

Appendix for 300440

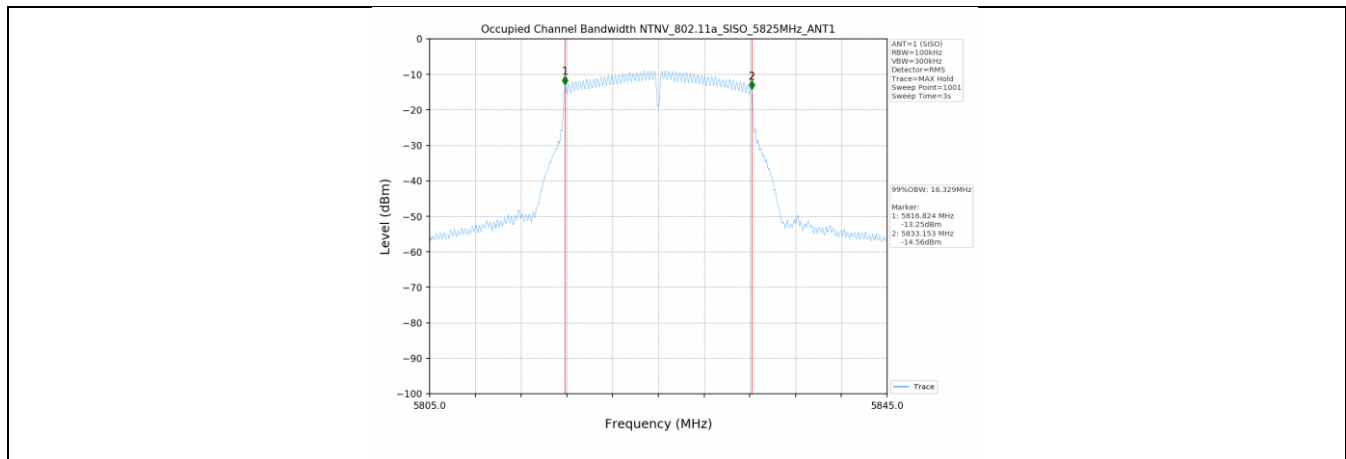
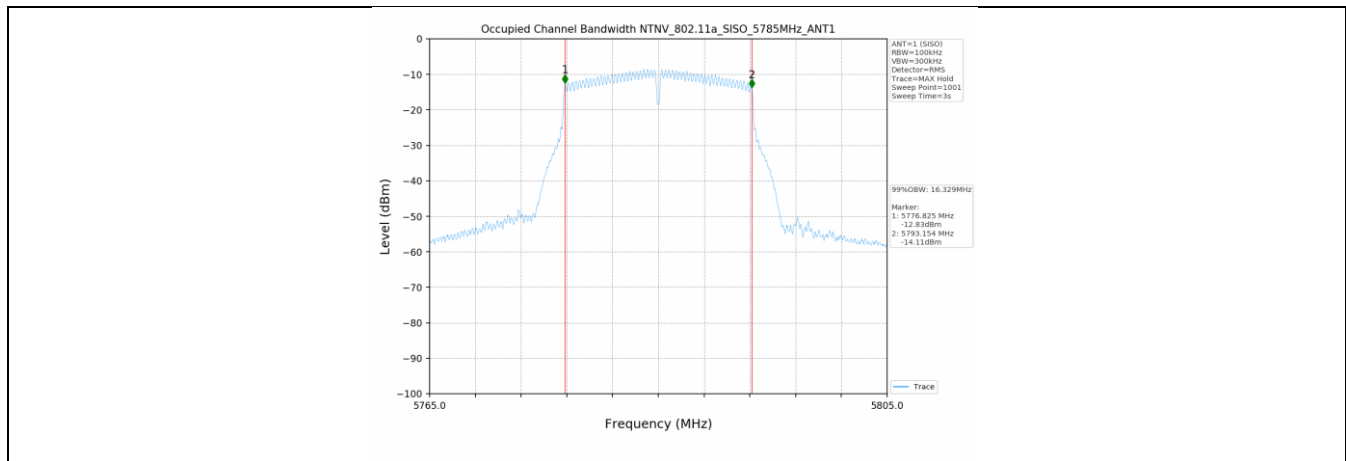
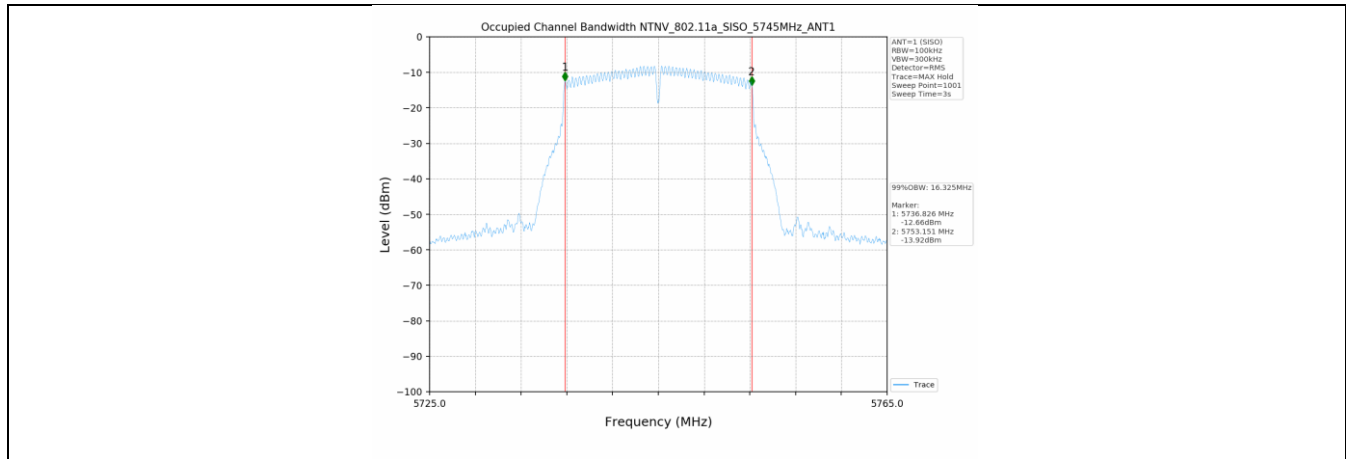
1. Occupied Channel Bandwidth

