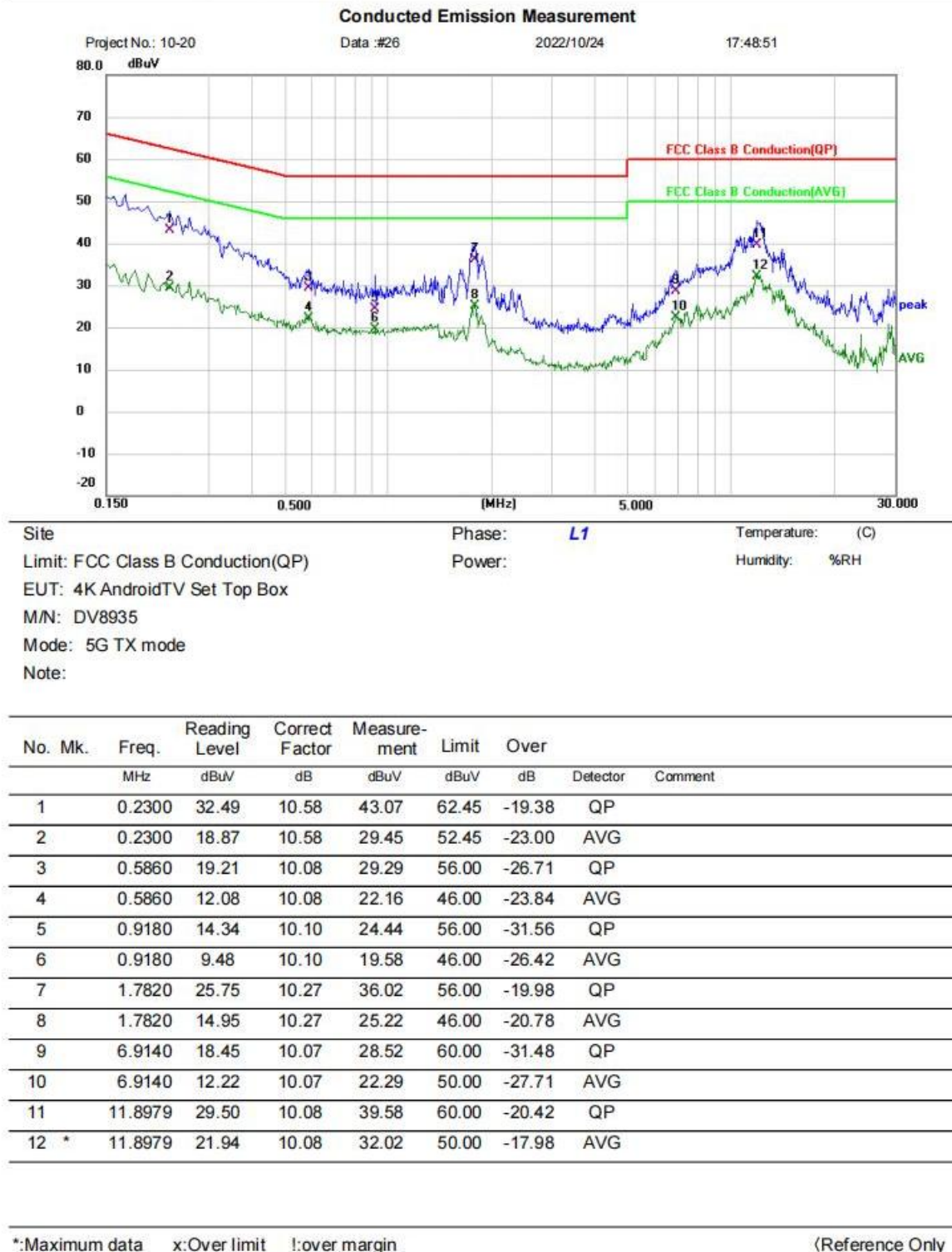


[TestMode: Transmitting mode]; [Line: Line] ;[Power:AC120V/60Hz]



Test Result: Pass

19 Antenna Requirement

Test Standard	47 CFR Part 15, Subpart E 15.203
Test Method	N/A

19.1 Conclusion

Standard Requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is Antenna 1:3.19dBi,Antenna 2:3.09dBi

20 Appendix

20.1 Maximum Conducted Output Power

Note: if transmitting antennas of directional gain greater than 6 dBi are used, then the limit should be reduced. Because the directional gain = 6.38dB > 6.0 dBi, the limit should be calculated as below:

For Band123, Limit = 24 dBm - directional gain -6 dBi = 23.62dBm

For Band4, Power Limit = 30 dBm - directional gain -6 dBi = 29.62dBm

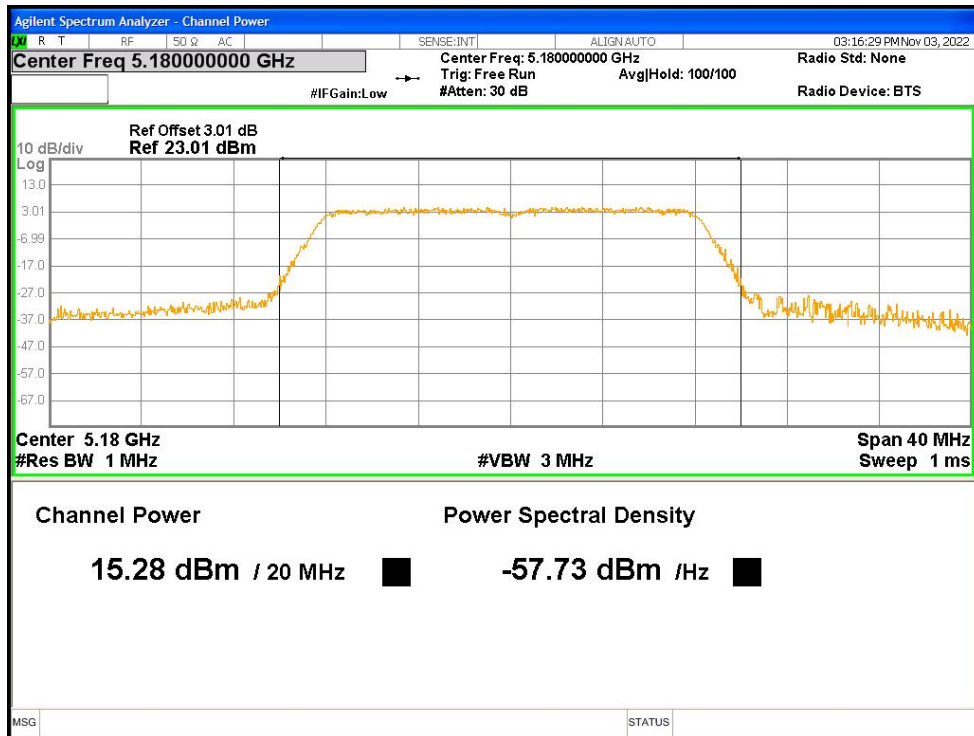
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5180	Ant1	15.631	23.62	Pass
NVNT	a	5200	Ant1	15.479	23.62	Pass
NVNT	a	5240	Ant1	14.817	23.62	Pass
NVNT	a	5260	Ant1	15.412	23.62	Pass
NVNT	a	5280	Ant1	15.217	23.62	Pass
NVNT	a	5320	Ant1	15.051	23.62	Pass
NVNT	a	5500	Ant1	15.22	23.62	Pass
NVNT	a	5600	Ant1	15.764	23.62	Pass
NVNT	a	5700	Ant1	15.511	23.62	Pass
NVNT	a	5745	Ant1	15.637	29.62	Pass
NVNT	a	5785	Ant1	15.596	29.62	Pass
NVNT	a	5825	Ant1	15.484	29.62	Pass
NVNT	a	5180	Ant2	15.407	23.62	Pass
NVNT	a	5200	Ant2	15.752	23.62	Pass
NVNT	a	5240	Ant2	15.21	23.62	Pass
NVNT	a	5260	Ant2	15.206	23.62	Pass
NVNT	a	5280	Ant2	15.397	23.62	Pass
NVNT	a	5320	Ant2	15.324	23.62	Pass
NVNT	a	5500	Ant2	15.131	23.62	Pass
NVNT	a	5600	Ant2	15.33	23.62	Pass
NVNT	a	5700	Ant2	15.376	23.62	Pass
NVNT	a	5745	Ant2	15.477	29.62	Pass
NVNT	a	5785	Ant2	15.433	29.62	Pass
NVNT	a	5825	Ant2	15.284	29.62	Pass
NVNT	ac20	5180	Ant1	15.223	23.62	Pass
NVNT	ac20	5180	Ant2	12.991	23.62	Pass
NVNT	ac20	5180	Sum	17.259	23.62	Pass
NVNT	ac20	5200	Ant1	15.881	23.62	Pass
NVNT	ac20	5200	Ant2	14.854	23.62	Pass
NVNT	ac20	5200	Sum	18.408	23.62	Pass
NVNT	ac20	5240	Ant1	14.864	23.62	Pass
NVNT	ac20	5240	Ant2	14.46	23.62	Pass
NVNT	ac20	5240	Sum	17.677	23.62	Pass
NVNT	ac20	5260	Ant1	15.24	23.62	Pass

