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FCC ID: 2A9HV-AUT210

BT Test Data

1. -20dB Bandwidth and 99% Occupied Bandwidth

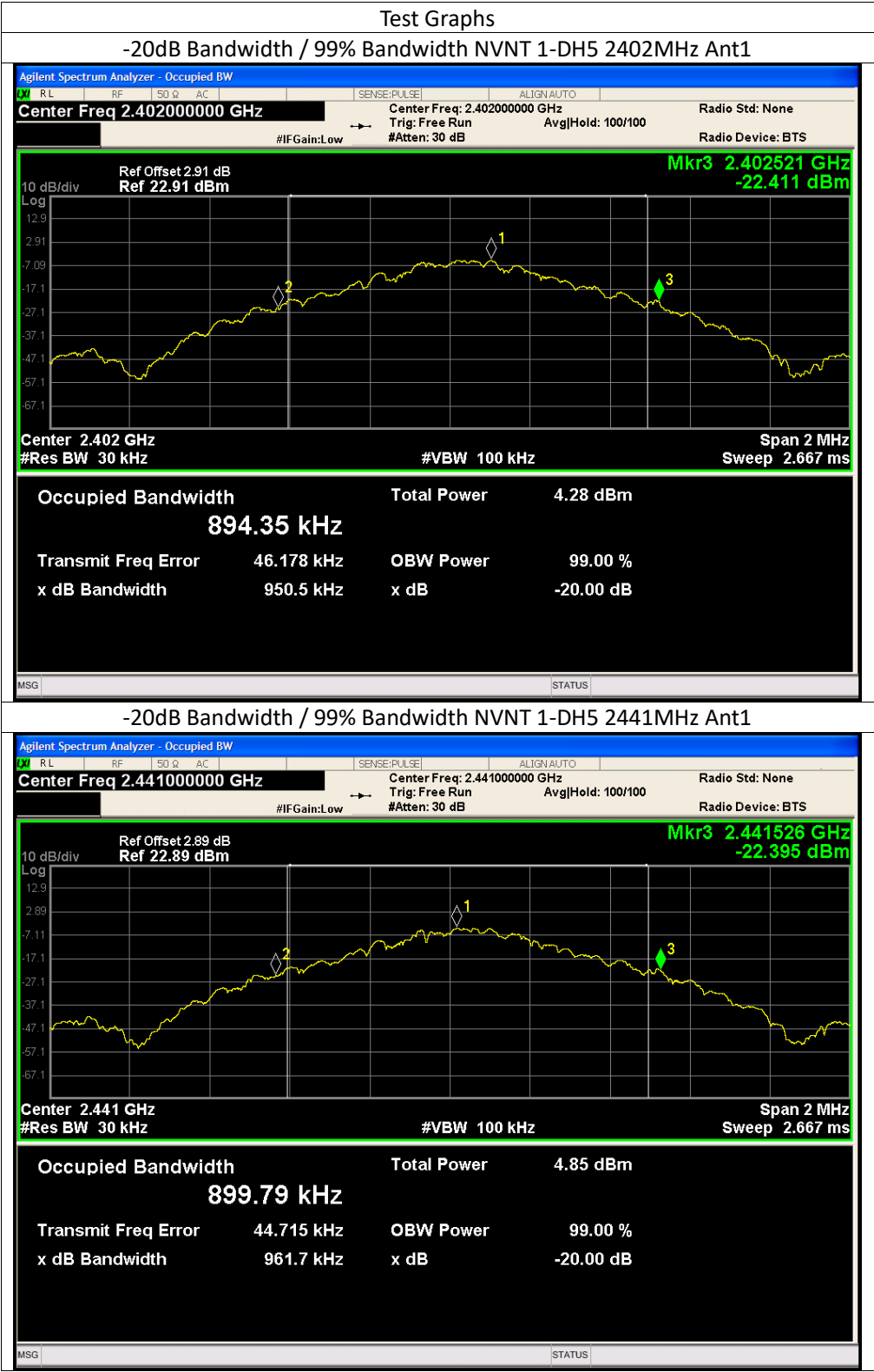
Earphone (Left)

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.950	0.895	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.962	0.900	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.961	0.897	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.362	1.200	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.367	1.200	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.366	1.195	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.349	1.201	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.352	1.210	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.350	1.210	N/A	Pass

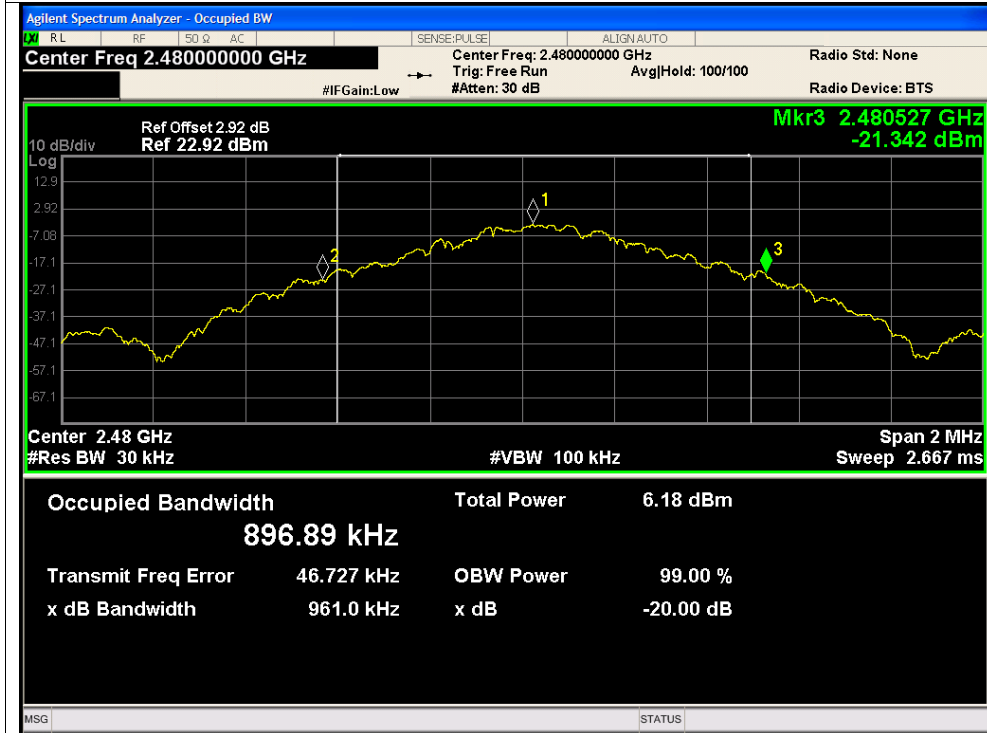
Earphone (Right)

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.964	0.886	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.962	0.891	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.955	0.884	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.270	1.178	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.280	1.184	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.275	1.177	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.289	1.188	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.286	1.183	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.306	1.190	N/A	Pass

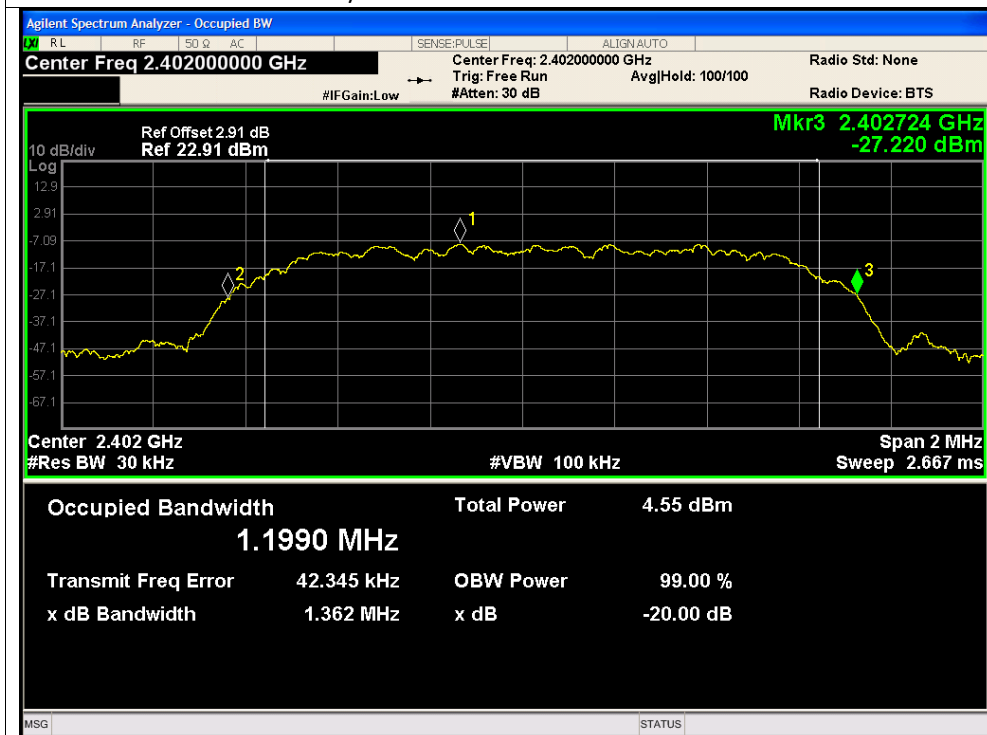
Earphone (Left)



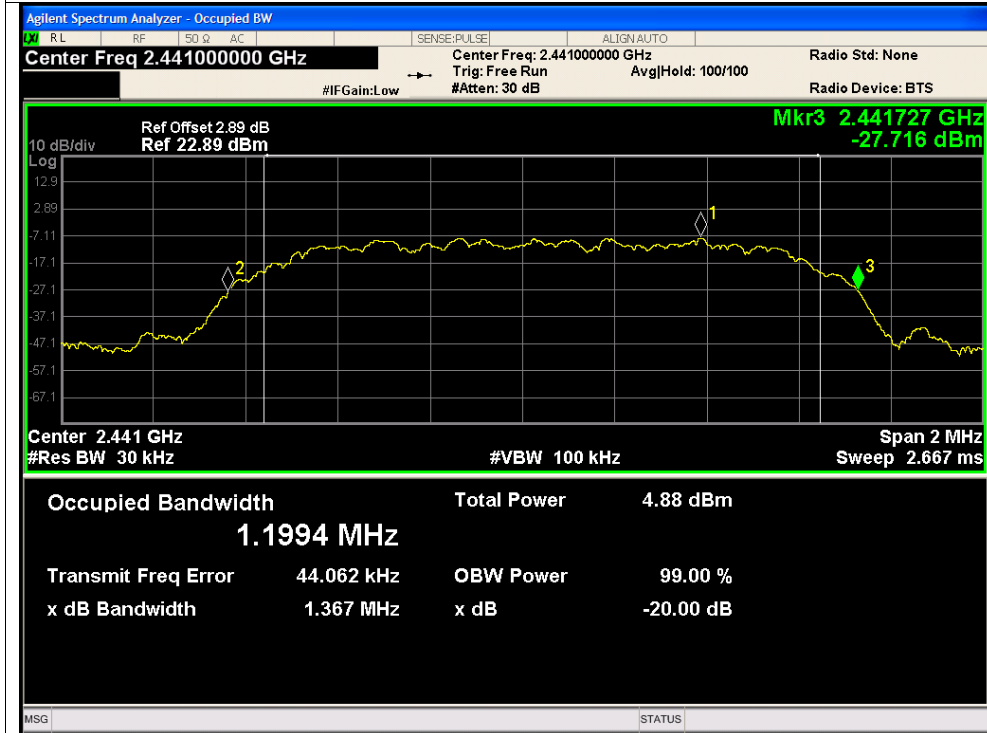
-20dB Bandwidth / 99% Bandwidth NVNT 1-DH5 2480MHz Ant1



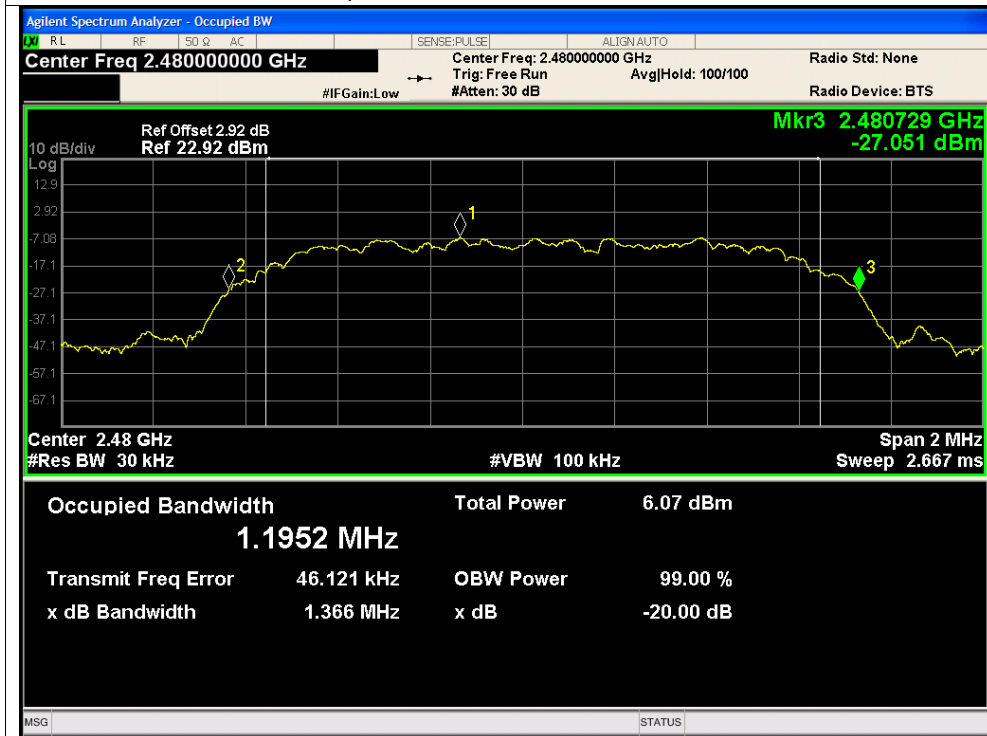
-20dB Bandwidth / 99% Bandwidth NVNT 2-DH5 2402MHz Ant1



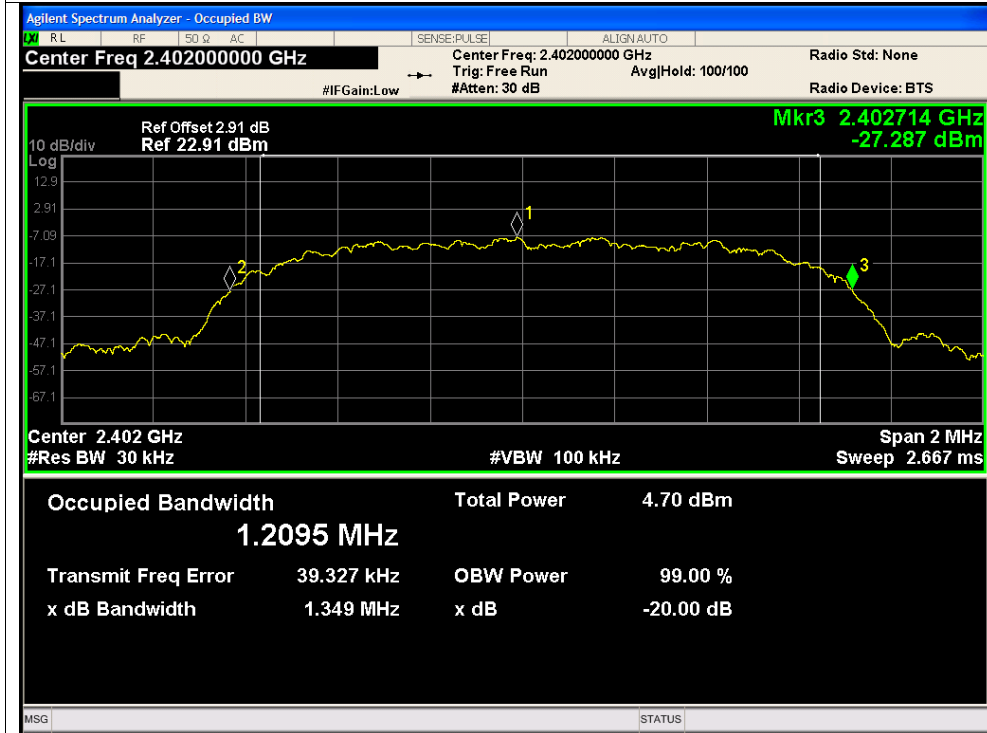
-20dB Bandwidth / 99% Bandwidth NVNT 2-DH5 2441MHz Ant1



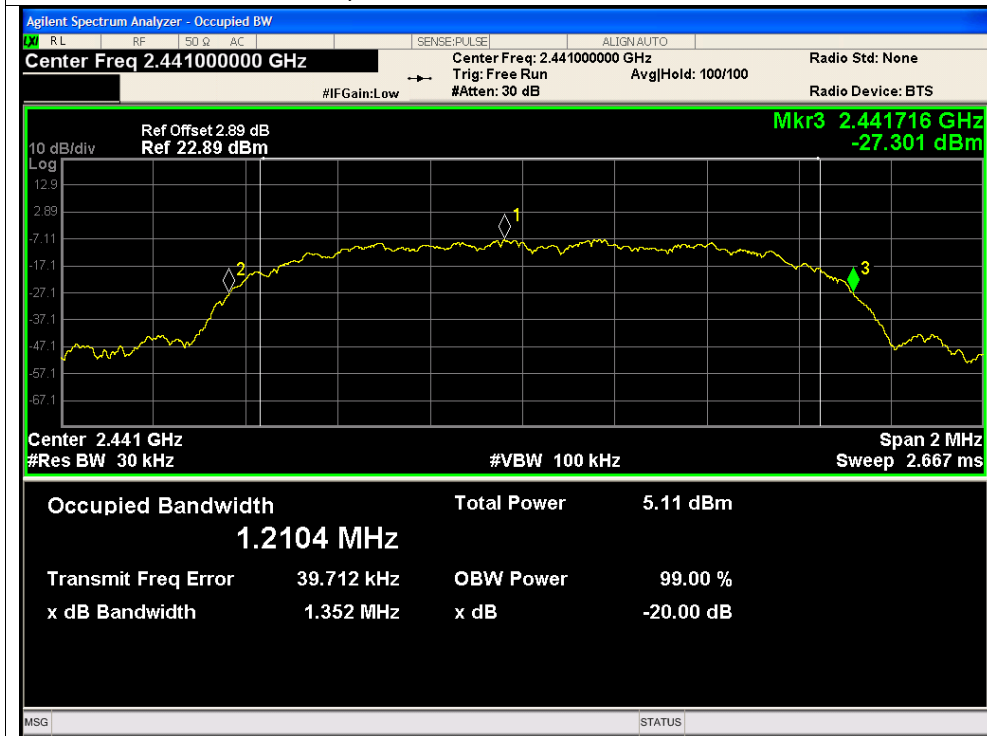
-20dB Bandwidth / 99% Bandwidth NVNT 2-DH5 2480MHz Ant1



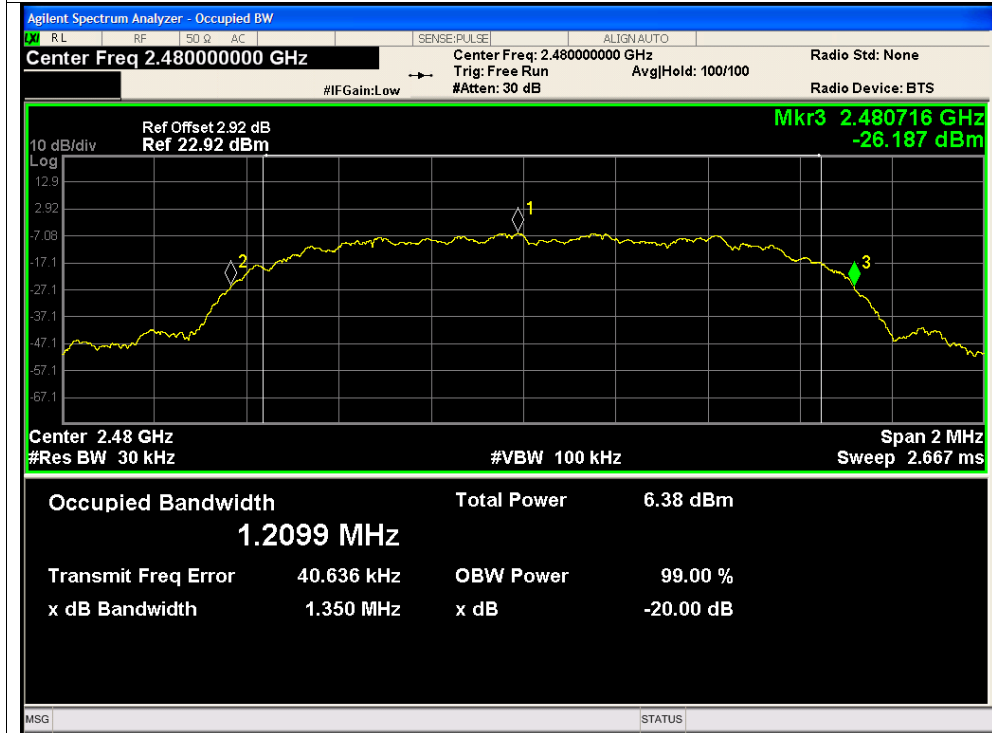
-20dB Bandwidth / 99% Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth / 99% Bandwidth NVNT 3-DH5 2441MHz Ant1



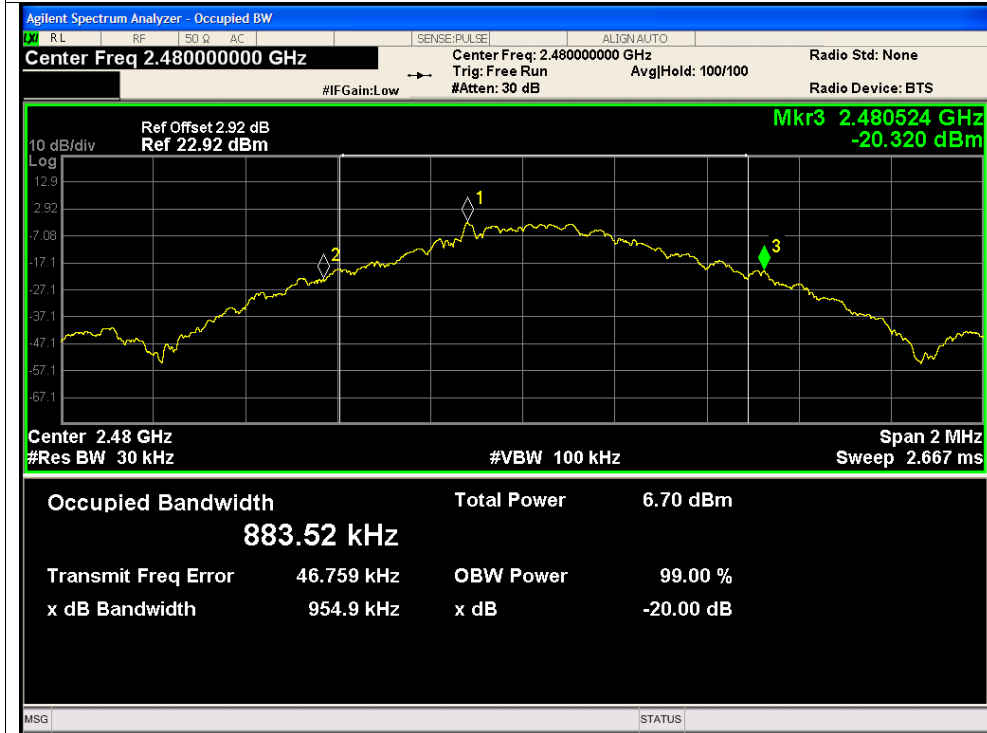
-20dB Bandwidth / 99% Bandwidth NVNT 3-DH5 2480MHz Ant1



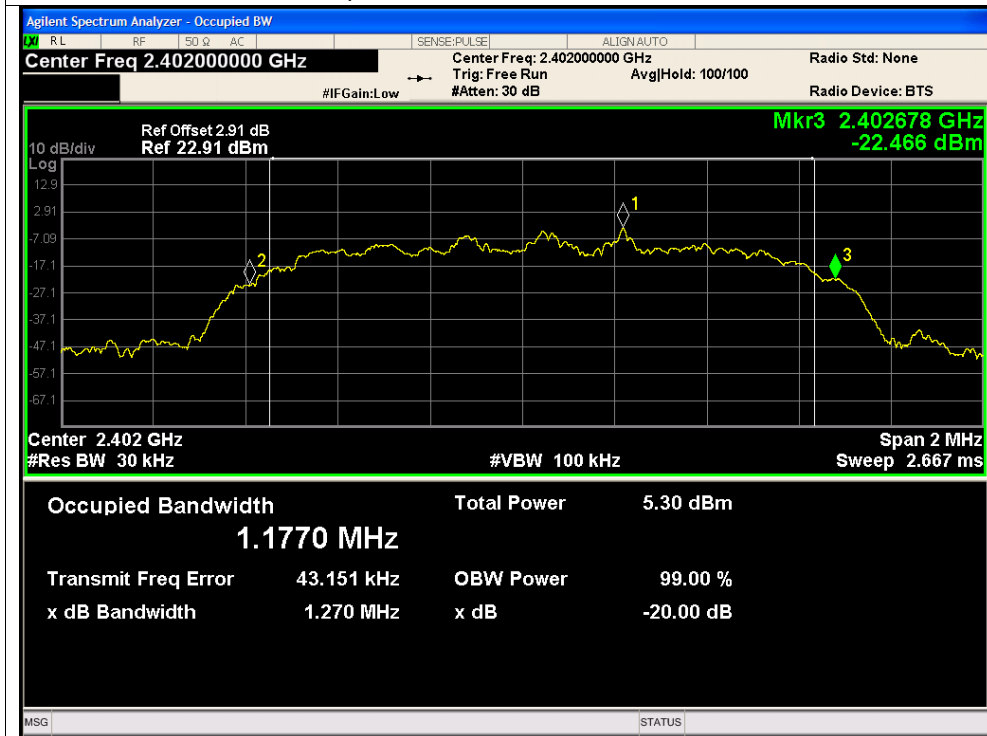
Earphone (Right)



