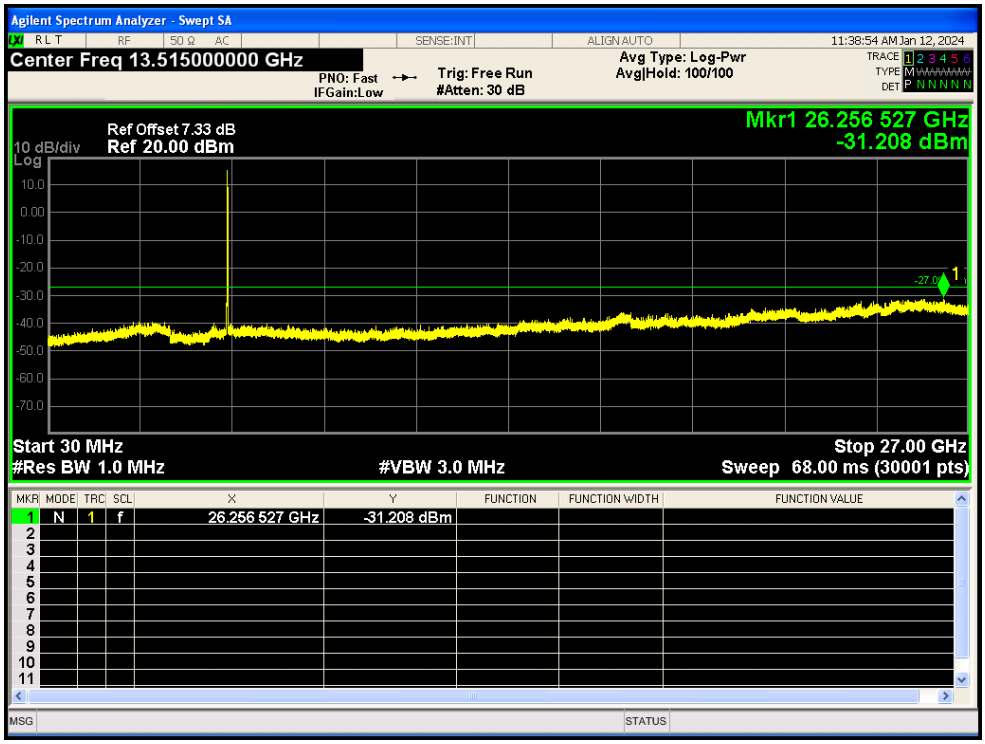
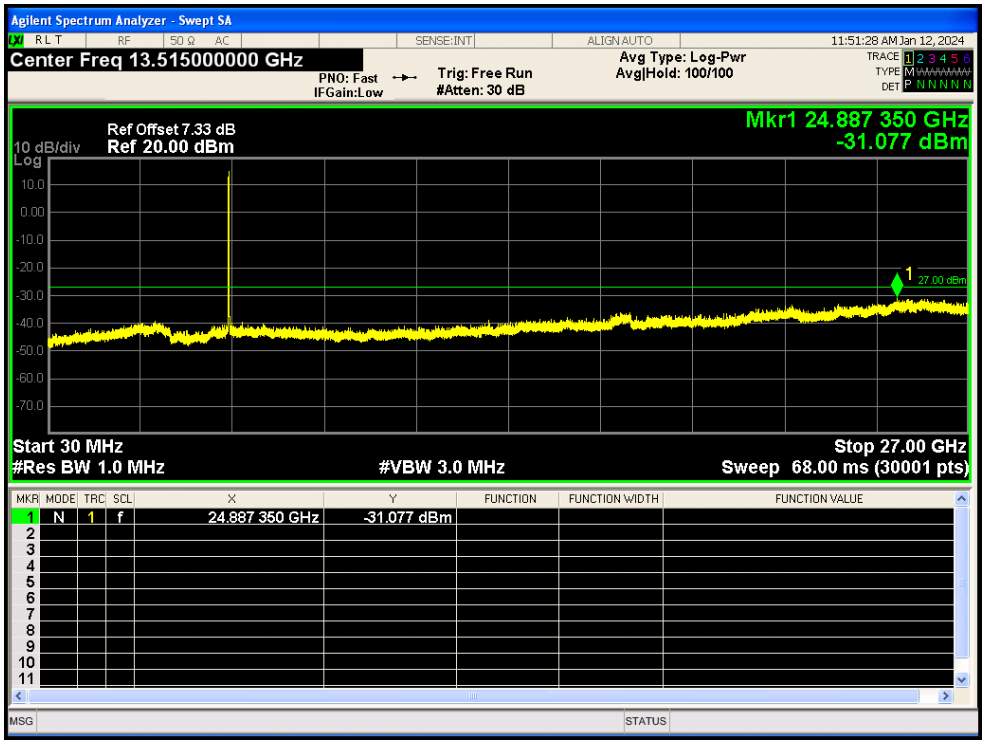
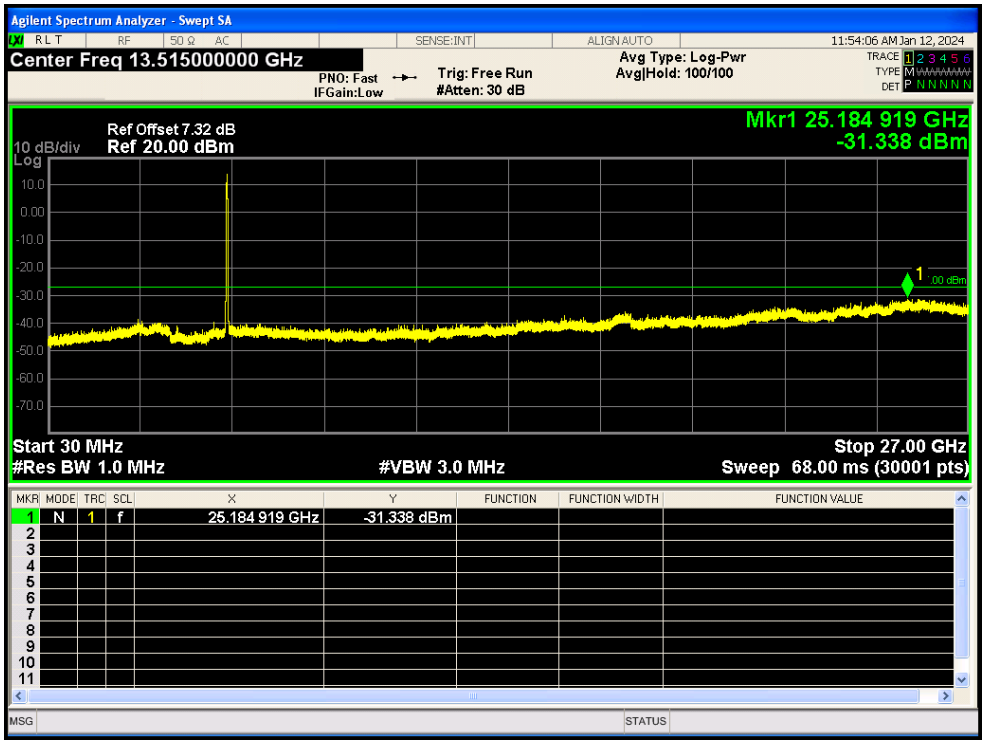


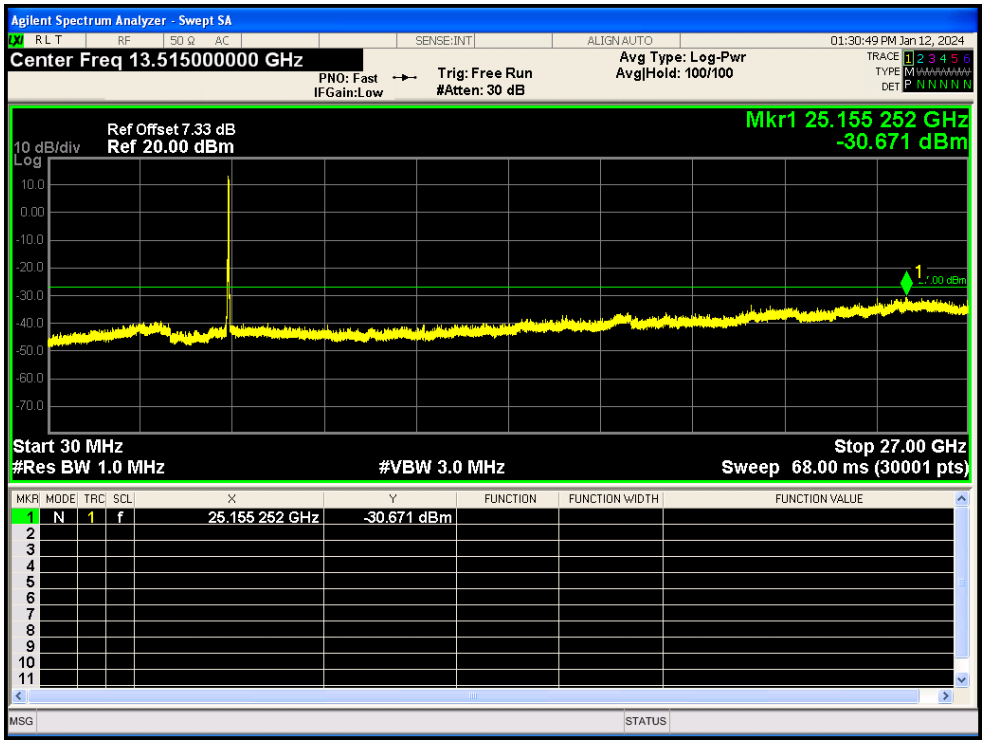
Tx. Spurious NVNT n20 5320MHz Ant1 Emission



Tx. Spurious NVNT n40 5270MHz Ant1 Emission



Tx. Spurious NVNT n40 5310MHz Ant1 Emission

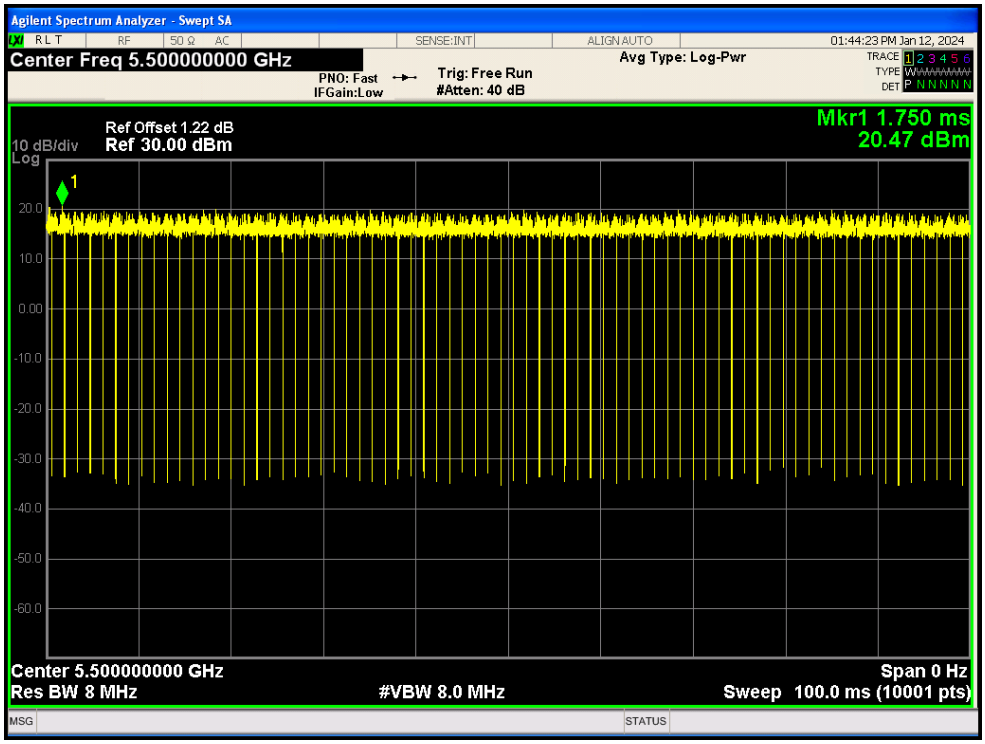


5.6G WIFI:

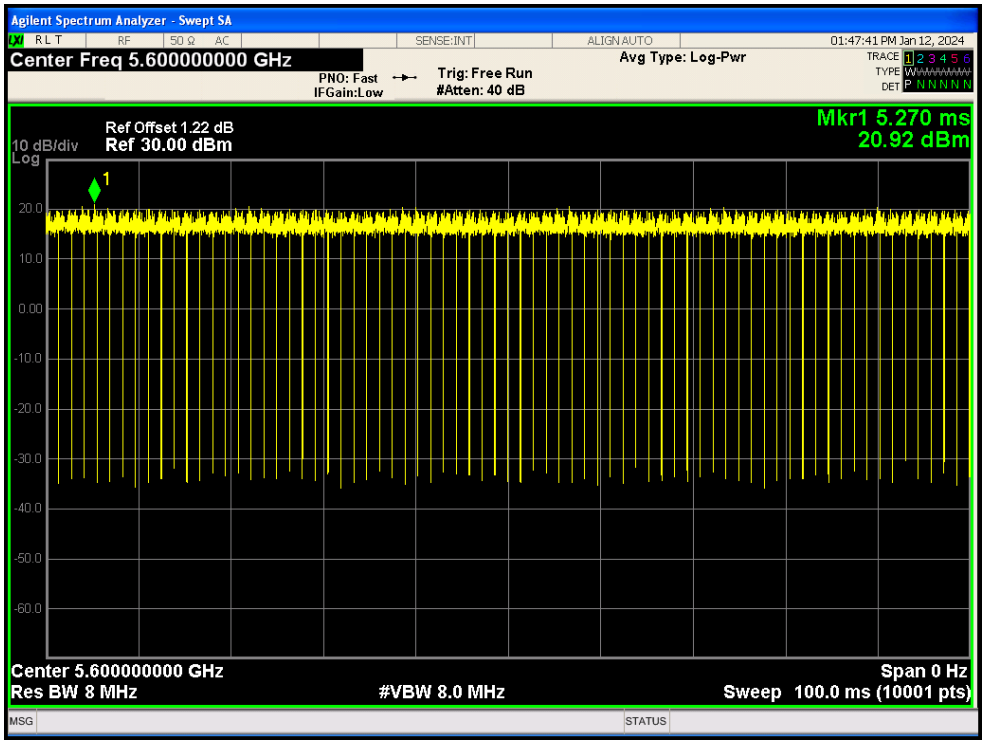
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5500	Ant1	98.77	0.05
NVNT	a	5600	Ant1	98.77	0.05
NVNT	a	5700	Ant1	98.77	0.05
NVNT	ac20	5500	Ant1	98.67	0.06
NVNT	ac20	5600	Ant1	98.69	0.06
NVNT	ac20	5700	Ant1	98.69	0.06
NVNT	ac40	5510	Ant1	97.39	0.11
NVNT	ac40	5590	Ant1	97.38	0.12
NVNT	ac40	5670	Ant1	97.43	0.11
NVNT	n20	5500	Ant1	98.68	0.06
NVNT	n20	5600	Ant1	98.68	0.06
NVNT	n20	5700	Ant1	98.69	0.06
NVNT	n40	5510	Ant1	97.41	0.11
NVNT	n40	5590	Ant1	97.39	0.11
NVNT	n40	5670	Ant1	97.39	0.11

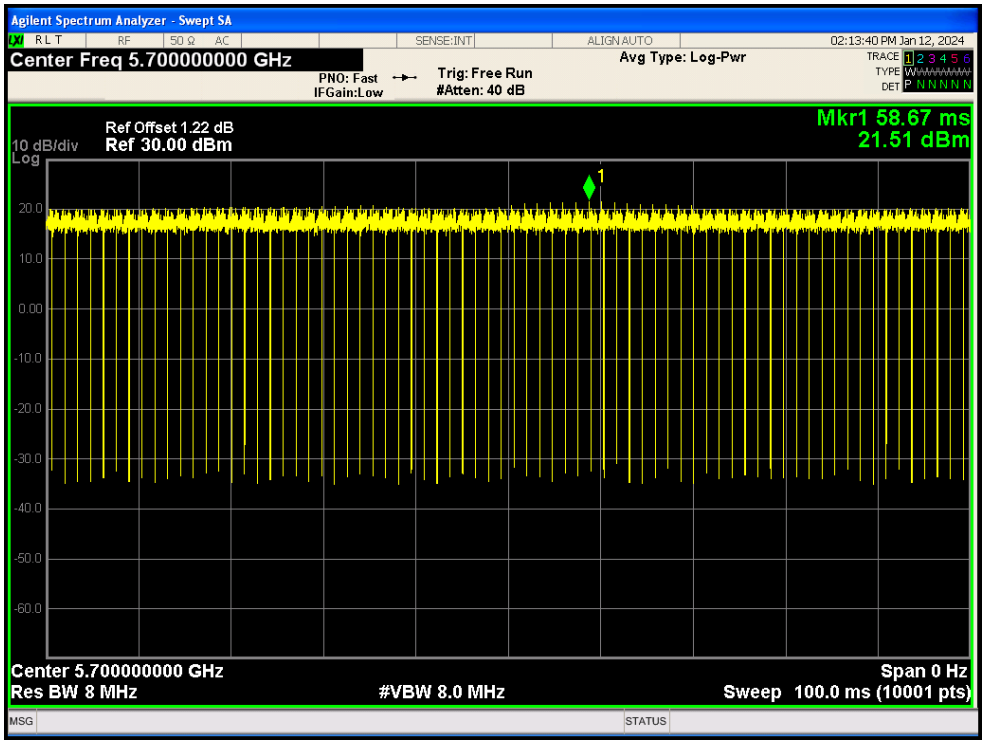
Duty Cycle NVNT a 5500MHz Ant1



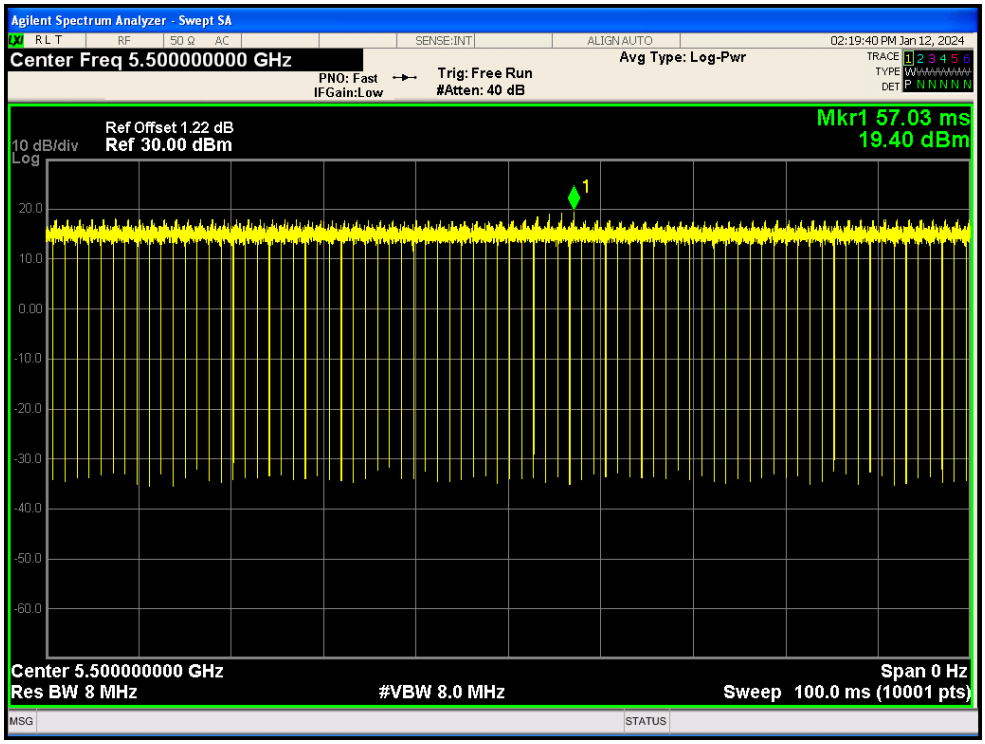
Duty Cycle NVNT a 5600MHz Ant1



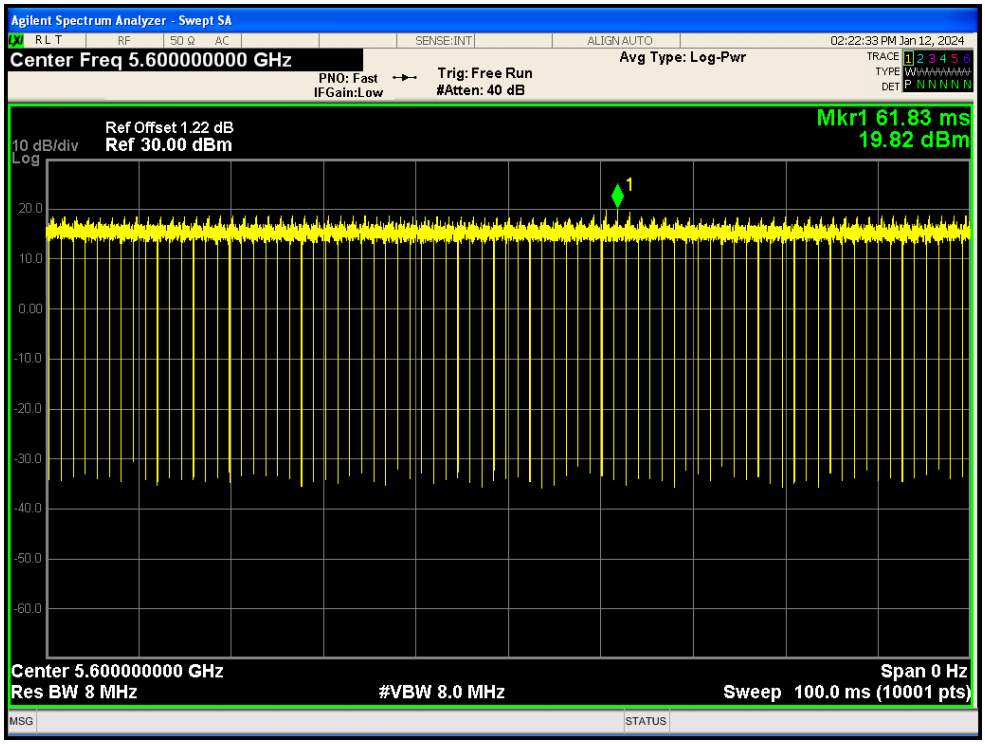
Duty Cycle NVNT a 5700MHz Ant1



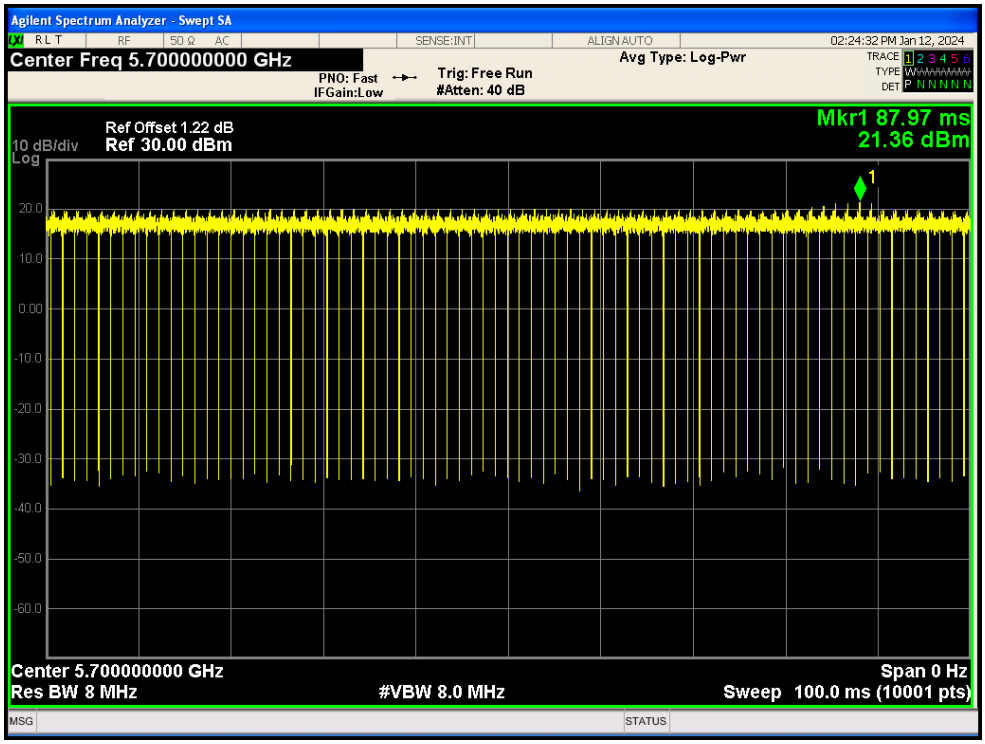
Duty Cycle NVNT ac20 5500MHz Ant1



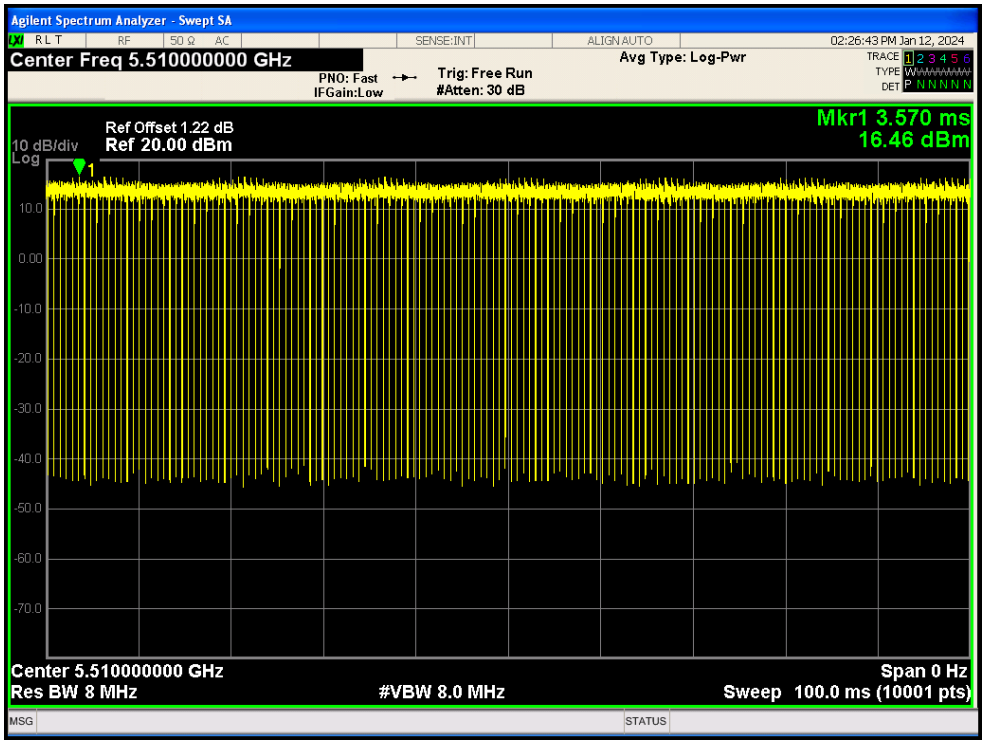
Duty Cycle NVNT ac20 5600MHz Ant1



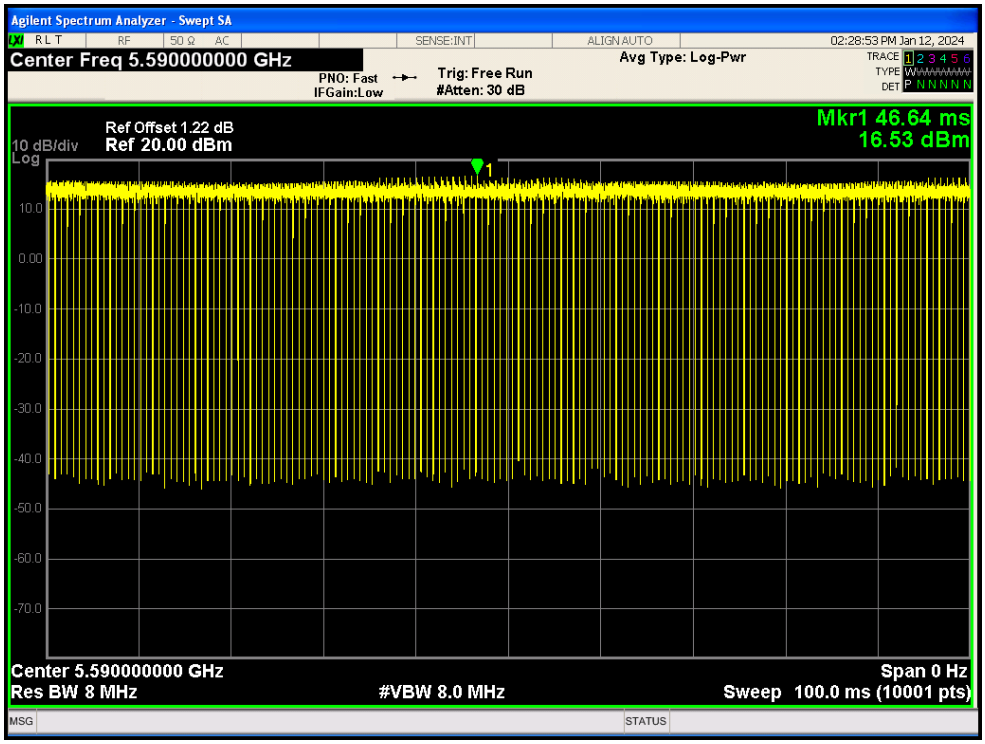
Duty Cycle NVNT ac20 5700MHz Ant1



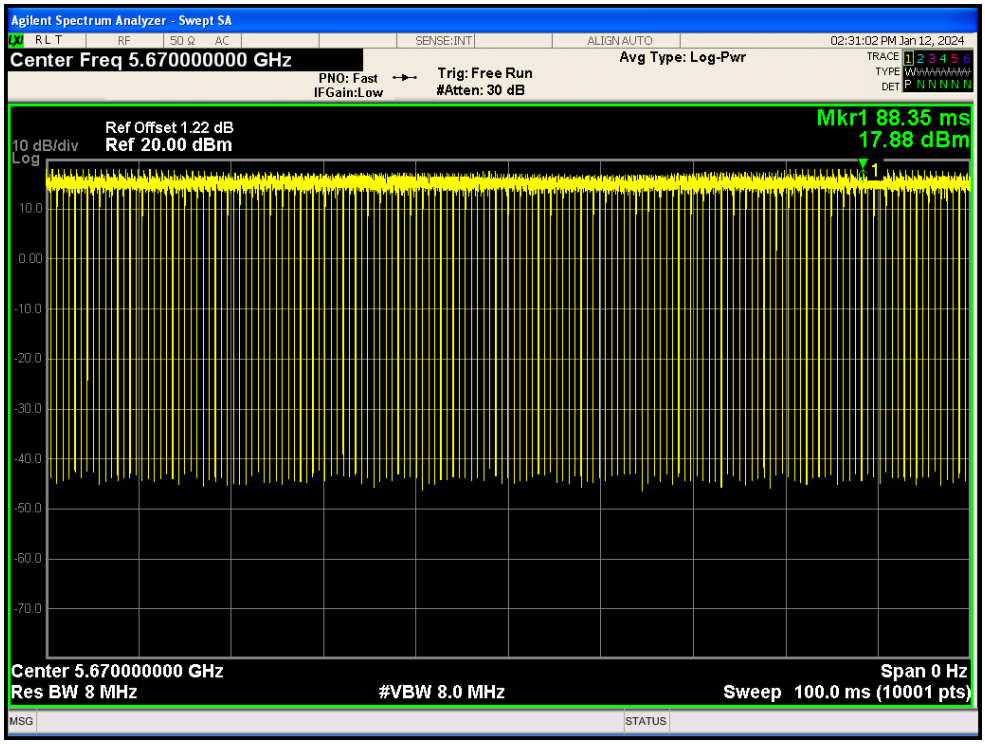
Duty Cycle NVNT ac40 5510MHz Ant1



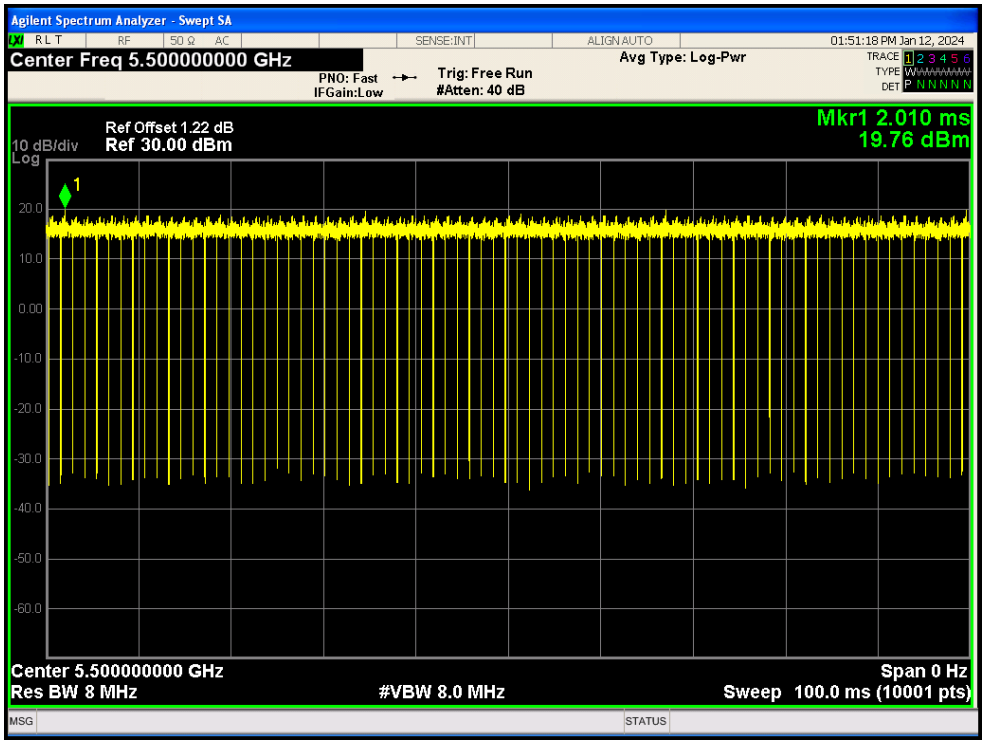
Duty Cycle NVNT ac40 5590MHz Ant1



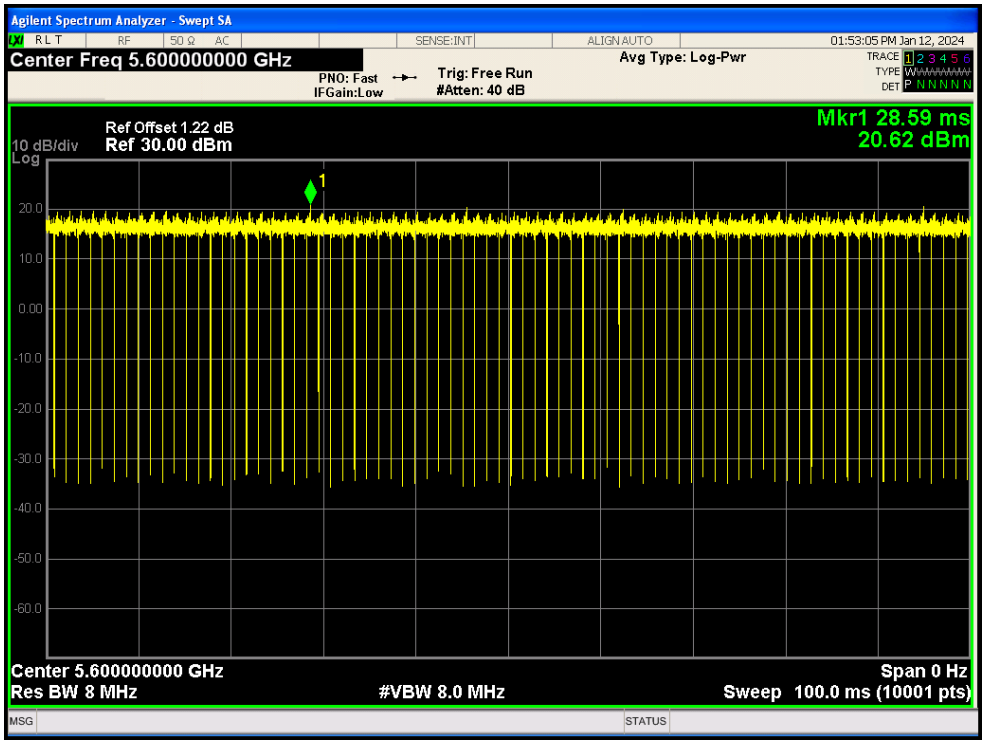
Duty Cycle NVNT ac40 5670MHz Ant1



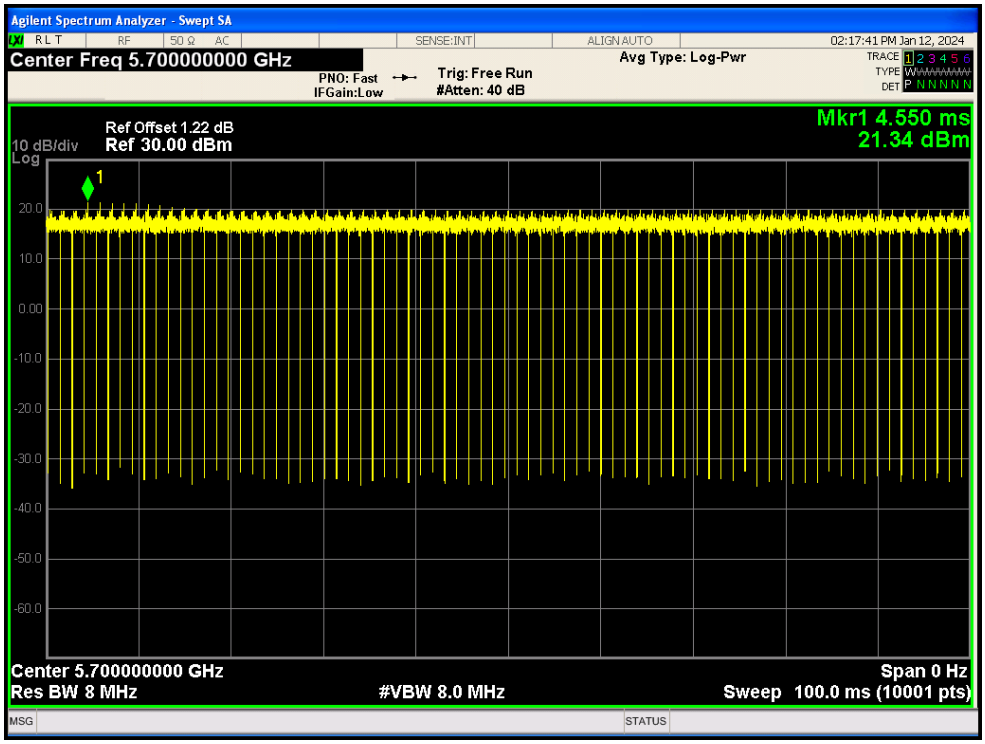
Duty Cycle NVNT n20 5500MHz Ant1



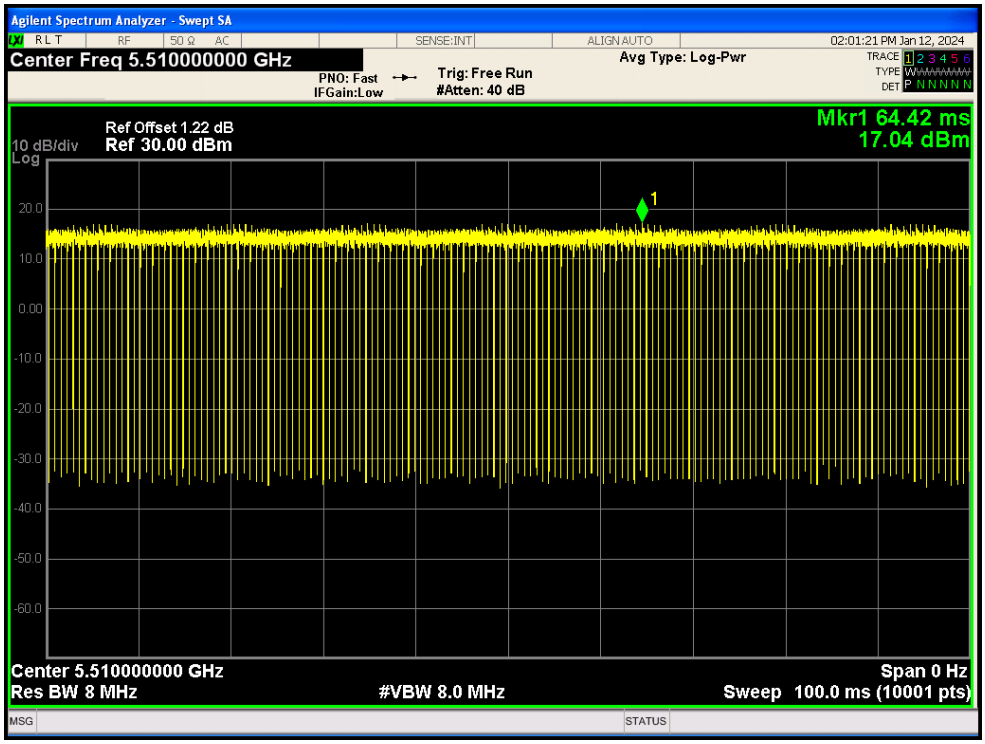
Duty Cycle NVNT n20 5600MHz Ant1



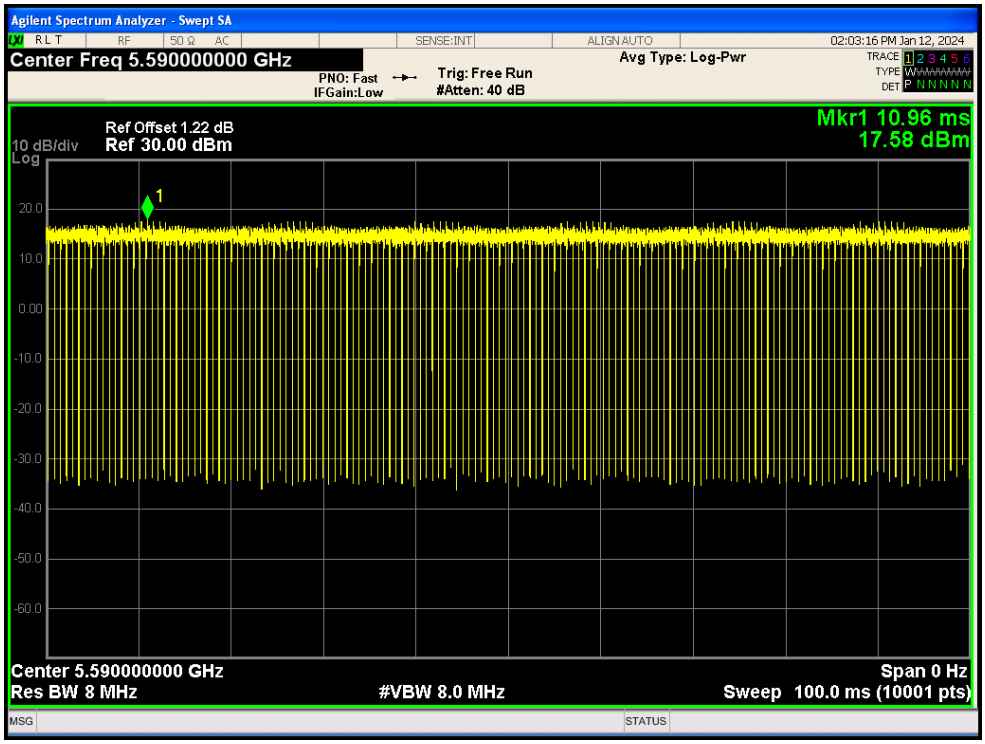
Duty Cycle NVNT n20 5700MHz Ant1



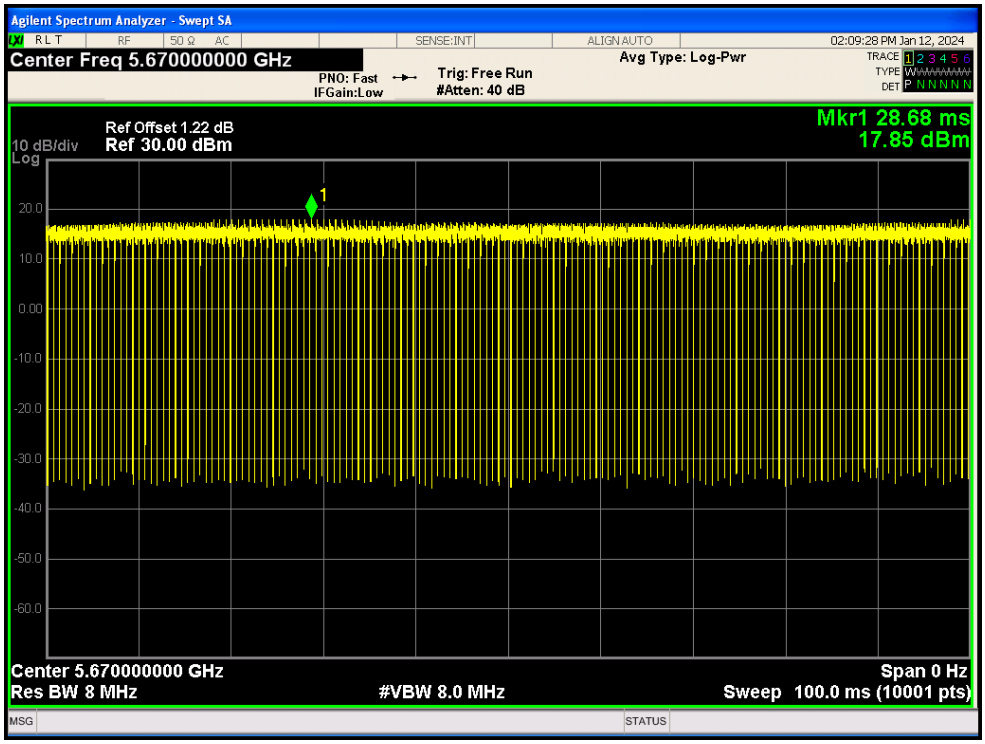
Duty Cycle NVNT n40 5510MHz Ant1



Duty Cycle NVNT n40 5590MHz Ant1



Duty Cycle NVNT n40 5670MHz Ant1



Maximum Conducted Output Power

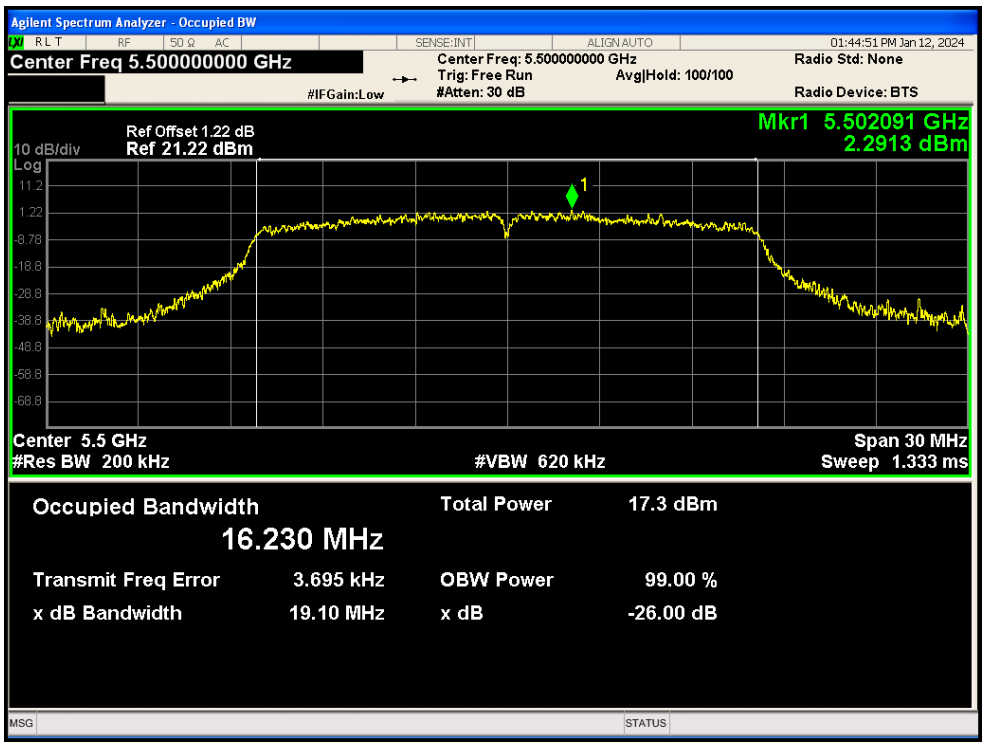
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	11.813	23.89	Pass
NVNT	a	5600	Ant1	11.978	23.89	Pass
NVNT	a	5700	Ant1	12.385	23.89	Pass
NVNT	ac20	5500	Ant1	10.625	23.89	Pass
NVNT	ac20	5600	Ant1	10.834	23.89	Pass
NVNT	ac20	5700	Ant1	12.162	23.89	Pass
NVNT	ac40	5510	Ant1	11.182	23.89	Pass
NVNT	ac40	5590	Ant1	11.234	23.89	Pass
NVNT	ac40	5670	Ant1	12.614	23.89	Pass
NVNT	n20	5500	Ant1	11.666	23.89	Pass
NVNT	n20	5600	Ant1	11.814	23.89	Pass
NVNT	n20	5700	Ant1	12.167	23.89	Pass
NVNT	n40	5510	Ant1	11.995	23.89	Pass
NVNT	n40	5590	Ant1	12.302	23.89	Pass
NVNT	n40	5670	Ant1	12.483	23.89	Pass

