Appendix E

RF Test Data for 5.8GWIFI (Conducted Measurement)

Product Name: IPTV Set-Top Box

Test Model: SML-5045W6

Environmental Conditions

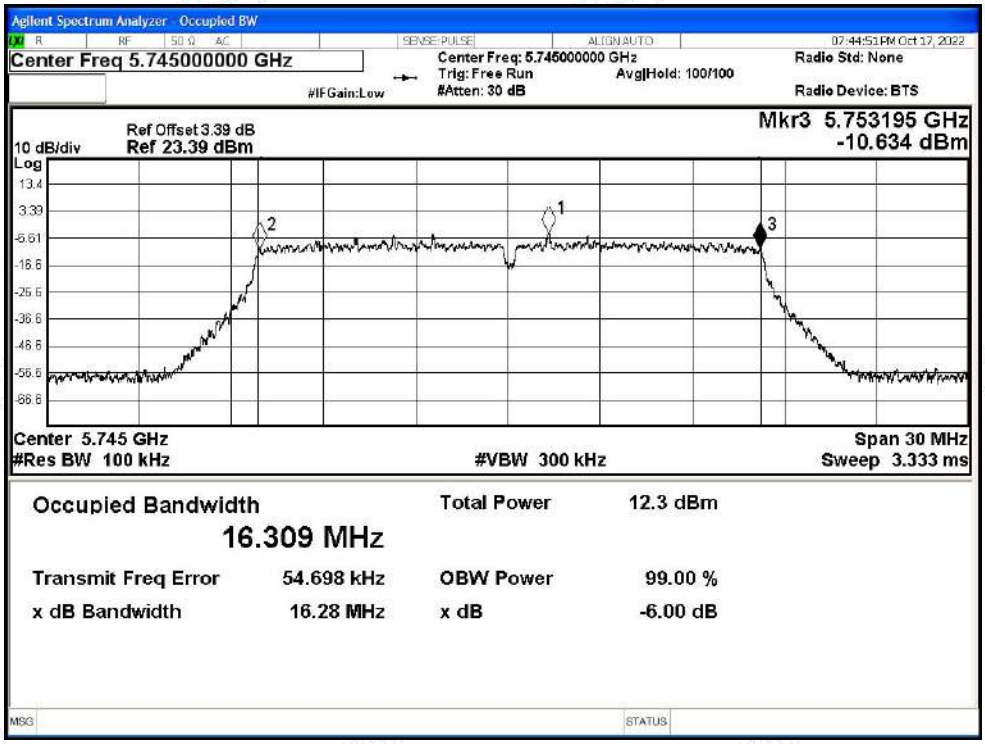
Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li Huan

E.1 -6dB Bandwidth

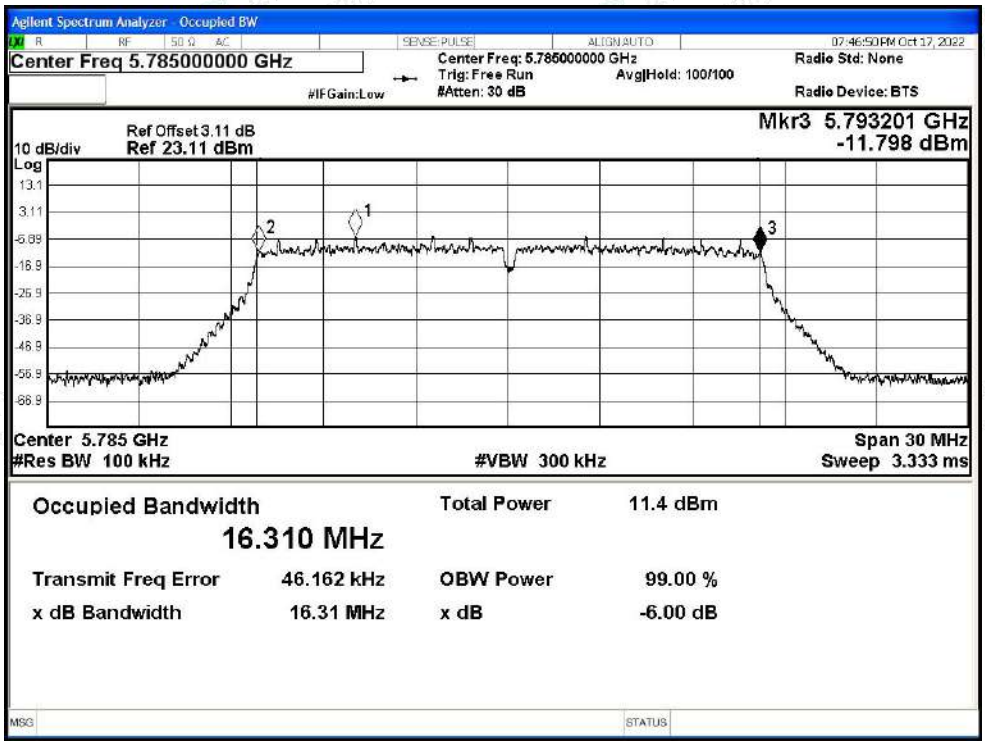
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant0	16.281	>=0.5	Pass
NVNT	a	5785	Ant0	16.309	>=0.5	Pass
NVNT	a	5825	Ant0	16.305	>=0.5	Pass
NVNT	n20	5745	Ant0	17.241	>=0.5	Pass
NVNT	n20	5785	Ant0	17.136	>=0.5	Pass
NVNT	n20	5825	Ant0	16.915	>=0.5	Pass
NVNT	n40	5755	Ant0	35.348	>=0.5	Pass
NVNT	n40	5795	Ant0	35.12	>=0.5	Pass
NVNT	ac20	5745	Ant0	16.651	>=0.5	Pass
NVNT	ac20	5785	Ant0	16.88	>=0.5	Pass
NVNT	ac20	5825	Ant0	16.871	>=0.5	Pass
NVNT	ac40	5755	Ant0	35.568	>=0.5	Pass
NVNT	ac40	5795	Ant0	35.465	>=0.5	Pass
NVNT	ac80	5775	Ant0	75.757	>=0.5	Pass
NVNT	ax20	5745	Ant0	18.361	>=0.5	Pass
NVNT	ax20	5785	Ant0	17.555	>=0.5	Pass
NVNT	ax20	5825	Ant0	18.423	>=0.5	Pass
NVNT	ax40	5755	Ant0	36.612	>=0.5	Pass
NVNT	ax40	5795	Ant0	37.81	>=0.5	Pass
NVNT	ax80	5775	Ant0	77.352	>=0.5	Pass

