Appendix E

RF Test Data for 5.3GWIFI (Conducted Measurement)

Product Name: IPTV Set-Top Box

Test Model: SML-5041W

Environmental Conditions

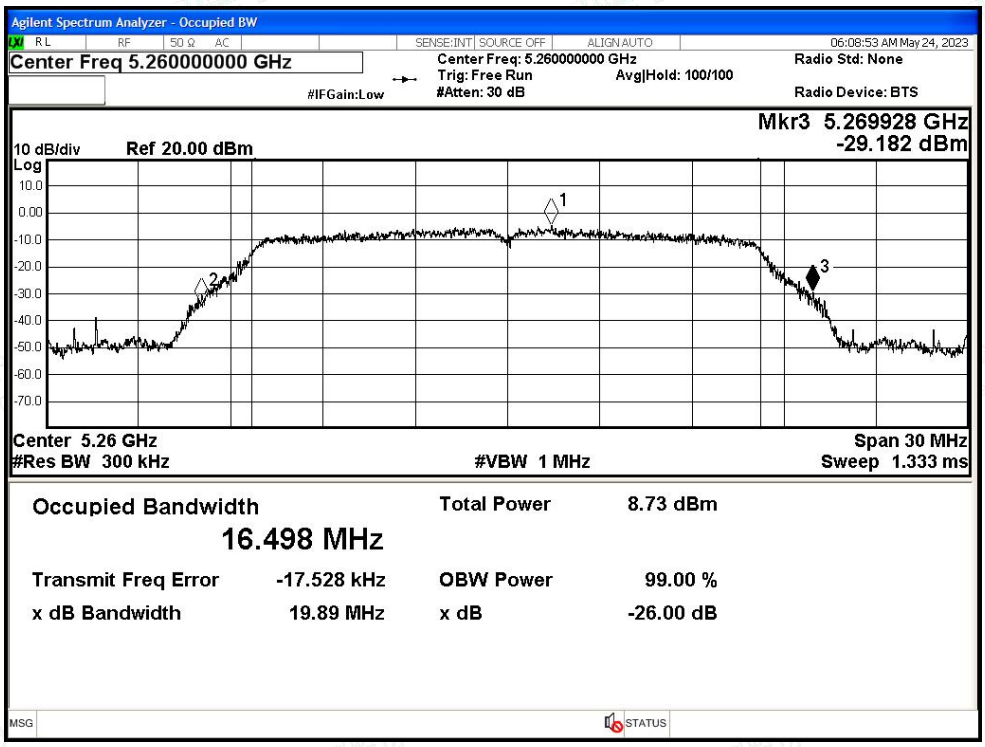
Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Mening Su
Supervised by:	Ling Zhu

E.1 -26dB Bandwidth

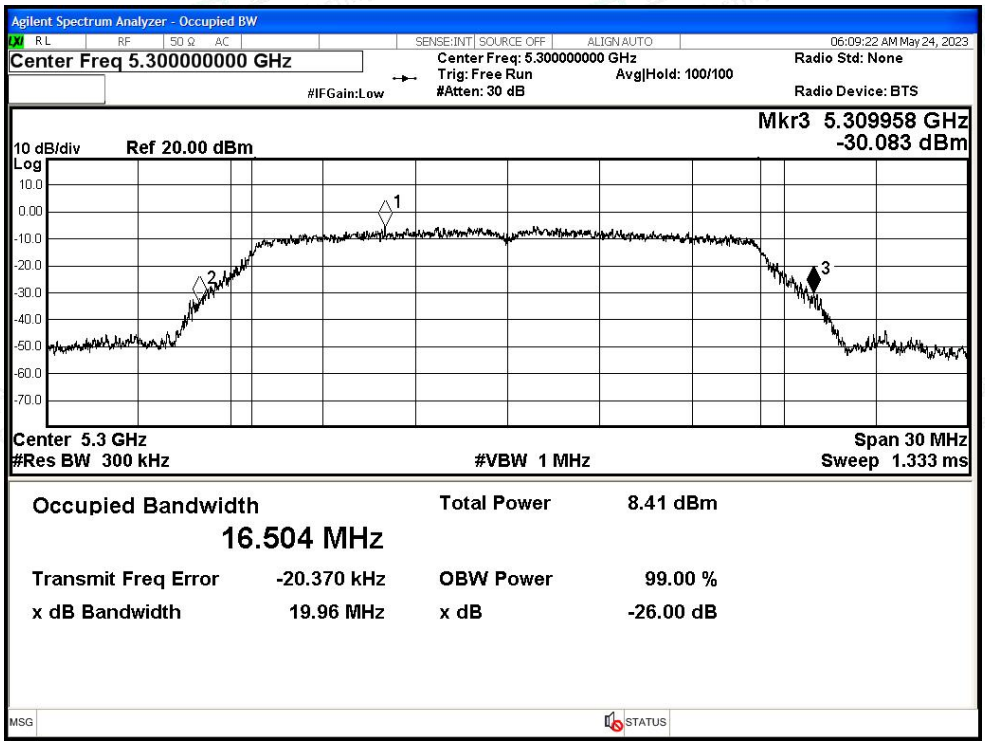
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant0	19.891	--	Pass
NVNT	a	5300	Ant0	19.957	--	Pass
NVNT	a	5320	Ant0	19.739	--	Pass
NVNT	n20	5260	Ant0	20.372	--	Pass
NVNT	n20	5300	Ant0	20.178	--	Pass
NVNT	n20	5320	Ant0	20.244	--	Pass
NVNT	n40	5270	Ant0	40.034	--	Pass
NVNT	n40	5310	Ant0	39.817	--	Pass
NVNT	ac20	5260	Ant0	20.339	--	Pass
NVNT	ac20	5300	Ant0	20.289	--	Pass
NVNT	ac20	5320	Ant0	20.243	--	Pass
NVNT	ac40	5270	Ant0	39.513	--	Pass
NVNT	ac40	5310	Ant0	39.453	--	Pass
NVNT	ac80	5290	Ant0	79.371	--	Pass

