Appendix A for 5GWIFI Test Data

Product Name: MINIPC

Test Model: AM02

Environmental Conditions

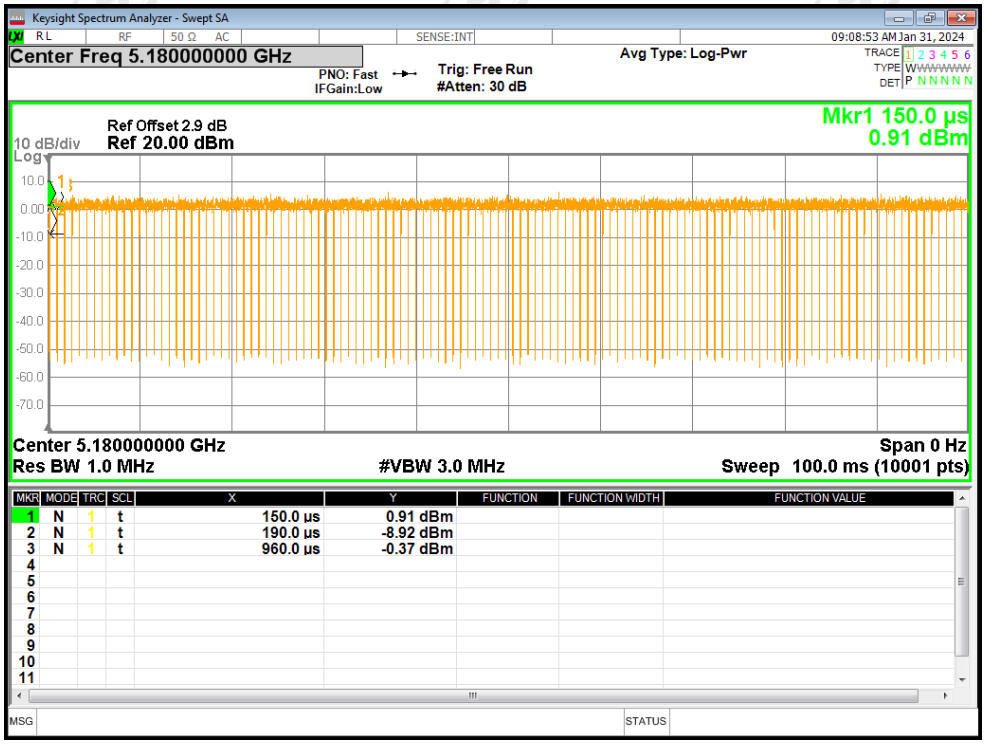
Temperature:	23.8℃
Relative Humidity:	52%
ATM Pressure:	101.0 kPa
Test Engineer:	Kimi Lu
Supervised by:	Baret Wu

A1. Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5180	Ant1	95.06	0.22
NVNT	a	5200	Ant1	93.83	0.28
NVNT	a	5240	Ant1	93.83	0.28
NVNT	a	5180	Ant2	95.06	0.22
NVNT	a	5200	Ant2	95.06	0.22
NVNT	a	5240	Ant2	93.83	0.28
NVNT	n20	5180	Ant1	95.06	0.22
NVNT	n20	5200	Ant1	95.06	0.22
NVNT	n20	5240	Ant1	93.83	0.28
NVNT	n20	5180	Ant2	93.83	0.28
NVNT	n20	5200	Ant2	93.83	0.28
NVNT	n20	5240	Ant2	93.83	0.28
NVNT	n40	5190	Ant1	93.9	0.27
NVNT	n40	5230	Ant1	93.98	0.27
NVNT	n40	5190	Ant2	93.98	0.27
NVNT	n40	5230	Ant2	93.98	0.27
NVNT	ac20	5180	Ant1	93.83	0.28
NVNT	ac20	5200	Ant1	93.75	0.28
NVNT	ac20	5240	Ant1	95	0.22
NVNT	ac20	5180	Ant2	93.75	0.28
NVNT	ac20	5200	Ant2	95	0.22
NVNT	ac20	5240	Ant2	93.83	0.28
NVNT	ac40	5190	Ant1	93.83	0.28
NVNT	ac40	5230	Ant1	93.75	0.28
NVNT	ac40	5190	Ant2	93.83	0.28
NVNT	ac40	5230	Ant2	93.83	0.28
NVNT	ac80	5210	Ant1	93.83	0.28
NVNT	ac80	5210	Ant2	93.83	0.28

