

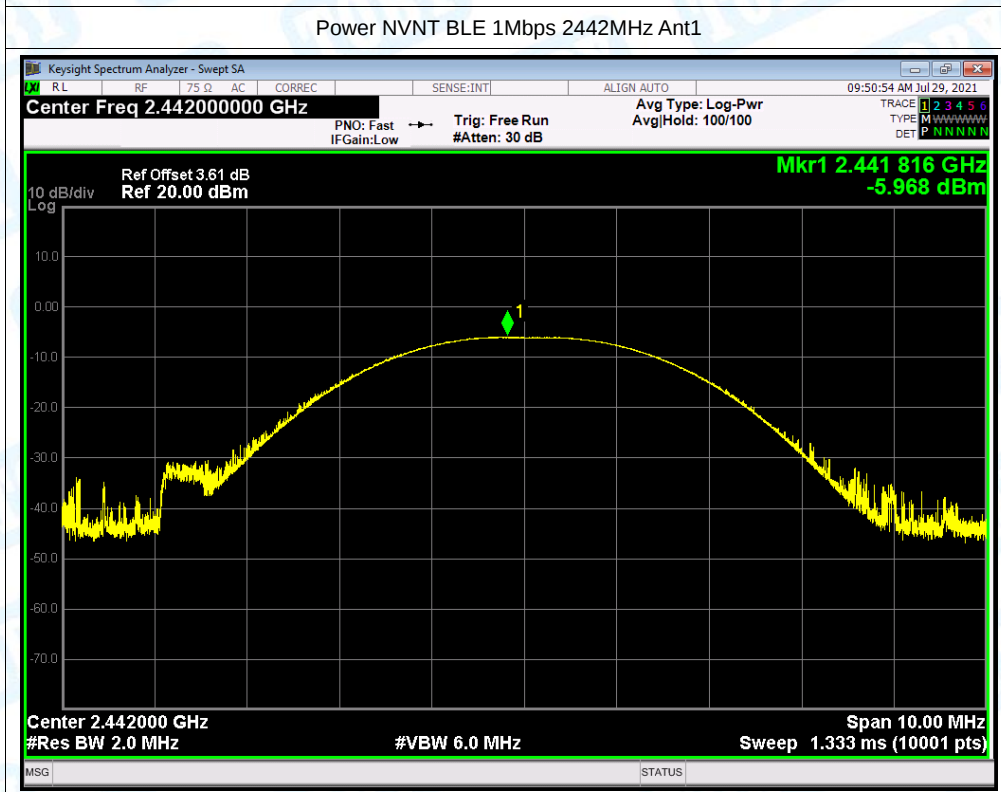
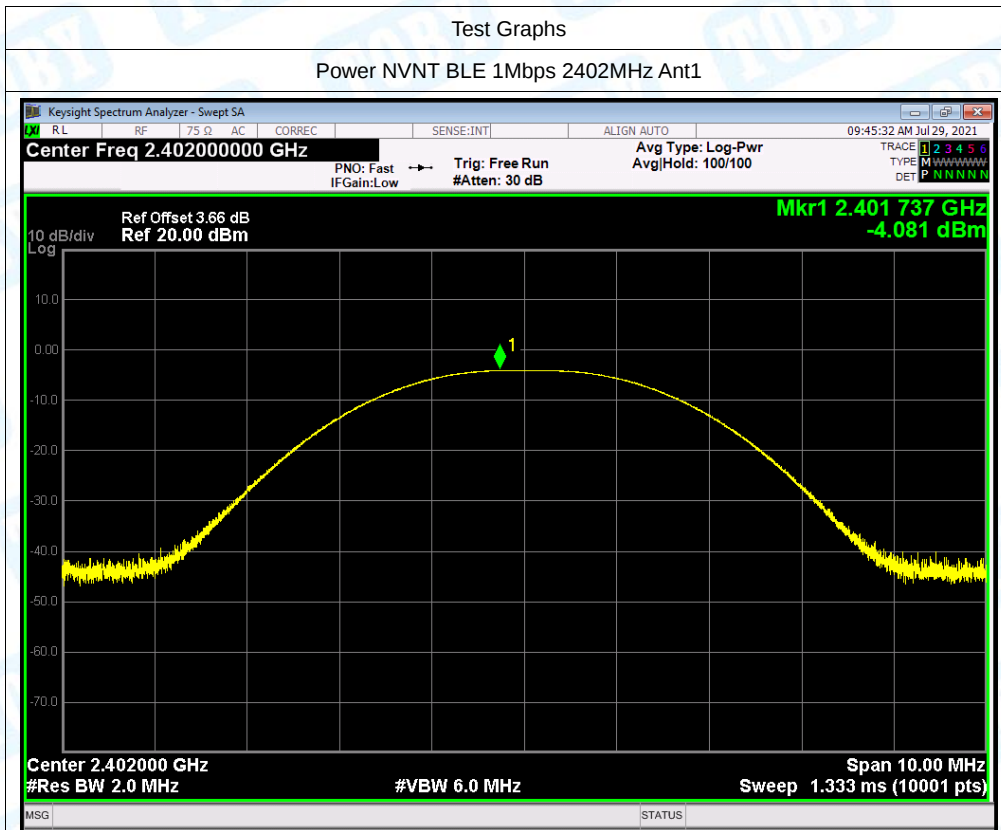
RF Test Data for Bluetooth LE

(Conducted Measurements)

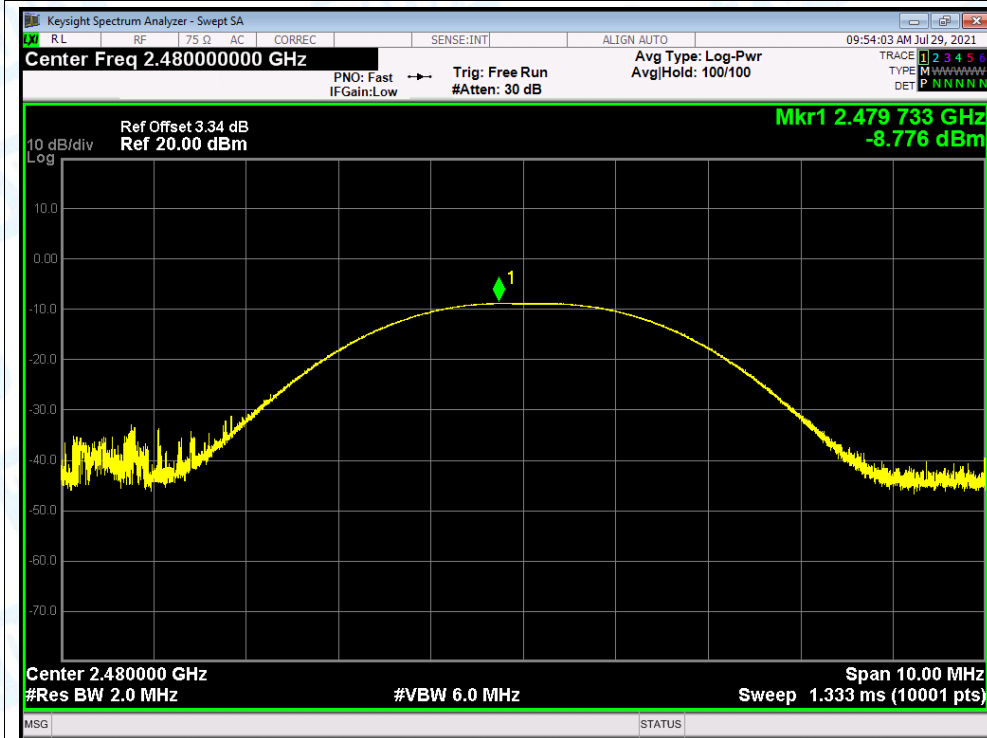
General Description of EUT	
Product Name:	SleepUp
Test Model:	SleepUp
Sample ID:	20210609-17-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	HeJingchang
Note: For a more detailed features description, please refer to the report TB-RF182747.	

1.Maximum Conducted Output Power

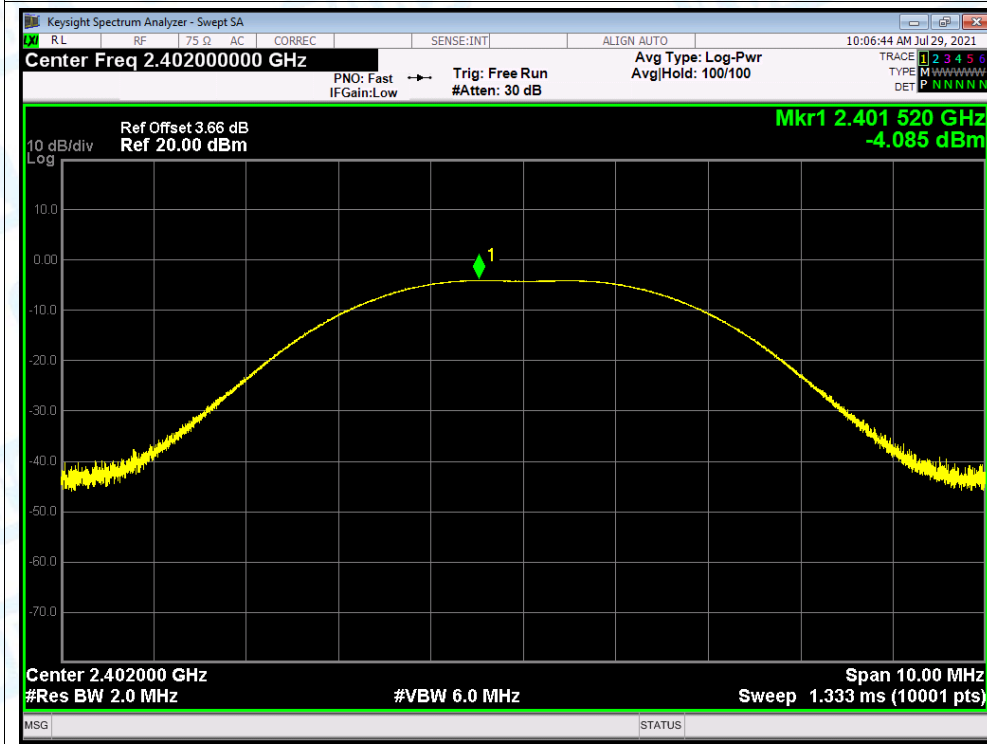
Condition	Mode	Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	-4.081	30	Pass
NVNT	BLE 1Mbps	2442	-5.968	30	Pass
NVNT	BLE 1Mbps	2480	-8.776	30	Pass
NVNT	BLE 2Mbps	2402	-4.085	30	Pass
NVNT	BLE 2Mbps	2442	-6.082	30	Pass
NVNT	BLE 2Mbps	2480	-8.561	30	Pass



