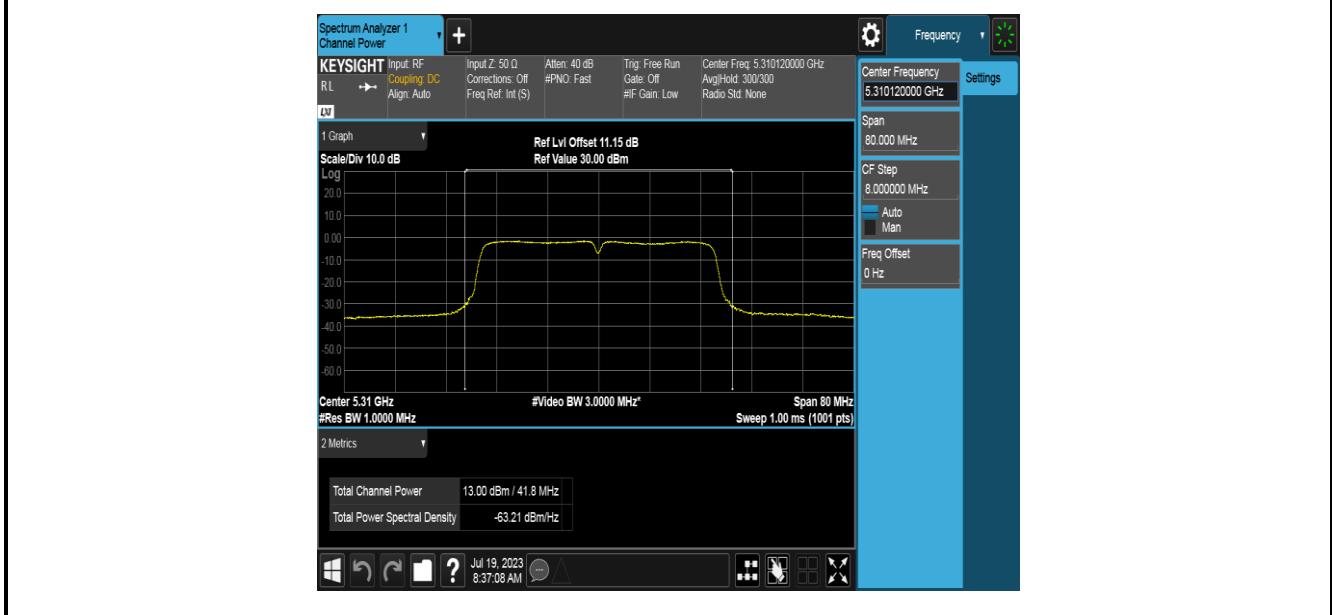
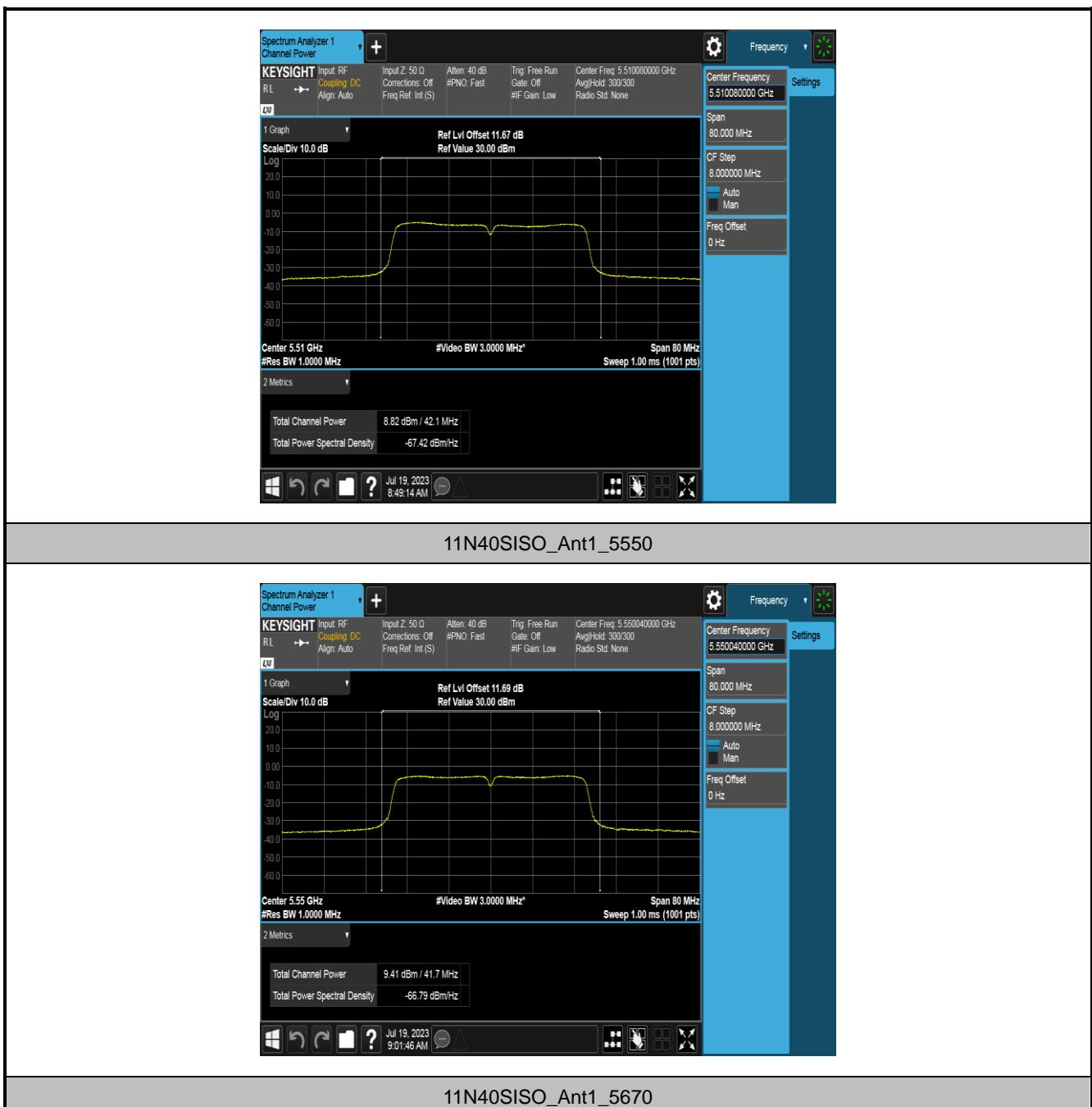


