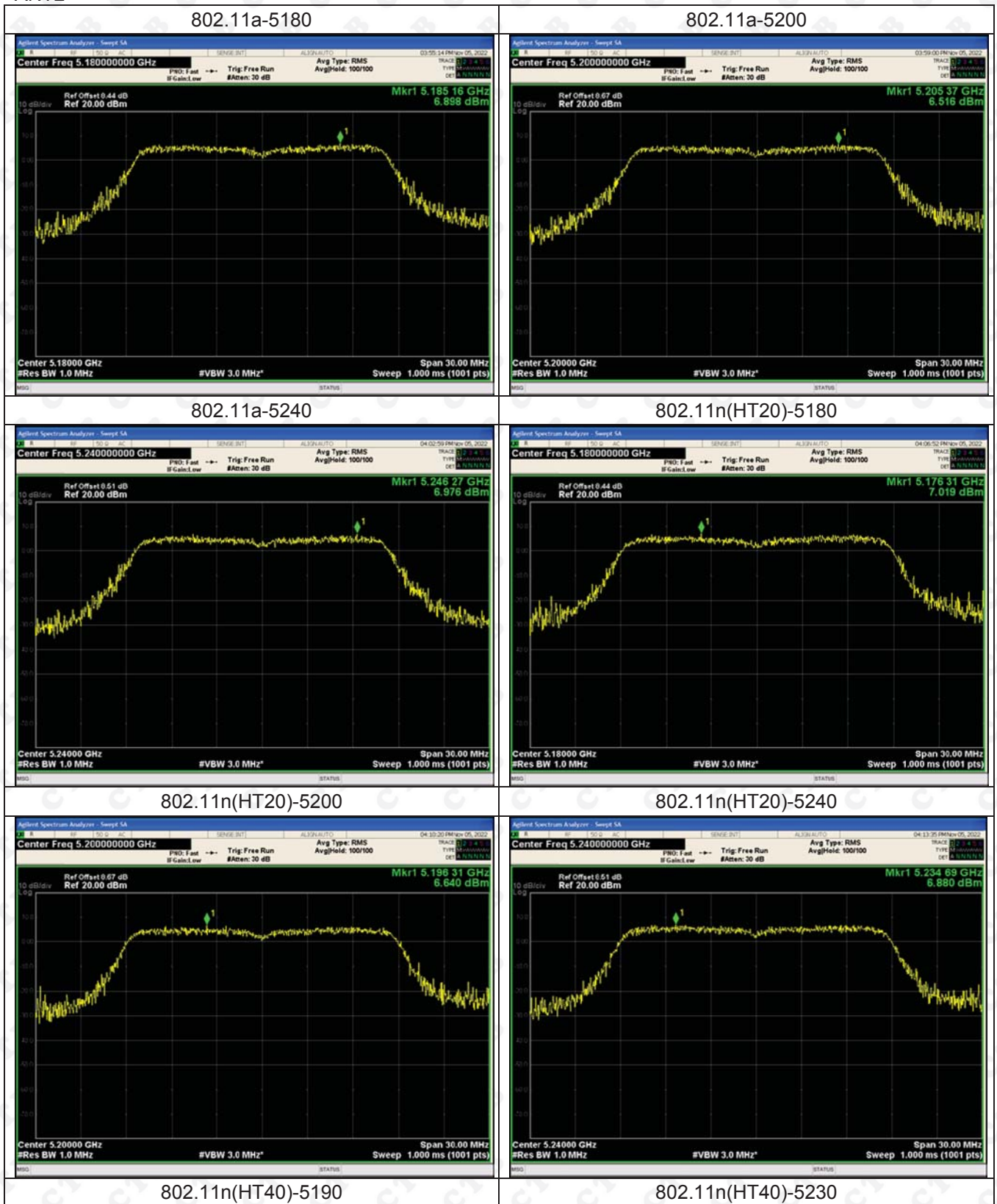


ANT2





802.11ac(VH20)-5180



802.11ac(VH20)-5200



802.11ac(VH20)-5240



802.11ac(VH40)-5190



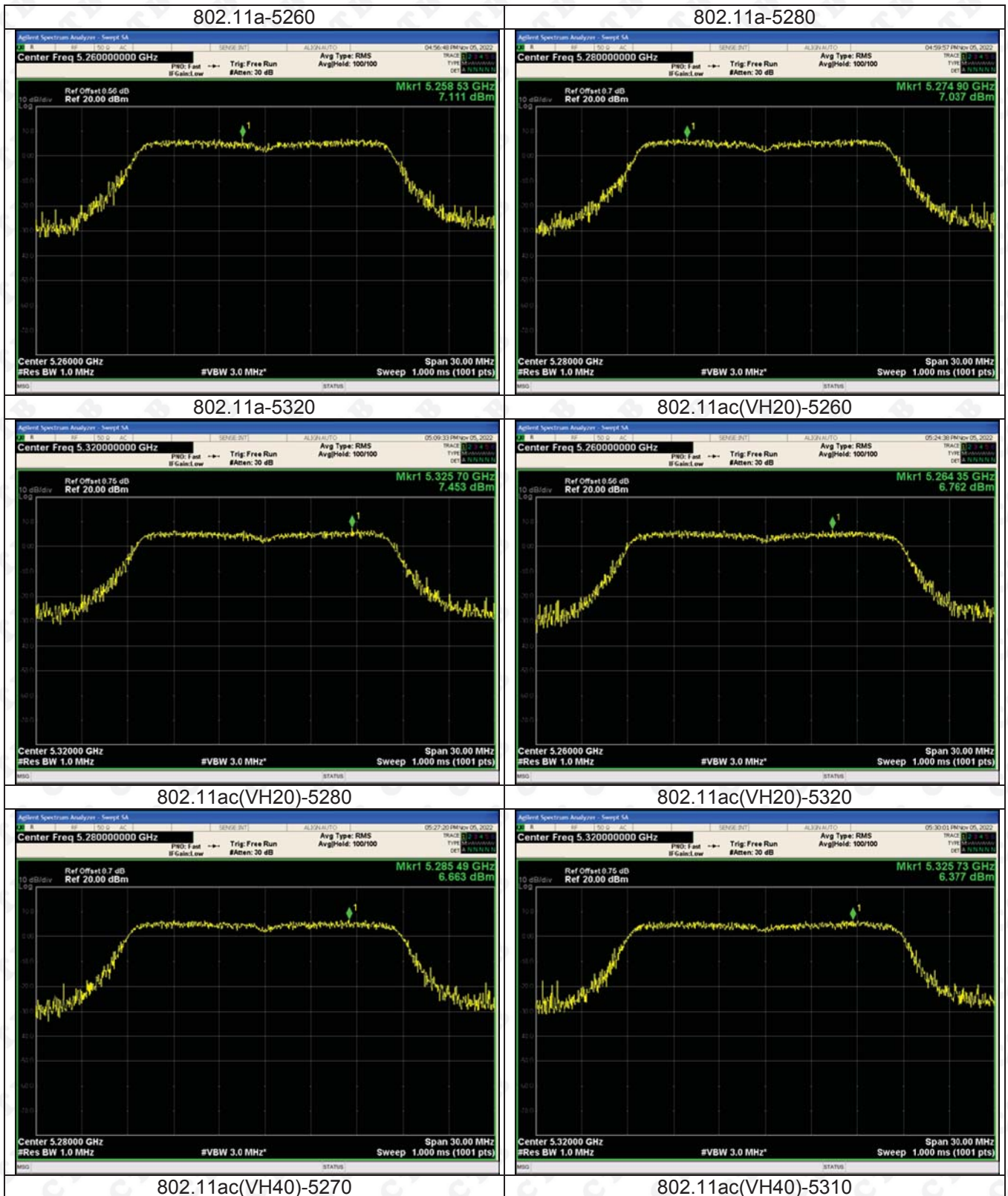
802.11ac(VH40)-5230



802.11ac(VH80)-5210



