

Appendix A for 5GWIFI Test Data

Product Name: Wanbo Projector

Test Model: WPB84

Environmental Conditions

Temperature:	24.2℃
Relative Humidity:	53%
ATM Pressure:	101.0 kPa
Test Engineer:	Kimi Lu
Supervised by:	Baret Wu

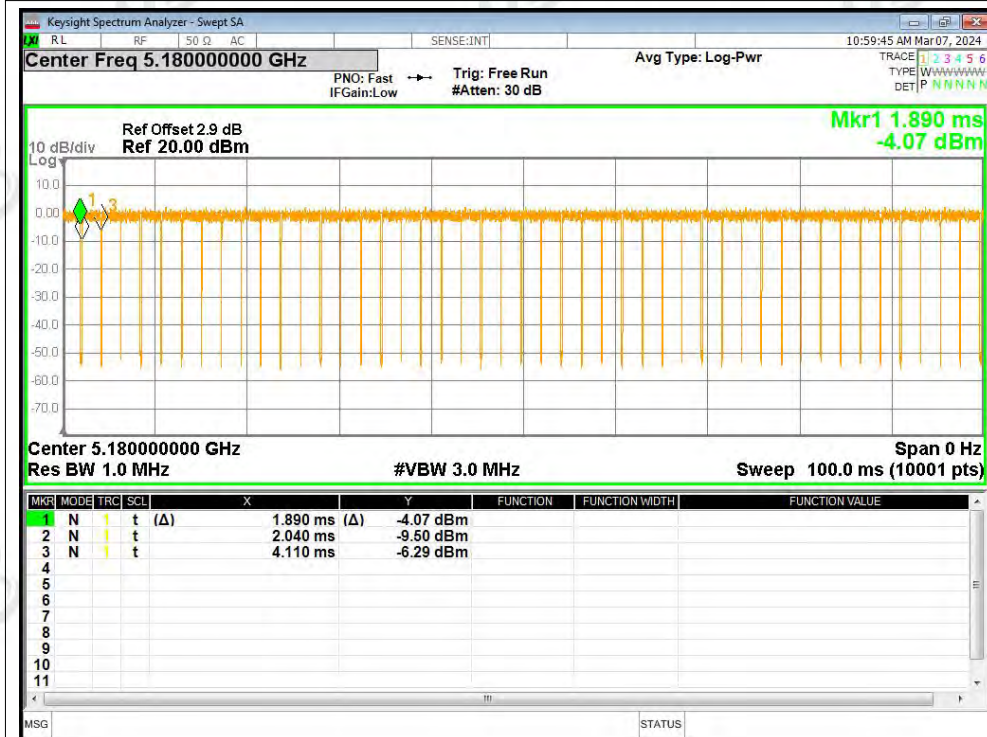


A1. Duty Cycle

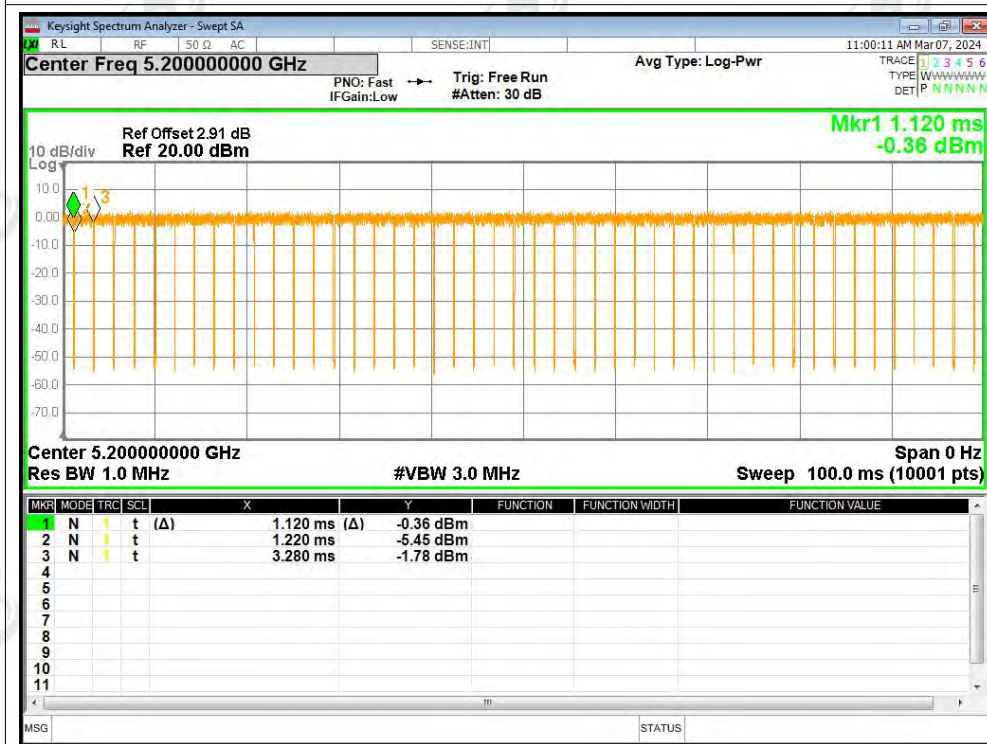
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	93.24	0.35	0.48
NVNT	a	5200	Ant1	95.37	0.26	0.49
NVNT	a	5240	Ant1	93.64	0.35	0.49
NVNT	n20	5180	Ant1	94.12	0.24	0.52
NVNT	n20	5200	Ant1	97.46	0.26	0.52
NVNT	n20	5240	Ant1	95.52	0.37	0.52
NVNT	n40	5190	Ant1	89.52	0.48	1.06
NVNT	n40	5230	Ant1	93.07	0.31	1.06
NVNT	ac20	5180	Ant1	95.54	0.32	0.52
NVNT	ac20	5200	Ant1	91.9	0.35	0.52
NVNT	ac20	5240	Ant1	94.17	0.28	0.52
NVNT	ac40	5190	Ant1	96.97	0.13	1.04
NVNT	ac40	5230	Ant1	88.79	0.52	1.05
NVNT	ac80	5210	Ant1	88.46	0.53	2.17

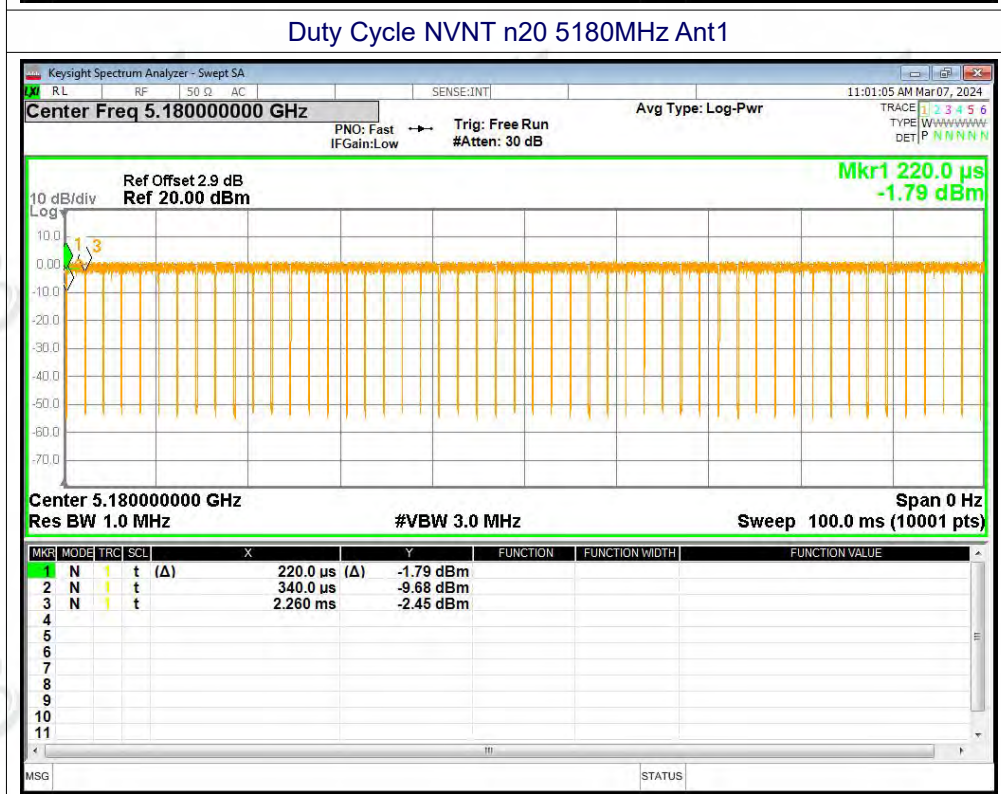
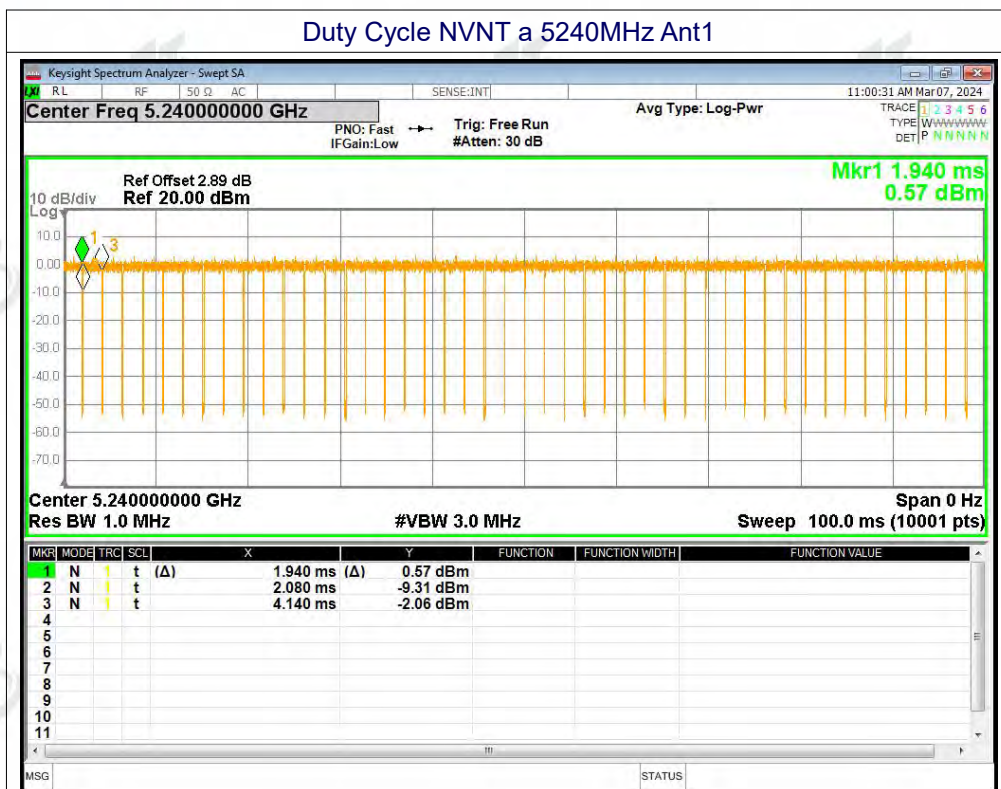
Test Graphs

