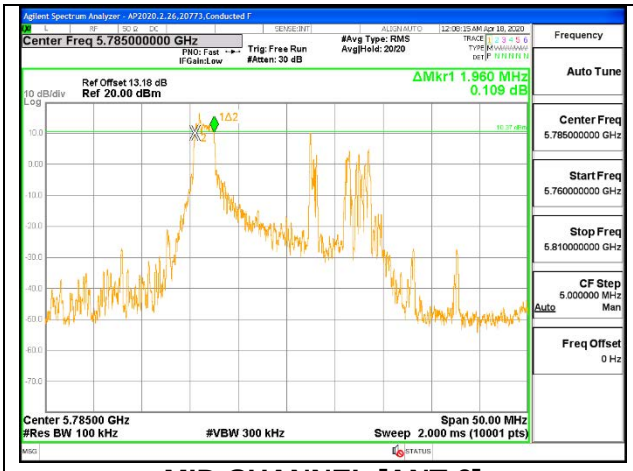
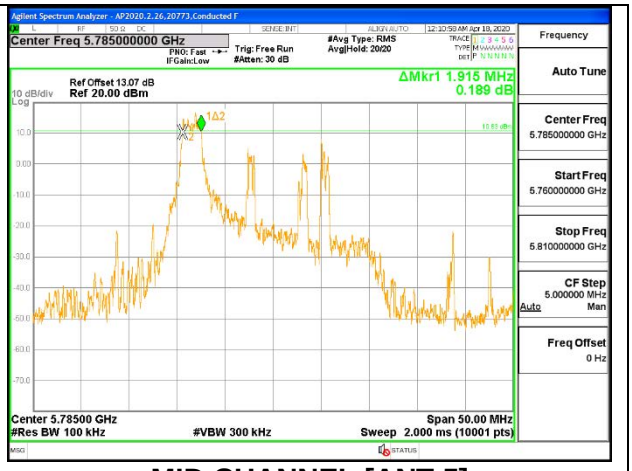
2TX ANT 6 + ANT 5 OFDMA MODE: 26 Tones, RU Index 0

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5745	2.015	2.045	0.5
Mid	5785	1.960	1.915	0.5
High	5825	2.005	2.030	0.5



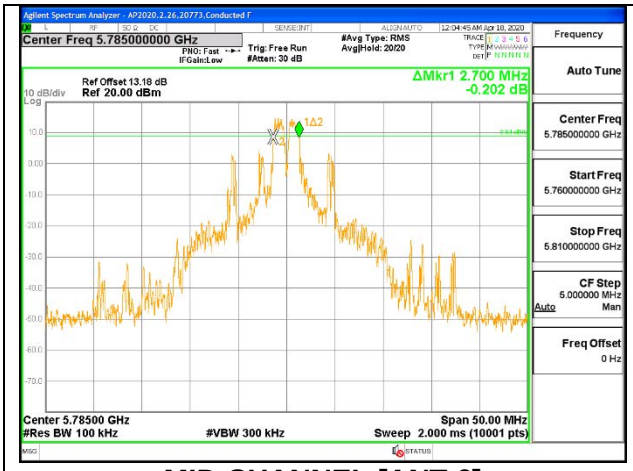
MID CHANNEL [ANT 6]



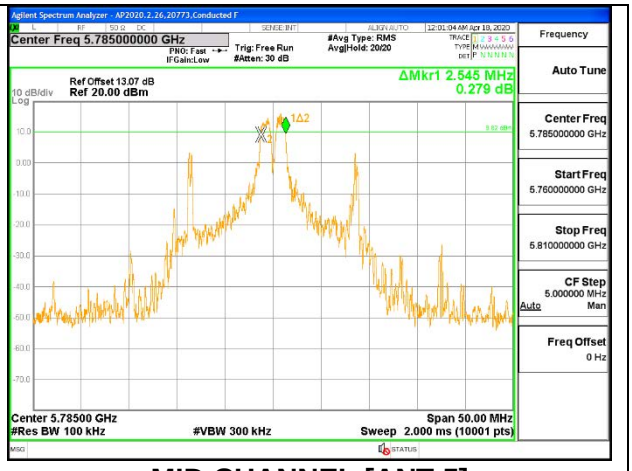
MID CHANNEL [ANT 5]

2TX ANT 6 + ANT 5 OFDMA MODE: 26 Tones, RU Index 4

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5745	2.565	2.595	0.5
Mid	5785	2.700	2.545	0.5
High	5825	2.580	2.555	0.5



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

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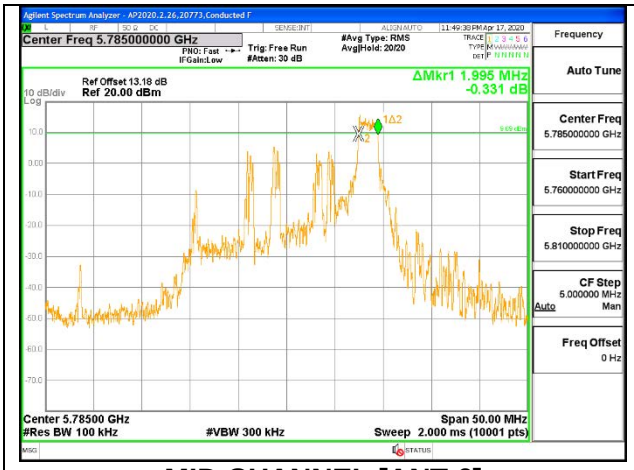
2TX ANT 6 + ANT 5 OFDMA MODE: 26 Tones, RU Index 8

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5745	1.980	1.940	0.5
Mid	5785	1.995	1.990	0.5
High	5825	2.015	2.015	0.5
144	5720	2.002	2.082	0.5

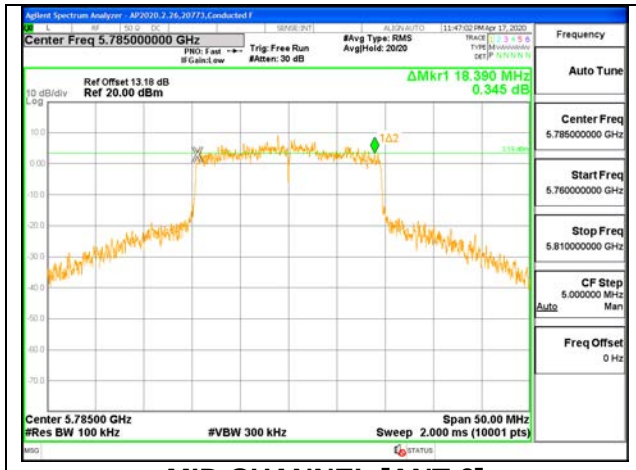


MID CHANNEL [ANT 6]

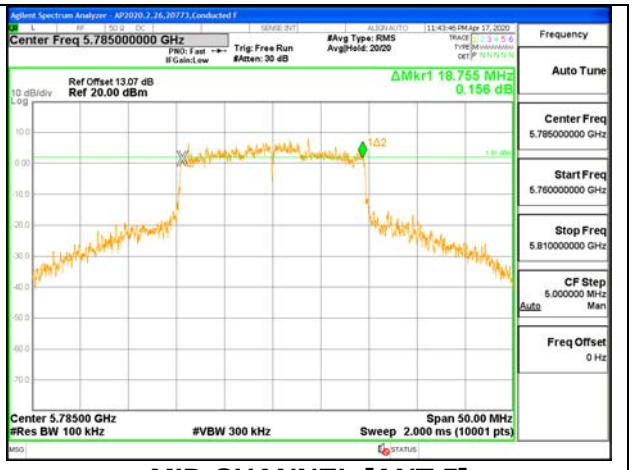
MID CHANNEL [ANT 5]

2TX ANT 6 + ANT 5 OFDMA MODE: 242 Tones, RU Index 61

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5745	18.575	18.880	0.5
Mid	5785	18.390	18.755	0.5
High	5825	18.775	18.555	0.5
144	5720	4.470	4.470	0.5



MID CHANNEL [ANT 6]



MID CHANNEL [ANT 5]

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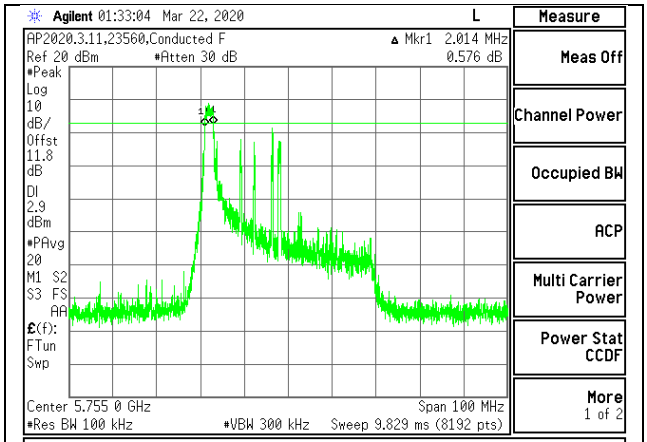
8.3.5. 802.11ax HE40 MODE IN THE 5.8 GHz BAND

1TX ANT 6 MODE: 26 Tones, RU Index 0

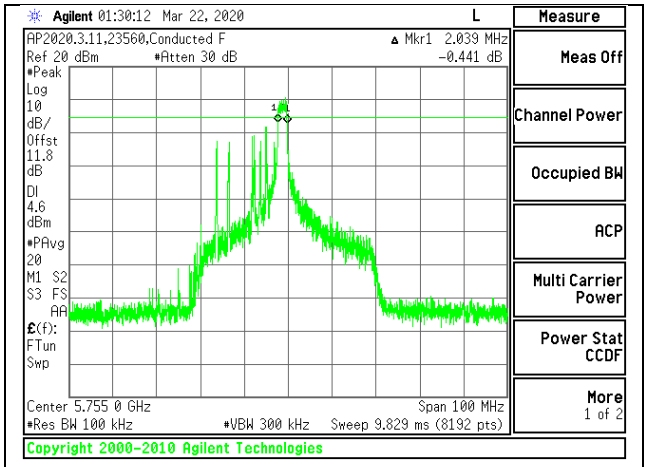
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	2.014	0.5
High	5795	2.075	0.5



LOW CHANNEL

1TX ANT 6 MODE: 26 Tones, RU Index 8

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	2.039	0.5
High	5795	2.039	0.5



LOW CHANNEL

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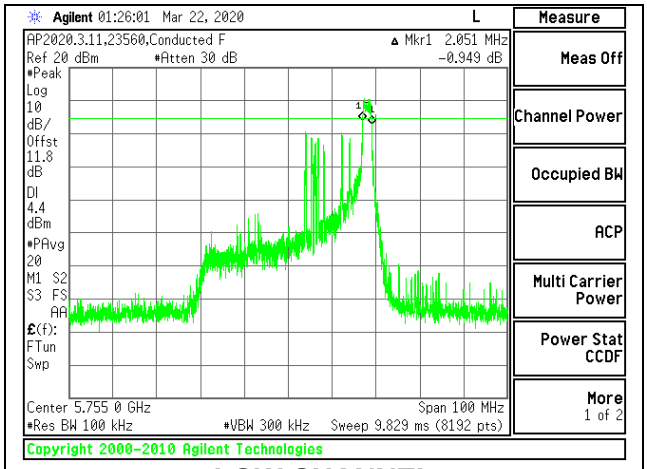
1TX ANT 6 MODE: 26 Tones, RU Index 17

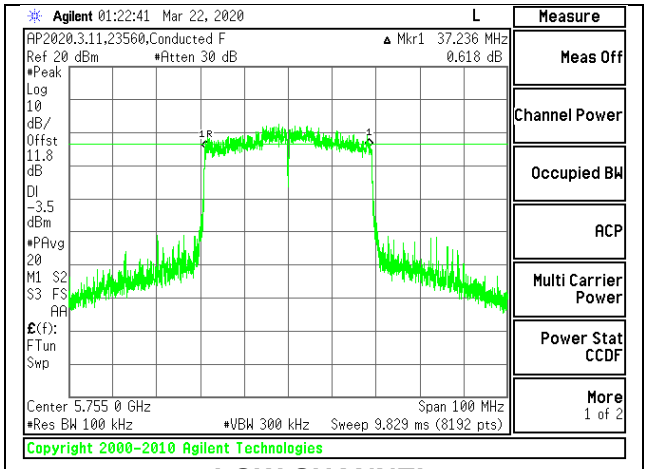
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	2.051	0.5
High	5795	2.051	0.5
142	5710	2.002	0.5



LOW CHANNEL

1TX ANT 6 MODE: 484 Tones, RU Index 65

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	37.236	0.5
High	5795	37.907	0.5
142	5710	4.010	0.5



LOW CHANNEL

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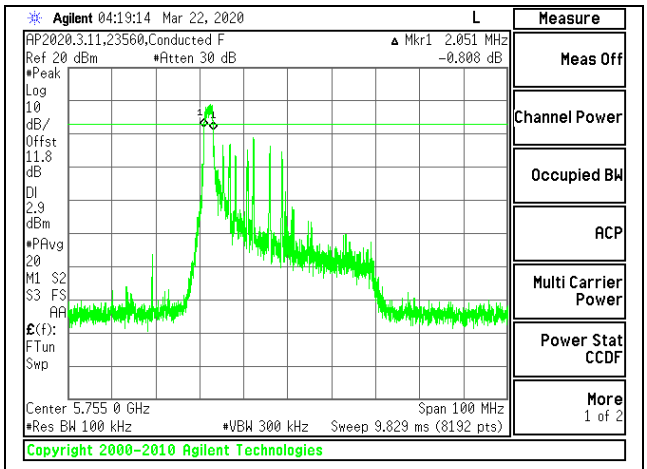
1TX ANT 5 MODE: 26 Tones, RU Index 0

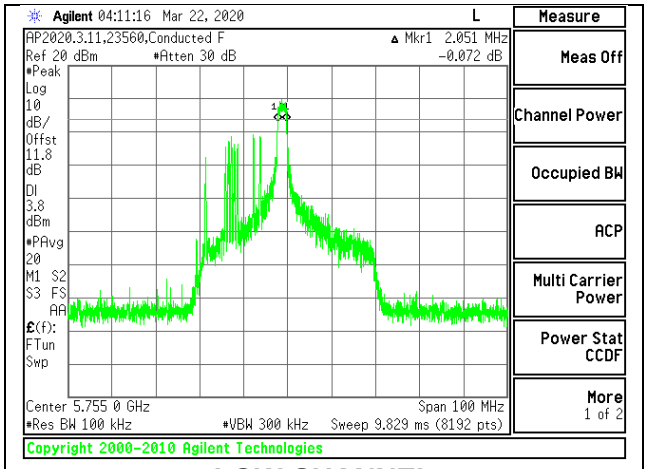
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	2.051	0.5
High	5795	2.100	0.5



LOW CHANNEL

1TX ANT 5 MODE: 26 Tones, RU Index 8

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	2.051	0.5
High	5795	2.039	0.5



LOW CHANNEL

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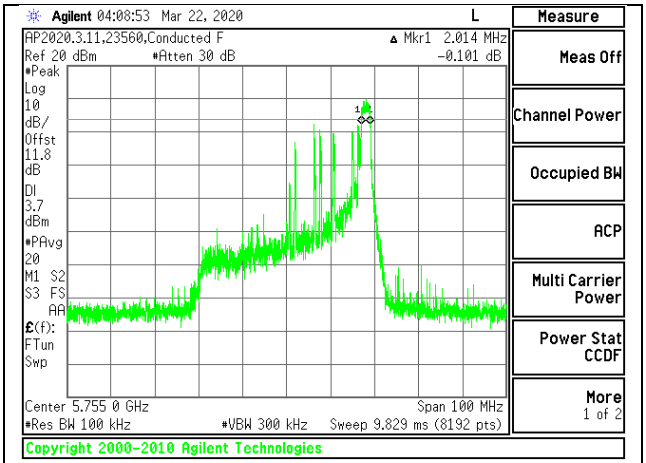
1TX ANT 5 MODE: 26 Tones, RU Index 17

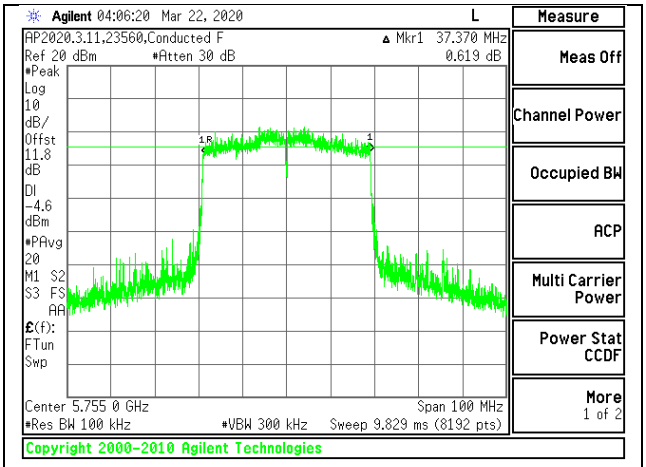
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	2.014	0.5
High	5795	2.063	0.5
142	5710	2.039	0.5



LOW CHANNEL

1TX ANT 5 MODE: 484 Tones, RU Index 65

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	37.370	0.5
High	5795	36.577	0.5
142	5710	4.020	0.5



LOW CHANNEL

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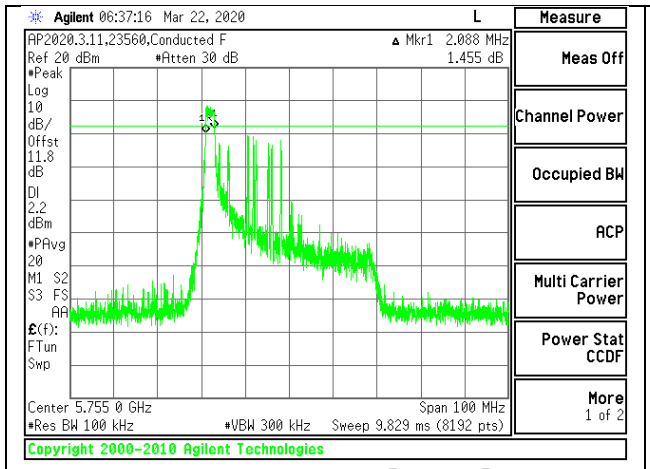
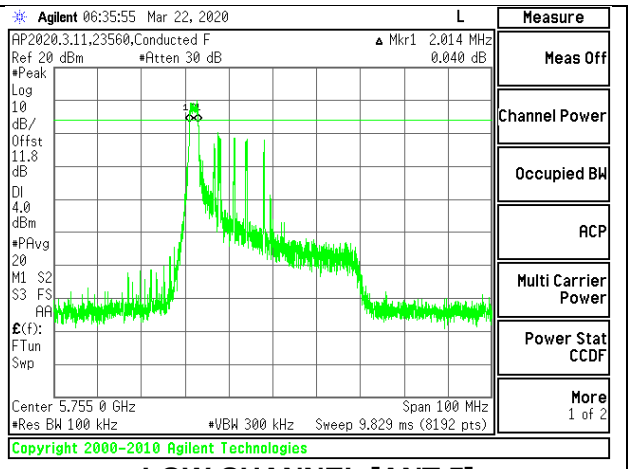
2TX ANT 6 + ANT 5 OFDMA MODE: 26 Tones, RU Index 0