Test Graphs

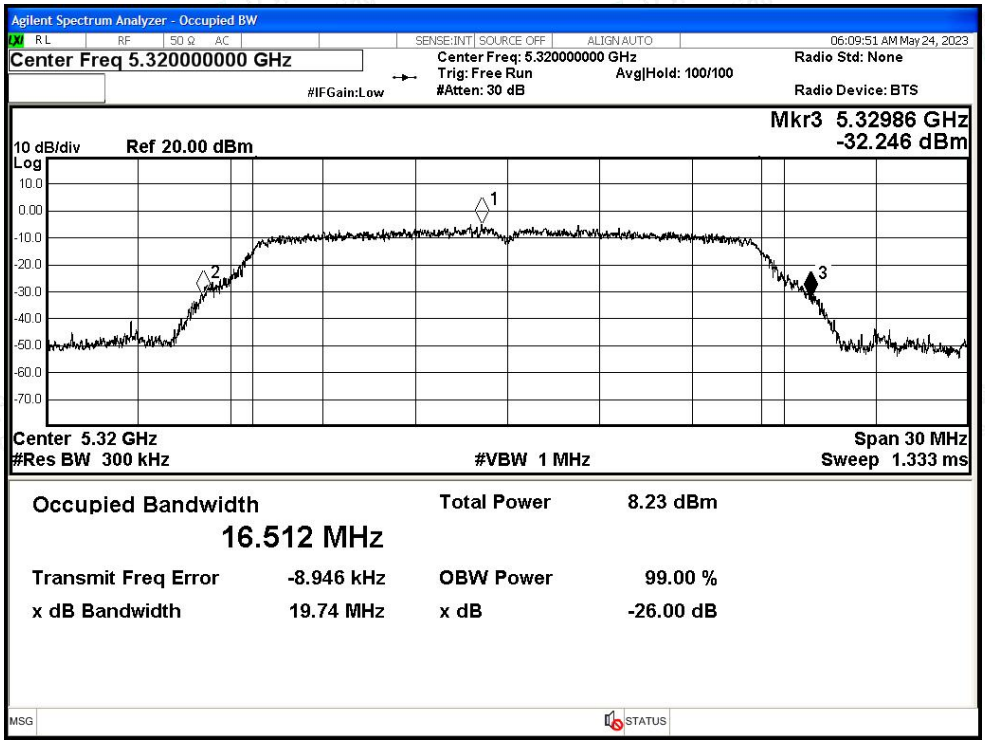
-26dB Bandwidth NVNT a 5260MHz Ant0



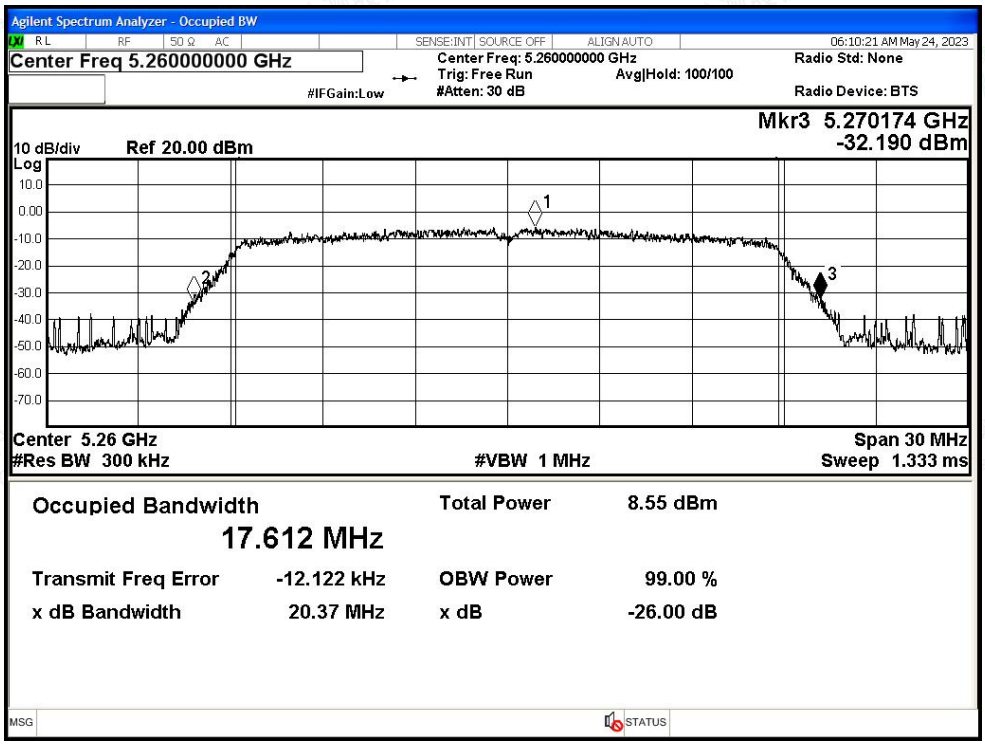
-26dB Bandwidth NVNT a 5300MHz Ant0



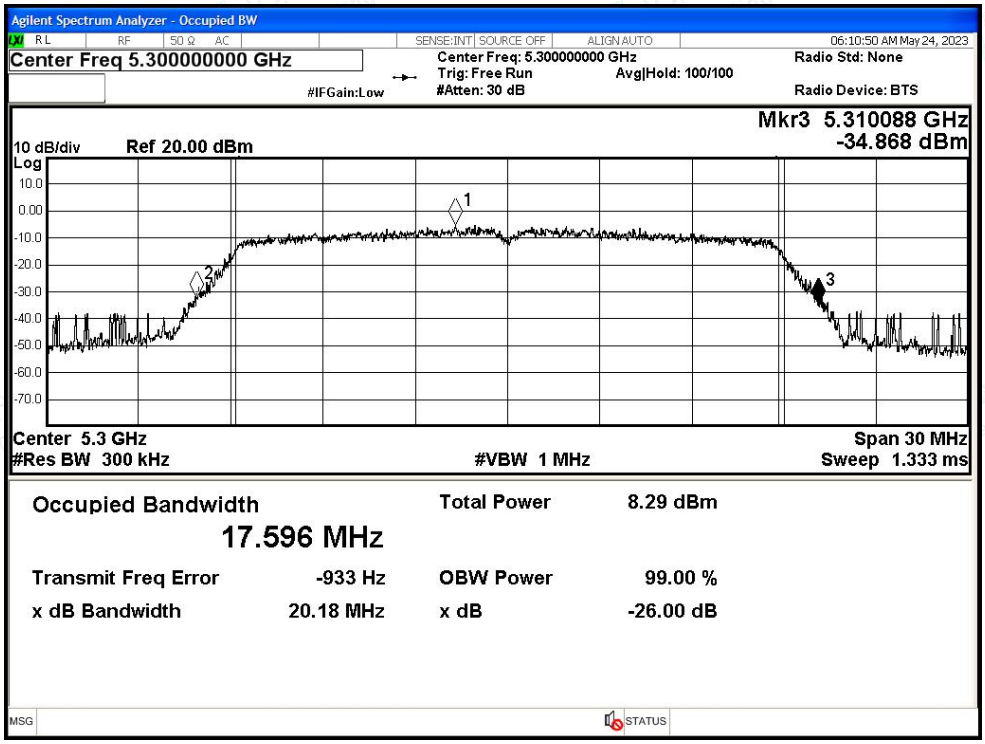
-26dB Bandwidth NVNT a 5320MHz Ant0



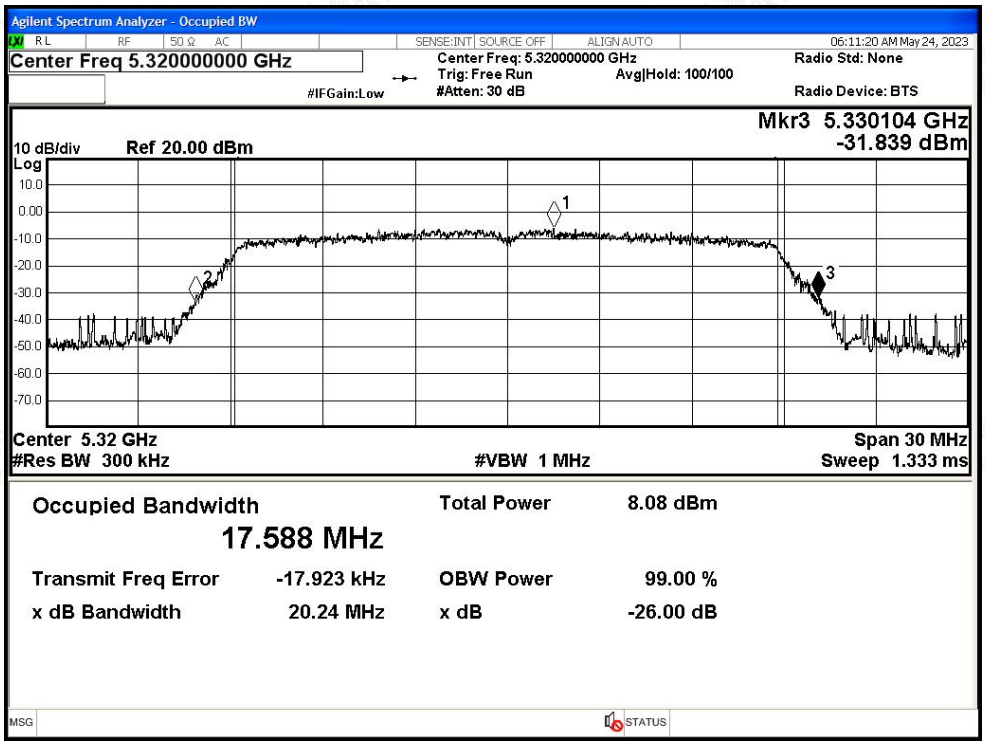
-26dB Bandwidth NVNT n20 5260MHz Ant0



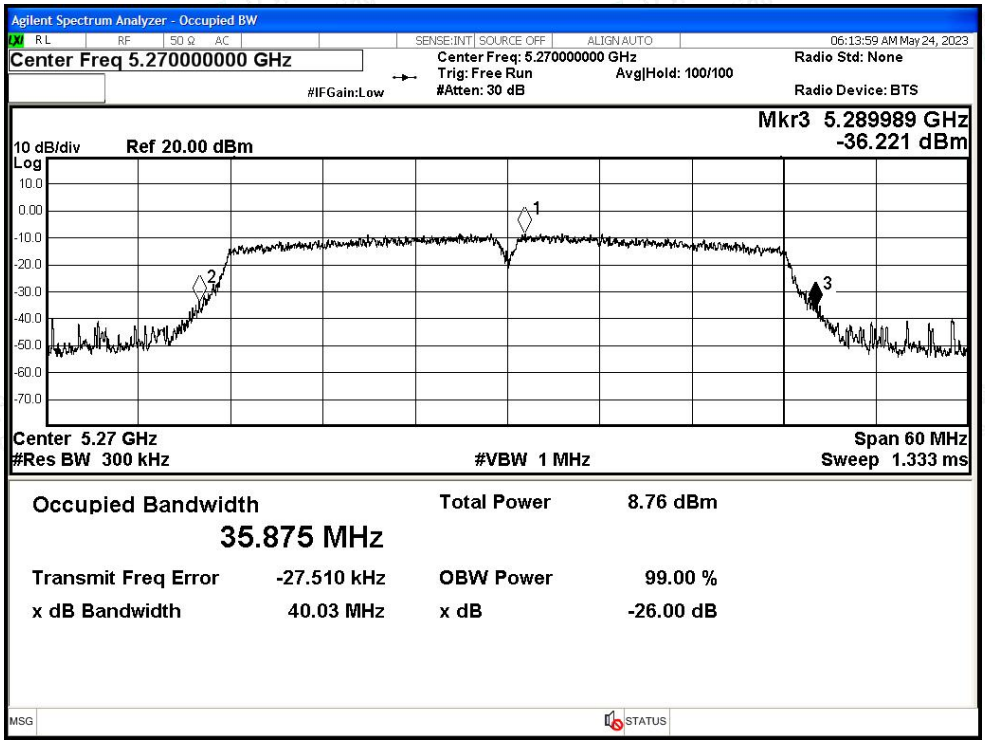
-26dB Bandwidth NVNT n20 5300MHz Ant0



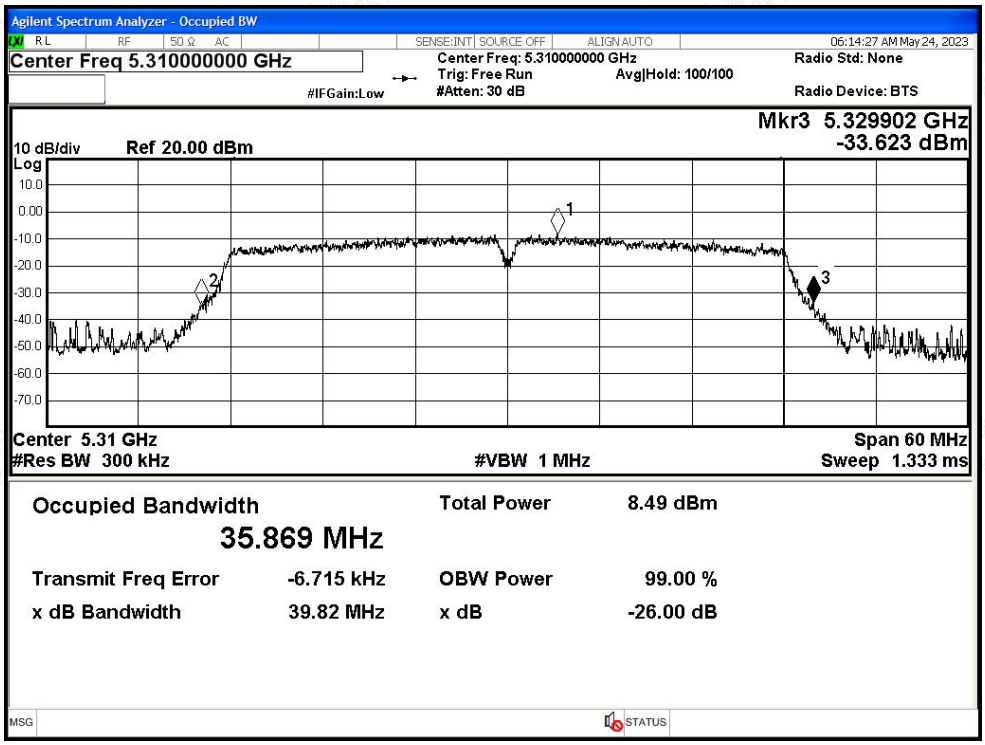
-26dB Bandwidth NVNT n20 5320MHz Ant0



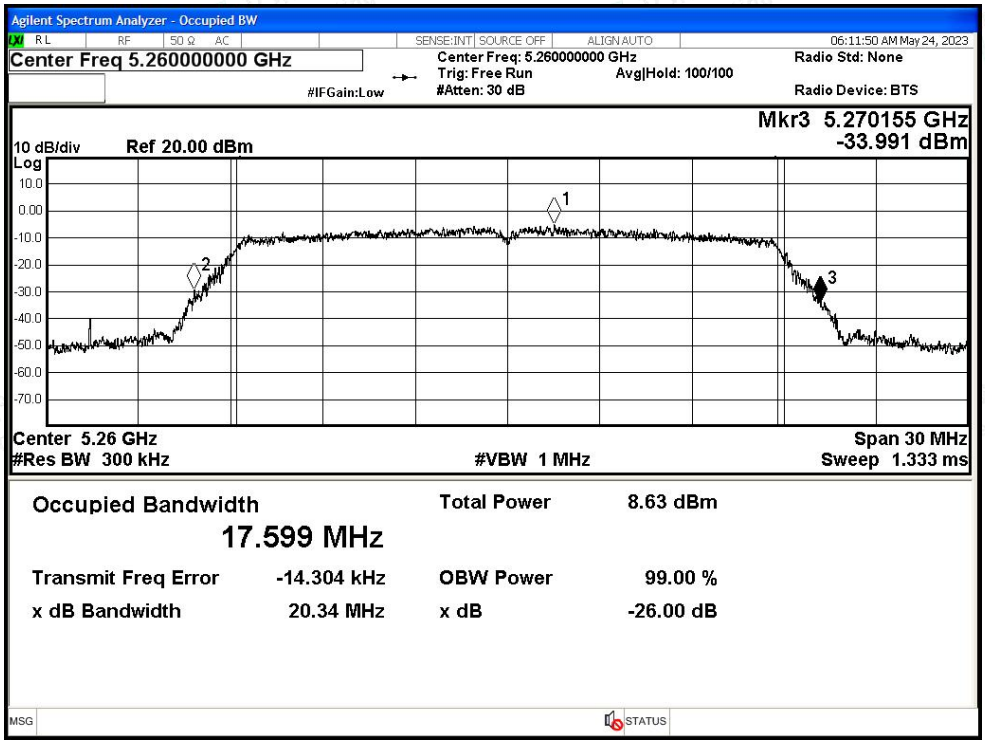
-26dB Bandwidth NVNT n40 5270MHz Ant0



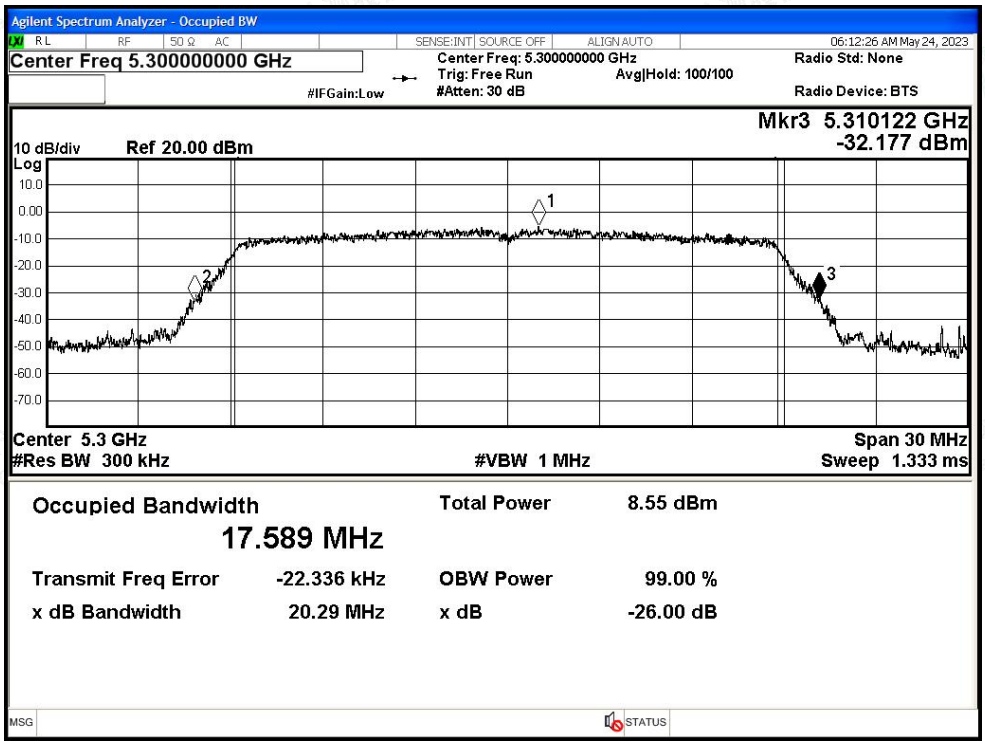
-26dB Bandwidth NVNT n40 5310MHz Ant0



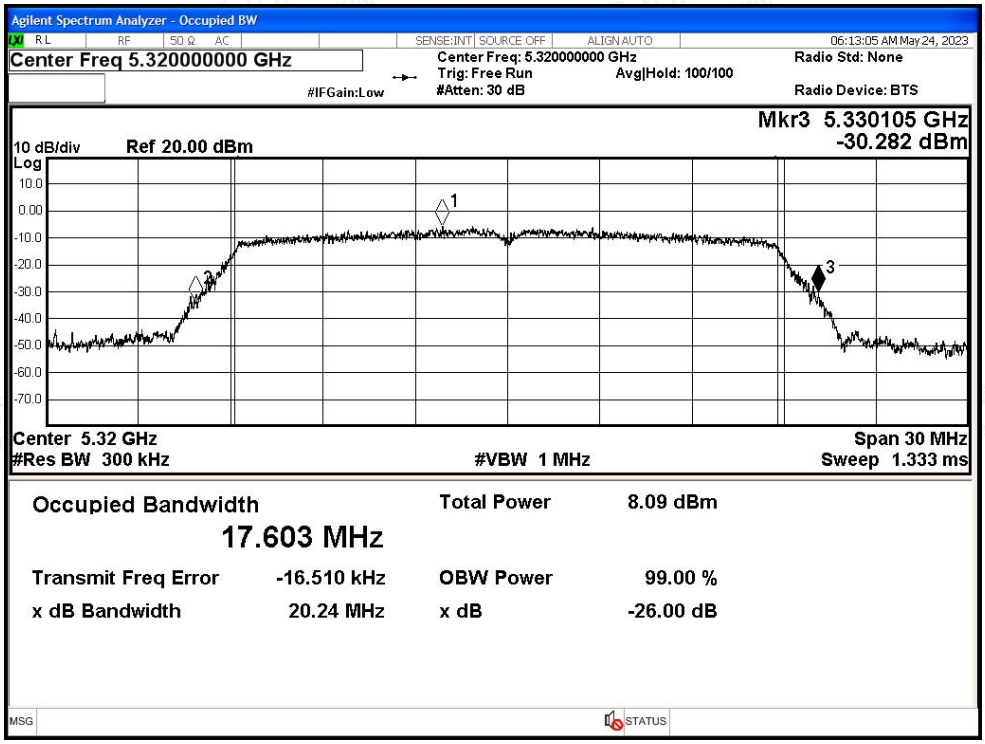
-26dB Bandwidth NVNT ac20 5260MHz Ant0



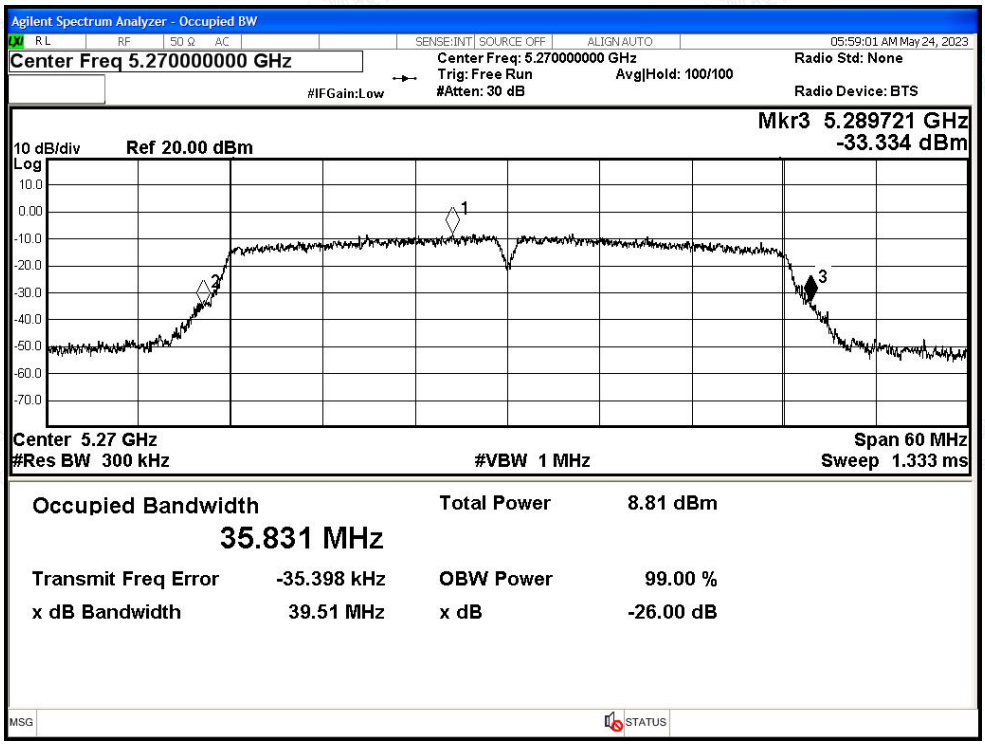
-26dB Bandwidth NVNT ac20 5300MHz Ant0