Duty Cycle NVNT a 5180MHz Ant1

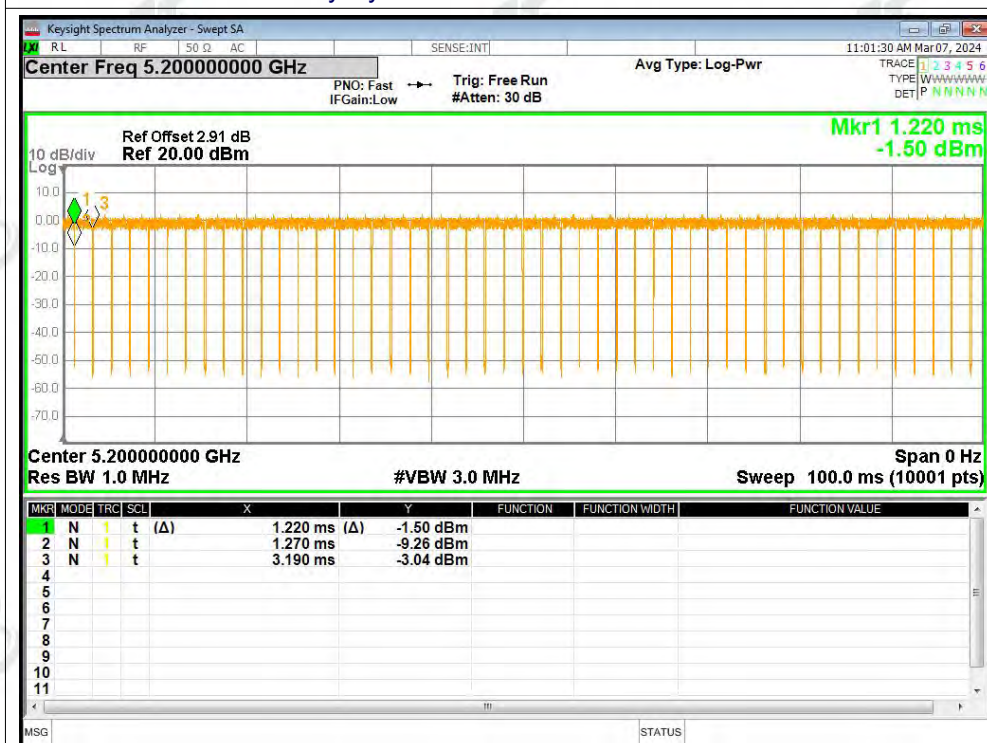


Duty Cycle NVNT a 5200MHz Ant1

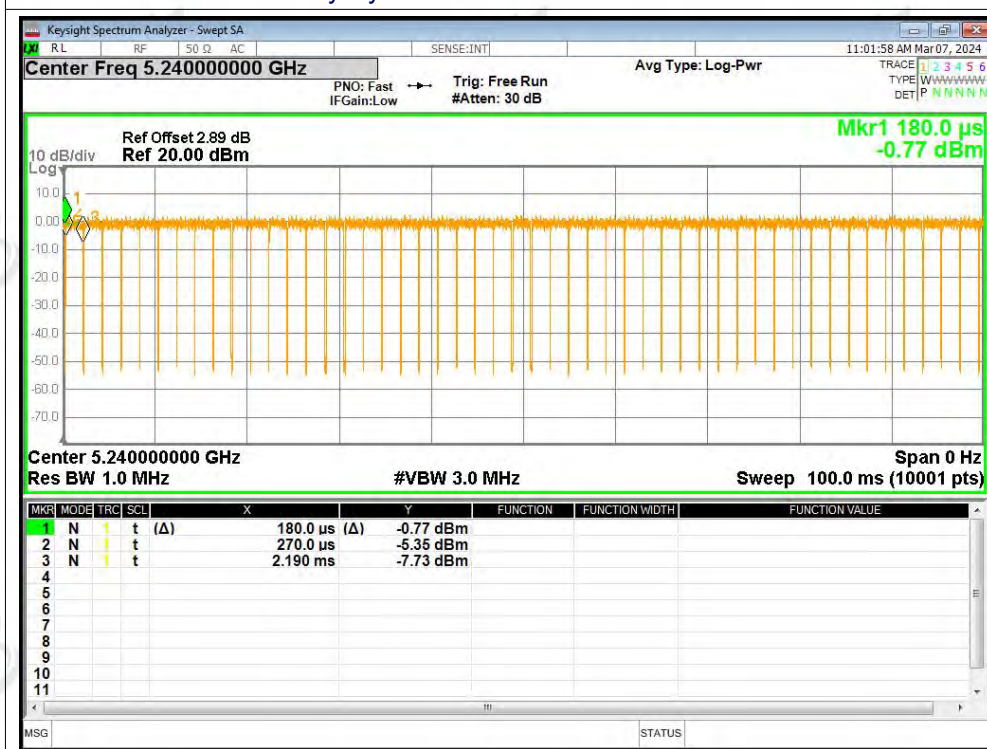




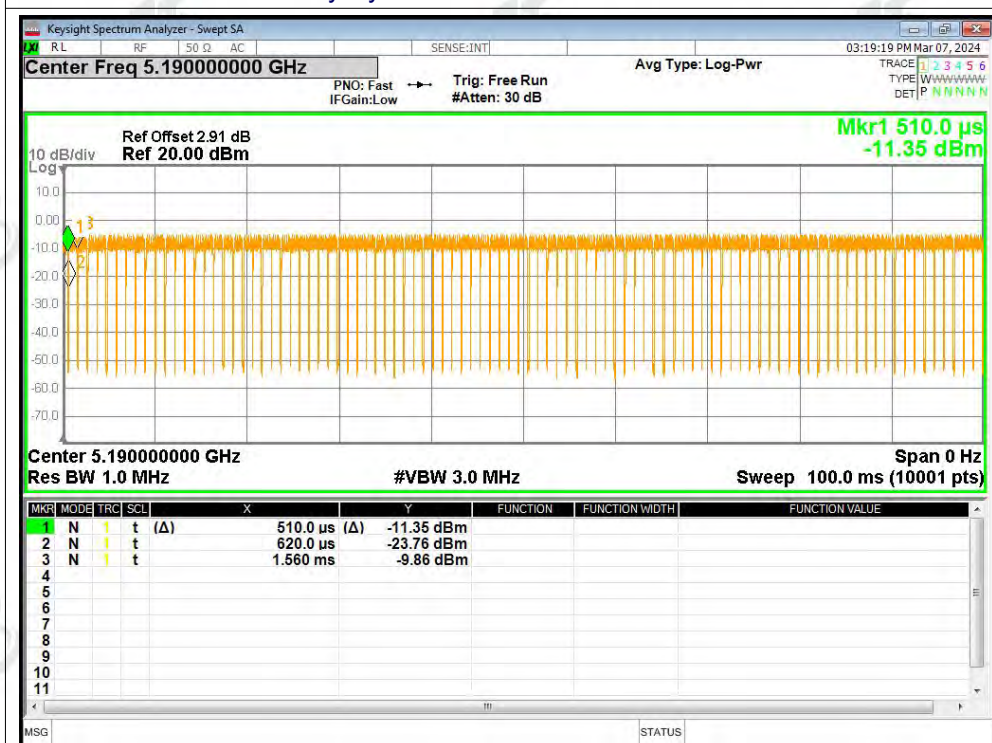
Duty Cycle NVNT n20 5200MHz Ant1



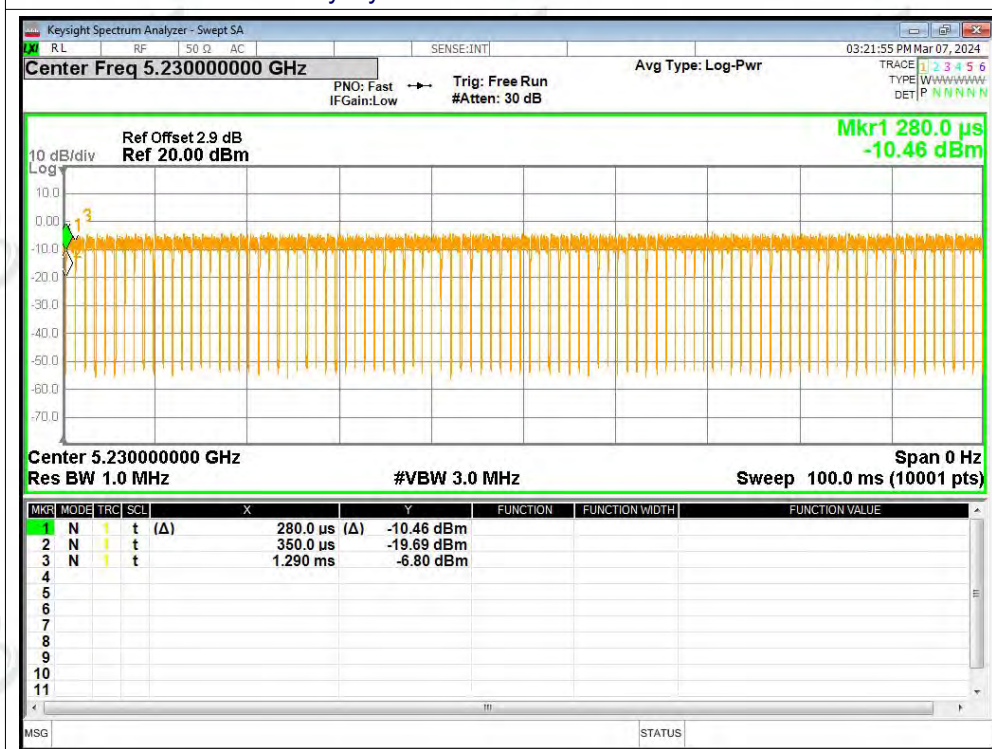
Duty Cycle NVNT n20 5240MHz Ant1



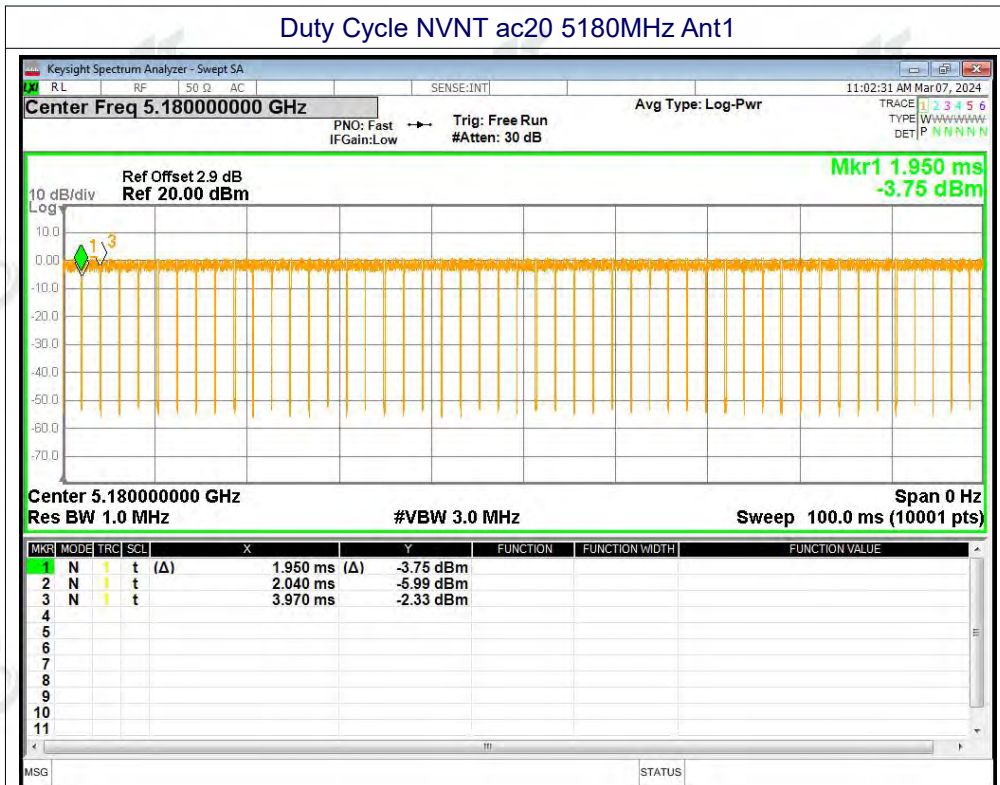
Duty Cycle NVNT n40 5190MHz Ant1



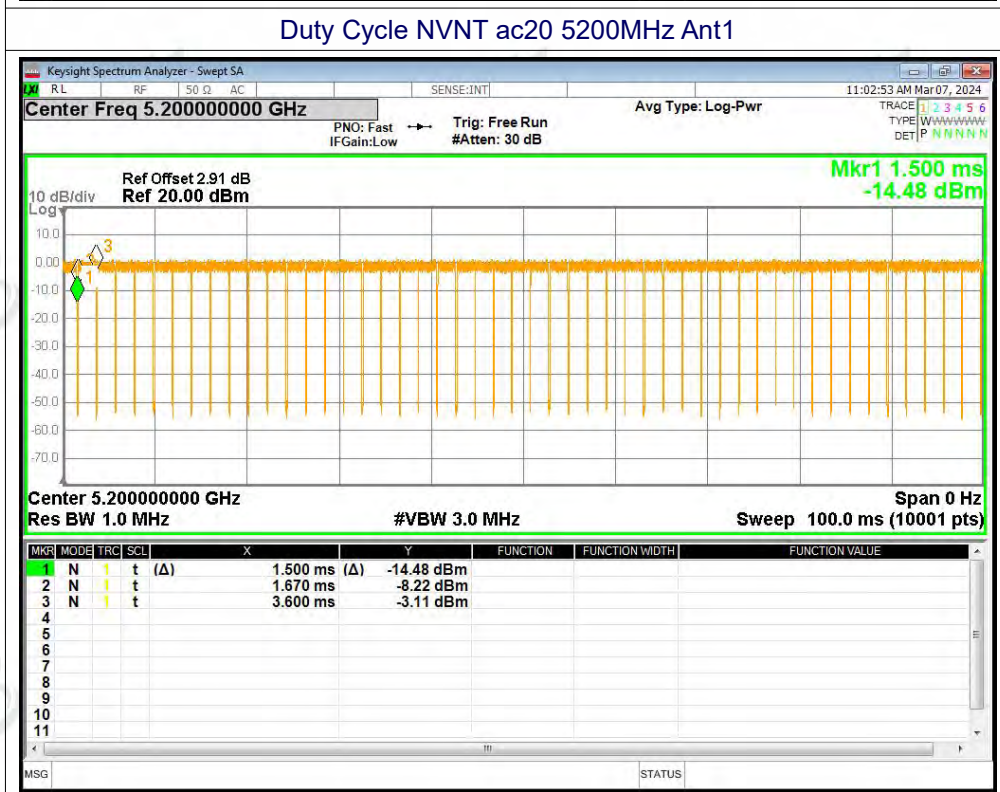
Duty Cycle NVNT n40 5230MHz Ant1



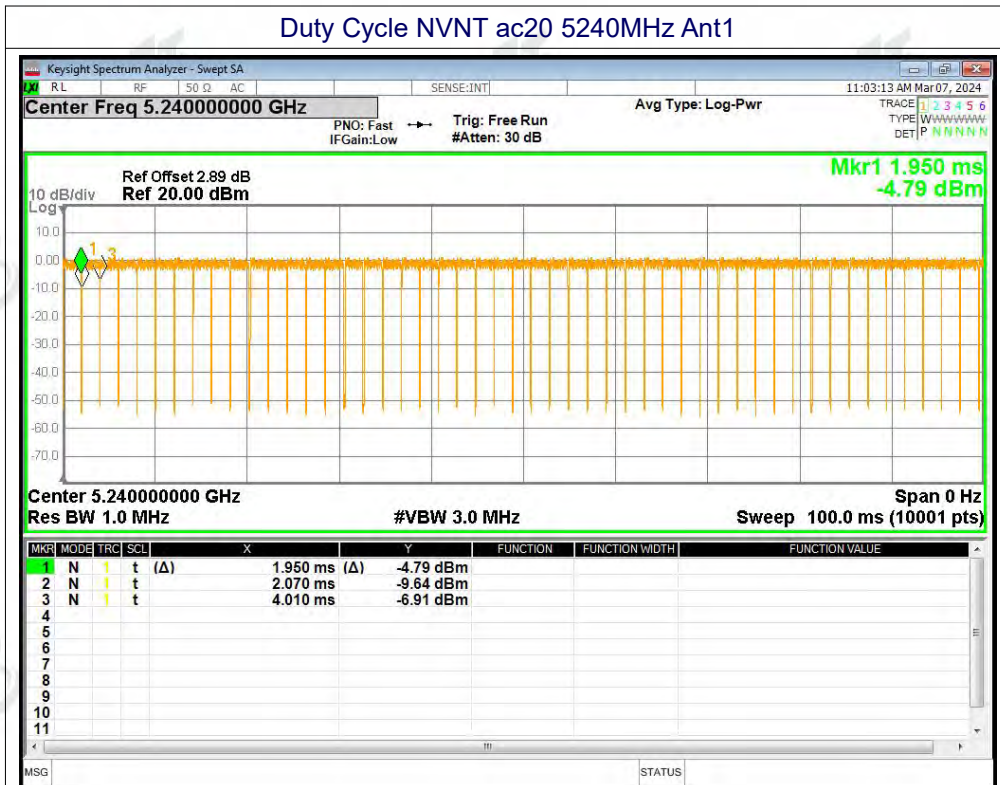
Duty Cycle NVNT ac20 5180MHz Ant1



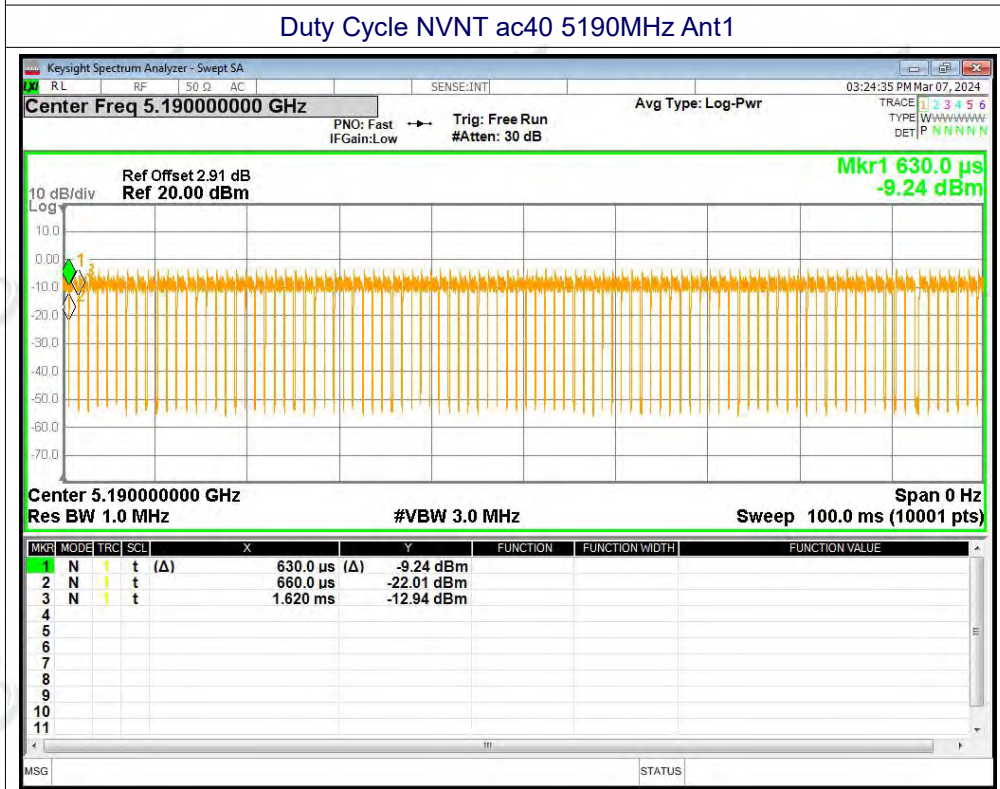
Duty Cycle NVNT ac20 5200MHz Ant1



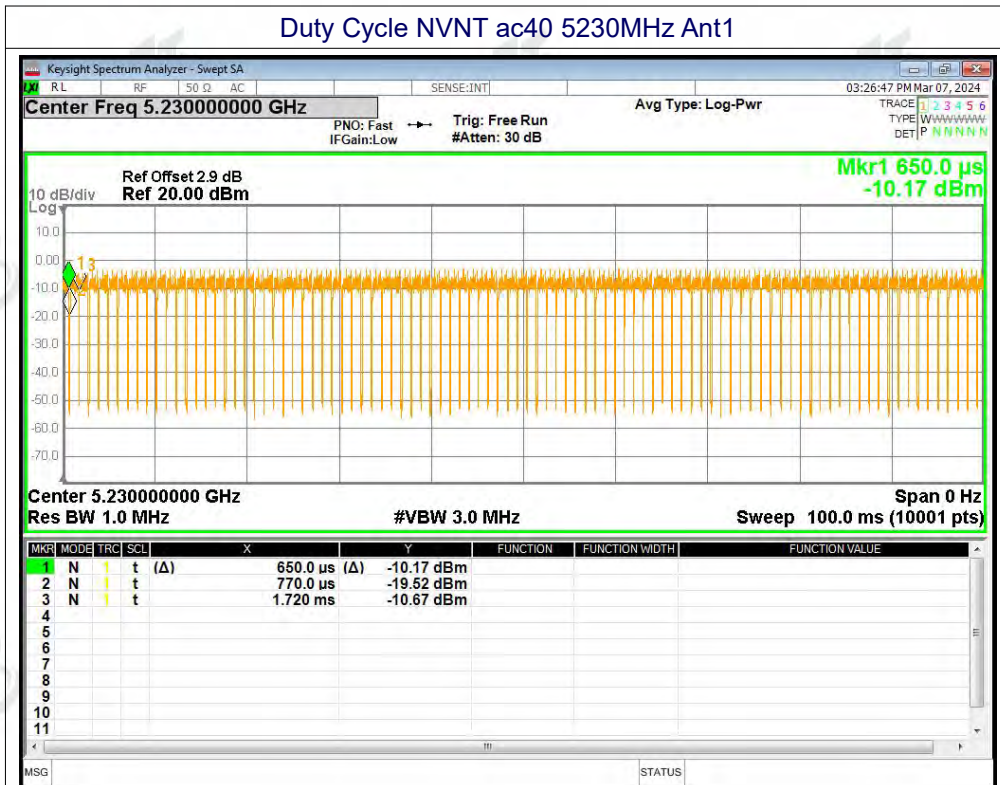
Duty Cycle NVNT ac20 5240MHz Ant1



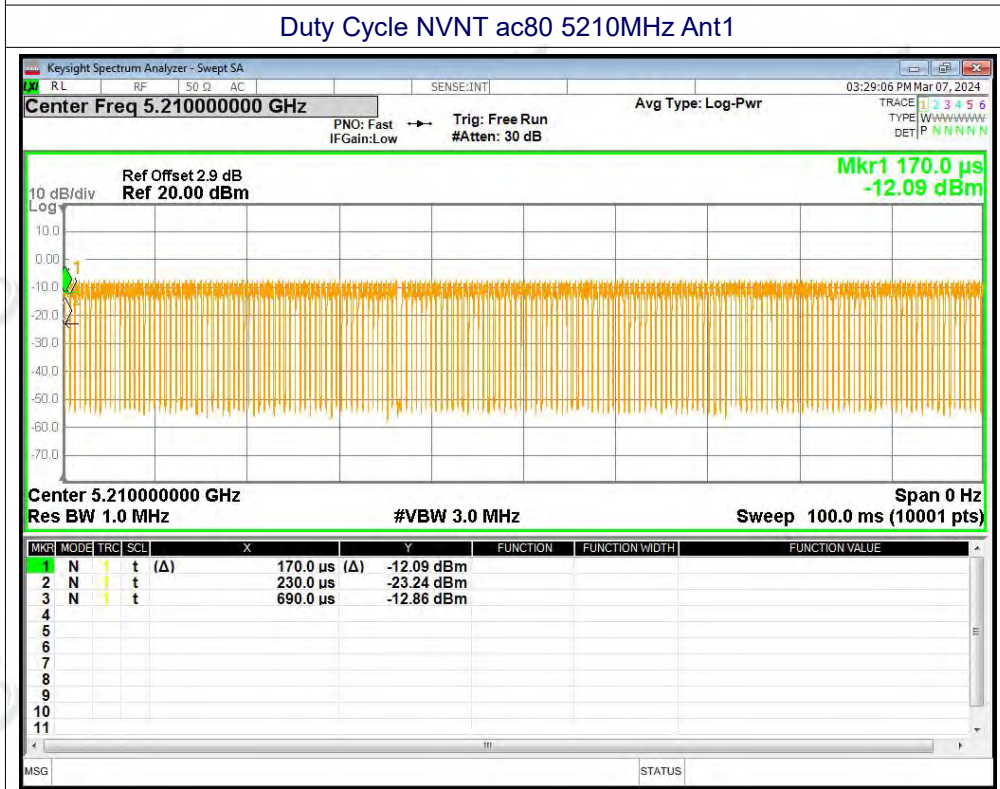
Duty Cycle NVNT ac40 5190MHz Ant1



Duty Cycle NVNT ac40 5230MHz Ant1



