



# Appendix E

## RF Test Data for 5.2G WIFI (Conducted Measurement)

Product Name: ALL IN ONE COMPUTER

Test Model: 650TAIO

### Environmental Conditions

Temperature:	23.9 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	<i>monkey.Li</i> Monkey Li
Supervised by:	<i>Lihan</i> Li Huan





### E.1 -26dB Bandwidth

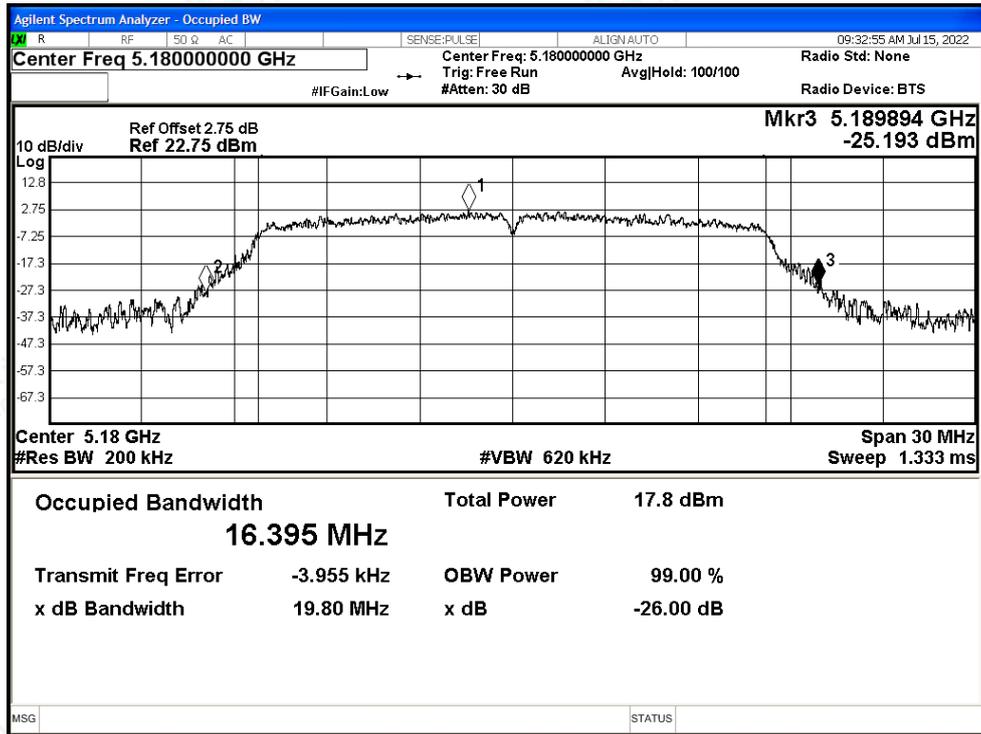
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict
NVNT	a	5180	Ant1	19.796	Pass
NVNT	a	5200	Ant1	19.74	Pass
NVNT	a	5240	Ant1	19.618	Pass
NVNT	n20	5180	Ant1	19.824	Pass
NVNT	n20	5200	Ant1	19.725	Pass
NVNT	n20	5240	Ant1	19.83	Pass
NVNT	n40	5190	Ant1	40.188	Pass
NVNT	n40	5230	Ant1	39.742	Pass
NVNT	ac20	5180	Ant1	19.903	Pass
NVNT	ac20	5200	Ant1	19.708	Pass
NVNT	ac20	5240	Ant1	19.686	Pass
NVNT	ac40	5190	Ant1	40.112	Pass
NVNT	ac40	5230	Ant1	40.303	Pass
NVNT	ac80	5210	Ant1	80.657	Pass



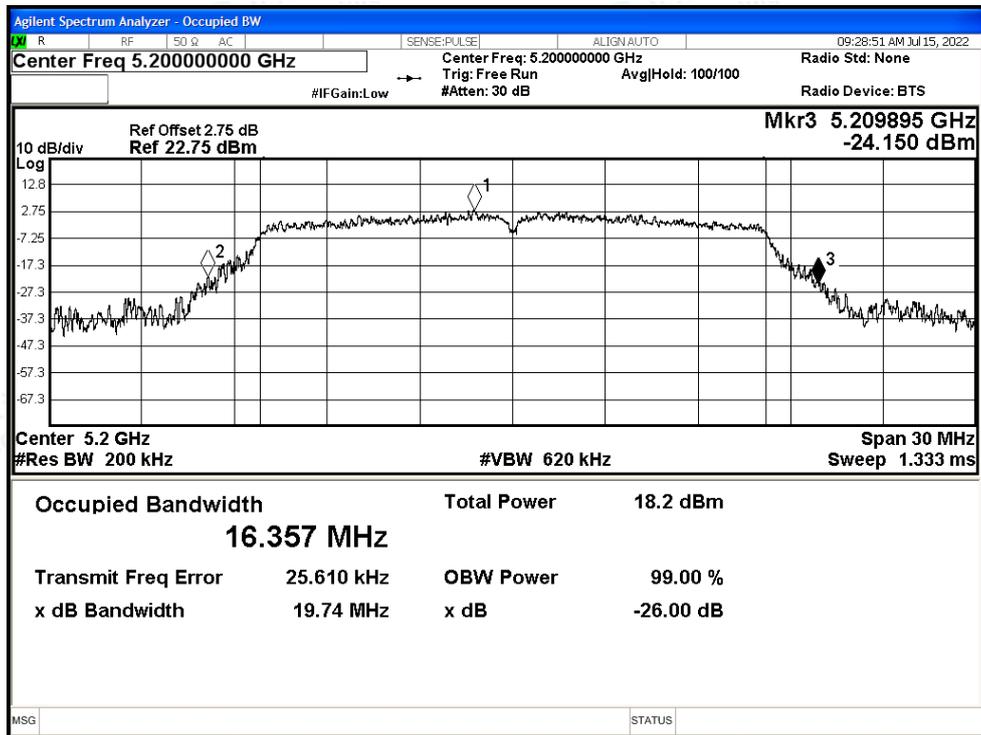


Test Graphs

-26dB Bandwidth NVNT a 5180MHz Ant1

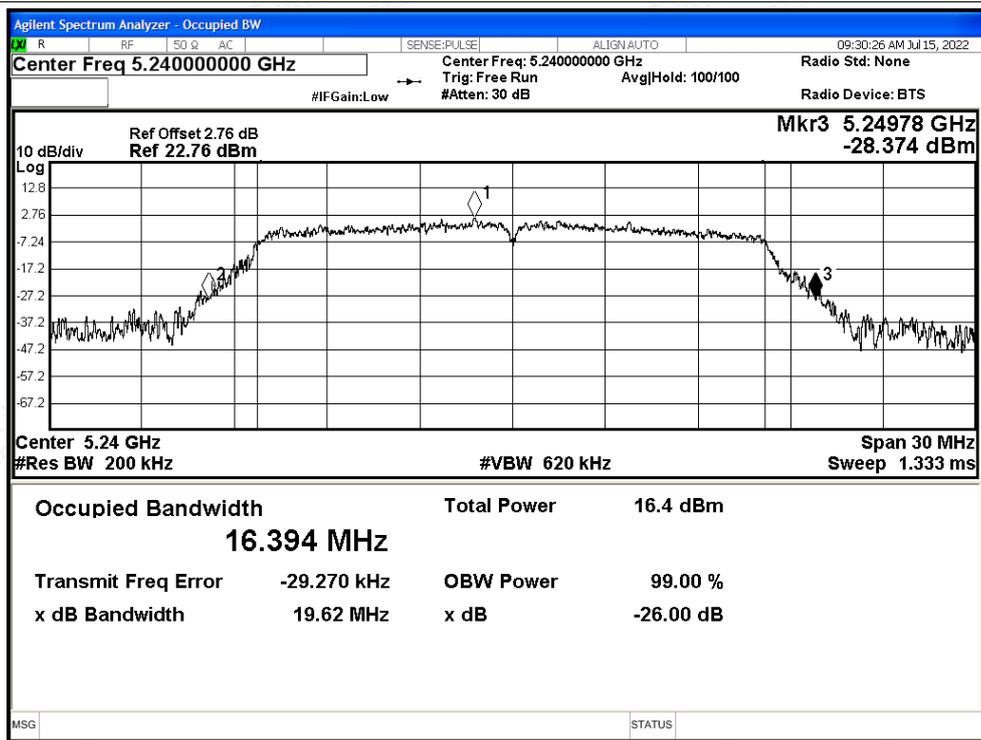


-26dB Bandwidth NVNT a 5200MHz Ant1

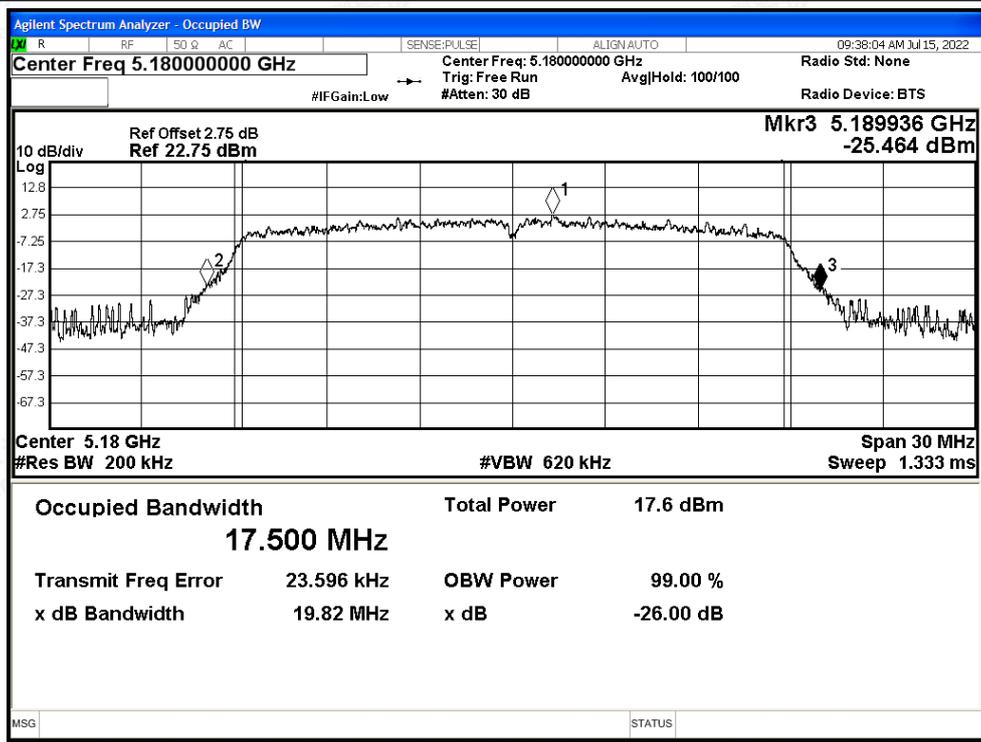




-26dB Bandwidth NVNT a 5240MHz Ant1

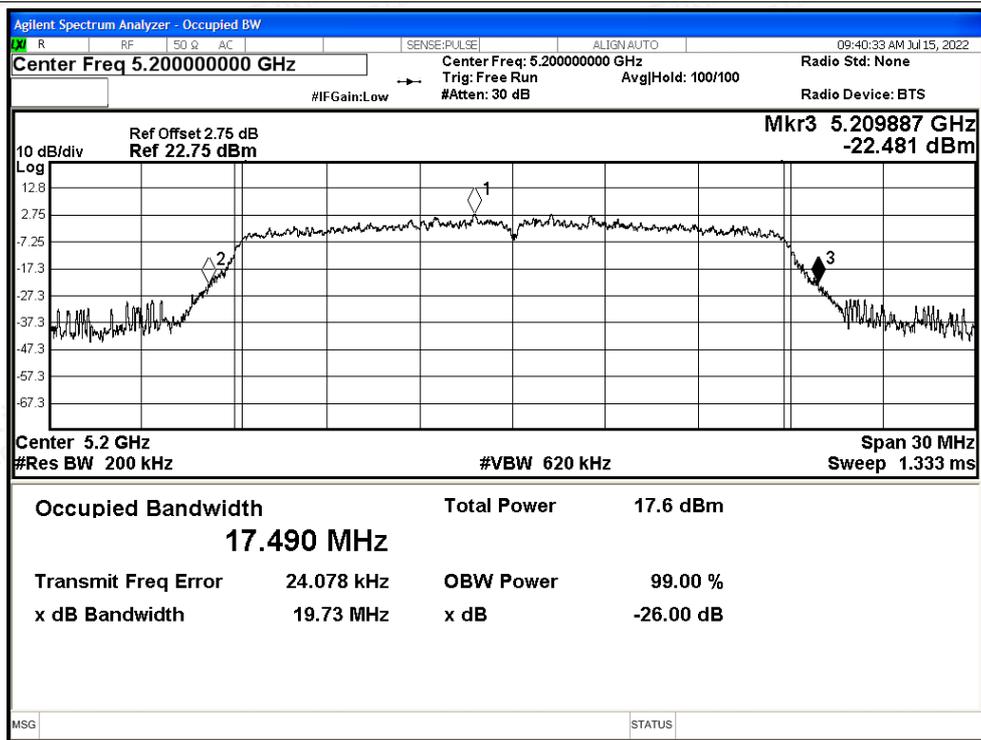


-26dB Bandwidth NVNT n20 5180MHz Ant1

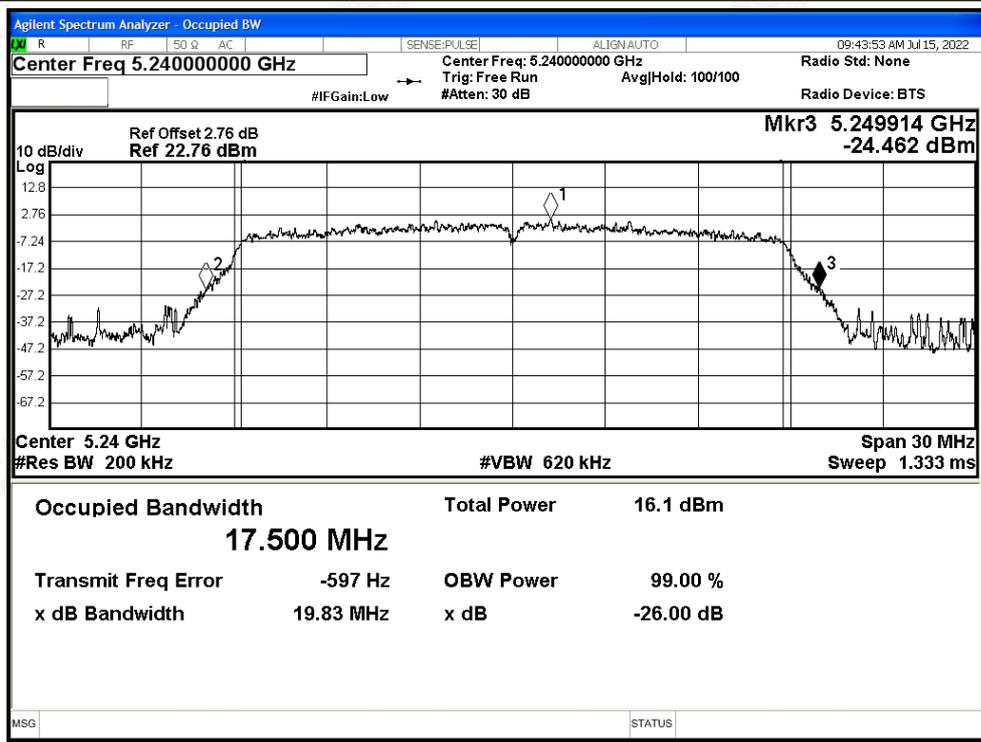




-26dB Bandwidth NVNT n20 5200MHz Ant1

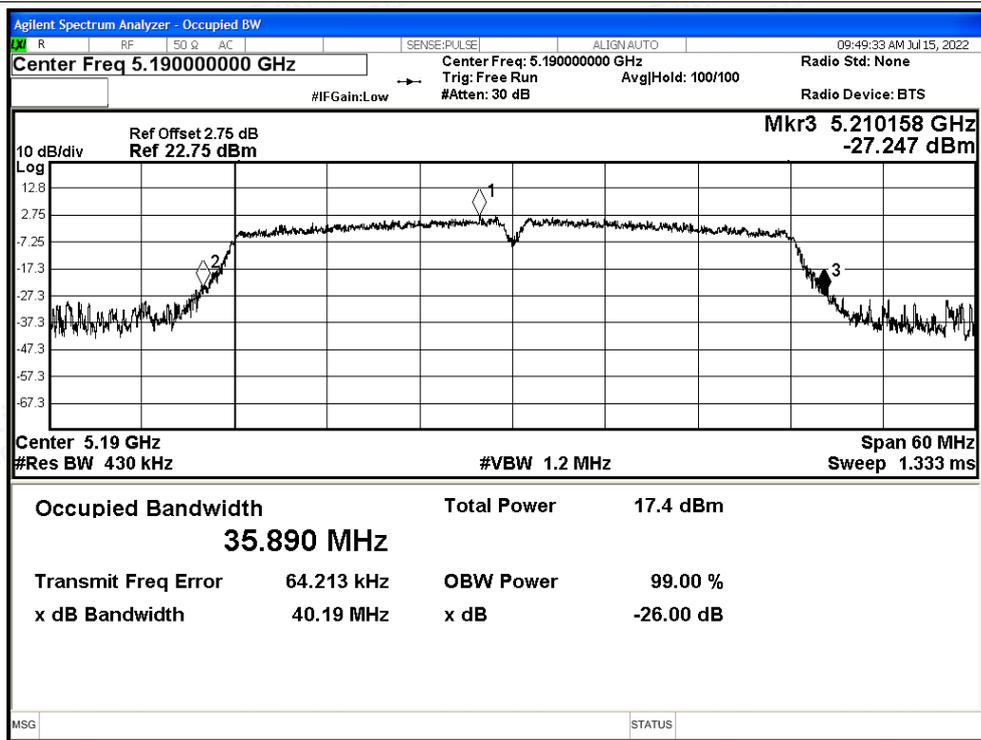


-26dB Bandwidth NVNT n20 5240MHz Ant1

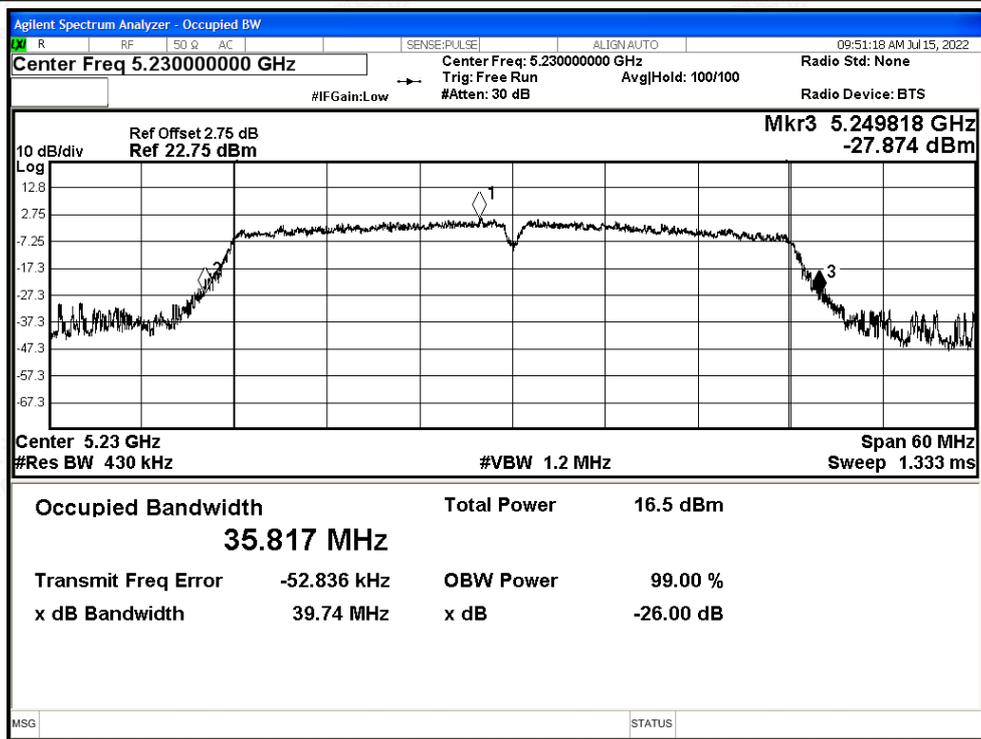




-26dB Bandwidth NVNT n40 5190MHz Ant1

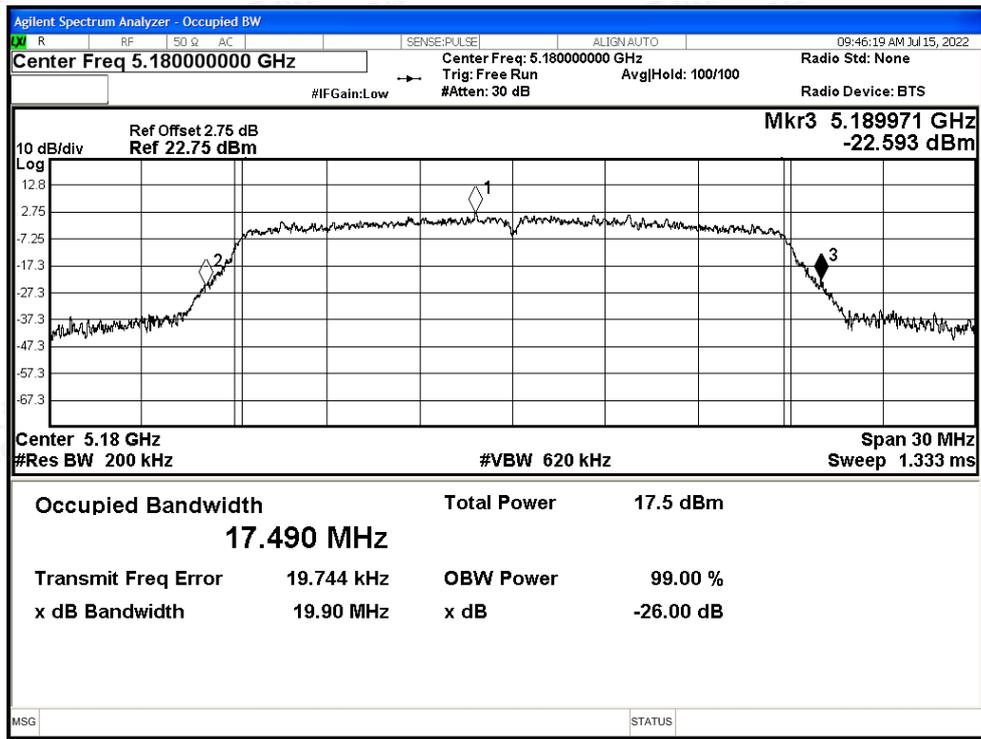


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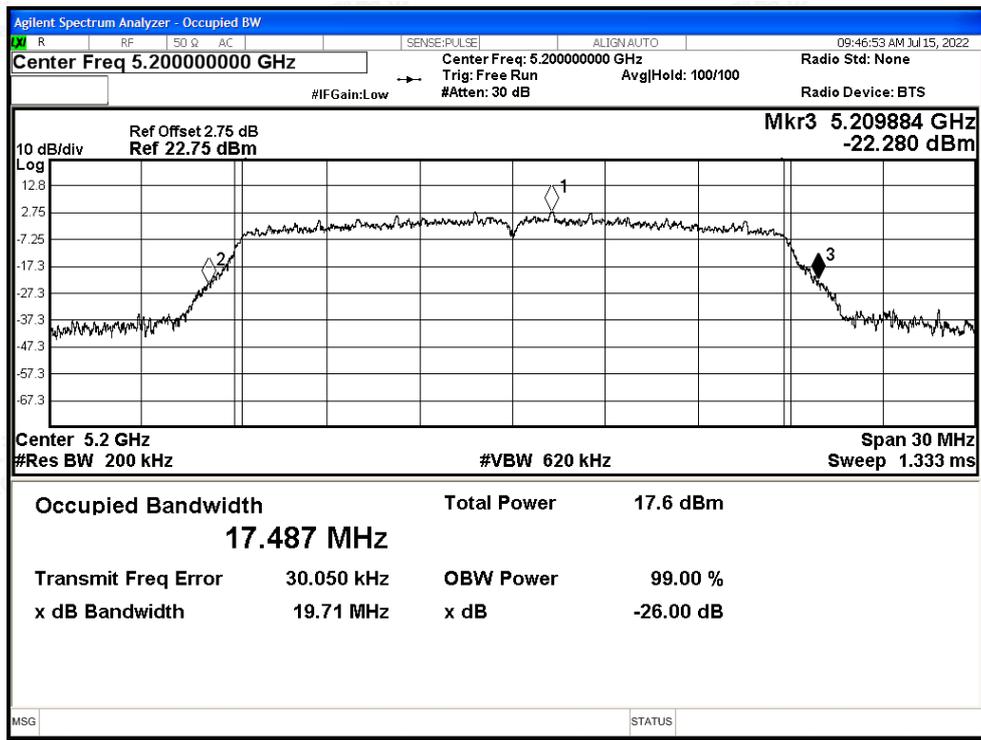