11N40SISO\_Ant1\_5310



11N40SISO\_Ant1\_5510

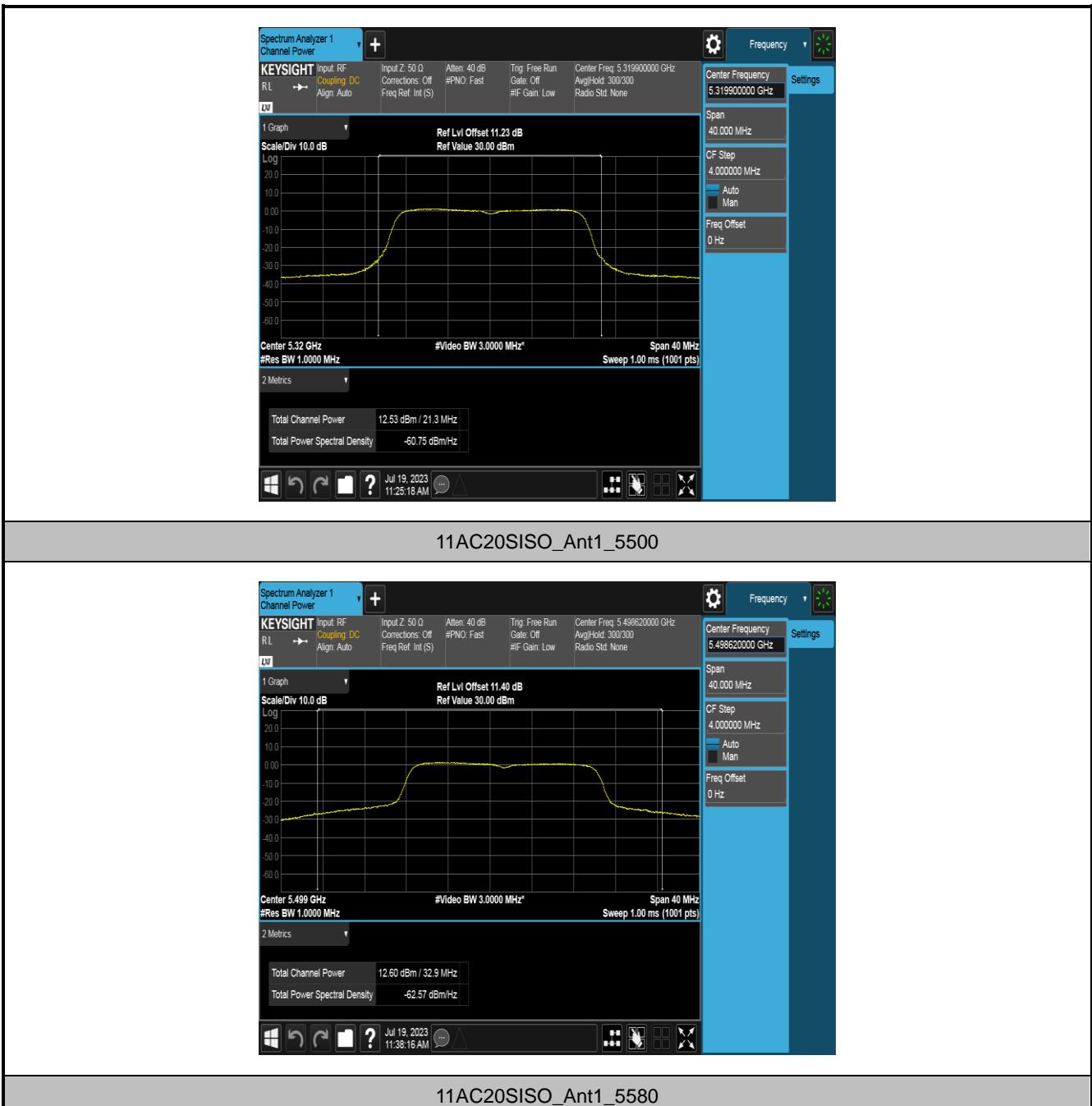


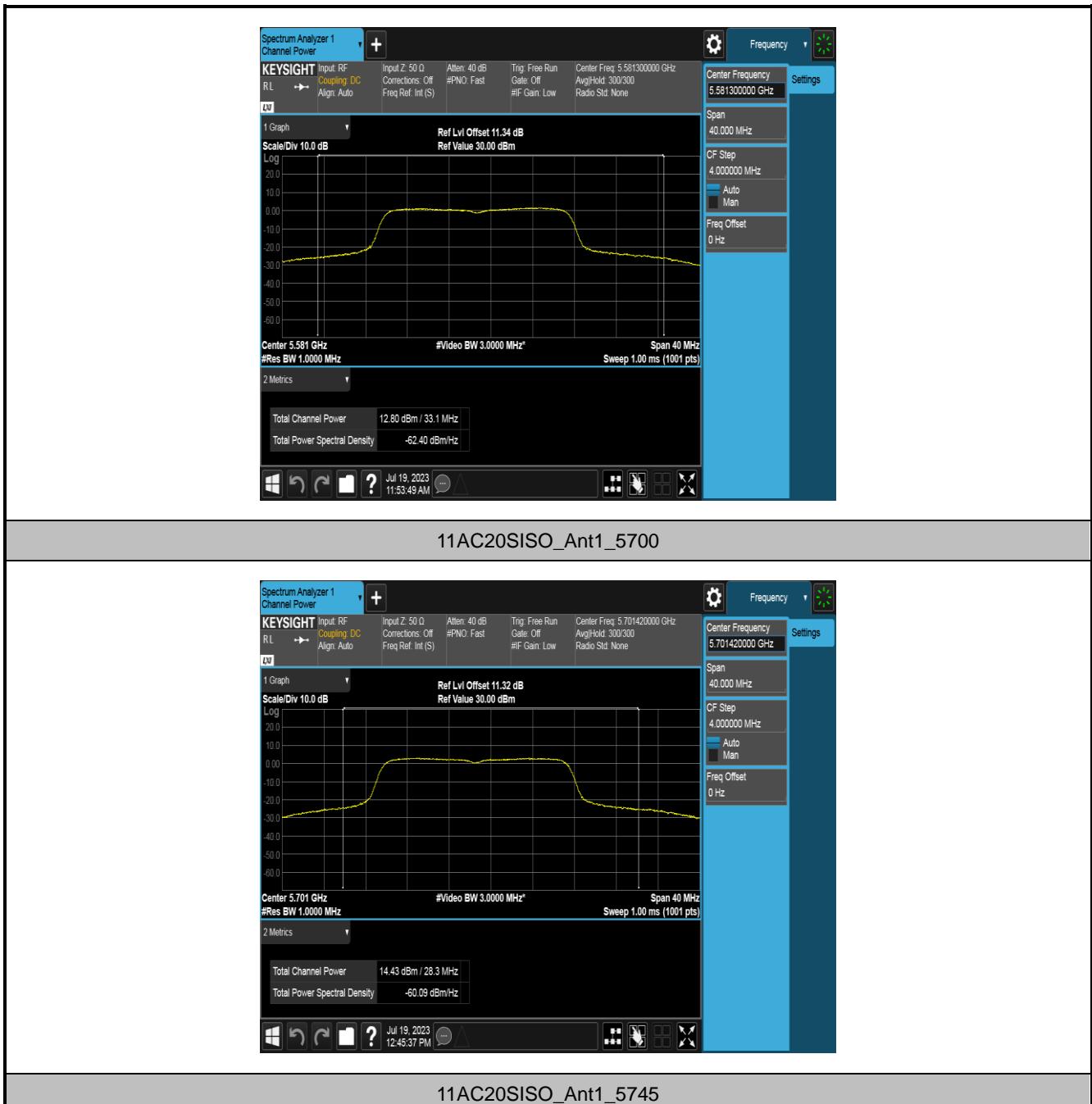










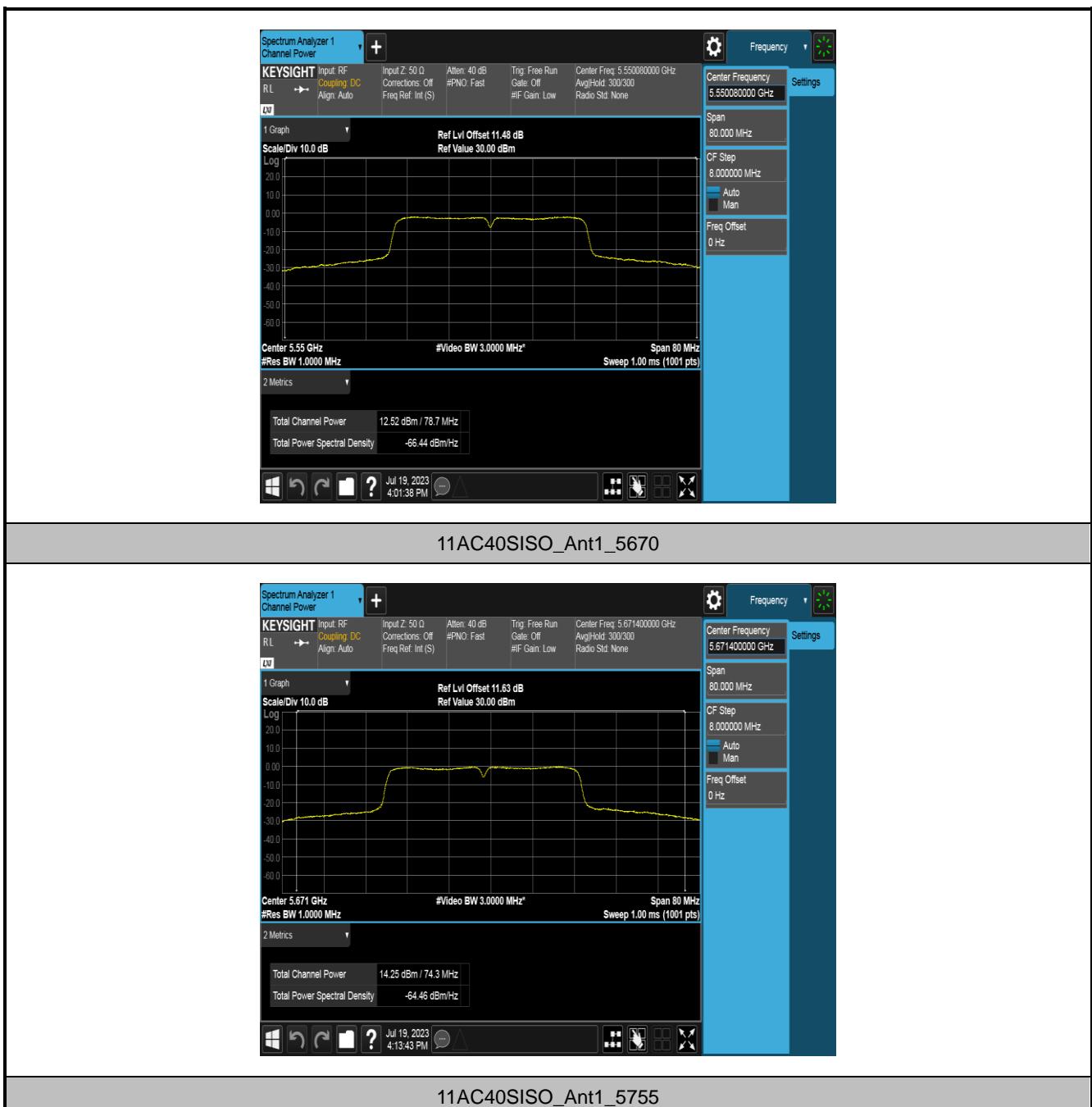






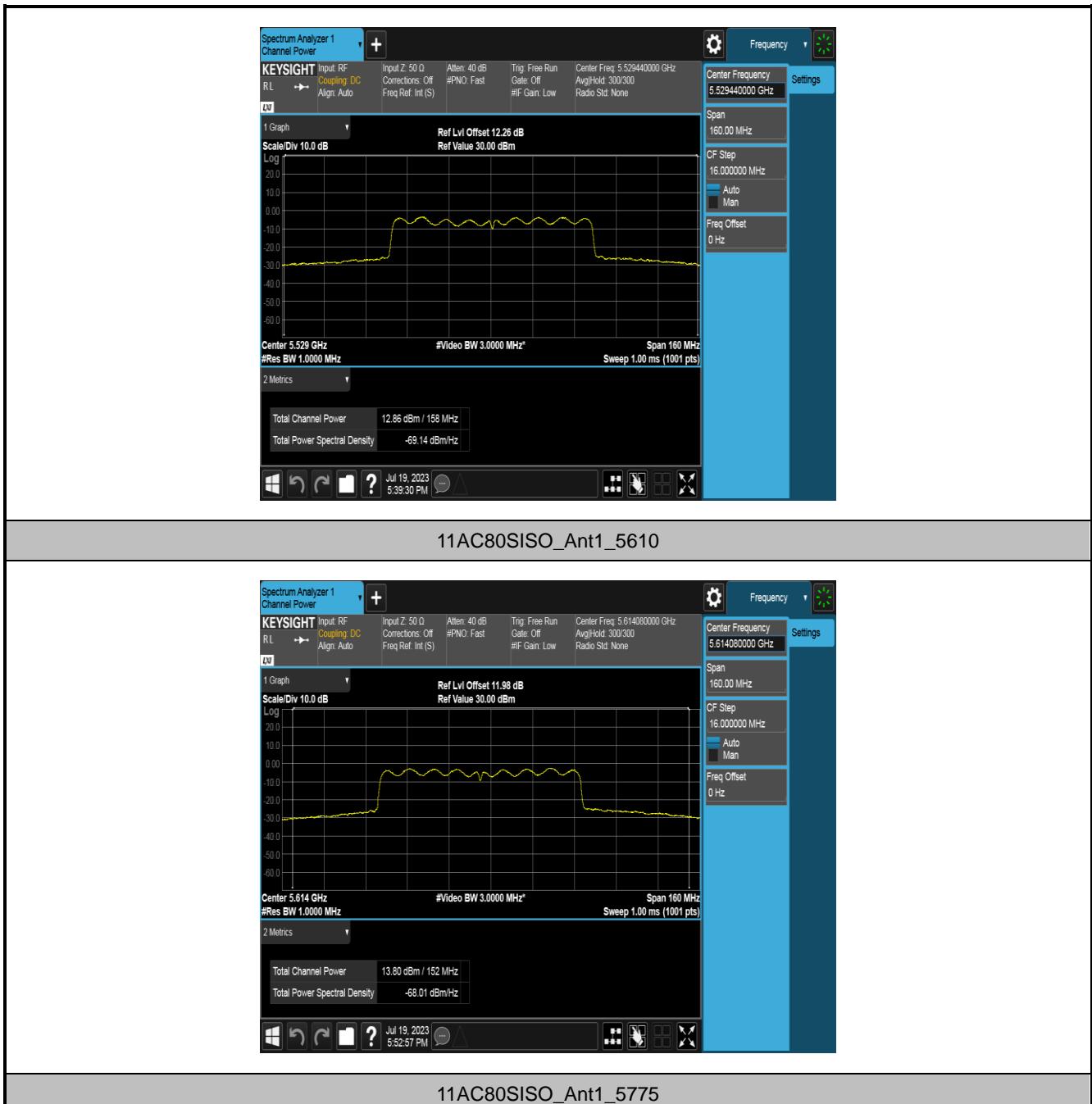














## 7.5. Transmit Power Control

### 7.5.1. Test Limit

The U-NII device is required to have the capability to operate at least 6 dB below the mean EIRP value of 30 dBm.

### 7.5.2. Test Procedure Used

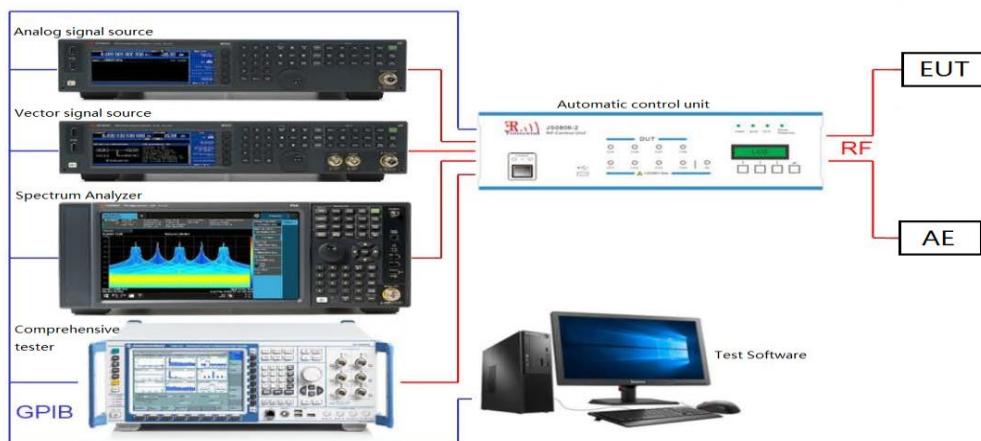
KDB 789033 D02v02r01 - Section E) 3) b) Method PM-G

ANSI C63.10-2013 – Section 12.3.3.2 Method PM-G

### 7.5.3. Test Setting

Average power measurements were performed only when the EUT was transmitting at its maximum power control level using a broadband power meter with a pulse sensor. The power meter implemented triggering and gating capabilities which were set up such that power measurements were recorded only during the ON time of the transmitter. The trace was averaged over 100 traces to obtain the final measured average power.

### 7.5.4. Test Setup



### 7.5.5. Test Result

A TPC mechanism is not required for systems with an e.i.r.p. of less than 500 mW.

## 7.6. Power Spectral Density Measurement

### 7.6.1. Test Limit

For client devices in the 5.15–5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band.

For the band 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band.