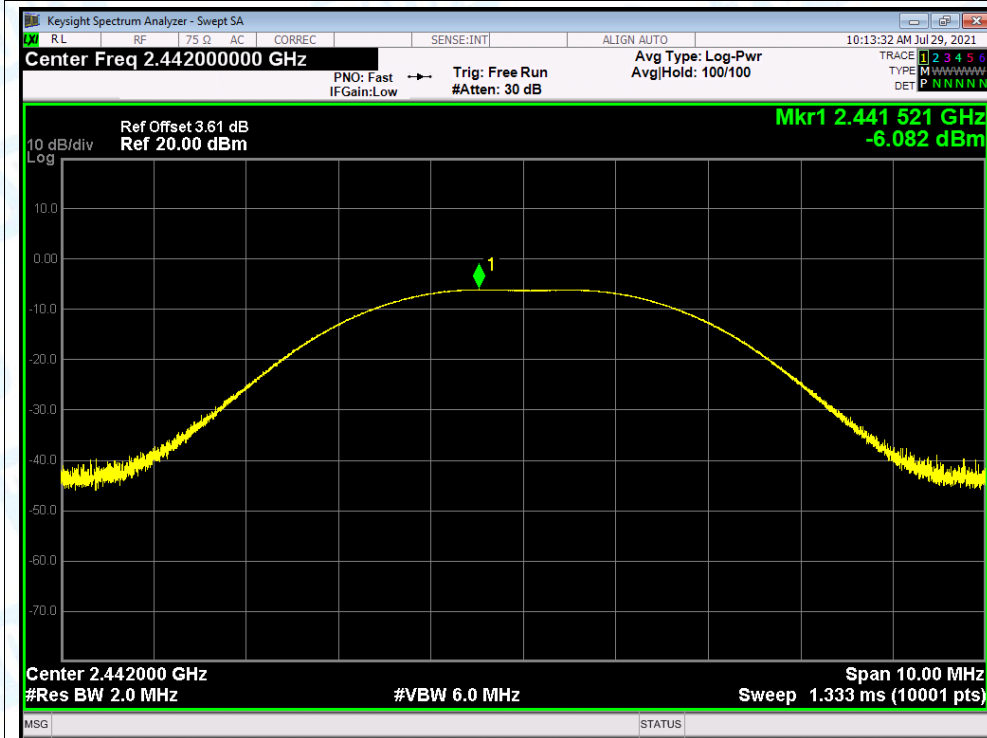
Power NVNT BLE 1Mbps 2480MHz Ant1



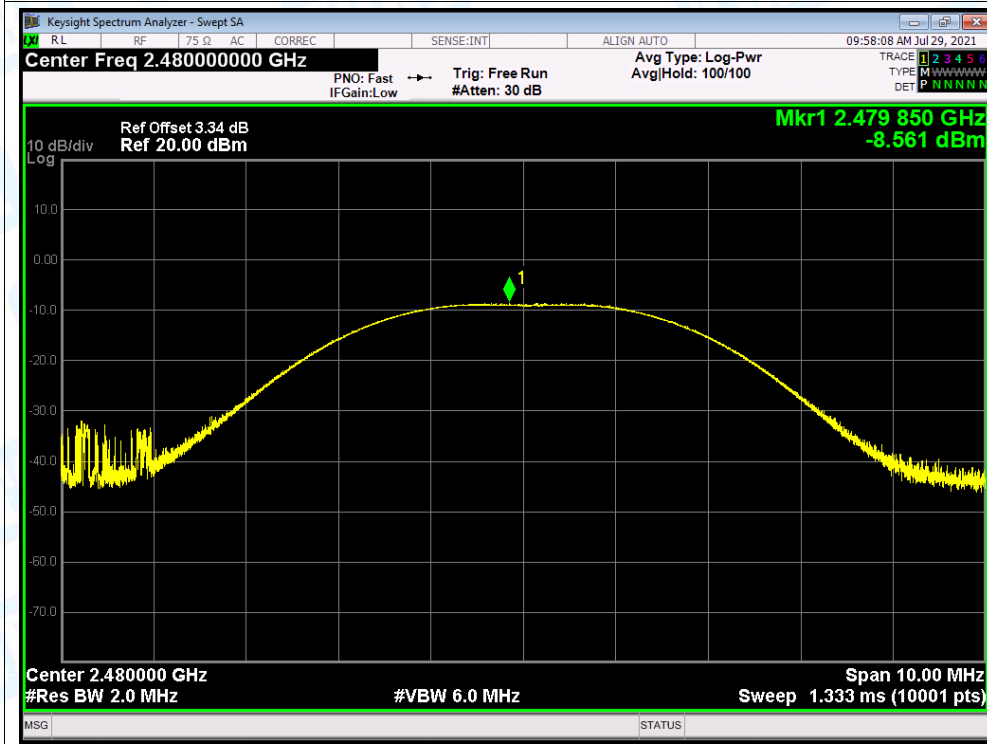
Power NVNT BLE 2Mbps 2402MHz Ant1



Power NVNT BLE 2Mbps 2442MHz Ant1



Power NVNT BLE 2Mbps 2480MHz Ant1

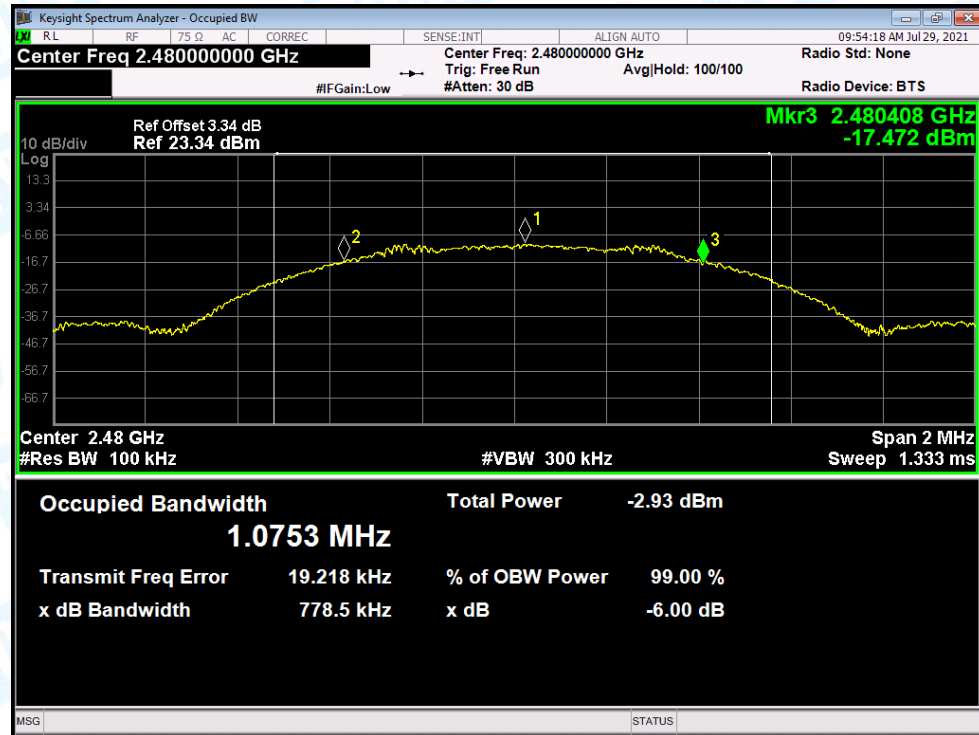


2.-6dB Bandwidth

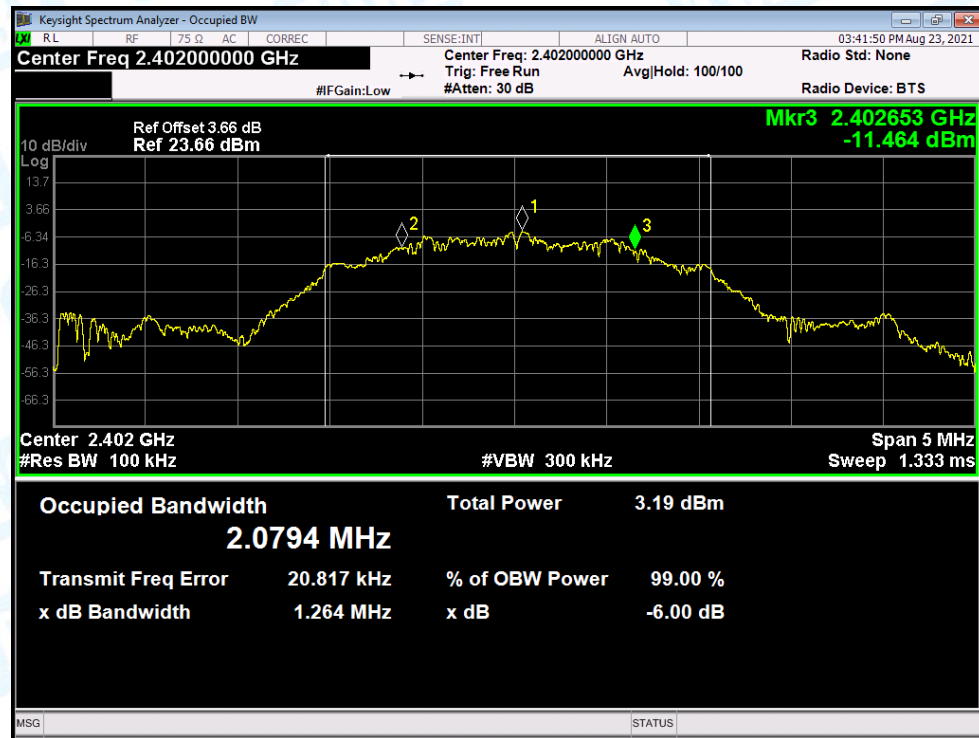
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	0.769	0.5	Pass
NVNT	BLE 1Mbps	2442	0.763	0.5	Pass
NVNT	BLE 1Mbps	2480	0.779	0.5	Pass
NVNT	BLE 2Mbps	2402	1.264	0.5	Pass
NVNT	BLE 2Mbps	2442	1.112	0.5	Pass
NVNT	BLE 2Mbps	2480	1.142	0.5	Pass



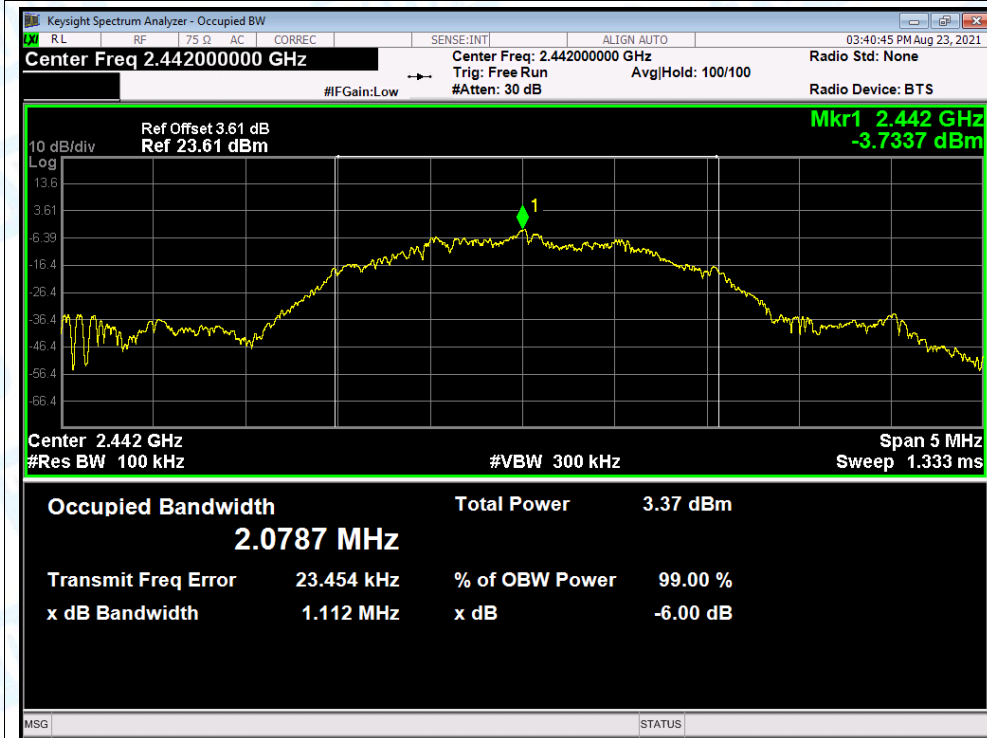
-6dB Bandwidth NVNT BLE 1Mbps 2480MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2442MHz Ant1

