5470-5725MHz:
ANT1+ANT2

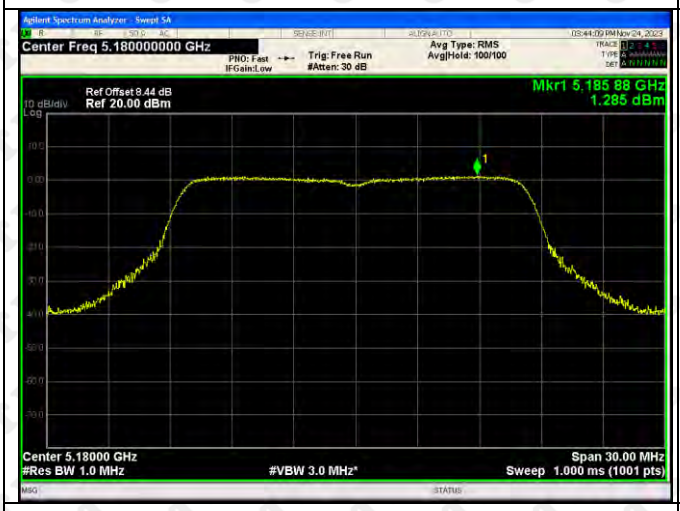
Test mode	Test Channel (MHz)	PSD [dBm/MHz] ANT 1	PSD [dBm/MHz] ANT 2	PSD [dBm/MHz] Total	Limit (dBm)	Result
802.11a	5500	1.248	1.267	/	11	Pass
	5580	2.612	2.285	/	11	Pass
	5700	2.002	2.565	/	11	Pass
802.11n(HT20)	5500	0.127	0.639	3.401	11	Pass
	5580	1.641	2.603	5.159	11	Pass
	5700	1.828	2.443	5.157	11	Pass
802.11n(HT40)	5510	-2.546	-2.366	0.555	11	Pass
	5670	-1.414	-1.653	1.478	11	Pass
802.11ac(VH20)	5530	-3.854	-50.67	-3.854	11	Pass
	5500	0.39	0.852	3.637	11	Pass
	5580	1.533	1.948	4.756	11	Pass
802.11ac(VH40)	5700	1.453	2.014	4.753	11	Pass
	5510	-2.388	-2.293	0.670	11	Pass
802.11ac(VH80)	5670	-1.249	-1.368	1.702	11	Pass

5725-5850MHz:
ANT1+ANT2

Test mode	Test Channel (MHz)	PSD [dBm/MHz] ANT 1	PSD [dBm/MHz] ANT 2	PSD [dBm/MHz] Total	Limit (dBm)	Result
802.11a	5745	-1.603	-2.711	/	30	Pass
	5785	-2.206	-3.569	/	30	Pass
	5825	-2.629	-2.678	/	30	Pass
802.11n(HT20)	5745	-3.807	-3.069	-0.412	30	Pass
	5785	-2.992	-4.105	-0.503	30	Pass
	5825	-2.941	-3.699	-0.293	30	Pass
802.11n(HT40)	5755	-6.112	-4.836	-2.417	30	Pass
	5795	-6.836	-6.742	-3.778	30	Pass
802.11ac(VH20)	5745	-7.473	-7.892	-4.667	30	Pass
	5785	-2.759	-2.43	0.419	30	Pass
	5825	-3.01	-4.046	-0.487	30	Pass
802.11ac(VH40)	5755	-3.269	-3.038	-0.142	30	Pass
	5795	-6.11	-4.141	-2.005	30	Pass
802.11ac(VH80)	5775	-7.066	-6.58	-3.806	30	Pass