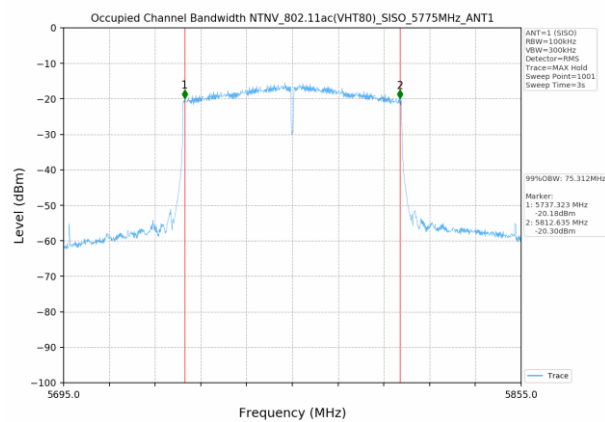
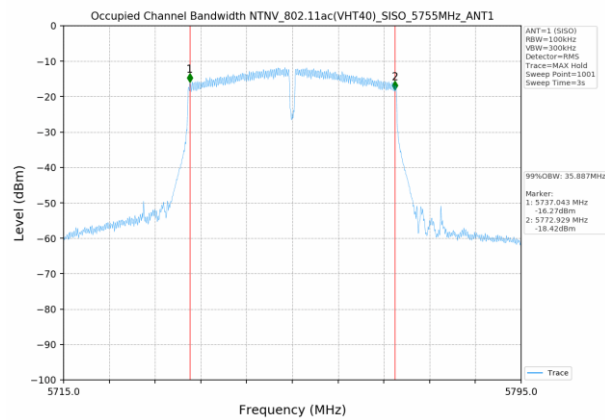
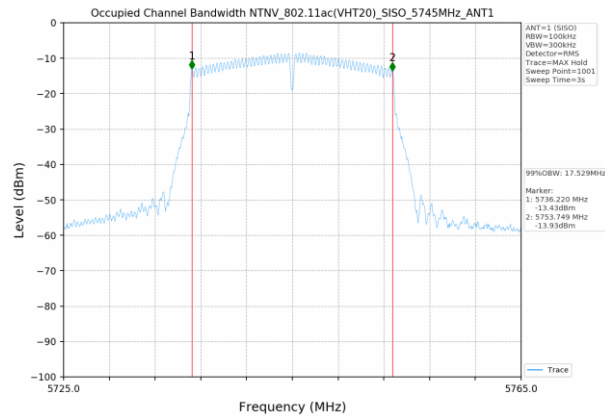
1.1 Test Result

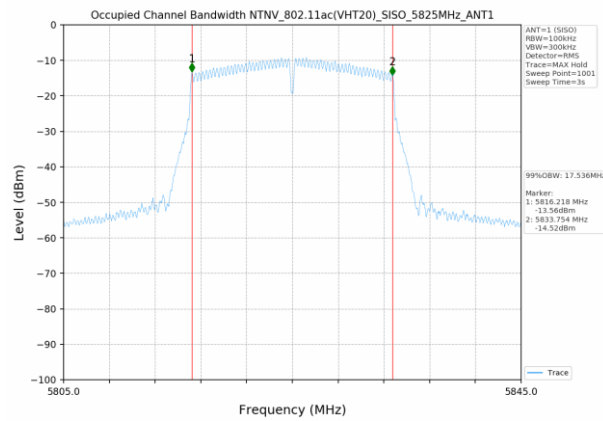
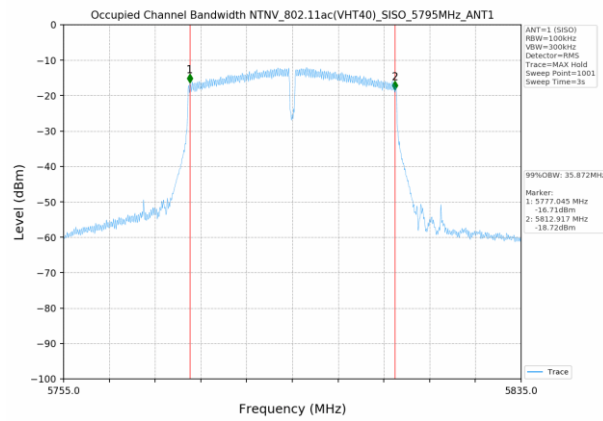
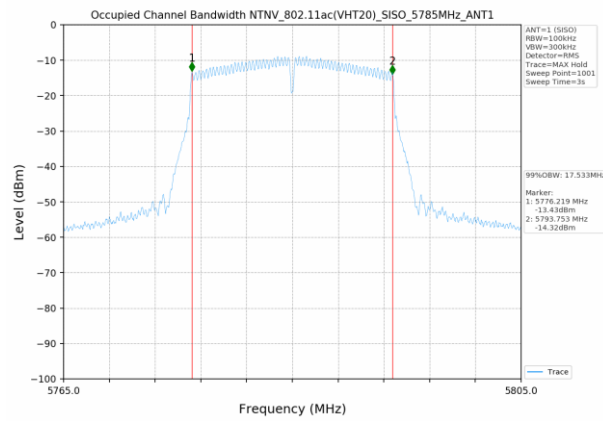
Test Condition	Test Mode	Test Frequency [MHz]	Ant	OBW	F _L	F _H	Verdict
NTNV	802.11a	5745	1	16.325MHz	5736.826	5753.151MHz	PASS
			2	16.326MHz	5736.820	5753.146MHz	PASS
		5785	1	16.329MHz	5776.825	5793.154MHz	PASS
			2	16.329MHz	5776.823	5793.152MHz	PASS
		5825	1	16.329MHz	5816.824	5833.153MHz	PASS
			2	16.329MHz	5816.822	5833.151MHz	PASS
	802.11ac	5745	1	17.529MHz	5736.220	5753.749MHz	PASS
			2	17.536MHz	5736.214	5753.75MHz	PASS
		5755	1	35.887MHz	5737.443	5772.929MHz	PASS
			2	35.903MHz	5737.029	5772.932MHz	PASS
		5775	1	75.312MHz	5737.323	5812.635MHz	PASS
			2	75.324MHz	5737.307	5812.632MHz	PASS
		5785	1	17.533MHz	5776.219	5793.753MHz	PASS
			2	17.535MHz	5776.216	5793.751MHz	PASS
		5795	1	35.872MHz	5777.045	5812.917MHz	PASS
			2	35.869MHz	5777.052	5812.921MHz	PASS
		5825	1	17.536MHz	5816.218	5833.754MHz	PASS
			2	17.536MHz	5816.215	5833.751MHz	PASS
	802.11n	5745	1	17.535MHz	5736.218	5753.752MHz	PASS
			2	17.53MHz	5736.220	5753.75MHz	PASS
		5755	1	35.914MHz	5737.030	5772.944MHz	PASS
			2	35.9MHz	5737.056	5772.956MHz	PASS
		5785	1	17.537MHz	5776.218	5793.755MHz	PASS
			2	17.536MHz	5776.218	5793.754MHz	PASS
		5795	1	35.882MHz	5777.039	5812.921MHz	PASS
			2	35.881MHz	5777.065	5812.946MHz	PASS
		5825	1	17.536MHz	5816.224	5833.759MHz	PASS
			2	17.54MHz	5816.217	5833.756MHz	PASS

