

1. Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	73.16	1.36	0.73
NVNT	a	5200	Ant1	73.16	1.36	0.73
NVNT	a	5240	Ant1	73.16	1.36	0.73
NVNT	a	5180	Ant2	73.16	1.36	0.73
NVNT	a	5200	Ant2	73.16	1.36	0.73
NVNT	a	5240	Ant2	73.16	1.36	0.73
NVNT	n20	5180	Sum	71.81	1.44	0.78
NVNT	n20	5200	Sum	71.81	1.44	0.78
NVNT	n20	5240	Sum	71.8	1.44	0.79
NVNT	n40	5190	Sum	55.88	2.53	1.58
NVNT	n40	5230	Sum	55.95	2.52	1.58

Duty Cycle NVNT a 5240MHz Ant1

Agilent Spectrum Analyzer - Sweep SA

Center Freq 5.24000000 GHz

Ref Offset 4.56 dB
Ref 20.00 dBm

10 dB/div
Log

Center 5.24000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Sweep 6.000 ms (10001 pts)

Span 0 Hz

Marker 1: 1.104 ms, -16.22 dBm
Marker 2: 1.604 ms, -31.47 dBm
Marker 3: 2.966 ms, -15.94 dBm

MKS	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	1.104 ms	-16.22 dBm			
2	N	1	t	1.604 ms	-31.47 dBm			
3	N	1	t	2.966 ms	-15.94 dBm			

Agilent Spectrum Analyzer - Swept SA

Center Freq 5.18000000 GHz

Ref Offset 4.65 dB
Res BW 1.0 MHz

Span 0 Hz

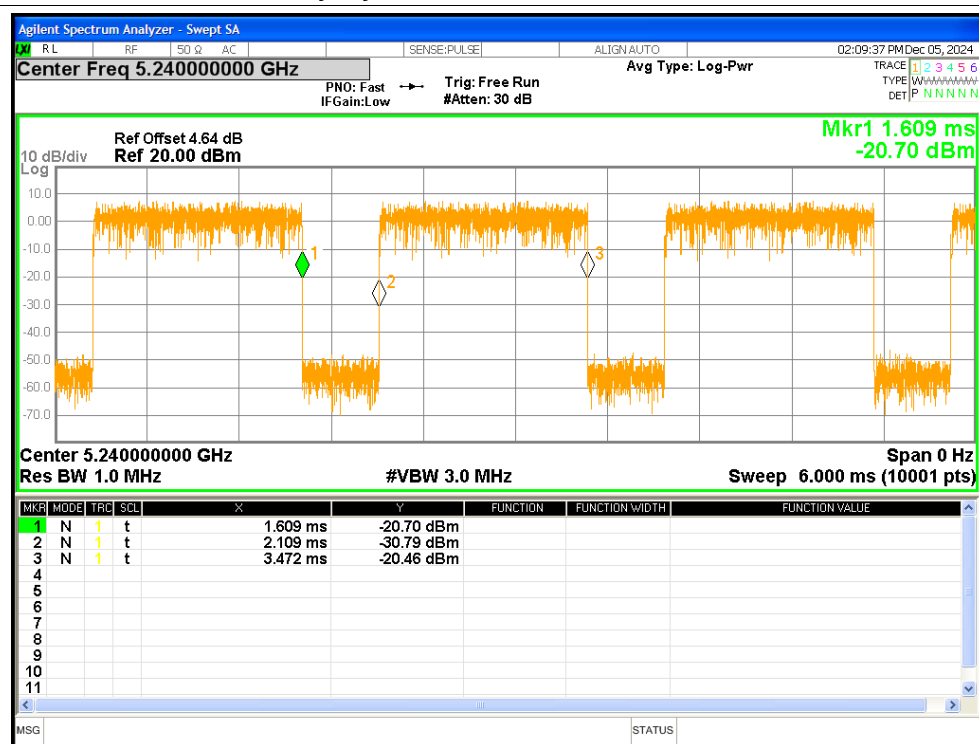
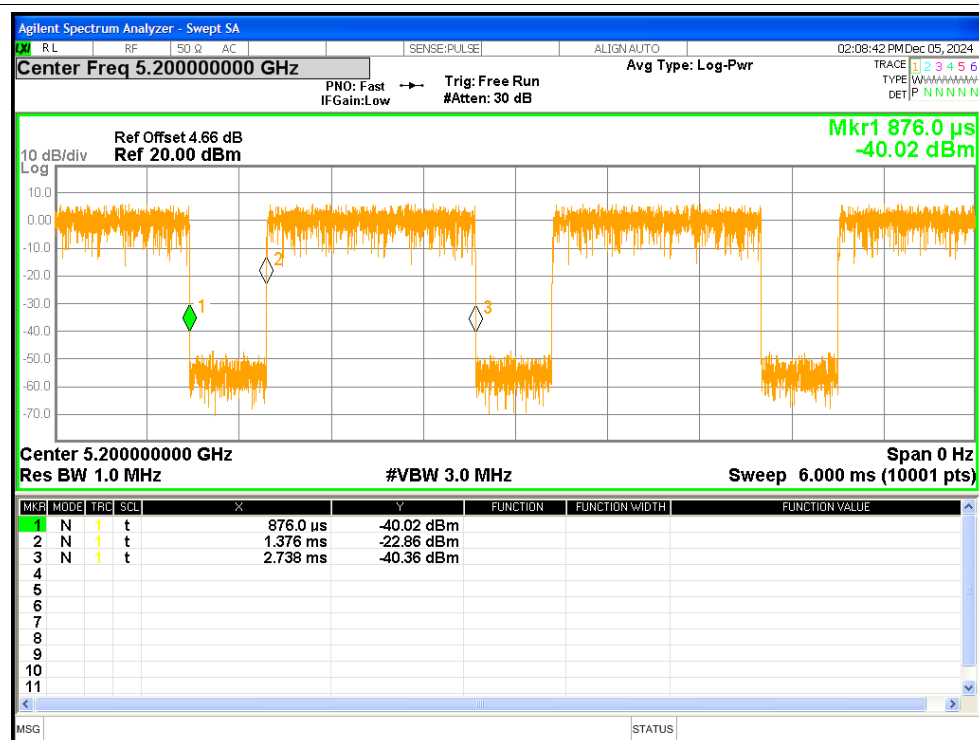
Trig: Free Run
#Atten: 30 dB

Avg Type: Log-Pwr

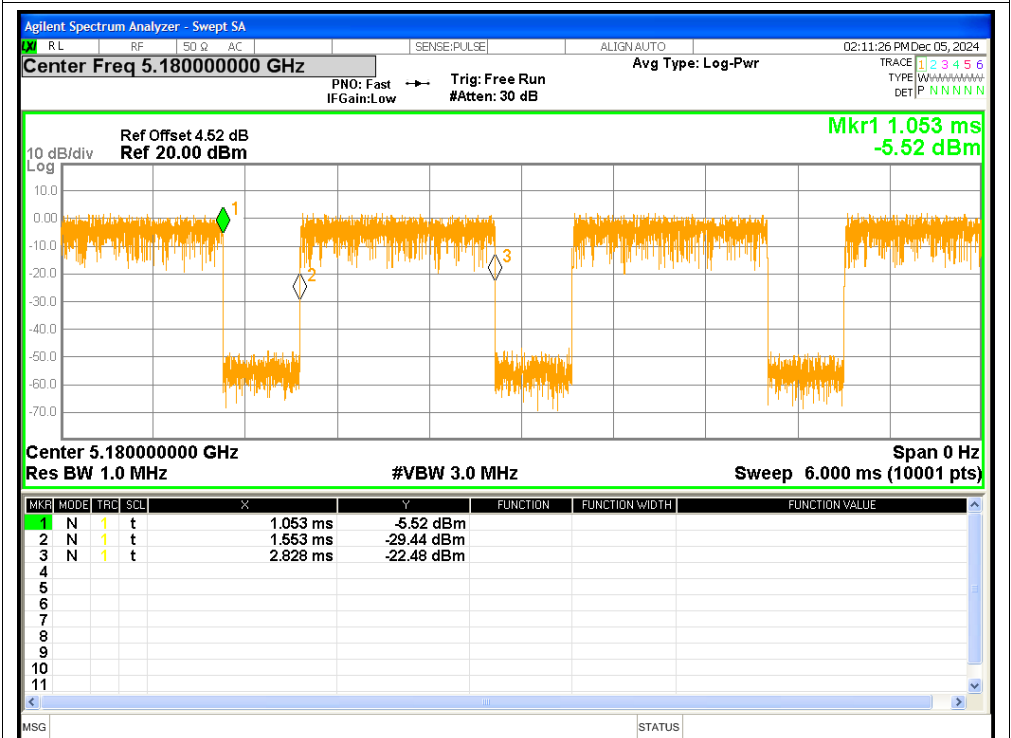
Trace 1 2 3 4 5 6
Type W W W W W W
Det P N N N N N

Mkr1 223.8 μ s
-31.38 dBm

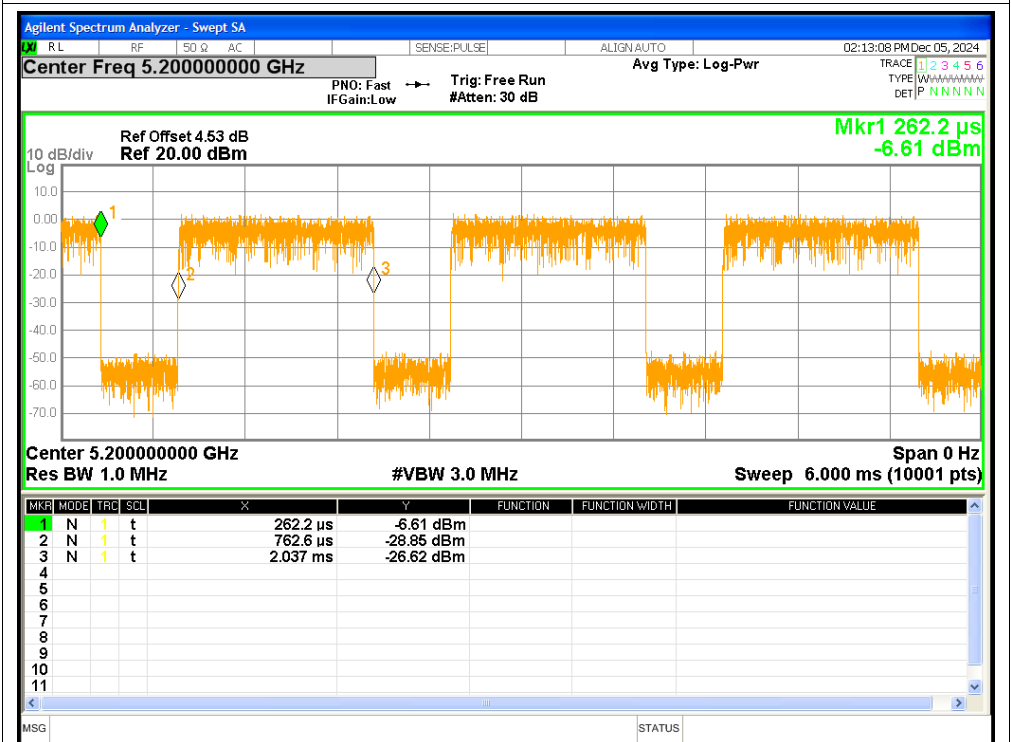
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	223.8 μ s	-31.38 dBm			
2	N	1	t	723.6 μ s	-24.73 dBm			
3	N	1	t	2.086 ms	-30.95 dBm			



Duty Cycle NVNT n20 5180MHz Sum	
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2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
7	0.000000
8	0.000000
9	0.000000
10	0.000000
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22	0.000000
23	0.000000
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123	0.000000
124	0.000000
125	0.000000
126	0.000000
127	0.000000
128	0.000000
129	0.000000
130	0.000000
131	0.000000
132	0.000000
133	0.000000
134	0.000000
135	0.000000
136	0.000000
137	0.000000
138	0.000



Duty Cycle NVNT n20 5200MHz Sum	
0	0.000000
1	0.000000
2	0.000000
3	0.000000
4	0.000000
5	0.000000
6	0.000000
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129	0.000000
130	0.000000
131	0.000000
132	0.000000
133	0.000000
134	0.000000
135	0.000000
136	0.000000
137	0.000000
138	0.000



Duty Cycle NVNT n20 5240MHz Sum

Agilent Spectrum Analyzer - Swept SA

Center Freq 5.24000000 GHz Avg Type: Log-Pwr

Ref Offset 4.56 dB Ref 20.00 dBm

10 dB/div Log

Mkr1 348.0 μ s -10.70 dBm

Center 5.24000000 GHz Span 0 Hz

Res BW 1.0 MHz #VBW 3.0 MHz Sweep 6.000 ms (10001 pts)

Mkr	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	348.0 μ s	-10.70 dBm			
2	N	1	t	848.4 μ s	-24.73 dBm			
3	N	1	t	2.122 ms	-4.35 dBm			

Duty Cycle NVNT n40 5190MHz Sum

Center Freq 5.19000000 GHz

Ref Offset 4.53 dB
Ref 20.00 dBm

Mkr1 199.0 μs
-20.68 dBm

Center 5.19000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Sweep 5.000 ms (10001 pts)

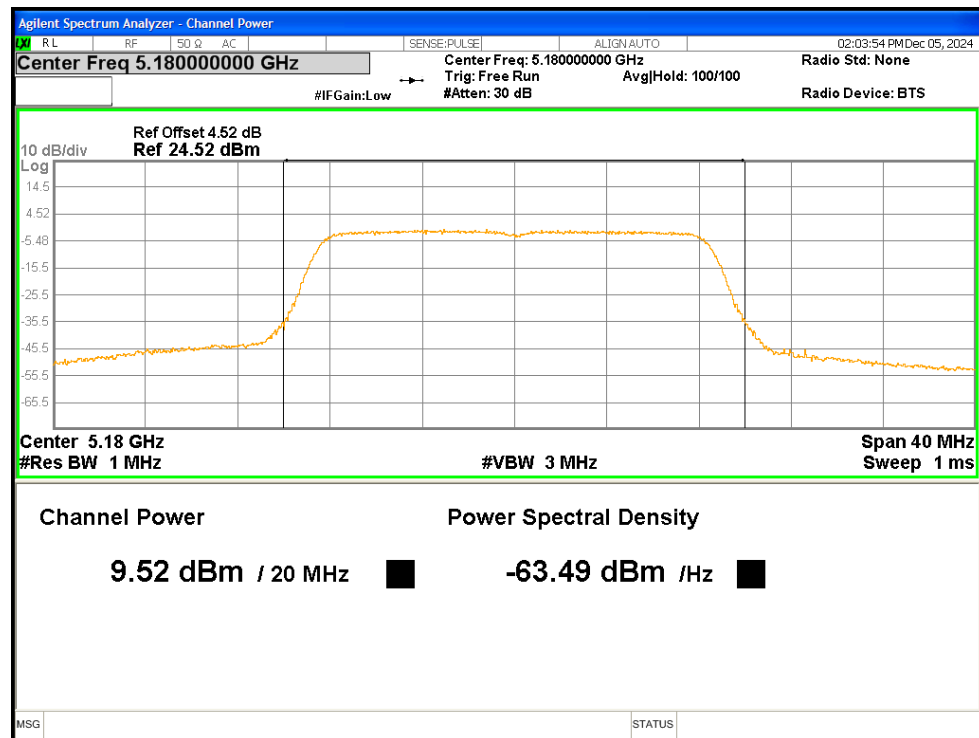
MKR	MODE	TRG	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	t	199.0 μs	-20.68 dBm			
2	N	1	t	699.5 μs	-25.58 dBm			
3	N	1	t	1.334 ms	-27.00 dBm			

2. Maximum Conducted Output Power

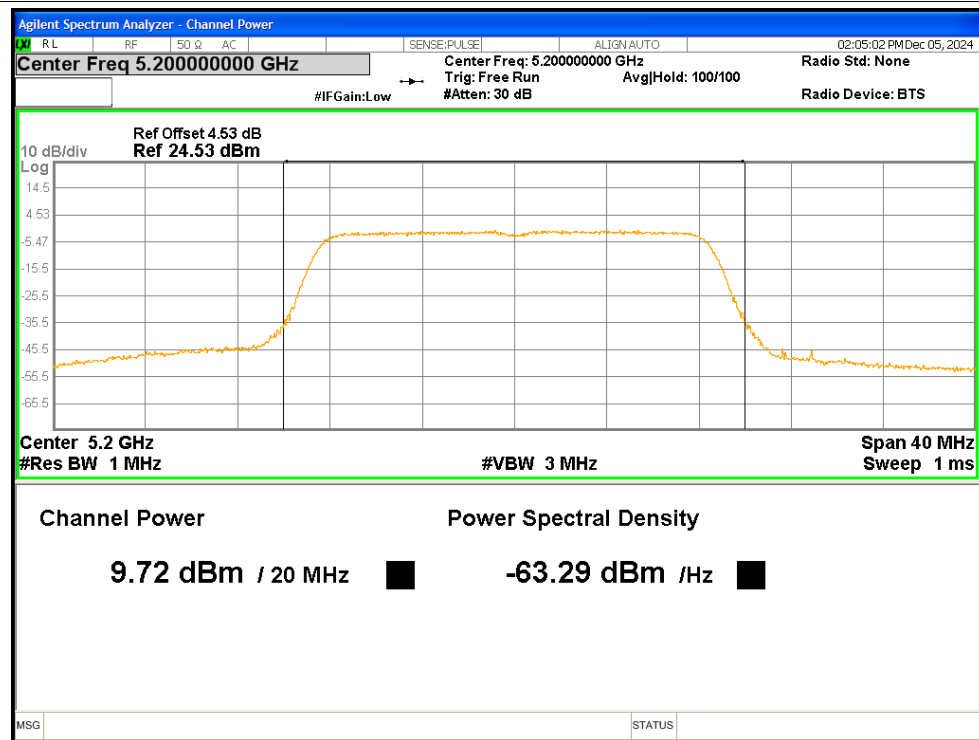
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	9.52	1.36	10.88	<=24	Pass
NVNT	a	5200	Ant1	9.72	1.36	11.08	<=24	Pass
NVNT	a	5240	Ant1	11.04	1.36	12.4	<=24	Pass
NVNT	a	5180	Ant2	10.3	1.36	11.66	<=24	Pass
NVNT	a	5200	Ant2	10.31	1.36	11.67	<=24	Pass
NVNT	a	5240	Ant2	11.24	1.36	12.6	<=24	Pass
NVNT	n20	5180	Ant1	6.1	1.44	7.54	<=24	Pass
NVNT	n20	5180	Ant2	7.33	1.44	8.77	<=24	Pass
NVNT	n20	5180	Sum	9.77	1.44	11.21	<=21.19	Pass
NVNT	n20	5200	Ant1	6.21	1.44	7.65	<=24	Pass
NVNT	n20	5200	Ant2	6.87	1.44	8.31	<=24	Pass
NVNT	n20	5200	Sum	9.56	1.44	11	<=21.19	Pass
NVNT	n20	5240	Ant1	7.45	1.44	8.89	<=24	Pass
NVNT	n20	5240	Ant2	8.09	1.44	9.53	<=24	Pass
NVNT	n20	5240	Sum	10.79	1.44	12.23	<=21.19	Pass
NVNT	n40	5190	Ant1	4.85	2.53	7.38	<=24	Pass
NVNT	n40	5190	Ant2	5.89	2.53	8.42	<=24	Pass
NVNT	n40	5190	Sum	8.41	2.53	10.94	<=21.19	Pass
NVNT	n40	5230	Ant1	5.09	2.52	7.61	<=24	Pass
NVNT	n40	5230	Ant2	6.76	2.52	9.28	<=24	Pass
NVNT	n40	5230	Sum	9.02	2.52	11.54	<=21.19	Pass