Test Graphs

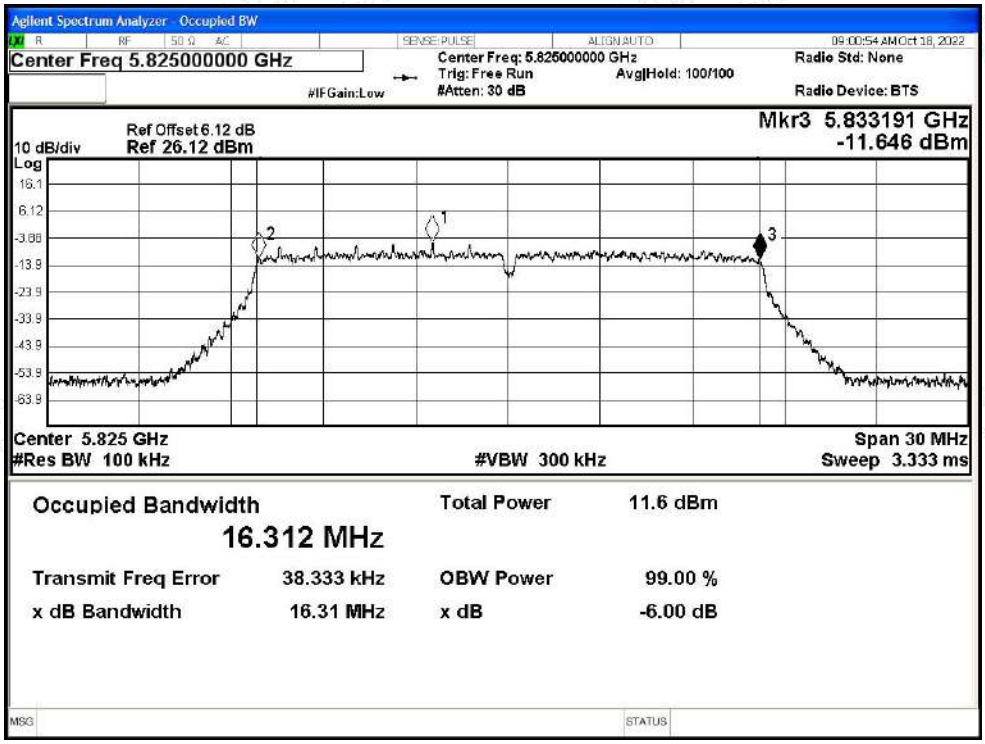
-6dB Bandwidth NVNT a 5745MHz Ant0



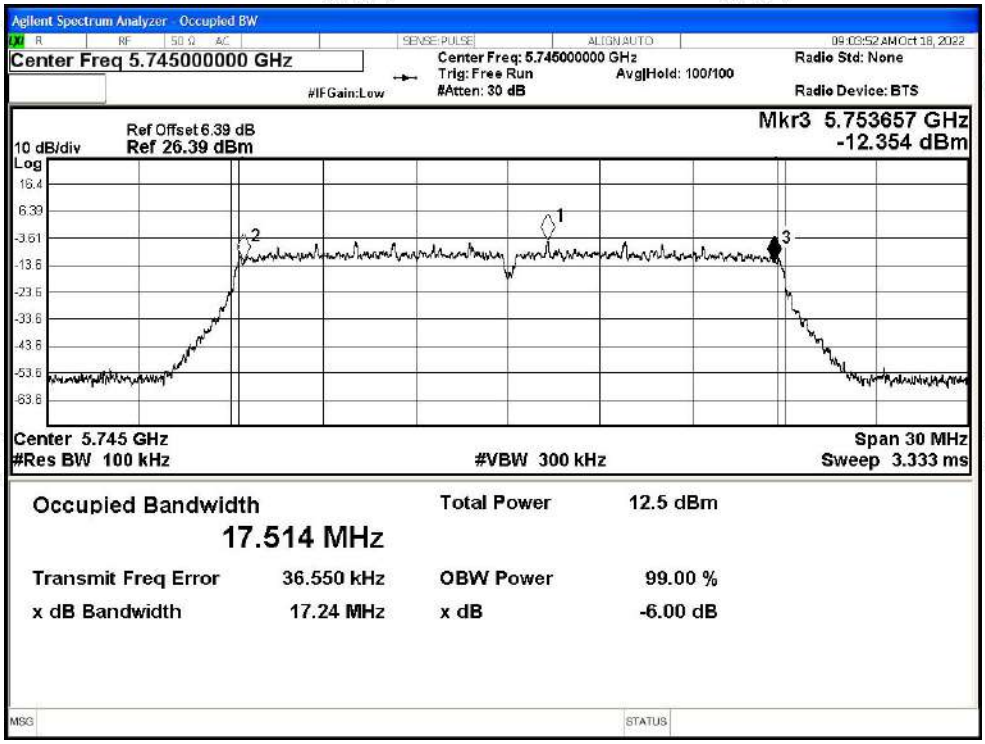
-6dB Bandwidth NVNT a 5785MHz Ant0



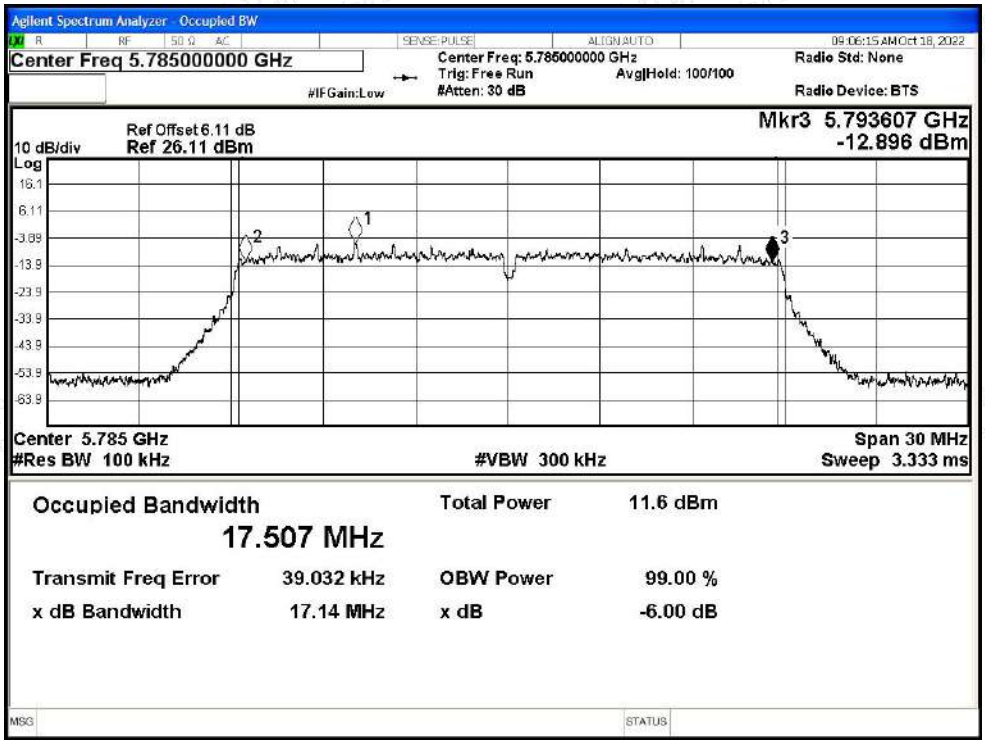
-6dB Bandwidth NVNT a 5825MHz Ant0



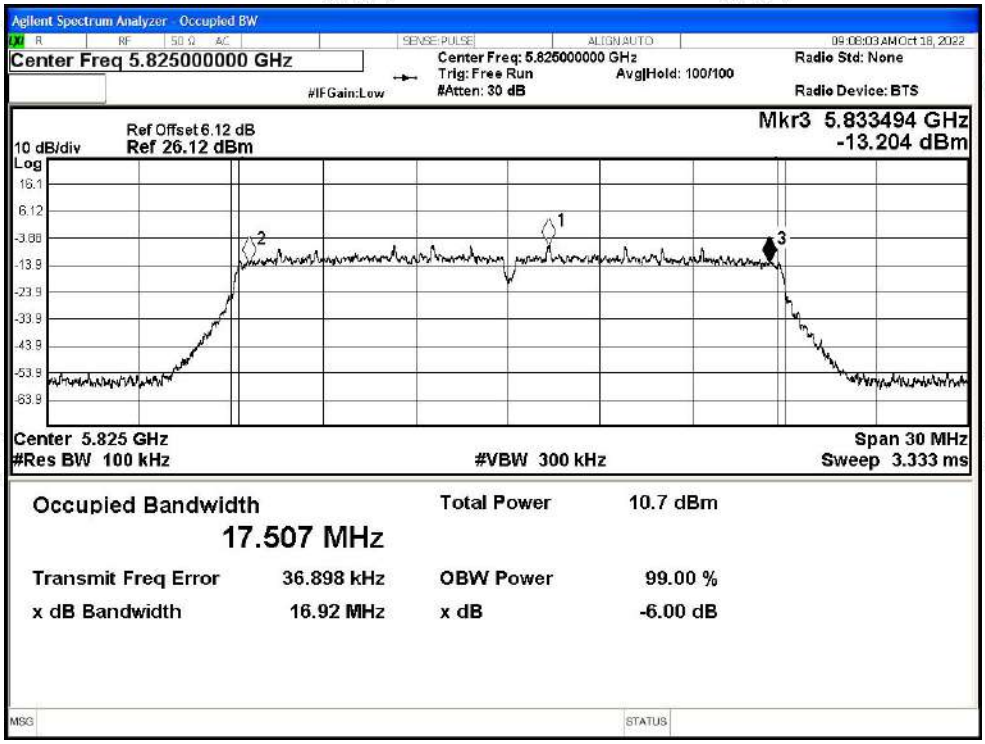
-6dB Bandwidth NVNT n20 5745MHz Ant0



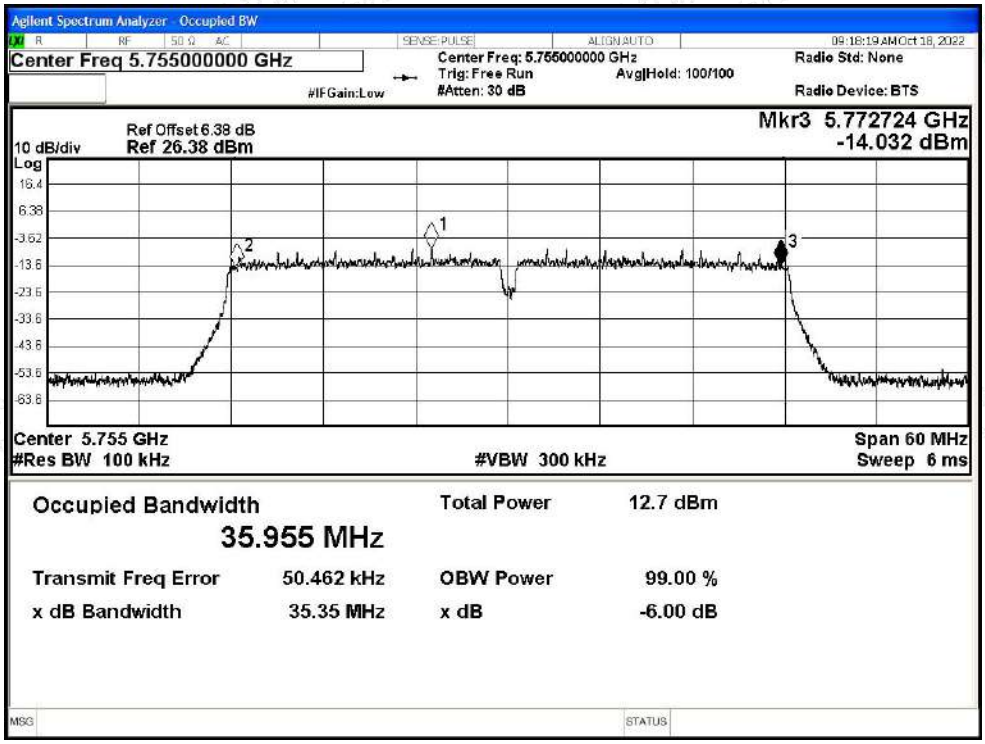
-6dB Bandwidth NVNT n20 5785MHz Ant0



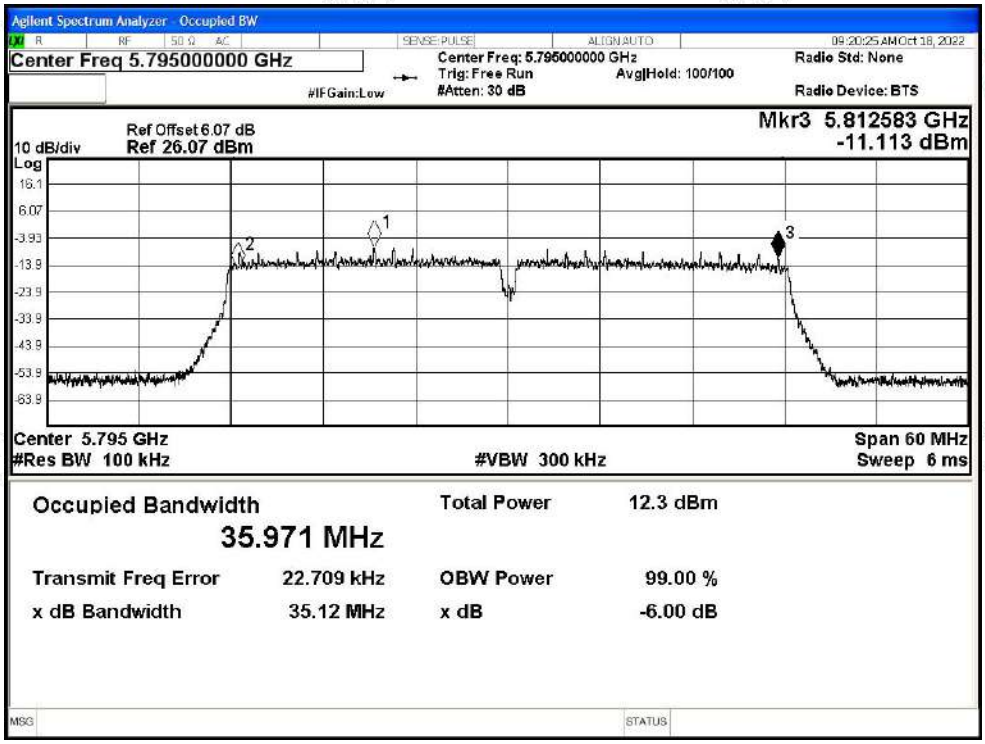
-6dB Bandwidth NVNT n20 5825MHz Ant0



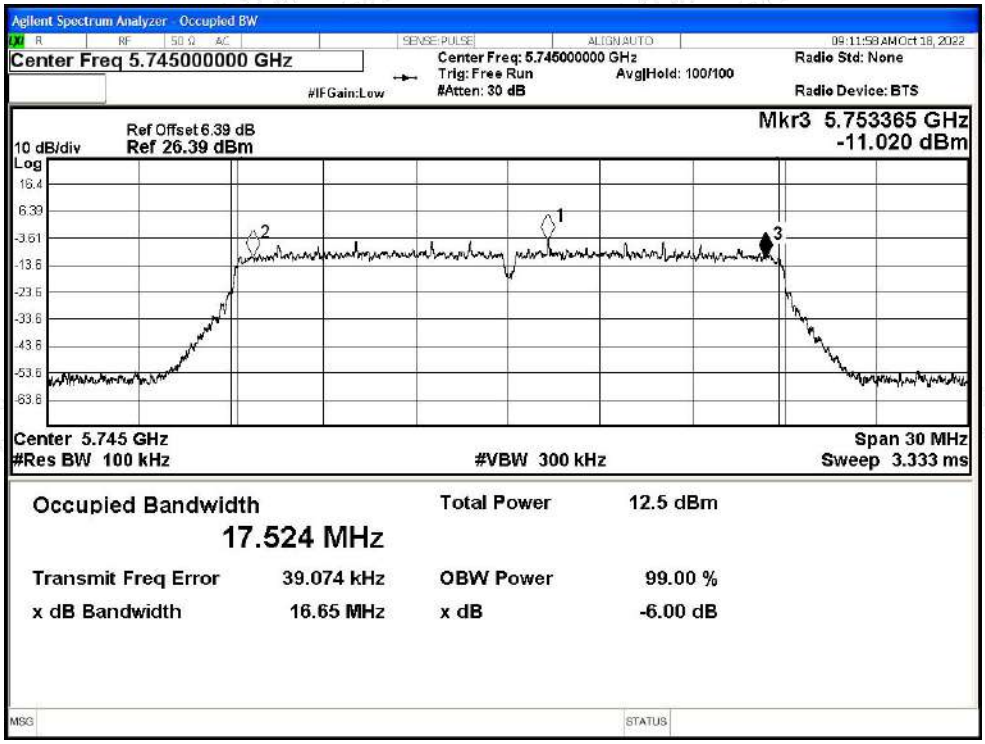
-6dB Bandwidth NVNT n40 5755MHz Ant0



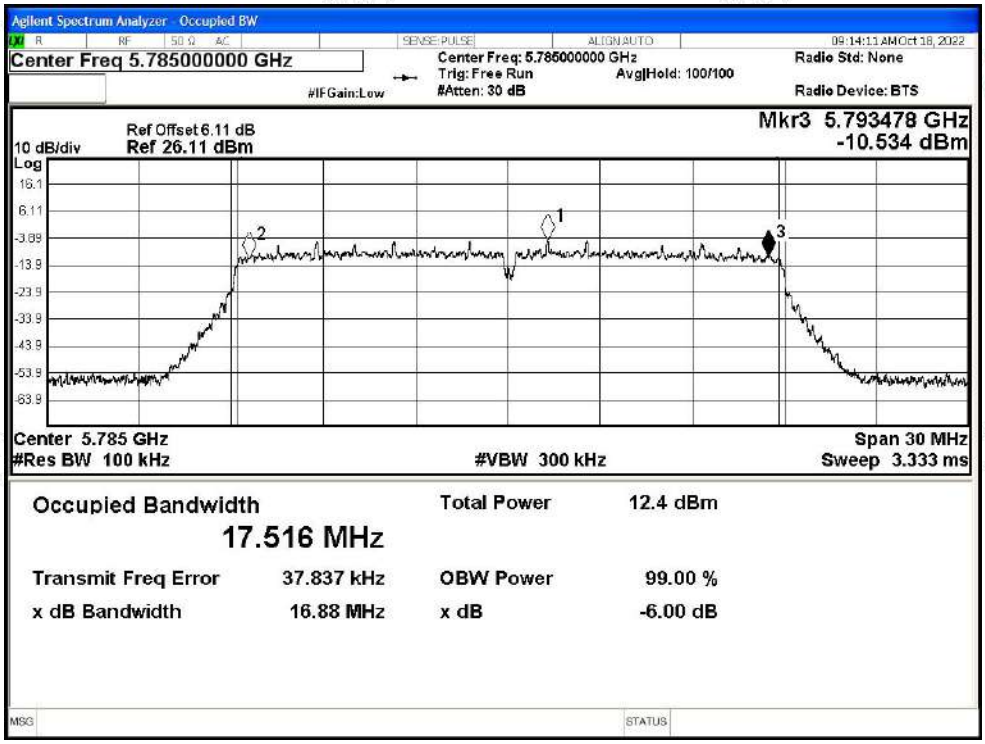
