

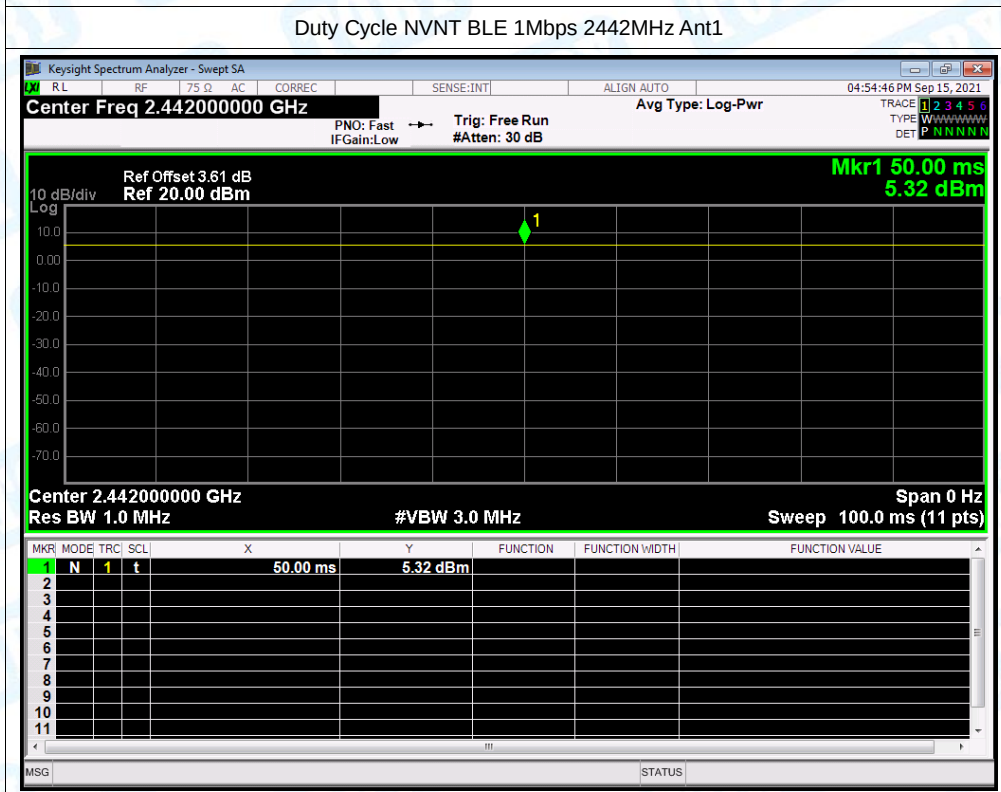
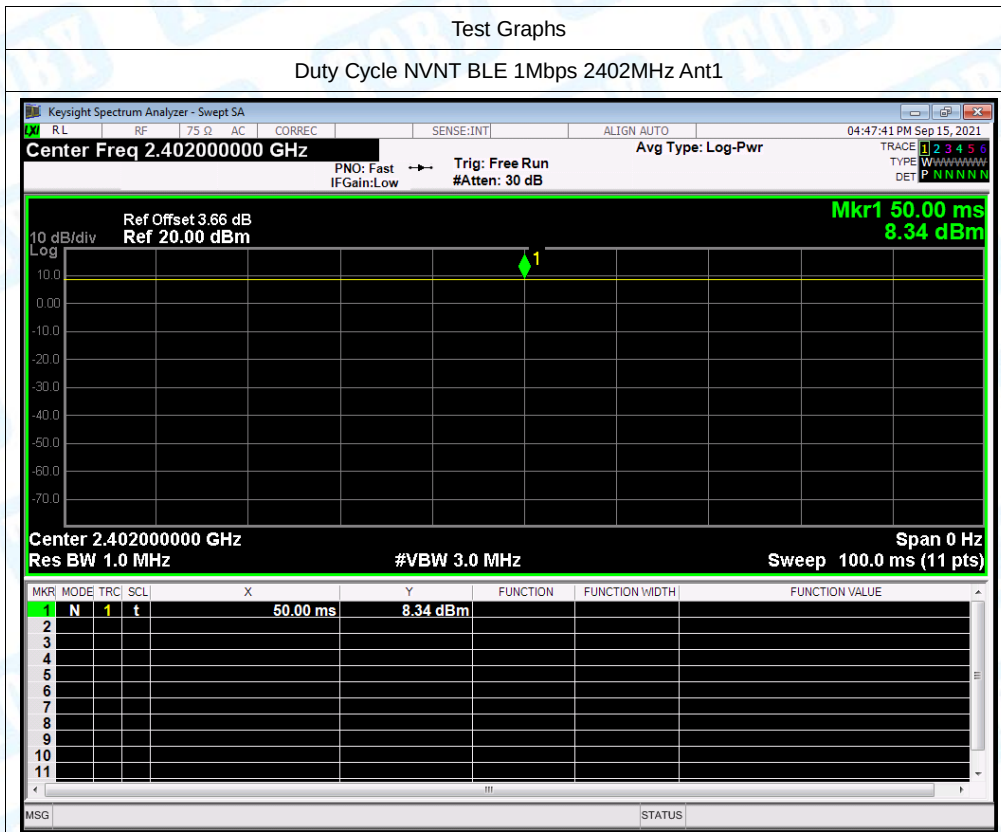
RF Test Data for Bluetooth LE

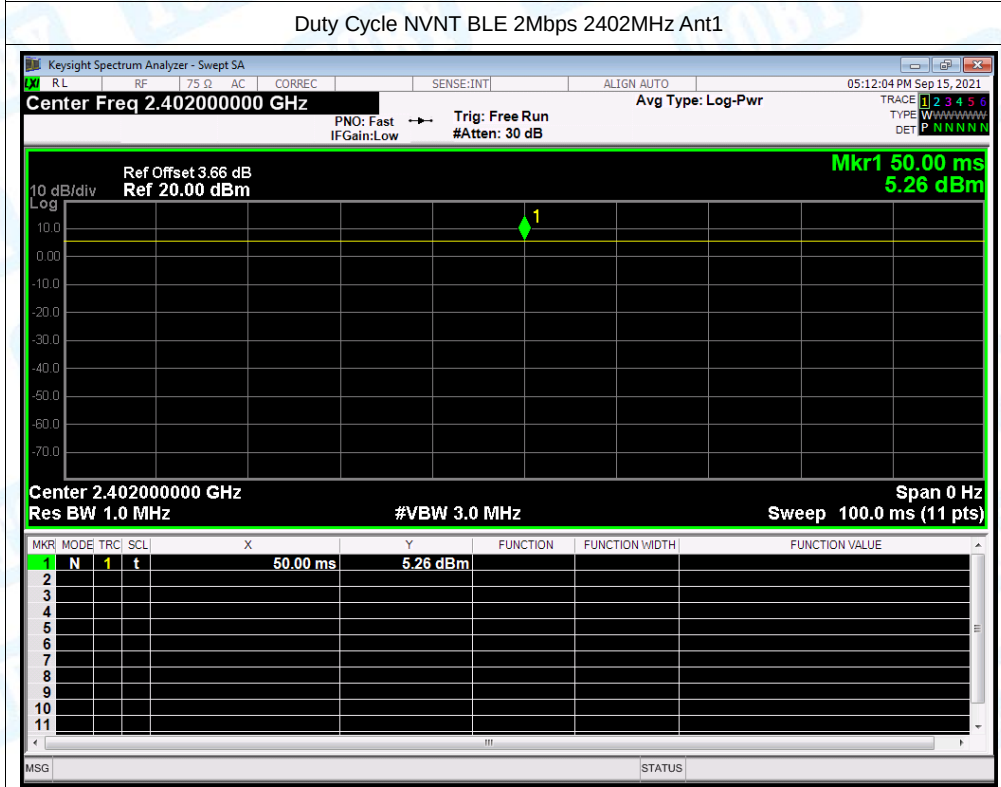
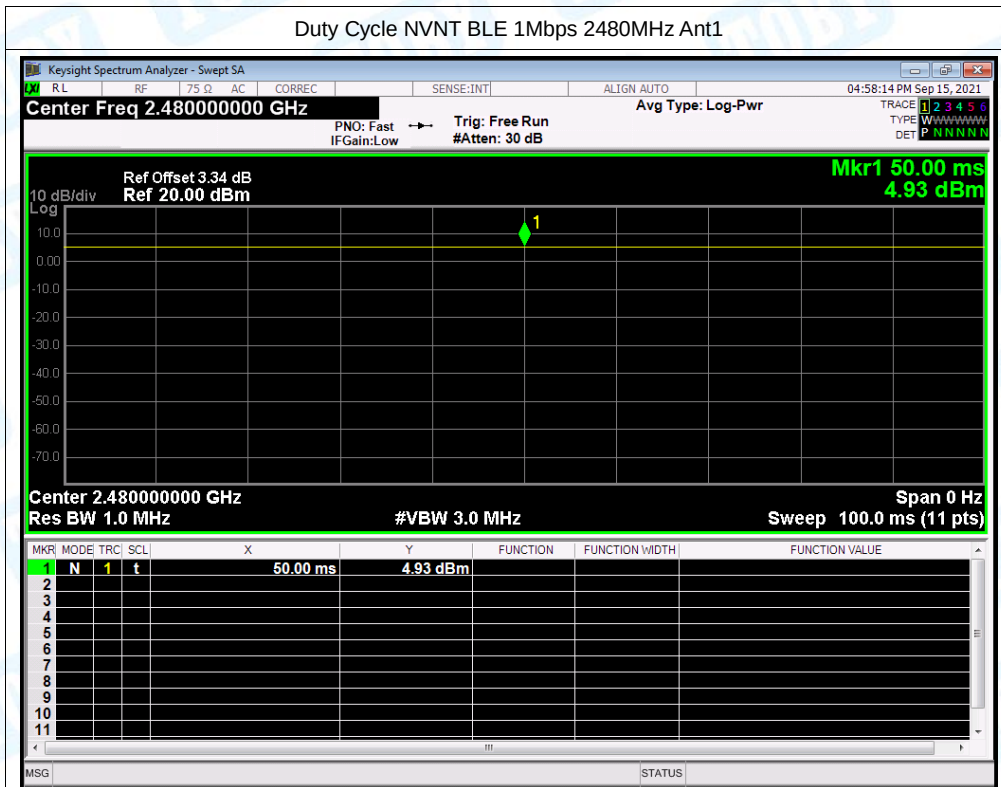
(Conducted Measurements)

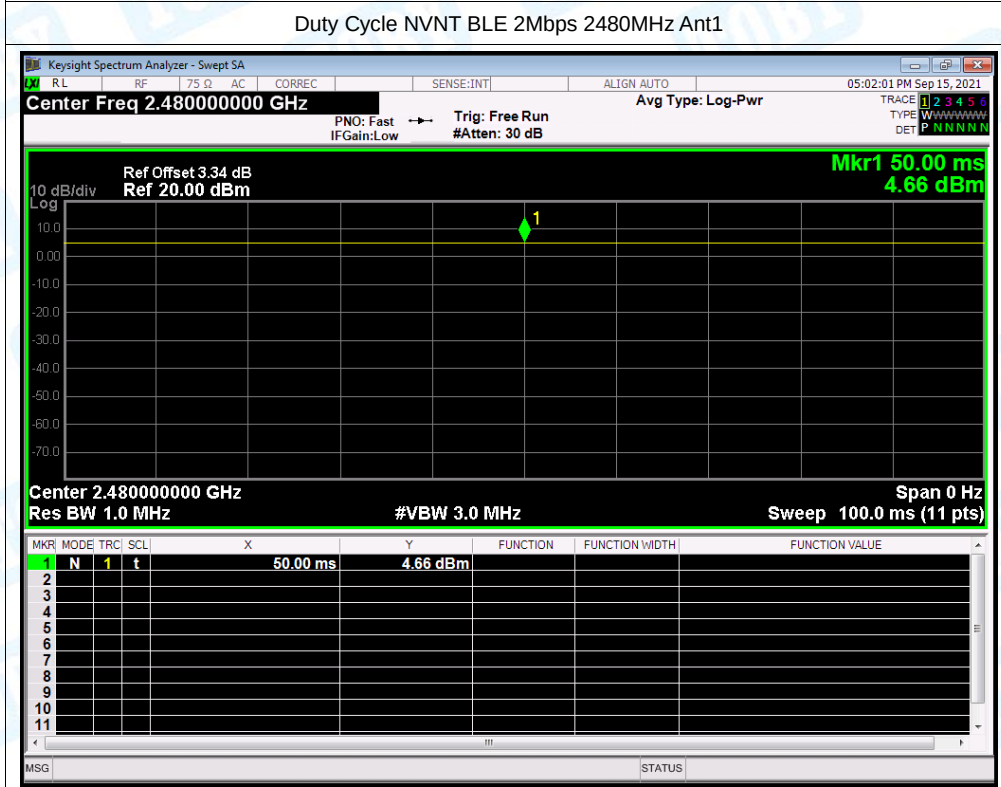
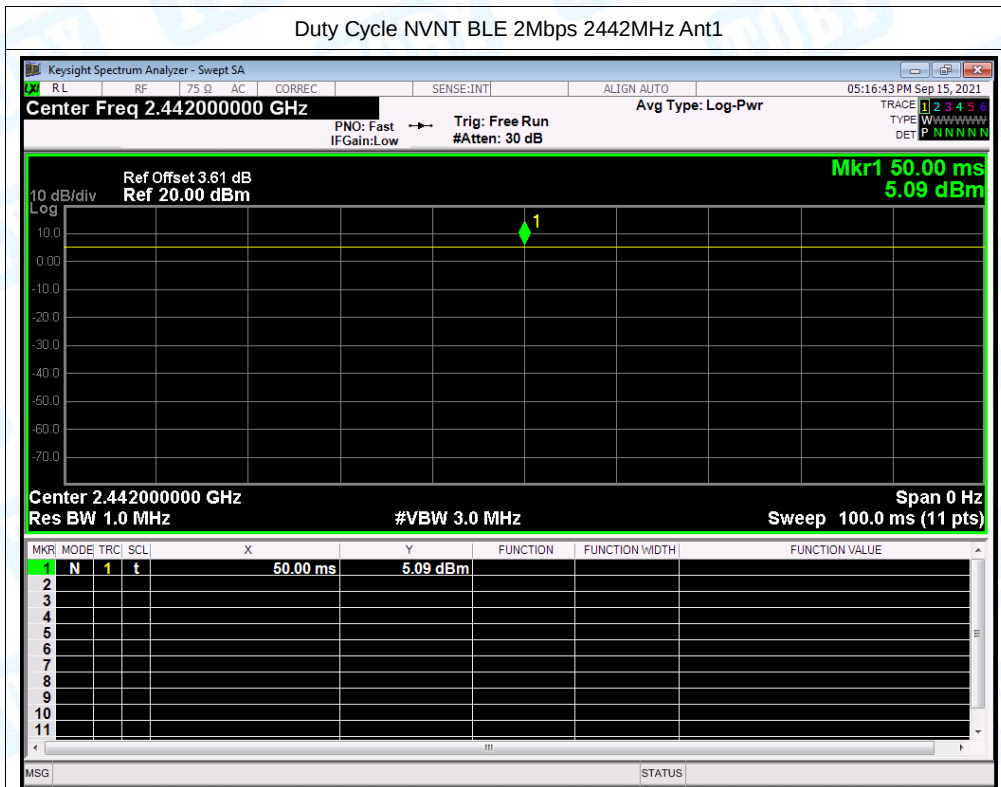
General Description of EUT	
Product Name:	Wireless Network Video Recorder
Test Model:	WNVR-BTWN8-1-V2
Sample ID:	20210910-03_01-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	HeJingchang
Note: For a more detailed features description, please refer to the report TB-FCC183776	

Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1Mbps	2402	Ant1	100	0	0
NVNT	BLE 1Mbps	2442	Ant1	100	0	0
NVNT	BLE 1Mbps	2480	Ant1	100	0	0
NVNT	BLE 2Mbps	2402	Ant1	100	0	0
NVNT	BLE 2Mbps	2442	Ant1	100	0	0
NVNT	BLE 2Mbps	2480	Ant1	100	0	0

