

4.5. Unwanted Emission Strength Measurement

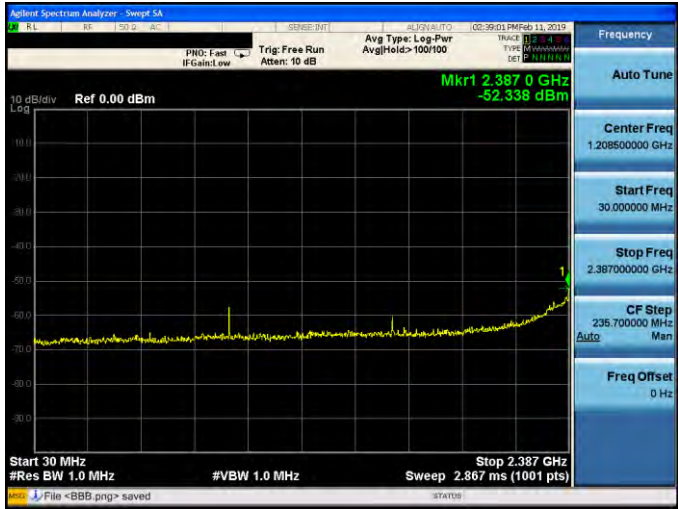
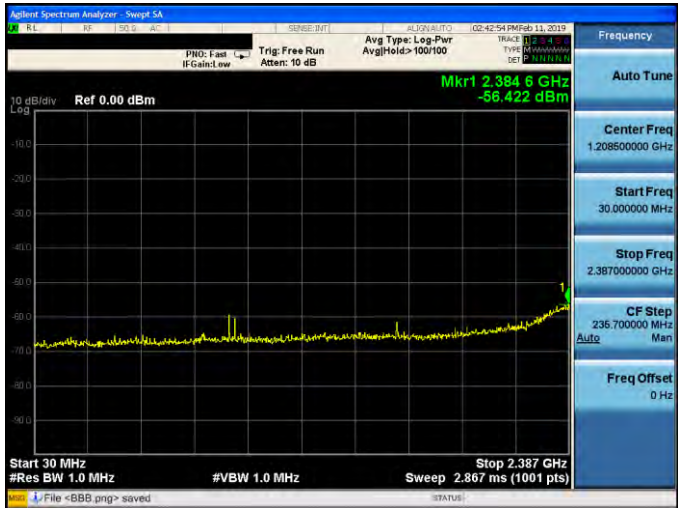
Test Mode		Mode 1					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2412	2442	2472	Result	Notes
Channel Number		Ch.	1	7	13		
TX0	Under 2387MHz	μ W/MHz	0.07	0.03	0.02	PASS	----
		MHz	2387.00	2384.60	2382.30	----	----
	2387-2400MHz	μ W/MHz	2.57	0.04	0.03	PASS	----
		MHz	2398.38	2399.99	2392.71	----	----
	2483.5-2496.5 MHz	μ W/MHz	0.03	0.05	2.95	PASS	----
		MHz	2485.00	2484.94	2485.75	----	----
	2496.5 - 12.5 GHz	μ W/MHz	0.09	0.09	0.44	PASS	----
		MHz	4827.00	7328.00	2527.00	----	----
Limit		μ W/MHz	Under 2387MHz and 2496.5 - 12.5 GHz ≤ 2.5				
			2387-2400MHz and 2483.5-2496.5 MHz ≤ 25				

Test Mode		Mode 2					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2412	2442	2472	Result	Notes
Channel Number		Ch.	1	7	13		
TX0	Under 2387 MHz	μ W/MHz	1.42	0.07	0.04	PASS	-----
		MHz	2387.00	902.10	2379.90	-----	-----
	2387-2400 MHz	μ W/MHz	16.52	0.19	0.05	PASS	-----
		MHz	2399.83	2399.56	2397.74	-----	-----
	2483.5-2496.5 MHz	μ W/MHz	0.07	0.22	1.50	PASS	-----
		MHz	2484.57	2485.18	2484.33	-----	-----
	2496.5 - 12.5 GHz	μ W/MHz	0.07	0.00	0.03	PASS	-----
		MHz	7238.00	7238.00	2497.00	-----	-----
Limit		μ W/MHz	Under 2387 MHz and 2496.5 - 12.5 GHz ≤ 2.5				
			2387-2400 MHz and 2483.5-2496.5 MHz ≤ 25				

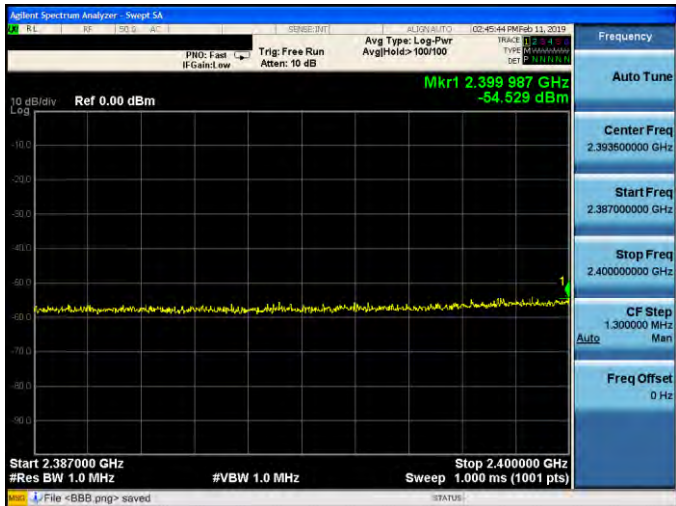
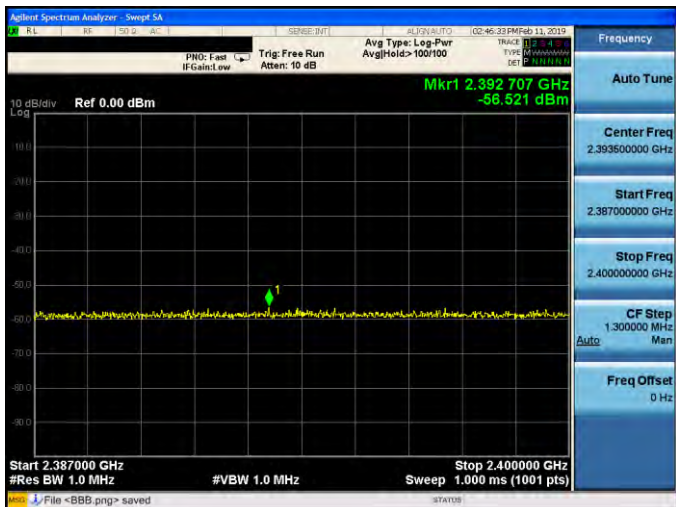
Test Mode		Mode 3					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2412	2442	2472	Result	Notes
Channel Number		Ch.	1	7	13		
TX0	Under 2387 MHz	μ W/MHz	0.08	0.05	0.04	PASS	----
		MHz	2387.00	2370.50	2387.00	----	----
	2387-2400 MHz	μ W/MHz	18.36	0.48	0.05	PASS	----
		MHz	2399.83	2398.36	2387.16	----	----
	2483.5-2496.5 MHz	μ W/MHz	0.06	0.24	1.67	PASS	----
		MHz	2488.47	2485.02	2483.88	----	----
	2496.5 - 12.5 GHz	μ W/MHz	0.07	0.07	0.06	PASS	----
		MHz	7238.00	7328.00	2497.00	----	----
Limit		μ W/MHz	Under 2387 MHz and 2496.5 - 12.5 GHz ≤ 2.5				
			2387-2400 MHz and 2483.5-2496.5 MHz ≤ 25				

