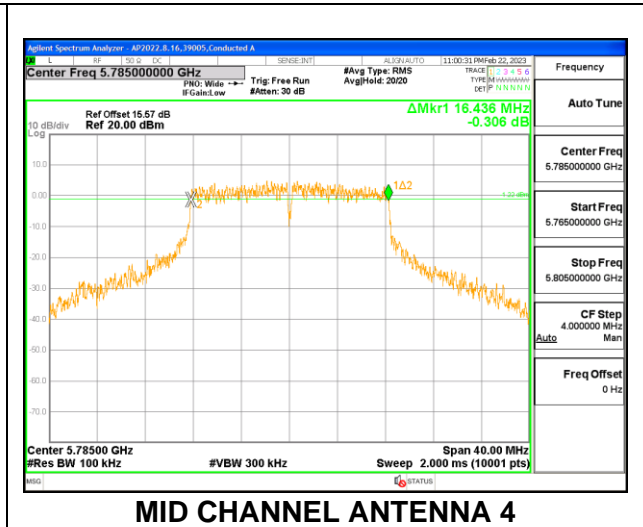
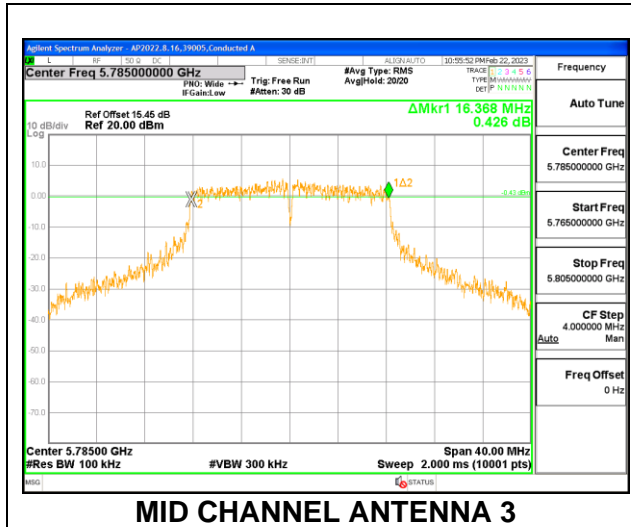
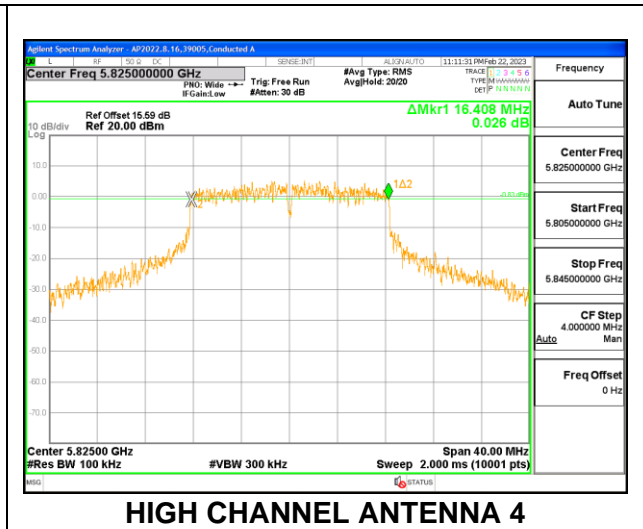
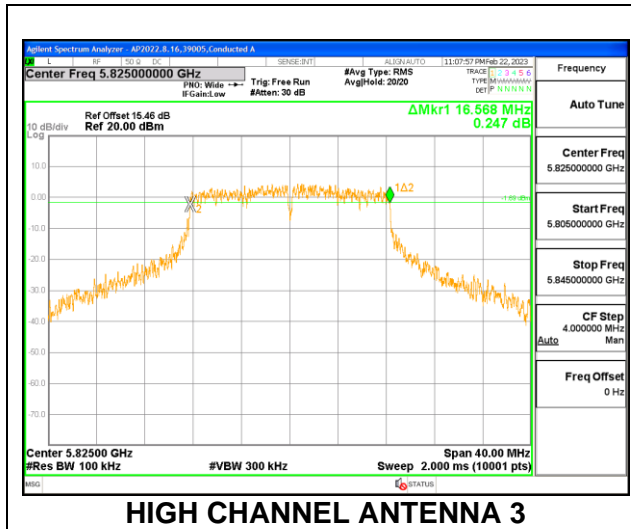


MID CHANNEL



HIGH CHANNEL

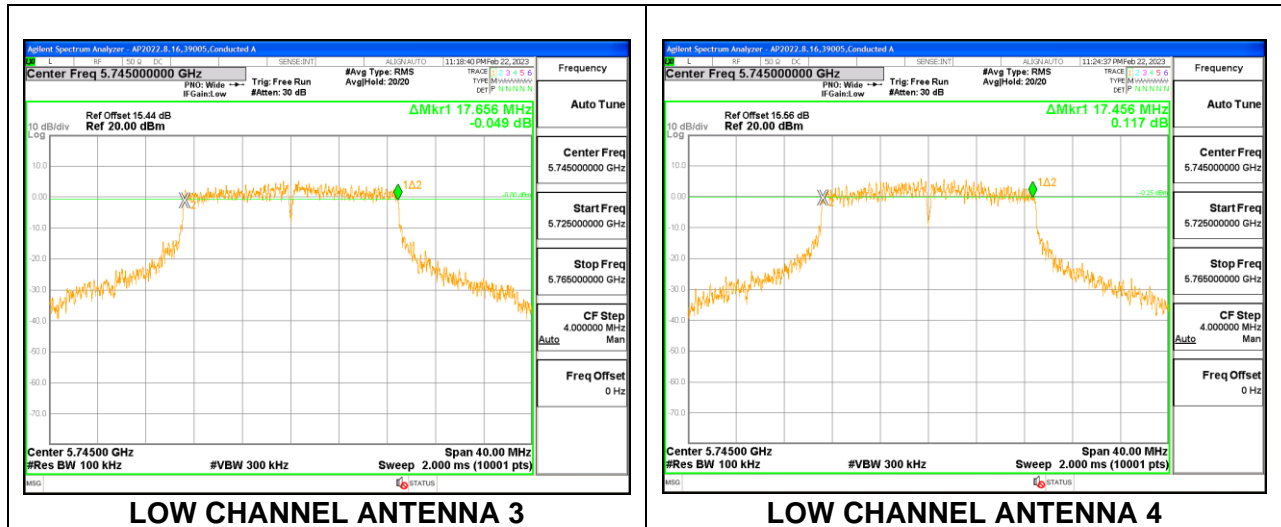


9.4.2. 802.11n HT20 MODE IN THE 5.8 GHz BAND

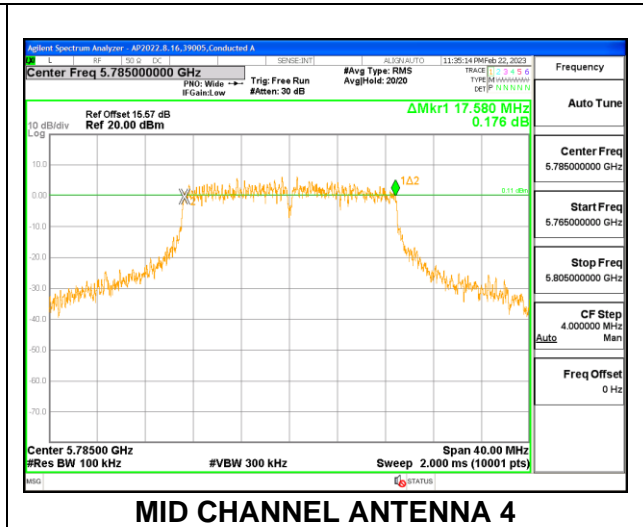
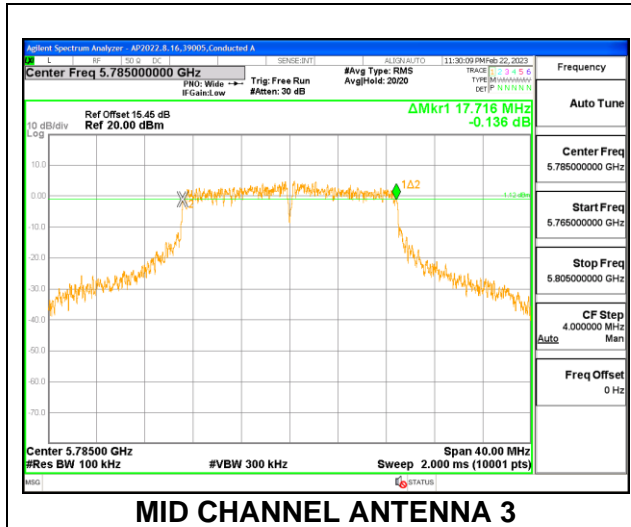
2TX Antenna 3 + Antenna 4 CDD MODE

Channel	Frequency (MHz)	6 dB BW Antenna 3 (MHz)	6 dB BW Antenna 4 (MHz)	Minimum Limit (MHz)
Low	5745	17.656	17.456	0.5
Mid	5785	17.716	17.580	0.5
High	5825	17.668	17.604	0.5

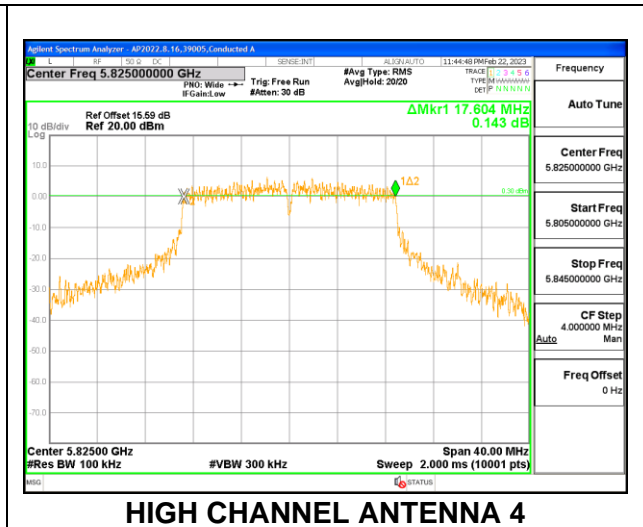
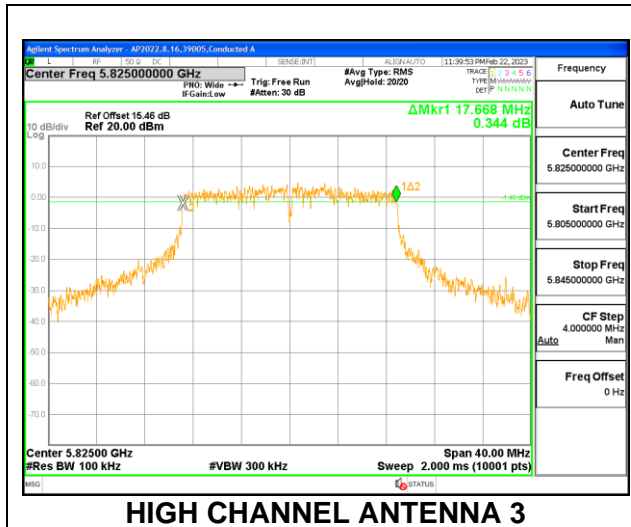
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL

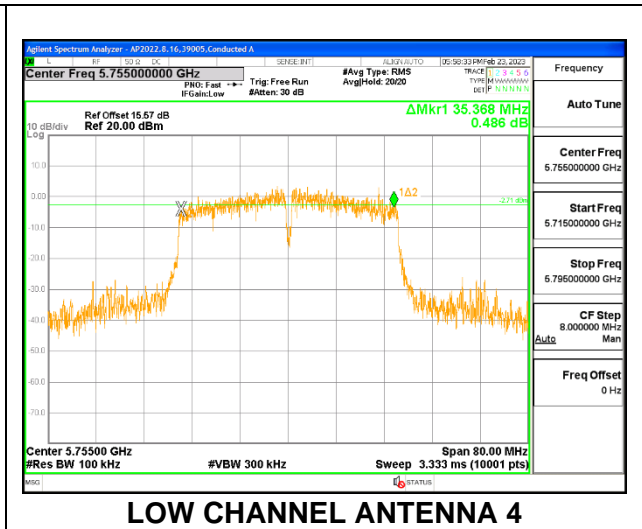
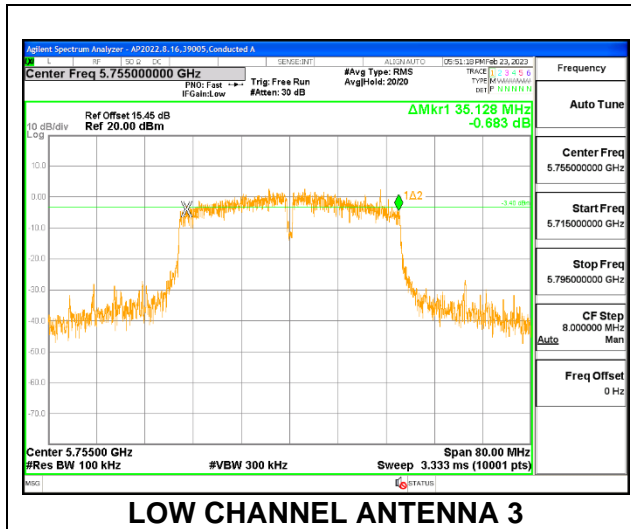


