



## Appendix A for SHEM180500347301

## 1.6dB Bandwidth

Test Mode	Test	EBW[MHz]		Limit	Verdict
		Ant1	Ant2		
11B	2412	10.05	9.57	0.5	PASS
11B	2437	10.05	10.06	0.5	PASS
11B	2462	10.04	10.07	0.5	PASS
11G	2412	15.09	15.07	0.5	PASS
11G	2437	15.07	15.00	0.5	PASS
11G	2462	15.09	15.10	0.5	PASS
11N20SISO	2412	15.10	15.08	0.5	PASS
11N20SISO	2437	15.10	15.10	0.5	PASS
11N20SISO	2462	15.07	15.09	0.5	PASS
11N40SISO	2422	35.09	35.06	0.5	PASS
11N40SISO	2437	35.05	35.06	0.5	PASS
11N40SISO	2452	35.08	33.84	0.5	PASS

## 6dB Bandwidth\_11B\_2412\_Ant1



## 6dB Bandwidth\_11B\_2437\_Ant1



## 6dB Bandwidth\_11B\_2462\_Ant1



## 6dB Bandwidth\_11G\_2412\_Ant1



## 6dB Bandwidth\_11G\_2437\_Ant1



## 6dB Bandwidth\_11G\_2462\_Ant1



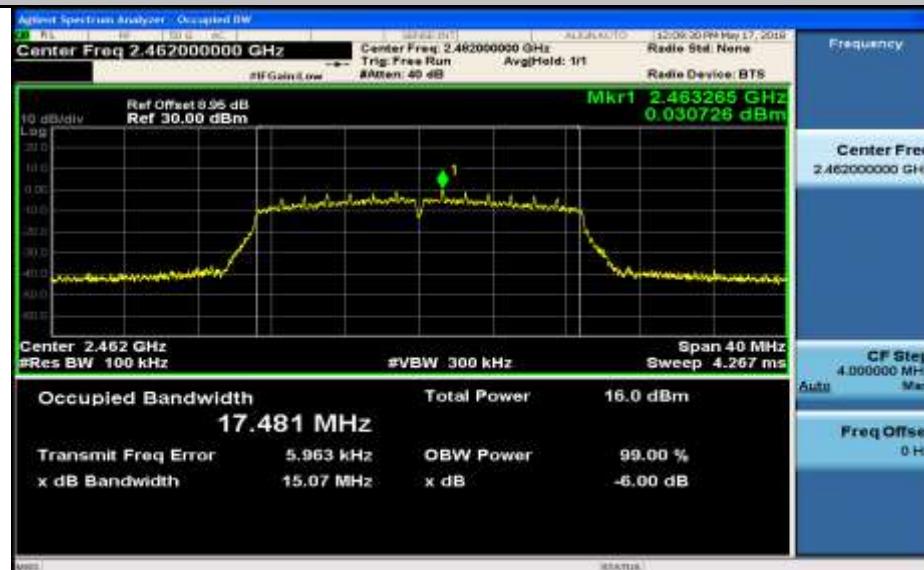
## 6dB Bandwidth\_11N20SISO\_2412\_Ant1



## 6dB Bandwidth\_11N20SISO\_2437\_Ant1



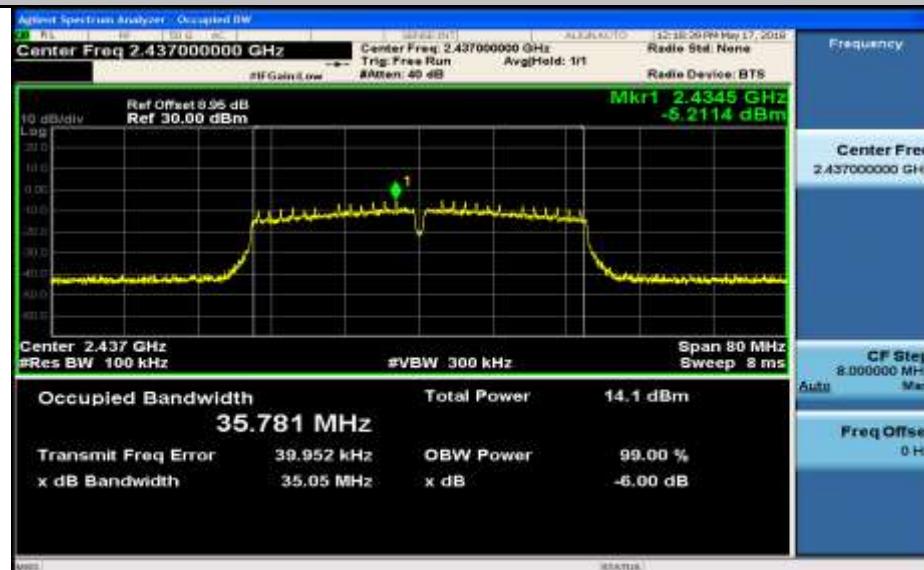
## 6dB Bandwidth\_11N20SISO\_2462\_Ant1



## 6dB Bandwidth\_11N40SISO\_2422\_Ant1



## 6dB Bandwidth\_11N40SISO\_2437\_Ant1



## 6dB Bandwidth\_11N40SISO\_2452\_Ant1



## 6dB Bandwidth\_11B\_2412\_Ant2



## 6dB Bandwidth\_11B\_2437\_Ant2



## 6dB Bandwidth\_11B\_2462\_Ant2



## 6dB Bandwidth\_11G\_2412\_Ant2



## 6dB Bandwidth\_11G\_2437\_Ant2



## 6dB Bandwidth\_11G\_2462\_Ant2



## 6dB Bandwidth\_11N20SISO\_2412\_Ant2



## 6dB Bandwidth\_11N20SISO\_2437\_Ant2



## 6dB Bandwidth\_11N20SISO\_2462\_Ant2



## 6dB Bandwidth\_11N40SISO\_2422\_Ant2



## 6dB Bandwidth\_11N40SISO\_2437\_Ant2



## 6dB Bandwidth\_11N40SISO\_2452\_Ant2



**2.Occupied Bandwidth**

Test Mode	Test Channel	OBW[MHz]		Limit[MHz]	Verdict
		Ant1	Ant2		
11B	2412	14.78	14.53	---	PASS
11B	2437	14.79	15.17	---	PASS
11B	2462	14.75	15.44	---	PASS
11G	2412	16.72	16.61	---	PASS
11G	2437	16.64	16.80	---	PASS
11G	2462	16.65	16.79	---	PASS
11N20SISO	2412	17.59	17.57	---	PASS
11N20SISO	2437	17.59	17.63	---	PASS
11N20SISO	2462	17.57	17.64	---	PASS
11N40SISO	2422	36.05	36.07	---	PASS
11N40SISO	2437	36.06	36.10	---	PASS
11N40SISO	2452	36.01	36.08	---	PASS

## Occupied Bandwidth\_11B\_2412\_Ant1



## Occupied Bandwidth\_11B\_2437\_Ant1



## Occupied Bandwidth\_11B\_2462\_Ant1



## Occupied Bandwidth\_11G\_2412\_Ant1



## Occupied Bandwidth\_11G\_2437\_Ant1



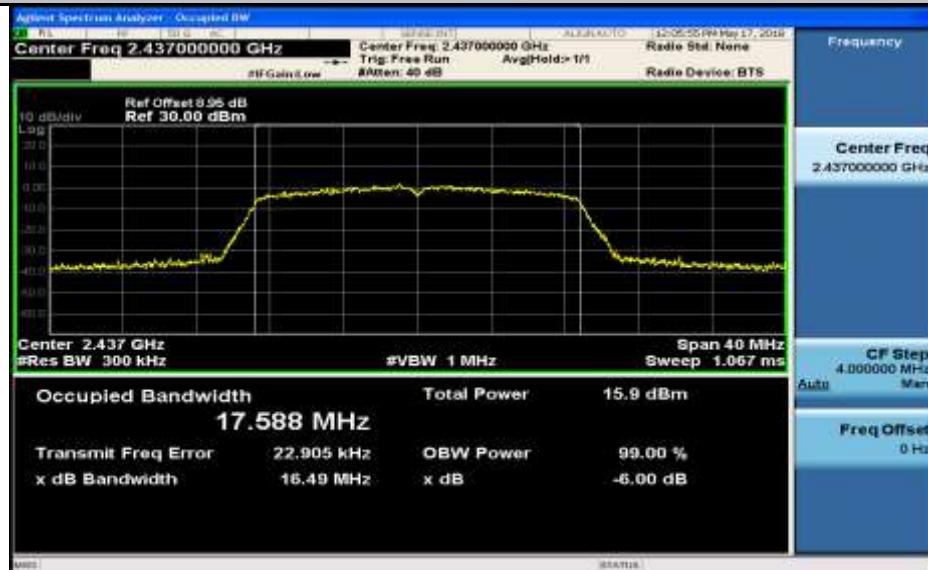
## Occupied Bandwidth\_11G\_2462\_Ant1



## Occupied Bandwidth\_11N20SISO\_2412\_Ant1



## Occupied Bandwidth\_11N20SISO\_2437\_Ant1



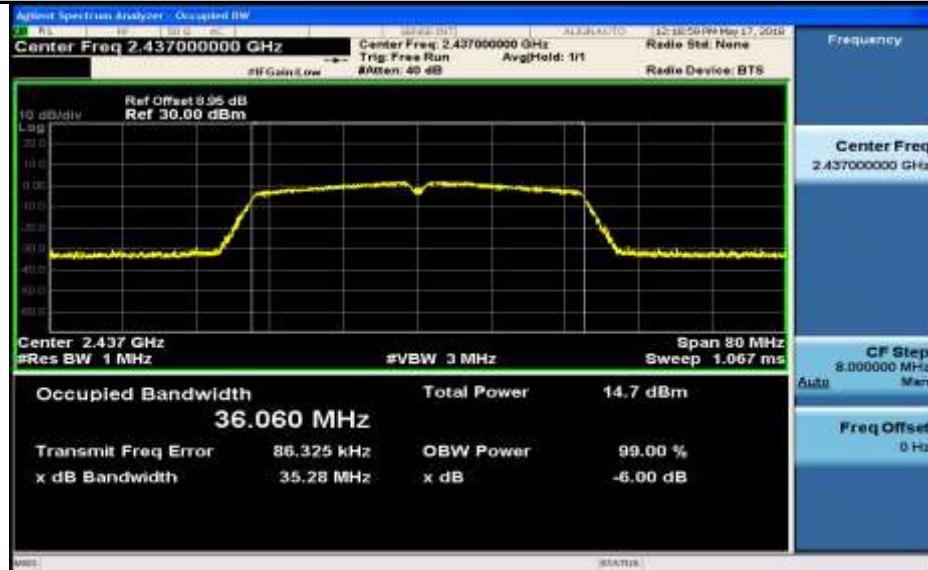
## Occupied Bandwidth\_11N20SISO\_2462\_Ant1



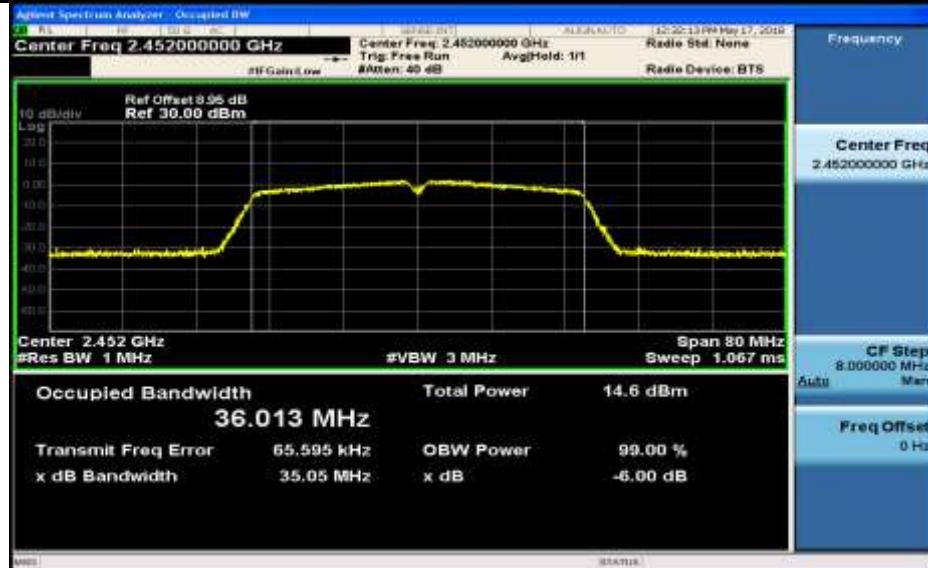
## Occupied Bandwidth\_11N40SISO\_2422\_Ant1



## Occupied Bandwidth\_11N40SISO\_2437\_Ant1



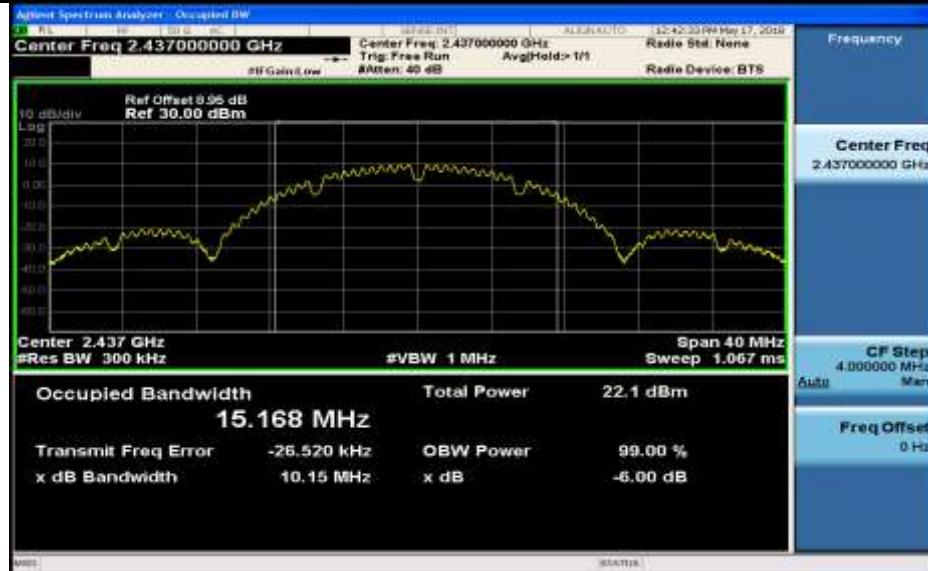
## Occupied Bandwidth\_11N40SISO\_2452\_Ant1



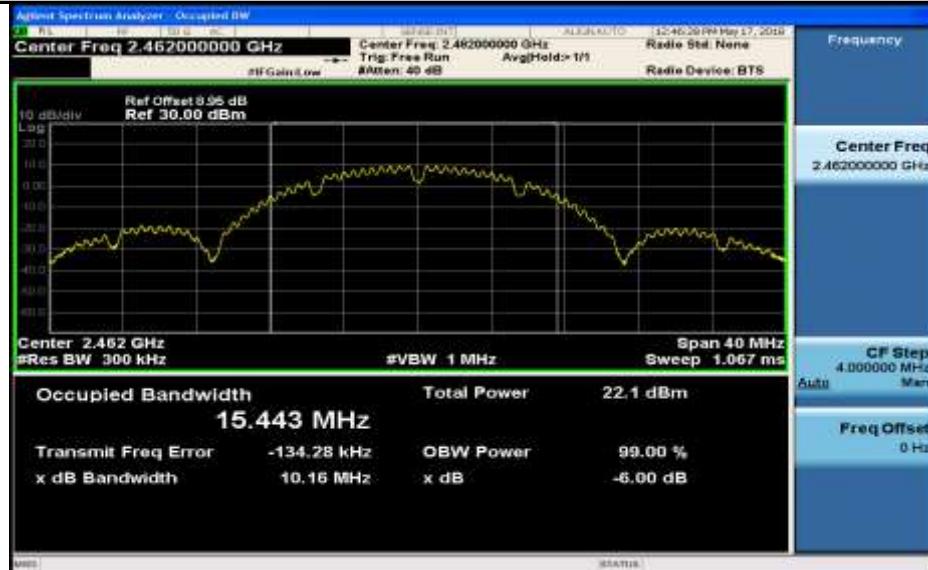
## Occupied Bandwidth\_11B\_2412\_Ant2



## Occupied Bandwidth\_11B\_2437\_Ant2



## Occupied Bandwidth\_11B\_2462\_Ant2



## Occupied Bandwidth\_11G\_2412\_Ant2



## Occupied Bandwidth\_11G\_2437\_Ant2



## Occupied Bandwidth\_11G\_2462\_Ant2



## Occupied Bandwidth\_11N20SISO\_2412\_Ant2



## Occupied Bandwidth\_11N20SISO\_2437\_Ant2



## Occupied Bandwidth\_11N20SISO\_2462\_Ant2



## Occupied Bandwidth\_11N40SISO\_2422\_Ant2



## Occupied Bandwidth\_11N40SISO\_2437\_Ant2



## Occupied Bandwidth\_11N40SISO\_2452\_Ant2



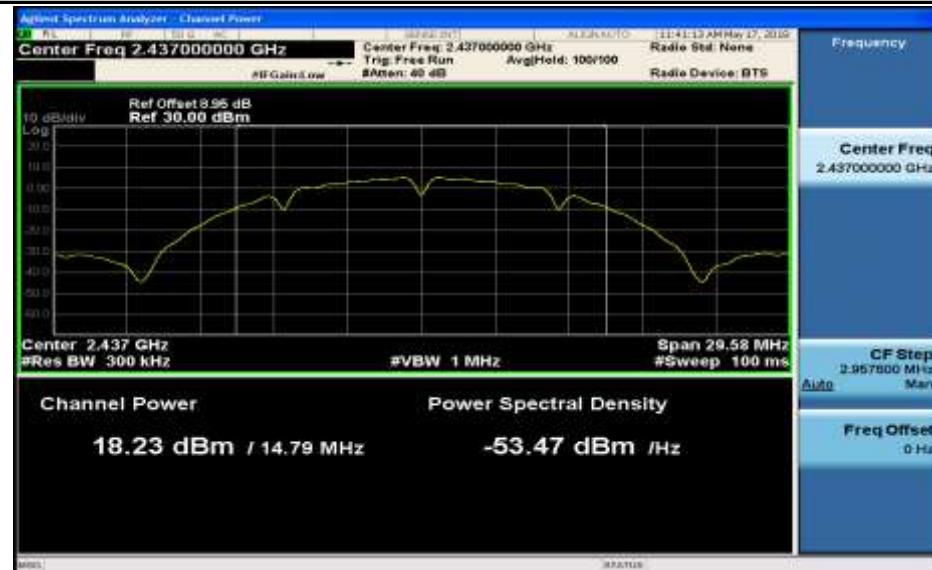
**3. Maximum conducted (average) output power**

Test Mode	Test Channel	Level [dBm]		10log(1/x) Factor[dB]		Power [dBm]			Limit [dBm]	Verdict
		Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	MIMO		
11B	2412	17.8	15.12	0.07	0.02	17.87	15.14	NA	30	PASS
11B	2437	18.23	18.46	0.04	0.02	18.27	18.48	NA	30	PASS
11B	2462	18.11	18.28	0.02	0.02	18.13	18.29	NA	30	PASS
11G	2412	13.83	9.95	0.39	0.09	14.22	10.04	NA	30	PASS
11G	2437	14.08	13.5	0.31	0.28	14.38	13.78	NA	30	PASS
11G	2462	14.03	13.53	0.44	0.36	14.47	13.89	NA	30	PASS
11N20MIMO	2412	8.77	8.72	0.51	0.58	9.28	9.30	12.30	30	PASS
11N20MIMO	2437	9.08	12.47	0.71	0.79	9.78	13.26	14.87	30	PASS
11N20MIMO	2462	8.93	12.38	0.67	0.32	9.60	12.70	14.43	30	PASS
11N40MIMO	2422	6.44	6.75	1.71	1.36	8.15	8.11	11.14	30	PASS
11N40MIMO	2437	6.52	10.21	0.57	1.59	7.10	11.80	13.07	30	PASS
11N40MIMO	2452	6.47	10.37	1.73	0.70	8.20	11.07	12.88	30	PASS

## Maximum conducted (average) output power\_11B\_2412\_Ant1



## Maximum conducted (average) output power\_11B\_2437\_Ant1



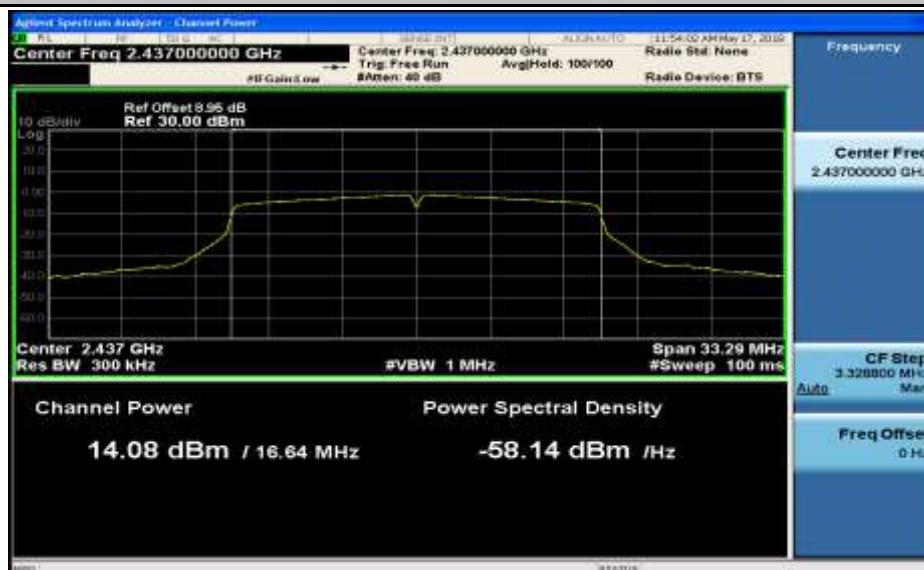
## Maximum conducted (average) output power\_11B\_2462\_Ant1



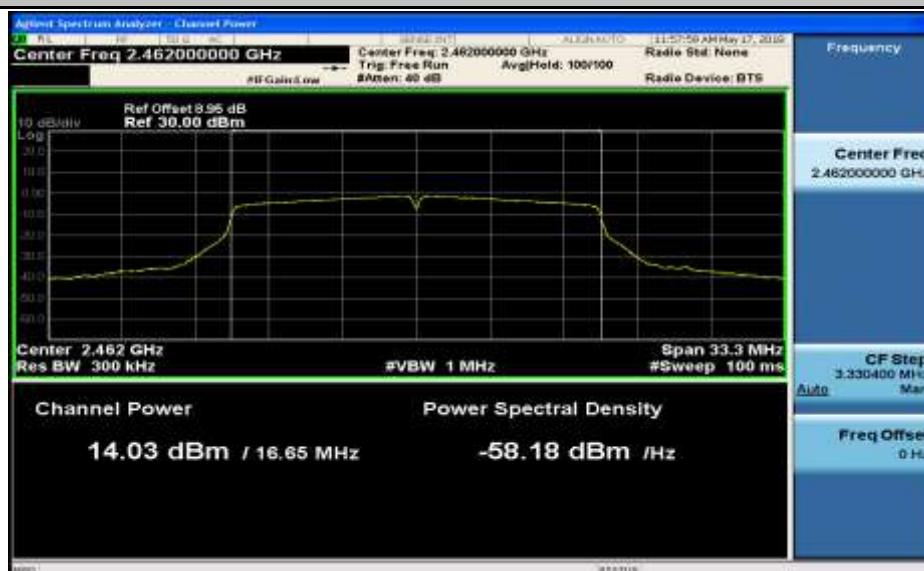
## Maximum conducted (average) output power\_11G\_2412\_Ant1



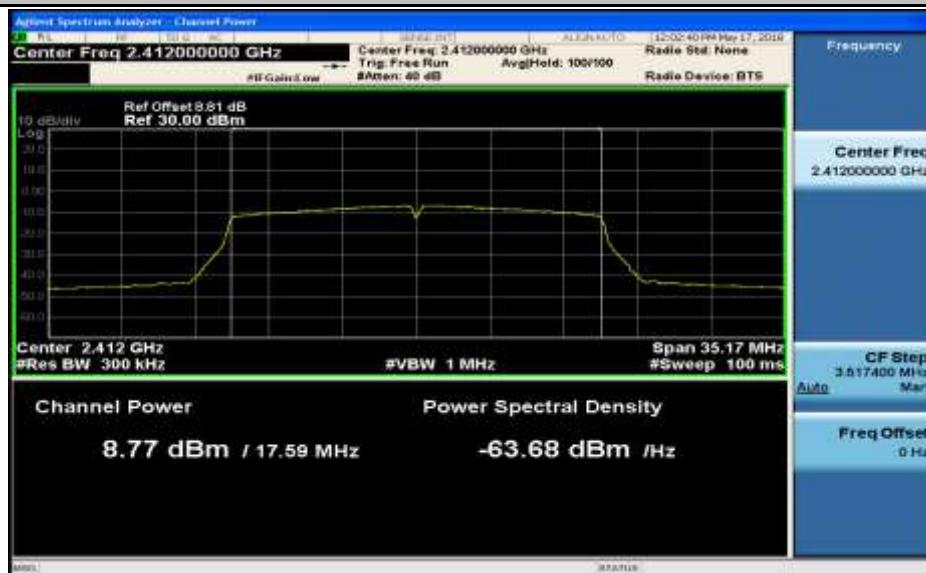
## Maximum conducted (average) output power\_11G\_2437\_Ant1



