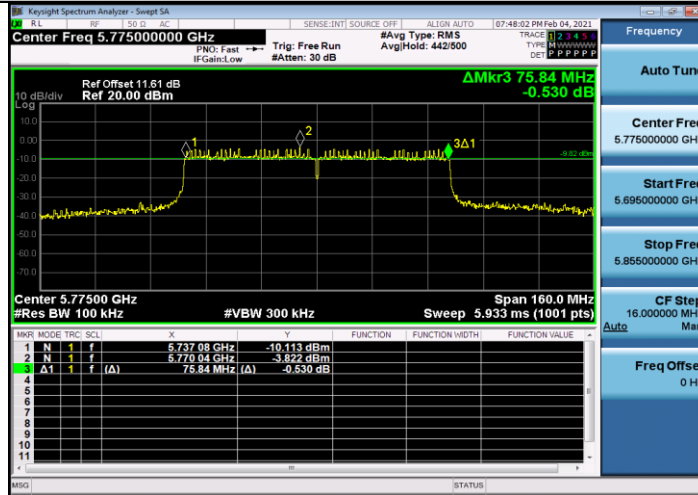




# 11AC80MIMO\_Ant2\_5775



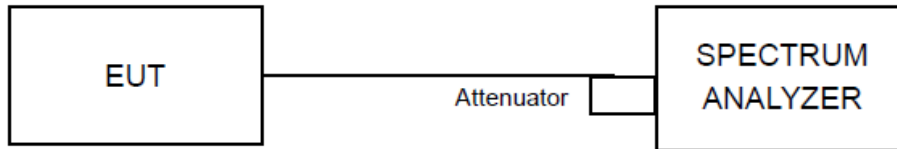
#### 4.4 Conducted Output Power

##### 4.4.1 Limit

Frequency band (MHz)	EUT Category		Limit
5150-5250		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p $\leq$ 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Client devices	250mW (24 dBm)
5250-5350	√		250mW (24 dBm) or 11 dBm+10 log B*
5470-5725	√		250mW (24 dBm) or 11 dBm+10 log B*
5725-5850	√		1 Watt (30 dBm)

Note: Where B is the 26dB emission bandwidth in MHz.

##### 4.4.2 Test Setup



##### 4.4.3 Test Procedures

- 1) Measure the duty cycle, x, of the transmitter output signal as described in section II.B.
- 2) Set span to encompass the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- 3) Set RBW = 1 MHz.
- 4) Set VBW  $\geq$  3 MHz.
- 5) Number of points in sweep  $\geq$  2 Span / RBW. (This ensures that bin-to-bin spacing is  $\leq$  RBW/2, so that narrowband signals are not lost between frequency bins.)
- 6) Sweep time = auto.
- 7) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
- 8) Do not use sweep triggering. Allow the sweep to “free run”.
- 9) Trace average at least 100 traces in power averaging (i.e., RMS) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
- 10) Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied



bandwidth) of the signal using the instrument's band power measurement function with band limits set equal to the EBW (or occupied bandwidth)band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.

11) Add  $10 \log(1/x)$ , 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  $10 \log(1/0.25) = 6$  dB if the duty cycle is 25 percent.

#### **4.4.4 Deviation of Test Standard**

No deviation.



#### 4.4.5 Test Results

The test result refer to the report FVC-ESH-P20112379B-14.

Test Mode	Antenna	Channel [MHz]	Result [dBm]	10log(1/x) Factor[dB]	Power [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	14.09	0.08	14.17	<=24	PASS
	Ant2	5180	14.64	0.08	14.72	<=24	PASS
	Ant1	5220	13.91	0.08	13.99	<=24	PASS
	Ant2	5220	13.83	0.08	13.91	<=24	PASS
	Ant1	5240	14.77	0.08	14.85	<=24	PASS
	Ant2	5240	14.25	0.08	14.33	<=24	PASS
	Ant1	5260	14.92	0.08	15.00	<=24	PASS
	Ant2	5260	14.70	0.08	14.78	<=24	PASS
	Ant1	5280	15.11	0.08	15.19	<=24	PASS
	Ant2	5280	15.09	0.08	15.17	<=24	PASS
	Ant1	5320	15.12	0.08	15.20	<=24	PASS
	Ant2	5320	15.94	0.08	16.02	<=24	PASS
	Ant1	5500	13.89	0.08	13.97	<=24	PASS
	Ant2	5500	14.00	0.08	14.08	<=24	PASS
	Ant1	5600	14.64	0.08	14.72	<=24	PASS
	Ant2	5600	15.87	0.08	15.95	<=24	PASS
	Ant1	5700	13.53	0.08	13.61	<=24	PASS
	Ant2	5700	15.32	0.08	15.40	<=24	PASS
	Ant1	5745	13.59	0.08	13.67	<=30	PASS
	Ant2	5745	14.33	0.08	14.41	<=30	PASS
	Ant1	5785	13.09	0.08	13.17	<=30	PASS
	Ant2	5785	13.18	0.08	13.26	<=30	PASS
	Ant1	5825	12.63	0.08	12.71	<=30	PASS
	Ant2	5825	12.74	0.08	12.82	<=30	PASS
11N20MIMO	Ant1	5180	11.19	0.09	11.28	<=24	PASS
	Ant2	5180	13.65	0.09	13.74	<=24	PASS
	total	5180	--	--	15.69	<=24	PASS
	Ant1	5220	11.61	0.09	11.7	<=24	PASS
	Ant2	5220	13.20	0.09	13.29	<=24	PASS
	total	5220	--	--	15.58	<=24	PASS
	Ant1	5240	12.06	0.09	12.15	<=24	PASS
	Ant2	5240	13.67	0.09	13.76	<=24	PASS
	total	5240	--	--	16.04	<=24	PASS
	Ant1	5260	12.13	0.09	12.22	<=24	PASS
Ant2	5260	14.14	0.09	14.23	<=24	PASS	



