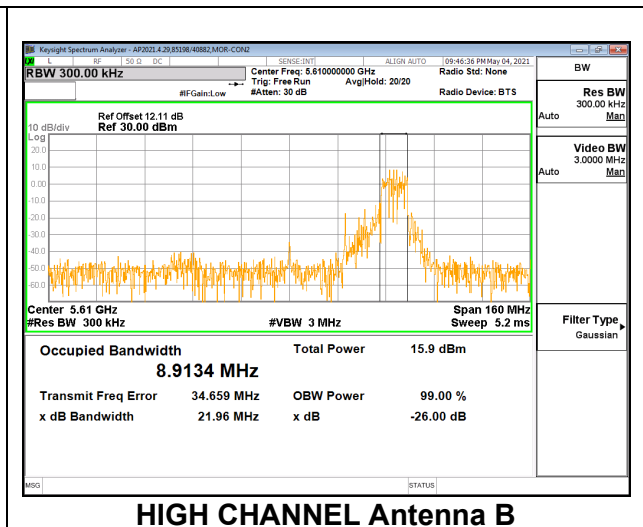
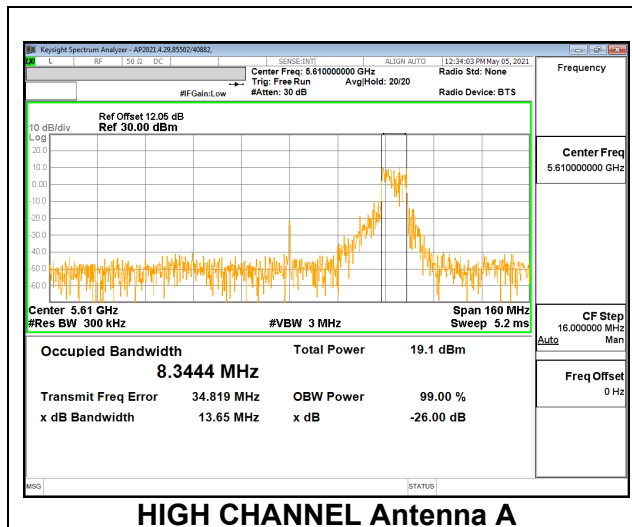
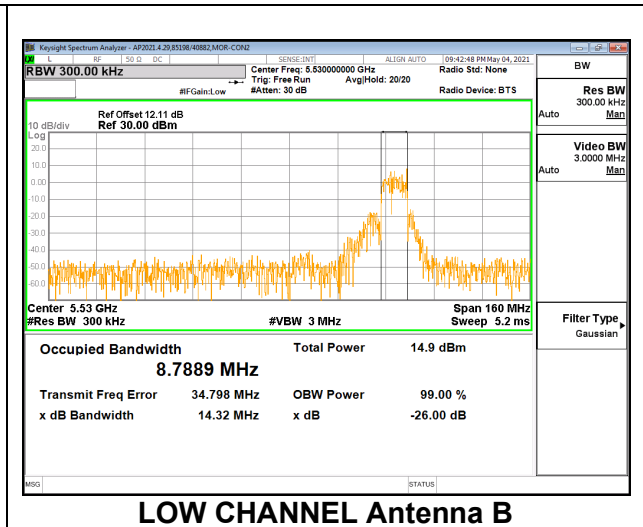
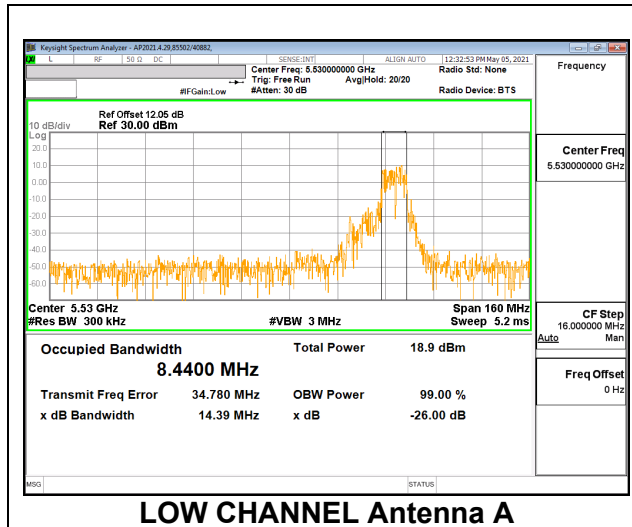
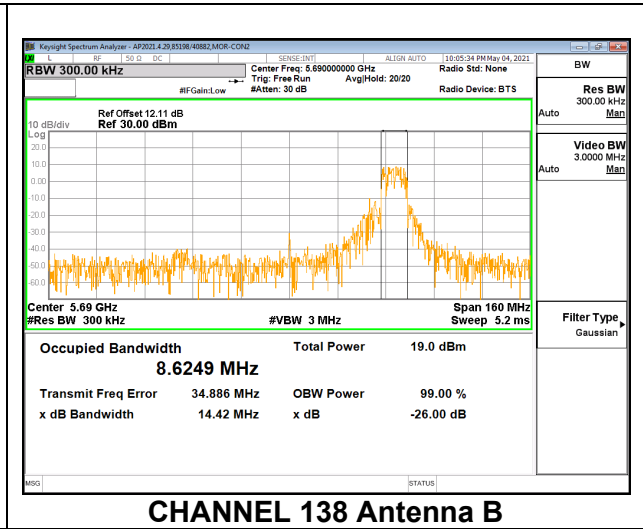
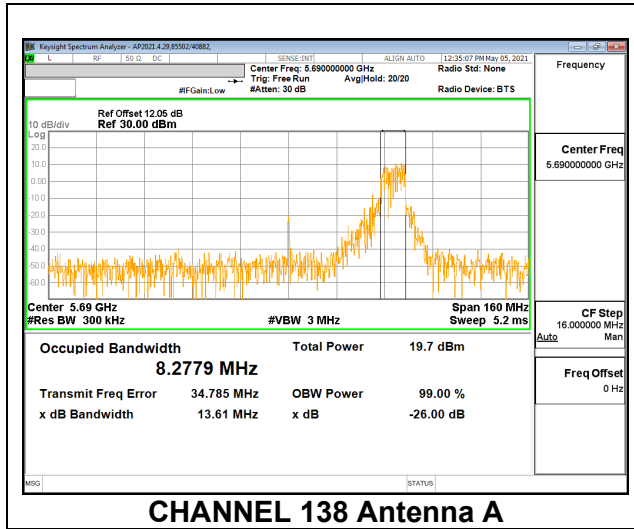


**2TX Antenna A + Antenna B SDM OFDMA MODE: 106-Tones, RU Index 60**

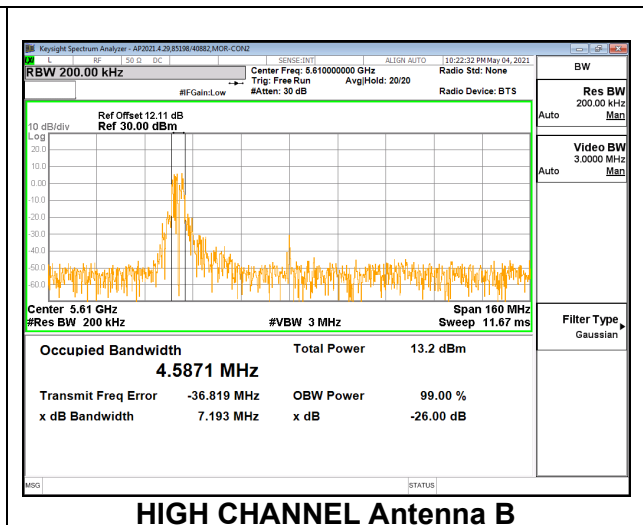
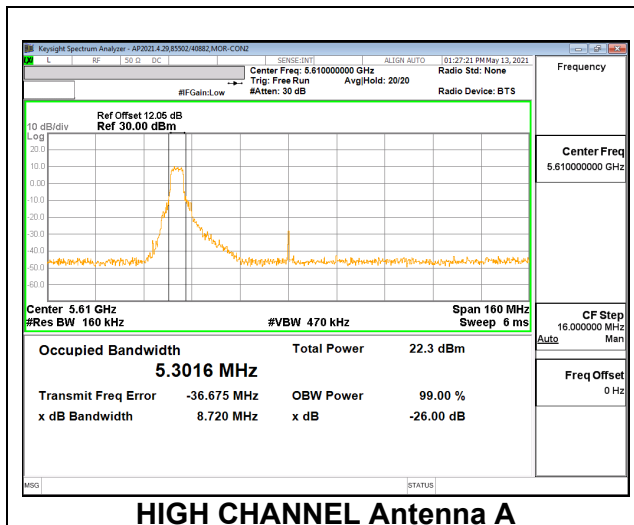
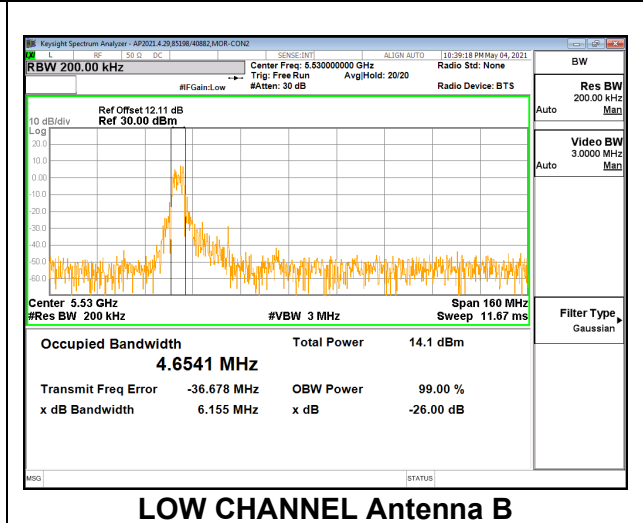
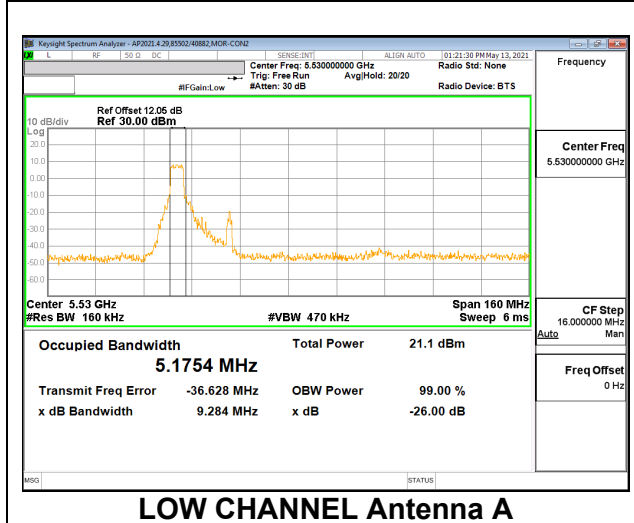
Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Low	5530	8.4400	8.7889
High	5610	8.3444	8.9134
138	5690	8.2779	8.6249

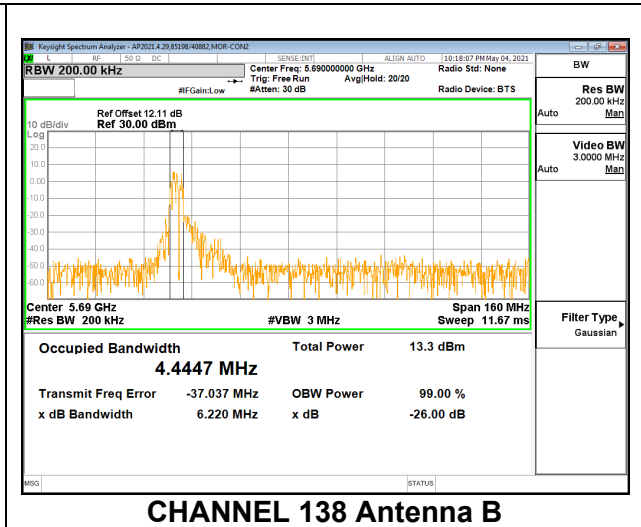
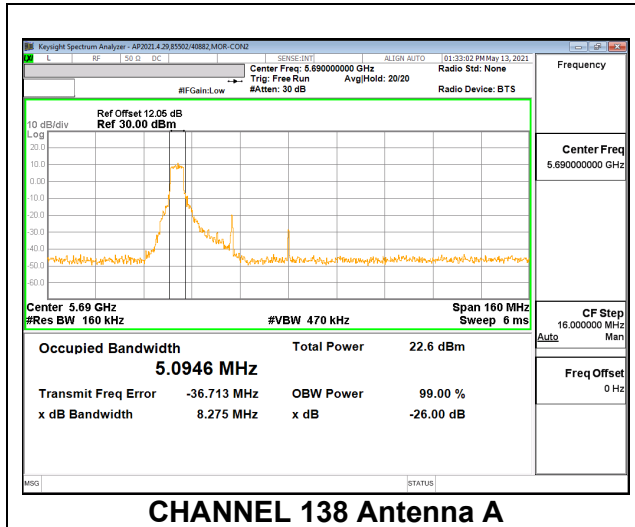