5260-5320MHz  
ANT1





802.11n(HT20)-5260



802.11n(HT20)-5280



802.11n(HT20)-5320



802.11n(HT40)-5270



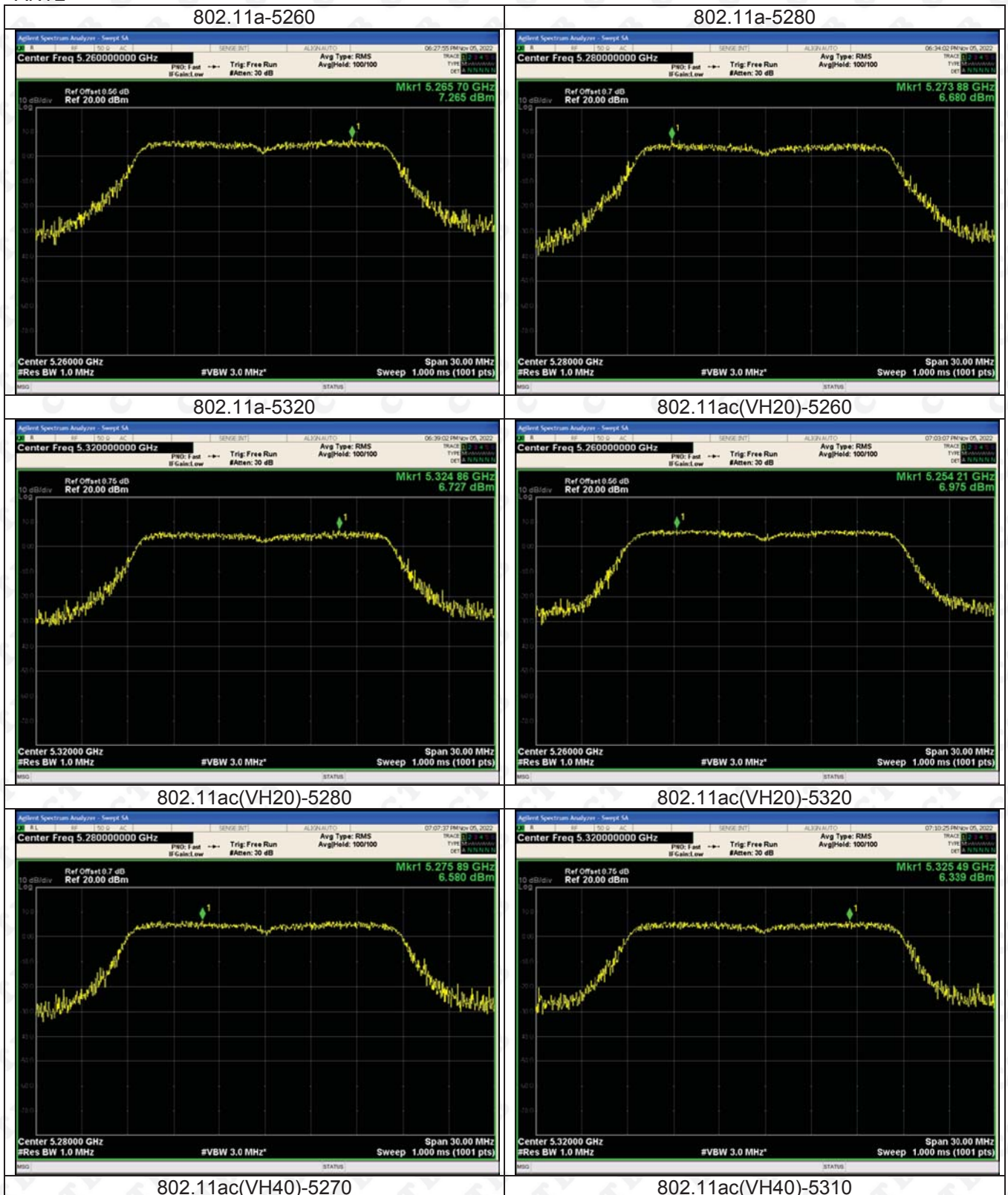
802.11n(HT40)-5310



802.11ac(HT80)-5290



ANT2