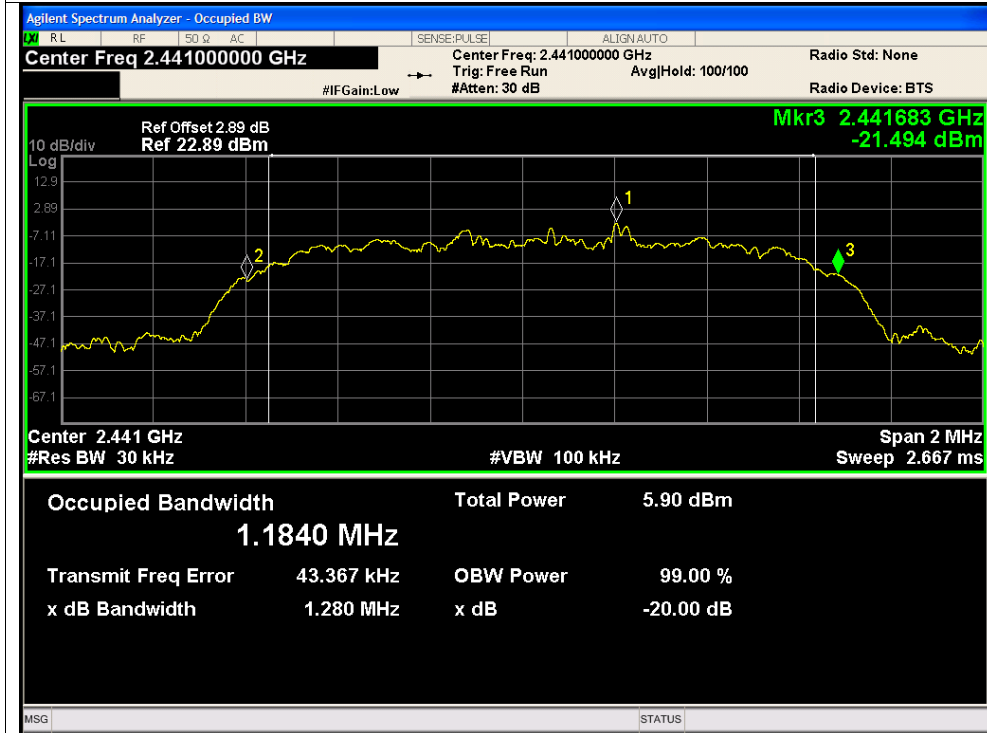
-20dB Bandwidth / 99% Bandwidth NVNT 1-DH5 2480MHz Ant1



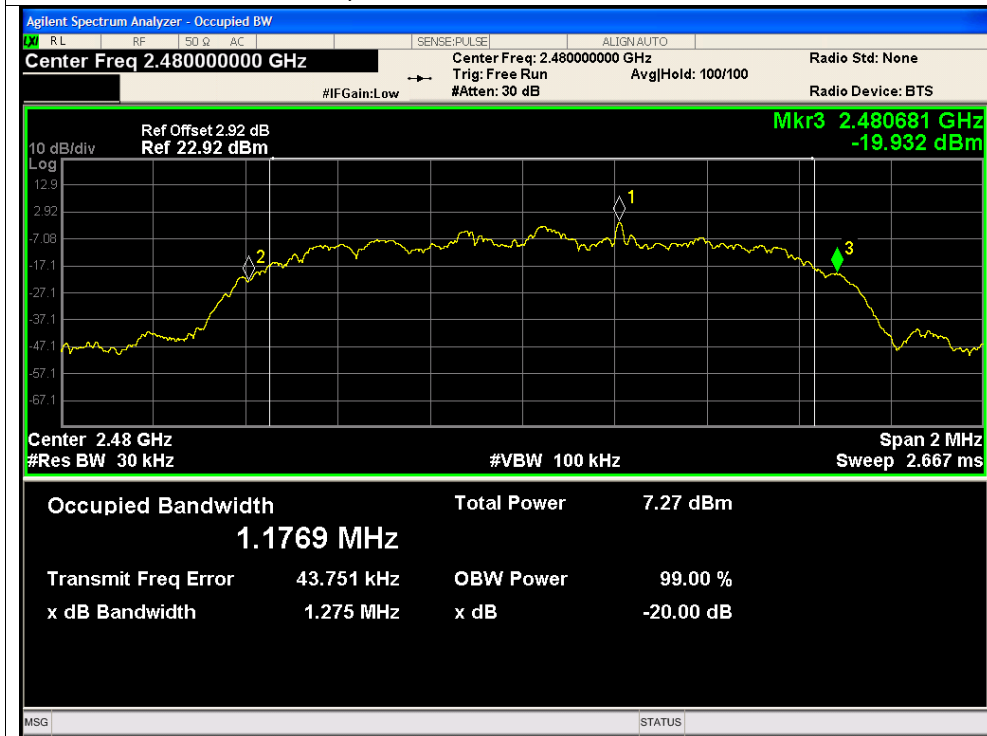
-20dB Bandwidth / 99% Bandwidth NVNT 2-DH5 2402MHz Ant1



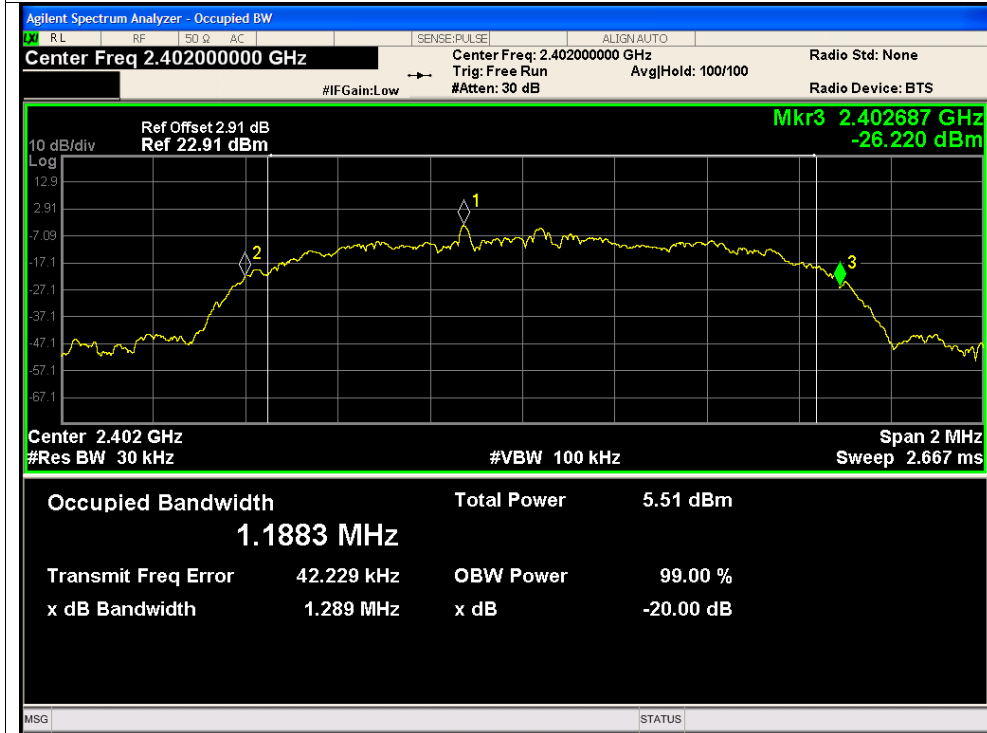
-20dB Bandwidth / 99% Bandwidth NVNT 2-DH5 2441MHz Ant1



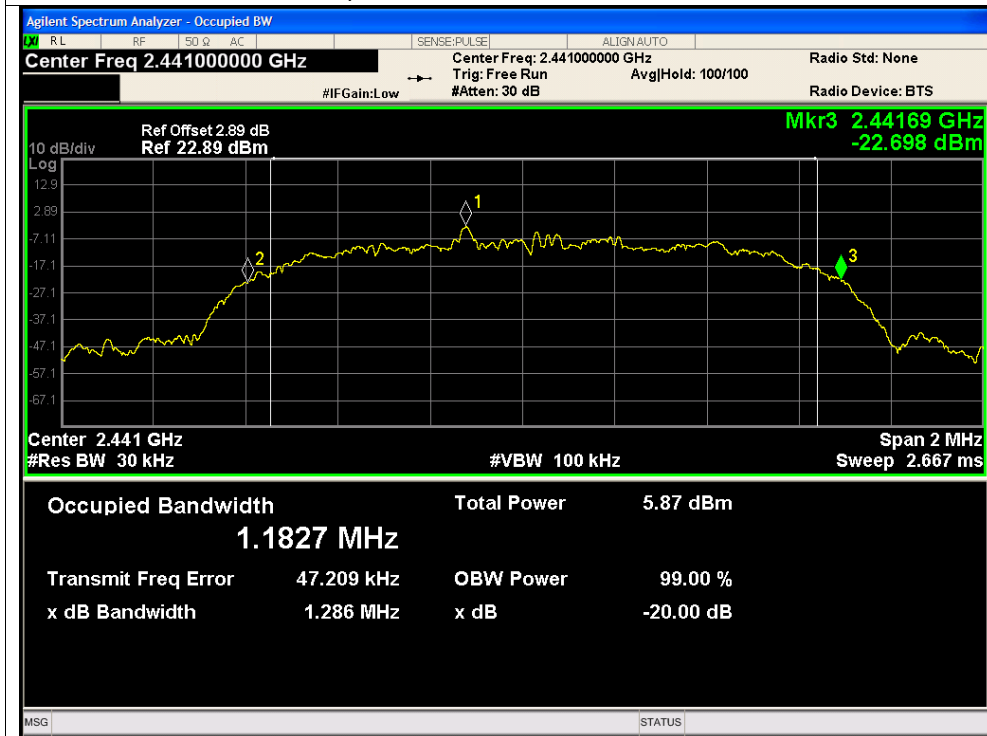
-20dB Bandwidth / 99% Bandwidth NVNT 2-DH5 2480MHz Ant1



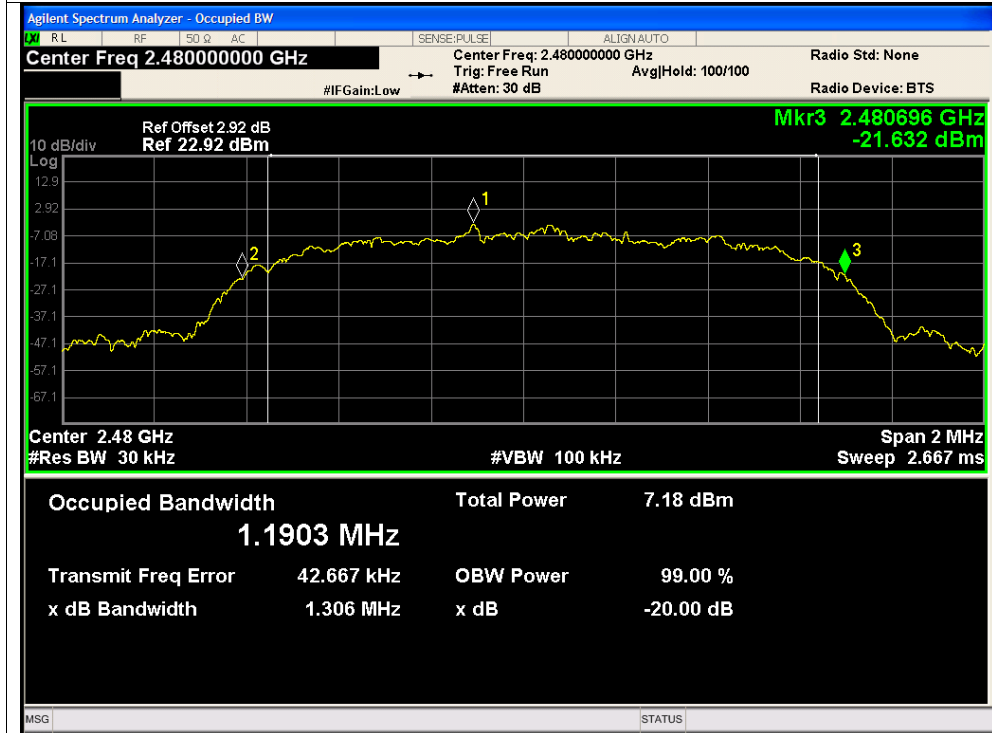
-20dB Bandwidth / 99% Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth / 99% Bandwidth NVNT 3-DH5 2441MHz Ant1



-20dB Bandwidth / 99% Bandwidth NVNT 3-DH5 2480MHz Ant1



2. Peak Output Power

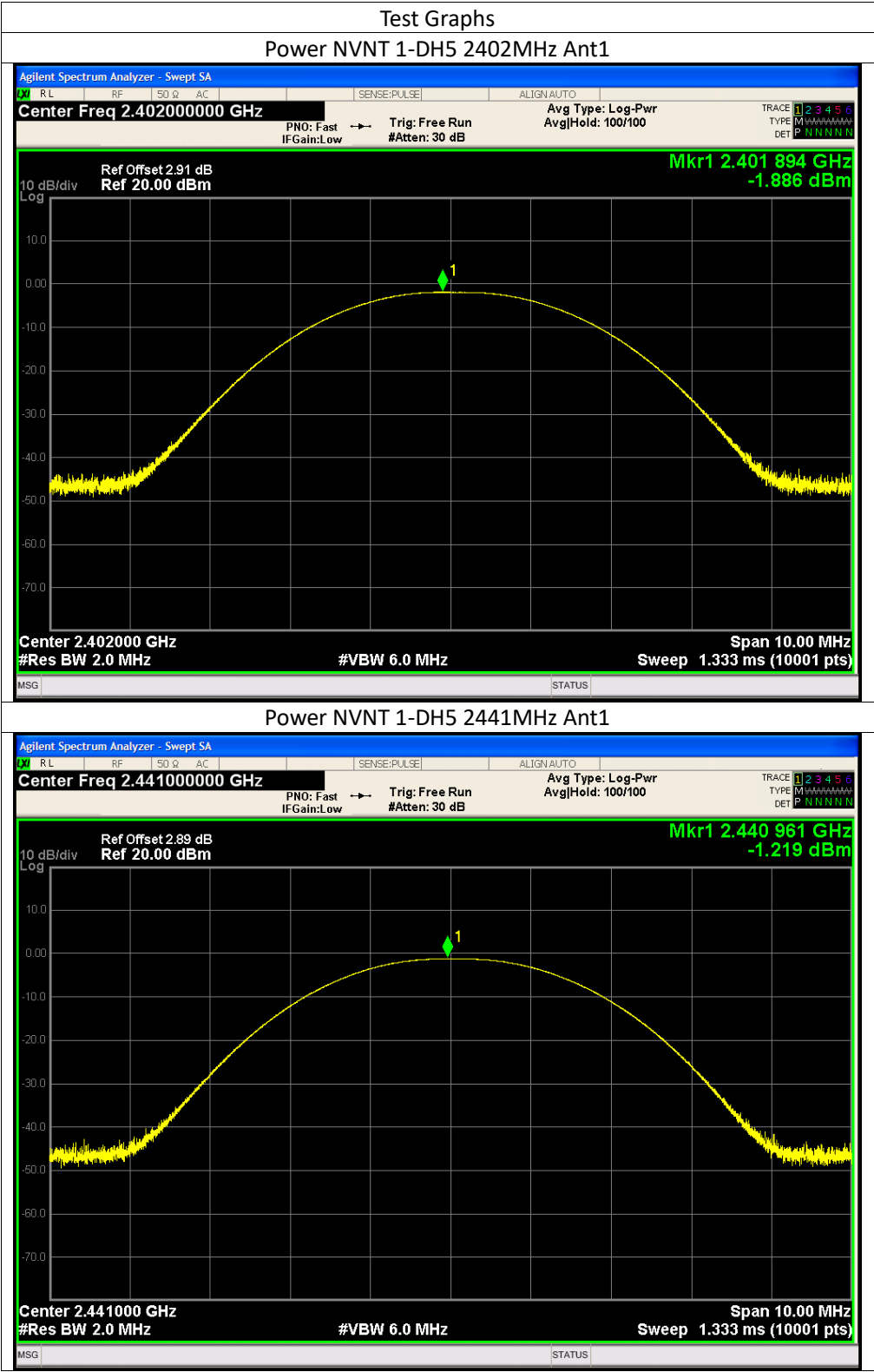
Earphone (Left)

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-1.89	21	Pass
NVNT	1-DH5	2441	Ant1	-1.22	21	Pass
NVNT	1-DH5	2480	Ant1	0.07	21	Pass
NVNT	2-DH5	2402	Ant1	0.61	21	Pass
NVNT	2-DH5	2441	Ant1	0.97	21	Pass
NVNT	2-DH5	2480	Ant1	2.14	21	Pass
NVNT	3-DH5	2402	Ant1	1.09	21	Pass
NVNT	3-DH5	2441	Ant1	1.61	21	Pass
NVNT	3-DH5	2480	Ant1	2.72	21	Pass

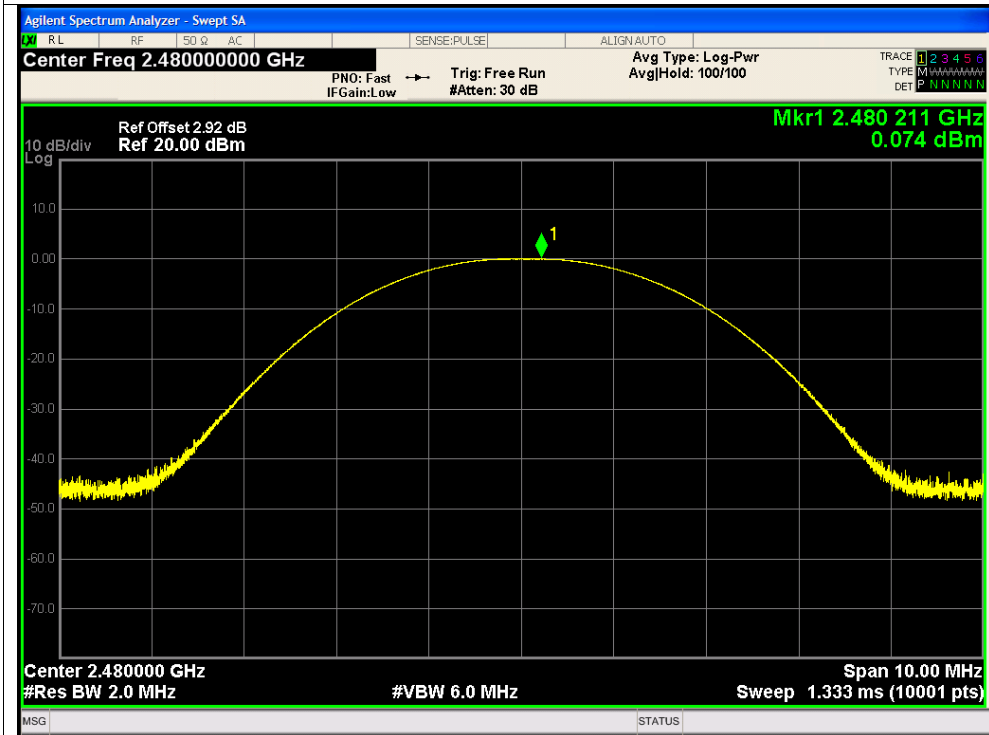
Earphone (Right)

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-1.58	21	Pass
NVNT	1-DH5	2441	Ant1	-0.91	21	Pass
NVNT	1-DH5	2480	Ant1	-0.02	21	Pass
NVNT	2-DH5	2402	Ant1	0.57	21	Pass
NVNT	2-DH5	2441	Ant1	1.00	21	Pass
NVNT	2-DH5	2480	Ant1	2.22	21	Pass
NVNT	3-DH5	2402	Ant1	1.26	21	Pass
NVNT	3-DH5	2441	Ant1	1.64	21	Pass
NVNT	3-DH5	2480	Ant1	2.90	21	Pass

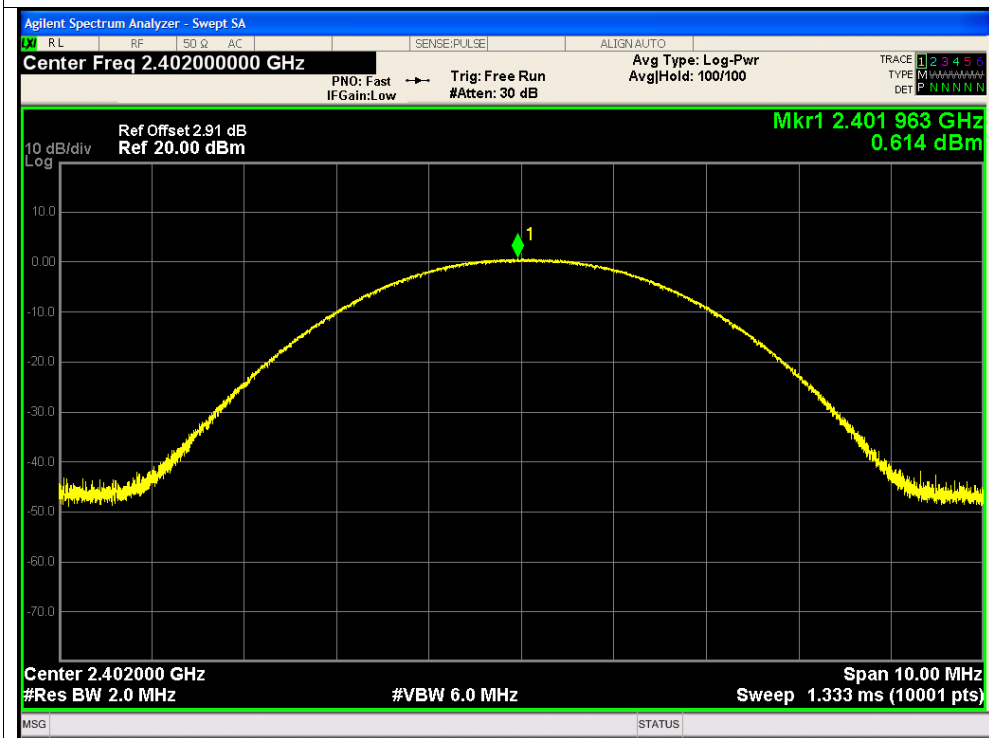
Earphone (Left)