-26dB Bandwidth

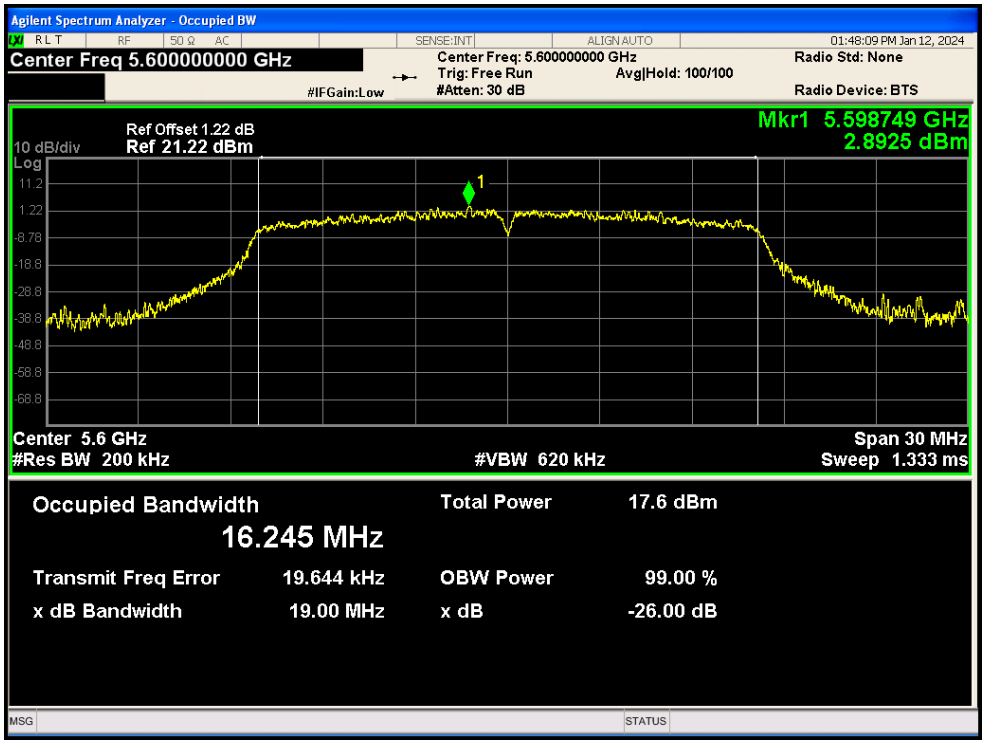
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Verdict

NVNT	a	5500	Ant1	19.095	Pass
NVNT	a	5600	Ant1	18.996	Pass
NVNT	a	5700	Ant1	18.935	Pass
NVNT	ac20	5500	Ant1	20.101	Pass
NVNT	ac20	5600	Ant1	19.884	Pass
NVNT	ac20	5700	Ant1	19.701	Pass
NVNT	ac40	5510	Ant1	37.902	Pass
NVNT	ac40	5590	Ant1	37.891	Pass
NVNT	ac40	5670	Ant1	37.807	Pass
NVNT	n20	5500	Ant1	20.346	Pass
NVNT	n20	5600	Ant1	20.051	Pass
NVNT	n20	5700	Ant1	20.086	Pass
NVNT	n40	5510	Ant1	37.91	Pass
NVNT	n40	5590	Ant1	37.797	Pass
NVNT	n40	5670	Ant1	37.759	Pass

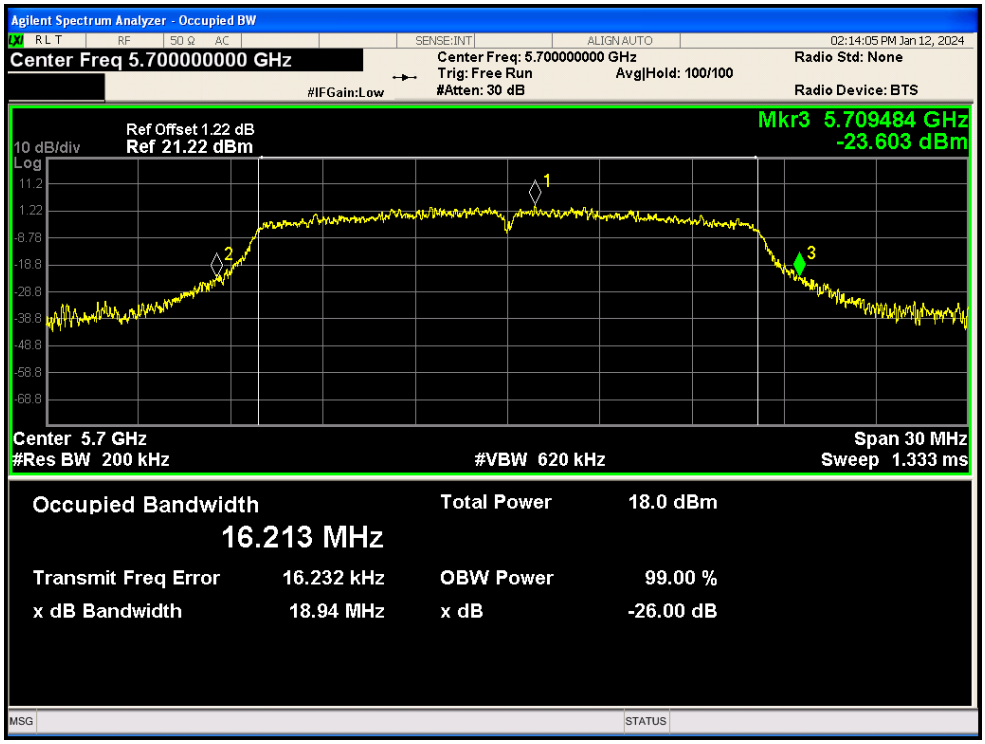
-26dB Bandwidth NVNT a 5500MHz Ant1



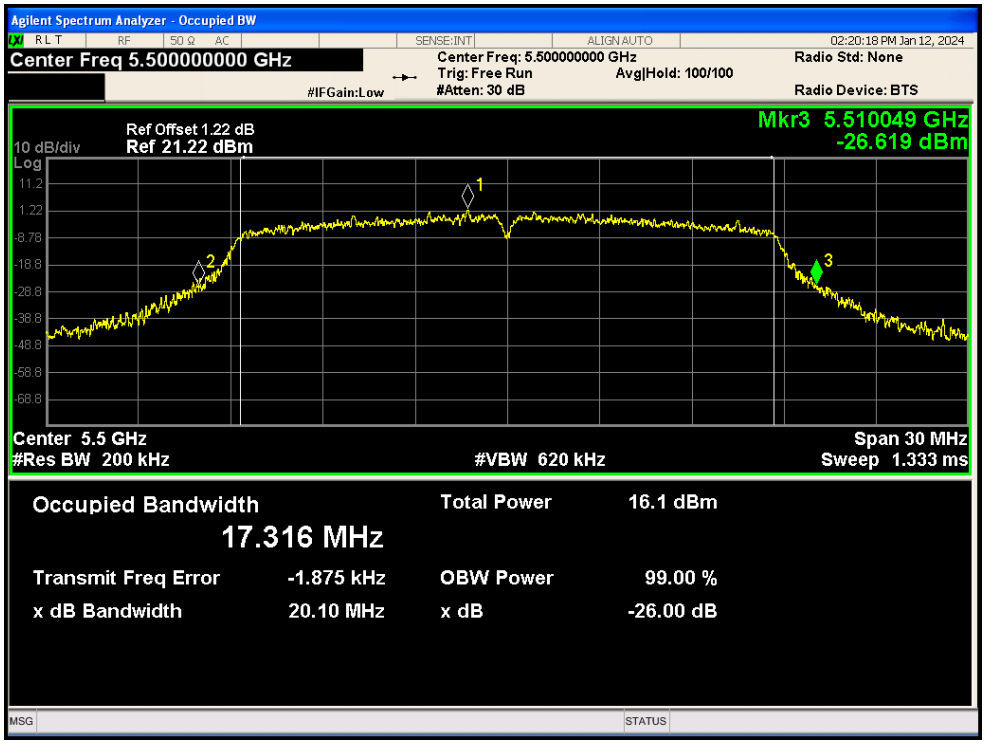
-26dB Bandwidth NVNT a 5600MHz Ant1



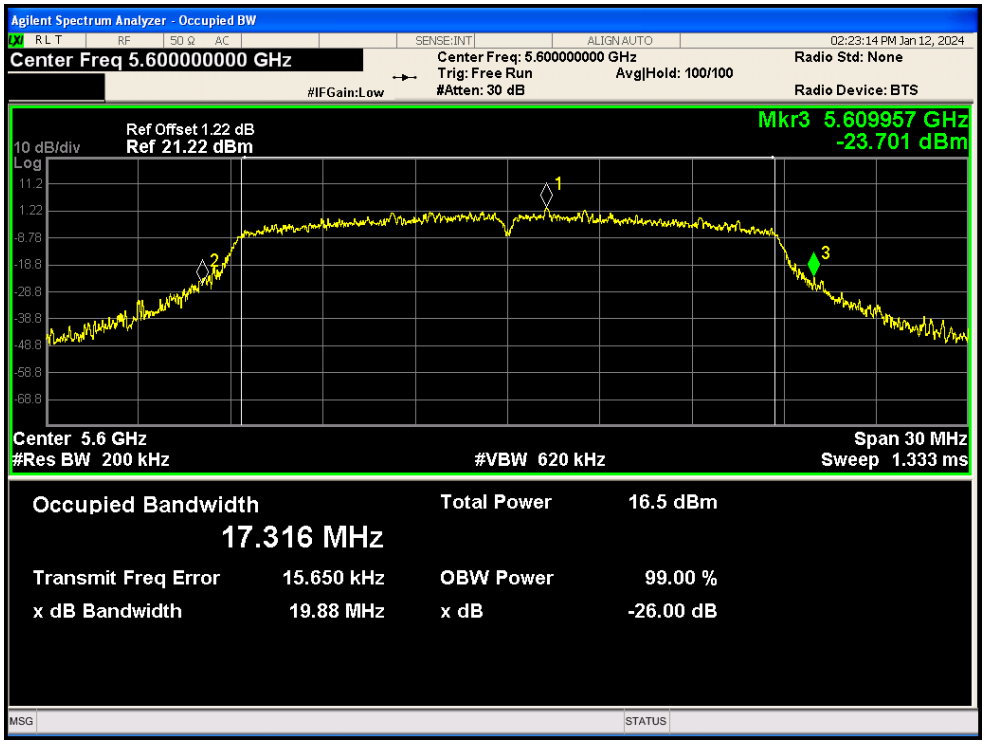
-26dB Bandwidth NVNT a 5700MHz Ant1



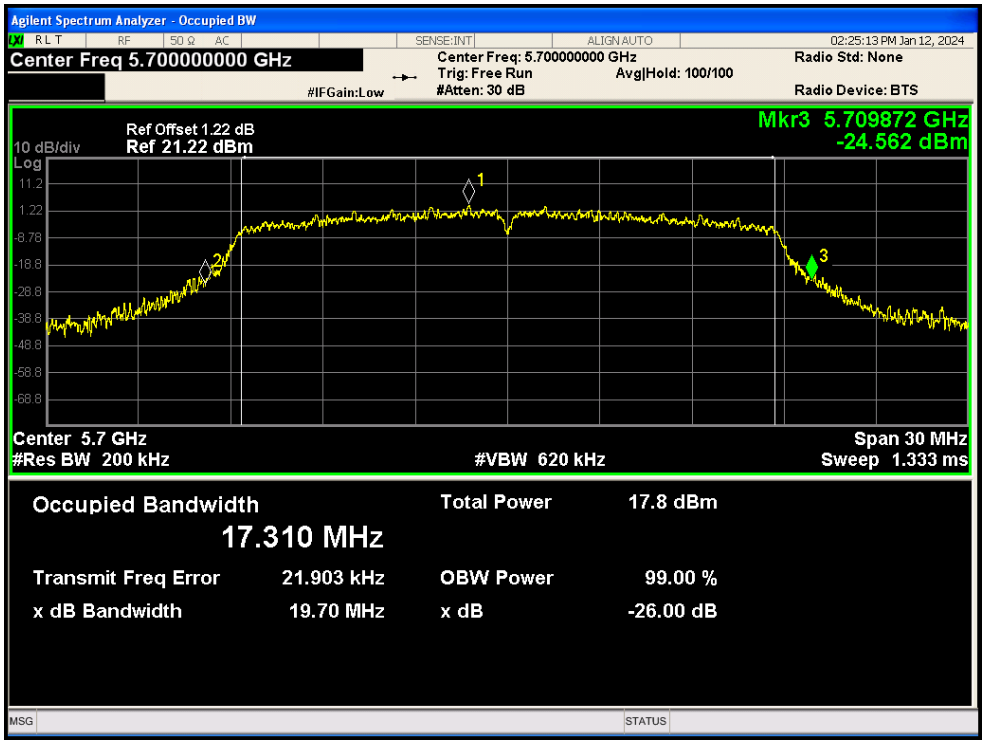
-26dB Bandwidth NVNT ac20 5500MHz Ant1



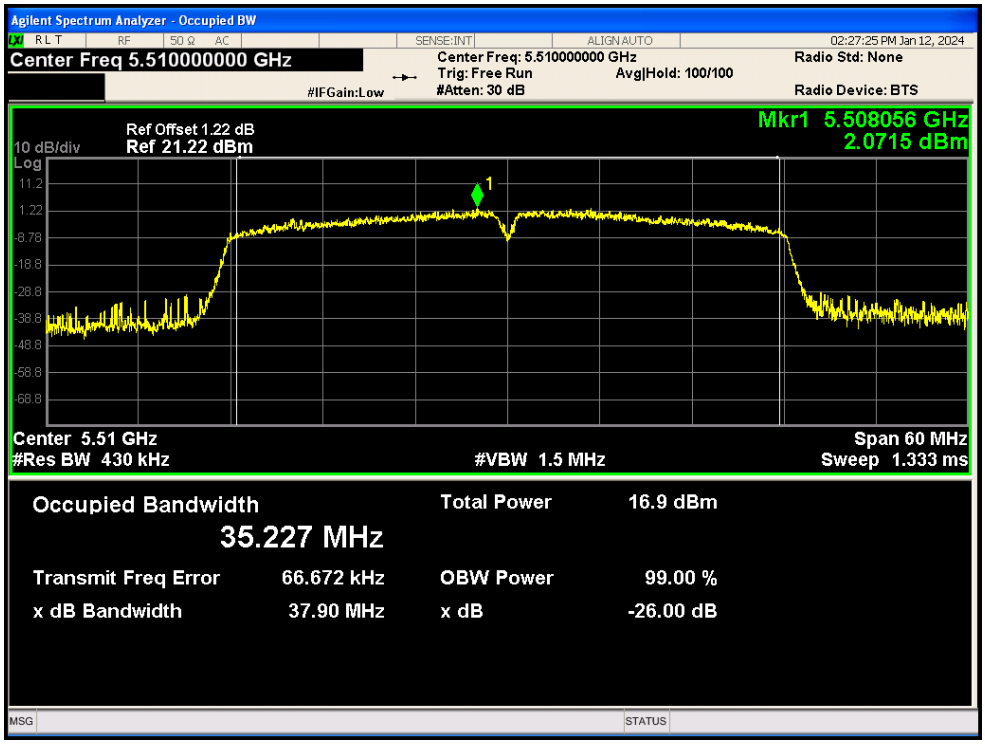
-26dB Bandwidth NVNT ac20 5600MHz Ant1



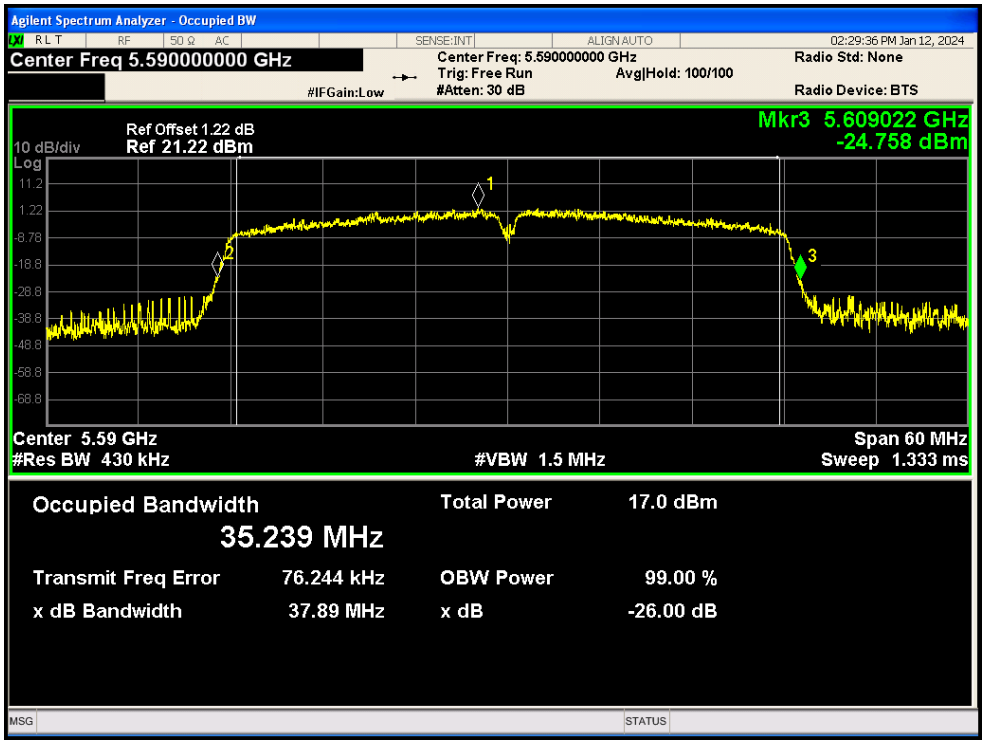
-26dB Bandwidth NVNT ac20 5700MHz Ant1



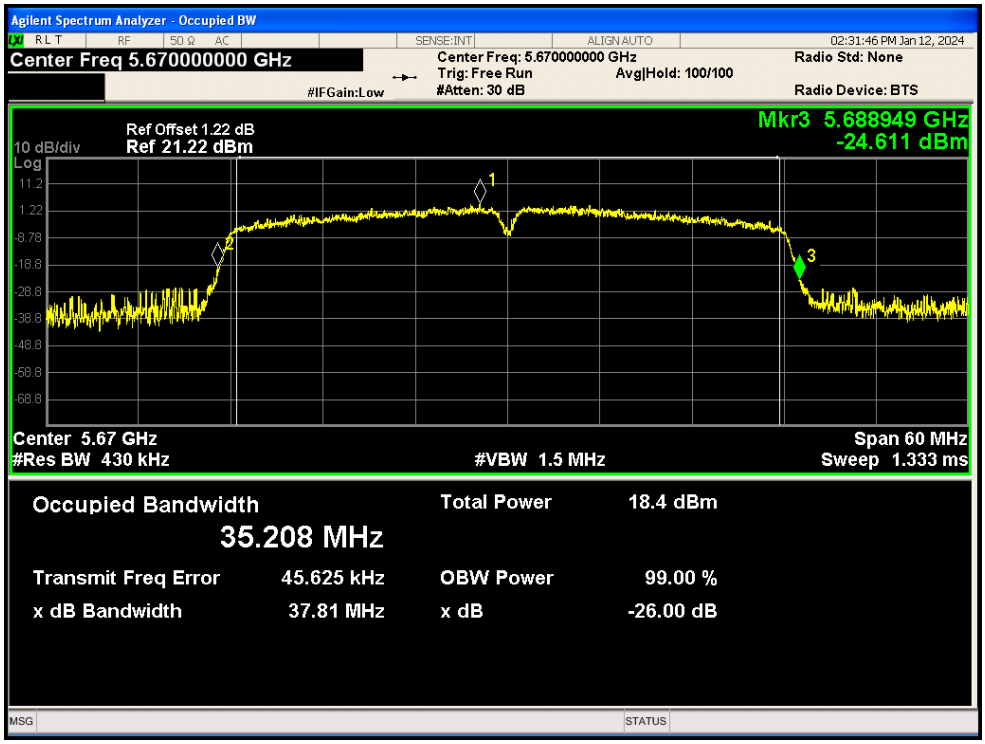
-26dB Bandwidth NVNT ac40 5510MHz Ant1



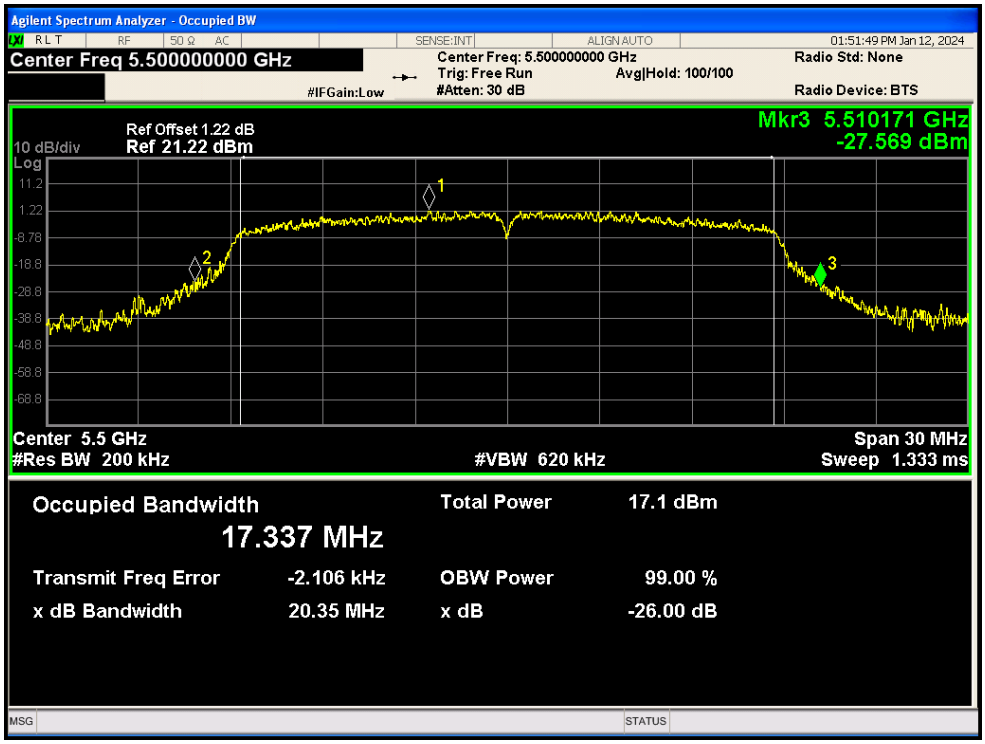
-26dB Bandwidth NVNT ac40 5590MHz Ant1



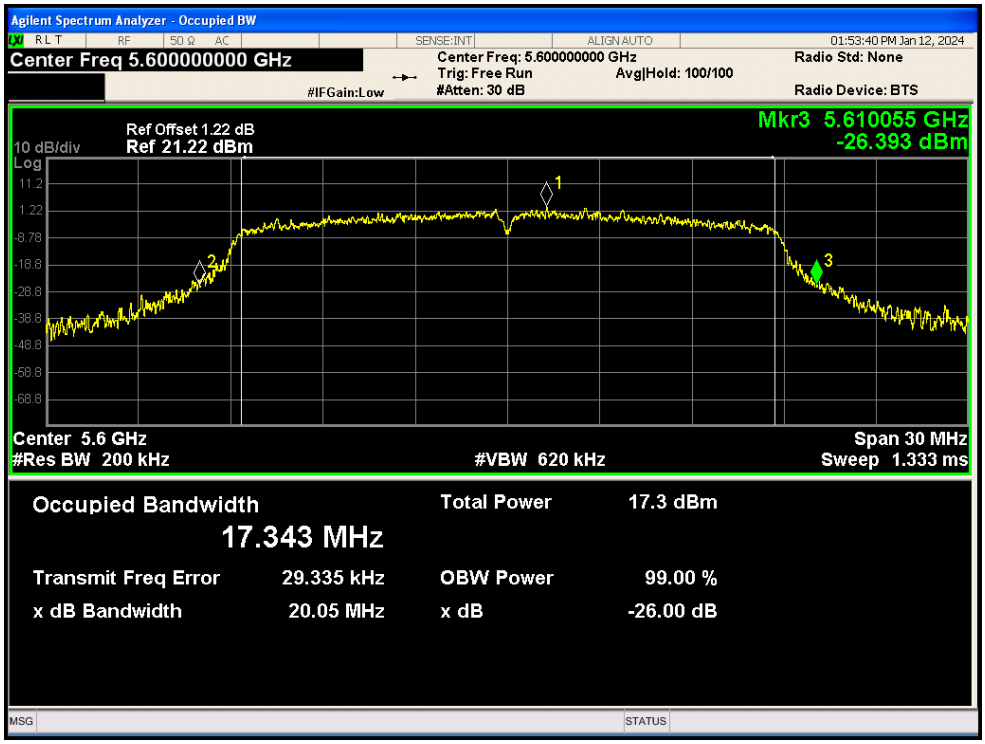
-26dB Bandwidth NVNT ac40 5670MHz Ant1



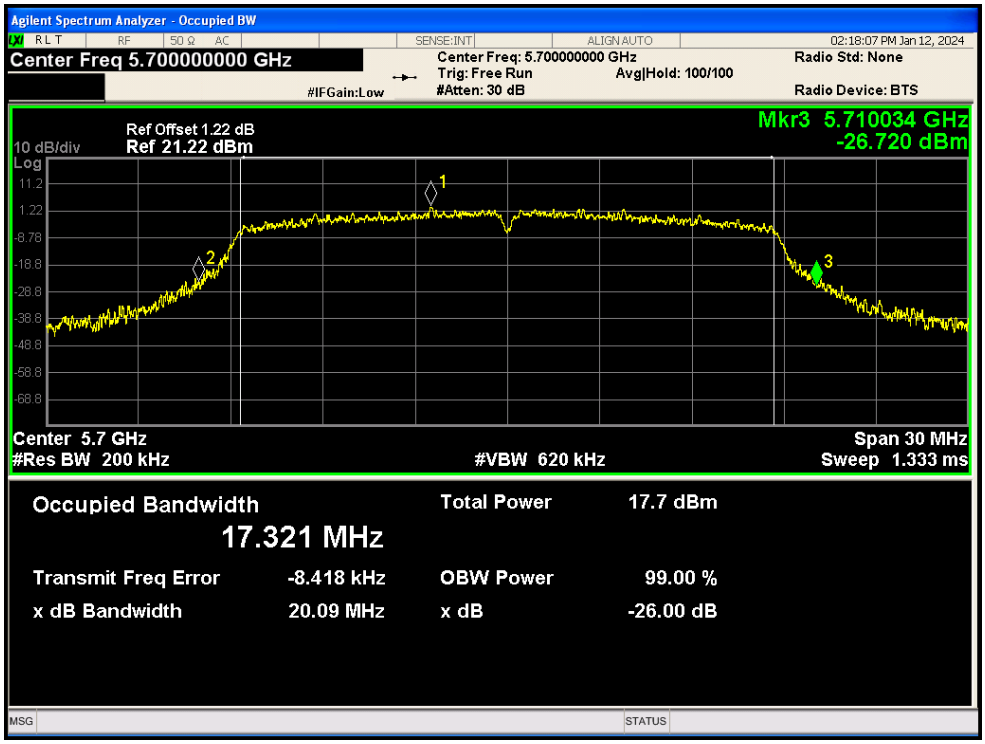
-26dB Bandwidth NVNT n20 5500MHz Ant1



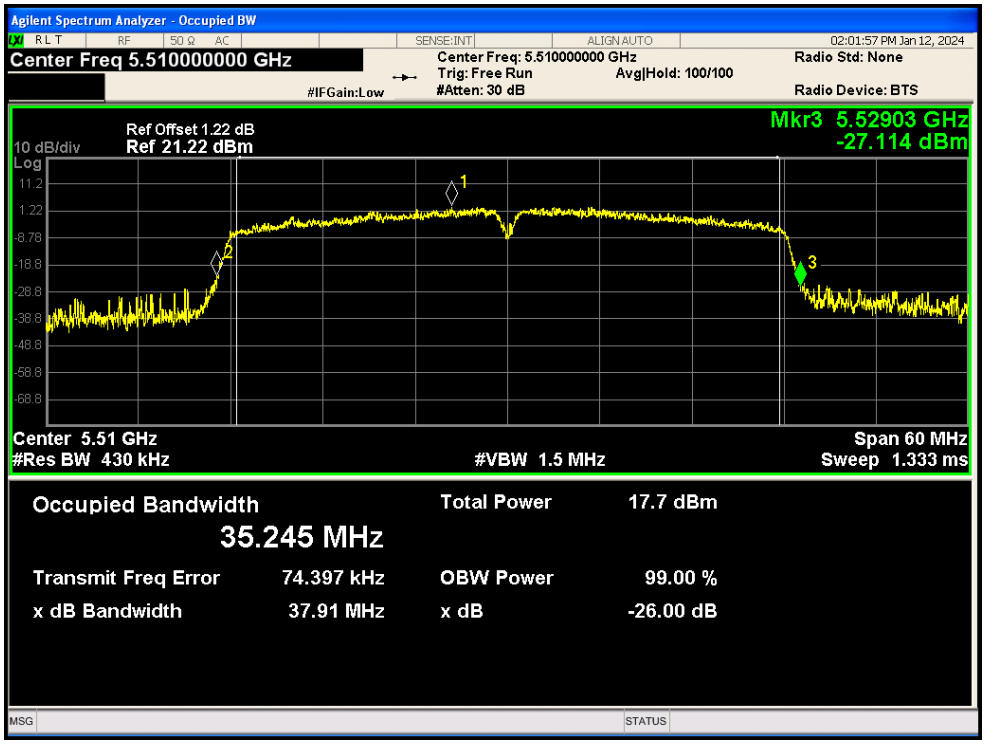
-26dB Bandwidth NVNT n20 5600MHz Ant1



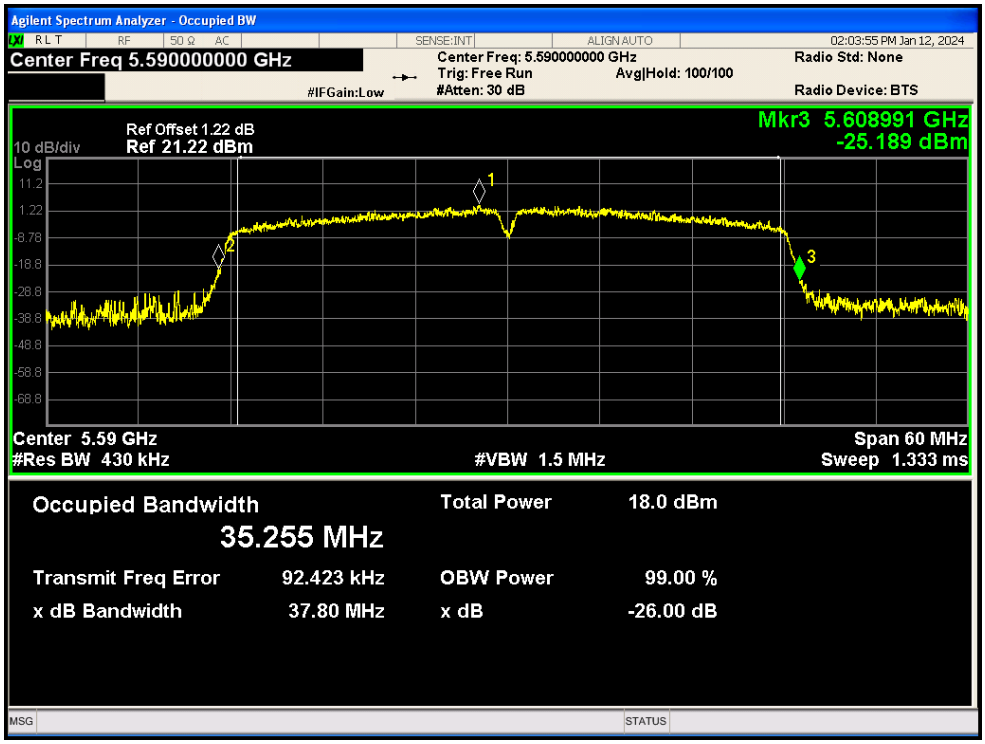
-26dB Bandwidth NVNT n20 5700MHz Ant1



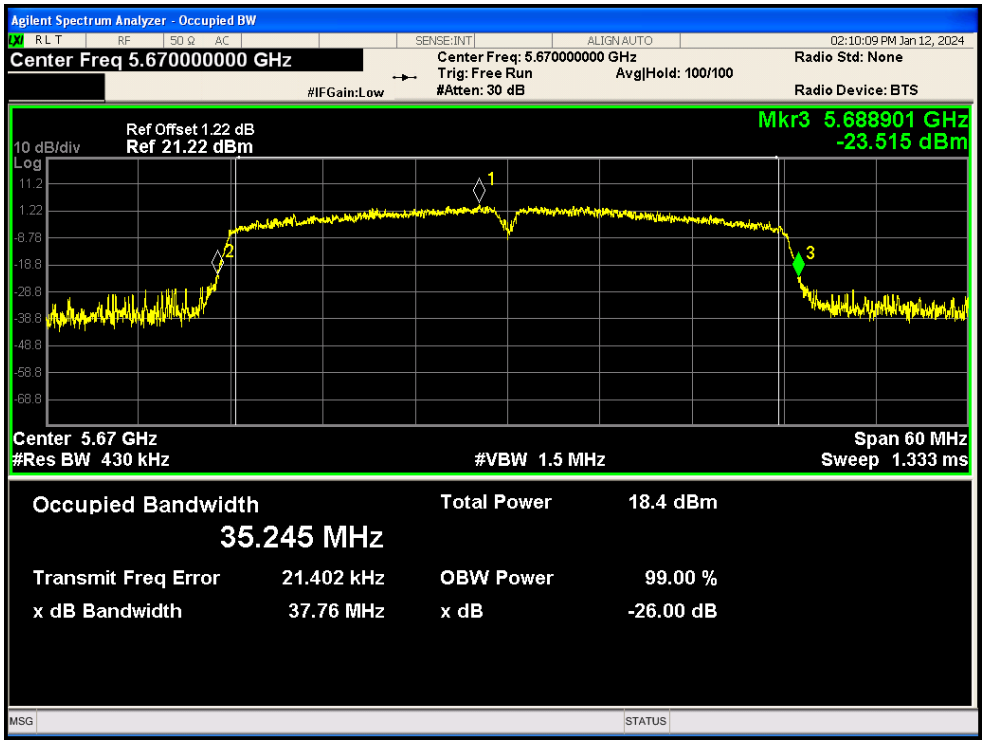
-26dB Bandwidth NVNT n40 5510MHz Ant1



-26dB Bandwidth NVNT n40 5590MHz Ant1



-26dB Bandwidth NVNT n40 5670MHz Ant1

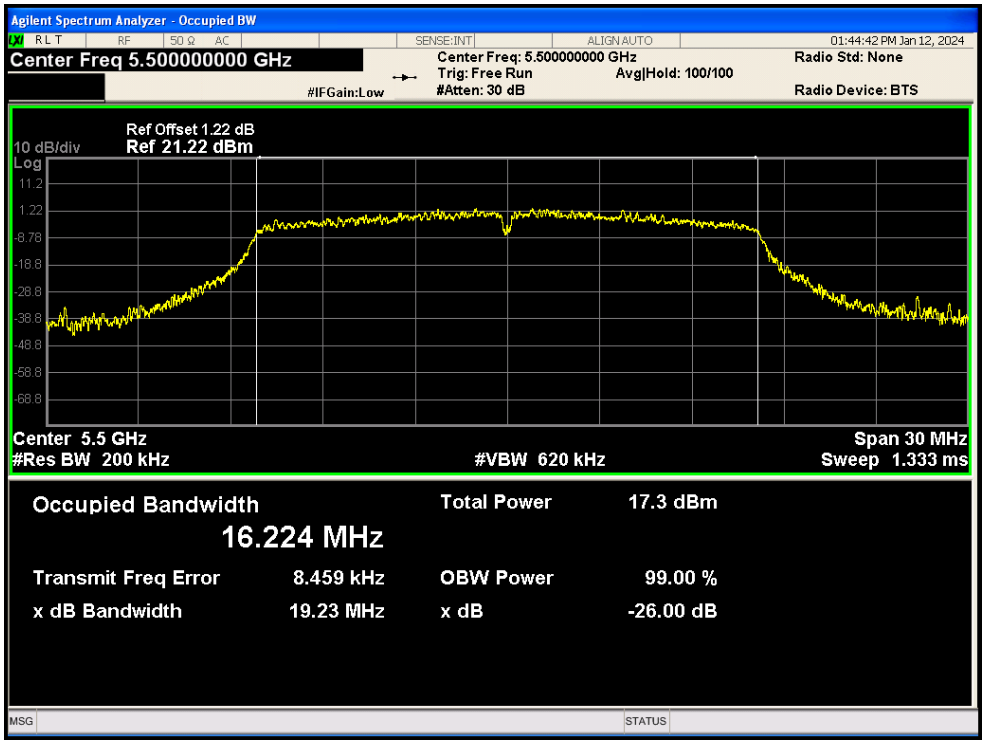


Occupied Channel Bandwidth

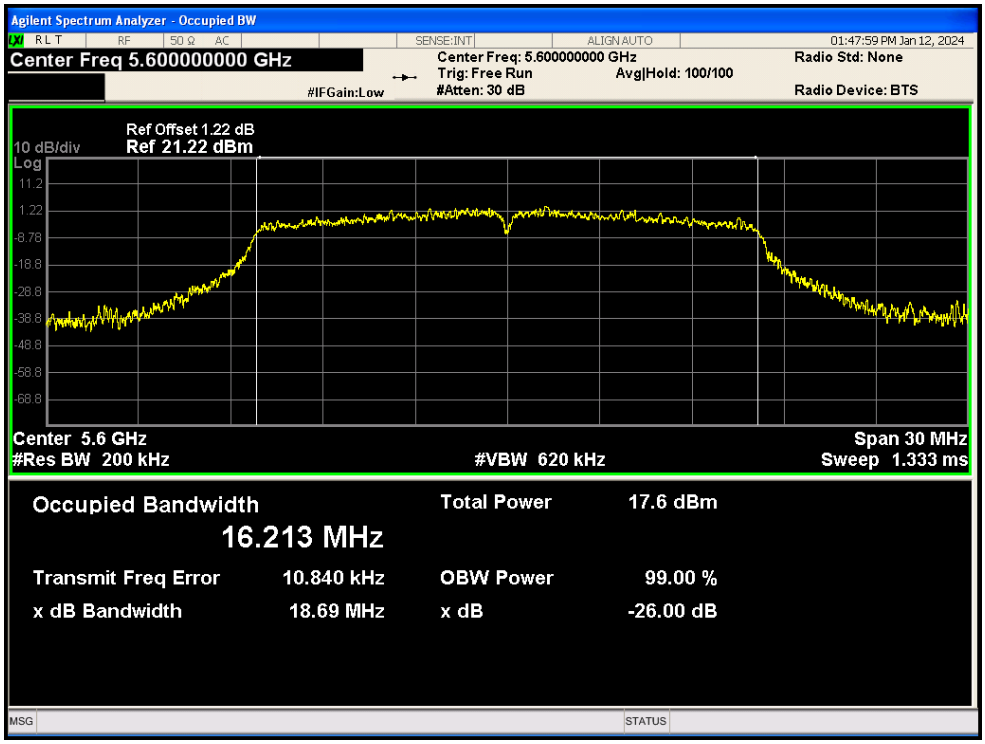
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5500	Ant1	16.224
NVNT	a	5600	Ant1	16.213
NVNT	a	5700	Ant1	16.217

