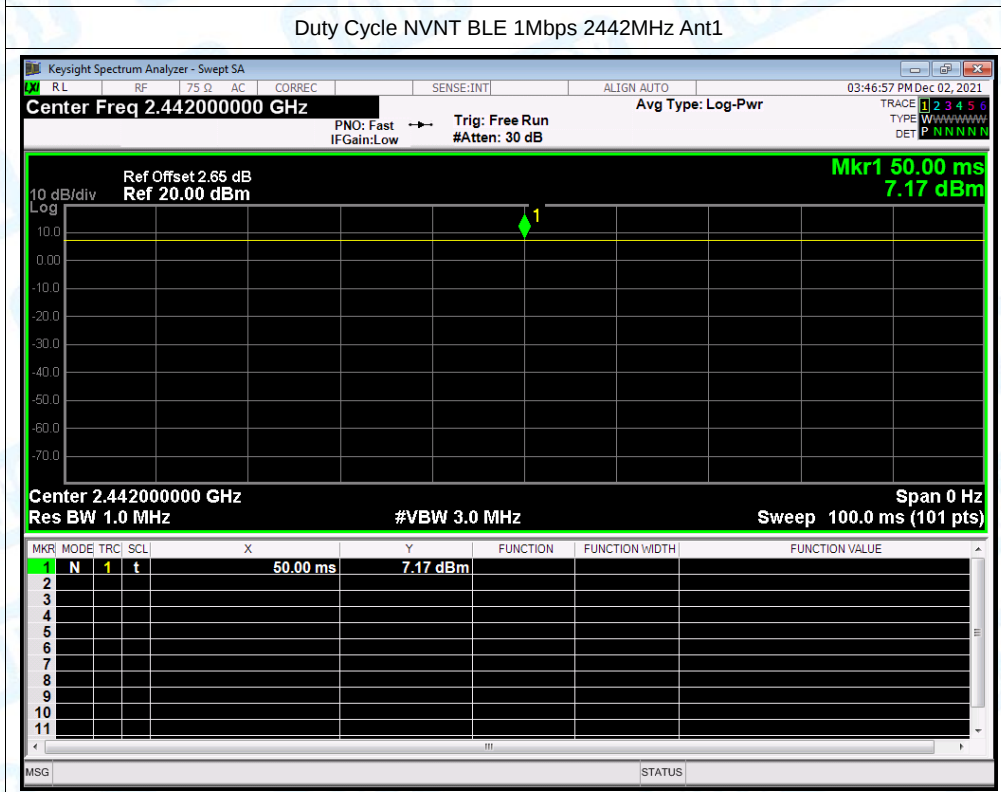
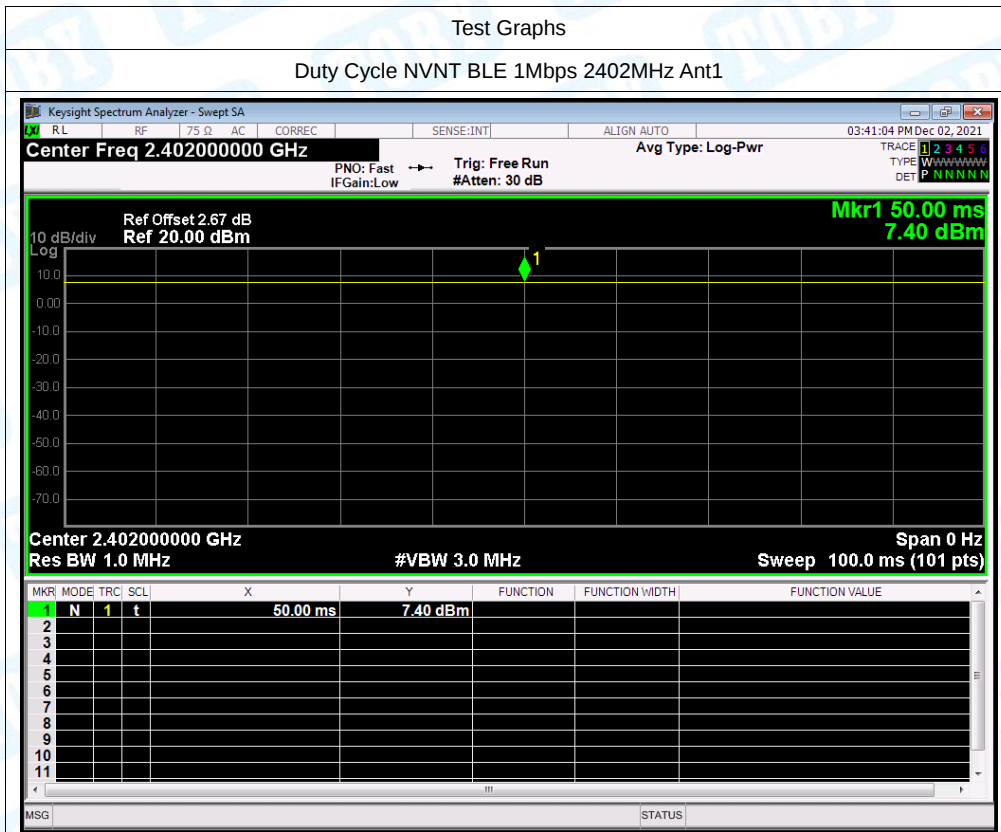


RF Test Data for Bluetooth LE (Conducted Measurements)

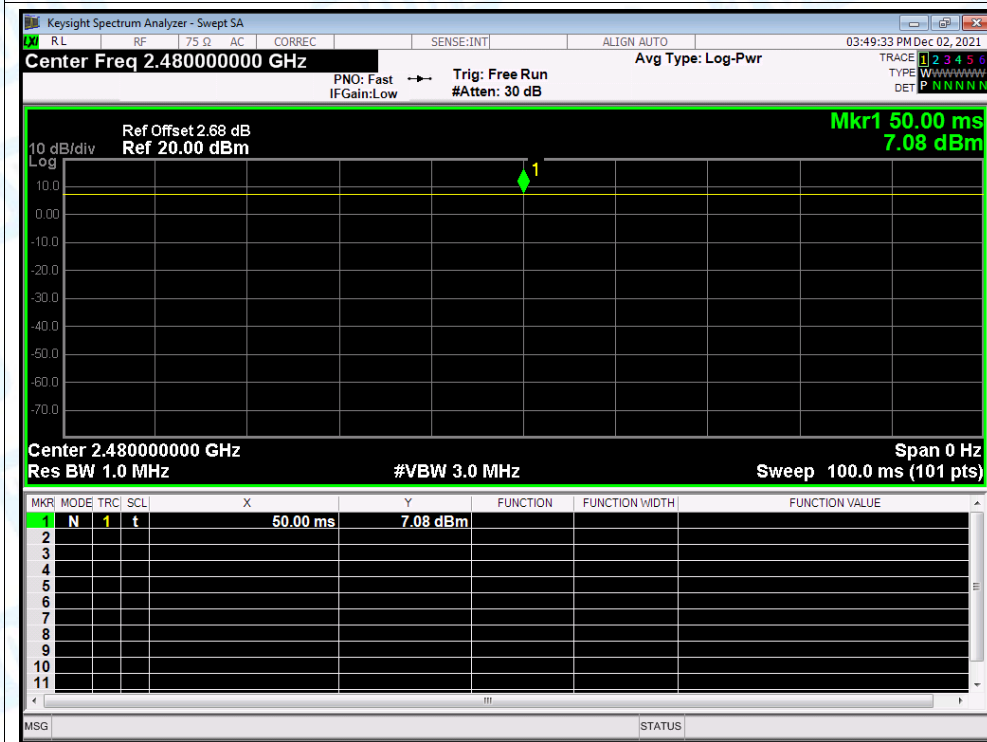
General Description of EUT	
Product Name:	Earshots
Test Model:	ESEP020
Sample ID:	20210804-23-2#
Environmental Conditions	
Temperature:	24°C
Relative Humidity:	50%
Test Voltage:	DC3.7V
Test Engineer:	Hejingchang
Note: For a more detailed features description, please refer to the report TB-FCC186328	

Duty Cycle

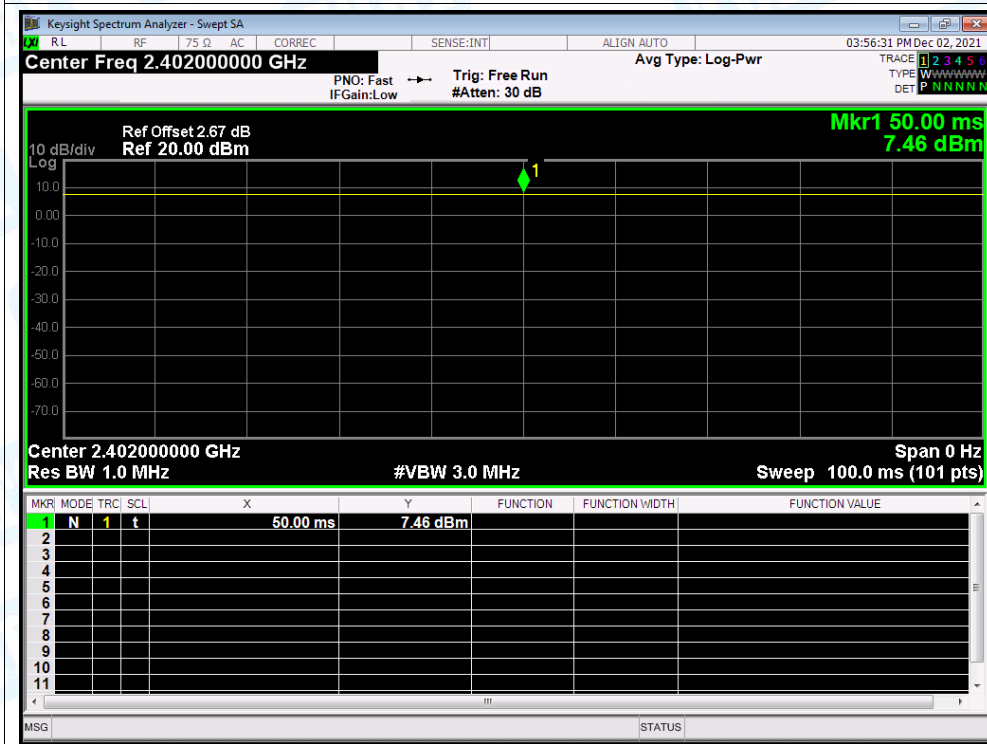
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1Mbps	2402	Ant1	100	0	0
NVNT	BLE 1Mbps	2442	Ant1	100	0	0
NVNT	BLE 1Mbps	2480	Ant1	100	0	0
NVNT	BLE 2Mbps	2402	Ant1	100	0	0
NVNT	BLE 2Mbps	2442	Ant1	100	0	0
NVNT	BLE 2Mbps	2480	Ant1	100	0	0

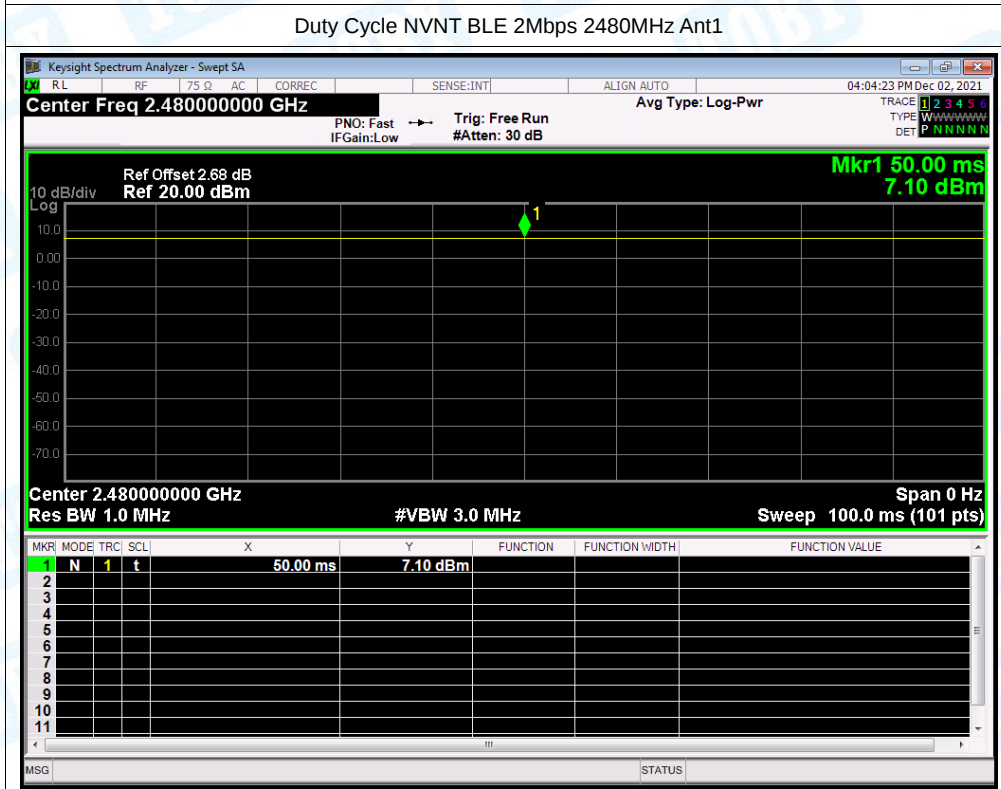
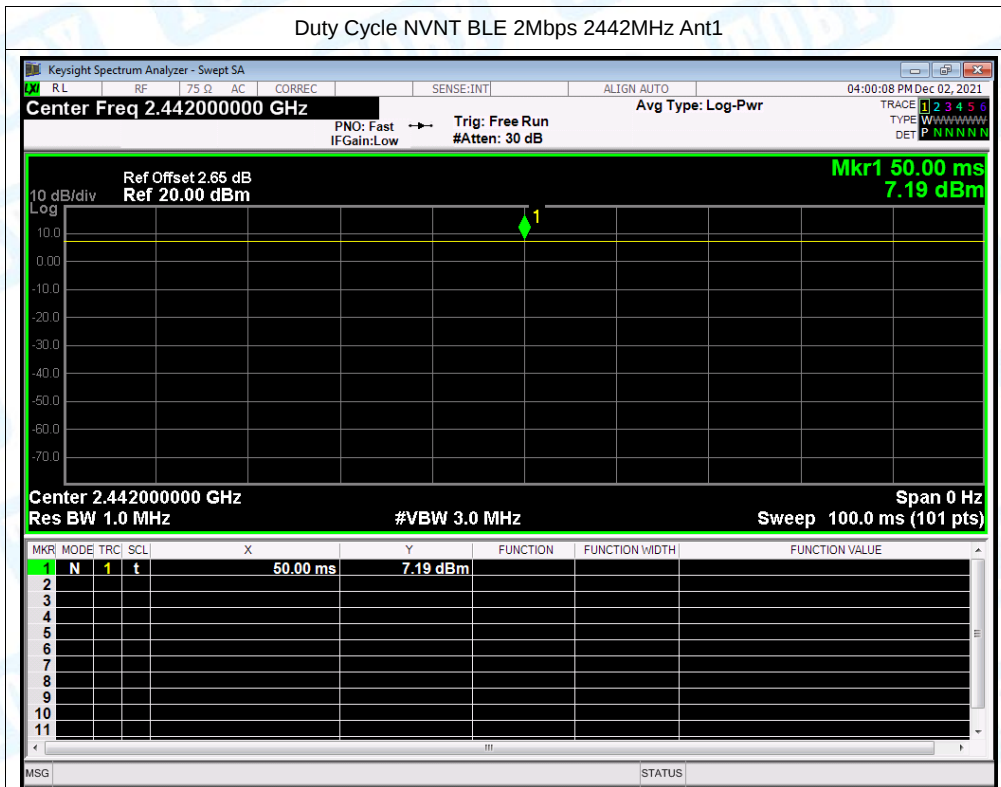