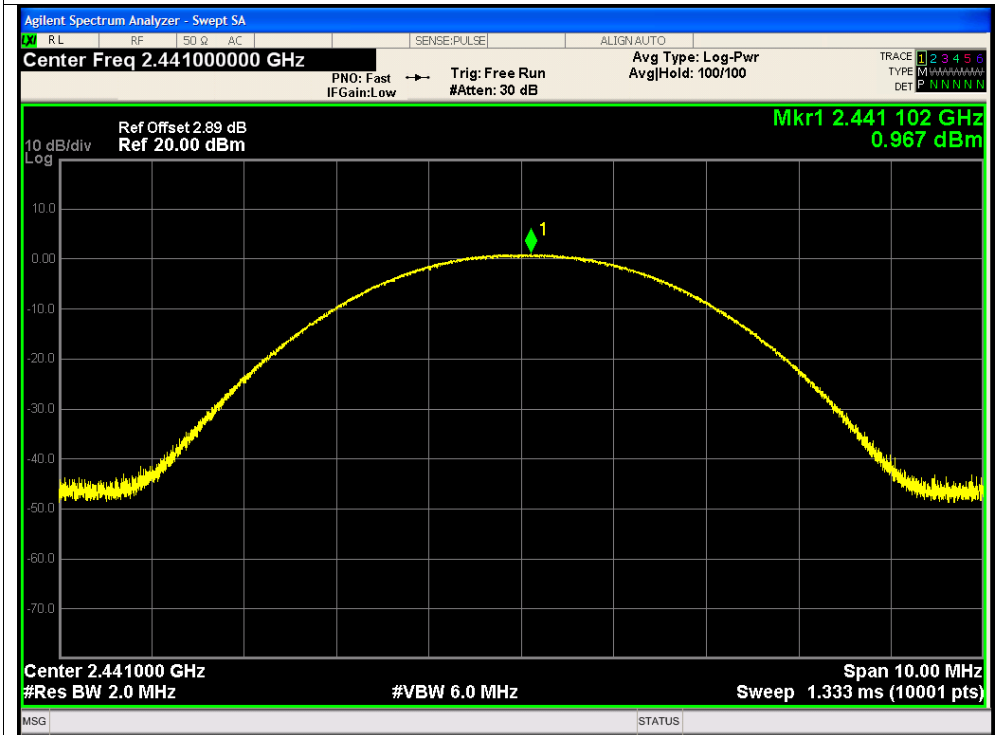
Power NVNT 1-DH5 2480MHz Ant1



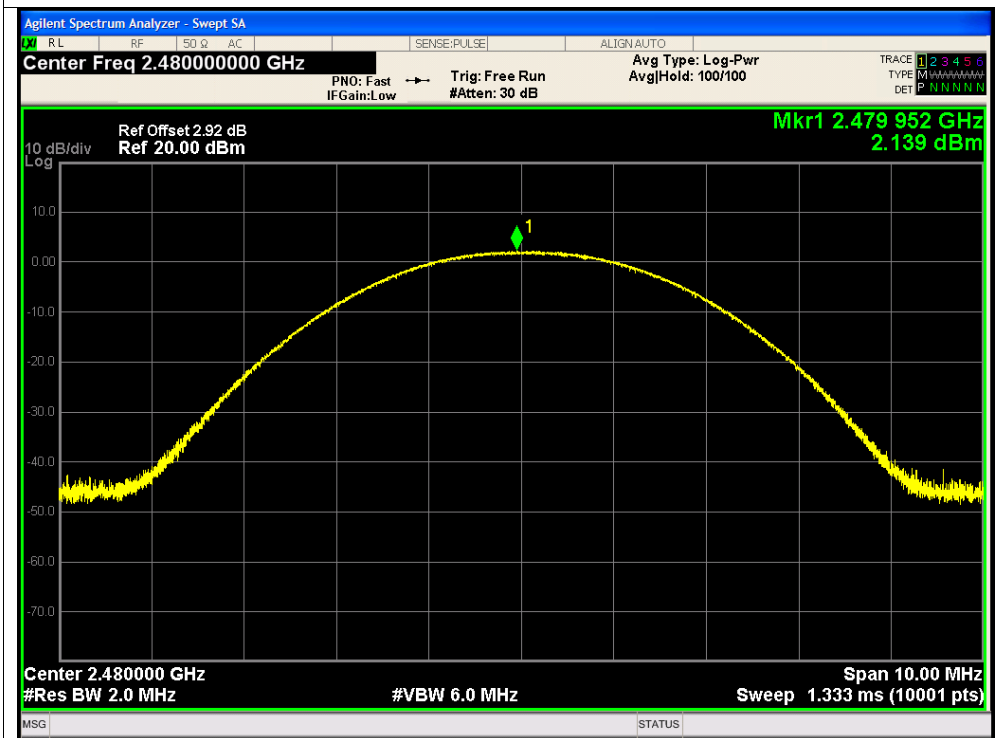
Power NVNT 2-DH5 2402MHz Ant1



Power NVNT 2-DH5 2441MHz Ant1

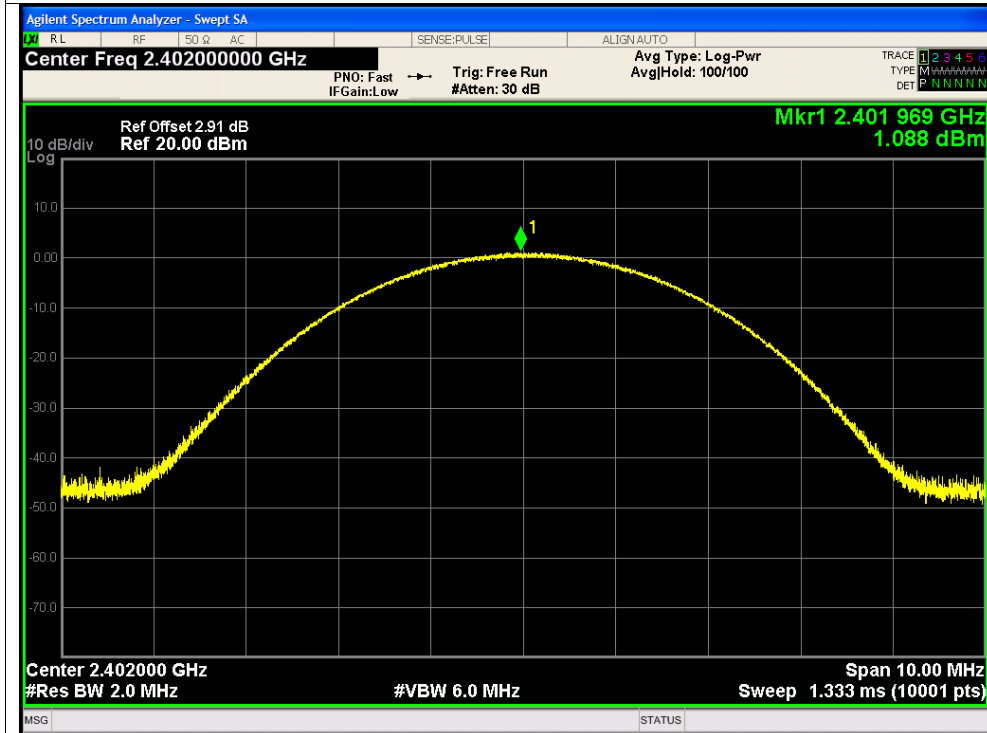


Power NVNT 2-DH5 2480MHz Ant1

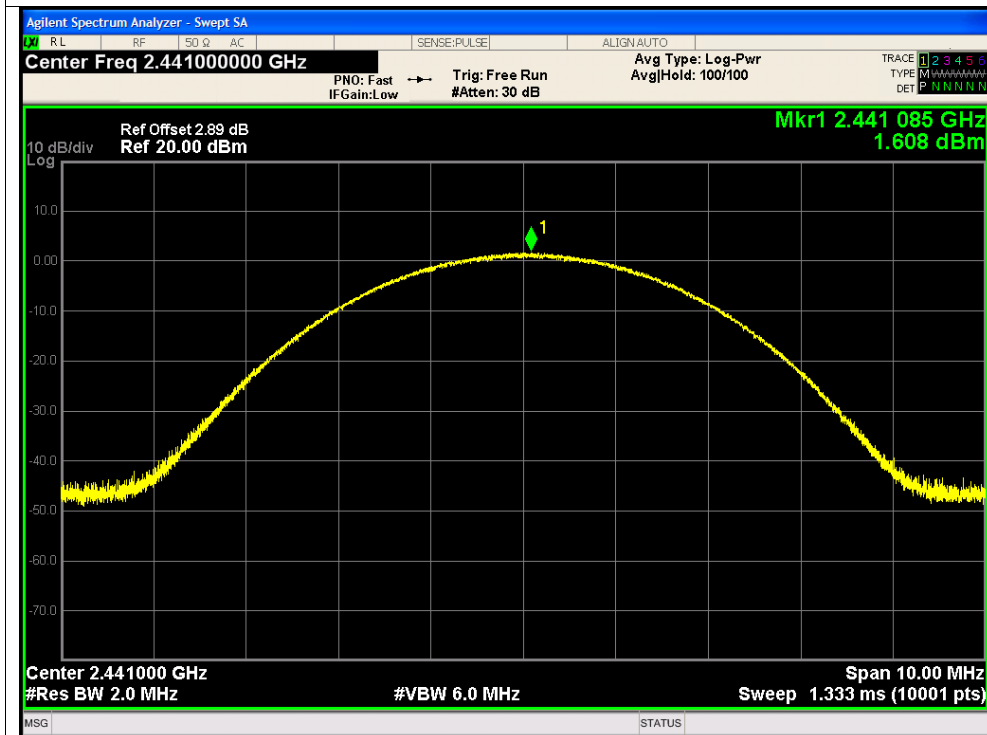


Test Graphs

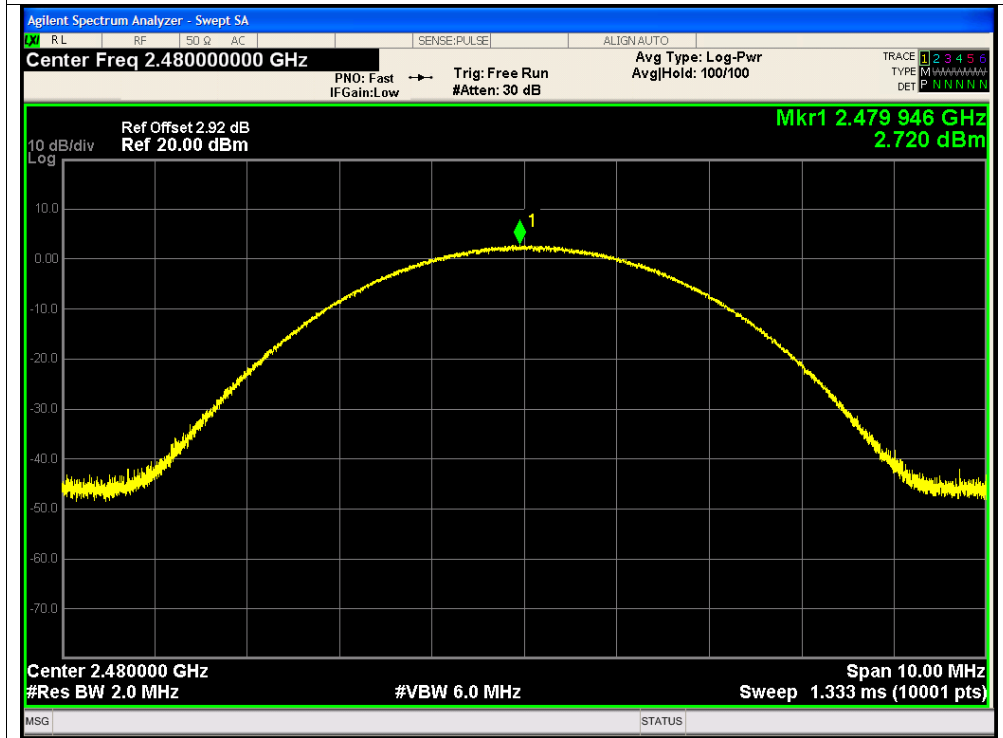
Power NVNT 3-DH5 2402MHz Ant1



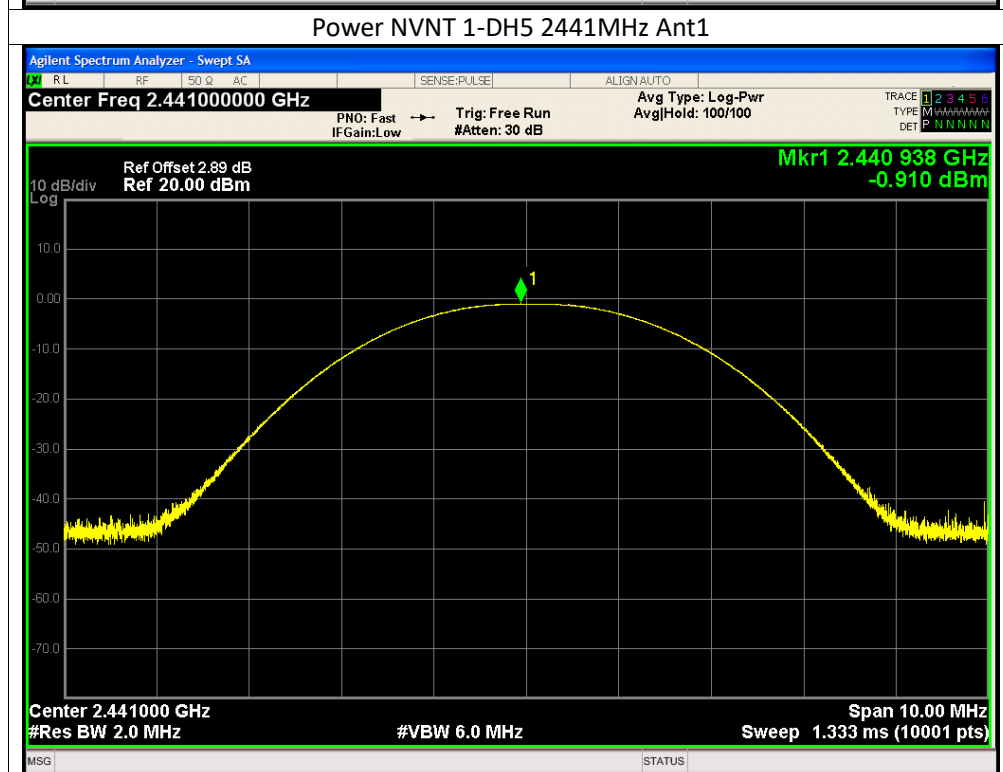
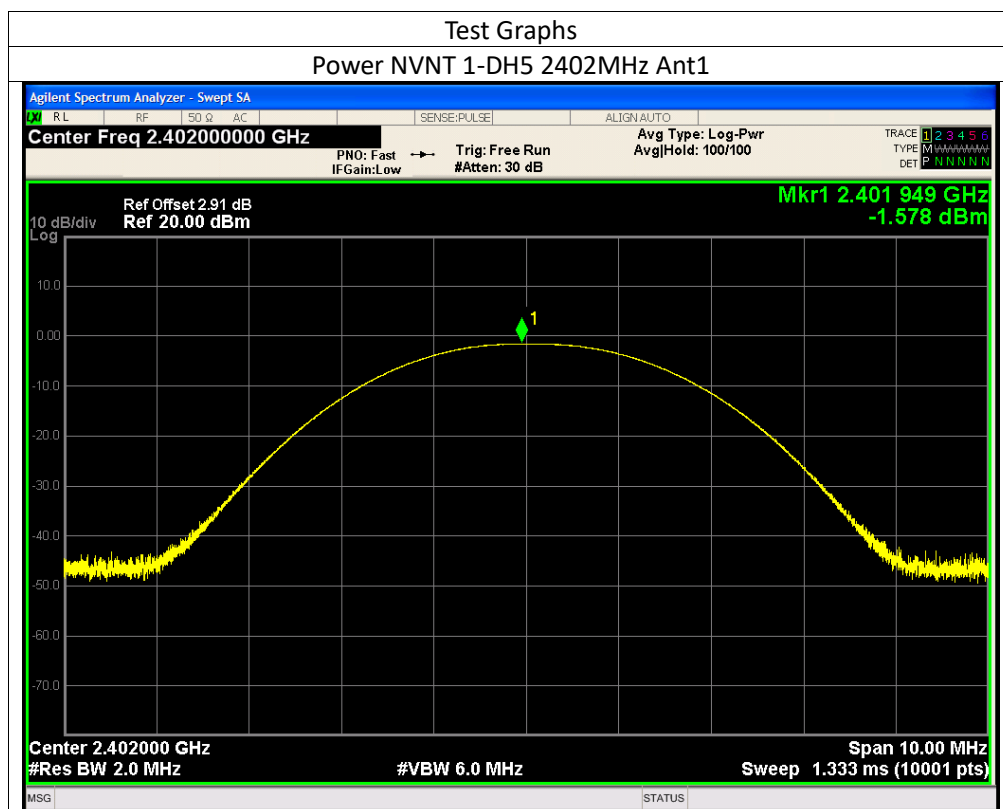
Power NVNT 3-DH5 2441MHz Ant1



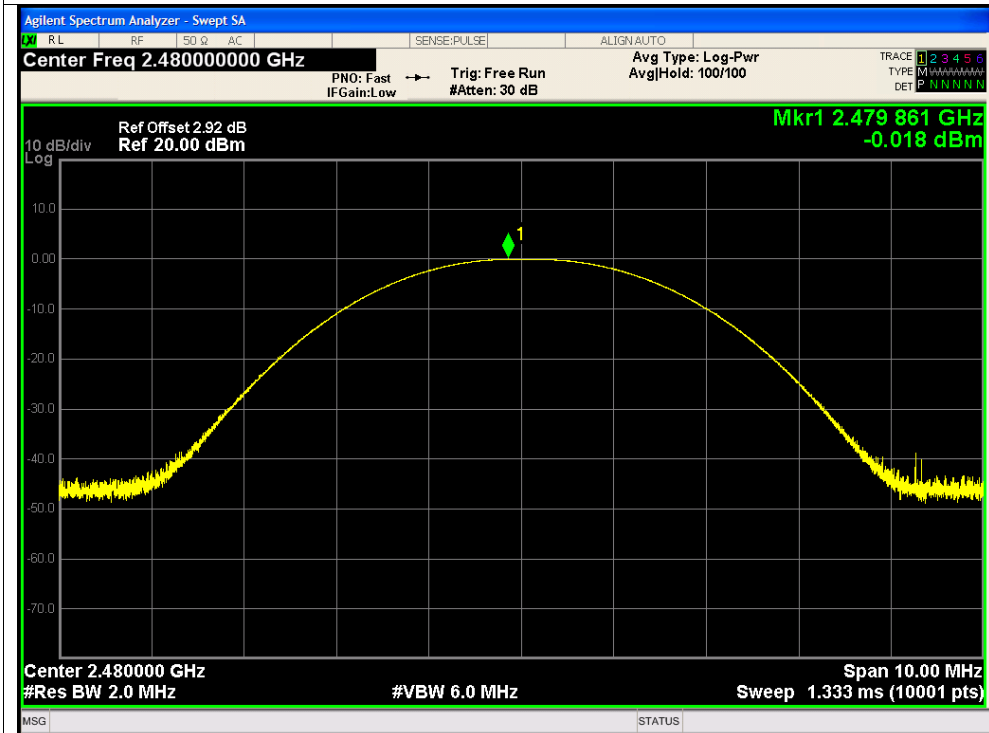
Power NVNT 3-DH5 2480MHz Ant1



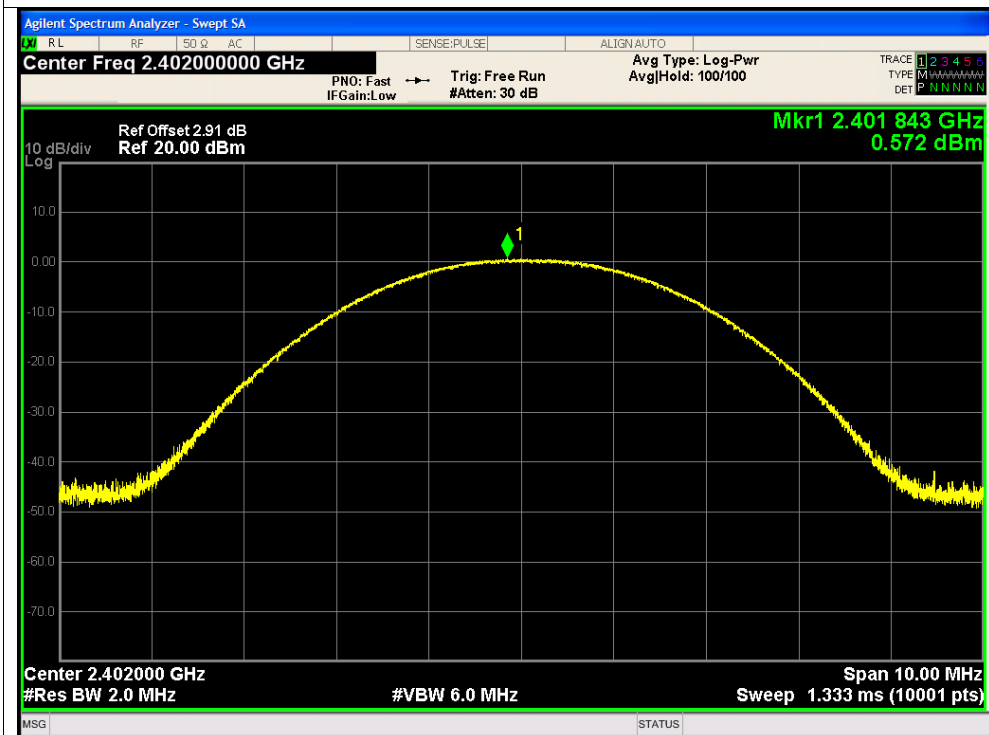
Earphone (Right)