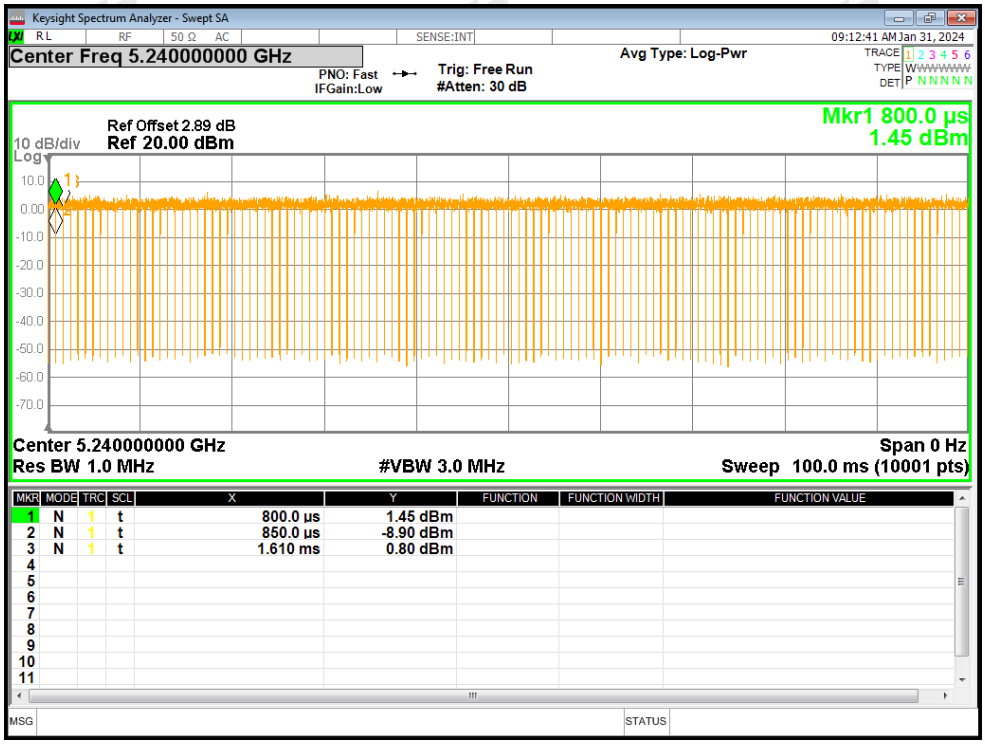
Test Graphs

Duty Cycle NVNT a 5180MHz Ant1

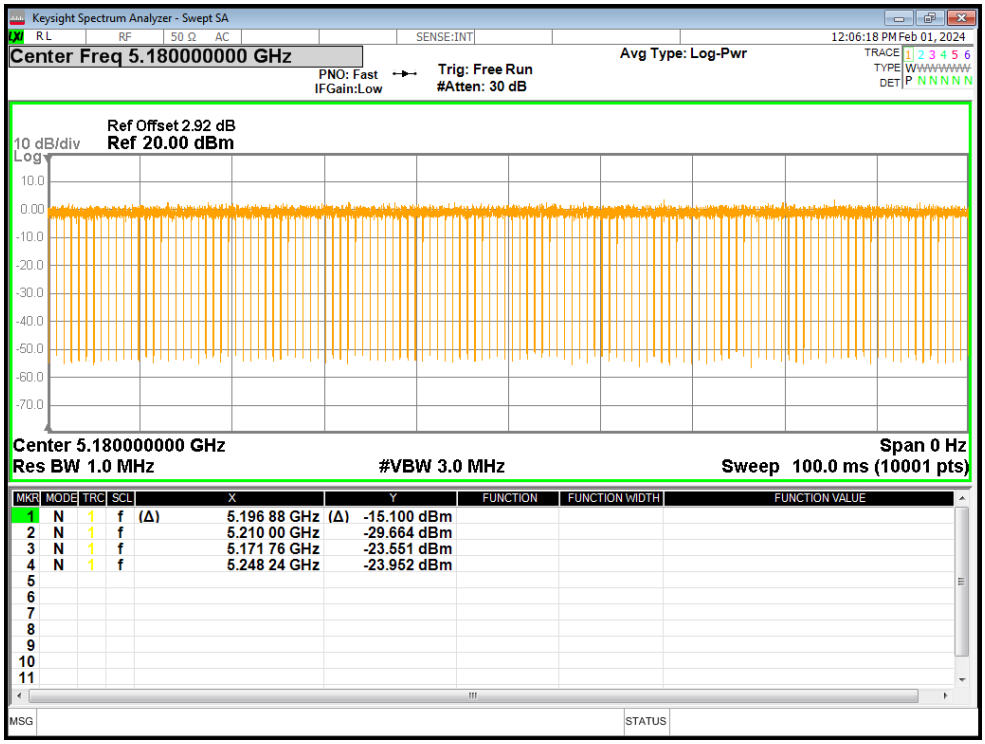


Duty Cycle NVNT a 5200MHz Ant1

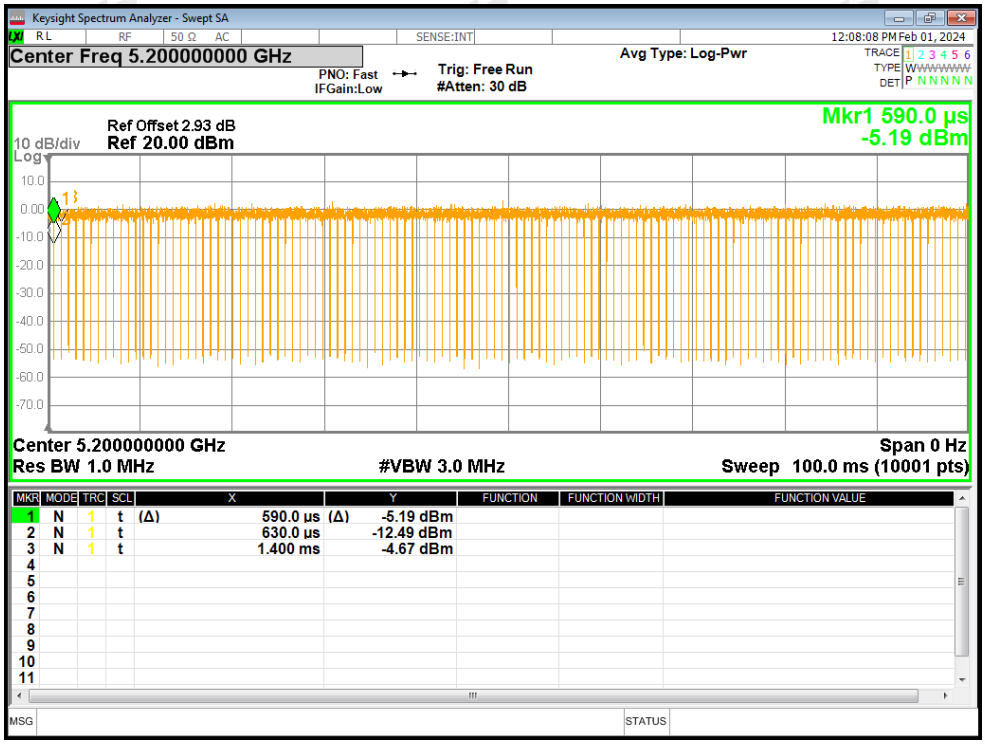
Duty Cycle NVNT a 5240MHz Ant1



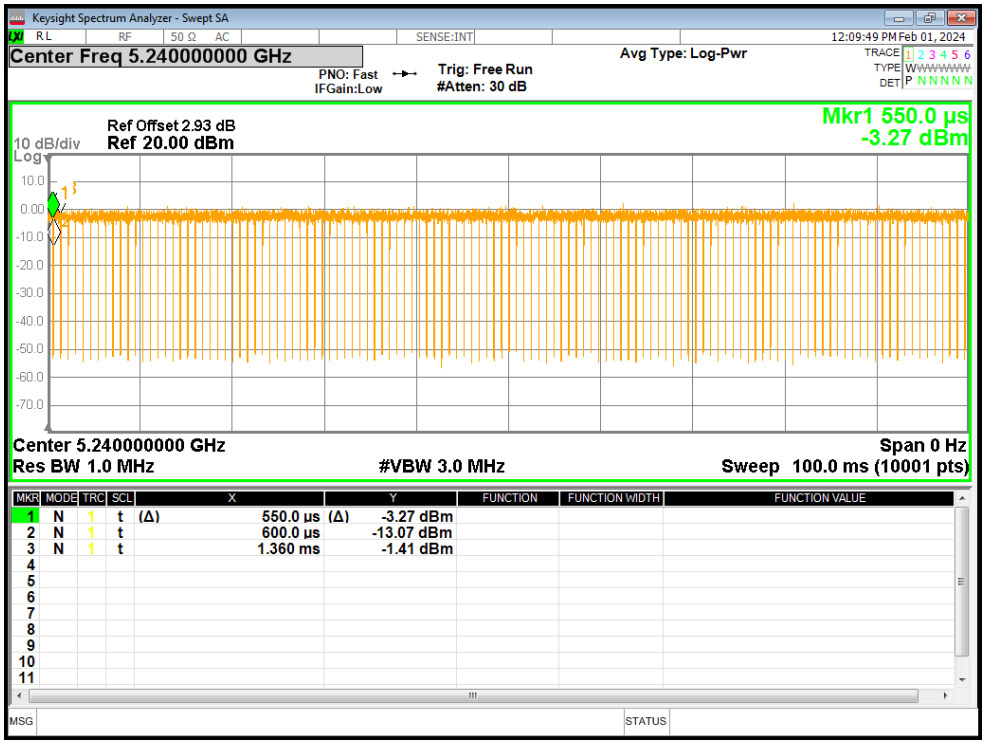
Duty Cycle NVNT a 5180MHz Ant2



Duty Cycle NVNT a 5200MHz Ant2

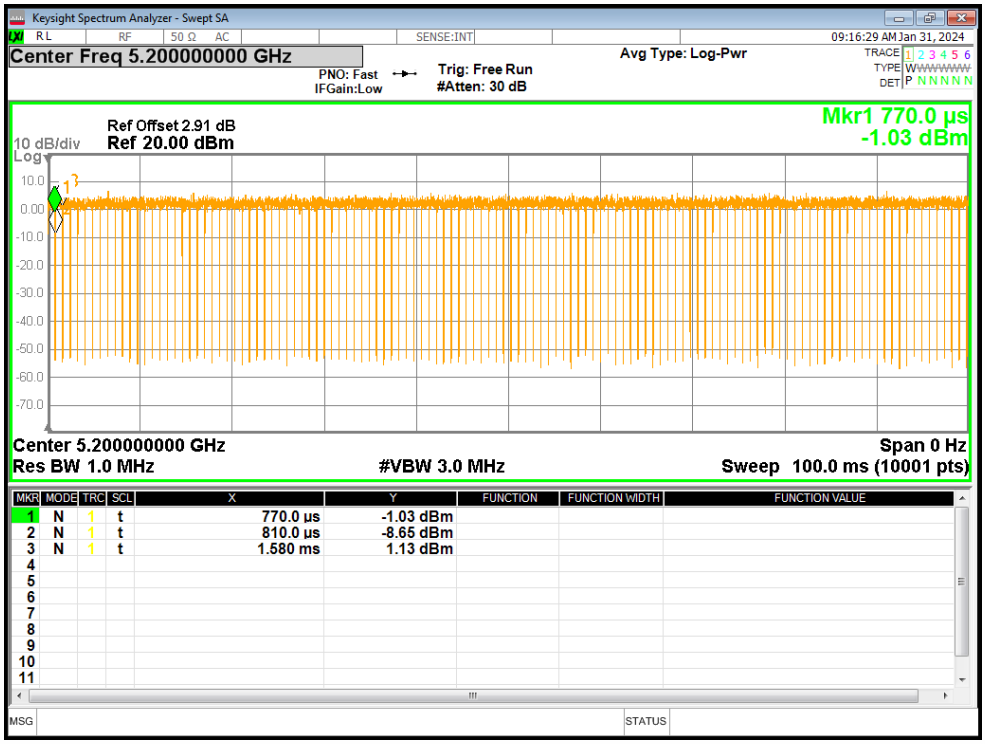


Duty Cycle NVNT a 5240MHz Ant2



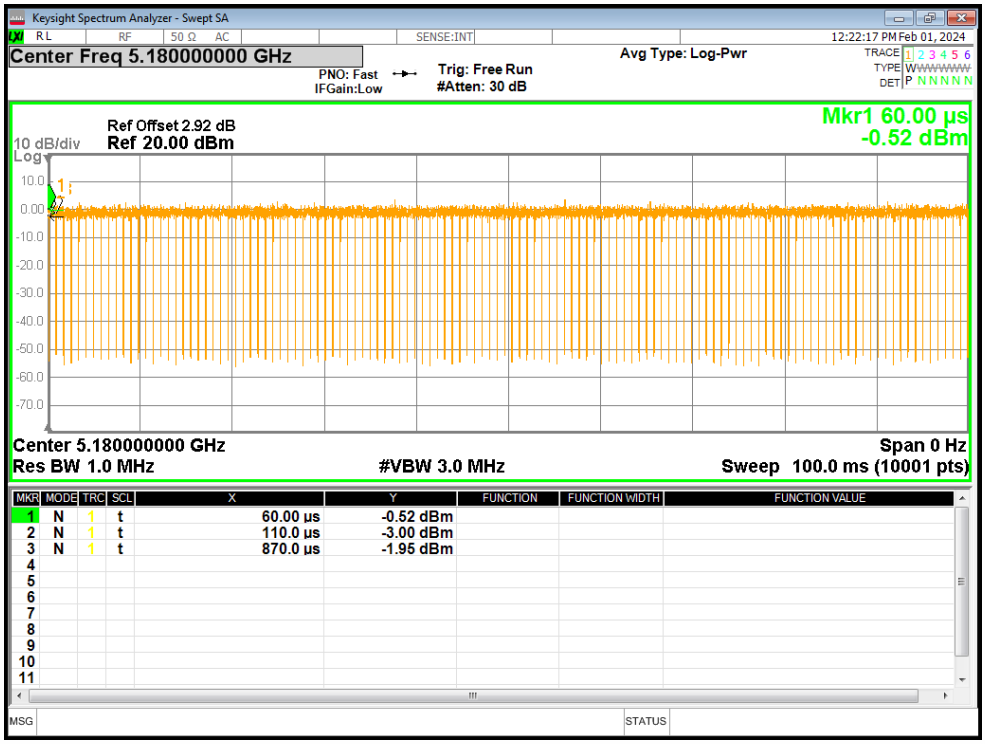
Duty Cycle NVNT n20 5180MHz Ant1

Duty Cycle NVNT n20 5200MHz Ant1

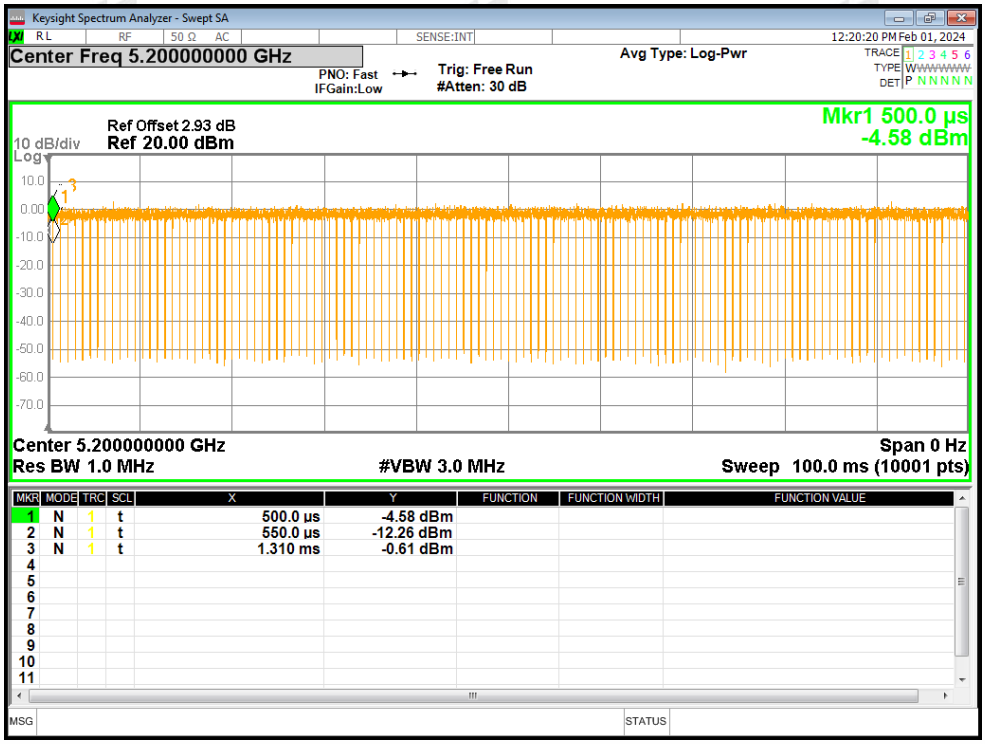


Duty Cycle NVNT n20 5240MHz Ant1

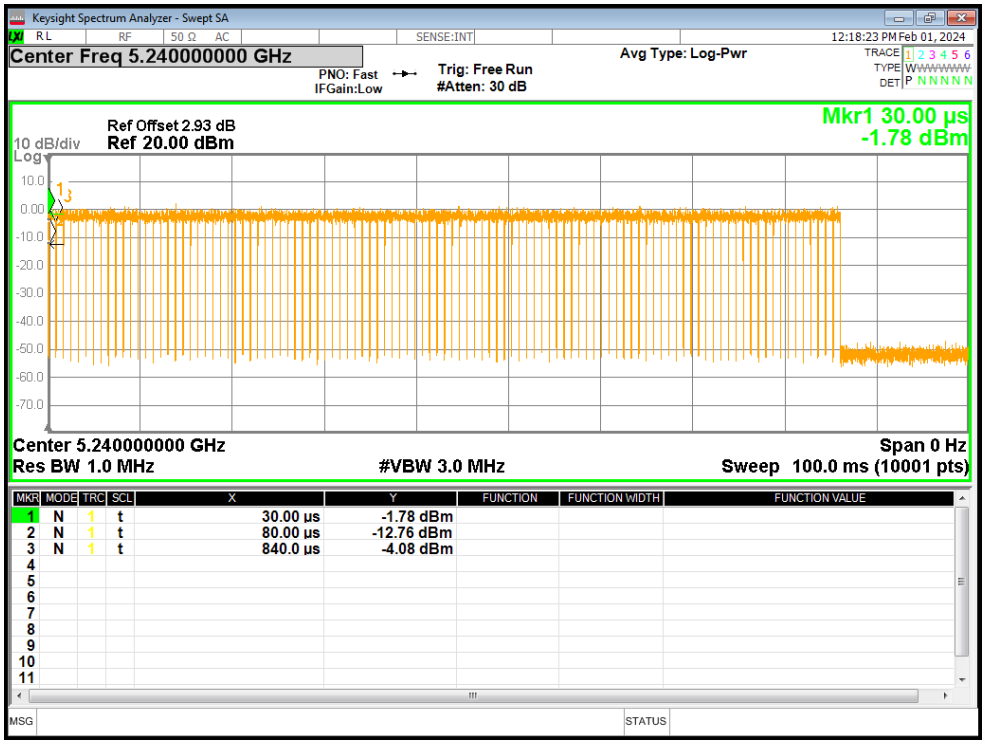
Duty Cycle NVNT n20 5180MHz Ant2



Duty Cycle NVNT n20 5200MHz Ant2



Duty Cycle NVNT n20 5240MHz Ant2



Duty Cycle NVNT n40 5190MHz Ant1

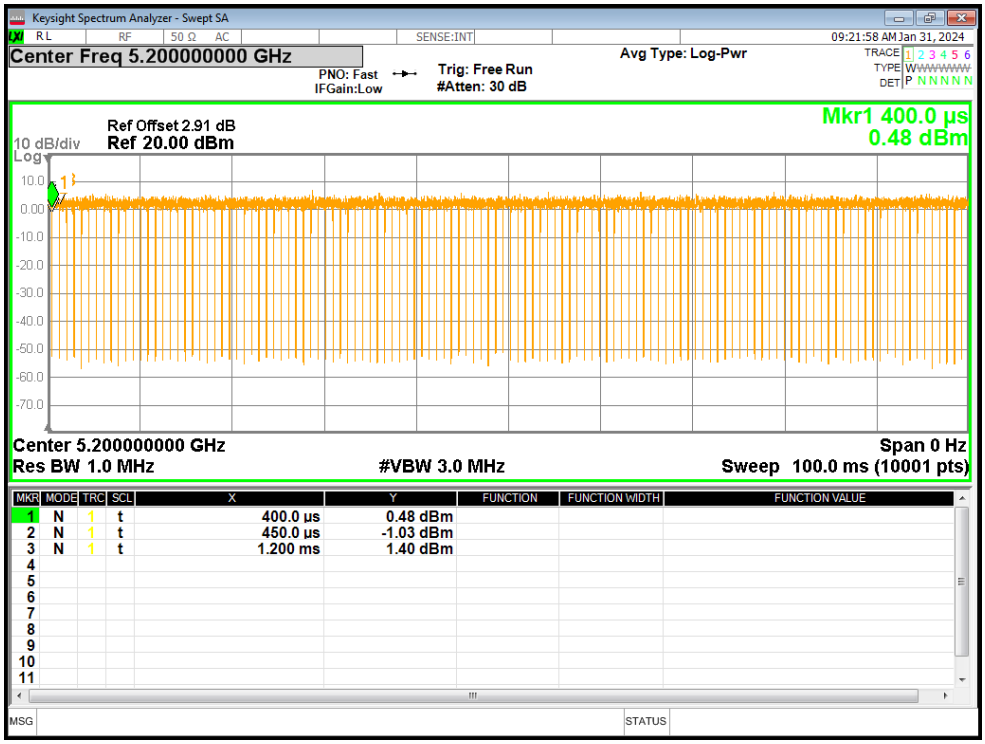
Duty Cycle NVNT n40 5230MHz Ant1

Duty Cycle NVNT n40 5190MHz Ant2

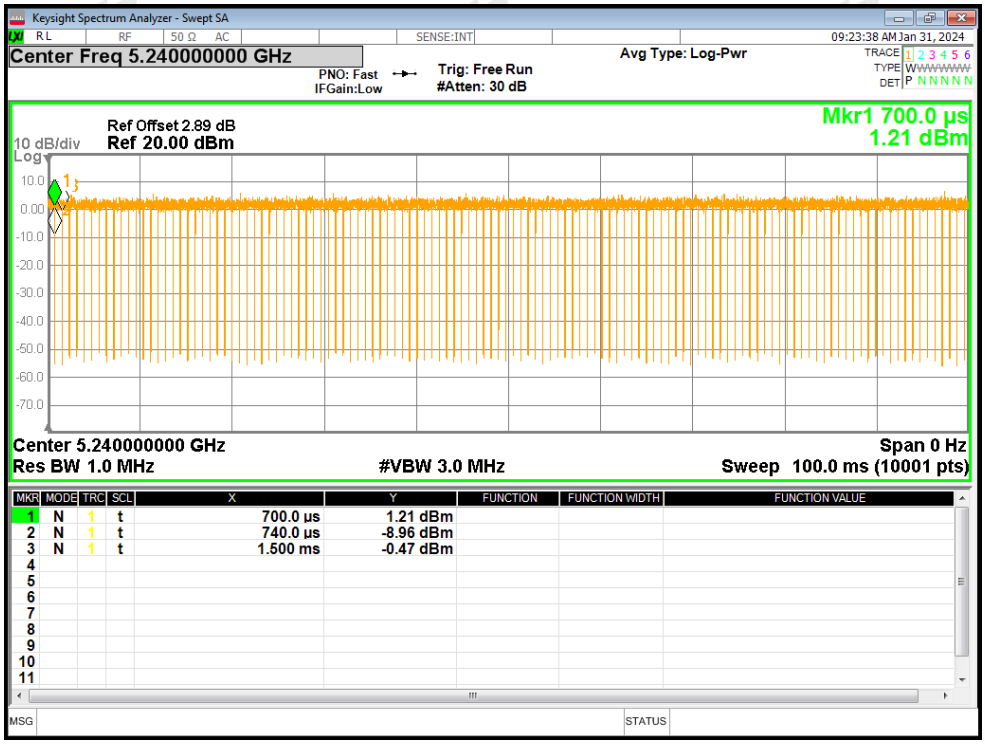
Duty Cycle NVNT n40 5230MHz Ant2

Duty Cycle NVNT ac20 5180MHz Ant1

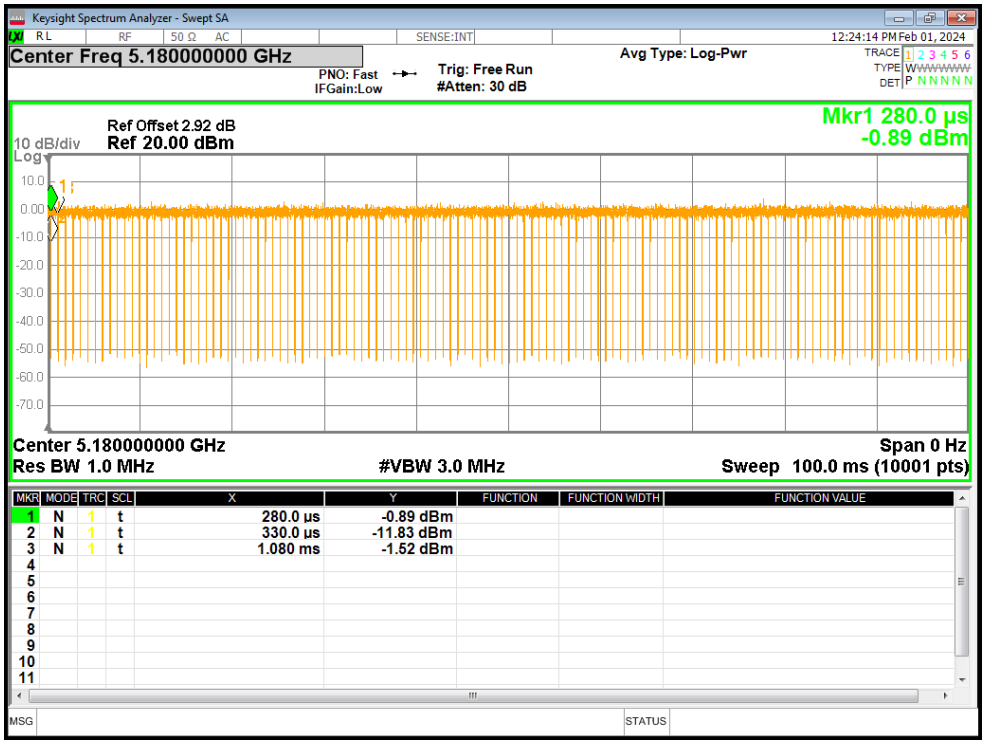
Duty Cycle NVNT ac20 5200MHz Ant1



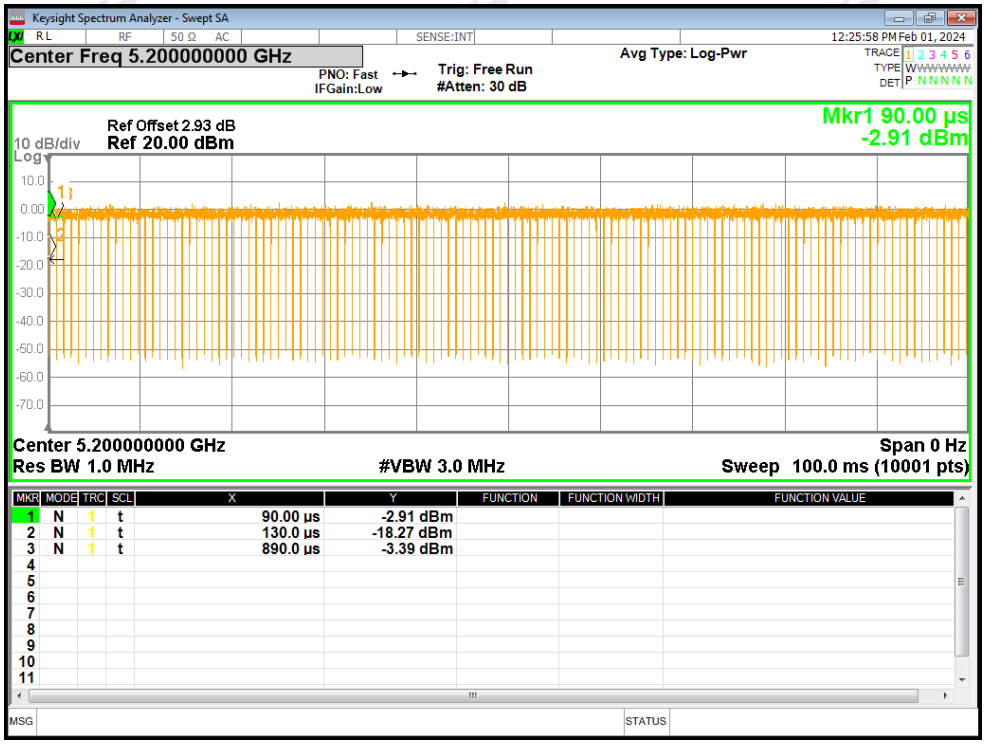
Duty Cycle NVNT ac20 5240MHz Ant1



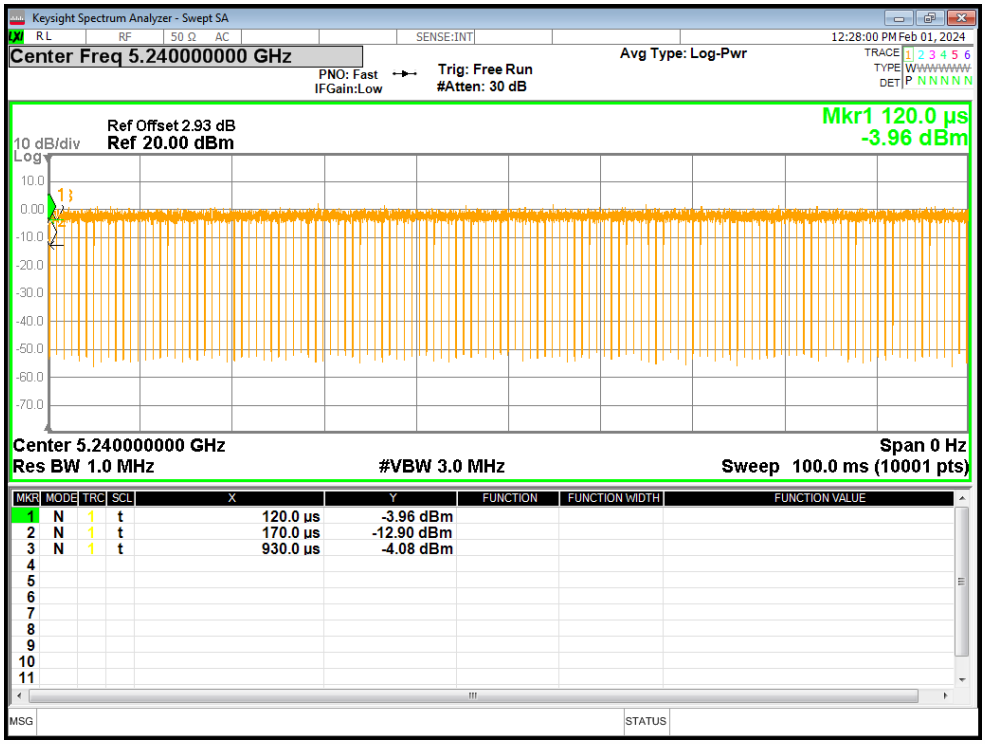
Duty Cycle NVNT ac20 5180MHz Ant2



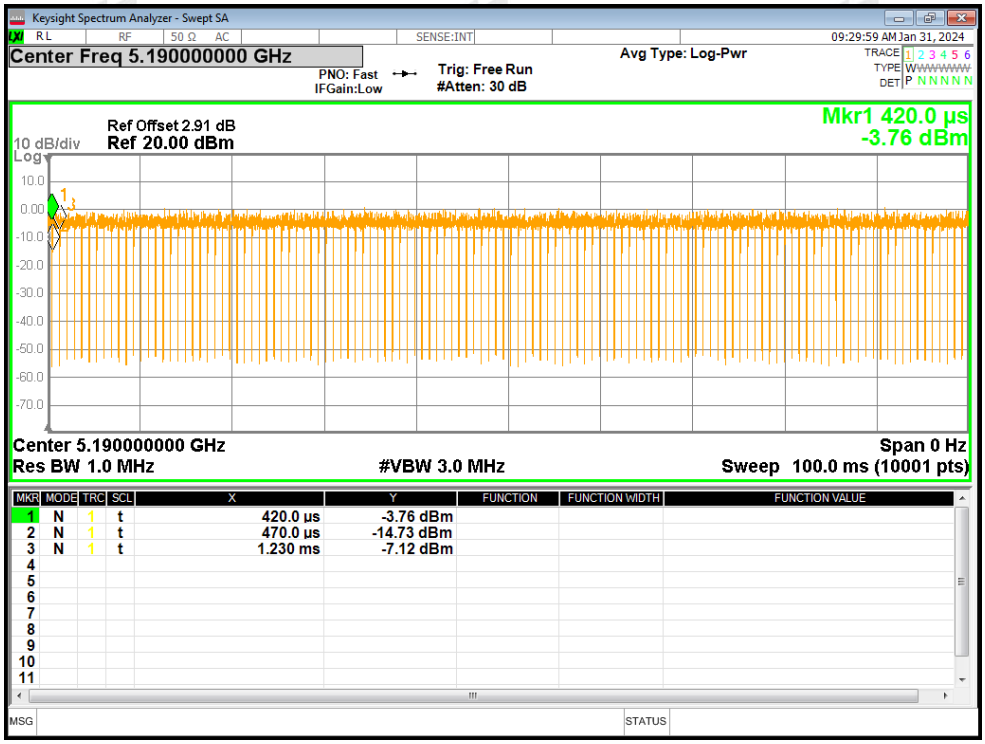
Duty Cycle NVNT ac20 5200MHz Ant2



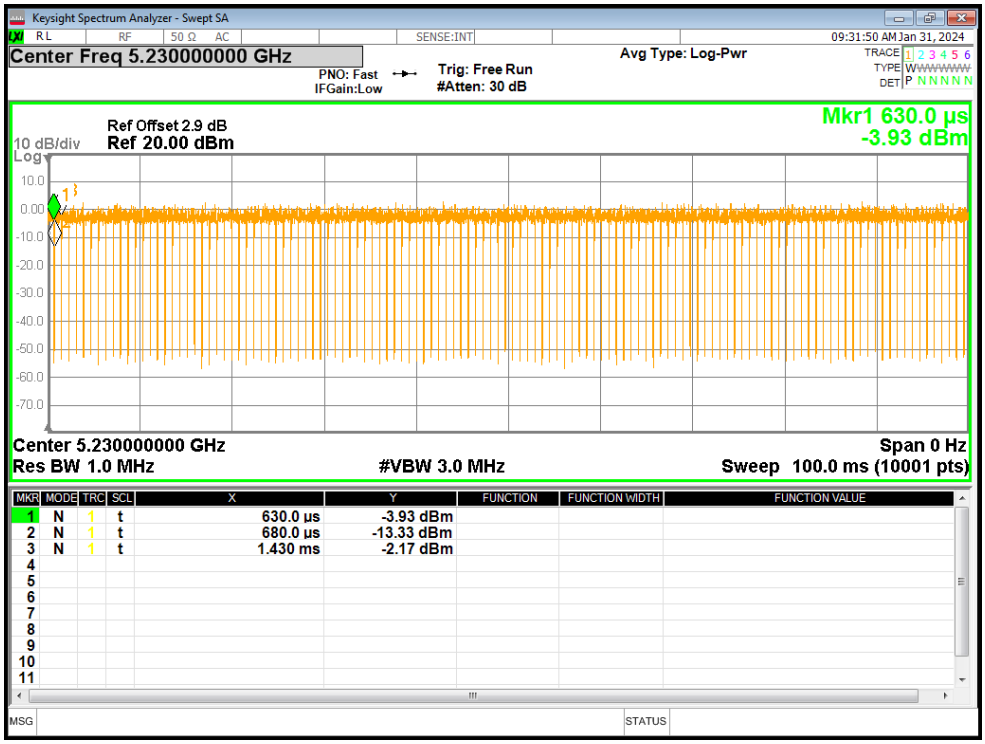
Duty Cycle NVNT ac20 5240MHz Ant2



Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1



Duty Cycle NVNT ac40 5190MHz Ant2

Duty Cycle NVNT ac40 5230MHz Ant2

Duty Cycle NVNT ac80 5210MHz Ant1

Duty Cycle NVNT ac80 5210MHz Ant2

A2. Maximum Conducted Output Power

Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Conducted PowerLimit (dBm)	Verdict
a	5180	Ant1	8.49	24	Pass
a	5200	Ant1	8.99	24	Pass
a	5240	Ant1	8.65	24	Pass
a	5180	Ant2	5.67	24	Pass
a	5200	Ant2	5.17	24	Pass
a	5240	Ant2	4.44	24	Pass
n20	5180	Ant1	8.51	24	Pass
n20	5200	Ant1	8.99	24	Pass
n20	5240	Ant1	8.59	24	Pass
n20	5180	Ant2	5.75	24	Pass
n20	5200	Ant2	5.18	24	Pass