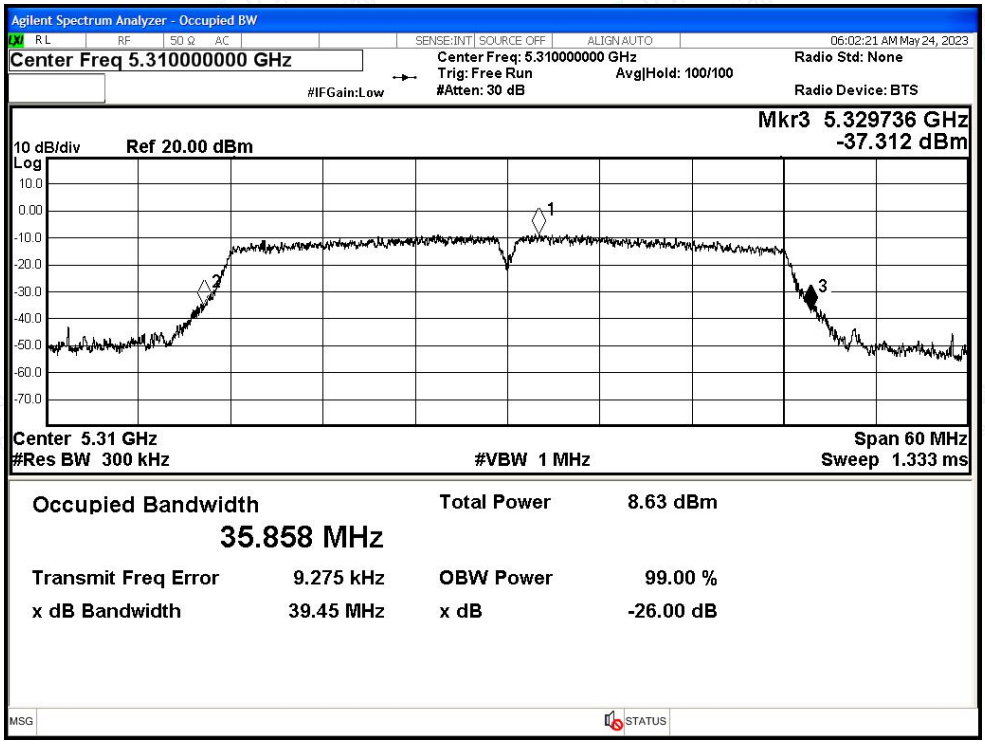
-26dB Bandwidth NVNT ac20 5320MHz Ant0



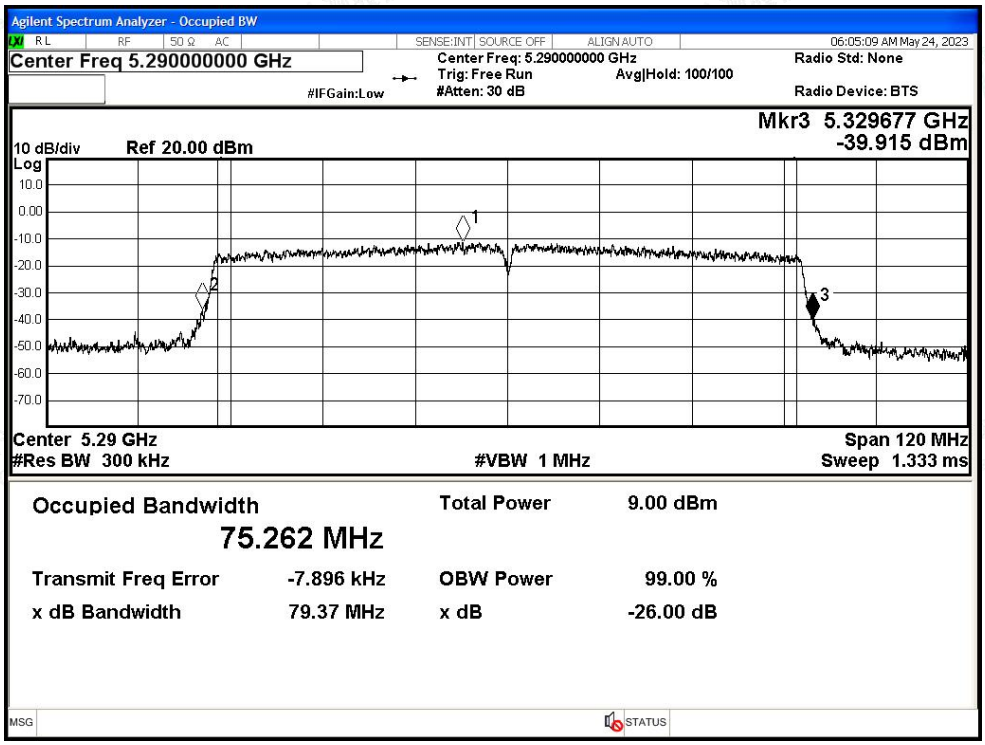
-26dB Bandwidth NVNT ac40 5270MHz Ant0



-26dB Bandwidth NVNT ac40 5310MHz Ant0



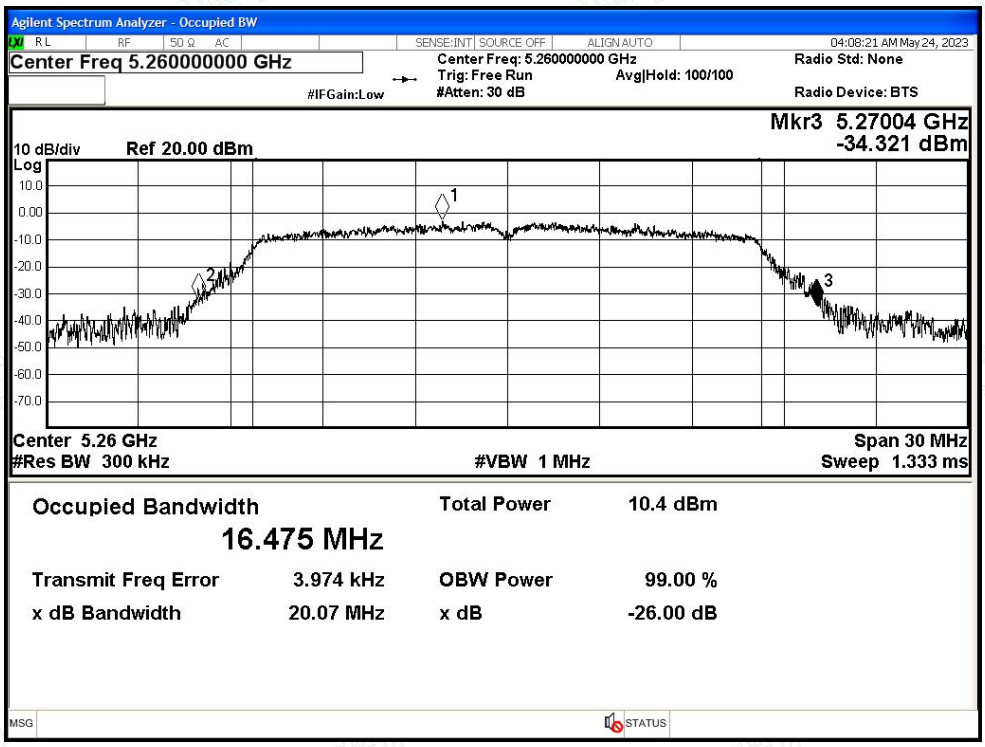
-26dB Bandwidth NVNT ac80 5290MHz Ant0



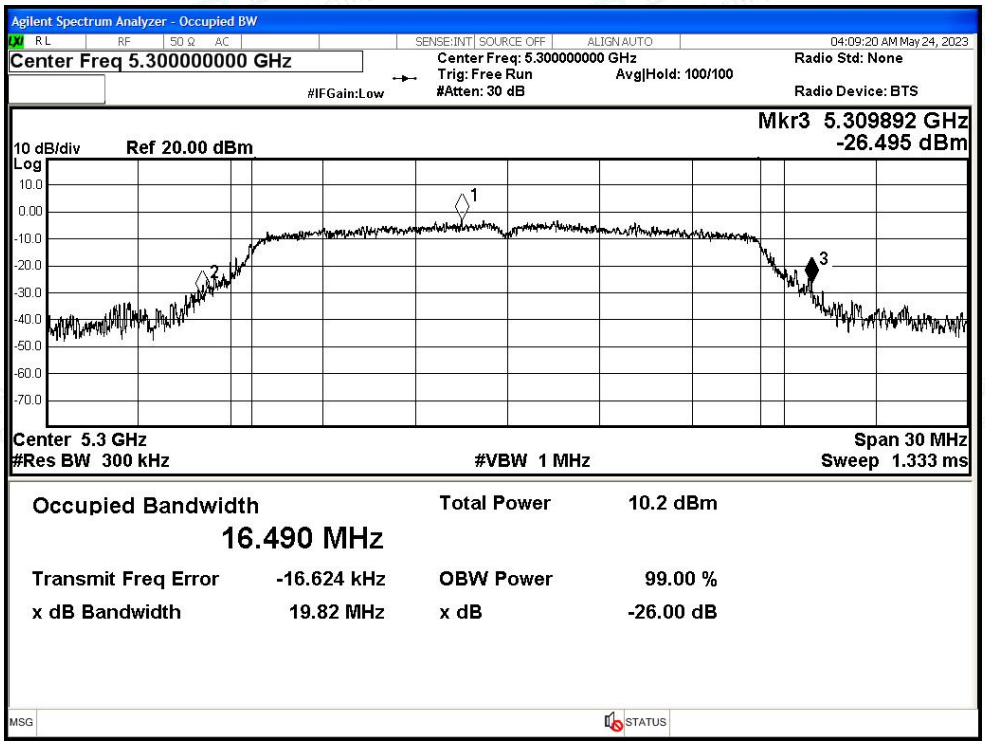
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5260	Ant1	20.072	--	Pass
NVNT	a	5300	Ant1	19.817	--	Pass
NVNT	a	5320	Ant1	20.49	--	Pass
NVNT	n20	5260	Ant1	20.201	--	Pass
NVNT	n20	5300	Ant1	20.375	--	Pass
NVNT	n20	5320	Ant1	20.219	--	Pass
NVNT	n40	5270	Ant1	39.387	--	Pass
NVNT	n40	5310	Ant1	40.171	--	Pass
NVNT	ac20	5260	Ant1	20.118	--	Pass
NVNT	ac20	5300	Ant1	20.242	--	Pass
NVNT	ac20	5320	Ant1	20.299	--	Pass
NVNT	ac40	5270	Ant1	40.023	--	Pass
NVNT	ac40	5310	Ant1	39.147	--	Pass
NVNT	ac80	5290	Ant1	80.08	--	Pass

