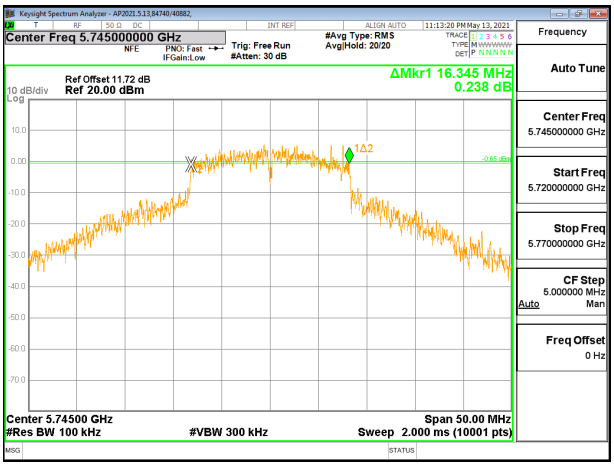
9.4.1. 802.11a MODE IN THE 5.8 GHz BAND

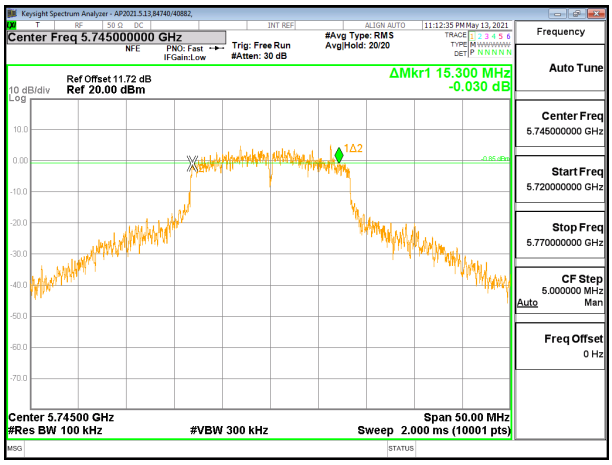
2TX Antenna 0 + Antenna 1 CDD MODE

Channel	Frequency (MHz)	6 dB BW Antenna 0 (MHz)	6 dB BW Antenna 1 (MHz)	Minimum Limit (MHz)
Low	5745	16.345	15.300	0.5
Mid	5785	16.275	16.070	0.5
High	5825	16.050	16.090	0.5

LOW CHANNEL

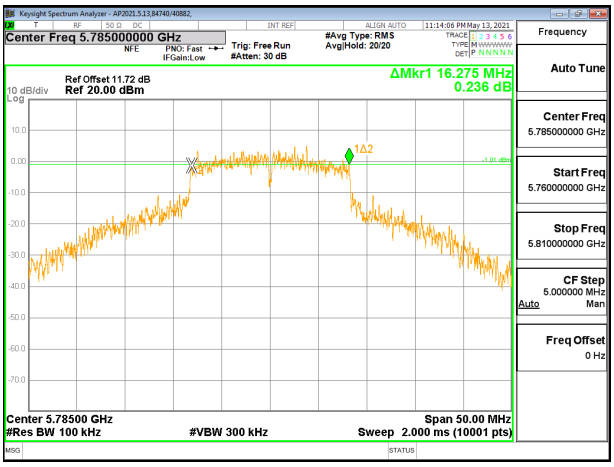


LOW CHANNEL ANTENNA 0

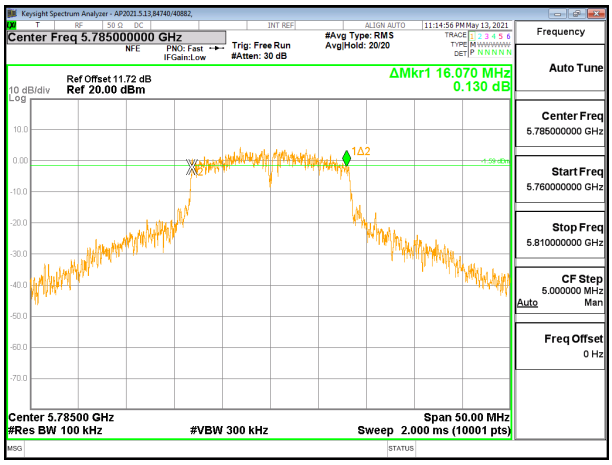


LOW CHANNEL ANTENNA 1

MID CHANNEL

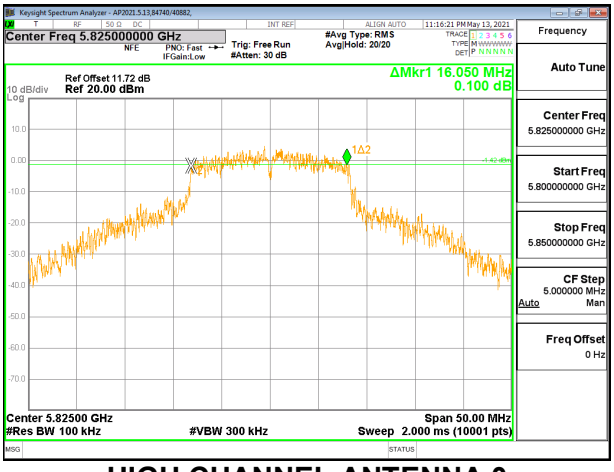


MID CHANNEL ANTENNA 0



MID CHANNEL ANTENNA 1

HIGH CHANNEL



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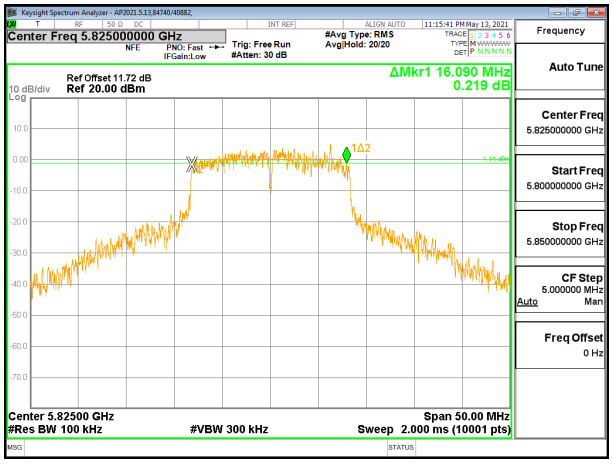


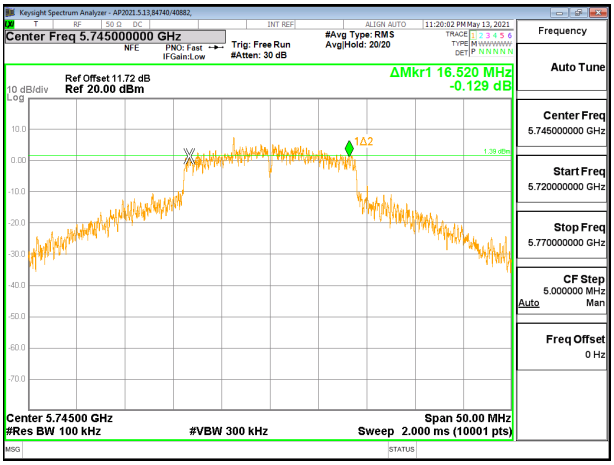
HIGH CHANNEL ANTENNA 1

9.4.2. 802.11n HT20 MODE IN THE 5.8 GHz BAND

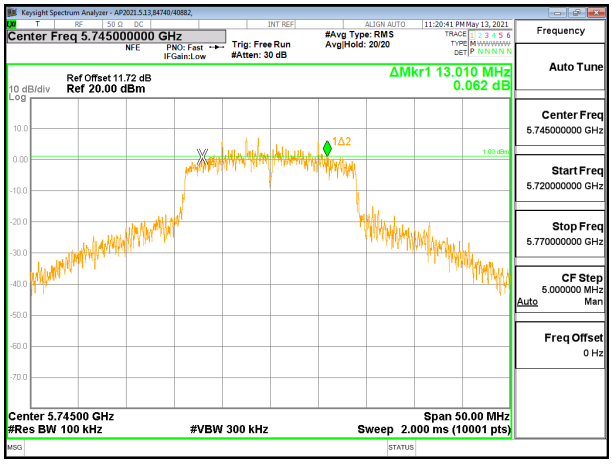
2TX Antenna 0 + Antenna 1 CDD MODE

Channel	Frequency (MHz)	6 dB BW Antenna 0 (MHz)	6 dB BW Antenna 1 (MHz)	Minimum Limit (MHz)
Low	5745	16.520	13.010	0.5
Mid	5785	15.090	17.145	0.5
High	5825	17.640	16.545	0.5

LOW CHANNEL

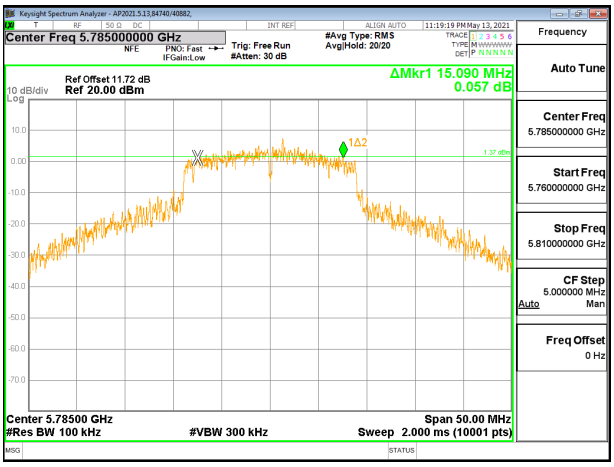


LOW CHANNEL ANTENNA 0

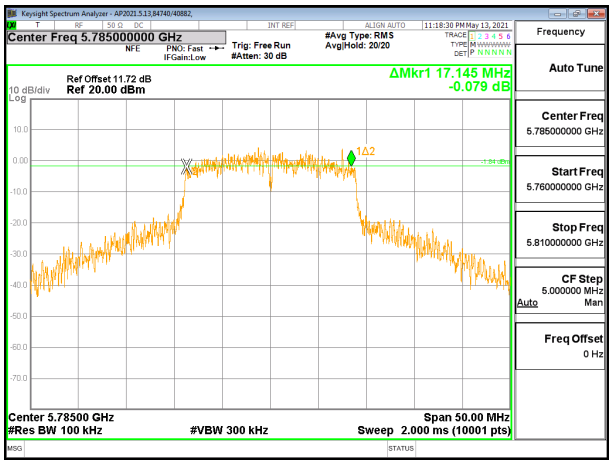


LOW CHANNEL ANTENNA 1

MID CHANNEL

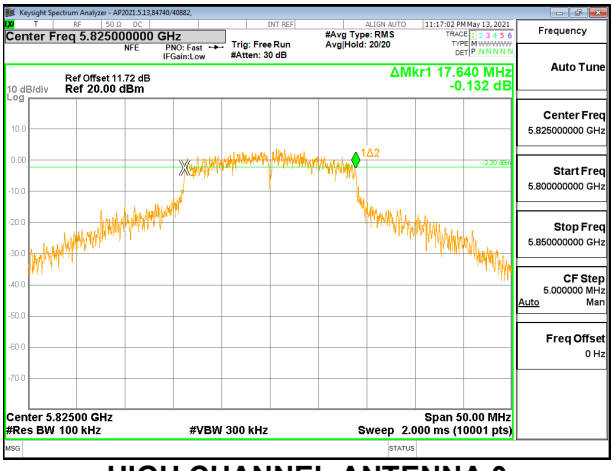


MID CHANNEL ANTENNA 0

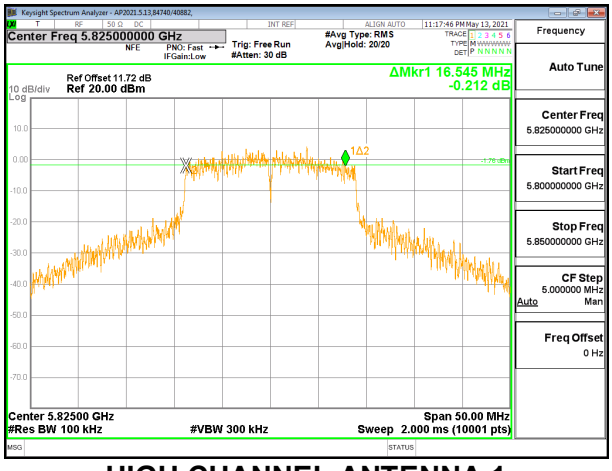


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

9.5. OUTPUT POWER AND PSD

LIMITS

FCC §15.407

Band 5.15–5.25 GHz

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 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.

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RSS-247

Band 5.15-5.25 GHz
The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10B, 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 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

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 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

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

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DIRECTIONAL ANTENNA GAIN

For 2 TX:

Tx chains are uncorrelated for power and correlated for PSD due to the device supporting CDD in all MIMO modes. The directional gains are as follows:

Band (GHz)	Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	4.30	4.50	4.40	7.41
5.3	4.7	4.8	4.75	7.76
5.6	5.1	4.5	4.81	7.82
5.8	5.2	4.5	4.86	7.87

RESULTS

9.5.1. 802.11a MODE IN THE 5.2 GHz BAND

2TX Antenna 0 + Antenna 1 CDD MODE (FCC) AP

Test Engineer:	84740/40882
Test Date:	2021-05-12

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	4.40	7.41	30.00	15.59
Mid	5200	4.40	7.41	30.00	15.59
High	5240	4.40	7.41	30.00	15.59

Duty Cycle CF (dB)	1.39	**Included in Calculations of Corr'd PSD**

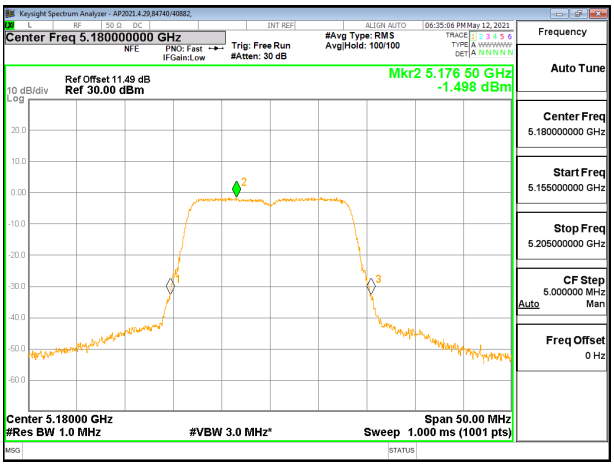
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	12.08	10.84	14.51	30.00	-15.49
Mid	5200	11.28	10.38	13.86	30.00	-16.14
High	5240	12.07	11.21	14.67	30.00	-15.33

