

8.5. 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.

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-2) was used.

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

DIRECTIONAL ANTENNA GAIN

For 1 TX:

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

For 2 TX:

Tx 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)	Ant 6 Gain (dBi)	Ant 5 Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)	Correlated Chains Directional Gain (dBi)
5.2	-5.0	-2.3	-3.44	-0.54
5.3	-4.5	-2.6	-3.45	-0.49
5.6	-2.9	-0.8	-1.72	1.22
5.8	-5.3	-3.4	-4.25	-1.29

ID:	44353	Date:	06/06/2018
-----	-------	-------	------------

RESULTS

8.5.1. 802.11n HT20 MODE IN THE 5.2 GHz BAND

1TX Antenna 6 MODE (FCC) MOBILE

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-5.00	24.00	11.00
Mid	5200	-5.00	24.00	11.00
High	5240	-5.00	24.00	11.00

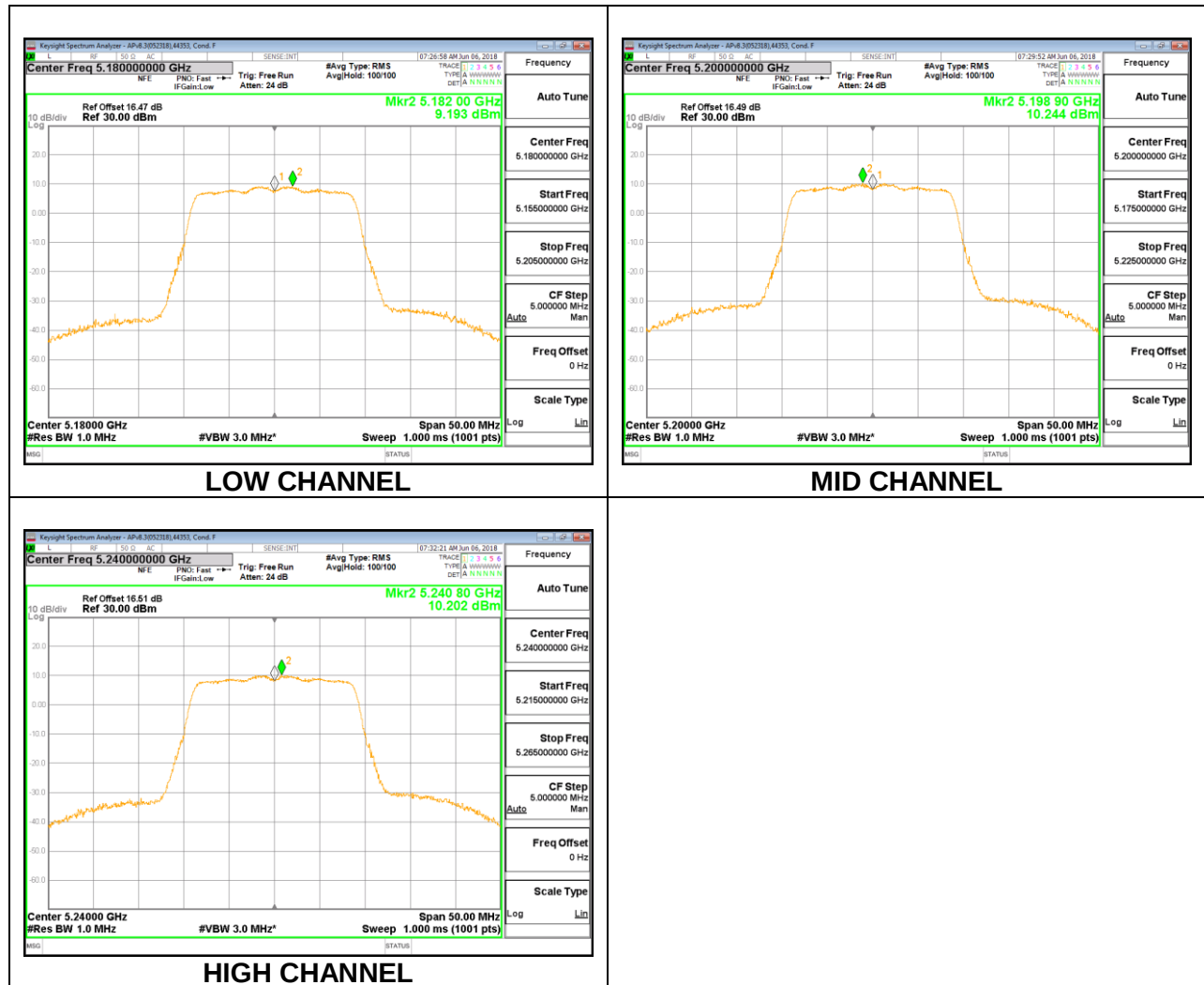
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.89	18.89	24.00	-5.11
Mid	5200	20.73	20.73	24.00	-3.27
High	5240	20.87	20.87	24.00	-3.13

PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	9.19	9.19	11.00	-1.81
Mid	5200	10.24	10.24	11.00	-0.76
High	5240	10.20	10.20	11.00	-0.80



1TX Antenna 5 MODE (FCC) MOBILE

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5180	-2.30	24.00	11.00
Mid	5200	-2.30	24.00	11.00
High	5240	-2.30	24.00	11.00

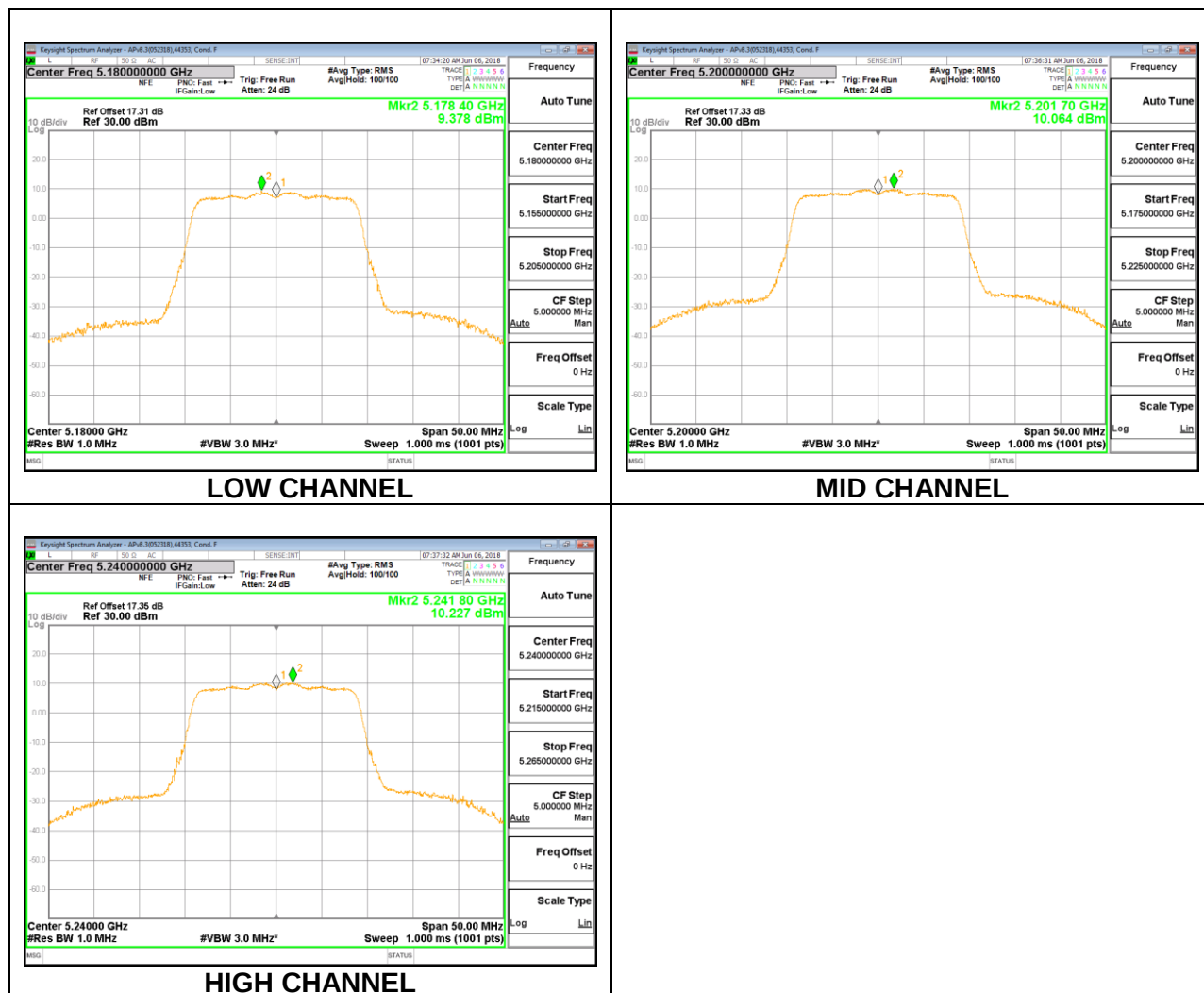
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
---------------------------	------	---

Output Power Results

Channel	Frequency (MHz)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	18.86	18.86	24.00	-5.14
Mid	5200	20.89	20.89	24.00	-3.11
High	5240	20.83	20.83	24.00	-3.17

PSD Results

Channel	Frequency (MHz)	ANT 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	9.38	9.38	11.00	-1.62
Mid	5200	10.06	10.06	11.00	-0.94
High	5240	10.23	10.23	11.00	-0.77



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

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	-3.44	-0.54	24.00	11.00
Mid	5200	-3.44	-0.54	24.00	11.00
High	5240	-3.44	-0.54	24.00	11.00

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

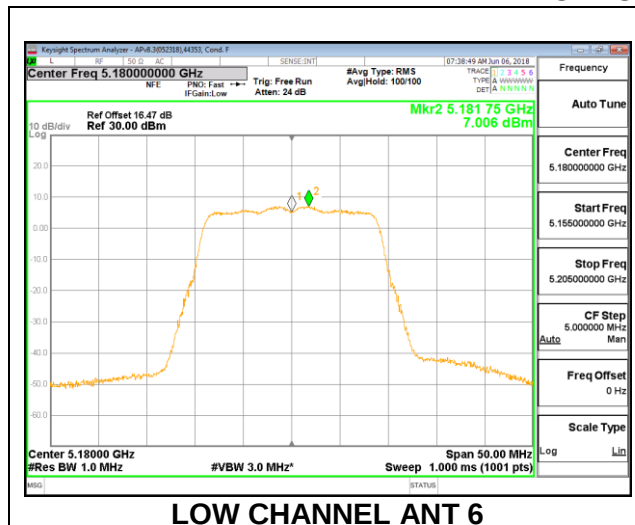
Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	17.78	17.94	20.87	24.00	-3.13
Mid	5200	17.86	17.88	20.88	24.00	-3.12
High	5240	17.79	17.86	20.84	24.00	-3.16

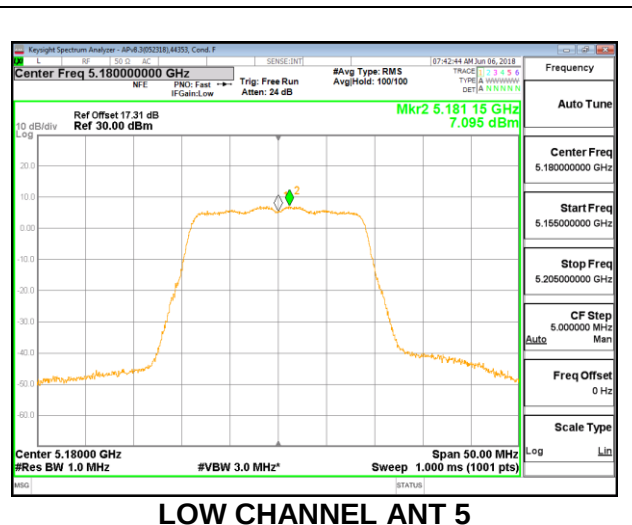
PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/1MHz)	ANT 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5180	7.01	7.10	10.06	11.00	-0.94
Mid	5200	6.96	7.07	10.03	11.00	-0.97
High	5240	7.07	7.10	10.09	11.00	-0.91