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5755	2.088	2.014	0.5
High	5795	1.990	2.039	0.5



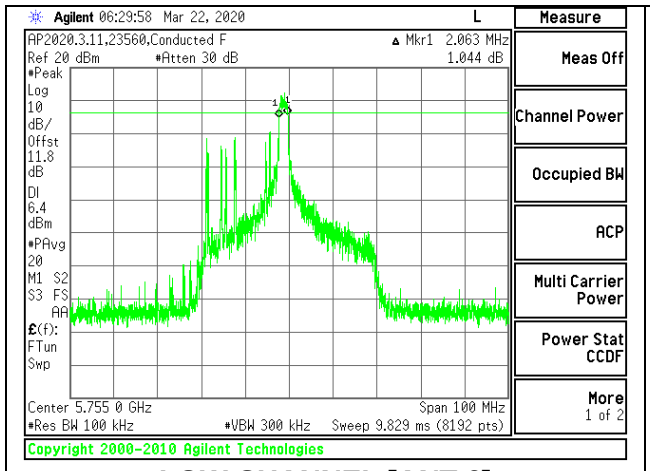
LOW CHANNEL [ANT 6]



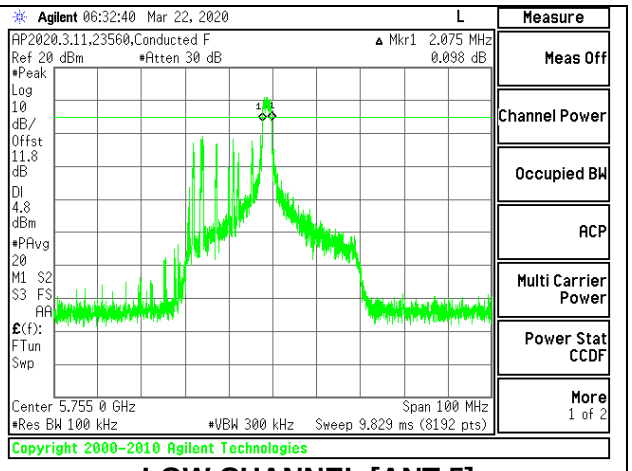
LOW CHANNEL [ANT 5]

2TX ANT 6 + ANT 5 OFDMA MODE: 26 Tones, RU Index 8

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5755	2.063	2.075	0.5
High	5795	2.002	2.027	0.5



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

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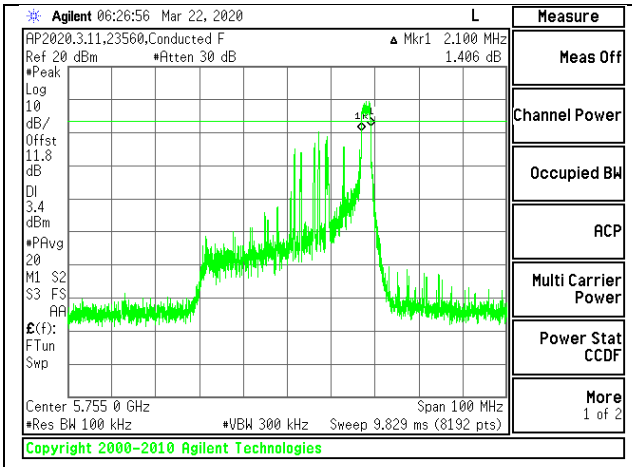
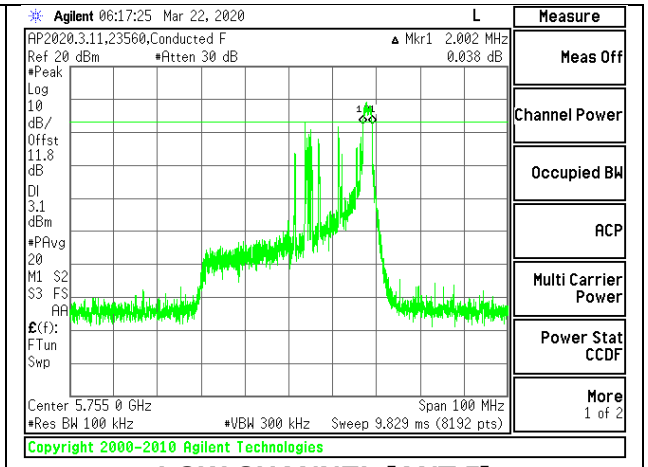
2TX ANT 6 + ANT 5 OFDMA MODE: 26 Tones, RU Index 17

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5755	2.100	2.002	0.5
High	5795	1.990	2.100	0.5
142	5710	2.063	2.000	0.5



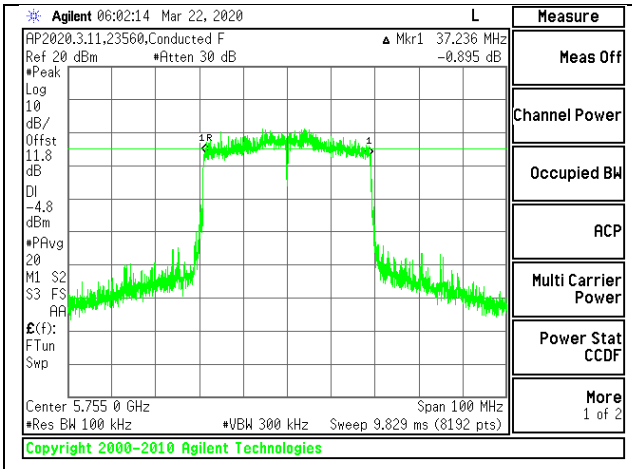
LOW CHANNEL [ANT 6]



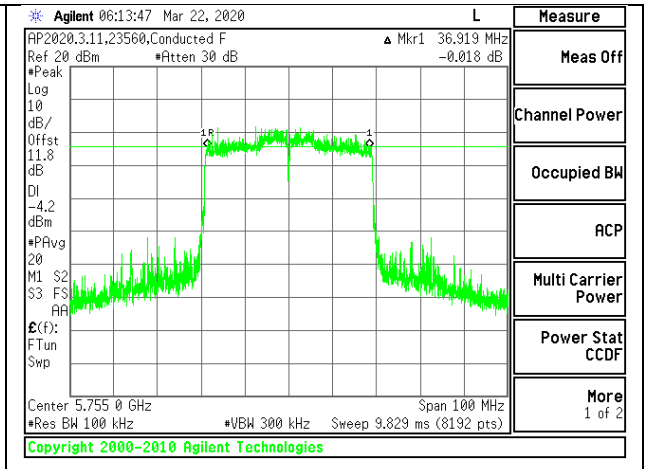
LOW CHANNEL [ANT 5]

2TX ANT 6 + ANT 5 OFDMA MODE: 484 Tones, RU Index 65

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Low	5755	37.236	36.919	0.5
High	5795	37.627	37.553	0.5
142	5710	4.010	4.050	0.5



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

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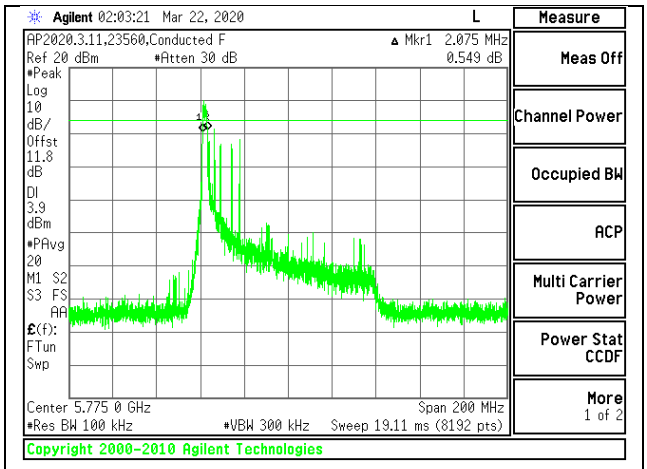
8.3.6. 802.11ax HE80 MODE IN THE 5.8 GHz BAND

1TX ANT 6 MODE: 26 Tones, RU Index 0

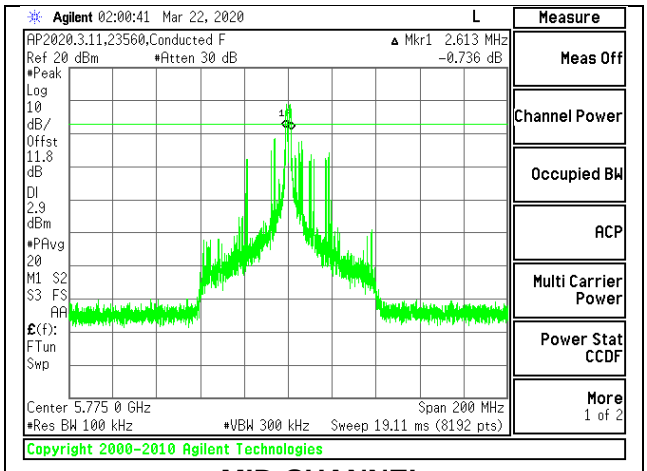
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.075	0.5



MID CHANNEL

1TX ANT 6 MODE: 26 Tones, RU Index 18

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.613	0.5



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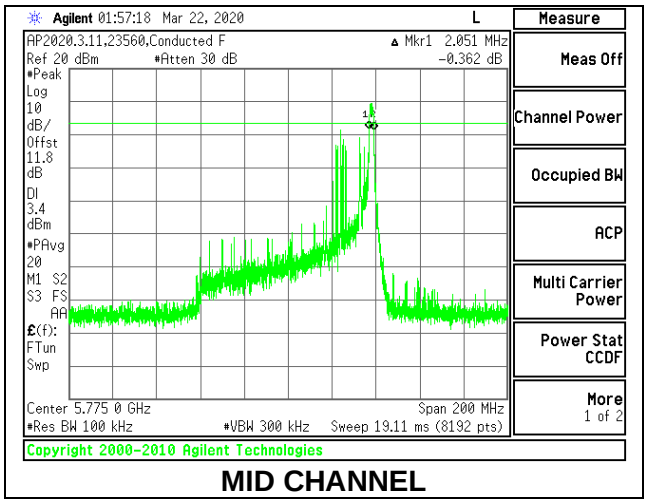
1TX ANT 6 MODE: 26 Tones, RU Index 36

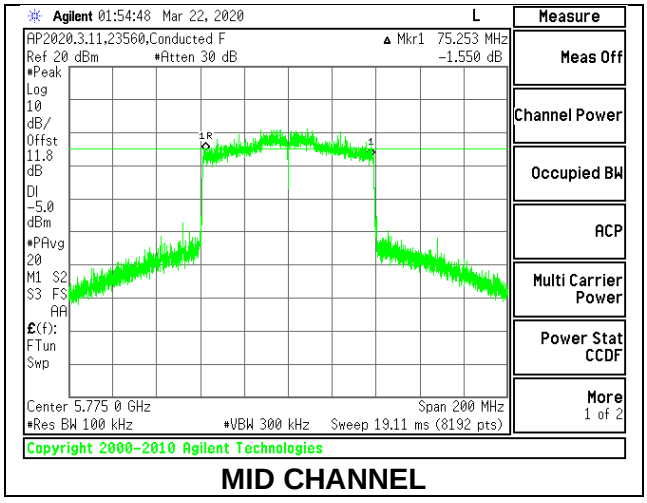
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.051	0.5
138	5690	1.980	0.5



MID CHANNEL

1TX ANT 6 MODE: 996 Tones, RU Index 67

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	75.253	0.5
138	5690	4.040	0.5



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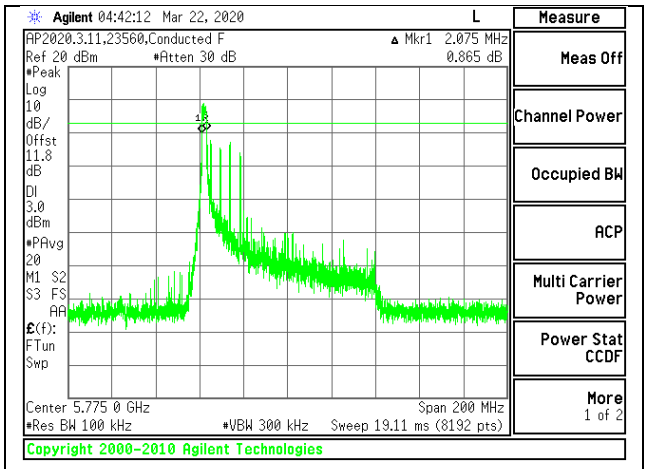
1TX ANT 5 MODE: 26 Tones, RU Index 0

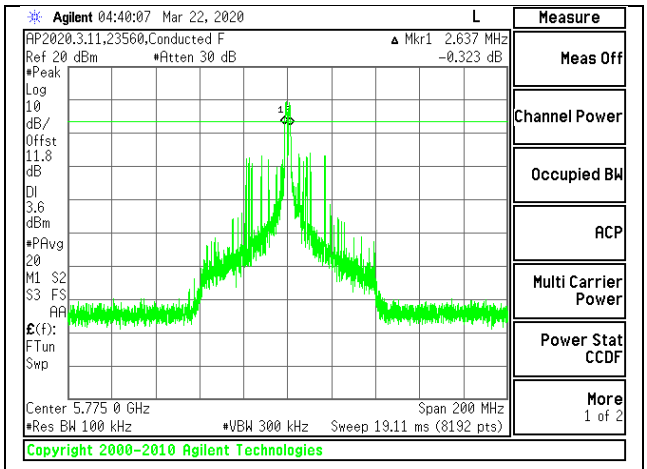
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.075	0.5



MID CHANNEL

1TX ANT 5 MODE: 26 Tones, RU Index 18

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.637	0.5



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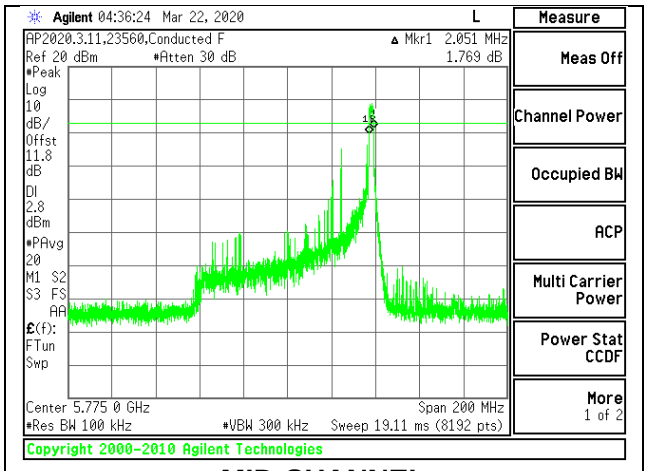
1TX ANT 5 MODE: 26 Tones, RU Index 36

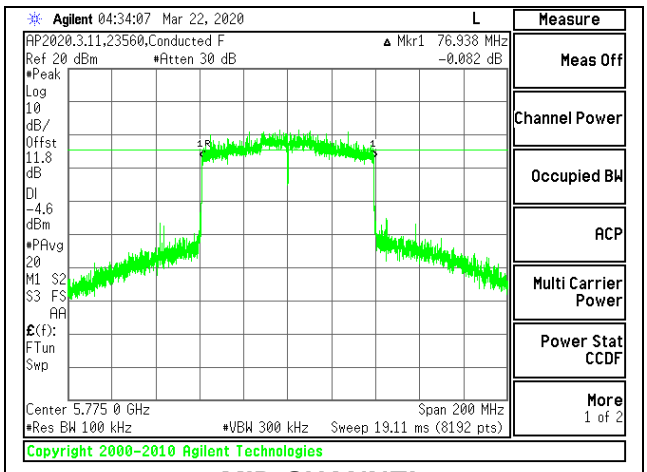
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	2.051	0.5
138	5690	2.020	0.5



MID CHANNEL

1TX ANT 5 MODE: 996 Tones, RU Index 67

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Mid	5775	76.938	0.5
138	5690	4.000	0.5



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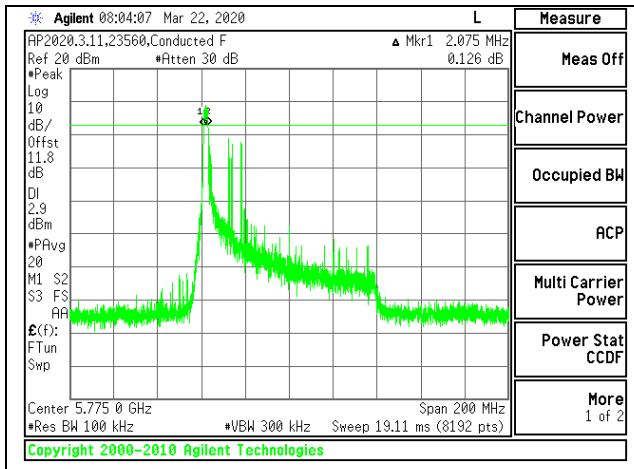
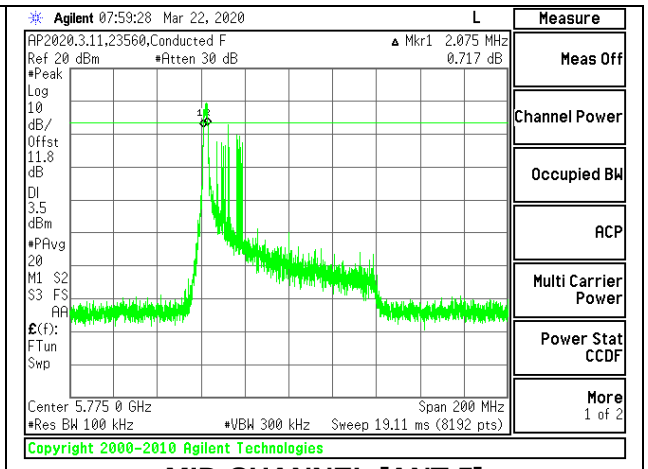
2TX ANT 6 + ANT 5 OFDMA MODE: 26 Tones, RU Index 0