9.4.3. 802.11n HT40 MODE IN THE 5.8 GHz BAND

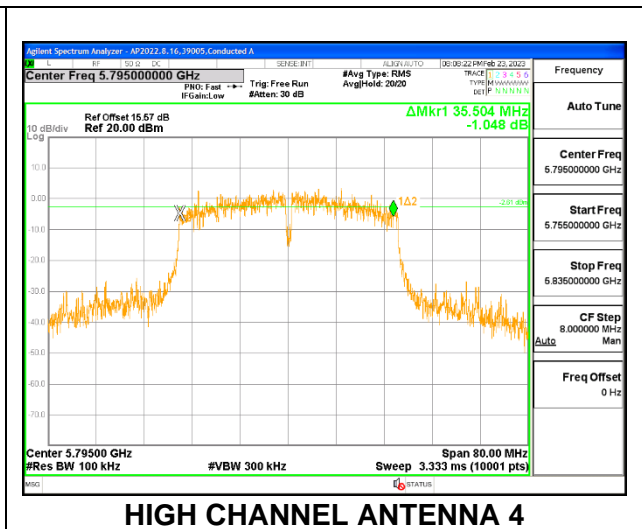
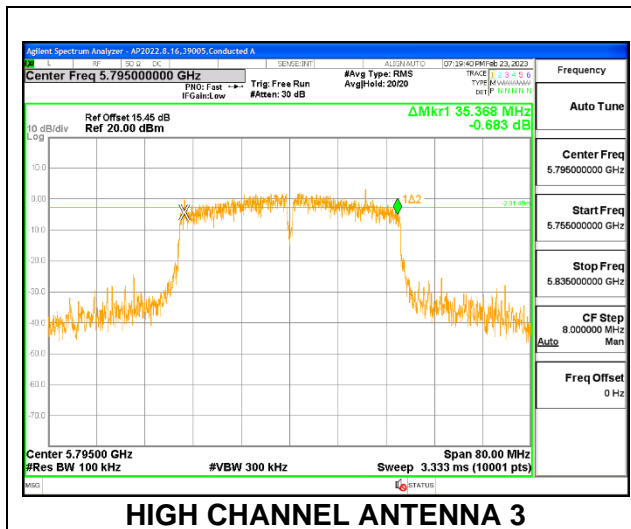
2TX Antenna 3 + Antenna 4 CDD MODE

Channel	Frequency (MHz)	6 dB BW Antenna 3 (MHz)	6 dB BW Antenna 4 (MHz)	Minimum Limit (MHz)
Low	5755	35.128	35.368	0.5
High	5795	35.368	35.504	0.5

LOW CHANNEL



HIGH CHANNEL

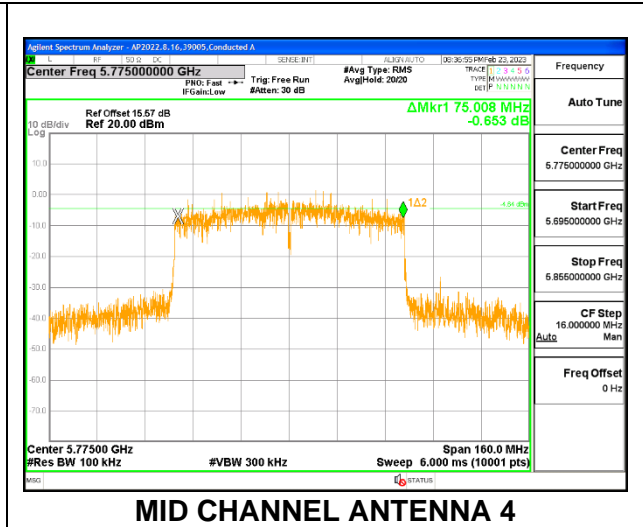
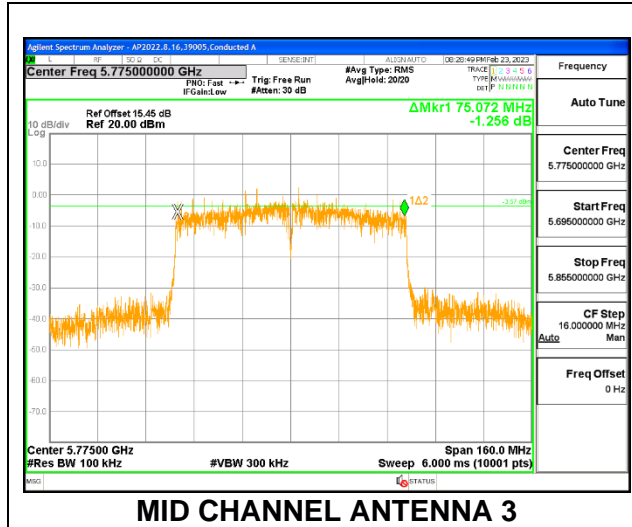


9.4.4. 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

2TX Antenna 3 + Antenna 4 CDD MODE

Channel	Frequency (MHz)	6 dB BW Antenna 3 (MHz)	6 dB BW Antenna 4 (MHz)	Minimum Limit (MHz)
Mid	5775	75.072	75.008	0.5

MID CHANNEL



9.5. 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) and for straddles channels KDB 789033 D02 v02r01, Section E.2.b (Method SA-1) was used.

The measurement method used for power spectral density is KDB 789033 D02 v02r01, Section F

The power output was measured on the EUT antenna port using SMA cable with 10dB attenuator connected to a power meter via wideband average power sensor. Gated average output power was read directly from power meter.

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:

NOTE: For 5.2GHz and 5.6GHz Bands worst case combination is Antenna 3 and antenna 2. For 5.3GHz Band worst case combination is Antenna 1 and antenna 2. For 5.8GHz Band worst case combination is Antenna 3 and antenna 4.

Antenna 1 and Antenna 2:

Band (GHz)	Chain 0 Antenna 1	Chain 1 Antenna 2	Uncorrelated Chains Directional	Correlated Chains Directional
	Gain (dBi)	Gain (dBi)	Gain (dBi)	Gain (dBi)
5.2	2.3	2.7	2.50	5.51
5.3	2.8	3.3	3.06	6.06
5.6	2.2	3.4	2.84	5.83
5.8	2.1	2.5	2.30	5.31

Antenna 1 and Antenna 4:

Band (GHz)	Chain 0 Antenna 1	Chain 1 Antenna 4	Uncorrelated Chains Directional	Correlated Chains Directional
	Gain (dBi)	Gain (dBi)	Gain (dBi)	Gain (dBi)
5.2	2.3	2.6	2.45	5.46
5.3	2.8	2.5	2.65	5.66
5.6	2.2	3.3	2.78	5.78
5.8	2.1	3	2.57	5.57

Antenna 3 and Antenna 2:

Band (GHz)	Chain 0 Antenna 3	Chain 1 Antenna 2	Uncorrelated Chains Directional	Correlated Chains Directional
	Gain (dBi)	Gain (dBi)	Gain (dBi)	Gain (dBi)
5.2	2.6	2.7	2.65	5.66
5.3	2.4	3.3	2.87	5.87
5.6	2.9	3.4	3.16	6.16
5.8	2.2	2.5	2.35	5.36

Antenna 3 and Antenna 4:

Band (GHz)	Chain 0 Antenna 3 Gain (dBi)	Chain 1 Antenna 4 Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	2.6	2.6	2.60	5.61
5.3	2.4	2.5	2.45	5.46
5.6	2.9	3.3	3.10	6.11
5.8	2.2	3.0	2.62	5.62

RESULTS

9.5.1. 802.11a MODE IN THE 5.2 GHz BAND

2TX Antenna 3 + Antenna 2 CDD MODE (FCC)

Test Engineer:	RA 39005
Test Date:	2023-02-21

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	2.65	5.66	24.00	11.00
Mid	5200	2.65	5.66	24.00	11.00
High	5240	2.65	5.66	24.00	11.00

Duty Cycle CF (dB)	1.61	Included in Calculations of Corr'd PSD
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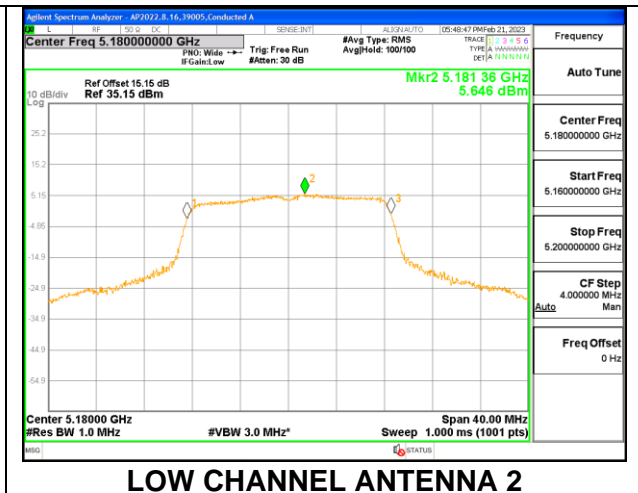
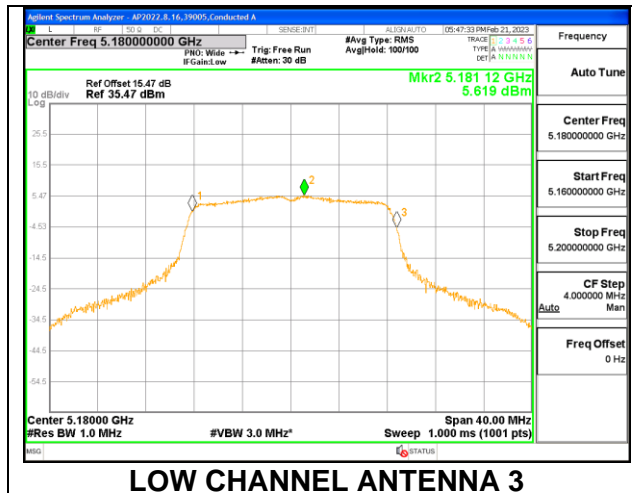
Output Power Results

Channel	Frequency (MHz)	Antenna 3 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.44	18.43	21.45	24.00	-2.55
Mid	5200	18.40	18.76	21.59	24.00	-2.41
High	5240	18.83	18.85	21.85	24.00	-2.15

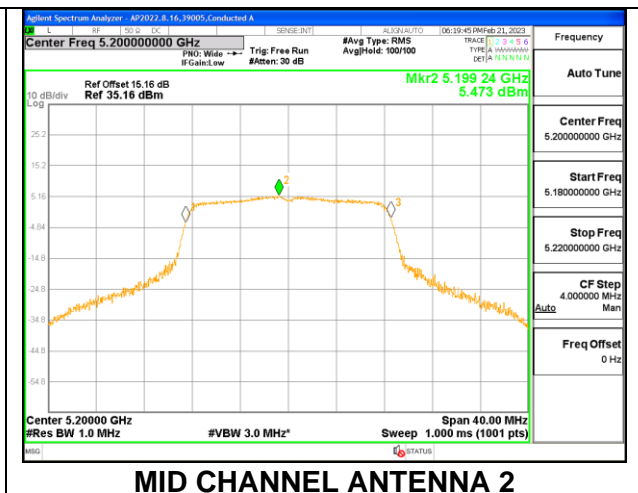
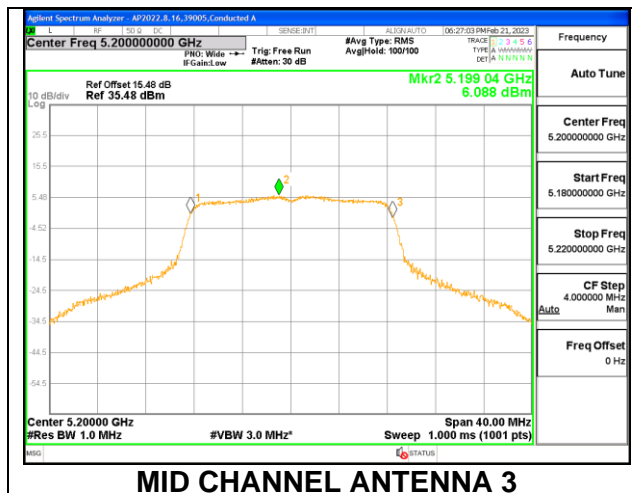
PSD Results

Channel	Frequency (MHz)	Antenna 3 Meas PSD (dBm/1MHz)	Antenna 2 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5180	5.62	5.65	10.25	11.00	-0.75
Mid	5200	6.09	5.47	10.41	11.00	-0.59
High	5240	5.97	5.45	10.34	11.00	-0.66