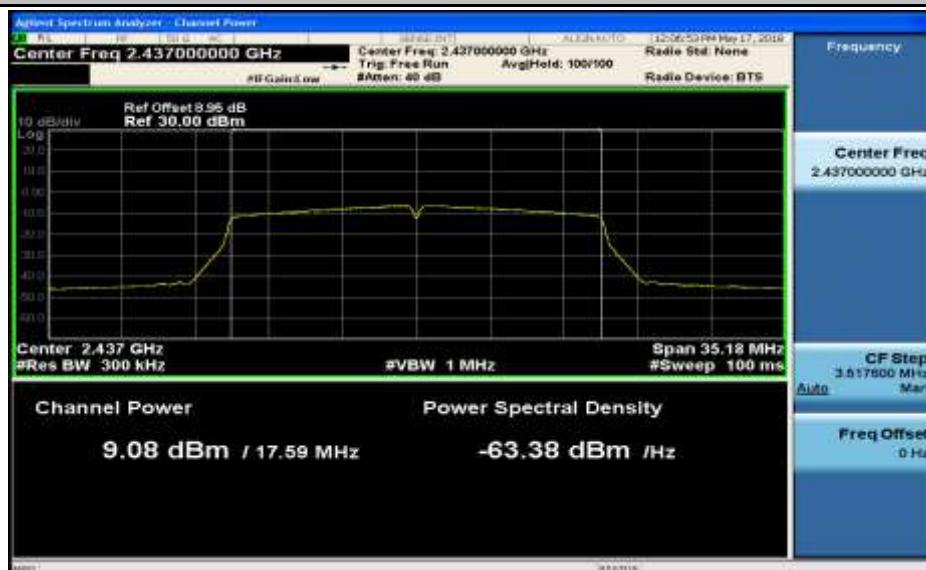
## Maximum conducted (average) output power\_11G\_2462\_Ant1



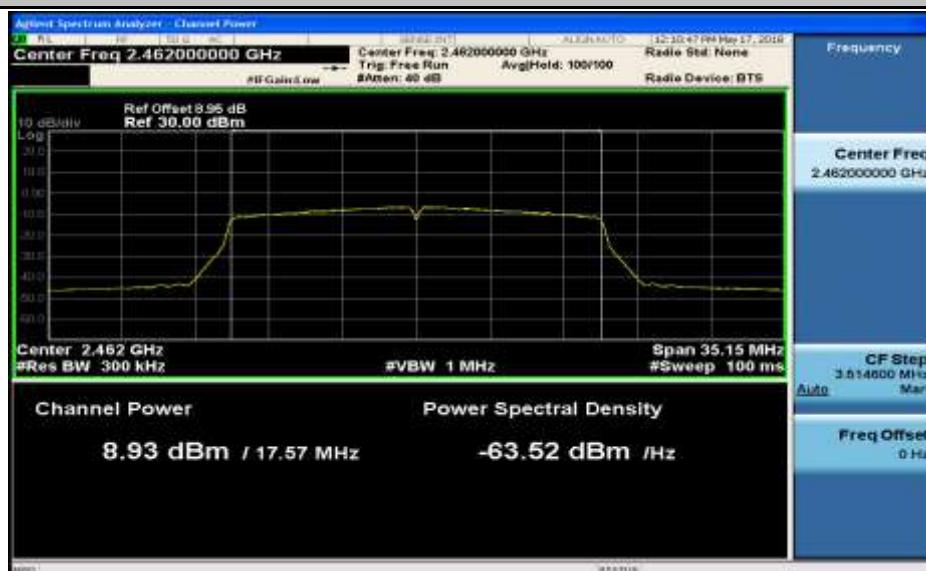
## Maximum conducted (average) output power\_11N20MIMO\_2412\_Ant1



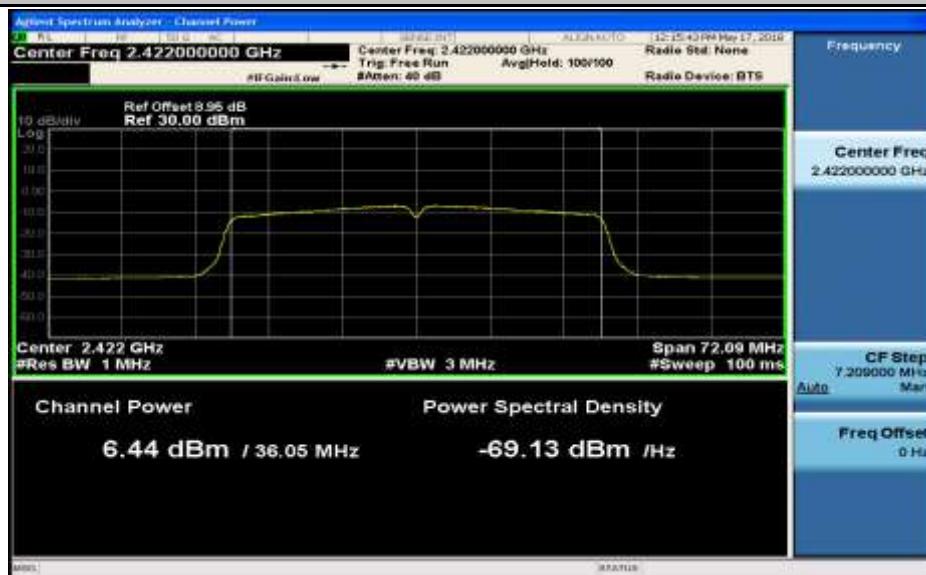
## Maximum conducted (average) output power\_11N20MIMO\_2437\_Ant1



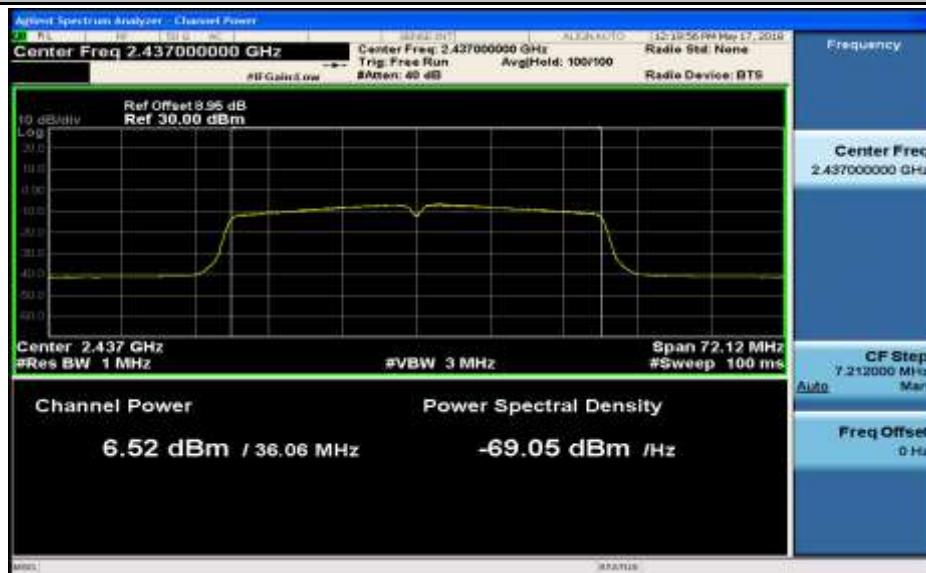
## Maximum conducted (average) output power\_11N20MIMO\_2462\_Ant1



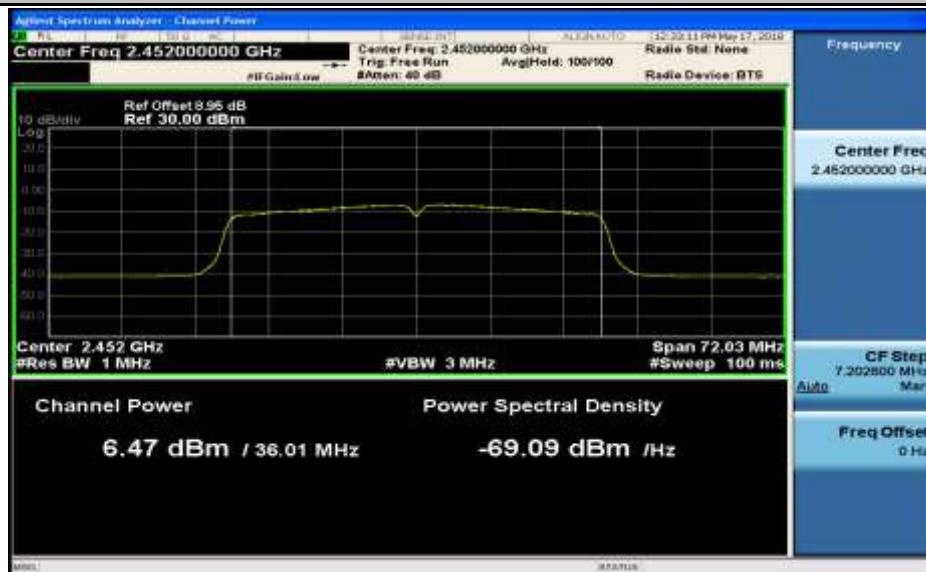
## Maximum conducted (average) output power\_11N40MIMO\_2422\_Ant1



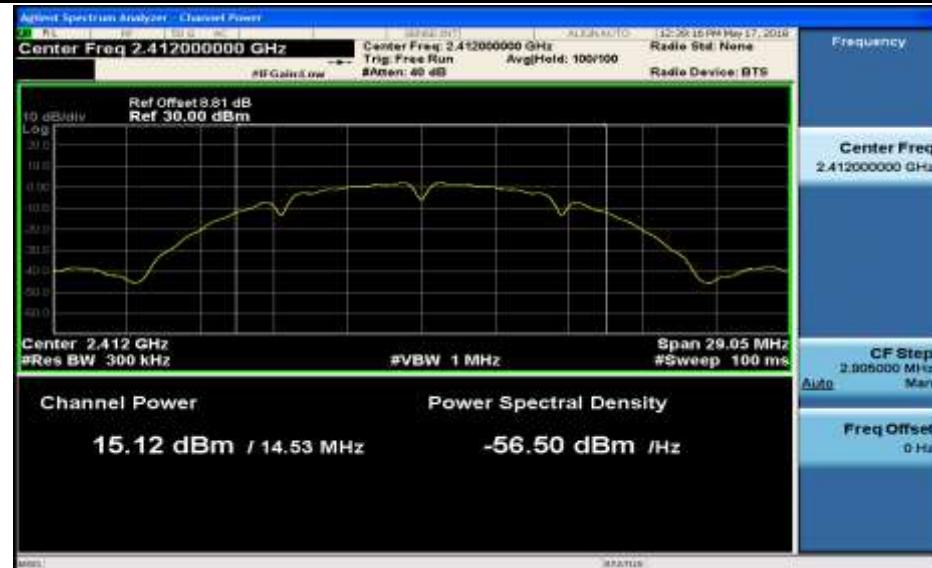
## Maximum conducted (average) output power\_11N40MIMO\_2437\_Ant1



## Maximum conducted (average) output power\_11N40MIMO\_2452\_Ant1



Maximum conducted (average) output power\_11B\_2412\_Ant2



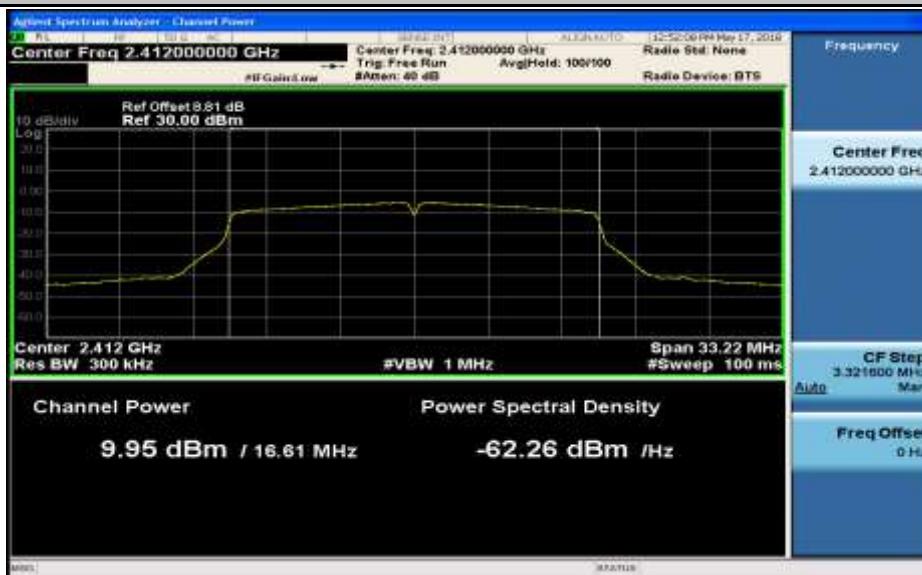
Maximum conducted (average) output power\_11B\_2437\_Ant2



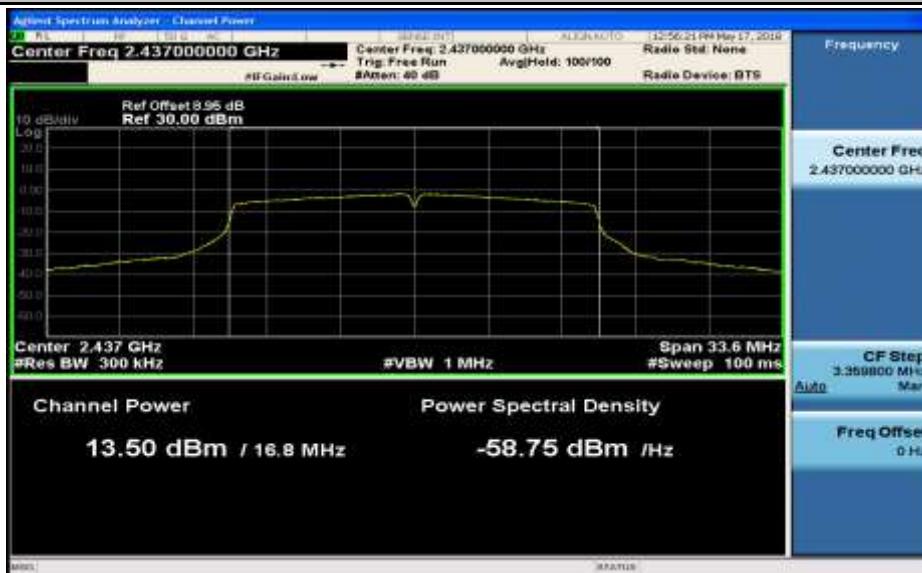
Maximum conducted (average) output power 11B 2462 Ant2



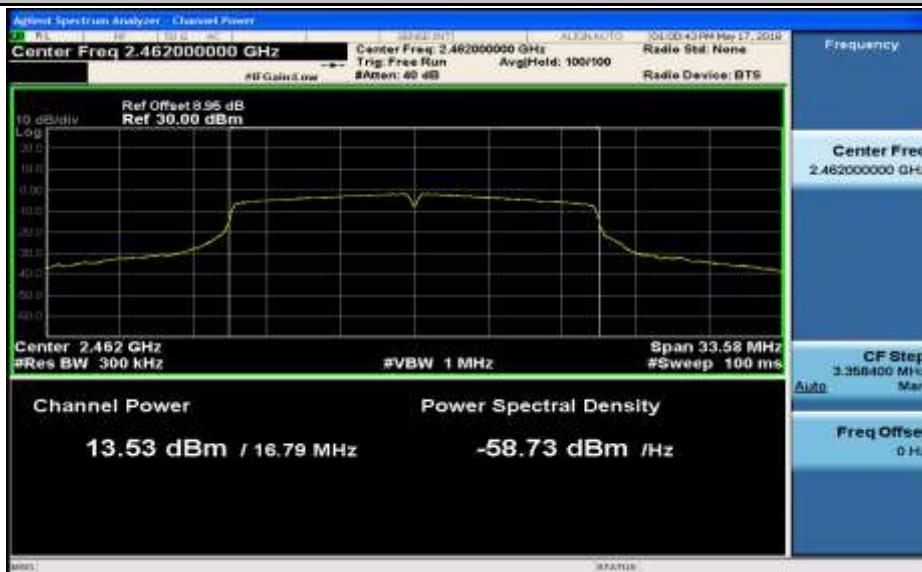
## Maximum conducted (average) output power\_11G\_2412\_Ant2



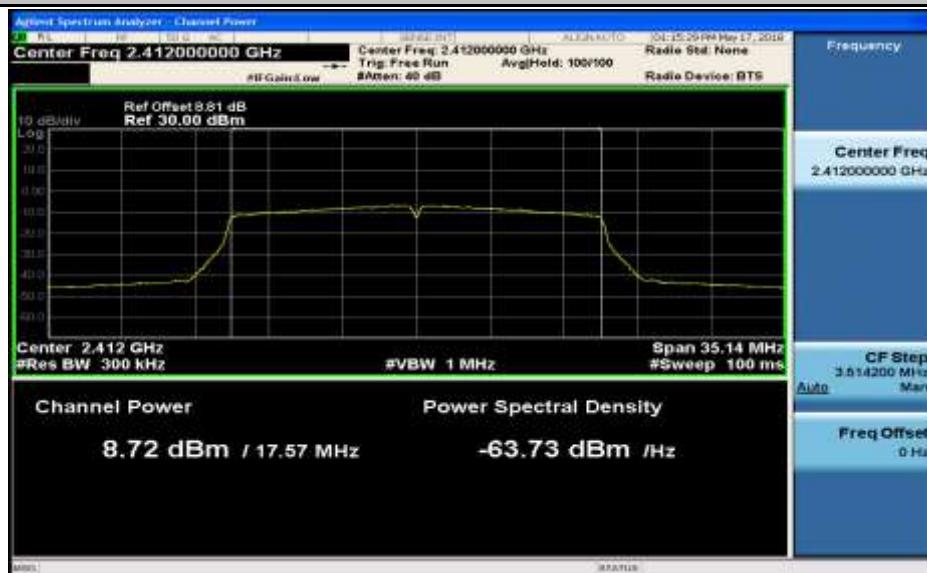
## Maximum conducted (average) output power\_11G\_2437\_Ant2



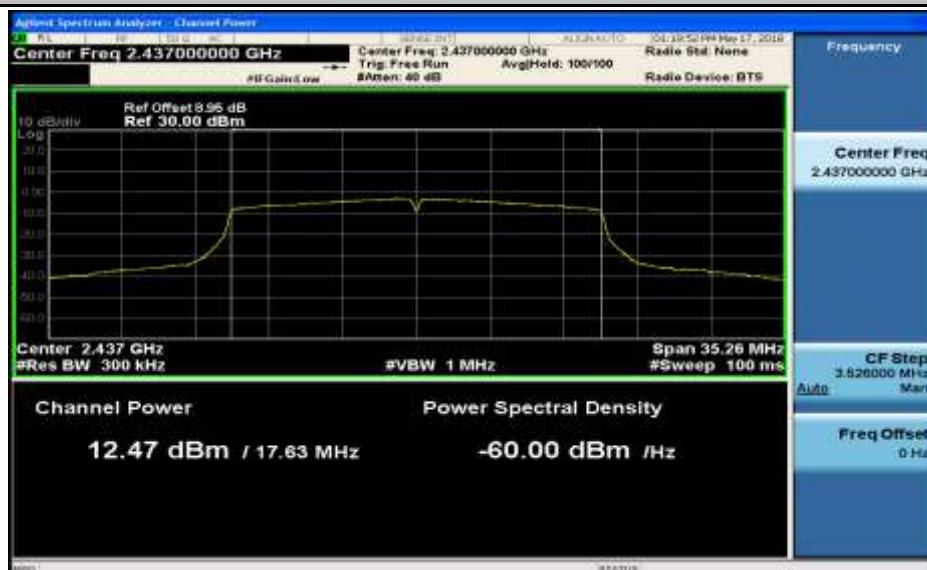
## Maximum conducted (average) output power\_11G\_2462\_Ant2



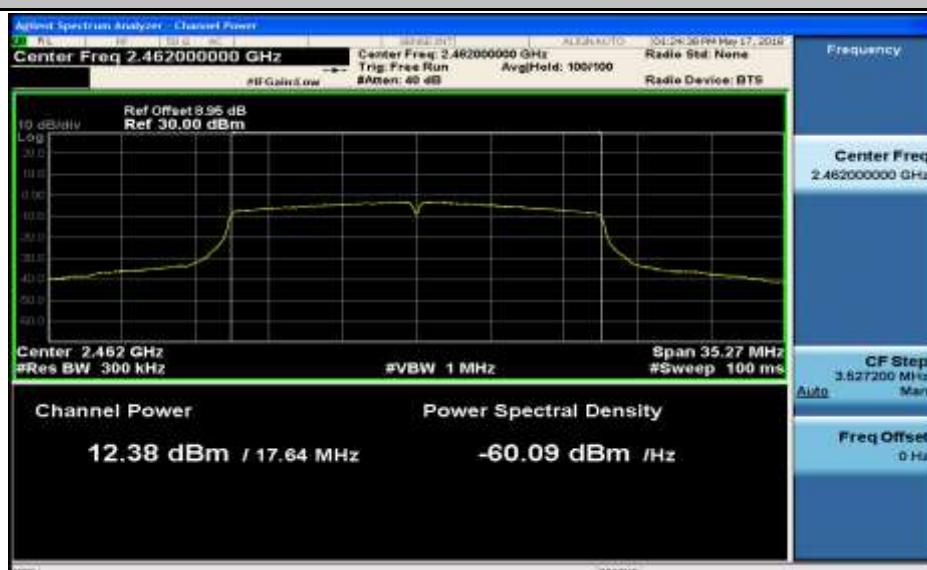
Maximum conducted (average) output power\_11N20MIMO\_2412\_Ant2



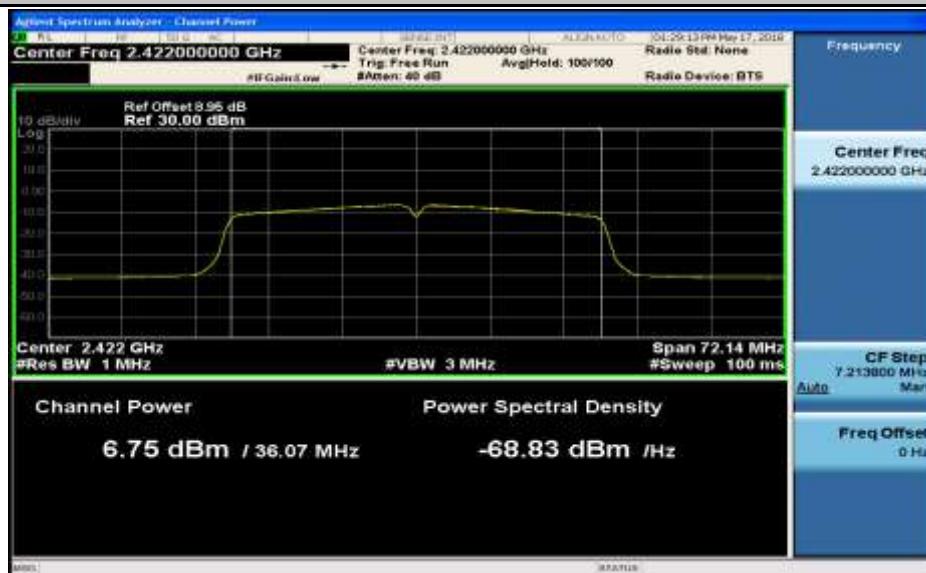
Maximum conducted (average) output power\_11N20MIMO\_2437\_Ant2