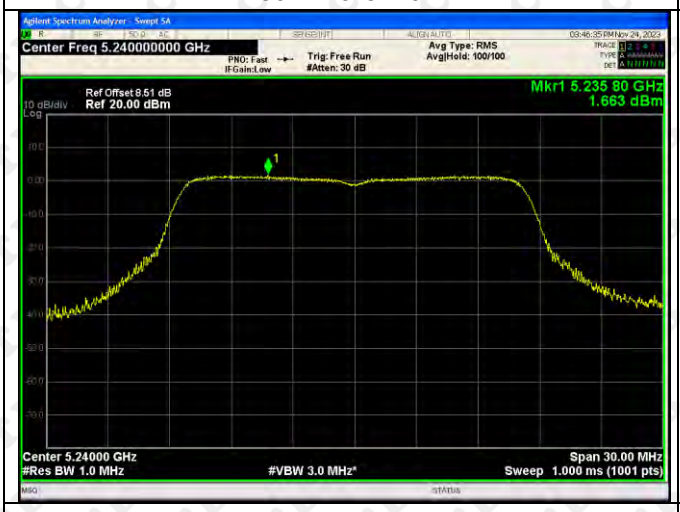
Test Graph:
5150-5250MHz
ANT1

802.11a-5180



802.11a-5200

802.11a-5240



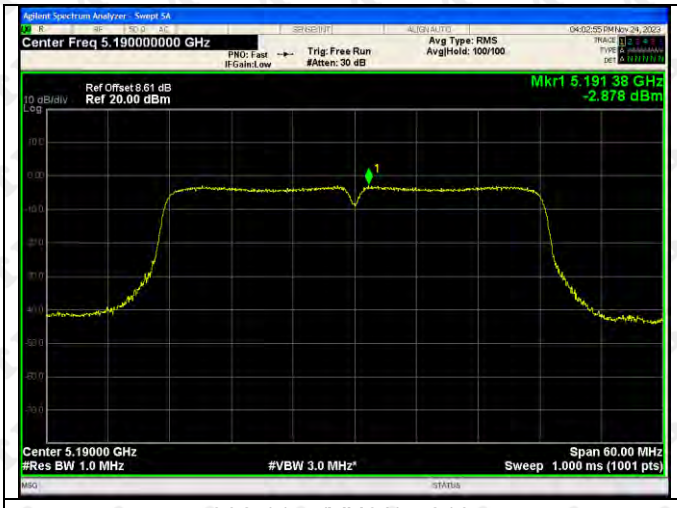
802.11ac(VH20)-5180

802.11ac(VH20)-5200

802.11ac(VH20)-5240

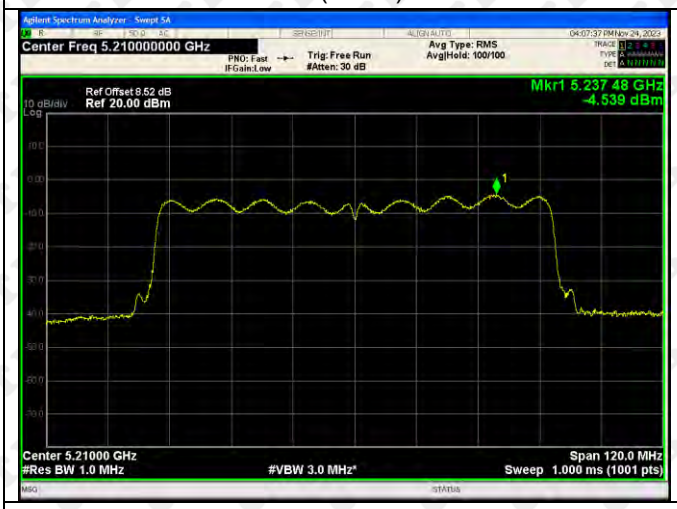
802.11ac(VH40)-5190

802.11ac(VH40)-5230

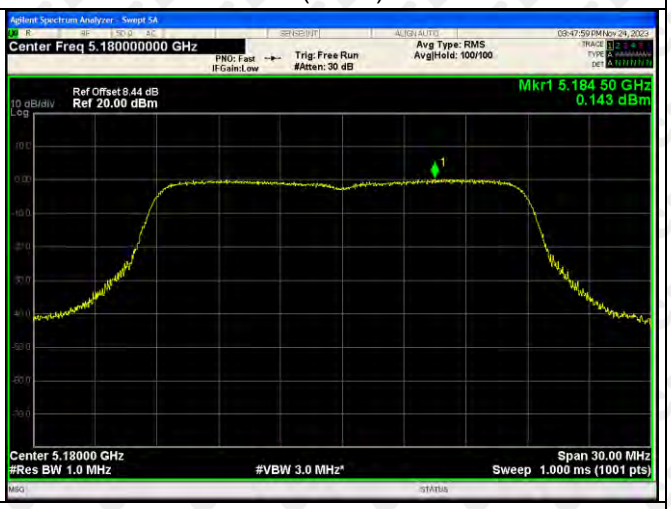


802.11ac(VH80)-5210

802.11n(HT20)-5180



802.11n(HT20)-5200

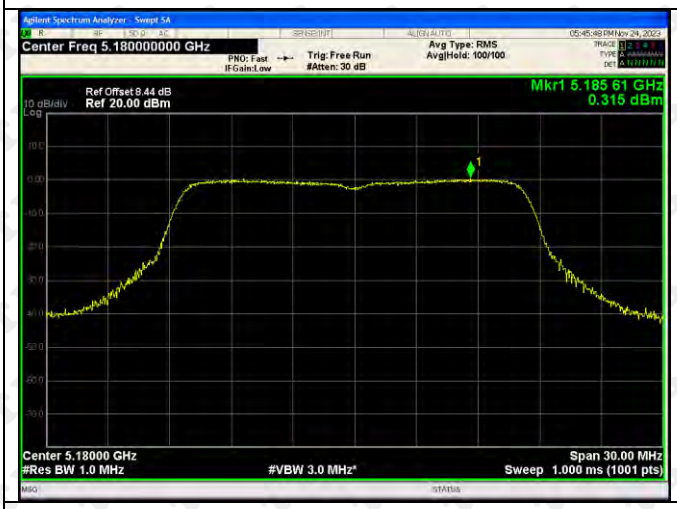
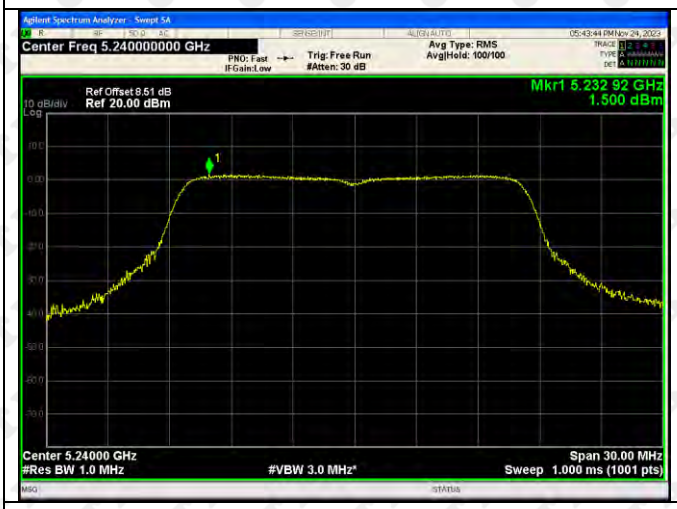