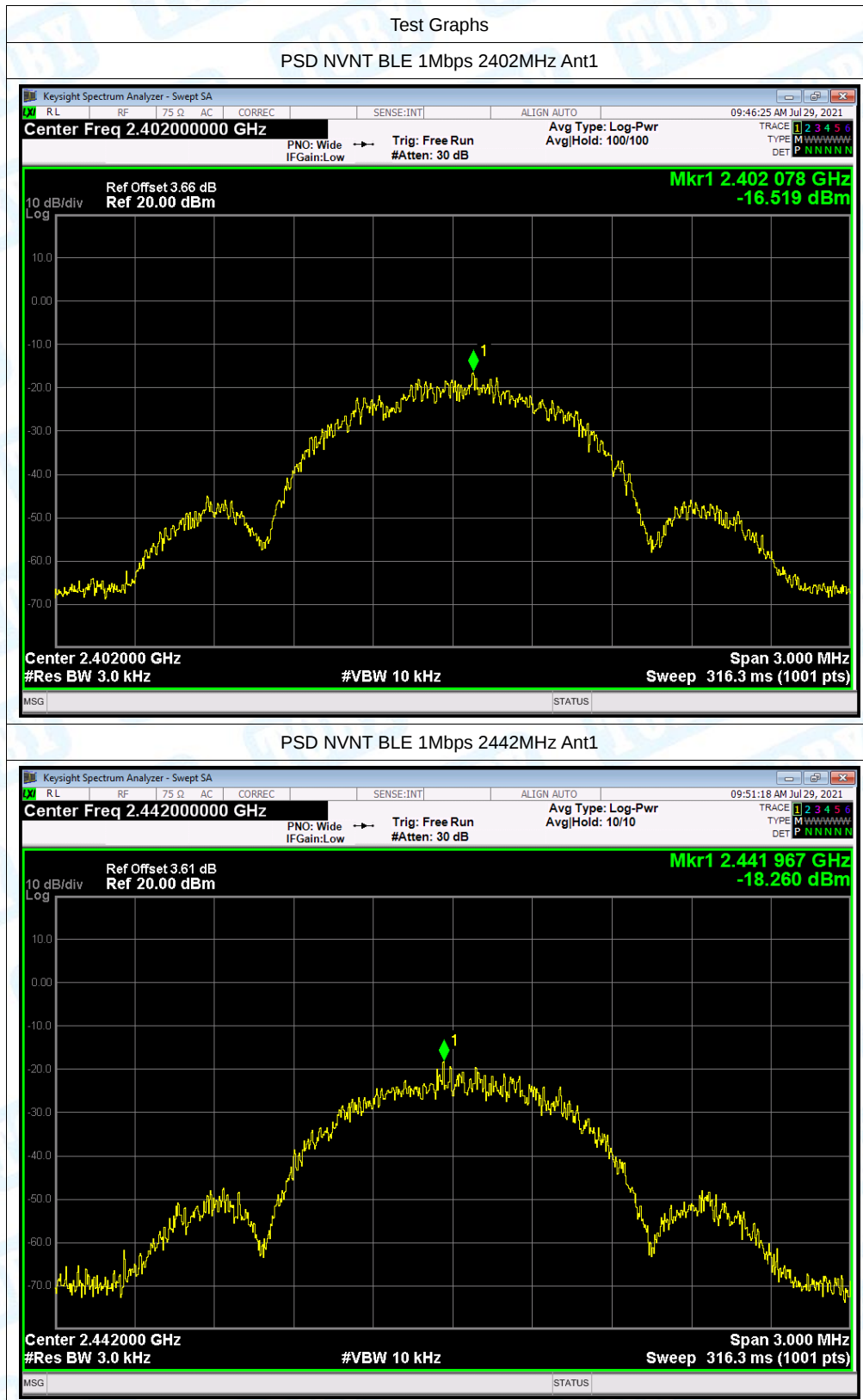


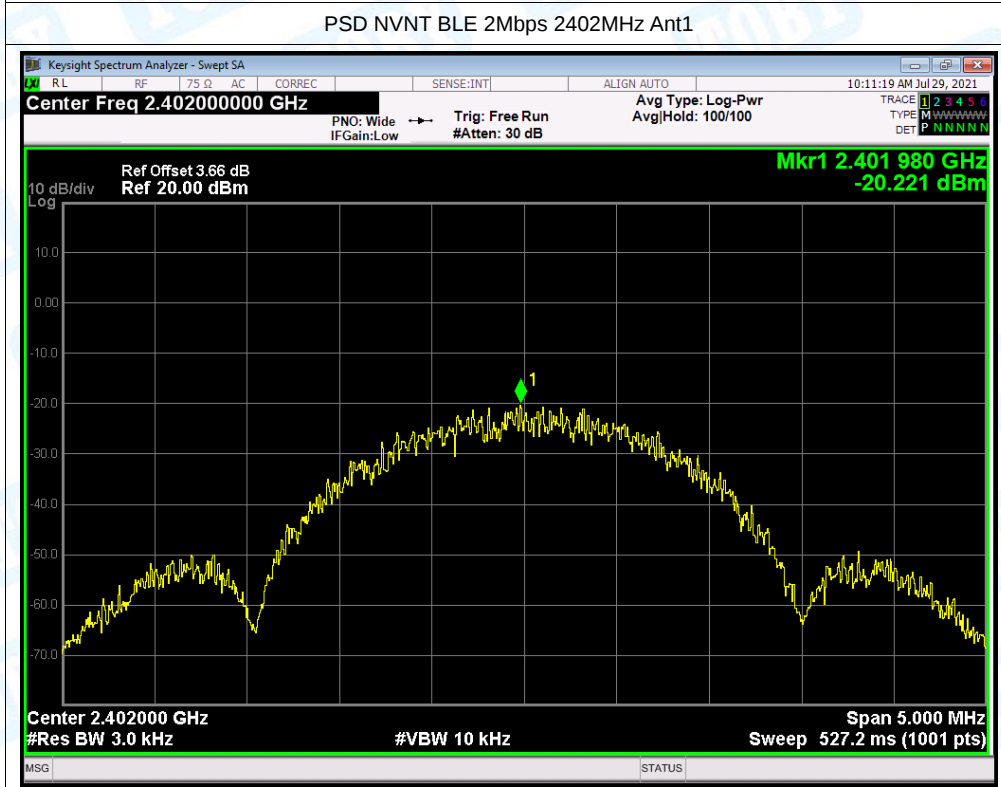
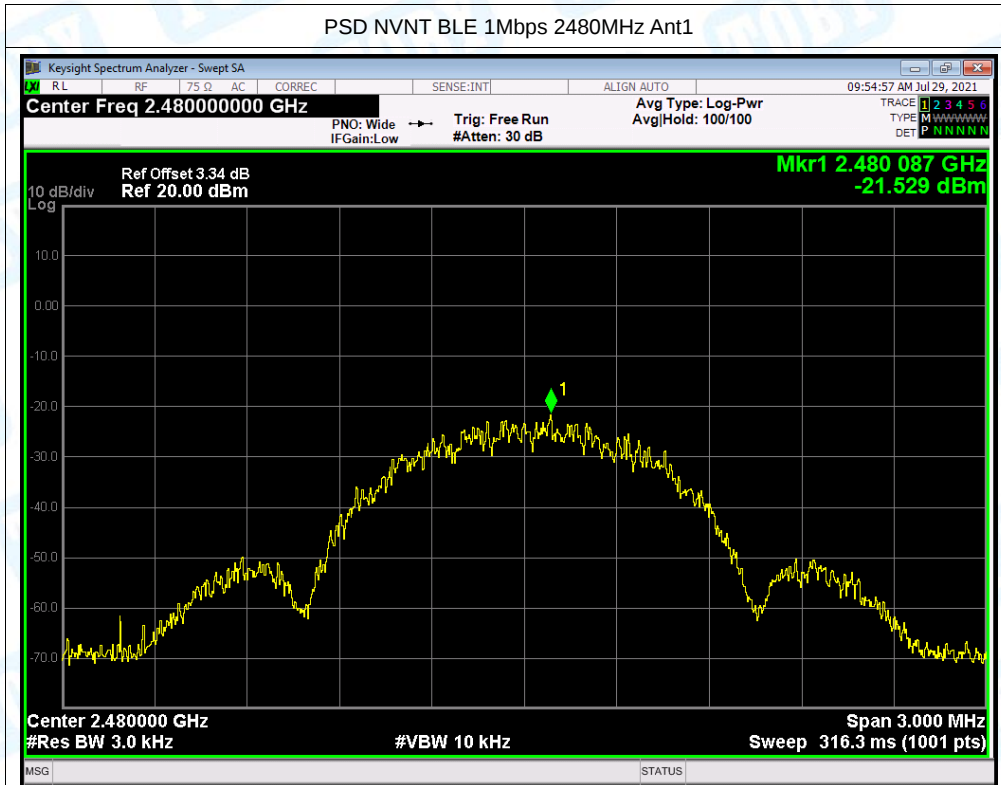
-6dB Bandwidth NVNT BLE 2Mbps 2480MHz Ant1

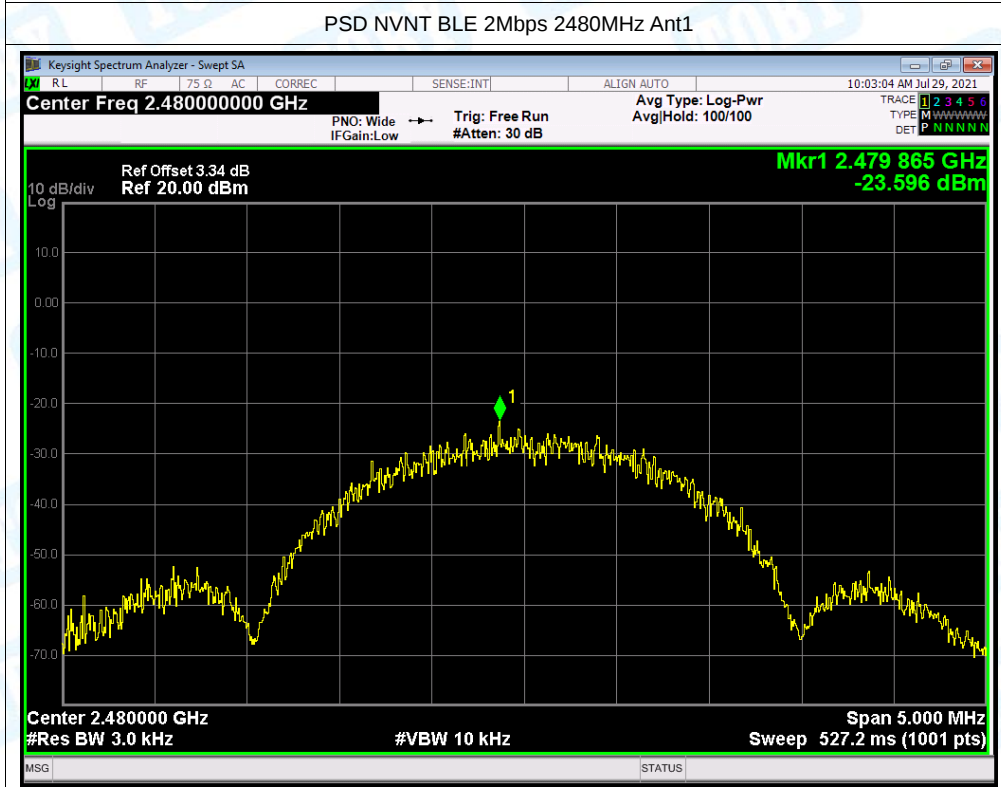
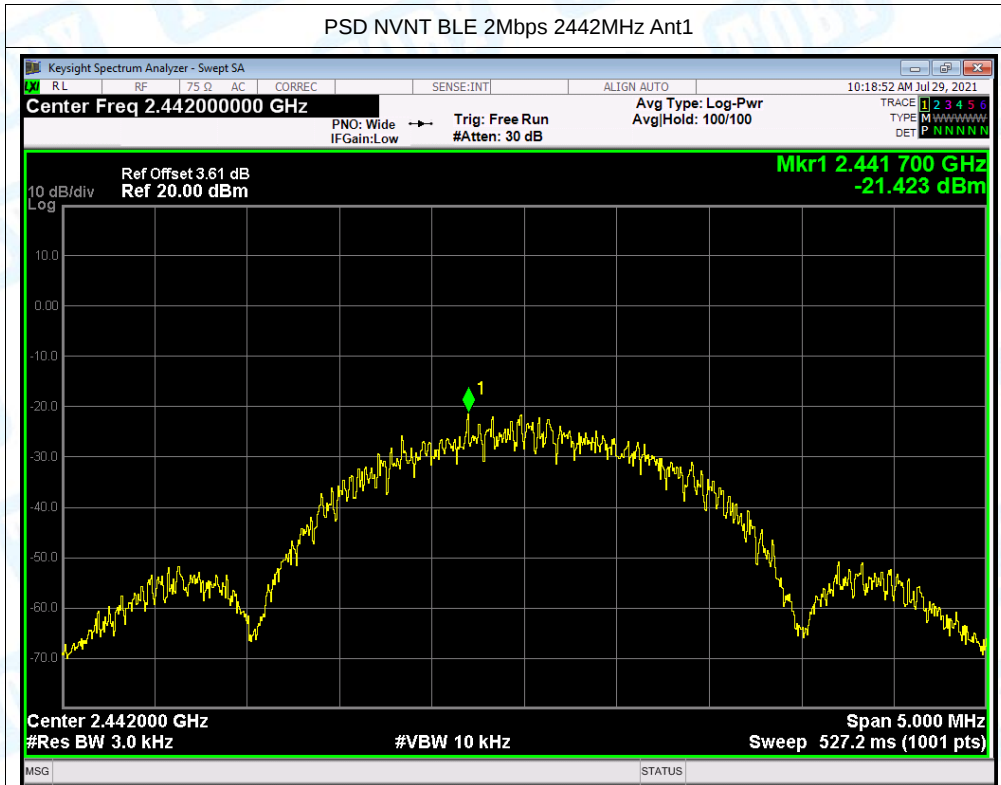


