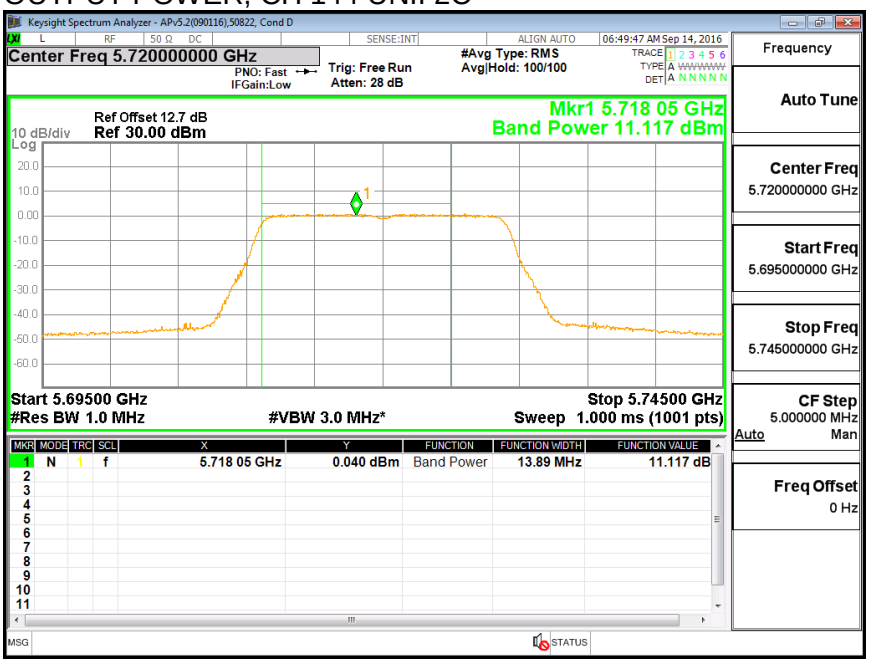
OUTPUT POWER, CHAIN 0

OUTPUT POWER, CH 144 UNII 2C



OUTPUT POWER, CHAIN 1

OUTPUT POWER, CH 144 UNII 2C



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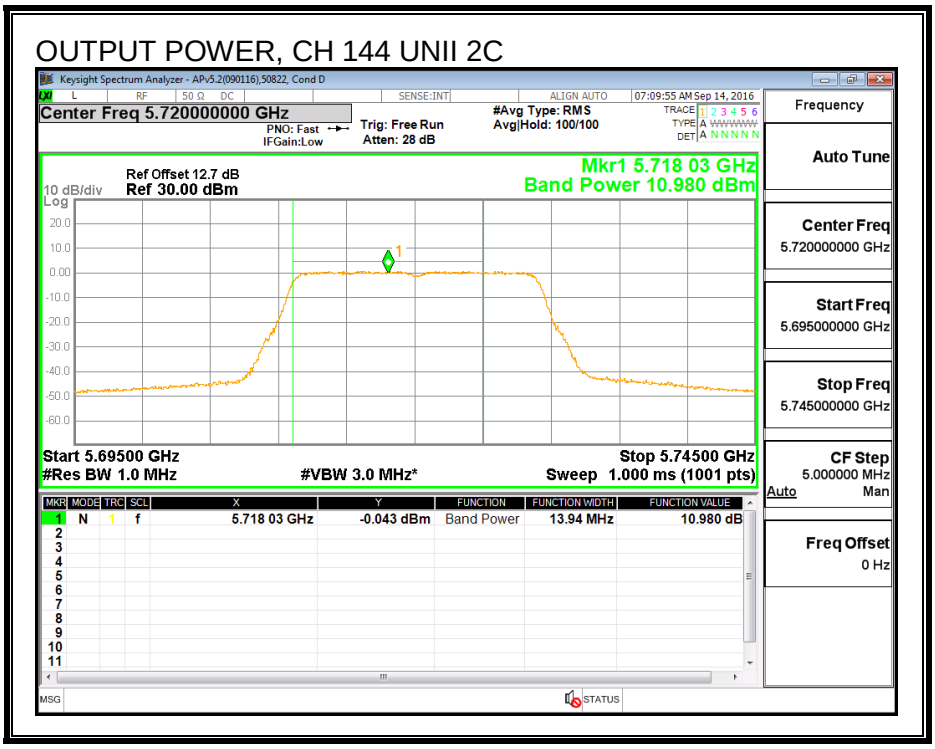
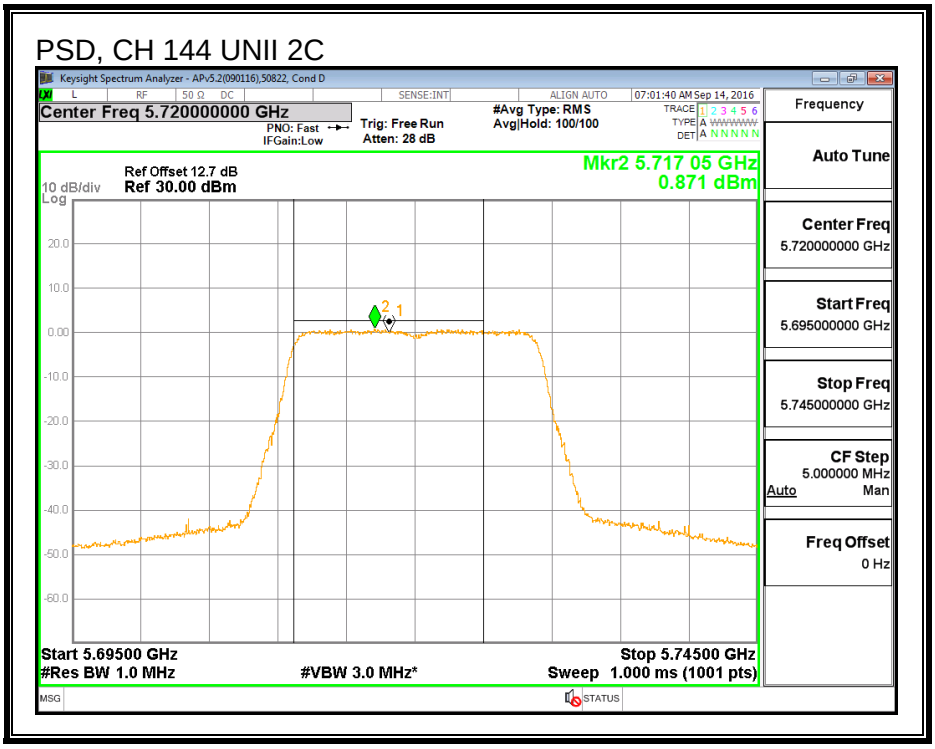
OUTPUT POWER, CHAIN 2



PSD, CHAIN 0



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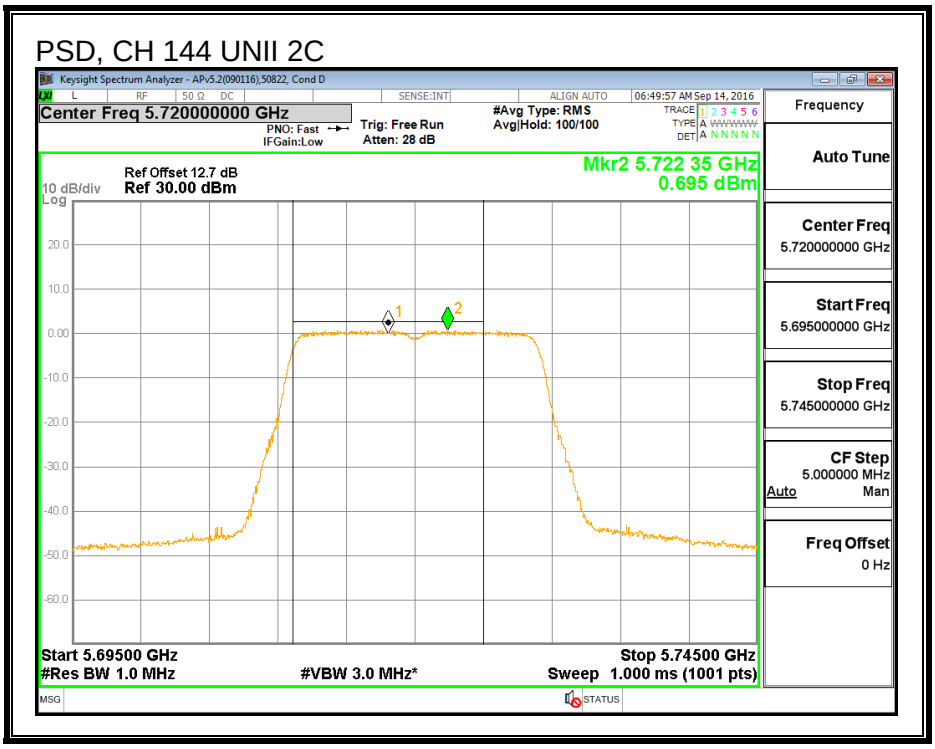
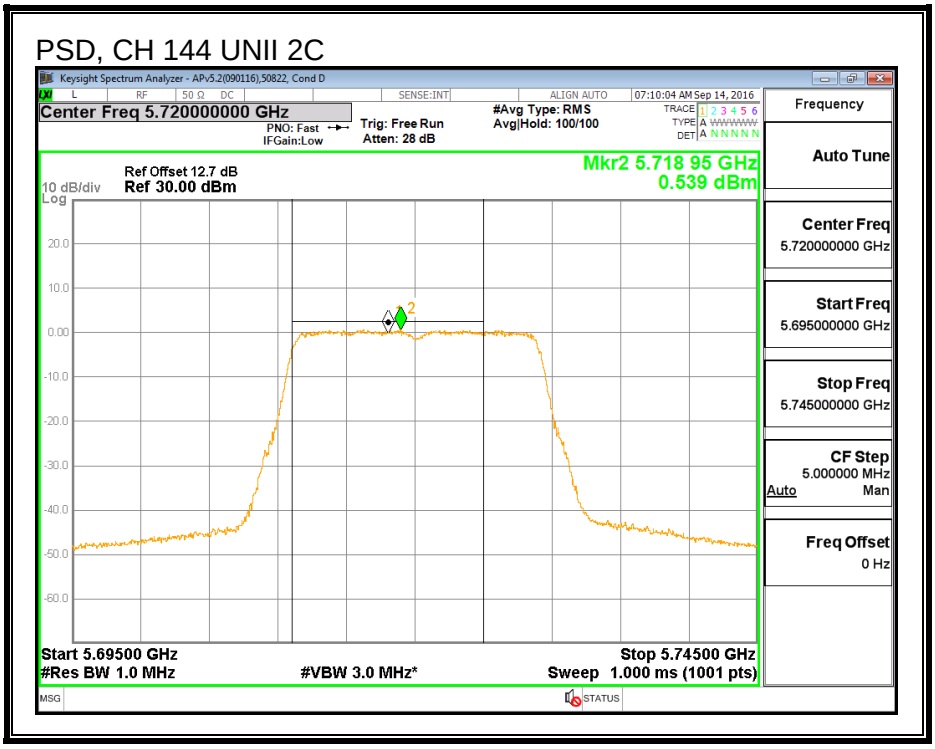
PSD, CHAIN 1