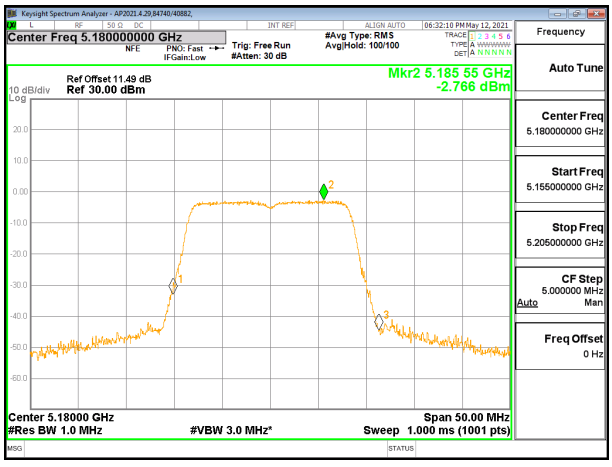
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/1MHz)	Antenna 1 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	-1.498	-2.766	2.31	15.59	-13.28
Mid	5200	-2.044	-3.473	1.70	15.59	-13.89
High	5240	-0.515	-4.122	2.45	15.59	-13.14

LOW CHANNEL

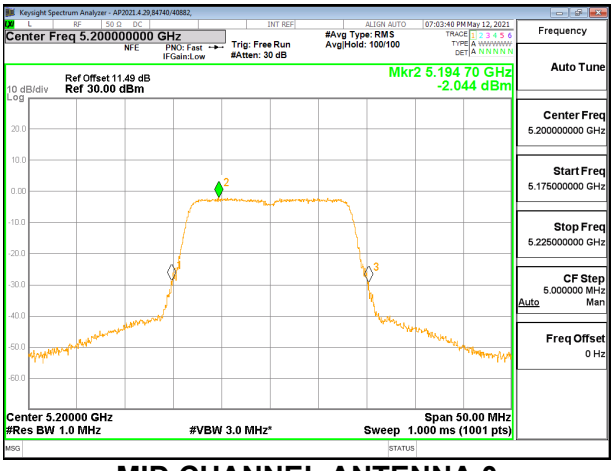


LOW CHANNEL ANTENNA 0



LOW CHANNEL ANTENNA 1

MID CHANNEL



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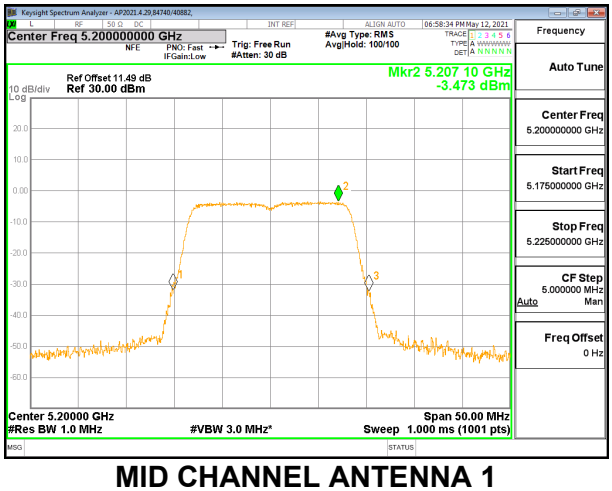
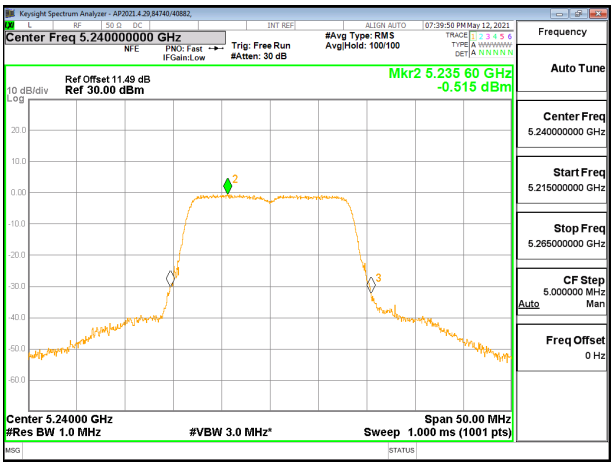
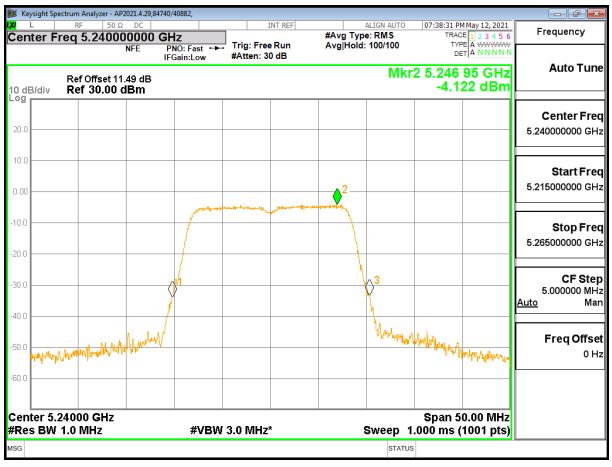


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

2TX Antenna 0 + Antenna 1 CDD MODE (IC)

Test Engineer:	84740/40882
Test Date:	2021-05-12

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	EIRP Power Limit (dBm)	Power Limit (dBm)	EIRP PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Low	5180	16.6450	4.40	7.41	22.21	17.81	10.00	2.59
Mid	5200	16.7040	4.40	7.41	22.23	17.83	10.00	2.59
High	5240	16.6360	4.40	7.41	22.21	17.81	10.00	2.59

Duty Cycle CF (dB)	1.39	**Included in Calculations of Corr'd PSD**

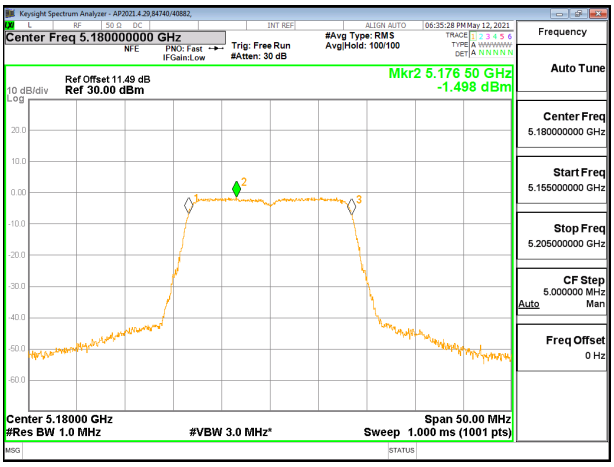
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	12.08	10.84	14.51	17.81	-3.30
Mid	5200	11.28	10.38	13.86	17.83	-3.96
High	5240	12.07	11.21	14.67	17.81	-3.14

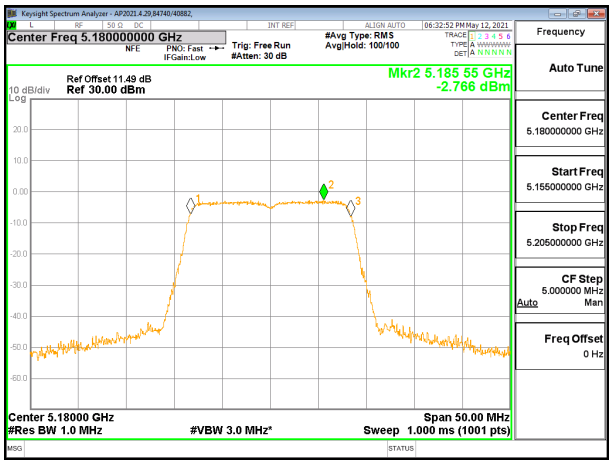
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/1MHz)	Antenna 1 Meas PSD (dBm/1MHz)	Total Corr'd D (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5180	-1.498	-2.766	2.31	2.59	-0.28
Mid	5200	-2.044	-3.473	1.70	2.59	-0.89
High	5240	-0.515	-4.122	2.45	2.59	-0.14

LOW CHANNEL

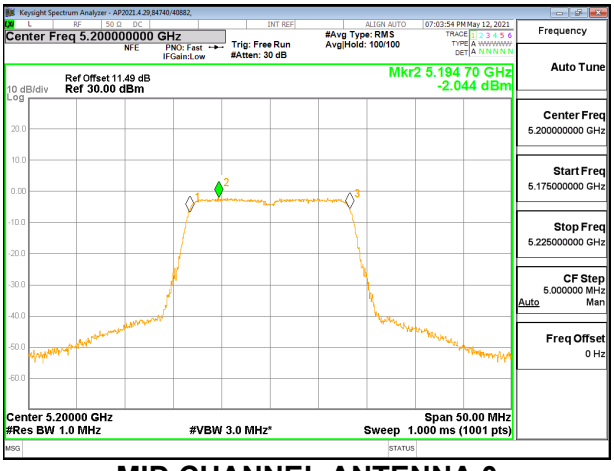


LOW CHANNEL ANTENNA 0

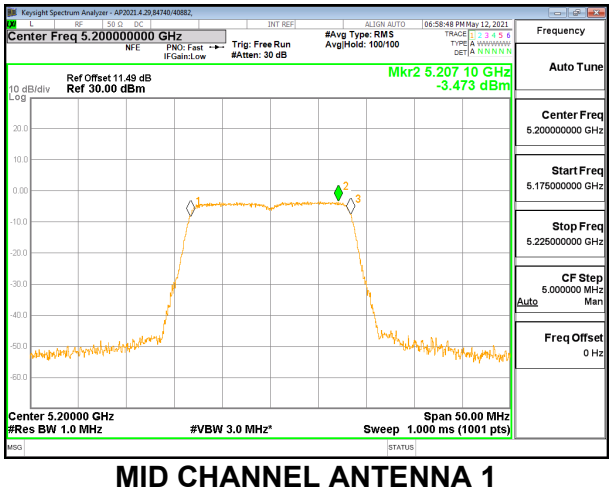


LOW CHANNEL ANTENNA 1

MID CHANNEL

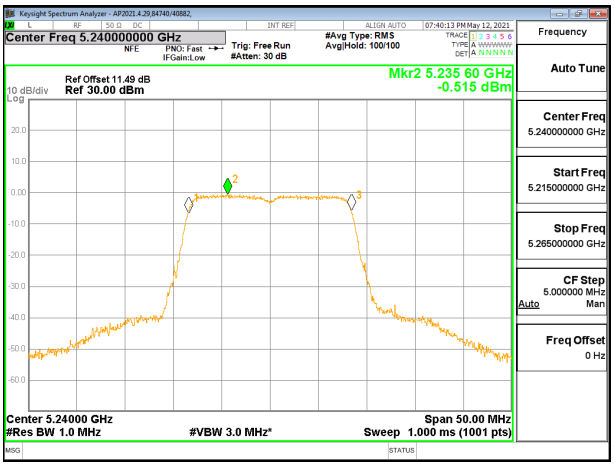


MID CHANNEL ANTENNA 0

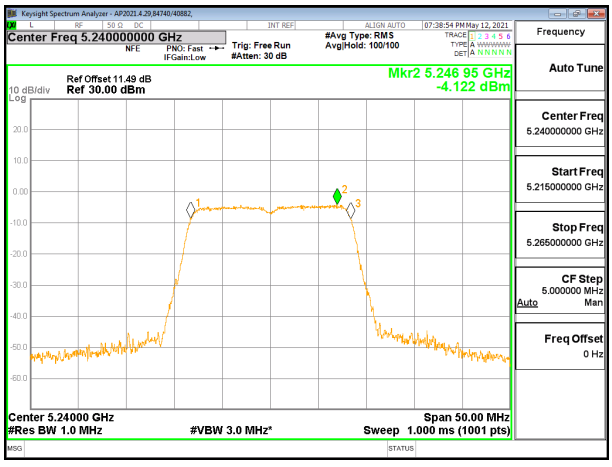


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

9.5.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

2TX Antenna 0 + Antenna 1 CDD MODE (FCC) AP

Test Engineer:	84740/40882
Test Date:	2021-05-12

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	4.40	7.41	30.00	15.59
Mid	5200	4.40	7.41	30.00	15.59
High	5240	4.40	7.41	30.00	15.59

Duty Cycle CF (dB)	1.48	**Included in Calculations of Corr'd PSD**

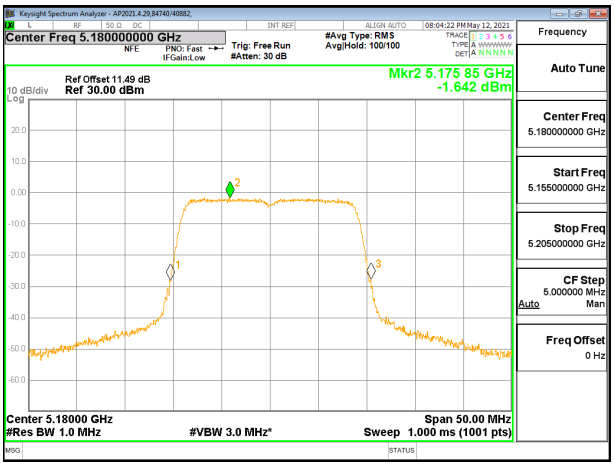
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	12.00	10.74	14.43	30.00	-15.57
Mid	5200	11.88	10.80	14.38	30.00	-15.62
High	5240	11.92	10.42	14.24	30.00	-15.76

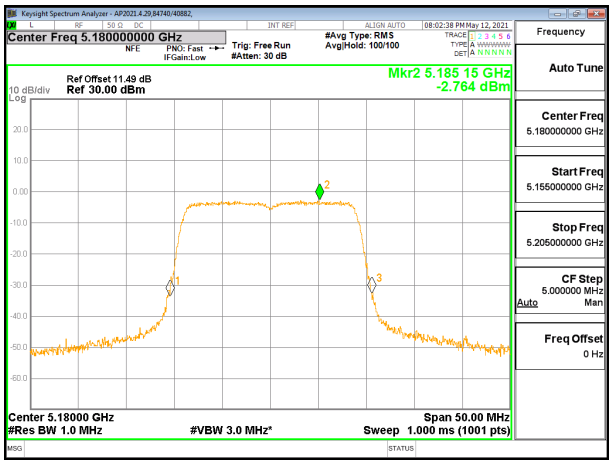
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/1MHz)	Antenna 1 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	-1.642	-2.764	2.32	15.59	-13.27
Mid	5200	-1.197	-3.803	2.18	15.59	-13.41
High	5240	-1.780	-3.733	1.84	15.59	-13.75