	total	5260	--	--	16.35	<=24	PASS
	Ant1	5280	12.29	0.09	12.38	<=24	PASS
	Ant2	5280	14.43	0.09	14.52	<=24	PASS
	total	5280	--	--	16.59	<=24	PASS
	Ant1	5320	12.33	0.09	12.42	<=24	PASS
	Ant2	5320	15.41	0.09	15.5	<=24	PASS
	total	5320	--	--	17.24	<=24	PASS
	Ant1	5500	11.11	0.09	11.2	<=24	PASS
	Ant2	5500	13.55	0.09	13.64	<=24	PASS
	total	5500	--	--	15.60	<=24	PASS
	Ant1	5600	11.95	0.09	12.04	<=24	PASS
	Ant2	5600	15.15	0.09	15.24	<=24	PASS
	total	5600	--	--	16.94	<=24	PASS
	Ant1	5700	10.67	0.09	10.76	<=24	PASS
	Ant2	5700	14.76	0.09	14.85	<=24	PASS
	total	5700	--	--	16.28	<=24	PASS
	Ant1	5745	10.69	0.09	10.78	<=30	PASS
	Ant2	5745	13.67	0.09	13.76	<=30	PASS
	total	5745	--	--	15.53	<=30	PASS
	Ant1	5785	10.41	0.13	10.54	<=30	PASS
Ant2	5785	12.61	0.18	12.79	<=30	PASS	
total	5785	--	--	14.82	<=30	PASS	
Ant1	5825	10.23	0.13	10.36	<=30	PASS	
Ant2	5825	11.88	0.13	12.01	<=30	PASS	
total	5825	--	--	14.27	<=30	PASS	
11N40MIMO	Ant1	5190	10.02	0.13	10.15	<=24	PASS
	Ant2	5190	12.00	0.13	12.13	<=24	PASS
	total	5190	--	--	14.26	<=24	PASS
	Ant1	5230	10.95	0.13	11.08	<=24	PASS
	Ant2	5230	12.07	0.13	12.2	<=24	PASS
	total	5230	--	--	14.69	<=24	PASS
	Ant1	5270	11.01	0.13	11.14	<=24	PASS
	Ant2	5270	13.23	0.13	13.36	<=24	PASS
	total	5270	--	--	15.40	<=24	PASS
	Ant1	5310	10.98	0.13	11.11	<=24	PASS
	Ant2	5310	13.92	0.18	14.1	<=24	PASS
	total	5310	--	--	15.87	<=24	PASS
	Ant1	5510	9.90	0.13	10.03	<=24	PASS
	Ant2	5510	12.15	0.13	12.28	<=24	PASS