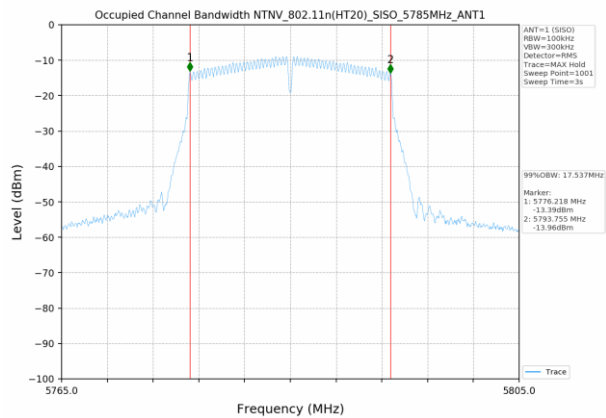
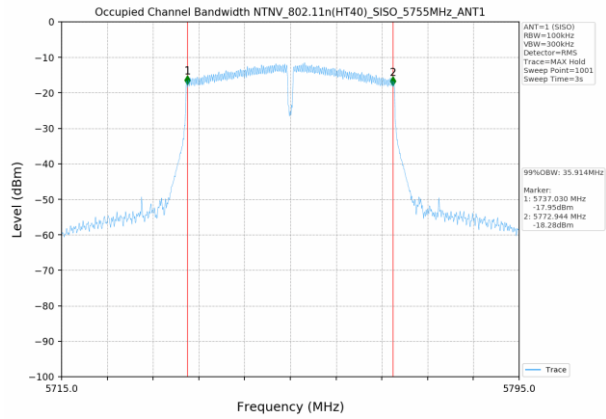
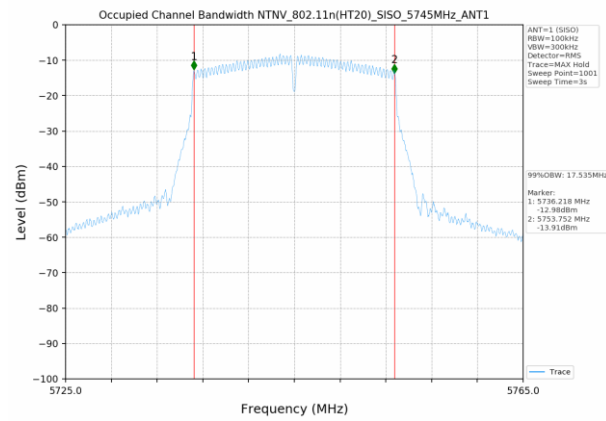
1.2 Test Graph

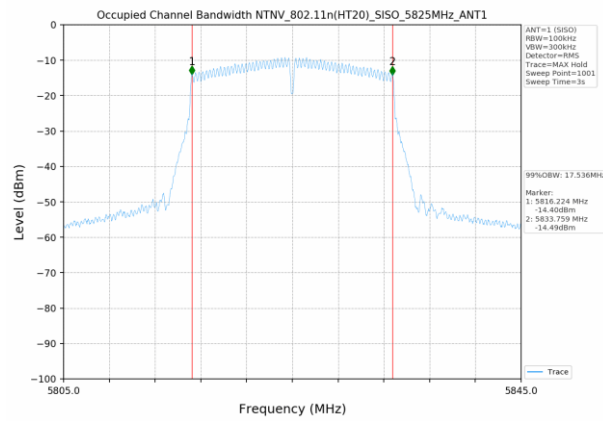
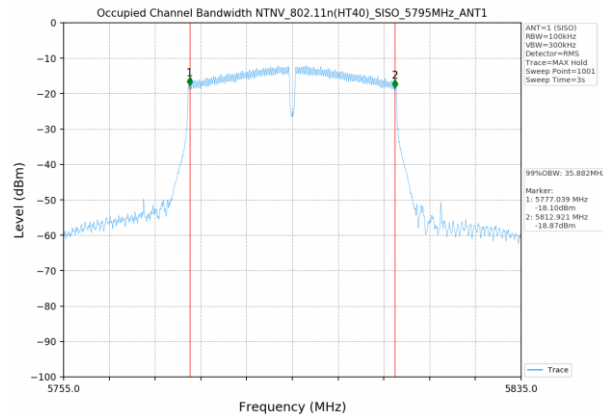
ANT 1:



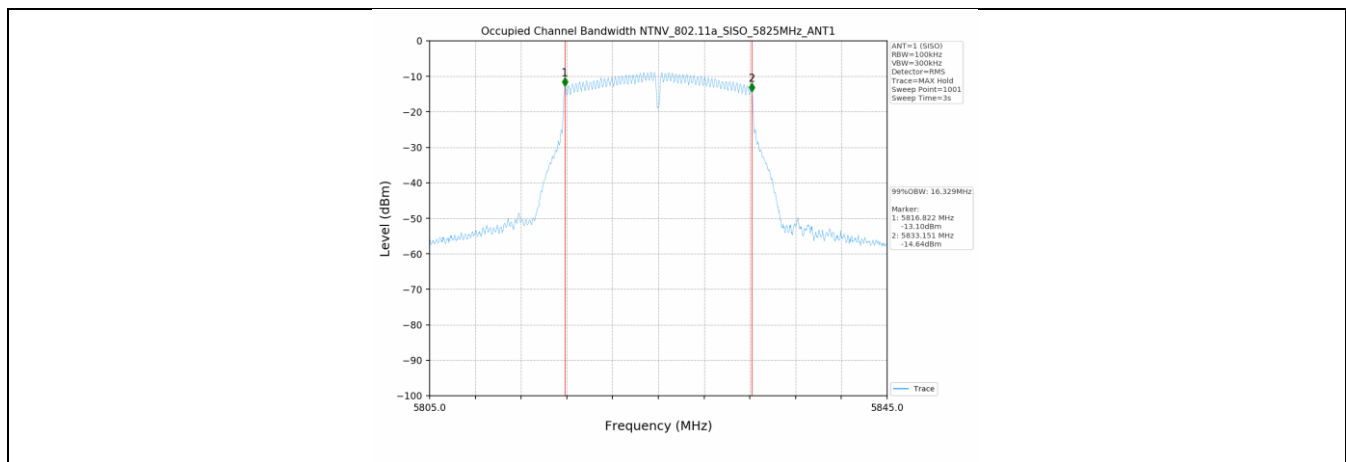
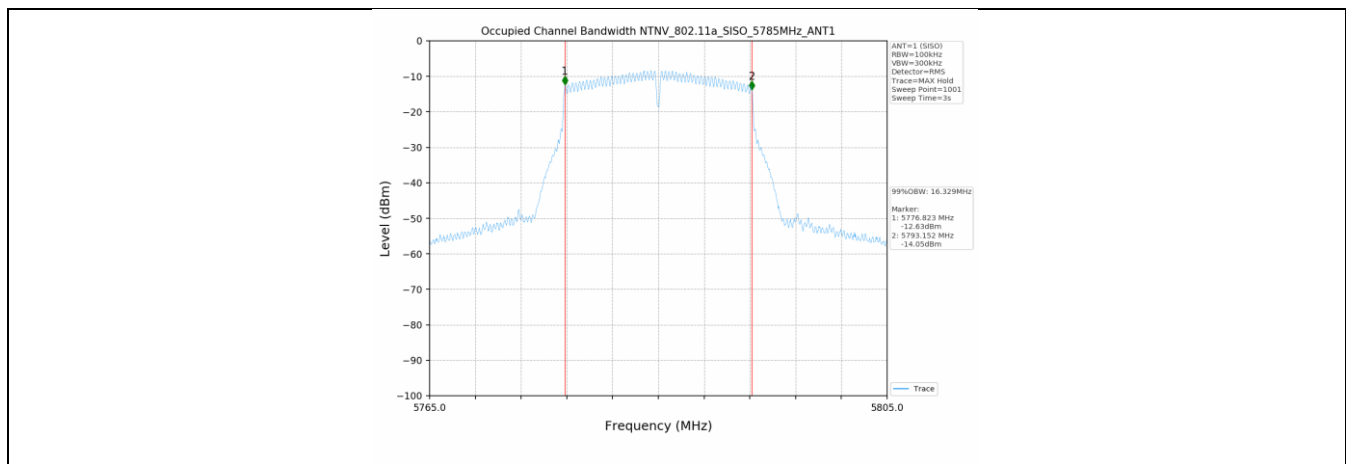
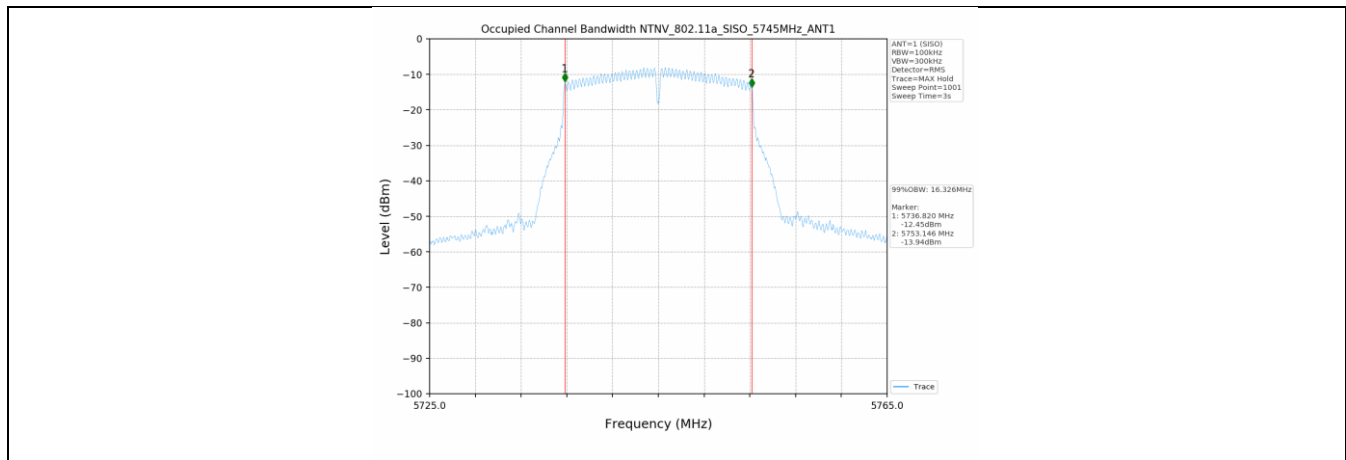