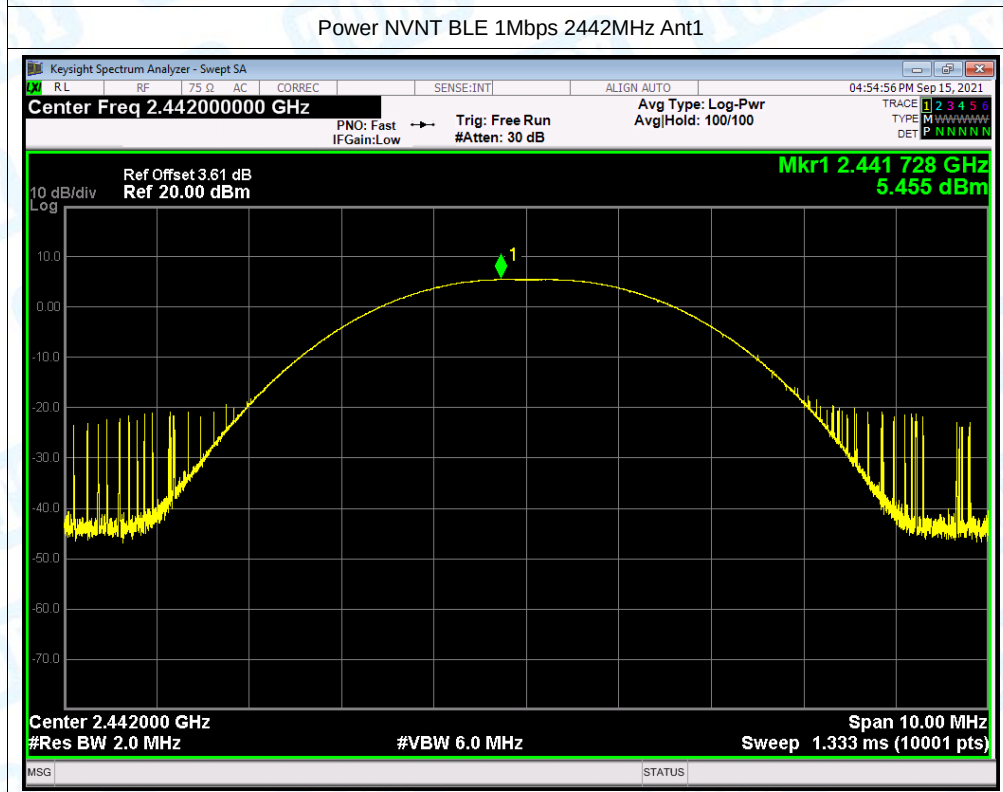
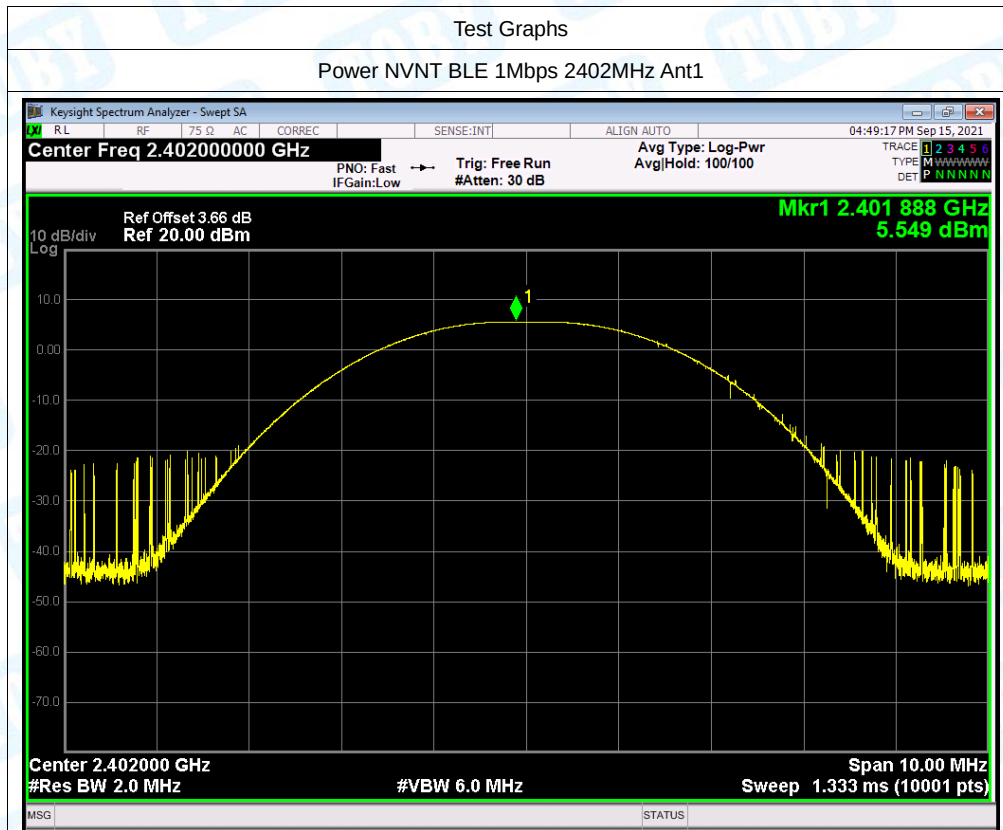




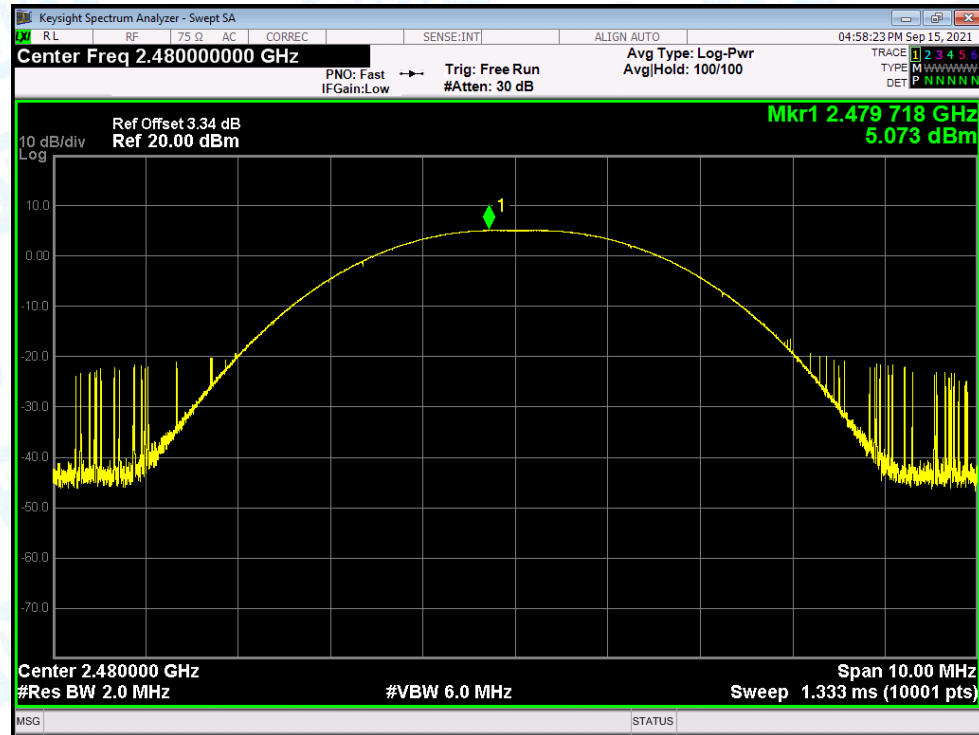


Maximum Conducted Output Power

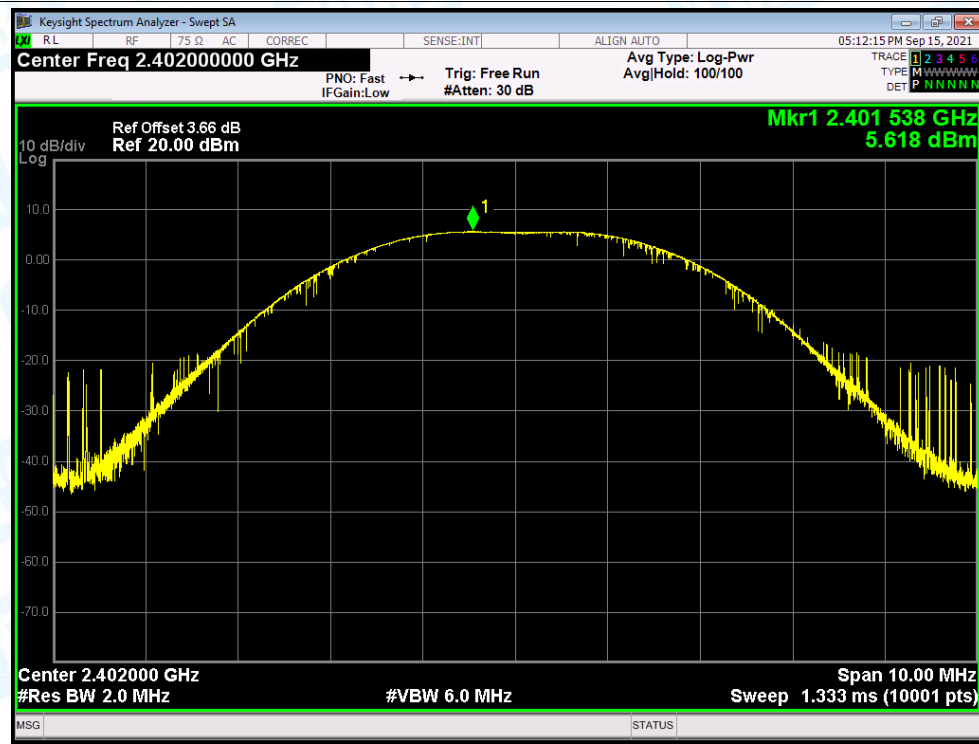
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	5.549	0	5.549	30	Pass
NVNT	BLE 1Mbps	2442	Ant1	5.455	0	5.455	30	Pass
NVNT	BLE 1Mbps	2480	Ant1	5.073	0	5.073	30	Pass
NVNT	BLE 2Mbps	2402	Ant1	5.618	0	5.618	30	Pass
NVNT	BLE 2Mbps	2442	Ant1	5.47	0	5.47	30	Pass
NVNT	BLE 2Mbps	2480	Ant1	5.076	0	5.076	30	Pass