LOW CHANNEL

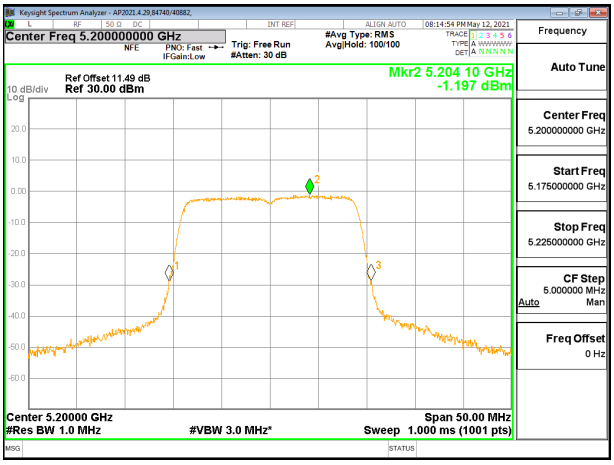


LOW CHANNEL ANTENNA 0

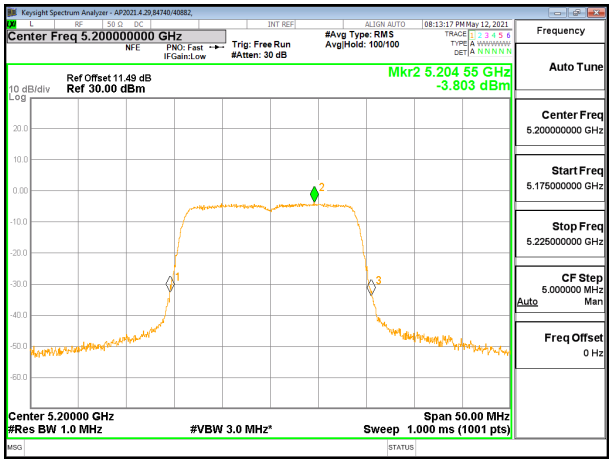


LOW CHANNEL ANTENNA 1

MID CHANNEL

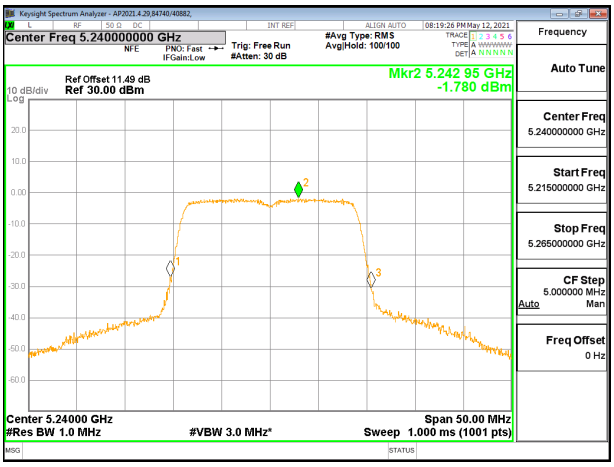


MID CHANNEL ANTENNA 0

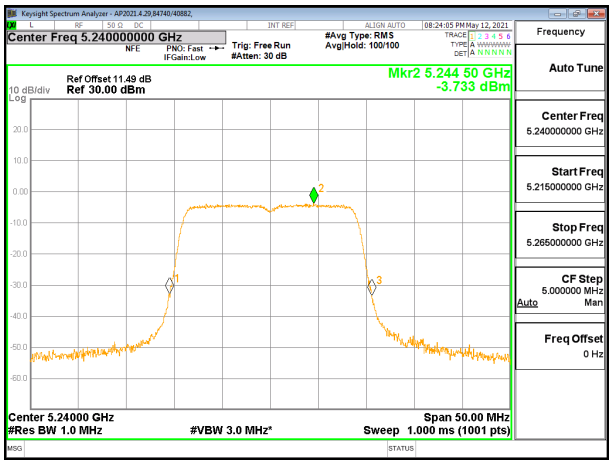


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

2TX Antenna 0 + Antenna 1 CDD MODE (IC) AP

Test Engineer:	84740/40882
Test Date:	2021-05-12

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	EIRP Power Limit (dBm)	Power Limit (dBm)	EIRP PSD Limit (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)
Low	5180	17.7840	4.40	7.41	22.50	18.10	10.00	2.59
Mid	5200	17.8430	4.40	7.41	22.51	18.11	10.00	2.59
High	5240	17.8010	4.40	7.41	22.50	18.10	10.00	2.59

Duty Cycle CF (dB)	1.48	**Included in Calculations of Corr'd PSD**

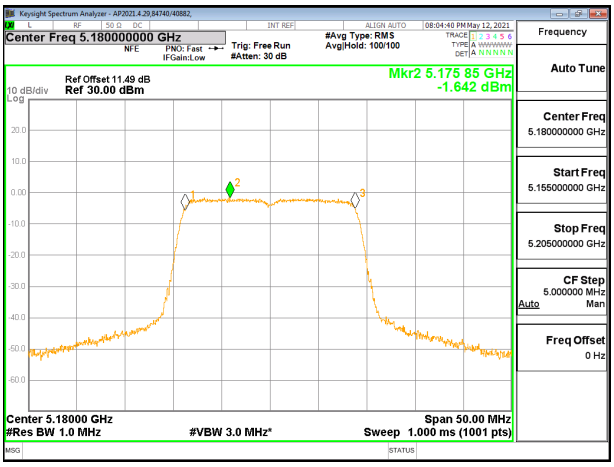
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	12.00	10.74	14.43	18.10	-3.67
Mid	5200	11.88	10.80	14.38	18.11	-3.73
High	5240	11.92	10.42	14.24	18.51	-4.27

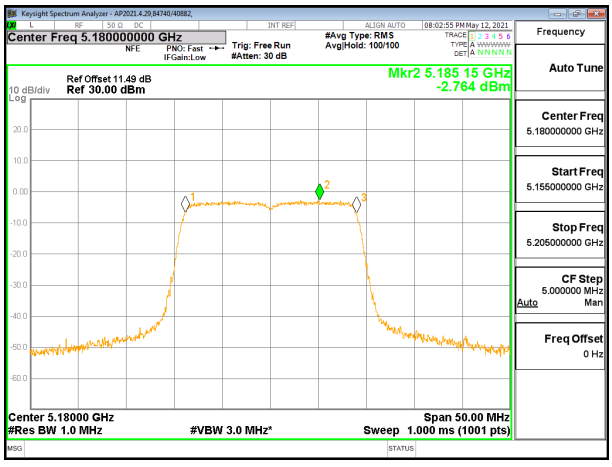
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/1MHz)	Antenna 1 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	-1.642	-2.764	2.32	2.59	-0.27
Mid	5200	-1.197	-3.803	2.18	2.59	-0.41
High	5240	-1.780	-3.733	1.84	2.59	-0.75

LOW CHANNEL

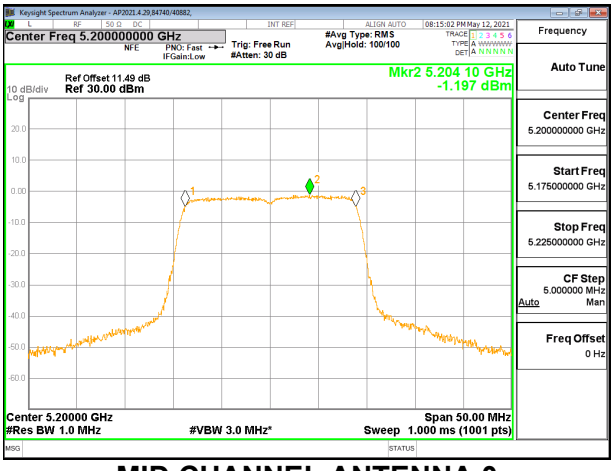


LOW CHANNEL ANTENNA 0

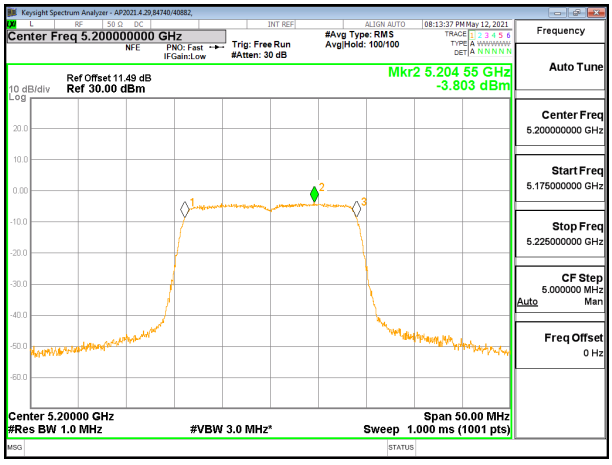


LOW CHANNEL ANTENNA 1

MID CHANNEL

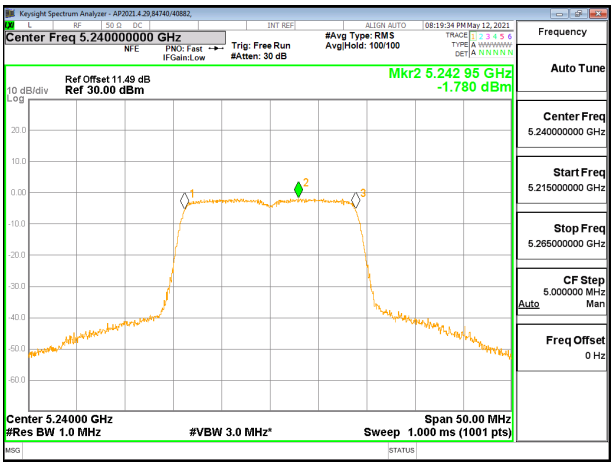


MID CHANNEL ANTENNA 0

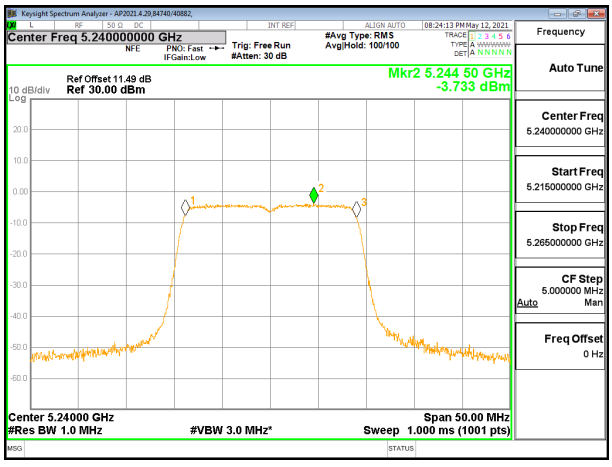


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

9.5.3. 802.11a MODE IN THE 5.3 GHz BAND

2TX Antenna 0 + Antenna 1 CDD MODE (FCC)

Test Engineer:	84740/40882
Test Date:	2021-05-13 , 2021-05-14

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	33.30	4.75	7.76	24.00	9.24
Mid	5300	33.90	4.75	7.76	24.00	9.24
High	5320	26.55	4.75	7.76	24.00	9.24

Duty Cycle CF (dB)	1.39	**Included in Calculations of Corr'd PSD**

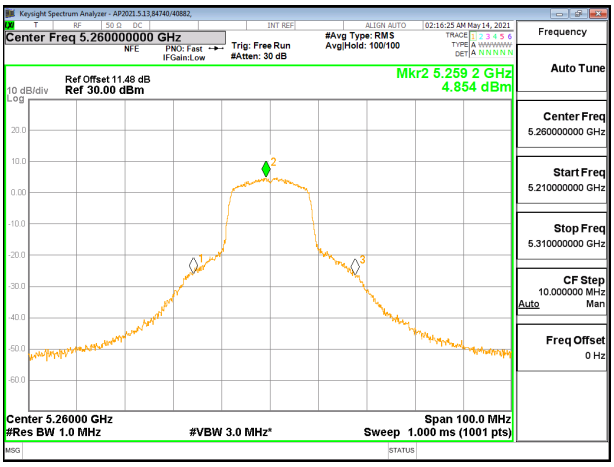
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	18.35	18.04	21.21	24.00	-2.79
Mid	5300	17.41	17.72	20.58	24.00	-3.42
High	5320	15.46	14.66	18.09	24.00	-5.91

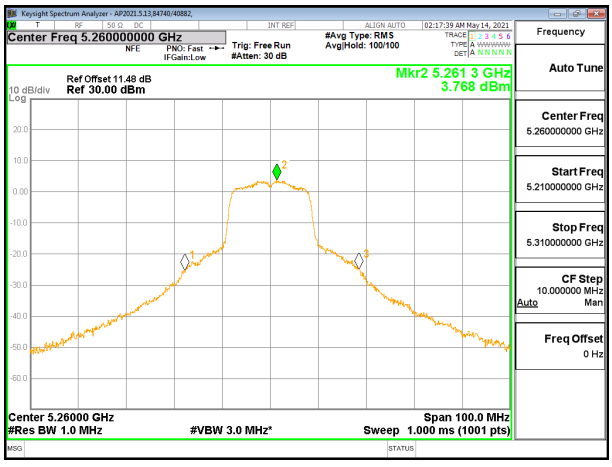
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/1MHz)	Antenna 1 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	4.85	3.77	8.75	9.24	-0.49
Mid	5300	4.88	3.90	8.81	9.24	-0.43
High	5320	0.58	0.53	4.95	9.24	-4.29

LOW CHANNEL

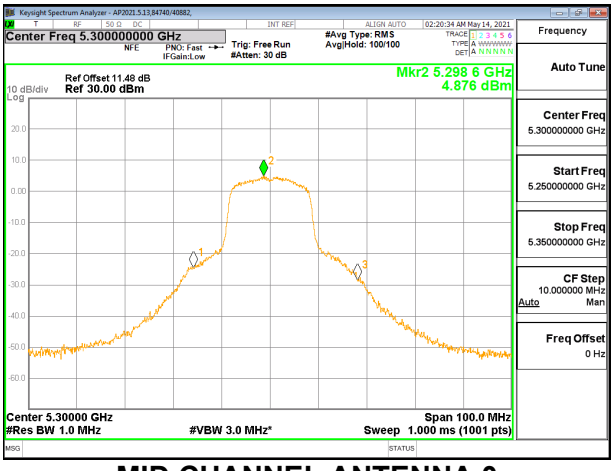


LOW CHANNEL ANTENNA 0

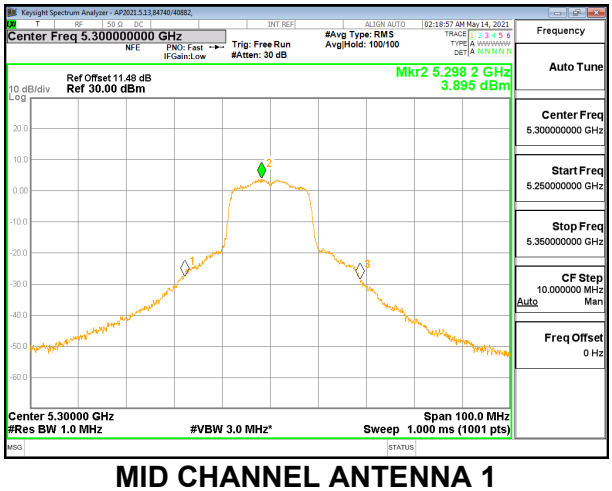


LOW CHANNEL ANTENNA 1

MID CHANNEL

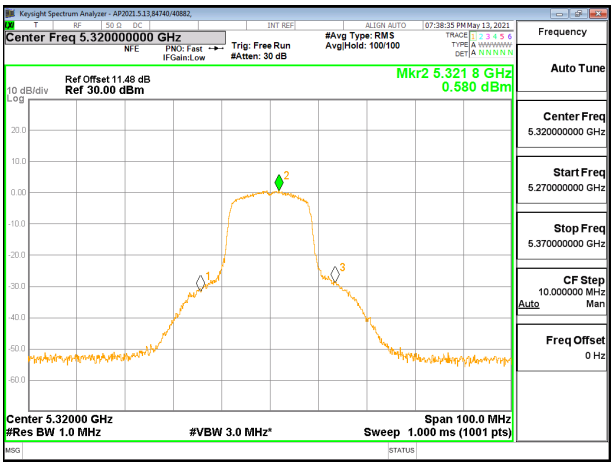


MID CHANNEL ANTENNA 0

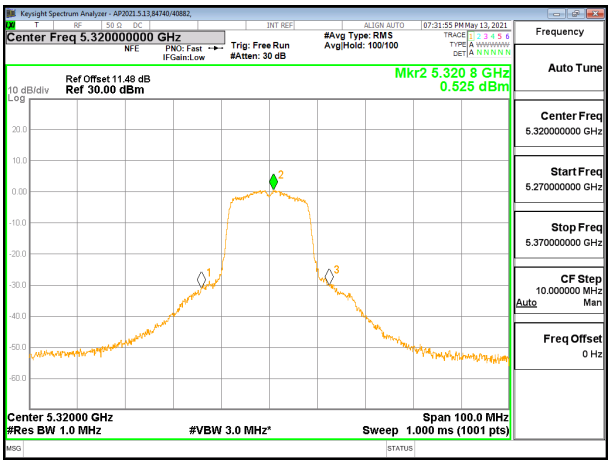


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

2TX Antenna 0 + Antenna 1 CDD MODE (IC)