802.11n(HT20)-5260



802.11n(HT20)-5280



802.11n(HT20)-5320



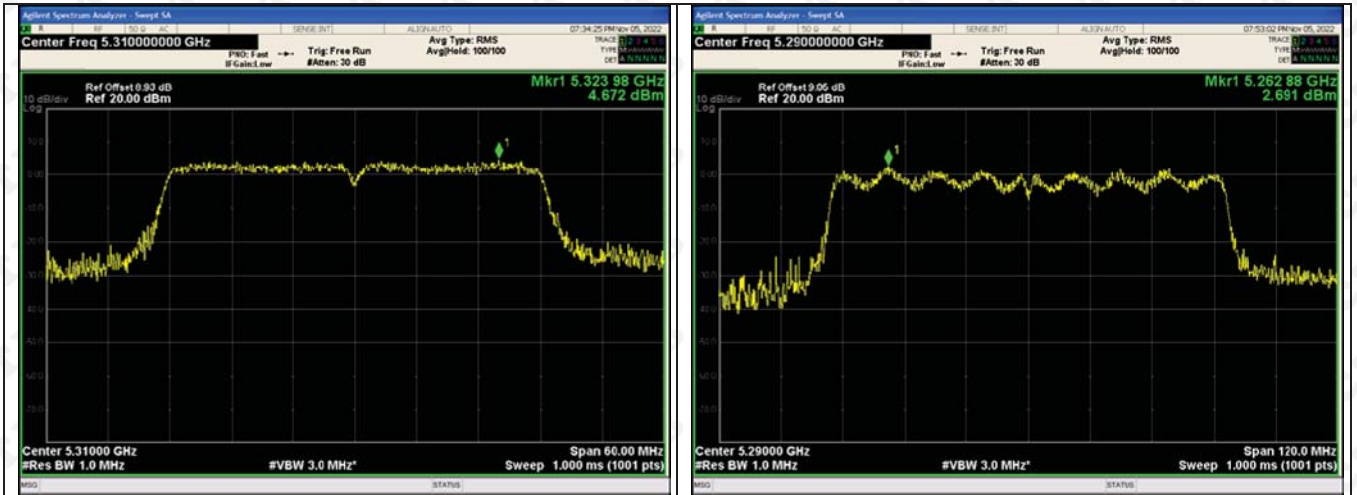
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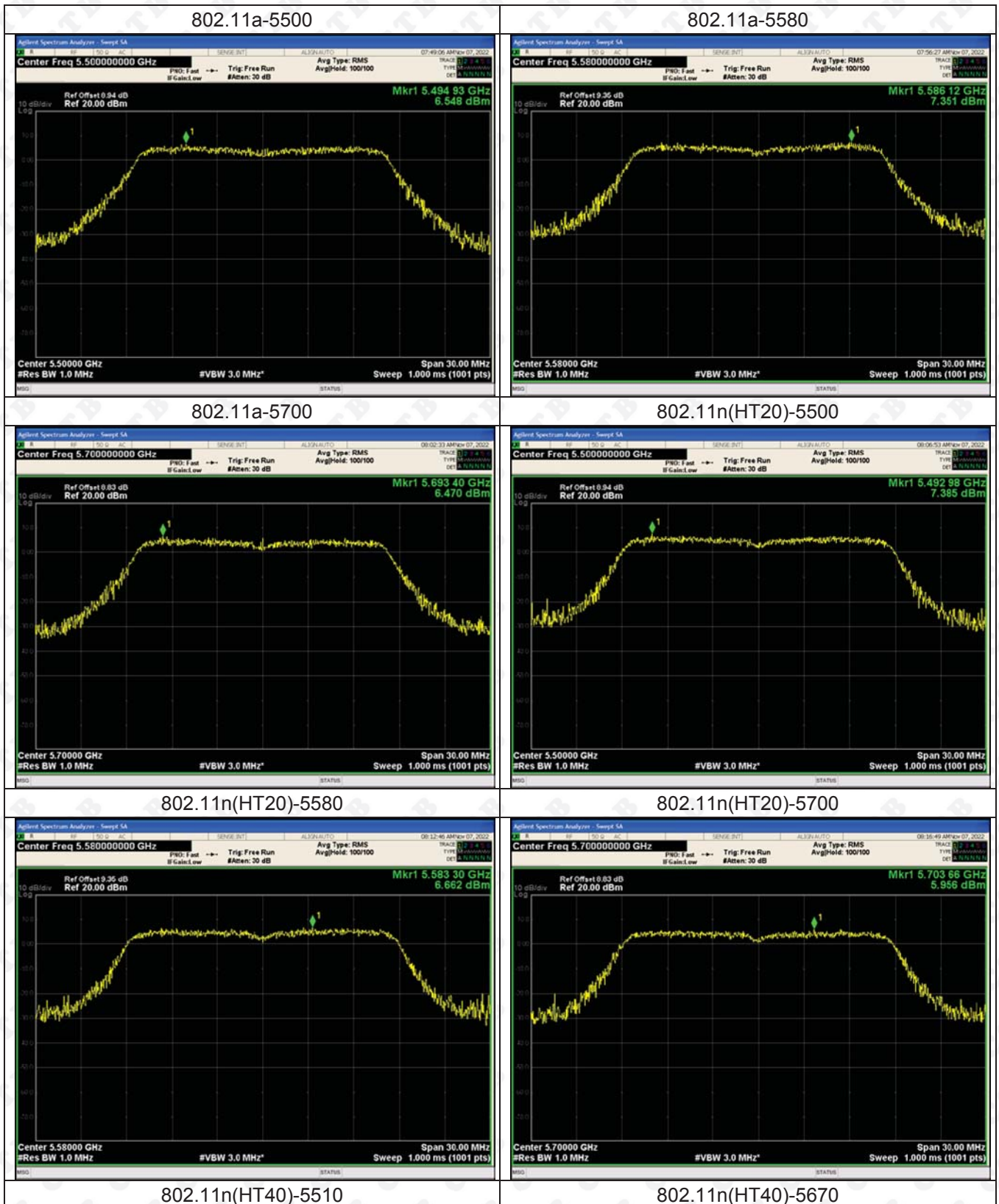
802.11n(HT40)-5310