NVNT	ac20	5260	Ant2	14.773	23.62	Pass
NVNT	ac20	5260	Sum	18.023	23.62	Pass
NVNT	ac20	5280	Ant1	15.816	23.62	Pass
NVNT	ac20	5280	Ant2	14.174	23.62	Pass
NVNT	ac20	5280	Sum	18.082	23.62	Pass
NVNT	ac20	5320	Ant1	14.493	23.62	Pass
NVNT	ac20	5320	Ant2	15.14	23.62	Pass
NVNT	ac20	5320	Sum	17.839	23.62	Pass
NVNT	ac20	5500	Ant1	15.075	23.62	Pass
NVNT	ac20	5500	Ant2	13.799	23.62	Pass
NVNT	ac20	5500	Sum	17.494	23.62	Pass
NVNT	ac20	5600	Ant1	15.585	23.62	Pass
NVNT	ac20	5600	Ant2	13.038	23.62	Pass
NVNT	ac20	5600	Sum	17.506	23.62	Pass
NVNT	ac20	5700	Ant1	16.218	23.62	Pass
NVNT	ac20	5700	Ant2	14.917	23.62	Pass
NVNT	ac20	5700	Sum	18.626	23.62	Pass
NVNT	ac20	5745	Ant1	16.079	29.62	Pass
NVNT	ac20	5745	Ant2	14.377	29.62	Pass
NVNT	ac20	5745	Sum	18.321	29.62	Pass
NVNT	ac20	5785	Ant1	15.782	29.62	Pass
NVNT	ac20	5785	Ant2	14.24	29.62	Pass
NVNT	ac20	5785	Sum	18.089	29.62	Pass
NVNT	ac20	5825	Ant1	14.963	29.62	Pass
NVNT	ac20	5825	Ant2	13.389	29.62	Pass
NVNT	ac20	5825	Sum	17.257	29.62	Pass
NVNT	ac40	5190	Ant1	15.653	23.62	Pass
NVNT	ac40	5190	Ant2	15.057	23.62	Pass
NVNT	ac40	5190	Sum	18.376	23.62	Pass
NVNT	ac40	5230	Ant1	15.988	23.62	Pass
NVNT	ac40	5230	Ant2	15.271	23.62	Pass
NVNT	ac40	5230	Sum	18.655	23.62	Pass
NVNT	ac40	5270	Ant1	16.196	23.62	Pass
NVNT	ac40	5270	Ant2	14.74	23.62	Pass
NVNT	ac40	5270	Sum	18.539	23.62	Pass
NVNT	ac40	5310	Ant1	15.8	23.62	Pass
NVNT	ac40	5310	Ant2	15.282	23.62	Pass
NVNT	ac40	5310	Sum	18.559	23.62	Pass
NVNT	ac40	5510	Ant1	14.544	23.62	Pass
NVNT	ac40	5510	Ant2	16.402	23.62	Pass
NVNT	ac40	5510	Sum	18.582	23.62	Pass
NVNT	ac40	5590	Ant1	14.261	23.62	Pass
NVNT	ac40	5590	Ant2	16.147	23.62	Pass
NVNT	ac40	5590	Sum	18.316	23.62	Pass
NVNT	ac40	5670	Ant1	16.068	23.62	Pass

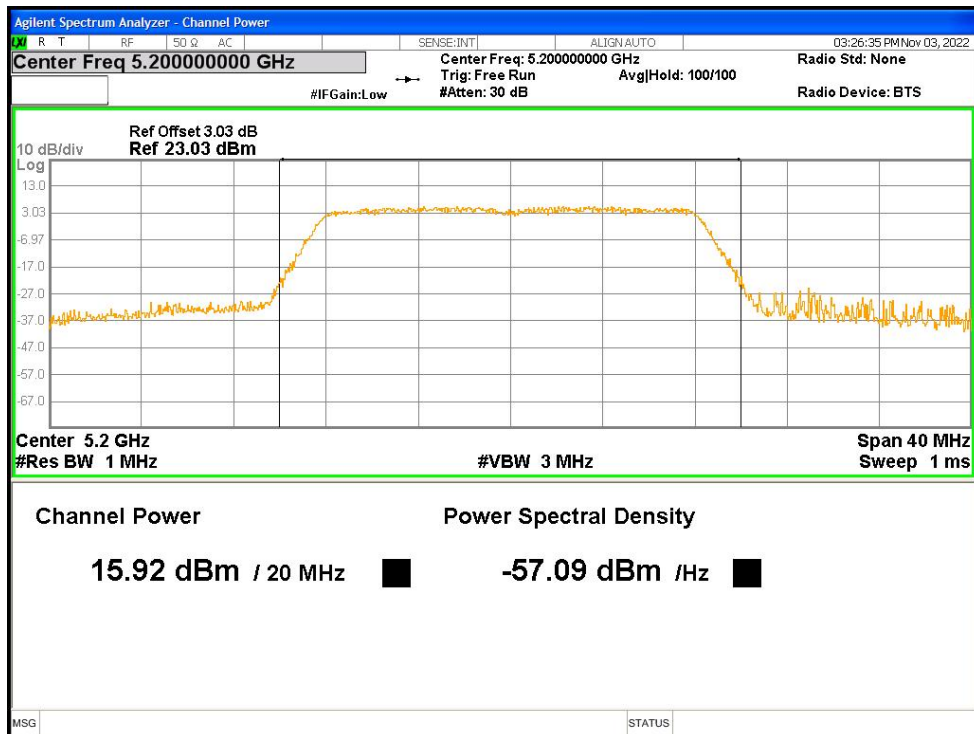
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NVNT	ac40	5755	Ant1	16.012	29.62	Pass
NVNT	ac40	5755	Ant2	14.605	29.62	Pass
NVNT	ac40	5755	Sum	18.376	29.62	Pass
NVNT	ac40	5795	Ant1	15.857	29.62	Pass
NVNT	ac40	5795	Ant2	14.516	29.62	Pass
NVNT	ac40	5795	Sum	18.248	29.62	Pass
NVNT	ac80	5210	Ant1	15.804	23.62	Pass
NVNT	ac80	5210	Ant2	15.407	23.62	Pass
NVNT	ac80	5210	Sum	18.62	23.62	Pass
NVNT	ac80	5290	Ant1	16.069	23.62	Pass
NVNT	ac80	5290	Ant2	14.988	23.62	Pass
NVNT	ac80	5290	Sum	18.572	23.62	Pass
NVNT	ac80	5530	Ant1	14.436	23.62	Pass
NVNT	ac80	5530	Ant2	15.912	23.62	Pass
NVNT	ac80	5530	Sum	18.247	23.62	Pass
NVNT	ac80	5610	Ant1	14.308	23.62	Pass
NVNT	ac80	5610	Ant2	15.31	23.62	Pass
NVNT	ac80	5610	Sum	17.848	23.62	Pass
NVNT	ac80	5775	Ant1	16.787	29.62	Pass
NVNT	ac80	5775	Ant2	15.44	29.62	Pass
NVNT	ac80	5775	Sum	19.176	29.62	Pass
NVNT	n20	5180	Ant1	15.978	23.62	Pass
NVNT	n20	5180	Ant2	14.174	23.62	Pass
NVNT	n20	5180	Sum	18.179	23.62	Pass
NVNT	n20	5200	Ant1	15.874	23.62	Pass
NVNT	n20	5200	Ant2	14.715	23.62	Pass
NVNT	n20	5200	Sum	18.343	23.62	Pass
NVNT	n20	5240	Ant1	15.656	23.62	Pass
NVNT	n20	5240	Ant2	14.44	23.62	Pass
NVNT	n20	5240	Sum	18.101	23.62	Pass
NVNT	n20	5260	Ant1	15.627	23.62	Pass
NVNT	n20	5260	Ant2	13.646	23.62	Pass
NVNT	n20	5260	Sum	17.759	23.62	Pass
NVNT	n20	5280	Ant1	15.692	23.62	Pass
NVNT	n20	5280	Ant2	13.98	23.62	Pass
NVNT	n20	5280	Sum	17.93	23.62	Pass
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NVNT	n20	5320	Ant2	14.092	23.62	Pass
NVNT	n20	5320	Sum	17.292	23.62	Pass
NVNT	n20	5500	Ant1	14.45	23.62	Pass
NVNT	n20	5500	Ant2	15.767	23.62	Pass
NVNT	n20	5500	Sum	18.169	23.62	Pass
NVNT	n20	5600	Ant1	14.343	23.62	Pass

NVNT	n20	5600	Ant2	14.788	23.62	Pass
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NVNT	n20	5700	Ant1	15.694	23.62	Pass
NVNT	n20	5700	Ant2	14.114	23.62	Pass
NVNT	n20	5700	Sum	17.986	23.62	Pass
NVNT	n20	5745	Ant1	15.242	29.62	Pass
NVNT	n20	5745	Ant2	13.524	29.62	Pass
NVNT	n20	5745	Sum	17.478	29.62	Pass
NVNT	n20	5785	Ant1	15.058	29.62	Pass
NVNT	n20	5785	Ant2	13.476	29.62	Pass
NVNT	n20	5785	Sum	17.349	29.62	Pass
NVNT	n20	5825	Ant1	15.339	29.62	Pass
NVNT	n20	5825	Ant2	14.154	29.62	Pass
NVNT	n20	5825	Sum	17.797	29.62	Pass
NVNT	n40	5190	Ant1	15.292	23.62	Pass
NVNT	n40	5190	Ant2	14.785	23.62	Pass
NVNT	n40	5190	Sum	18.056	23.62	Pass
NVNT	n40	5230	Ant1	15.968	23.62	Pass
NVNT	n40	5230	Ant2	15.252	23.62	Pass
NVNT	n40	5230	Sum	18.635	23.62	Pass
NVNT	n40	5270	Ant1	16.21	23.62	Pass
NVNT	n40	5270	Ant2	15	23.62	Pass
NVNT	n40	5270	Sum	18.657	23.62	Pass
NVNT	n40	5310	Ant1	15.703	23.62	Pass
NVNT	n40	5310	Ant2	15.202	23.62	Pass
NVNT	n40	5310	Sum	18.47	23.62	Pass
NVNT	n40	5510	Ant1	14.471	23.62	Pass
NVNT	n40	5510	Ant2	16.186	23.62	Pass
NVNT	n40	5510	Sum	18.423	23.62	Pass
NVNT	n40	5590	Ant1	14.8	23.62	Pass
NVNT	n40	5590	Ant2	16.317	23.62	Pass
NVNT	n40	5590	Sum	18.635	23.62	Pass
NVNT	n40	5670	Ant1	15.031	23.62	Pass
NVNT	n40	5670	Ant2	15.119	23.62	Pass
NVNT	n40	5670	Sum	18.086	23.62	Pass
NVNT	n40	5755	Ant1	15.64	29.62	Pass
NVNT	n40	5755	Ant2	14.164	29.62	Pass
NVNT	n40	5755	Sum	17.975	29.62	Pass
NVNT	n40	5795	Ant1	16.102	29.62	Pass
NVNT	n40	5795	Ant2	14.771	29.62	Pass
NVNT	n40	5795	Sum	18.498	29.62	Pass