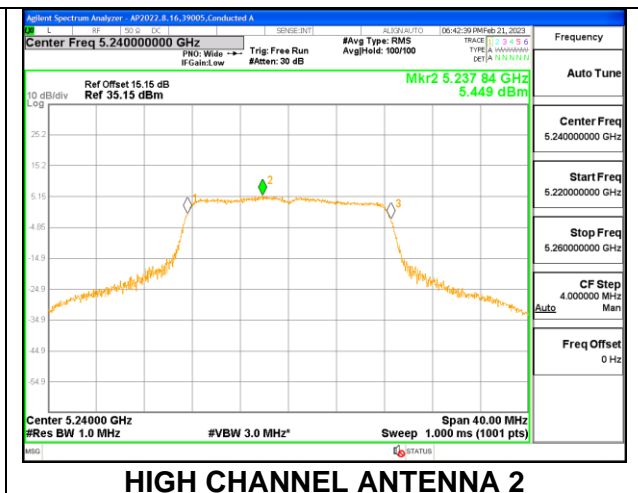
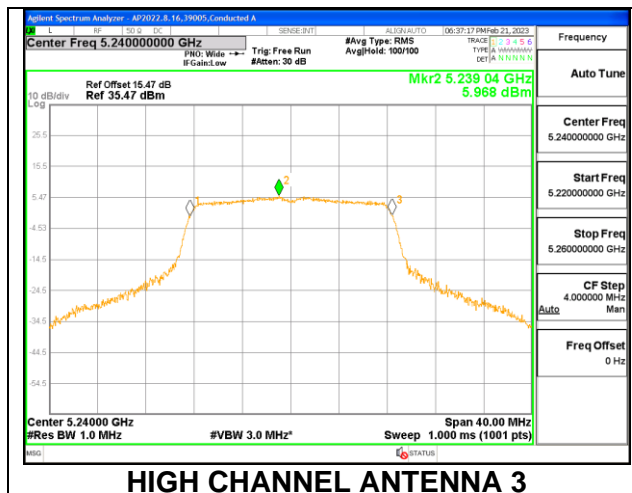
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



(IC)

Test Engineer:	CW20756
Test Date:	2023-02-23

(Note: IC PSD was tested by radiated method)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)
Low	5180	16.964
Mid	5200	16.727
High	5240	16.725

Limits

Channel	Frequency (MHz)	ISED EIRP Limit (dBm)	ISED EIRP PSD Limit (dBm/ 1MHz)
Low	5180	22.30	10.00
Mid	5200	22.23	10.00
High	5240	22.23	10.00

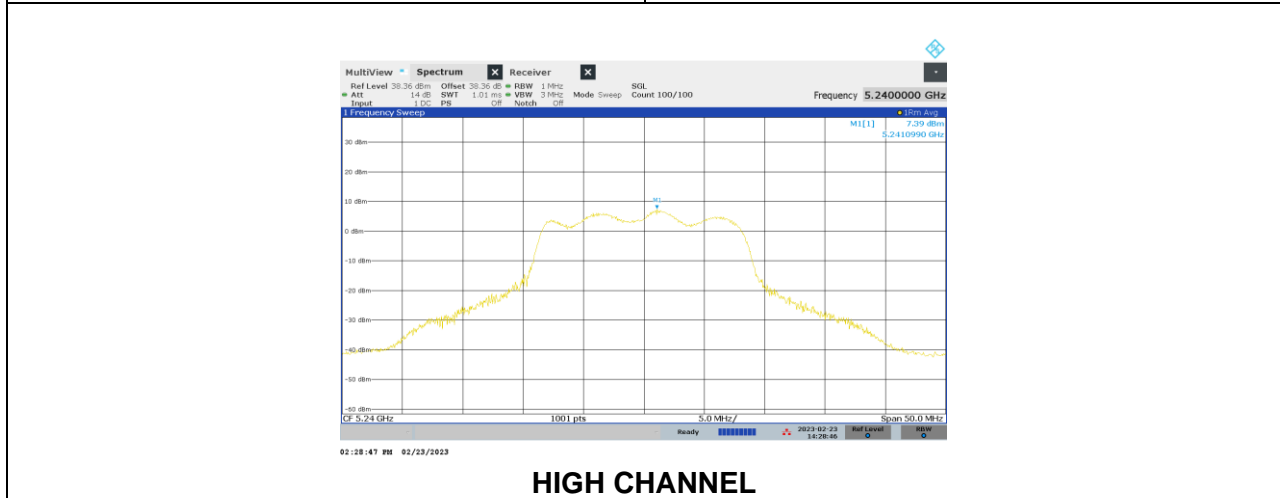
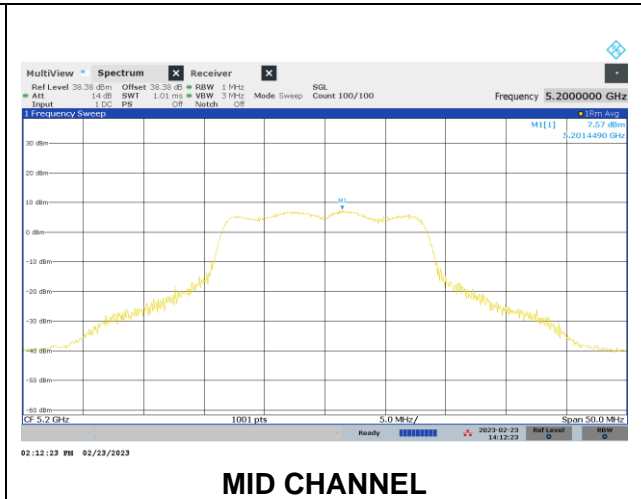
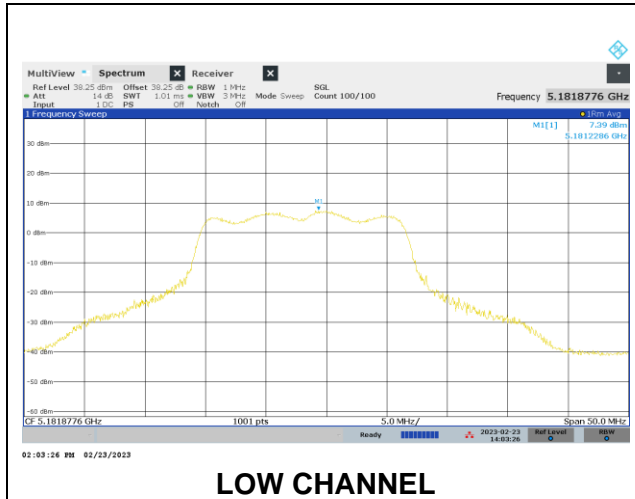
Duty Cycle CF (dB)	1.61	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Total Meas Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.83	22.30	-3.47
Mid	5200	19.12	22.23	-3.11
High	5240	17.79	22.23	-4.44

PSD Results

Channel	Frequency (MHz)	Total Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	7.39	9.00	10.00	-1.00
Mid	5200	7.57	9.18	10.00	-0.82
High	5240	7.39	9.00	10.00	-1.00



9.5.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

2TX Antenna 3 + Antenna 2 CDD MODE (FCC)

Test Engineer:	RA 39005
Test Date:	2023-02-21

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	2.65	5.66	24.00	11.00
Mid	5200	2.65	5.66	24.00	11.00
High	5240	2.65	5.66	24.00	11.00

Duty Cycle CF (dB)	1.69	Included in Calculations of Corr'd PSD
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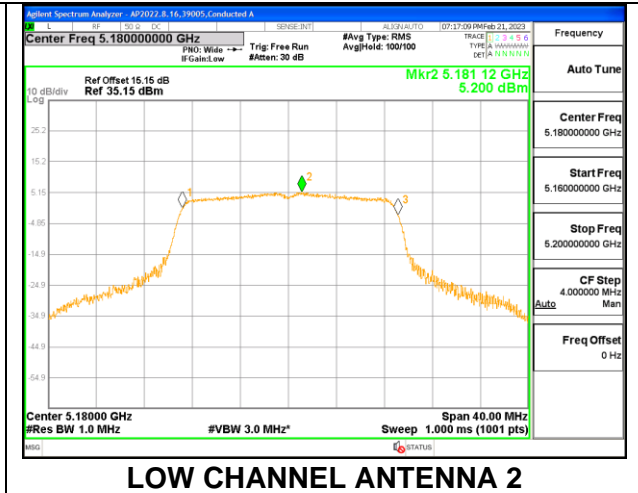
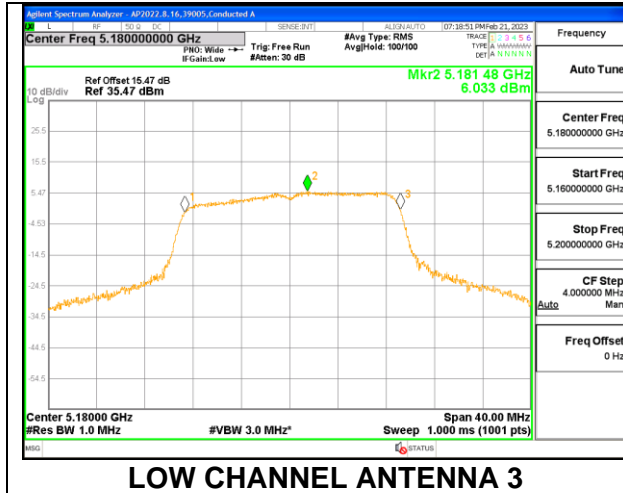
Output Power Results

Channel	Frequency (MHz)	Antenna 3 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.26	18.57	21.43	24.00	-2.57
Mid	5200	18.68	18.70	21.70	24.00	-2.30
High	5240	18.76	18.83	21.81	24.00	-2.19

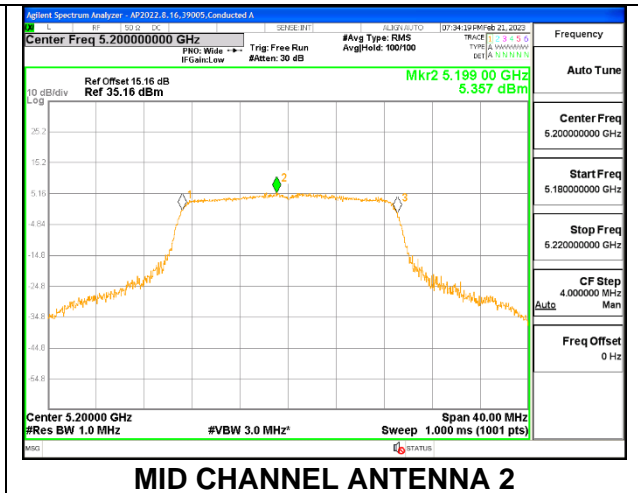
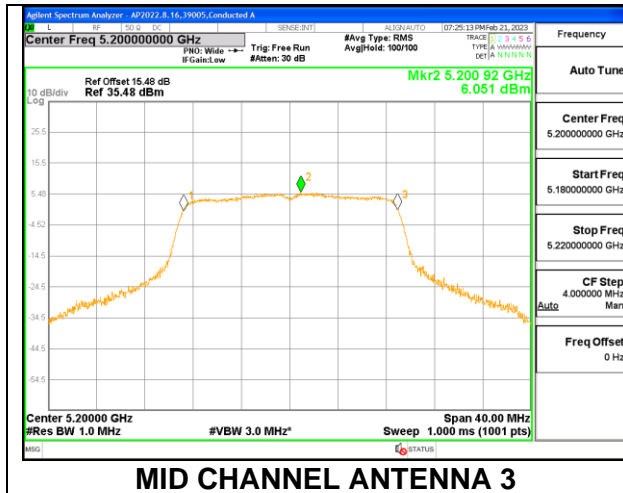
PSD Results

Channel	Frequency (MHz)	Antenna 3 Meas PSD (dBm/1MHz)	Antenna 2 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5180	6.03	5.20	10.34	11.00	-0.66
Mid	5200	6.05	5.36	10.42	11.00	-0.58
High	5240	6.16	5.41	10.50	11.00	-0.50

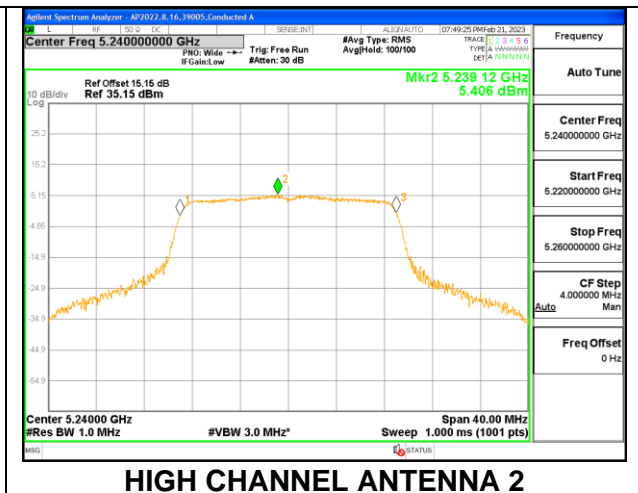
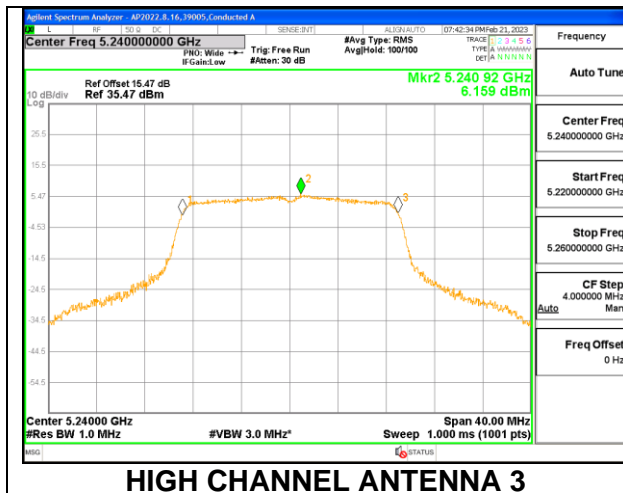
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



(IC)

Test Engineer:	CW20756
Test Date:	2023-02-23

(Note: IC PSD was tested by radiated method)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)
Low	5180	17.847
Mid	5200	17.719
High	5240	17.834