Test Graphs

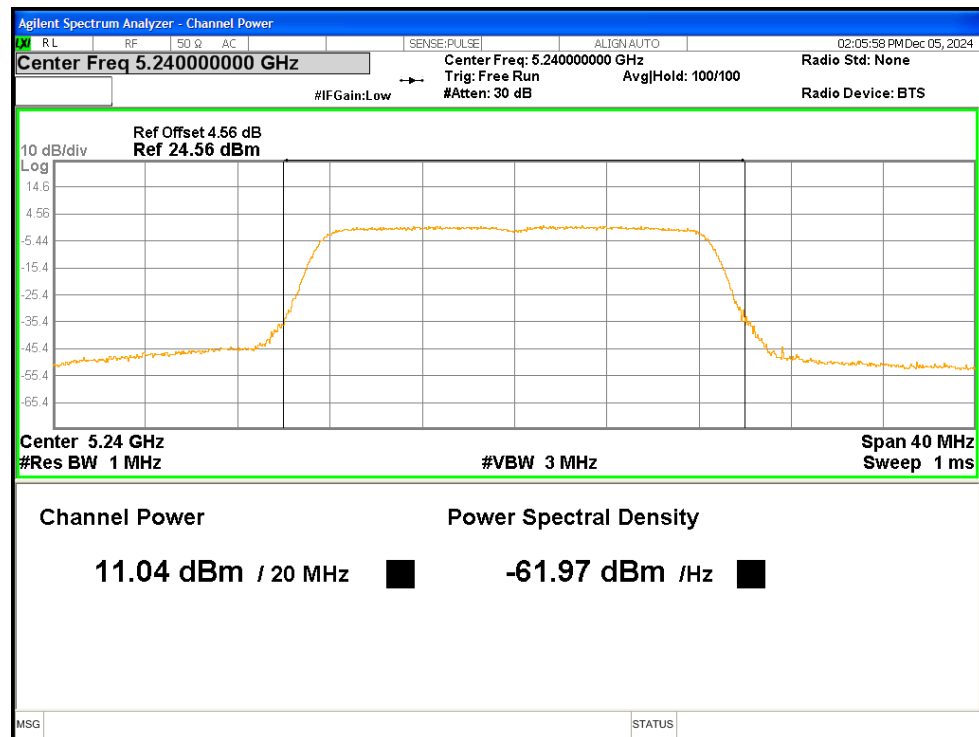
Power NVNT a 5180MHz Ant1



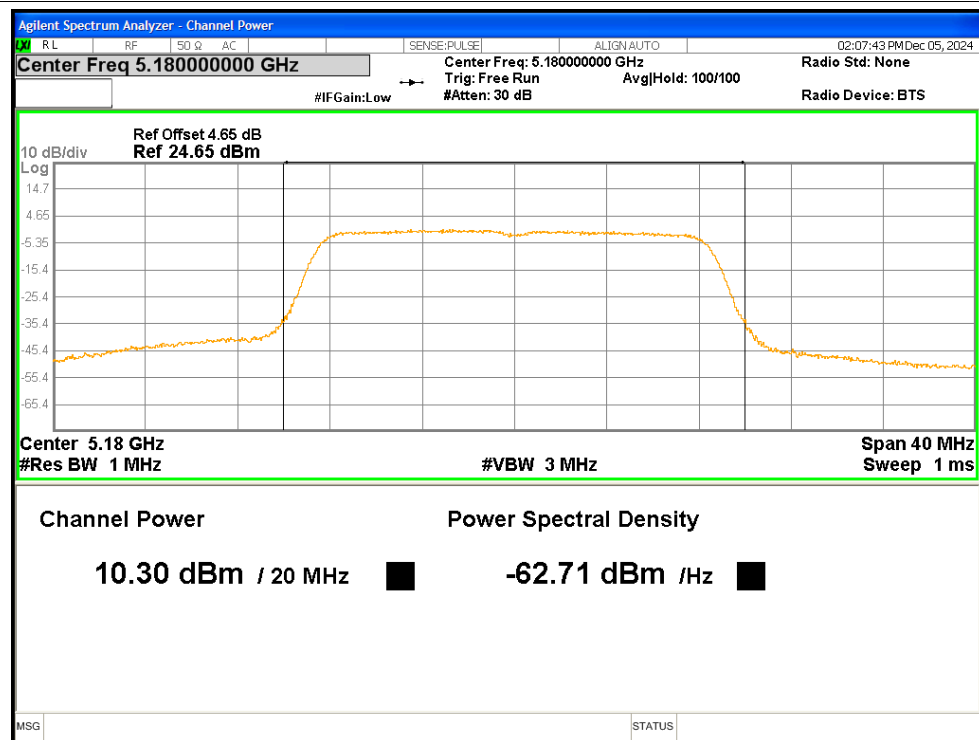
Power NVNT a 5200MHz Ant1



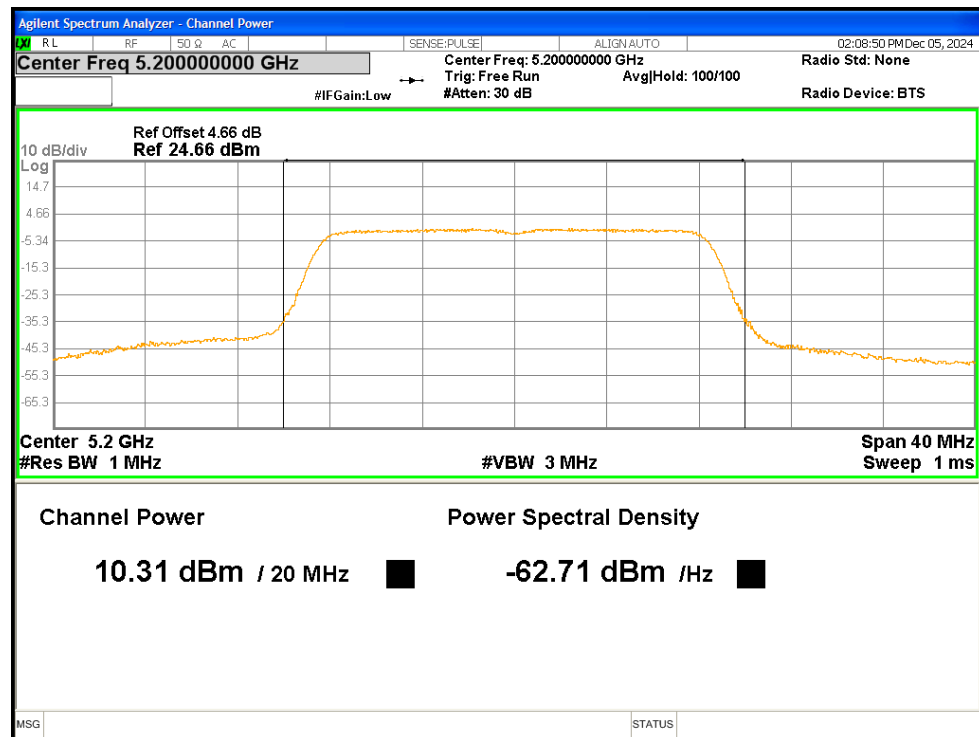
Power NVNT a 5240MHz Ant1



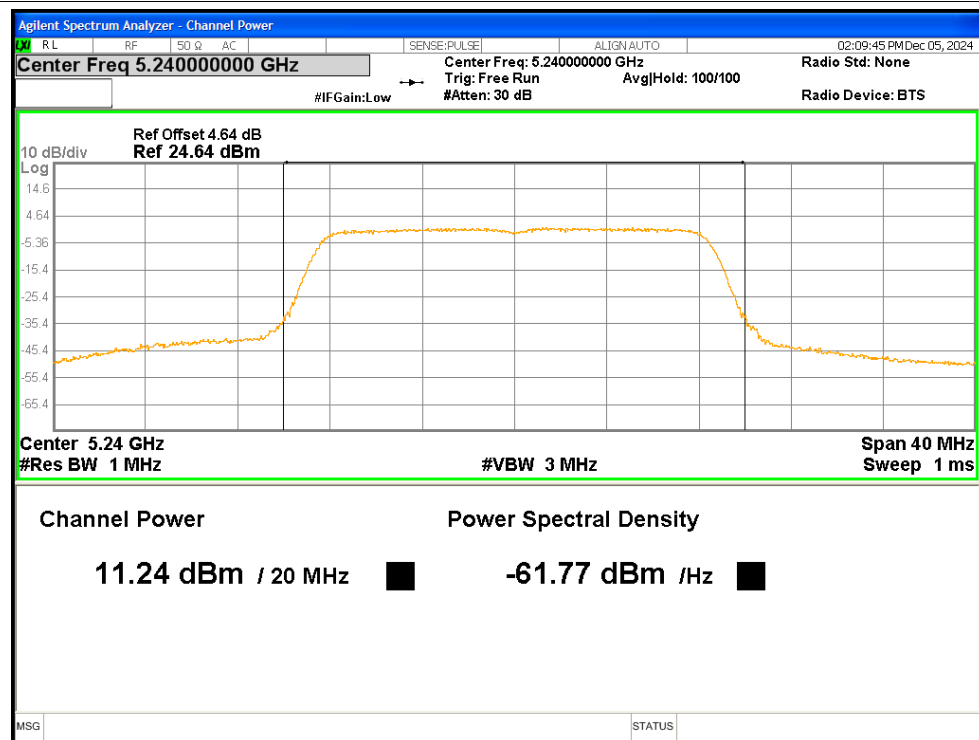
Power NVNT a 5180MHz Ant2



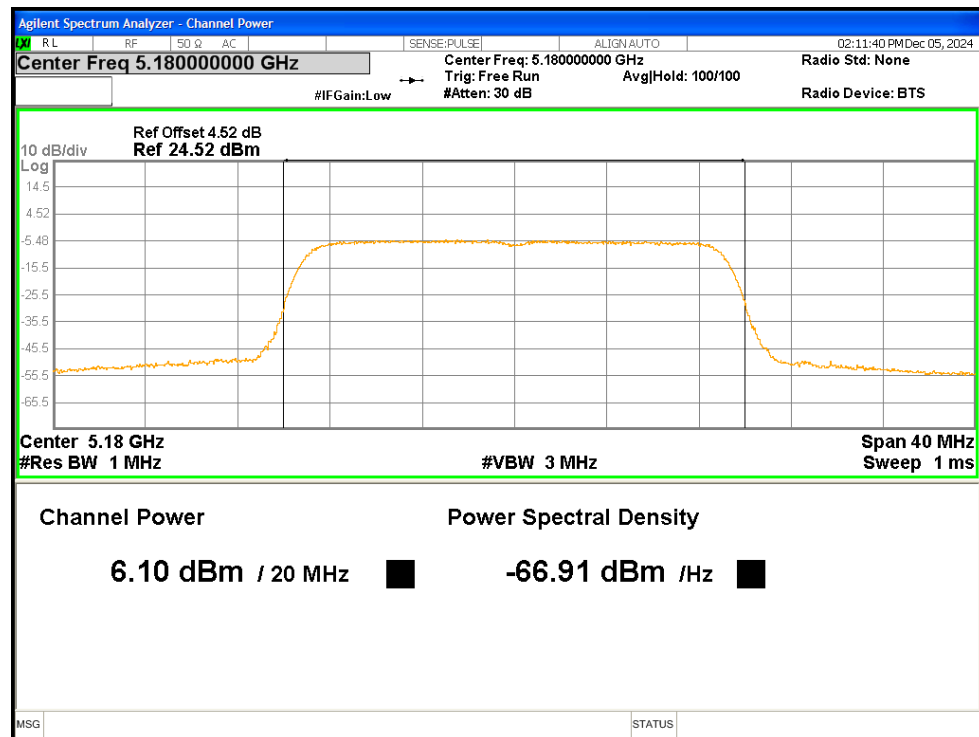
Power NVNT a 5200MHz Ant2



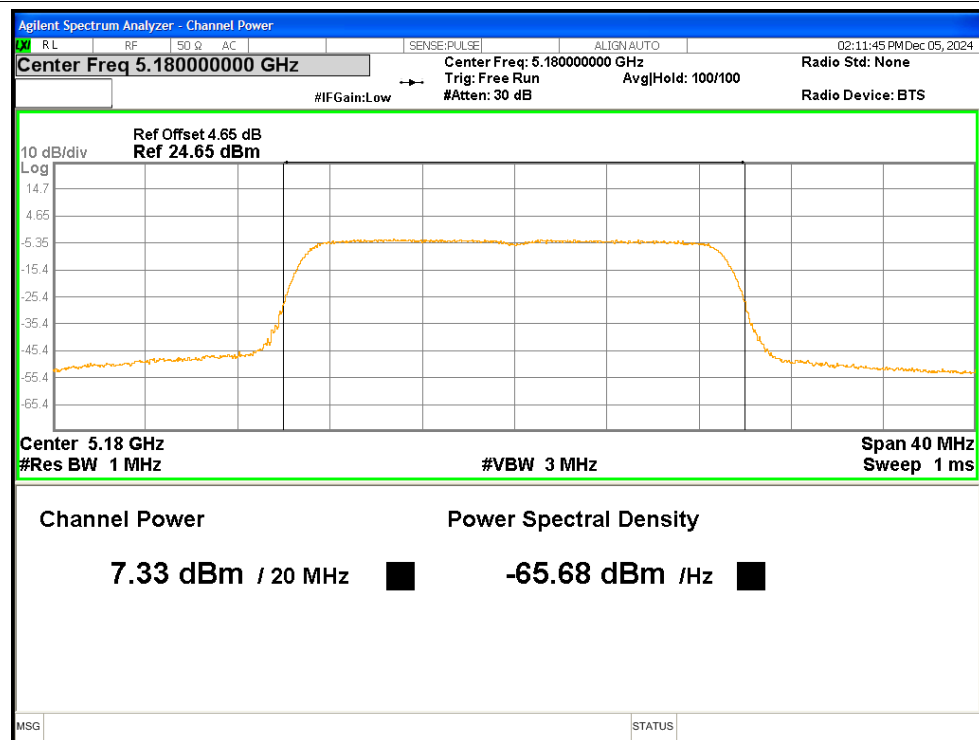
Power NVNT a 5240MHz Ant2



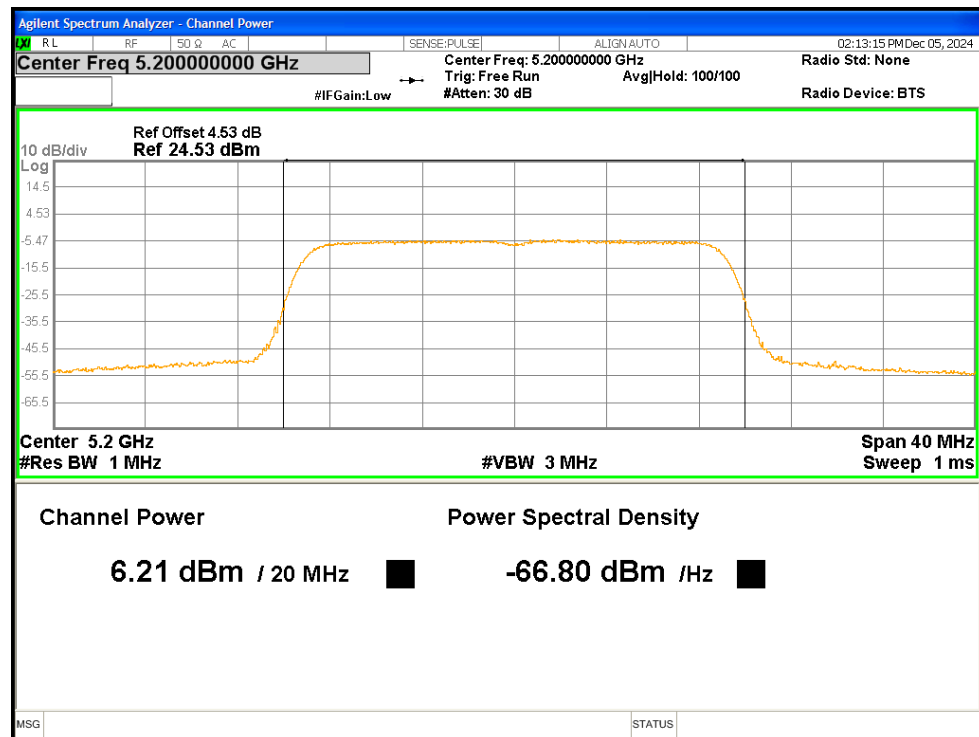
Power NVNT n20 5180MHz Ant1



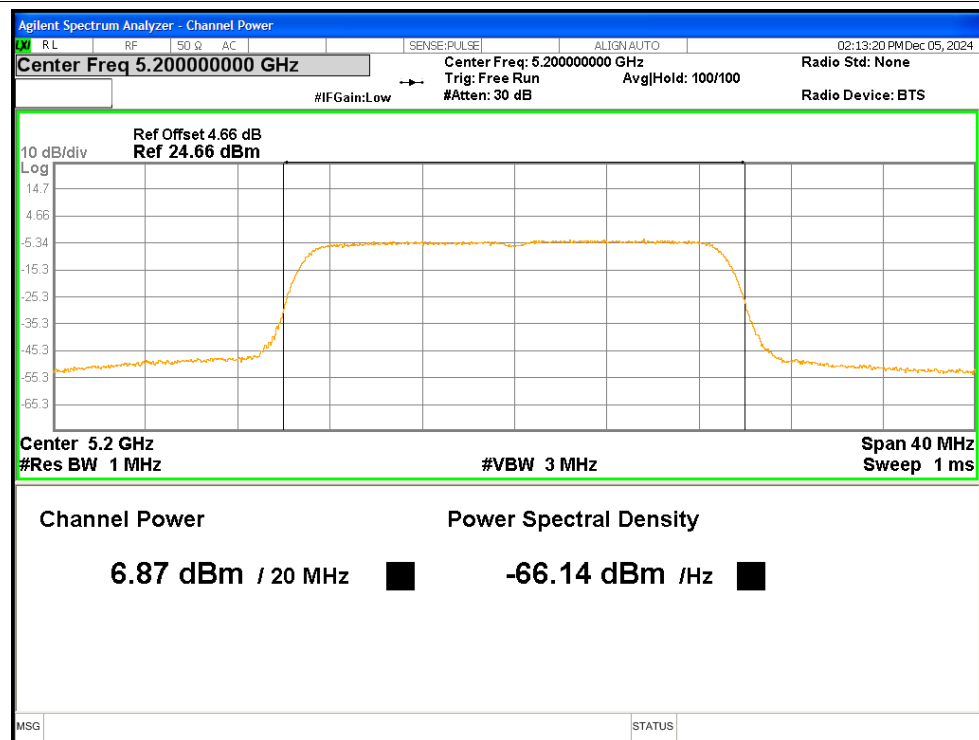
Power NVNT n20 5180MHz Ant2



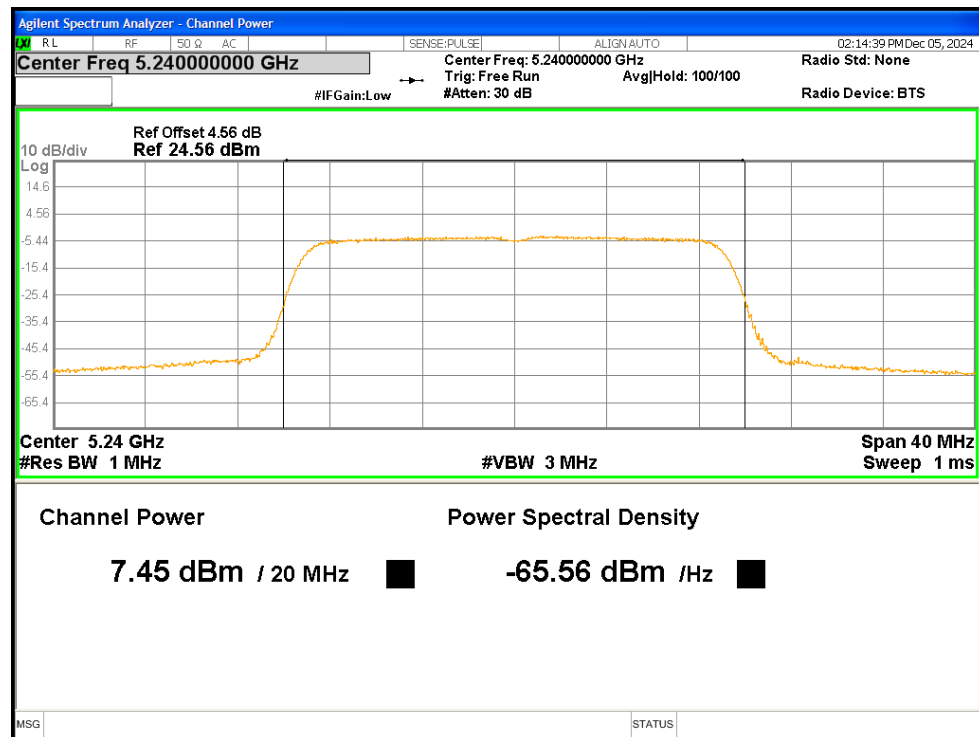
Power NVNT n20 5200MHz Ant1



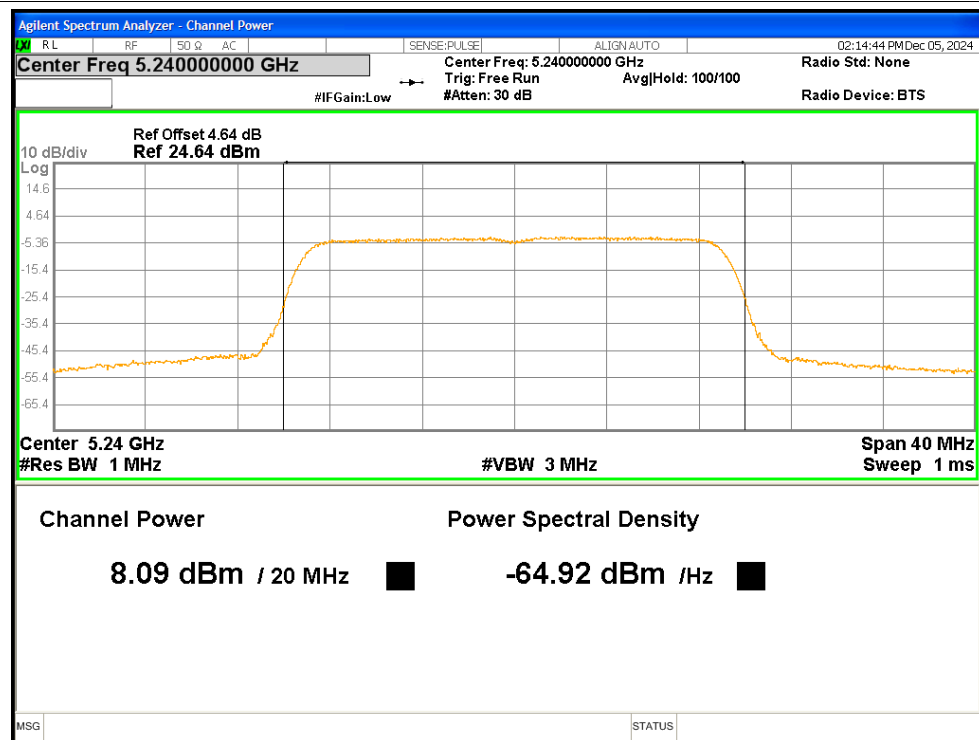
Power NVNT n20 5200MHz Ant2



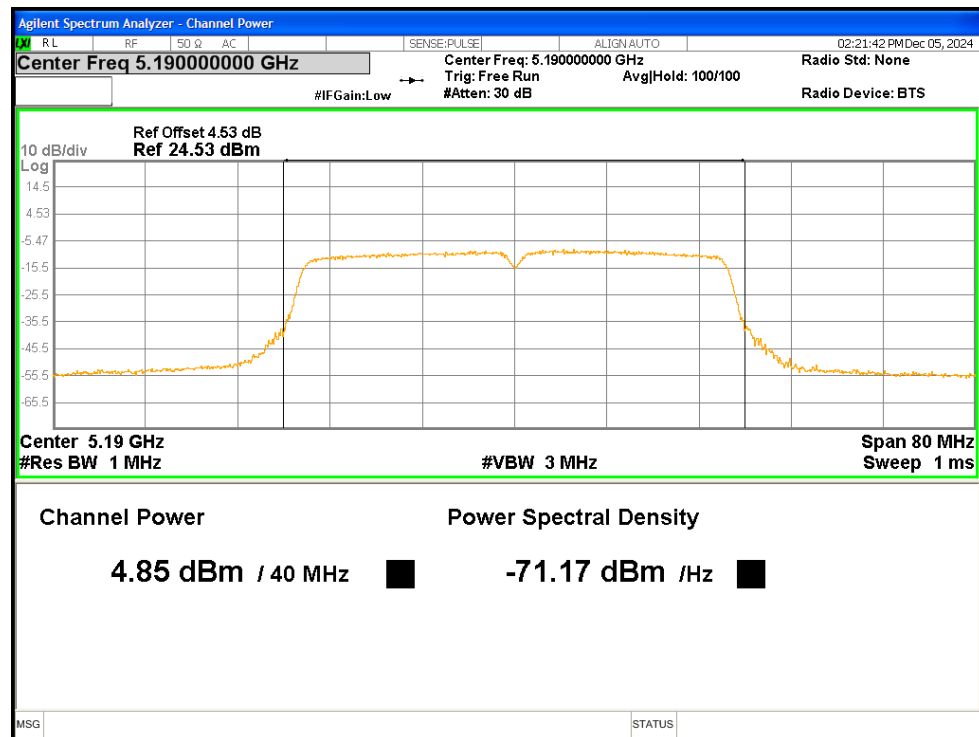
Power NVNT n20 5240MHz Ant1



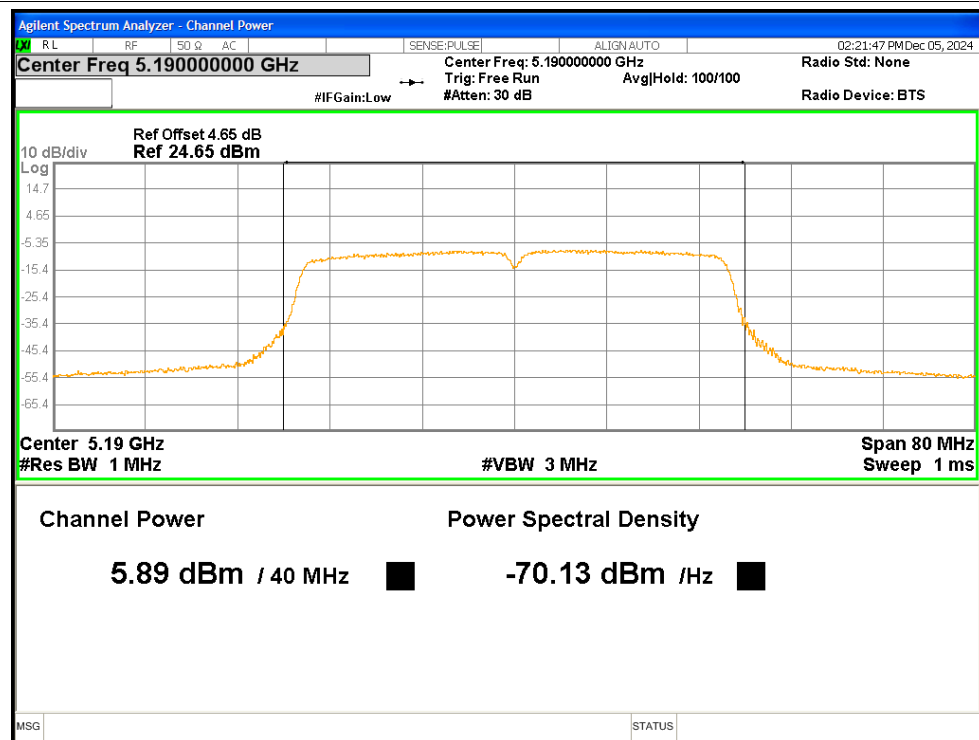
Power NVNT n20 5240MHz Ant2



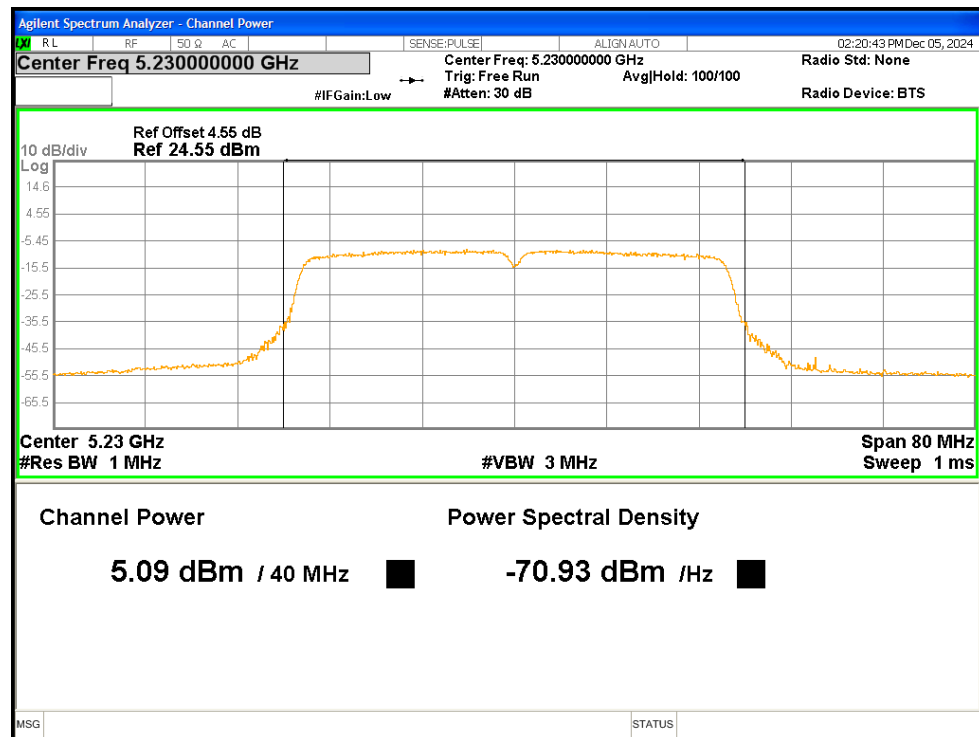
