Table of Contents

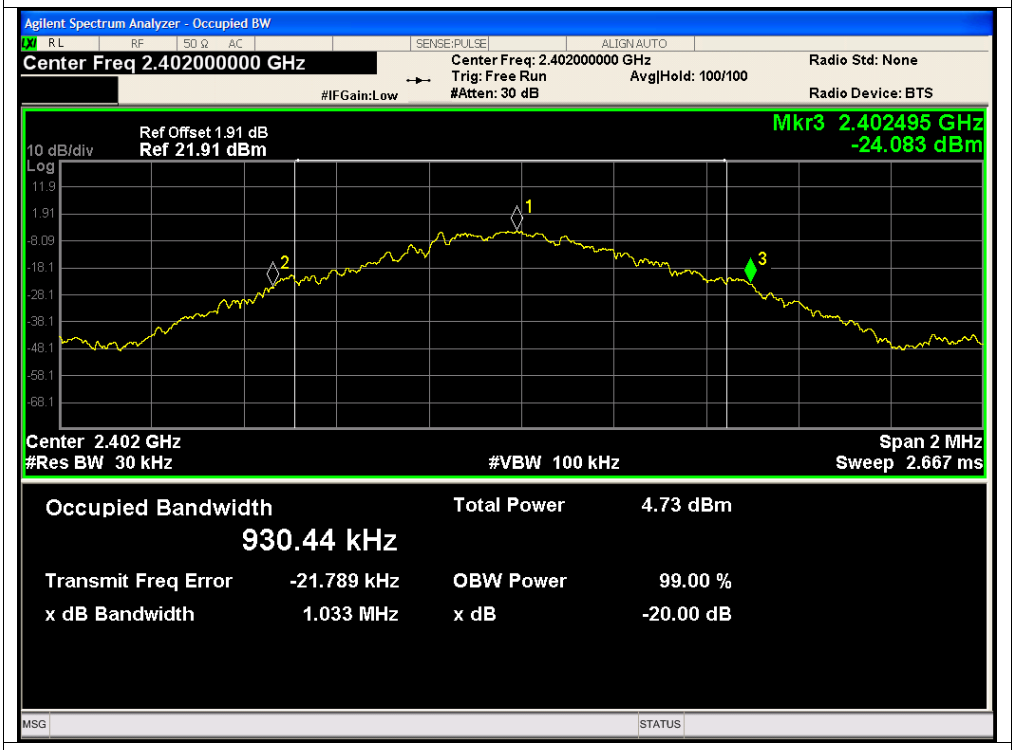
FCC ID: 2BHCJ-WPC58
FCC_BT (Part15.247) Test Data

1. -20dB Bandwidth and 99% Occupied Bandwidth

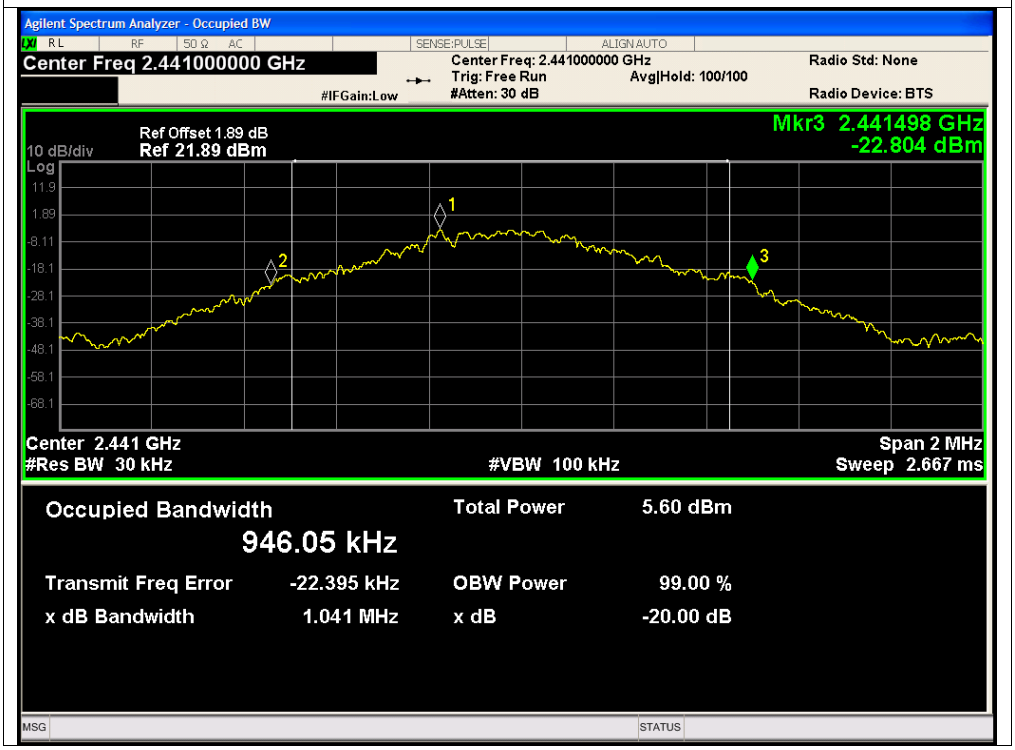
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	99% Occupied Bandwidth (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	1.033	0.9304	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.041	0.9460	N/A	Pass
NVNT	1-DH5	2480	Ant1	1.052	0.9699	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.285	1.2146	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.339	1.2373	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.302	1.2341	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.283	1.2128	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.291	1.2183	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.315	1.2293	N/A	Pass

Test Graphs

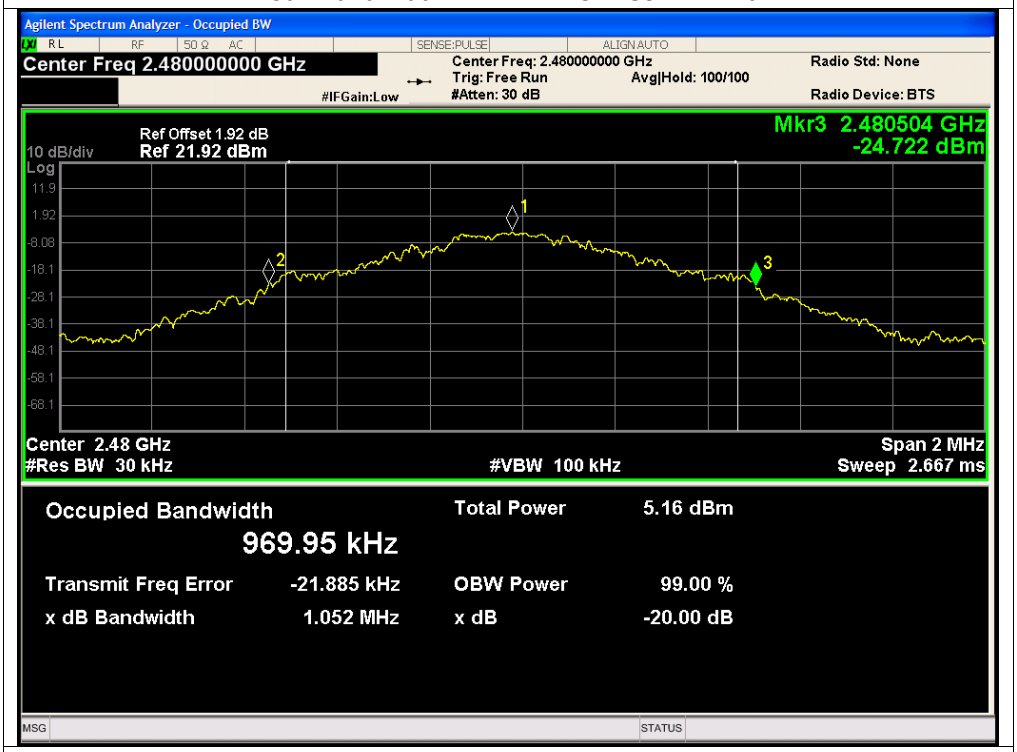
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



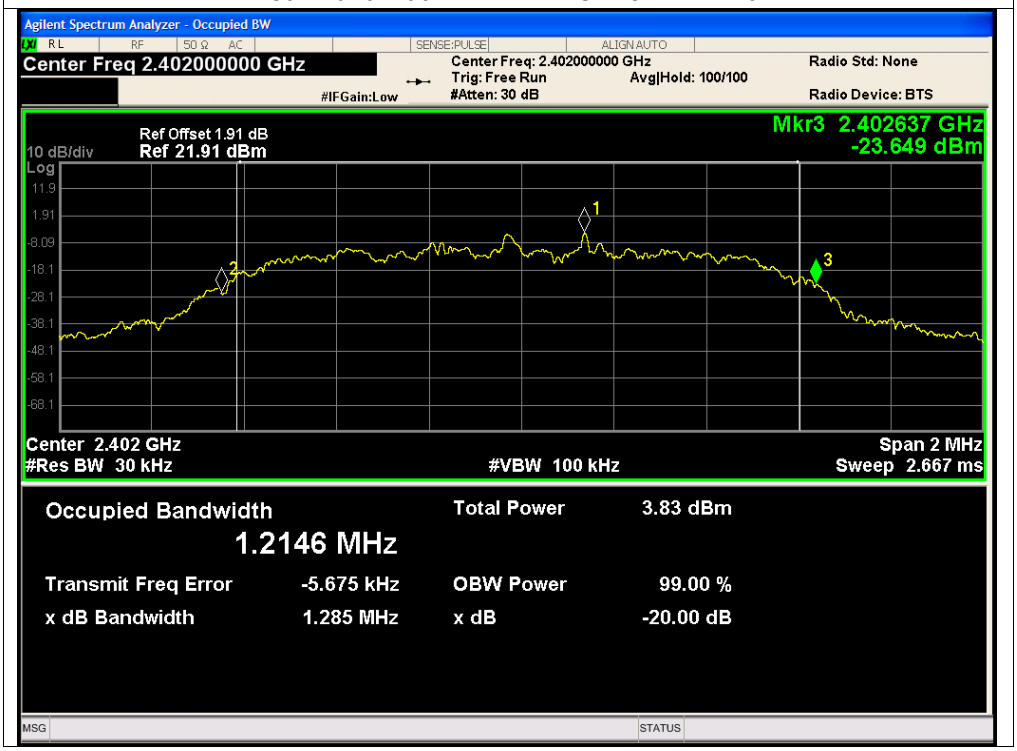
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



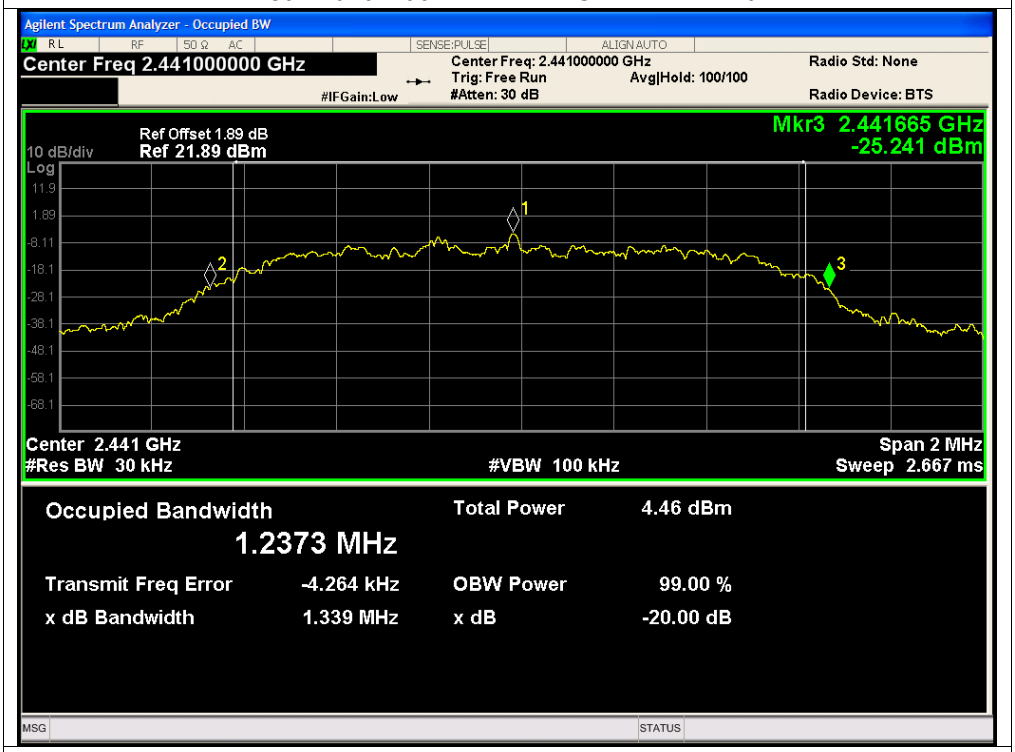
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