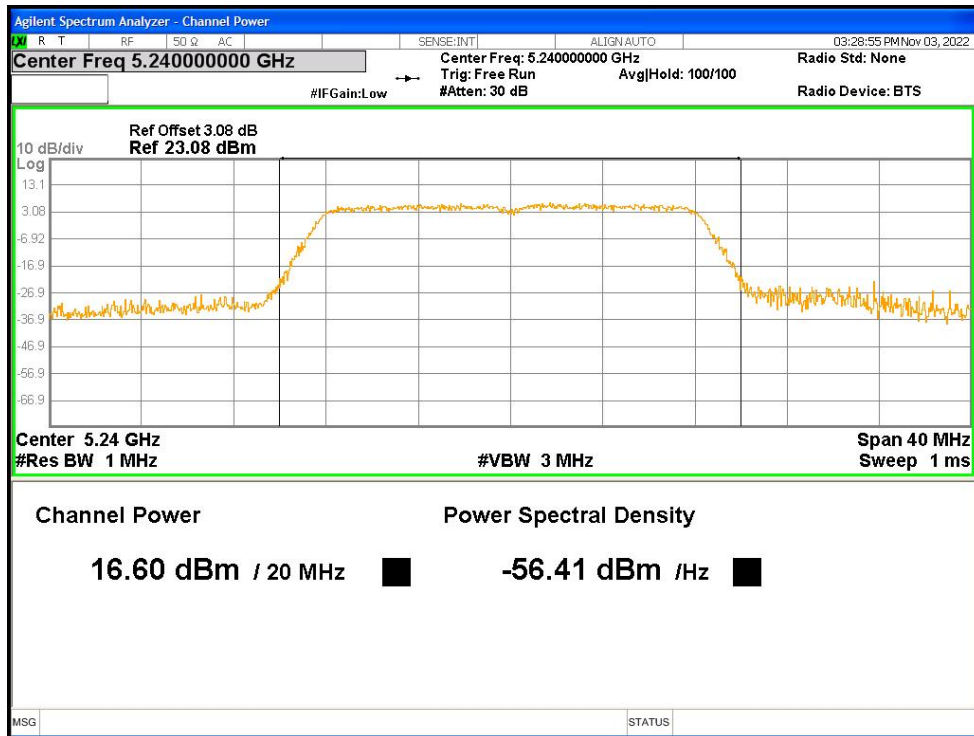
Power NVNT a 5180MHz Ant1



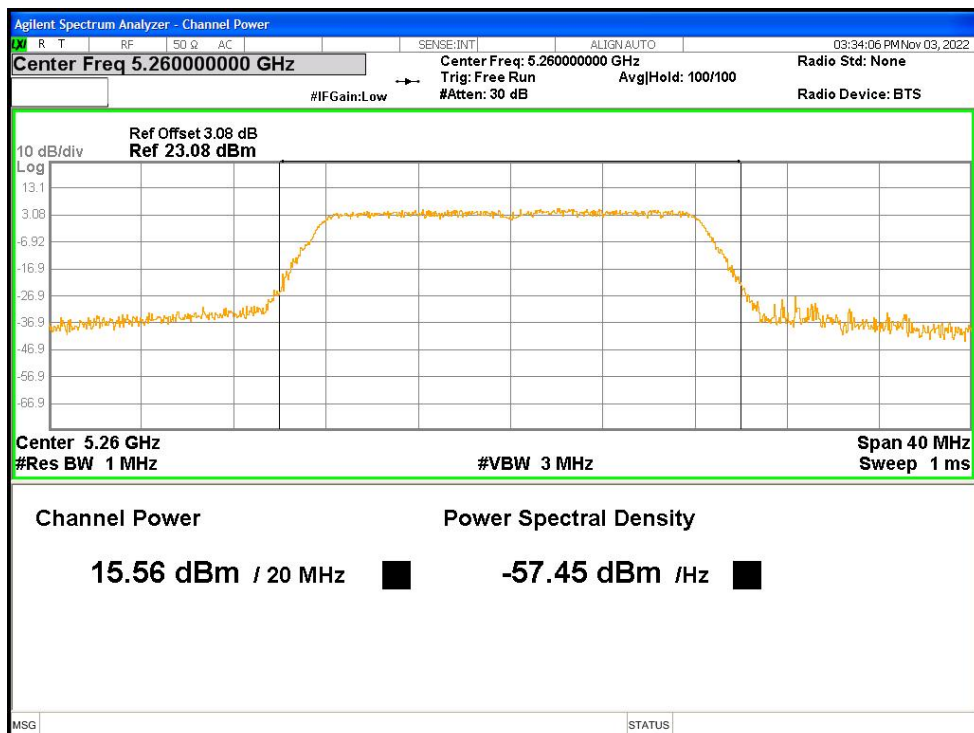
Power NVNT a 5200MHz Ant1



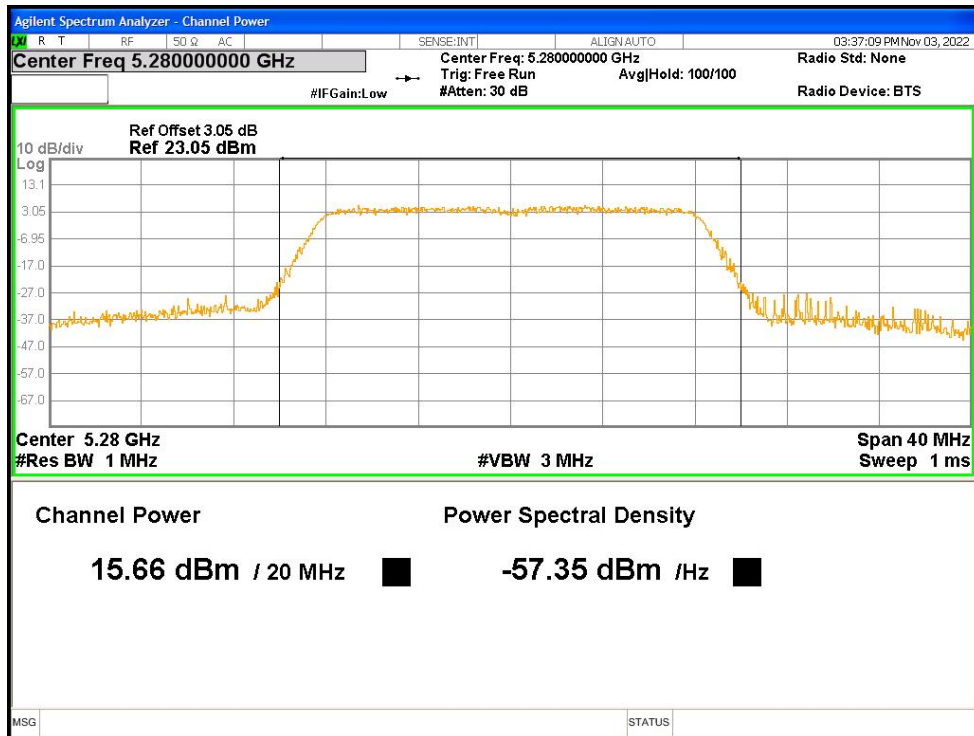
Power NVNT a 5240MHz Ant1



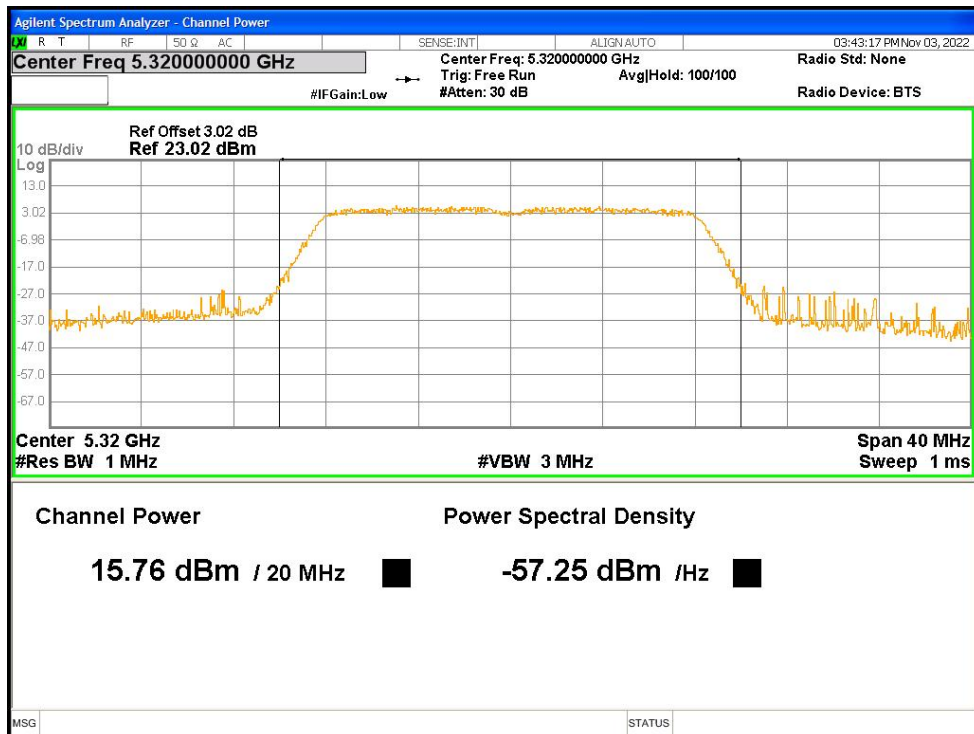
Power NVNT a 5260MHz Ant1



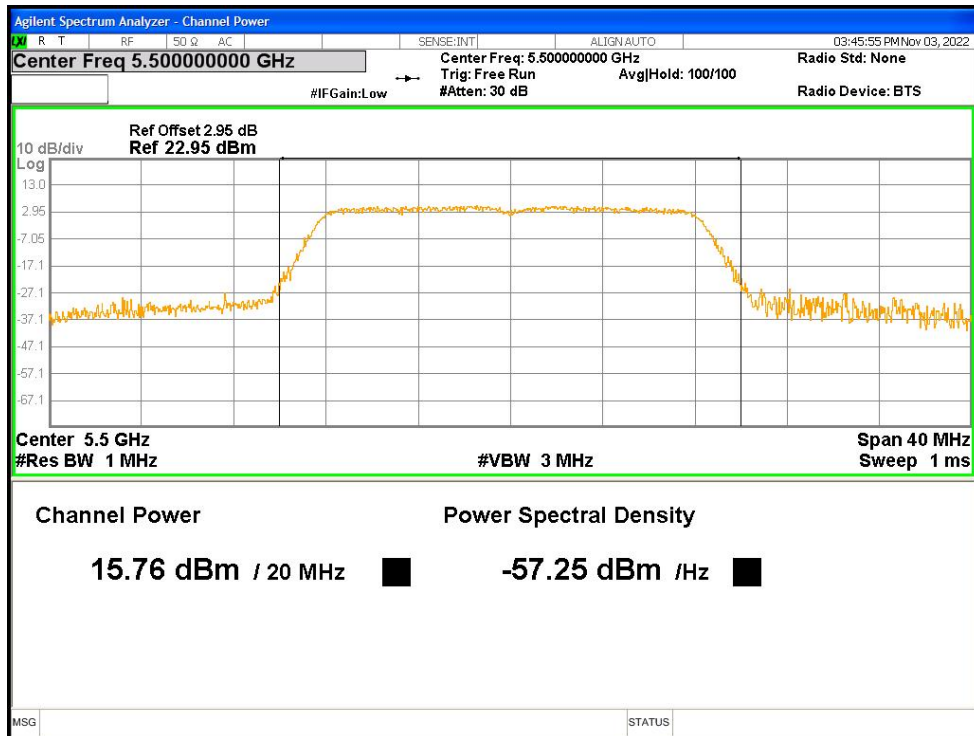