802.11n(HT20)-5240

802.11n(HT40)-5190

802.11n(HT40)-5230

ANT2

802.11a-5180	802.11a-5200
	
802.11a-5240	802.11ac(VH20)-5180
	
802.11ac(VH20)-5200	802.11ac(VH20)-5240

802.11ac(VH40)-5190

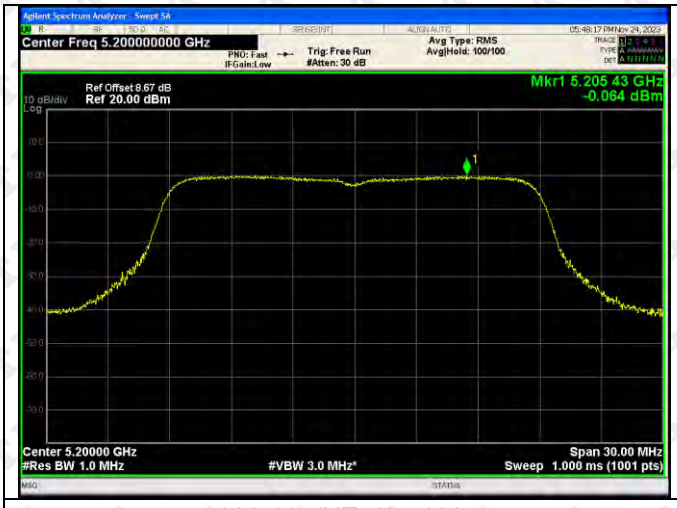
802.11ac(VH40)-5230

802.11ac(VH80)-5210

802.11n(HT20)-5180

802.11n(HT20)-5200

802.11n(HT20)-5240



802.11n(HT40)-5190

802.11n(HT40)-5230

5250-5350MHz
ANT1

802.11a-5260

802.11a-5280

802.11a-5320

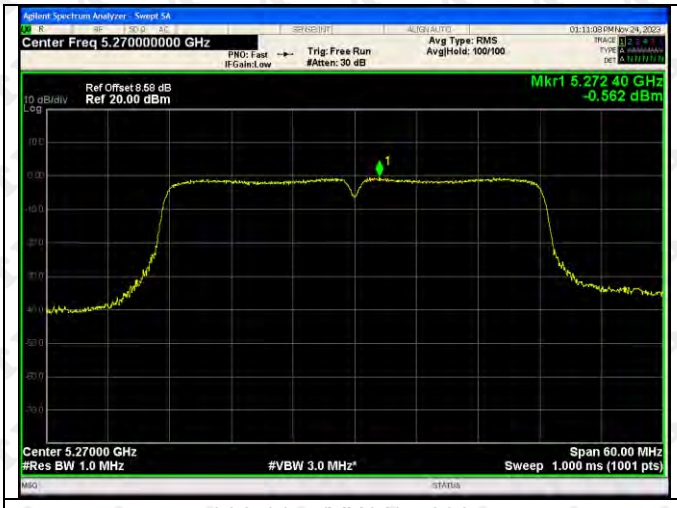
802.11ac(VH20)-5260

802.11ac(VH20)-5280

802.11ac(VH20)-5320

802.11ac(VH40)-5270

802.11ac(VH40)-5310



802.11ac(VH80)-5290

802.11n(HT20)-5260

802.11n(HT20)-5280

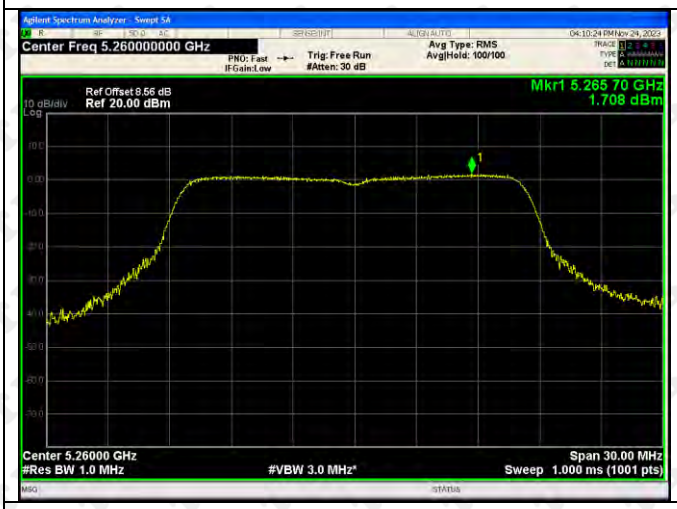
802.11n(HT20)-5320

802.11n(HT40)-5270

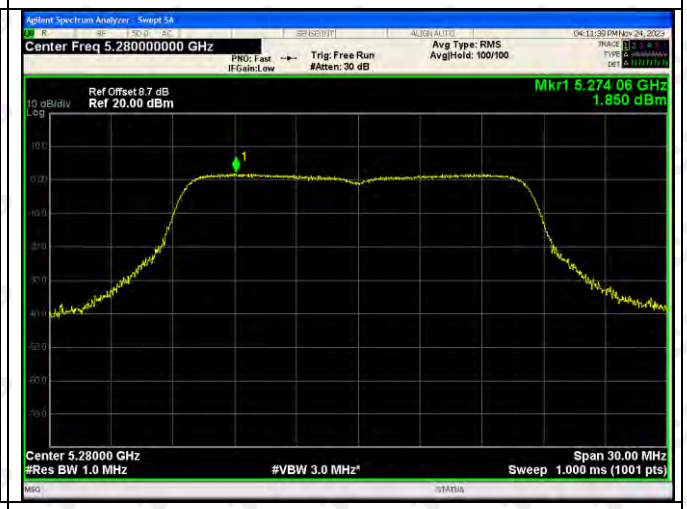
802.11n(HT40)-5310

ANT2

802.11a-5260

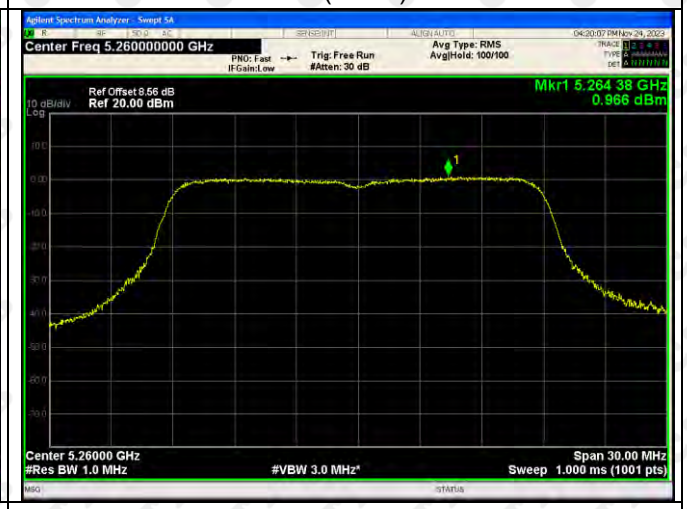


802.11a-5280



802.11a-5320

802.11ac(VH20)-5260



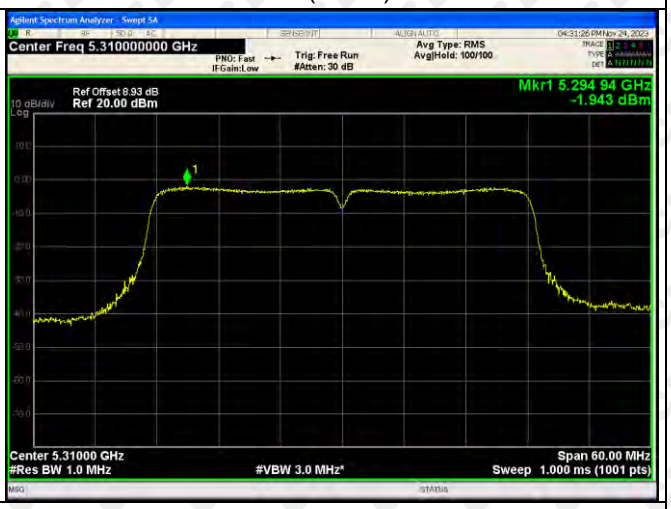
802.11ac(VH20)-5280

802.11ac(VH20)-5320

802.11ac(VH40)-5270

802.11ac(VH40)-5310

802.11ac(VH80)-5290



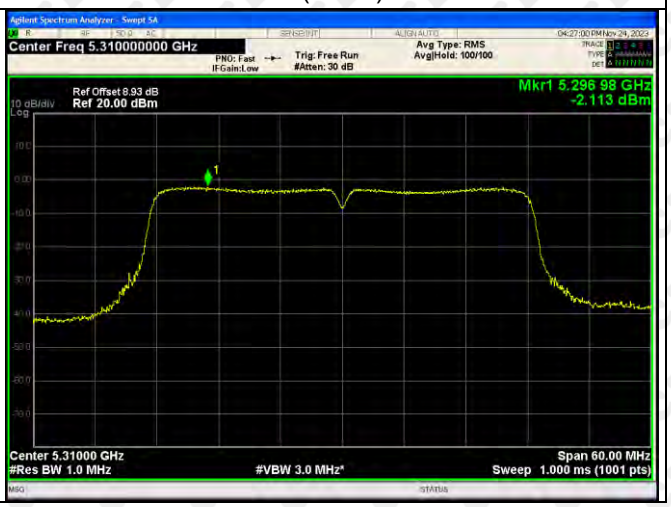
802.11n(HT20)-5260

802.11n(HT20)-5280

802.11n(HT20)-5320

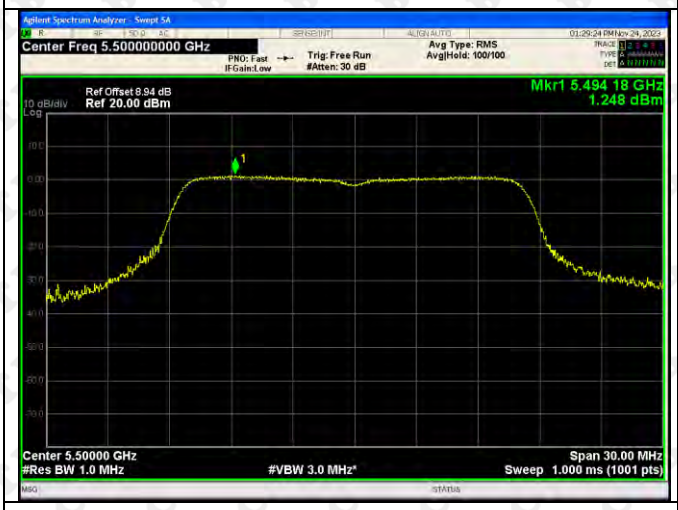
802.11n(HT40)-5270