NVNT	ac20	5500	Ant1	17.318
NVNT	ac20	5600	Ant1	17.309
NVNT	ac20	5700	Ant1	17.318
NVNT	ac40	5510	Ant1	35.239
NVNT	ac40	5590	Ant1	35.224
NVNT	ac40	5670	Ant1	35.26
NVNT	n20	5500	Ant1	17.319
NVNT	n20	5600	Ant1	17.334
NVNT	n20	5700	Ant1	17.301
NVNT	n40	5510	Ant1	35.23
NVNT	n40	5590	Ant1	35.231
NVNT	n40	5670	Ant1	35.273

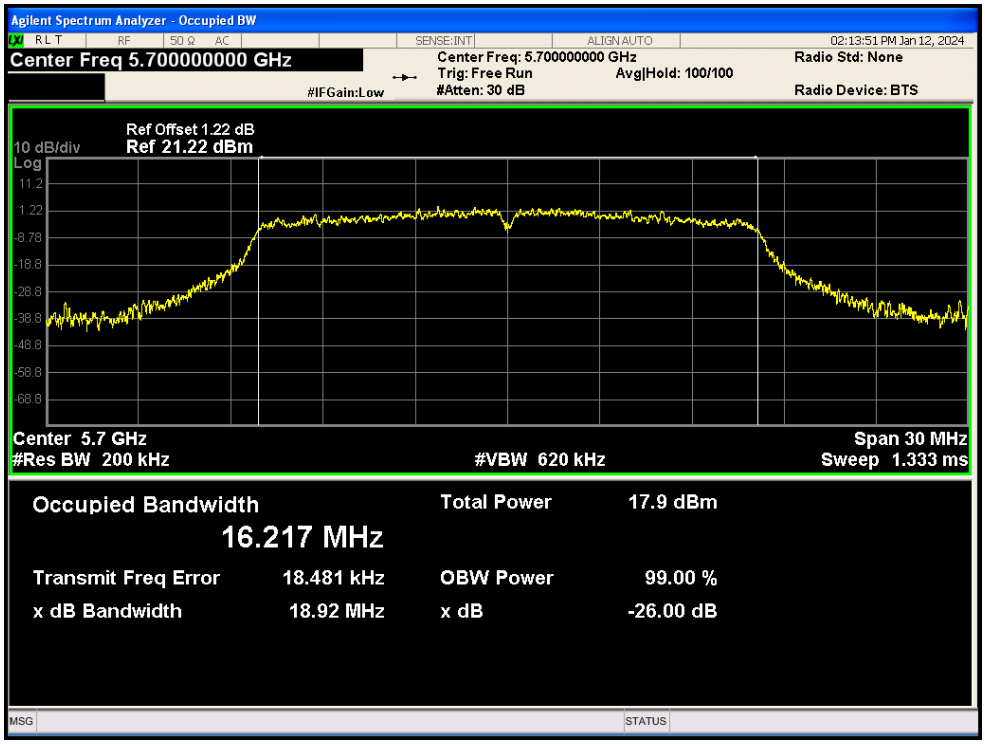
OBW NVNT a 5500MHz Ant1



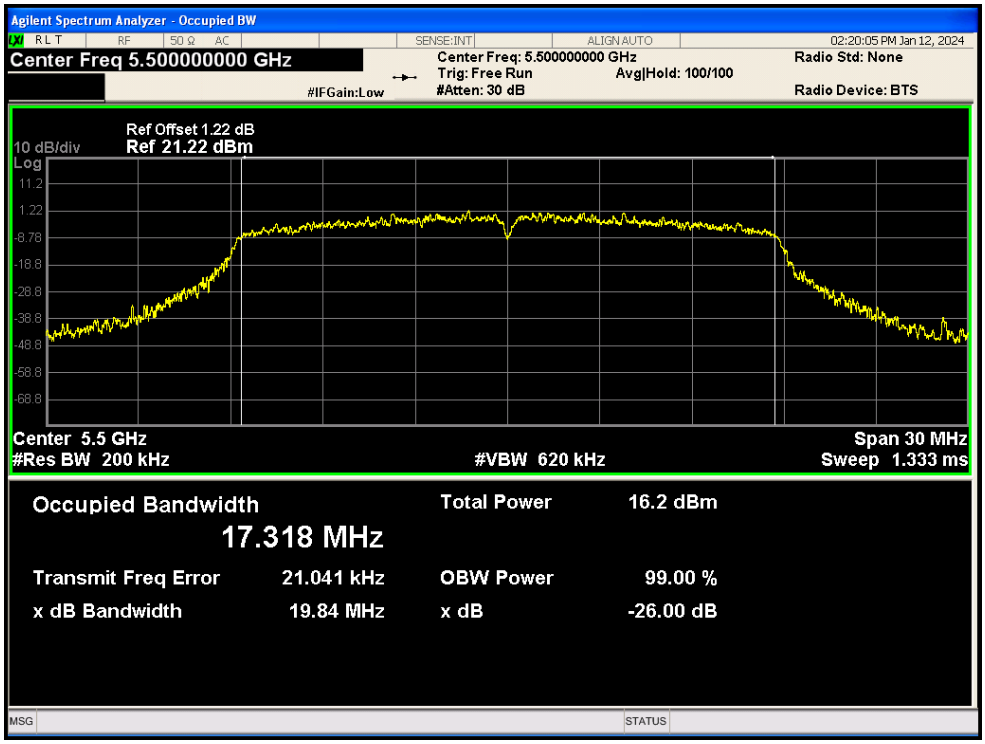
OBW NVNT a 5600MHz Ant1



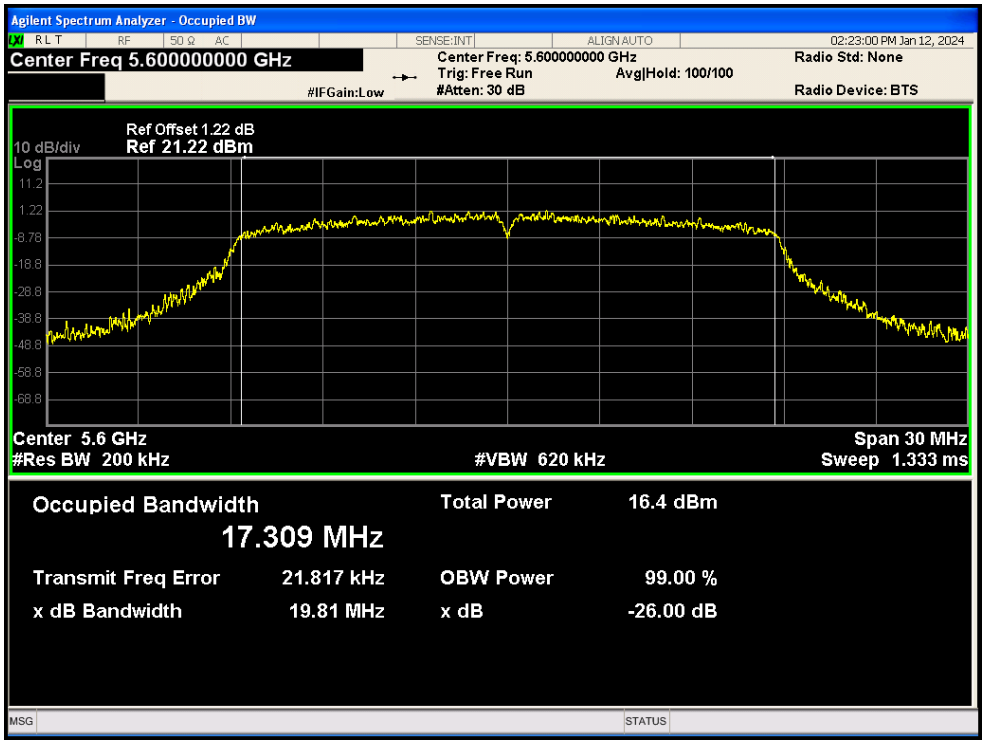
OBW NVNT a 5700MHz Ant1



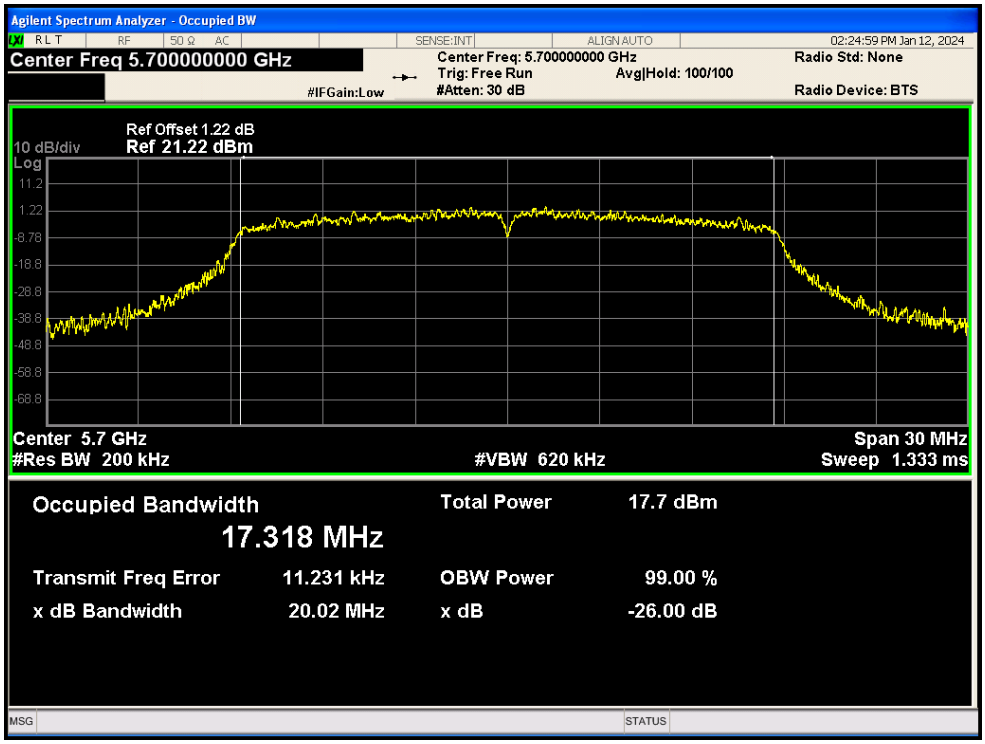
OBW NVNT ac20 5500MHz Ant1



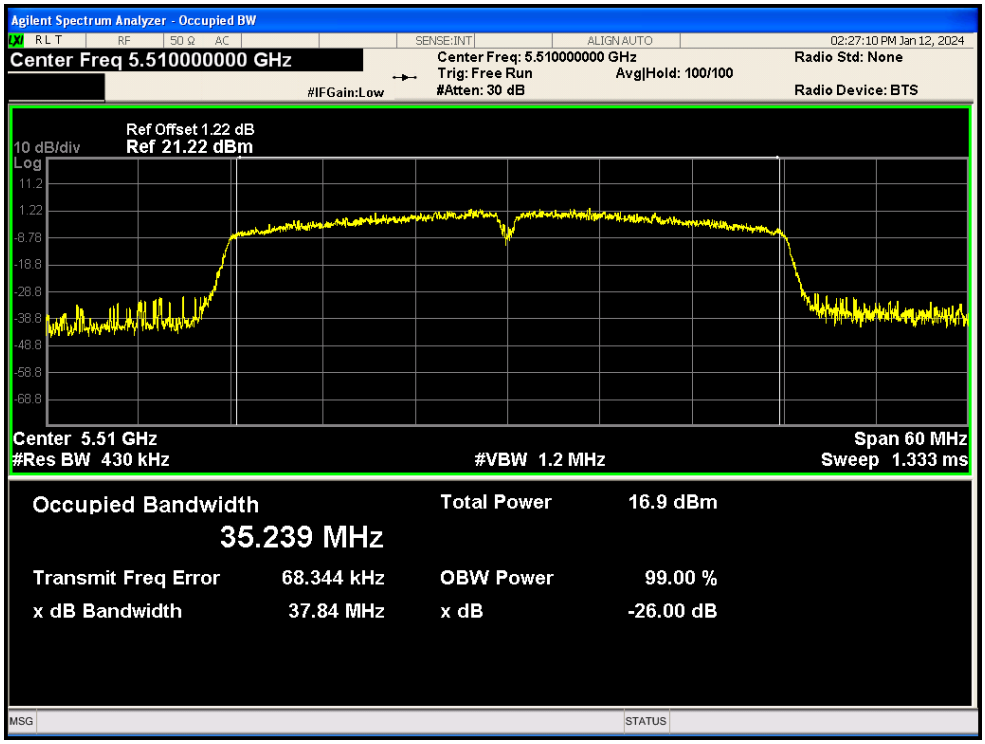
OBW NVNT ac20 5600MHz Ant1



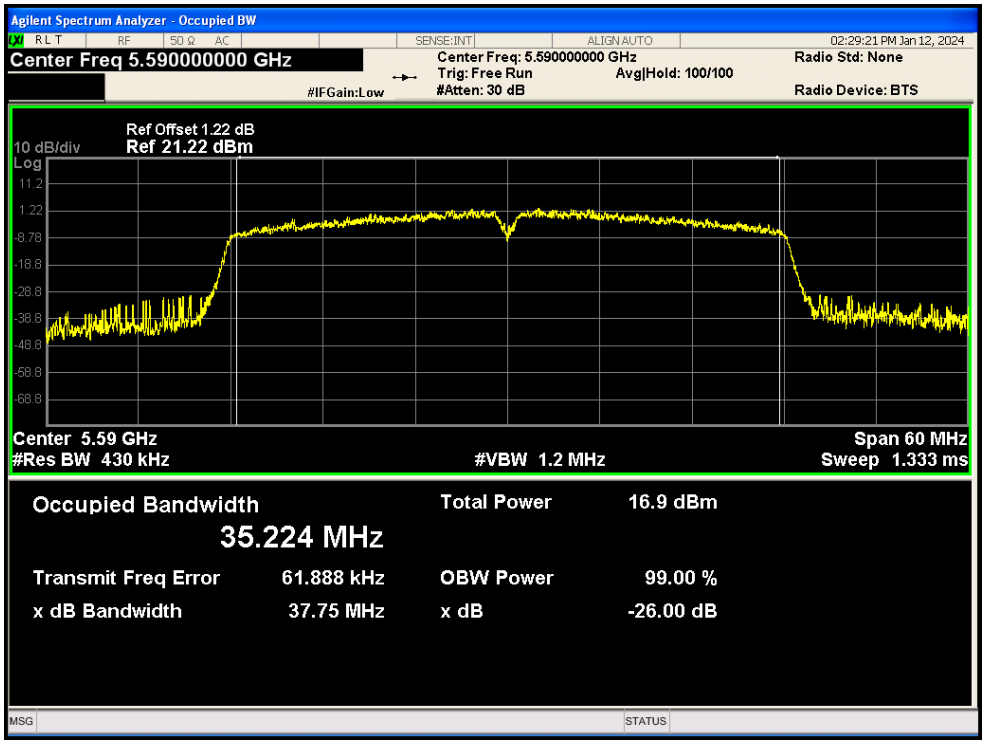
OBW NVNT ac20 5700MHz Ant1



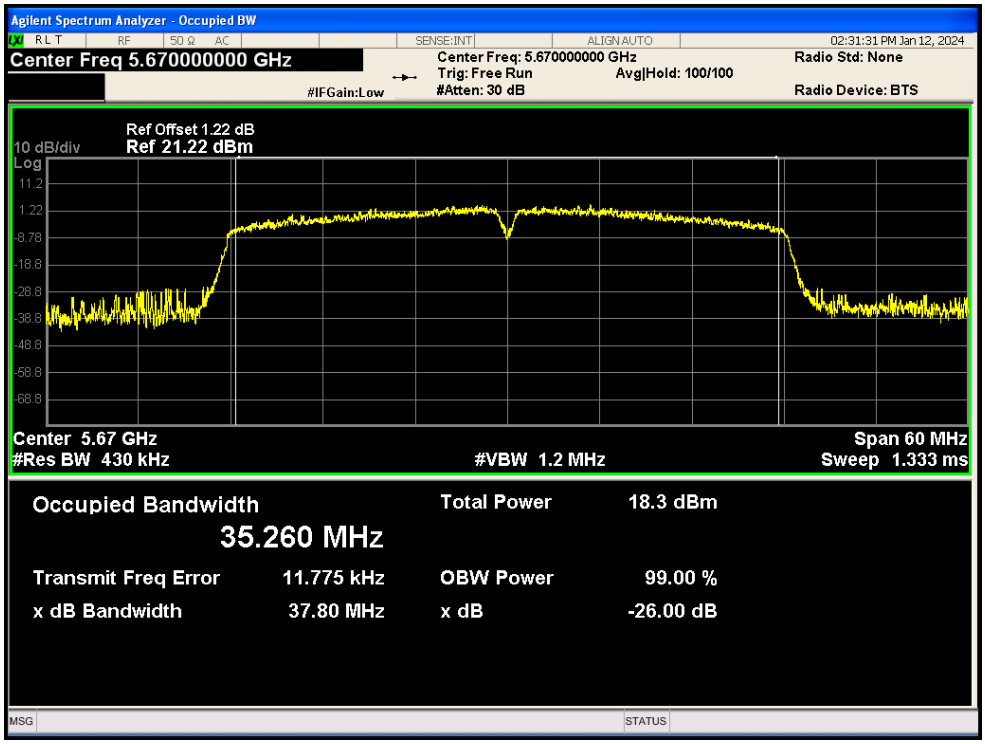
OBW NVNT ac40 5510MHz Ant1



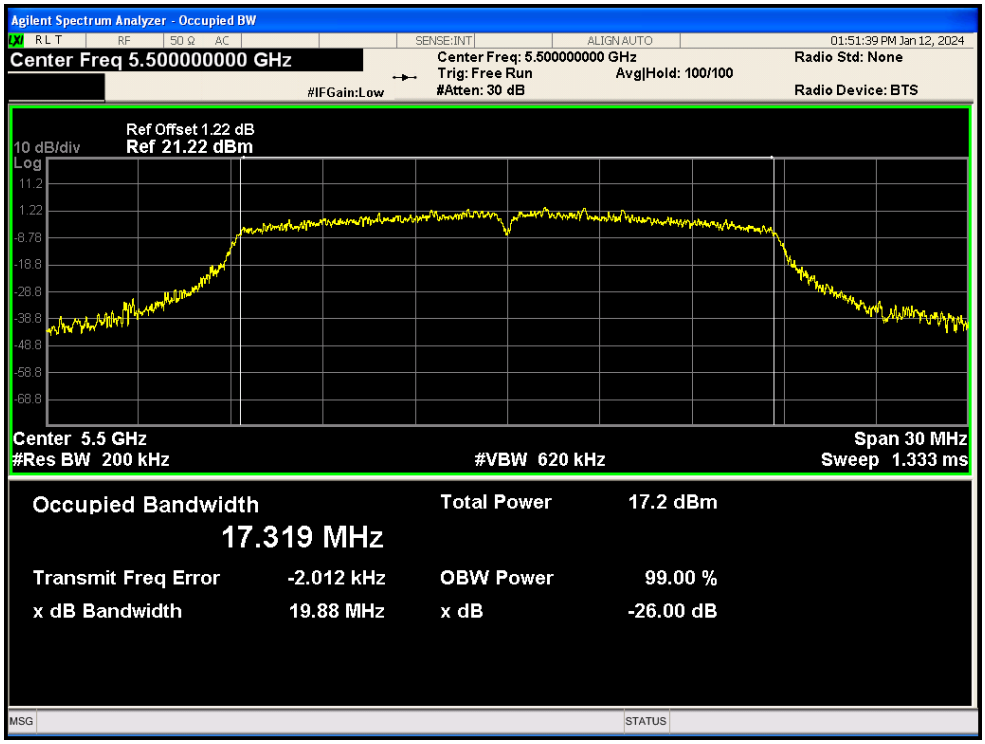
OBW NVNT ac40 5590MHz Ant1



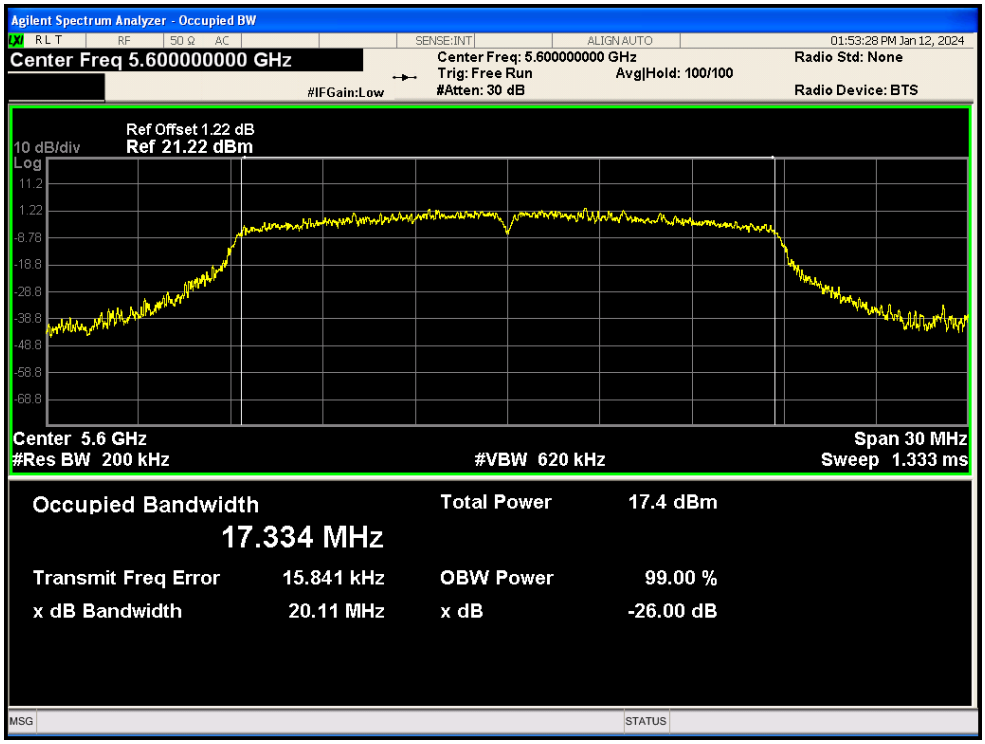
OBW NVNT ac40 5670MHz Ant1



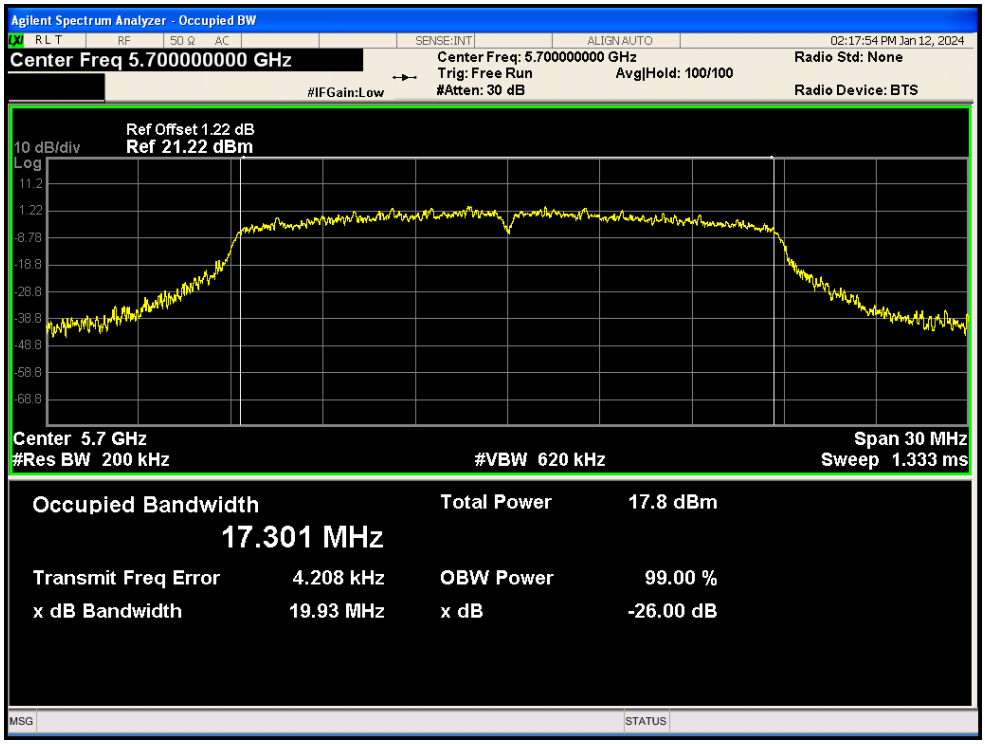
OBW NVNT n20 5500MHz Ant1



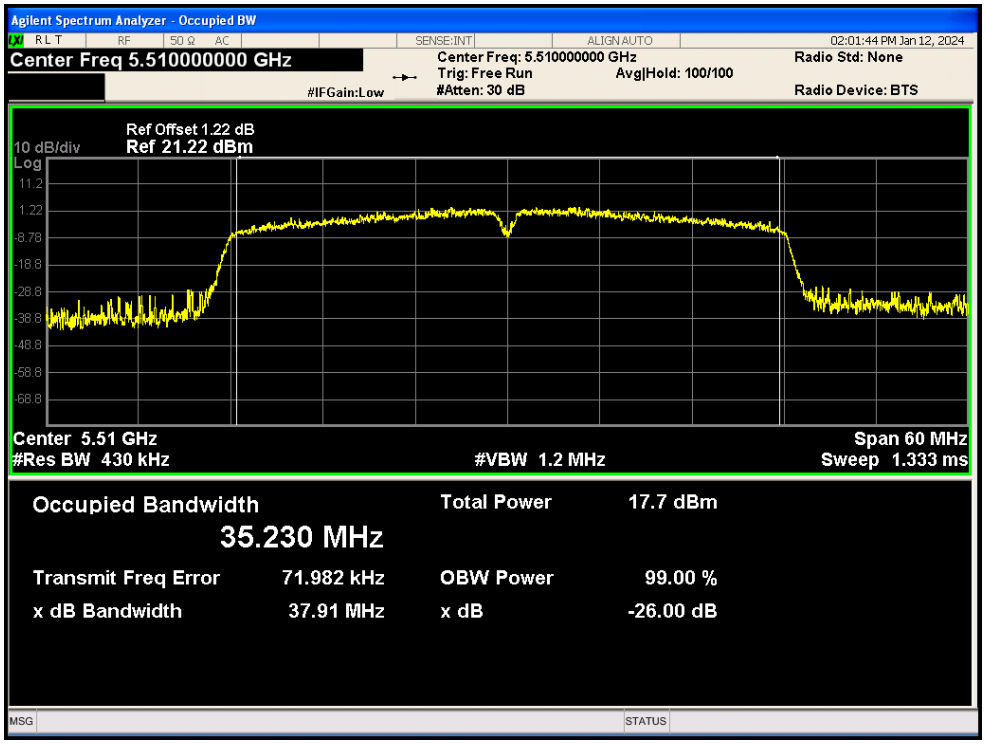
OBW NVNT n20 5600MHz Ant1



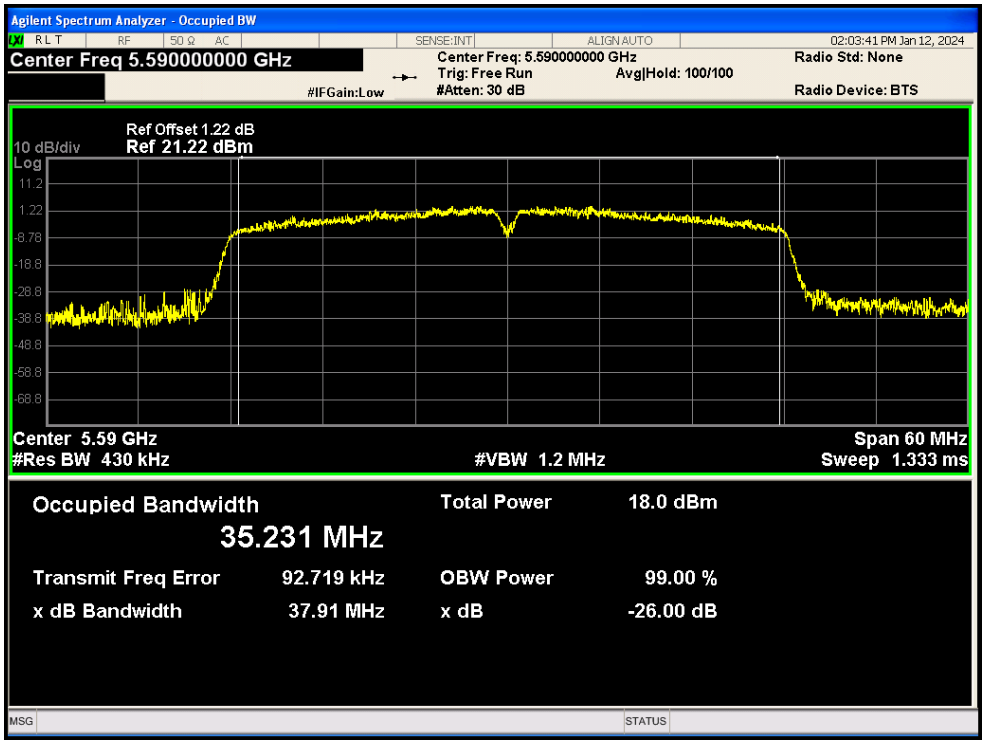
OBW NVNT n20 5700MHz Ant1



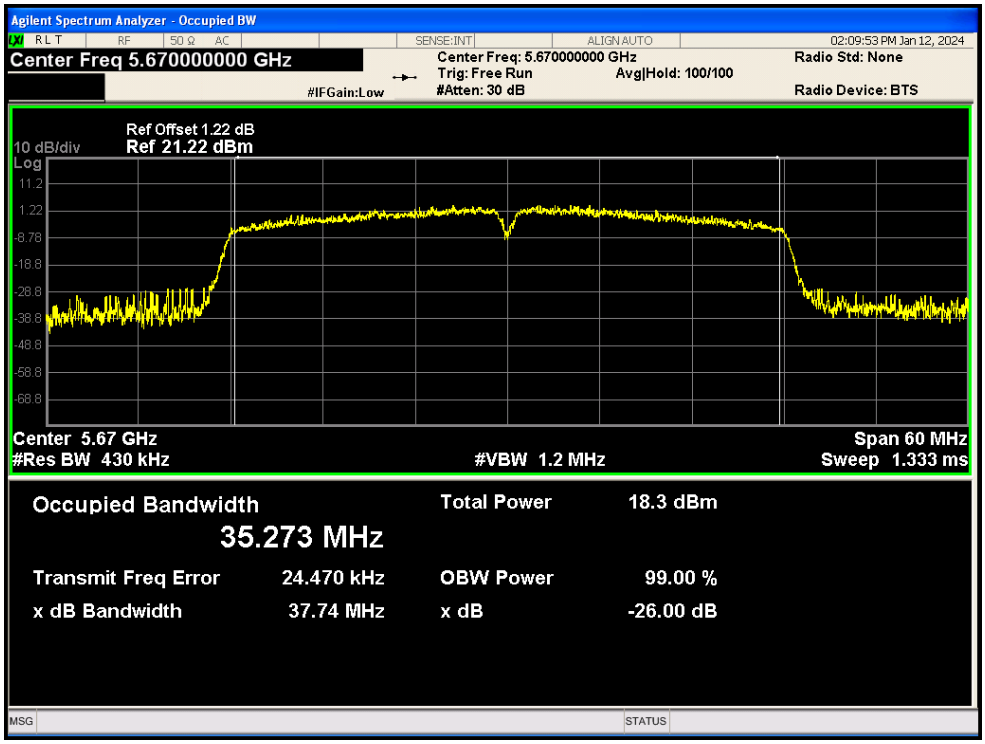
OBW NVNT n40 5510MHz Ant1



OBW NVNT n40 5590MHz Ant1



OBW NVNT n40 5670MHz Ant1

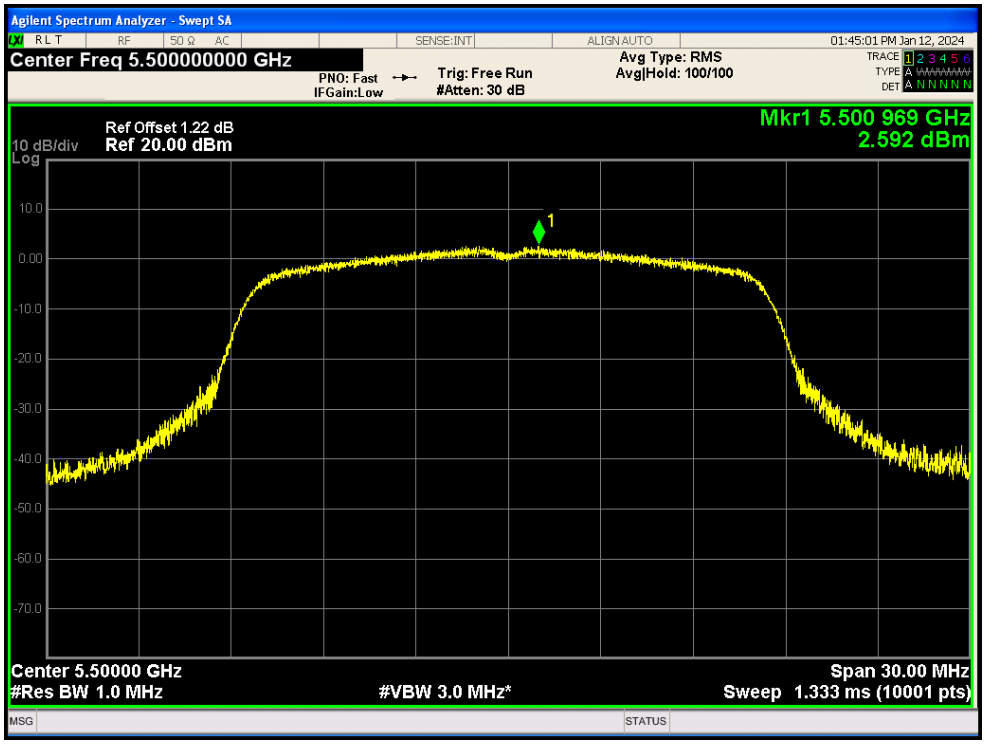


Maximum Power Spectral Density Level

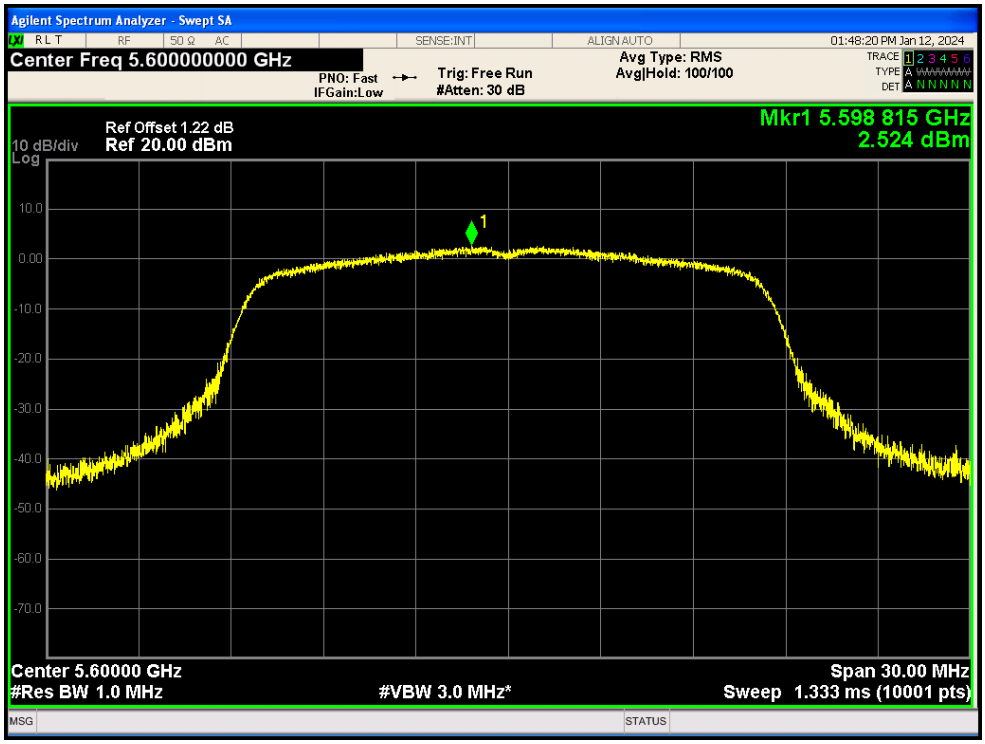
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant1	2.592	11	Pass
NVNT	a	5600	Ant1	2.524	11	Pass

NVNT	a	5700	Ant1	2.992	11	Pass
NVNT	ac20	5500	Ant1	1.47	11	Pass
NVNT	ac20	5600	Ant1	1.666	11	Pass
NVNT	ac20	5700	Ant1	2.823	11	Pass
NVNT	ac40	5510	Ant1	-1.06	11	Pass
NVNT	ac40	5590	Ant1	-0.924	11	Pass
NVNT	ac40	5670	Ant1	0.546	11	Pass
NVNT	n20	5500	Ant1	2.231	11	Pass
NVNT	n20	5600	Ant1	2.52	11	Pass
NVNT	n20	5700	Ant1	2.862	11	Pass
NVNT	n40	5510	Ant1	-0.066	11	Pass
NVNT	n40	5590	Ant1	0.078	11	Pass
NVNT	n40	5670	Ant1	0.376	11	Pass