PSD, CHAIN 2



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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	3.820	5.98	5.98	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 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
144	5720	5.36	5.41	5.31	10.13	30.00	-19.87

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
144	5720	-2.04	-2.41	-2.38	2.50	30.00	-27.50

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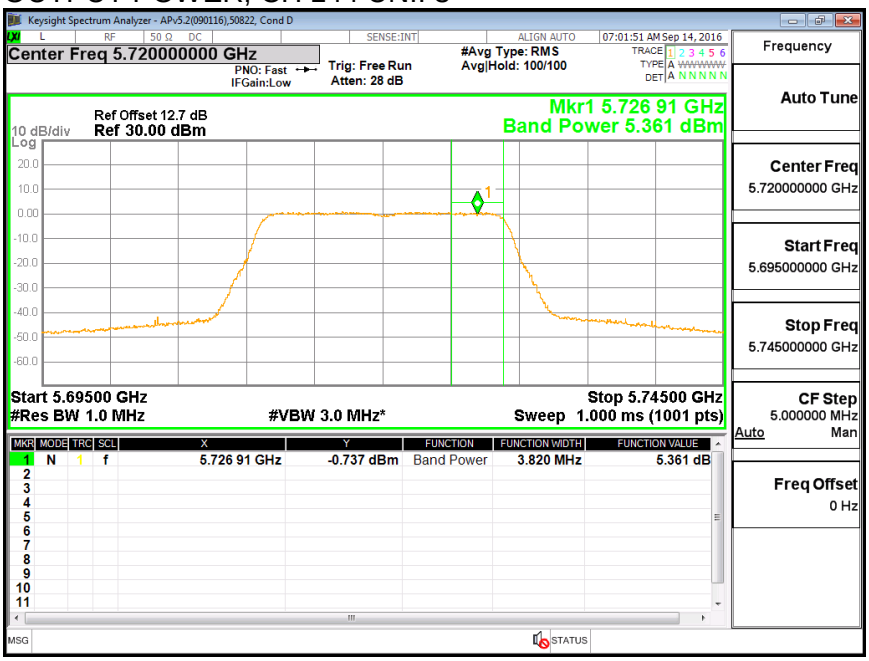
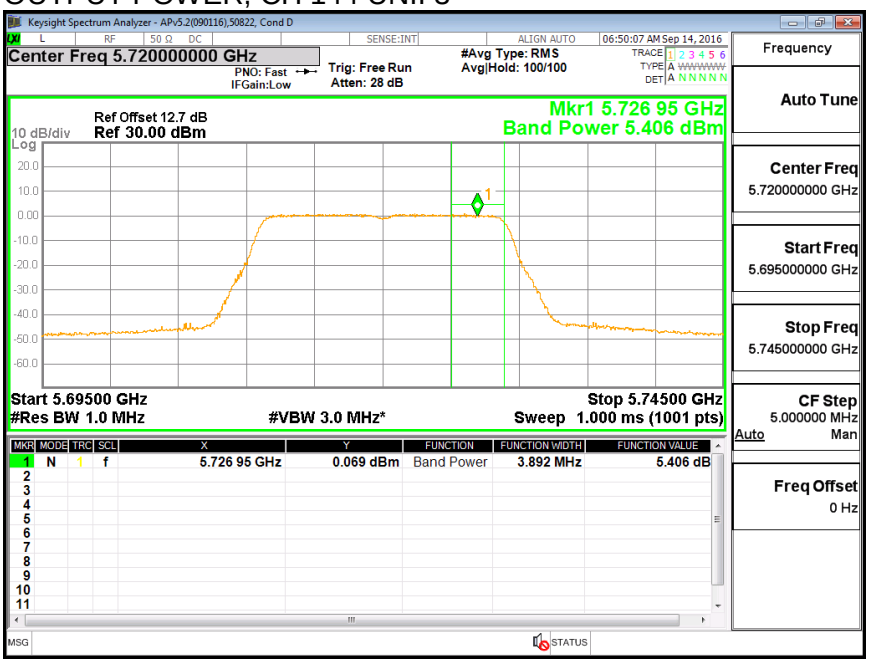
OUTPUT POWER, CHAIN 0

OUTPUT POWER, CH 144 UNII 3



OUTPUT POWER, CHAIN 1

OUTPUT POWER, CH 144 UNII 3



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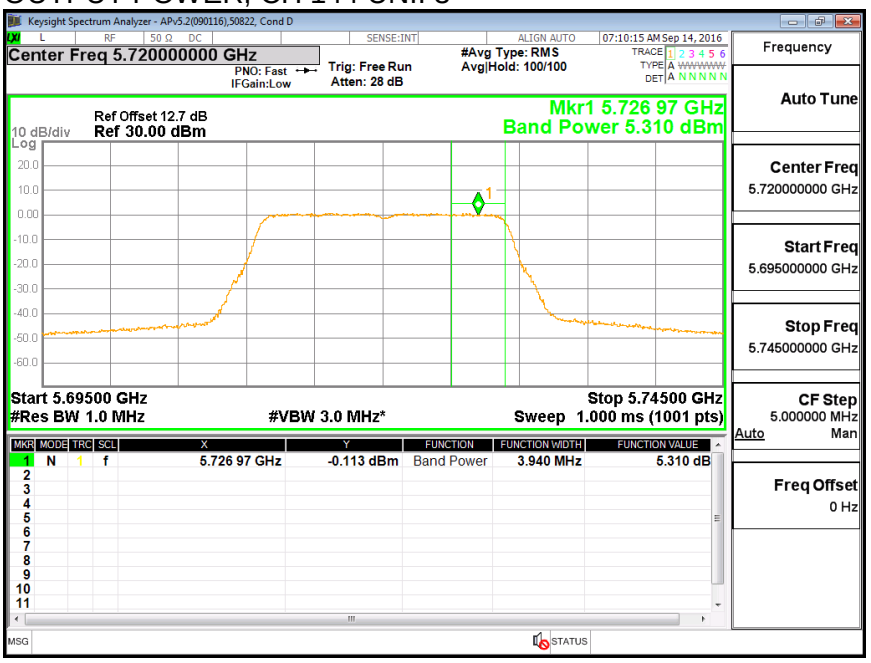
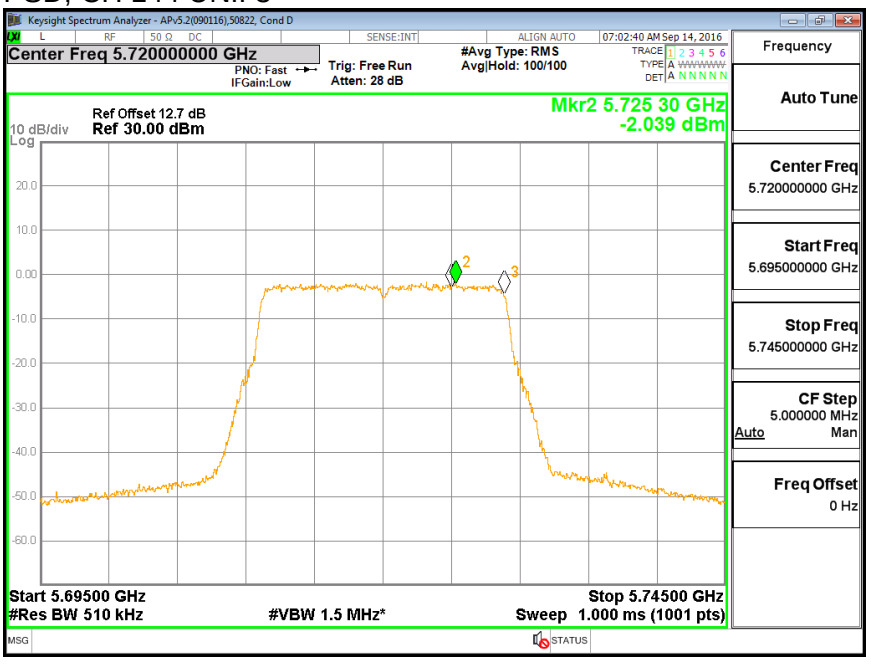
OUTPUT POWER, CHAIN 2