Test Mode		Mode 4					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2422	2442	2462	Result	Notes
Channel Number		Ch.	3	7	11		
TX0	Under 2387 MHz	μ W/MHz	0.00	0.18	0.08	PASS	----
		MHz	2382.30	2387.00	2384.90	----	----
	2387-2400 MHz	μ W/MHz	6.35	3.25	0.19	PASS	----
		MHz	2397.40	2397.40	2399.16	----	----
	2483.5-2496.5 MHz	μ W/MHz	0.27	4.82	9.01	PASS	----
		MHz	2487.67	2486.26	2484.76	----	----
	2496.5 - 12.5 GHz	μ W/MHz	0.11	0.76	0.00	PASS	----
		MHz	2497.00	2497.00	2497.00	----	----
Limit		μ W/MHz	Under 2387 MHz and 2496.5 - 12.5 GHz ≤ 2.5				
			2387-2400 MHz and 2483.5-2496.5 MHz ≤ 25				

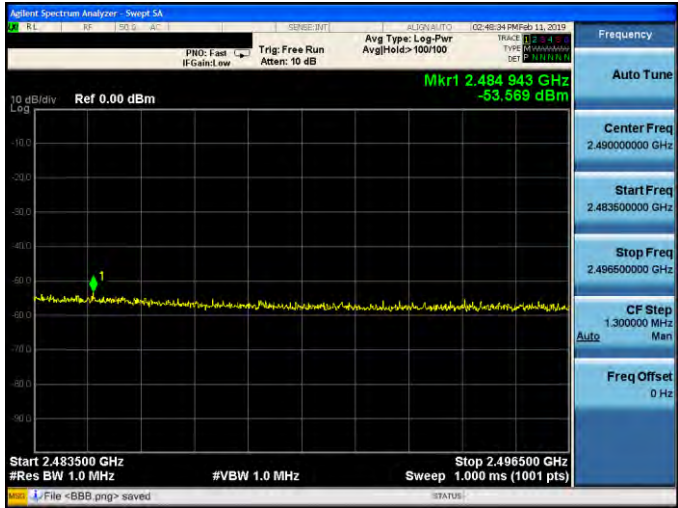
Test Graphs

Mode 1 _ Normal Voltage _ TX0 _ Under 2387 MHz	
2412 MHz	
2442 MHz	
2472 MHz	



Mode 1 _ Normal Voltage _ TX0 _ 2387-2400 MHz	
2412 MHz	
2442 MHz	
2472 MHz	

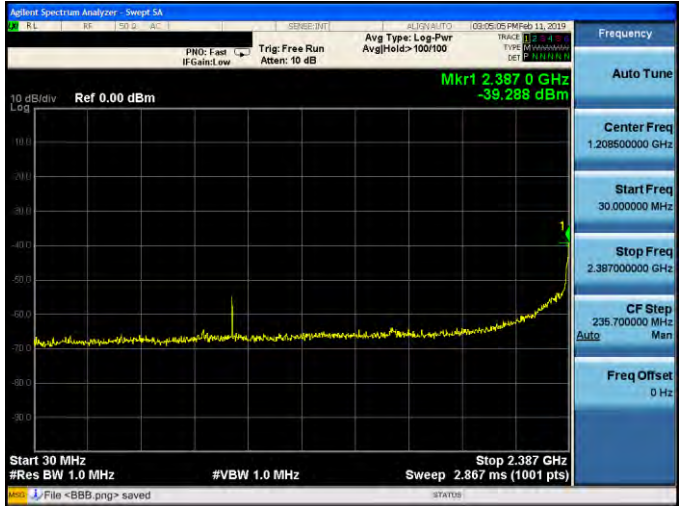
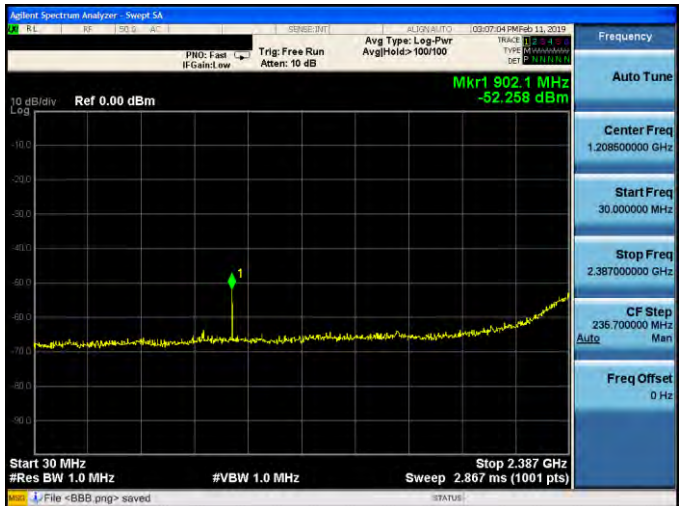


Mode 1 _ Normal Voltage _ TX0 _ 2483.5-2496.5 MHz	
2412 MHz	
2442 MHz	
2472 MHz	

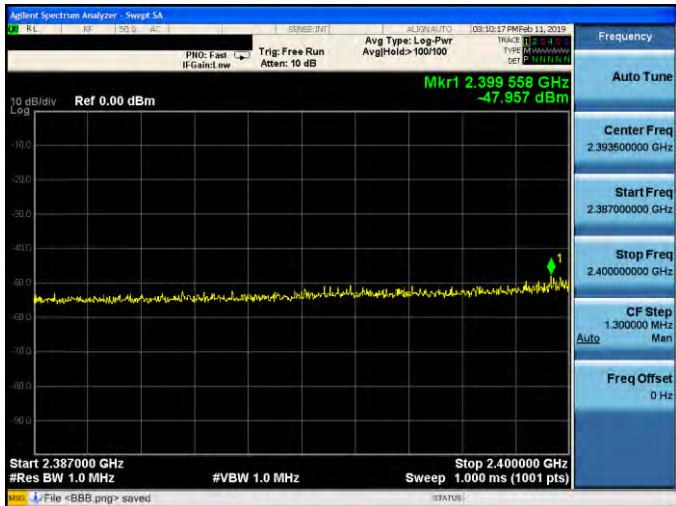
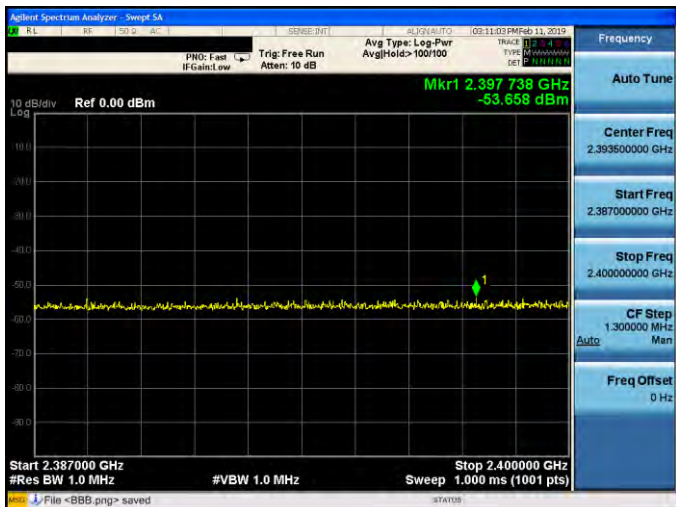