LOW CHANNEL

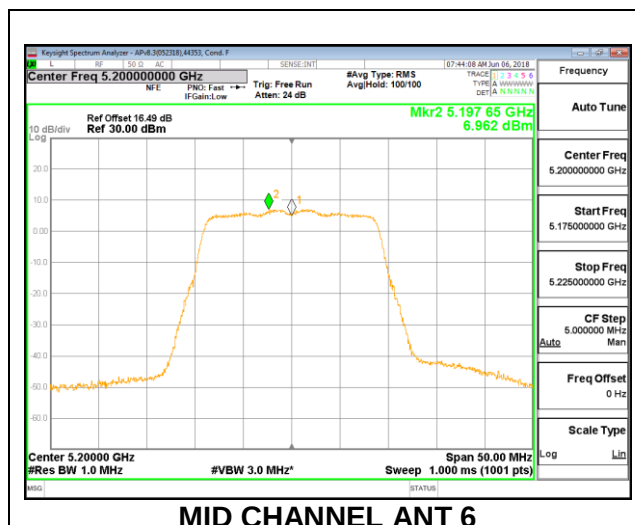


LOW CHANNEL ANT 6

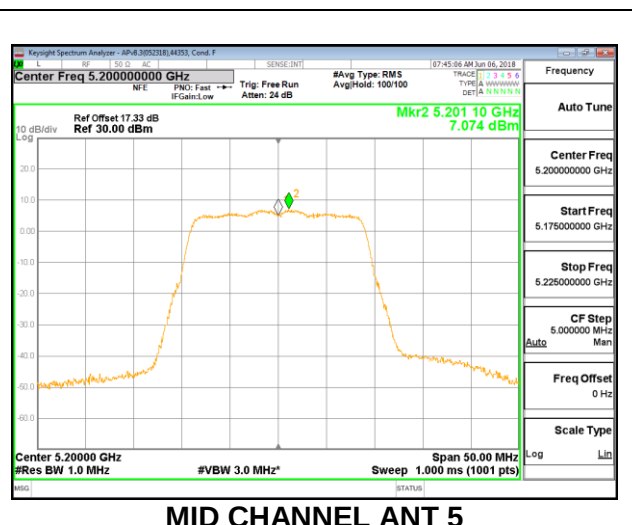


LOW CHANNEL ANT 5

MID CHANNEL

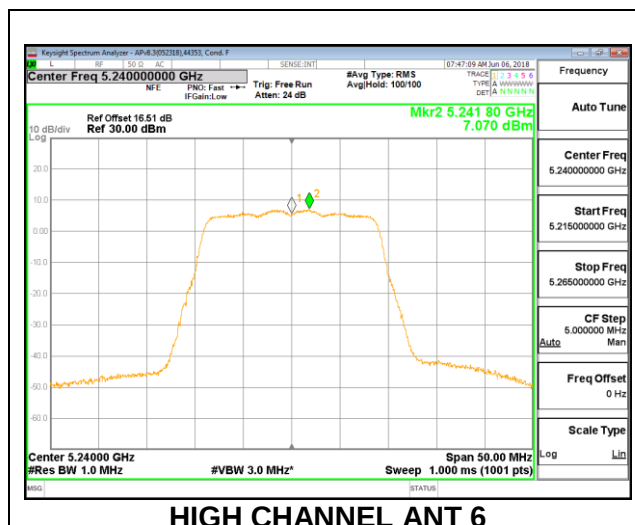


MID CHANNEL ANT 6

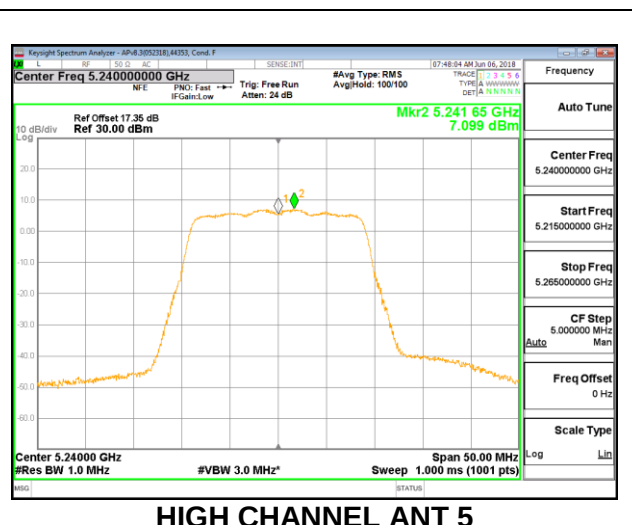


MID CHANNEL ANT 5

HIGH CHANNEL



HIGH CHANNEL ANT 6



HIGH CHANNEL ANT 5

8.5.2. 802.11n HT40 MODE IN THE 5.2 GHz BAND

1TX Antenna 6 MODE (FCC) MOBILE

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-5.00	24.00	11.00
High	5230	-5.00	24.00	11.00

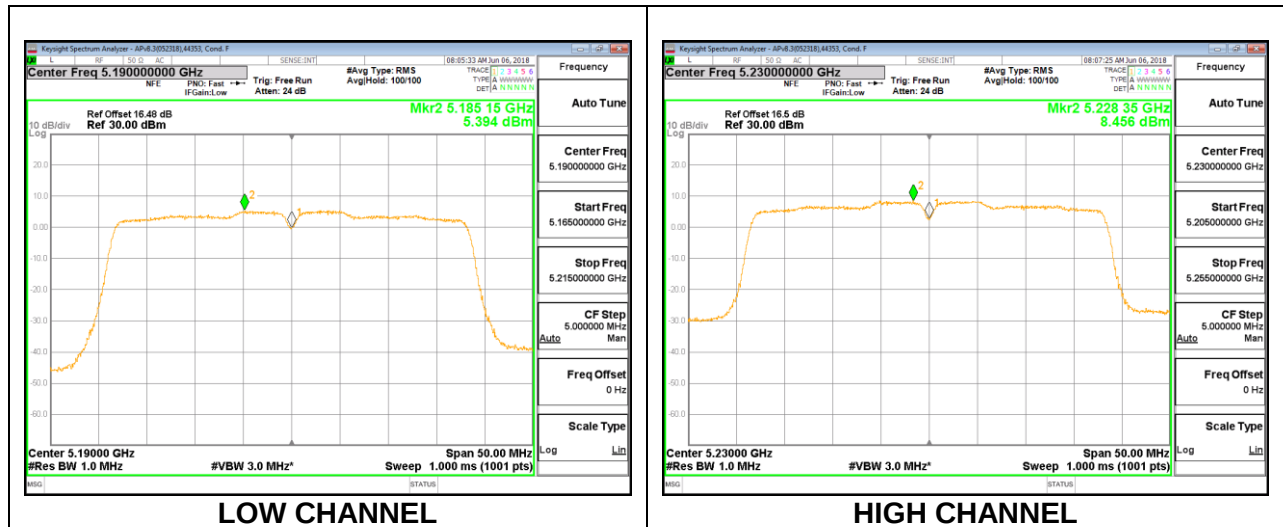
Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	17.91	17.91	24.00	-6.09
High	5230	21.67	21.67	24.00	-2.33

PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	5.39	5.48	11.00	-5.52
High	5230	8.46	8.55	11.00	-2.45



1TX Antenna 5 MODE (FCC) MOBILE

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5190	-2.30	24.00	11.00
High	5230	-2.30	24.00	11.00

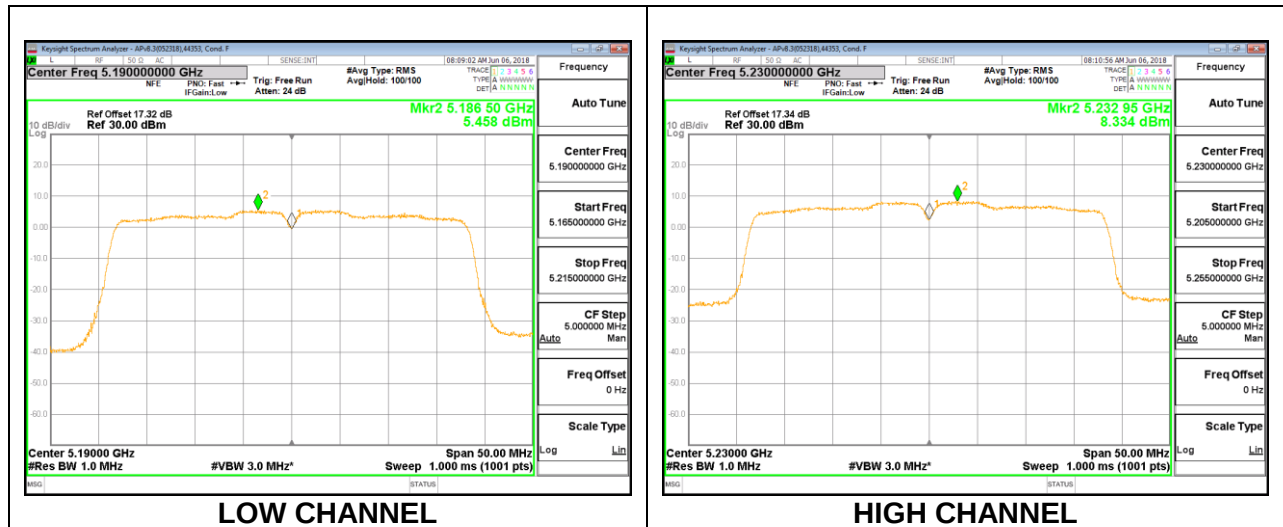
Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	17.93	17.93	24.00	-6.07
High	5230	21.59	21.59	24.00	-2.41

PSD Results

Channel	Frequency (MHz)	ANT 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	5.46	5.55	11.00	-5.45
High	5230	8.33	8.42	11.00	-2.58



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

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	-3.44	-0.54	24.00	11.00
High	5230	-3.44	-0.54	24.00	11.00

Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

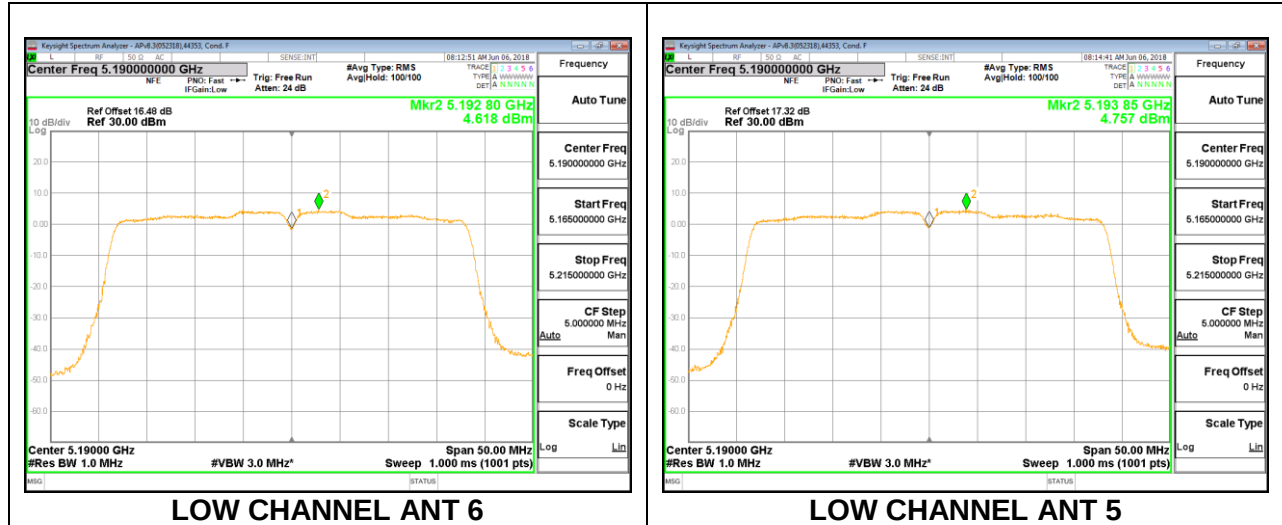
Output Power Results

Channel	Frequency (MHz)	Ant 6 Meas Power (dBm)	Ant 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	16.79	16.85	19.83	24.00	-4.17
High	5230	19.81	19.76	22.80	24.00	-1.20