If transmitting antennas of directional gain greater than 6dBi are used, the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

### 7.6.2. Test Procedure Used

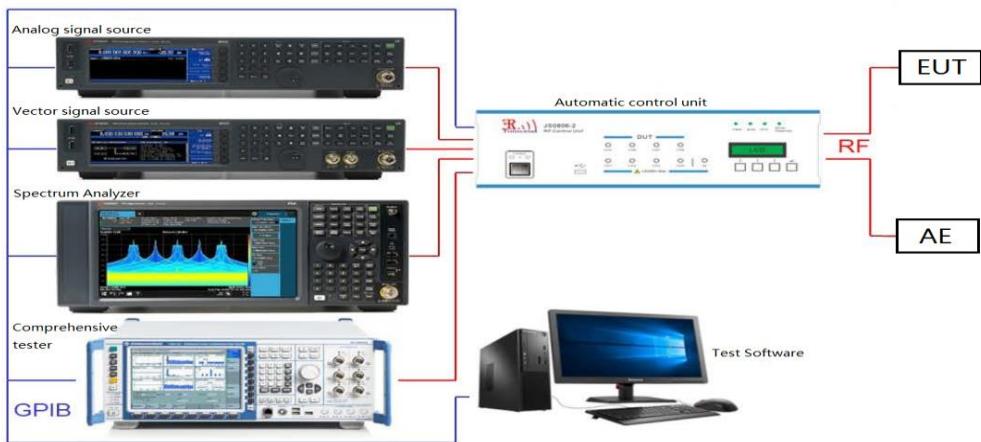
KDB 789033 D02v02r01 - Section F

ANSI C63.10-2013 - Section 12.3.2.2

### 7.6.3. Test Setting

1. Analyzer was set to the center frequency of the UNII channel under investigation
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz
4. VBW = 3MHz
5. Number of sweep points  $\geq 2 \times (\text{span} / \text{RBW})$
6. Detector = power averaging (Average)
7. Sweep time = auto
8. Trigger = free run
9. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
10. Add  $10 \times \log(1/x)$ , where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add  $10 \times \log(1/0.25) = 6$  dB if the duty cycle is 25 percent.
11. When the measurement bandwidth of Maximum PSD is specified in 500 kHz, add a constant factor  $10 \times \log(500\text{kHz}/300\text{kHz}) = 2.2$  dB to the measured result

#### 7.6.4. Test Setup



### 7.6.5. Test Result

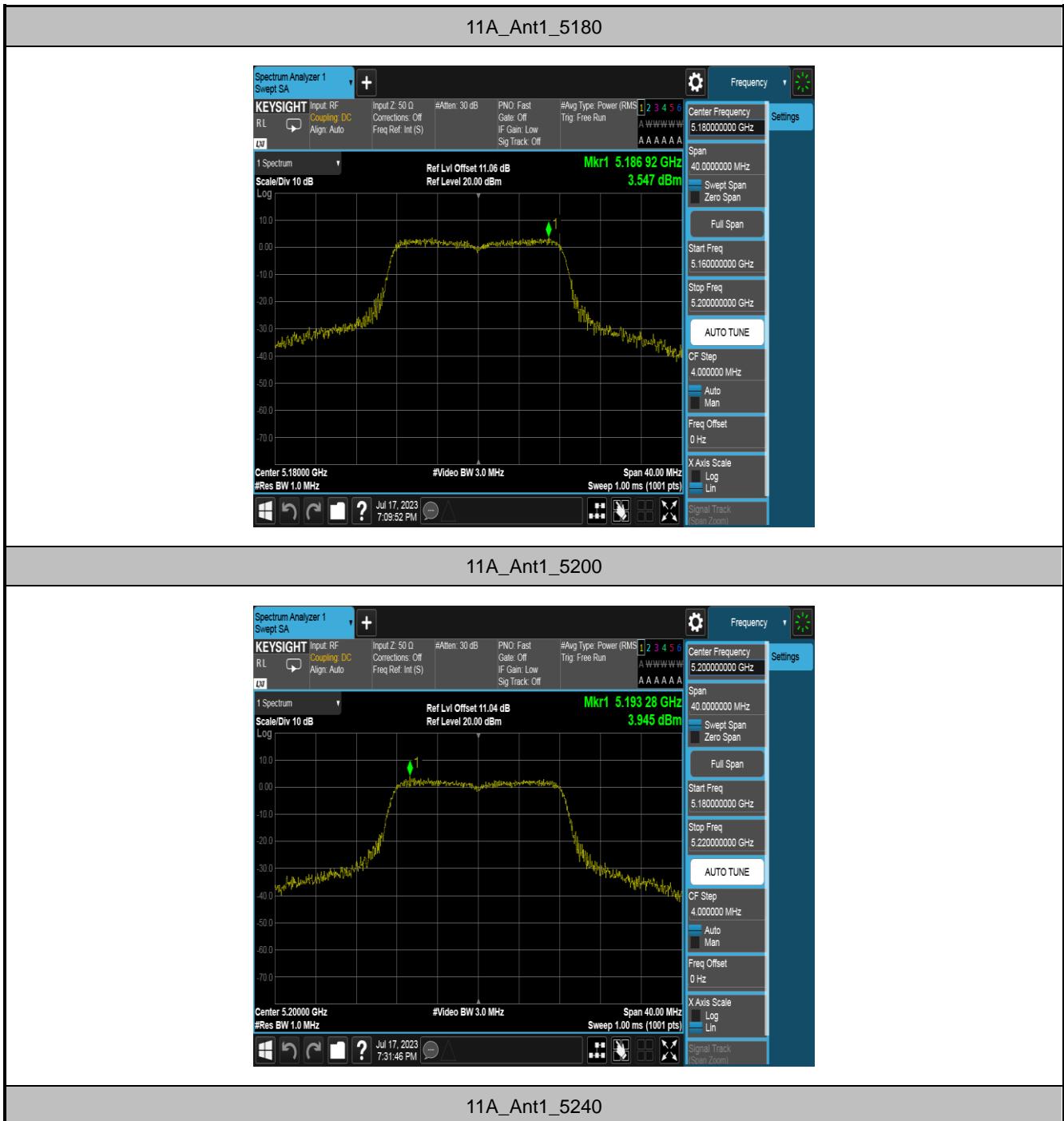
Test Mode	Antenna	Channel	Power [dBm/MHz]	Limit [dBm/MHz]	Verdict
11A	Ant1	5180	3.55	≤11.00	PASS
		5200	3.95	≤11.00	PASS
		5240	2.81	≤11.00	PASS
		5260	2.76	≤11.00	PASS
		5280	1.55	≤11.00	PASS
		5320	2.38	≤11.00	PASS
		5500	1.57	≤11.00	PASS
		5580	3.10	≤11.00	PASS
		5700	4.44	≤11.00	PASS
		5745	4.40	≤30.00	PASS
		5785	6.33	≤30.00	PASS
		5825	7.24	≤30.00	PASS
11N20SISO	Ant1	5180	2.48	≤11.00	PASS
		5200	3.34	≤11.00	PASS
		5240	2.74	≤11.00	PASS
		5260	2.42	≤11.00	PASS
		5280	1.59	≤11.00	PASS
		5320	2.35	≤11.00	PASS
		5500	-1.06	≤11.00	PASS
		5580	3.30	≤11.00	PASS
		5700	4.76	≤11.00	PASS
		5745	5.50	≤30.00	PASS
		5785	6.40	≤30.00	PASS
		5825	6.82	≤30.00	PASS
11N40SISO	Ant1	5190	1.17	≤11.00	PASS
		5230	1.68	≤11.00	PASS
		5270	0.64	≤11.00	PASS
		5310	-0.10	≤11.00	PASS
		5510	-3.66	≤11.00	PASS
		5550	-3.88	≤11.00	PASS
		5670	2.31	≤11.00	PASS
		5755	3.04	≤30.00	PASS
		5795	5.10	≤30.00	PASS

