

RESULTS

Antenna Gain and Limits

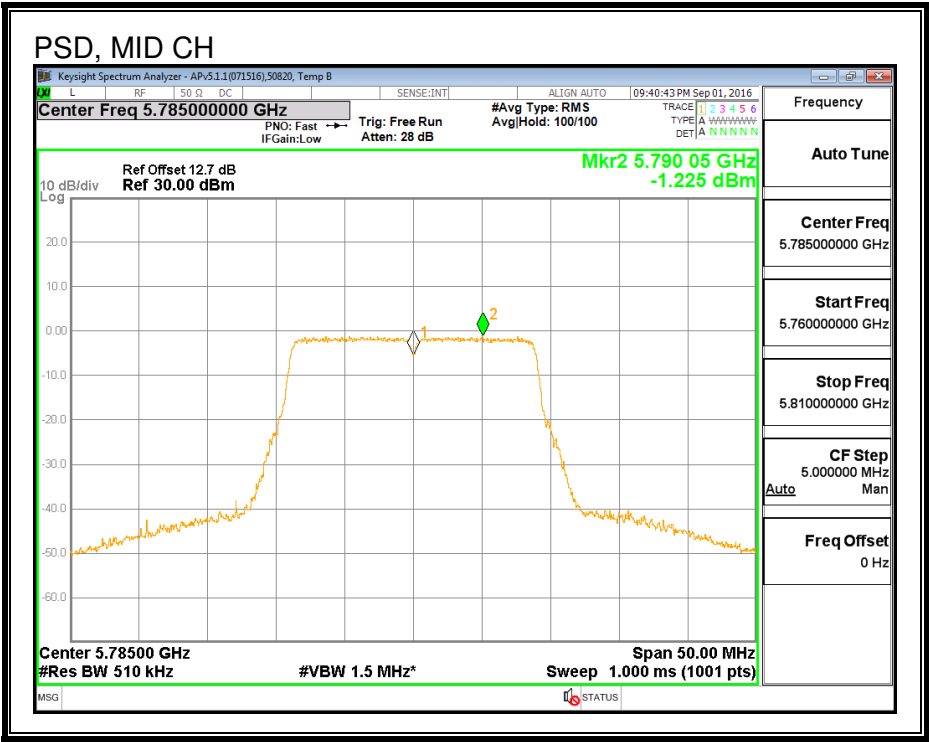
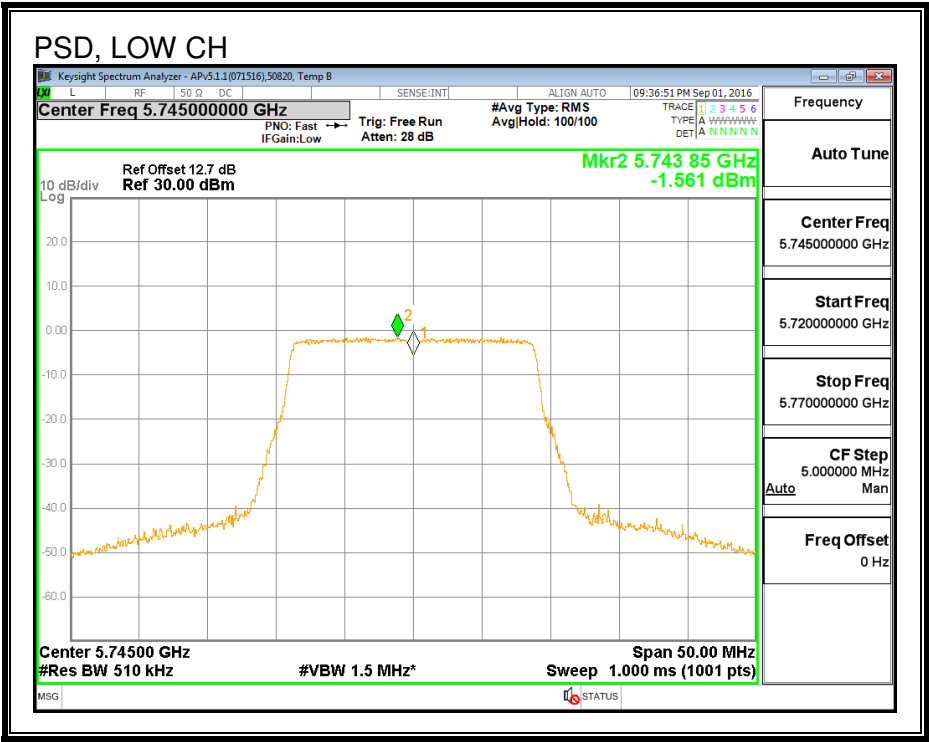
| Channel | Frequency (MHz) | Directional Gain (dBi) | PSD Limit (dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low | 5745 | 8.24 | 27.76 |
| Mid | 5785 | 8.24 | 27.76 |
| High | 5825 | 8.24 | 27.76 |

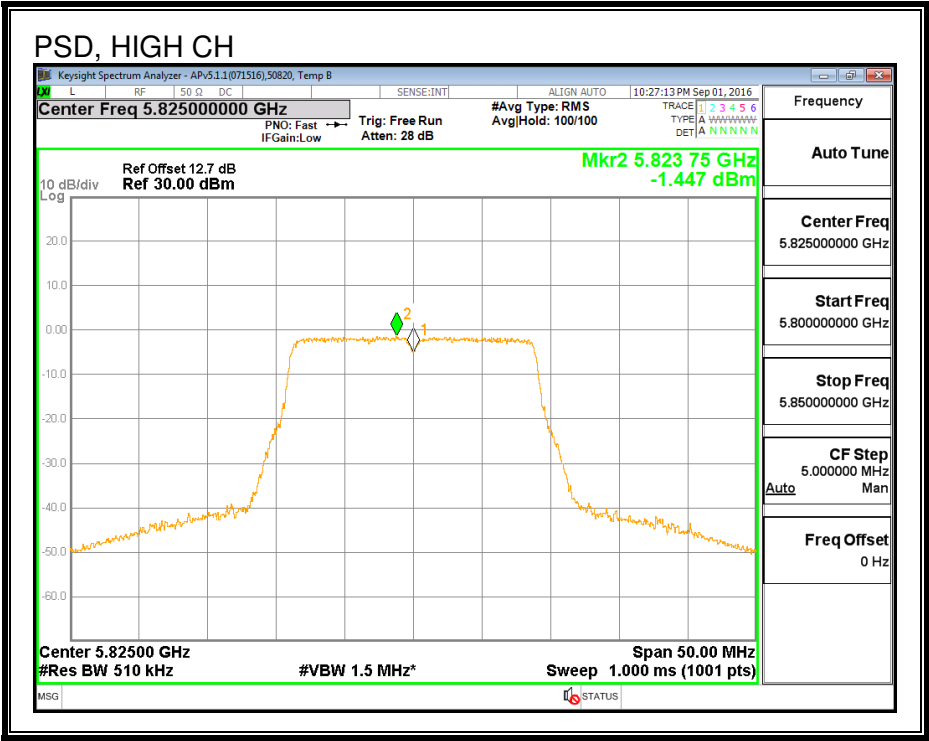
| | | |
|--------------------|------|--|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|--------------------|------|--|

PSD Results

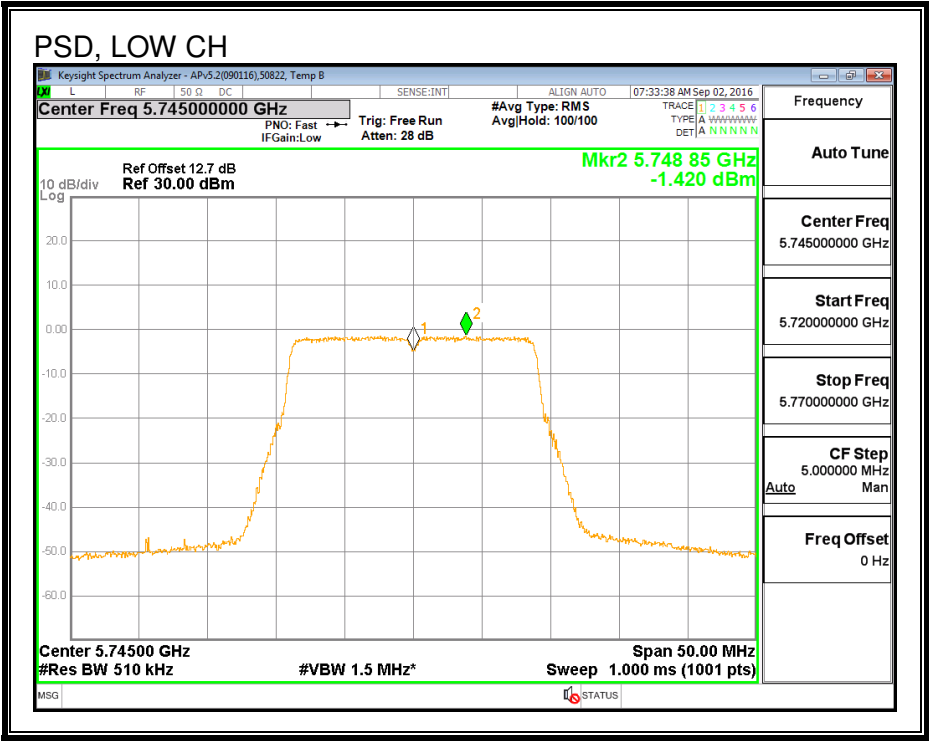
| Channel | Frequency (MHz) | Chain 0 Meas PSD (dBm) | Chain 1 Meas PSD (dBm) | Total Corr'd PSD (dBm) | PSD Limit (dBm) | PSD Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low | 5745 | -1.56 | -1.42 | 1.52 | 27.76 | -26.24 |
| Mid | 5785 | -1.23 | -1.10 | 1.85 | 27.76 | -25.91 |
| High | 5825 | -1.45 | -1.45 | 1.56 | 27.76 | -26.20 |

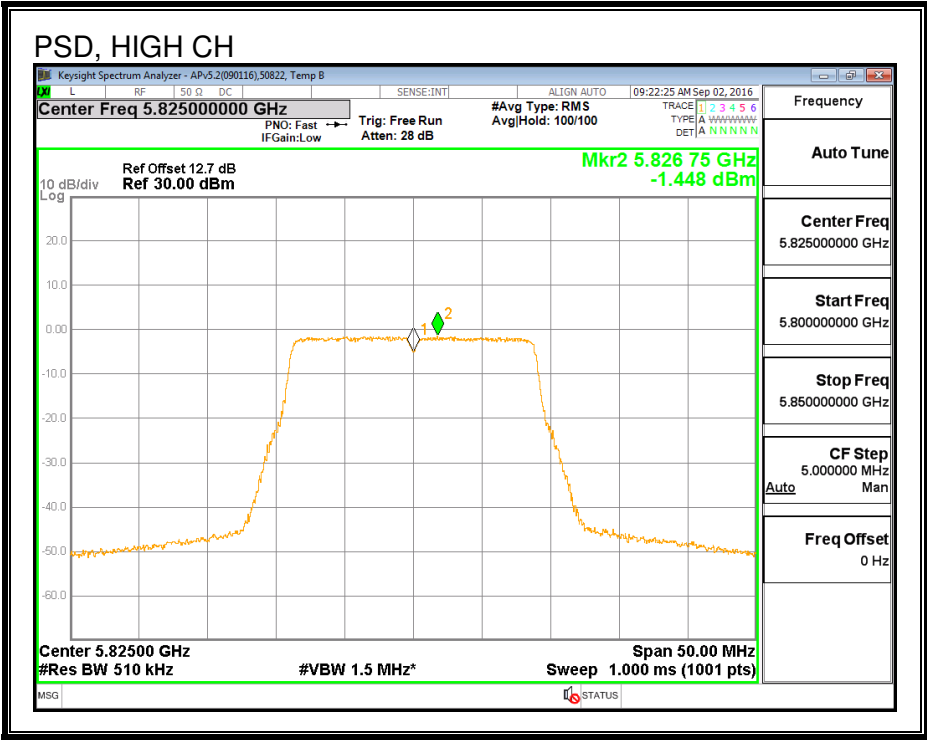
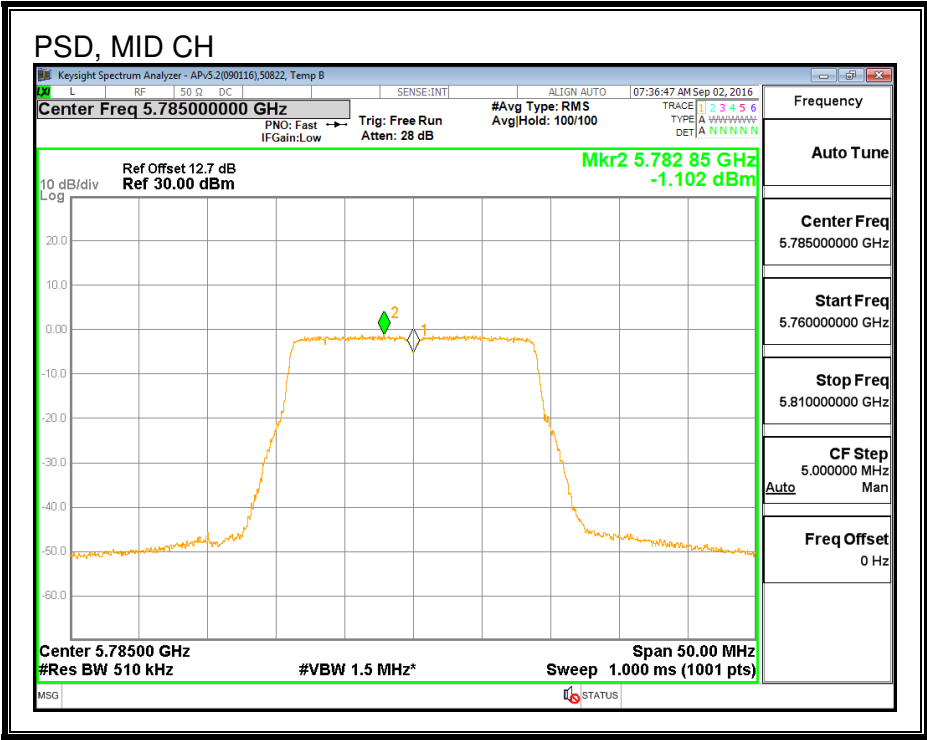
PSD, CHAIN 0





PSD, CHAIN 1





8.5. 802.11n HT20 2Tx (CHAIN 0 + CHAIN 2) CDD MODE IN THE 5.8 GHz BAND

8.5.1. 6 dB BANDWIDTH

LIMITS

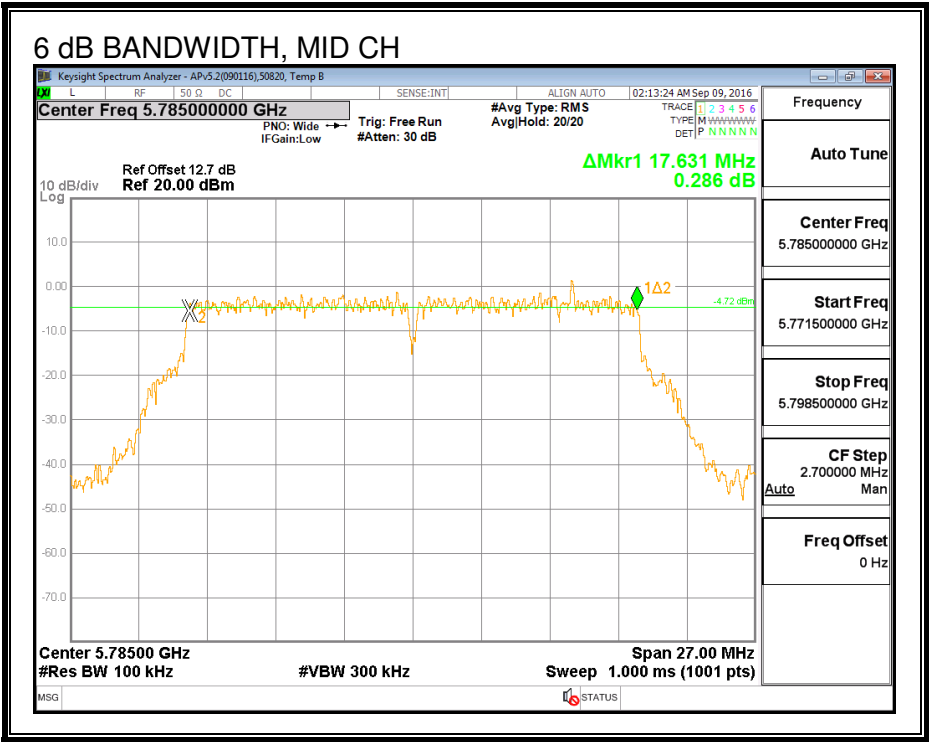
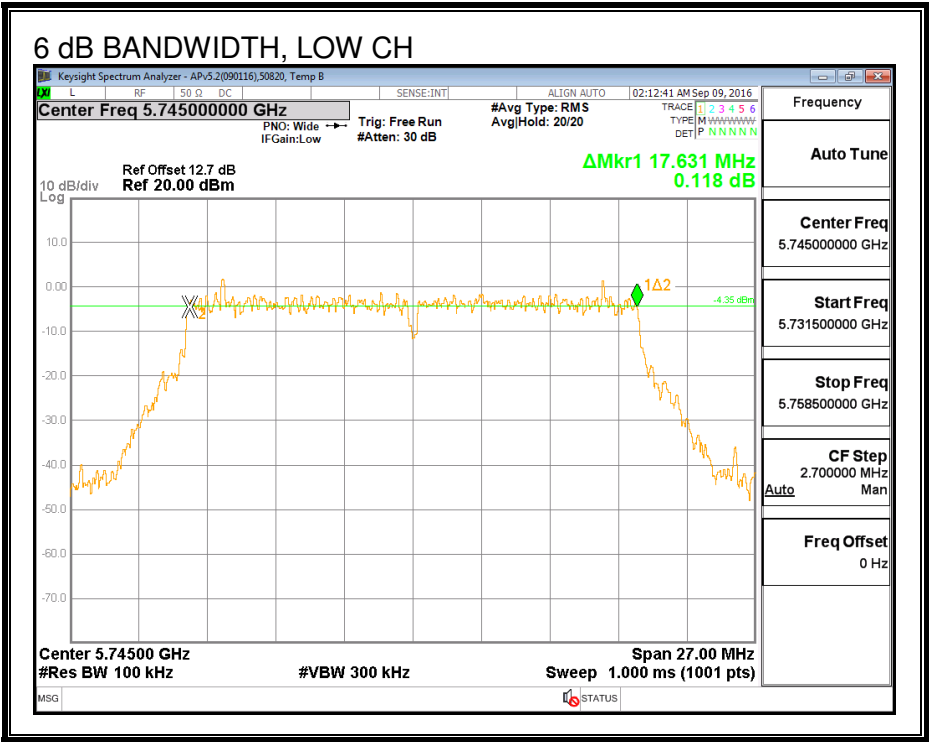
FCC §15.407 (e)

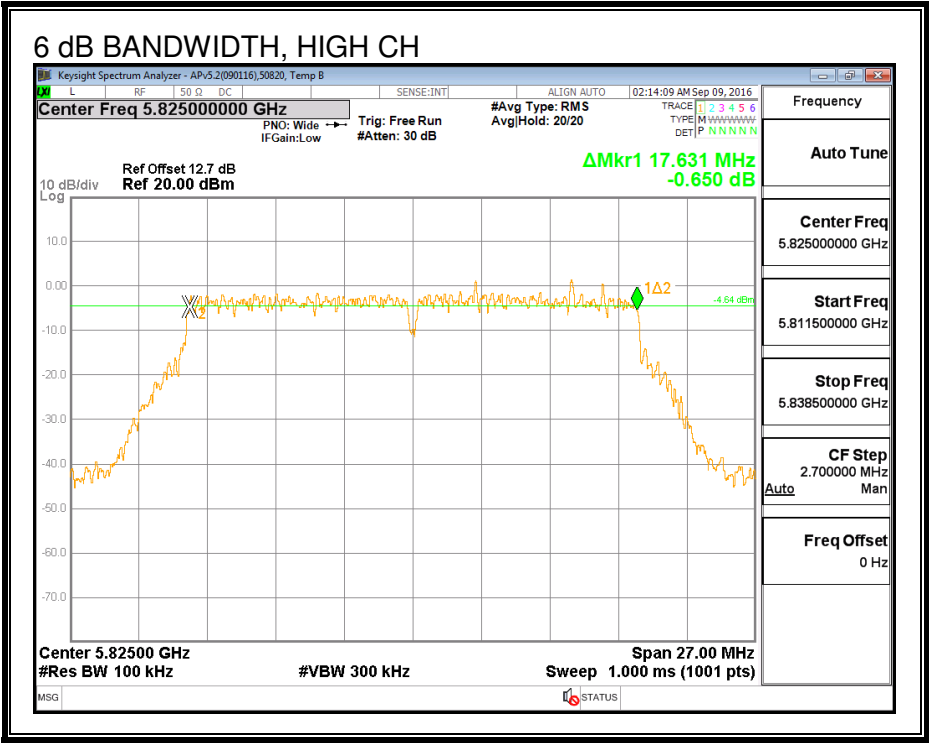
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

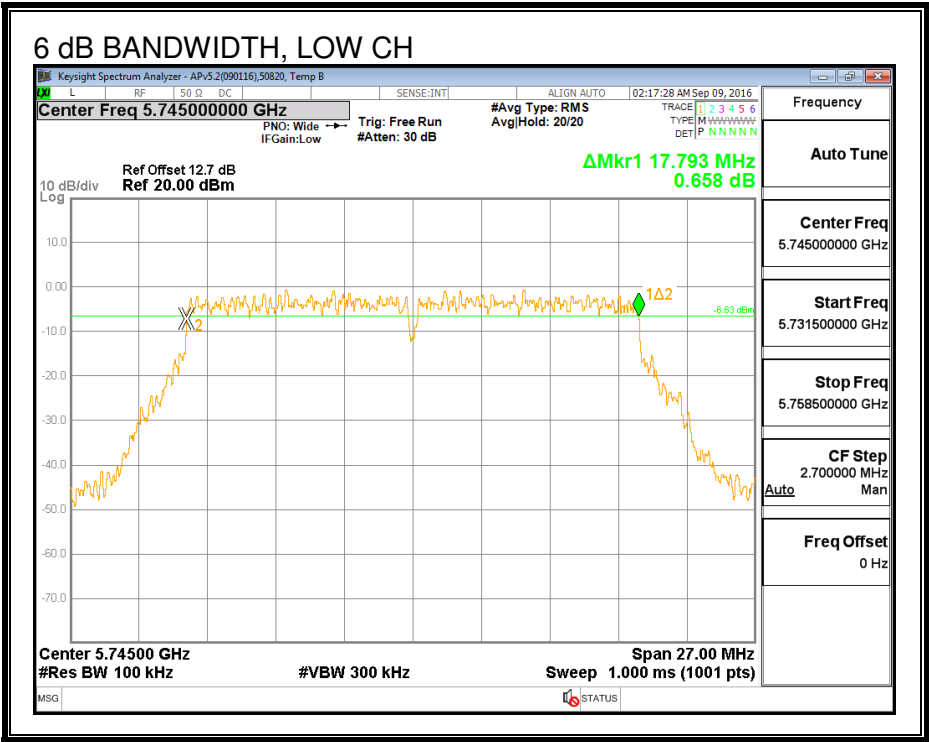
| Channel | Frequency (MHz) | 6 dB BW Chain 0 (MHz) | 6 dB BW Chain 2 (MHz) | Minimum Limit (MHz) |
|---------|--------------------|-----------------------------|-----------------------------|---------------------------|
| Low | 5745 | 17.631 | 17.793 | 0.5 |
| Mid | 5785 | 17.631 | 17.793 | 0.5 |
| High | 5825 | 17.631 | 17.793 | 0.5 |

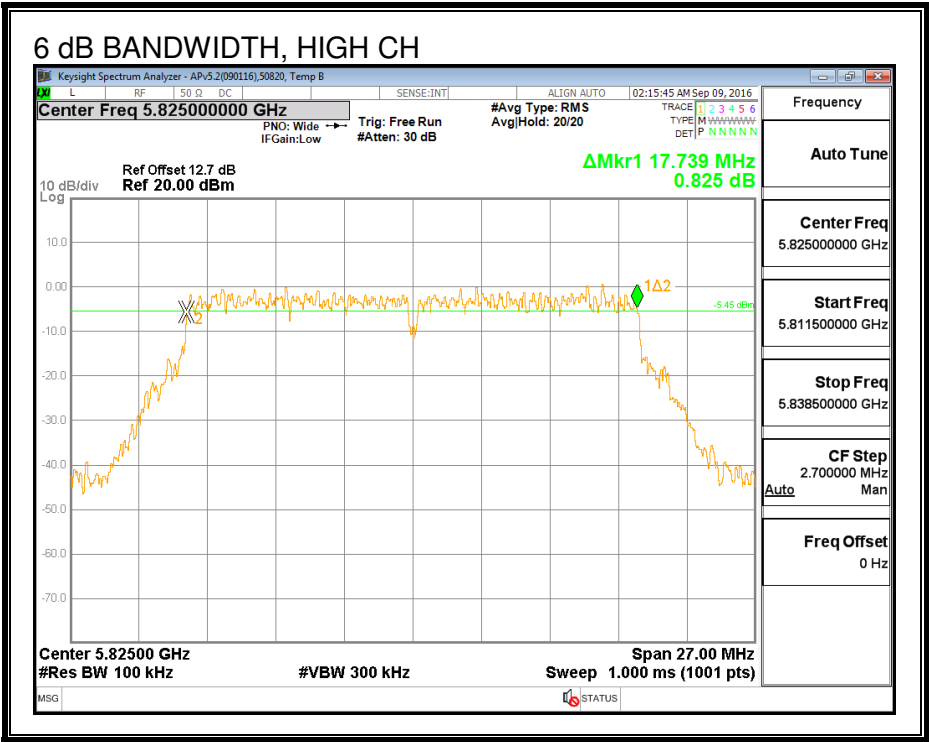
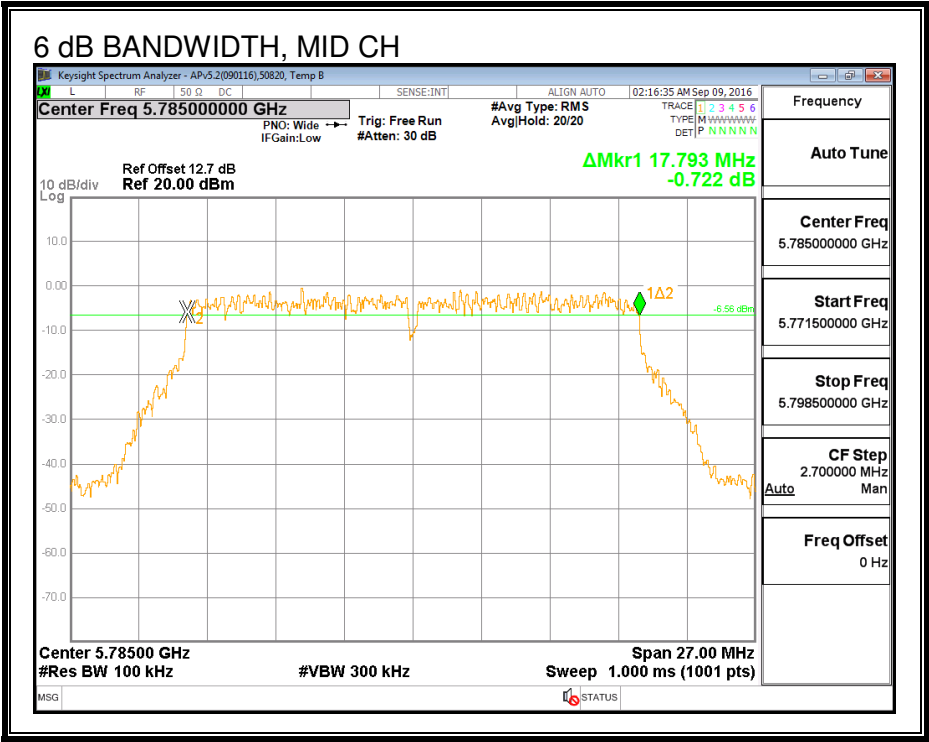
6 dB BANDWIDTH, CHAIN 0





6 dB BANDWIDTH, CHAIN 2





8.5.2. 26 dB BANDWIDTH

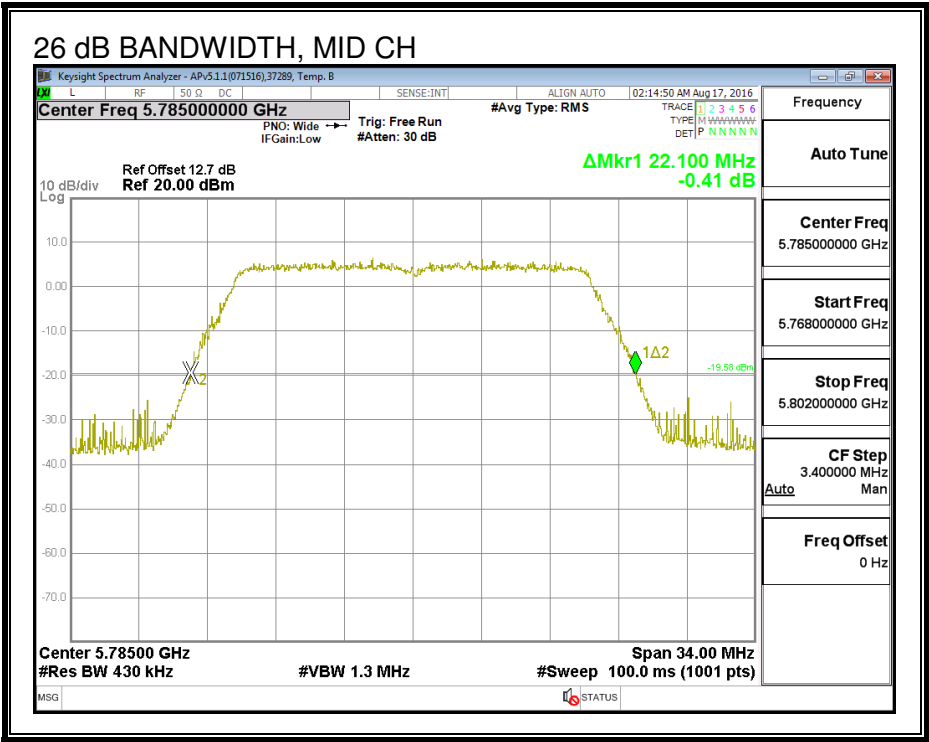
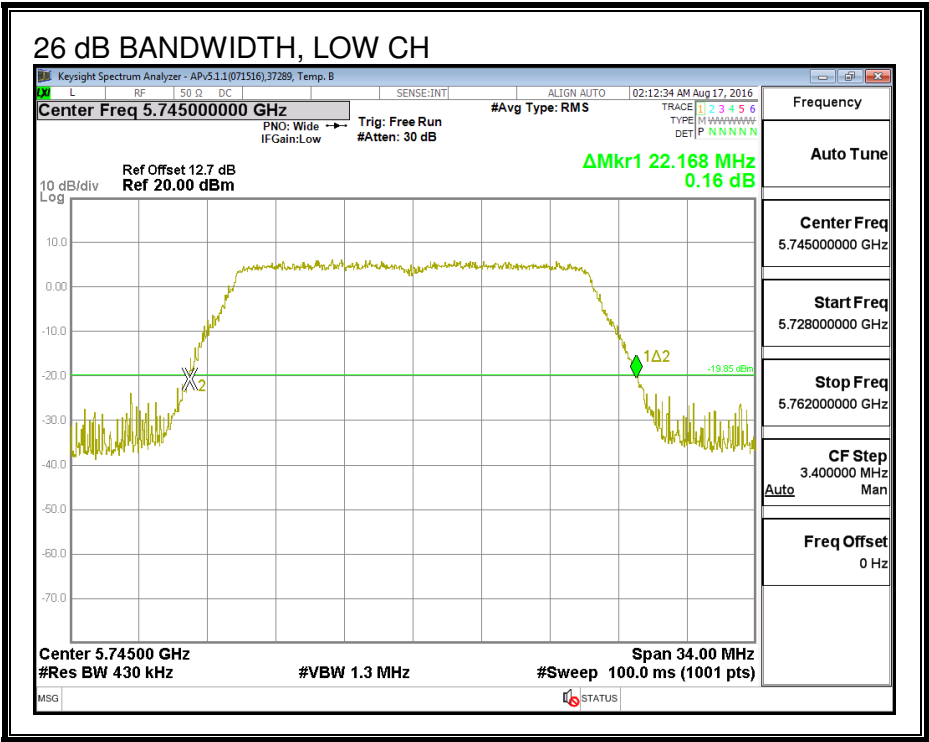
LIMITS

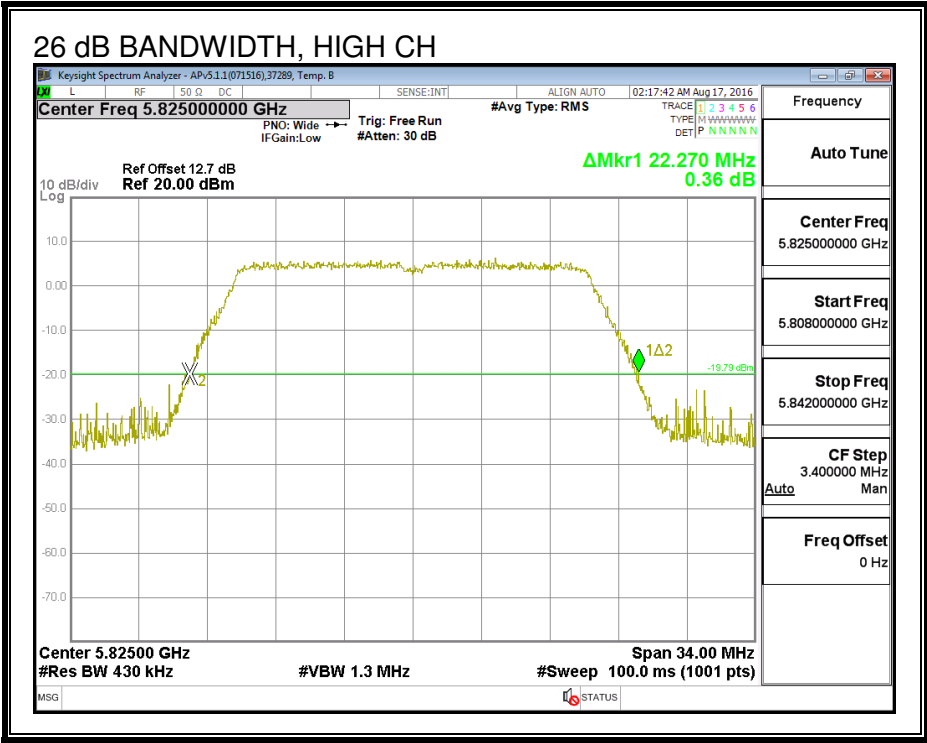
None, for reporting purposes only.