-26dB Bandwidth NVNT ac20 5180MHz Ant1

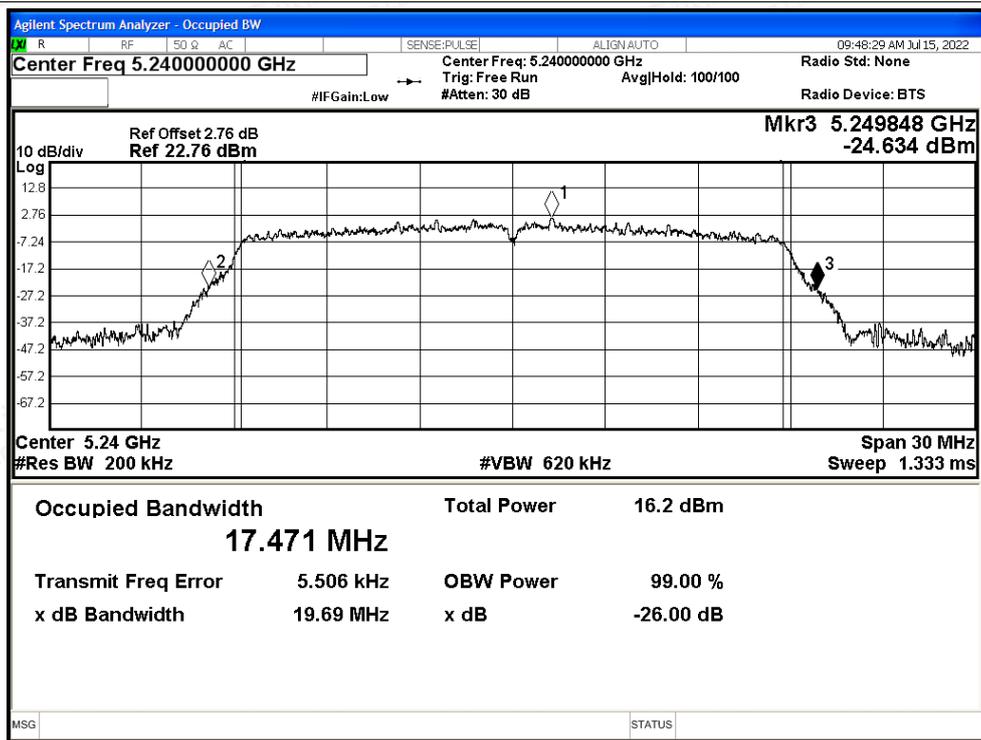


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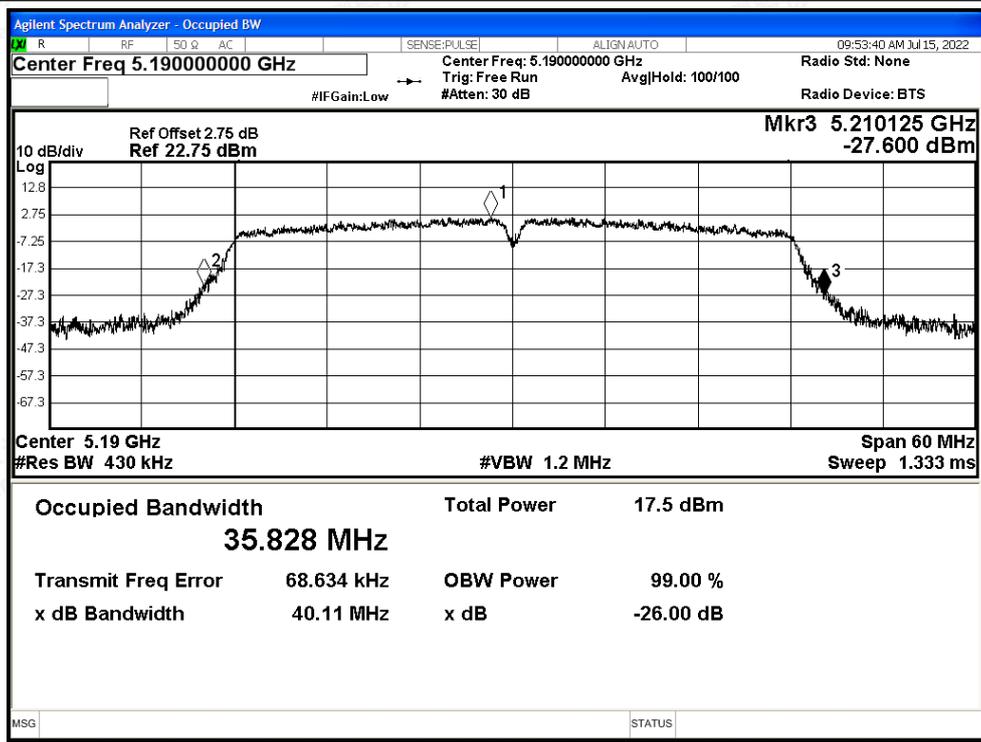




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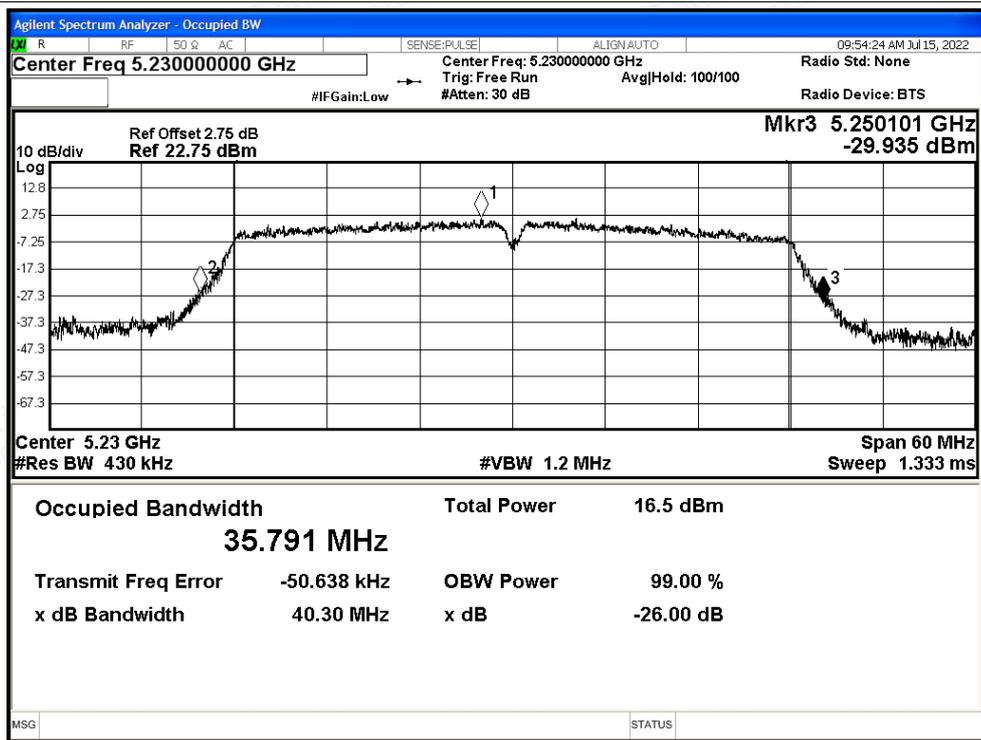


-26dB Bandwidth NVNT ac40 5190MHz Ant1

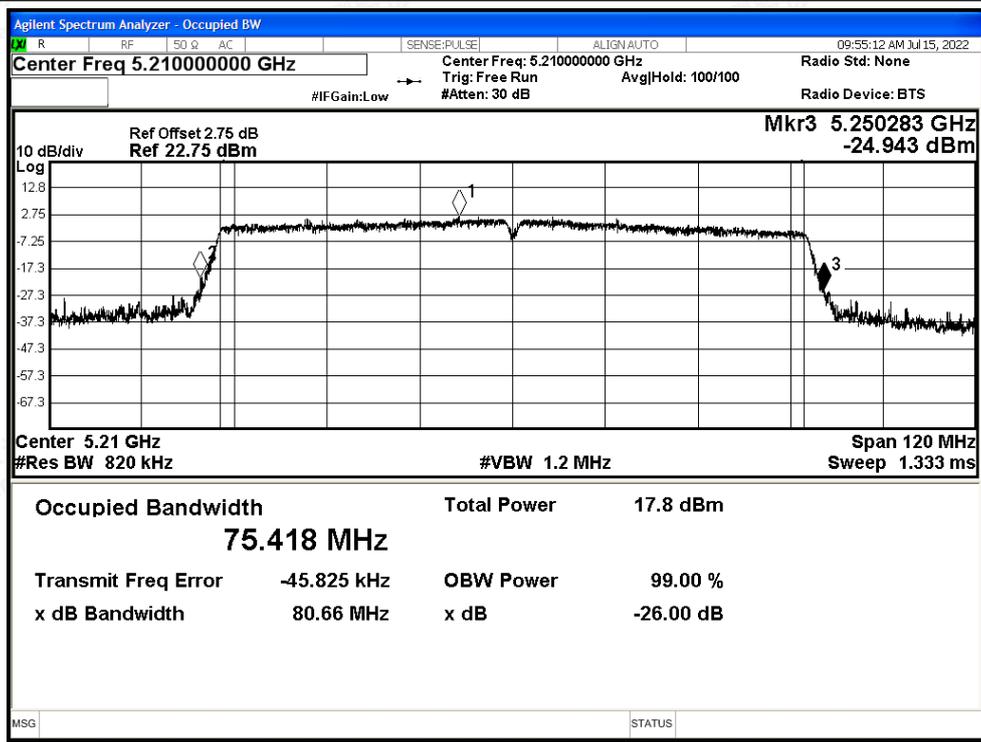




-26dB Bandwidth NVNT ac40 5230MHz Ant1



-26dB Bandwidth NVNT ac80 5210MHz Ant1





### E.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	12.76	0.96	13.72	24	Pass
NVNT	a	5200	Ant1	12.77	0.96	13.73	24	Pass
NVNT	a	5240	Ant1	12.48	0.96	13.44	24	Pass
NVNT	n20	5180	Ant1	12.61	1.02	13.63	24	Pass
NVNT	n20	5200	Ant1	12.7	1.02	13.72	24	Pass
NVNT	n20	5240	Ant1	12.35	1.02	13.37	24	Pass
NVNT	n40	5190	Ant1	11.3	1.88	13.18	24	Pass
NVNT	n40	5230	Ant1	12.2	1.88	14.08	24	Pass
NVNT	ac20	5180	Ant1	12.65	1.81	14.46	24	Pass
NVNT	ac20	5200	Ant1	12.63	1.81	14.44	24	Pass
NVNT	ac20	5240	Ant1	12.32	1.81	14.13	24	Pass
NVNT	ac40	5190	Ant1	11.43	3.06	14.49	24	Pass
NVNT	ac40	5230	Ant1	12.25	3.06	15.31	24	Pass
NVNT	ac80	5210	Ant1	11.28	4.79	16.07	24	Pass



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### E.3 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	1.08	0.96	2.04	11	Pass
NVNT	a	5200	Ant1	0.87	0.96	1.83	11	Pass
NVNT	a	5240	Ant1	0.83	0.96	1.79	11	Pass
NVNT	n20	5180	Ant1	0.92	1.02	1.94	11	Pass
NVNT	n20	5200	Ant1	0.62	1.02	1.64	11	Pass
NVNT	n20	5240	Ant1	0.28	1.02	1.30	11	Pass
NVNT	n40	5190	Ant1	-2.94	1.88	-1.06	11	Pass
NVNT	n40	5230	Ant1	-4.96	1.88	-3.08	11	Pass
NVNT	ac20	5180	Ant1	1	1.81	2.81	11	Pass
NVNT	ac20	5200	Ant1	0.9	1.81	2.71	11	Pass
NVNT	ac20	5240	Ant1	-0.06	1.81	1.75	11	Pass
NVNT	ac40	5190	Ant1	-11.38	3.06	-8.32	11	Pass
NVNT	ac40	5230	Ant1	-2.89	3.06	0.17	11	Pass
NVNT	ac80	5210	Ant1	-18.23	4.79	-13.44	11	Pass

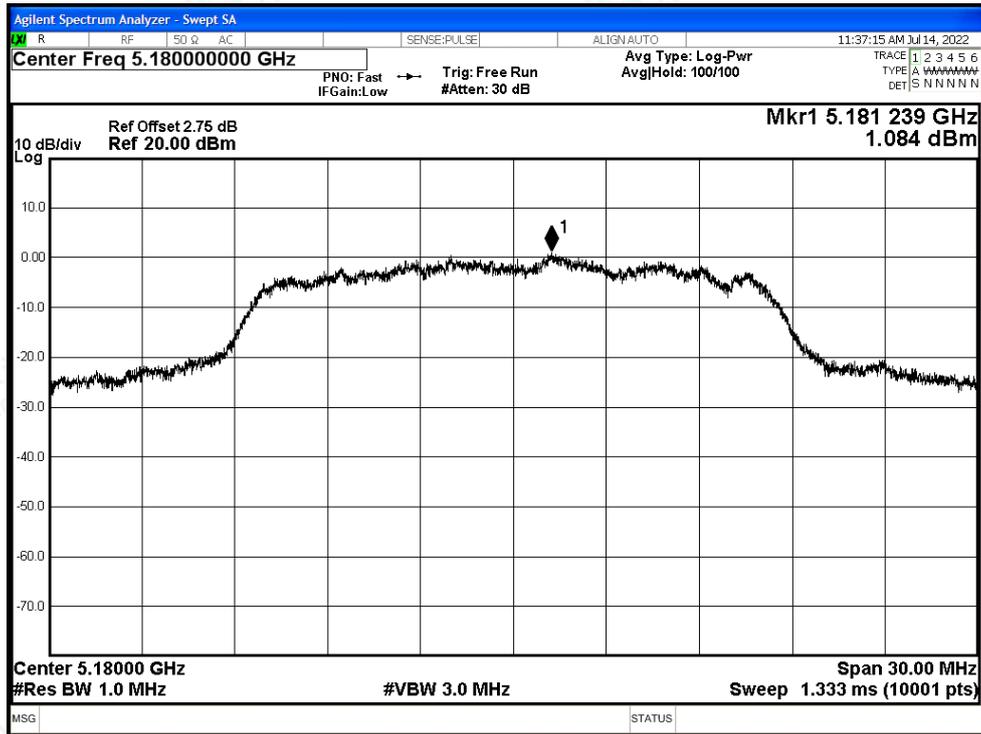


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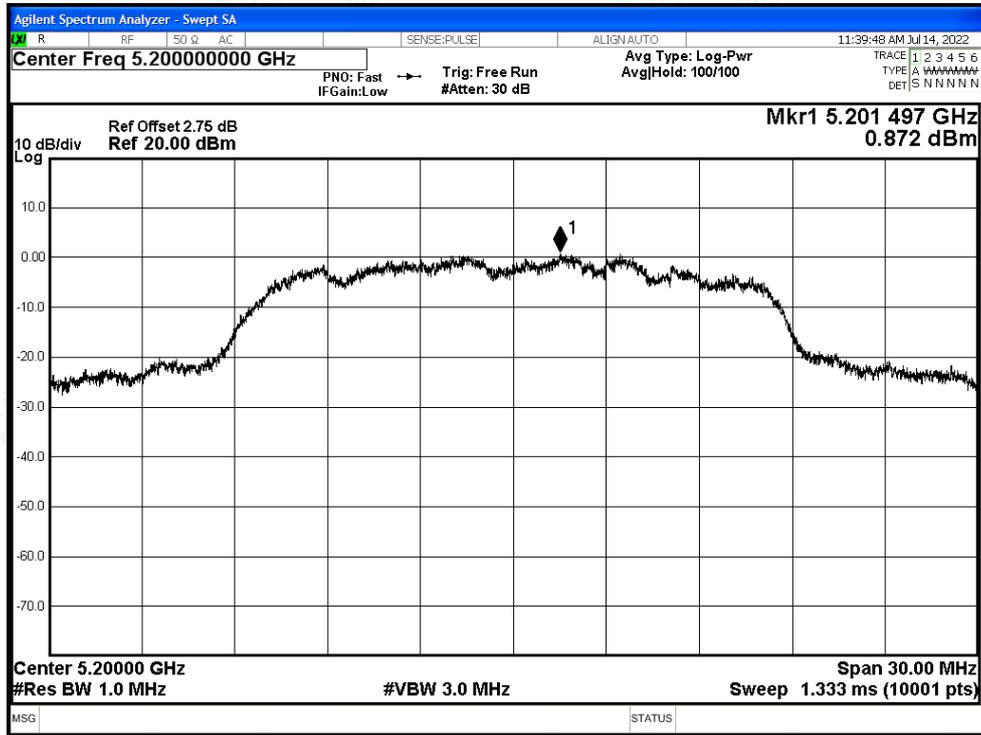


Test Graphs

PSD NVNT a 5180MHz Ant1

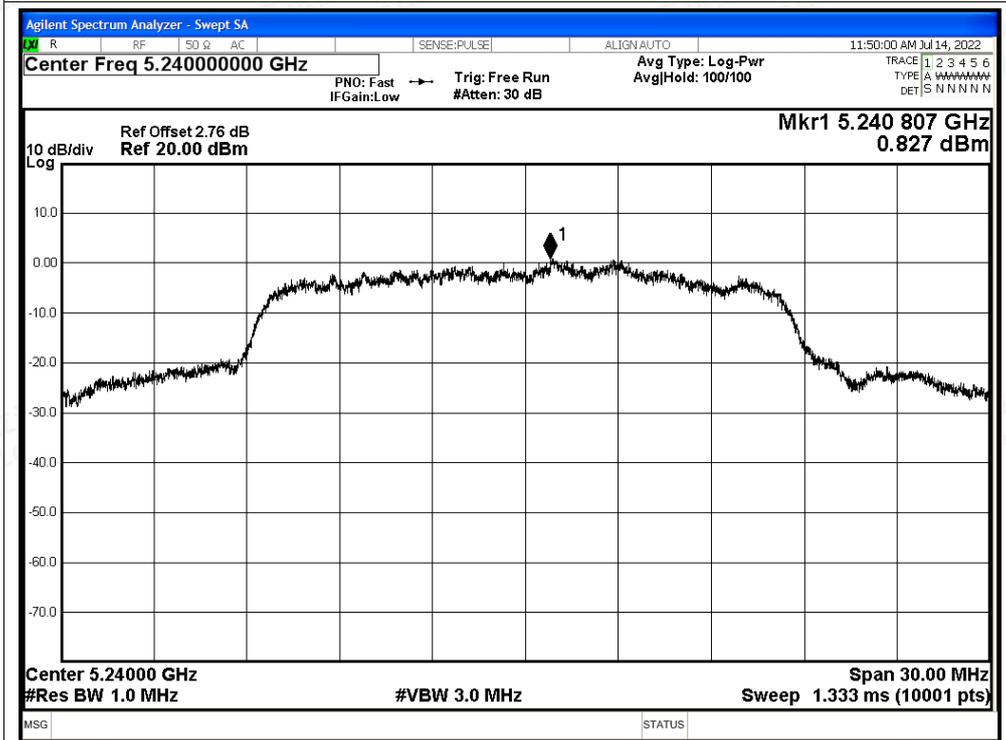


PSD NVNT a 5200MHz Ant1

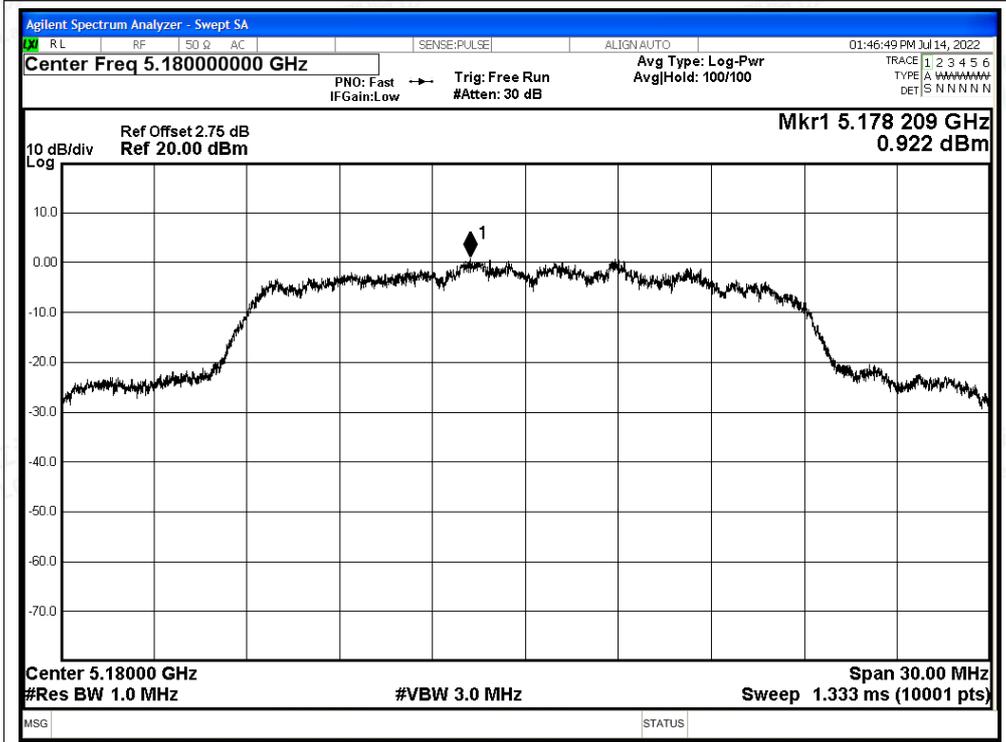


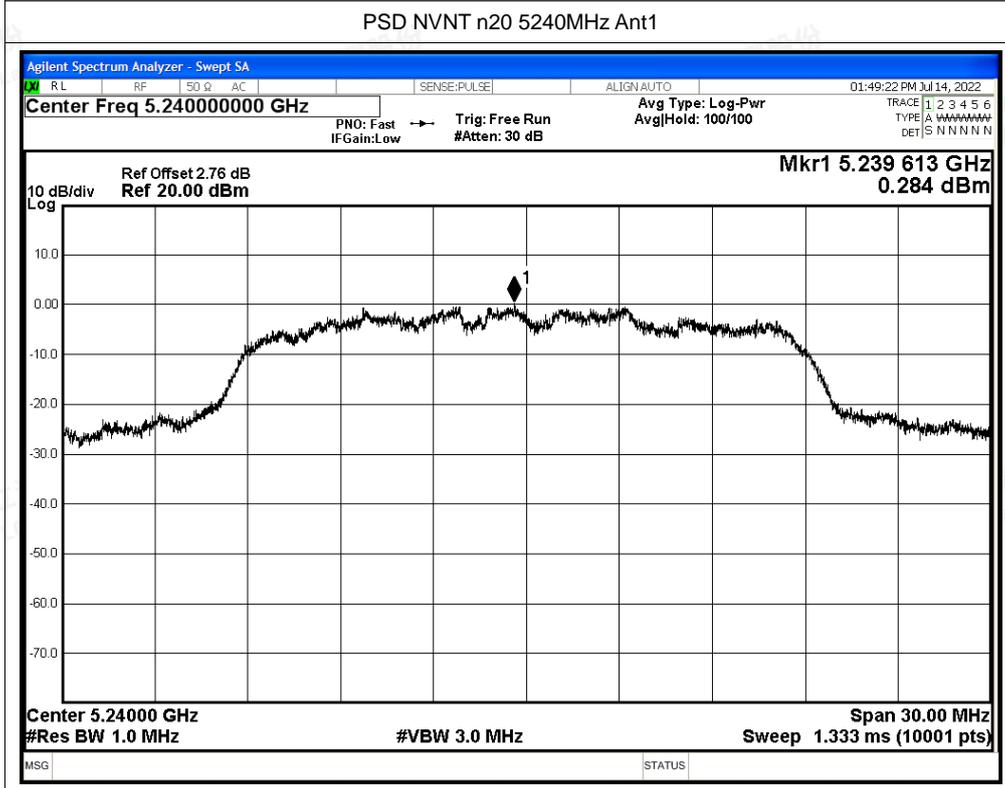
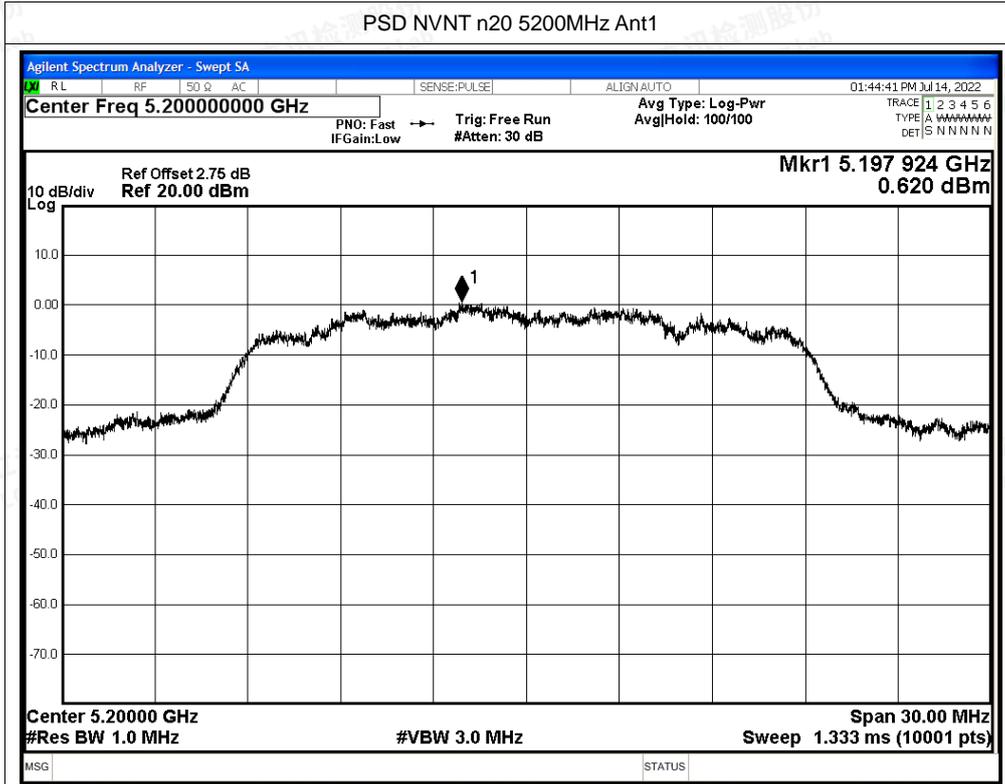