OUTPUT POWER, CH 144 UNII 3



PSD, CHAIN 0

PSD, CH 144 UNII 3



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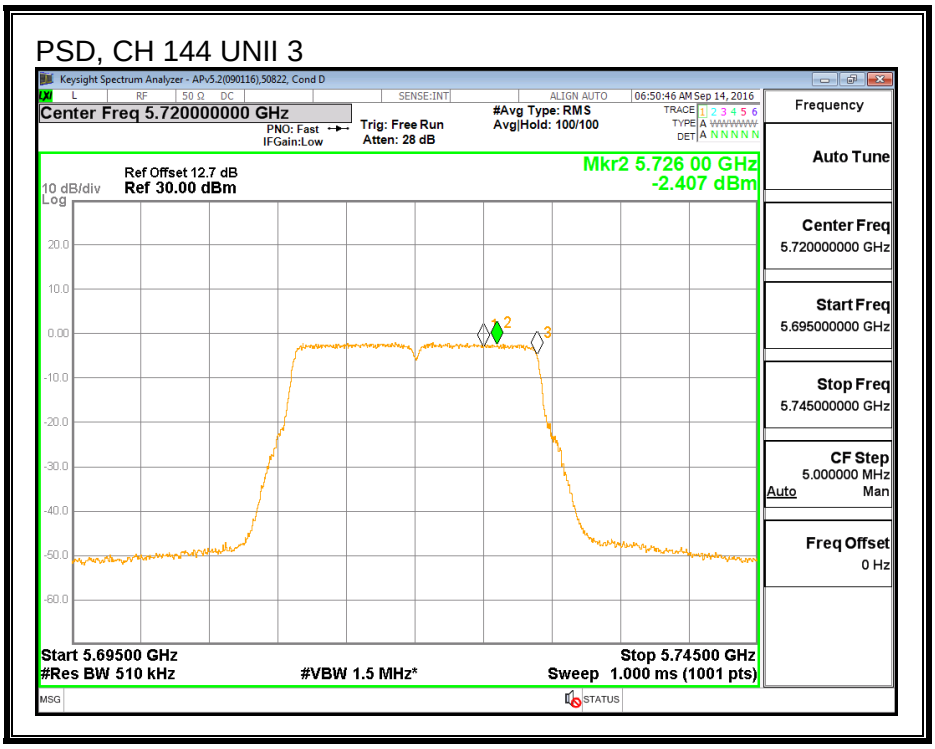
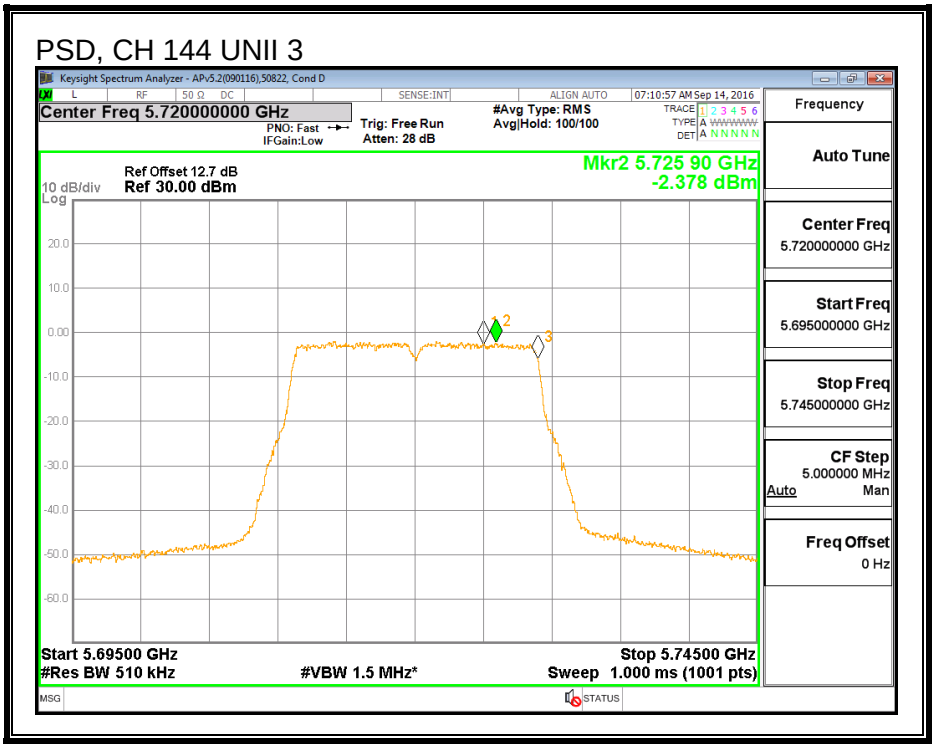
PSD, CHAIN 1



PSD, CHAIN 2



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8.42.2. **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)	6 dB BW Chain 2 (MHz)
144	5720	3.915	3.564	3.888

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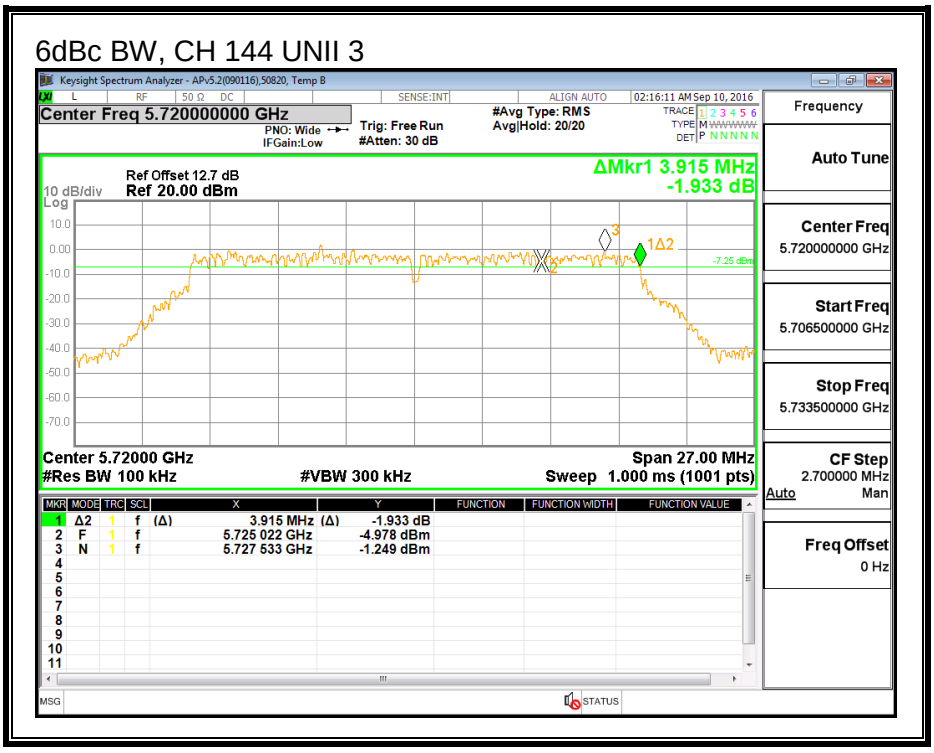
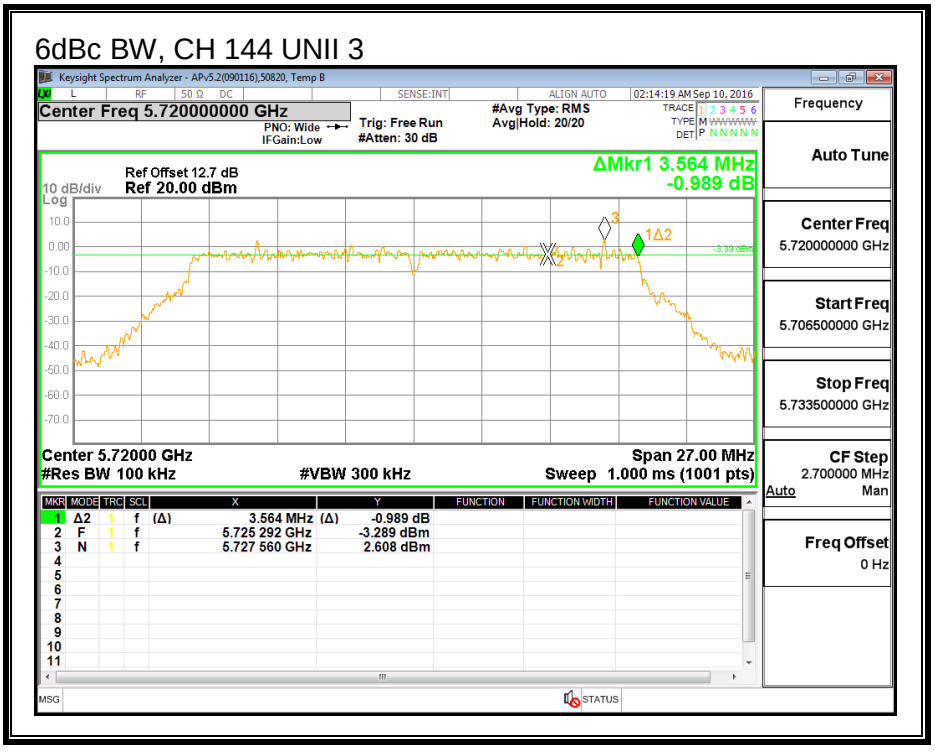
CHAIN 0



CHAIN 1



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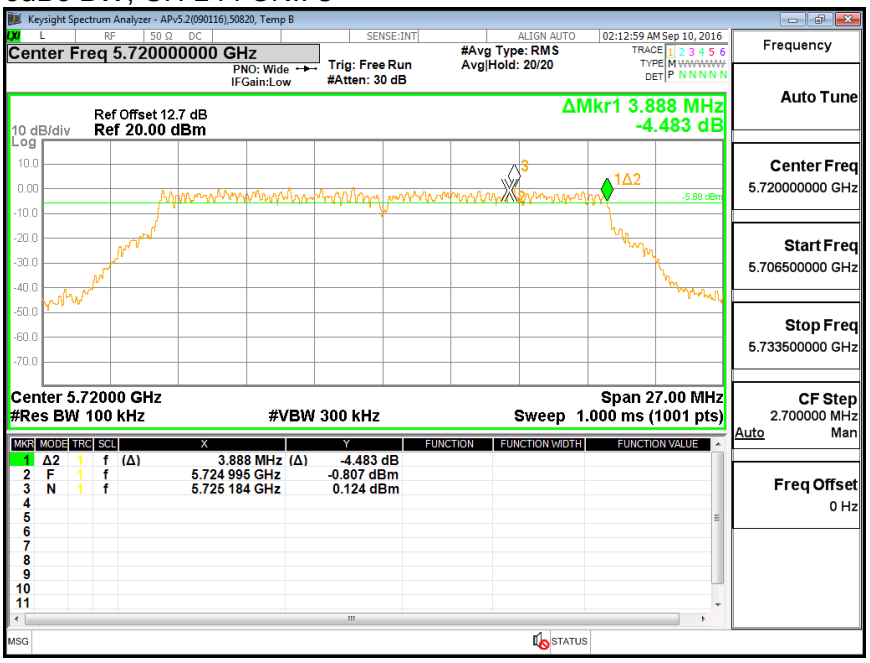
CHAIN 2