Mode 1 _ Normal Voltage _ TX0 _ 2496.5 - 12.5 GHz	
2412 MHz	
2442 MHz	
2472 MHz	

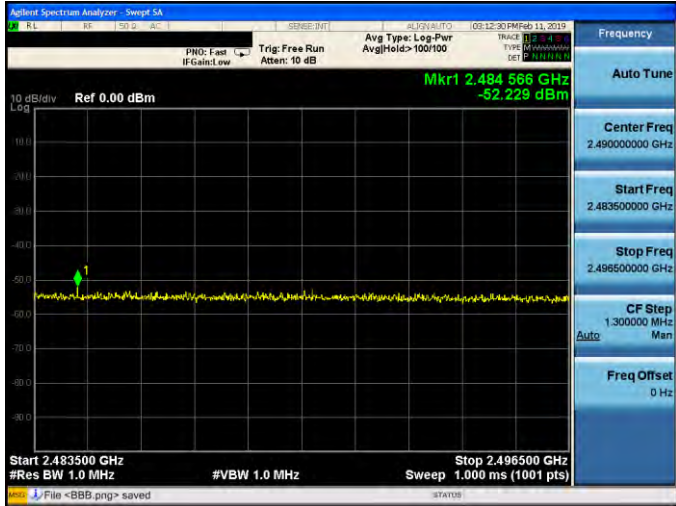
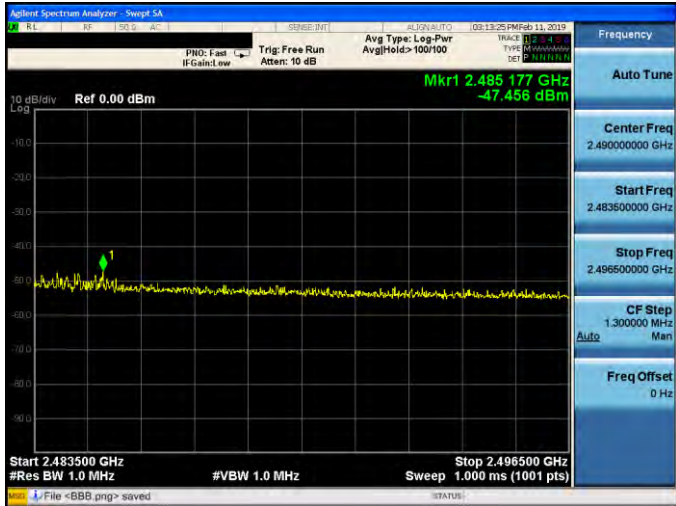


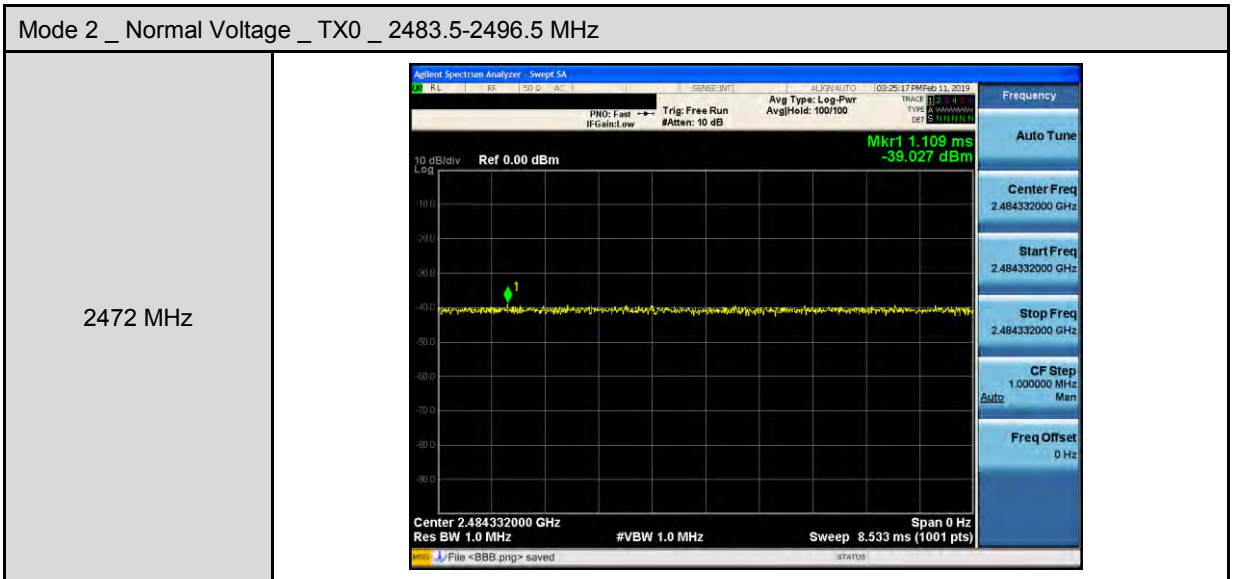
Mode 2 _ Normal Voltage _ TX0 _ Under 2387 MHz	
2412 MHz	
2442 MHz	
2472 MHz	



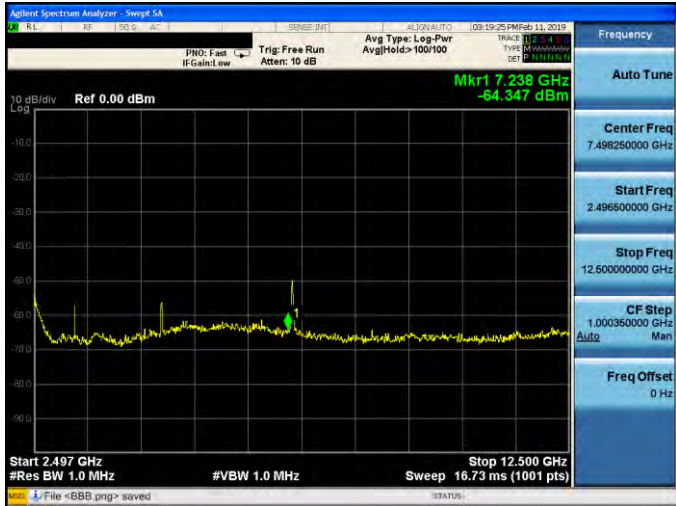
Mode 2 _ Normal Voltage _ TX0 _ 2387-2400 MHz	
2412 MHz	
2442 MHz	
2472 MHz	