Test Engineer:	84740/40882
Test Date:	2021-05-13 , 2021-05-14

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	17.599	4.75	7.76	23.45	11.00
Mid	5300	17.878	4.75	7.76	23.52	11.00
High	5320	16.591	4.75	7.76	23.20	11.00

Duty Cycle CF (dB)	1.39	**Included in Calculations of Corr'd PSD**

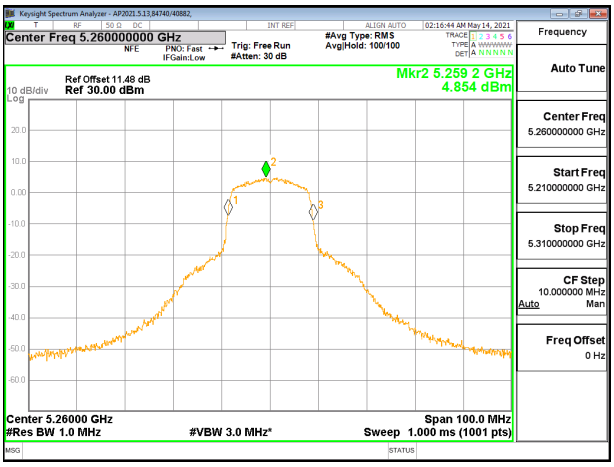
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	18.35	18.04	21.21	23.45	-2.25
Mid	5300	17.41	17.72	20.58	23.52	-2.95
High	5320	15.46	14.66	18.09	23.20	-5.11

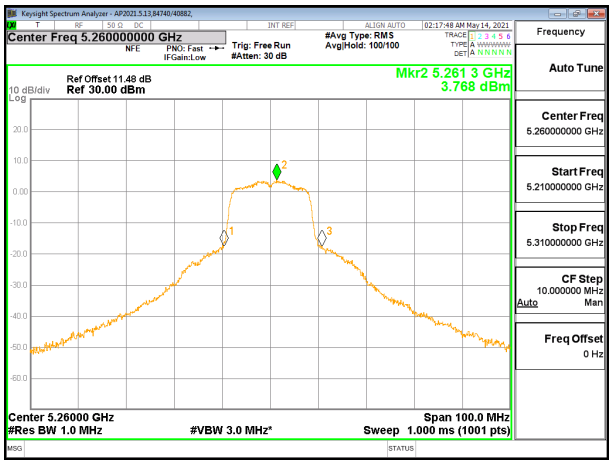
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/1MHz)	Antenna 1 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	4.85	3.77	8.75	11.00	-2.25
Mid	5300	4.88	3.90	8.81	11.00	-2.19
High	5320	0.580	0.525	4.95	11.00	-6.05

LOW CHANNEL

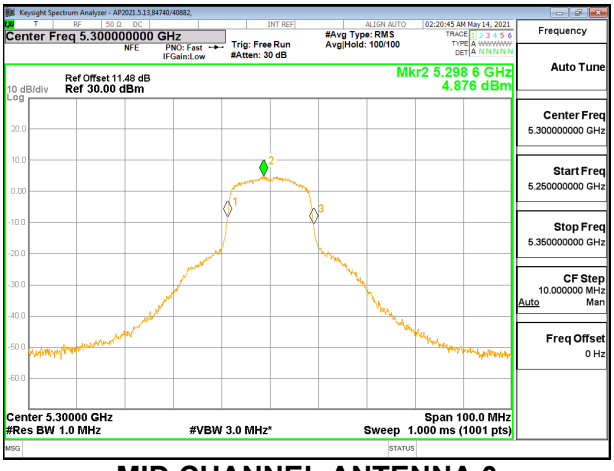


LOW CHANNEL ANTENNA 0

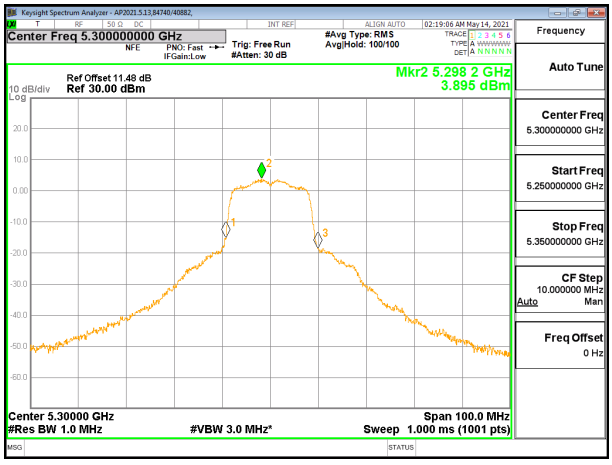


LOW CHANNEL ANTENNA 1

MID CHANNEL

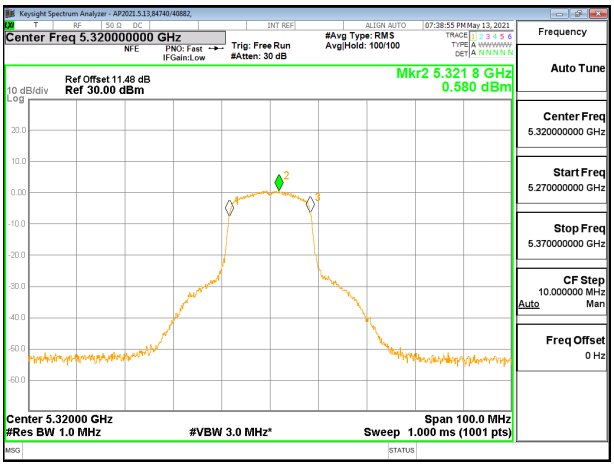


MID CHANNEL ANTENNA 0

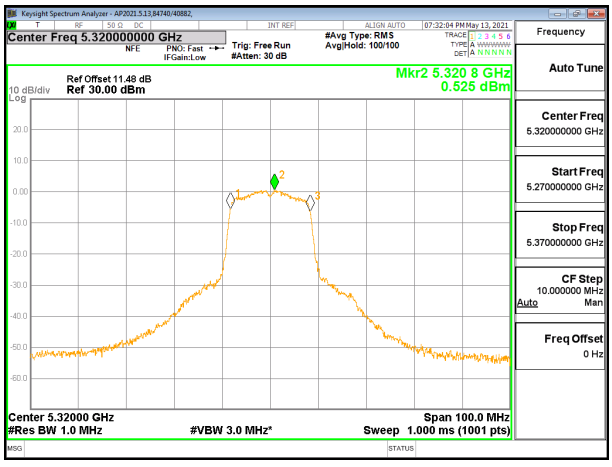


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

9.5.4. 802.11n HT20 MODE IN THE 5.3 GHz BAND

2TX Antenna 0 + Antenna 1 CDD MODE (FCC)

Test Engineer:	84740/40882
Test Date:	2021-05-13 , 2021-05-14

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	37.50	4.75	7.76	24.00	9.24
Mid	5300	38.20	4.75	7.76	24.00	9.24
High	5320	31.65	4.75	7.76	24.00	9.24

Duty Cycle CF (dB)	1.48	**Included in Calculations of Corr'd PSD**

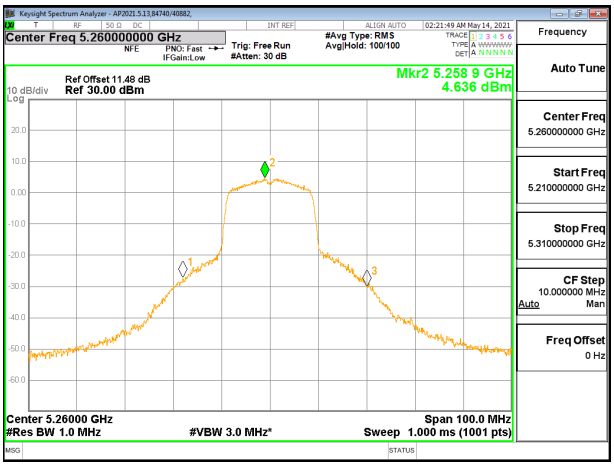
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	18.28	18.06	21.18	24.00	-2.82
Mid	5300	17.31	16.24	19.82	24.00	-4.18
High	5320	16.23	15.55	18.91	24.00	-5.09

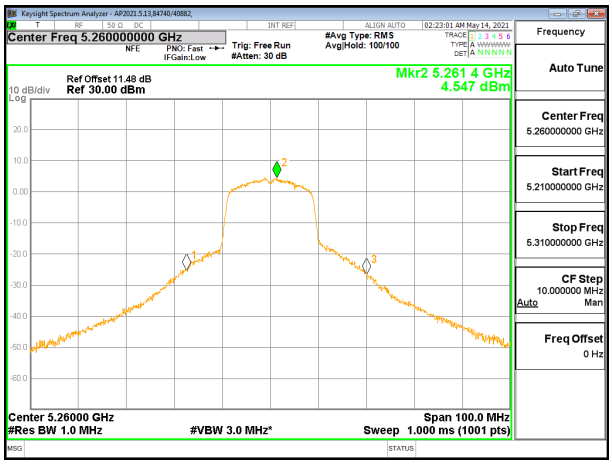
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/1MHz)	Antenna 1 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	4.636	4.547	9.08	9.24	-0.16
Mid	5300	3.937	3.684	8.30	9.24	-0.94
High	5320	1.256	2.360	6.33	9.24	-2.91

LOW CHANNEL

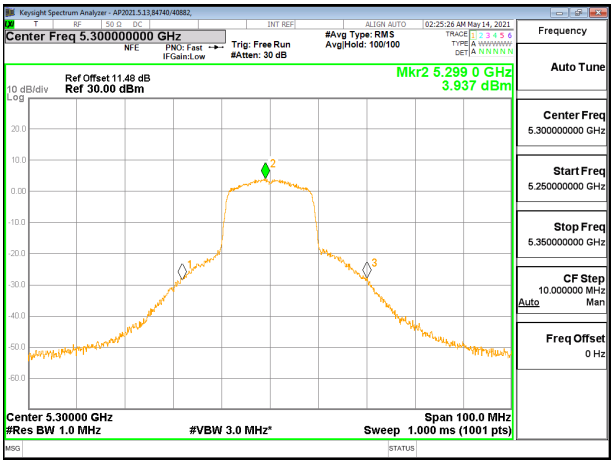


LOW CHANNEL ANTENNA 0

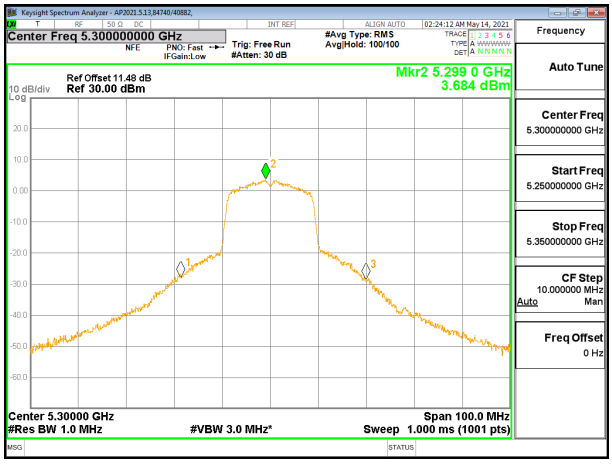


LOW CHANNEL ANTENNA 1

MID CHANNEL

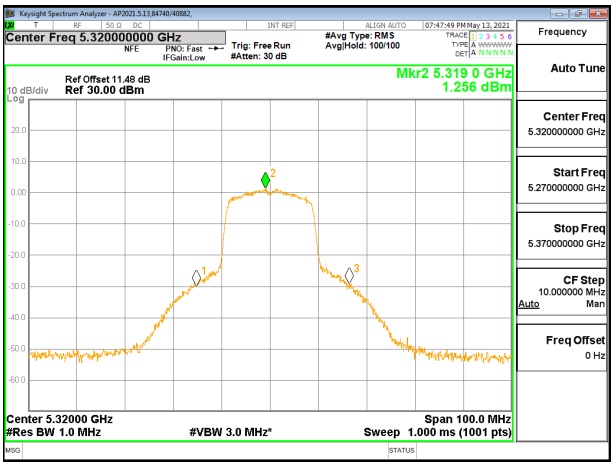


MID CHANNEL ANTENNA 0

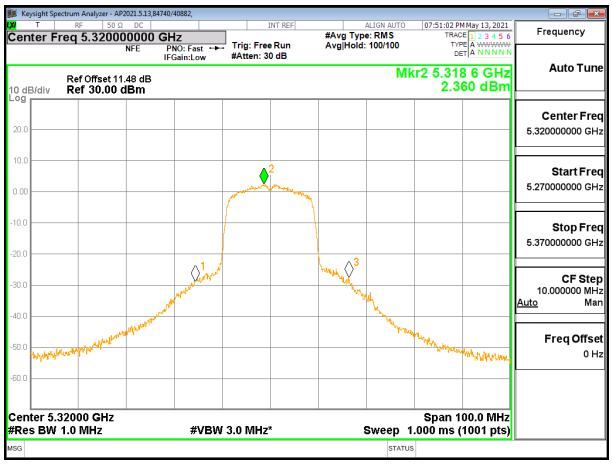


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

2TX Antenna 0 + Antenna 1 CDD MODE (IC)