	total	5510	--	--	14.31	<=24	PASS
	Ant1	5590	10.18	0.13	10.31	<=24	PASS
	Ant2	5590	14.36	0.18	14.54	<=24	PASS
	total	5590	--	--	15.93	<=24	PASS
	Ant1	5670	10.11	0.13	10.24	<=24	PASS
	Ant2	5670	14.60	0.13	14.73	<=24	PASS
	total	5670	--	--	16.05	<=24	PASS
	Ant1	5755	9.50	0.13	9.63	<=30	PASS
	Ant2	5755	12.37	0.13	12.5	<=30	PASS
	total	5755	--	--	14.31	<=30	PASS
	Ant1	5795	9.07	0.13	9.2	<=30	PASS
	Ant2	5795	11.29	0.13	11.42	<=30	PASS
	total	5795	--	--	13.46	<=30	PASS
11AC20MIMO	Ant1	5180	10.64	0.09	10.73	<=24	PASS
	Ant2	5180	12.04	0.09	12.13	<=24	PASS
	total	5180	--	--	14.50	<=24	PASS
	Ant1	5220	10.53	0.09	10.62	<=24	PASS
	Ant2	5220	11.39	0.09	11.48	<=24	PASS
	total	5220	--	--	14.08	<=24	PASS
	Ant1	5240	11.11	0.09	11.2	<=24	PASS
	Ant2	5240	12.10	0.09	12.19	<=24	PASS
	total	5240	--	--	14.73	<=24	PASS
	Ant1	5260	11.03	0.09	11.12	<=24	PASS
	Ant2	5260	12.66	0.09	12.75	<=24	PASS
	total	5260	--	--	15.02	<=24	PASS
	Ant1	5280	11.11	0.09	11.2	<=24	PASS
	Ant2	5280	12.88	0.09	12.97	<=24	PASS
	total	5280	--	--	15.18	<=24	PASS
	Ant1	5320	10.96	0.09	11.05	<=24	PASS
	Ant2	5320	13.20	0.09	13.29	<=24	PASS
	total	5320	--	--	15.32	<=24	PASS
	Ant1	5500	10.09	0.09	10.18	<=24	PASS
	Ant2	5500	12.09	0.09	12.18	<=24	PASS
	total	5500	--	--	14.30	<=24	PASS
	Ant1	5600	10.87	0.09	10.96	<=24	PASS
	Ant2	5600	13.51	0.09	13.6	<=24	PASS
	total	5600	--	--	15.49	<=24	PASS
Ant1	5700	9.63	0.09	9.72	<=24	PASS	
Ant2	5700	13.80	0.09	13.89	<=24	PASS	



	total	5700	--	--	15.30	<=24	PASS
	Ant1	5745	9.77	0.09	9.86	<=30	PASS
	Ant2	5745	12.96	0.09	13.05	<=30	PASS
	total	5745	--	--	14.75	<=30	PASS
	Ant1	5785	9.27	0.09	9.36	<=30	PASS
	Ant2	5785	11.76	0.09	11.85	<=30	PASS
	total	5785	--	--	13.79	<=30	PASS
	Ant1	5825	8.86	0.09	8.95	<=30	PASS
	Ant2	5825	10.66	0.09	10.75	<=30	PASS
	total	5825	--	--	12.95	<=30	PASS
11AC40MIMO	Ant1	5190	9.14	0.18	9.32	<=24	PASS
	Ant2	5190	10.68	0.18	10.86	<=24	PASS
	total	5190	--	--	13.17	<=24	PASS
	Ant1	5230	9.91	0.18	10.09	<=24	PASS
	Ant2	5230	10.79	0.18	10.97	<=24	PASS
	total	5230	--	--	13.56	<=24	PASS
	Ant1	5270	10.22	0.18	10.4	<=24	PASS
	Ant2	5270	11.33	0.18	11.51	<=24	PASS
	total	5270	--	--	14.00	<=24	PASS
	Ant1	5310	10.00	0.18	10.18	<=24	PASS
	Ant2	5310	12.59	0.18	12.77	<=24	PASS
	total	5310	--	--	14.68	<=24	PASS
	Ant1	5510	9.09	0.18	9.27	<=24	PASS
	Ant2	5510	11.00	0.18	11.18	<=24	PASS
	total	5510	--	--	13.34	<=24	PASS
	Ant1	5590	9.54	0.18	9.72	<=24	PASS
	Ant2	5590	12.98	0.18	13.16	<=24	PASS
	total	5590	--	--	14.78	<=24	PASS
	Ant1	5670	9.40	0.18	9.58	<=24	PASS
	Ant2	5670	13.52	0.18	13.7	<=24	PASS
	total	5670	--	--	15.12	<=24	PASS
	Ant1	5755	8.61	0.18	8.79	<=30	PASS
	Ant2	5755	10.87	0.18	11.05	<=30	PASS
	total	5755	--	--	13.08	<=30	PASS
Ant1	5795	8.16	0.18	8.34	<=30	PASS	
Ant2	5795	9.75	0.18	9.93	<=30	PASS	
total	5795	--	--	12.22	<=30	PASS	
11AC80MIMO	Ant1	5210	9.68	0.36	10.04	<=24	PASS
	Ant2	5210	11.52	0.36	11.88	<=24	PASS