n20	5240	Ant2	4.39	24	Pass
n40	5190	Ant1	9.06	24	Pass
n40	5230	Ant1	11.16	24	Pass
n40	5190	Ant2	5.71	24	Pass
n40	5230	Ant2	6.42	24	Pass
ac20	5180	Ant1	8.43	24	Pass
ac20	5200	Ant1	8.96	24	Pass
ac20	5240	Ant1	8.59	24	Pass
ac20	5180	Ant2	5.67	24	Pass
ac20	5200	Ant2	5.19	24	Pass
ac20	5240	Ant2	4.38	24	Pass
ac40	5190	Ant1	8.97	24	Pass
ac40	5230	Ant1	11.2	24	Pass
ac40	5190	Ant2	5.69	24	Pass
ac40	5230	Ant2	6.44	24	Pass
ac80	5210	Ant1	9.75	24	Pass
ac80	5210	Ant2	5.78	24	Pass
n20	5180	MIMO	10.36	24	Pass
n20	5200	MIMO	10.50	24	Pass
n20	5240	MIMO	9.99	24	Pass
n40	5190	MIMO	10.71	24	Pass
n40	5230	MIMO	12.42	24	Pass
n40	5190	MIMO	10.28	24	Pass
ac20	5180	MIMO	10.48	24	Pass
ac20	5200	MIMO	9.99	24	Pass
ac20	5240	MIMO	10.64	24	Pass
ac40	5190	MIMO	12.45	24	Pass
ac40	5230	MIMO	11.21	24	Pass

ac80	5210	MIMO	10.36	24	Pass

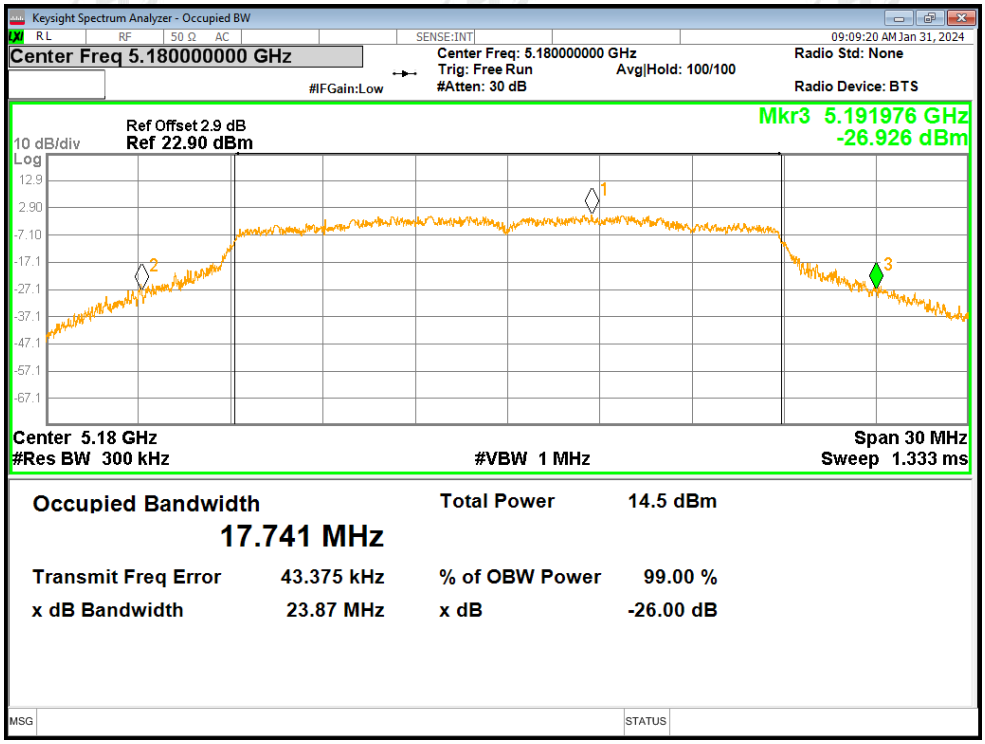
Directional gain(MIMO) =10 log(10G1/10+10G2/10) dBi=3.88dBi

A3. -26dB Bandwidth

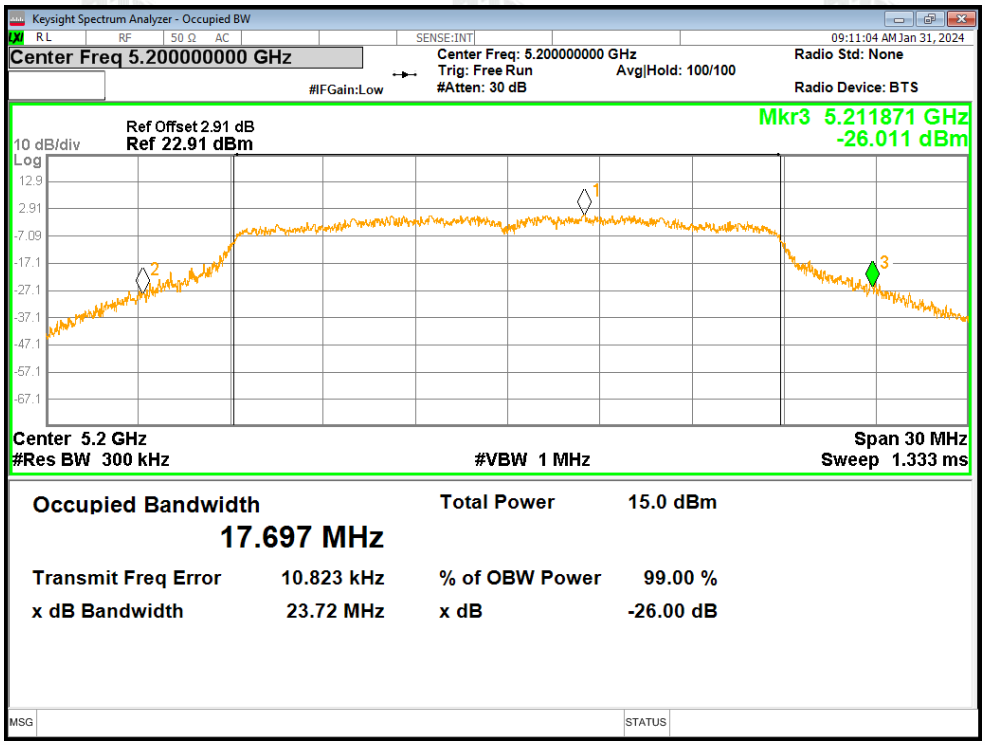
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	23.866	0.5	Pass
NVNT	a	5200	Ant1	23.721	0.5	Pass
NVNT	a	5240	Ant1	23.096	0.5	Pass
NVNT	a	5180	Ant2	23.251	0.5	Pass
NVNT	a	5200	Ant2	23.077	0.5	Pass
NVNT	a	5240	Ant2	23.4	0.5	Pass
NVNT	n20	5180	Ant1	23.647	0.5	Pass
NVNT	n20	5200	Ant1	23.21	0.5	Pass
NVNT	n20	5240	Ant1	23.408	0.5	Pass
NVNT	n20	5180	Ant2	24.047	0.5	Pass
NVNT	n20	5200	Ant2	23.699	0.5	Pass
NVNT	n20	5240	Ant2	23.478	0.5	Pass
NVNT	n40	5190	Ant1	41.738	0.5	Pass
NVNT	n40	5230	Ant1	42.698	0.5	Pass
NVNT	n40	5190	Ant2	42.387	0.5	Pass
NVNT	n40	5230	Ant2	42.454	0.5	Pass
NVNT	ac20	5180	Ant1	24.726	0.5	Pass
NVNT	ac20	5200	Ant1	23.579	0.5	Pass
NVNT	ac20	5240	Ant1	23.52	0.5	Pass
NVNT	ac20	5180	Ant2	22.924	0.5	Pass
NVNT	ac20	5200	Ant2	23.585	0.5	Pass
NVNT	ac20	5240	Ant2	23.92	0.5	Pass
NVNT	ac40	5190	Ant1	42.593	0.5	Pass
NVNT	ac40	5230	Ant1	43.184	0.5	Pass
NVNT	ac40	5190	Ant2	42.662	0.5	Pass
NVNT	ac40	5230	Ant2	41.614	0.5	Pass
NVNT	ac80	5210	Ant1	85.176	0.5	Pass
NVNT	ac80	5210	Ant2	82.834	0.5	Pass