3.Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	-16.519	8	Pass
NVNT	BLE 1Mbps	2442	-18.26	8	Pass
NVNT	BLE 1Mbps	2480	-21.529	8	Pass
NVNT	BLE 2Mbps	2402	-20.221	8	Pass
NVNT	BLE 2Mbps	2442	-21.423	8	Pass
NVNT	BLE 2Mbps	2480	-23.596	8	Pass

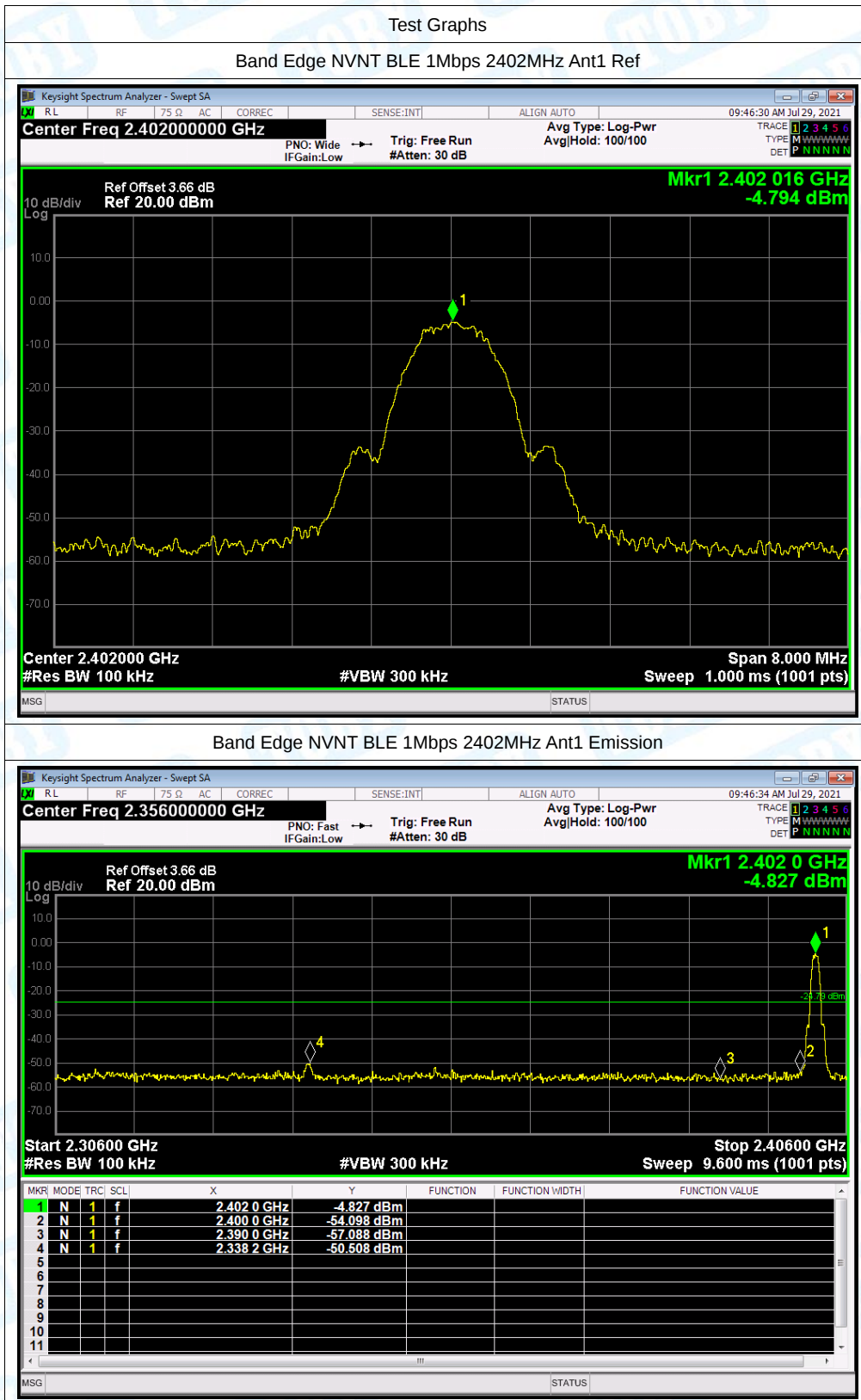




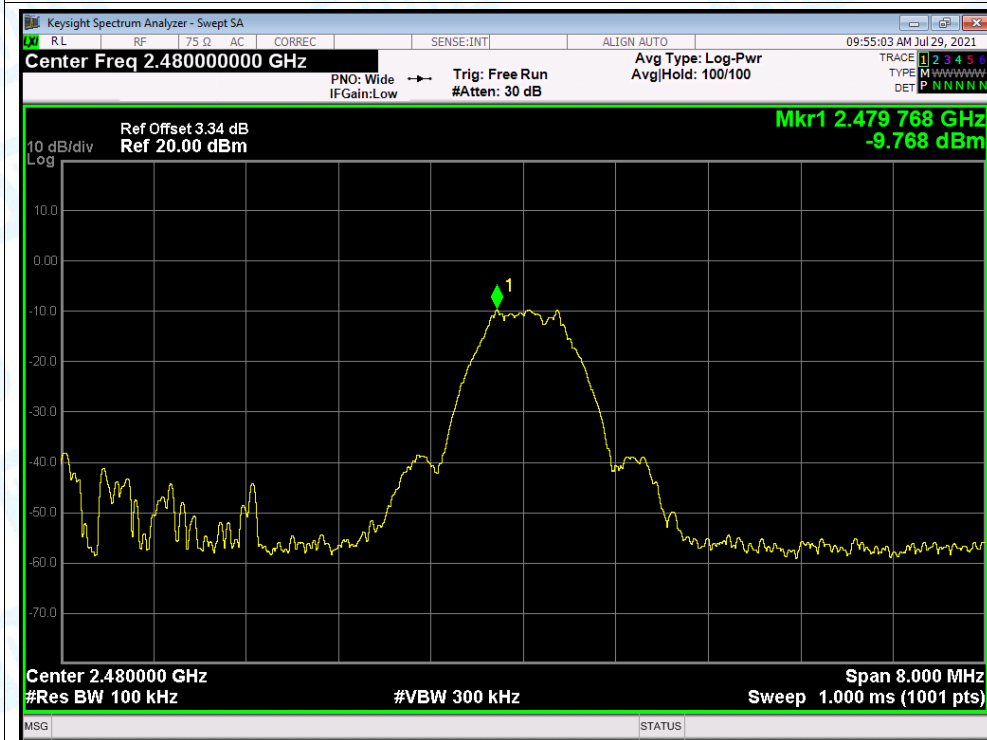


4.Band Edge

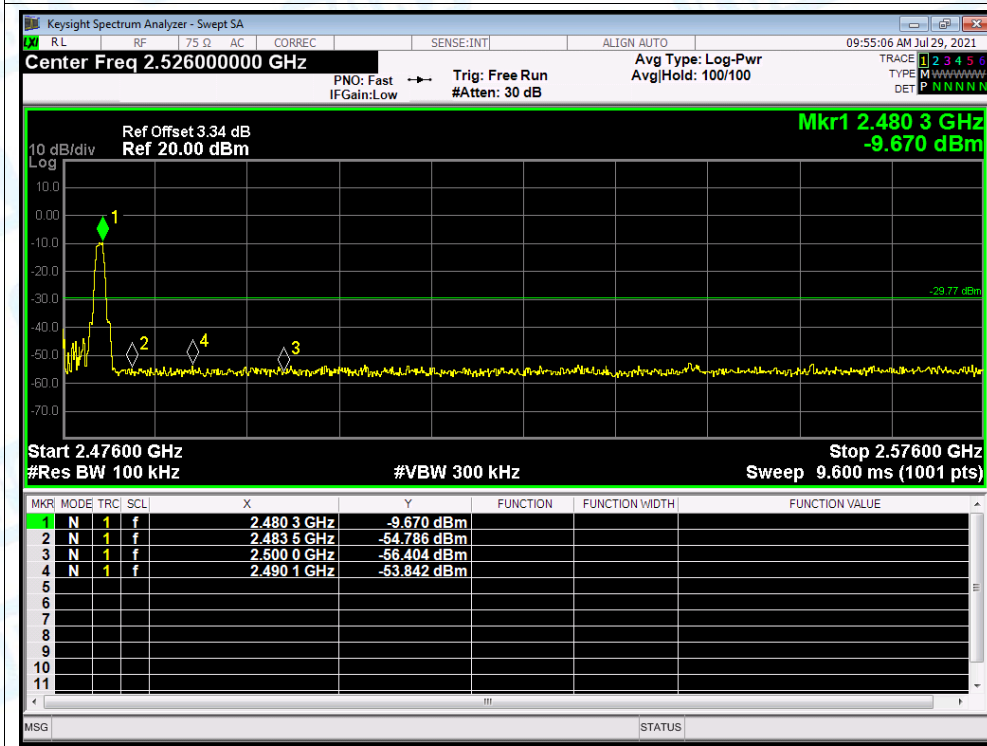
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	-45.71	-20	Pass
NVNT	BLE 1Mbps	2480	-44.07	-20	Pass
NVNT	BLE 2Mbps	2402	-45.97	-20	Pass
NVNT	BLE 2Mbps	2480	-42.78	-20	Pass



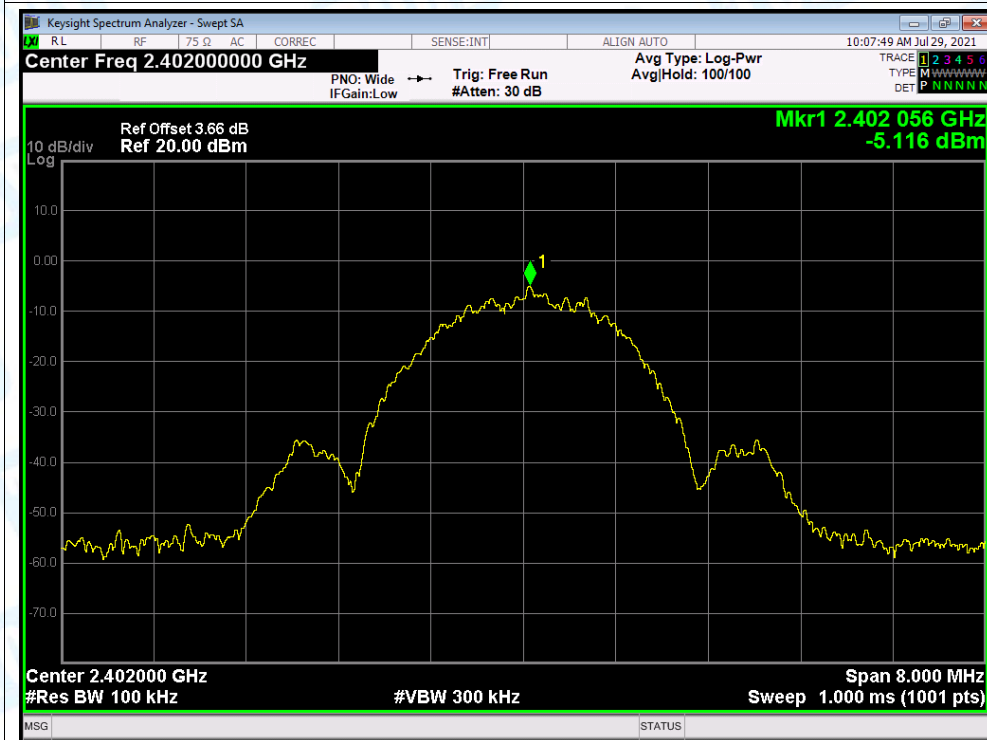
Band Edge NVNT BLE 1Mbps 2480MHz Ant1 Ref