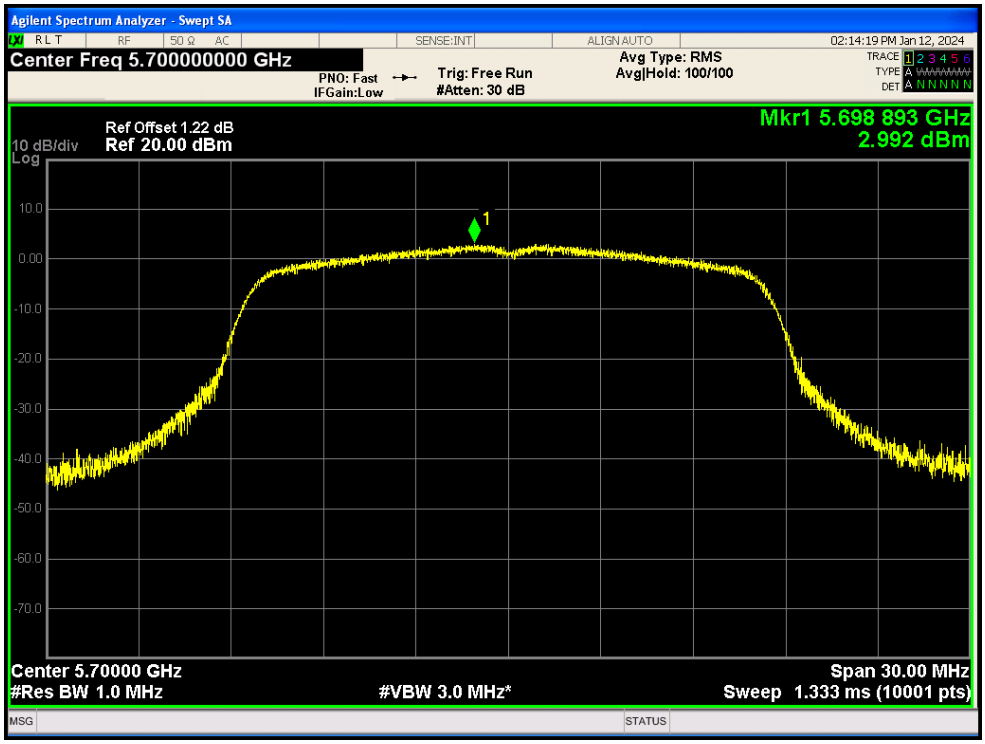
PSD NVNT a 5500MHz Ant1



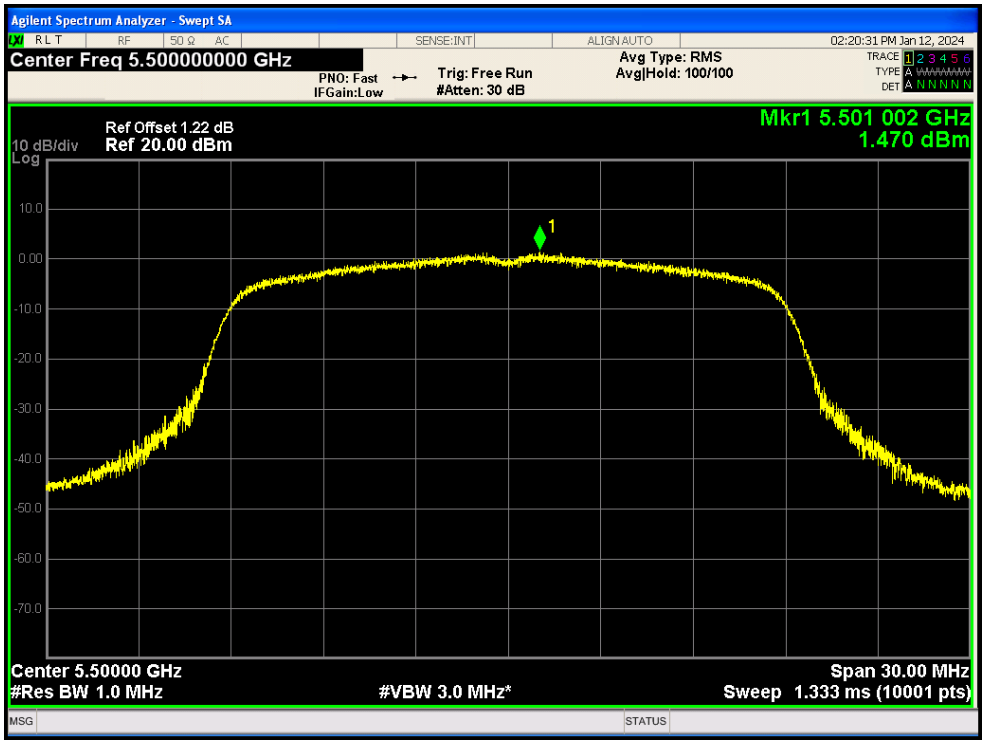
PSD NVNT a 5600MHz Ant1



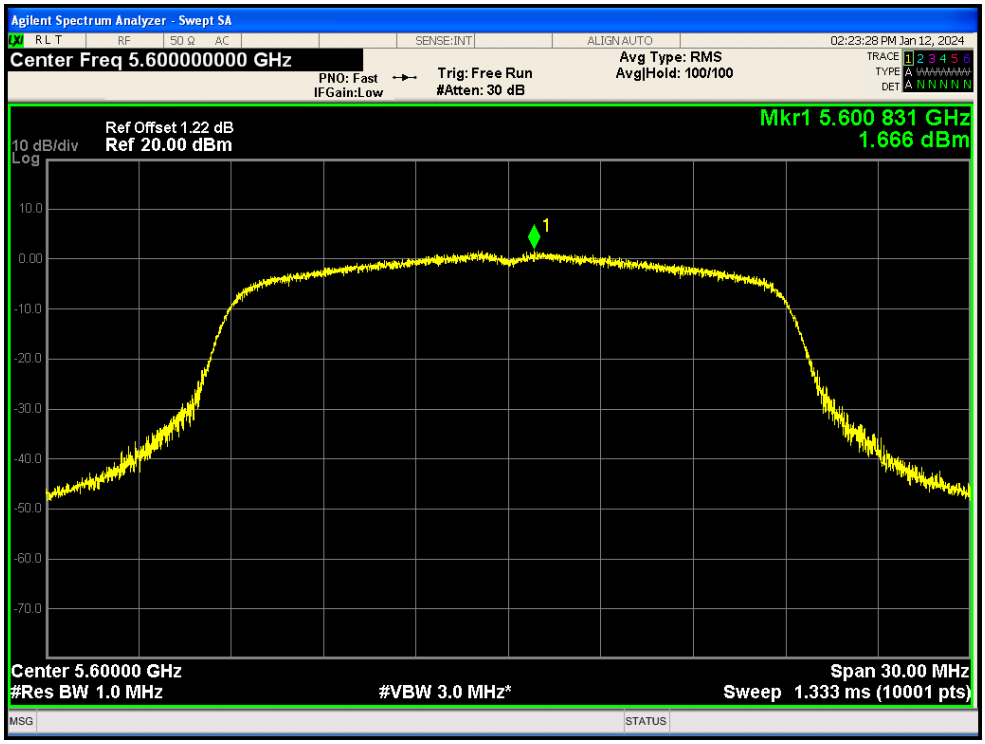
PSD NVNT a 5700MHz Ant1



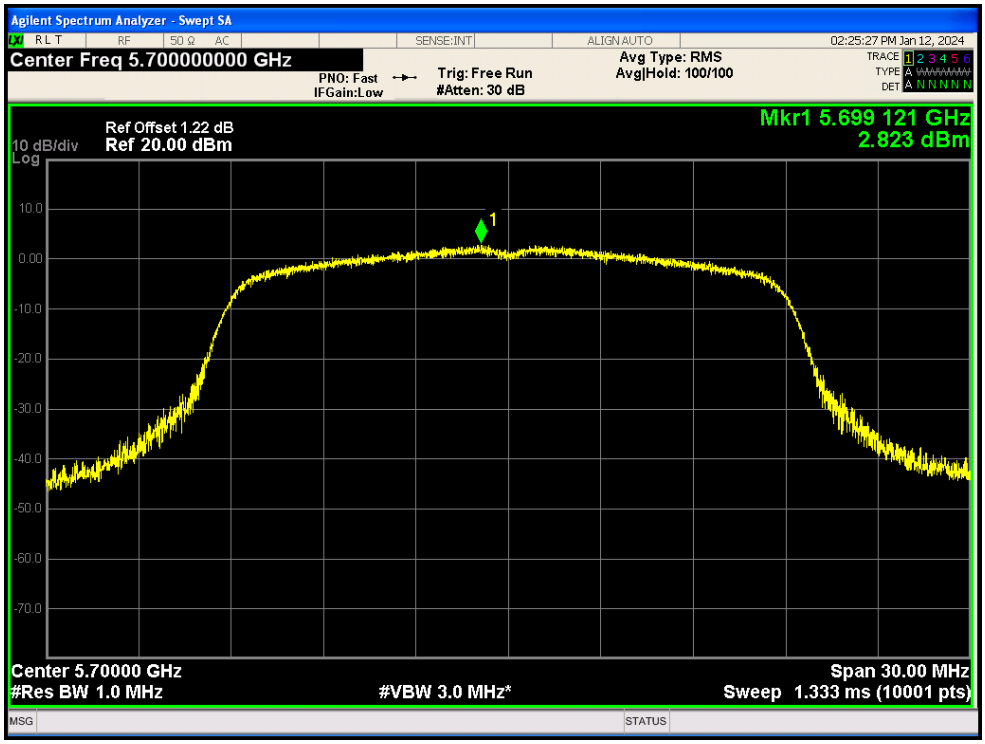
PSD NVNT ac20 5500MHz Ant1



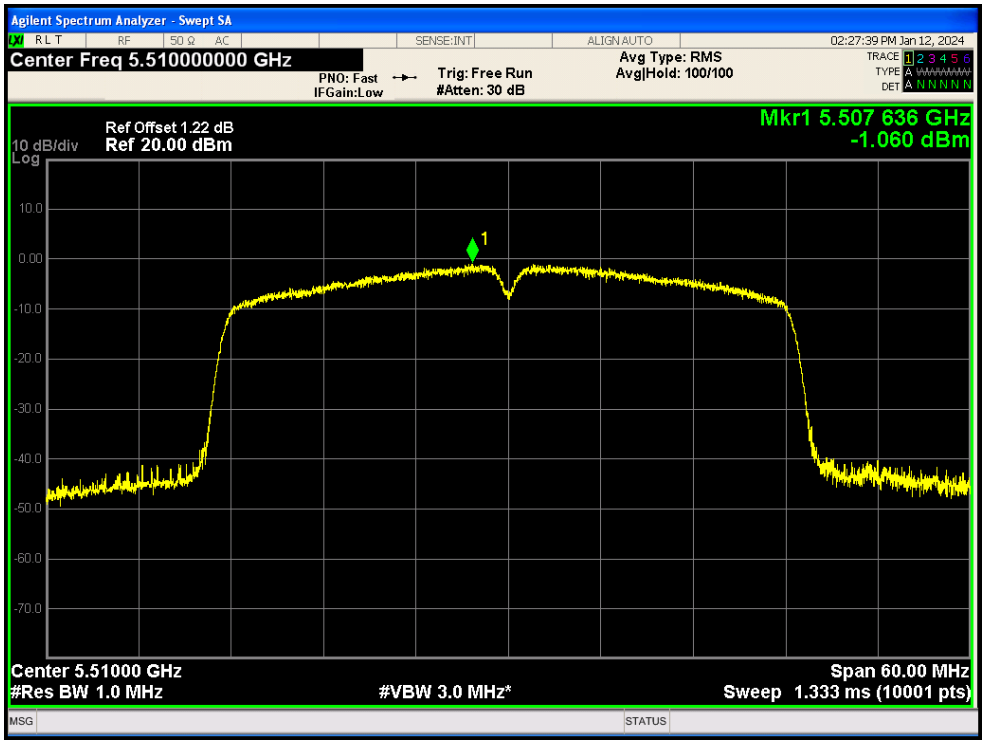
PSD NVNT ac20 5600MHz Ant1



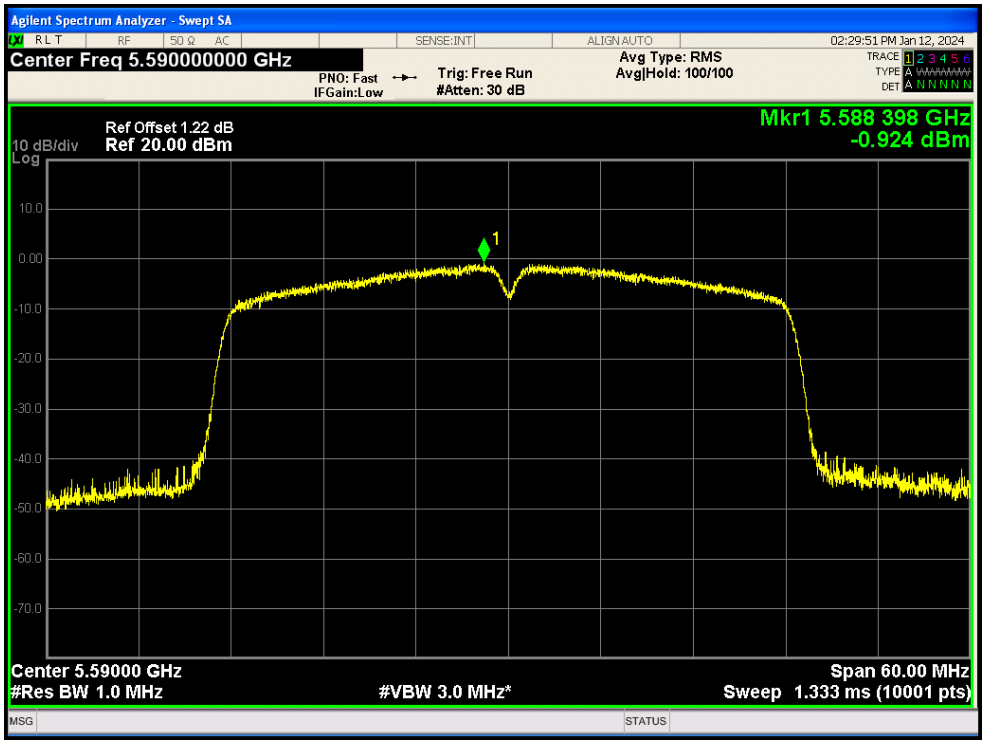
PSD NVNT ac20 5700MHz Ant1



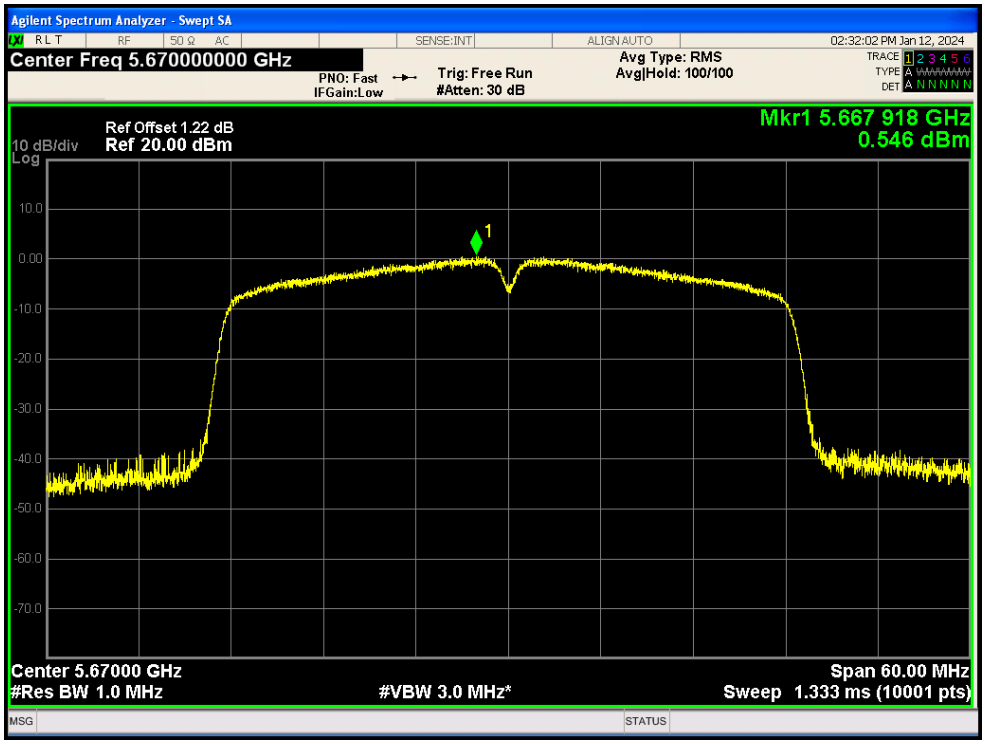
PSD NVNT ac40 5510MHz Ant1



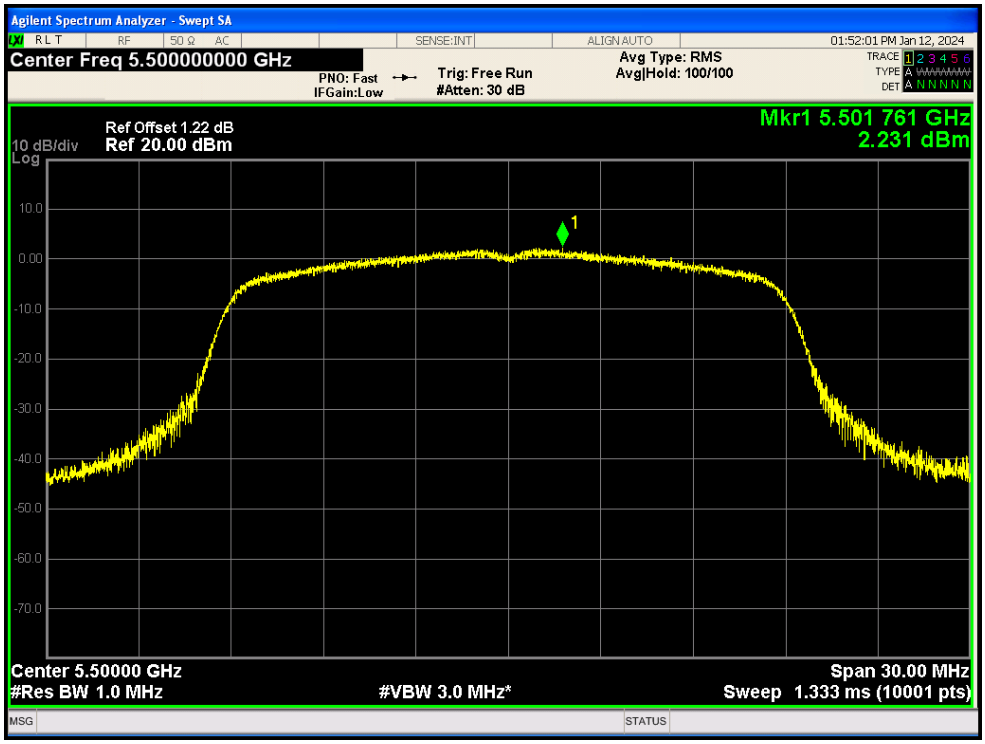
PSD NVNT ac40 5590MHz Ant1



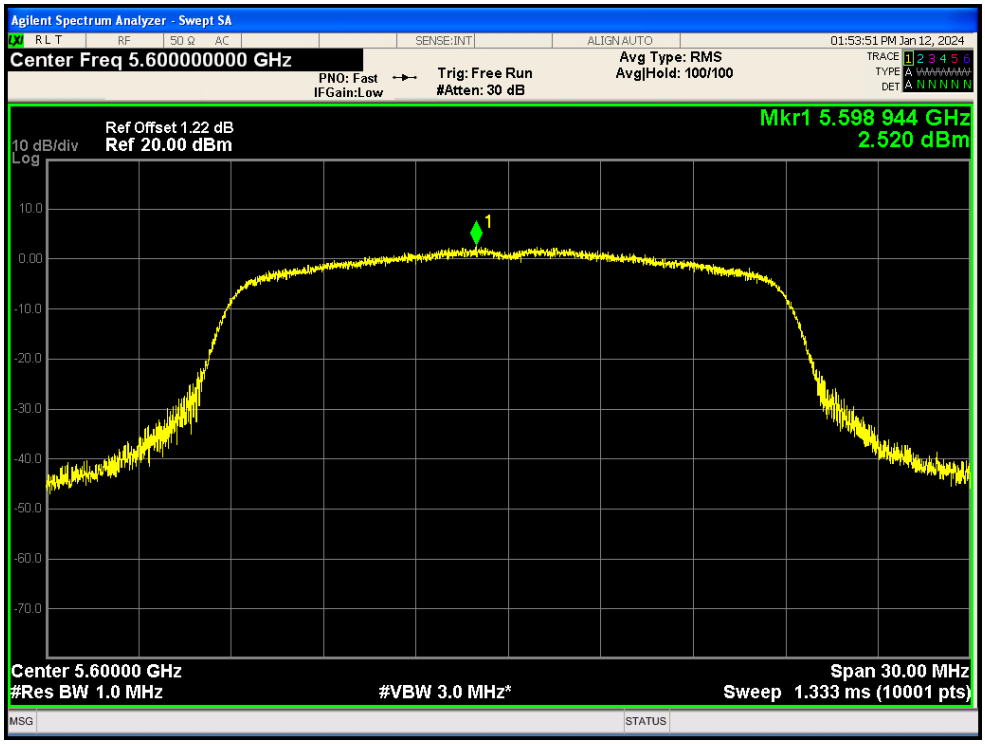
PSD NVNT ac40 5670MHz Ant1



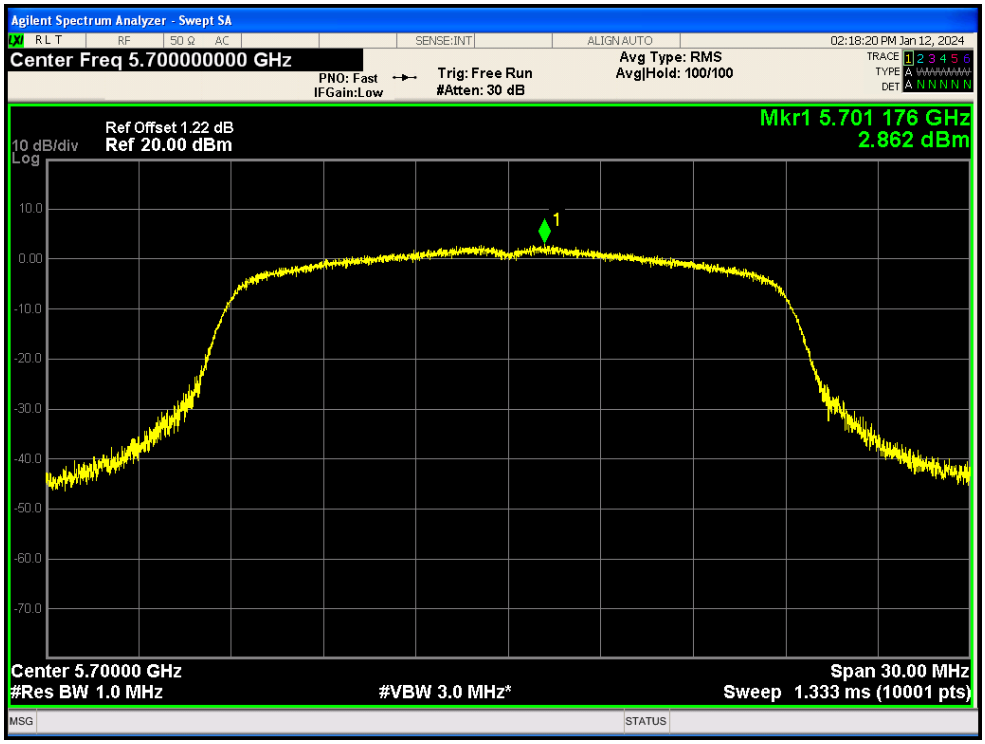
PSD NVNT n20 5500MHz Ant1



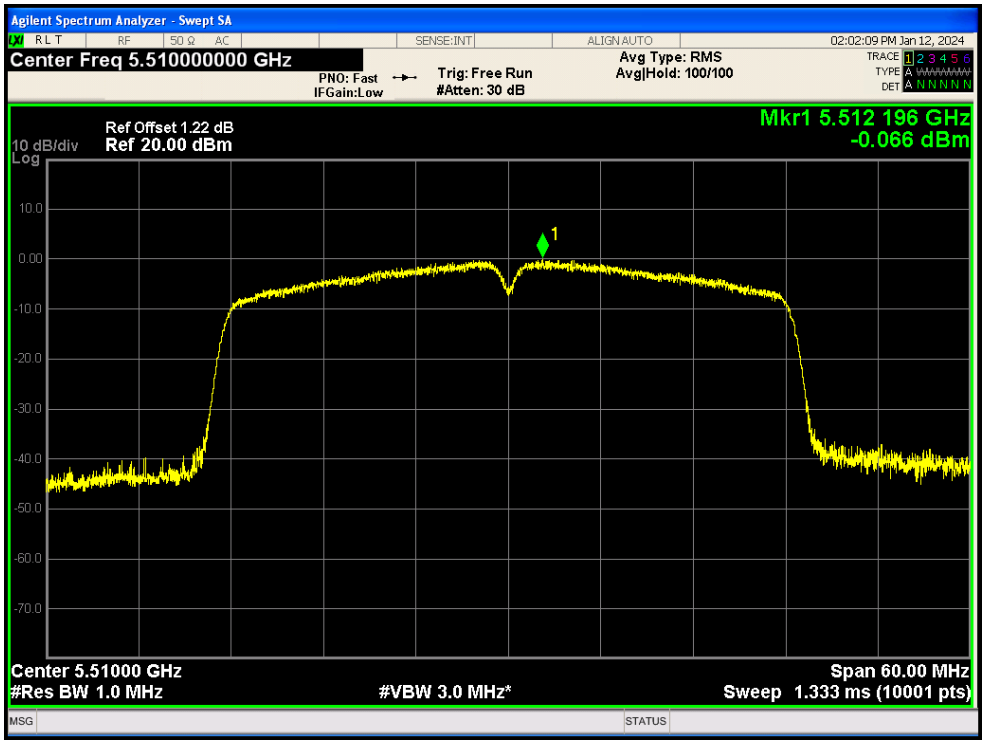
PSD NVNT n20 5600MHz Ant1



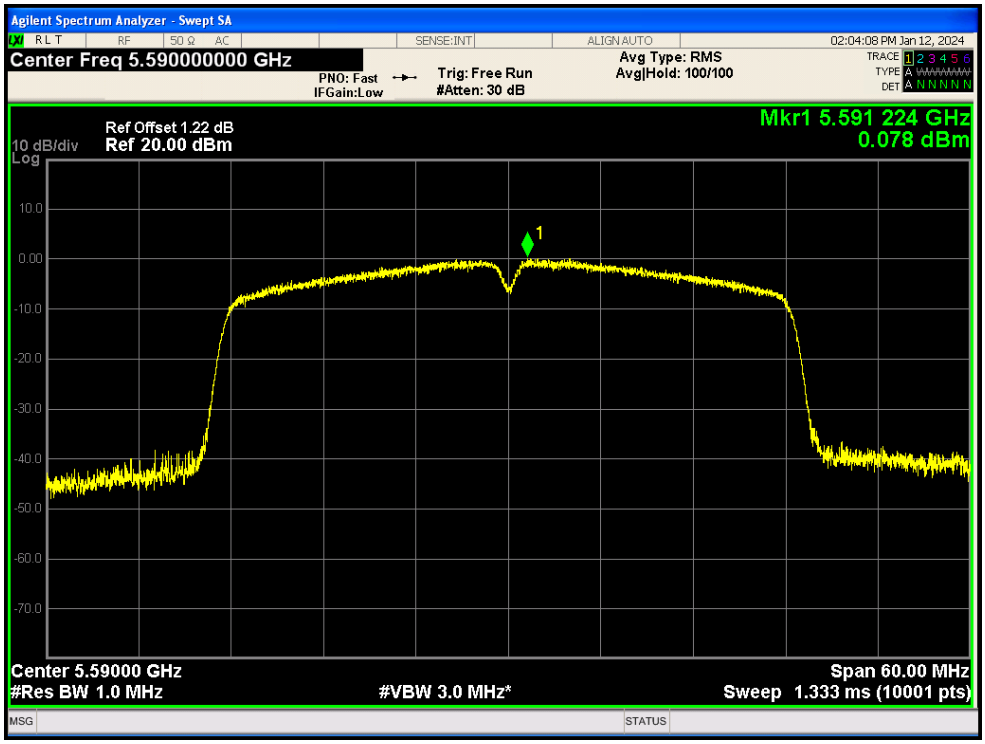
PSD NVNT n20 5700MHz Ant1



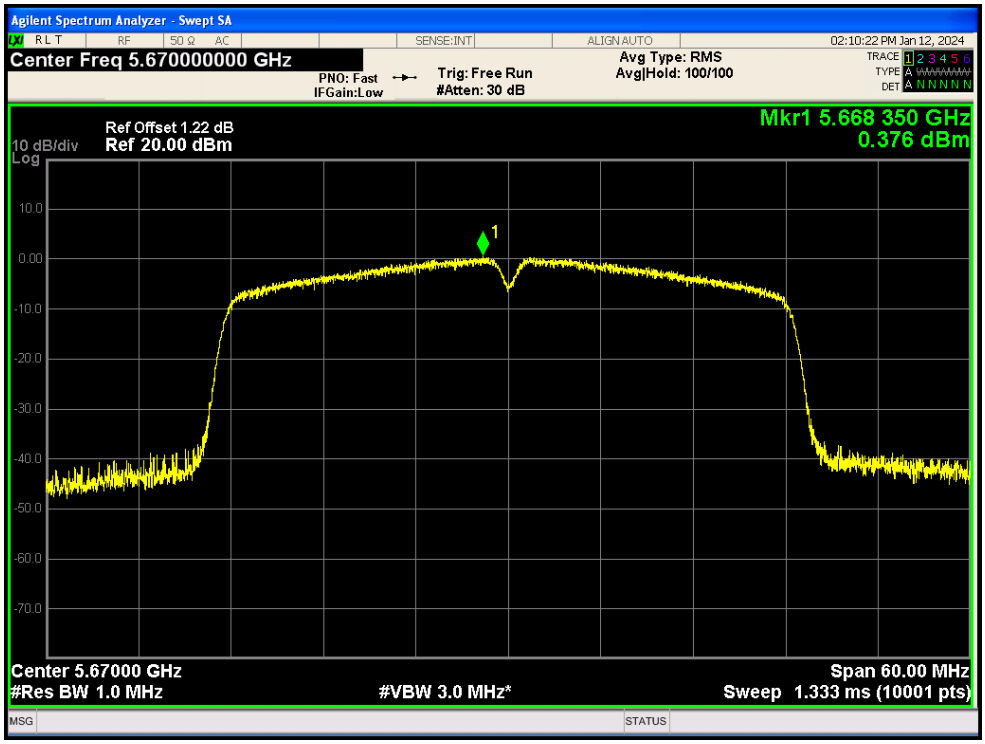
PSD NVNT n40 5510MHz Ant1



PSD NVNT n40 5590MHz Ant1



PSD NVNT n40 5670MHz Ant1



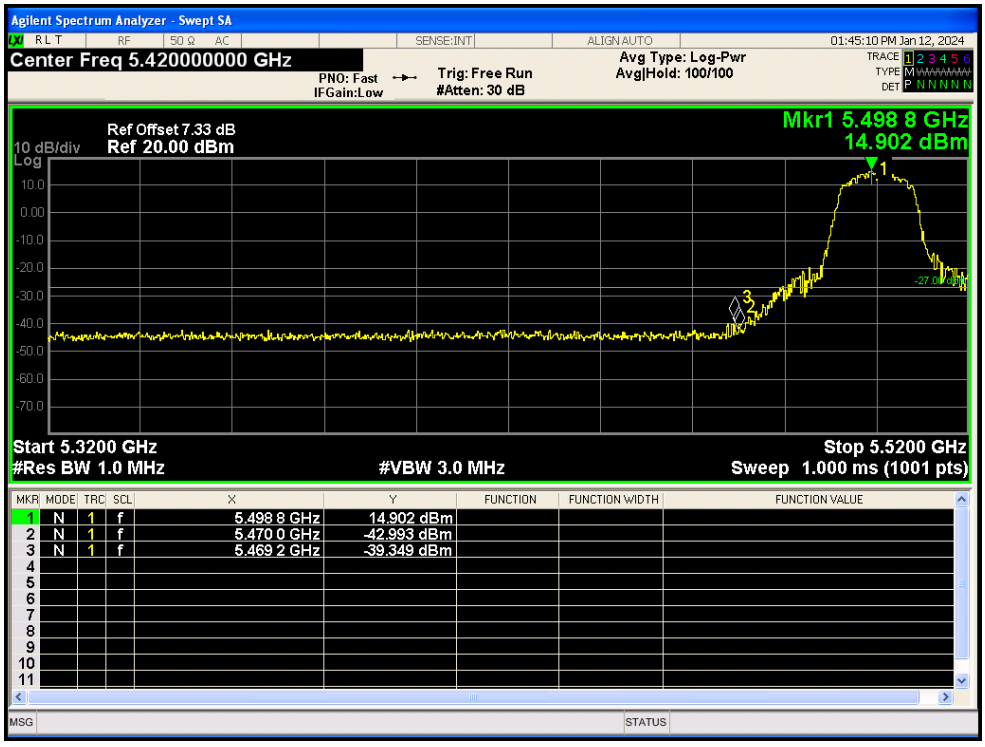
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5500	Ant1	-39.34	-27	Pass
NVNT	a	5700	Ant1	-29.38	-27	Pass
NVNT	ac20	5500	Ant1	-40.56	-27	Pass

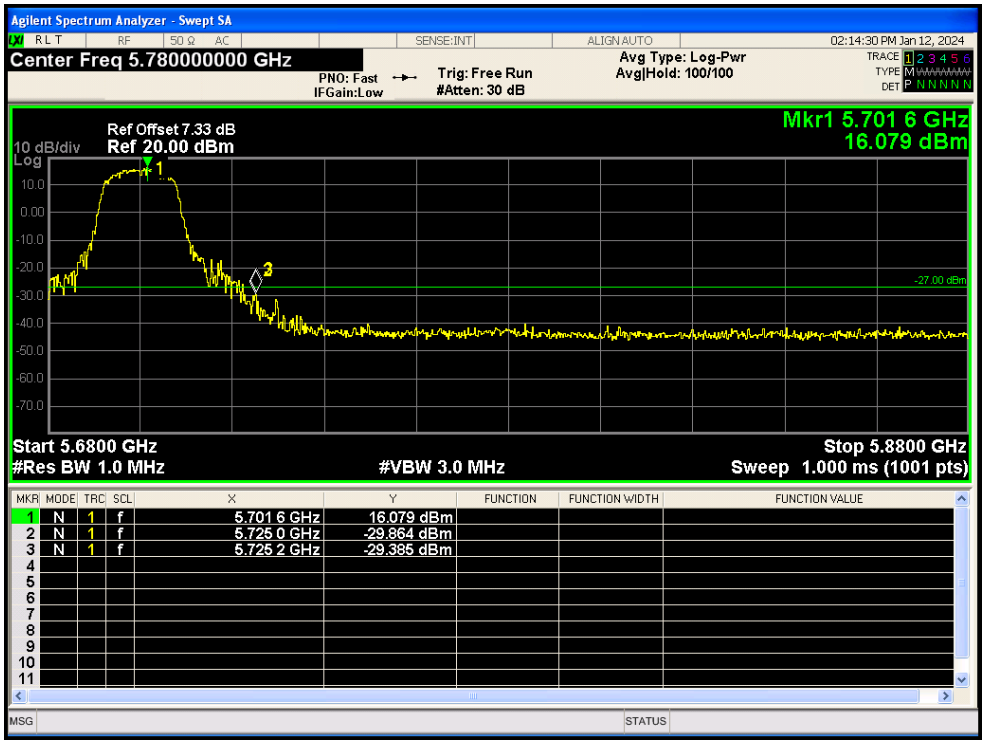
NVNT	ac20	5700	Ant1	-30.34	-27	Pass
NVNT	ac40	5510	Ant1	-32.11	-27	Pass
NVNT	ac40	5670	Ant1	-34.47	-27	Pass
NVNT	n20	5500	Ant1	-39.9	-27	Pass
NVNT	n20	5700	Ant1	-28.82	-27	Pass
NVNT	n40	5510	Ant1	-29.82	-27	Pass
NVNT	n40	5670	Ant1	-33.42	-27	Pass

Note: This test has increased antenna gain .

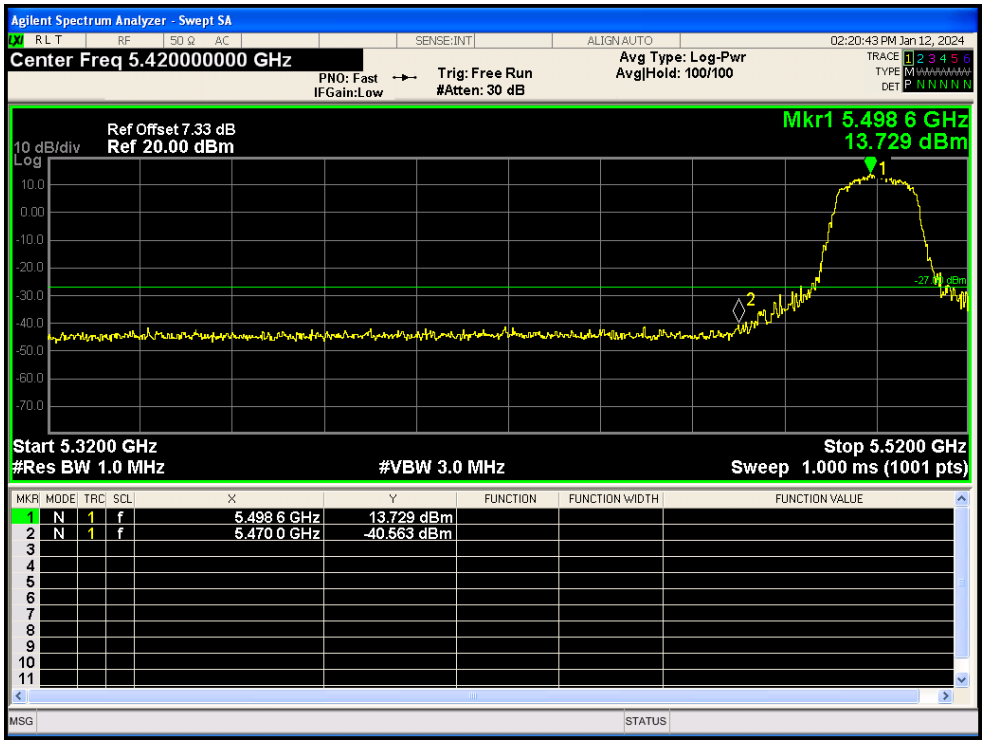
Band Edge NVNT a 5500MHz Low Ant1



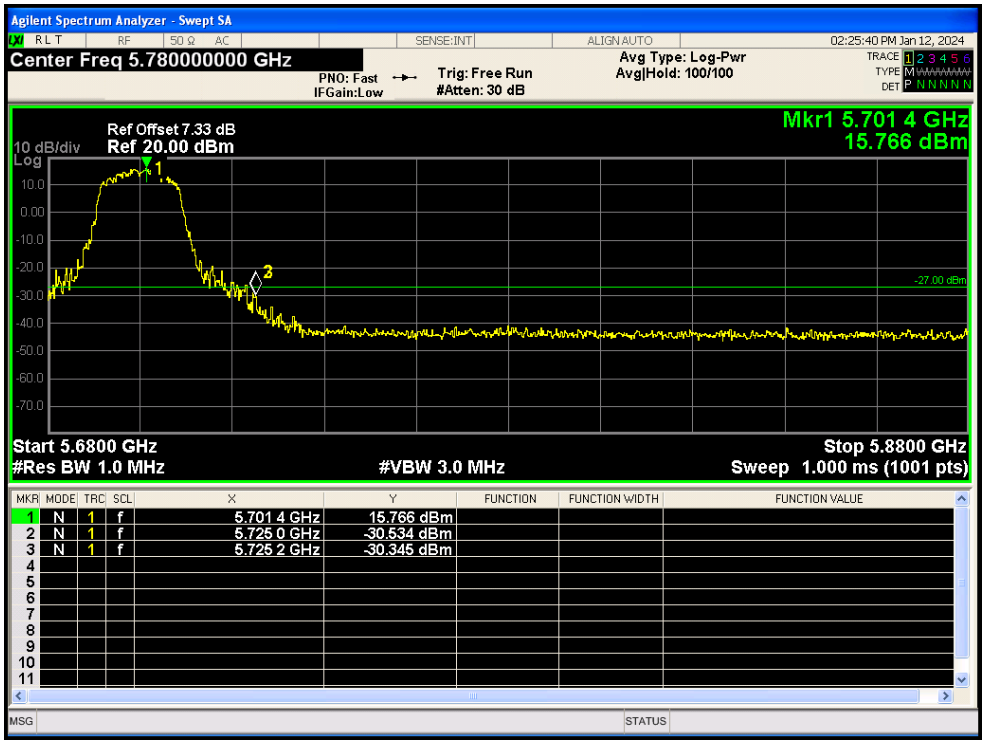
Band Edge NVNT a 5700MHz High Ant1



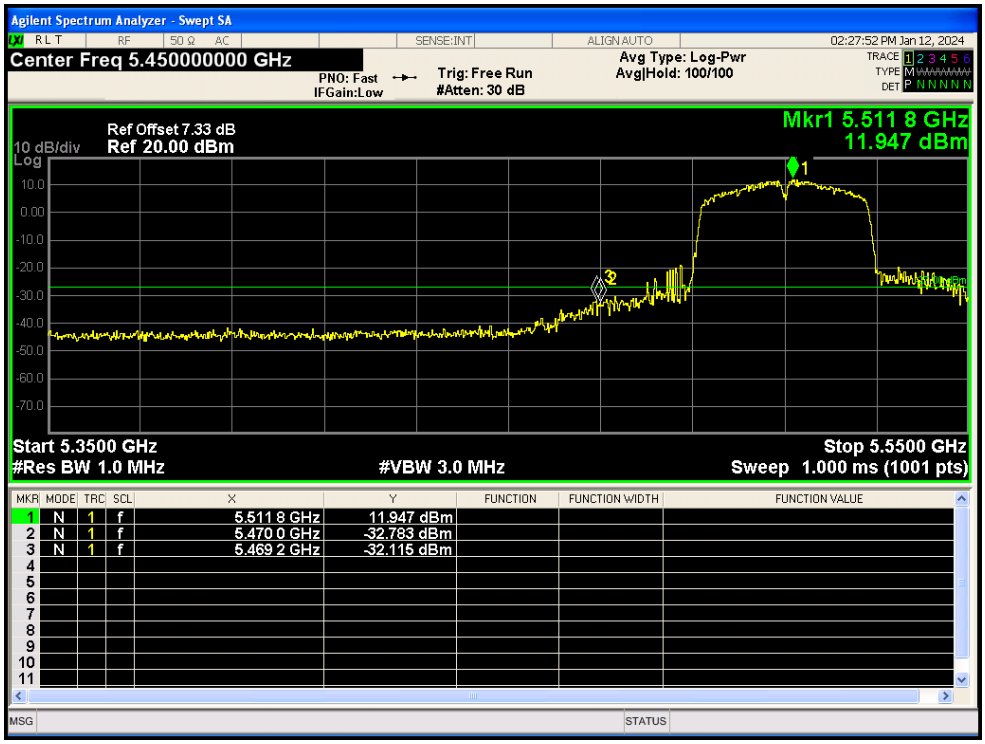
Band Edge NVNT ac20 5500MHz Low Ant1



Band Edge NVNT ac20 5700MHz High Ant1

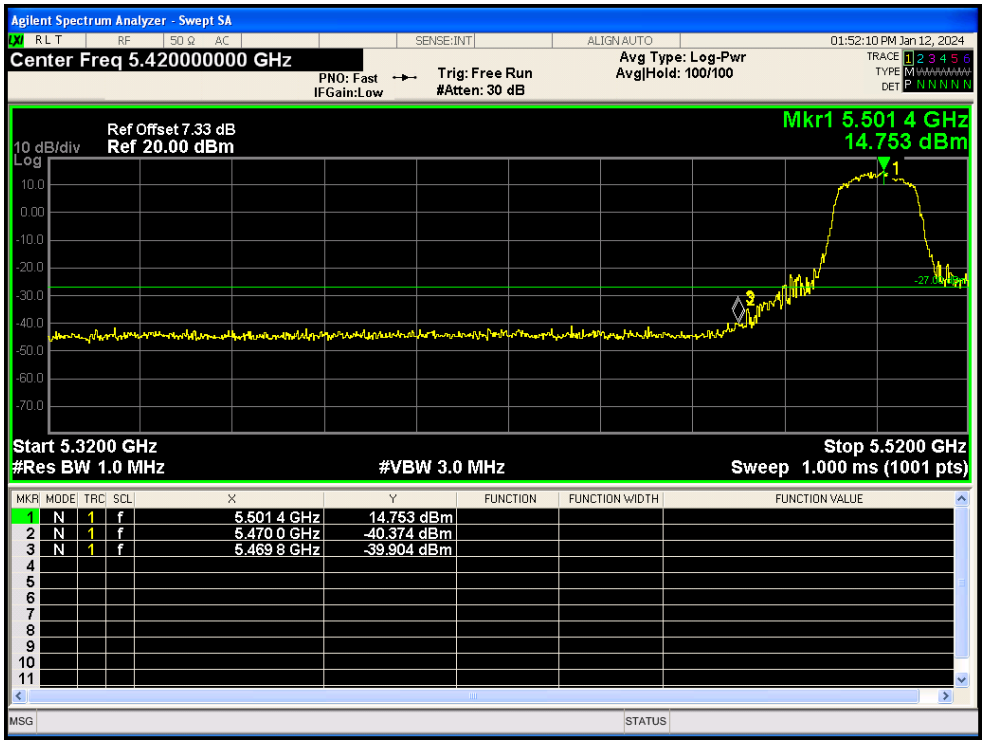


Band Edge NVNT ac40 5510MHz Low Ant1

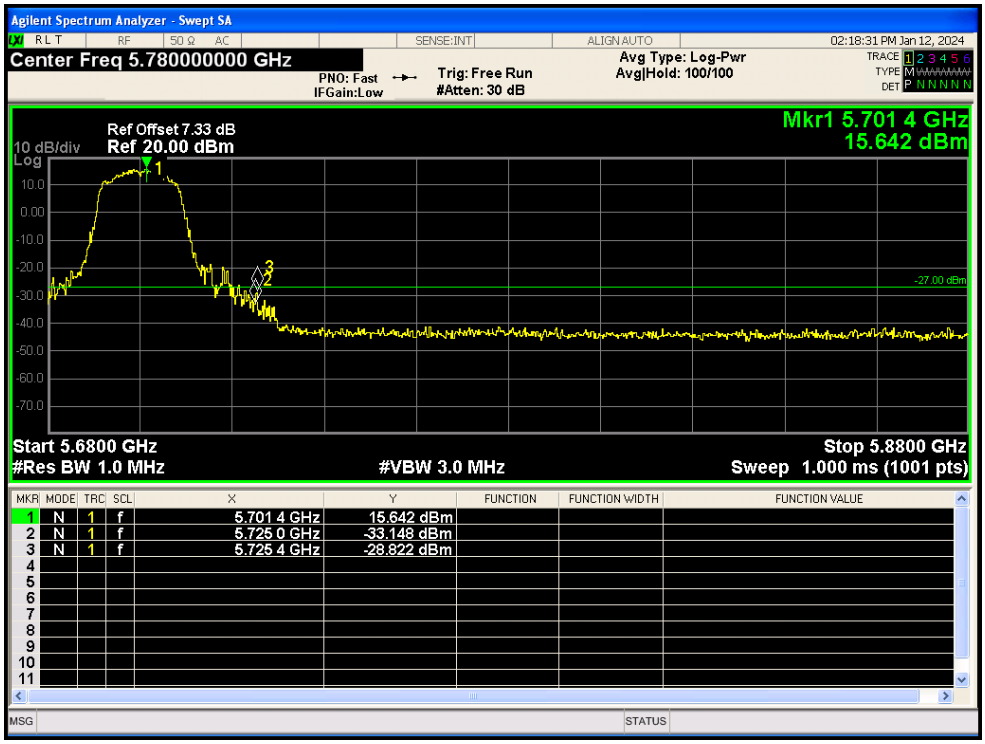


Band Edge NVNT ac40 5670MHz High Ant1

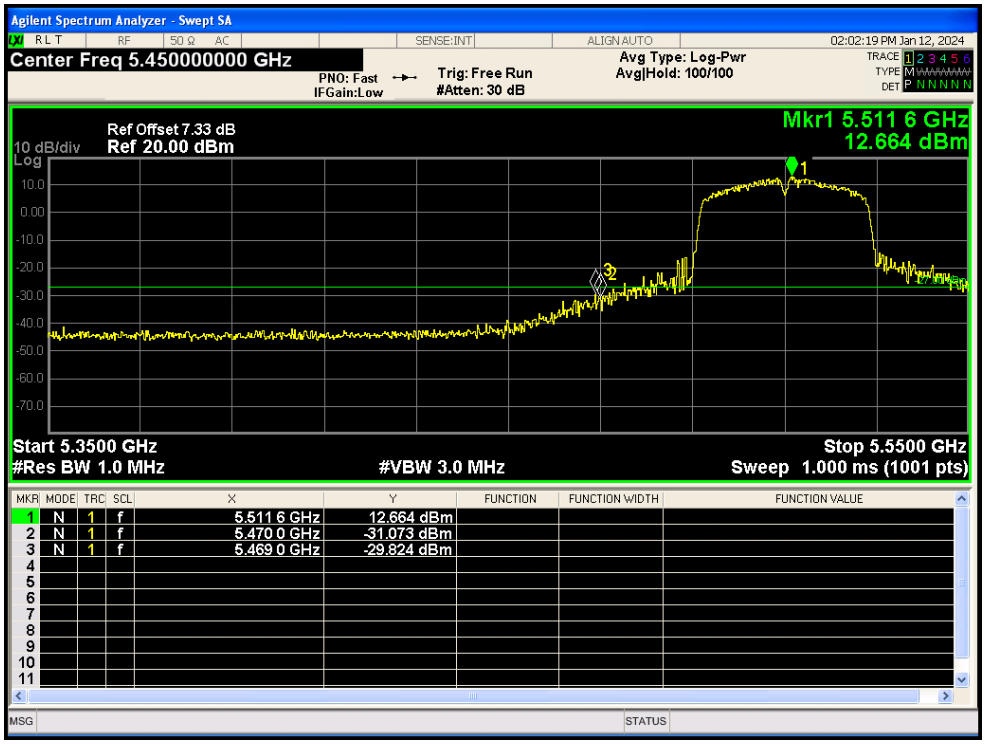
Band Edge NVNT n20 5500MHz Low Ant1



Band Edge NVNT n20 5700MHz High Ant1



Band Edge NVNT n40 5510MHz Low Ant1

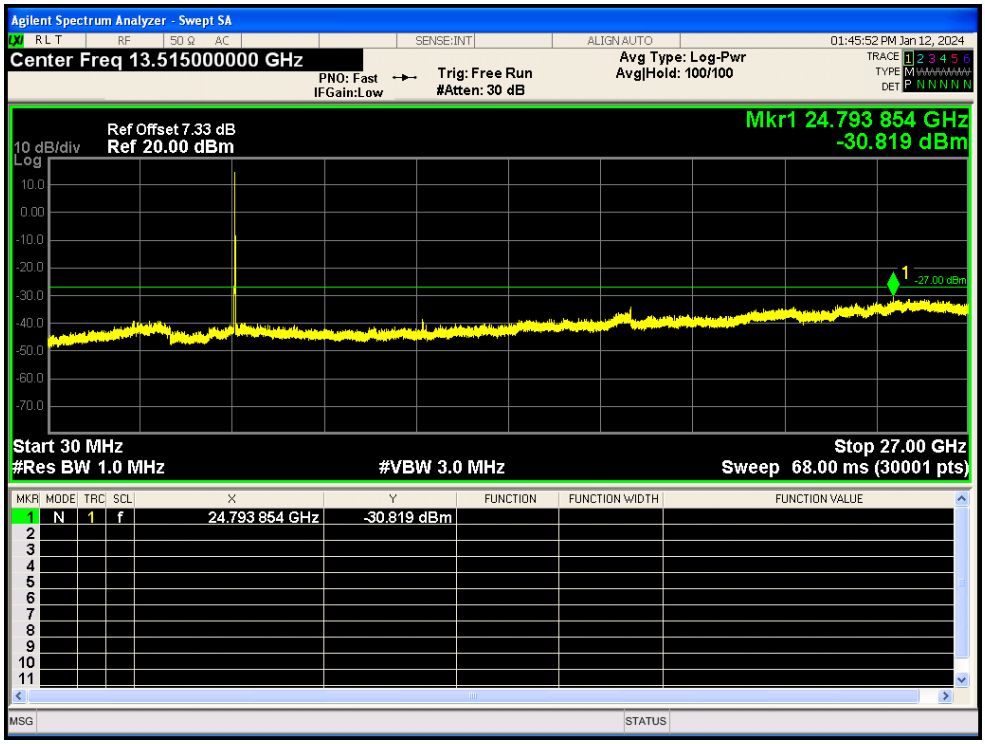


Band Edge NVNT n40 5670MHz High Ant1

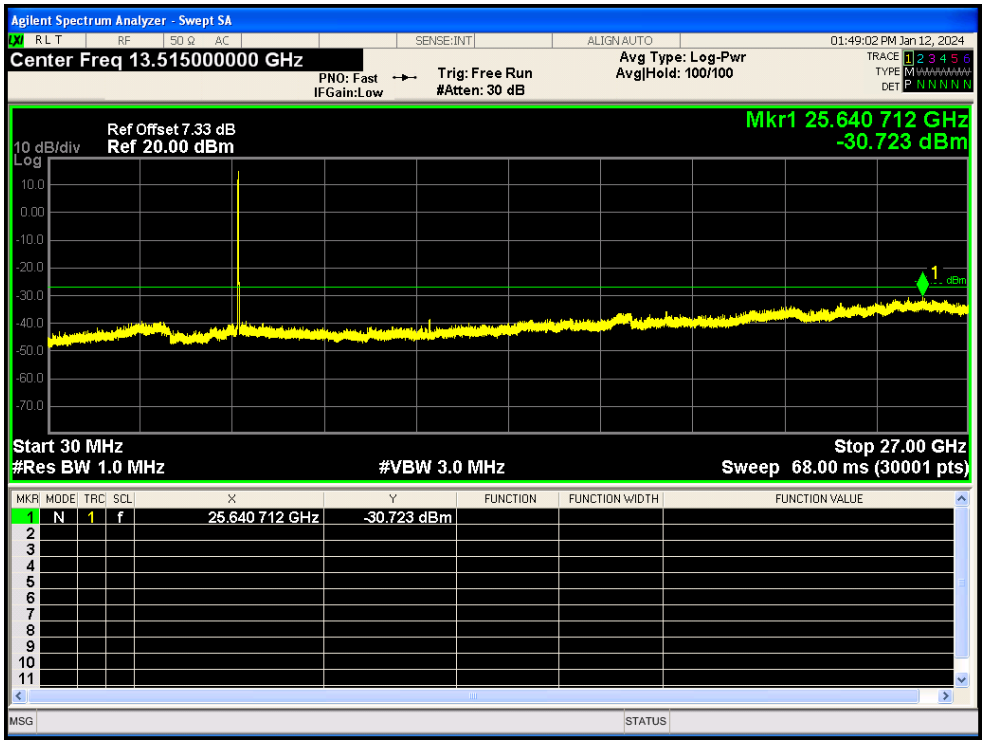
Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	a	5500	Ant1	-30.81	-27	Pass
NVNT	a	5600	Ant1	-30.72	-27	Pass
NVNT	a	5700	Ant1	-31.17	-27	Pass
NVNT	ac20	5500	Ant1	-29.99	-27	Pass
NVNT	ac20	5600	Ant1	-30.94	-27	Pass
NVNT	ac20	5700	Ant1	-31.33	-27	Pass
NVNT	ac40	5510	Ant1	-30.83	-27	Pass
NVNT	ac40	5590	Ant1	-31.12	-27	Pass
NVNT	ac40	5670	Ant1	-30.08	-27	Pass
NVNT	n20	5500	Ant1	-31.41	-27	Pass
NVNT	n20	5600	Ant1	-30.35	-27	Pass
NVNT	n20	5700	Ant1	-31.16	-27	Pass
NVNT	n40	5510	Ant1	-31.1	-27	Pass
NVNT	n40	5590	Ant1	-31.06	-27	Pass
NVNT	n40	5670	Ant1	-30.79	-27	Pass