**2TX Antenna A + Antenna B SDM OFDMA MODE: 52-Tones, RU Index 37**

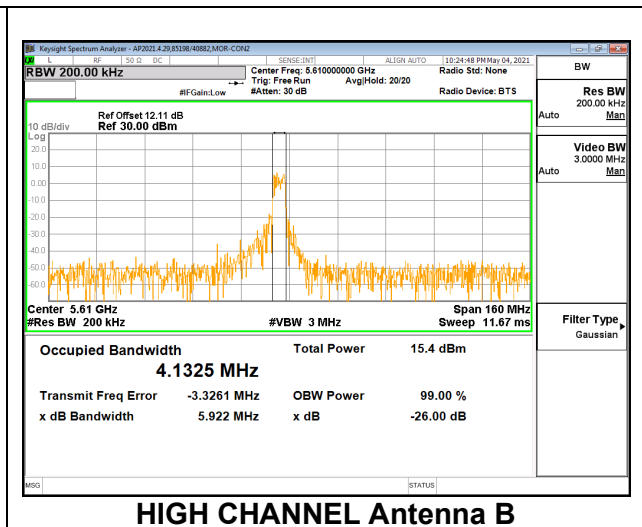
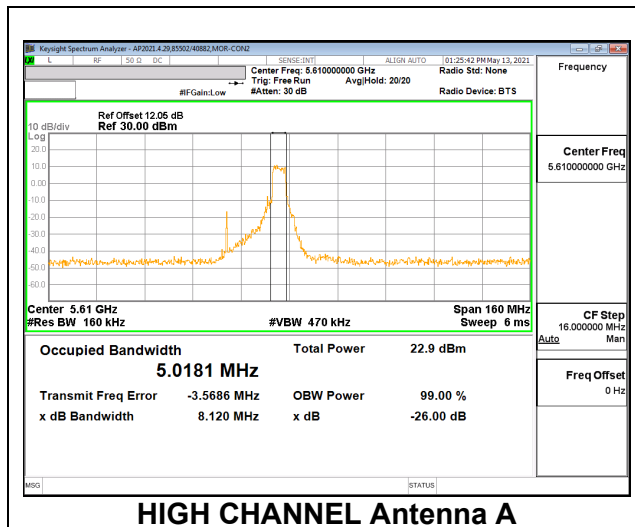
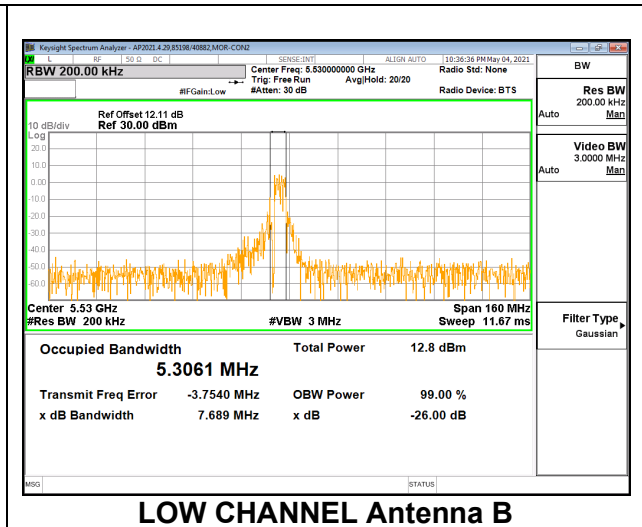
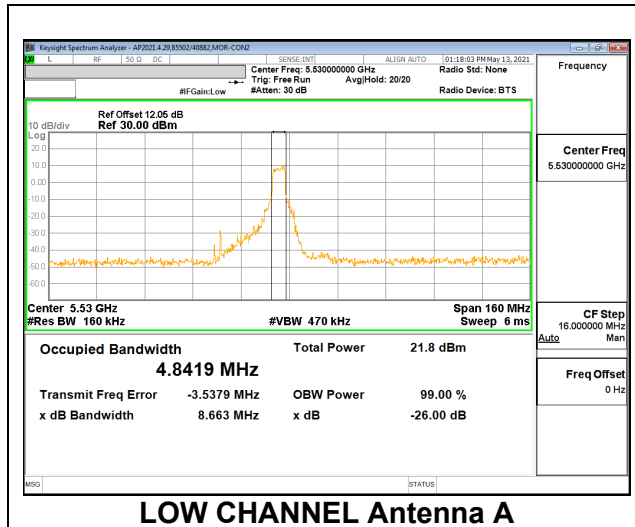
Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Low	5530	5.1754	4.6541
High	5610	5.3016	4.5871
138	5690	5.0946	4.4447

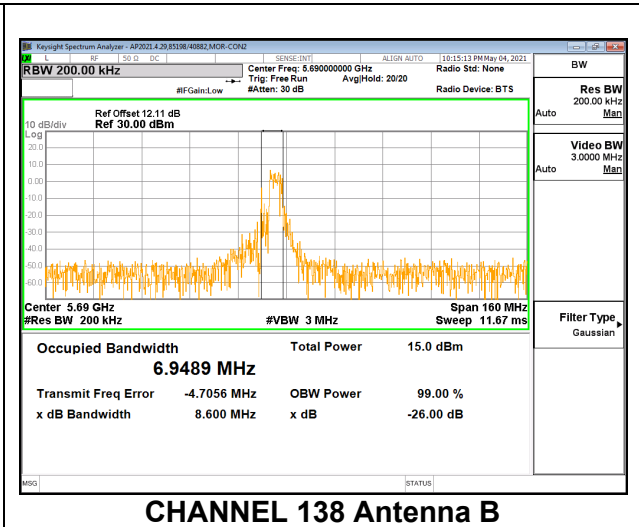
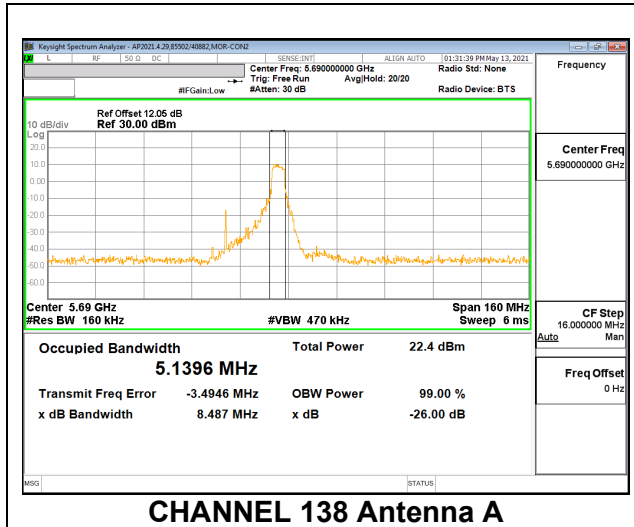




**2TX Antenna A + Antenna B SDM OFDMA MODE: 52-Tones, RU Index 44**

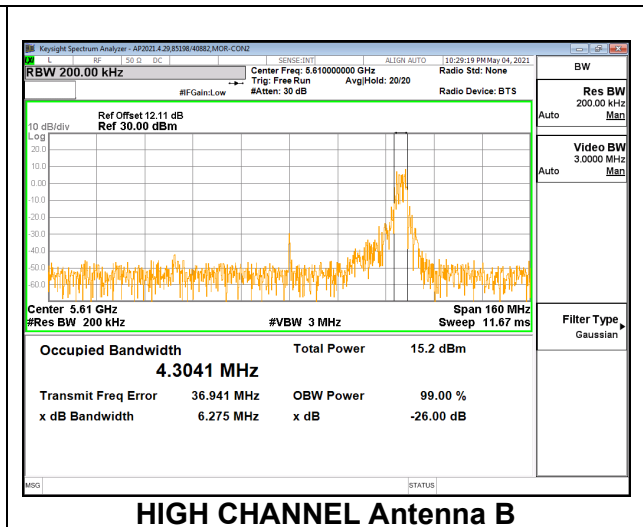
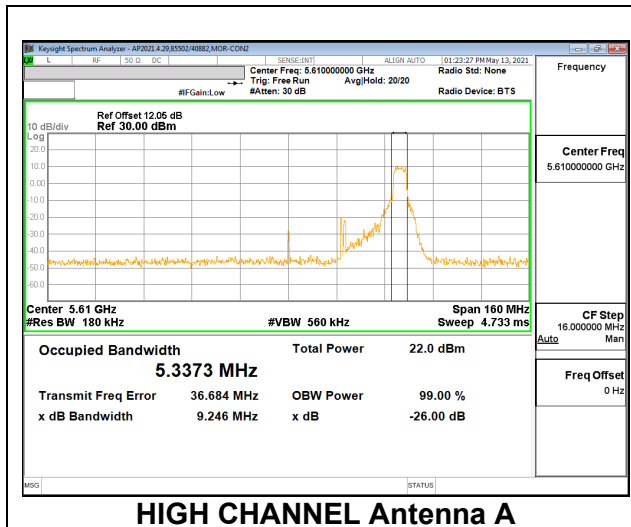
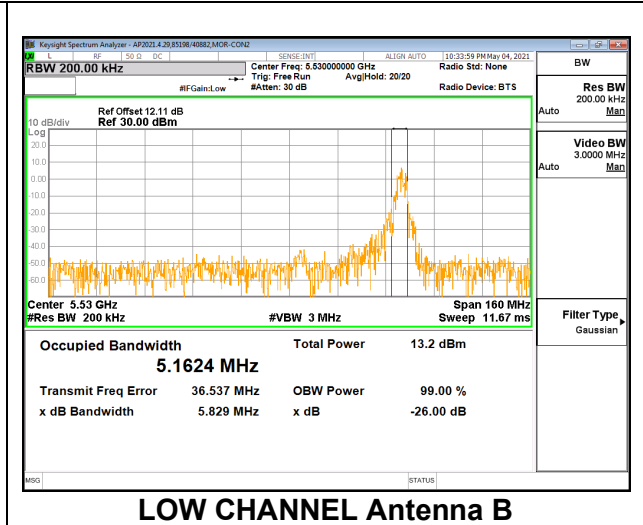
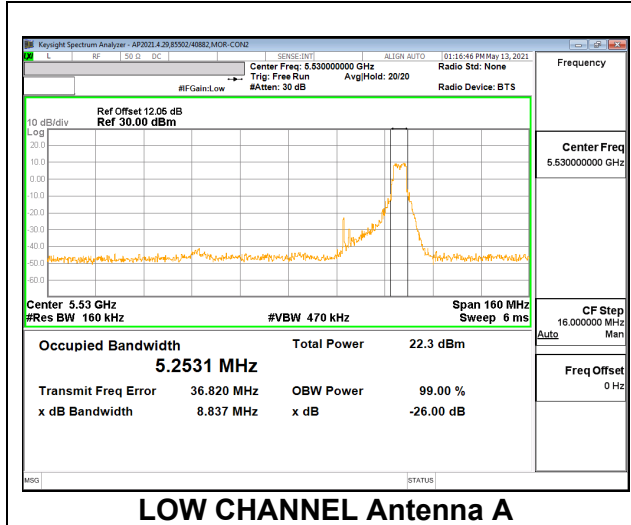
Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Low	5530	4.8419	5.3061
High	5610	5.0181	4.1325
138	5690	5.1396	6.9489



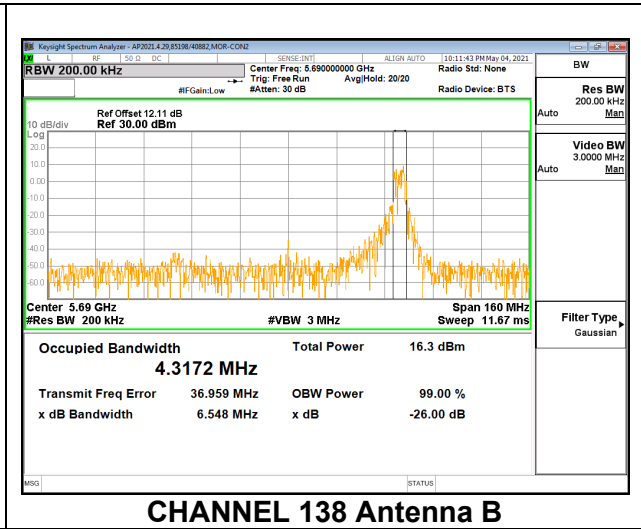
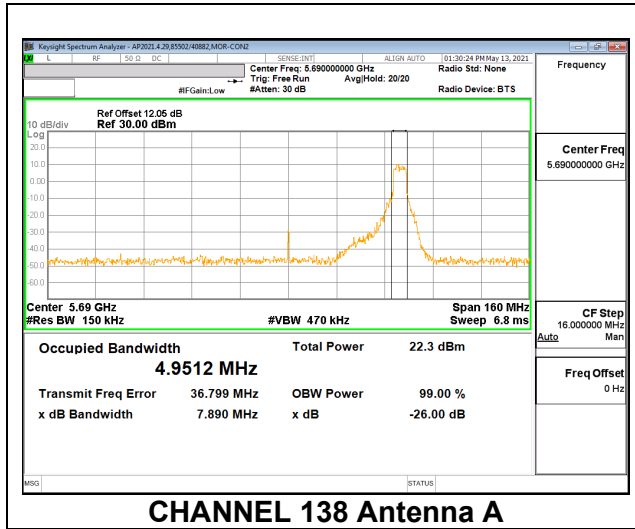


**2TX Antenna A + Antenna B SDM OFDMA MODE: 52-Tones, RU Index 52**

Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Low	5530	5.2531	5.1624
High	5610	5.3373	4.3041
138	5690	4.9512	4.3172

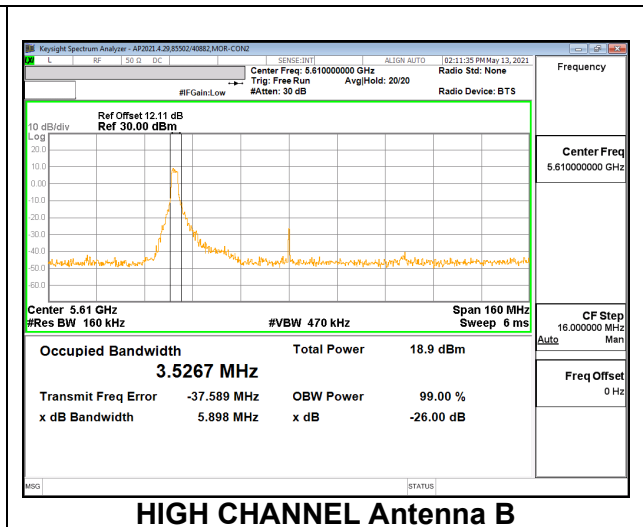
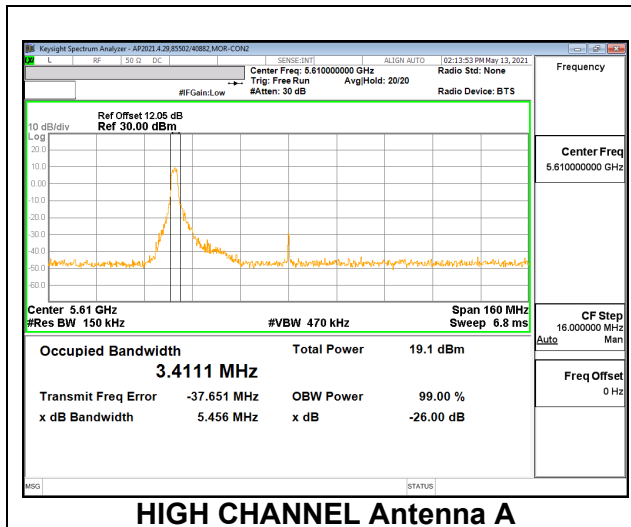
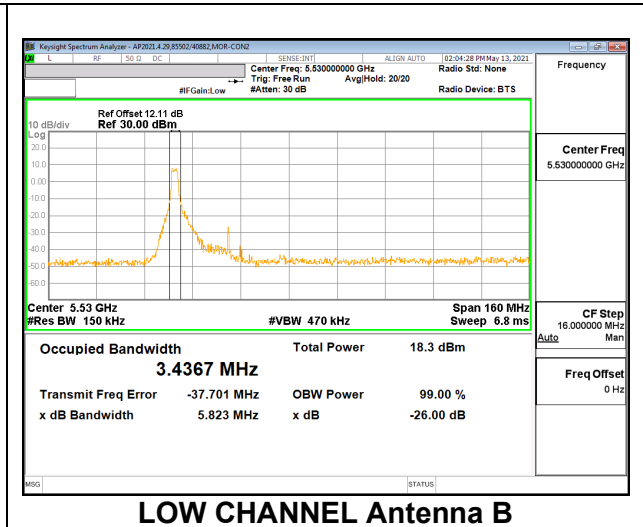
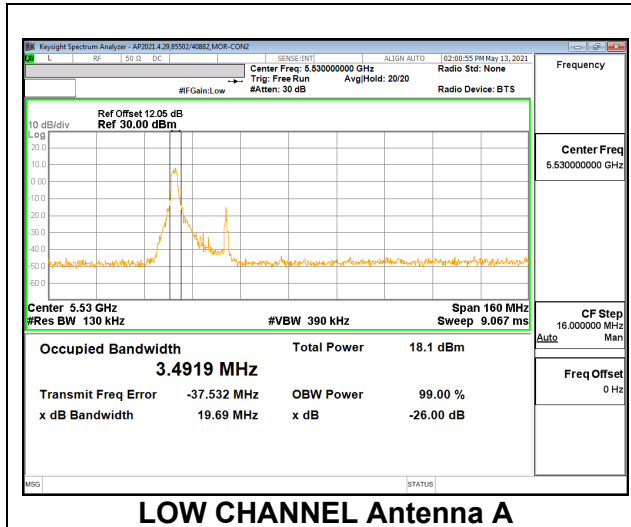