Test Graphs

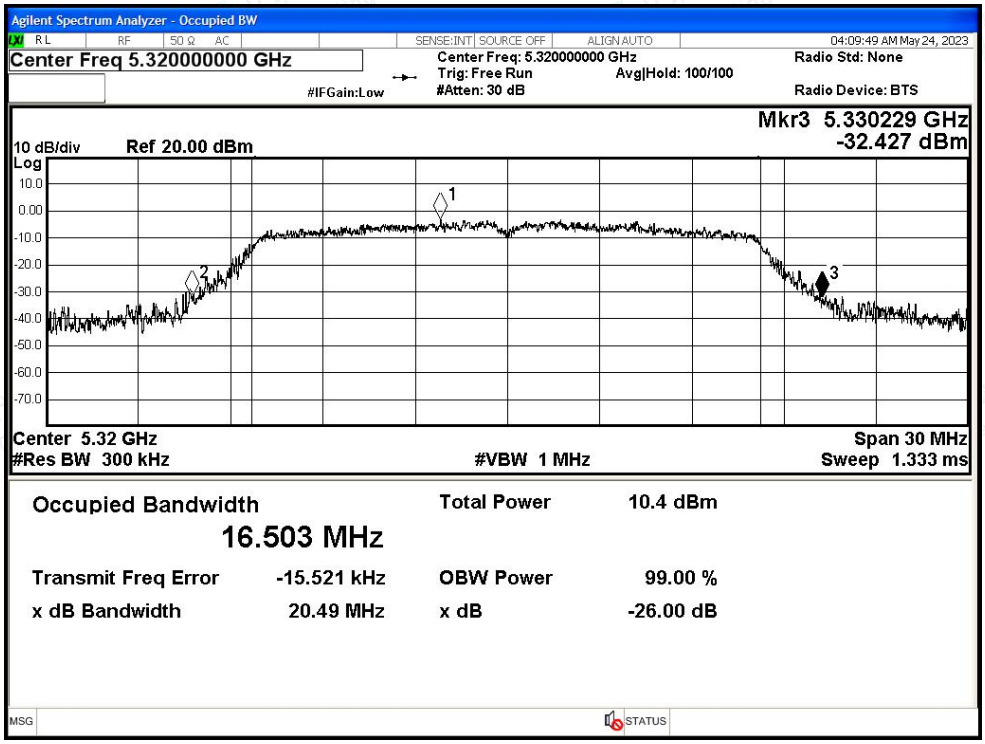
-26dB Bandwidth NVNT a 5260MHz Ant1



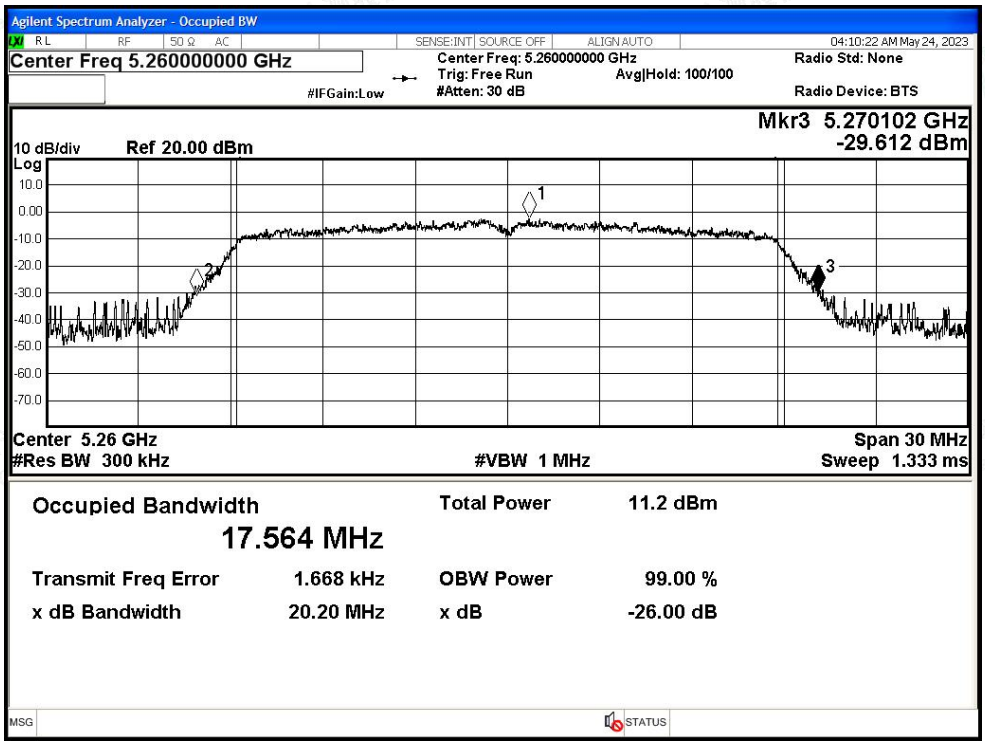
-26dB Bandwidth NVNT a 5300MHz Ant1



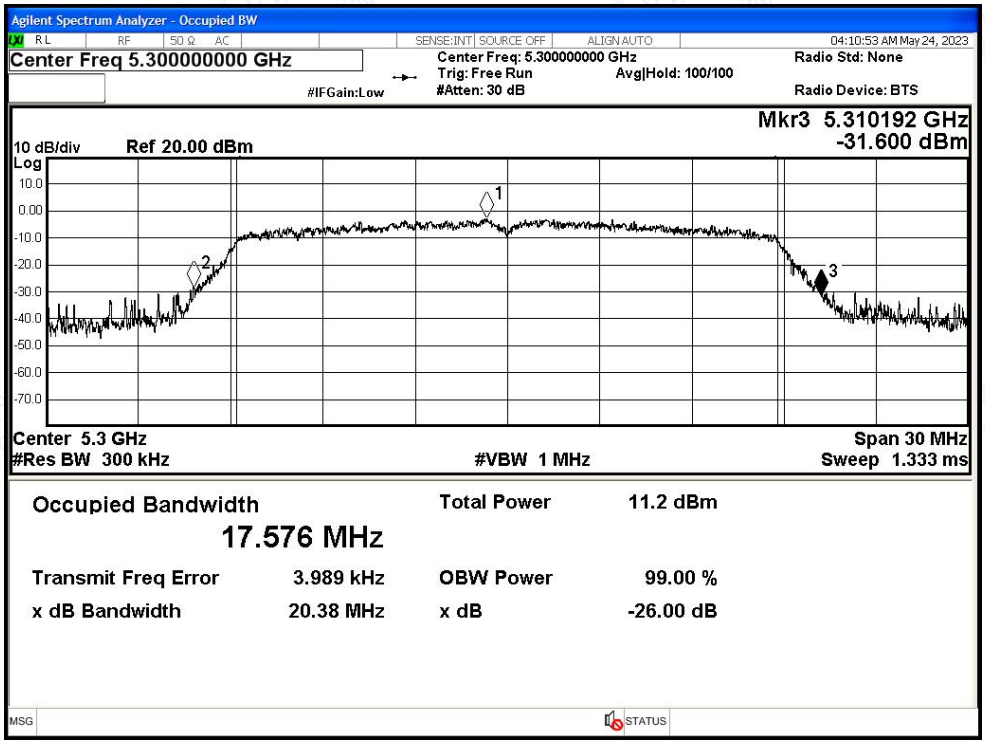
-26dB Bandwidth NVNT a 5320MHz Ant1



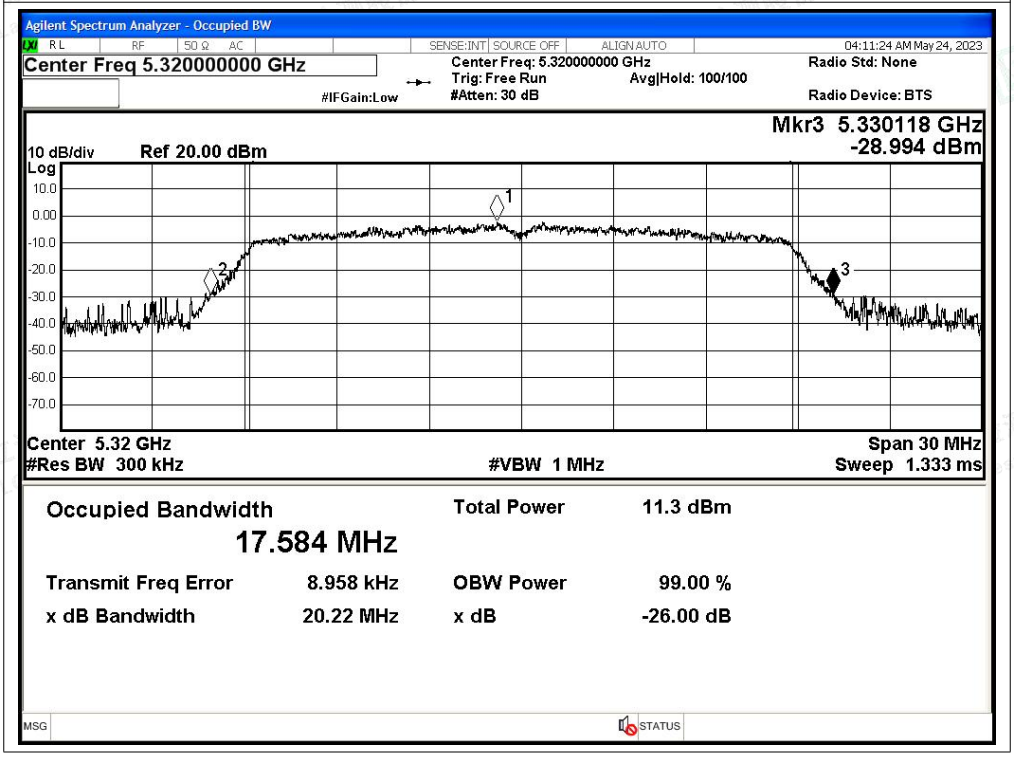
-26dB Bandwidth NVNT n20 5260MHz Ant1



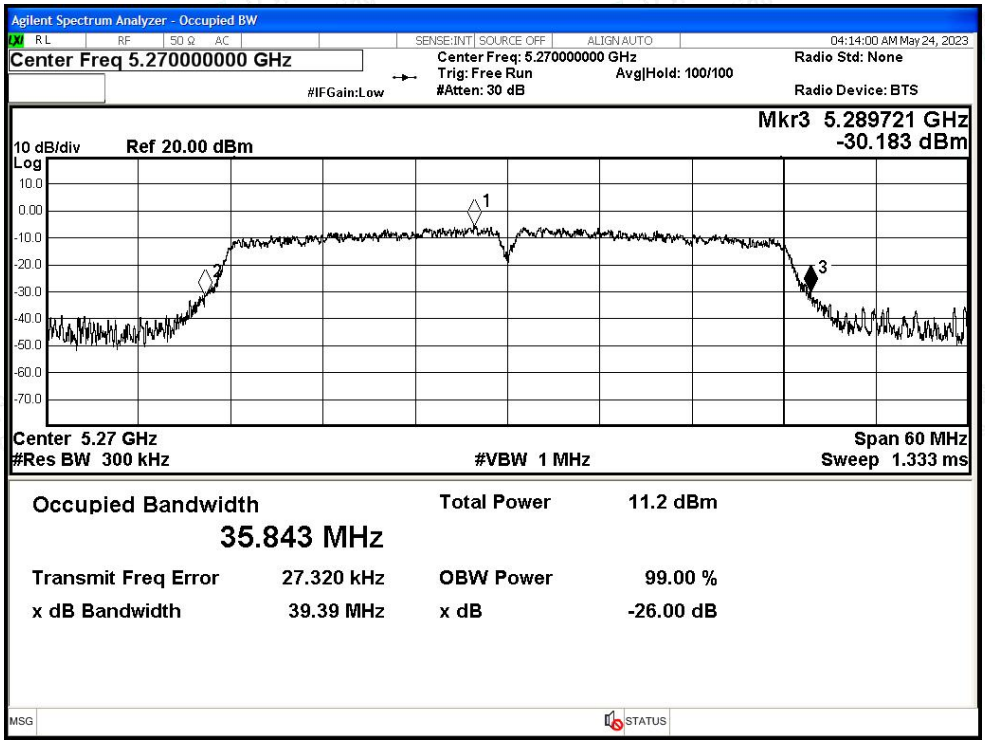
-26dB Bandwidth NVNT n20 5300MHz Ant1



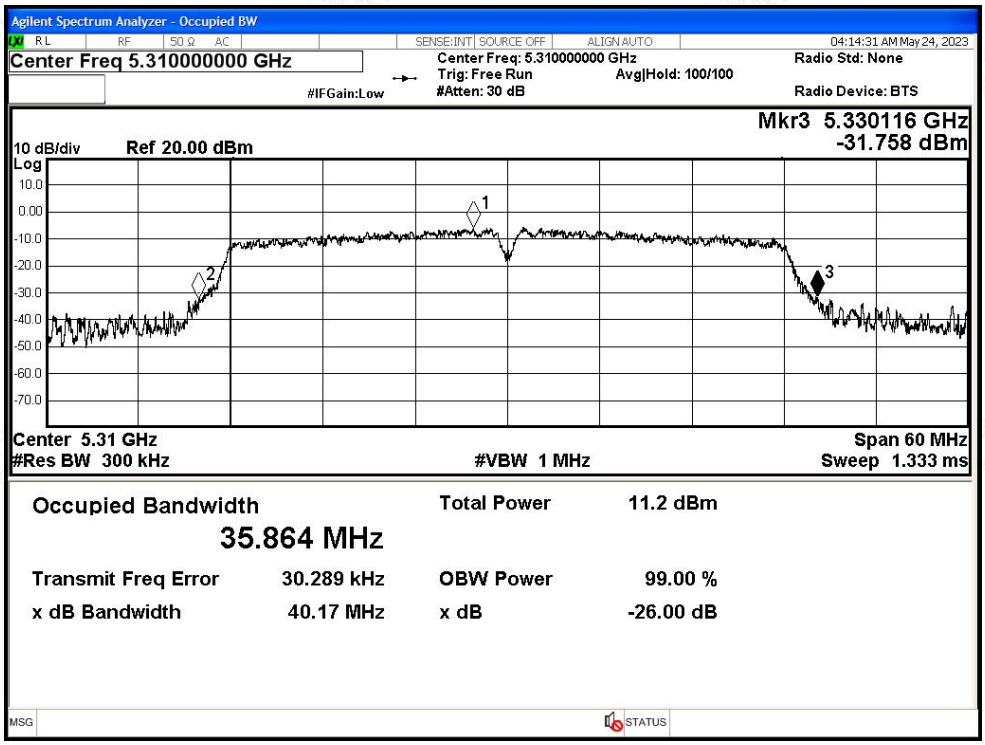
-26dB Bandwidth NVNT n20 5320MHz Ant1



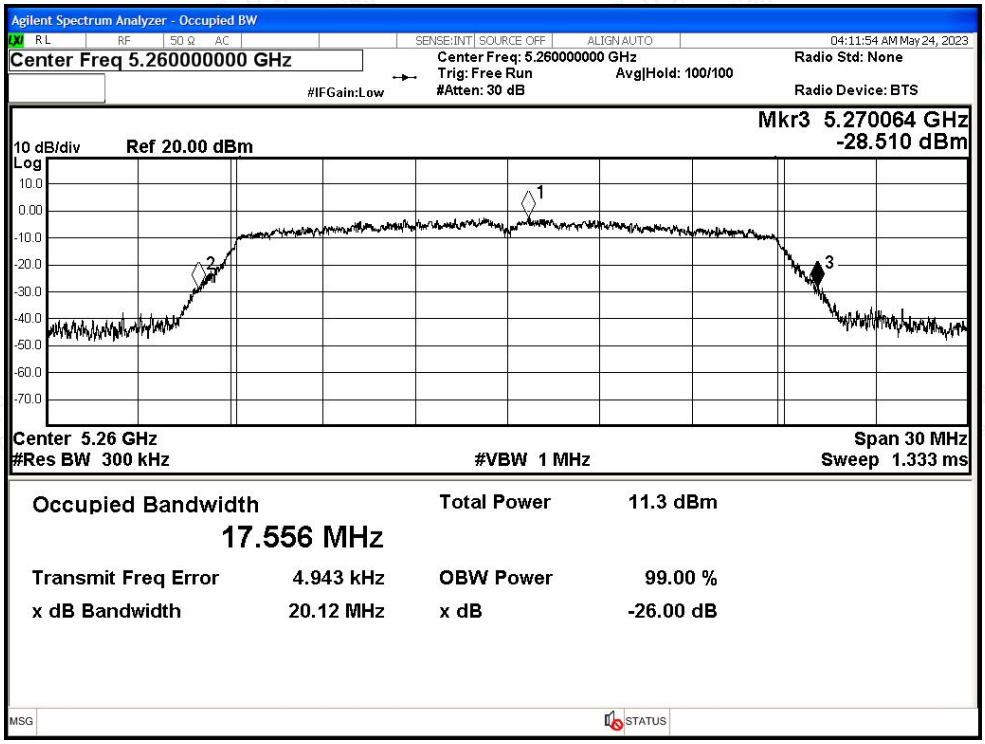
-26dB Bandwidth NVNT n40 5270MHz Ant1



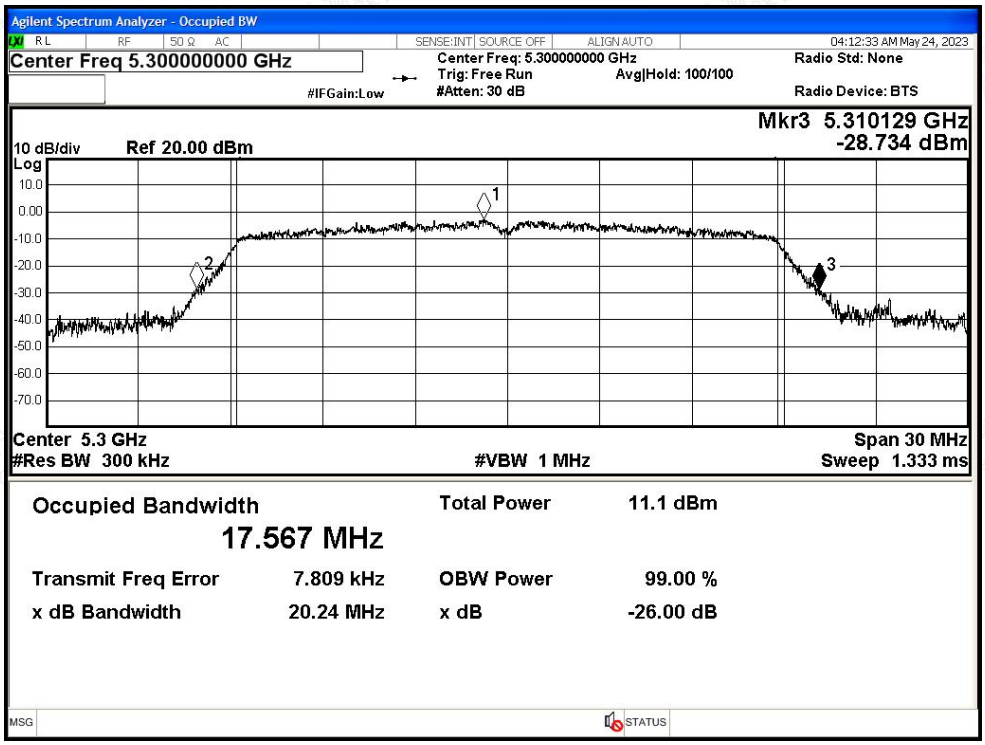
-26dB Bandwidth NVNT n40 5310MHz Ant1



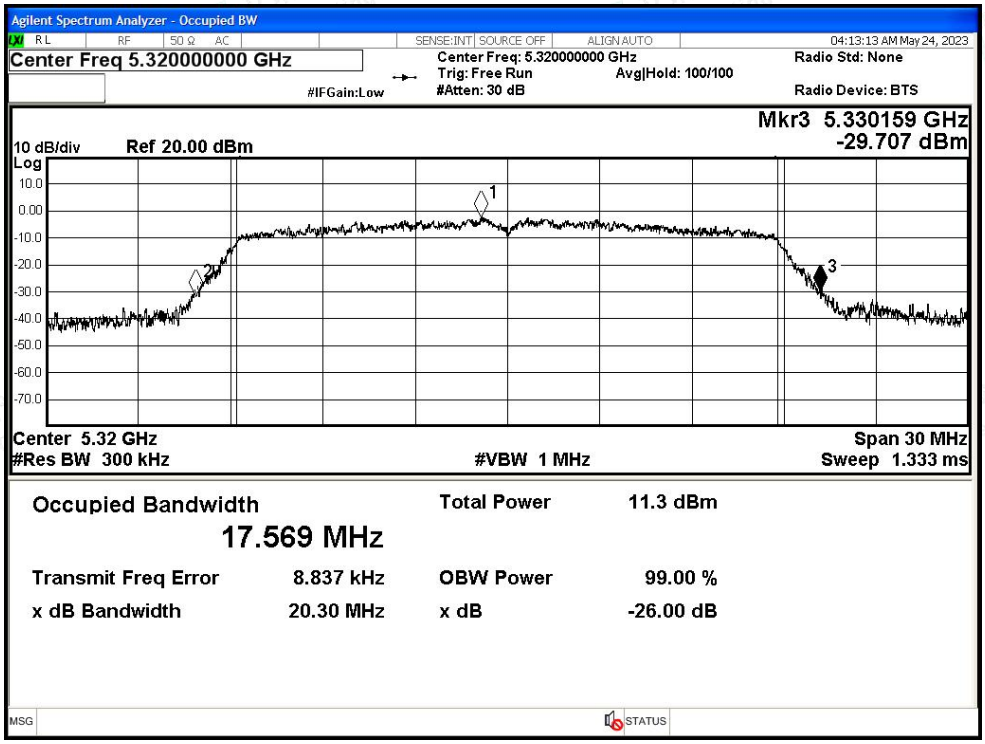
-26dB Bandwidth NVNT ac20 5260MHz Ant1



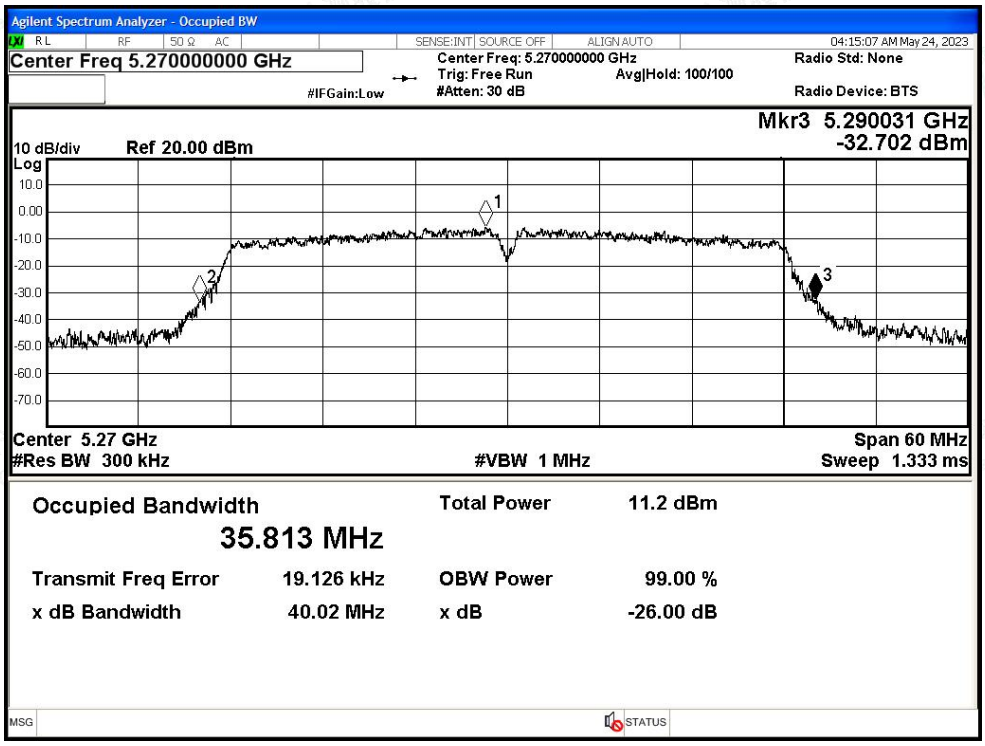
-26dB Bandwidth NVNT ac20 5300MHz Ant1



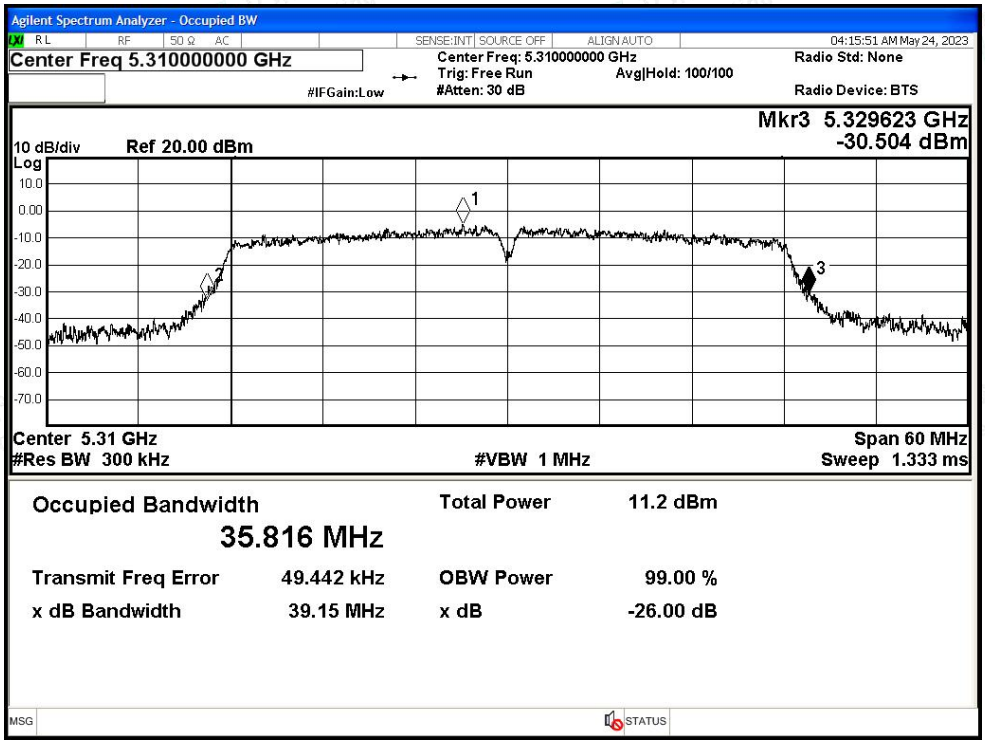
-26dB Bandwidth NVNT ac20 5320MHz Ant1



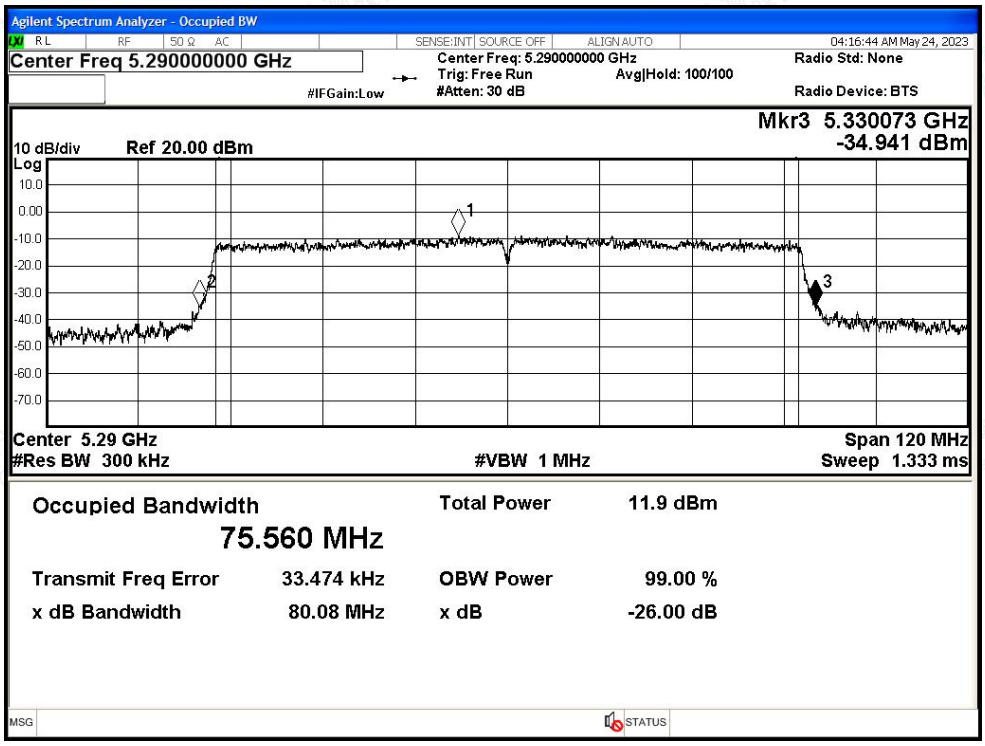
-26dB Bandwidth NVNT ac40 5270MHz Ant1



-26dB Bandwidth NVNT ac40 5310MHz Ant1



-26dB Bandwidth NVNT ac80 5290MHz 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	5260	Ant0	11.53	0.13	11.66	24	Pass
NVNT	a	5300	Ant0	11.41	0.13	11.54	24	Pass
NVNT	a	5320	Ant0	11.89	0.13	12.02	24	Pass
NVNT	n20	5260	Ant0	11.54	0.14	11.68	24	Pass
NVNT	n20	5300	Ant0	11.45	0.14	11.59	24	Pass
NVNT	n20	5320	Ant0	11.81	0.14	11.95	24	Pass
NVNT	n40	5270	Ant0	9.1	0.28	9.38	24	Pass
NVNT	n40	5310	Ant0	10.4	0.28	10.68	24	Pass
NVNT	ac20	5260	Ant0	11.23	0.14	11.37	24	Pass
NVNT	ac20	5300	Ant0	9.5	0.15	9.65	24	Pass
NVNT	ac20	5320	Ant0	9.54	0.14	9.68	24	Pass
NVNT	ac40	5270	Ant0	11.41	0.28	11.69	24	Pass
NVNT	ac40	5310	Ant0	11.01	0.28	11.29	24	Pass
NVNT	ac80	5290	Ant0	10.99	0.55	11.54	24	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5260	Ant1	11.29	0.11	11.4	24	Pass
NVNT	a	5300	Ant1	11.09	0.11	11.2	24	Pass
NVNT	a	5320	Ant1	11.15	0.11	11.26	24	Pass
NVNT	n20	5260	Ant1	11.11	0.12	11.23	24	Pass
NVNT	n20	5300	Ant1	11.27	0.12	11.39	24	Pass
NVNT	n20	5320	Ant1	11.22	0.12	11.34	24	Pass
NVNT	n40	5270	Ant1	11.55	0.23	11.78	24	Pass
NVNT	n40	5310	Ant1	11.49	0.23	11.72	24	Pass
NVNT	ac20	5260	Ant1	11.36	0.12	11.48	24	Pass