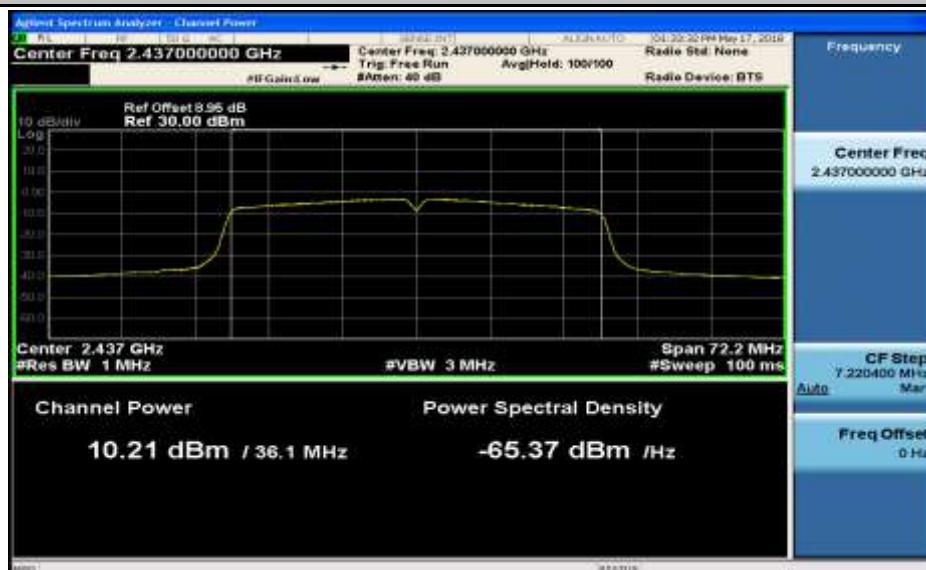
Maximum conducted (average) output power 11N20MIMO 2462 Ant2



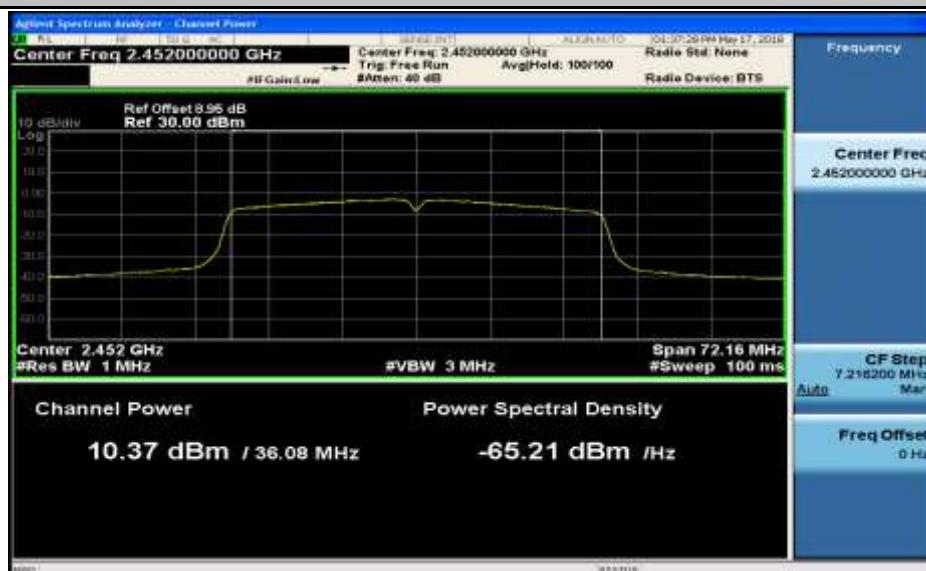
## Maximum conducted (average) output power\_11N40MIMO\_2422\_Ant2



## Maximum conducted (average) output power\_11N40MIMO\_2437\_Ant2



## Maximum conducted (average) output power\_11N40MIMO\_2452\_Ant2



**4. Maximum(average) power spectral density**

Test Mode	Test Channel	Level [dBm/3kHz]		10log(1/x) Factor[dB]		PSD[dBm/3kHz]			Limit[dBm/3kHz]	Verdict
		Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	MIMO		
11B	2412	-14.76	-16.64	0.07	0.02	-14.69	-16.62	NA	8.00	PASS
11B	2437	-14.29	-1.55	0.04	0.02	-14.25	-1.53	NA	8.00	PASS
11B	2462	-14.52	-14.29	0.02	0.02	-14.50	-14.27	NA	8.00	PASS
11G	2412	-19.56	-23.43	0.39	0.09	-19.17	-23.34	NA	8.00	PASS
11G	2437	-19.07	-19.67	0.31	0.28	-18.76	-19.39	NA	8.00	PASS
11G	2462	-19.07	-19.77	0.44	0.36	-18.63	-19.41	NA	8.00	PASS
11N20MIMO	2412	-24.49	-24.63	0.51	0.58	-23.98	-24.05	-21.00	8.00	PASS
11N20MIMO	2437	-24.13	-21.08	0.71	0.79	-23.42	-20.29	-18.57	8.00	PASS
11N20MIMO	2462	-24.55	-21.29	0.67	0.32	-23.88	-20.97	-19.18	8.00	PASS
11N40MIMO	2422	-29.24	-29.02	1.71	1.36	-27.53	-27.66	-24.58	8.00	PASS
11N40MIMO	2437	-29.45	-25.65	0.57	1.59	-28.88	-24.06	-22.82	8.00	PASS
11N40MIMO	2452	-29.35	-25.40	1.73	0.70	-27.62	-24.70	-22.91	8.00	PASS

Maximum(average) power spectral density\_11B\_2412\_Ant1



Maximum(average) power spectral density\_11B\_2437\_Ant1



Maximum(average) power spectral density 11B 2462 Ant1



## Maximum(average) power spectral density\_11G\_2412\_Ant1



## Maximum(average) power spectral density\_11G\_2437\_Ant1



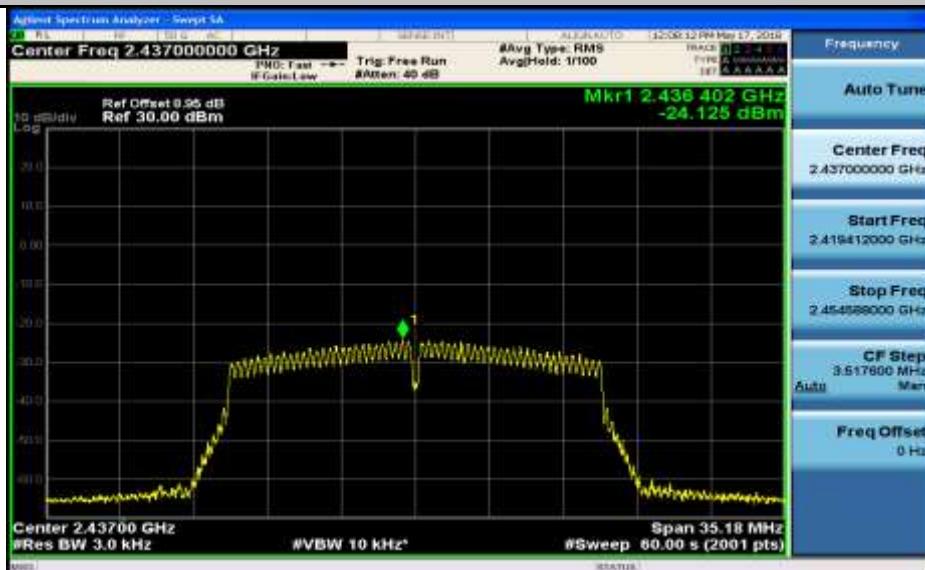
## Maximum(average) power spectral density\_11G\_2462\_Ant1



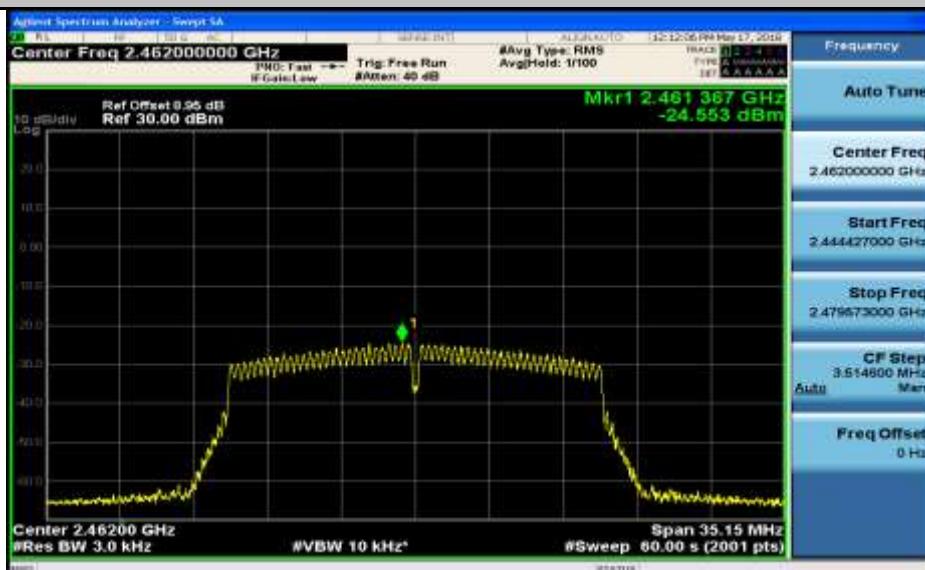
Maximum(average) power spectral density\_11N20MIMO\_2412\_Ant1



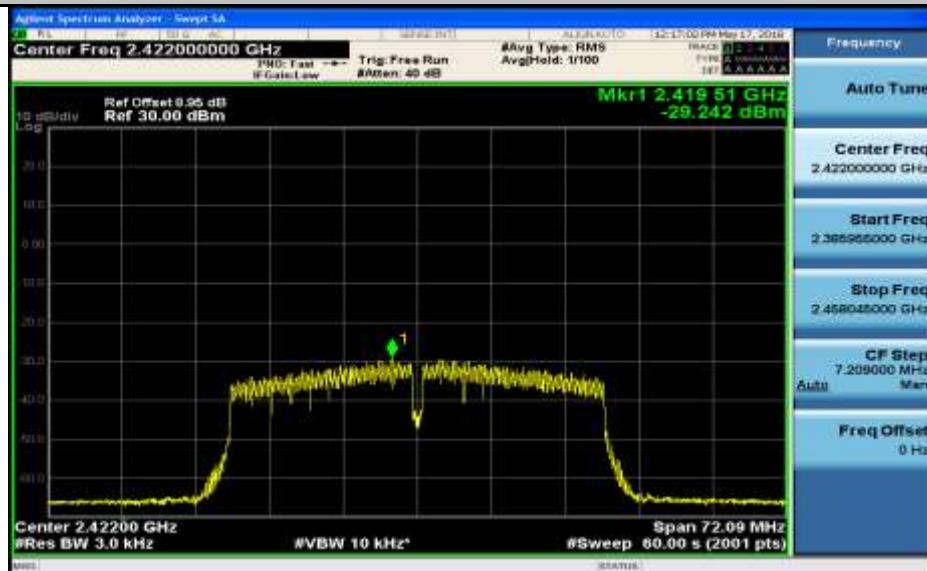
Maximum(average) power spectral density\_11N20MIMO\_2437\_Ant1



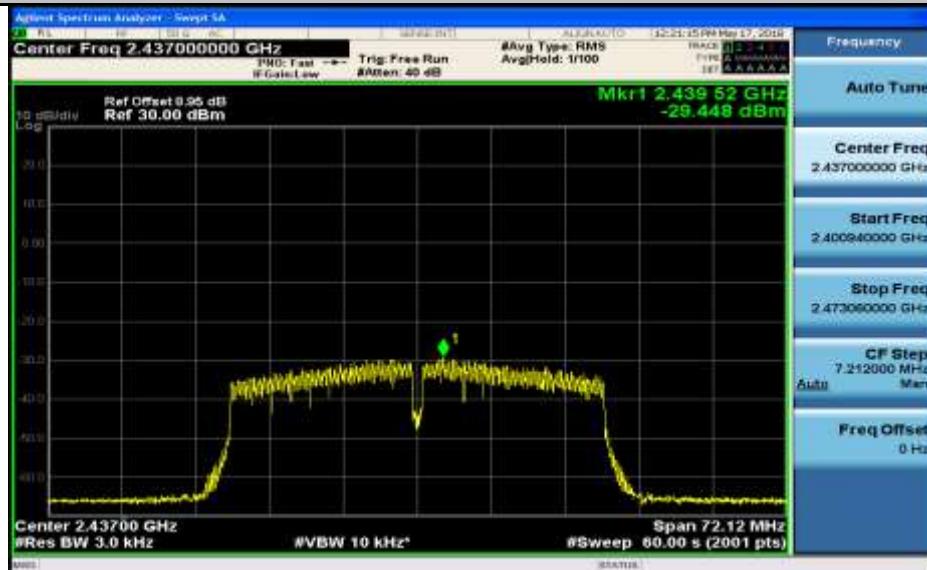
Maximum(average) power spectral density\_11N20MIMO\_2462\_Ant1



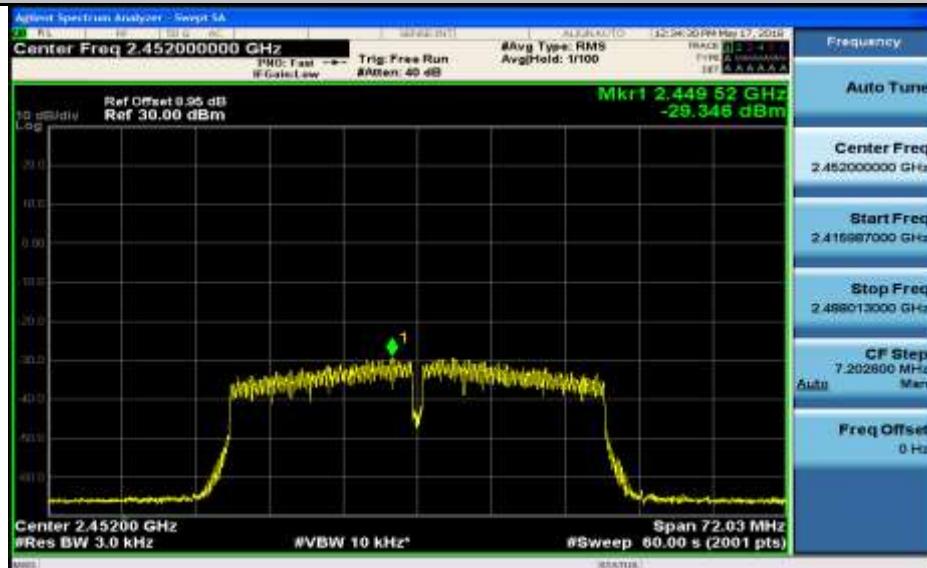
## Maximum(average) power spectral density\_11N40MIMO\_2422\_Ant1



## Maximum(average) power spectral density\_11N40MIMO\_2437\_Ant1



## Maximum(average) power spectral density\_11N40MIMO\_2452\_Ant1



## Maximum(average) power spectral density\_11B\_2412\_Ant2



## Maximum(average) power spectral density\_11B\_2437\_Ant2



## Maximum(average) power spectral density\_11B\_2462\_Ant2



## Maximum(average) power spectral density\_11G\_2412\_Ant2



## Maximum(average) power spectral density\_11G\_2437\_Ant2



## Maximum(average) power spectral density\_11G\_2462\_Ant2



## Maximum(average) power spectral density\_11N20MIMO\_2412\_Ant2



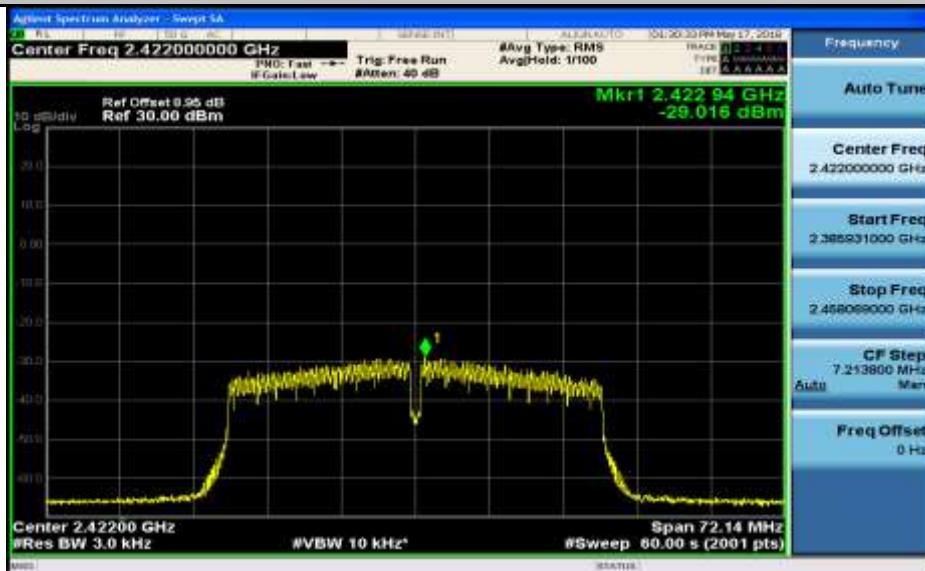
## Maximum(average) power spectral density\_11N20MIMO\_2437\_Ant2



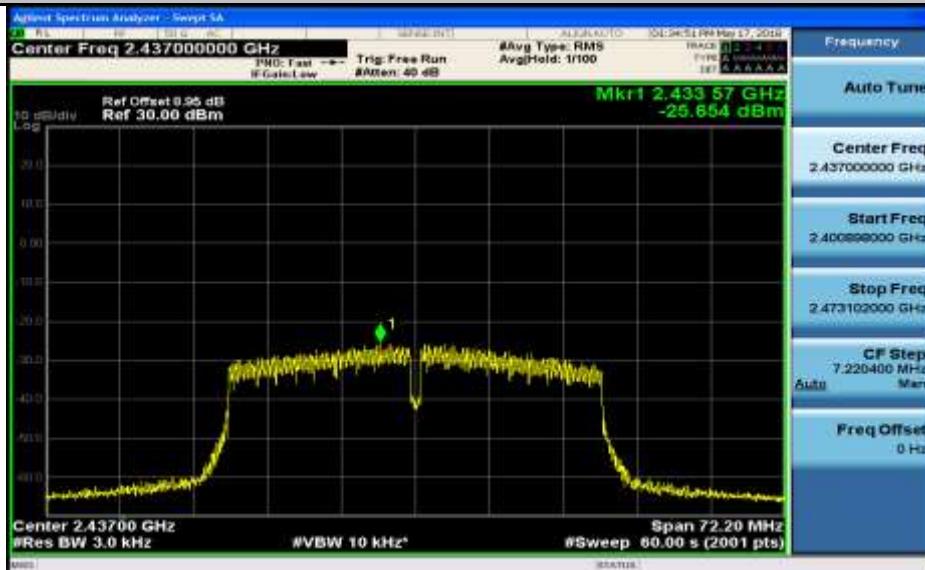
## Maximum(average) power spectral density\_11N20MIMO\_2462\_Ant2



## Maximum(average) power spectral density\_11N40MIMO\_2422\_Ant2



## Maximum(average) power spectral density\_11N40MIMO\_2437\_Ant2



## Maximum(average) power spectral density\_11N40MIMO\_2452\_Ant2



**5.Band-edge for RF Conducted Emissions**

Test Mode	Test Channel	Carrier Power[dBm]		Max. Spurious Level [dBm]		Limit [dBm]		Verdict
		Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
11B	2412	8.27	5.51	-27.29	-34.66	-21.73	-24.49	PASS
11B	2462	8.64	8.49	-46.73	-45.77	-21.36	-21.52	PASS
11G	2412	3.37	0.59	-27.79	-35.36	-26.63	-29.42	PASS
11G	2462	4.26	3.81	-45.66	-44.25	-25.74	-26.20	PASS
11N20SISO	2412	-0.27	-0.01	-39.80	-38.06	-30.27	-30.01	PASS
11N20SISO	2462	-1.04	2.41	-52.01	-43.25	-31.04	-27.59	PASS
11N40SISO	2422	-5.10	-5.06	-46.43	-42.60	-35.10	-35.06	PASS
11N40SISO	2452	-5.13	-1.14	-49.68	-41.91	-35.13	-31.14	PASS

## Band-edge for RF Conducted Emissions\_11B\_2412\_Ant1



## Band-edge for RF Conducted Emissions\_11B\_2462\_Ant1



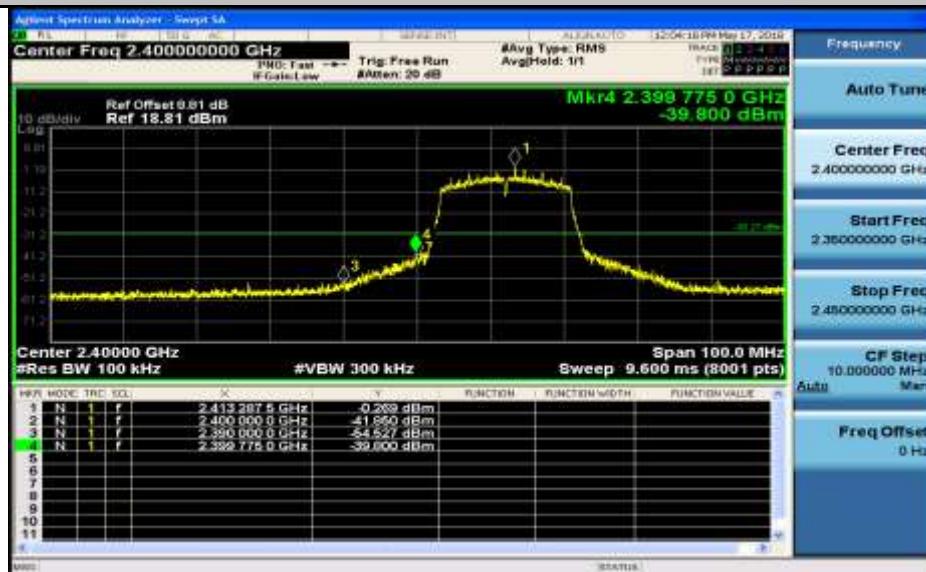
## Band-edge for RF Conducted Emissions\_11G\_2412\_Ant1