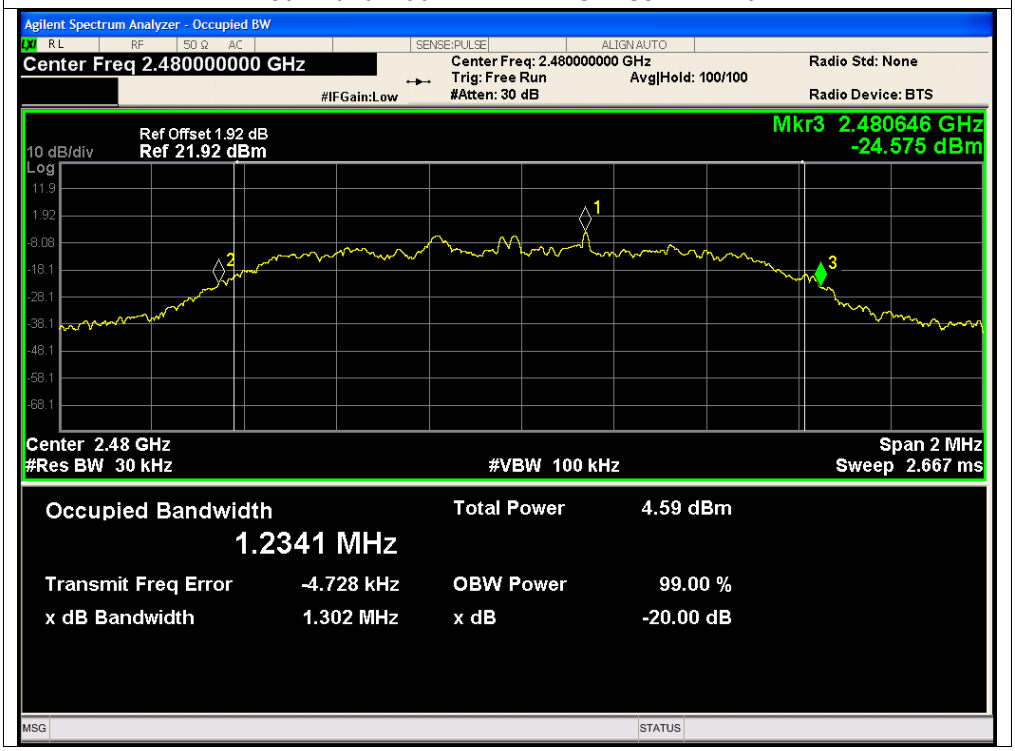
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



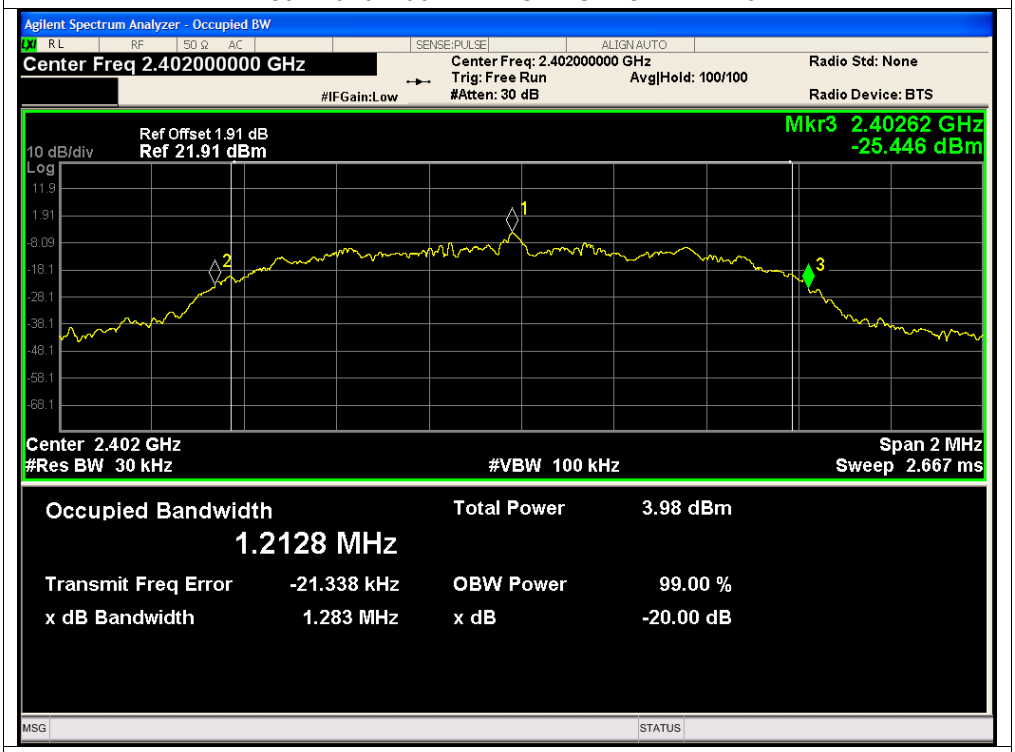
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



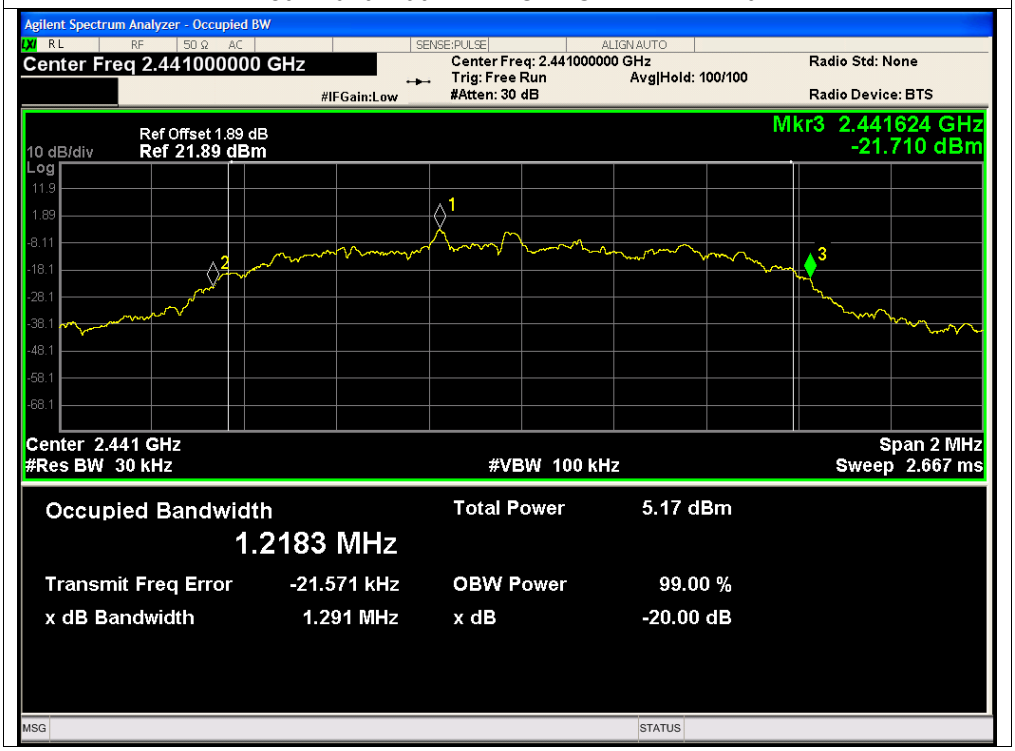
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1



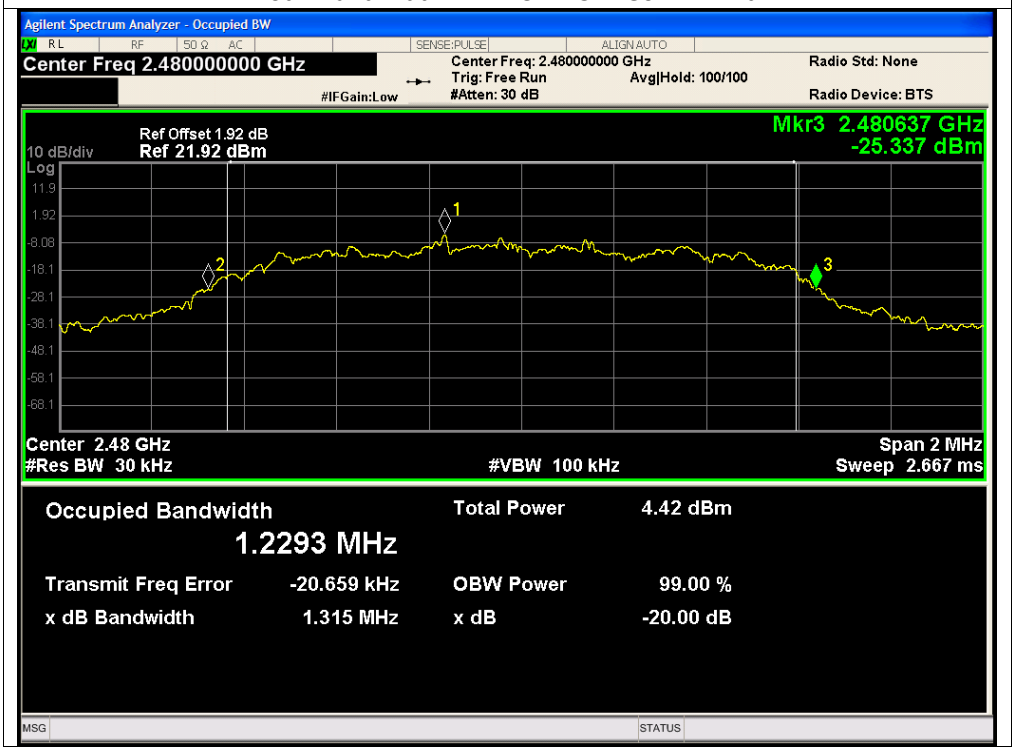
-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2480MHz Ant1

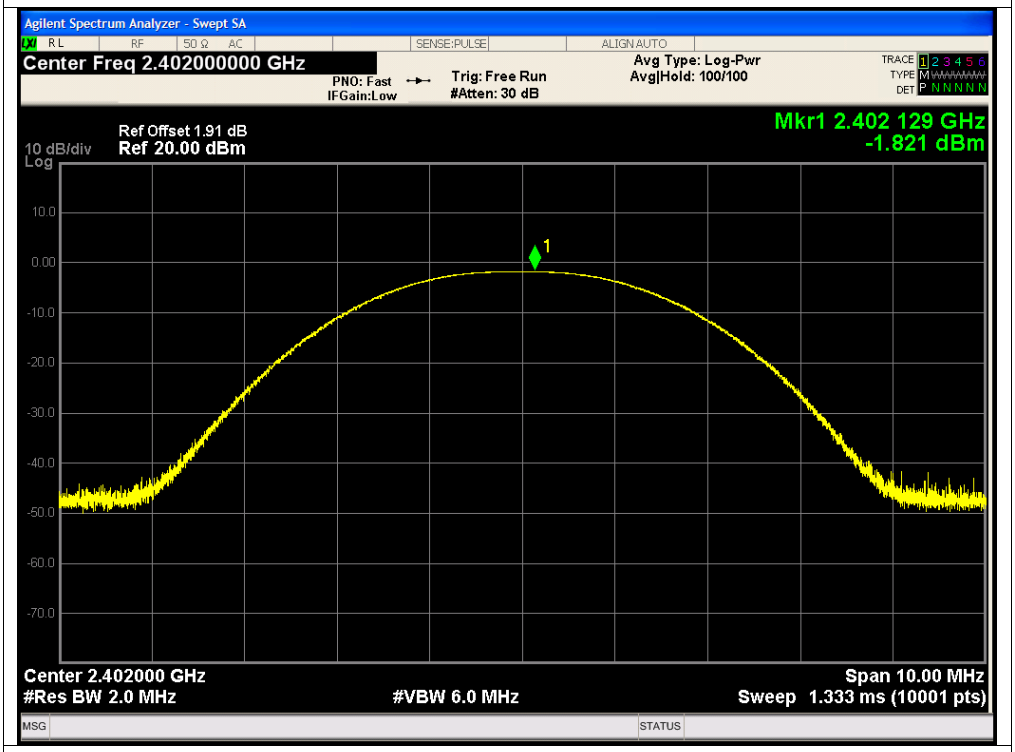


2. Peak Output Power

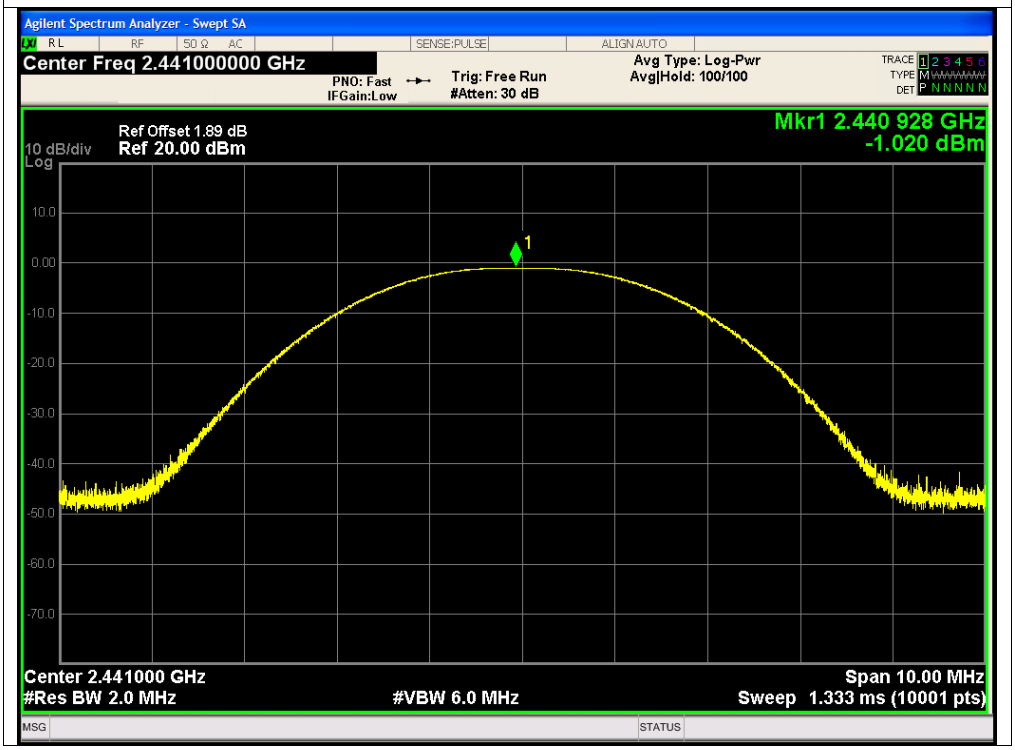
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-1.82	21	Pass
NVNT	1-DH5	2441	Ant1	-1.02	21	Pass
NVNT	1-DH5	2480	Ant1	-1.19	21	Pass
NVNT	2-DH5	2402	Ant1	-1	21	Pass
NVNT	2-DH5	2441	Ant1	-0.2	21	Pass
NVNT	2-DH5	2480	Ant1	-0.4	21	Pass
NVNT	3-DH5	2402	Ant1	-0.37	21	Pass
NVNT	3-DH5	2441	Ant1	0.43	21	Pass
NVNT	3-DH5	2480	Ant1	0.2	21	Pass