NVNT	ac20	5300	Ant1	11.33	0.12	11.45	24	Pass
NVNT	ac20	5320	Ant1	11.54	0.12	11.66	24	Pass
NVNT	ac40	5270	Ant1	11.56	0.23	11.79	24	Pass
NVNT	ac40	5310	Ant1	11.5	0.23	11.73	24	Pass
NVNT	ac80	5290	Ant1	11.77	0.45	12.22	24	Pass

MIMO

Condition	Mode	Frequency (MHz)	Total Power (dBm)			Limit (dBm)	Verdict
			Ant0	Ant1	Ant0+Ant1		
NVNT	n20	5260	11.68	11.23	14.47	24	Pass
NVNT	n20	5300	11.59	11.39	14.50	24	Pass
NVNT	n20	5320	11.95	11.34	14.67	24	Pass
NVNT	n40	5270	9.38	11.78	13.75	24	Pass
NVNT	n40	5310	10.68	11.72	14.24	24	Pass
NVNT	ac20	5260	11.37	11.48	14.44	24	Pass
NVNT	ac20	5300	9.65	11.45	13.65	24	Pass
NVNT	ac20	5320	9.68	11.66	13.79	24	Pass
NVNT	ac40	5270	11.69	11.79	14.75	24	Pass
NVNT	ac40	5310	11.29	11.73	14.53	24	Pass
NVNT	ac80	5290	11.54	12.22	14.90	24	Pass

E.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5260	Ant0	-0.41	0.13	-0.28	11	Pass
NVNT	a	5300	Ant0	-0.79	0.13	-0.66	11	Pass
NVNT	a	5320	Ant0	-1	0.13	-0.87	11	Pass
NVNT	n20	5260	Ant0	-1.3	0.14	-1.16	11	Pass
NVNT	n20	5300	Ant0	-0.5	0.14	-0.36	11	Pass
NVNT	n20	5320	Ant0	0.37	0.14	0.51	11	Pass
NVNT	n40	5270	Ant0	-6.65	0.28	-6.37	11	Pass
NVNT	n40	5310	Ant0	-4.64	0.28	-4.36	11	Pass
NVNT	ac20	5260	Ant0	-1.29	0.14	-1.15	11	Pass
NVNT	ac20	5300	Ant0	-2.54	0.15	-2.39	11	Pass
NVNT	ac20	5320	Ant0	-3.21	0.14	-3.07	11	Pass
NVNT	ac40	5270	Ant0	-4.91	0.28	-4.63	11	Pass
NVNT	ac40	5310	Ant0	-4.74	0.28	-4.46	11	Pass
NVNT	ac80	5290	Ant0	-10.1	0.55	-9.55	11	Pass

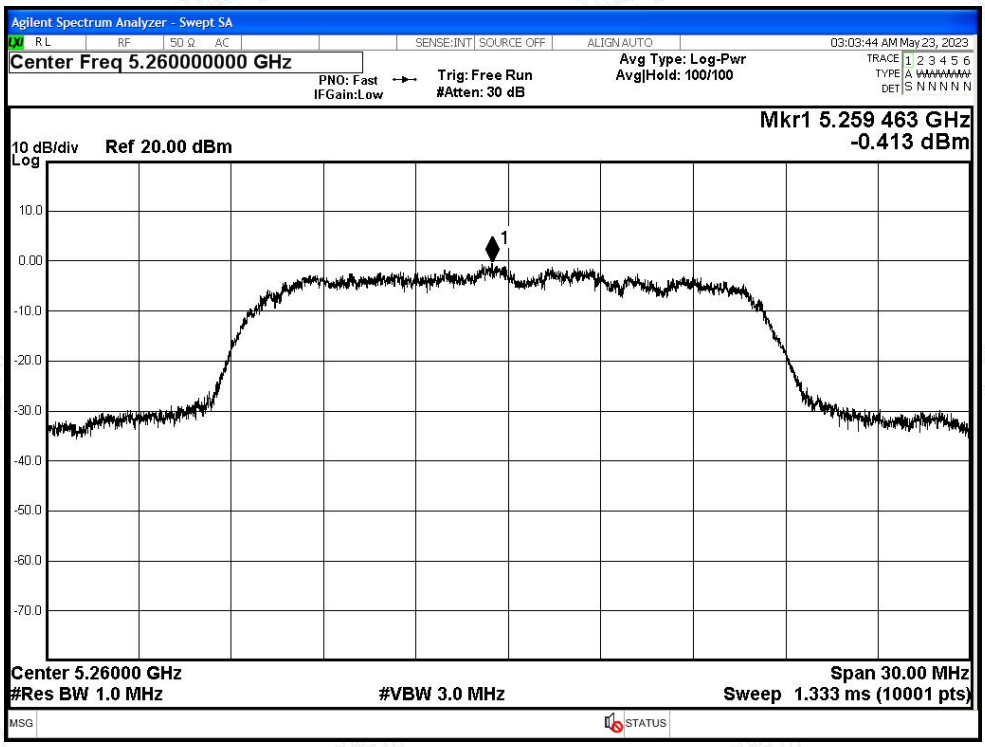
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5260	Ant1	-0.05	0.11	0.06	11	Pass
NVNT	a	5300	Ant1	-1.1	0.11	-0.99	11	Pass
NVNT	a	5320	Ant1	0	0.11	0.11	11	Pass
NVNT	n20	5260	Ant1	-0.84	0.12	-0.72	11	Pass
NVNT	n20	5300	Ant1	-0.88	0.12	-0.76	11	Pass
NVNT	n20	5320	Ant1	-0.38	0.12	-0.26	11	Pass
NVNT	n40	5270	Ant1	-4.07	0.23	-3.84	11	Pass
NVNT	n40	5310	Ant1	-4.07	0.23	-3.84	11	Pass
NVNT	ac20	5260	Ant1	-0.66	0.12	-0.54	11	Pass
NVNT	ac20	5300	Ant1	-0.86	0.12	-0.74	11	Pass
NVNT	ac20	5320	Ant1	-0.86	0.12	-0.74	11	Pass
NVNT	ac40	5270	Ant1	-4.11	0.23	-3.88	11	Pass
NVNT	ac40	5310	Ant1	-3.82	0.23	-3.59	11	Pass
NVNT	ac80	5290	Ant1	-9.76	0.45	-9.31	11	Pass