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Mid	5775	2.075	2.075	0.5



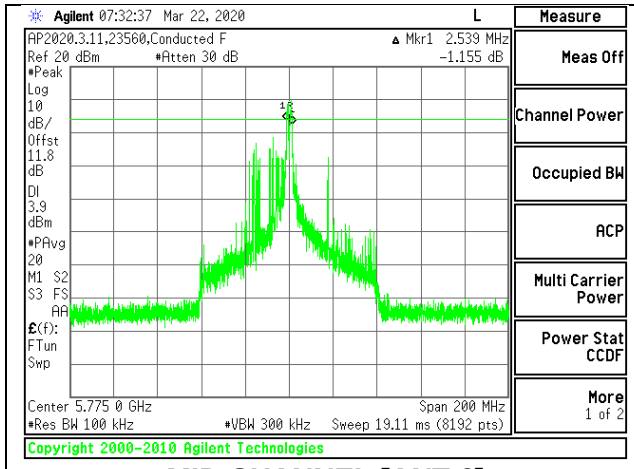
MID CHANNEL [ANT 6]



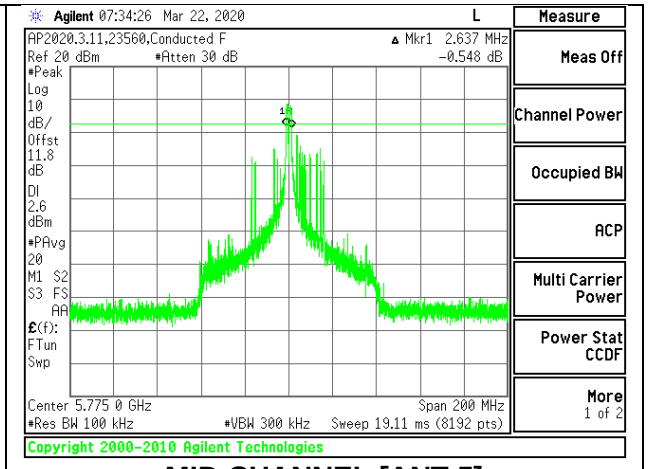
MID CHANNEL [ANT 5]

2TX ANT 6 + ANT 5 OFDMA MODE: 26 Tones, RU Index 18

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Mid	5775	2.539	2.637	0.5



MID CHANNEL [ANT 6]



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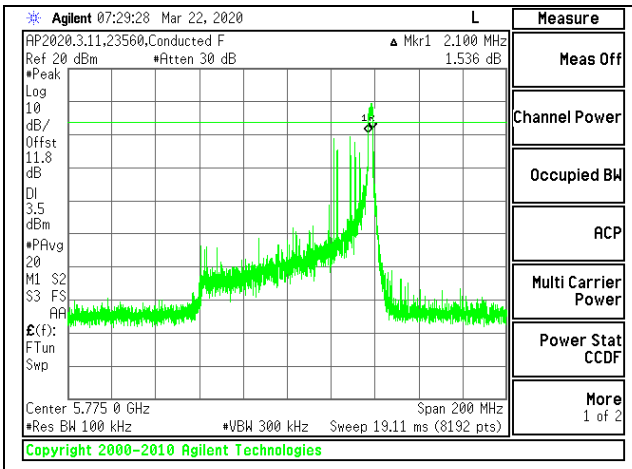
2TX ANT 6 + ANT 5 OFDMA MODE: 26 Tones, RU Index 36

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Mid	5775	2.100	2.124	0.5
138	5690	2.040	2.080	0.5



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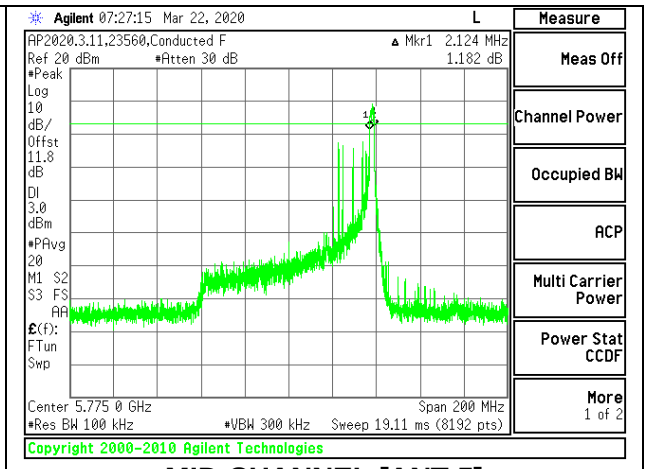
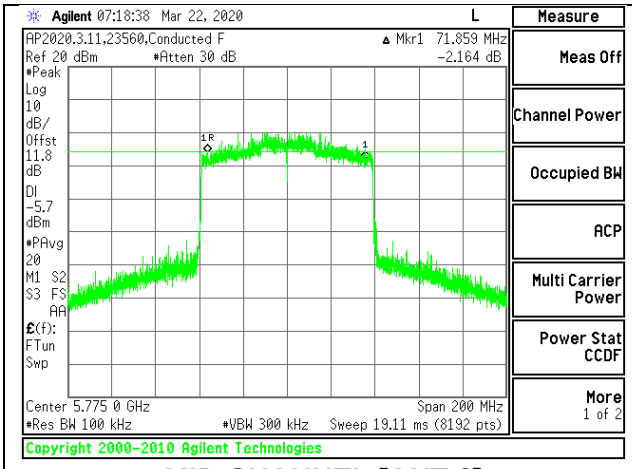


MID CHANNEL [ANT 5]

TX ANT 6 + ANT 5 OFDMA MODE: 996 Tones, RU Index 67

Channel	Frequency (MHz)	6 dB Bandwidth Antenna 6 (MHz)	6 dB Bandwidth Antenna 5 (MHz)	Minimum Limit (MHz)
Mid	5775	71.859	75.668	0.5
138	5690	3.860	3.980	0.5



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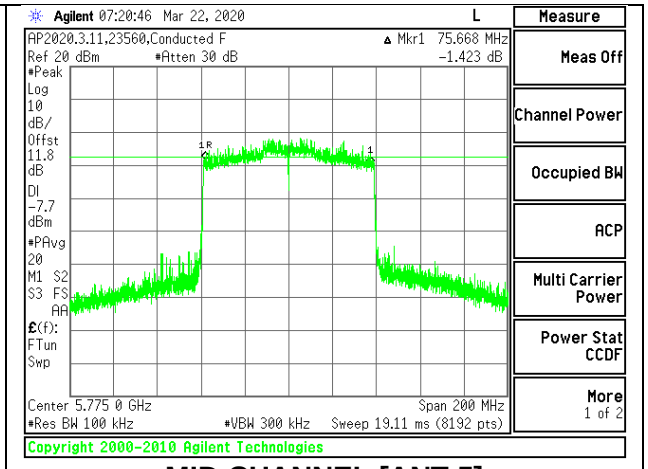

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8.4. OUTPUT POWER AND PSD

LIMITS

FCC §15.407

Band 5.15–5.25 GHz

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Bands 5.25-5.35 GHz and 5.47-5.725 GHz
The maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

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. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information.

TEST PROCEDURE

The measurement method used for output power is KDB 789033 D02 v02r01, Section E.3.b (Method PM-G).

The measurement method used for power spectral density is KDB 789033 D02 v02r01, Section F.
For all straddle channels, full bandwidth power is reported in the 5.6GHz section. The combined 5.6GHz and 5.8GHz power already passed the worst case 5.6GHz 24dBm limit, therefore there is no need to provide the 5.8GHz power.

11n HT20 and 11ax HE20 straddle channel 26dB bandwidth= (26dB BW/2)+5
11n HT20 and 11ax HE20 straddle channel 99% bandwidth= (99% BW/2)+5

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DIRECTIONAL ANTENNA GAIN

For 1 TX:
There is only one transmitter output therefore the directional gain is equal to the antenna gain.

For 2 TX:
Tx chains are uncorreANTed for power and correANTed for PSD due to the device supporting CDD in all MIMO modes. The directional gains are as follows:

Band (GHz)	ANT 6 Gain (dBi)	ANT 5 Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	0.9	-4.3	-0.96	1.69
5.3	1.8	-3.0	0.03	2.74
5.6	2.2	-1.4	0.76	3.60
5.8	-1.1	-2.9	-1.91	1.06

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8.4.1. 802.11n HT20 MODE IN THE 5.2 GHz BAND

1TX ANT 6 MODE (FCC) MOBILE

Test Engineer:	44352
Test Date:	8/19/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	0.90	24.00	11.00
Mid	5200	0.90	24.00	11.00
High	5240	0.90	24.00	11.00

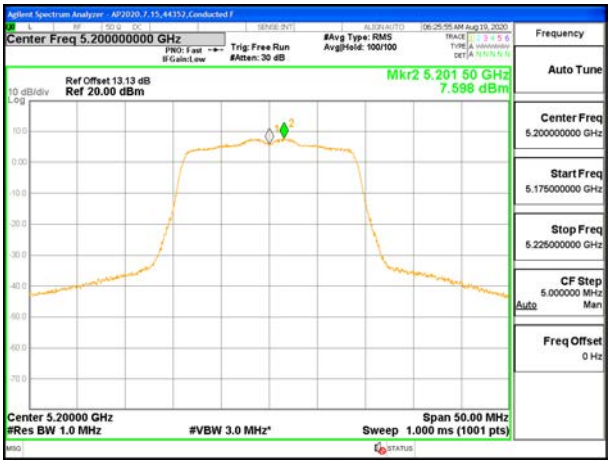
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.21	18.21	24.00	-5.79
Mid	5200	18.49	18.49	24.00	-5.51
High	5240	18.44	18.44	24.00	-5.56

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	7.465	7.465	11.00	-3.535
Mid	5200	7.598	7.598	11.00	-3.402
High	5240	7.369	7.369	11.00	-3.631



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1TX ANT 5 MODE (FCC) MOBILE

Test Engineer:	12485 & 44352
Test Date:	4/21/2020 & 8/19/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-4.30	24.00	11.00
Mid	5200	-4.30	24.00	11.00
High	5240	-4.30	24.00	11.00

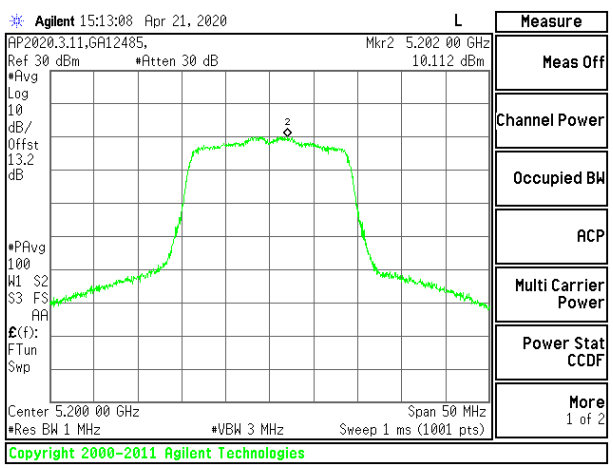
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.37	18.37	24.00	-5.63
Mid	5200	19.85	19.85	24.00	-4.15
High	5240	19.66	19.66	24.00	-4.34

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	7.474	7.474	11.00	-3.526
Mid	5200	10.112	10.112	11.00	-0.888
High	5240	10.024	10.024	11.00	-0.976



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2TX ANT 6 + ANT 5 CDD MODE (FCC) MOBILE

Test Engineer:	12485 & 20773
Test Date:	4/21/2020 & 4/28/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-0.96	1.69	24.00	11.00
Mid	5200	-0.96	1.69	24.00	11.00
High	5240	-0.96	1.69	24.00	11.00

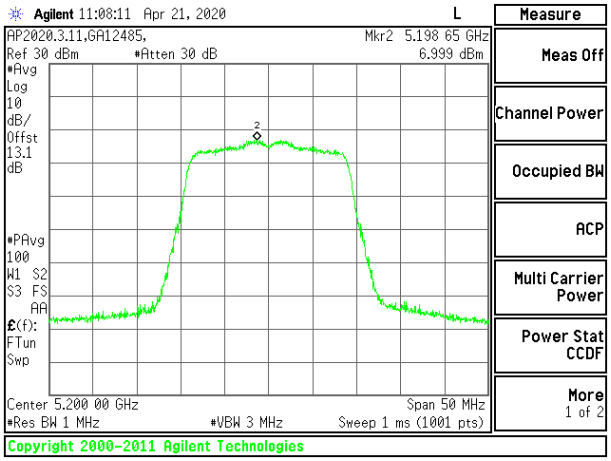
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

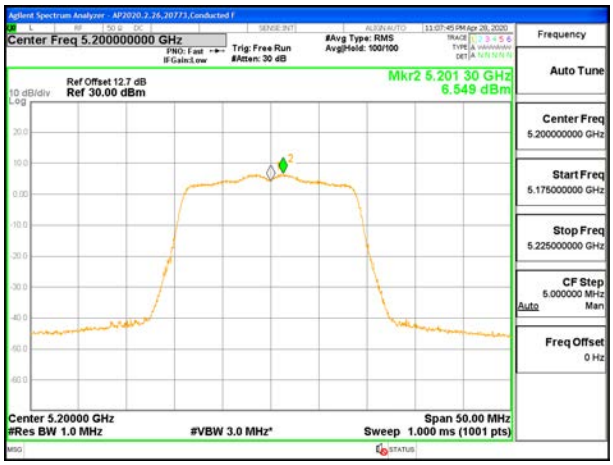
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	16.49	16.73	19.62	24.00	-4.38
Mid	5200	16.69	16.66	19.69	24.00	-4.31
High	5240	16.55	16.87	19.72	24.00	-4.28

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	6.496	6.769	9.645	11.00	-1.355
Mid	5200	6.999	6.549	9.790	11.00	-1.210
High	5240	6.932	6.760	9.857	11.00	-1.143



MID CHANNEL [ANT 6]



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8.4.2. 802.11n HT40 MODE IN THE 5.2 GHz BAND

1TX ANT 6 MODE (FCC) MOBILE

Test Engineer:	44352
Test Date:	8/19/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	0.90	24.00	11.00
High	5230	0.90	24.00	11.00

Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	16.96	16.96	24.00	-7.04
High	5230	18.43	18.43	24.00	-5.57

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	3.654	3.744	11.00	-7.256
High	5230	4.838	4.928	11.00	-6.072

LOW CHANNEL

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1TX ANT 5 MODE (FCC) MOBILE

Test Engineer:	23560 & 44352
Test Date:	3/21/2020 & 8/19/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-4.30	24.00	11.00
High	5230	-4.30	24.00	11.00

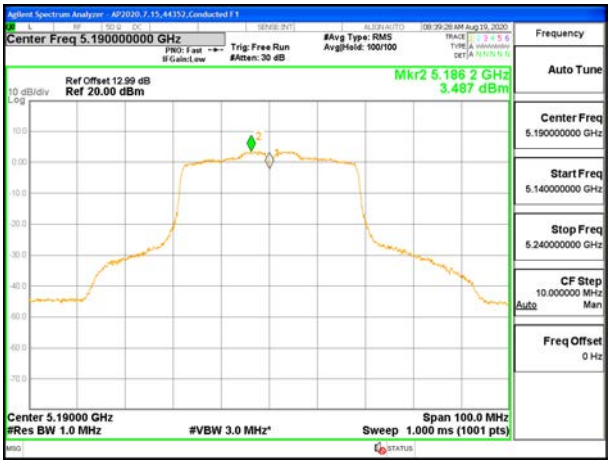
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	16.87	16.87	24.00	-7.13
High	5230	20.65	20.65	24.00	-3.35

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	3.487	3.577	11.00	-7.423
High	5230	8.325	8.415	11.00	-2.585



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2TX ANT 6 + ANT 5 CDD MODE (FCC) MOBILE

Test Engineer:	23560 & 44352
Test Date:	3/22/2020 & 8/19/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-0.96	1.69	24.00	11.00
High	5230	-0.96	1.69	24.00	11.00

Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.31	15.49	18.41	24.00	-5.59
High	5230	18.42	19.65	22.09	24.00	-1.91

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	2.006	2.047	5.127	11.00	-5.873
High	5230	4.858	6.931	9.117	11.00	-1.883

LOW CHANNEL [ANT 6]

LOW CHANNEL [ANT 5]

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8.4.3. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

1TX ANT 6 MODE (FCC) MOBILE

Test Engineer:	23560
Test Date:	3/21/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	0.90	24.00	11.00

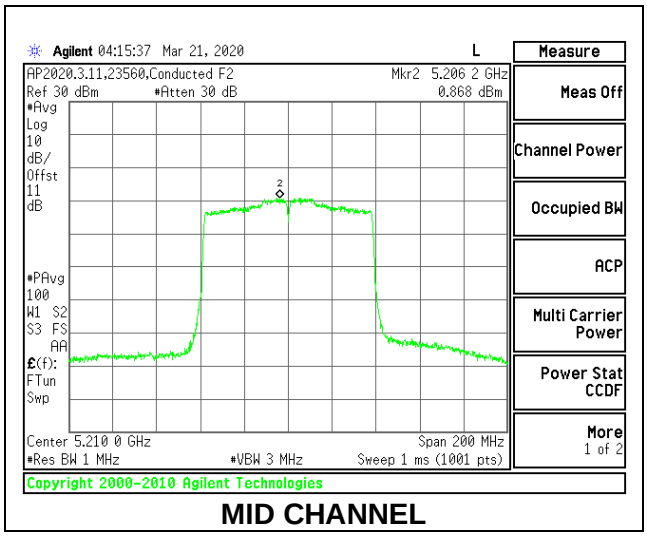
Duty Cycle CF (dB)	0.19	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	16.40	16.40	24.00	-7.60

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	0.868	1.058	11.00	-9.942



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1TX ANT 5 MODE (FCC) MOBILE

Test Engineer:	23560
Test Date:	3/21/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-4.30	24.00	11.00

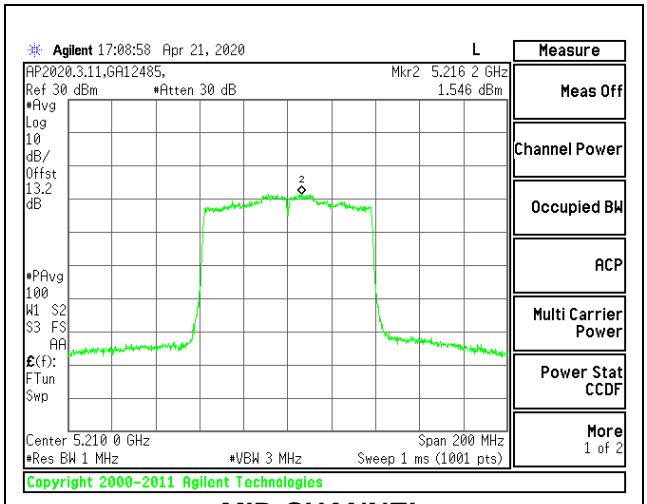
Duty Cycle CF (dB)	0.19	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	16.45	16.45	24.00	-7.55