Duty Cycle NVNT BLE 1Mbps 2480MHz Ant1



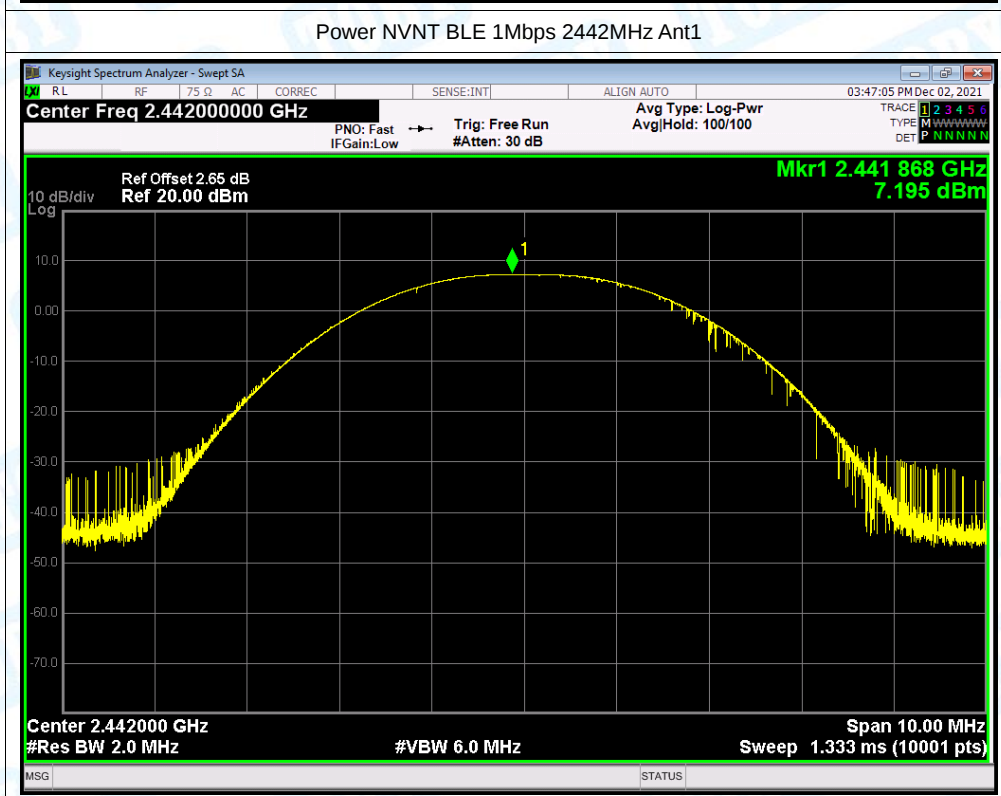
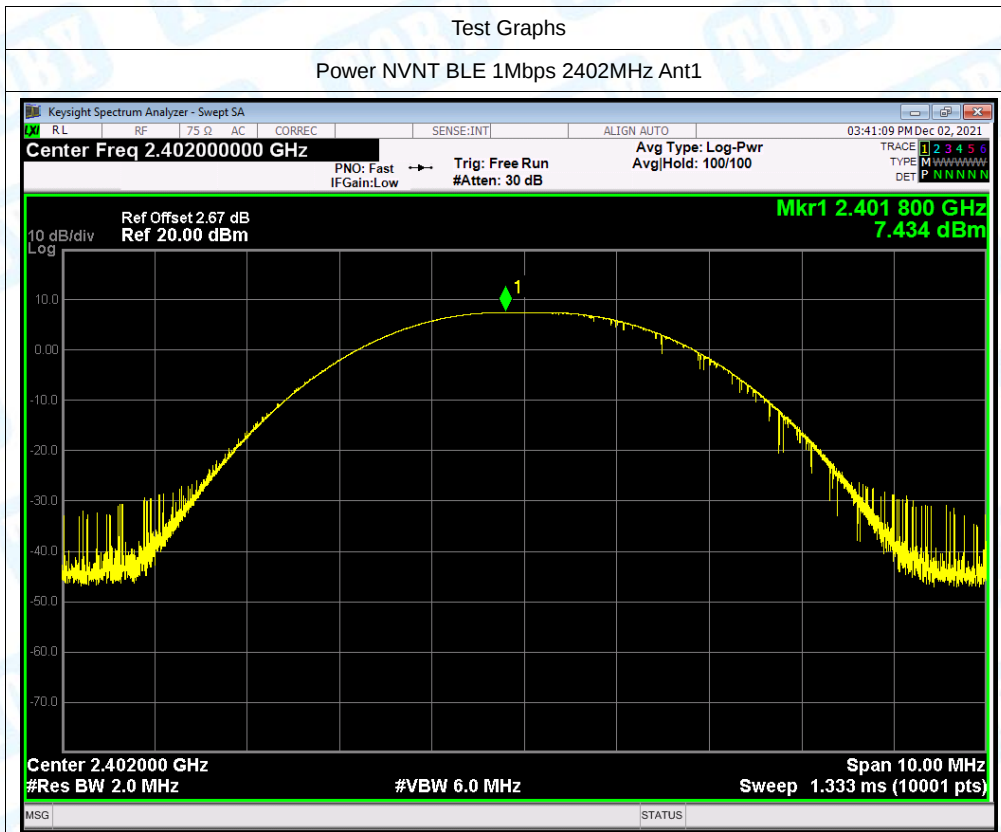
Duty Cycle NVNT BLE 2Mbps 2402MHz Ant1



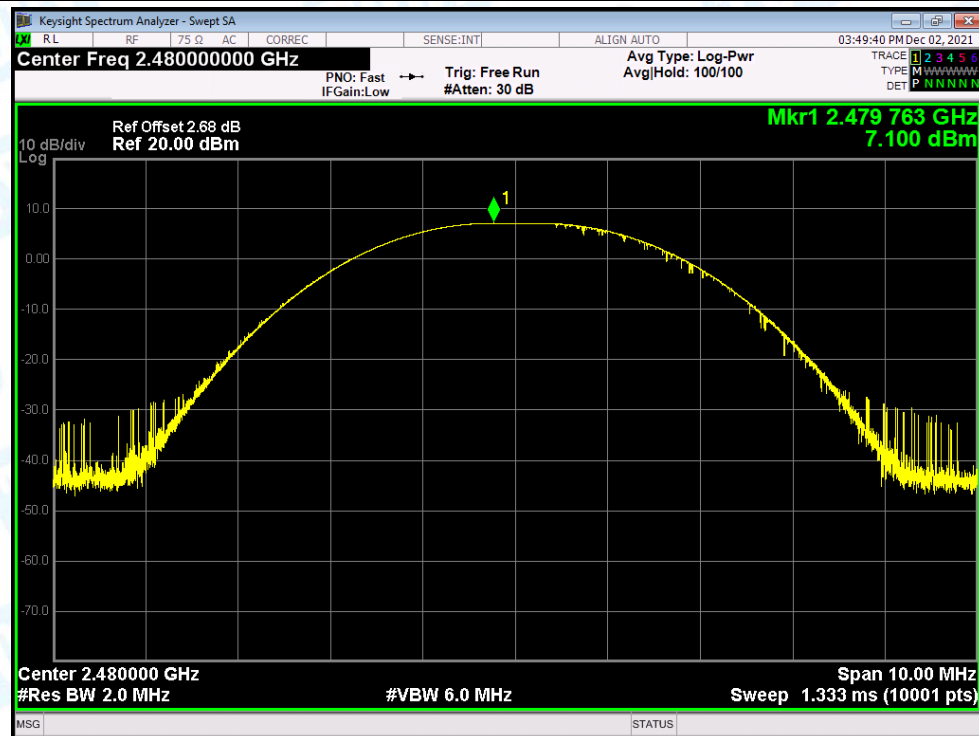


Maximum Conducted Output Power

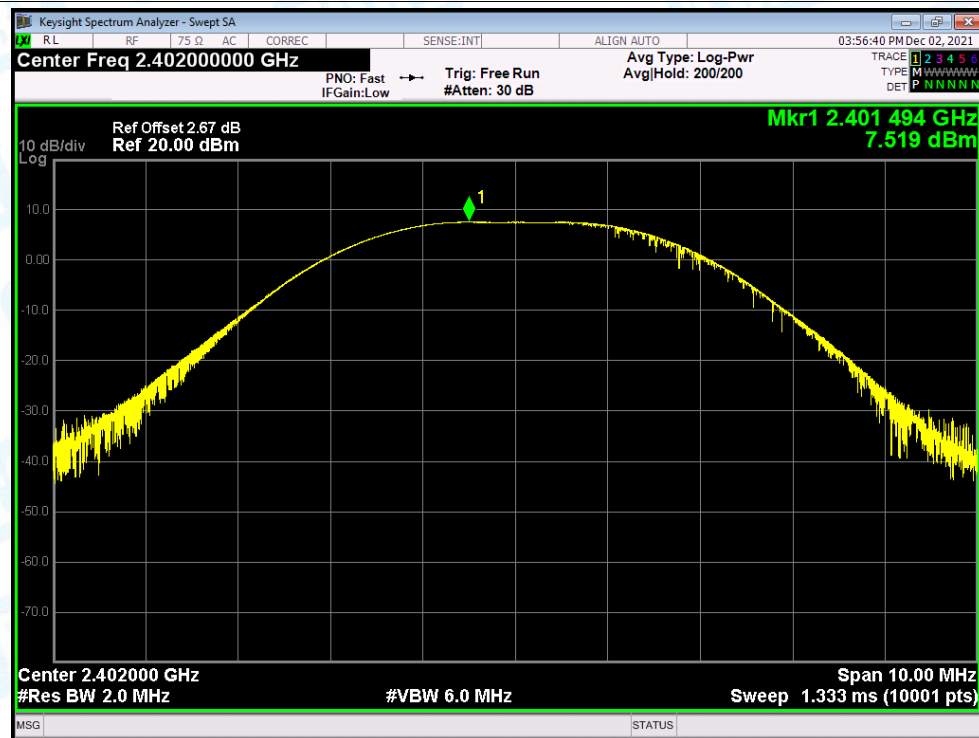
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	7.434	0	7.434	30	Pass
NVNT	BLE 1Mbps	2442	Ant1	7.195	0	7.195	30	Pass
NVNT	BLE 1Mbps	2480	Ant1	7.1	0	7.1	30	Pass
NVNT	BLE 2Mbps	2402	Ant1	7.519	0	7.519	30	Pass
NVNT	BLE 2Mbps	2442	Ant1	7.195	0	7.195	30	Pass
NVNT	BLE 2Mbps	2480	Ant1	7.126	0	7.126	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