Limits

Channel	Frequency (MHz)	ISED EIRP Limit (dBm)	ISED EIRP PSD Limit (dBm/ 1MHz)
Low	5180	22.52	10.00
Mid	5200	22.48	10.00
High	5240	22.51	10.00

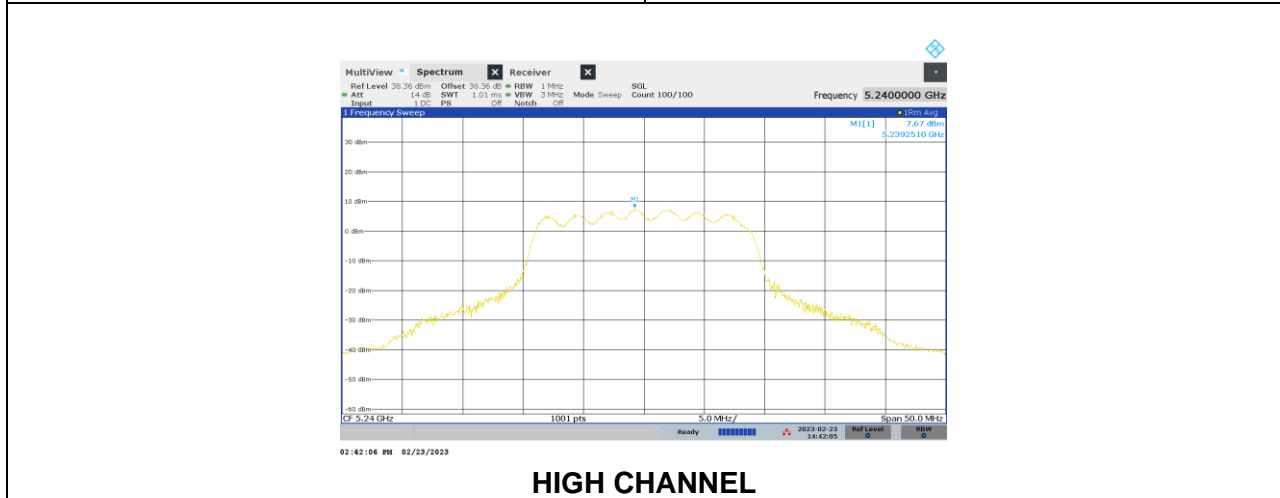
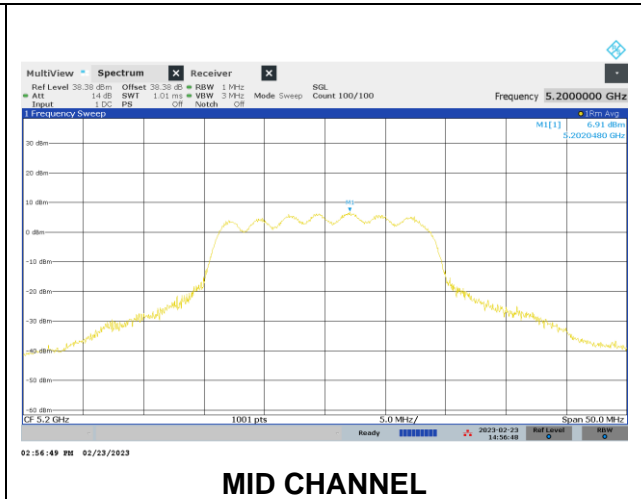
Duty Cycle CF (dB)	1.69	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Total Meas Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.23	22.52	-4.29
Mid	5200	17.42	22.48	-5.06
High	5240	17.90	22.51	-4.61

PSD Results

Channel	Frequency (MHz)	Total Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	7.02	8.71	10.00	-1.29
Mid	5200	6.91	8.60	10.00	-1.40
High	5240	7.67	9.36	10.00	-0.64



9.5.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

2TX Antenna 3 + Antenna 2 CDD MODE (FCC)

Test Engineer:	RA 39005
Test Date:	2023-02-21

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	2.65	5.66	24.00	11.00
High	5230	2.65	5.66	24.00	11.00

Duty Cycle CF (dB)	2.96	Included in Calculations of Corr'd PSD
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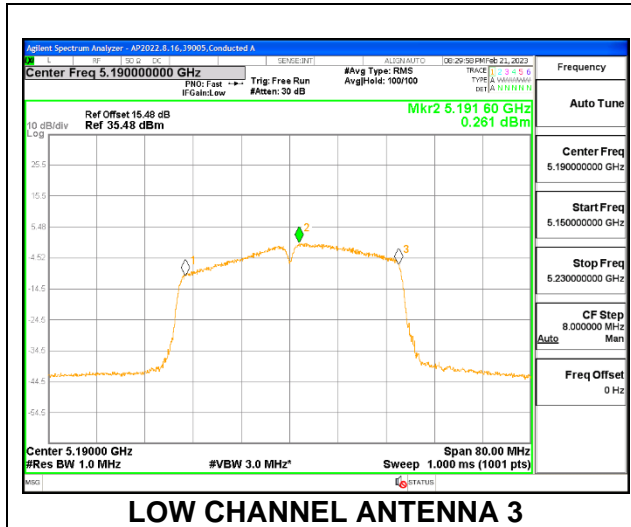
Output Power Results

Channel	Frequency (MHz)	Antenna 3 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.61	15.93	18.78	24.00	-5.22
High	5230	15.46	15.32	18.40	24.00	-5.60

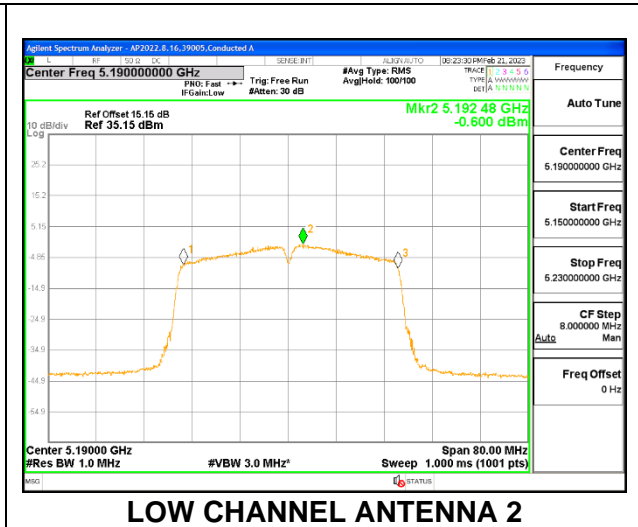
PSD Results

Channel	Frequency (MHz)	Antenna 3 Meas PSD (dBm/ 1MHz)	Antenna 2 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	0.26	-0.60	5.82	11.00	-5.18
High	5230	-0.81	-1.37	4.89	11.00	-6.11

LOW CHANNEL

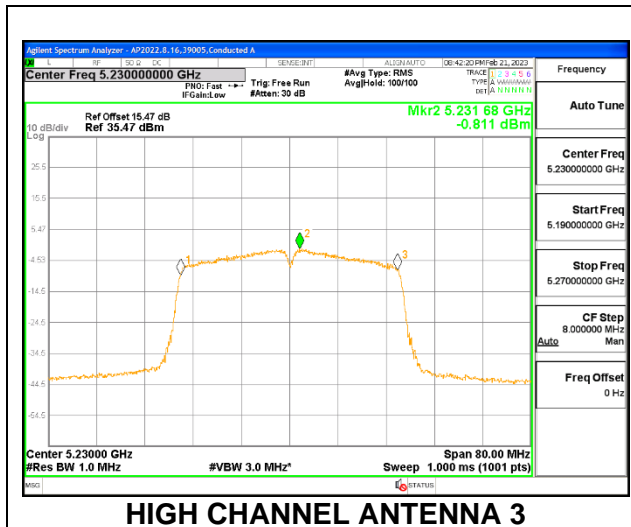


LOW CHANNEL ANTENNA 3

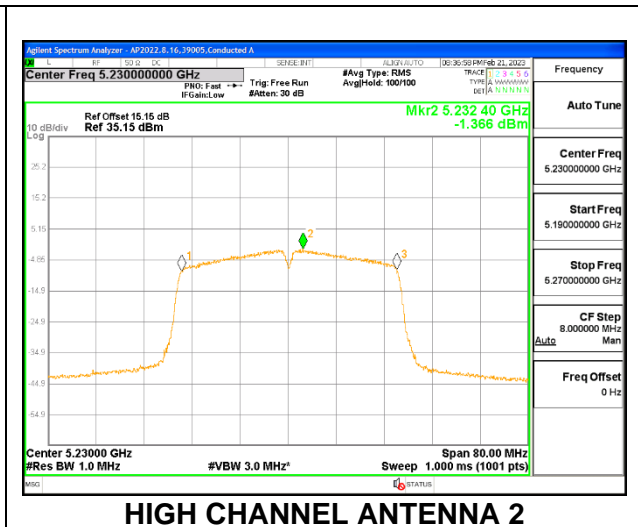


LOW CHANNEL ANTENNA 2

HIGH CHANNEL



HIGH CHANNEL ANTENNA 3



HIGH CHANNEL ANTENNA 2

(IC)

Test Engineer:	CW20756
Test Date:	2023-02-23

(Note: IC PSD was tested by radiated method)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)
Low	5190	35.391
High	5230	35.941

Limits

Channel	Frequency (MHz)	ISED EIRP Limit (dBm)	ISED eirp PSD Limit (dBm/ 1MHz)
Low	5190	23.00	10.00
High	5230	23.00	10.00

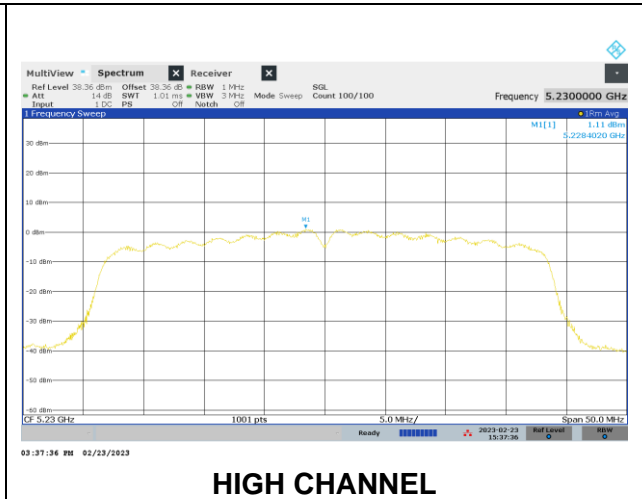
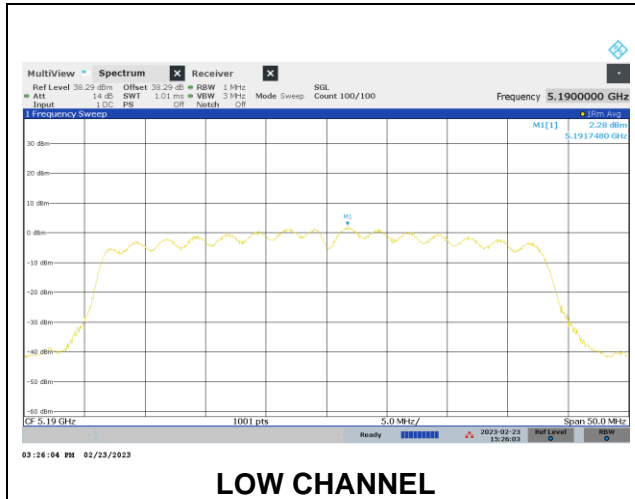
Duty Cycle CF (dB)	2.96	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Total Meas Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	15.30	23.00	-7.70
High	5230	14.93	23.00	-8.07

PSD Results

Channel	Frequency (MHz)	Total Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	2.28	5.24	10.00	-4.76
High	5230	1.11	4.07	10.00	-5.93



9.5.4. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

2TX Antenna 3 + Antenna 2 CDD MODE (FCC)

Test Engineer:	RA 39005
Test Date:	2023-02-21

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	2.65	5.66	24.00	11.00

Duty Cycle CF (dB)	4.69	Included in Calculations of Corr'd PSD
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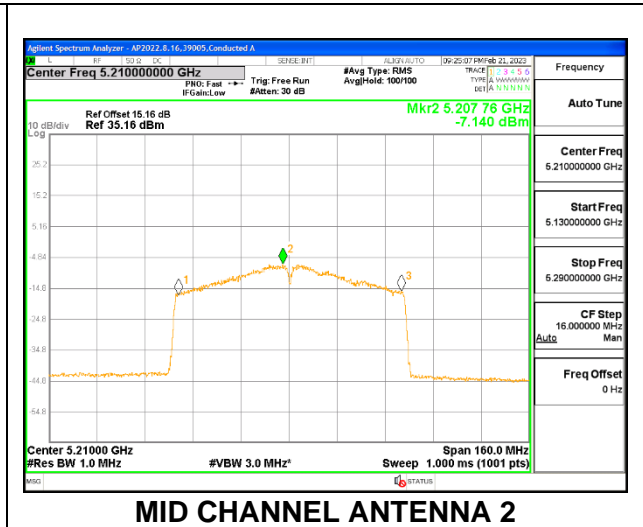
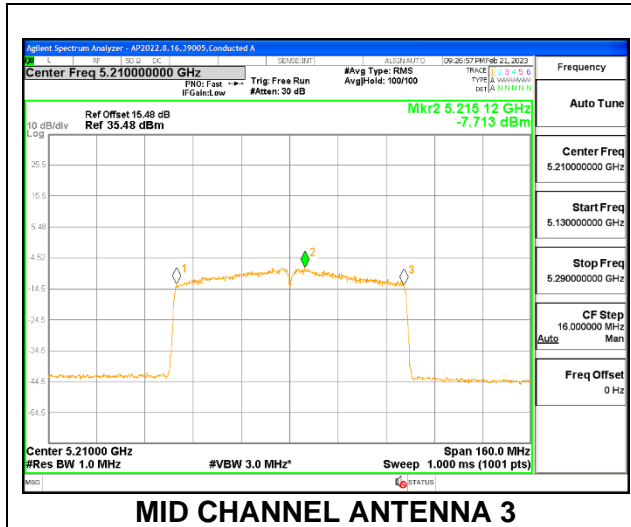
Output Power Results