-6dB Bandwidth NVNT n40 5795MHz Ant0



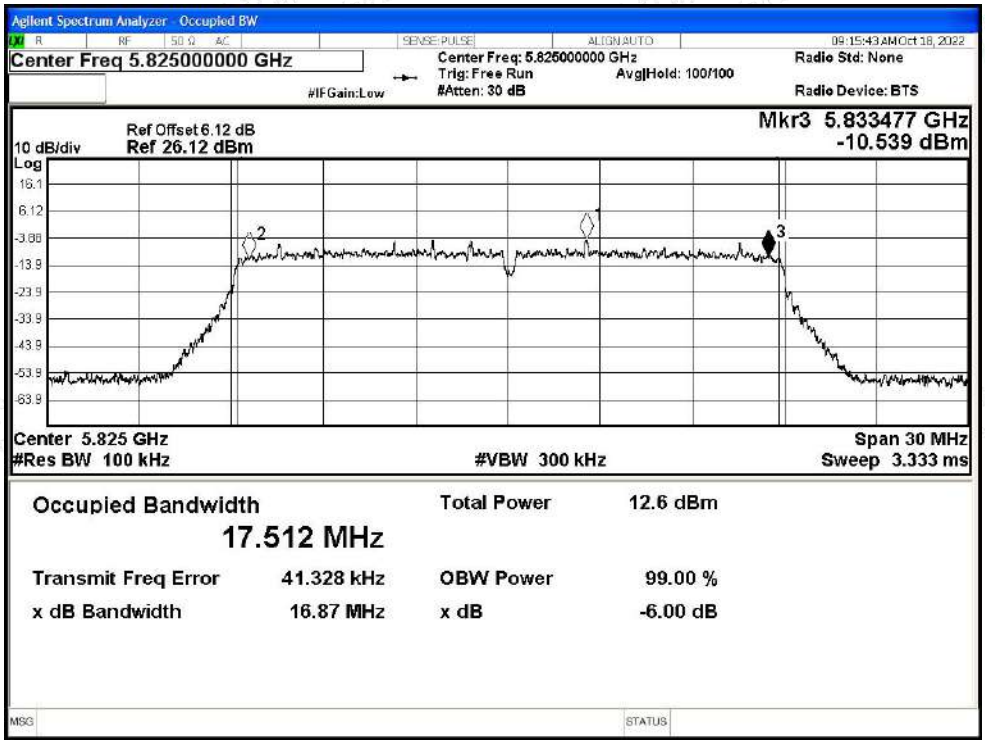
-6dB Bandwidth NVNT ac20 5745MHz Ant0



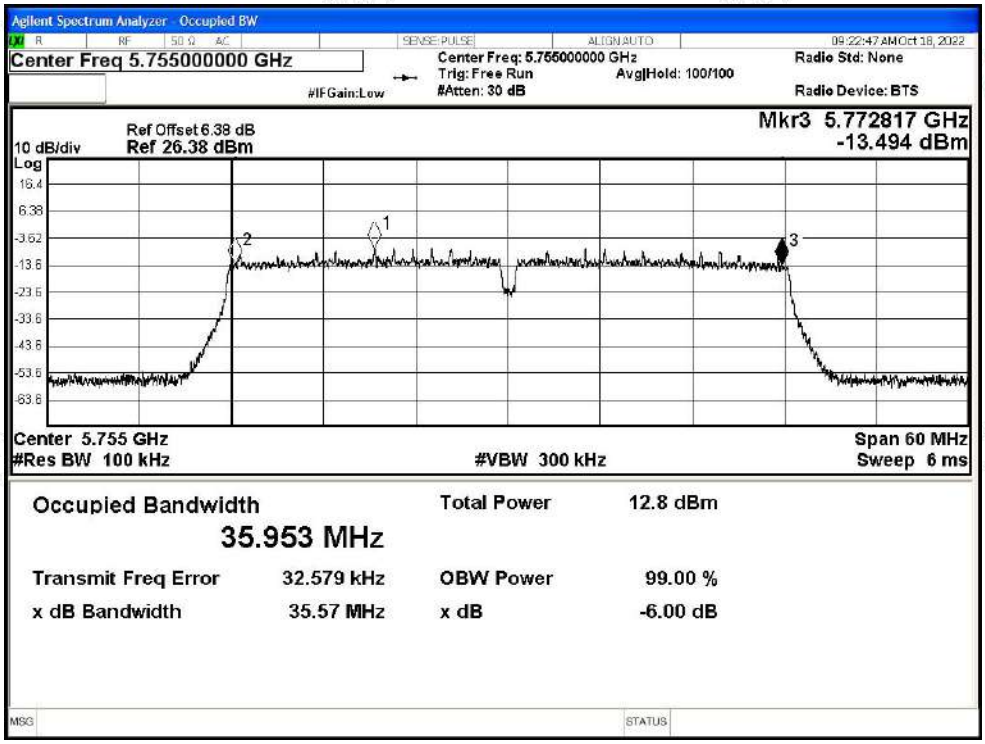
-6dB Bandwidth NVNT ac20 5785MHz Ant0



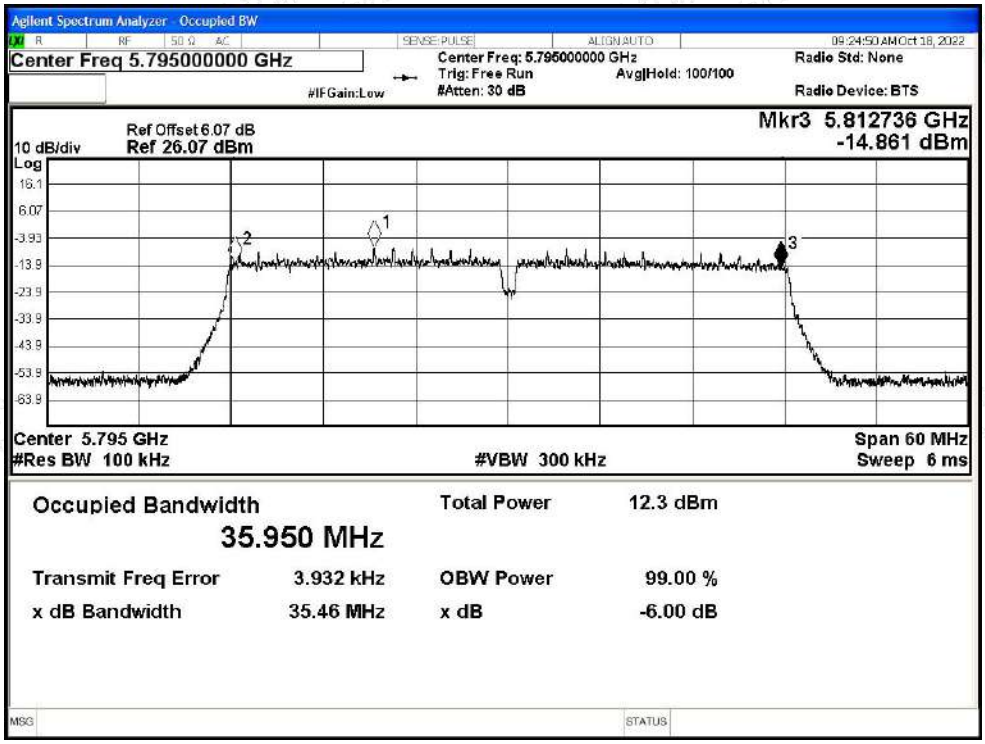
-6dB Bandwidth NVNT ac20 5825MHz Ant0



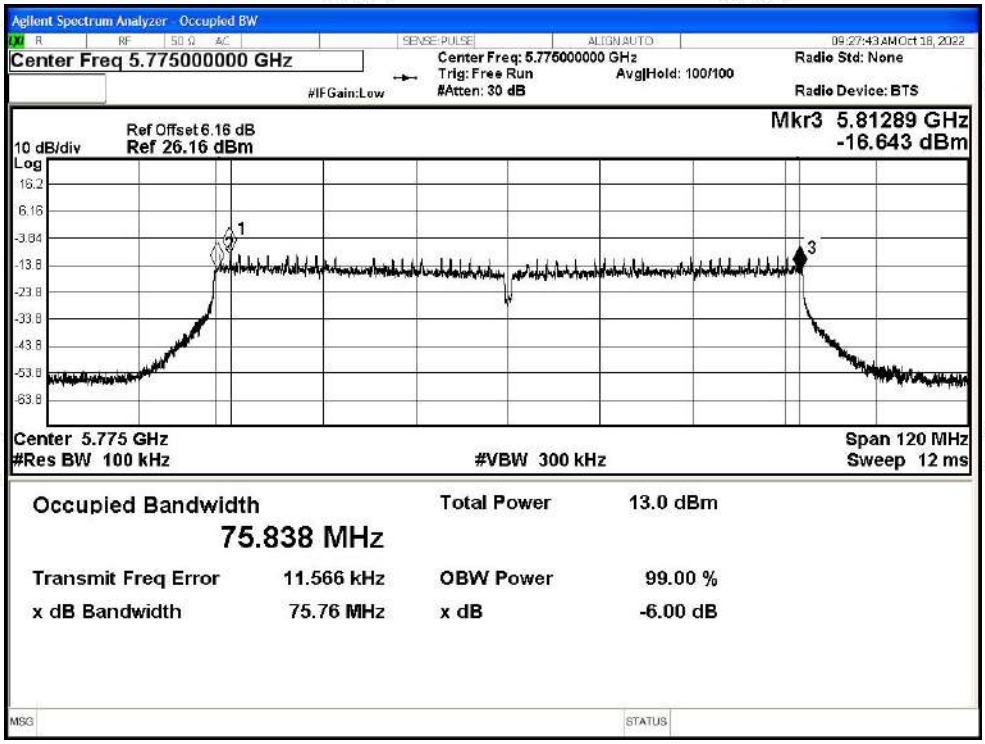
-6dB Bandwidth NVNT ac40 5755MHz Ant0



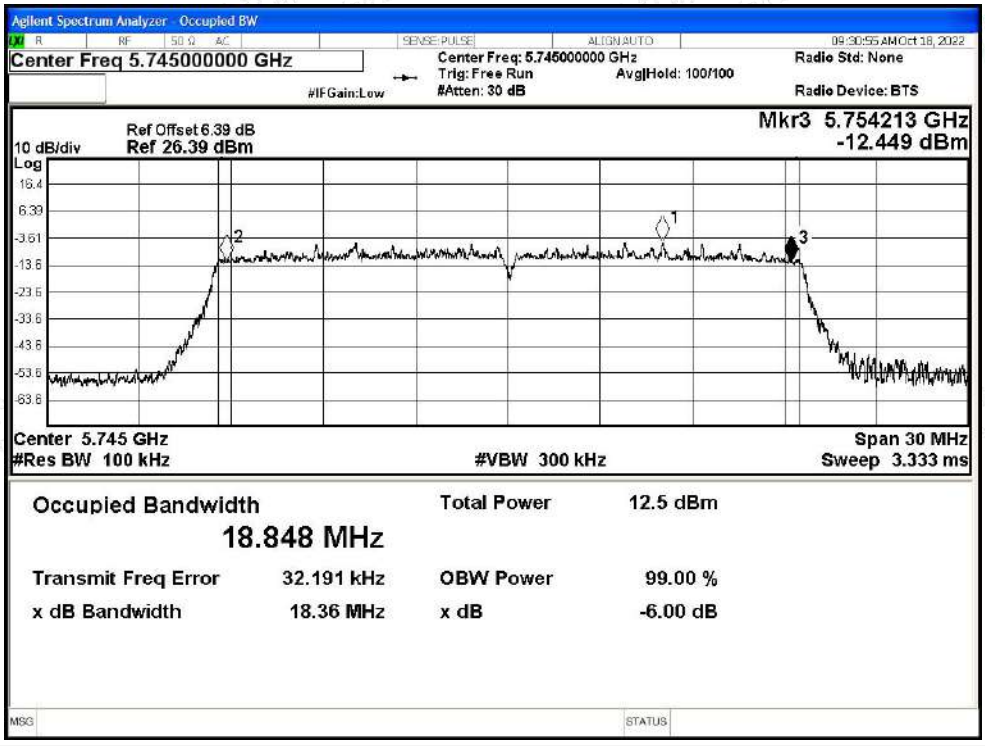
-6dB Bandwidth NVNT ac40 5795MHz Ant0



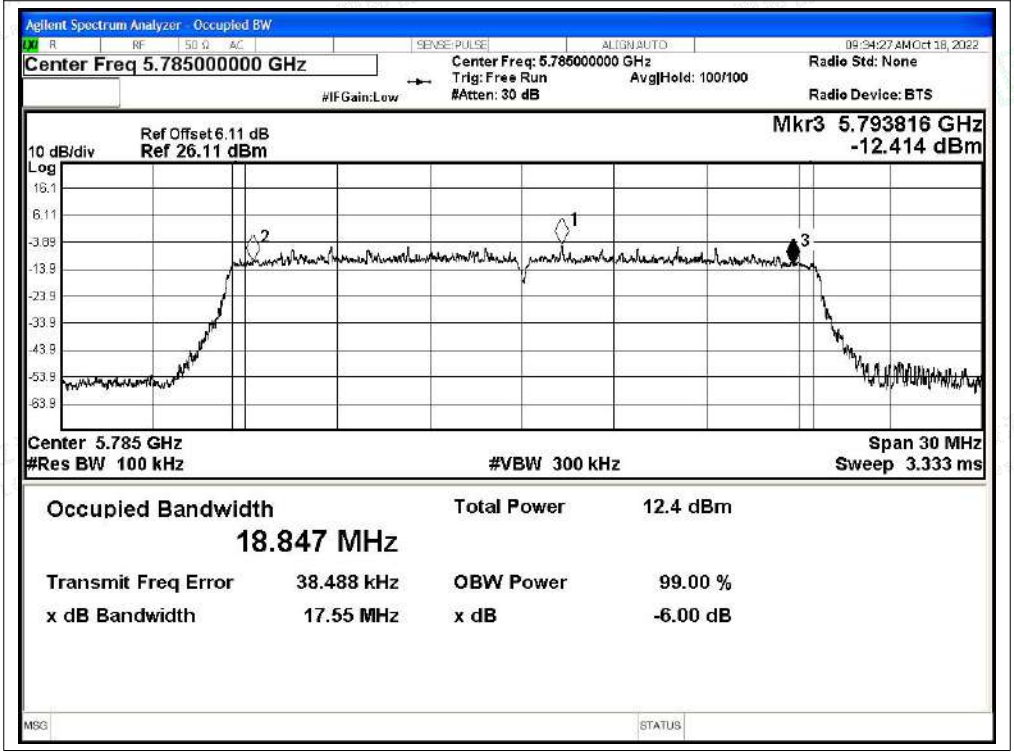
-6dB Bandwidth NVNT ac80 5775MHz Ant0



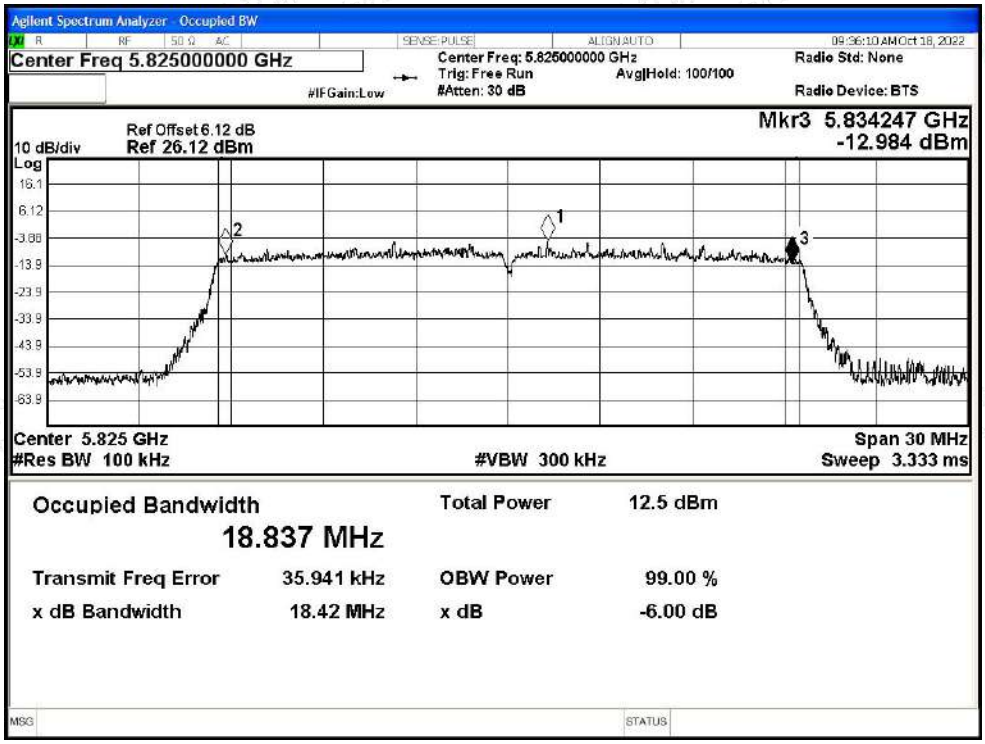
-6dB Bandwidth NVNT ax20 5745MHz Ant0