Power NVNT a 5280MHz Ant1



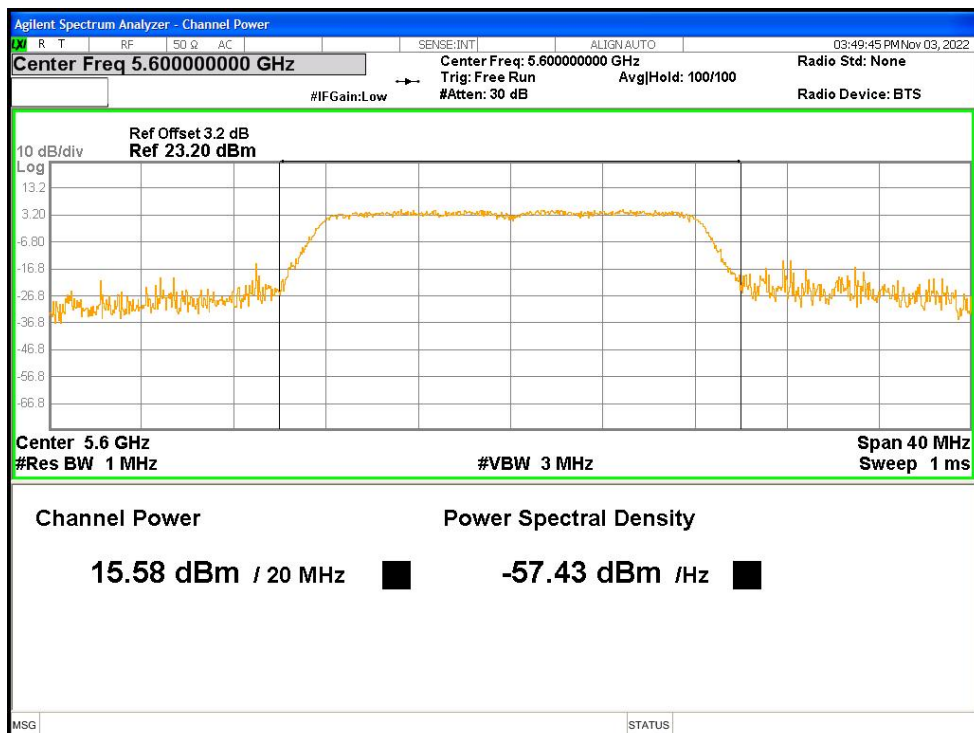
Power NVNT a 5320MHz Ant1



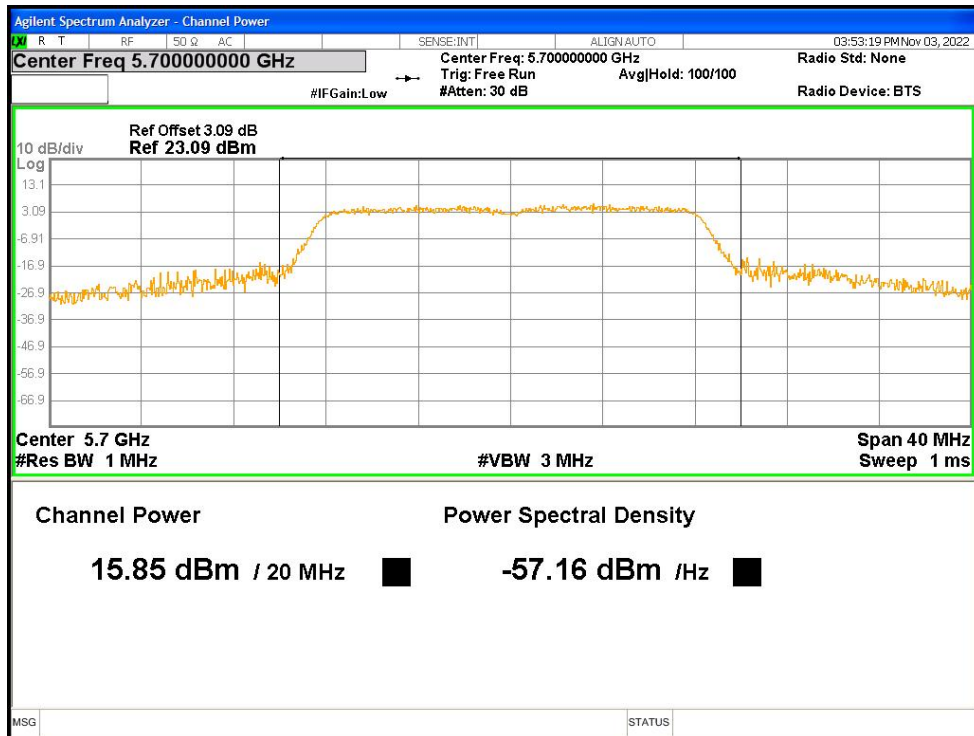
Power NVNT a 5500MHz Ant1



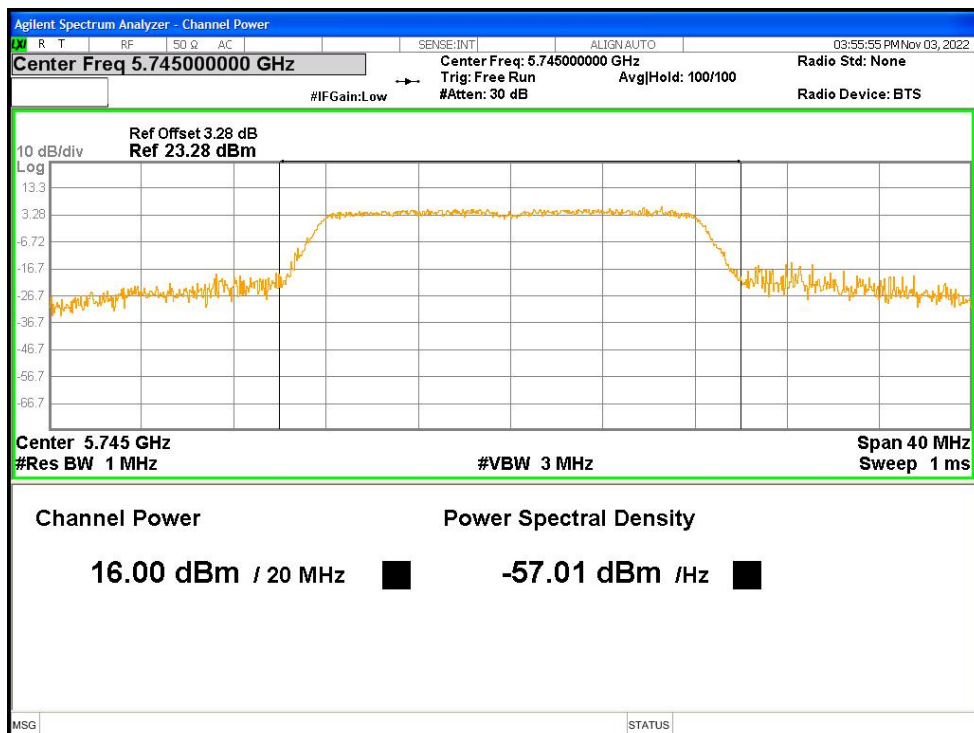
Power NVNT a 5600MHz Ant1



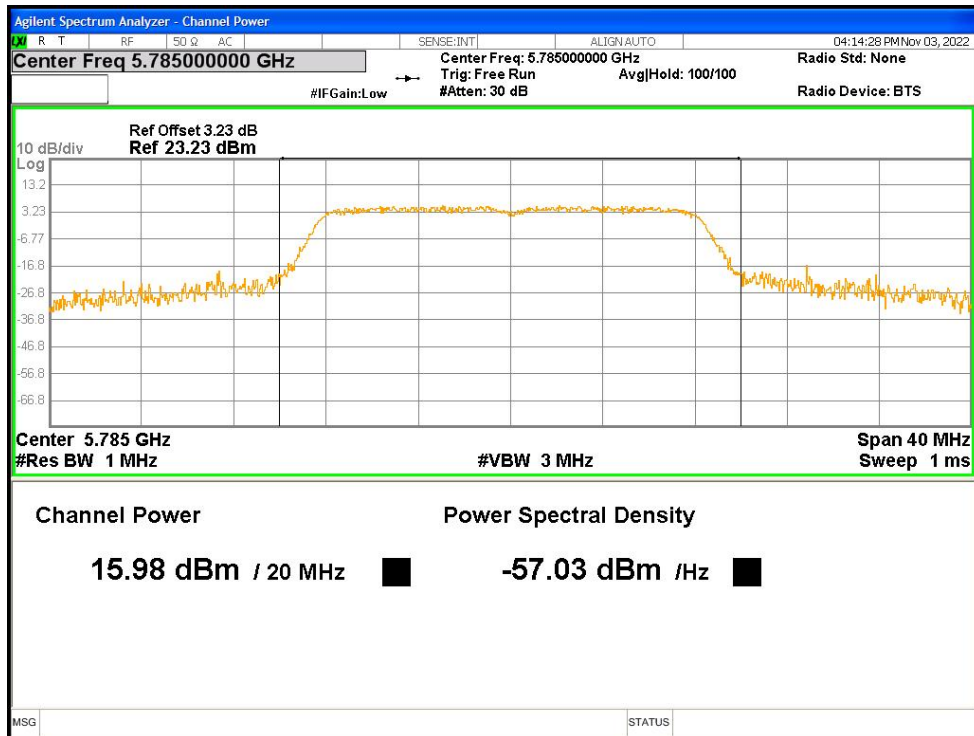
Power NVNT a 5700MHz Ant1