Test Graphs

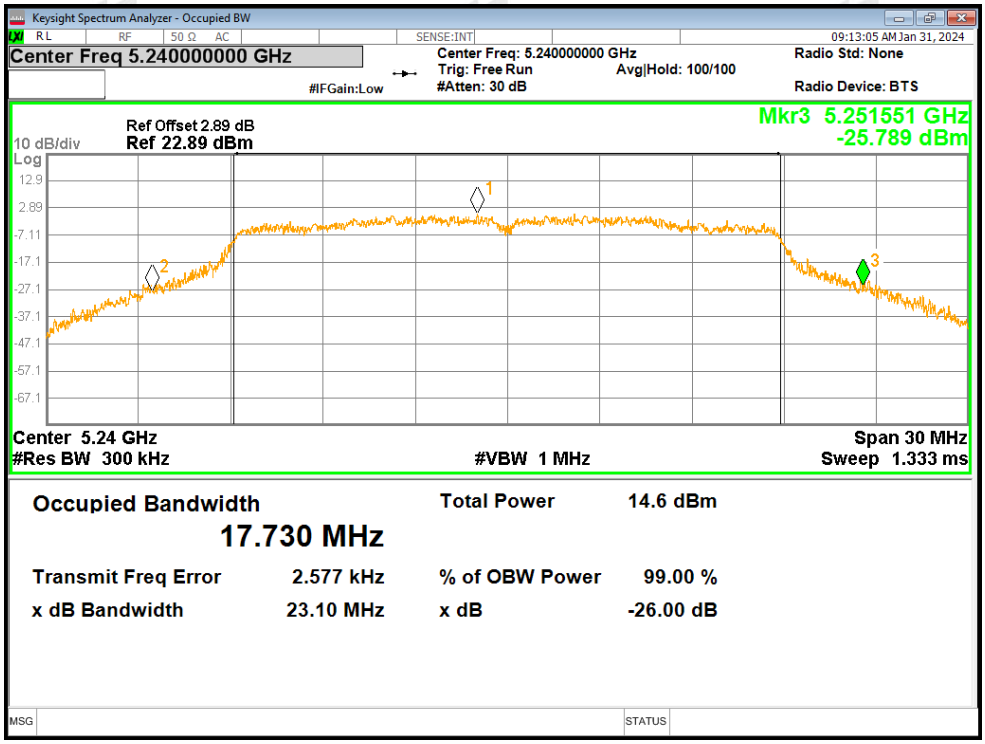
-26dB Bandwidth NVNT a 5180MHz Ant1



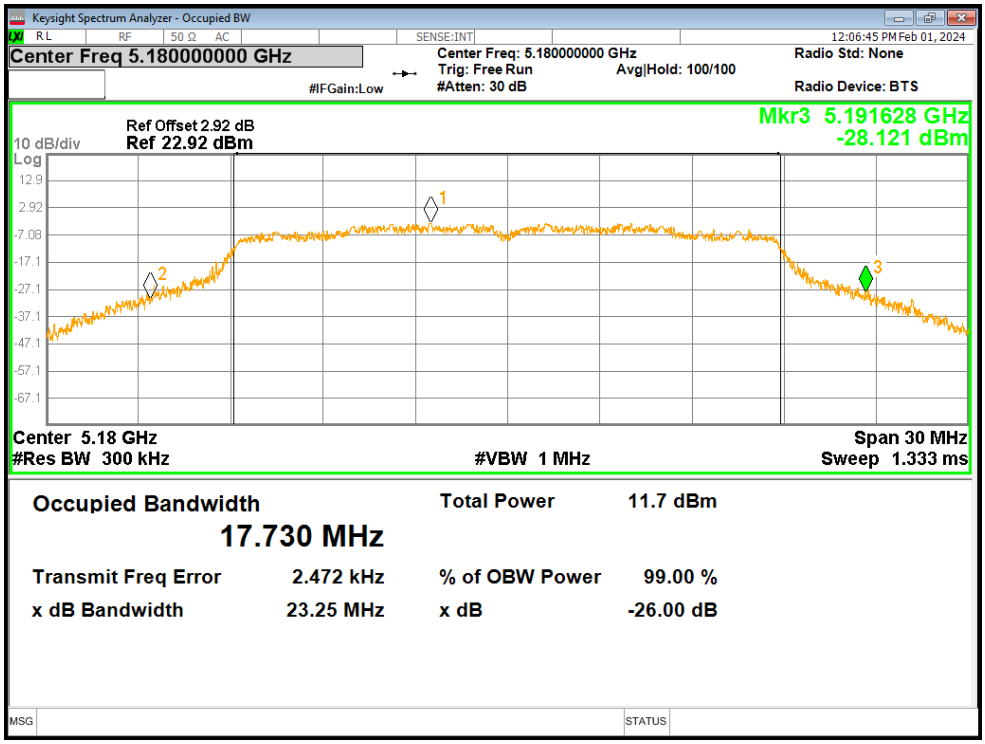
-26dB Bandwidth NVNT a 5200MHz Ant1



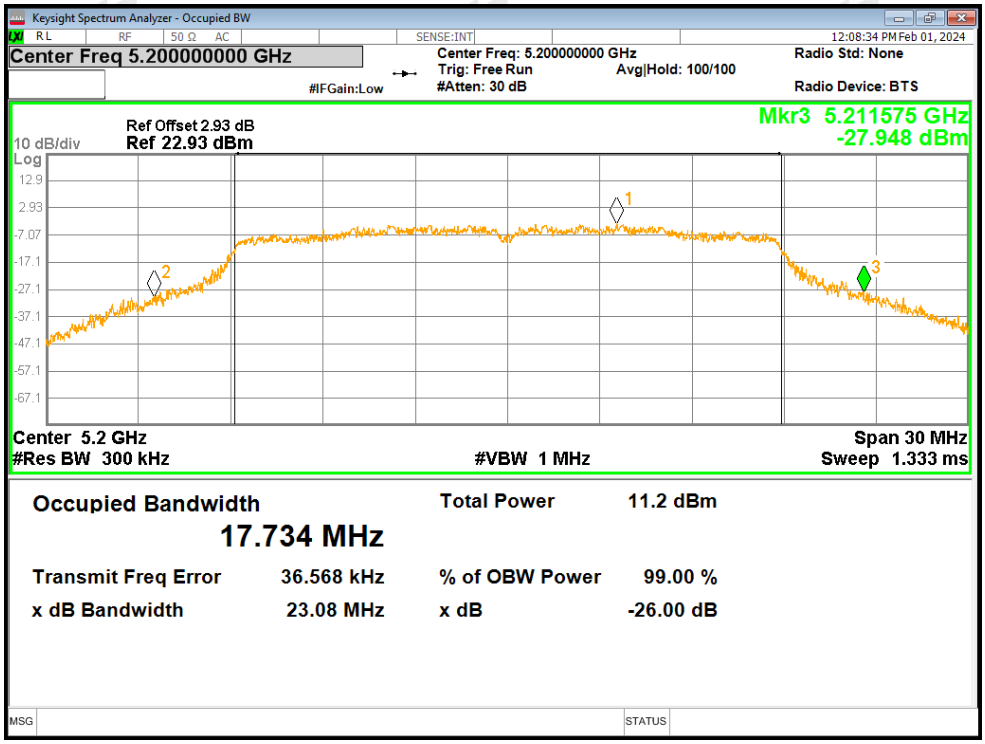
-26dB Bandwidth NVNT a 5240MHz Ant1



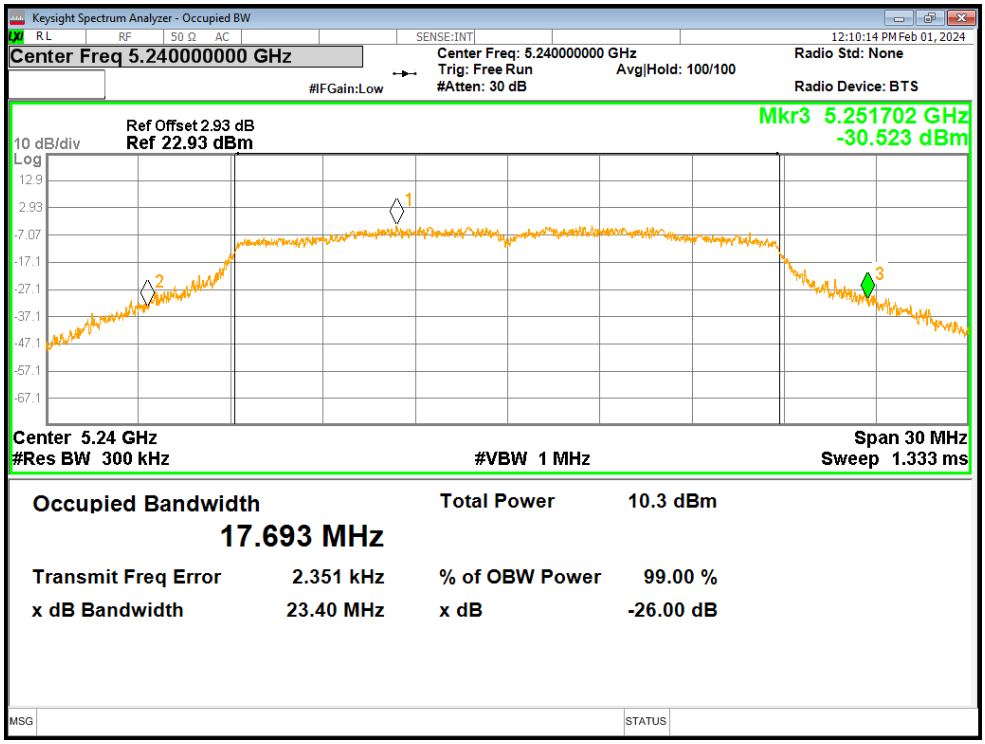
-26dB Bandwidth NVNT a 5180MHz Ant2



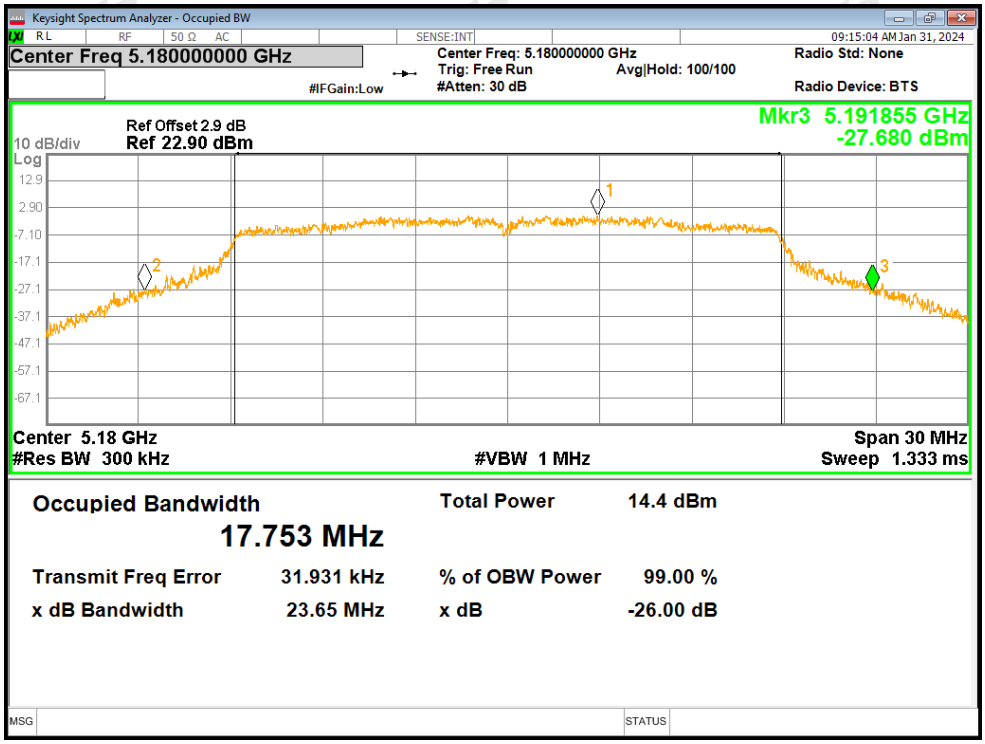
-26dB Bandwidth NVNT a 5200MHz Ant2



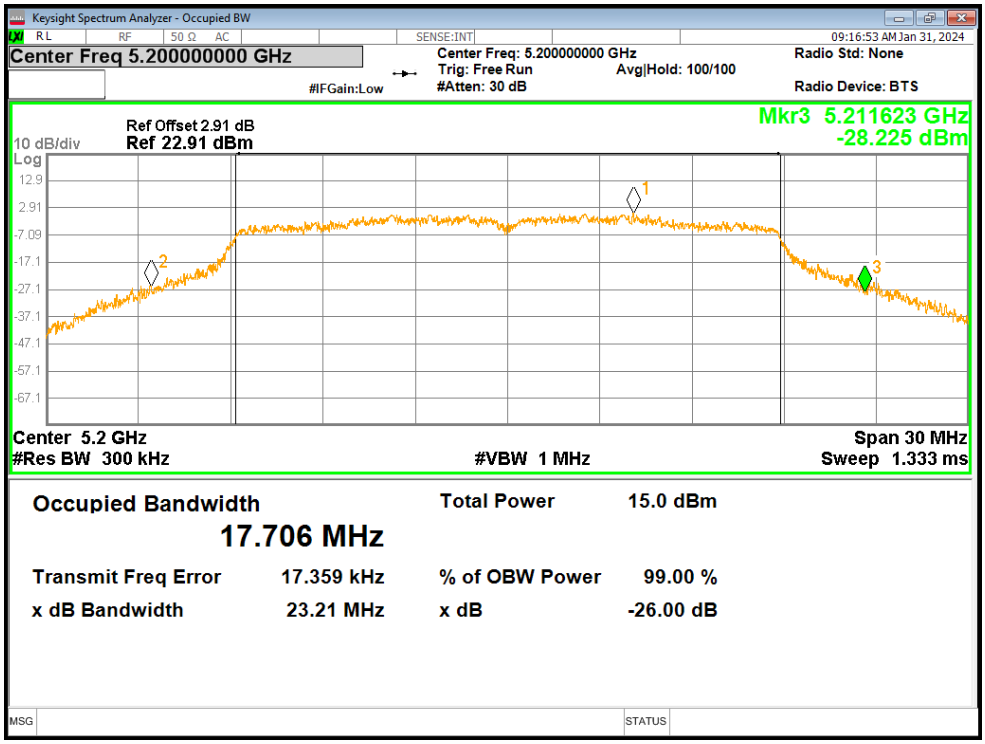
-26dB Bandwidth NVNT a 5240MHz Ant2



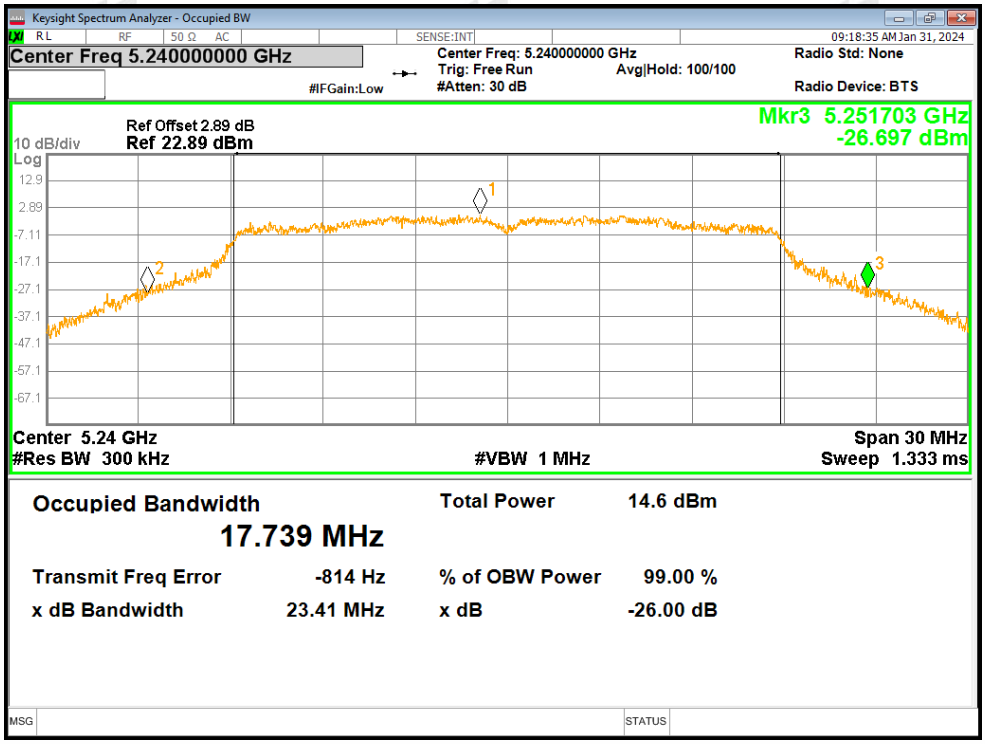
-26dB Bandwidth NVNT n20 5180MHz Ant1



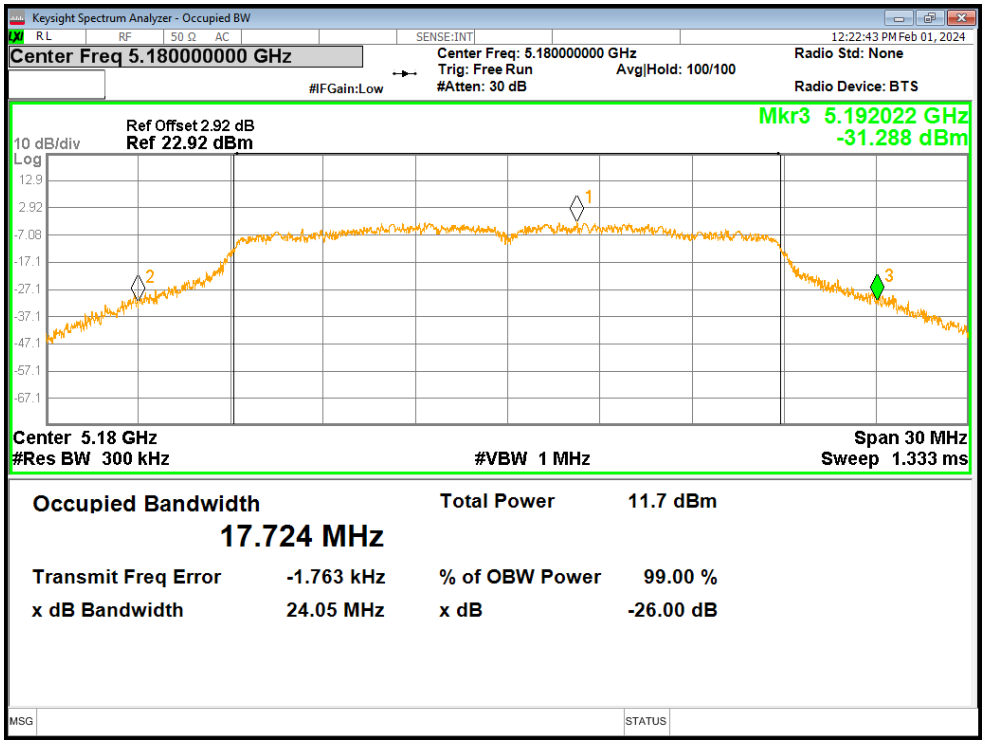
-26dB Bandwidth NVNT n20 5200MHz Ant1



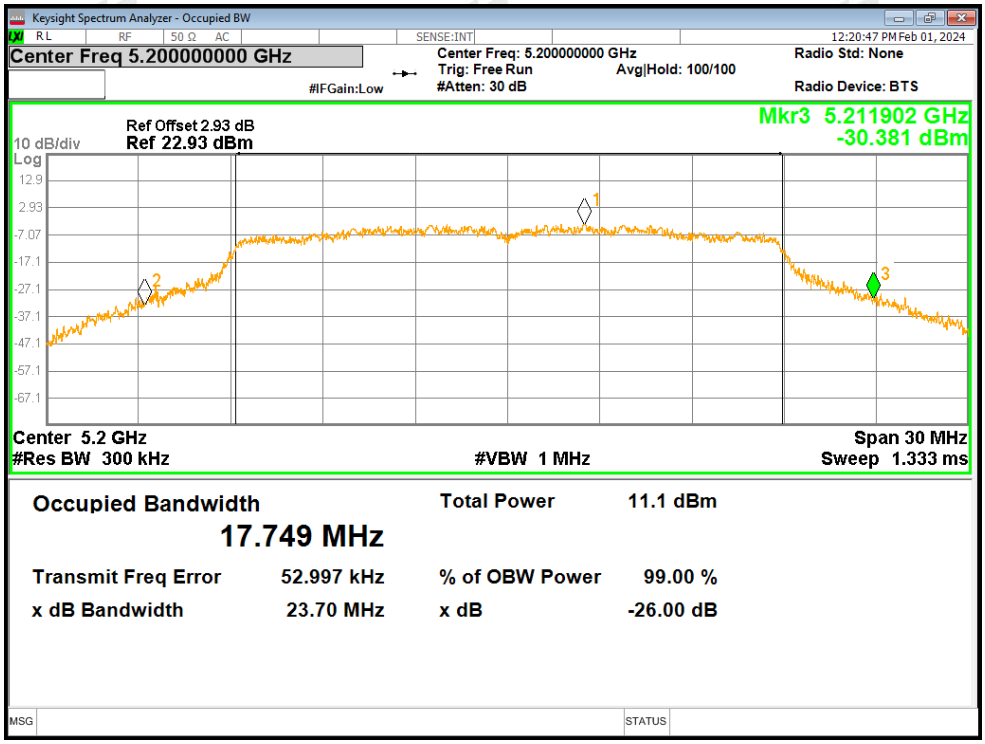
-26dB Bandwidth NVNT n20 5240MHz Ant1



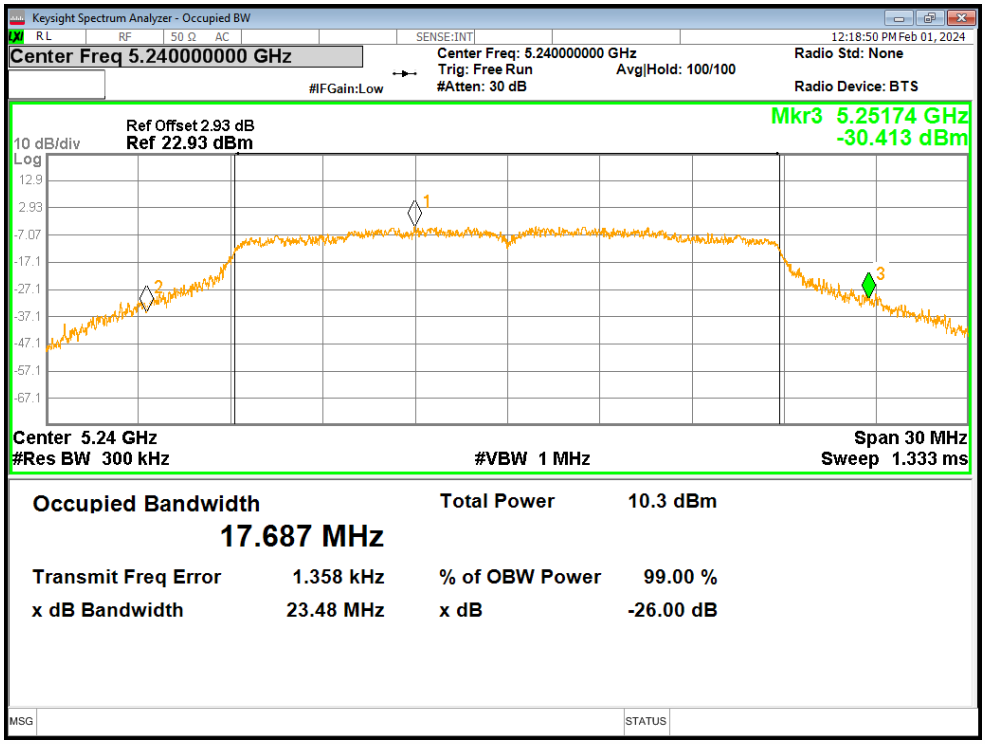
-26dB Bandwidth NVNT n20 5180MHz Ant2



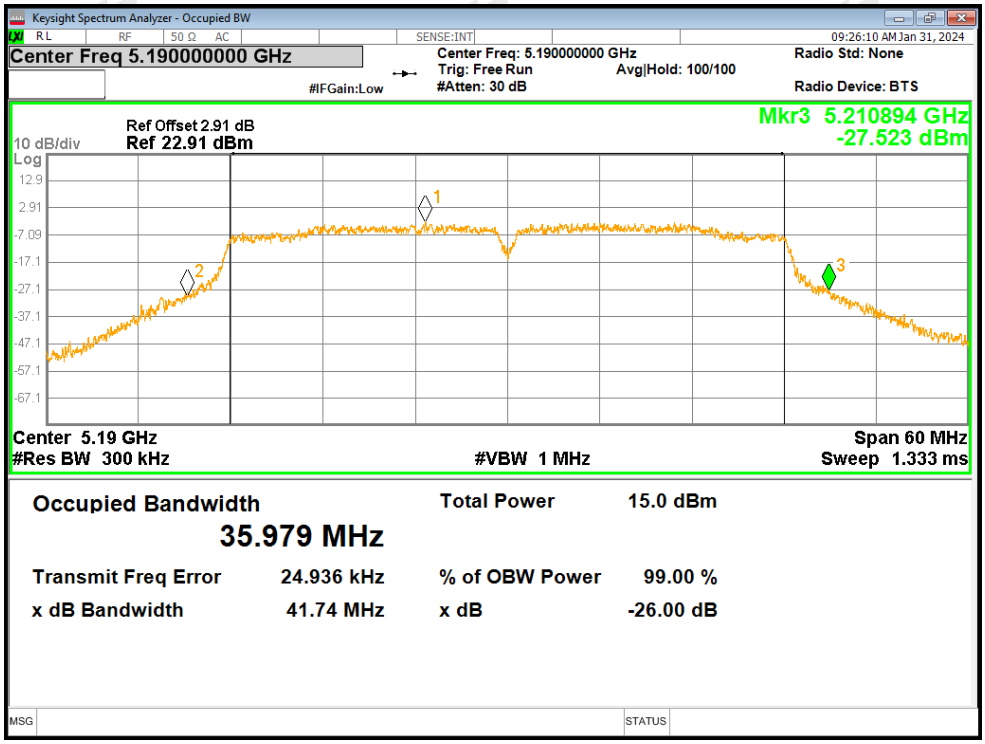
-26dB Bandwidth NVNT n20 5200MHz Ant2



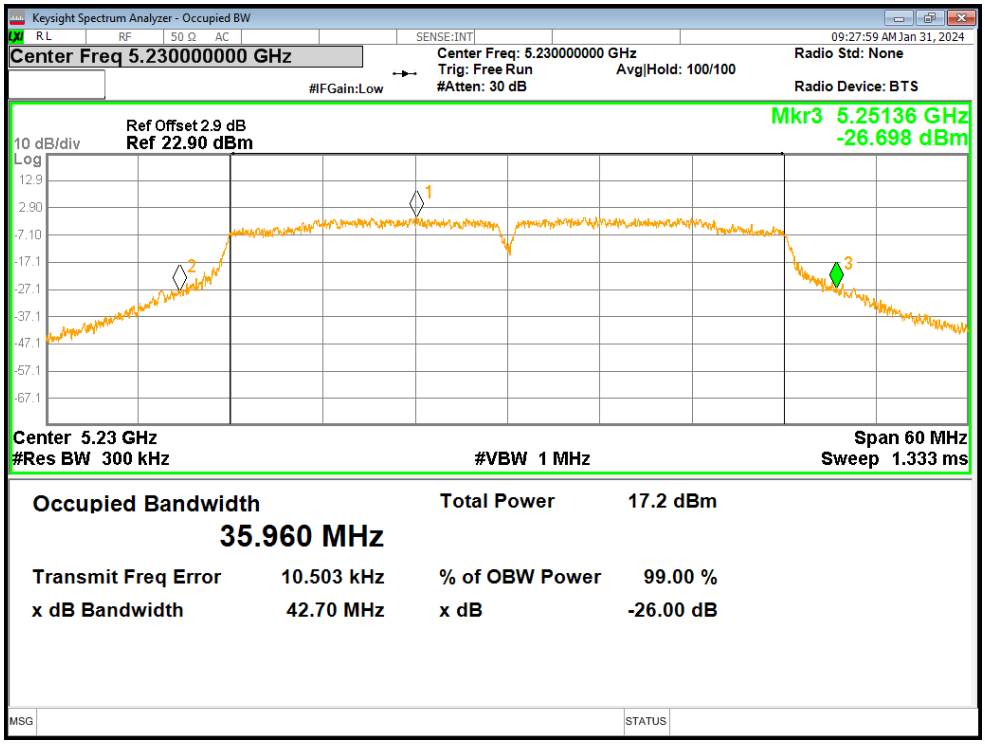
-26dB Bandwidth NVNT n20 5240MHz Ant2



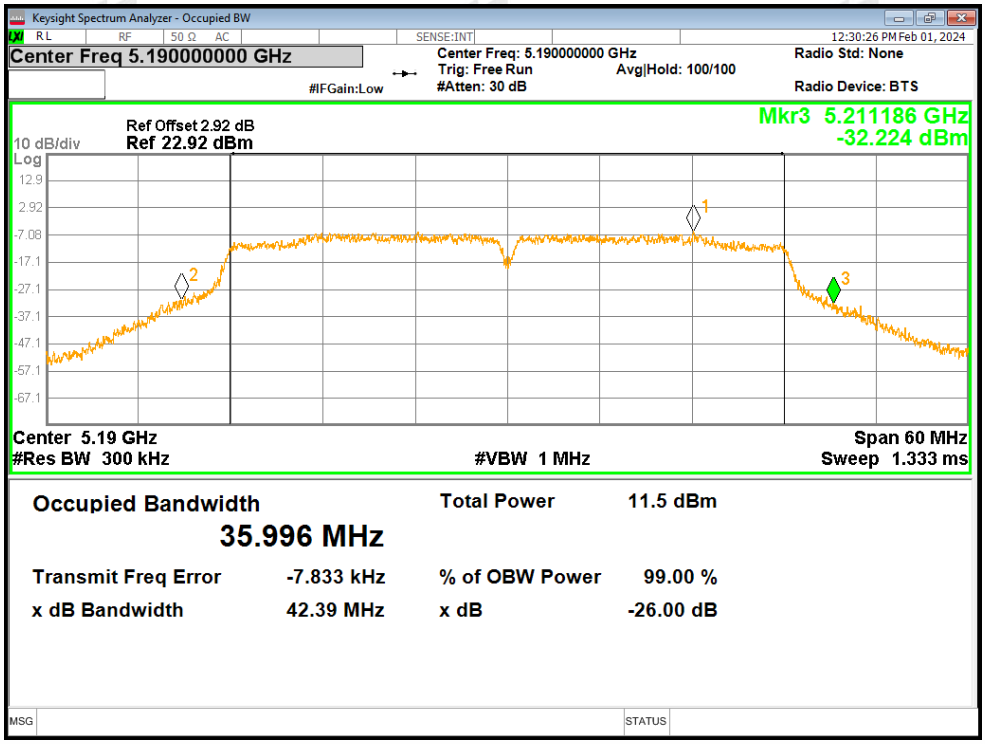
-26dB Bandwidth NVNT n40 5190MHz Ant1



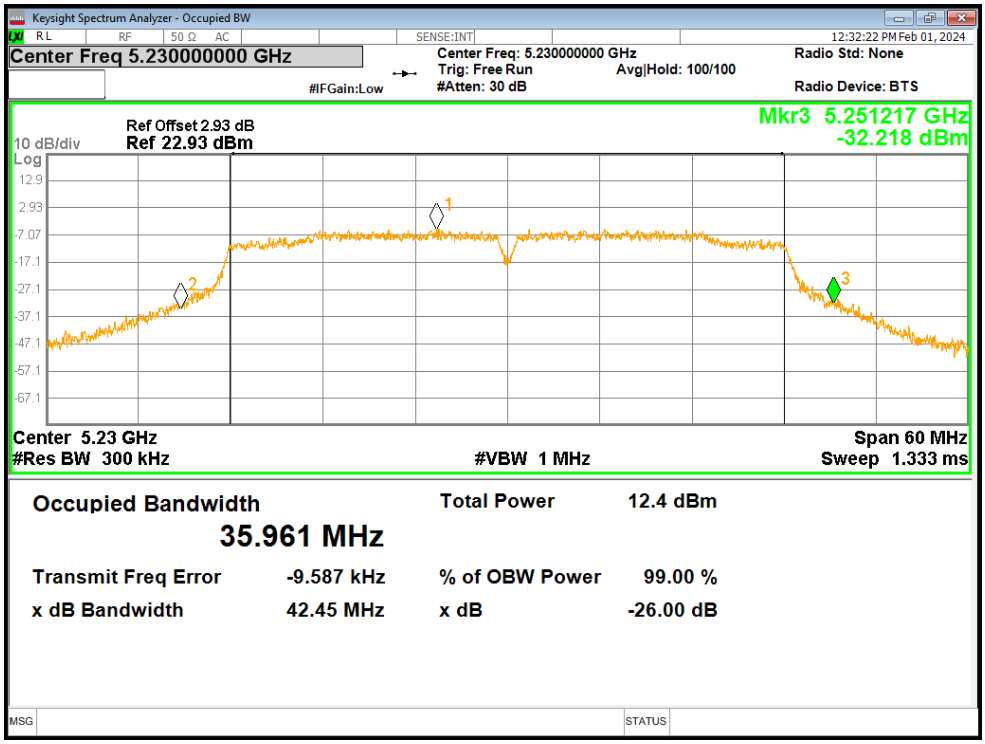
-26dB Bandwidth NVNT n40 5230MHz Ant1



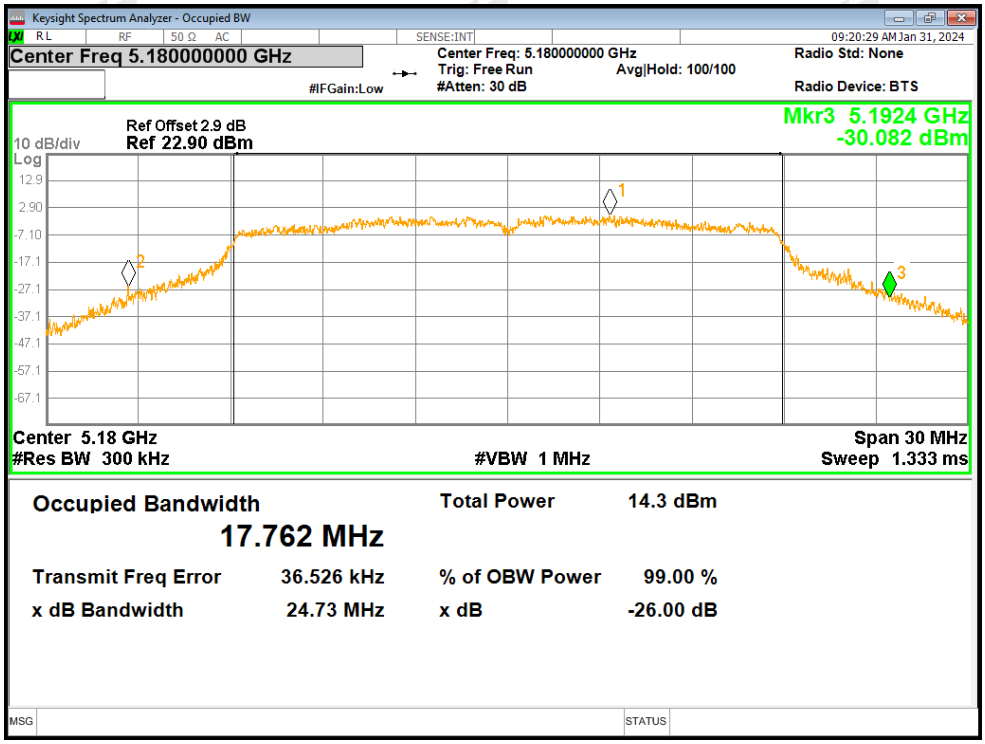
-26dB Bandwidth NVNT n40 5190MHz Ant2



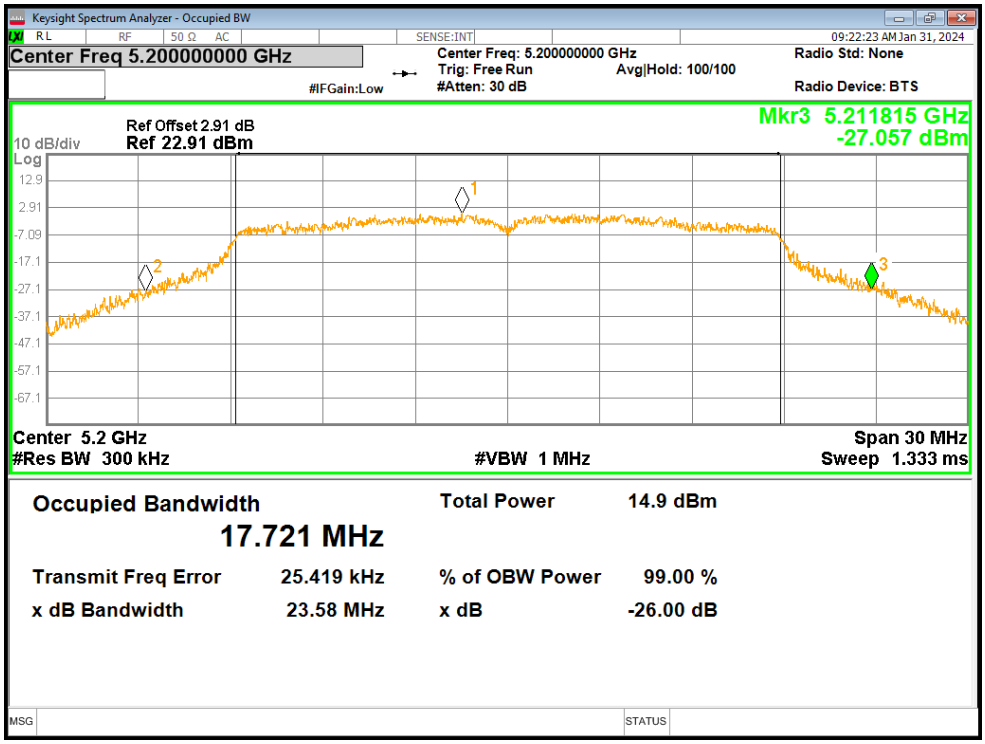
-26dB Bandwidth NVNT n40 5230MHz Ant2



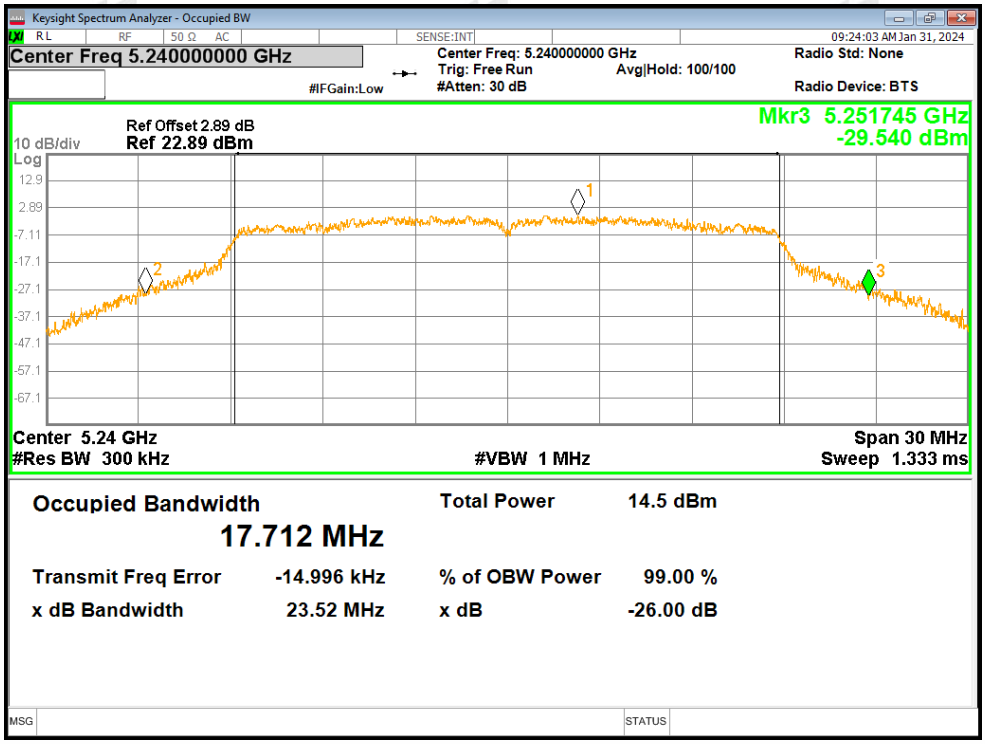
-26dB Bandwidth NVNT ac20 5180MHz Ant1



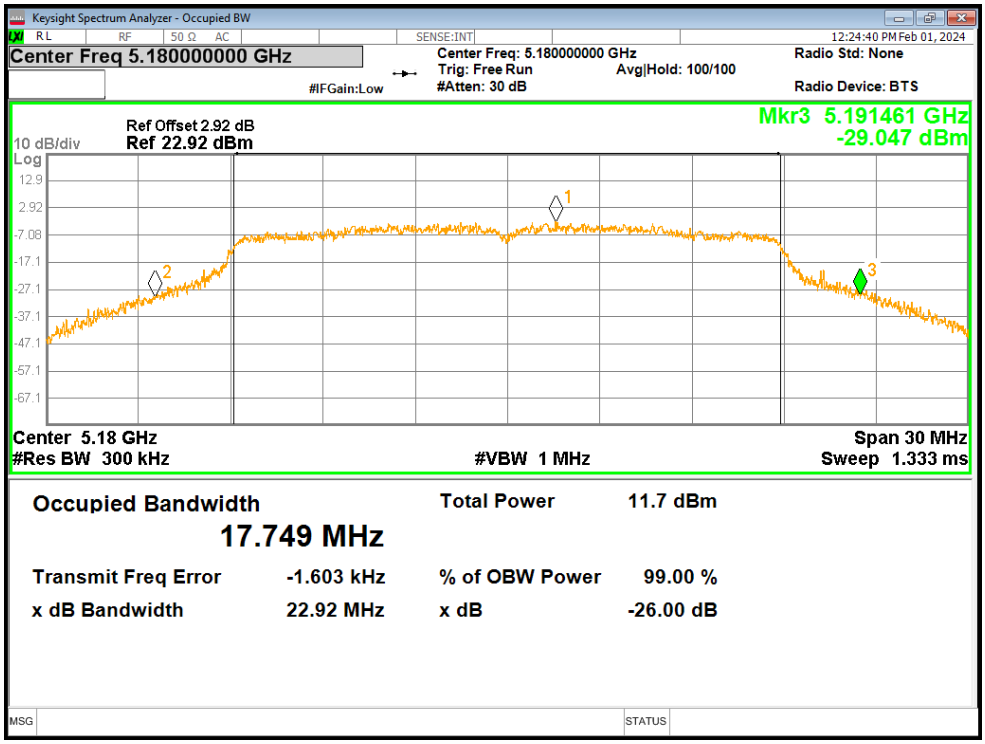
-26dB Bandwidth NVNT ac20 5200MHz Ant1



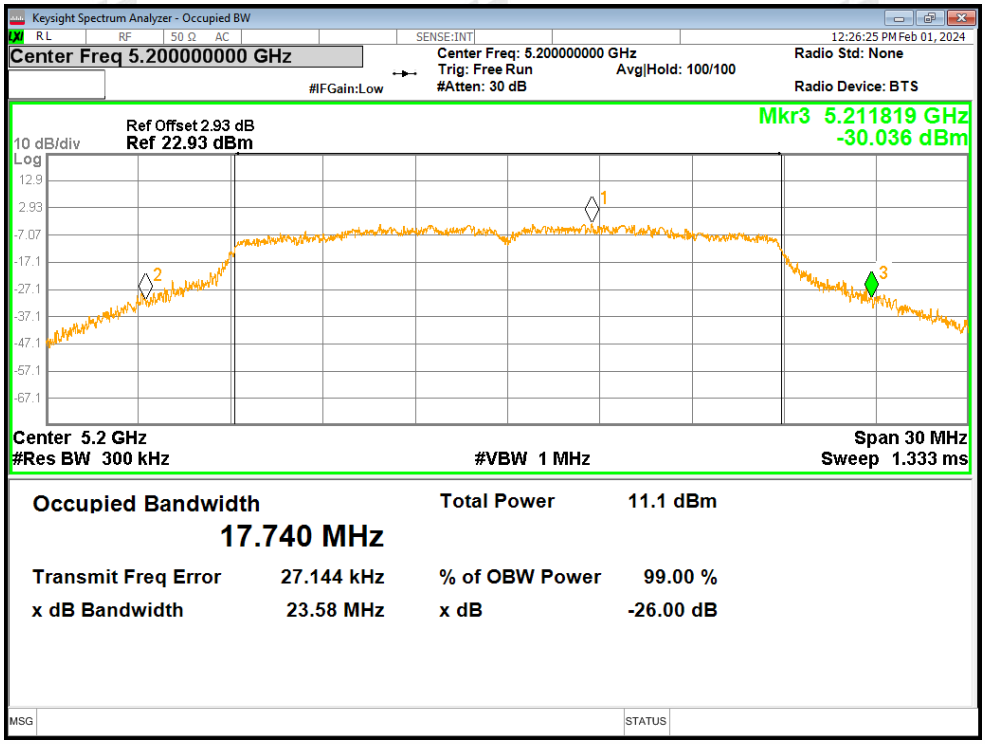
-26dB Bandwidth NVNT ac20 5240MHz Ant1