802.11ac(HT80)-5290



5500-5700MHz  
ANT1





802.11ac(VH20)-5500



802.11ac(VH20)-5580



802.11ac(VH20)-5700



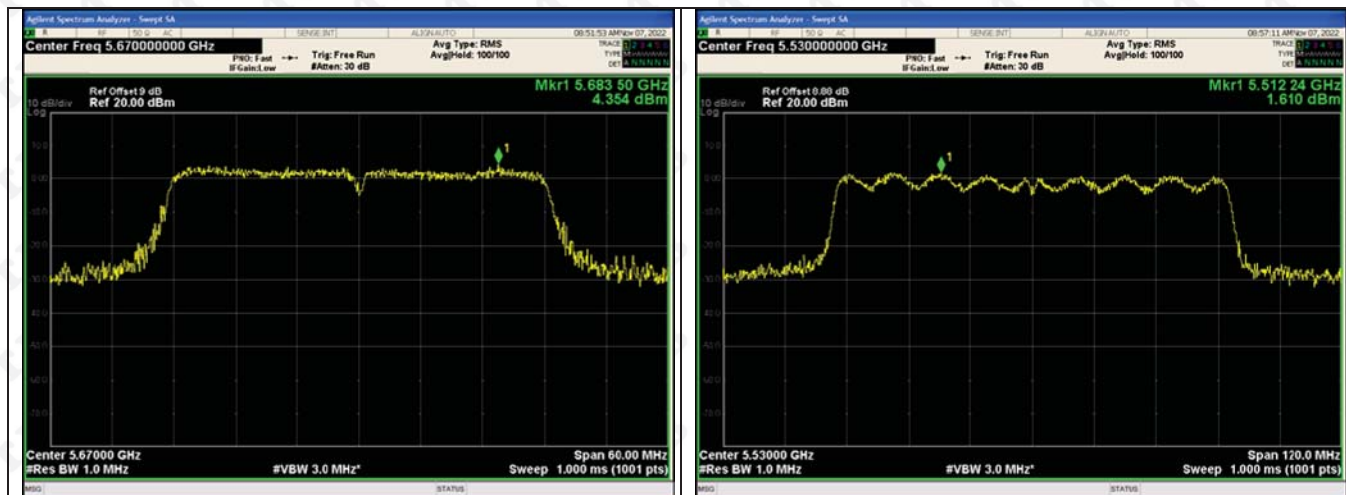
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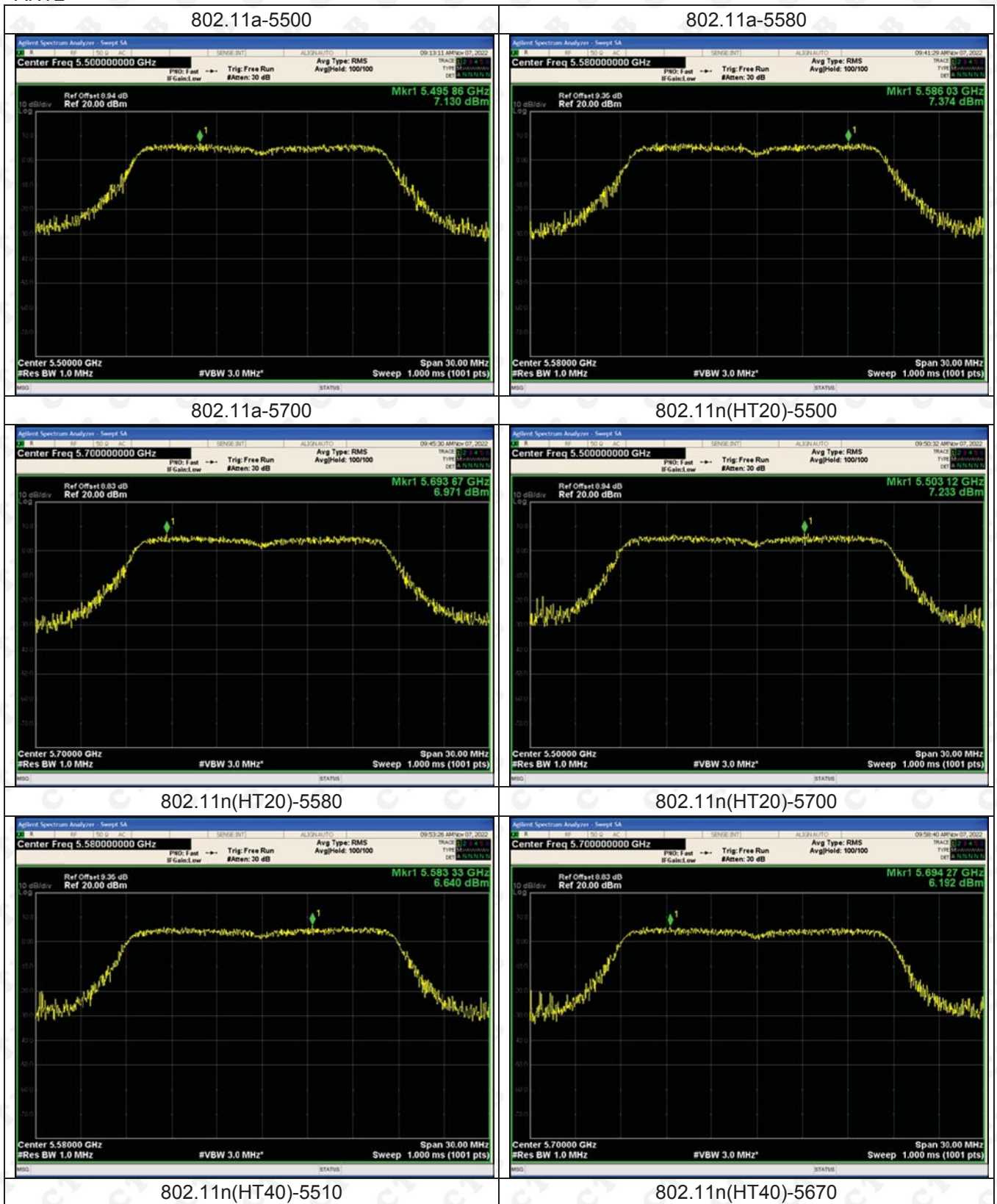
802.11ac(VH40)-5670