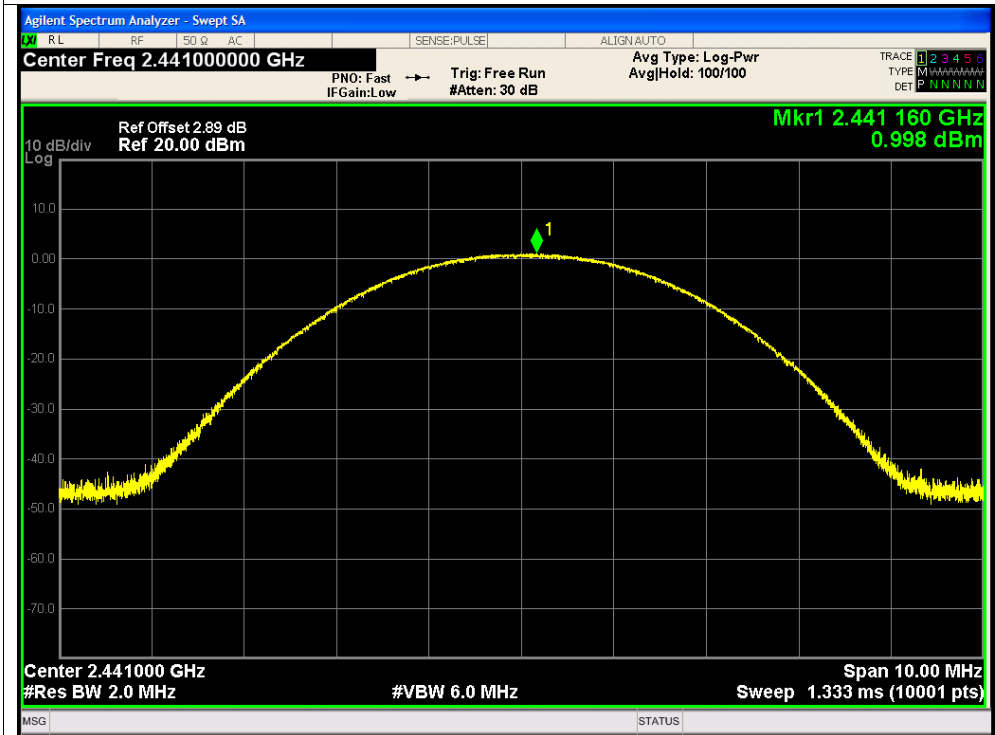
Power NVNT 1-DH5 2480MHz Ant1



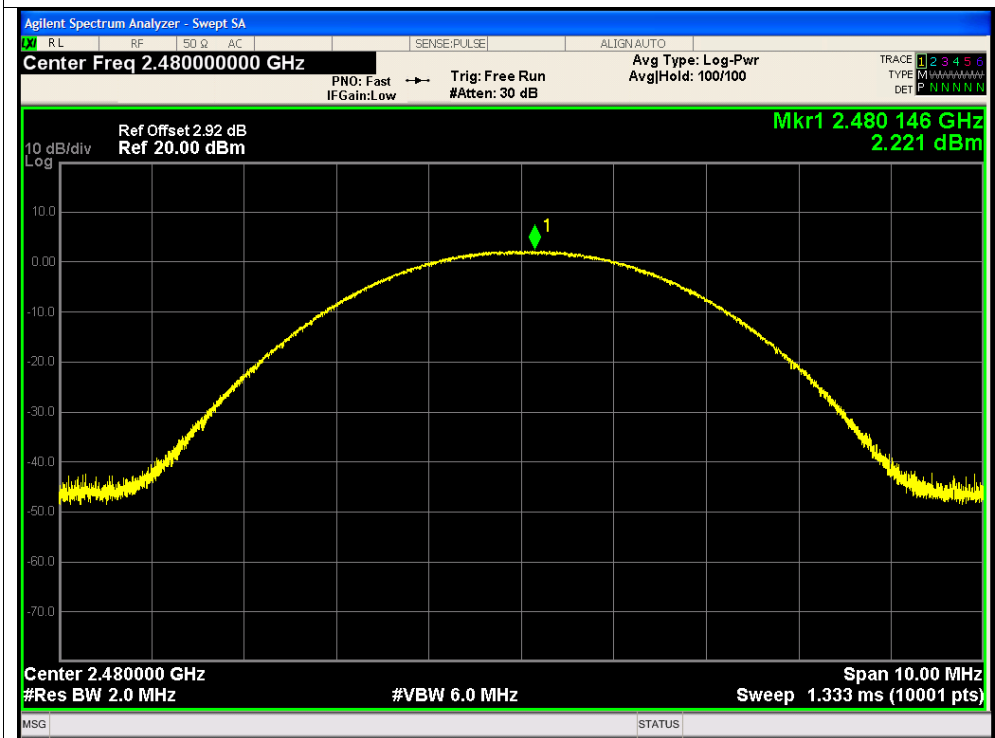
Power NVNT 2-DH5 2402MHz Ant1



Power NVNT 2-DH5 2441MHz Ant1

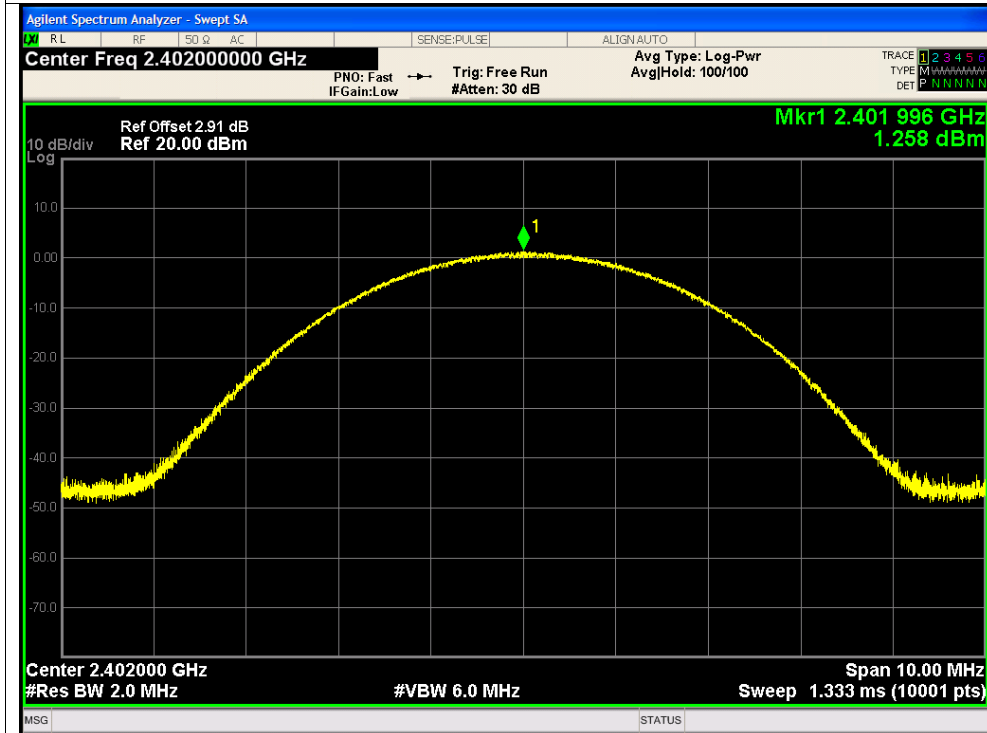


Power NVNT 2-DH5 2480MHz Ant1

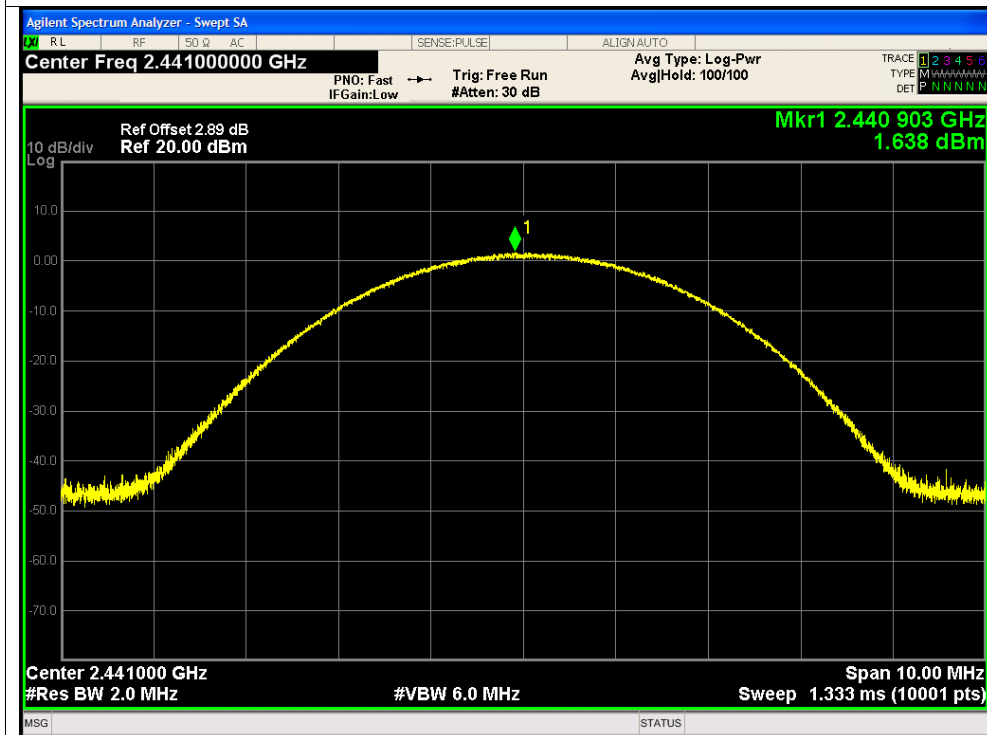


Test Graphs

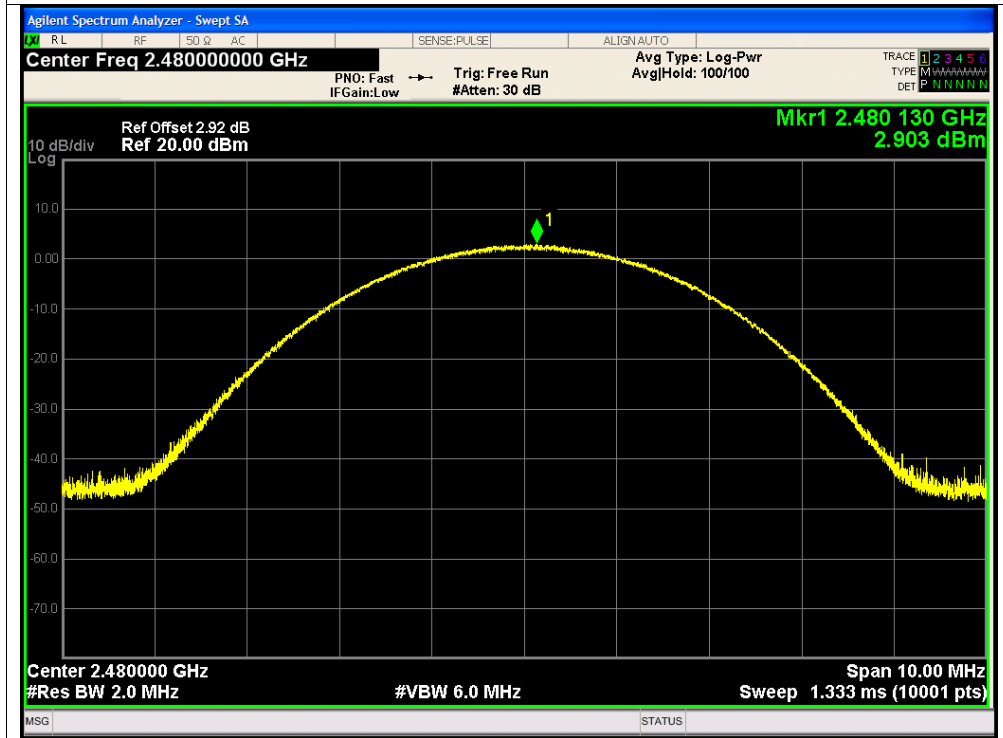
Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



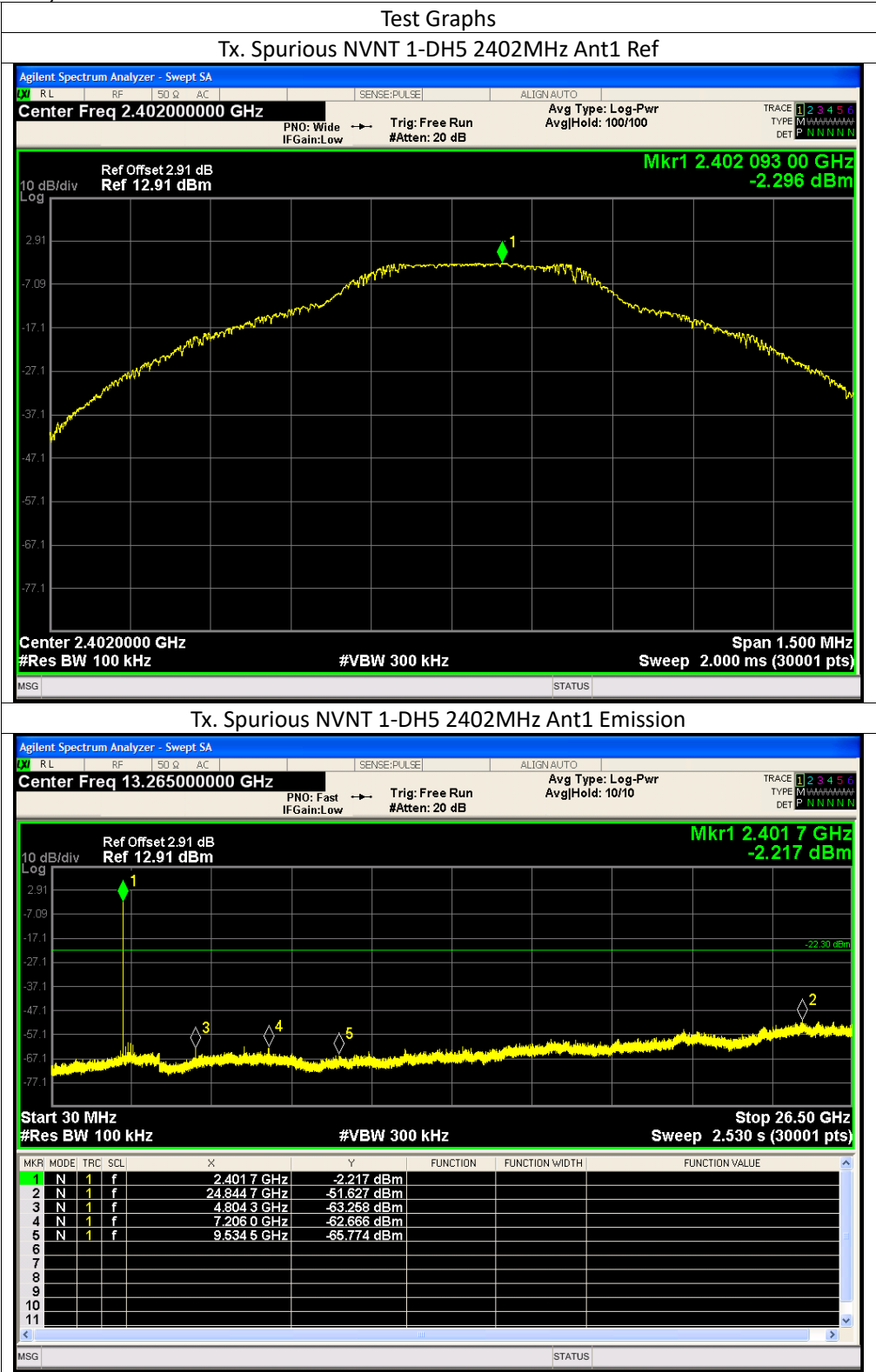
Power NVNT 3-DH5 2480MHz Ant1



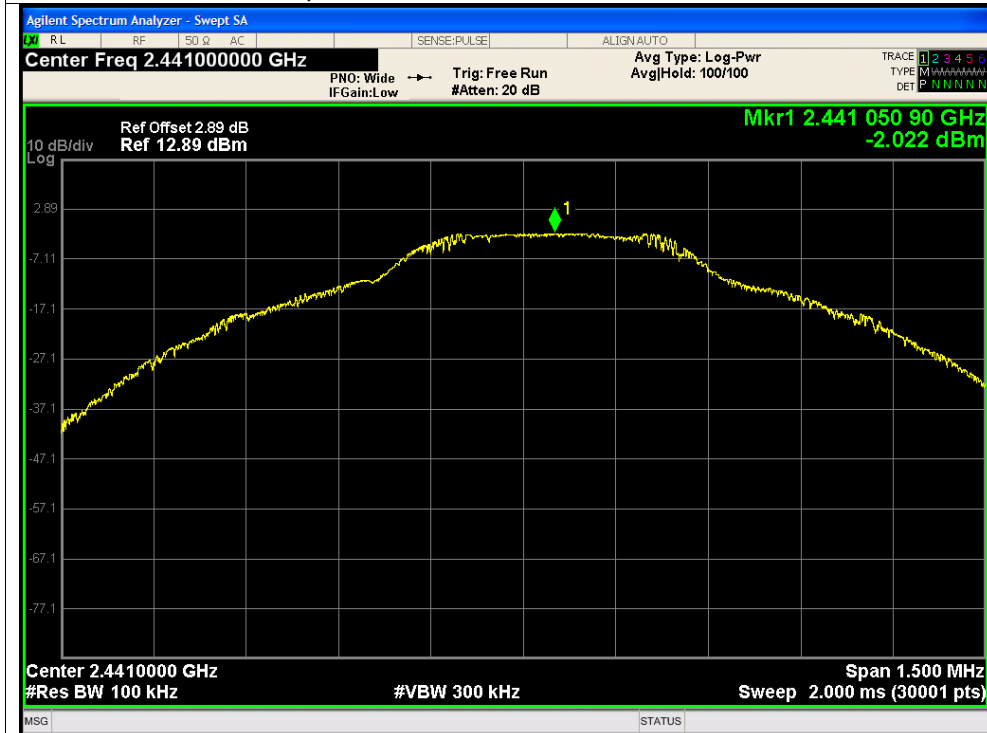
3. Spurious Emissions

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

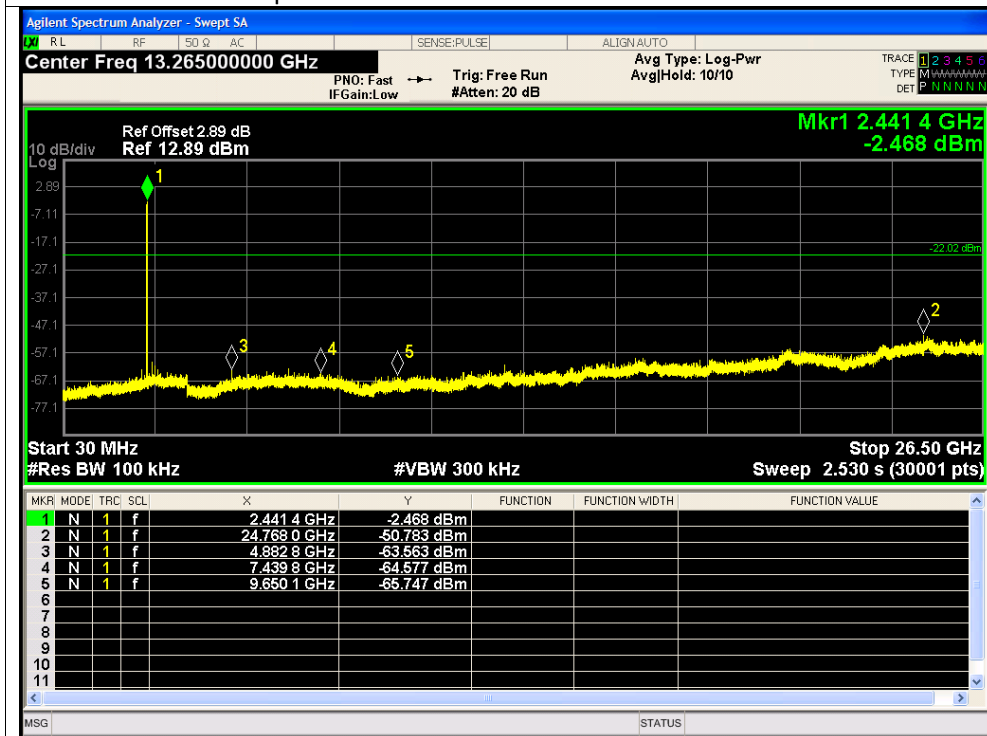
Earphone (Left)



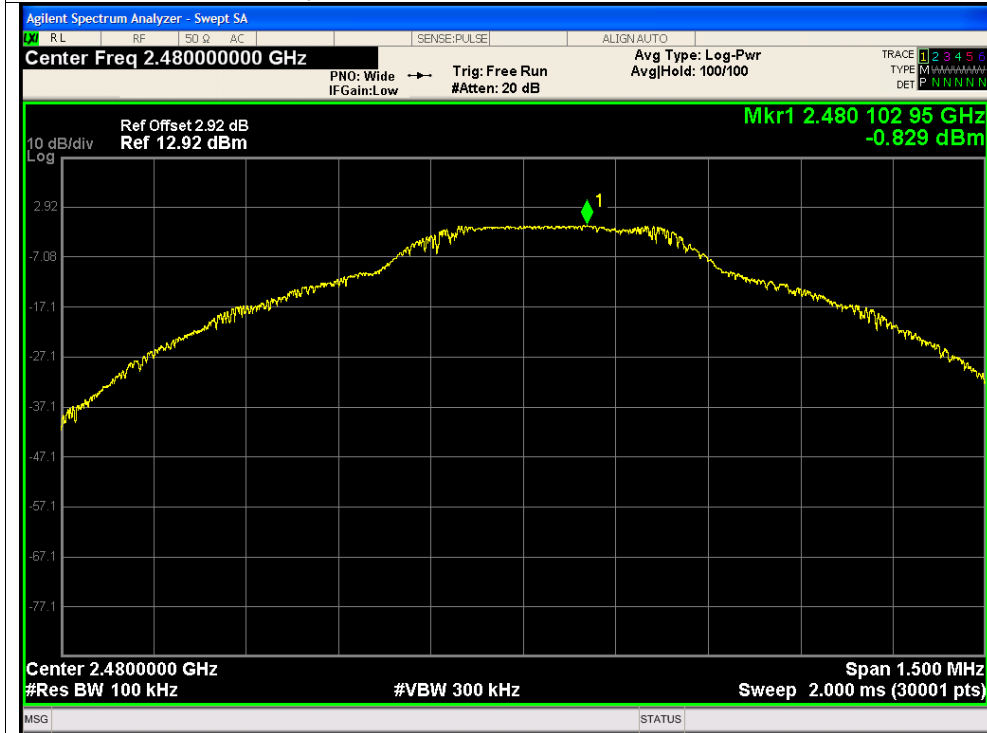
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



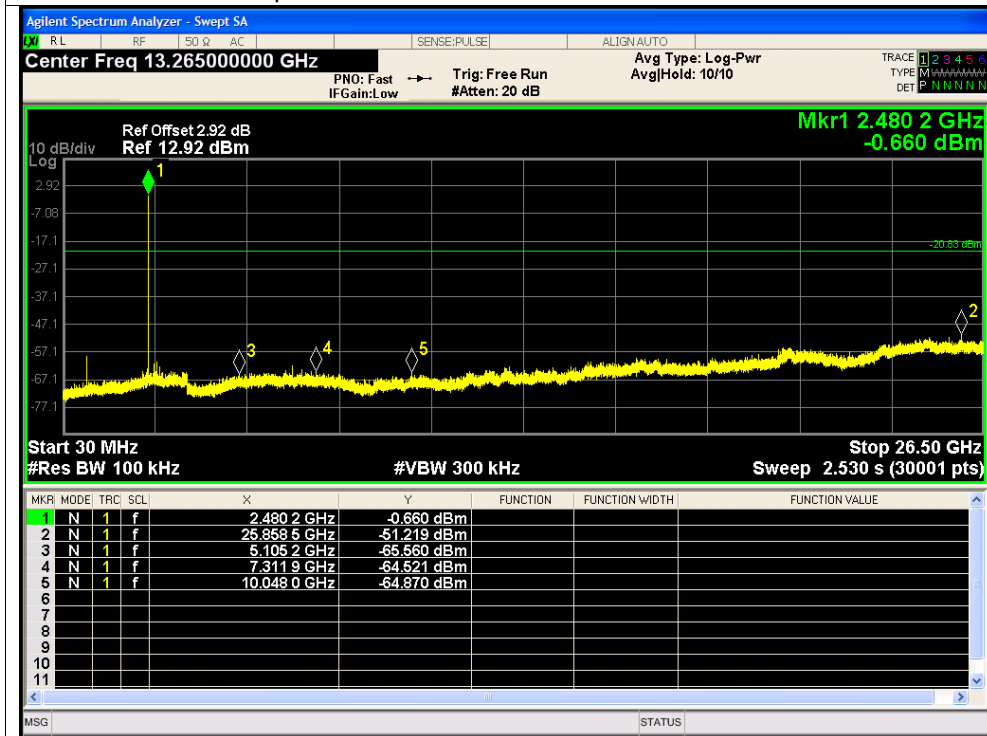
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



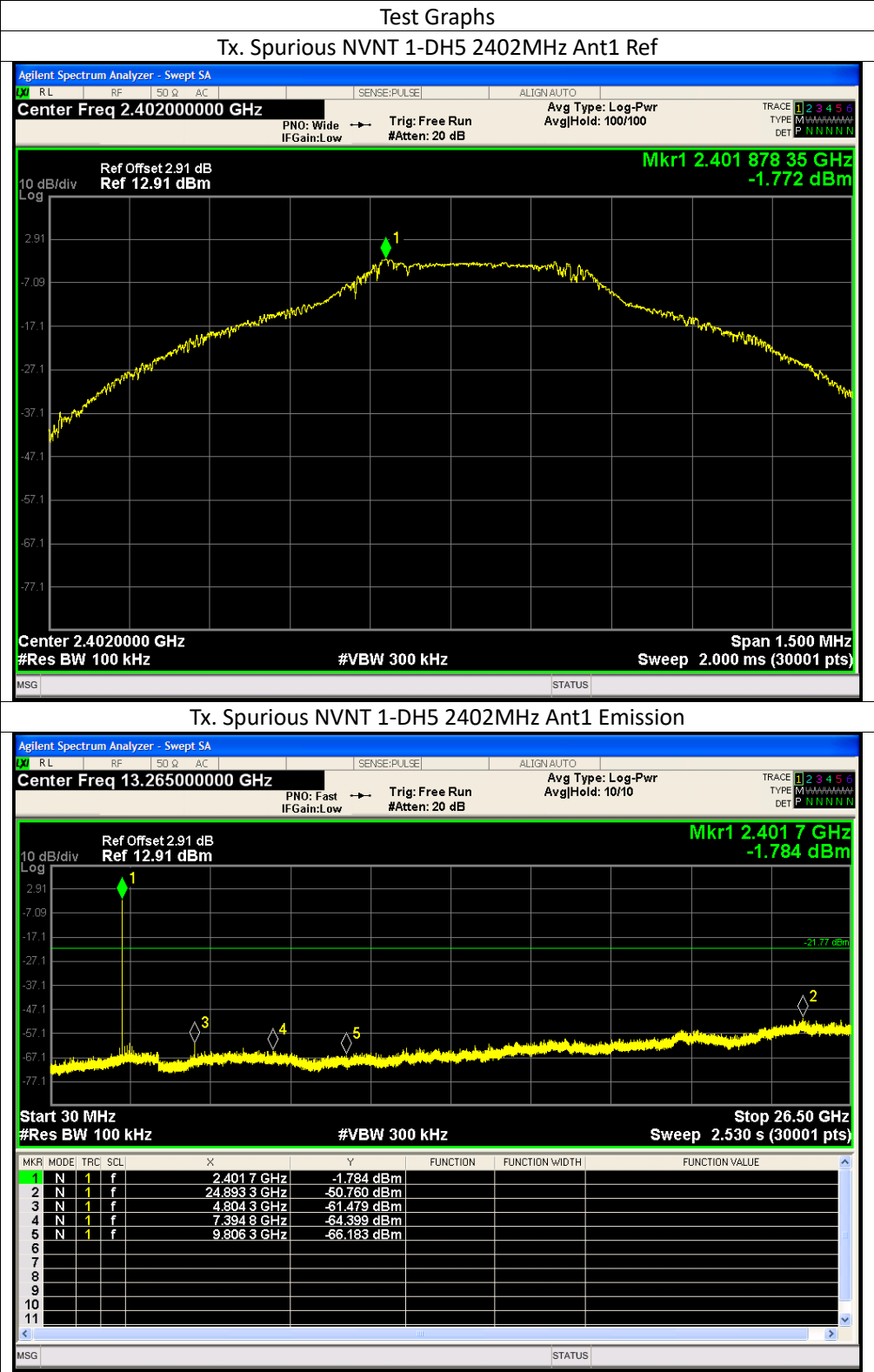
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



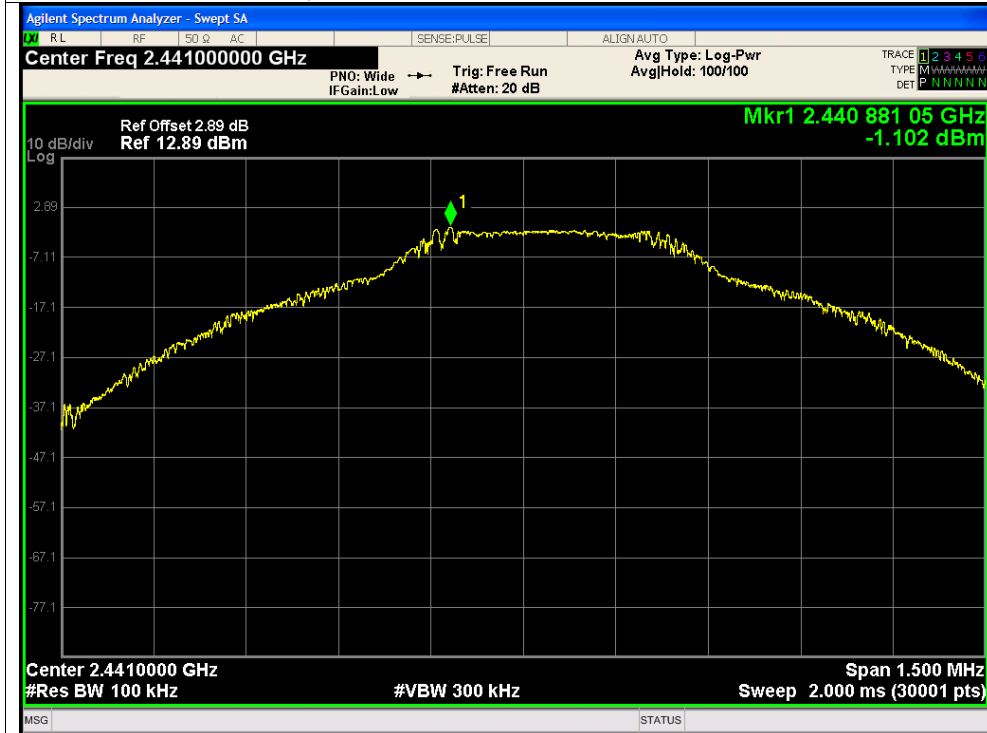
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