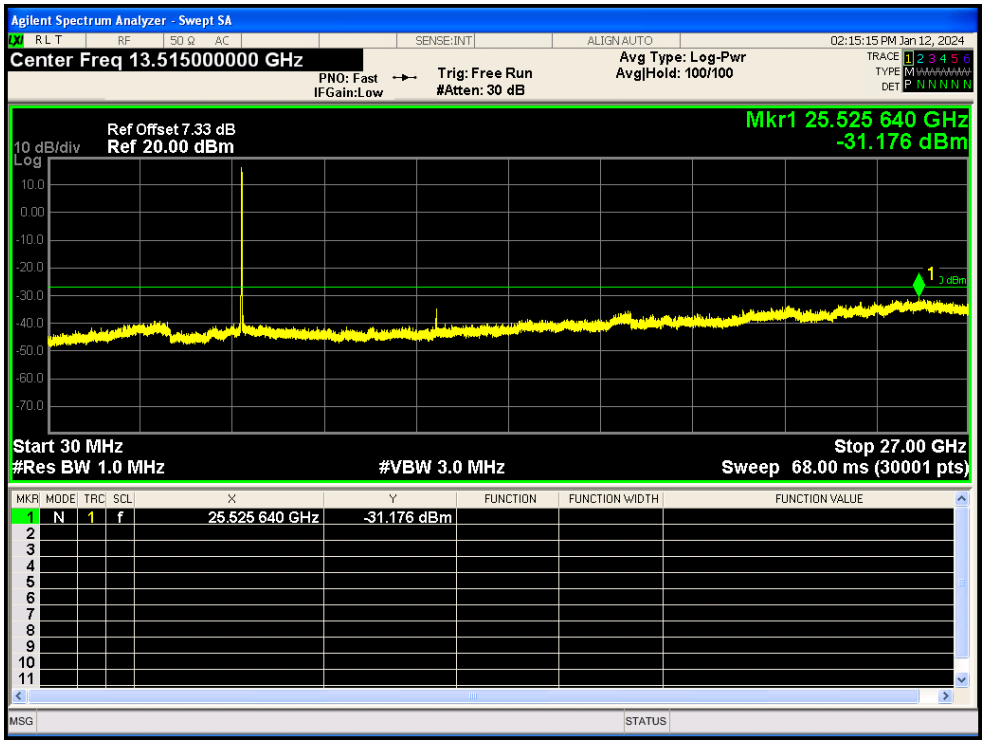
Tx. Spurious NVNT a 5500MHz Ant1 Emission



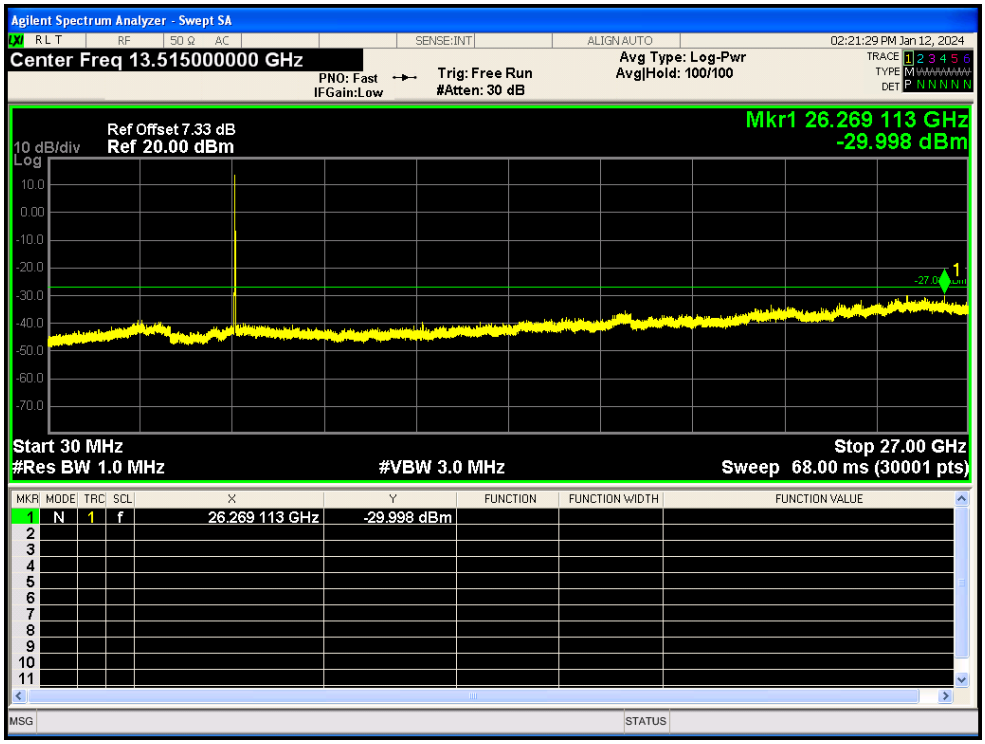
Tx. Spurious NVNT a 5600MHz Ant1 Emission



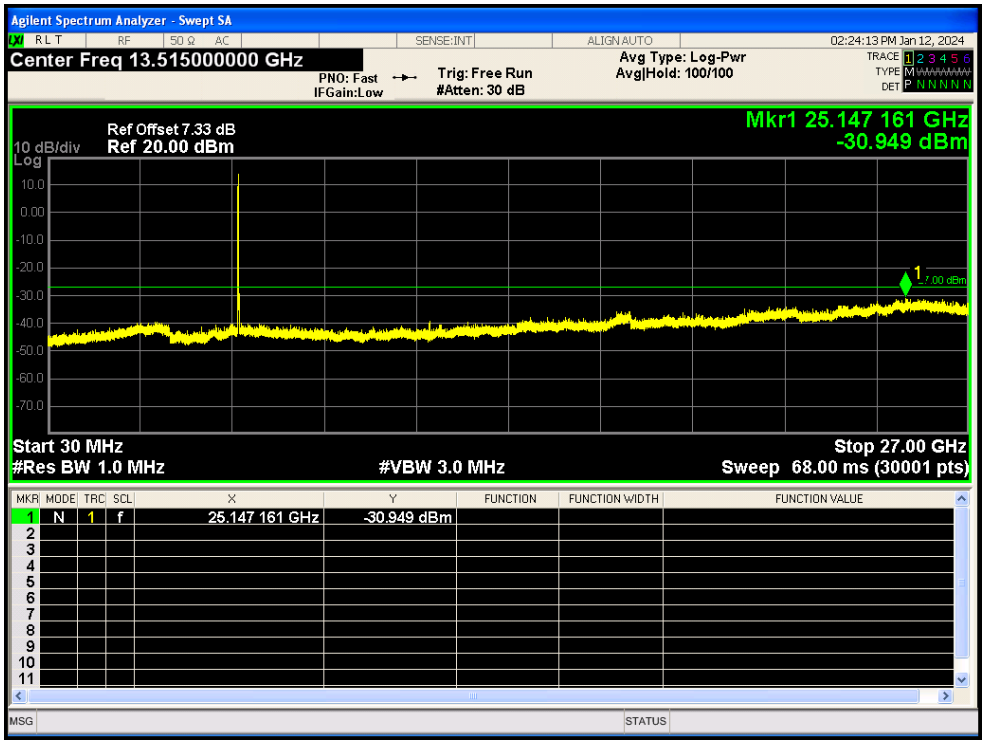
Tx. Spurious NVNT a 5700MHz Ant1 Emission



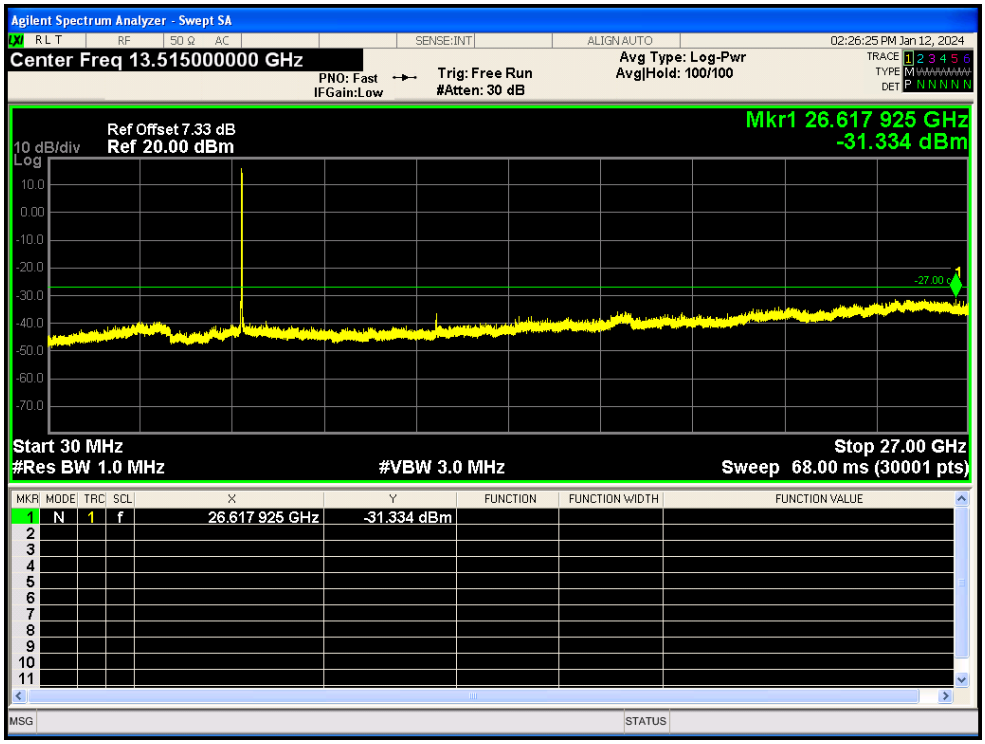
Tx. Spurious NVNT ac20 5500MHz Ant1 Emission



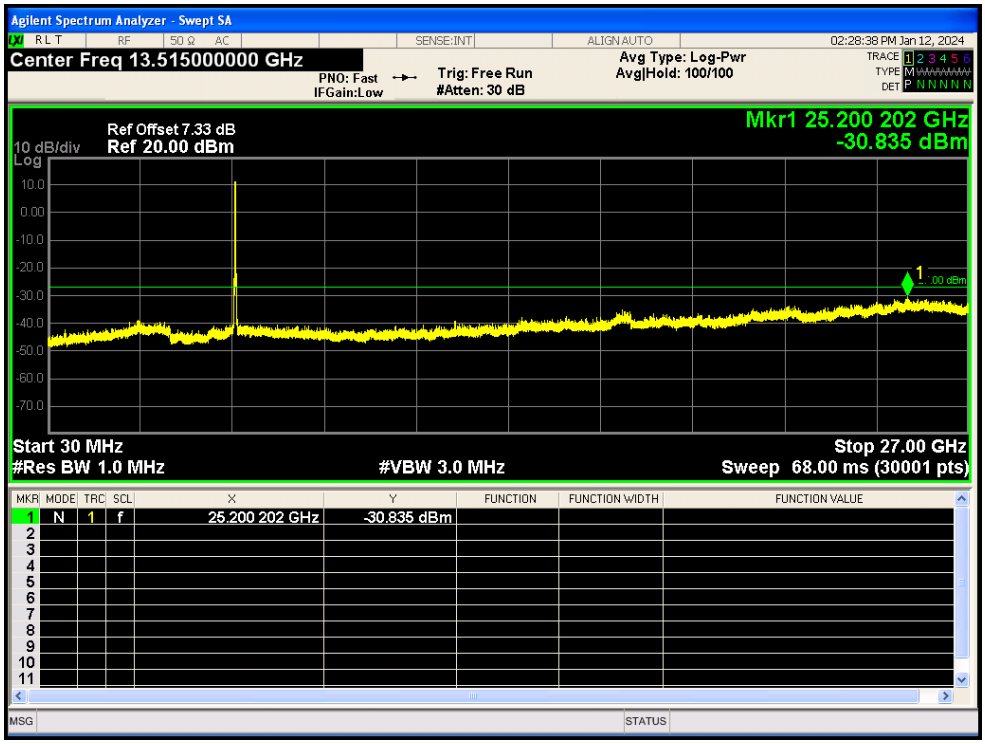
Tx. Spurious NVNT ac20 5600MHz Ant1 Emission



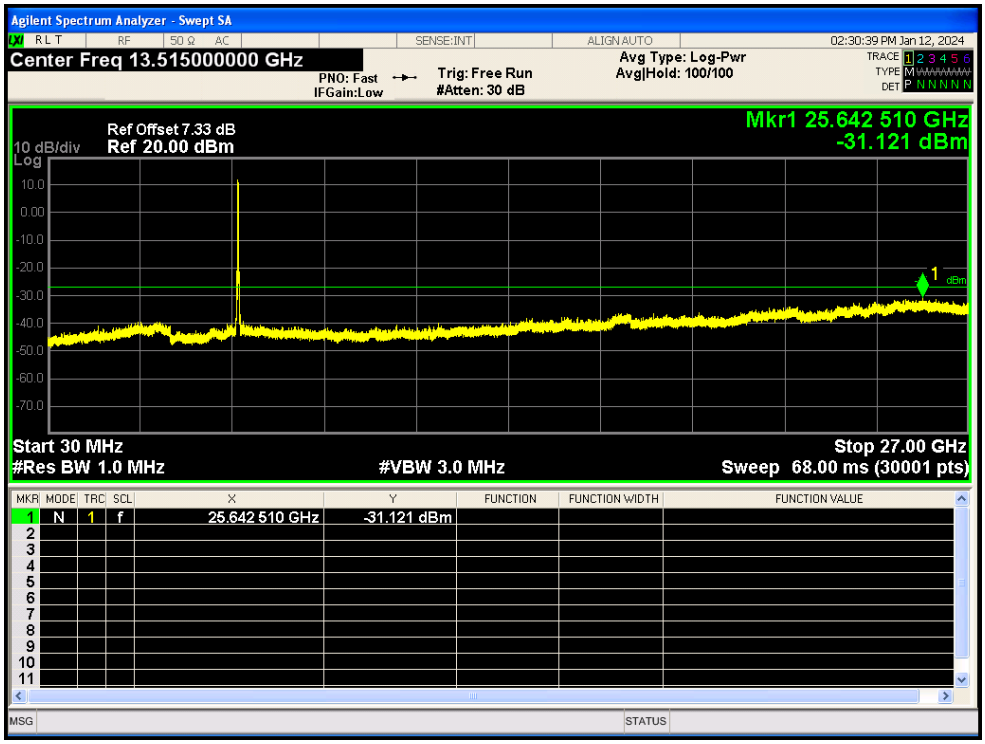
Tx. Spurious NVNT ac20 5700MHz Ant1 Emission



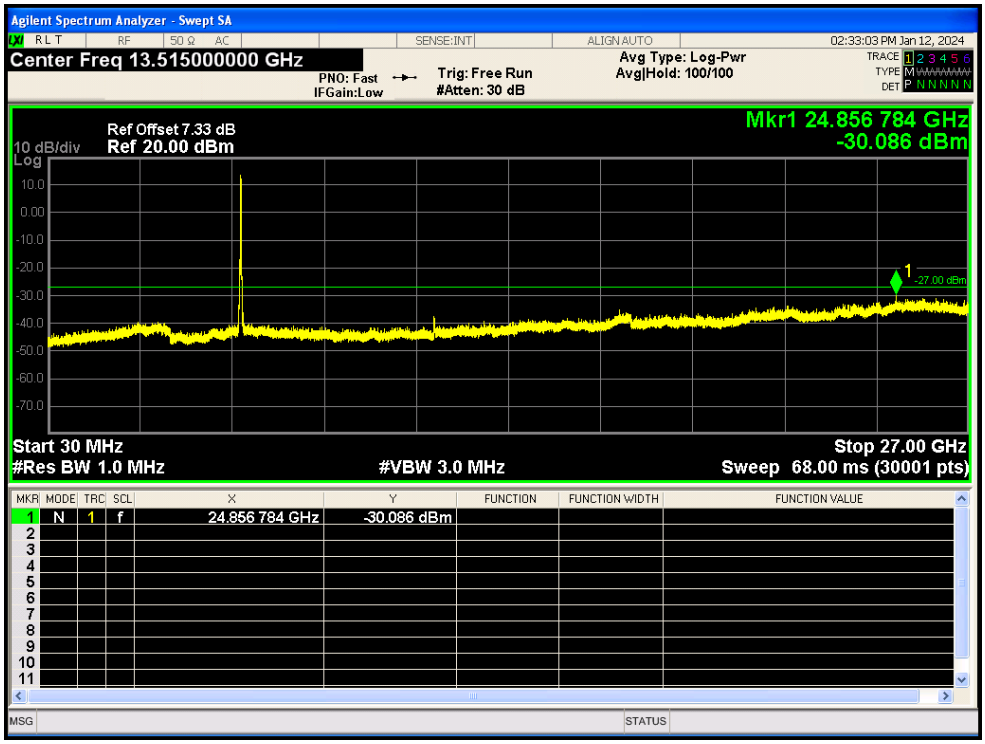
Tx. Spurious NVNT ac40 5510MHz Ant1 Emission



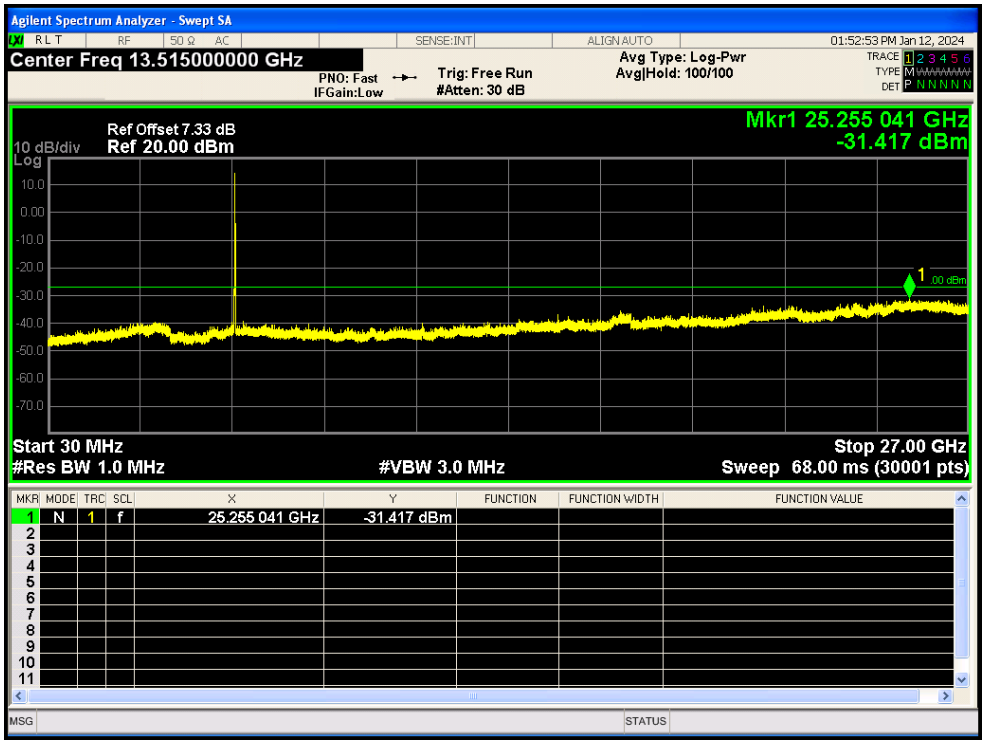
Tx. Spurious NVNT ac40 5590MHz Ant1 Emission



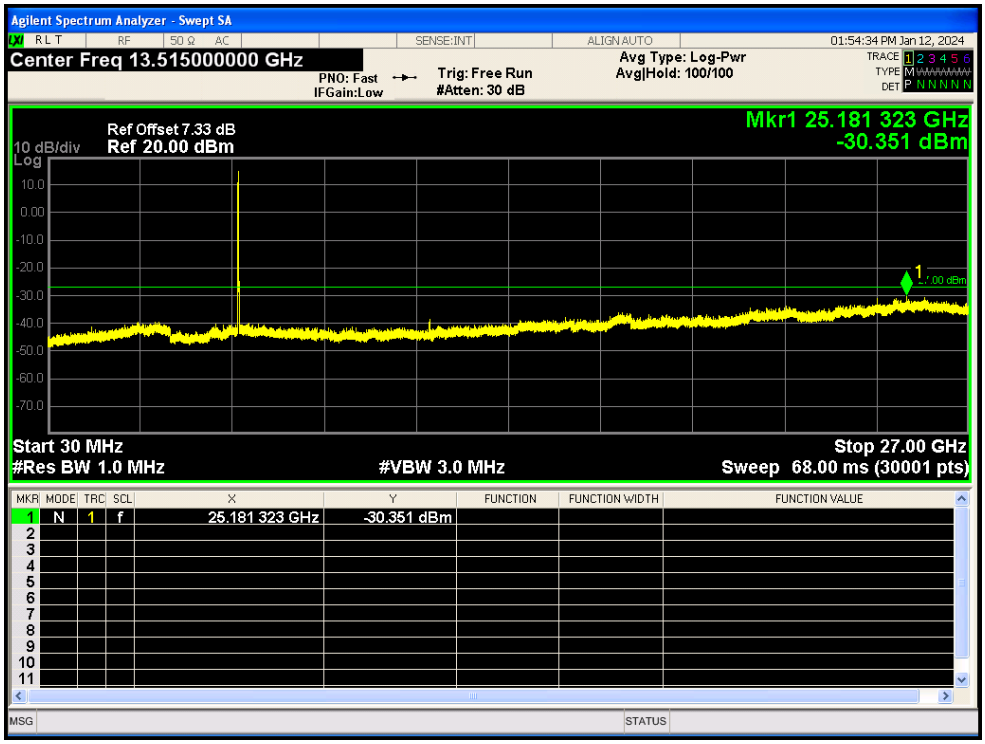
Tx. Spurious NVNT ac40 5670MHz Ant1 Emission



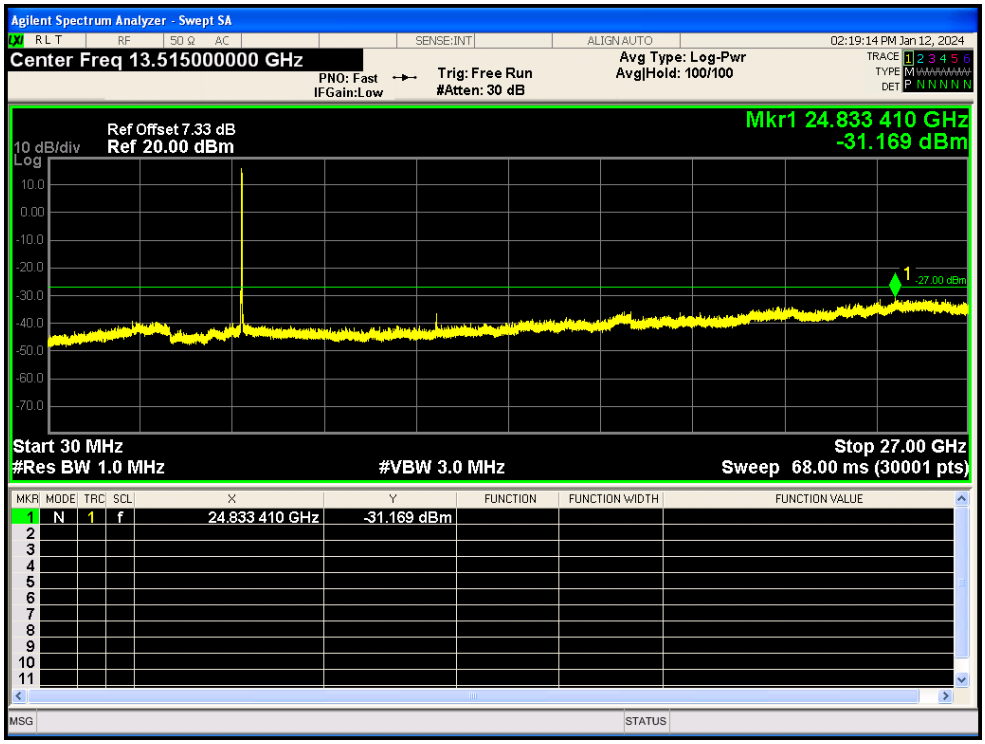
Tx. Spurious NVNT n20 5500MHz Ant1 Emission



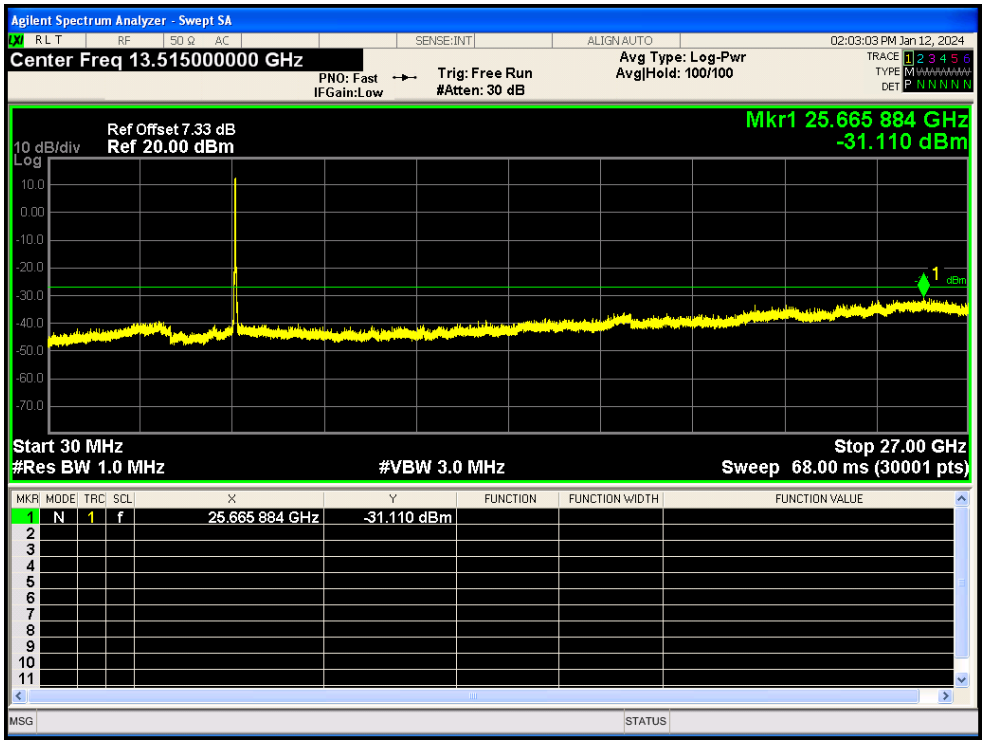
Tx. Spurious NVNT n20 5600MHz Ant1 Emission



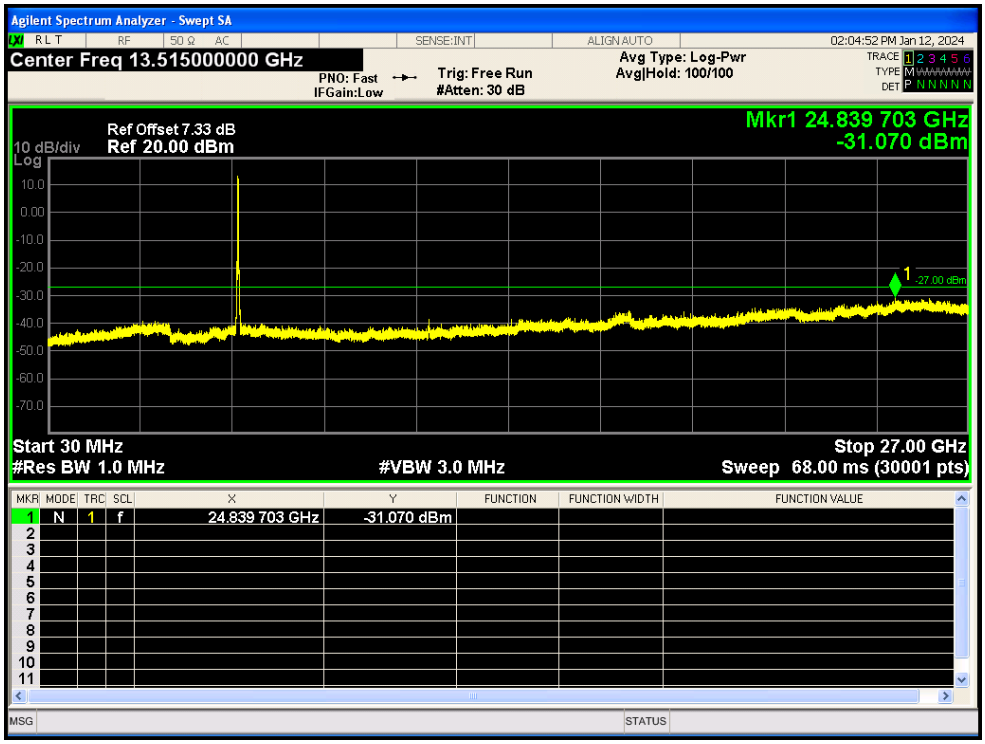
Tx. Spurious NVNT n20 5700MHz Ant1 Emission



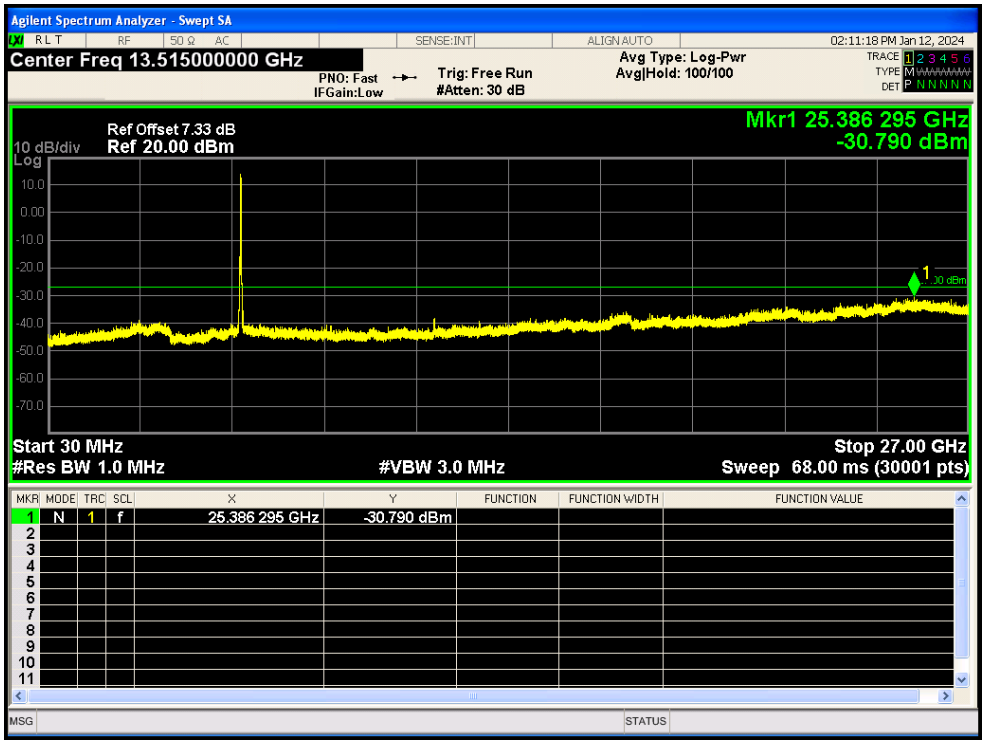
Tx. Spurious NVNT n40 5510MHz Ant1 Emission



Tx. Spurious NVNT n40 5590MHz Ant1 Emission



Tx. Spurious NVNT n40 5670MHz Ant1 Emission

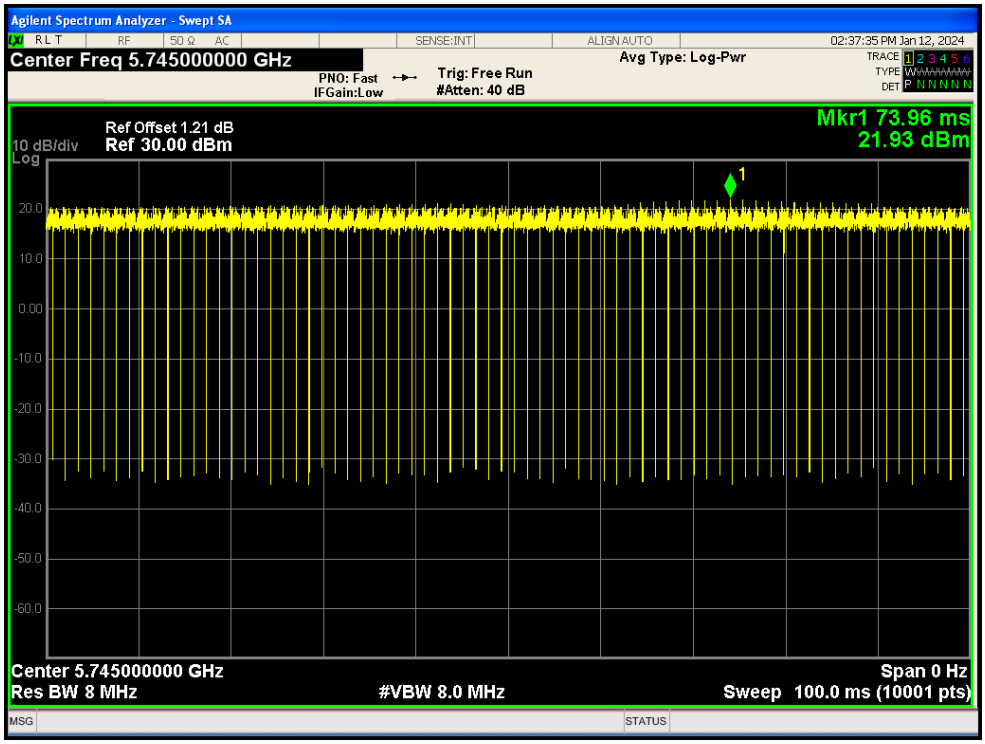

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.515000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: Log-Pwr
Avg|Hold: 100/100
02:11:18 PM Jan 12, 2024
Ref Offset 7.33 dB
10 dB/div
Ref 20.00 dBm
Log
Mkr1 25.386 295 GHz
-30.790 dBm
Start 30 MHz
#Res BW 1.0 MHz
#VBW 3.0 MHz
Stop 27.00 GHz
Sweep 68.00 ms (30001 pts)
1 N 1 f 25.386 295 GHz -30.790 dBm

5.8G WIFI:

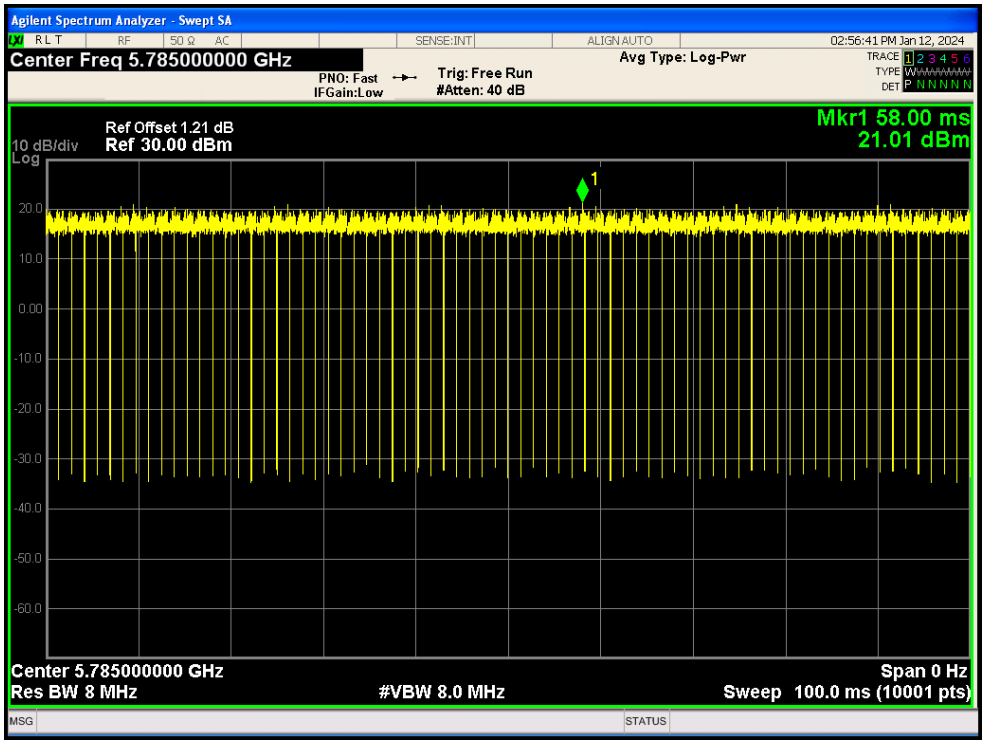
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)
NVNT	a	5745	Ant1	98.76	0.05
NVNT	a	5785	Ant1	98.77	0.05
NVNT	a	5825	Ant1	98.77	0.05
NVNT	ac20	5745	Ant1	98.68	0.06
NVNT	ac20	5785	Ant1	98.68	0.06
NVNT	ac20	5825	Ant1	98.67	0.06
NVNT	ac40	5755	Ant1	97.42	0.11
NVNT	ac40	5795	Ant1	97.38	0.12
NVNT	n20	5745	Ant1	98.67	0.06
NVNT	n20	5785	Ant1	98.68	0.06
NVNT	n20	5825	Ant1	98.69	0.06
NVNT	n40	5755	Ant1	97.42	0.11
NVNT	n40	5795	Ant1	97.4	0.11