802.11ac(VH80)-5530



ANT2





802.11ac(VH20)-5500



802.11ac(VH20)-5580



802.11ac(VH20)-5700



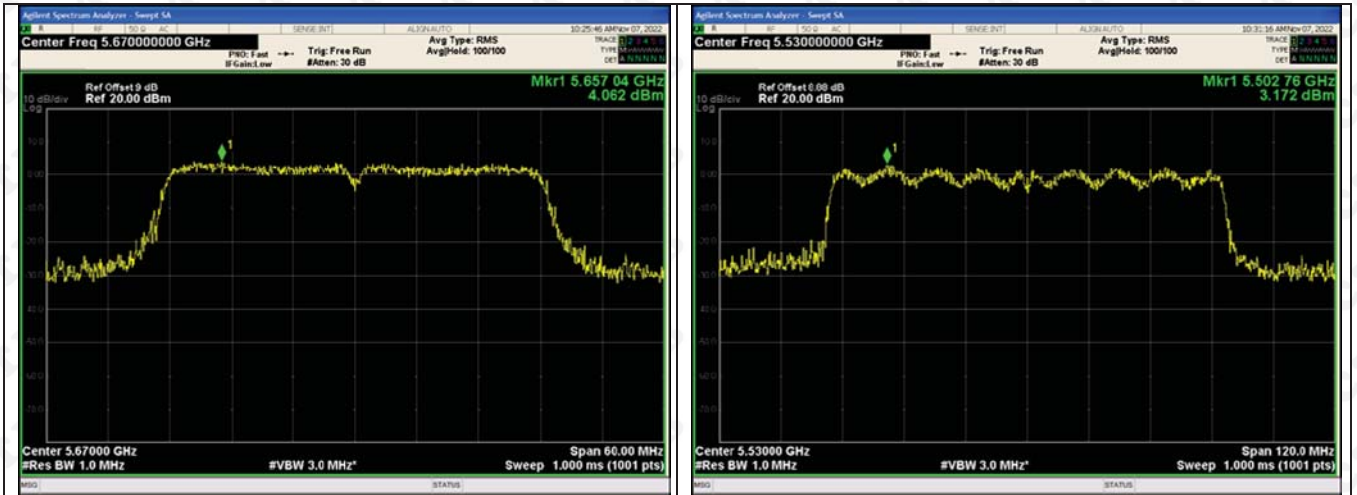
802.11ac(VH40)-5510



802.11ac(VH40)-5670

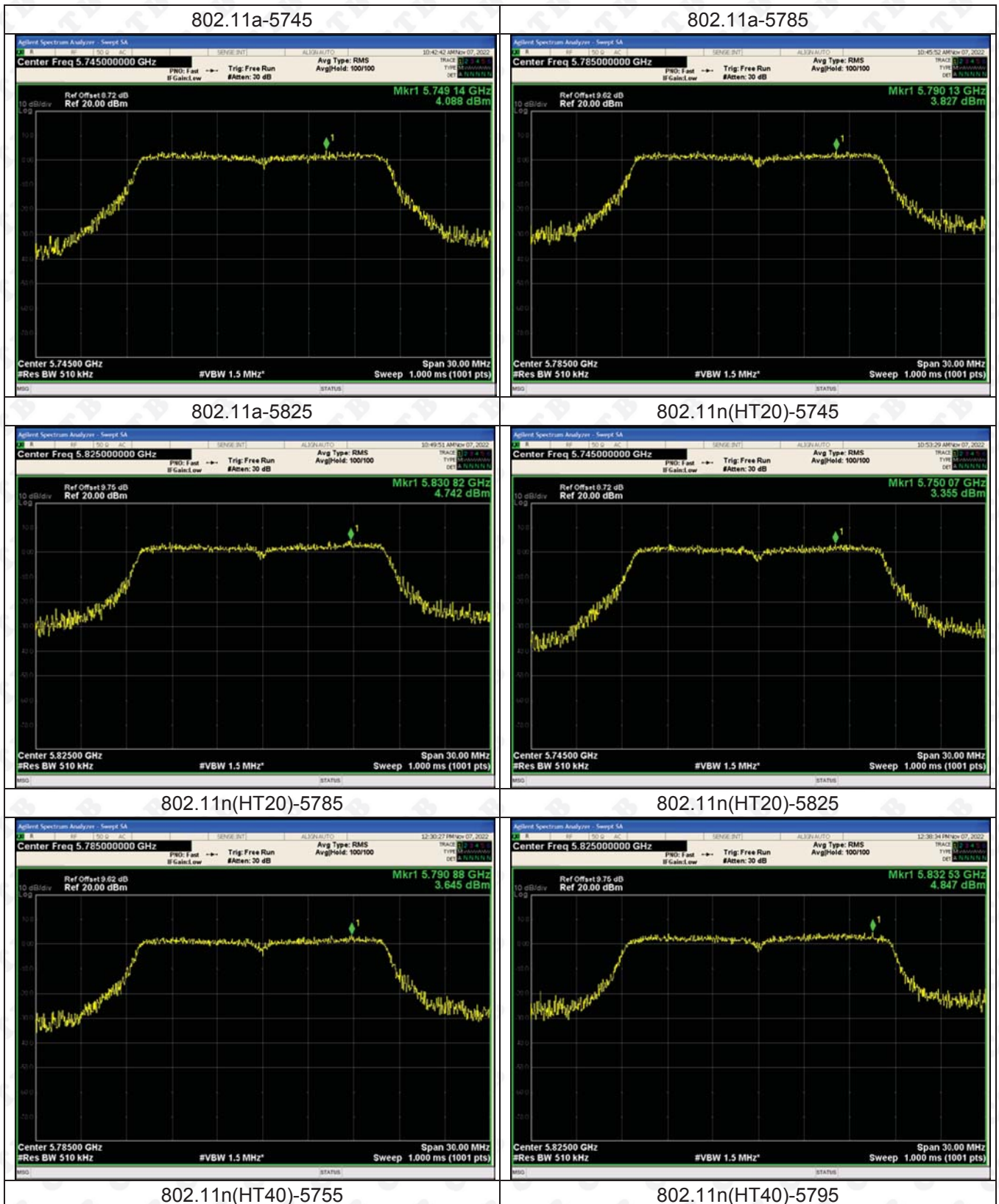


802.11ac(VH80)-5530





5745-5825MHz  
ANT1





802.11ac(VH20)-5745



802.11ac(VH20)-5785



802.11ac(VH20)-5825



802.11ac(VH40)-5755



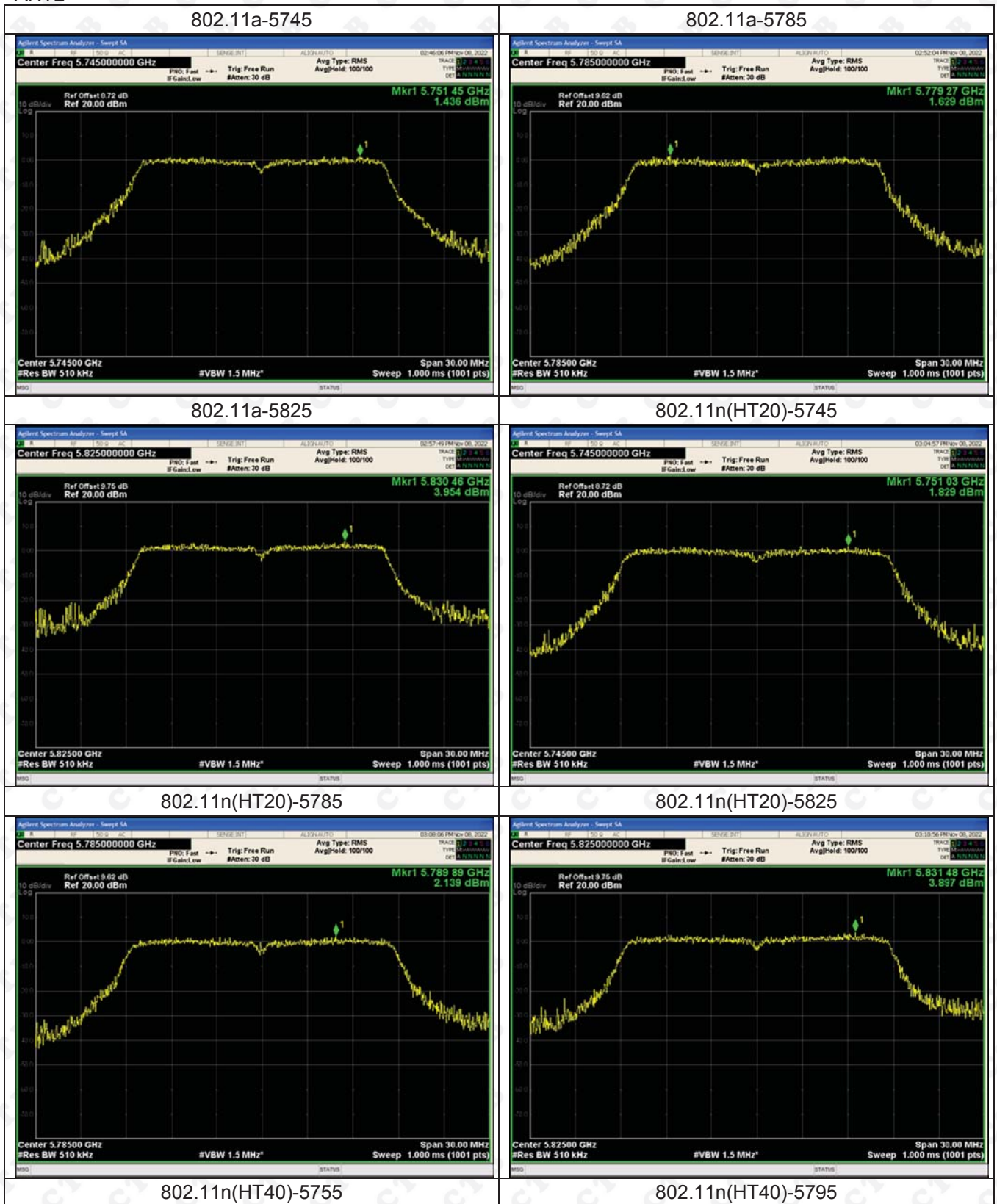
802.11ac(VH40)-5795



802.11ac(VH80)-5775



ANT2





802.11ac(VH20)-5745



802.11ac(VH20)-5785



802.11ac(VH20)-5825



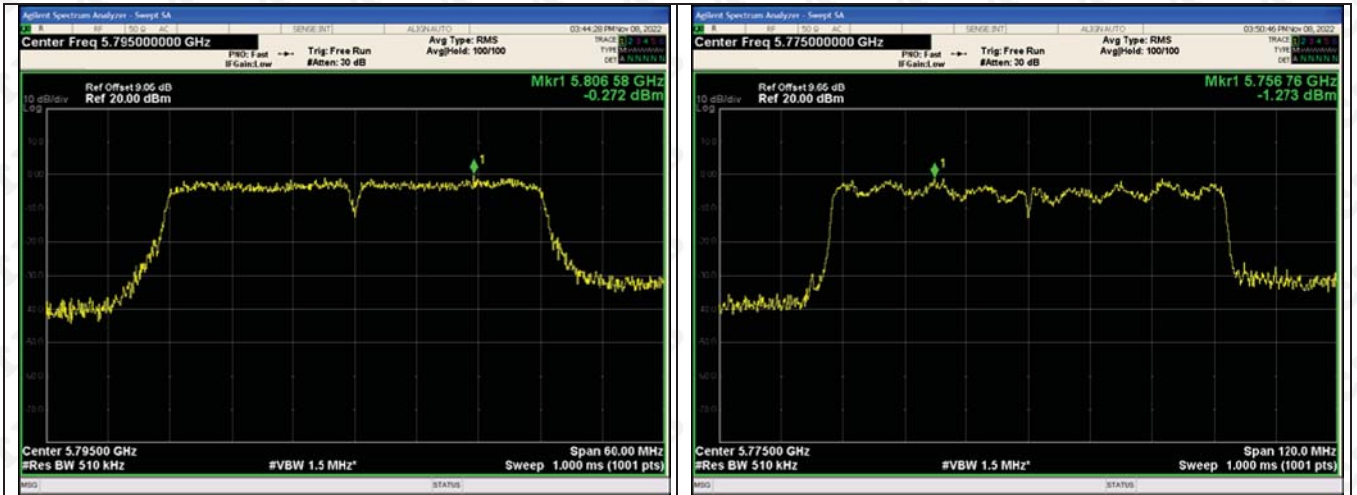
802.11ac(VH40)-5755



802.11ac(VH40)-5795

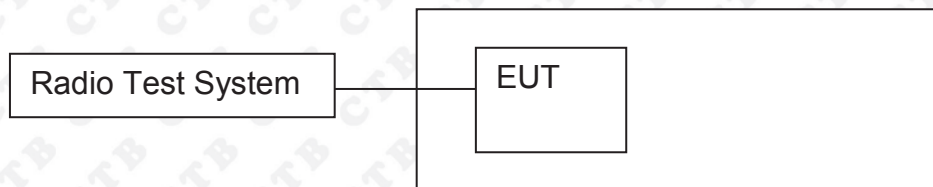


802.11ac(VH80)-5775



## 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)	120	5180.1219	5180	0.1219	23.5320
		V max (V)	132	5180.0520	5180	0.0520	10.0401
		V min (V)	108	5180.0235	5180	0.0235	4.5463
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5180.0399	5180	0.0399	7.7073
		T (°C)	10	5180.0233	5180	0.0233	4.4982
		T (°C)	20	5180.0126	5180	0.0126	2.4306
		T (°C)	30	5180.0033	5180	0.0033	0.6334
		T (°C)	40	5180.0347	5180	0.0347	6.7029
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)	120	5200.0364	5200	0.0364	7.0005
		V max (V)	132	5200.0484	5200	0.0484	9.3090
		V min (V)	108	5200.0027	5200	0.0027	0.5256
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5200.0361	5200	0.0361	6.9349
		T (°C)	10	5200.0261	5200	0.0261	5.0249
		T (°C)	20	5200.0057	5200	0.0057	1.0935
		T (°C)	30	5200.0349	5200	0.0349	6.7116
		T (°C)	40	5200.0375	5200	0.0375	7.2079
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)	120	5240.0251	5240	0.0251	4.7826
		V max (V)	132	5240.0371	5240	0.0371	7.0894
		V min (V)	108	5240.0134	5240	0.0134	2.5599
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5240.0032	5240	0.0032	0.6186
		T (°C)	10	5240.0100	5240	0.0100	1.9033
		T (°C)	20	5240.0177	5240	0.0177	3.3760
		T (°C)	30	5240.0023	5240	0.0023	0.4467
		T (°C)	40	5240.0356	5240	0.0356	6.7979