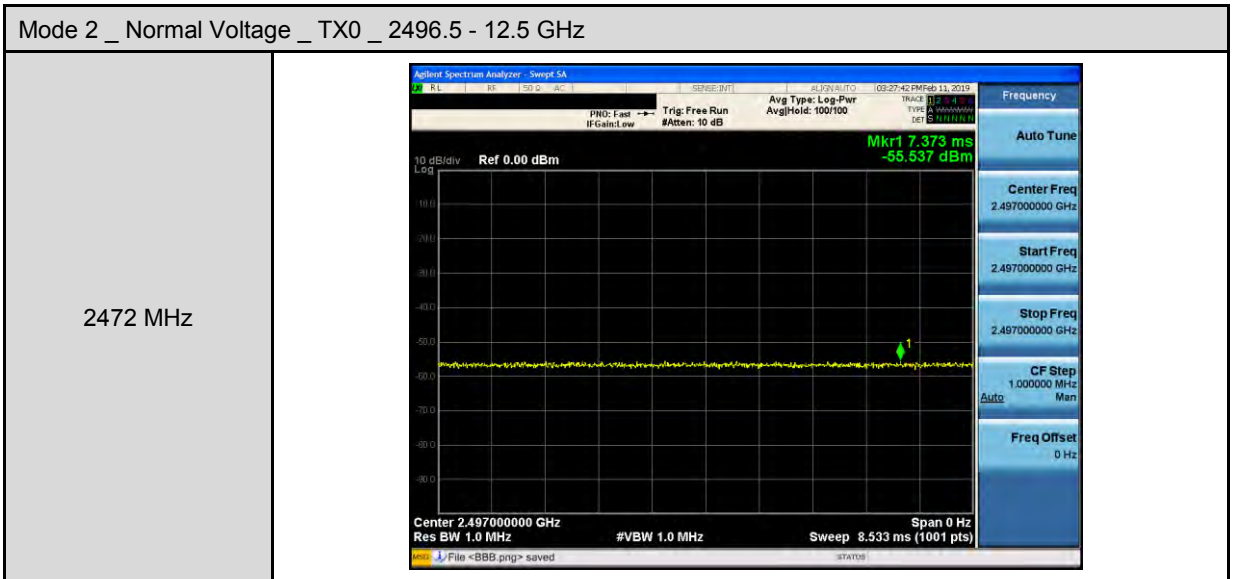


Mode 2 _ Normal Voltage _ TX0 _ 2483.5-2496.5 MHz	
2412 MHz	
2442 MHz	
2472 MHz	

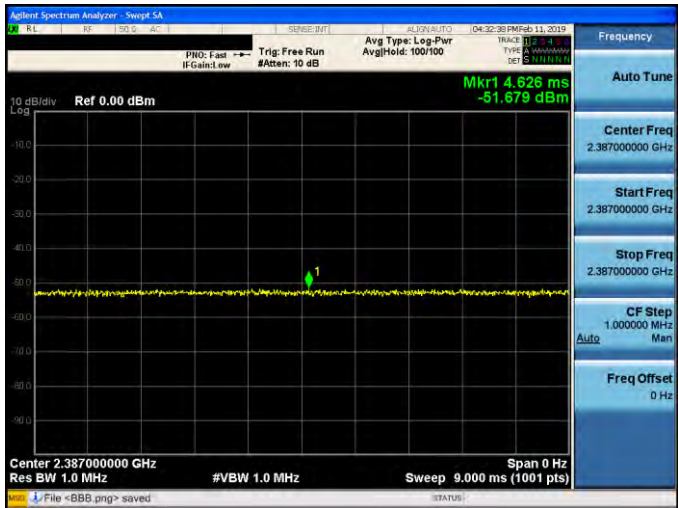


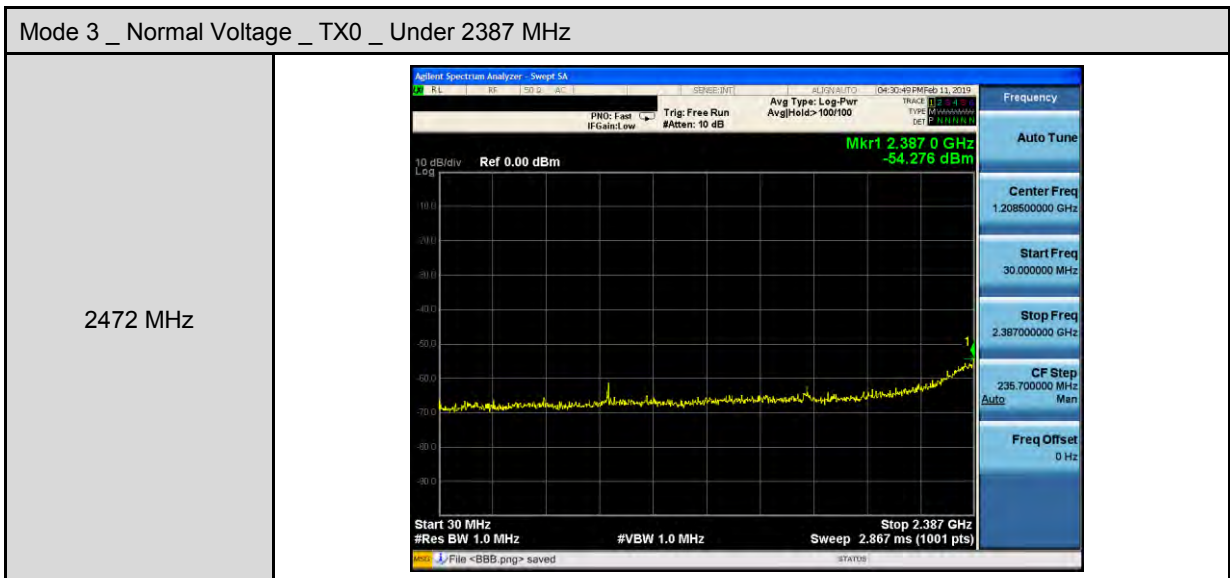


Mode 2 _ Normal Voltage _ TX0 _ 2496.5 - 12.5 GHz	
2412 MHz	
2442 MHz	
2472 MHz	





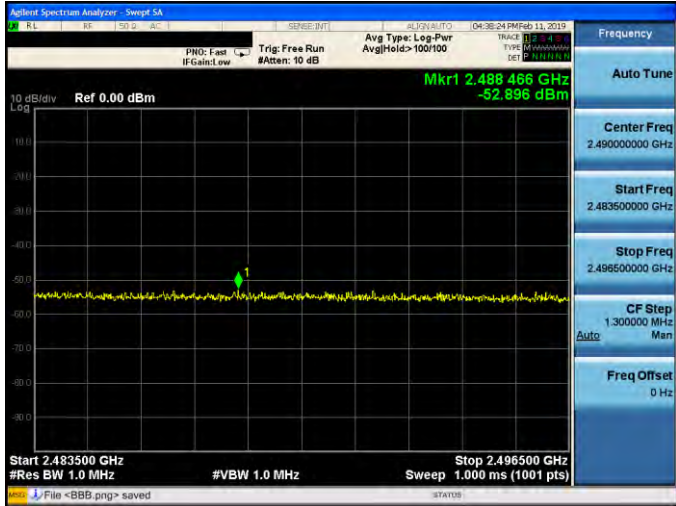
Mode 3 _ Normal Voltage _ TX0 _ Under 2387 MHz	
2412 MHz	
2412 MHz	
2442 MHz	