6dBc BW, CH 144 UNII 3



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8.43. 802.11ac VHT20 3Tx BEAM FORMING MODE IN THE 5.6 GHz BAND

8.43.1. **26 dB BANDWIDTH**

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)	26 dB BW Chain 2 (MHz)
Low	5500	21.813	21.813	21.846
Mid	5580	22.066	22.168	22.270
High	5700	21.879	21.780	21.747
144	5720	22.280	22.100	22.236

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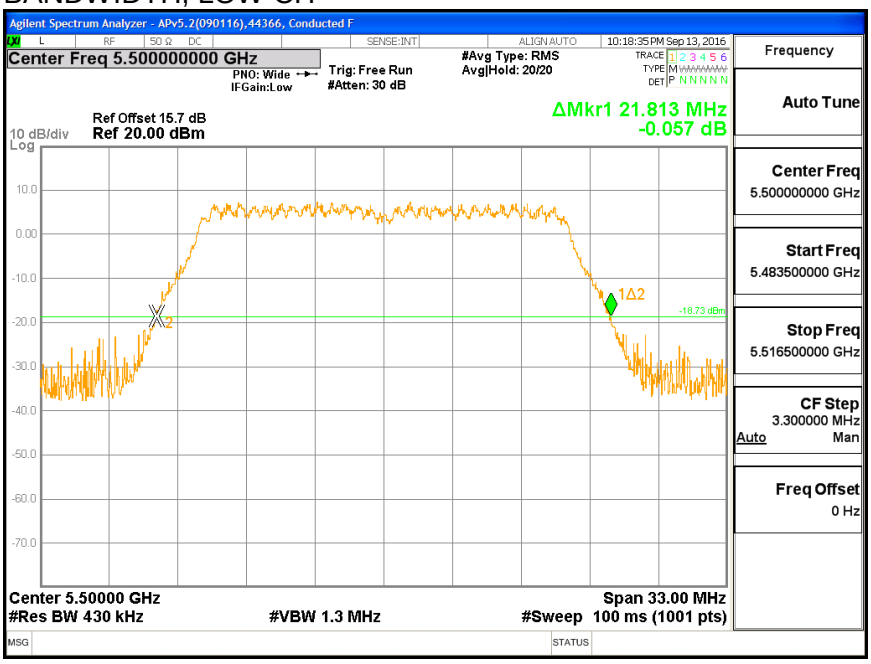
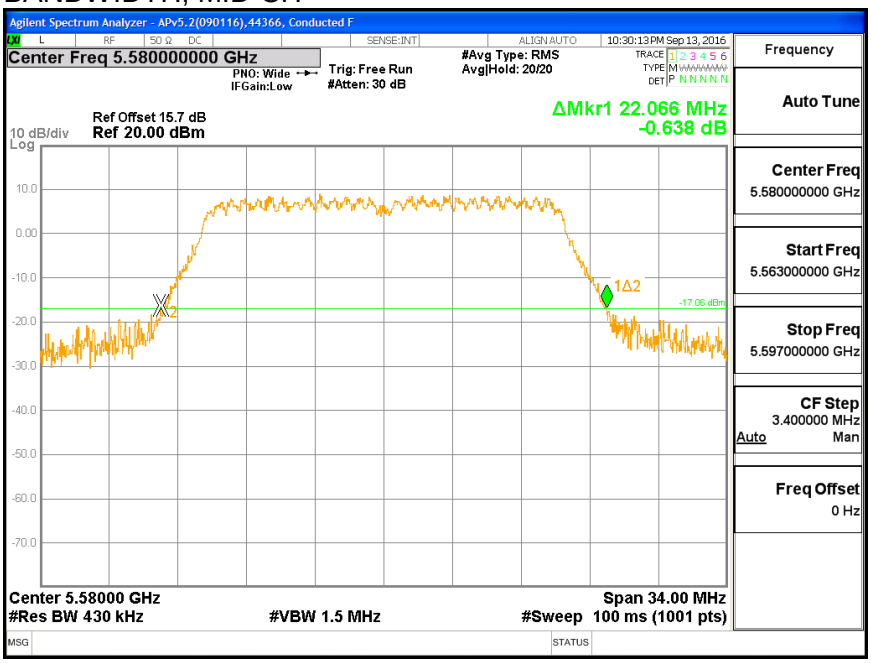
26 dB BANDWIDTH, CHAIN 0

BANDWIDTH, LOW CH



BANDWIDTH, MID CH



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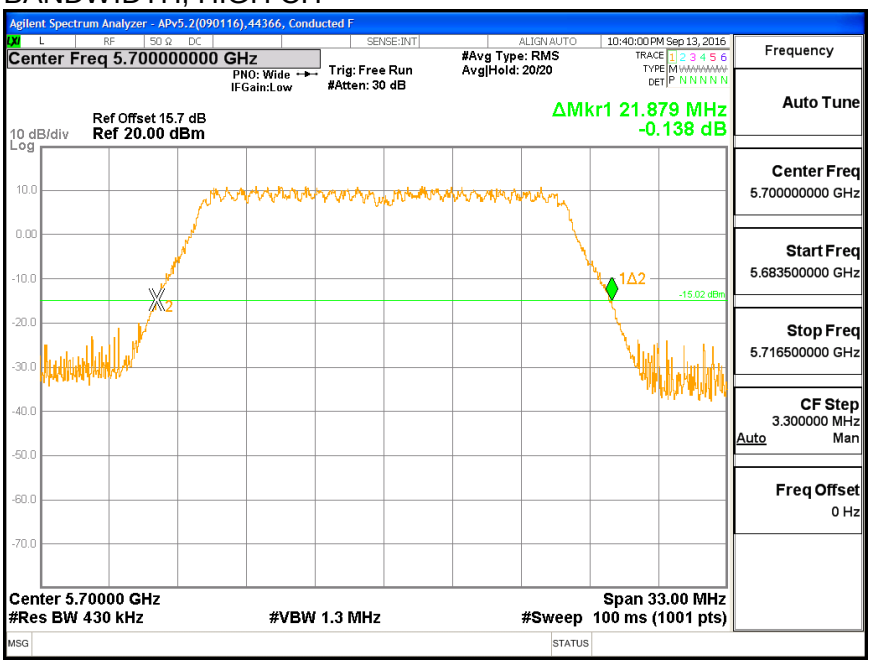
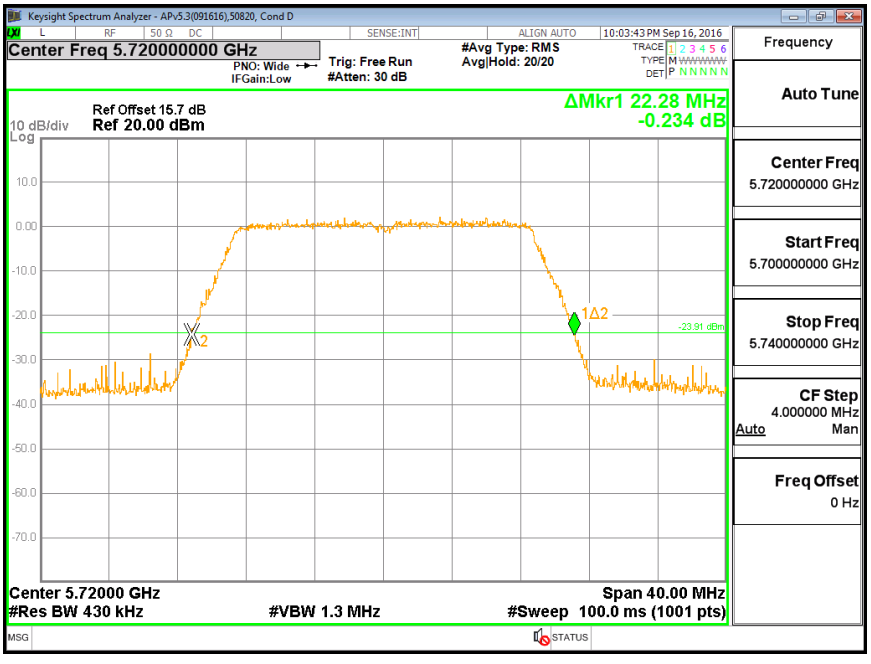
BANDWIDTH, HIGH CH