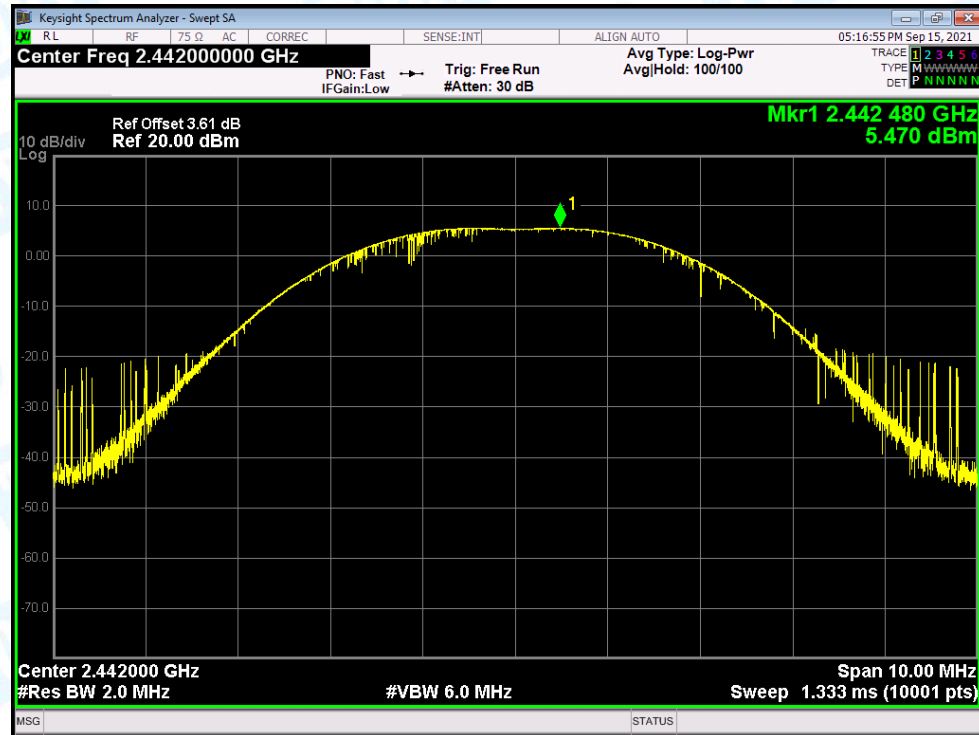
Power NVNT BLE 1Mbps 2480MHz Ant1



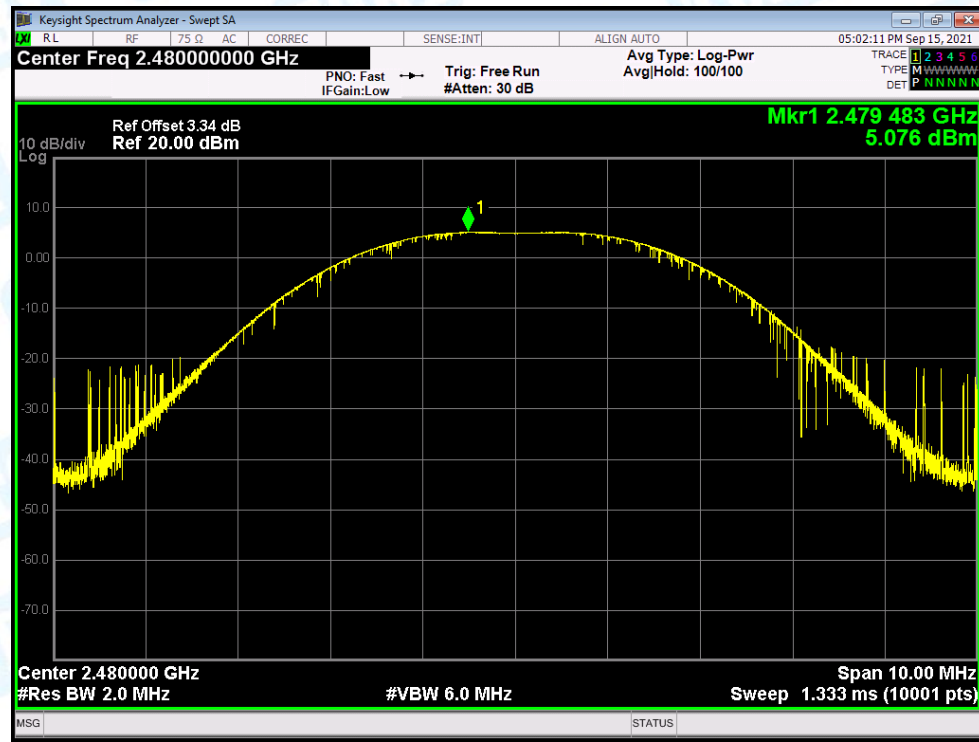
Power NVNT BLE 2Mbps 2402MHz Ant1



Power NVNT BLE 2Mbps 2442MHz Ant1



Power NVNT BLE 2Mbps 2480MHz Ant1

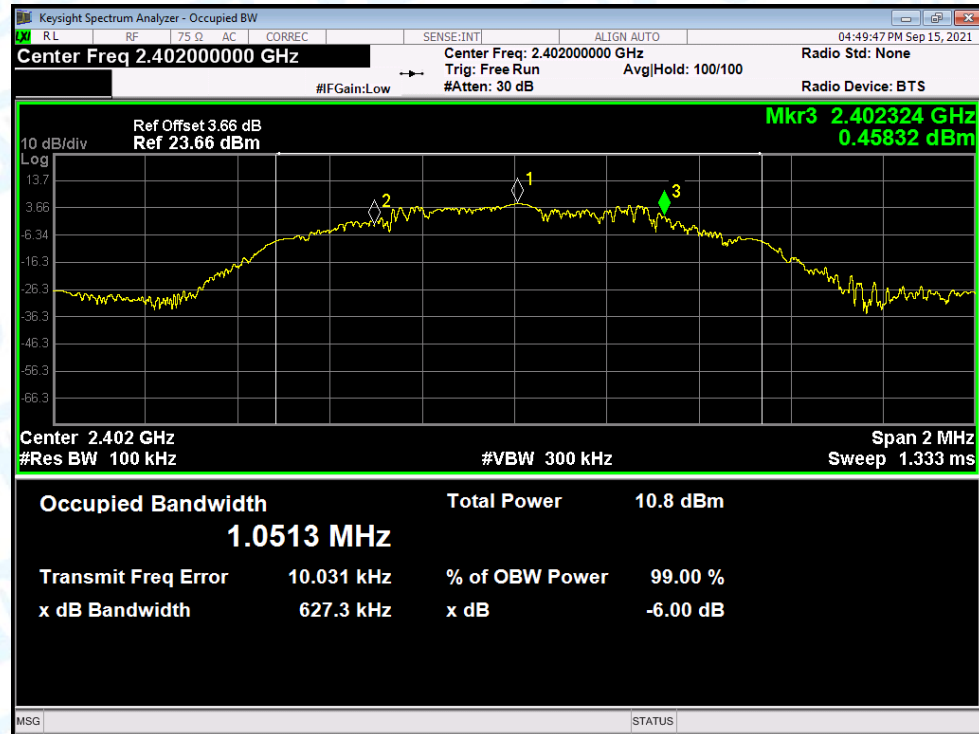


-6dB Bandwidth

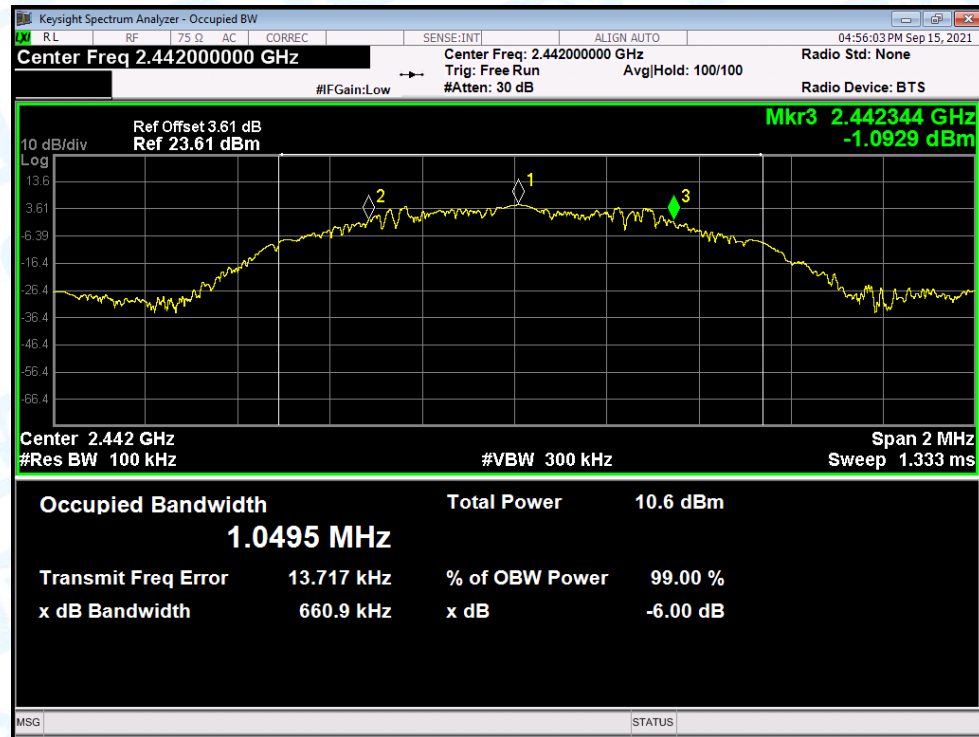
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.627	0.5	Pass
NVNT	BLE 1Mbps	2442	Ant1	0.661	0.5	Pass
NVNT	BLE 1Mbps	2480	Ant1	0.653	0.5	Pass
NVNT	BLE 2Mbps	2402	Ant1	1.125	0.5	Pass
NVNT	BLE 2Mbps	2442	Ant1	1.052	0.5	Pass
NVNT	BLE 2Mbps	2480	Ant1	1.068	0.5	Pass

Test Graphs

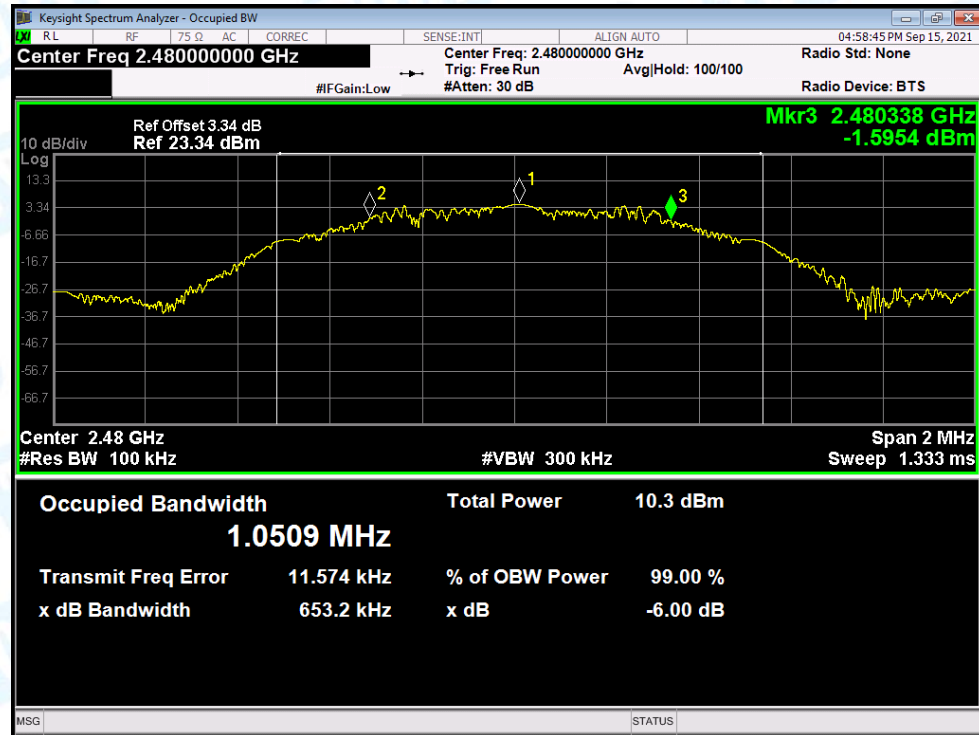
-6dB Bandwidth NVNT BLE 1Mbps 2402MHz Ant1



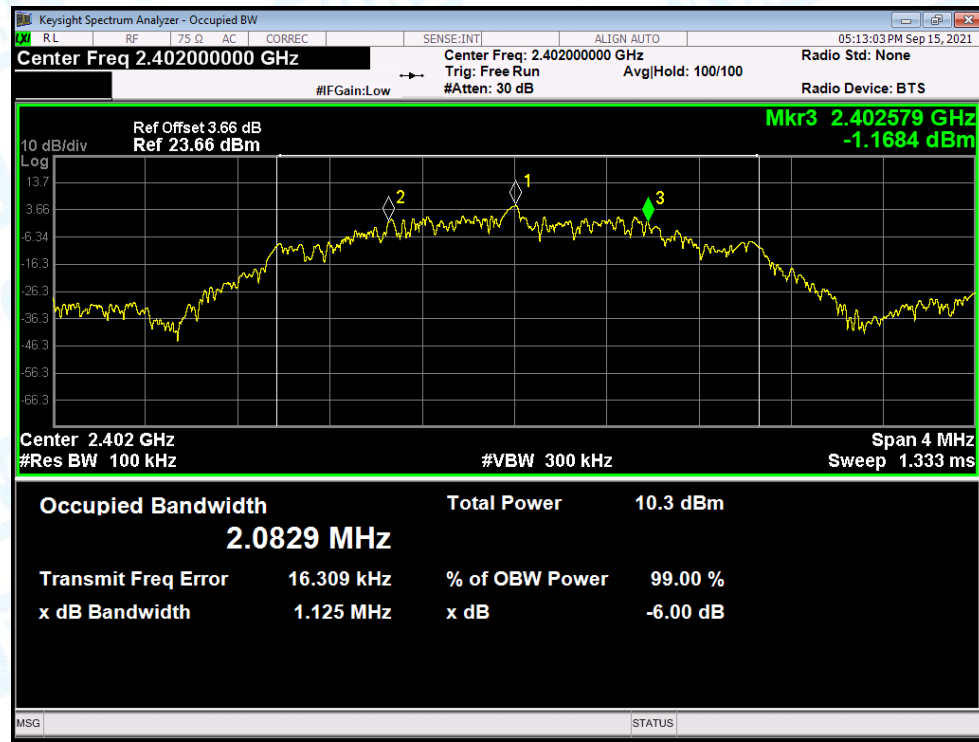
-6dB Bandwidth NVNT BLE 1Mbps 2442MHz Ant1



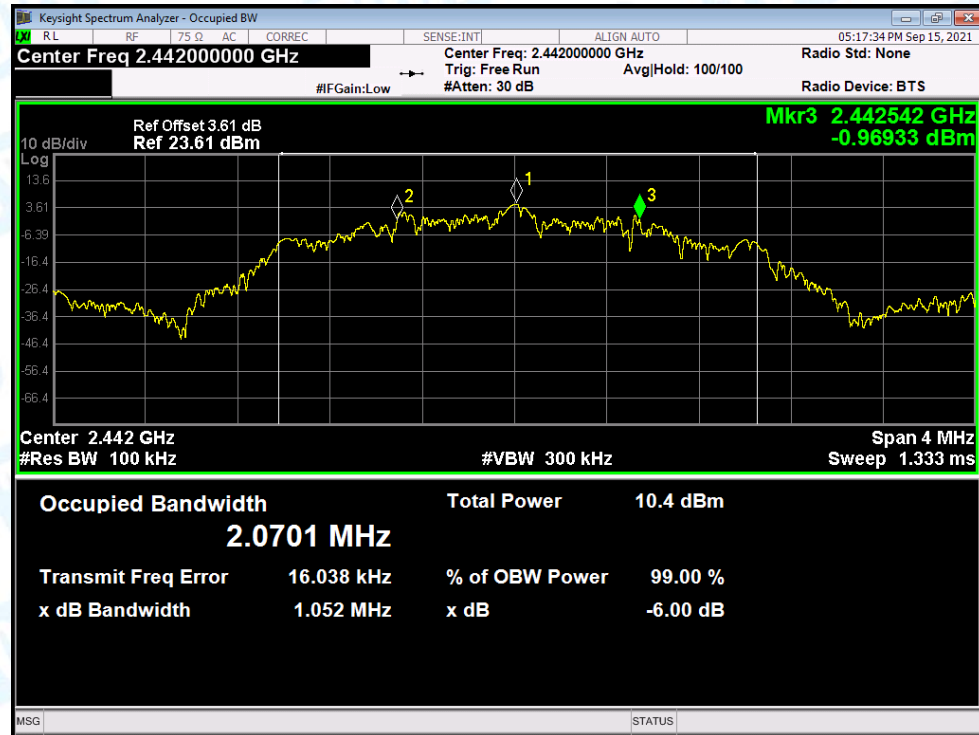
-6dB Bandwidth NVNT BLE 1Mbps 2480MHz Ant1



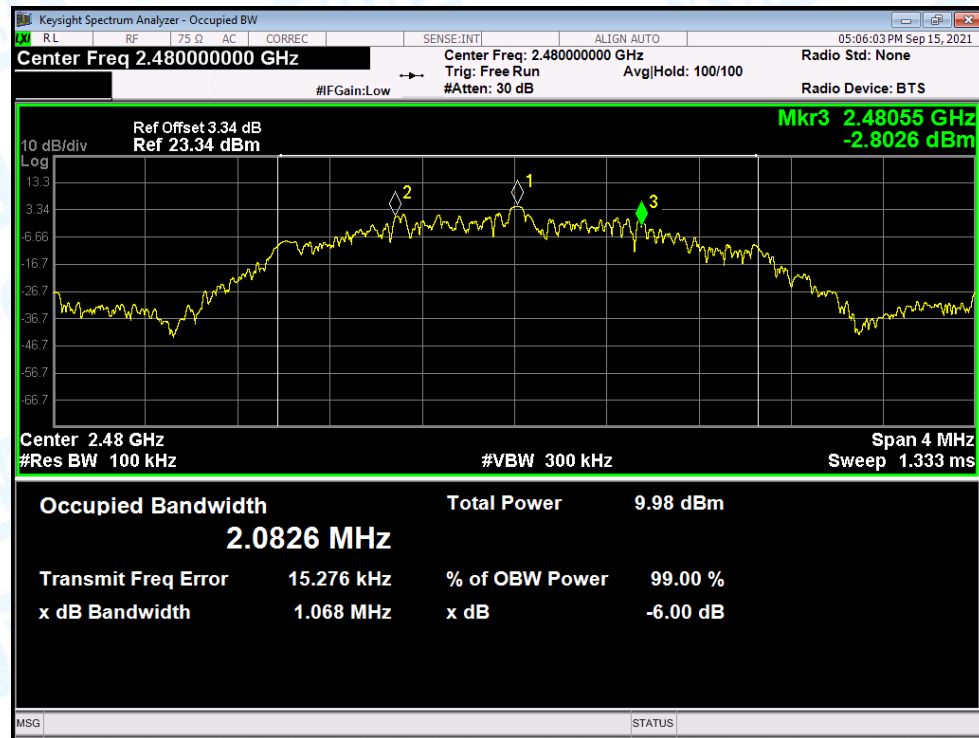
-6dB Bandwidth NVNT BLE 2Mbps 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2442MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2480MHz Ant1