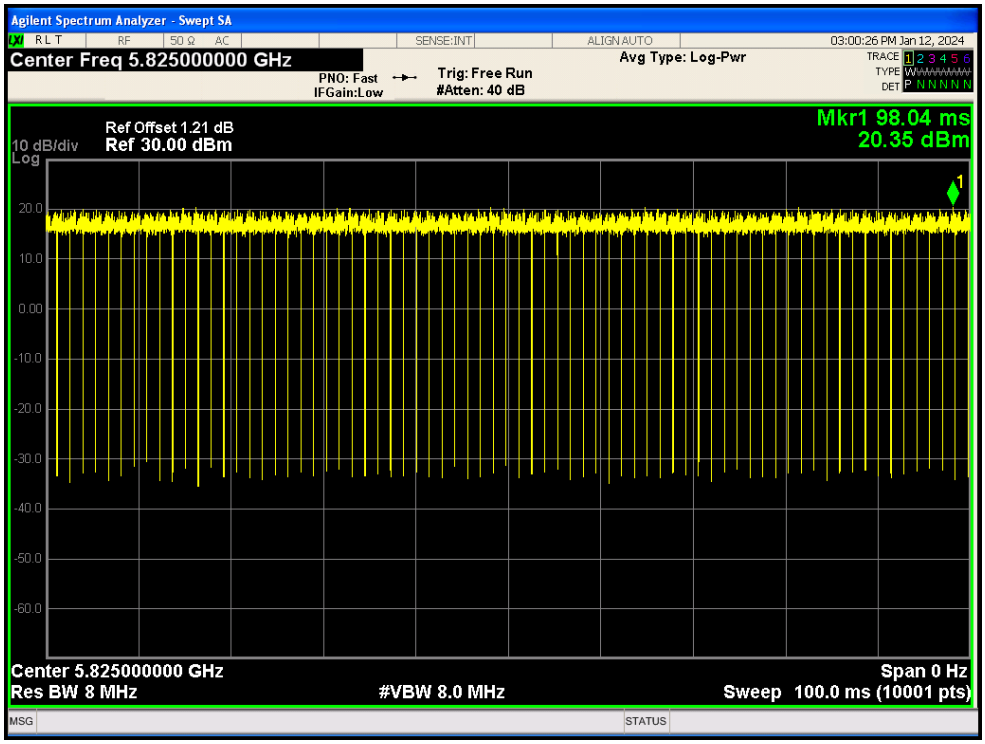
Duty Cycle NVNT a 5745MHz Ant1



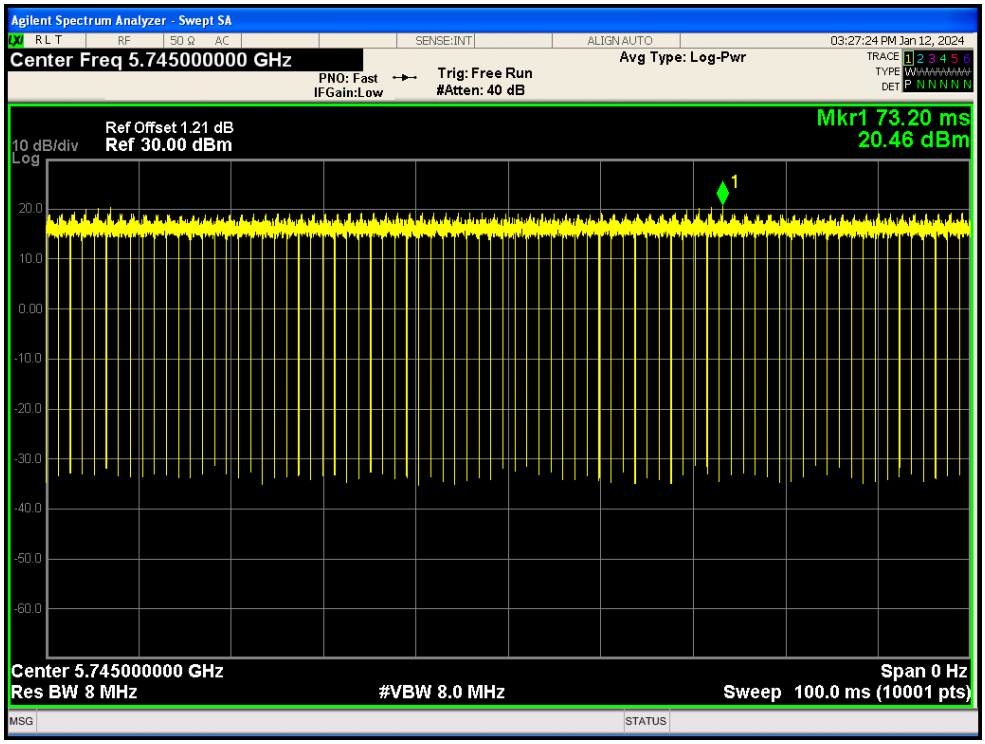
Duty Cycle NVNT a 5785MHz Ant1



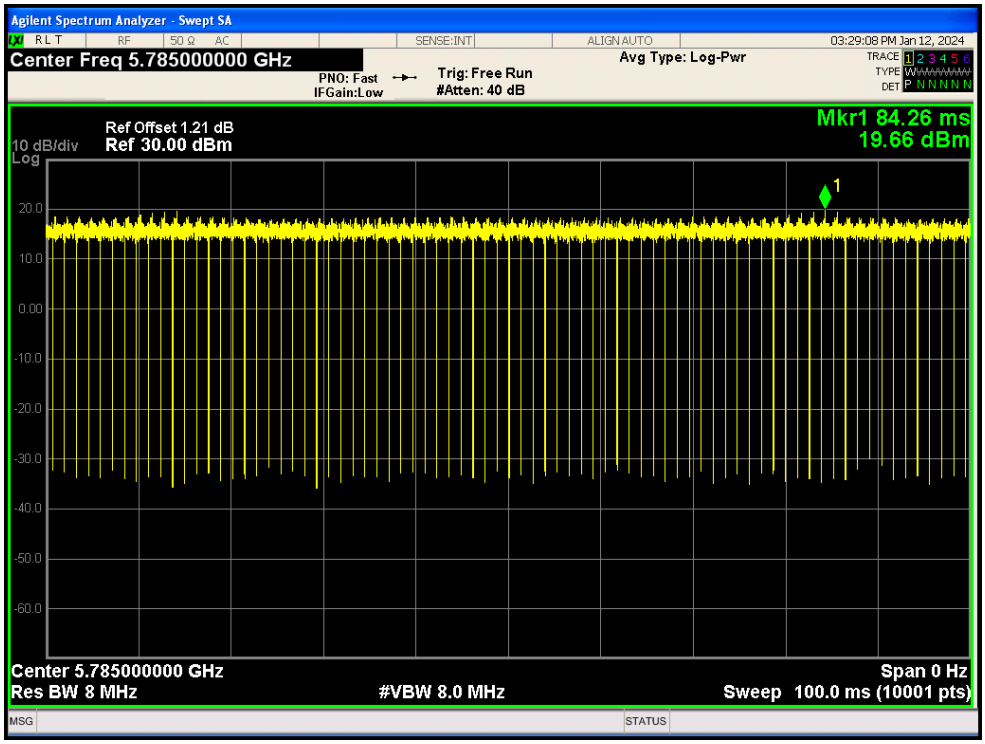
Duty Cycle NVNT a 5825MHz Ant1



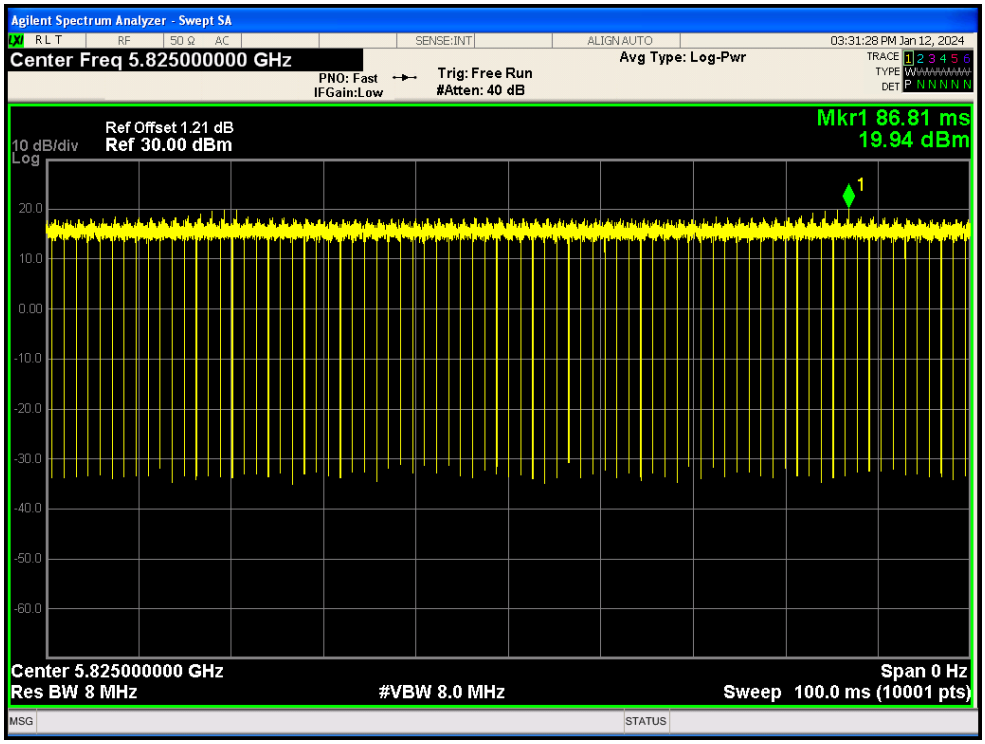
Duty Cycle NVNT ac20 5745MHz Ant1



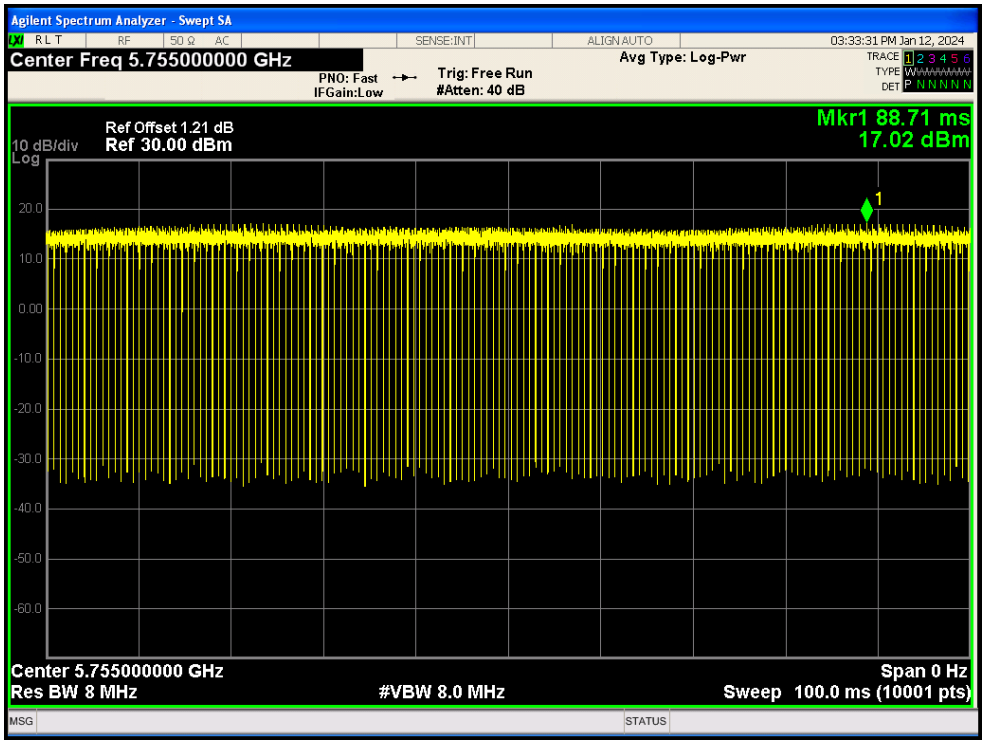
Duty Cycle NVNT ac20 5785MHz Ant1



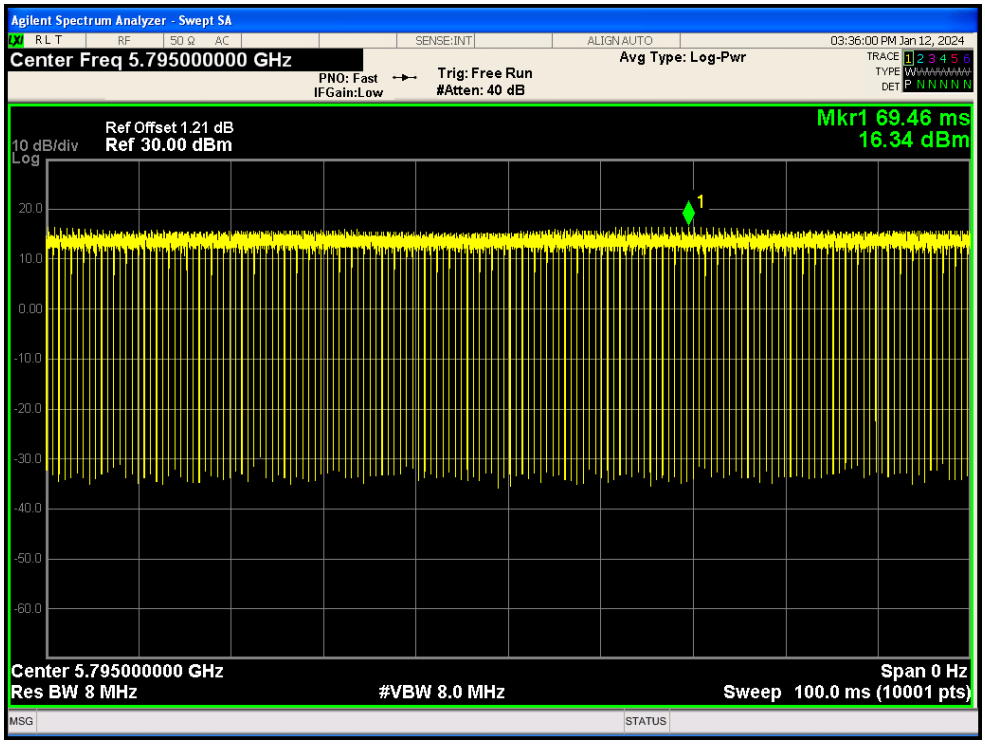
Duty Cycle NVNT ac20 5825MHz Ant1



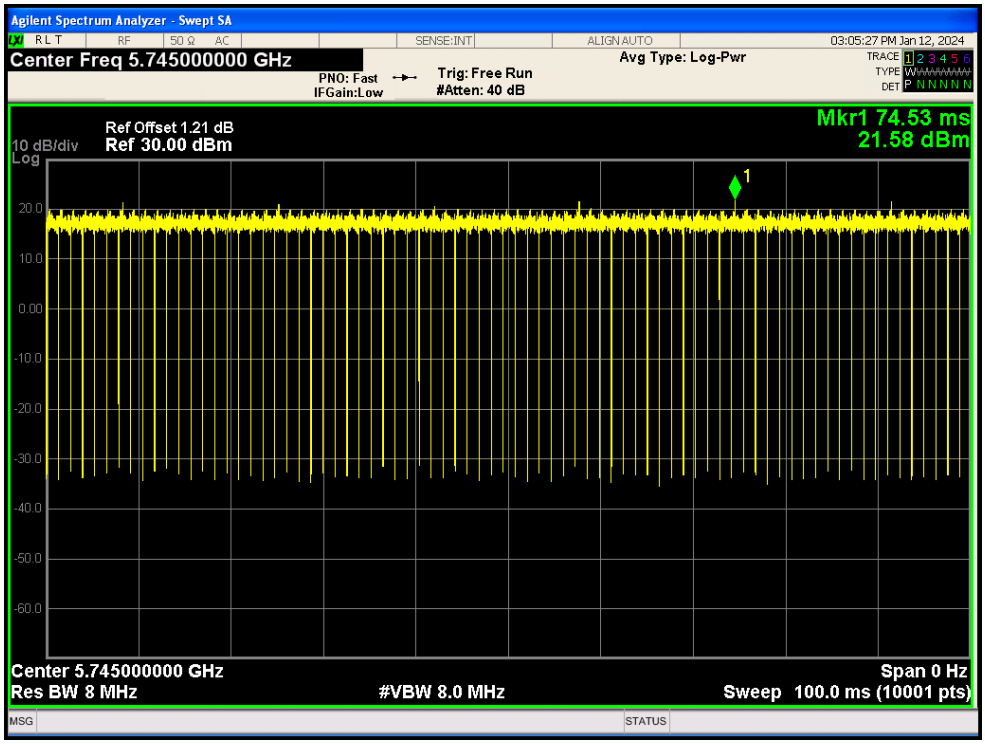
Duty Cycle NVNT ac40 5755MHz Ant1



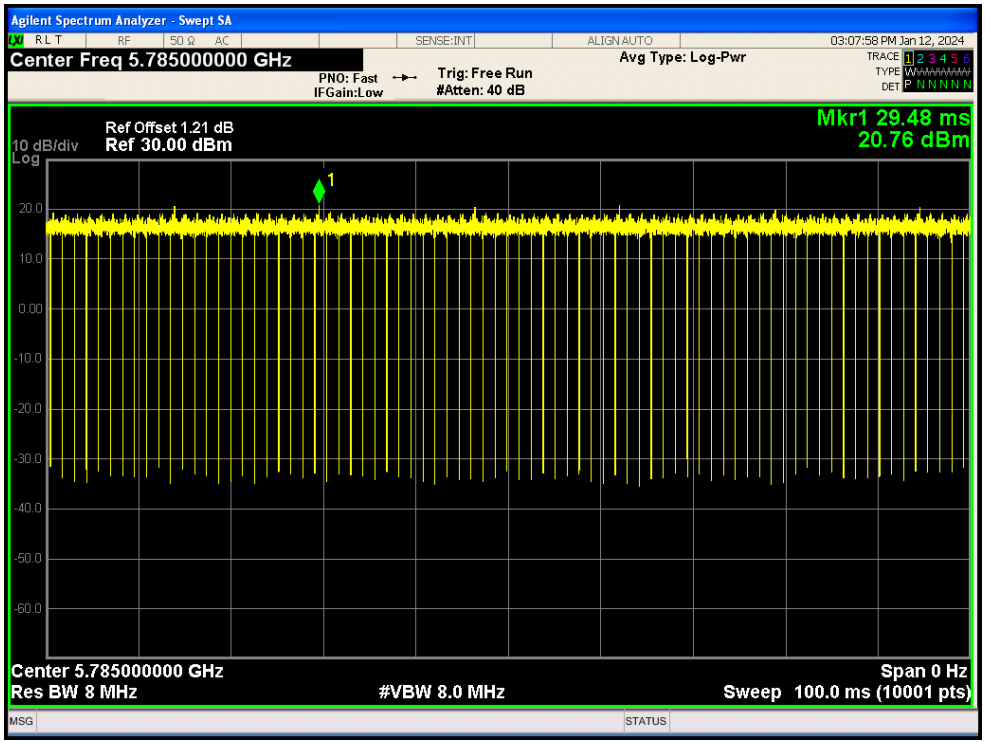
Duty Cycle NVNT ac40 5795MHz Ant1



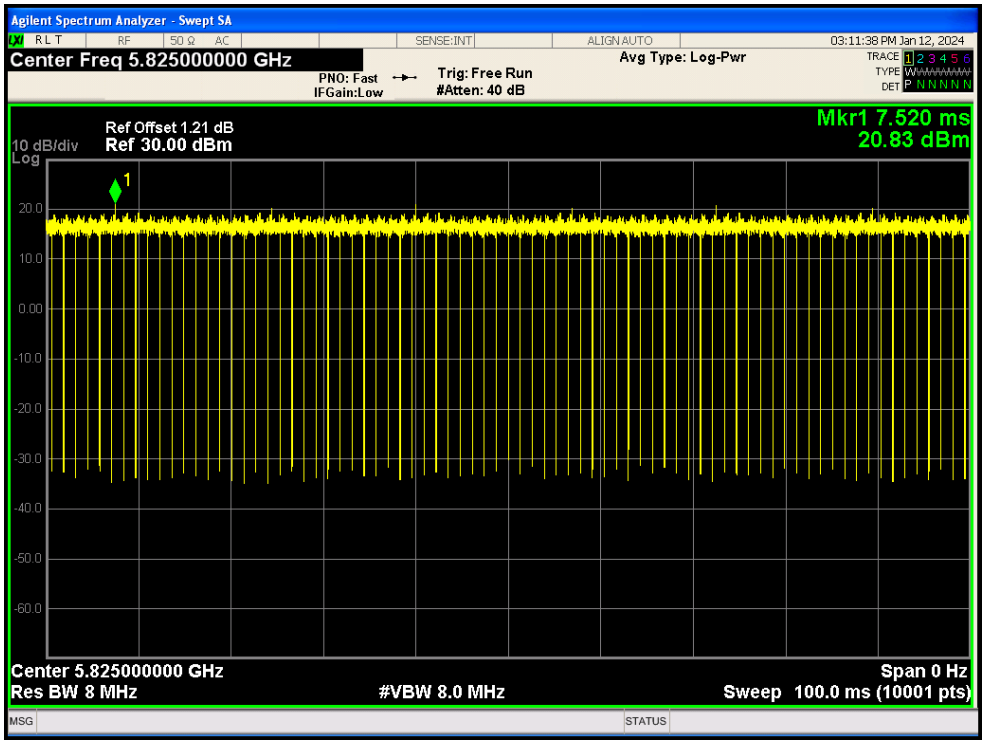
Duty Cycle NVNT n20 5745MHz Ant1



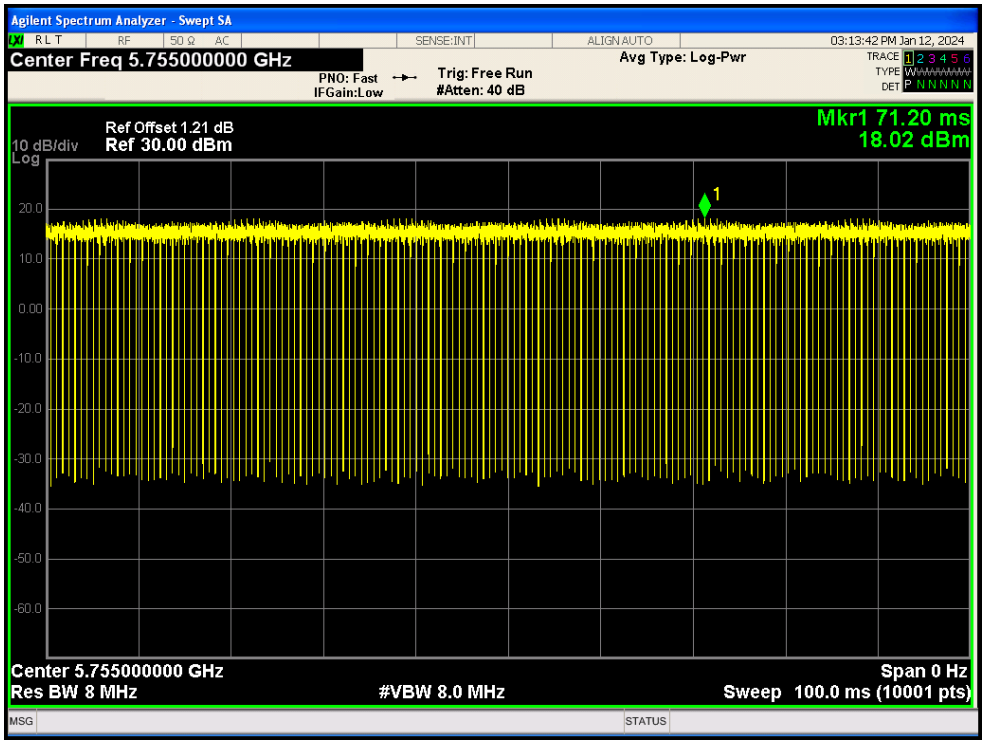
Duty Cycle NVNT n20 5785MHz Ant1



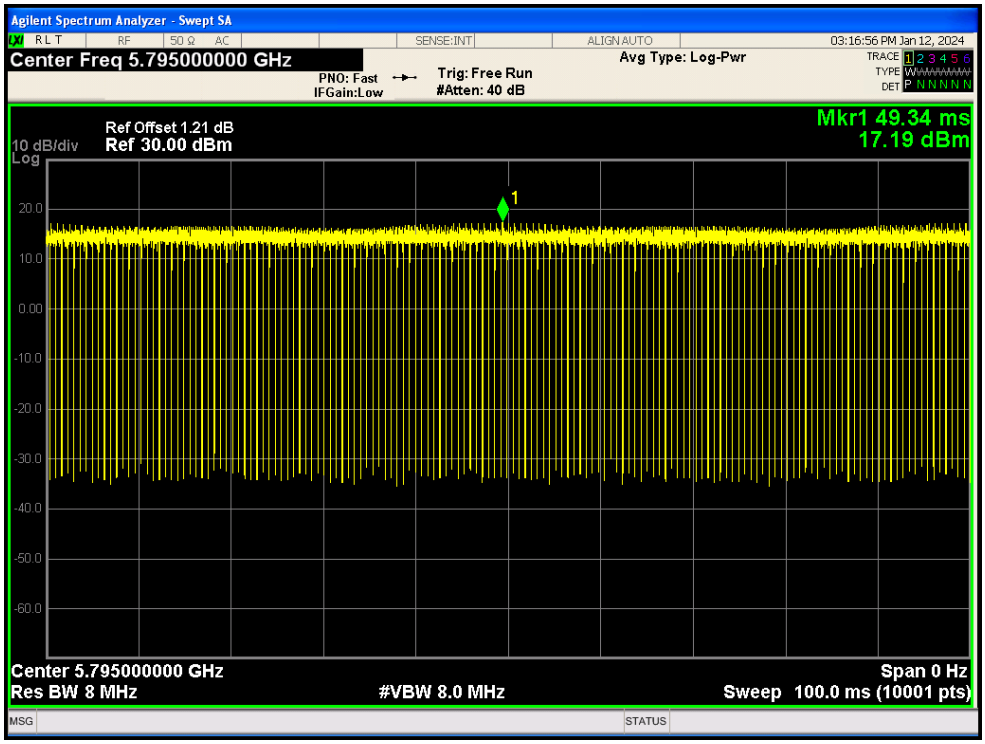
Duty Cycle NVNT n20 5825MHz Ant1



Duty Cycle NVNT n40 5755MHz Ant1



Duty Cycle NVNT n40 5795MHz Ant1



Maximum Conducted Output Power

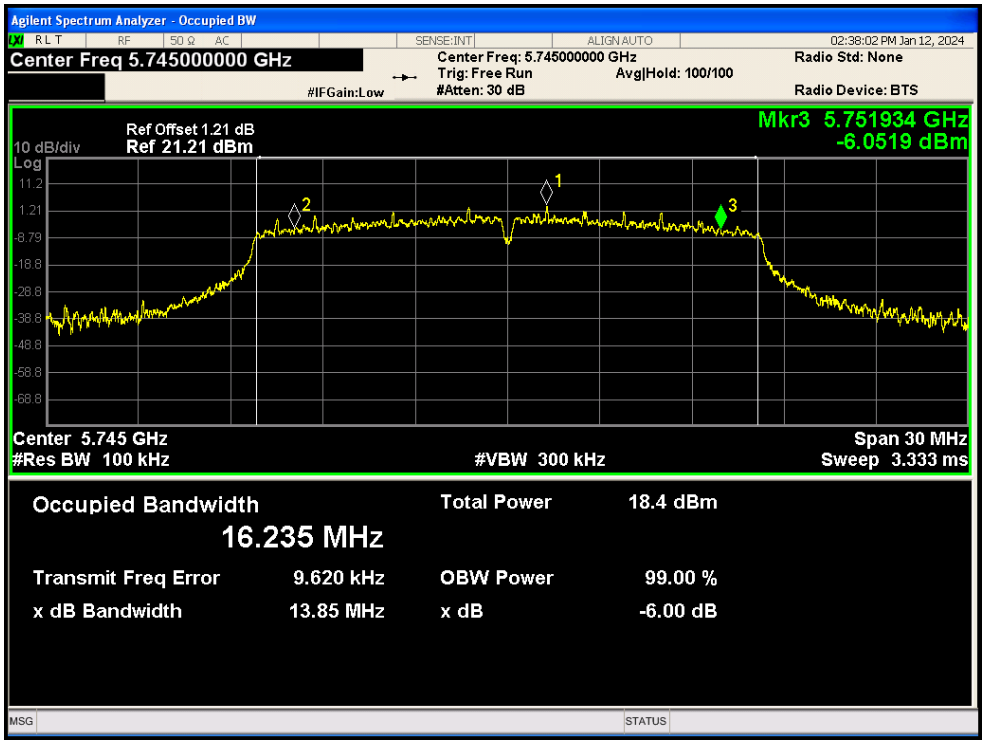
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	12.605	29.89	Pass
NVNT	a	5785	Ant1	11.892	29.89	Pass
NVNT	a	5825	Ant1	11.967	29.89	Pass
NVNT	ac20	5745	Ant1	11.375	29.89	Pass
NVNT	ac20	5785	Ant1	10.739	29.89	Pass
NVNT	ac20	5825	Ant1	10.779	29.89	Pass
NVNT	ac40	5755	Ant1	11.562	29.89	Pass
NVNT	ac40	5795	Ant1	10.954	29.89	Pass
NVNT	n20	5745	Ant1	12.407	29.89	Pass
NVNT	n20	5785	Ant1	11.615	29.89	Pass
NVNT	n20	5825	Ant1	11.773	29.89	Pass
NVNT	n40	5755	Ant1	12.714	29.89	Pass
NVNT	n40	5795	Ant1	11.842	29.89	Pass

-6dB Bandwidth

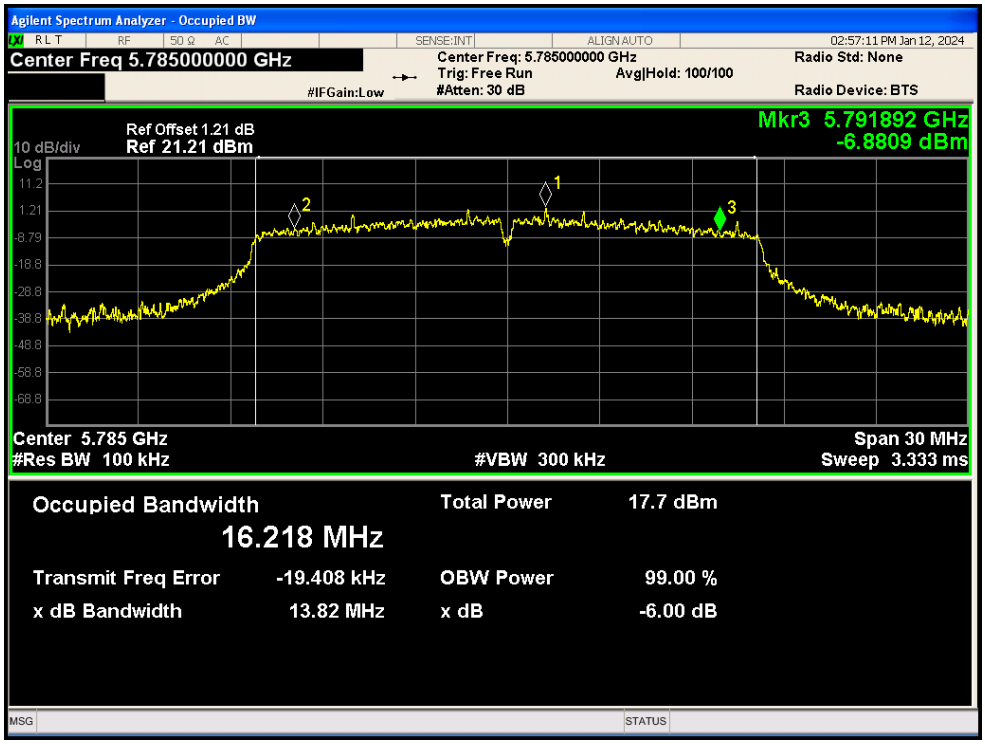
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict

NVNT	a	5745	Ant1	13.849	0.5	Pass
NVNT	a	5785	Ant1	13.822	0.5	Pass
NVNT	a	5825	Ant1	13.851	0.5	Pass
NVNT	ac20	5745	Ant1	15.457	0.5	Pass
NVNT	ac20	5785	Ant1	15.204	0.5	Pass
NVNT	ac20	5825	Ant1	15.637	0.5	Pass
NVNT	ac40	5755	Ant1	29.929	0.5	Pass
NVNT	ac40	5795	Ant1	30.523	0.5	Pass
NVNT	n20	5745	Ant1	15.677	0.5	Pass
NVNT	n20	5785	Ant1	14.615	0.5	Pass
NVNT	n20	5825	Ant1	15.66	0.5	Pass
NVNT	n40	5755	Ant1	29.385	0.5	Pass
NVNT	n40	5795	Ant1	30.523	0.5	Pass