MIMO

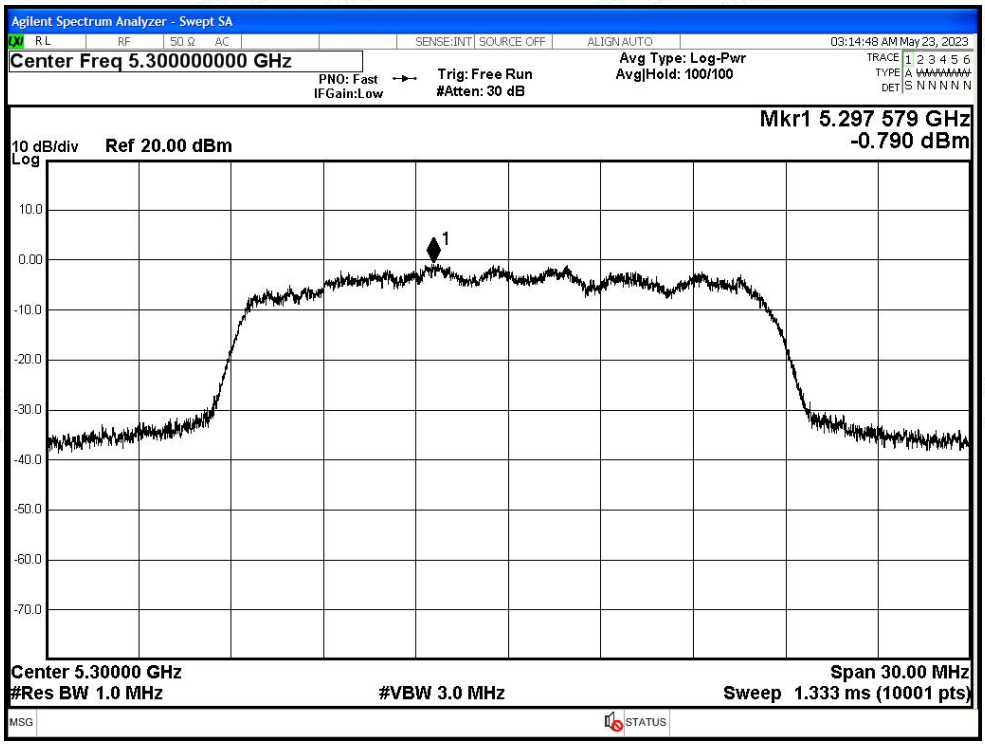
Condition	Mode	Frequency (MHz)	Total PSD (dBm/MHz)			Limit (dBm/MHz)	Verdict
			Ant0	Ant1	Ant0+Ant1		
NVNT	n20	5260	-1.16	-0.72	2.08	11	Pass
NVNT	n20	5300	-0.36	-0.76	2.45	11	Pass
NVNT	n20	5320	0.51	-0.26	3.15	11	Pass
NVNT	n40	5270	-6.37	-3.84	-1.91	11	Pass
NVNT	n40	5310	-4.36	-3.84	-1.08	11	Pass
NVNT	ac20	5260	-1.15	-0.54	2.18	11	Pass
NVNT	ac20	5300	-2.39	-0.74	1.52	11	Pass
NVNT	ac20	5320	-3.07	-0.74	1.26	11	Pass
NVNT	ac40	5270	-4.63	-3.88	-1.23	11	Pass
NVNT	ac40	5310	-4.46	-3.59	-0.99	11	Pass
NVNT	ac80	5290	-9.55	-9.31	-6.42	11	Pass