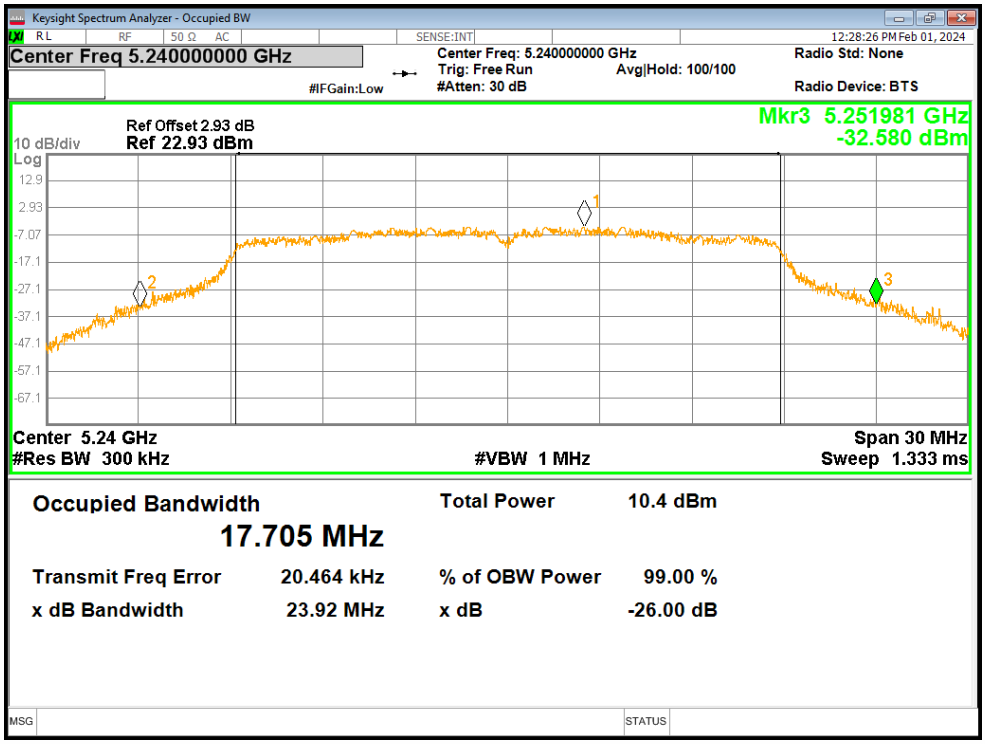
-26dB Bandwidth NVNT ac20 5180MHz Ant2



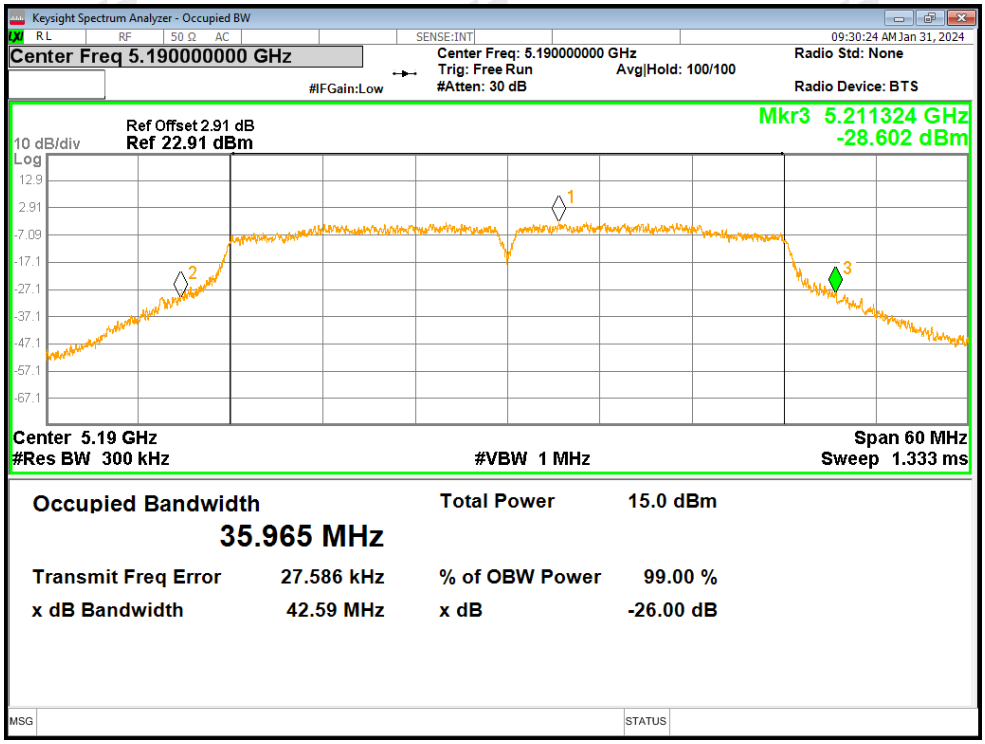
-26dB Bandwidth NVNT ac20 5200MHz Ant2



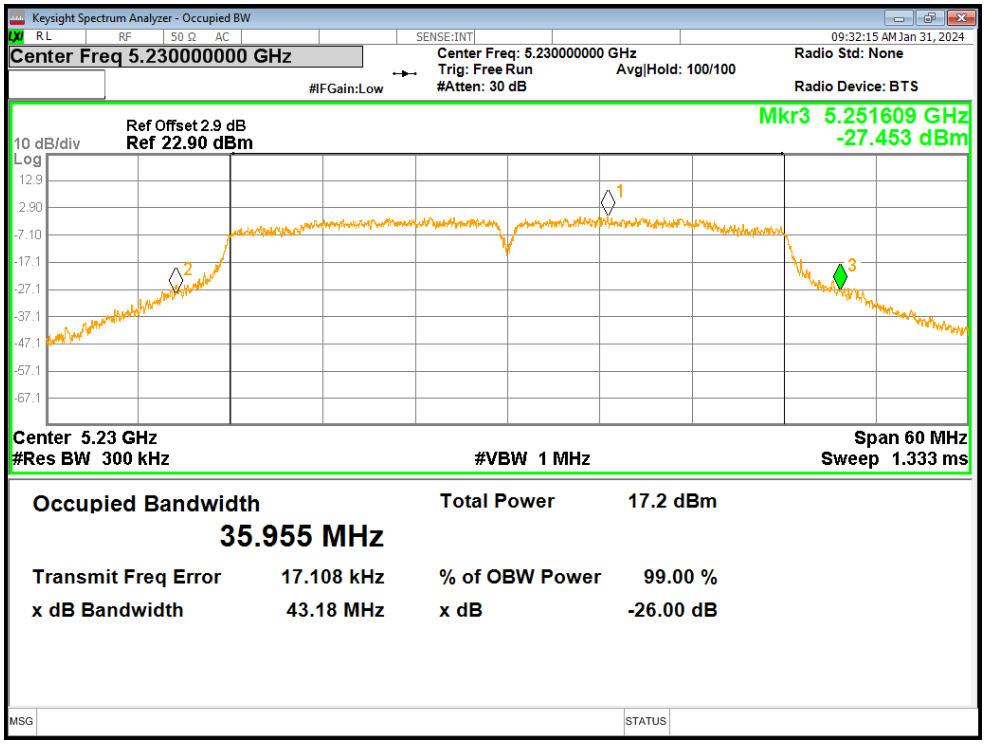
-26dB Bandwidth NVNT ac20 5240MHz Ant2



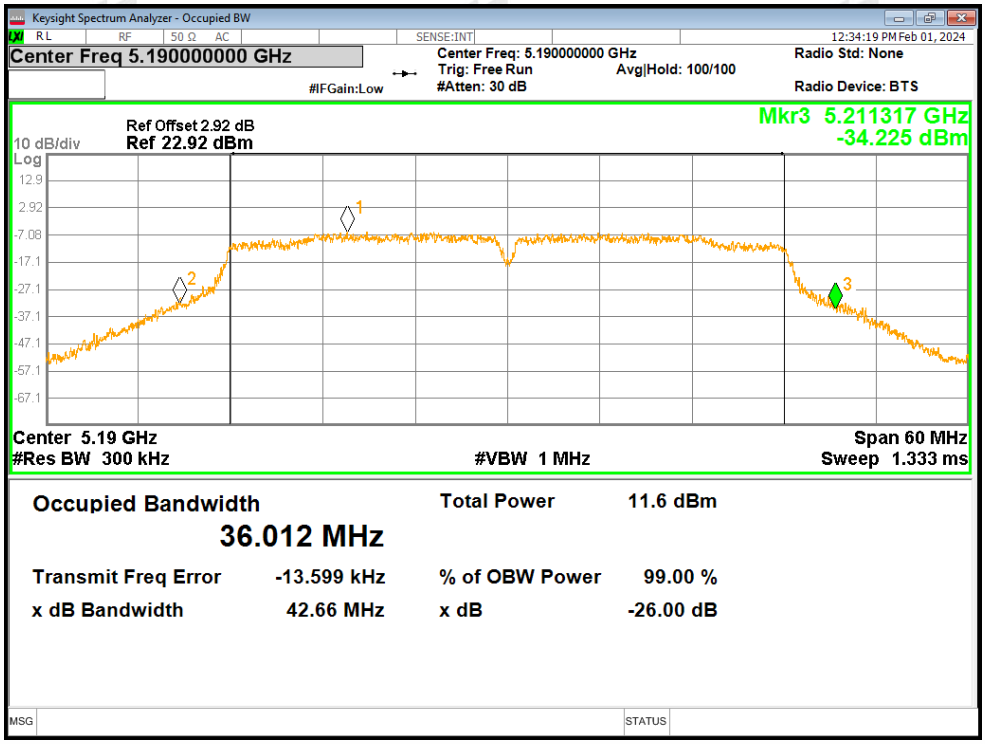
-26dB Bandwidth NVNT ac40 5190MHz Ant1



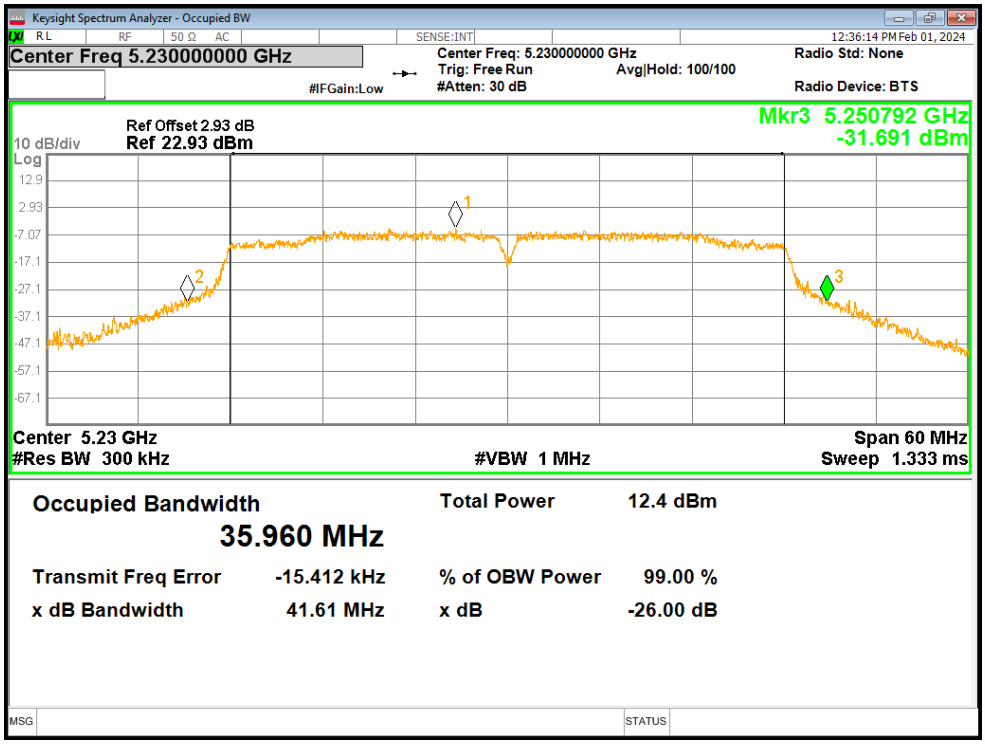
-26dB Bandwidth NVNT ac40 5230MHz Ant1



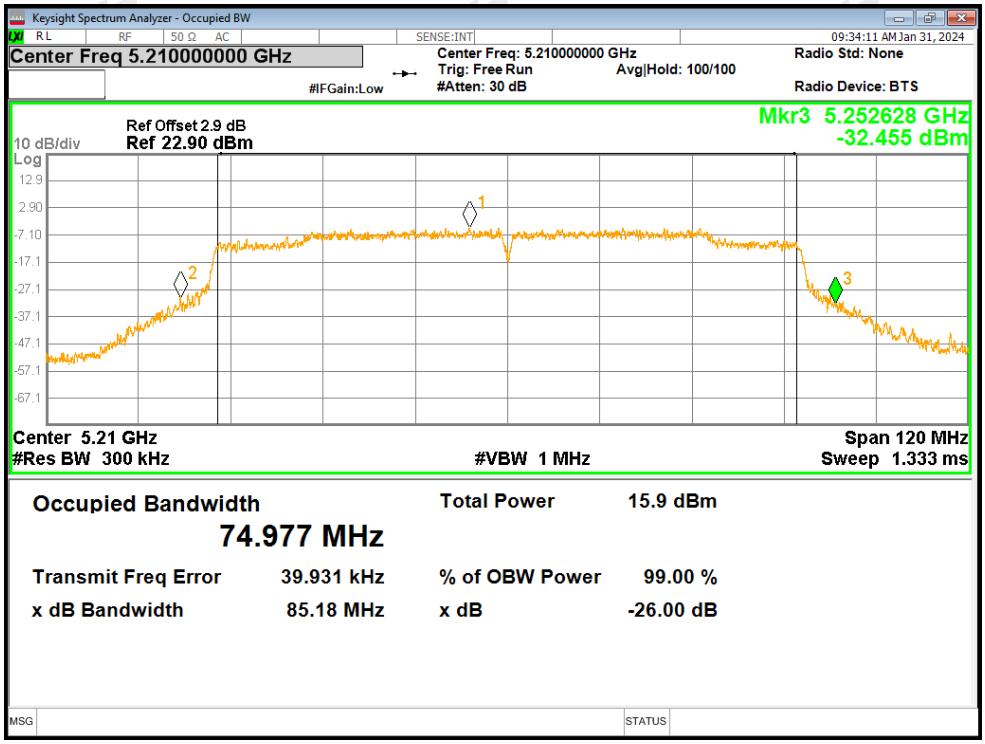
-26dB Bandwidth NVNT ac40 5190MHz Ant2



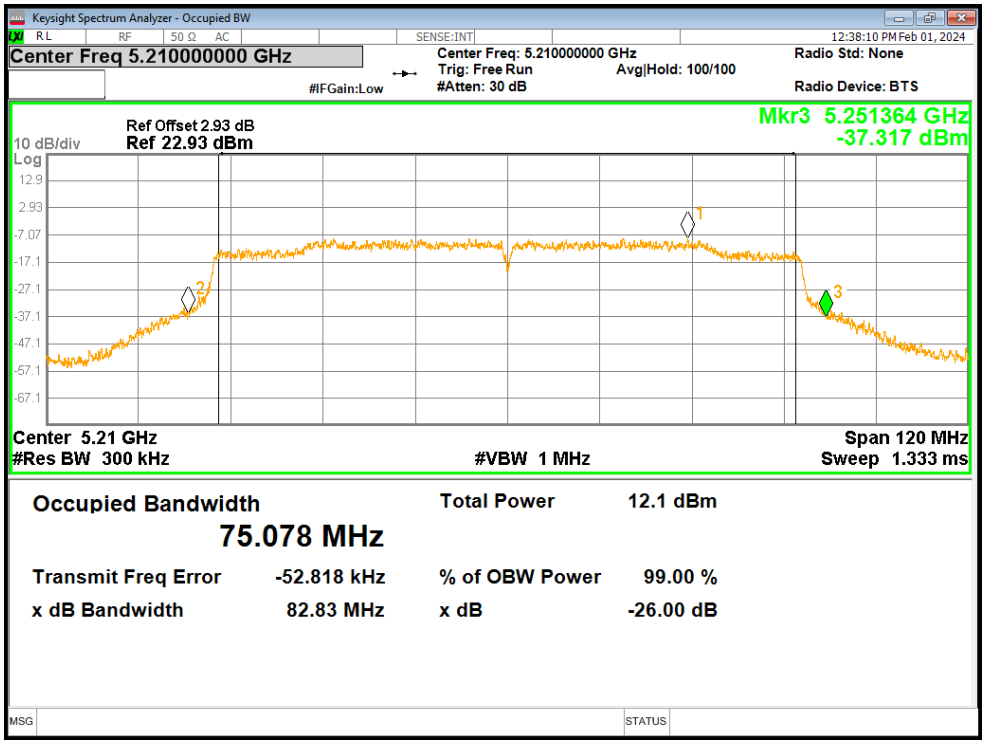
-26dB Bandwidth NVNT ac40 5230MHz Ant2



-26dB Bandwidth NVNT ac80 5210MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant2

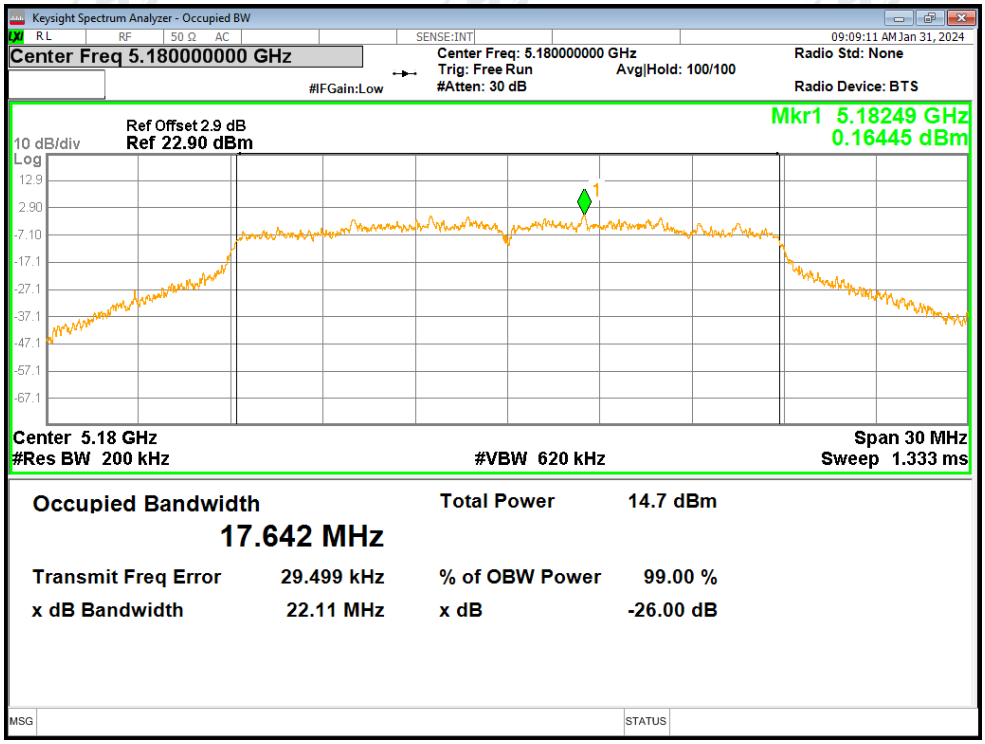


A4. Occupied Channel Bandwidth

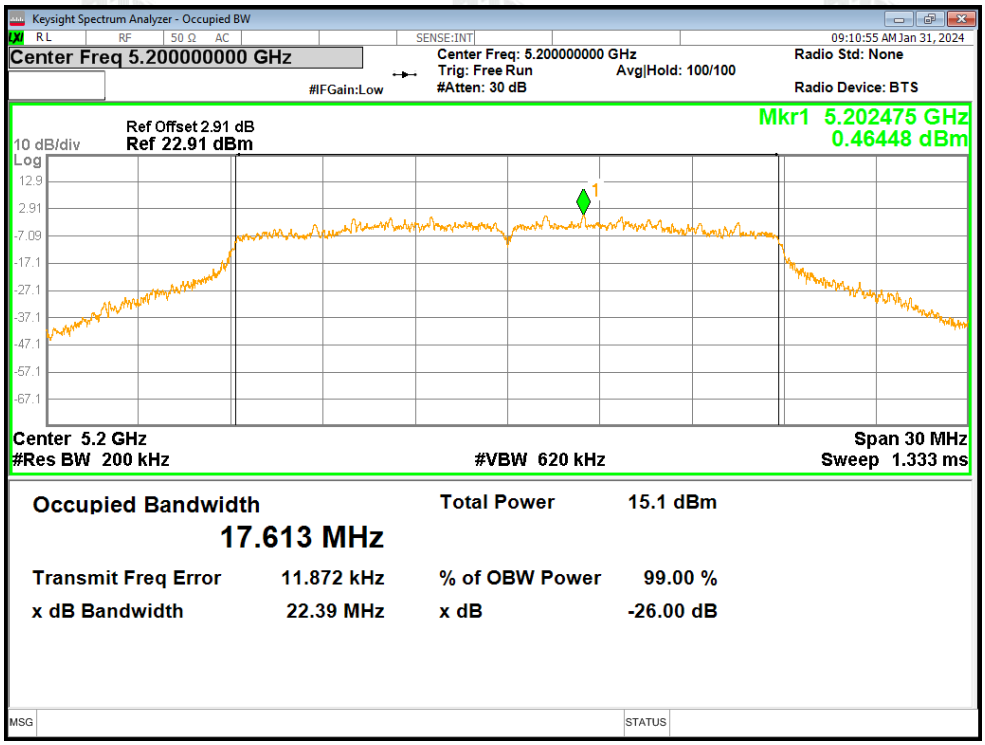
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	17.642
NVNT	a	5200	Ant1	17.613
NVNT	a	5240	Ant1	17.629
NVNT	a	5180	Ant2	17.627
NVNT	a	5200	Ant2	17.671
NVNT	a	5240	Ant2	17.645
NVNT	n20	5180	Ant1	17.674
NVNT	n20	5200	Ant1	17.63
NVNT	n20	5240	Ant1	17.651
NVNT	n20	5180	Ant2	17.652
NVNT	n20	5200	Ant2	17.645
NVNT	n20	5240	Ant2	17.648
NVNT	n40	5190	Ant1	36.062
NVNT	n40	5230	Ant1	35.994
NVNT	n40	5190	Ant2	36.053
NVNT	n40	5230	Ant2	36.003
NVNT	ac20	5180	Ant1	17.679
NVNT	ac20	5200	Ant1	17.656
NVNT	ac20	5240	Ant1	17.648
NVNT	ac20	5180	Ant2	17.648
NVNT	ac20	5200	Ant2	17.694
NVNT	ac20	5240	Ant2	17.632
NVNT	ac40	5190	Ant1	35.97
NVNT	ac40	5230	Ant1	36.001
NVNT	ac40	5190	Ant2	36.036
NVNT	ac40	5230	Ant2	35.978
NVNT	ac80	5210	Ant1	74.952
NVNT	ac80	5210	Ant2	75.059