Test Graphs

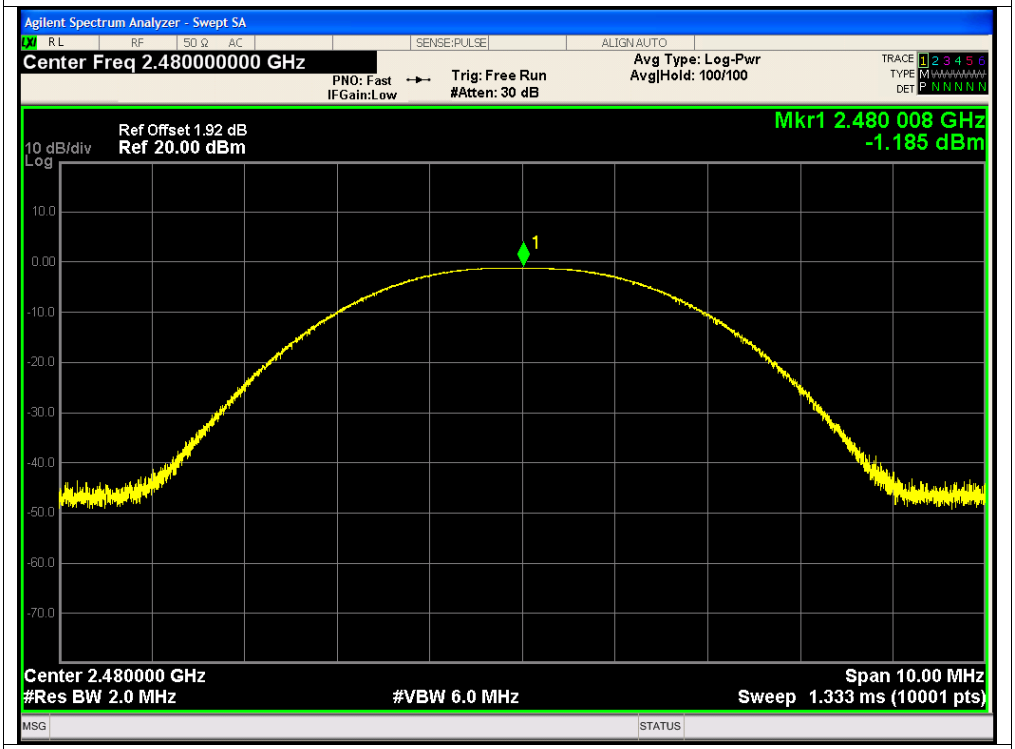
Power NVNT 1-DH5 2402MHz Ant1



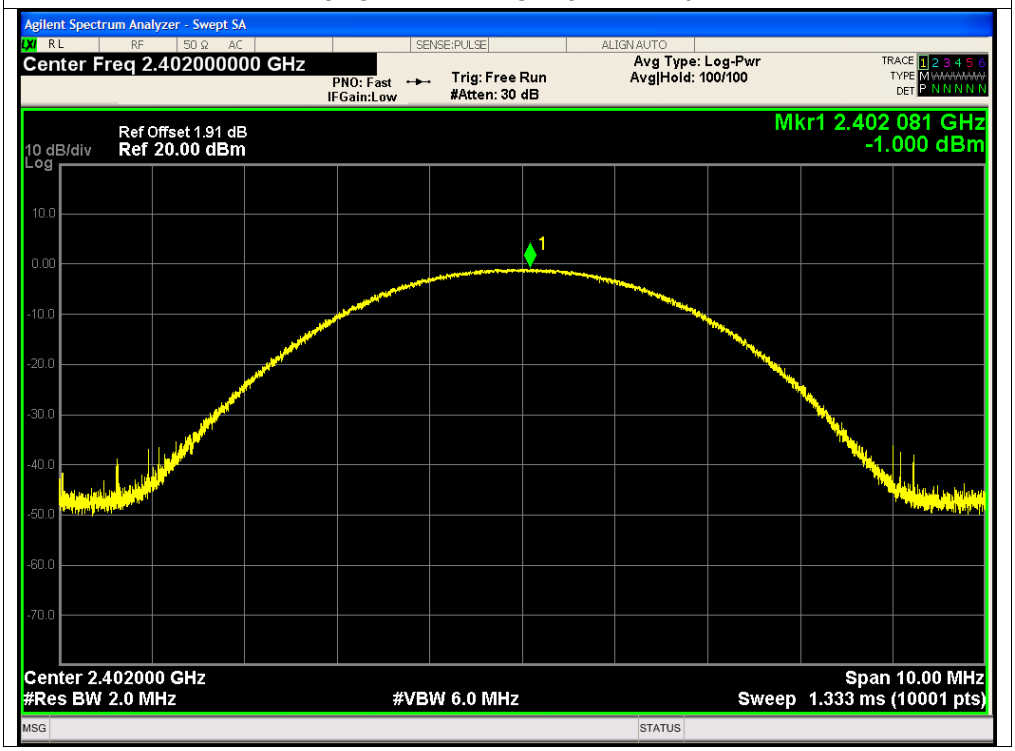
Power NVNT 1-DH5 2441MHz Ant1



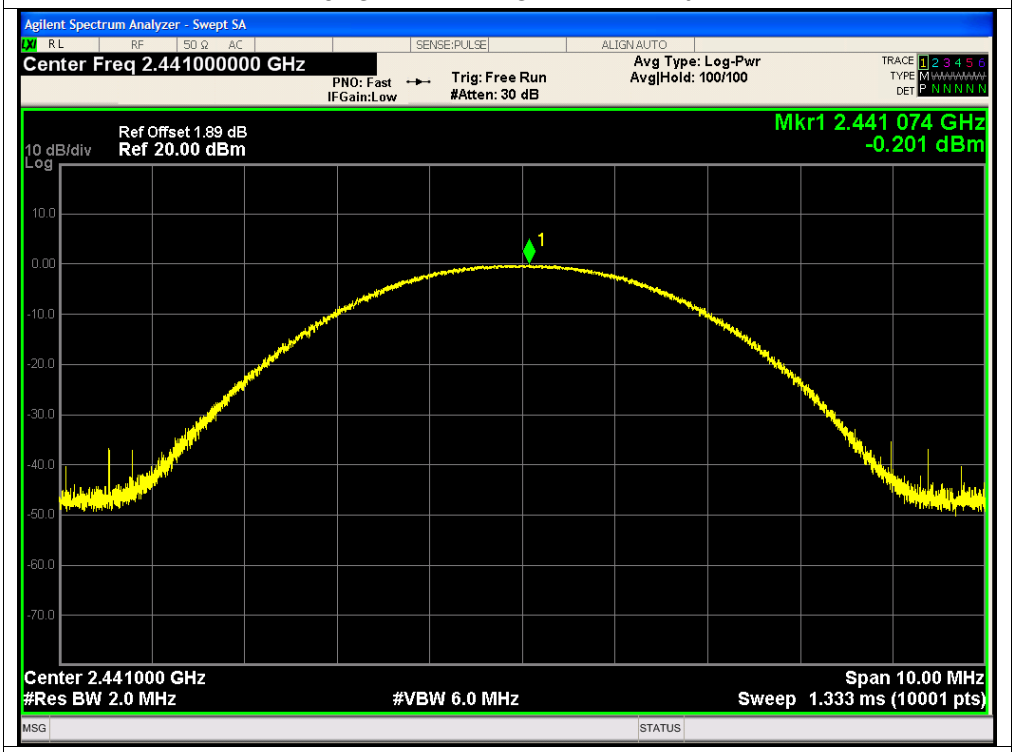
Power NVNT 1-DH5 2480MHz Ant1



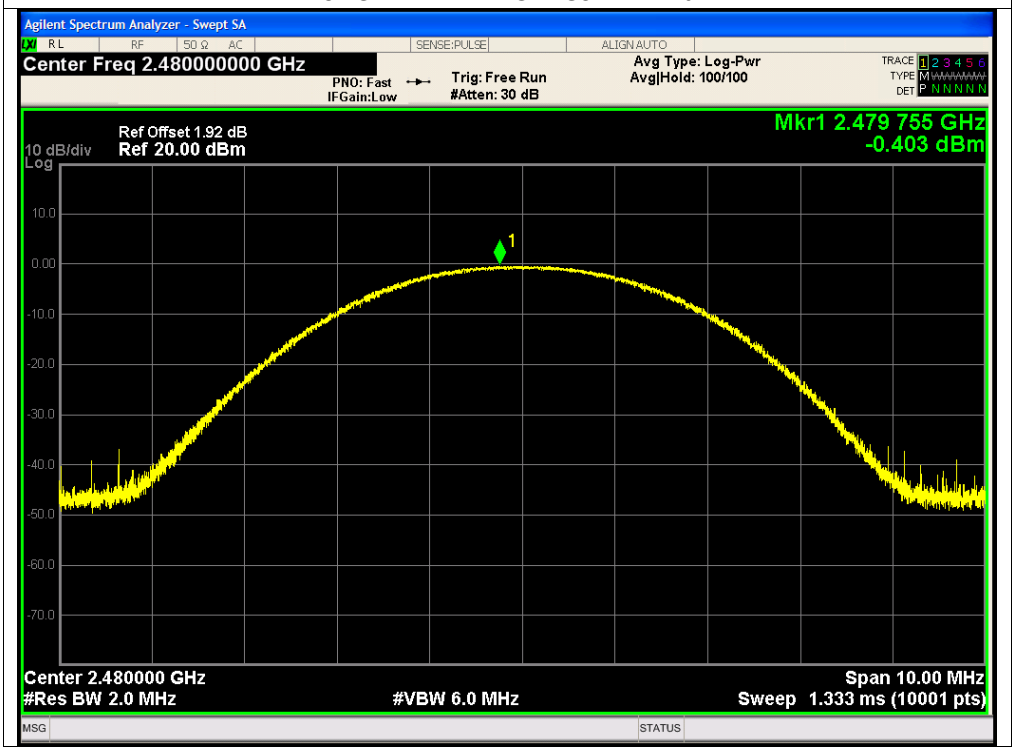
Power NVNT 2-DH5 2402MHz Ant1



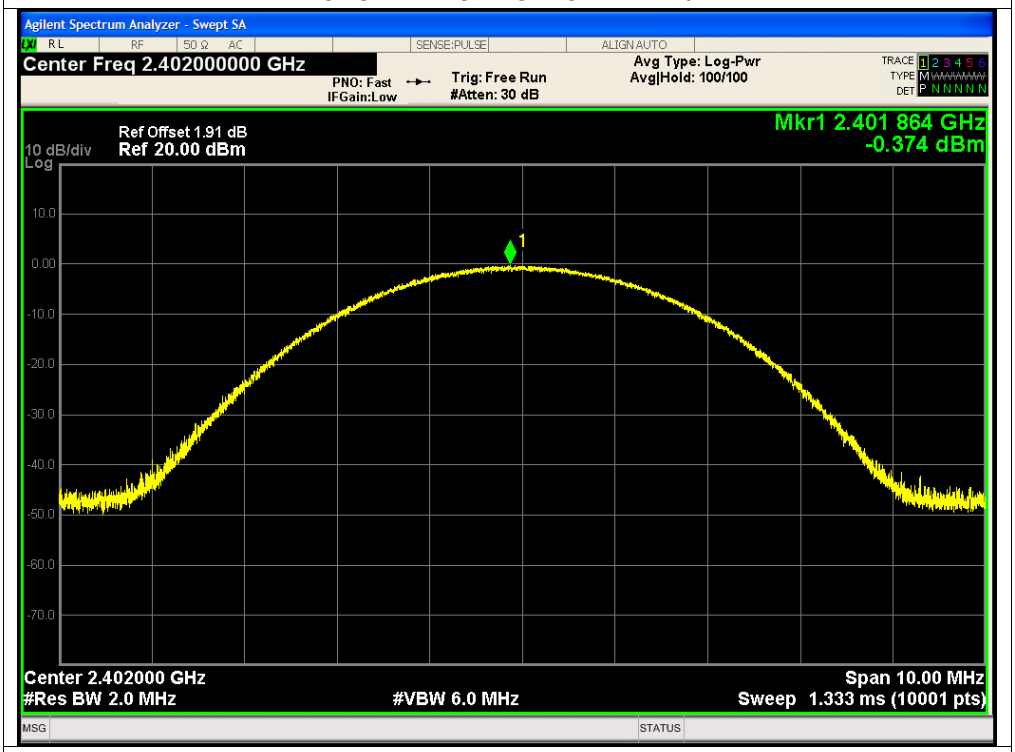
Power NVNT 2-DH5 2441MHz Ant1



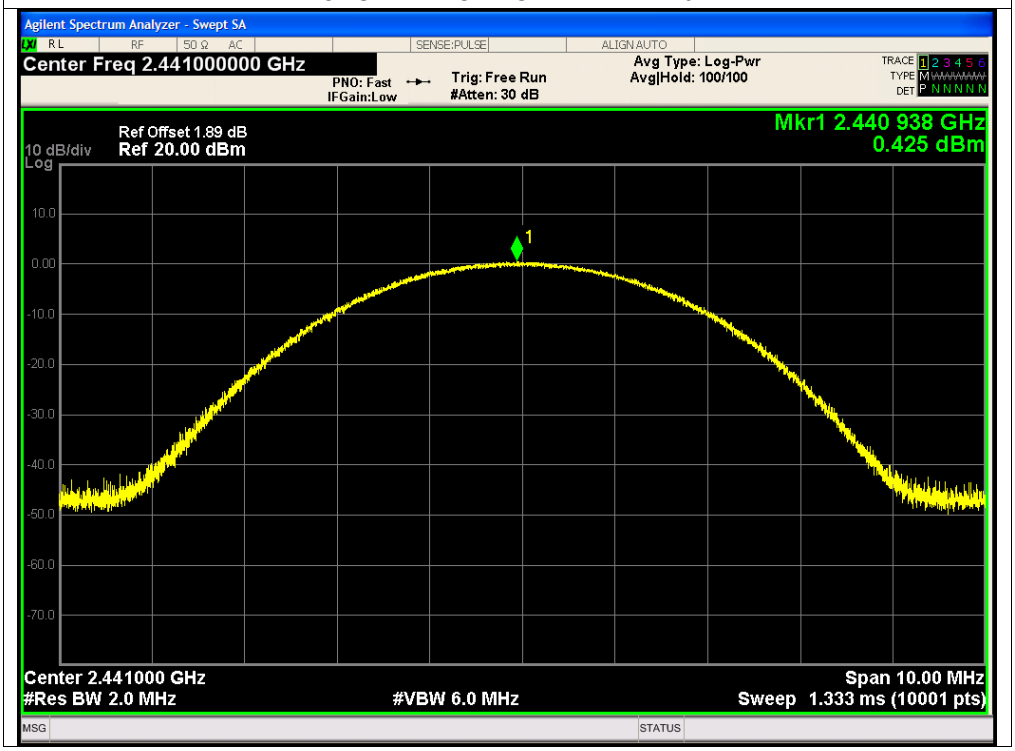
Power NVNT 2-DH5 2480MHz Ant1



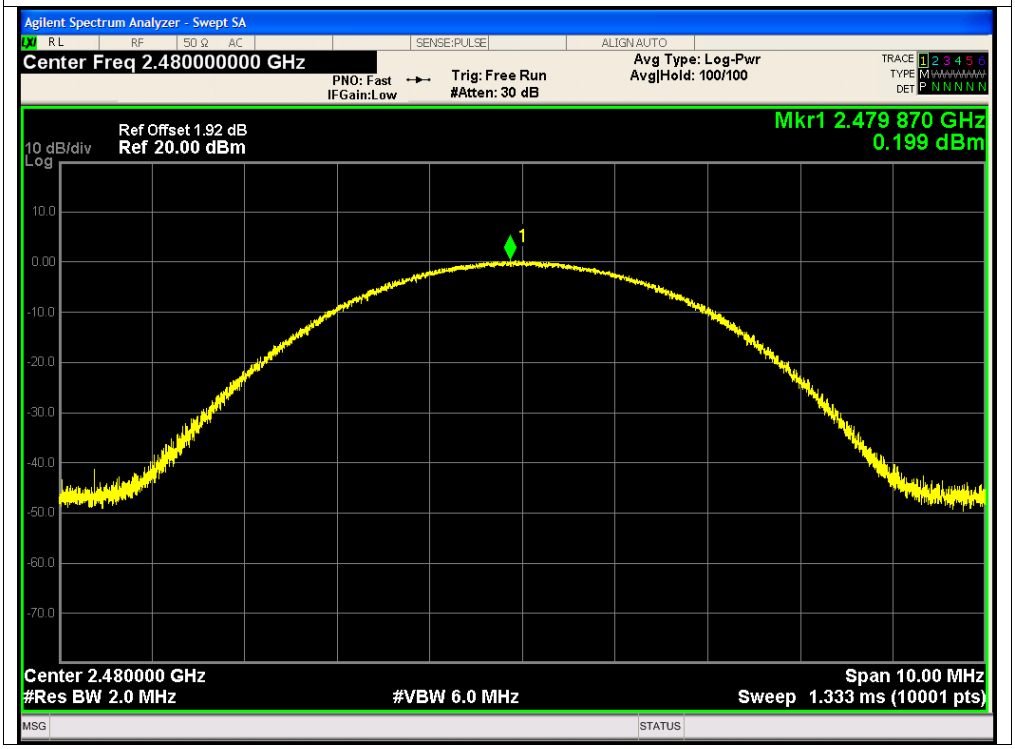