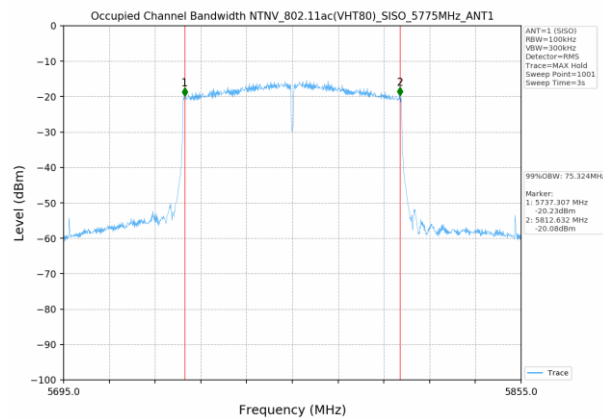
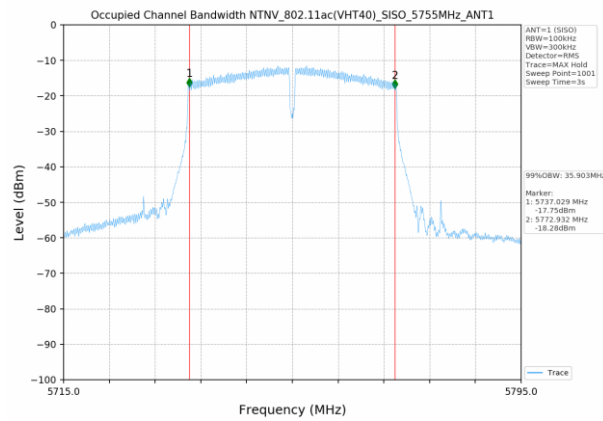
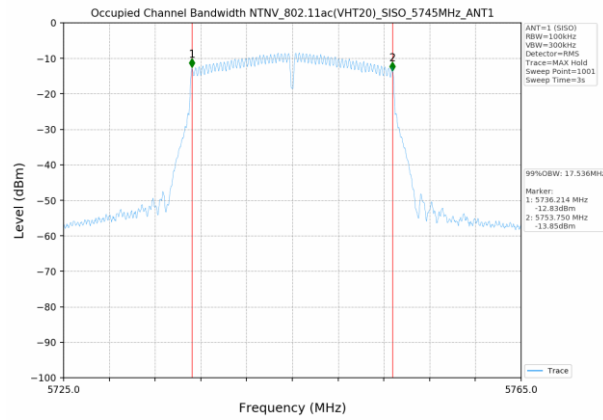


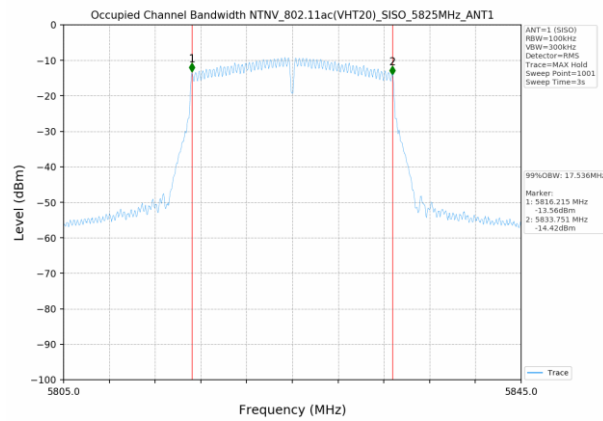
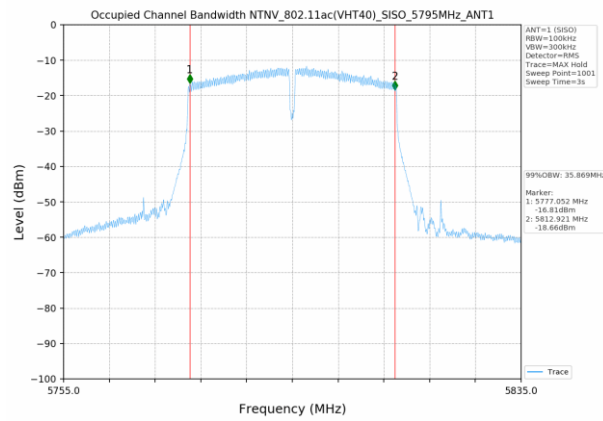
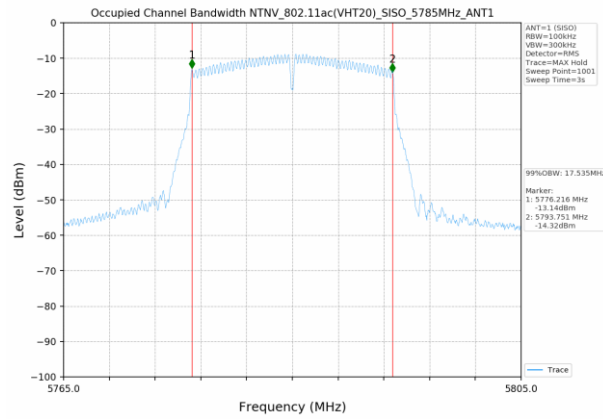