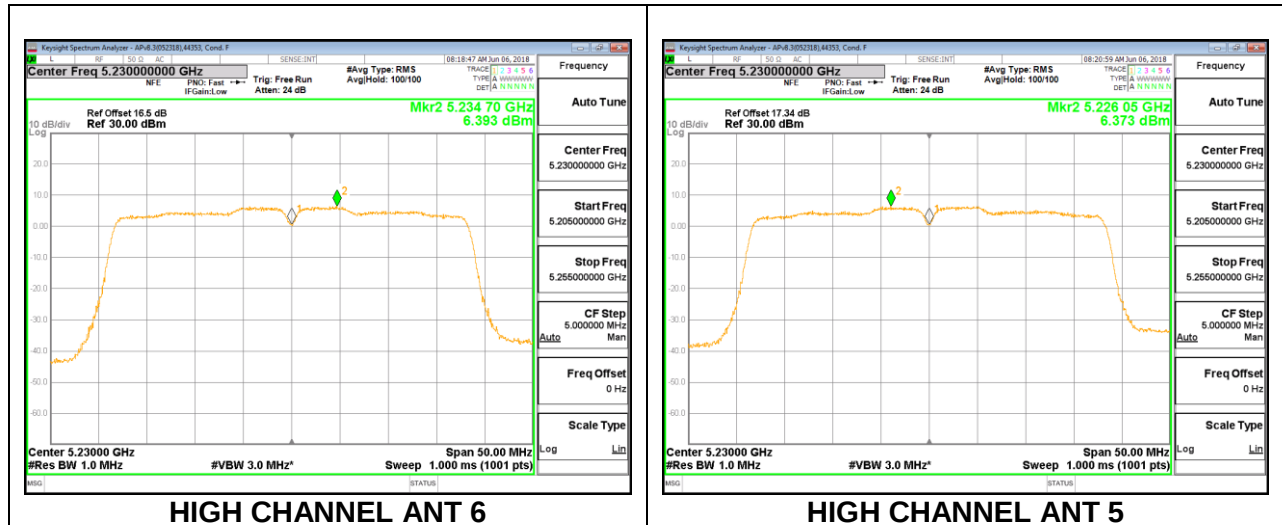
PSD Results

Channel	Frequency (MHz)	Ant 6 Meas PSD (dBm/ 1MHz)	Ant 5 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5190	4.62	4.76	7.79	11.00	-3.21
High	5230	6.39	6.37	9.48	11.00	-1.52

LOW CHANNEL



HIGH CHANNEL



8.5.3. 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

1TX Antenna 6 MODE (FCC) MOBILE

Antenna Gain and Limits

Channel	Frequency	Directional Gain	Power Limit	PSD Limit
	(MHz)	(dBi)	(dBm)	(dBm/1MHz)
Mid	5210	-5.00	24.00	11.00

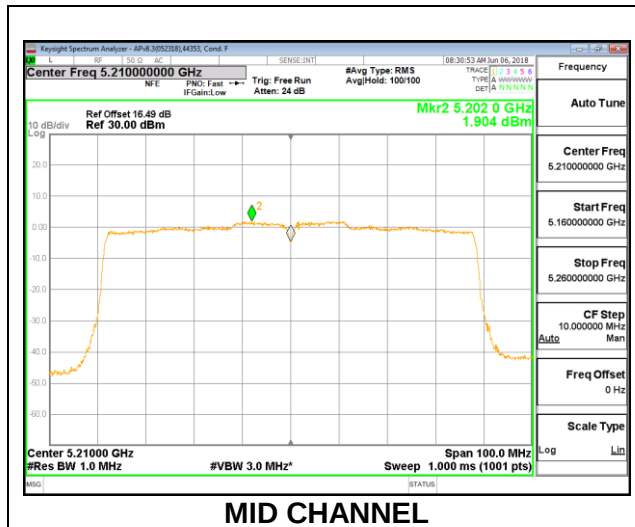
Duty Cycle CF (dB)	0.19	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency	ANT 6 Meas Power	Total Corr'd Power	Power Limit	Power Margin
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
Mid	5210	17.33	17.33	24.00	-6.67

PSD Results

Channel	Frequency	ANT 6 Meas PSD	Total Corr'd PSD	PSD Limit	PSD Margin
	(MHz)	(dBm/1MHz)	(dBm/1MHz)	(dBm/1MHz)	(dB)
Mid	5210	1.90	2.09	11.00	-8.91



1TX Antenna 5 MODE (FCC) MOBILE

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Mid	5210	-2.30	24.00	11.00

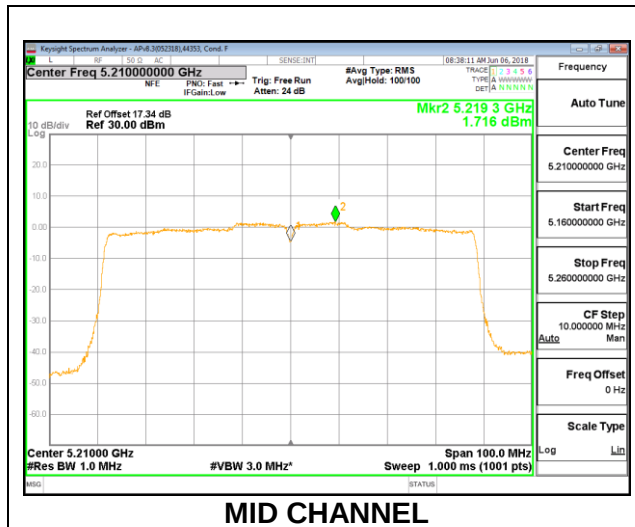
Duty Cycle CF (dB)	0.19	Included in Calculations of Corr'd PSD
---------------------------	------	---

Output Power Results

Channel	Frequency (MHz)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	17.29	17.29	24.00	-6.71

PSD Results

Channel	Frequency (MHz)	ANT 5 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	1.72	1.91	11.00	-9.09



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

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	-3.44	-0.54	24.00	11.00

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

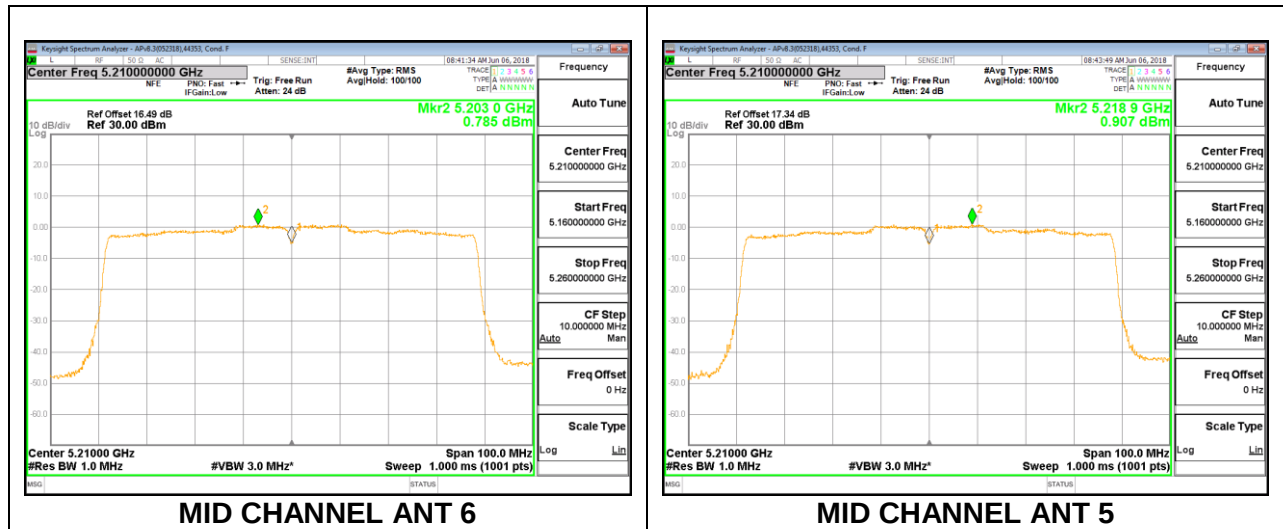
Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5210	16.37	16.40	19.40	24.00	-4.60

PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/ 1MHz)	ANT 5 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Mid	5210	0.79	0.91	4.05	11.00	-6.95

MID CHANNEL



8.5.4. 802.11n HT20 MODE IN THE 5.3 GHz BAND

1TX Antenna 6 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.80	-4.50	24.00	11.00
Mid	5300	22.20	-4.50	24.00	11.00
High	5320	22.05	-4.50	24.00	11.00

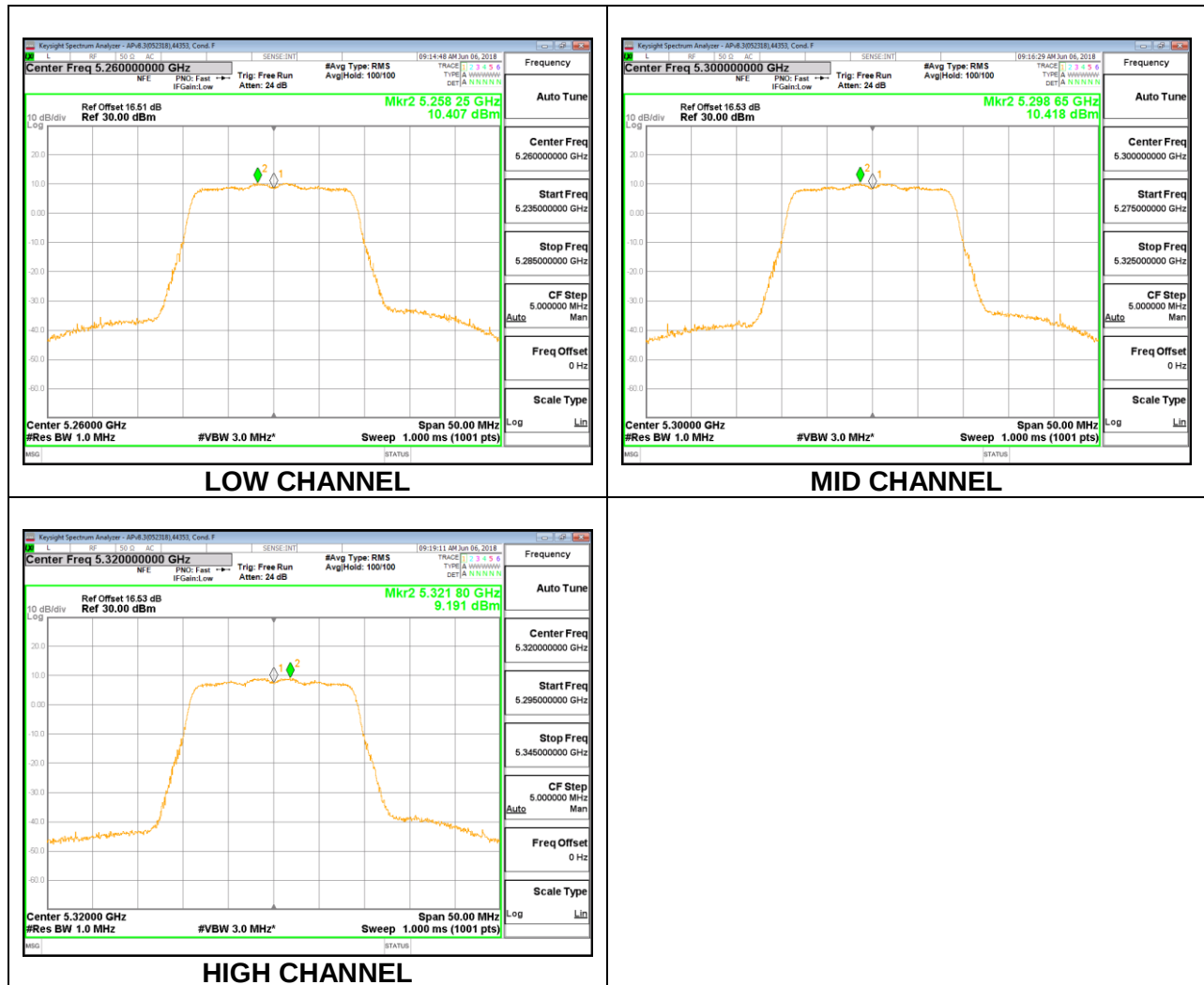
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	20.84	20.84	24.00	-3.16
Mid	5300	20.85	20.85	24.00	-3.15
High	5320	18.77	18.77	24.00	-5.23

PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	10.41	10.41	11.00	-0.59
Mid	5300	10.42	10.42	11.00	-0.58
High	5320	9.19	9.19	11.00	-1.81



1TX Antenna 5 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.60	-2.60	24.00	11.00
Mid	5300	21.55	-2.60	24.00	11.00
High	5320	21.65	-2.60	24.00	11.00