Test Graphs

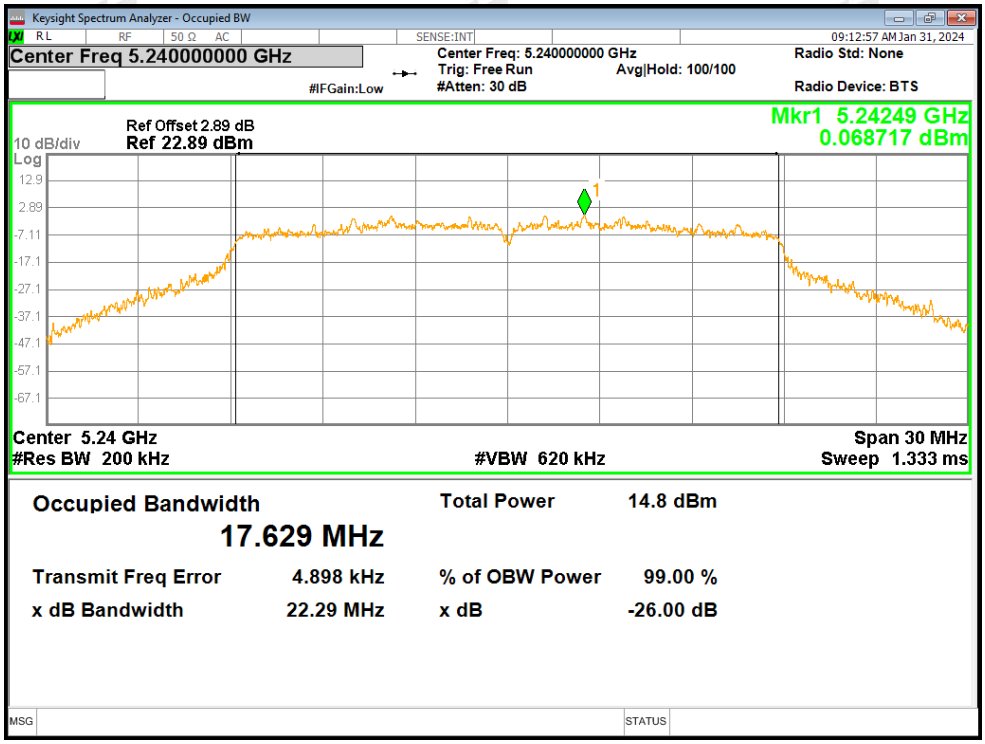
OBW NVNT a 5180MHz Ant1



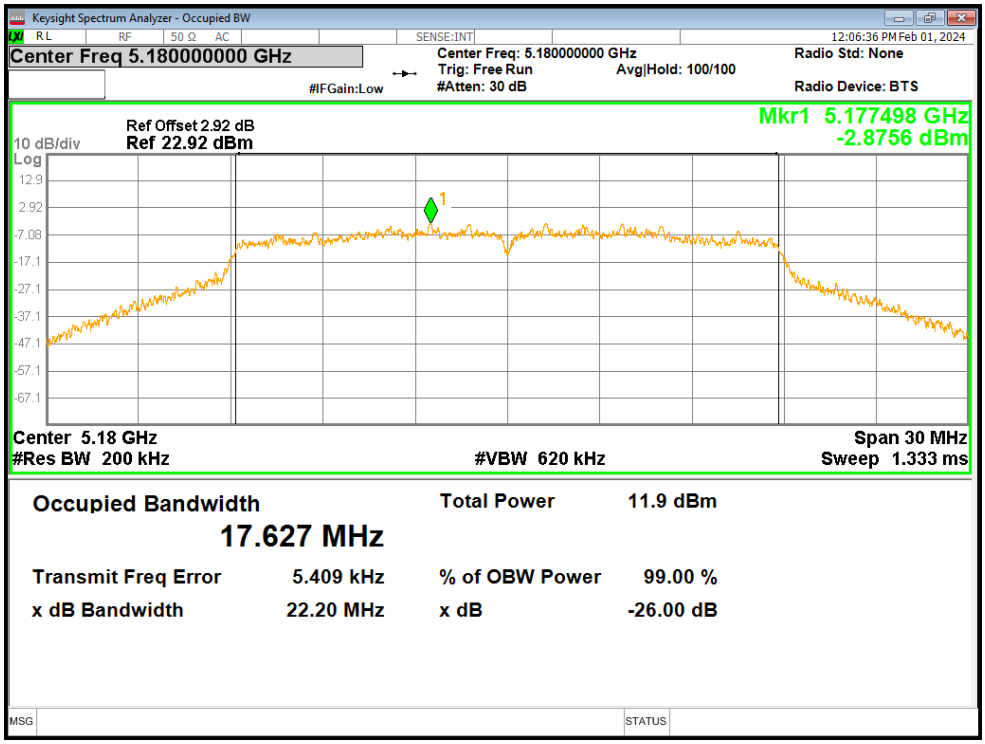
OBW NVNT a 5200MHz Ant1



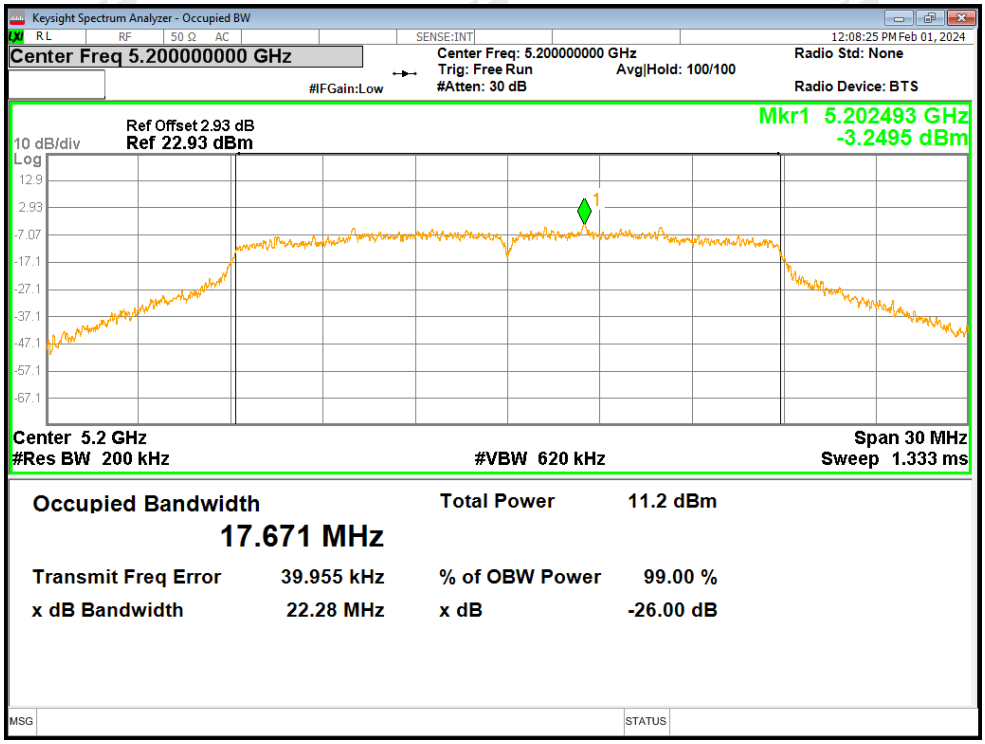
OBW NVNT a 5240MHz Ant1



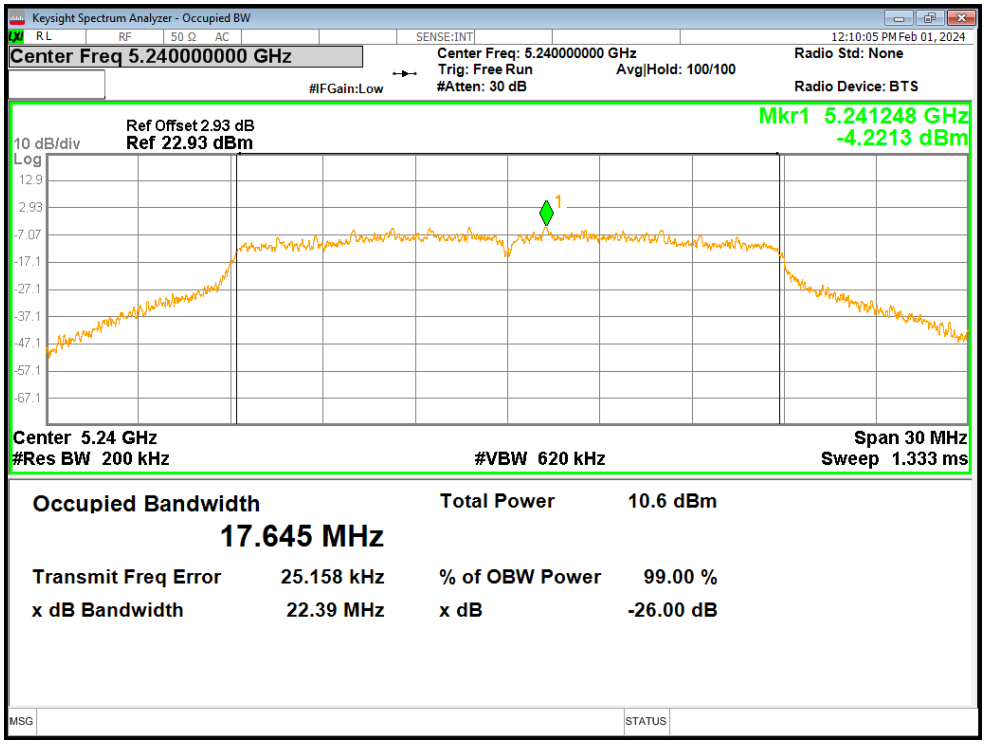
OBW NVNT a 5180MHz Ant2



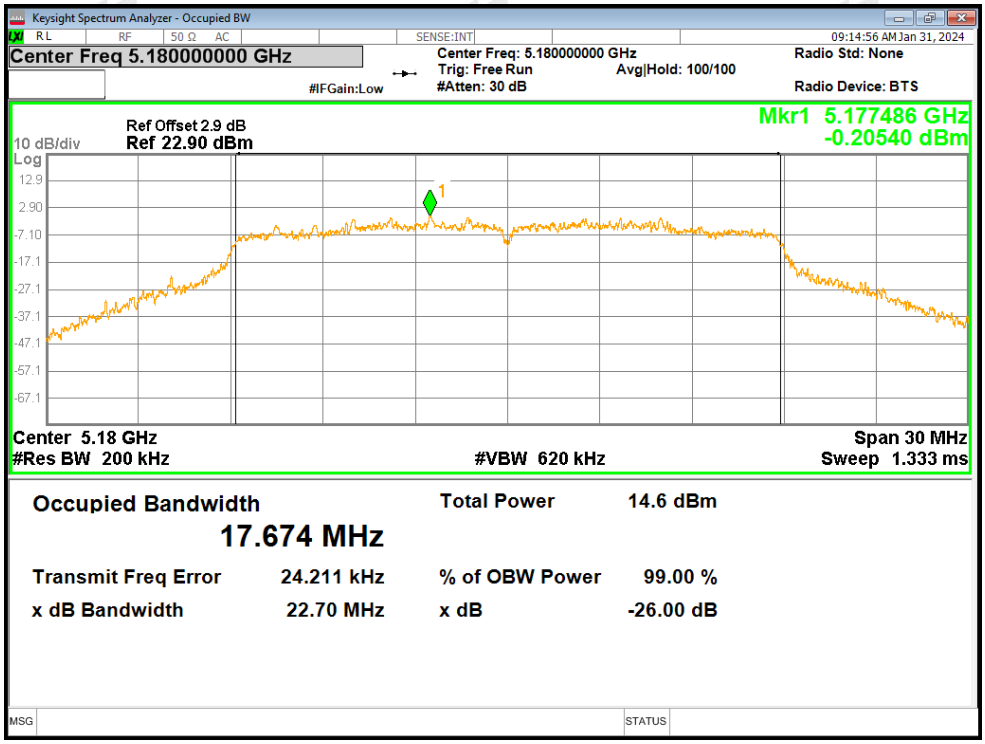
OBW NVNT a 5200MHz Ant2



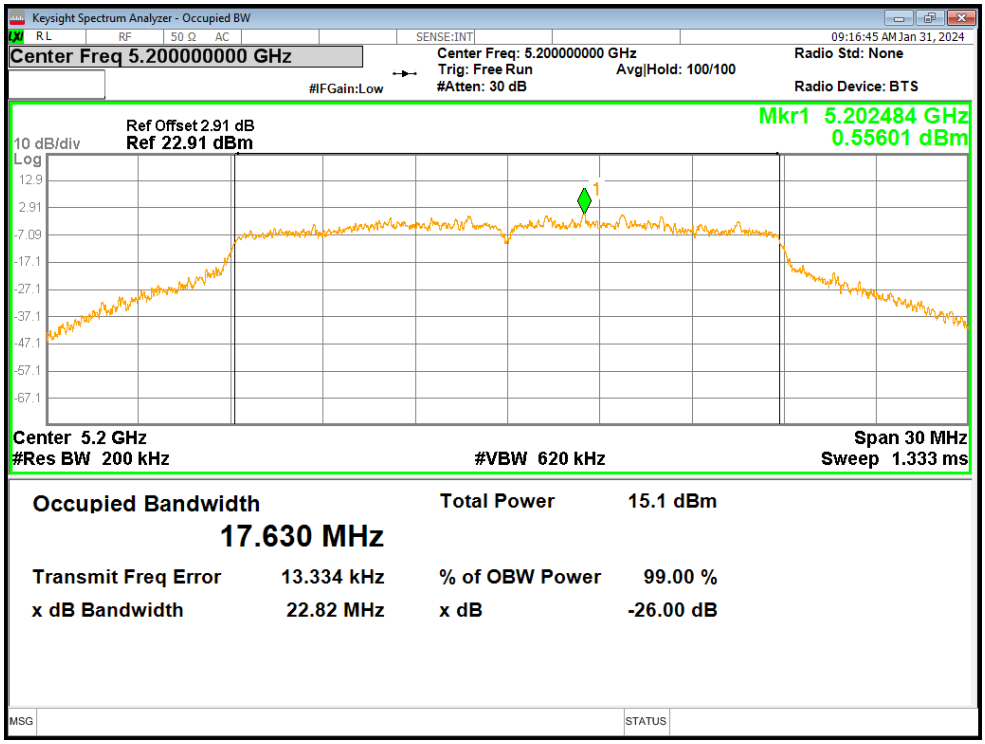
OBW NVNT a 5240MHz Ant2



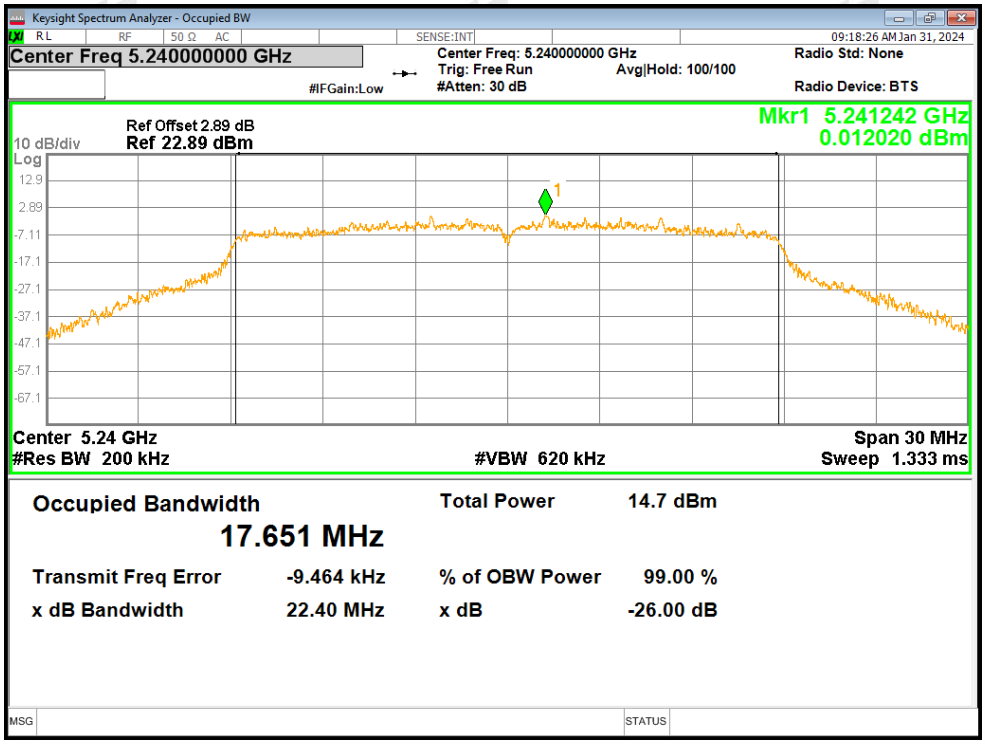
OBW NVNT n20 5180MHz Ant1



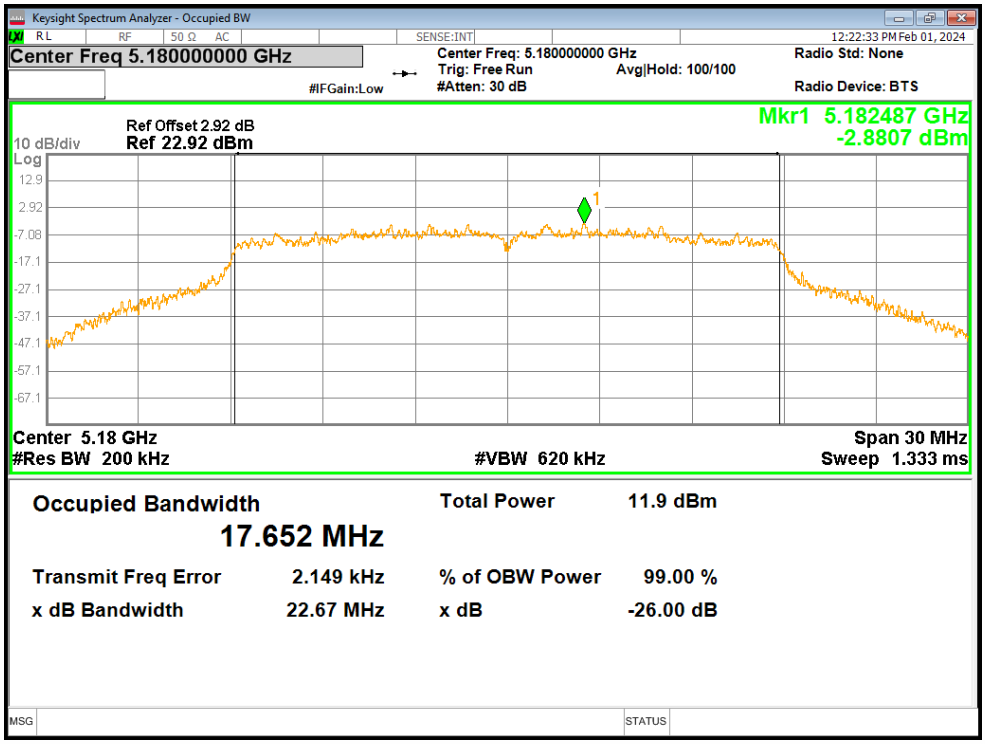
OBW NVNT n20 5200MHz Ant1



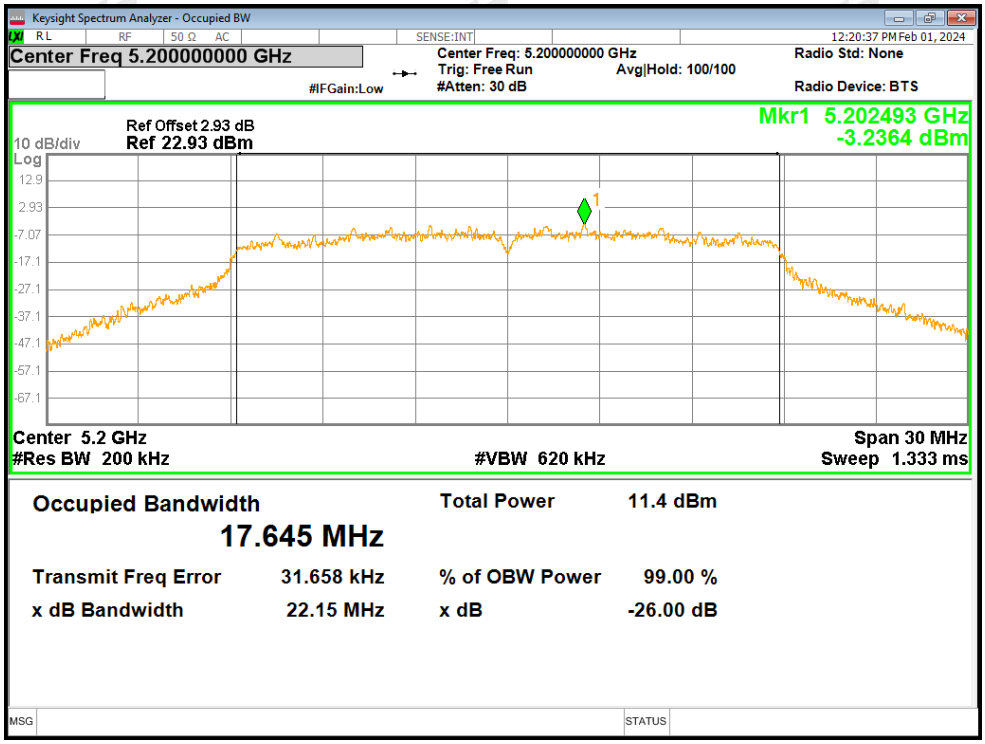
OBW NVNT n20 5240MHz Ant1



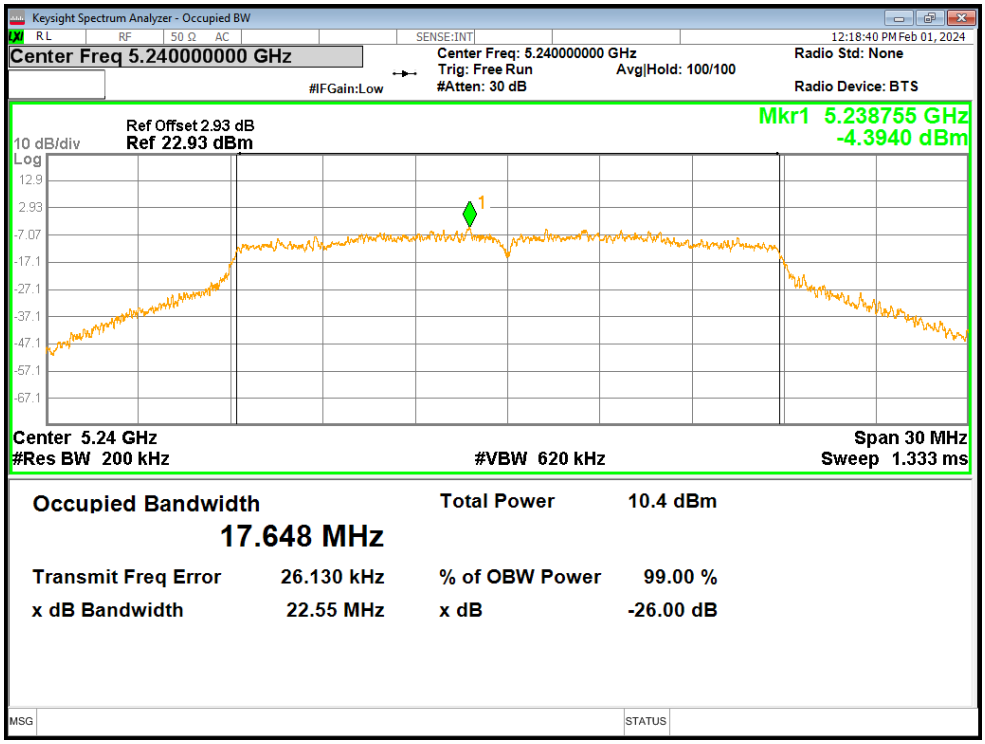
OBW NVNT n20 5180MHz Ant2



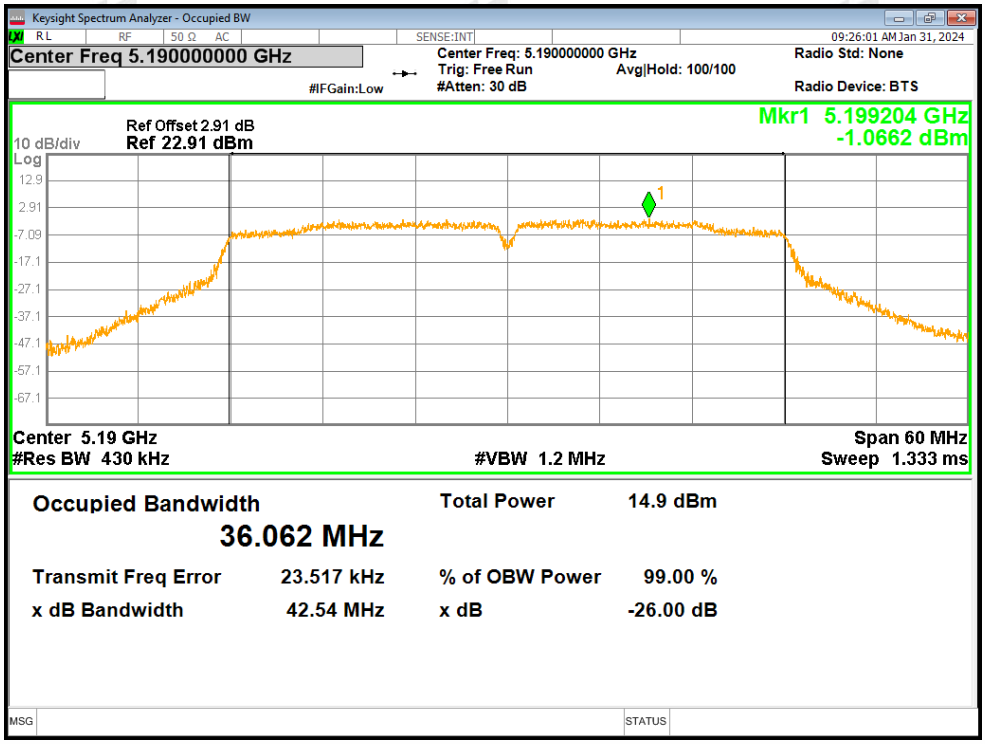
OBW NVNT n20 5200MHz Ant2



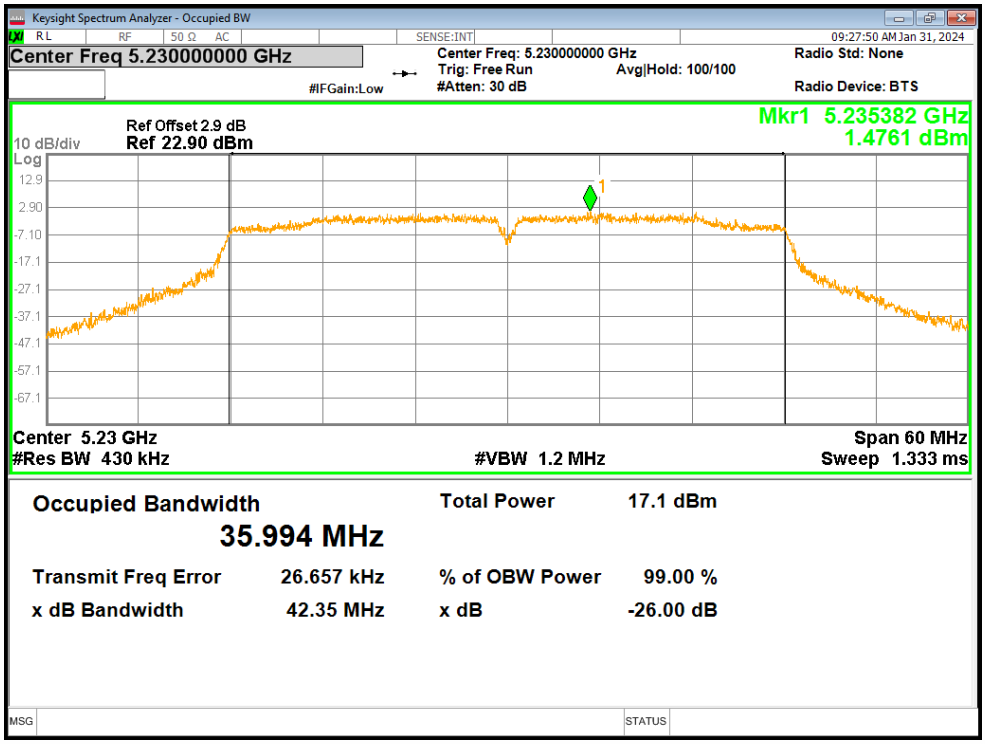
OBW NVNT n20 5240MHz Ant2



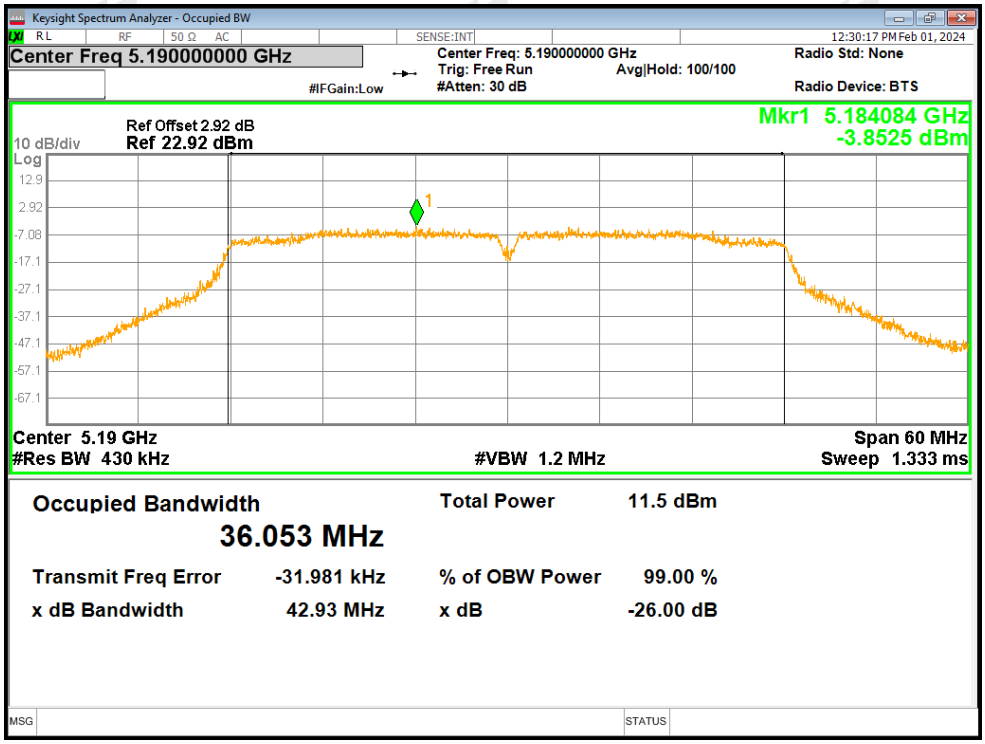
OBW NVNT n40 5190MHz Ant1



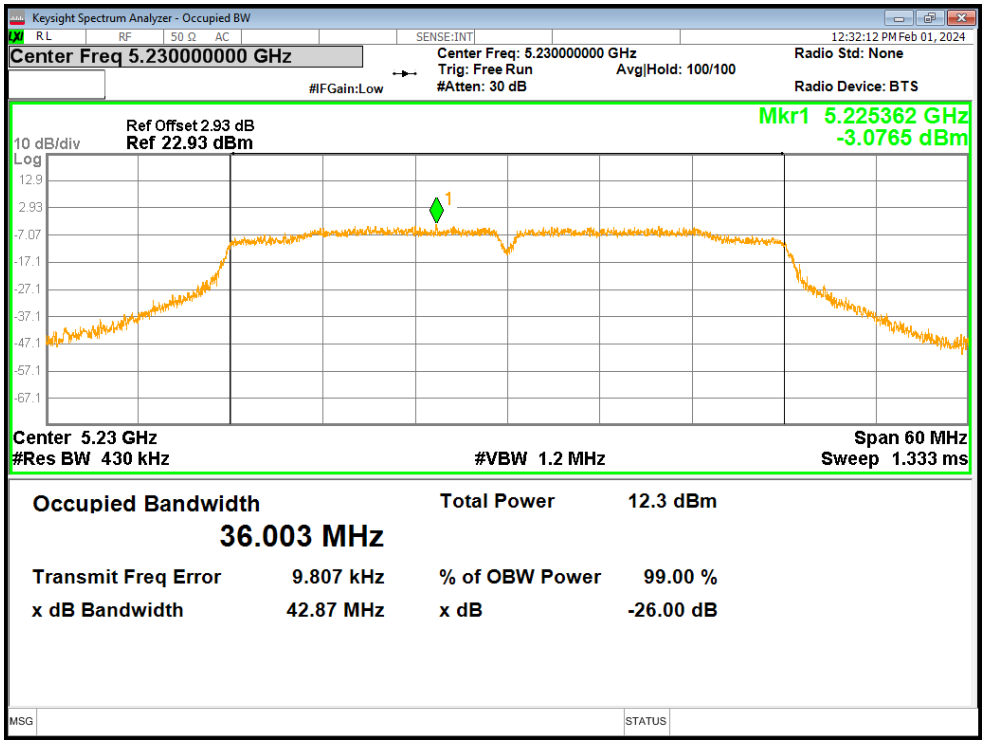
OBW NVNT n40 5230MHz Ant1



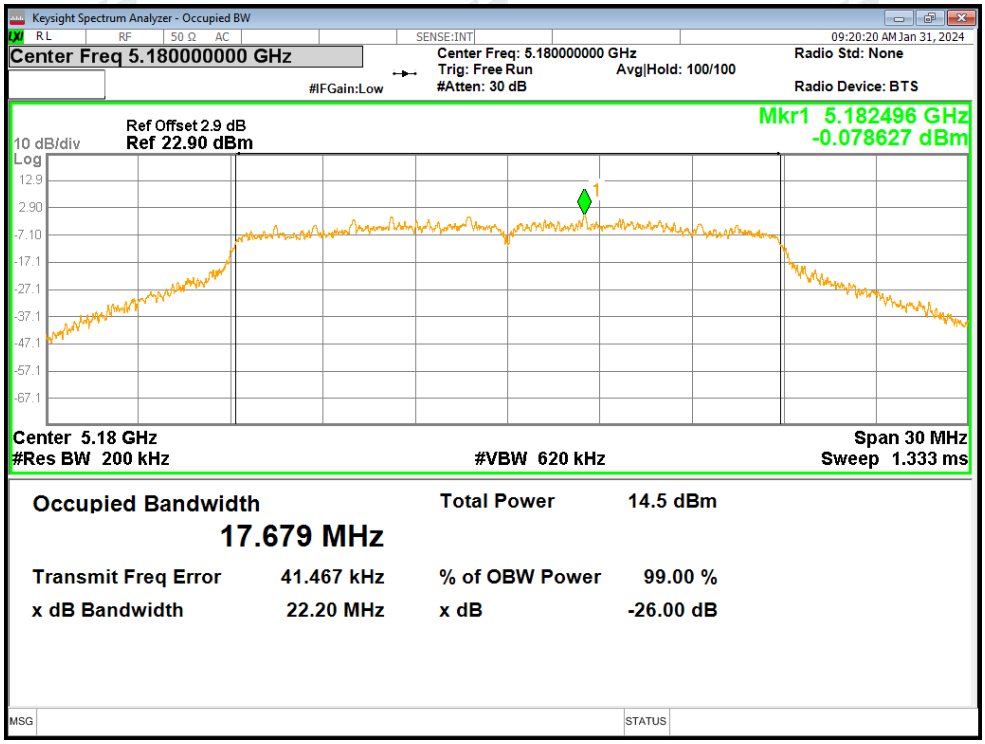
OBW NVNT n40 5190MHz Ant2



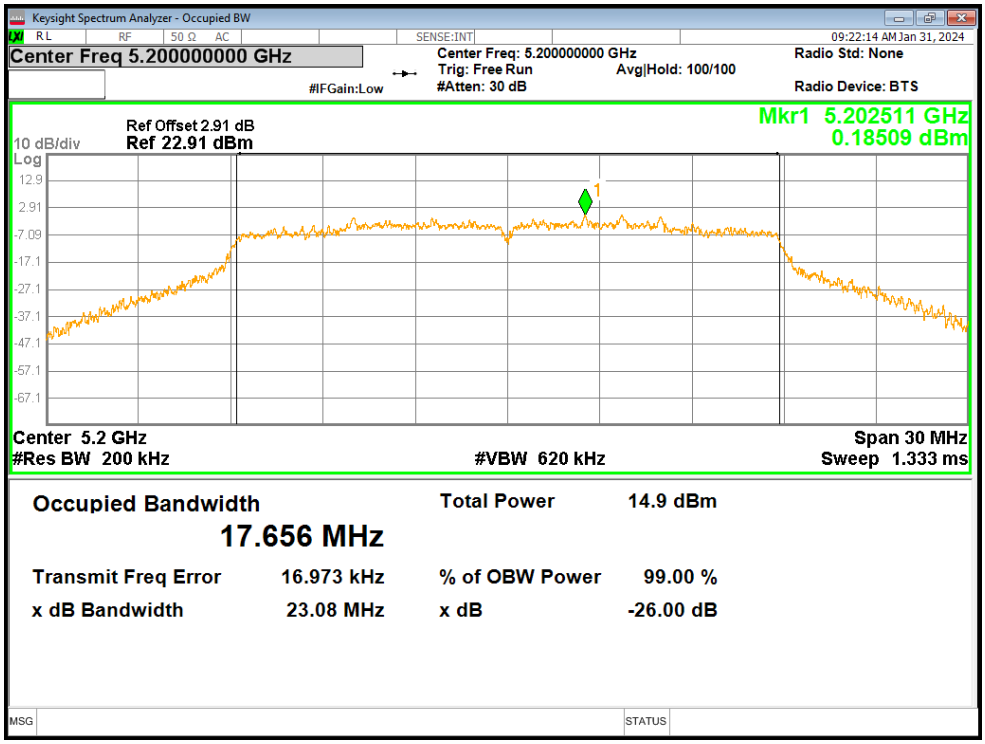
OBW NVNT n40 5230MHz Ant2



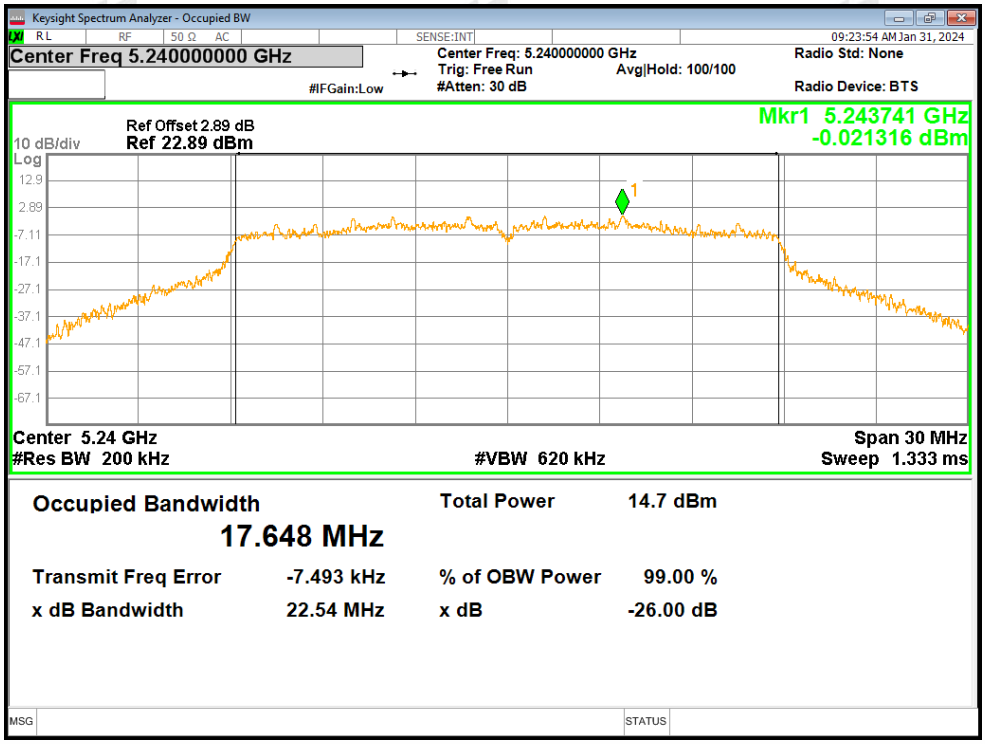
OBW NVNT ac20 5180MHz Ant1



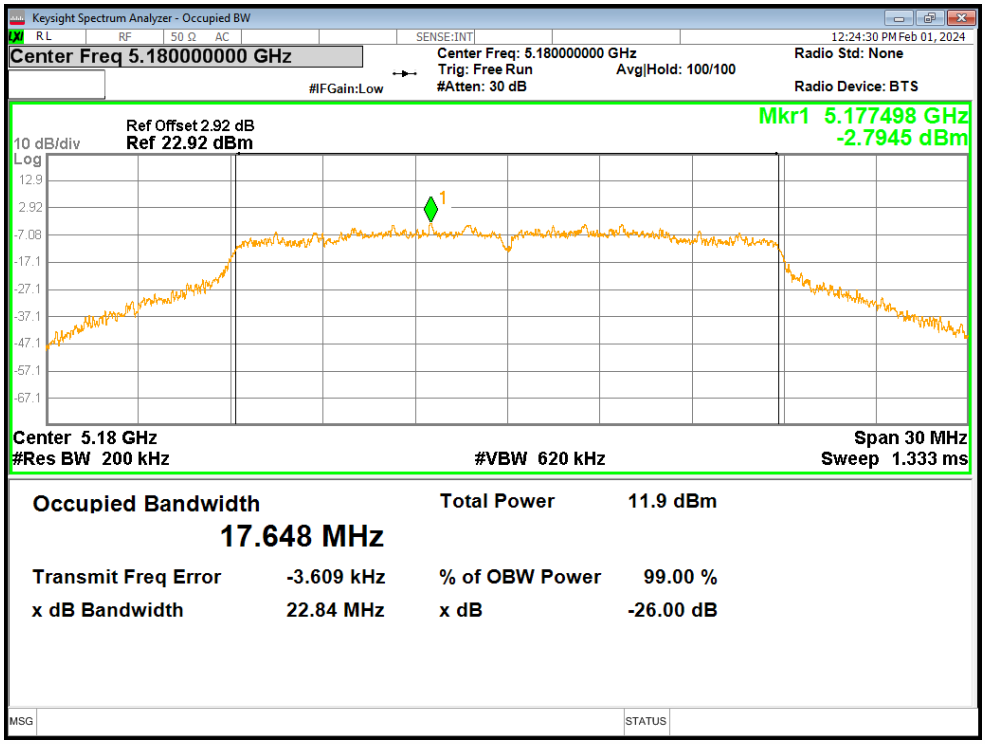
OBW NVNT ac20 5200MHz Ant1



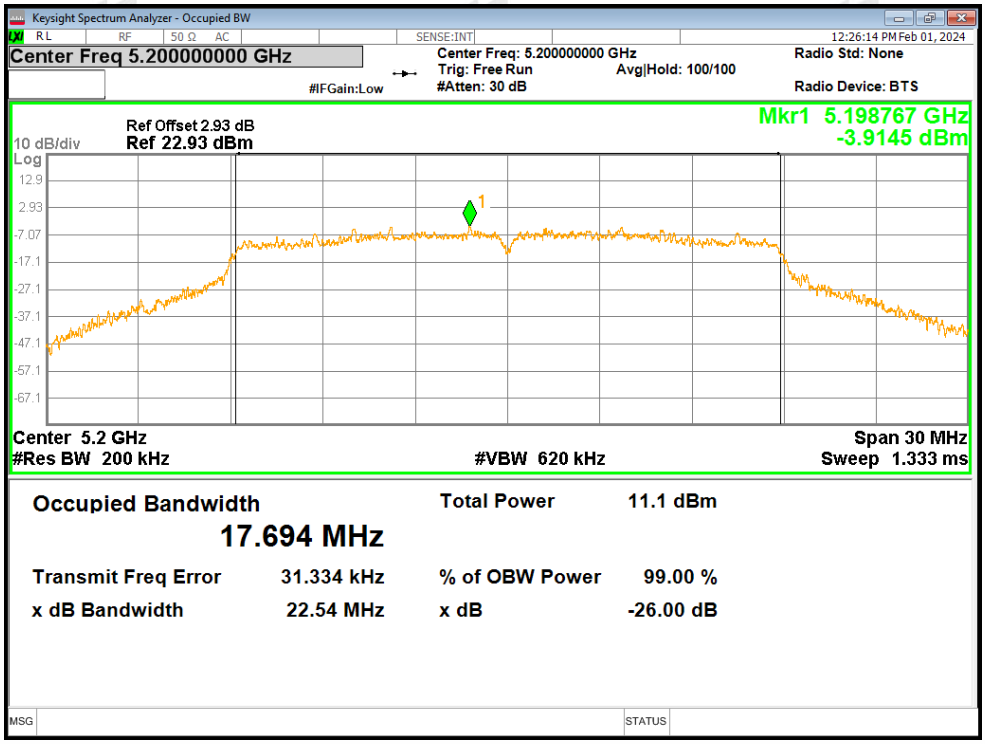
OBW NVNT ac20 5240MHz Ant1



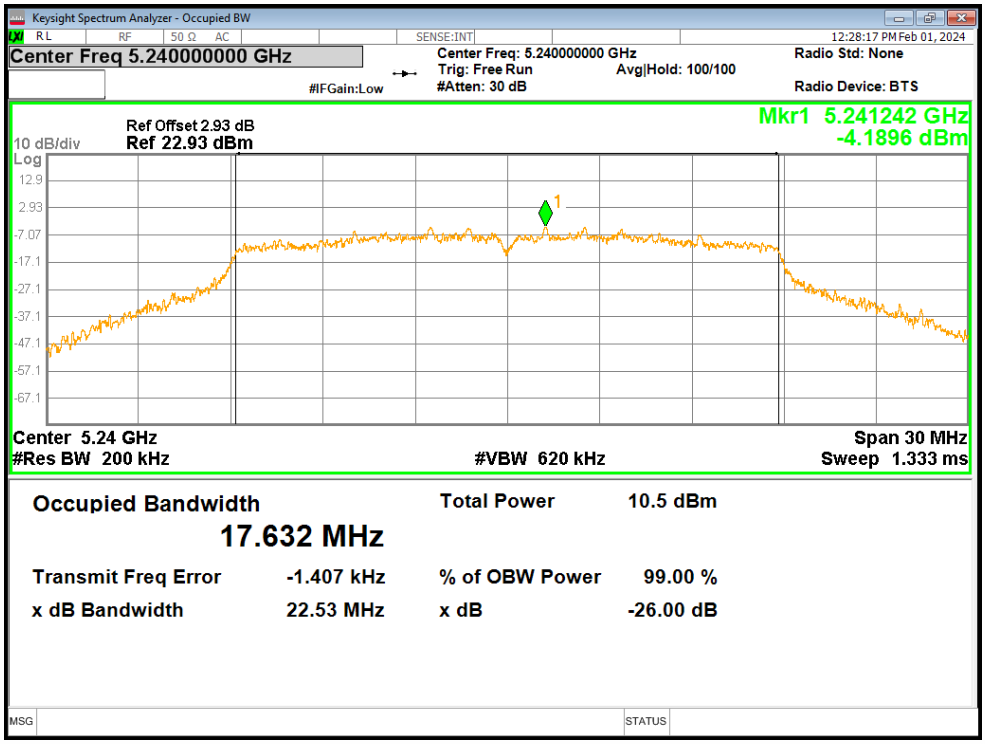
OBW NVNT ac20 5180MHz Ant2



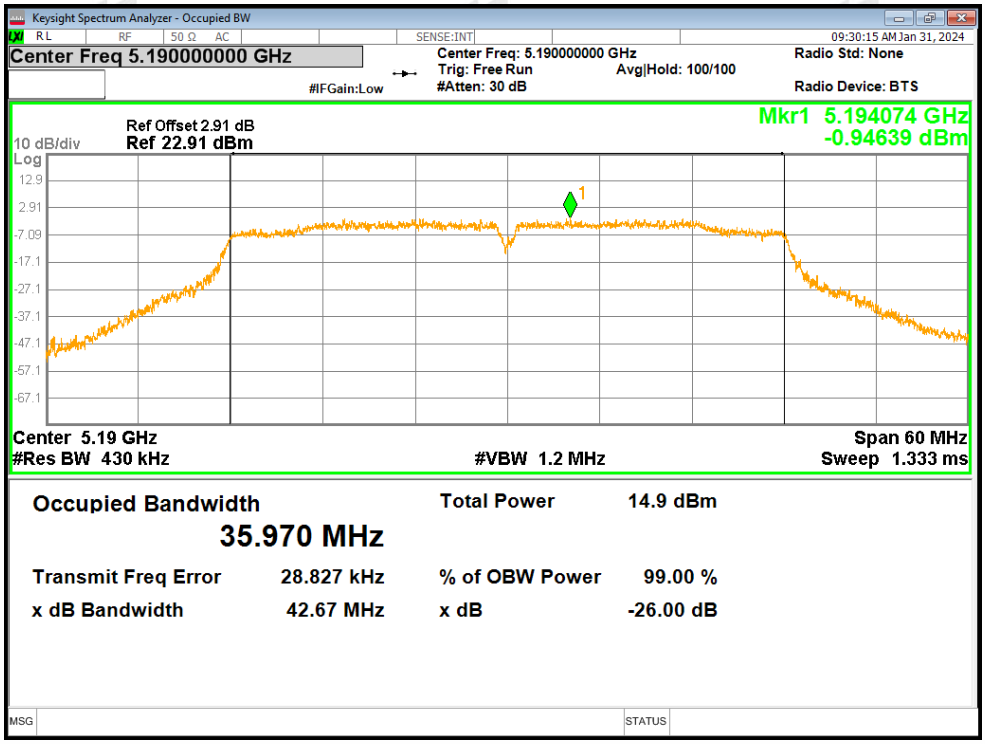
OBW NVNT ac20 5200MHz Ant2



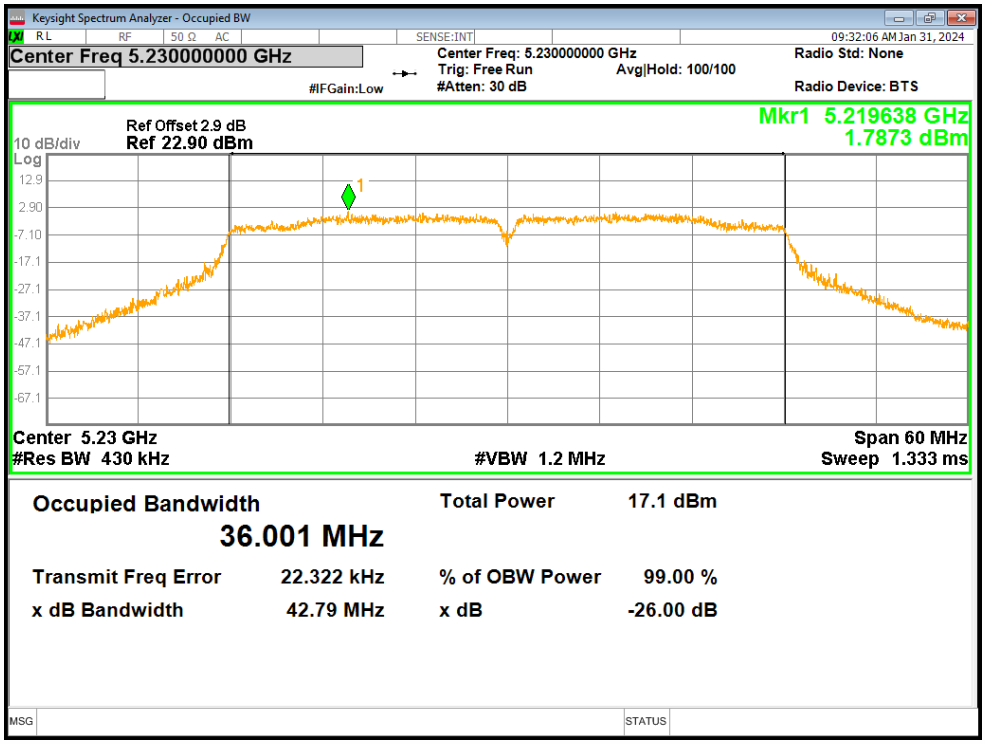
OBW NVNT ac20 5240MHz Ant2



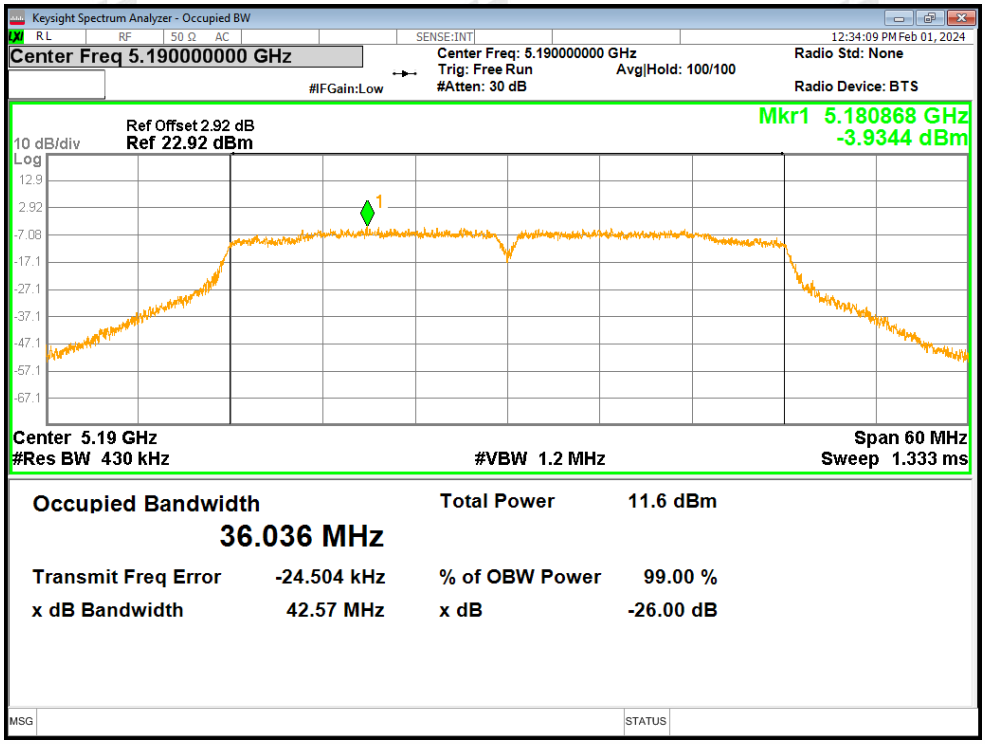
OBW NVNT ac40 5190MHz Ant1



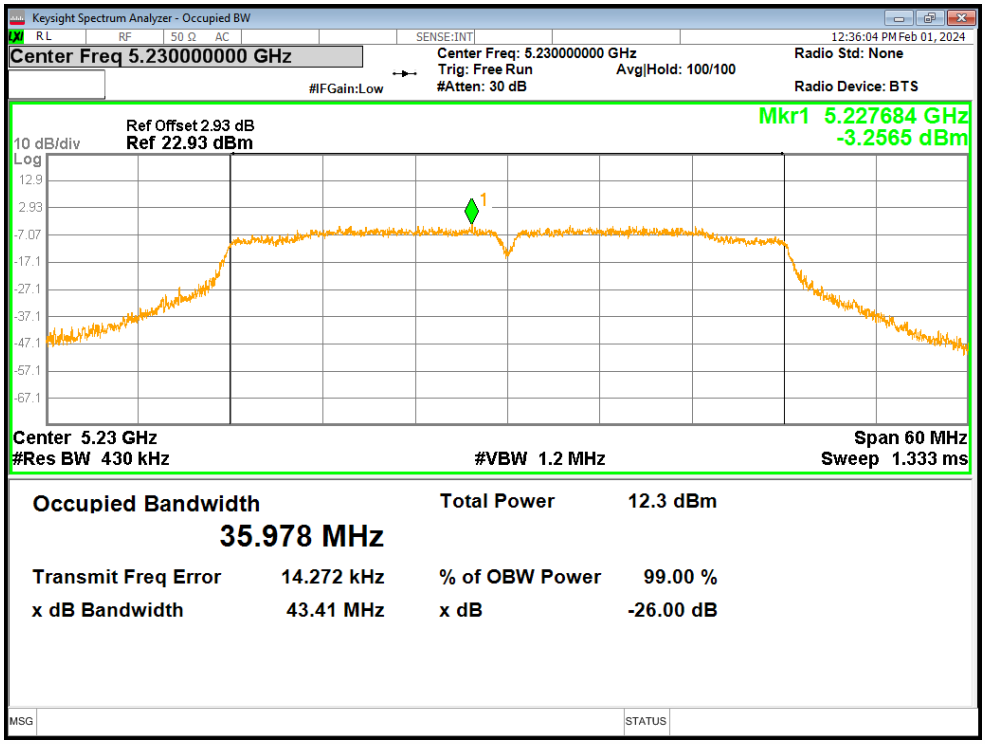