RESULTS

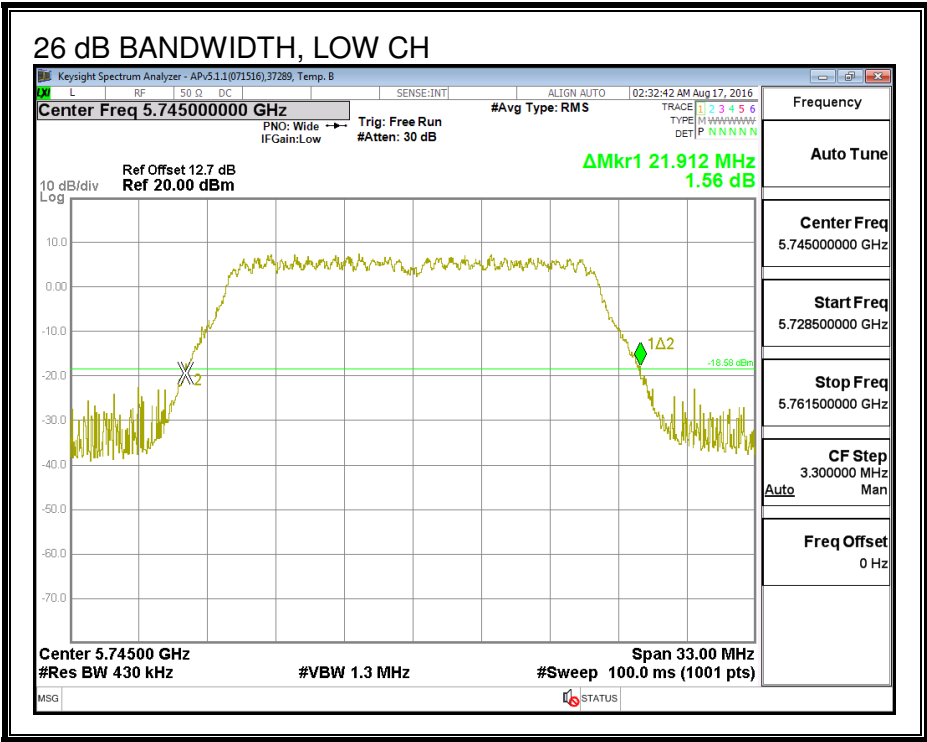
| Channel | Frequency (MHz) | 26 dB BW Chain 0 (MHz) | 26 dB BW Chain 2 (MHz) |
|---------|--------------------|------------------------------|------------------------------|
| Low | 5745 | 22.168 | 21.912 |
| Mid | 5785 | 22.100 | 21.879 |
| High | 5825 | 22.270 | 21.780 |

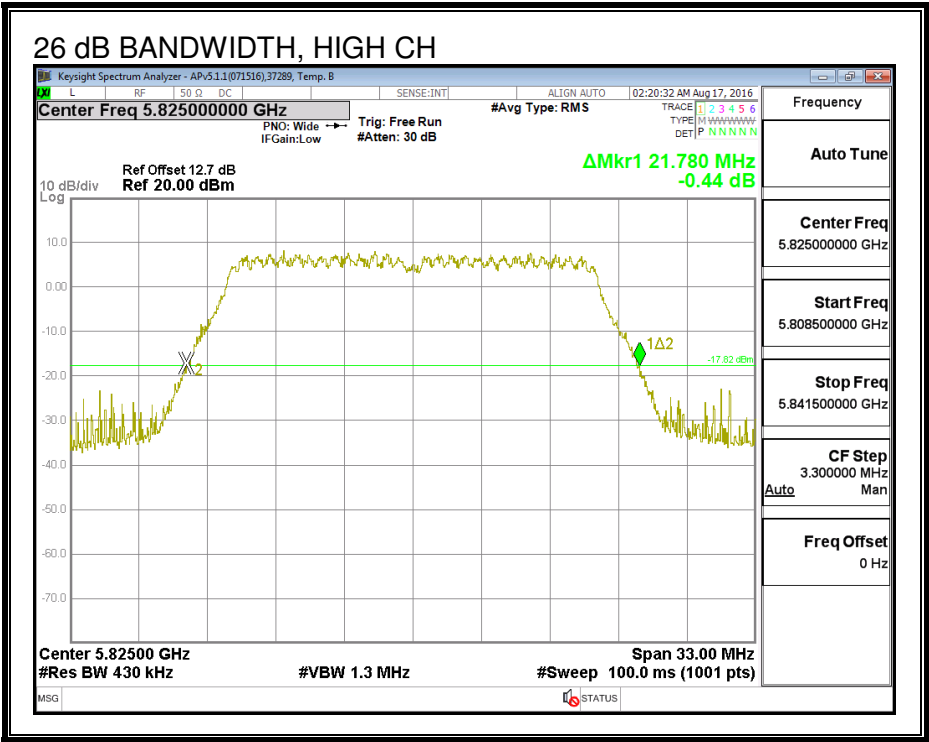
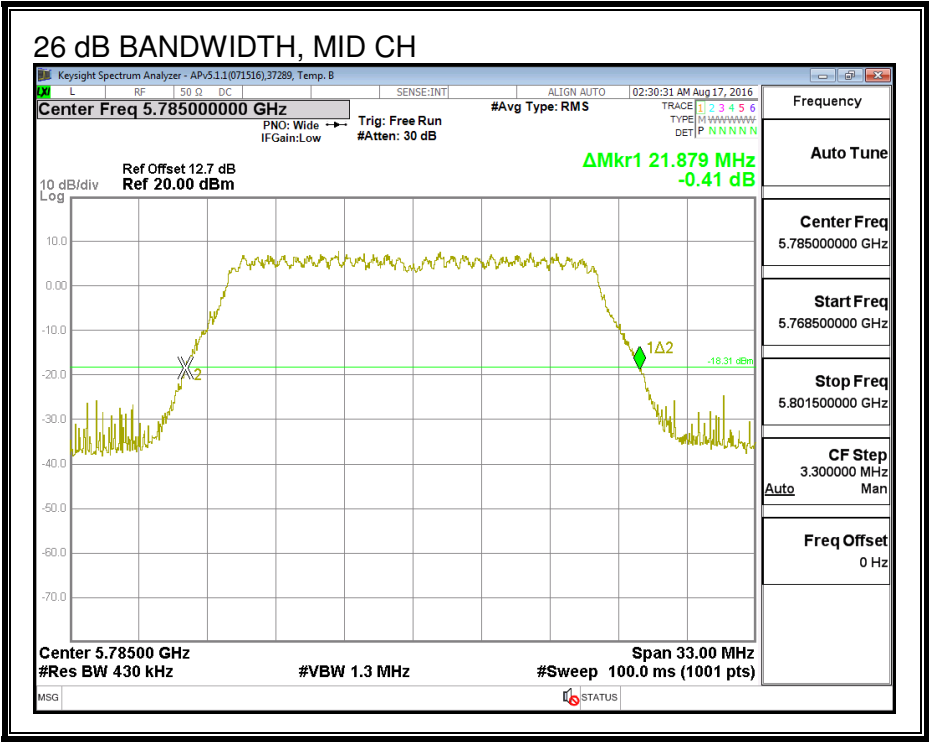
26 dB BANDWIDTH, CHAIN 0





26 dB BANDWIDTH, CHAIN 2





8.5.3. 99% BANDWIDTH

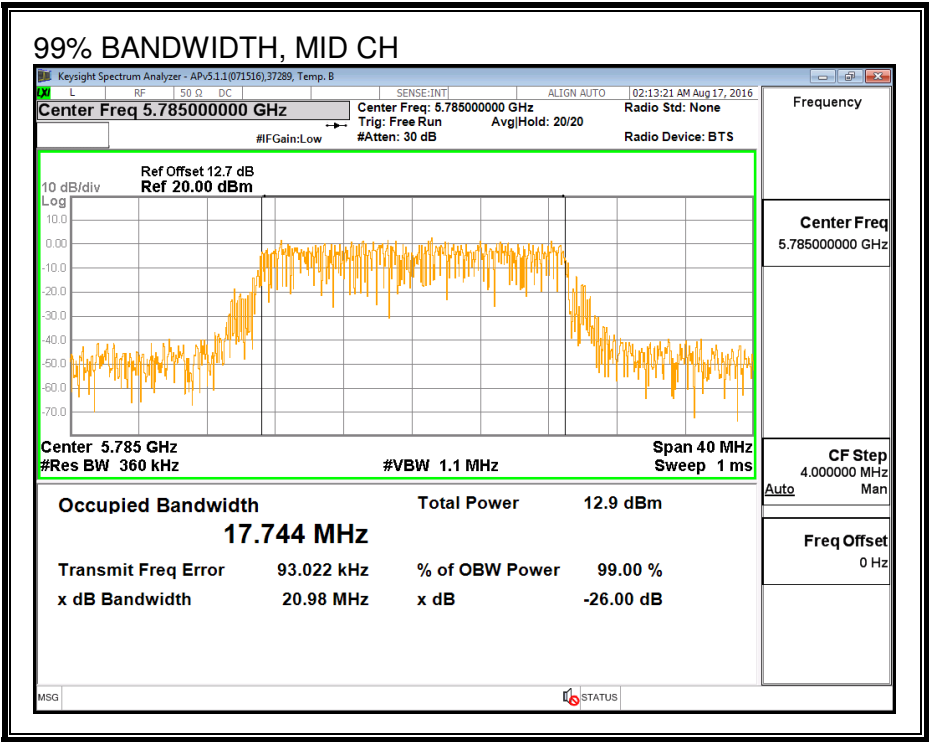
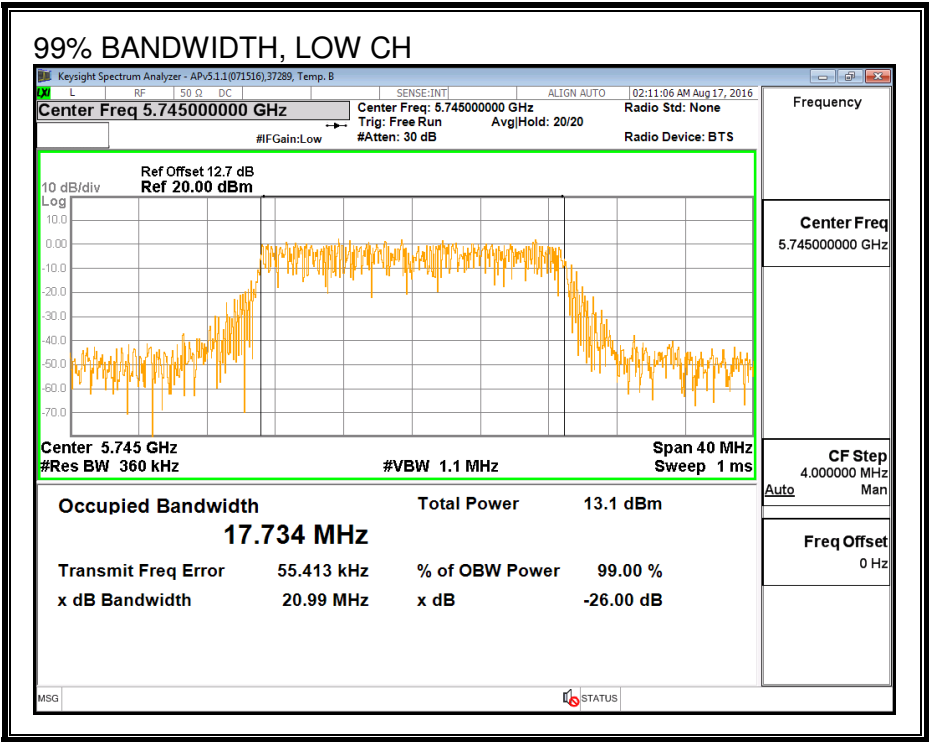
LIMITS

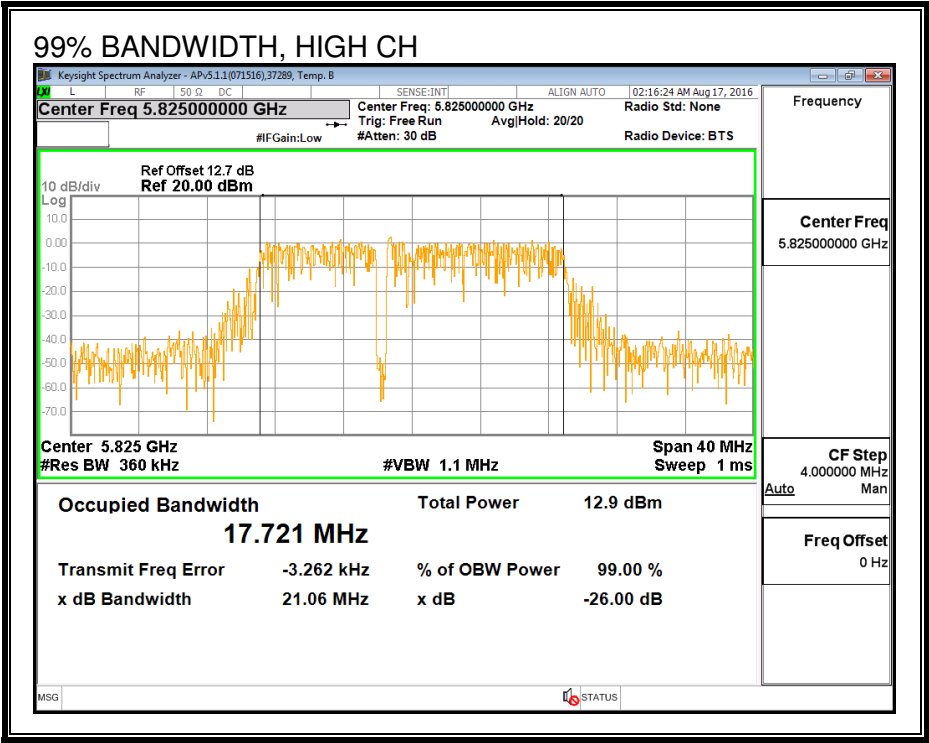
None; for reporting purposes only.

RESULTS

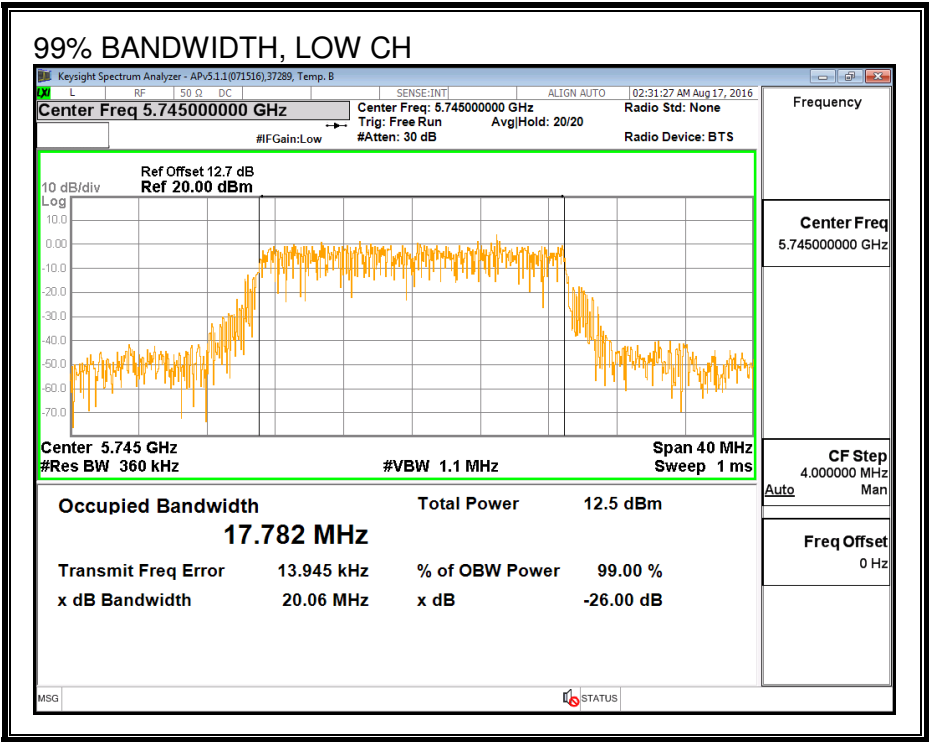
| Channel | Frequency (MHz) | 99% BW Chain 0 (MHz) | 99% BW Chain 2 (MHz) |
|---------|--------------------|----------------------------|----------------------------|
| Low | 5745 | 17.734 | 17.782 |
| Mid | 5785 | 17.744 | 17.724 |
| High | 5825 | 17.721 | 17.732 |

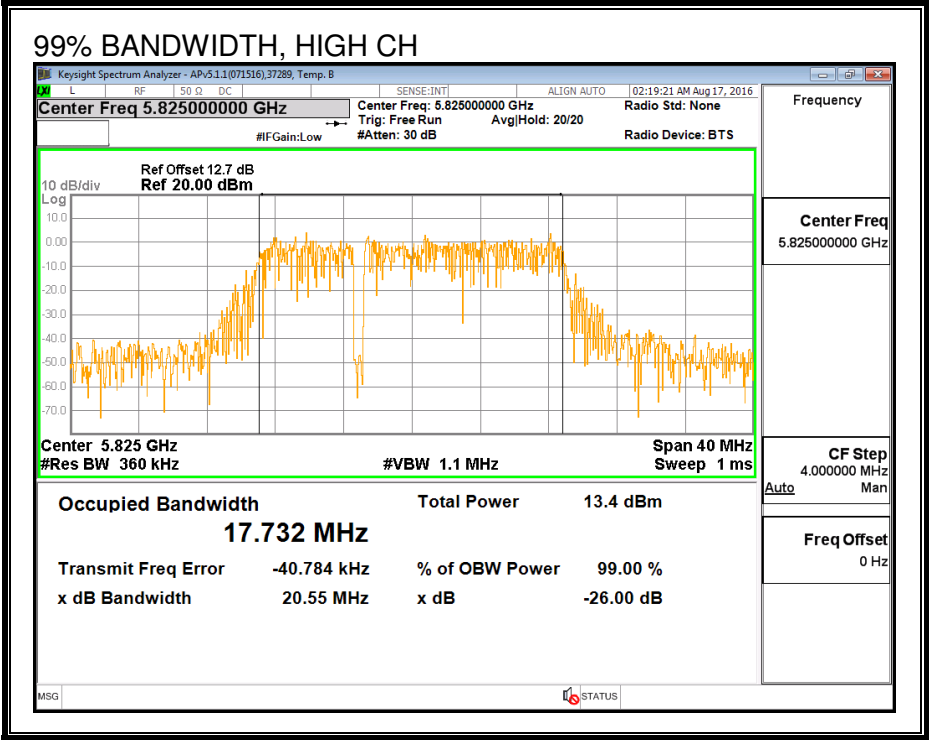
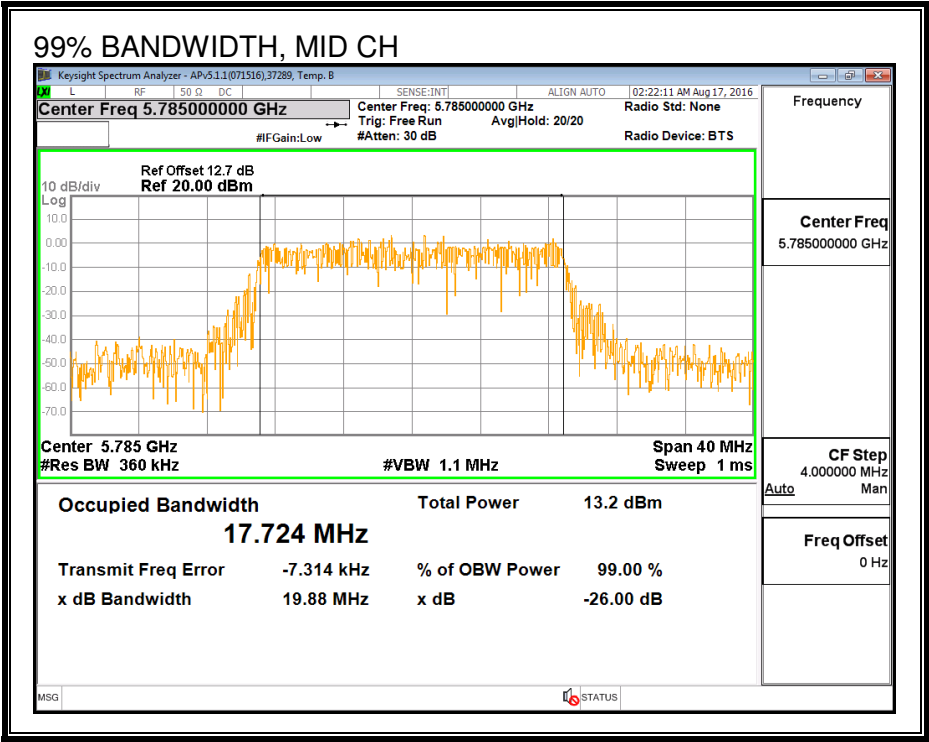
99% BANDWIDTH, CHAIN 0





99% BANDWIDTH, CHAIN 2





8.5.4. AVERAGE POWER (FCC/IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

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

| Channel | Frequency (MHz) | Chain 0 Power (dBm) | Chain 2 Power (dBm) | Total Power (dBm) |
|---------|--------------------|---------------------------|---------------------------|-------------------------|
| Low | 5745 | 12.63 | 12.69 | 15.67 |
| Mid | 5785 | 12.73 | 12.65 | 15.70 |
| High | 5825 | 12.63 | 12.62 | 15.64 |

8.5.5. OUTPUT POWER (FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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) |
|-------------------------------------|-------------------------------------|---|
| 4.00 | 4.70 | 4.36 |

RESULTS

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

Antenna Gain and Limit

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5745 | 4.36 | 30.00 |
| Mid | 5785 | 4.36 | 30.00 |
| High | 5825 | 4.36 | 30.00 |

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 | 5745 | 12.63 | 12.69 | 15.67 | 30.00 | -14.33 |
| Mid | 5785 | 12.73 | 12.65 | 15.70 | 30.00 | -14.30 |
| High | 5825 | 12.63 | 12.62 | 15.64 | 30.00 | -14.36 |

8.5.6. PSD (FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

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 2 Antenna Gain (dBi) | Correlated Chains Directional Gain (dBi) |
|-------------------------------------|-------------------------------------|---|
| 4.00 | 4.70 | 7.37 |

RESULTS

Antenna Gain and Limits

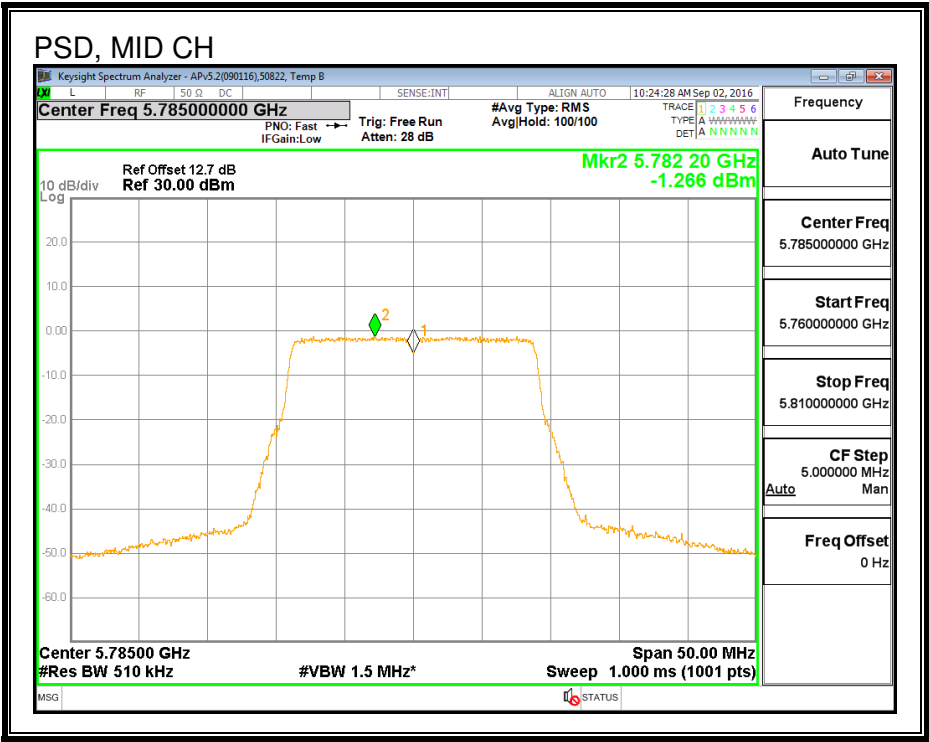
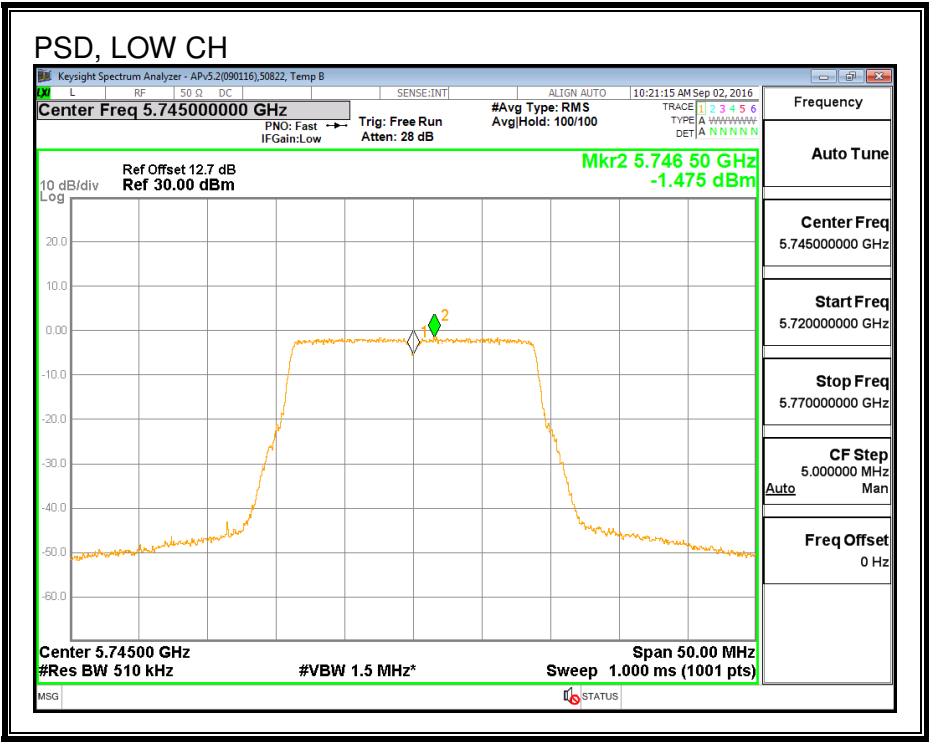
| Channel | Frequency (MHz) | Directional Gain (dBi) | PSD Limit (dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low | 5745 | 7.37 | 28.63 |
| Mid | 5785 | 7.37 | 28.63 |
| High | 5825 | 7.37 | 28.63 |

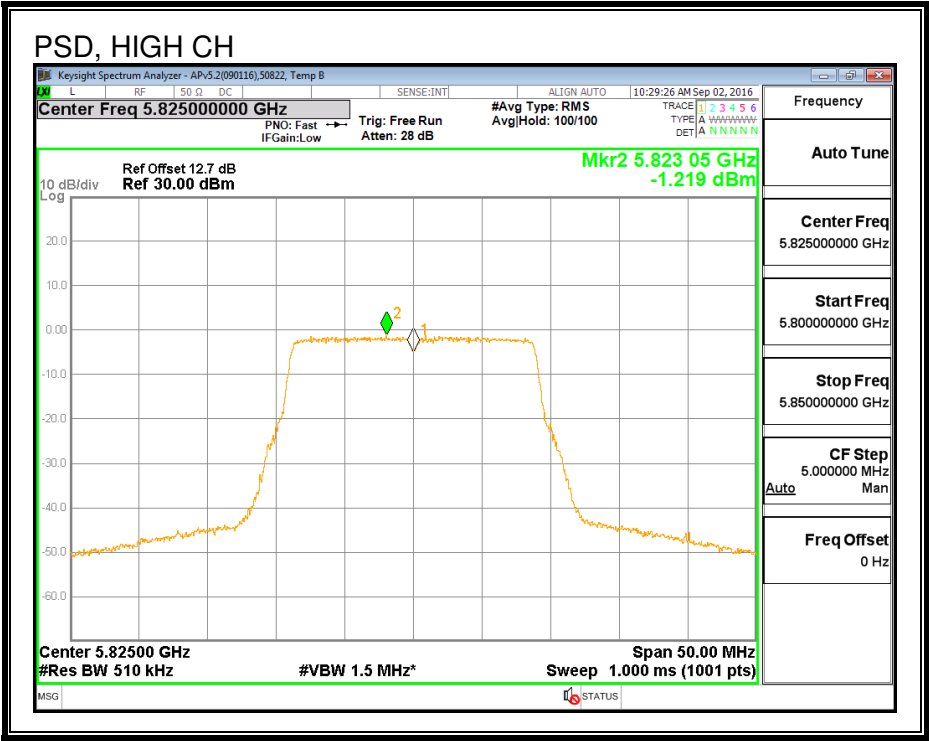
| | | |
|--------------------|------|--|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|--------------------|------|--|

PSD Results

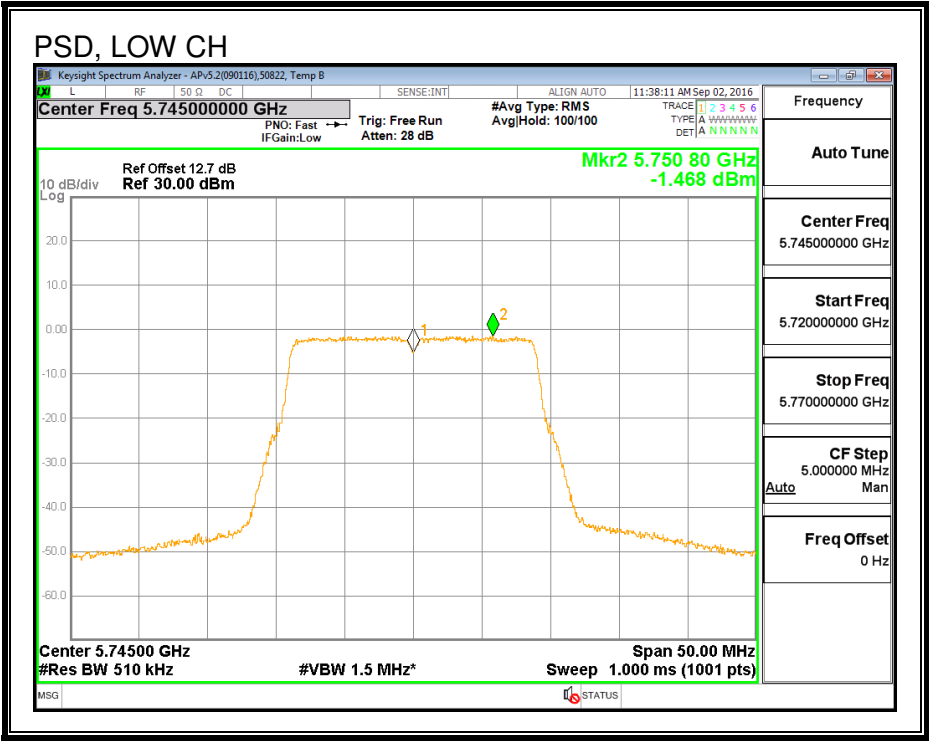
| Channel | Frequency (MHz) | Chain 0 Meas PSD (dBm) | Chain 2 Meas PSD (dBm) | Total Corr'd PSD (dBm) | PSD Limit (dBm) | PSD Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low | 5745 | -1.48 | -1.47 | 1.54 | 28.63 | -27.09 |
| Mid | 5785 | -1.27 | -1.22 | 1.77 | 28.63 | -26.86 |
| High | 5825 | -1.22 | -1.41 | 1.70 | 28.63 | -26.93 |

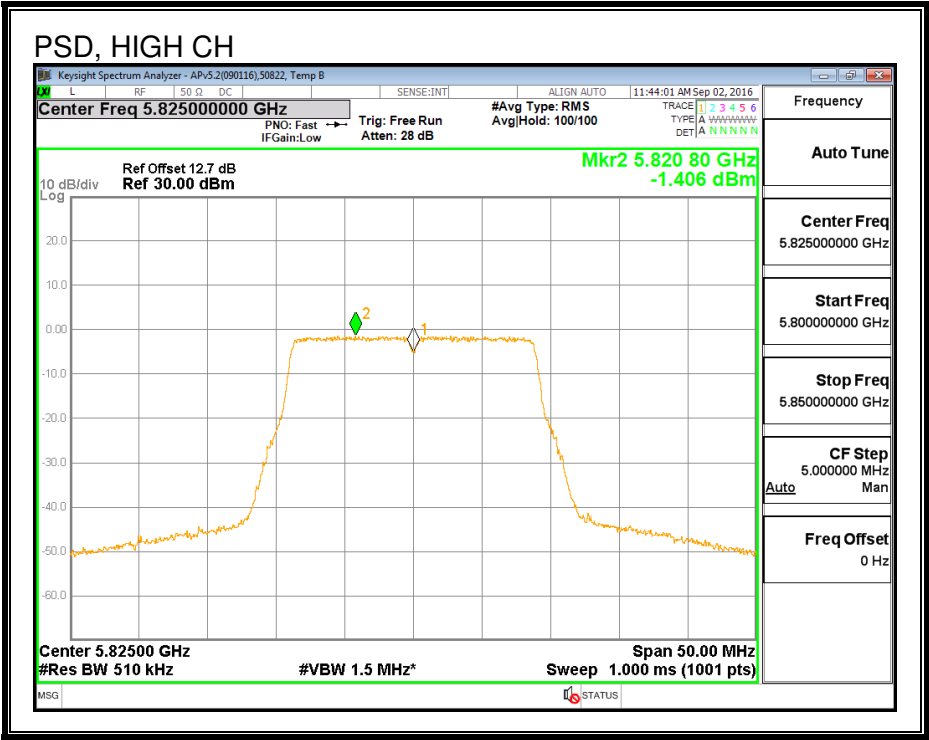
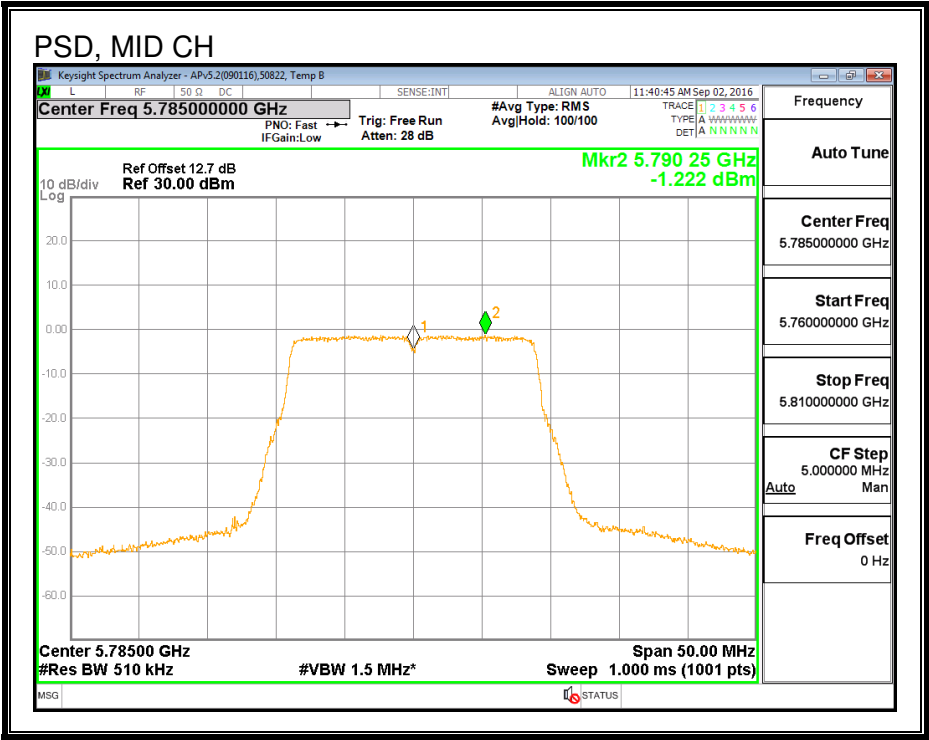
PSD, CHAIN 0