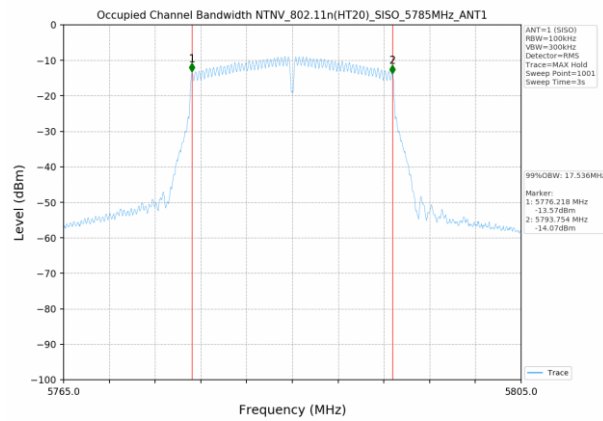
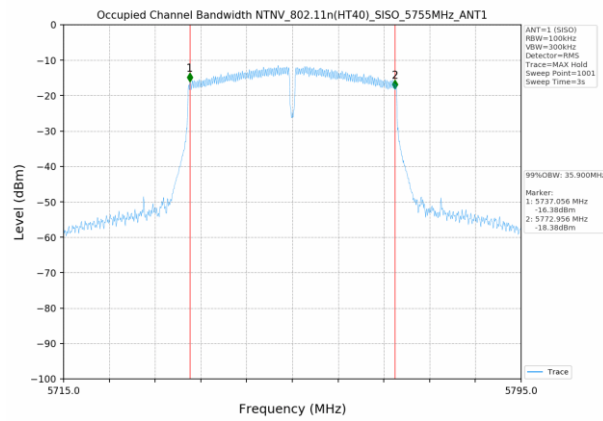
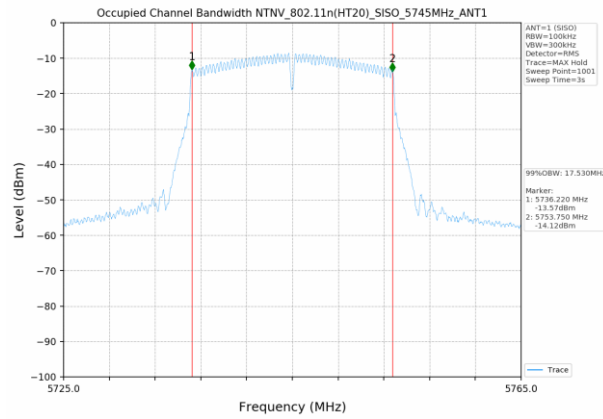


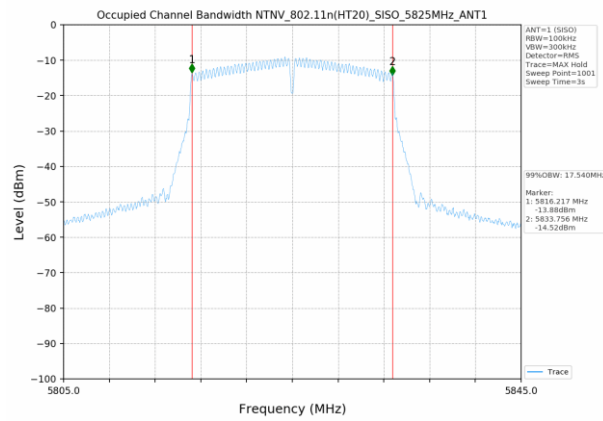
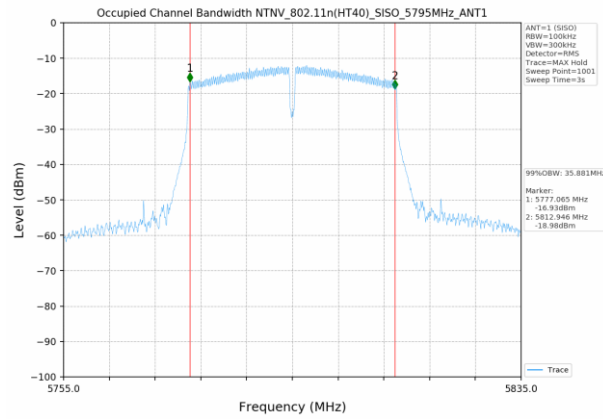
ANT 2:











2. RF Output Power

2.1 Test Result

Test Condition	Test Mode	Test Frequency[MHz]	Ant	EIRP[dBm]	Limit[dBm]	Verdict
NTNV	802.11a	5745	1	10.62	<14	PASS
			2	10.57	<14	PASS
		5785	1	10.43	<14	PASS
			2	10.36	<14	PASS
		5825	1	10.27	<14	PASS
			2	10.35	<14	PASS
	802.11ac	5745	1	10.5	<14	PASS
			2	10.58	<14	PASS
			Total	13.55	<14	PASS
		5755	1	10.36	<14	PASS
			2	10.51	<14	PASS
			Total	13.45	<14	PASS
		5775	1	10.21	<14	PASS
			2	10.46	<14	PASS
			Total	13.35	<14	PASS
		5785	1	10.15	<14	PASS
			2	10.37	<14	PASS
			Total	13.27	<14	PASS
		5795	1	10.32	<14	PASS
			2	10.44	<14	PASS
			Total	13.39	<14	PASS
		5825	1	10.11	<14	PASS
			2	10.13	<14	PASS
			Total	13.13	<14	PASS
	802.11n	5745	1	10.5	<14	PASS
			2	10.51	<14	PASS
			Total	13.52	<14	PASS
		5755	1	10.4	<14	PASS
			2	10.84	<14	PASS
			Total	13.64	<14	PASS
		5785	1	10.19	<14	PASS
			2	10.25	<14	PASS
			Total	13.23	<14	PASS
		5795	1	10.3	<14	PASS
			2	10.23	<14	PASS
			Total	13.28	<14	PASS
		5825	1	10.02	<14	PASS
			2	10.1	<14	PASS
			Total	13.07	<14	PASS
HTHV	802.11a	5745	1	10.63	<14	PASS
			2	10.56	<14	PASS
		5785	1	10.47	<14	PASS
			2	10.35	<14	PASS
		5825	1	10.33	<14	PASS
			2	10.19	<14	PASS
	802.11ac	5745	1	10.54	<14	PASS
			2	10.64	<14	PASS
			Total	13.6	<14	PASS
		5755	1	10.37	<14	PASS
			2	10.51	<14	PASS