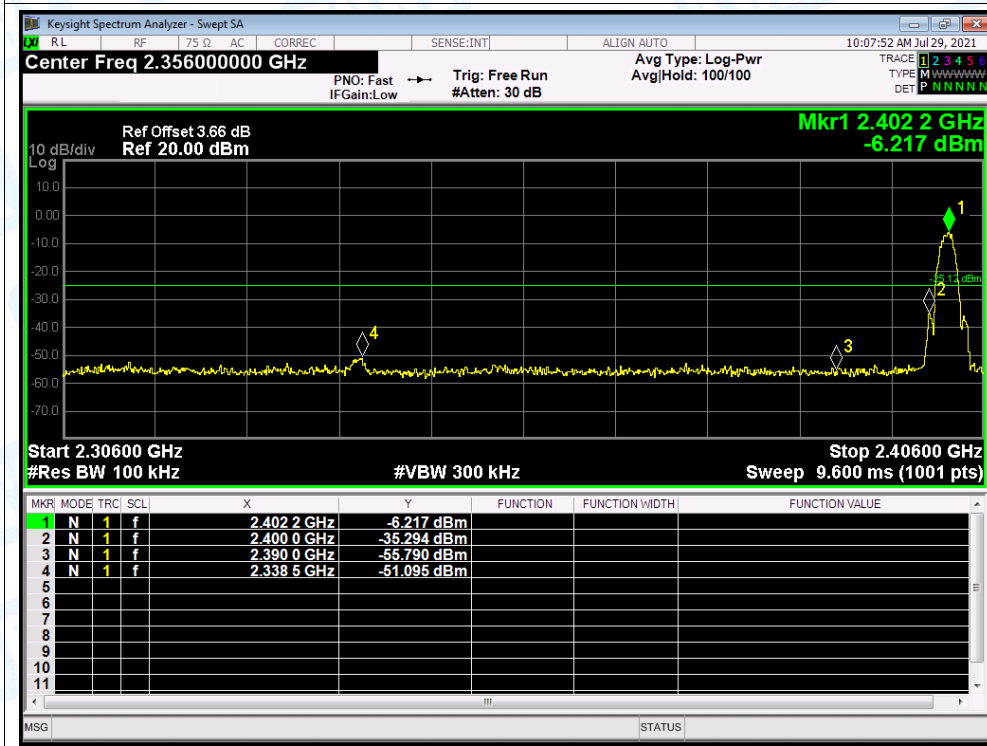
Band Edge NVNT BLE 1Mbps 2480MHz Ant1 Emission



Band Edge NVNT BLE 2Mbps 2402MHz Ant1 Ref



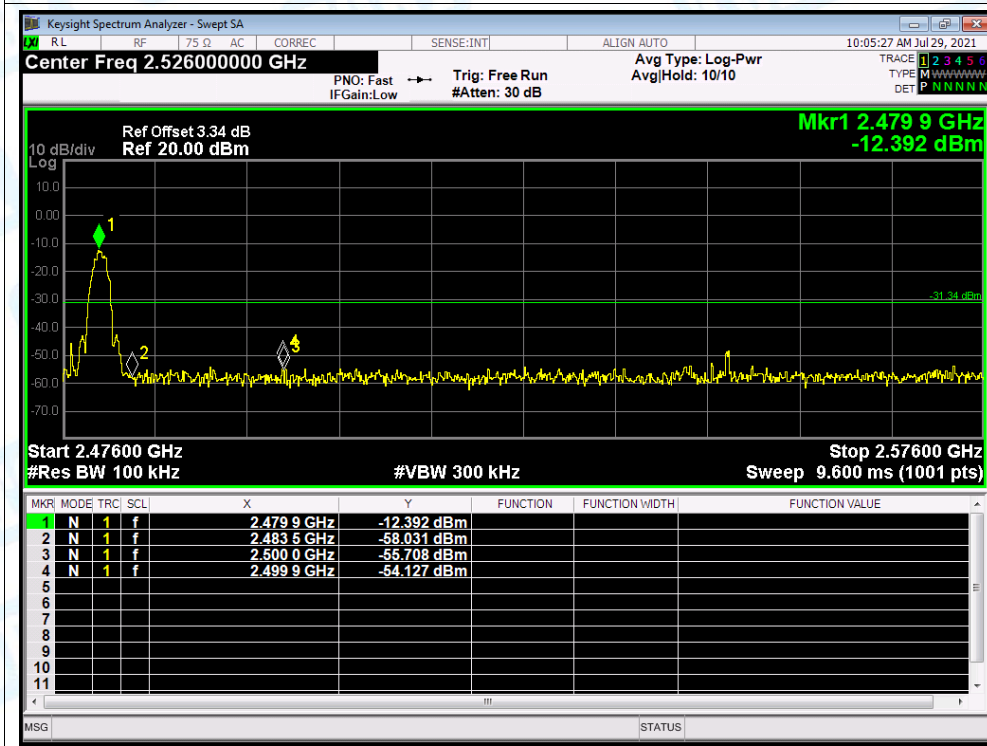
Band Edge NVNT BLE 2Mbps 2402MHz Ant1 Emission



Band Edge NVNT BLE 2Mbps 2480MHz Ant1 Ref

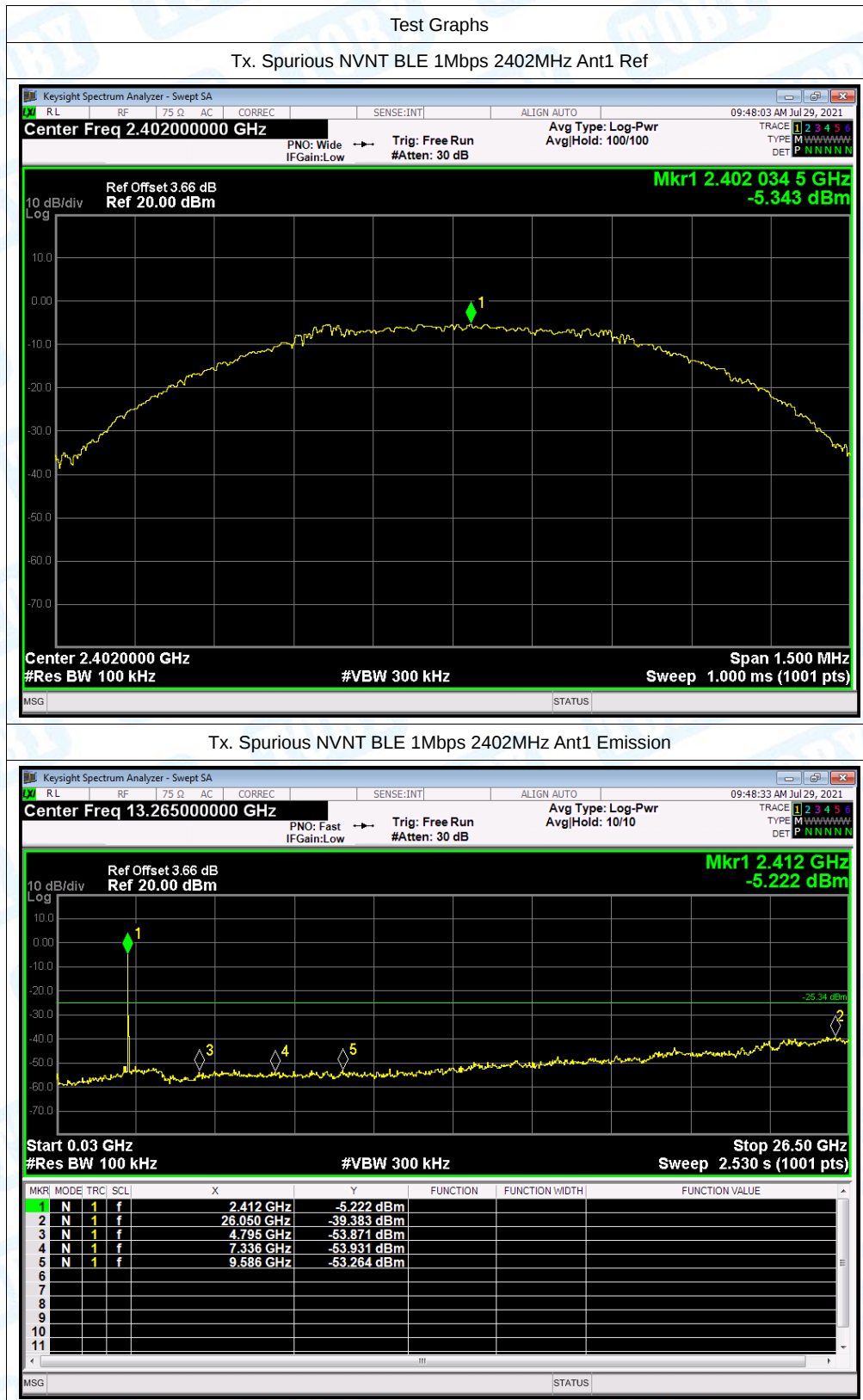


Band Edge NVNT BLE 2Mbps 2480MHz Ant1 Emission



5. Conducted RF Spurious Emission

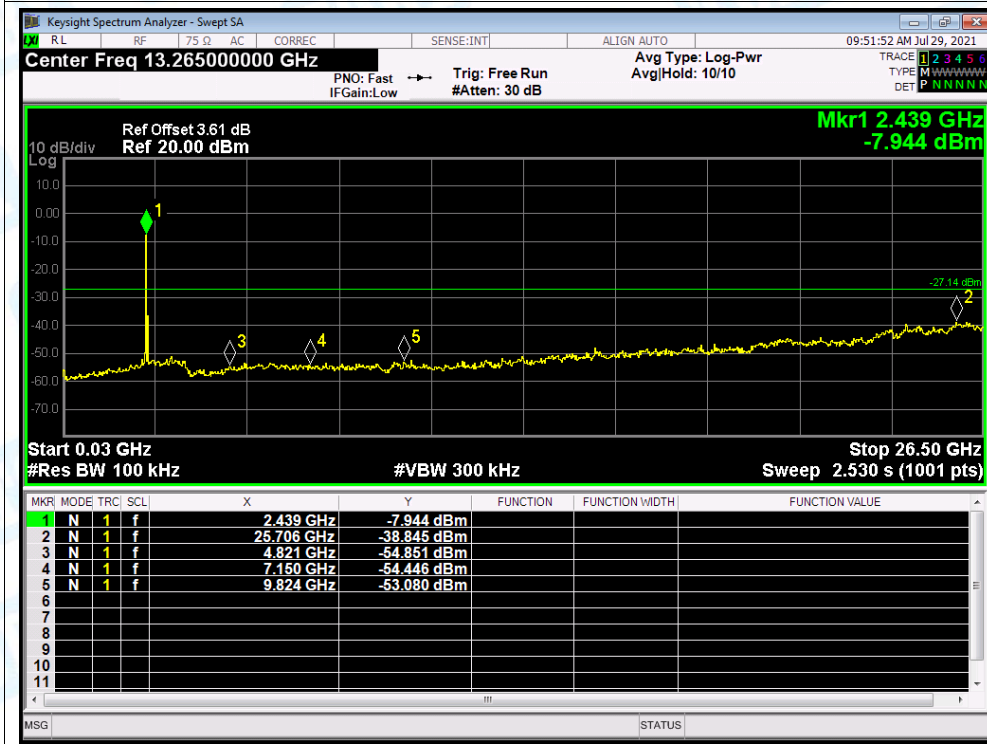
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	-34.04	-20	Pass
NVNT	BLE 1Mbps	2442	-31.7	-20	Pass
NVNT	BLE 1Mbps	2480	-29.16	-20	Pass
NVNT	BLE 2Mbps	2402	-33.63	-20	Pass
NVNT	BLE 2Mbps	2442	-25.12	-20	Pass
NVNT	BLE 2Mbps	2480	-28.38	-20	Pass