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	1.546	1.736	11.00	-9.264



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2TX ANT 6 + ANT 5 CDD MODE (FCC) MOBILE

Test Engineer:	23560
Test Date:	3/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-0.96	1.69	24.00	11.00

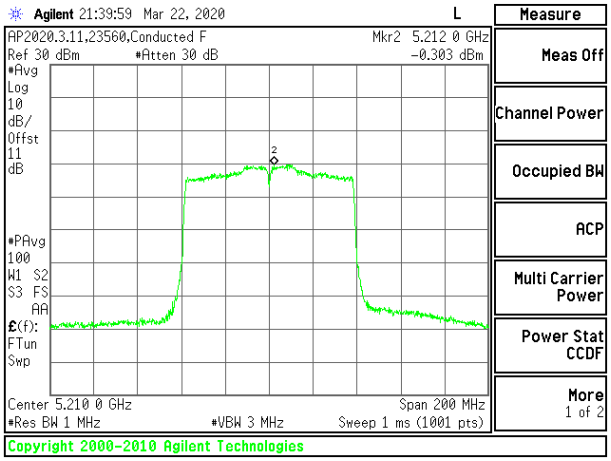
Duty Cycle CF (dB)	0.19	**Included in Calculations of Corr'd PSD**

Output Power Results

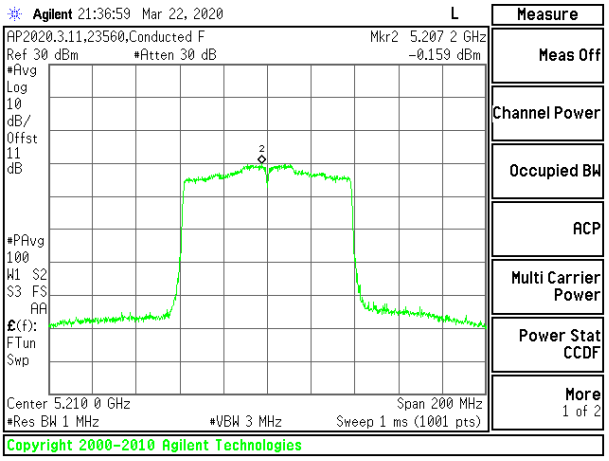
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	15.29	15.41	18.36	24.00	-5.64

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-0.303	-0.159	2.970	11.00	-8.030



MID CHANNEL [ANT 6]



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8.4.4. 802.11ax HE20 MODE IN THE 5.2 GHz BAND

1TX ANT 6 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	0.90	24.00	11.00
Mid	5200	0.90	24.00	11.00
High	5240	0.90	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.73	11.73	24.00	-12.27
Mid	5200	11.50	11.50	24.00	-12.50
High	5240	11.78	11.78	24.00	-12.22

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	9.391	9.391	11.00	-1.609
Mid	5200	8.943	8.943	11.00	-2.057
High	5240	9.482	9.482	11.00	-1.518

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1TX ANT 6 MODE (FCC) MOBILE – 26 Tones, RU Index 4

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	0.90	24.00	11.00
Mid	5200	0.90	24.00	11.00
High	5240	0.90	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.55	11.55	24.00	-12.45
Mid	5200	11.65	11.65	24.00	-12.35
High	5240	11.60	11.60	24.00	-12.40

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	8.055	8.055	11.00	-2.945
Mid	5200	8.244	8.244	11.00	-2.756
High	5240	8.118	8.118	11.00	-2.882

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1TX ANT 6 MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	0.90	24.00	11.00
Mid	5200	0.90	24.00	11.00
High	5240	0.90	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.70	11.70	24.00	-12.30
Mid	5200	11.66	11.66	24.00	-12.34
High	5240	11.57	11.57	24.00	-12.43

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	8.976	8.976	11.00	-2.024
Mid	5200	8.911	8.911	11.00	-2.089
High	5240	8.639	8.639	11.00	-2.361

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1TX ANT 6 MODE (FCC) MOBILE – 242 Tones, RU Index 61

Test Engineer:	44352
Test Date:	8/19/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	0.90	24.00	11.00
Mid	5200	0.90	24.00	11.00
High	5240	0.90	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	17.89	17.89	24.00	-6.11
Mid	5200	18.41	18.41	24.00	-5.59
High	5240	18.44	18.44	24.00	-5.56

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	5.630	5.630	11.00	-5.370
Mid	5200	6.083	6.083	11.00	-4.917
High	5240	6.121	6.121	11.00	-4.879

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1TX ANT 5 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/21/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-4.30	24.00	11.00
Mid	5200	-4.30	24.00	11.00
High	5240	-4.30	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.92	11.92	24.00	-12.08
Mid	5200	11.88	11.88	24.00	-12.12
High	5240	11.96	11.96	24.00	-12.04

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	9.339	9.339	11.00	-1.661
Mid	5200	8.657	8.657	11.00	-2.343
High	5240	9.412	9.412	11.00	-1.588

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1TX ANT 5 MODE (FCC) MOBILE – 26 Tones, RU Index 4

Test Engineer:	20773
Test Date:	4/21/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-4.30	24.00	11.00
Mid	5200	-4.30	24.00	11.00
High	5240	-4.30	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.51	11.51	24.00	-12.49
Mid	5200	11.52	11.52	24.00	-12.48
High	5240	11.63	11.63	24.00	-12.37

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	7.897	7.897	11.00	-3.103
Mid	5200	8.324	8.324	11.00	-2.676
High	5240	8.373	8.373	11.00	-2.627

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1TX ANT 5 MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/21/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-4.30	24.00	11.00
Mid	5200	-4.30	24.00	11.00
High	5240	-4.30	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.51	11.51	24.00	-12.49
Mid	5200	11.77	11.77	24.00	-12.23
High	5240	11.80	11.80	24.00	-12.20

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	8.566	8.566	11.00	-2.434
Mid	5200	9.010	9.010	11.00	-1.990
High	5240	9.093	9.093	11.00	-1.907

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1TX ANT 5 MODE (FCC) MOBILE – 242 Tones, RU Index 61

Test Engineer:	20773
Test Date:	4/21/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-4.30	24.00	11.00
Mid	5200	-4.30	24.00	11.00
High	5240	-4.30	24.00	11.00

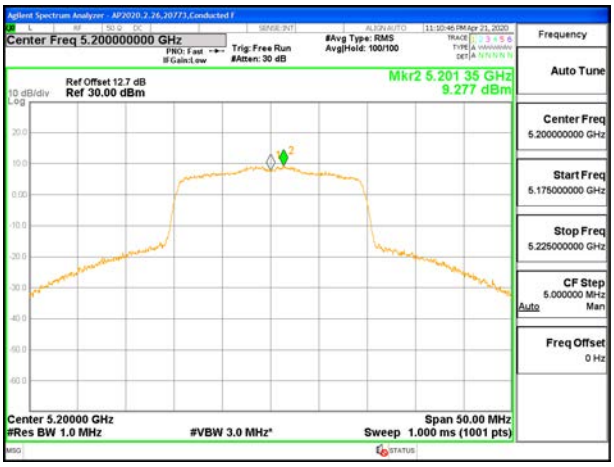
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	17.69	17.69	24.00	-6.31
Mid	5200	19.82	19.82	24.00	-4.18
High	5240	19.54	19.54	24.00	-4.46

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	6.988	6.988	11.00	-4.012
Mid	5200	9.277	9.277	11.00	-1.723
High	5240	9.024	9.024	11.00	-1.976



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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-0.96	1.69	24.00	11.00
Mid	5200	-0.96	1.69	24.00	11.00
High	5240	-0.96	1.69	24.00	11.00

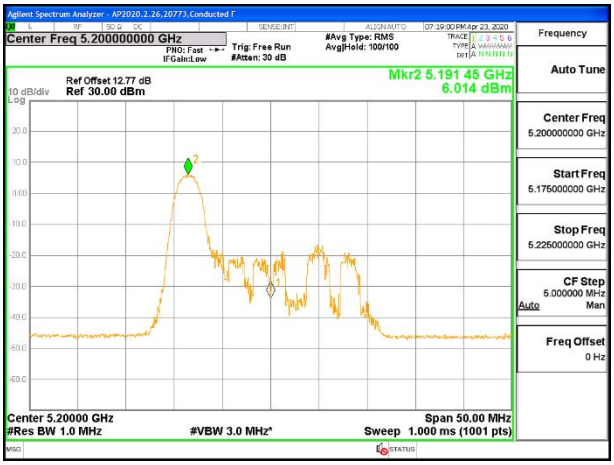
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.80	8.71	11.77	24.00	-12.23
Mid	5200	8.71	8.75	11.74	24.00	-12.26
High	5240	8.65	8.69	11.68	24.00	-12.32

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	6.371	6.234	9.313	11.00	-1.687
Mid	5200	6.014	5.980	9.007	11.00	-1.993
High	5240	6.131	6.020	9.086	11.00	-1.914



MID CHANNEL ANT 6

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 4

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-0.96	1.69	24.00	11.00
Mid	5200	-0.96	1.69	24.00	11.00
High	5240	-0.96	1.69	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.70	8.77	11.75	24.00	-12.25
Mid	5200	8.60	8.83	11.73	24.00	-12.27
High	5240	8.55	8.62	11.60	24.00	-12.40

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	5.041	5.359	8.213	11.00	-2.787
Mid	5200	5.250	4.819	8.050	11.00	-2.950
High	5240	5.120	5.141	8.141	11.00	-2.859

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-0.96	1.69	24.00	11.00
Mid	5200	-0.96	1.69	24.00	11.00
High	5240	-0.96	1.69	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.52	8.77	11.66	24.00	-12.34
Mid	5200	8.51	8.86	11.70	24.00	-12.30
High	5240	8.55	8.60	11.59	24.00	-12.41

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	5.847	6.218	9.047	11.00	-1.953
Mid	5200	5.854	6.330	9.109	11.00	-1.891
High	5240	6.091	5.984	9.048	11.00	-1.952

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 242 Tones, RU Index 61

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-0.96	1.69	24.00	11.00
Mid	5200	-0.96	1.69	24.00	11.00
High	5240	-0.96	1.69	24.00	11.00

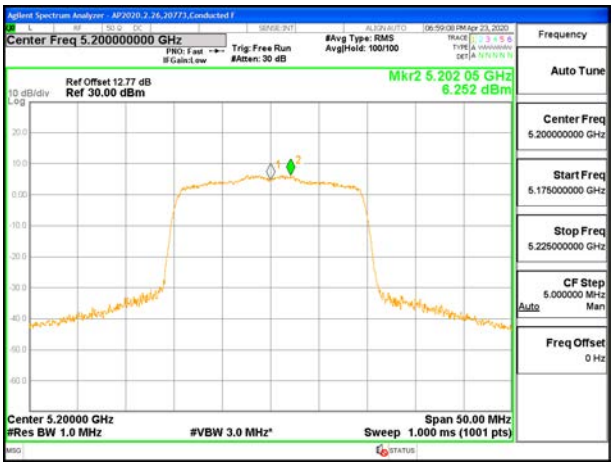
Duty Cycle CF (dB)		**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	16.52	16.80	19.67	24.00	-4.33
Mid	5200	16.96	16.81	19.90	24.00	-4.10
High	5240	16.68	16.75	19.73	24.00	-4.27

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	6.498	6.297	9.409	11.00	-1.591
Mid	5200	6.252	6.442	9.358	11.00	-1.642
High	5240	6.011	5.910	8.971	11.00	-2.029



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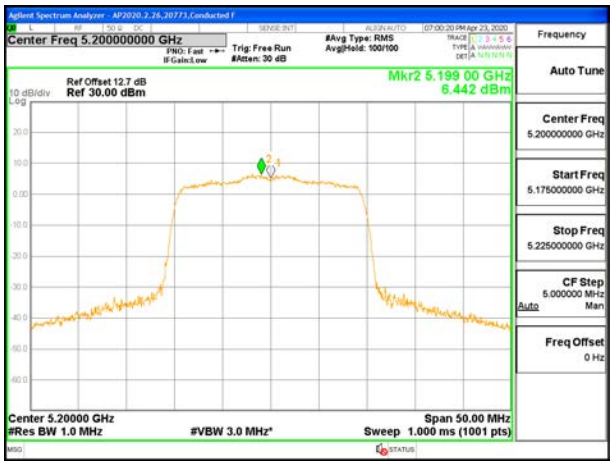

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8.4.5. 802.11ax HE40 MODE IN THE 5.2 GHz BAND

1TX ANT 6 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	0.90	24.00	11.00
High	5230	0.90	24.00	11.00

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

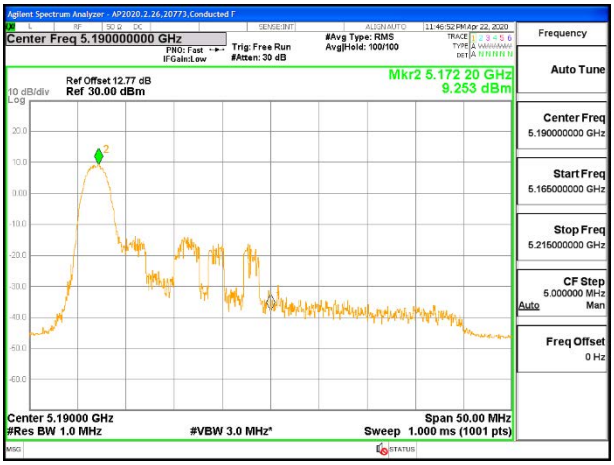
Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.58	11.58	24.00	-12.42
High	5230	11.89	11.89	24.00	-12.11

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.253	9.253	11.00	-1.747
High	5230	9.096	9.096	11.00	-1.904

*PSD tested at higher power



LOW CHANNEL

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1TX ANT 6 MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	0.90	24.00	11.00
High	5230	0.90	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.79	11.79	24.00	-12.21
High	5230	11.82	11.82	24.00	-12.18

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	8.875	8.875	11.00	-2.125
High	5230	8.830	8.830	11.00	-2.170

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1TX ANT 6 MODE (FCC) MOBILE – 26 Tones, RU Index 17

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	0.90	24.00	11.00
High	5230	0.90	24.00	11.00

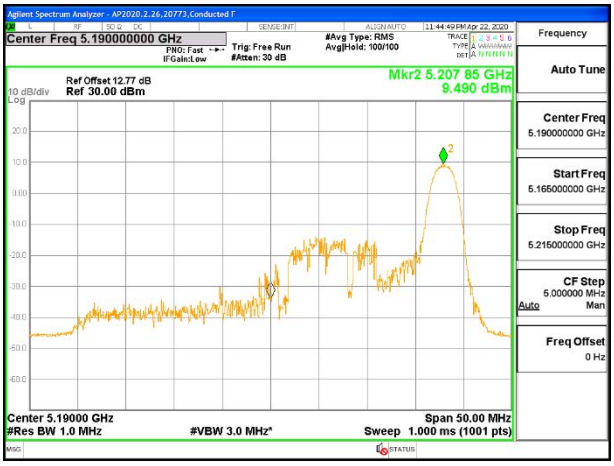
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.52	11.52	24.00	-12.48
High	5230	11.76	11.76	24.00	-12.24

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.490	9.490	11.00	-1.510
High	5230	8.586	8.586	11.00	-2.414



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1TX ANT 6 MODE (FCC) MOBILE – 484 Tones, RU Index 65

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	0.90	24.00	11.00
High	5230	0.90	24.00	11.00

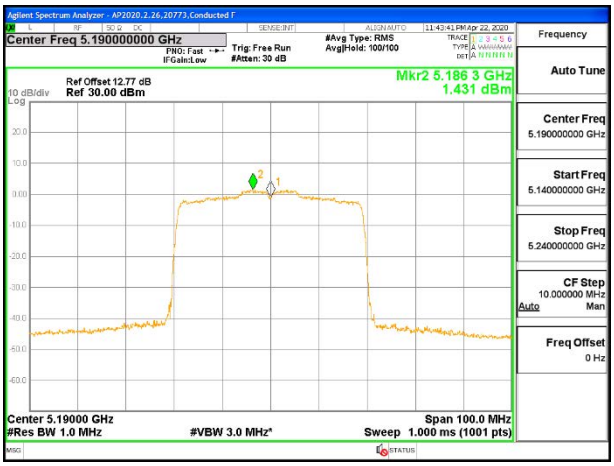
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.58	15.58	24.00	-8.42
High	5230	18.35	18.35	24.00	-5.65

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	1.431	1.431	11.00	-9.569
High	5230	6.630	6.630	11.00	-4.370



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1TX ANT 5 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-4.30	24.00	11.00
High	5230	-4.30	24.00	11.00

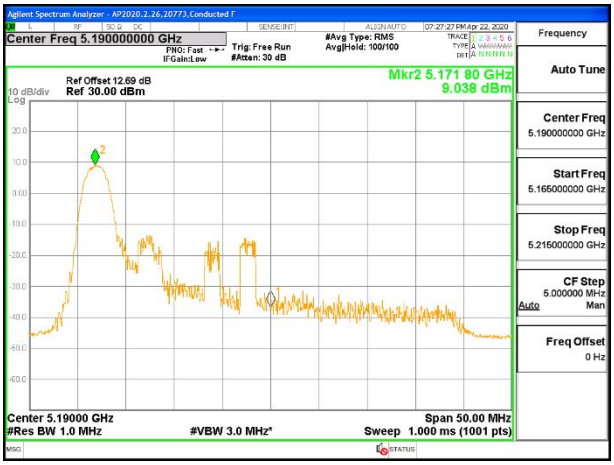
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.76	11.76	24.00	-12.24
High	5230	11.80	11.80	24.00	-12.20

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.038	9.038	11.00	-1.962
High	5230	9.041	9.041	11.00	-1.959



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1TX ANT 5 MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-4.30	24.00	11.00
High	5230	-4.30	24.00	11.00