Channel	Frequency (MHz)	Antenna 3 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	13.21	13.25	16.24	24.00	-7.76

PSD Results

Channel	Frequency (MHz)	Antenna 3 Meas PSD (dBm/ 1MHz)	Antenna 2 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-7.71	-7.14	0.28	11.00	-10.72

MID CHANNEL



(IC)

Test Engineer:	CW20756
Test Date:	2023-02-23

(Note: IC PSD was tested by radiated method)

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)
Mid	5210	75.247

Limits

Channel	Frequency (MHz)	ISED EIRP Limit (dBm)	ISED EIRP PSD Limit (dBm/ 1MHz)
Mid	5210	23.00	10.00

Duty Cycle CF (dB)	4.69	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Total Meas Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	12.28	23.00	-10.72

PSD Results

Channel	Frequency (MHz)	Total Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	-6.80	-2.11	10.00	-12.11



9.5.5. 802.11a MODE IN THE 5.3 GHz BAND

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

Test Engineer:	RA 39005
Test Date:	2023-02-21

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5260	26.68	16.790	3.06	6.06
Mid	5300	26.76	16.761	3.06	6.06
High	5320	26.44	16.709	3.06	6.06

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5260	24.00	23.25	29.25	23.25	10.94	11.00	10.94
Mid	5300	24.00	23.24	29.24	23.24	10.94	11.00	10.94
High	5320	24.00	23.23	29.23	23.23	10.94	11.00	10.94

Duty Cycle CF (dB)	1.61	Included in Calculations of Corr'd PPSD
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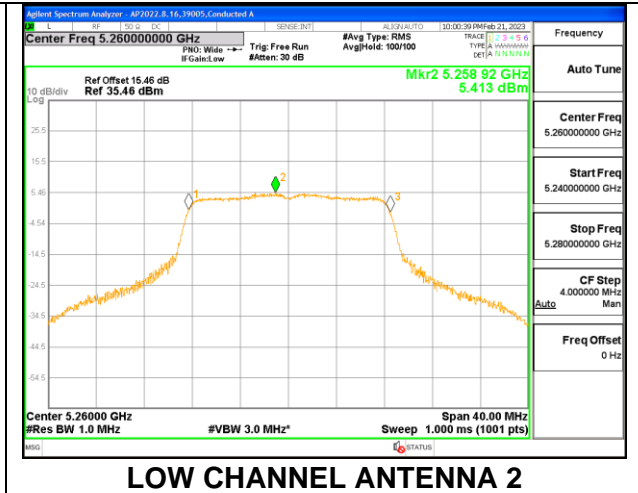
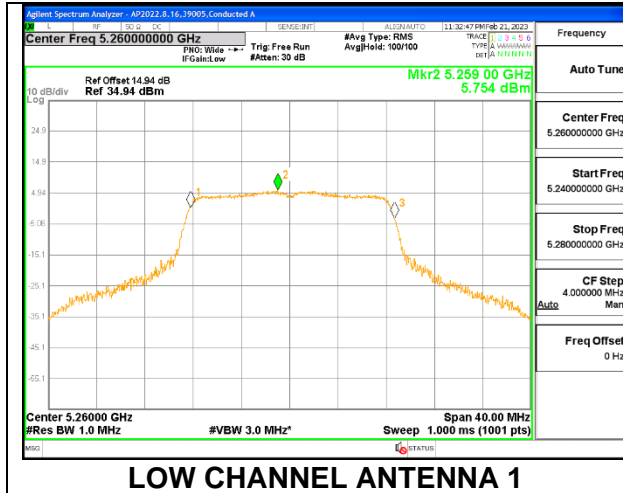
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	18.69	18.7	21.71	23.25	-1.55
Mid	5300	18.02	18.62	21.34	23.24	-1.90
High	5320	18.40	18.72	21.57	23.23	-1.66

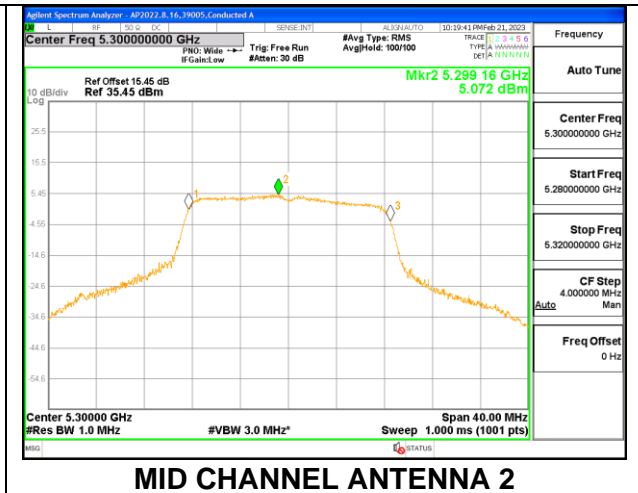
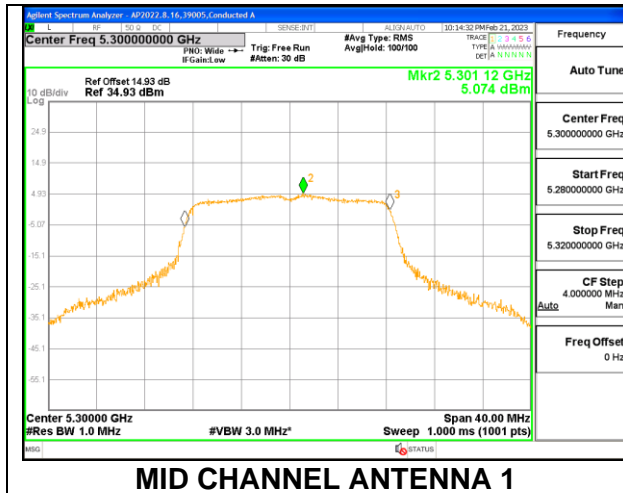
PPSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PPSD (dBm/ 1MHz)	Antenna 2 Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Low	5260	5.754	5.413	10.21	10.94	-0.73
Mid	5300	5.074	5.072	9.69	10.94	-1.25
High	5320	5.284	5.269	9.90	10.94	-1.04

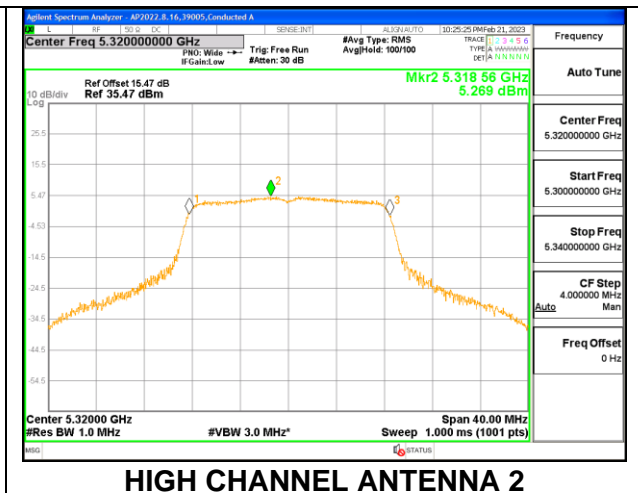
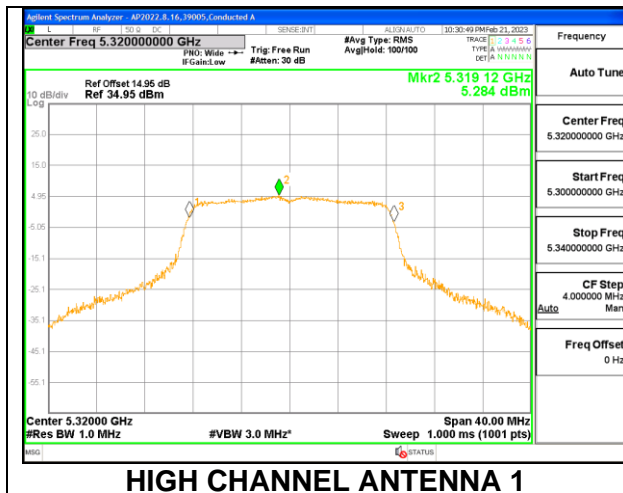
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



9.5.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

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

Test Engineer:	RA 39005
Test Date:	2023-02-21

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5260	27.00	17.852	3.06	6.06
Mid	5300	27.00	17.823	3.06	6.06
High	5320	27.20	17.857	3.06	6.06

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5260	24.00	23.52	29.52	23.52	10.94	11.00	10.94
Mid	5300	24.00	23.51	29.51	23.51	10.94	11.00	10.94
High	5320	24.00	23.52	29.52	23.52	10.94	11.00	10.94

Duty Cycle CF (dB)	1.69	Included in Calculations of Corr'd PPSD
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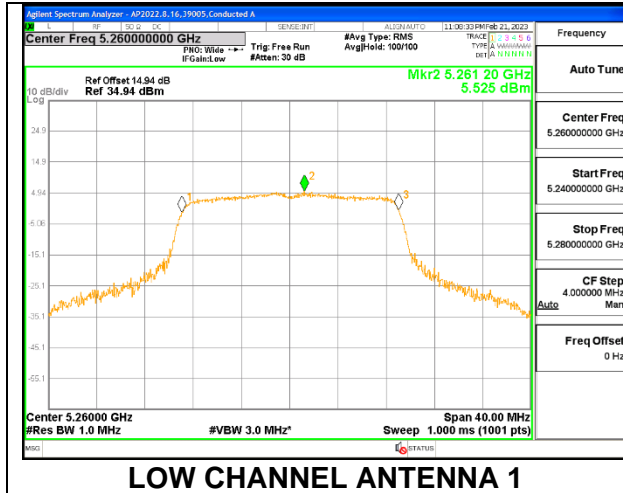
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	18.3	18.8	21.57	23.52	-1.95
Mid	5300	18.01	18.82	21.44	23.51	-2.07
High	5320	18.30	18.78	21.56	23.52	-1.96

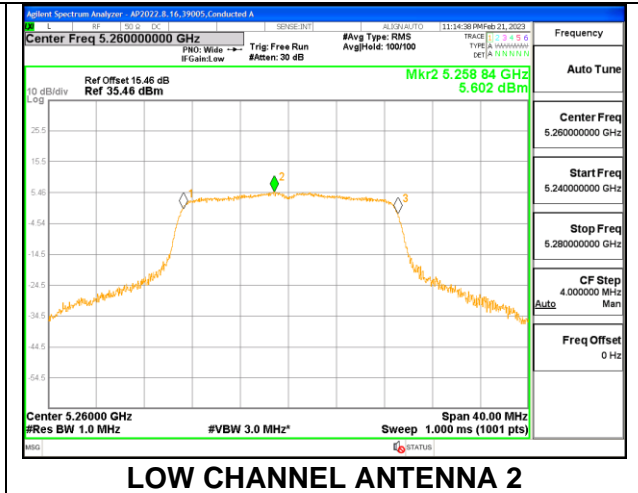
PPSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PPSD (dBm/ 1MHz)	Antenna 2 Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Low	5260	5.525	5.602	10.26	10.94	-0.68
Mid	5300	4.274	5.549	9.66	10.94	-1.28
High	5320	4.598	5.322	9.68	10.94	-1.26