PSD, CHAIN 2





8.6. 802.11n HT20 2Tx (CHAIN 1 + CHAIN 2) CDD MODE IN THE 5.8 GHz BAND

8.6.1. 6 dB BANDWIDTH

LIMITS

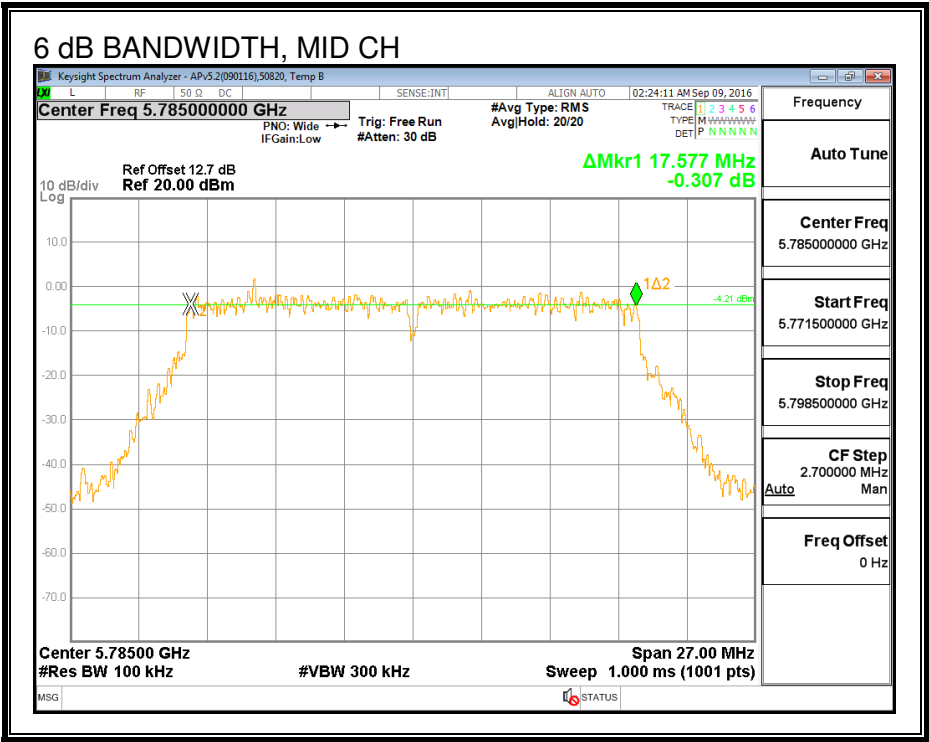
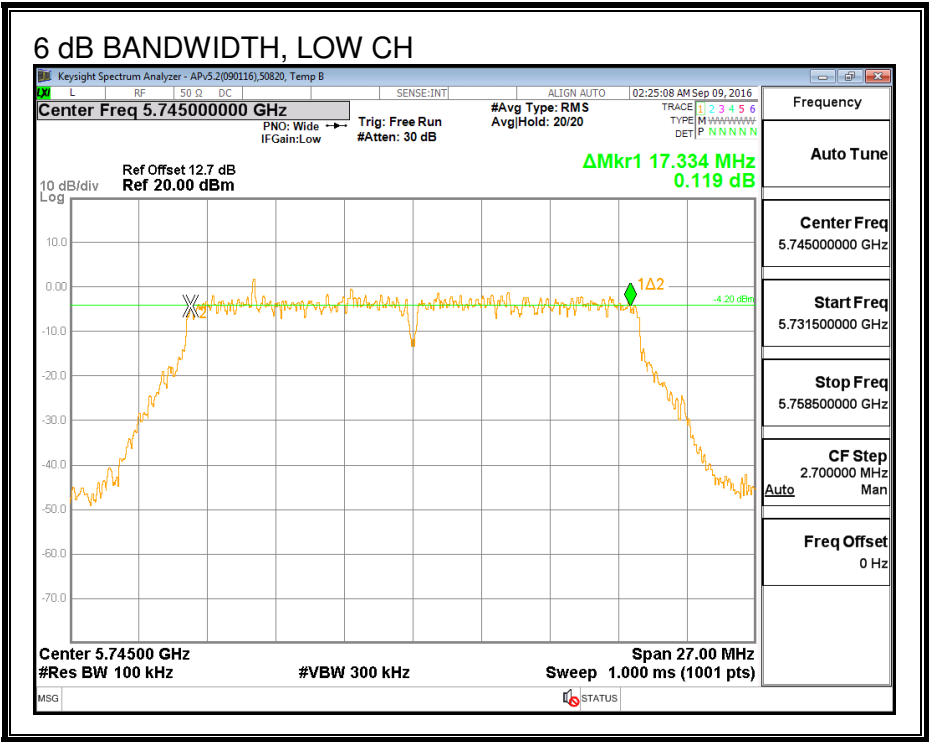
FCC §15.407 (e)

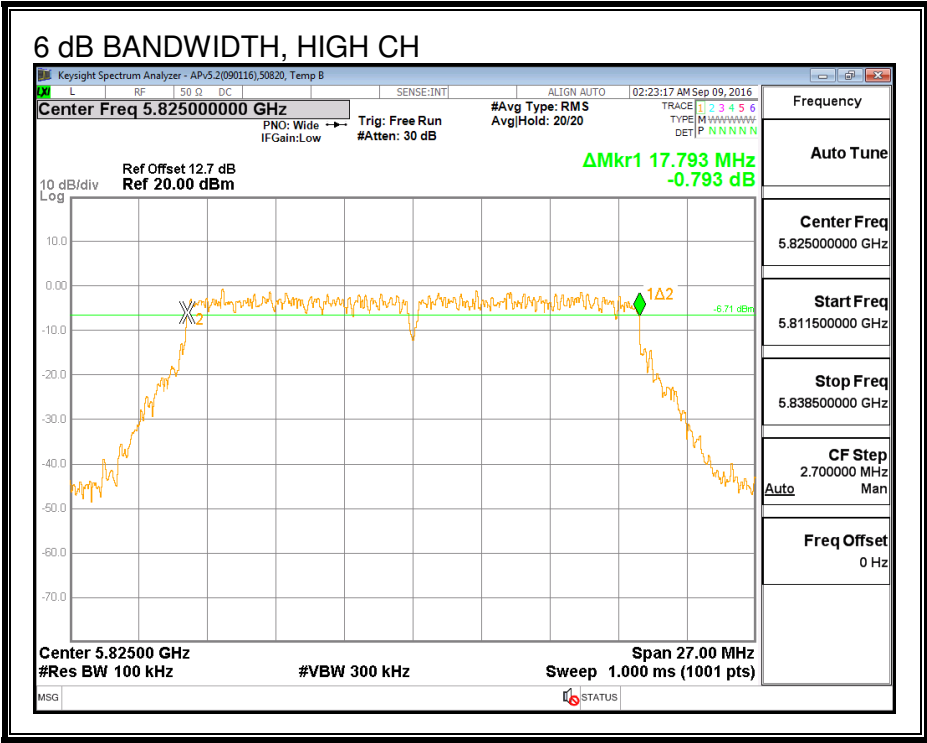
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

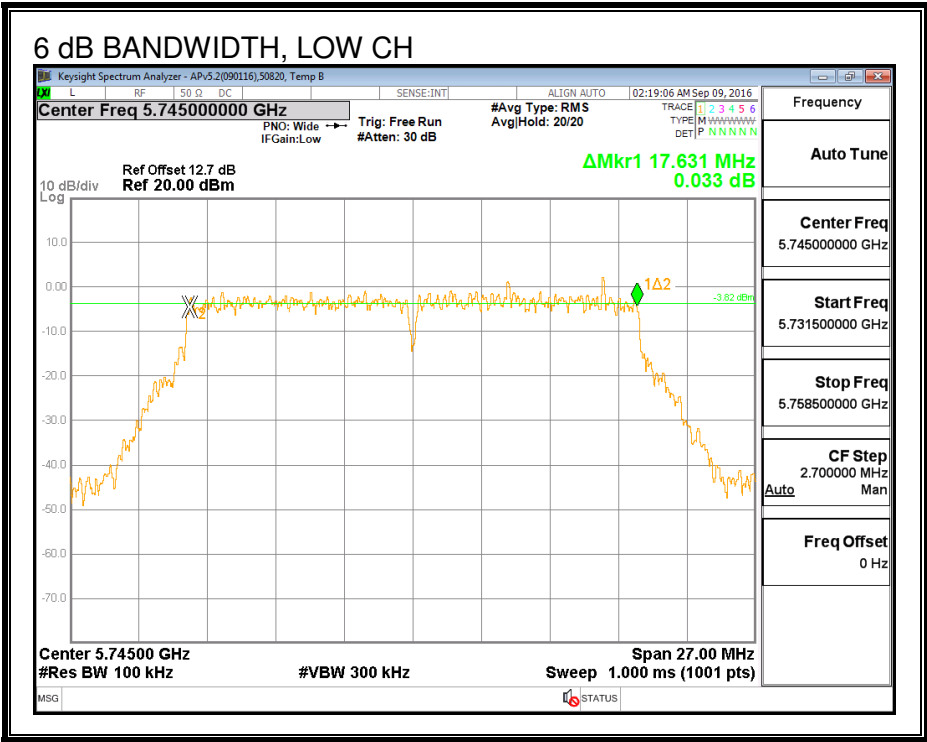
| Channel | Frequency (MHz) | 6 dB BW Chain 1 (MHz) | 6 dB BW Chain 2 (MHz) | Minimum Limit (MHz) |
|---------|--------------------|-----------------------------|-----------------------------|---------------------------|
| Low | 5745 | 17.334 | 17.631 | 0.5 |
| Mid | 5785 | 17.577 | 17.658 | 0.5 |
| High | 5825 | 17.793 | 17.631 | 0.5 |

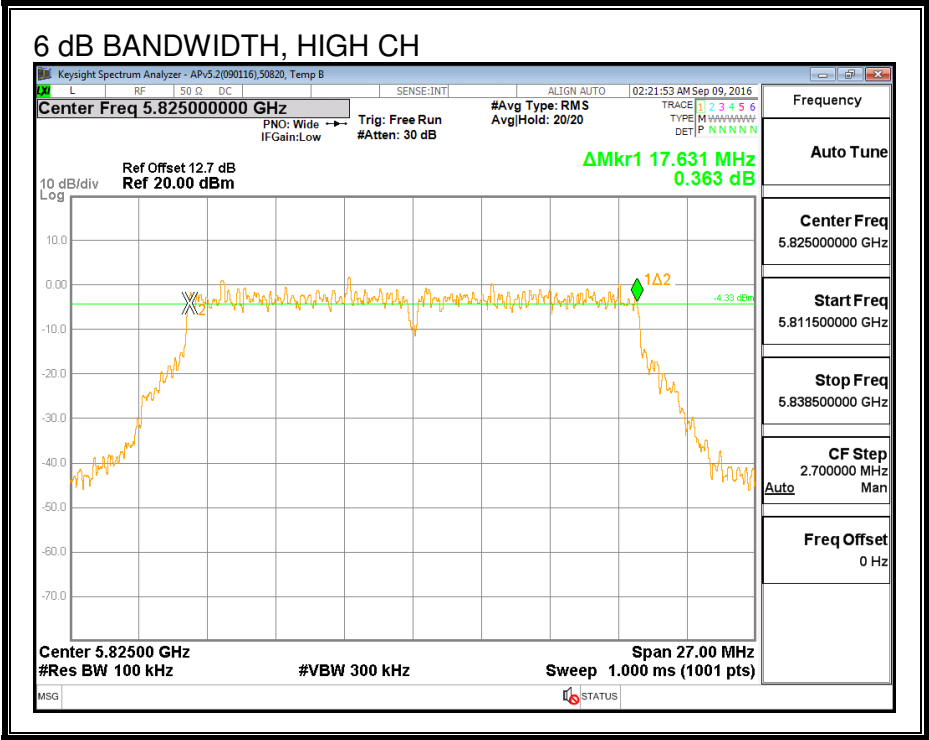
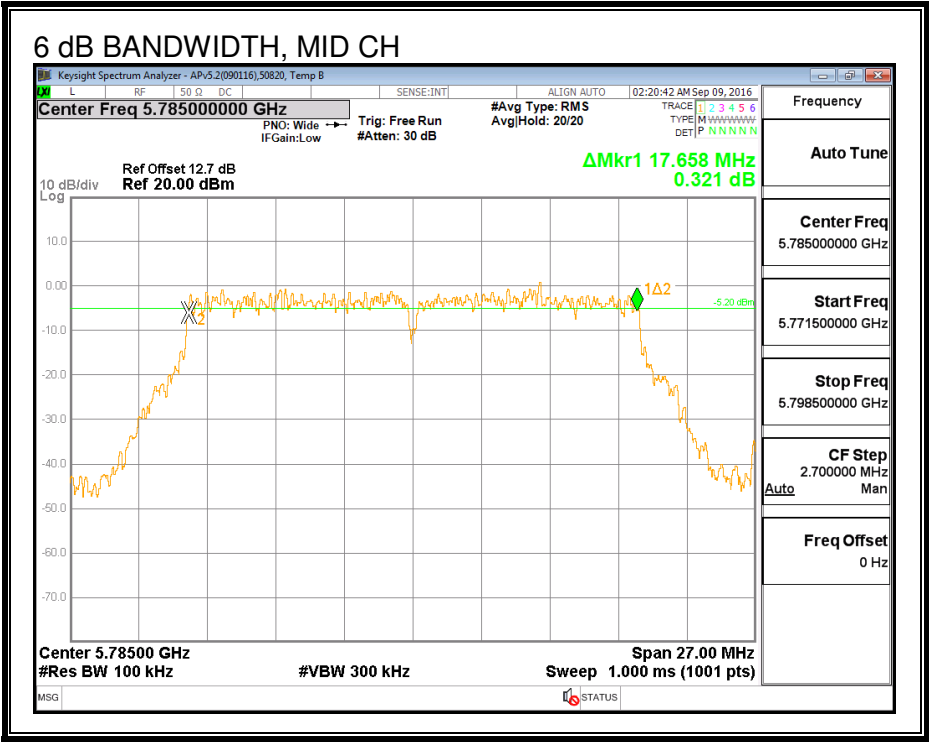
6 dB BANDWIDTH, CHAIN 1





6 dB BANDWIDTH, CHAIN 2





8.6.2. 26 dB BANDWIDTH

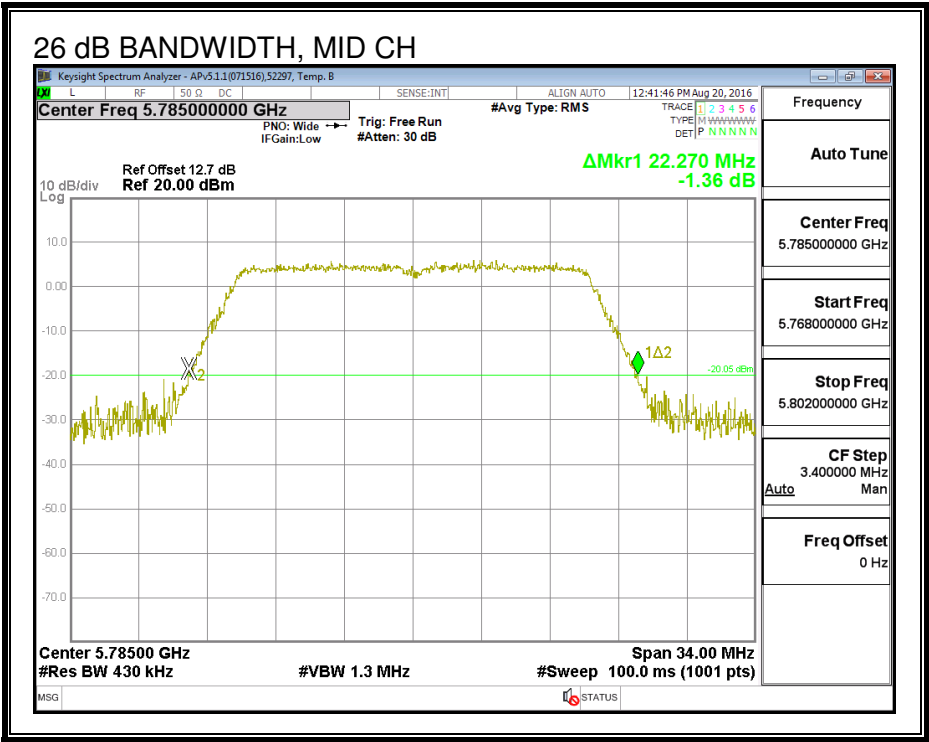
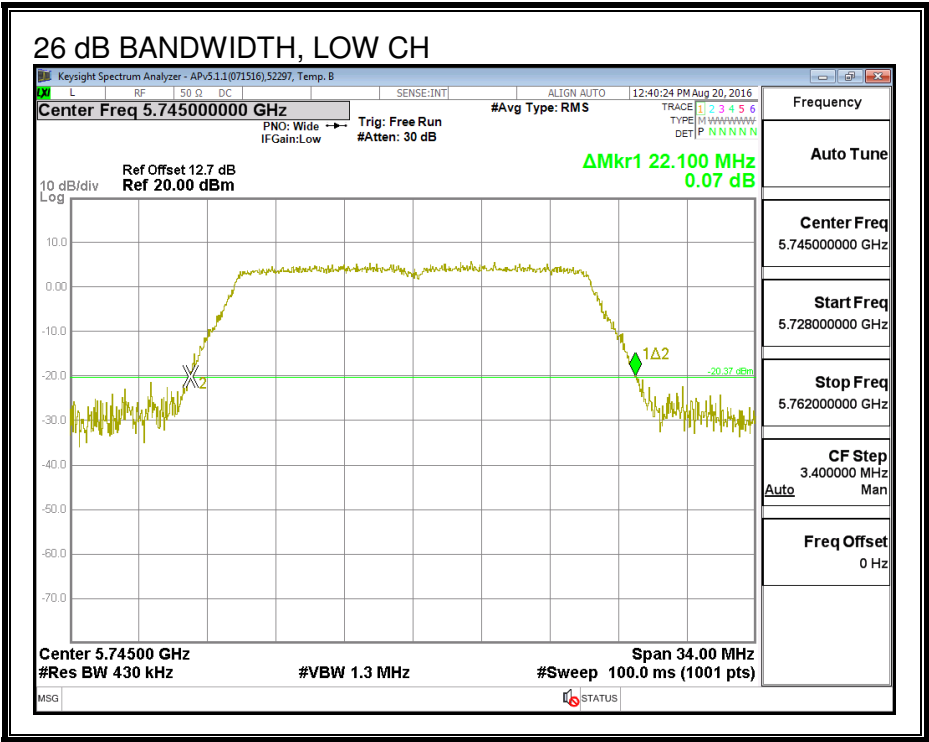
LIMITS

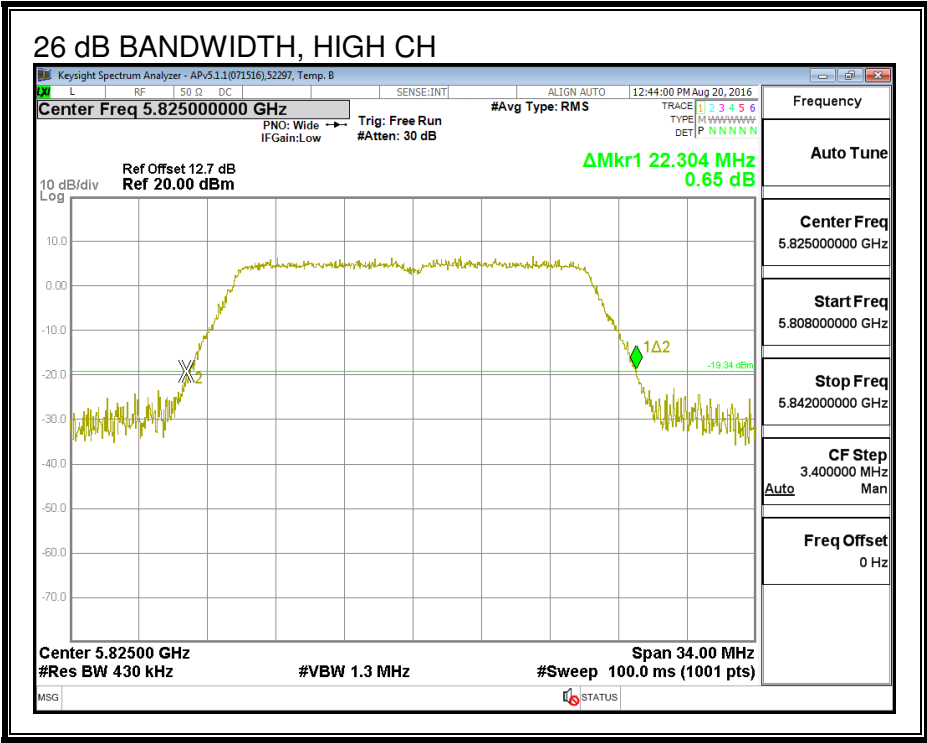
None, for reporting purposes only.

RESULTS

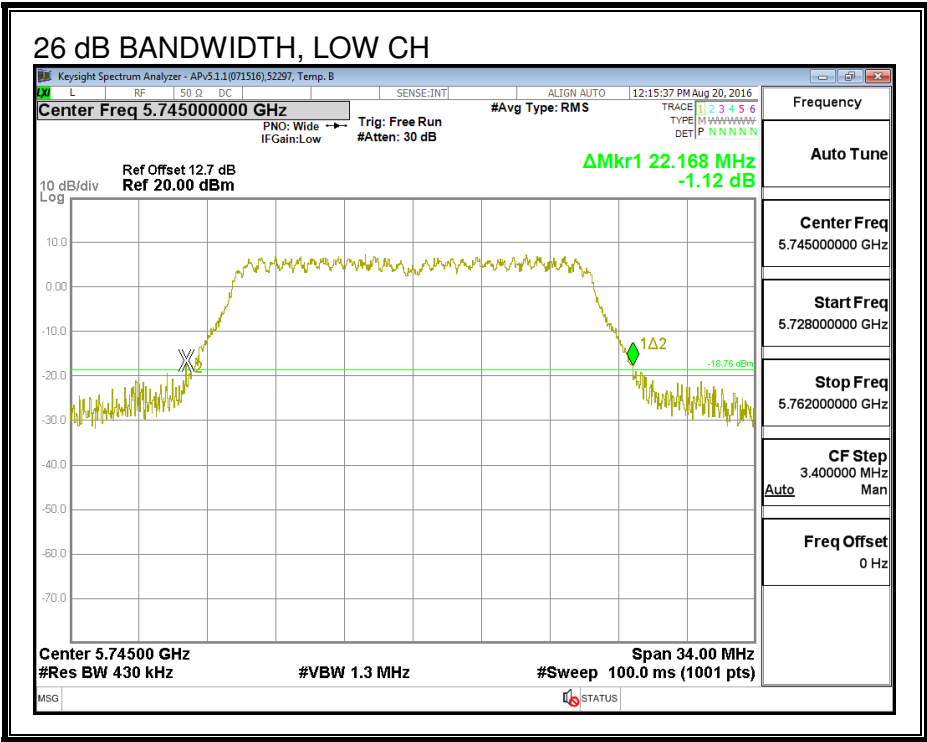
| Channel | Frequency (MHz) | 26 dB BW Chain 1 (MHz) | 26 dB BW Chain 2 (MHz) |
|---------|--------------------|------------------------------|------------------------------|
| Low | 5745 | 22.100 | 22.168 |
| Mid | 5785 | 22.270 | 21.780 |
| High | 5825 | 22.304 | 21.978 |

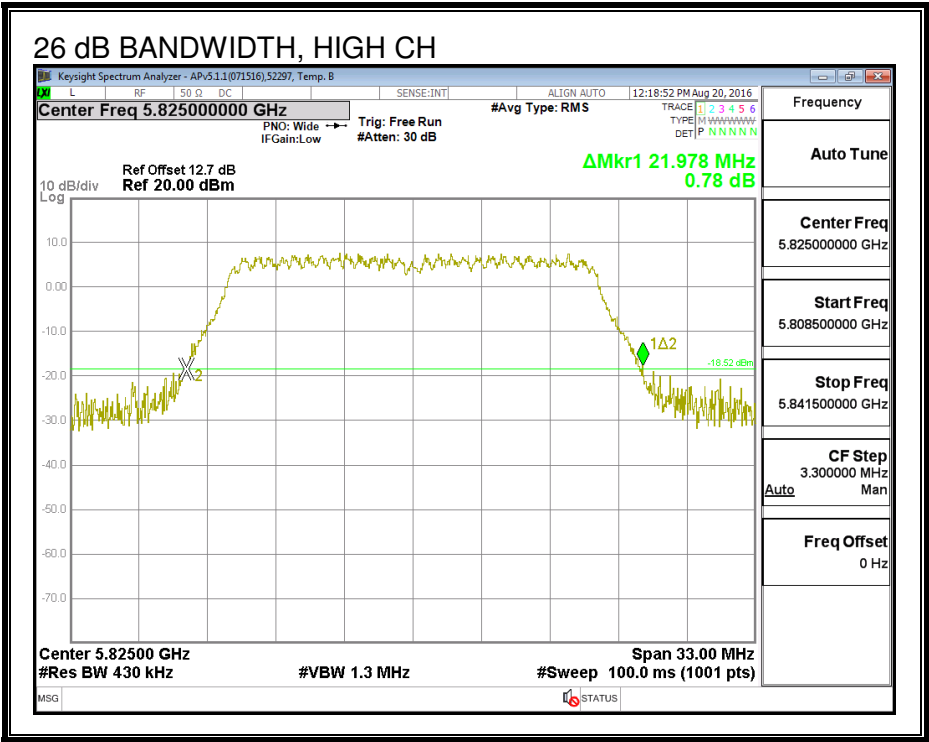
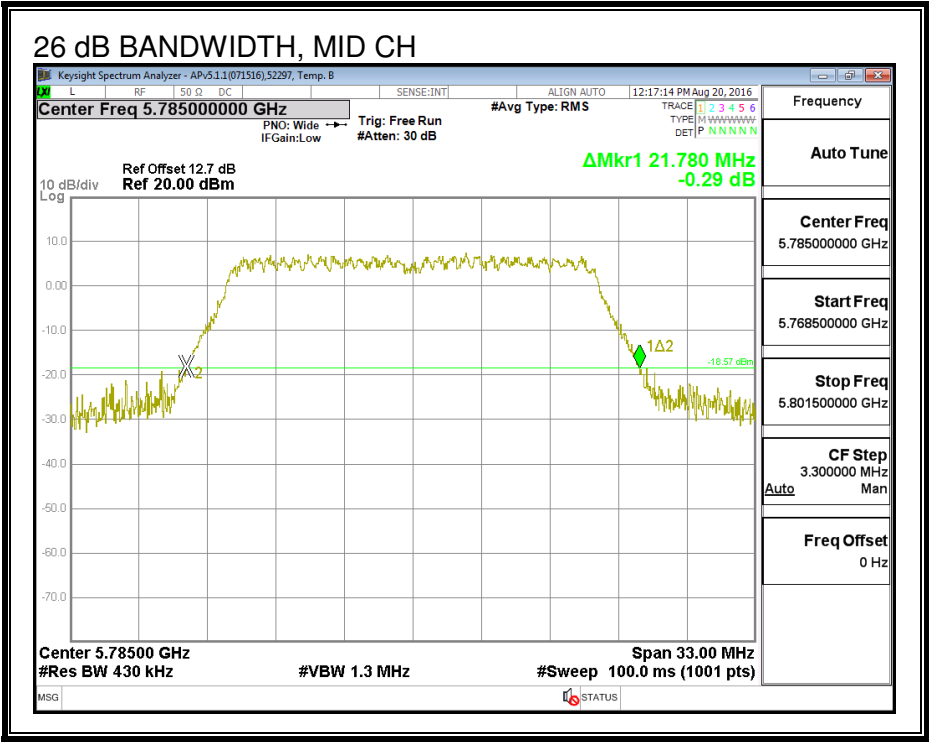
26 dB BANDWIDTH, CHAIN 1





26 dB BANDWIDTH, CHAIN 2





8.6.3. 99% BANDWIDTH

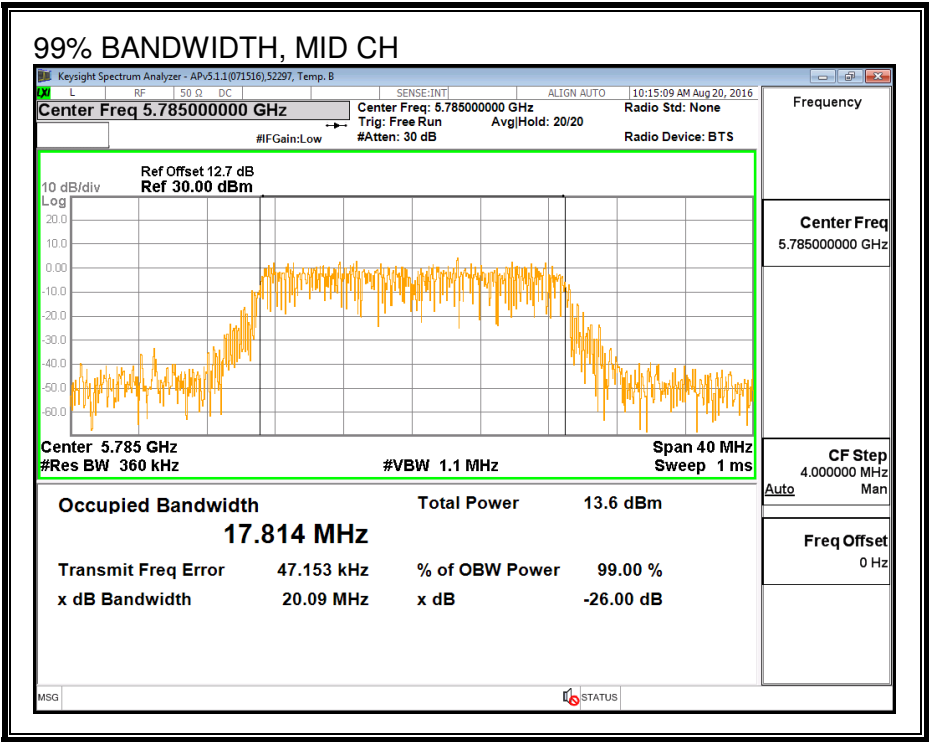
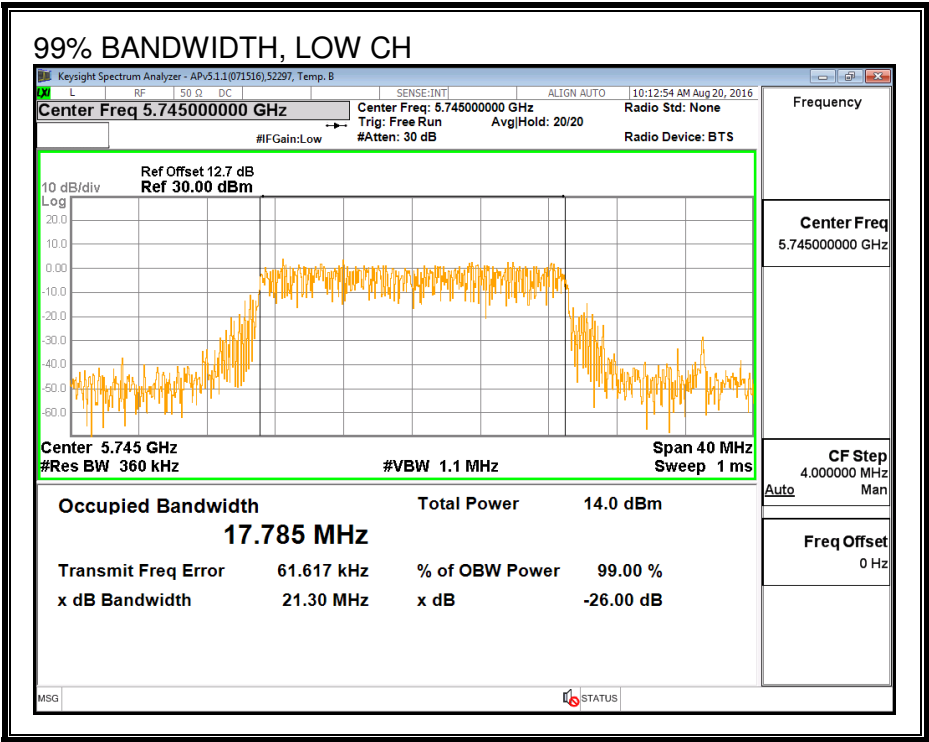
LIMITS

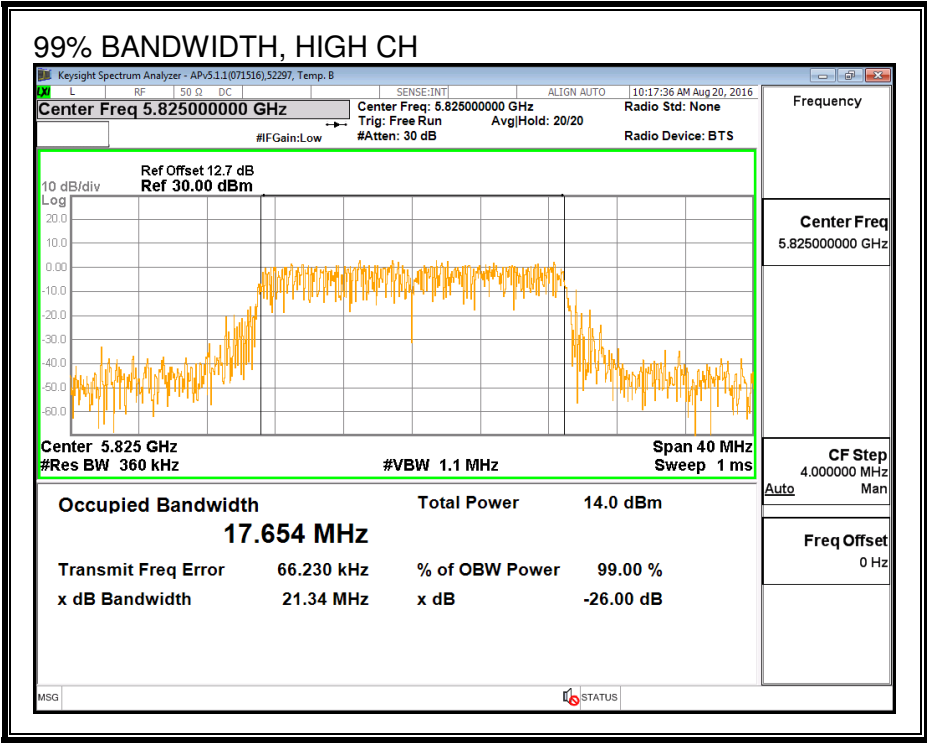
None; for reporting purposes only.