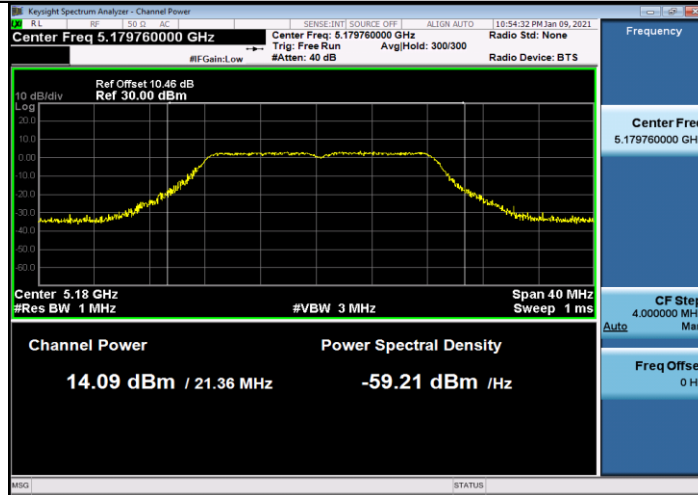


	total	5210	--	--	14.07	<=24	PASS
	Ant1	5290	10.82	0.36	11.18	<=24	PASS
	Ant2	5290	12.88	0.36	13.24	<=24	PASS
	total	5290	--	--	15.34	<=24	PASS
	Ant1	5530	9.61	0.36	9.97	<=24	PASS
	Ant2	5530	12.05	0.36	12.41	<=24	PASS
	total	5530	--	--	14.37	<=24	PASS
	Ant1	5610	9.91	0.36	10.27	<=24	PASS
	Ant2	5610	13.97	0.36	14.33	<=24	PASS
	total	5610	--	--	15.77	<=24	PASS
	Ant1	5775	8.53	0.36	8.89	<=30	PASS
	Ant2	5775	10.73	0.36	11.09	<=30	PASS
	total	5775	--	--	13.14	<=30	PASS

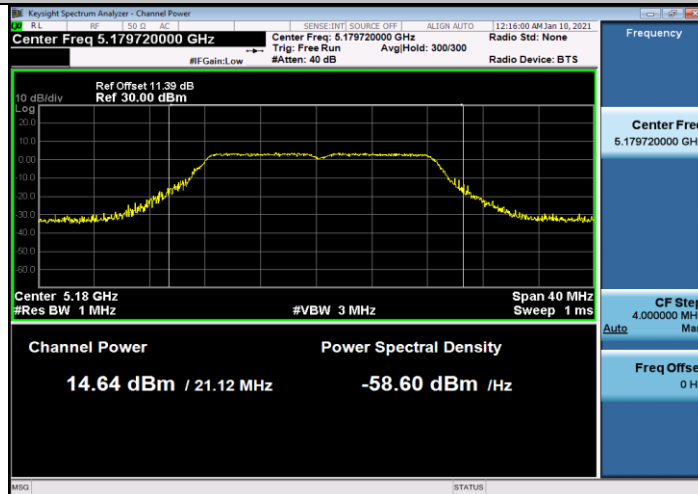




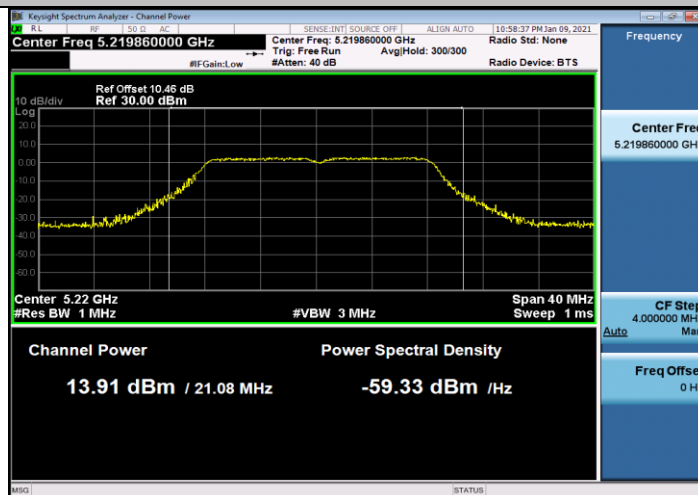
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### 11A\_Ant2\_5180