Tx. Spurious NVNT BLE 1Mbps 2442MHz Ant1 Ref



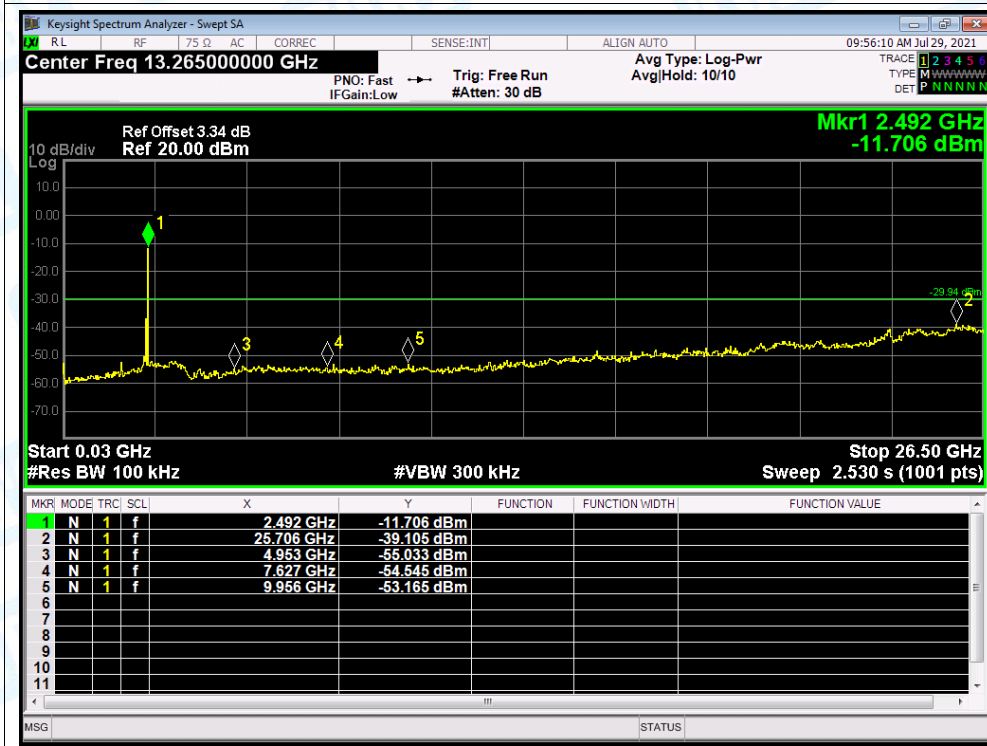
Tx. Spurious NVNT BLE 1Mbps 2442MHz Ant1 Emission



Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Ref



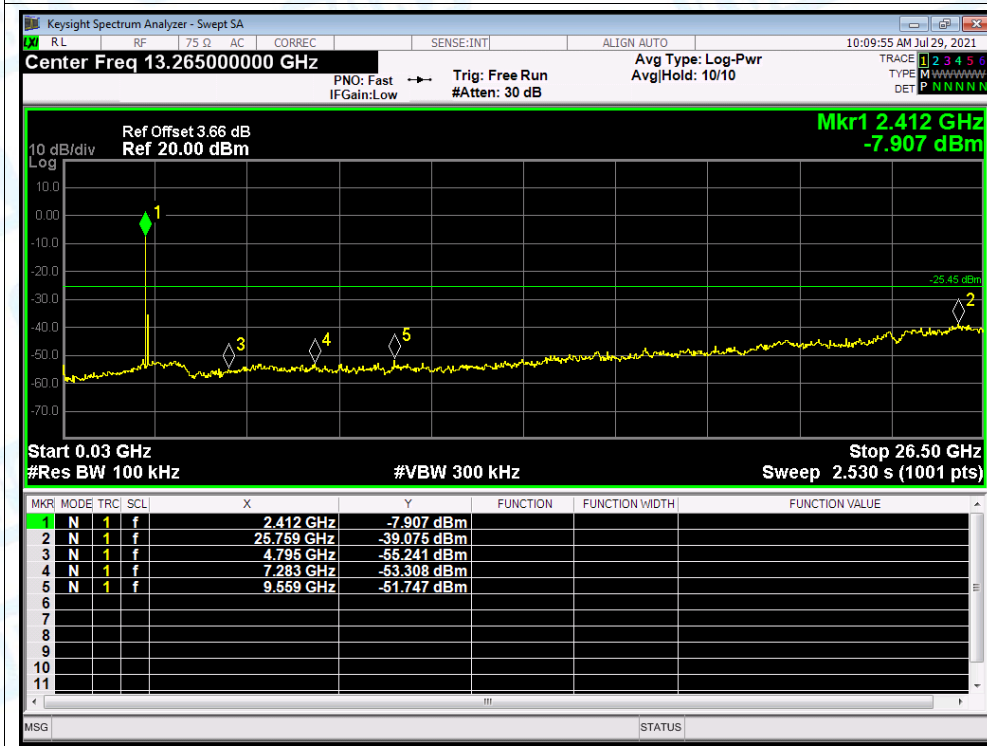
Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Emission



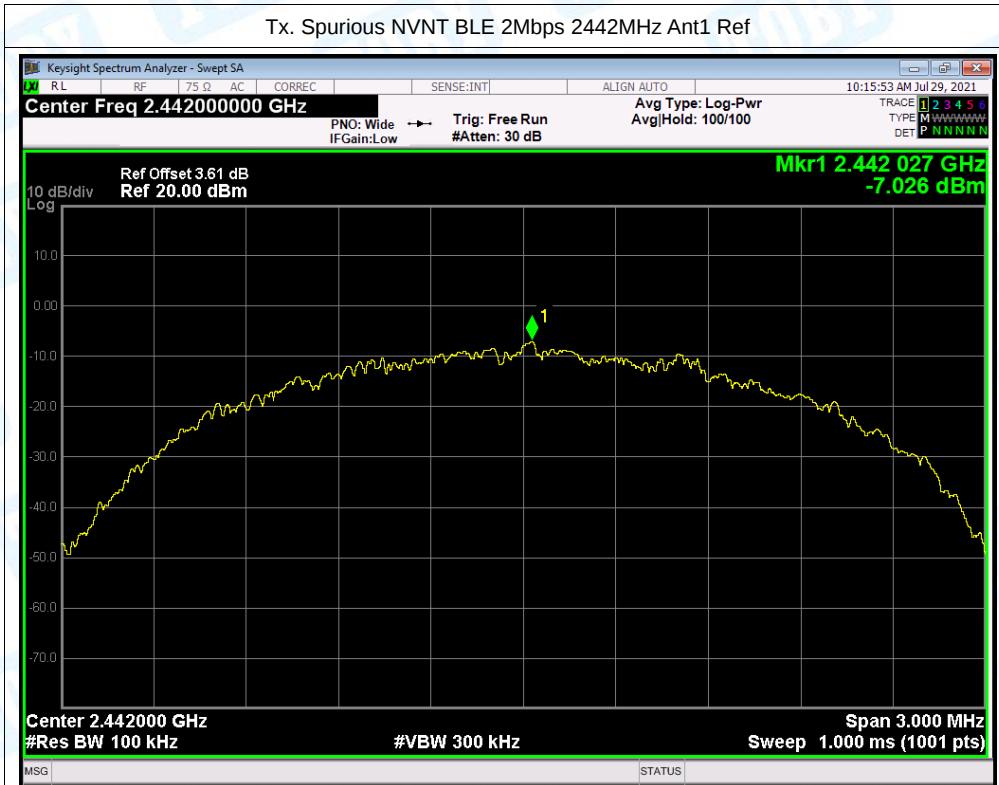
Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Ref



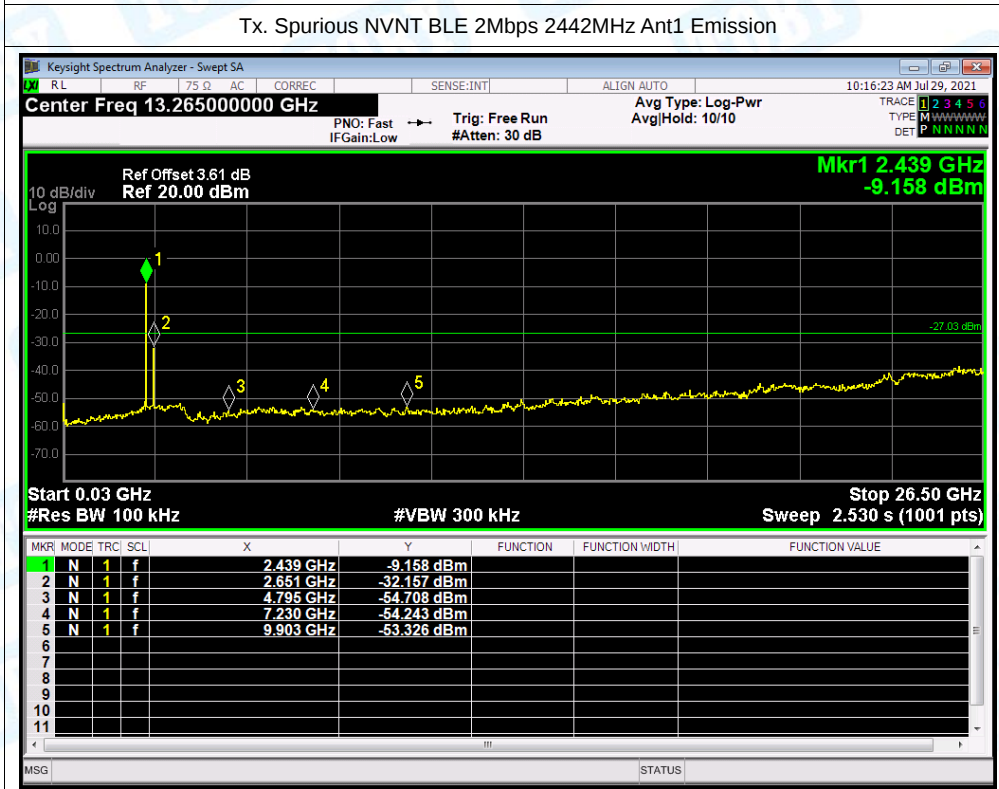
Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Emission