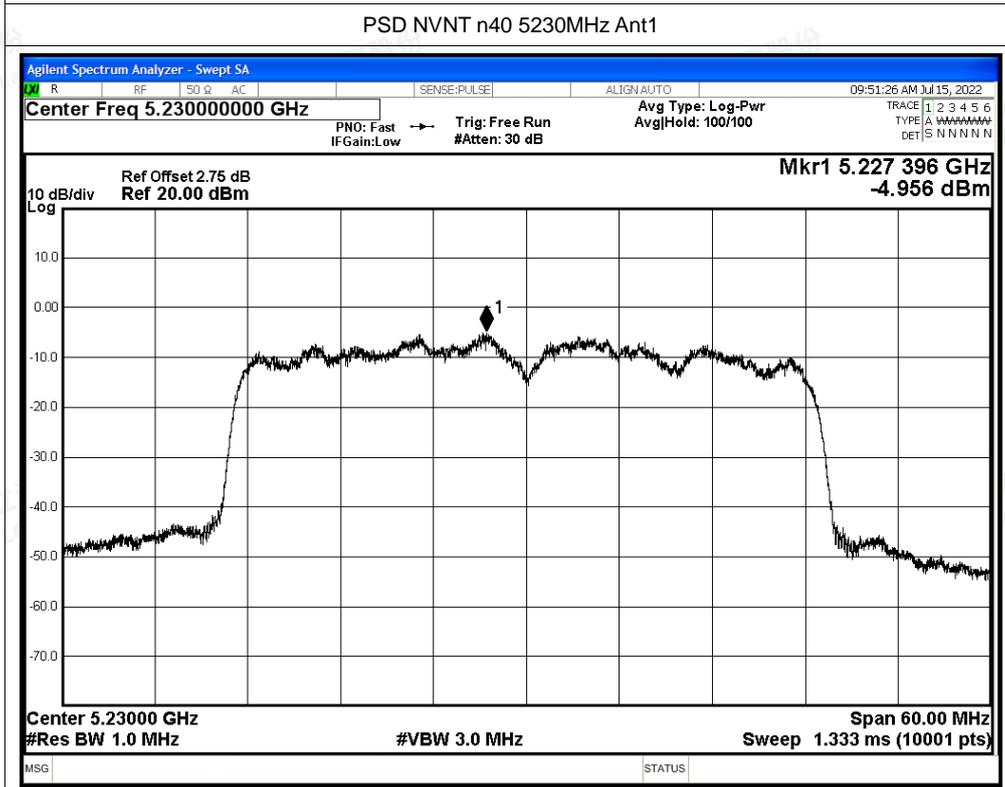
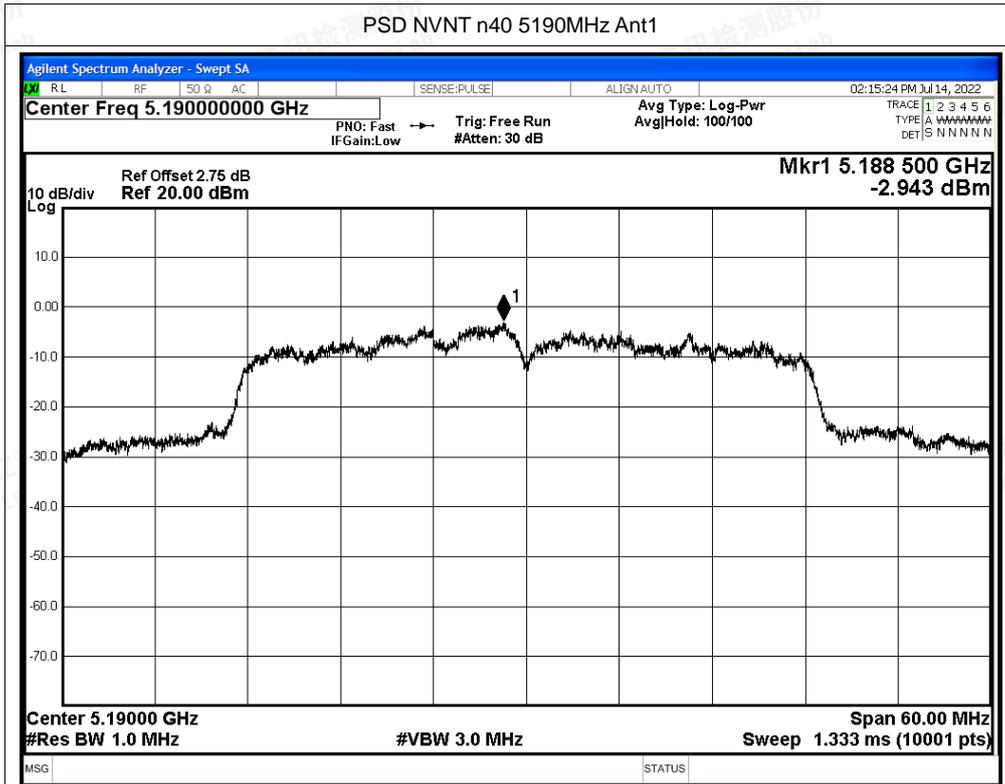
PSD NVNT a 5240MHz Ant1

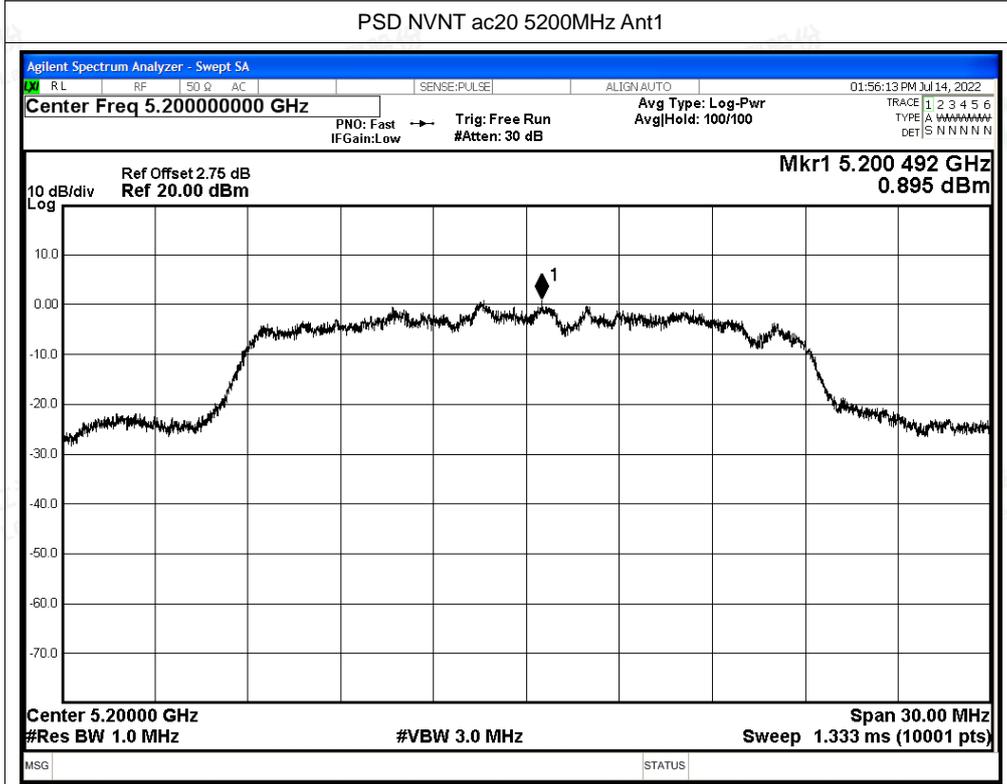
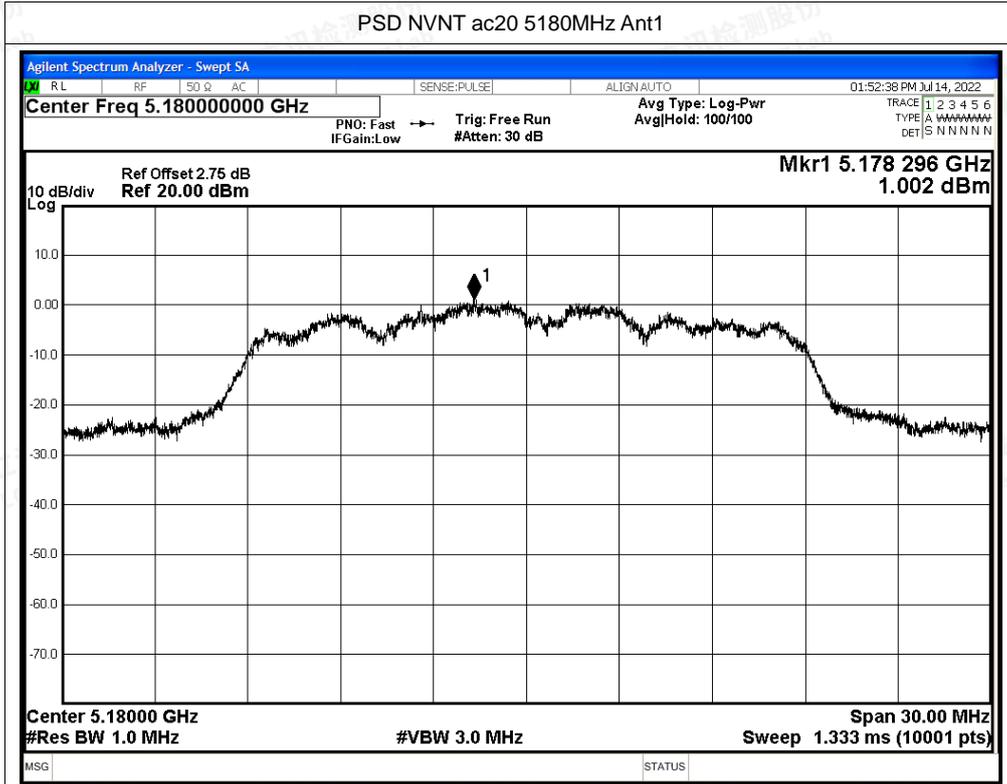


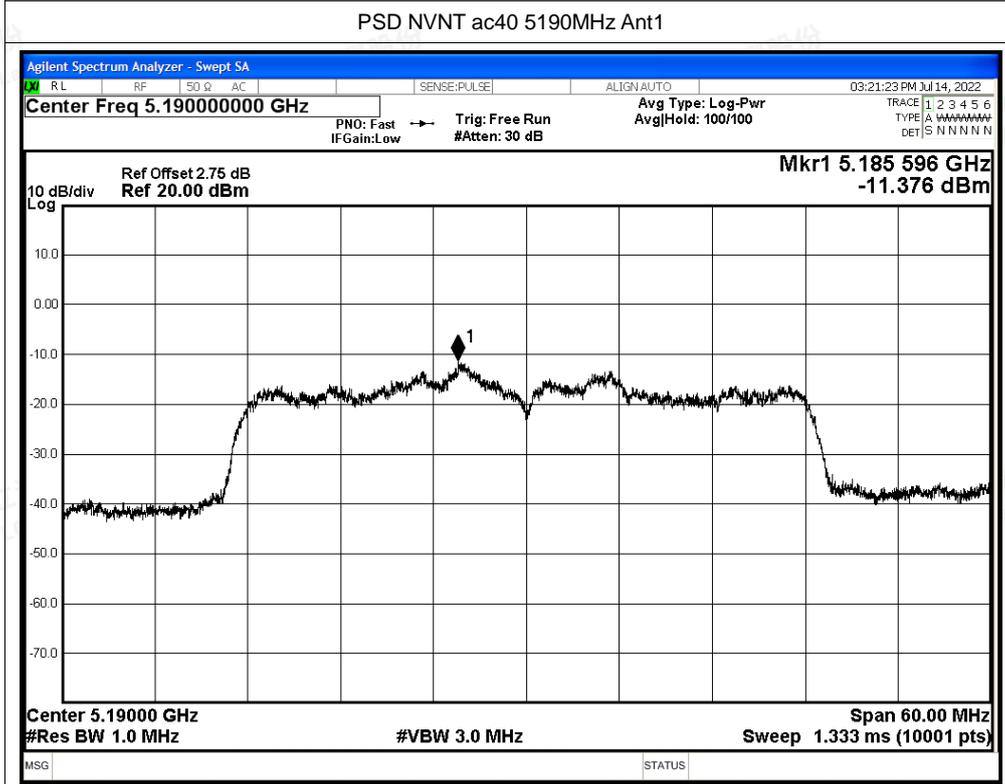
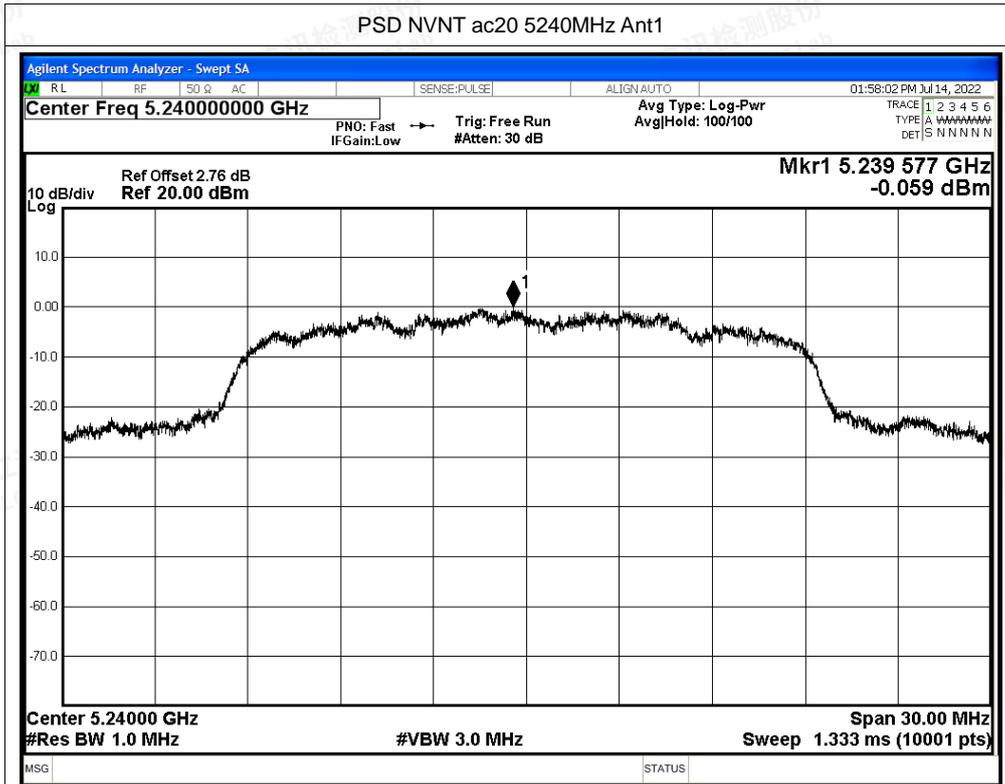
PSD NVNT n20 5180MHz Ant1

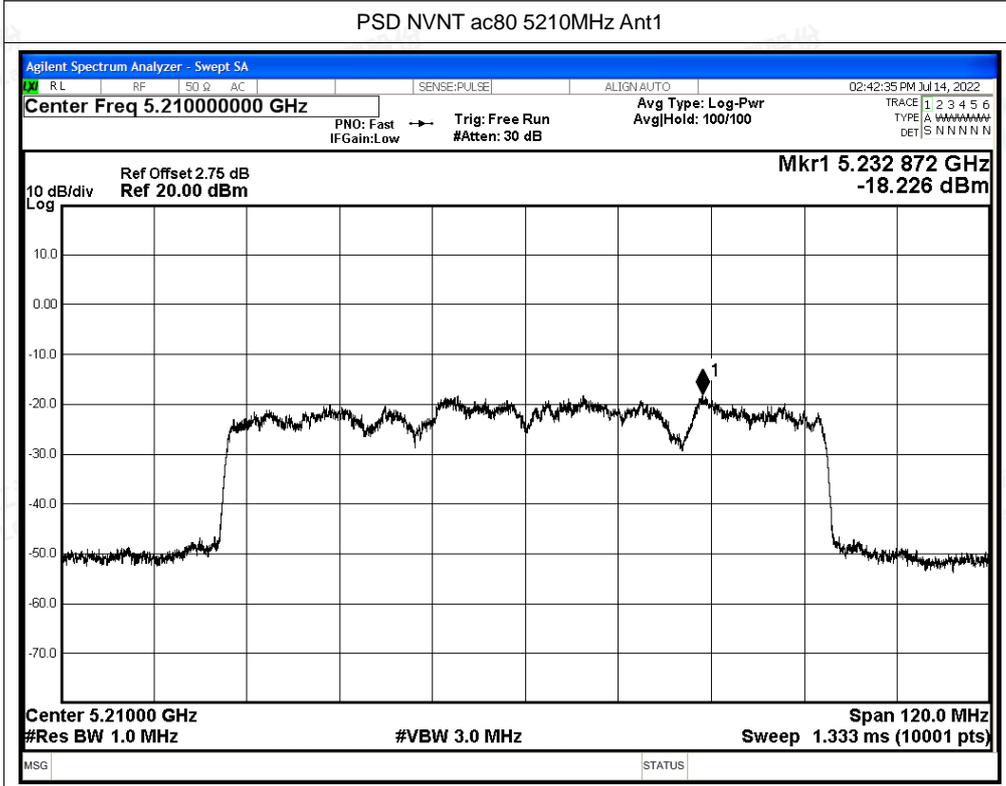
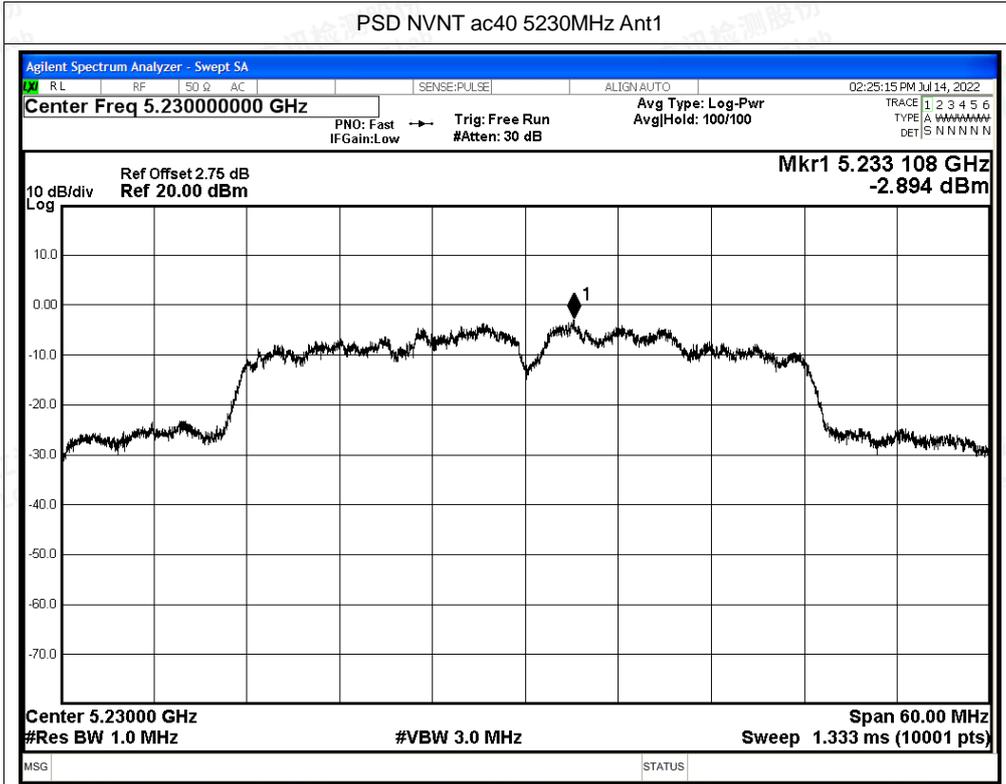














### E.4 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	a	5180	Ant1	4500	-51.48	3.59	47.34	Peak	68.2	Pass
NVNT	a	5180	Ant1	4500	-60.59	3.59	38.23	Average	54	Pass
NVNT	a	5180	Ant1	4962	-46.56	3.59	52.26	Peak	68.2	Pass
NVNT	a	5180	Ant1	5110.4	-59.02	3.59	39.80	Average	54	Pass
NVNT	a	5180	Ant1	5150	-50	3.59	48.82	Peak	68.2	Pass
NVNT	a	5180	Ant1	5150	-59.26	3.59	39.56	Average	54	Pass
NVNT	a	5240	Ant1	5350	-52.64	3.59	46.18	Peak	68.2	Pass
NVNT	a	5240	Ant1	5350	-59.99	3.59	38.83	Average	54	Pass
NVNT	a	5240	Ant1	5434.56	-47.1	3.59	51.72	Peak	68.2	Pass
NVNT	a	5240	Ant1	5439.36	-59.66	3.59	39.16	Average	54	Pass
NVNT	a	5240	Ant1	5460	-50.25	3.59	48.57	Peak	68.2	Pass
NVNT	a	5240	Ant1	5460	-59.93	3.59	38.89	Average	54	Pass
NVNT	n20	5180	Ant1	4500	-51.23	3.59	47.59	Peak	68.2	Pass
NVNT	n20	5180	Ant1	4500	-60.63	3.59	38.19	Average	54	Pass
NVNT	n20	5180	Ant1	5037.6	-47.56	3.59	51.26	Peak	68.2	Pass
NVNT	n20	5180	Ant1	5104.1	-59.01	3.59	39.81	Average	54	Pass
NVNT	n20	5180	Ant1	5150	-49.23	3.59	49.59	Peak	68.2	Pass
NVNT	n20	5180	Ant1	5150	-59.23	3.59	39.59	Average	54	Pass
NVNT	n20	5240	Ant1	5350	-48.93	3.59	49.89	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5350	-60	3.59	38.82	Average	54	Pass
NVNT	n20	5240	Ant1	5367.12	-47.53	3.59	51.29	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5376.24	-59.62	3.59	39.20	Average	54	Pass
NVNT	n20	5240	Ant1	5460	-51.5	3.59	47.32	Peak	68.2	Pass
NVNT	n20	5240	Ant1	5460	-59.82	3.59	39.00	Average	54	Pass
NVNT	n40	5190	Ant1	4500	-51.11	3.59	47.71	Peak	68.2	Pass
NVNT	n40	5190	Ant1	4500	-60.41	3.59	38.41	Average	54	Pass
NVNT	n40	5190	Ant1	4761.34	-46.94	3.59	51.88	Peak	68.2	Pass
NVNT	n40	5190	Ant1	5149.7	-58.65	3.59	40.17	Average	54	Pass
NVNT	n40	5190	Ant1	5150	-48.38	3.59	50.44	Peak	68.2	Pass
NVNT	n40	5190	Ant1	5150	-58.65	3.59	40.17	Average	54	Pass
NVNT	n40	5230	Ant1	5350	-50.36	3.59	48.46	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5350	-59.79	3.59	39.03	Average	54	Pass
NVNT	n40	5230	Ant1	5414.1	-47.06	3.59	51.76	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5415.18	-59.23	3.59	39.59	Average	54	Pass
NVNT	n40	5230	Ant1	5460	-50.82	3.59	48.00	Peak	68.2	Pass
NVNT	n40	5230	Ant1	5460	-59.57	3.59	39.25	Average	54	Pass