LOW CHANNEL

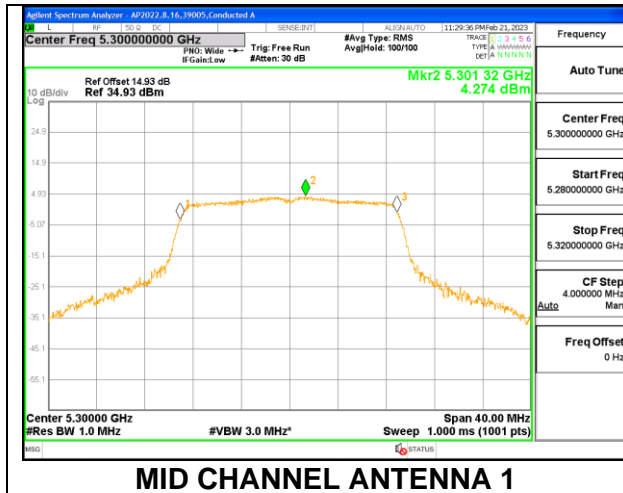


LOW CHANNEL ANTENNA 1

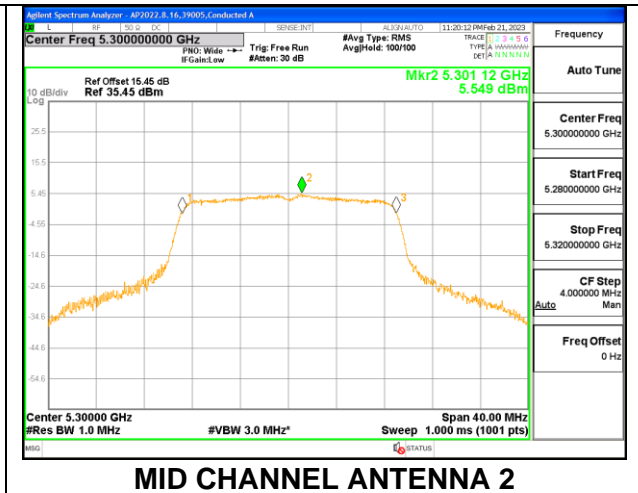


LOW CHANNEL ANTENNA 2

MID CHANNEL

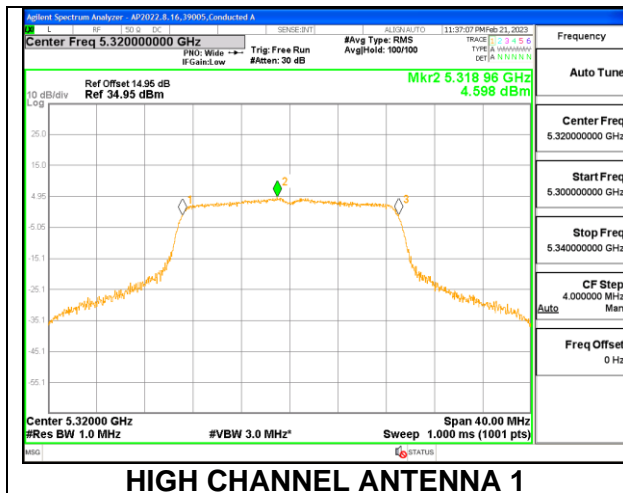


MID CHANNEL ANTENNA 1

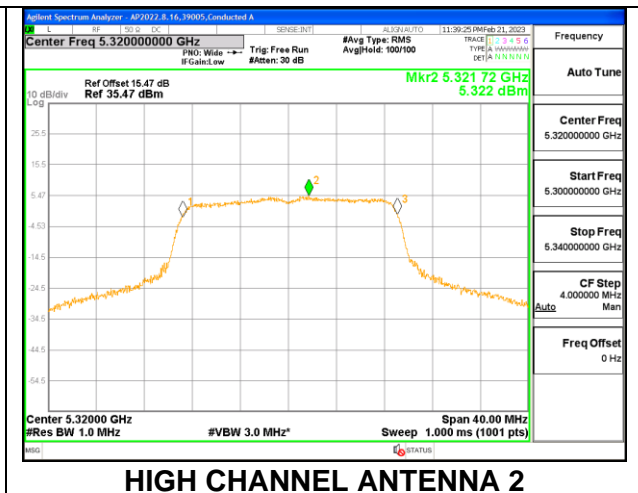


MID CHANNEL ANTENNA 2

HIGH CHANNEL



HIGH CHANNEL ANTENNA 1



HIGH CHANNEL ANTENNA 2

9.5.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

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

Test Engineer:	RA 39005
Test Date:	2023-02-22

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Low	5270	40.32	35.417	3.06	6.06
High	5310	41.12	36.012	3.06	6.06

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5270	24.00	24.00	30.00	24.00	10.94	11.00	10.94
High	5310	24.00	24.00	30.00	24.00	10.94	11.00	10.94

Duty Cycle CF (dB)	2.96	Included in Calculations of Corr'd PPSD
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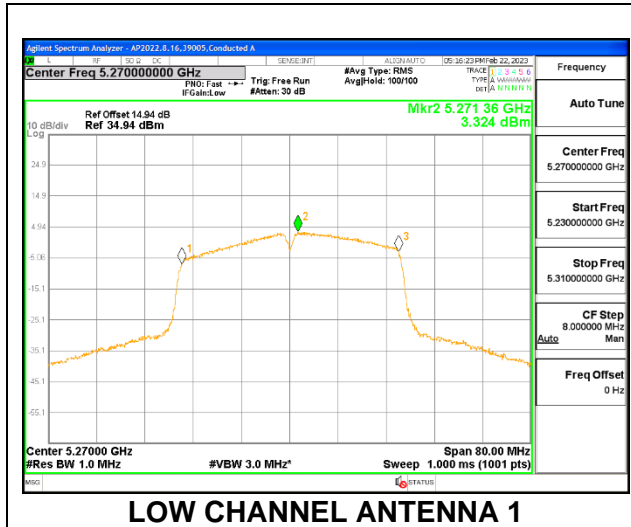
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	18.00	18.12	21.07	24.00	-2.93
High	5310	17.52	18.12	20.84	24.00	-3.16

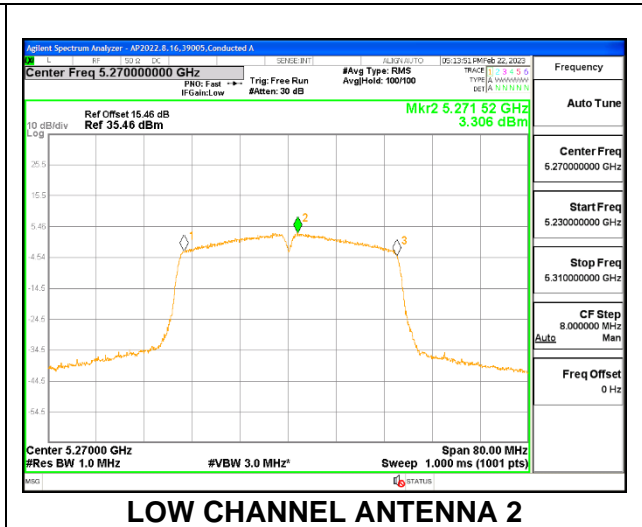
PPSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PPSD (dBm/ 1MHz)	Antenna 2 Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Low	5270	3.324	3.306	9.29	10.94	-1.65
High	5310	1.592	2.034	7.79	10.94	-3.15

LOW CHANNEL

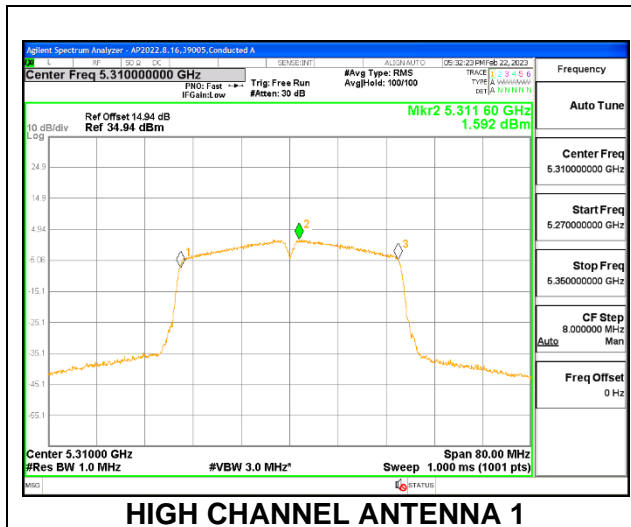


LOW CHANNEL ANTENNA 1

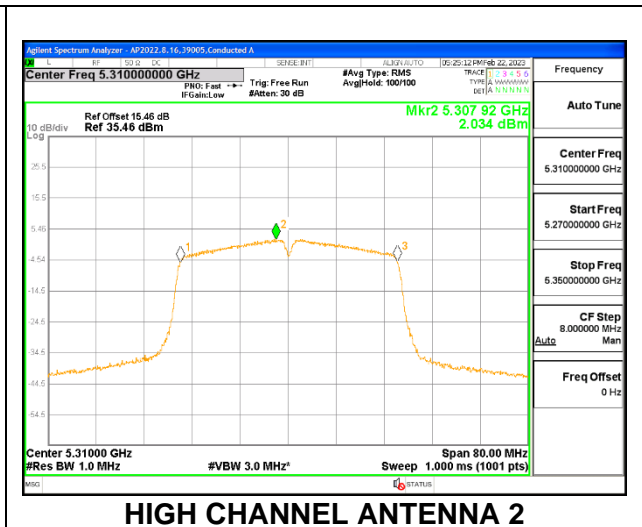


LOW CHANNEL ANTENNA 2

HIGH CHANNEL



HIGH CHANNEL ANTENNA 1



HIGH CHANNEL ANTENNA 2

9.5.8. 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

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

Test Engineer:	RA 39005
Test Date:	2023-02-22

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PPSD (dBi)
Mid	5290	80.32	74.598	3.06	6.06

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Mid	5290	24.00	24.00	30.00	24.00	10.94	11.00	10.94

Duty Cycle CF (dB)	4.69	Included in Calculations of Corr'd PPSD
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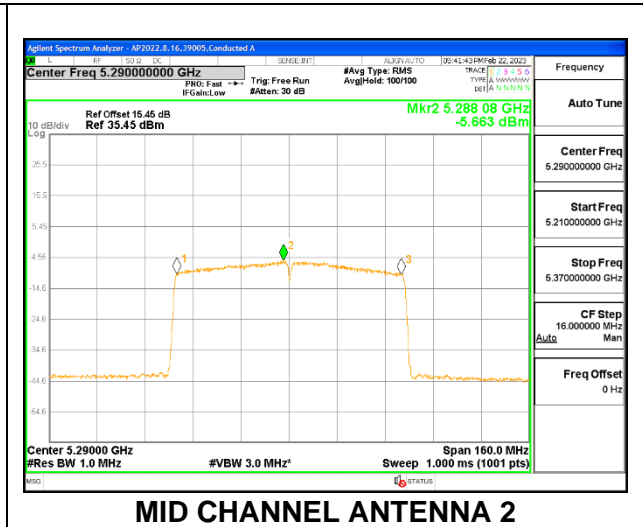
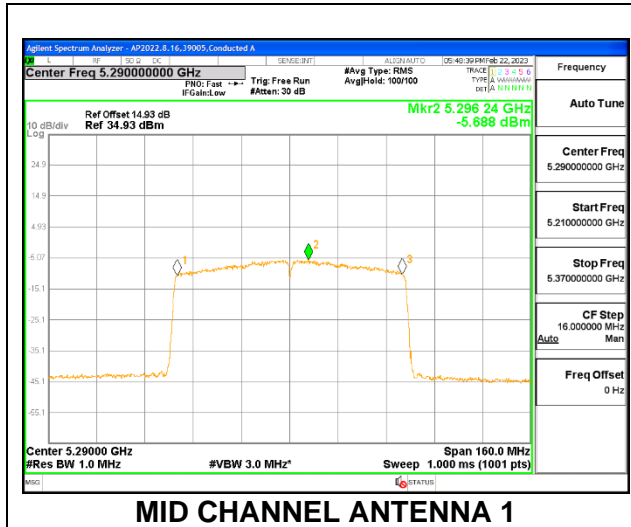
Output Power Results

Channel	Frequency (MHz)	Antenna 1 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	14.05	14.38	17.23	24.00	-6.77

PPSD Results

Channel	Frequency (MHz)	Antenna 1 Meas PPSD (dBm/ 1MHz)	Antenna 2 Meas PPSD (dBm/ 1MHz)	Total Corr'd PPSD (dBm/ 1MHz)	PPSD Limit (dBm/ 1MHz)	PPSD Margin (dB)
Mid	5290	-5.688	-5.663	2.02	10.94	-8.92

MID CHANNEL



9.5.9. 802.11a MODE IN THE 5.6 GHz BAND

2TX Antenna 3 + Antenna 2 CDD MODE (FCC+IC)

Test Engineer:	RA 39005
Test Date:	2023-02-22

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)
Low	5500	26.80	16.781	3.16	6.16
Mid	5580	26.16	16.786	3.16	6.16
High	5700	27.56	16.893	3.16	6.16

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)
Low	5500	24.00	23.25	29.25	23.25	10.84	11.00
Mid	5580	24.00	23.25	29.25	23.25	10.84	11.00
High	5700	24.00	23.28	29.28	23.28	10.84	11.00

Duty Cycle CF (dB)	1.61	Included in Calculations of Corr'd PSD
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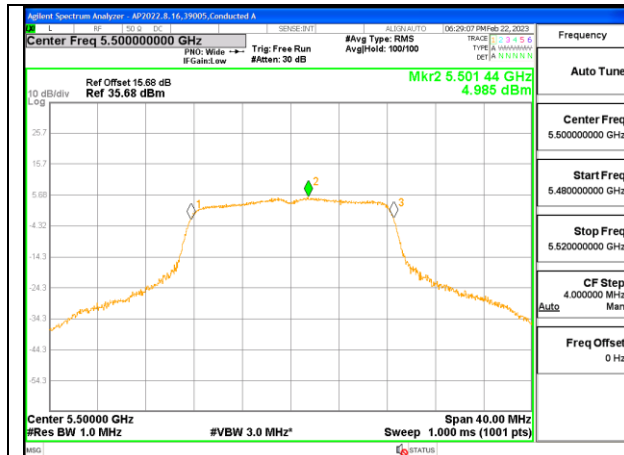
Output Power Results

Channel	Frequency (MHz)	Antenna 3 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	18.02	18.18	21.11	23.25	-2.14
Mid	5580	18.70	18.72	21.72	23.25	-1.53
High	5700	17.68	17.20	20.46	23.28	-2.82