RESULTS

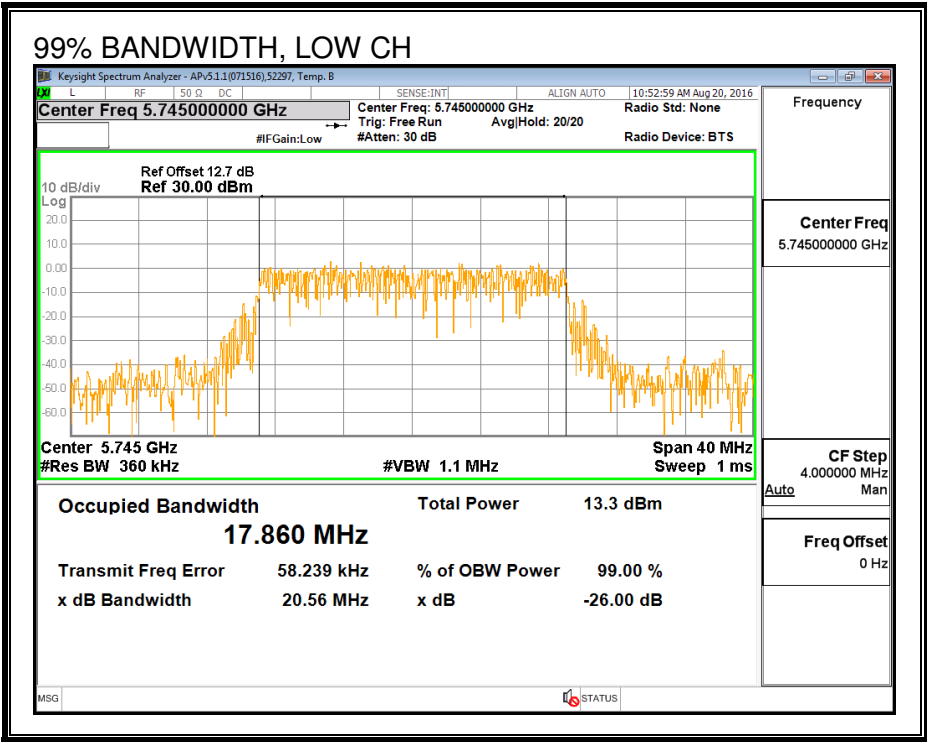
| Channel | Frequency (MHz) | 99% BW Chain 1 (MHz) | 99% BW Chain 2 (MHz) |
|---------|--------------------|----------------------------|----------------------------|
| Low | 5745 | 17.785 | 17.860 |
| Mid | 5785 | 17.814 | 17.817 |
| High | 5825 | 17.654 | 17.723 |

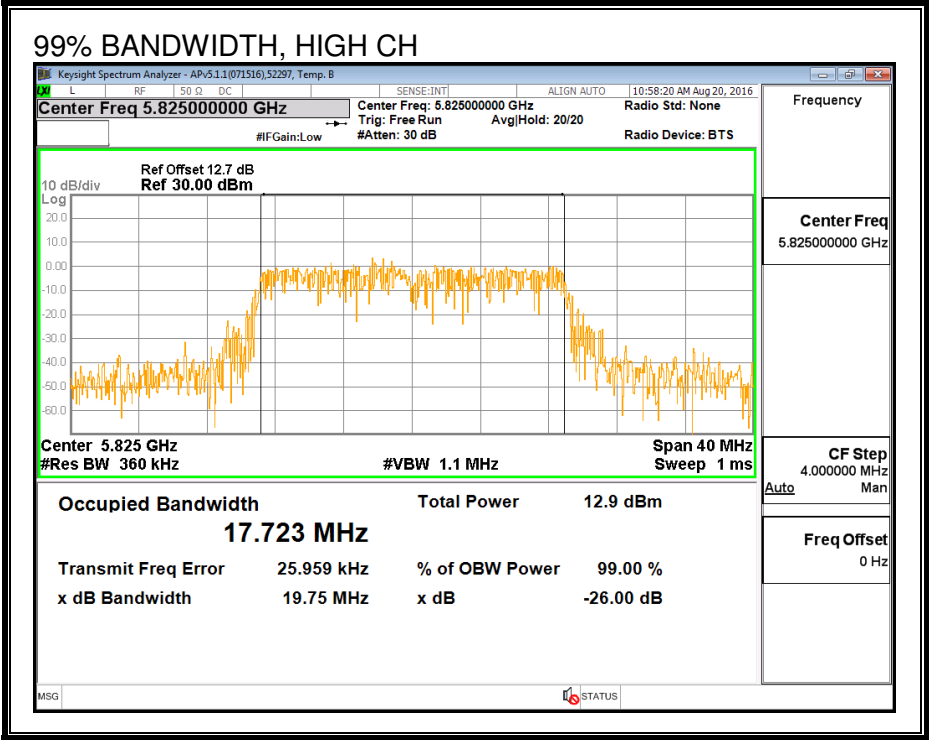
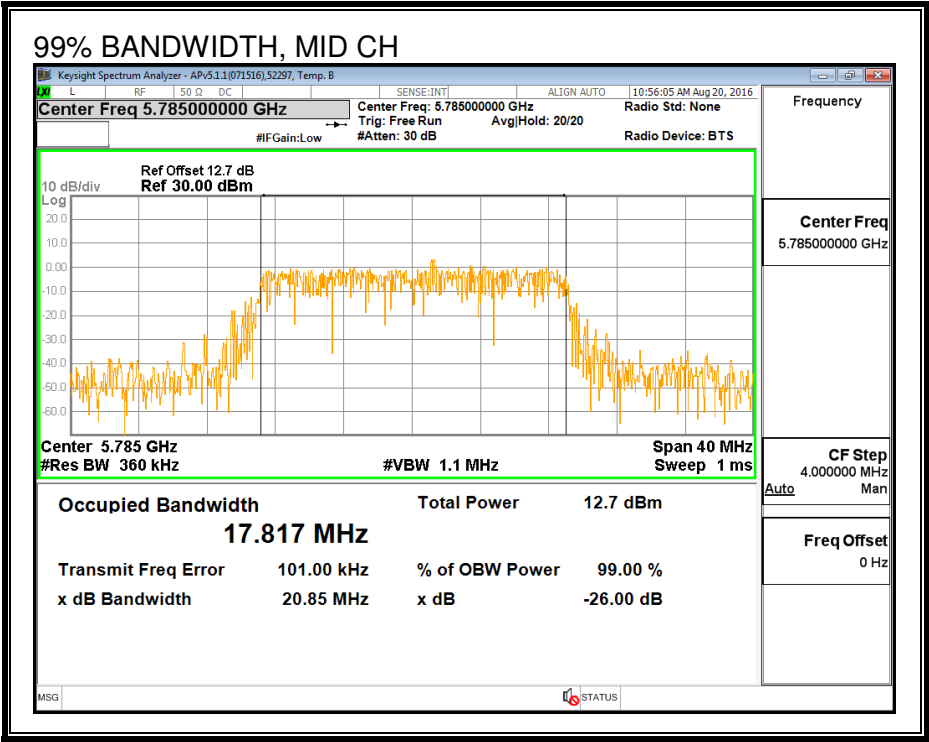
99% BANDWIDTH, CHAIN 1





99% BANDWIDTH, CHAIN 2





8.6.4. AVERAGE POWER (FCC/IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

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

| Channel | Frequency (MHz) | Chain 1 Power (dBm) | Chain 2 Power (dBm) | Total Power (dBm) |
|---------|--------------------|---------------------------|---------------------------|-------------------------|
| Low | 5745 | 12.66 | 12.70 | 15.69 |
| Mid | 5785 | 12.67 | 12.63 | 15.66 |
| High | 5825 | 12.60 | 12.70 | 15.66 |

8.6.5. OUTPUT POWER (FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

| Chain 1 Antenna Gain (dBi) | Chain 2 Antenna Gain (dBi) | Uncorrelated Chains Directional Gain (dBi) |
|-------------------------------------|-------------------------------------|---|
| 6.30 | 4.70 | 5.57 |

RESULTS

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

Antenna Gain and Limit

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5745 | 5.57 | 30.00 |
| Mid | 5785 | 5.57 | 30.00 |
| High | 5825 | 5.57 | 30.00 |

Output Power Results

| Channel | Frequency (MHz) | Chain 1 Meas Power (dBm) | Chain 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5745 | 12.66 | 12.70 | 15.69 | 30.00 | -14.31 |
| Mid | 5785 | 12.67 | 12.63 | 15.66 | 30.00 | -14.34 |
| High | 5825 | 12.60 | 12.70 | 15.66 | 30.00 | -14.34 |

8.6.6. PSD (FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

| Chain 1 Antenna Gain (dBi) | Chain 2 Antenna Gain (dBi) | Correlated Chains Directional Gain (dBi) |
|-------------------------------------|-------------------------------------|---|
| 6.30 | 4.70 | 8.55 |

RESULTS

Antenna Gain and Limits

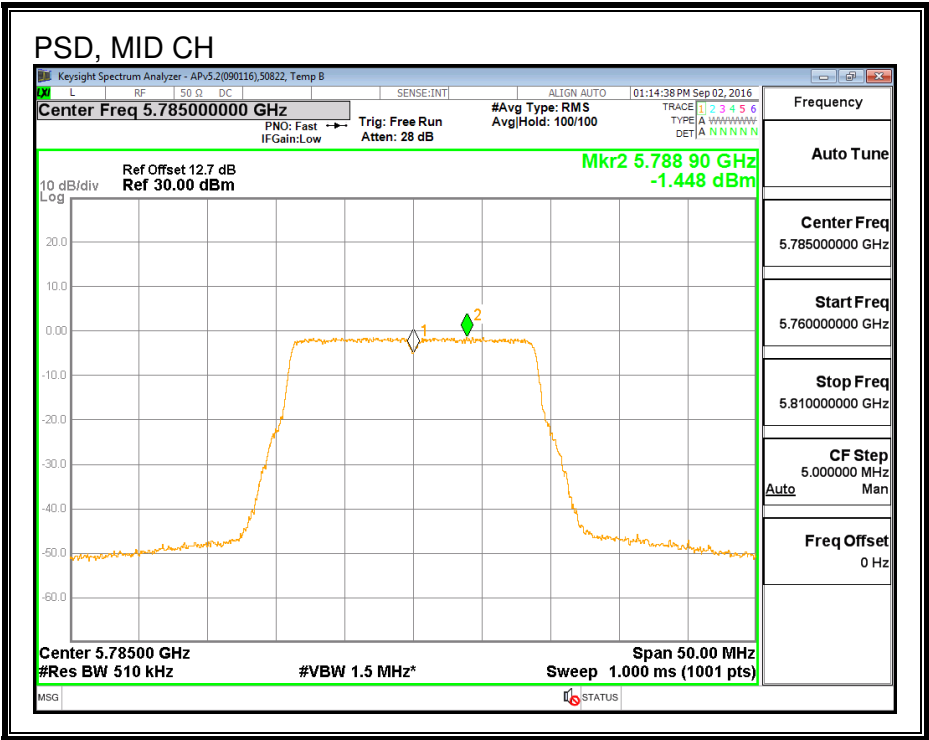
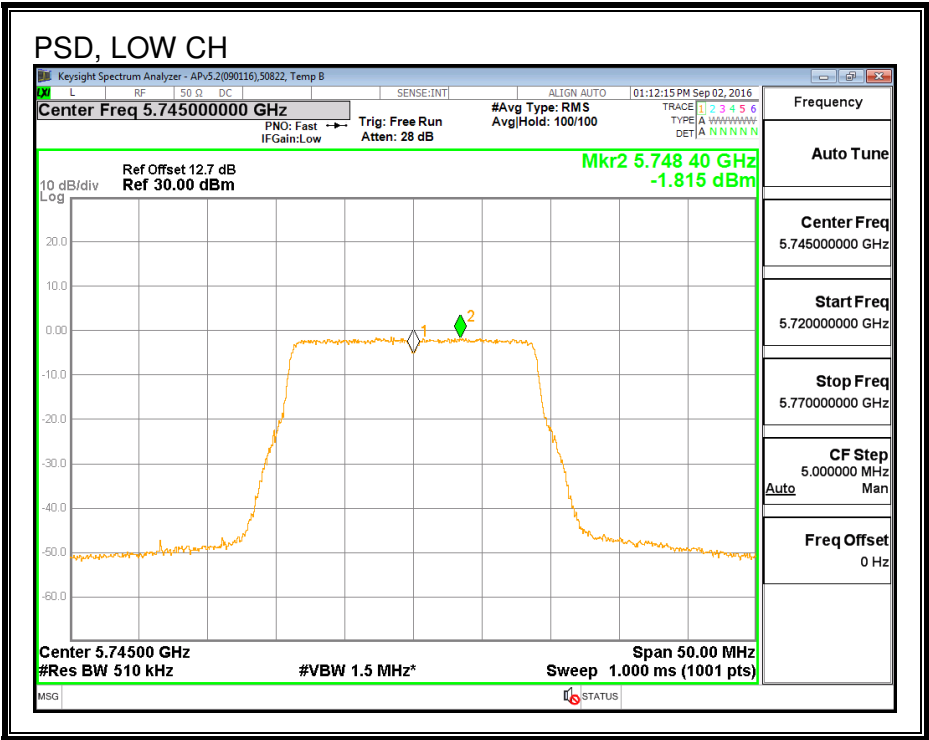
| Channel | Frequency (MHz) | Directional Gain (dBi) | PSD Limit (dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low | 5745 | 8.55 | 27.45 |
| Mid | 5785 | 8.55 | 27.45 |
| High | 5825 | 8.55 | 27.45 |

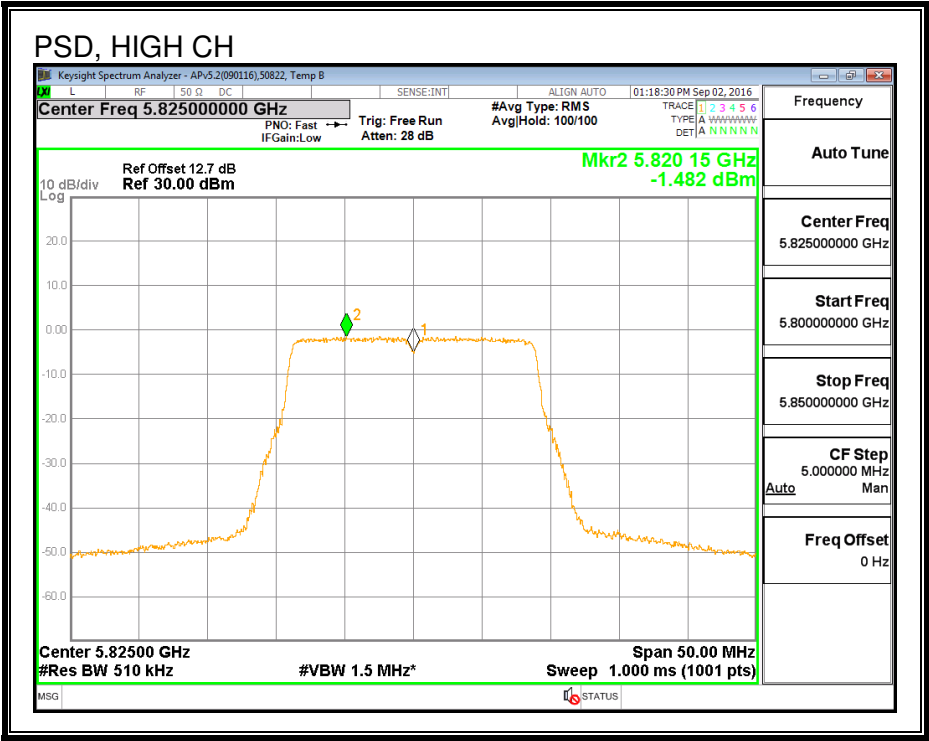
| | | |
|--------------------|------|--|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|--------------------|------|--|

PSD Results

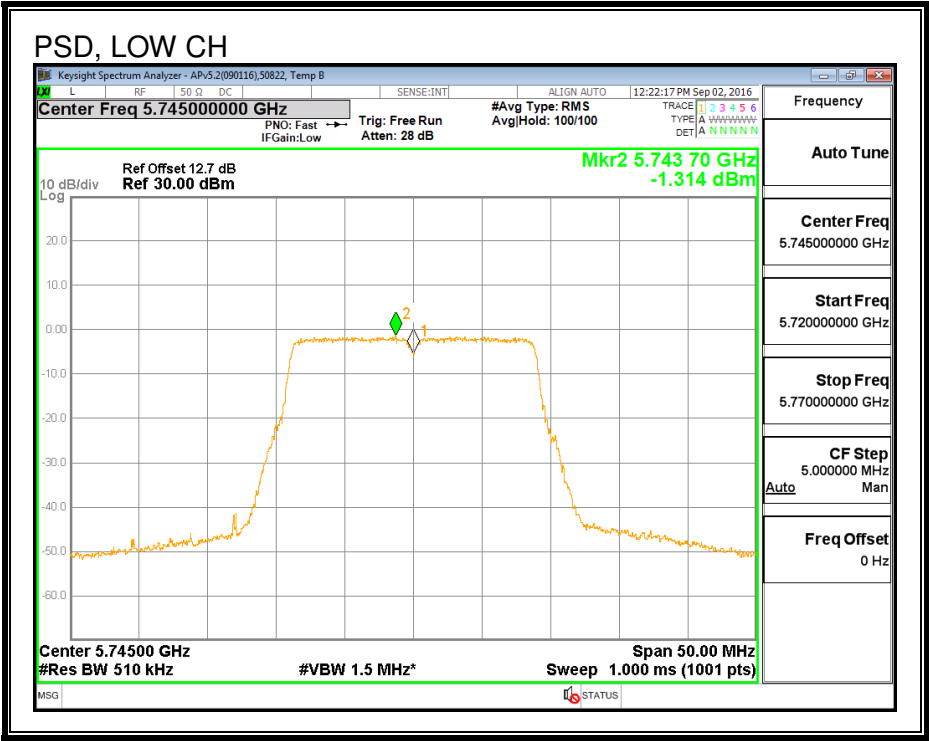
| Channel | Frequency (MHz) | Chain 1 Meas PSD (dBm) | Chain 2 Meas PSD (dBm) | Total Corr'd PSD (dBm) | PSD Limit (dBm) | PSD Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low | 5745 | -1.82 | -1.31 | 1.45 | 27.45 | -26.00 |
| Mid | 5785 | -1.45 | -1.42 | 1.58 | 27.45 | -25.87 |
| High | 5825 | -1.48 | -1.38 | 1.58 | 27.45 | -25.87 |

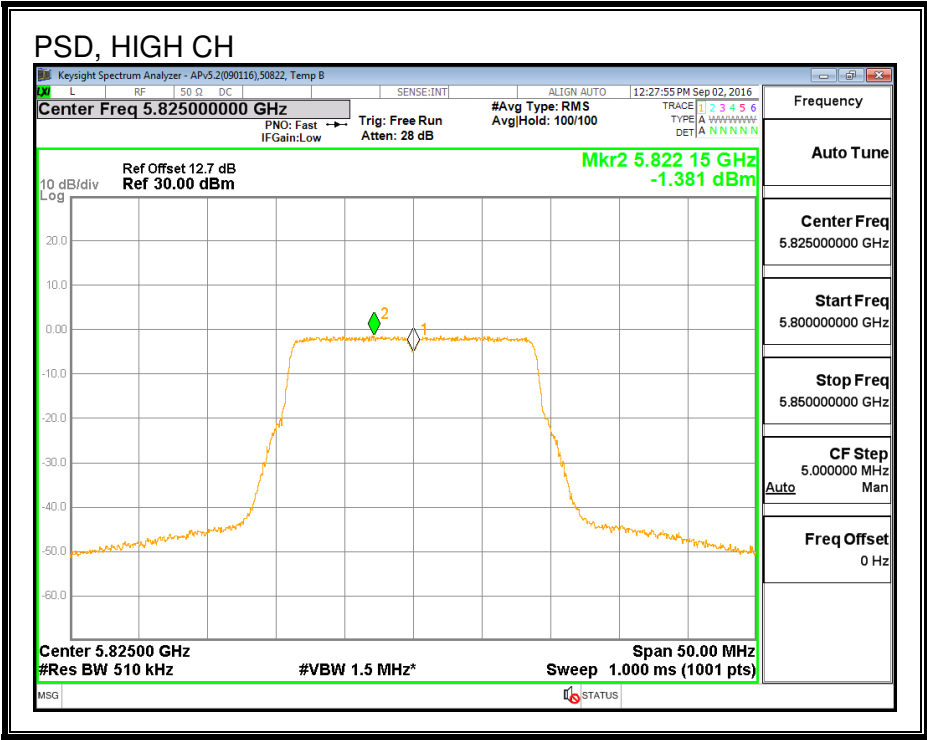
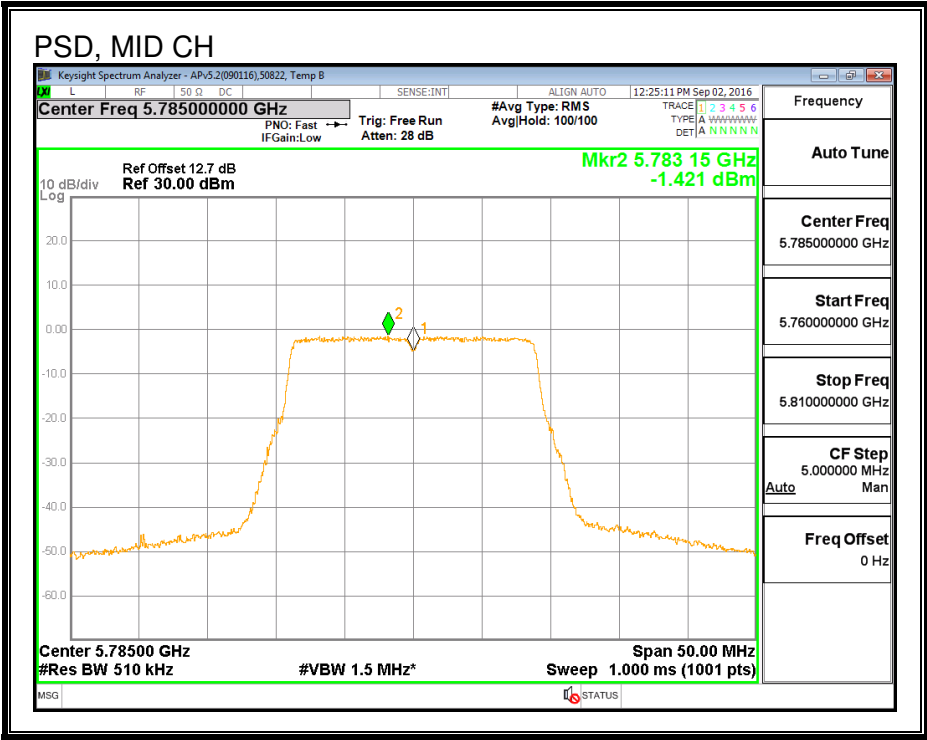
PSD, CHAIN 1





PSD, CHAIN 2





8.7. 802.11n HT20 2Tx (CHAIN 0 + CHAIN 1) STBC MODE IN THE 5.8 GHz BAND

8.7.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

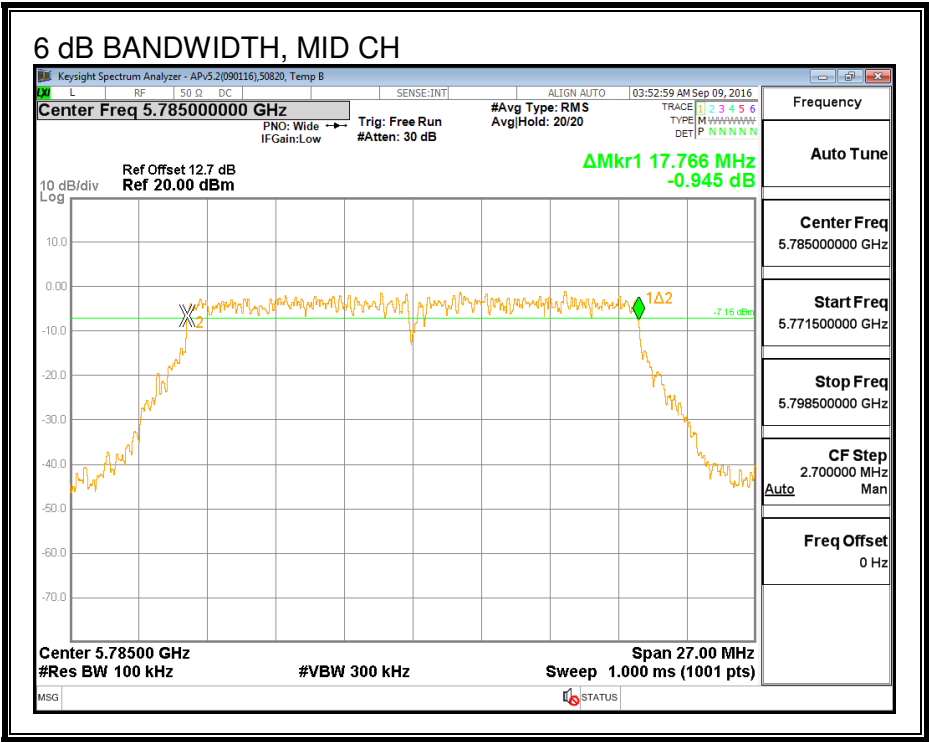
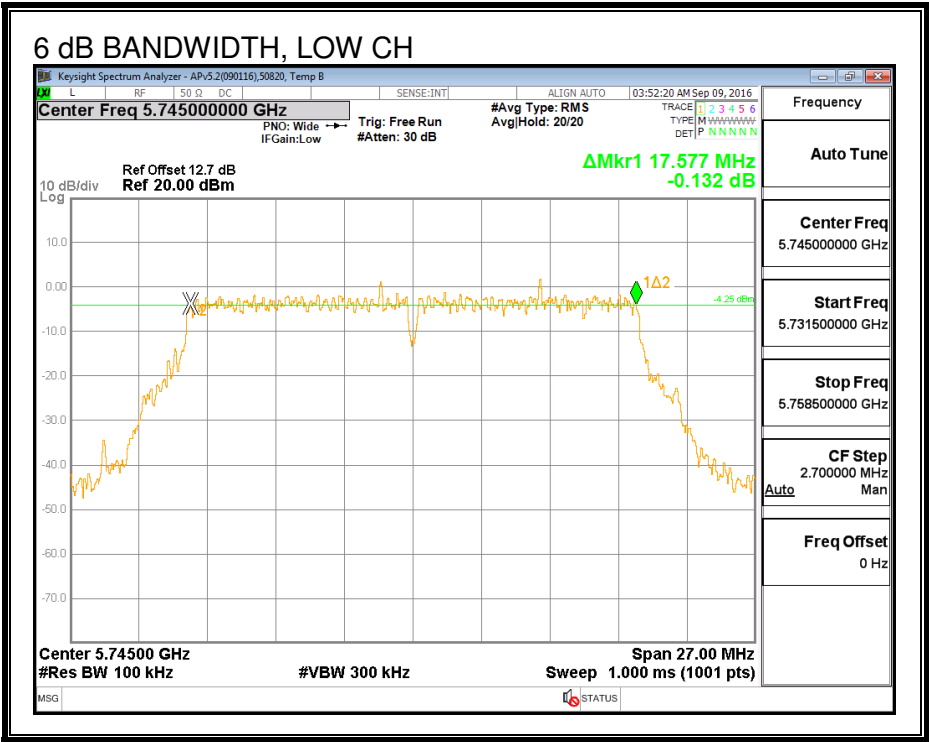
IC RSS-247 (6.2.4) (1)

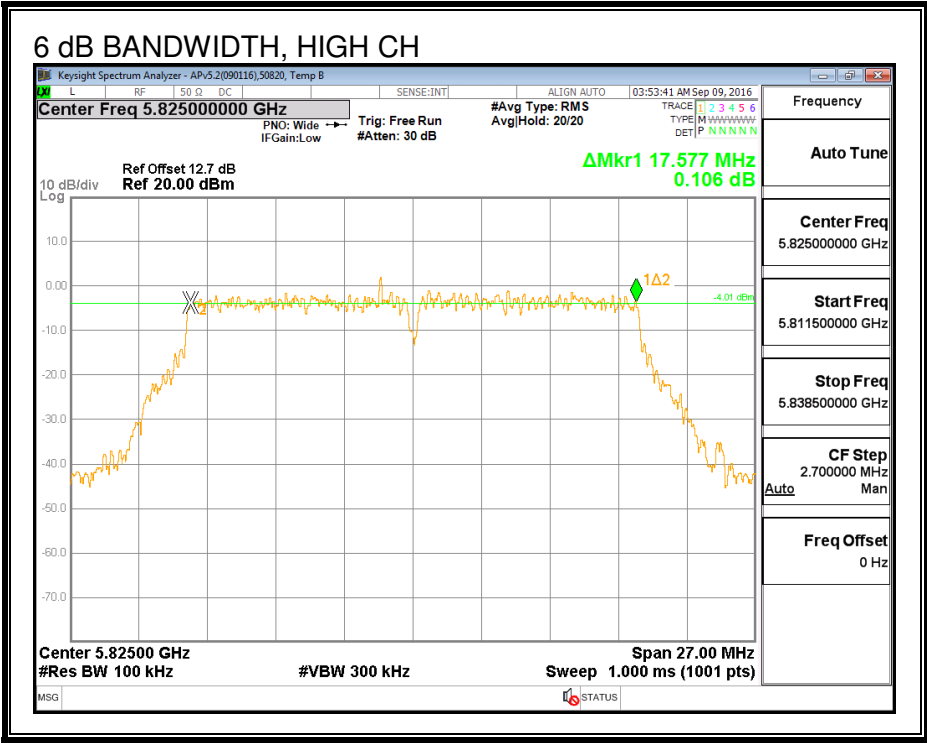
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

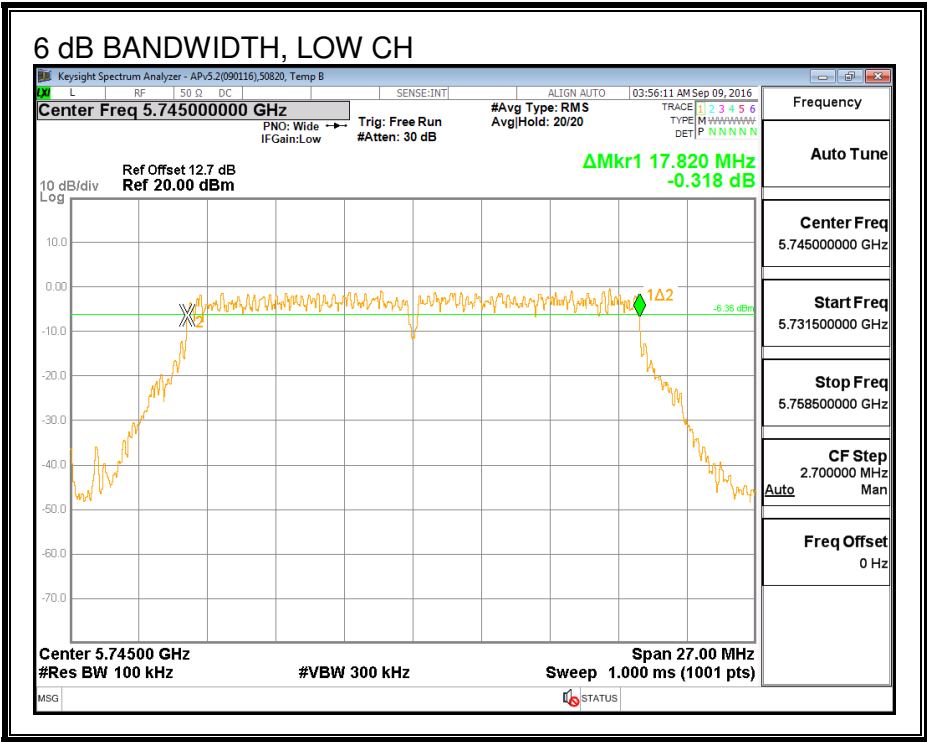
| Channel | Frequency (MHz) | 6 dB BW Chain 0 (MHz) | 6 dB BW Chain 1 (MHz) | Minimum Limit (MHz) |
|---------|--------------------|-----------------------------|-----------------------------|---------------------------|
| Low | 5745 | 17.58 | 17.82 | 0.5 |
| Mid | 5785 | 17.77 | 17.69 | 0.5 |
| High | 5825 | 17.58 | 17.63 | 0.5 |

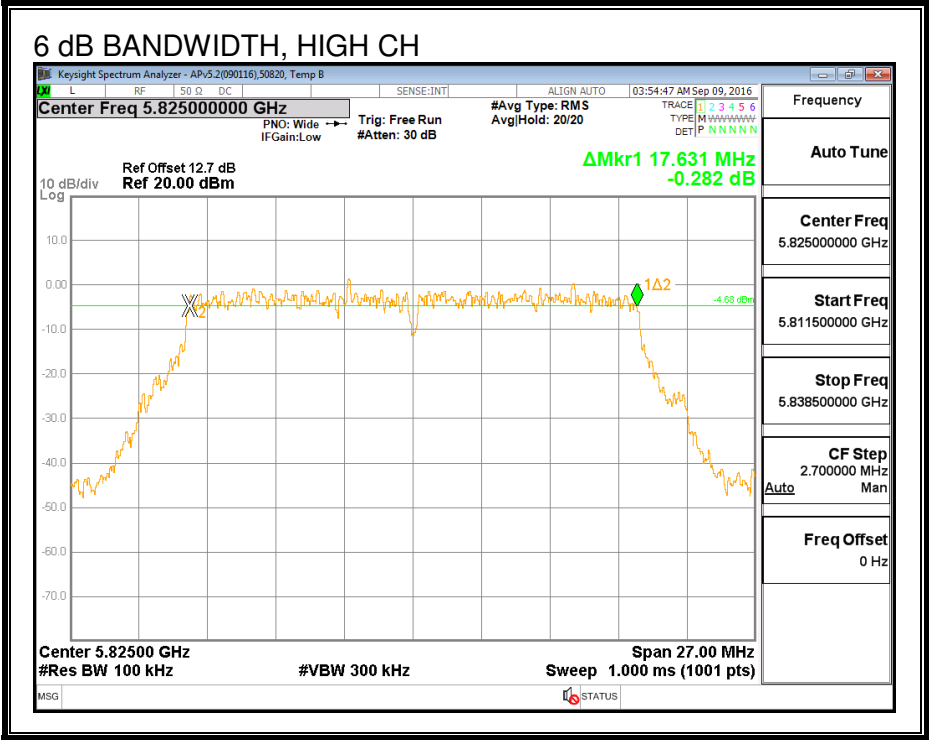
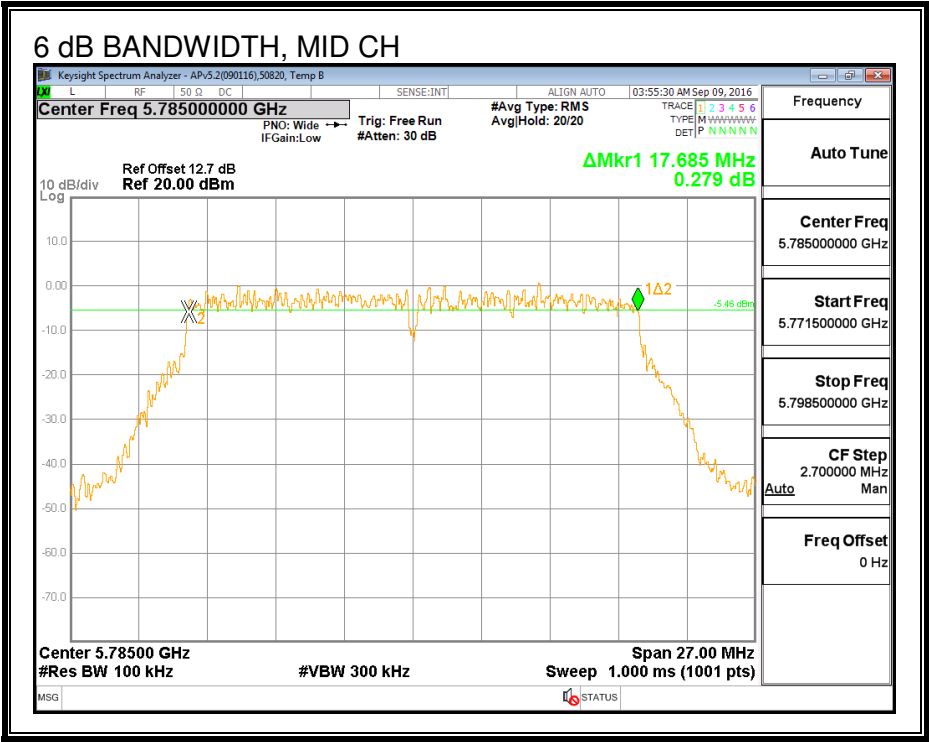
6 dB BANDWIDTH, CHAIN 0