## Band-edge for RF Conducted Emissions\_11G\_2462\_Ant1



## Band-edge for RF Conducted Emissions\_11N20SISO\_2412\_Ant1



## Band-edge for RF Conducted Emissions\_11N20SISO\_2462\_Ant1



## Band-edge for RF Conducted Emissions\_11N40SISO\_2422\_Ant1



## Band-edge for RF Conducted Emissions\_11N40SISO\_2452\_Ant1



## Band-edge for RF Conducted Emissions\_11B\_2412\_Ant2



## Band-edge for RF Conducted Emissions\_11B\_2462\_Ant2



## Band-edge for RF Conducted Emissions\_11G\_2412\_Ant2



## Band-edge for RF Conducted Emissions\_11G\_2462\_Ant2



## Band-edge for RF Conducted Emissions\_11N20SISO\_2412\_Ant2



## Band-edge for RF Conducted Emissions\_11N20SISO\_2462\_Ant2



## Band-edge for RF Conducted Emissions\_11N40SISO\_2422\_Ant2



## Band-edge for RF Conducted Emissions\_11N40SISO\_2452\_Ant2



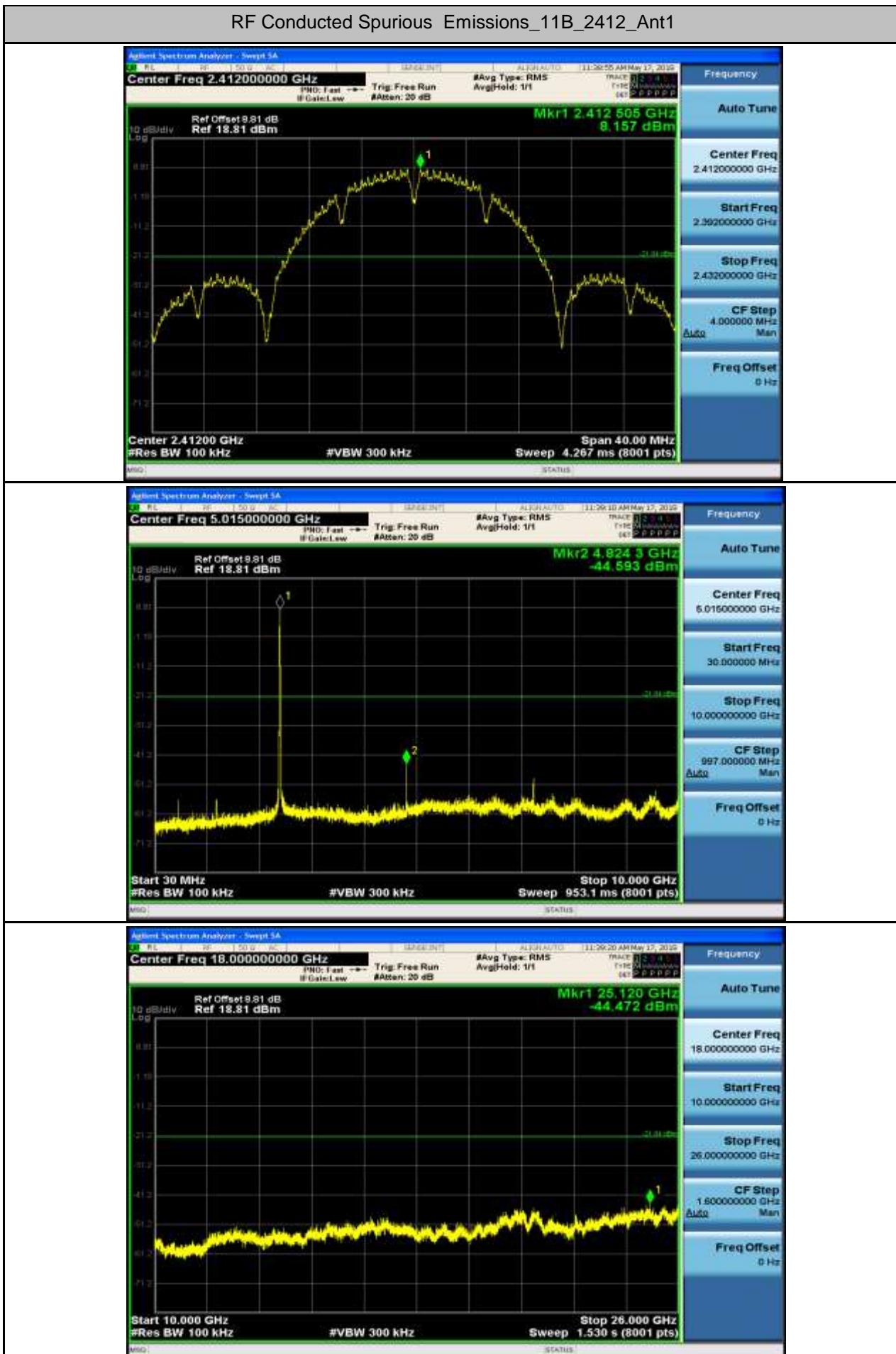


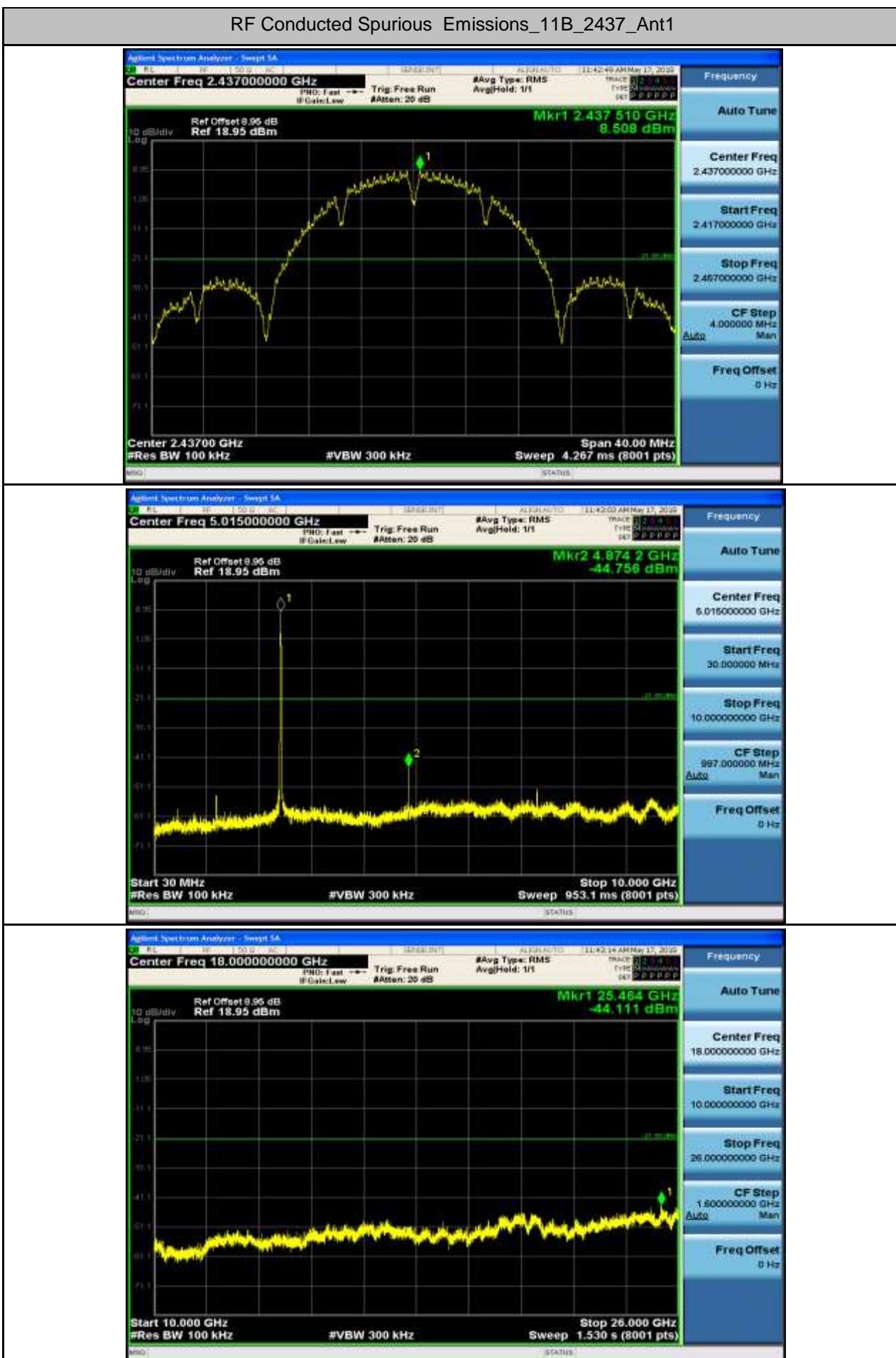
## 6.RF Conducted Spurious Emissions

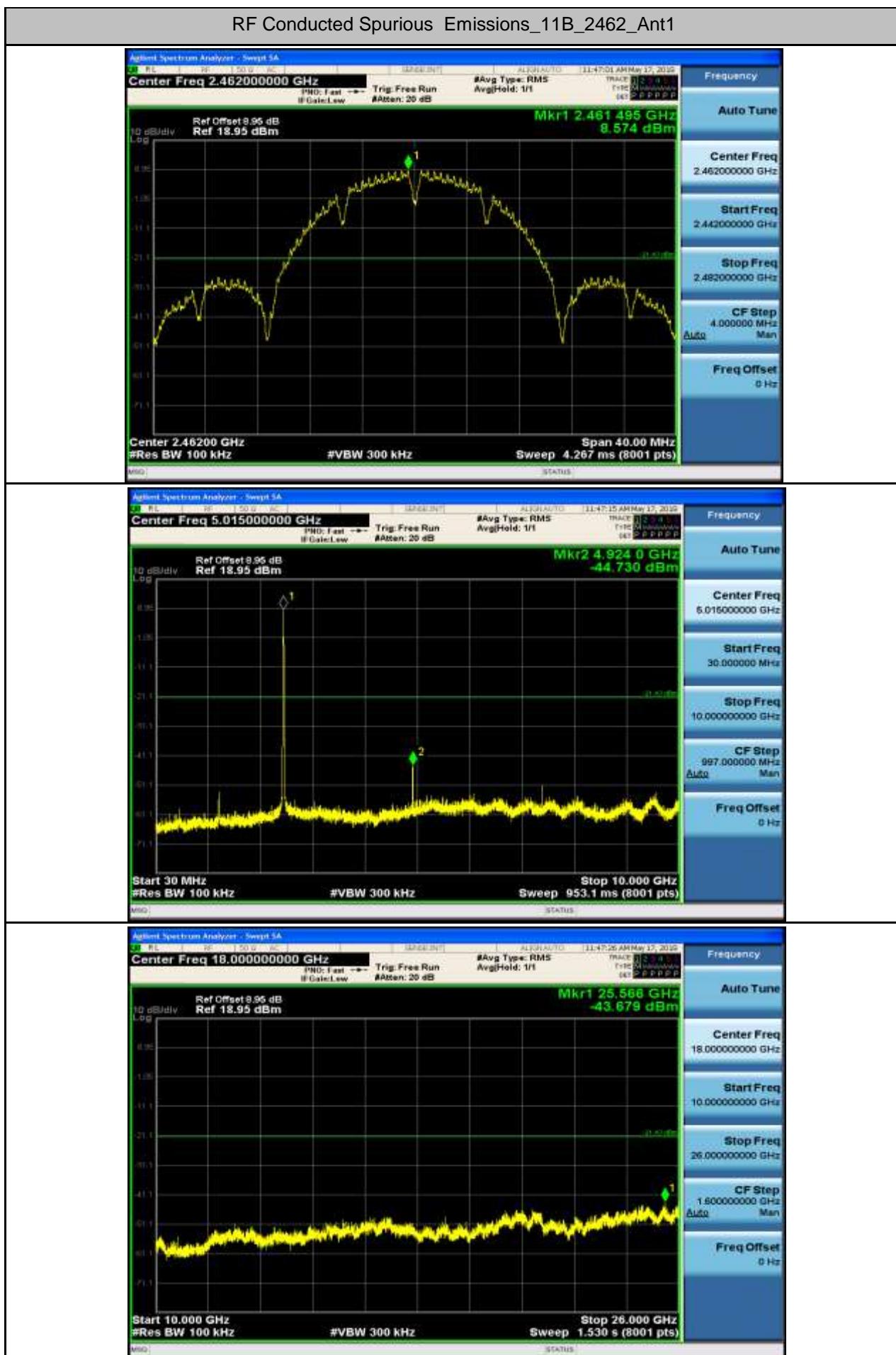
Test Mode	Test Channel	StartFre [MHz]	StopFre [MHz]	RBW [kHz]	VBW [kHz]	Pref[dBm]		Max. Level [dBm]		Limit [dBm]		Verdict
						Ant1	Ant2	Ant1	Ant2	Ant1	Ant2	
11B	2412	30	10000	100	300	8.16	5.47	-44.59	-53.75	<- 21.84	<- 24.53	PASS
11B	2412	10000	26000	100	300	8.157	5.466	- 44.472	- 44.795	<- 21.843	<- 24.534	PASS
11B	2437	30	10000	100	300	8.51	8.61	-44.76	-45.80	<- 21.49	<- 21.39	PASS
11B	2437	10000	26000	100	300	8.508	8.61	- 44.111	- 44.045	<- 21.492	<- 21.39	PASS
11B	2462	30	10000	100	300	8.57	8.47	-44.73	-44.67	<- 21.43	<- 21.53	PASS
11B	2462	10000	26000	100	300	8.574	8.466	- 43.679	- 43.397	<- 21.426	<- 21.534	PASS
11G	2412	30	10000	100	300	4.29	0.28	-53.30	-53.33	<- 25.71	<- 29.72	PASS
11G	2412	10000	26000	100	300	4.29	0.277	- 44.079	- 43.408	<- 25.71	<- 29.723	PASS
11G	2437	30	10000	100	300	4.80	3.08	-54.13	-53.25	<- 25.20	<- 26.92	PASS
11G	2437	10000	26000	100	300	4.801	3.081	- 43.705	- 43.034	<- 25.199	<- 26.919	PASS
11G	2462	30	10000	100	300	4.81	4.11	-53.17	-53.00	<- 25.19	<- 25.89	PASS
11G	2462	10000	26000	100	300	4.807	4.112	- 44.079	- 44.242	<- 25.193	<- 25.888	PASS
11N20SISO	2412	30	10000	100	300	-0.26	0.00	-54.32	-53.81	<- 30.26	<- 30.00	PASS
11N20SISO	2412	10000	26000	100	300	-0.264	0.002	- 44.251	- 44.461	<- 30.264	<- 29.998	PASS
11N20SISO	2437	30	10000	100	300	0.27	3.56	-54.53	-53.59	<- 29.73	<- 26.45	PASS
11N20SISO	2437	10000	26000	100	300	0.27	3.555	- 44.440	- 42.997	<- 29.73	<- 26.445	PASS
11N20SISO	2462	30	10000	100	300	0.00	3.22	-53.45	-53.91	<- 30.00	<- 26.78	PASS
11N20SISO	2462	10000	26000	100	300	-0.002	3.223	- 43.879	- 43.206	<- 30.002	<- 26.777	PASS
11N40SISO	2422	30	10000	100	300	-5.05	-5.10	-54.04	-53.01	<- 35.05	<- 35.10	PASS
11N40SISO	2422	10000	26000	100	300	-5.054	-5.095	- 44.045	- 44.575	<- 35.054	<- 35.095	PASS
11N40SISO	2437	30	10000	100	300	-5.03	-1.31	-52.63	-49.41	<- 35.03	<- 31.31	PASS
11N40SISO	2437	10000	26000	100	300	-5.031	-1.308	- 43.295	- 43.626	<- 35.031	<- 31.308	PASS

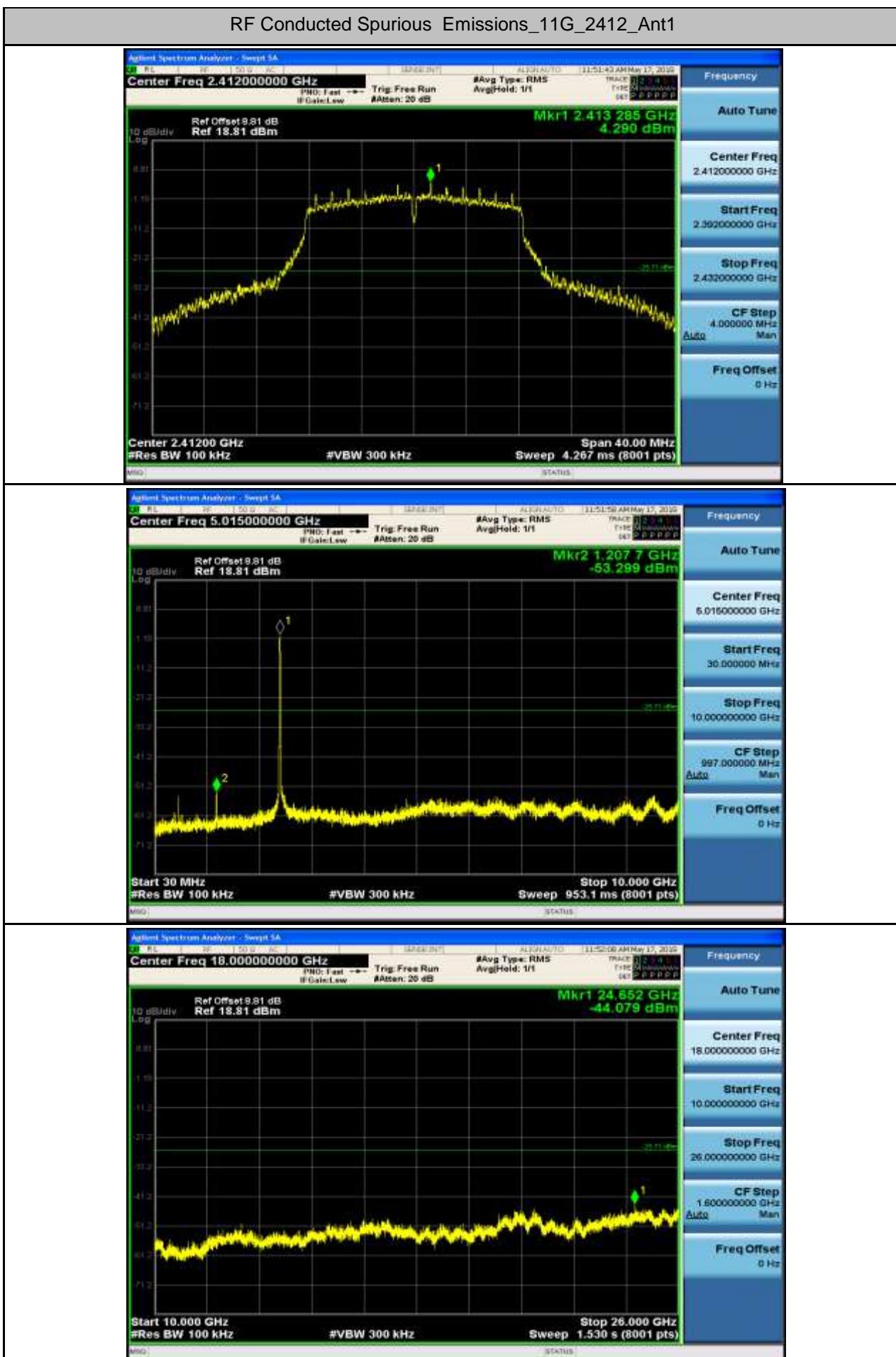


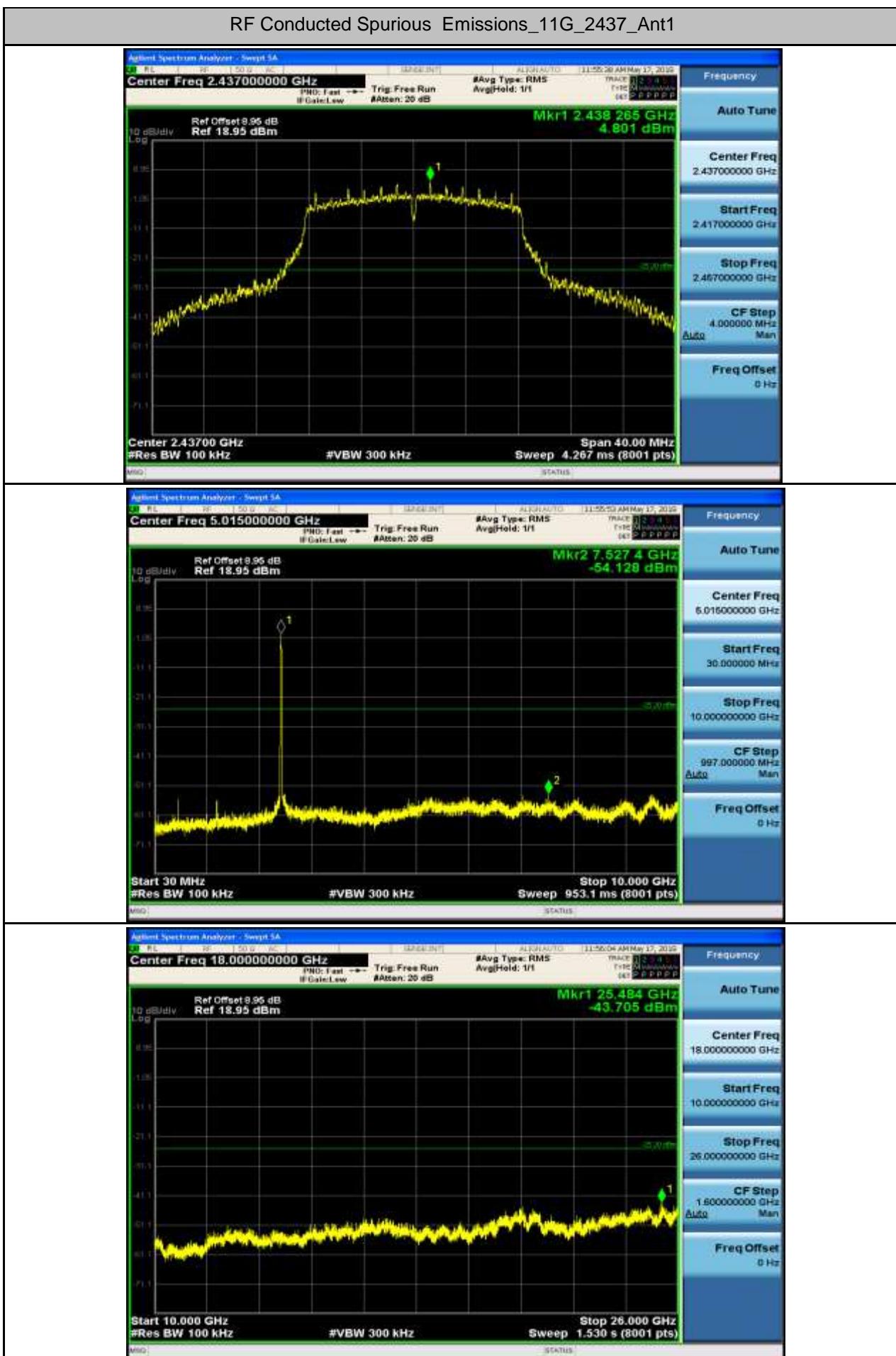
11N40SISO	2452	30	10000	100	300	-5.08	-1.24	-53.47	-49.97	< 35.08	< 31.24	PASS
11N40SISO	2452	10000	26000	100	300	-5.084	-1.238	-	-	< 43.764	< 43.799	< 35.084