Test Graphs

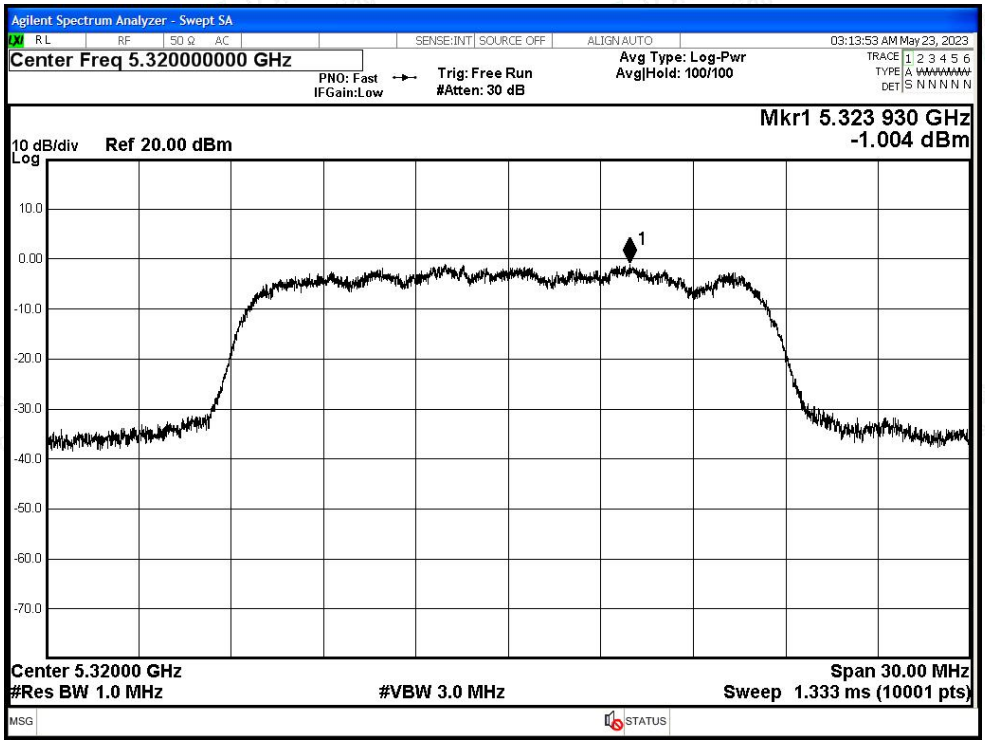
PSD NVNT a 5260MHz Ant0



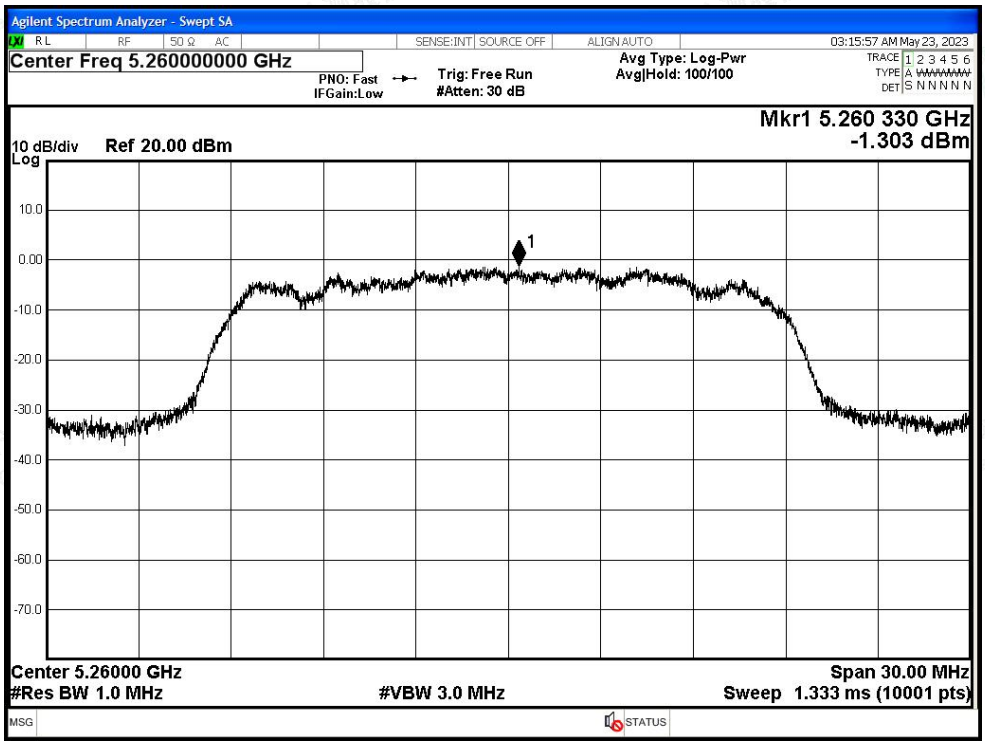
PSD NVNT a 5300MHz Ant0



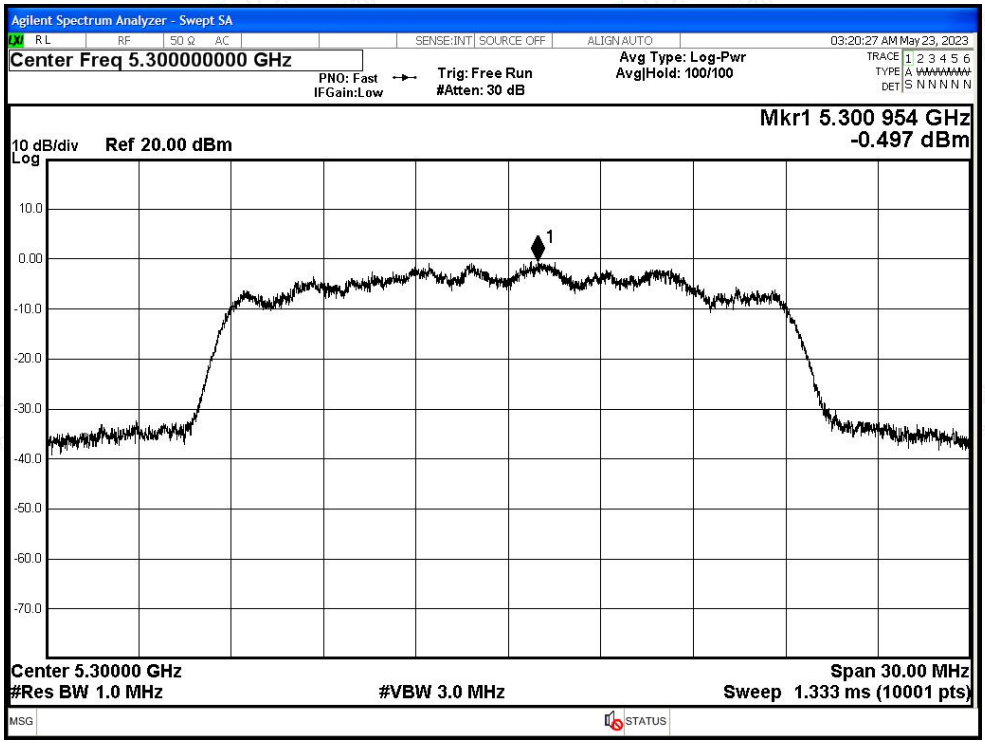
PSD NVNT a 5320MHz Ant0



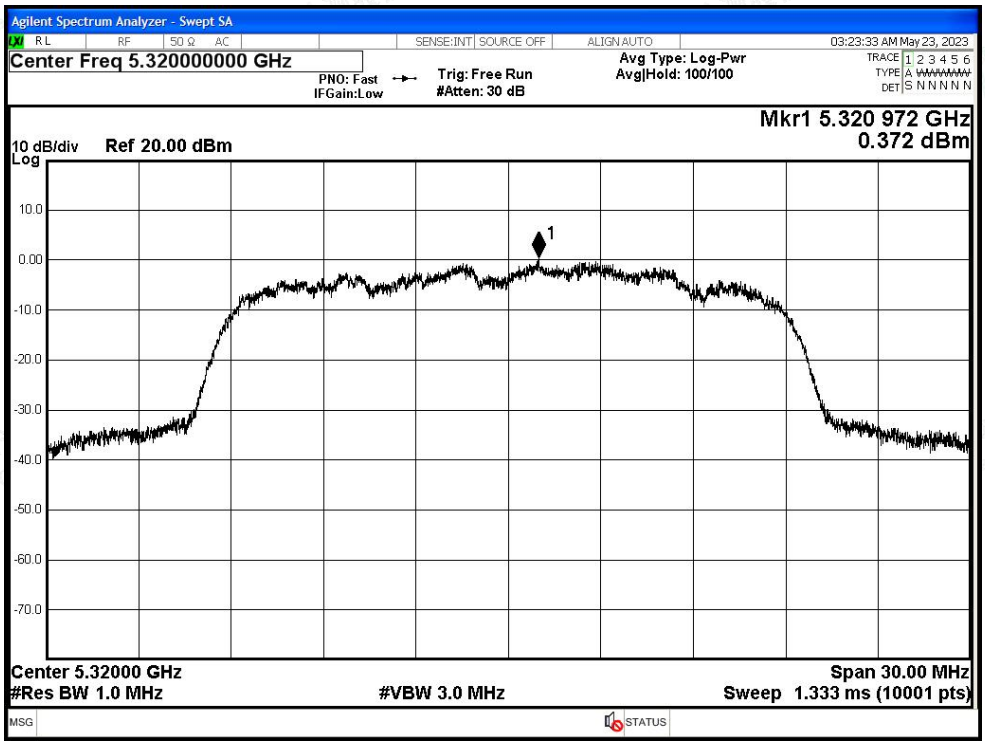
PSD NVNT n20 5260MHz Ant0



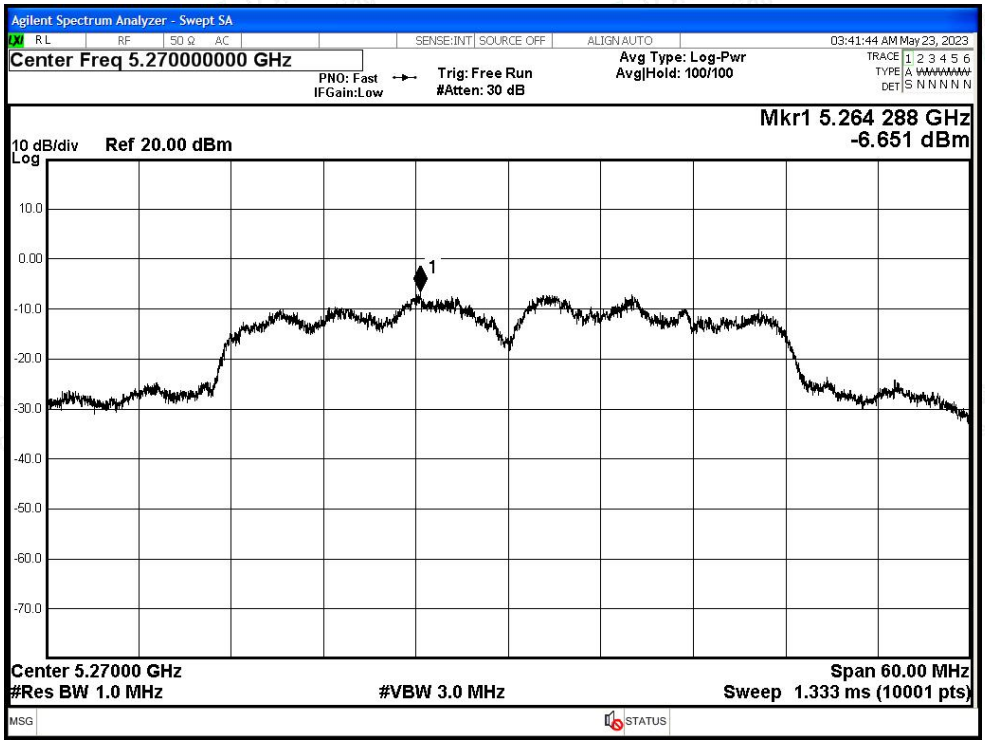
PSD NVNT n20 5300MHz Ant0



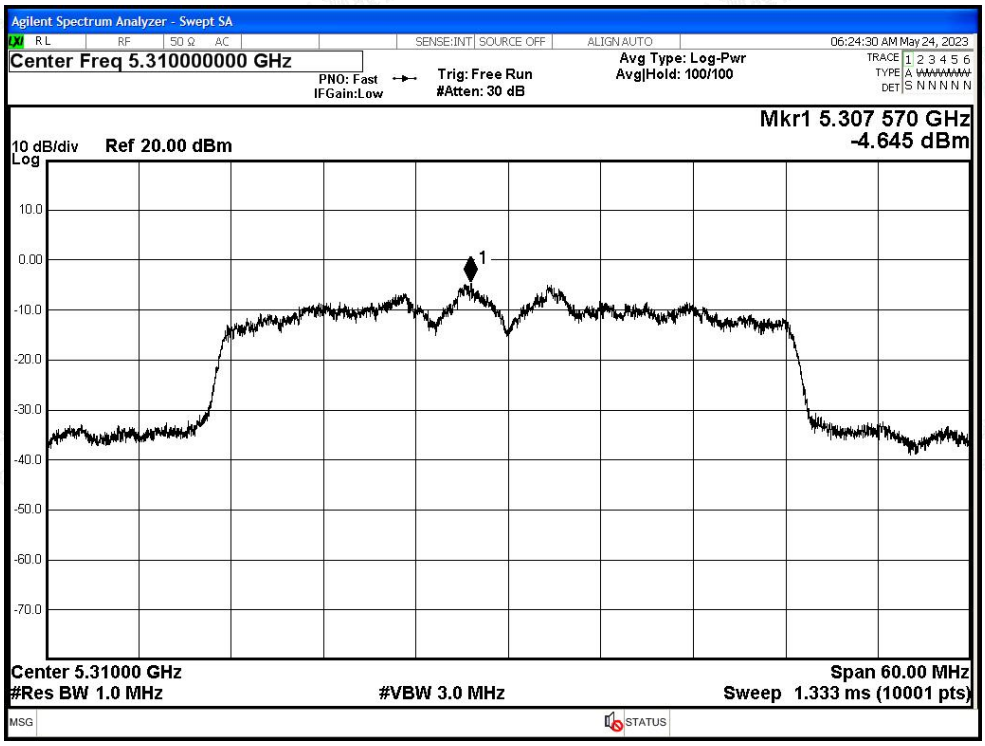
PSD NVNT n20 5320MHz Ant0



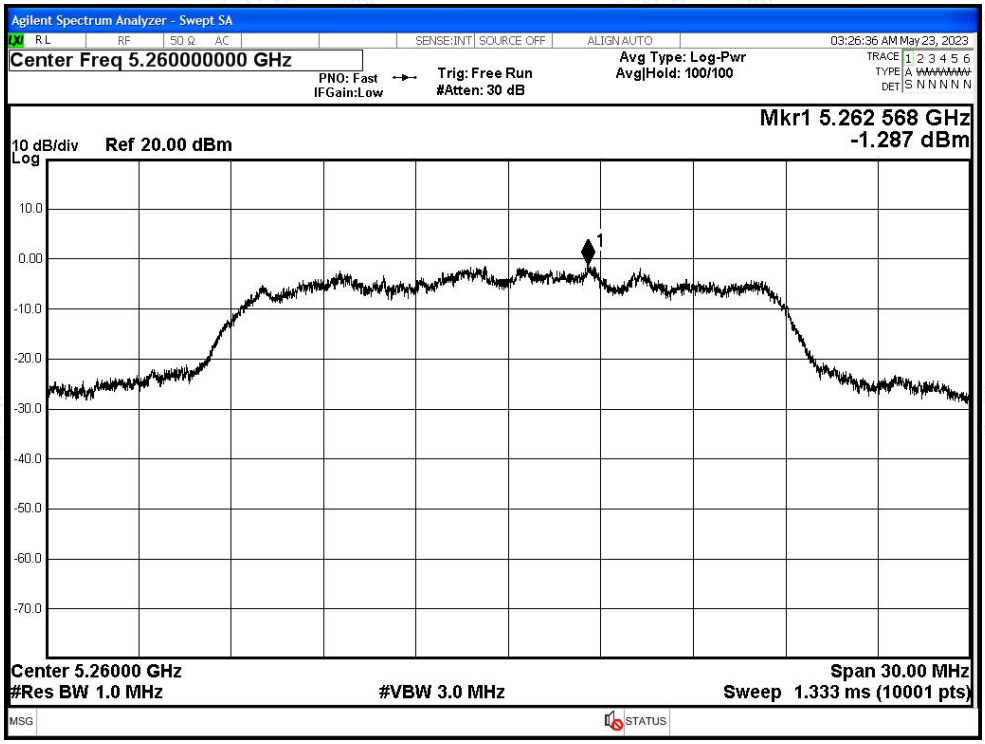
PSD NVNT n40 5270MHz Ant0



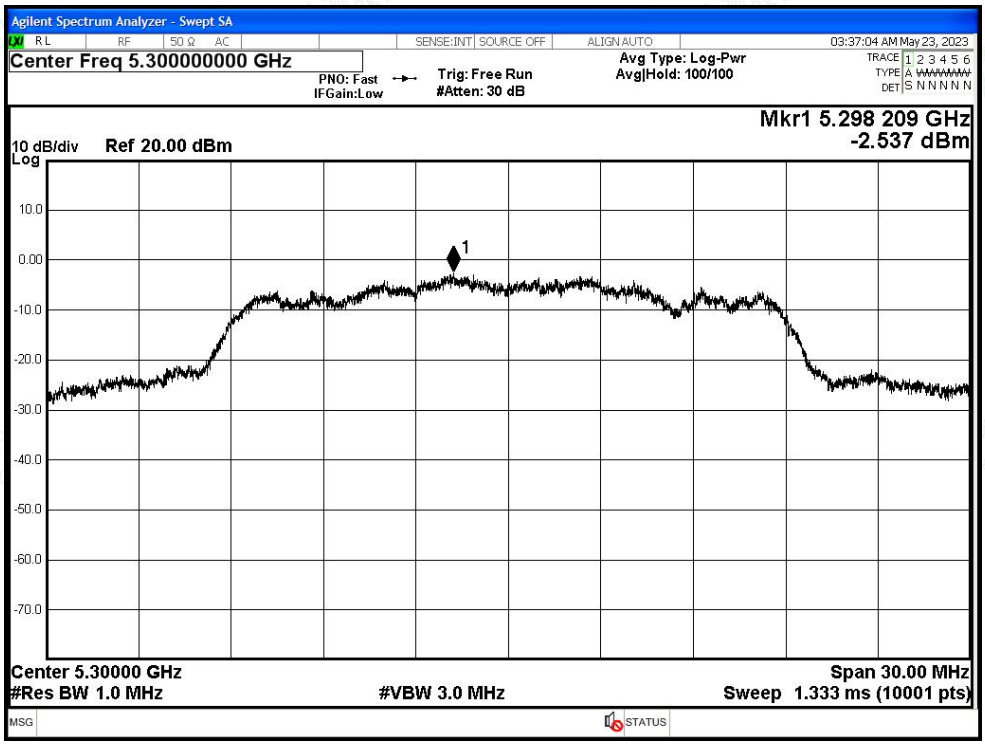
PSD NVNT n40 5310MHz Ant0



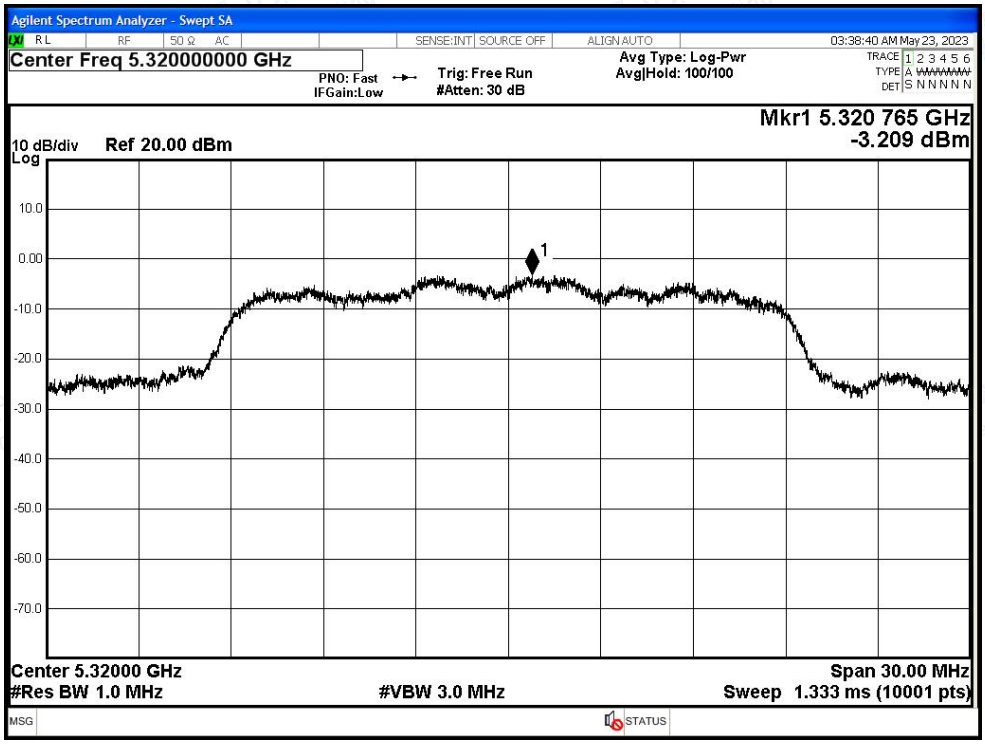
PSD NVNT ac20 5260MHz Ant0



PSD NVNT ac20 5300MHz Ant0



PSD NVNT ac20 5320MHz Ant0



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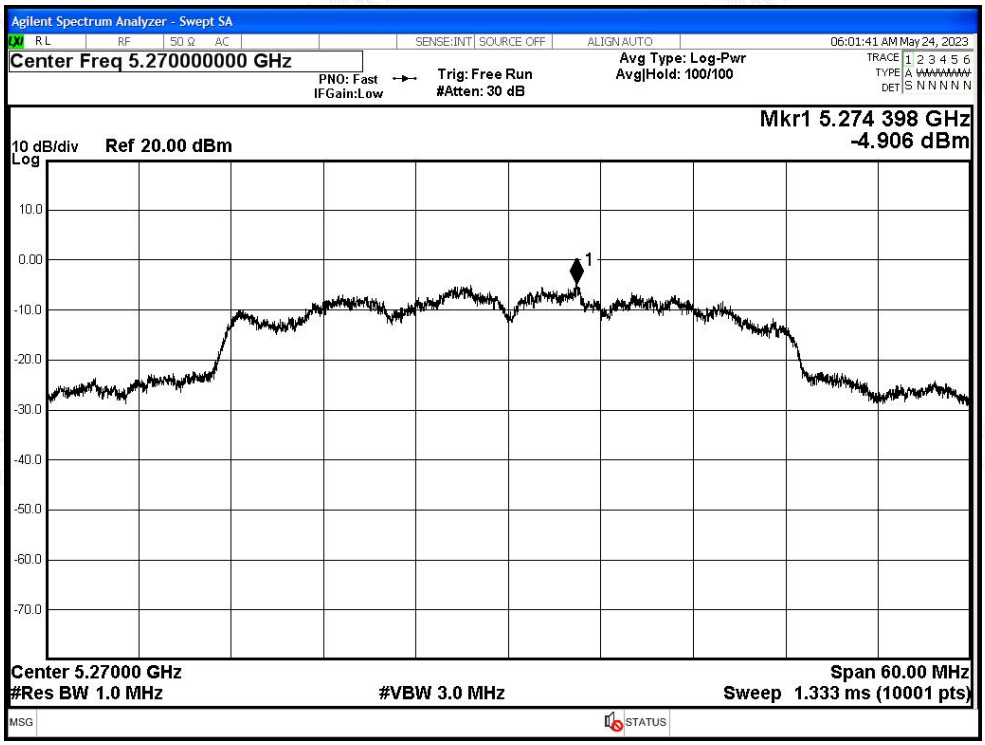
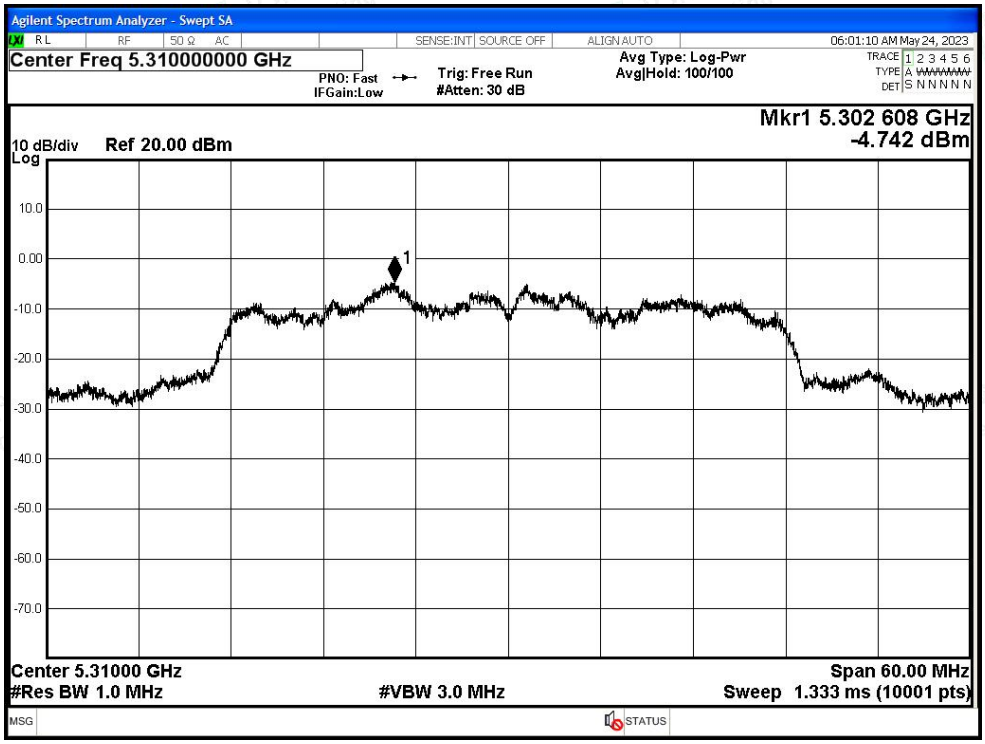
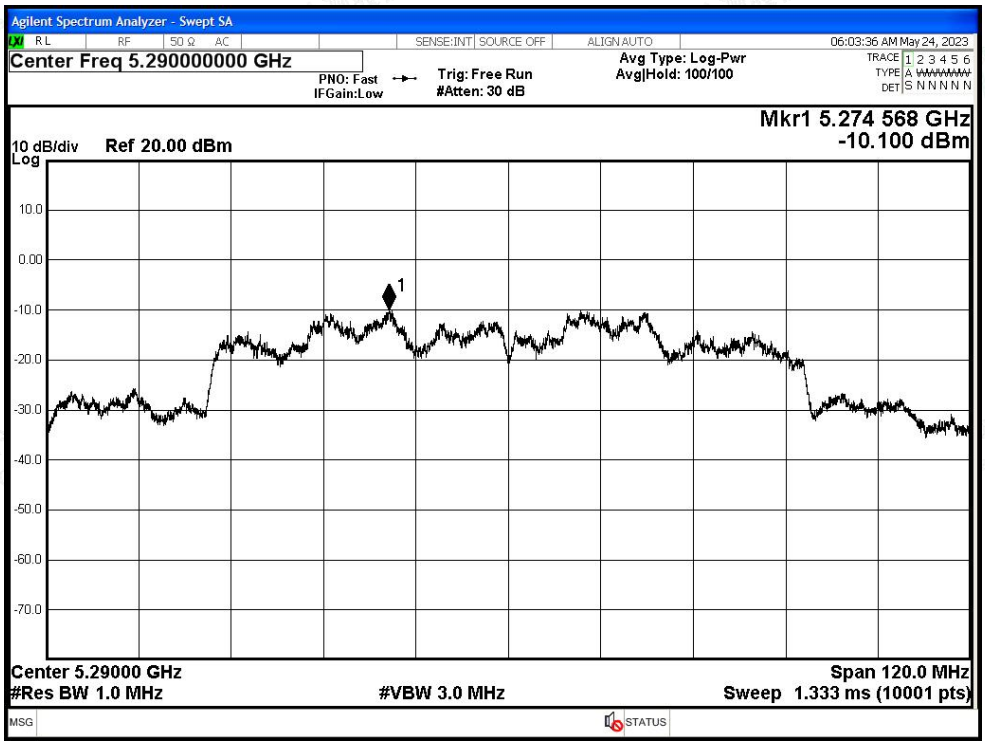