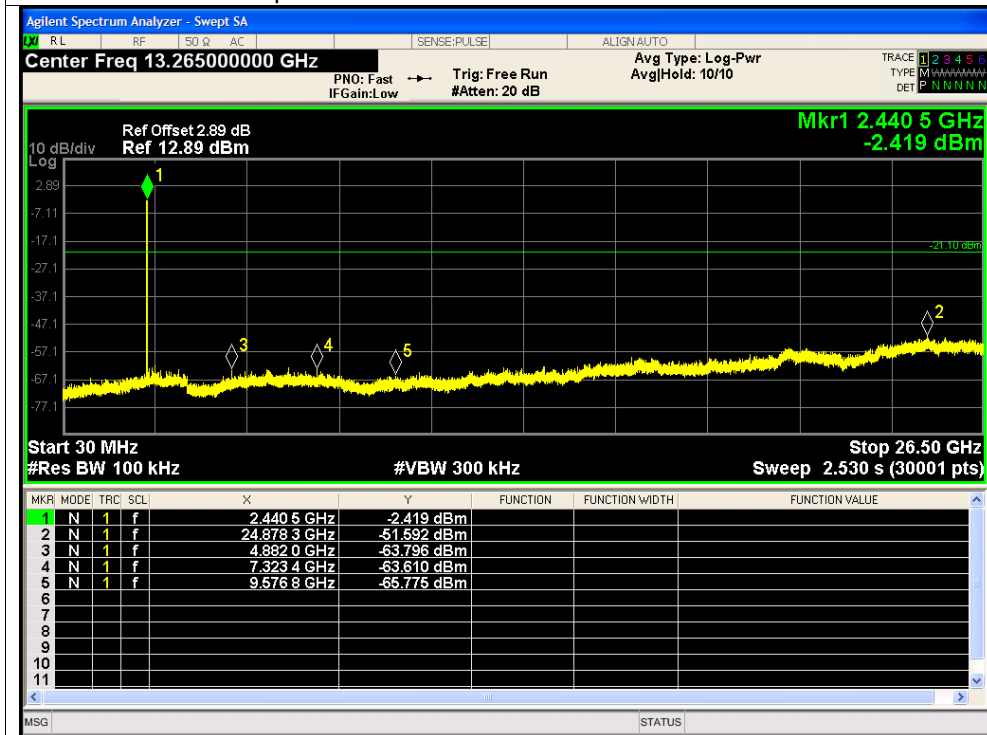
Earphone (Right)



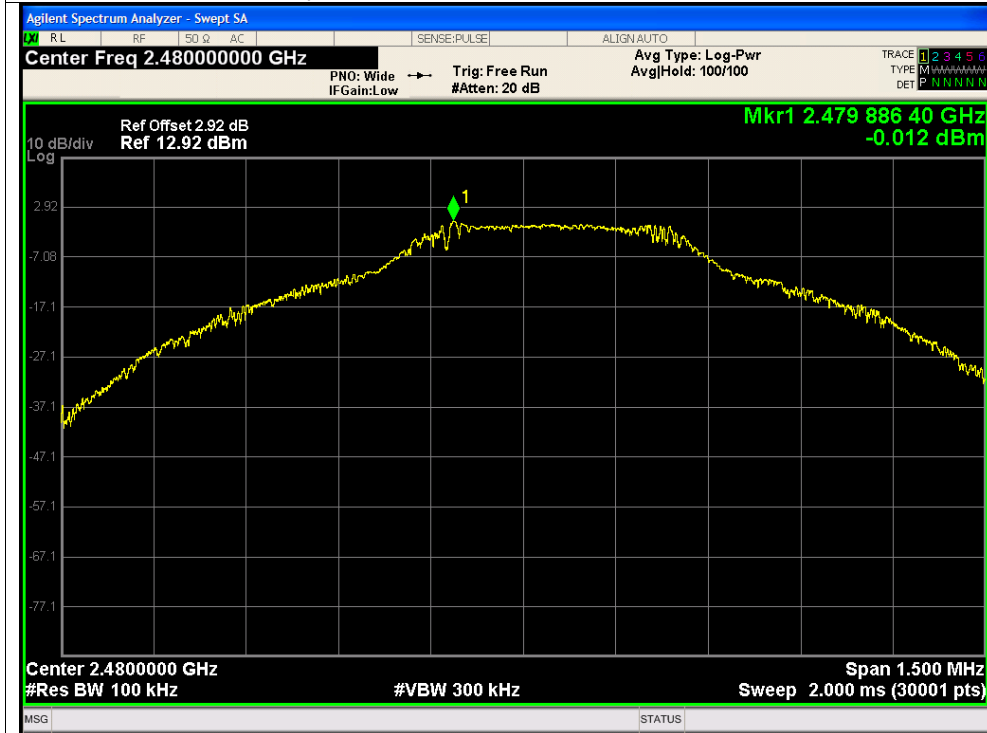
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



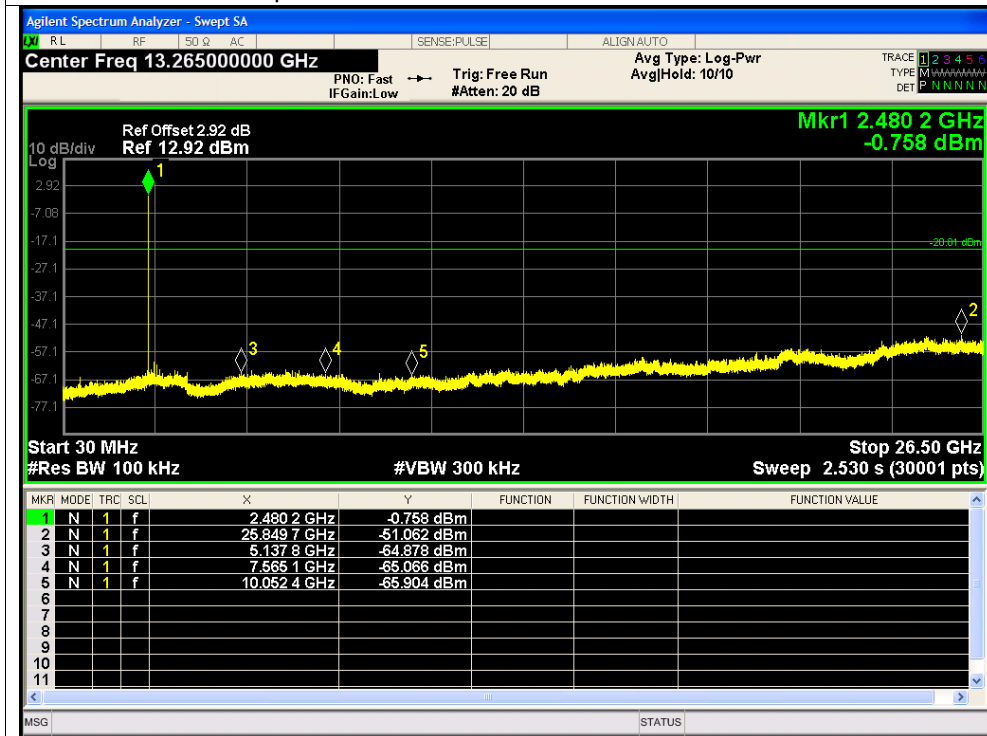
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



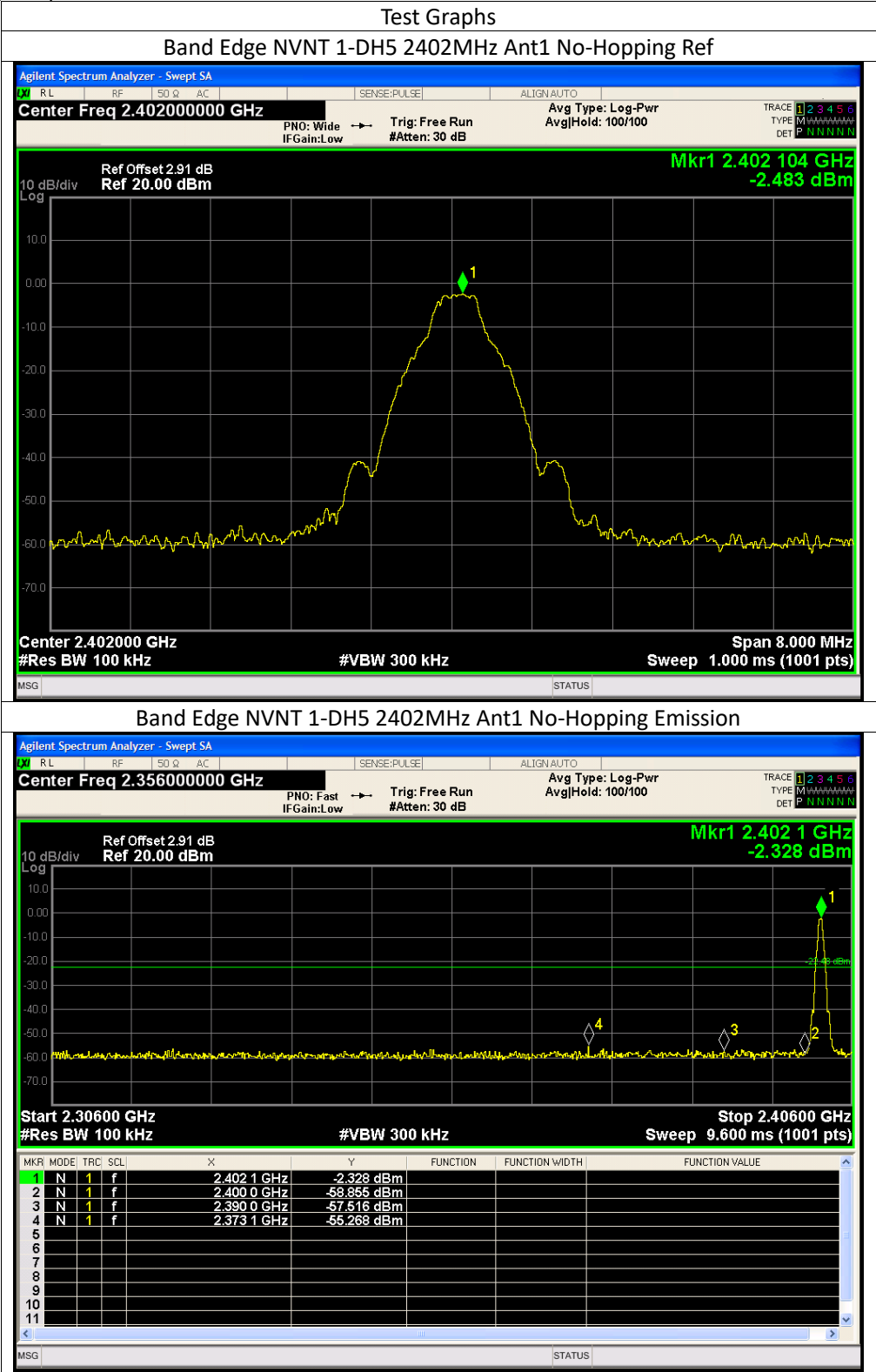
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



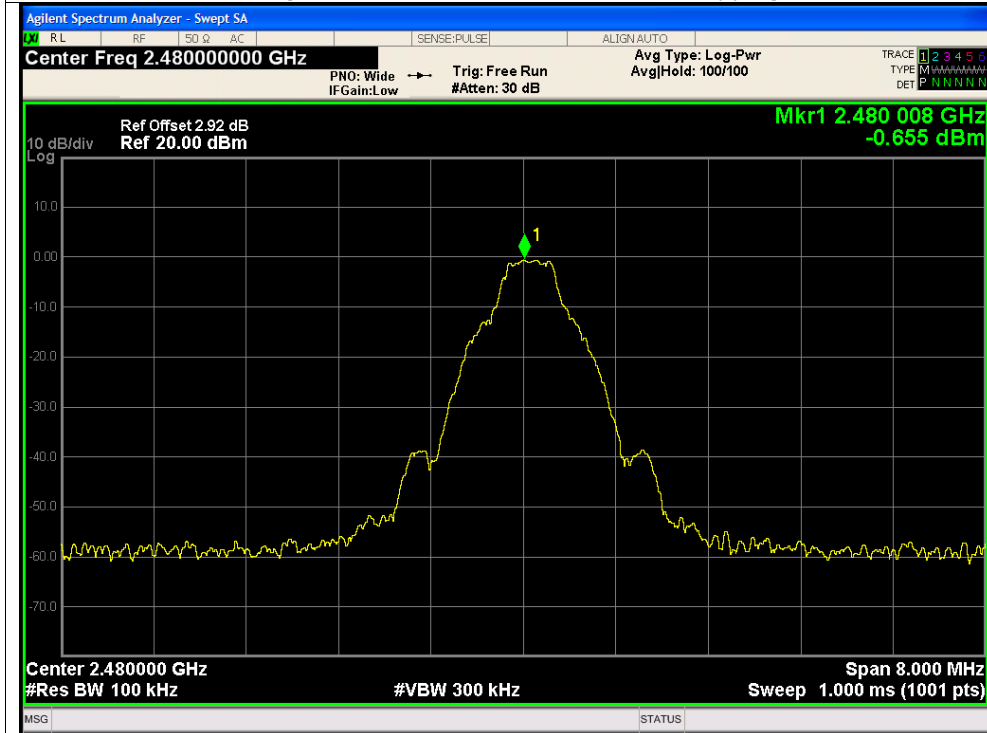
4. Bandedge

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

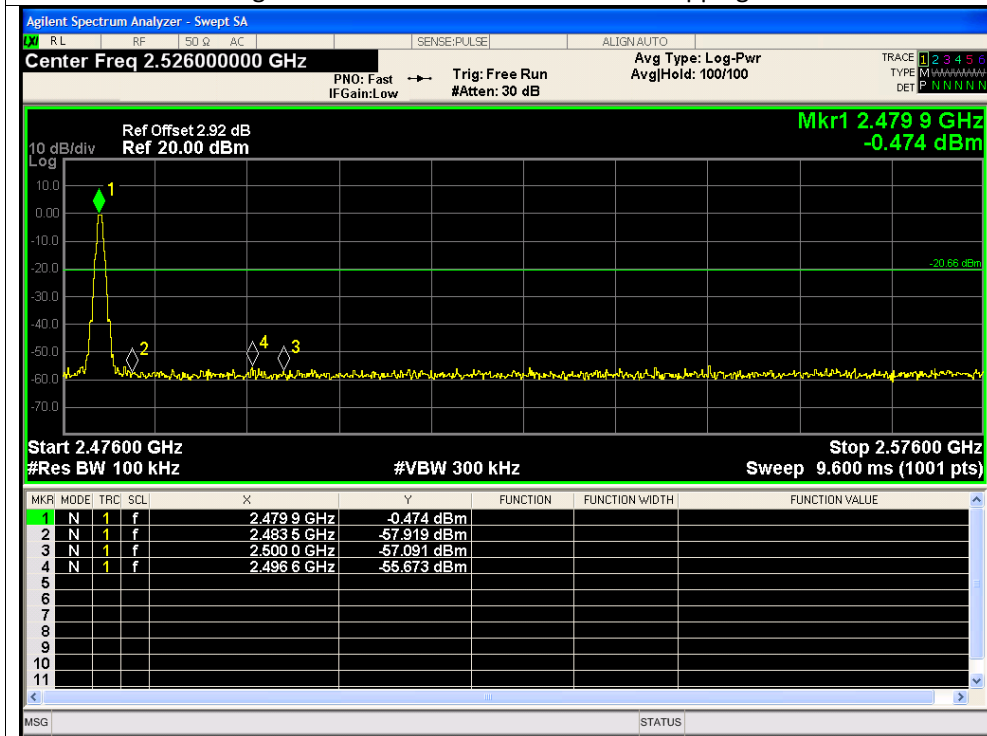
Earphone (Left)



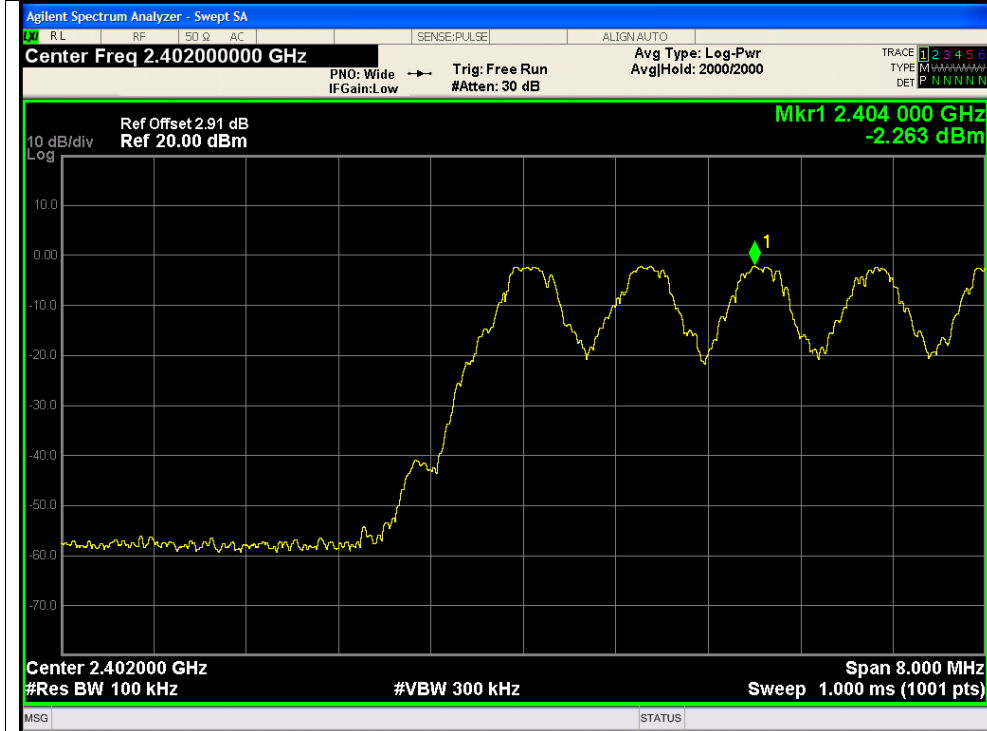
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



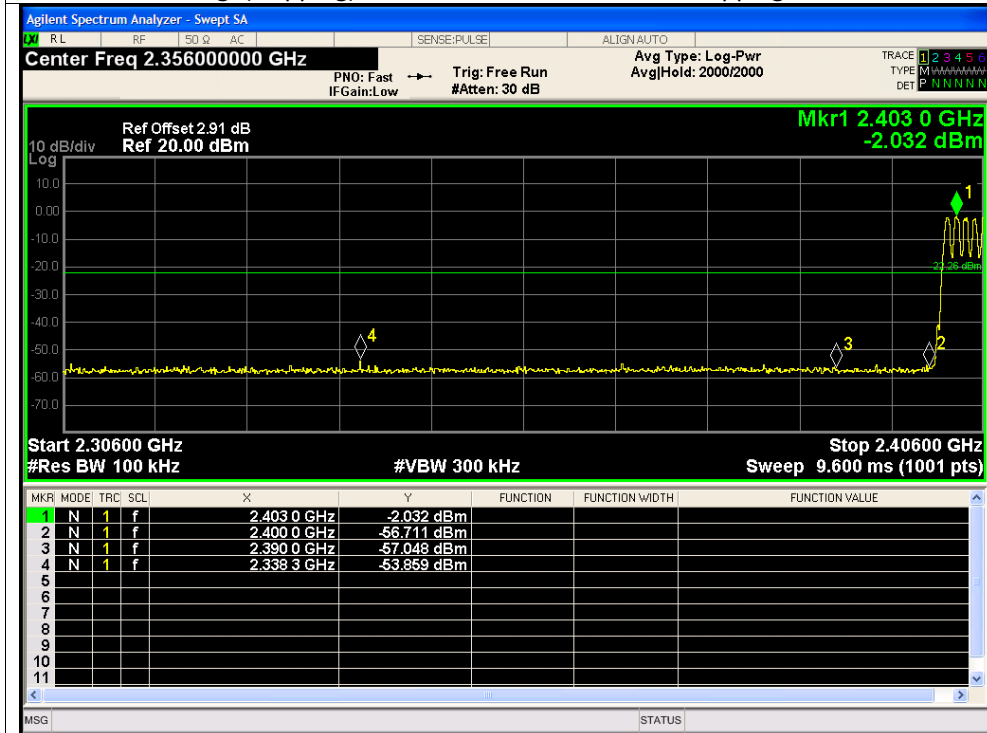
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



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



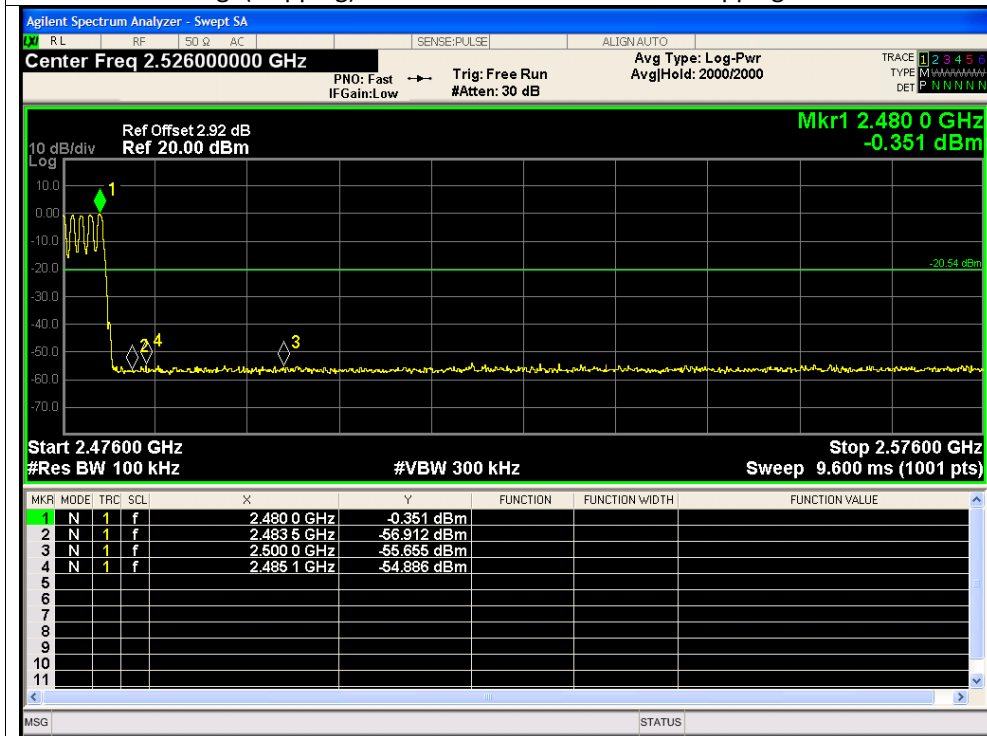
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



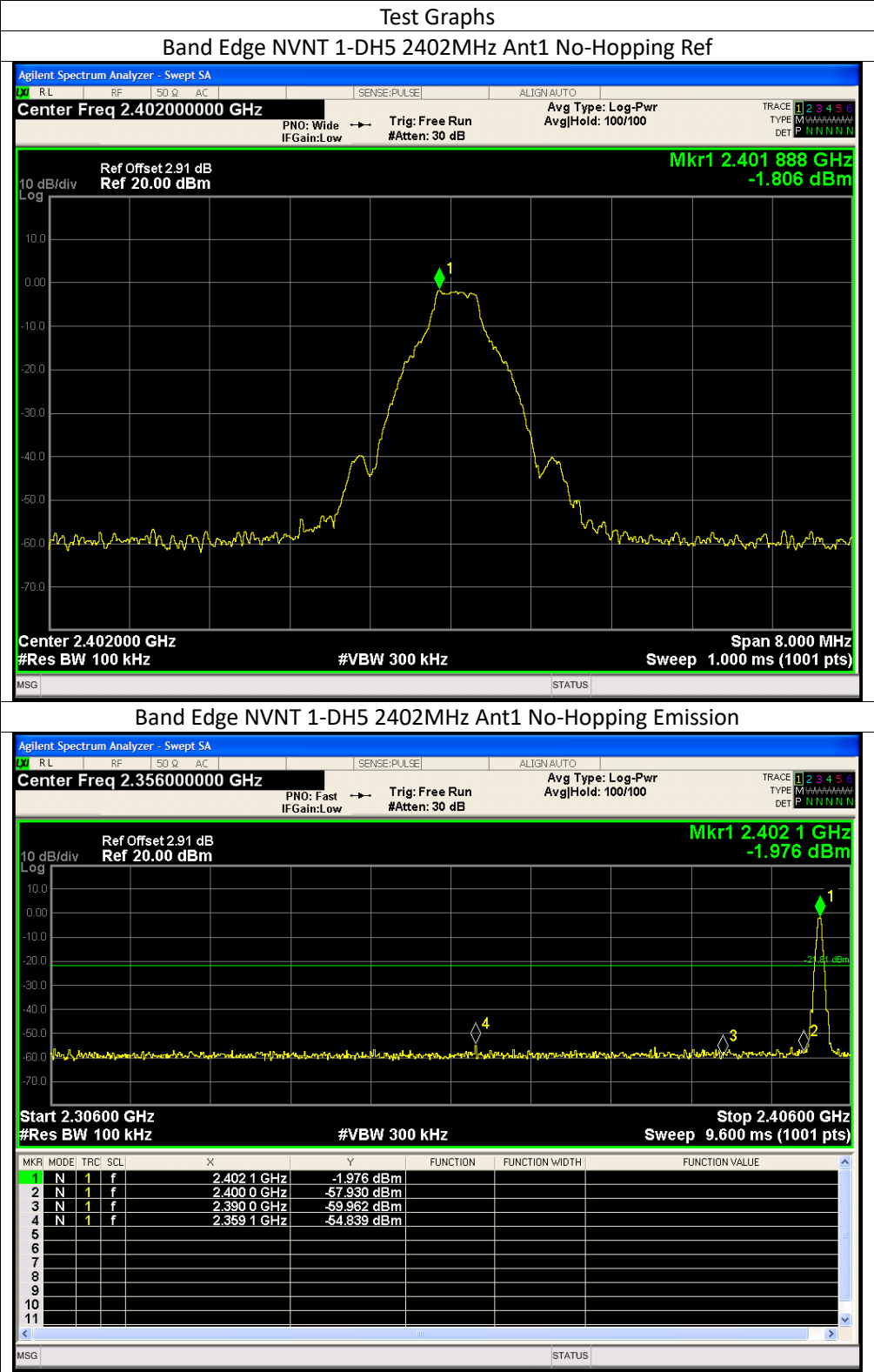
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