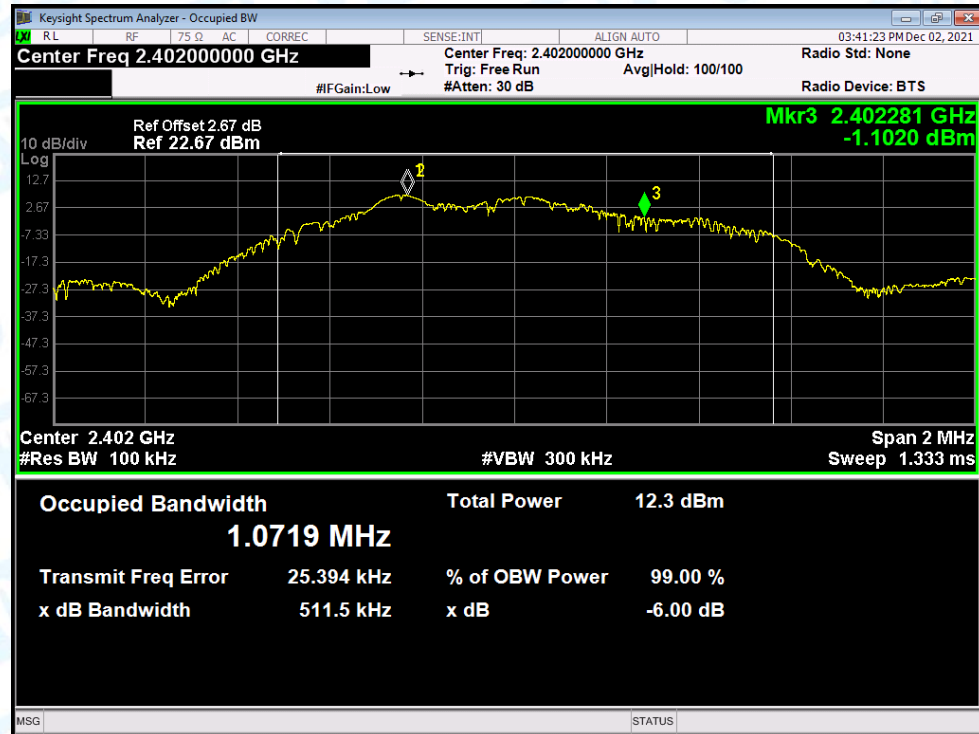


-6dB Bandwidth

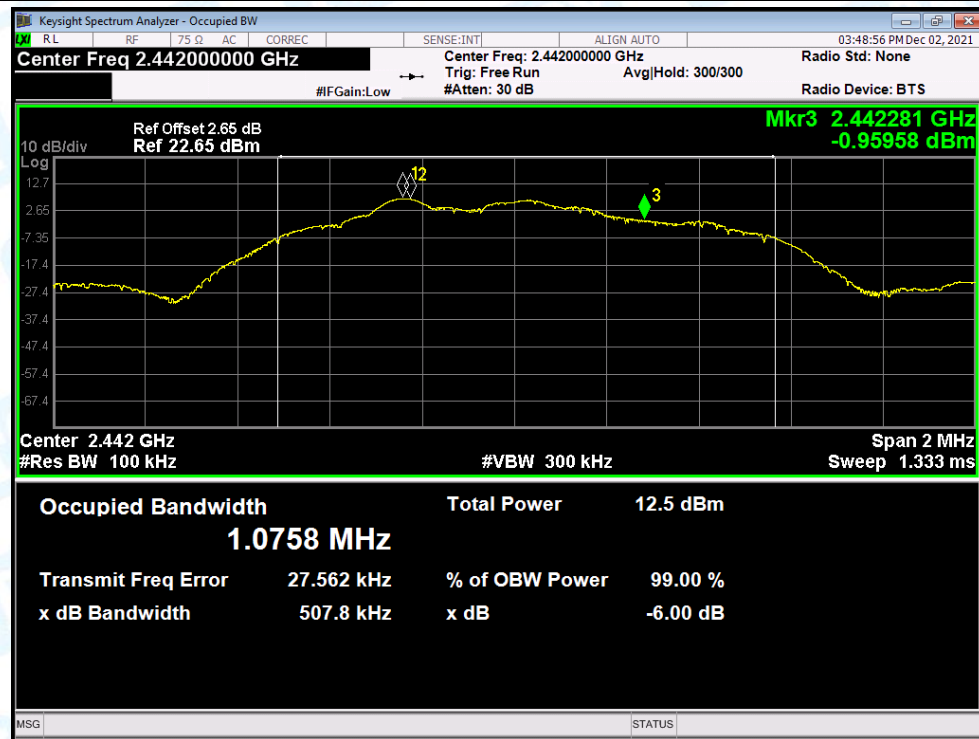
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.5115	0.5	Pass
NVNT	BLE 1Mbps	2442	Ant1	0.5078	0.5	Pass
NVNT	BLE 1Mbps	2480	Ant1	0.5095	0.5	Pass
NVNT	BLE 2Mbps	2402	Ant1	0.8723	0.5	Pass
NVNT	BLE 2Mbps	2442	Ant1	0.8667	0.5	Pass
NVNT	BLE 2Mbps	2480	Ant1	0.8811	0.5	Pass

Test Graphs

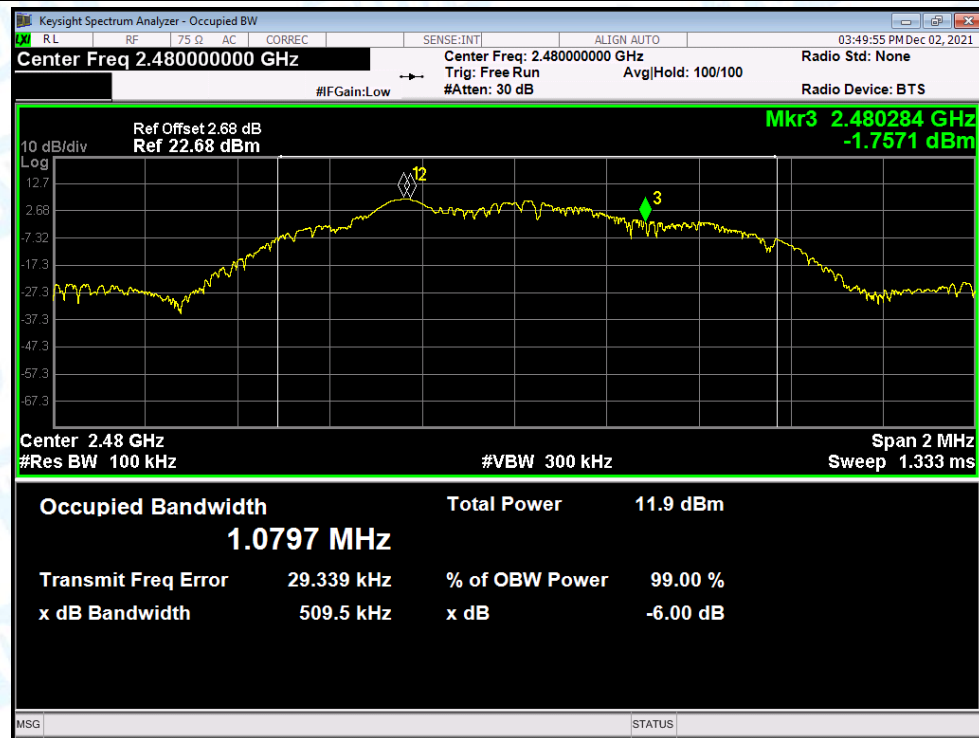
-6dB Bandwidth NVNT BLE 1Mbps 2402MHz Ant1



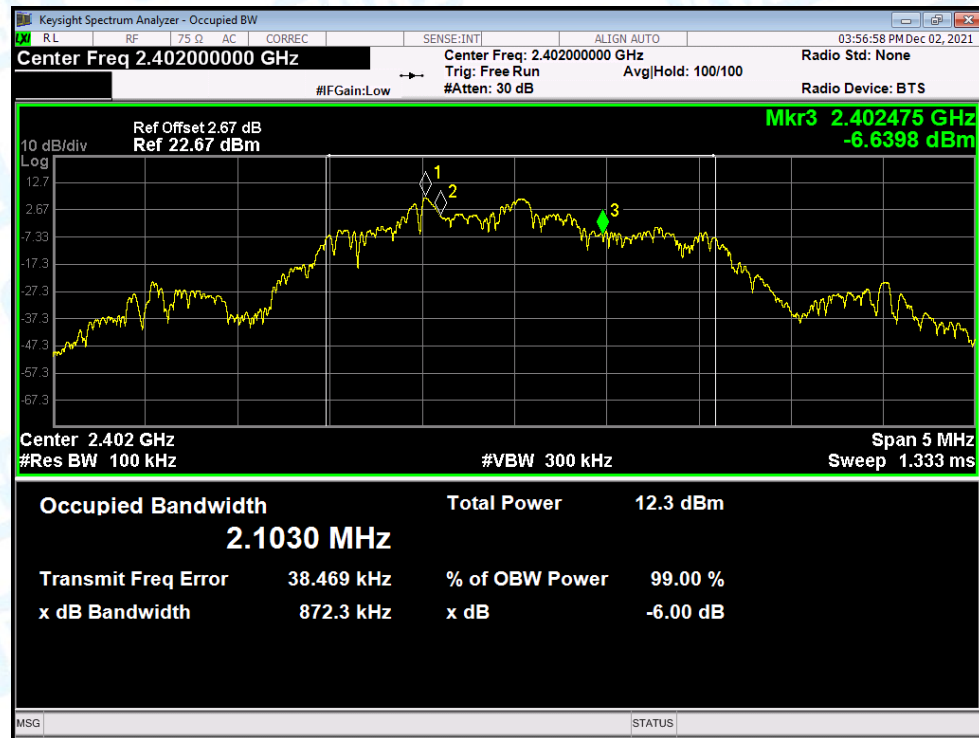
-6dB Bandwidth NVNT BLE 1Mbps 2442MHz Ant1



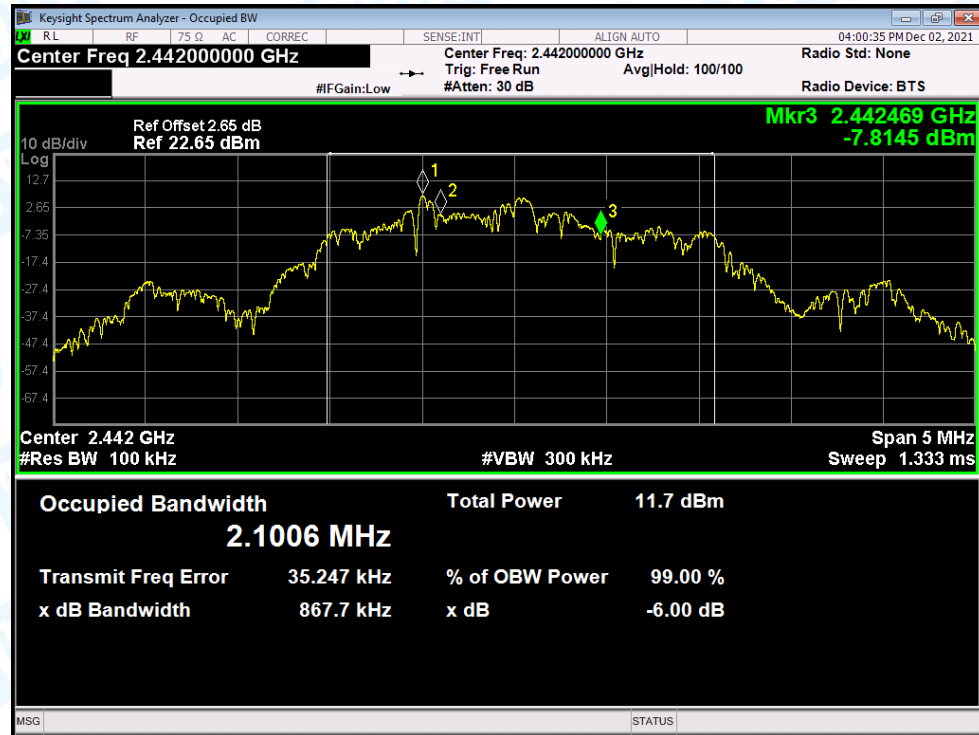
-6dB Bandwidth NVNT BLE 1Mbps 2480MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2442MHz Ant1



-6dB Bandwidth NVNT BLE 2Mbps 2480MHz Ant1

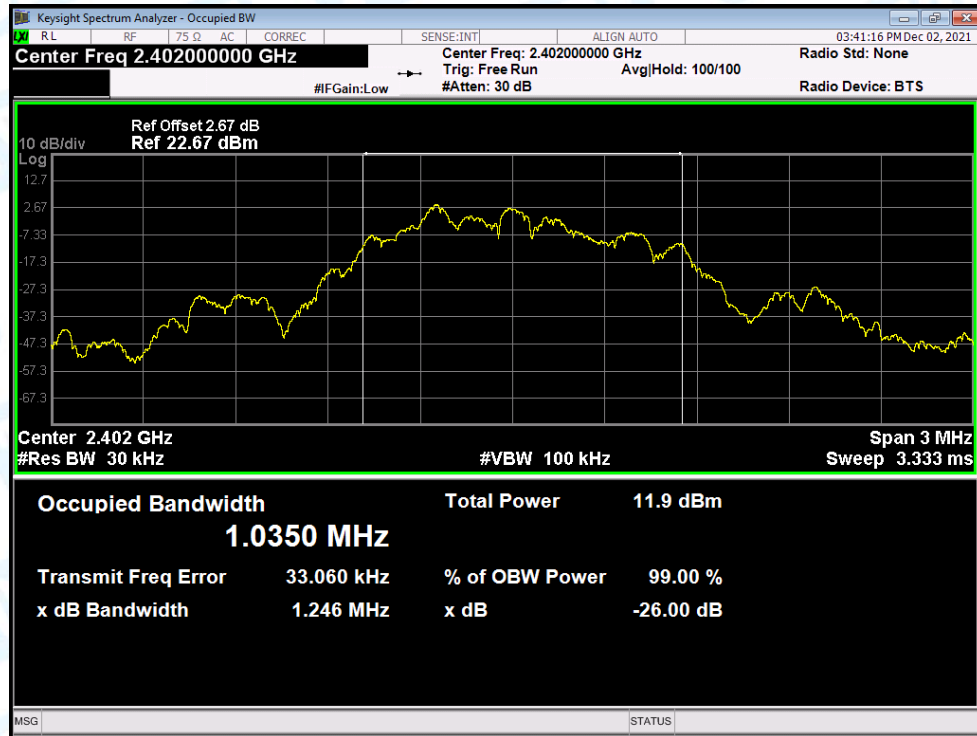


Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1Mbps	2402	Ant1	1.0350
NVNT	BLE 1Mbps	2442	Ant1	1.0343
NVNT	BLE 1Mbps	2480	Ant1	1.0325
NVNT	BLE 2Mbps	2402	Ant1	2.0735
NVNT	BLE 2Mbps	2442	Ant1	2.0764
NVNT	BLE 2Mbps	2480	Ant1	2.0605