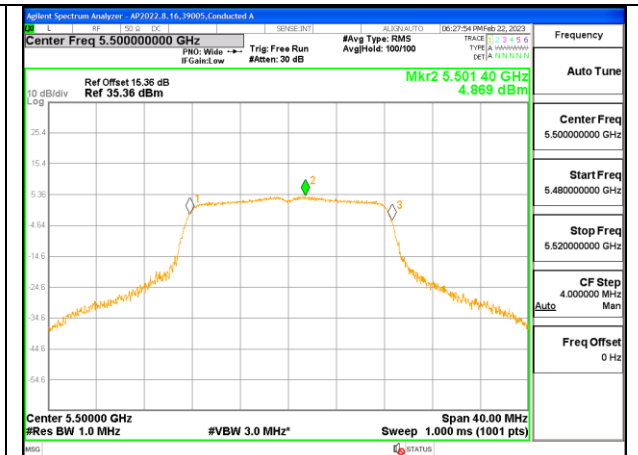
PSD Results

Channel	Frequency (MHz)	Antenna 3 Meas PSD (dBm/ 1MHz)	Antenna 2 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	4.985	4.869	9.548	10.84	-1.29
Mid	5580	5.486	5.481	10.104	10.84	-0.74
High	5700	5.988	5.013	10.148	10.84	-0.69

LOW CHANNEL

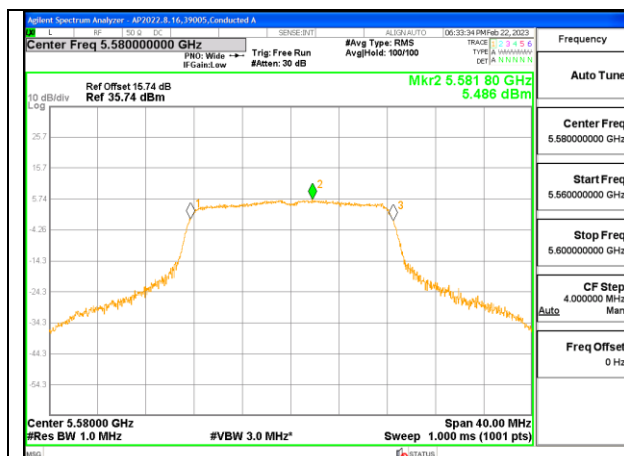


LOW CHANNEL ANTENNA 3

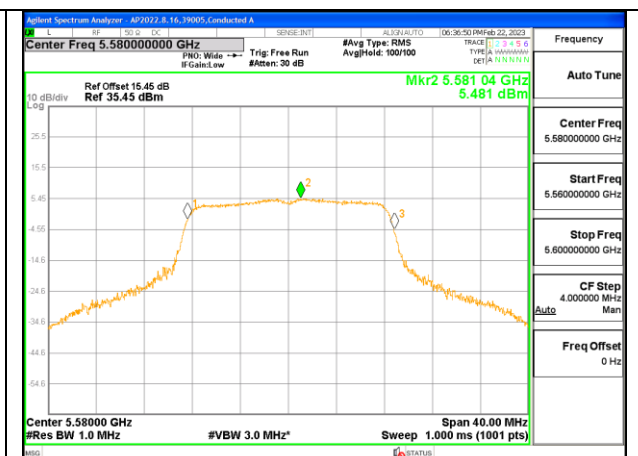


LOW CHANNEL ANTENNA 2

MID CHANNEL

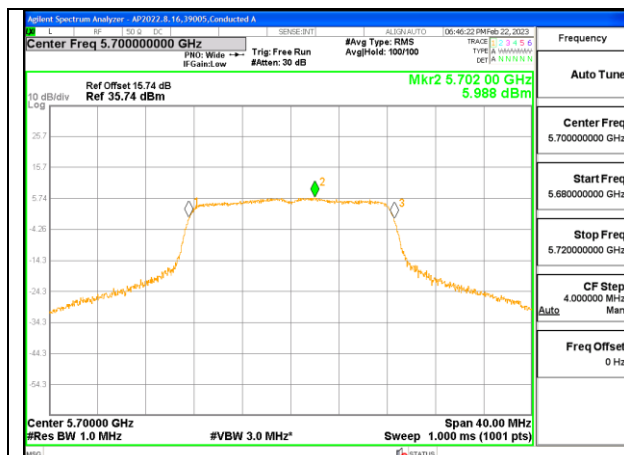


MID CHANNEL ANTENNA 3

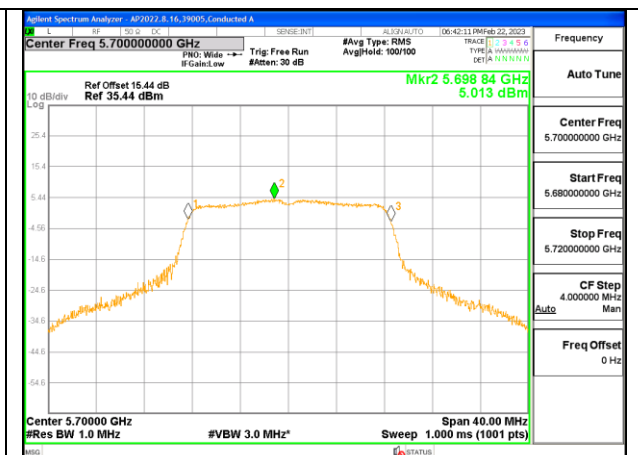


MID CHANNEL ANTENNA 2

HIGH CHANNEL



HIGH CHANNEL ANTENNA 3



HIGH CHANNEL ANTENNA 2

9.5.10. 802.11n HT20 MODE IN THE 5.6 GHz BAND

2TX Antenna 3 + Antenna 2 CDD MODE (FCC+IC)

Test Engineer:	RA 39005
Test Date:	2023-02-22

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)
Low	5500	25.68	17.774	3.16	6.16
Mid	5580	25.04	17.831	3.16	6.16
High	5700	25.20	17.892	3.16	6.16

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)
Low	5500	24.00	23.50	29.50	23.50	10.84	11.00
Mid	5580	24.00	23.51	29.51	23.51	10.84	11.00
High	5700	24.00	23.53	29.53	23.53	10.84	11.00

Duty Cycle CF (dB)	1.69	Included in Calculations of Corr'd PSD
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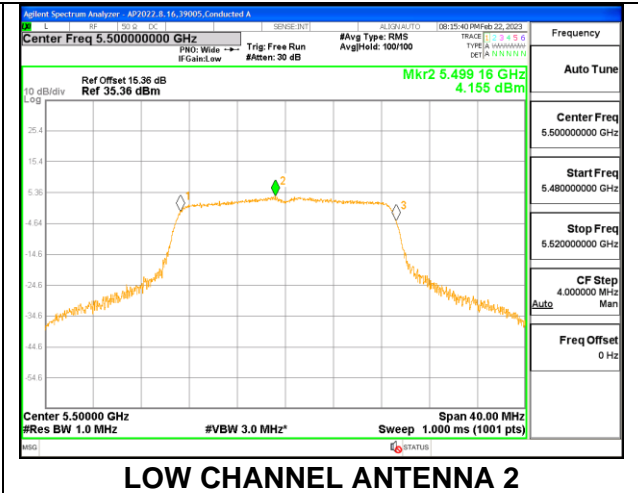
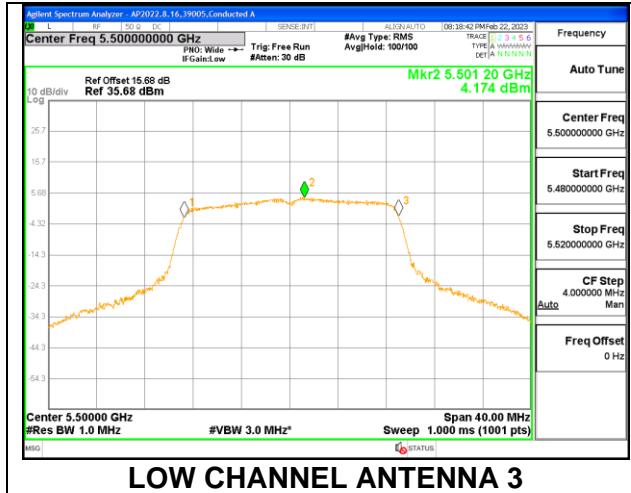
Output Power Results

Channel	Frequency (MHz)	Antenna 3 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	16.78	17.08	19.94	23.50	-3.55
Mid	5580	18.00	17.57	20.80	23.51	-2.71
High	5700	16.80	16.20	19.52	23.53	-4.01

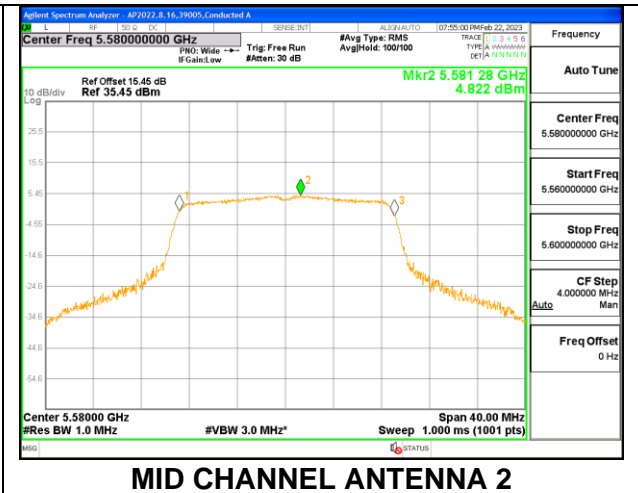
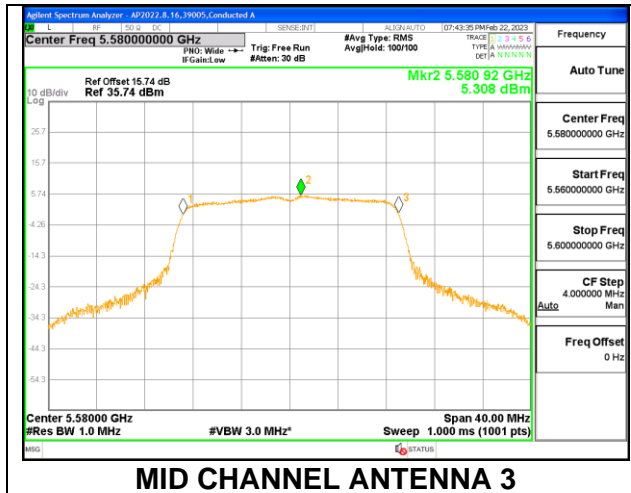
PSD Results

Channel	Frequency (MHz)	Antenna 3 Meas PSD (dBm/ 1MHz)	Antenna 2 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	4.174	4.155	8.865	10.84	-1.98
Mid	5580	5.308	4.822	9.772	10.84	-1.07
High	5700	5.363	4.594	9.696	10.84	-1.14

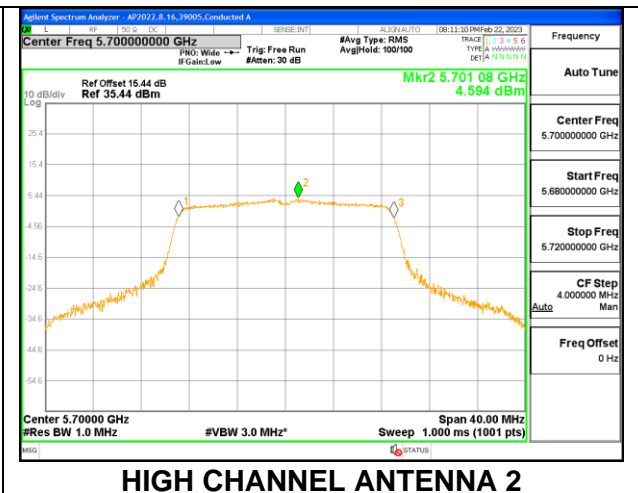
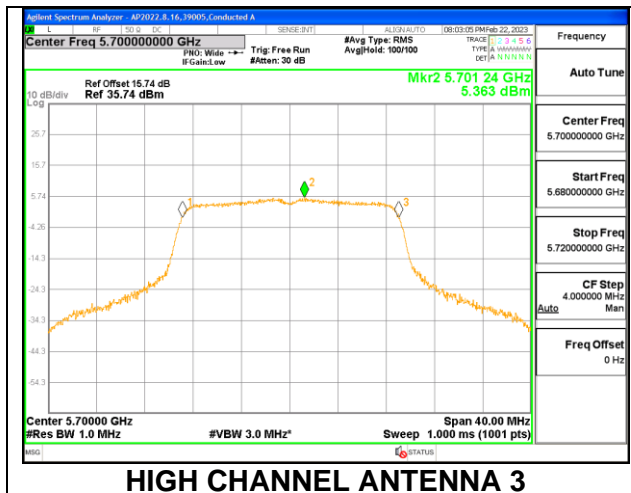
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



9.5.11. 802.11n HT40 MODE IN THE 5.6 GHz BAND

2TX Antenna 2 + Antenna 3 CDD MODE (FCC+IC)

Test Engineer:	RA 39005
Test Date:	2023-02-22

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)
Low	5510	40.24	35.373	3.16	6.16
Mid	5550	40.56	35.729	3.16	6.16
High	5670	40.72	35.664	3.16	6.16

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)
Low	5510	24.00	24.00	30.00	24.00	10.84	11.00	10.84
Mid	5550	24.00	24.00	30.00	24.00	10.84	11.00	10.84
High	5670	24.00	24.00	30.00	24.00	10.84	11.00	10.84