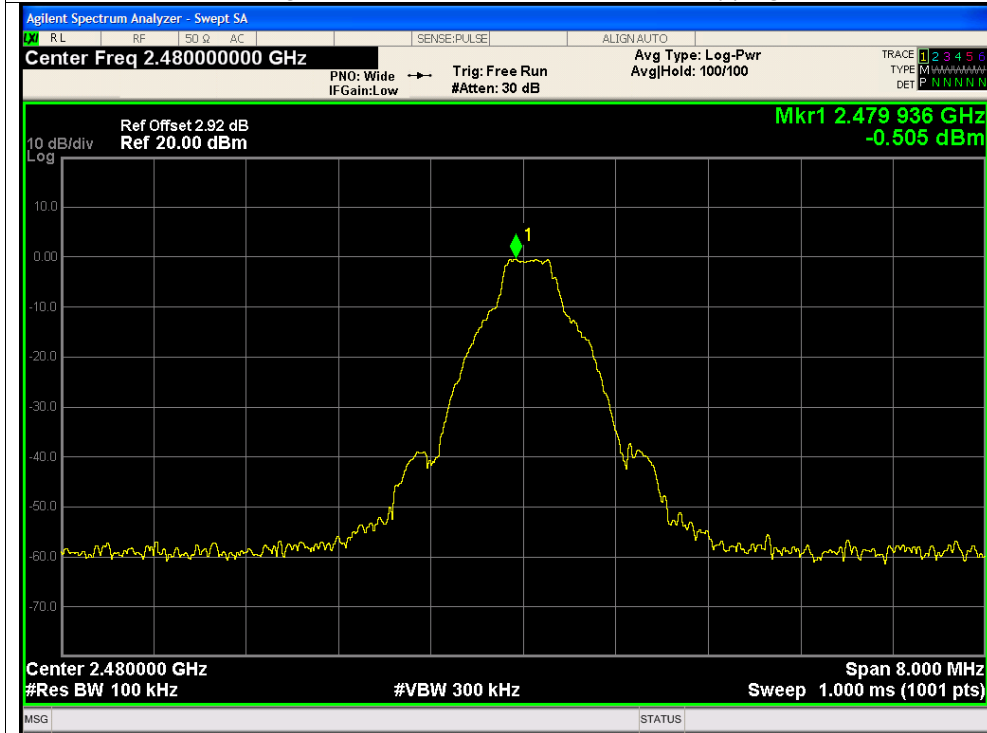
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



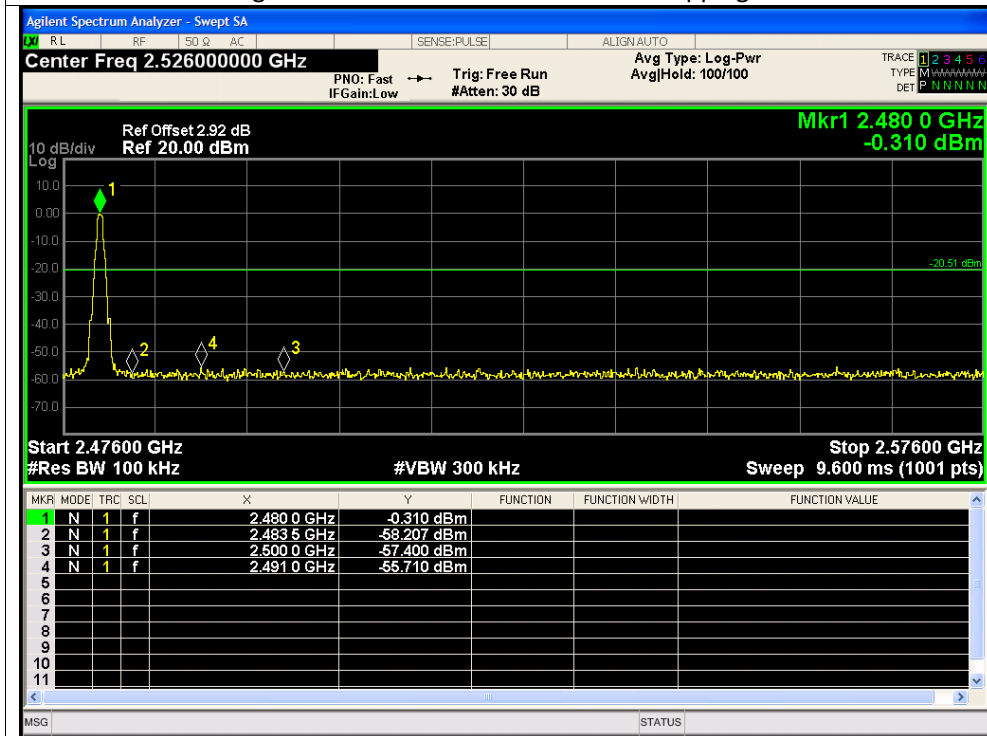
Earphone (Right)



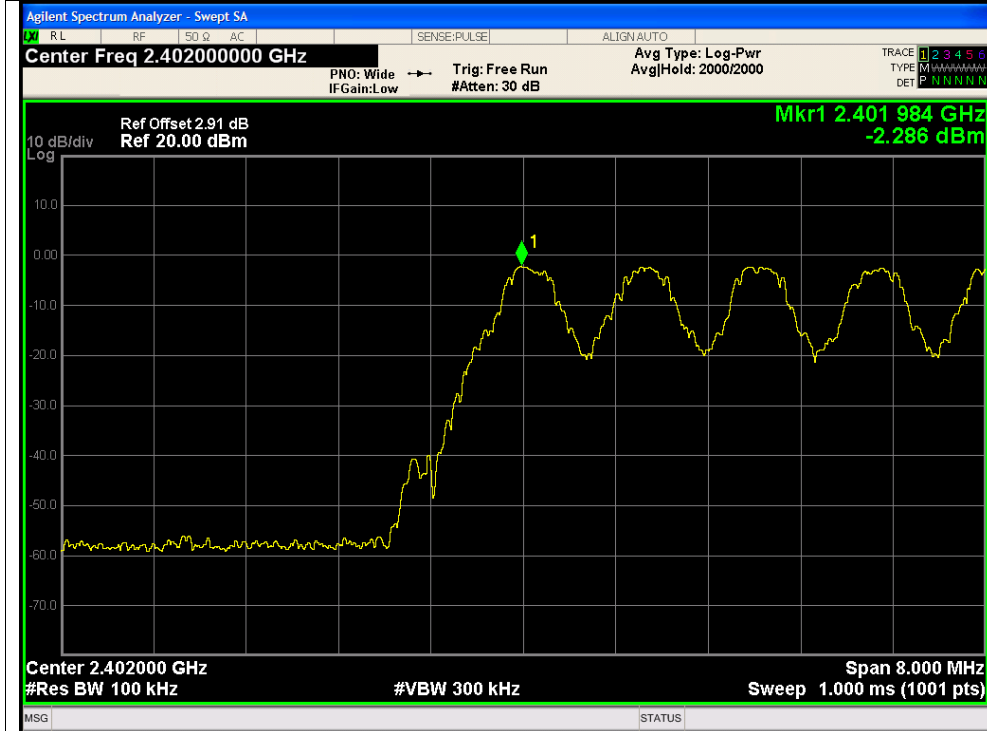
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



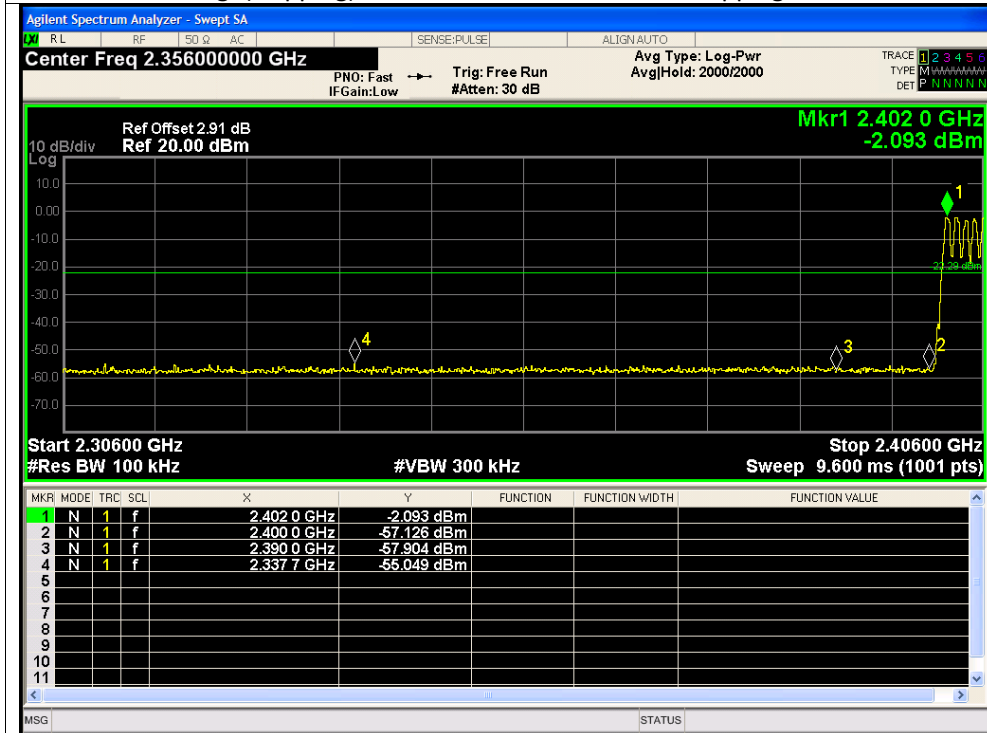
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



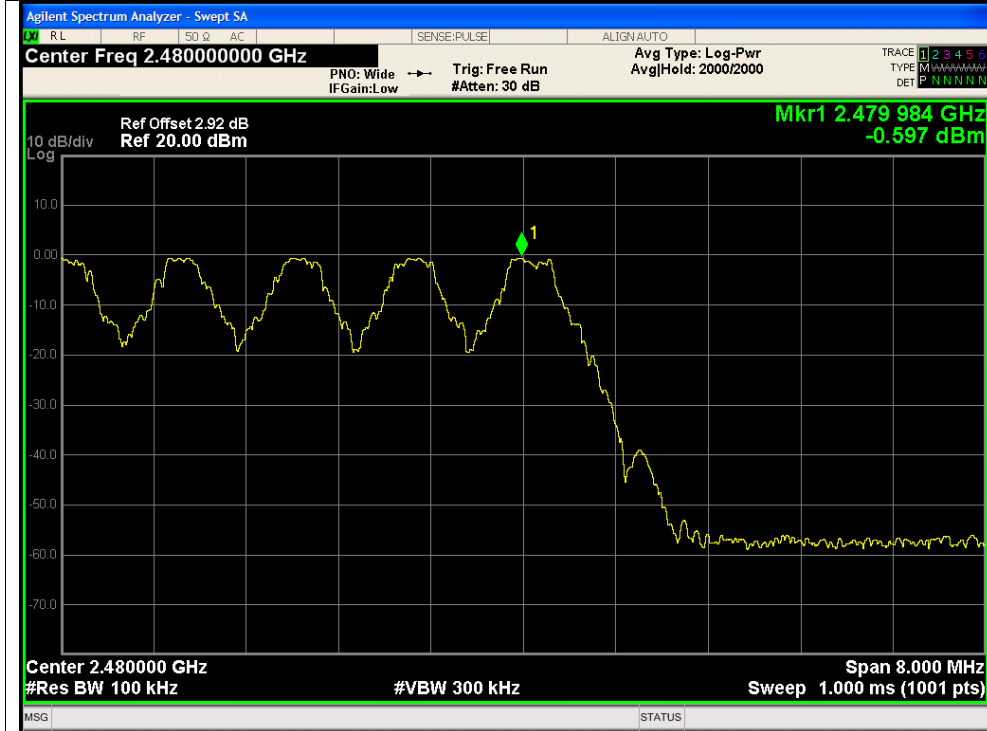
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



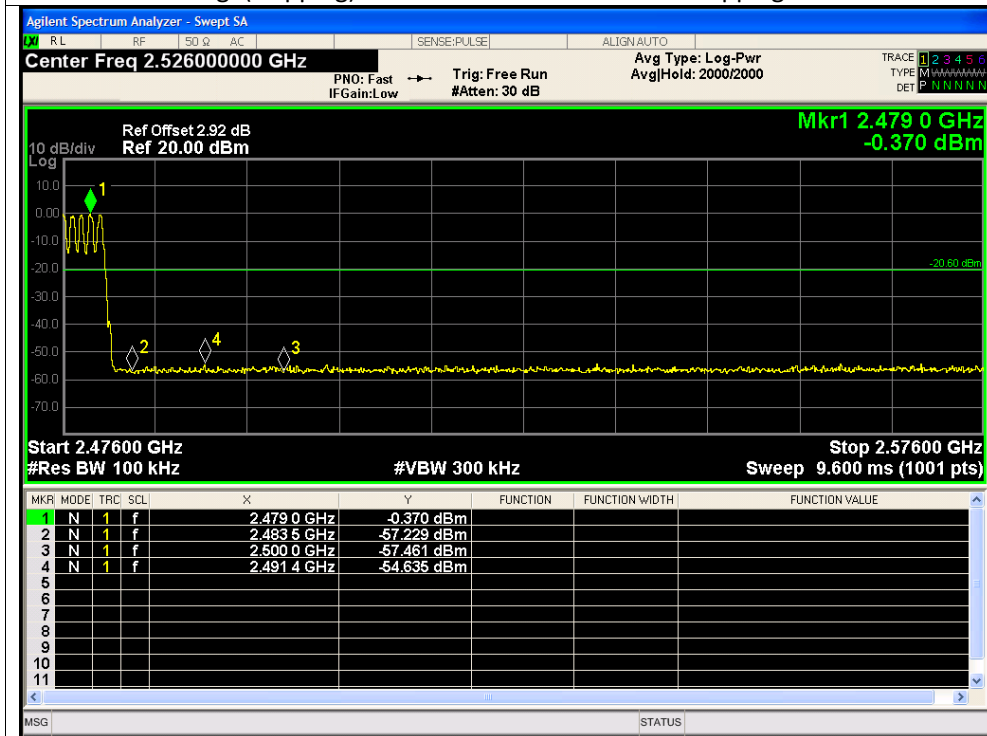
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



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



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



5. Carrier Frequencies Separation (Hopping)

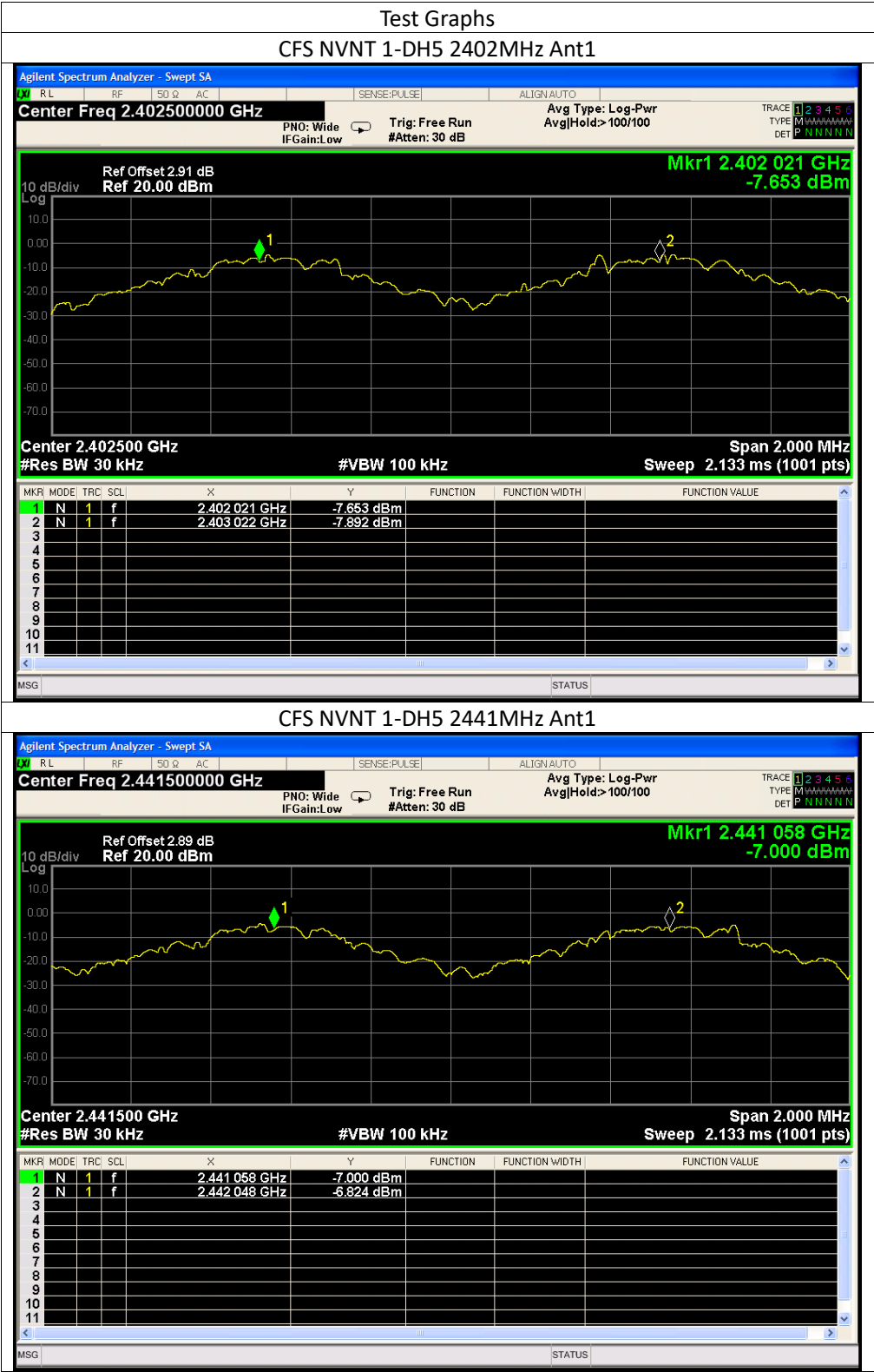
Earphone (Left)

Condition	Mode	Antenna	Channel Frequency (MHz)	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	Carrier Frequencies Separation (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402	2402.021	2403.022	1.001	>0.633	Pass
NVNT	1-DH5	Ant1	2441	2441.058	2442.048	0.990	>0.641	Pass
NVNT	1-DH5	Ant1	2480	2479.026	2480.066	1.040	>0.641	Pass
NVNT	2-DH5	Ant1	2402	2402.02	2403.08	1.060	>0.908	Pass
NVNT	2-DH5	Ant1	2441	2441.081	2442.202	1.121	>0.911	Pass
NVNT	2-DH5	Ant1	2480	2479.004	2479.987	0.983	>0.911	Pass
NVNT	3-DH5	Ant1	2402	2402.051	2403.099	1.048	>0.899	Pass
NVNT	3-DH5	Ant1	2441	2440.863	2442.047	1.184	>0.901	Pass
NVNT	3-DH5	Ant1	2480	2478.924	2480.032	1.108	>0.900	Pass
Note: Limit = 20dB bandwidth * 2/3								

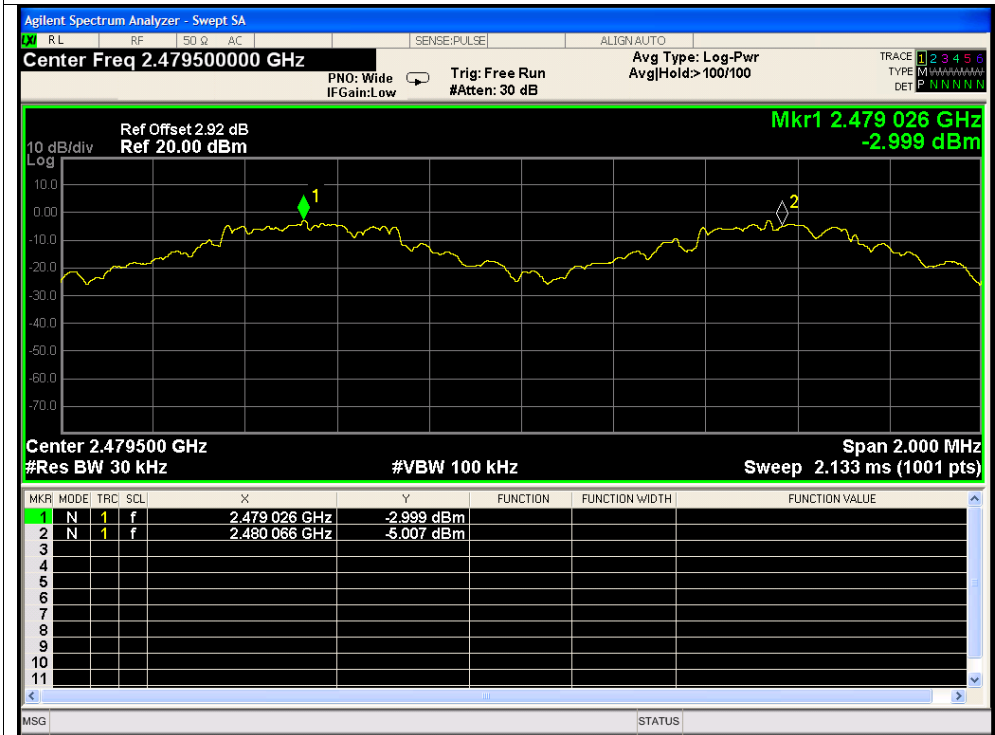
Earphone (Right)

Condition	Mode	Antenna	Channel Frequency (MHz)	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	Carrier Frequencies Separation (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2402	2402.043	2403.026	0.983	>0.643	Pass
NVNT	1-DH5	Ant1	2441	2441.024	2442.086	1.062	>0.641	Pass
NVNT	1-DH5	Ant1	2480	2479.066	2480.049	0.983	>0.637	Pass
NVNT	2-DH5	Ant1	2402	2402.019	2403.119	1.100	>0.847	Pass
NVNT	2-DH5	Ant1	2441	2441.000	2442.072	1.072	>0.853	Pass
NVNT	2-DH5	Ant1	2480	2479.2	2480.134	0.934	>0.850	Pass
NVNT	3-DH5	Ant1	2402	2402.073	2403.068	0.995	>0.859	Pass
NVNT	3-DH5	Ant1	2441	2441.022	2442.023	1.001	>0.857	Pass
NVNT	3-DH5	Ant1	2480	2479.089	2480.027	0.938	>0.871	Pass
Note: Limit = 20dB bandwidth * 2/3								

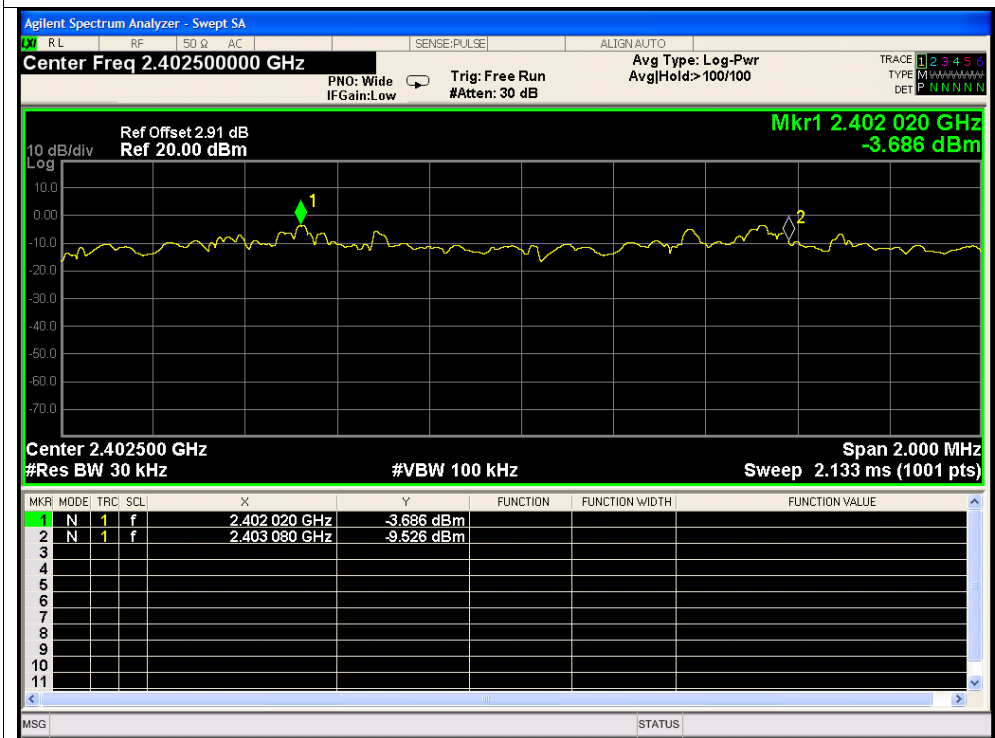
Earphone (Left)