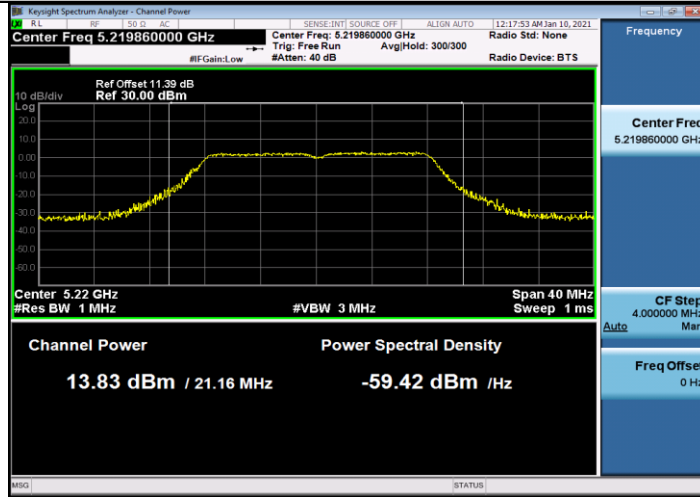


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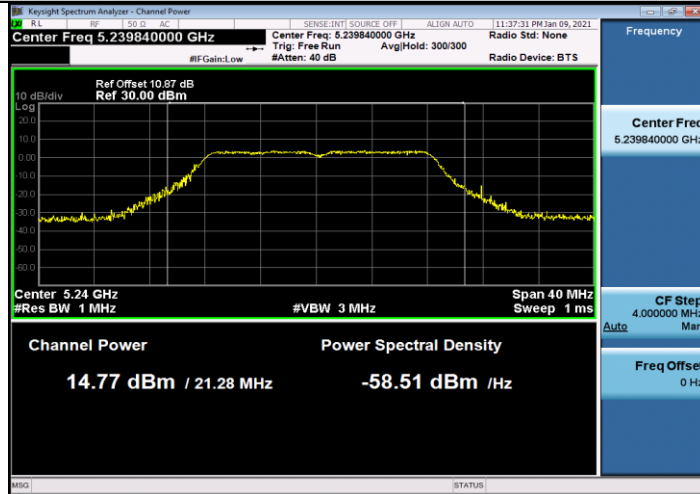