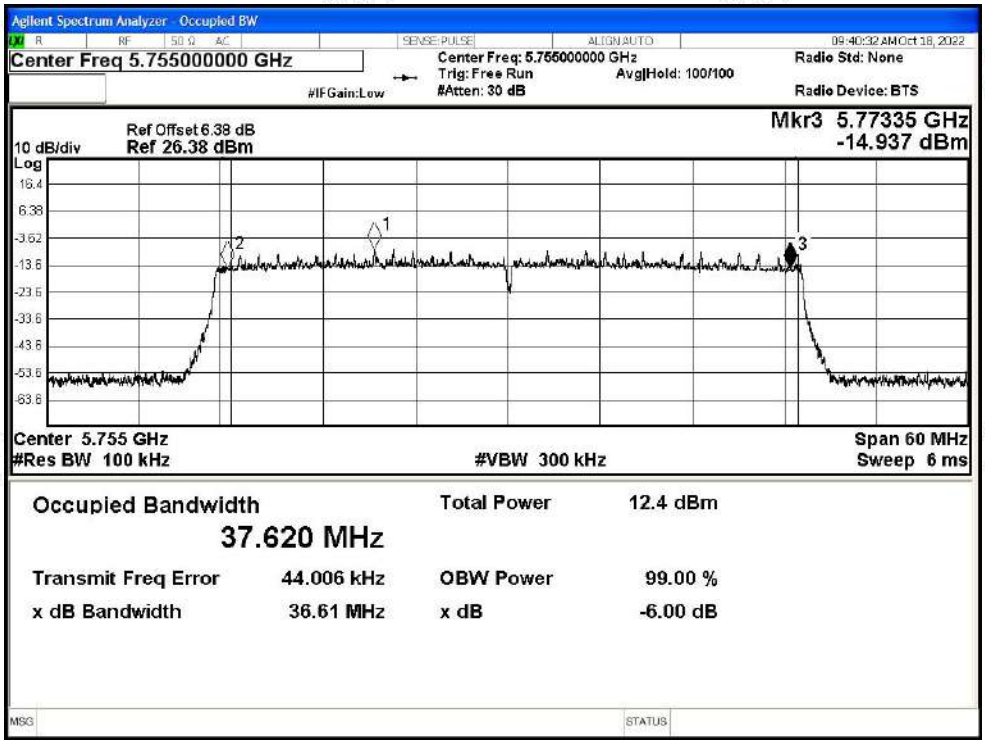
-6dB Bandwidth NVNT ax20 5785MHz Ant0



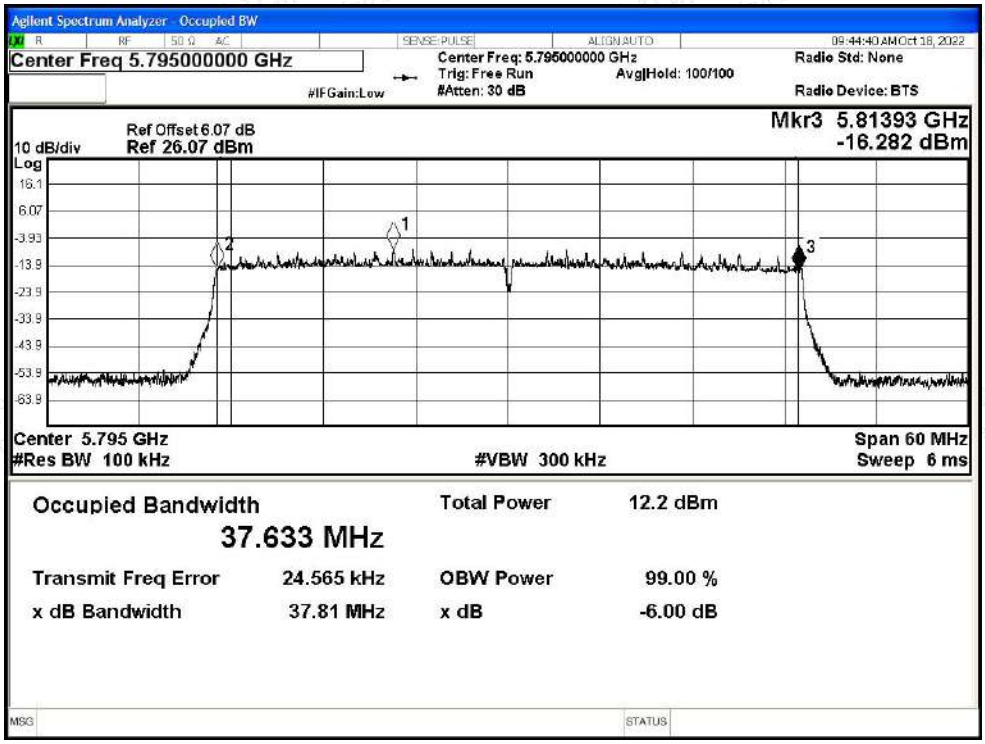
-6dB Bandwidth NVNT ax20 5825MHz Ant0



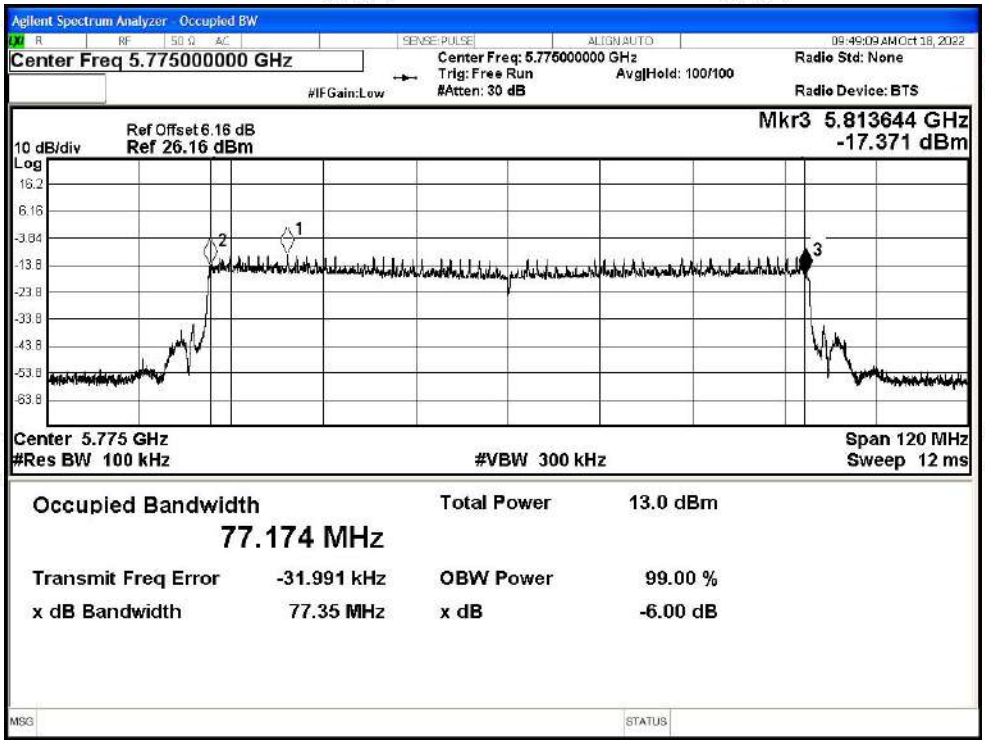
-6dB Bandwidth NVNT ax40 5755MHz Ant0



-6dB Bandwidth NVNT ax40 5795MHz Ant0



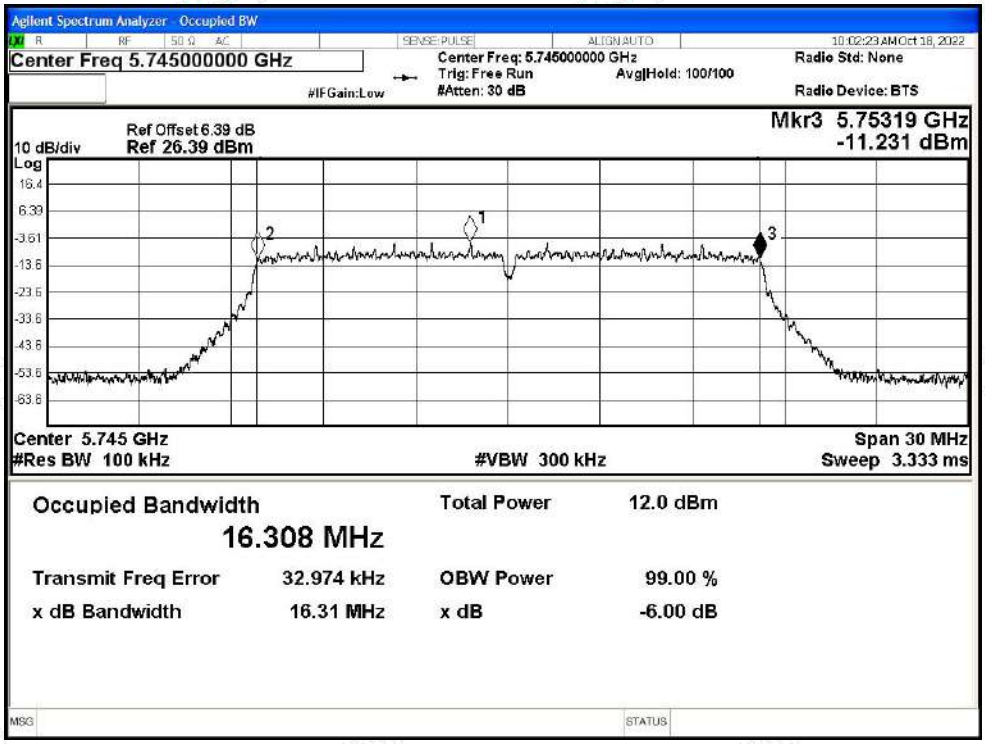
-6dB Bandwidth NVNT ax80 5775MHz Ant0



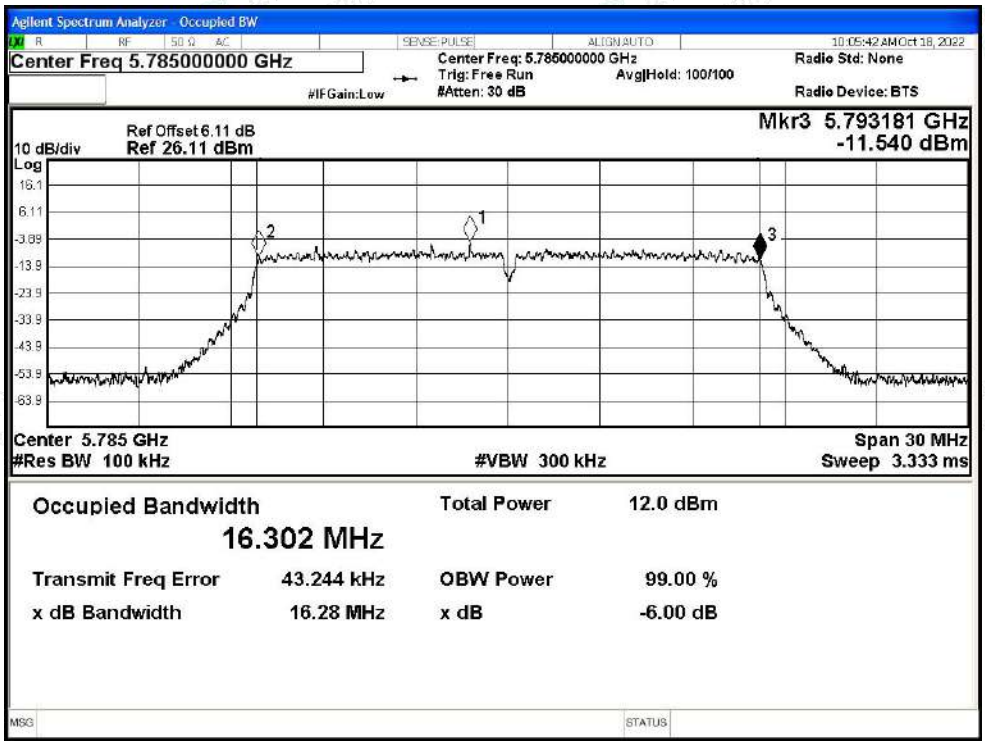
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	16.315	>=0.5	Pass
NVNT	a	5785	Ant1	16.276	>=0.5	Pass
NVNT	a	5825	Ant1	16.311	>=0.5	Pass
NVNT	n20	5745	Ant1	17.253	>=0.5	Pass
NVNT	n20	5785	Ant1	16.686	>=0.5	Pass
NVNT	n20	5825	Ant1	17.024	>=0.5	Pass
NVNT	n40	5755	Ant1	35.14	>=0.5	Pass
NVNT	n40	5795	Ant1	35.497	>=0.5	Pass
NVNT	ac20	5745	Ant1	17.183	>=0.5	Pass
NVNT	ac20	5785	Ant1	16.939	>=0.5	Pass
NVNT	ac20	5825	Ant1	16.878	>=0.5	Pass
NVNT	ac40	5755	Ant1	35.3	>=0.5	Pass
NVNT	ac40	5795	Ant1	36.032	>=0.5	Pass
NVNT	ac80	5775	Ant1	75.73	>=0.5	Pass
NVNT	ax20	5745	Ant1	17.632	>=0.5	Pass
NVNT	ax20	5785	Ant1	18.267	>=0.5	Pass
NVNT	ax20	5825	Ant1	18.247	>=0.5	Pass
NVNT	ax40	5755	Ant1	37.679	>=0.5	Pass
NVNT	ax40	5795	Ant1	37.691	>=0.5	Pass
NVNT	ax80	5775	Ant1	77.326	>=0.5	Pass