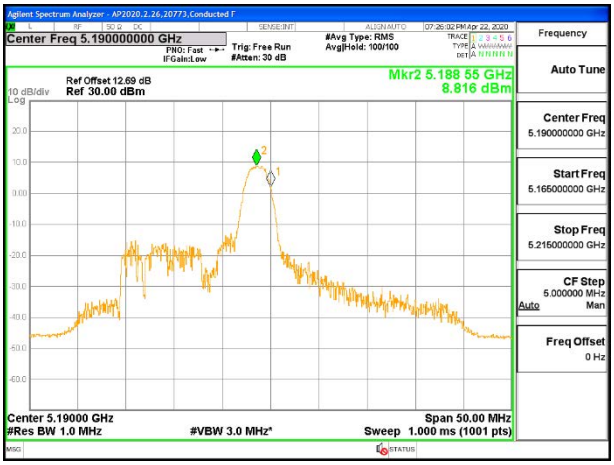
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.78	11.78	24.00	-12.22
High	5230	11.66	11.66	24.00	-12.34

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	8.816	8.816	11.00	-2.184
High	5230	8.754	8.754	11.00	-2.246



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1TX ANT 5 MODE (FCC) MOBILE – 26 Tones, RU Index 17

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-4.30	24.00	11.00
High	5230	-4.30	24.00	11.00

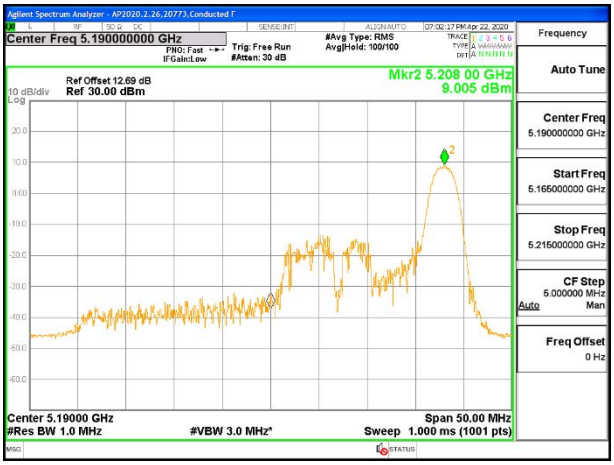
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.78	11.78	24.00	-12.22
High	5230	11.53	11.53	24.00	-12.47

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	9.005	9.005	11.00	-1.995
High	5230	8.746	8.746	11.00	-2.254



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1TX ANT 5 MODE (FCC) MOBILE – 484 Tones, RU Index 65

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-4.30	24.00	11.00
High	5230	-4.30	24.00	11.00

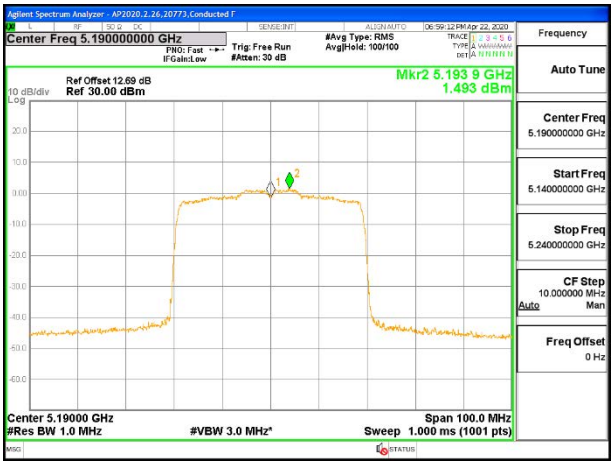
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.87	15.87	24.00	-8.13
High	5230	20.74	20.74	24.00	-3.26

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	1.483	1.483	11.00	-9.517
High	5230	6.600	6.600	11.00	-4.400



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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-0.96	1.69	24.00	11.00
High	5230	-0.96	1.69	24.00	11.00

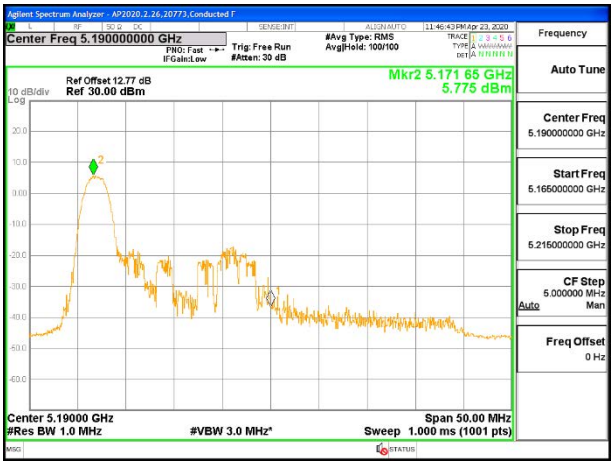
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

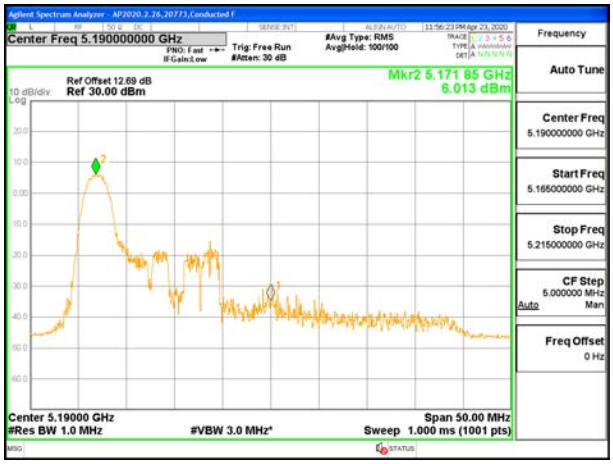
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	8.53	8.95	11.76	24.00	-12.24
High	5230	8.65	8.78	11.73	24.00	-12.27

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	5.775	6.013	8.906	11.00	-2.094
High	5230	5.845	6.181	9.027	11.00	-1.973



LOW CHANNEL [ANT 6]



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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-0.96	1.69	24.00	11.00
High	5230	-0.96	1.69	24.00	11.00

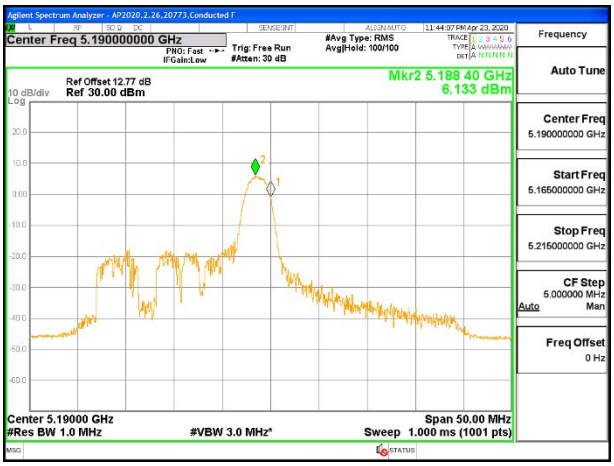
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	8.60	8.52	11.57	24.00	-12.43
High	5230	8.34	8.64	11.50	24.00	-12.50

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	6.133	5.748	8.955	11.00	-2.045
High	5230	6.115	6.309	9.223	11.00	-1.777



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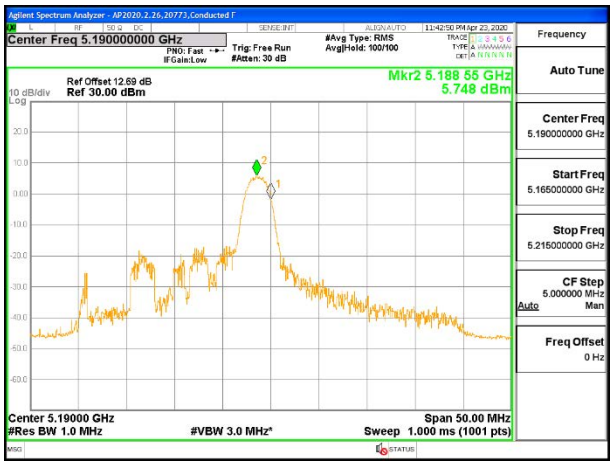

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 17

Test Engineer:	20773
Test Date:	4/23/2020

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-0.96	1.69	24.00	11.00
High	5230	-0.96	1.69	24.00	11.00

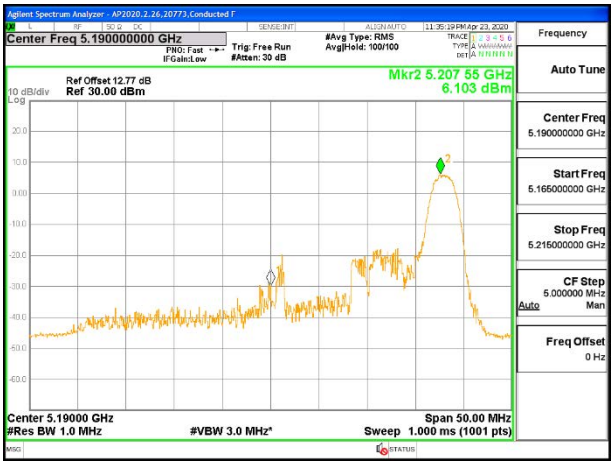
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	8.78	8.50	11.65	24.00	-12.35
High	5230	8.37	8.70	11.55	24.00	-12.45

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	6.103	5.672	8.903	11.00	-2.097
High	5230	6.077	6.093	9.095	11.00	-1.905



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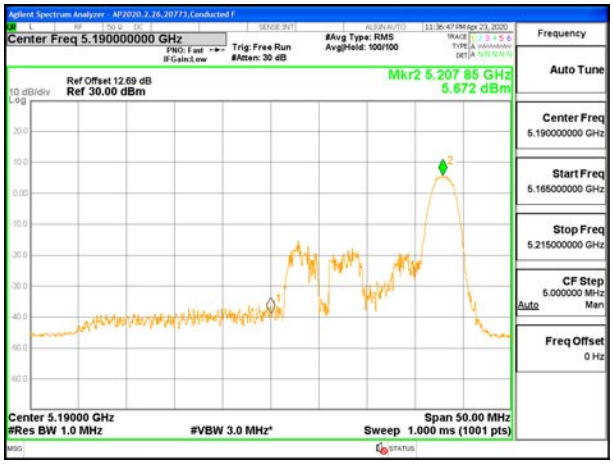

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 484 Tones, RU Index 65

Test Engineer:	44352
Test Date:	8/20/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-0.96	1.69	24.00	11.00
High	5230	-0.96	1.69	24.00	11.00

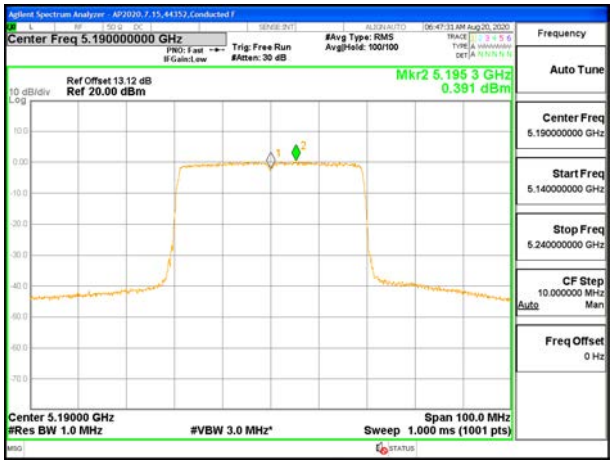
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.49	15.35	18.43	24.00	-5.57
High	5230	18.41	19.94	22.25	24.00	-1.75

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	0.391	0.495	3.454	11.00	-7.546
High	5230	3.280	4.760	7.093	11.00	-3.907



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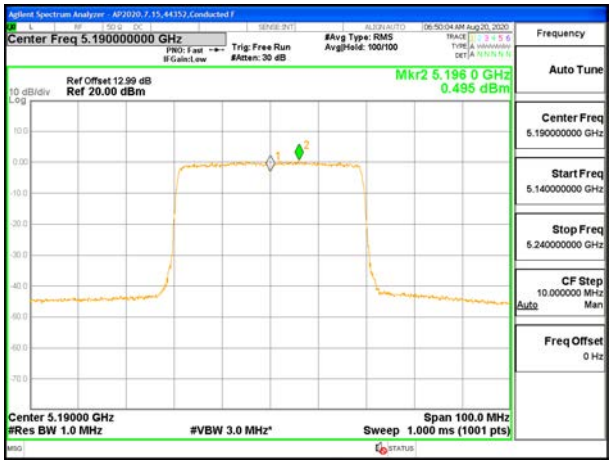

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8.4.6. 802.11ax HE80 MODE IN THE 5.2 GHz BAND

1TX ANT 6 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	0.90	24.00	11.00

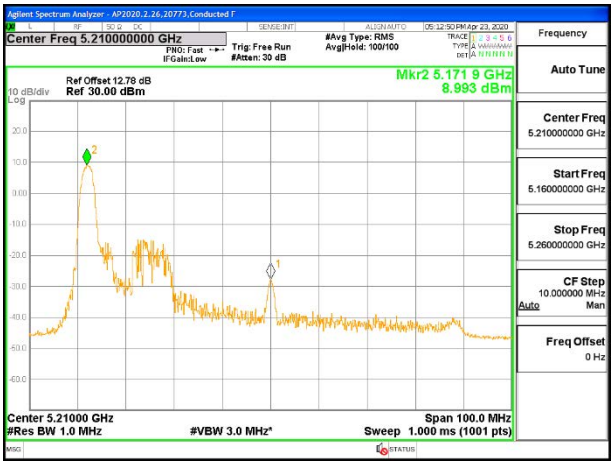
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.78	11.78	24.00	-12.22

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	8.993	8.993	11.00	-2.007



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1TX ANT 6 MODE (FCC) MOBILE – 26 Tones, RU Index 18

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	0.90	24.00	11.00

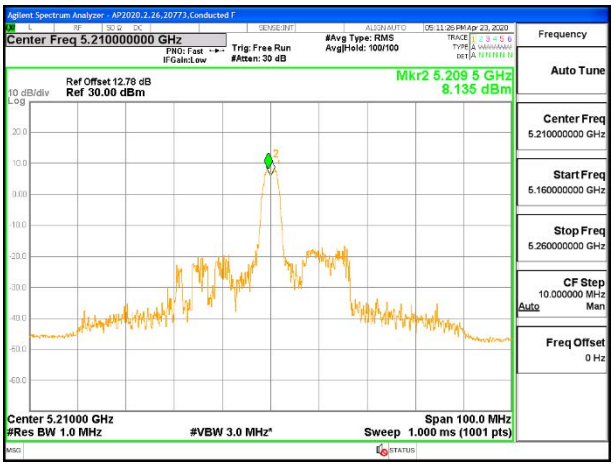
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.94	11.94	24.00	-12.06

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	8.135	8.135	11.00	-2.865



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1TX ANT 6 MODE (FCC) MOBILE – 26 Tones, RU Index 36

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	0.90	24.00	11.00

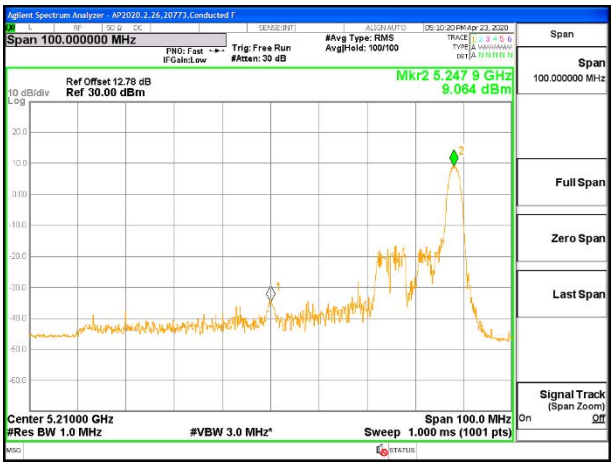
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.95	11.95	24.00	-12.05

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	9.064	9.064	11.00	-1.936



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1TX ANT 6 MODE (FCC) MOBILE – 996 Tones, RU Index 67

Test Engineer:	20773
Test Date:	4/23/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	0.90	24.00	11.00

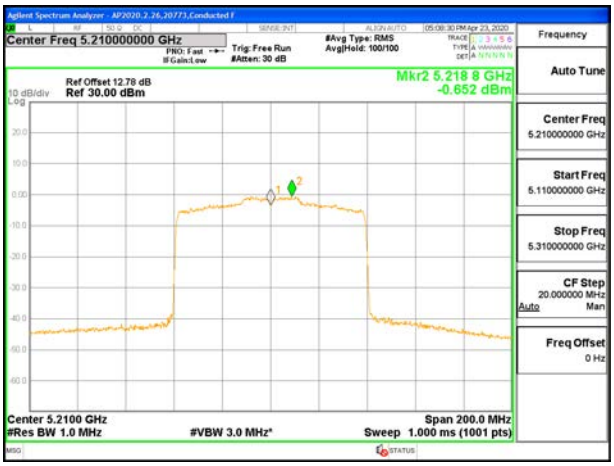
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	15.60	15.60	24.00	-8.40

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-0.652	-0.652	11.00	-11.652



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1TX ANT 5 MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-4.30	24.00	11.00

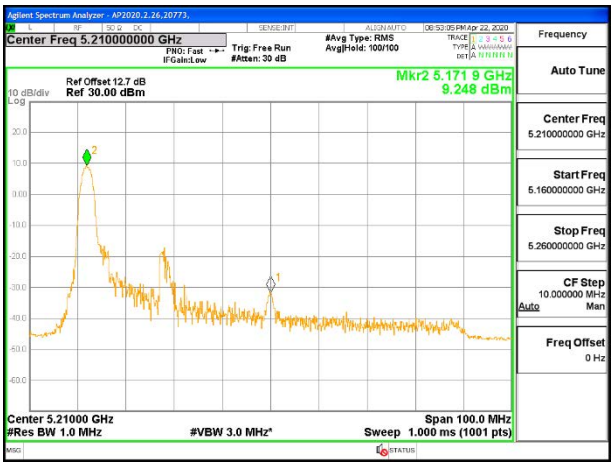
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.84	11.84	24.00	-12.16

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	9.248	9.248	11.00	-1.752



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1TX ANT 5 MODE (FCC) MOBILE – 26 Tones, RU Index 18

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-4.30	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.57	11.57	24.00	-12.43

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	8.238	8.238	11.00	-2.762

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1TX ANT 5 MODE (FCC) MOBILE – 26 Tones, RU Index 36

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-4.30	24.00	11.00

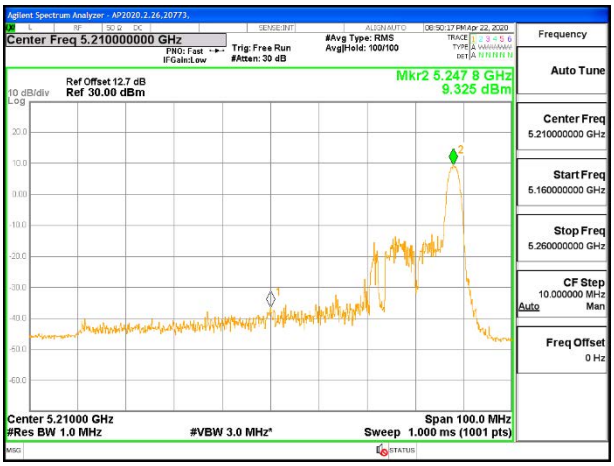
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	11.65	11.65	24.00	-12.35