Test Graphs

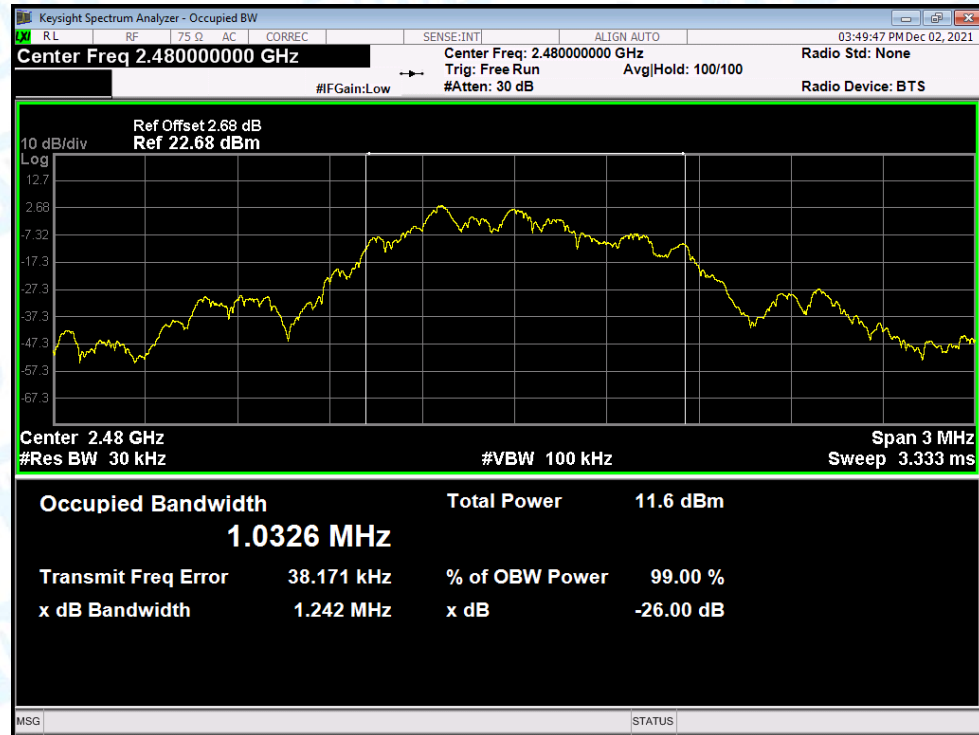
OBW NVNT BLE 1Mbps 2402MHz Ant1



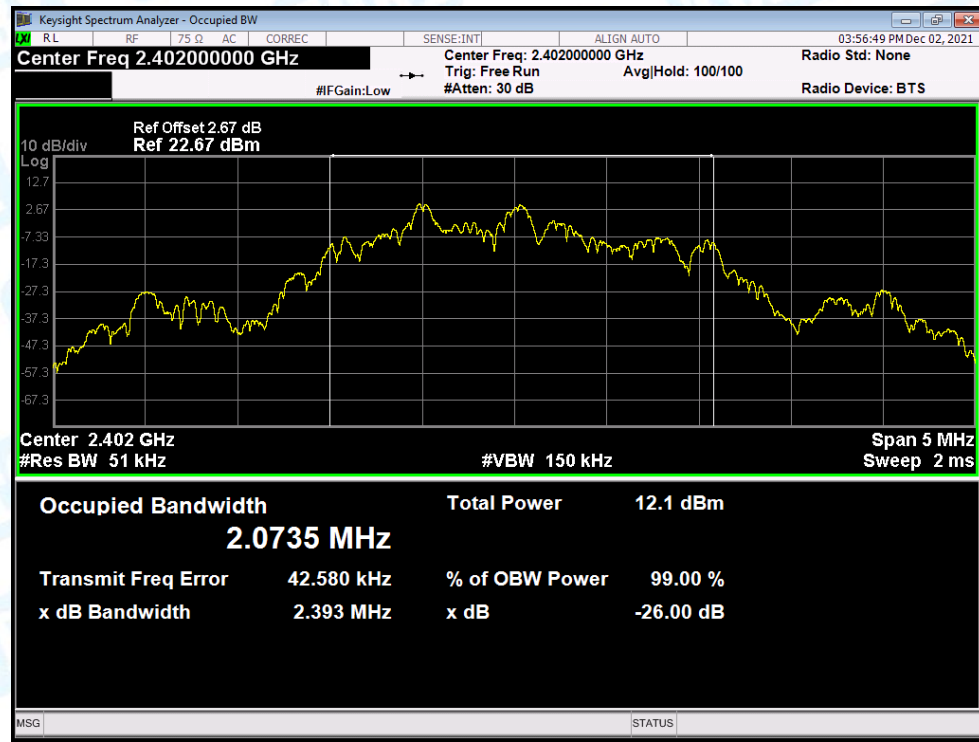
OBW NVNT BLE 1Mbps 2442MHz Ant1



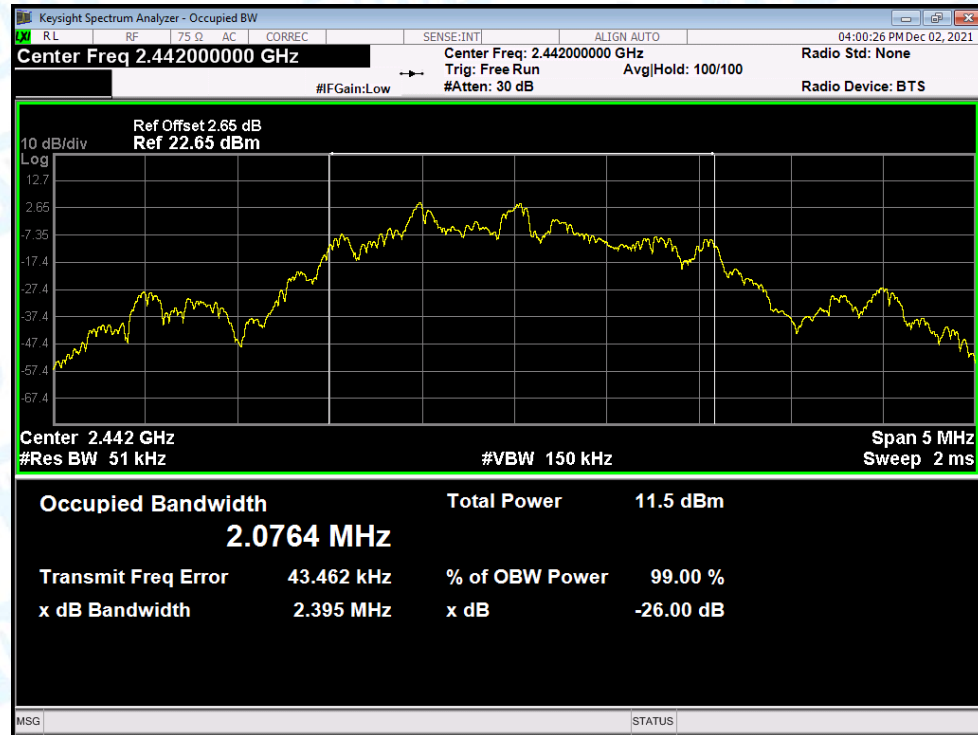
OBW NVNT BLE 1Mbps 2480MHz Ant1



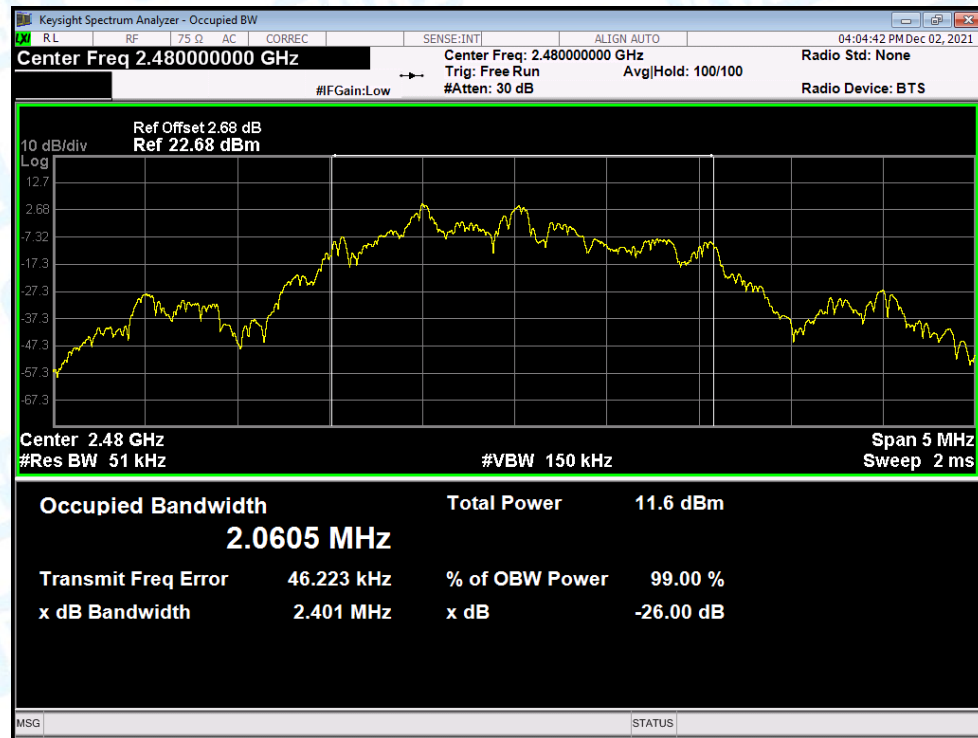
OBW NVNT BLE 2Mbps 2402MHz Ant1



OBW NVNT BLE 2Mbps 2442MHz Ant1

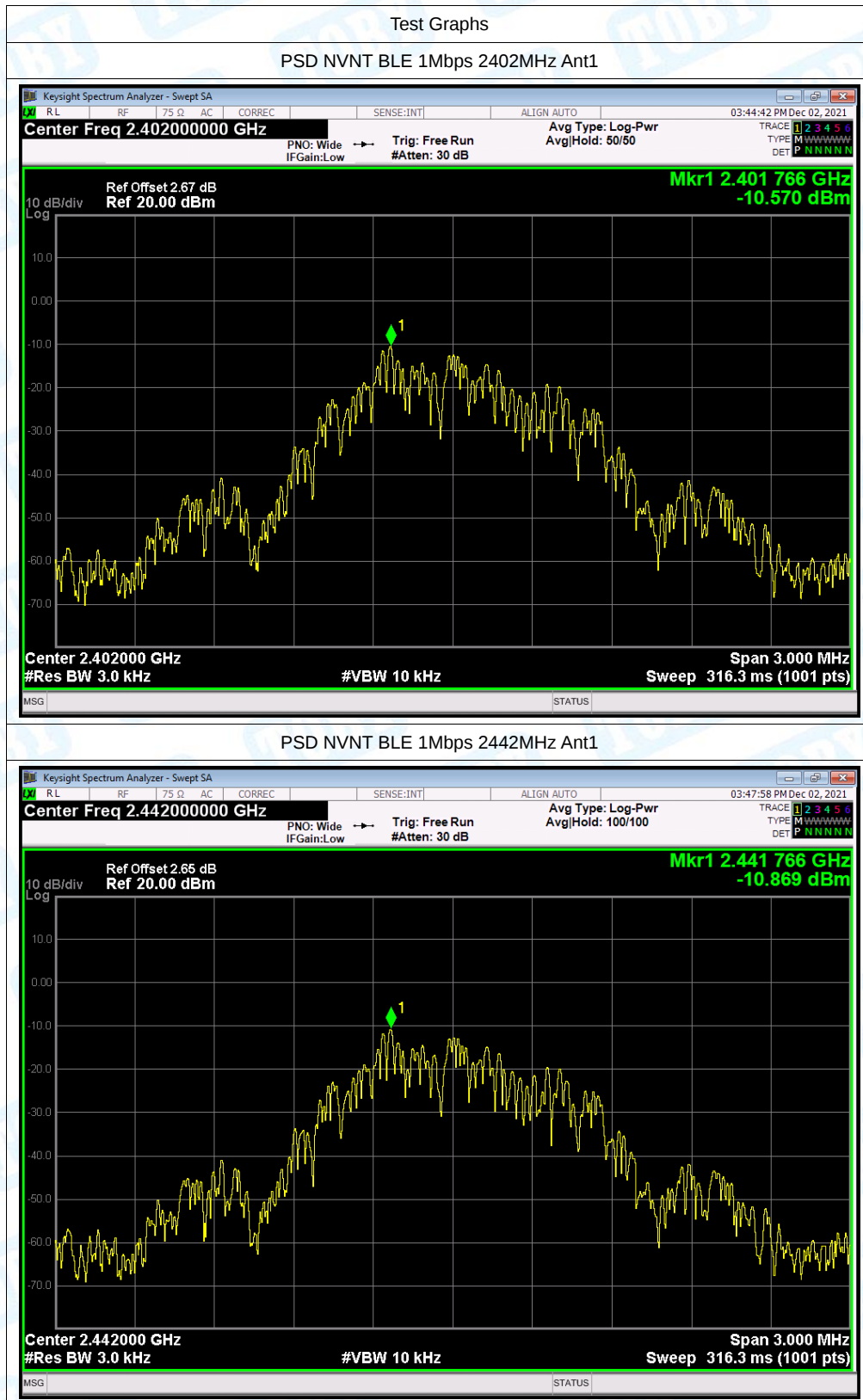


OBW NVNT BLE 2Mbps 2480MHz Ant1



Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-10.57	8	Pass
NVNT	BLE 1Mbps	2442	Ant1	-10.869	8	Pass
NVNT	BLE 1Mbps	2480	Ant1	-10.961	8	Pass
NVNT	BLE 2Mbps	2402	Ant1	-13.401	8	Pass
NVNT	BLE 2Mbps	2442	Ant1	-13.74	8	Pass
NVNT	BLE 2Mbps	2480	Ant1	-13.803	8	Pass