Test Graphs

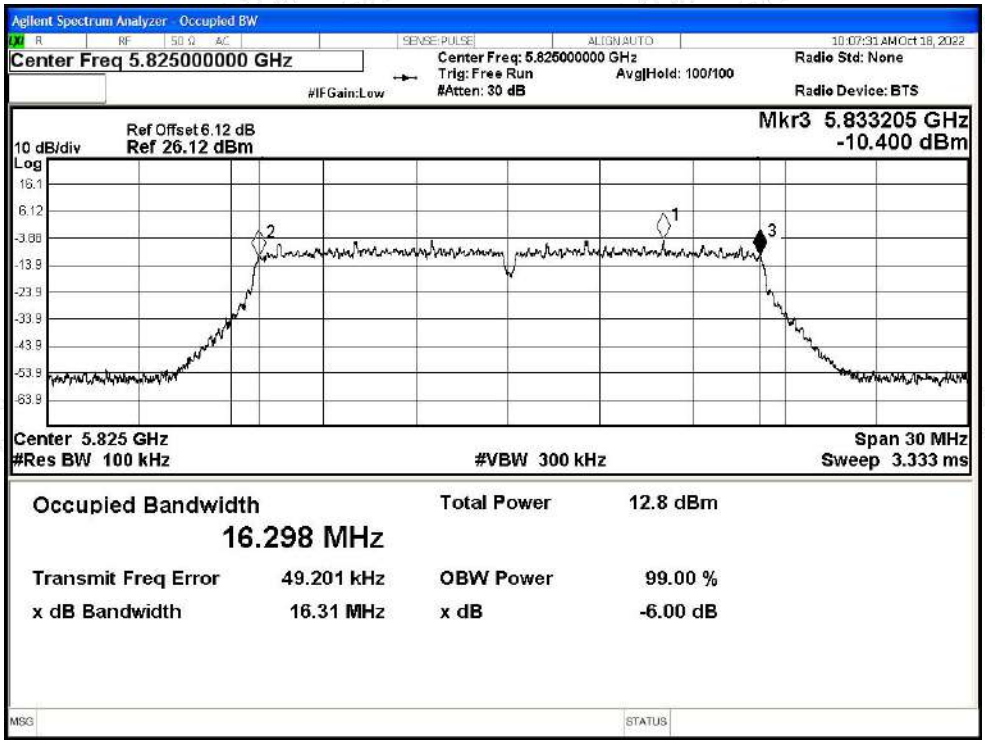
-6dB Bandwidth NVNT a 5745MHz Ant1



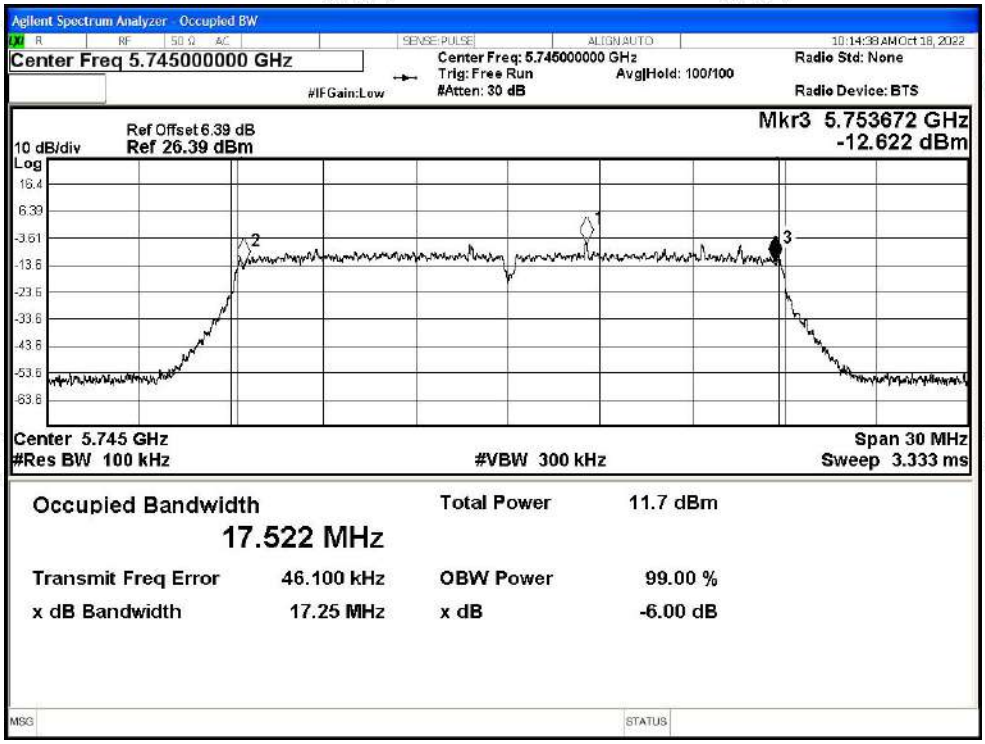
-6dB Bandwidth NVNT a 5785MHz Ant1



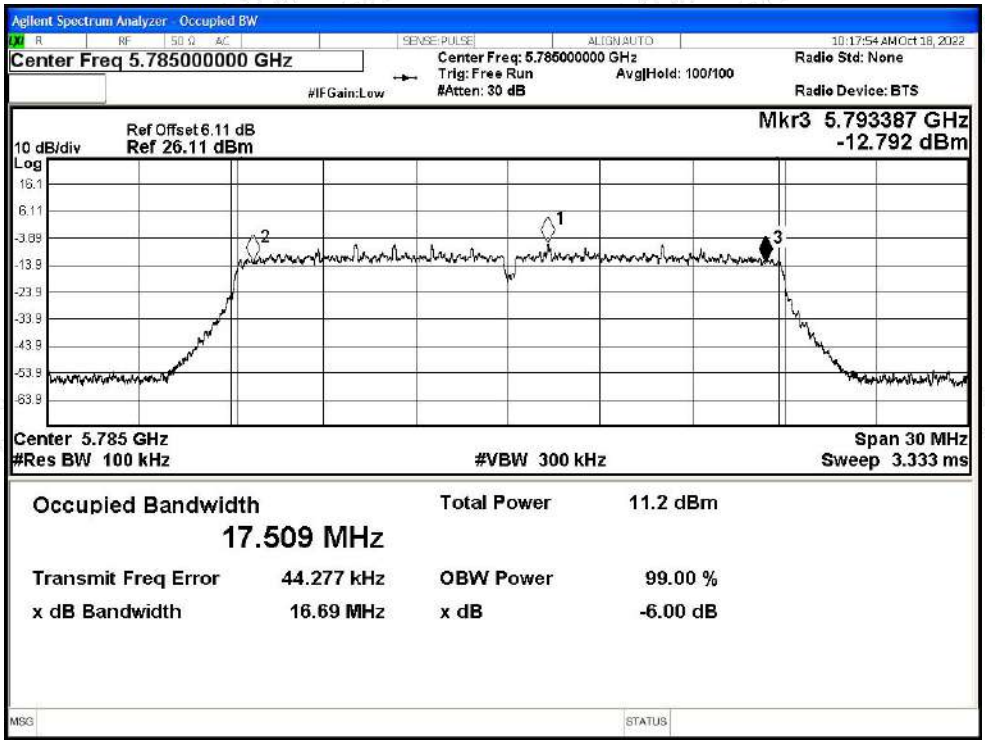
-6dB Bandwidth NVNT a 5825MHz Ant1



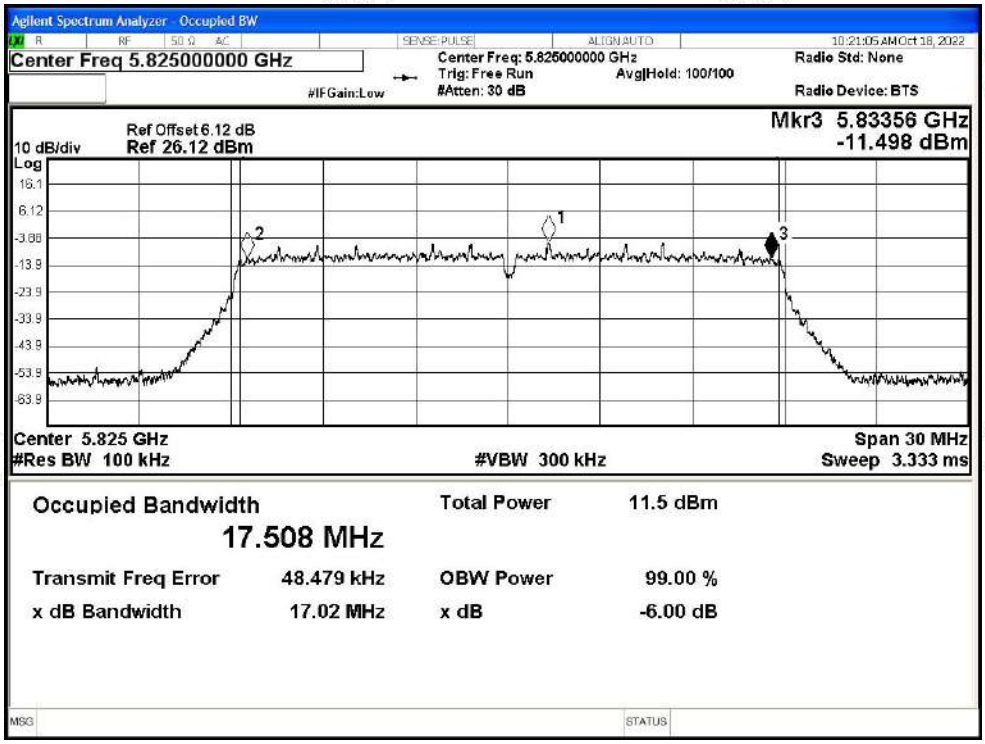
-6dB Bandwidth NVNT n20 5745MHz Ant1



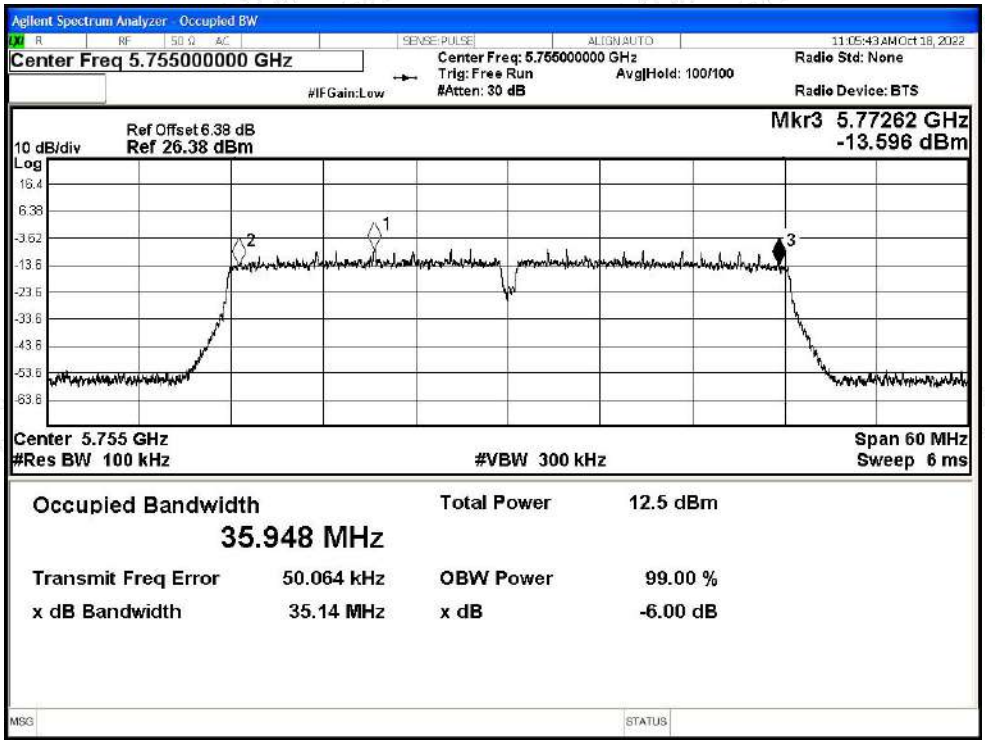
-6dB Bandwidth NVNT n20 5785MHz Ant1



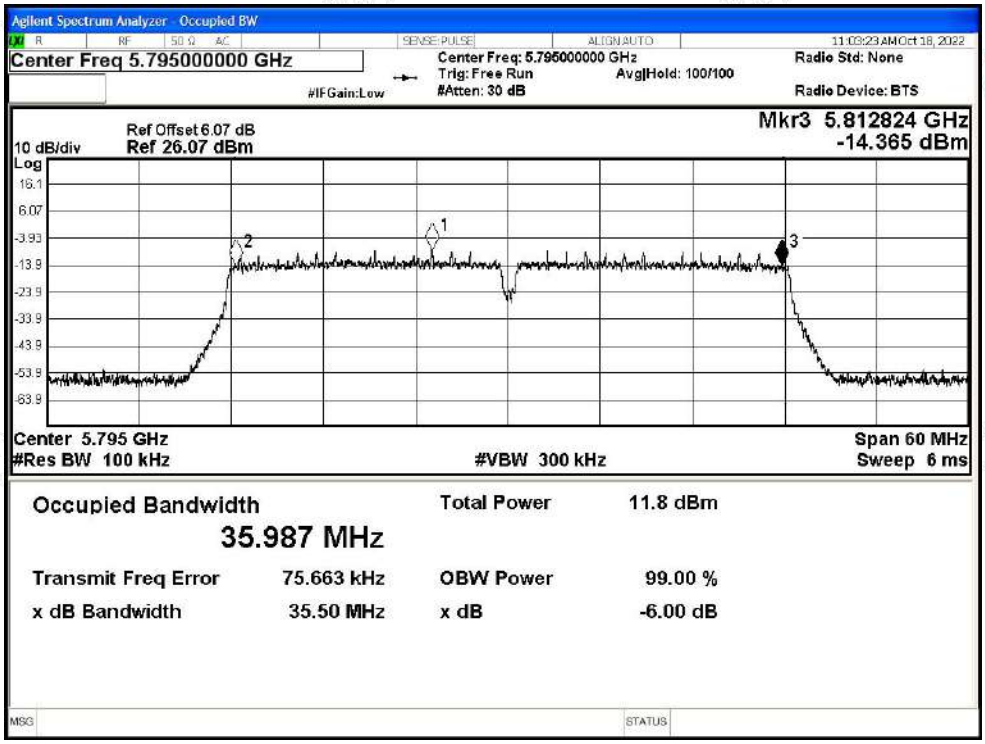
-6dB Bandwidth NVNT n20 5825MHz Ant1



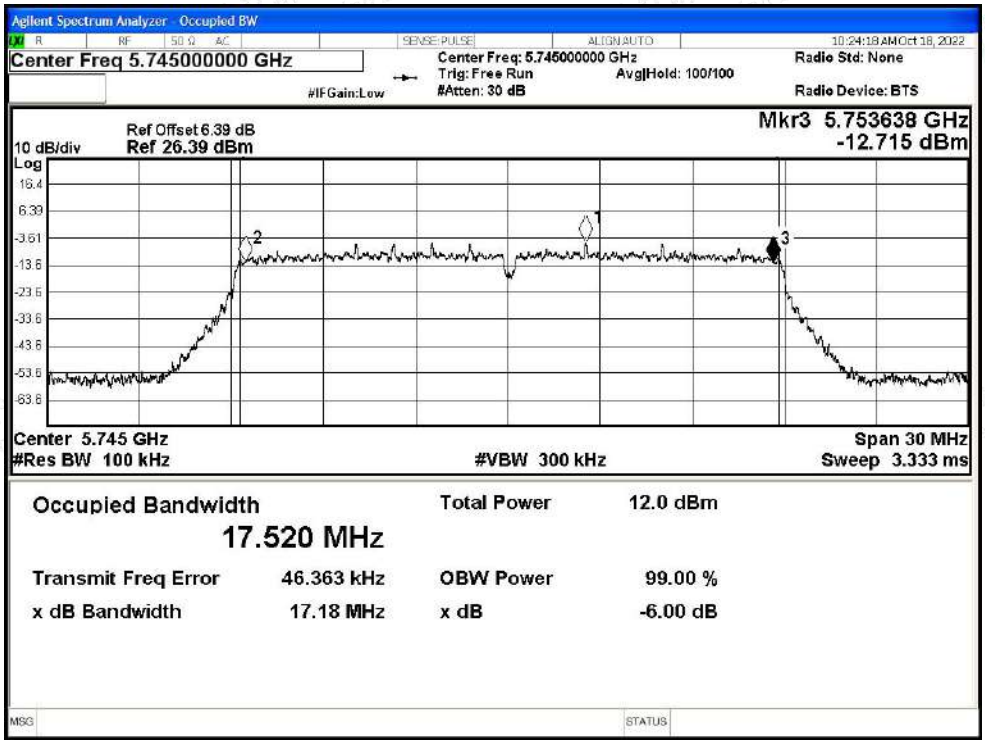
-6dB Bandwidth NVNT n40 5755MHz Ant1



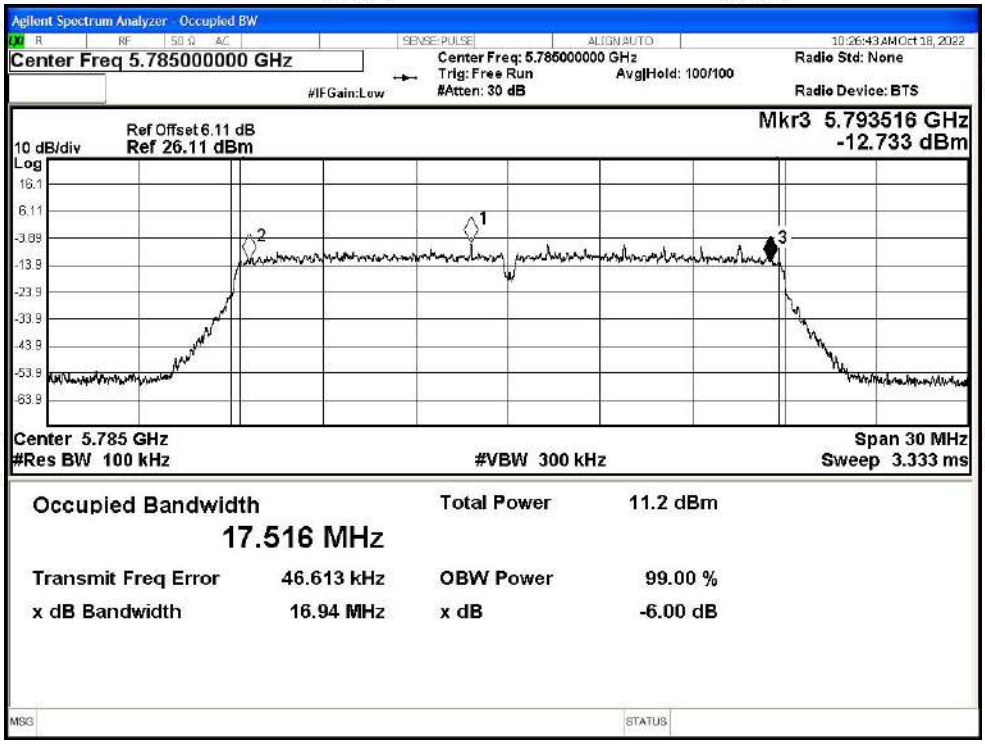
-6dB Bandwidth NVNT n40 5795MHz Ant1



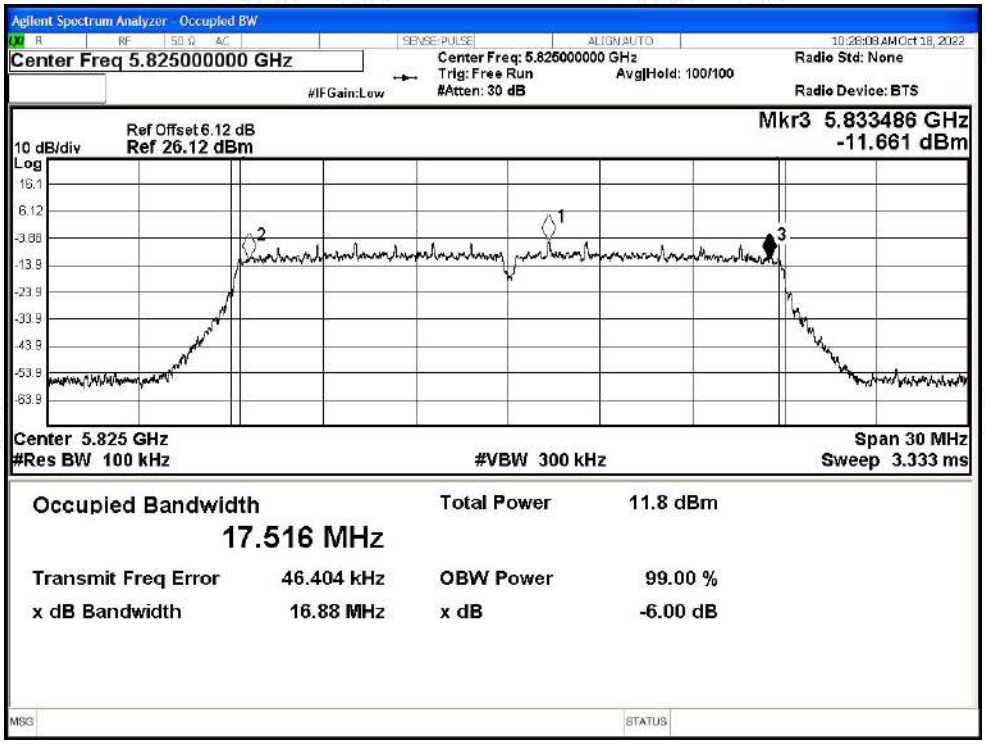
-6dB Bandwidth NVNT ac20 5745MHz Ant1