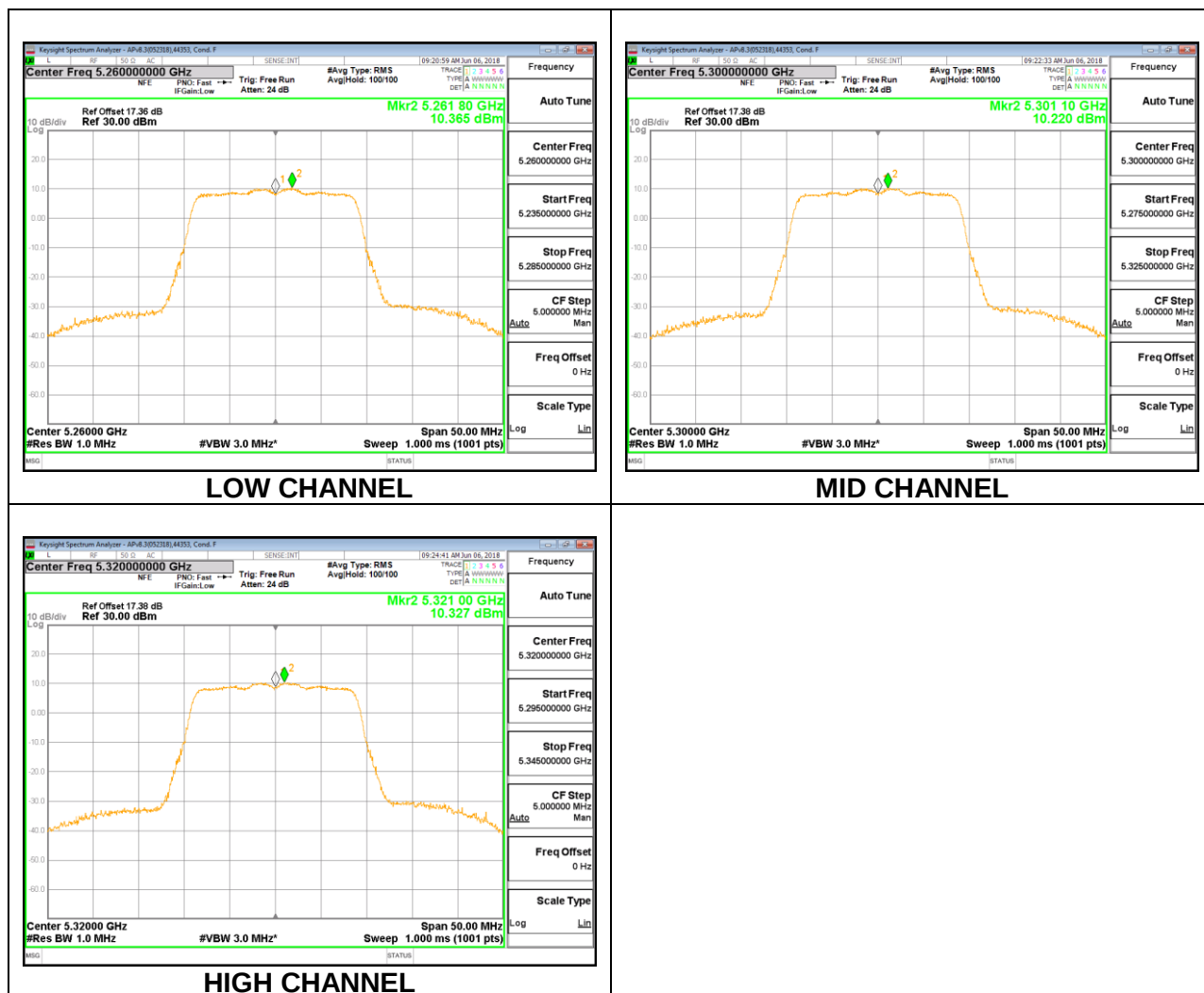
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	20.80	20.80	24.00	-3.20
Mid	5300	20.73	20.73	24.00	-3.27
High	5320	18.71	18.71	24.00	-5.29

PSD Results

Channel	Frequency (MHz)	ANT 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	10.37	10.37	11.00	-0.64
Mid	5300	10.22	10.22	11.00	-0.78
High	5320	10.33	10.33	11.00	-0.67



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

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5260	21.60	-3.45	-0.49	24.00	11.00
Mid	5300	21.75	-3.45	-0.49	24.00	11.00
High	5320	21.75	-3.45	-0.49	24.00	11.00

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

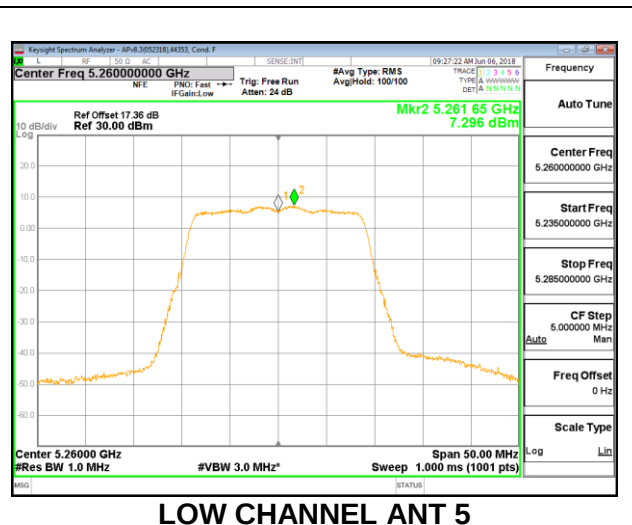
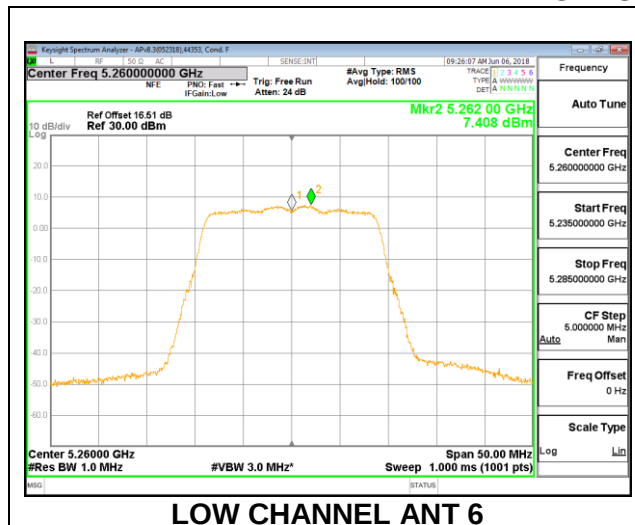
Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	17.87	17.66	20.78	24.00	-3.22
Mid	5300	17.85	17.67	20.77	24.00	-3.23
High	5320	17.73	17.59	20.67	24.00	-3.33

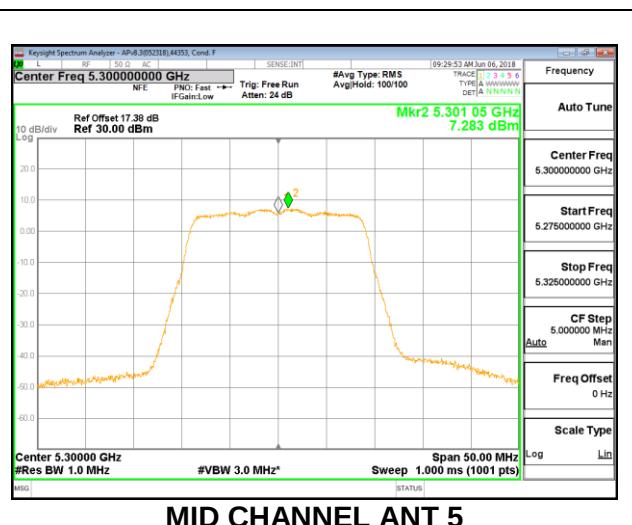
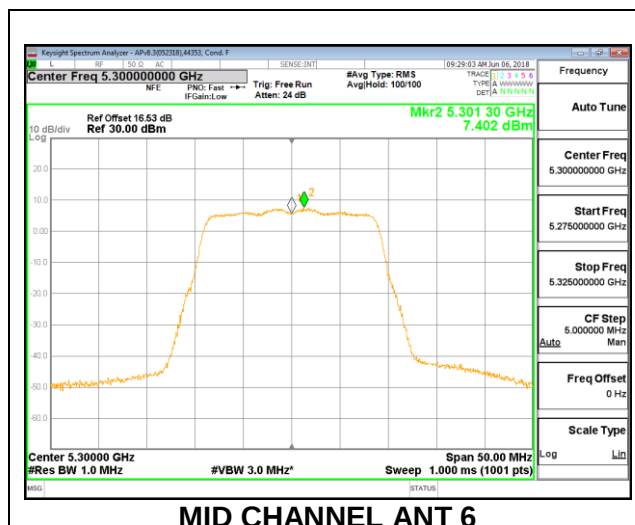
PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/1MHz)	ANT 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5260	7.41	7.30	10.36	11.00	-0.64
Mid	5300	7.40	7.28	10.35	11.00	-0.65
High	5320	7.30	7.38	10.35	11.00	-0.65

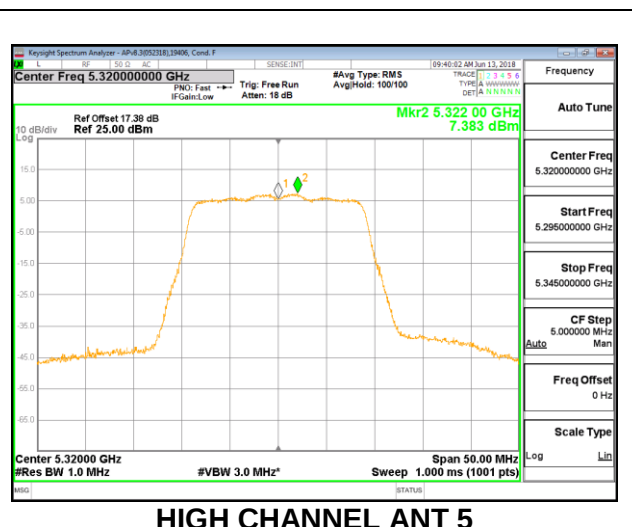
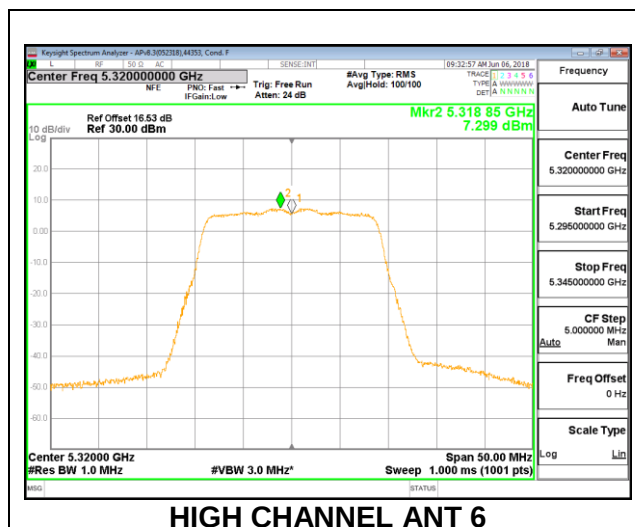
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



8.5.5. 802.11n HT40 MODE IN THE 5.3 GHz BAND

1TX Antenna 6 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	40.60	-4.50	24.00	11.00
High	5310	40.60	-4.50	24.00	11.00

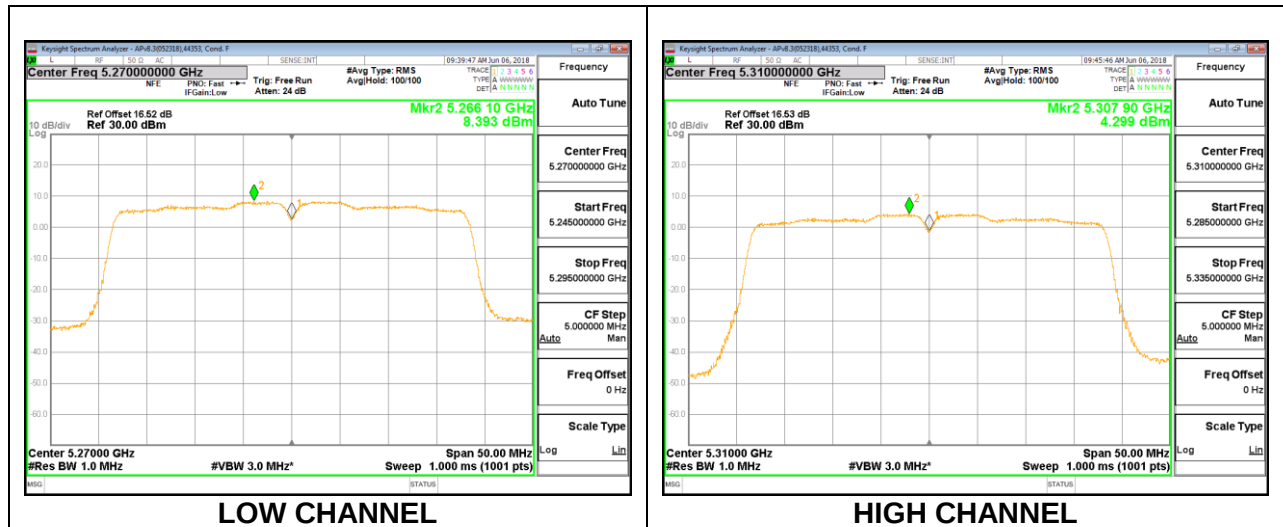
Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	21.86	21.86	24.00	-2.14
High	5310	17.88	17.88	24.00	-6.12

PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	8.39	8.48	11.00	-2.52
High	5310	4.30	4.39	11.00	-6.61



1TX Antenna 5 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	40.10	-2.60	24.00	11.00
High	5310	40.00	-2.60	24.00	11.00

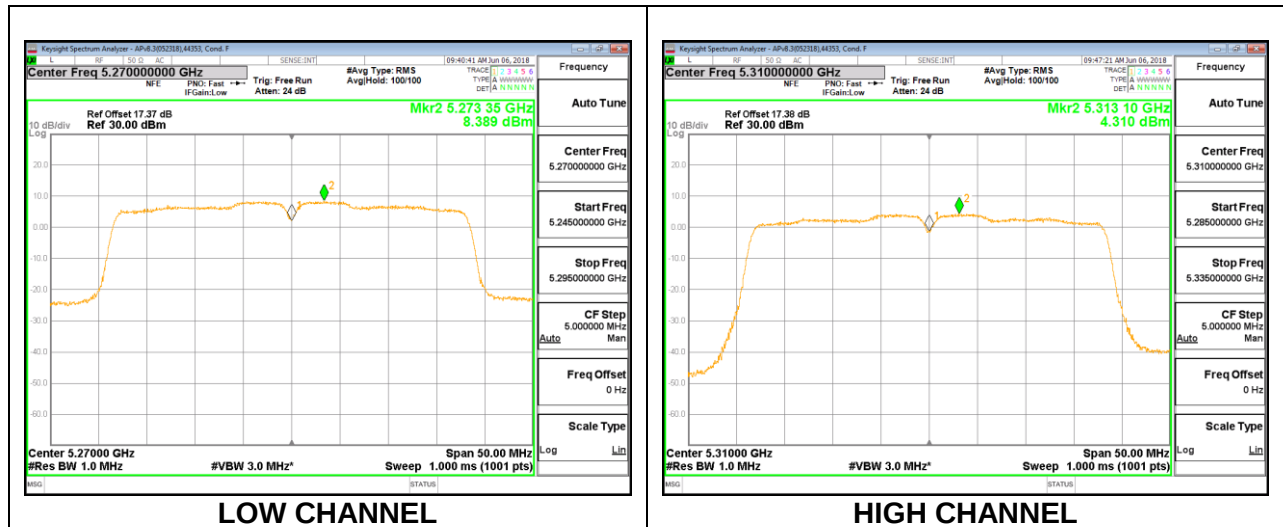
Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd PSD
---------------------------	------	---

Output Power Results

Channel	Frequency (MHz)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	21.83	21.83	24.00	-2.17
High	5310	17.79	17.79	24.00	-6.21

PSD Results

Channel	Frequency (MHz)	ANT 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	8.39	8.48	11.00	-2.52
High	5310	4.31	4.40	11.00	-6.60



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

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Low	5270	40.00	-3.45	-0.49	24.00	11.00
High	5310	40.10	-3.45	-0.49	24.00	11.00

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

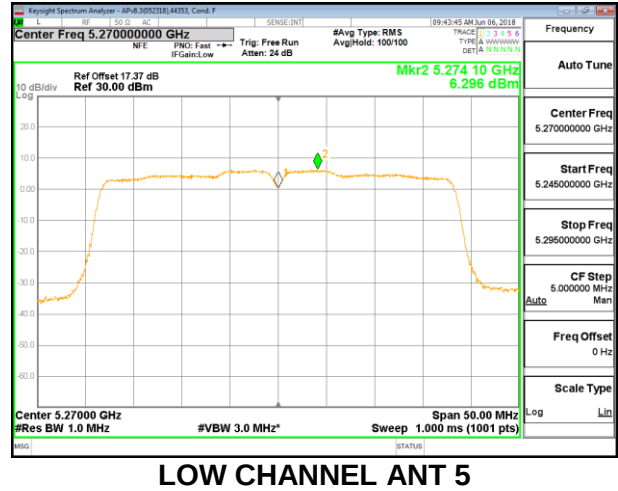
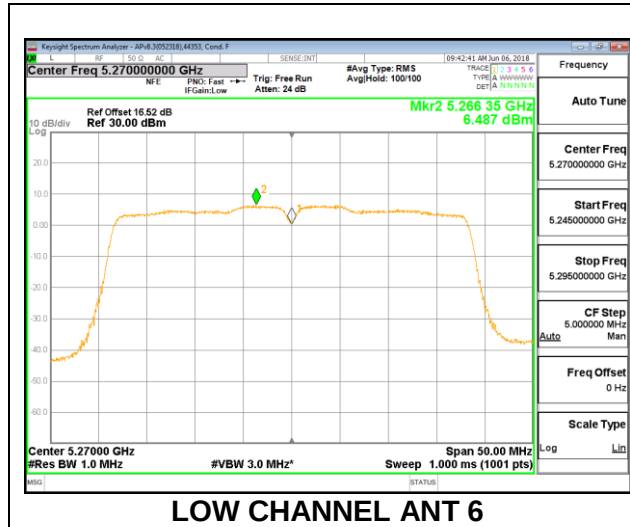
Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	19.89	19.80	22.86	24.00	-1.14
High	5310	16.71	16.76	19.75	24.00	-4.25

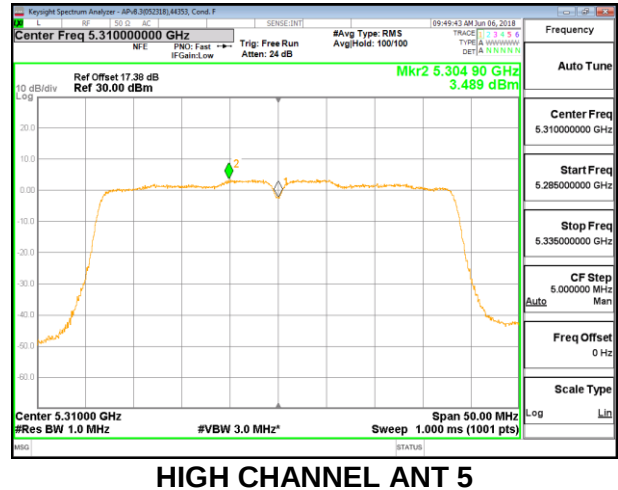
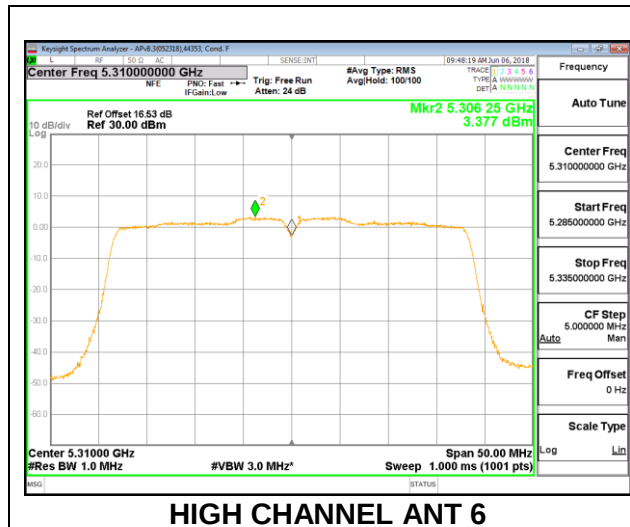
PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/1MHz)	ANT 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Low	5270	6.49	6.30	9.49	11.00	-1.51
High	5310	3.38	3.49	6.53	11.00	-4.47

LOW CHANNEL



HIGH CHANNEL



8.5.6. 802.11ac VHT80 MODE IN THE 5.3 GHz BAND

1TX Antenna 6 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5290	82.60	-4.50	24.00	11.00

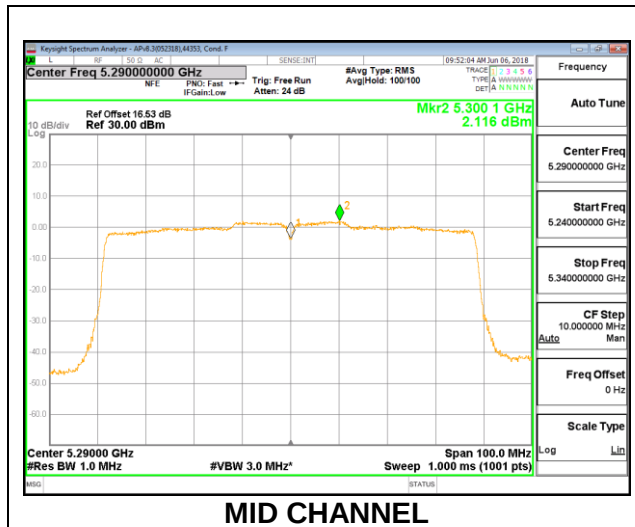
Duty Cycle CF (dB)	0.19	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	17.41	17.41	24.00	-6.59

PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5290	2.12	2.31	11.00	-8.69



1TX Antenna 5 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5290	82.20	-2.60	24.00	11.00

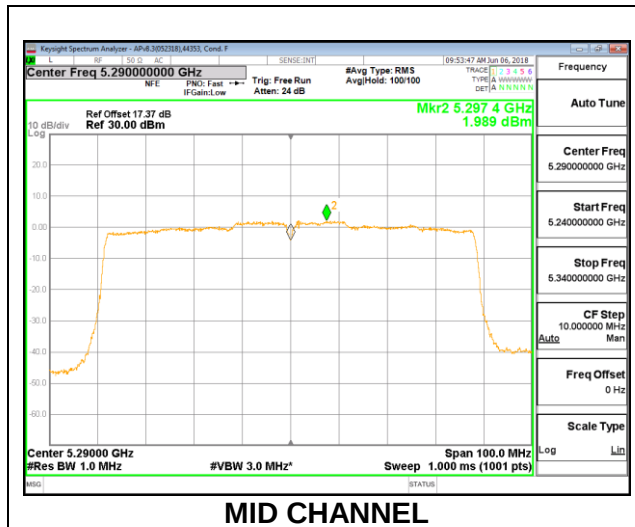
Duty Cycle CF (dB)	0.19	Included in Calculations of Corr'd PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	17.32	17.32	24.00	-6.68

PSD Results

Channel	Frequency (MHz)	ANT 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5290	1.99	2.18	11.00	-8.82



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

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm/1MHz)
Mid	5290	82.40	-3.45	-0.49	24.00	11.00

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

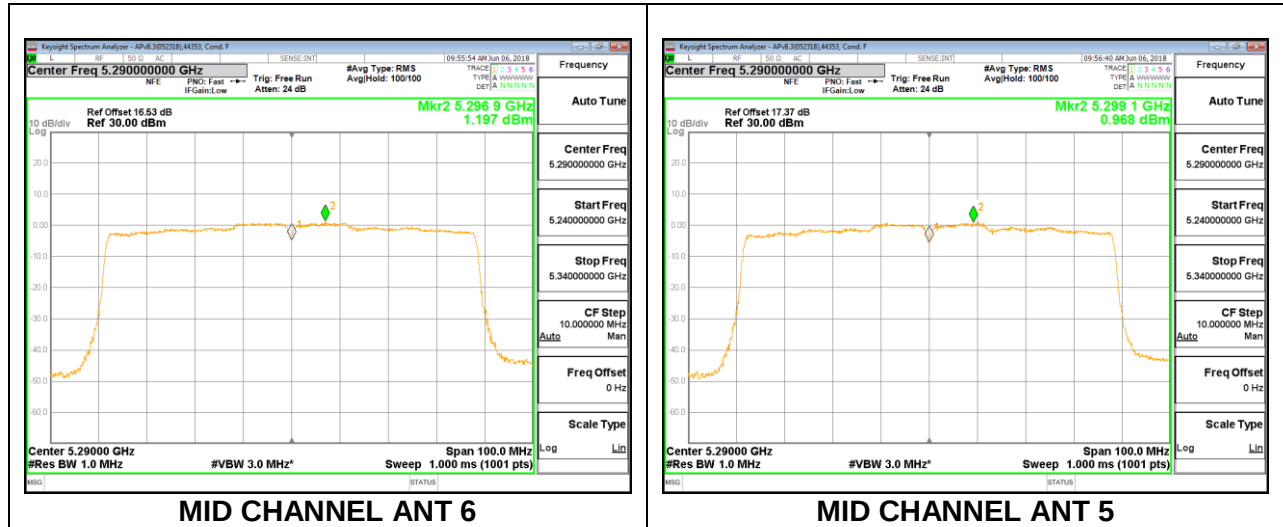
Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Mid	5290	16.39	16.34	19.38	24.00	-4.62

PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/1MHz)	ANT 5 Meas PSD (dBm/1MHz)	Total Corr'd PSD (dBm/1MHz)	PSD Limit (dBm/1MHz)	PSD Margin (dB)
Mid	5290	1.20	0.97	4.28	11.00	-6.72

MID CHANNEL



8.5.7. 802.11n HT20 MODE IN THE 5.6 GHz BAND

1TX Antenna 6 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5500	22.00	-2.90	24.00	11.00
Mid	5580	21.95	-2.90	24.00	11.00
High	5700	21.90	-2.90	24.00	11.00
144	5720	21.95	-2.90	24.00	11.00

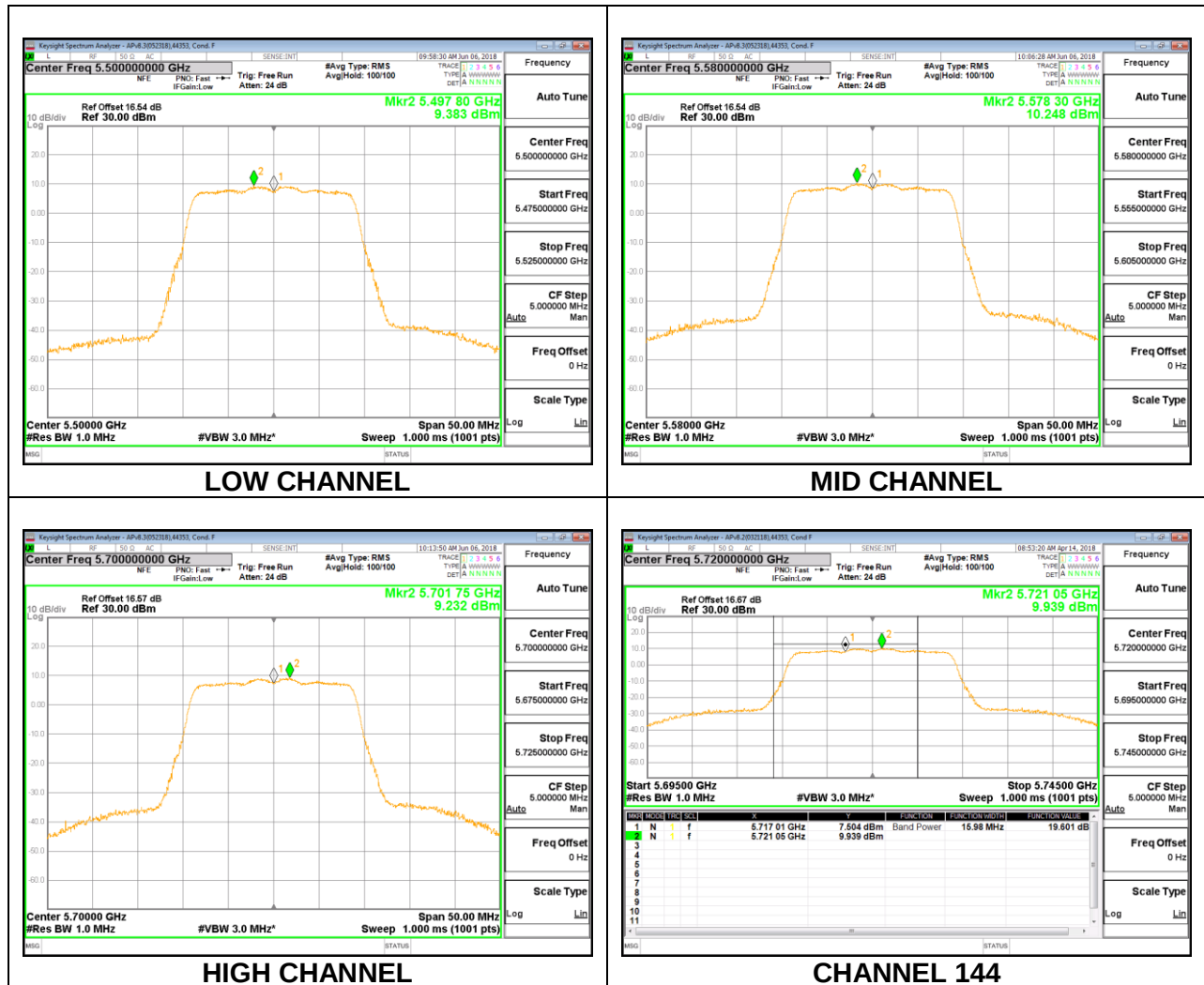
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power (CH 144) & PSD
--------------------	------	---

Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	18.84	18.84	24.00	-5.16
Mid	5580	20.88	20.88	24.00	-3.12
High	5700	18.76	18.76	24.00	-5.24
144	5720	19.60	19.60	24.00	-4.40

PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	9.38	9.38	11.00	-1.62
Mid	5580	10.25	10.25	11.00	-0.75
High	5700	9.23	9.23	11.00	-1.77
144	5720	9.94	9.94	11.00	-1.06



1TX Antenna 5 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5500	21.65	-0.80	24.00	11.00
Mid	5580	21.70	-0.80	24.00	11.00
High	5700	21.65	-0.80	24.00	11.00
144	5720	21.60	-0.80	24.00	11.00

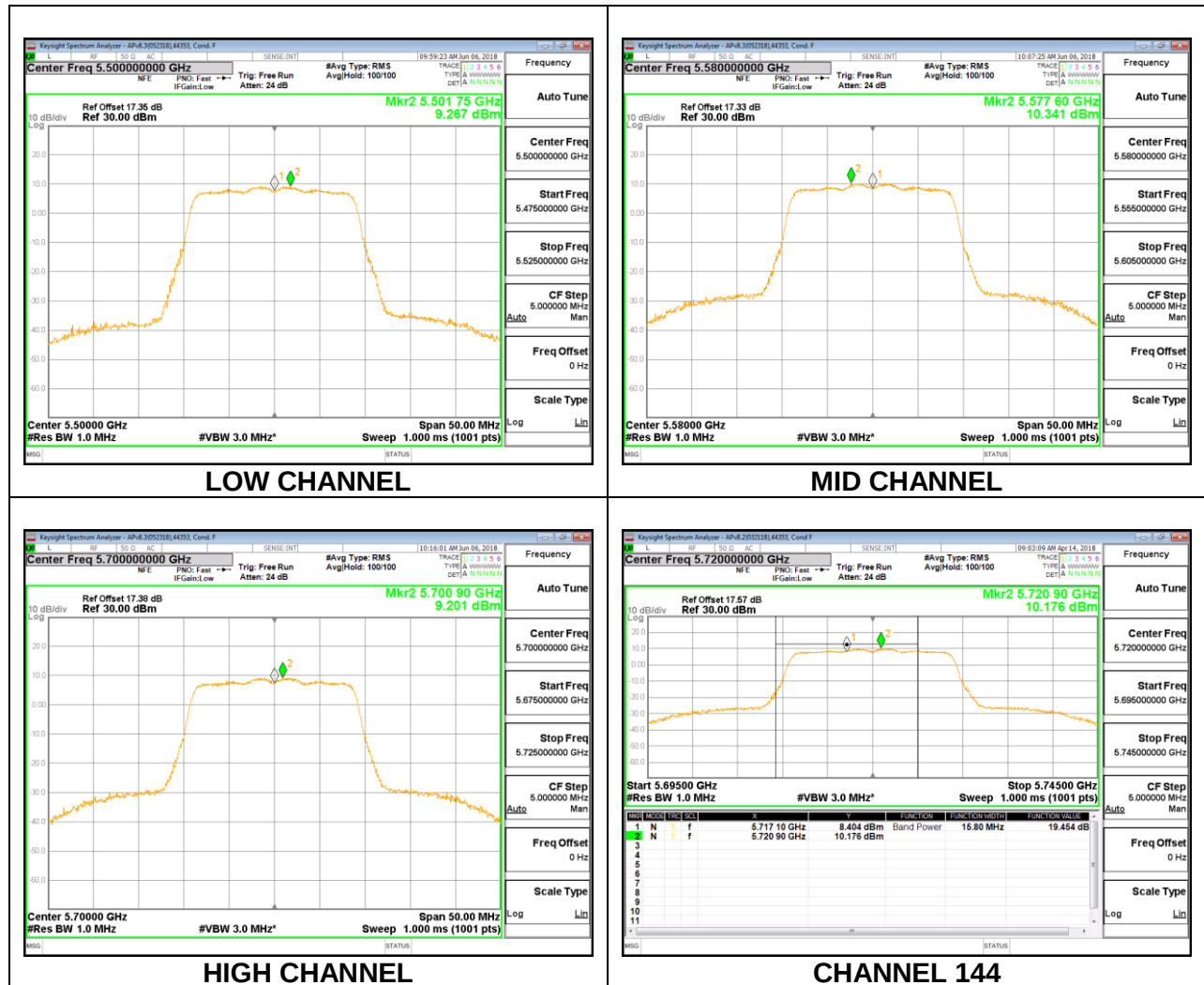
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power (Ch 144) & PSD
---------------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	18.76	18.76	24.00	-5.24
Mid	5580	20.89	20.89	24.00	-3.11
High	5700	18.71	18.71	24.00	-5.29
144	5720	19.45	19.45	24.00	-4.55

PSD Results

Channel	Frequency (MHz)	ANT 5 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	9.27	9.27	11.00	-1.73
Mid	5580	10.34	10.34	11.00	-0.66
High	5700	9.20	9.20	11.00	-1.80
144	5720	10.18	10.18	11.00	-0.82



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

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	21.75	-1.72	1.22	24.00	11.00
Mid	5580	21.70	-1.72	1.22	24.00	11.00
High	5700	21.65	-1.72	1.22	24.00	11.00
144	5720	21.55	-1.72	1.22	24.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power (Ch144) & PSD
---------------------------	------	---

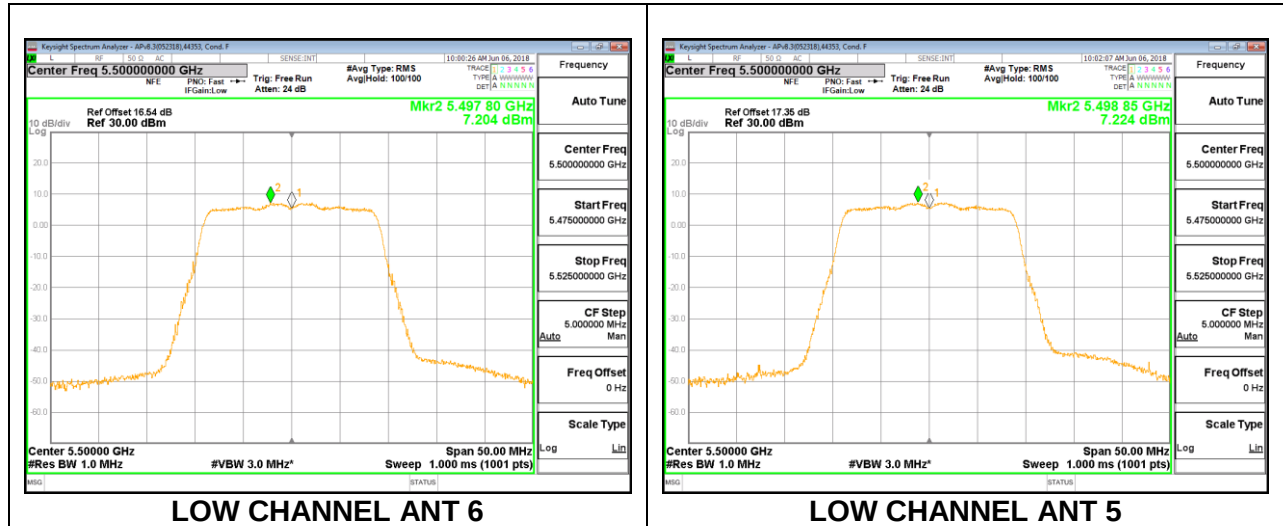
Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	17.87	17.53	20.71	24.00	-3.29
Mid	5580	17.88	17.67	20.79	24.00	-3.21
High	5700	17.88	17.68	20.79	24.00	-3.21
144	5720	16.67	16.68	19.68	24.00	-4.32