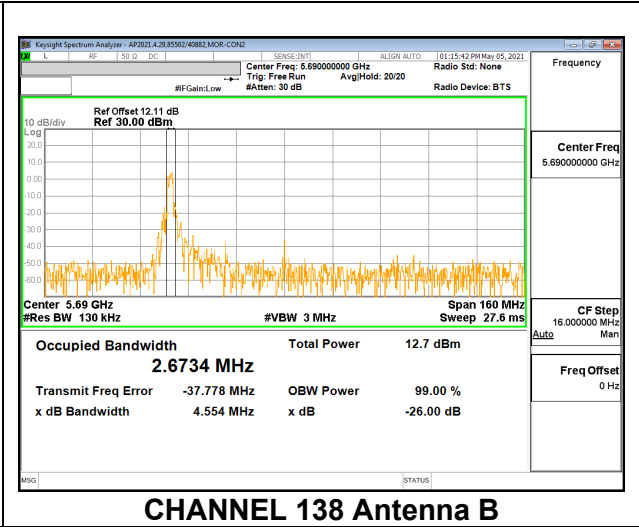
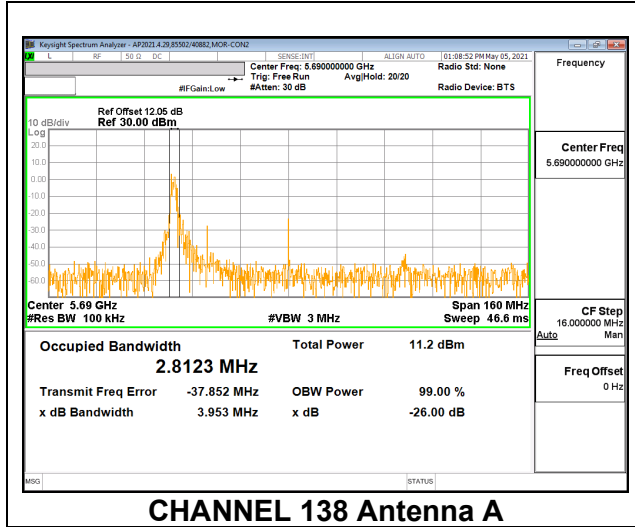




**2TX Antenna A + Antenna B SDM OFDMA MODE: 26-Tones, RU Index 0**

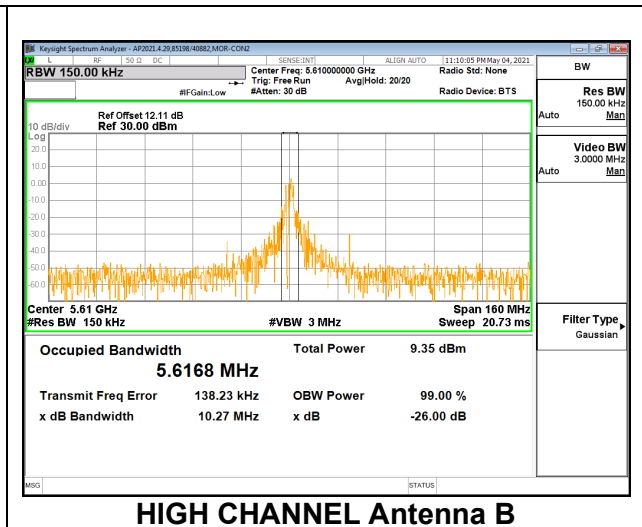
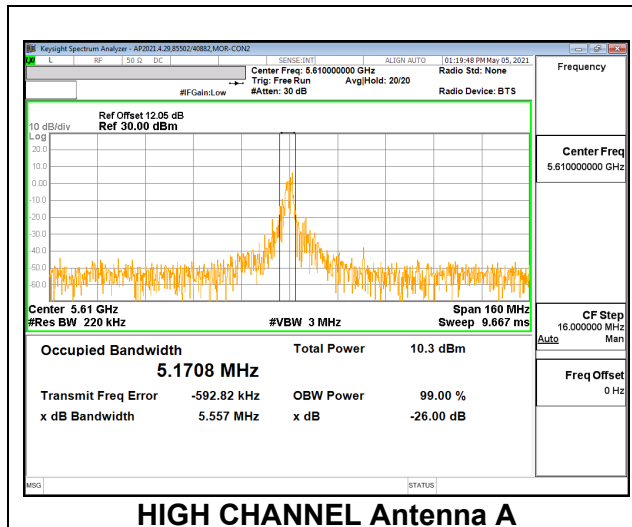
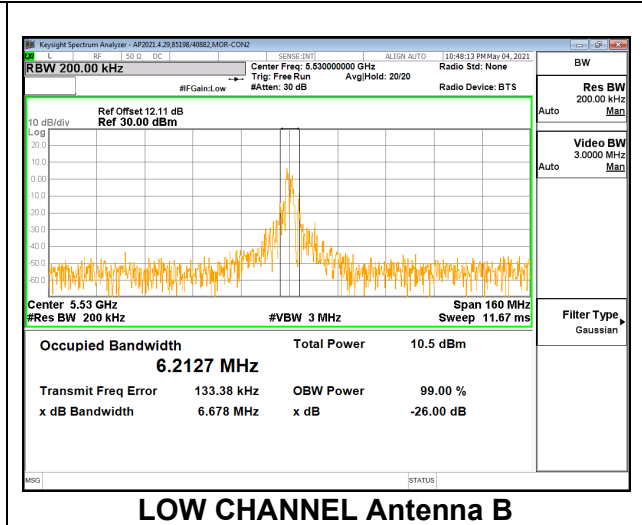
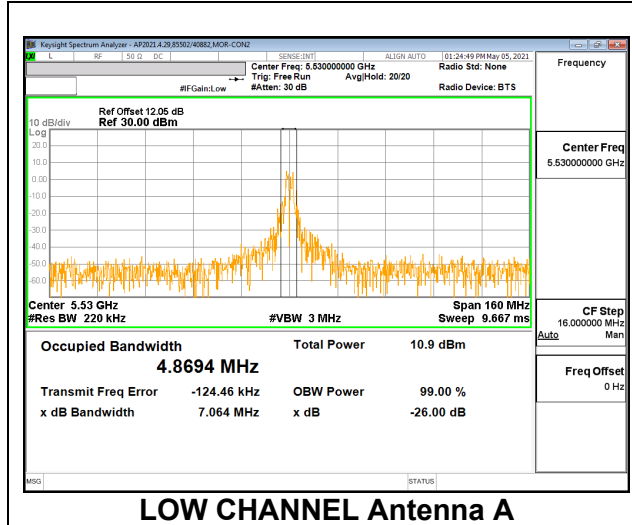
Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Low	5530	3.4919	3.4367
High	5610	3.4111	3.5267
138	5690	2.8123	2.6734

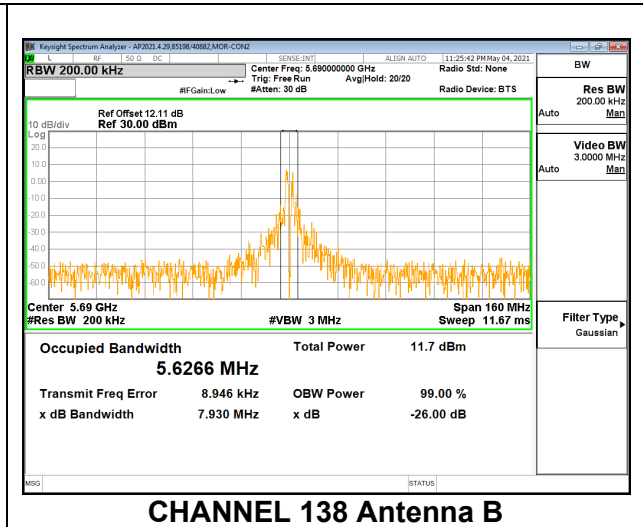
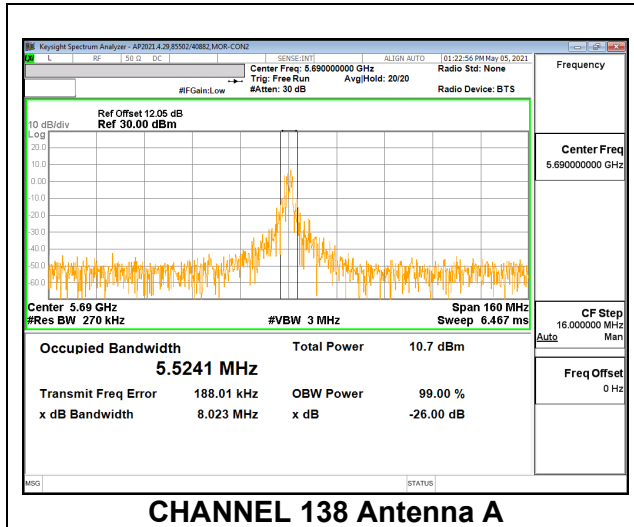




**2TX Antenna A + Antenna B SDM OFDMA MODE: 26-Tones, RU Index 18**

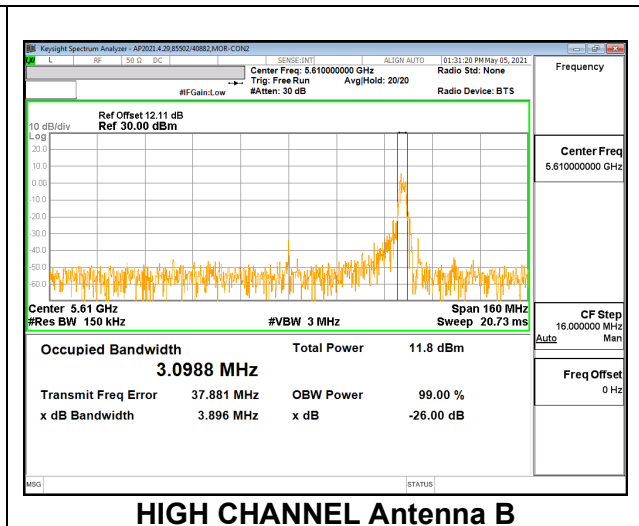
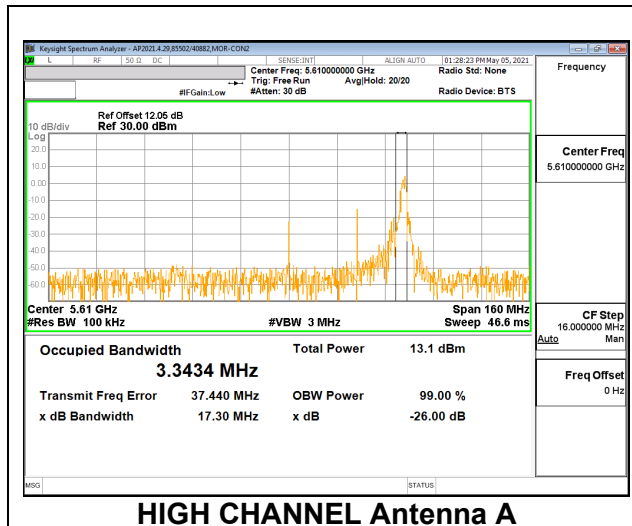
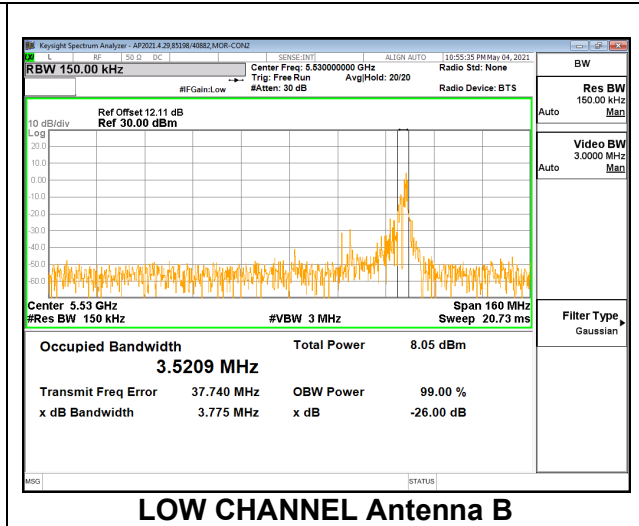
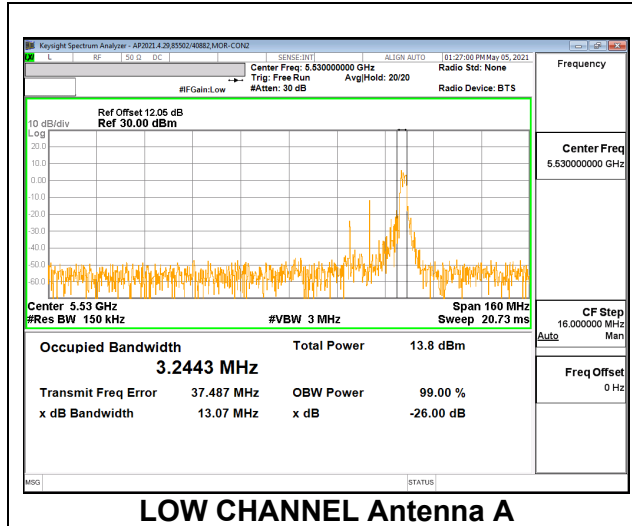
Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Low	5530	4.8694	6.2127
High	5610	5.1708	5.6168
138	5690	5.5241	5.6266