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



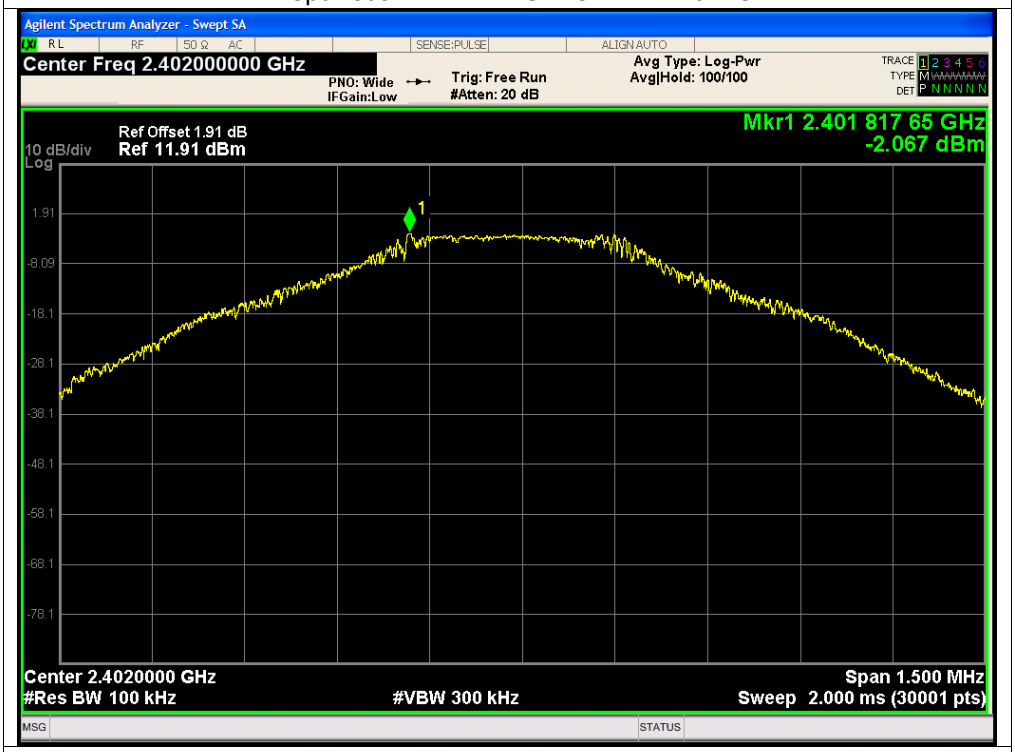
Power NVNT 3-DH5 2480MHz Ant1



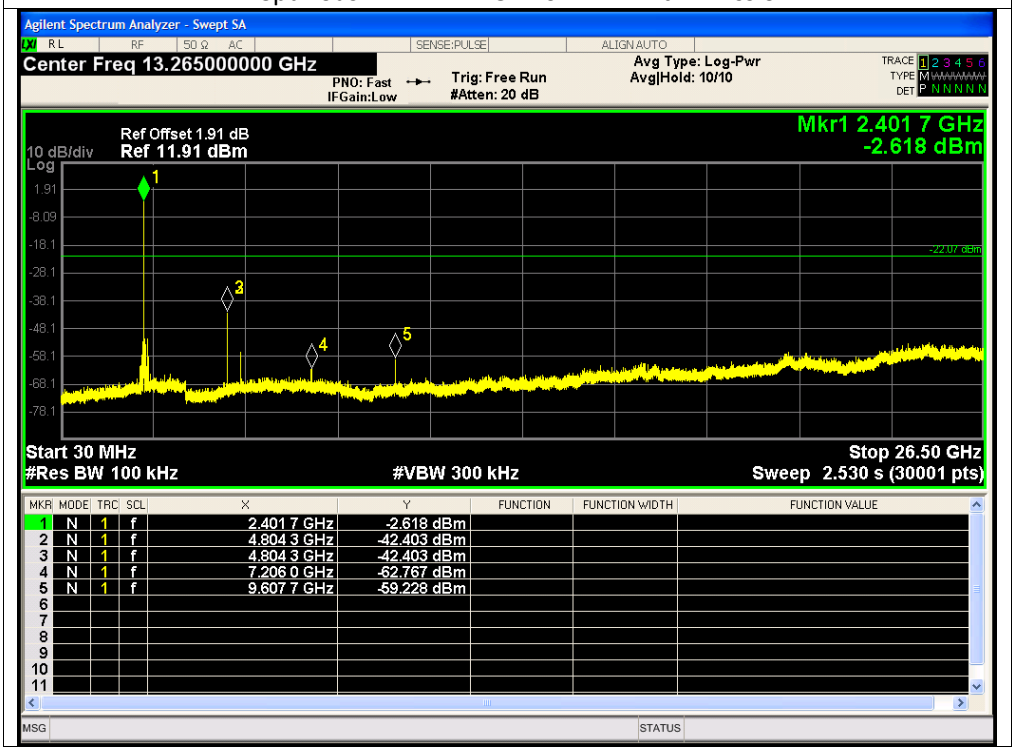
3. Spurious Emissions

All the modes have tested and recorded the worst mode (GFSK) in the report.

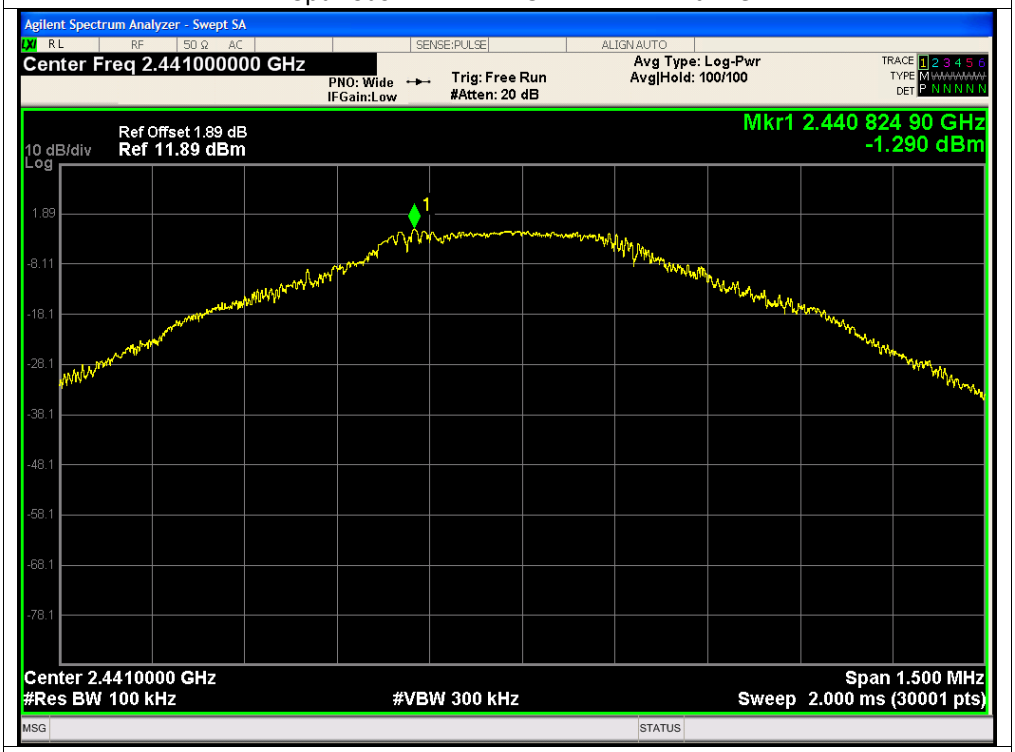
Test Graphs
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



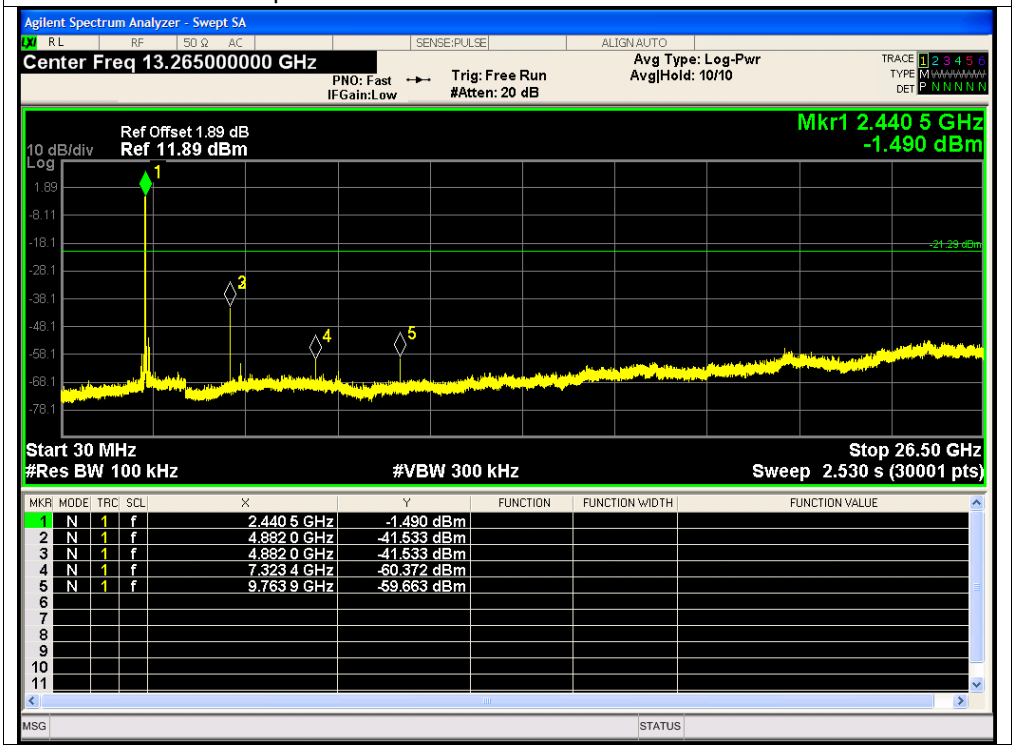
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