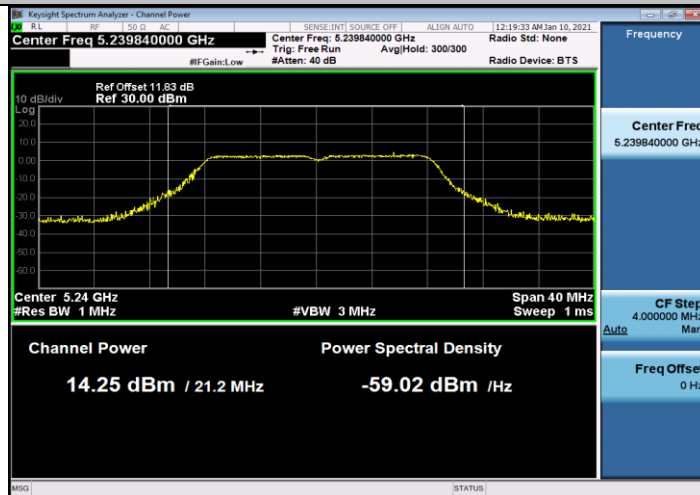
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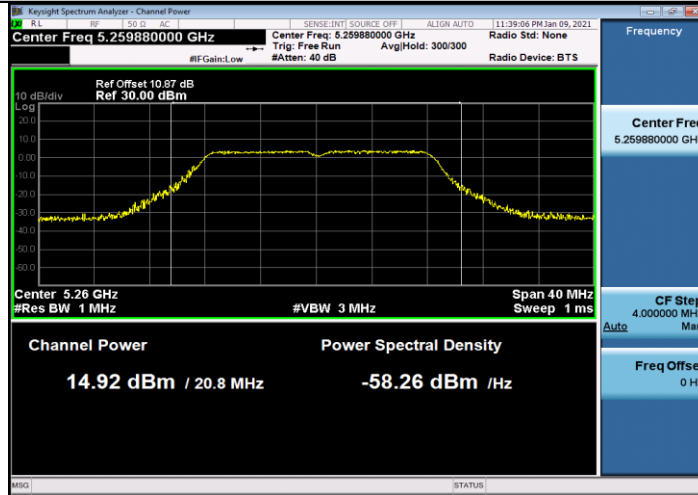
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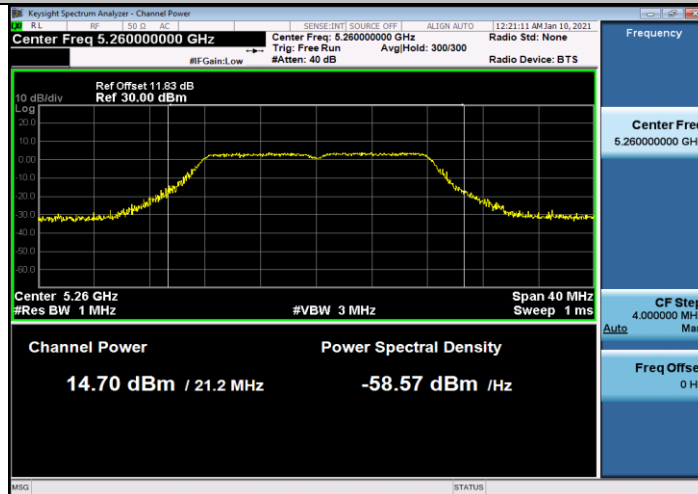
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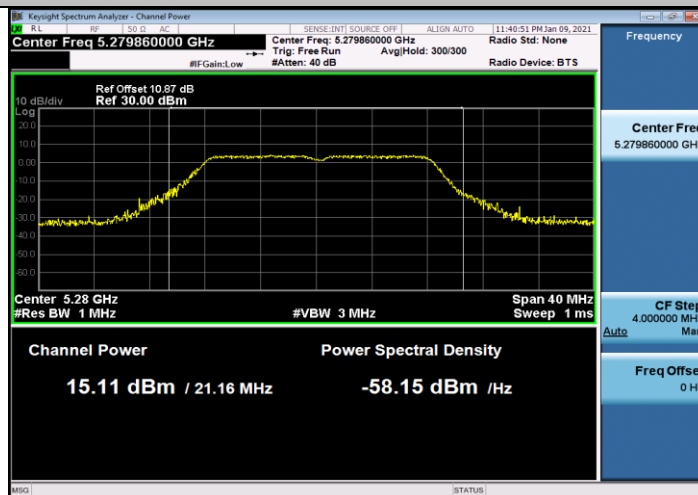
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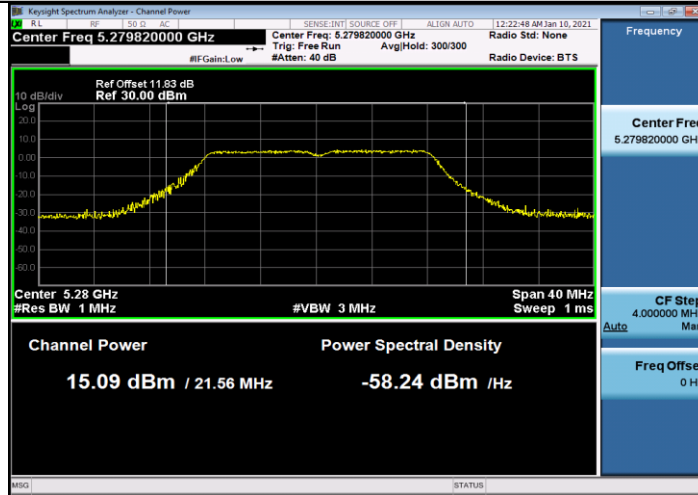
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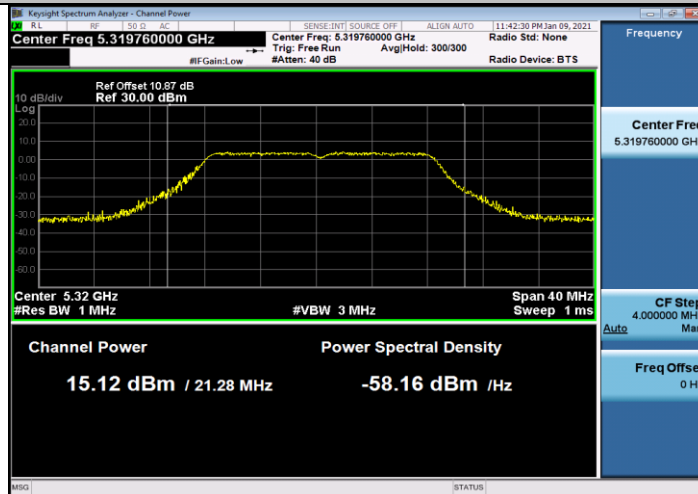