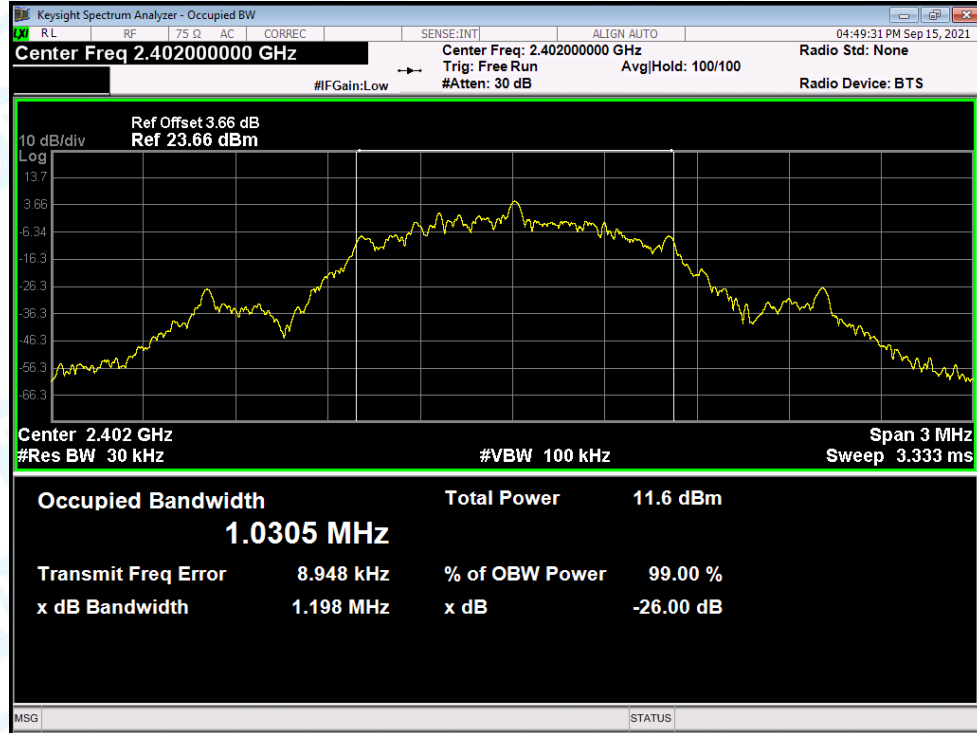


Occupied Channel Bandwidth

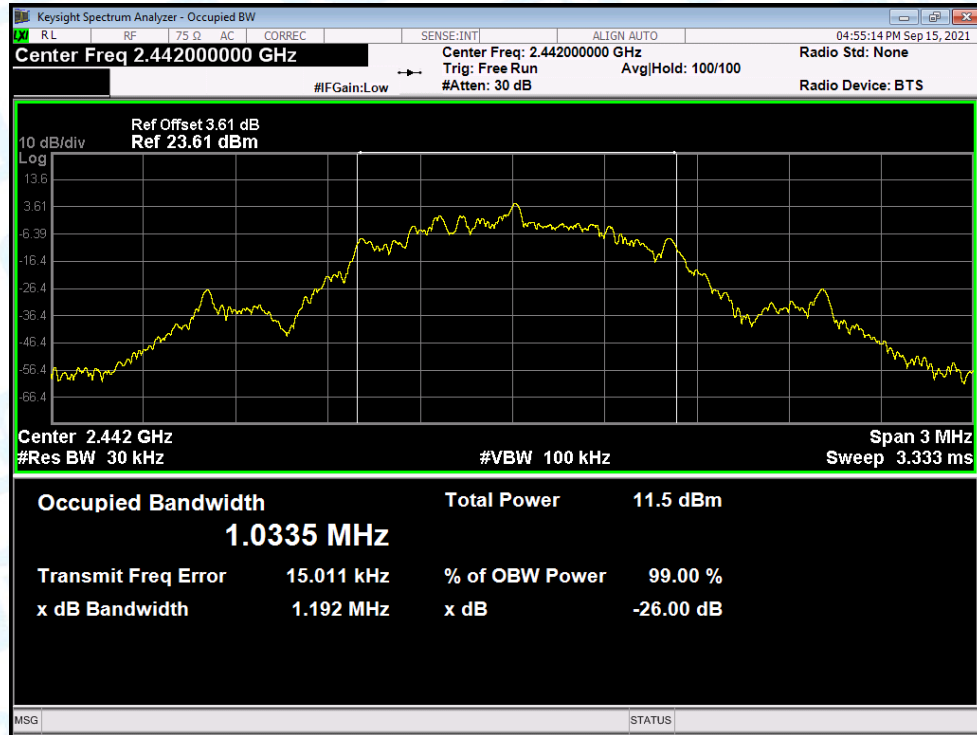
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1Mbps	2402	Ant1	1.03049252
NVNT	BLE 1Mbps	2442	Ant1	1.03349341
NVNT	BLE 1Mbps	2480	Ant1	1.040419017
NVNT	BLE 2Mbps	2402	Ant1	2.039893276
NVNT	BLE 2Mbps	2442	Ant1	2.072453725
NVNT	BLE 2Mbps	2480	Ant1	2.07466856