Power NVNT n40 5190MHz Ant1



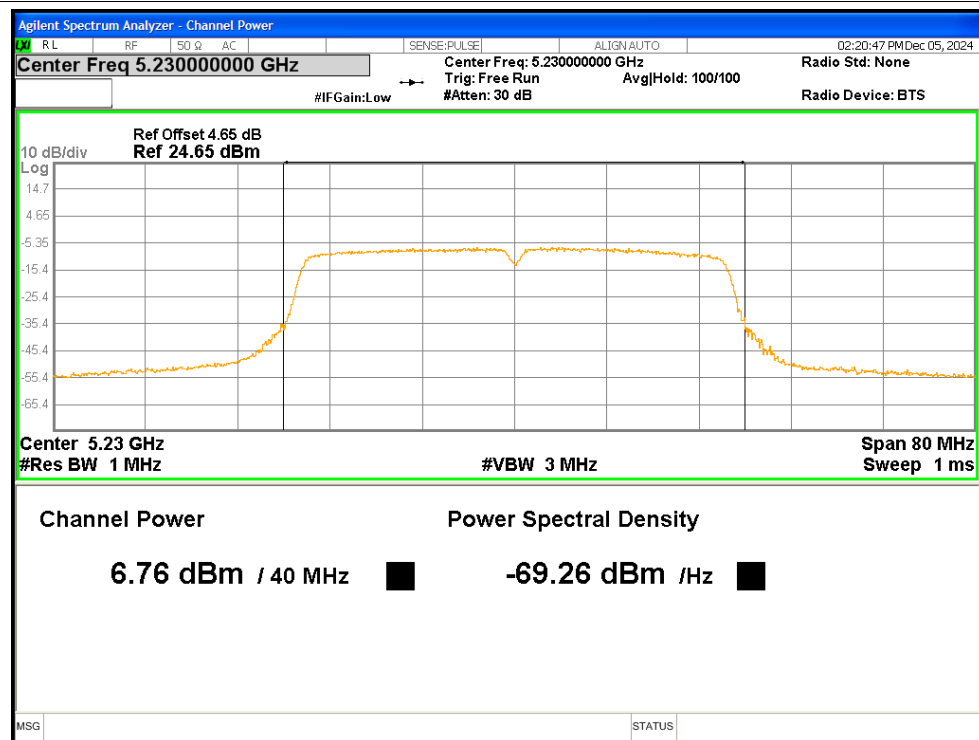
Power NVNT n40 5190MHz Ant2



Power NVNT n40 5230MHz Ant1



Power NVNT n40 5230MHz Ant2

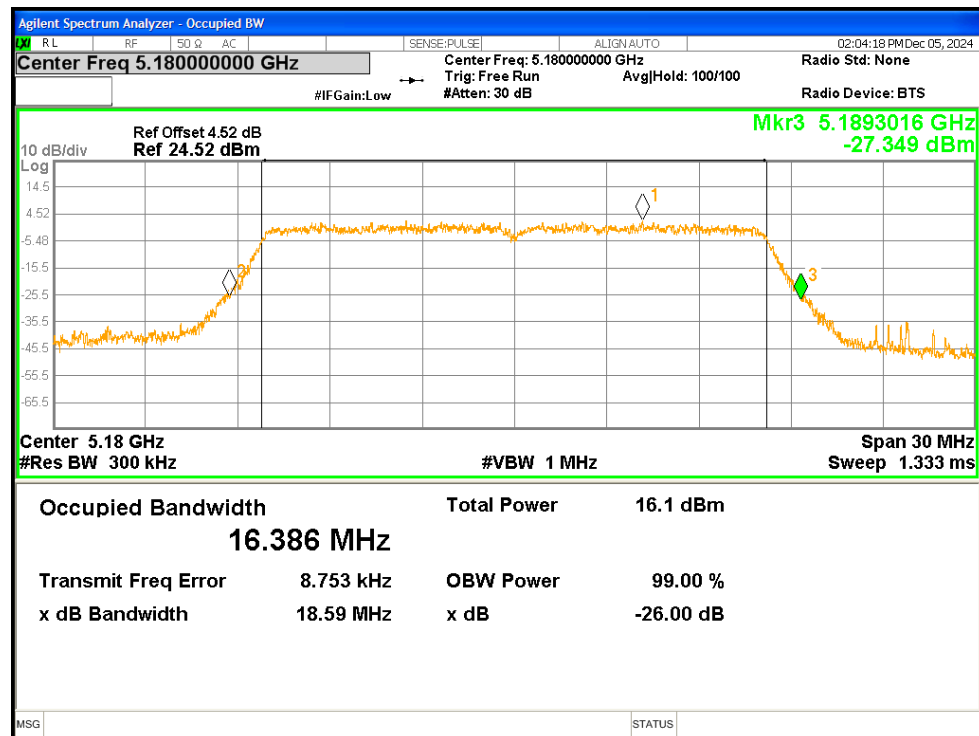


3. -26dB Bandwidth

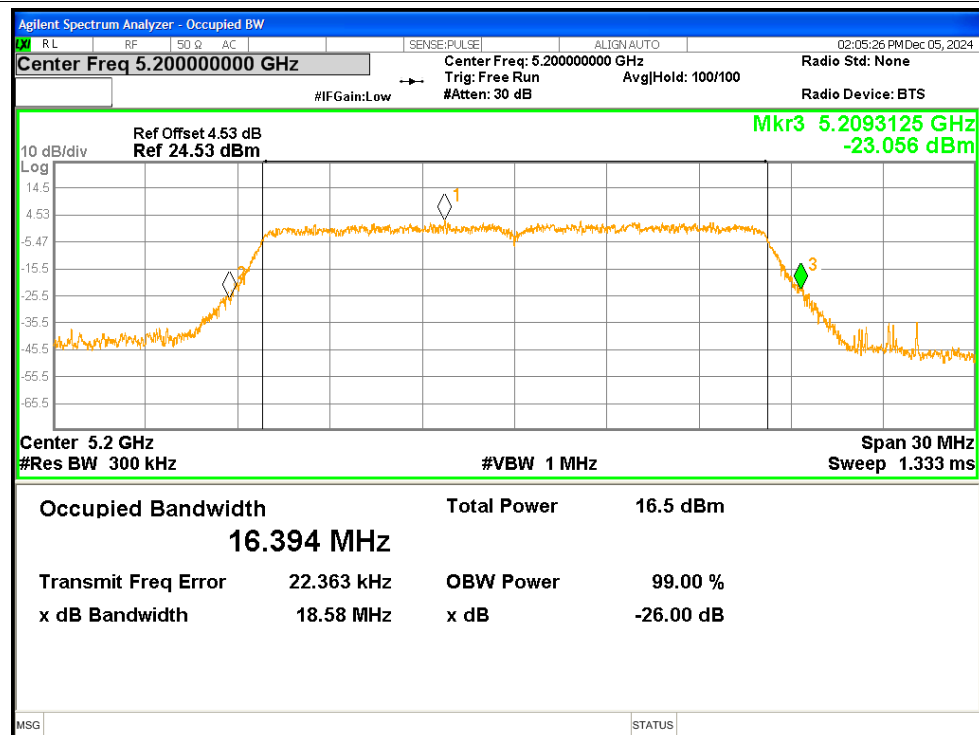
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	18.5856	Pass
NVNT	a	5200	Ant1	18.5804	Pass
NVNT	a	5240	Ant1	18.6448	Pass
NVNT	a	5180	Ant2	18.5589	Pass
NVNT	a	5200	Ant2	18.6507	Pass
NVNT	a	5240	Ant2	18.5936	Pass
NVNT	n20	5180	Ant1	19.6164	Pass
NVNT	n20	5180	Ant2	19.3796	Pass
NVNT	n20	5200	Ant1	19.527	Pass
NVNT	n20	5200	Ant2	19.4806	Pass
NVNT	n20	5240	Ant1	19.4675	Pass
NVNT	n20	5240	Ant2	19.5213	Pass
NVNT	n40	5190	Ant1	40.6351	Pass
NVNT	n40	5190	Ant2	41.2106	Pass
NVNT	n40	5230	Ant1	40.4125	Pass
NVNT	n40	5230	Ant2	40.8028	Pass

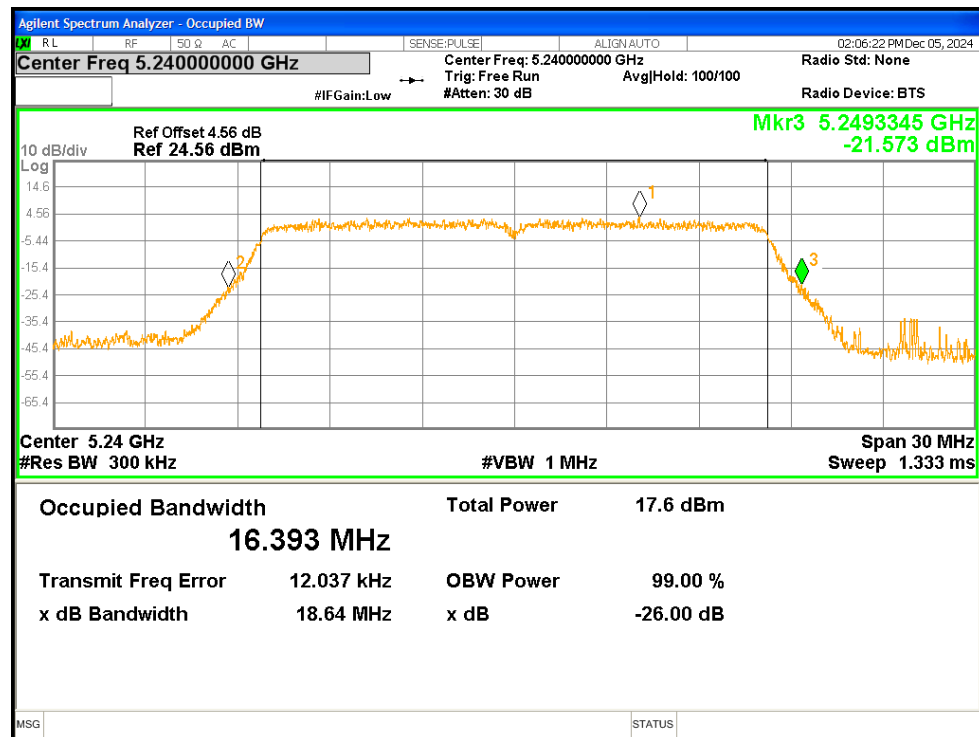
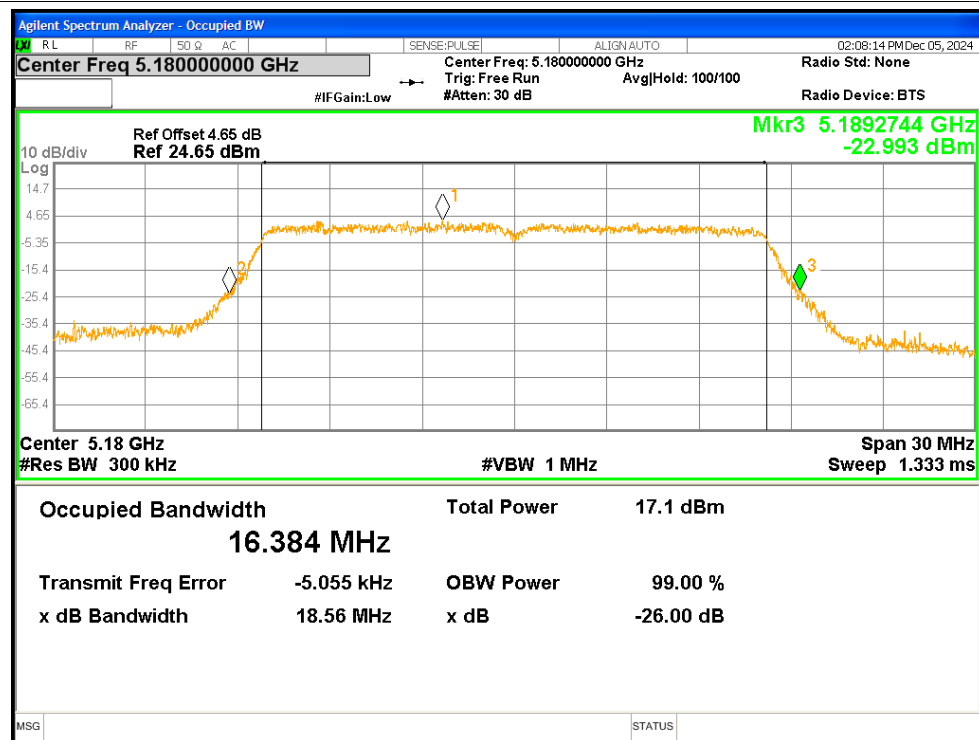
Test Graphs