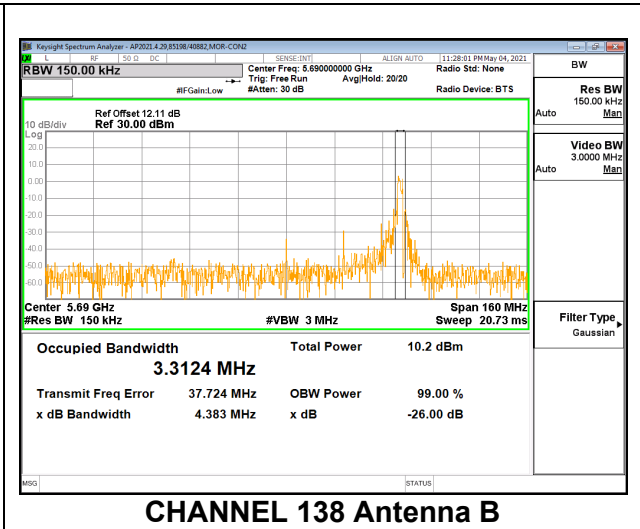
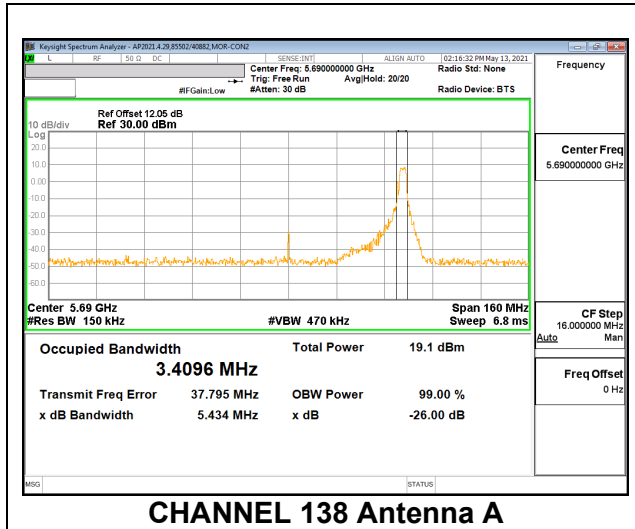




**2TX Antenna A + Antenna B SDM OFDMA MODE: 26-Tones, RU Index 36**

Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Low	5530	3.2443	3.5209
High	5610	3.3434	3.0988
138	5690	3.4096	3.3124

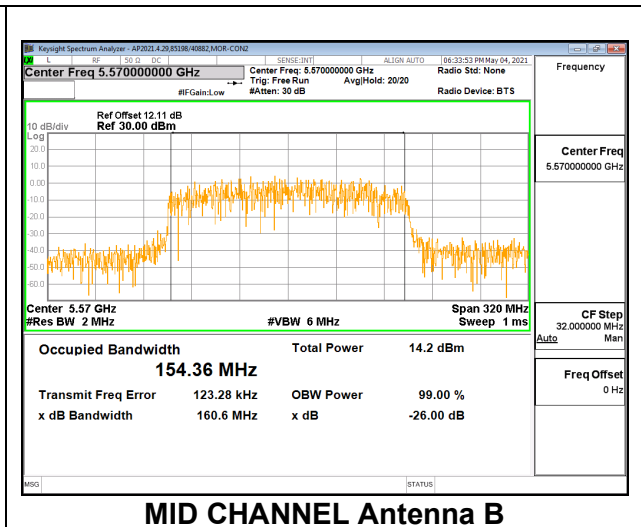
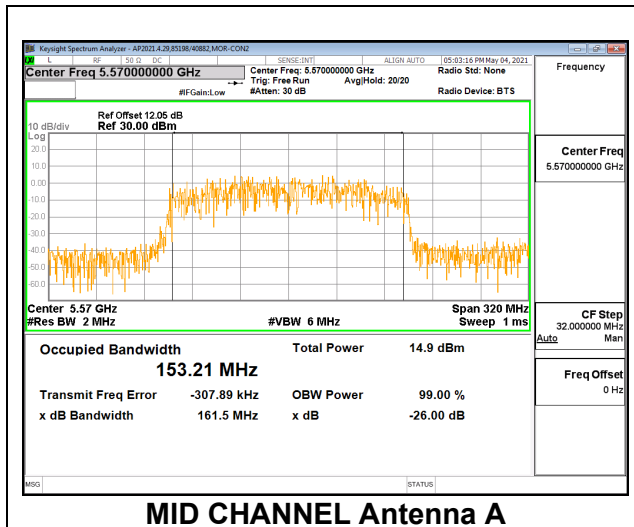




### 9.3.4. 802.11ax HE160 MODE 2TX IN THE 5.6GHz BAND

#### 2TX Antenna A + Antenna B SDM OFDMA MODE: SU, Single User

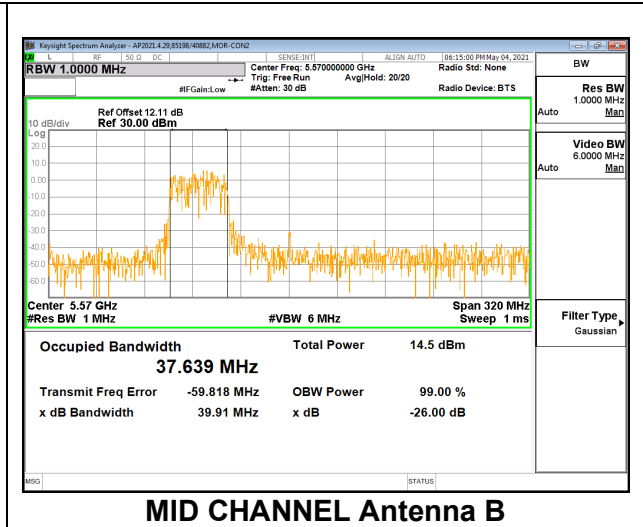
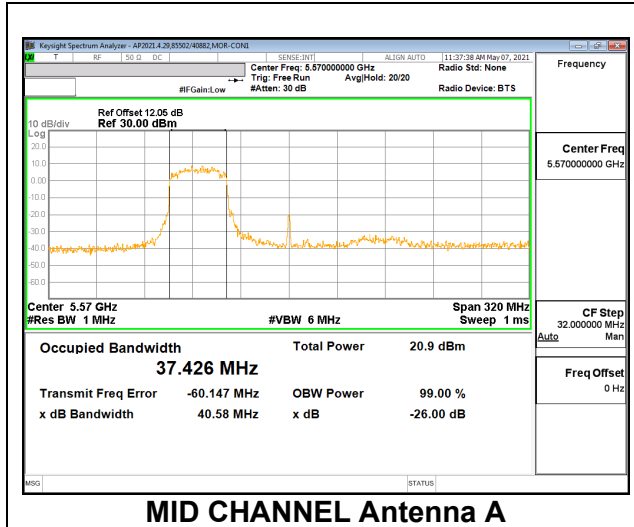
Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Mid	5570	153.2100	154.3600





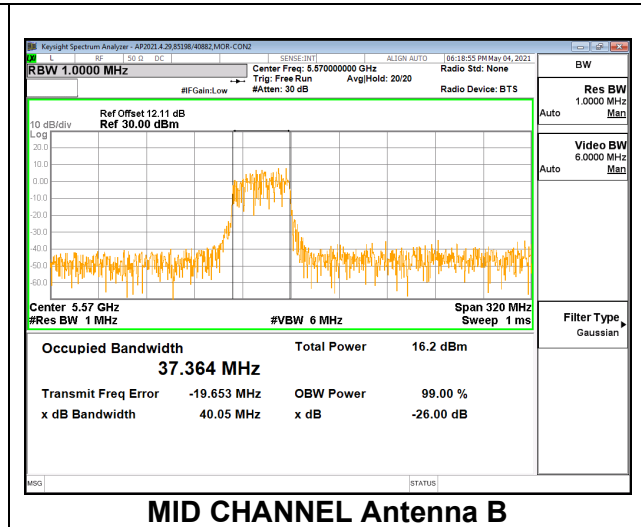
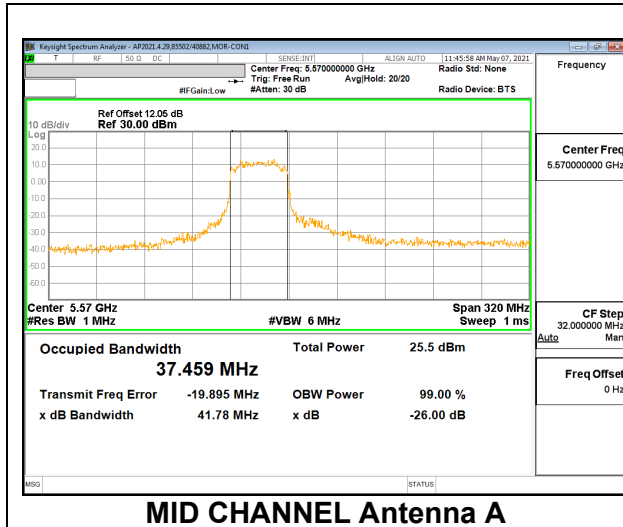
**2TX Antenna A + Antenna B SDM OFDMA MODE: 484-Tones, RU Index 65**

Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Mid	5570	37.4260	37.6390



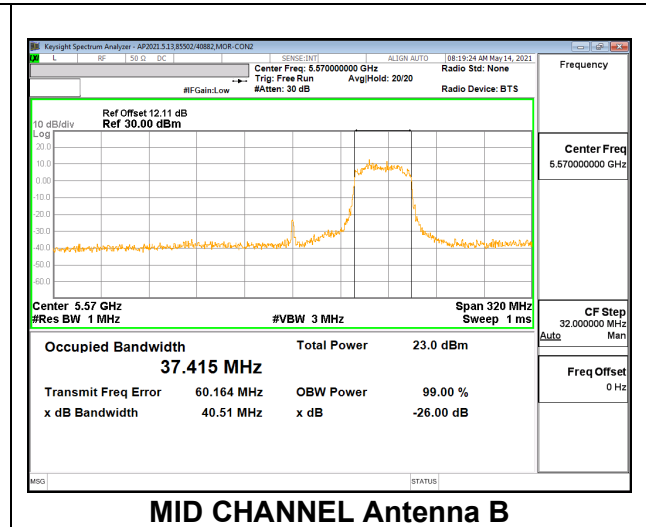
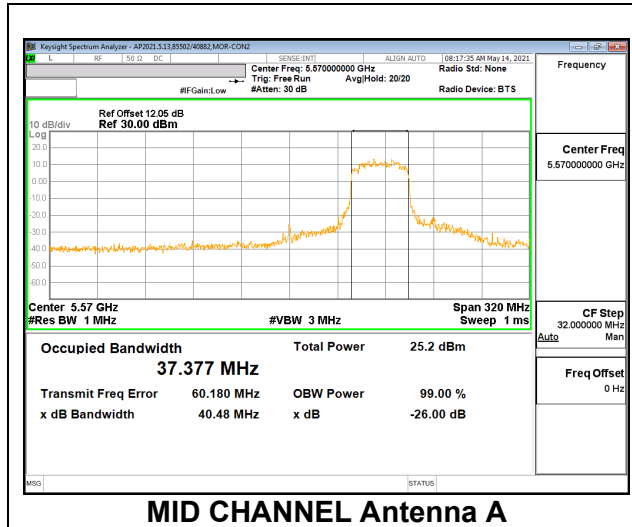
**2TX Antenna A + Antenna B SDM OFDMA MODE: 484-Tones, RU Index 66**

Channel	Frequency (MHz)	99% Bandwidth ANT A (MHz)	99% Bandwidth ANT B (MHz)
Mid	5570	37.4590	37.3640



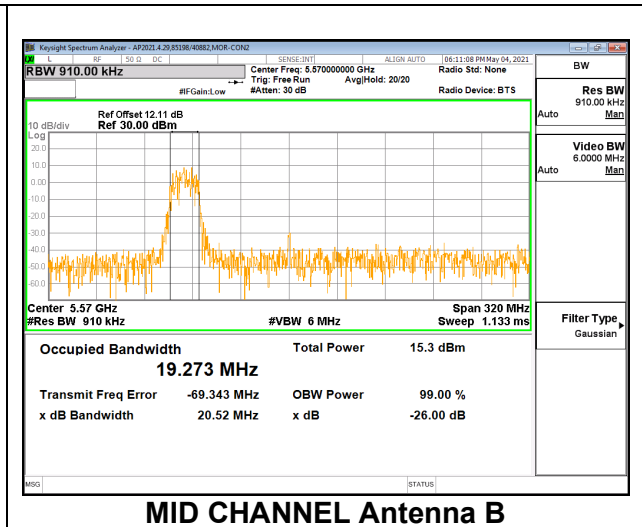
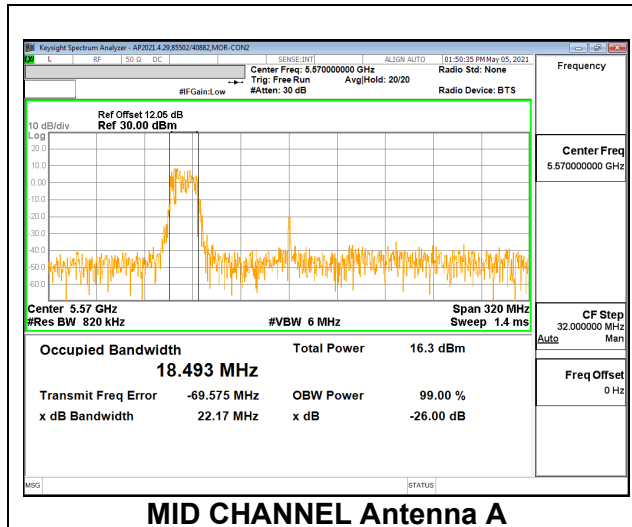
**2TX Antenna A + Antenna B SDM OFDMA MODE: 484-Tones, RU Index S66**