Test Graphs

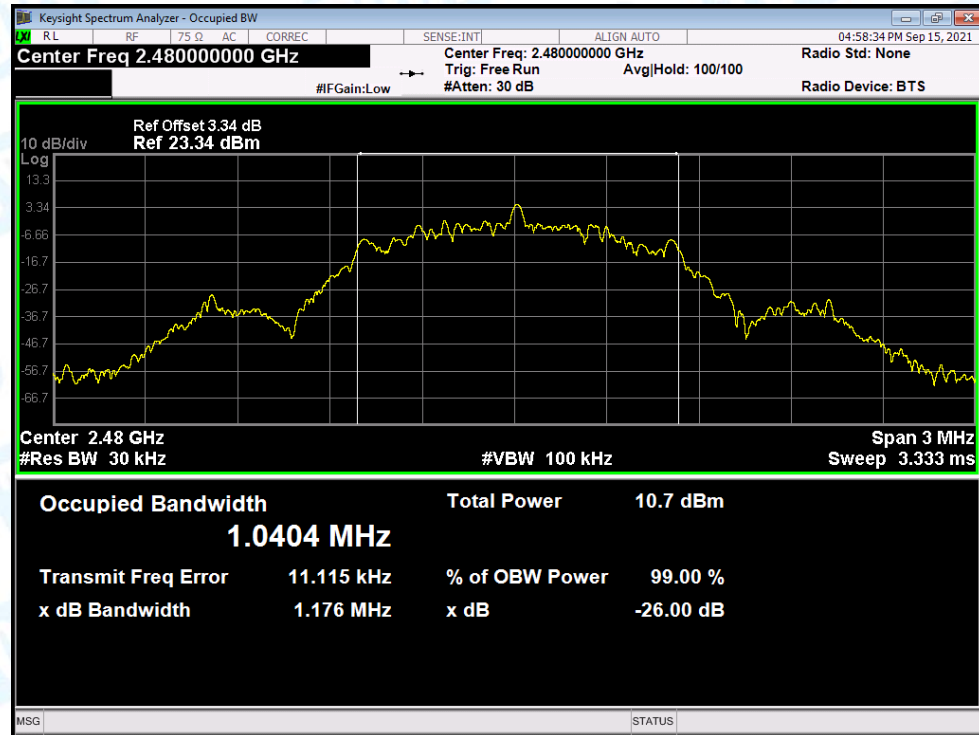
OBW NVNT BLE 1Mbps 2402MHz Ant1



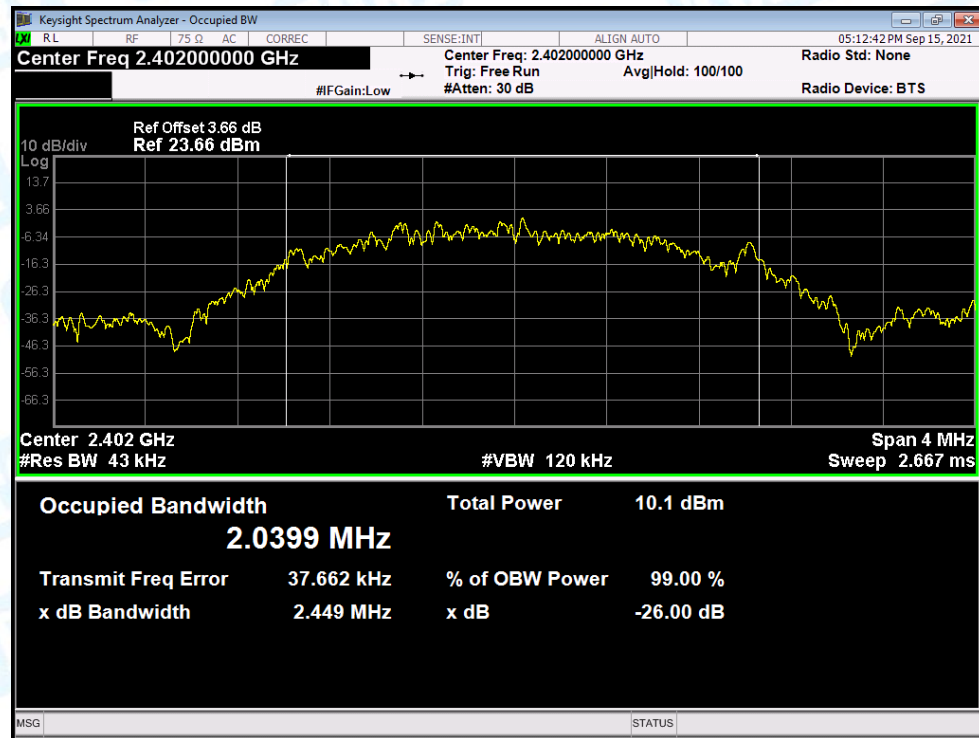
OBW NVNT BLE 1Mbps 2442MHz Ant1



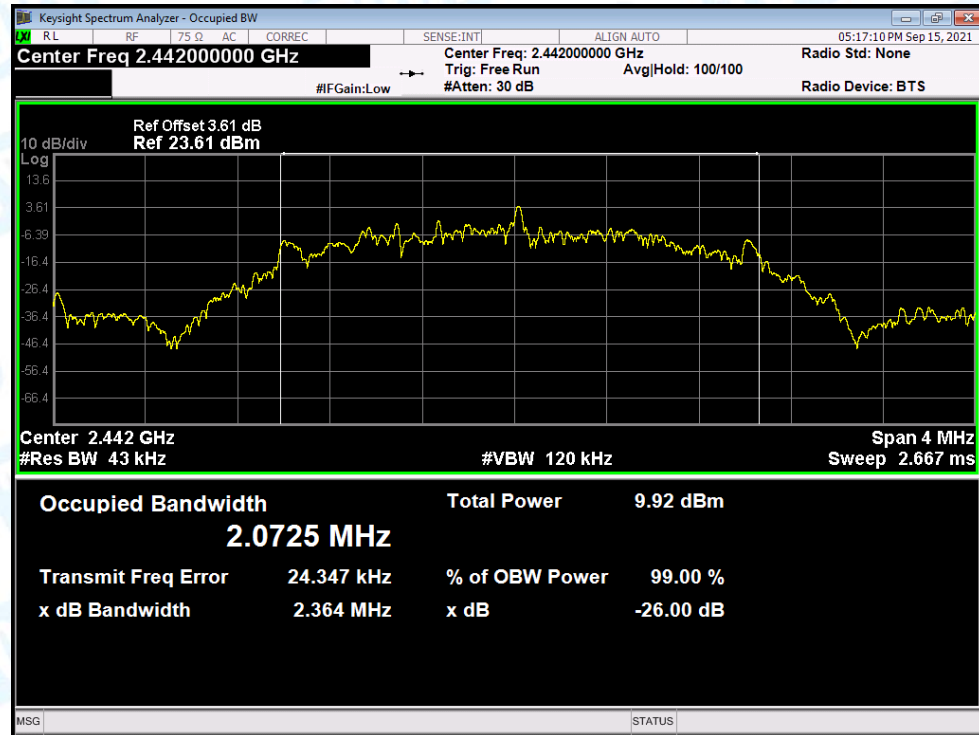
OBW NVNT BLE 1Mbps 2480MHz Ant1



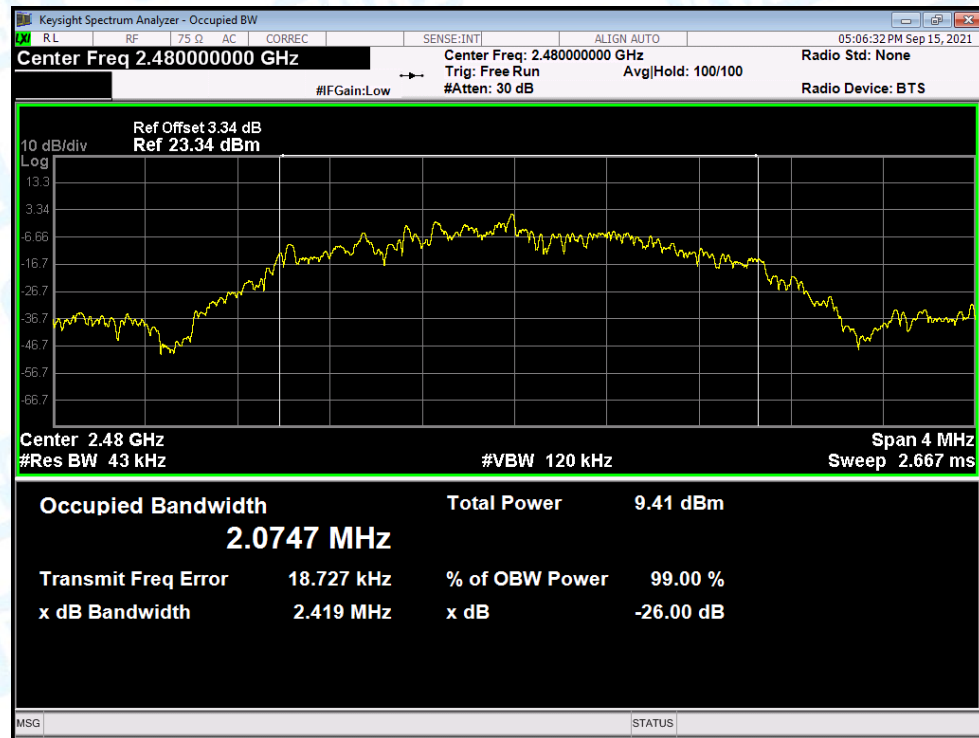
OBW NVNT BLE 2Mbps 2402MHz Ant1



OBW NVNT BLE 2Mbps 2442MHz Ant1

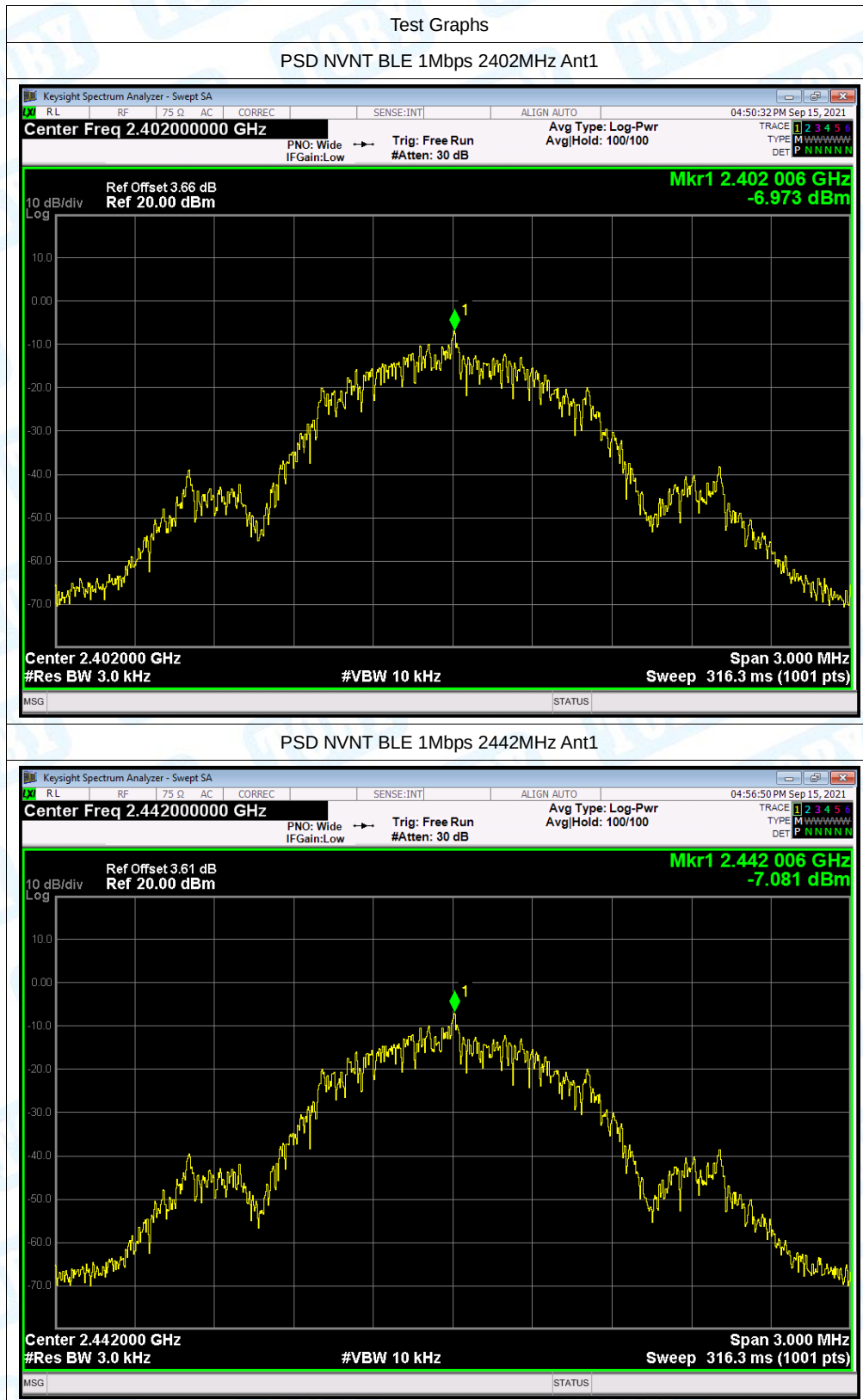


OBW NVNT BLE 2Mbps 2480MHz Ant1

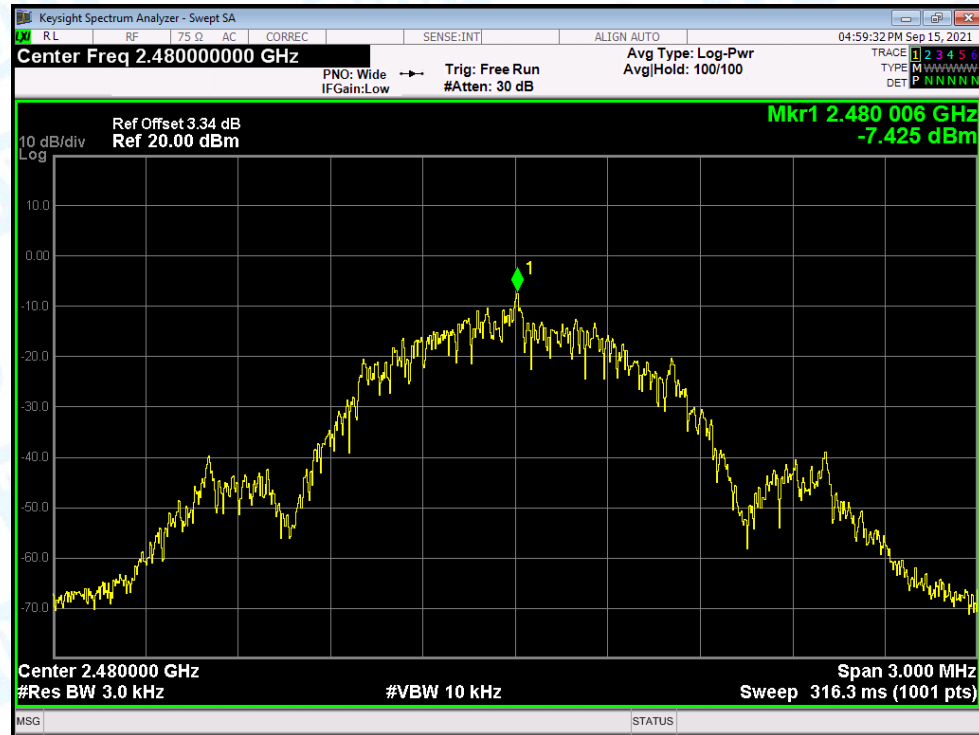


Maximum Power Spectral Density Level

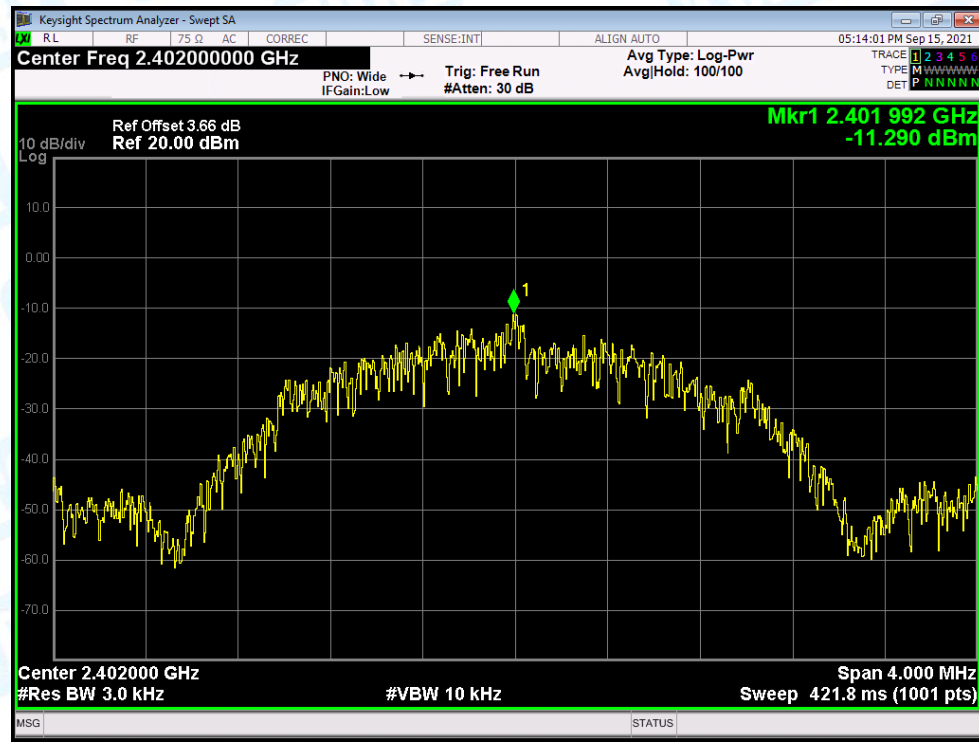
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-6.973	8	Pass
NVNT	BLE 1Mbps	2442	Ant1	-7.081	8	Pass
NVNT	BLE 1Mbps	2480	Ant1	-7.425	8	Pass
NVNT	BLE 2Mbps	2402	Ant1	-11.29	8	Pass
NVNT	BLE 2Mbps	2442	Ant1	-11.318	8	Pass
NVNT	BLE 2Mbps	2480	Ant1	-11.778	8	Pass