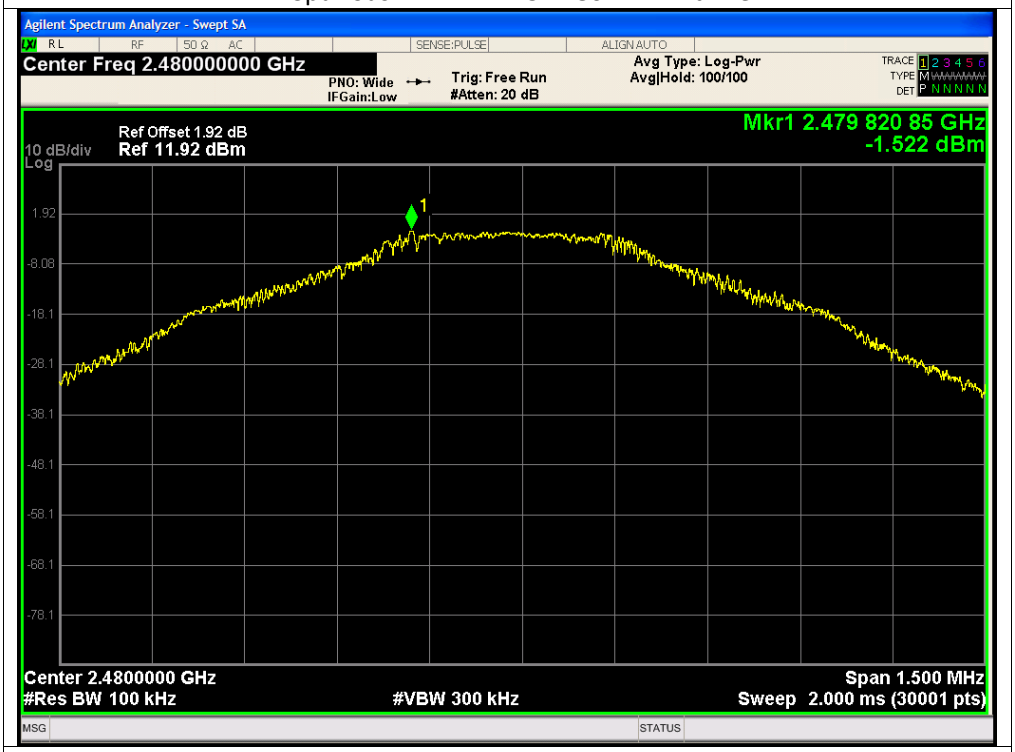


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

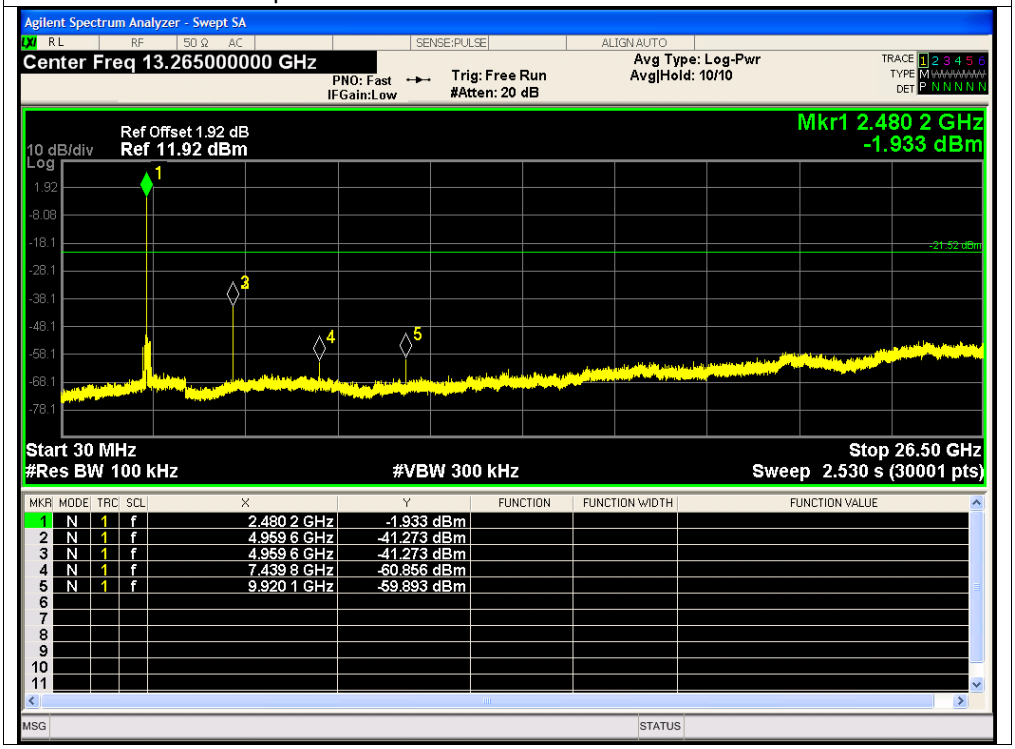


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.440 5 GHz	-1.490 dBm			
2	N	1	f	4.882 0 GHz	-41.533 dBm			
3	N	1	f	4.882 0 GHz	-41.533 dBm			
4	N	1	f	7.323 4 GHz	-60.372 dBm			
5	N	1	f	9.763 9 GHz	-59.663 dBm			

Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

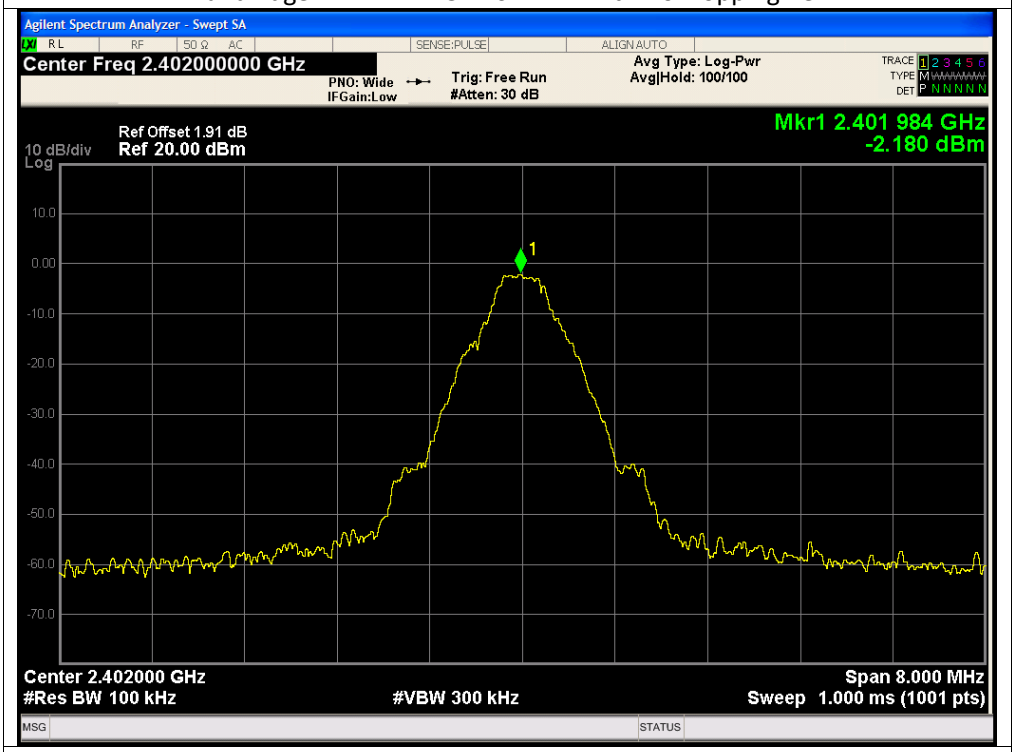


4. Band Edge

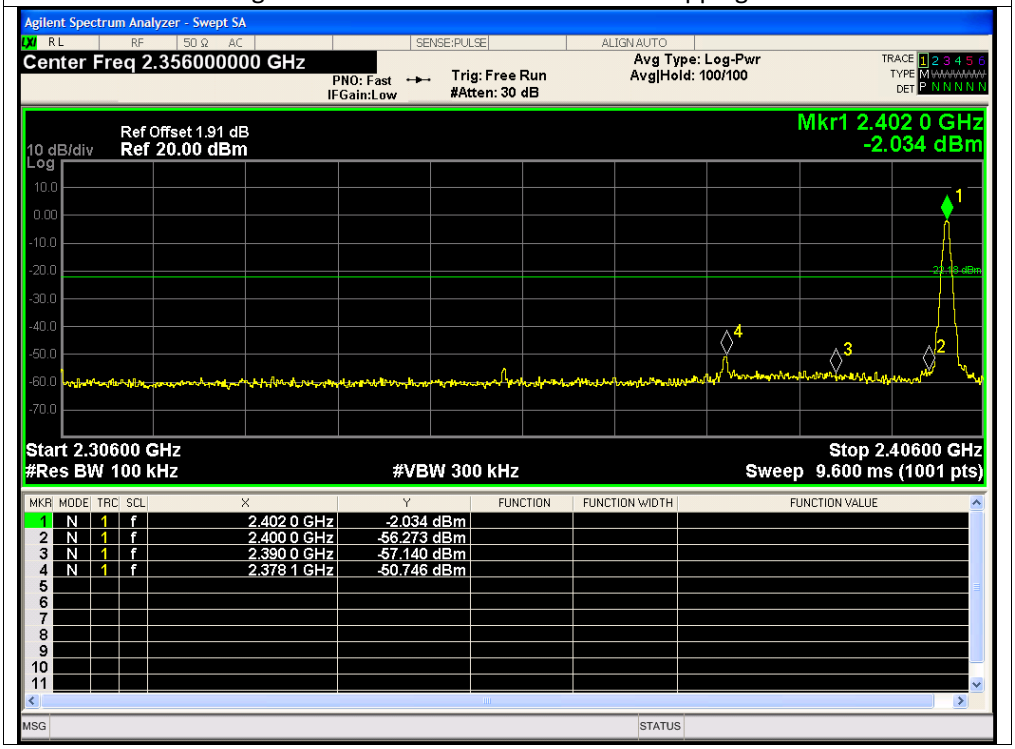
All the modes have tested and recorded the worst mode (GFSK) in the report

Test Graphs

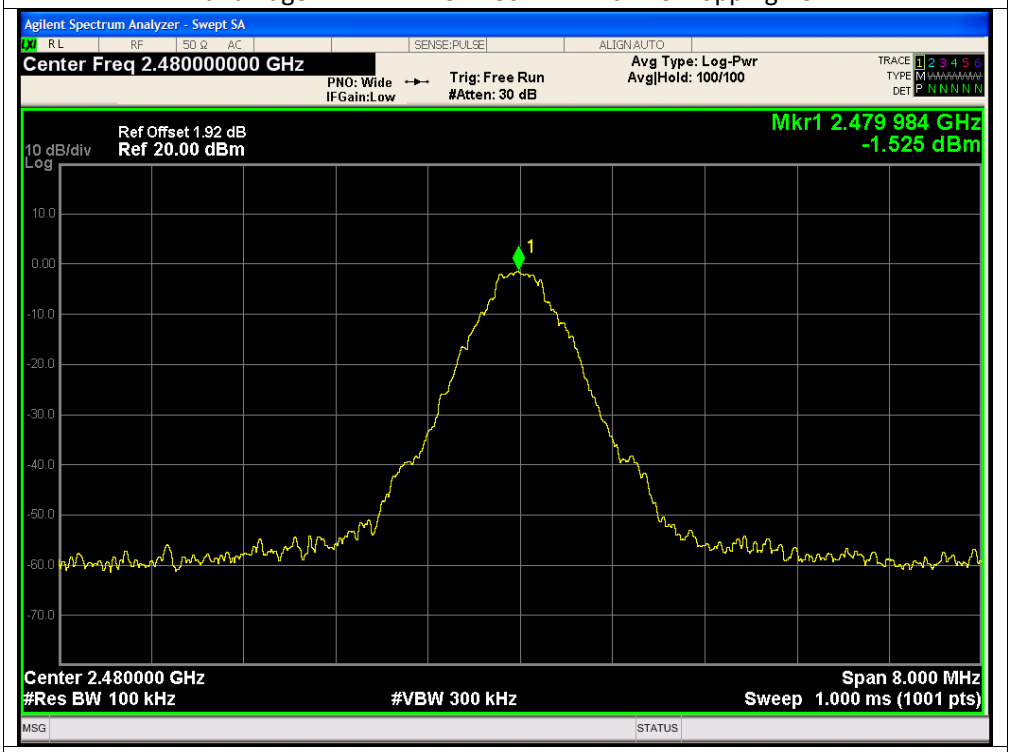
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