Duty Cycle NVNT ac80 5210MHz Ant1

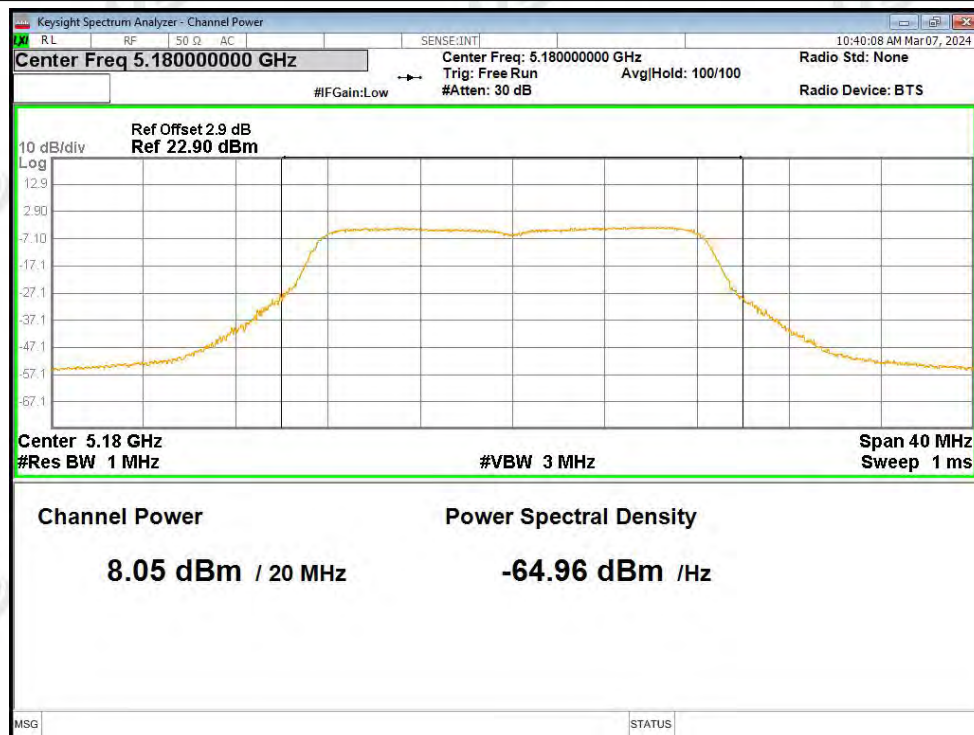


**A2. Maximum Conducted Output Power**

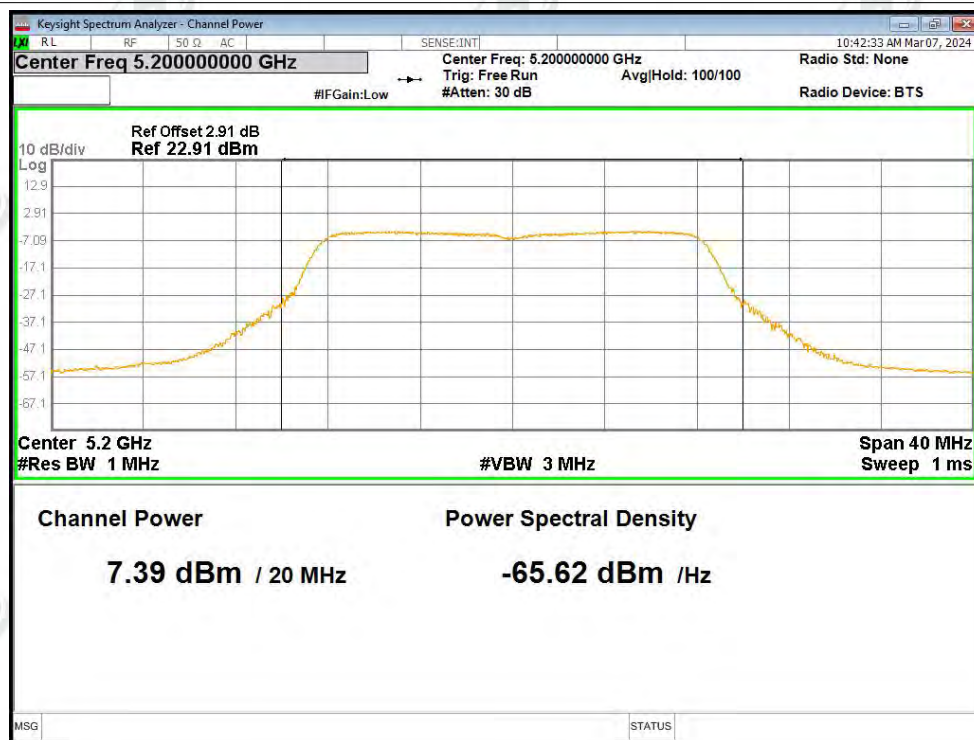
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	8.05	0.35	8.4	24	Pass
NVNT	a	5200	Ant1	7.39	0.26	7.65	24	Pass
NVNT	a	5240	Ant1	7.75	0.35	8.1	24	Pass
NVNT	n20	5180	Ant1	7.46	0.24	7.7	24	Pass
NVNT	n20	5200	Ant1	7.68	0.26	7.94	24	Pass
NVNT	n20	5240	Ant1	7.19	0.37	7.56	24	Pass
NVNT	n40	5190	Ant1	4.92	0.48	5.4	24	Pass
NVNT	n40	5230	Ant1	5.36	0.31	5.67	24	Pass
NVNT	ac20	5180	Ant1	6.37	0.32	6.69	24	Pass
NVNT	ac20	5200	Ant1	6.62	0.35	6.97	24	Pass
NVNT	ac20	5240	Ant1	6.79	0.28	7.07	24	Pass
NVNT	ac40	5190	Ant1	4.61	0.13	4.74	24	Pass
NVNT	ac40	5230	Ant1	5.02	0.52	5.54	24	Pass
NVNT	ac80	5210	Ant1	4.74	0.53	5.27	24	Pass