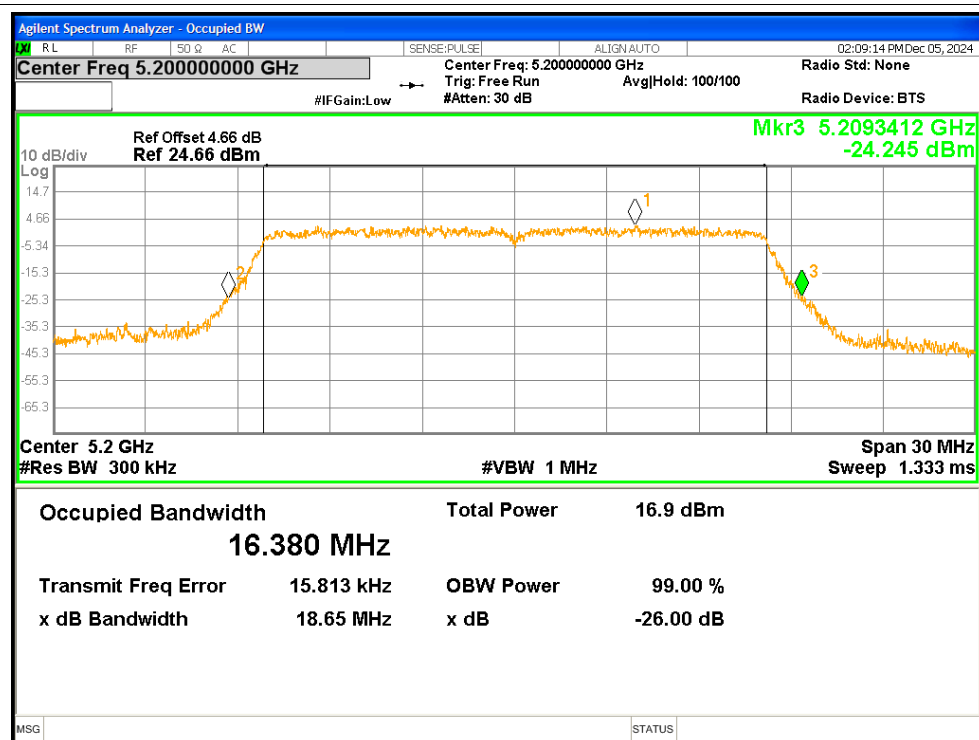
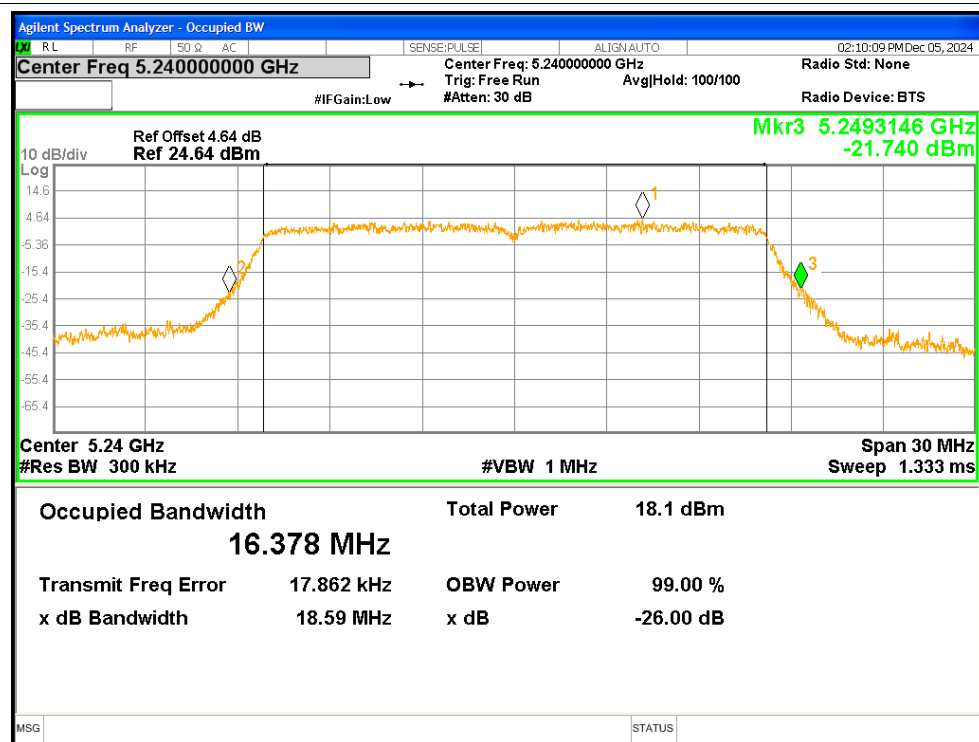
-26dB Bandwidth NVNT a 5180MHz Ant1

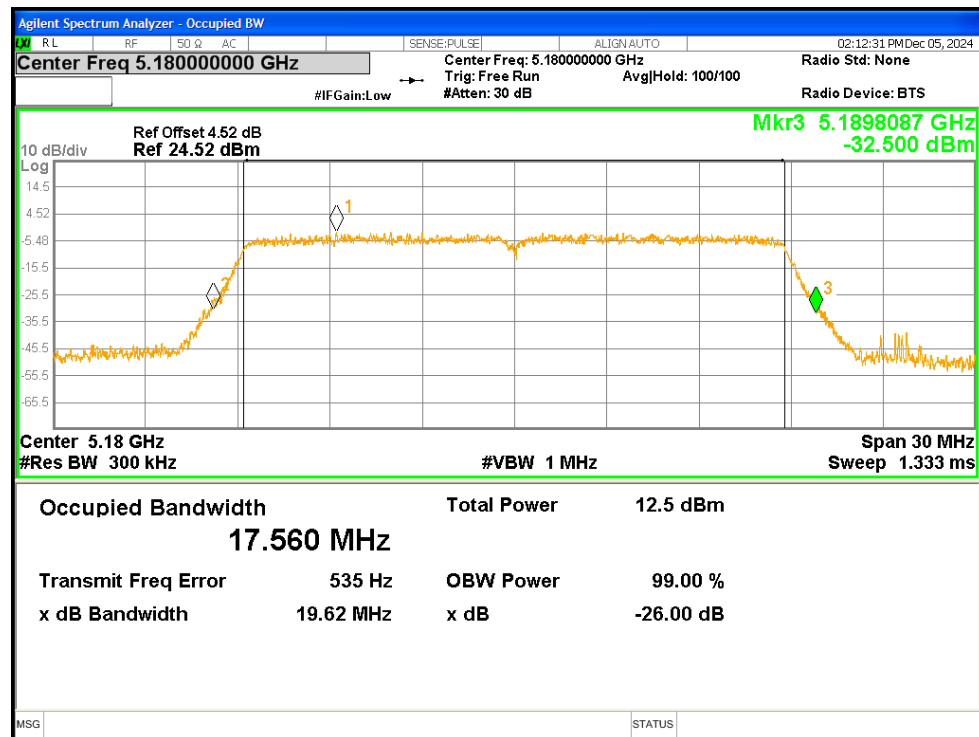
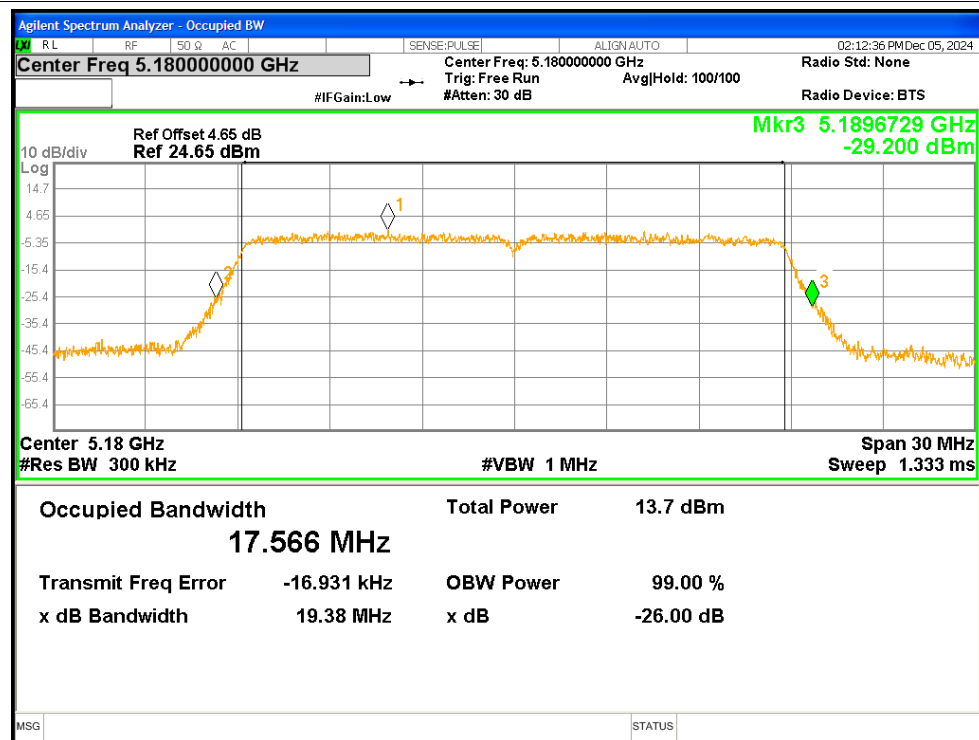


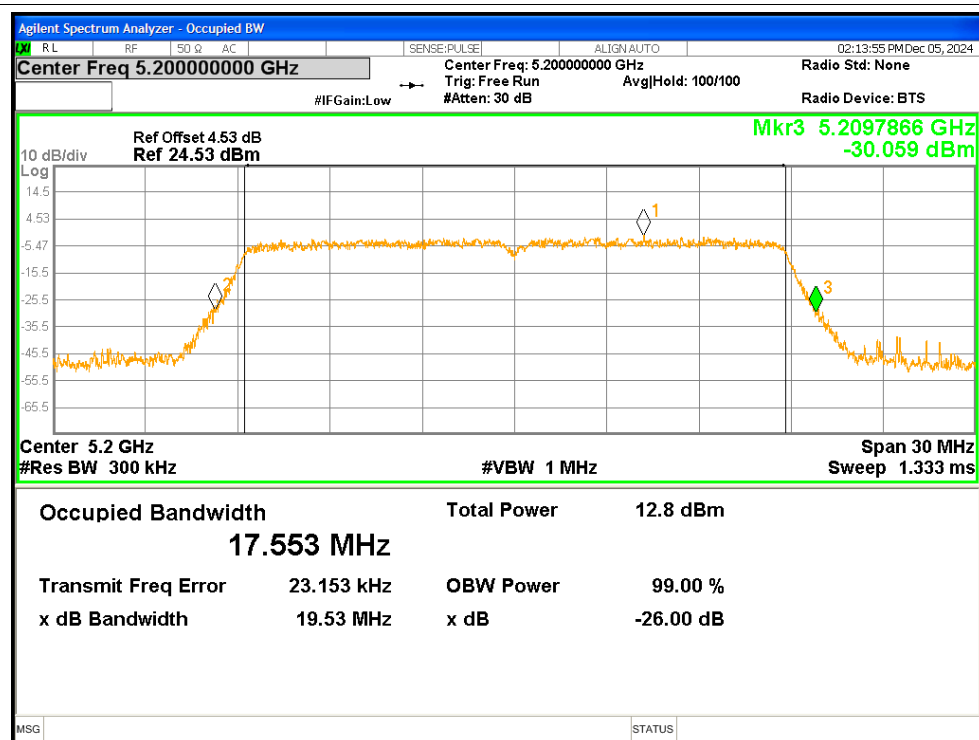
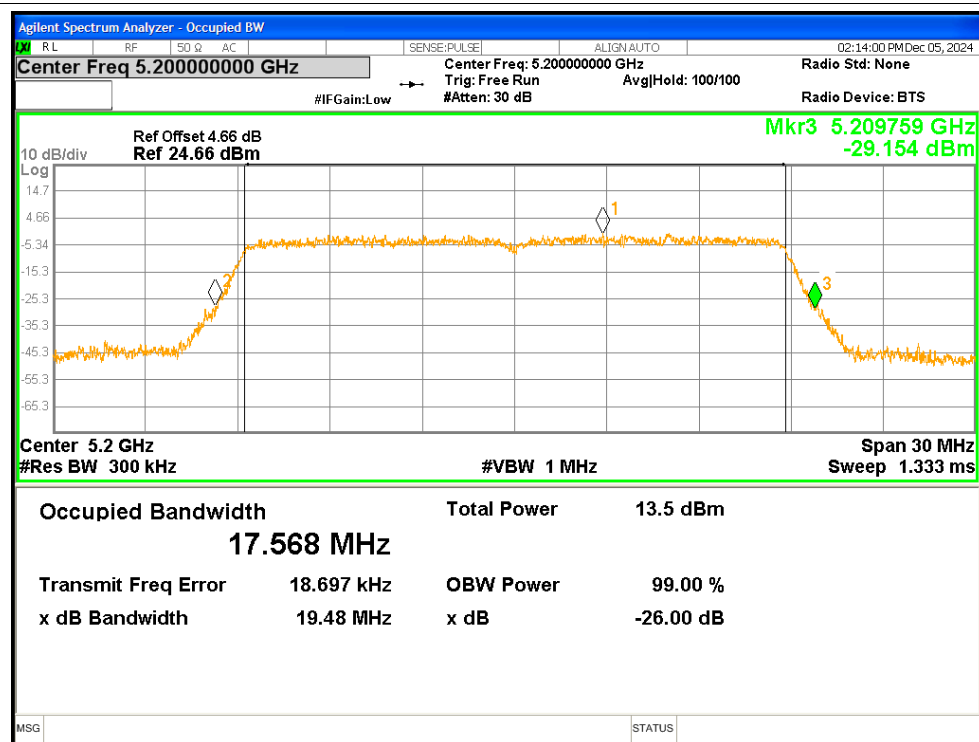
-26dB Bandwidth NVNT a 5200MHz Ant1

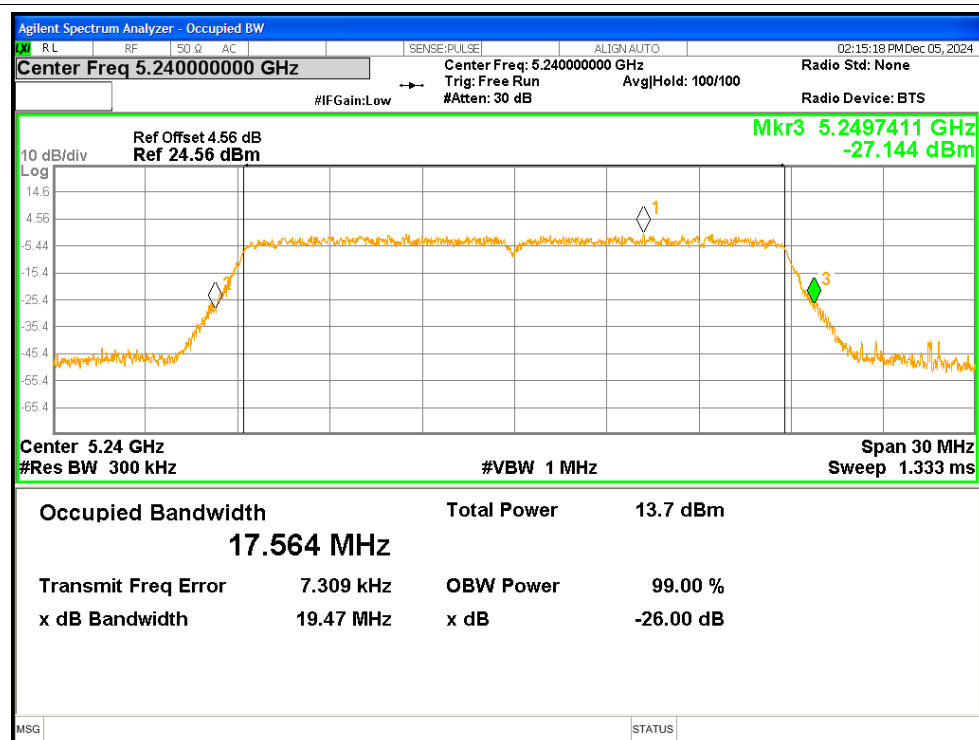
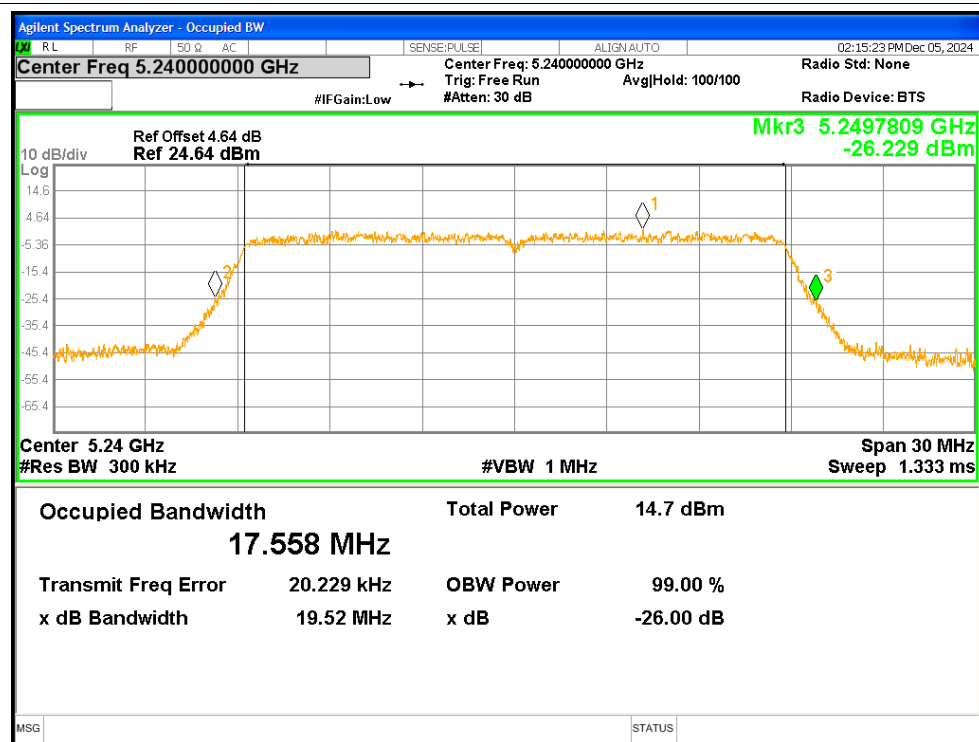


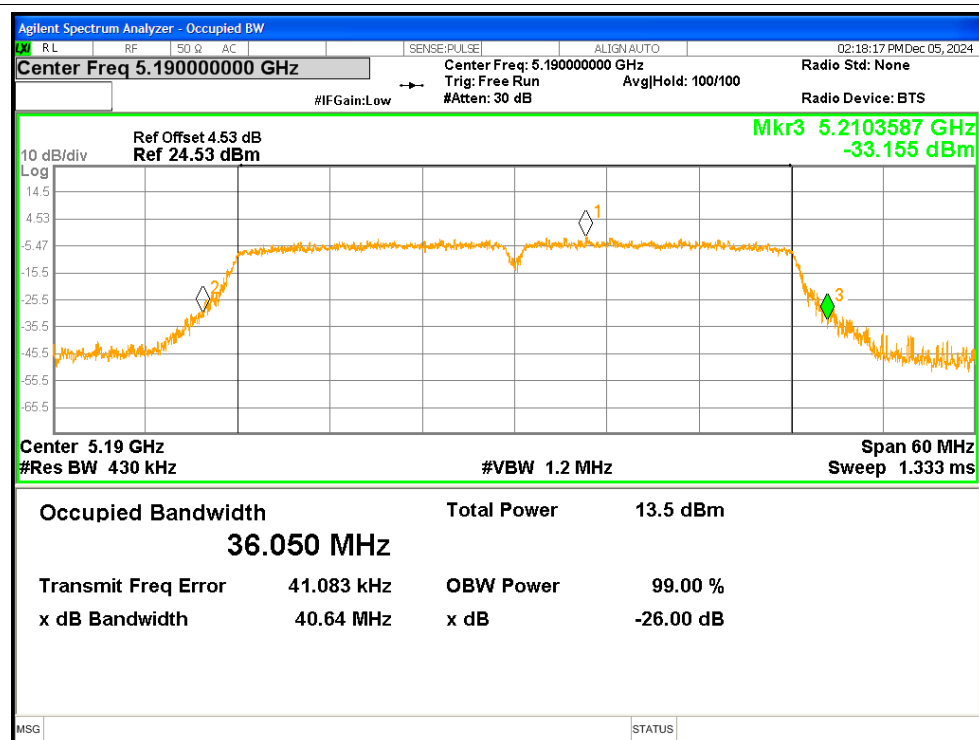
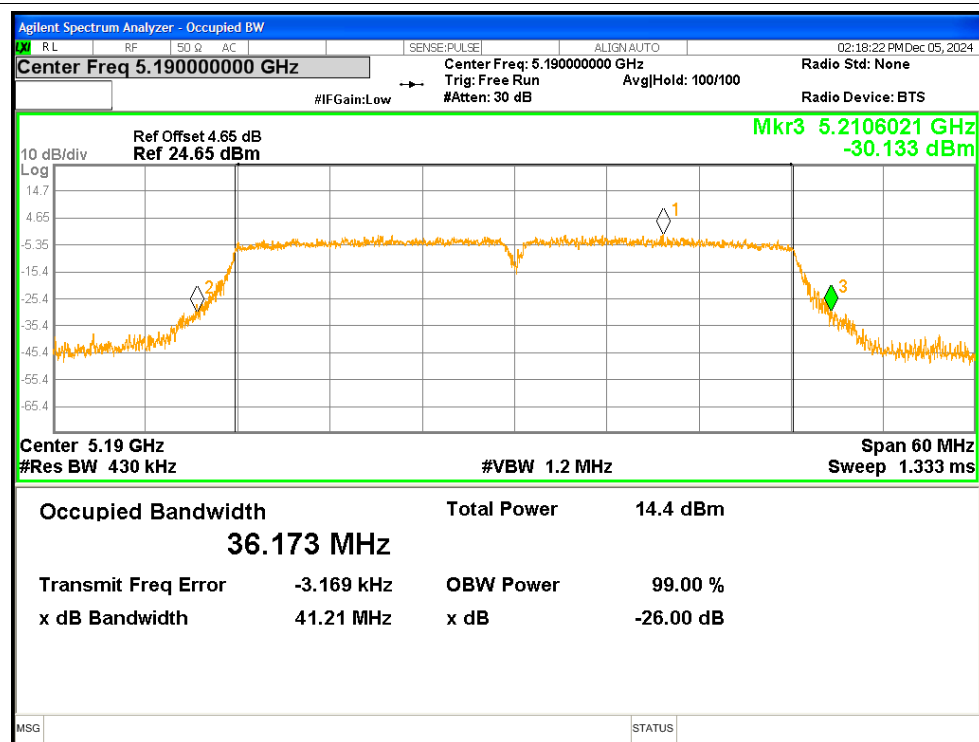
-26dB Bandwidth NVNT a 5240MHz Ant1**-26dB Bandwidth NVNT a 5180MHz Ant2**