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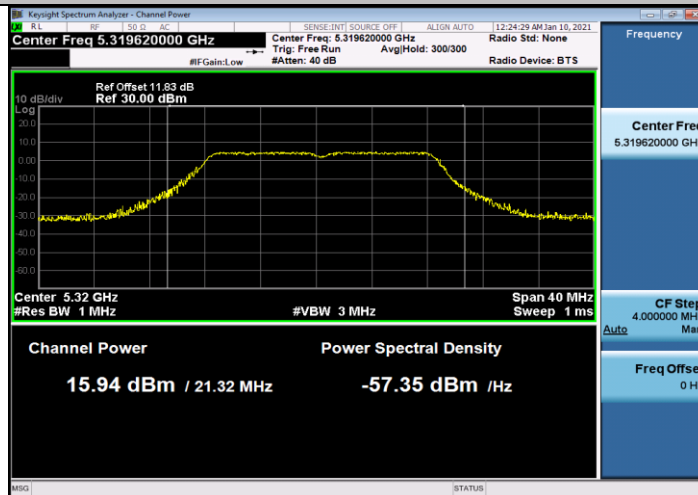
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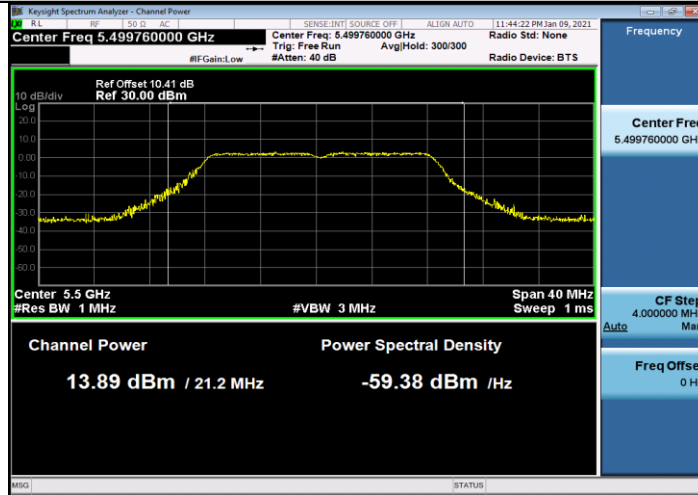
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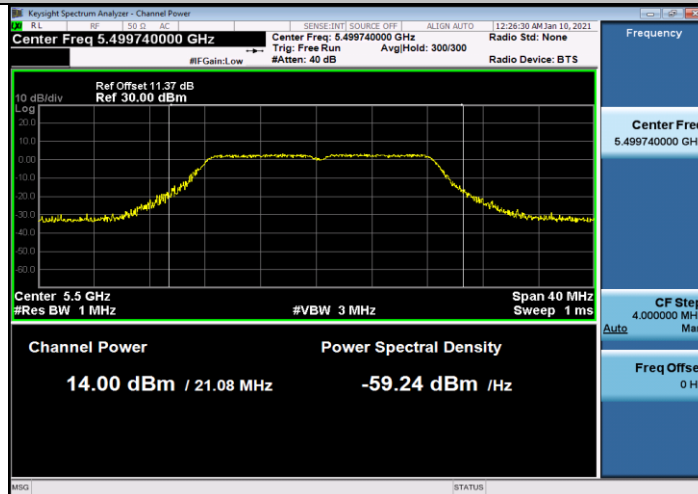
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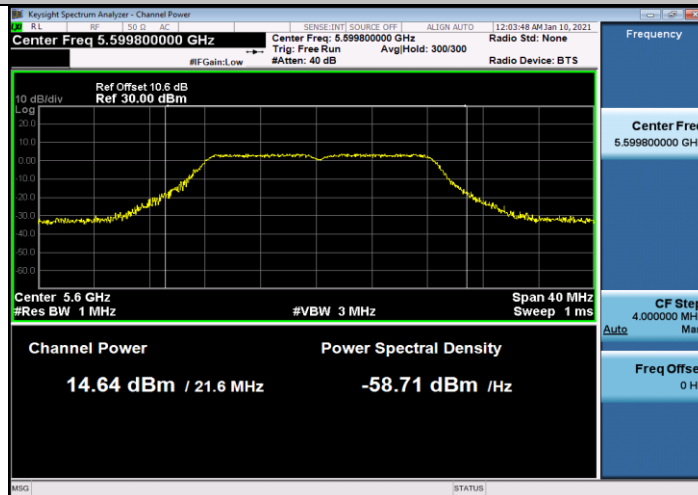
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### 11A\_Ant2\_5500