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NVNT	ac20	5180	Ant1	4500	-51.08	3.59	47.74	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	4500	-60.42	3.59	38.40	Average	54	Pass
NVNT	ac20	5180	Ant1	5062.1	-47.3	3.59	51.52	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	5098.5	-58.72	3.59	40.10	Average	54	Pass
NVNT	ac20	5180	Ant1	5150	-48.97	3.59	49.85	Peak	68.2	Pass
NVNT	ac20	5180	Ant1	5150	-58.67	3.59	40.15	Average	54	Pass
NVNT	ac20	5240	Ant1	5350	-51.35	3.59	47.47	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5350	-59.61	3.59	39.21	Average	54	Pass
NVNT	ac20	5240	Ant1	5371.2	-47.5	3.59	51.32	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5444.88	-59.27	3.59	39.55	Average	54	Pass
NVNT	ac20	5240	Ant1	5460	-50.64	3.59	48.18	Peak	68.2	Pass
NVNT	ac20	5240	Ant1	5460	-59.63	3.59	39.19	Average	54	Pass
NVNT	ac40	5190	Ant1	4500	-51.04	3.59	47.78	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	4500	-60.27	3.59	38.55	Average	54	Pass
NVNT	ac40	5190	Ant1	4981.8	-46.81	3.59	52.01	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	5068.67	-58.06	3.59	40.76	Average	54	Pass
NVNT	ac40	5190	Ant1	5150	-50.06	3.59	48.76	Peak	68.2	Pass
NVNT	ac40	5190	Ant1	5150	-58.27	3.59	40.55	Average	54	Pass
NVNT	ac40	5230	Ant1	5350	-51.19	3.59	47.63	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5350	-59.43	3.59	39.39	Average	54	Pass
NVNT	ac40	5230	Ant1	5441.64	-46.54	3.59	52.28	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5450.28	-58.94	3.59	39.88	Average	54	Pass
NVNT	ac40	5230	Ant1	5460	-48.29	3.59	50.53	Peak	68.2	Pass
NVNT	ac40	5230	Ant1	5460	-59.29	3.59	39.53	Average	54	Pass
NVNT	ac80	5210	Ant1	5350	-51.3	3.59	47.52	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5350	-50.52	3.59	48.30	Average	54	Pass
NVNT	ac80	5210	Ant1	5406.21	-47.63	3.59	51.19	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5424.36	-49.36	3.59	49.46	Average	54	Pass
NVNT	ac80	5210	Ant1	5460	-49.58	3.59	49.24	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5460	-50.93	3.59	47.89	Average	54	Pass
NVNT	ac80	5210	Ant1	4500	-51.67	3.59	47.15	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	4500	-59.74	3.59	39.08	Average	54	Pass
NVNT	ac80	5210	Ant1	5002.44	-46.19	3.59	52.63	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5100.4	-57.46	3.59	41.36	Average	54	Pass
NVNT	ac80	5210	Ant1	5150	-48.71	3.59	50.11	Peak	68.2	Pass
NVNT	ac80	5210	Ant1	5150	-58.24	3.59	40.58	Average	54	Pass

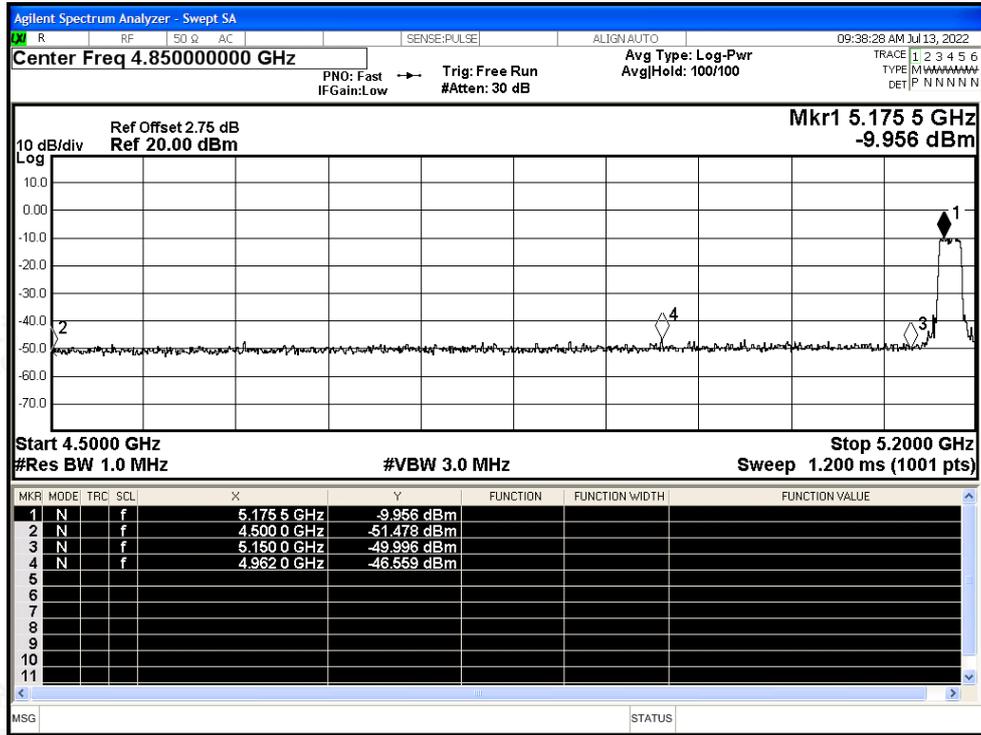


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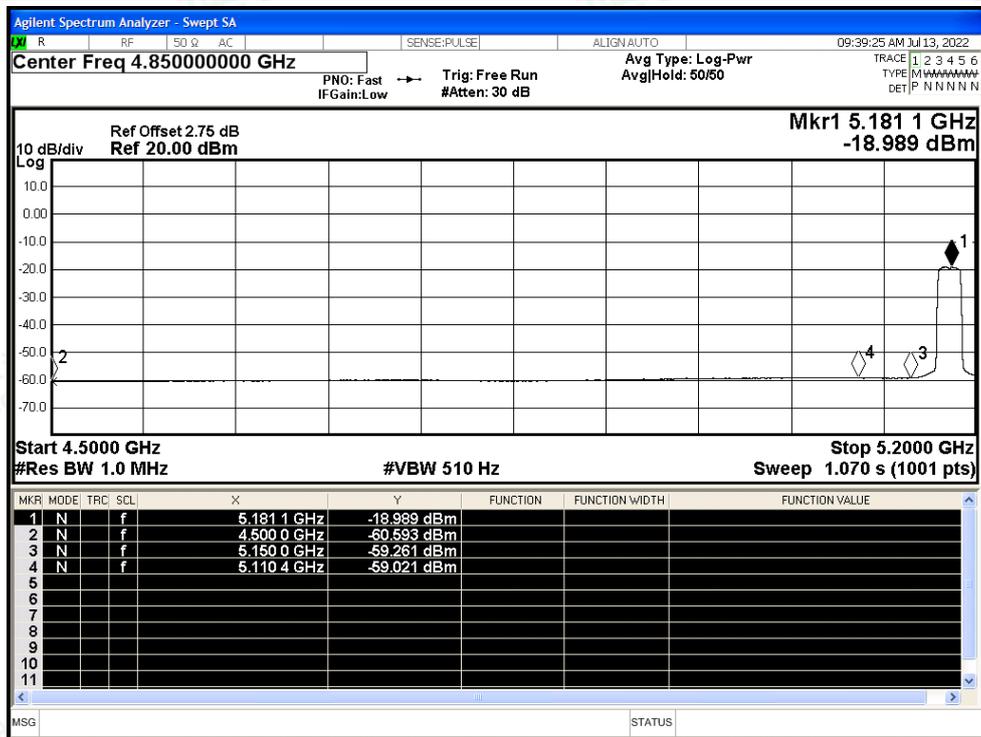


Test Graphs

Restrict Band NVNT a 5180MHz Ant1 Peak

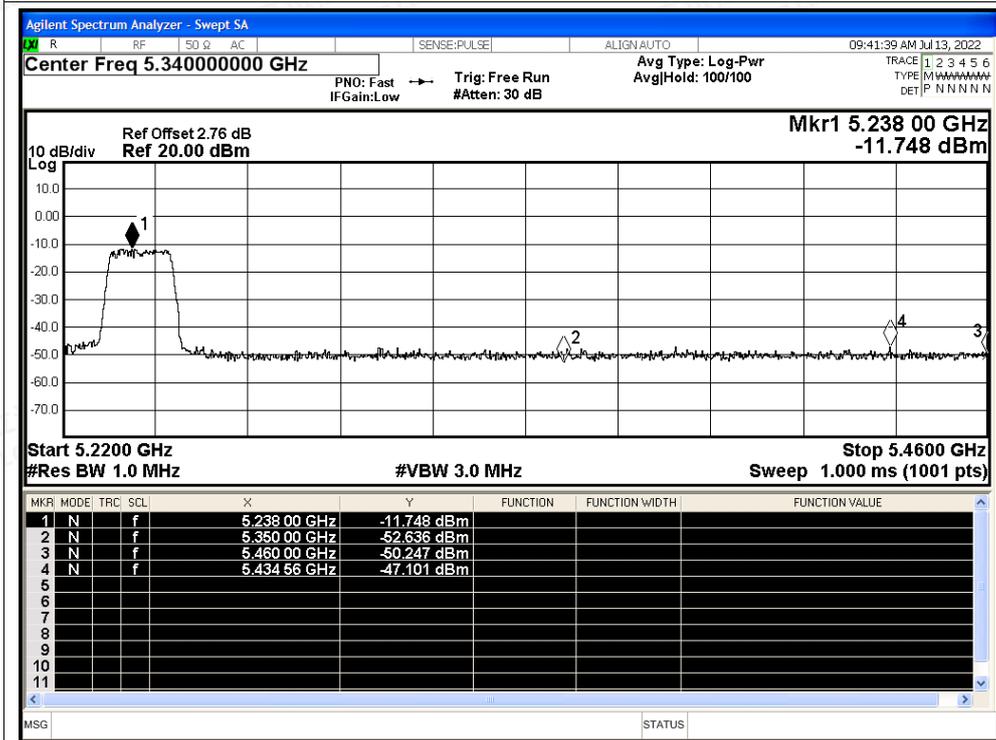


Restrict Band NVNT a 5180MHz Ant1 Average

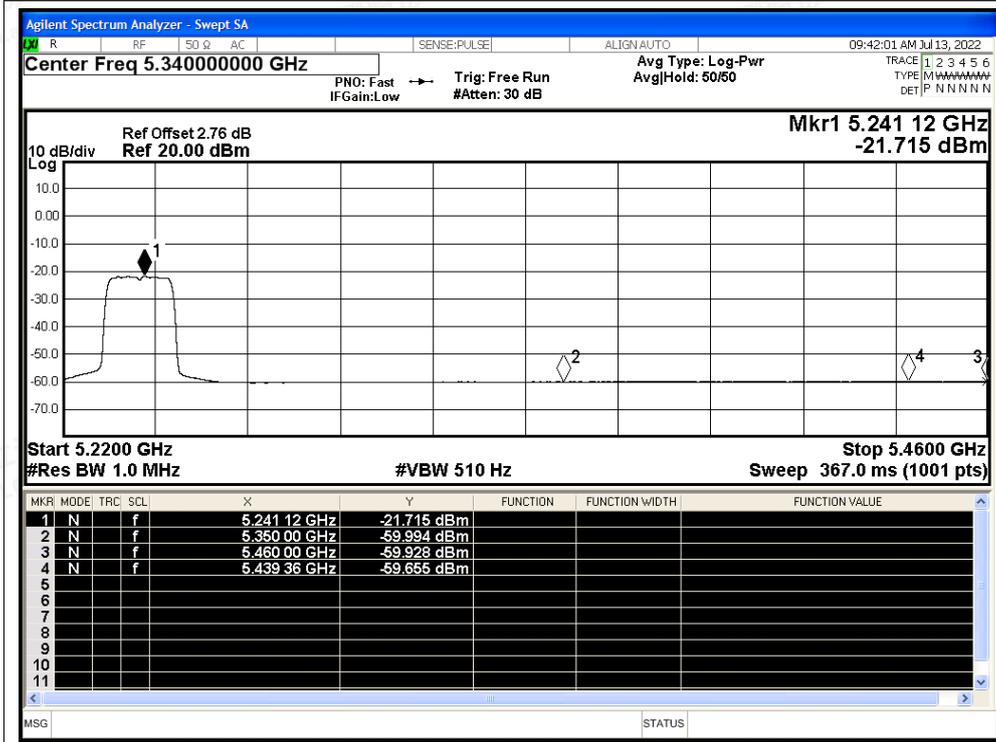




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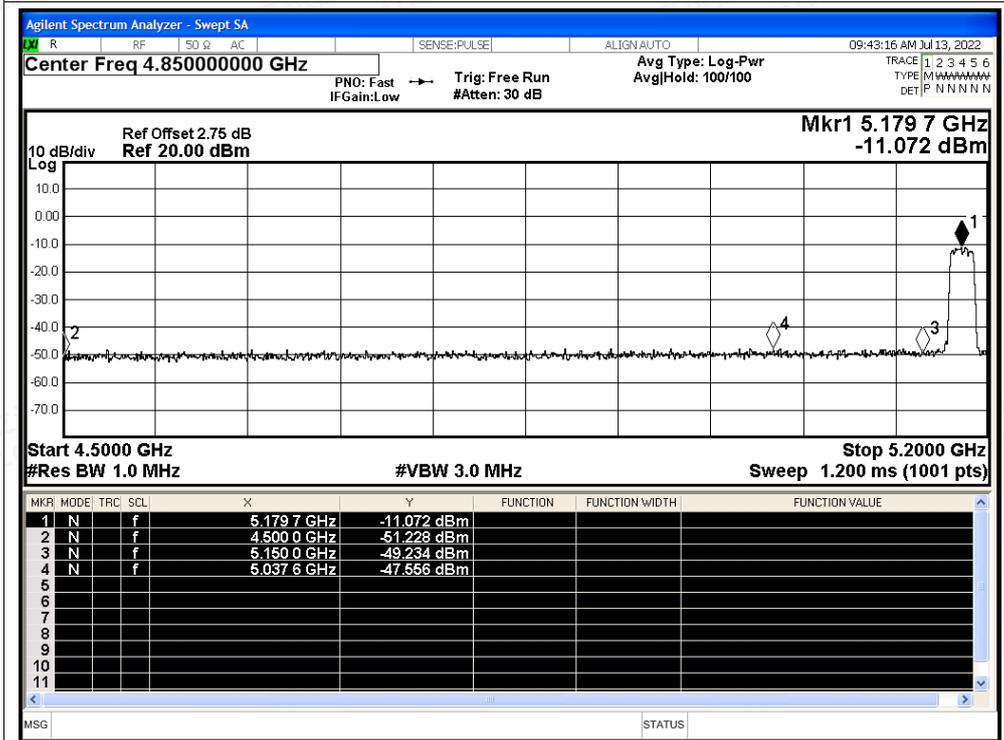