PSD NVNT ac40 5310MHz Ant0

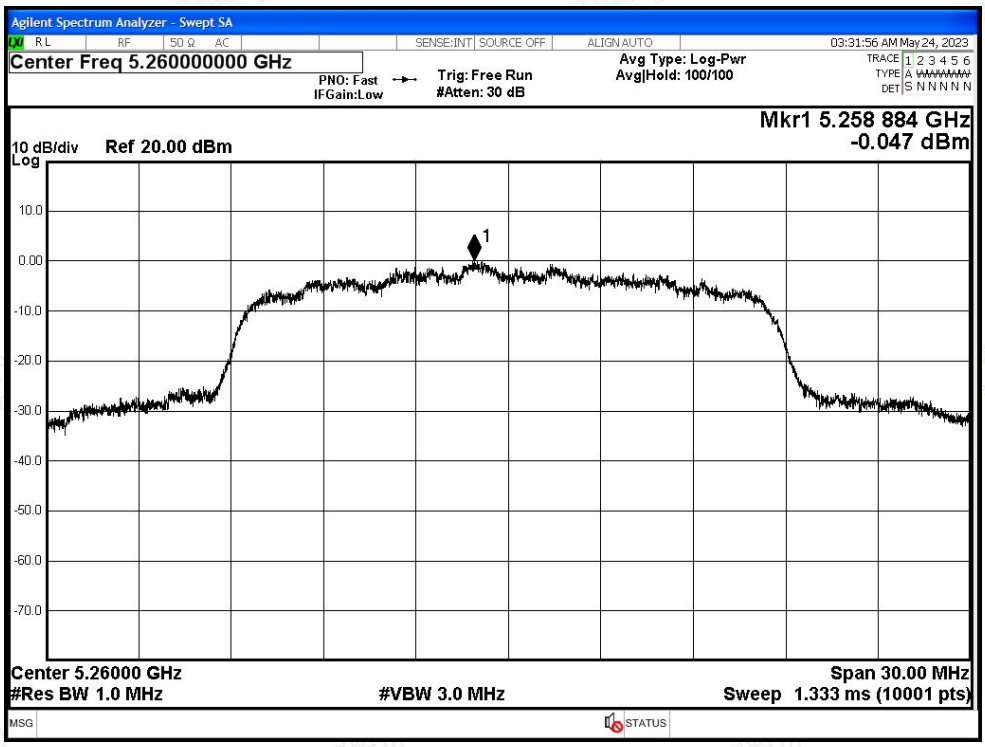


PSD NVNT ac80 5290MHz Ant0

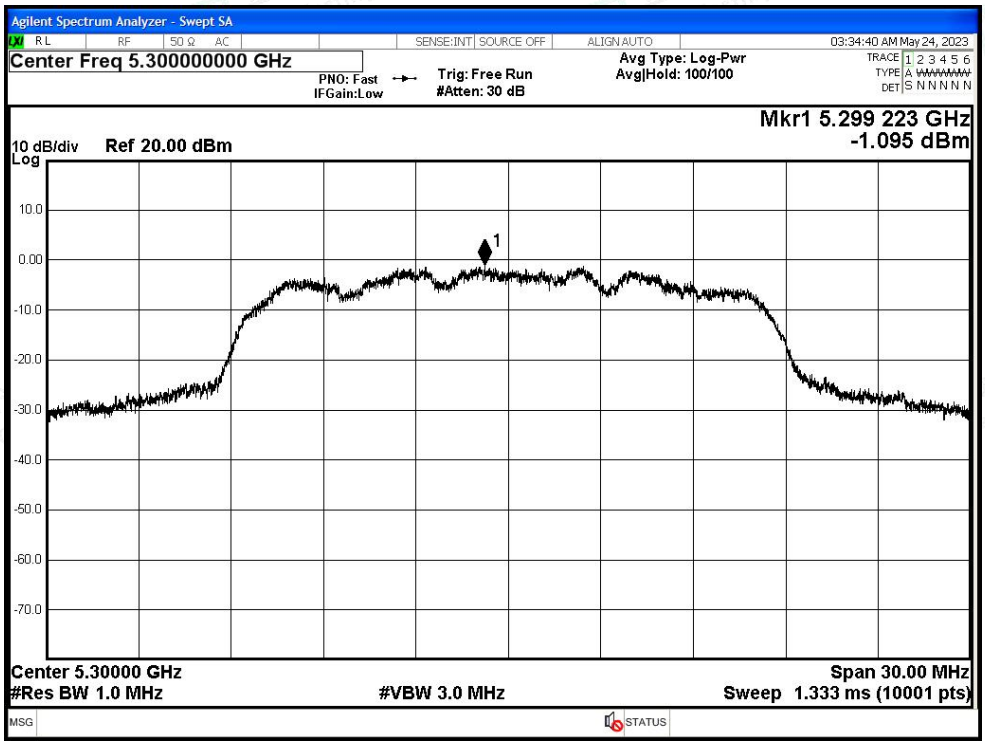


Test Graphs

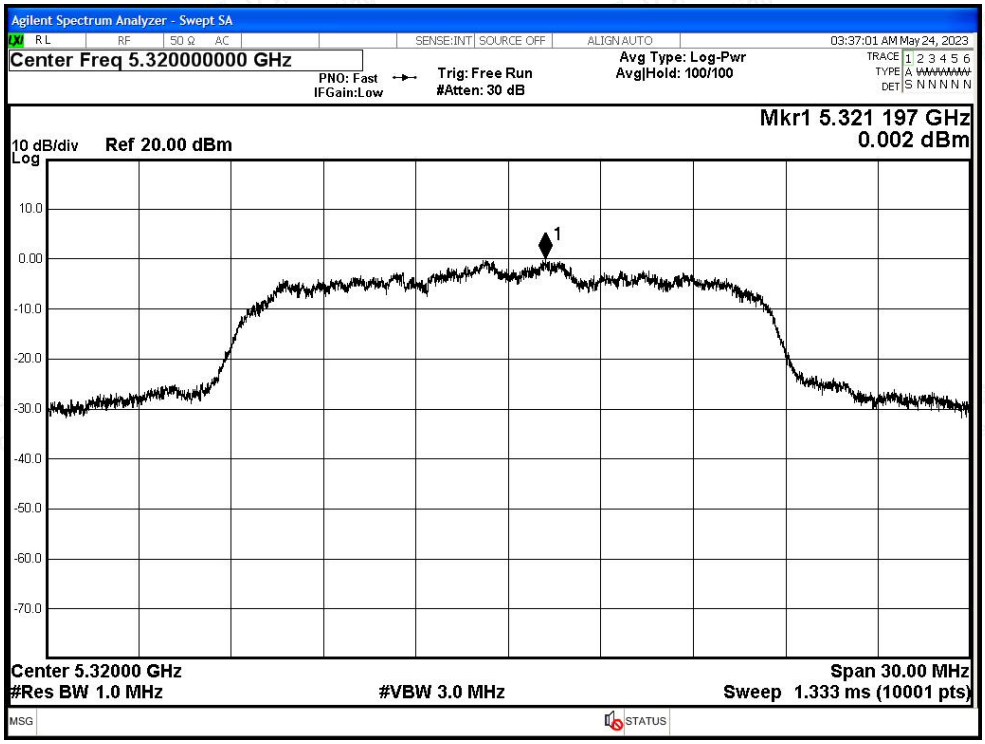
PSD NVNT a 5260MHz Ant1



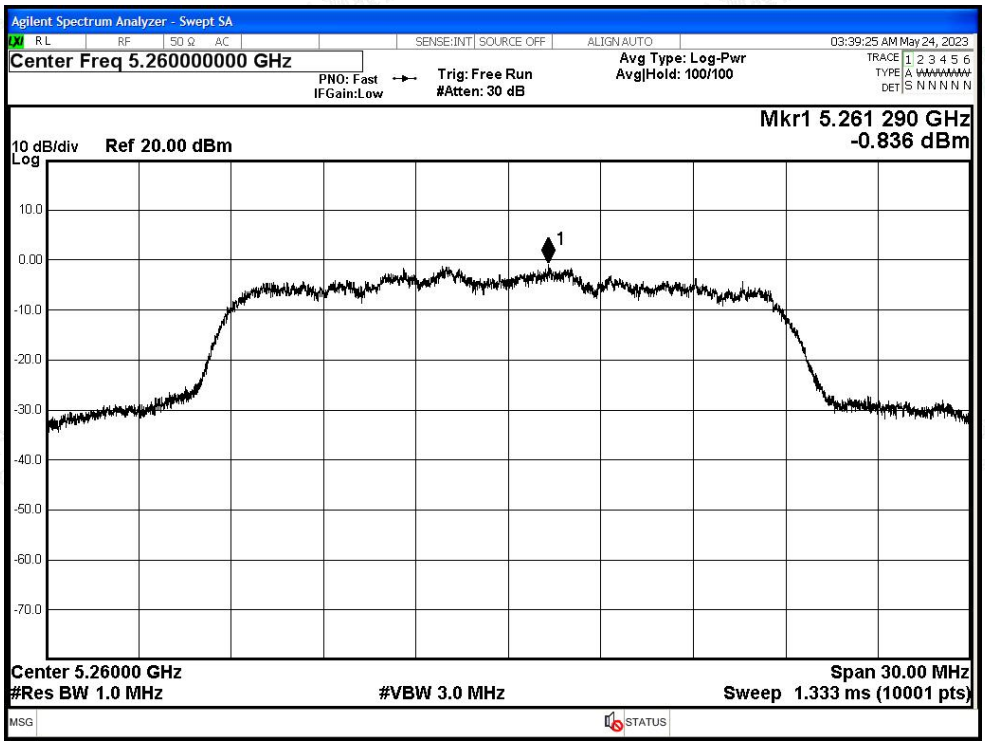
PSD NVNT a 5300MHz Ant1



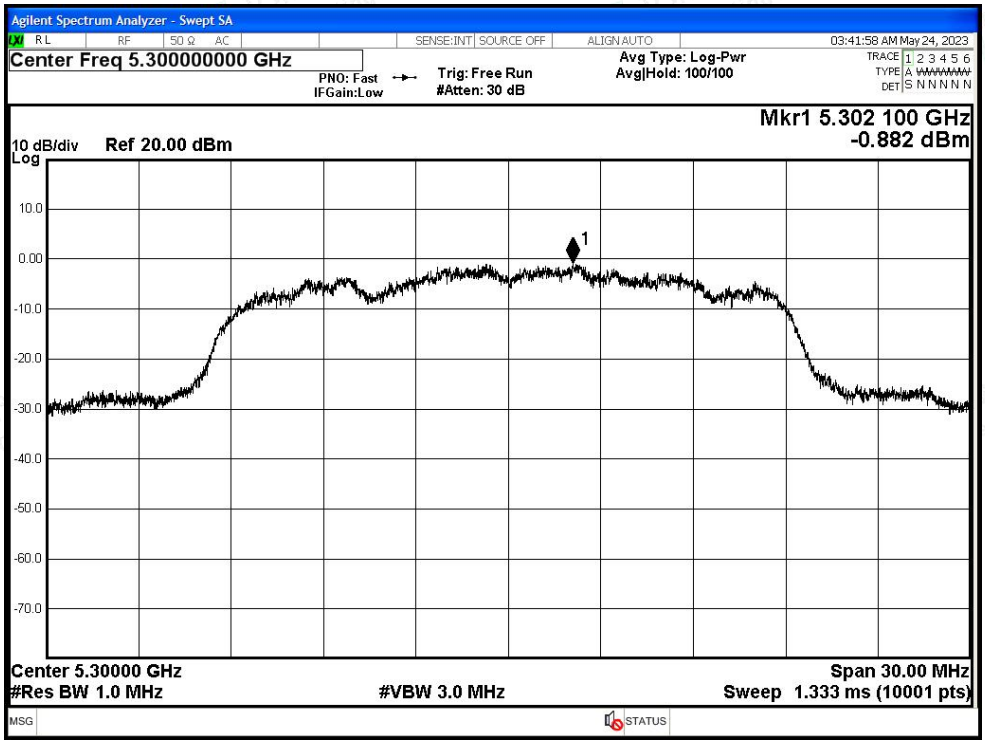
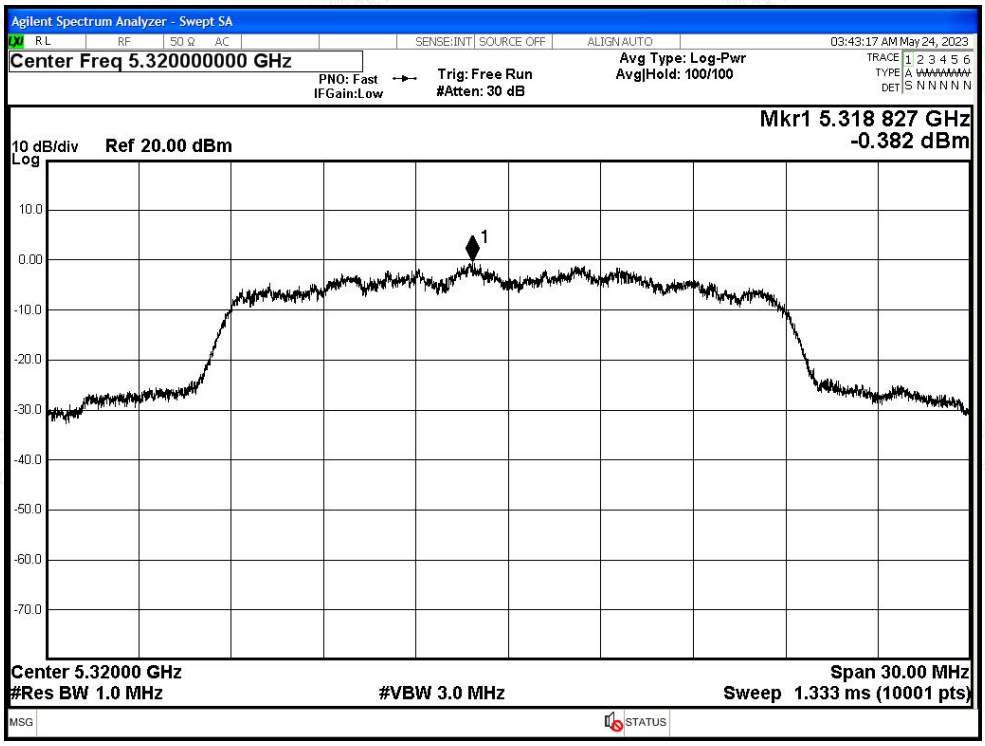
PSD NVNT a 5320MHz Ant1



PSD NVNT n20 5260MHz Ant1



PSD NVNT n20 5300MHz Ant1



PSD NVNT n20 5320MHz Ant1