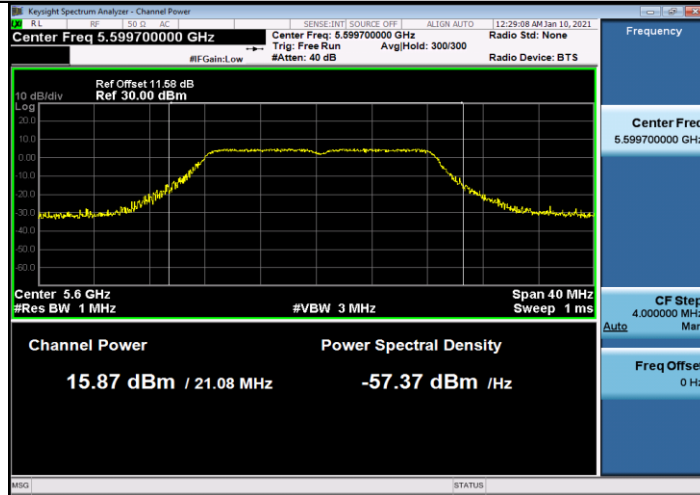


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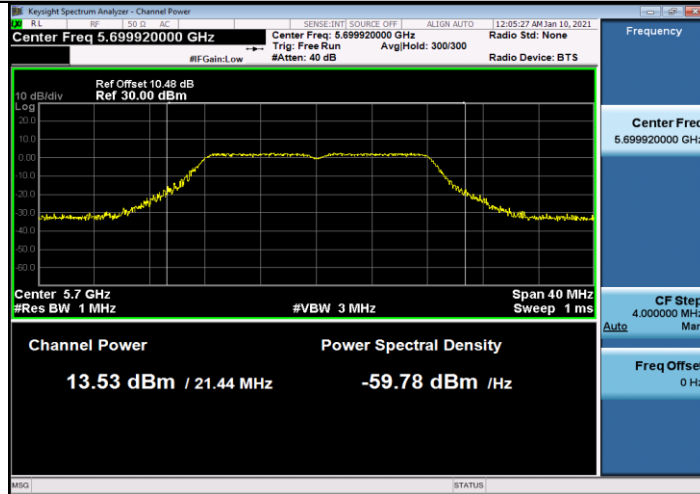




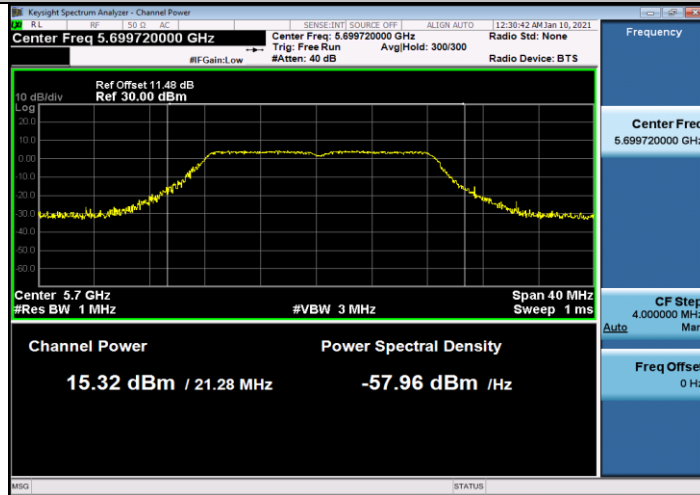
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### 11A\_Ant1\_5700

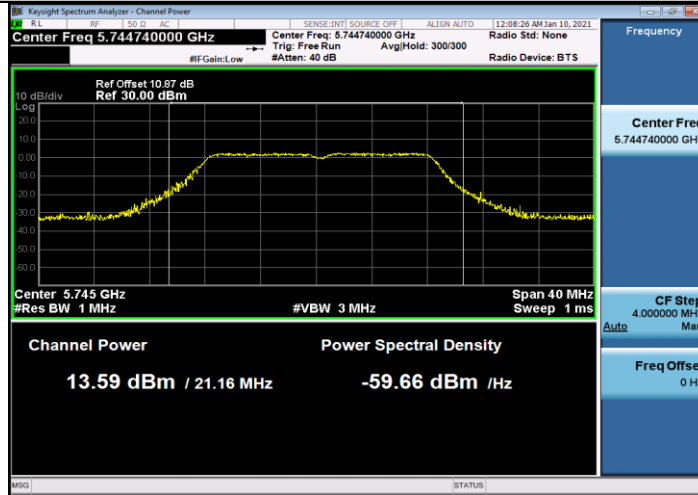


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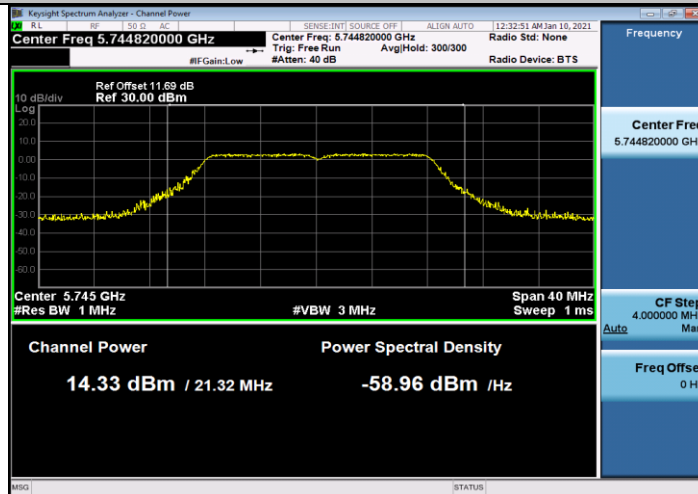




### 11A\_Ant1\_5745



### 11A\_Ant2\_5745



### 11A\_Ant1\_5785