Test Graphs

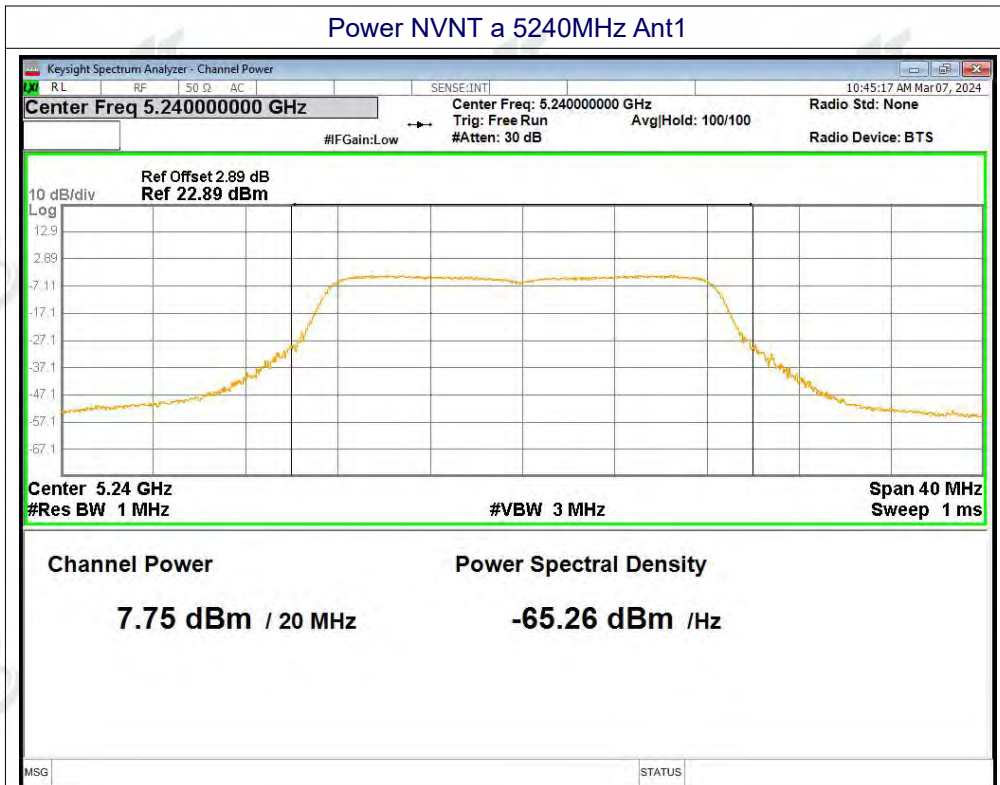
Power NVNT a 5180MHz Ant1



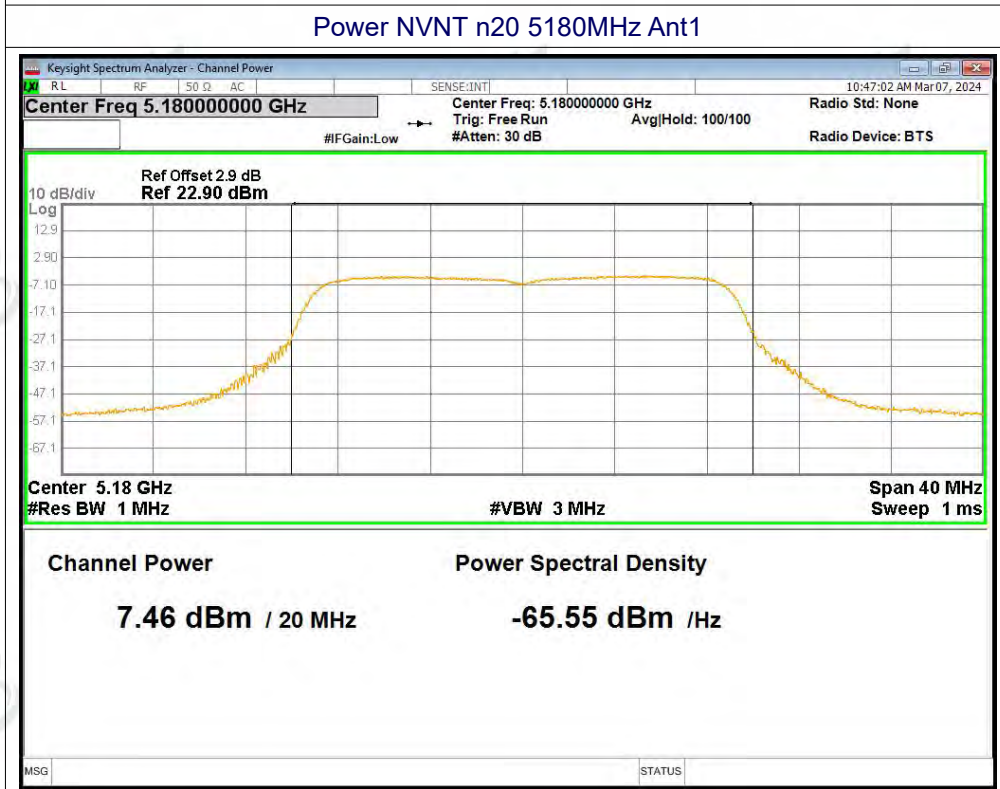
Power NVNT a 5200MHz Ant1



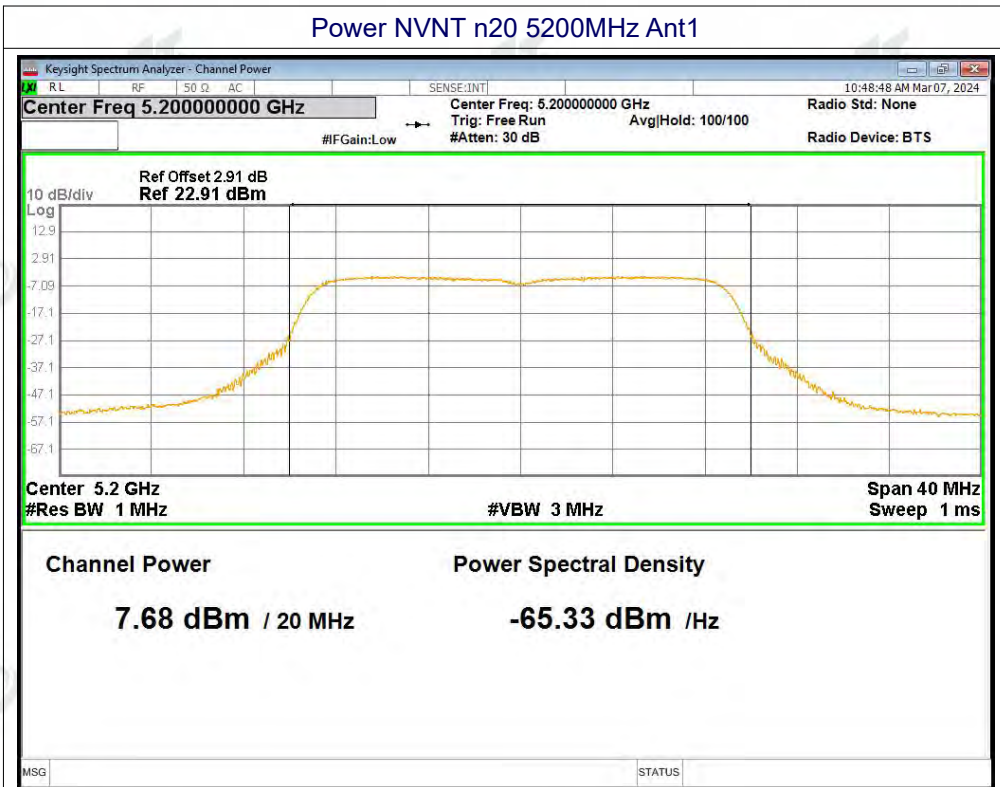
Power NVNT a 5240MHz Ant1



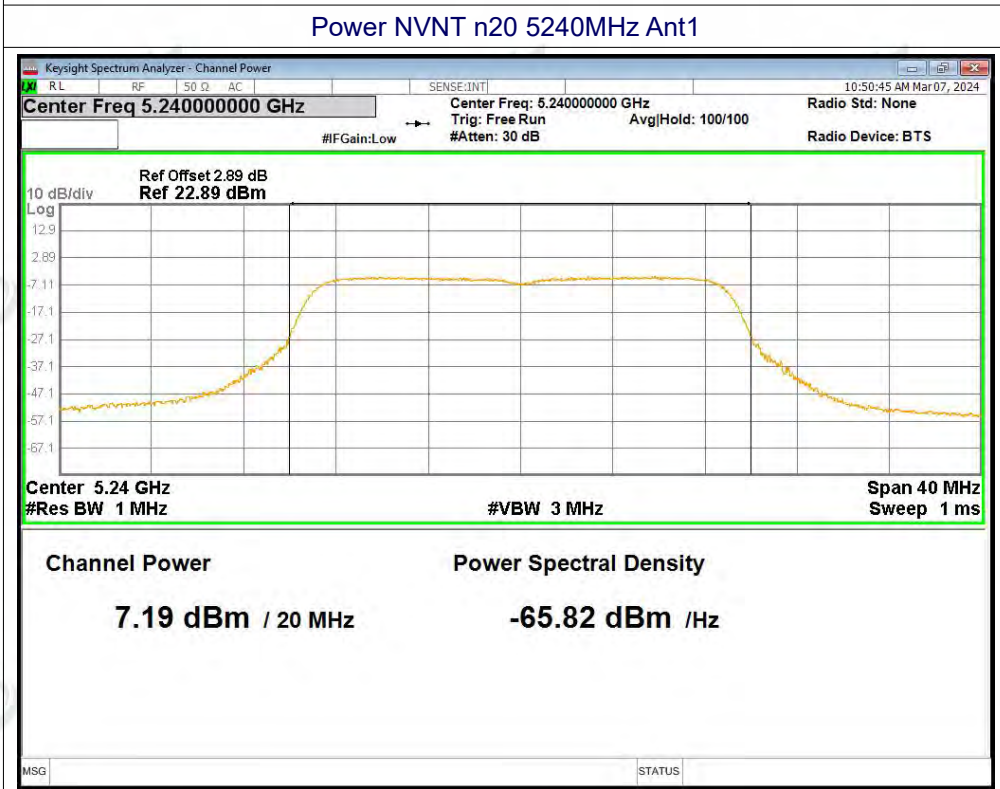
Power NVNT n20 5180MHz Ant1



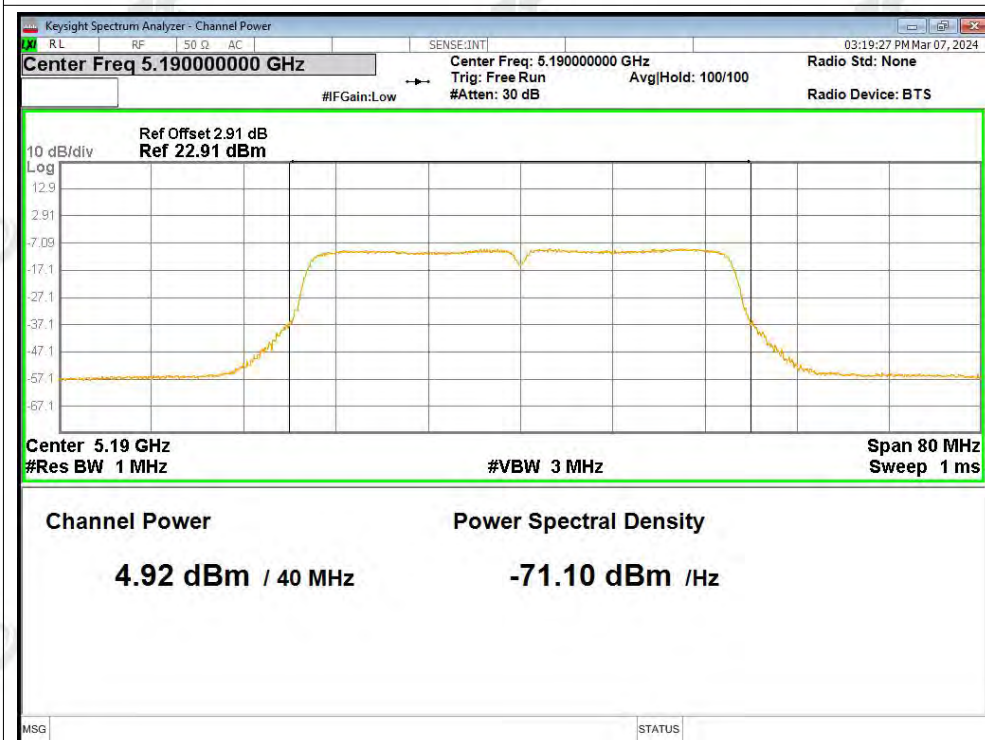
Power NVNT n20 5200MHz Ant1



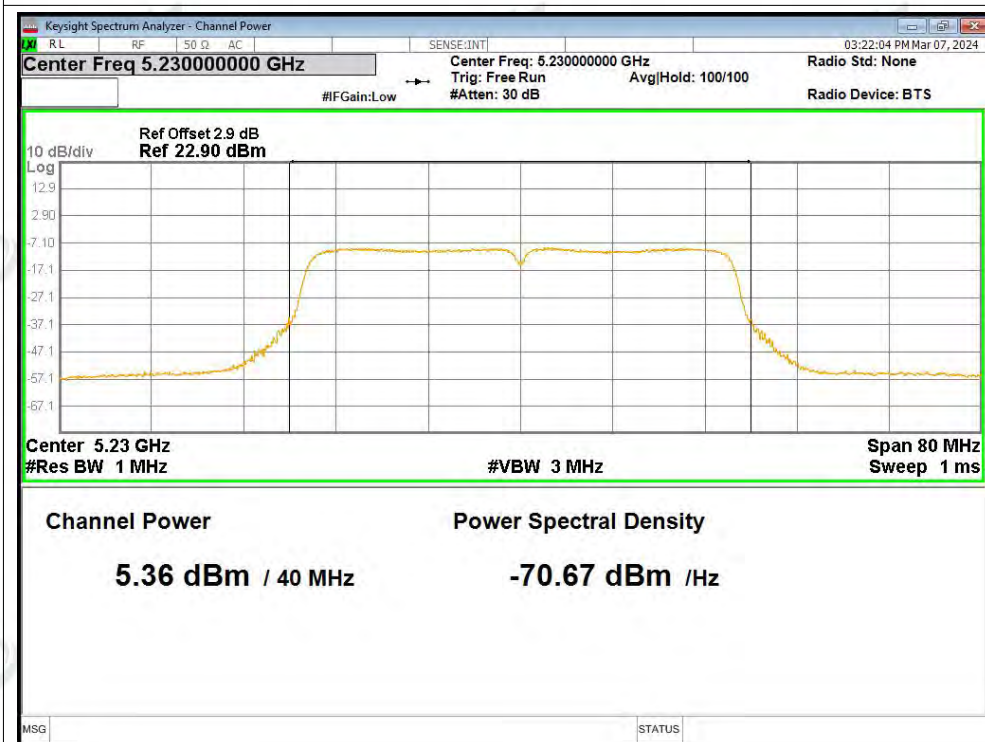
Power NVNT n20 5240MHz Ant1



Power NVNT n40 5190MHz Ant1



Power NVNT n40 5230MHz Ant1



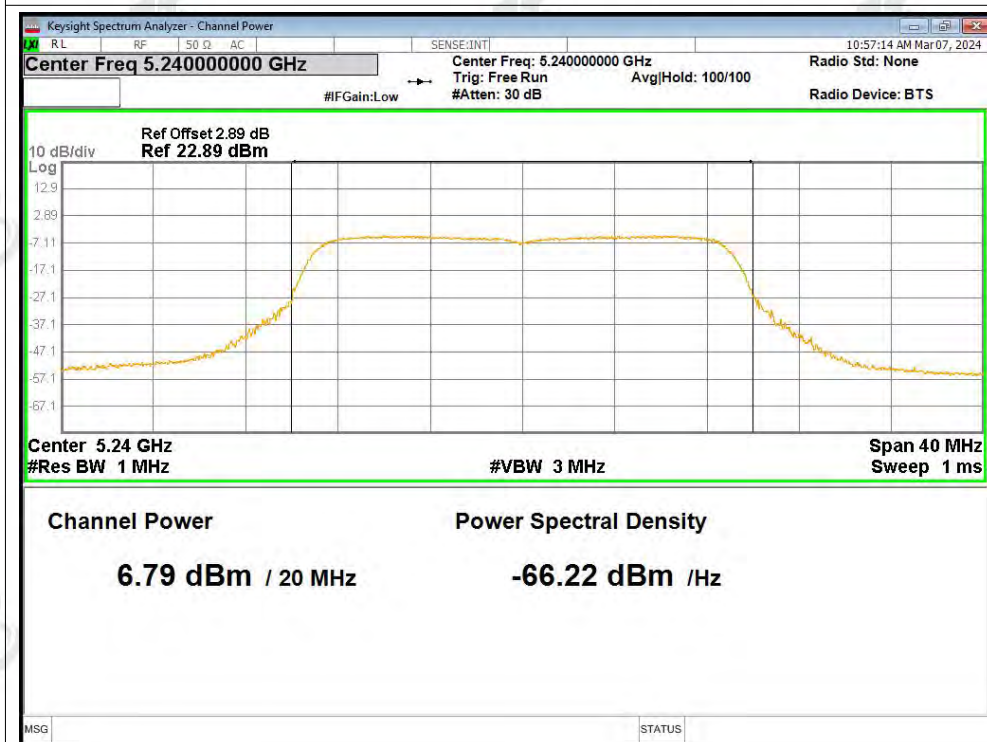
Power NVNT ac20 5180MHz Ant1



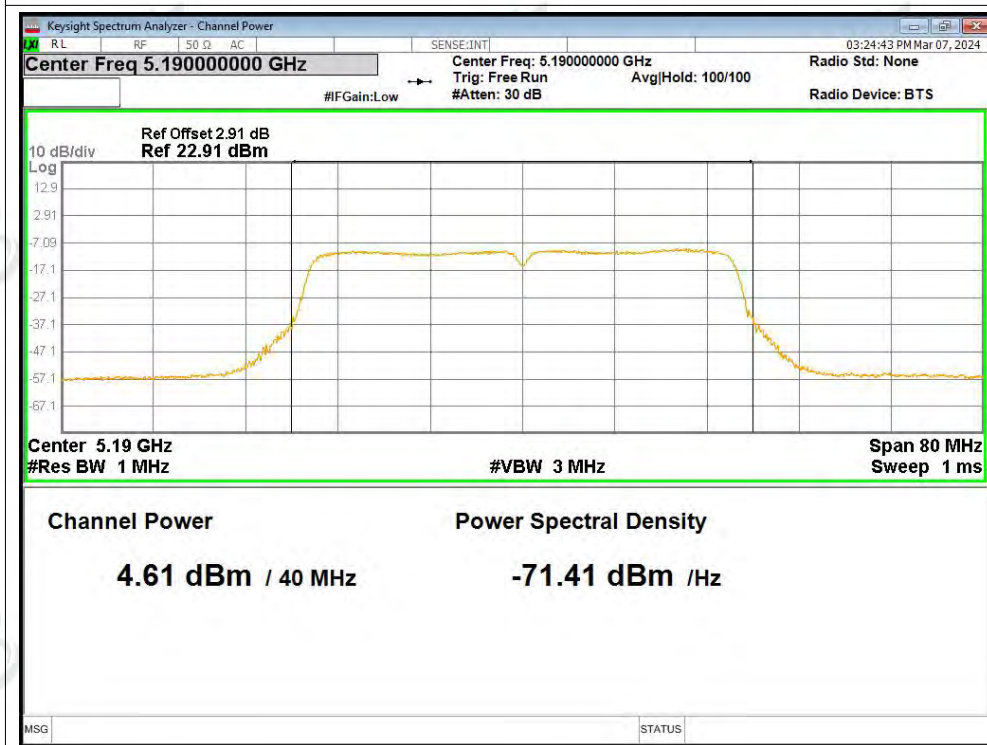
Power NVNT ac20 5200MHz Ant1



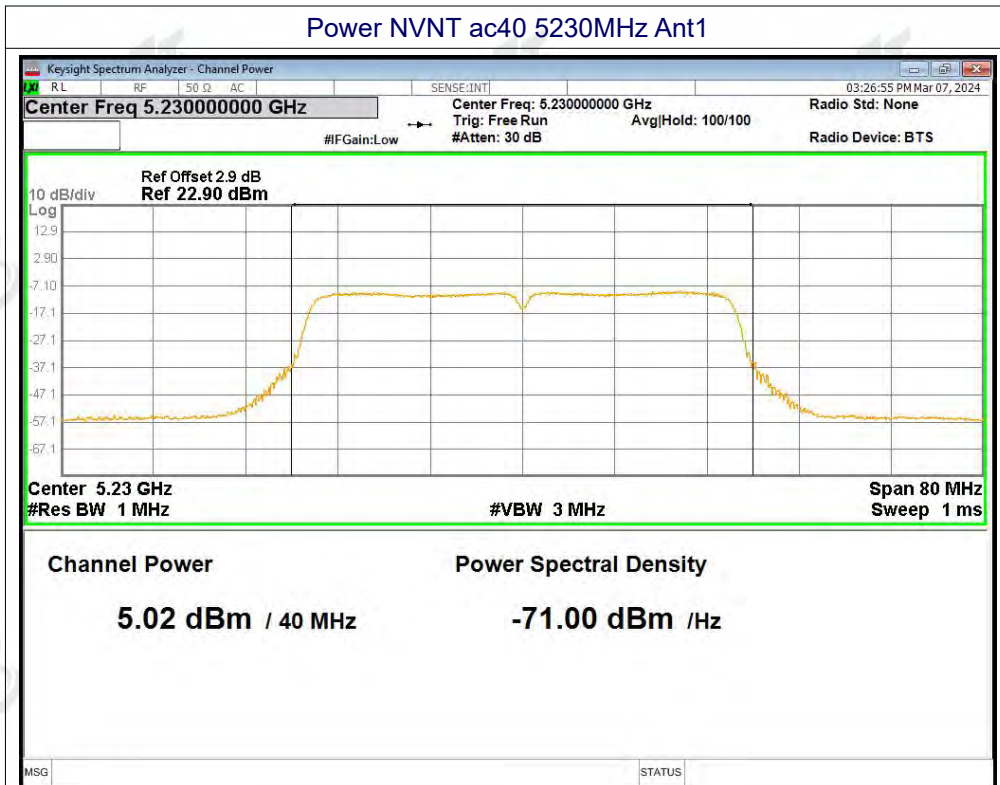
Power NVNT ac20 5240MHz Ant1



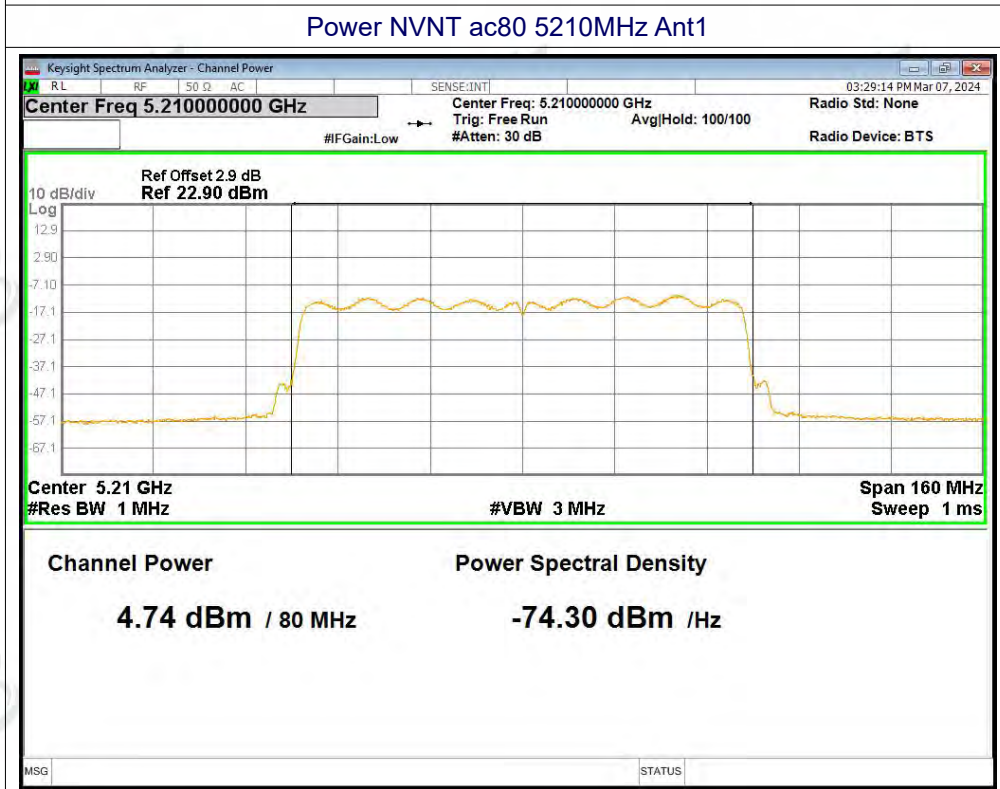
Power NVNT ac40 5190MHz Ant1



Power NVNT ac40 5230MHz Ant1



Power NVNT ac80 5210MHz Ant1



**A3. -26dB Bandwidth**

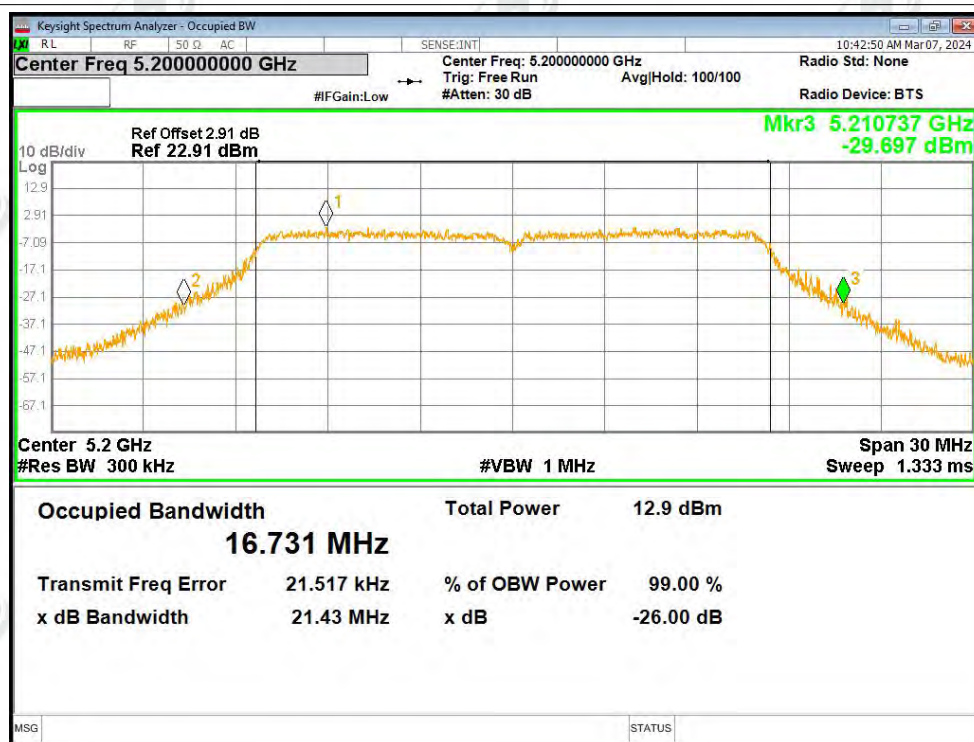
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	21.158	Pass
NVNT	a	5200	Ant1	21.432	Pass
NVNT	a	5240	Ant1	21.512	Pass
NVNT	n20	5180	Ant1	21.574	Pass
NVNT	n20	5200	Ant1	21.695	Pass
NVNT	n20	5240	Ant1	21.265	Pass
NVNT	n40	5190	Ant1	40.884	Pass
NVNT	n40	5230	Ant1	40.68	Pass
NVNT	ac20	5180	Ant1	21.477	Pass
NVNT	ac20	5200	Ant1	21.214	Pass
NVNT	ac20	5240	Ant1	21.553	Pass
NVNT	ac40	5190	Ant1	40.165	Pass
NVNT	ac40	5230	Ant1	41.061	Pass
NVNT	ac80	5210	Ant1	79.489	Pass