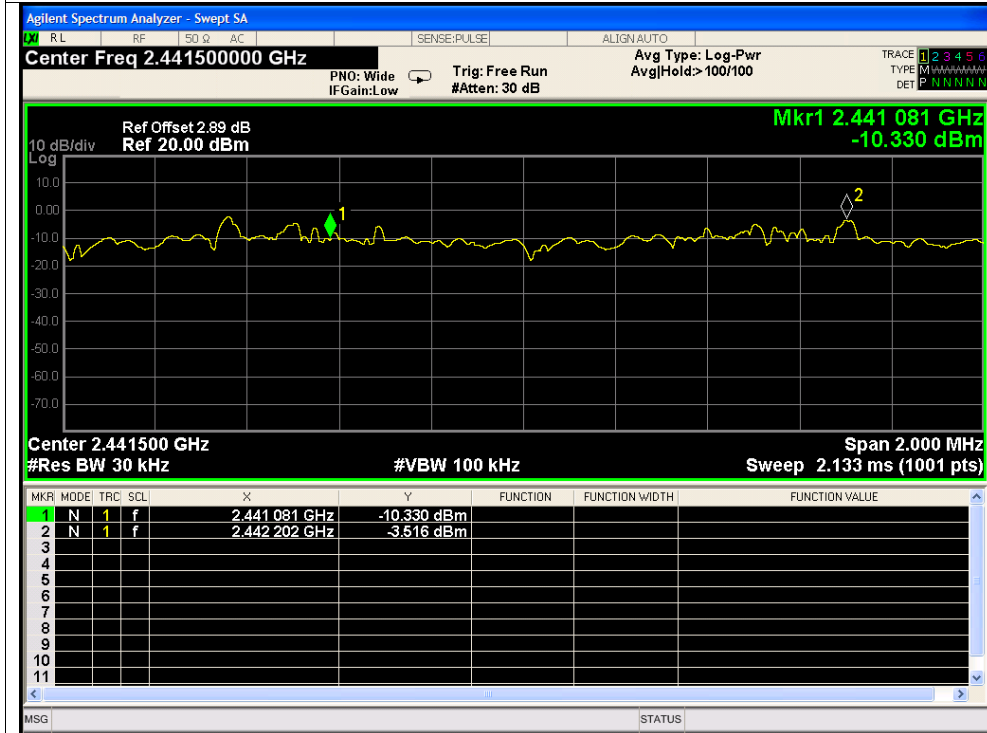
CFS NVNT 1-DH5 2480MHz Ant1



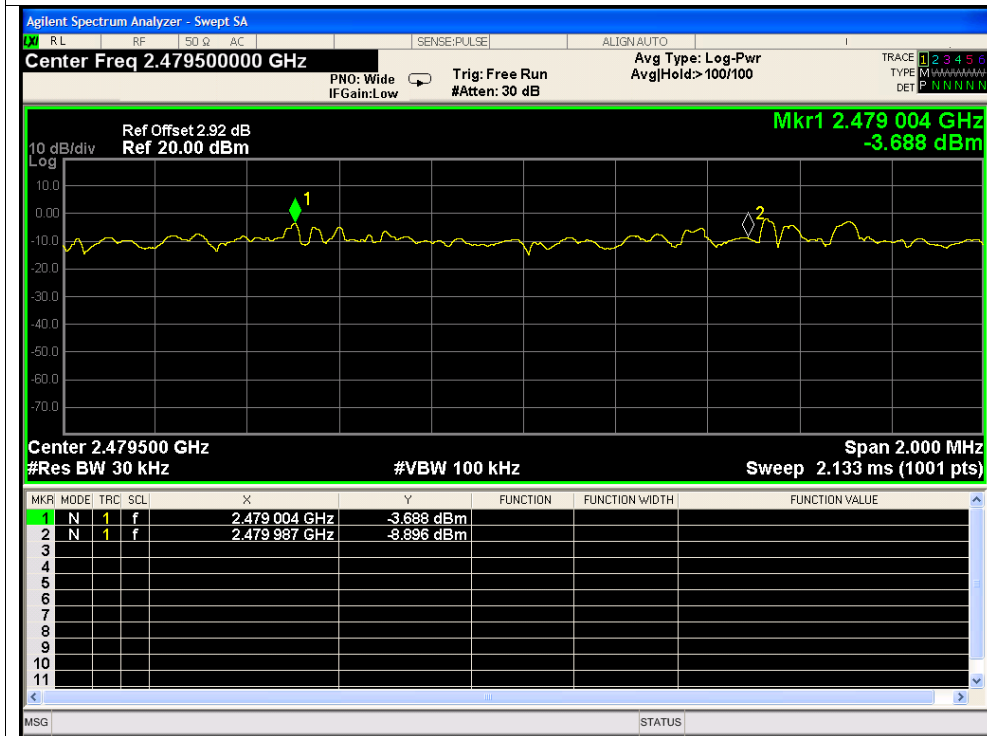
CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2441MHz Ant1

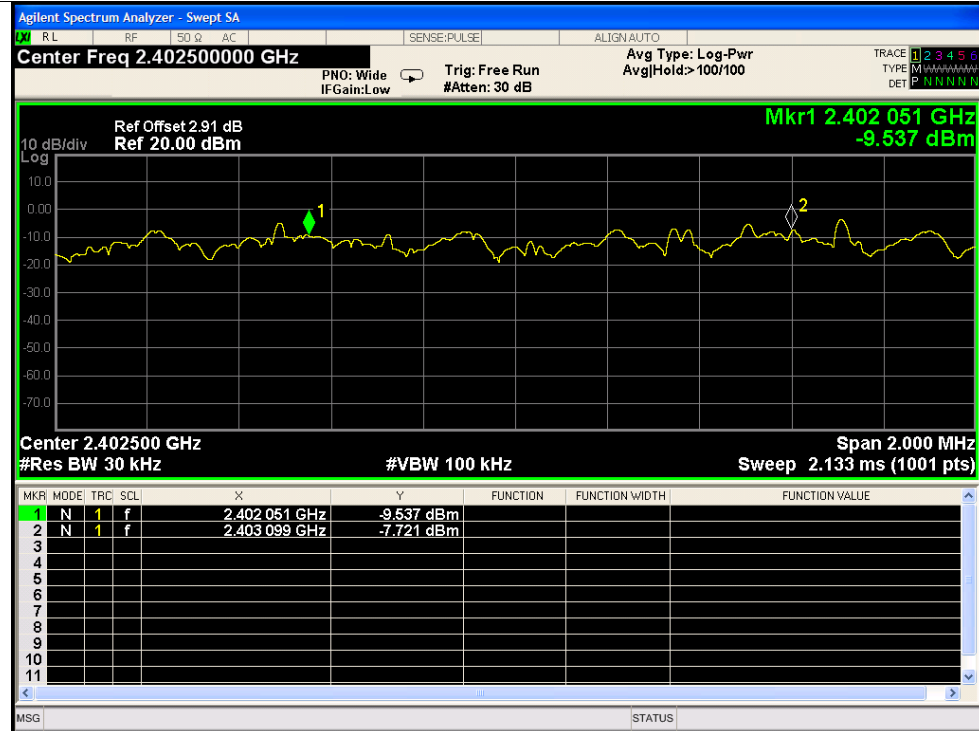


CFS NVNT 2-DH5 2480MHz Ant1

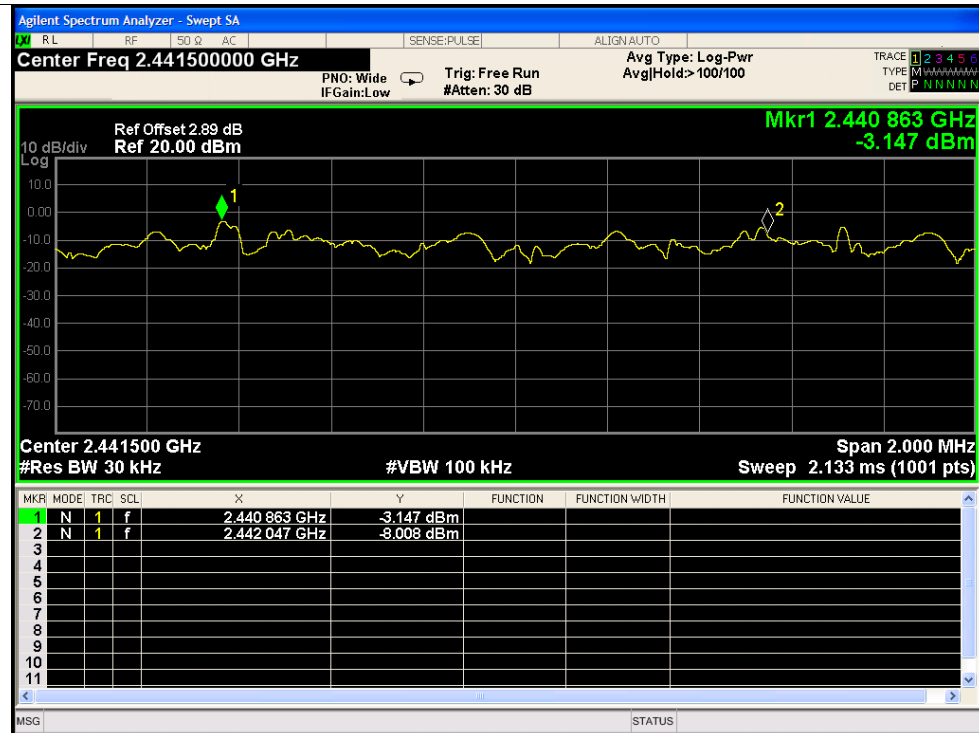


Test Graphs

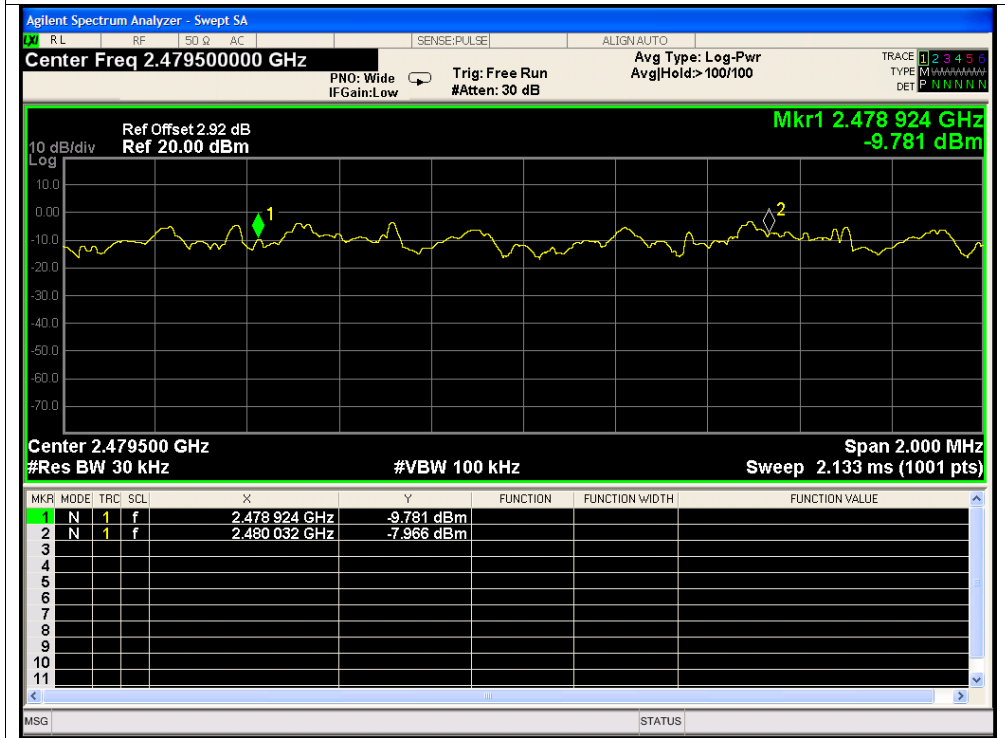
CFS NVNT 3-DH5 2402MHz Ant1



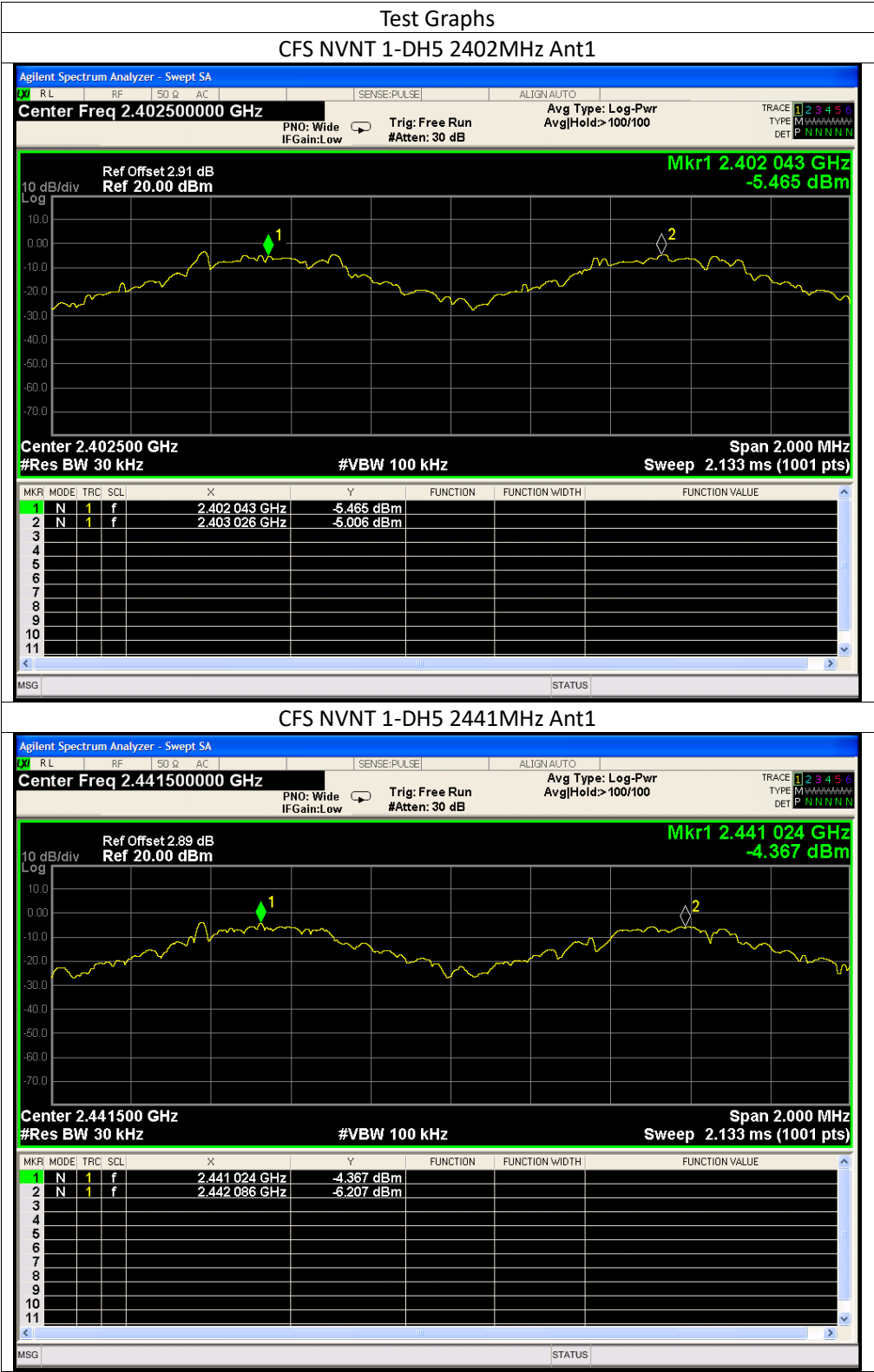
CFS NVNT 3-DH5 2441MHz Ant1



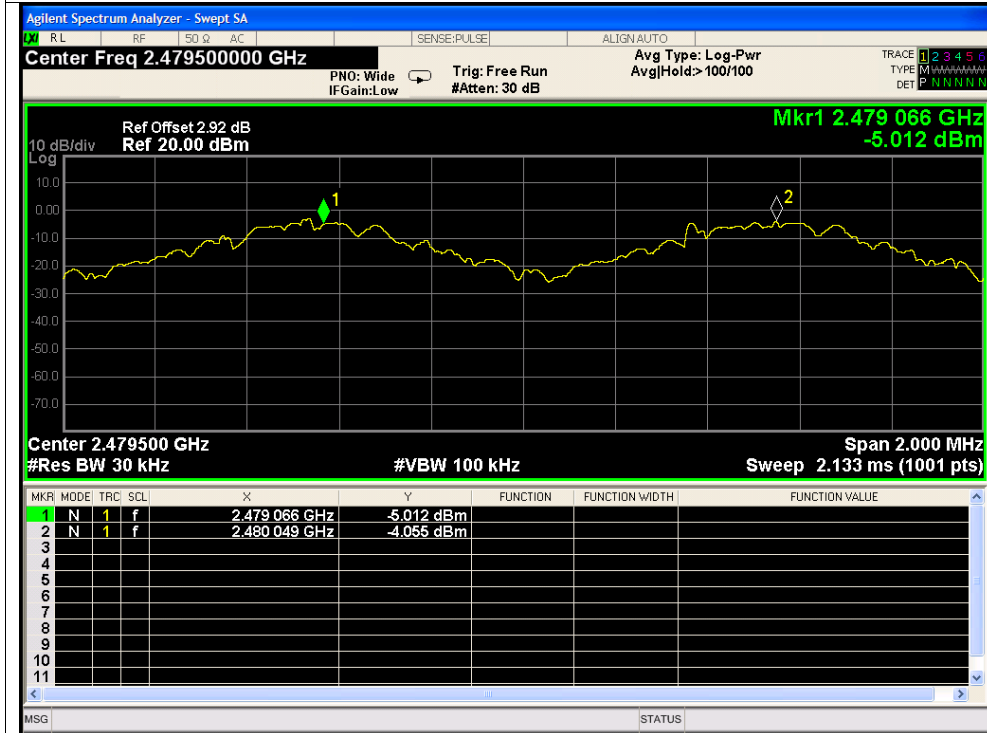
CFS NVNT 3-DH5 2480MHz Ant1



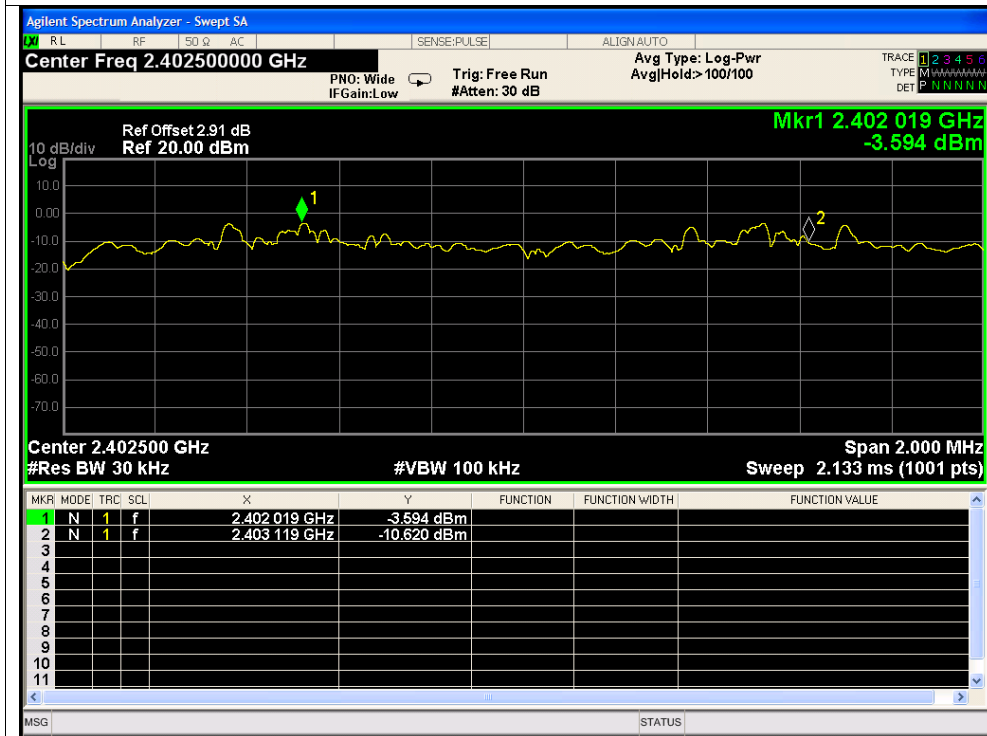
Earphone (Right)



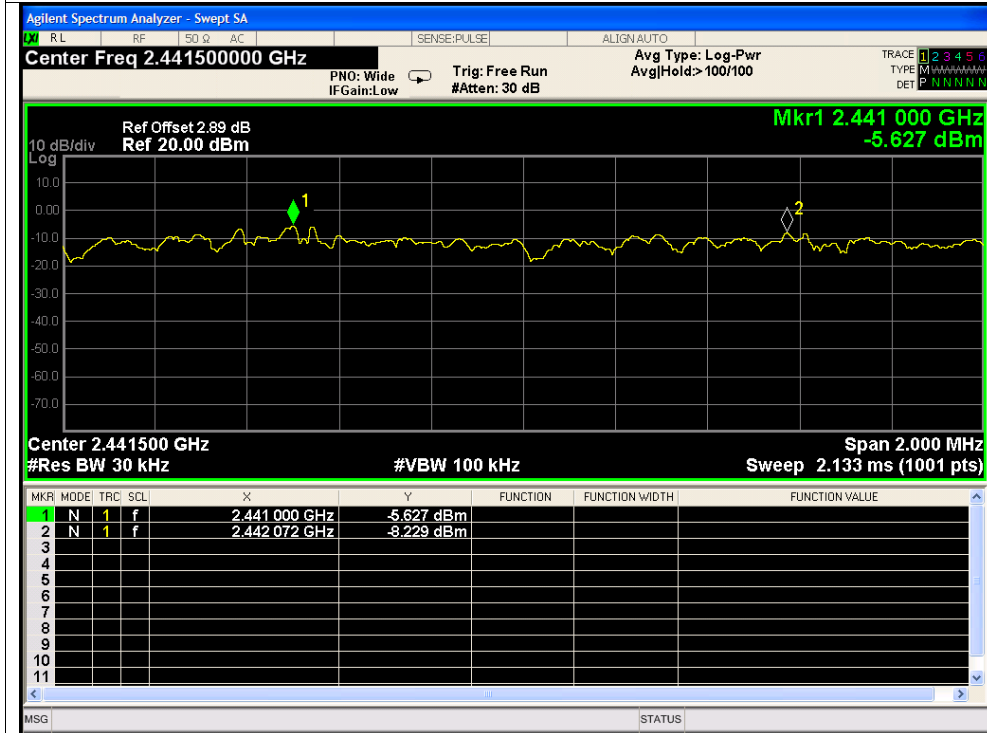
CFS NVNT 1-DH5 2480MHz Ant1



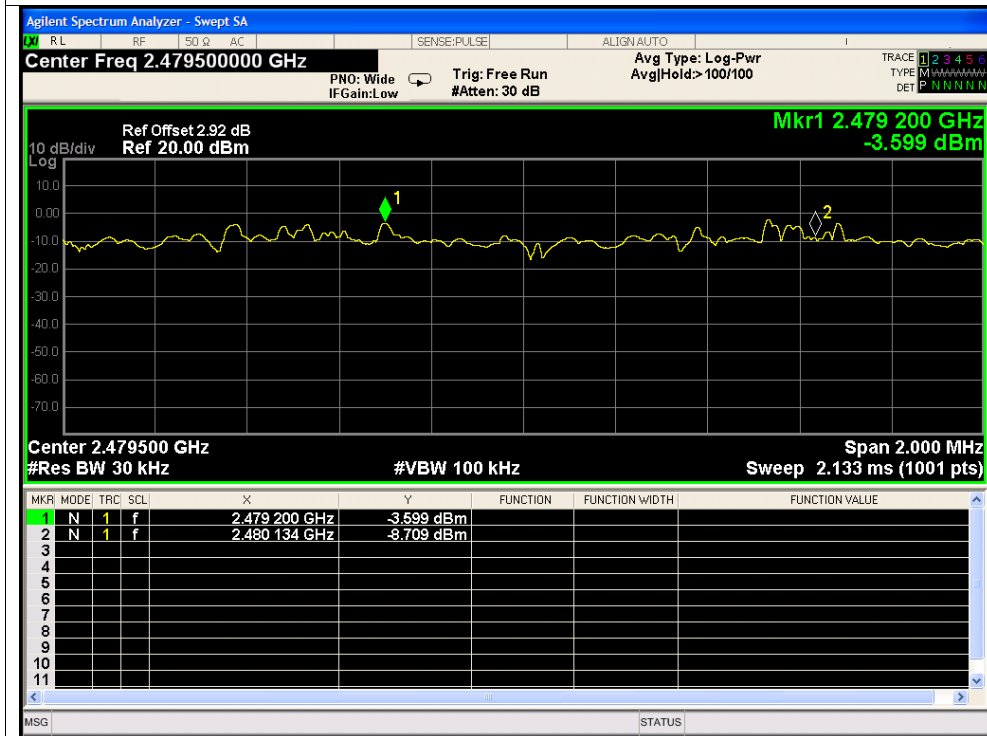
CFS NVNT 2-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2441MHz Ant1