PSD NVNT BLE 1Mbps 2480MHz Ant1



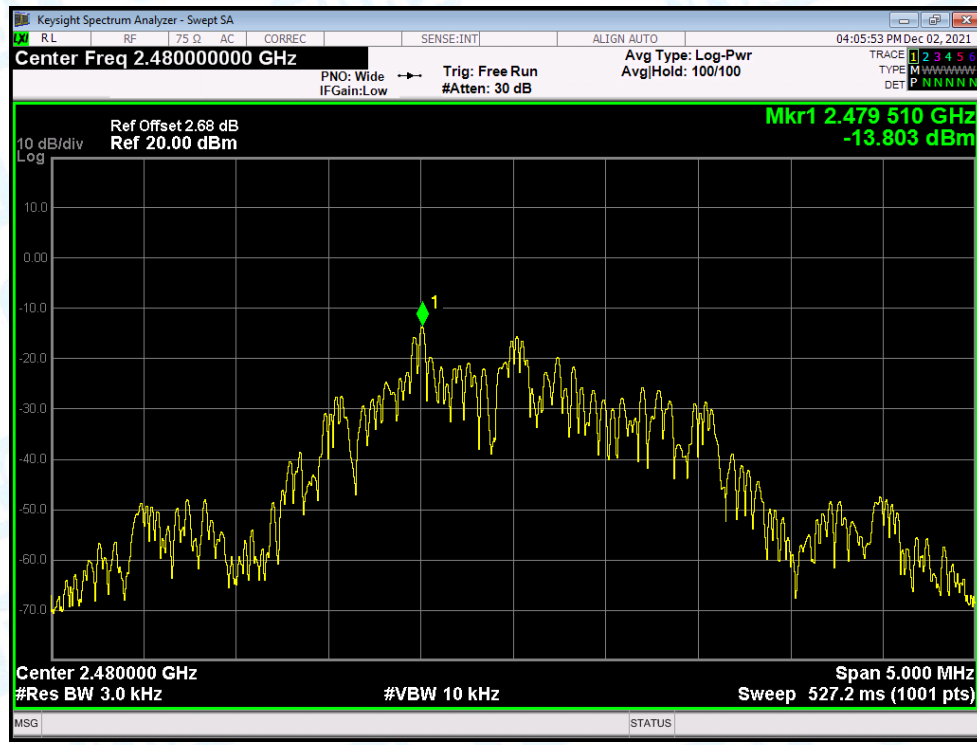
PSD NVNT BLE 2Mbps 2402MHz Ant1



PSD NVNT BLE 2Mbps 2442MHz Ant1

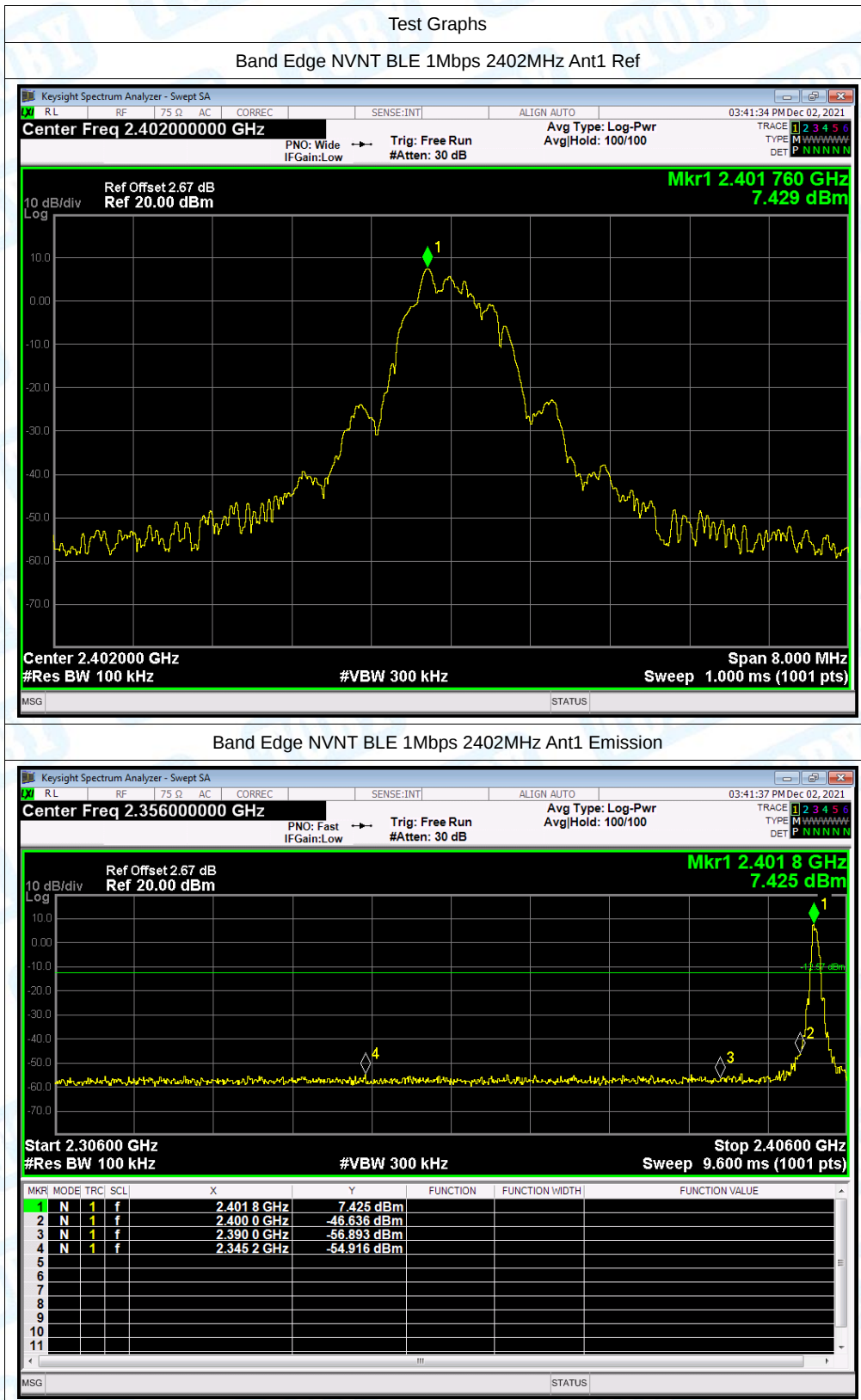


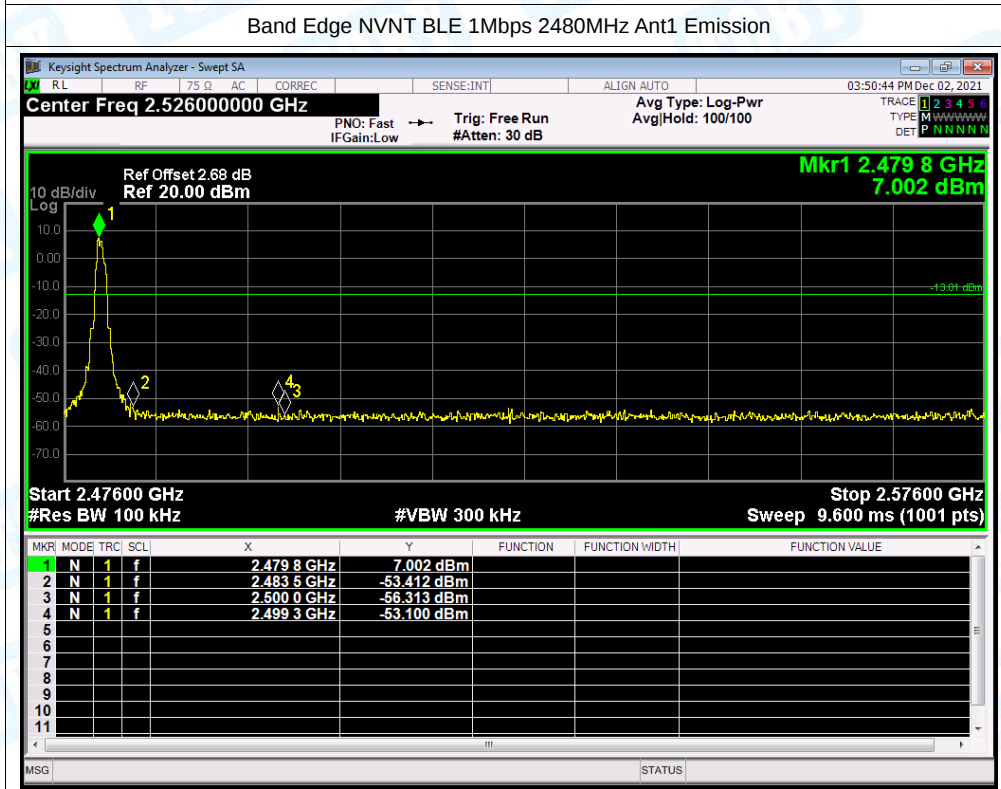
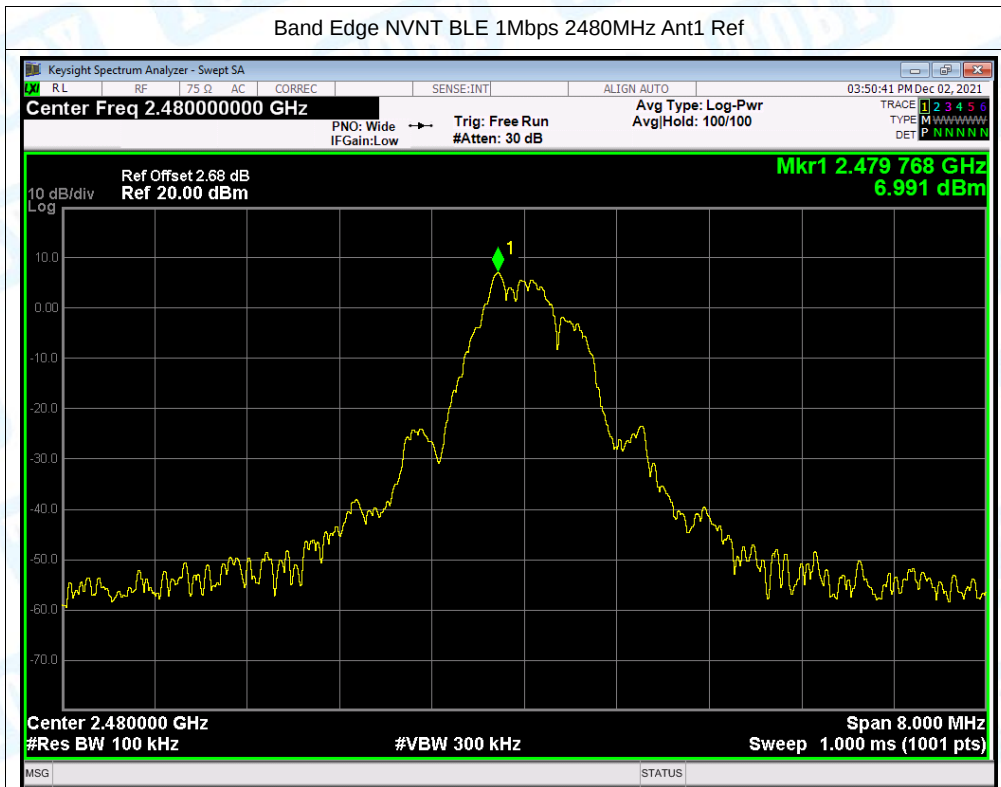
PSD NVNT BLE 2Mbps 2480MHz Ant1



Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-62.34	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-60.08	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-61.64	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-59.05	-20	Pass