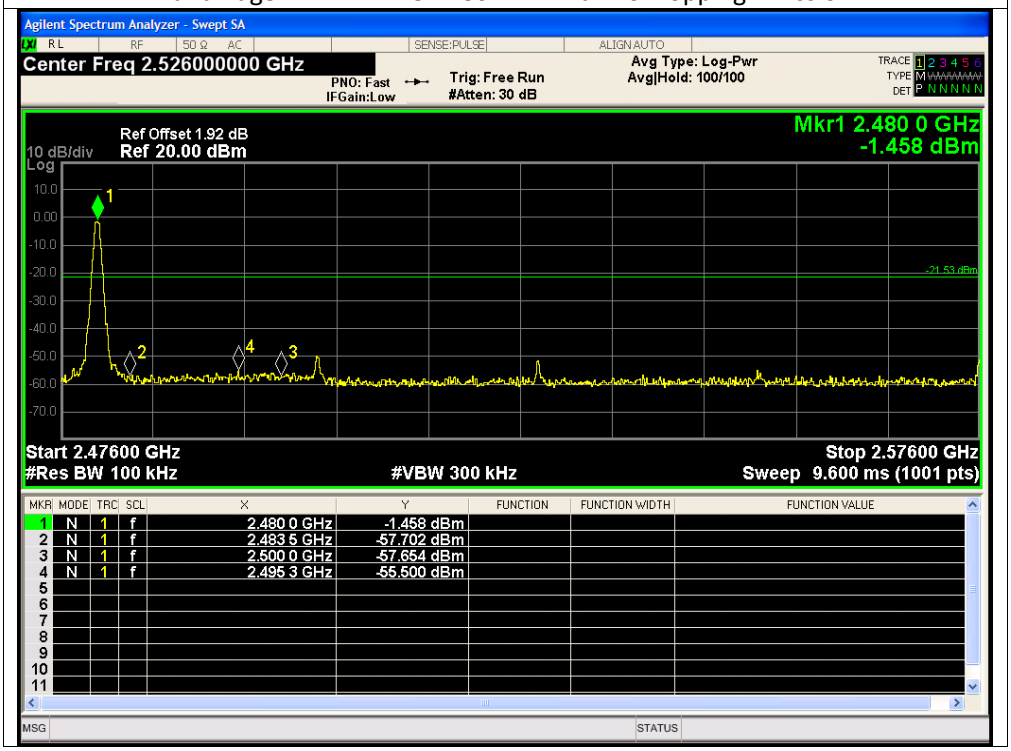
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



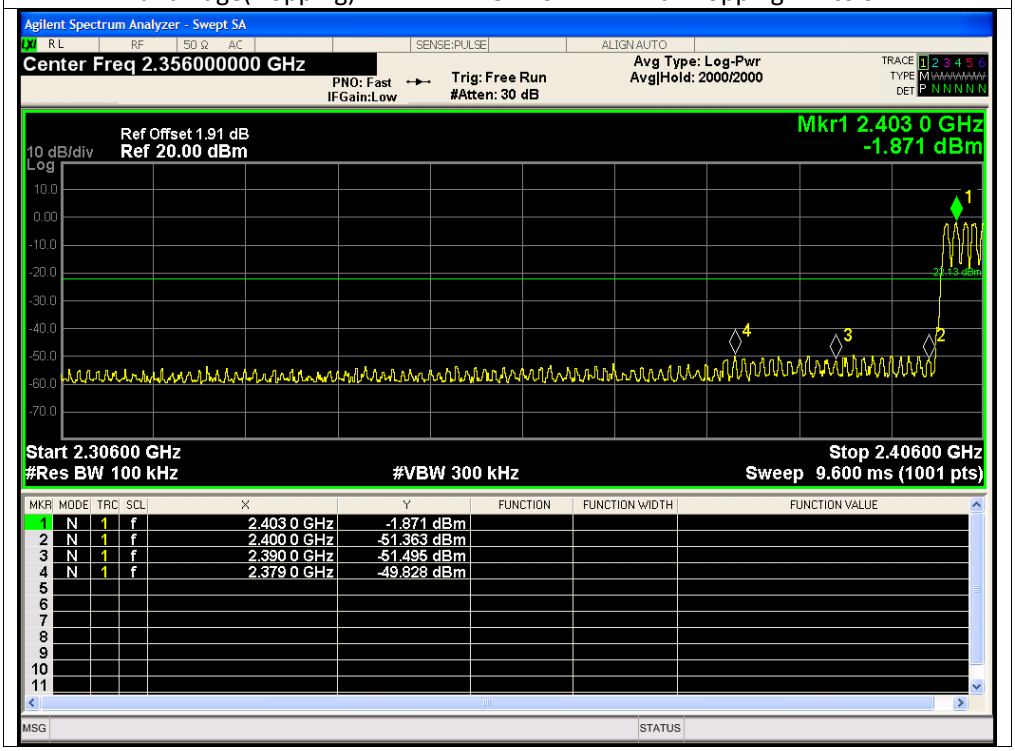
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



Test Graphs

Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref

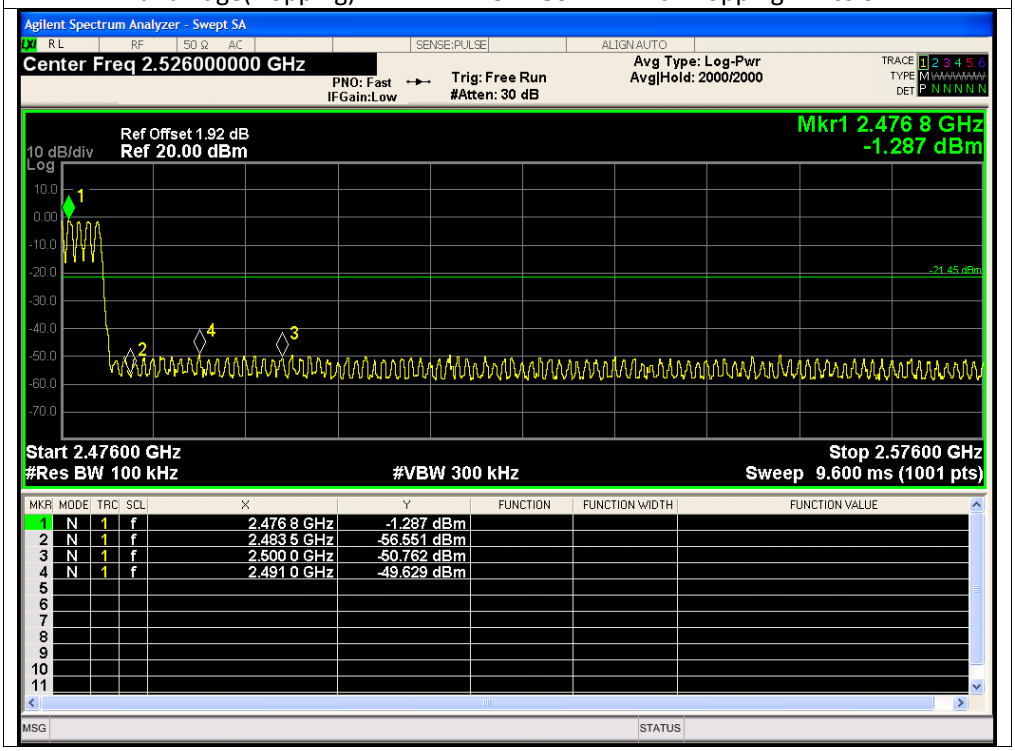
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.403 0 GHz	-1.871 dBm			
2	N	1	f	2.400 0 GHz	-51.363 dBm			
3	N	1	f	2.390 0 GHz	-51.495 dBm			
4	N	1	f	2.379 0 GHz	-49.828 dBm			

Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref

Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission

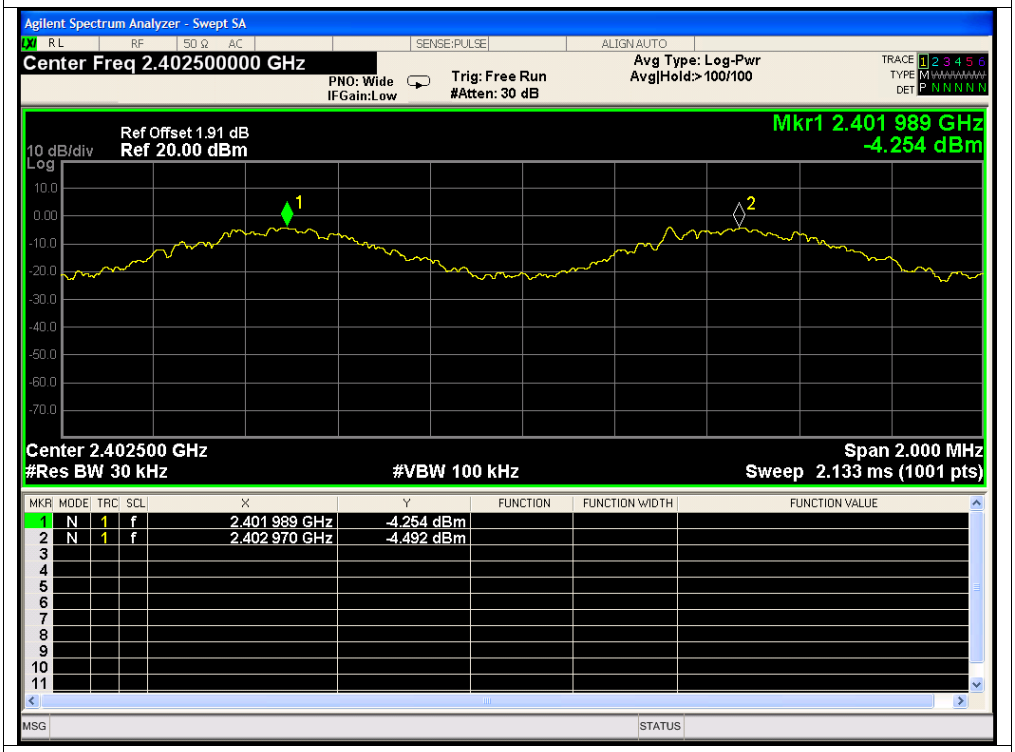


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.476 8 GHz	-1.287 dBm			
2	N	1	f	2.483 5 GHz	-56.551 dBm			
3	N	1	f	2.500 0 GHz	-50.762 dBm			
4	N	1	f	2.491 0 GHz	-49.629 dBm			
5								
6								
7								
8								
9								
10								
11								

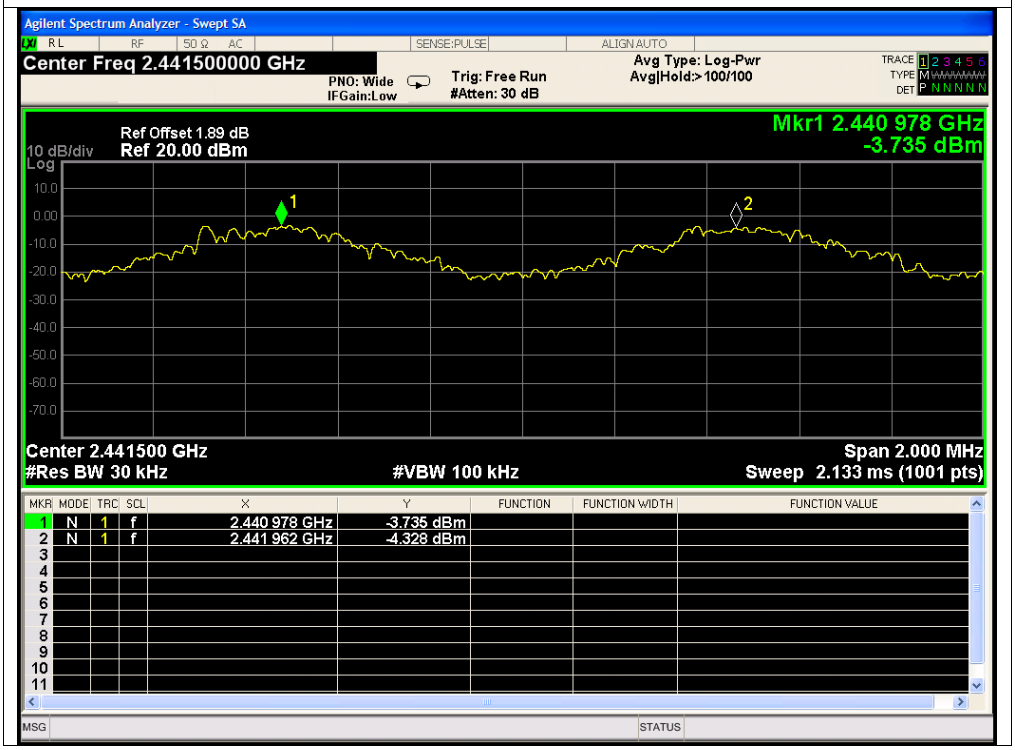
5. Carrier Frequencies Separation (Hopping)

Condition	Mode	Antenna	Channel Frequency (MHz)	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	Carrier Frequencies Separation (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402	2401.989	2402.97	0.981	0.689	Pass
NVNT	1-DH5	Ant1	2441	2440.978	2441.962	0.984	0.694	Pass
NVNT	1-DH5	Ant1	2480	2479.001	2479.956	0.955	0.701	Pass
NVNT	2-DH5	Ant1	2402	2402.09	2402.99	0.9	0.857	Pass
NVNT	2-DH5	Ant1	2441	2441.144	2442.332	1.188	0.893	Pass
NVNT	2-DH5	Ant1	2480	2478.98	2480.248	1.268	0.868	Pass
NVNT	3-DH5	Ant1	2402	2401.881	2402.81	0.929	0.855	Pass
NVNT	3-DH5	Ant1	2441	2440.903	2441.808	0.905	0.861	Pass
NVNT	3-DH5	Ant1	2480	2478.882	2479.978	1.096	0.877	Pass
Note: Limit = 20dB bandwidth * 2/3								