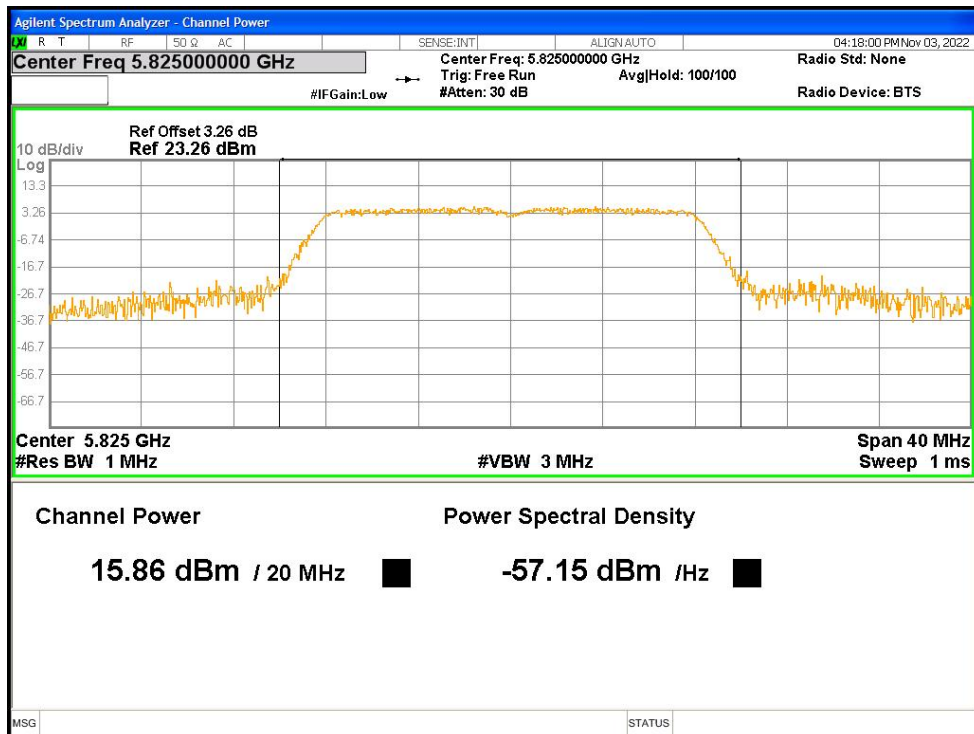
Power NVNT a 5745MHz Ant1



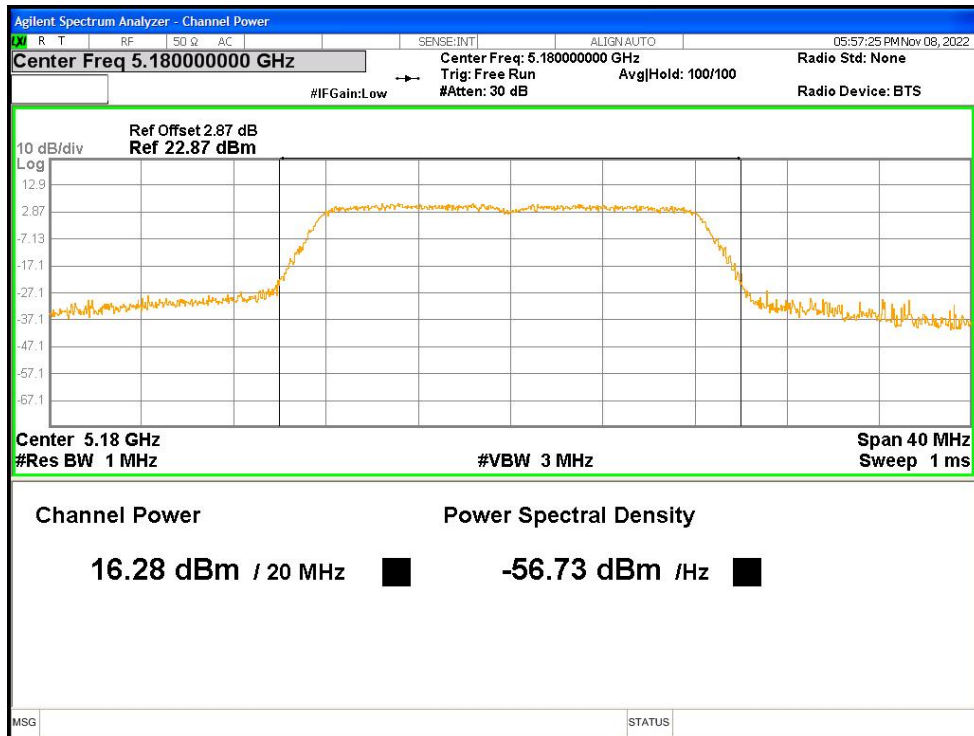
Power NVNT a 5785MHz Ant1



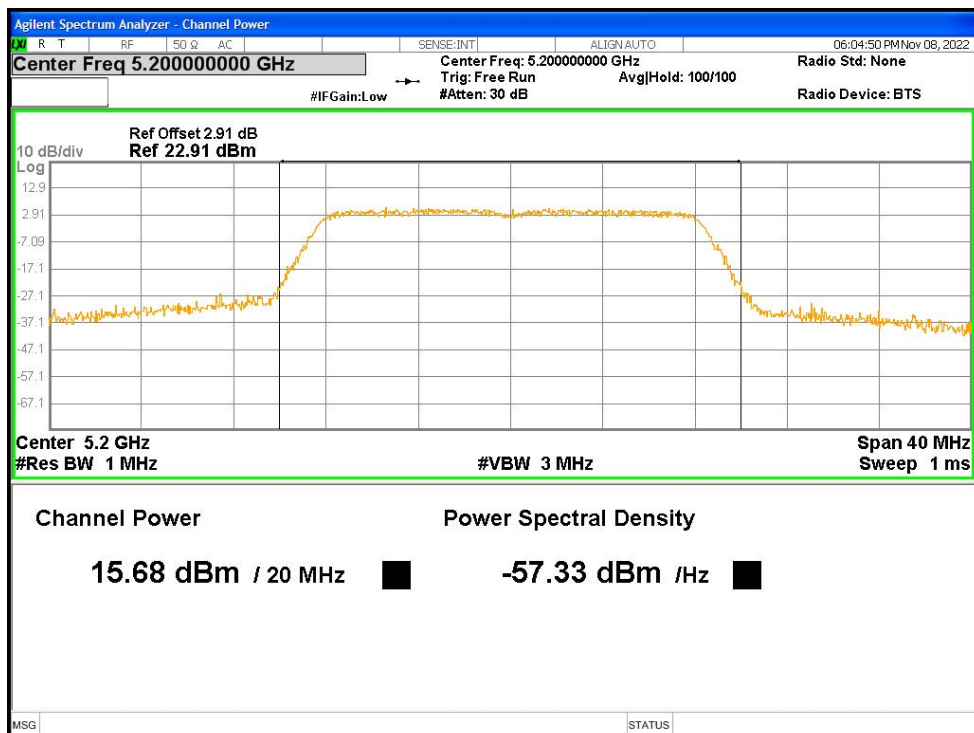
Power NVNT a 5825MHz Ant1



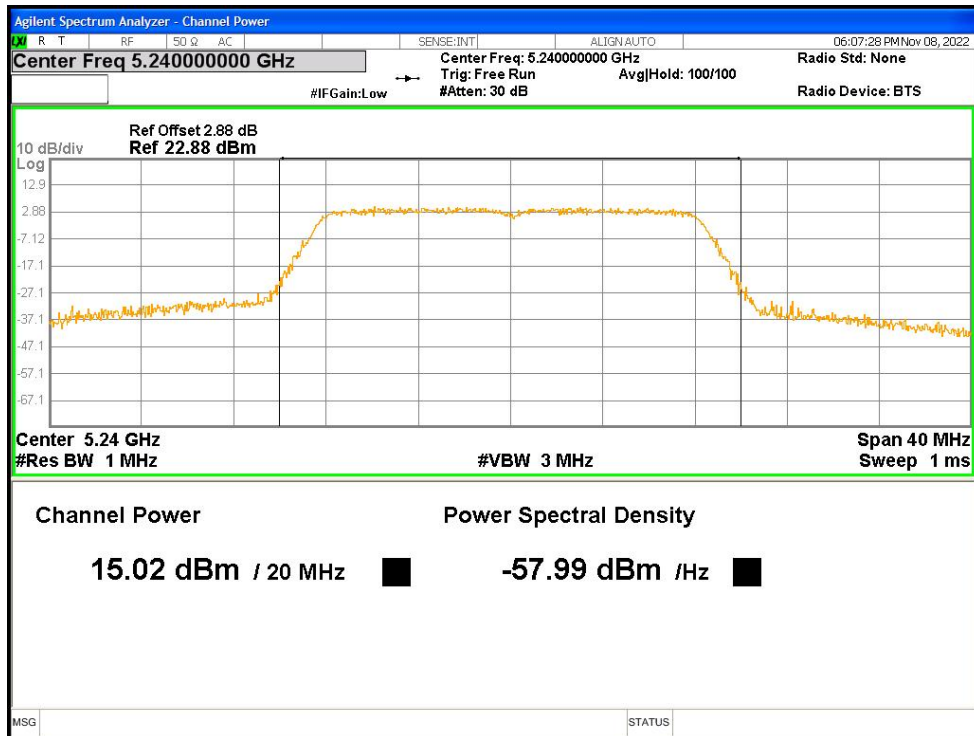
Power NVNT a 5180MHz Ant2



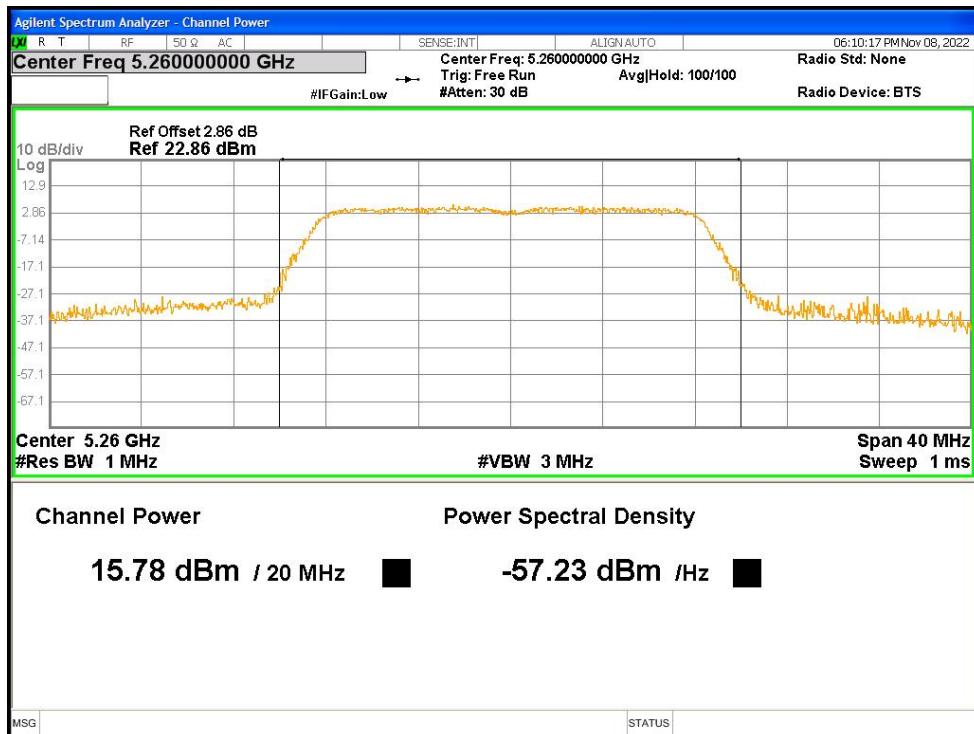