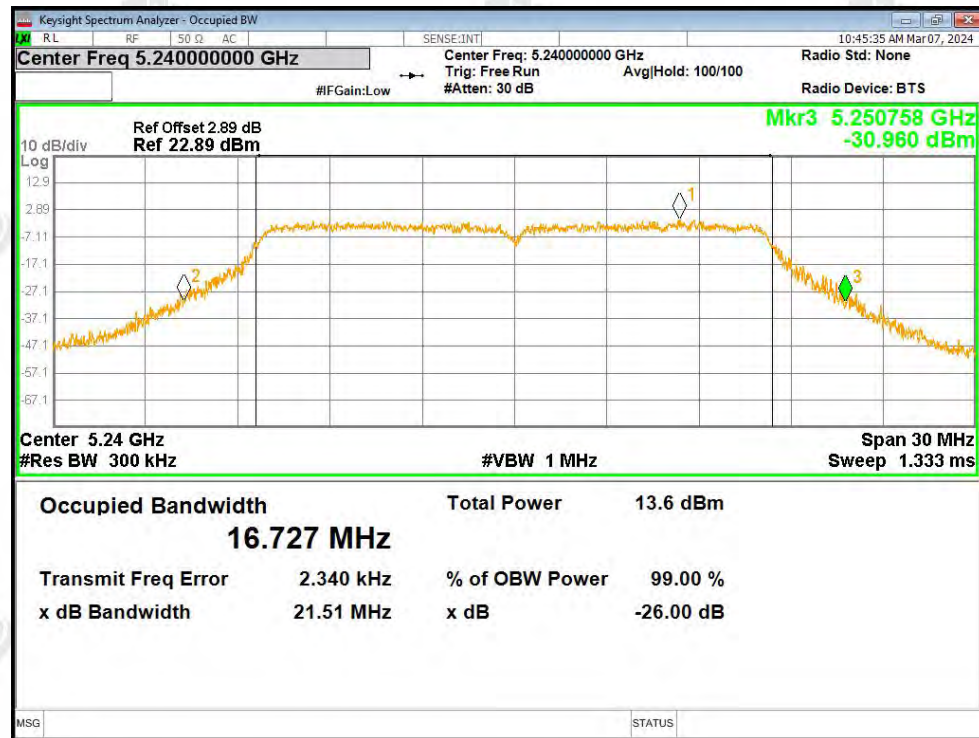
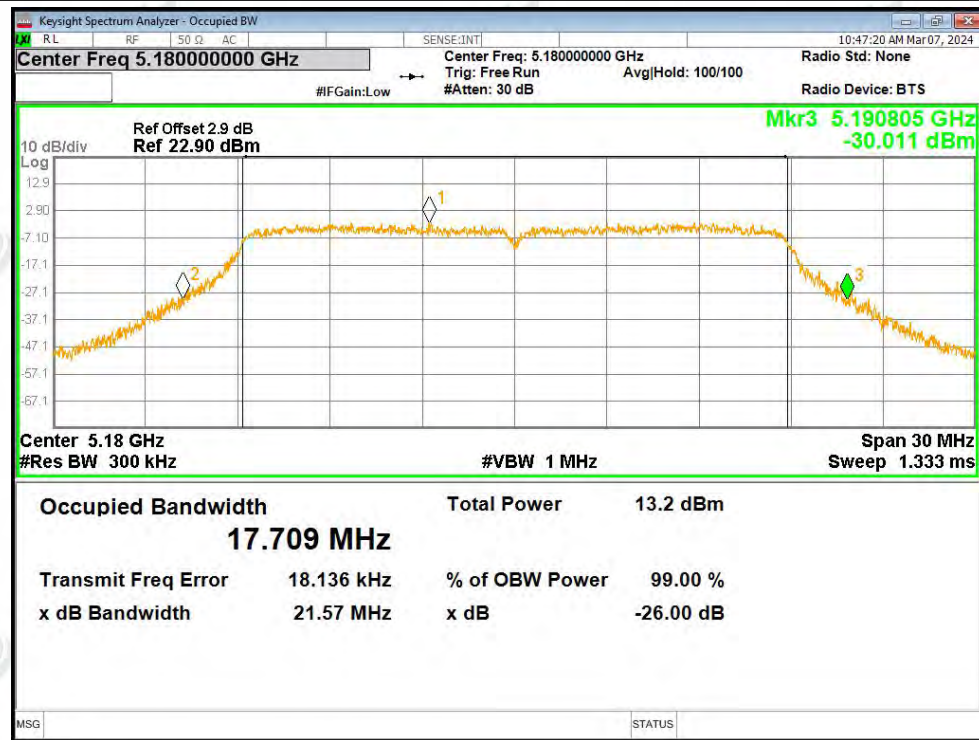
Test Graphs