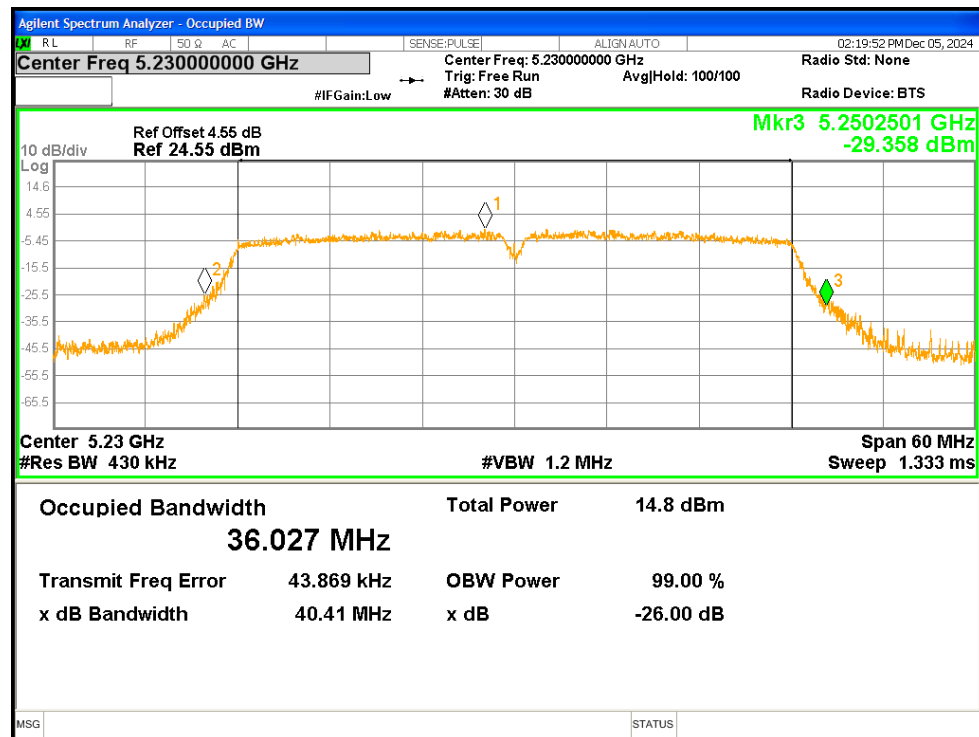
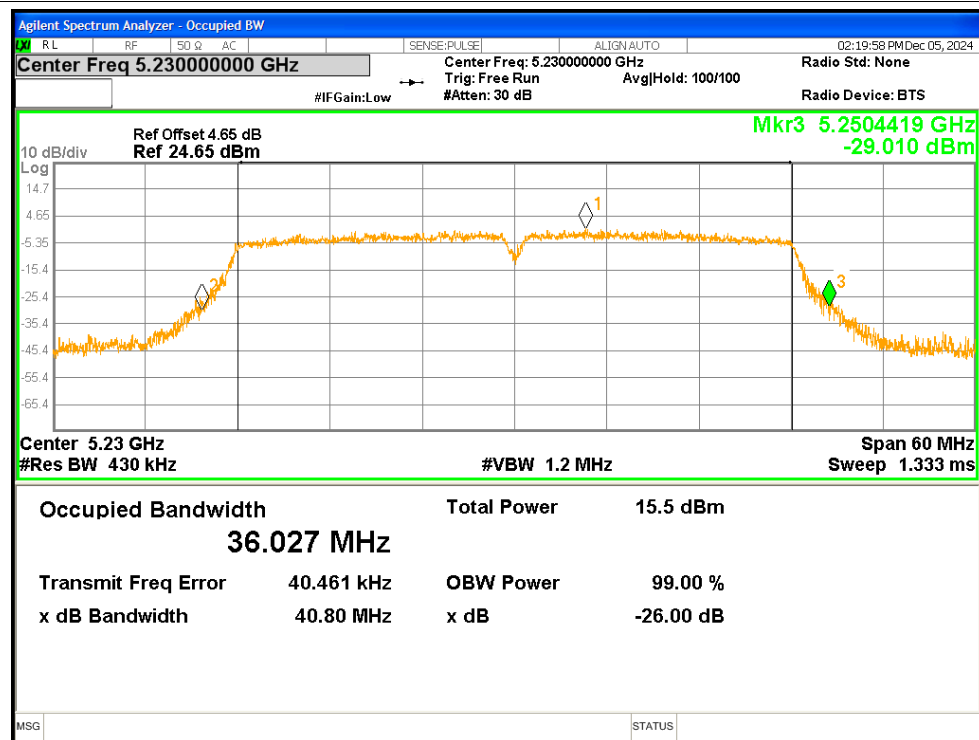
-26dB Bandwidth NVNT a 5200MHz Ant2**-26dB Bandwidth NVNT a 5240MHz Ant2**

-26dB Bandwidth NVNT n20 5180MHz Ant1**-26dB Bandwidth NVNT n20 5180MHz Ant2**

-26dB Bandwidth NVNT n20 5200MHz Ant1**-26dB Bandwidth NVNT n20 5200MHz Ant2**

-26dB Bandwidth NVNT n20 5240MHz Ant1**-26dB Bandwidth NVNT n20 5240MHz Ant2**

-26dB Bandwidth NVNT n40 5190MHz Ant1**-26dB Bandwidth NVNT n40 5190MHz Ant2**

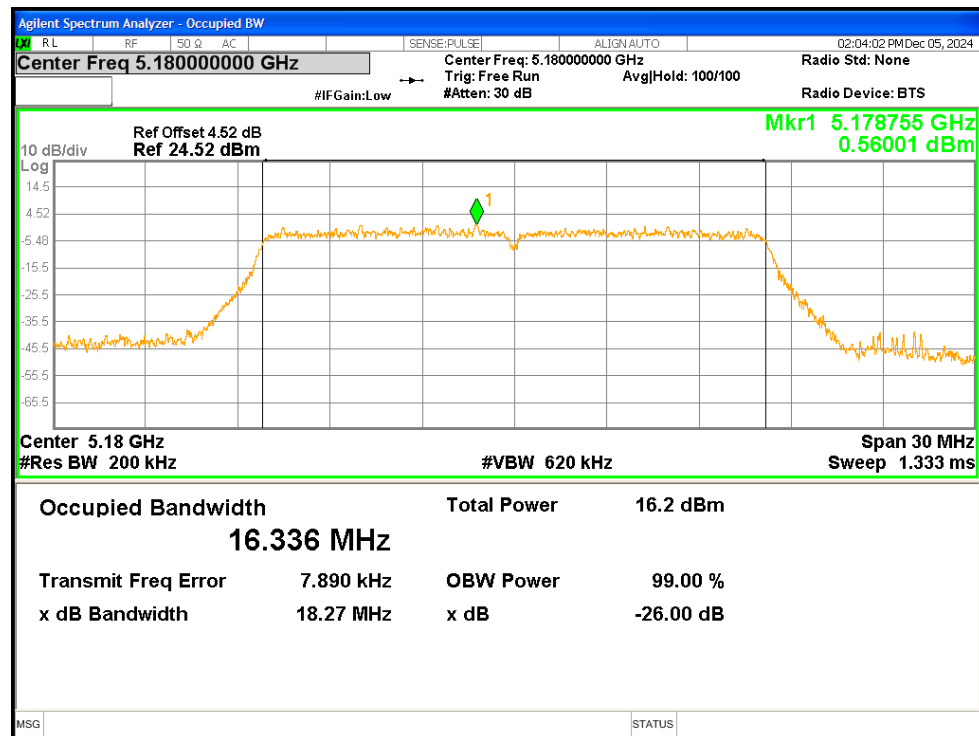
-26dB Bandwidth NVNT n40 5230MHz Ant1**-26dB Bandwidth NVNT n40 5230MHz Ant2**

4. Occupied Channel Bandwidth

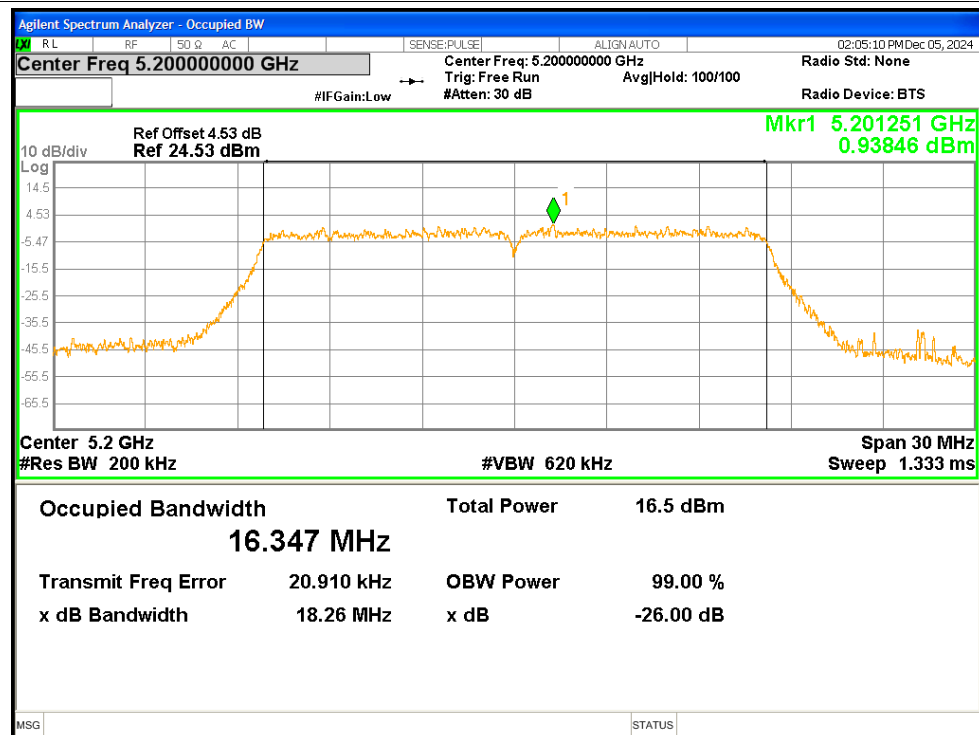
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5180	Ant1	16.3356
NVNT	a	5200	Ant1	16.3471
NVNT	a	5240	Ant1	16.3404
NVNT	a	5180	Ant2	16.34
NVNT	a	5200	Ant2	16.3394
NVNT	a	5240	Ant2	16.3446
NVNT	n20	5180	Ant1	17.5414
NVNT	n20	5180	Ant2	17.5185
NVNT	n20	5200	Ant1	17.5175
NVNT	n20	5200	Ant2	17.5302
NVNT	n20	5240	Ant1	17.5166
NVNT	n20	5240	Ant2	17.5352
NVNT	n40	5190	Ant1	36.0785
NVNT	n40	5190	Ant2	36.1467
NVNT	n40	5230	Ant1	36.0265
NVNT	n40	5230	Ant2	35.9952