Channel	Frequency (MHz)	99% Bandwidth ANT A (MHz)	99% Bandwidth ANT B (MHz)
Mid	5570	37.3770	37.4150



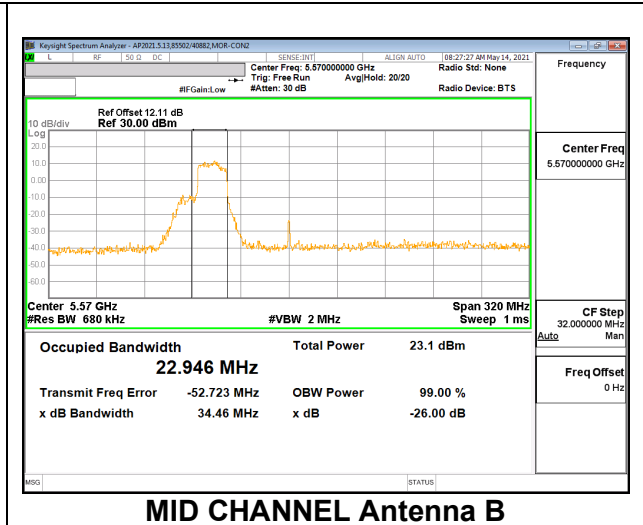
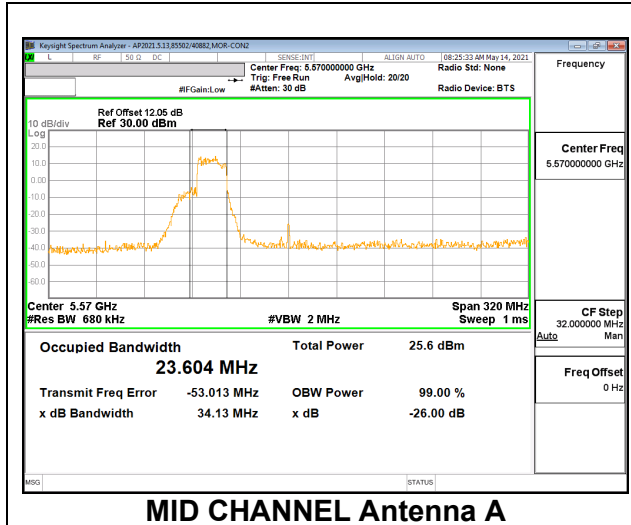
**2TX Antenna A + Antenna B SDM OFDMA MODE: 242-Tones, RU Index 61**

Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Mid	5570	18.4930	19.2730



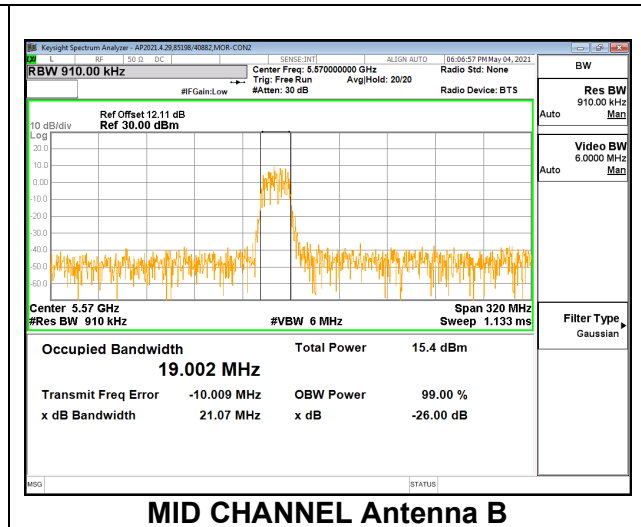
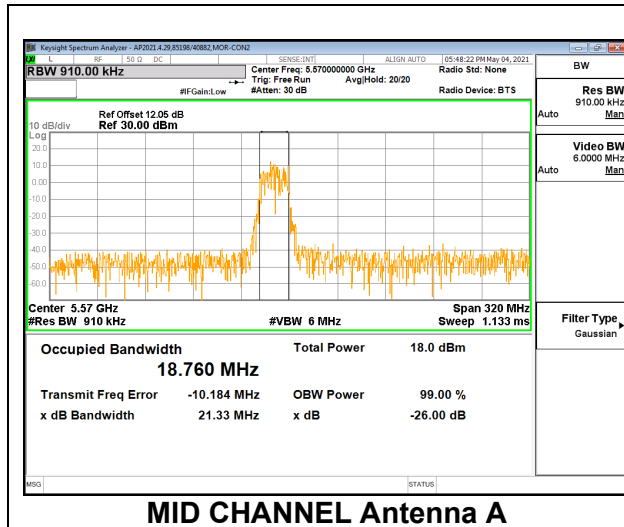
**2TX Antenna A + Antenna B SDM OFDMA MODE: 242-Tones, RU Index 62**

Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Mid	5570	23.6040	22.9460



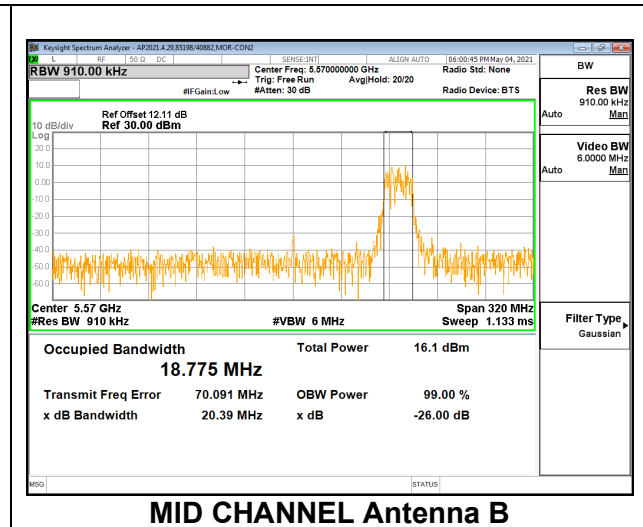
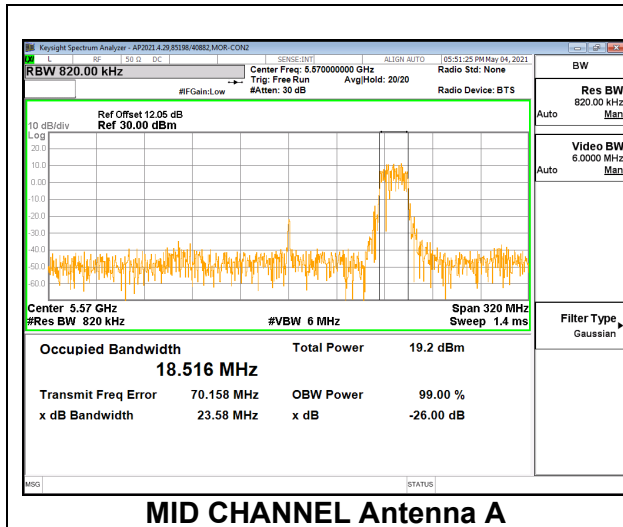
**2TX Antenna A + Antenna B SDM OFDMA MODE: 242-Tones, RU Index 64**

Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Mid	5570	18.7600	19.0020



**2TX Antenna A + Antenna B SDM OFDMA MODE: 242-Tones, RU Index S64**

Channel	Frequency (MHz)	99% Bandwidth Antenna A (MHz)	99% Bandwidth Antenna B (MHz)
Mid	5570	18.5160	18.7750



## 9.4. 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  $11 \text{ dBm} + 10 \log B$ , 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.



## **RSS-247**

### **Band 5.15-5.25 GHz**

The maximum e.i.r.p. shall not exceed 200 mW or  $10 + 10 \log_{10}B$ , dBm, whichever power is less. B is the 99% emission bandwidth in megahertz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

### **Band 5.25-5.35 GHz**

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

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

### **Bands 5.47-5.6 GHz and 5.65-5.725 GHz**

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

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

### **Band 5.725-5.85 GHz**

The maximum conducted output power shall not exceed 1 W. The 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 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 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.

**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 antennas are uncorrelated for power.

Tx antennas are uncorrelated for 11ax PSD.

The directional gains are as follows:

Band (GHz)	ANT A Antenna Gain (dBi)	ANT B Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	4.50	3.40	3.98	6.98
5.3	4.60	4.60	4.60	7.61
5.6	6.40	6.90	6.66	9.66
5.8	7.80	7.70	7.75	10.76

**RESULT**

Note: 99%OBW for straddle channels (where T/RU spans 5.6/5.8 bands only) is calculated as:

- 26T: (99% OBW/2) + 0.5MHz
- 52T: (99% OBW/2) + 1MHz
- 106T: (99% OBW/2) + 2MHz
- 242T/SU: (99% OBW/2) + 5MHz
- 484T/SU: (99% OBW/2) + 15MHz
- 996T/SU: (99% OBW/2) + 35MHz

### 9.4.1. 802.11ax HE20 MODE 2TX IN THE 5.6GHz BAND (FCC+IC)

#### 2TX Antenna A + Antenna B SDM OFDMA MODE: SU, Single User

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-06

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)
136	5680	23.4500	18.8940	6.66	6.66
High	5700	23.3000	18.7950	6.66	6.66
144	5720	16.9000	14.3950	6.66	6.66

#### Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
136	5680	23.34	23.76	29.76	23.10	10.34	11.00	10.34
High	5700	23.34	23.74	29.74	23.08	10.34	11.00	10.34
144	5720	22.62	22.58	28.58	21.92	10.34	11.00	10.34

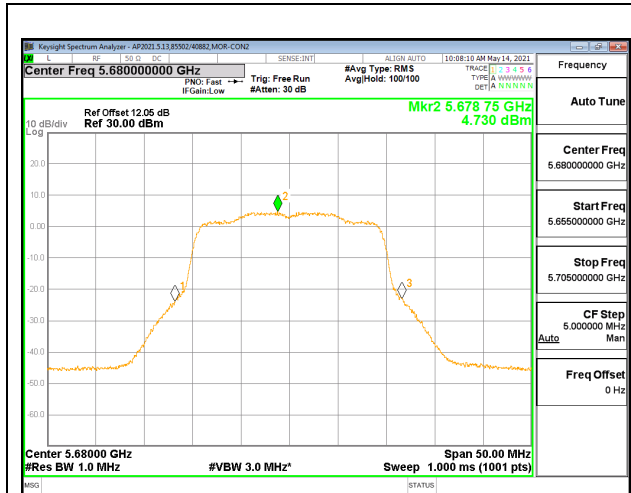
<b>Duty Cycle CF (dB)</b>	0.00	Included in Calculations of Corr'd PSD
---------------------------	------	--

#### Output Power Results

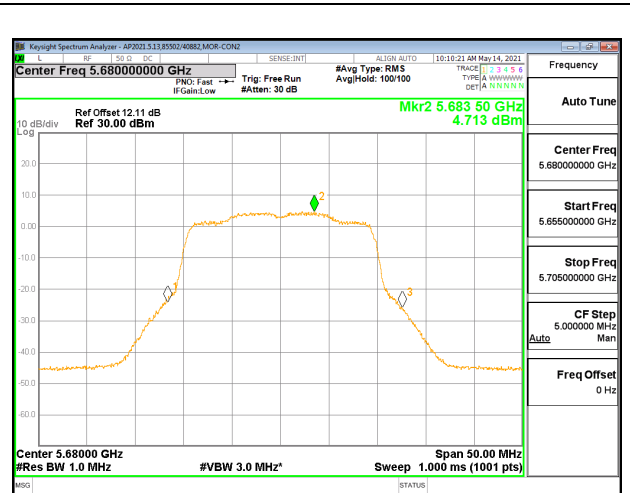
Channel	Frequency (MHz)	Antenna A Meas Power (dBm)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
136	5680	15.01	14.72	17.88	23.10	-5.23
High	5700	15.15	14.80	17.99	23.08	-5.09
144	5720	15.07	14.83	17.96	21.92	-3.96

#### PSD Results

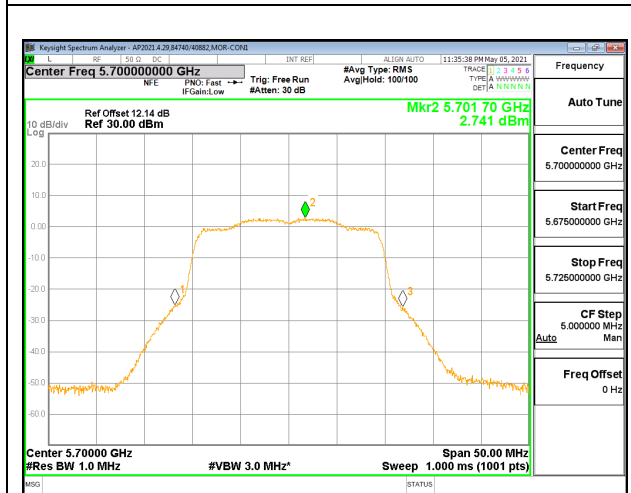
Channel	Frequency (MHz)	Antenna A Meas PSD (dBm/ 1MHz)	Antenna B Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
136	5680	4.730	4.713	7.732	10.34	-2.61
High	5700	2.741	2.473	5.619	10.34	-4.72
144	5720	4.794	4.393	7.608	10.34	-2.73