Power NVNT a 5200MHz Ant2



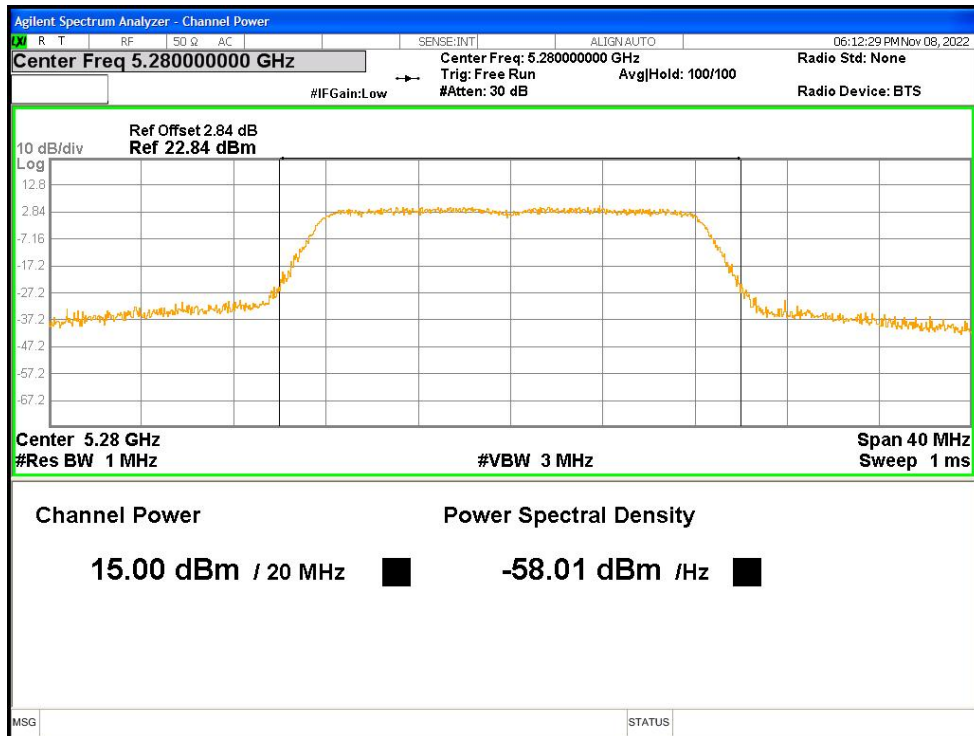
Power NVNT a 5240MHz Ant2



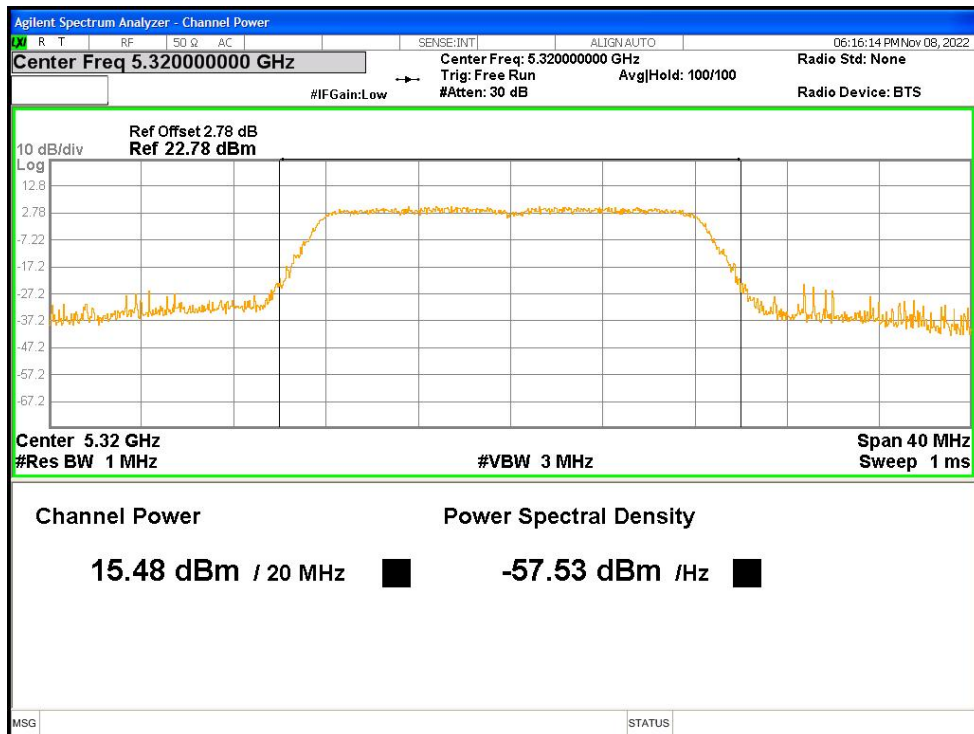
Power NVNT a 5260MHz Ant2



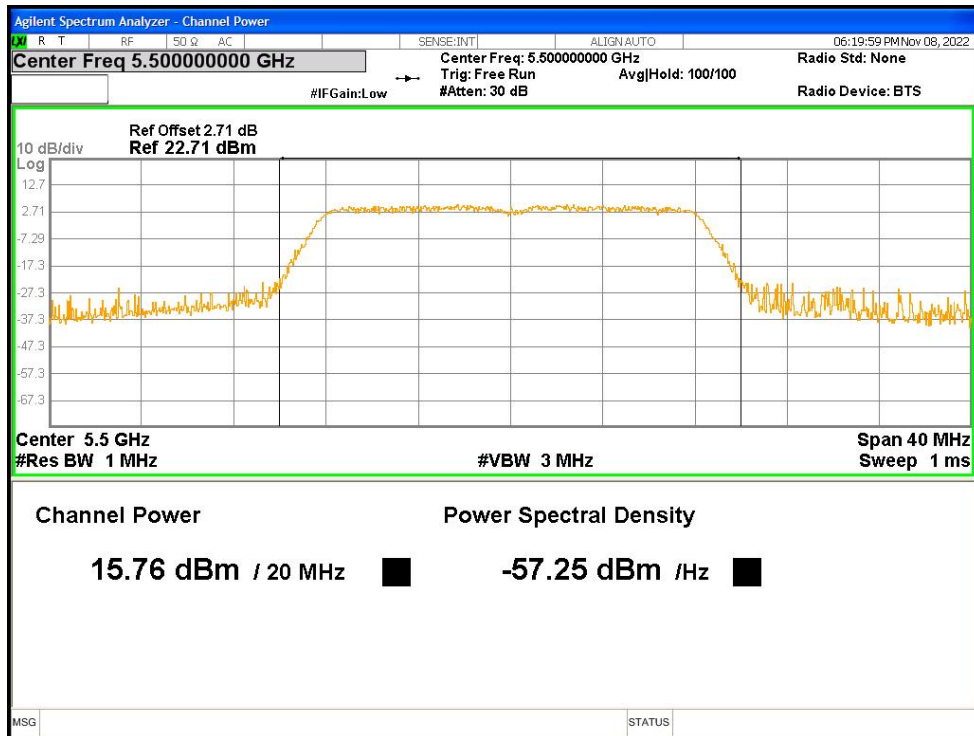
Power NVNT a 5280MHz Ant2



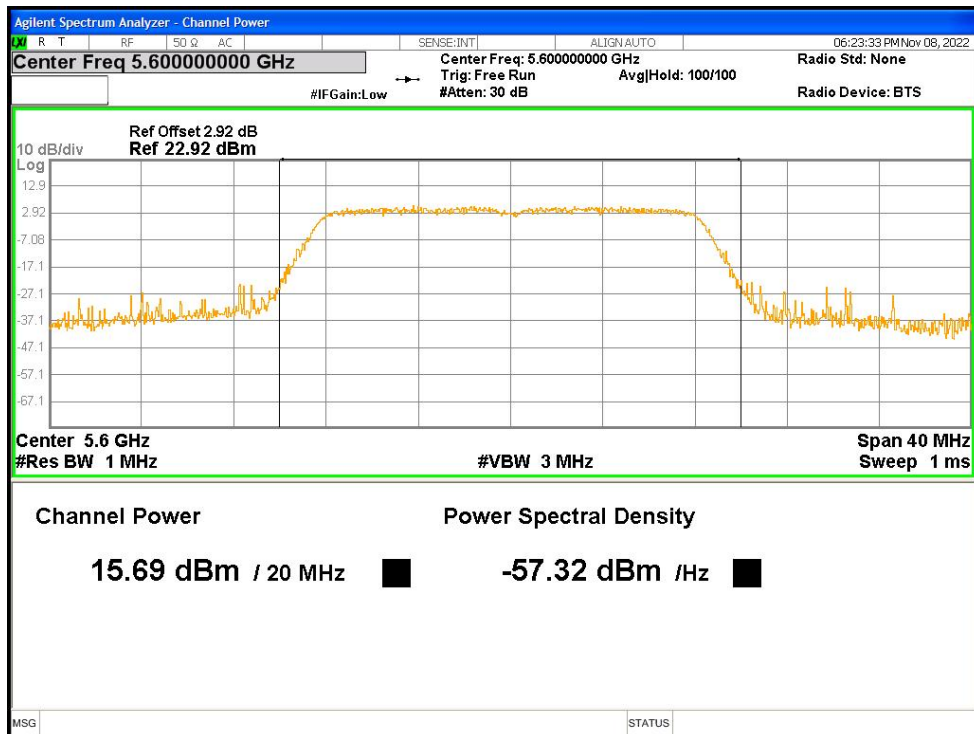
Power NVNT a 5320MHz Ant2