BANDWIDTH STRADDLE CH 144



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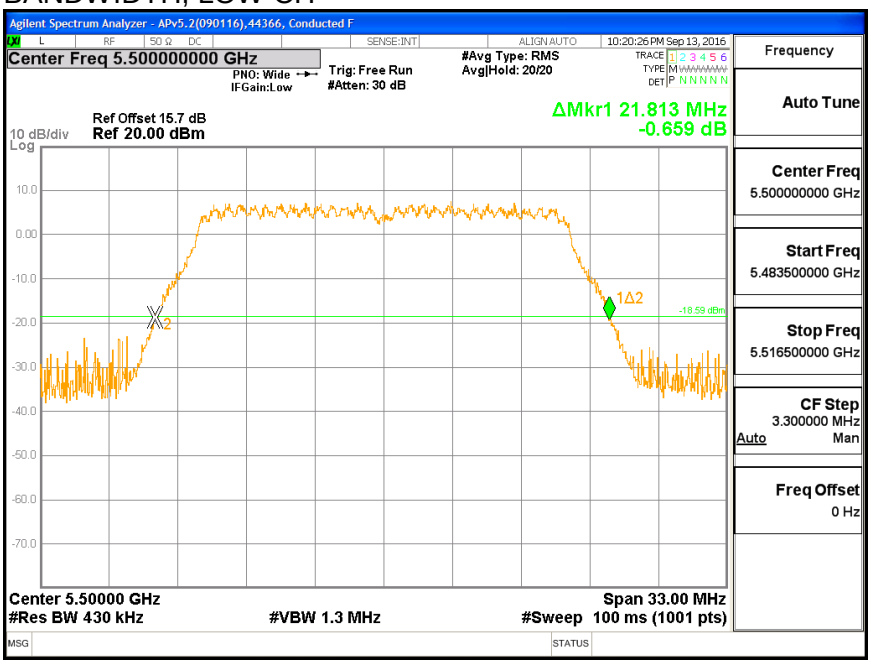
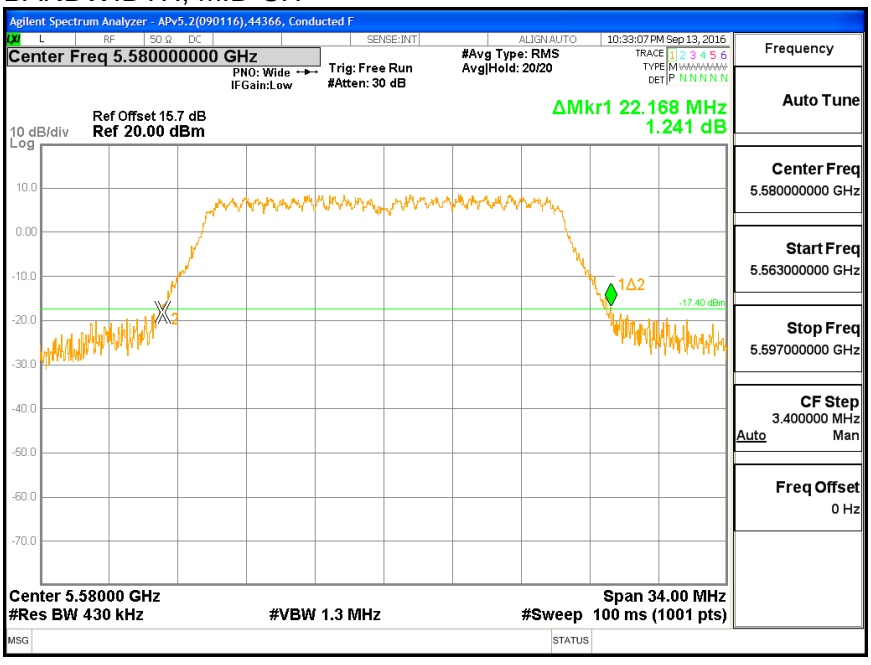
26 dB BANDWIDTH, CHAIN 1

BANDWIDTH, LOW CH



BANDWIDTH, MID CH



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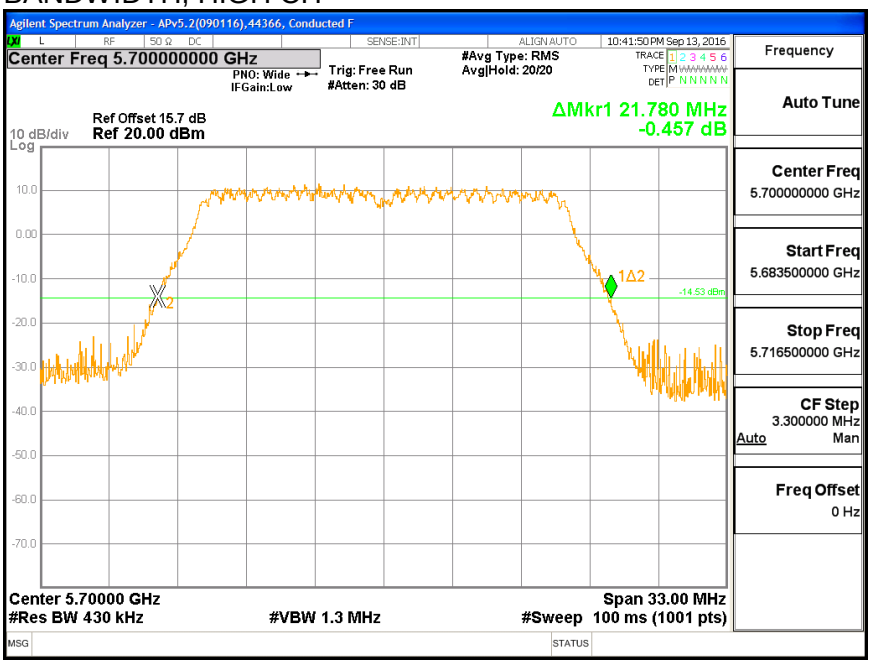
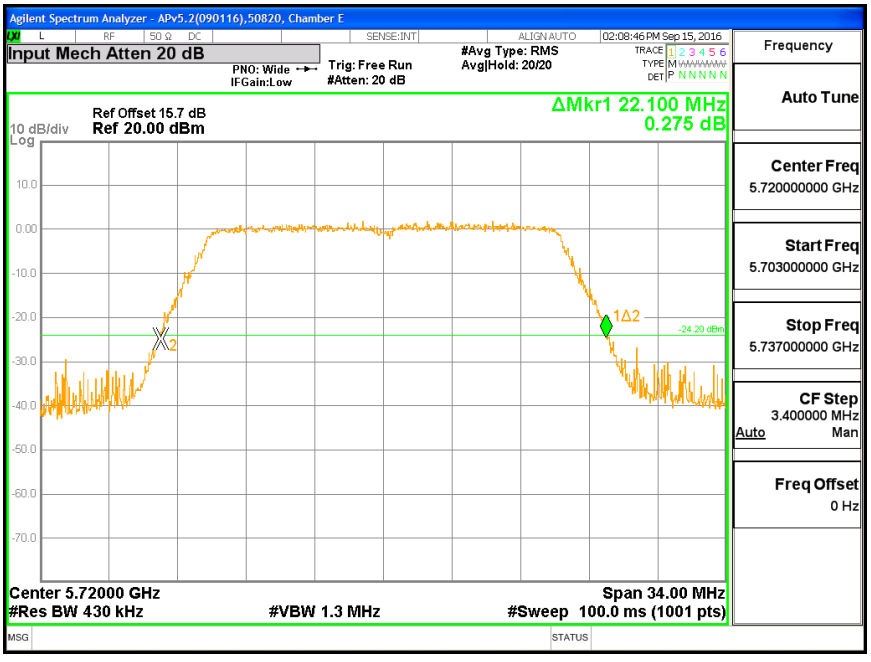
BANDWIDTH, HIGH CH



BANDWIDTH STRADDLE CH 144



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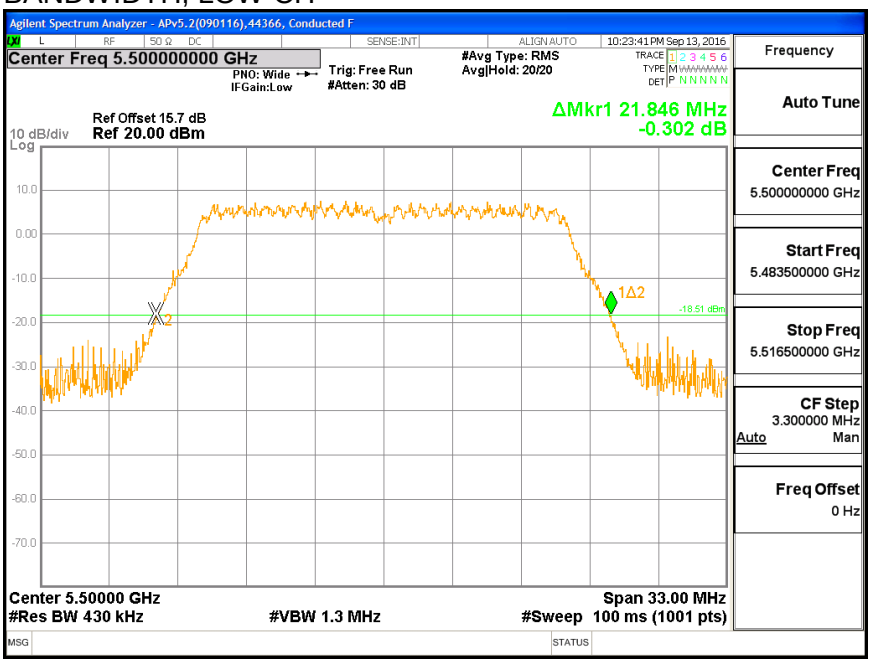
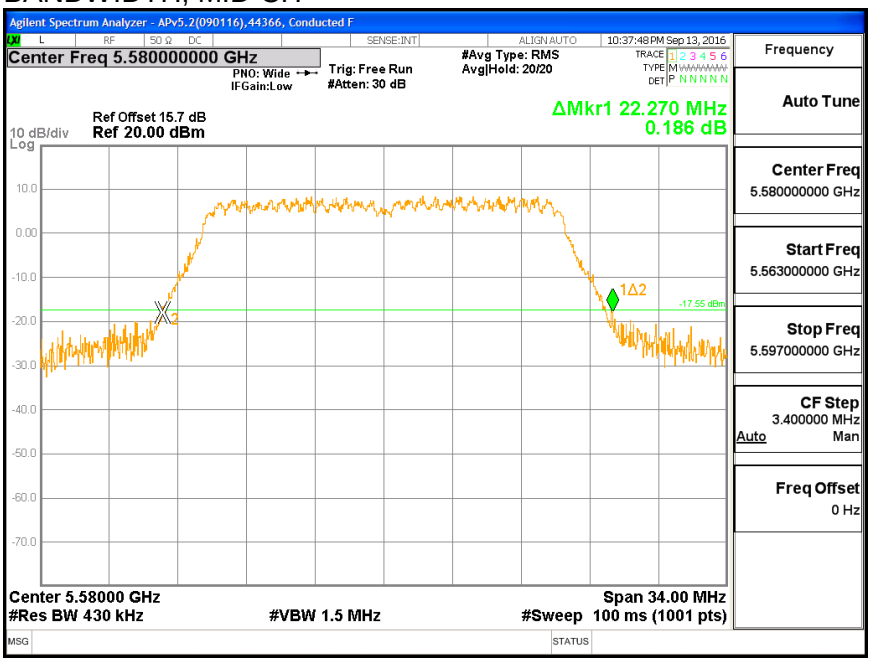
26 dB BANDWIDTH, CHAIN 2