Test Engineer:	84740/40882
Test Date:	2021-05-13 – 2021-05-14

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	18.078	4.75	7.76	23.57	11.00
Mid	5300	18.608	4.75	7.76	23.70	11.00
High	5320	17.751	4.75	7.76	23.49	11.00

Duty Cycle CF (dB)	1.48	**Included in Calculations of Corr'd PSD**

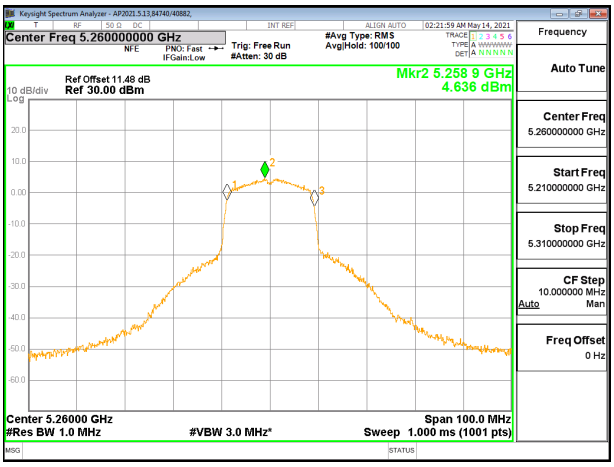
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	18.28	18.06	21.18	23.57	-2.39
Mid	5300	17.31	16.24	19.82	23.70	-3.88
High	5320	16.23	15.55	18.91	23.49	-4.58

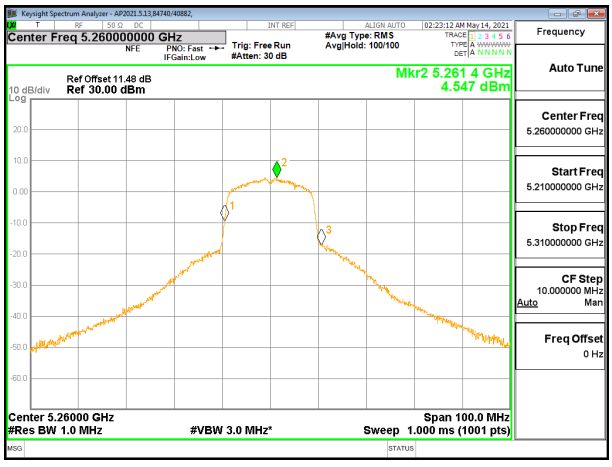
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/1MHz)	Antenna 1 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	4.636	4.547	9.08	11.00	-1.92
Mid	5300	3.937	3.684	8.30	11.00	-2.70
High	5320	1.256	2.360	6.33	11.00	-4.67

LOW CHANNEL

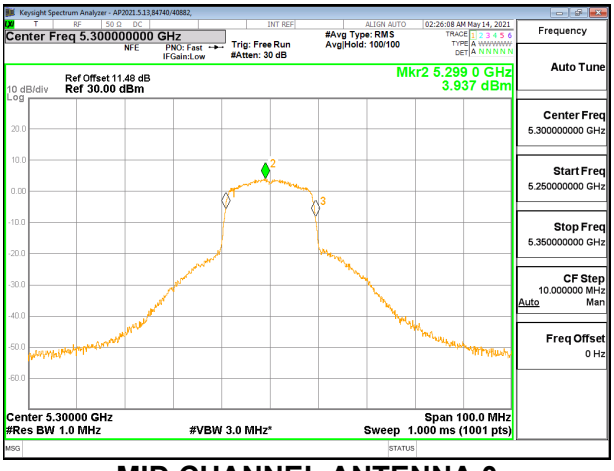


LOW CHANNEL ANTENNA 0

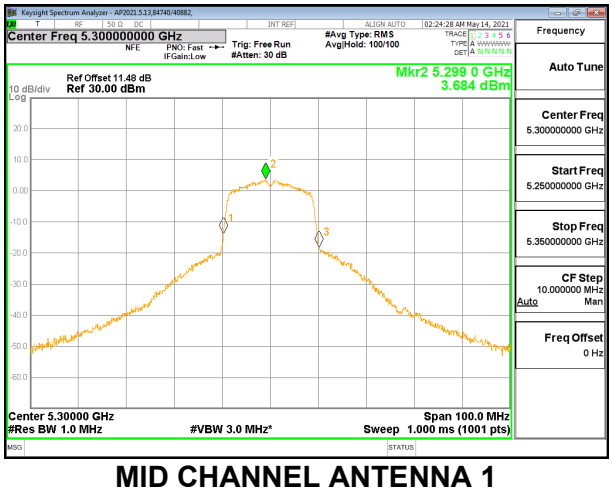


LOW CHANNEL ANTENNA 1

MID CHANNEL

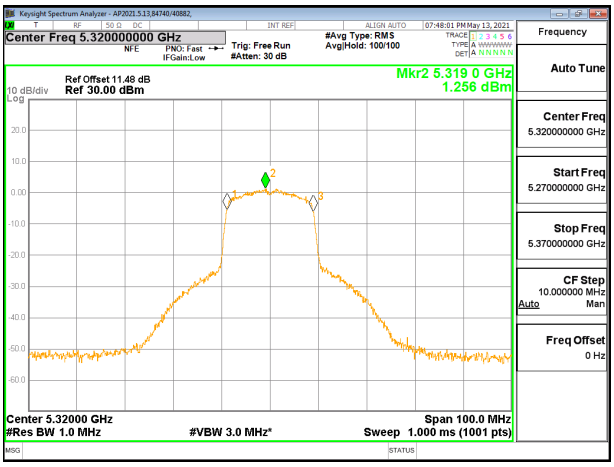


MID CHANNEL ANTENNA 0

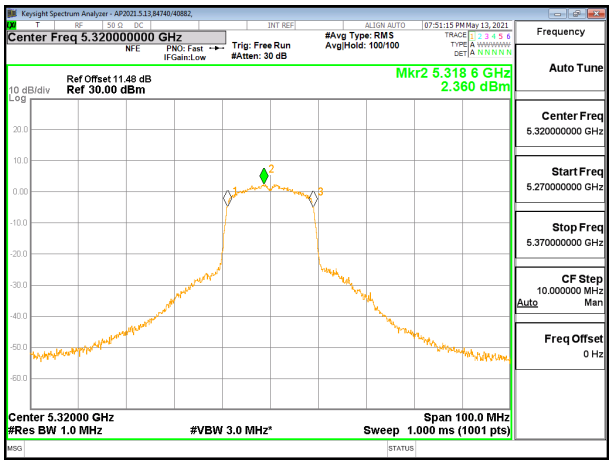


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

9.5.5. 802.11a MODE IN THE 5.6 GHz BAND

2TX Antenna 0 + Antenna 1 CDD MODE (FCC)

Test Engineer:	84740/40882
Test Date:	2021-05-13, 2021-05-17

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	5500	22.85	4.81	7.82	24.00	9.18
Low	5520	35.35	4.81	7.82	24.00	9.18
Mid	5580	25.65	4.81	7.82	24.00	9.18
Mid	5660	36.65	4.81	7.82	24.00	9.18
High	5680	37.35	4.81	7.82	24.00	9.18
High	5700	20.00	4.81	7.82	24.00	9.18

Duty Cycle CF (dB)	1.39	Included in Calculations of Corr'd PSD

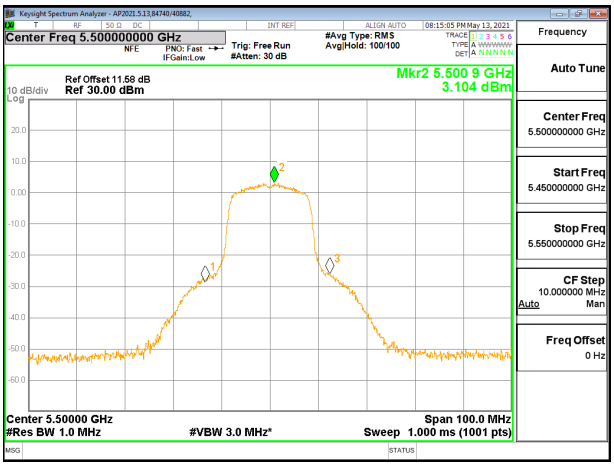
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	14.88	14.91	17.91	24.00	-6.09
Low	5520	16.24	16.85	19.57	24.00	-4.43
Mid	5580	16.12	16.67	19.41	24.00	-4.59
Mid	5660	16.21	16.46	19.35	24.00	-4.65
High	5680	16.27	16.33	19.31	24.00	-4.69
High	5700	13.08	12.53	15.82	24.00	-8.18

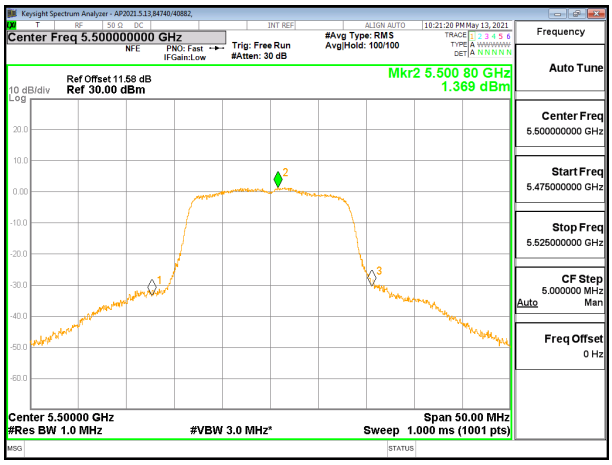
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/ 1MHz)	Antenna 1 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	3.104	1.369	6.72	9.18	-2.46
Low	5520	4.300	4.109	8.61	9.18	-0.57
Mid	5580	4.816	3.121	8.45	9.18	-0.73
Mid	5660	4.681	4.804	9.14	9.18	-0.04
High	5680	4.590	4.759	9.08	9.18	-0.10
High	5700	0.933	-0.913	4.51	9.18	-4.67