Restrict Band NVNT a 5240MHz Ant1 Average

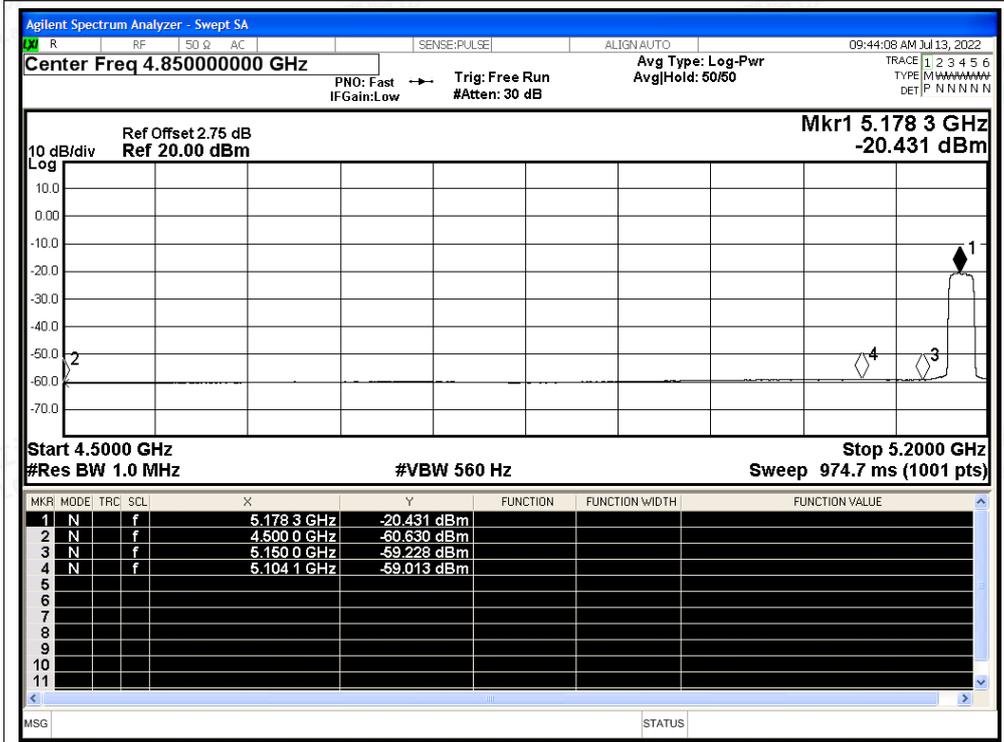




Restrict Band NVNT n20 5180MHz Ant1 Peak

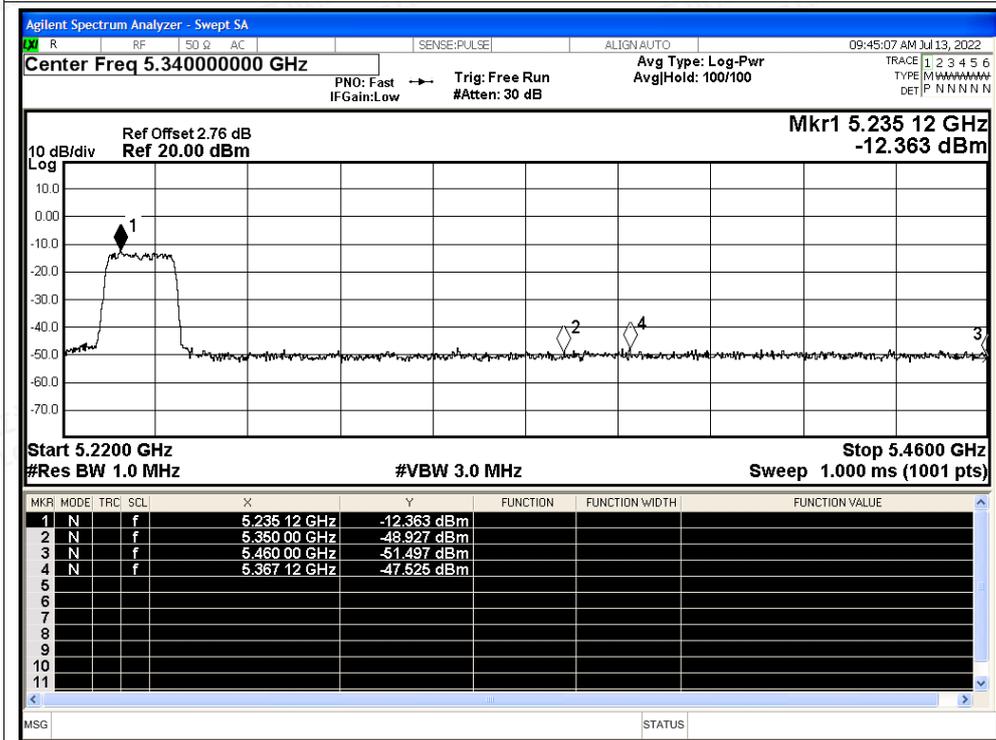


Restrict Band NVNT n20 5180MHz Ant1 Average

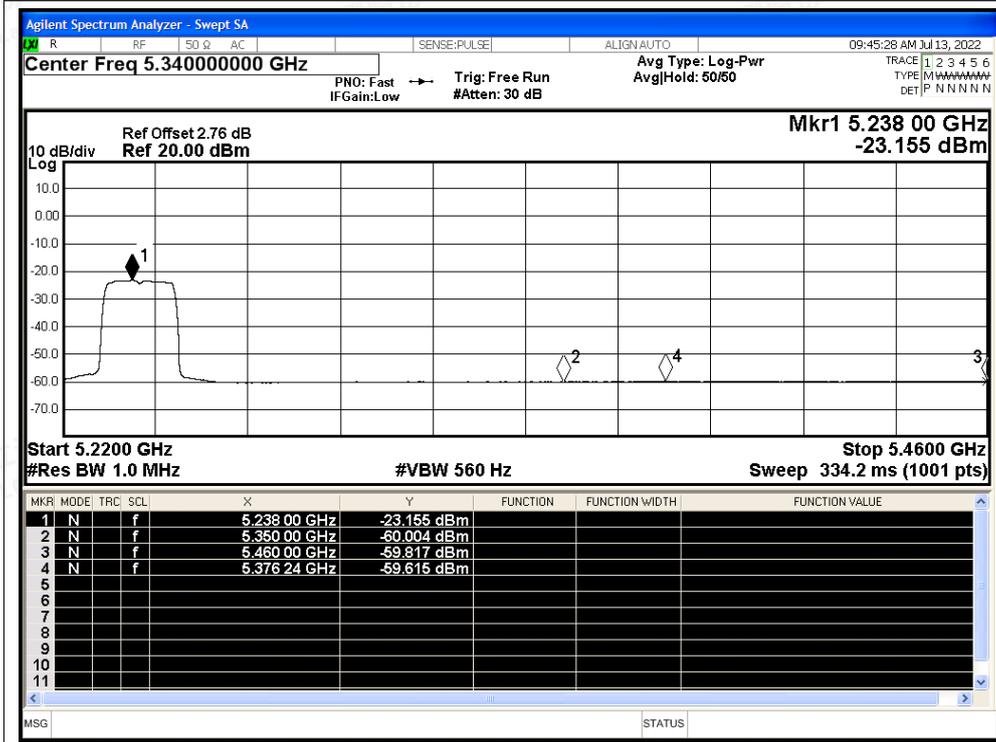




Restrict Band NVNT n20 5240MHz Ant1 Peak

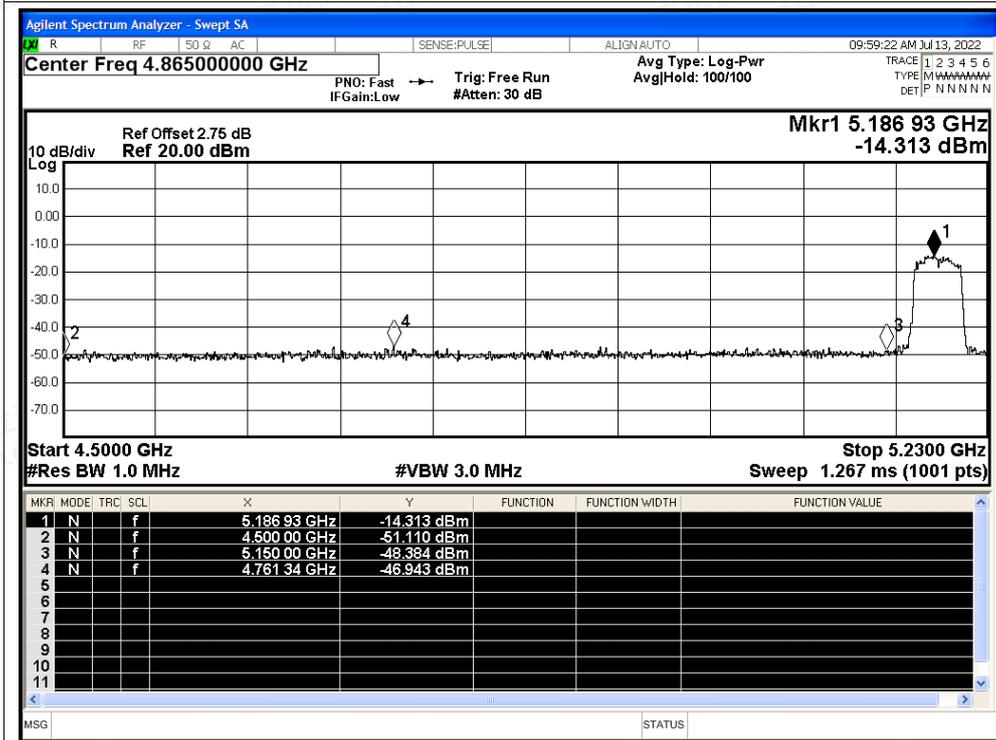


Restrict Band NVNT n20 5240MHz Ant1 Average

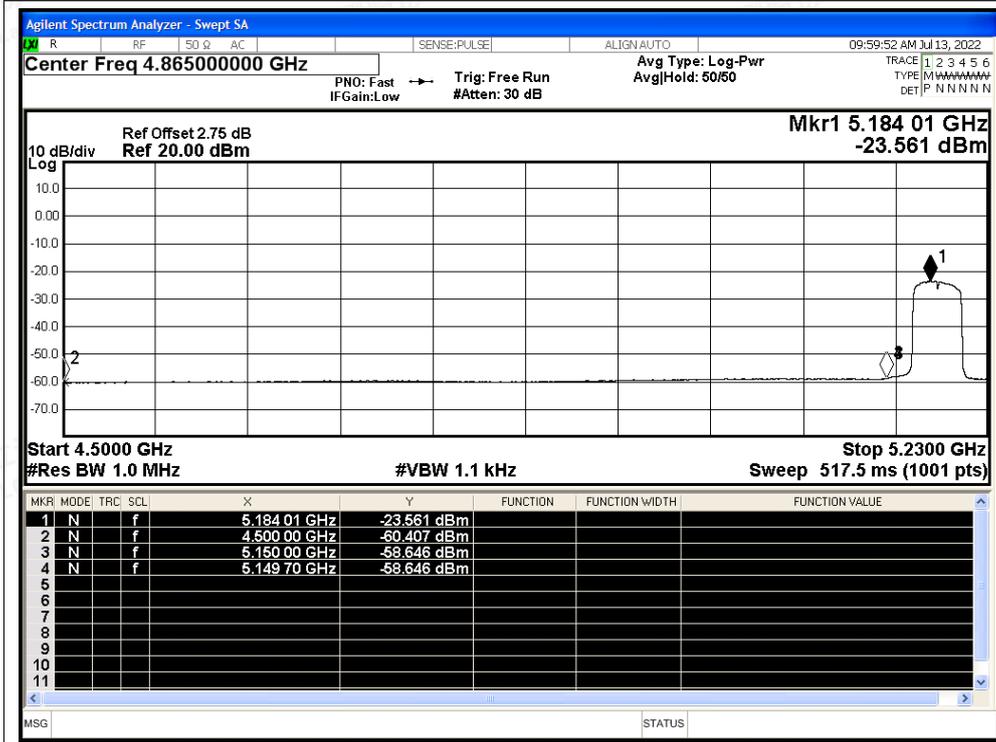




Restrict Band NVNT n40 5190MHz Ant1 Peak

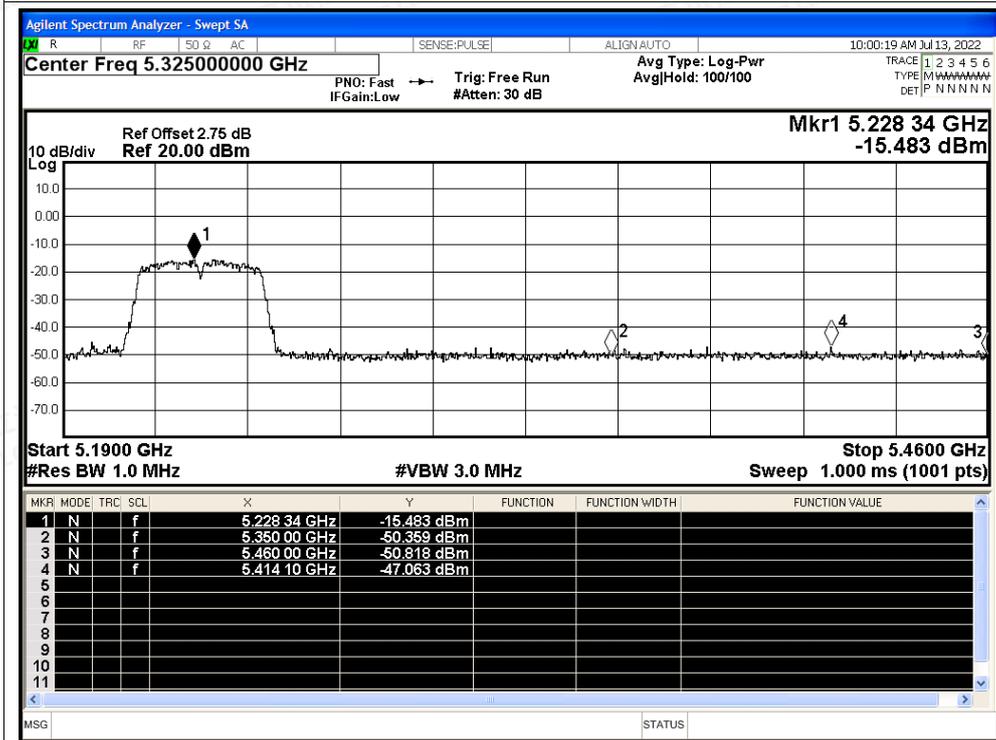


Restrict Band NVNT n40 5190MHz Ant1 Average

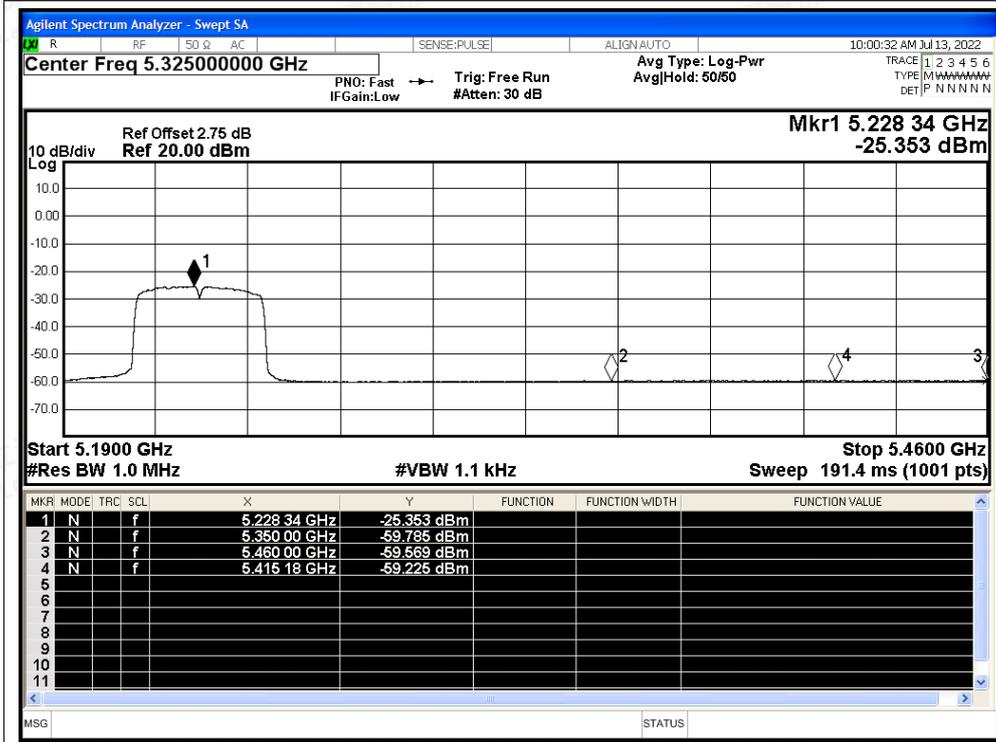




Restrict Band NVNT n40 5230MHz Ant1 Peak

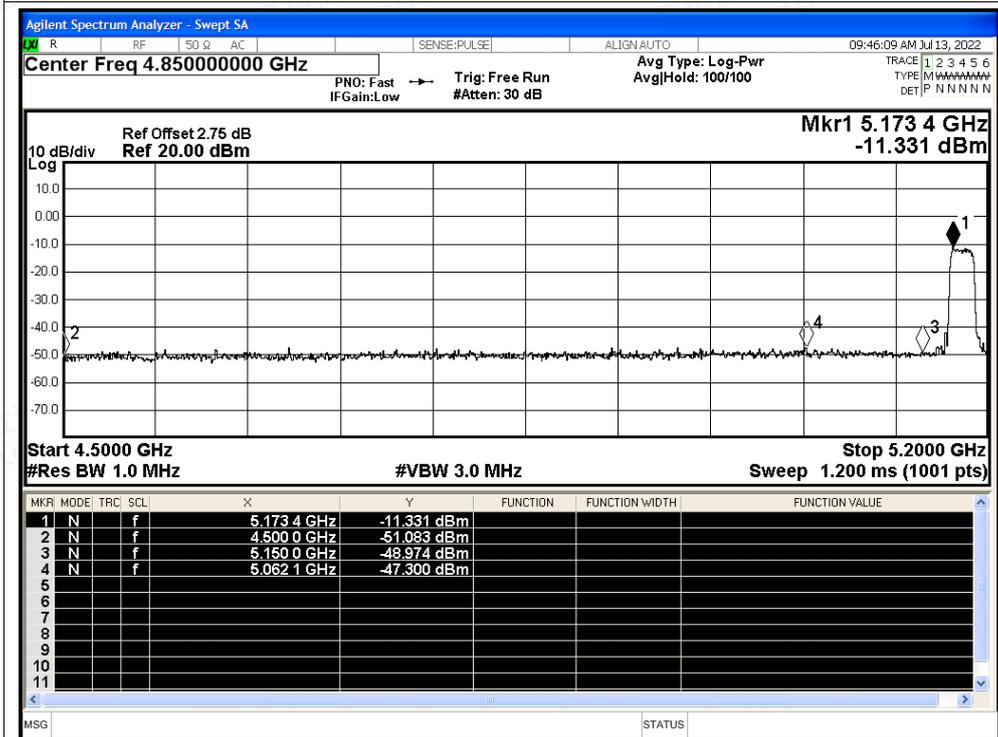


Restrict Band NVNT n40 5230MHz Ant1 Average

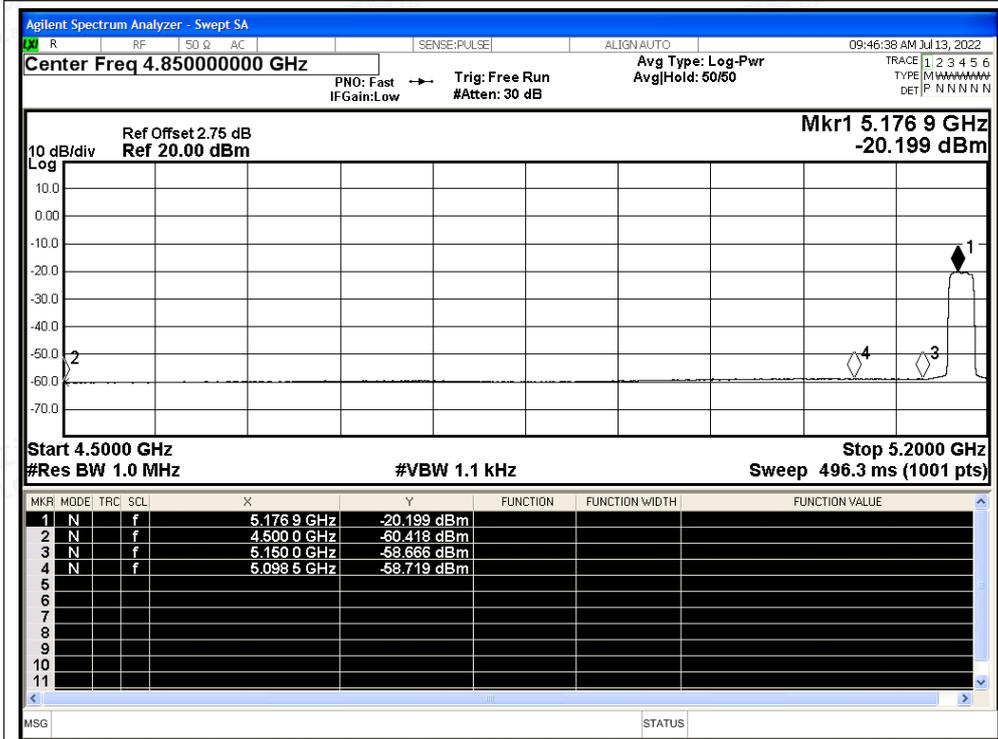




Restrict Band NVNT ac20 5180MHz Ant1 Peak

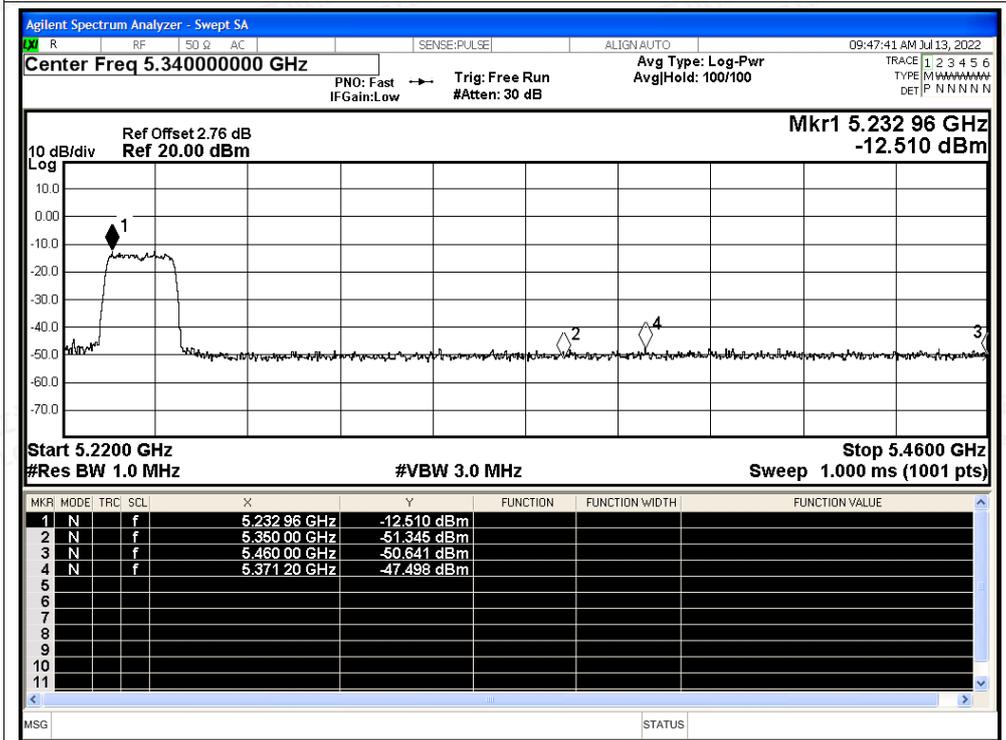


Restrict Band NVNT ac20 5180MHz Ant1 Average

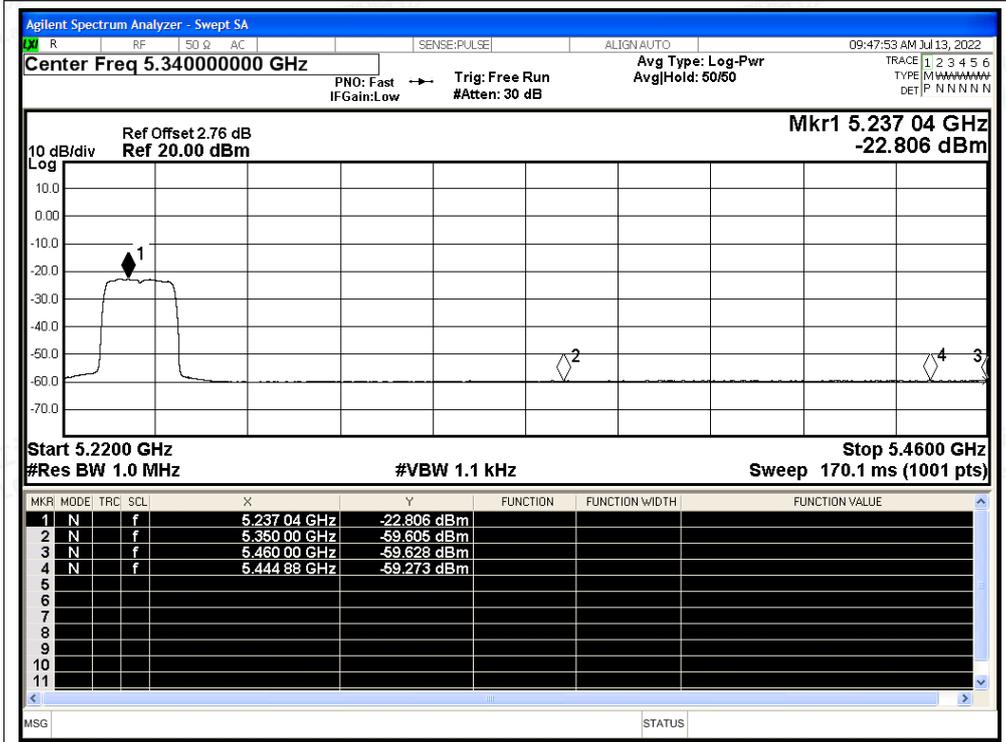




Restrict Band NVNT ac20 5240MHz Ant1 Peak

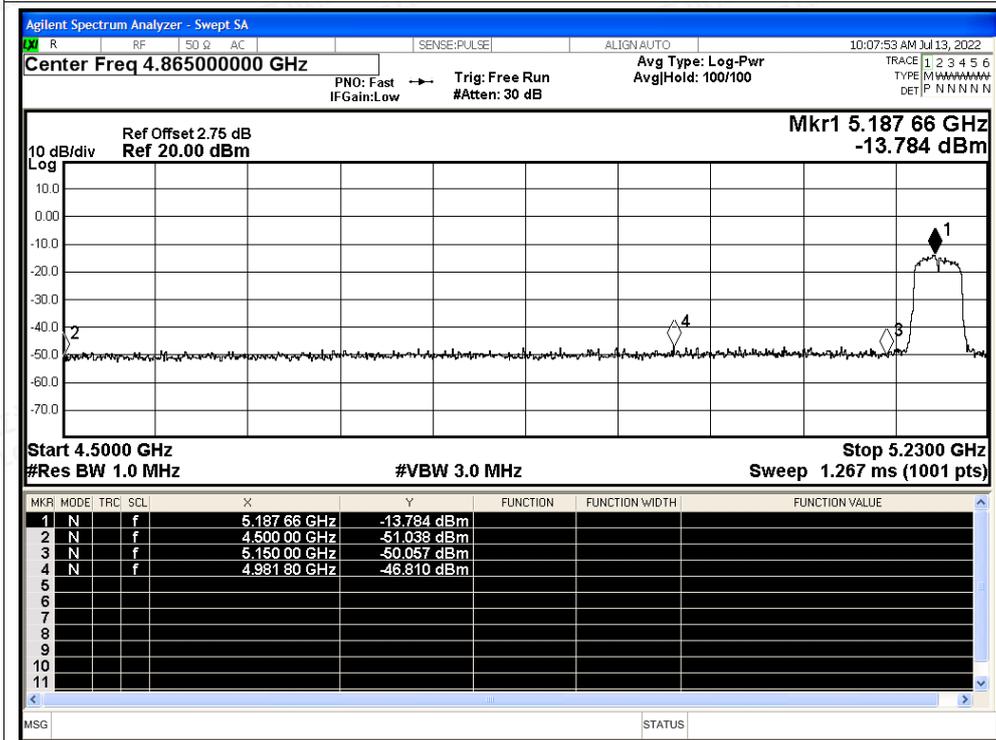


Restrict Band NVNT ac20 5240MHz Ant1 Average

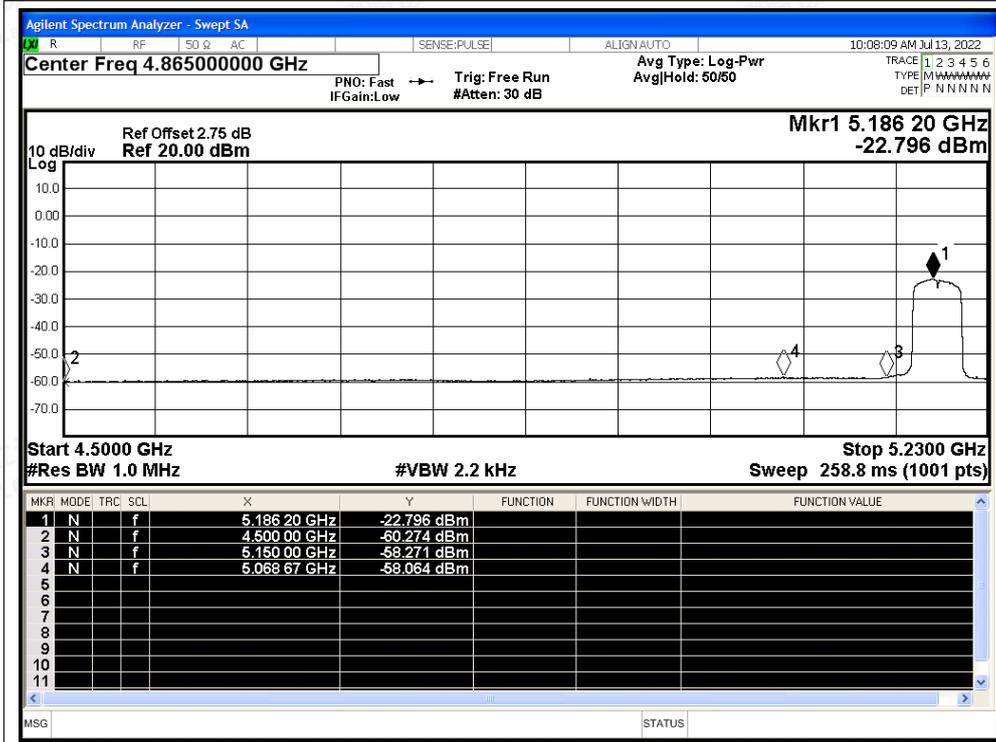




Restrict Band NVNT ac40 5190MHz Ant1 Peak

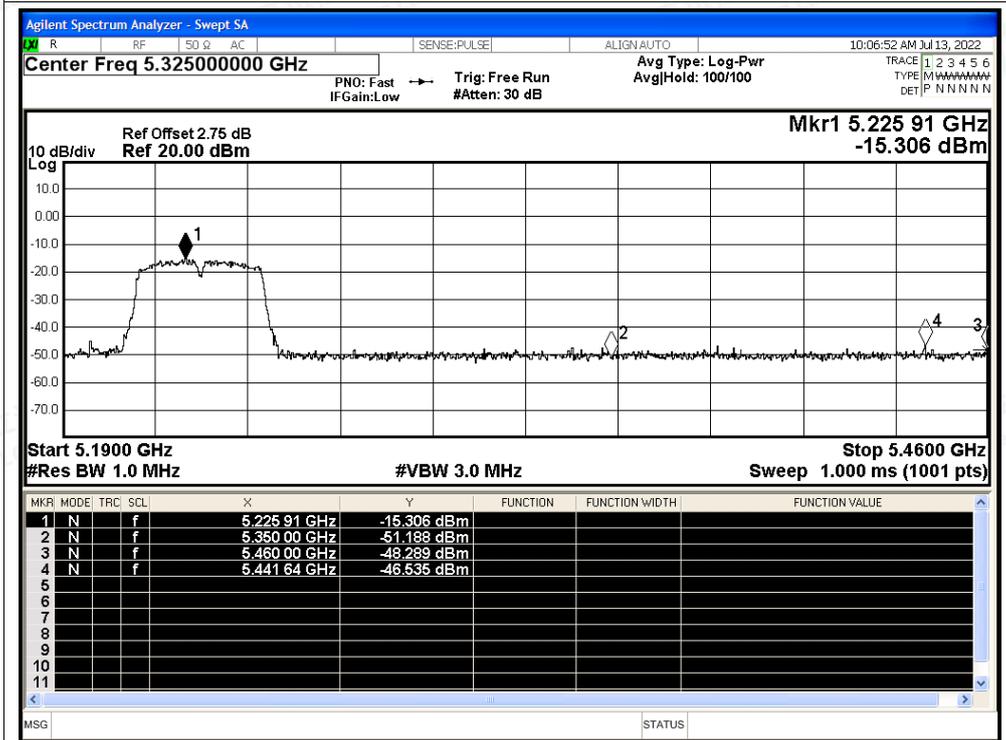


Restrict Band NVNT ac40 5190MHz Ant1 Average

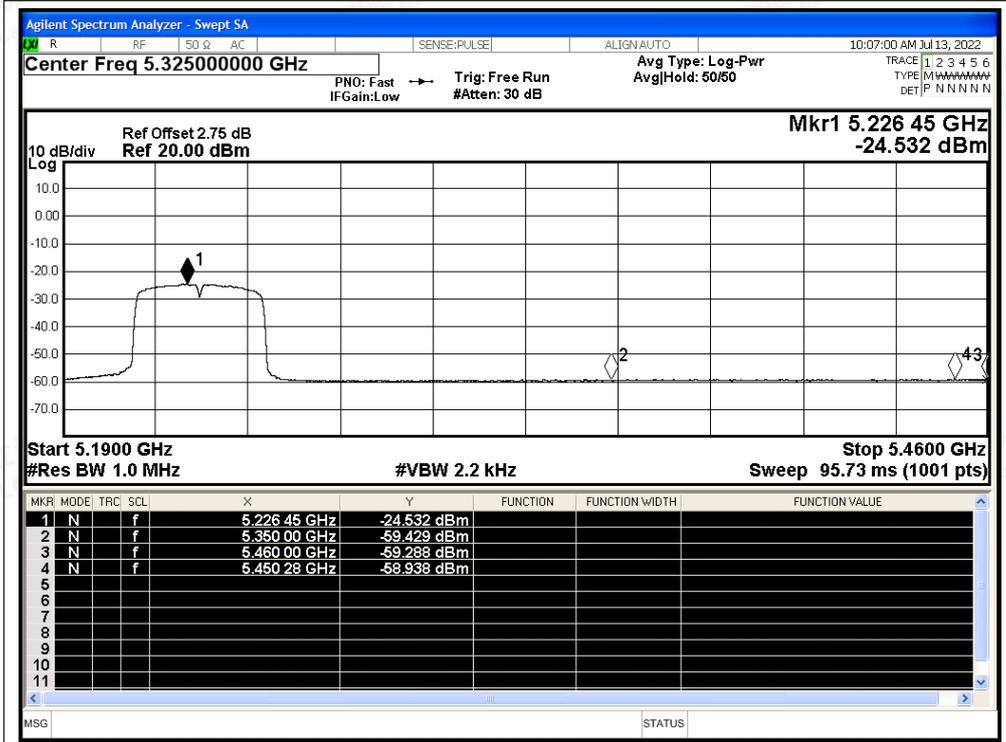




Restrict Band NVNT ac40 5230MHz Ant1 Peak

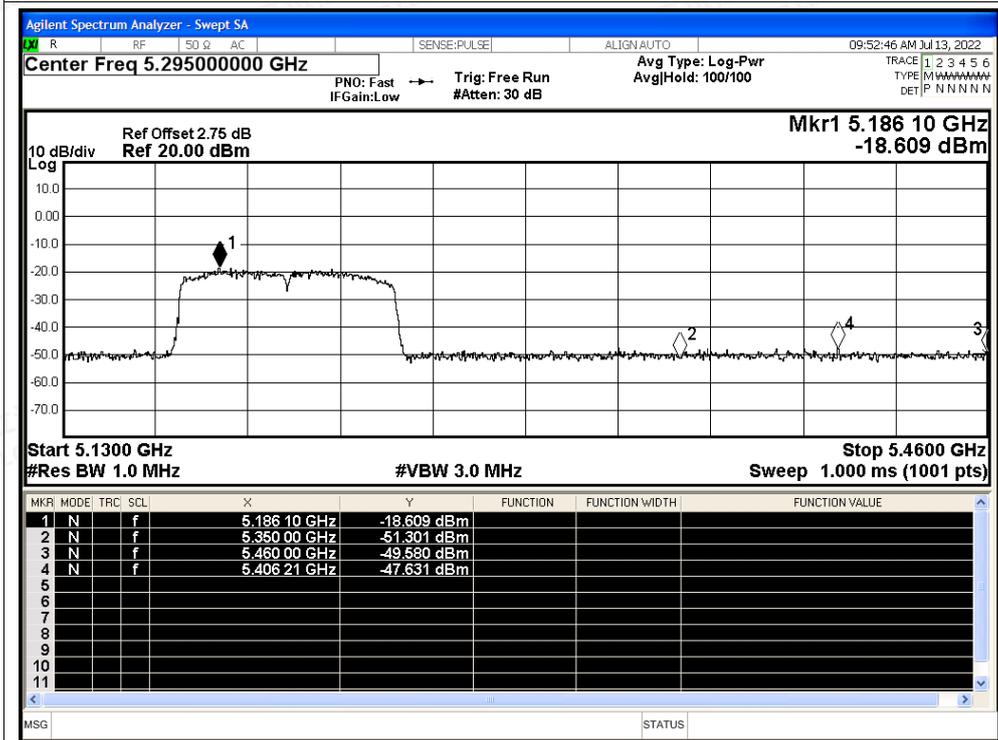


Restrict Band NVNT ac40 5230MHz Ant1 Average

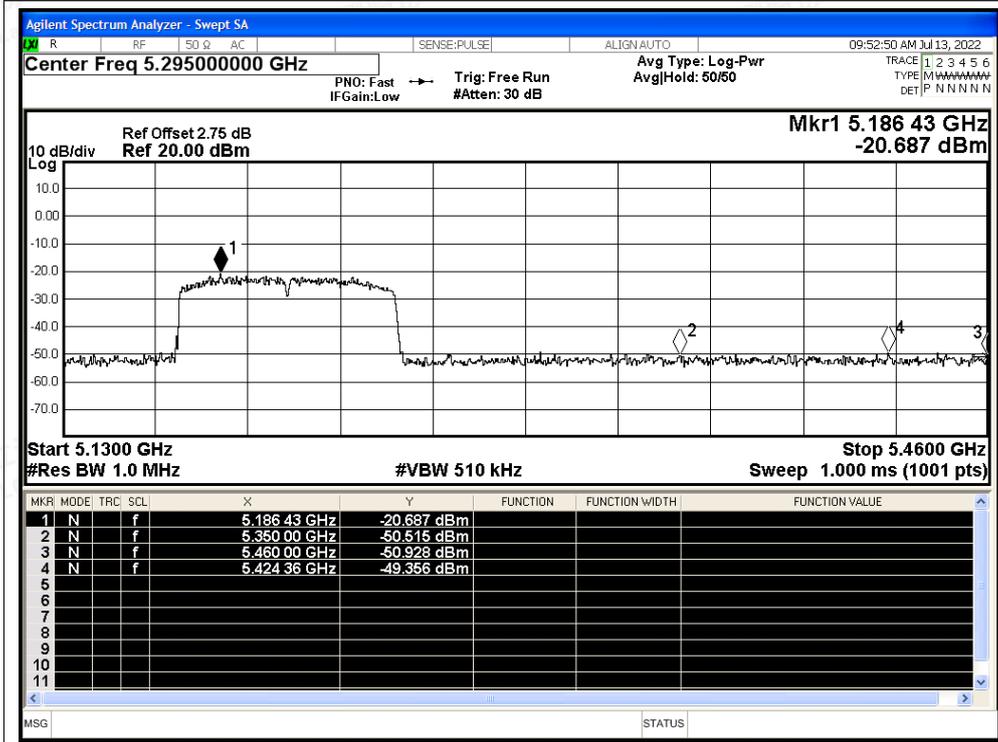