802.11n(HT40)-5310



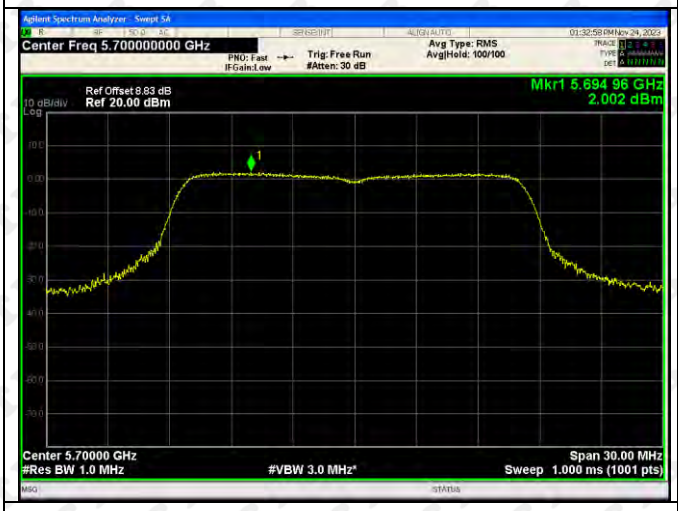
5470-5725MHzANT1

802.11a-5500



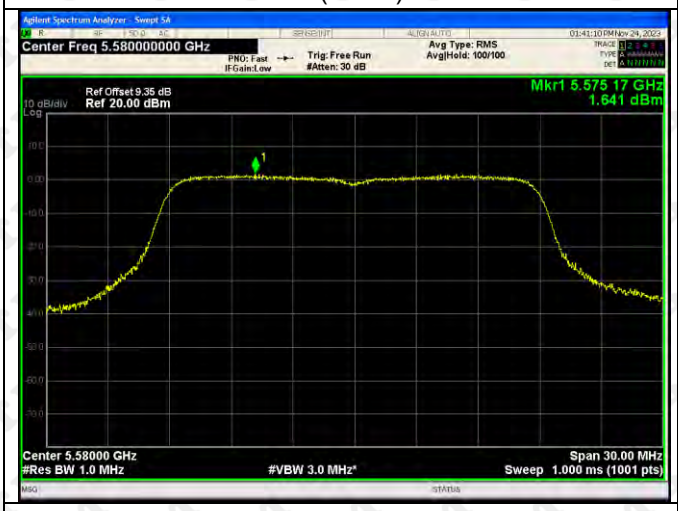
802.11a-5580

802.11a-5700



802.11ac(VH20)-5500

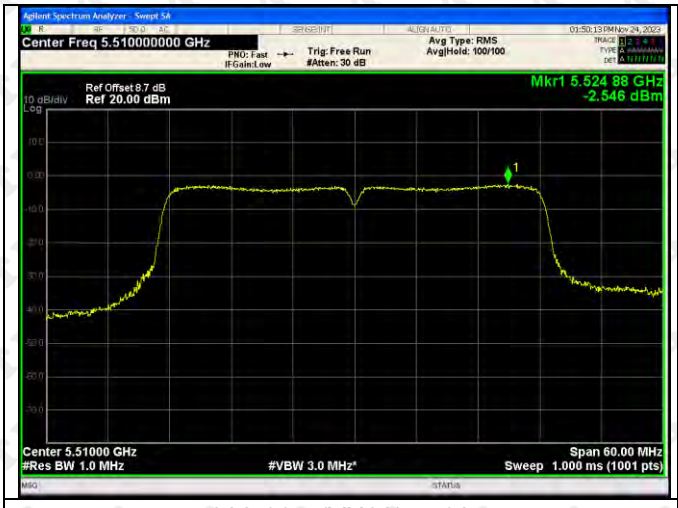
802.11ac(VH20)-5580



802.11ac(VH20)-5700

802.11ac(VH40)-5510

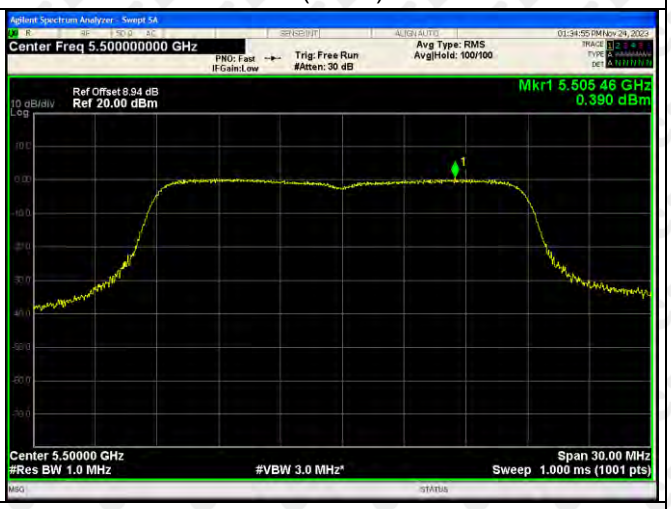
802.11ac(VH40)-5670



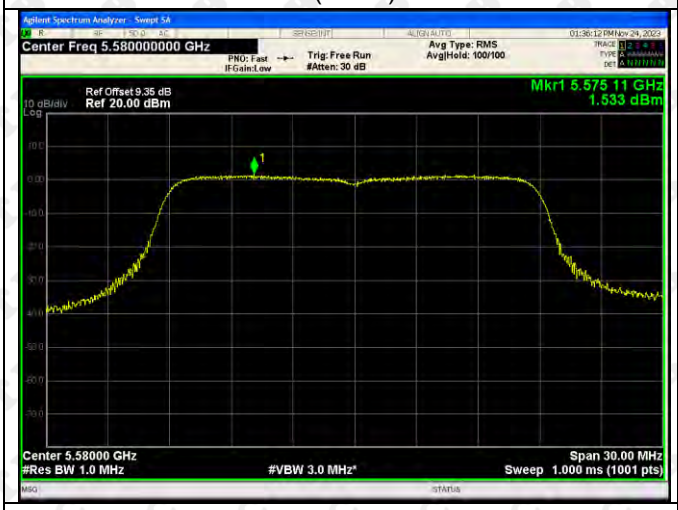
802.11ac(VH80)-5530

802.11n(HT20)-5500

802.11n(HT20)-5580



802.11n(HT20)-5700

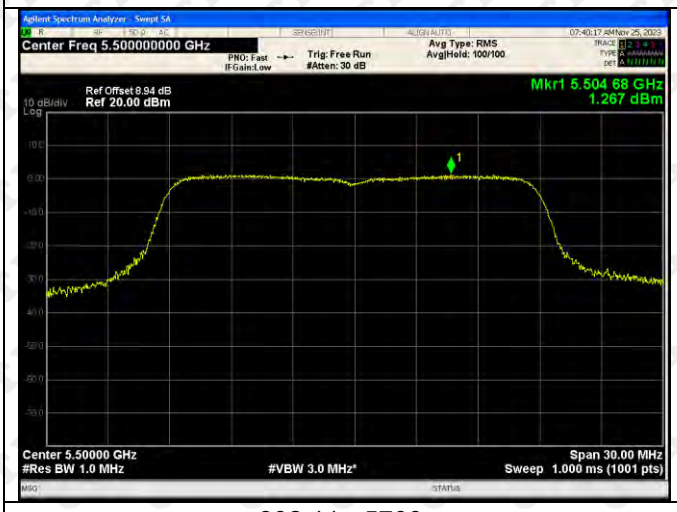


802.11n(HT40)-5510

802.11n(HT40)-5670

ANT2

802.11a-5500



802.11a-5580

802.11a-5700

802.11ac(VH20)-5500

802.11ac(VH20)-5580

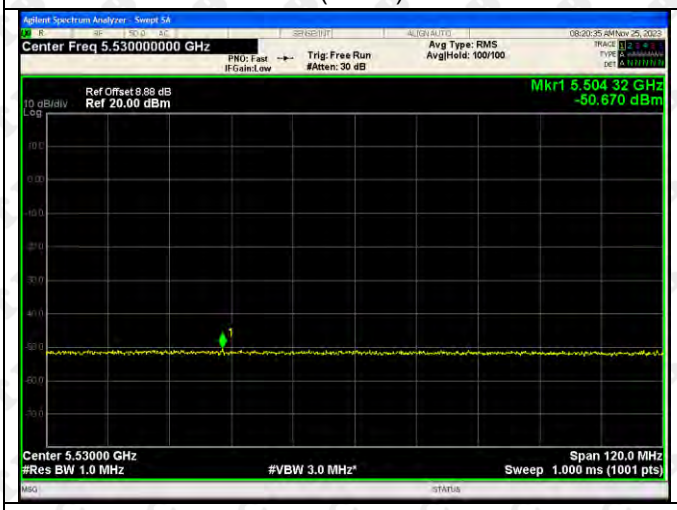
802.11ac(VH20)-5700

802.11ac(VH40)-5510

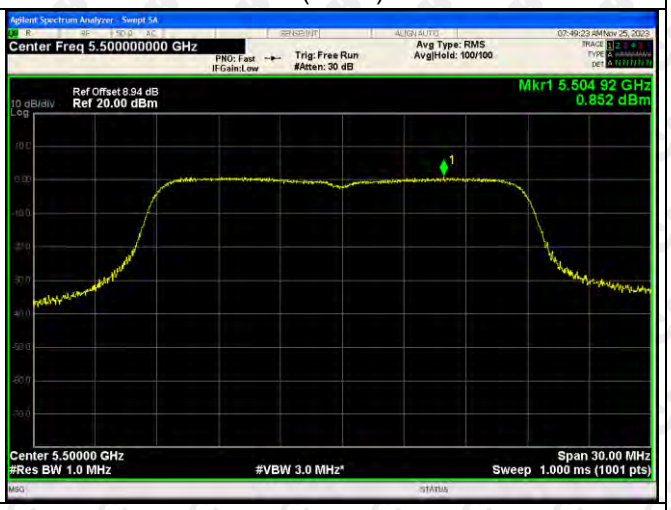
802.11ac(VH40)-5670

802.11ac(VH80)-5530

802.11n(HT20)-5500

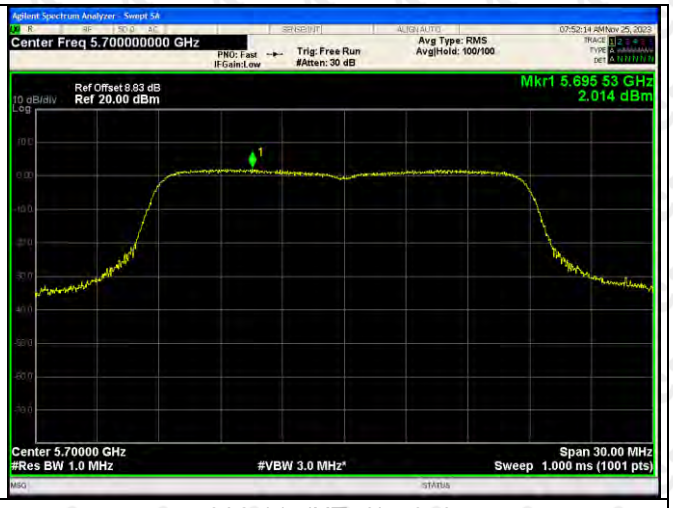


802.11n(HT20)-5580

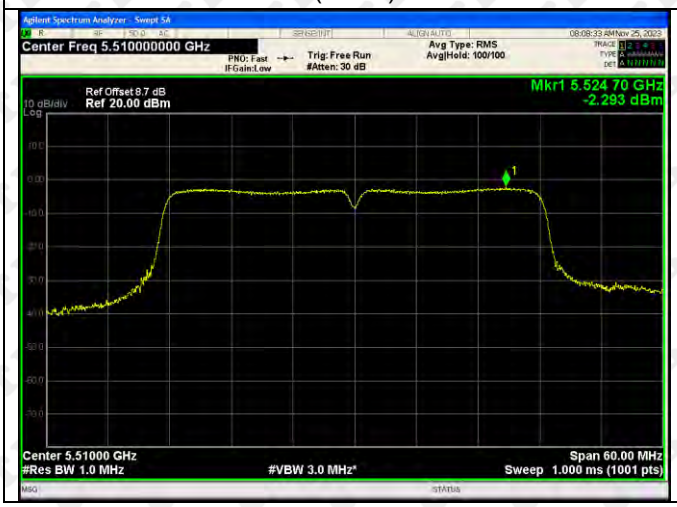


802.11n(HT20)-5700

802.11n(HT40)-5510



802.11n(HT40)-5670



5725-5850MHz:
ANT1

802.11a-5745

802.11a-5785

802.11a-5825

802.11ac(VH20)-5745

802.11ac(VH20)-5785

802.11ac(VH20)-5825

802.11ac(VH40)-5755

802.11ac(VH40)-5795

802.11ac(VH80)-5775