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	9.325	9.325	11.00	-1.675



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1TX ANT 5 MODE (FCC) MOBILE – 996 Tones, RU Index 67

Test Engineer:	20773
Test Date:	4/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-4.30	24.00	11.00

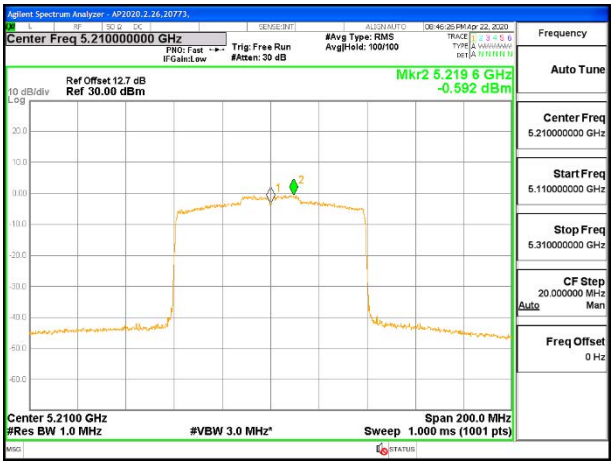
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	15.56	15.56	24.00	-8.44

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-0.592	-0.592	11.00	-11.592



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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 0

Test Engineer:	23560
Test Date:	3/22/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-0.96	1.69	24.00	11.00

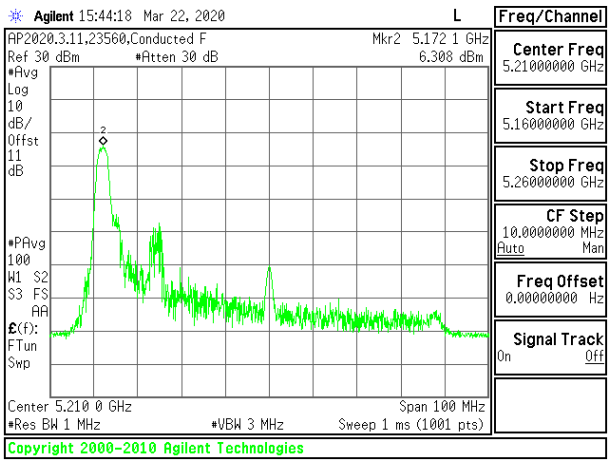
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	8.57	8.85	11.72	24.00	-12.28

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	6.308	6.367	9.348	11.00	-1.652



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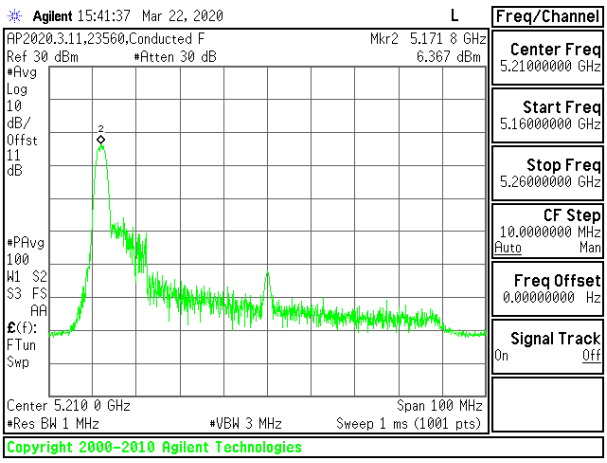

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 18

Test Engineer:	20773
Test Date:	4/21/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-0.96	1.69	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	8.75	8.88	11.83	24.00	-12.17

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	4.979	5.112	8.056	11.00	-2.944

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 26 Tones, RU Index 36

Test Engineer:	20773
Test Date:	4/21/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-0.96	1.69	24.00	11.00

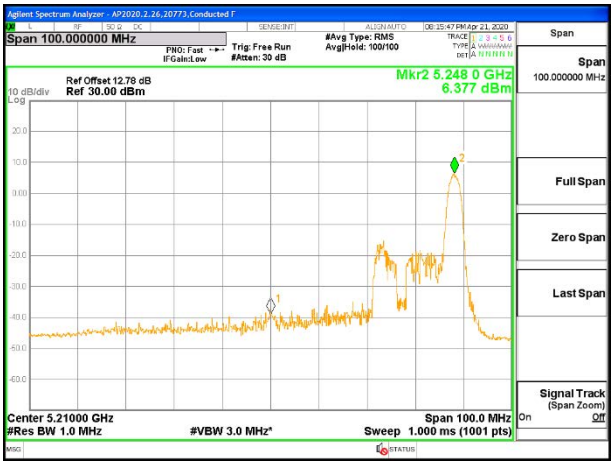
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	8.77	8.93	11.86	24.00	-12.14

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	6.377	6.289	9.344	11.00	-1.656



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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) MOBILE – 996 Tones, RU Index 67

Test Engineer:	20773
Test Date:	4/21/2020

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5210	-0.96	1.69	24.00	11.00

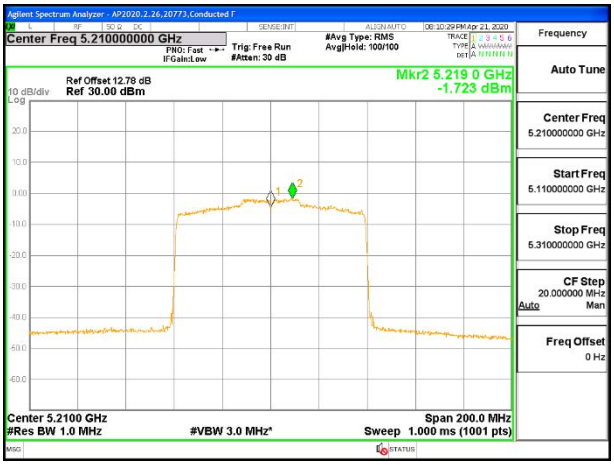
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	14.60	14.58	17.60	24.00	-6.40

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-1.723	-1.645	1.326	11.00	-9.674



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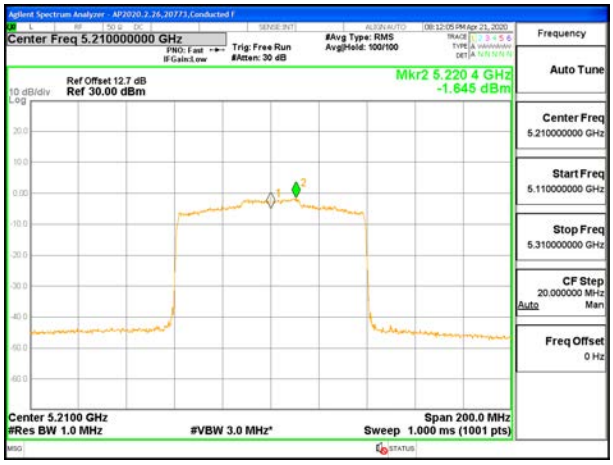

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8.4.7. 802.11n HT20 MODE IN THE 5.3 GHz BAND

1TX ANT 6 MODE (FCC)

Test Engineer:	23560 & 44352
Test Date:	3/21/2020 & 8/18/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.40	1.80	24.00	11.00
Mid	5300	21.50	1.80	24.00	11.00
High	5320	21.55	1.80	24.00	11.00

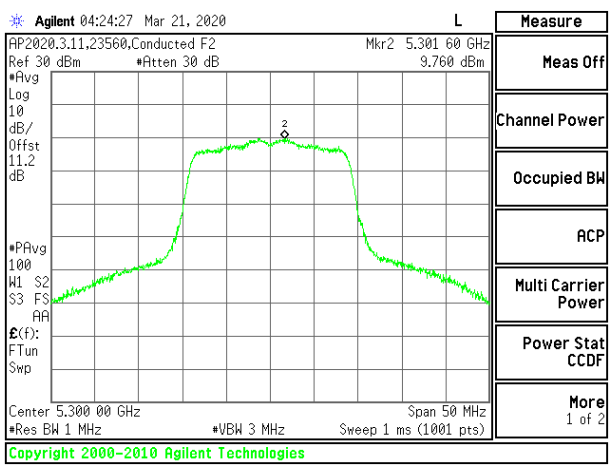
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	17.72	17.72	24.00	-6.28
Mid	5300	17.68	17.68	24.00	-6.32
High	5320	17.46	17.46	24.00	-6.54

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	9.851	9.851	11.00	-1.149
Mid	5300	9.760	9.760	11.00	-1.240
High	5320	8.737	8.737	11.00	-2.263



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1TX ANT 5 MODE (FCC)

Test Engineer:	12485
Test Date:	4/21/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.50	1.00	24.00	11.00
Mid	5300	21.40	1.00	24.00	11.00
High	5320	21.75	1.00	24.00	11.00

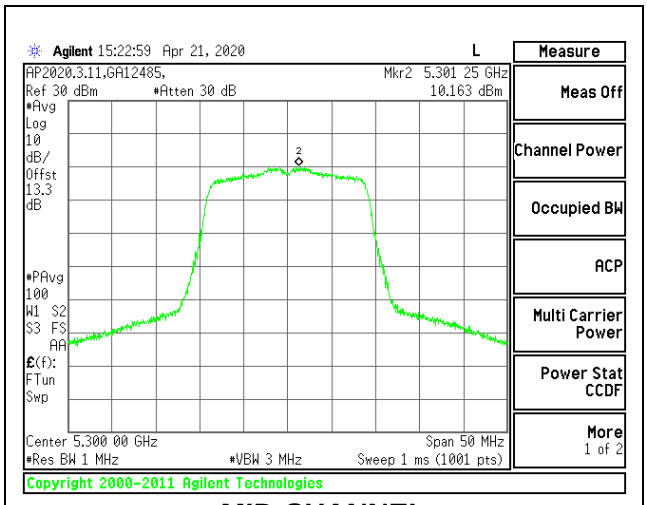
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	19.95	19.95	24.00	-4.05
Mid	5300	19.87	19.87	24.00	-4.13
High	5320	18.29	18.29	24.00	-5.71

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	10.159	10.159	11.00	-0.841
Mid	5300	10.163	10.163	11.00	-0.837
High	5320	8.947	8.947	11.00	-2.053



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2TX ANT 6 + ANT 5 CDD MODE (FCC)

Test Engineer:	23560 & 12485
Test Date:	3/22/2020 & 4/21/2020

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/1MHz)
Low	5260	21.20	0.03	2.74	24.00	11.00
Mid	5300	21.15	0.03	2.74	24.00	11.00
High	5320	21.20	0.03	2.74	24.00	11.00

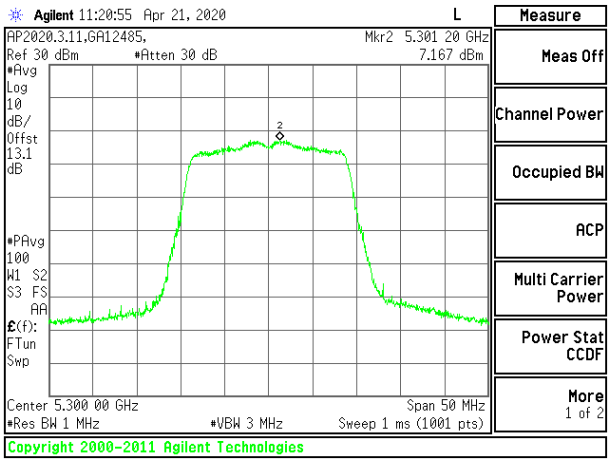
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	16.78	16.85	19.83	24.00	-4.17
Mid	5300	16.98	16.89	19.95	24.00	-4.05
High	5320	16.77	16.87	19.83	24.00	-4.17

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	6.907	6.976	9.952	11.00	-1.048
Mid	5300	7.167	7.056	10.122	11.00	-0.878
High	5320	7.016	6.941	9.989	11.00	-1.011



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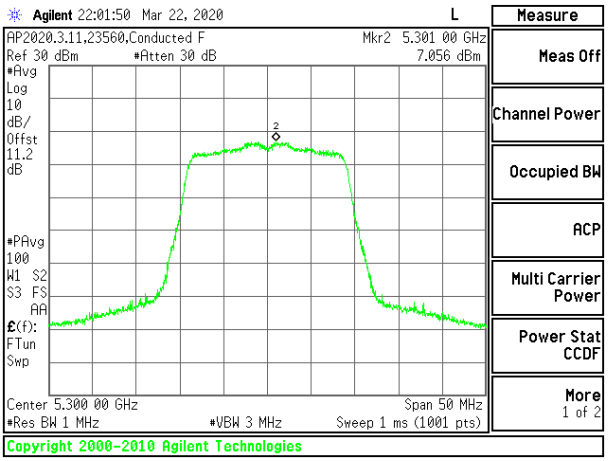

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8.4.8. 802.11n HT40 MODE IN THE 5.3 GHz BAND

1TX ANT 6 MODE (FCC)

Test Engineer:	23560
Test Date:	3/21/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	43.70	1.80	24.00	11.00
High	5310	43.40	1.80	24.00	11.00

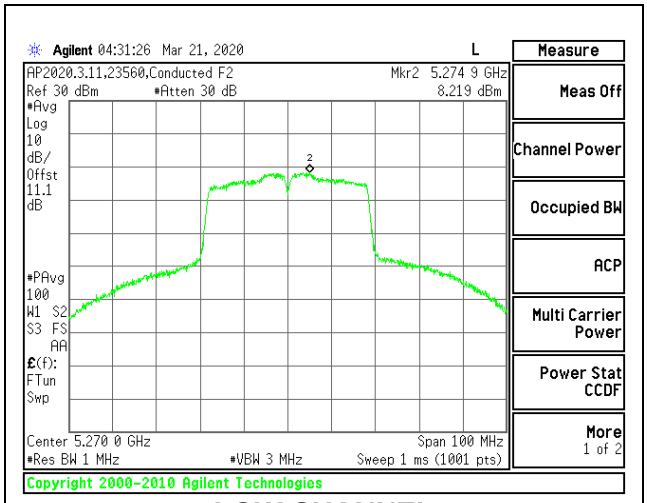
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	17.63	17.63	24.00	-6.37
High	5310	16.66	16.66	24.00	-7.34

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	8.219	8.219	11.00	-2.781
High	5310	3.335	3.335	11.00	-7.665



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1TX ANT 5 MODE (FCC)

Test Engineer:	12485
Test Date:	4/21/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	43.50	-3.00	24.00	11.00
High	5310	43.00	-3.00	24.00	11.00

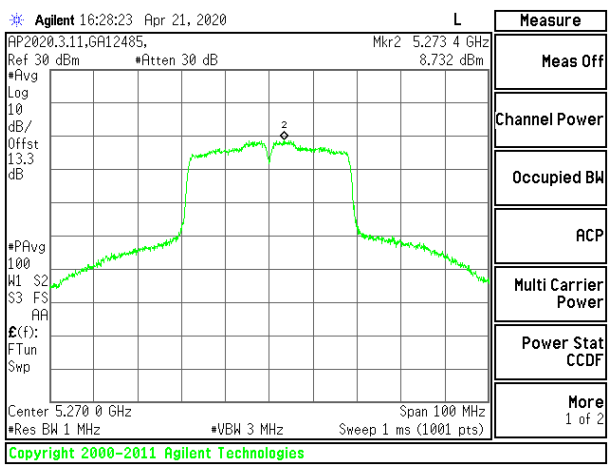
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	20.54	20.54	24.00	-3.46
High	5310	16.78	16.78	24.00	-7.22

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	8.732	8.822	11.00	-2.178
High	5310	3.355	3.355	11.00	-7.645



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2TX ANT 6 + ANT 5 CDD MODE (FCC)

Test Engineer:	23560 & 20773
Test Date:	3/22/2020 & 8/20/2020

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/1MHz)
Low	5270	41.50	0.03	2.74	24.00	11.00
High	5310	41.00	0.03	2.74	24.00	11.00

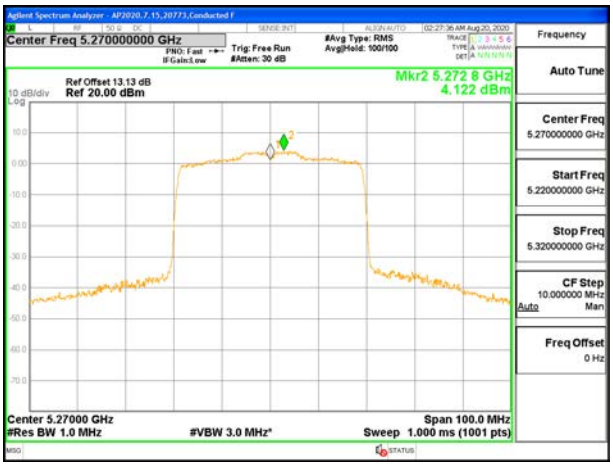
Duty Cycle CF (dB)	0.09	**Included in Calculations of Corr'd PSD**

Output Power Results

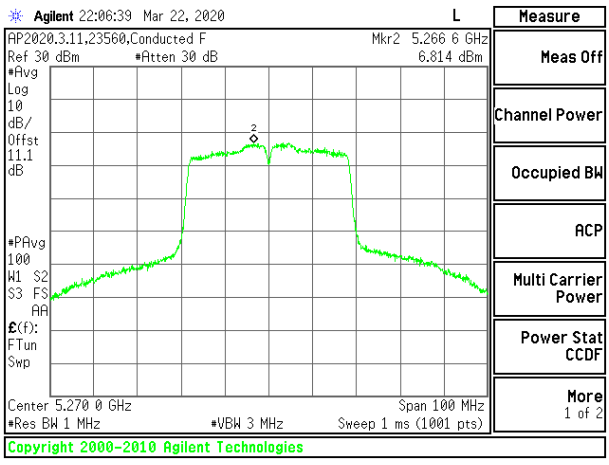
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	17.66	19.97	21.98	24.00	-2.02
High	5310	15.45	15.34	18.41	24.00	-5.59

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	4.122	6.814	8.774	11.00	-2.226
High	5310	1.872	1.823	4.948	11.00	-6.052



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

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8.4.9. 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

1TX ANT 6 MODE (FCC)

Test Engineer:	23560
Test Date:	3/21/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5290	83.00	1.80	1.80	11.00