Restrict Band NVNT ac80 5210MHz Ant1 Peak

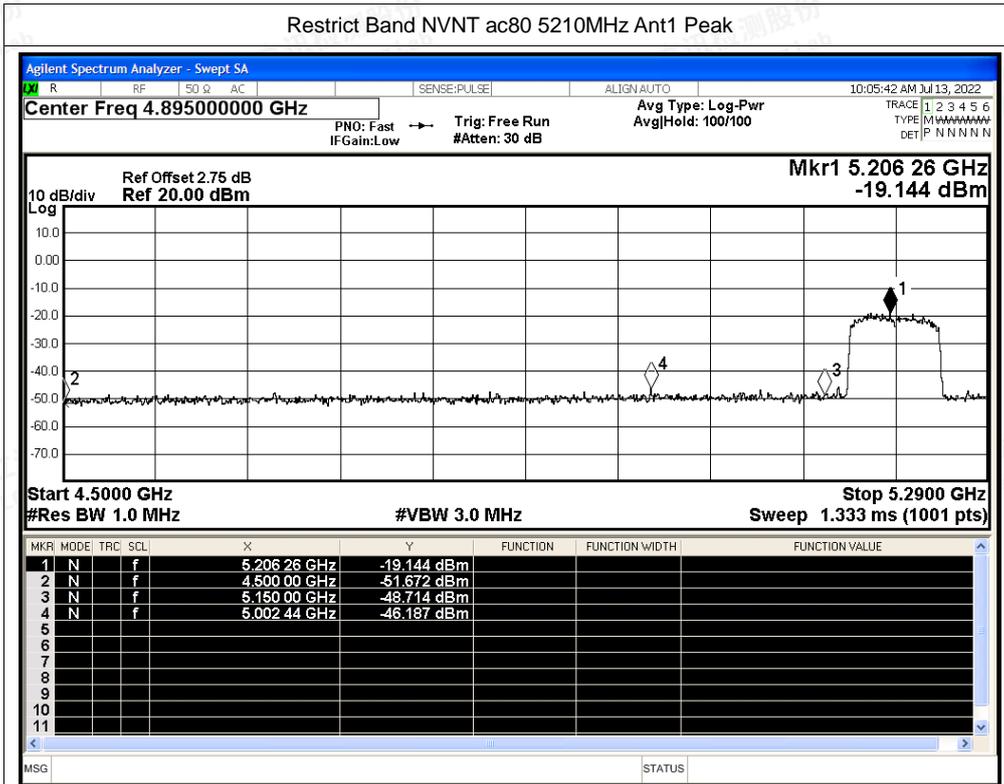


Restrict Band NVNT ac80 5210MHz Ant1 Average

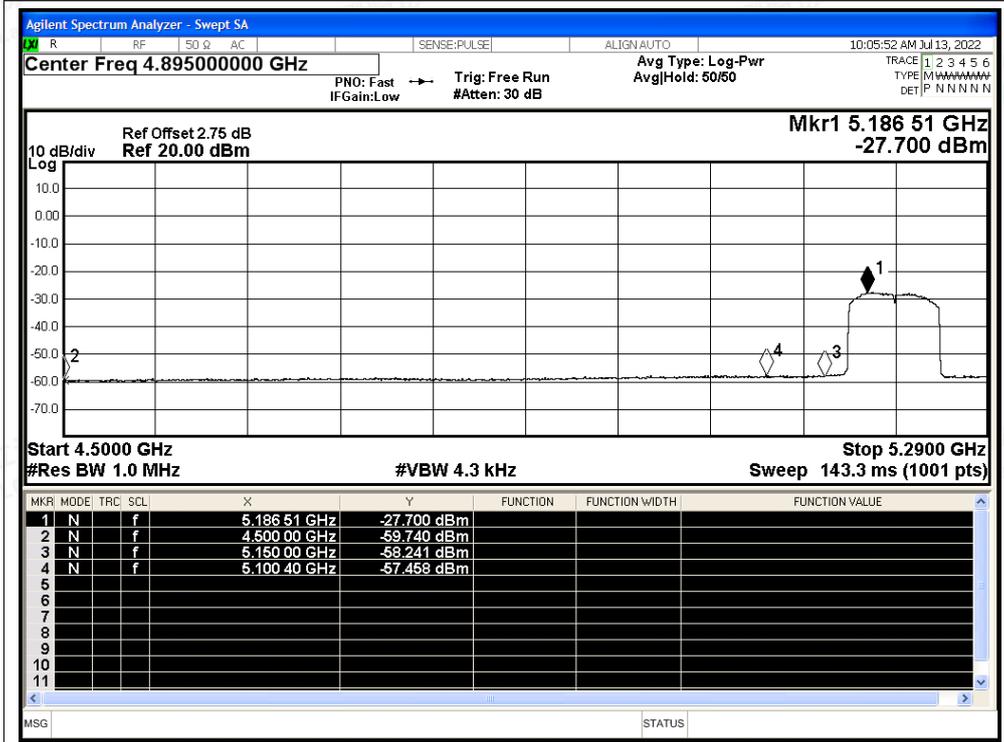




Restrict Band NVNT ac80 5210MHz Ant1 Peak



Restrict Band NVNT ac80 5210MHz Ant1 Average





### E.5 Frequency Stability

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5180	Ant1	5180	0	0	25	Pass
NVNT	a	5200	Ant1	5200	0	0	25	Pass
NVNT	a	5240	Ant1	5240	0	0	25	Pass
NVNT	n20	5180	Ant1	5180	0	0	25	Pass
NVNT	n20	5200	Ant1	5200	0	0	25	Pass
NVNT	n20	5240	Ant1	5240	0	0	25	Pass
NVNT	n40	5190	Ant1	5190	0	0	25	Pass
NVNT	n40	5230	Ant1	5230	0	0	25	Pass
NVNT	ac20	5180	Ant1	5180	0	0	25	Pass
NVNT	ac20	5200	Ant1	5200	0	0	25	Pass
NVNT	ac20	5240	Ant1	5240	0	0	25	Pass
NVNT	ac40	5190	Ant1	5190	0	0	25	Pass
NVNT	ac40	5230	Ant1	5230	0	0	25	Pass
NVNT	ac80	5210	Ant1	5210	0	0	25	Pass

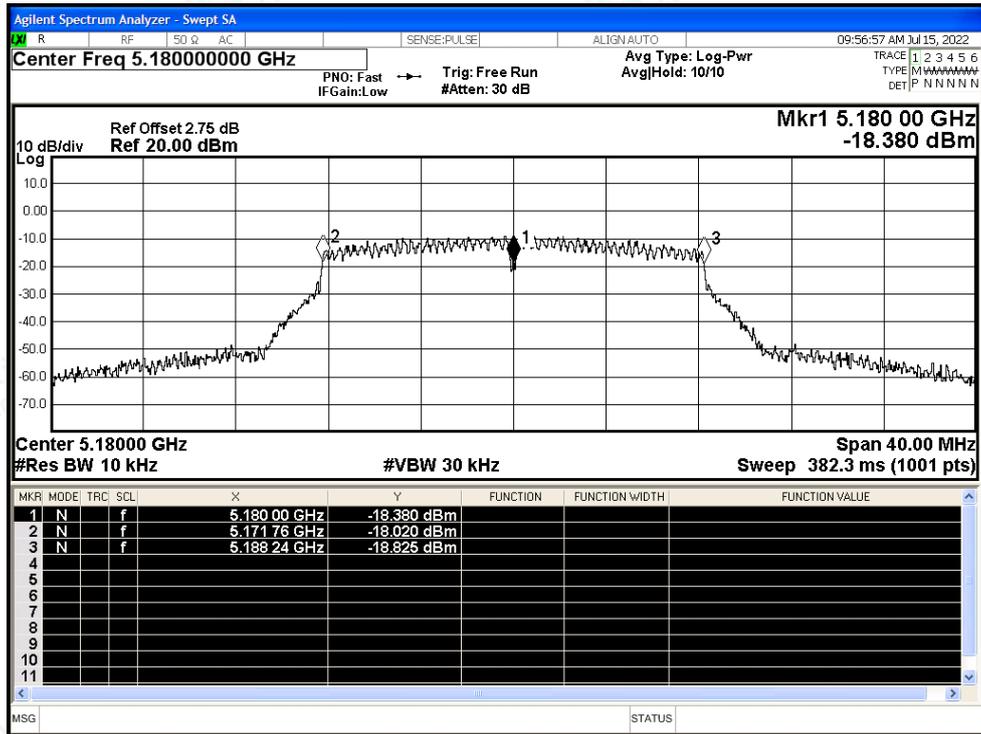


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 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity

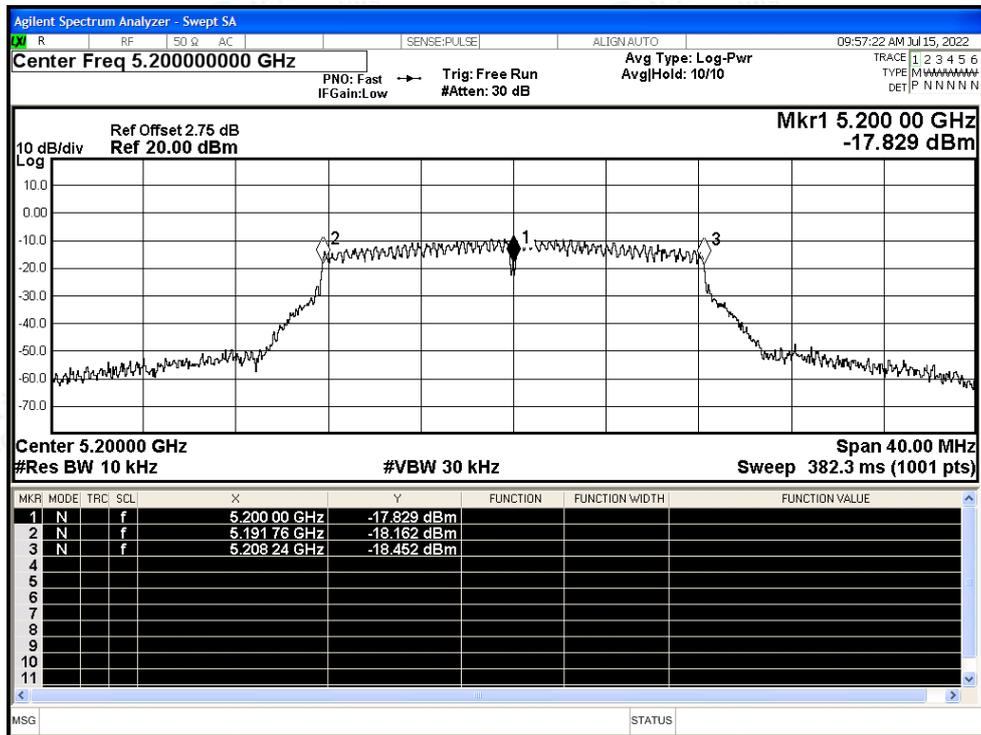


Test Graphs

Freq. Stability NVNT a 5180MHz Ant1

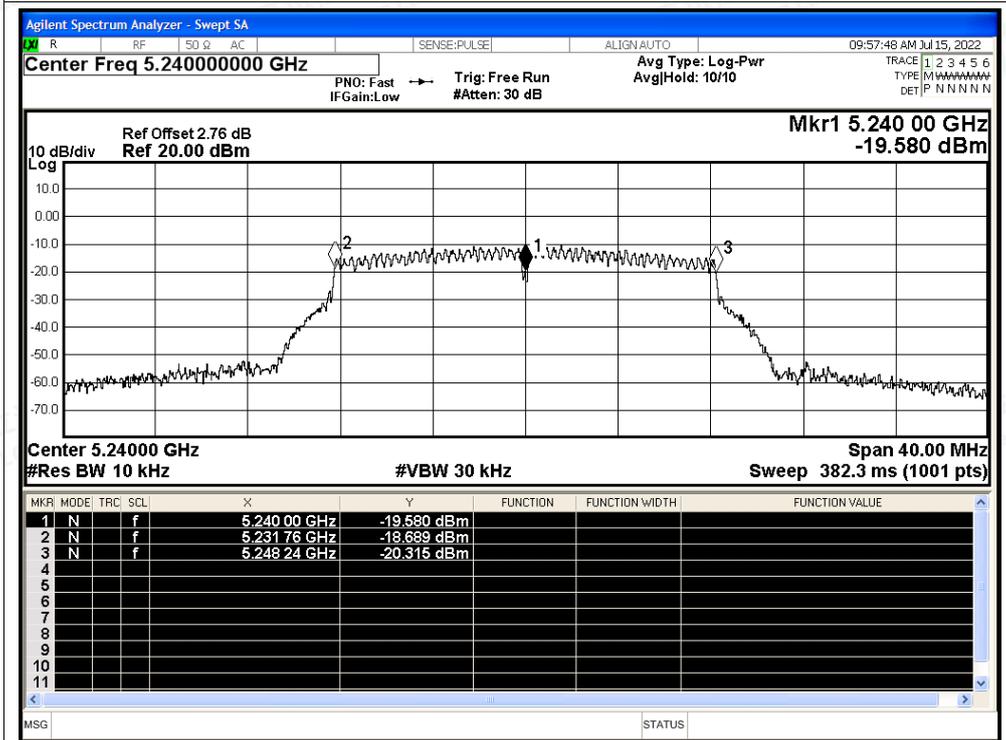


Freq. Stability NVNT a 5200MHz Ant1

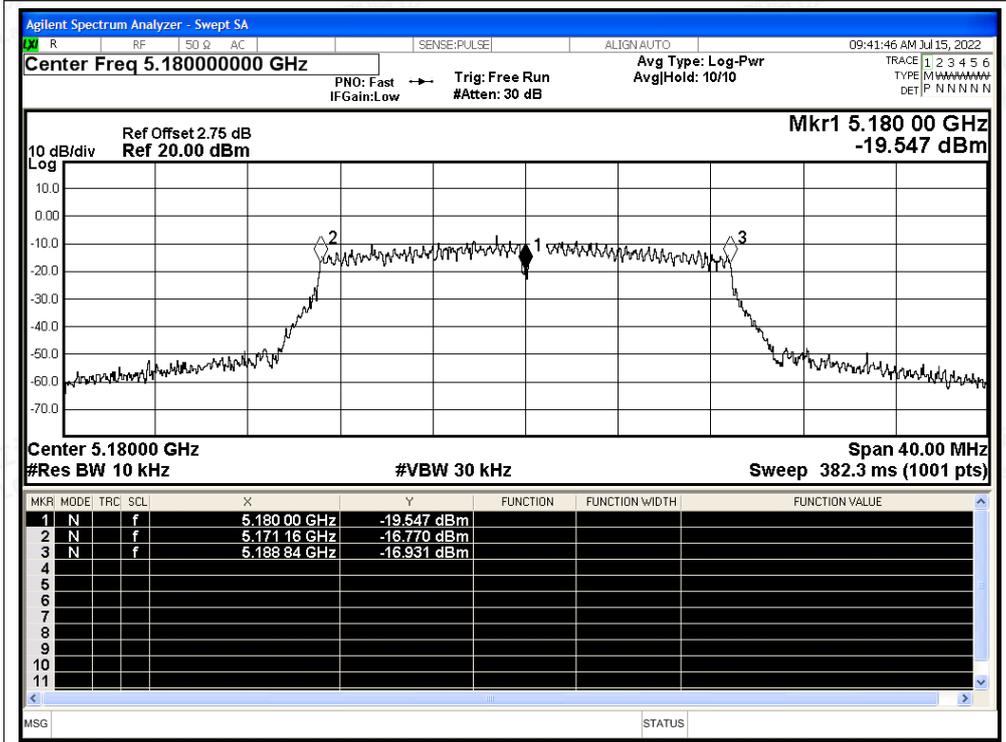




Freq. Stability NVNT a 5240MHz Ant1

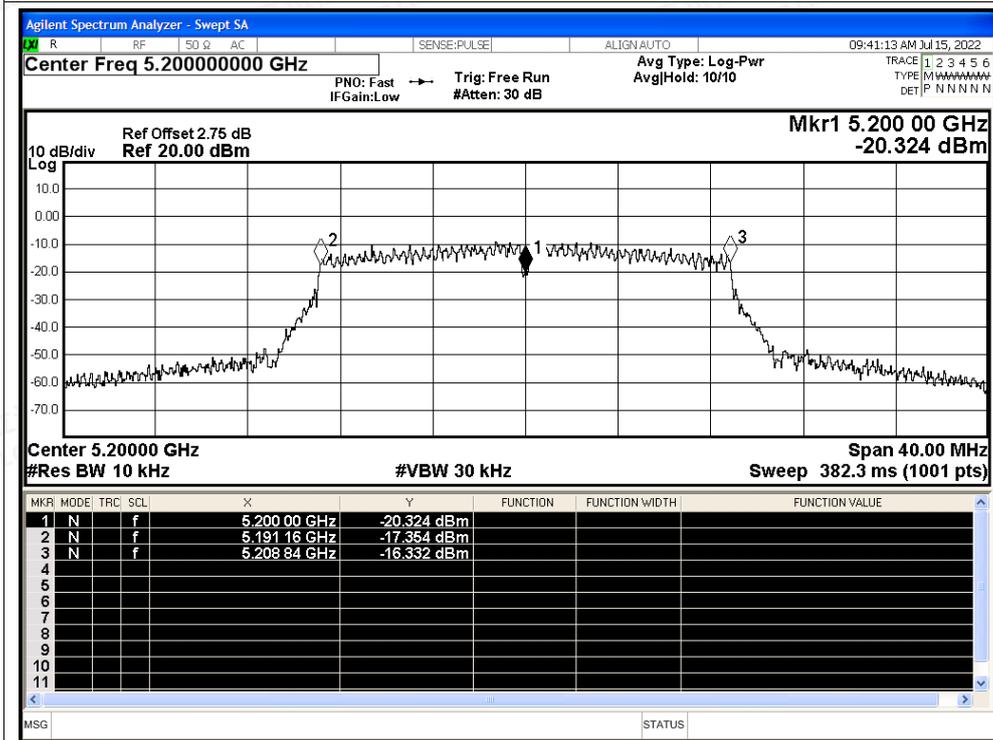


Freq. Stability NVNT n20 5180MHz Ant1

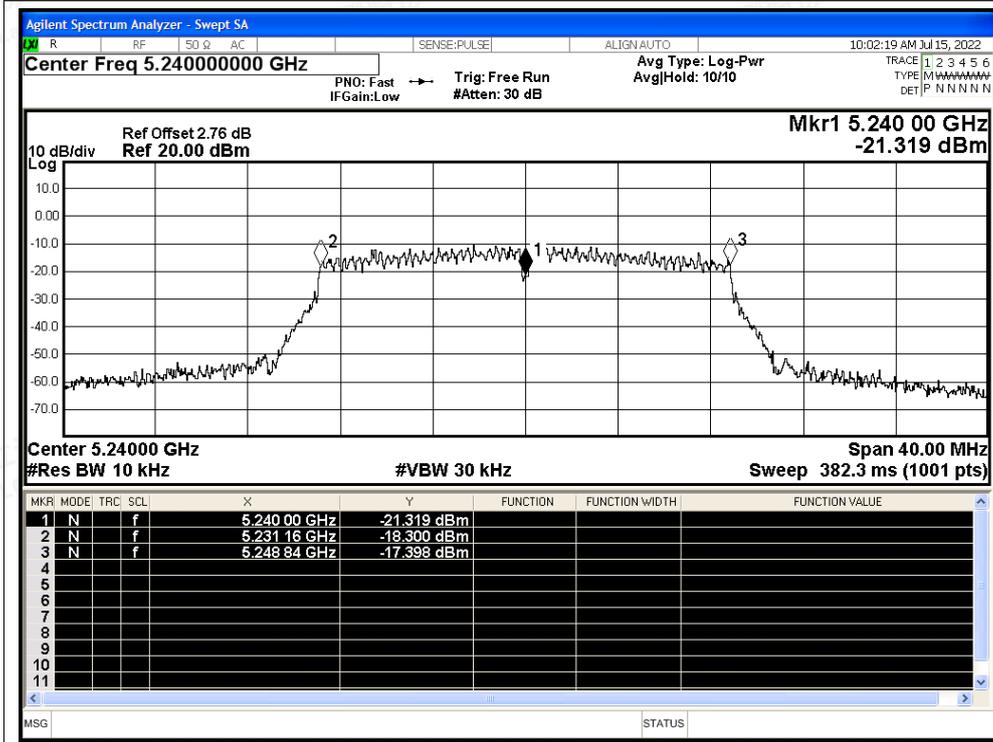




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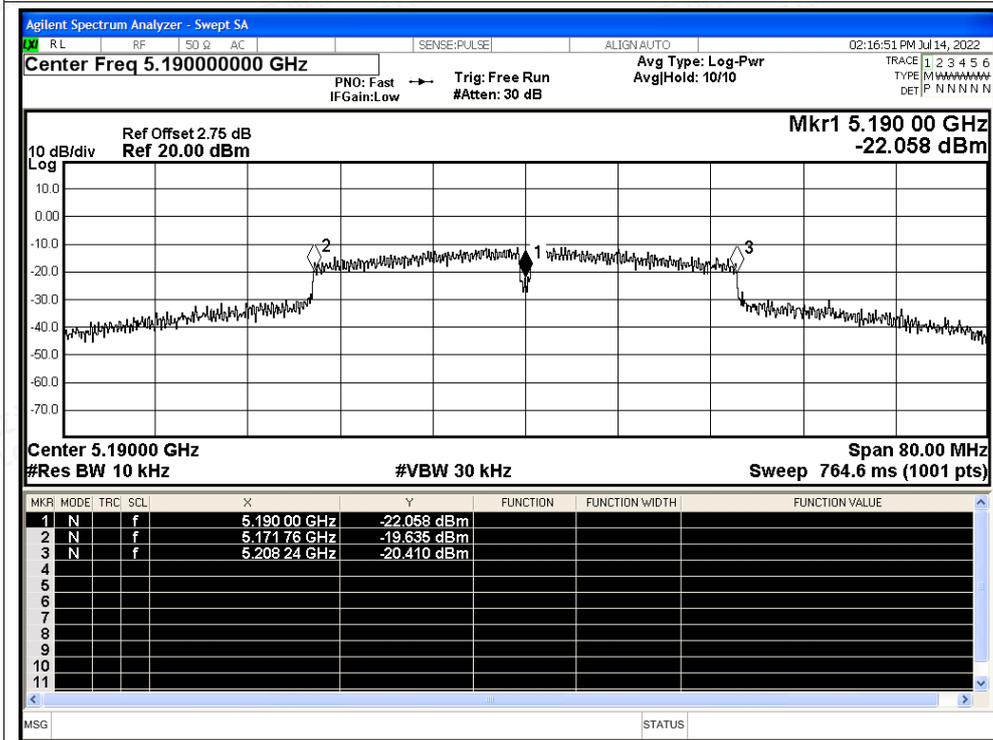