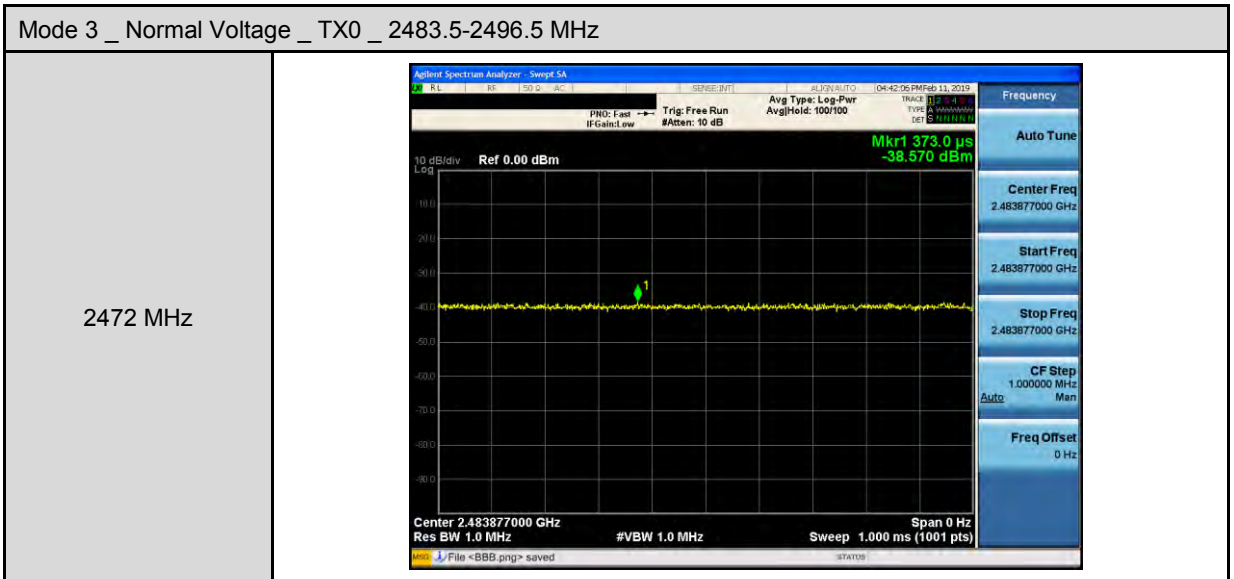




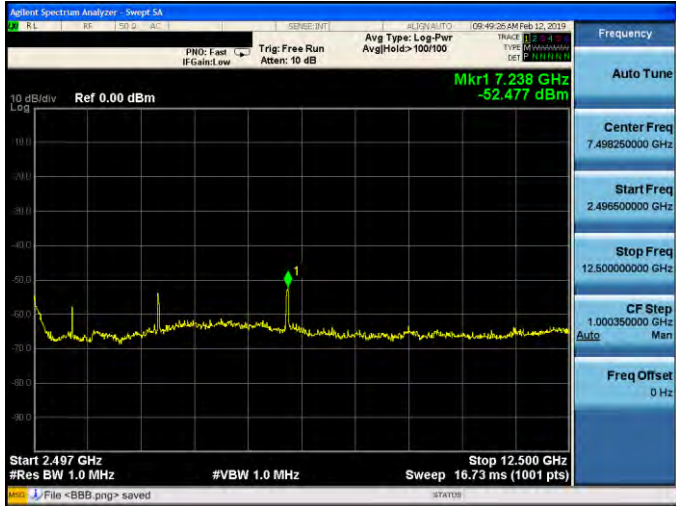
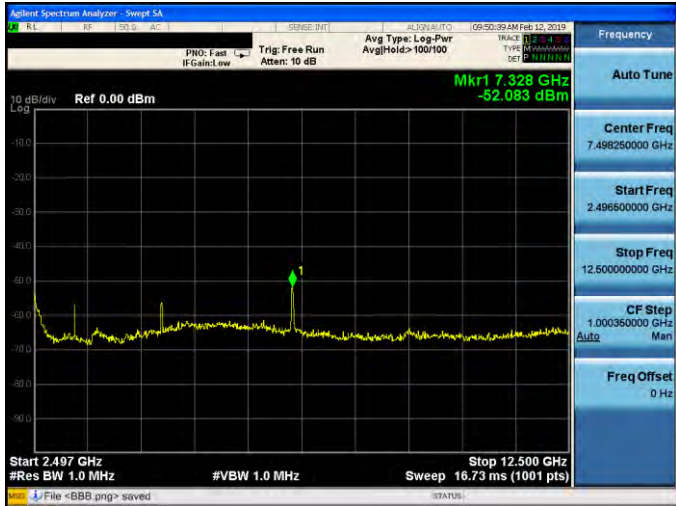
Mode 3 _ Normal Voltage _ TX0 _ 2387-2400 MHz	
2412 MHz	
2442 MHz	
2472 MHz	

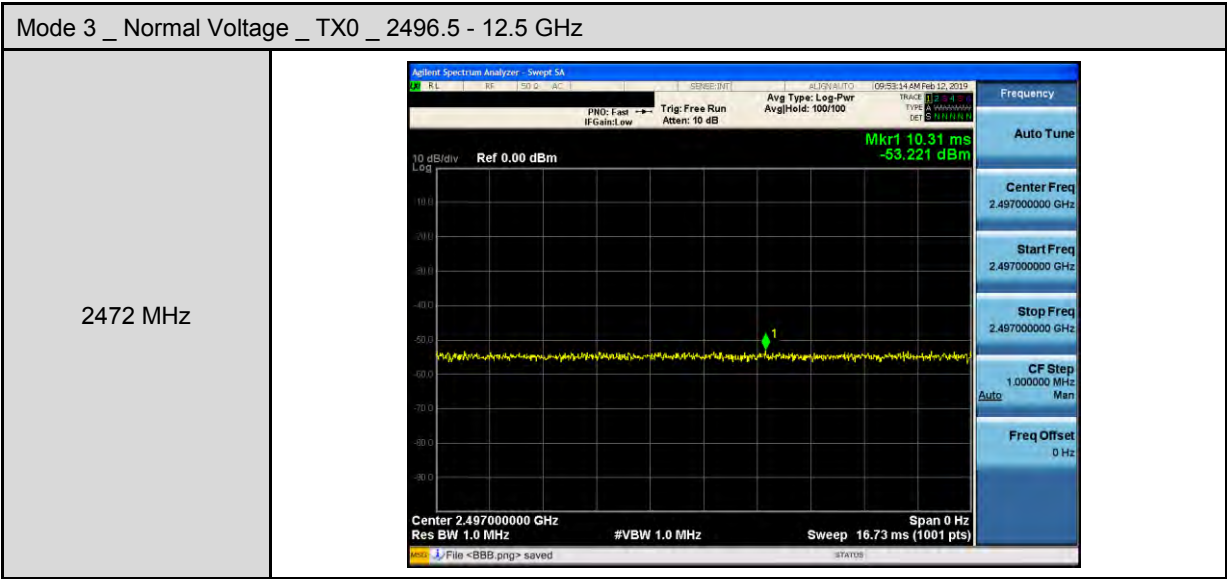


Mode 3 _ Normal Voltage _ TX0 _ 2483.5-2496.5 MHz	
2412 MHz	
2442 MHz	
2472 MHz	





Mode 3 _ Normal Voltage _ TX0 _ 2496.5 - 12.5 GHz	
2412 MHz	
2442 MHz	
2472 MHz	

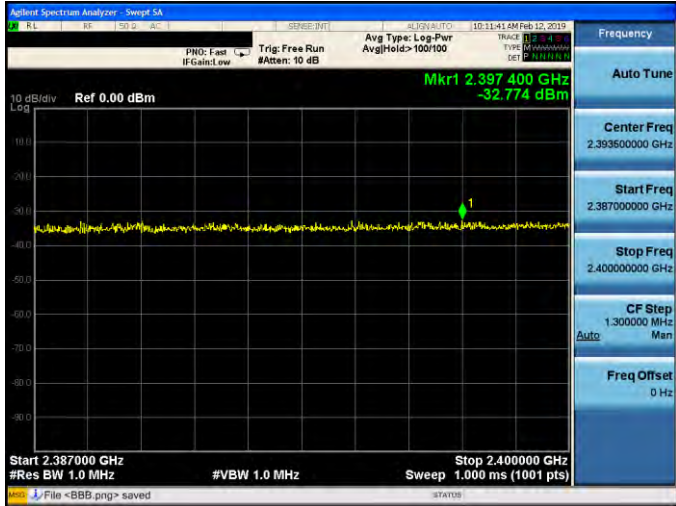
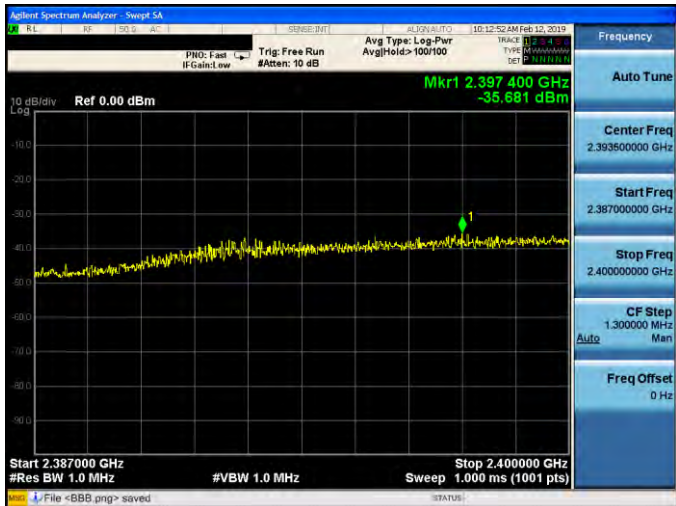
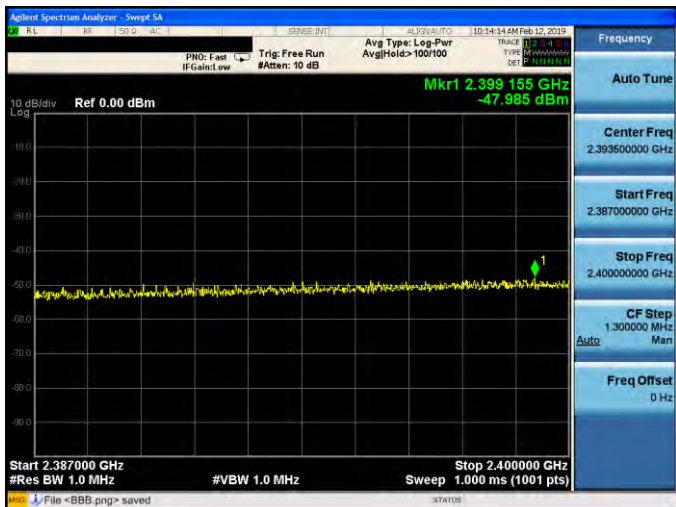