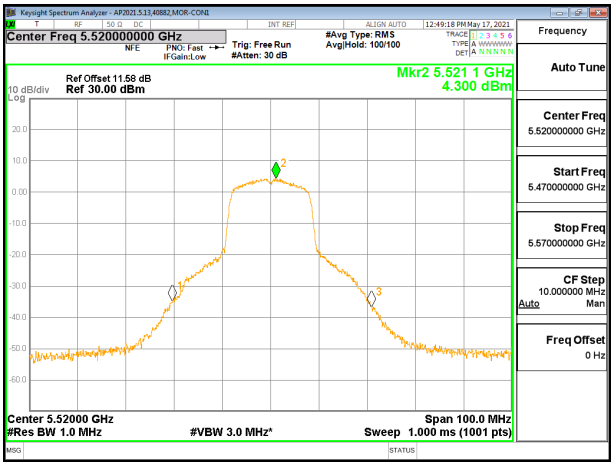
LOW CHANNEL



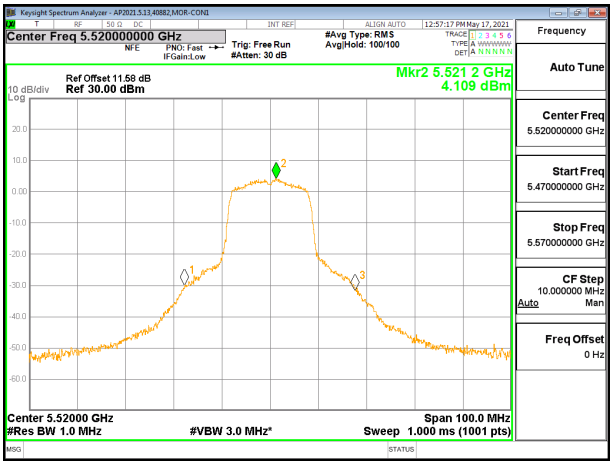
LOW CHANNEL (5500MHz) ANTENNA 0



LOW CHANNEL (5500MHz) ANTENNA 1

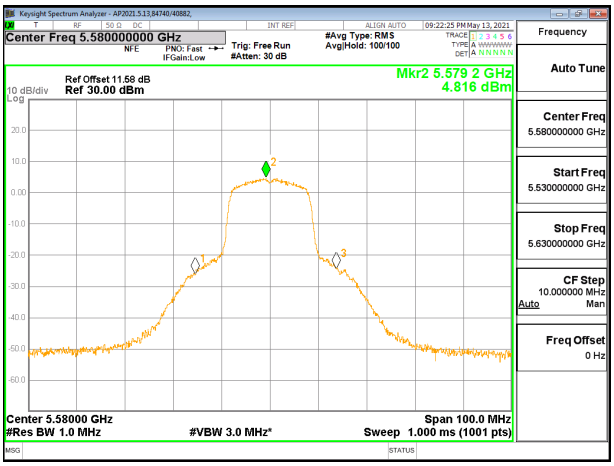


LOW CHANNEL (5520MHz) ANTENNA 0

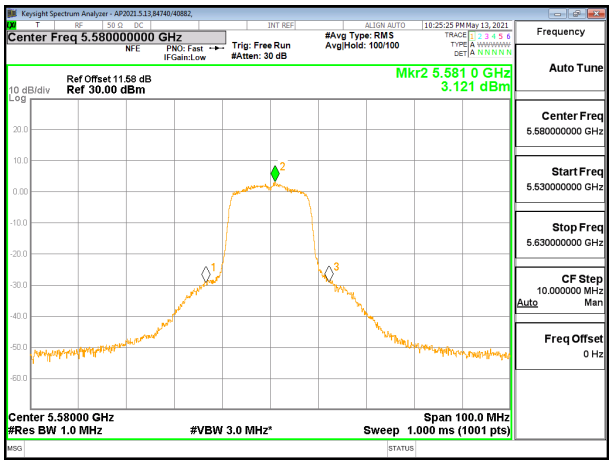


LOW CHANNEL (5520MHz) ANTENNA 1

MID CHANNEL

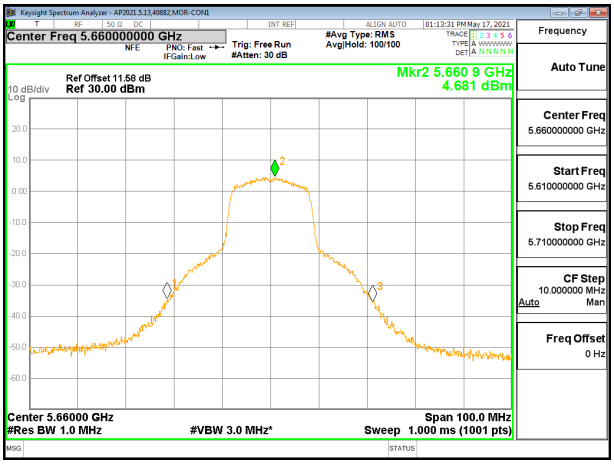


MID CHANNEL (5580MHz) ANTENNA 0

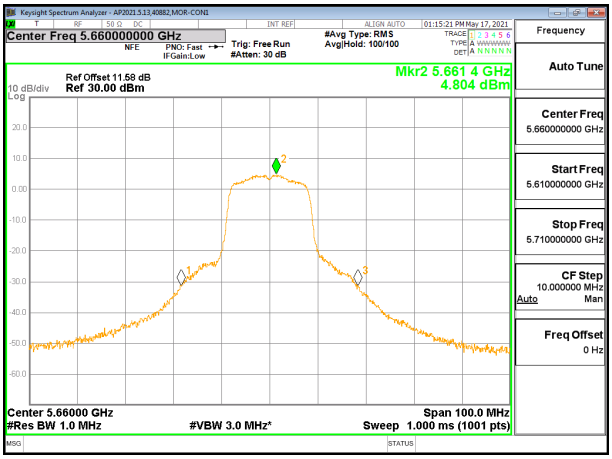


MID CHANNEL (5580MHz) ANTENNA 1

MID CHANNEL

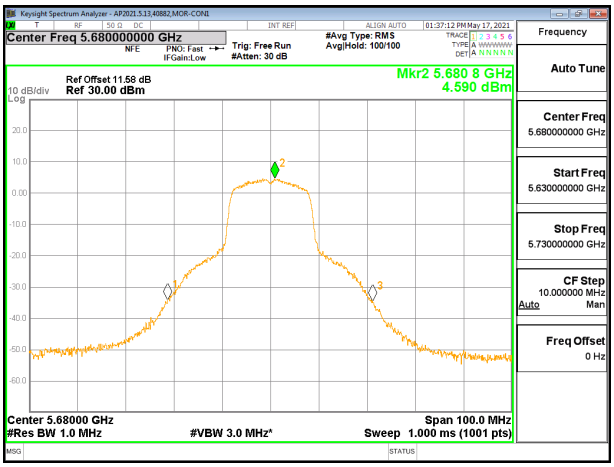


MID CHANNEL ANTENNA 0 (5660MHz)

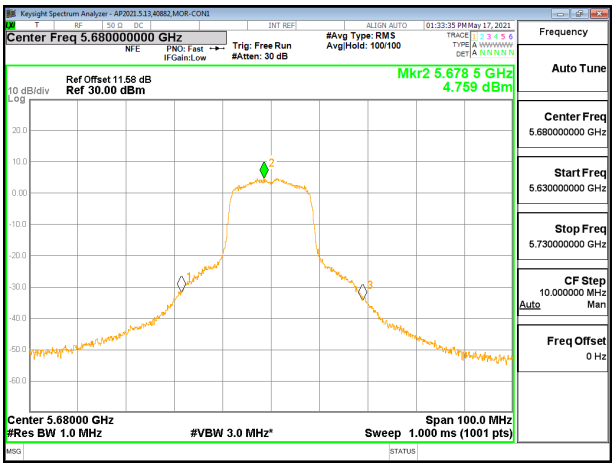


MID CHANNEL ANTENNA 1 (5660MHz)

HIGH CHANNEL

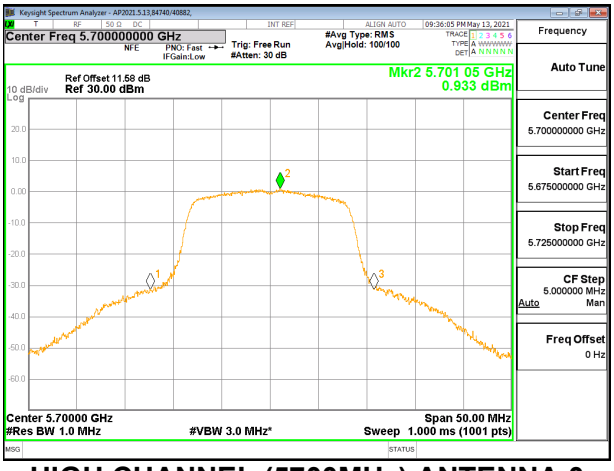


HIGH CHANNEL (5680MHz) ANTENNA 0

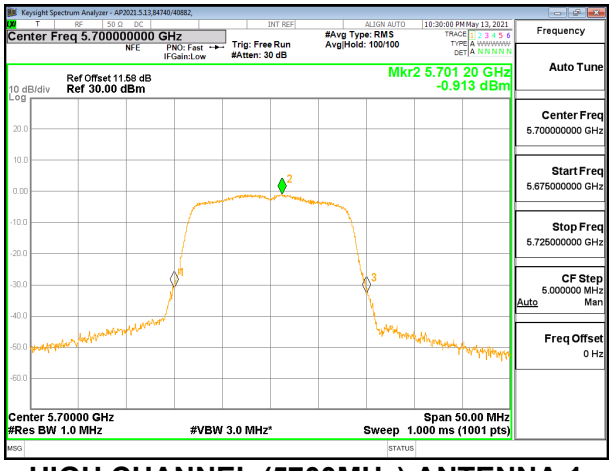


HIGH CHANNEL (5680MHz) ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL (5700MHz) ANTENNA 0



HIGH CHANNEL (5700MHz) ANTENNA 1

2TX Antenna 0 + Antenna 1 CDD MODE (IC)

Test Engineer:	84740/40882
Test Date:	2021-05-13, 2021-05-17

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5500	16.48	4.81	7.82	23.17	9.18
Low	5520	18.56	4.81	7.82	23.69	9.18
Mid	5580	16.59	4.81	7.82	23.20	9.18
High	5580	21.57	4.81	7.82	24.00	9.18
High	5700	16.42	4.81	7.82	23.15	9.18

Duty Cycle CF (dB)	1.39	**Included in Calculations of Corr'd PSD**

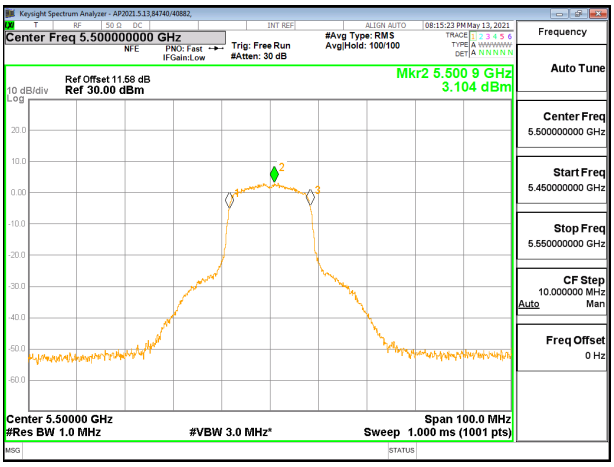
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	14.88	14.91	17.91	23.17	-5.27
Low	5520	16.24	16.85	19.57	23.69	-4.12
Mid	5580	16.12	16.67	19.41	23.20	-3.78
High	5580	16.27	16.33	19.31	24.00	-4.69
High	5700	13.08	12.53	15.82	23.15	-7.33

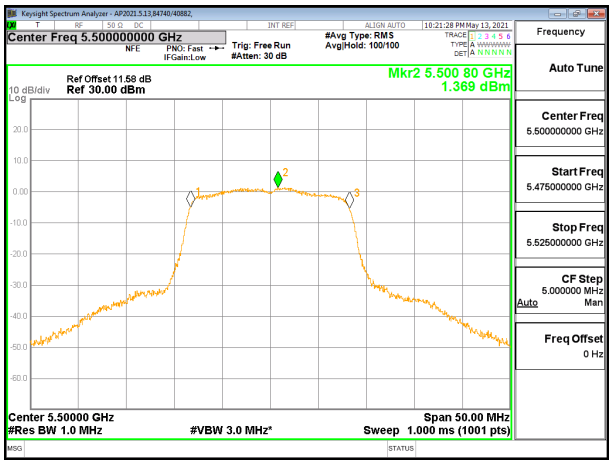
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/ 1MHz)	Antenna 1 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	3.104	1.369	6.72	9.18	-2.46
Low	5520	4.300	4.109	8.61	9.18	-0.57
Mid	5580	4.816	3.121	8.45	9.18	-0.73
High	5580	4.590	4.759	9.08	9.18	-0.10
High	5700	0.933	-0.913	4.51	9.18	-4.67

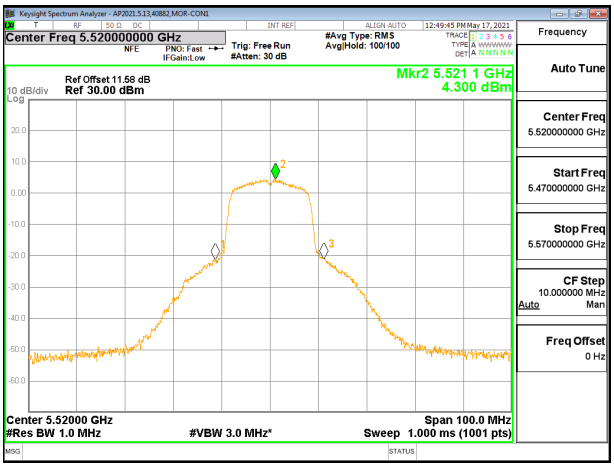
LOW CHANNEL



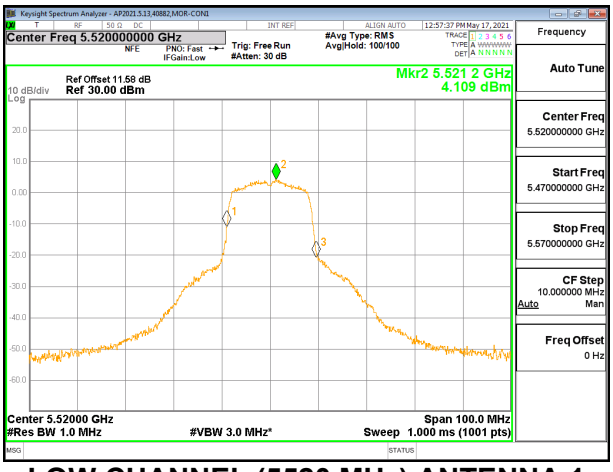
LOW CHANNEL ANTENNA 0



LOW CHANNEL ANTENNA 1

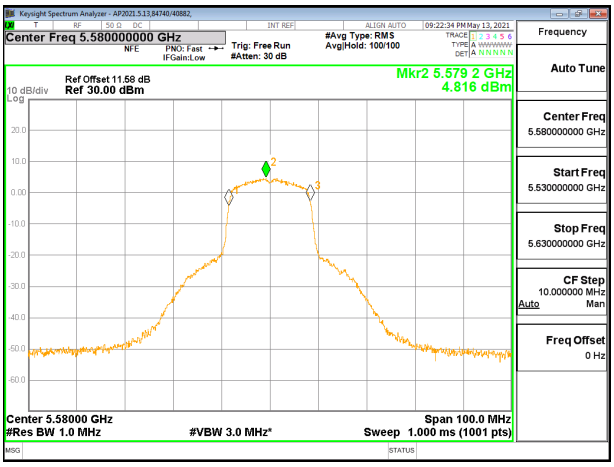


LOW CHANNEL (5520 MHz) ANTENNA 0

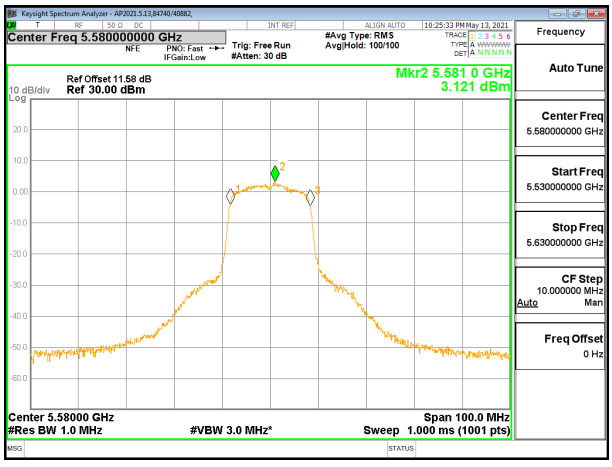


LOW CHANNEL (5520 MHz) ANTENNA 1

MID CHANNEL

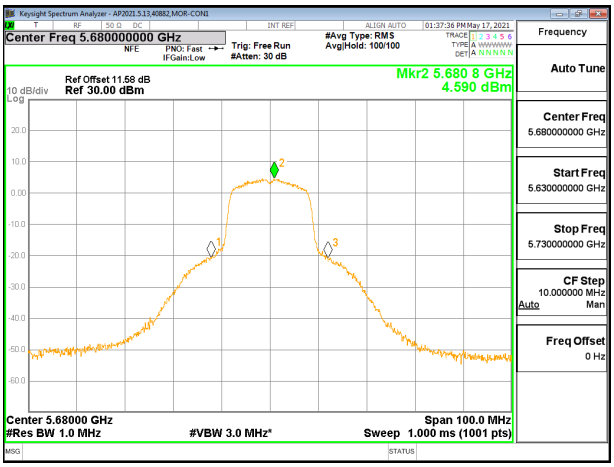


MID CHANNEL ANTENNA 0

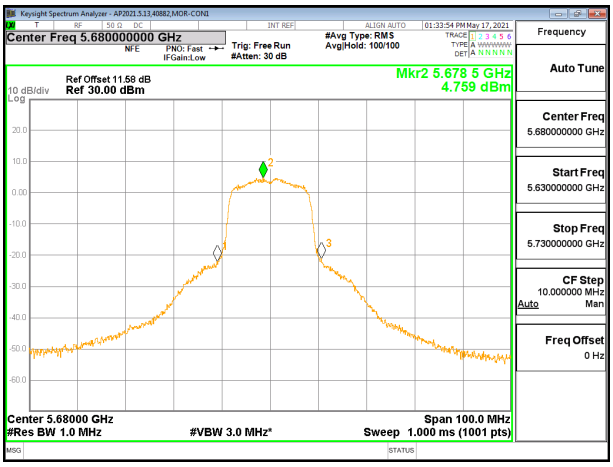


MID CHANNEL ANTENNA 1

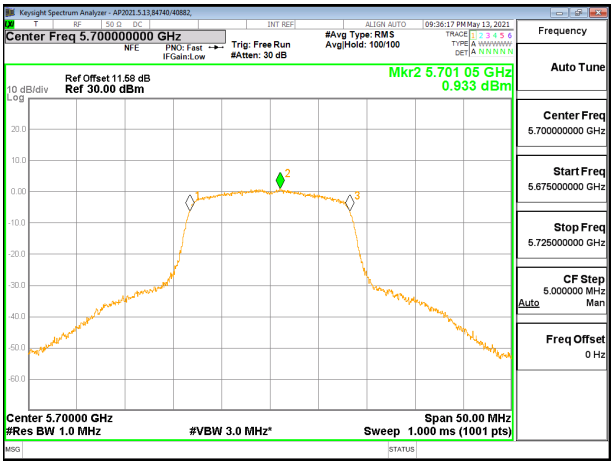
HIGH CHANNEL



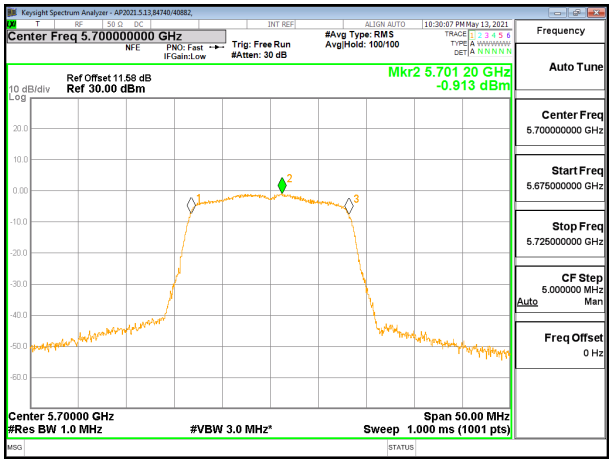
HIGH CHANNEL (5680 MHz) ANTENNA 0



HIGH CHANNEL (5680 MHz) ANTENNA 1



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

9.5.6. 802.11n HT20 MODE IN THE 5.6 GHz BAND

2TX Antenna 0 + Antenna 1 CDD MODE (FCC)