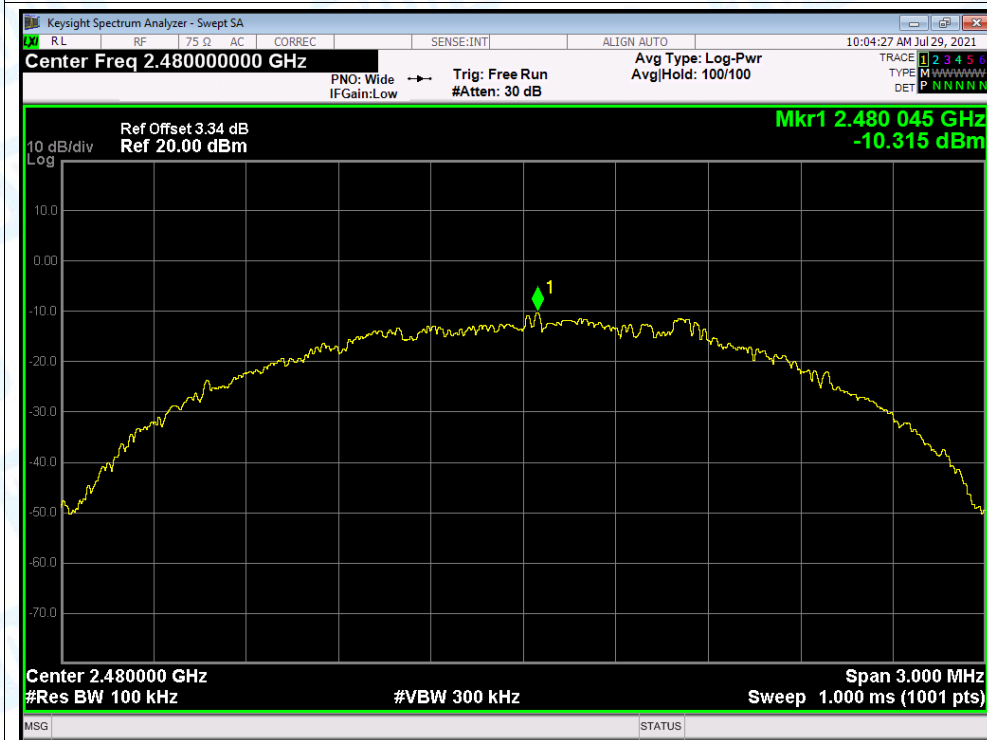
Tx. Spurious NVNT BLE 2Mbps 2442MHz Ant1 Ref



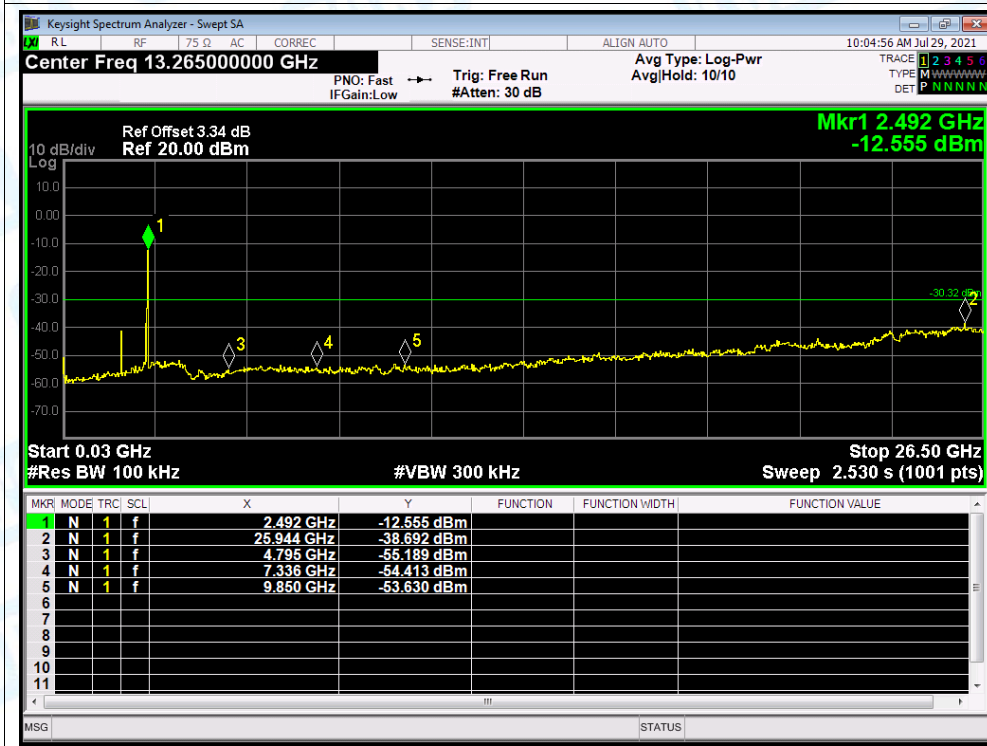
Tx. Spurious NVNT BLE 2Mbps 2442MHz Ant1 Emission



Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Ref

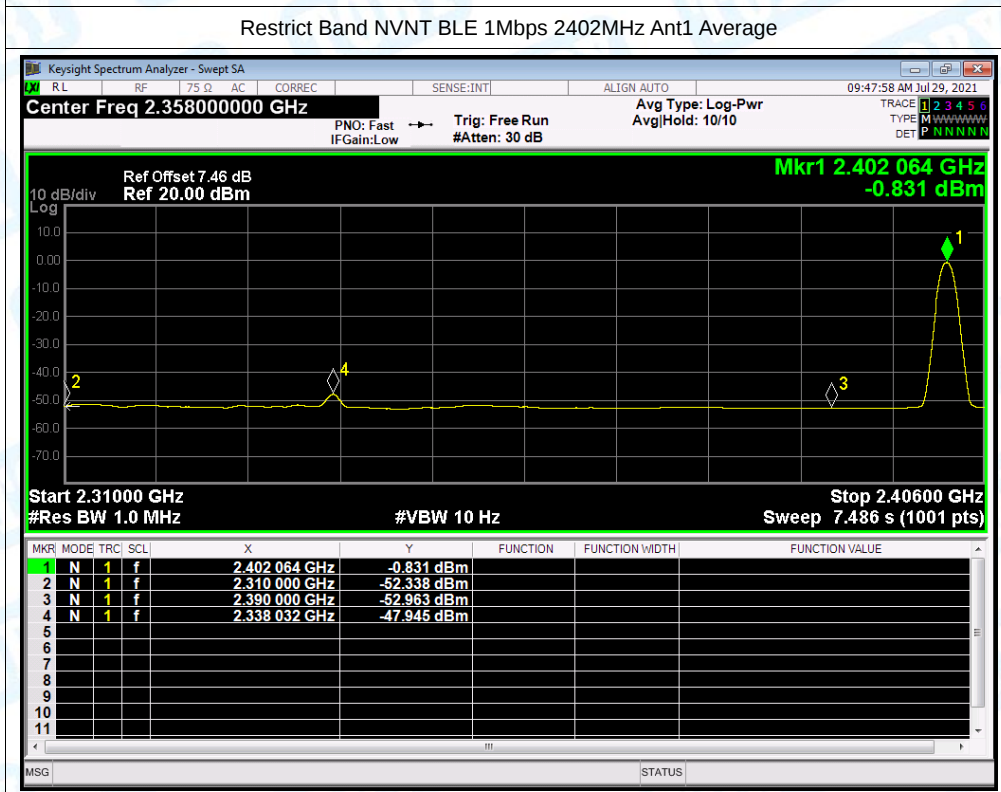
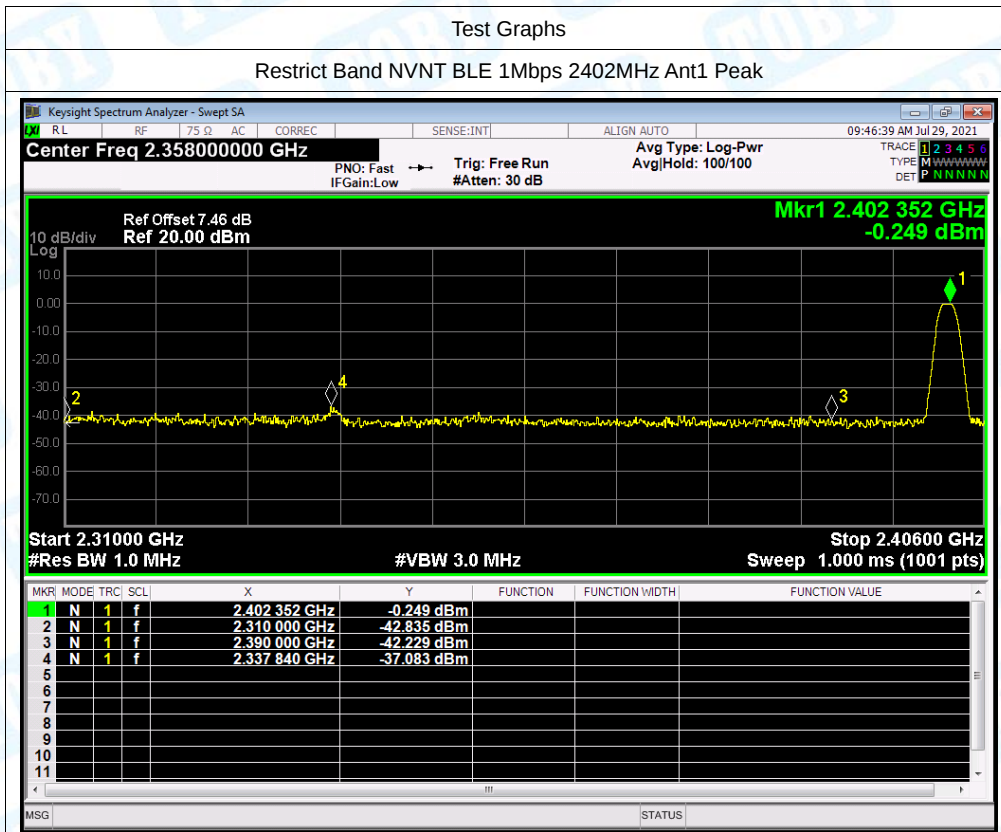


Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Emission

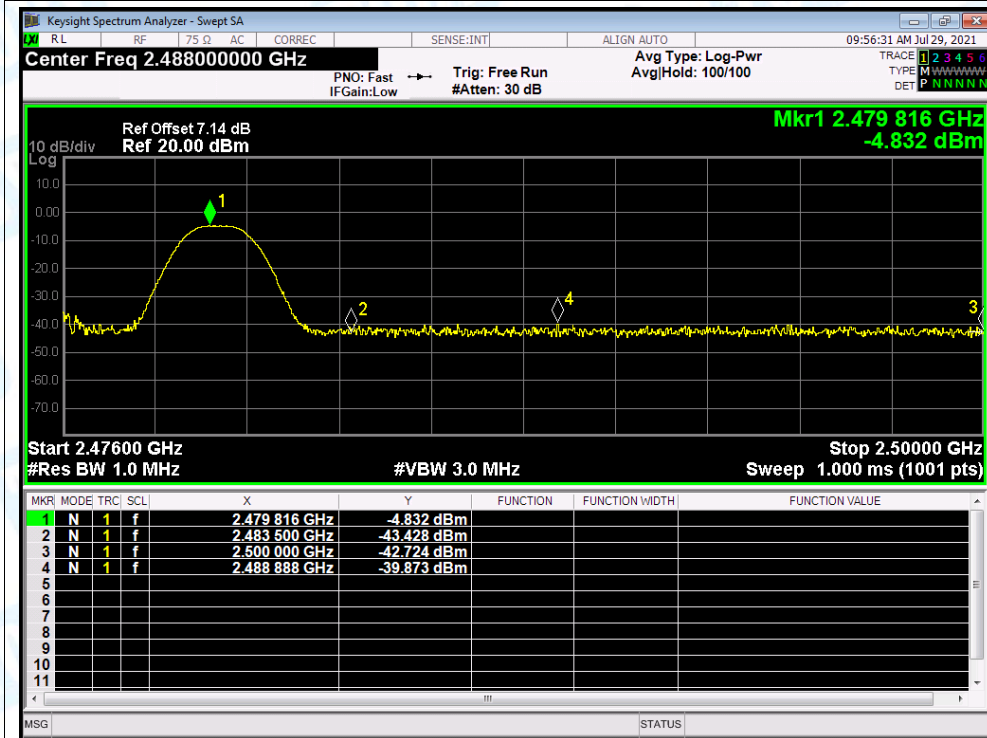


6.Restrict Band

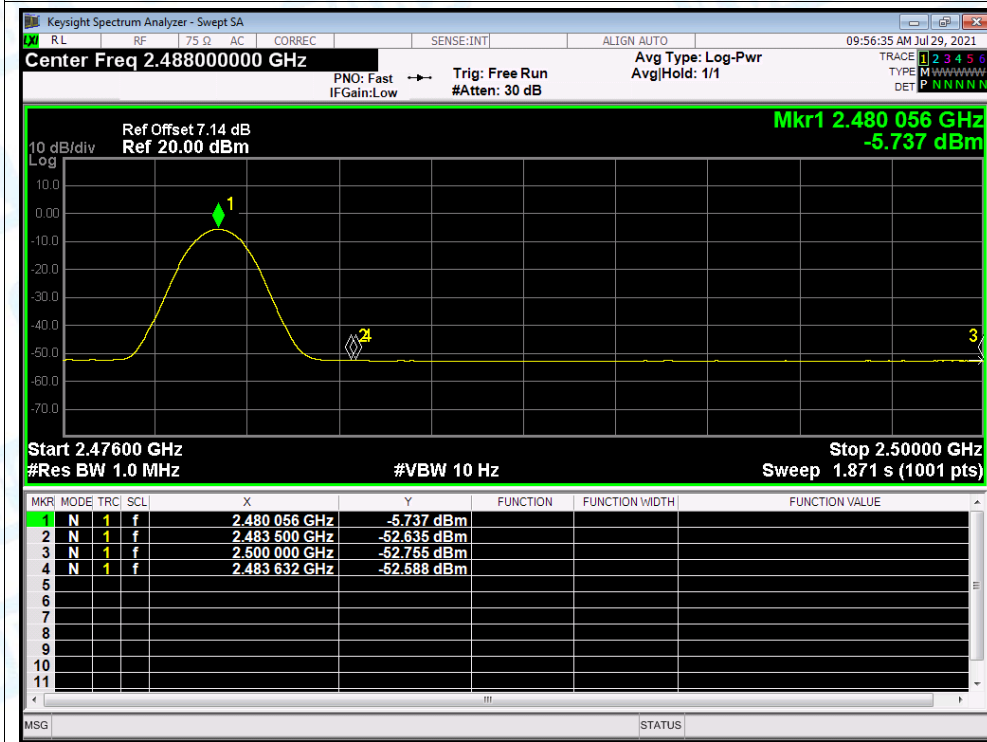
Condition	Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE 1Mbps	2402	2310	-41.47	3.8	57.59	Peak	74	Pass
NVNT	BLE 1Mbps	2402	2310	-52.28	3.8	46.78	Average	54	Pass
NVNT	BLE 1Mbps	2402	2337.84	-37.08	3.8	61.98	Peak	74	Pass
NVNT	BLE 1Mbps	2402	2338.032	-47.94	3.8	51.12	Average	54	Pass
NVNT	BLE 1Mbps	2402	2390	-42.17	3.8	56.89	Peak	74	Pass
NVNT	BLE 1Mbps	2402	2390	-52.94	3.8	46.12	Average	54	Pass
NVNT	BLE 1Mbps	2480	2483.5	-43.42	3.8	55.64	Peak	74	Pass
NVNT	BLE 1Mbps	2480	2483.5	-52.63	3.8	46.43	Average	54	Pass
NVNT	BLE 1Mbps	2480	2488.888	-39.87	3.8	59.19	Peak	74	Pass
NVNT	BLE 1Mbps	2480	2483.632	-52.58	3.8	46.48	Average	54	Pass
NVNT	BLE 1Mbps	2480	2500	-42.72	3.8	56.34	Peak	74	Pass
NVNT	BLE 1Mbps	2480	2500	-52.75	3.8	46.31	Average	54	Pass
NVNT	BLE 2Mbps	2402	2310	-40.65	3.8	58.41	Peak	74	Pass
NVNT	BLE 2Mbps	2402	2310	-52.16	3.8	46.9	Average	54	Pass
NVNT	BLE 2Mbps	2402	2338.608	-37.1	3.8	61.96	Peak	74	Pass
NVNT	BLE 2Mbps	2402	2337.936	-48.46	3.8	50.6	Average	54	Pass
NVNT	BLE 2Mbps	2402	2390	-43.36	3.8	55.7	Peak	74	Pass
NVNT	BLE 2Mbps	2402	2390	-52.81	3.8	46.25	Average	54	Pass
NVNT	BLE 2Mbps	2480	2483.5	-42.1	3.8	56.96	Peak	74	Pass
NVNT	BLE 2Mbps	2480	2483.5	-51.89	3.8	47.17	Average	54	Pass
NVNT	BLE 2Mbps	2480	2498.224	-39.98	3.8	59.08	Peak	74	Pass
NVNT	BLE 2Mbps	2480	2483.512	-51.89	3.8	47.17	Average	54	Pass
NVNT	BLE 2Mbps	2480	2500	-42.57	3.8	56.49	Peak	74	Pass
NVNT	BLE 2Mbps	2480	2500	-52.62	3.8	46.44	Average	54	Pass

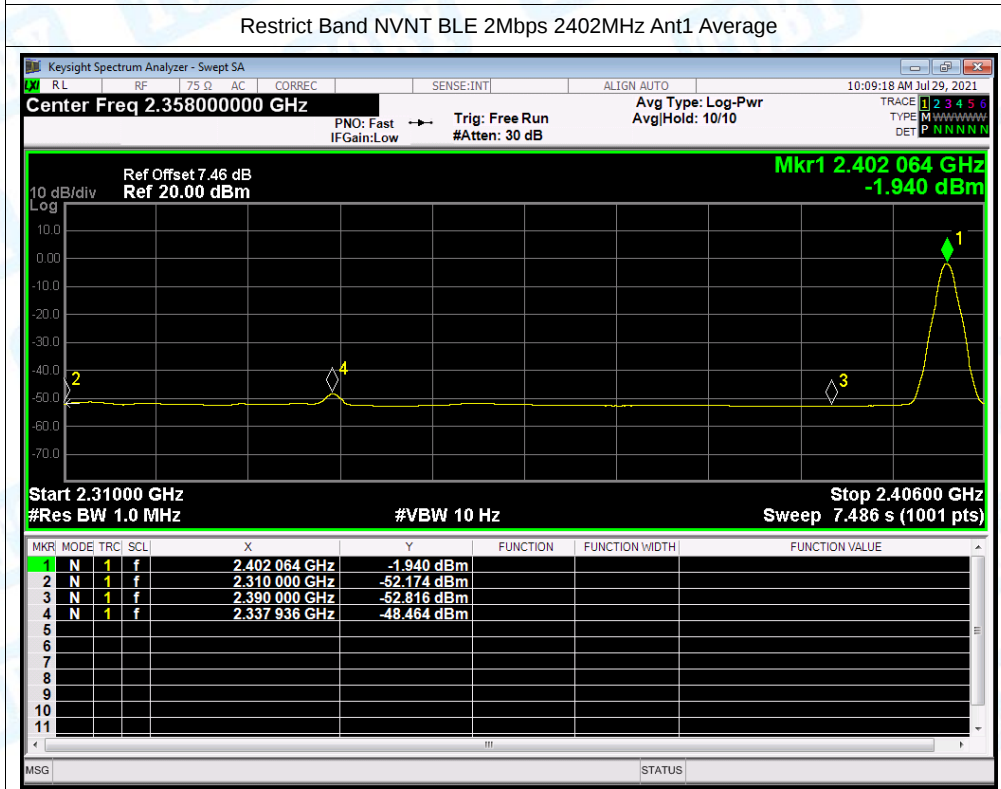
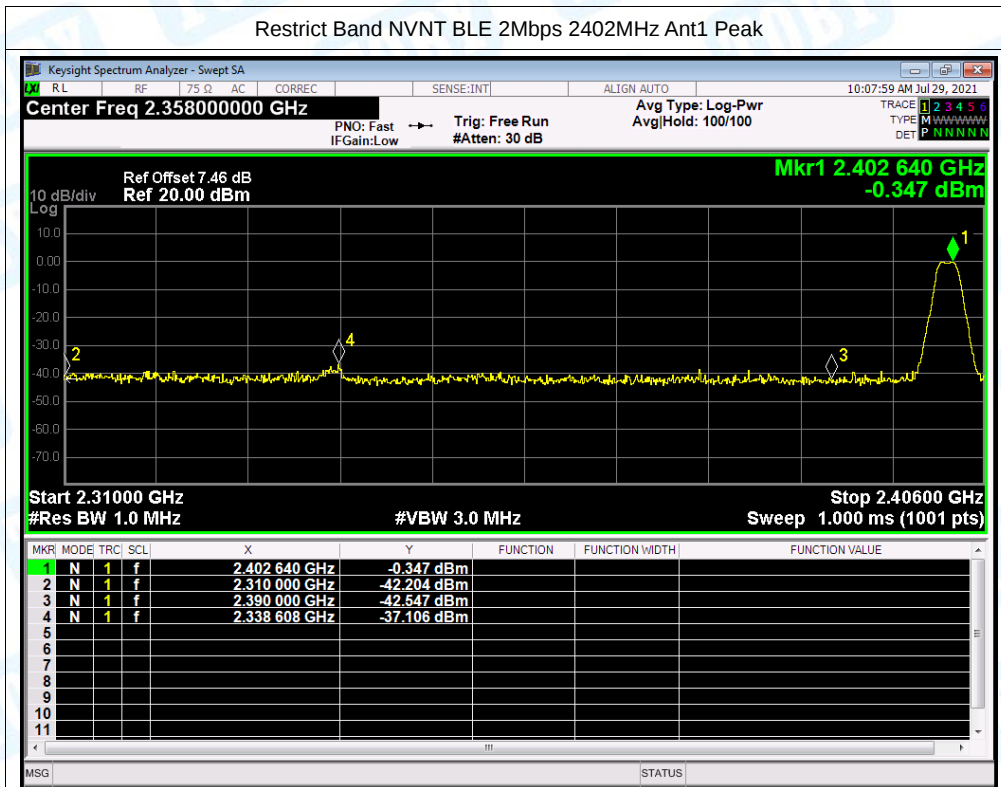


Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Peak

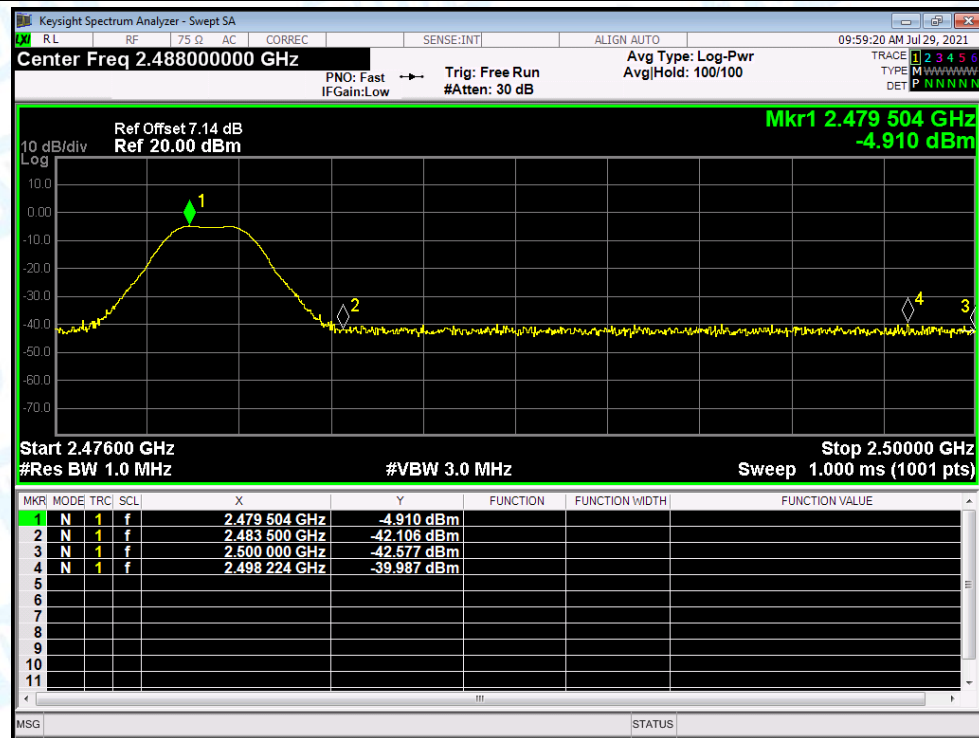


Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Average





Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Peak



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Average