802.11n(HT20)-5745

802.11n(HT20)-5785

802.11n(HT20)-5825

802.11n(HT40)-5795

802.11n(HT40)-5825

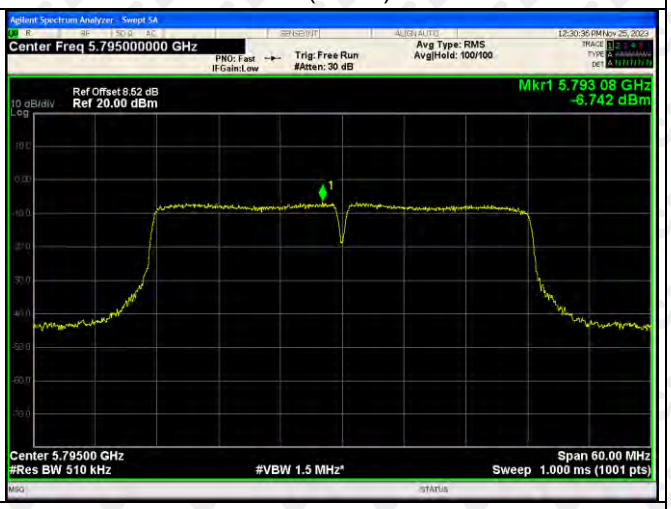
ANT2

802.11a-5745	802.11a-5785
802.11a-5825	802.11ac(VH20)-5745
802.11ac(VH20)-5785	802.11ac(VH20)-5825

802.11ac(VH40)-5755

802.11ac(VH40)-5795

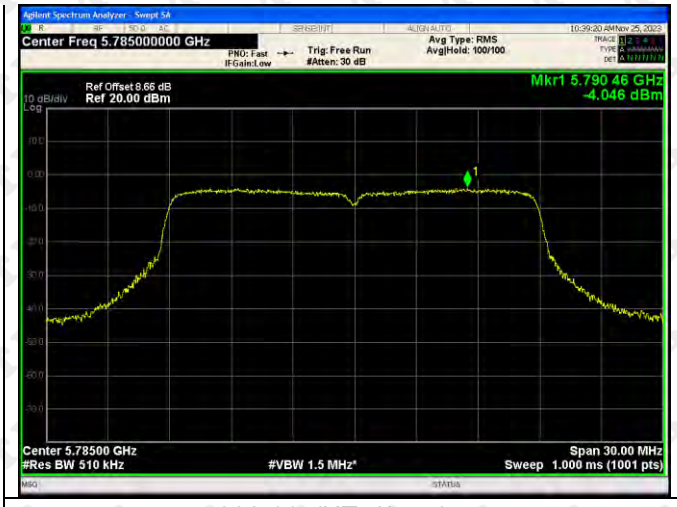
802.11ac(VH80)-5775



802.11n(HT20)-5745

802.11n(HT20)-5785

802.11n(HT20)-5825

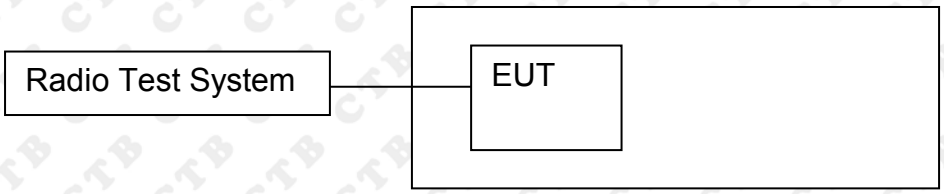


802.11n(HT40)-5795

802.11n(HT40)-5825

12. FREQUENCY STABILITY

12.1 Block Diagram Of Test Setup



12.2 Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

12.3 Test procedure

1. The EUT was placed inside temperature chamber and powered and powered by nominal DC voltage.

2. Set EUT as normal operation.

3. Turn the EUT on and couple its output to spectrum.

4. Turn the EUT off and set the chamber to the highest temperature specified.

5. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT and measure the operating frequency.

6. Repeat step with the temperature chamber set to the lowest temperature.

12.4 Test Result

TX Frequency (5150-5250MHz)

ANT1

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5180.0555	5180	0.0555	10.7214