OBW NVNT ac40 5230MHz Ant1



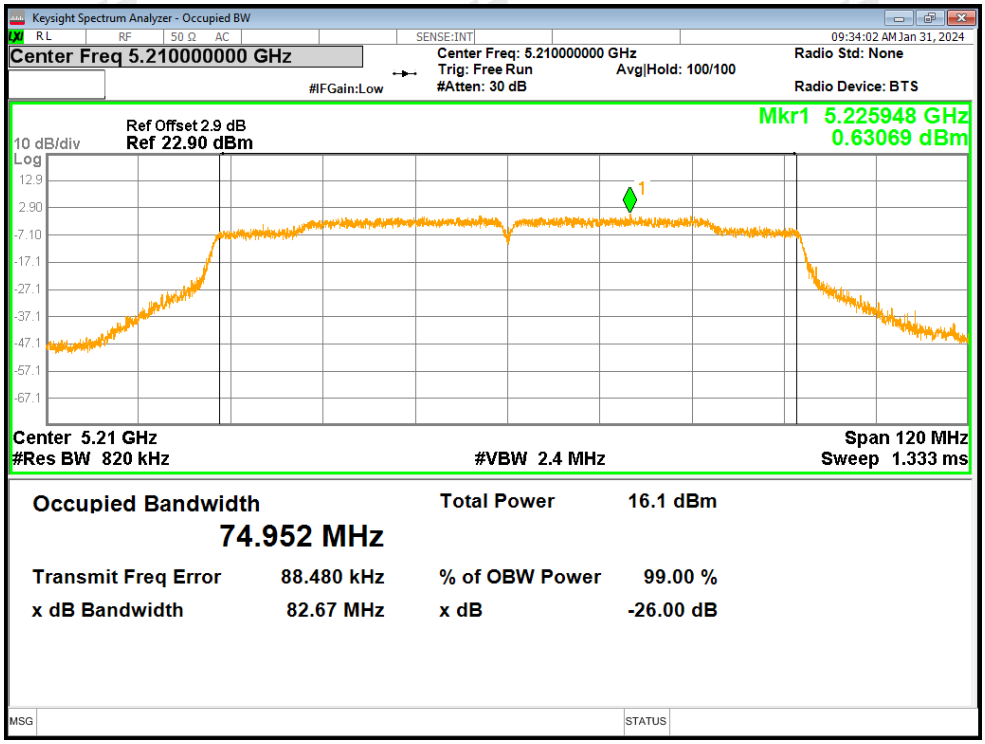
OBW NVNT ac40 5190MHz Ant2



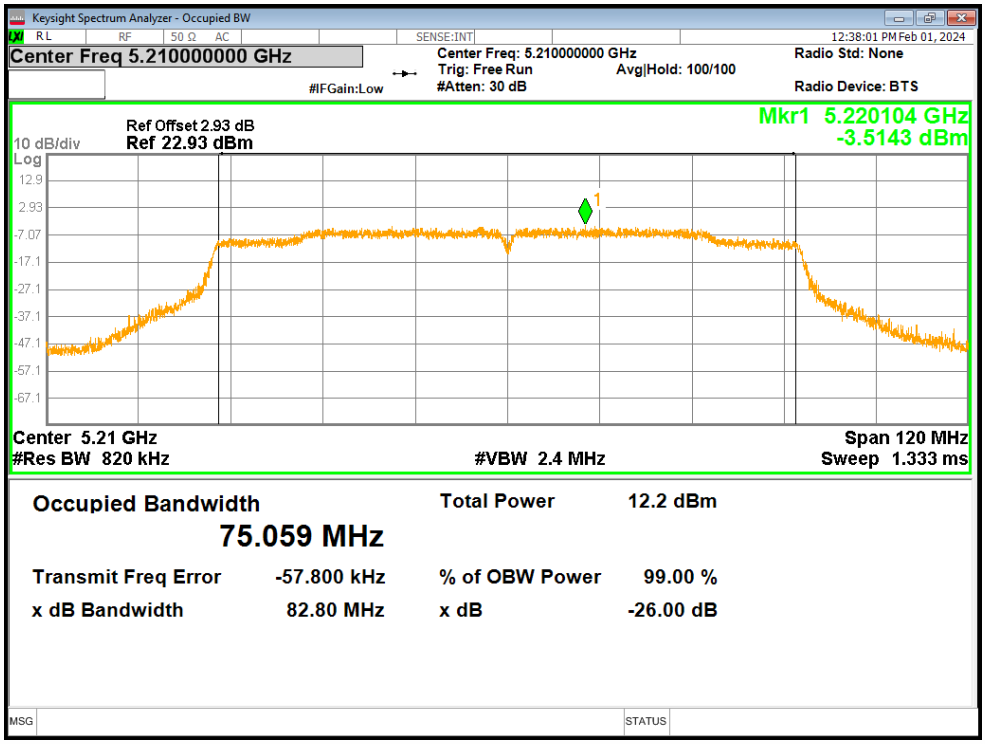
OBW NVNT ac40 5230MHz Ant2



OBW NVNT ac80 5210MHz Ant1



OBW NVNT ac80 5210MHz Ant2

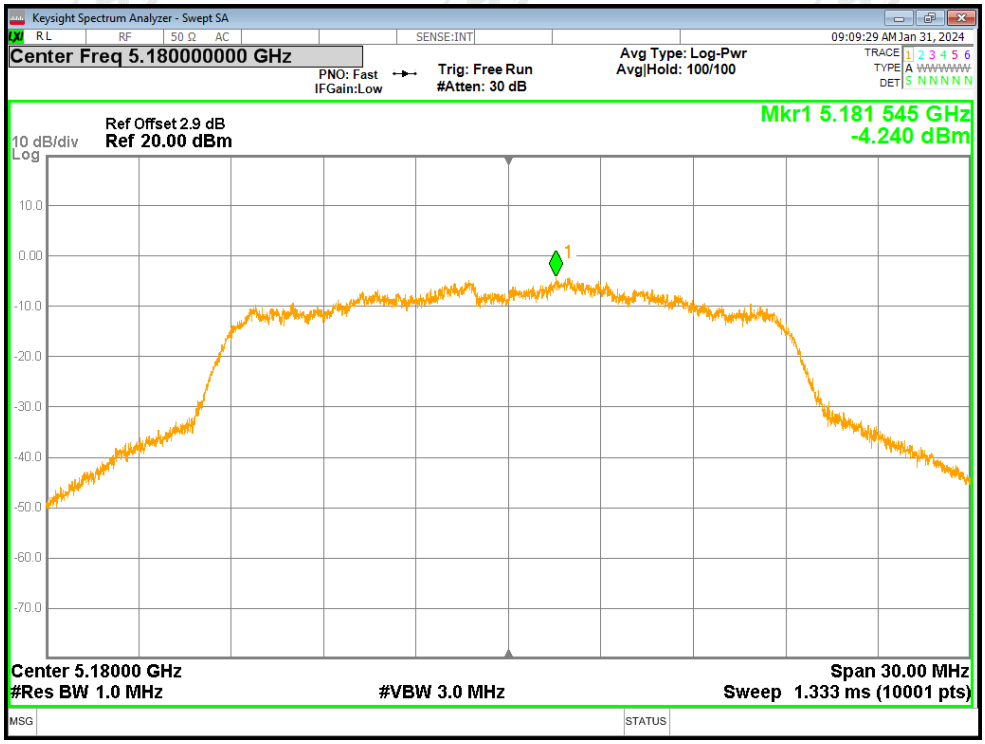


A5. Maximum Power Spectral Density Level

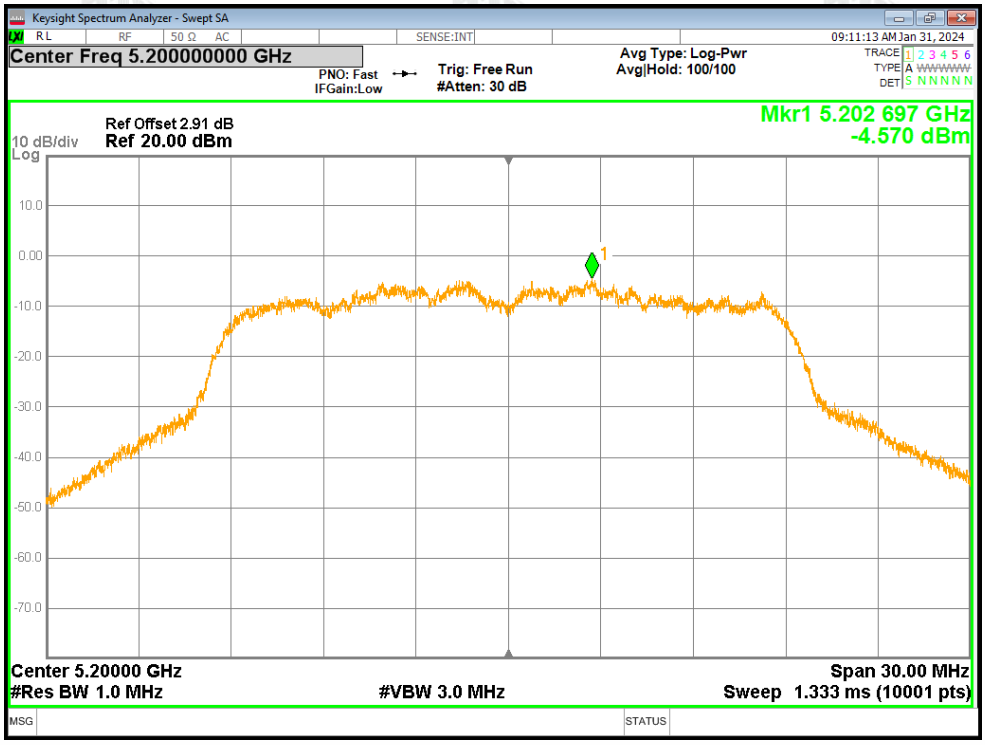
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-4.24	11	Pass
NVNT	a	5200	Ant1	-4.57	11	Pass
NVNT	a	5240	Ant1	-3.86	11	Pass
NVNT	a	5180	Ant2	-7.54	11	Pass
NVNT	a	5200	Ant2	-8.03	11	Pass
NVNT	a	5240	Ant2	-8.2	11	Pass
NVNT	n20	5180	Ant1	-4.53	11	Pass
NVNT	n20	5200	Ant1	-4.01	11	Pass
NVNT	n20	5240	Ant1	-4.08	11	Pass
NVNT	n20	5180	Ant2	-6.55	11	Pass
NVNT	n20	5200	Ant2	-7.95	11	Pass
NVNT	n20	5240	Ant2	-8.14	11	Pass
NVNT	n40	5190	Ant1	-7.18	11	Pass
NVNT	n40	5230	Ant1	-5.56	11	Pass
NVNT	n40	5190	Ant2	-10.62	11	Pass
NVNT	n40	5230	Ant2	-10.08	11	Pass
NVNT	ac20	5180	Ant1	-3.8	11	Pass
NVNT	ac20	5200	Ant1	-4.01	11	Pass
NVNT	ac20	5240	Ant1	-3.96	11	Pass
NVNT	ac20	5180	Ant2	-6.55	11	Pass
NVNT	ac20	5200	Ant2	-8.32	11	Pass
NVNT	ac20	5240	Ant2	-7.91	11	Pass
NVNT	ac40	5190	Ant1	-7.16	11	Pass
NVNT	ac40	5230	Ant1	-4.58	11	Pass
NVNT	ac40	5190	Ant2	-10.76	11	Pass
NVNT	ac40	5230	Ant2	-10.05	11	Pass
NVNT	ac80	5210	Ant1	-9.55	11	Pass
NVNT	ac80	5210	Ant2	-11.3	11	Pass
NVNT	n20	5180	MIMO	-2.41	11	Pass
NVNT	n20	5200	MIMO	-2.54	11	Pass
NVNT	n20	5240	MIMO	-2.64	11	Pass
NVNT	n40	5190	MIMO	-5.56	11	Pass
NVNT	n40	5230	MIMO	-4.25	11	Pass
NVNT	ac20	5180	MIMO	-1.95	11	Pass
NVNT	ac20	5200	MIMO	-2.64	11	Pass
NVNT	ac20	5240	MIMO	-2.49	11	Pass
NVNT	ac40	5190	MIMO	-5.59	11	Pass
NVNT	ac40	5230	MIMO	-3.50	11	Pass
NVNT	ac80	5210	MIMO	-7.33	11	Pass