-26dB Bandwidth NVNT a 5180MHz Ant1

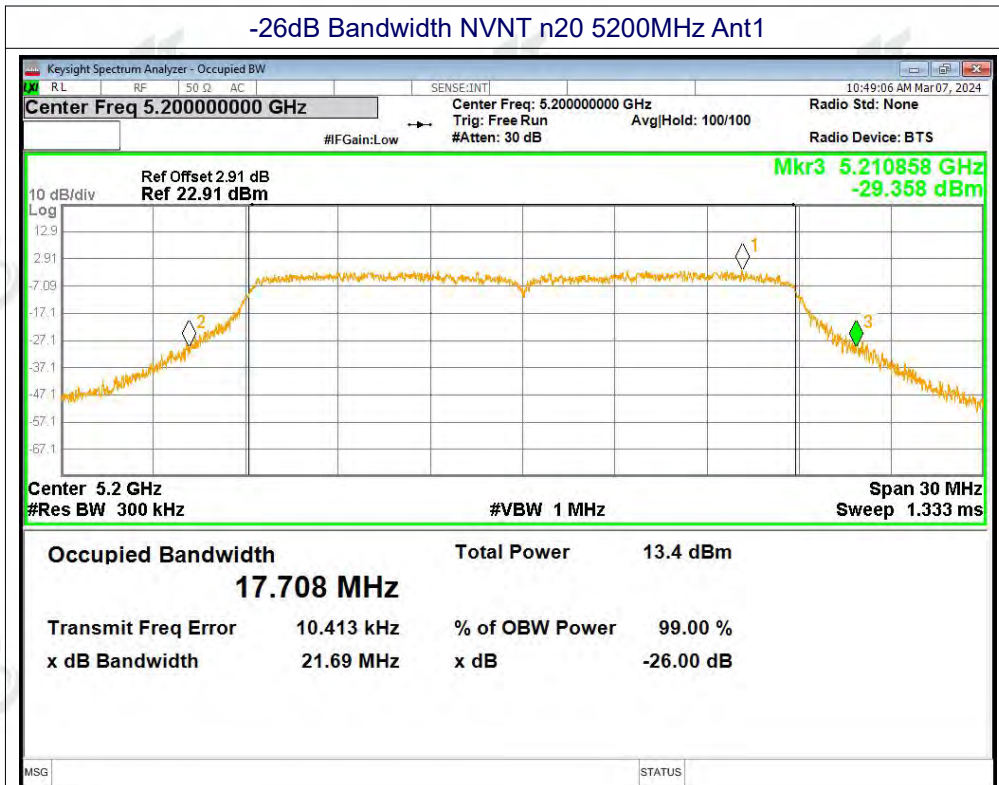


-26dB Bandwidth NVNT a 5200MHz Ant1

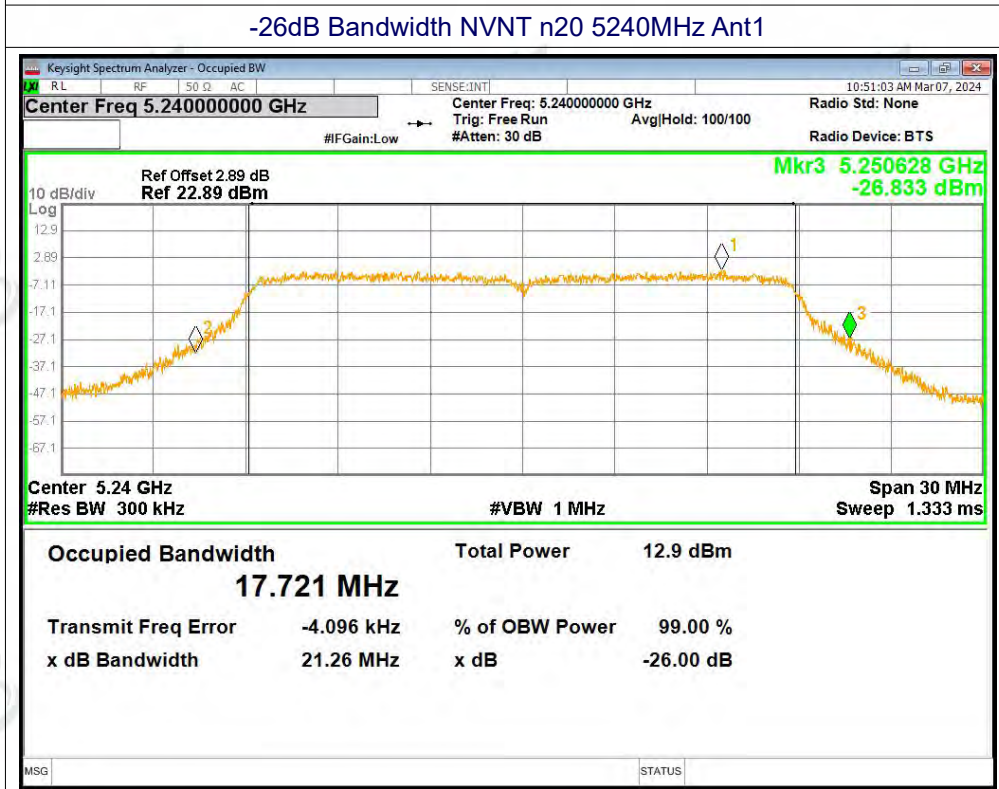


**-26dB Bandwidth NVNT a 5240MHz Ant1****-26dB Bandwidth NVNT n20 5180MHz Ant1**

-26dB Bandwidth NVNT n20 5200MHz Ant1



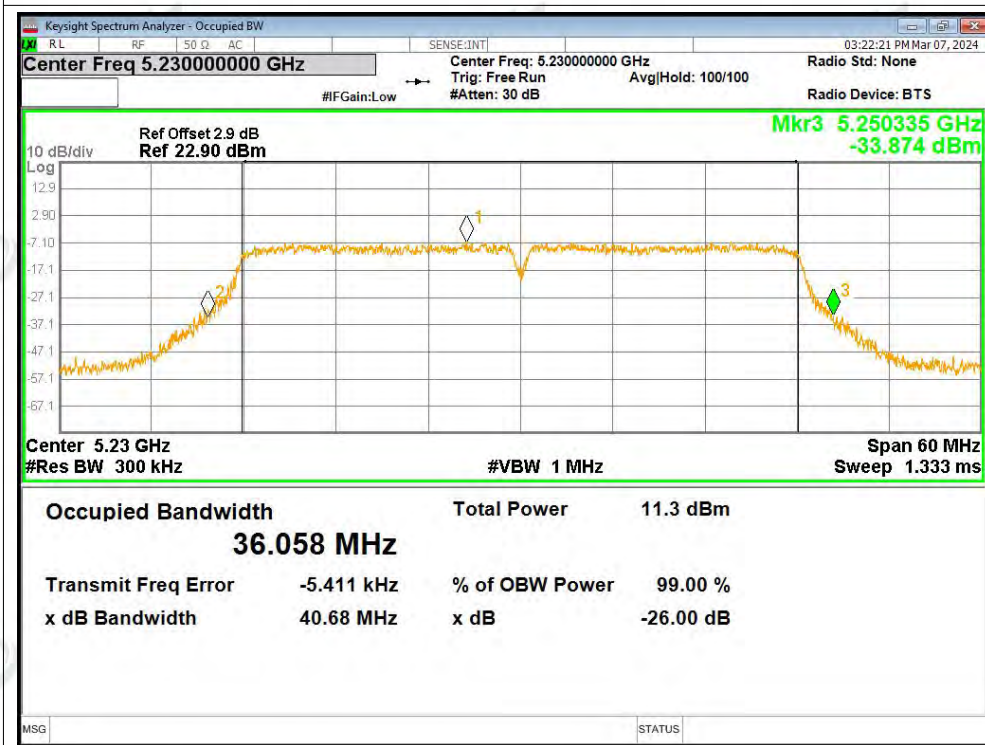
-26dB Bandwidth NVNT n20 5240MHz Ant1



-26dB Bandwidth NVNT n40 5190MHz Ant1

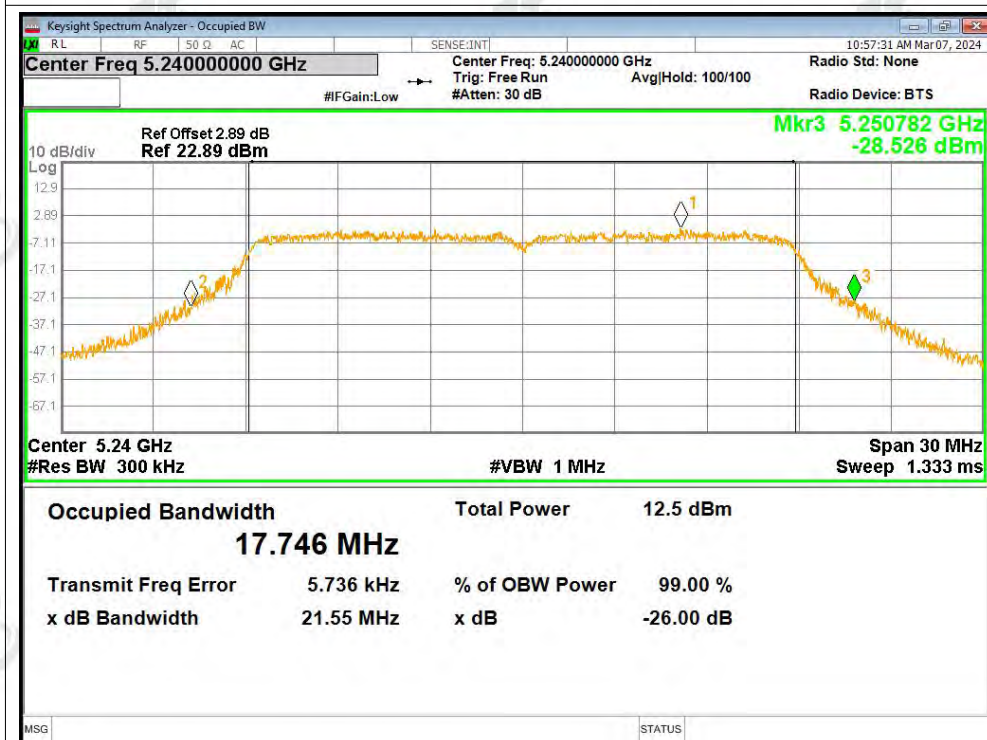


-26dB Bandwidth NVNT n40 5230MHz Ant1

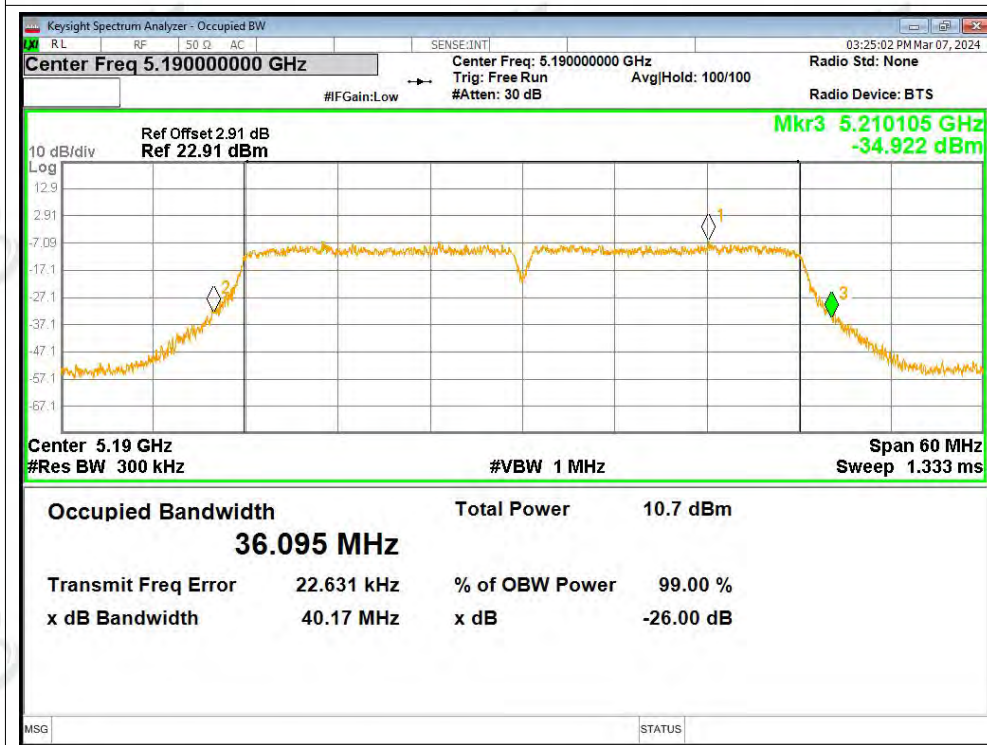




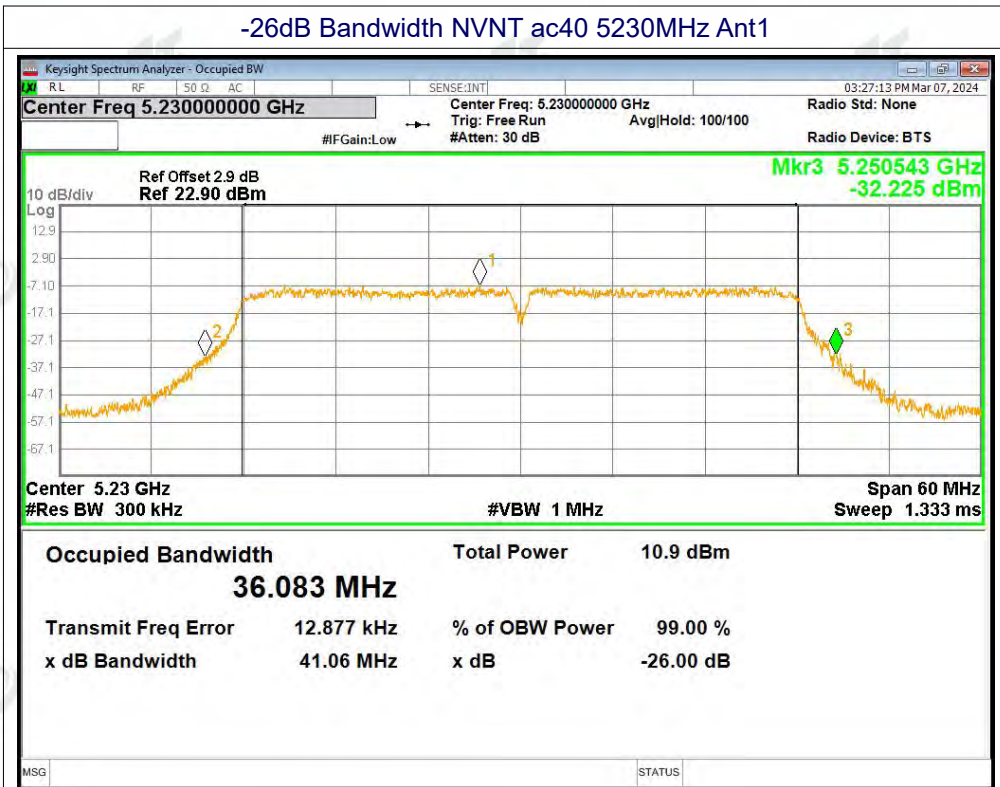
-26dB Bandwidth NVNT ac20 5240MHz Ant1



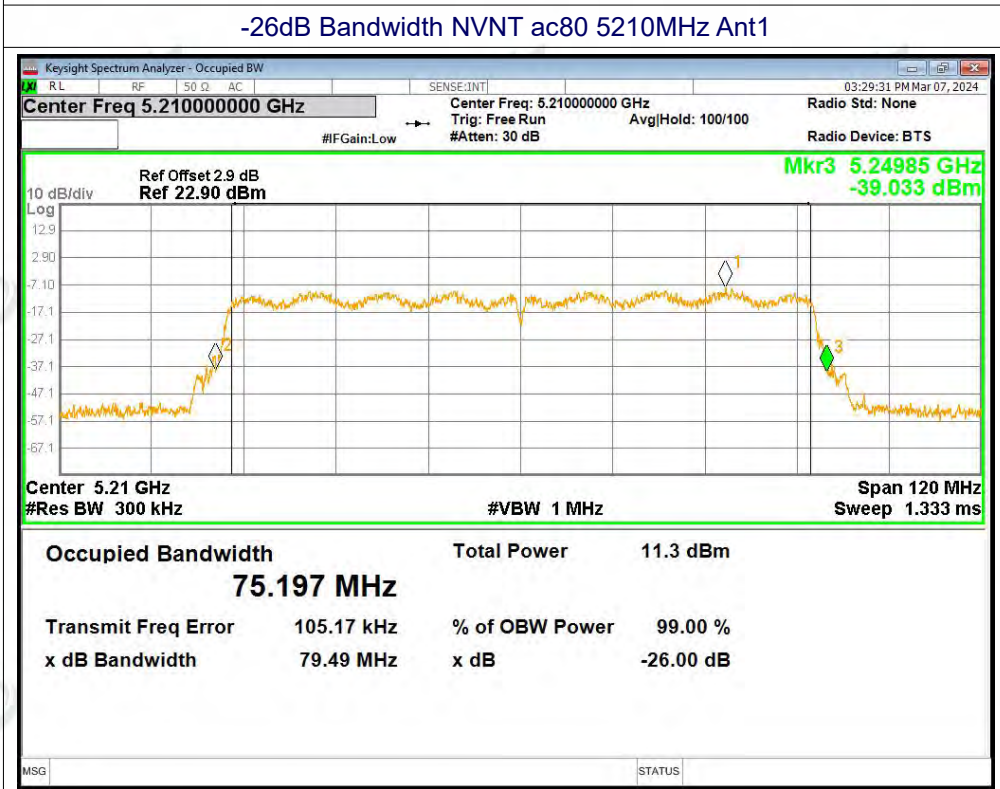
-26dB Bandwidth NVNT ac40 5190MHz Ant1



-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant1

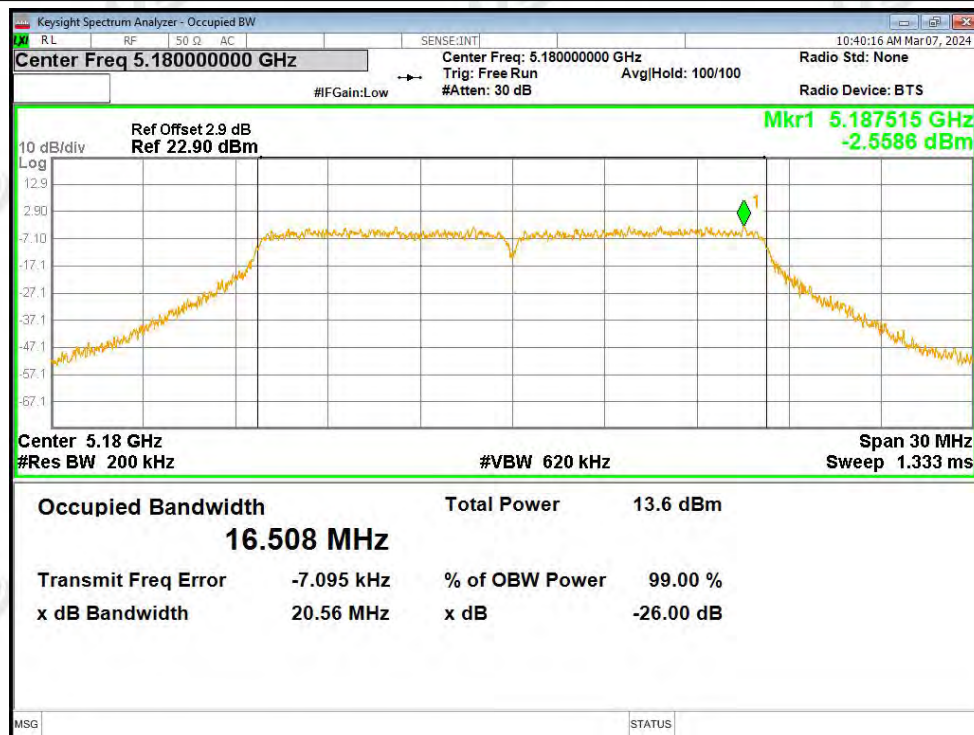


**A4. Occupied Channel Bandwidth**

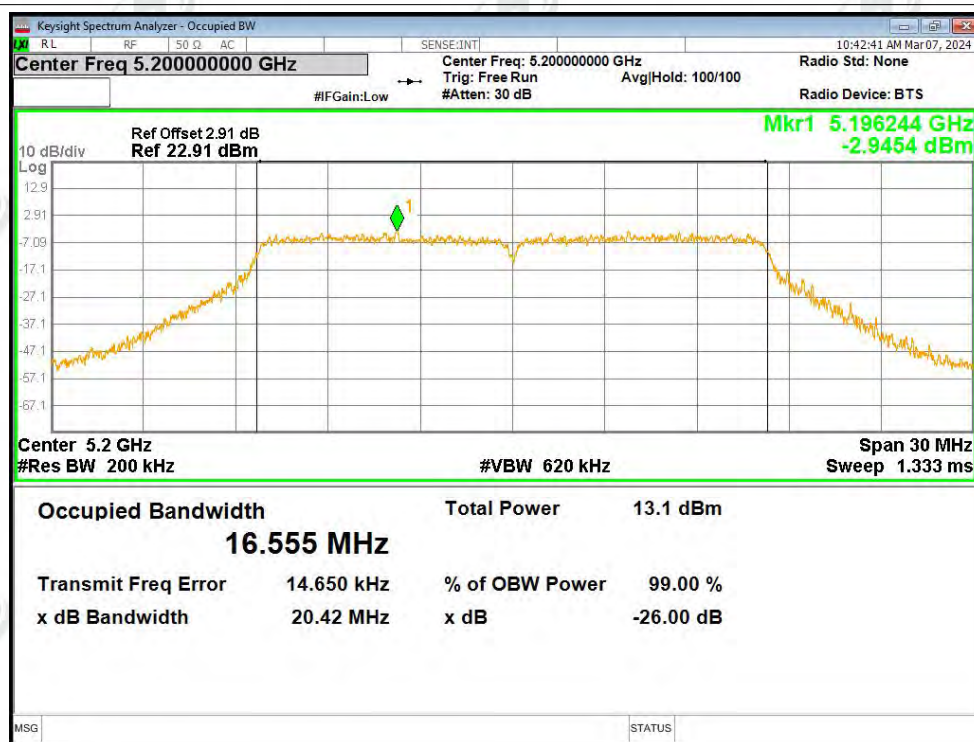
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.508
NVNT	a	5200	Ant1	16.555
NVNT	a	5240	Ant1	16.532
NVNT	n20	5180	Ant1	17.633
NVNT	n20	5200	Ant1	17.603
NVNT	n20	5240	Ant1	17.61
NVNT	n40	5190	Ant1	36.111
NVNT	n40	5230	Ant1	36.135
NVNT	ac20	5180	Ant1	17.651
NVNT	ac20	5200	Ant1	17.618
NVNT	ac20	5240	Ant1	17.618
NVNT	ac40	5190	Ant1	36.159
NVNT	ac40	5230	Ant1	36.164
NVNT	ac80	5210	Ant1	75.268