Test Graphs

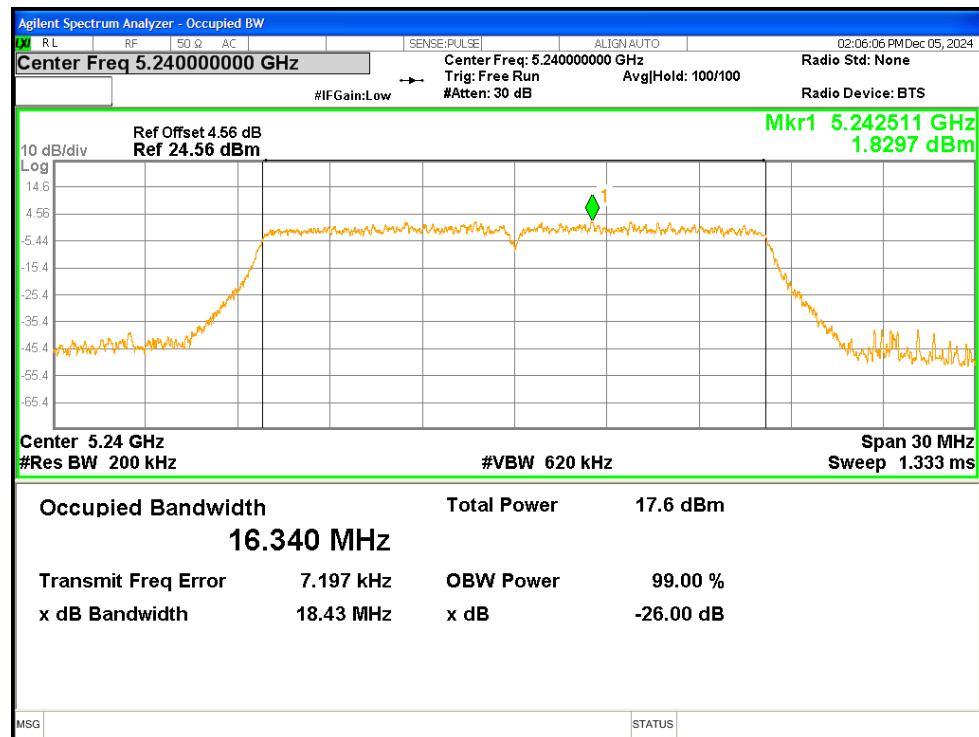
OBW NVNT a 5180MHz Ant1



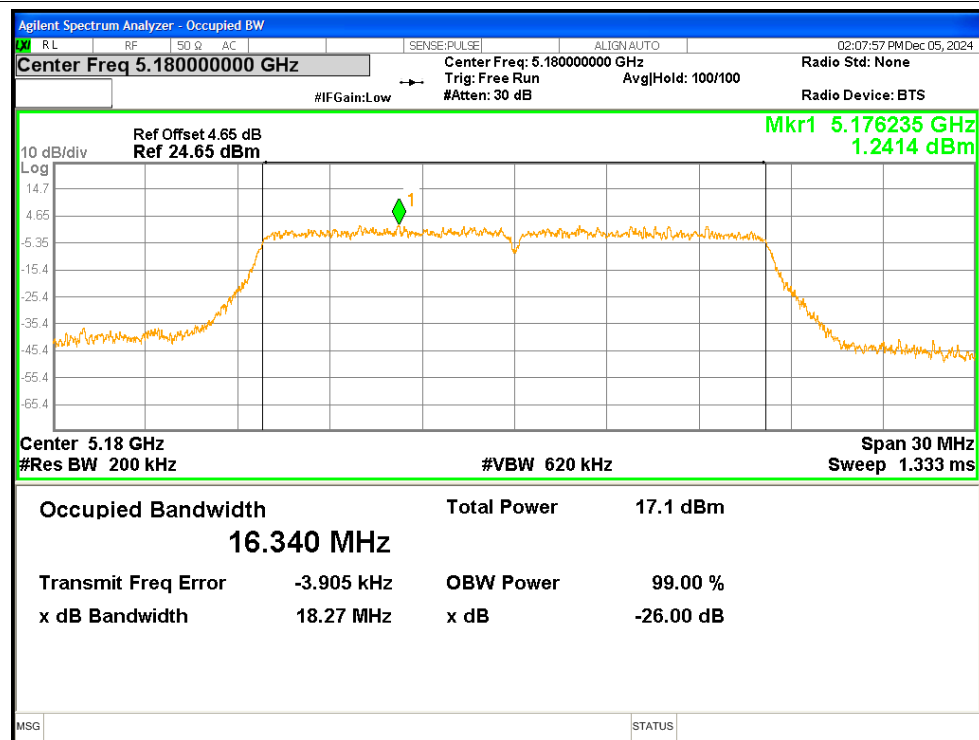
OBW NVNT a 5200MHz Ant1



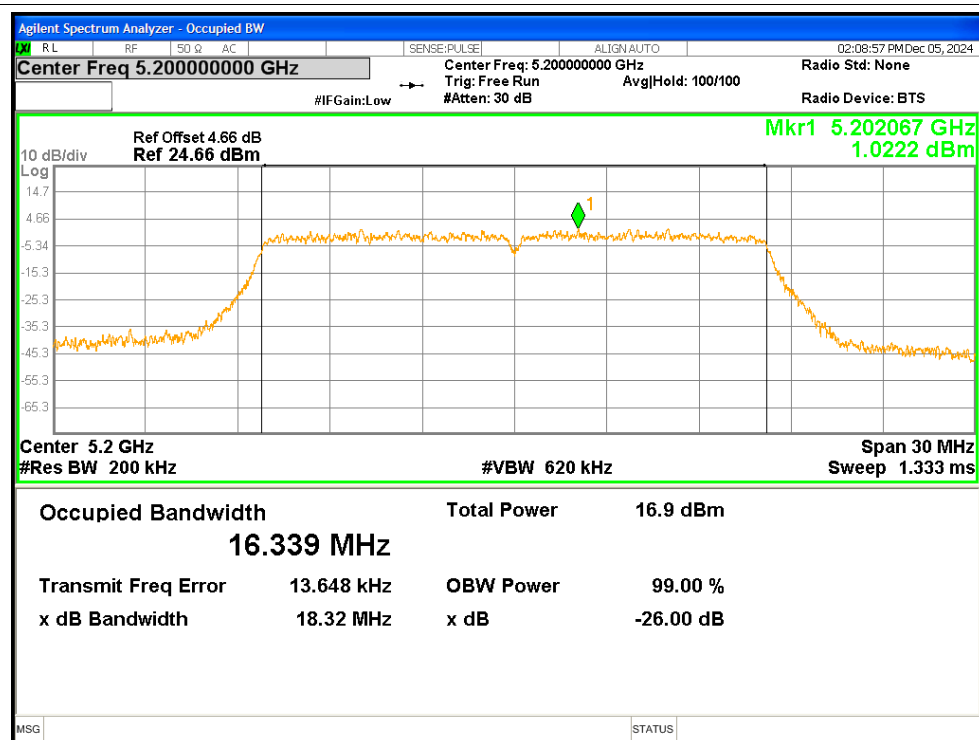
OBW NVNT a 5240MHz Ant1



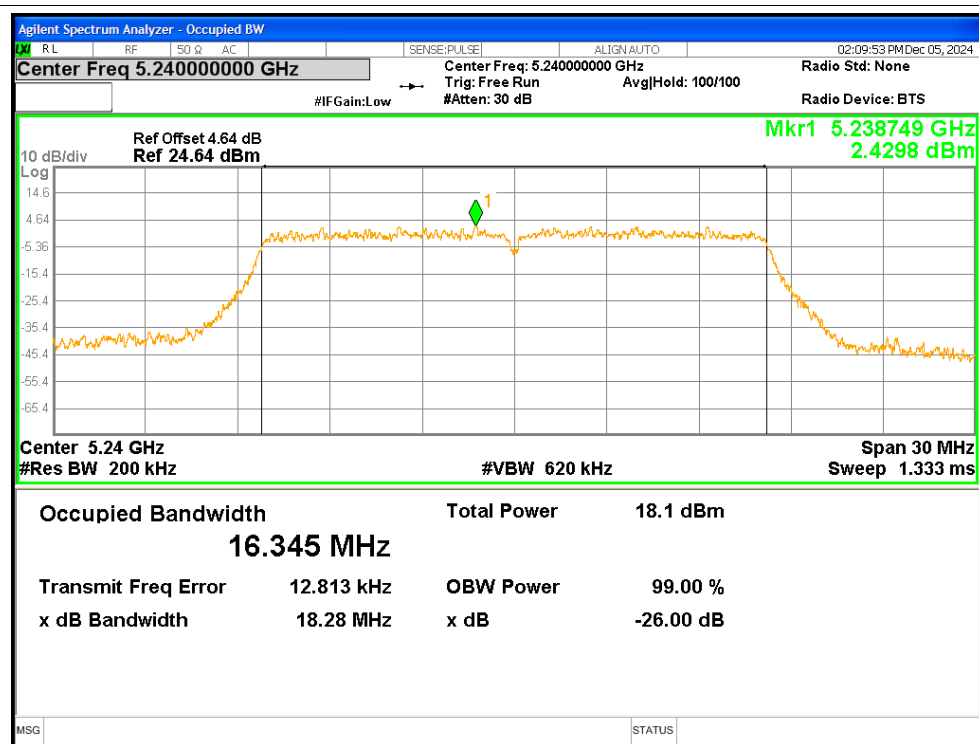
OBW NVNT a 5180MHz Ant2



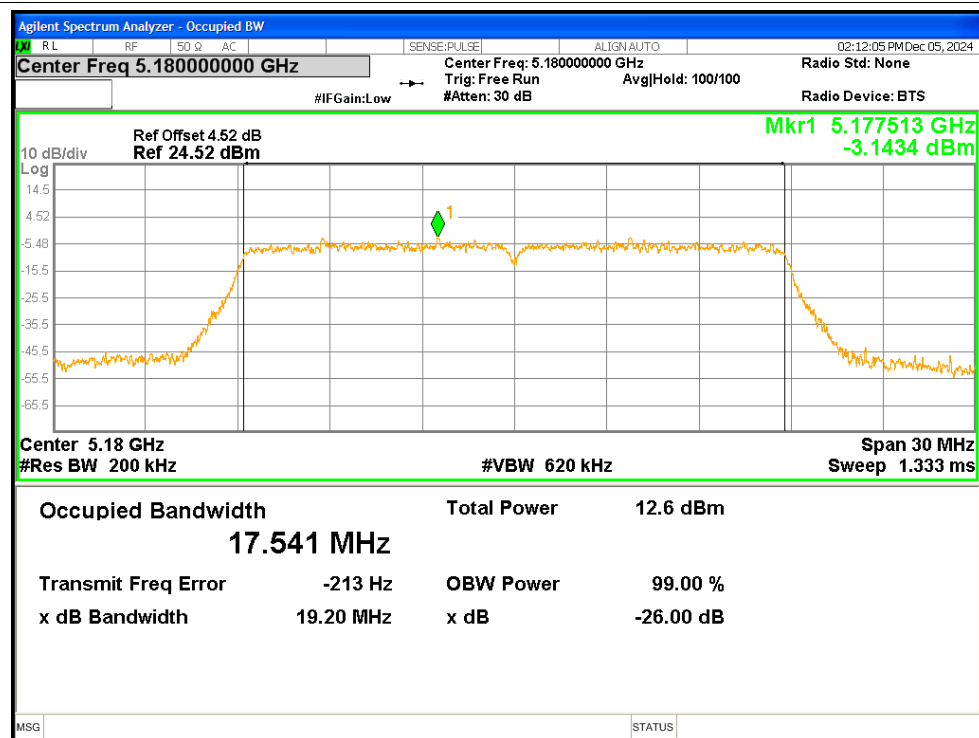
OBW NVNT a 5200MHz Ant2



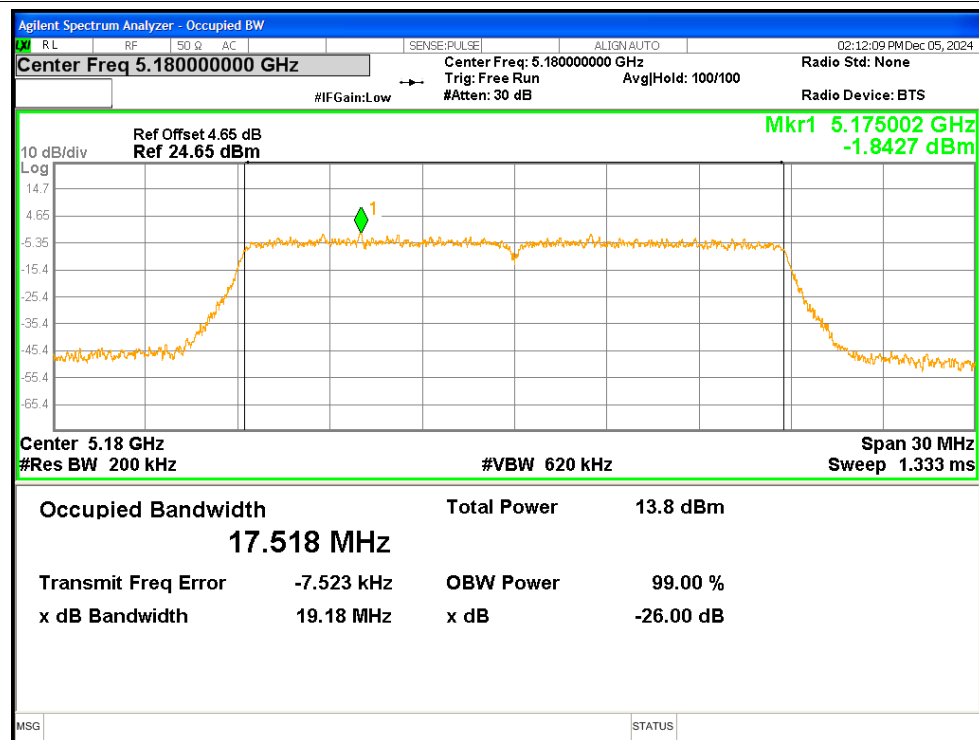
OBW NVNT a 5240MHz Ant2



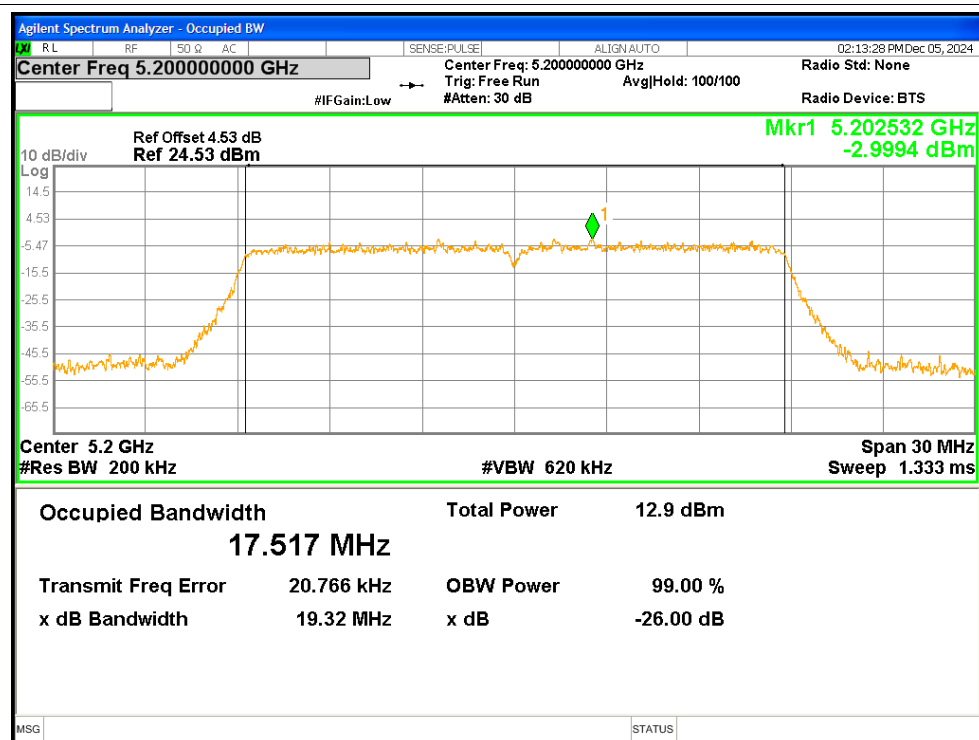
OBW NVNT n20 5180MHz Ant1



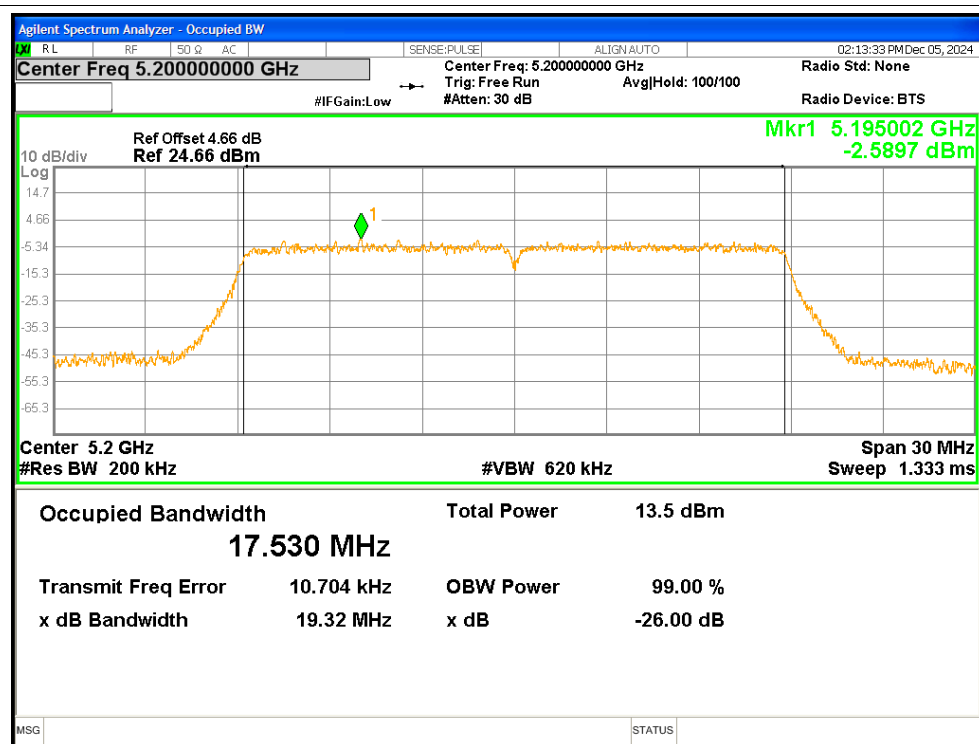
OBW NVNT n20 5180MHz Ant2



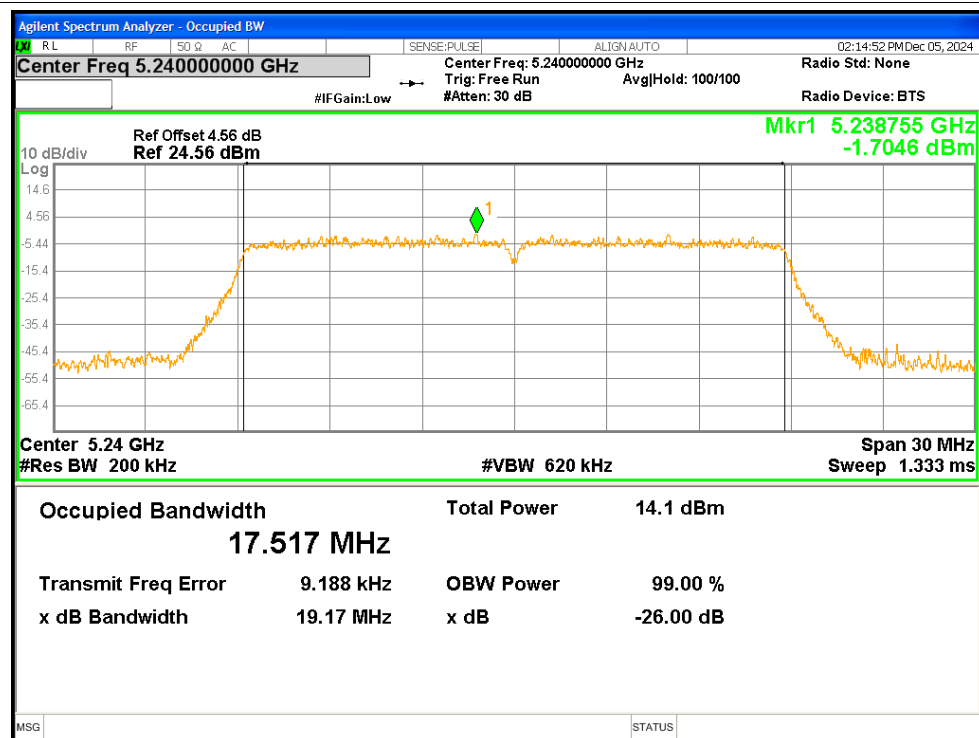
OBW NVNT n20 5200MHz Ant1



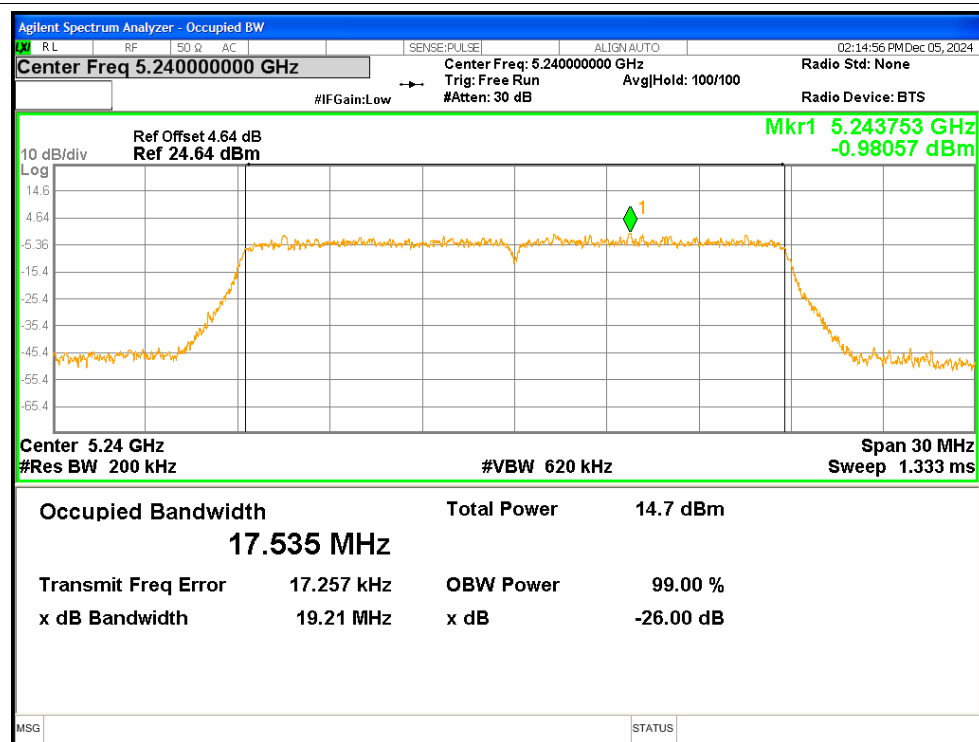
OBW NVNT n20 5200MHz Ant2



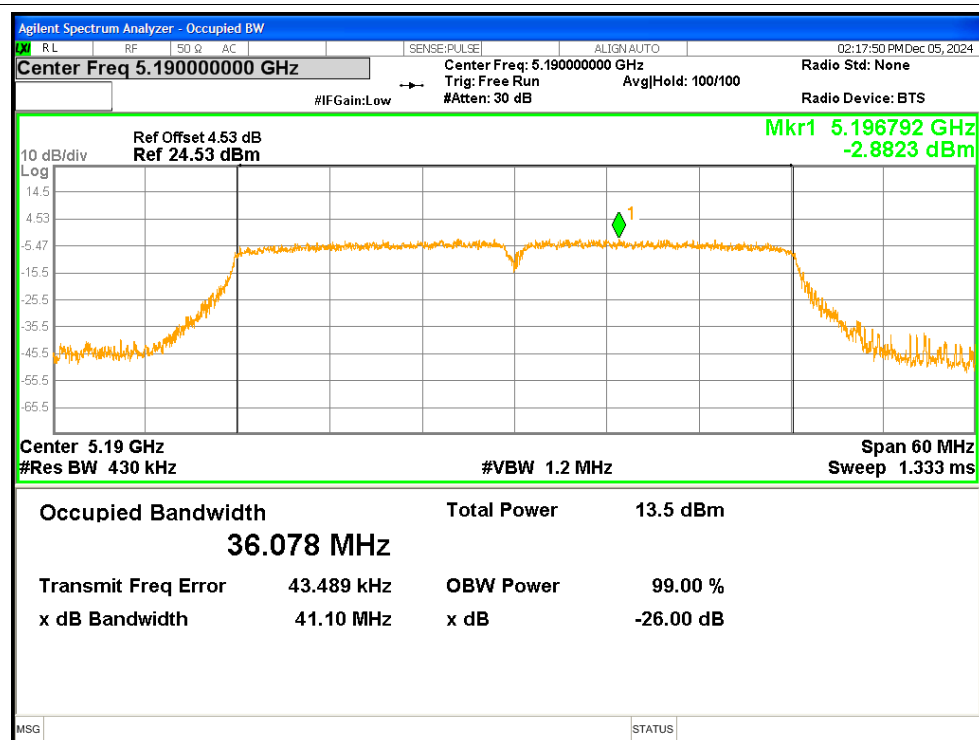
OBW NVNT n20 5240MHz Ant1



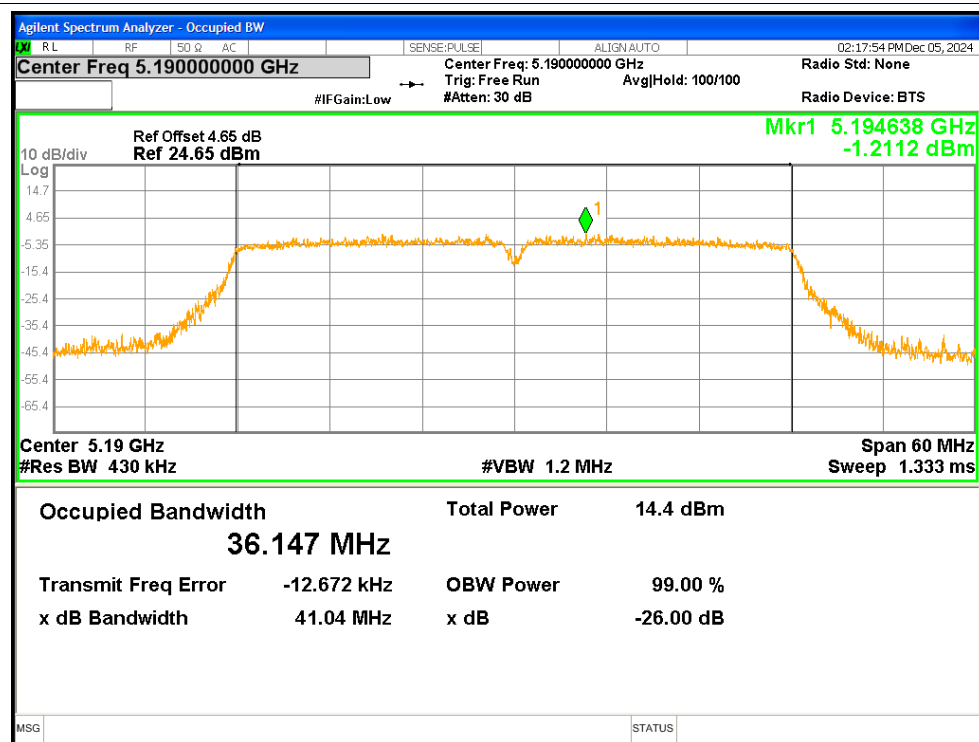
OBW NVNT n20 5240MHz Ant2



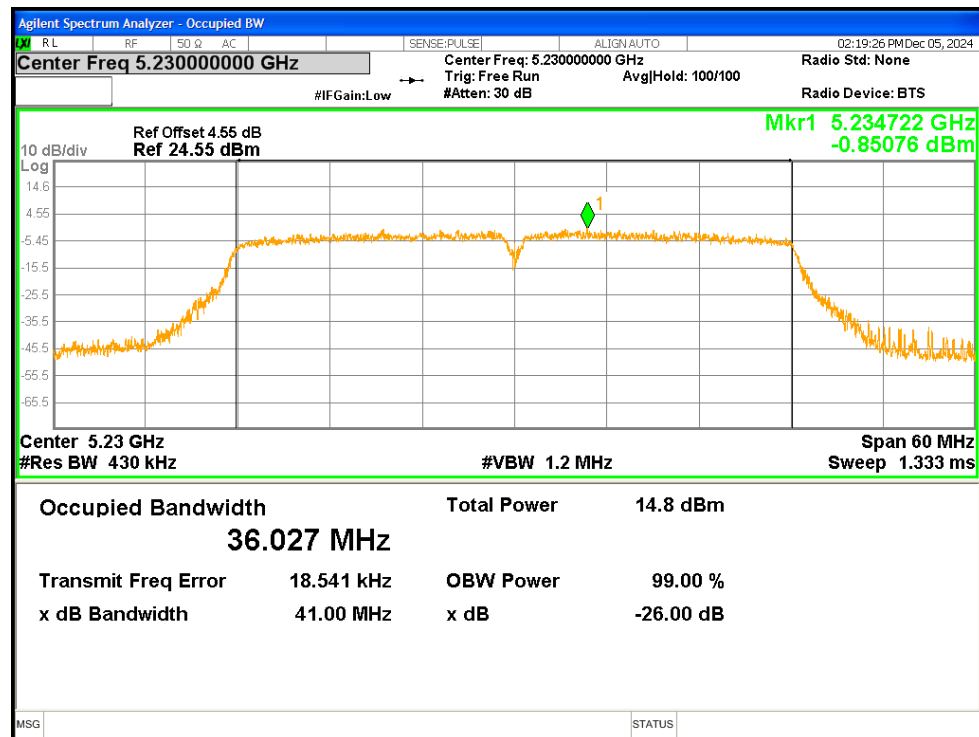
OBW NVNT n40 5190MHz Ant1



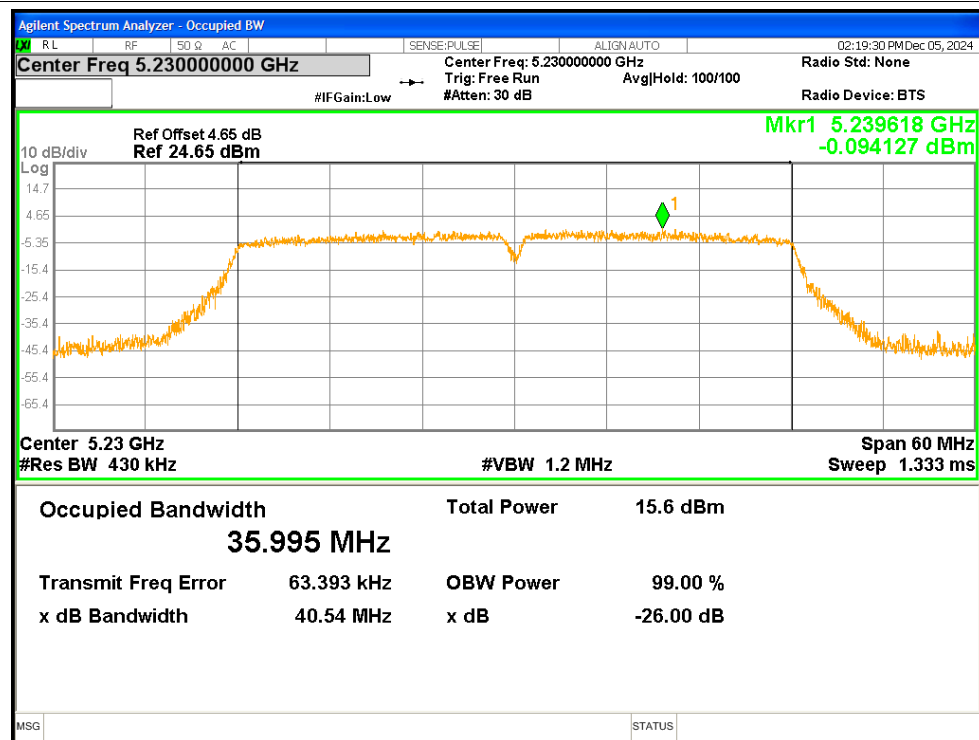
OBW NVNT n40 5190MHz Ant2



OBW NVNT n40 5230MHz Ant1



OBW NVNT n40 5230MHz Ant2

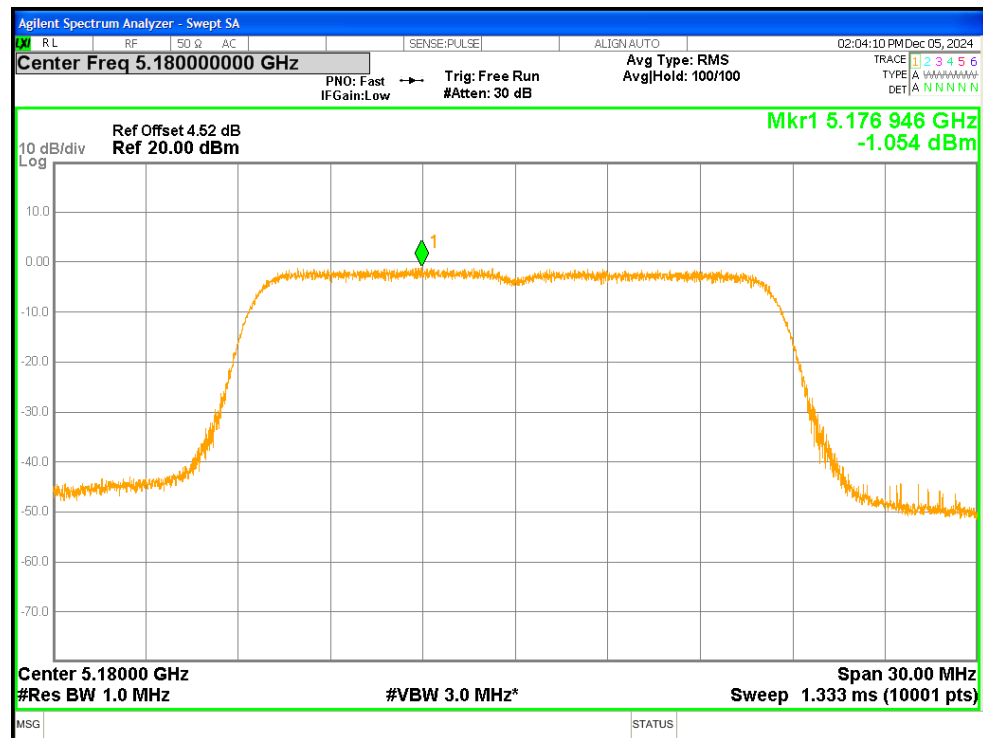