		5775	Total	13.45	<14	PASS
			1	10.37	<14	PASS
			2	10.47	<14	PASS
		5785	Total	13.43	<14	PASS
			1	10.18	<14	PASS
			2	10.45	<14	PASS
		5795	Total	13.33	<14	PASS
			1	10.33	<14	PASS
			2	10.47	<14	PASS
		5825	Total	13.41	<14	PASS
			1	10.19	<14	PASS
			2	10.21	<14	PASS
	802.11n	5745	Total	13.21	<14	PASS
			1	10.34	<14	PASS
			2	10.44	<14	PASS
		5755	Total	13.4	<14	PASS
			1	10.4	<14	PASS
			2	10.93	<14	PASS
		5785	Total	13.68	<14	PASS
			1	10.26	<14	PASS
			2	10.31	<14	PASS
		5795	Total	13.29	<14	PASS
			1	10.34	<14	PASS
			2	10.07	<14	PASS
		5825	Total	13.22	<14	PASS
			1	10.08	<14	PASS
			2	10.11	<14	PASS
HTLV	802.11a	5745	Total	13.11	<14	PASS
			1	10.58	<14	PASS
		5785	2	10.54	<14	PASS
			1	10.44	<14	PASS
		5825	2	10.33	<14	PASS
			1	10.25	<14	PASS
	802.11ac	5745	2	10.34	<14	PASS
			1	10.47	<14	PASS
			2	10.58	<14	PASS
		5755	Total	13.54	<14	PASS
			1	10.38	<14	PASS
			2	10.51	<14	PASS
		5775	Total	13.46	<14	PASS
			1	10.21	<14	PASS
			2	10.47	<14	PASS
		5785	Total	13.35	<14	PASS
			1	10.2	<14	PASS
			2	10.39	<14	PASS
		5795	Total	13.31	<14	PASS
			1	10.36	<14	PASS
			2	10.44	<14	PASS
		5825	Total	13.41	<14	PASS
			1	10.16	<14	PASS
			2	10.16	<14	PASS
	802.11n	5745	Total	13.17	<14	PASS
			1	10.43	<14	PASS
			2	10.42	<14	PASS
		5755	Total	13.44	<14	PASS
			1	10.39	<14	PASS
			2	10.68	<14	PASS
		5785	Total	13.55	<14	PASS
			1	10.21	<14	PASS
			2	10.21	<14	PASS
		5795	Total	13.41	<14	PASS

			2	10.23	<14	PASS		
			Total	13.23	<14	PASS		
			5795	1	10.27	<14	PASS	
				2	10.25	<14	PASS	
				Total	13.27	<14	PASS	
		5825	1	10.08	<14	PASS		
			2	10.05	<14	PASS		
			Total	13.07	<14	PASS		
		LTHV	802.11a	5745	1	10.58	<14	PASS
					2	10.55	<14	PASS
5785	1			10.45	<14	PASS		
	2			10.37	<14	PASS		
5825	1			10.27	<14	PASS		
	2			10.35	<14	PASS		
802.11ac	5745		1	10.51	<14	PASS		
			2	10.63	<14	PASS		
			Total	13.58	<14	PASS		
	5755		1	10.36	<14	PASS		
			2	10.5	<14	PASS		
			Total	13.44	<14	PASS		
	5775		1	10.21	<14	PASS		
			2	10.47	<14	PASS		
			Total	13.35	<14	PASS		
	5785		1	10.16	<14	PASS		
			2	10.36	<14	PASS		
			Total	13.27	<14	PASS		
	5795		1	10.34	<14	PASS		
			2	10.42	<14	PASS		
			Total	13.39	<14	PASS		
	5825		1	10.15	<14	PASS		
			2	10.18	<14	PASS		
			Total	13.18	<14	PASS		
	802.11n		5745	1	10.4	<14	PASS	
				2	10.46	<14	PASS	
				Total	13.44	<14	PASS	
			5755	1	10.4	<14	PASS	
				2	10.88	<14	PASS	
				Total	13.67	<14	PASS	
5785			1	10.21	<14	PASS		
			2	10.29	<14	PASS		
			Total	13.26	<14	PASS		
5795			1	10.28	<14	PASS		
			2	10.24	<14	PASS		
			Total	13.27	<14	PASS		
5825			1	10.09	<14	PASS		
			2	10.08	<14	PASS		
			Total	13.09	<14	PASS		
LTLV			802.11a	5745	1	10.61	<14	PASS
		2			10.57	<14	PASS	
		5785		1	10.4	<14	PASS	
	2			10.38	<14	PASS		
	5825	1		10.27	<14	PASS		
		2		10.4	<14	PASS		
	802.11ac	5745	1	10.54	<14	PASS		
			2	10.67	<14	PASS		
			Total	13.62	<14	PASS		
		5755	1	10.37	<14	PASS		
			2	10.49	<14	PASS		
			Total	13.44	<14	PASS		

		5775	1	10.22	<14	PASS
			2	10.48	<14	PASS
			Total	13.36	<14	PASS
		5785	1	10.14	<14	PASS
			2	10.33	<14	PASS
			Total	13.25	<14	PASS
		5795	1	10.34	<14	PASS
			2	10.48	<14	PASS
			Total	13.42	<14	PASS
		5825	1	10.16	<14	PASS
			2	10.13	<14	PASS
			Total	13.16	<14	PASS
	802.11n	5745	1	10.44	<14	PASS
			2	10.4	<14	PASS
			Total	13.43	<14	PASS
		5755	1	10.4	<14	PASS
			2	10.89	<14	PASS
			Total	13.66	<14	PASS
		5785	1	10.21	<14	PASS
			2	10.24	<14	PASS
			Total	13.24	<14	PASS
		5795	1	10.27	<14	PASS
			2	10.25	<14	PASS
			Total	13.27	<14	PASS
		5825	1	10.04	<14	PASS
			2	10.04	<14	PASS
			Total	13.05	<14	PASS