Test Graphs

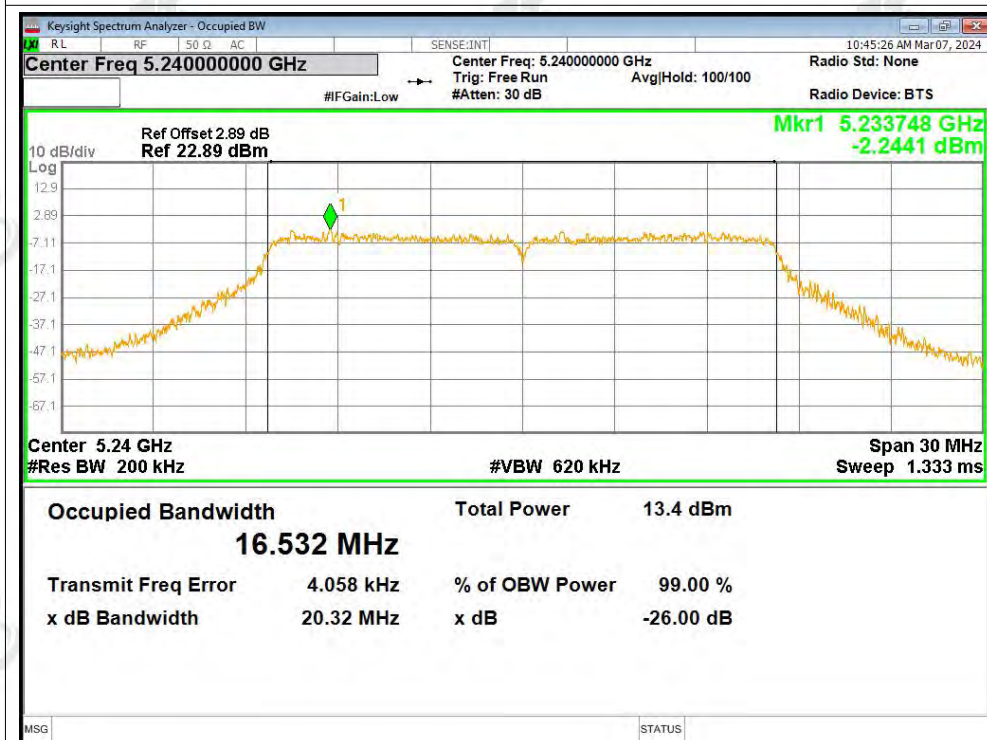
OBW NVNT a 5180MHz Ant1



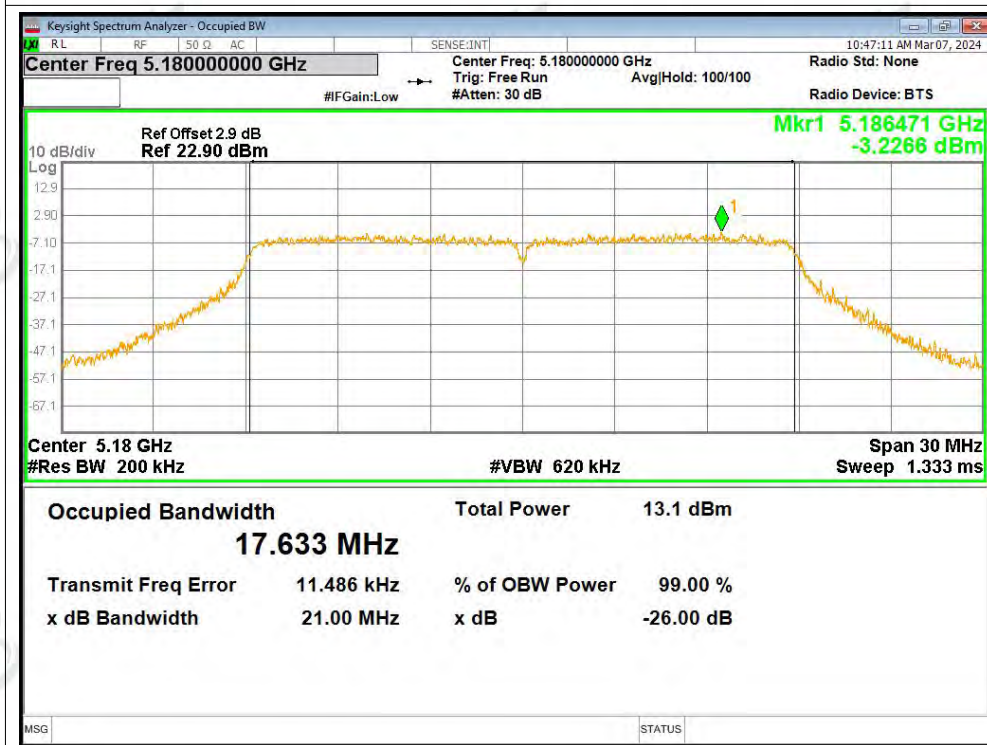
OBW NVNT a 5200MHz Ant1



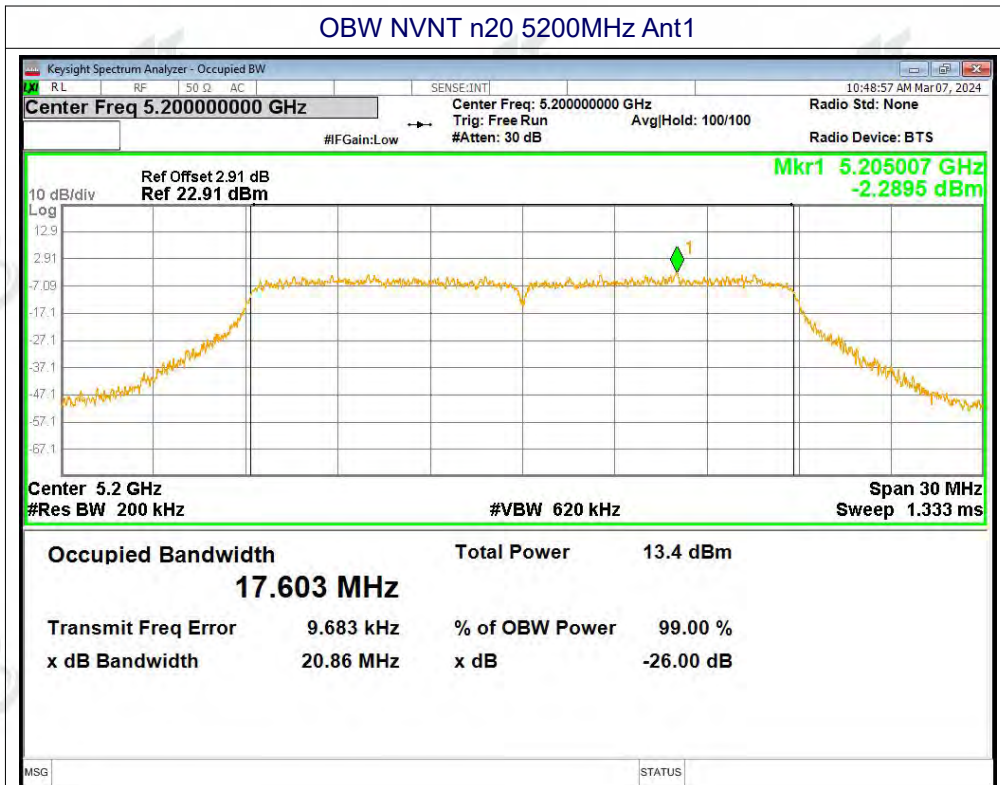
OBW NVNT a 5240MHz Ant1



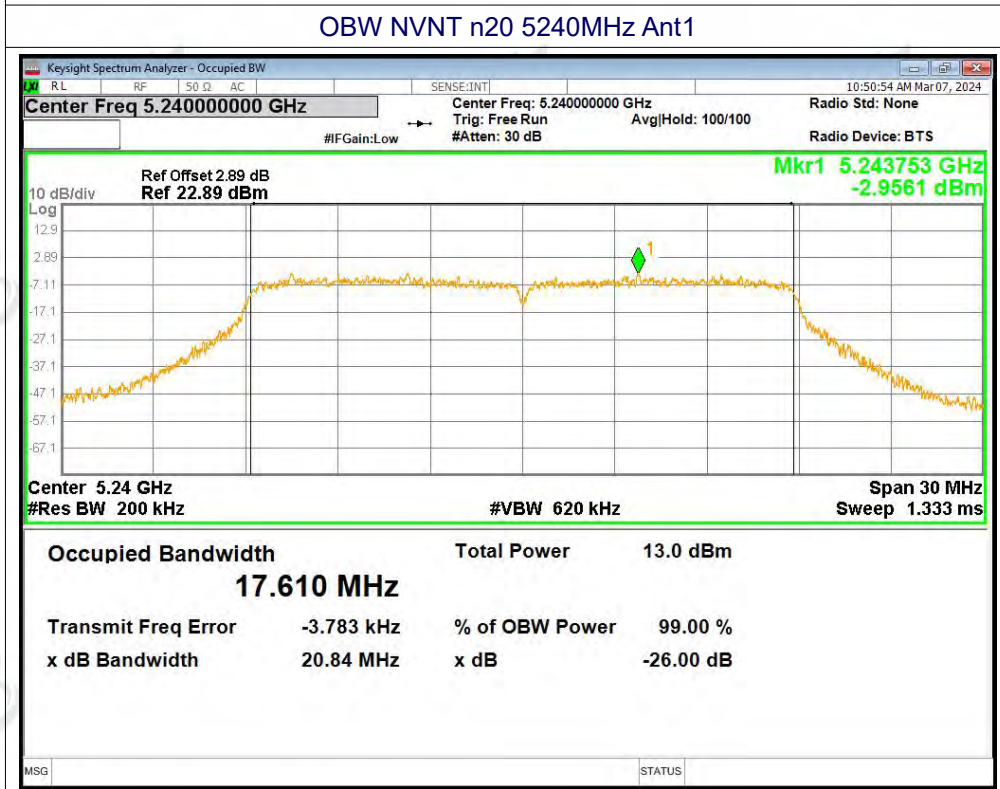
OBW NVNT n20 5180MHz Ant1



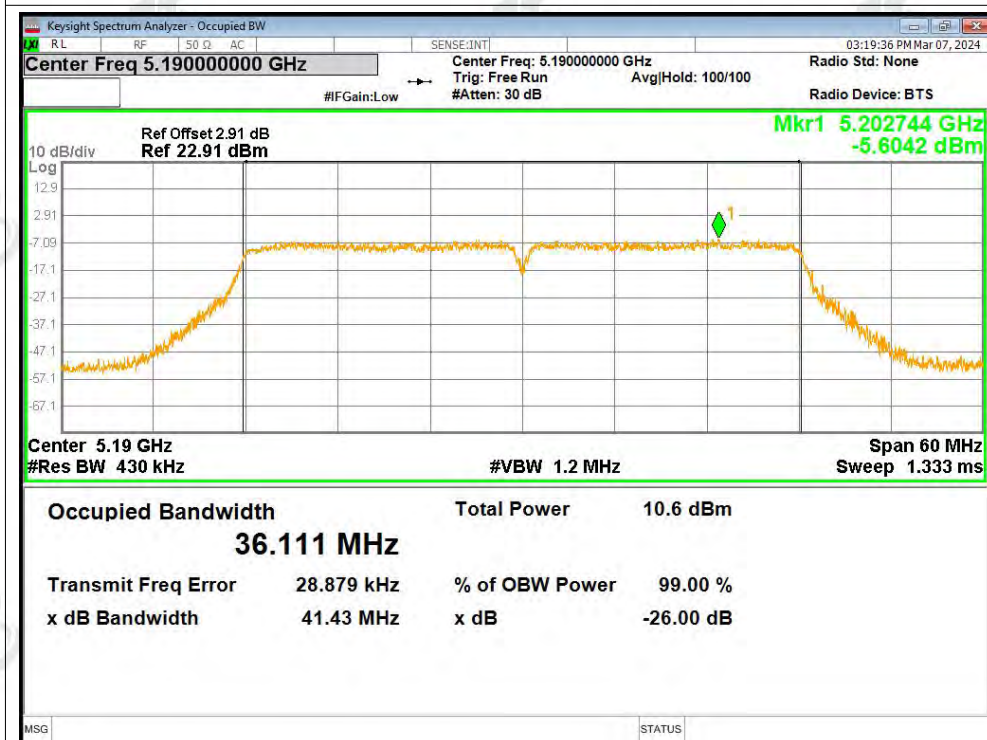
OBW NVNT n20 5200MHz Ant1



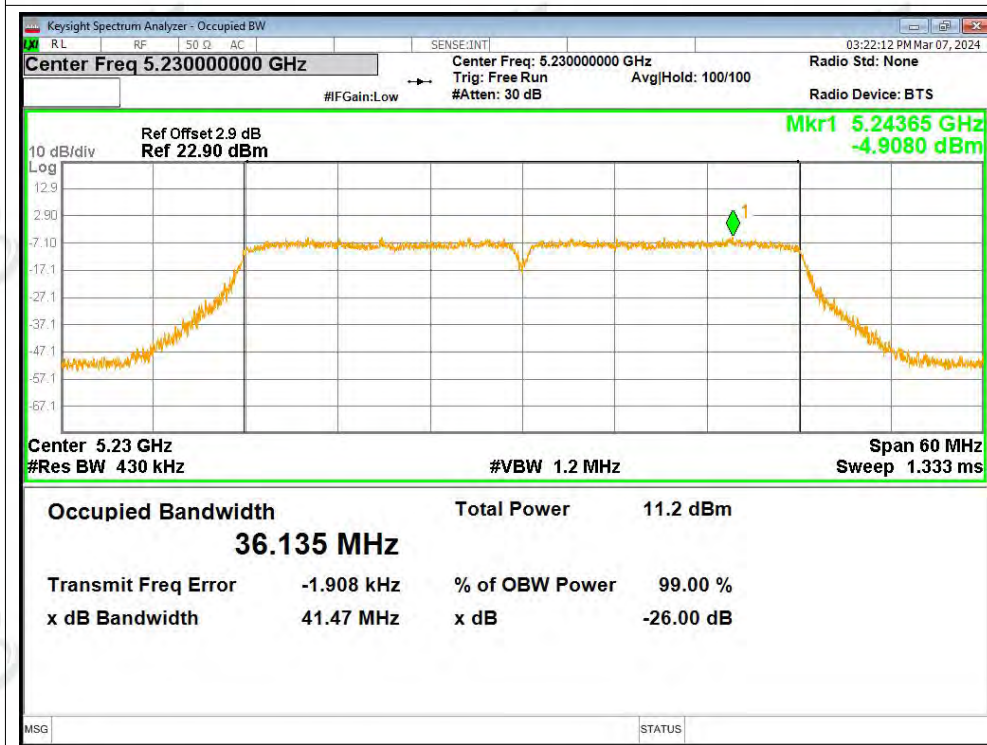
OBW NVNT n20 5240MHz Ant1



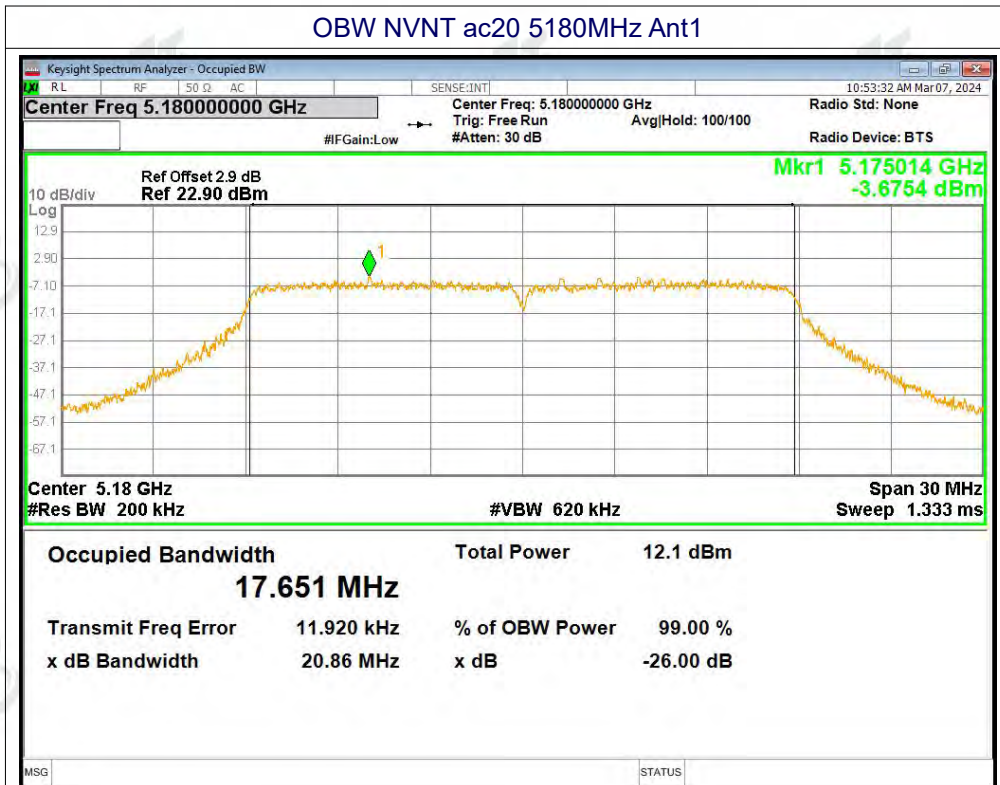
OBW NVNT n40 5190MHz Ant1



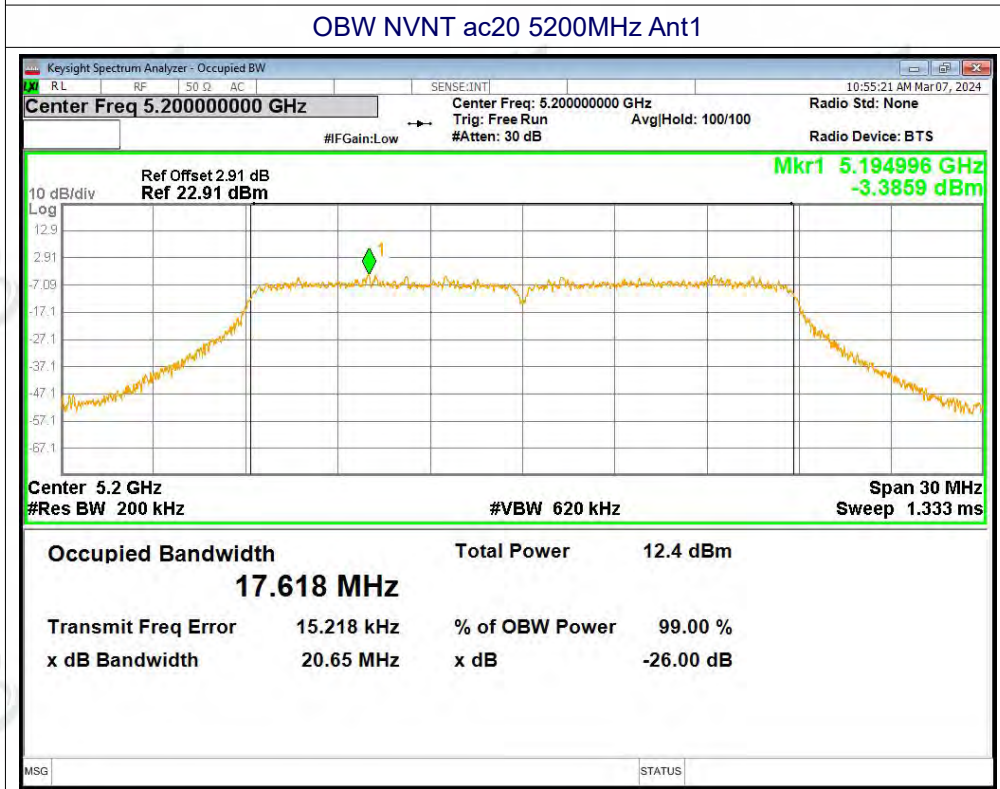
OBW NVNT n40 5230MHz Ant1



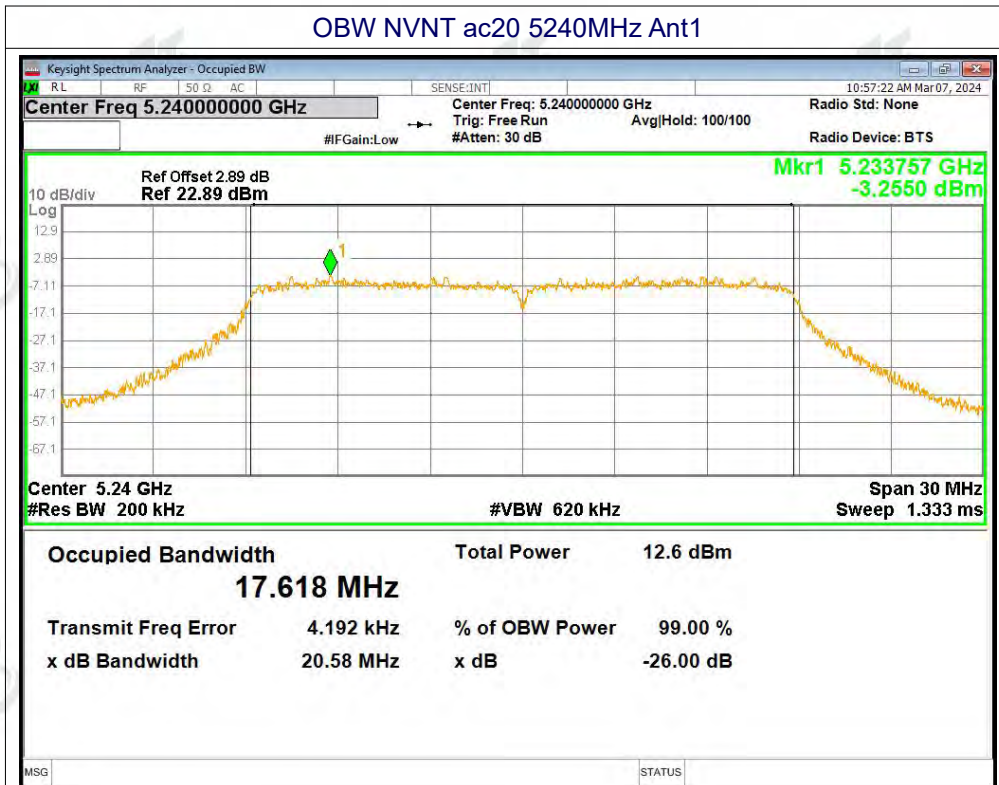
OBW NVNT ac20 5180MHz Ant1



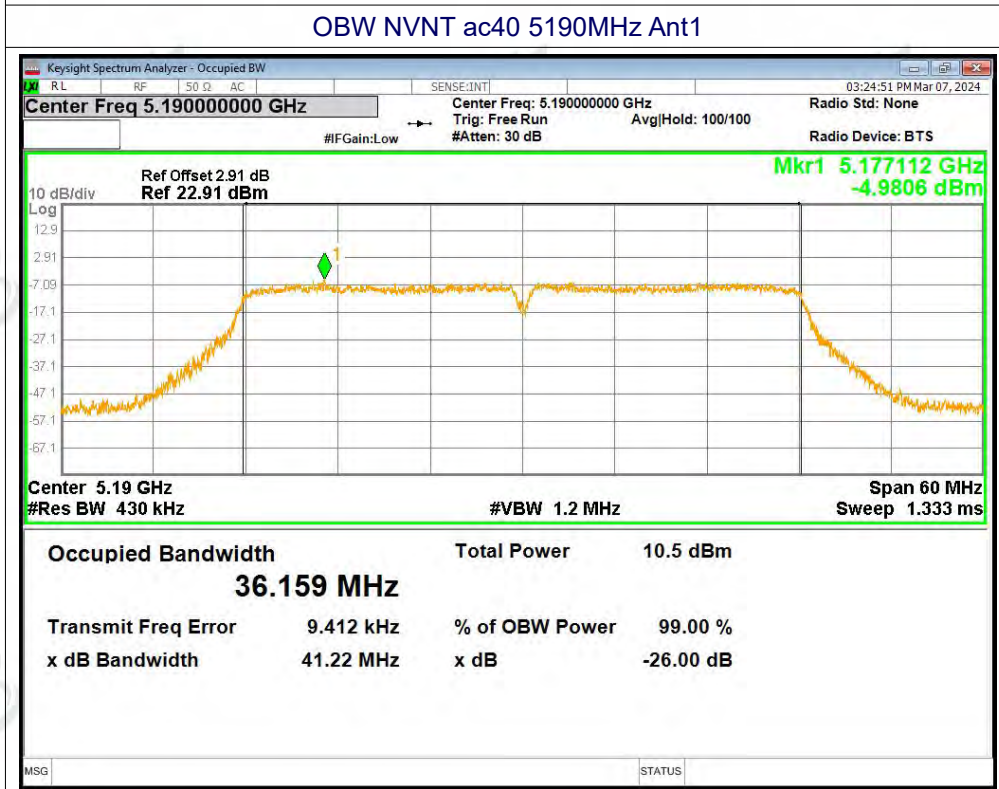
OBW NVNT ac20 5200MHz Ant1



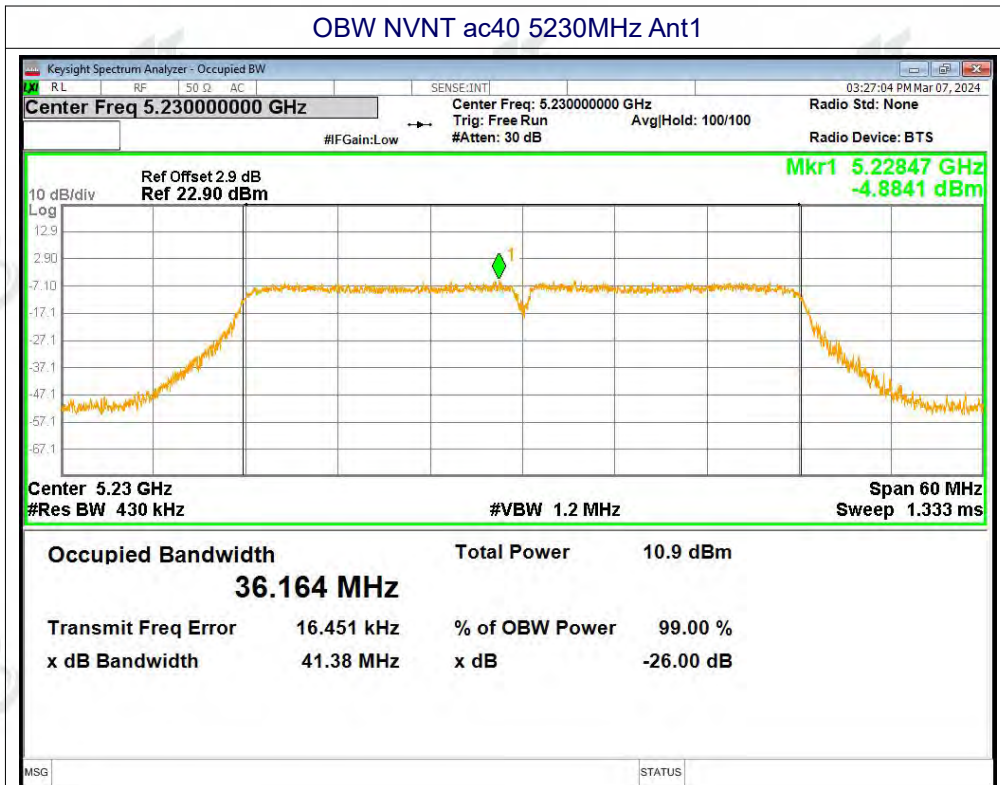
OBW NVNT ac20 5240MHz Ant1



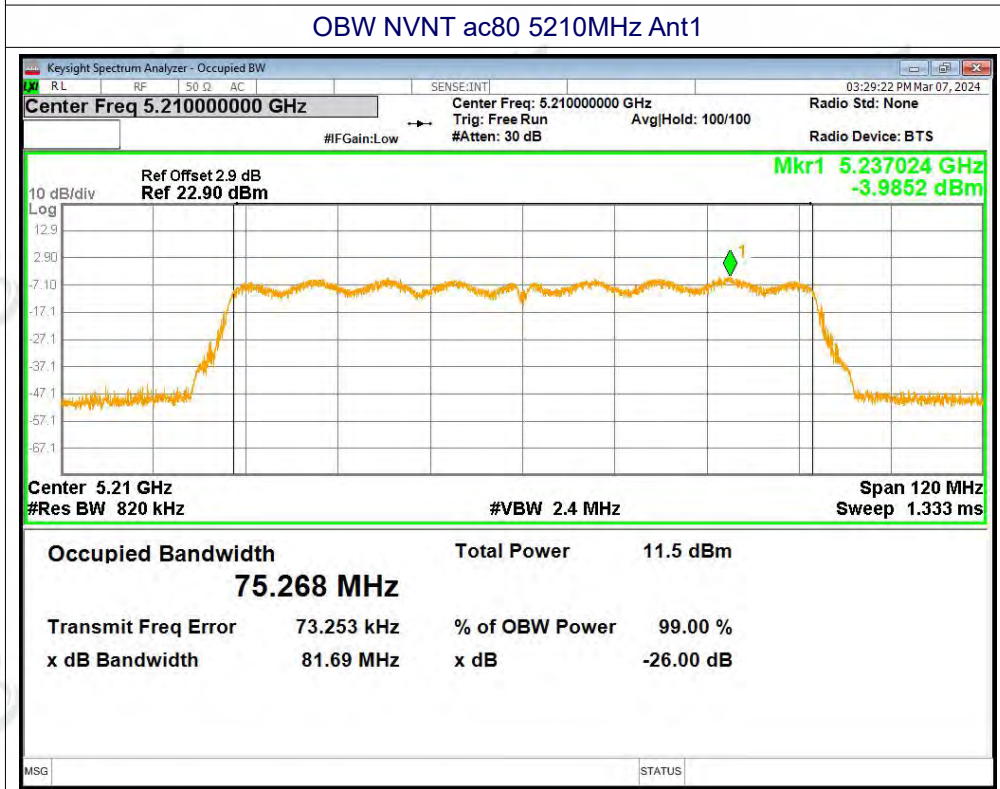
OBW NVNT ac40 5190MHz Ant1



OBW NVNT ac40 5230MHz Ant1



OBW NVNT ac80 5210MHz Ant1



**A5. Maximum Power Spectral Density Level**

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-4.79	0.35	-4.44	11	Pass