5. Maximum Power Spectral Density Level

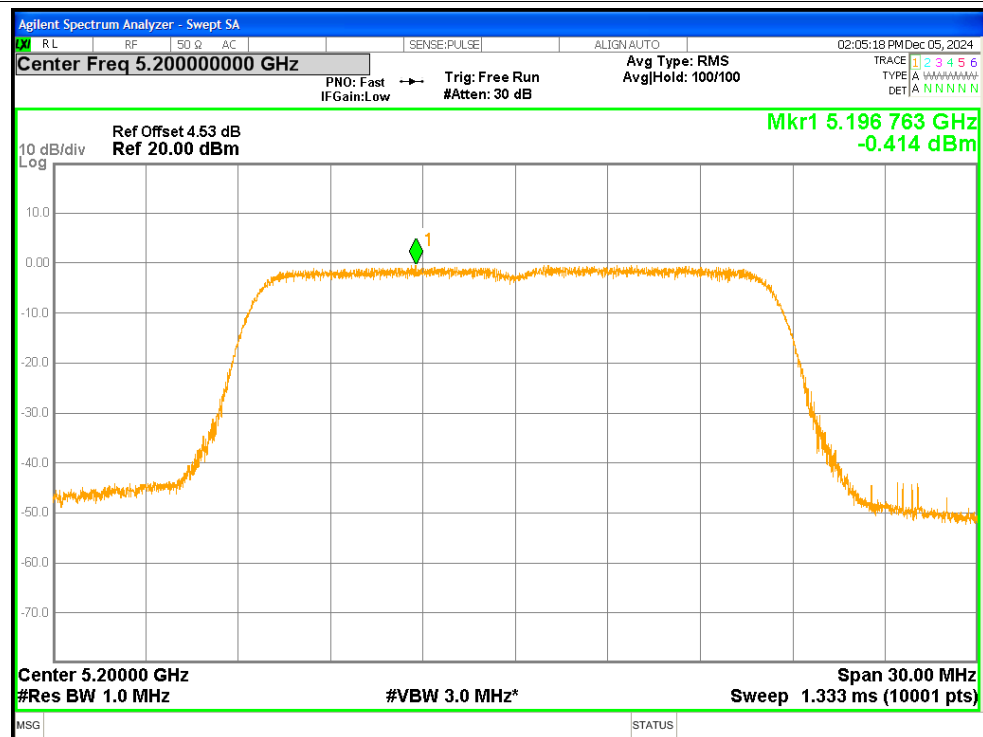
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	-1.054	1.36	0.306	<=11	Pass
NVNT	a	5200	Ant1	-0.414	1.36	0.946	<=11	Pass
NVNT	a	5240	Ant1	0.617	1.36	1.977	<=11	Pass
NVNT	a	5180	Ant2	-0.016	1.36	1.344	<=11	Pass
NVNT	a	5200	Ant2	-0.179	1.36	1.181	<=11	Pass
NVNT	a	5240	Ant2	1.142	1.36	2.502	<=11	Pass
NVNT	n20	5180	Ant1	-4.823	1.44	-3.383	<=11	Pass
NVNT	n20	5180	Ant2	-3.621	1.44	-2.181	<=11	Pass
NVNT	n20	5180	Sum	-1.17	1.44	0.27	<=8.19	Pass
NVNT	n20	5200	Ant1	-4.299	1.44	-2.859	<=11	Pass
NVNT	n20	5200	Ant2	-4.072	1.44	-2.632	<=11	Pass
NVNT	n20	5200	Sum	-1.174	1.44	0.266	<=8.19	Pass
NVNT	n20	5240	Ant1	-3.196	1.44	-1.756	<=11	Pass
NVNT	n20	5240	Ant2	-2.727	1.44	-1.287	<=11	Pass
NVNT	n20	5240	Sum	0.055	1.44	1.495	<=8.19	Pass
NVNT	n40	5190	Ant1	-8.422	2.53	-5.892	<=11	Pass
NVNT	n40	5190	Ant2	-7.7	2.53	-5.17	<=11	Pass
NVNT	n40	5190	Sum	-5.036	2.53	-2.506	<=8.19	Pass
NVNT	n40	5230	Ant1	-7.255	2.52	-4.735	<=11	Pass
NVNT	n40	5230	Ant2	-6.488	2.52	-3.968	<=11	Pass
NVNT	n40	5230	Sum	-3.844	2.52	-1.324	<=8.19	Pass