BANDWIDTH, LOW CH



BANDWIDTH, MID CH



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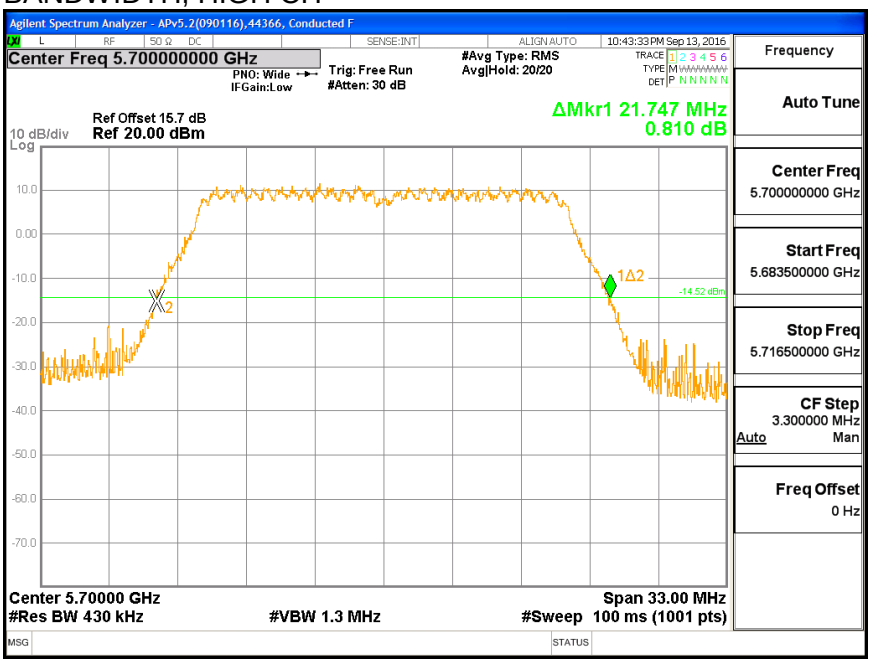
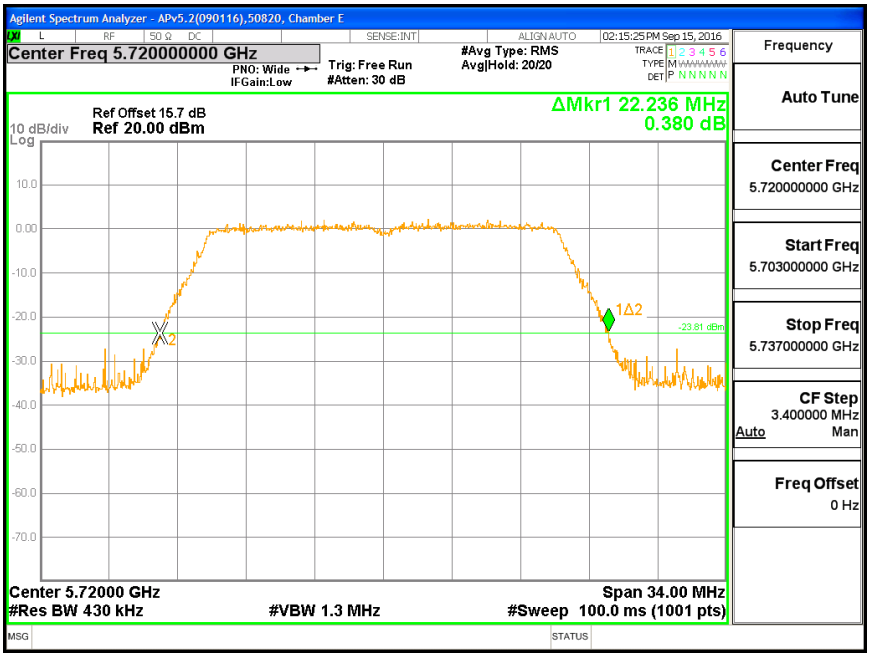
BANDWIDTH, HIGH CH



BANDWIDTH STRADDLE CH 144



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8.43.2. **99% BANDWIDTH**

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)	99% BW Chain 2 (MHz)
Low	5500	17.743	17.824	17.793
Mid	5580	17.791	17.731	17.841
High	5700	17.859	17.914	17.735
144	5720	17.780	17.732	17.708

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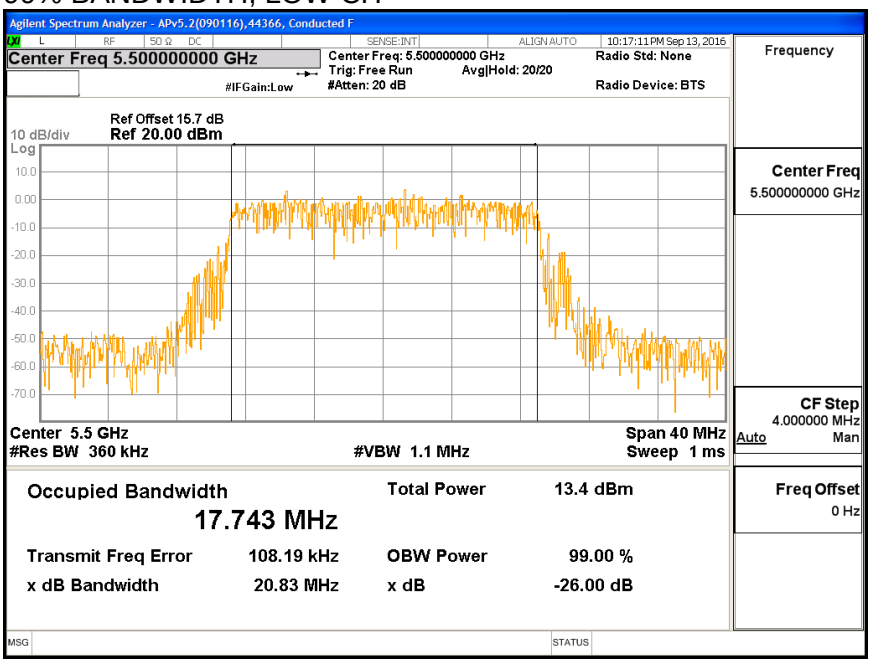
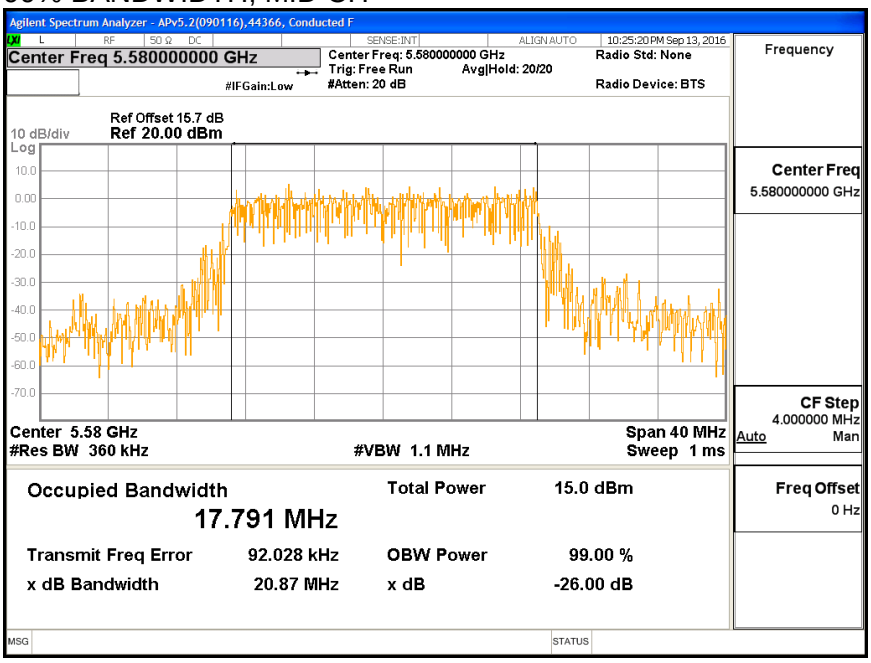
99% BANDWIDTH, CHAIN 0