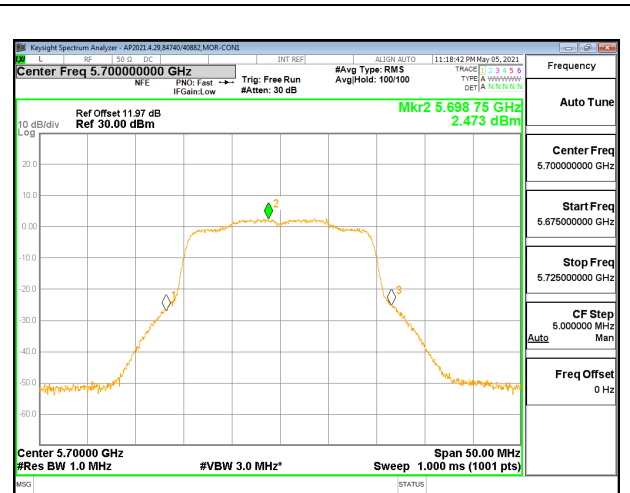
**CHANNEL 136 Antenna A**



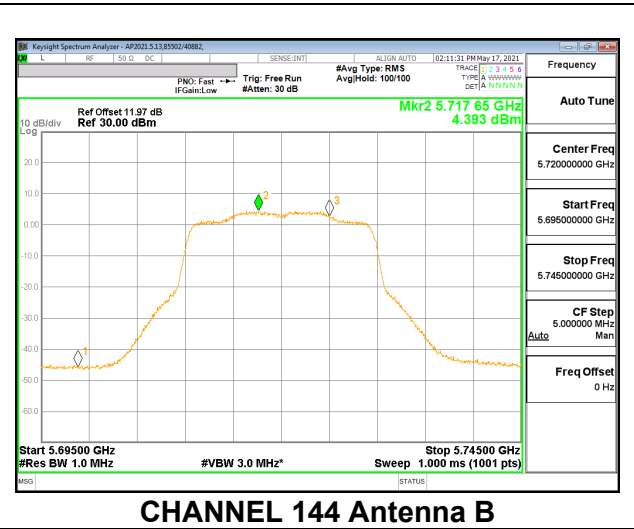
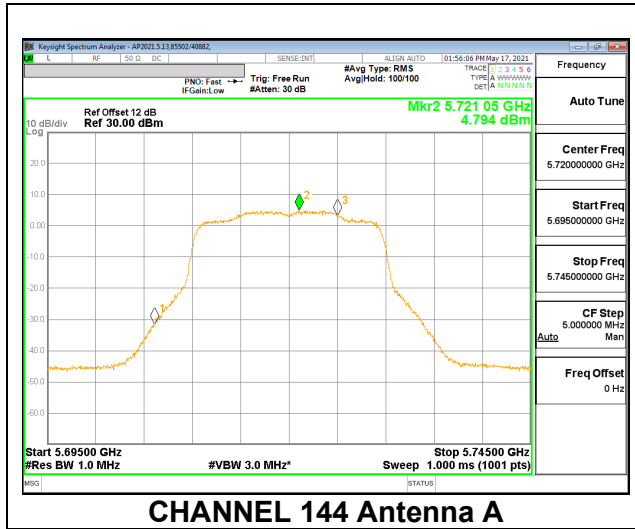
**CHANNEL 136 Antenna B**



**HIGH CHANNEL Antenna A**



**HIGH CHANNEL Antenna B**



**2TX Antenna A + Antenna B SDM OFDMA MODE: 106-Tones, RU Index 54**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-06

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Direction Gain for PSD (dBi)
High	5700	23.2500	8.6334	6.66	6.66
144	5720	16.0500	6.2648	6.66	6.66

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)
High	5700	23.34	20.36	26.36	19.70	10.34	11.00
144	5720	22.39	18.97	24.97	18.31	10.34	11.00

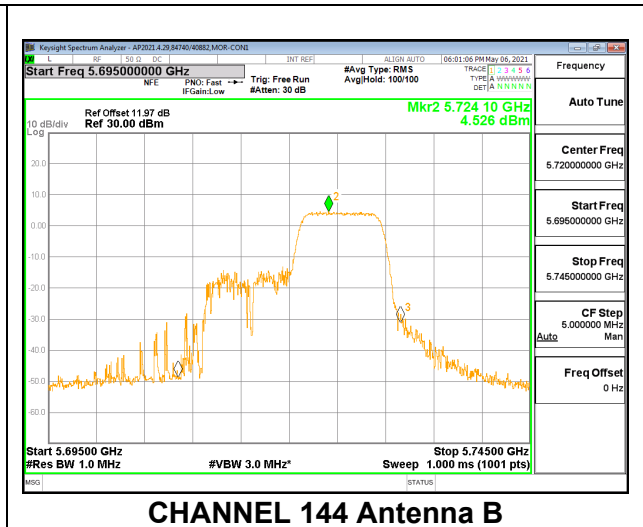
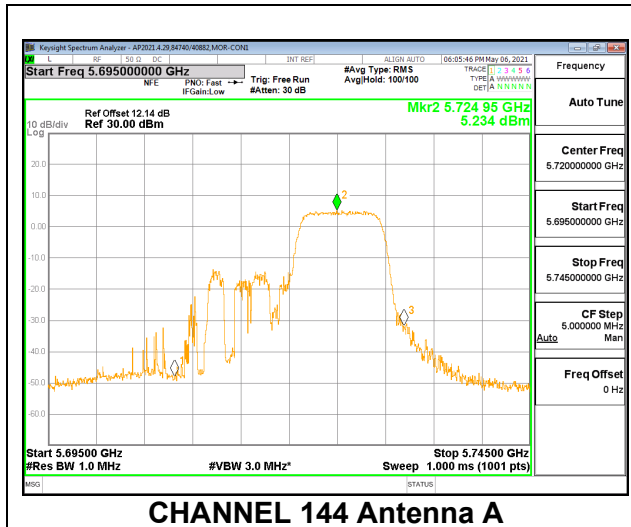
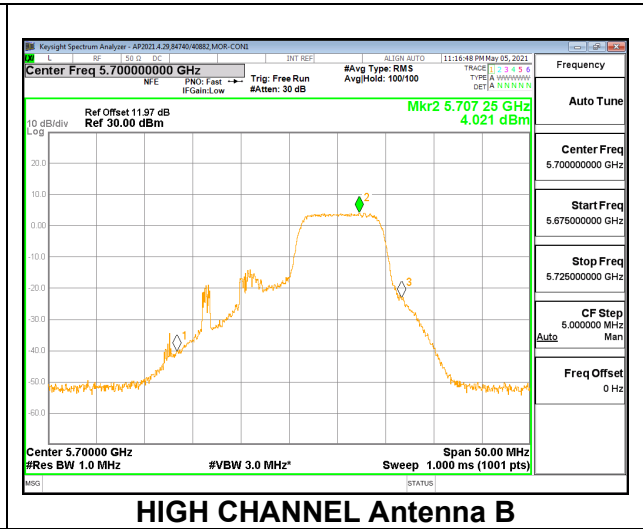
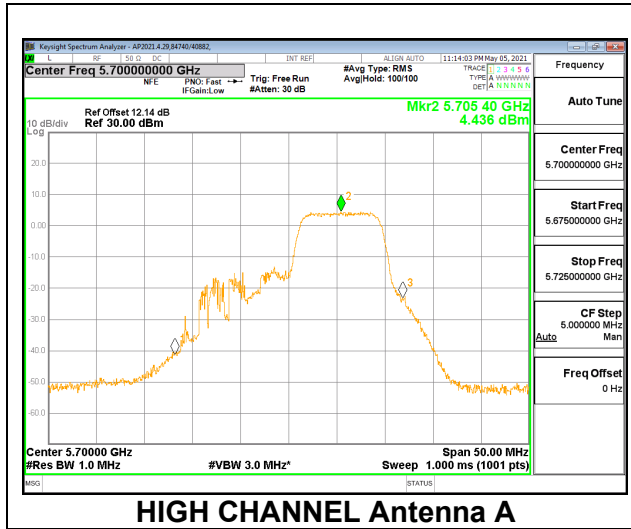
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
---------------------------	------	---

**Output Power Results**

Channel	Frequency (MHz)	Antenna Meas Power (dBm)	Antenna Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	14.22	13.88	17.06	19.70	-2.64
144	5720	14.62	14.25	17.45	18.31	-0.86

**PSD Results**

Channel	Frequency (MHz)	Antenna Meas PSD (dBm/ 1MHz)	Antenna Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	4.436	4.021	7.244	10.34	-3.10
144	5720	5.234	4.526	7.905	10.34	-2.44



**2TX Antenna A + Antenna B SDM OFDMA MODE: 52-Tones, RU Index 40**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-06

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Direction Gain for PSD (dBi)
High	5700	21.4000	4.5170	6.66	6.66
144	5720	16.0000	3.2468	6.66	6.66

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)
High	5700	23.34	17.55	23.55	16.89	10.34	11.00
144	5720	22.38	16.11	22.11	15.45	10.34	11.00

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

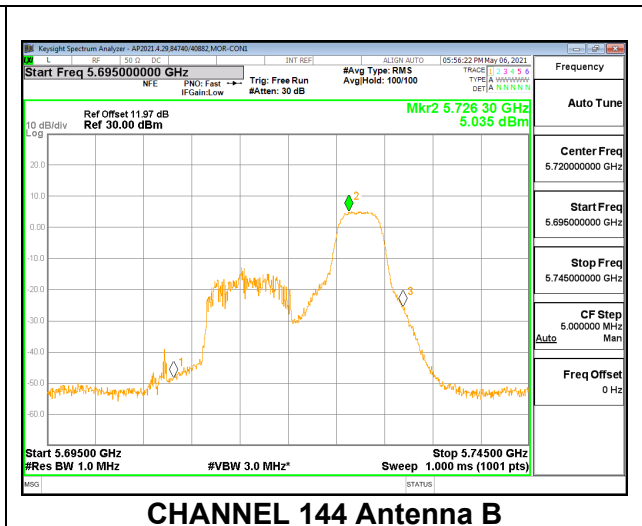
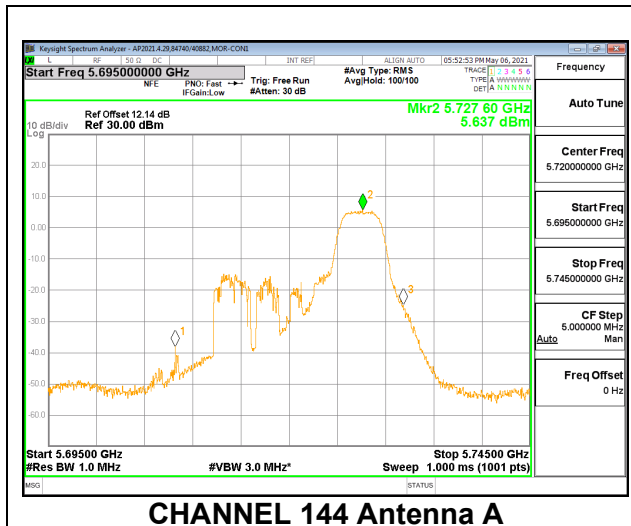
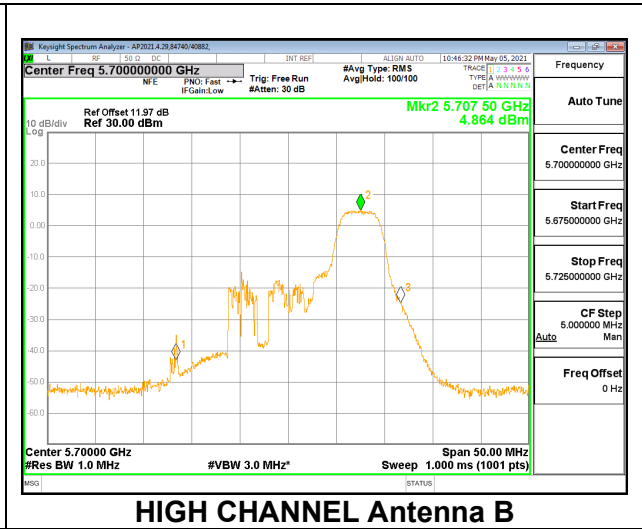
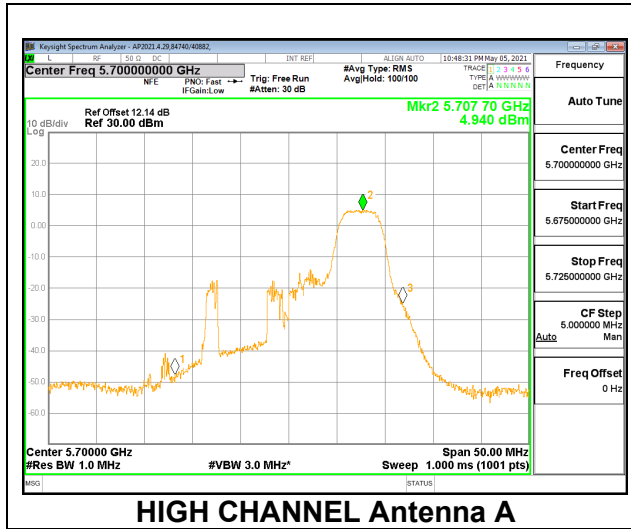
**Output Power Results**

Channel	Frequency (MHz)	Antenna Meas Power (dBm)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	12.12	11.82	14.98	16.89	-1.91
144	5720	11.90	11.81	14.87	15.45	-0.59

**PSD Results**

Channel	Frequency	Antenna Meas PSD	Antenna B Meas PSD	Total Corr'd PSD	PSD Limit	PSD Margin
High	5700	4.940	4.864	7.912	10.34	-2.43
144	5720	5.637	5.035	8.357	10.34	-1.98





**2TX Antenna A + Antenna B SDM OFDMA MODE: 26-Tones, RU Index 8**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-06

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Direction Gain for PSD (dBi)
High	5700	20.0500	2.7032	6.66	6.66
144	5720	14.2500	1.9287	6.66	6.66

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)
High	5700	23.34	15.32	21.32	14.66	10.34	11.00
144	5720	21.88	13.85	19.85	13.19	10.34	11.00