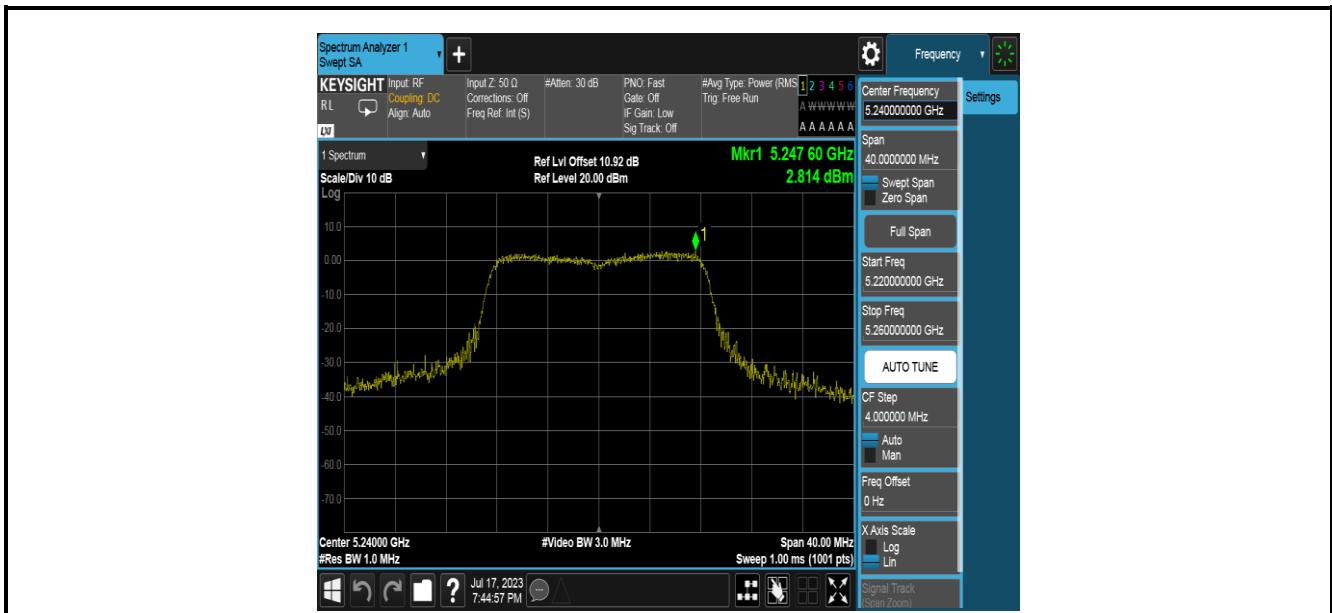
11AC20SISO	Ant1	5180	3.02	$\leq 11.00$	PASS
		5200	3.77	$\leq 11.00$	PASS
		5240	3.22	$\leq 11.00$	PASS
		5260	2.47	$\leq 11.00$	PASS
		5280	2.64	$\leq 11.00$	PASS
		5320	2.93	$\leq 11.00$	PASS
		5500	2.50	$\leq 11.00$	PASS
		5580	2.64	$\leq 11.00$	PASS
		5700	3.96	$\leq 11.00$	PASS
		5745	4.25	$\leq 30.00$	PASS
		5785	6.29	$\leq 30.00$	PASS
		5825	6.48	$\leq 30.00$	PASS
11AC40SISO	Ant1	5190	1.11	$\leq 11.00$	PASS
		5230	0.75	$\leq 11.00$	PASS
		5270	0.65	$\leq 11.00$	PASS
		5310	-0.24	$\leq 11.00$	PASS
		5510	-0.57	$\leq 11.00$	PASS
		5550	-1.02	$\leq 11.00$	PASS
		5670	0.90	$\leq 11.00$	PASS
		5755	2.25	$\leq 30.00$	PASS
		5795	3.23	$\leq 30.00$	PASS
11AC80SISO	Ant1	5210	-1.93	$\leq 11.00$	PASS
		5290	-1.86	$\leq 11.00$	PASS
		5530	-2.31	$\leq 11.00$	PASS
		5610	-1.38	$\leq 11.00$	PASS
		5775	-1.81	$\leq 30.00$	PASS

Note: 1.The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85 GHz.