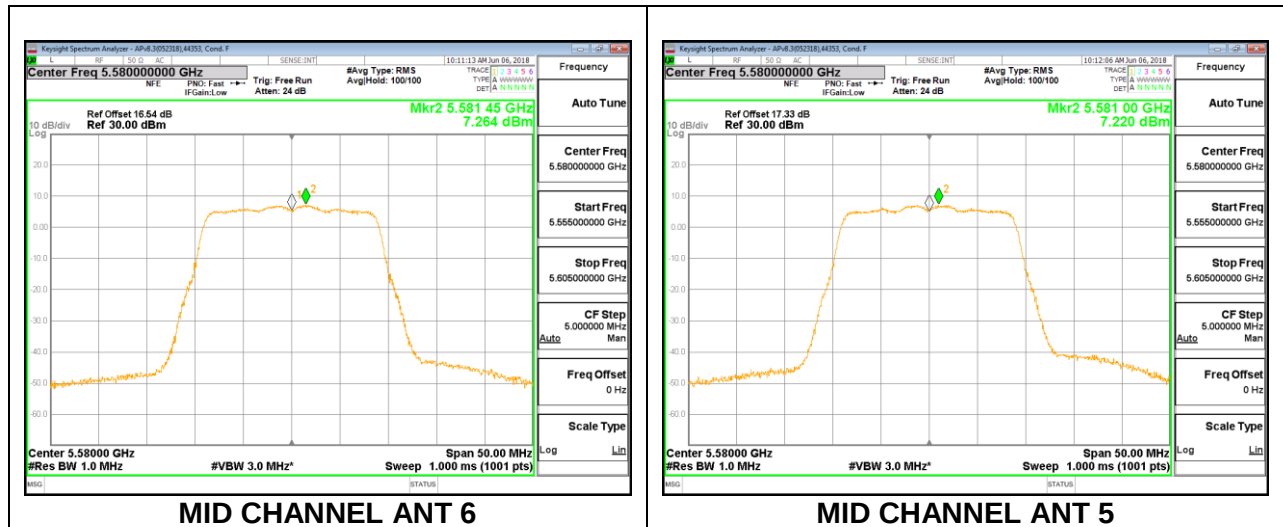
PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/ 1MHz)	ANT 5 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5500	7.20	7.22	10.22	11.00	-0.78
Mid	5580	7.26	7.22	10.25	11.00	-0.75
High	5700	7.27	7.23	10.26	11.00	-0.74
144	5720	6.95	6.82	9.90	11.00	-1.10

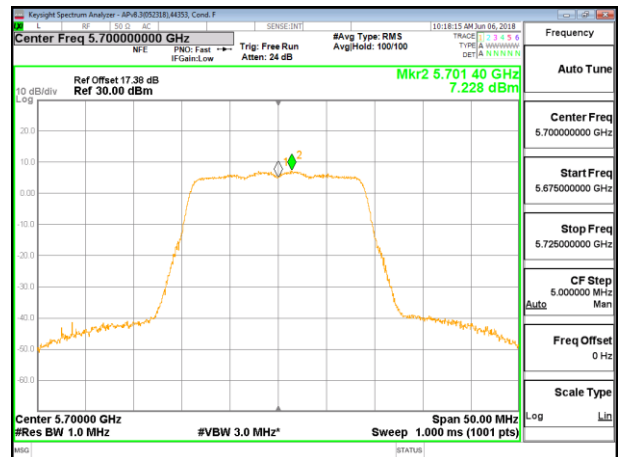
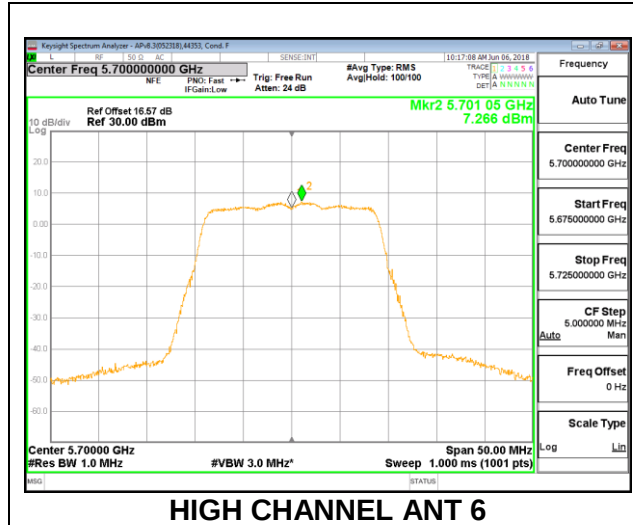
LOW CHANNEL



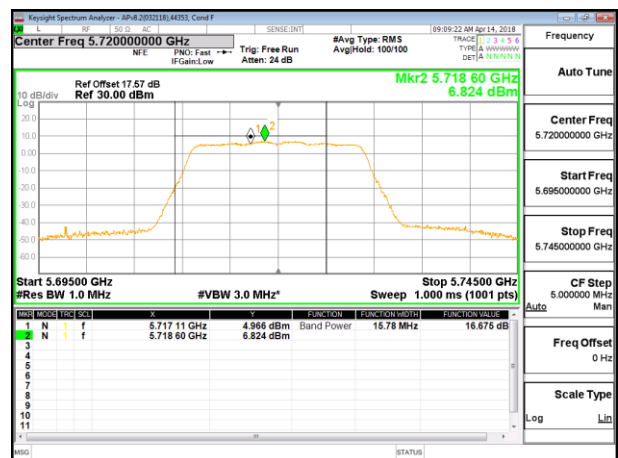
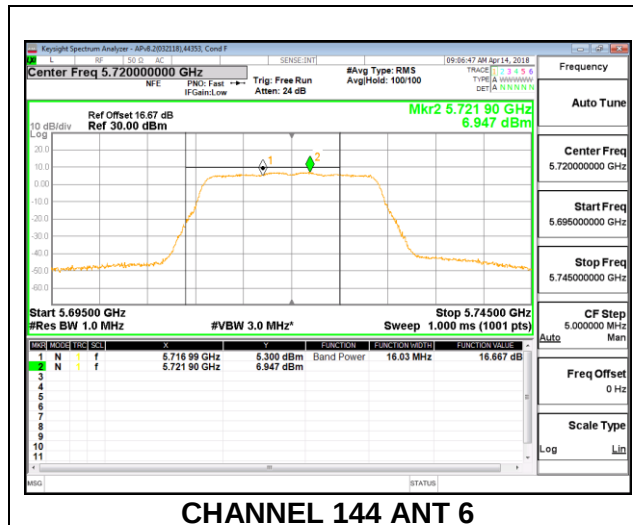
MID CHANNEL



HIGH CHANNEL



CHANNEL 144



8.5.8. 802.11n HT40 MODE IN THE 5.6 GHz BAND

1TX Antenna 6 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5510	40.50	-2.90	24.00	11.00
Mid	5550	40.40	-2.90	24.00	11.00
High	5670	40.40	-2.90	24.00	11.00
142	5710	40.50	-2.90	24.00	11.00

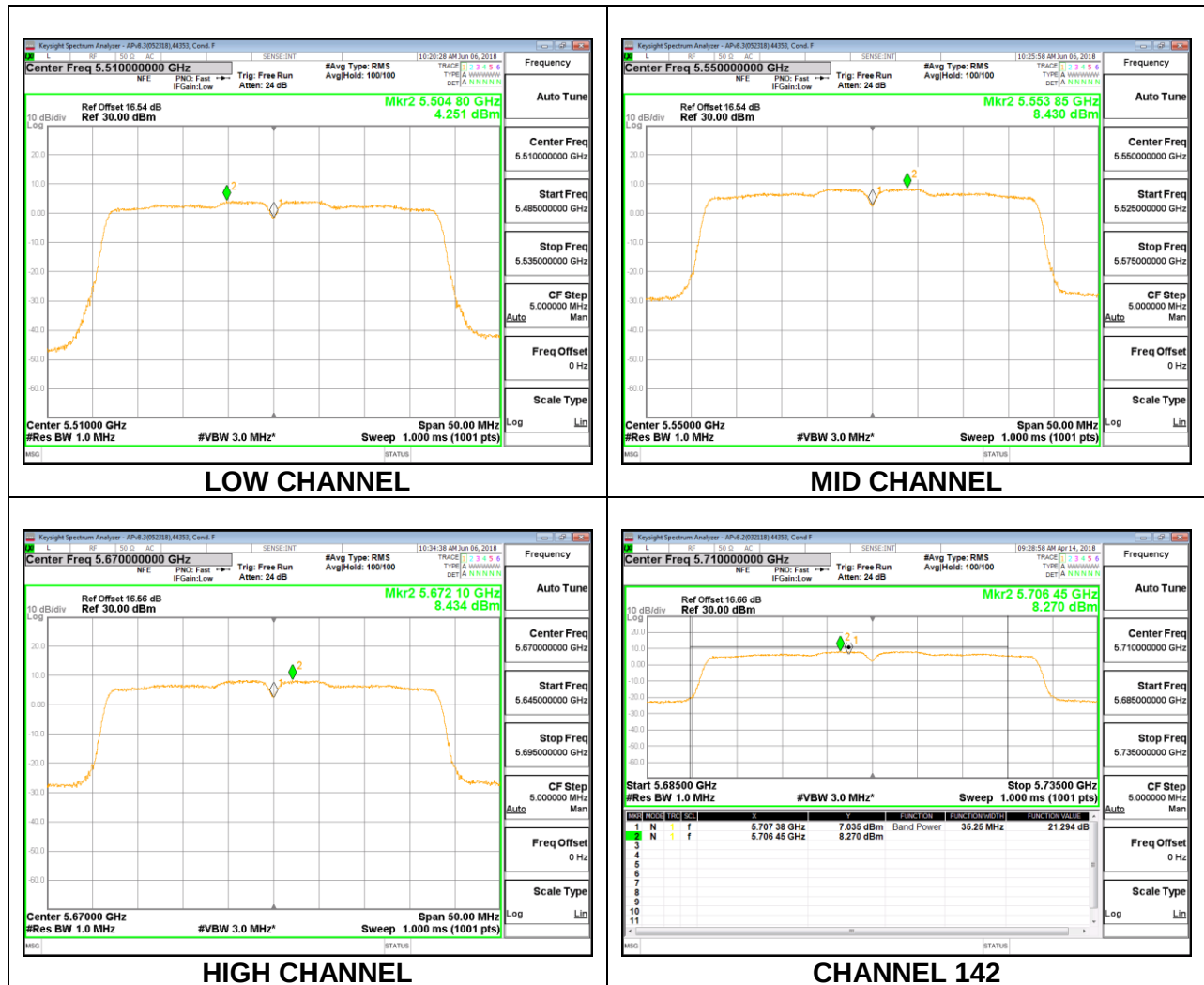
Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power (Ch 142) & PSD
--------------------	------	---

Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	17.87	17.87	24.00	-6.13
Mid	5550	21.83	21.83	24.00	-2.17
High	5670	21.80	21.80	24.00	-2.20
142	5710	21.29	21.38	24.00	-2.62

PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5510	4.25	4.34	11.00	-6.66
Mid	5550	8.43	8.52	11.00	-2.48
High	5670	8.43	8.52	11.00	-2.48
142	5710	8.27	8.36	11.00	-2.64



1TX Antenna 5 MODE (FCC)

Bandwidth, Antenna Gain, and Limits

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directional Gain (dBi)	Power Limit (dBm)	PSD Limit (dBm/ 1MHz)
Low	5510	40.10	-0.80	24.00	11.00
Mid	5550	40.10	-0.80	24.00	11.00
High	5670	40.10	-0.80	24.00	11.00
142	5710	39.90	-0.80	24.00	11.00