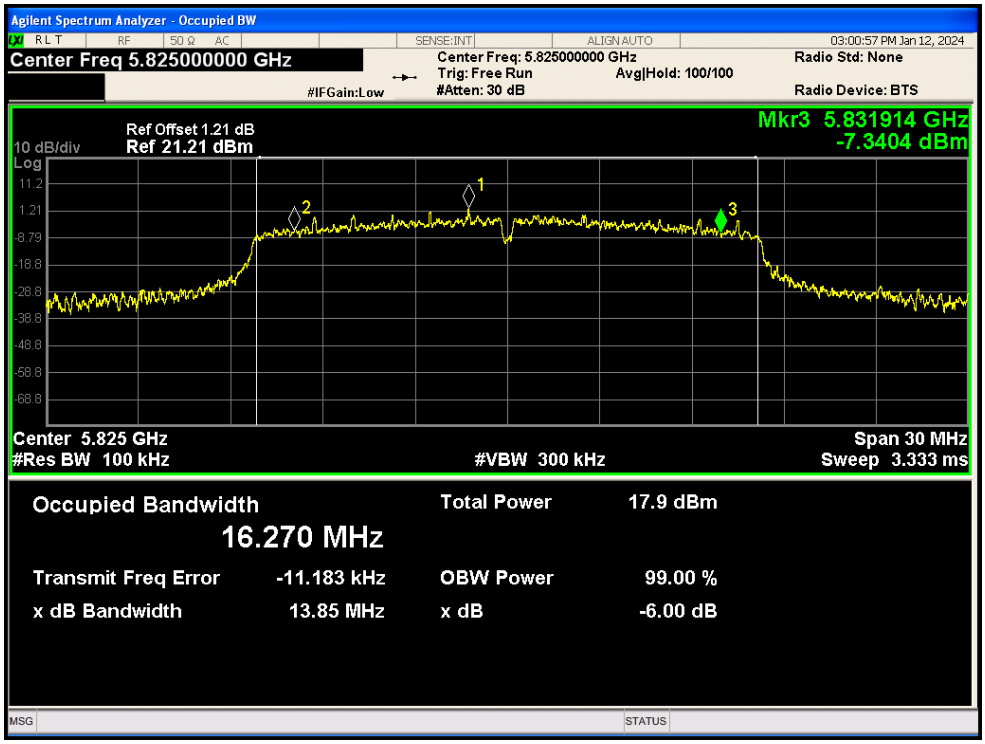
-6dB Bandwidth NVNT a 5745MHz Ant1



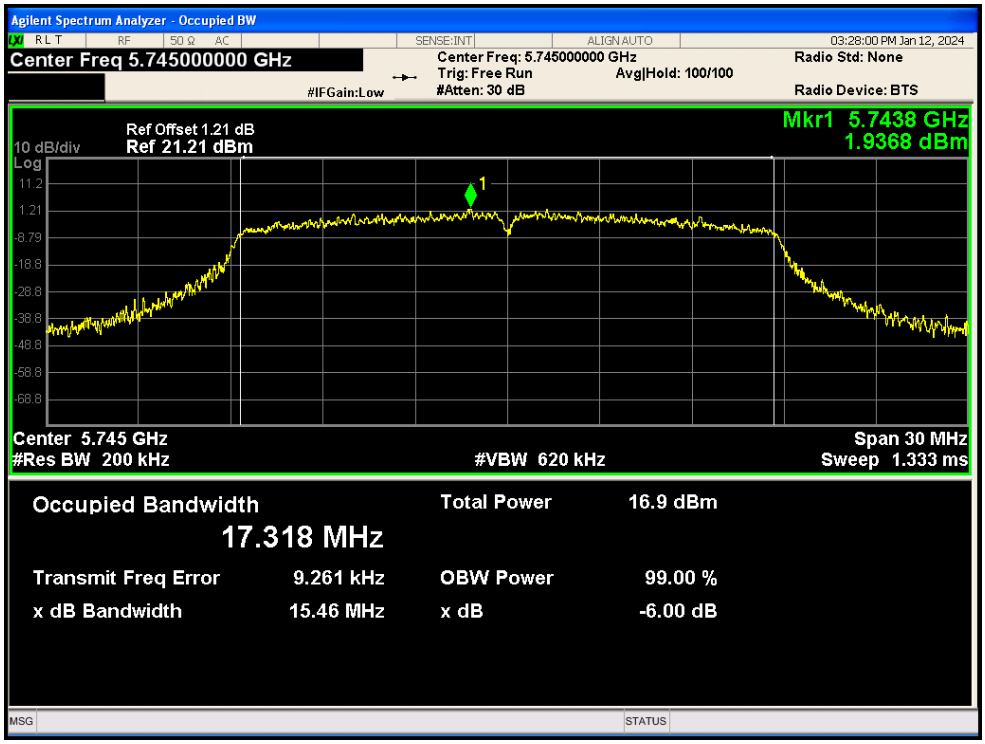
-6dB Bandwidth NVNT a 5785MHz Ant1



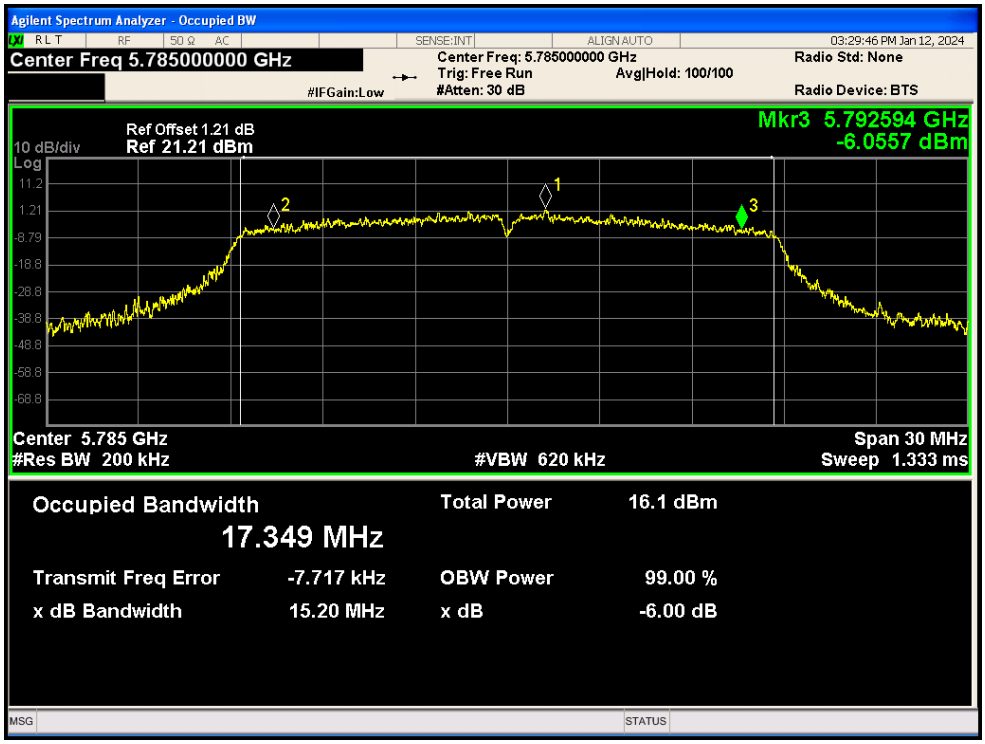
-6dB Bandwidth NVNT a 5825MHz Ant1



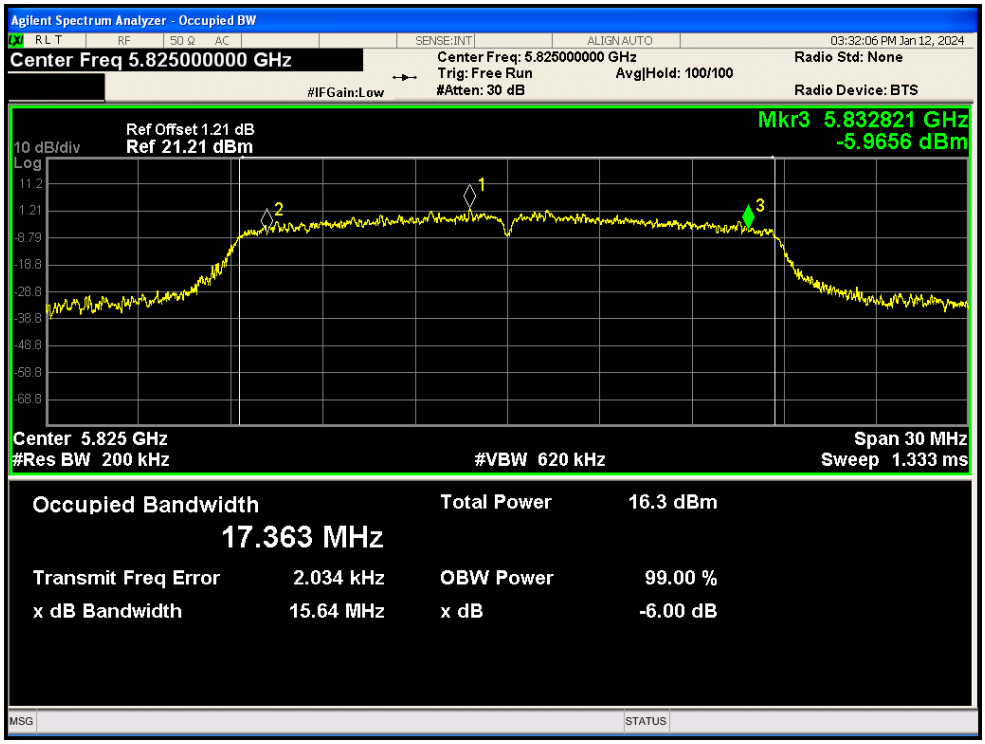
-6dB Bandwidth NVNT ac20 5745MHz Ant1



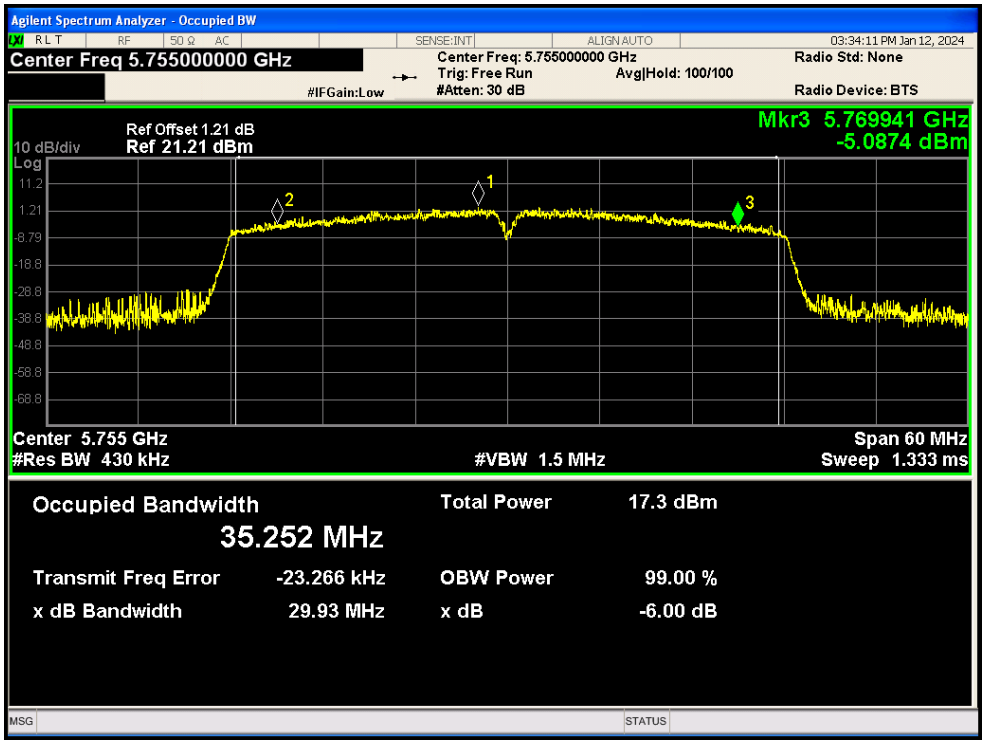
-6dB Bandwidth NVNT ac20 5785MHz Ant1



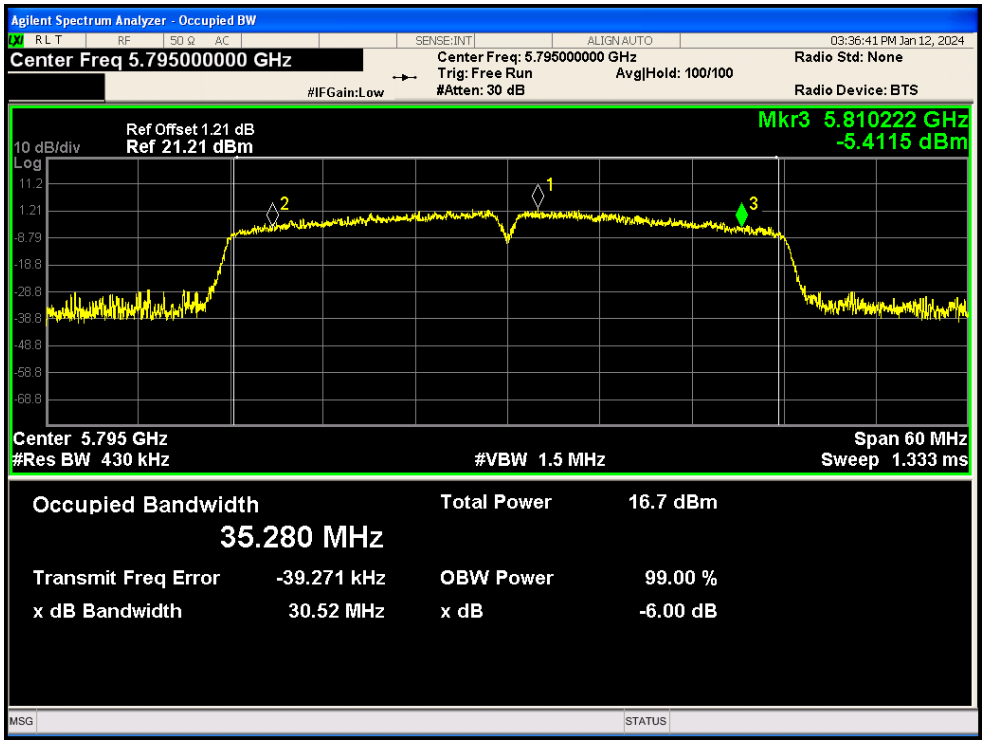
-6dB Bandwidth NVNT ac20 5825MHz Ant1



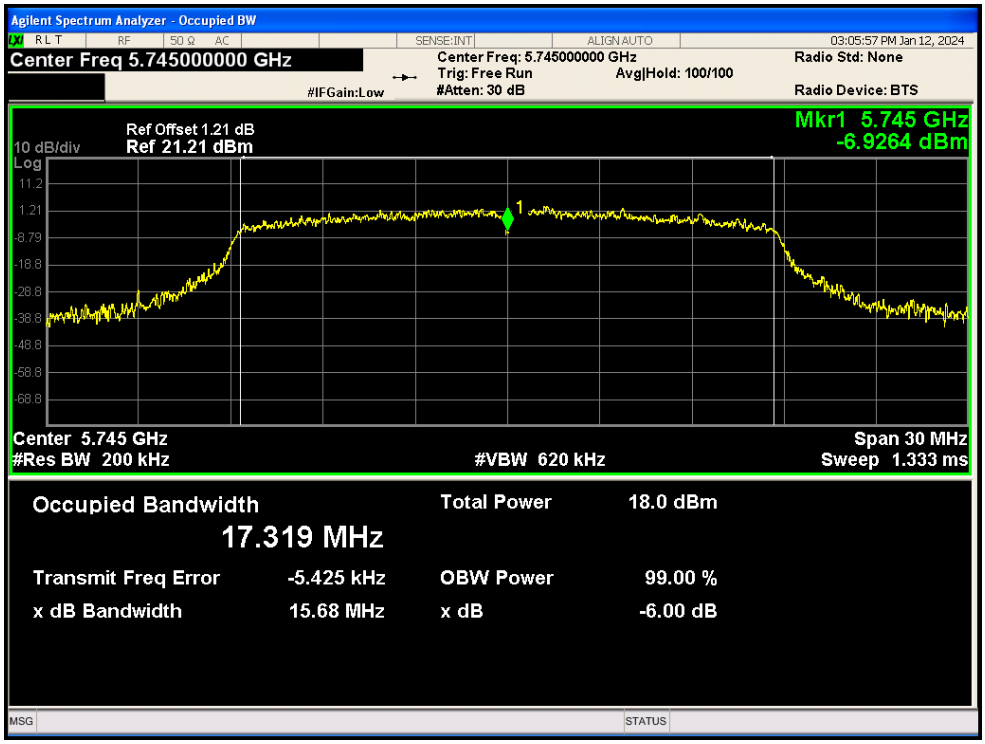
-6dB Bandwidth NVNT ac40 5755MHz Ant1



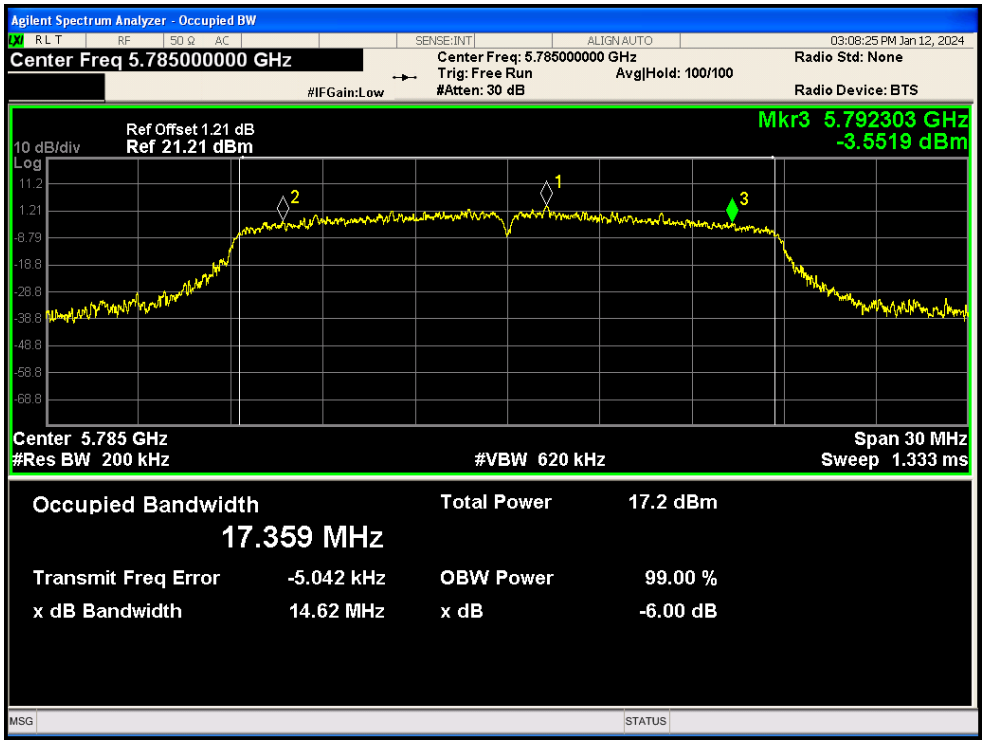
-6dB Bandwidth NVNT ac40 5795MHz Ant1



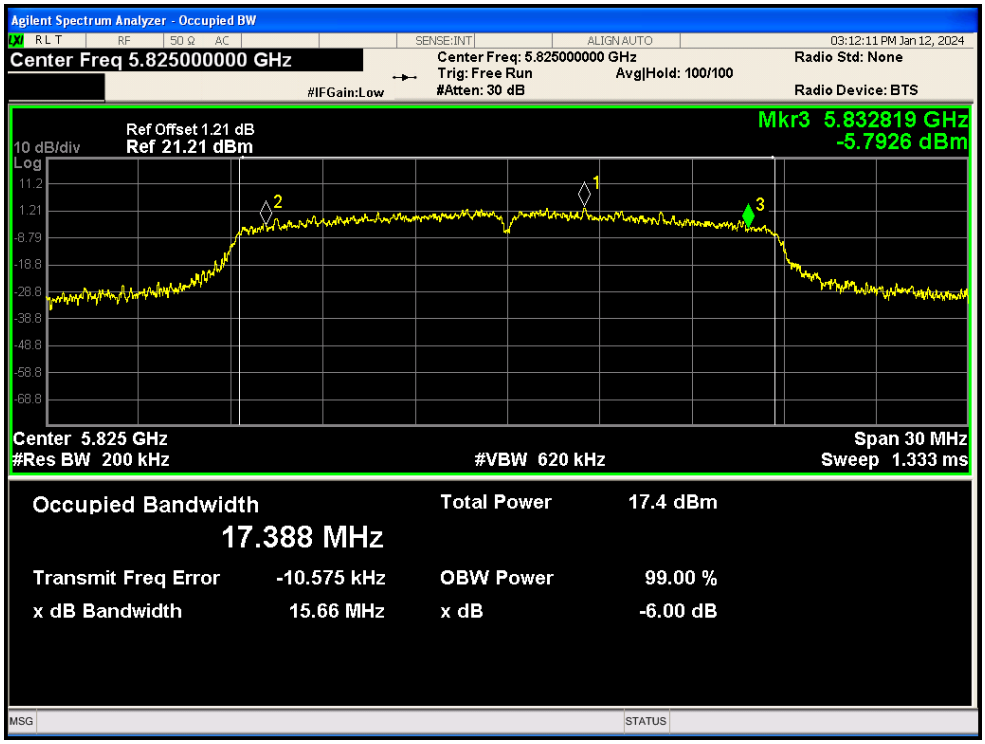
-6dB Bandwidth NVNT n20 5745MHz Ant1



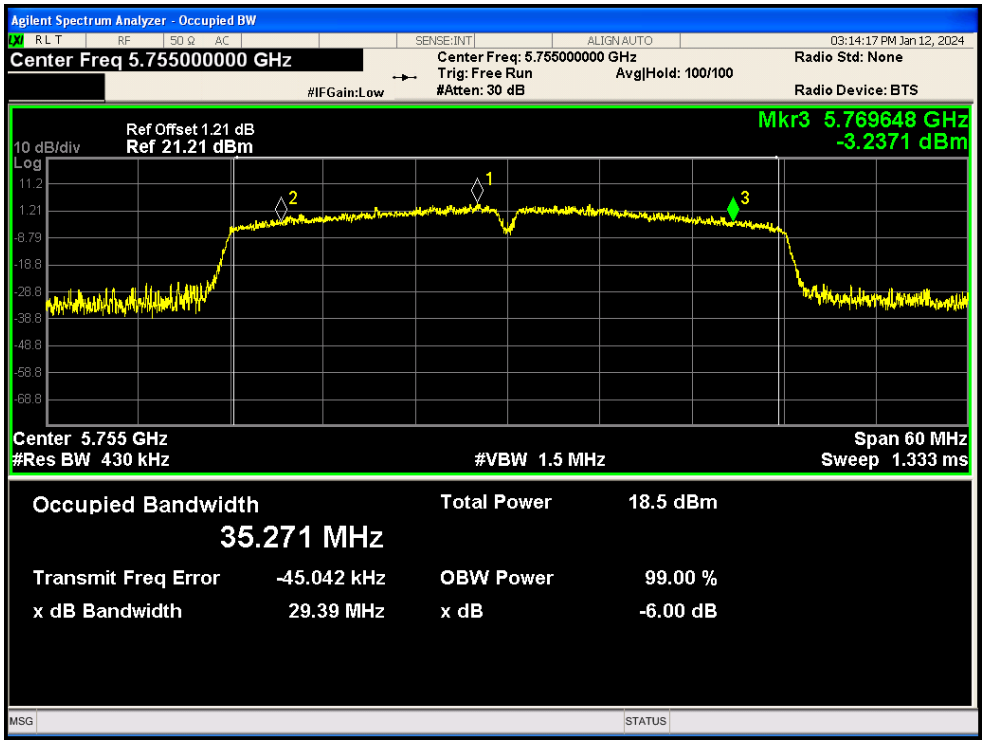
-6dB Bandwidth NVNT n20 5785MHz Ant1



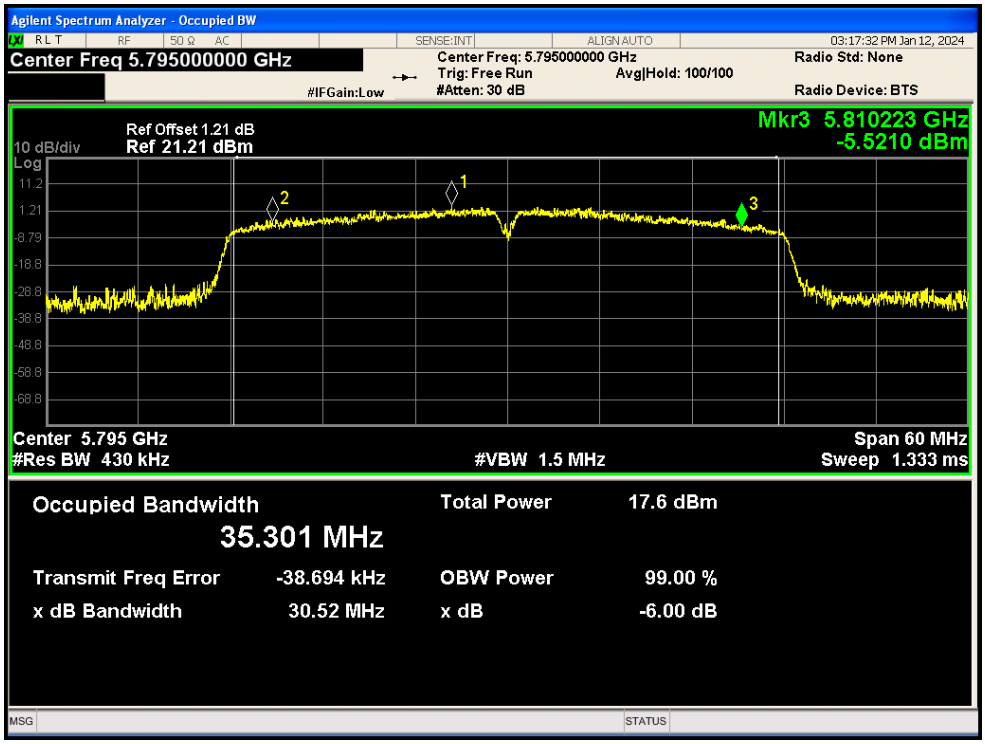
-6dB Bandwidth NVNT n20 5825MHz Ant1



-6dB Bandwidth NVNT n40 5755MHz Ant1



-6dB Bandwidth NVNT n40 5795MHz Ant1

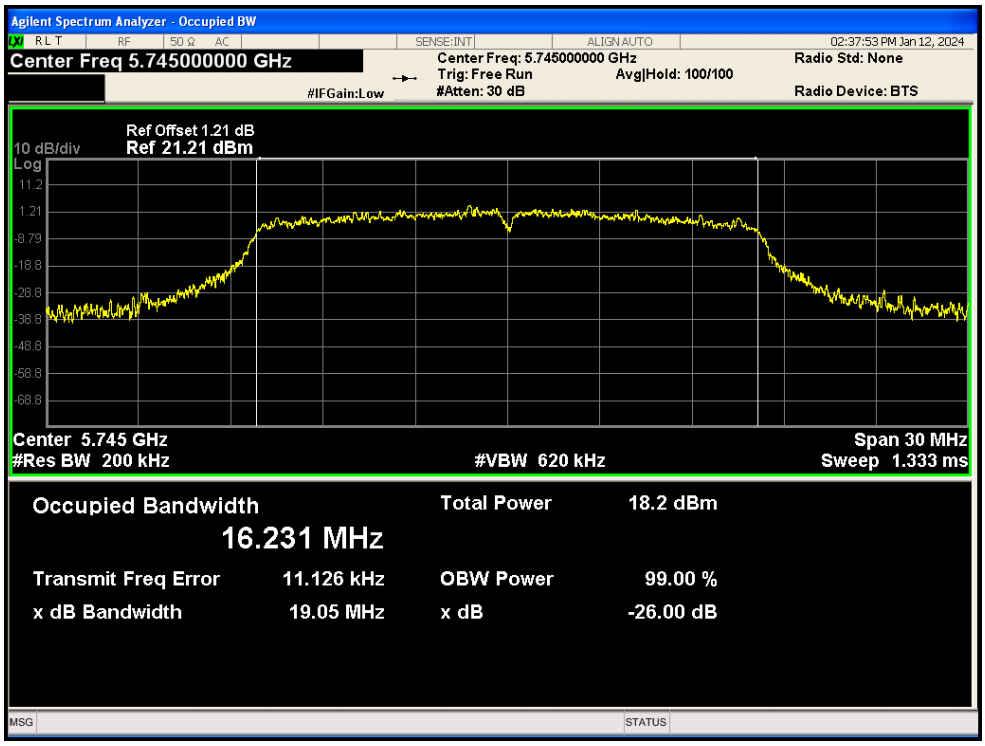


Occupied Channel Bandwidth

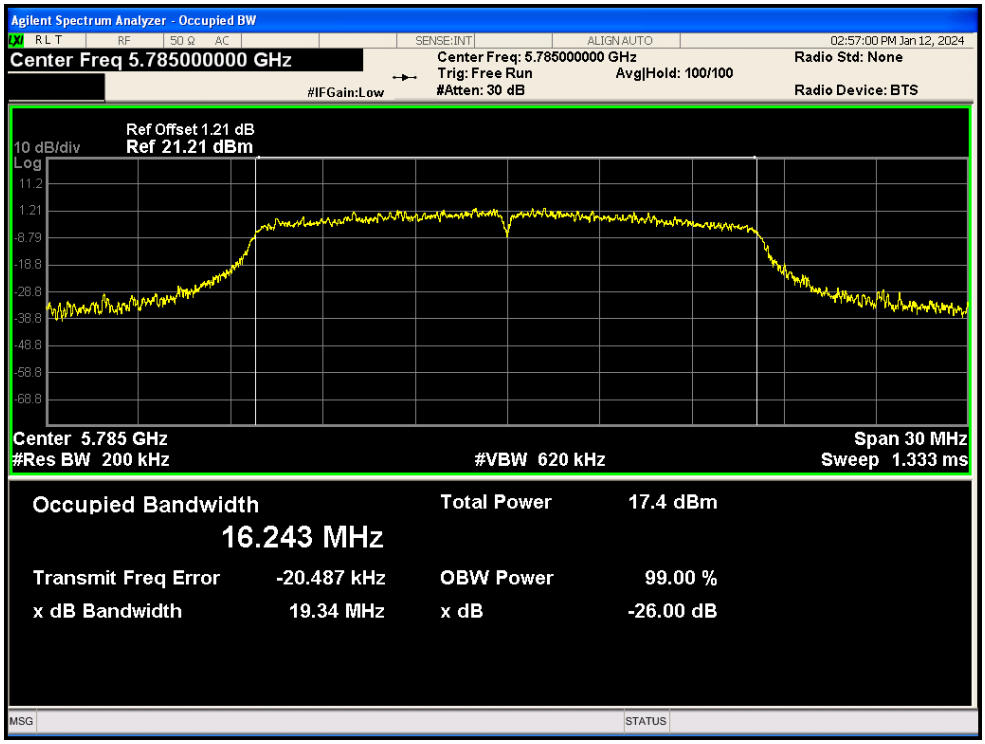
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.231
NVNT	a	5785	Ant1	16.243
NVNT	a	5825	Ant1	16.306

NVNT	ac20	5745	Ant1	17.326
NVNT	ac20	5785	Ant1	17.342
NVNT	ac20	5825	Ant1	17.386
NVNT	ac40	5755	Ant1	35.243
NVNT	ac40	5795	Ant1	35.311
NVNT	n20	5745	Ant1	17.332
NVNT	n20	5785	Ant1	17.348
NVNT	n20	5825	Ant1	17.393
NVNT	n40	5755	Ant1	35.289
NVNT	n40	5795	Ant1	35.326

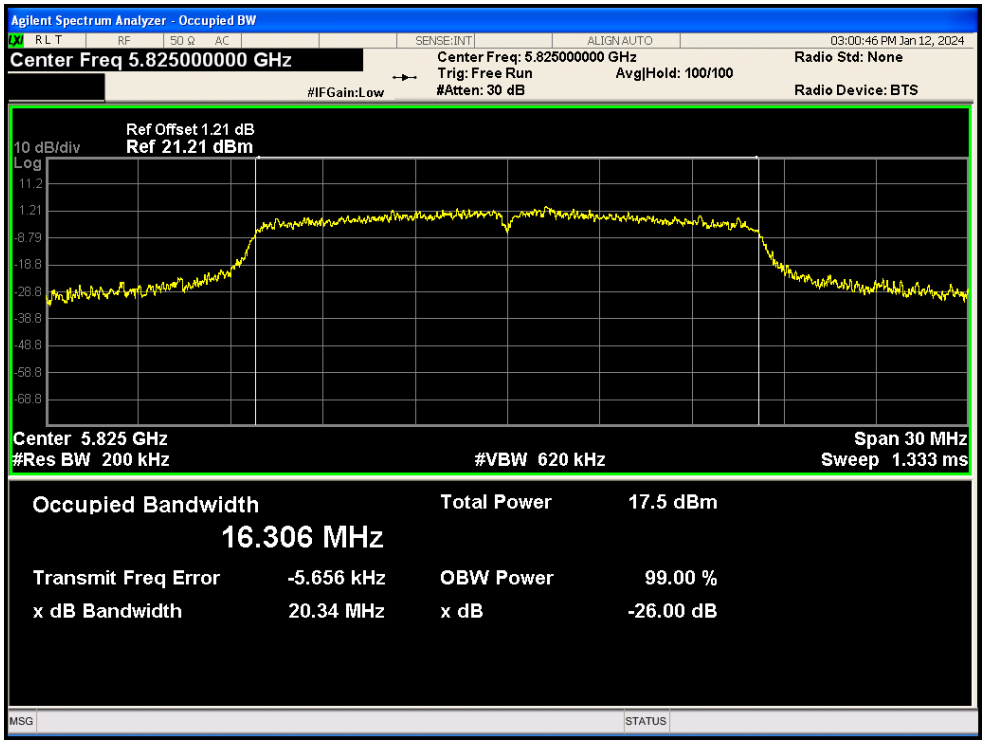
OBW NVNT a 5745MHz Ant1



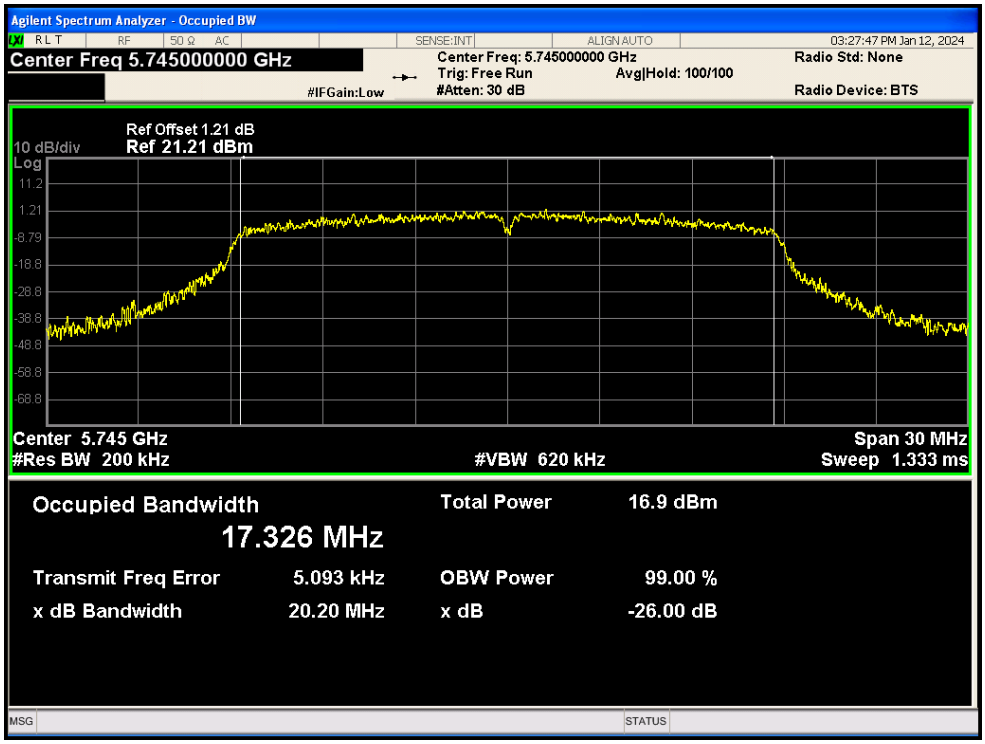
OBW NVNT a 5785MHz Ant1



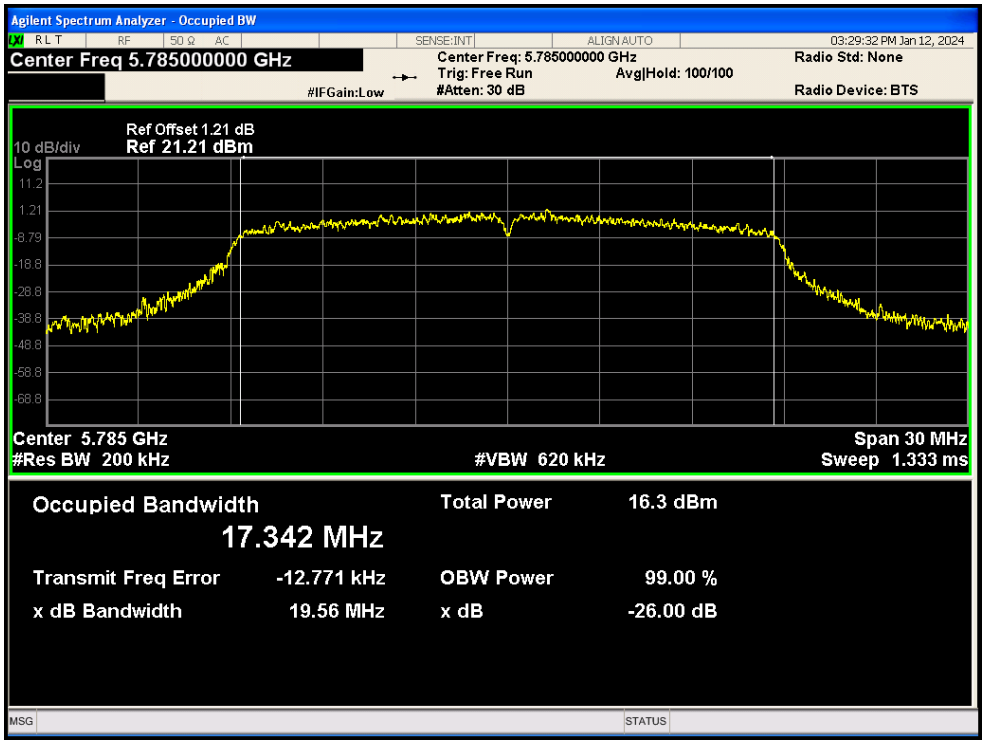
OBW NVNT a 5825MHz Ant1



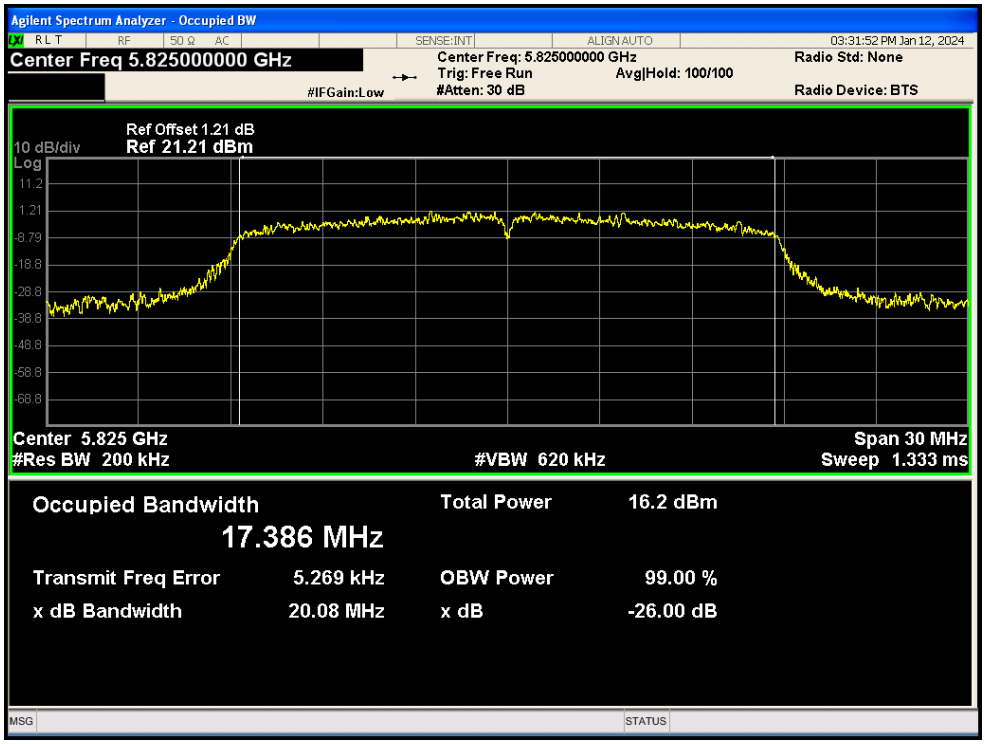
OBW NVNT ac20 5745MHz Ant1



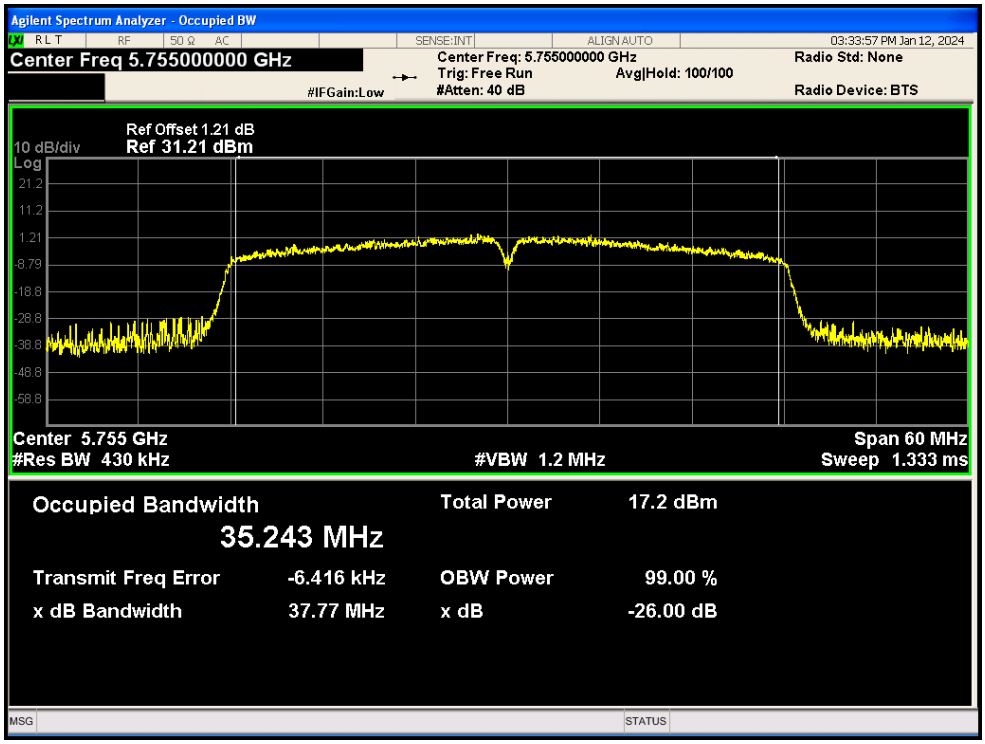
OBW NVNT ac20 5785MHz Ant1



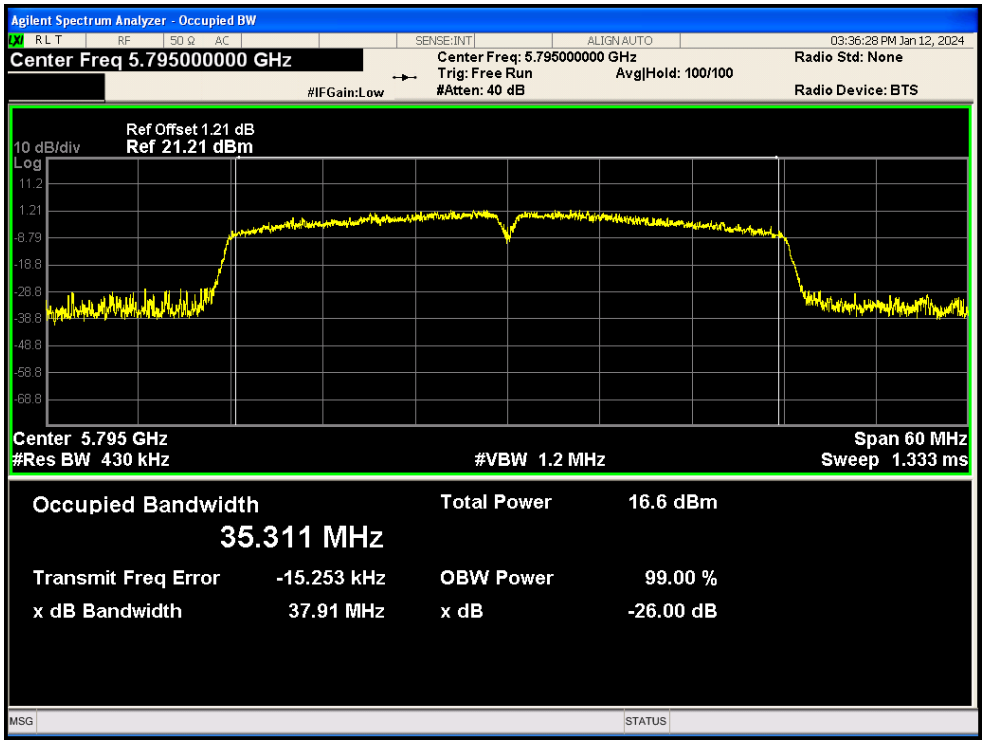
OBW NVNT ac20 5825MHz Ant1



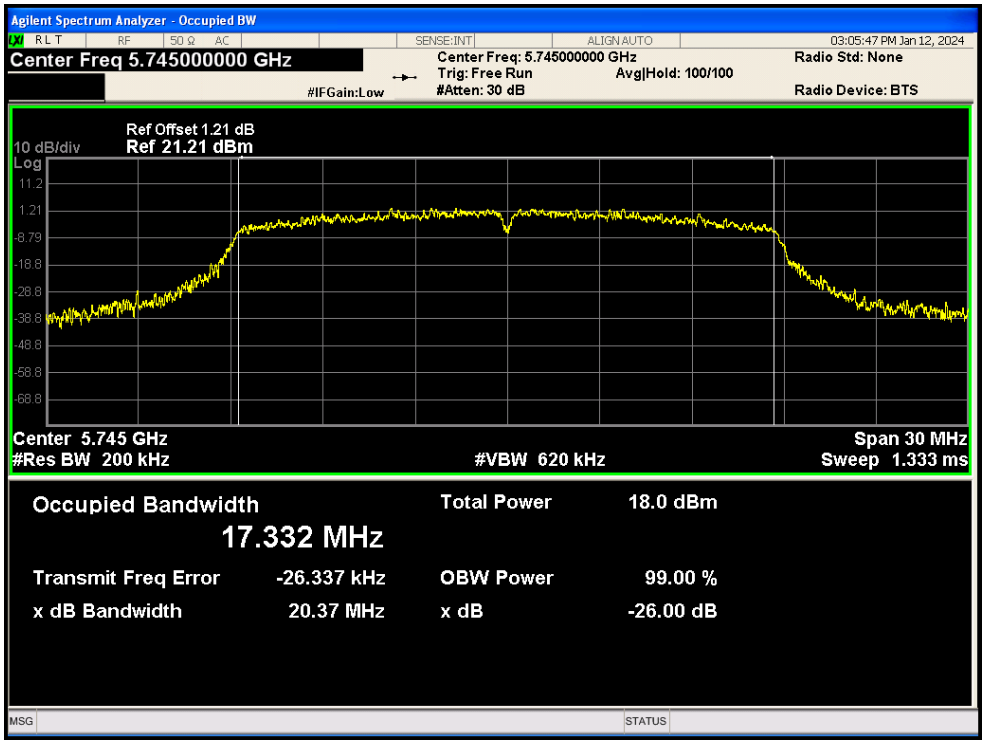
OBW NVNT ac40 5755MHz Ant1



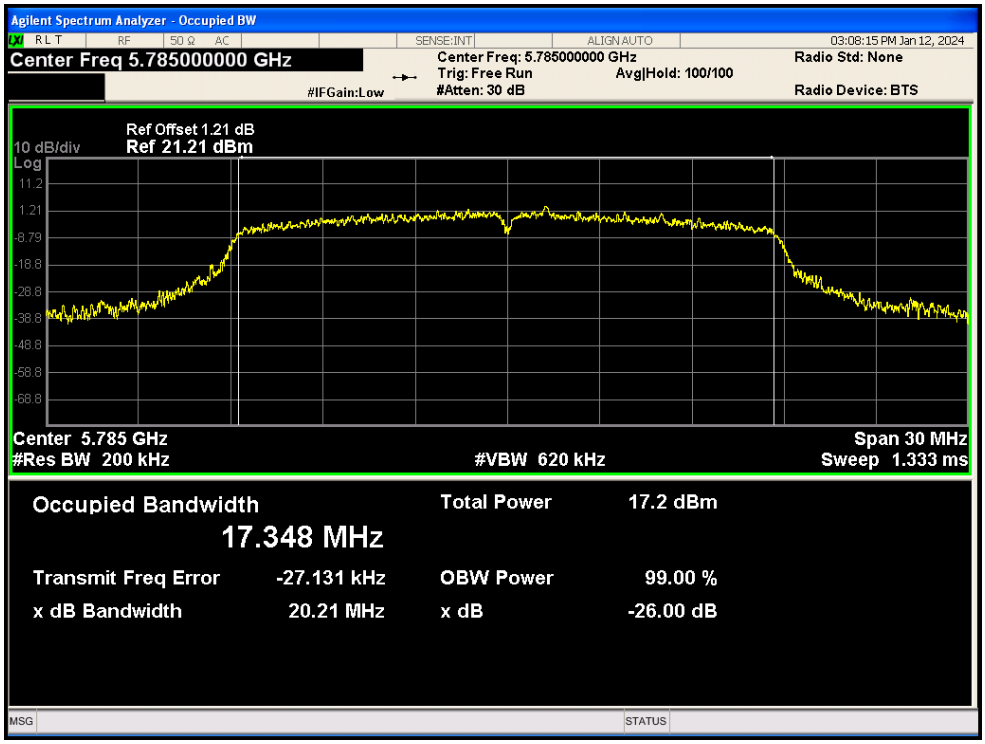
OBW NVNT ac40 5795MHz Ant1



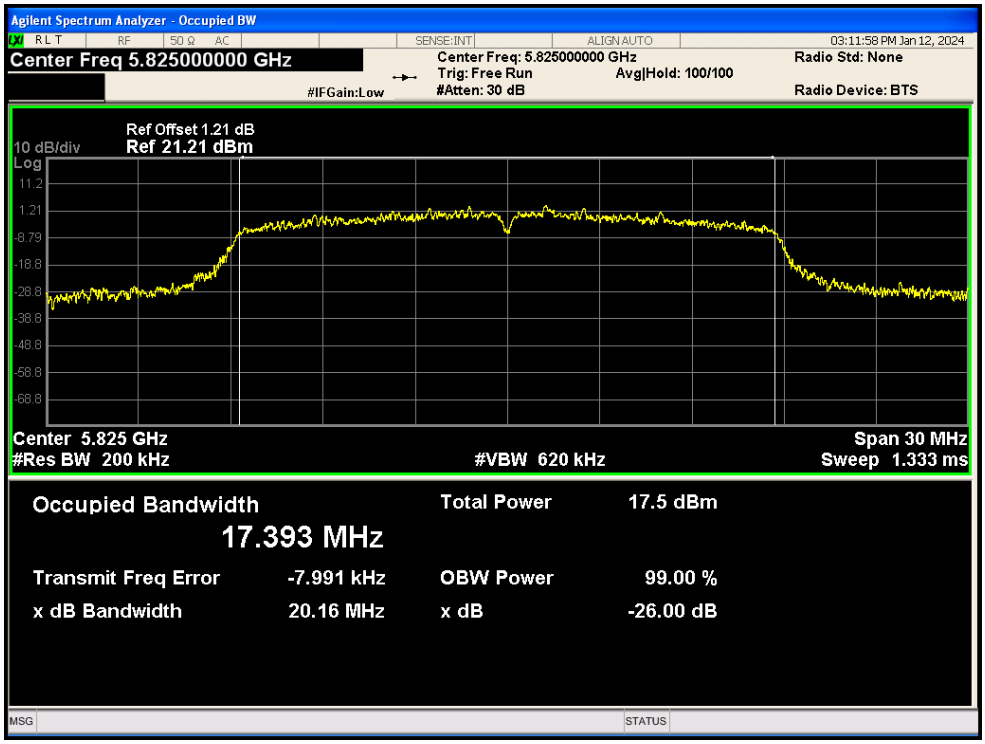
OBW NVNT n20 5745MHz Ant1



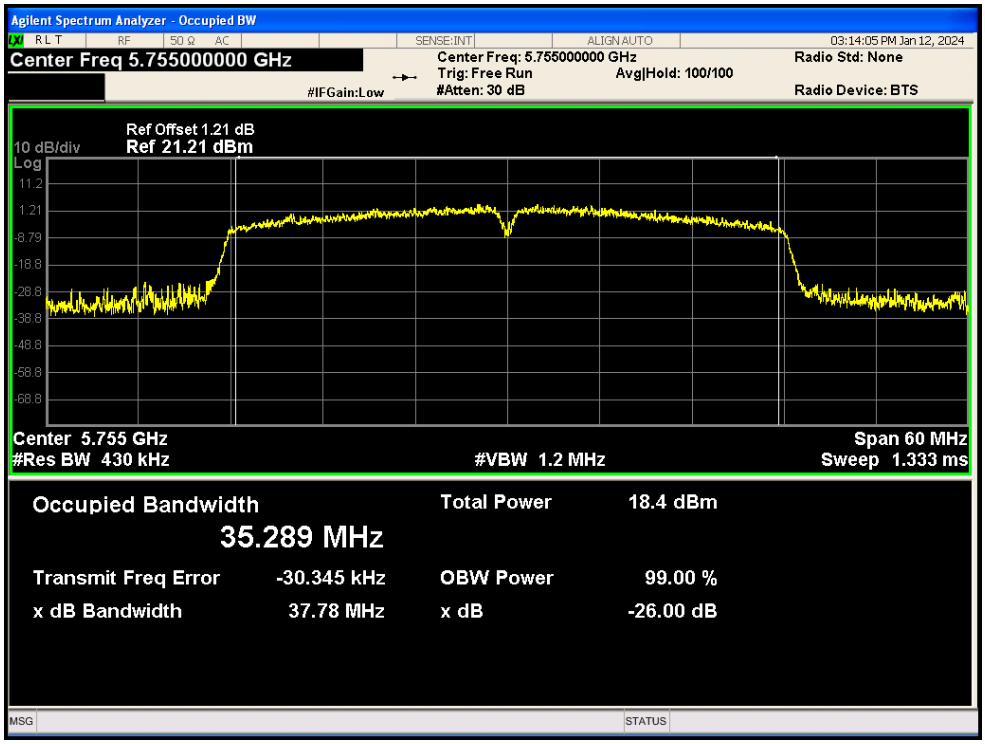
OBW NVNT n20 5785MHz Ant1



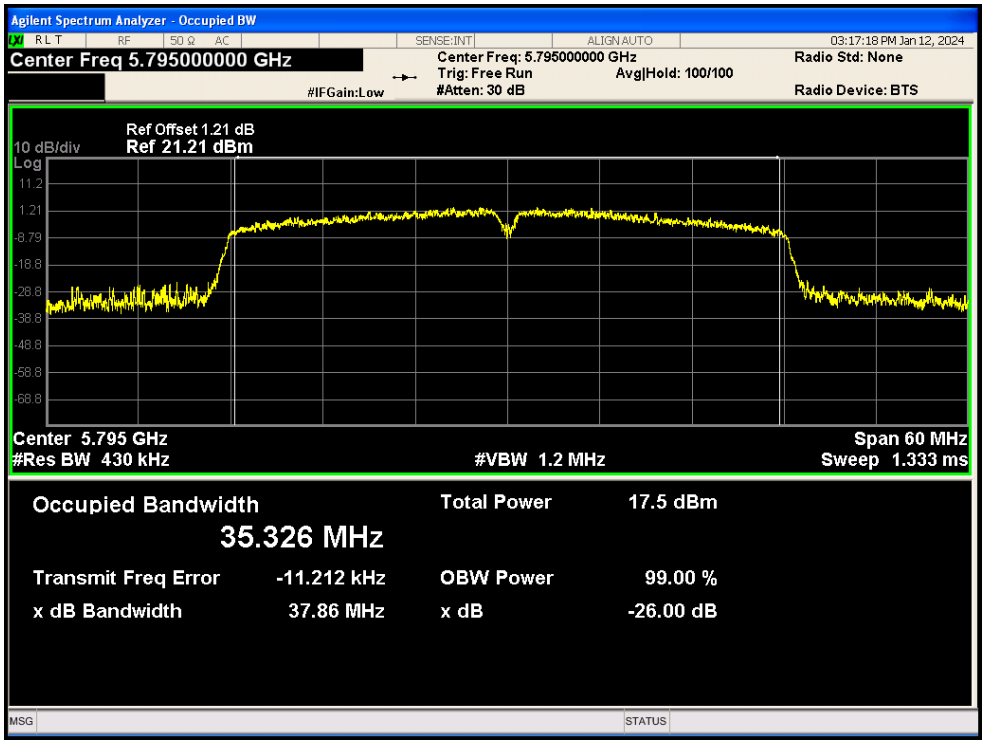
OBW NVNT n20 5825MHz Ant1



OBW NVNT n40 5755MHz Ant1



OBW NVNT n40 5795MHz Ant1

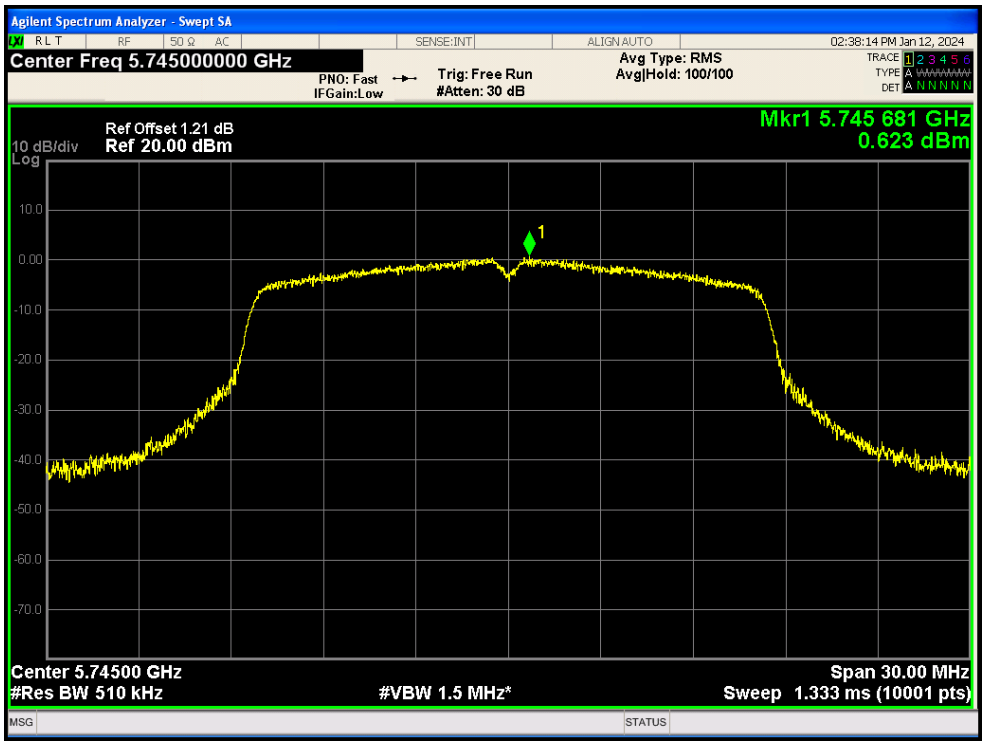


Maximum Power Spectral Density Level

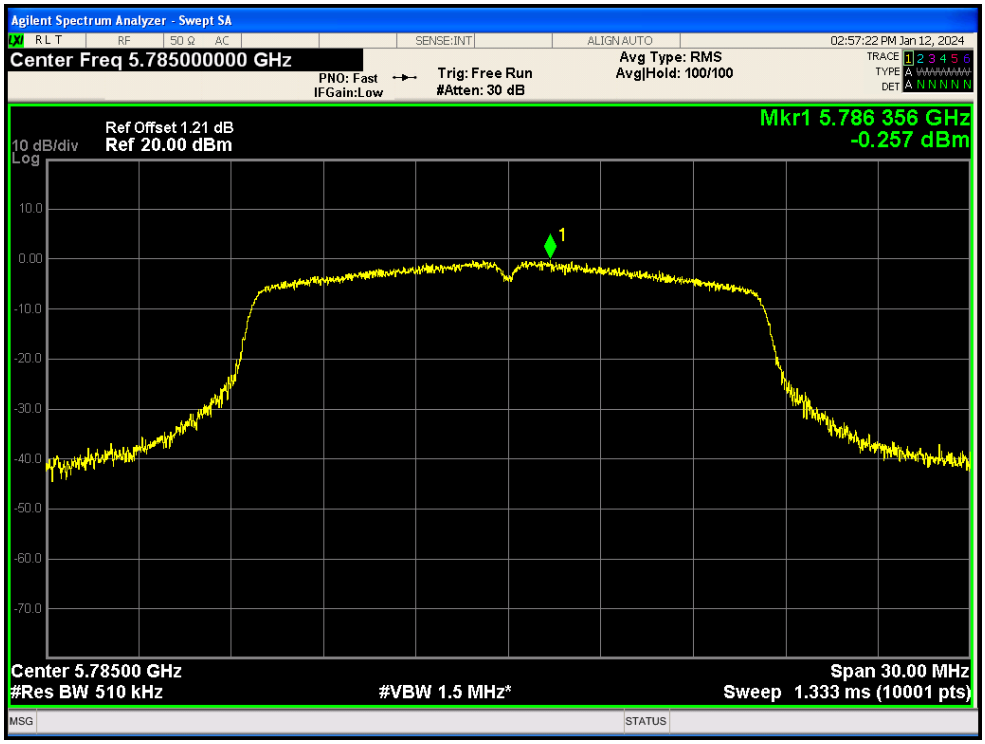
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	0.623	30	Pass
NVNT	a	5785	Ant1	-0.257	30	Pass