6 dB BANDWIDTH, CHAIN 1





8.7.2. 26 dB BANDWIDTH

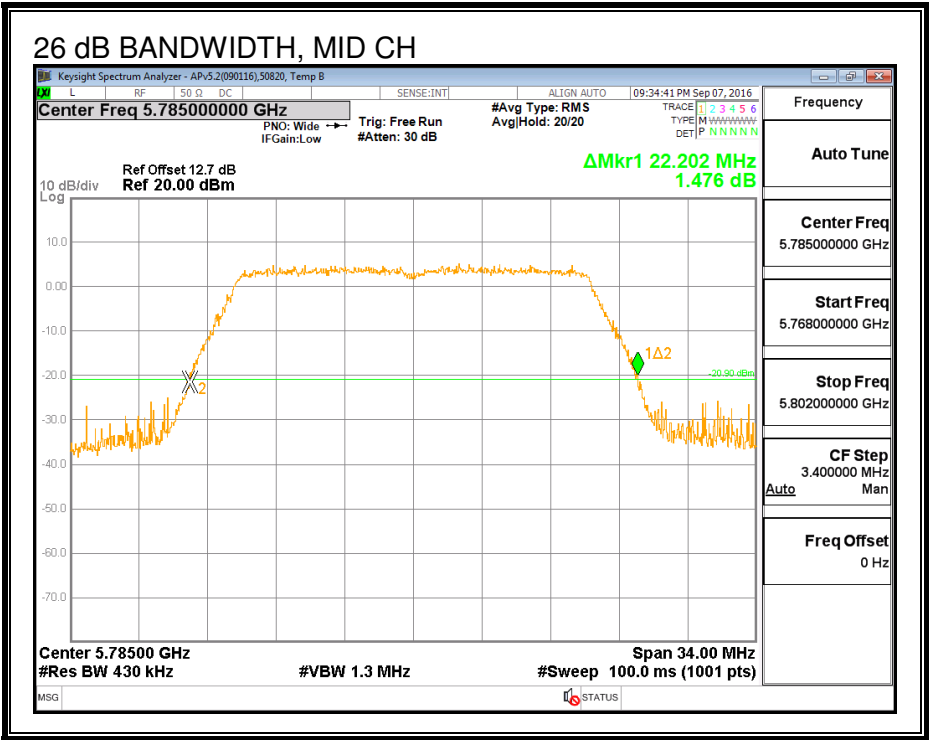
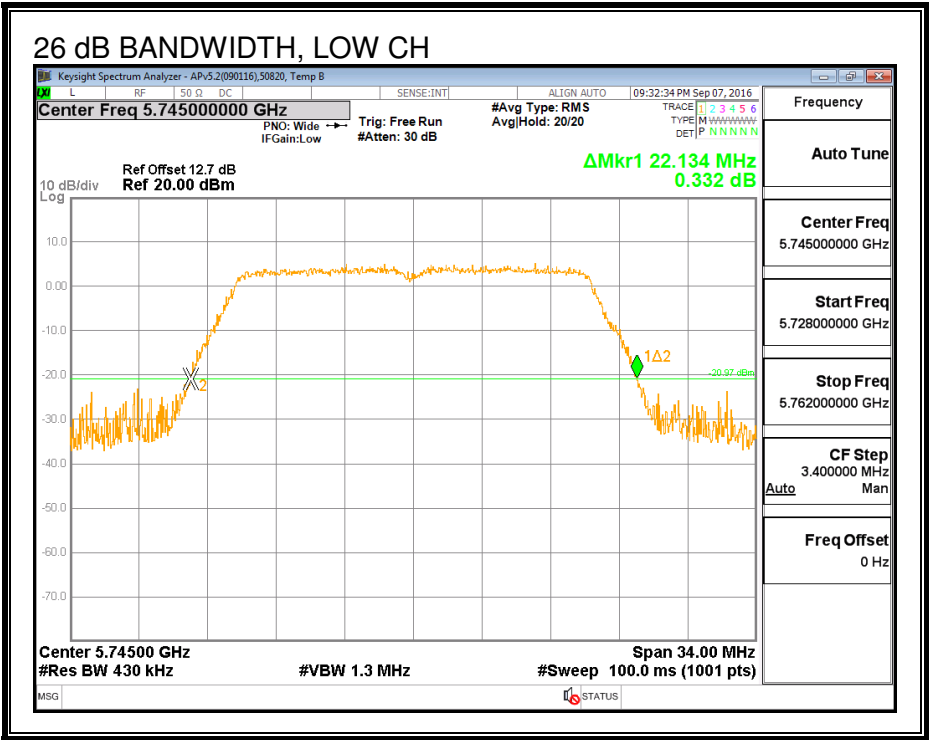
LIMITS

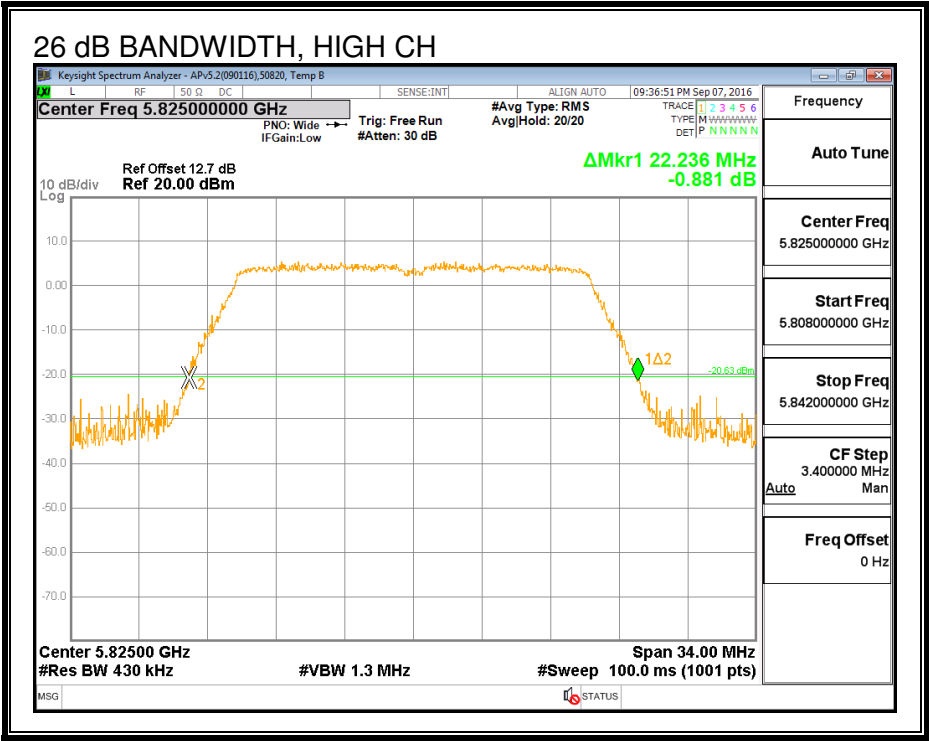
None, for reporting purposes only.

RESULTS

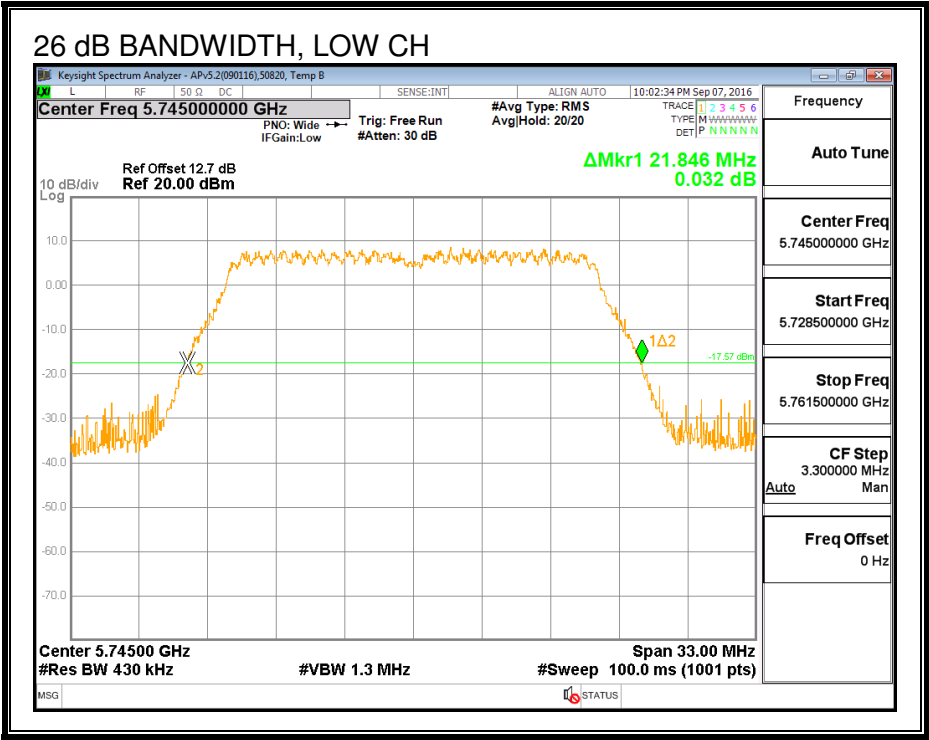
| Channel | Frequency (MHz) | 26 dB BW Chain 0 (MHz) | 26 dB BW Chain 1 (MHz) |
|---------|--------------------|------------------------------|------------------------------|
| Low | 5745 | 22.134 | 21.846 |
| Mid | 5785 | 22.202 | 21.846 |
| High | 5825 | 22.236 | 21.747 |

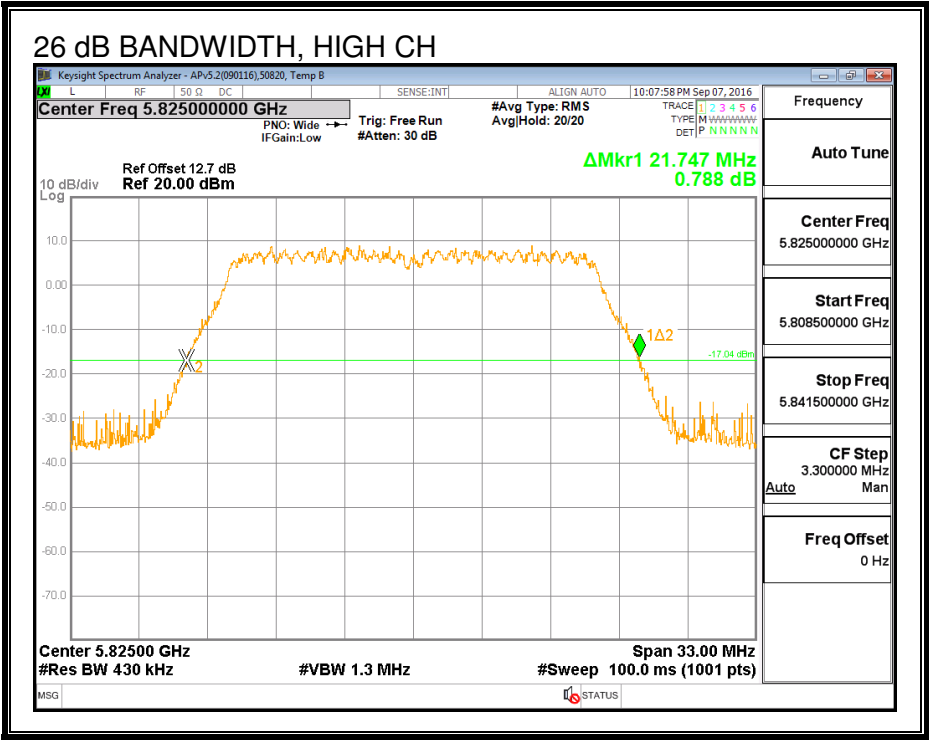
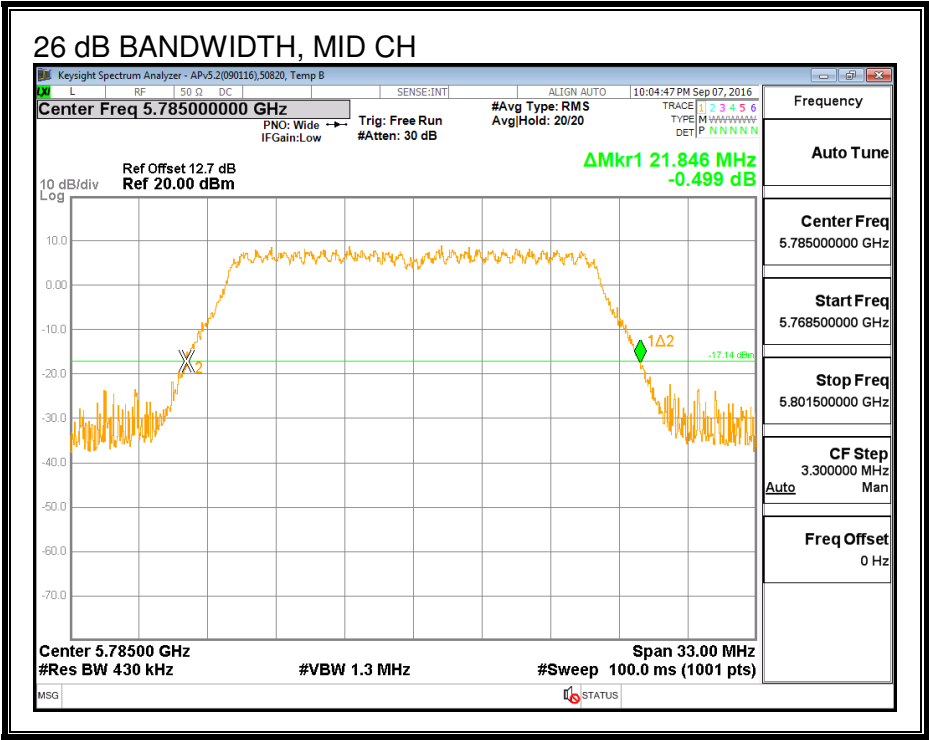
26 dB BANDWIDTH, CHAIN 0





26 dB BANDWIDTH, CHAIN 1





8.7.3. 99% BANDWIDTH

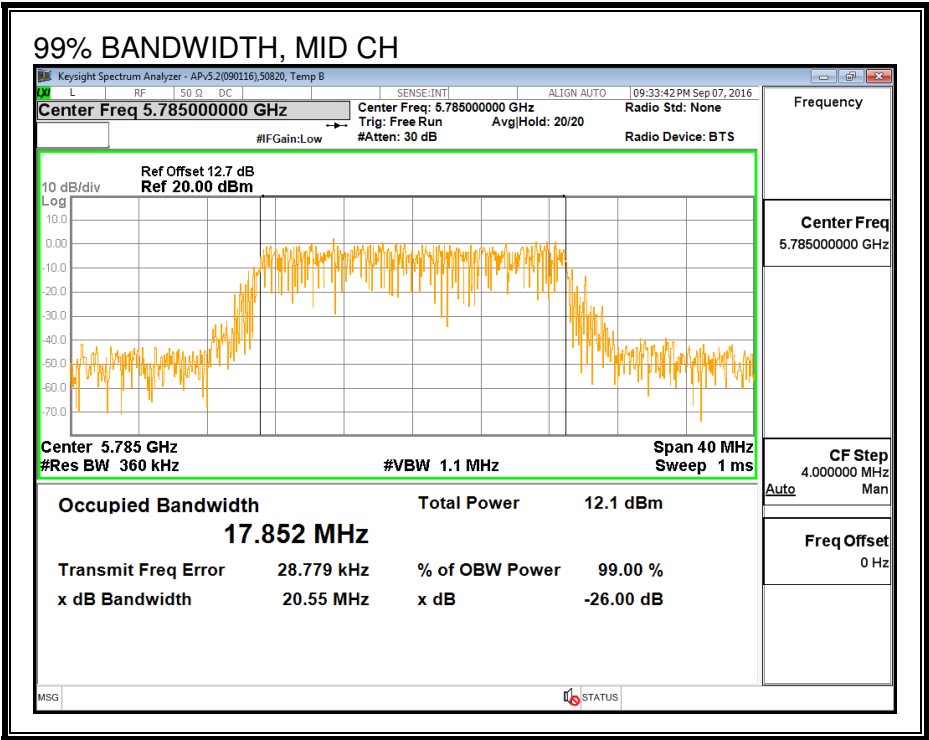
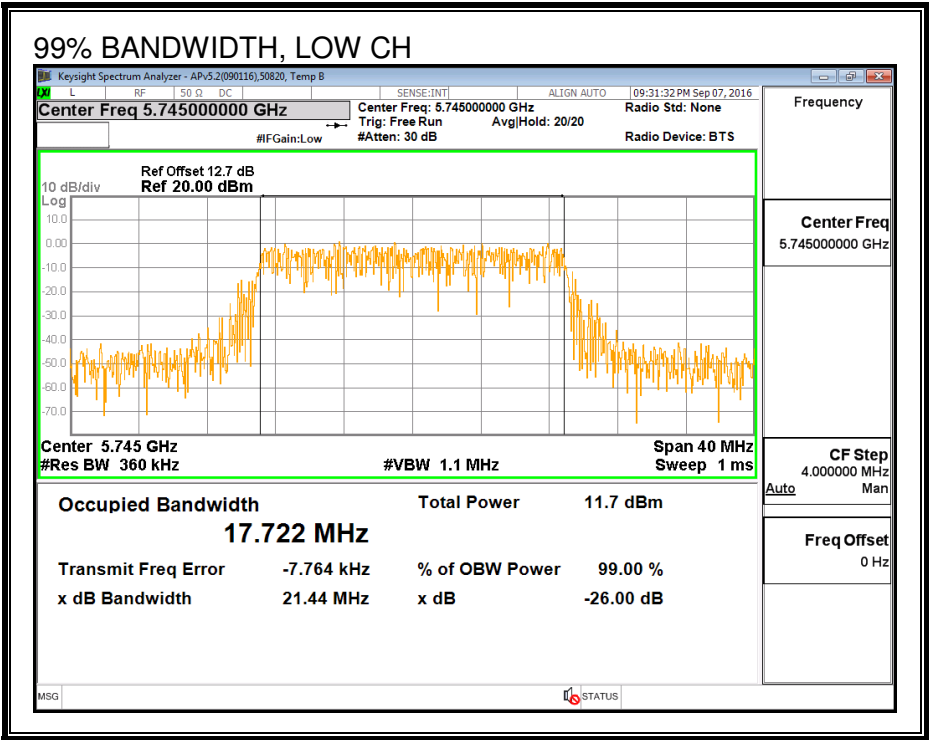
LIMITS

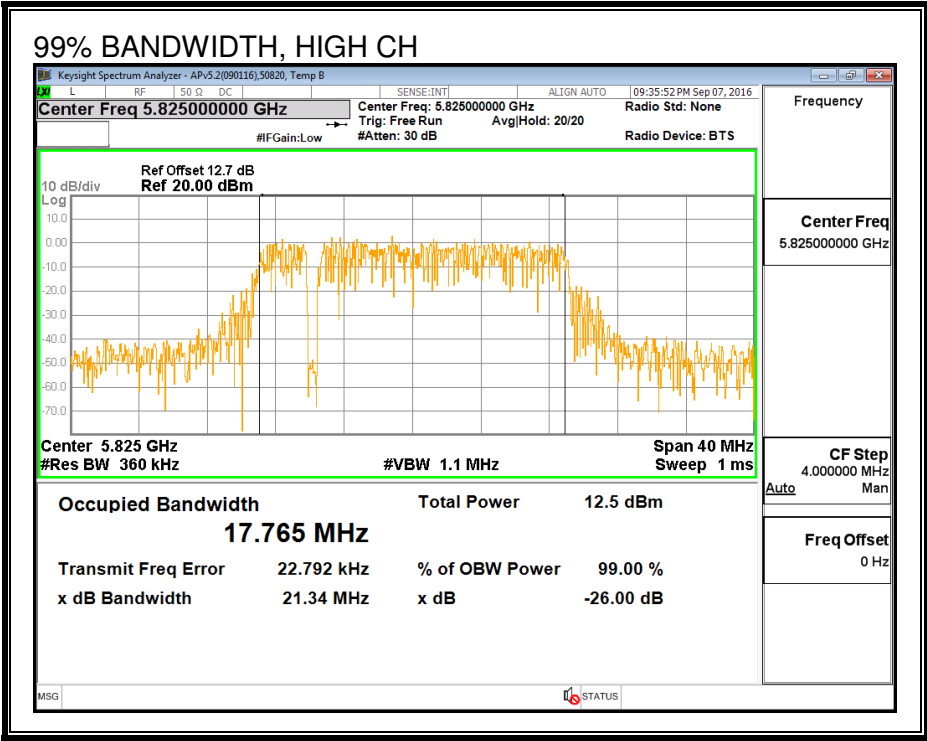
None; for reporting purposes only.

RESULTS

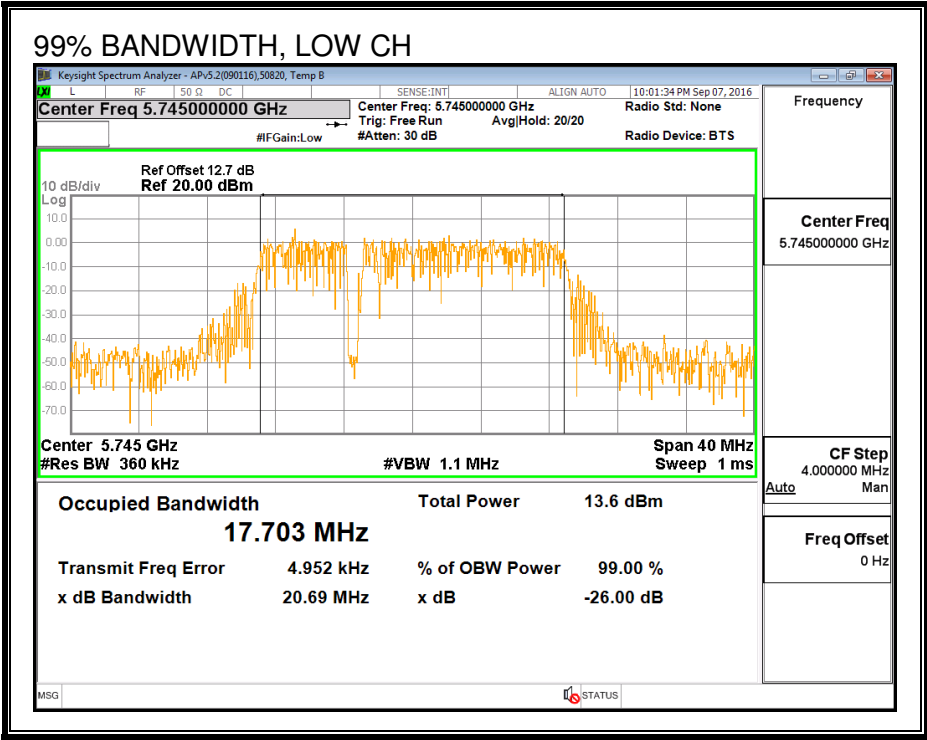
| Channel | Frequency (MHz) | 99% BW Chain 0 (MHz) | 99% BW Chain 1 (MHz) |
|---------|--------------------|----------------------------|----------------------------|
| Low | 5745 | 17.722 | 17.703 |
| Mid | 5785 | 17.852 | 17.000 |
| High | 5825 | 17.765 | 17.802 |

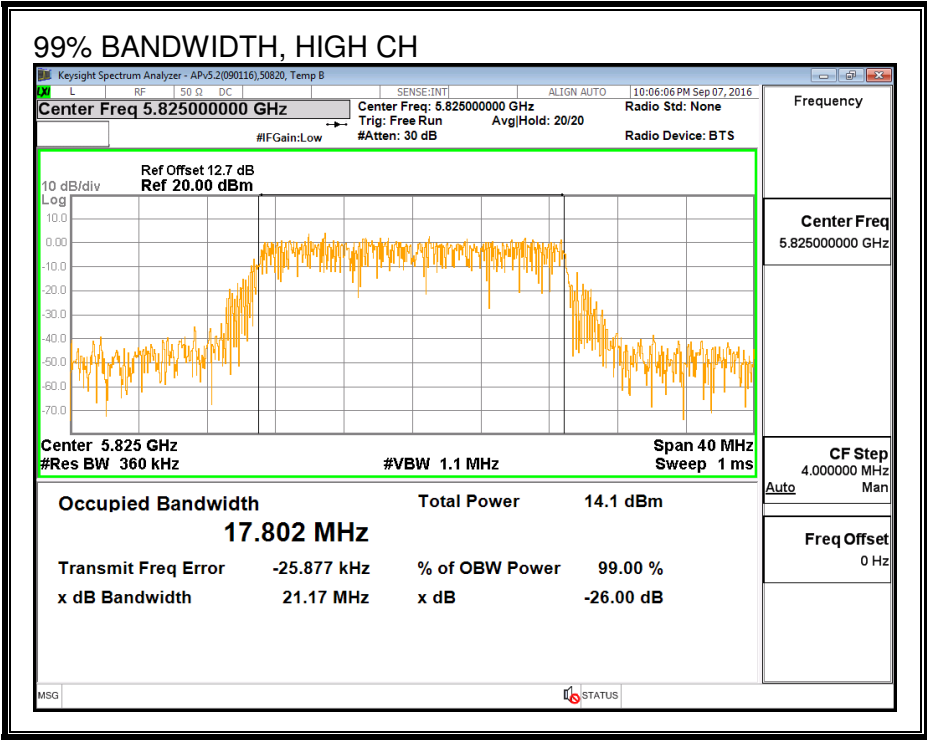
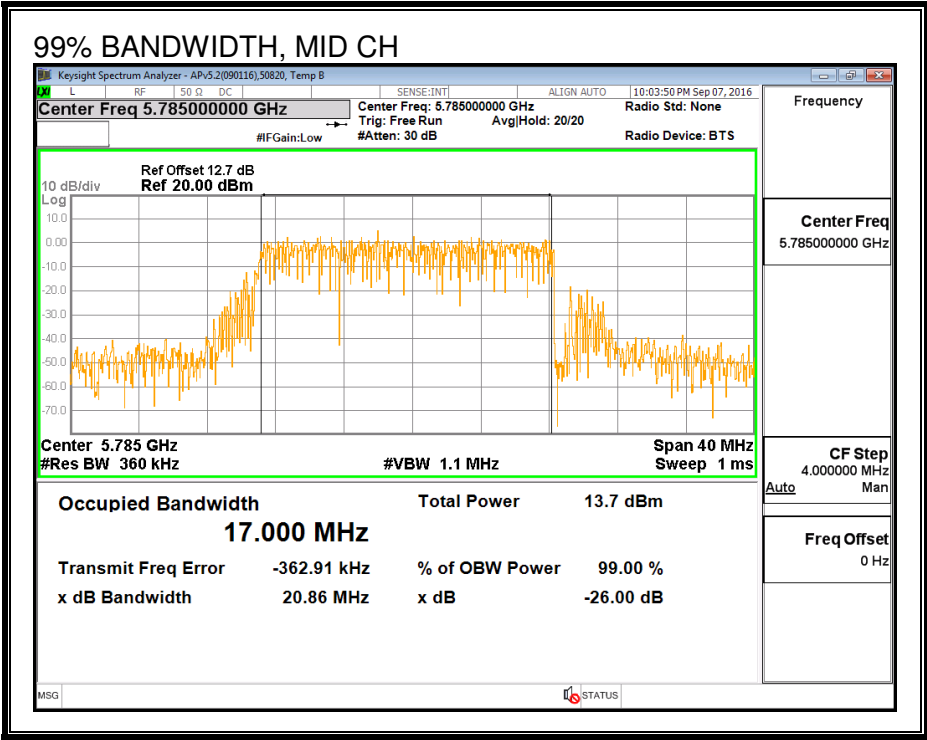
99% BANDWIDTH, CHAIN 0





99% BANDWIDTH, CHAIN 1





8.7.4. AVERAGE POWER (FCC/IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

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

| Channel | Frequency (MHz) | Chain 0 Power (dBm) | Chain 1 Power (dBm) | Total Power (dBm) |
|---------|--------------------|---------------------------|---------------------------|-------------------------|
| Low | 5745 | 12.67 | 12.65 | 15.67 |
| Mid | 5785 | 12.75 | 12.55 | 15.66 |
| High | 5825 | 12.73 | 12.70 | 15.73 |

8.7.5. OUTPUT POWER (FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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) |
|-------------------------------------|-------------------------------------|---|
| 4.00 | 6.30 | 5.30 |

RESULTS

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

Antenna Gain and Limit

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5745 | 5.30 | 30.00 |
| Mid | 5785 | 5.30 | 30.00 |
| High | 5825 | 5.30 | 30.00 |

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 | 5745 | 12.67 | 12.65 | 15.67 | 30.00 | -14.33 |
| Mid | 5785 | 12.75 | 12.55 | 15.66 | 30.00 | -14.34 |
| High | 5825 | 12.73 | 12.70 | 15.73 | 30.00 | -14.27 |

8.7.6. PSD (FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

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) |
|---|---|---|
| 4.00 | 6.30 | 5.30 |

RESULTS

Antenna Gain and Limits

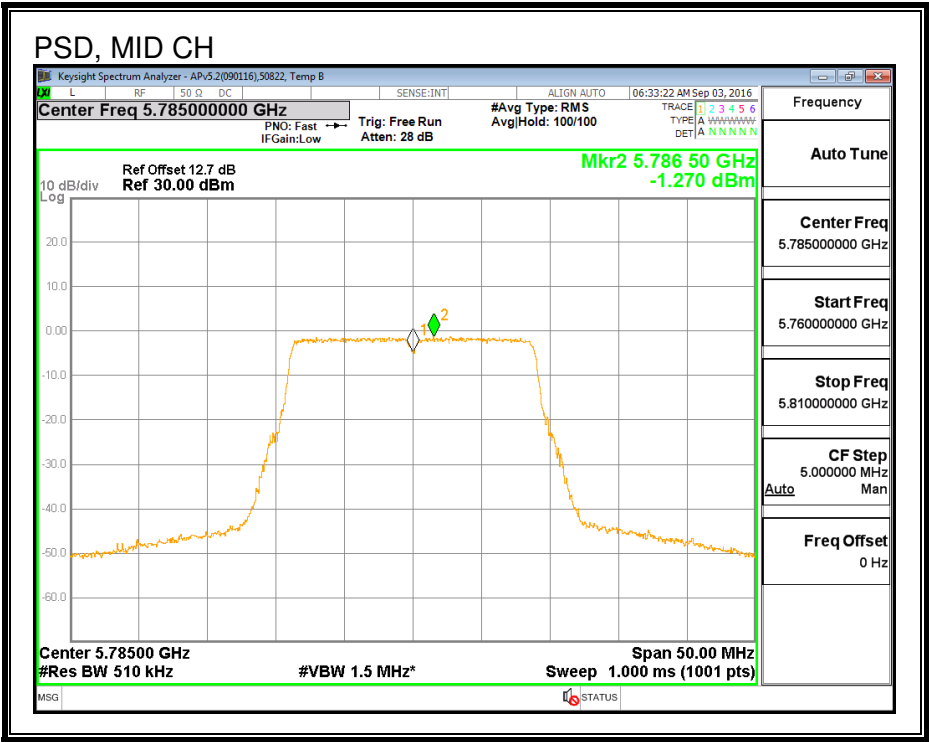
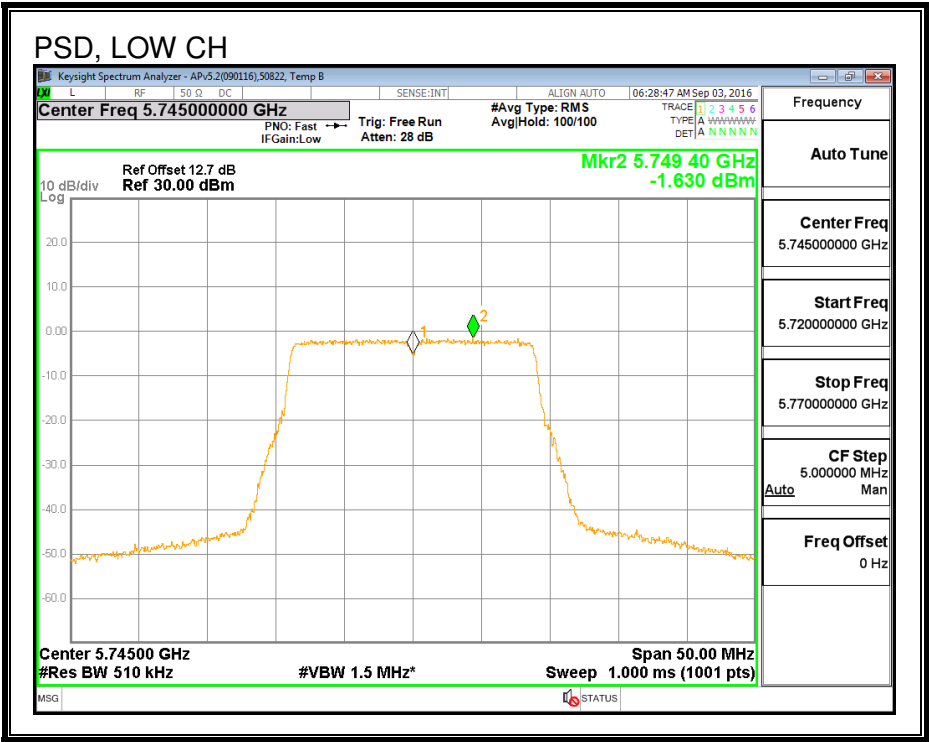
| Channel | Frequency (MHz) | Directional Gain (dBi) | PSD Limit (dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low | 5745 | 5.30 | 30.00 |
| Mid | 5785 | 5.30 | 30.00 |
| High | 5825 | 5.30 | 30.00 |

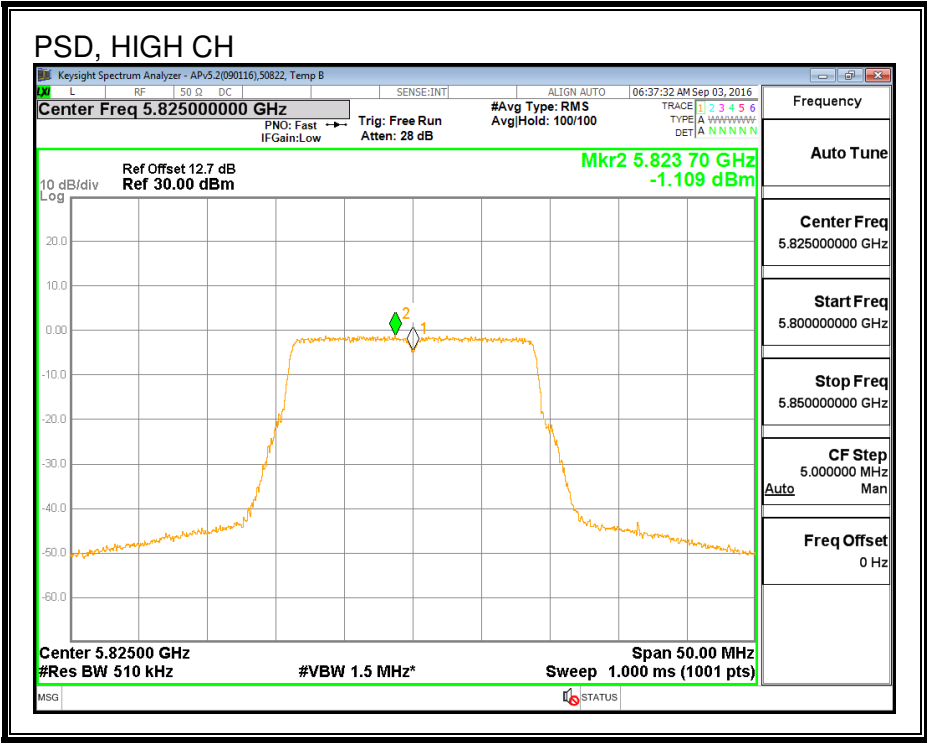
| | | |
|--------------------|------|--|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|--------------------|------|--|