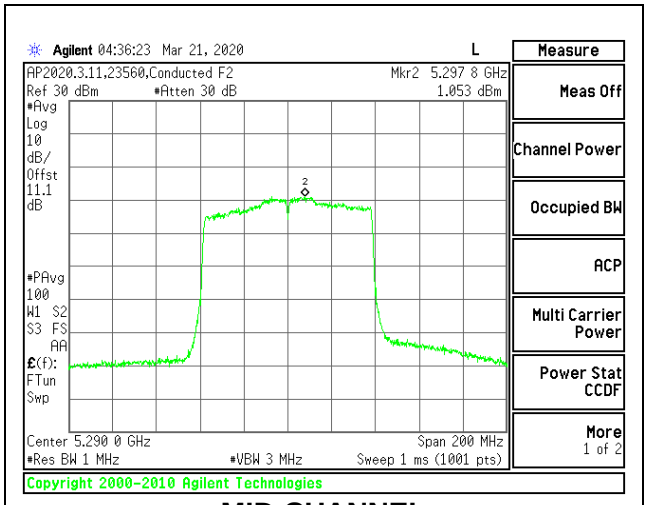
Duty Cycle CF (dB)	0.19	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	16.48	16.48	1.80	14.68

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5290	1.053	1.243	11.00	-9.757



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1TX ANT 5 MODE (FCC)

Test Engineer:	12485
Test Date:	4/21/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5290	83.80	-3.00	24.00	11.00

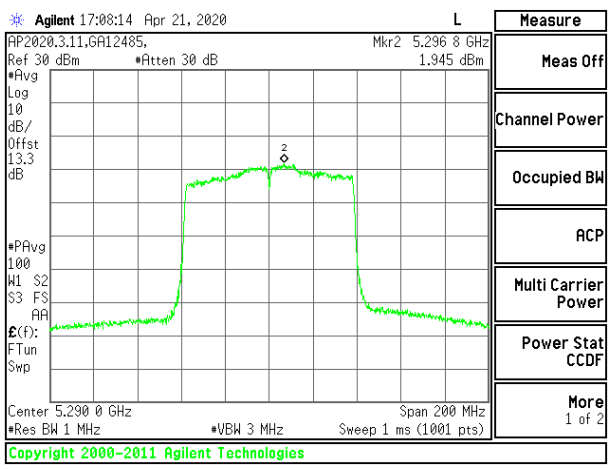
Duty Cycle CF (dB)	0.19	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	16.44	16.44	24.00	-7.56

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5290	1.945	2.135	11.00	-8.865



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2TX ANT 6 + ANT 5 CDD MODE (FCC)

Test Engineer:	23560
Test Date:	3/21/2020

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/1MHz)
Mid	5290	83.00	0.03	2.74	24.00	11.00

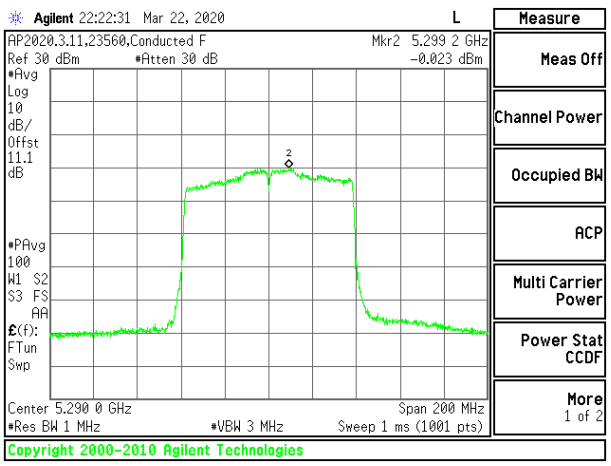
Duty Cycle CF (dB)	0.18	**Included in Calculations of Corr'd PSD**

Output Power Results

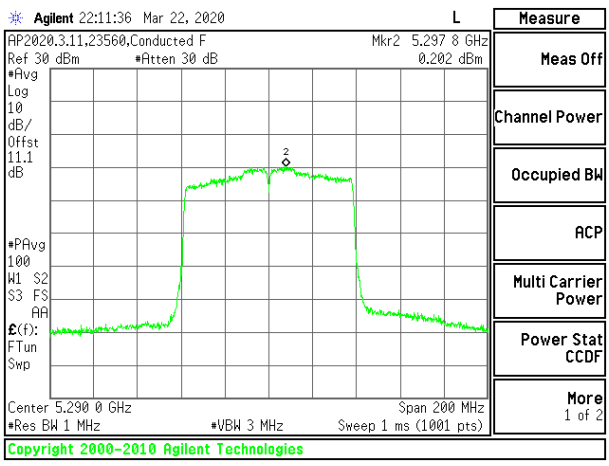
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	14.70	14.79	17.76	24.00	-6.24

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5290	-0.023	0.202	3.281	11.00	-7.719



MID CHANNEL [ANT 6]



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8.4.10.802.11ax HE20 MODE IN THE 5.3 GHz BAND

1TX ANT 6 MODE (FCC) – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	20.25	1.80	24.00	11.00
Mid	5300	20.15	1.80	24.00	11.00
High	5320	20.20	1.80	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	11.98	11.98	24.00	-12.02
Mid	5300	11.97	11.97	24.00	-12.03
High	5320	11.88	11.88	24.00	-12.12

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	8.796	8.796	11.00	-2.204
Mid	5300	8.527	8.527	11.00	-2.473
High	5320	8.135	8.135	11.00	-2.865

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1TX ANT 6 MODE (FCC) – 26 Tones, RU Index 4

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	19.30	1.80	23.86	11.00
Mid	5300	19.30	1.80	23.86	11.00
High	5320	19.00	1.80	23.79	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	11.96	11.96	23.86	-11.90
Mid	5300	11.85	11.85	23.86	-12.01
High	5320	11.88	11.88	23.79	-11.91

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	7.909	7.909	11.00	-3.091
Mid	5300	7.511	7.511	11.00	-3.489
High	5320	7.397	7.397	11.00	-3.603

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1TX ANT 6 MODE (FCC) – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	20.55	1.80	24.00	11.00
Mid	5300	20.70	1.80	24.00	11.00
High	5320	20.70	1.80	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	11.82	11.82	24.00	-12.18
Mid	5300	11.79	11.79	24.00	-12.21
High	5320	11.83	11.83	24.00	-12.17

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	8.565	8.565	11.00	-2.435
Mid	5300	8.546	8.546	11.00	-2.454
High	5320	8.570	8.570	11.00	-2.430

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1TX ANT 6 MODE (FCC) – 242 Tones, RU Index 61

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.40	1.80	24.00	11.00
Mid	5300	21.45	1.80	24.00	11.00
High	5320	21.40	1.80	24.00	11.00

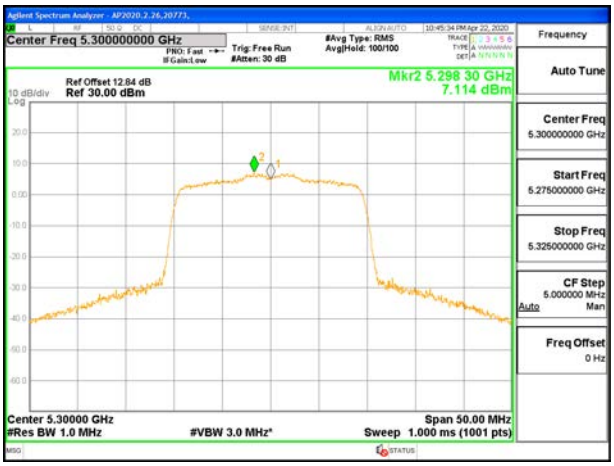
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	17.68	17.68	24.00	-6.32
Mid	5300	17.65	17.65	24.00	-6.35
High	5320	17.50	17.50	24.00	-6.50

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	8.821	8.821	11.00	-2.179
Mid	5300	7.114	7.114	11.00	-3.886
High	5320	6.746	6.746	11.00	-4.254



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1TX ANT 5 MODE (FCC) – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/21/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	20.25	-3.00	24.00	11.00
Mid	5300	19.90	-3.00	23.99	11.00
High	5320	20.10	-3.00	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	11.78	11.78	24.00	-12.22
Mid	5300	11.86	11.86	23.99	-12.13
High	5320	11.63	11.63	24.00	-12.37

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	9.046	9.046	11.00	-1.954
Mid	5300	9.230	9.230	11.00	-1.770
High	5320	8.675	8.675	11.00	-2.325

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1TX ANT 5 MODE (FCC) – 26 Tones, RU Index 4

Test Engineer:	20773
Test Date:	4/21/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	19.30	-3.00	23.86	11.00
Mid	5300	19.40	-3.00	23.88	11.00
High	5320	19.35	-3.00	23.87	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	11.80	11.80	23.86	-12.06
Mid	5300	11.65	11.65	23.88	-12.23
High	5320	11.62	11.62	23.87	-12.25

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	8.288	8.288	11.00	-2.712
Mid	5300	7.877	7.877	11.00	-3.123
High	5320	7.715	7.715	11.00	-3.285

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1TX ANT 5 MODE (FCC) – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/21/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	20.65	-3.00	24.00	11.00
Mid	5300	20.50	-3.00	24.00	11.00
High	5320	20.30	-3.00	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	11.89	11.89	24.00	-12.11
Mid	5300	11.98	11.98	24.00	-12.02
High	5320	11.84	11.84	24.00	-12.16

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	8.977	8.977	11.00	-2.023
Mid	5300	8.999	8.999	11.00	-2.001
High	5320	8.884	8.884	11.00	-2.116

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1TX ANT 5 MODE (FCC) – 242 Tones, RU Index 61

Test Engineer:	20773
Test Date:	4/21/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.35	-3.00	24.00	11.00
Mid	5300	21.45	-3.00	24.00	11.00
High	5320	21.35	-3.00	24.00	11.00

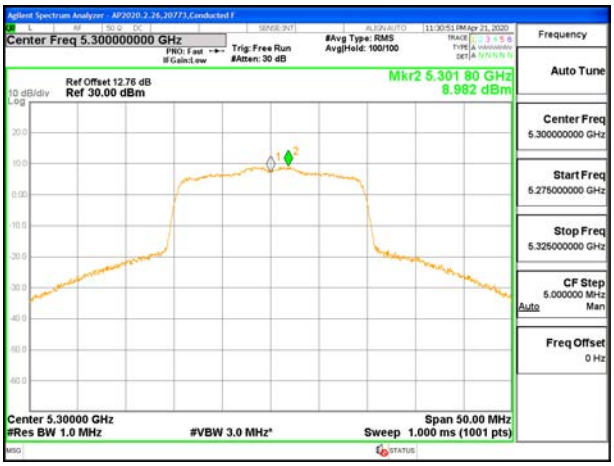
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	19.96	19.96	24.00	-4.04
Mid	5300	19.88	19.88	24.00	-4.12
High	5320	17.69	17.69	24.00	-6.31

PSD Results

Channel	Frequency (MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	9.348	9.348	11.00	-1.652
Mid	5300	8.982	8.982	11.00	-2.018
High	5320	6.922	6.922	11.00	-4.078



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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/23/2020

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/1MHz)
Low	5260	19.50	0.03	2.74	23.90	11.00
Mid	5300	20.00	0.03	2.74	24.00	11.00
High	5320	19.85	0.03	2.74	23.98	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	8.46	8.65	11.57	23.90	-12.33
Mid	5300	8.95	8.71	11.84	24.00	-12.16
High	5320	8.63	8.53	11.59	23.98	-12.39

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	5.784	5.955	8.881	11.00	-2.119
Mid	5300	5.922	5.903	8.923	11.00	-2.077
High	5320	5.372	5.542	8.468	11.00	-2.532

MID CHANNEL [ANT 6]

MID CHANNEL [ANT 5]

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) – 26 Tones, RU Index 4

Test Engineer:	20773
Test Date:	4/23/2020

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/1MHz)
Low	5260	18.20	0.03	2.74	23.60	11.00
Mid	5300	18.35	0.03	2.74	23.64	11.00
High	5320	18.45	0.03	2.74	23.66	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	8.69	8.57	11.64	23.60	-11.96
Mid	5300	8.76	8.88	11.83	23.64	-11.81
High	5320	8.89	8.96	11.94	23.66	-11.72

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	4.580	4.920	7.764	11.00	-3.236
Mid	5300	4.727	4.621	7.685	11.00	-3.315
High	5320	4.735	4.609	7.683	11.00	-3.317

MID CHANNEL [ANT 6]

MID CHANNEL [ANT 5]

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/23/2020

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/1MHz)
Low	5260	19.70	0.03	2.74	23.94	11.00
Mid	5300	19.90	0.03	2.74	23.99	11.00
High	5320	20.00	0.03	2.71	24.00	11.00

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

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	8.77	8.64	11.72	23.94	-12.23
Mid	5300	8.75	8.94	11.86	23.99	-12.13
High	5320	8.62	8.85	11.75	24.00	-12.25

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	5.822	5.832	8.837	11.00	-2.163
Mid	5300	5.689	5.705	8.707	11.00	-2.293
High	5320	5.200	5.649	8.441	11.00	-2.559

MID CHANNEL [ANT 6]

MID CHANNEL [ANT 5]

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) – 242 Tones, RU Index 61

Test Engineer:	20773
Test Date:	4/23/2020

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/1MHz)
Low	5260	21.40	0.03	2.74	24.00	11.00
Mid	5300	21.30	0.03	2.74	24.00	11.00
High	5320	21.35	0.03	2.74	24.00	11.00

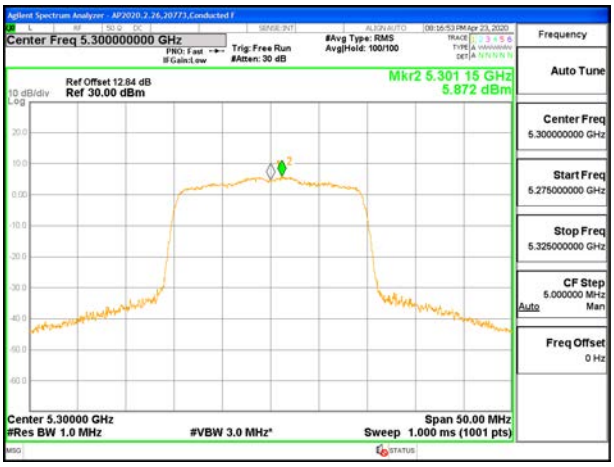
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	16.97	16.58	19.79	24.00	-4.21
Mid	5300	16.96	16.70	19.84	24.00	-4.16
High	5320	16.63	16.88	19.77	24.00	-4.23

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	6.154	6.261	9.218	11.00	-1.782
Mid	5300	5.872	5.840	8.866	11.00	-2.134
High	5320	5.596	6.007	8.817	11.00	-2.183



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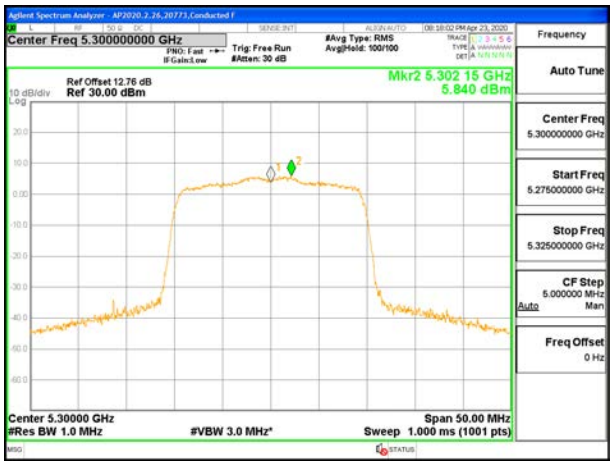

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8.4.11.802.11ax HE40 MODE IN THE 5.3 GHz BAND

1TX ANT 6 MODE (FCC) – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	20.50	1.80	24.00	11.00
High	5310	20.50	1.80	24.00	11.00

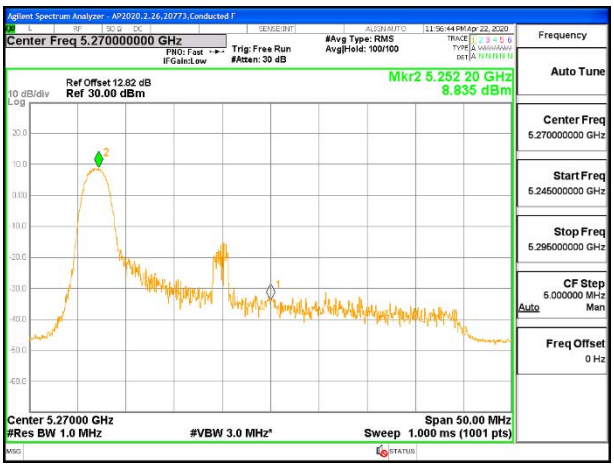
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	11.71	11.71	24.00	-12.29
High	5310	11.68	11.68	24.00	-12.32

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	8.835	8.835	11.00	-2.165
High	5310	8.712	8.712	11.00	-2.288



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1TX ANT 6 MODE (FCC) – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	23.00	1.80	24.00	11.00
High	5310	23.50	1.80	24.00	11.00

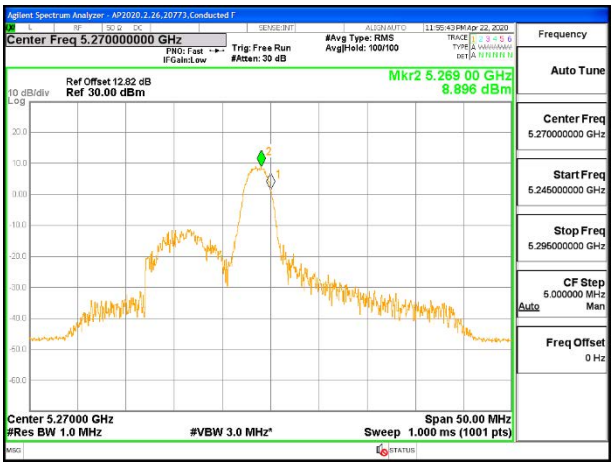
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	11.73	11.73	24.00	-12.27
High	5310	11.65	11.65	24.00	-12.35

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	8.896	8.896	11.00	-2.104
High	5310	8.355	8.355	11.00	-2.645



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1TX ANT 6 MODE (FCC) – 26 Tones, RU Index 17

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	19.70	1.80	23.94	11.00
High	5310	20.20	1.80	24.00	11.00