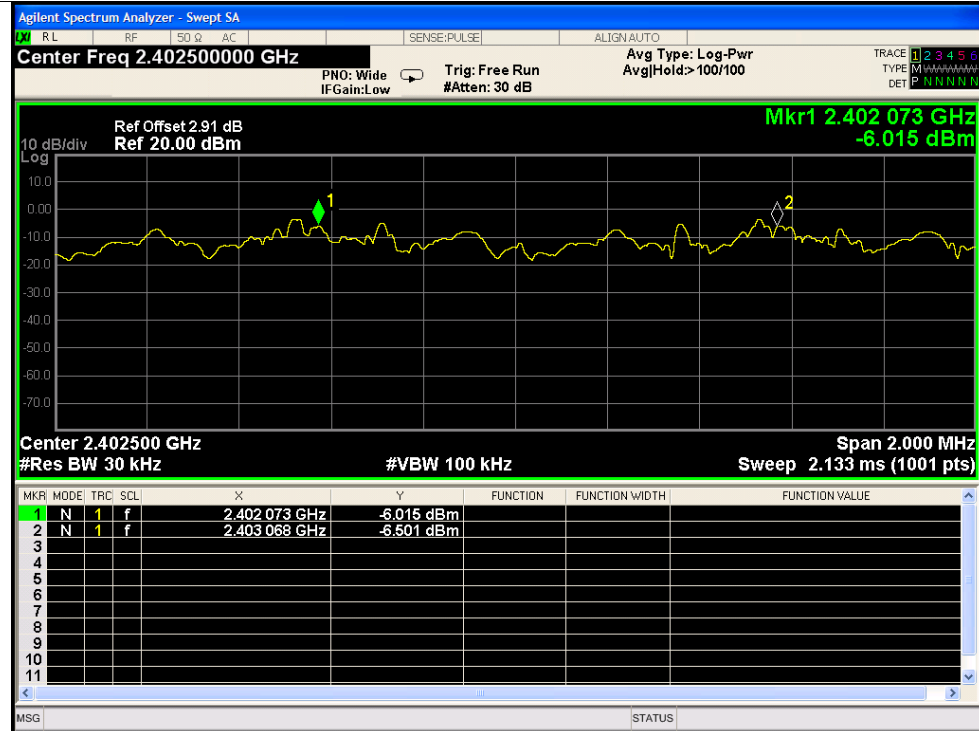


CFS NVNT 2-DH5 2480MHz Ant1

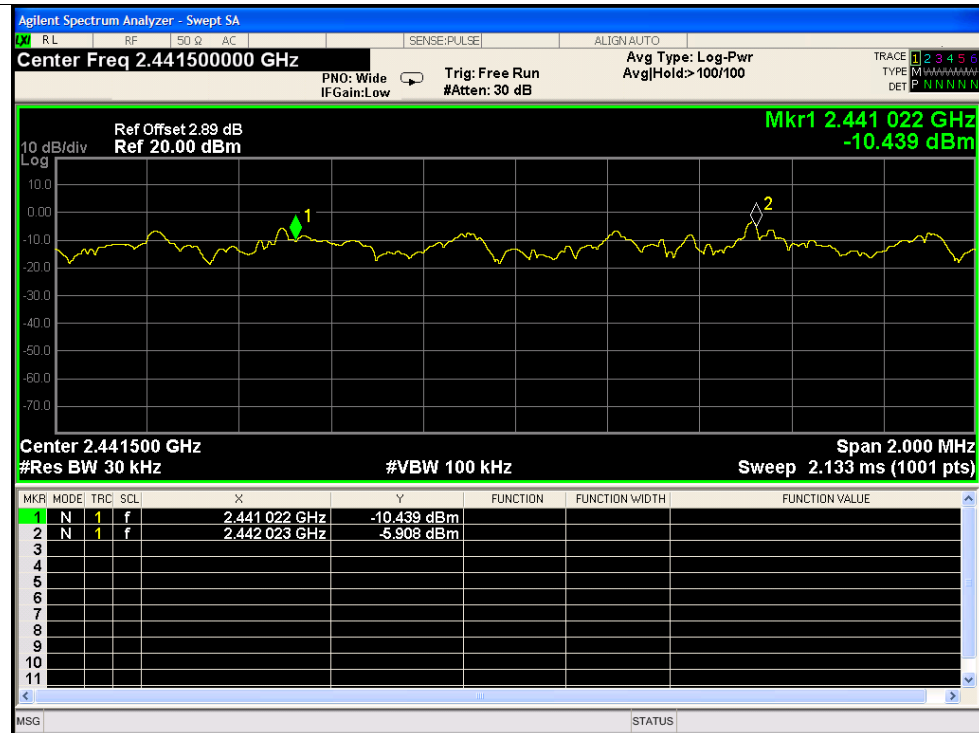


Test Graphs

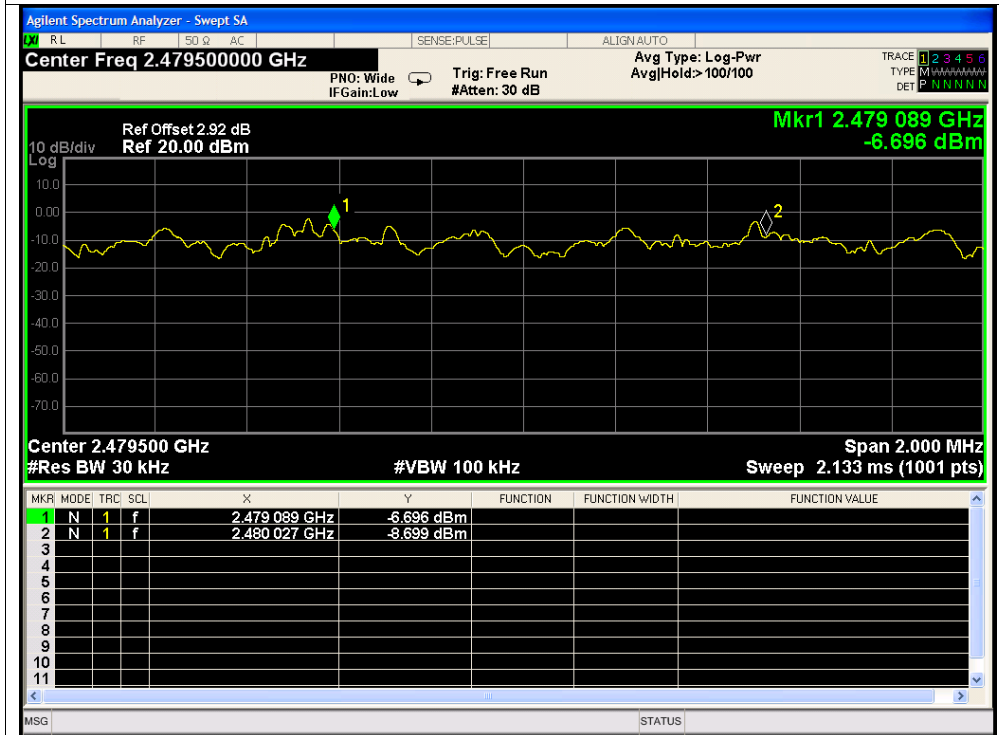
CFS NVNT 3-DH5 2402MHz Ant1



CFS NVNT 3-DH5 2441MHz Ant1



CFS NVNT 3-DH5 2480MHz Ant1



6. Number of Hopping Channel (Hopping)

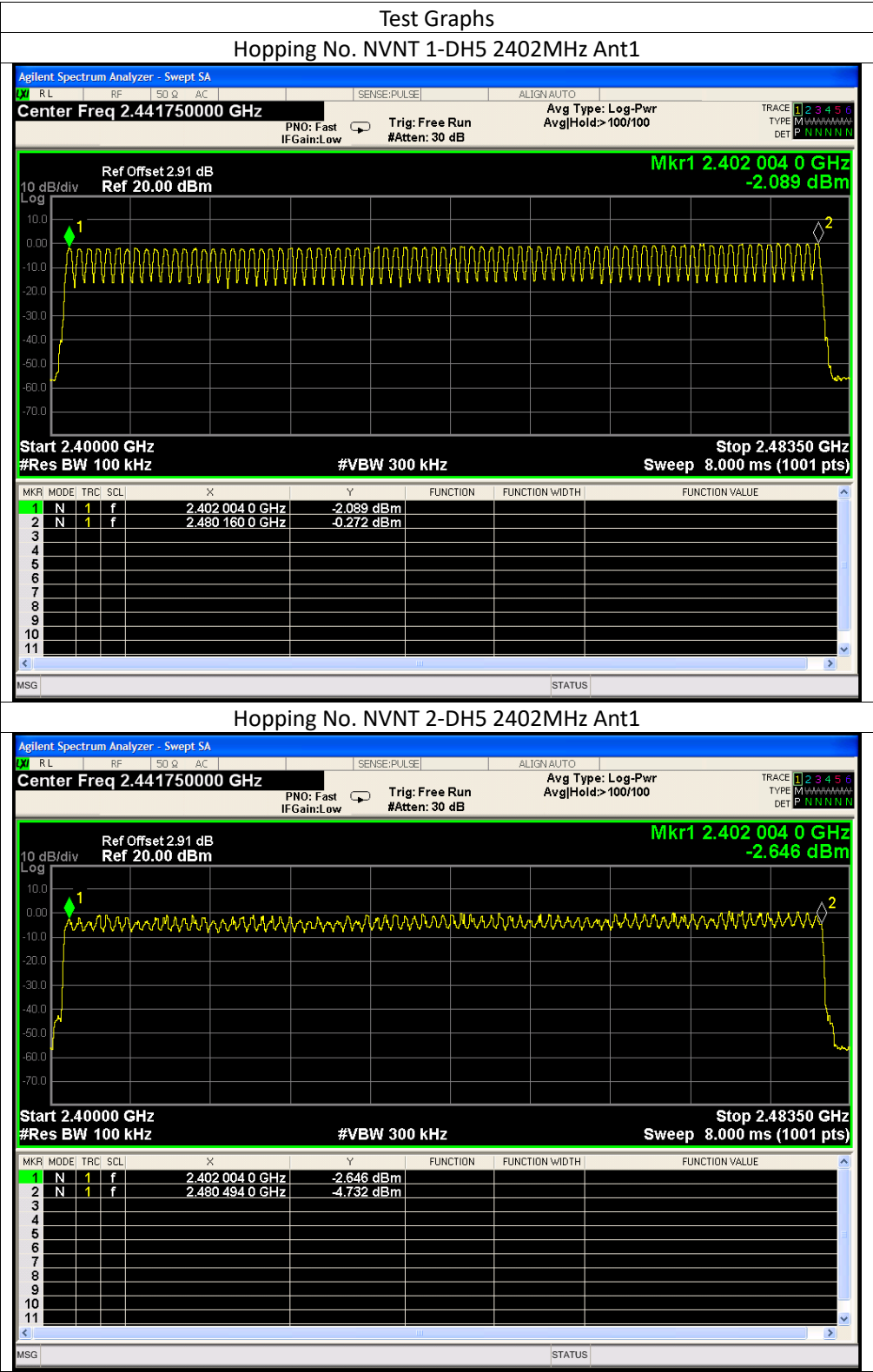
Earphone (Left)

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

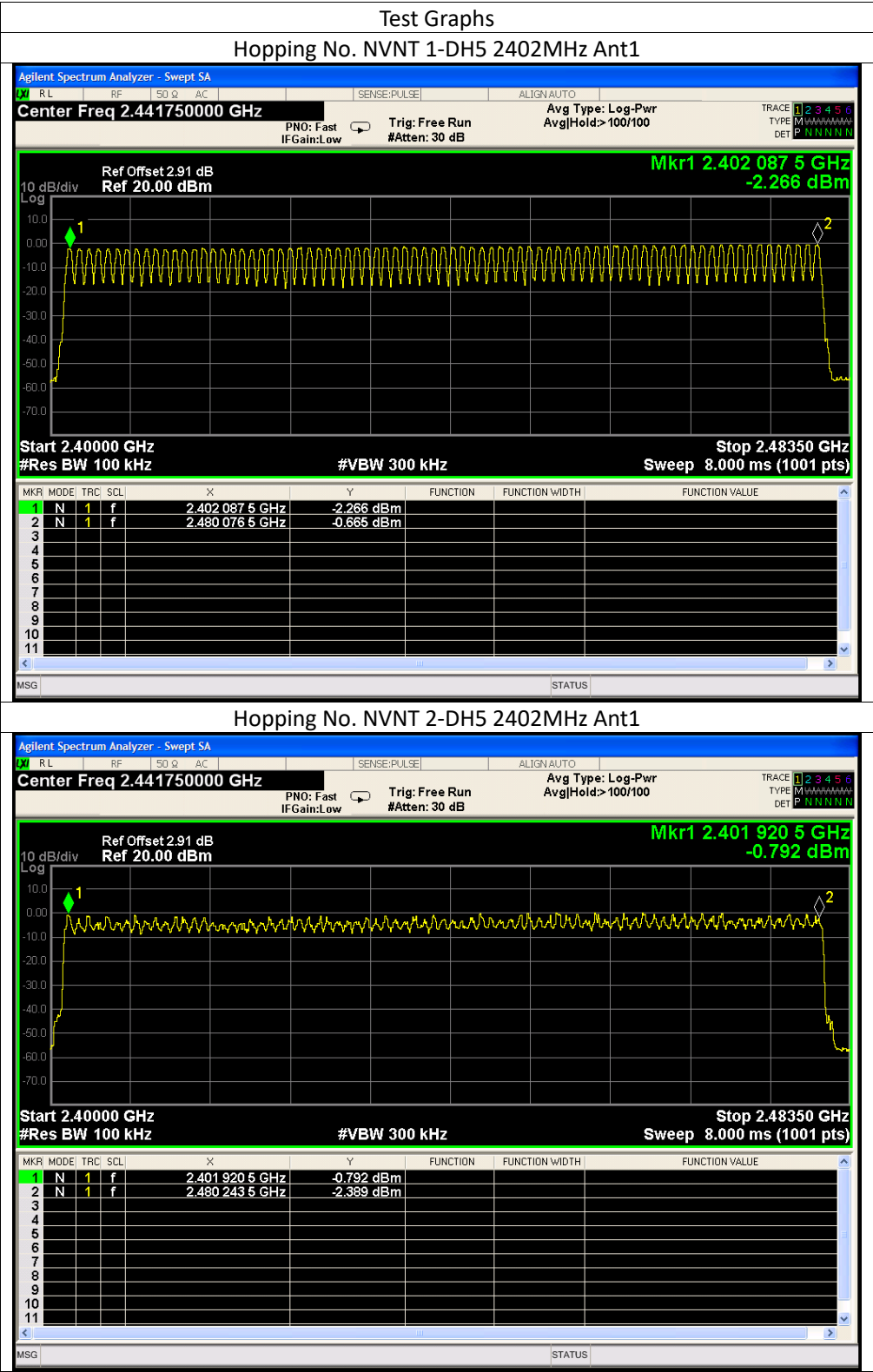
Earphone (Right)

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

Earphone (Left)



Earphone (Right)



Hopping No. NVNT 2-DH5 2402MHz Ant1

Agilent Spectrum Analyzer - Swept SA

RLRF50 QACSENSE:PULSEALIGN AUTO

Center Freq 2.441750000 GHz

PNO: FastIFGain:LowTrig: Free Run#Atten: 30 dB

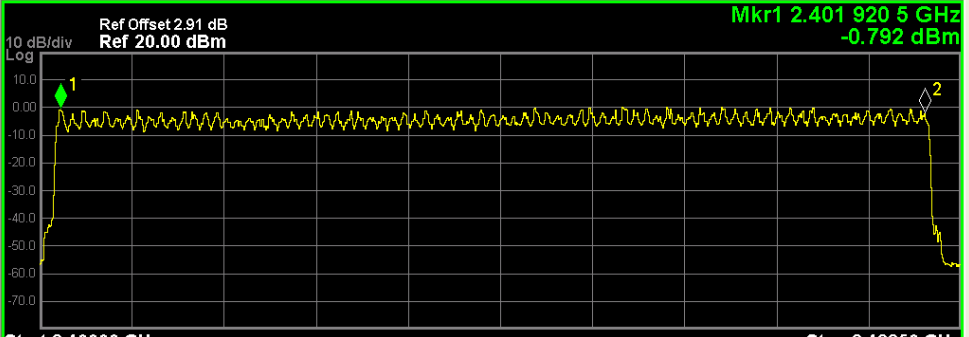
Avg Type: Log-PwrAvgHold> 100/100

TRACE 1 2 3 4 5 6TYPE M DET P N N N N N

10 dB/divLog

Ref Offset 2.91 dBRef 20.00 dBm

Mkr1 2.401 920 5 GHz-0.792 dBm



Start 2.40000 GHz#Res BW 100 kHz

#VBW 300 kHz

Stop 2.48350 GHzSweep 8.000 ms (1001 pts)

MSGSTATUS

7. Dwell Time (Hopping)

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

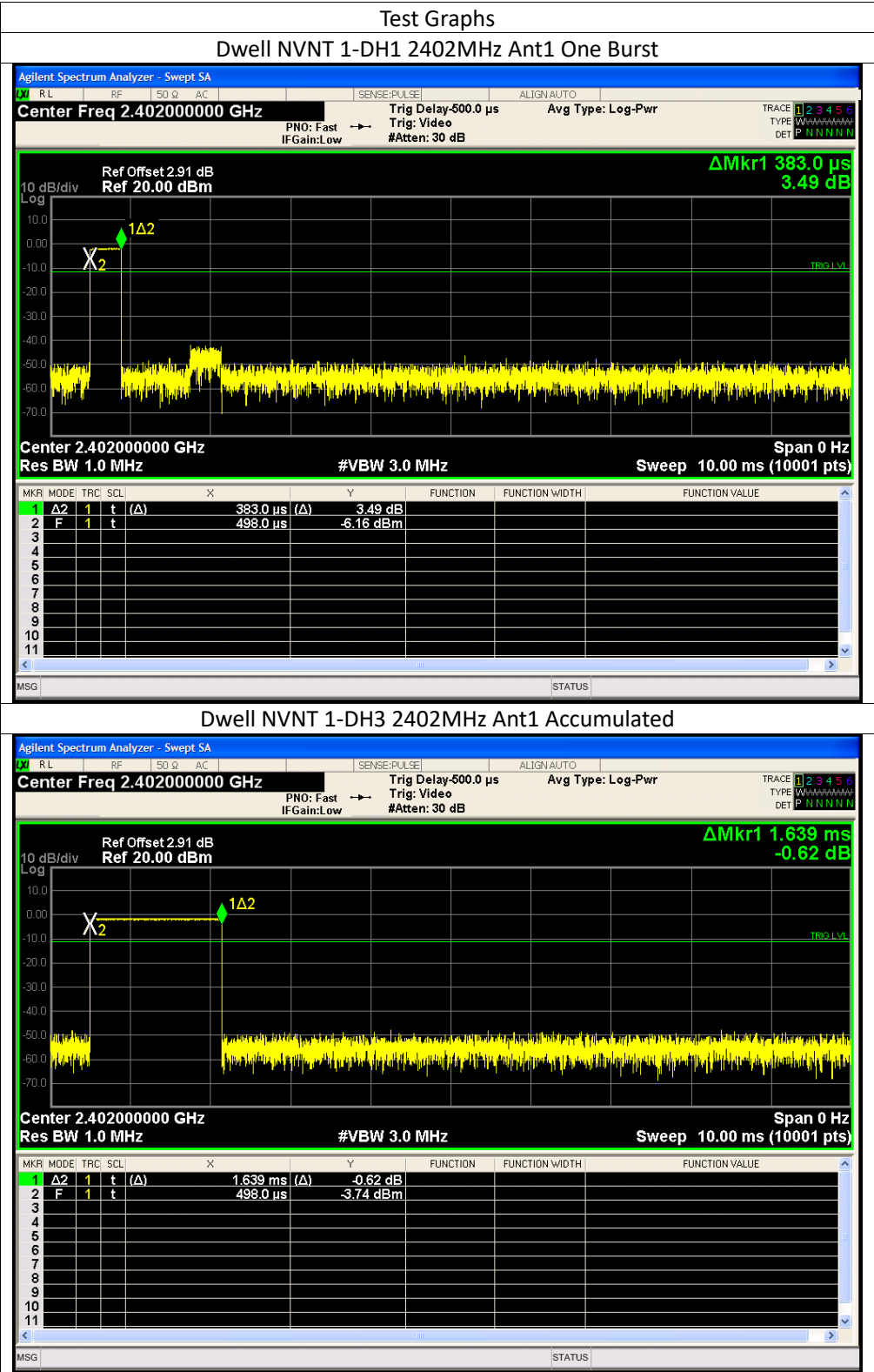
Earphone (Left)

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Dwell Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2402	Ant1	0.383	122.560	<400	Pass
NVNT	1-DH3	2402	Ant1	1.639	262.240	<400	Pass
NVNT	1-DH5	2402	Ant1	2.887	307.947	<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							

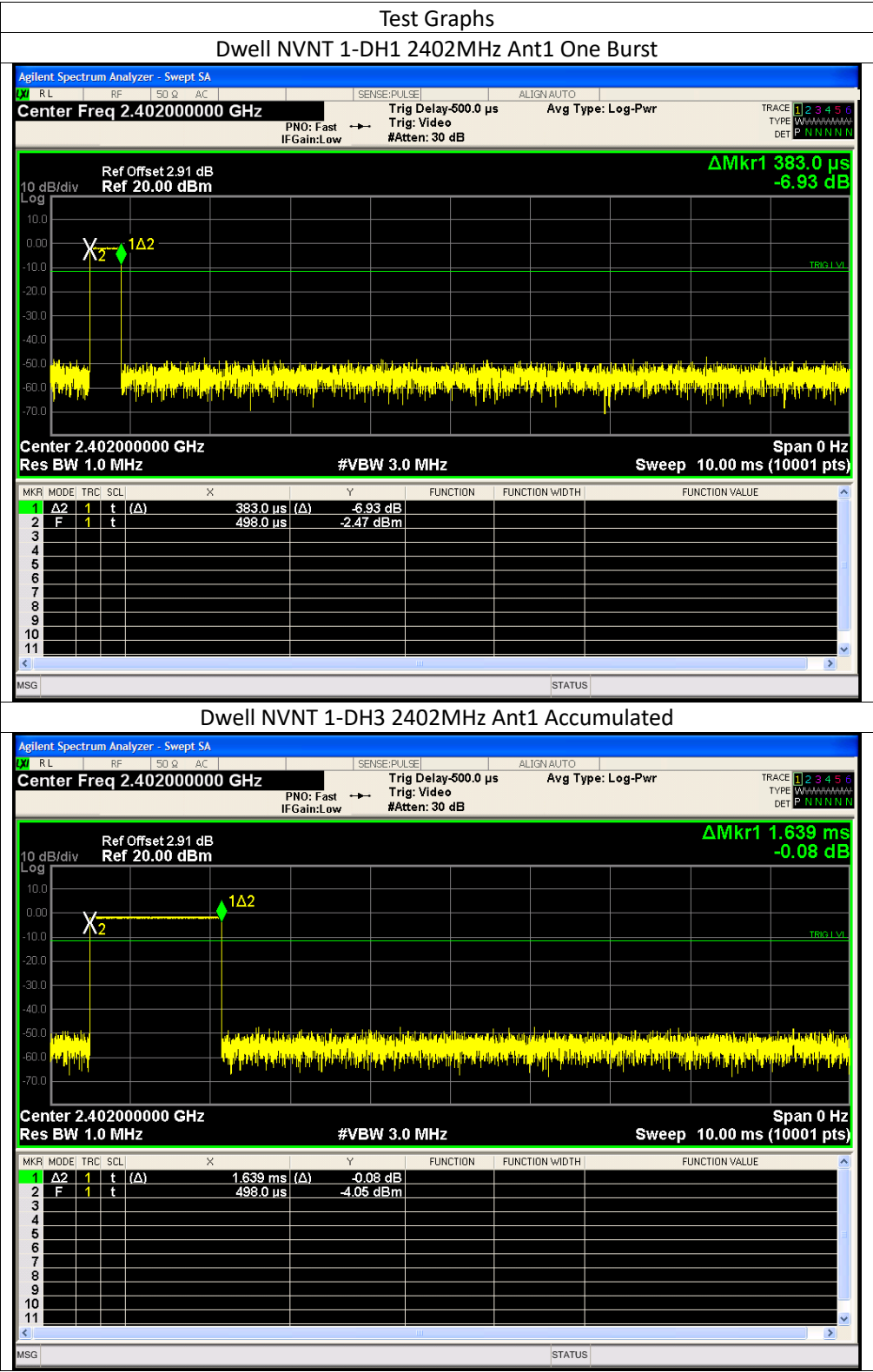
Earphone (Right)

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Dwell Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2402	Ant1	0.383	122.560	<400	Pass
NVNT	1-DH3	2402	Ant1	1.639	262.240	<400	Pass
NVNT	1-DH5	2402	Ant1	2.887	307.947	<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							

Earphone (Left)



Earphone (Right)



Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