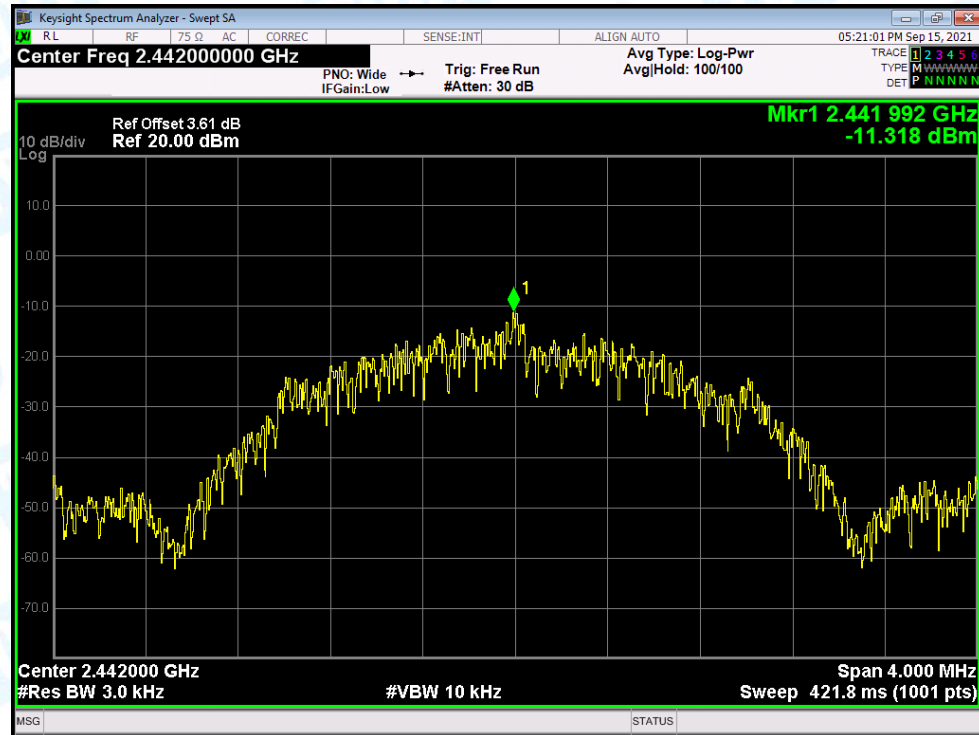
PSD NVNT BLE 1Mbps 2480MHz Ant1



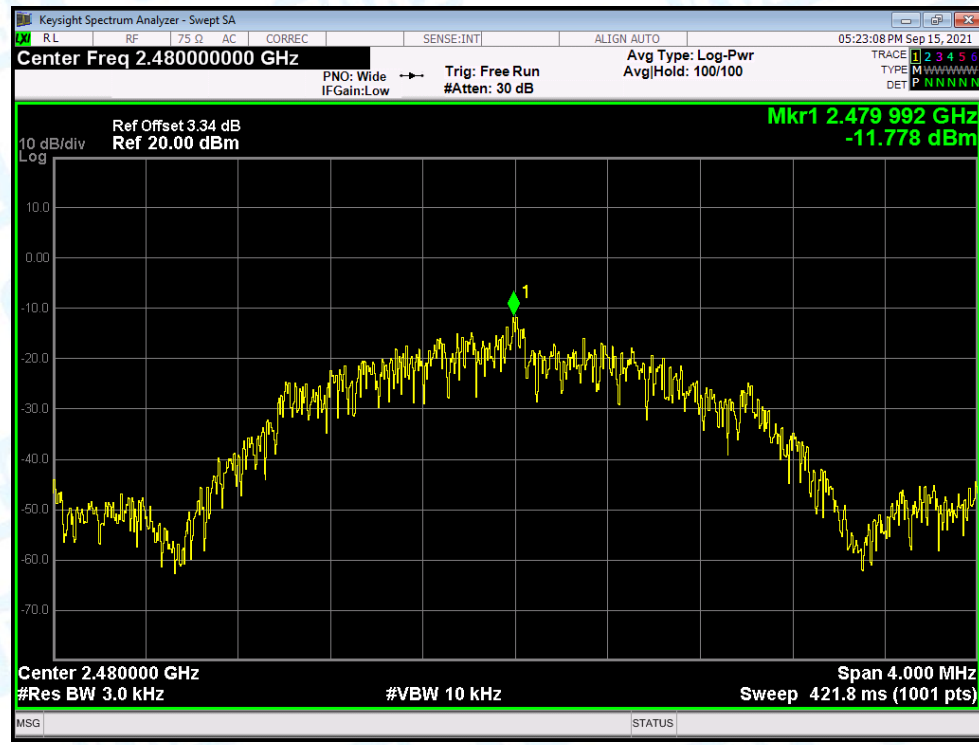
PSD NVNT BLE 2Mbps 2402MHz Ant1



PSD NVNT BLE 2Mbps 2442MHz Ant1

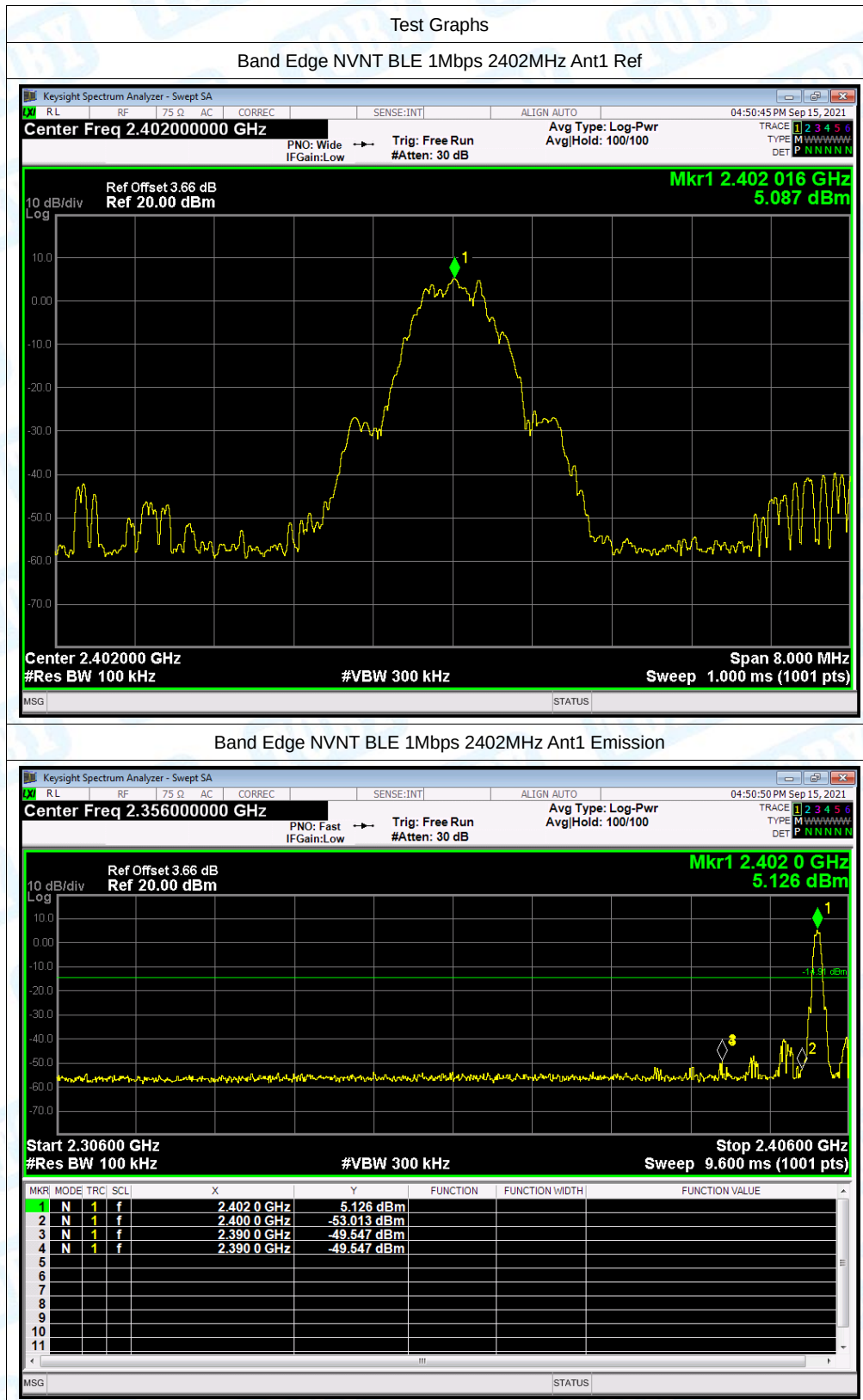


PSD NVNT BLE 2Mbps 2480MHz Ant1

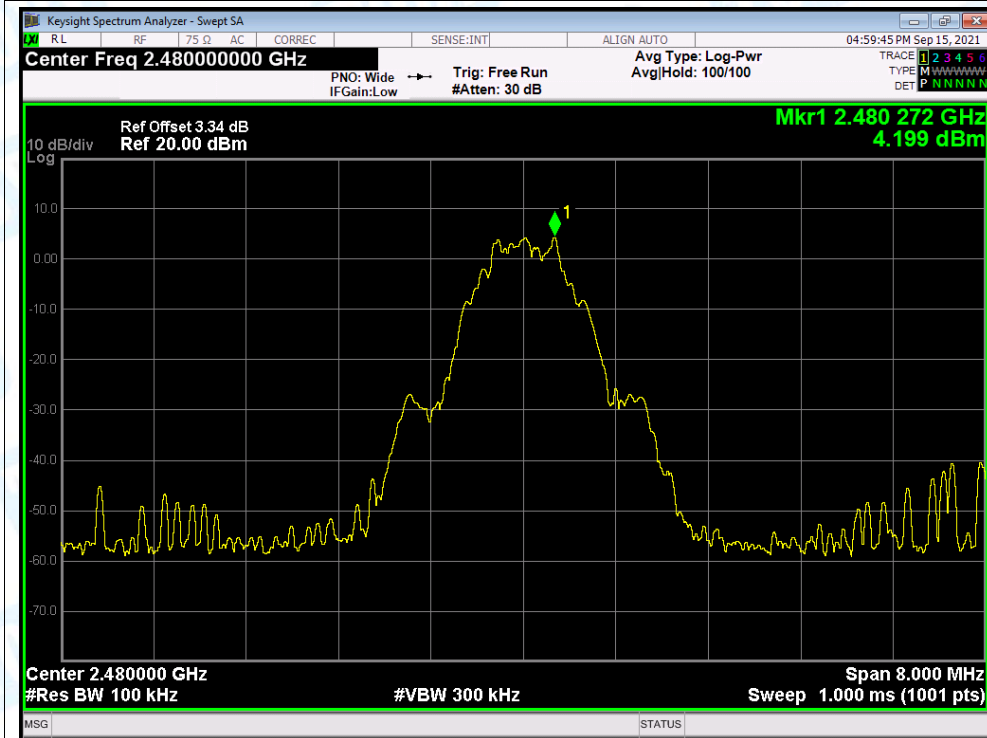


Band Edge

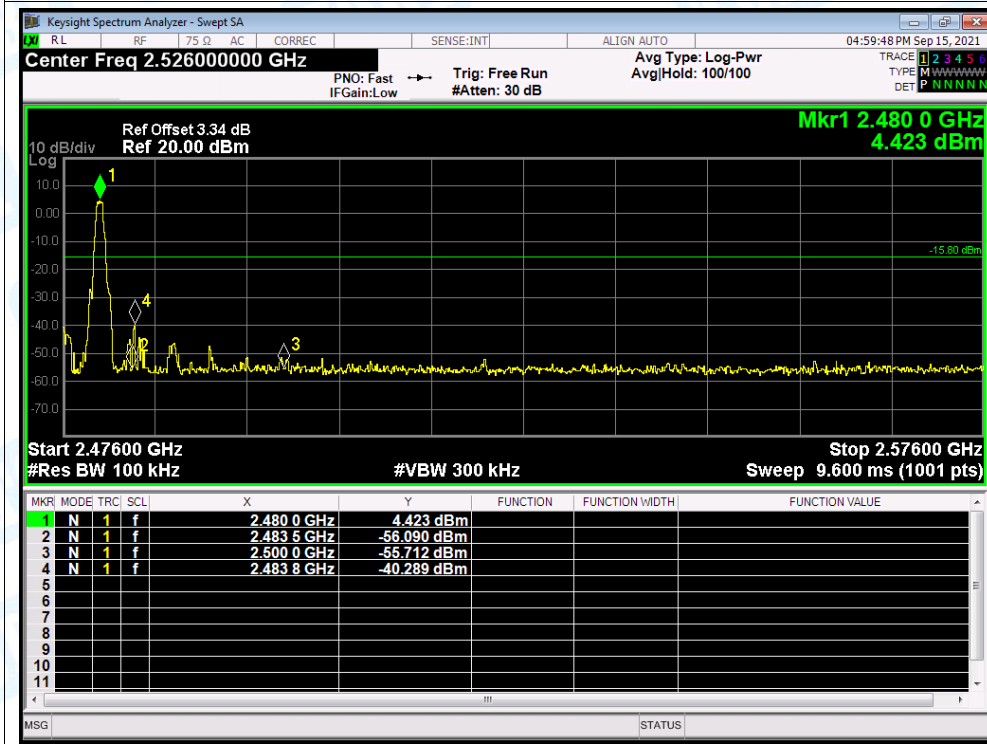
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-54.63	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-44.48	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-56.08	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-42.37	-20	Pass



Band Edge NVNT BLE 1Mbps 2480MHz Ant1 Ref



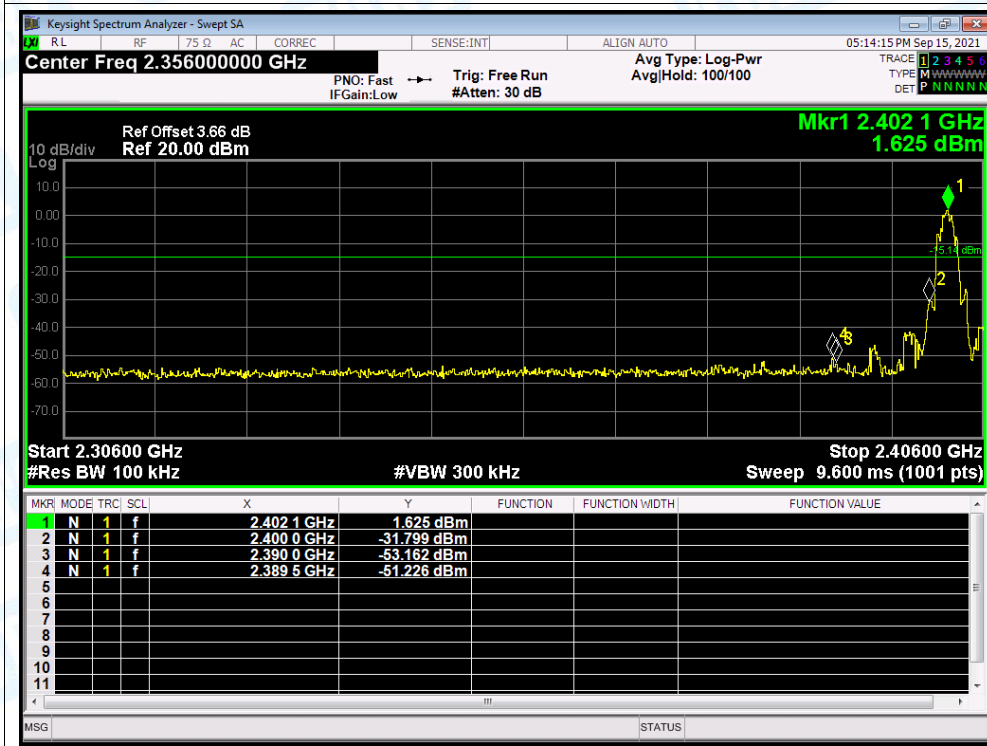
Band Edge NVNT BLE 1Mbps 2480MHz Ant1 Emission



Band Edge NVNT BLE 2Mbps 2402MHz Ant1 Ref



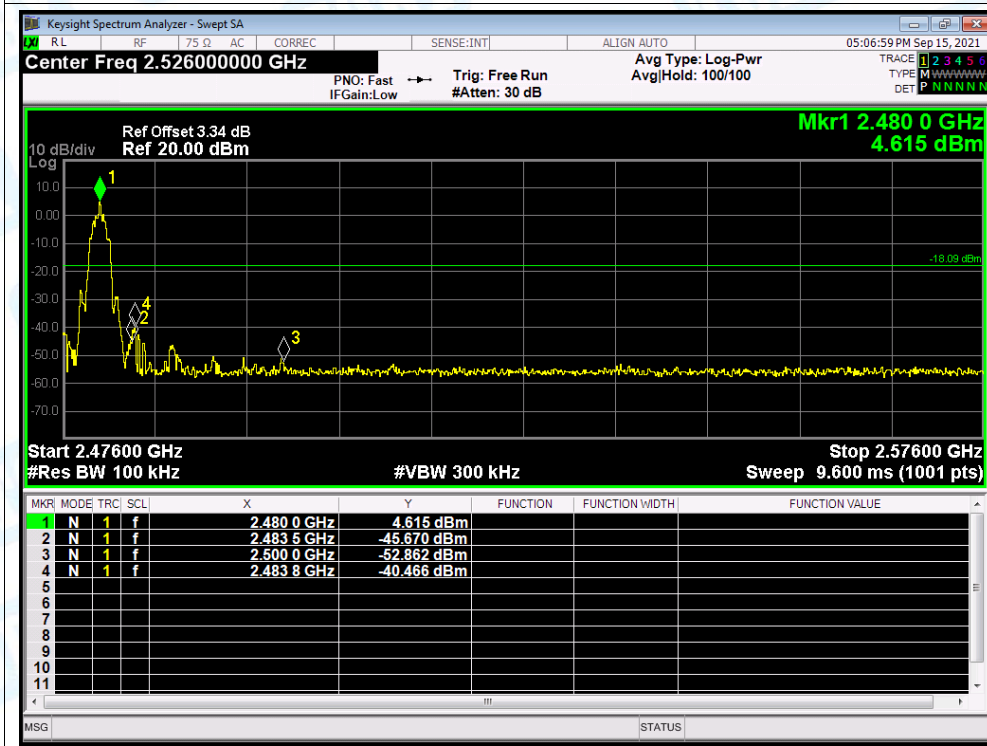
Band Edge NVNT BLE 2Mbps 2402MHz Ant1 Emission



Band Edge NVNT BLE 2Mbps 2480MHz Ant1 Ref

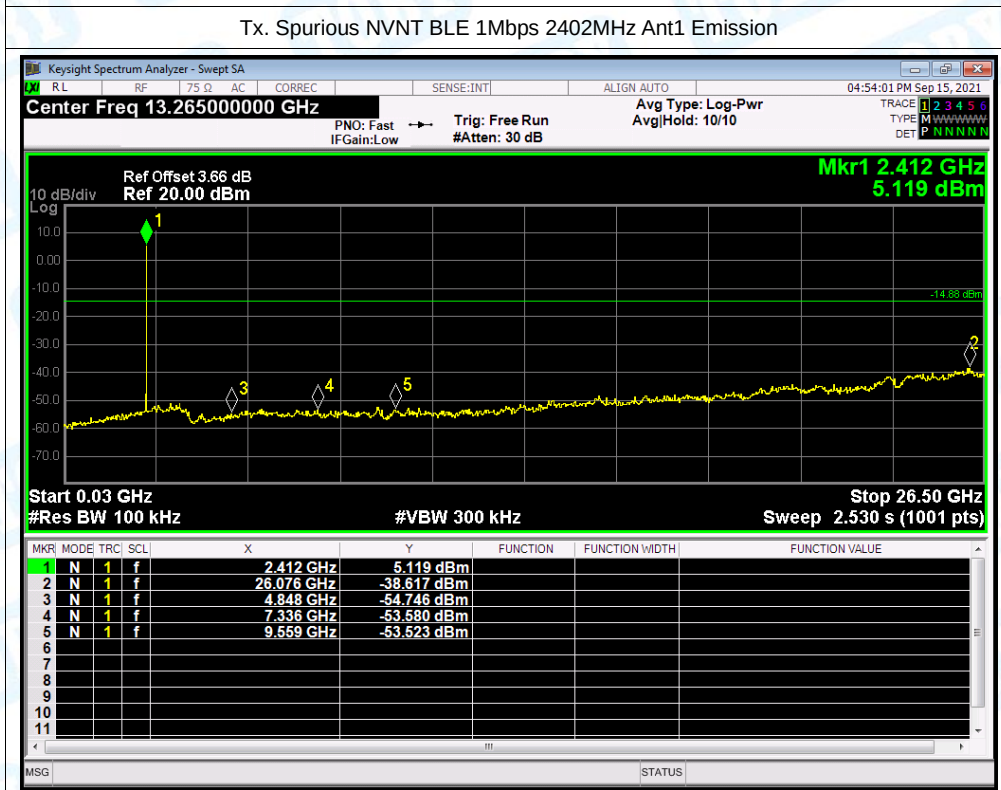
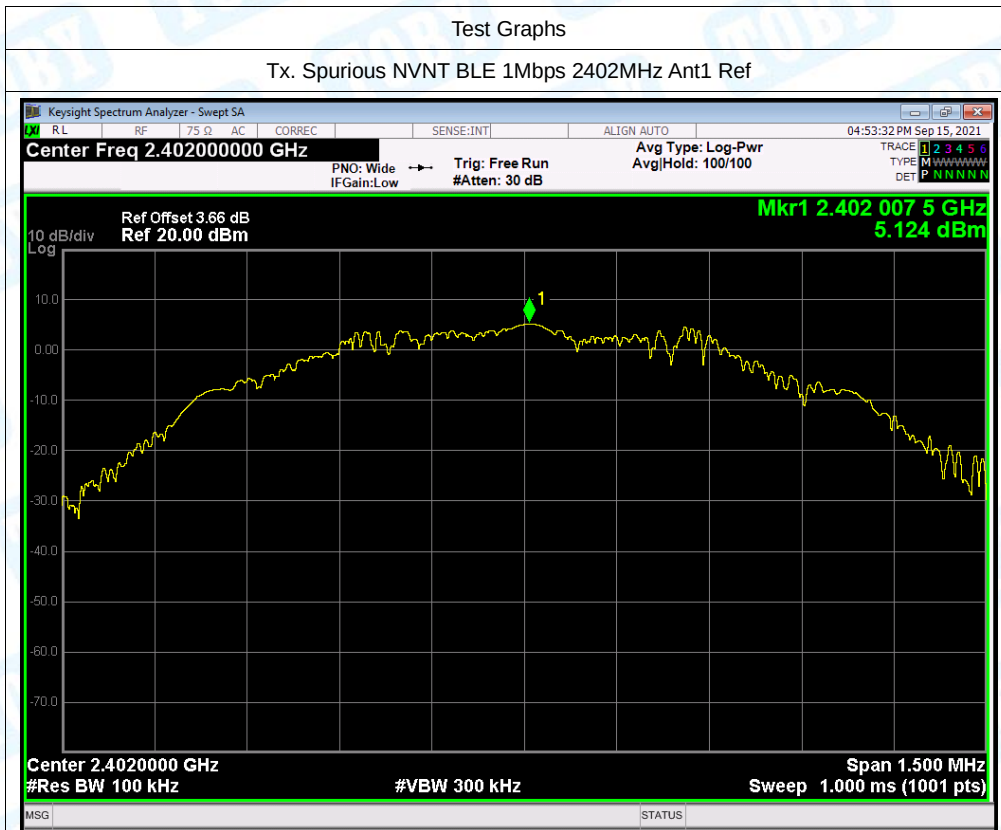


Band Edge NVNT BLE 2Mbps 2480MHz Ant1 Emission



Conducted RF Spurious Emission

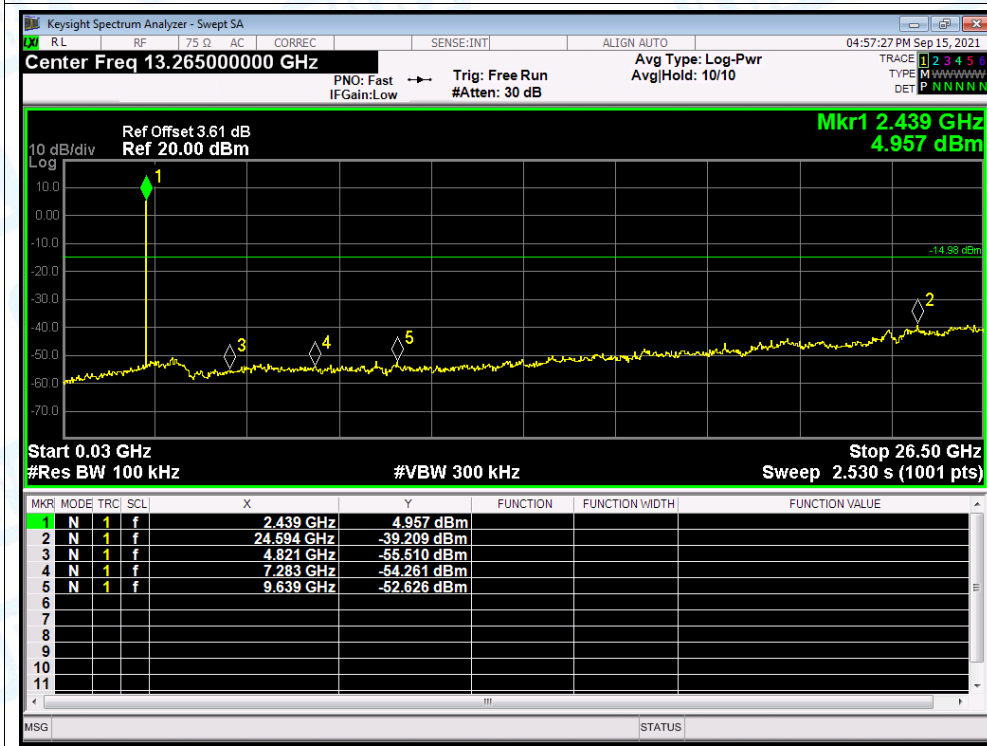
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-43.73	-20	Pass
NVNT	BLE 1Mbps	2442	Ant1	-44.22	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-44.06	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-43.72	-20	Pass
NVNT	BLE 2Mbps	2442	Ant1	-44.33	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-43.26	-20	Pass