Test Graphs
CFS NVNT 1-DH5 2402MHz Ant1

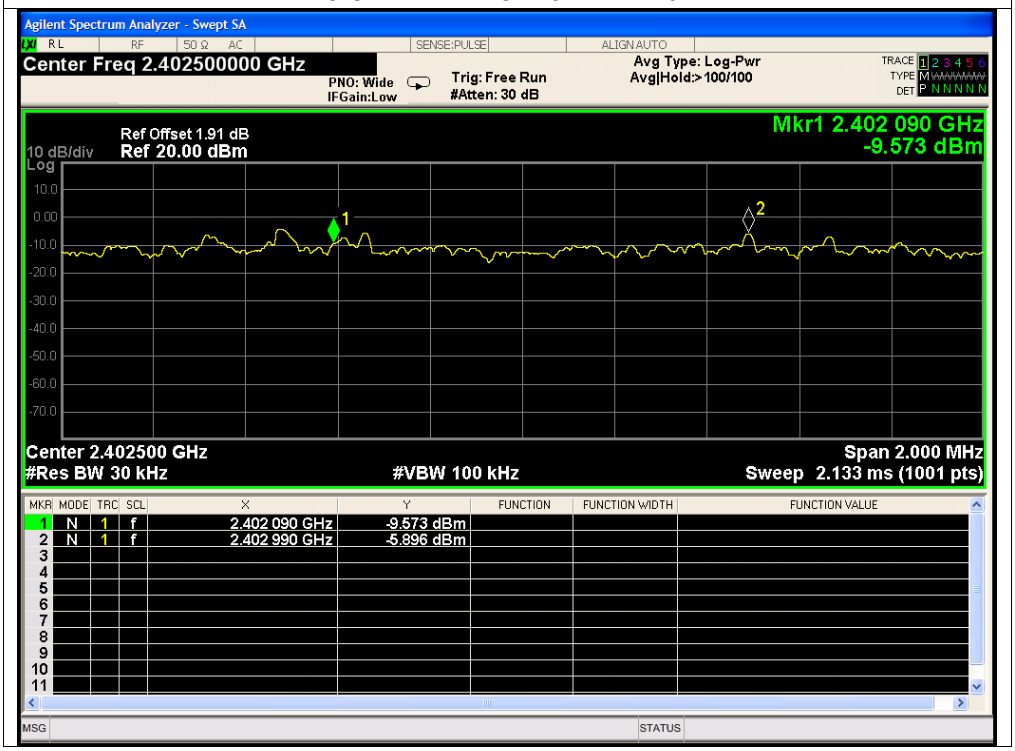


CFS NVNT 1-DH5 2441MHz Ant1

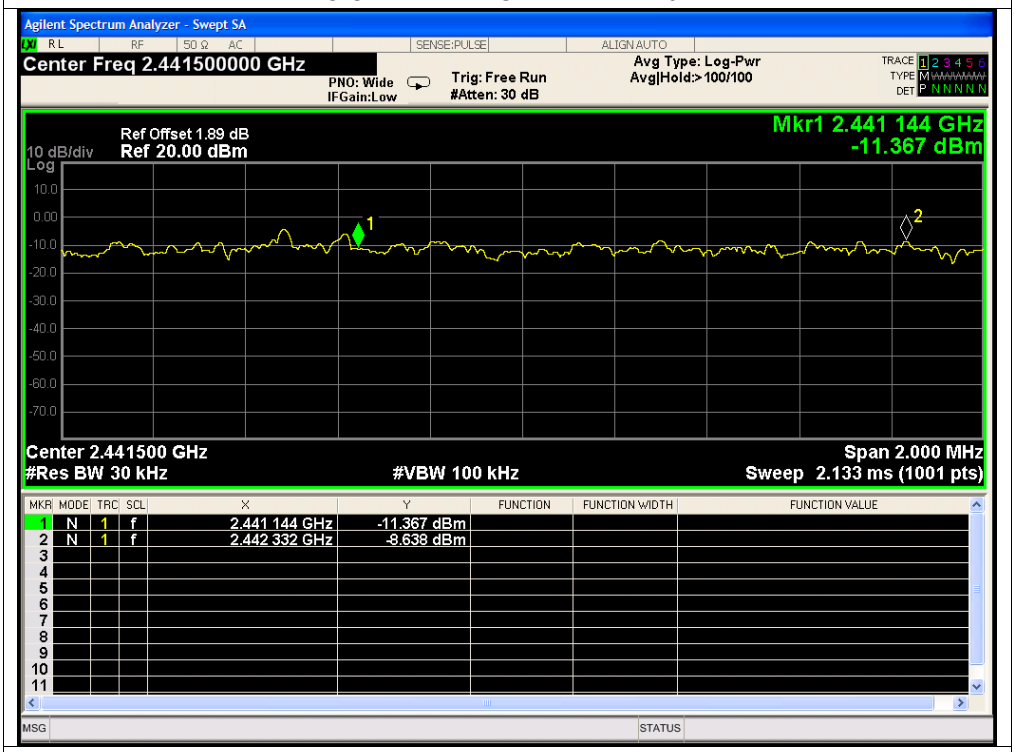


CFS NVNT 1-DH5 2480MHz Ant1

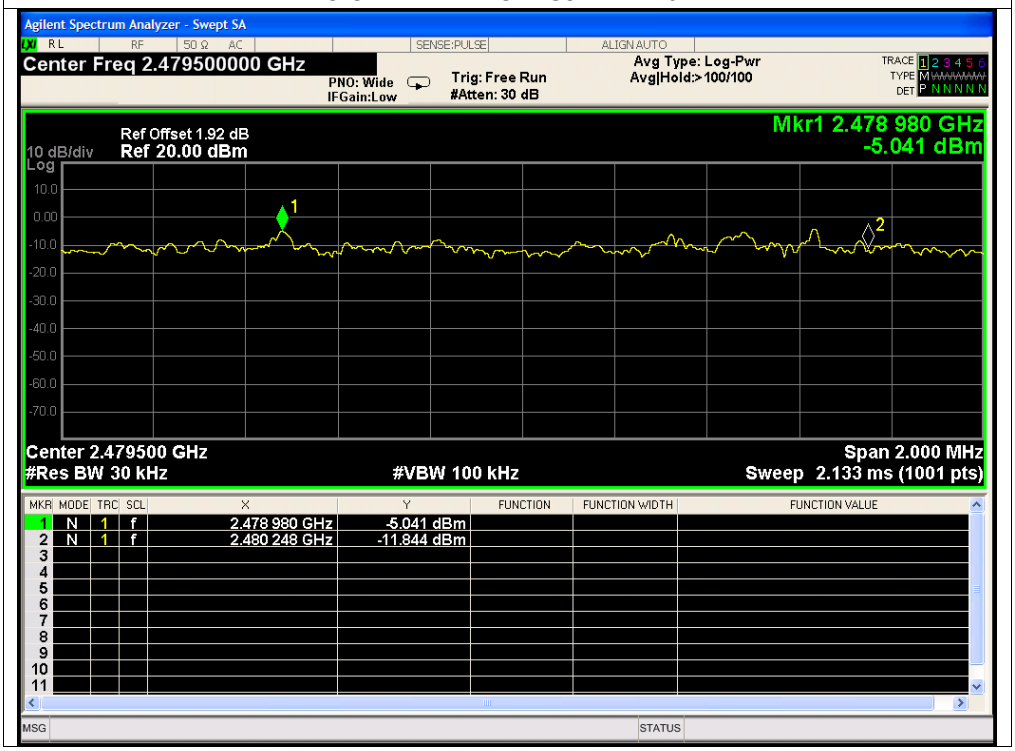
CFS NVNT 2-DH5 2402MHz Ant1



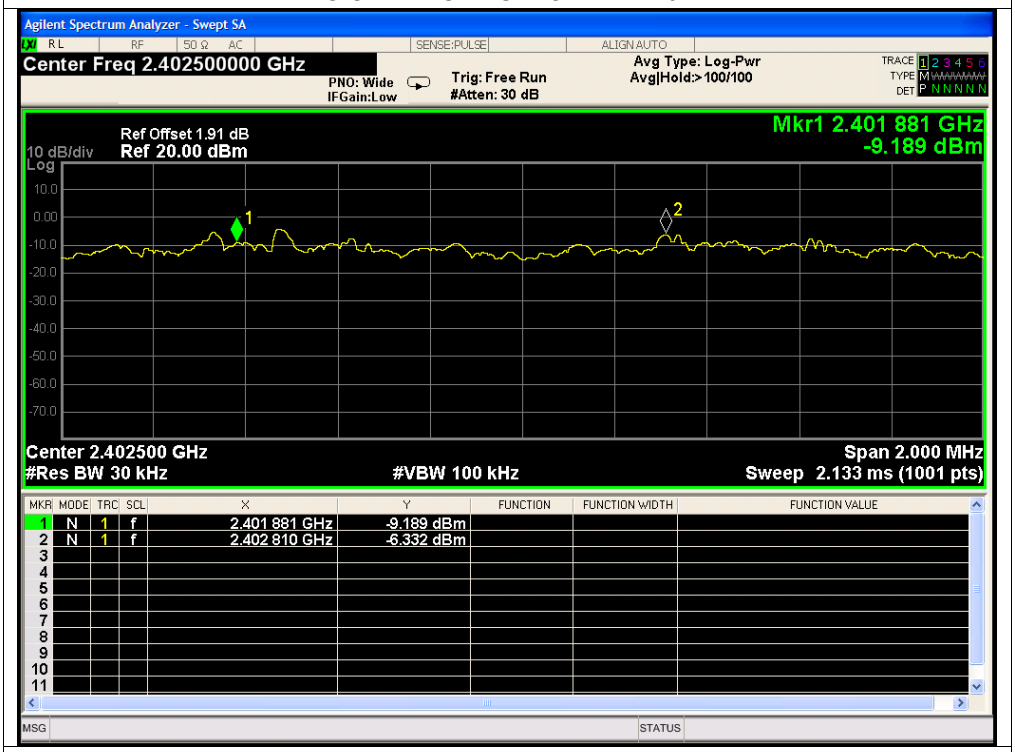
CFS NVNT 2-DH5 2441MHz Ant1



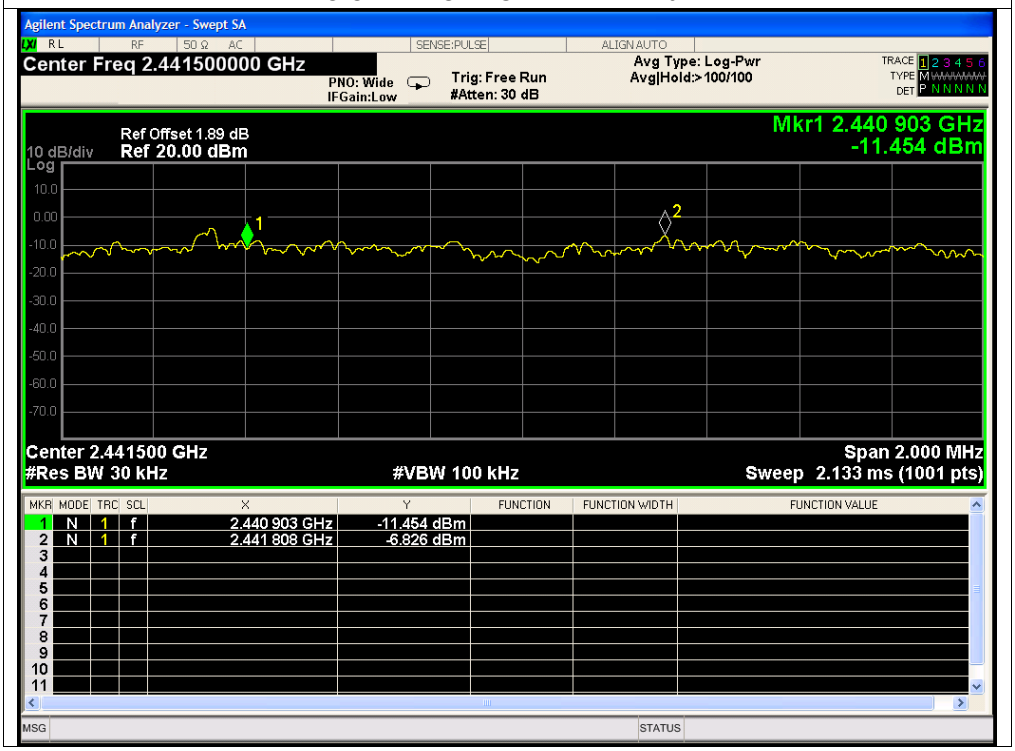
CFS NVNT 2-DH5 2480MHz Ant1



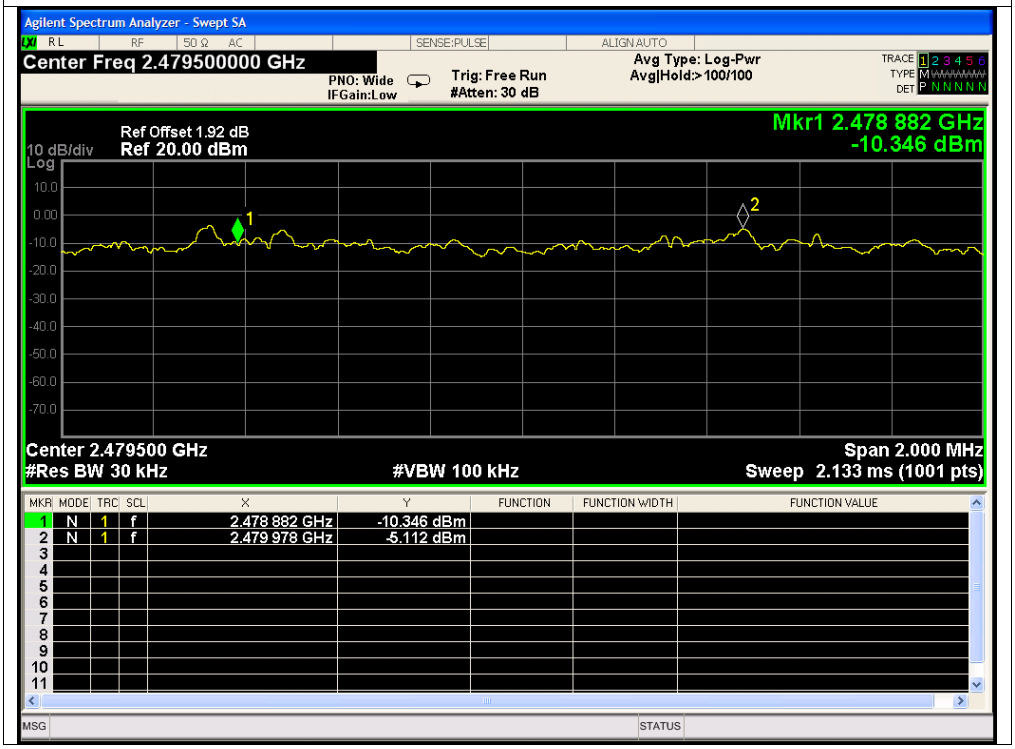
CFS NVNT 3-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2441MHz Ant1