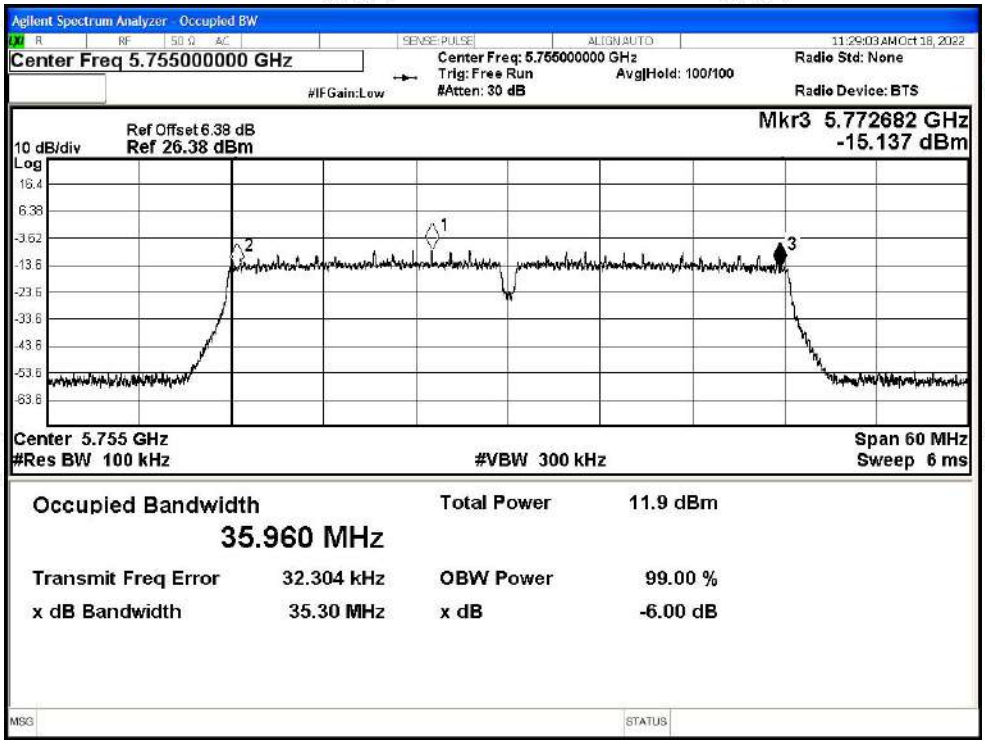
-6dB Bandwidth NVNT ac20 5785MHz Ant1



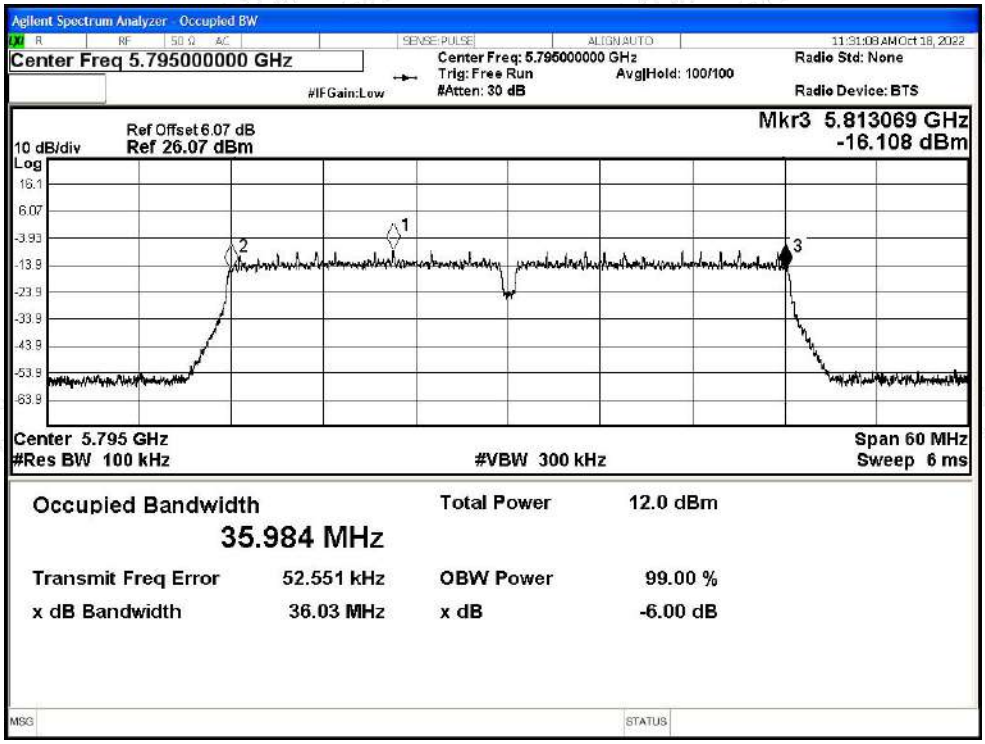
-6dB Bandwidth NVNT ac20 5825MHz Ant1



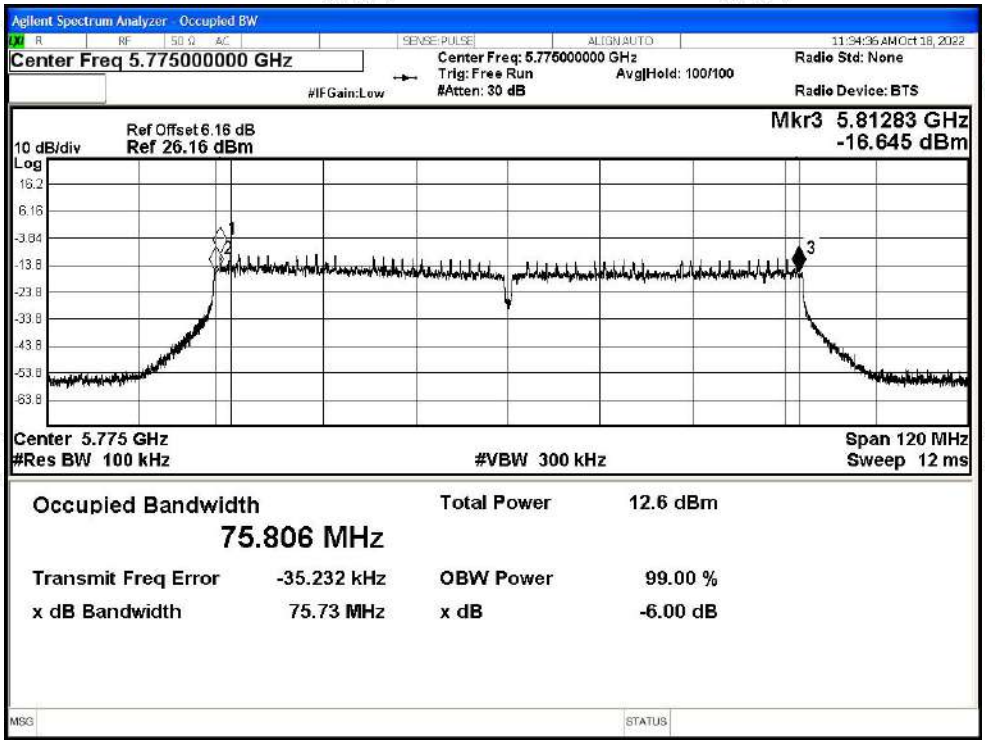
-6dB Bandwidth NVNT ac40 5755MHz Ant1



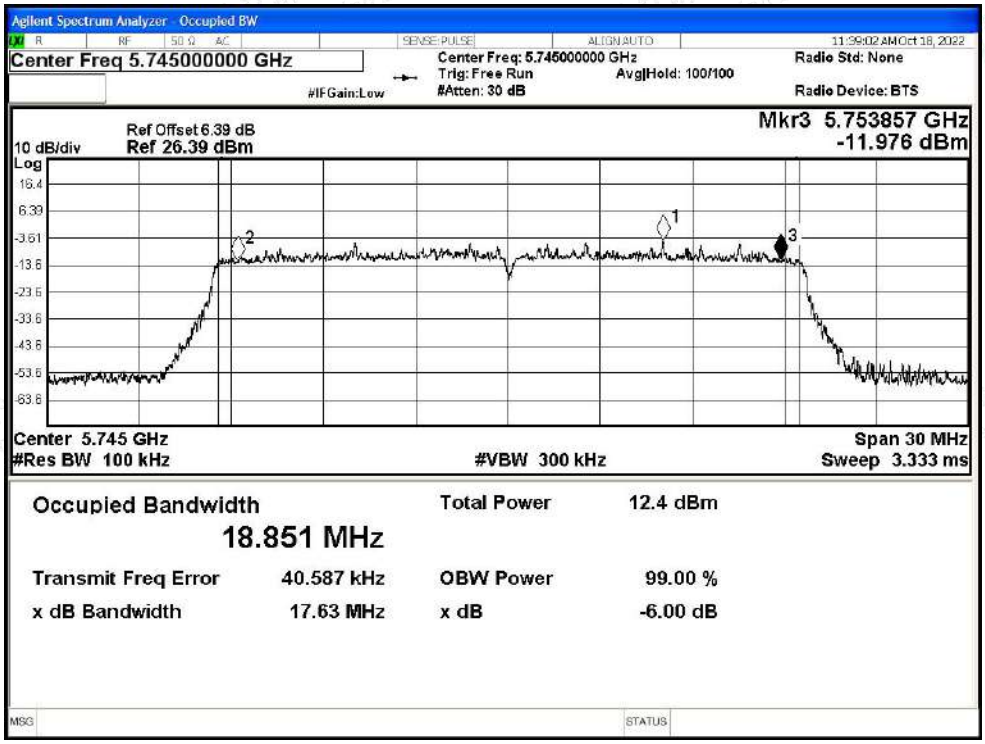
-6dB Bandwidth NVNT ac40 5795MHz Ant1



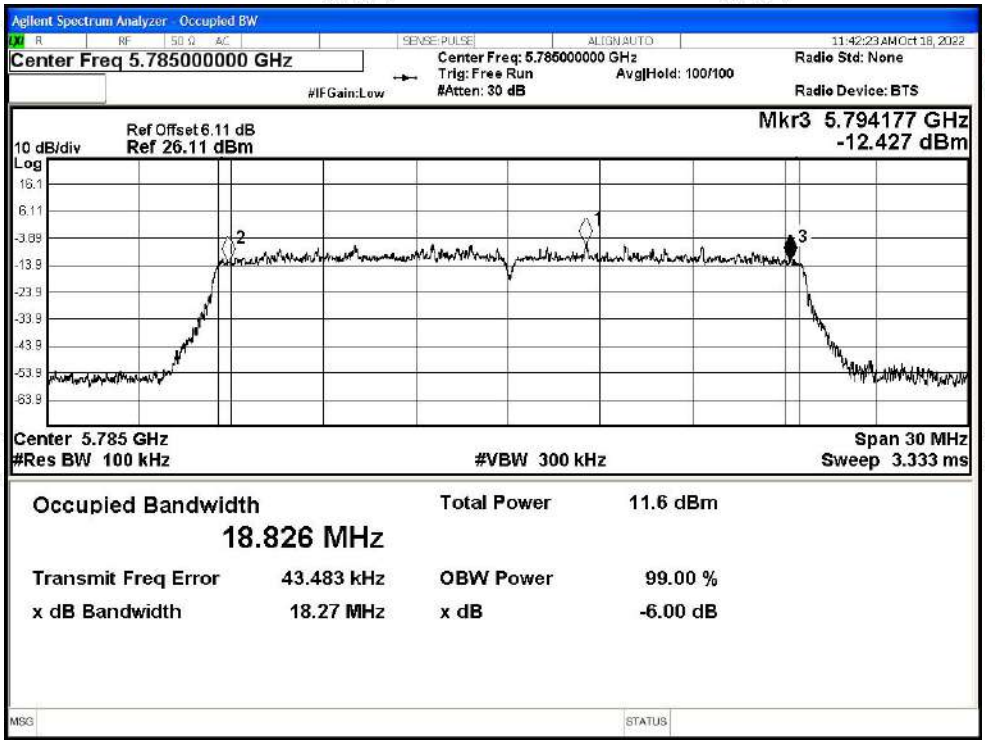
-6dB Bandwidth NVNT ac80 5775MHz Ant1



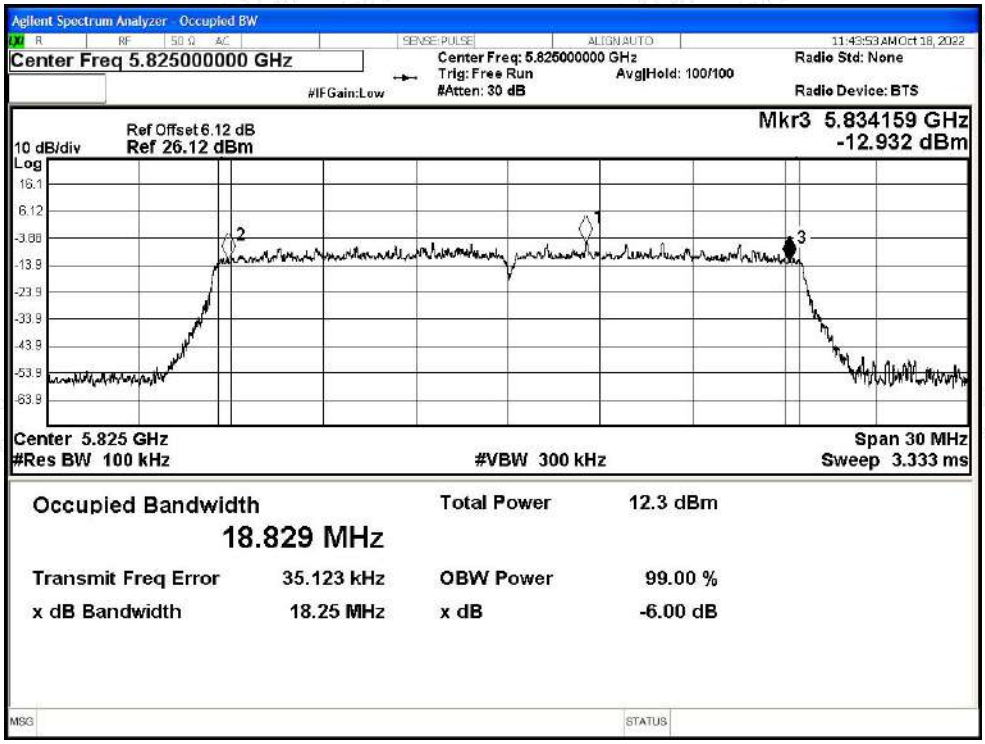
-6dB Bandwidth NVNT ax20 5745MHz Ant1



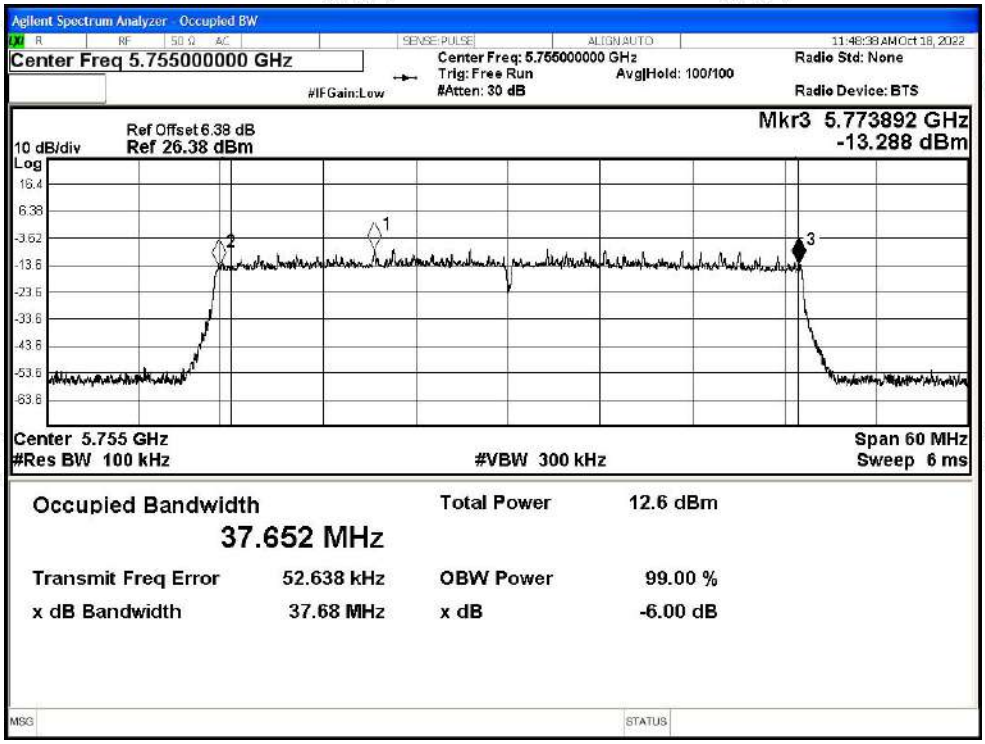
-6dB Bandwidth NVNT ax20 5785MHz Ant1



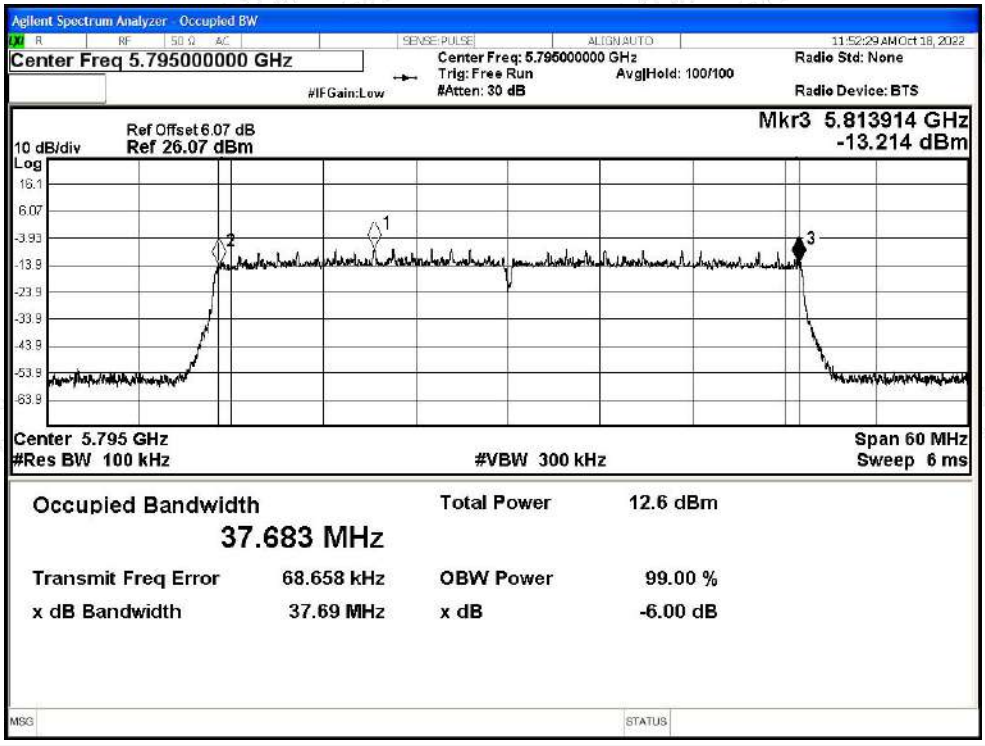
-6dB Bandwidth NVNT ax20 5825MHz Ant1



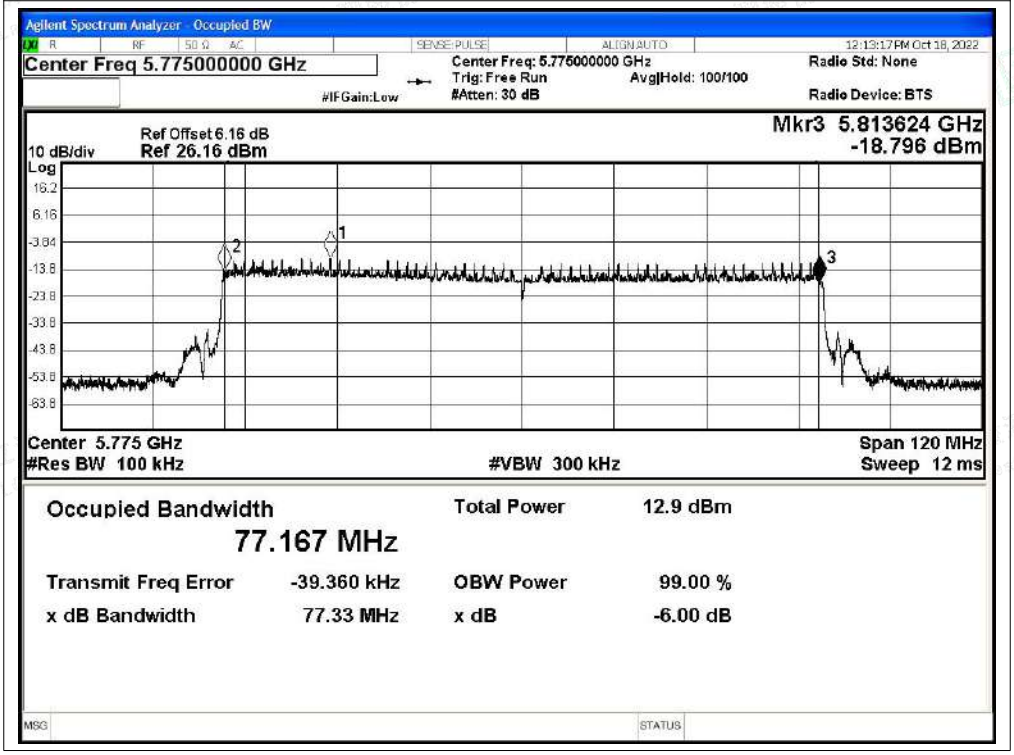
-6dB Bandwidth NVNT ax40 5755MHz Ant1



-6dB Bandwidth NVNT ax40 5795MHz Ant1