PSD Results

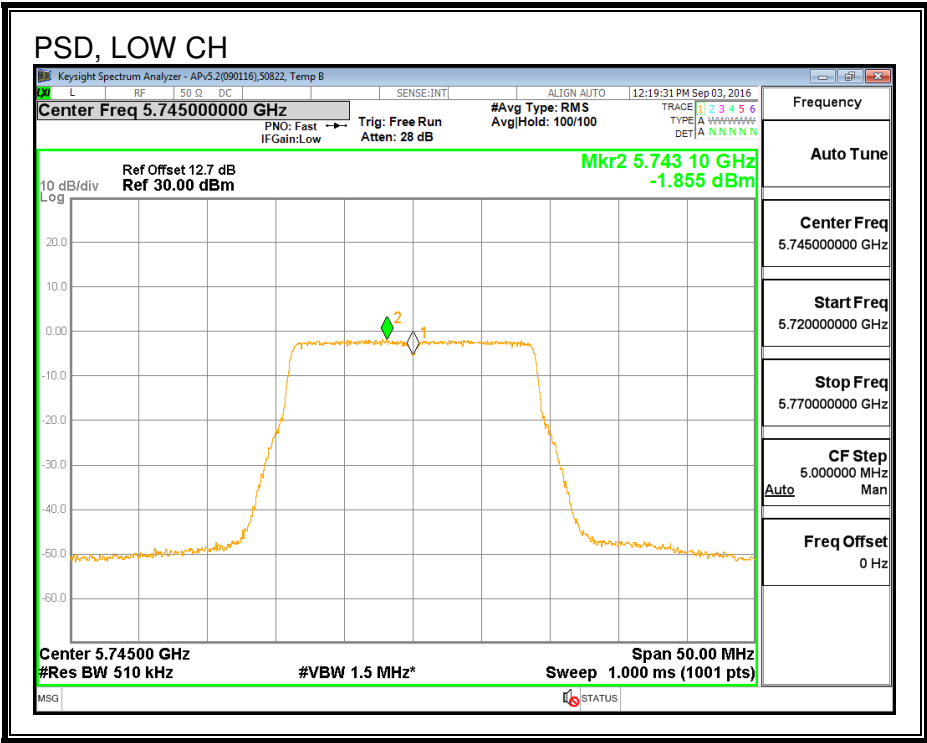
| Channel | Frequency (MHz) | Chain 0 Meas PSD (dBm) | Chain 1 Meas PSD (dBm) | Total Corr'd PSD (dBm) | PSD Limit (dBm) | PSD Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low | 5745 | -1.63 | -1.86 | 1.27 | 30.00 | -28.73 |
| Mid | 5785 | -1.27 | -1.53 | 1.61 | 30.00 | -28.39 |
| High | 5825 | -1.11 | -1.36 | 1.78 | 30.00 | -28.22 |

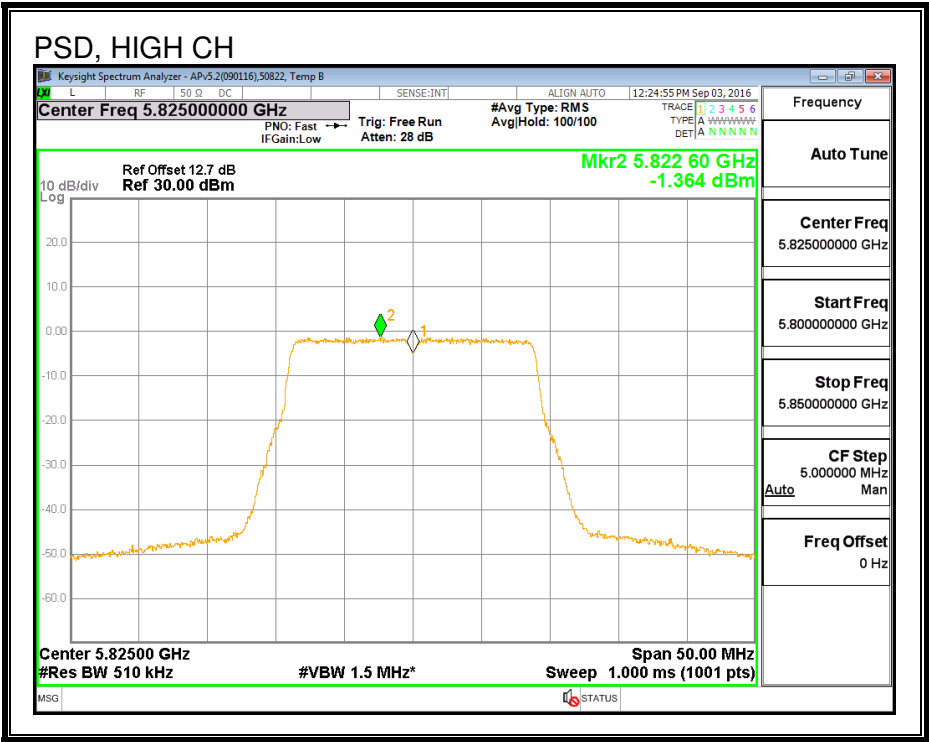
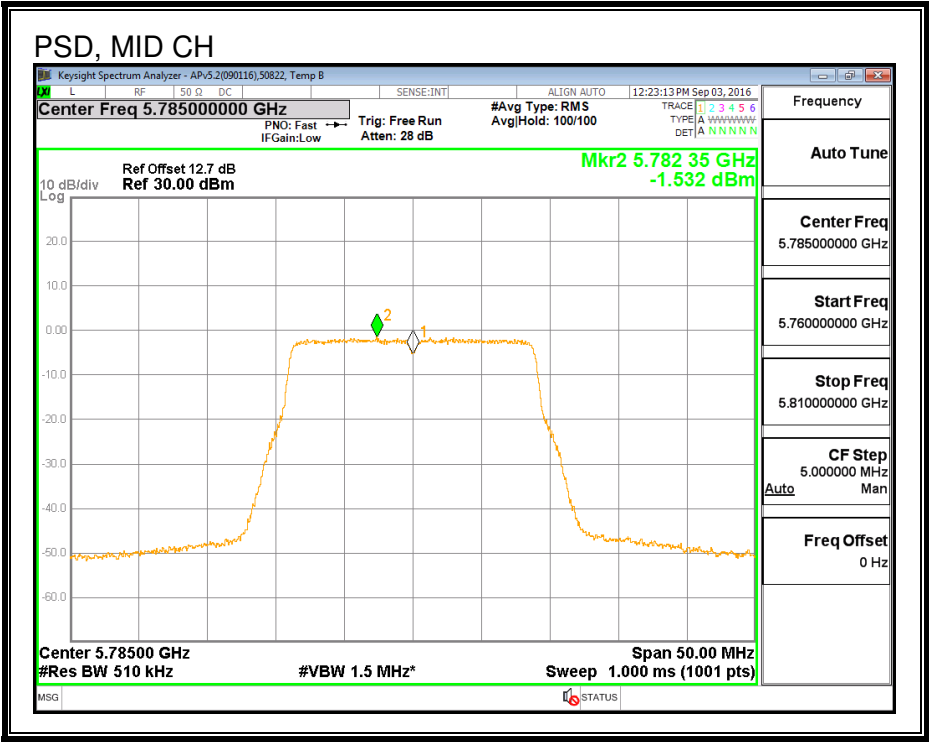
PSD, CHAIN 0





PSD, CHAIN 1





8.8. 802.11n HT20 2Tx (CHAIN 0 + CHAIN 2) STBC MODE IN THE 5.8 GHz BAND

8.8.1. 6 dB BANDWIDTH

LIMITS

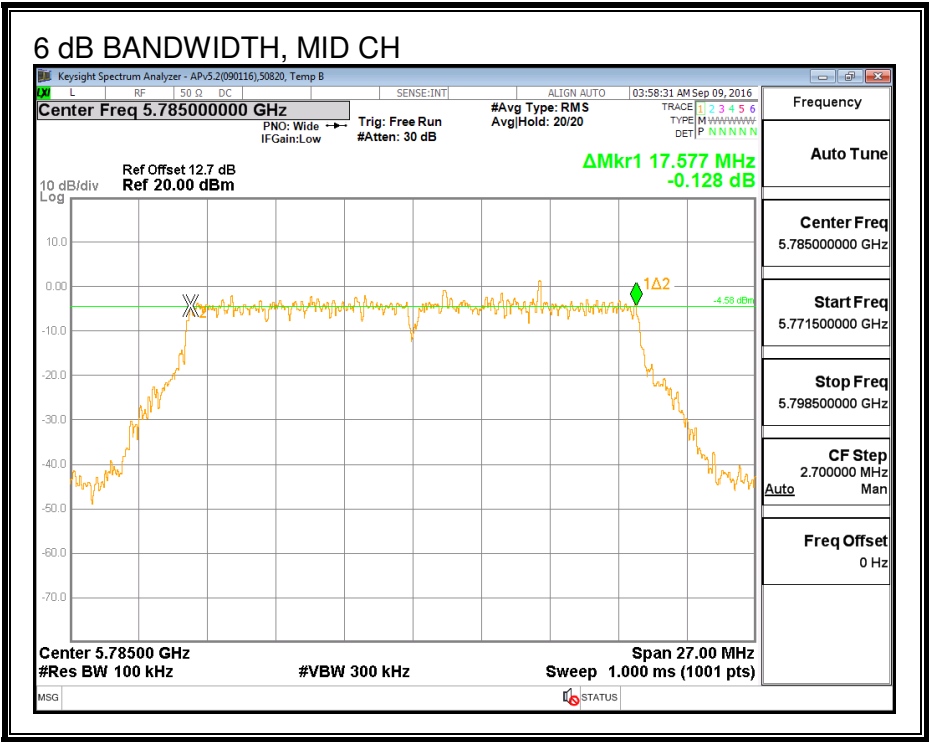
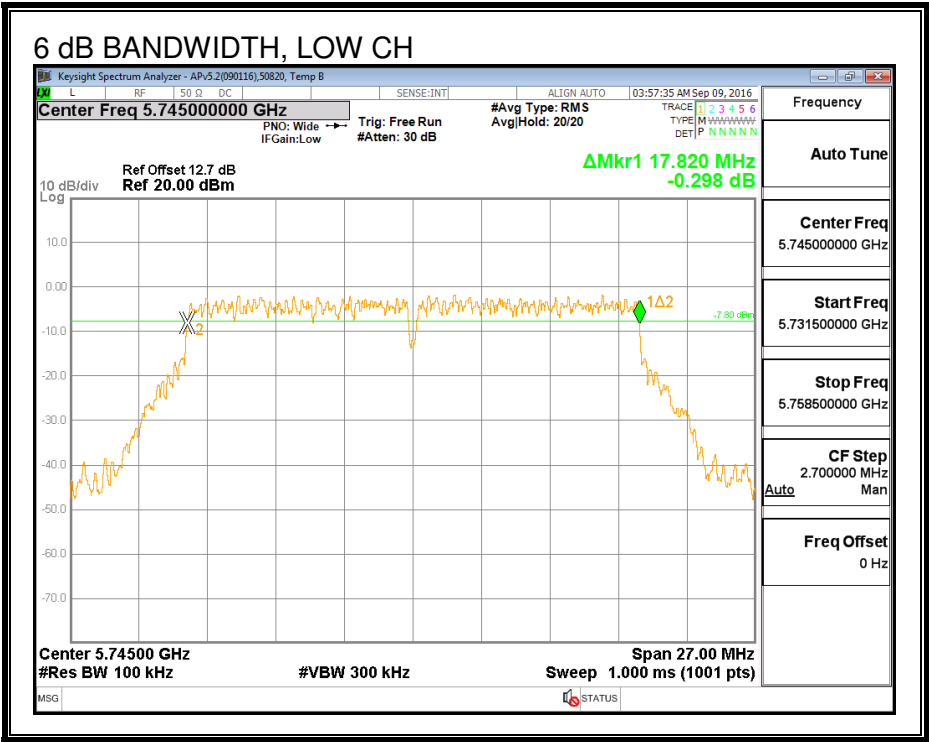
FCC §15.407 (e)

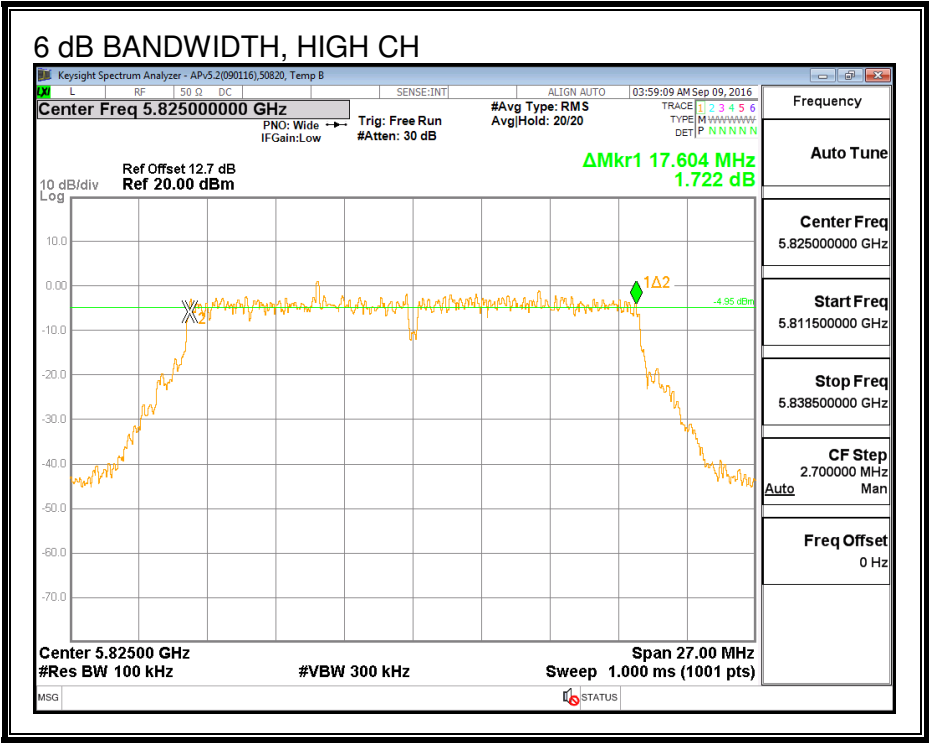
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

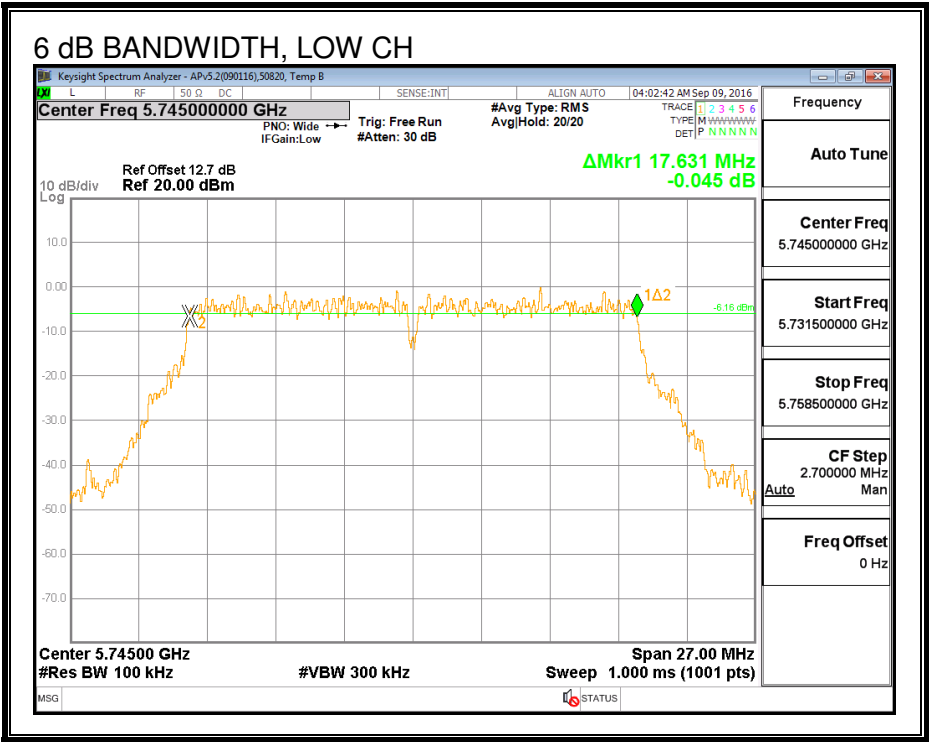
| Channel | Frequency (MHz) | 6 dB BW Chain 0 (MHz) | 6 dB BW Chain 2 (MHz) | Minimum Limit (MHz) |
|---------|--------------------|-----------------------------|-----------------------------|---------------------------|
| Low | 5745 | 17.820 | 17.631 | 0.5 |
| Mid | 5785 | 17.577 | 17.766 | 0.5 |
| High | 5825 | 17.604 | 17.604 | 0.5 |

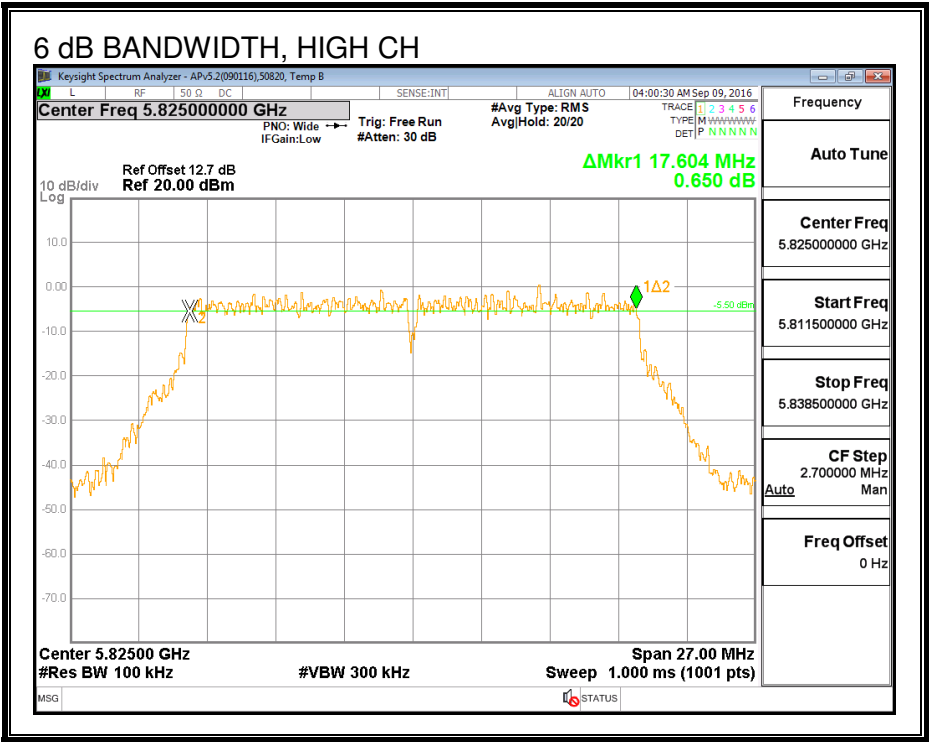
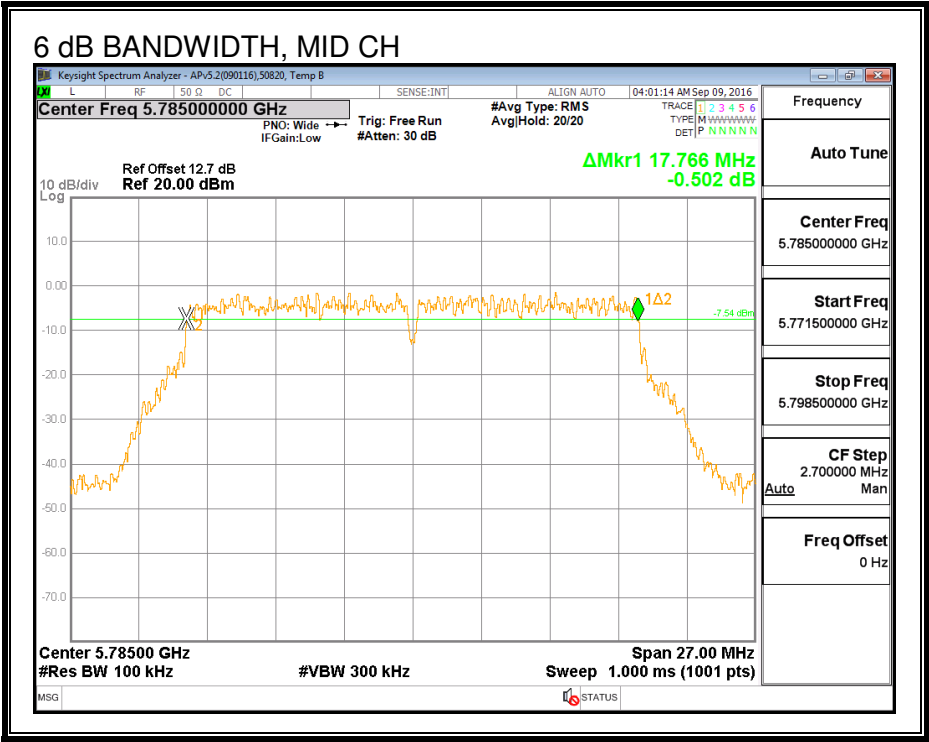
6 dB BANDWIDTH, CHAIN 0





6 dB BANDWIDTH, CHAIN 2





8.8.2. 26 dB BANDWIDTH

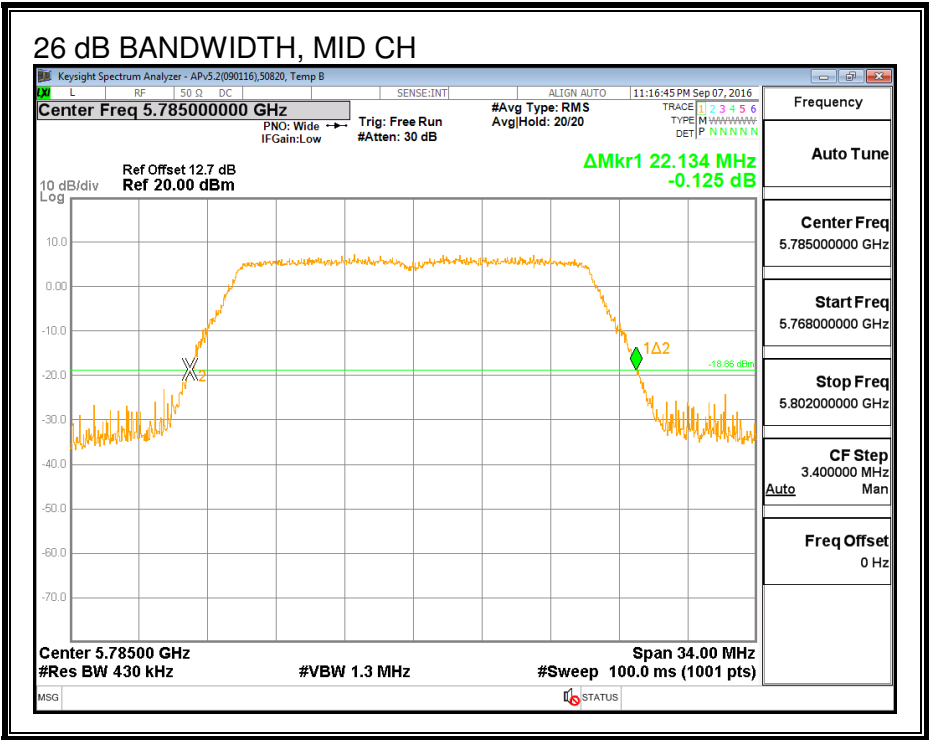
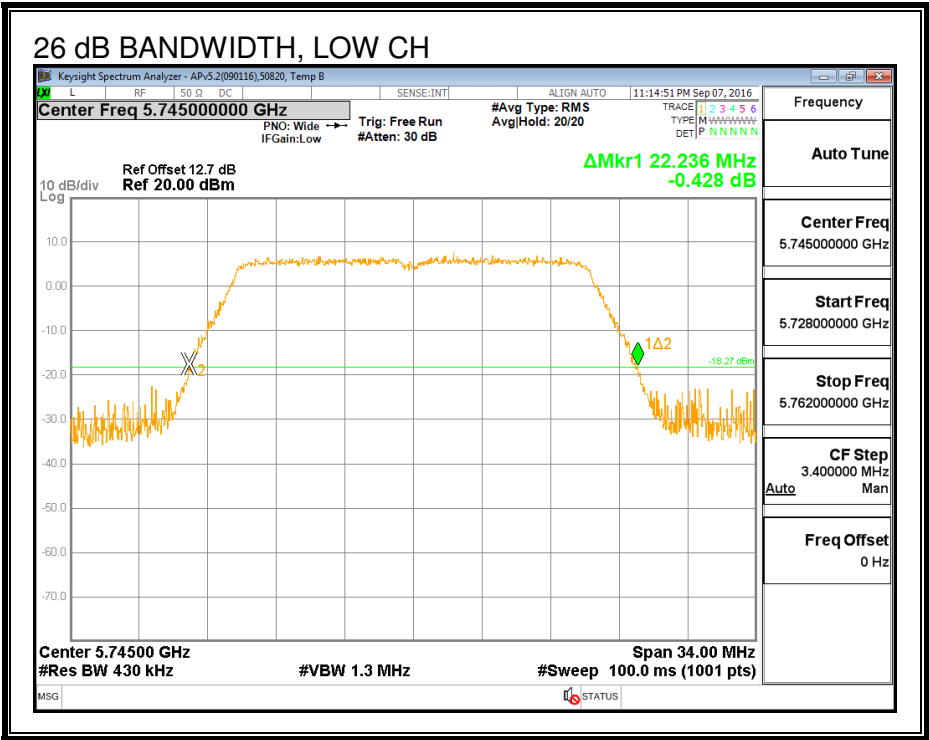
LIMITS

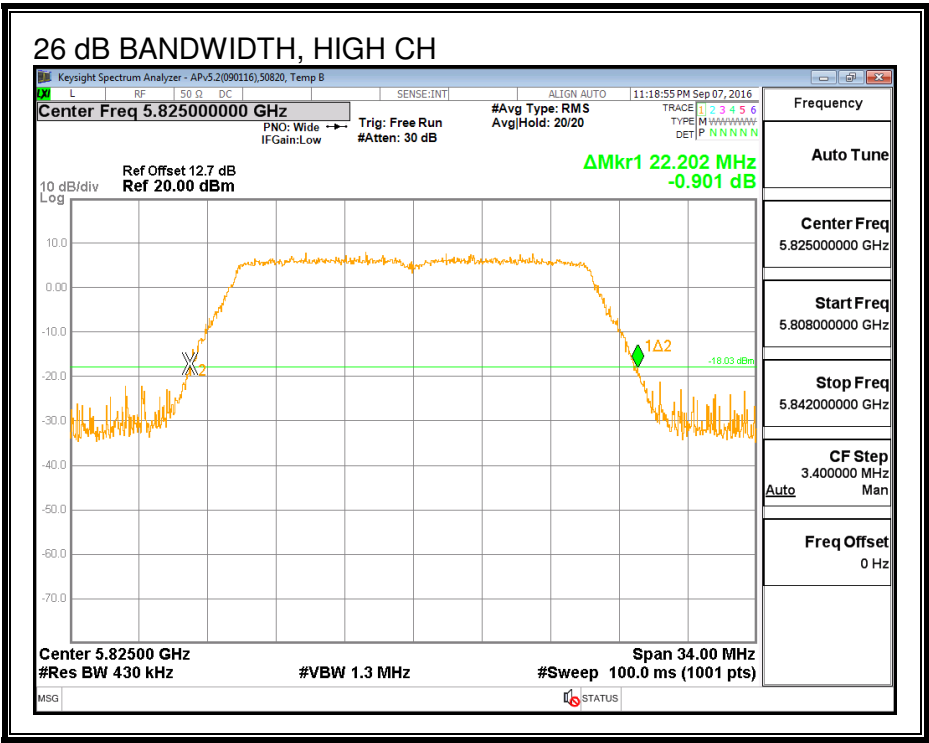
None, for reporting purposes only.

RESULTS

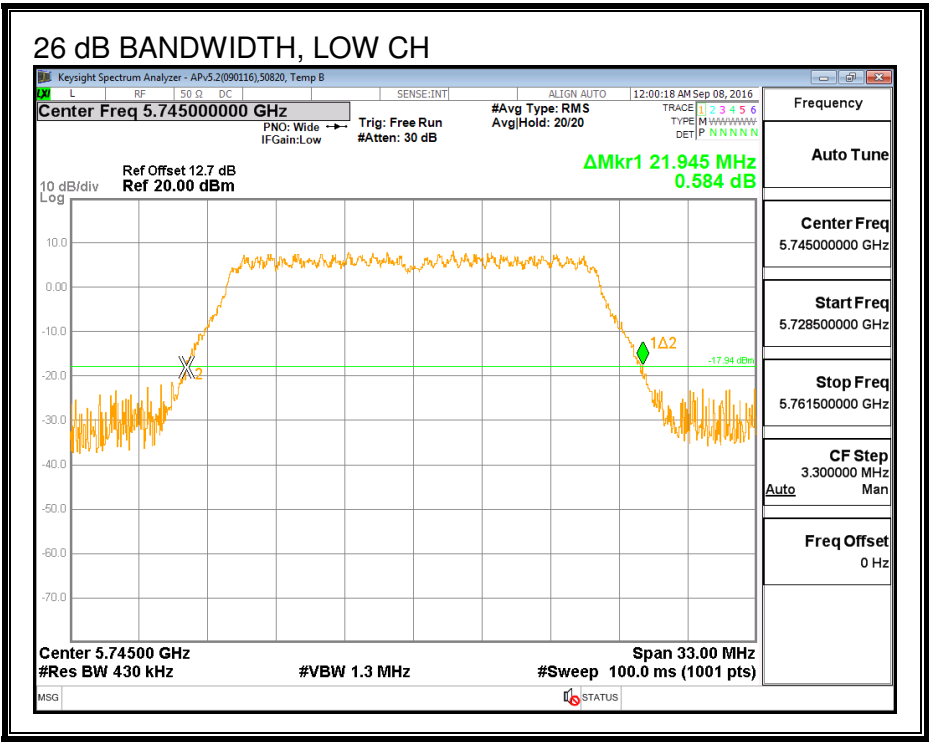
| Channel | Frequency (MHz) | 26 dB BW Chain 0 (MHz) | 26 dB BW Chain 2 (MHz) |
|---------|--------------------|------------------------------|------------------------------|
| Low | 5745 | 22.236 | 21.945 |
| Mid | 5785 | 22.134 | 21.747 |
| High | 5825 | 22.202 | 21.846 |

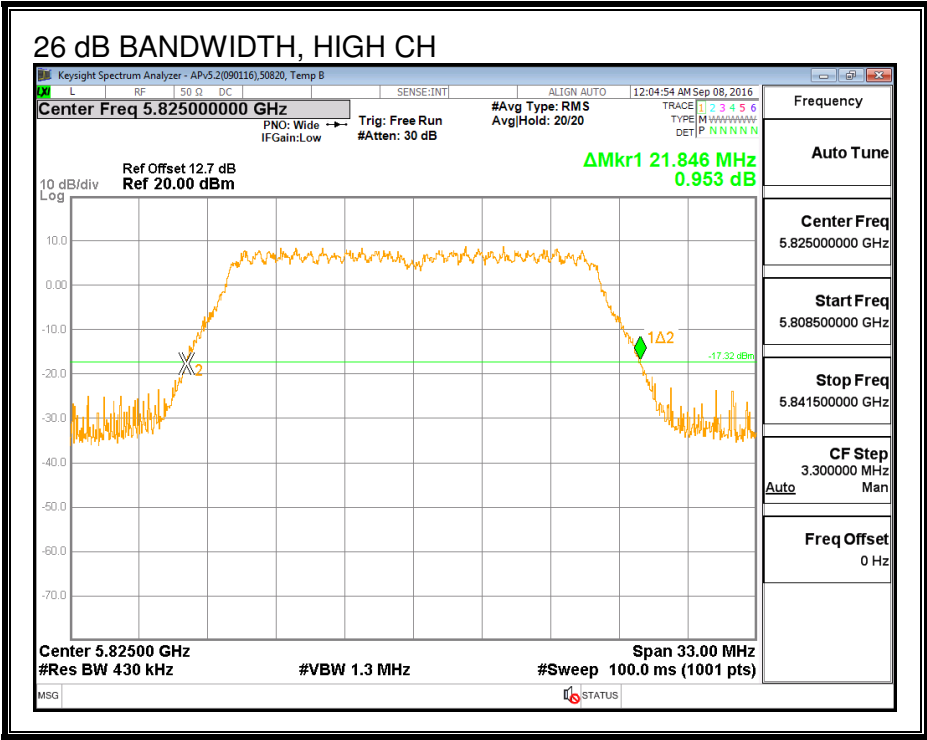
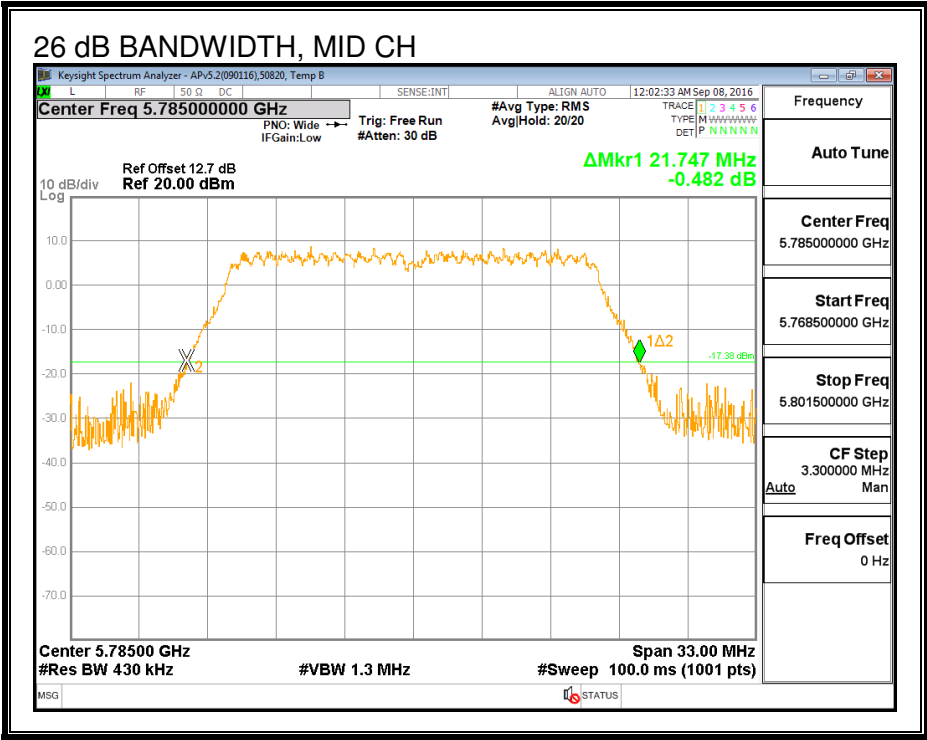
26 dB BANDWIDTH, CHAIN 0





26 dB BANDWIDTH, CHAIN 2





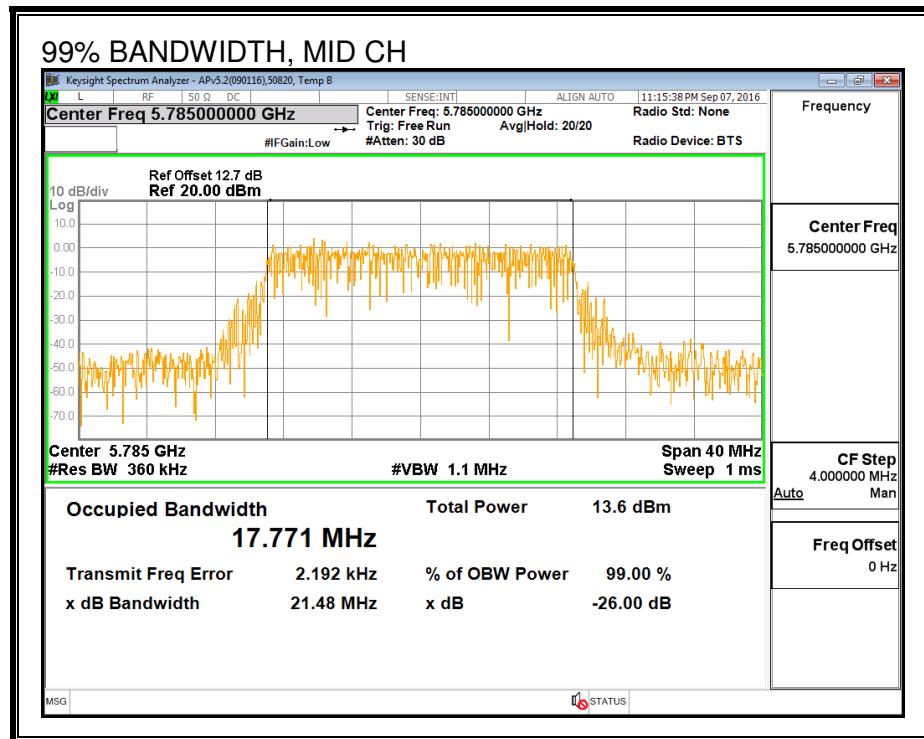
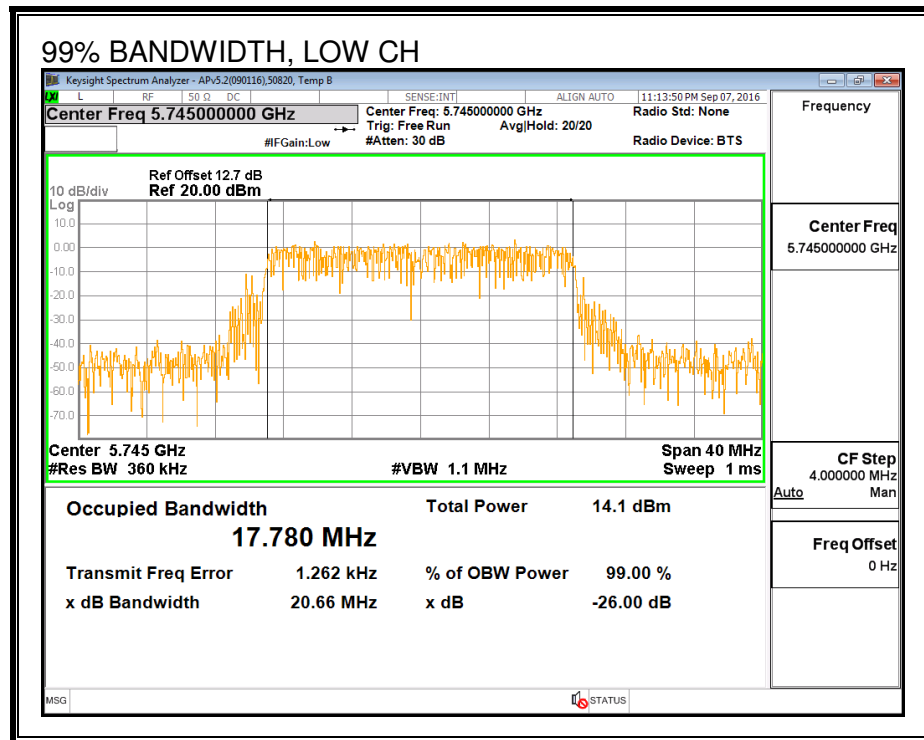
8.8.3. 99% BANDWIDTH

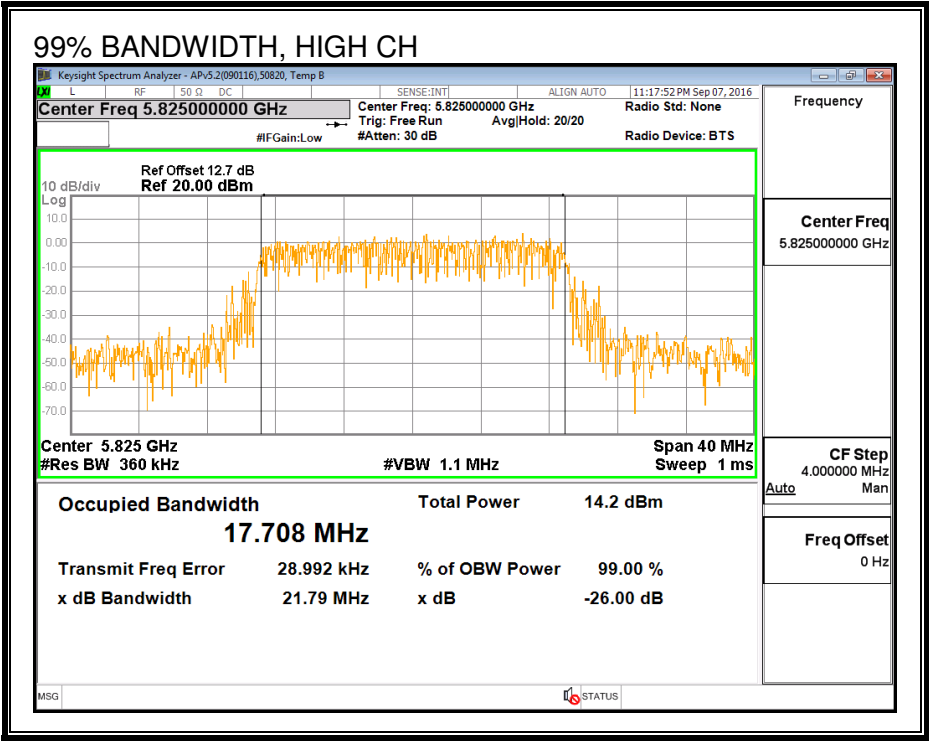
LIMITS

None; for reporting purposes only.