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)	120	5260.0132	5260	0.0132	2.5179
		V max (V)	132	5260.0256	5260	0.0256	4.8719
		V min (V)	108	5260.0121	5260	0.0121	2.2973
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5260.0133	5260	0.0133	2.5353
		T (°C)	10	5260.0654	5260	0.0654	12.4361
		T (°C)	20	5260.0308	5260	0.0308	5.8637
		T (°C)	30	5260.0837	5260	0.0837	15.9194
		T (°C)	40	5260.0904	5260	0.0904	17.1829
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)	120	5280.0571	5280	0.0571	10.8092
		V max (V)	132	5280.0239	5280	0.0239	4.5243
		V min (V)	108	5280.0683	5280	0.0683	12.9345
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5280.0333	5280	0.0333	6.3068
		T (°C)	10	5280.0507	5280	0.0507	9.5989
		T (°C)	20	5280.0647	5280	0.0647	12.2588
		T (°C)	30	5280.0077	5280	0.0077	1.4635
		T (°C)	40	5280.0447	5280	0.0447	8.4722
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)	120	5320.0379	5320	0.0379	7.1172
		V max (V)	132	5320.0777	5320	0.0777	14.6126
		V min (V)	108	5320.0788	5320	0.0788	14.8061
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5320.0199	5320	0.0199	3.7342
		T (°C)	10	5320.0011	5320	0.0011	0.2131
		T (°C)	20	5320.0829	5320	0.0829	15.5896
		T (°C)	30	5320.0034	5320	0.0034	0.6444
		T (°C)	40	5320.0905	5320	0.0905	17.0202
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)	120	5550.0597	5500	50.0597	9101.7548
		V max (V)	132	5550.0173	5500	50.0173	9094.0600
		V min (V)	108	5550.0545	5500	50.0545	9100.8185
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5500.0890	5500	0.0890	16.1908
		T (°C)	10	5500.0880	5500	0.0880	15.9935
		T (°C)	20	5500.0016	5500	0.0016	0.2906
		T (°C)	30	5500.0371	5500	0.0371	6.7412
		T (°C)	40	5500.0243	5500	0.0243	4.4259
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)	120	5580.0145	5580	0.0145	2.5939
		V max (V)	132	5580.0496	5580	0.0496	8.8956
		V min (V)	108	5580.0932	5580	0.0932	16.6965
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5580.0145	5580	0.0145	2.5941