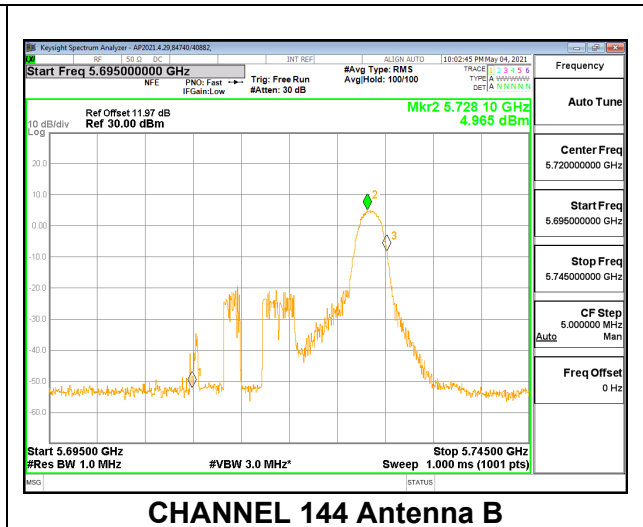
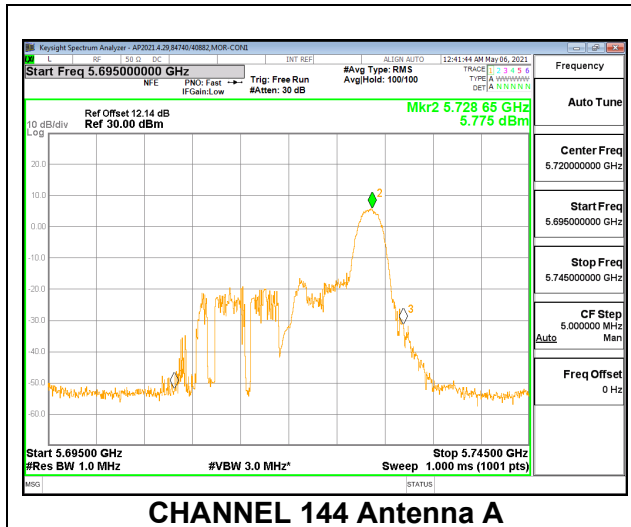
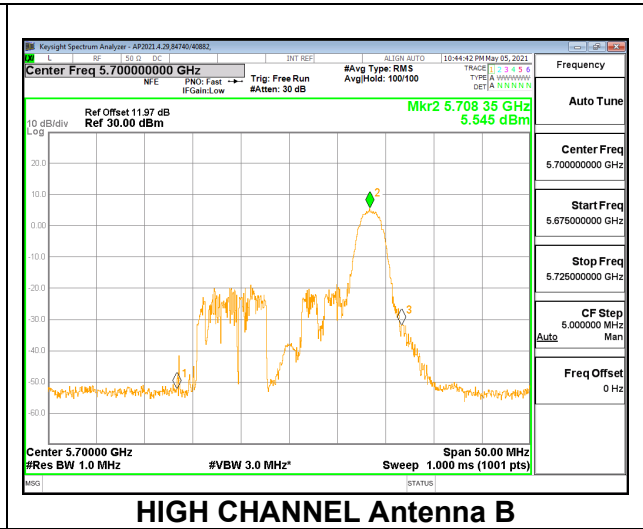
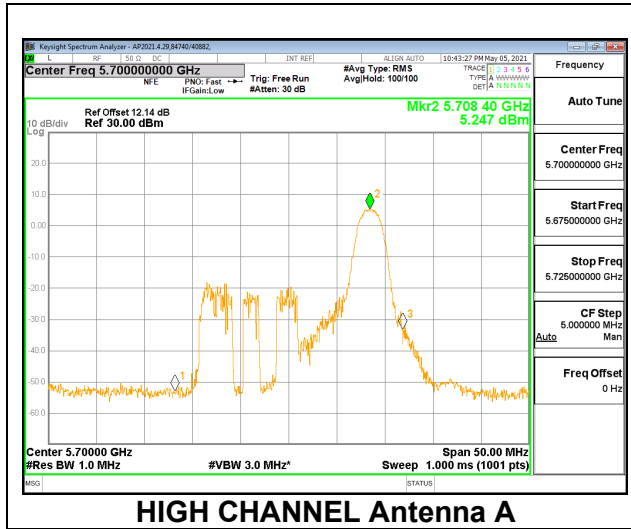
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
---------------------------	------	---

**Output Power Results**

Channel	Frequency (MHz)	Antenna A Meas Power (dBm)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	9.43	9.15	12.30	14.66	-2.36
144	5720	9.54	9.17	12.37	13.19	-0.82

**PSD Results**

Channel	Frequency (MHz)	Antenna A Meas PSD (dBm/ 1MHz)	Antenna B Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	5.247	5.545	8.409	10.34	-1.93
144	5720	5.775	4.965	8.399	10.34	-1.94



### 9.4.2. 802.11ax HE20 MODE 1TX IN THE 5.6GHz BAND (FCC+IC)

#### 1TX Antenna A OFDMA MODE: SU, Single User

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-07

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
136	5680	23.4500	18.9220	6.40
High	5700	23.6000	18.7950	6.40
144	5720	17.2000	14.4485	6.40

#### Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
136	5680	23.60	23.77	29.77	23.37	10.60	11.00	10.60
High	5700	23.60	23.74	29.74	23.34	10.60	11.00	10.60
144	5720	22.96	22.60	28.60	22.20	10.60	11.00	10.60

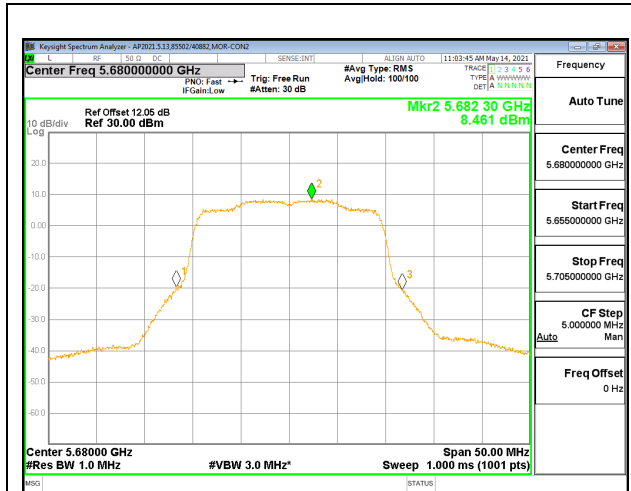
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
---------------------------	------	---

#### Output Power Results

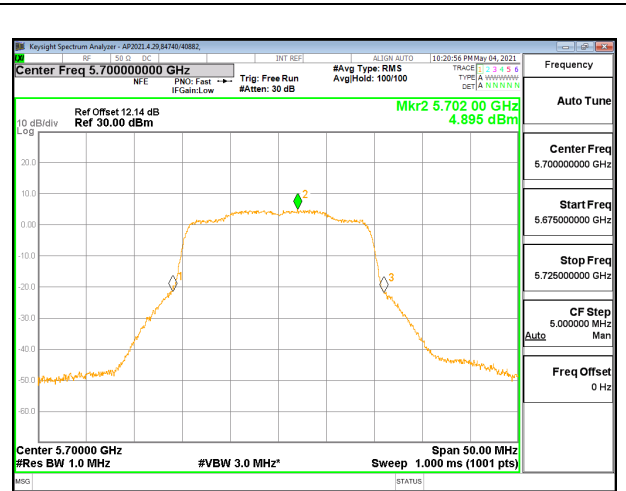
Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
136	5680	18.980	18.98	23.37	-4.39
High	5700	17.020	17.02	23.34	-6.32
144	5720	19.000	19.00	22.20	-3.20

#### PSD Results

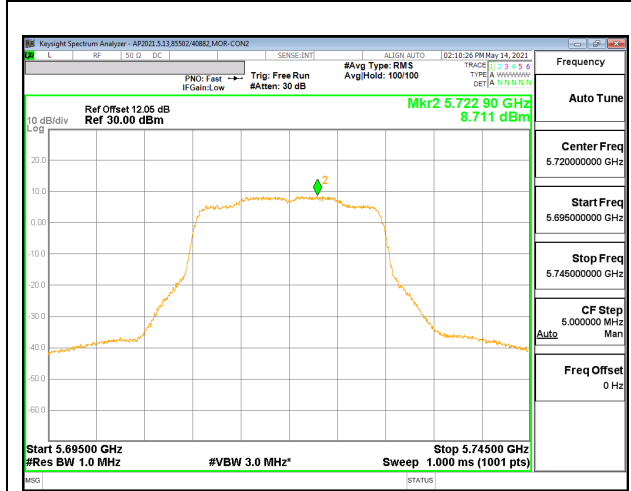
Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
136	5680	8.461	8.461	10.60	-2.14
High	5700	4.895	4.895	10.60	-5.71
144	5720	8.711	8.711	10.60	-1.89



**CHANNEL 136**



**HIGH CHANNEL**



**CHANNEL 144**

**INTENTIONALLY LEFT BLANK**

**1TX Antenna A OFDMA MODE: 106-Tones, RU Index 54**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-07

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5700	23.25	8.7410	6.40
144	5720	16.05	6.2648	6.40

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
High	5700	23.60	20.42	26.42	20.02	10.60	11.00	10.60
144	5720	22.65	18.97	24.97	18.57	10.60	11.00	10.60

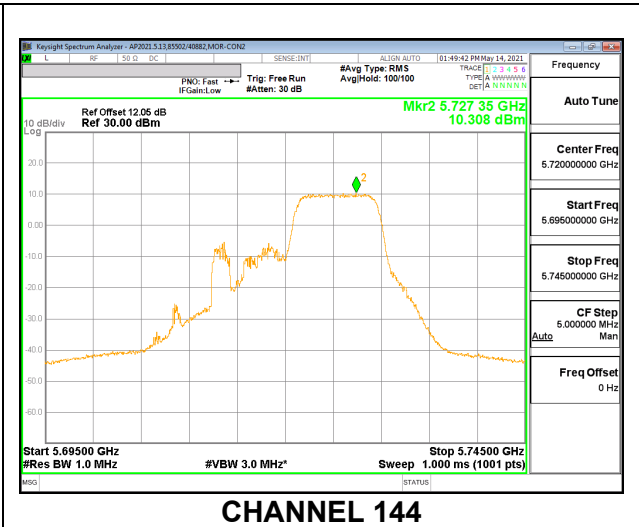
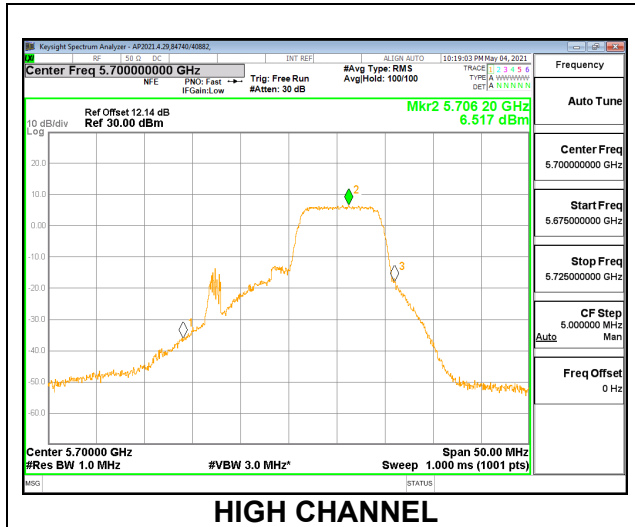
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
---------------------------	------	---

**Output Power Results**

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	16.250	16.25	20.02	-3.77
144	5720	18.180	18.18	18.57	-0.39

**PSD Results**

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	6.517	6.517	10.60	-4.08
144	5720	10.308	10.308	10.60	-0.29



**1TX Antenna A OFDMA MODE: 106-Tones, RU Index 53**

<b>Test Engineer:</b>	85502/40882
<b>Test Date:</b>	2021-05-14

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5700	22.80	9.0981	6.40

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
High	5700	23.60	20.59	26.59	20.19	10.60	11.00	10.60

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

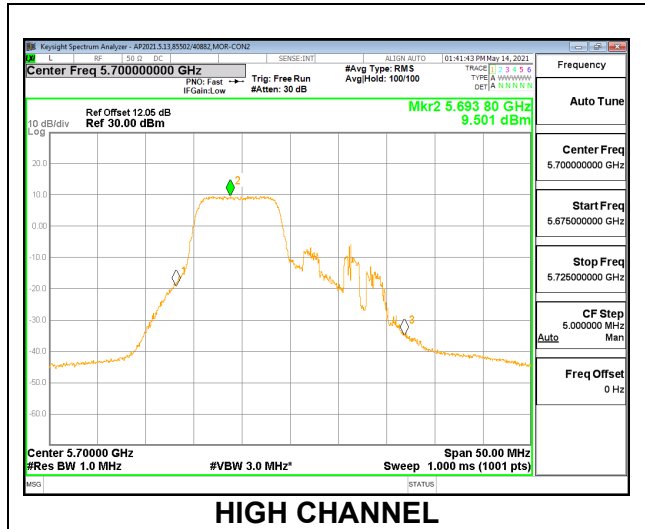
**Output Power Results**

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	18.980	18.98	20.19	-1.21

**PSD Results**

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	9.501	9.501	10.60	-1.10





**1TX Antenna A OFDMA MODE: 52-Tones, RU Index 40**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-07

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5700	21.4000	5.0820	6.40
144	5720	16.0000	3.2468	6.40

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
High	5700	23.60	18.06	24.06	17.66	10.60	11.00	10.60
144	5720	22.64	16.11	22.11	15.71	10.60	11.00	10.60

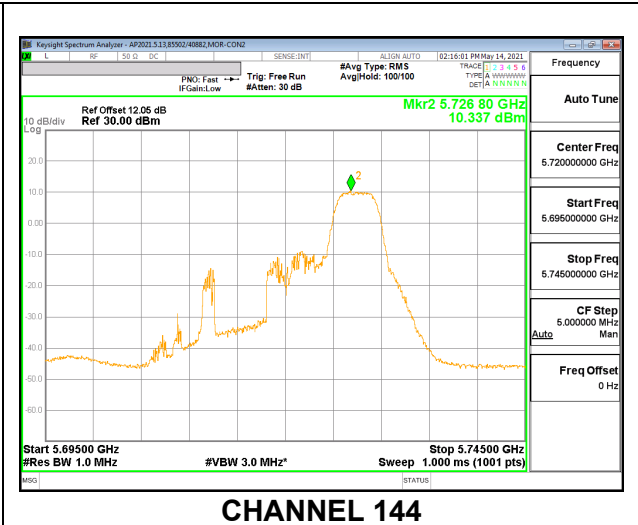
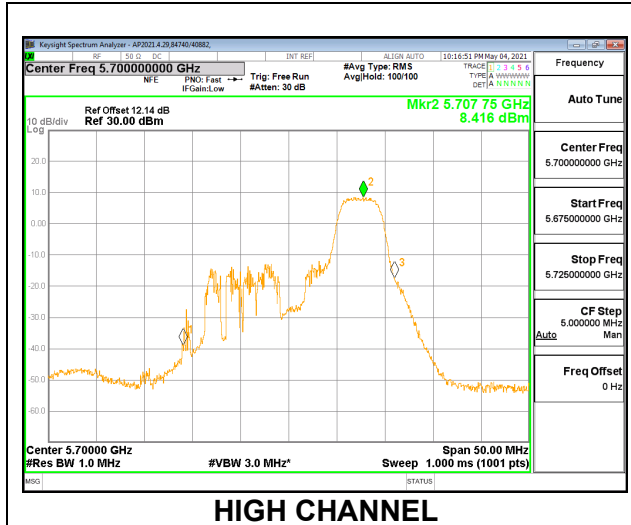
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
---------------------------	------	---

**Output Power Results**

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	15.180	15.18	17.66	-2.48
144	5720	15.210	15.21	15.71	-0.50

**PSD Results**

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	8.416	8.416	10.60	-2.18
144	5720	10.377	10.377	10.60	-0.22