Tx. Spurious NVNT BLE 1Mbps 2442MHz Ant1 Ref



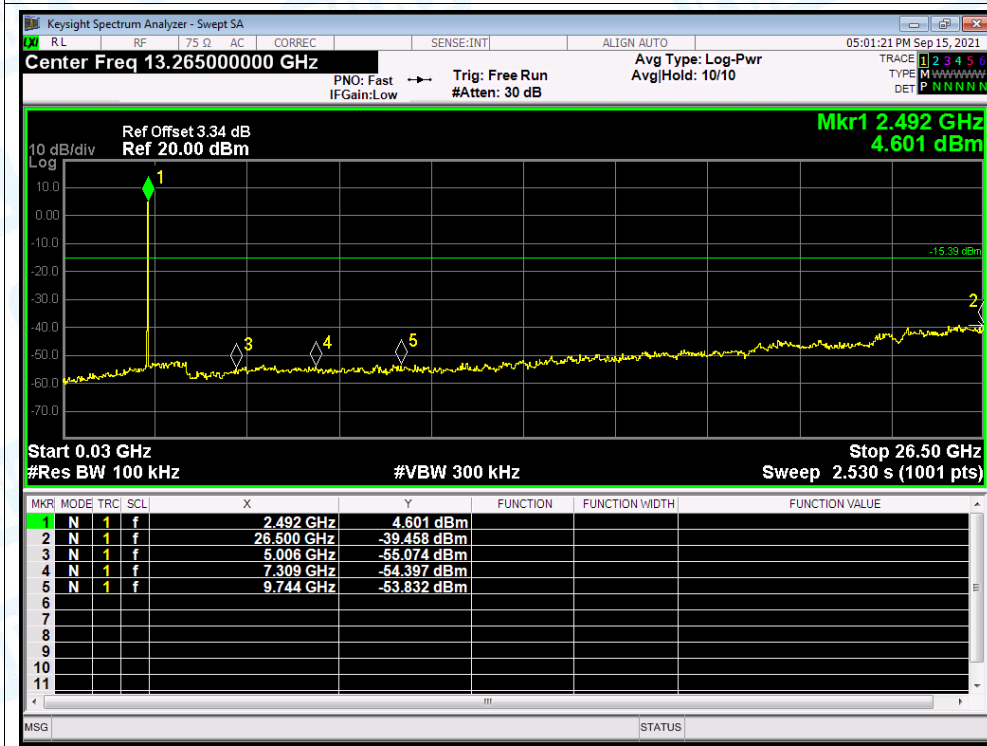
Tx. Spurious NVNT BLE 1Mbps 2442MHz Ant1 Emission



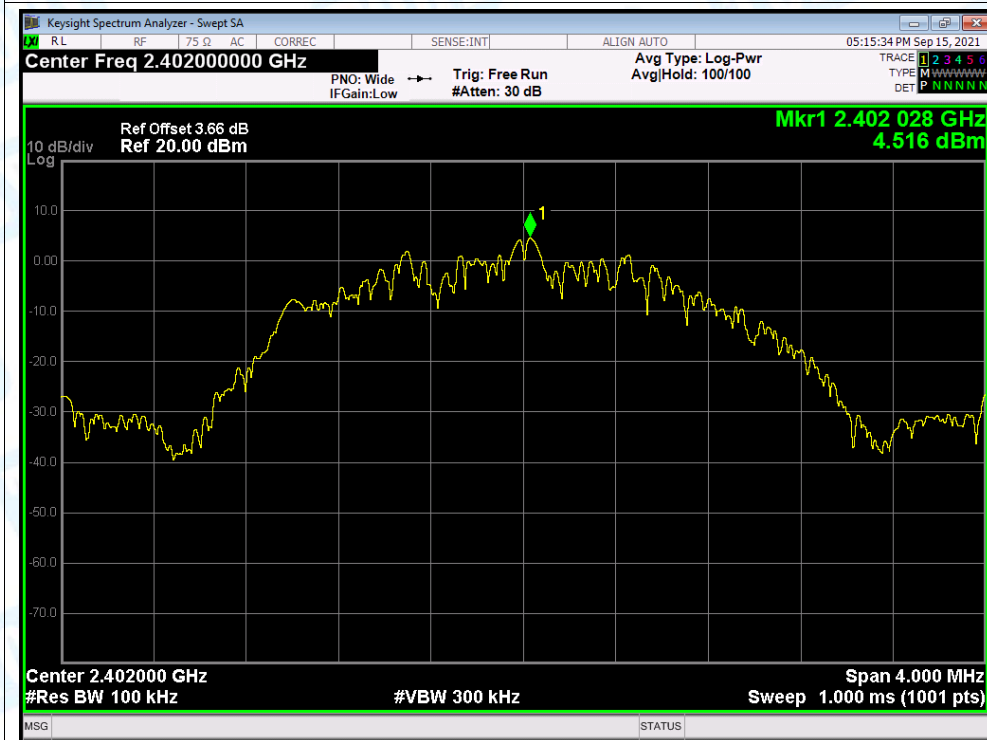
Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Ref



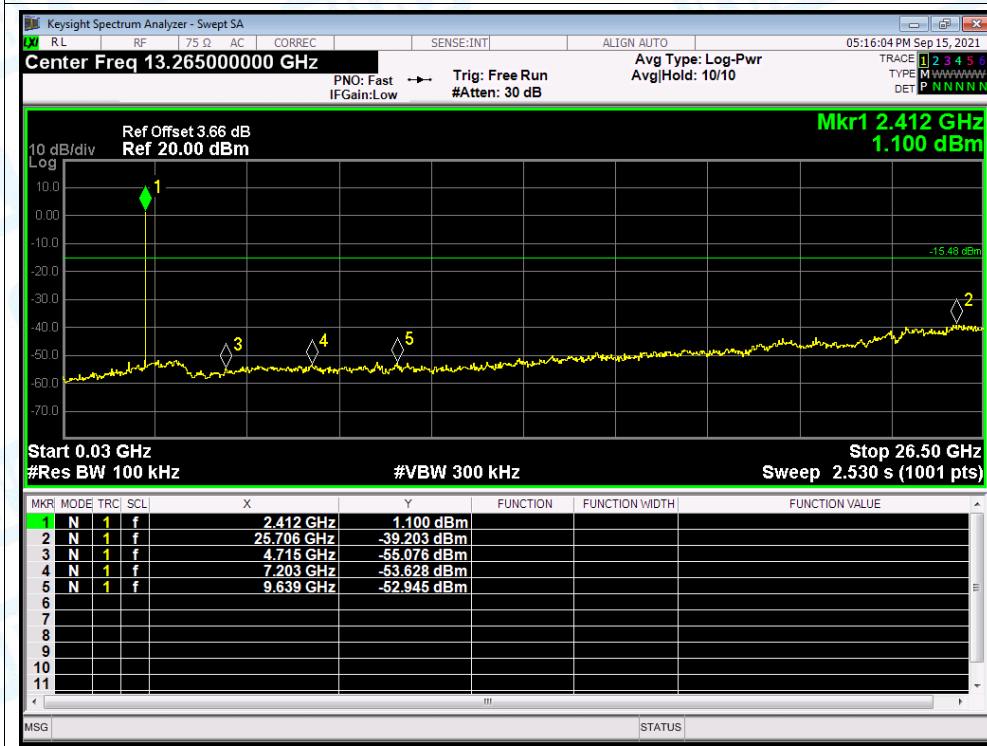
Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Emission



Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Ref



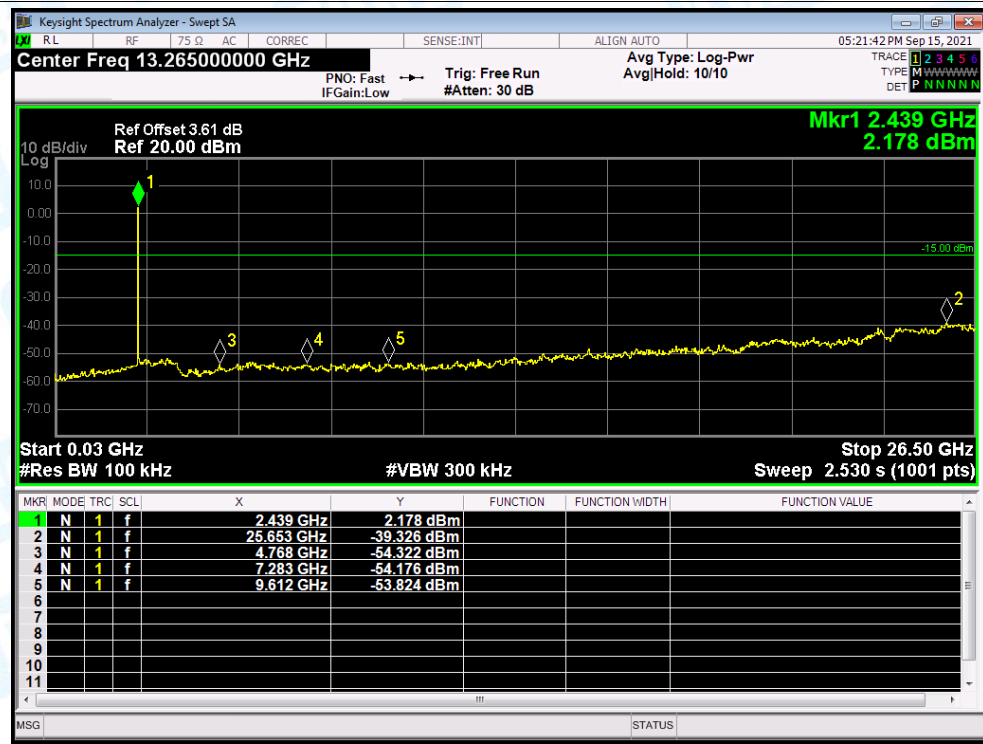
Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Emission



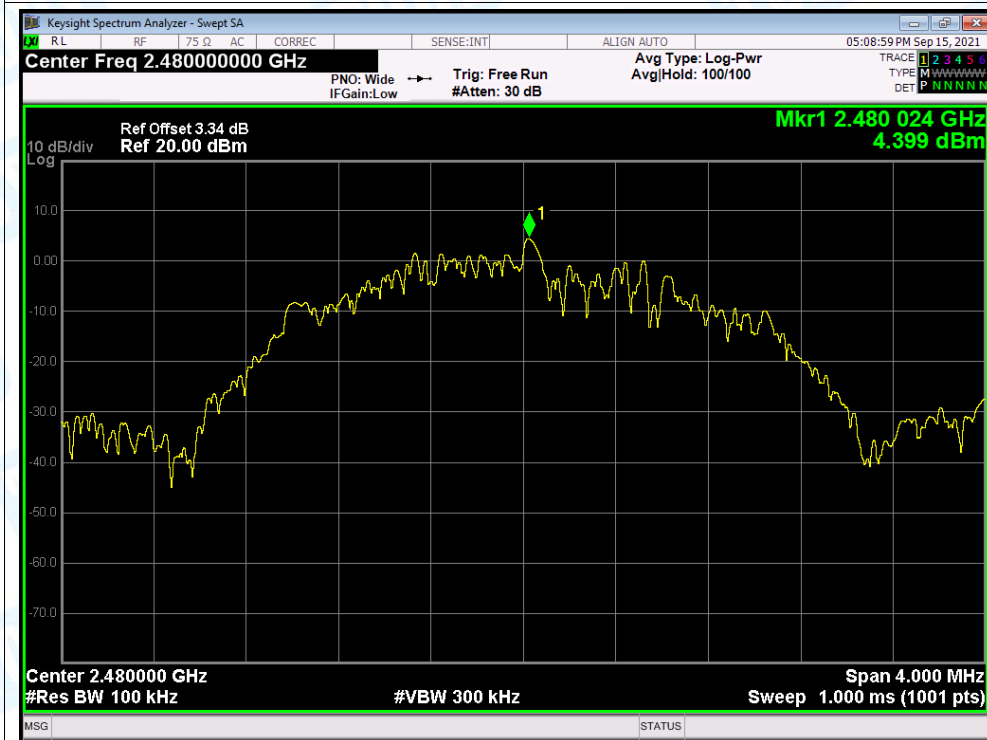
Tx. Spurious NVNT BLE 2Mbps 2442MHz Ant1 Ref



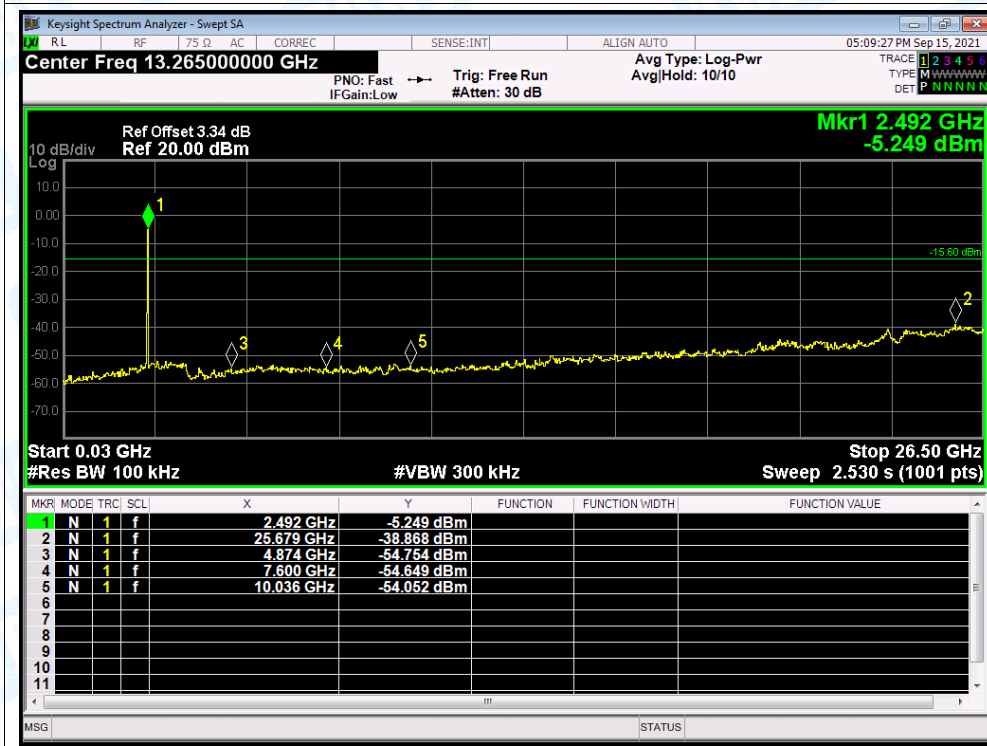
Tx. Spurious NVNT BLE 2Mbps 2442MHz Ant1 Emission



Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Emission



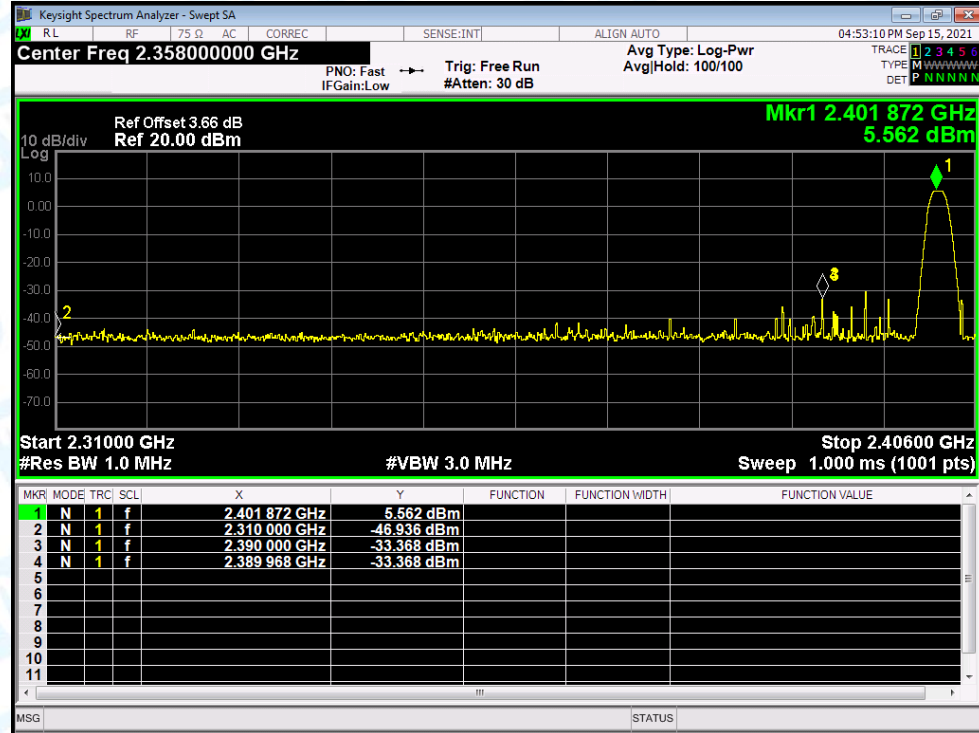
Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	2310	-46.58	2	50.68	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2310	-56.71	2	40.55	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2389.968	-33.36	2	63.9	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2377.968	-55.81	2	41.45	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-40.34	2	56.92	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-55.97	2	41.29	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-45.95	2	51.31	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-55.59	2	41.67	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2484.064	-24.99	2	72.27	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.776	-55.08	2	42.18	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-43.75	2	53.51	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-55.91	2	41.35	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-46.76	2	50.5	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-56.71	2	40.55	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2385.648	-37.64	2	59.62	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2371.92	-55.87	2	41.39	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-45.79	2	51.47	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-55.89	2	41.37	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-24.95	2	72.31	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-54.6	2	42.66	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.512	-24.95	2	72.31	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.512	-54.6	2	42.66	Average	54	Pass