		V max (V)	13.2	5180.0388	5180	0.0388	7.4893
		V min (V)	10.8	5180.1242	5180	0.1242	23.9785
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5180.0352	5180	0.0352	6.7959
		T (°C)	10	5180.0186	5180	0.0186	3.5886
		T (°C)	20	5180.0071	5180	0.0071	1.3669
		T (°C)	30	5180.0300	5180	0.0300	5.7991
		T (°C)	40	5180.0514	5180	0.0514	9.9251
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5200.0028	5200	0.0028	0.5437
		V max (V)	13.2	5200.0238	5200	0.0238	4.5697
		V min (V)	10.8	5200.0515	5200	0.0515	9.8965
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5200.0411	5200	0.0411	7.9105
		T (°C)	10	5200.0085	5200	0.0085	1.6256
		T (°C)	20	5200.0050	5200	0.0050	0.9647
		T (°C)	30	5200.0246	5200	0.0246	4.7338
		T (°C)	40	5200.0180	5200	0.0180	3.4538
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5240.0242	5240	0.0242	4.6103
		V max (V)	13.2	5240.0375	5240	0.0375	7.1500
		V min (V)	10.8	5240.0187	5240	0.0187	3.5743
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5240.0435	5240	0.0435	8.2976
		T (°C)	10	5240.0212	5240	0.0212	4.0535
		T (°C)	20	5240.0101	5240	0.0101	1.9230
		T (°C)	30	5240.0268	5240	0.0268	5.1168
		T (°C)	40	5240.0320	5240	0.0320	6.1028
Limits				±20ppm			
Result				Complies			