		T (°C)	10	5580.0718	5580	0.0718	12.8756
		T (°C)	20	5580.0244	5580	0.0244	4.3681
		T (°C)	30	5580.0889	5580	0.0889	15.9282
		T (°C)	40	5580.0701	5580	0.0701	12.5578
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)	120	5700.0786	5700	0.0786	13.7825
		V max (V)	132	5700.0564	5700	0.0564	9.9022
		V min (V)	108	5700.0546	5700	0.0546	9.5744
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5700.0807	5700	0.0807	14.1587
		T (°C)	10	5700.0853	5700	0.0853	14.9635
		T (°C)	20	5700.0670	5700	0.0670	11.7570
		T (°C)	30	5700.0845	5700	0.0845	14.8294
		T (°C)	40	5700.0287	5700	0.0287	5.0312
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)	120	5745.0821	5745	0.0821	14.2883
		V max (V)	132	5745.0736	5745	0.0736	12.8115
		V min (V)	108	5745.0821	5745	0.0821	14.2883
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5745.0351	5745	0.0351	6.1043
		T (°C)	10	5745.0426	5745	0.0426	7.4102
		T (°C)	20	5745.0014	5745	0.0014	0.2476
		T (°C)	30	5745.0935	5745	0.0935	16.2741
		T (°C)	40	5745.0283	5745	0.0283	4.9330
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)	120	5785.0686	5785	0.0686	11.8617
		V max (V)	132	5785.0659	5785	0.0659	11.3845
		V min (V)	108	5785.0000	5785	0.0000	0.0044
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5785.0052	5785	0.0052	0.9013
		T (°C)	10	5785.0892	5785	0.0892	15.4248
		T (°C)	20	5785.0934	5785	0.0934	16.1489
		T (°C)	30	5785.0615	5785	0.0615	10.6352
		T (°C)	40	5785.0321	5785	0.0321	5.5440
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)	120	5825.0336	5825	0.0336	5.7619
		V max (V)	132	5825.0895	5825	0.0895	15.3698
		V min (V)	108	5825.0364	5825	0.0364	6.2492
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5825.0455	5825	0.0455	7.8153
		T (°C)	10	5825.0505	5825	0.0505	8.6762
		T (°C)	20	5825.0182	5825	0.0182	3.1295
		T (°C)	30	5825.0064	5825	0.0064	1.0935
		T (°C)	40	5825.0398	5825	0.0398	6.8377
Limits				±20ppm			
Result				Complies			

ANT2:

TX Frequency (5150-5250MHz)