Mode 4 _ Normal Voltage _ TX0 _ Under 2387 MHz	
2422 MHz	
2422 MHz	
2442 MHz	



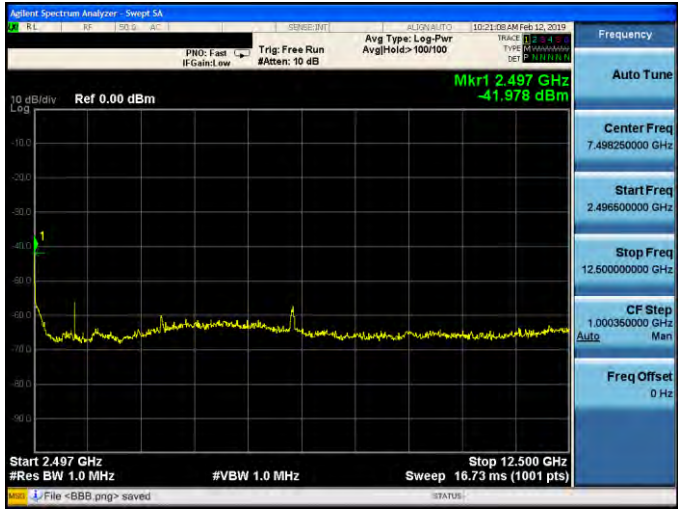


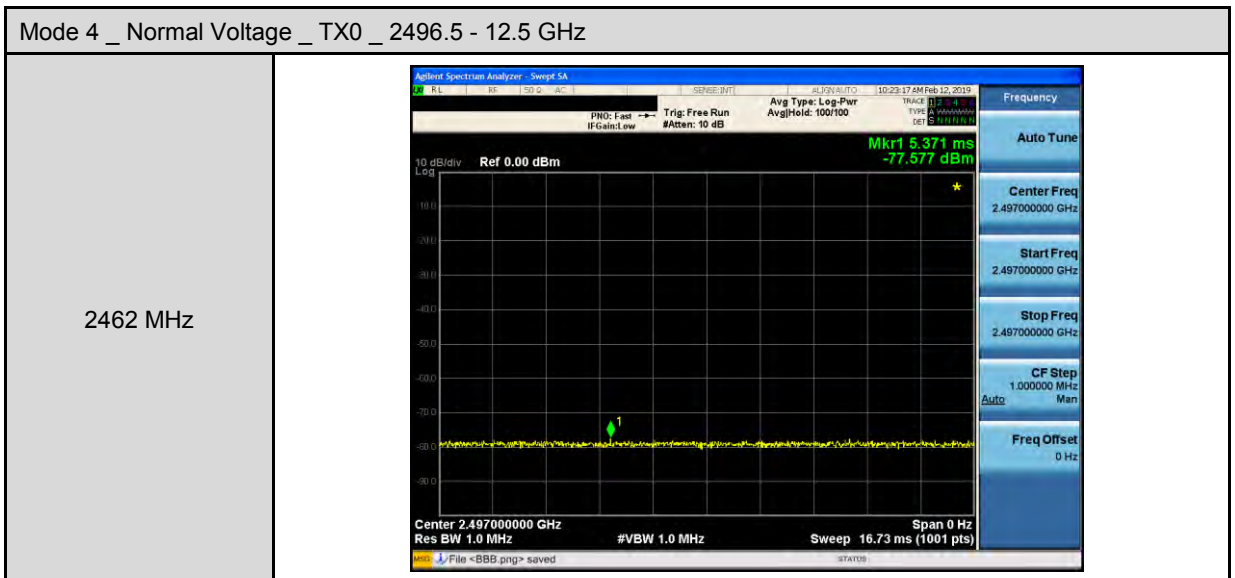
Mode 4 _ Normal Voltage _ TX0 _ 2387-2400 MHz	
2422 MHz	
2442 MHz	
2462 MHz	



Mode 4 _ Normal Voltage _ TX0 _ 2483.5-2496.5 MHz	
2422 MHz	
2442 MHz	
2462 MHz	



Mode 4 _ Normal Voltage _ TX0 _ 2496.5 - 12.5 GHz	
2422 MHz	
2442 MHz	
2462 MHz	



4.6. Secondly Emitted Radio Wave Strength Measurement

Test Mode		Mode 1					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2412	2442	2472	Result	Notes
Channel Number		Ch.	1	7	13		
RX0	Under 1 GHz	nW	0.027	0.022	0.019	PASS	----
		MHz	906.880	802.120	767.200	----	----
	1 - 12.5 GHz	nW	0.765	0.509	0.493	PASS	----
		MHz	2518.000	5462.000	5301.000	----	----
Limit		nW	Under 1 GHz ≤ 4				
			1 - 12.5 GHz ≤ 20				

Test Mode		Mode 2					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2412	2442	2472	Result	Notes
Channel Number		Ch.	1	7	13		
RX0	Under 1 GHz	nW	0.021	0.023	0.020	PASS	----
		MHz	794.360	943.740	866.140	----	----
	1 - 12.5 GHz	nW	0.927	0.492	0.572	PASS	----
		MHz	6187.000	5577.000	6072.000	----	----
Limit		nW	Under 1 GHz ≤ 4				
			1 - 12.5 GHz ≤ 20				



Test Mode		Mode 3					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2412	2442	2472	Result	Notes
Channel Number		Ch.	1	7	13		
RX0	Under 1 GHz	nW	0.020	0.020	0.021	PASS	----
		MHz	876.810	792.420	873.900	----	----
	1 - 12.5 GHz	nW	0.633	0.553	0.497	PASS	----
		MHz	5405.000	5301.000	5255.000	----	----
Limit		nW	Under 1 GHz ≤ 4				
			1 - 12.5 GHz ≤ 20				

Test Mode		Mode 4					
Test Voltage		5 Vdc	Normal Voltage				
Measurement Frequency		MHz	2422	2442	2462	Result	Notes
Channel Number		Ch.	3	7	11		
RX0	Under 1 GHz	nW	0.026	0.025	0.022	PASS	----
		MHz	149.310	902.030	840.920	----	----
	1 - 12.5 GHz	nW	0.647	0.639	0.536	PASS	----
		MHz	6440.000	5991.000	6175.000	----	----
Limit		nW	Under 1 GHz ≤ 4				
			1 - 12.5 GHz ≤ 20				