NVNT	a	5200	Ant1	-6.17	0.26	-5.91	11	Pass
NVNT	a	5240	Ant1	-5.58	0.35	-5.23	11	Pass
NVNT	n20	5180	Ant1	-5.34	0.24	-5.1	11	Pass
NVNT	n20	5200	Ant1	-7.04	0.26	-6.78	11	Pass
NVNT	n20	5240	Ant1	-6.73	0.37	-6.36	11	Pass
NVNT	n40	5190	Ant1	-13.01	0.48	-12.53	11	Pass
NVNT	n40	5230	Ant1	-13.18	0.31	-12.87	11	Pass
NVNT	ac20	5180	Ant1	-6.78	0.32	-6.46	11	Pass
NVNT	ac20	5200	Ant1	-7.28	0.35	-6.93	11	Pass
NVNT	ac20	5240	Ant1	-6.54	0.28	-6.26	11	Pass
NVNT	ac40	5190	Ant1	-12.39	0.13	-12.26	11	Pass
NVNT	ac40	5230	Ant1	-12.8	0.52	-12.28	11	Pass
NVNT	ac80	5210	Ant1	-17.56	0.53	-17.03	11	Pass

Test Graphs

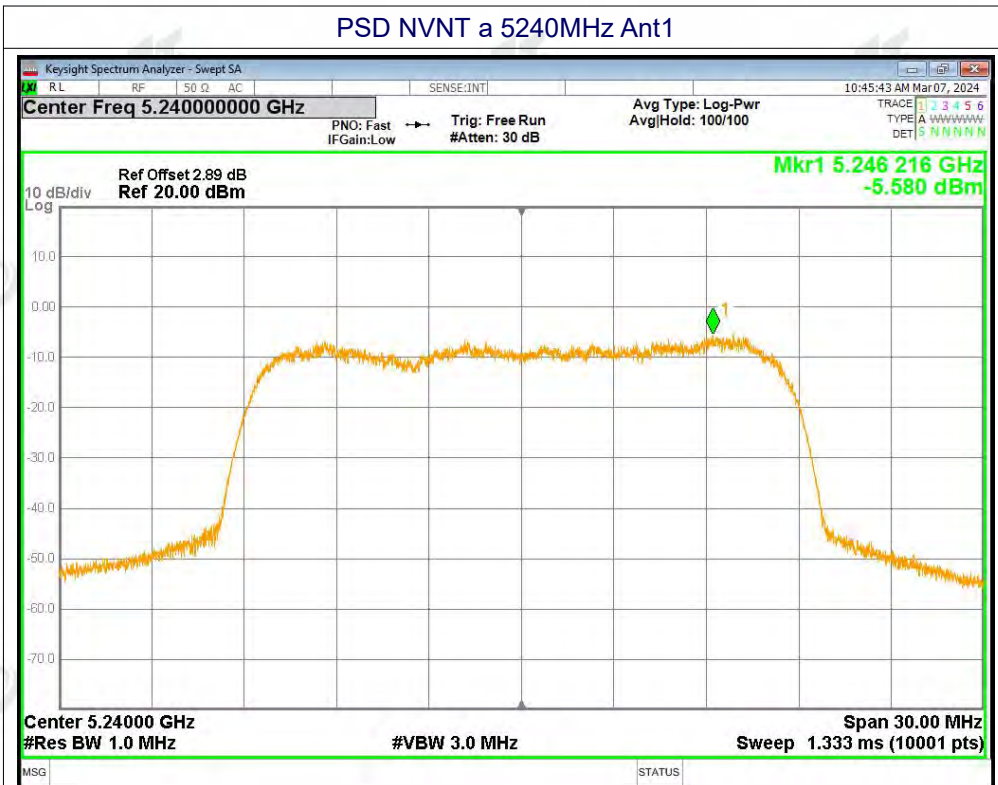
PSD NVNT a 5180MHz Ant1



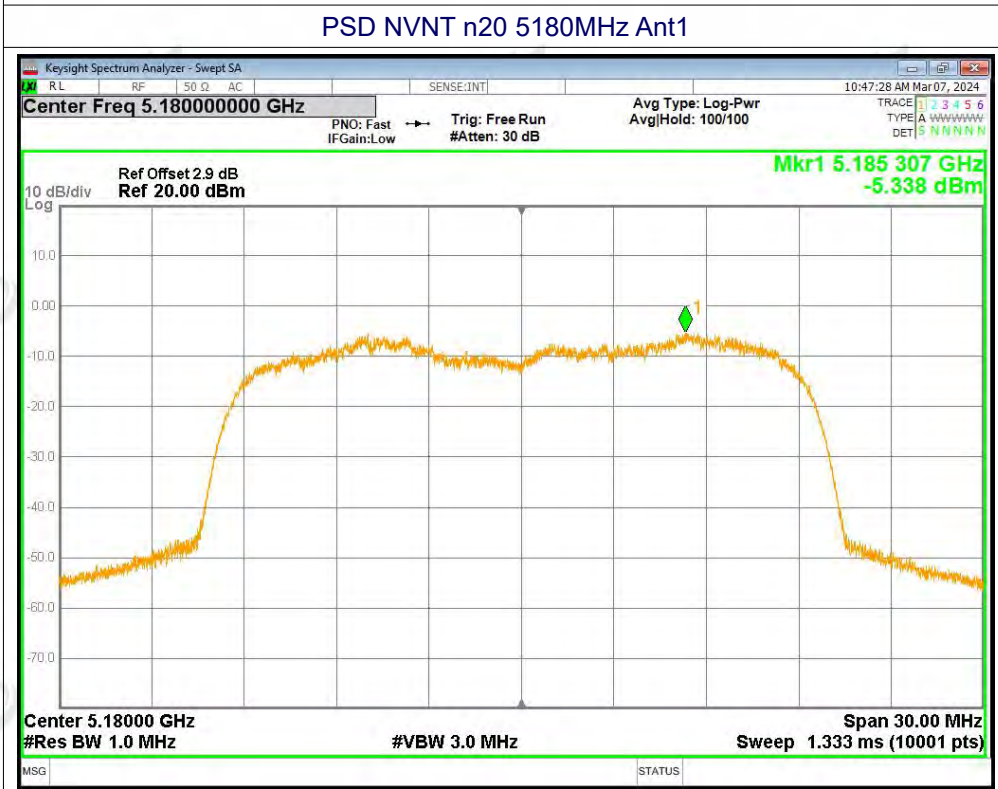
PSD NVNT a 5200MHz Ant1



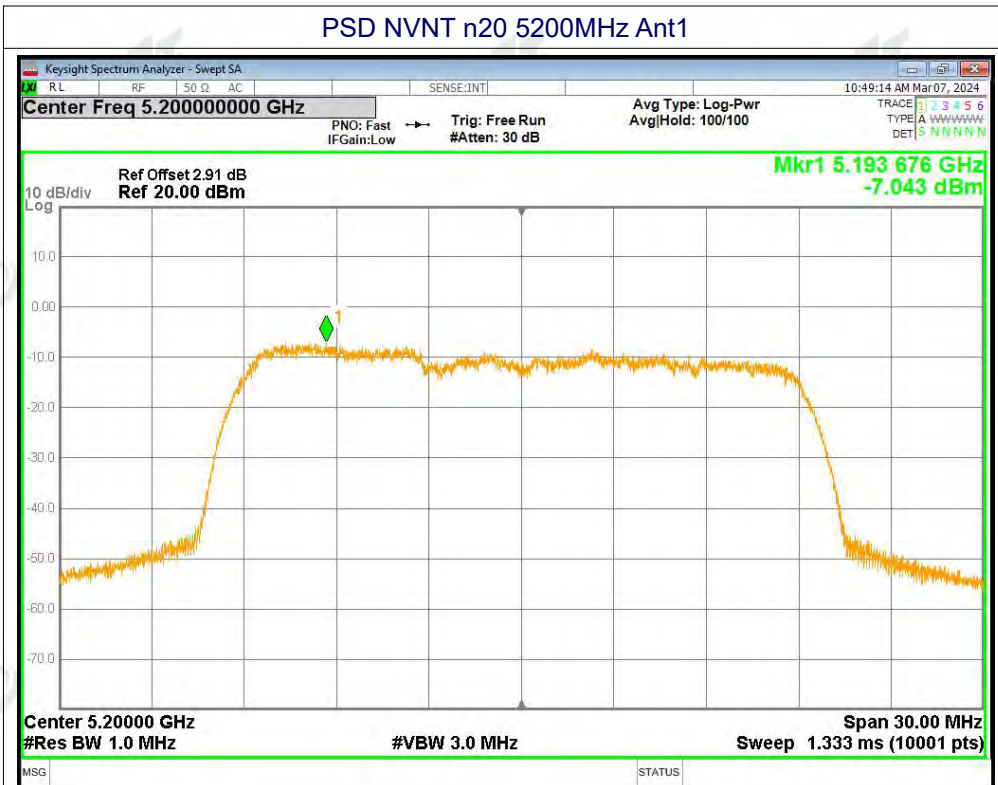
PSD NVNT a 5240MHz Ant1



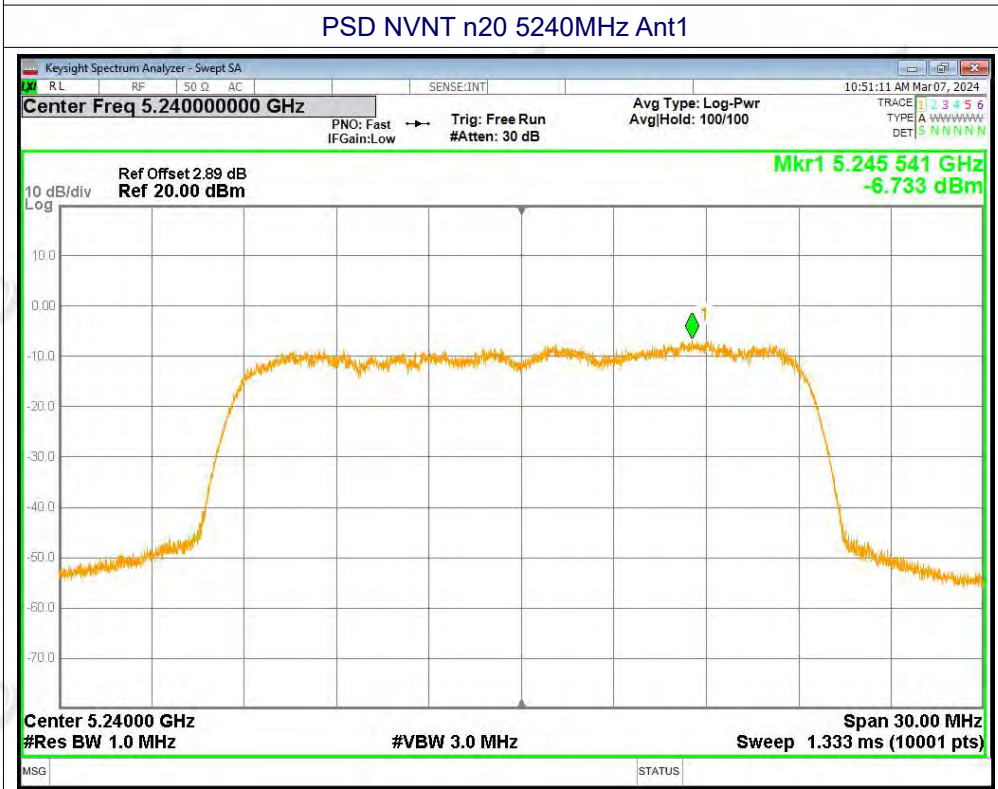
PSD NVNT n20 5180MHz Ant1



PSD NVNT n20 5200MHz Ant1



PSD NVNT n20 5240MHz Ant1



PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5230MHz Ant1