**1TX Antenna A OFDMA MODE: 26-Tones, RU Index 8**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-07

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5700	20.55	2.7032	6.40
144	5720	15.00	2.0582	6.40

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
High	5700	23.60	15.32	21.32	14.92	10.60	11.00	10.60
144	5720	22.36	14.13	20.13	13.73	10.60	11.00	10.60

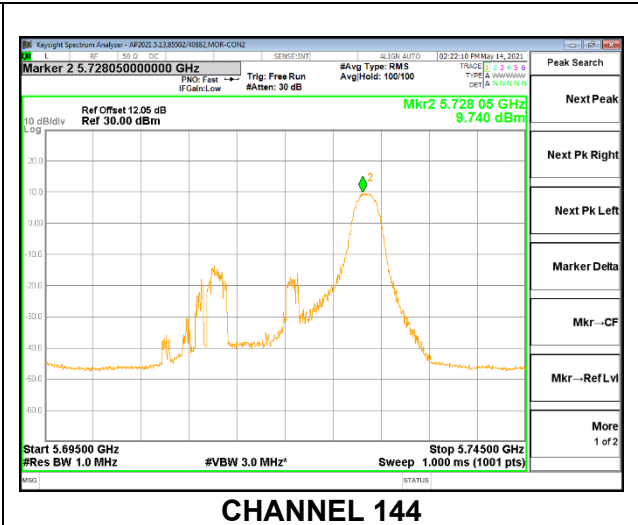
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
---------------------------	------	---

**Output Power Results**

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	12.150	12.15	14.92	-2.77
144	5720	12.030	12.03	13.73	-1.70

**PSD Results**

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	7.649	7.649	10.60	-2.95
144	5720	9.740	9.740	10.60	-0.86



**1TX Antenna B OFDMA MODE: SU, Single User**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-07

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5700	23.30	18.8650	6.90
144	5720	16.90	14.3950	6.90

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
High	5700	23.10	23.76	29.76	22.86	10.10	11.00	10.10
144	5720	22.38	22.58	28.58	21.68	10.10	11.00	10.10

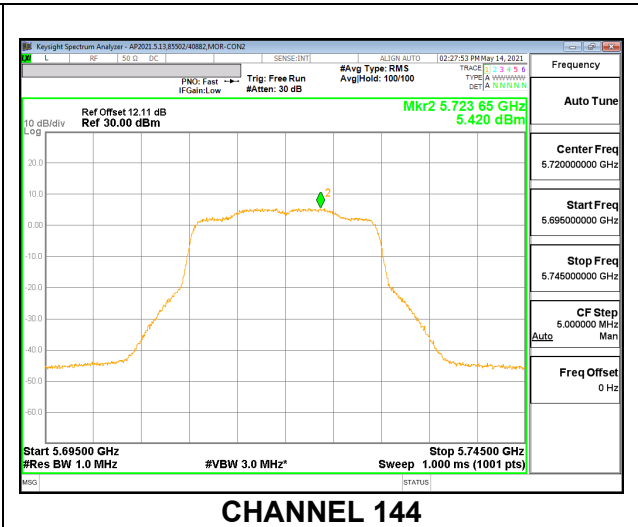
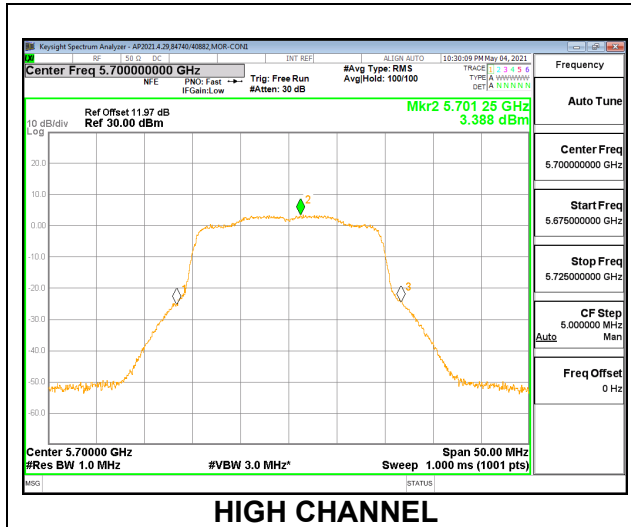
<b>Duty Cycle CF (dB)</b>	0.12	<b>Included in Calculations of Corr'd PSD</b>
---------------------------	------	---

**Output Power Results**

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	15.890	15.89	22.86	-6.97
144	5720	15.940	16.06	21.68	-5.62

**PSD Results**

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	3.388	3.508	10.10	-6.59
144	5720	5.420	5.540	10.10	-4.56



**1TX Antenna B OFDMA MODE: 106-Tones, RU Index 54**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-07

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5700	24.0000	8.6334	6.90
144	5720	16.3500	6.2738	6.90

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
High	5700	23.10	20.36	26.36	19.46	10.10	11.00	10.10
144	5720	22.24	18.98	24.98	18.08	10.10	11.00	10.10

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

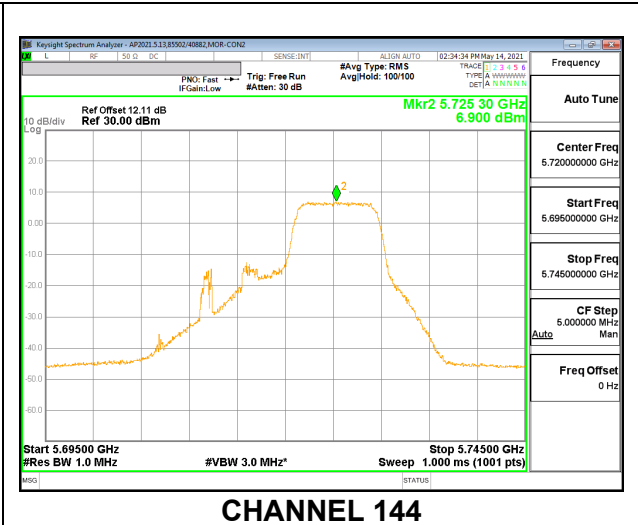
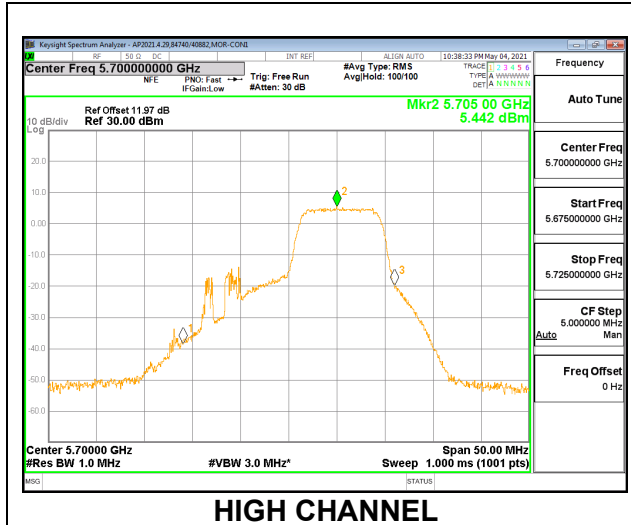
**Output Power Results**

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	14.910	14.91	19.46	-4.55
144	5720	15.050	15.05	18.08	-3.03

**PSD Results**

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	5.442	5.442	10.10	-4.66
144	5720	6.900	6.900	10.10	-3.20





**1TX Antenna B OFDMA MODE: 52-Tones, RU Index 40**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-07

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5700	21.6500	4.5170	6.90
144	5720	16.1500	3.5433	6.90

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
High	5700	23.10	17.55	23.55	16.65	10.10	11.00	10.10
144	5720	22.18	16.49	22.49	15.59	10.10	11.00	10.10

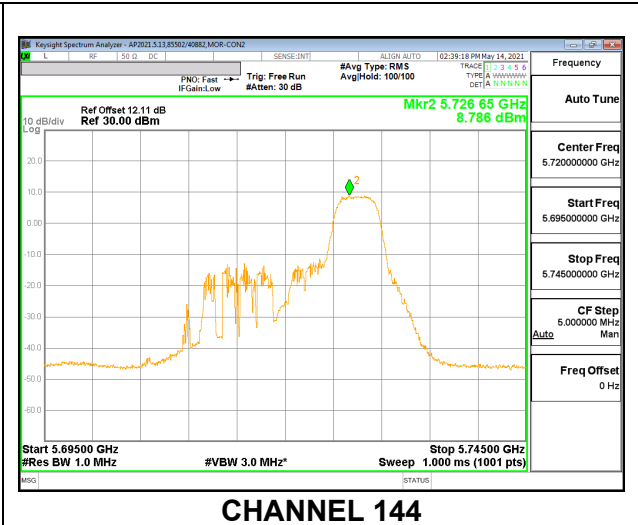
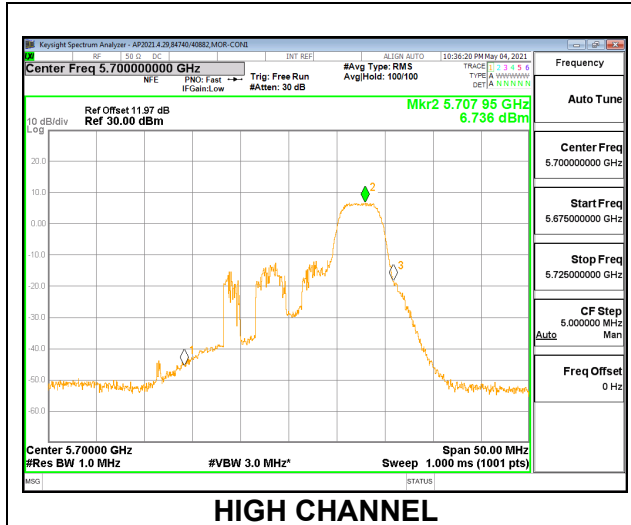
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
---------------------------	------	---

**Output Power Results**

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	13.970	13.97	16.65	-2.68
144	5720	13.950	13.95	15.59	-1.64

**PSD Results**

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	6.736	6.736	10.10	-3.36
144	5720	8.786	8.786	10.10	-1.31



**1TX Antenna B OFDMA MODE: 26-Tones, RU Index 8**

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-07

**Bandwidth and Antenna Gain**

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
High	5700	20.0500	2.8557	6.90
144	5720	14.2500	1.9287	6.90

**Limits**

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/1MHz)	ISED PSD Limit (dBm/1MHz)	PSD Limit (dBm/1MHz)
High	5700	23.10	15.56	21.56	14.66	10.10	11.00	10.10
144	5720	21.64	13.85	19.85	12.95	10.10	11.00	10.10

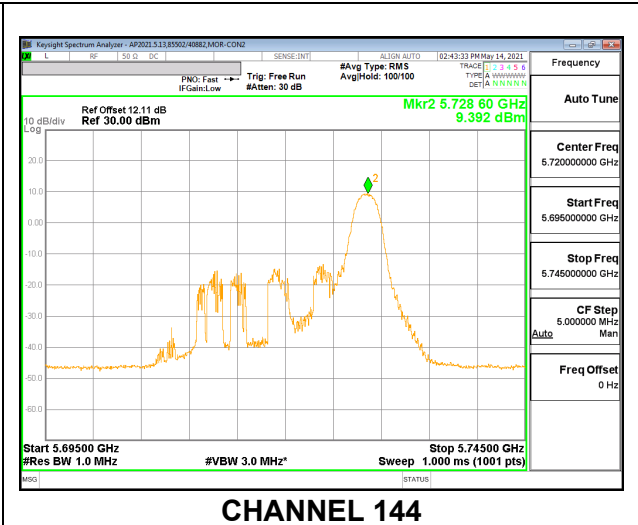
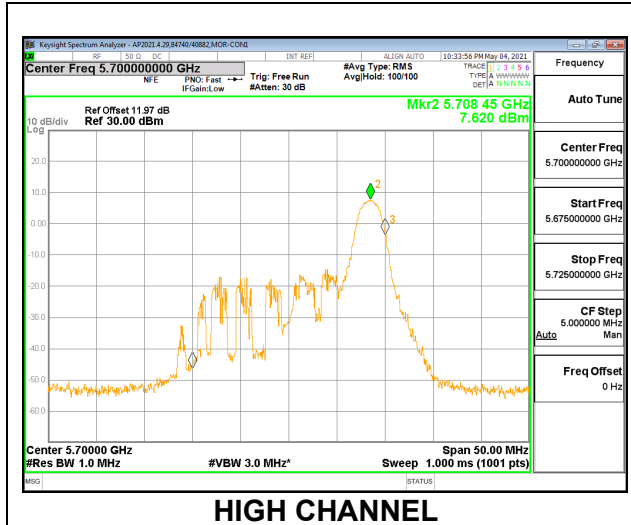
<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd PSD</b>
---------------------------	------	---

**Output Power Results**

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
High	5700	11.730	11.73	14.66	-2.93
144	5720	11.830	11.83	12.95	-1.12

**PSD Results**

Channel	Frequency (MHz)	Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
High	5700	7.620	7.620	10.10	-2.48
144	5720	9.392	9.392	10.10	-0.71



### 9.4.3. 802.11ax HE40 MODE 2TX IN THE 5.6GHz BAND (FCC+IC)

#### 2TX Antenna A + Antenna B SDM OFDMA MODE: SU, Single User

<b>Test Engineer:</b>	84740/40882
<b>Test Date:</b>	2021-05-03 – 2021-05-05

#### Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)
126	5630	42.2000	37.5110	6.66	6.66
High	5670	42.3000	37.5300	6.66	6.66
142	5710	36.4000	33.6100	6.66	6.66

#### Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Power Limit (dBm)	FCC PSD Limit (dBm/ 1MHz)	ISED PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
126	5630	23.34	24.00	30.00	23.34	10.34	11.00	10.34
High	5670	23.34	24.00	30.00	23.34	10.34	11.00	10.34
142	5710	23.34	24.00	30.00	23.34	10.34	11.00	10.34

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power &amp; PSD</b>
---------------------------	------	---

#### Output Power Results

Channel	Frequency (MHz)	Antenna A Meas Power (dBm)	Antenna B Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
126	5630	15.03	14.71	17.88	23.34	-5.46
High	5670	14.06	13.77	16.93	23.34	-6.41
142	5710	15.24	14.74	18.01	23.34	-5.33

#### PSD Results

Channel	Frequency (MHz)	Antenna A Meas PSD (dBm/ 1MHz)	Antenna B Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
126	5630	1.40	1.60	4.51	10.34	-5.83
High	5670	2.74	2.47	5.62	10.34	-4.72
142	5710	2.09	1.29	4.72	10.34	-5.62