99% BANDWIDTH, LOW CH



99% BANDWIDTH, MID CH



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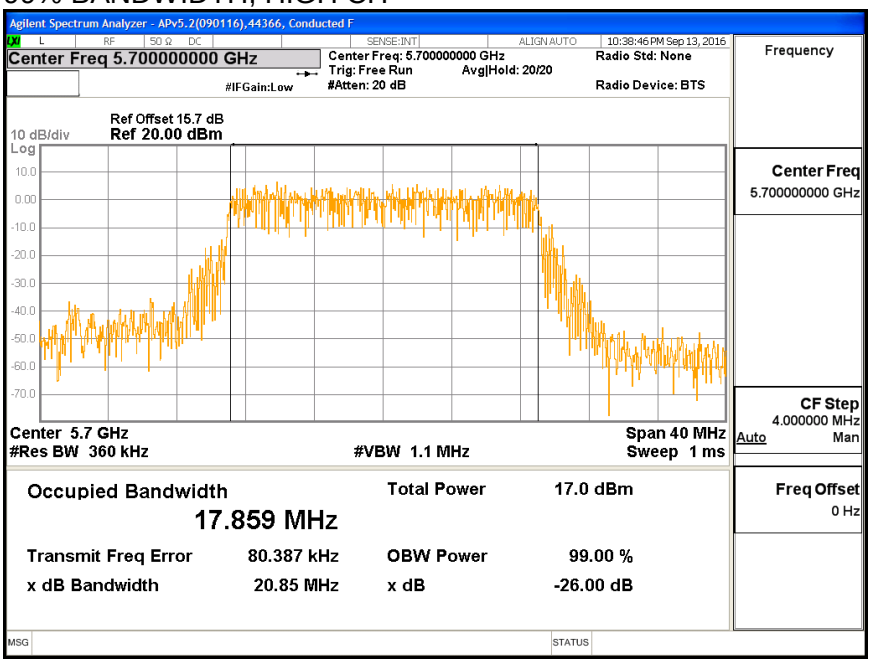
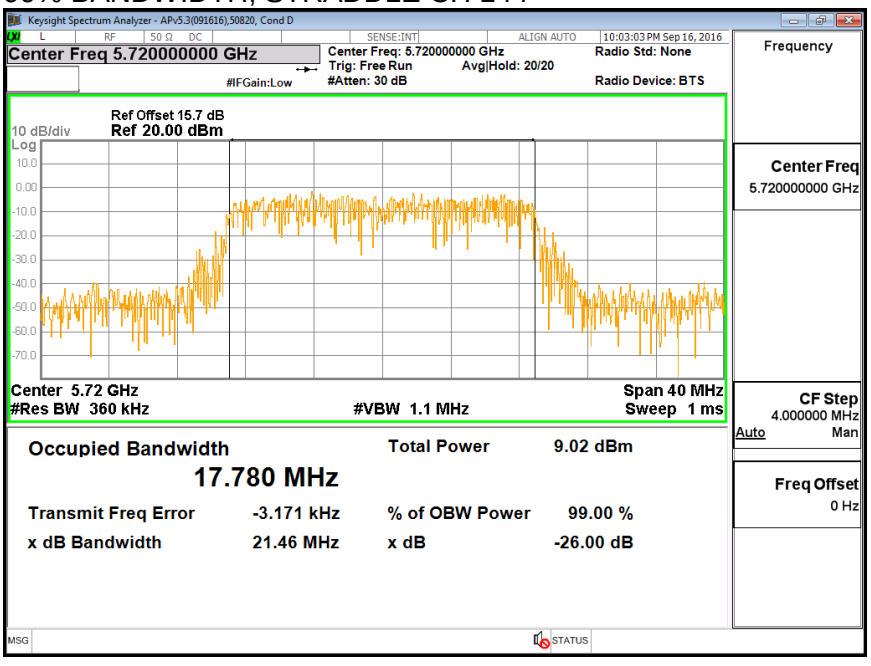
99% BANDWIDTH, HIGH CH



99% BANDWIDTH, STRADDLE CH 144



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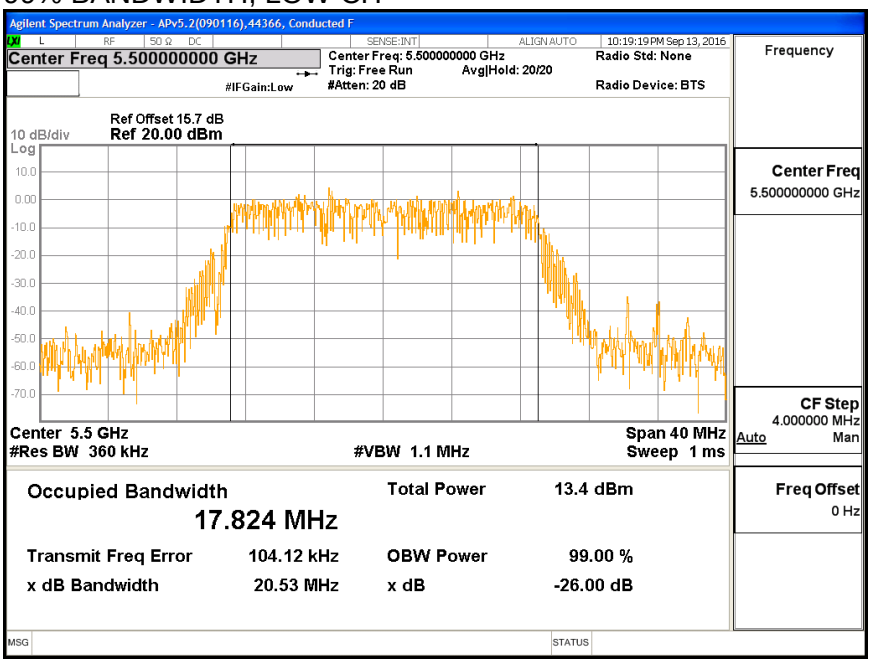
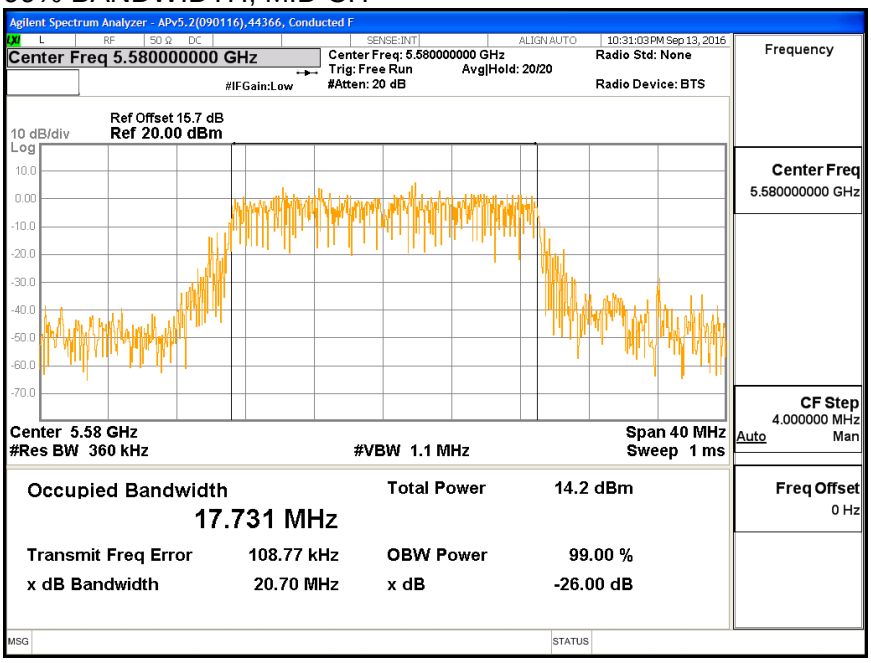
99% BANDWIDTH, CHAIN 1

99% BANDWIDTH, LOW CH



99% BANDWIDTH, MID CH



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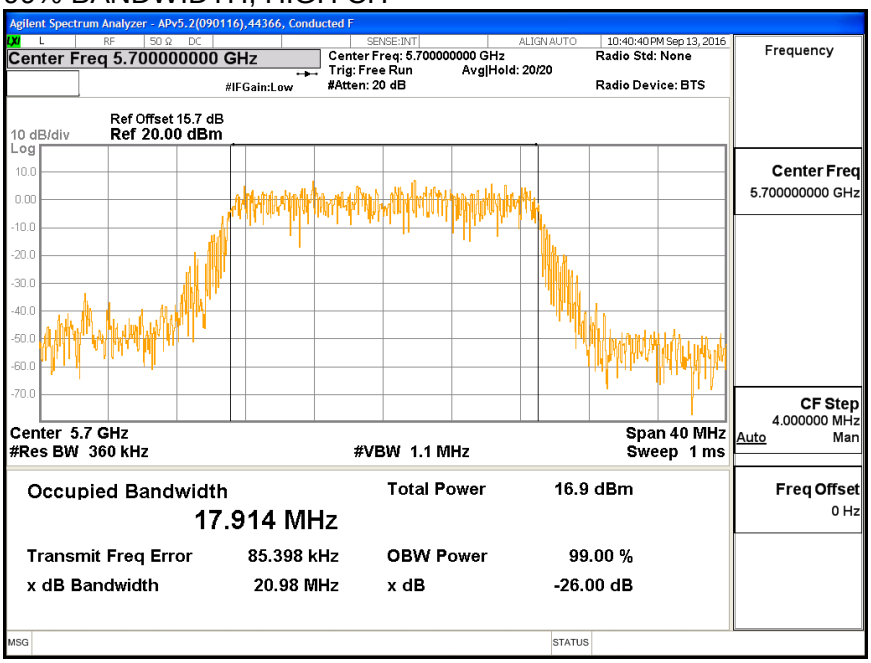
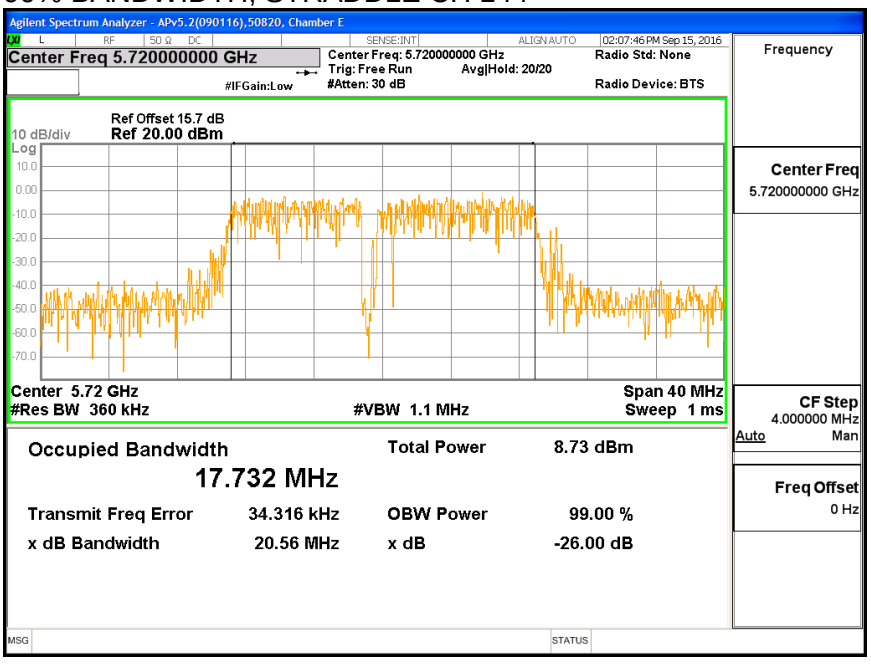
99% BANDWIDTH, HIGH CH