3. Transmitter unwanted emissions

3.1 Test Result

802.11ac(HT20)				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Test Result
	polarization	Level(dBm)		
Lowest Channel				
39.78	Vertical	-75.27	Reference to above	Pass
623.32	V	-77.30		
11490.00	V	-59.11		
17235.00	V	-58.82		
80.49	Horizontal	-77.59		
560.70	H	-76.99		
11490.00	H	-59.40		
17235.00	H	-53.53		
Highest Channel				
227.61	Vertical	-75.81	Reference to above	Pass
902.05	V	-78.25		
11650.00	V	-57.70		
17475.00	V	-58.61		
314.85	Horizontal	-76.59		
692.72	H	-75.93		
11650.00	H	-58.81		
17475.00	H	-52.56		

802.11ac(HT40)				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Test Result
	polarization	Level(dBm)		
Lowest Channel				
136.11	Vertical	-75.59	Reference to above	Pass
766.13	V	-77.94		
11510.00	V	-57.83		
17265.00	V	-59.29		
31.68	Horizontal	-77.30		
510.42	H	-76.82		
11510.00	H	-58.44		
17265.00	H	-54.00		
Highest Channel				
377.78	Vertical	-75.55	Reference to above	Pass
764.43	V	-77.70		
11590.00	V	-58.97		
17385.00	V	-59.01		
235.25	Horizontal	-77.53		
618.57	H	-77.27		
11590.00	H	-59.24		
17385.00	H	-53.61		

802.11ac(HT80)				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Test Result
	polarization	Level(dBm)		
Middle Channel				
99.27	Vertical	-74.42	Reference to above	Pass
581.35	V	-77.80		
11550.00	V	-57.71		
17325.00	V	-59.38		
168.74	Horizontal	-76.14		
681.08	H	-76.93		
11550.00	H	-58.30		
17325.00	H	-52.24		

4. Receiver unwanted emissions

4.1 Test Result

802.11ac(HT20)				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Test Result
	polarization	Level(dBm)		
Lowest Channel				
159.36	Vertical	-78.15	2nW/ -57dBm below 1GHz, 20nW/ -47dBm above 1GHz.	Pass
649.03	V	-71.93		
11490.00	V	-55.76		
17235.00	V	-53.08		
115.23	Horizontal	-77.74		
543.71	H	-74.19		
11490.00	H	-56.30		
17235.00	H	-54.84		
Highest Channel				
252.64	Vertical	-78.09	2nW/ -57dBm below 1GHz, 20nW/ -47dBm above 1GHz.	Pass
546.60	V	-71.95		
11650.00	V	-56.55		
17475.00	V	-53.45		
49.18	Horizontal	-77.75		
913.05	H	-74.49		
11650.00	H	-56.42		
17475.00	H	-54.87		

802.11ac(HT40)				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Test Result
	polarization	Level(dBm)		
Lowest Channel				
455.46	Vertical	-78.30	2nW/ -57dBm below 1GHz, 20nW/ -47dBm above 1GHz.	Pass
761.96	V	-71.06		
11510.00	V	-56.60		
17265.00	V	-53.50		
304.95	Horizontal	-77.57		
612.15	H	-74.29		
11510.00	H	-56.24		
17265.00	H	-54.03		
Highest Channel				
254.61	Vertical	-78.12	2nW/ -57dBm below 1GHz, 20nW/ -47dBm above 1GHz.	Pass
627.76	V	-70.97		
11590.00	V	-55.84		
17385.00	V	-53.50		
329.56	Horizontal	-77.40		
675.04	H	-73.86		
11590.00	H	-56.61		
17385.00	H	-54.61		

802.11ac(HT80)				
Frequency (MHz)	Spurious Emission		Limit (dBm)	Test Result
	polarization	Level(dBm)		
Middle Channel				
73.51	Vertical	-78.36	2nW/ -57dBm below 1GHz, 20nW/ -47dBm above 1GHz.	Pass
668.89	V	-72.01		
11550.00	V	-56.29		
17325.00	V	-53.34		
154.13	Horizontal	-77.83		
954.43	H	-73.54		
11550.00	H	-55.87		
17325.00	H	-54.61		

5. Adjacent Channel Selectivity

5.1 Test Result

BW=20MHz

Test point centre frequency (MHz)	Adjacent Frequency (MHz)	Measured data [dB]	Limit [dB]	Test Result
5745	5765	-45.8	-58.19	Pass
5825	5805	-43.1	-58.31	Pass

BW=40MHz

Test point centre frequency (MHz)	Adjacent Frequency (MHz)	Measured data [dB]	Limit [dB]	Test Result
5755	5795	-44.2	-61.22	Pass
5795	5755	-48.7	-61.28	Pass

BW=80MHz

Test point centre frequency (MHz)	Adjacent Frequency (MHz)	Measured data [dB]	Limit [dB]	Test Result
5775	N/A	N/A	-64.23	N/A

6. Blocking or Desensitization

6.1 Test Result

BW=20MHz

Test point centre frequency (MHz)	10 times blocking signal level Measured data [dB]	20 times blocking signal level Measured data [dB]	50 times blocking signal level Measured data [dB]	Limit [dB]	Test Result
5745	-45.4	-38.4	-30.2	-58.19	Pass
5825	-46.1	-38.2	-31.7	-58.31	Pass

BW=40MHz

Test point centre frequency (MHz)	10 times blocking signal level Measured data [dB]	20 times blocking signal level Measured data [dB]	50 times blocking signal level Measured data [dB]	Limit [dB]	Test Result
5755	-45.0	-39.4	-32.6	-61.22	Pass
5795	-46.2	-37.9	-30.1	-61.28	Pass

BW=80MHz

Test point centre frequency (MHz)	10 times blocking signal level Measured data [dB]	20 times blocking signal level Measured data [dB]	50 times blocking signal level Measured data [dB]	Limit [dB]	Test Result
5775	-48.4	-40.3	-34.7	-64.23	Pass