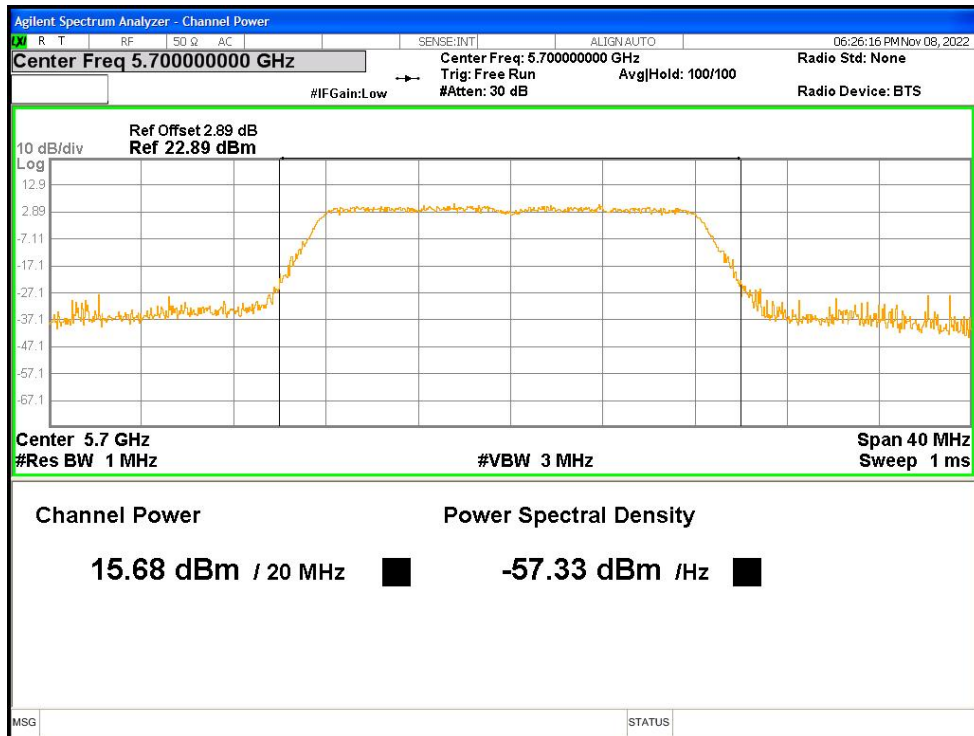
Power NVNT a 5500MHz Ant2



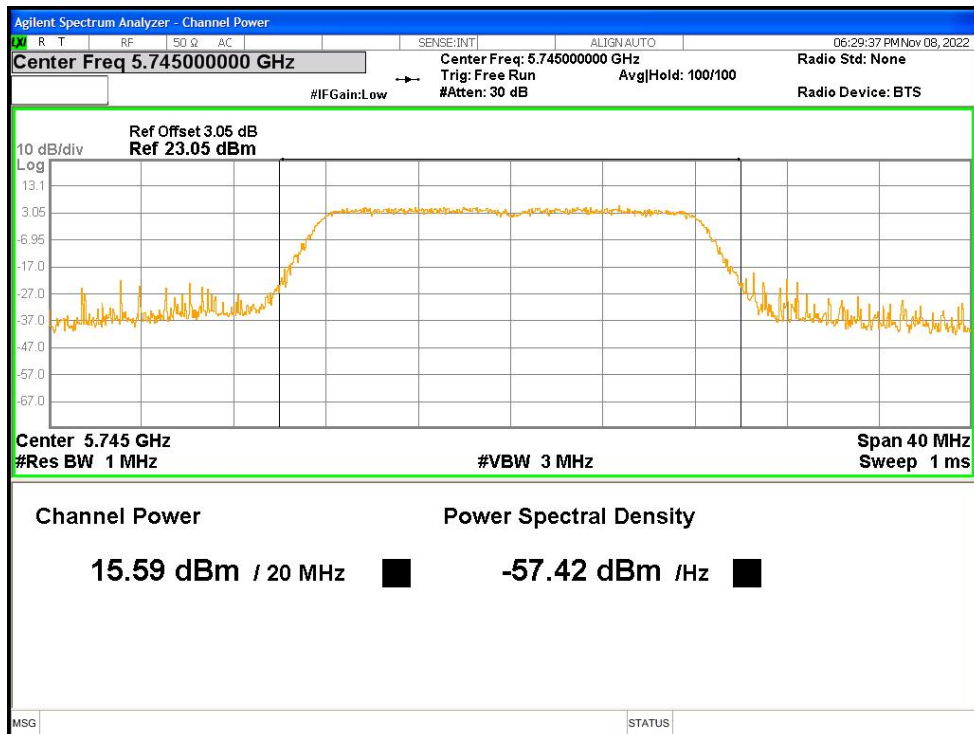
Power NVNT a 5600MHz Ant2



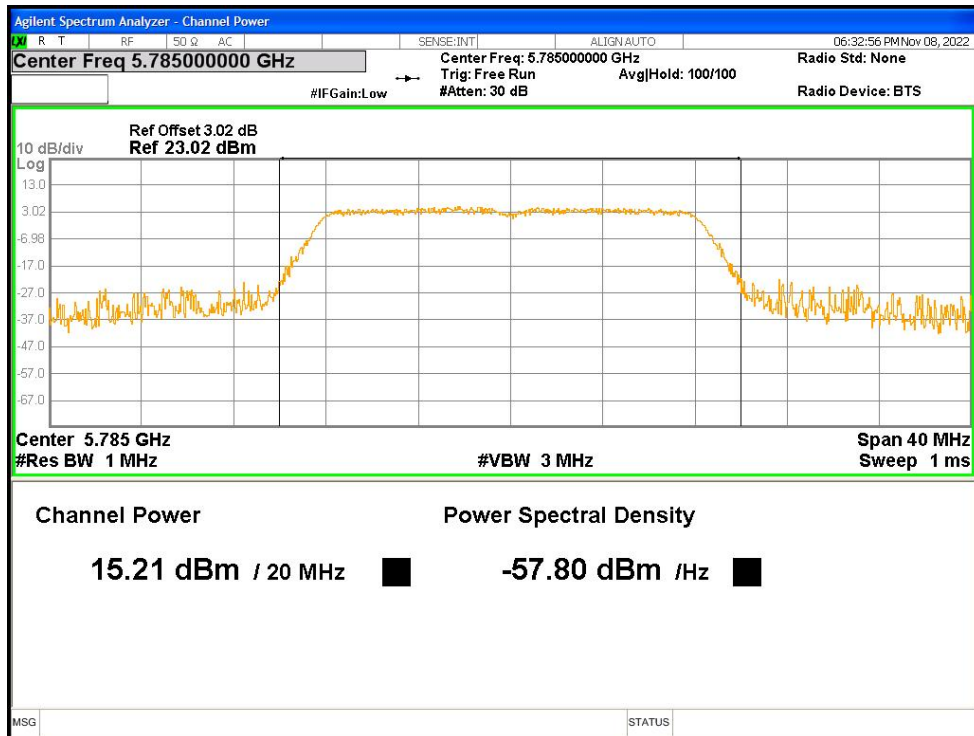
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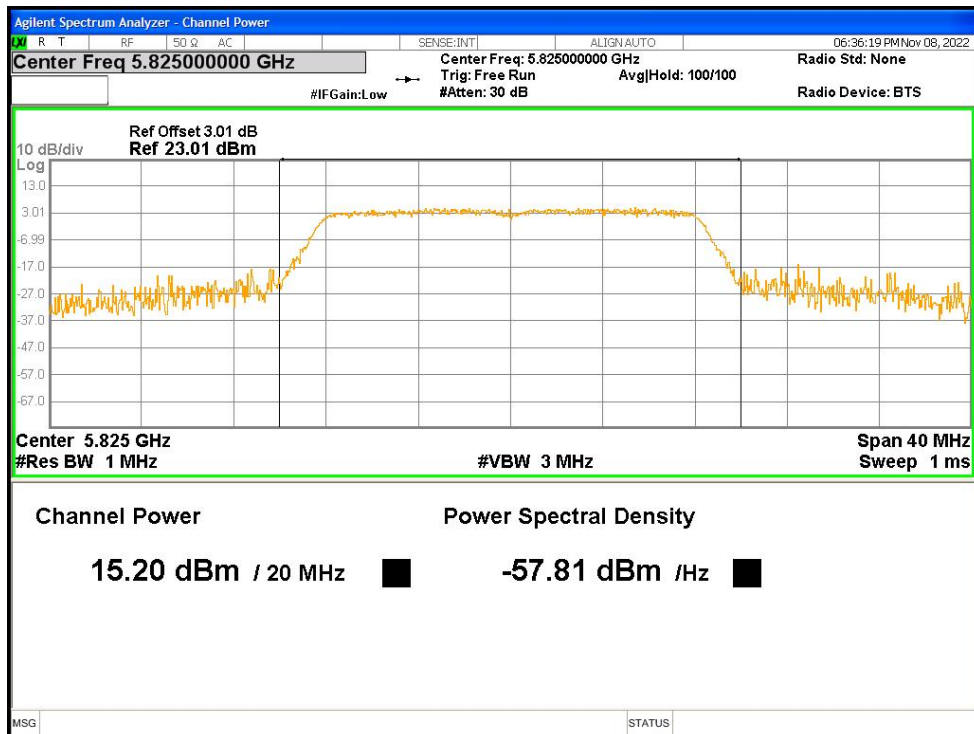
Power NVNT a 5745MHz Ant2