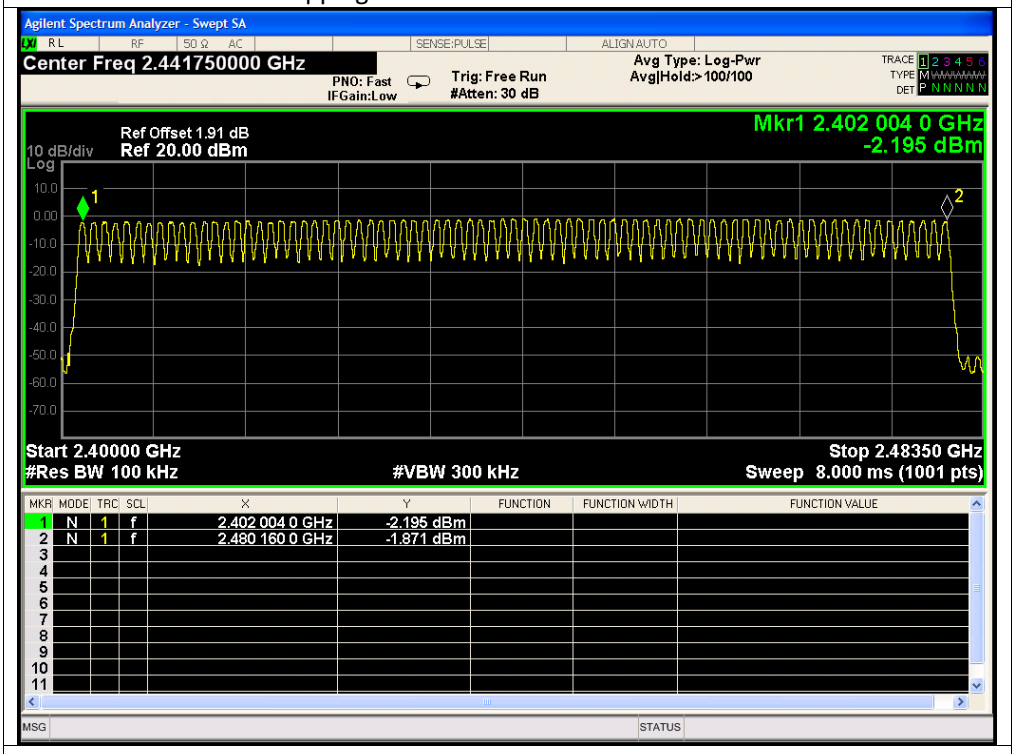
CFS NVNT 3-DH5 2480MHz Ant1



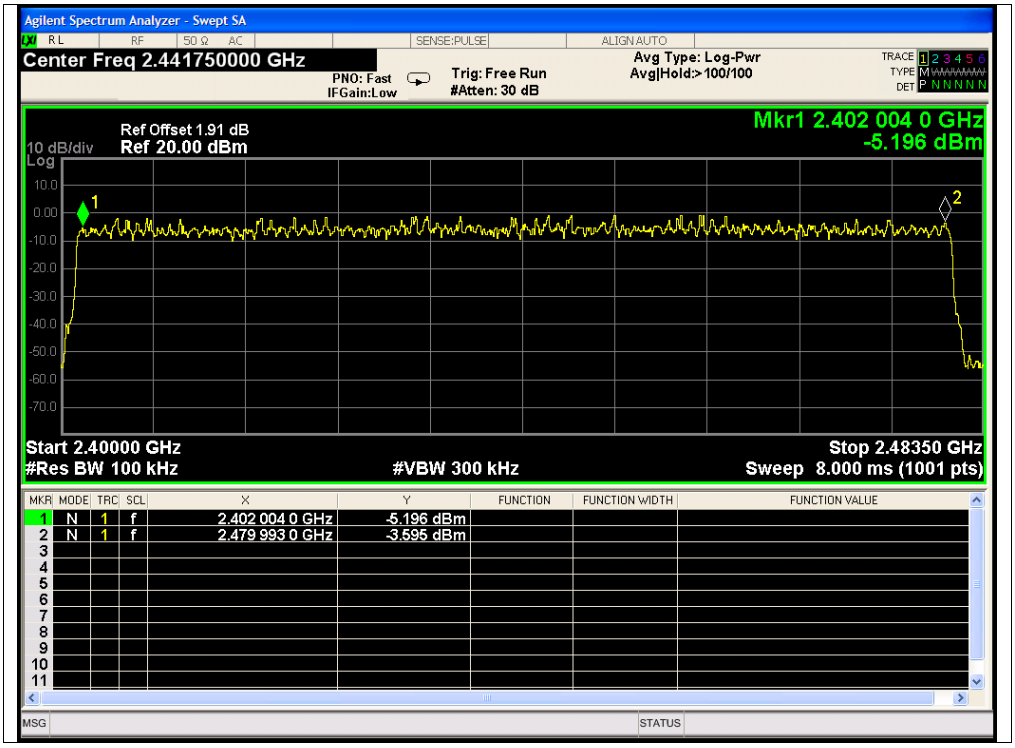
6. Number of Hopping Channel (Hopping)

Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

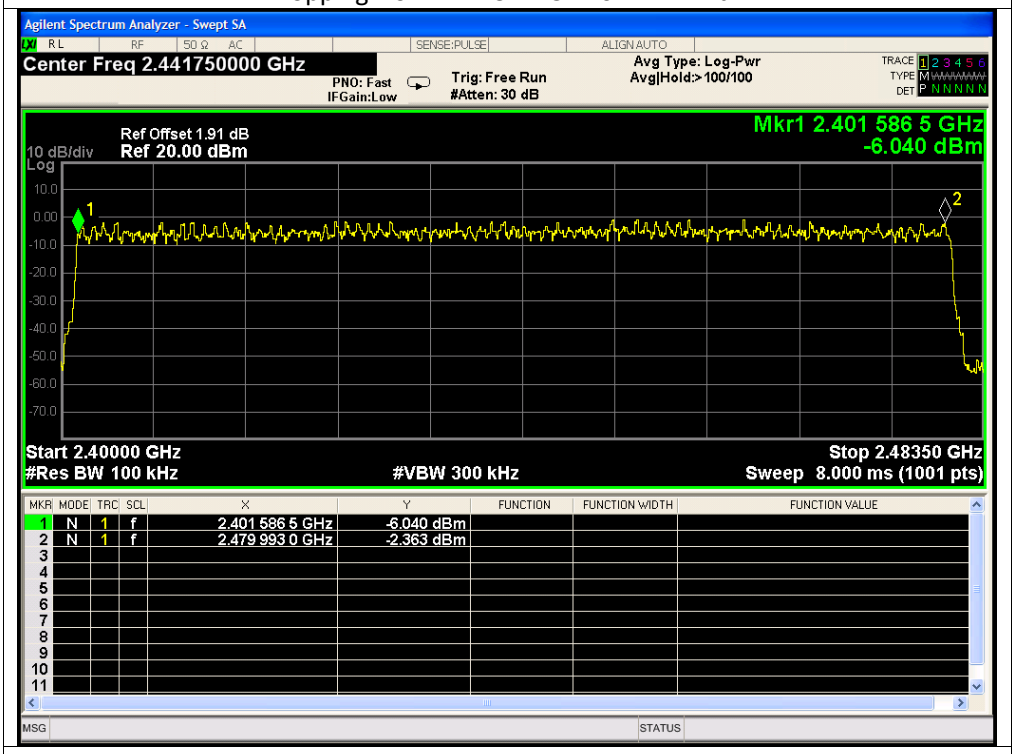
Test Graphs
Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1



Hopping No. NVNT 3-DH5 2402MHz Ant1

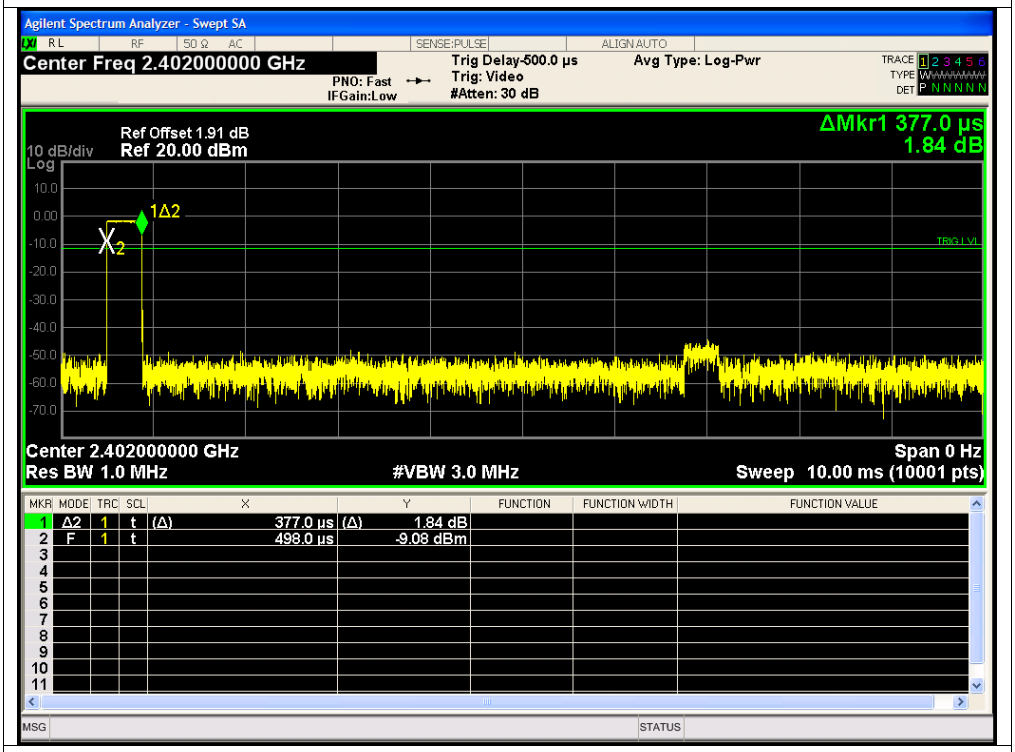


7. Dwell Time (Hopping)

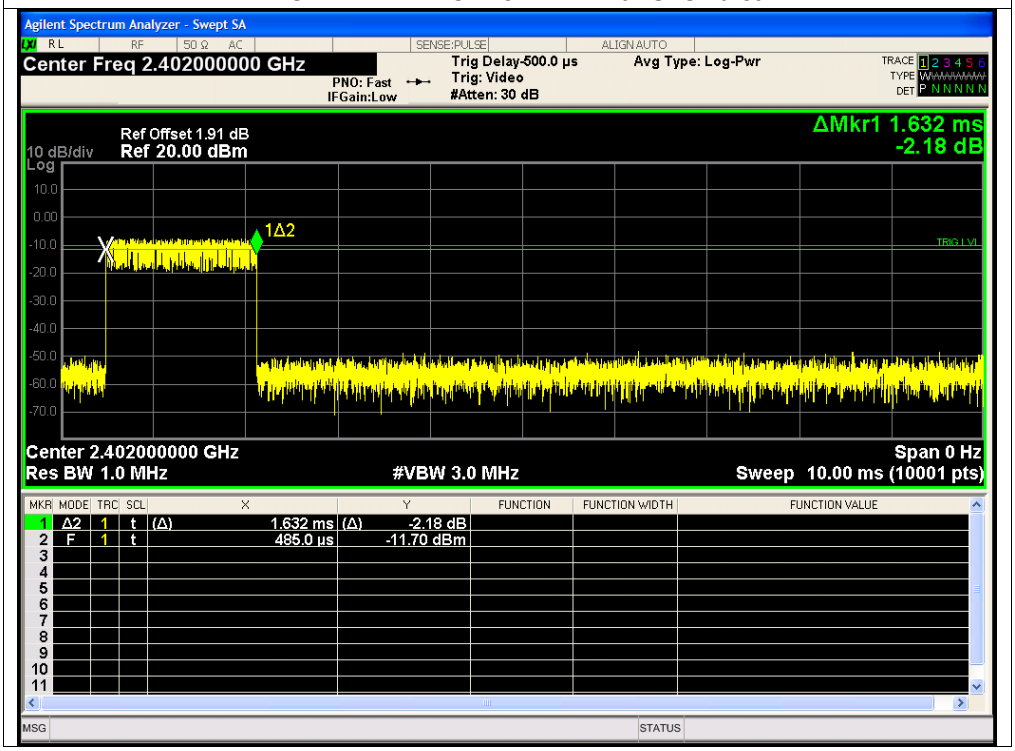
All the modes have tested and recorded the worst mode (GFSK) in the report

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Dwell Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2402	Ant1	0.377	120.263	400	Pass
NVNT	1-DH3	2402	Ant1	1.632	252.96	155	Pass
NVNT	1-DH5	2402	Ant1	2.88	342.72	400	Pass
Note: Dwell Time(DH1)=PW*(1600/2/79)*31.6 Dwell Time(DH3)=PW*(1600/4/79)*31.6 Dwell Time(DH5)=PW*(1600/6/79)*31.6							

Test Graphs
Dwell NVNT 1-DH1 2402MHz Ant1 One Burst



Dwell NVNT 1-DH3 2402MHz Ant1 One Burst



Dwell NVNT 1-DH5 2402MHz Ant1 One Burst