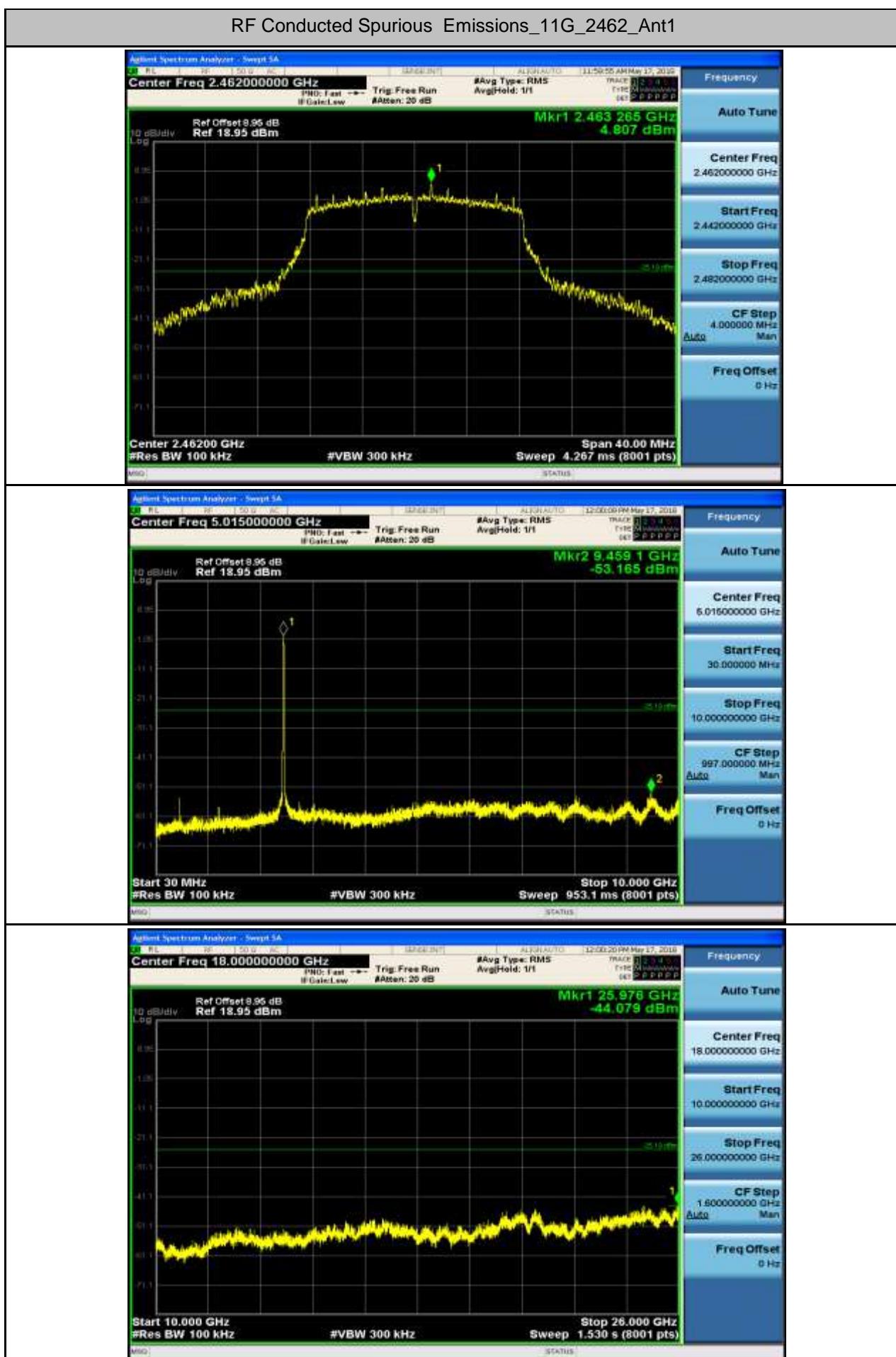


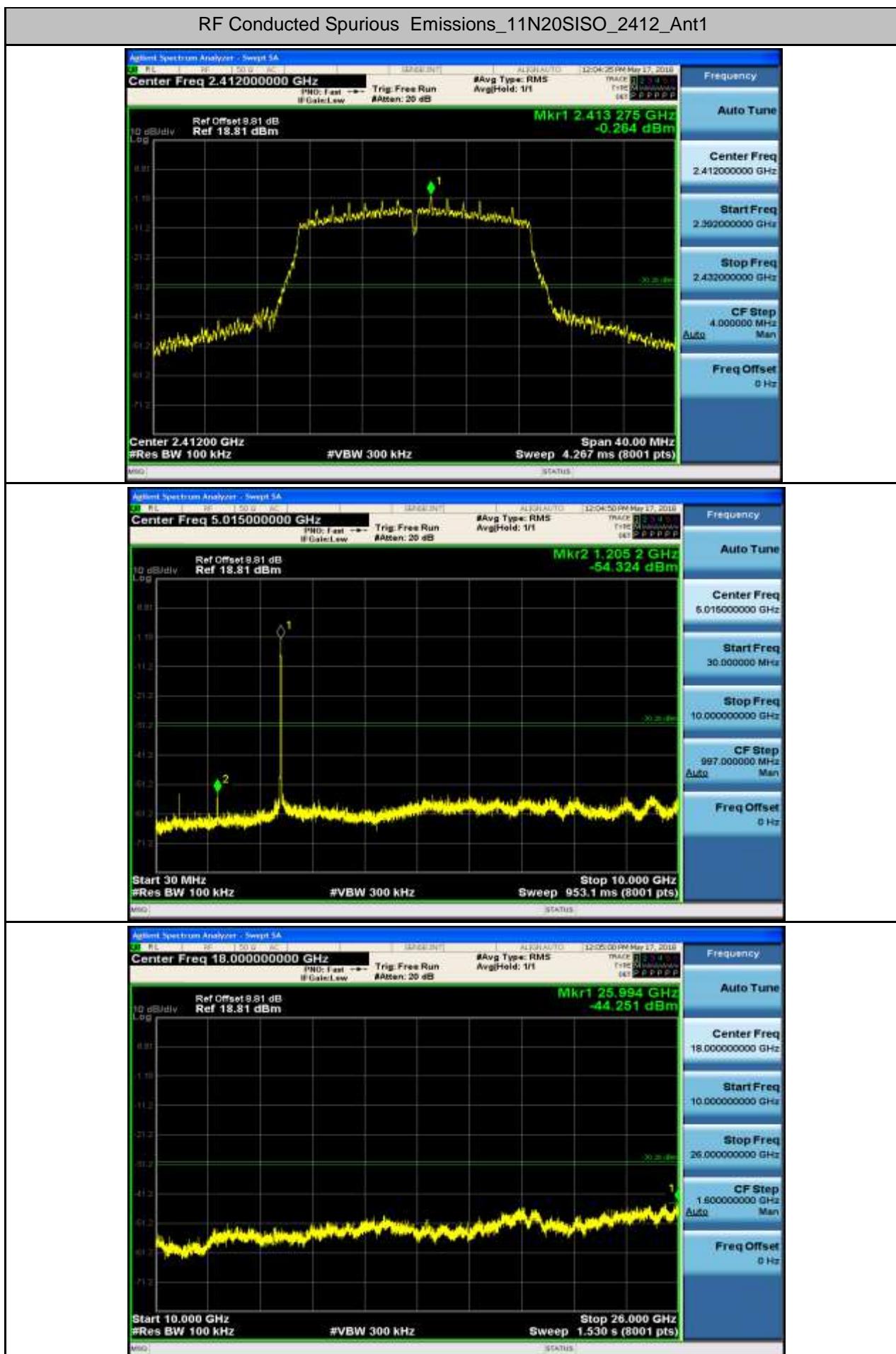


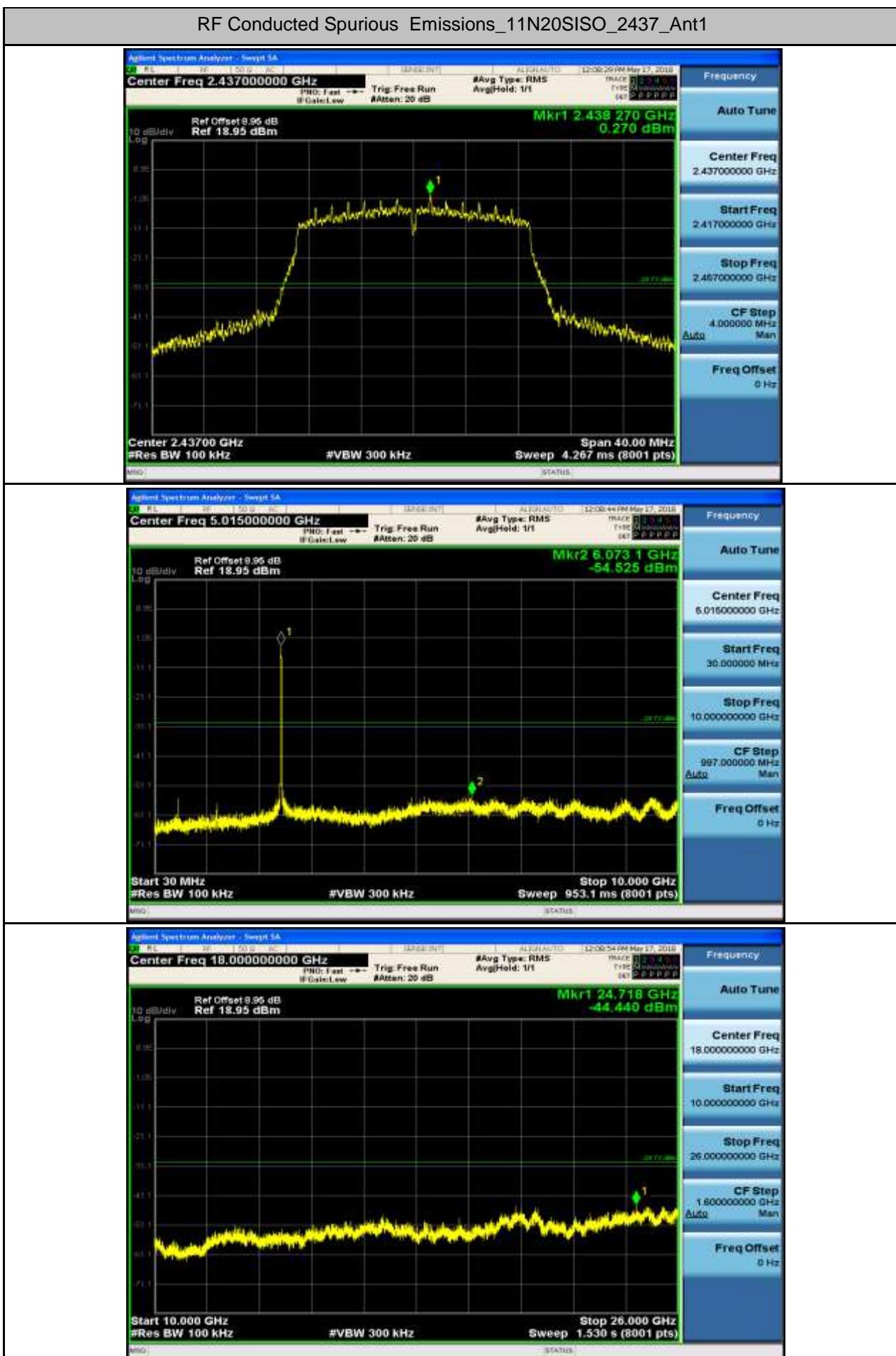


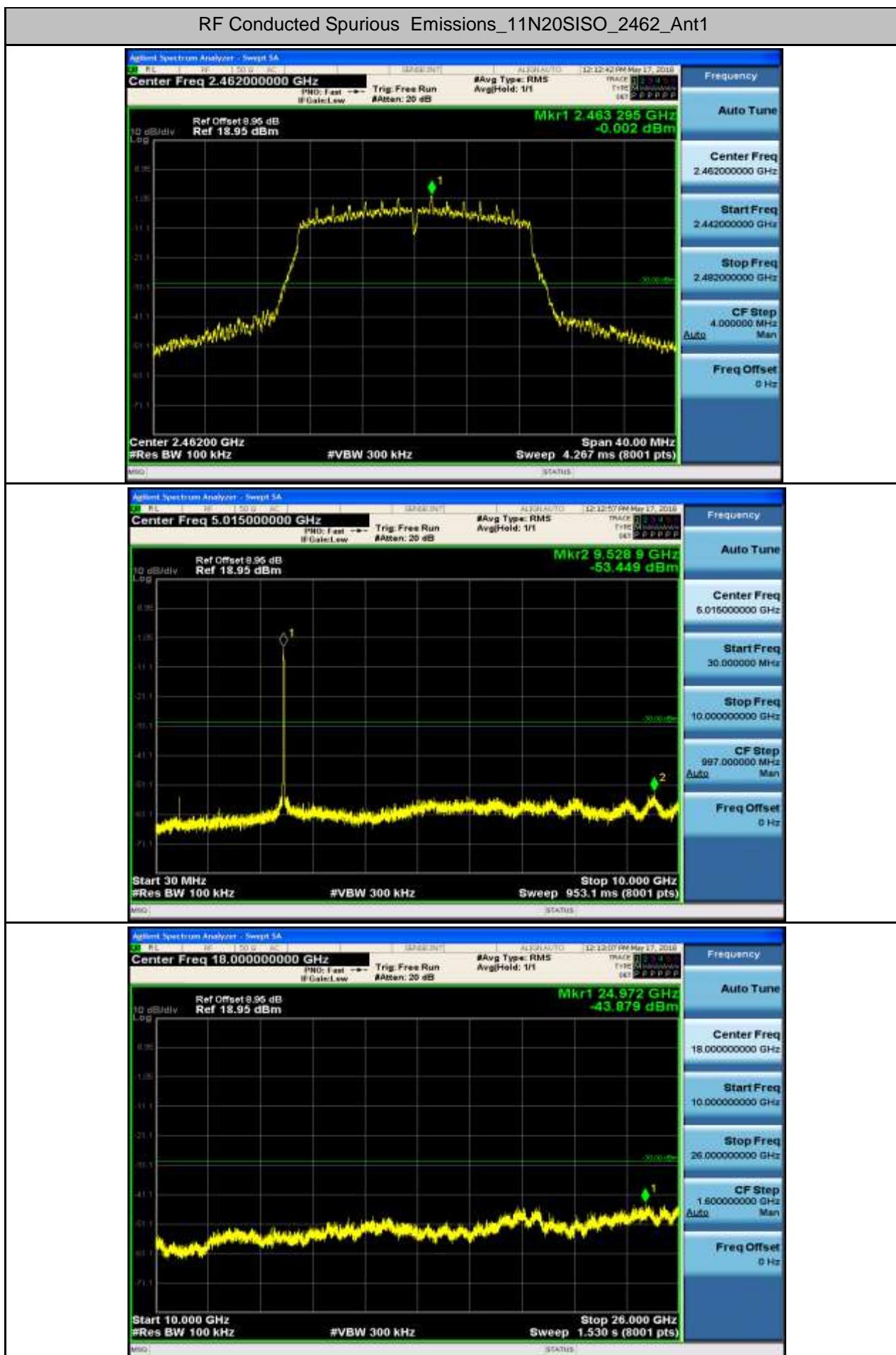


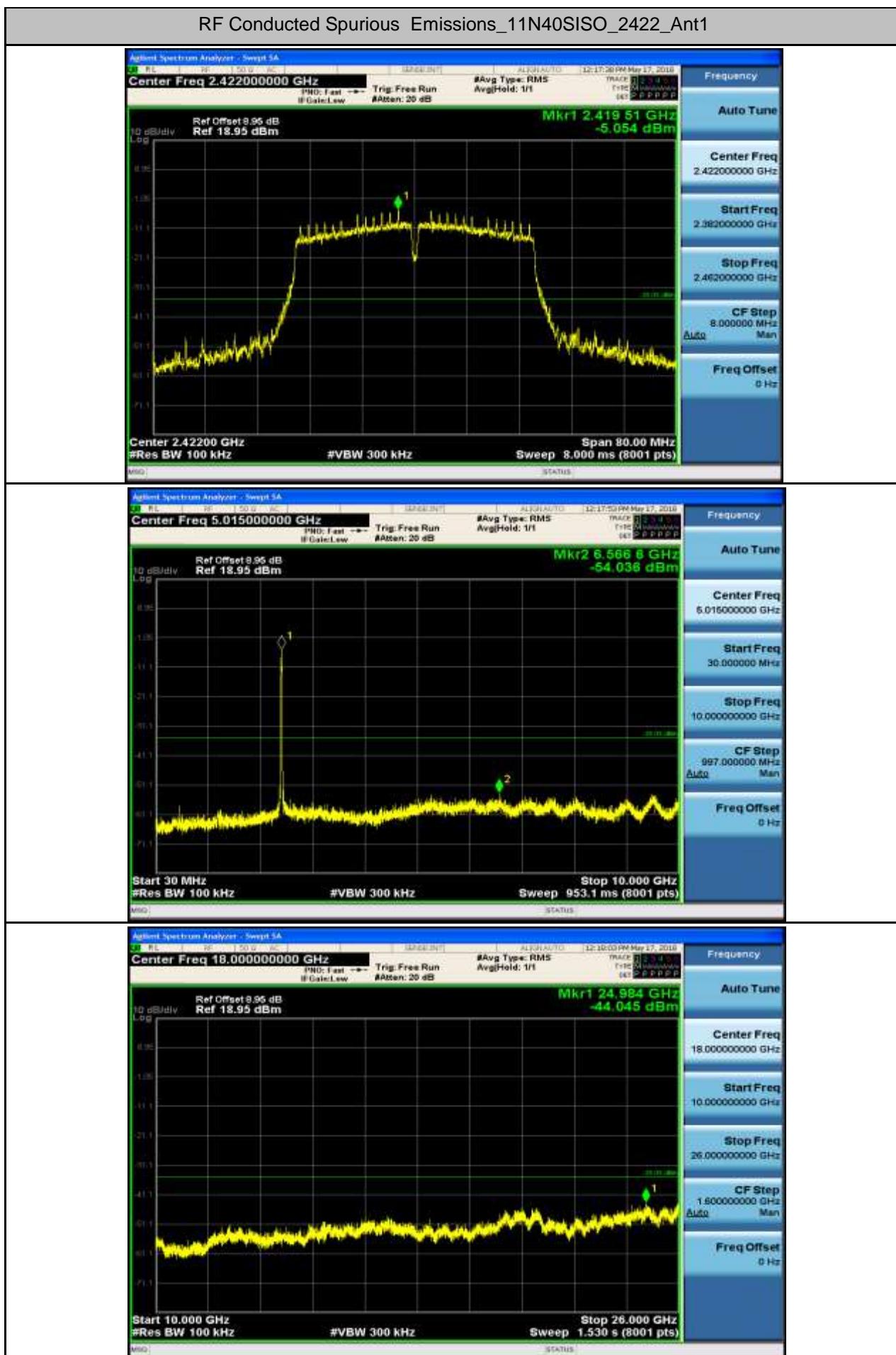


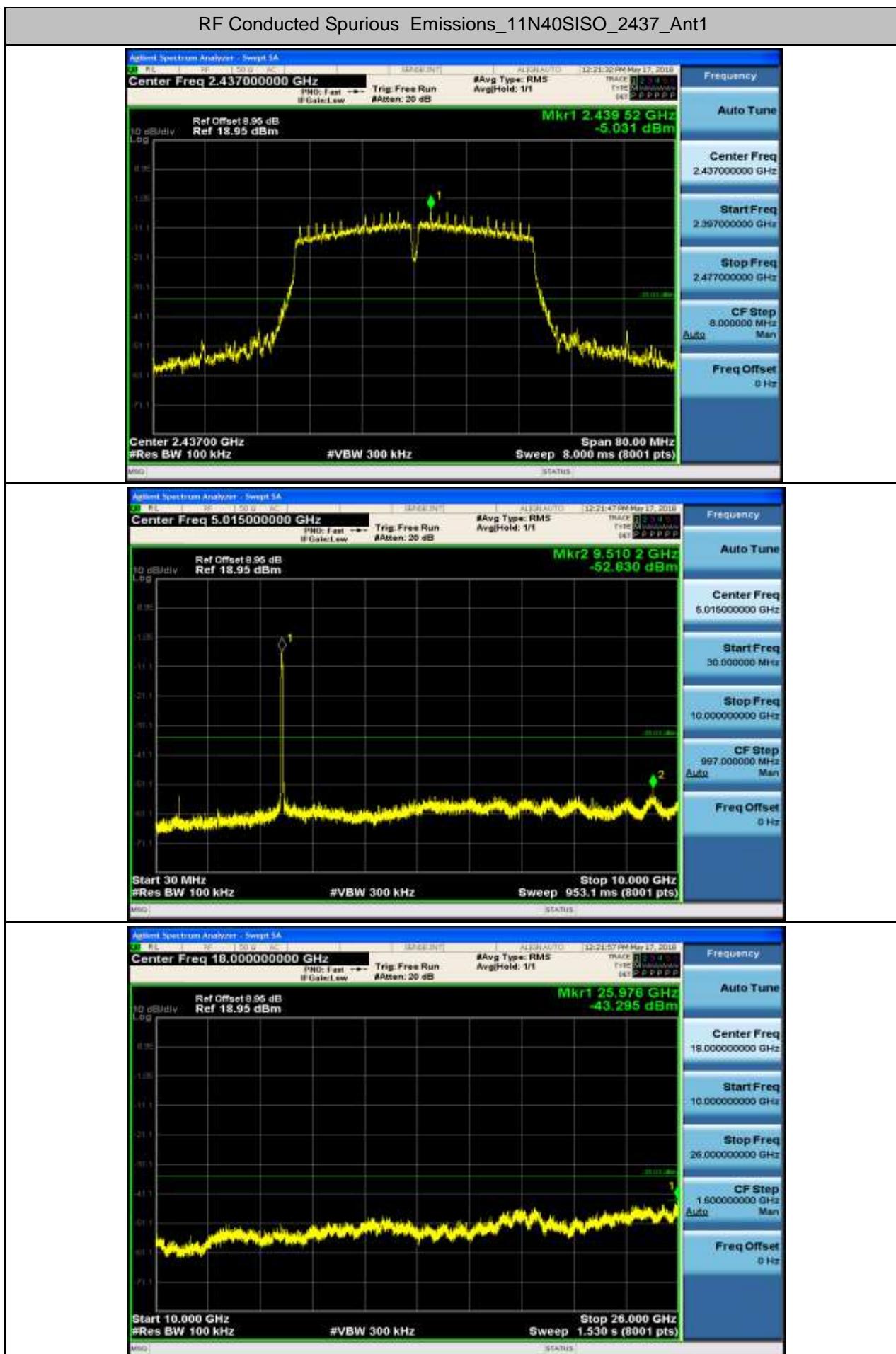


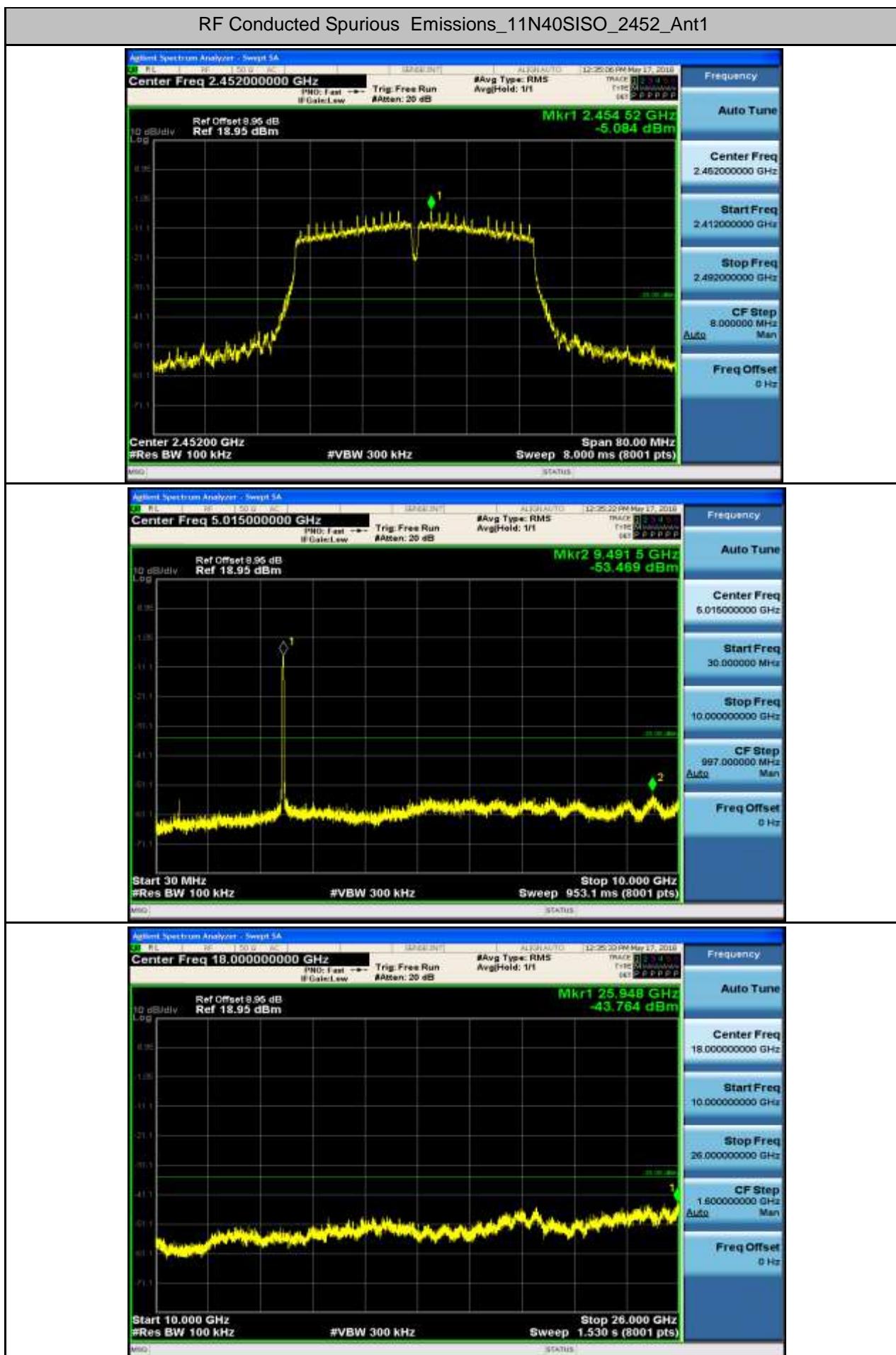


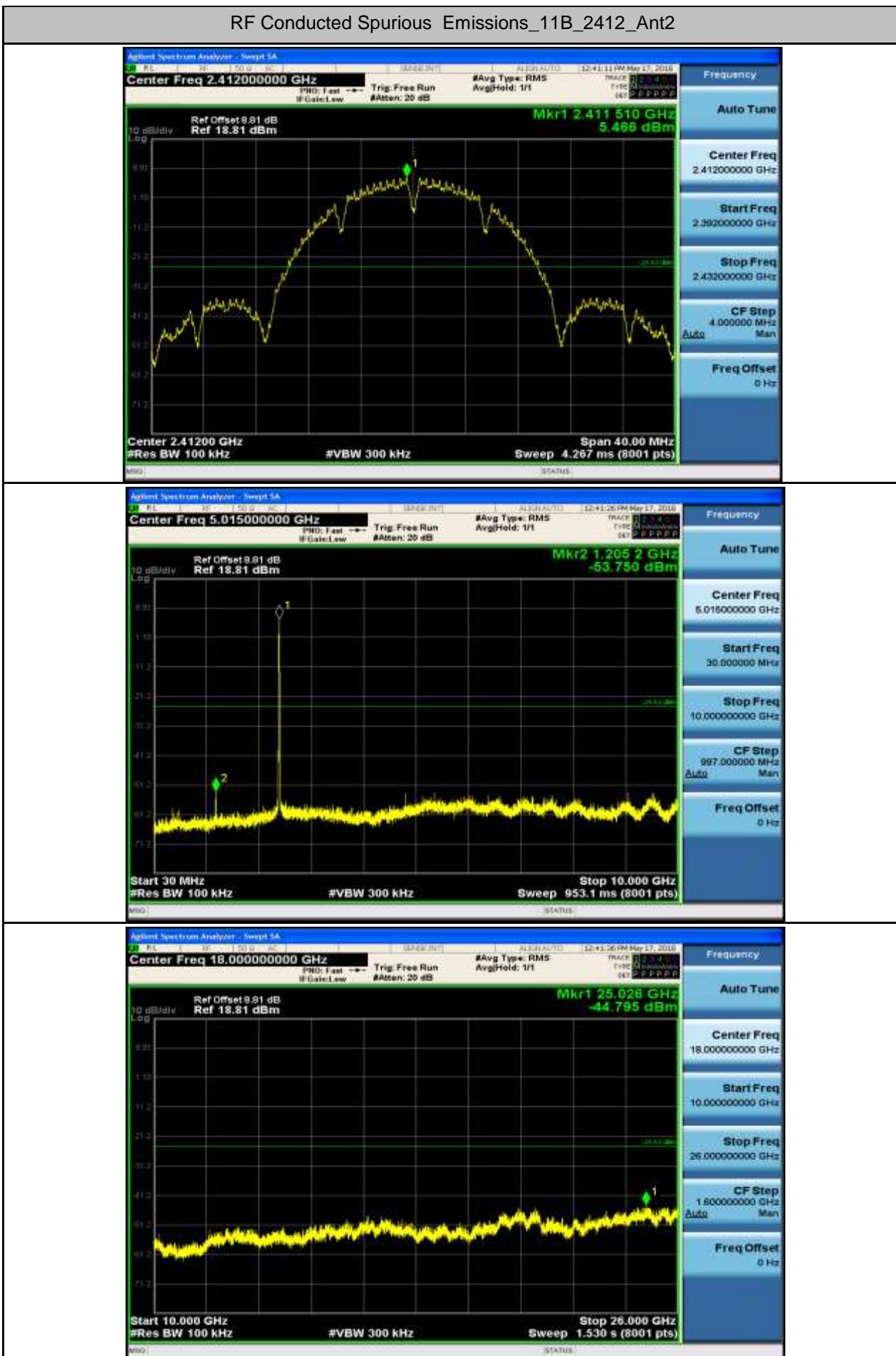


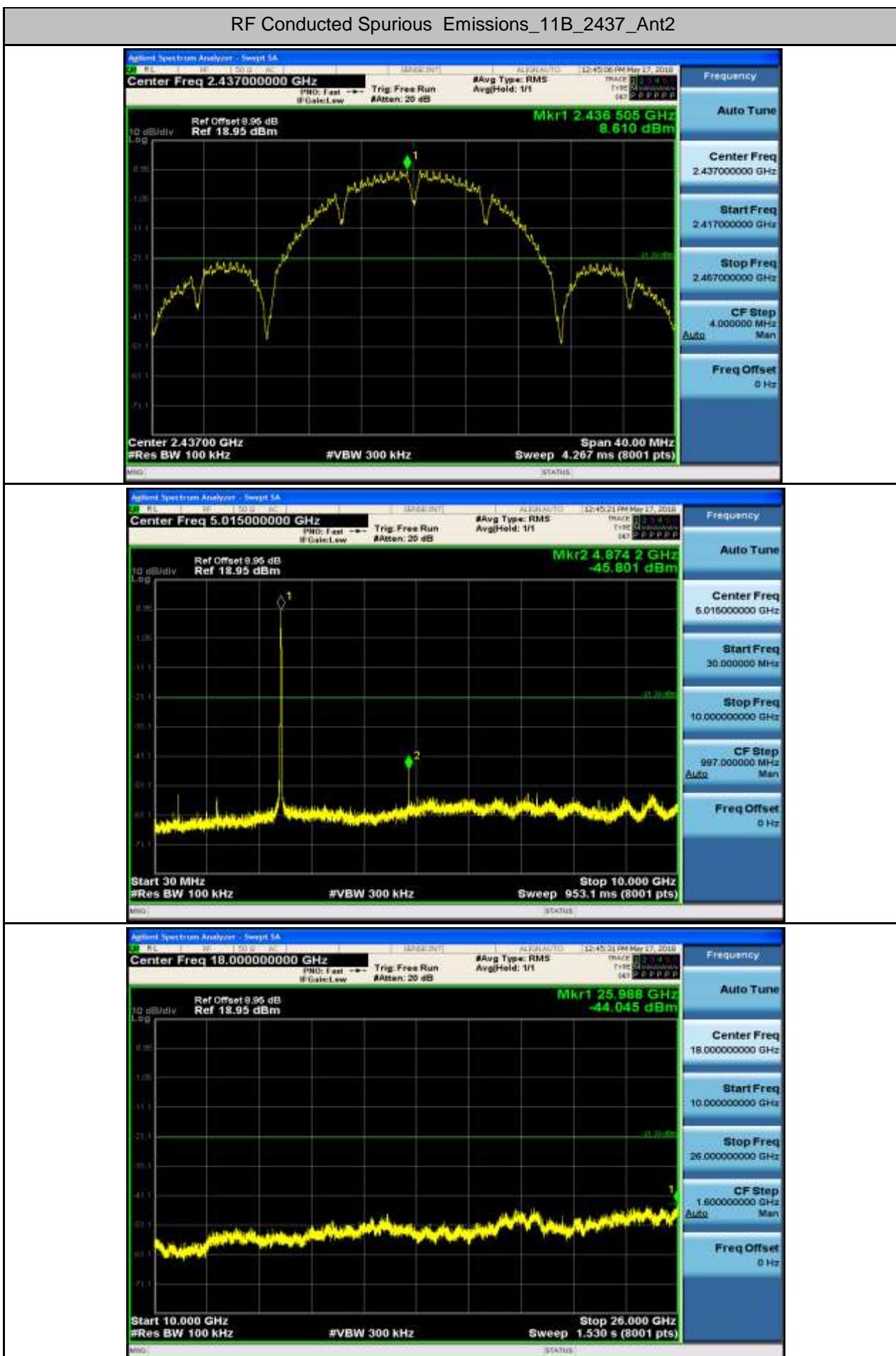


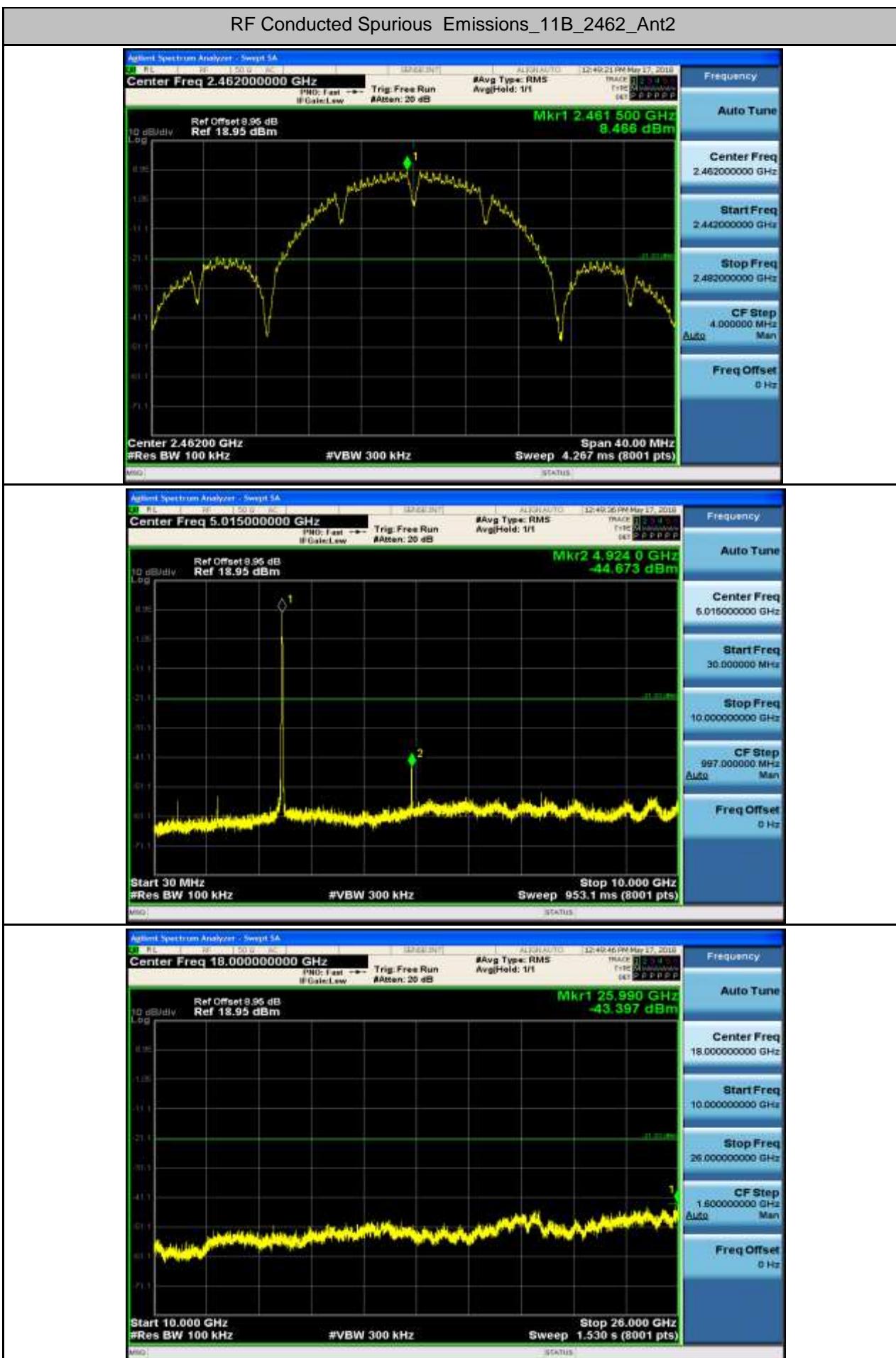