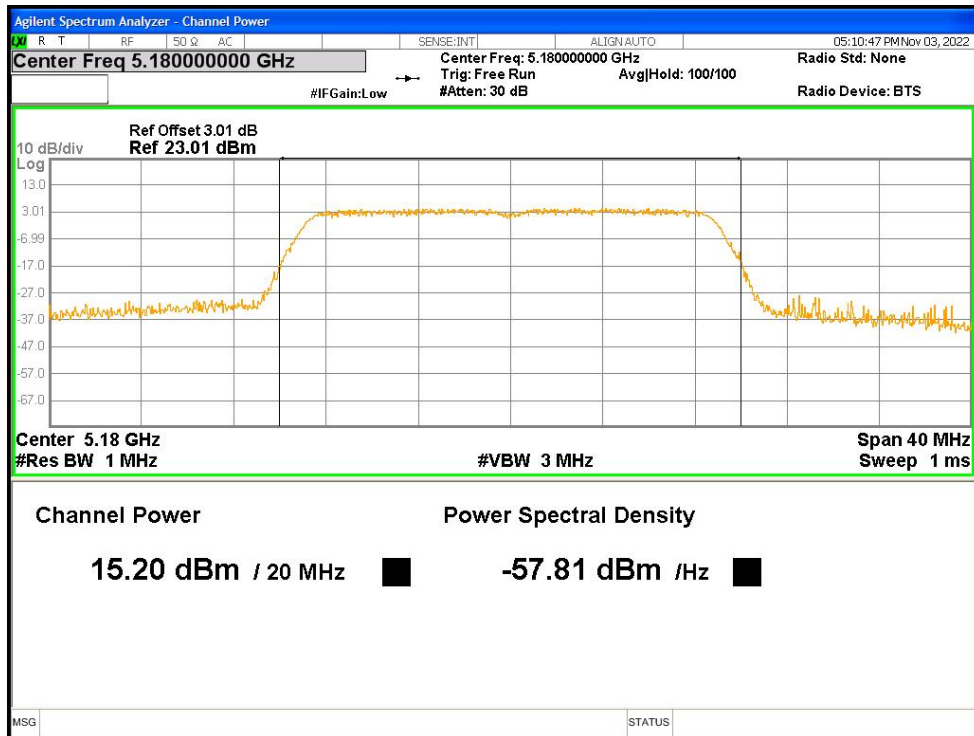
Power NVNT a 5785MHz Ant2



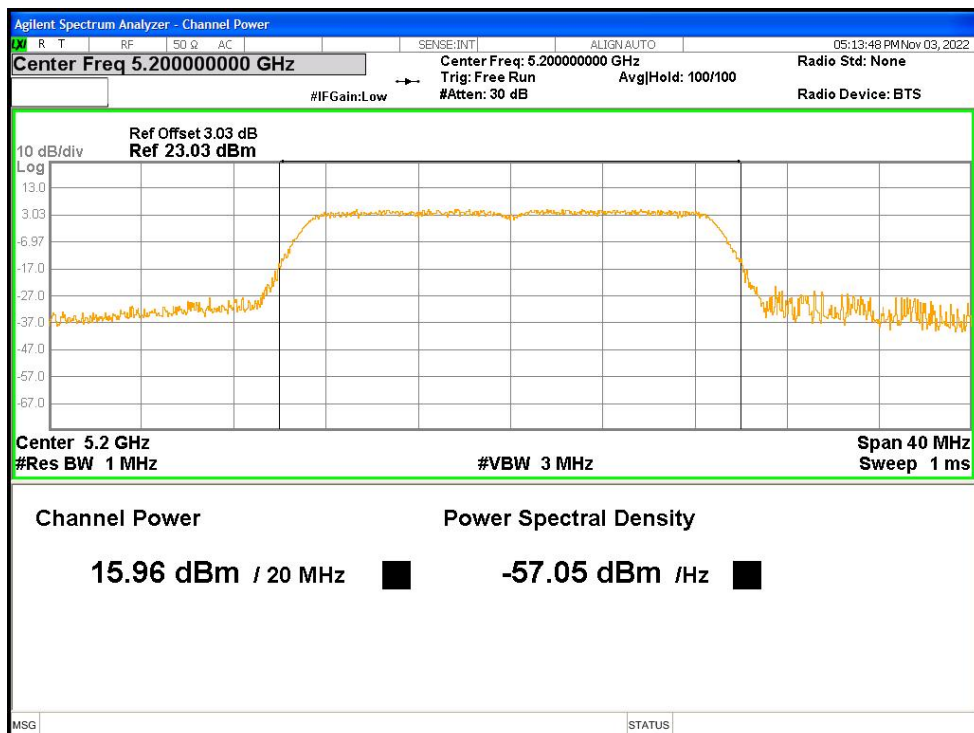
Power NVNT a 5825MHz Ant2



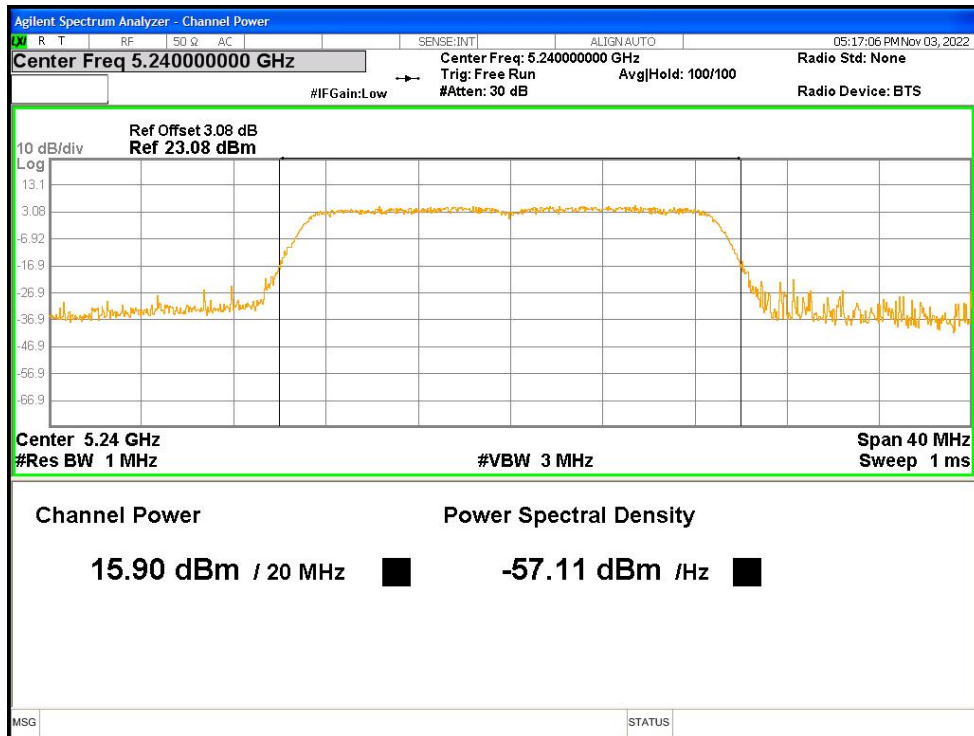
Power NVNT ac20 5180MHz Ant1



Power NVNT ac20 5200MHz Ant1



Power NVNT ac20 5240MHz Ant1



Power NVNT ac20 5260MHz Ant1