Voltage vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
T nom (°C)	20	V nom (V)	120	5180.0874	5180	0.0874	16.8794
		V max (V)	132	5180.0285	5180	0.0285	5.4963
		V min (V)	108	5180.0005	5180	0.0005	0.0871
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5180MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5180.0203	5180	0.0203	3.9280
		T (°C)	10	5180.0031	5180	0.0031	0.5959
		T (°C)	20	5180.0087	5180	0.0087	1.6803
		T (°C)	30	5180.0063	5180	0.0063	1.2252
		T (°C)	40	5180.0698	5180	0.0698	13.4758
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)	120	5200.0678	5200	0.0678	13.0473
		V max (V)	132	5200.0290	5200	0.0290	5.5799
		V min (V)	108	5200.0462	5200	0.0462	8.8786
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5200MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5200.0624	5200	0.0624	11.9905
		T (°C)	10	5200.0397	5200	0.0397	7.6299
		T (°C)	20	5200.0252	5200	0.0252	4.8459
		T (°C)	30	5200.0859	5200	0.0859	16.5275
		T (°C)	40	5200.0754	5200	0.0754	14.4956
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)	120	5240.0278	5240	0.0278	5.3017
		V max (V)	132	5240.0504	5240	0.0504	9.6209
		V min (V)	108	5240.0136	5240	0.0136	2.5945
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5240MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5240.0859	5240	0.0859	16.3863
		T (°C)	10	5240.0583	5240	0.0583	11.1325
		T (°C)	20	5240.0266	5240	0.0266	5.0670
		T (°C)	30	5240.0803	5240	0.0803	15.3318
		T (°C)	40	5240.0127	5240	0.0127	2.4282
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)	120	5260.0763	5260	0.0763	14.5140
		V max (V)	132	5260.0200	5260	0.0200	3.8062
		V min (V)	108	5260.0042	5260	0.0042	0.7907
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5260MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5260.0700	5260	0.0700	13.3115
		T (°C)	10	5260.0781	5260	0.0781	14.8511
		T (°C)	20	5260.0372	5260	0.0372	7.0746
		T (°C)	30	5260.0547	5260	0.0547	10.3954
		T (°C)	40	5260.0298	5260	0.0298	5.6610
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)	120	5280.0712	5280	0.0712	13.4936
		V max (V)	132	5280.0896	5280	0.0896	16.9642
		V min (V)	108	5280.0488	5280	0.0488	9.2445
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5280MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5280.0341	5280	0.0341	6.4624
		T (°C)	10	5280.0935	5280	0.0935	17.7173
		T (°C)	20	5280.0032	5280	0.0032	0.6119
		T (°C)	30	5280.0053	5280	0.0053	1.0087
		T (°C)	40	5280.0528	5280	0.0528	10.0068
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)	120	5320.0711	5320	0.0711	13.3565
		V max (V)	132	5320.0700	5320	0.0700	13.1561
		V min (V)	108	5320.0661	5320	0.0661	12.4232
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5320MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	-20	5320.0749	5320	0.0749	14.0724
		T (°C)	-10	5320.0067	5320	0.0067	1.2556
		T (°C)	0	5320.0011	5320	0.0011	0.2081
		T (°C)	10	5320.0444	5320	0.0444	8.3388
		T (°C)	20	5320.0446	5320	0.0446	8.3766
		T (°C)	30	5320.0537	5320	0.0537	10.0928
		T (°C)	40	5320.0654	5320	0.0654	12.2876
		T (°C)	50	5320.0360	5320	0.0360	6.7582
		T (°C)	60	5320.0662	5320	0.0662	12.4401
T (°C)	70	5320.0171	5320	0.0171	3.2086		
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)	120	5500.0795	5500	0.0795	14.4622
		V max (V)	132	5500.0078	5500	0.0078	1.4119
		V min (V)	108	5500.0903	5500	0.0903	16.4223
Limits				±20ppm			
Result				Complies			

Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5500MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5500.0347	5500	0.0347	6.3130
		T (°C)	10	5500.0374	5500	0.0374	6.8010
		T (°C)	20	5500.0865	5500	0.0865	15.7260
		T (°C)	30	5500.0224	5500	0.0224	4.0788
		T (°C)	40	5500.0621	5500	0.0621	11.2955
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)	120	5580.0263	5580	0.0263	4.7084
		V max (V)	132	5580.0169	5580	0.0169	3.0269
		V min (V)	108	5580.0625	5580	0.0625	11.2081
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5580MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5580.0661	5580	0.0661	11.8462
		T (°C)	10	5580.0574	5580	0.0574	10.2894
		T (°C)	20	5580.0662	5580	0.0662	11.8555
		T (°C)	30	5580.0262	5580	0.0262	4.6946
		T (°C)	40	5580.0372	5580	0.0372	6.6682
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)	120	5700.0257	5700	0.0257	4.5107
		V max (V)	132	5700.0428	5700	0.0428	7.5128
		V min (V)	108	5700.0338	5700	0.0338	5.9382
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5700MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5700.0243	5700	0.0243	4.2555
		T (°C)	10	5700.0089	5700	0.0089	1.5548
		T (°C)	20	5700.0859	5700	0.0859	15.0697
		T (°C)	30	5700.0215	5700	0.0215	3.7718
		T (°C)	40	5700.0765	5700	0.0765	13.4178
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)	120	5745.0325	5745	0.0325	5.6529
		V max (V)	132	5745.0897	5745	0.0897	15.6083
		V min (V)	108	5745.0527	5745	0.0527	9.1673
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5745MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5745.0860	5745	0.0860	14.9651
		T (°C)	10	5745.0802	5745	0.0802	13.9653
		T (°C)	20	5745.0884	5745	0.0884	15.3806
		T (°C)	30	5745.0094	5745	0.0094	1.6394
		T (°C)	40	5745.0124	5745	0.0124	2.1596
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)	120	5785.0214	5785	0.0214	3.6943
		V max (V)	132	5785.0089	5785	0.0089	1.5425
		V min (V)	108	5785.0732	5785	0.0732	12.6515
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5785MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5785.0776	5785	0.0776	13.4169
		T (°C)	10	5785.0670	5785	0.0670	11.5866
		T (°C)	20	5785.0165	5785	0.0165	2.8548
		T (°C)	30	5785.0444	5785	0.0444	7.6762
		T (°C)	40	5785.0124	5785	0.0124	2.1504
		T (°C)	50	5785.0478	5785	0.0478	8.2689
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)	120	5825.0462	5825	0.0462	7.9302
		V max (V)	132	5825.0068	5825	0.0068	1.1701
		V min (V)	108	5825.0321	5825	0.0321	5.5125
Limits				±20ppm			
Result				Complies			

## Temperature vs. Frequency Stability

TEST CONDITIONS				Reference Frequency: 5825MHz			
				f	fc	Max. Deviation (MHz)	Max. Deviation (ppm)
V nom (V)	120	T (°C)	0	5825.0881	5825	0.0881	15.1297
		T (°C)	10	5825.0516	5825	0.0516	8.8583
		T (°C)	20	5825.0620	5825	0.0620	10.6487
		T (°C)	30	5825.0350	5825	0.0350	6.0138
		T (°C)	40	5825.0412	5825	0.0412	7.0812
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 PIFA antenna and no consideration of replacement. The best case gain of the antenna is 5.2G:2.88dBi, 5.3G:3.13dBi, 5.6G:3.36dBi, 5.8G:3.14dBi.

**15. EUT PHOTOGRAPHS**

**EUT Photo 1**



**EUT Photo 2**



**16. EUT TEST SETUP PHOTOGRAPHS**

Spurious emissions

Below 1GHz



Above 1GHz



Conducted Emission



\*\*\*\*\* END OF REPORT \*\*\*\*\*