Test Engineer:	84740/40882
Test Date:	2021-05-13, 2021-05-18

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	5500	29.60	4.81	7.82	24.00	9.18
Mid	5580	26.65	4.81	7.82	24.00	9.18
High	5680	46.20	4.81	7.82	24.00	9.18
High	5700	20.30	4.81	7.82	24.00	9.18

Duty Cycle CF (dB)	1.48	**Included in Calculations of Corr'd PSD**

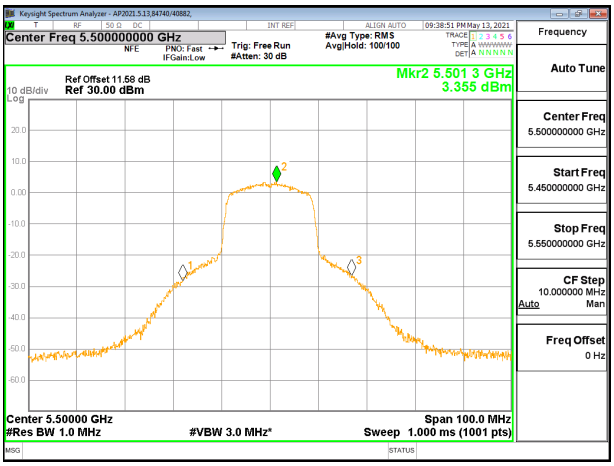
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	16.52	17.56	20.08	24.00	-3.92
Mid	5580	16.30	16.71	19.52	24.00	-4.48
High	5680	17.11	17.23	20.18	24.00	-3.82
High	5700	14.65	13.43	17.09	24.00	-6.91

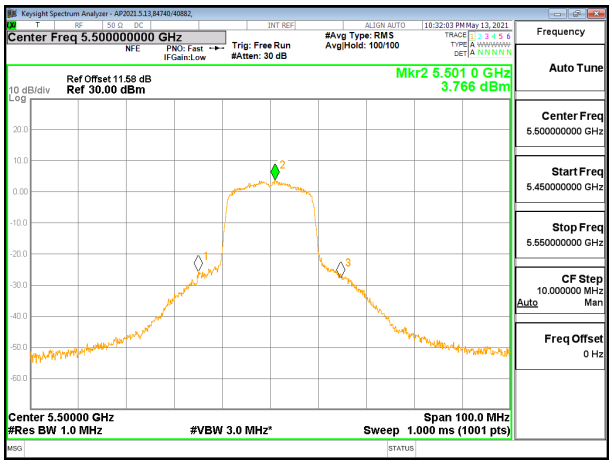
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/ 1MHz)	Antenna 1 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	3.355	3.768	8.06	9.18	-1.12
Mid	5580	4.702	3.323	8.56	9.18	-0.62
High	5680	4.556	4.033	8.79	9.18	-0.39
High	5700	1.826	0.358	5.64	9.18	-3.54

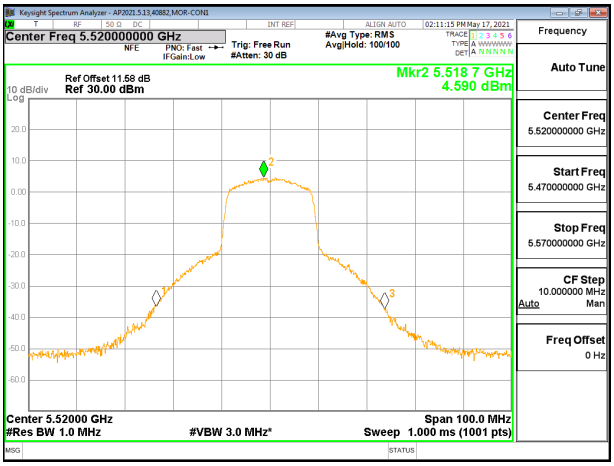
LOW CHANNEL



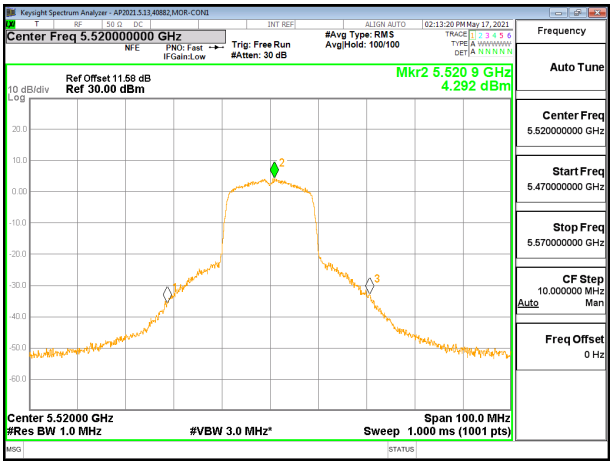
LOW CHANNEL (5500MHz) ANTENNA 0



LOW CHANNEL(5500MHz) ANTENNA 1

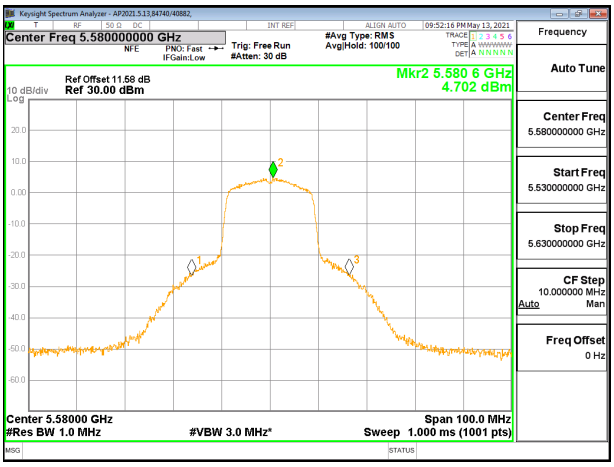


LOW CHANNEL (5520MHz) ANTENNA 0

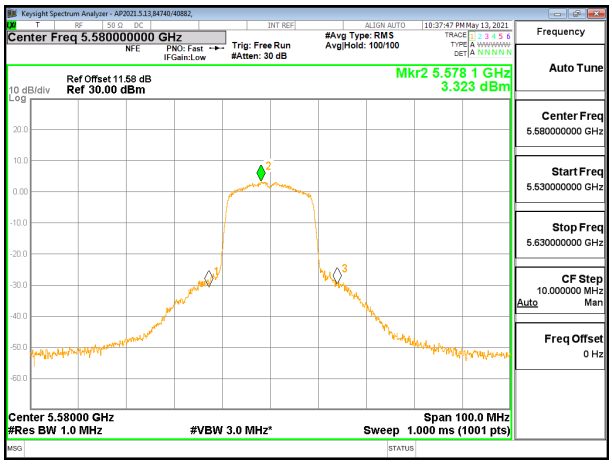


LOW CHANNEL(5520MHz) ANTENNA 1

MID CHANNEL

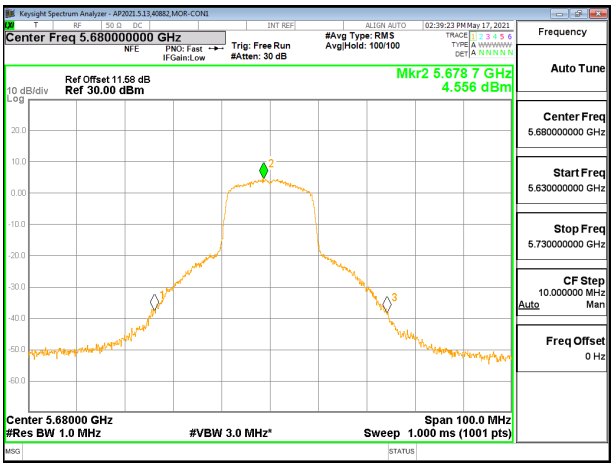


MID CHANNEL ANTENNA 0

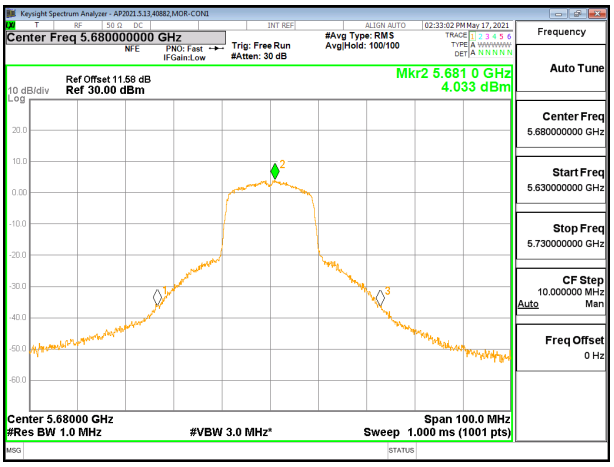


MID CHANNEL ANTENNA 1

HIGH CHANNEL

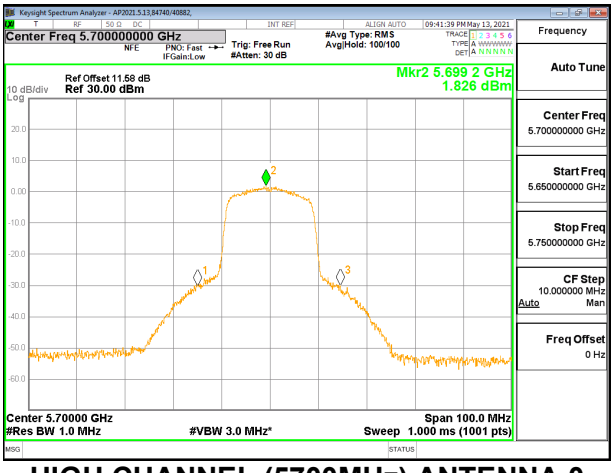


HIGH CHANNEL (5680MHz) ANTENNA 0

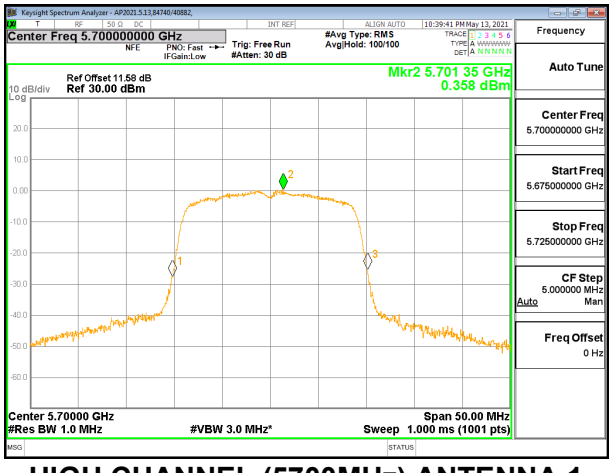


HIGH CHANNEL (5680MHz) ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL (5700MHz) ANTENNA 0



HIGH CHANNEL (5700MHz) ANTENNA 1

2TX Antenna 0 + Antenna 1 CDD MODE (IC)

Test Engineer:	84740/40882
Test Date:	2021-05-13, 2021-05-17

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5500	17.708	4.81	7.82	23.48	9.18
Mid	5580	17.626	4.81	7.82	23.46	9.18
High	5680	23.165	4.81	7.82	24.00	9.18
High	5700	17.544	4.81	7.82	23.44	9.18

Duty Cycle CF (dB)	1.48	**Included in Calculations of Corr'd PSD**

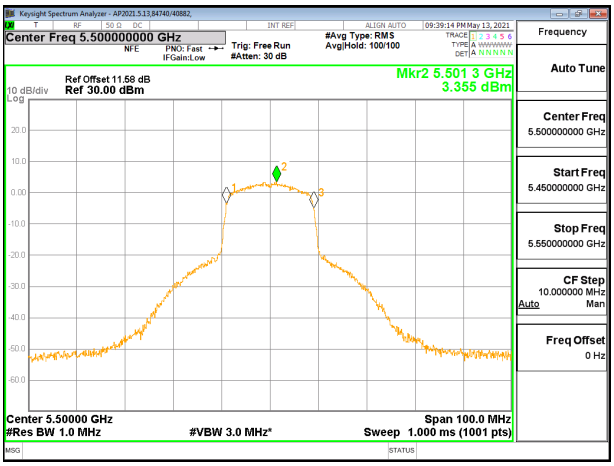
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	16.52	17.56	20.08	23.48	-3.40
Mid	5580	16.30	16.71	19.52	23.46	-3.94
High	5680	17.11	17.23	20.18	24.00	-3.82
High	5700	14.65	13.43	17.09	23.44	-6.35

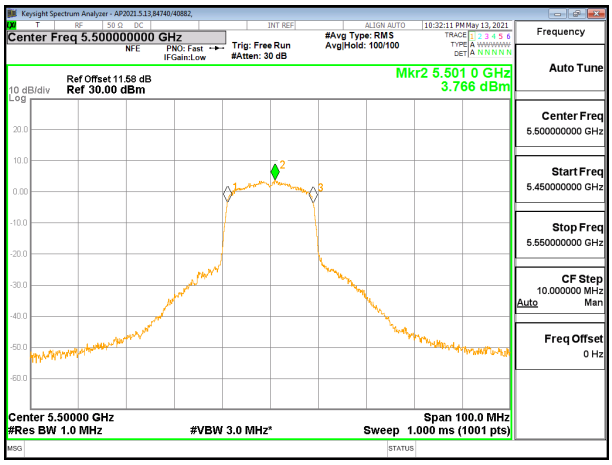
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/ 1MHz)	Antenna 1 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	3.355	3.768	8.06	9.18	-1.12
Mid	5580	4.702	3.323	8.56	9.18	-0.62
High	5680	4.556	4.033	8.79	9.18	-0.39
High	5700	1.826	0.358	5.64	9.18	-3.54