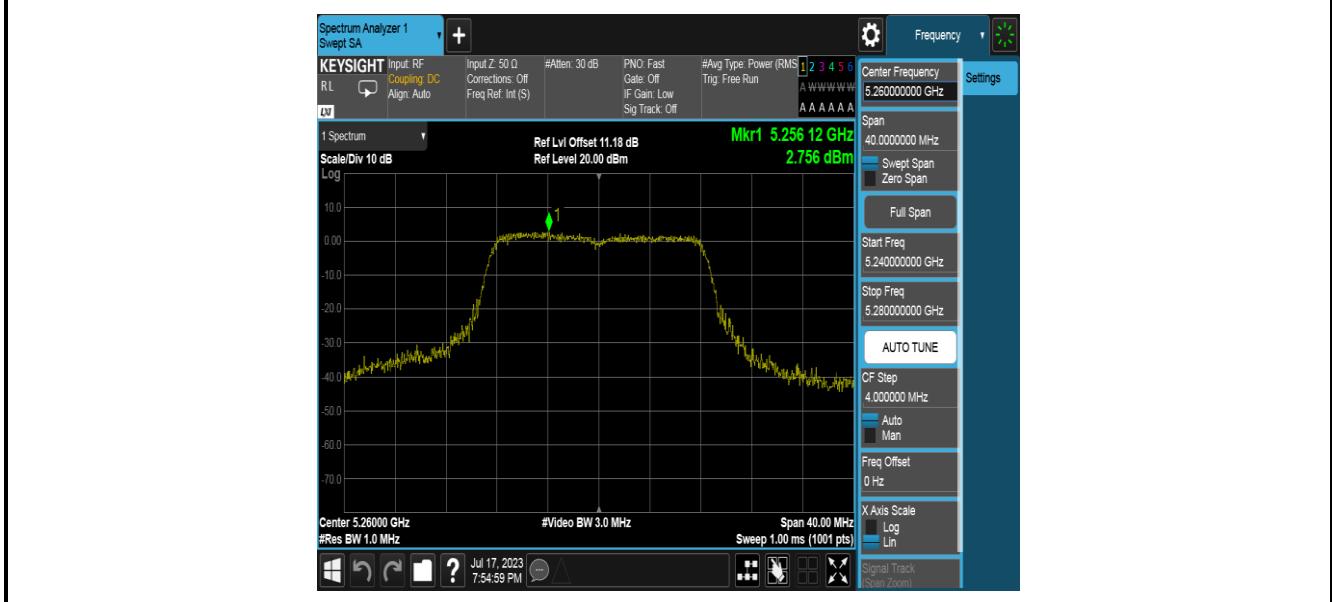
2.The Duty Cycle Factor and RBW Factor is compensated in the graph.

## Test Graphs

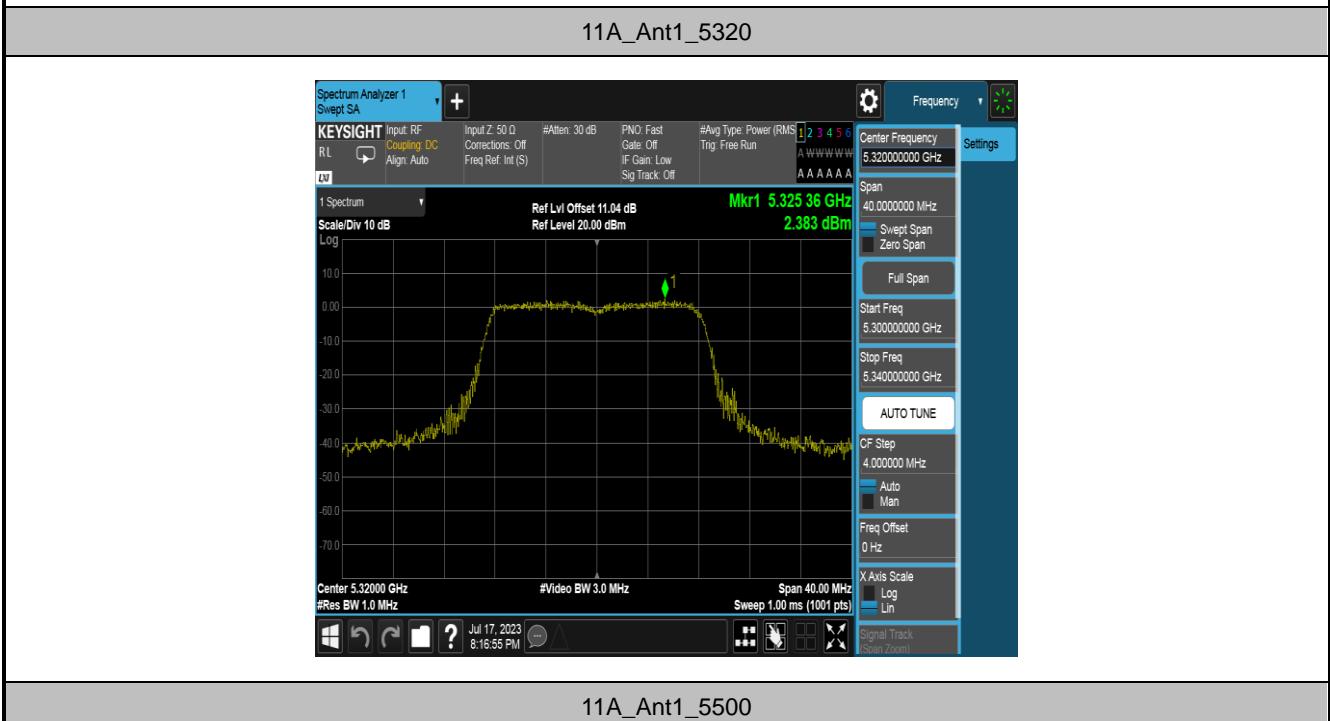
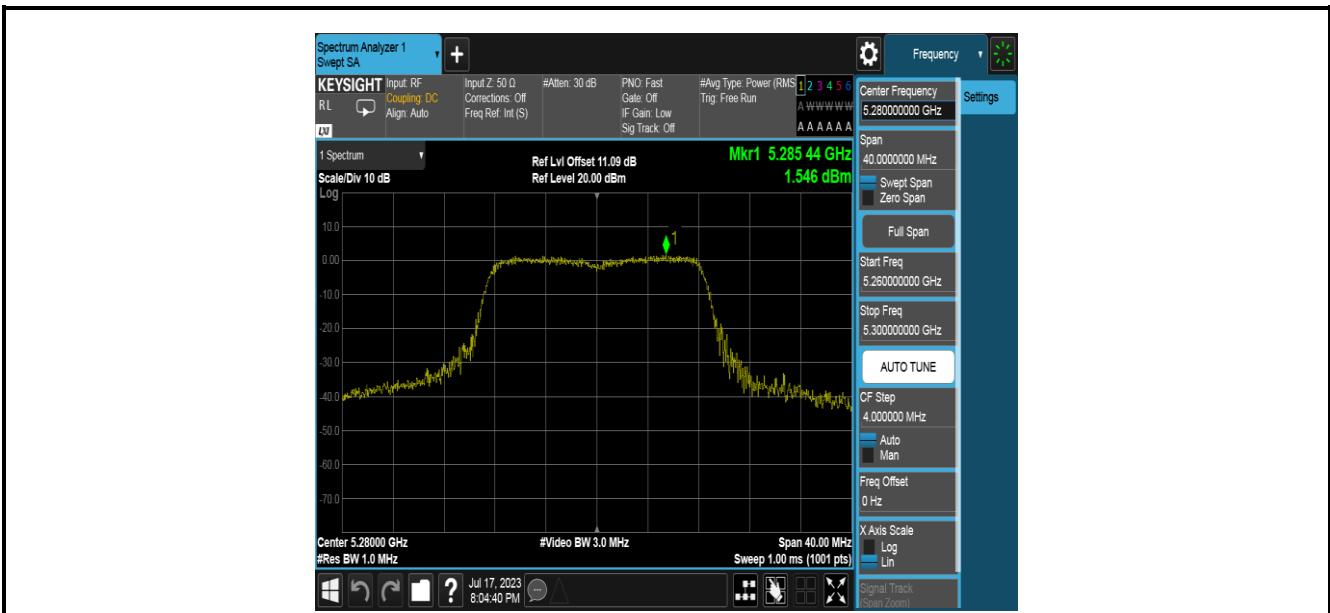