Freq. Stability NVNT n20 5240MHz Ant1

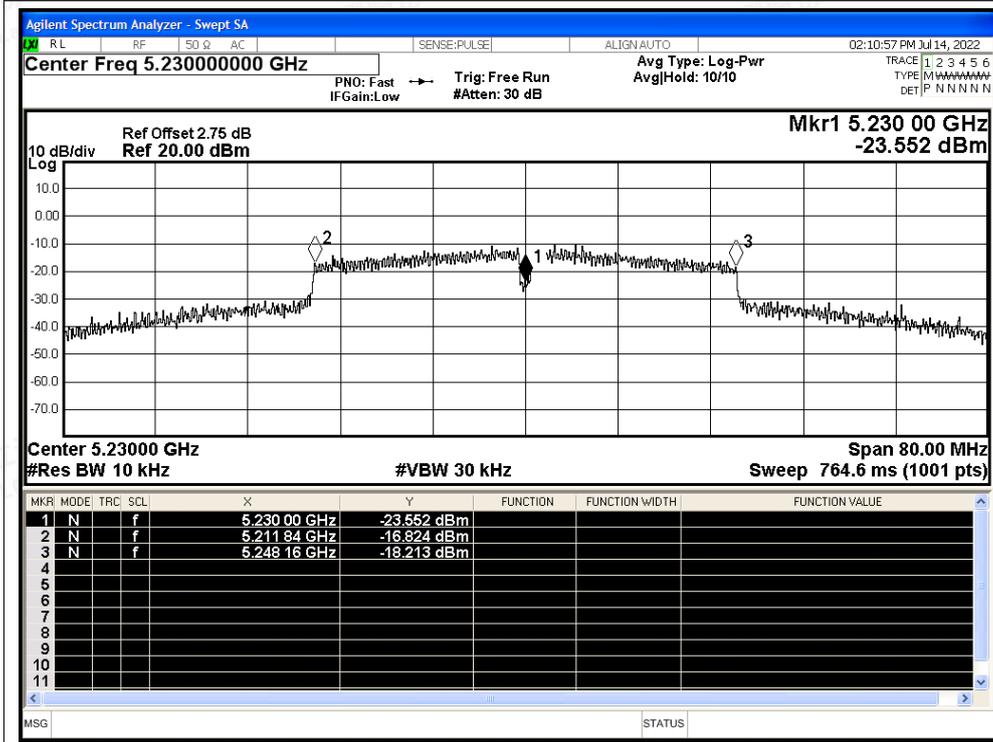




Freq. Stability NVNT n40 5190MHz Ant1

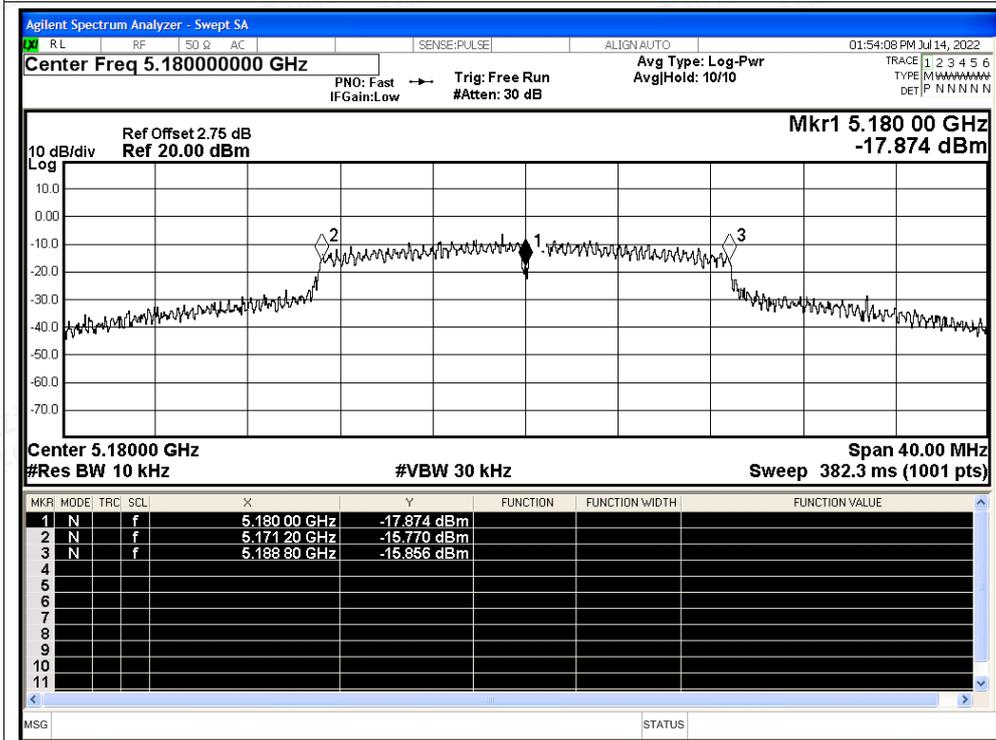


Freq. Stability NVNT n40 5230MHz Ant1

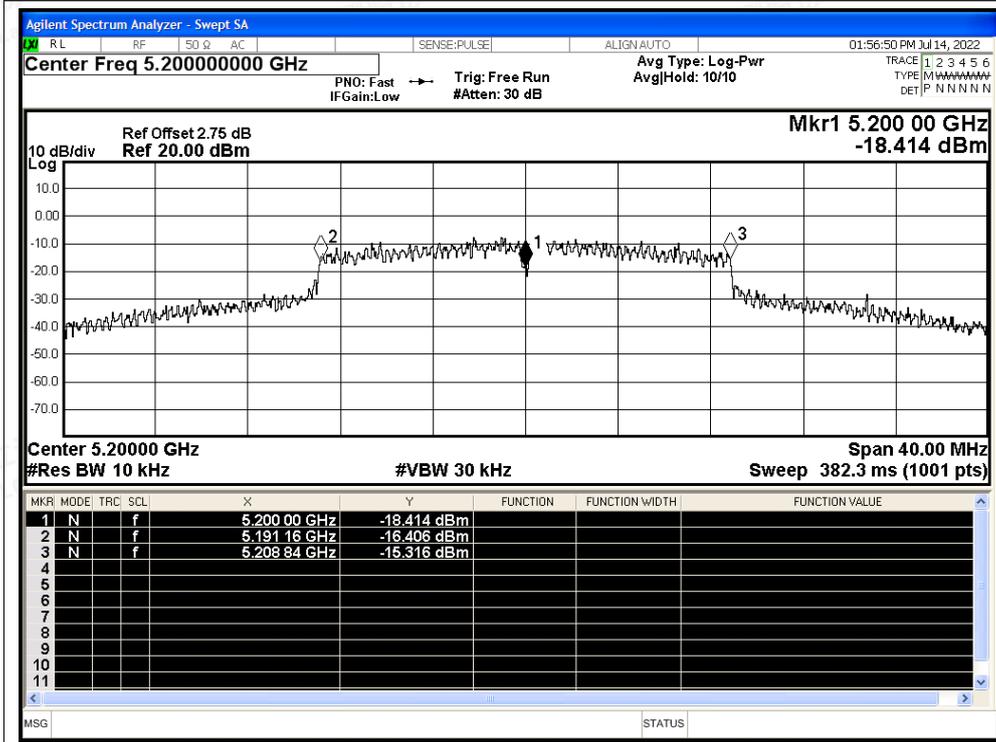




Freq. Stability NVNT ac20 5180MHz Ant1

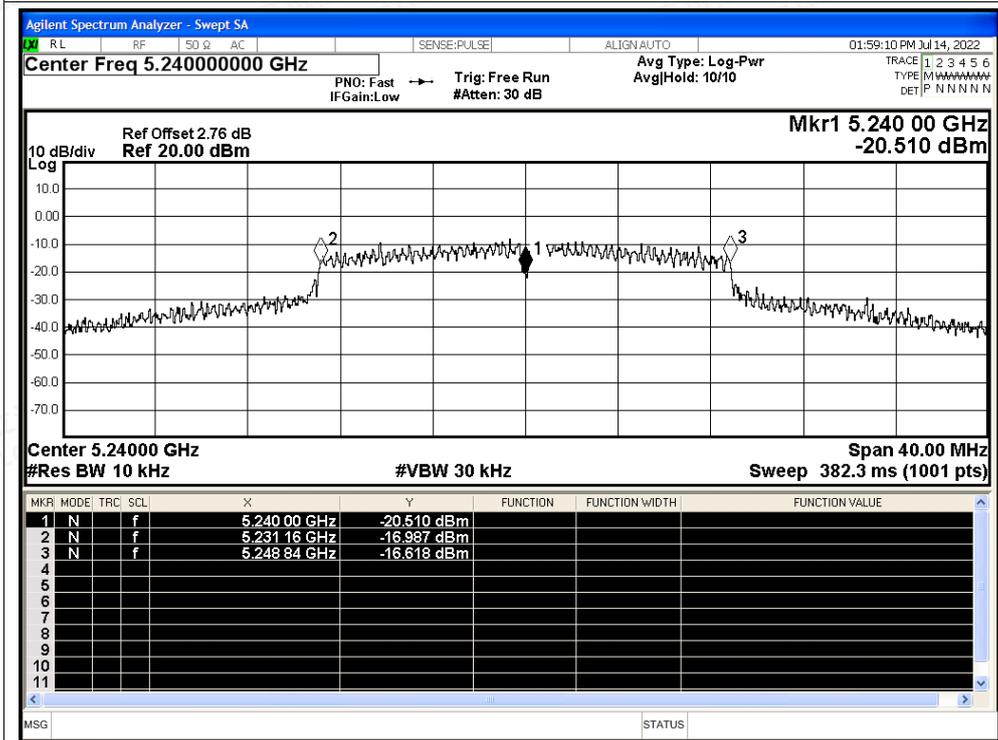


Freq. Stability NVNT ac20 5200MHz Ant1

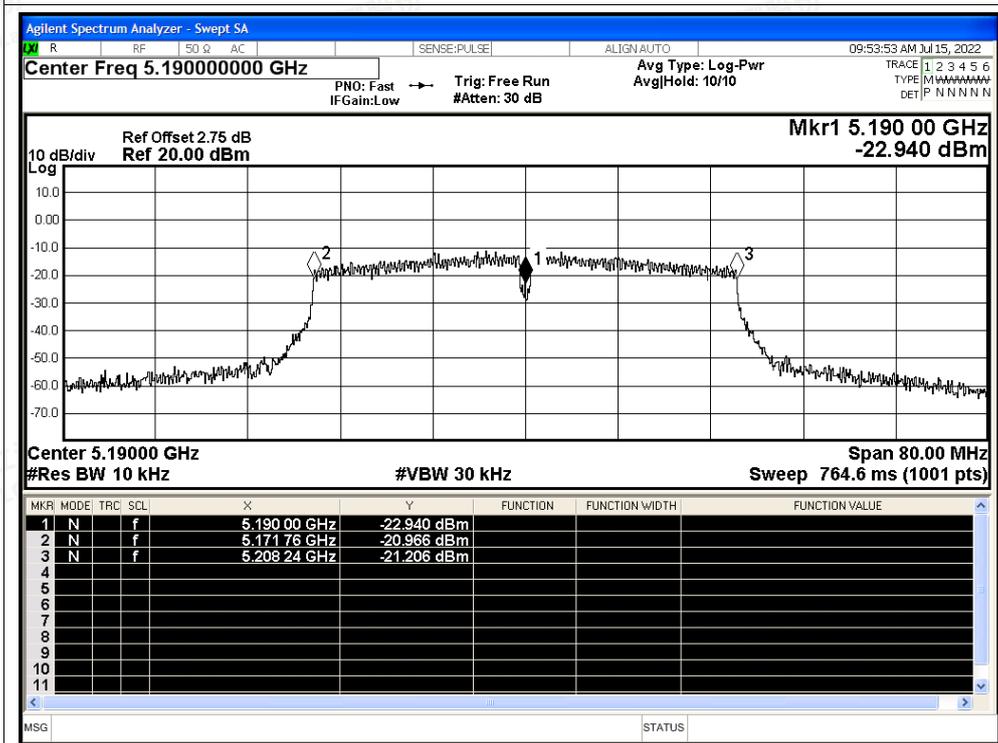




Freq. Stability NVNT ac20 5240MHz Ant1

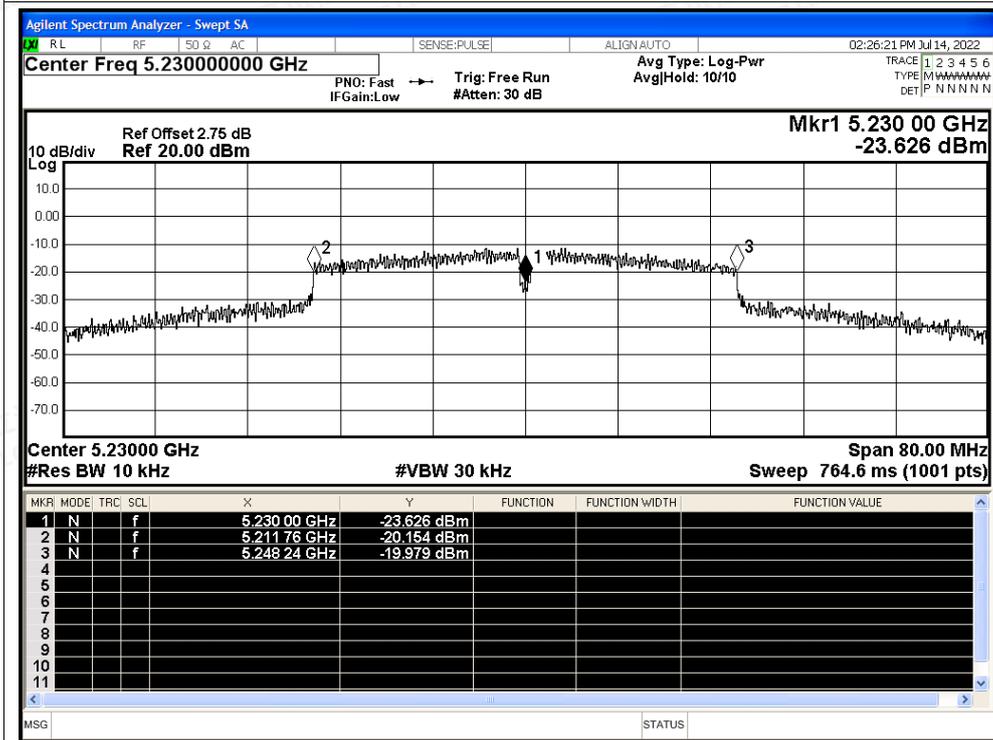


Freq. Stability NVNT ac40 5190MHz Ant1

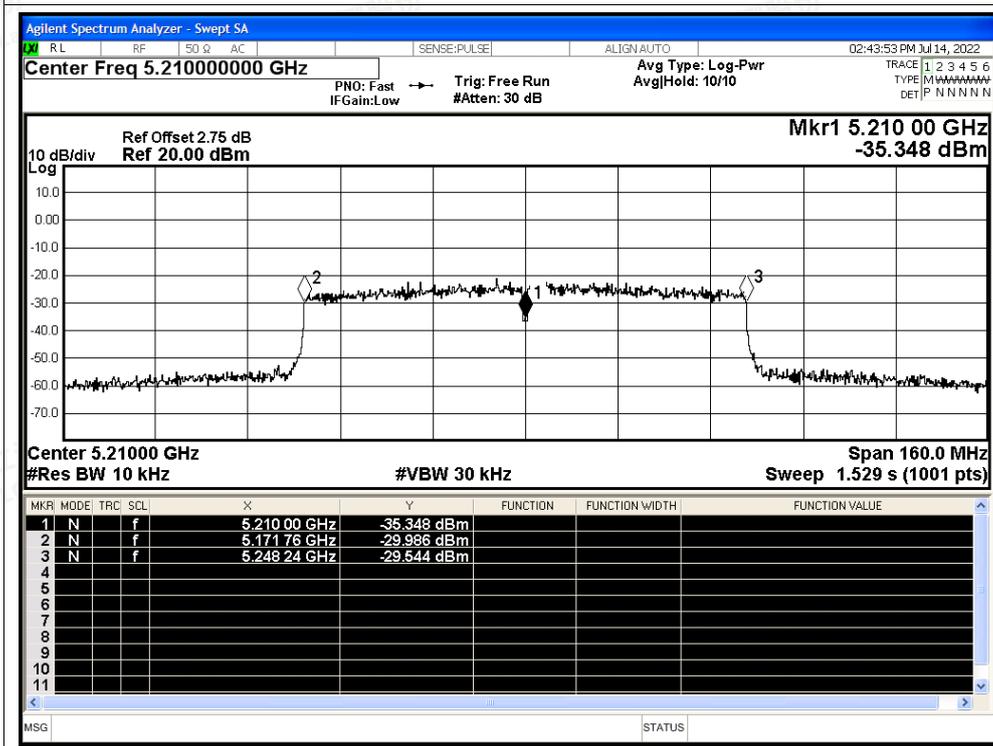




Freq. Stability NVNT ac40 5230MHz Ant1



Freq. Stability NVNT ac80 5210MHz Ant1





### E.6 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5180	Ant1	80.13	0.96	0.49
NVNT	a	5200	Ant1	80.17	0.96	0.49
NVNT	a	5240	Ant1	80.17	0.96	0.49
NVNT	n20	5180	Ant1	79	1.02	0.53
NVNT	n20	5200	Ant1	79.04	1.02	0.53
NVNT	n20	5240	Ant1	79	1.02	0.53
NVNT	n40	5190	Ant1	64.92	1.88	1.08
NVNT	n40	5230	Ant1	64.9	1.88	1.08
NVNT	ac20	5180	Ant1	65.85	1.81	1.03
NVNT	ac20	5200	Ant1	65.85	1.81	1.03
NVNT	ac20	5240	Ant1	65.85	1.81	1.03
NVNT	ac40	5190	Ant1	49.39	3.06	2.04
NVNT	ac40	5230	Ant1	49.39	3.06	2.04
NVNT	ac80	5210	Ant1	33.2	4.79	4.02

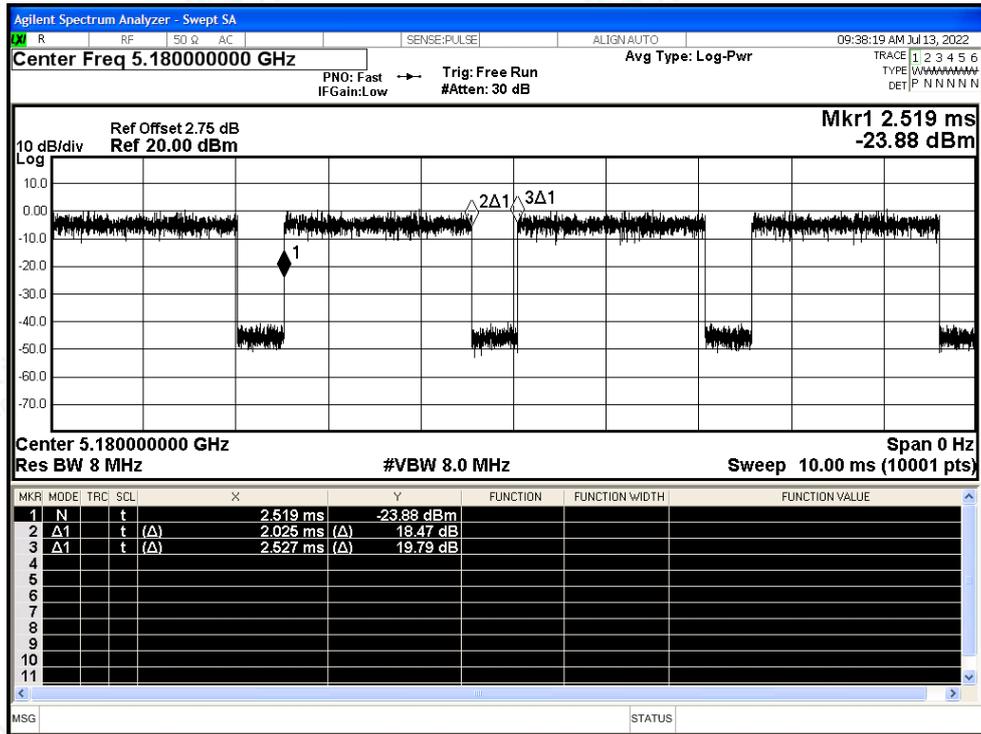


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 Scan code to check authenticity