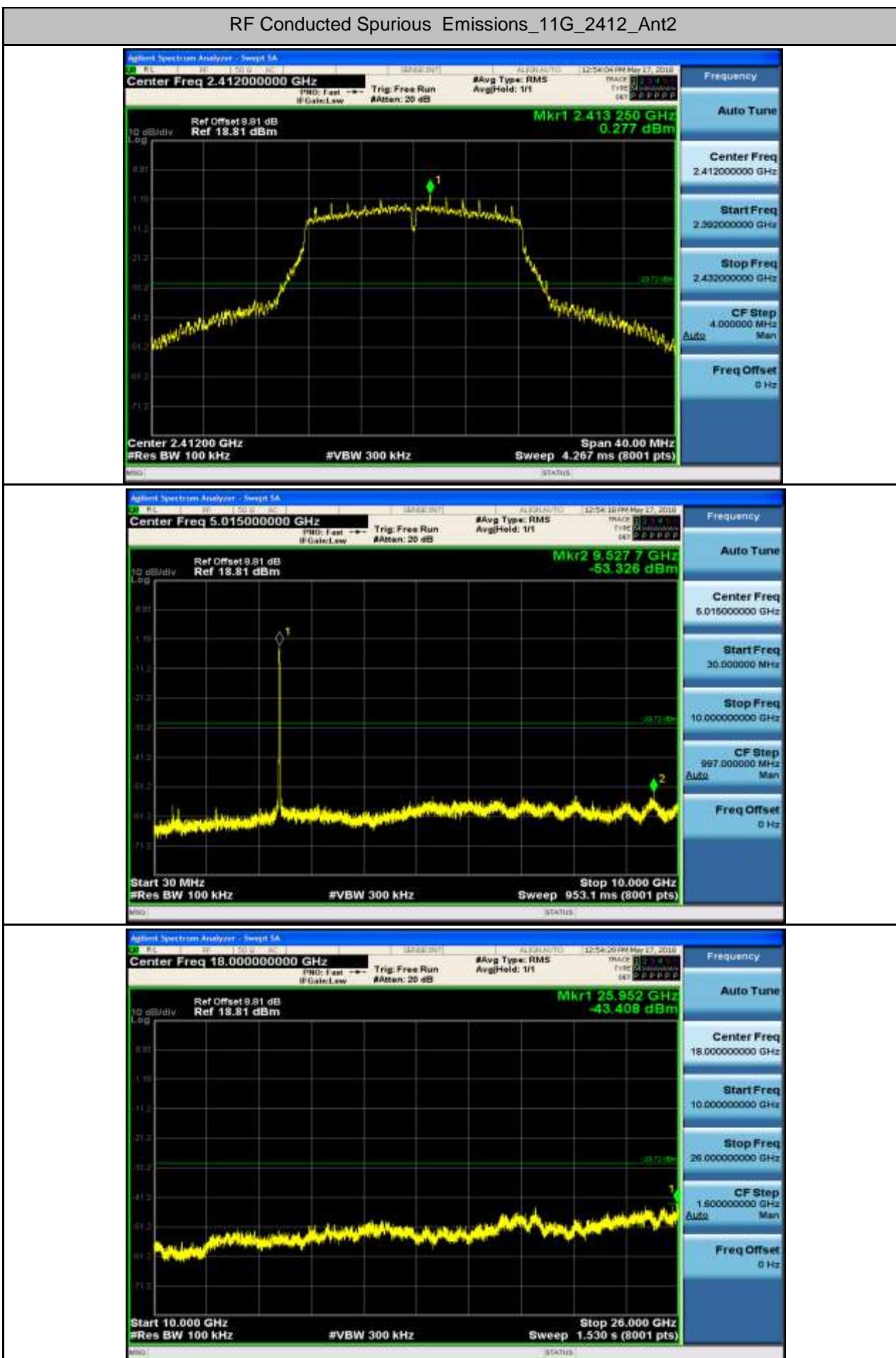


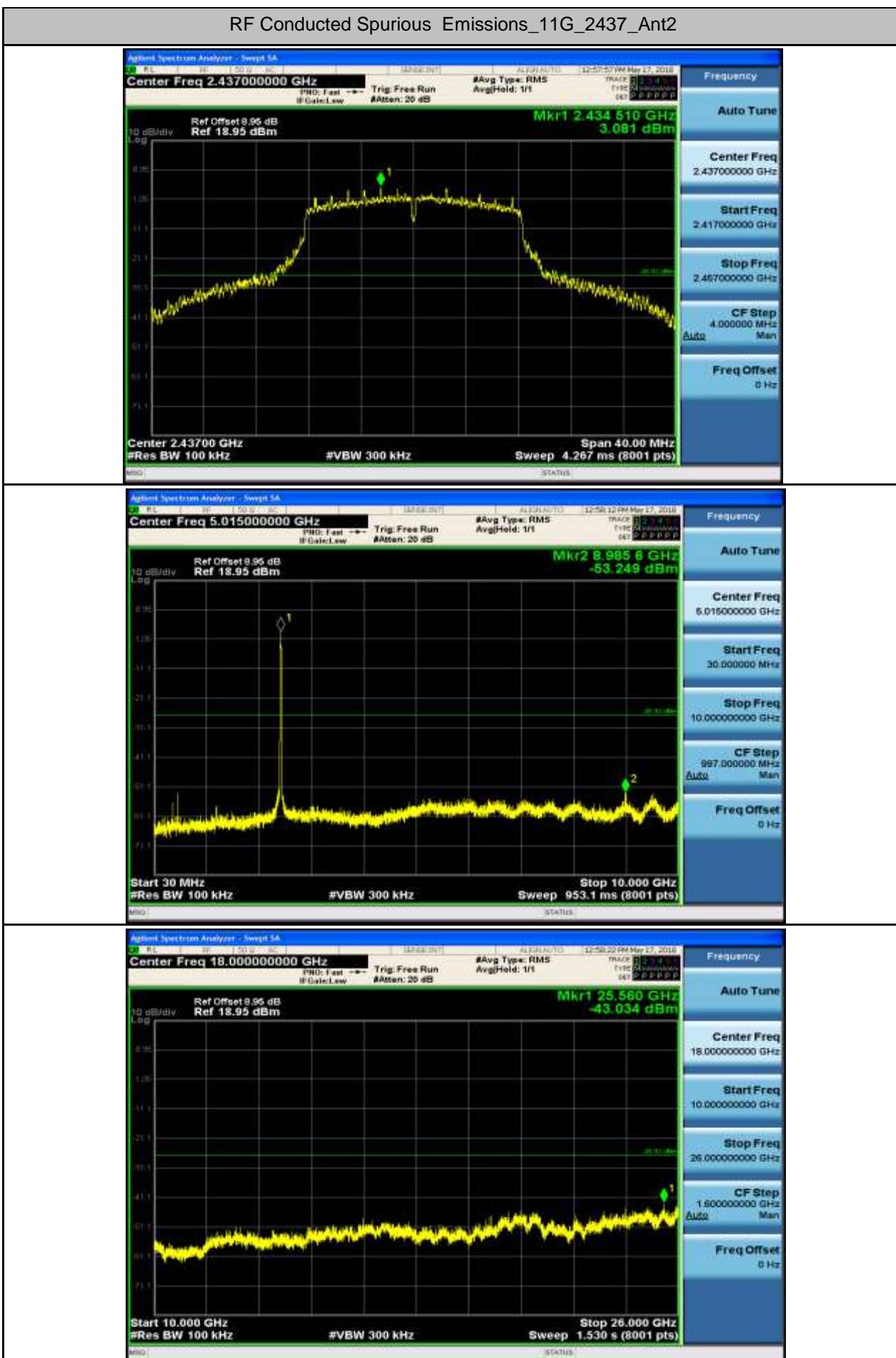


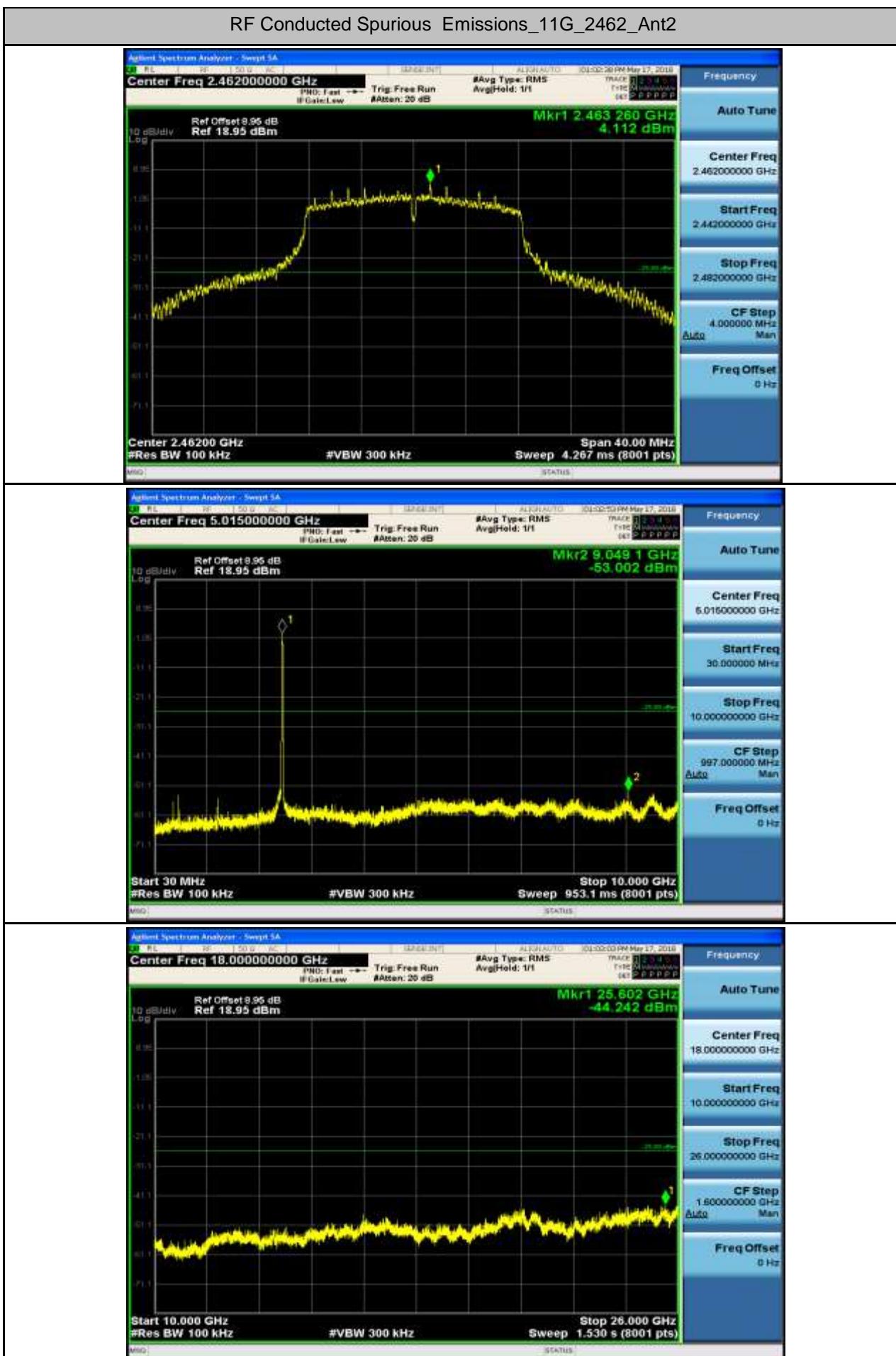


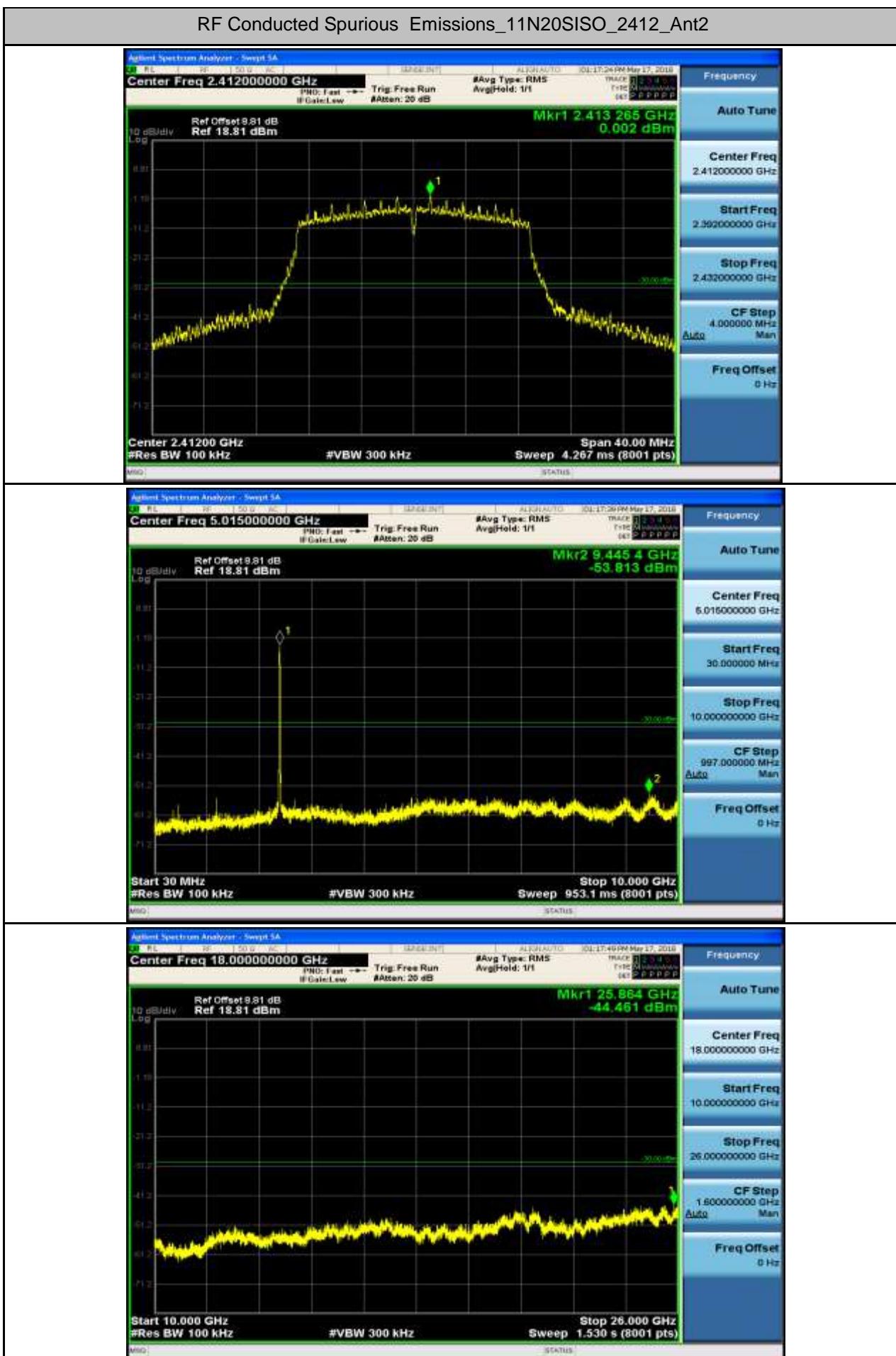


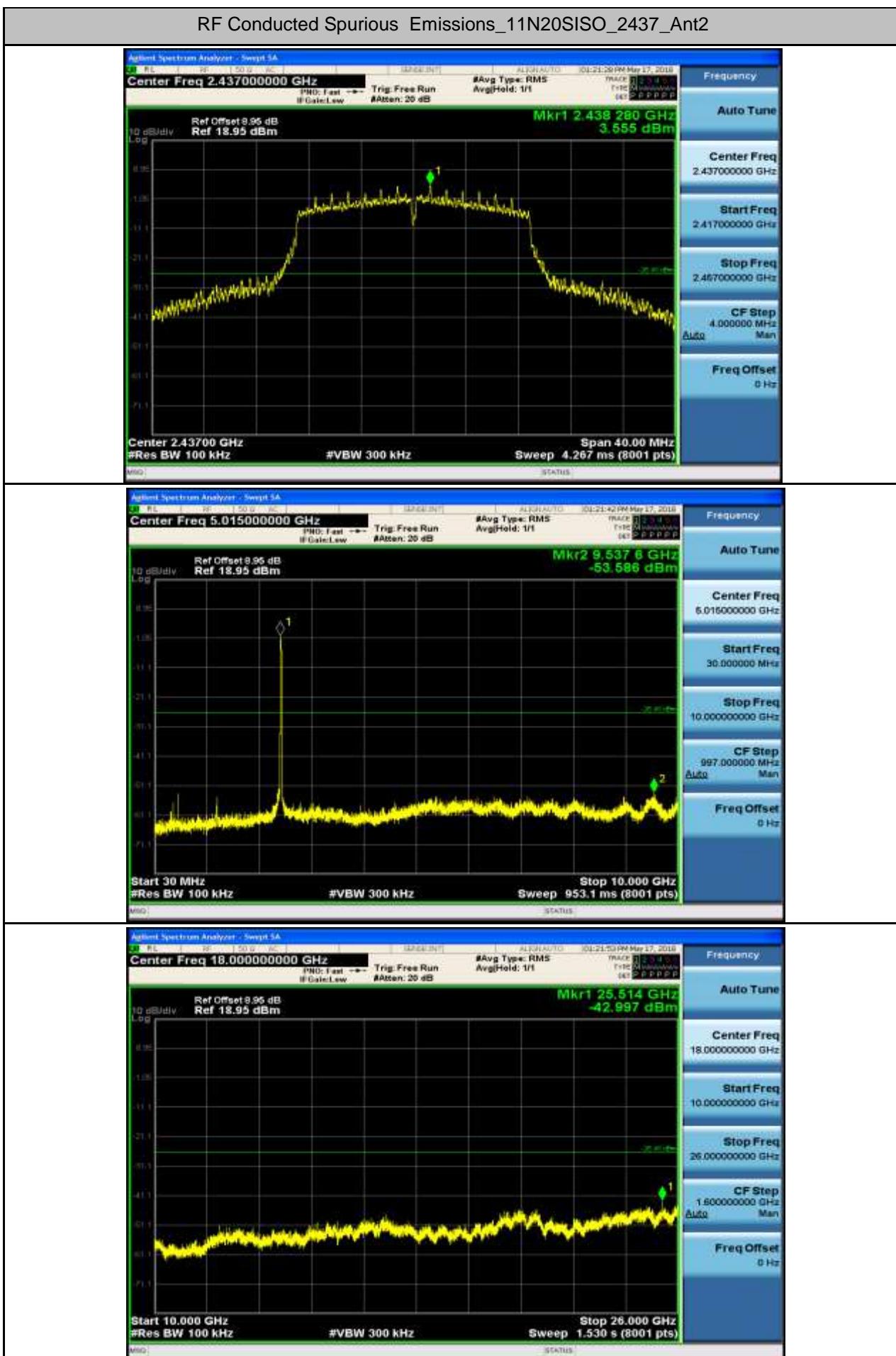


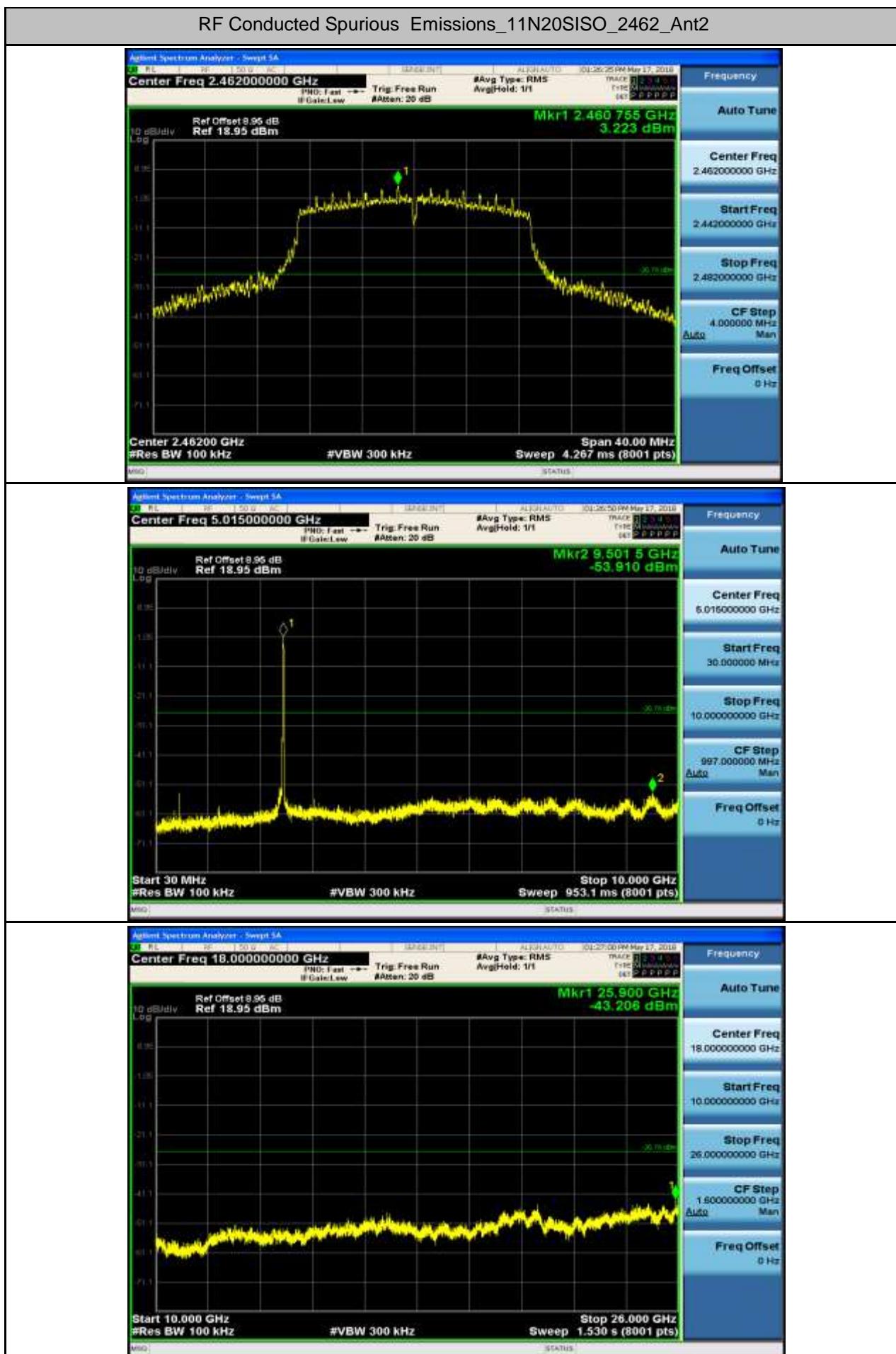


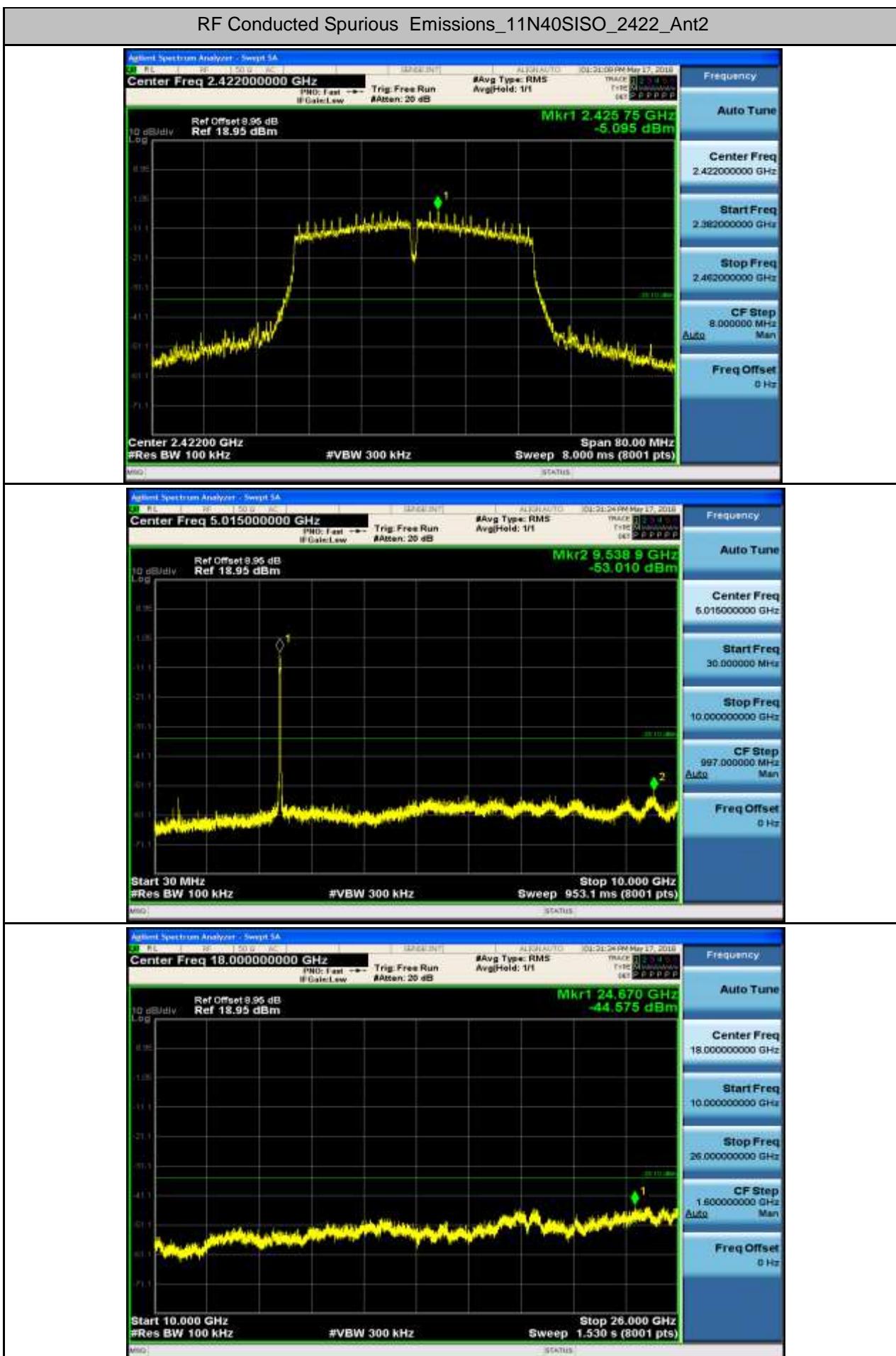


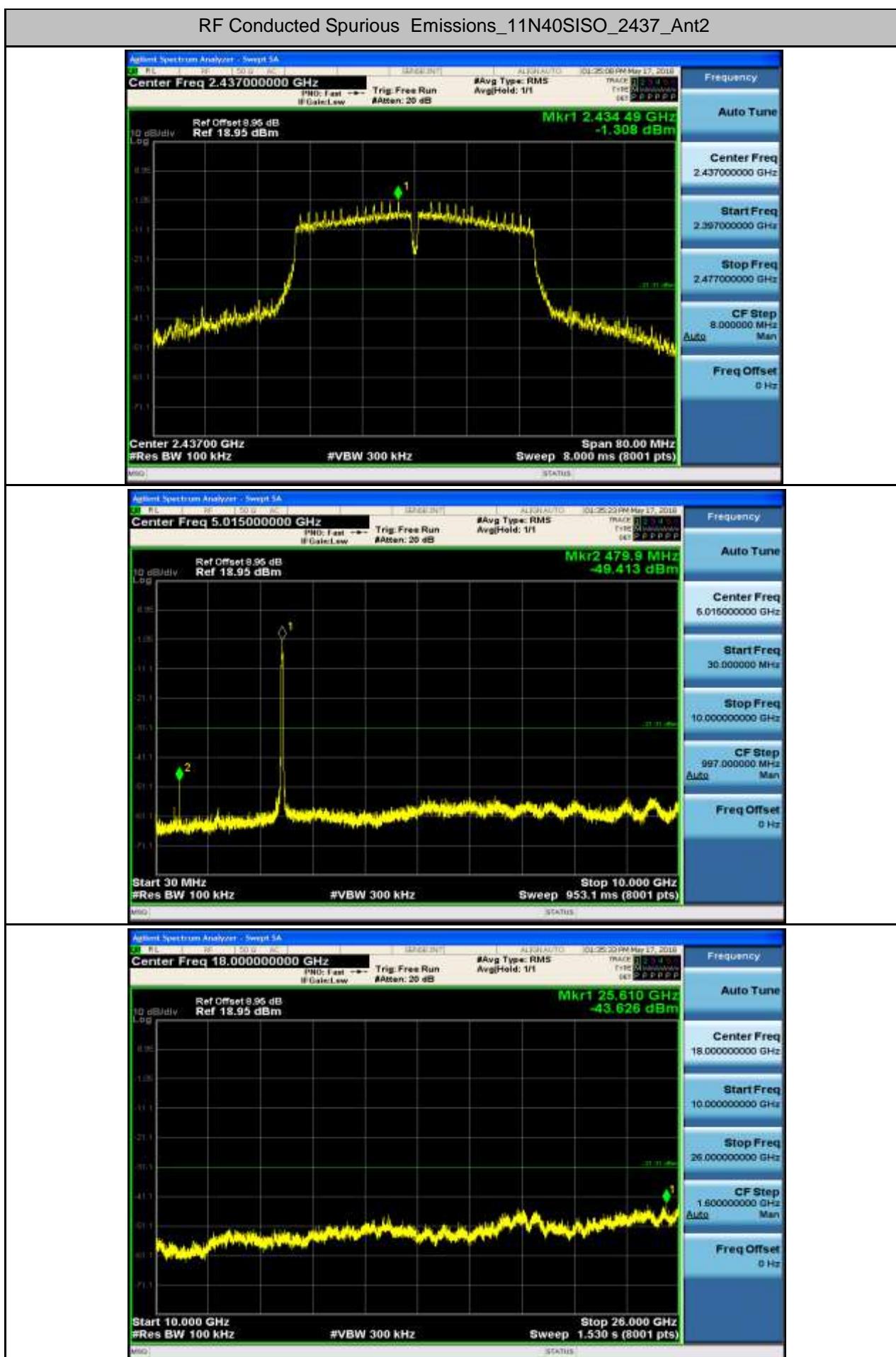


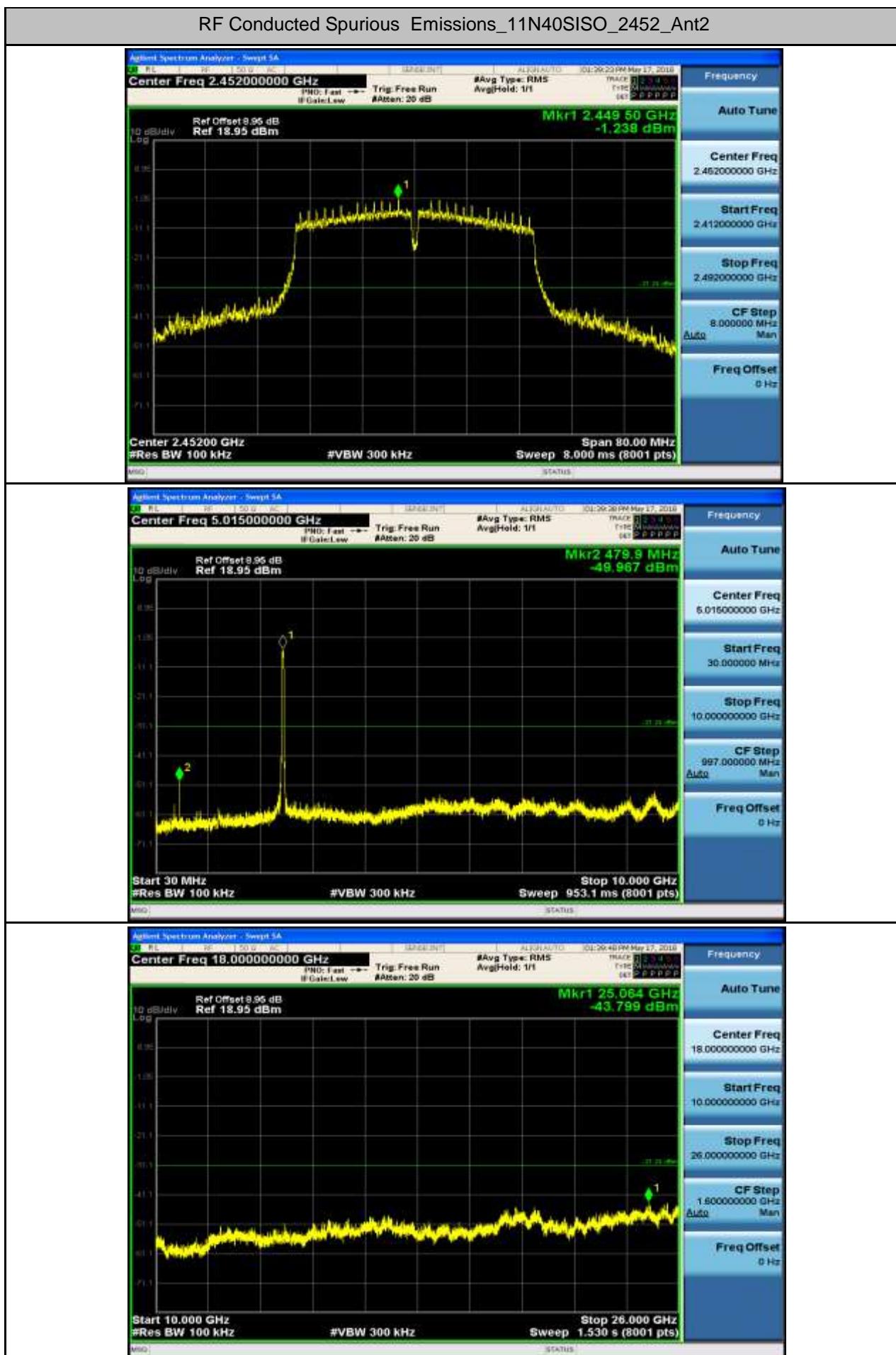












**7.Duty Cycle**

Test Mode	Test Channel	Duty Cycle[%]		10log(1/x) Factor[dB]	
		Ant1	Ant2	Ant1	Ant2
11B	2412	98.34	99.58	0.07	0.02
11B	2437	99.07	99.58	0.04	0.02
11B	2462	99.58	99.61	0.02	0.02
11G	2412	91.50	97.86	0.39	0.09
11G	2437	93.21	93.69	0.31	0.28
11G	2462	90.44	91.96	0.44	0.36
11N20SISO	2412	88.93	87.54	0.51	0.58
11N20SISO	2437	84.94	83.33	0.71	0.79
11N20SISO	2462	85.76	92.86	0.67	0.32
11N40SISO	2422	67.50	73.03	1.71	1.36
11N40SISO	2437	87.66	69.31	0.57	1.59
11N40SISO	2452	67.16	85.06	1.73	0.70