11A\_Ant1\_5260

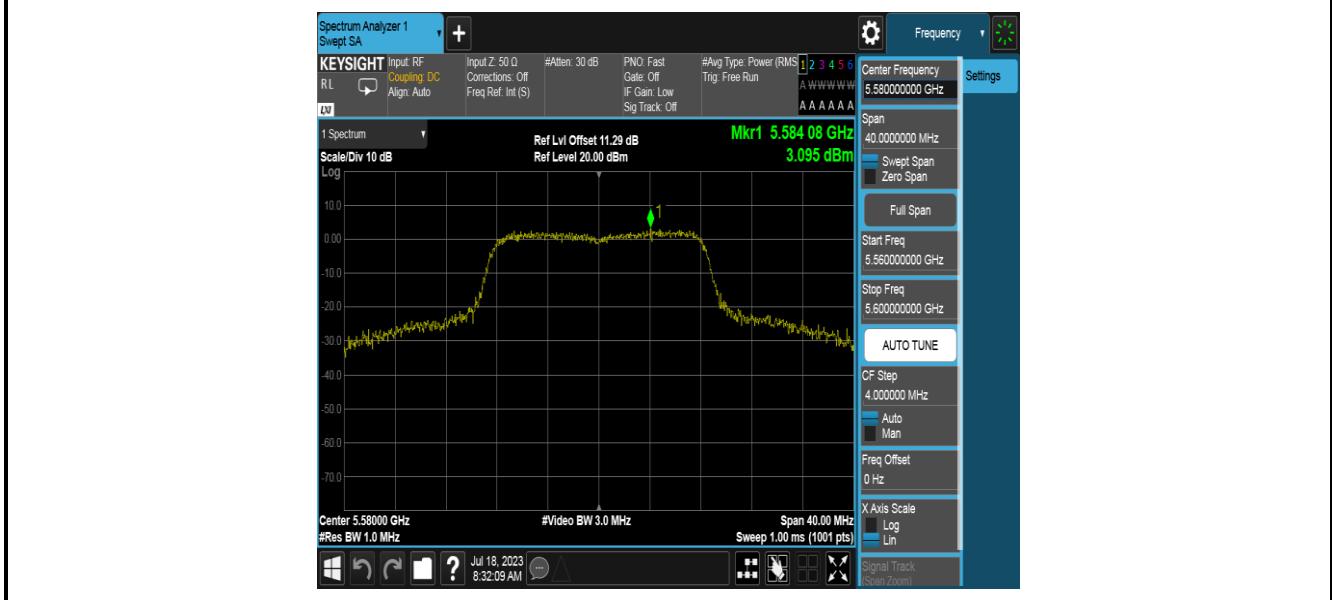


11A\_Ant1\_5280

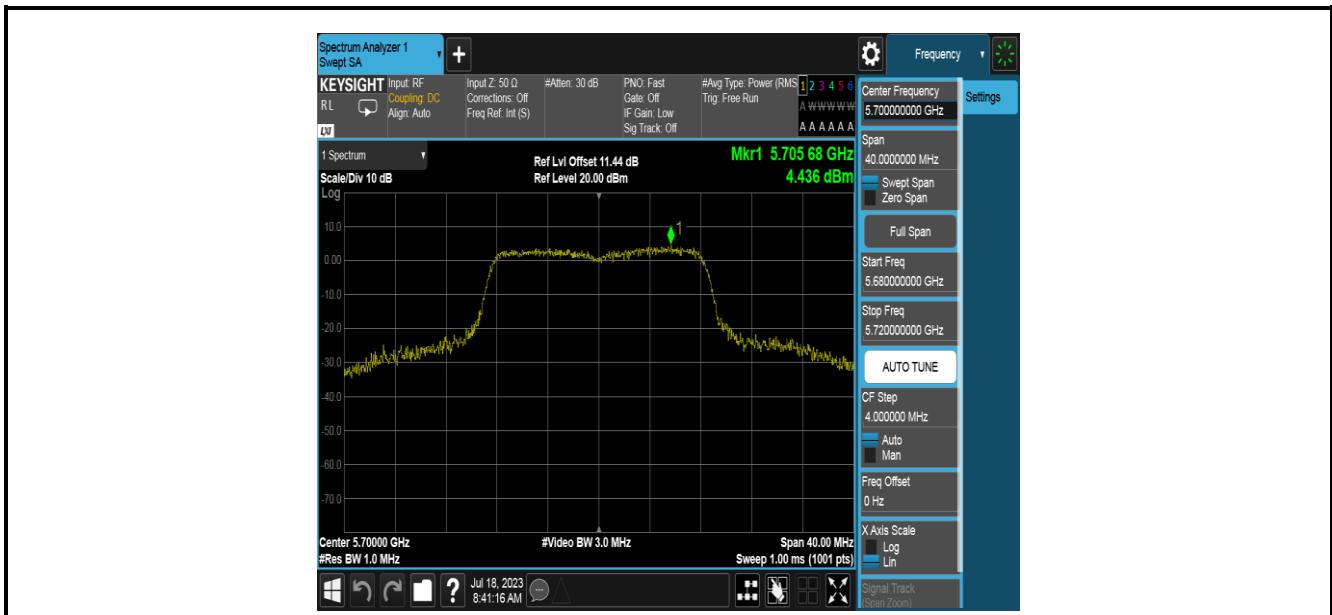




11A\_Ant1\_5580



11A\_Ant1\_5700



11A\_Ant1\_5745



11A\_Ant1\_5785