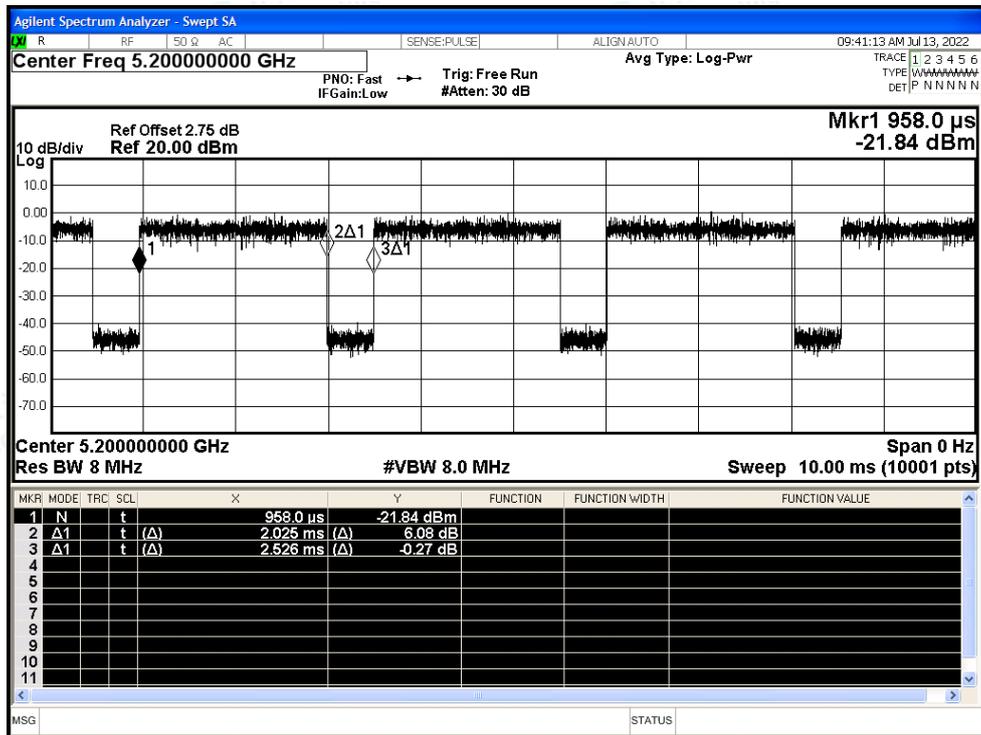


Test Graphs

Duty Cycle NVNT a 5180MHz Ant1

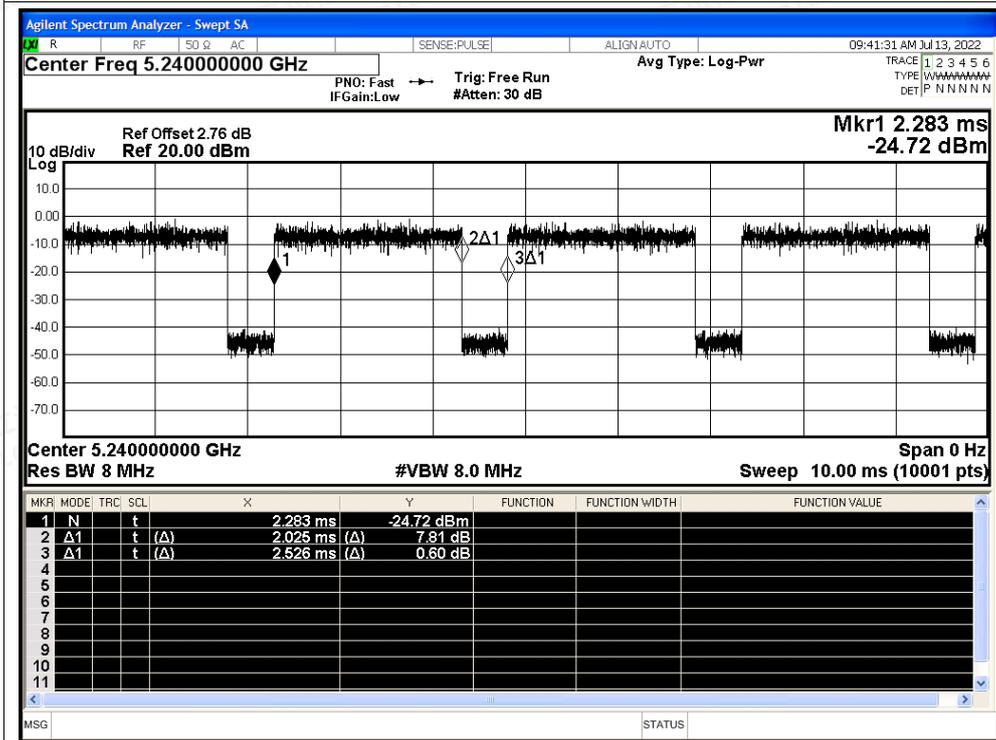


Duty Cycle NVNT a 5200MHz Ant1

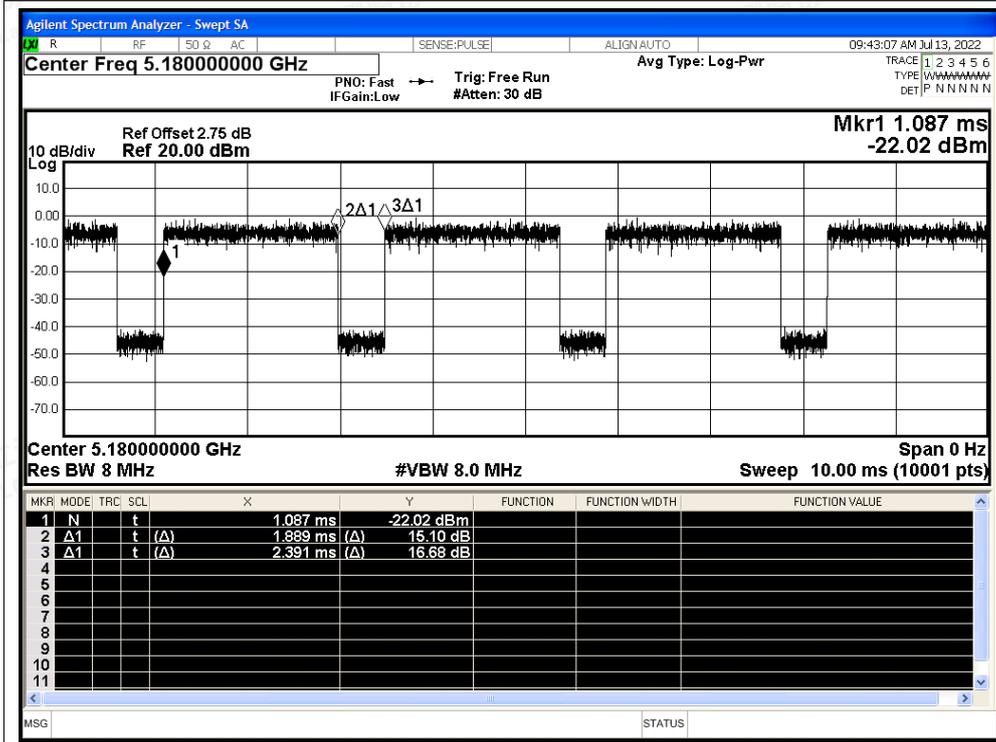




Duty Cycle NVNT a 5240MHz Ant1

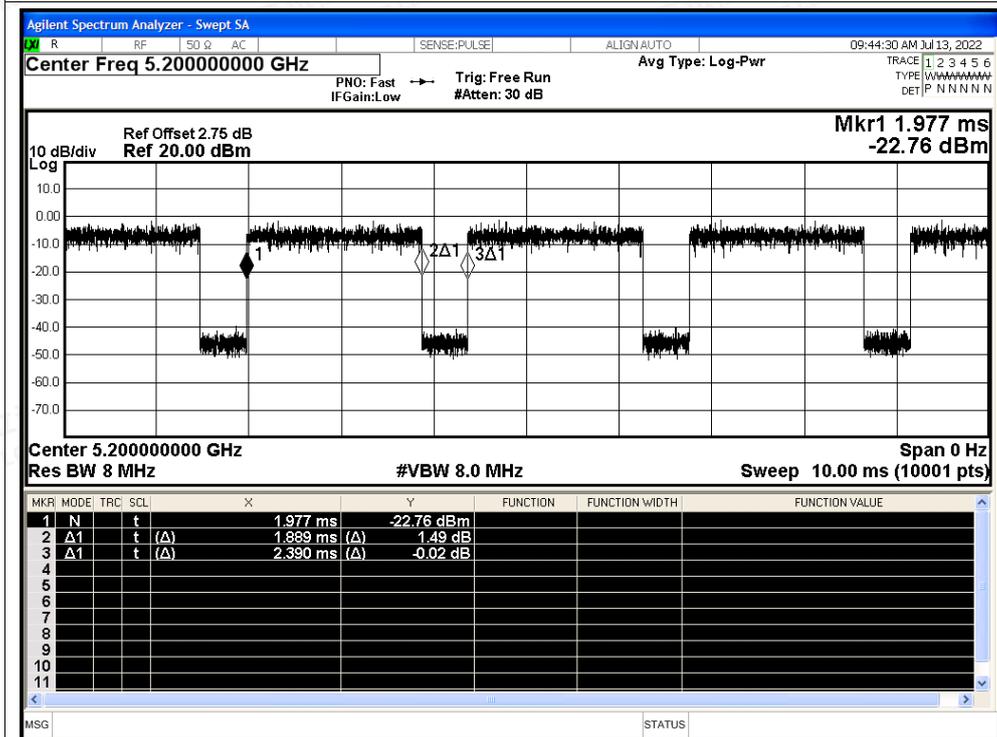


Duty Cycle NVNT n20 5180MHz Ant1

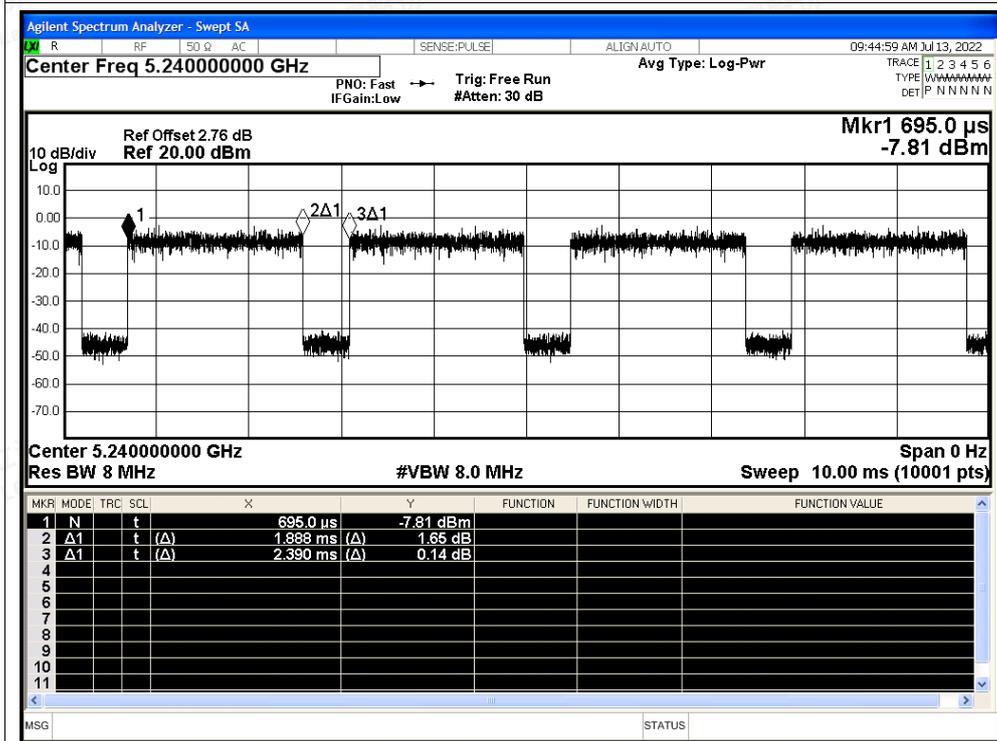




Duty Cycle NVNT n20 5200MHz Ant1

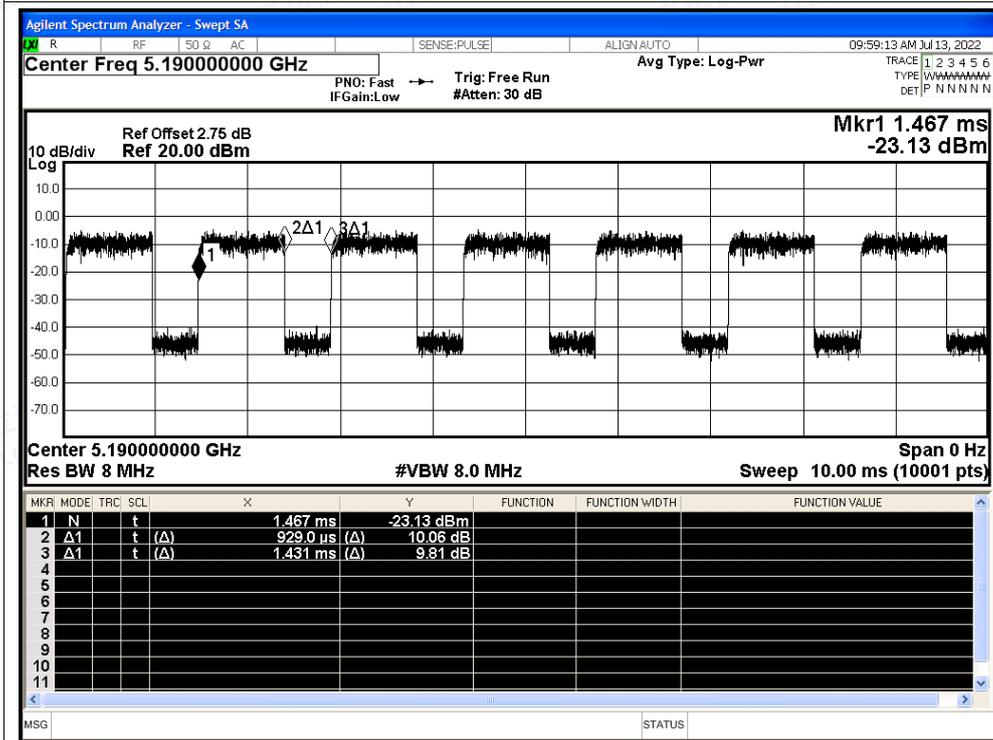


Duty Cycle NVNT n20 5240MHz Ant1

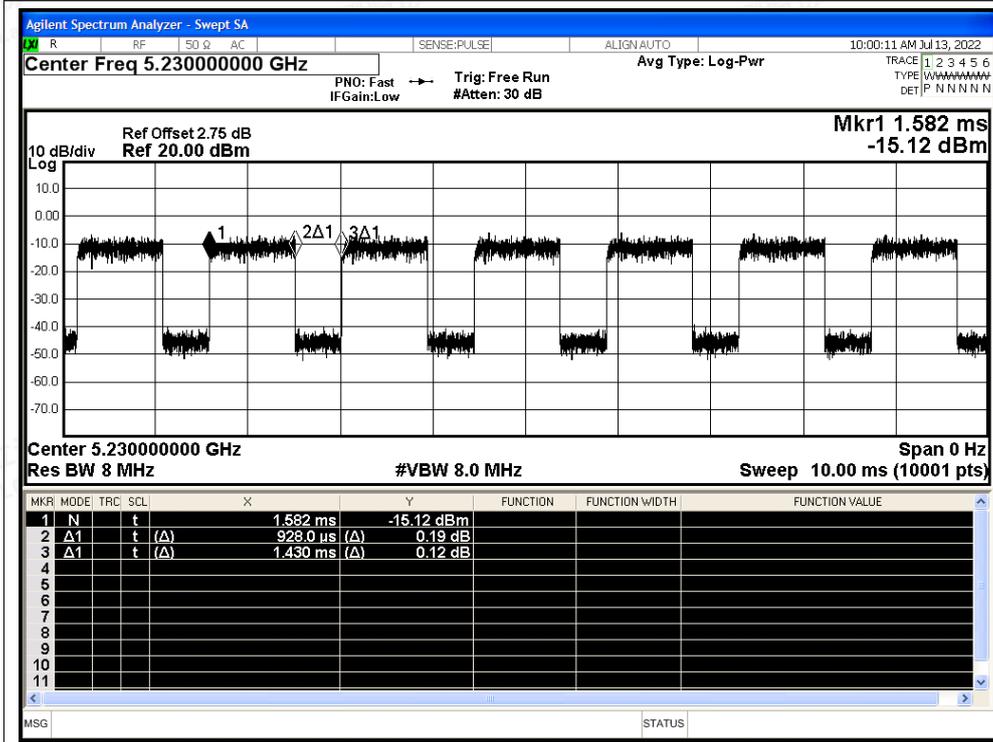




Duty Cycle NVNT n40 5190MHz Ant1

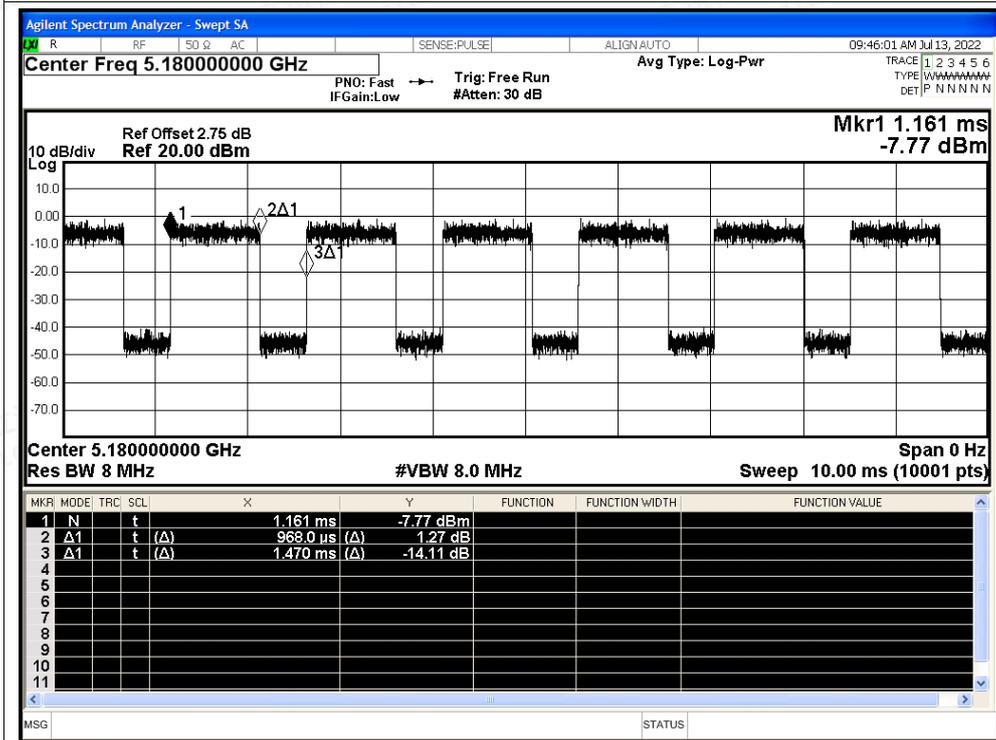


Duty Cycle NVNT n40 5230MHz Ant1

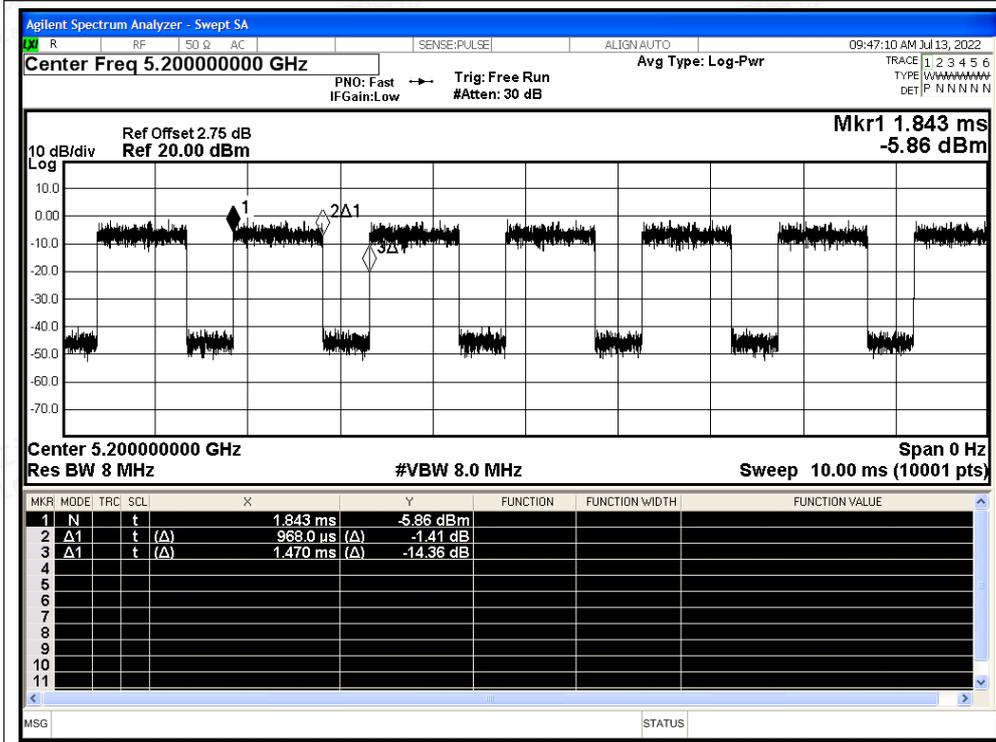




Duty Cycle NVNT ac20 5180MHz Ant1

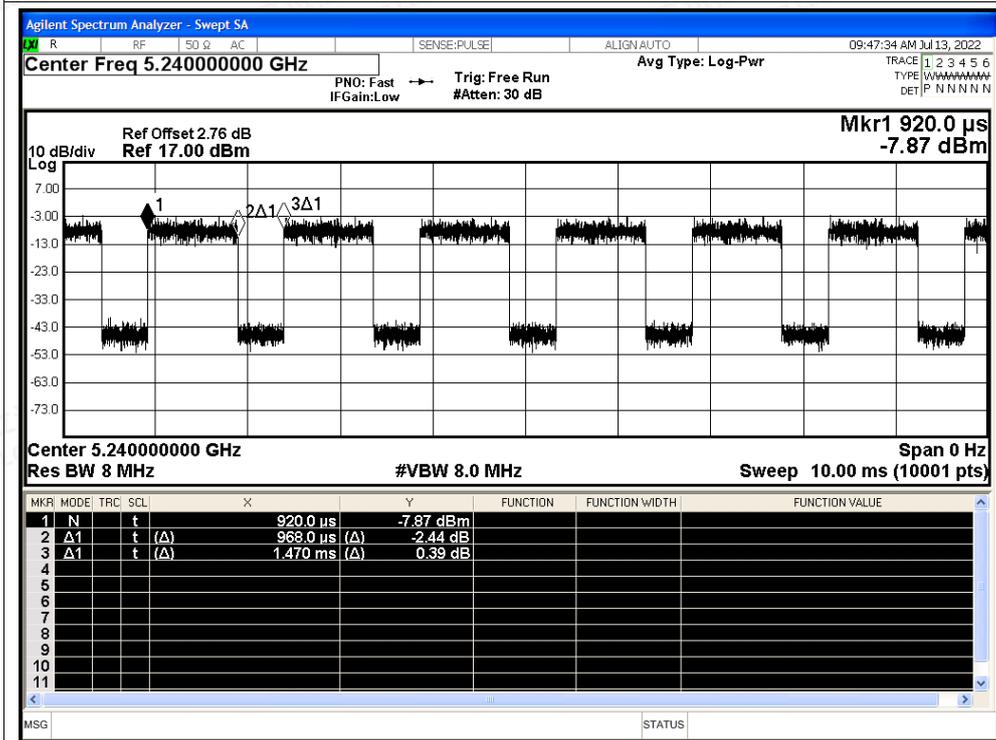


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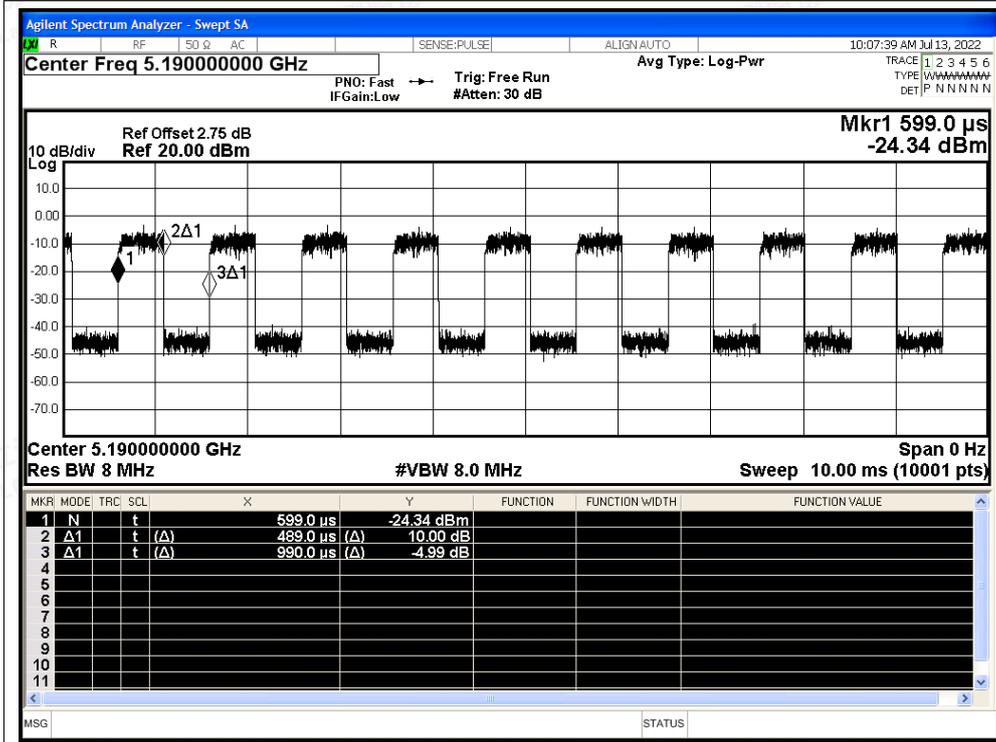




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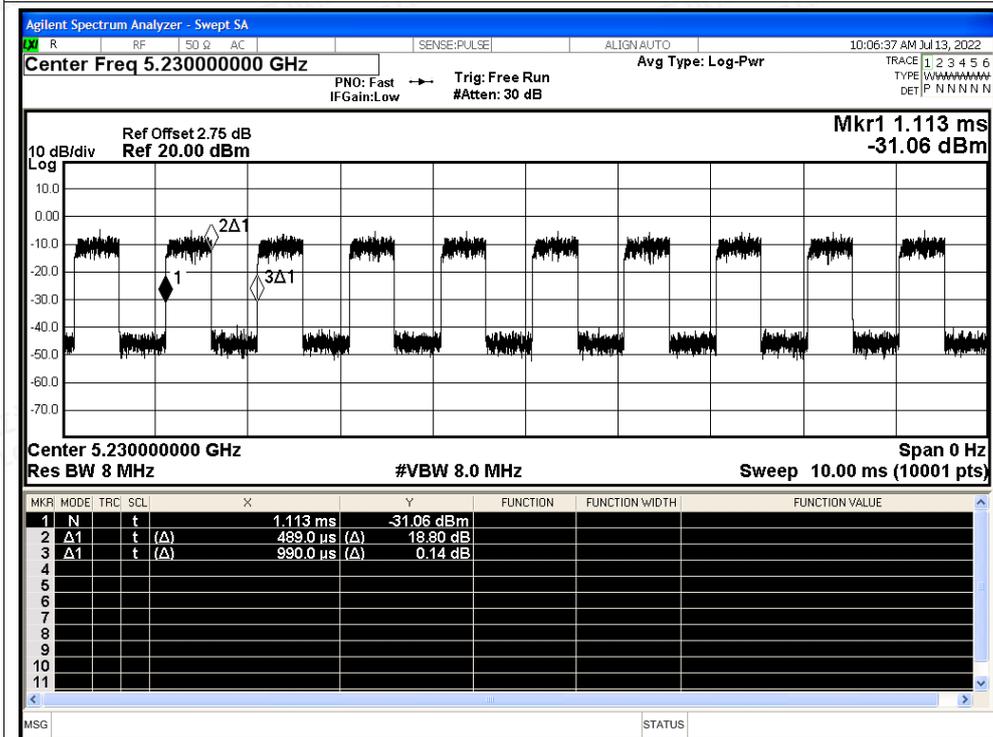


Duty Cycle NVNT ac40 5190MHz Ant1





Duty Cycle NVNT ac40 5230MHz Ant1



Duty Cycle NVNT ac80 5210MHz Ant1