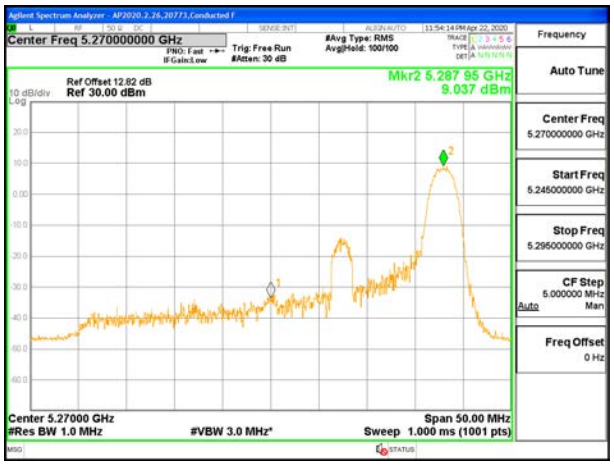
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	11.75	11.75	23.94	-12.19
High	5310	11.61	11.61	24.00	-12.39

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	9.037	9.037	11.00	-1.963
High	5310	8.356	8.356	11.00	-2.644



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1TX ANT 6 MODE (FCC) – 484 Tones, RU Index 65

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	40.90	1.80	24.00	11.00
High	5310	41.10	1.80	24.00	11.00

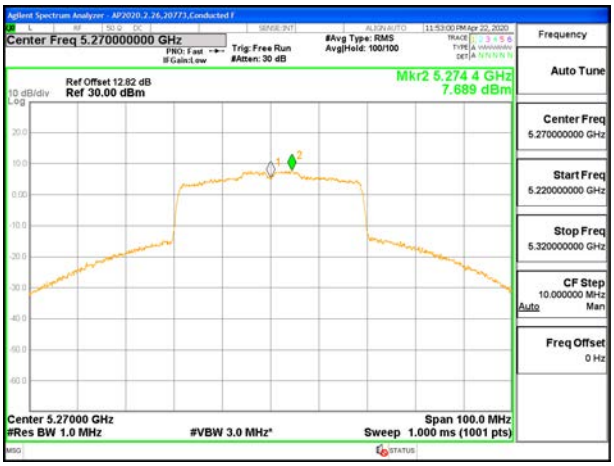
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	17.60	17.60	24.00	-6.40
High	5310	15.68	15.68	24.00	-8.32

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	7.689	7.689	11.00	-3.311
High	5310	1.107	1.107	11.00	-9.893



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1TX ANT 5 MODE (FCC) – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	20.30	-3.00	24.00	11.00
High	5310	20.50	-3.00	24.00	11.00

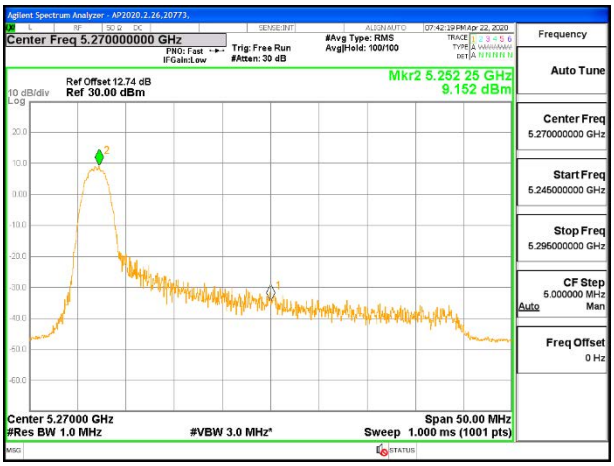
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	11.81	11.81	24.00	-12.19
High	5310	11.67	11.67	24.00	-12.33

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	9.152	9.152	11.00	-1.848
High	5310	8.624	8.624	11.00	-2.376



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1TX ANT 5 MODE (FCC) – 26 Tones, RU Index 8

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	22.70	-3.00	24.00	11.00
High	5310	22.70	-3.00	24.00	11.00

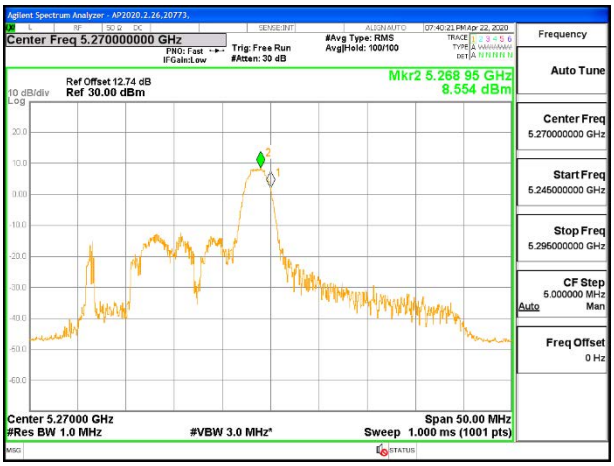
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	11.64	11.64	24.00	-12.36
High	5310	11.67	11.67	24.00	-12.33

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	8.554	8.554	11.00	-2.446
High	5310	8.629	8.629	11.00	-2.371



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1TX ANT 5 MODE (FCC) – 26 Tones, RU Index 17

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	19.80	-3.00	23.97	11.00
High	5310	20.50	-3.00	24.00	11.00

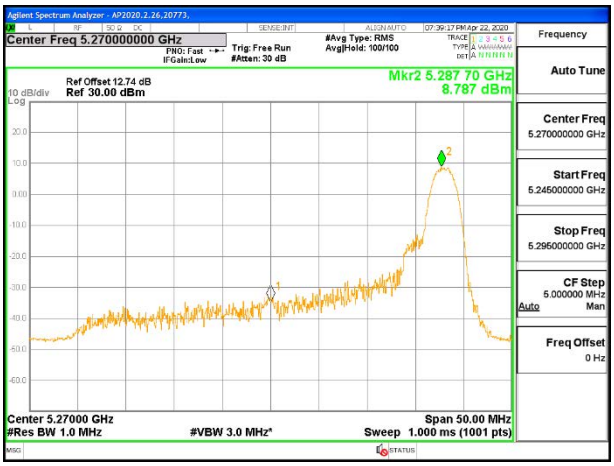
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	11.72	11.72	23.97	-12.25
High	5310	11.70	11.70	24.00	-12.30

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	8.787	8.787	11.00	-2.213
High	5310	8.768	8.768	11.00	-2.232



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1TX ANT 5 MODE (FCC) – 484 Tones, RU Index 65

Test Engineer:	20773
Test Date:	4/22/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	41.10	-3.00	24.00	11.00
High	5310	41.00	-3.00	24.00	11.00

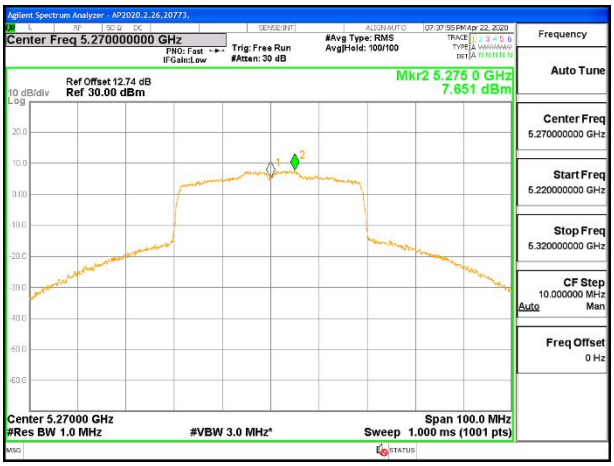
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	20.78	20.78	24.00	-3.22
High	5310	15.67	15.67	24.00	-8.33

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	7.651	7.651	11.00	-3.349
High	5310	2.619	2.619	11.00	-8.381



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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) – 26 Tones, RU Index 0

Test Engineer:	20773 & 44352
Test Date:	4/24/2020 & 8/20/2020

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/1MHz)
Low	5270	19.50	0.03	2.74	23.90	11.00
High	5310	19.40	0.03	2.74	23.88	11.00

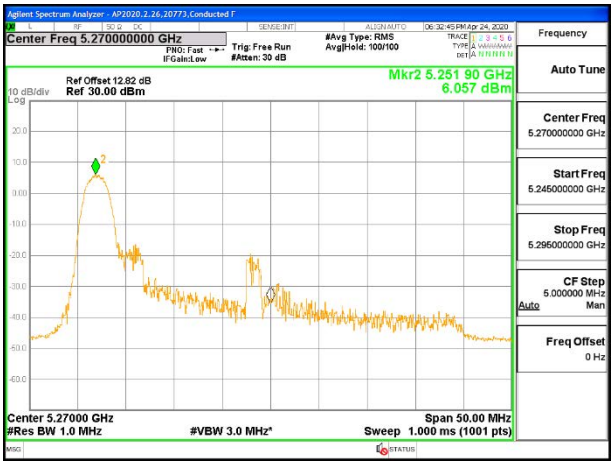
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

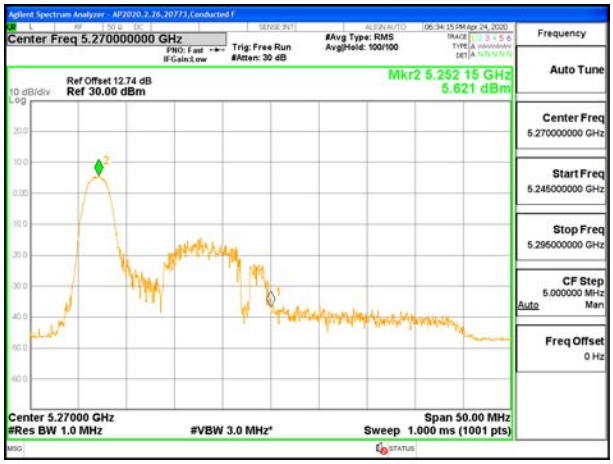
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	8.77	8.67	11.73	23.90	-12.17
High	5310	8.69	8.64	11.68	23.88	-12.20

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	6.057	5.621	8.855	11.00	-2.145
High	5310	5.883	5.789	8.847	11.00	-2.153



LOW CHANNEL [ANT 6]



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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) – 26 Tones, RU Index 8

Test Engineer:	20773 & 44352
Test Date:	4/24/2020 & 8/20/2020

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/1MHz)
Low	5270	22.30	0.03	2.74	24.00	11.00
High	5310	22.50	0.03	2.74	24.00	11.00

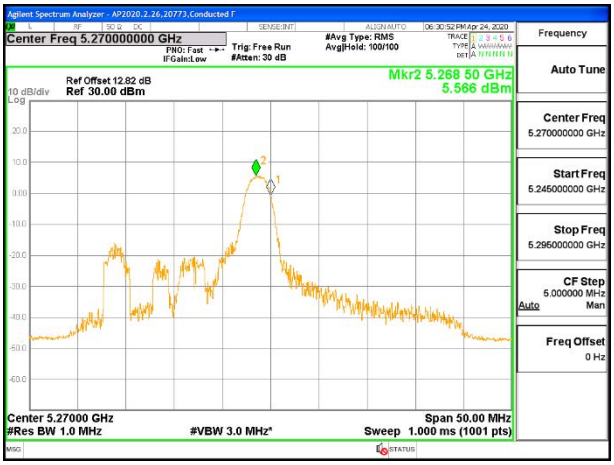
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

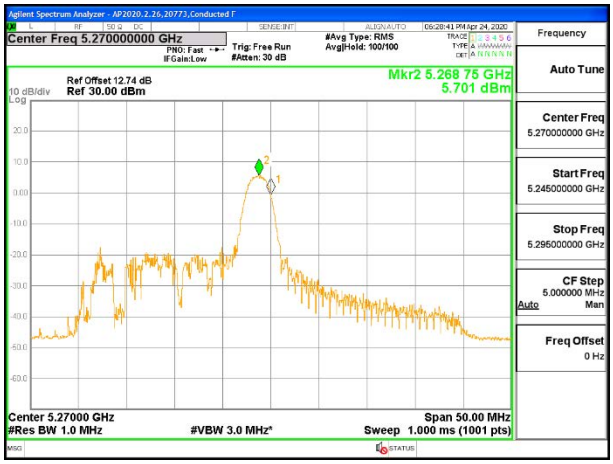
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	8.63	8.64	11.65	24.00	-12.35
High	5310	8.88	8.73	11.82	24.00	-12.18

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	5.566	5.701	8.644	11.00	-2.356
High	5310	5.965	5.811	8.899	11.00	-2.101



LOW CHANNEL [ANT 6]



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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) – 26 Tones, RU Index 17

Test Engineer:	23560, 20773 & 44352
Test Date:	3/23/2020, 4/24/2020 & 8/20/2020

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/1MHz)
Low	5270	19.10	0.03	2.74	23.81	11.00
High	5310	19.20	0.03	2.74	23.83	11.00

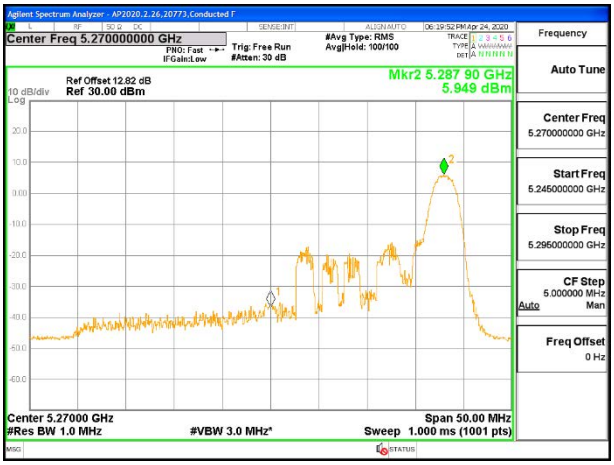
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

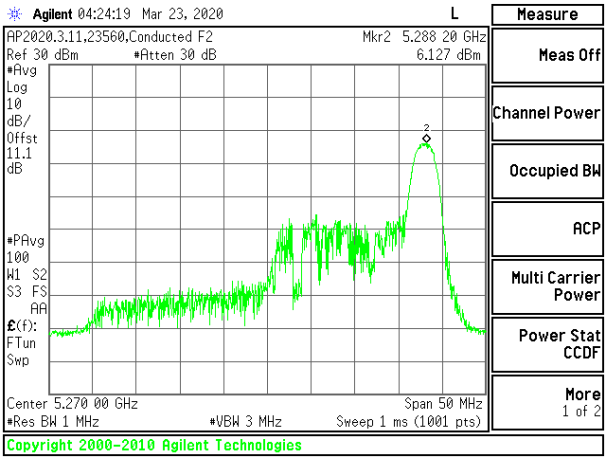
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	8.79	8.98	11.90	23.81	-11.91
High	5310	8.92	8.86	11.90	23.83	-11.93

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	5.949	6.127	9.049	11.00	-1.951
High	5310	6.048	5.949	9.009	11.00	-1.991



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

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2TX ANT 6 + ANT 5 OFDMA MODE (FCC) – 484 Tones, RU Index 65

Test Engineer:	20773 & 44352
Test Date:	4/24/2020 & 8/20/2020

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/1MHz)
Low	5270	40.90	0.03	2.74	24.00	11.00
High	5310	40.80	0.03	2.74	24.00	11.00

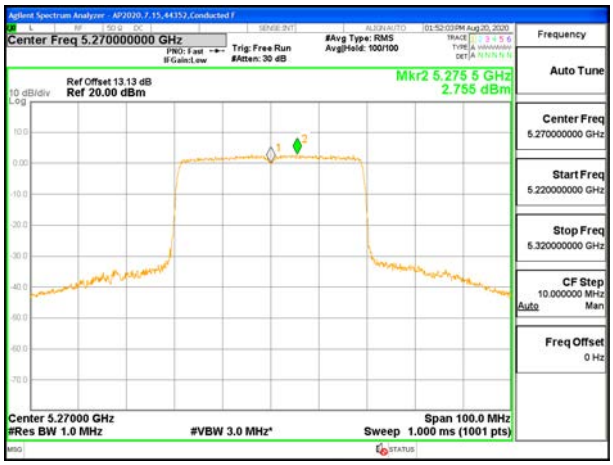
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

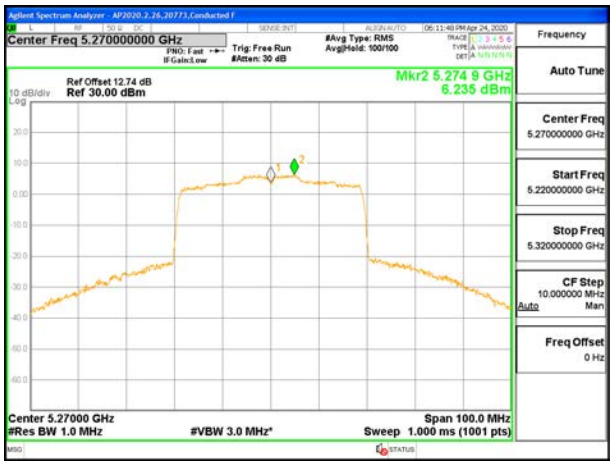
Channel	Frequency (MHz)	Antenna 6 Meas Power (dBm)	Antenna 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	17.68	19.73	21.84	24.00	-2.16
High	5310	15.37	15.41	18.40	24.00	-5.60

PSD Results

Channel	Frequency (MHz)	Antenna 6 Meas PSD (dBm/1MHz)	Antenna 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	2.755	6.235	7.845	11.00	-3.155
High	5310	0.878	0.962	3.931	11.00	-7.069



LOW CHANNEL [ANT 6]



LOW CHANNEL [ANT 5]

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8.4.12.802.11ax HE80 MODE IN THE 5.3 GHz BAND

1TX ANT 6 MODE (FCC) – 26 Tones, RU Index 0

Test Engineer:	20773
Test Date:	4/23/2020

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5290	20.400	1.80	24.00	11.00

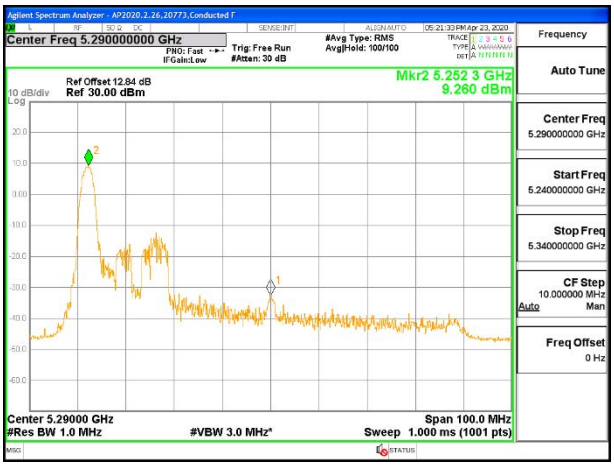
Duty Cycle CF (dB)	0.00	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	11.880	11.880	24.00	-12.12

PSD Results

Channel	Frequency (MHz)	Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5290	9.260	9.260	11.00	-1.74



MID CHANNEL

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