■ Test Graphs

Mode 1 _ Normal Voltage _ RX0 _ Under 1 GHz	
2412 MHz	
2442 MHz	
2472 MHz	



Mode 1 _ Normal Voltage _ RX0 _ 1 - 12.5 GHz	
2412 MHz	
2442 MHz	
2472 MHz	



Mode 2 _ Normal Voltage _ RX0 _ Under 1 GHz	
2412 MHz	
2442 MHz	
2472 MHz	



Mode 2 _ Normal Voltage _ RX0 _ 1 - 12.5 GHz	
2412 MHz	
2442 MHz	
2472 MHz	

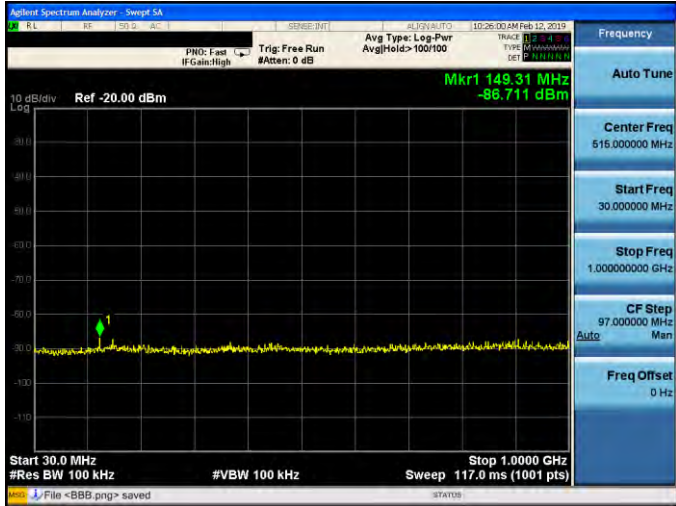
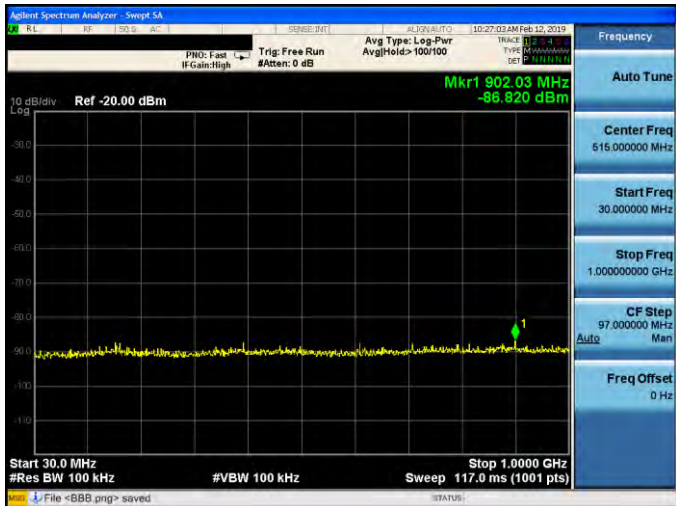
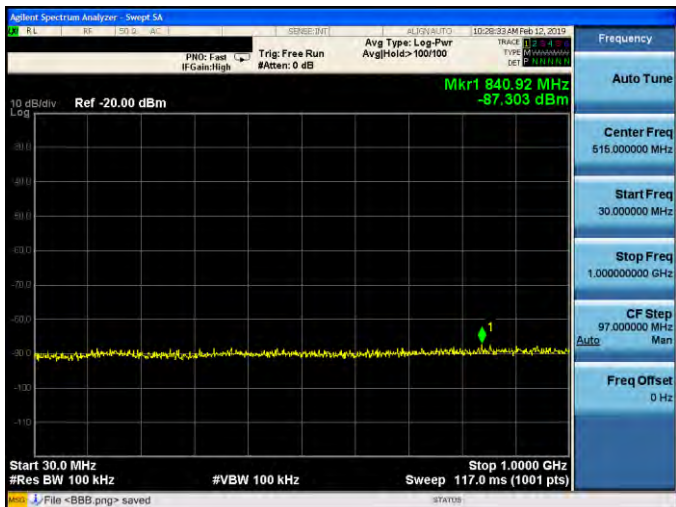


Mode 3 _ Normal Voltage _ RX0 _ Under 1 GHz	
2412 MHz	
2442 MHz	
2472 MHz	



Mode 3 _ Normal Voltage _ RX0 _ 1 - 12.5 GHz	
2412 MHz	
2442 MHz	
2472 MHz	



Mode 4 _ Normal Voltage _ RX0 _ Under 1 GHz	
2422 MHz	
2442 MHz	
2462 MHz	



Mode 4 _ Normal Voltage _ RX0 _ 1 - 12.5 GHz	
2422 MHz	
2442 MHz	
2462 MHz	



4.7. Carrier Sense Measurement

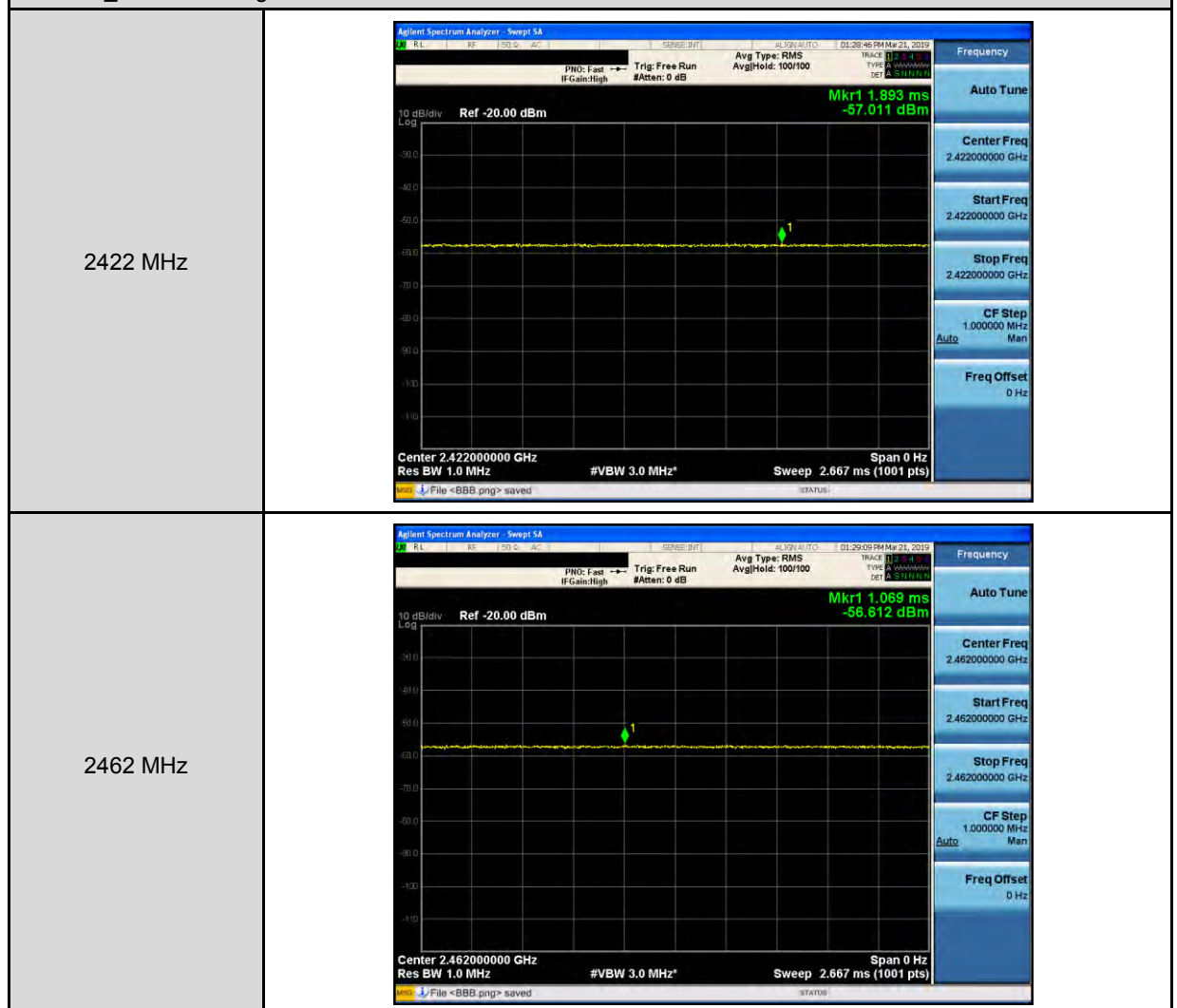
Test Mode	Mode 4					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2422	2442	2462	Result	Notes
Channel Number	Ch.	3	7	11		
-----		GOOD	GOOD	GOOD	-----	-----