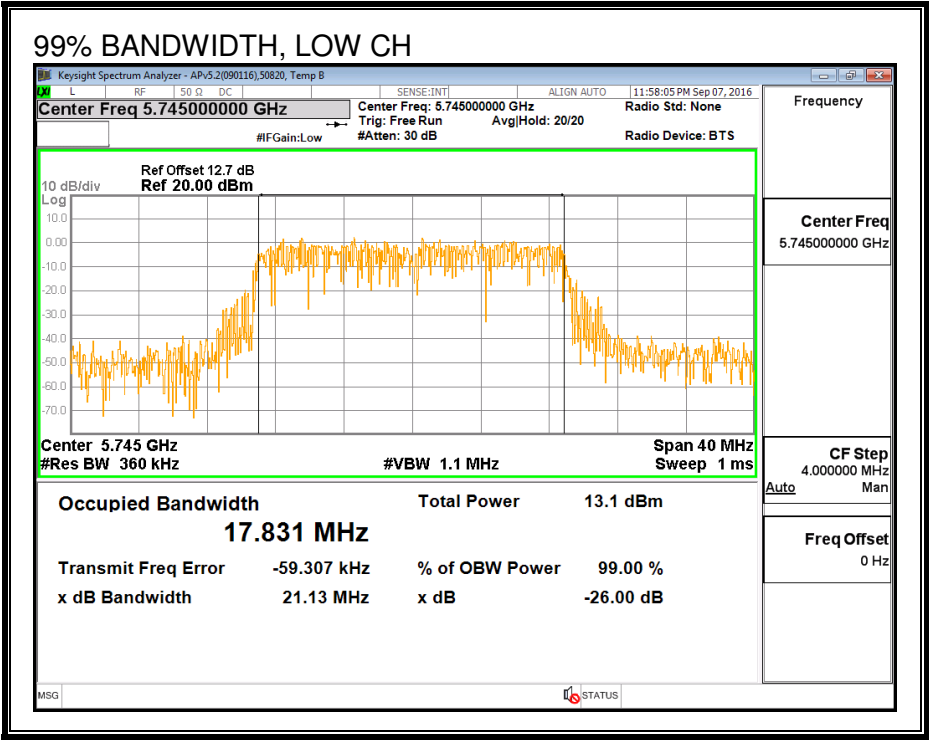
RESULTS

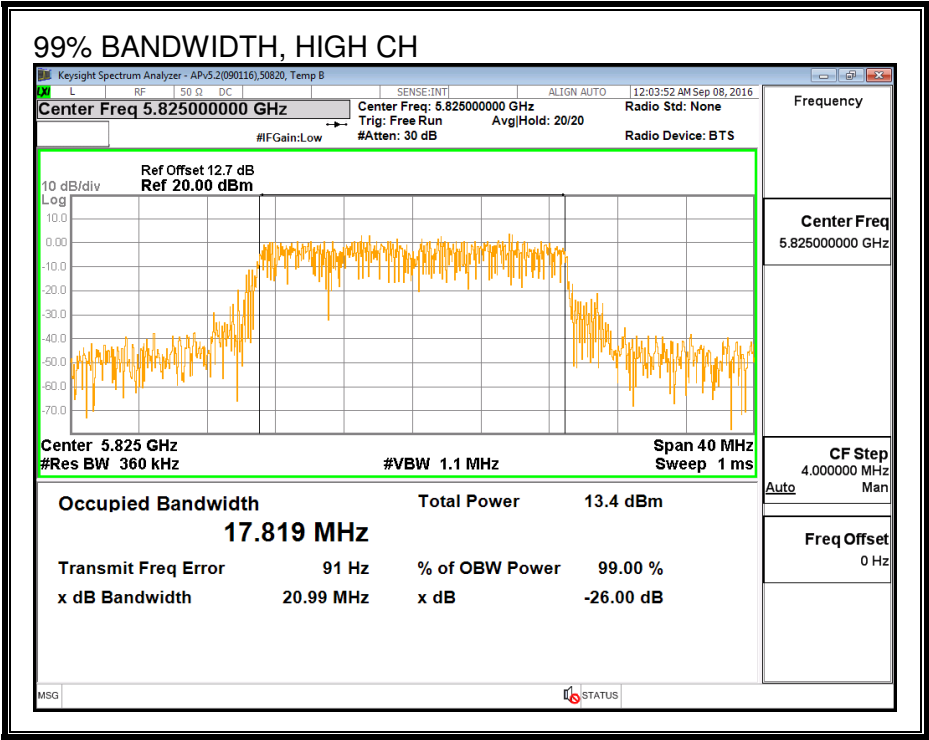
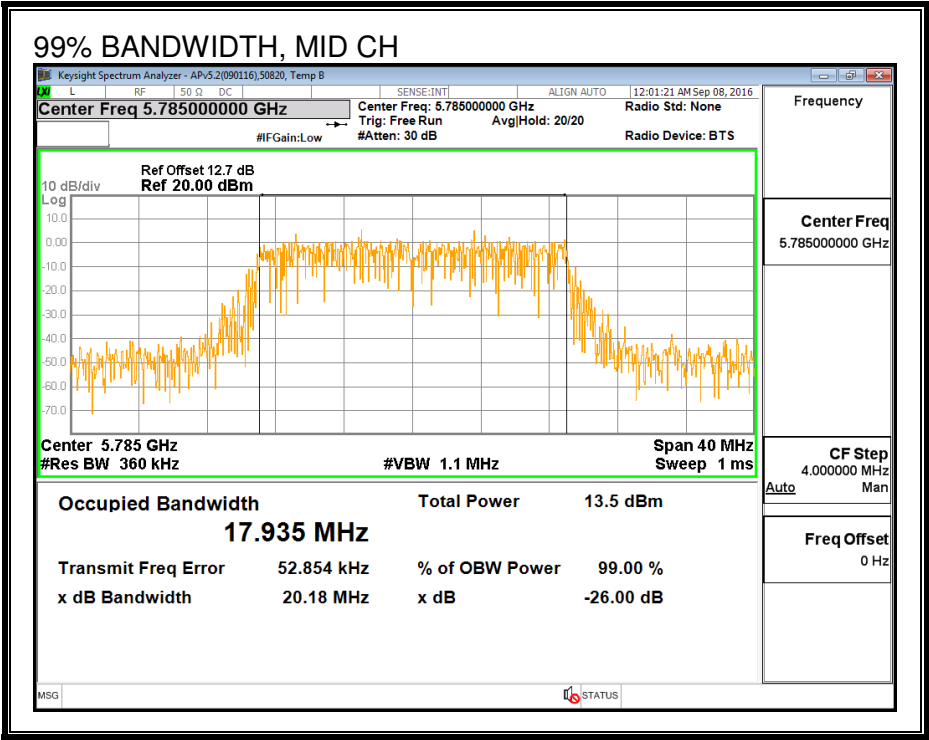
| Channel | Frequency (MHz) | 99% BW Chain 0 (MHz) | 99% BW Chain 2 (MHz) |
|---------|--------------------|----------------------------|----------------------------|
| Low | 5745 | 17.780 | 17.831 |
| Mid | 5785 | 17.771 | 17.935 |
| High | 5825 | 17.708 | 17.819 |





99% BANDWIDTH, CHAIN 2





8.8.4. AVERAGE POWER (FCC/IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

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

| Channel | Frequency (MHz) | Chain 0 Power (dBm) | Chain 2 Power (dBm) | Total Power (dBm) |
|---------|--------------------|---------------------------|---------------------------|-------------------------|
| Low | 5745 | 12.70 | 12.60 | 15.66 |
| Mid | 5785 | 12.71 | 12.61 | 15.67 |
| High | 5825 | 12.69 | 12.70 | 15.71 |

8.8.5. OUTPUT POWER(FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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) |
|-------------------------------------|-------------------------------------|---|
| 4.00 | 4.70 | 4.36 |

RESULTS

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

Antenna Gain and Limit

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5745 | 4.36 | 30.00 |
| Mid | 5785 | 4.36 | 30.00 |
| High | 5825 | 4.36 | 30.00 |

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 | 5745 | 12.70 | 12.60 | 15.66 | 30.00 | -14.34 |
| Mid | 5785 | 12.71 | 12.61 | 15.67 | 30.00 | -14.33 |
| High | 5825 | 12.69 | 12.70 | 15.71 | 30.00 | -14.29 |

8.8.6. PSD (FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

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) |
|---|---|---|
| 4.00 | 4.70 | 4.36 |

RESULTS

Antenna Gain and Limits

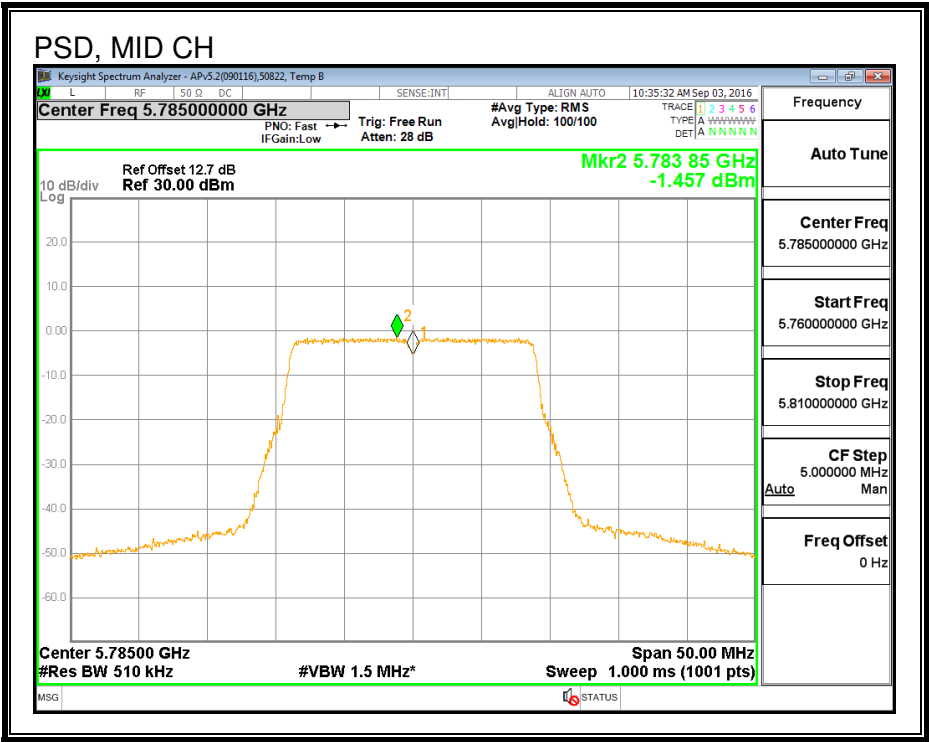
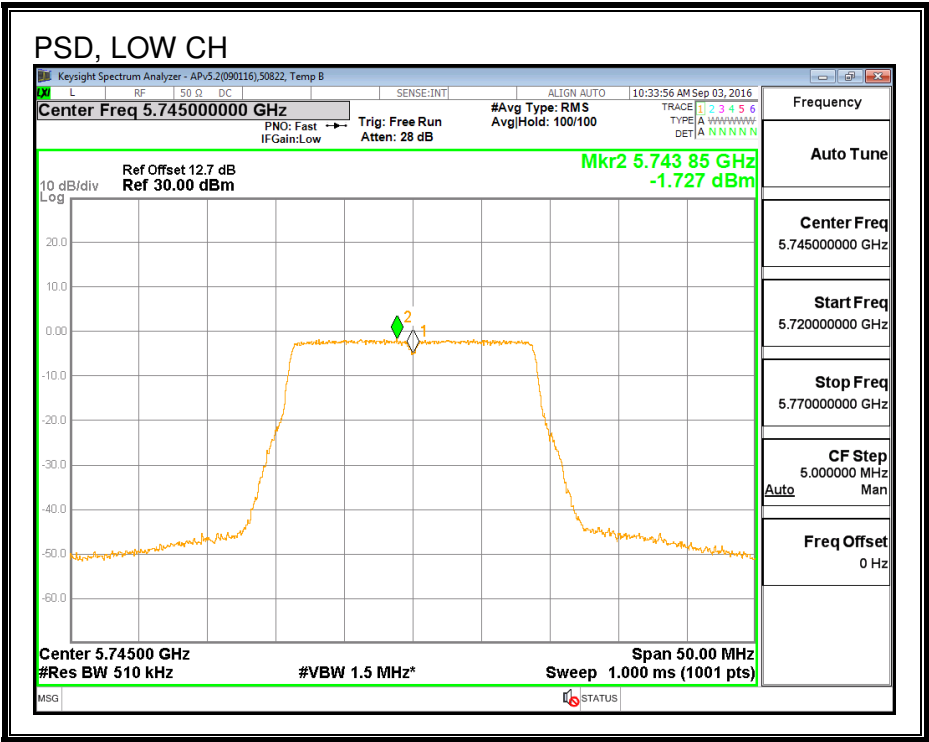
| Channel | Frequency (MHz) | Directional Gain (dBi) | PSD Limit (dBm) |
|---------|--------------------|------------------------------|-----------------------|
| Low | 5745 | 4.36 | 30.00 |
| Mid | 5785 | 4.36 | 30.00 |
| High | 5825 | 4.36 | 30.00 |

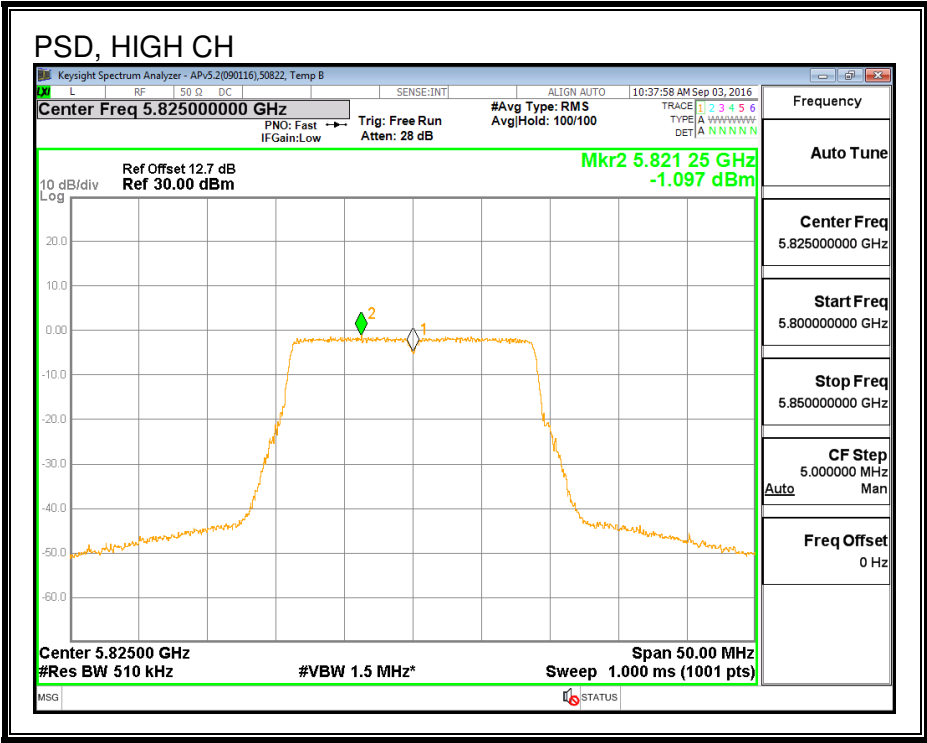
| | | |
|--------------------|------|--|
| Duty Cycle CF (dB) | 0.00 | Included in Calculations of Corr'd PSD |
|--------------------|------|--|

PSD Results

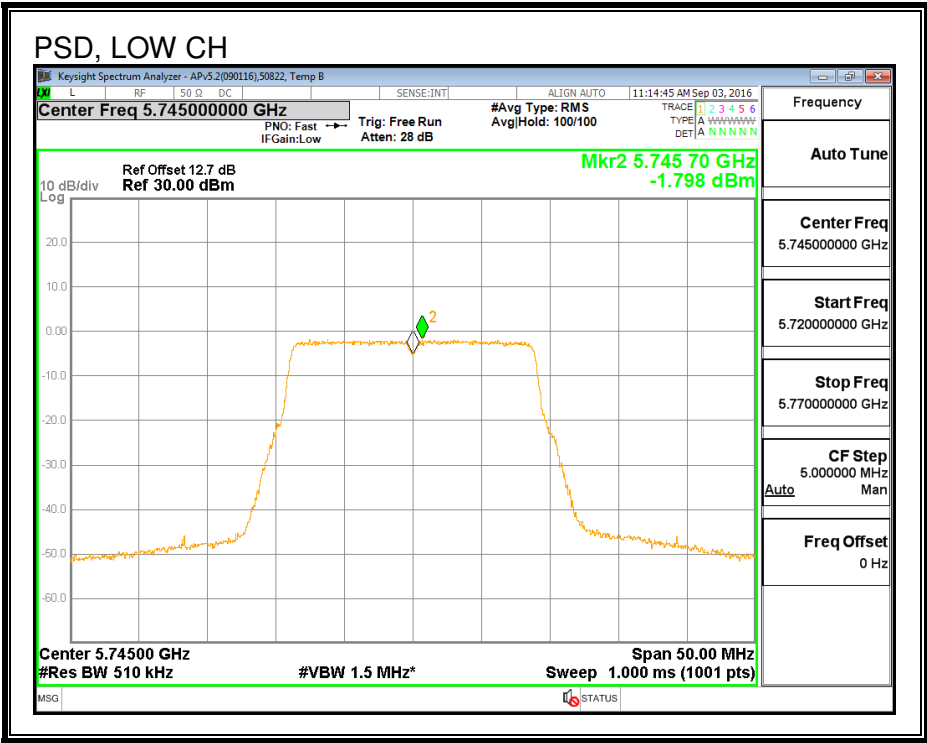
| Channel | Frequency (MHz) | Chain 0 Meas PSD (dBm) | Chain 2 Meas PSD (dBm) | Total Corr'd PSD (dBm) | PSD Limit (dBm) | PSD Margin (dB) |
|---------|--------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------|-----------------------|
| Low | 5745 | -1.73 | -1.80 | 1.25 | 30.00 | -28.75 |
| Mid | 5785 | -1.46 | -1.54 | 1.51 | 30.00 | -28.49 |
| High | 5825 | -1.10 | -1.46 | 1.73 | 30.00 | -28.27 |

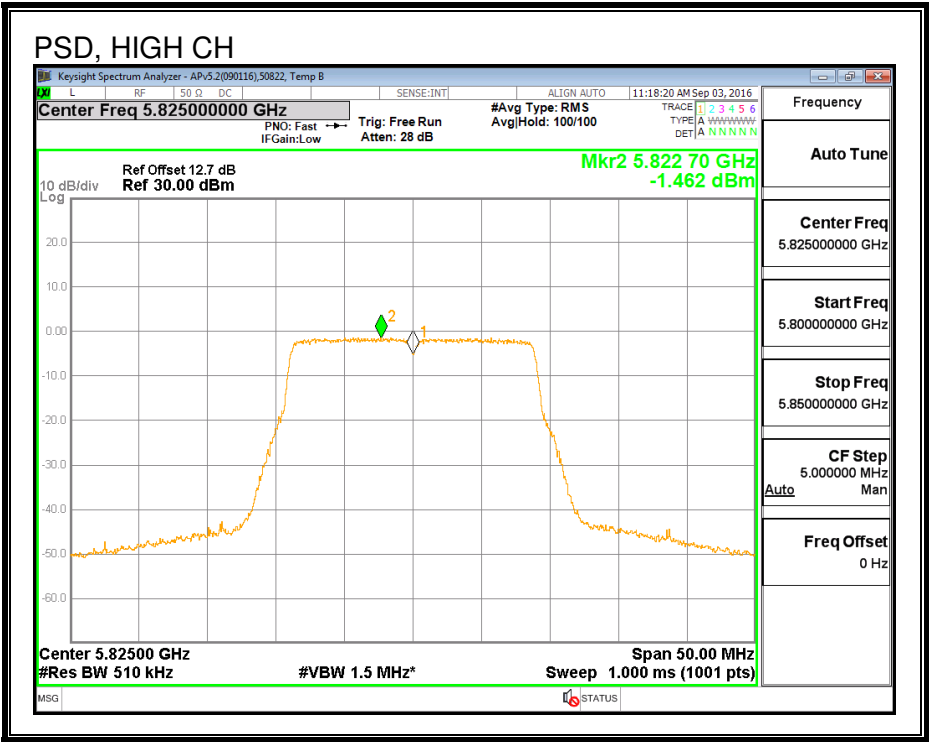
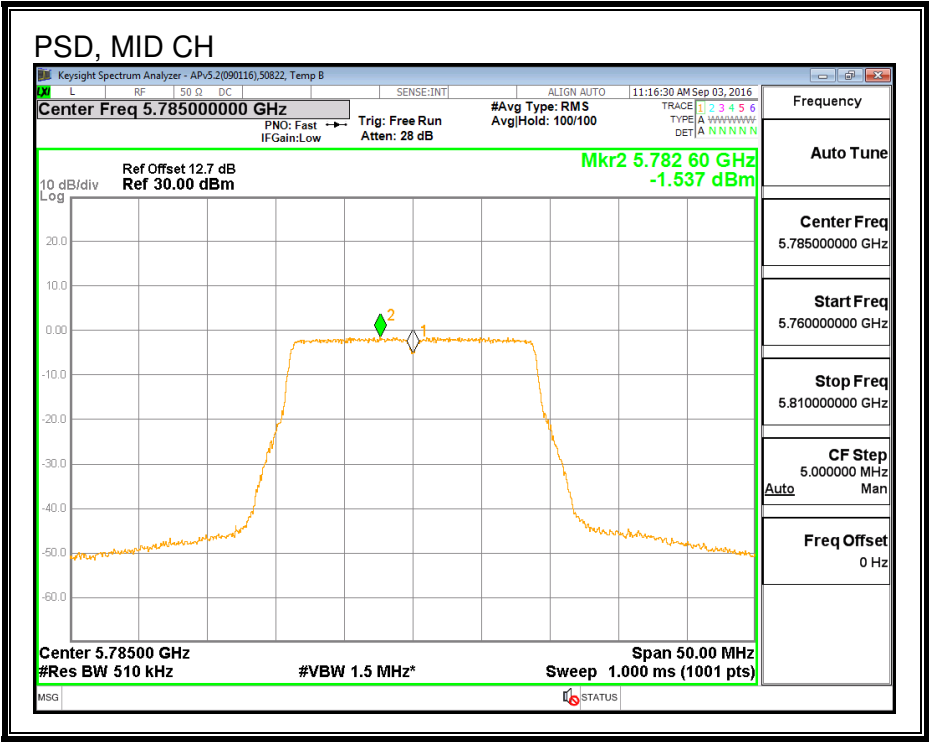
PSD, CHAIN 0





PSD, CHAIN 2





8.9. 802.11n HT20 2Tx (CHAIN 1 + CHAIN 2) STBC MODE IN THE 5.8 GHz BAND

8.9.1. 6 dB BANDWIDTH

LIMITS

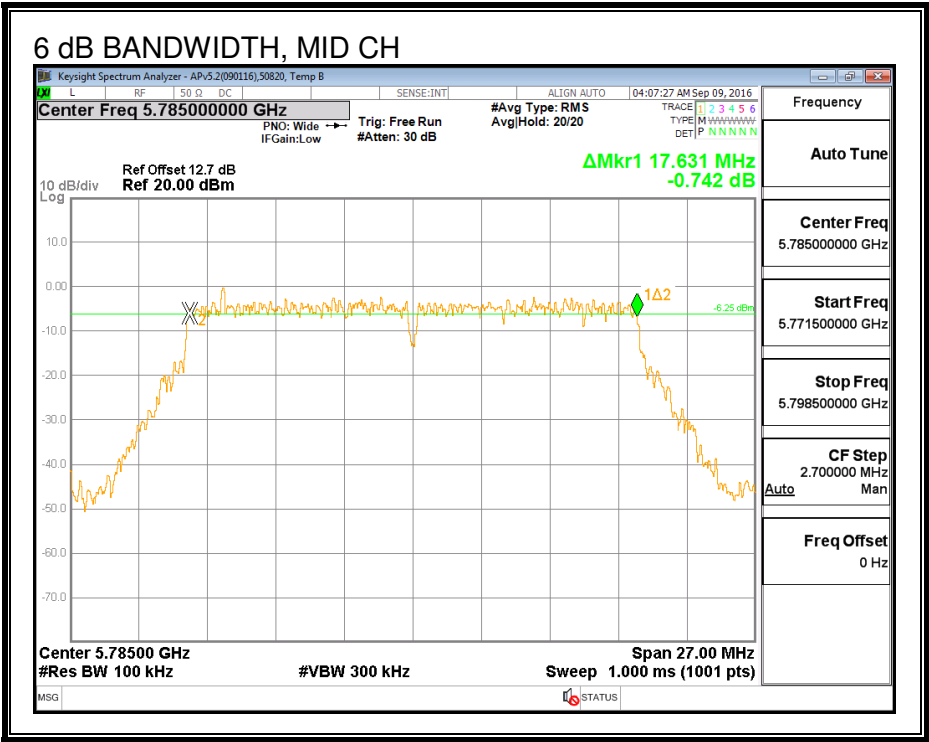
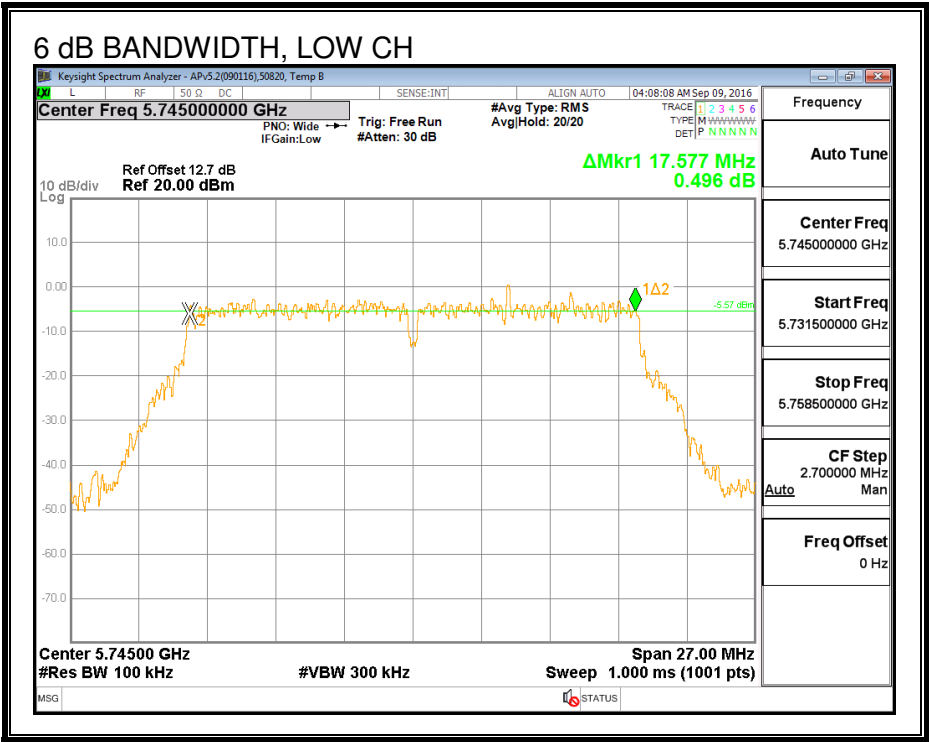
FCC §15.407 (e)

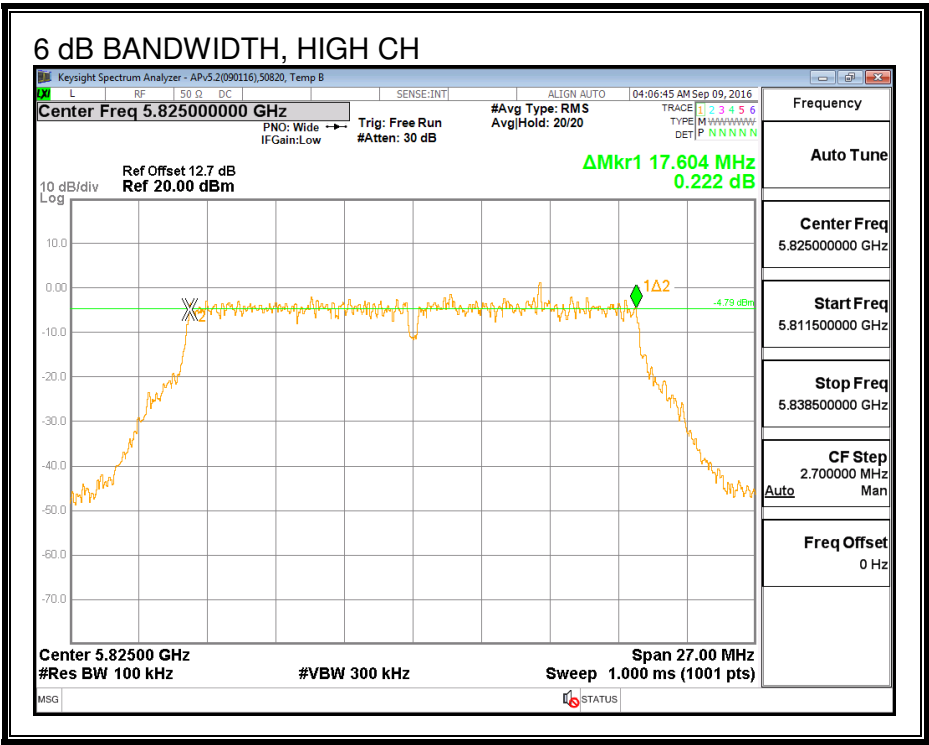
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