## Duty Cycle\_11B\_2412\_Ant1



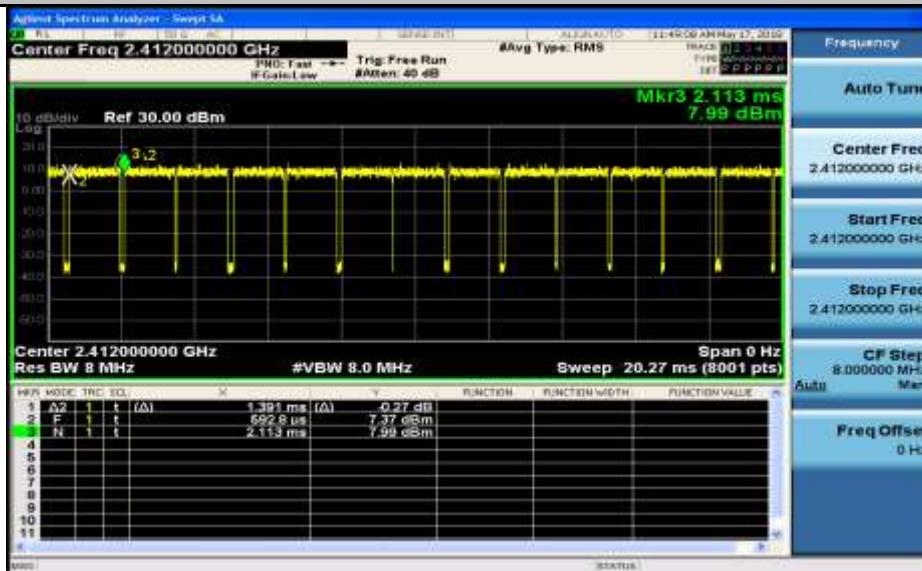
## Duty Cycle\_11B\_2437\_Ant1



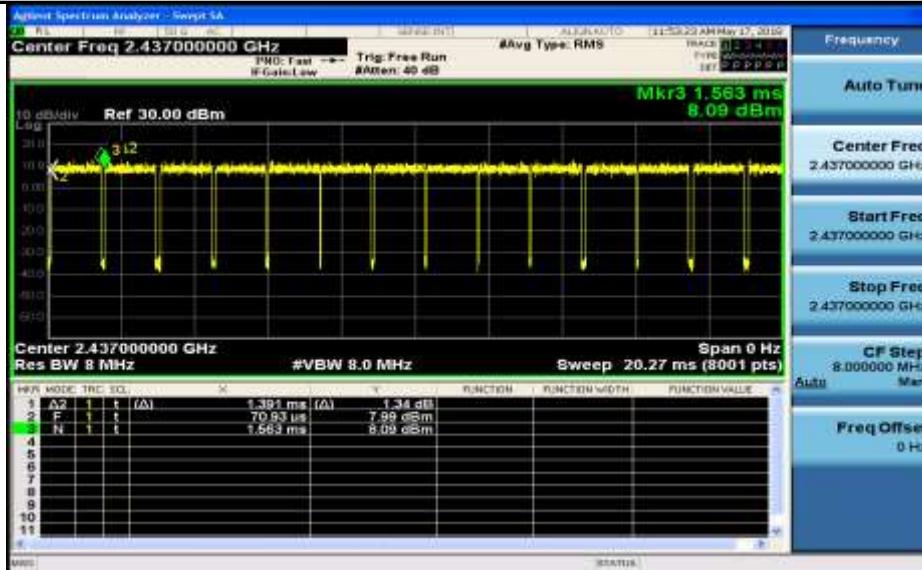
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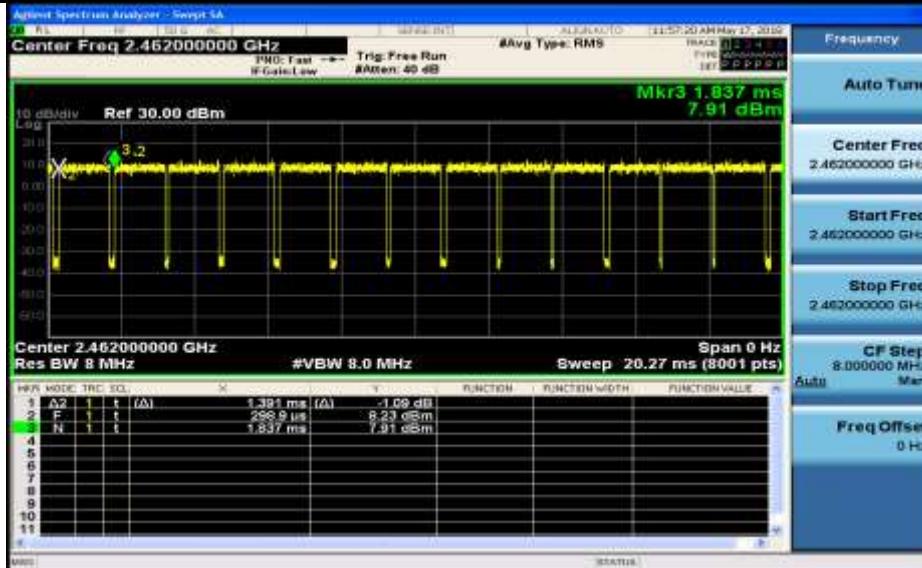
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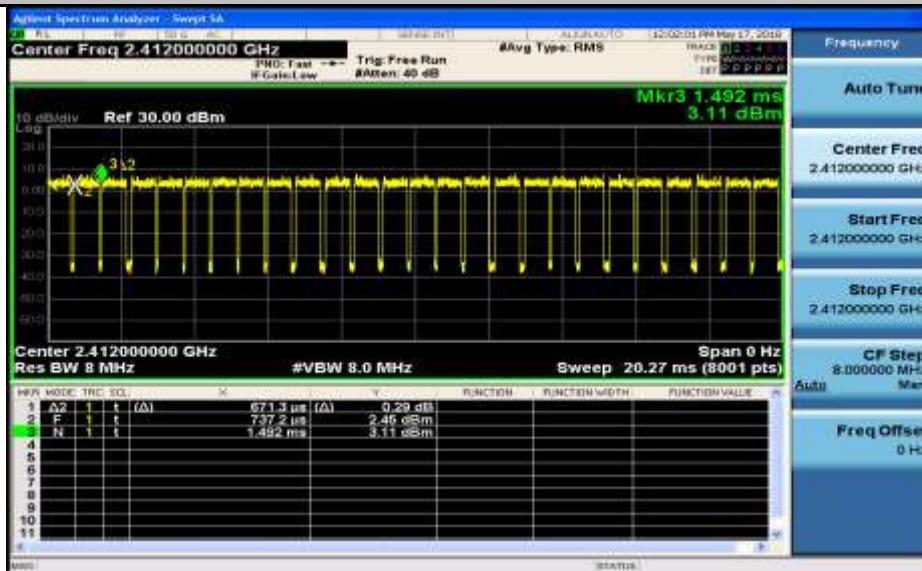
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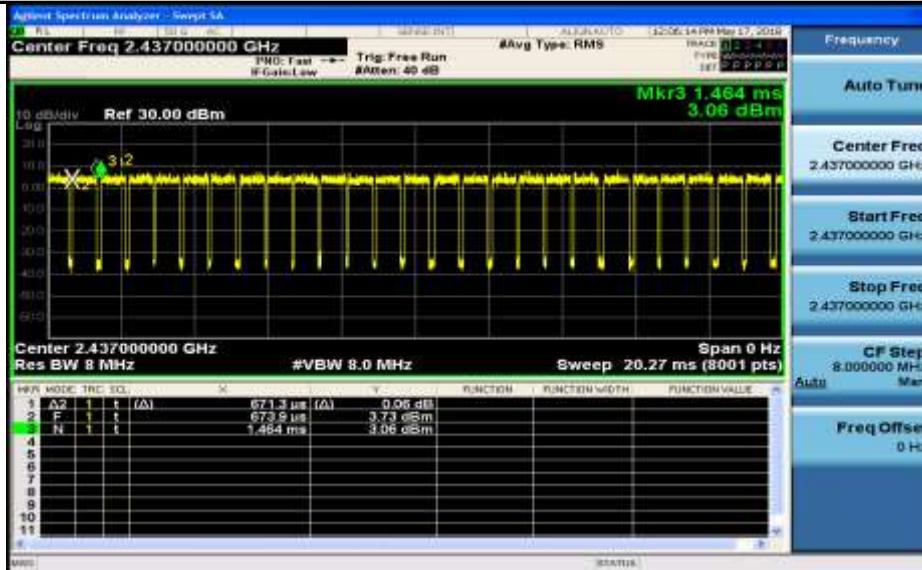
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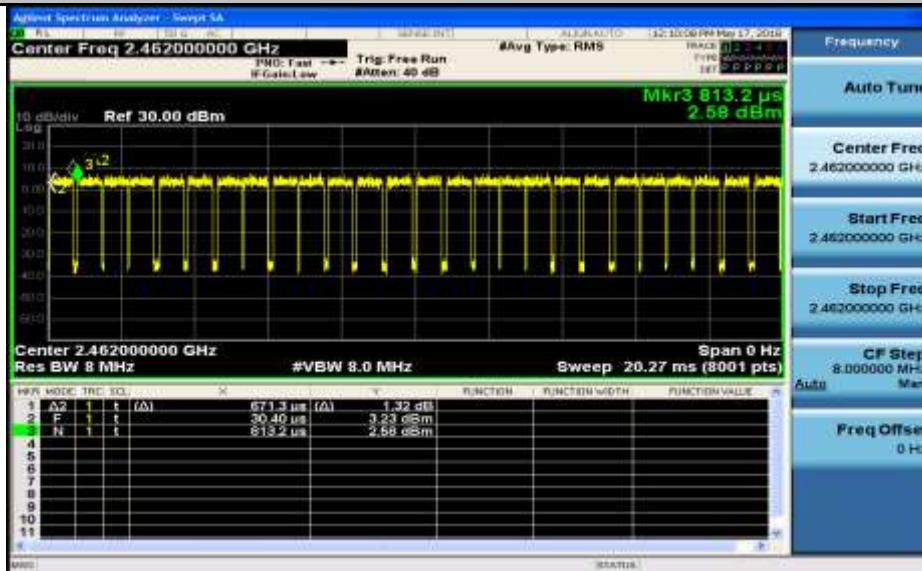
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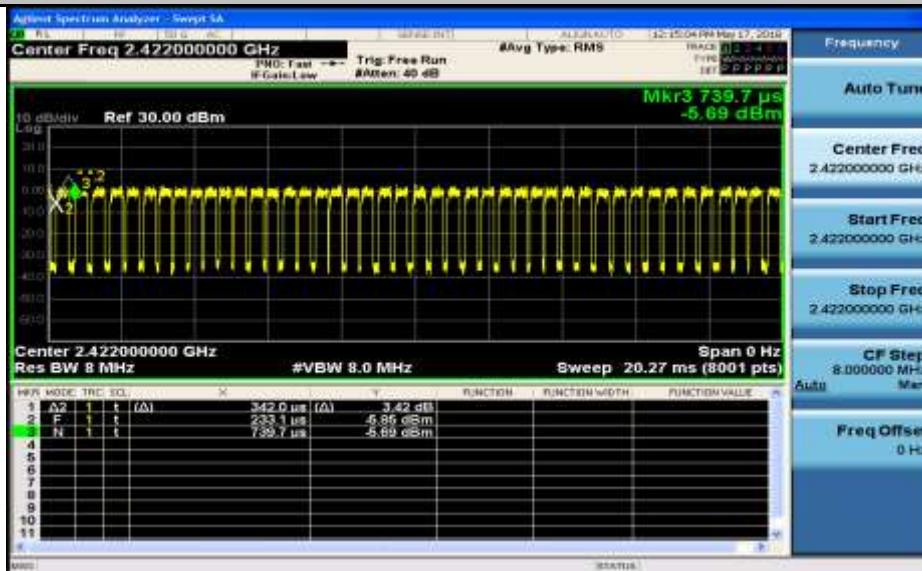
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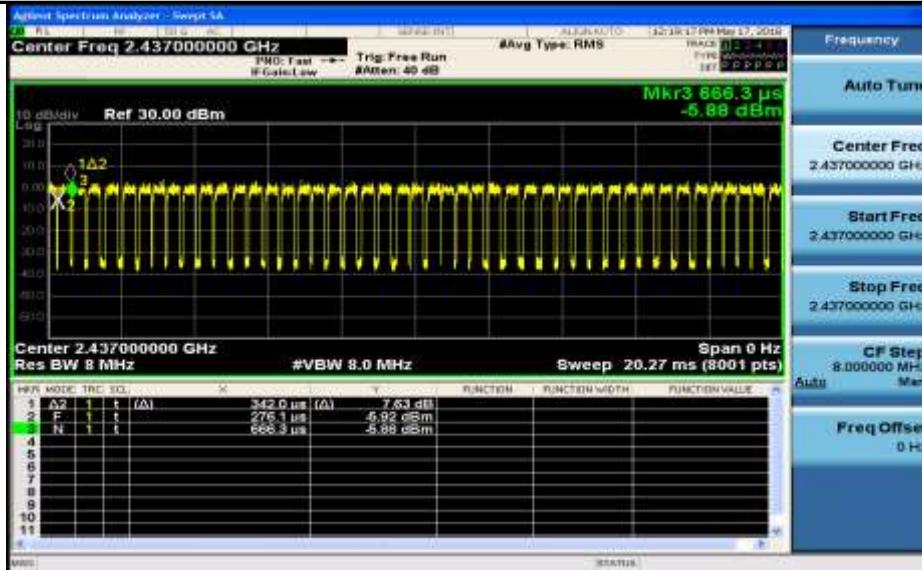
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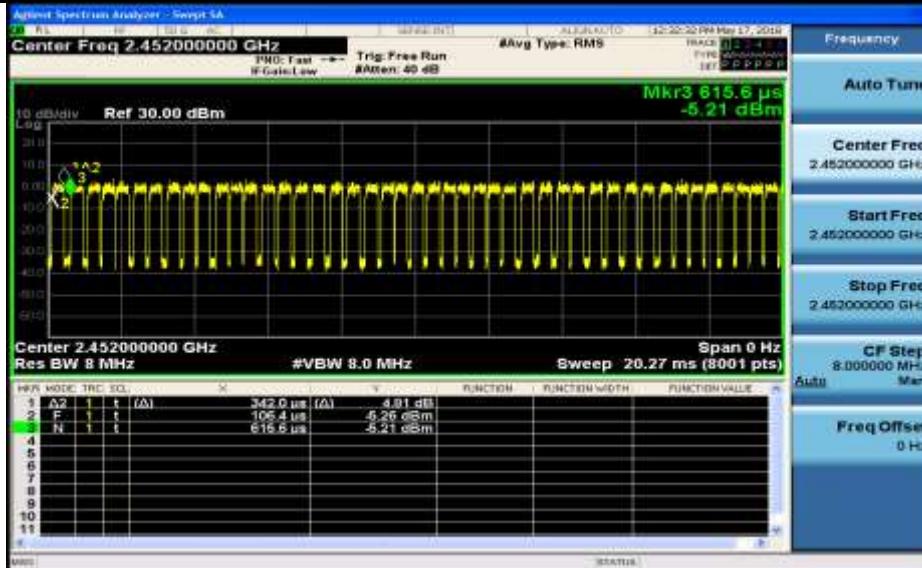
## Duty Cycle\_11N40SISO\_2422\_Ant1



## Duty Cycle\_11N40SISO\_2437\_Ant1



## Duty Cycle\_11N40SISO\_2452\_Ant1



## Duty Cycle\_11B\_2412\_Ant2



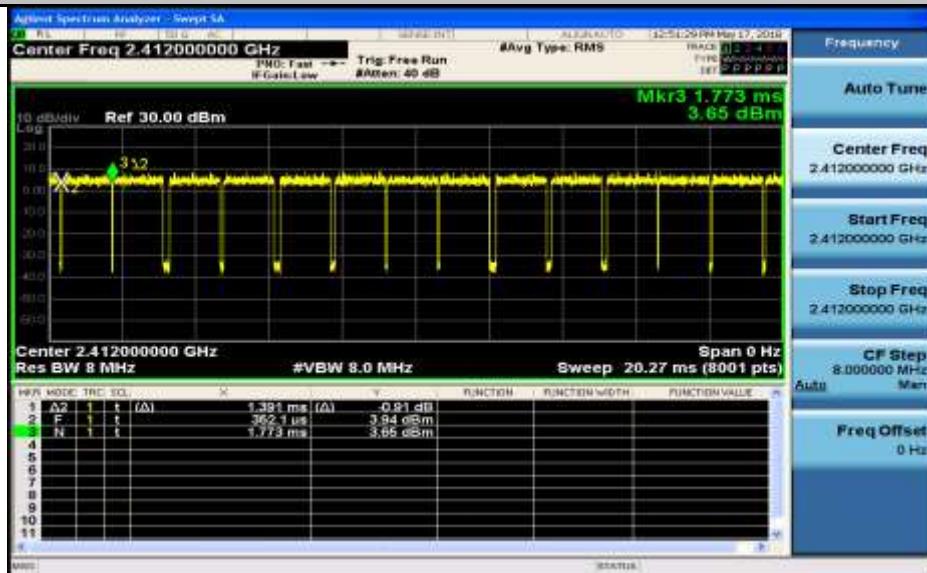
## Duty Cycle\_11B\_2437\_Ant2



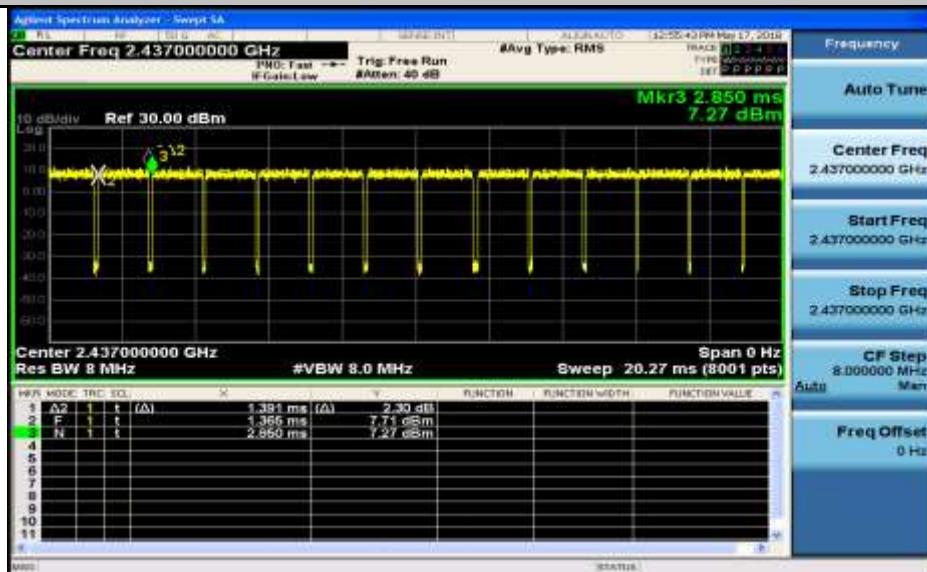
## Duty Cycle\_11B\_2462\_Ant2



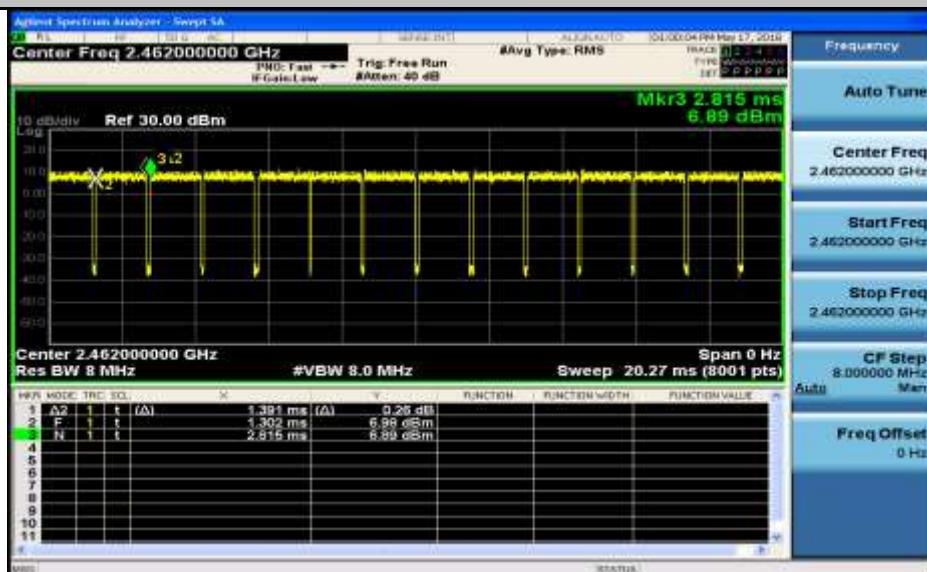
Duty Cycle\_11G\_2412\_Ant2



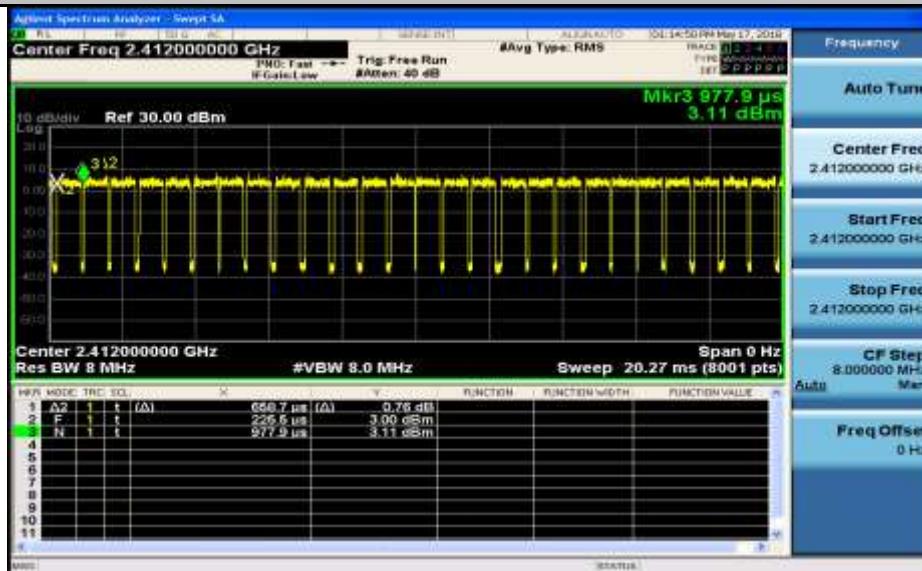
Duty Cycle\_11G\_2437\_Ant2



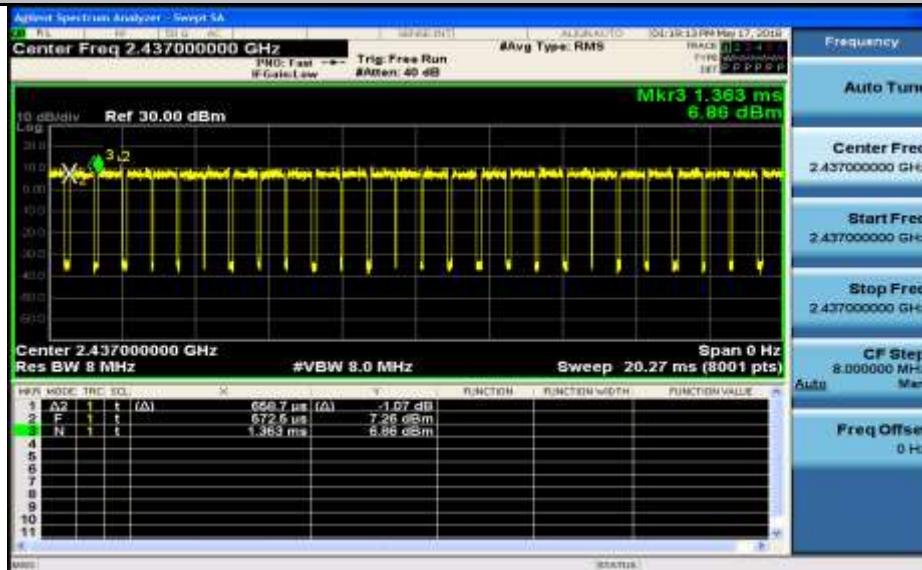
Duty Cycle\_11G\_2462\_Ant2



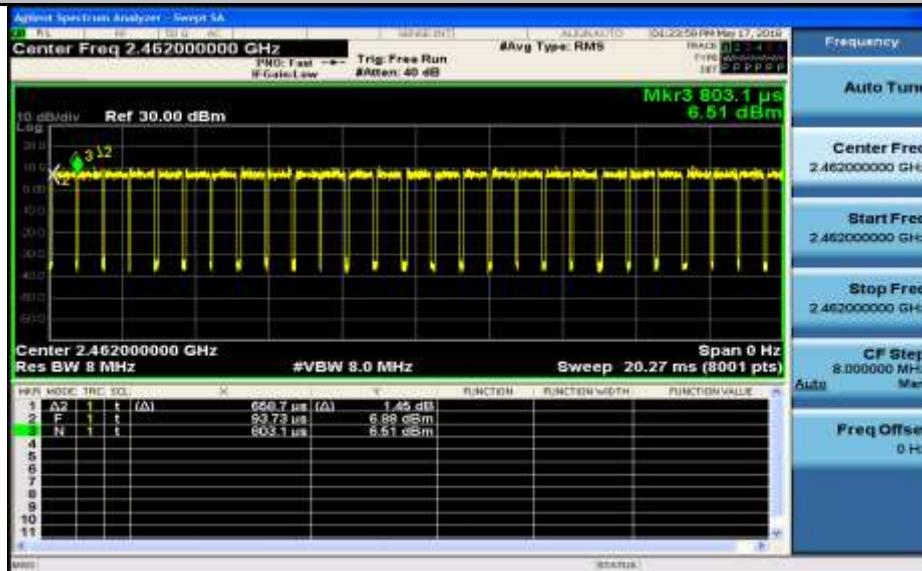
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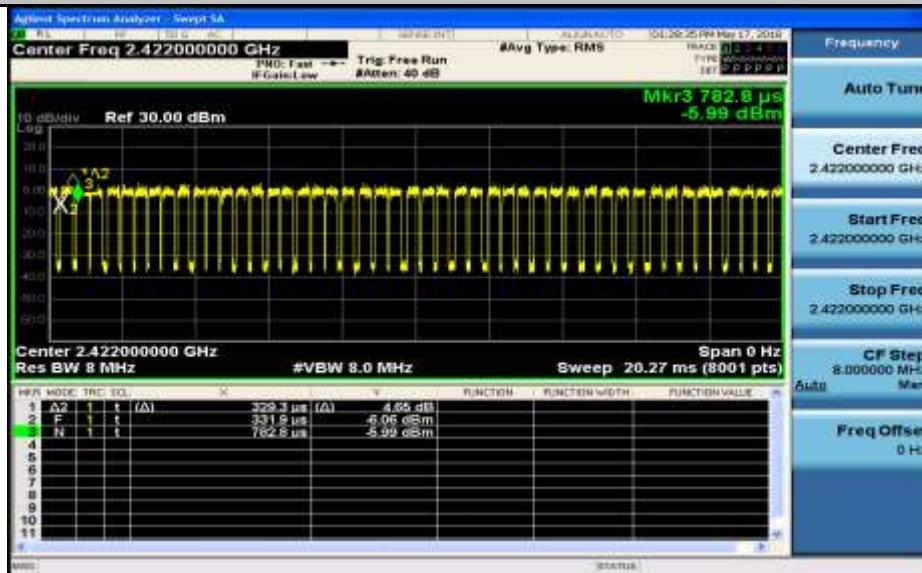
## Duty Cycle\_11N20SISO\_2437\_Ant2



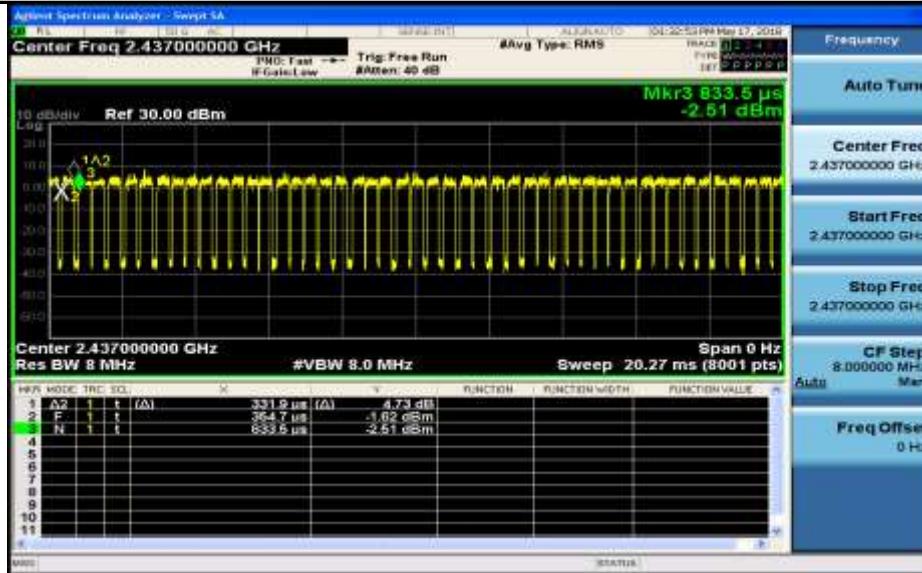
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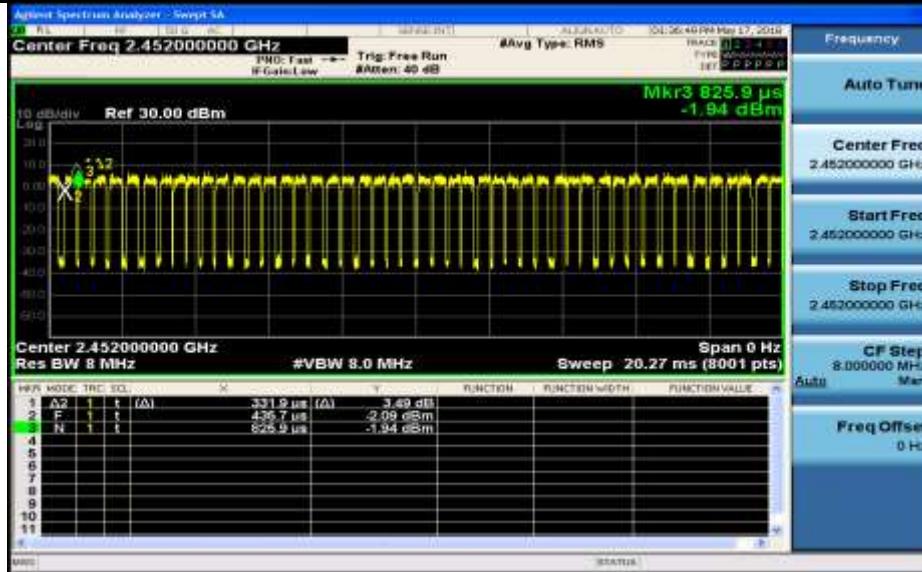
## Duty Cycle\_11N40SISO\_2422\_Ant2



## Duty Cycle\_11N40SISO\_2437\_Ant2



## Duty Cycle\_11N40SISO\_2452\_Ant2





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