Test Graphs

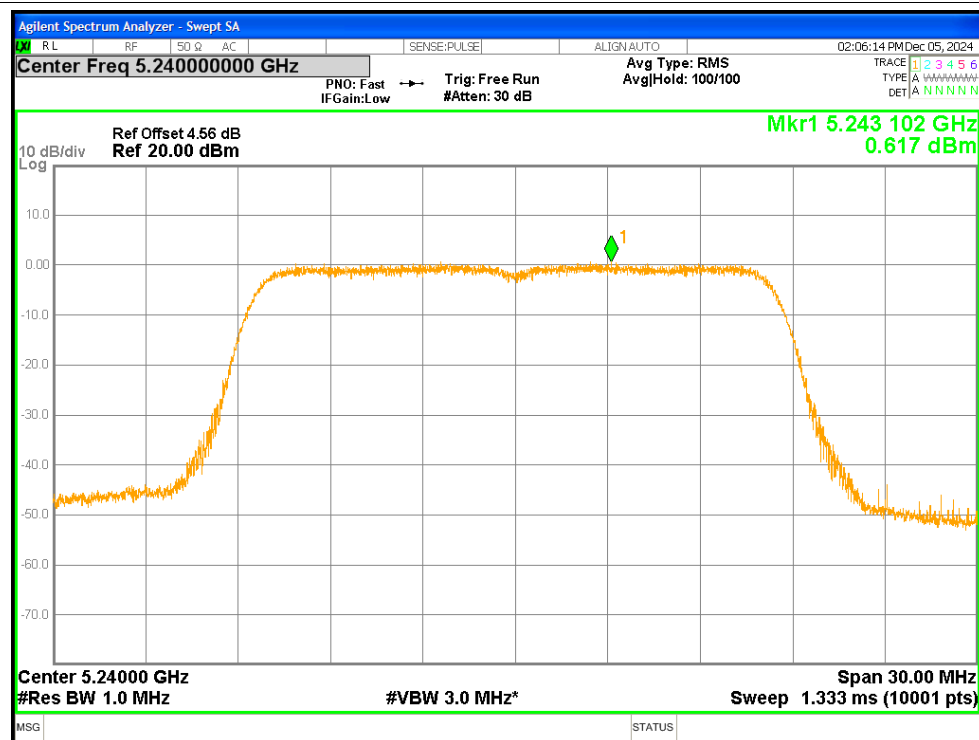
PSD NVNT a 5180MHz Ant1



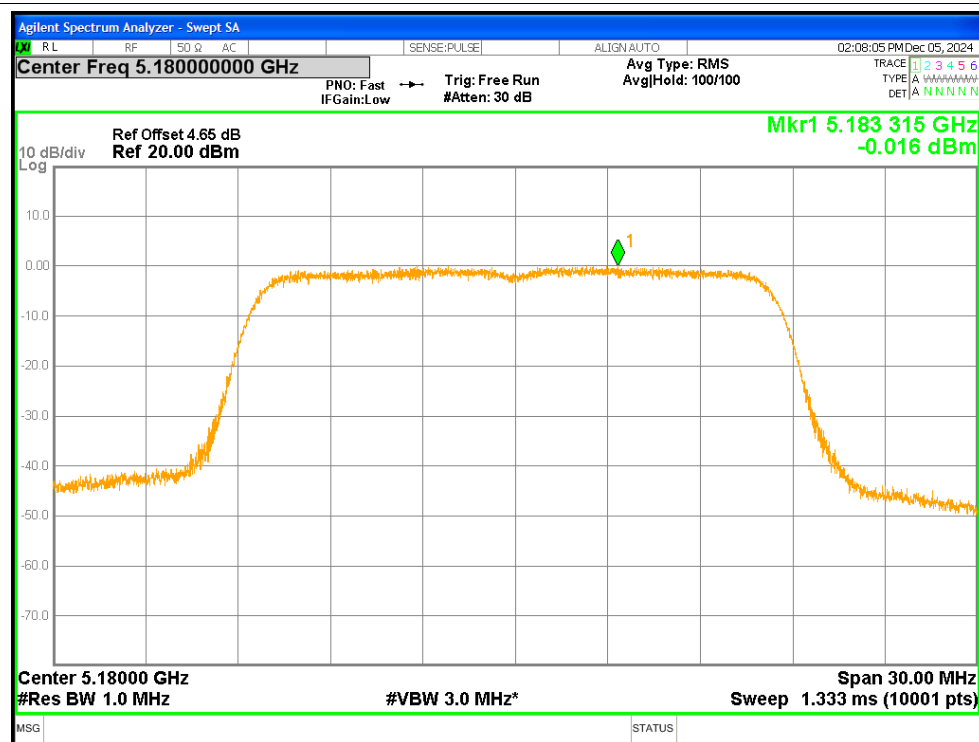
PSD NVNT a 5200MHz Ant1



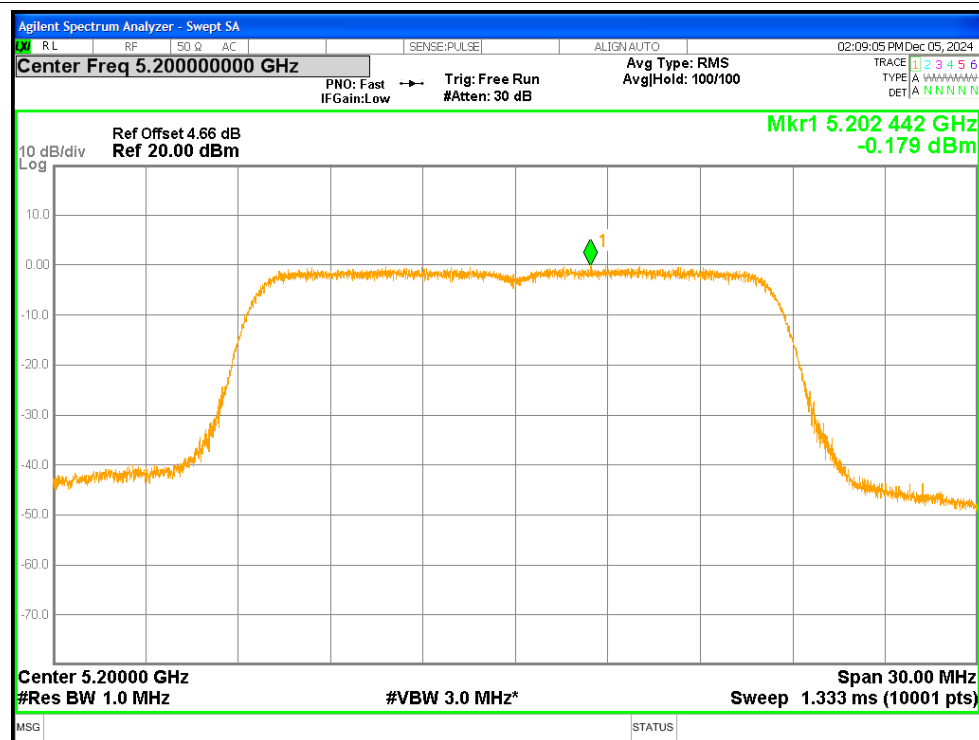
PSD NVNT a 5240MHz Ant1



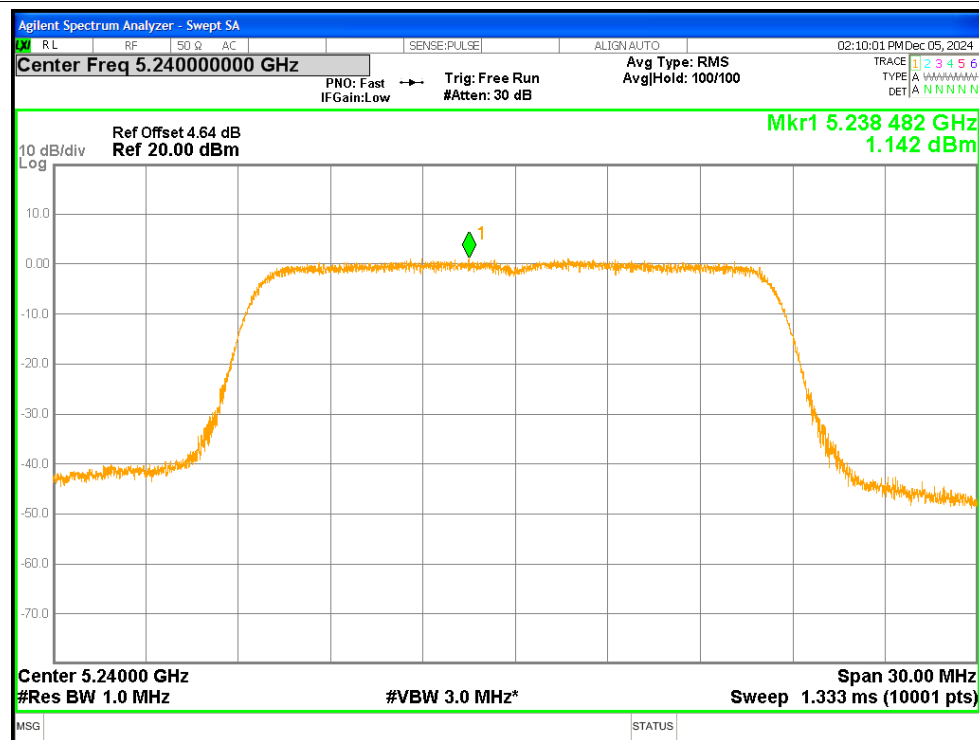
PSD NVNT a 5180MHz Ant2



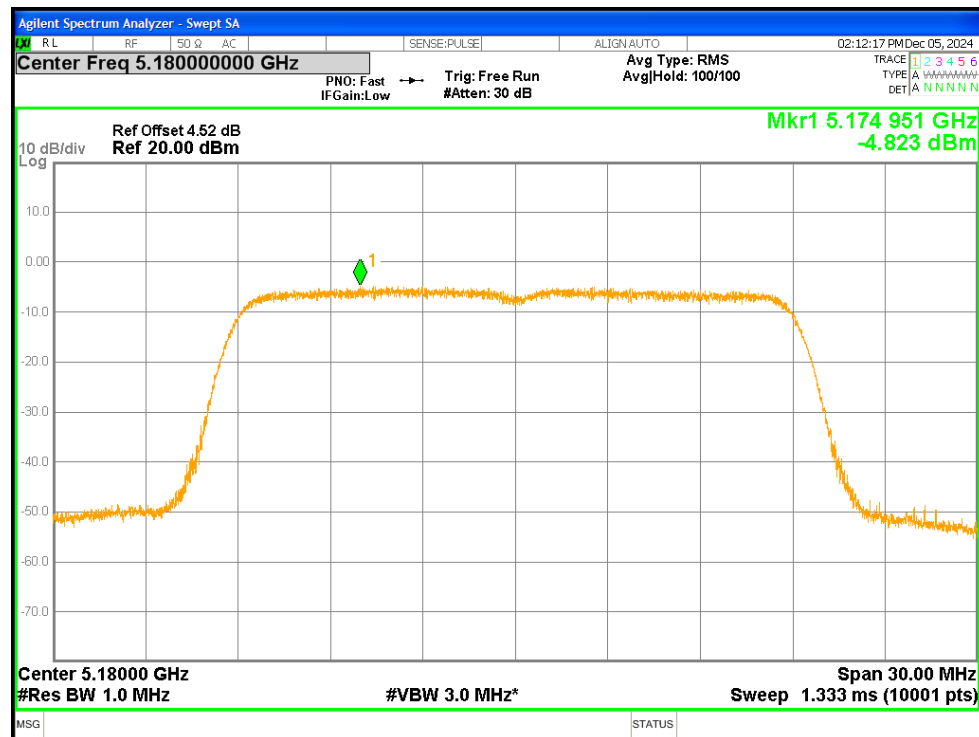
PSD NVNT a 5200MHz Ant2



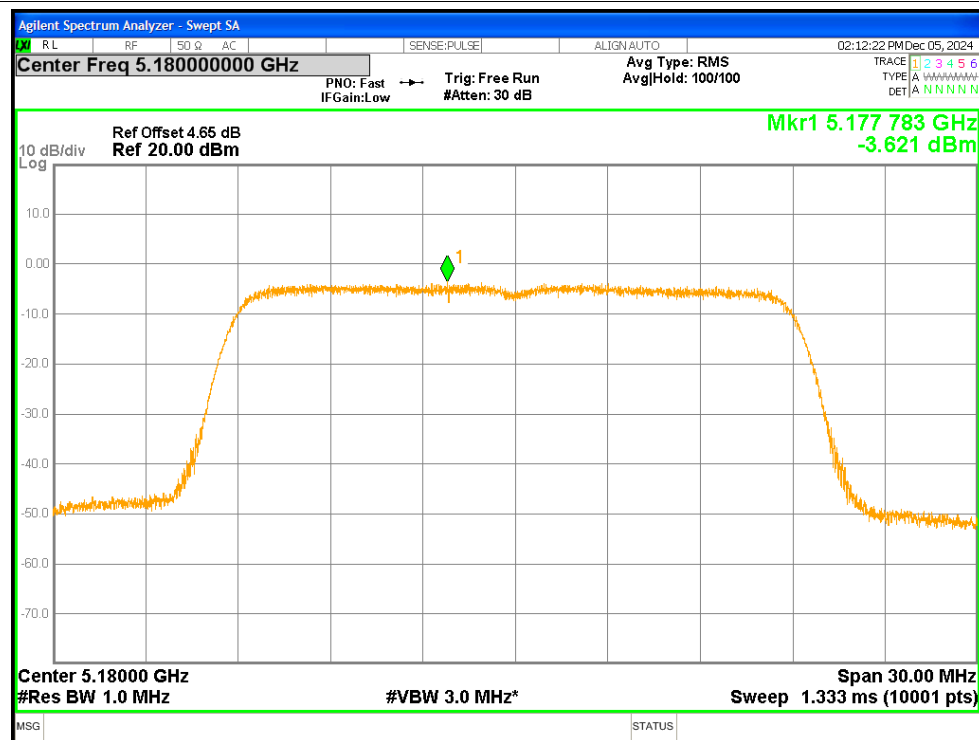
PSD NVNT a 5240MHz Ant2



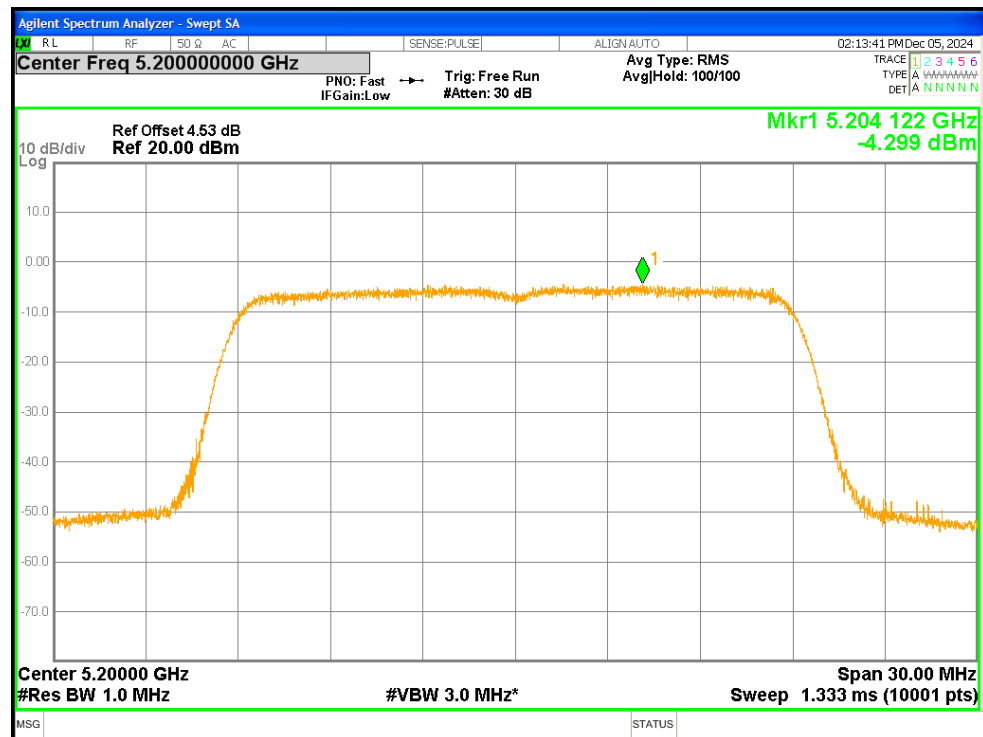
PSD NVNT n20 5180MHz Ant1



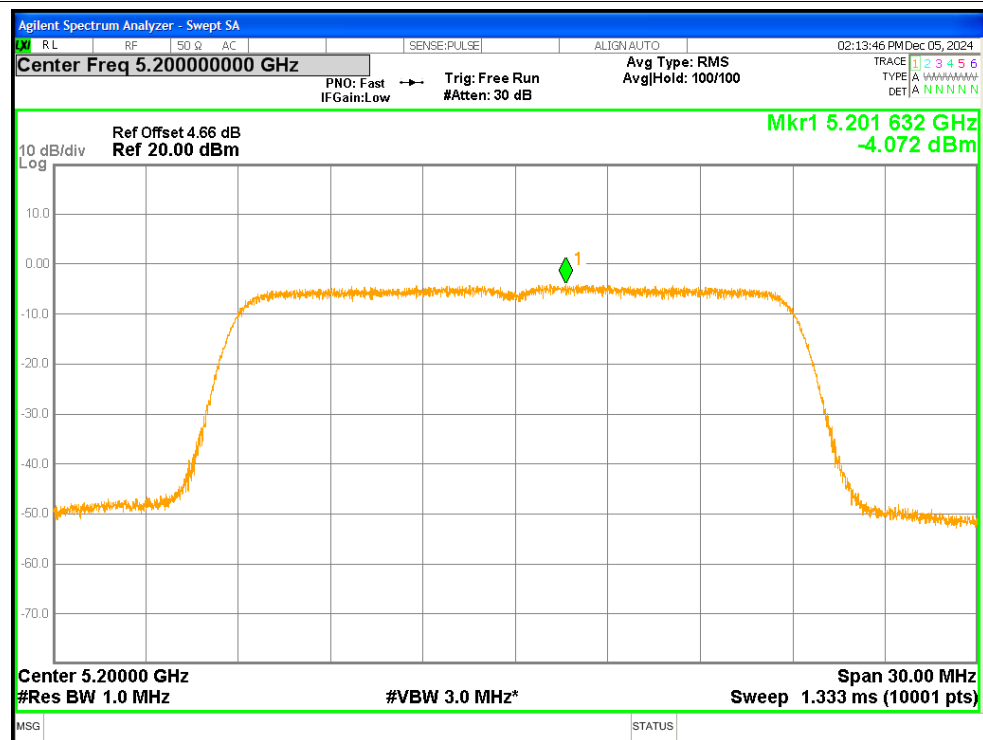
PSD NVNT n20 5180MHz Ant2



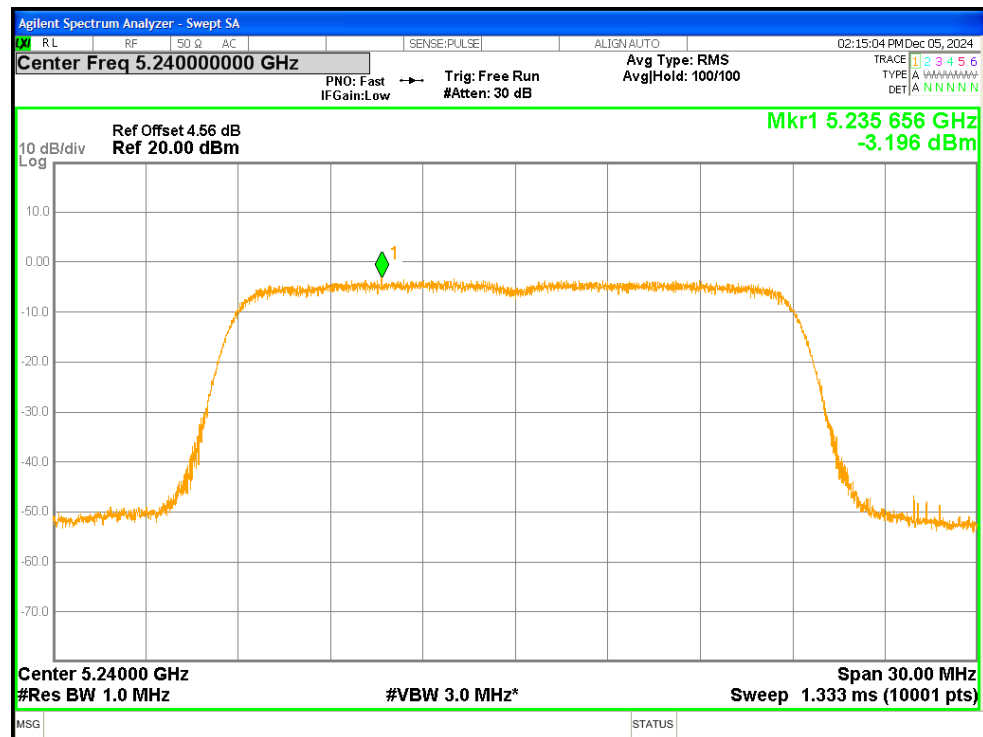
PSD NVNT n20 5200MHz Ant1



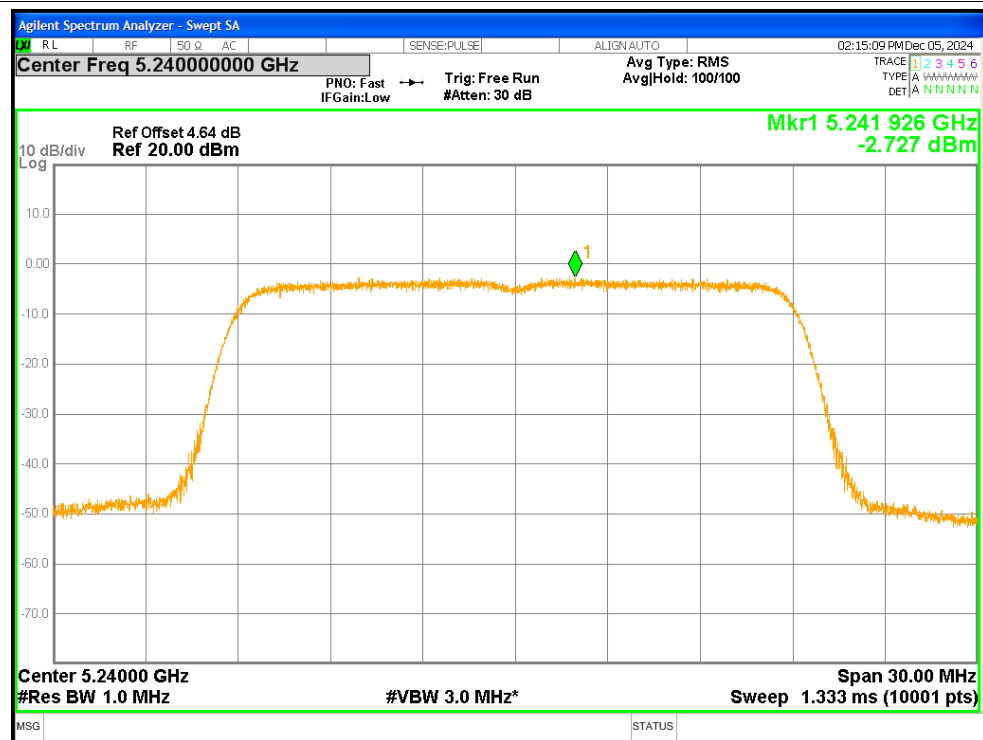
PSD NVNT n20 5200MHz Ant2



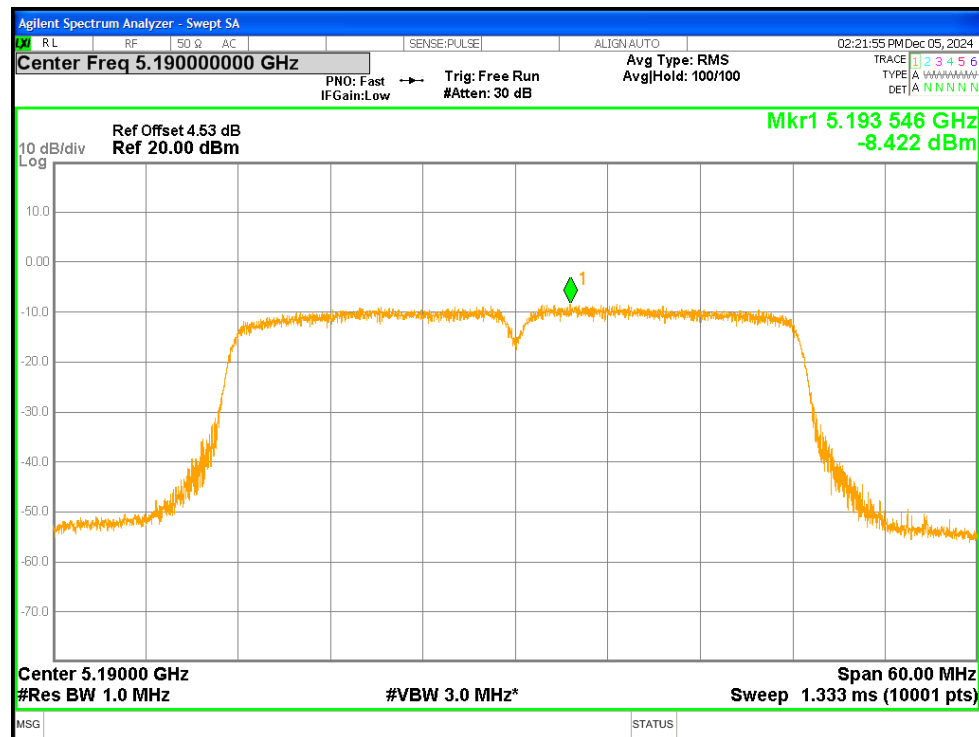
PSD NVNT n20 5240MHz Ant1



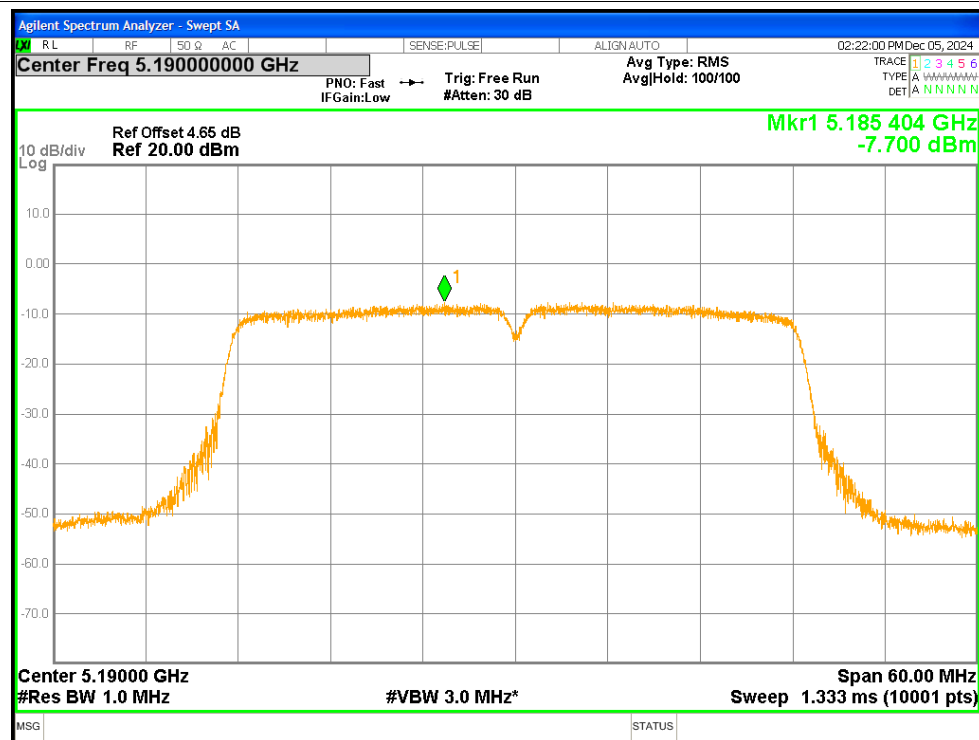
PSD NVNT n20 5240MHz Ant2



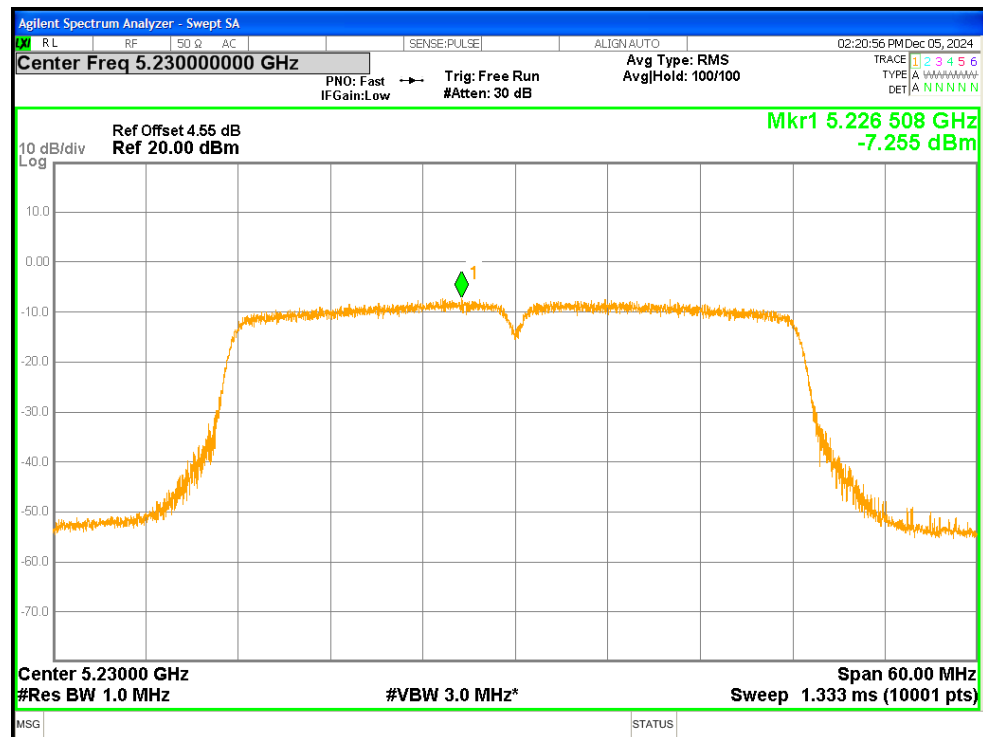
PSD NVNT n40 5190MHz Ant1



PSD NVNT n40 5190MHz Ant2



PSD NVNT n40 5230MHz Ant1



PSD NVNT n40 5230MHz Ant2