LOW CHANNEL

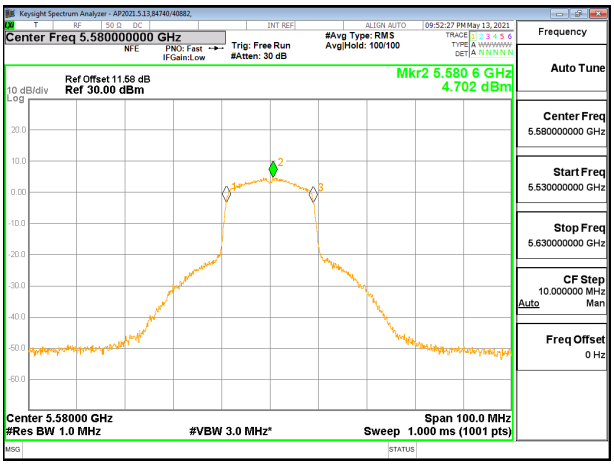


LOW CHANNEL ANTENNA 0

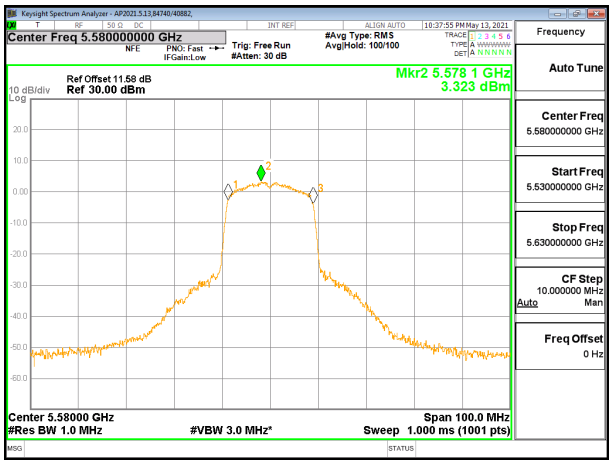


LOW CHANNEL ANTENNA 1

MID CHANNEL

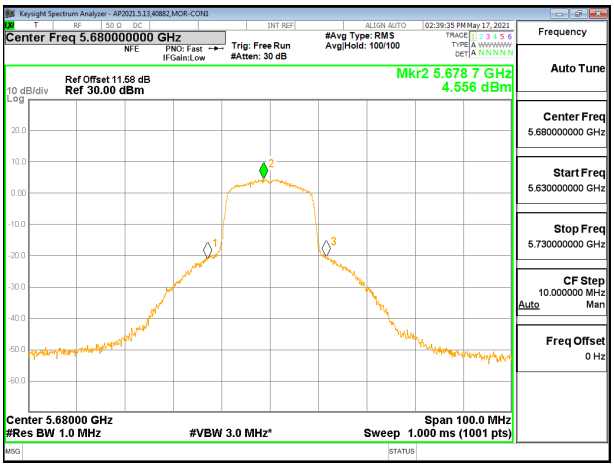


MID CHANNEL ANTENNA 0

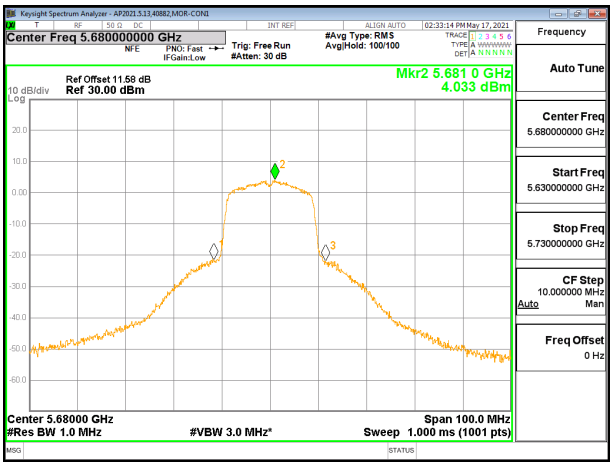


MID CHANNEL ANTENNA 1

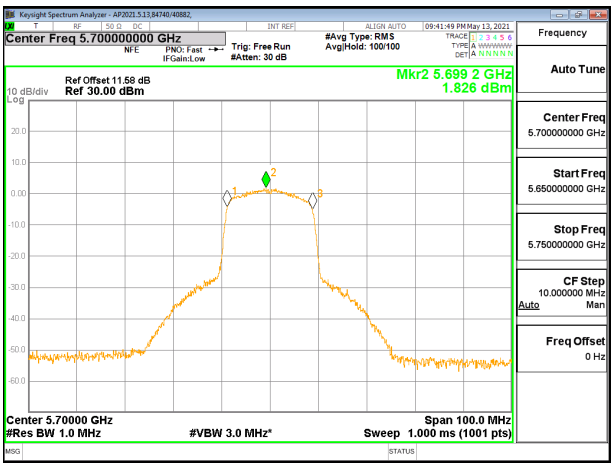
HIGH CHANNEL



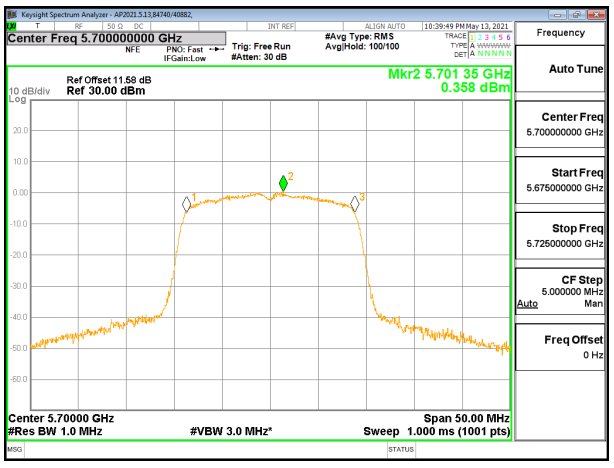
HIGH CHANNEL (5680 MHz) ANTENNA 0



HIGH CHANNEL (5680 MHz) ANTENNA 1



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

9.5.7. 802.11a MODE IN THE 5.8 GHz BAND

2TX Antenna 0 + Antenna 1 CDD MODE (FCC)

Test Engineer:	84740/40882
Test Date:	2021-05-13

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBm)	FCC/ISED Power Limit (dBm)	FCC/ISED PSD Limit (dBm/ 500KHz)
Low	5745	4.86	7.87	30.00	28.13
Mid	5785	4.86	7.87	30.00	28.13
High	5825	4.86	7.87	30.00	28.13

Duty Cycle CF (dB)	1.39	**Included in Calculations of Corr'd Power & PSD**

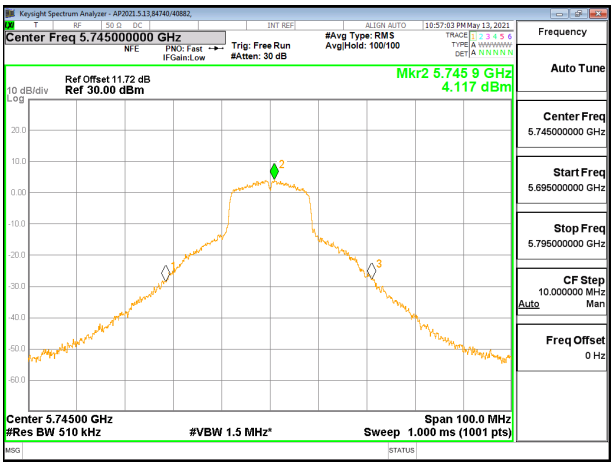
Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	20.70	19.02	22.95	30.00	-7.05
Mid	5785	20.61	18.72	22.78	30.00	-7.22
High	5825	20.50	18.56	22.65	30.00	-7.35

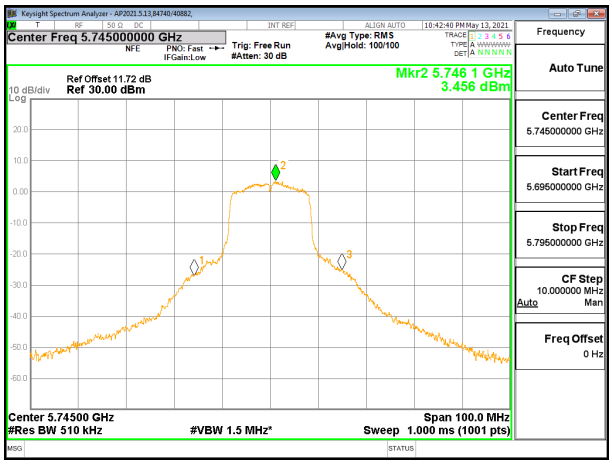
PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/ 500KHz)	Antenna 1 Meas PSD (dBm/ 500KHz)	Total Corr'd PSD (dBm/ 500KHz)	PSD Limit (dBm/ 500KHz)	PSD Margin (dB)
Low	5745	4.117	3.456	8.199	28.13	-19.93
Mid	5785	3.291	3.446	7.769	28.13	-20.36
High	5825	3.233	3.387	7.711	28.13	-20.42

LOW CHANNEL

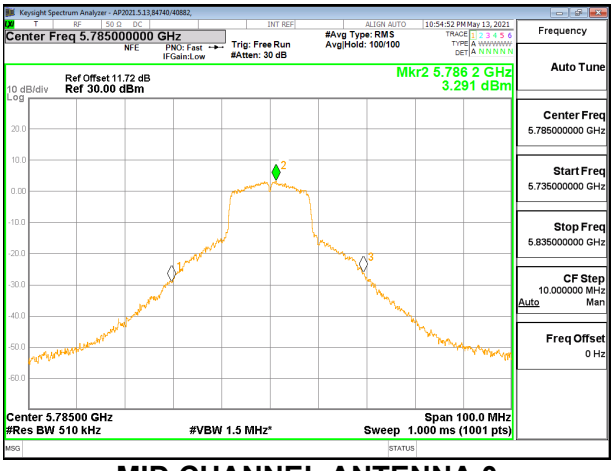


LOW CHANNEL ANTENNA 0

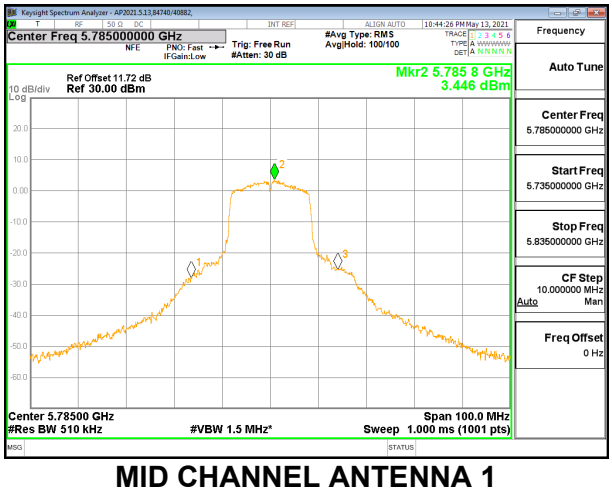


LOW CHANNEL ANTENNA 1

MID CHANNEL

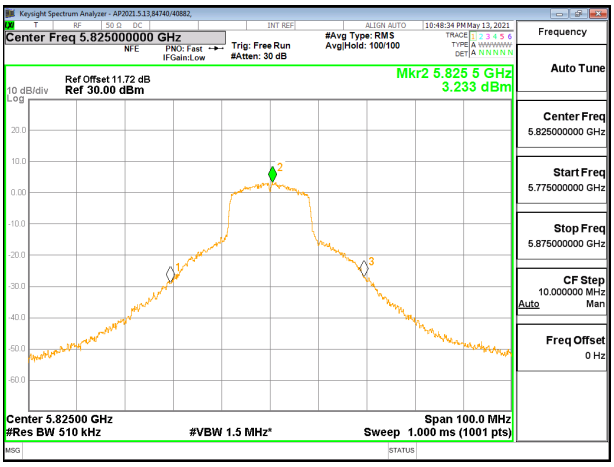


MID CHANNEL ANTENNA 0

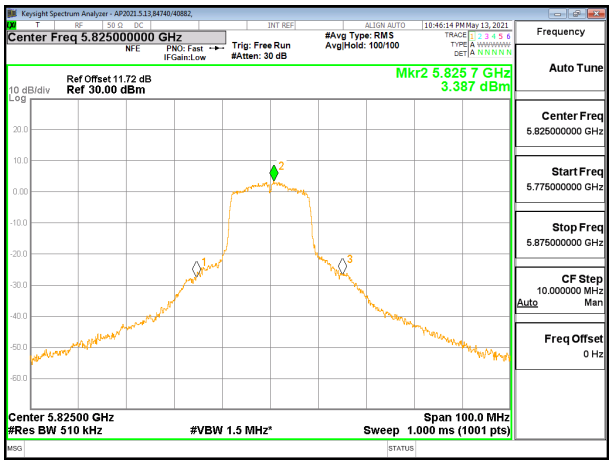


MID CHANNEL ANTENNA 1

HIGH CHANNEL



HIGH CHANNEL ANTENNA 0



HIGH CHANNEL ANTENNA 1

2TX Antenna 0 + Antenna 1 CDD MODE (IC)

Test Engineer:	84740/40882
Test Date:	2021-05-13

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain For Power (dBi)	Directional Gain For PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 500KHz)
Low	5745	4.86	7.87	30.00	28.13
Mid	5785	4.86	7.87	30.00	28.13
High	5825	4.86	7.87	30.00	28.13

Duty Cycle CF (dB)	1.39	**Included in Calculations of Corr'd PSD**

Output Power Results

Channel	Frequency (MHz)	Antenna 0 Meas Power (dBm)	Antenna 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	20.70	19.02	22.95	30.00	-7.05
Mid	5785	20.61	18.72	22.78	30.00	-7.22
High	5825	20.50	18.56	22.65	30.00	-7.35

PSD Results

Channel	Frequency (MHz)	Antenna 0 Meas PSD (dBm/ 500KHz)	Antenna 1 Meas PSD (dBm/ 500KHz)	Total Corr'd PSD (dBm/ 500KHz)	PSD Limit (dBm/ 500KHz)	PSD Margin (dB)
Low	5745	4.117	3.456	8.20	28.13	-19.93
Mid	5785	3.291	3.446	7.77	28.13	-20.36
High	5825	3.233	3.387	7.71	28.13	-20.42