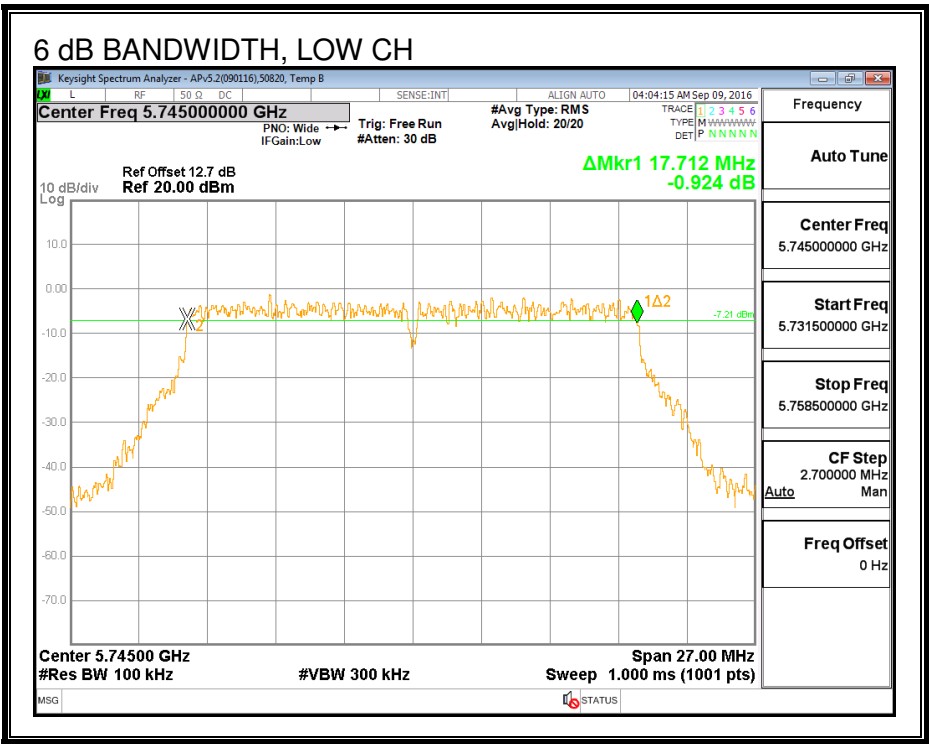
| Channel | Frequency (MHz) | 6 dB BW Chain 1 (MHz) | 6 dB BW Chain 2 (MHz) | Minimum Limit (MHz) |
|---------|--------------------|-----------------------------|-----------------------------|---------------------------|
| Low | 5745 | 17.577 | 17.712 | 0.5 |
| Mid | 5785 | 17.631 | 17.604 | 0.5 |
| High | 5825 | 17.604 | 17.685 | 0.5 |

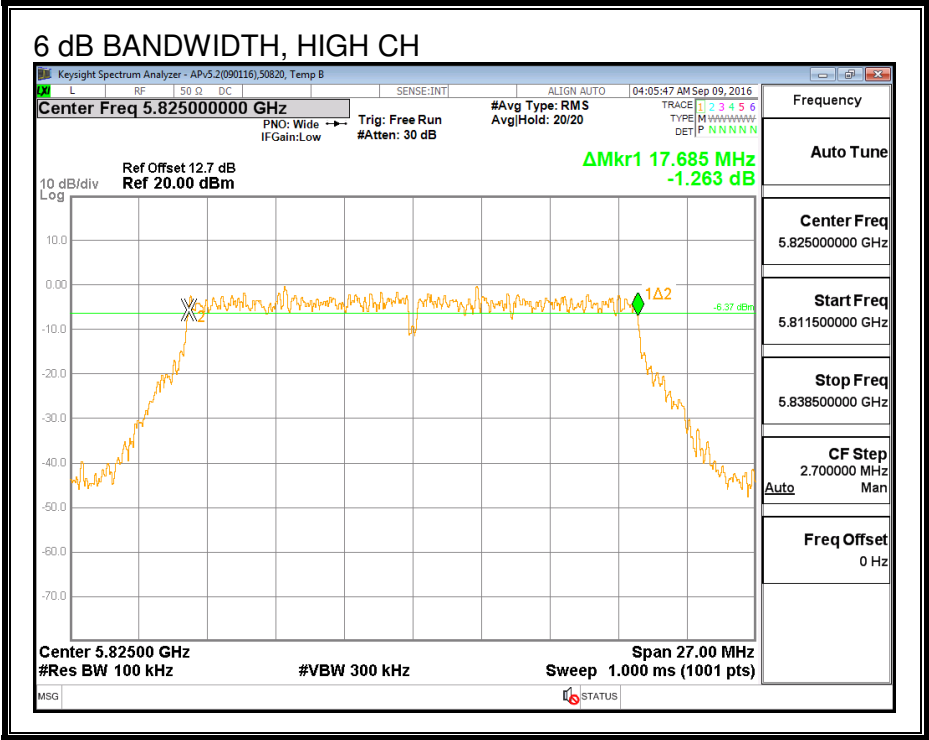
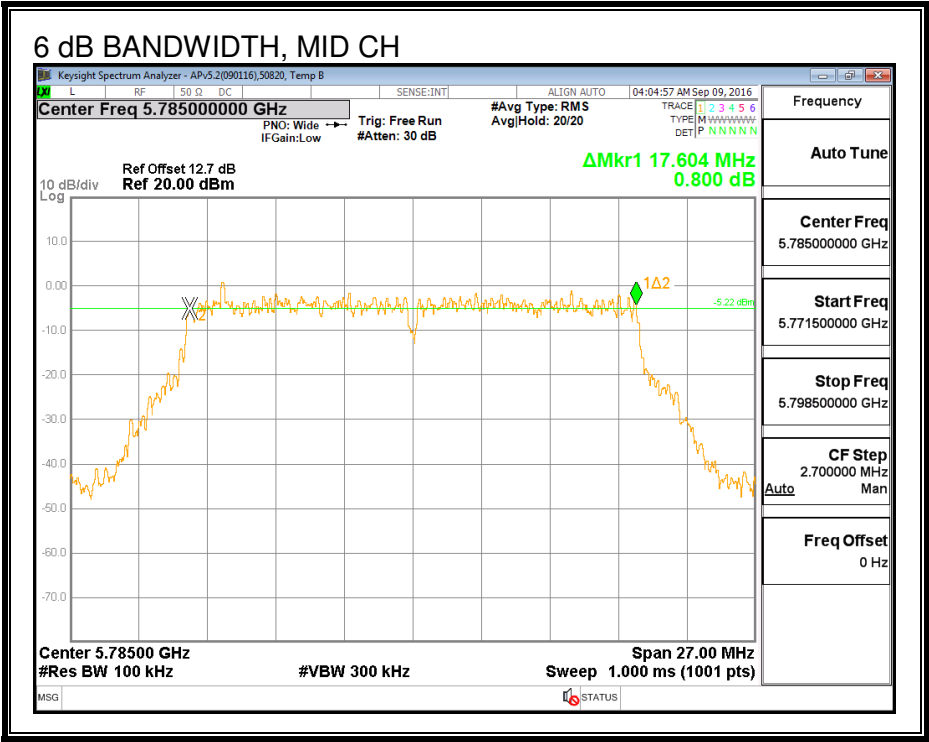
6 dB BANDWIDTH, CHAIN 1





6 dB BANDWIDTH, CHAIN 2





8.9.2. 26 dB BANDWIDTH

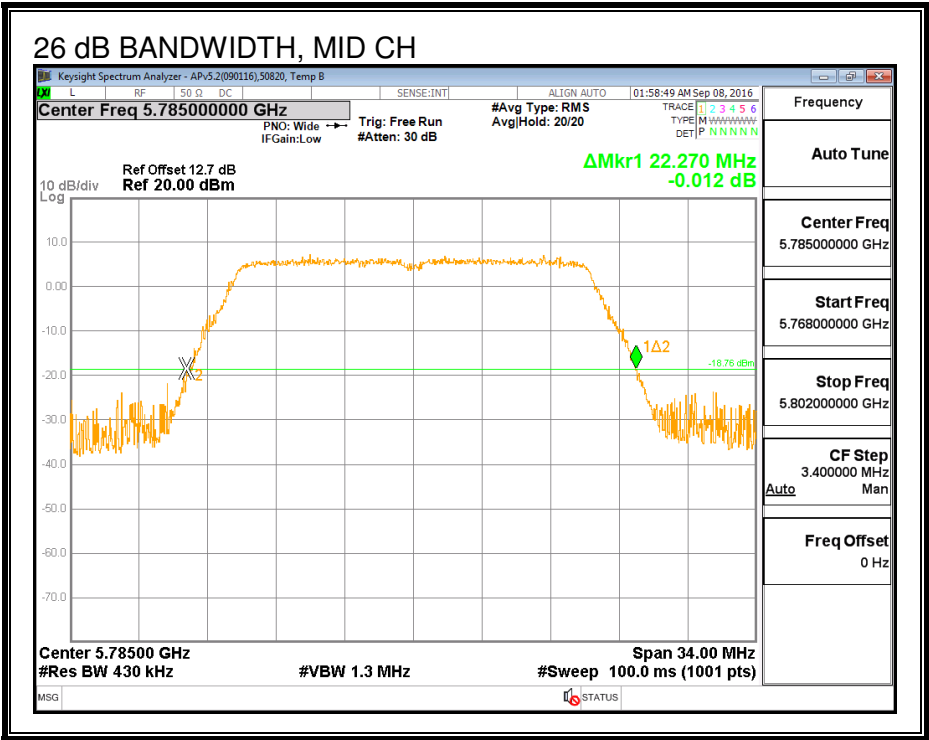
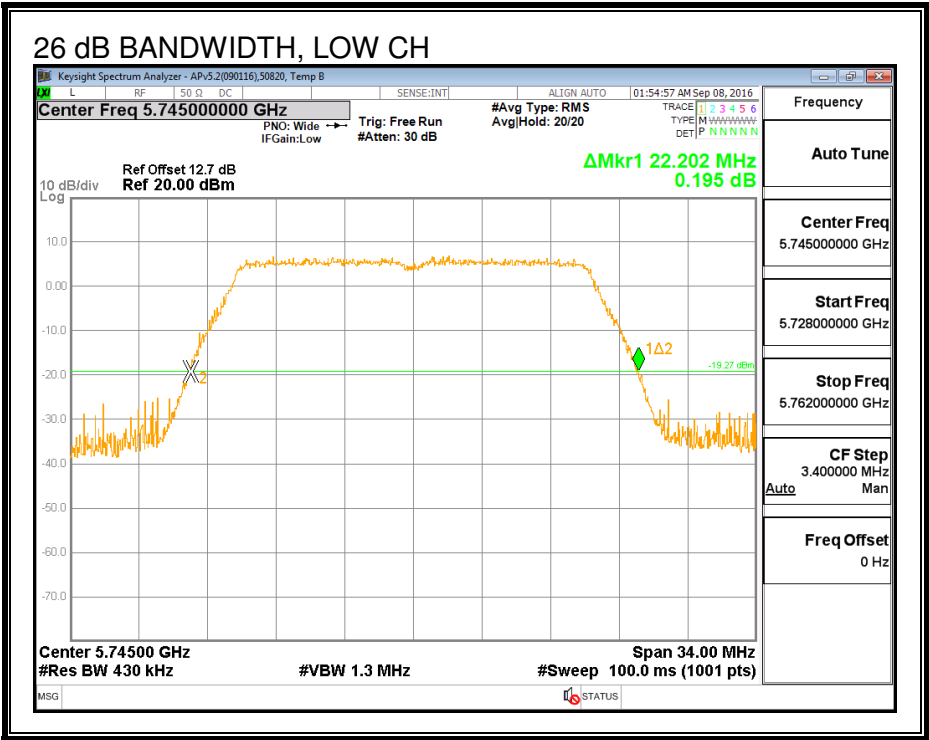
LIMITS

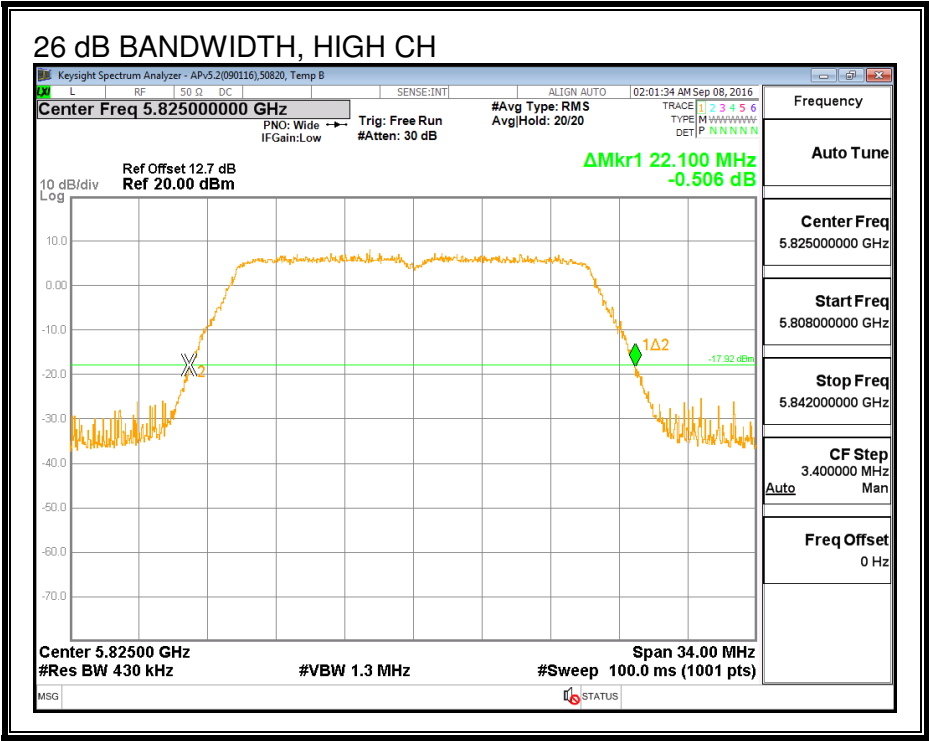
None, for reporting purposes only.

RESULTS

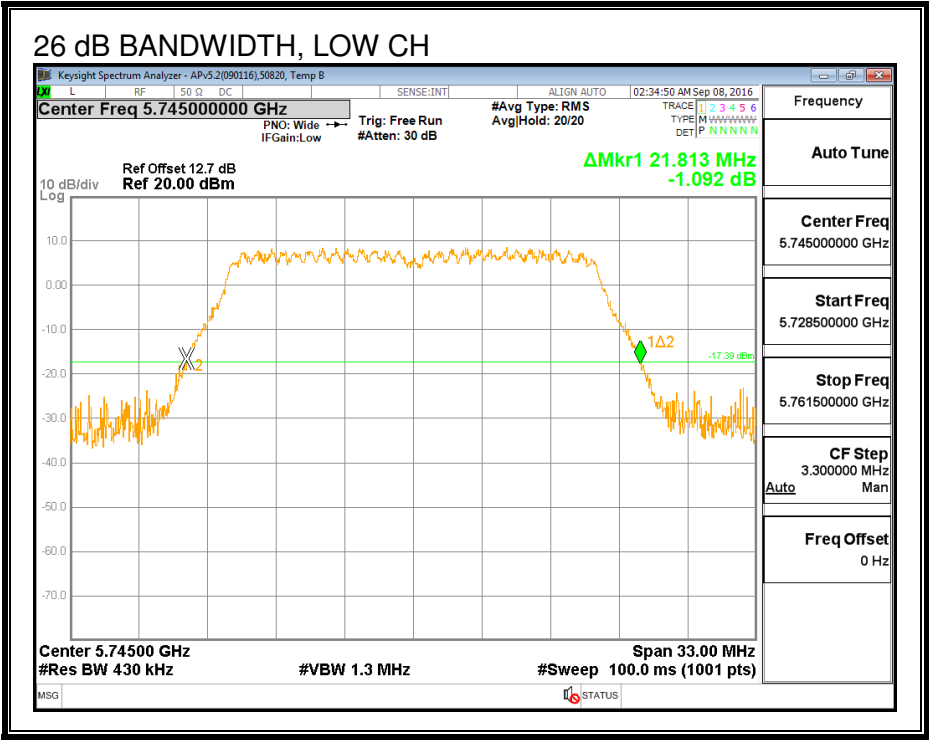
| Channel | Frequency (MHz) | 26 dB BW Chain 1 (MHz) | 26 dB BW Chain 2 (MHz) |
|---------|--------------------|------------------------------|------------------------------|
| Low | 5745 | 22.202 | 21.813 |
| Mid | 5785 | 22.270 | 21.780 |
| High | 5825 | 22.100 | 21.747 |

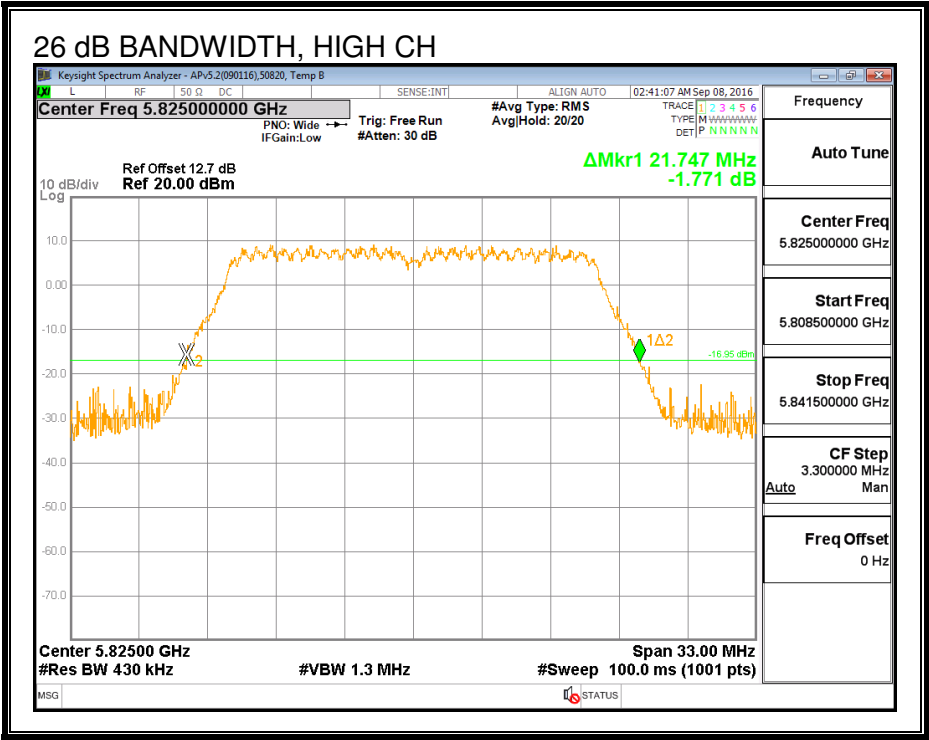
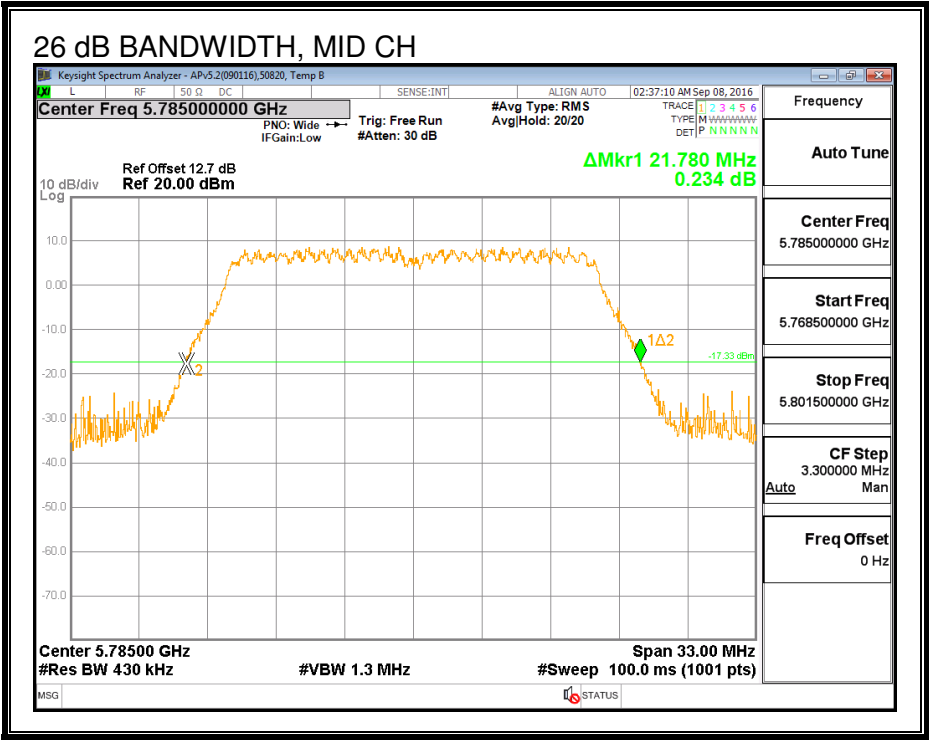
26 dB BANDWIDTH, CHAIN 1





26 dB BANDWIDTH, CHAIN 2





8.9.3. 99% BANDWIDTH

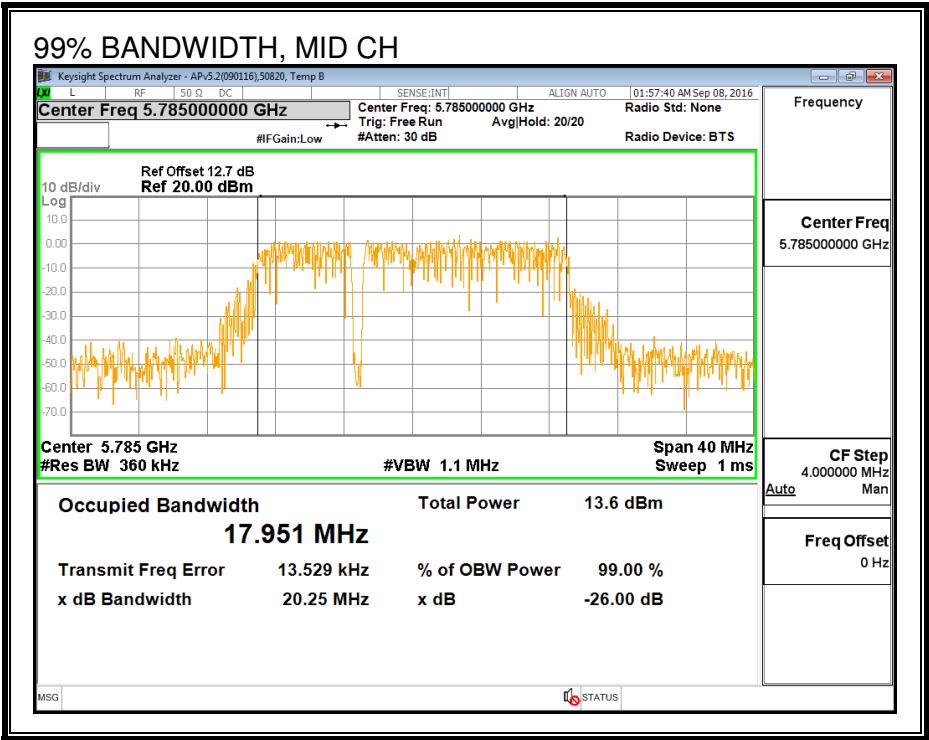
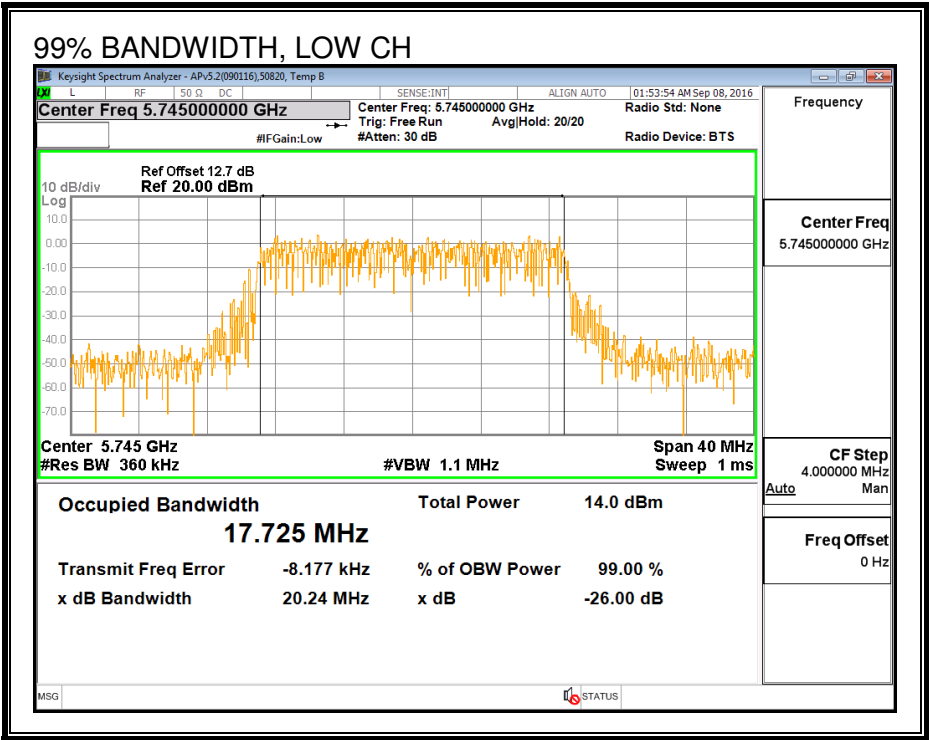
LIMITS

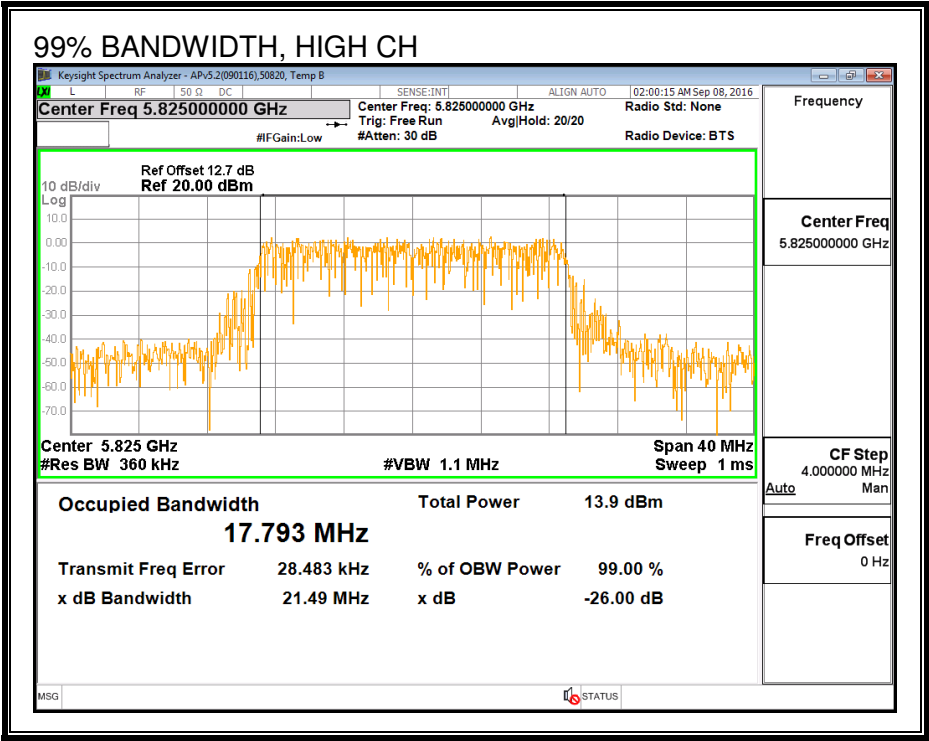
None; for reporting purposes only.

RESULTS

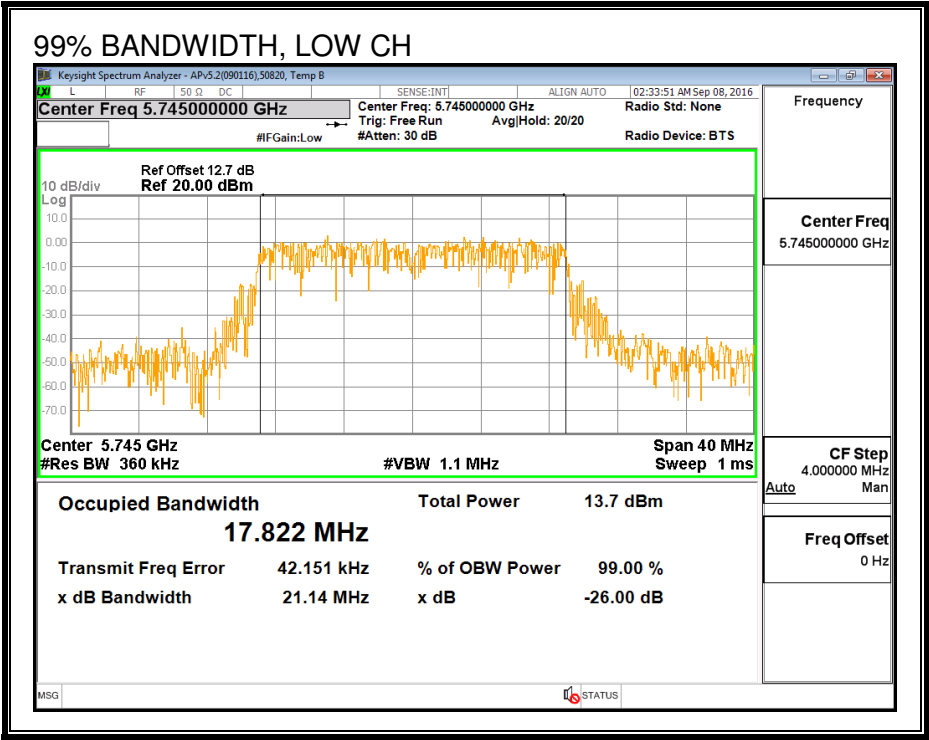
| Channel | Frequency (MHz) | 99% BW Chain 1 (MHz) | 99% BW Chain 2 (MHz) |
|---------|--------------------|----------------------------|----------------------------|
| Low | 5745 | 17.725 | 17.822 |
| Mid | 5785 | 17.951 | 16.328 |
| High | 5825 | 17.793 | 17.724 |

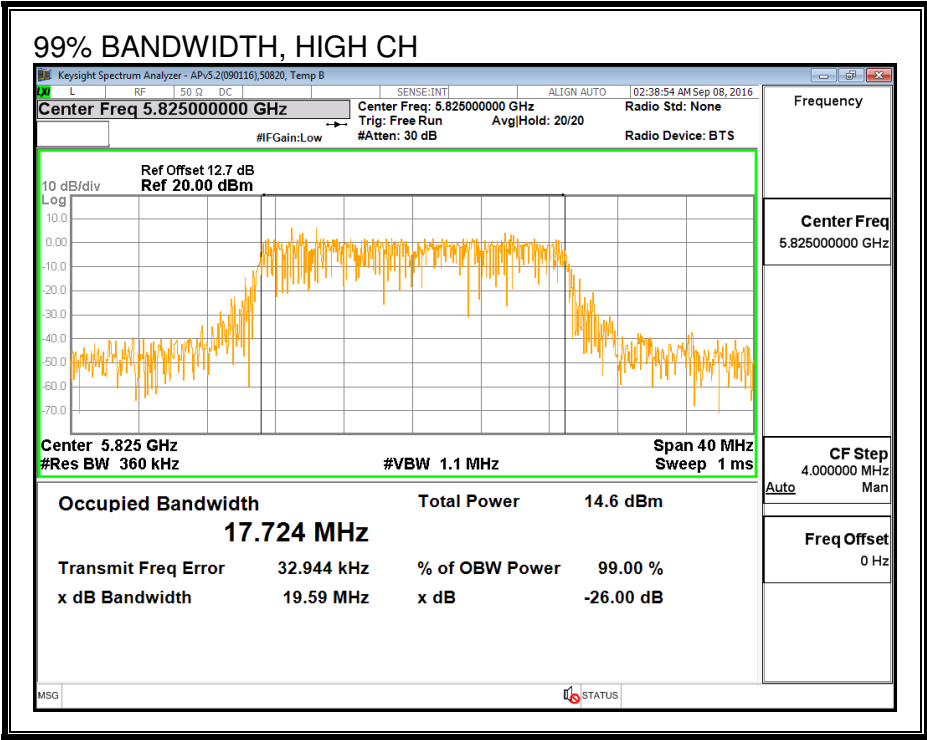
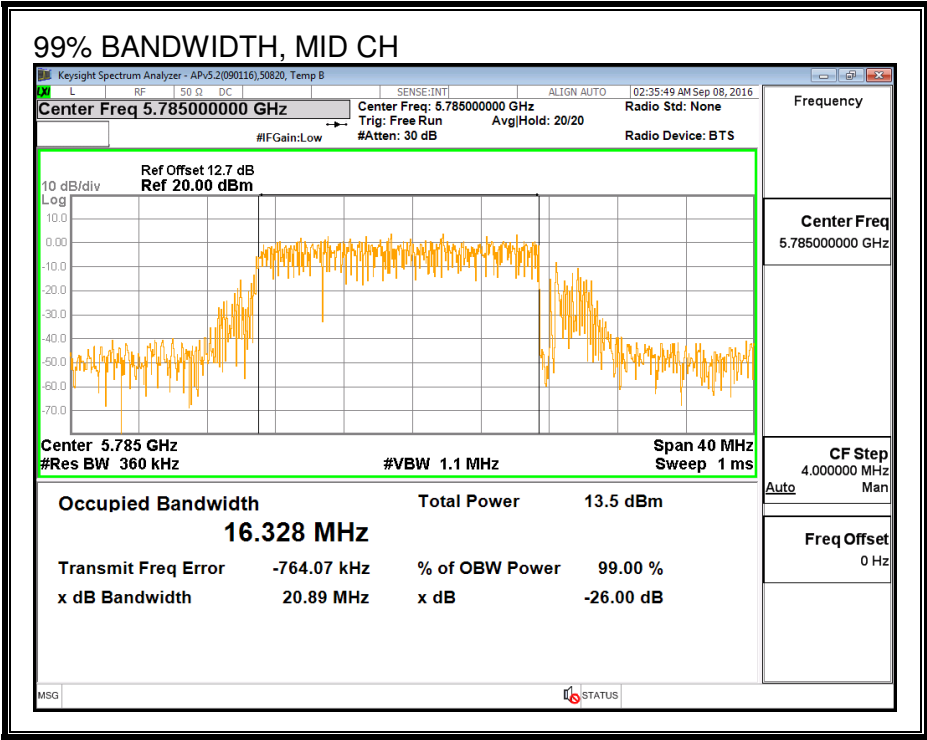
99% BANDWIDTH, CHAIN 1





99% BANDWIDTH, CHAIN 2





8.9.4. AVERAGE POWER (FCC/IC)

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

Measurements perform using a wideband gated RF power meter.

RESULTS

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

| Channel | Frequency (MHz) | Chain 1 Power (dBm) | Chain 2 Power (dBm) | Total Power (dBm) |
|---------|--------------------|---------------------------|---------------------------|-------------------------|
| Low | 5745 | 12.60 | 12.67 | 15.65 |
| Mid | 5785 | 12.65 | 12.74 | 15.71 |
| High | 5825 | 12.63 | 12.72 | 15.69 |

8.9.5. OUTPUT POWER (FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

TEST PROCEDURE

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

DIRECTIONAL ANTENNA GAIN

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

| Chain 1 Antenna Gain (dBi) | Chain 2 Antenna Gain (dBi) | Uncorrelated Chains Directional Gain (dBi) |
|-------------------------------------|-------------------------------------|---|
| 6.30 | 4.70 | 5.57 |

RESULTS

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

Antenna Gain and Limit

| Channel | Frequency (MHz) | Directional Gain for Power (dBi) | Power Limit (dBm) |
|---------|--------------------|---|-------------------------|
| Low | 5745 | 5.57 | 30.00 |
| Mid | 5785 | 5.57 | 30.00 |
| High | 5825 | 5.57 | 30.00 |

Output Power Results

| Channel | Frequency (MHz) | Chain 1 Meas Power (dBm) | Chain 2 Meas Power (dBm) | Total Corr'd Power (dBm) | Power Limit (dBm) | Power Margin (dB) |
|---------|--------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------|-------------------------|
| Low | 5745 | 12.60 | 12.67 | 15.65 | 30.00 | -14.35 |
| Mid | 5785 | 12.65 | 12.74 | 15.71 | 30.00 | -14.29 |
| High | 5825 | 12.63 | 12.72 | 15.69 | 30.00 | -14.31 |

8.9.6. PSD (FCC/IC)

LIMITS

FCC §15.407 (a) (3)

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

IC RSS-247 (6.2.4) (1)

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

DIRECTIONAL ANTENNA GAIN

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

| Chain 1 Antenna Gain (dBi) | Chain 2 Antenna Gain (dBi) | Uncorrelated Chains Directional Gain (dBi) |
|-------------------------------------|-------------------------------------|---|
| 6.30 | 4.70 | 5.57 |