Master

SG Power

■ Test Graphs

Mode 4 _ Normal Voltage



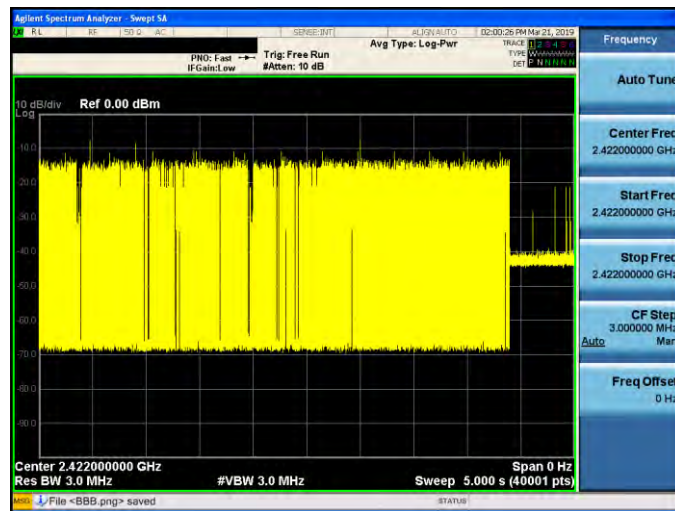


Carrier Sense

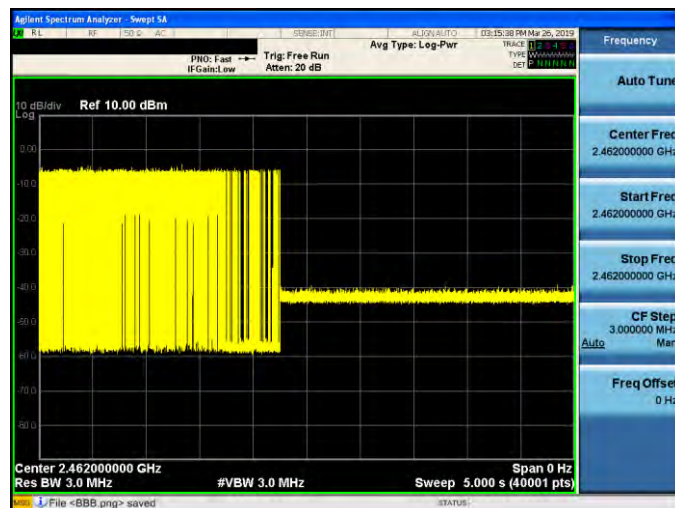
■ Test Graphs

Mode 4 _ Normal Voltage

2422 MHz



2462 MHz





Client

SG Power

■ Test Graphs

Mode 4 _ Normal Voltage

2422 MHz



2462 MHz



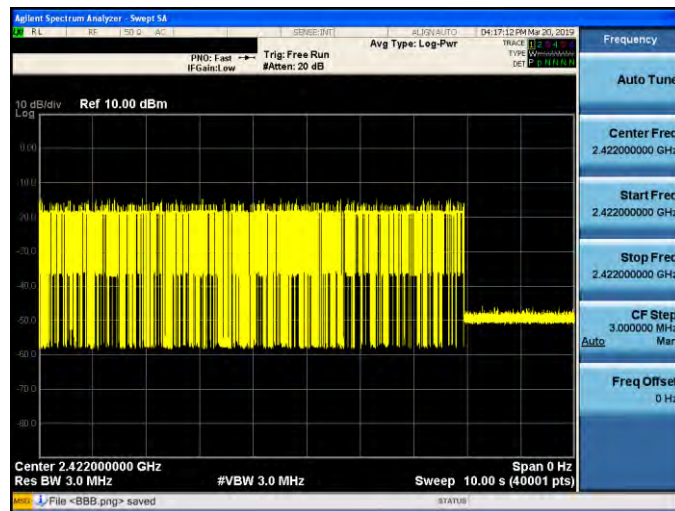


Carrier Sense

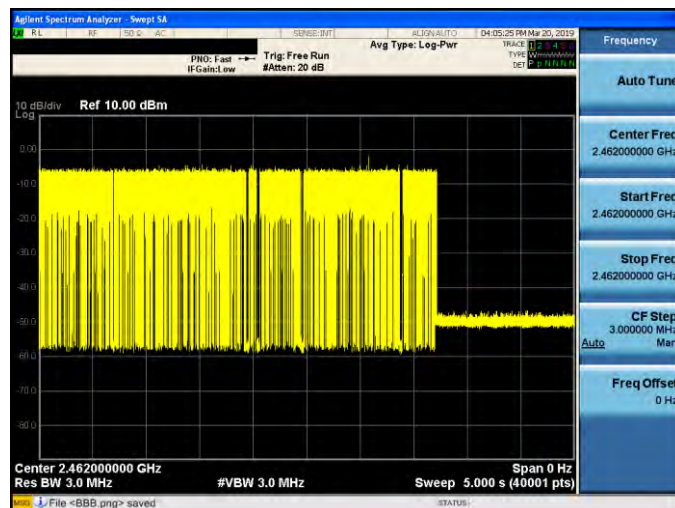
■ Test Graphs

Mode 4 _ Normal Voltage

2422 MHz



2462 MHz



4.8. Radio Interference Prevention Capability Measurement

Test Mode	Mode 1					
Test Voltage	5 Vdc	Normal Voltage				
Measurement Frequency	MHz	2412	2442	2472	Result	Notes
Channel Number	Ch.	1	7	13		
Identification code	bits	48	48	48	PASS	-----
Limit	bits	≥ 48				

■ Test Graphs

Description: MAC Address



4.9. Antenna List

Antenna			Gain Specification			Notes (Cable or Others)
No	Type	Model Name	Max Gain (dBi)	Attenuation (dB)	Net Gain (dBi)	
1	Dipole Antenna	AEM6P-100000	2	0	0	Horizontal + Vertical
2	Dipole Antenna	AEM6P-100001	2	0	0	Horizontal + Vertical
3	Multilayer ceramic Antenna	AEEE0-000000	2.13	0	0	Vertical
4	Chip Antenna	AEEE0-000001	4	0	0	Horizontal
5	Chip Antenna	AEEE0-000002	4	0	0	Horizontal
6	PIFA Antenna	AEP6P-100006X	3	0	0	Horizontal + Vertical
7	PIFA Antenna	AEP6P-100008X	3	0	0	Horizontal + Vertical
8	PCB Trace Antenna	RSIA7	0.712	0	0	Horizontal
9	Dipole Antenna	GW.71.5153	Straight: 3.3dBi / Bent: 3.8dBi	0	0	Horizontal + Vertical

4.10. Construction Protection Confirmation Method

■ Confirmation Method

Protected Method	Conformal shielding technology
Description	This RF chip is sealed with conformal shielding technology. If end user intends to open it, this product will be damaged and no longer be used.
Photo	
	