99% BANDWIDTH, STRADDLE CH 144



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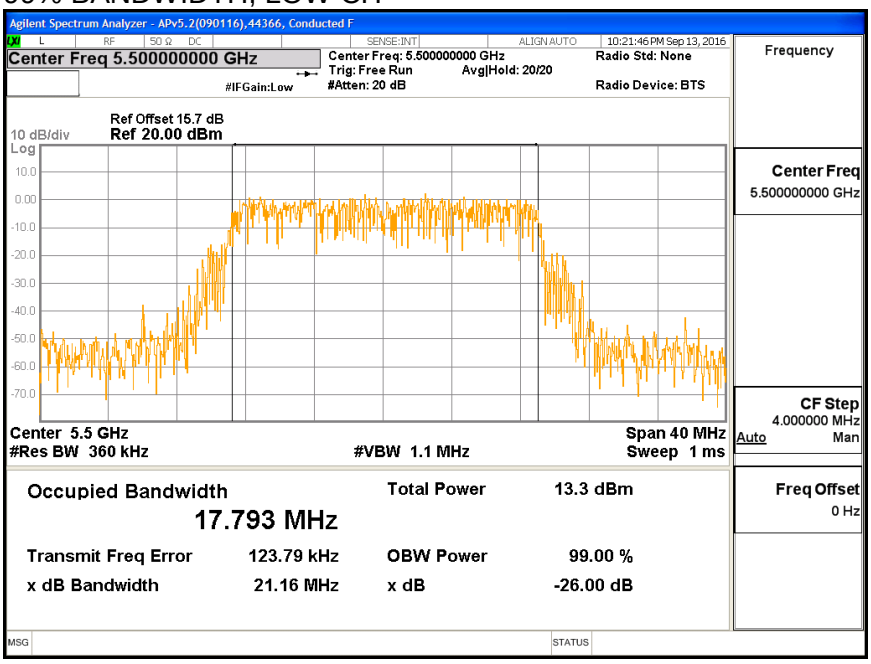
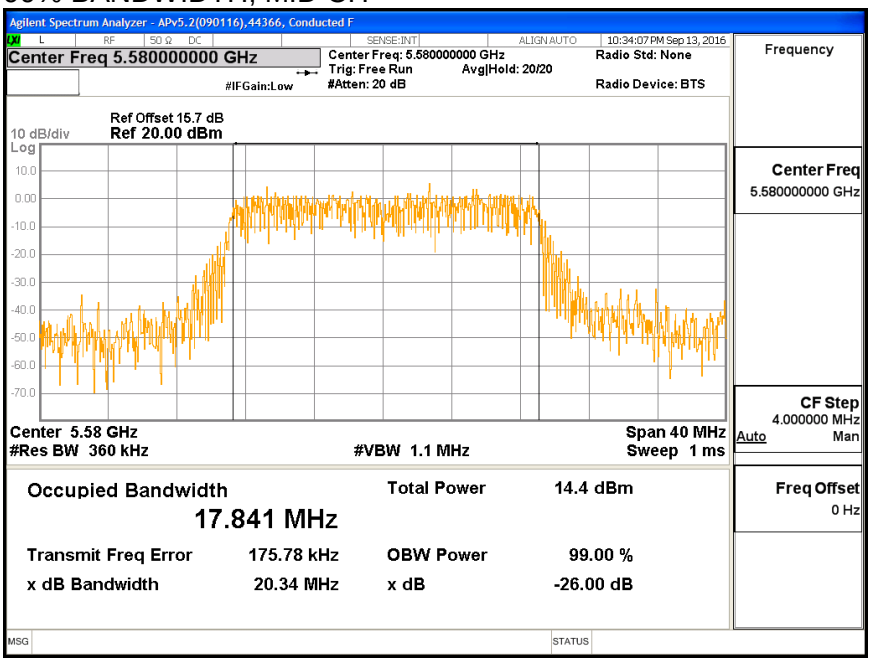
99% BANDWIDTH, CHAIN 2

99% BANDWIDTH, LOW CH



99% BANDWIDTH, MID CH



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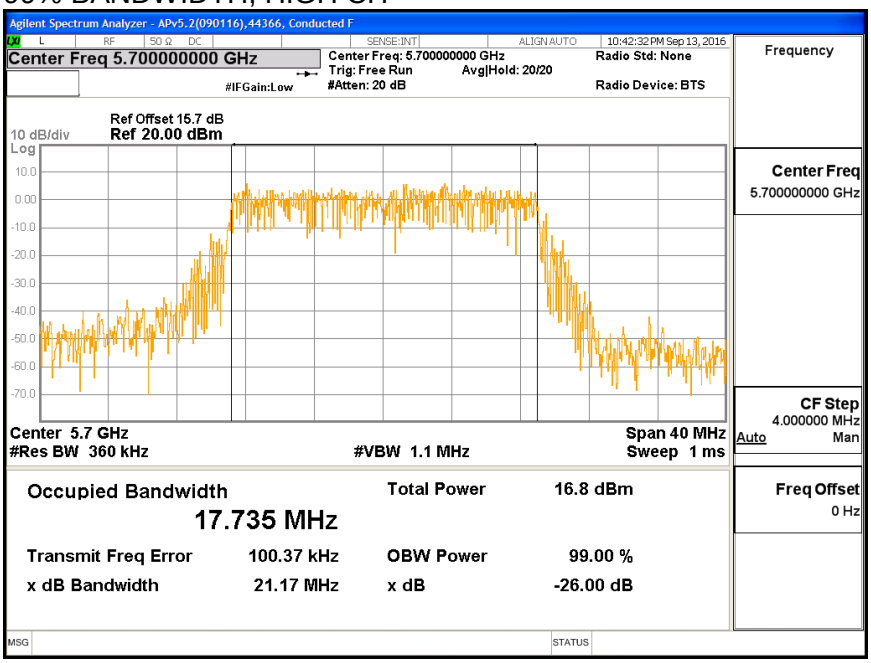
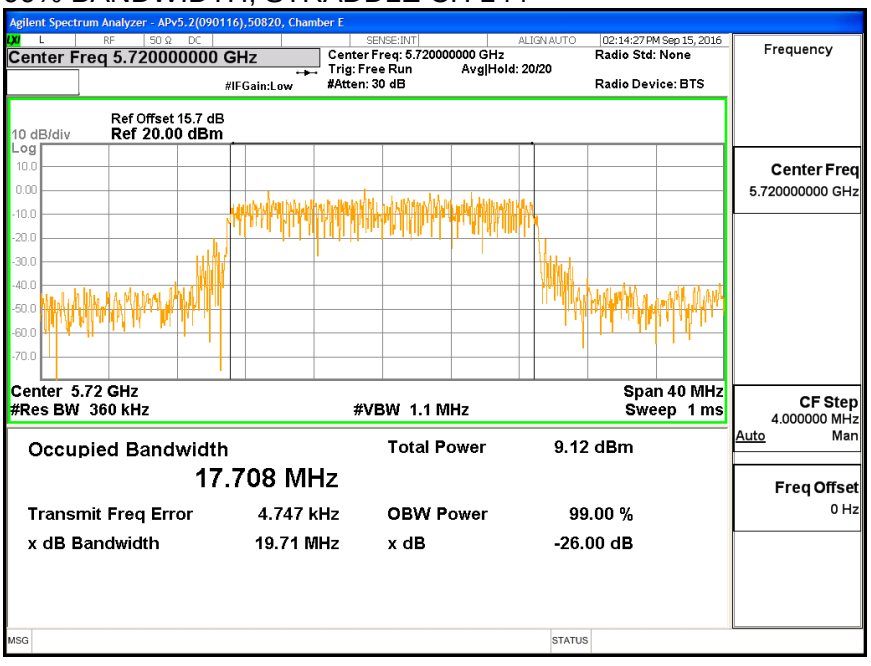
99% BANDWIDTH, HIGH CH



99% BANDWIDTH, STRADDLE CH 144



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8.43.3. **AVERAGE POWER**

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

ID:	44366	**Date:**	9/13/16

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Chain 2 Power (dBm)	Total Power (dBm)
Low	5500	9.40	9.44	9.47	14.21
Mid	5580	9.47	9.50	9.41	14.23
High	5700	9.49	9.47	9.50	14.26
144	5720	9.28	9.45	9.43	14.16

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8.43.4. 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 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 log10B, 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 log10B, 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.

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DIRECTIONAL ANTENNA GAIN

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)	Chain 2 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
4.90	7.40	5.20	10.68

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RESULTS

ID:	44366	Date:	9/13/16

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	21.81	17.743	10.68	10.68	18.81	6.32
Mid	5580	22.07	17.731	10.68	10.68	18.81	6.32
High	5700	21.75	17.735	10.68	10.68	18.81	6.32

Duty Cycle CF (dB)	0.69	Included in Calculations of Corr'd PSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	9.4	9.44	9.47	14.21	18.81	-4.60
Mid	5580	9.47	9.5	9.41	14.23	18.81	-4.58
High	5700	9.49	9.47	9.5	14.26	18.81	-4.55

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5500	-1.941	-1.875	-1.841	3.58	6.32	-2.74
Mid	5580	-1.911	-1.717	-1.934	3.61	6.32	-2.71
High	5700	-1.891	-1.815	-1.785	3.63	6.32	-2.69

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