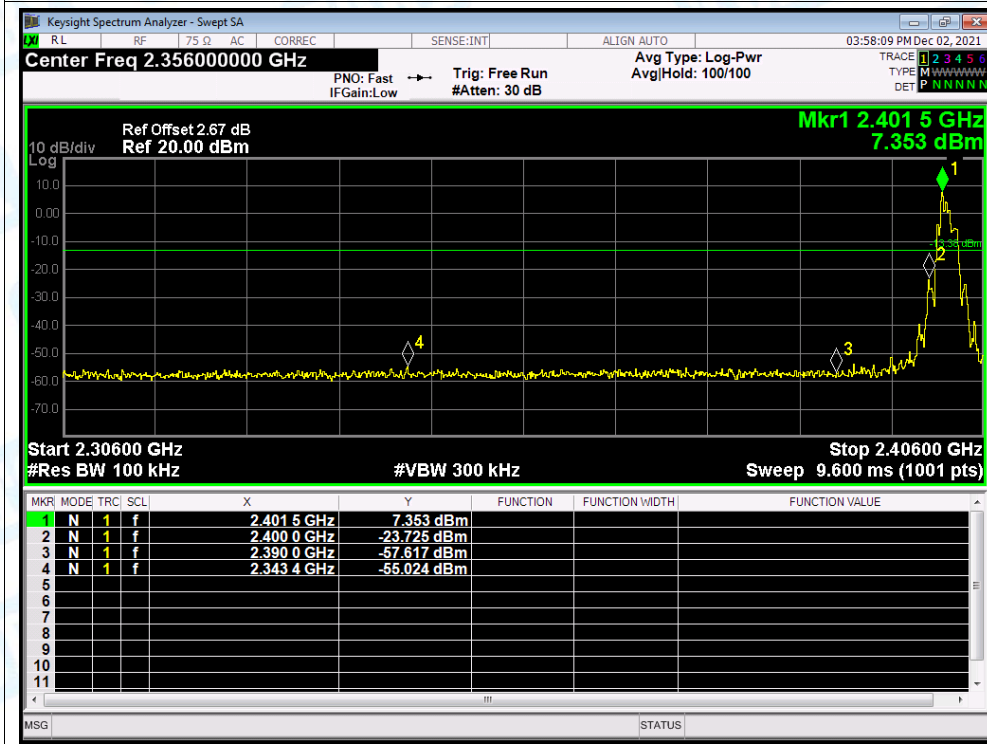




Band Edge NVNT BLE 2Mbps 2402MHz Ant1 Ref



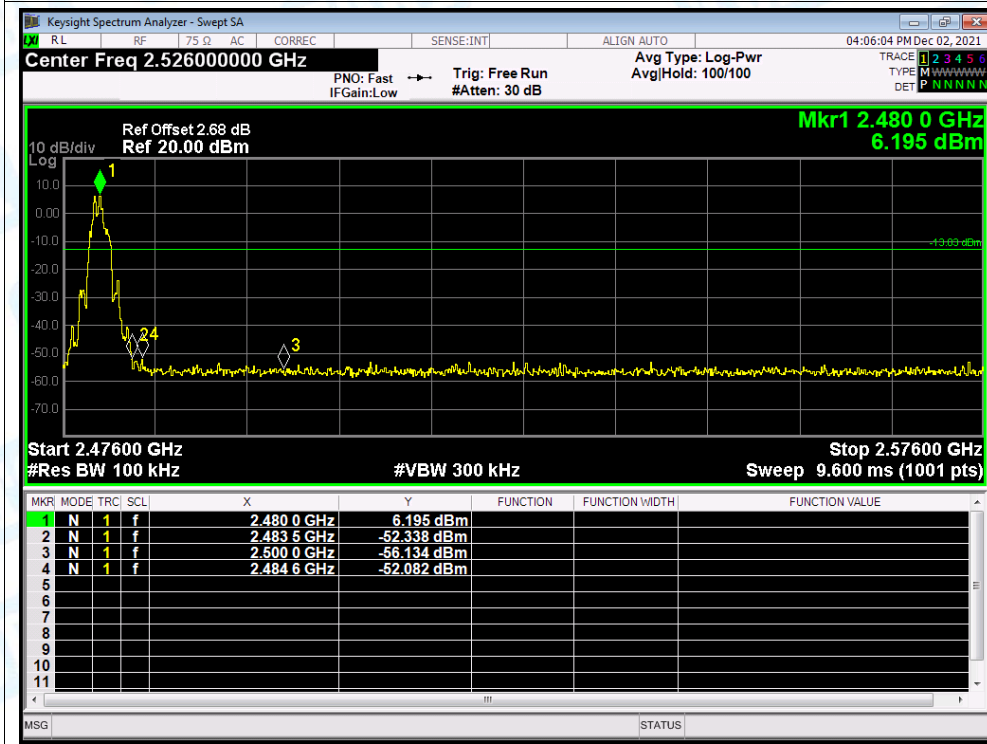
Band Edge NVNT BLE 2Mbps 2402MHz Ant1 Emission



Band Edge NVNT BLE 2Mbps 2480MHz Ant1 Ref

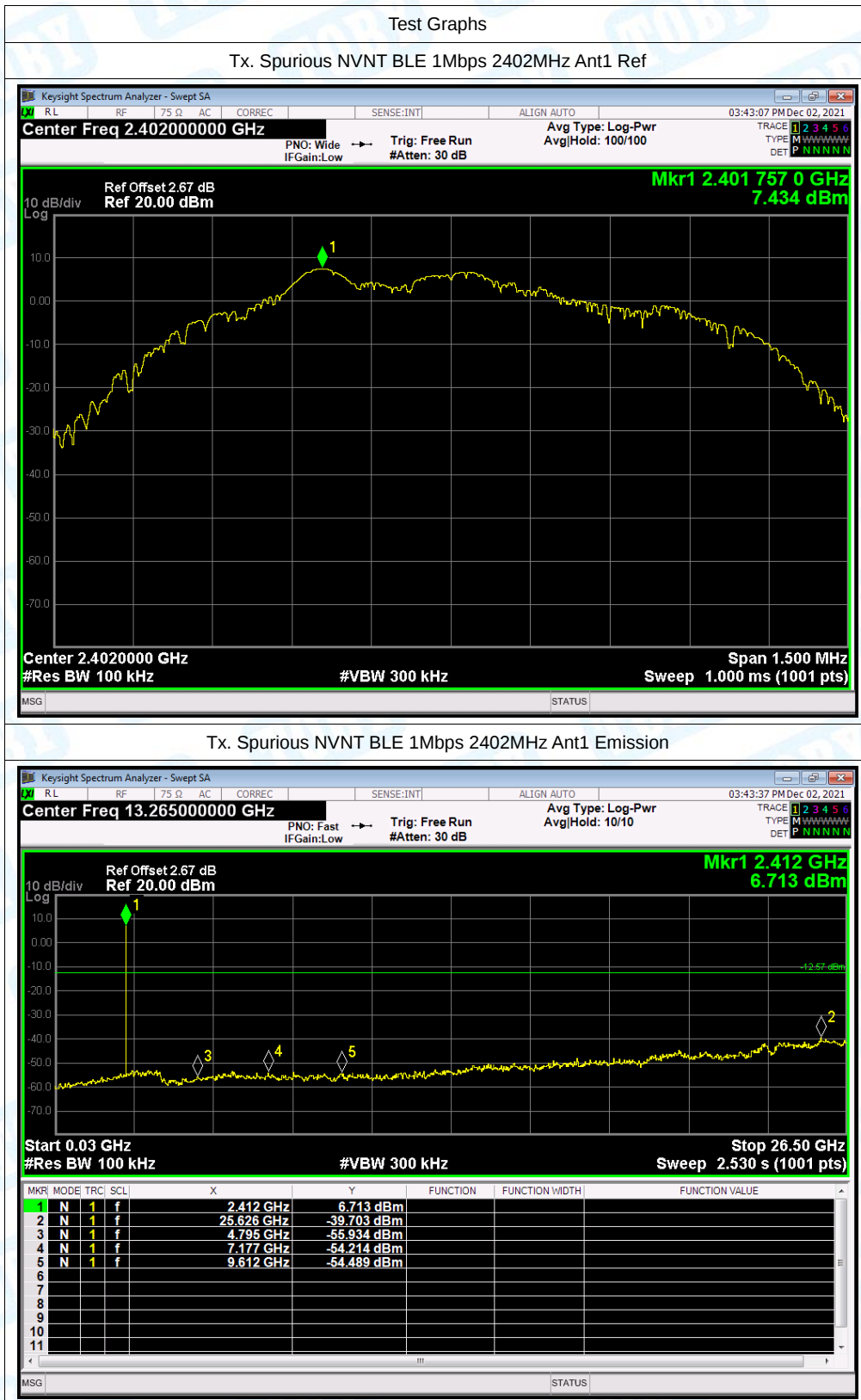


Band Edge NVNT BLE 2Mbps 2480MHz Ant1 Emission

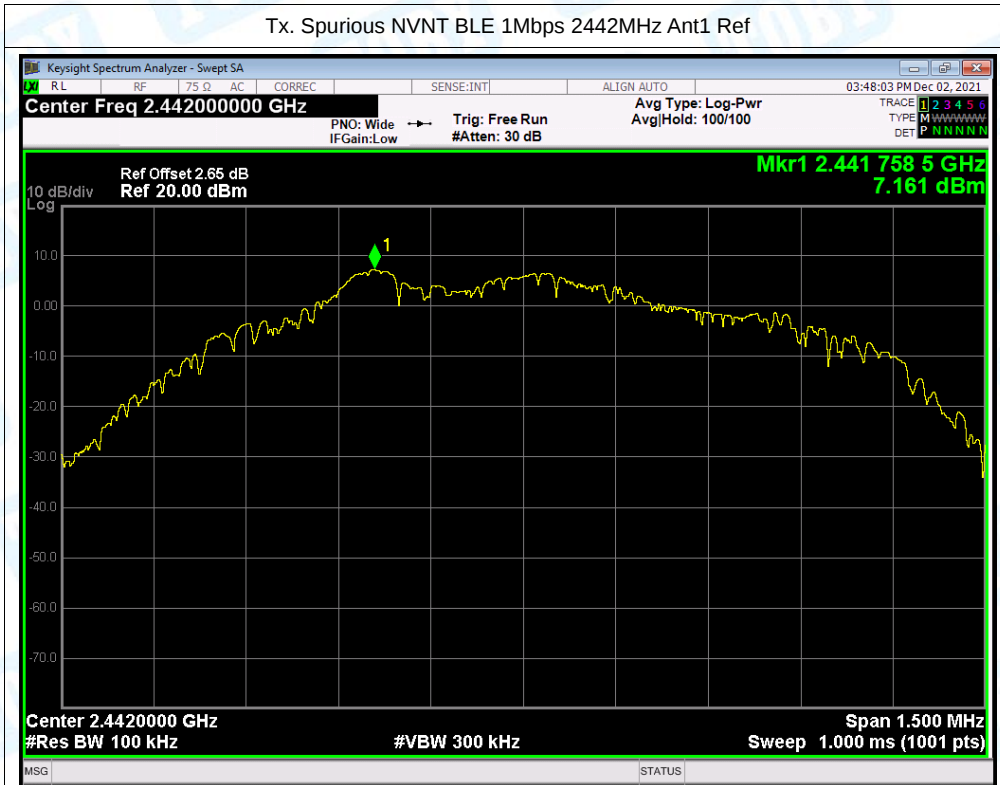


Conducted RF Spurious Emission

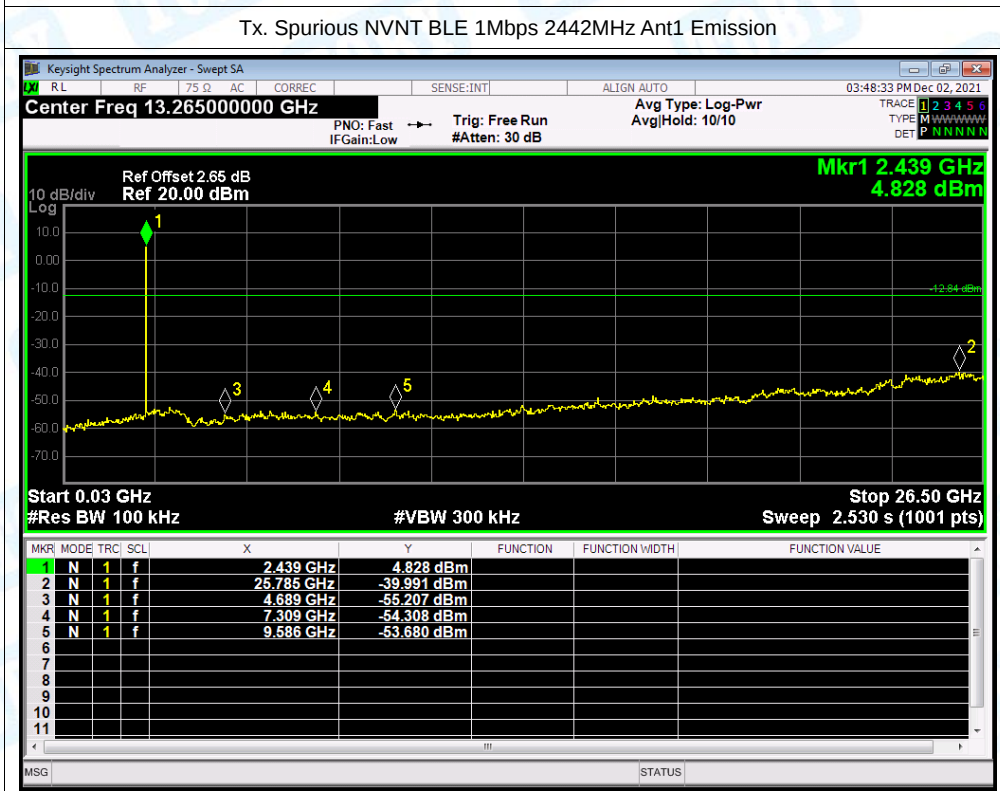
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-47.13	-20	Pass
NVNT	BLE 1Mbps	2442	Ant1	-47.15	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-46.49	-20	Pass
NVNT	BLE 2Mbps	2402	Ant1	-47.43	-20	Pass
NVNT	BLE 2Mbps	2442	Ant1	-45.98	-20	Pass
NVNT	BLE 2Mbps	2480	Ant1	-46.47	-20	Pass