Test Graphs

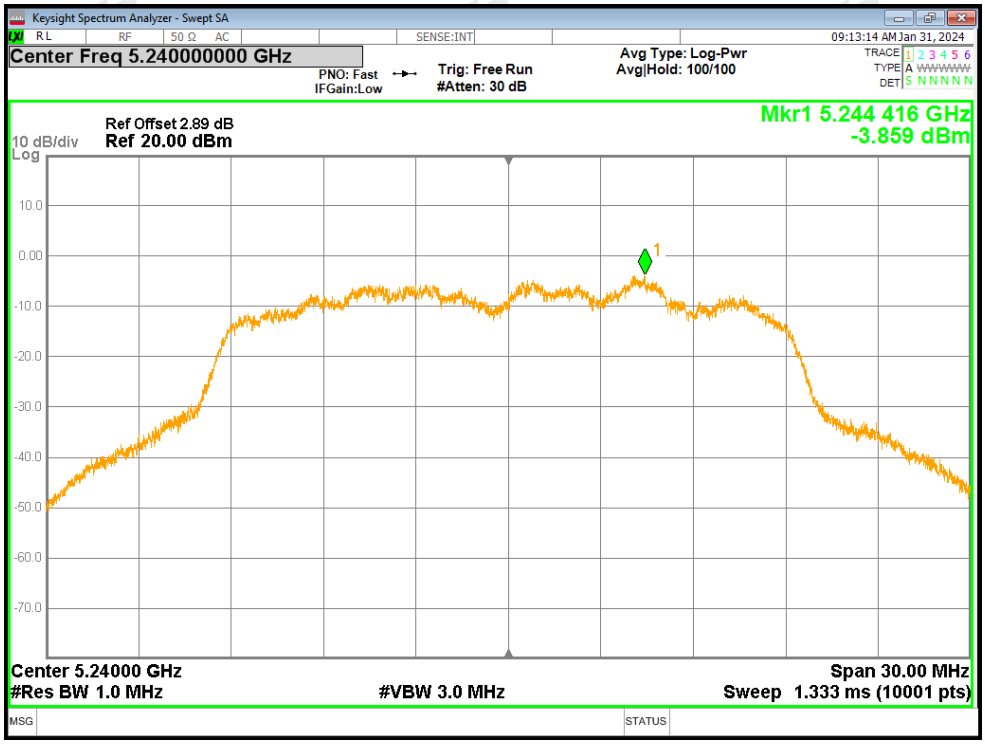
PSD NVNT a 5180MHz Ant1



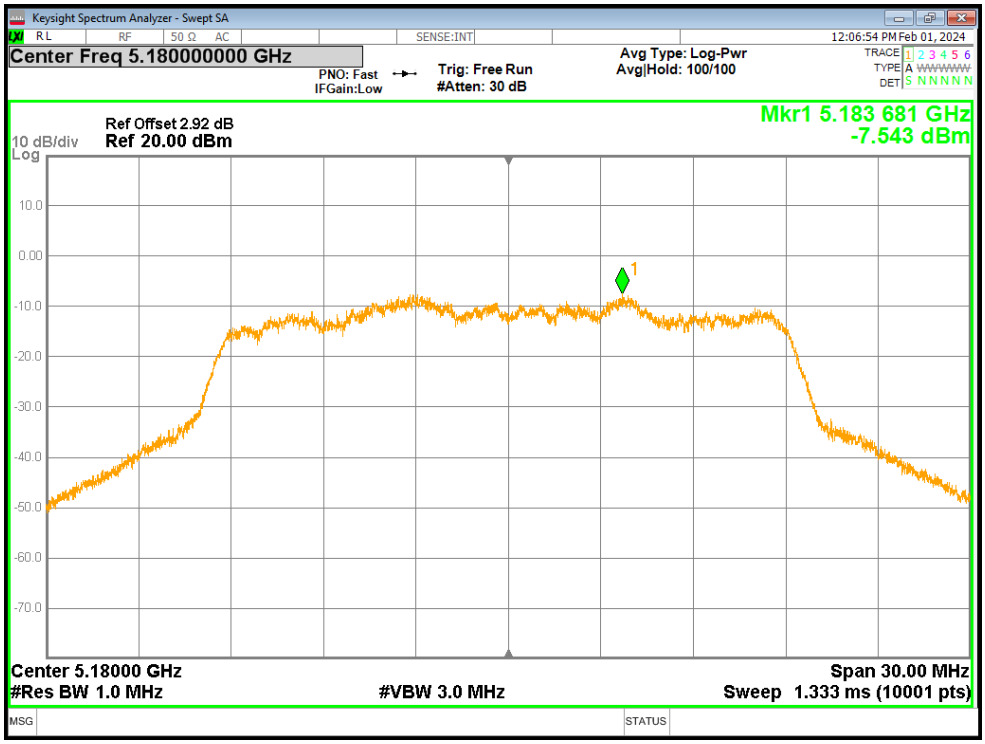
PSD NVNT a 5200MHz Ant1



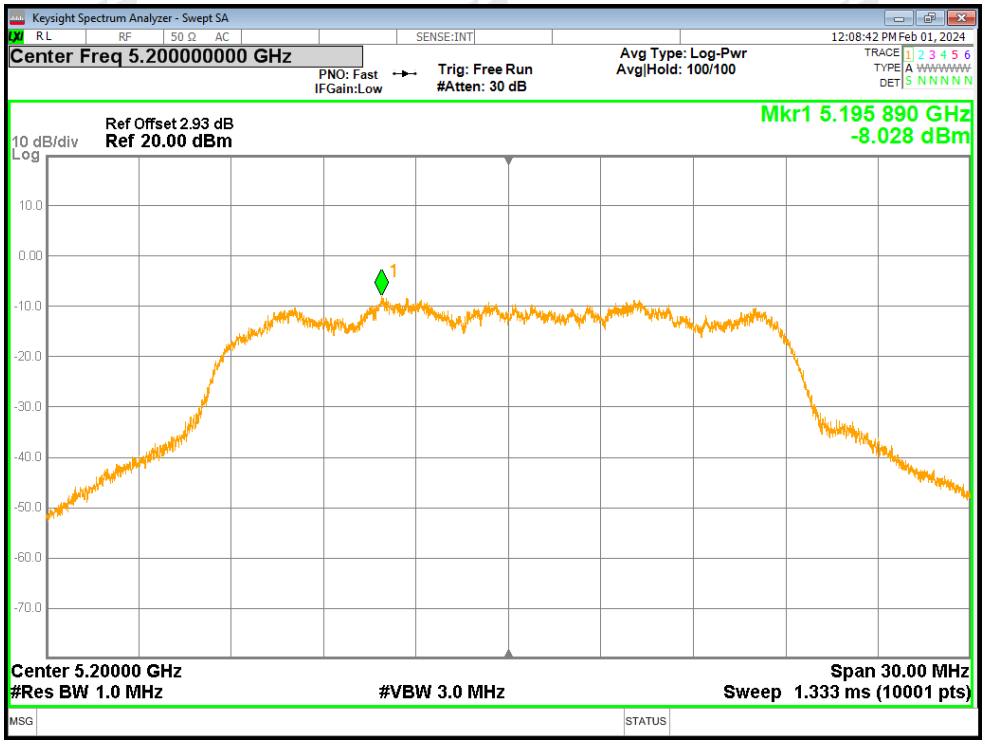
PSD NVNT a 5240MHz Ant1



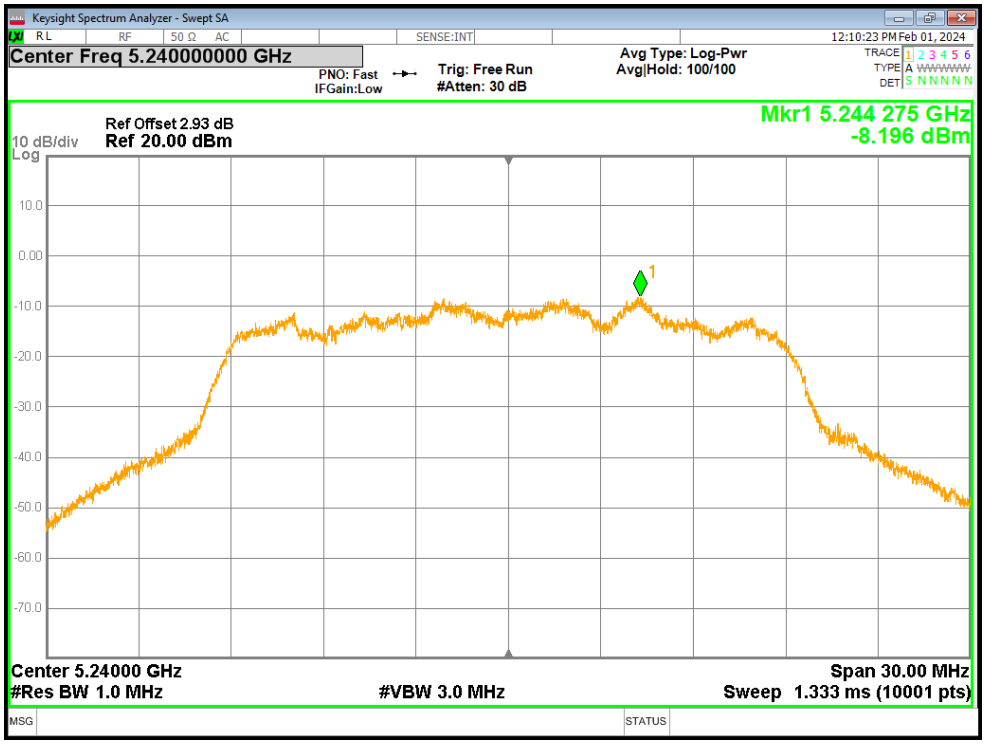
PSD NVNT a 5180MHz Ant2



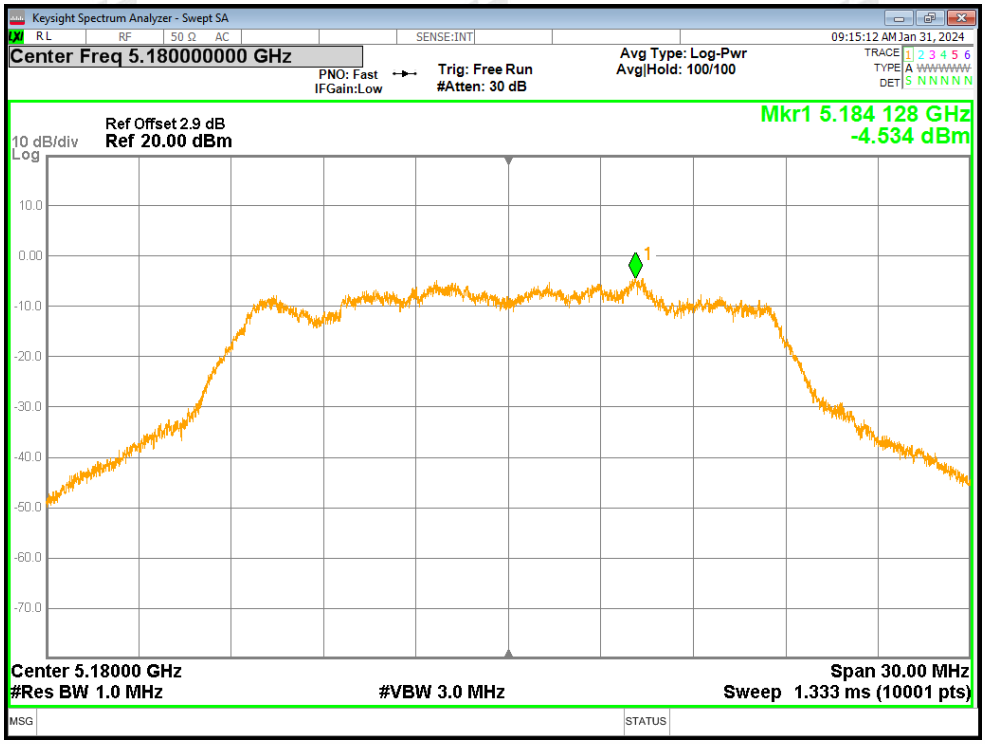
PSD NVNT a 5200MHz Ant2



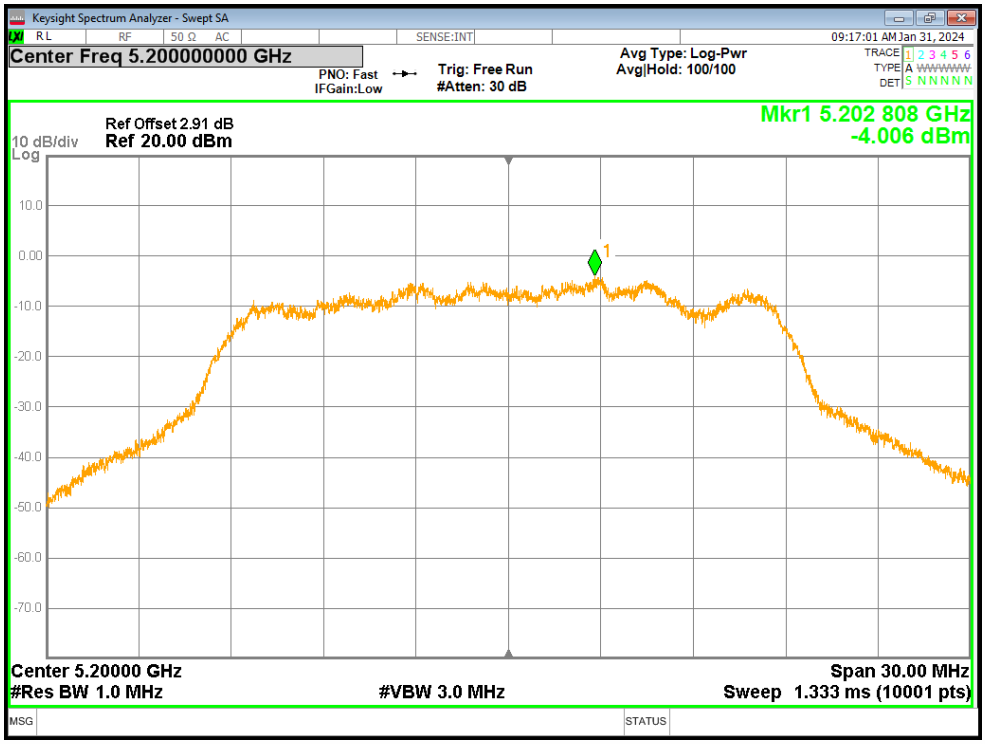
PSD NVNT a 5240MHz Ant2



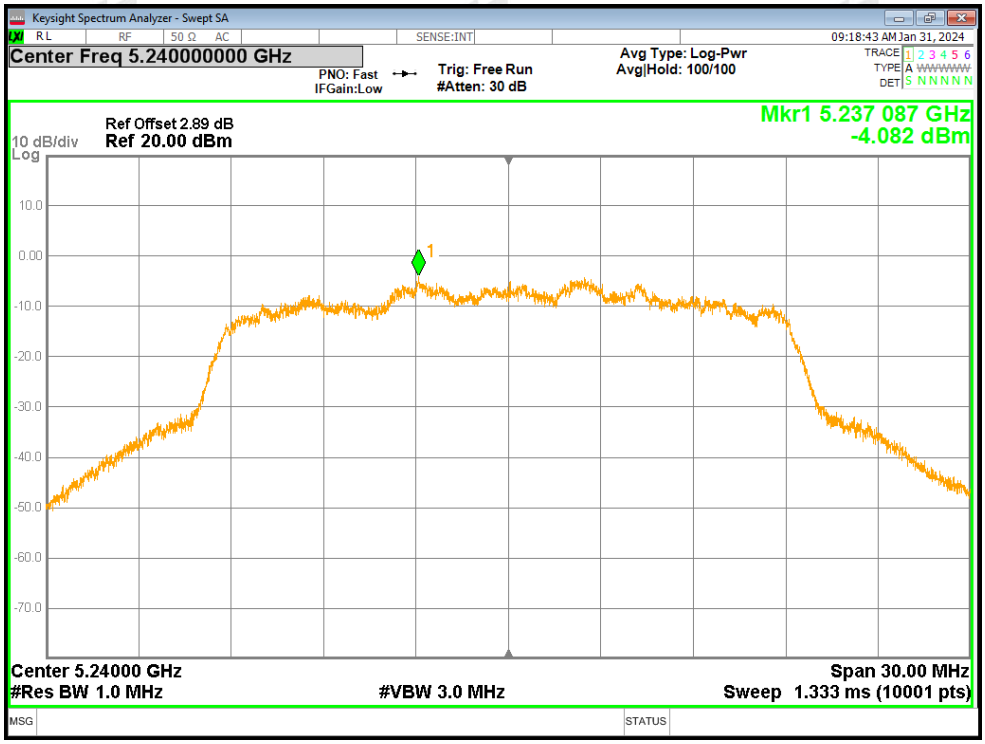
PSD NVNT n20 5180MHz Ant1



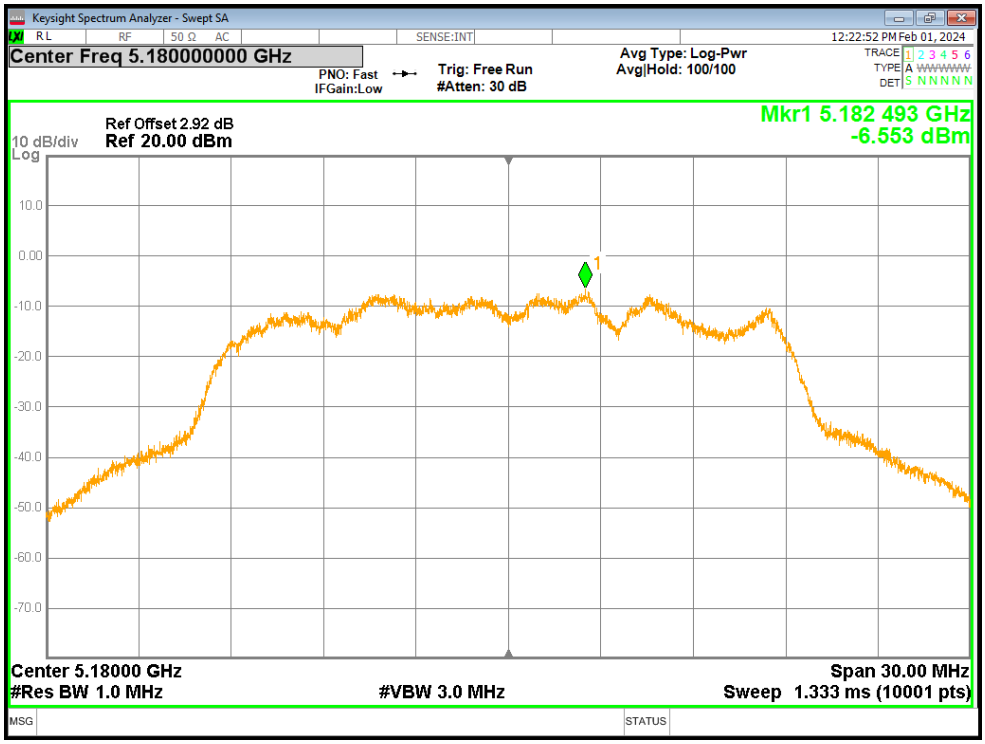
PSD NVNT n20 5200MHz Ant1



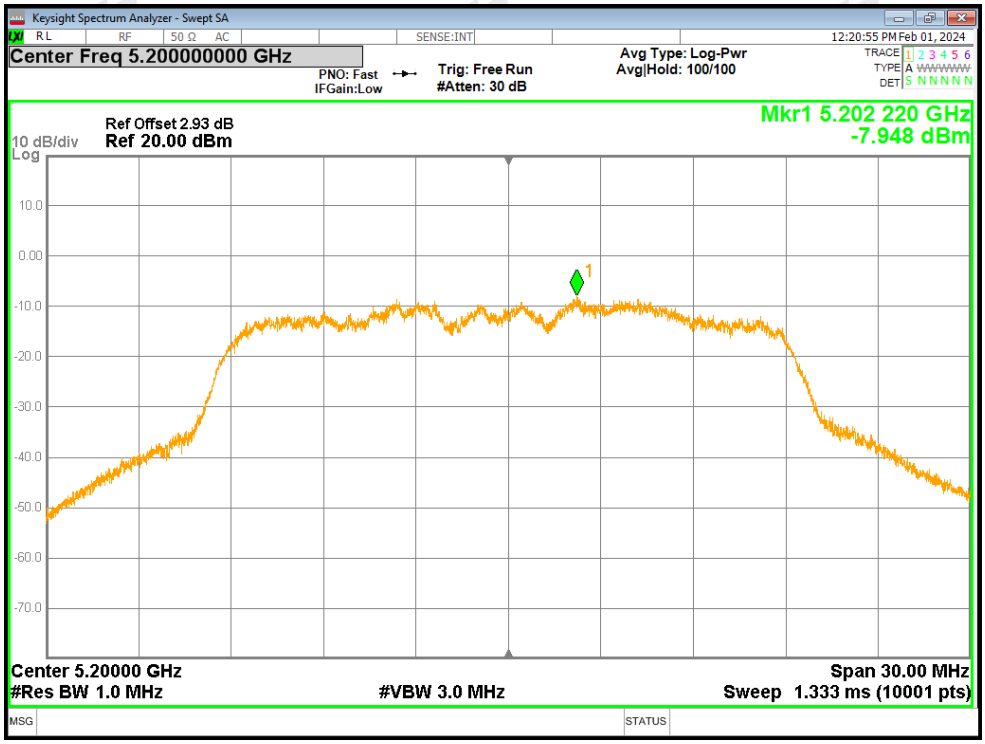
PSD NVNT n20 5240MHz Ant1



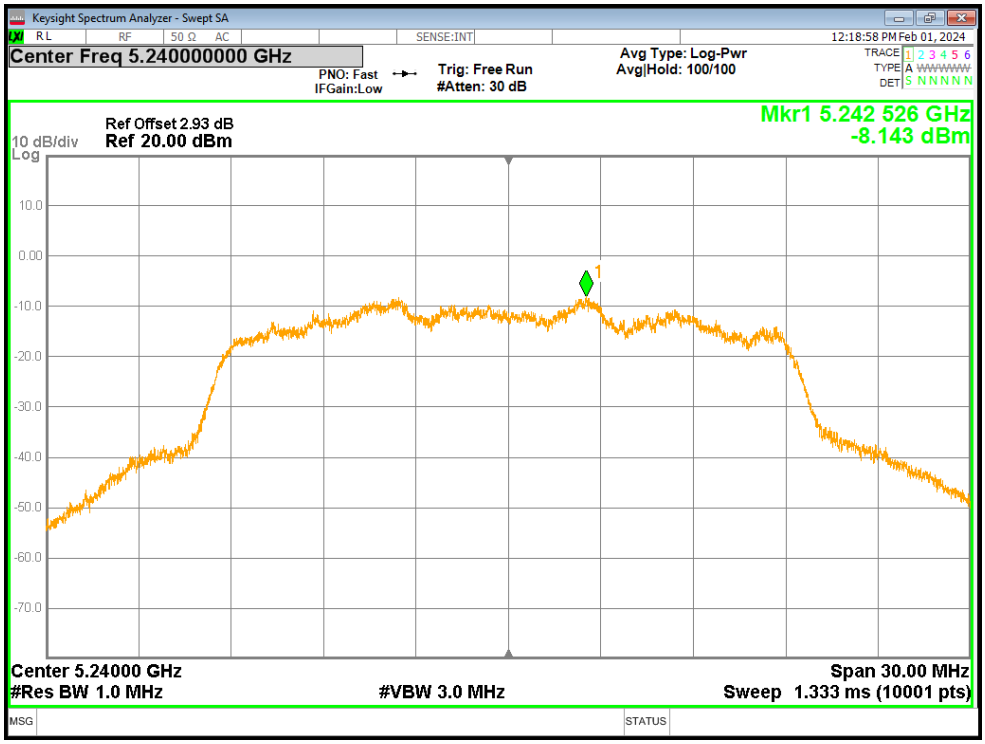
PSD NVNT n20 5180MHz Ant2



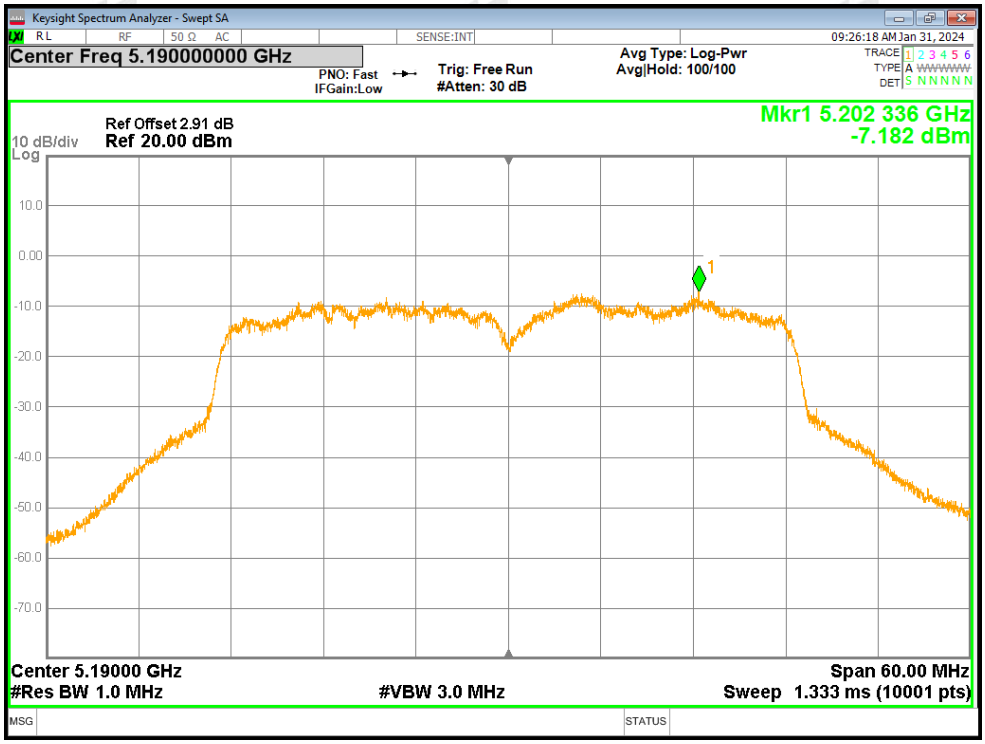
PSD NVNT n20 5200MHz Ant2



PSD NVNT n20 5240MHz Ant2



PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5230MHz Ant1