Duty Cycle CF (dB)	2.96	Included in Calculations of Corr'd PSD
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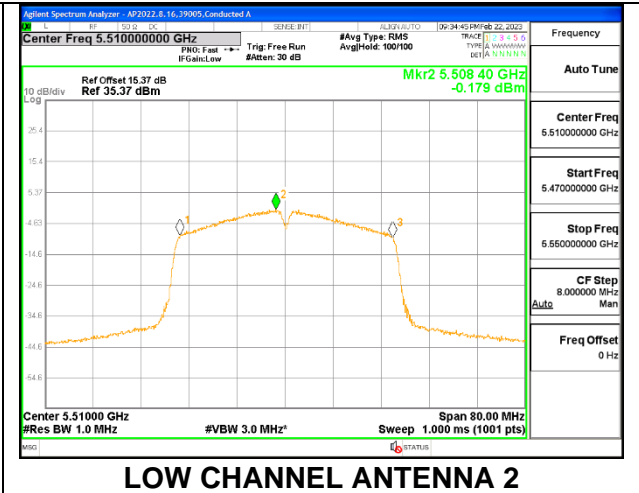
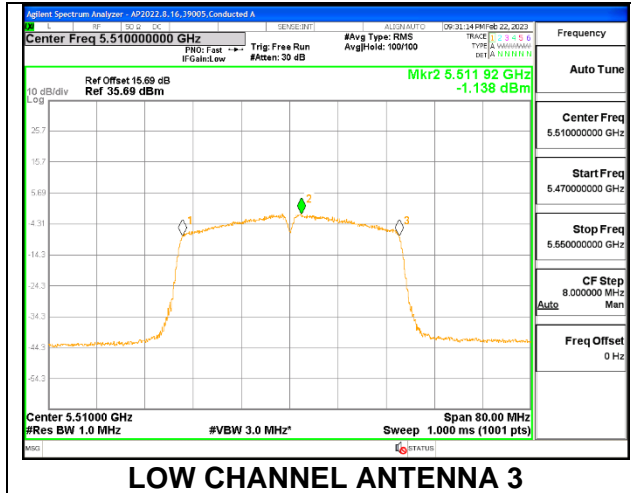
Output Power Results

Channel	Frequency (MHz)	Antenna 3 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	16.06	16.00	19.04	24.00	-4.96
Mid	5550	18.76	18.42	21.60	24.00	-2.40
High	5670	19.33	18.97	22.16	24.00	-1.84

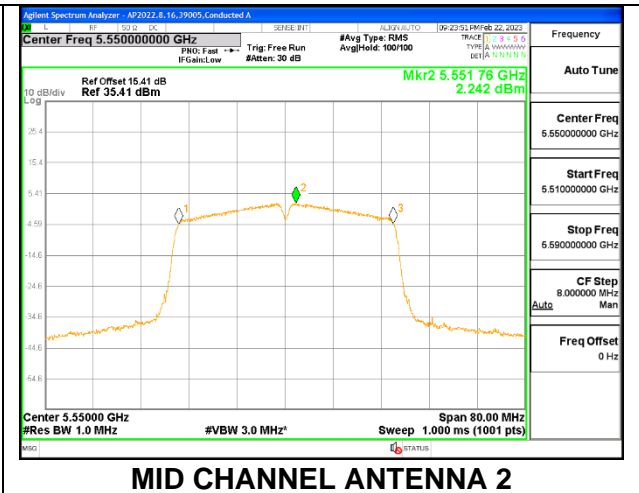
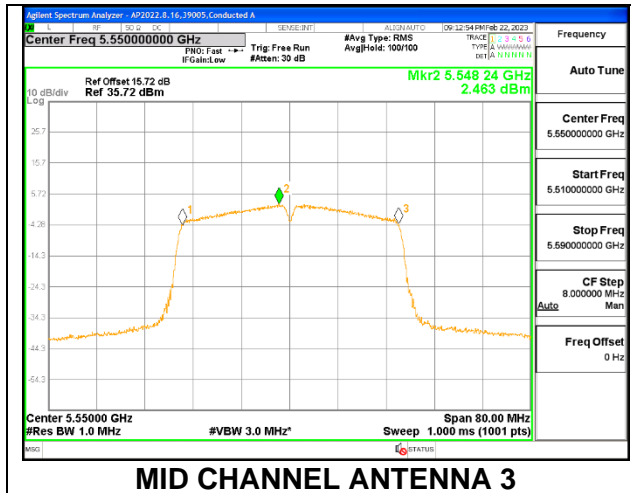
PSD Results

Channel	Frequency (MHz)	Antenna 3 Meas PSD (dBm/ 1MHz)	Antenna 2 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5510	-1.138	-0.179	5.34	10.84	-5.50
Mid	5550	2.463	2.242	8.32	10.84	-2.52
High	5670	4.443	3.509	9.97	10.84	-0.87

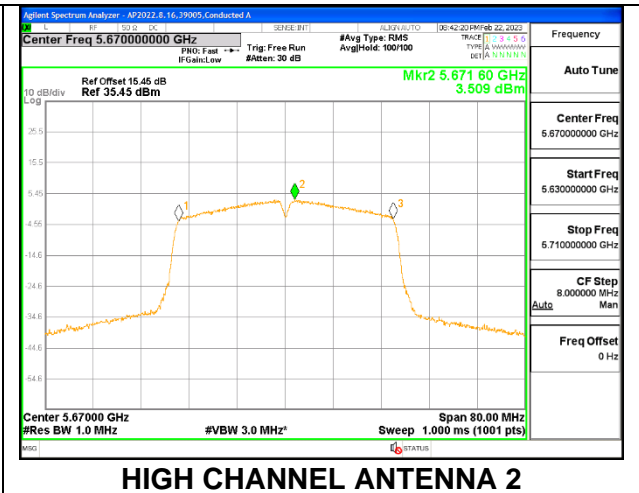
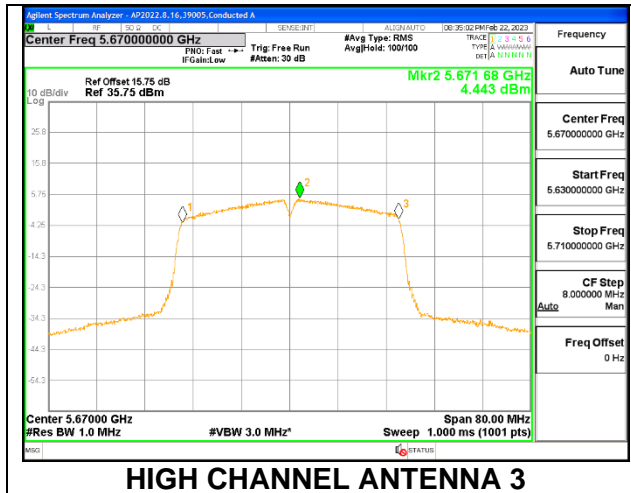
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



9.5.12. 802.11ac VHT80 MODE IN THE 5.6 GHz BAND

2TX Antenna 2 + Antenna 3 CDD MODE (FCC+IC)

Test Engineer:	RA 39005
Test Date:	2023-02-22

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)
Low	5530	80.64	75.176	3.16	6.16
High	5610	80.48	75.220	3.16	6.16

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)
Low	5530	24.00	24.00	30.00	24.00	10.84	11.00	10.84
High	5610	24.00	24.00	30.00	24.00	10.84	11.00	10.84

Duty Cycle CF (dB)	4.69	Included in Calculations of Corr'd PSD
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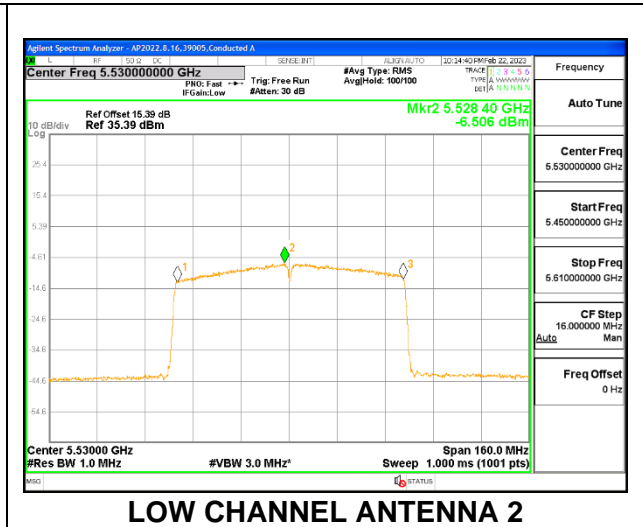
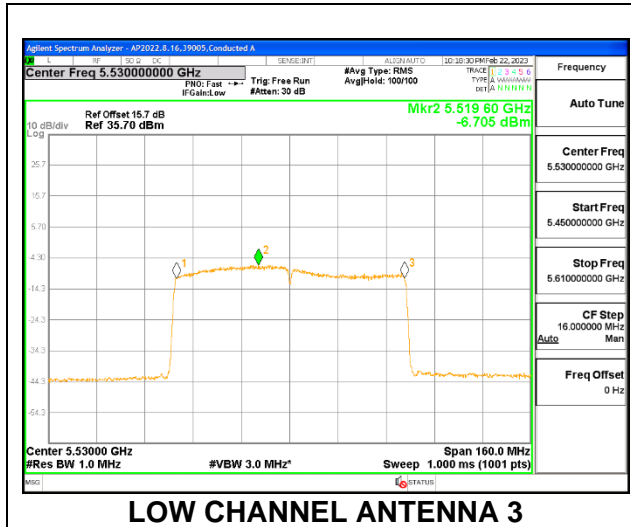
Output Power Results

Channel	Frequency (MHz)	Antenna 3 Meas Power (dBm)	Antenna 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	14.01	14.00	17.02	24.00	-6.98
High	5610	19.90	19.92	22.92	24.00	-1.08

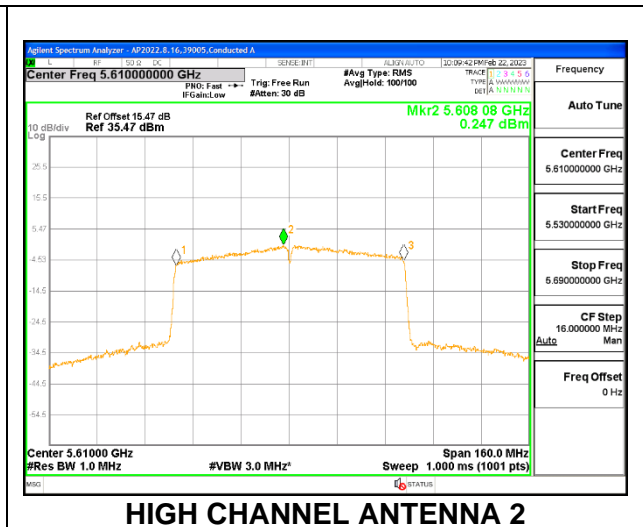
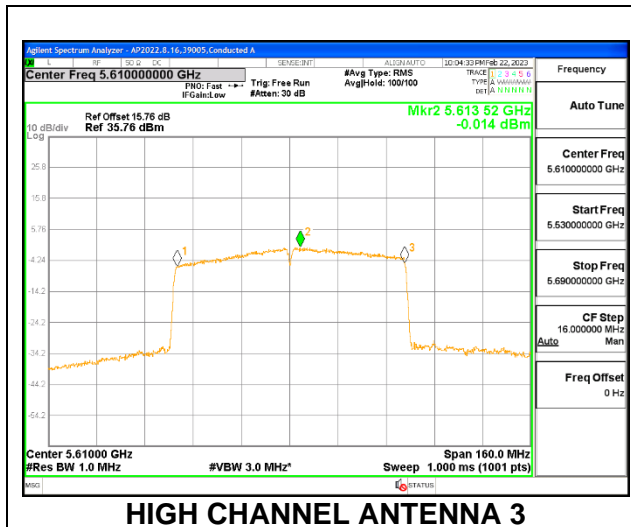
PSD Results

Channel	Frequency (MHz)	Antenna 3 Meas PSD (dBm/ 1MHz)	Antenna 2 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5530	-6.705	-6.506	1.096	10.84	-9.74
High	5610	-0.014	0.247	7.819	10.84	-3.02

LOW CHANNEL



HIGH CHANNEL



9.5.13. 802.11a MODE IN THE 5.8 GHz BAND

2TX Antenna 3 + Antenna 4 CDD MODE (FCC+IC)

Test Engineer:	RA 39005
Test Date:	2023-02-22

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	2.62	5.62	30.00	30.00
Mid	5785	2.62	5.62	30.00	30.00
High	5825	2.62	5.62	30.00	30.00

Duty Cycle CF (dB)	1.61	Included in Calculations of Corr'd PSD
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Output Power Results

Channel	Frequency (MHz)	Antenna 3 Meas Power (dBm)	Antenna 4 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	19.56	19.62	22.60	30.00	-7.40
Mid	5785	19.92	19.79	22.87	30.00	-7.13
High	5825	19.70	19.71	22.72	30.00	-7.28

PSD Results

Channel	Frequency (MHz)	Antenna 3 Meas PSD (dBm/500KHz)	Antenna 4 Meas PSD (dBm/500KHz)	Total Corr'd PSD (dBm/500KHz)	PSD Limit (dBm/500KHz)	PSD Margin (dB)
Low	5745	5.662	5.344	10.126	30.00	-19.87
Mid	5785	5.100	4.604	9.479	30.00	-20.52
High	5825	4.631	4.798	9.336	30.00	-20.66