Tx. Spurious NVNT BLE 1Mbps 2442MHz Ant1 Ref



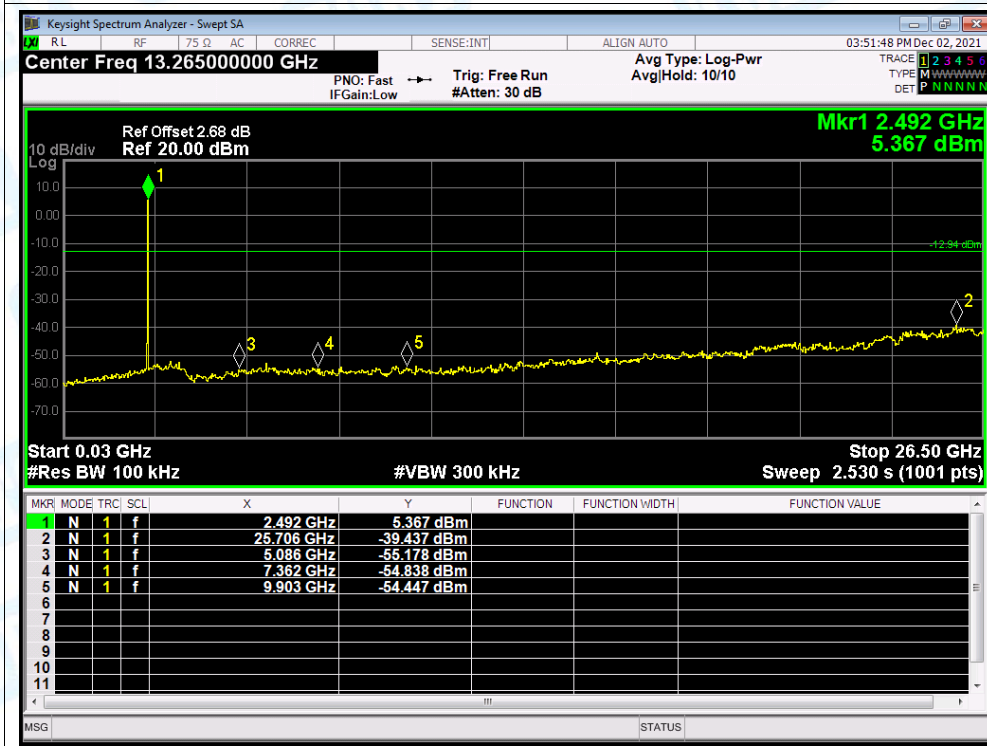
Tx. Spurious NVNT BLE 1Mbps 2442MHz Ant1 Emission



Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Ref



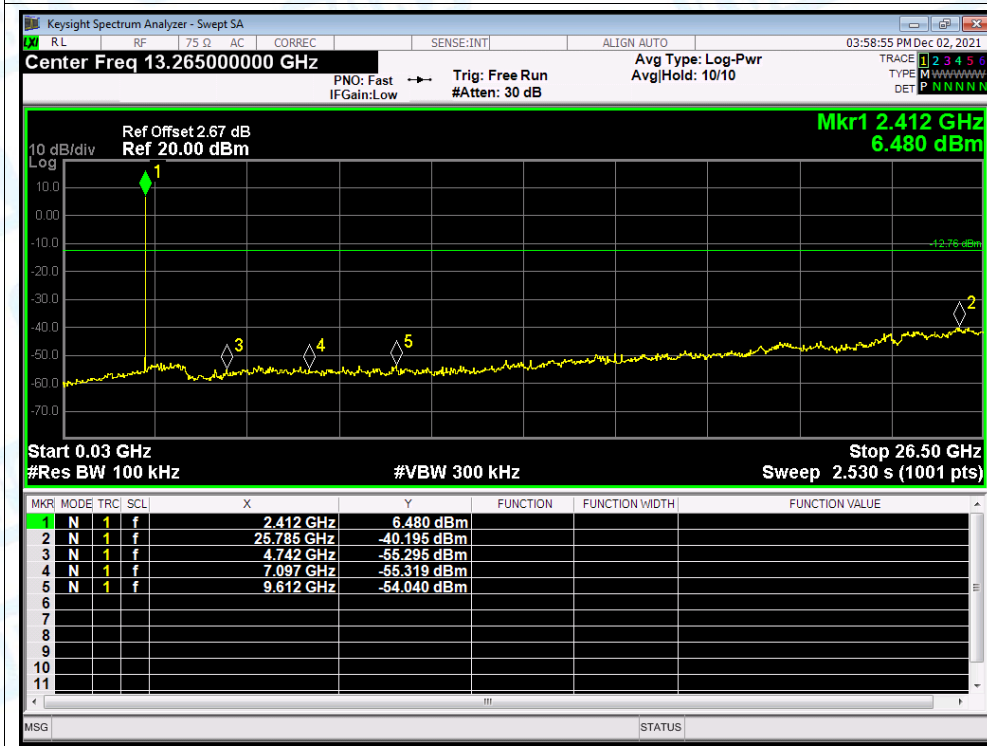
Tx. Spurious NVNT BLE 1Mbps 2480MHz Ant1 Emission



Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Ref



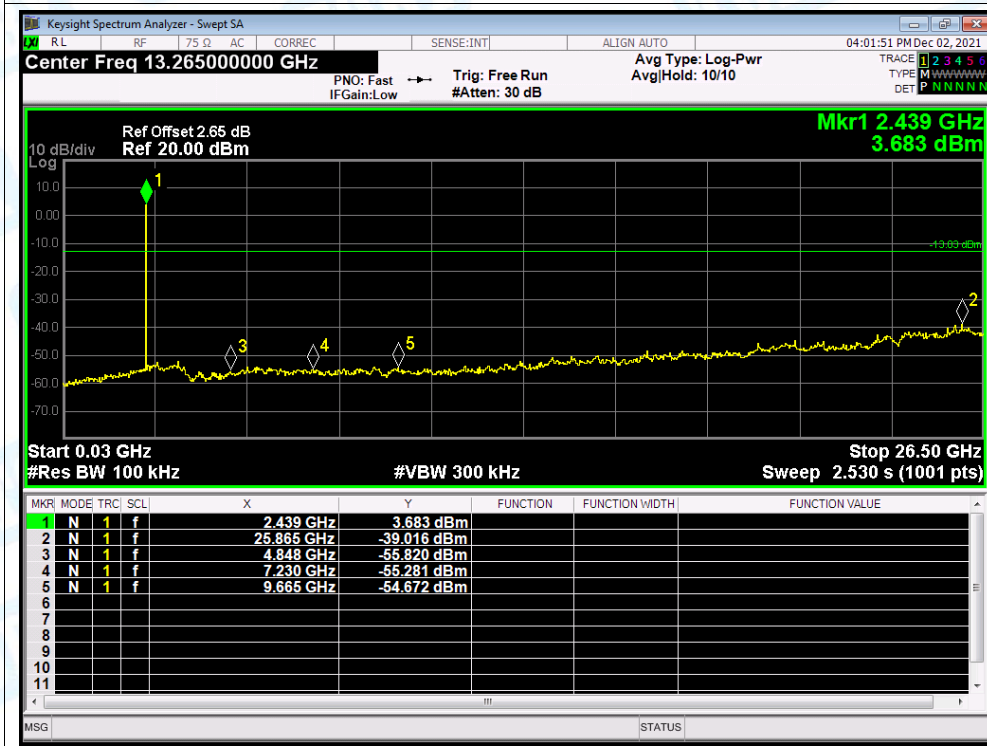
Tx. Spurious NVNT BLE 2Mbps 2402MHz Ant1 Emission



Tx. Spurious NVNT BLE 2Mbps 2442MHz Ant1 Ref



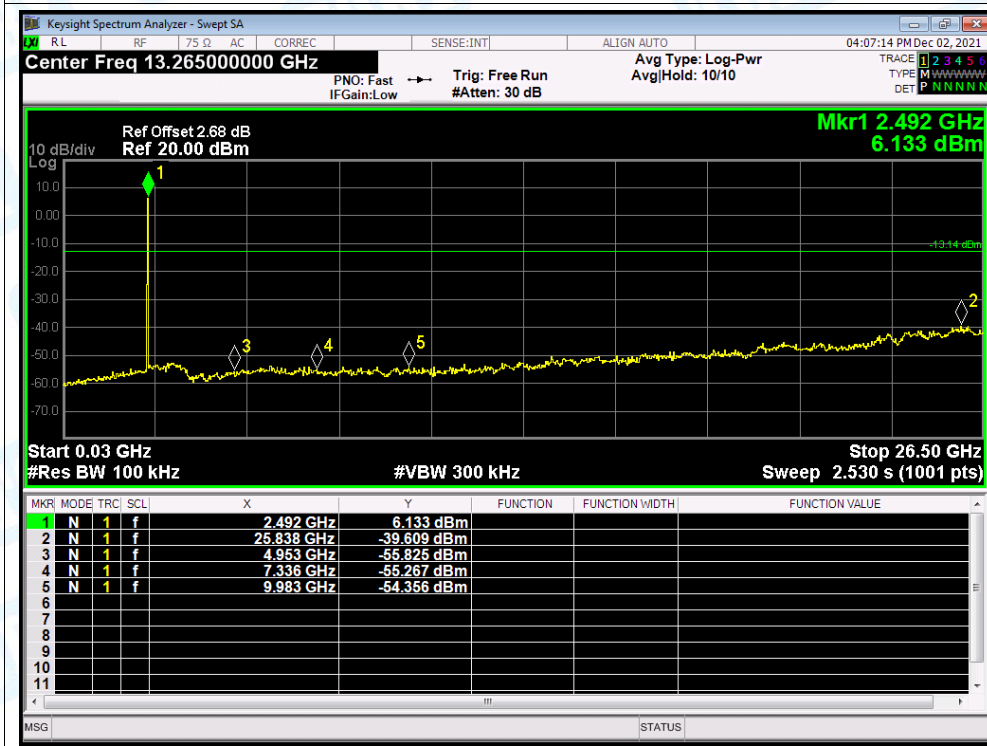
Tx. Spurious NVNT BLE 2Mbps 2442MHz Ant1 Emission



Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Ref



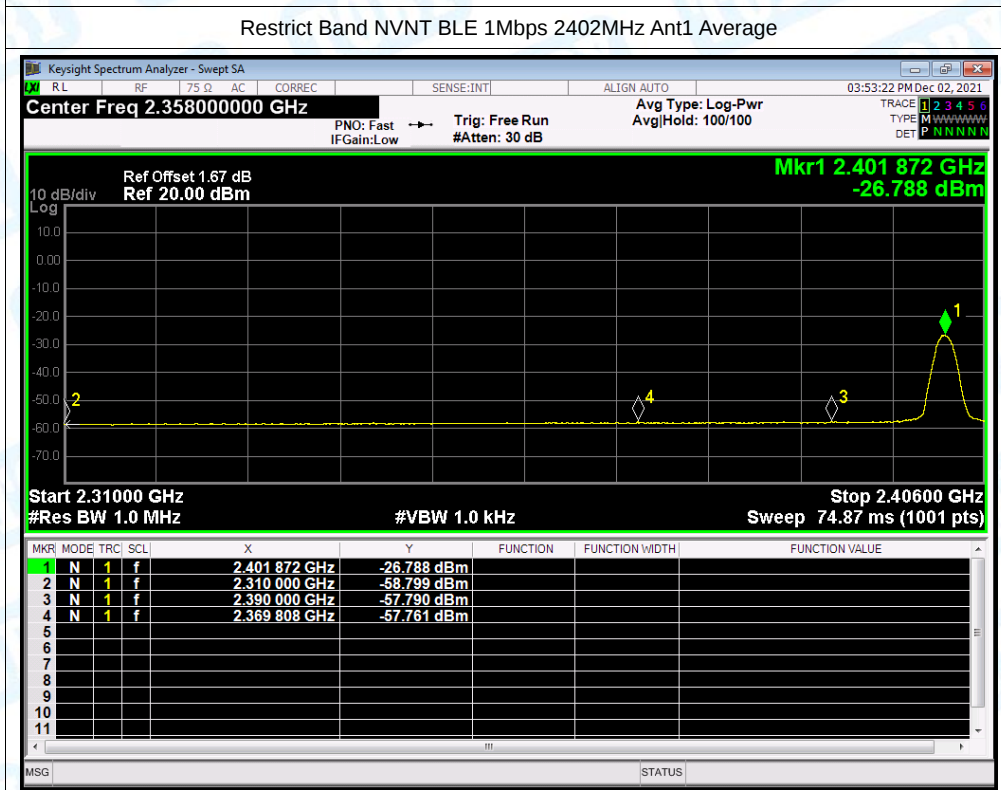
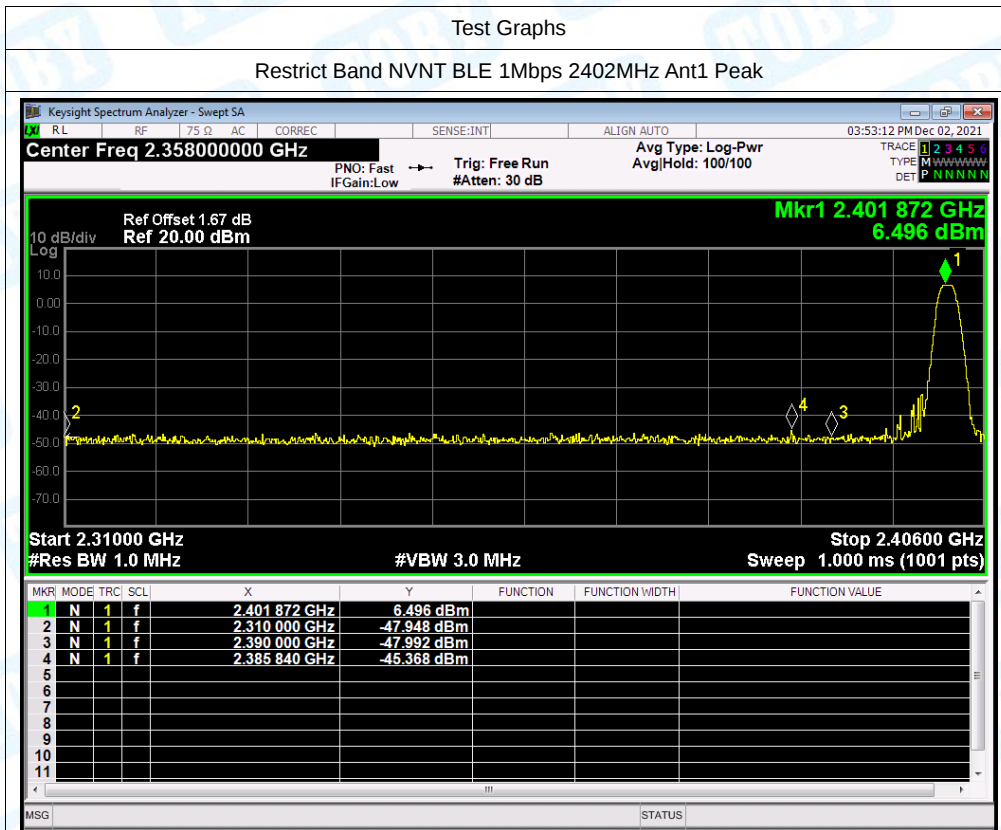
Tx. Spurious NVNT BLE 2Mbps 2480MHz Ant1 Emission