NVNT	a	5825	Ant1	0.105	30	Pass
NVNT	ac20	5745	Ant1	-0.945	30	Pass
NVNT	ac20	5785	Ant1	-1.124	30	Pass
NVNT	ac20	5825	Ant1	-1.326	30	Pass
NVNT	ac40	5755	Ant1	-3.732	30	Pass
NVNT	ac40	5795	Ant1	-4.004	30	Pass
NVNT	n20	5745	Ant1	0.034	30	Pass
NVNT	n20	5785	Ant1	-0.682	30	Pass
NVNT	n20	5825	Ant1	-0.406	30	Pass
NVNT	n40	5755	Ant1	-2.271	30	Pass
NVNT	n40	5795	Ant1	-3.181	30	Pass

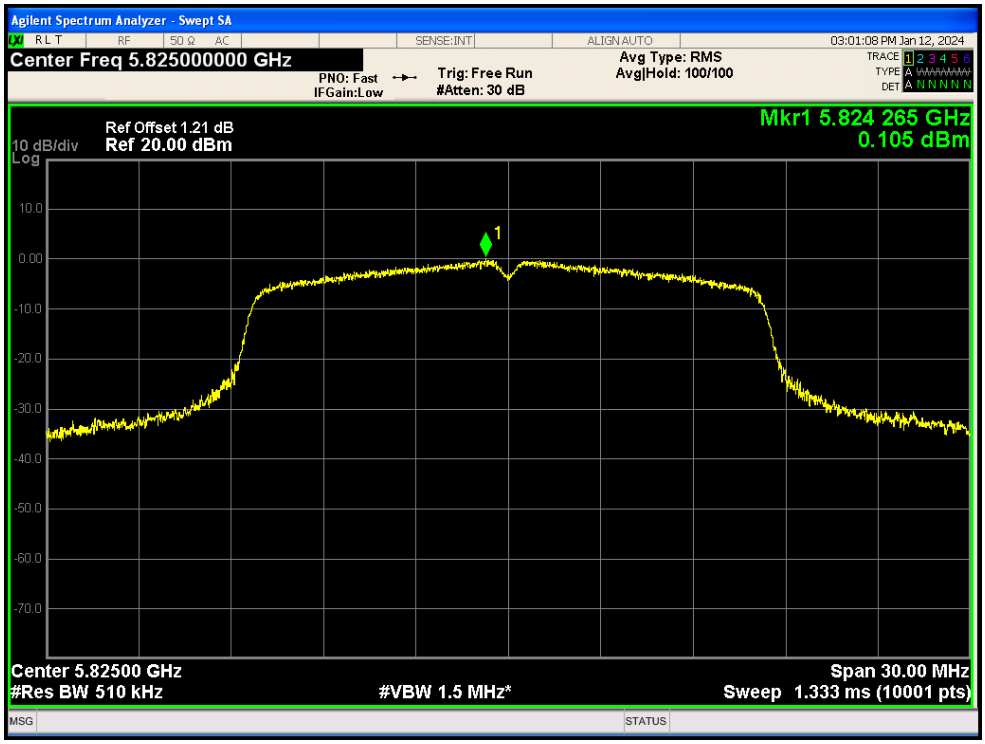
PSD NVNT a 5745MHz Ant1



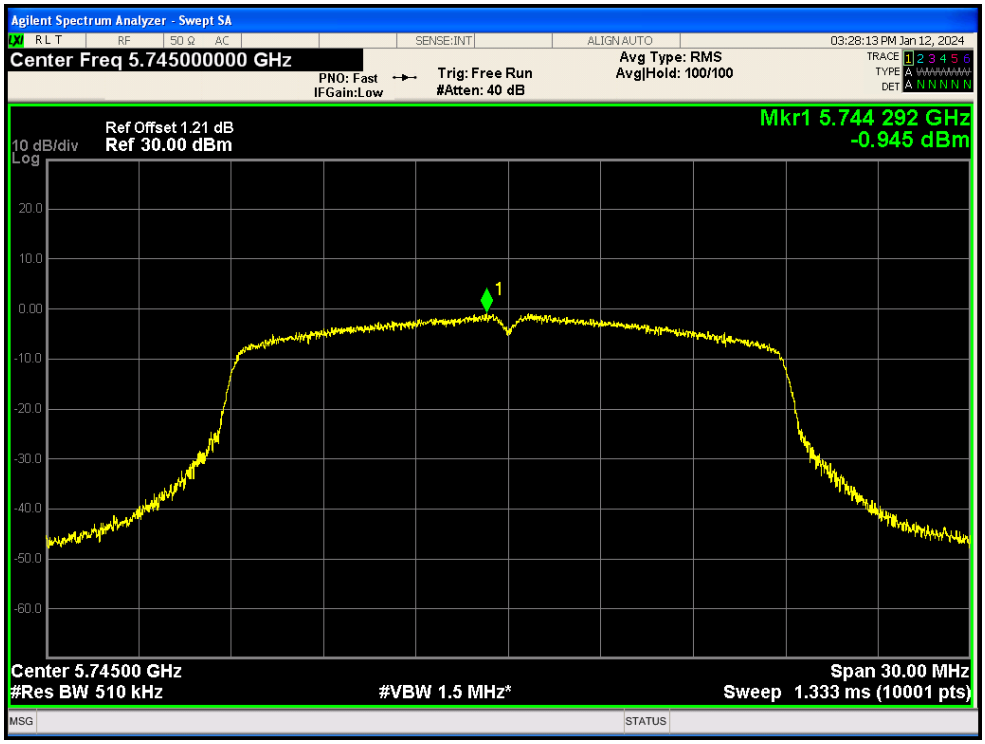
PSD NVNT a 5785MHz Ant1



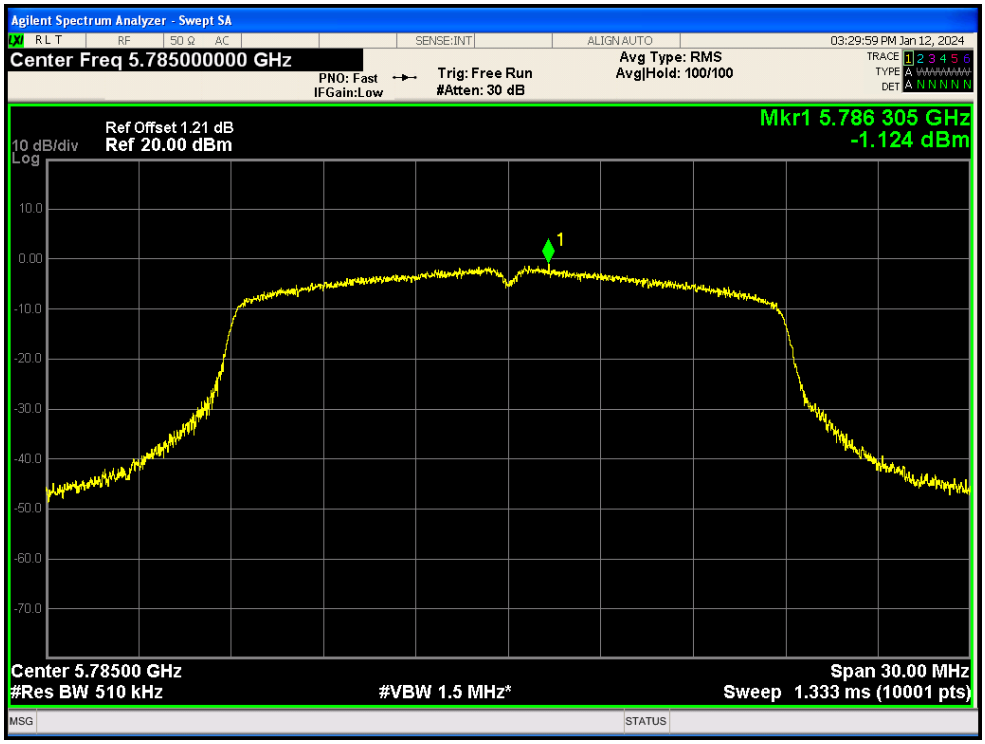
PSD NVNT a 5825MHz Ant1



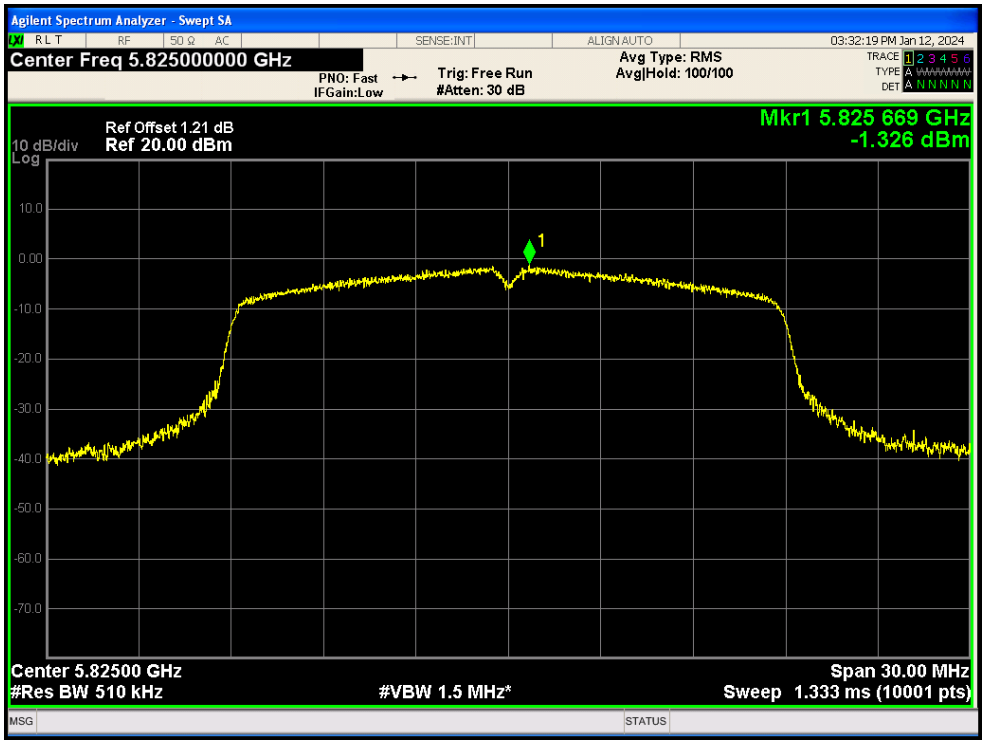
PSD NVNT ac20 5745MHz Ant1



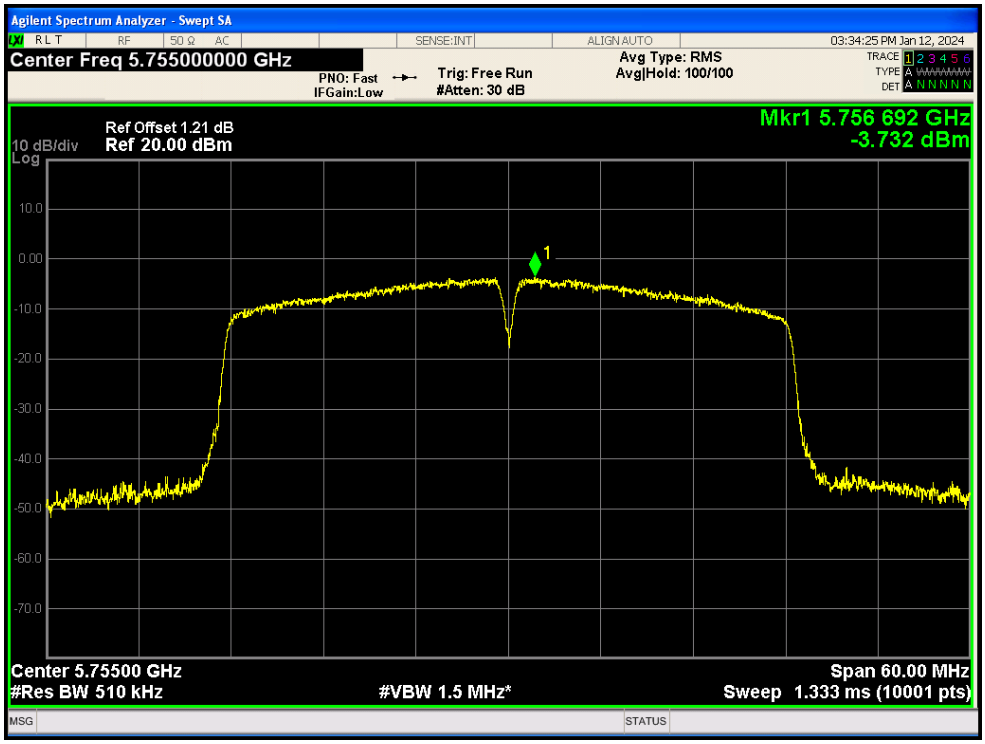
PSD NVNT ac20 5785MHz Ant1



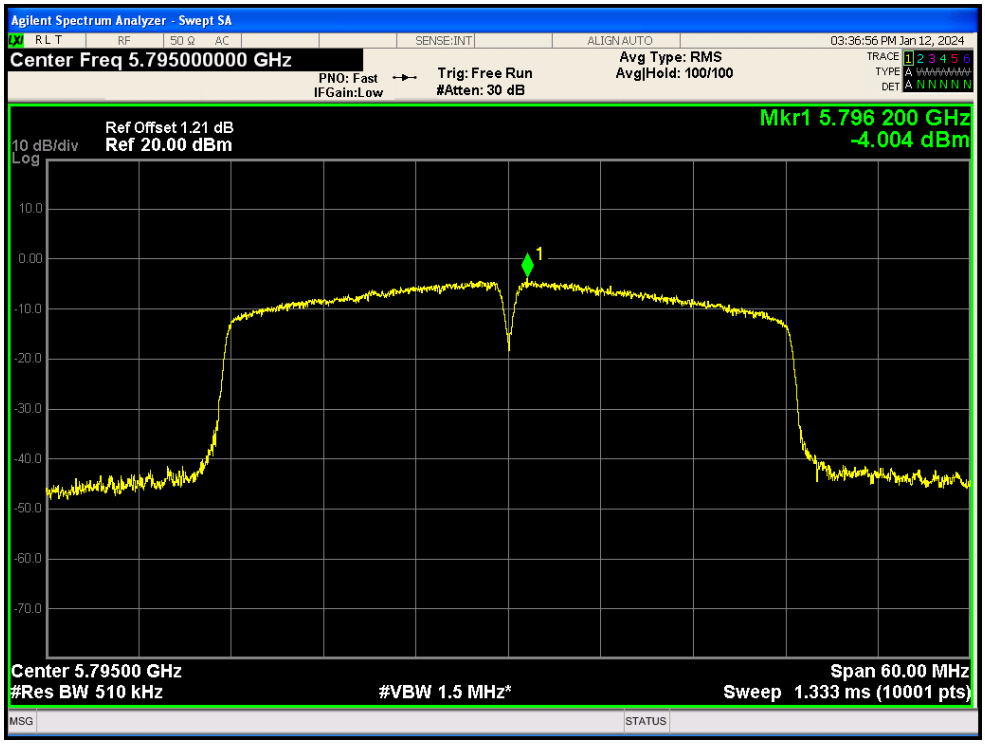
PSD NVNT ac20 5825MHz Ant1



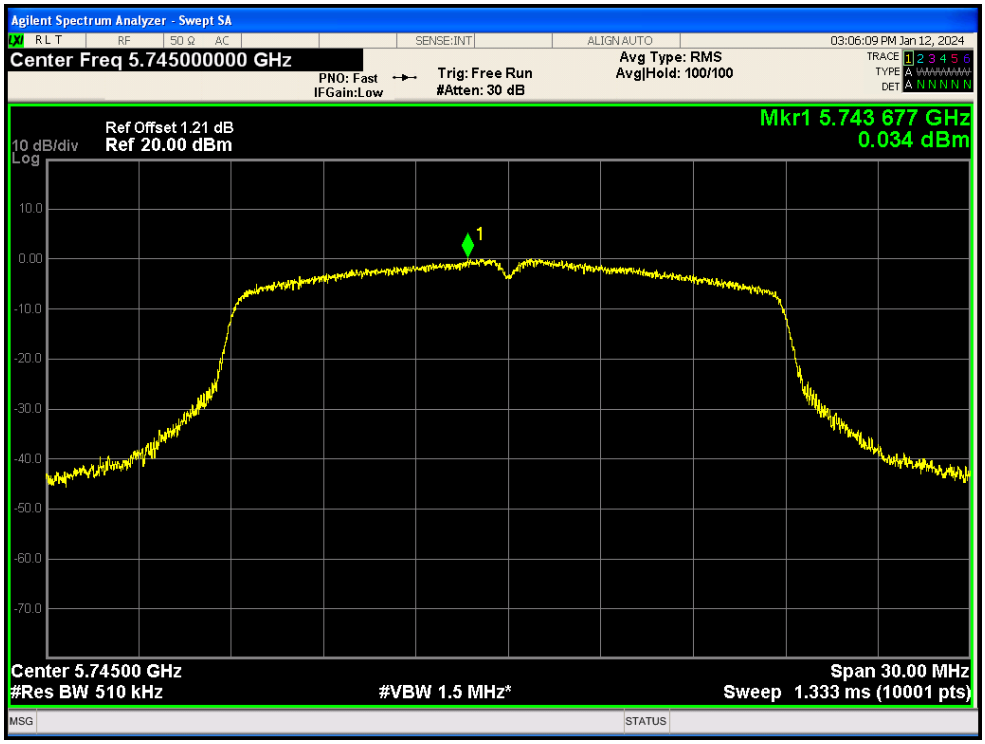
PSD NVNT ac40 5755MHz Ant1



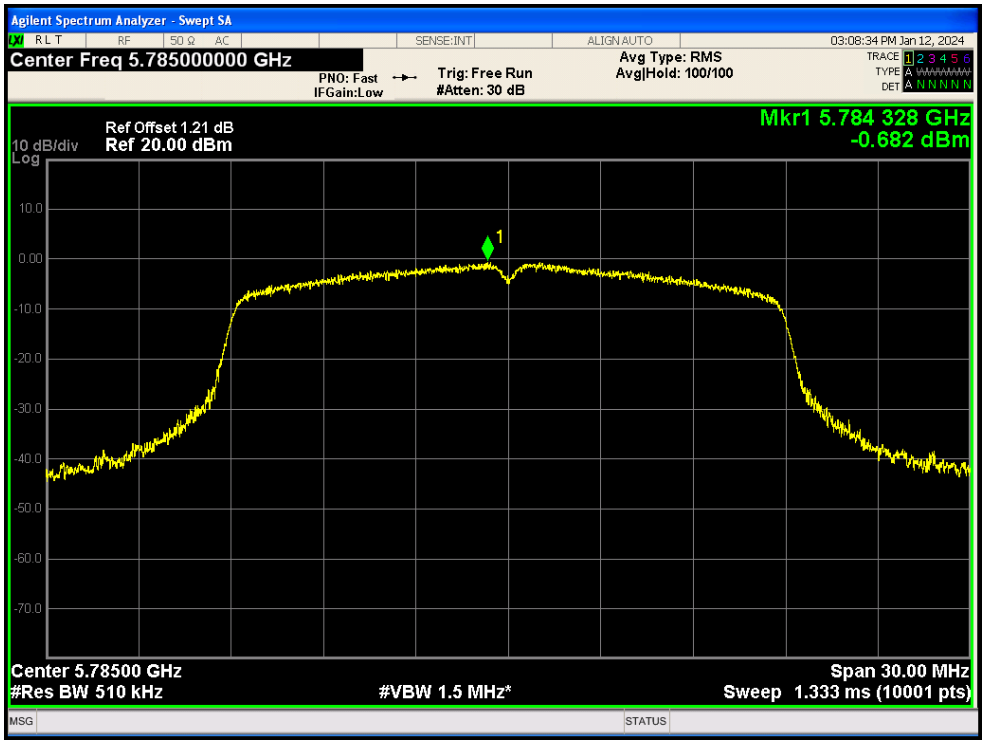
PSD NVNT ac40 5795MHz Ant1



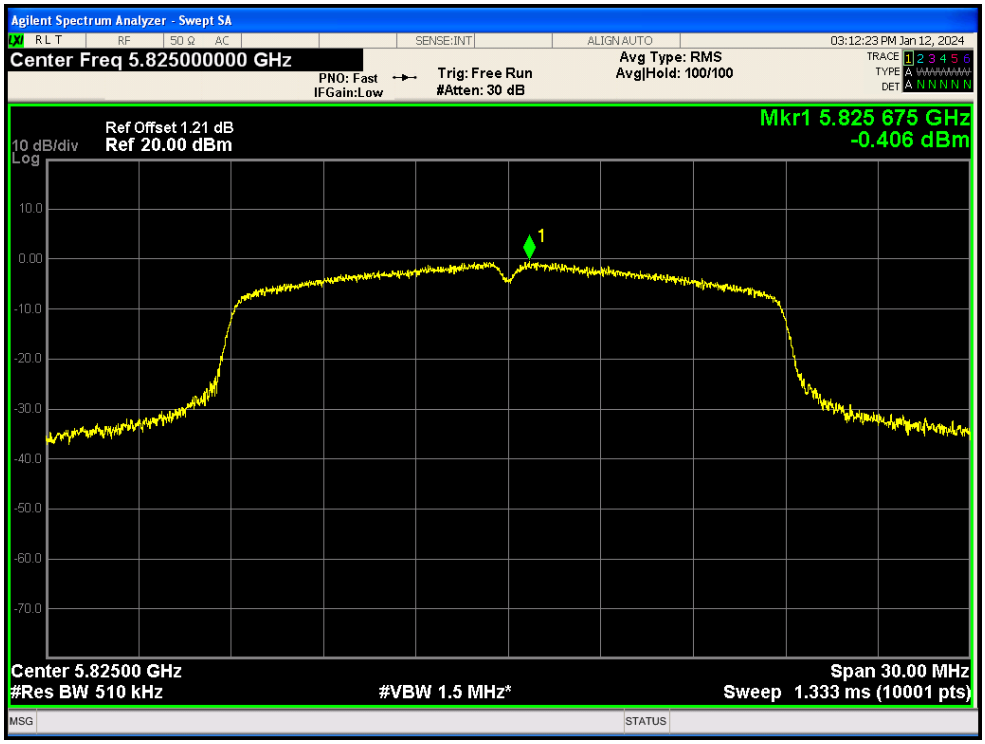
PSD NVNT n20 5745MHz Ant1



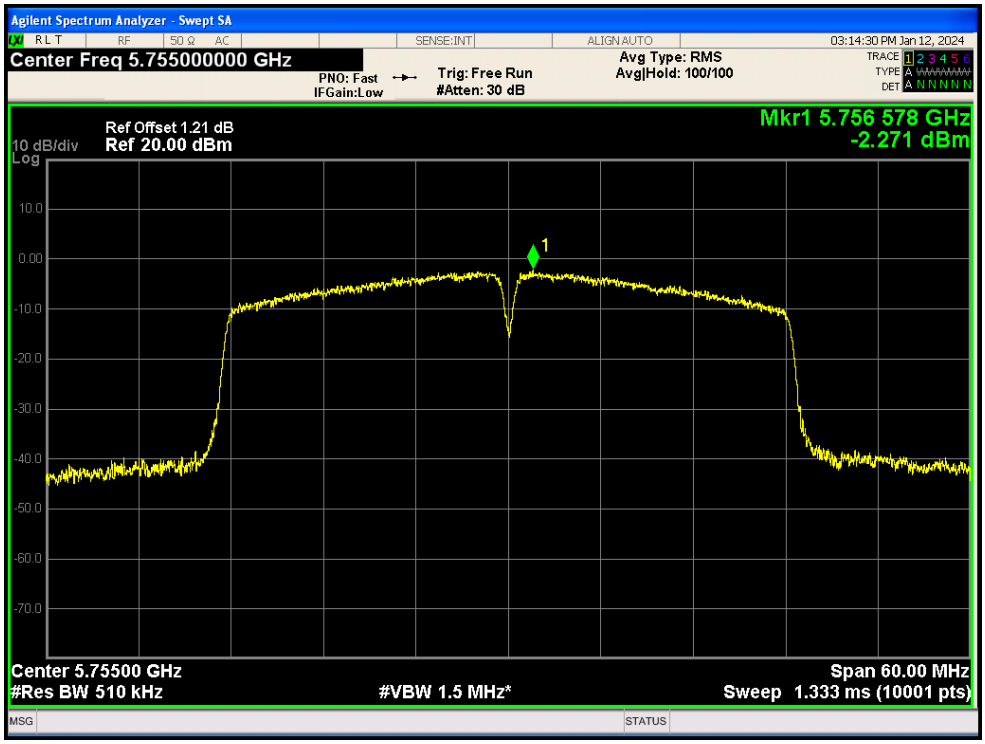
PSD NVNT n20 5785MHz Ant1



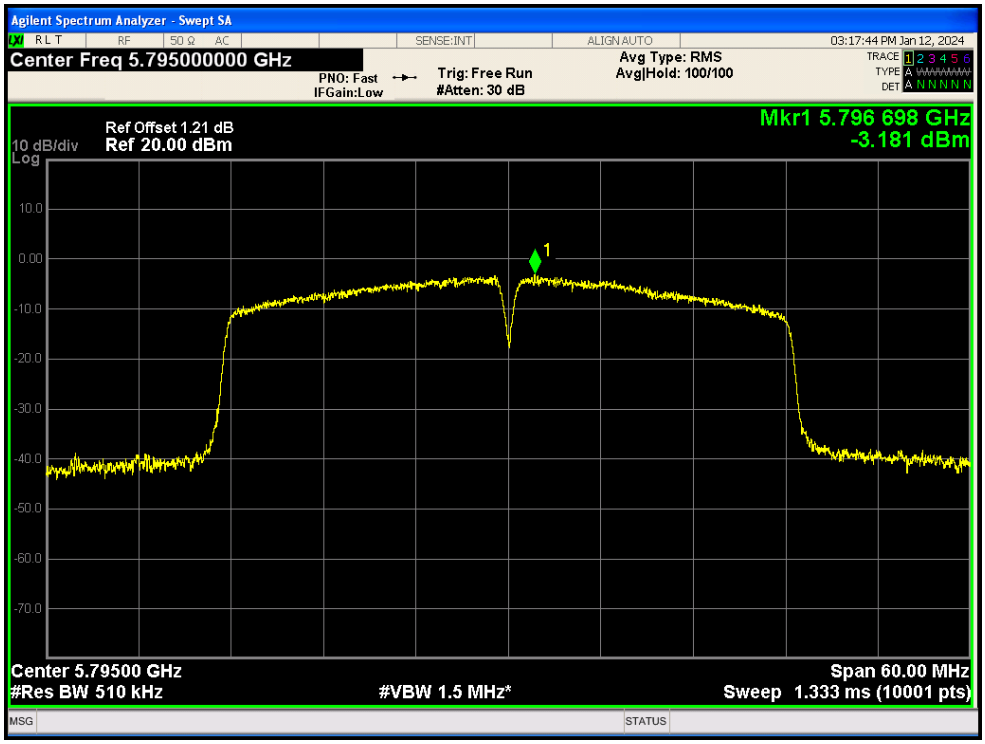
PSD NVNT n20 5825MHz Ant1



PSD NVNT n40 5755MHz Ant1



PSD NVNT n40 5795MHz Ant1



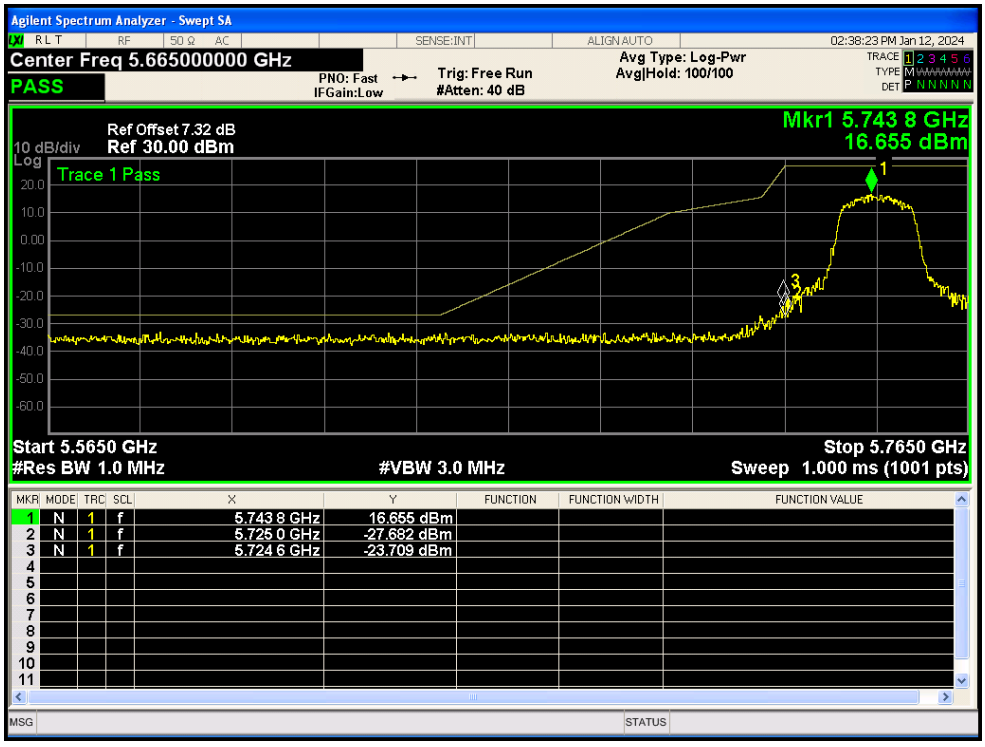
Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBm)	Verdict
NVNT	a	5745	Ant1	-23.7	Pass
NVNT	a	5825	Ant1	-22.87	Pass
NVNT	ac20	5745	Ant1	-28.31	Pass

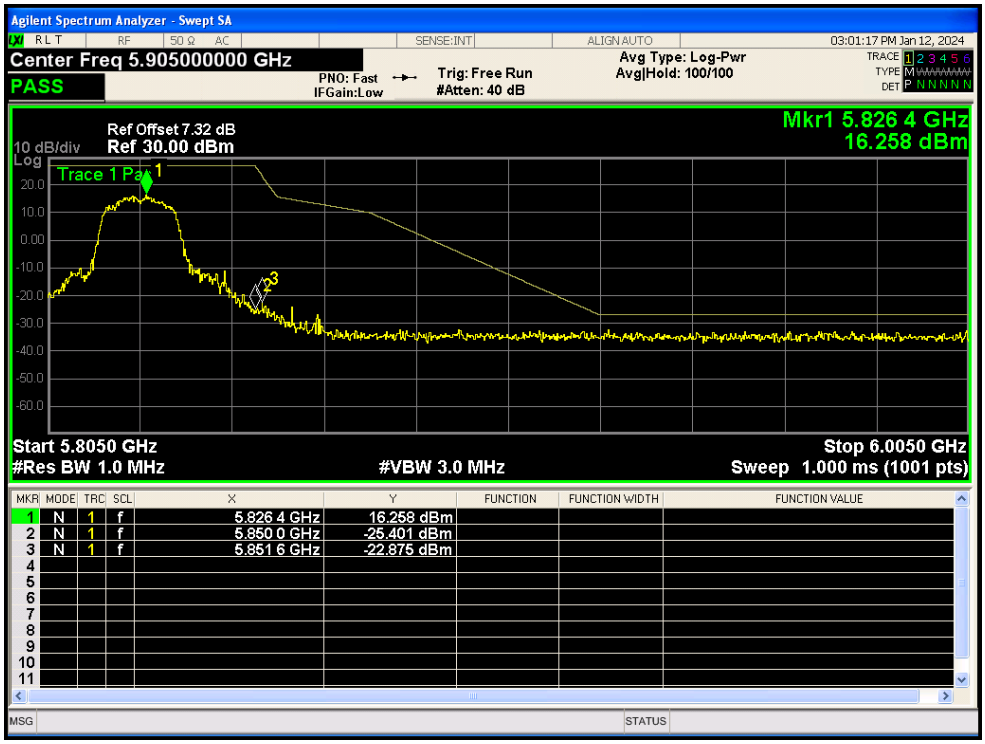
NVNT	ac20	5825	Ant1	-25.76	Pass
NVNT	ac40	5755	Ant1	-21.01	Pass
NVNT	ac40	5795	Ant1	-31.43	Pass
NVNT	n20	5745	Ant1	-22.22	Pass
NVNT	n20	5825	Ant1	-23.64	Pass
NVNT	n40	5755	Ant1	-16.94	Pass
NVNT	n40	5795	Ant1	-29.77	Pass

Note: This test has increased antenna gain .

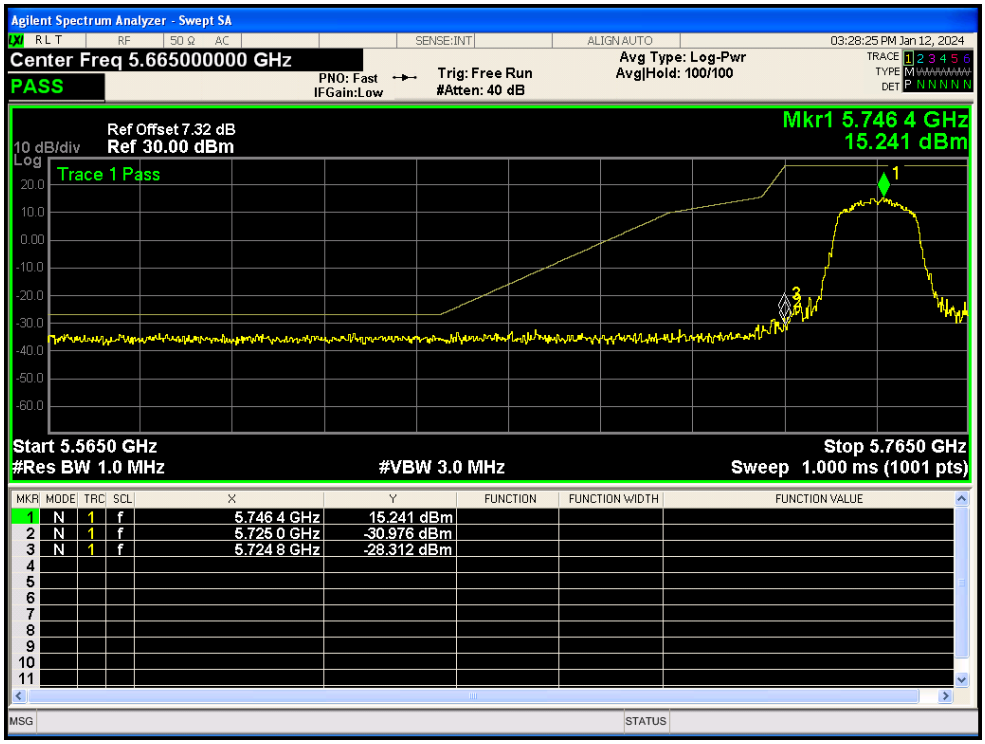
Band Edge NVNT a 5745MHz Low Ant1



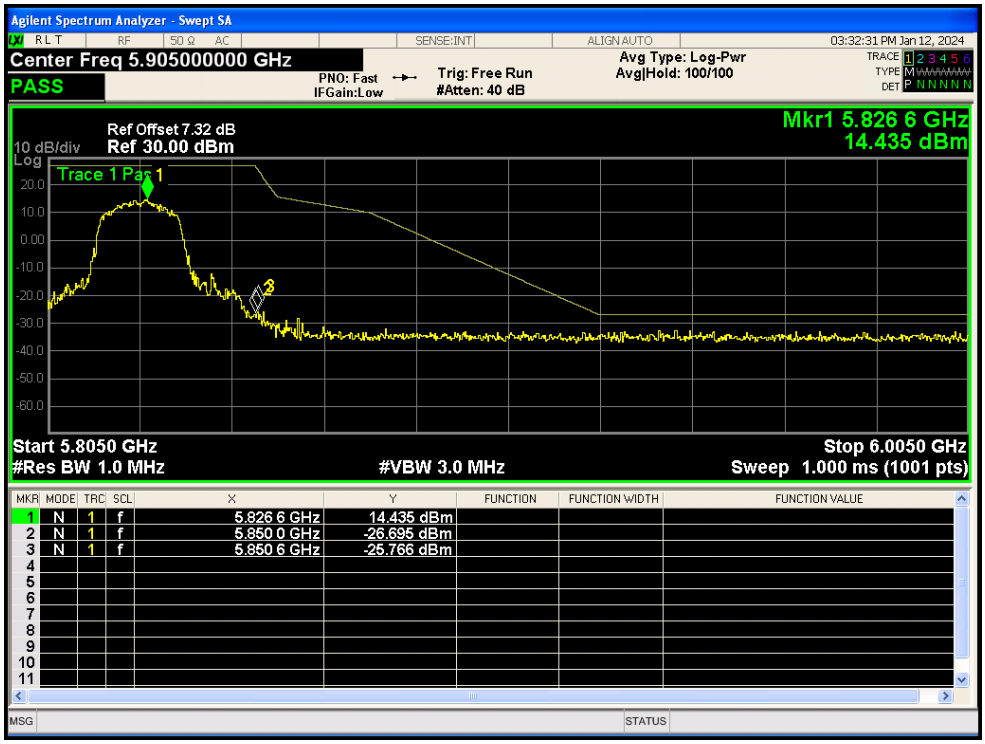
Band Edge NVNT a 5825MHz High Ant1



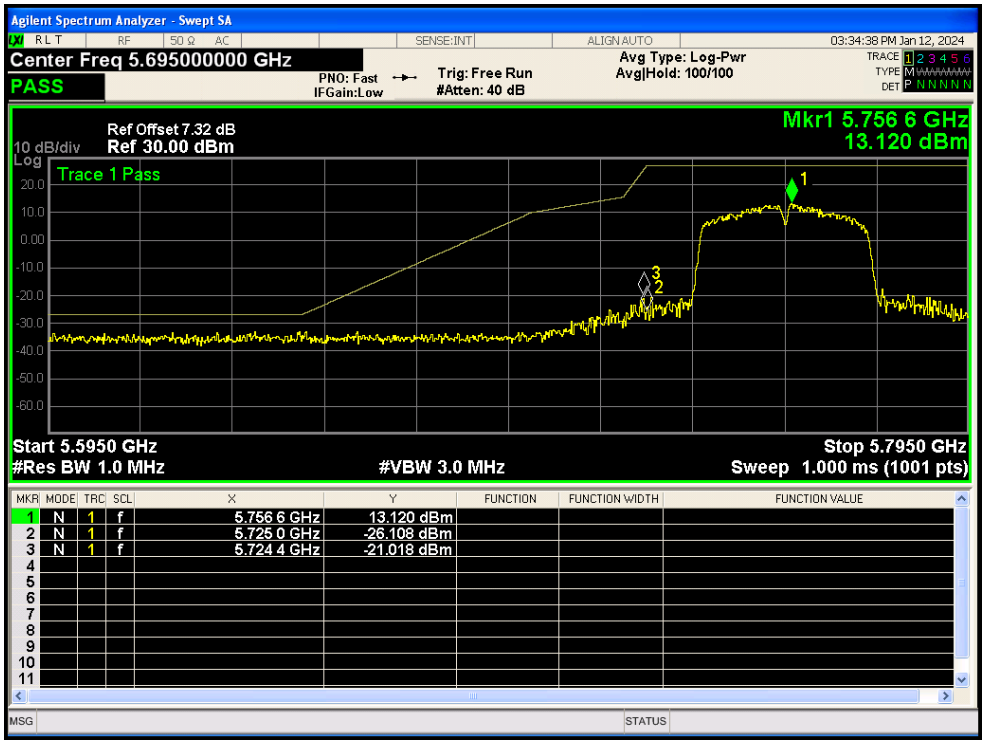
Band Edge NVNT ac20 5745MHz Low Ant1



Band Edge NVNT ac20 5825MHz High Ant1



Band Edge NVNT ac40 5755MHz Low Ant1



Band Edge NVNT ac40 5795MHz High Ant1