TX Frequency (5250-5350MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5260.0132	5260	0.0132	2.5062
		V max (V)	13.2	5260.0083	5260	0.0083	1.5834
		V min (V)	10.8	5260.0295	5260	0.0295	5.6059
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5260.0522	5260	0.0522	9.9299
		T (°C)	10	5260.0861	5260	0.0861	16.3599
		T (°C)	20	5260.0166	5260	0.0166	3.1601
		T (°C)	30	5260.0881	5260	0.0881	16.7401
		T (°C)	40	5260.0107	5260	0.0107	2.0303
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5280.0370	5280	0.0370	7.0070
		V max (V)	13.2	5280.0220	5280	0.0220	4.1596
		V min (V)	10.8	5280.0798	5280	0.0798	15.1170
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5280.0837	5280	0.0837	15.8513
		T (°C)	10	5280.0841	5280	0.0841	15.9282
		T (°C)	20	5280.0008	5280	0.0008	0.1468
		T (°C)	30	5280.0405	5280	0.0405	7.6790
		T (°C)	40	5280.0770	5280	0.0770	14.5926
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5320.0341	5320	0.0341	6.4113
		V max (V)	13.2	5320.0303	5320	0.0303	5.6900
		V min (V)	10.8	5320.0461	5320	0.0461	8.6657
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5320.0586	5320	0.0586	11.0127
		T (°C)	10	5320.0656	5320	0.0656	12.3239
		T (°C)	20	5320.0591	5320	0.0591	11.1165
		T (°C)	30	5320.0350	5320	0.0350	6.5821
		T (°C)	40	5320.0209	5320	0.0209	3.9272
Limits				±20ppm			
Result				Complies			

TX Frequency (5470-5725MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5550.0041	5500	50.0041	9091.6471
		V max (V)	13.2	5550.0431	5500	50.0431	9098.7411
		V min (V)	10.8	5550.0691	5500	50.0691	9103.4667
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5500.0290	5500	0.0290	5.2797
		T (°C)	10	5500.0634	5500	0.0634	11.5233
		T (°C)	20	5500.0042	5500	0.0042	0.7588
		T (°C)	30	5500.0296	5500	0.0296	5.3734
		T (°C)	40	5500.0258	5500	0.0258	4.6887
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5580.0199	5580	0.0199	3.5732
		V max (V)	13.2	5580.0475	5580	0.0475	8.5196
		V min (V)	10.8	5580.0812	5580	0.0812	14.5551
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5580.0547	5580	0.0547	9.7954
		T (°C)	10	5580.0087	5580	0.0087	1.5632
		T (°C)	20	5580.0488	5580	0.0488	8.7478
		T (°C)	30	5580.0480	5580	0.0480	8.5995
		T (°C)	40	5580.0540	5580	0.0540	9.6739
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5700.0377	5700	0.0377	6.6199
		V max (V)	13.2	5700.0082	5700	0.0082	1.4439
		V min (V)	10.8	5700.0523	5700	0.0523	9.1751
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5700.0001	5700	0.0001	0.0239
		T (°C)	10	5700.0259	5700	0.0259	4.5499
		T (°C)	20	5700.0214	5700	0.0214	3.7530
		T (°C)	30	5700.0608	5700	0.0608	10.6727
		T (°C)	40	5700.0098	5700	0.0098	1.7195
Limits				±20ppm			
Result				Complies			

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5745.0062	5745	0.0062	1.0804
		V max (V)	13.2	5745.0183	5745	0.0183	3.1935
		V min (V)	10.8	5745.0062	5745	0.0062	1.0804
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5745.0024	5745	0.0024	0.4260
		T (°C)	10	5745.0141	5745	0.0141	2.4625
		T (°C)	20	5745.0371	5745	0.0371	6.4500
		T (°C)	30	5745.0909	5745	0.0909	15.8261
		T (°C)	40	5745.0705	5745	0.0705	12.2663
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5785.0602	5785	0.0602	10.4013
		V max (V)	13.2	5785.0271	5785	0.0271	4.6800
		V min (V)	10.8	5785.0080	5785	0.0080	1.3837
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5785.0924	5785	0.0924	15.9776
		T (°C)	10	5785.0297	5785	0.0297	5.1257
		T (°C)	20	5785.0543	5785	0.0543	9.3917
		T (°C)	30	5785.0303	5785	0.0303	5.2377
		T (°C)	40	5785.0067	5785	0.0067	1.1500
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5825.0098	5825	0.0098	1.6909
		V max (V)	13.2	5825.0320	5825	0.0320	5.5009
		V min (V)	10.8	5825.0792	5825	0.0792	13.5984
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5825.0140	5825	0.0140	2.3986
		T (°C)	10	5825.0715	5825	0.0715	12.2720
		T (°C)	20	5825.0153	5825	0.0153	2.6253
		T (°C)	30	5825.0635	5825	0.0635	10.9078
		T (°C)	40	5825.0248	5825	0.0248	4.2633
Limits				±20ppm			
Result				Complies			

ANT2:

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5180.0758	5180	0.0758	14.6302
		V max (V)	13.2	5180.1190	5180	0.1190	22.9684
		V min (V)	10.8	5180.0275	5180	0.0275	5.3090
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5180.0498	5180	0.0498	9.6071
		T (°C)	10	5180.0092	5180	0.0092	1.7707
		T (°C)	20	5180.0316	5180	0.0316	6.0921
		T (°C)	30	5180.0204	5180	0.0204	3.9363
		T (°C)	40	5180.0474	5180	0.0474	9.1565
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5200.0046	5200	0.0046	0.8903
		V max (V)	13.2	5200.0449	5200	0.0449	8.6258
		V min (V)	10.8	5200.0235	5200	0.0235	4.5165
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5200.0289	5200	0.0289	5.5652
		T (°C)	10	5200.0069	5200	0.0069	1.3364
		T (°C)	20	5200.0233	5200	0.0233	4.4719
		T (°C)	30	5200.0164	5200	0.0164	3.1531
		T (°C)	40	5200.0344	5200	0.0344	6.6149
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5240.0190	5240	0.0190	3.6241
		V max (V)	13.2	5240.0273	5240	0.0273	5.2189
		V min (V)	10.8	5240.0292	5240	0.0292	5.5676
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5240.0026	5240	0.0026	0.5016
		T (°C)	10	5240.0141	5240	0.0141	2.6966
		T (°C)	20	5240.0169	5240	0.0169	3.2236
		T (°C)	30	5240.0196	5240	0.0196	3.7373
		T (°C)	40	5240.0311	5240	0.0311	5.9274
Limits				±20ppm			
Result				Complies			