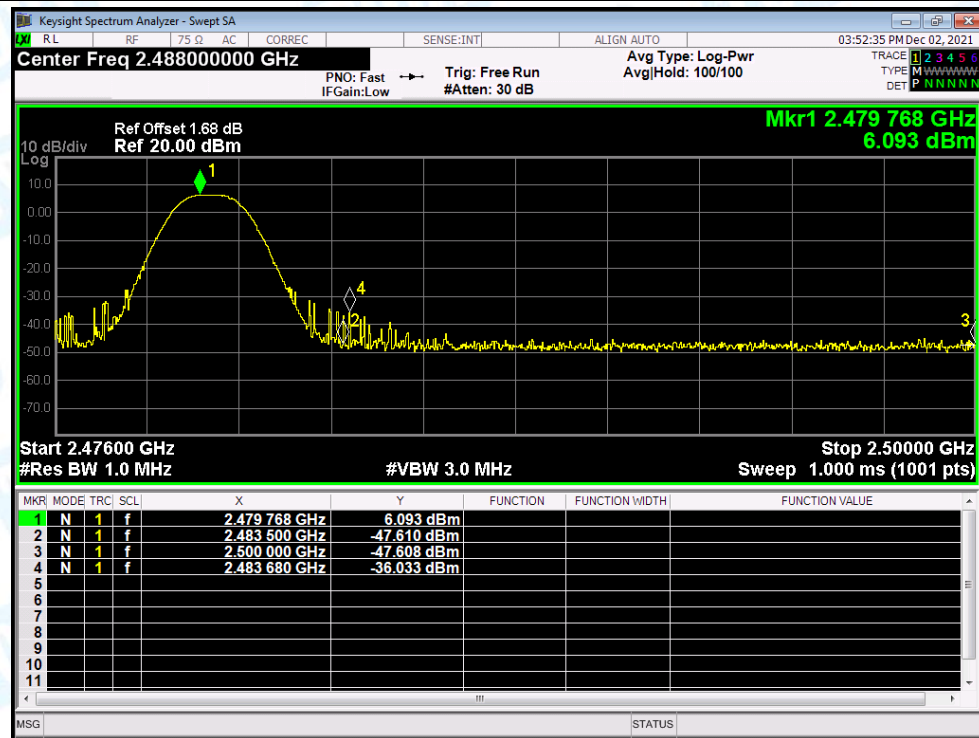
Restrict Band

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	-47.87	2	49.39	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2310	-58.72	2	38.54	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2385.84	-45.36	2	51.9	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2369.808	-57.76	2	39.5	Average	54	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-48.5	2	48.76	Peak	74	Pass
NVNT	BLE 1Mbps	2402	Ant1	2390	-57.78	2	39.48	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-47.6	2	49.66	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.5	-56.88	2	40.38	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.68	-36.03	2	61.23	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2483.848	-56.71	2	40.55	Average	54	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-47.6	2	49.66	Peak	74	Pass
NVNT	BLE 1Mbps	2480	Ant1	2500	-57.59	2	39.67	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-49.24	2	48.02	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2310	-58.75	2	38.51	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2350.992	-45.72	2	51.54	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2386.896	-57.86	2	39.4	Average	54	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-49.21	2	48.05	Peak	74	Pass
NVNT	BLE 2Mbps	2402	Ant1	2390	-58.15	2	39.11	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-43.95	2	53.31	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.5	-55.91	2	41.35	Average	54	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.584	-36.74	2	60.52	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2483.632	-55.89	2	41.37	Average	54	Pass

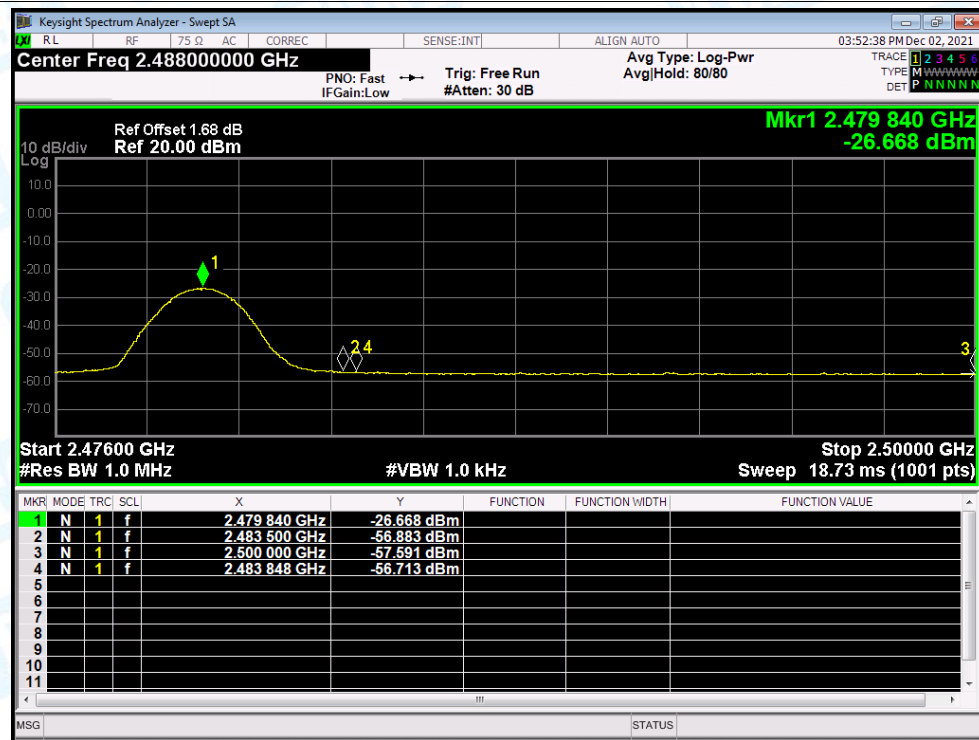
NVNT	BLE 2Mbps	2480	Ant1	2500	-47.33	2	49.93	Peak	74	Pass
NVNT	BLE 2Mbps	2480	Ant1	2500	-57.61	2	39.65	Average	54	Pass



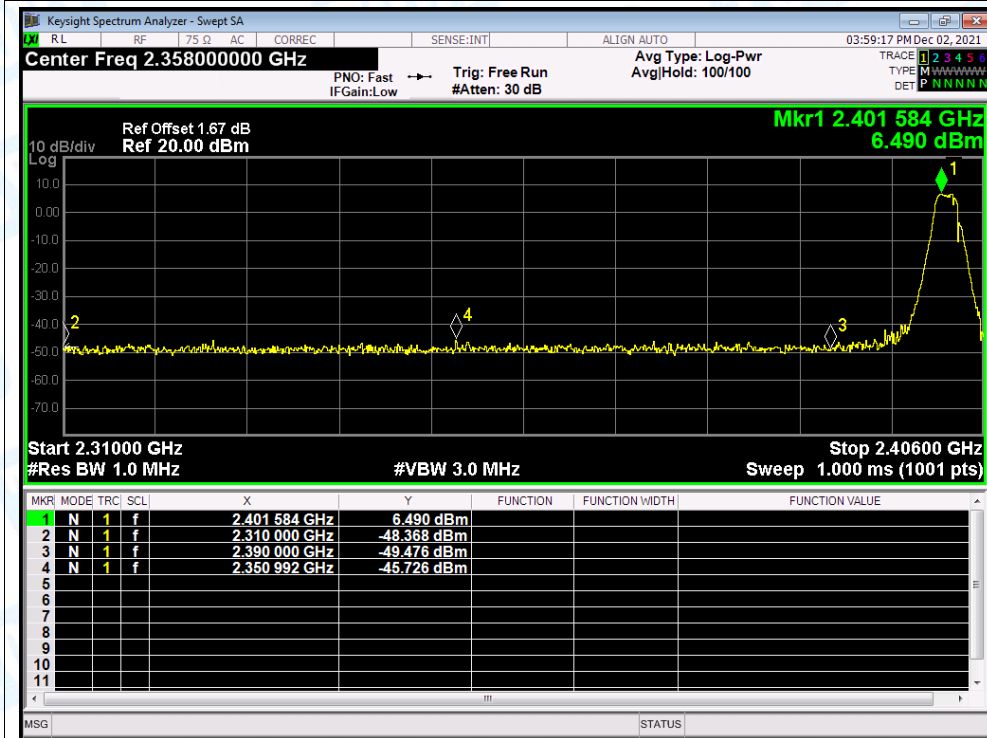
Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Peak



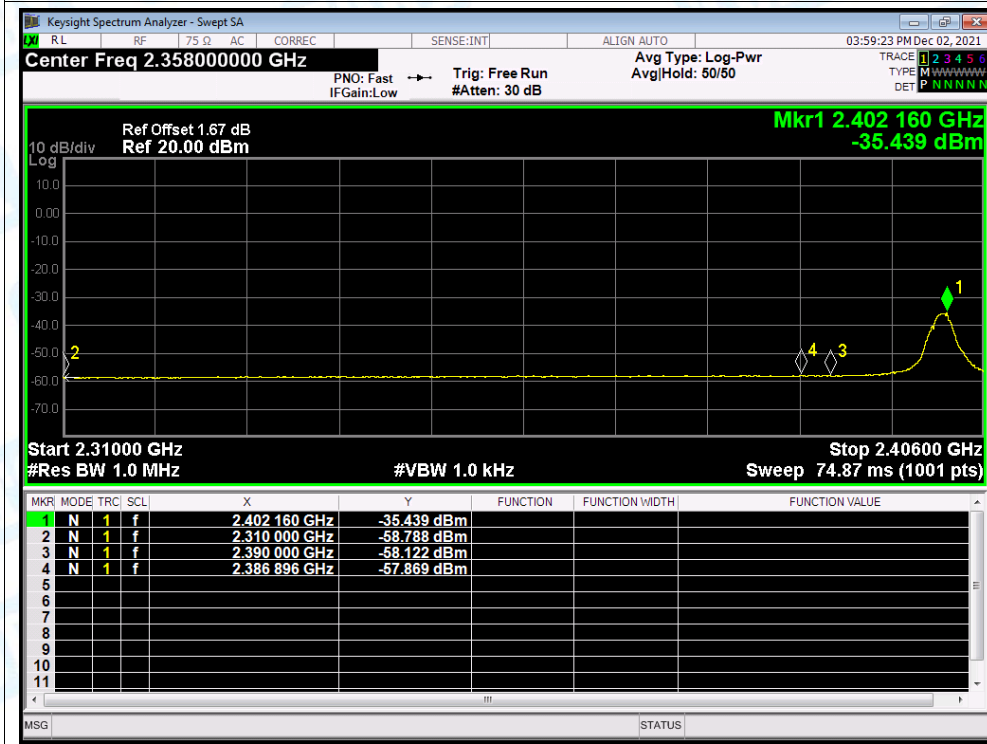
Restrict Band NVNT BLE 1Mbps 2480MHz Ant1 Average



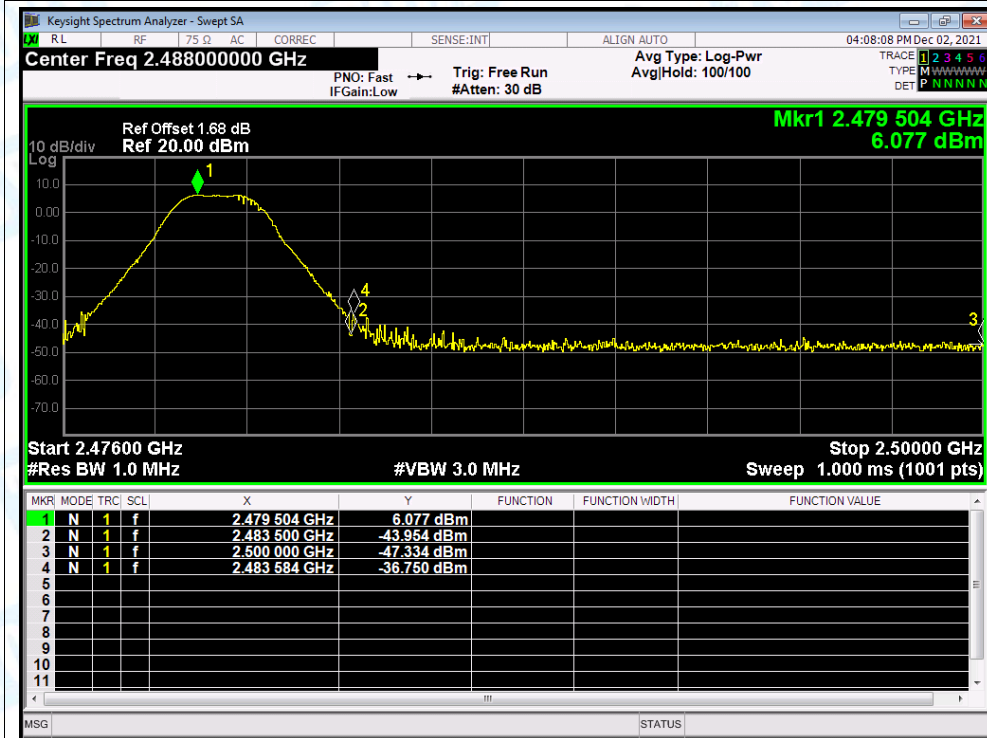
Restrict Band NVNT BLE 2Mbps 2402MHz Ant1 Peak



Restrict Band NVNT BLE 2Mbps 2402MHz Ant1 Average



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Peak



Restrict Band NVNT BLE 2Mbps 2480MHz Ant1 Average