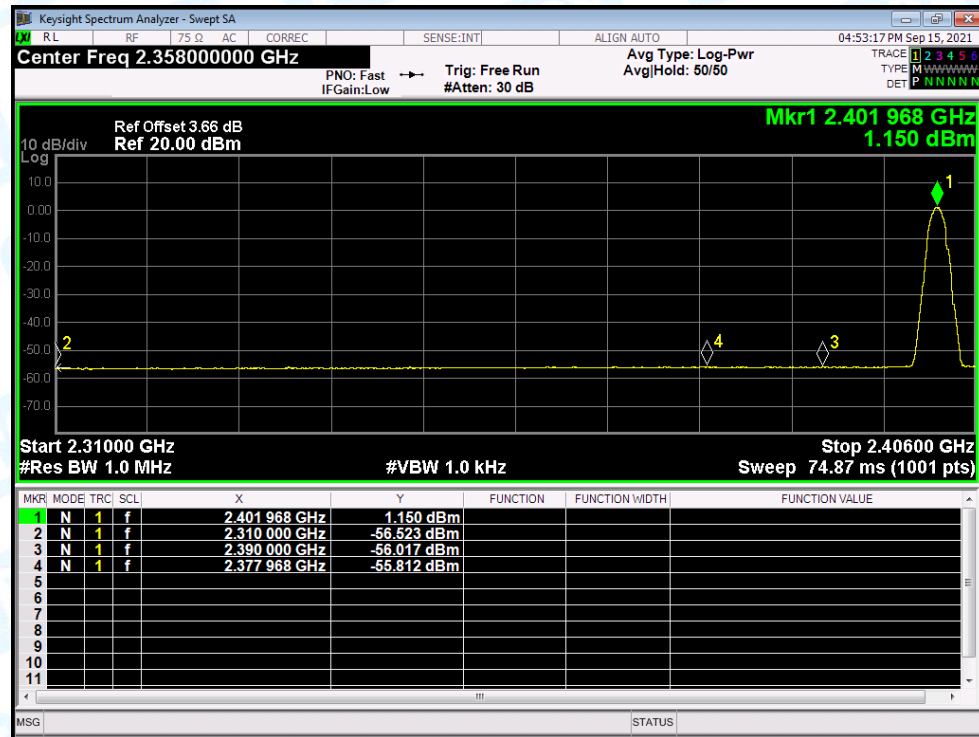
NVNT	BLE 2Mbps	2480	Ant1	2500	-44.06	2	53.2	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2500	-55.93	2	41.33	Average	54	Pass

Test Graphs

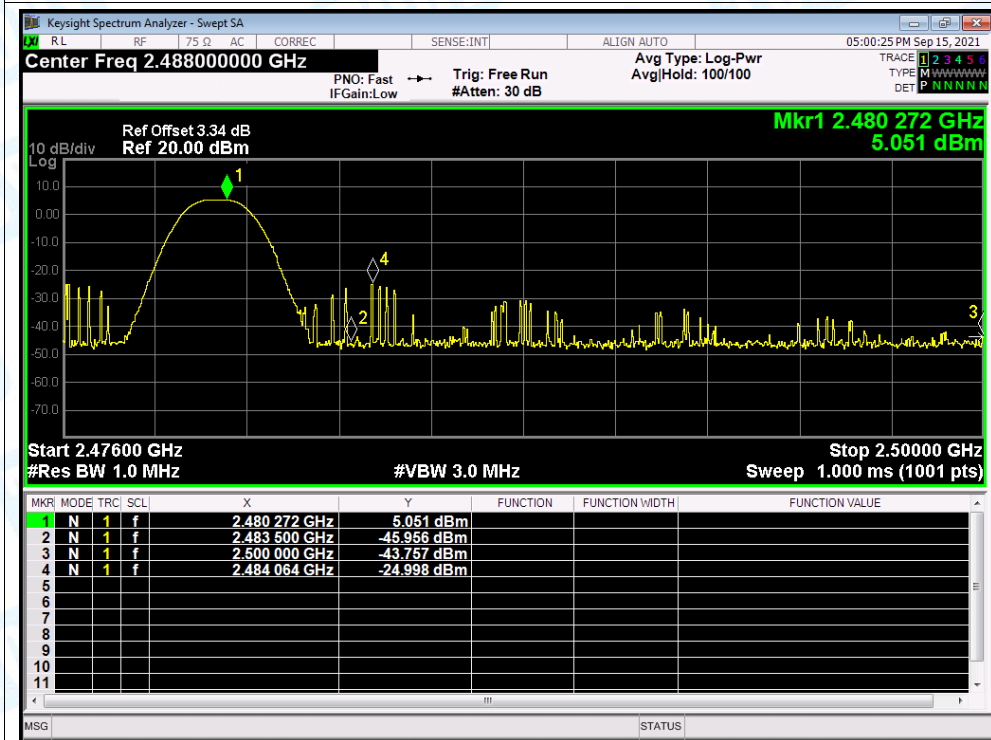
Restrict Band NVNT BLE 1Mbps 2402MHz Ant1 Peak



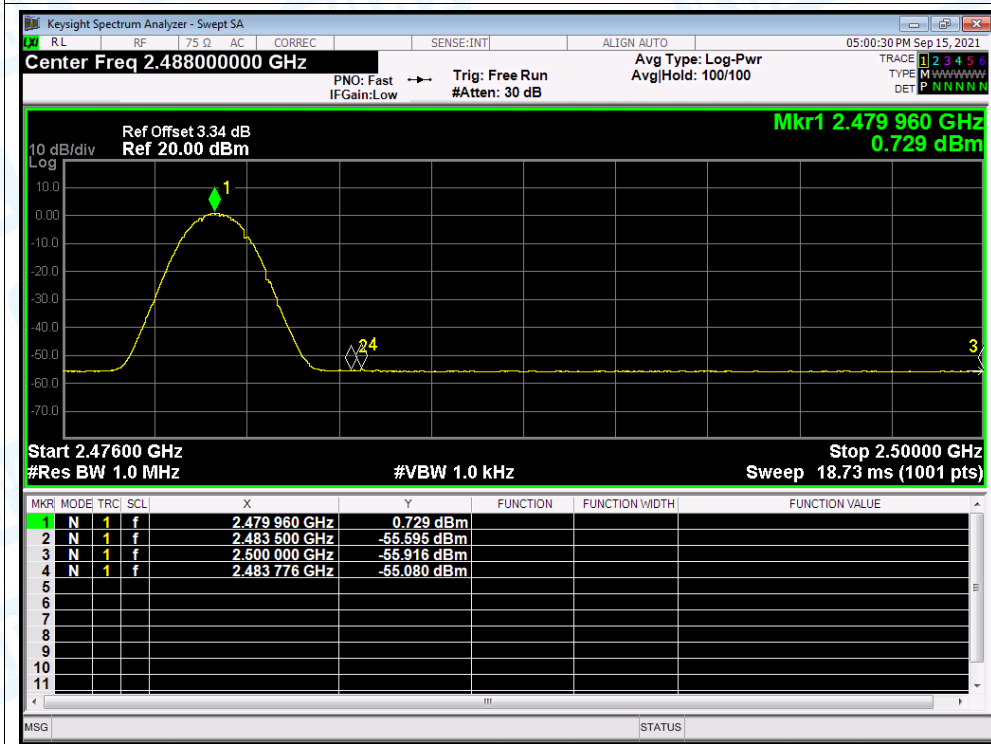
Restrict Band NVNT BLE 1Mbps 2402MHz Ant1 Average



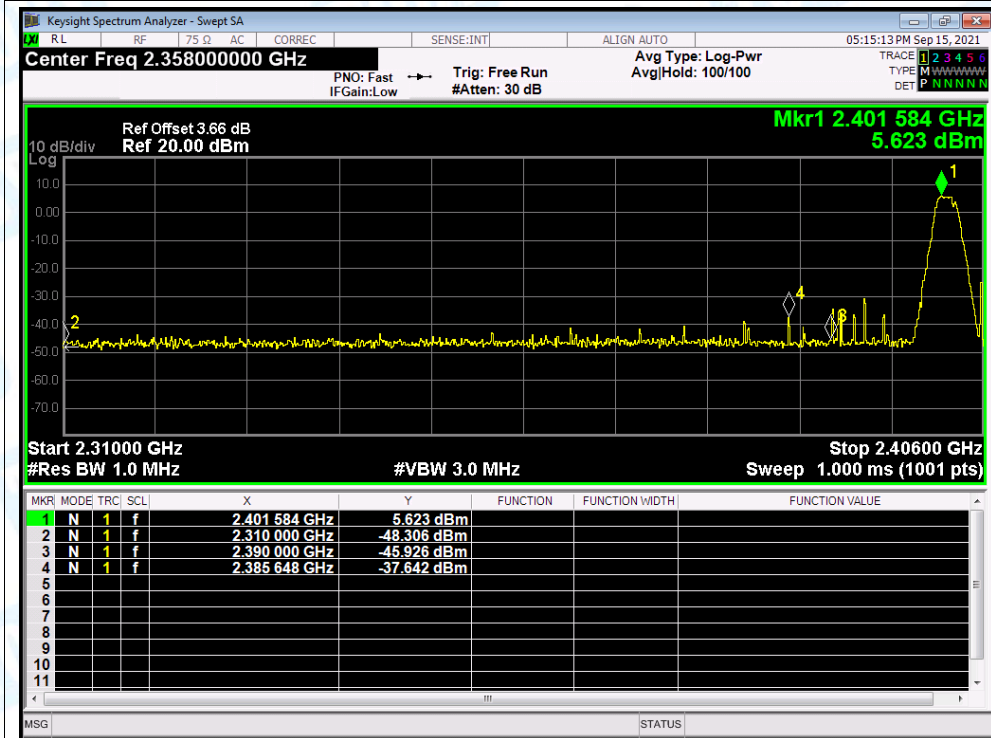
Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Peak



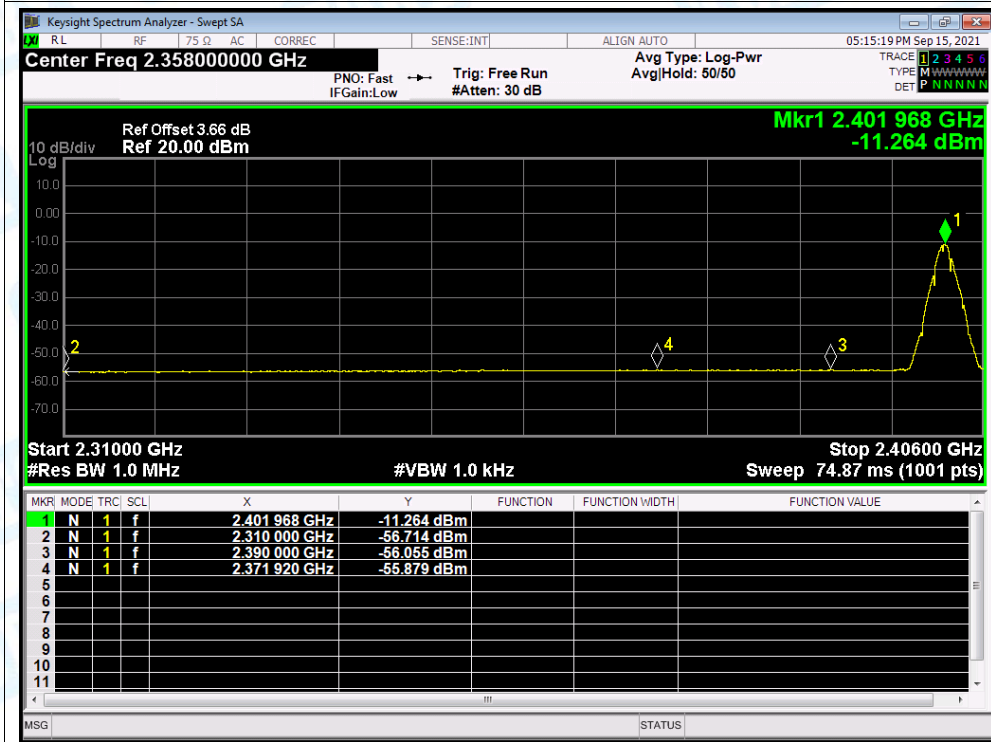
Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Average



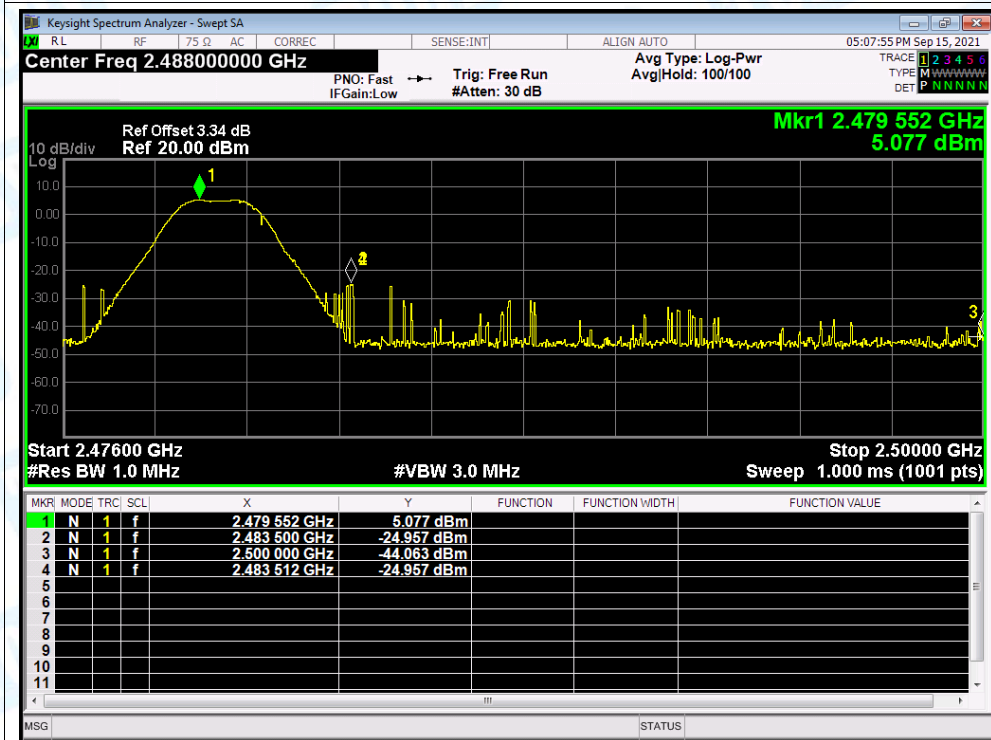
Restrict Band NVNT BLE 2Mbps 2402MHz Ant1 Peak



Restrict Band NVNT BLE 2Mbps 2402MHz Ant1 Average



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Peak



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Average