TX Frequency (5250-5350MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5260.0402	5260	0.0402	7.6394
		V max (V)	13.2	5260.0492	5260	0.0492	9.3562
		V min (V)	10.8	5260.0510	5260	0.0510	9.6881
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5260.0297	5260	0.0297	5.6541
		T (°C)	10	5260.0120	5260	0.0120	2.2761
		T (°C)	20	5260.0877	5260	0.0877	16.6706
		T (°C)	30	5260.0934	5260	0.0934	17.7505
		T (°C)	40	5260.0726	5260	0.0726	13.7953
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5280.0202	5280	0.0202	3.8242
		V max (V)	13.2	5280.0107	5280	0.0107	2.0343
		V min (V)	10.8	5280.0725	5280	0.0725	13.7260
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5280.0606	5280	0.0606	11.4770
		T (°C)	10	5280.0613	5280	0.0613	11.6170
		T (°C)	20	5280.0822	5280	0.0822	15.5601
		T (°C)	30	5280.0617	5280	0.0617	11.6947
		T (°C)	40	5280.0667	5280	0.0667	12.6261
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5320.0470	5320	0.0470	8.8278
		V max (V)	13.2	5320.0833	5320	0.0833	15.6572
		V min (V)	10.8	5320.0481	5320	0.0481	9.0323
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5320.0182	5320	0.0182	3.4280
		T (°C)	10	5320.0595	5320	0.0595	11.1749
		T (°C)	20	5320.0258	5320	0.0258	4.8573
		T (°C)	30	5320.0061	5320	0.0061	1.1416
		T (°C)	40	5320.0518	5320	0.0518	9.7404
Limits				±20ppm			
Result				Complies			

TX Frequency (5470-5725MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5550.0289	5500	50.0289	9096.1709
		V max (V)	13.2	5550.0133	5500	50.0133	9093.3220
		V min (V)	10.8	5550.0525	5500	50.0525	9100.4577
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5500.0799	5500	0.0799	14.5206
		T (°C)	10	5500.0245	5500	0.0245	4.4579
		T (°C)	20	5500.0838	5500	0.0838	15.2369
		T (°C)	30	5500.0049	5500	0.0049	0.8927
		T (°C)	40	5500.0750	5500	0.0750	13.6293
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5580.0602	5580	0.0602	10.7877
		V max (V)	13.2	5580.0809	5580	0.0809	14.4921
		V min (V)	10.8	5580.0629	5580	0.0629	11.2801
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5580.0320	5580	0.0320	5.7400
		T (°C)	10	5580.0168	5580	0.0168	3.0171
		T (°C)	20	5580.0844	5580	0.0844	15.1218
		T (°C)	30	5580.0259	5580	0.0259	4.6421
		T (°C)	40	5580.0830	5580	0.0830	14.8702
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5700.0469	5700	0.0469	8.2241
		V max (V)	13.2	5700.0602	5700	0.0602	10.5540
		V min (V)	10.8	5700.0606	5700	0.0606	10.6333
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5700.0267	5700	0.0267	4.6808
		T (°C)	10	5700.0490	5700	0.0490	8.5900
		T (°C)	20	5700.0769	5700	0.0769	13.4889
		T (°C)	30	5700.0194	5700	0.0194	3.4067
		T (°C)	40	5700.0428	5700	0.0428	7.5106
Limits				±20ppm			
Result				Complies			

TX Frequency (5725-5850MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5745.0004	5745	0.0004	0.0646
		V max (V)	13.2	5745.0228	5745	0.0228	3.9613
		V min (V)	10.8	5745.0004	5745	0.0004	0.0646
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5745.0651	5745	0.0651	11.3237
		T (°C)	10	5745.0069	5745	0.0069	1.2084
		T (°C)	20	5745.0098	5745	0.0098	1.7022
		T (°C)	30	5745.0652	5745	0.0652	11.3513
		T (°C)	40	5745.0604	5745	0.0604	10.5212
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5785.0366	5785	0.0366	6.3239
		V max (V)	13.2	5785.0861	5785	0.0861	14.8776
		V min (V)	10.8	5785.0110	5785	0.0110	1.9094
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5785.0907	5785	0.0907	15.6828
		T (°C)	10	5785.0906	5785	0.0906	15.6537
		T (°C)	20	5785.0077	5785	0.0077	1.3324
		T (°C)	30	5785.0616	5785	0.0616	10.6446
		T (°C)	40	5785.0071	5785	0.0071	1.2313
Limits				±20ppm			
Result				Complies			

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	12.0	5825.0752	5825	0.0752	12.9108
		V max (V)	13.2	5825.0427	5825	0.0427	7.3293
		V min (V)	10.8	5825.0664	5825	0.0664	11.4067
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency：5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	12	T (°C)	0	5825.0085	5825	0.0085	1.4633
		T (°C)	10	5825.0319	5825	0.0319	5.4780
		T (°C)	20	5825.0734	5825	0.0734	12.6048
		T (°C)	30	5825.0570	5825	0.0570	9.7885
		T (°C)	40	5825.0339	5825	0.0339	5.8151
Limits				±20ppm			
Result				Complies			

13. OPERATION IN THE ABSENCE OF INFORMATION TO THE TRANSMIT

13.1 Requirement

15.407(c) requirement:
The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signal ling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals. Applicants shall include in their application for equipment authorization a description of how this requirement is met.

13.2 Test Results

Operation in the absence of information to the transmit:

While the EUT is not transmitting any information, the EUT can automatically discontinue transmission and become standby mode for power saving. The EUT can detect the controlling
signal of ASK message transmitting from remote device and verify whether it shall resend or discontinue transmission. (manufacturer declare)

14. ANTENNA REQUIREMENT

15.203 requirement:
An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.
15.247(b) (4) requirement:
The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

EUT Antenna:

The antenna is FPC antenna and no consideration of replacement. The best case gain of the antenna is WiFi (5.2G): 4.28dBi, WiFi (5.3G): 4.28dBi , WiFi (5.6G): 4.01dBi, WiFi (5.8G): 3.96dBi.

15. EUT TEST SETUP PHOTOGRAPHS

Spurious emissions

Below 1GHz

Above 1GHz

※※※※※ **END OF REPORT** ※※※※※