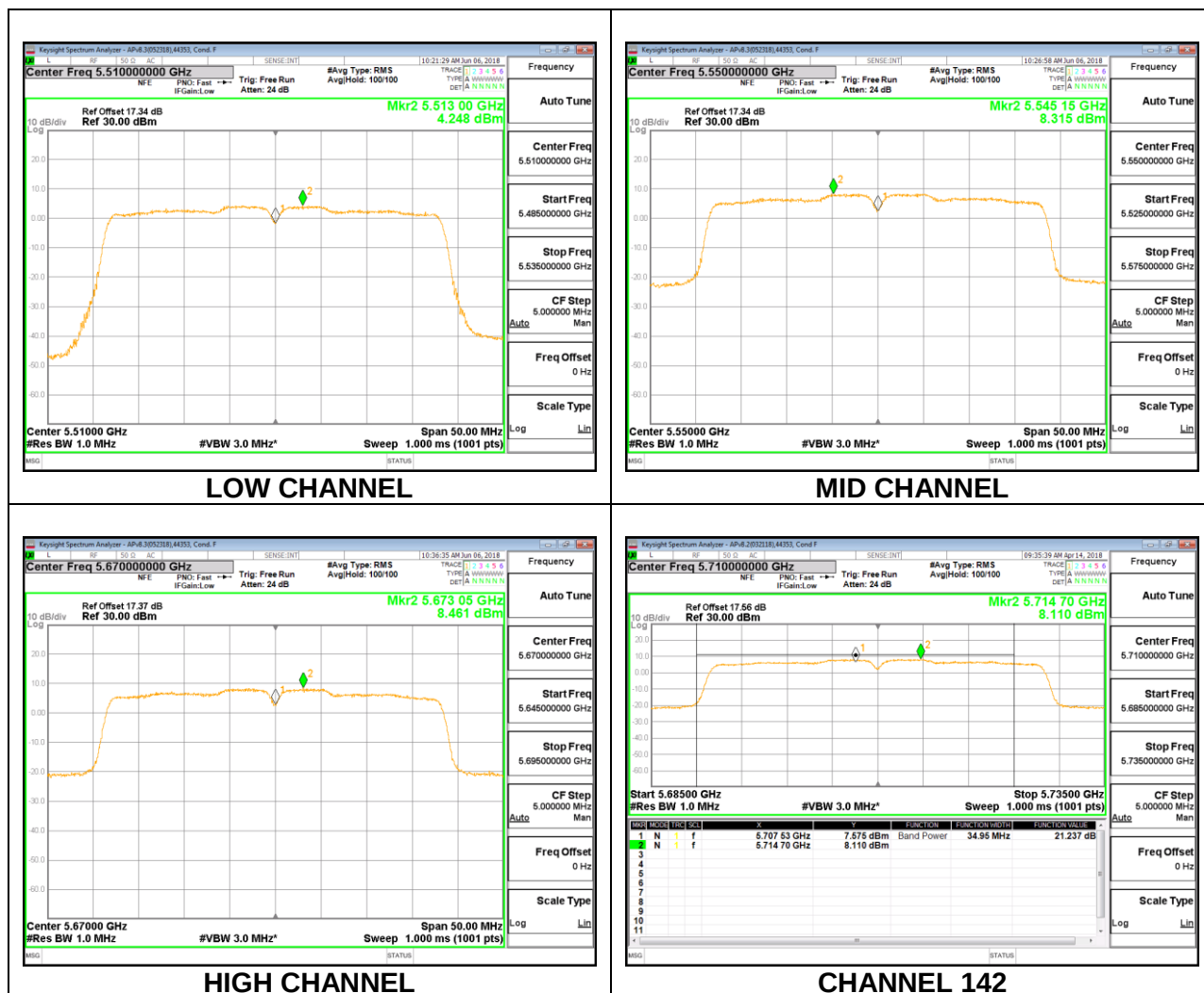
Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power (Ch 142) & PSD
---------------------------	------	--

Output Power Results

Channel	Frequency (MHz)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	17.95	17.95	24.00	-6.05
Mid	5550	21.67	21.67	24.00	-2.33
High	5670	21.77	21.77	24.00	-2.23
142	5710	21.24	21.33	24.00	-2.67

PSD Results

Channel	Frequency (MHz)	ANT 5 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5510	4.25	4.34	11.00	-6.66
Mid	5550	8.32	8.41	11.00	-2.60
High	5670	8.46	8.55	11.00	-2.45
142	5710	8.11	8.20	11.00	-2.80



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

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	5510	40.30	-1.72	1.22	24.00	11.00
Mid	5550	40.20	-1.72	1.22	24.00	11.00
High	5670	40.10	-1.72	1.22	24.00	11.00
142	5710	40.10	-1.72	1.22	24.00	11.00

Duty Cycle CF (dB)	0.09	Included in Calculations of Corr'd Power (Ch142) & PSD
---------------------------	------	---

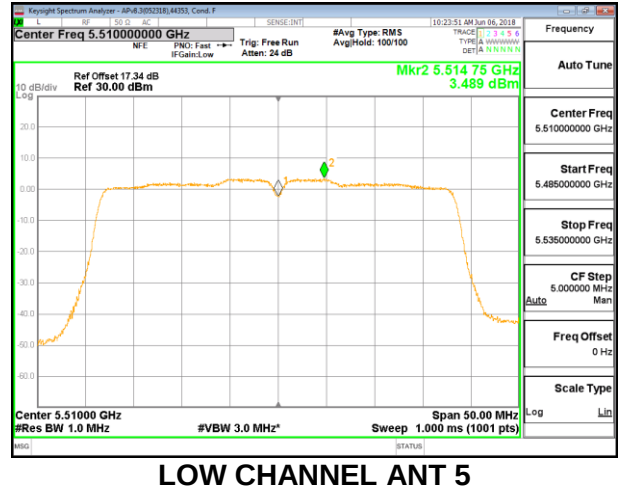
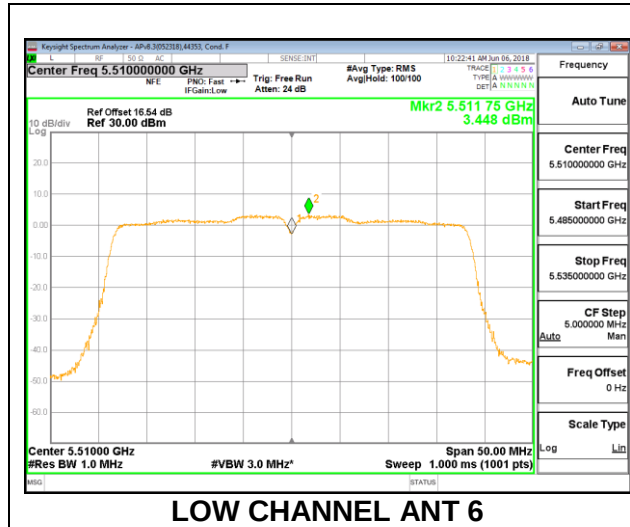
Output Power Results

Channel	Frequency (MHz)	ANT 6 Meas Power (dBm)	ANT 5 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	16.81	16.83	19.83	24.00	-4.17
Mid	5550	19.85	19.76	22.82	24.00	-1.18
High	5670	19.51	19.85	22.69	24.00	-1.31
142	5710	19.40	19.40	22.50	24.00	-1.50

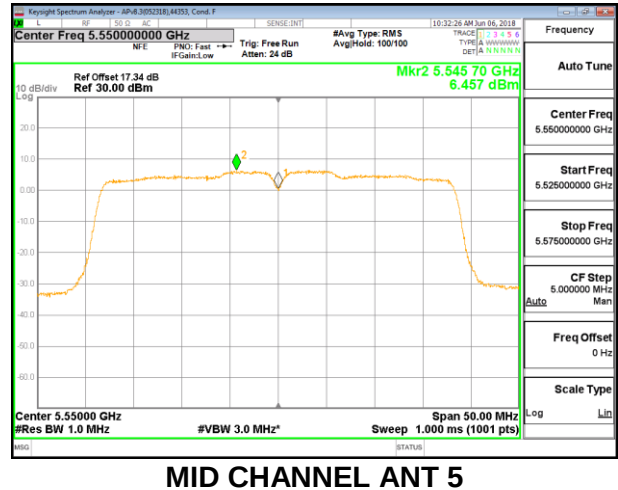
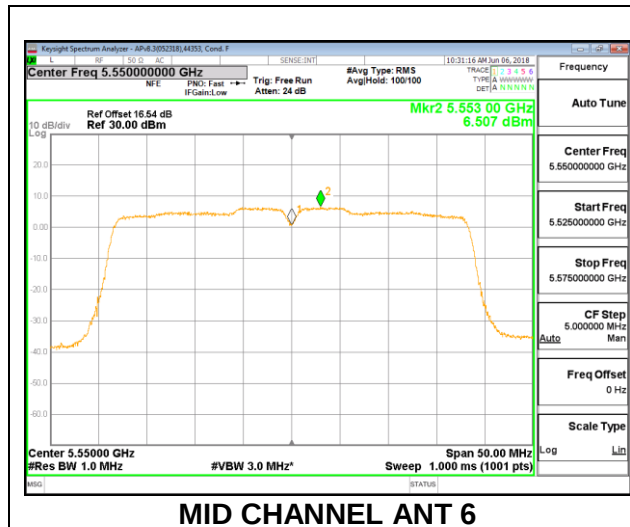
PSD Results

Channel	Frequency (MHz)	ANT 6 Meas PSD (dBm/ 1MHz)	ANT 5 Meas PSD (dBm/ 1MHz)	Total Corr'd PSD (dBm/ 1MHz)	PSD Limit (dBm/ 1MHz)	PSD Margin (dB)
Low	5510	3.45	3.49	6.57	11.00	-4.43
Mid	5550	6.51	6.46	9.58	11.00	-1.42
High	5670	6.41	6.48	9.55	11.00	-1.45
142	5710	6.43	6.29	9.46	11.00	-1.54

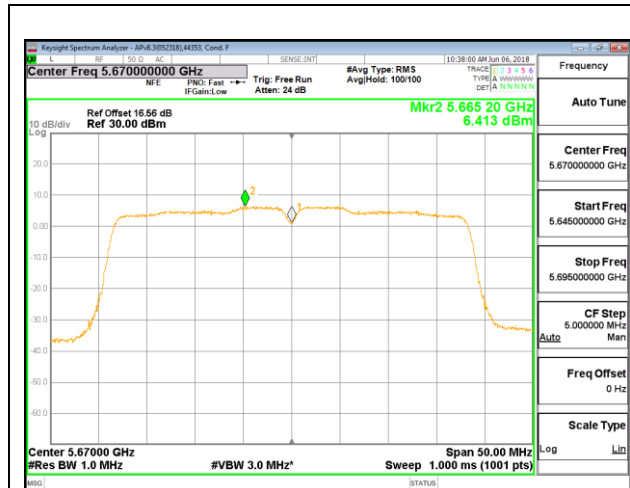
LOW CHANNEL



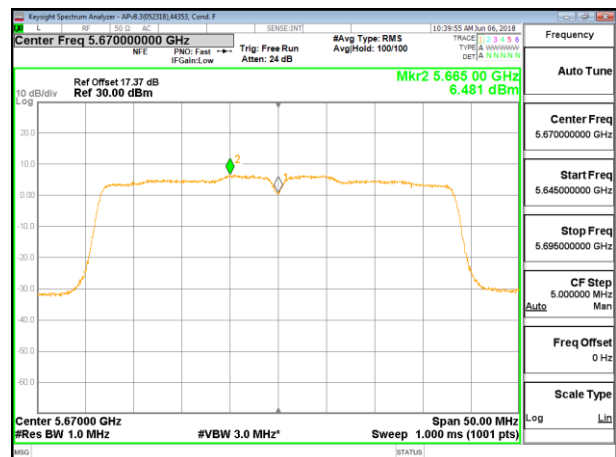
MID CHANNEL



HIGH CHANNEL

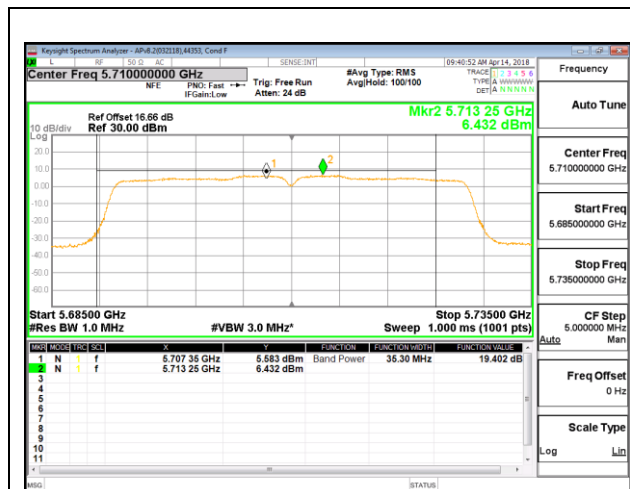


HIGH CHANNEL ANT 6

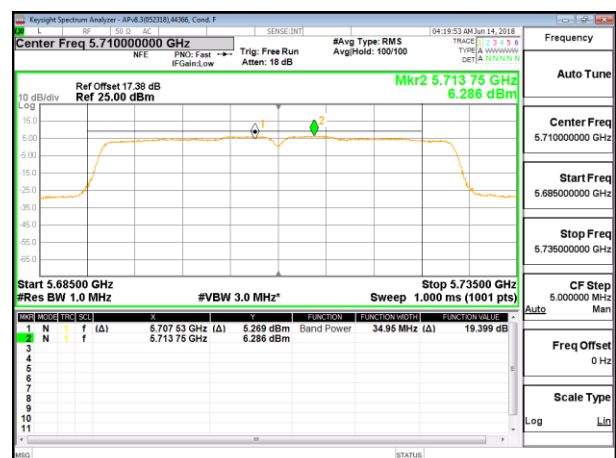


HIGH CHANNEL ANT 5

CHANNEL 142



CHANNEL 142 ANT 6



CHANNEL 142 ANT 5