-6dB Bandwidth NVNT ax80 5775MHz Ant1

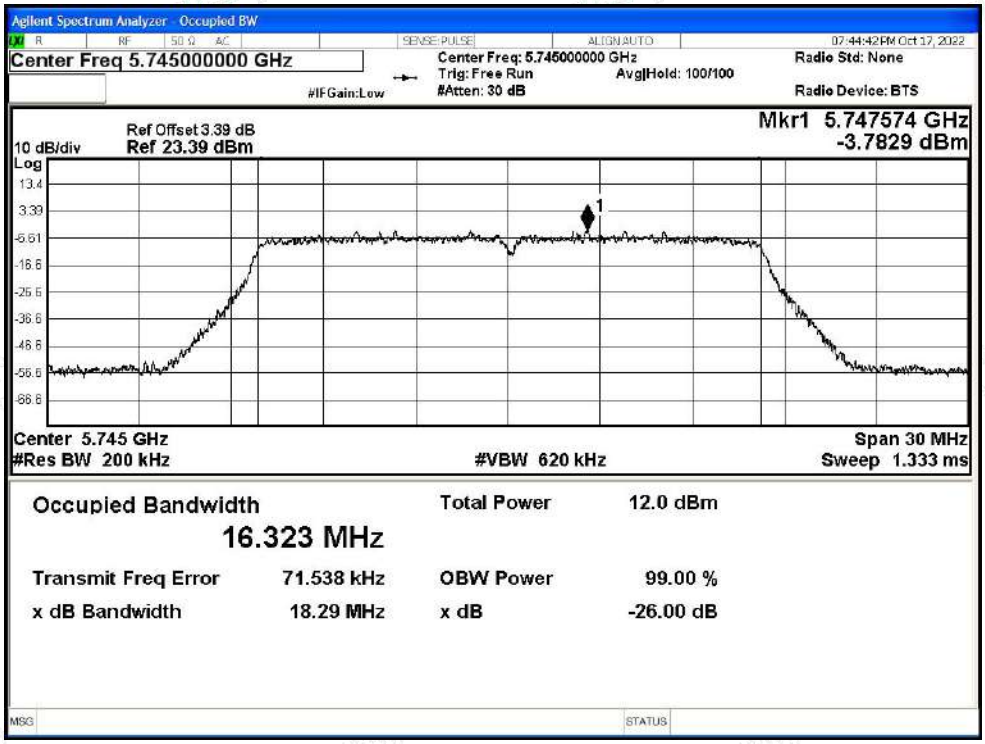


E.2 Occupied Channel Bandwidth

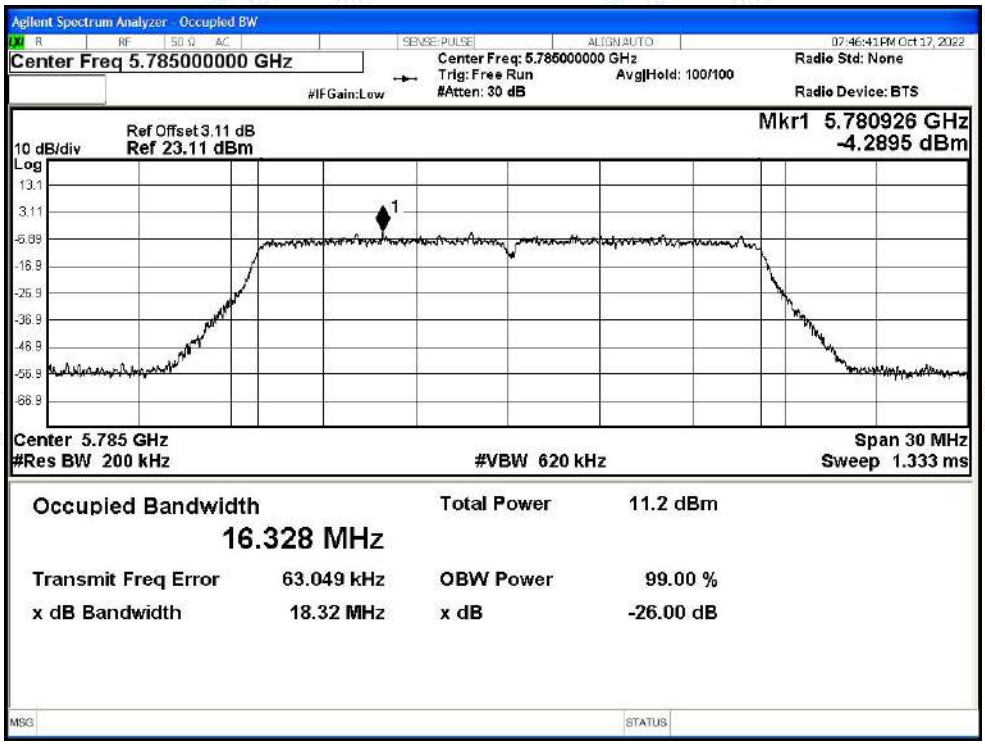
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant0	16.323
NVNT	a	5785	Ant0	16.328
NVNT	a	5825	Ant0	16.328
NVNT	n20	5745	Ant0	17.501
NVNT	n20	5785	Ant0	17.485
NVNT	n20	5825	Ant0	17.489
NVNT	n40	5755	Ant0	35.999
NVNT	n40	5795	Ant0	36.005
NVNT	ac20	5745	Ant0	17.498
NVNT	ac20	5785	Ant0	17.488
NVNT	ac20	5825	Ant0	17.493
NVNT	ac40	5755	Ant0	36.006
NVNT	ac40	5795	Ant0	36.033
NVNT	ac80	5775	Ant0	76.187
NVNT	ax20	5745	Ant0	18.865
NVNT	ax20	5785	Ant0	18.859
NVNT	ax20	5825	Ant0	18.874
NVNT	ax40	5755	Ant0	37.632
NVNT	ax40	5795	Ant0	37.637
NVNT	ax80	5775	Ant0	77.365

Test Graphs

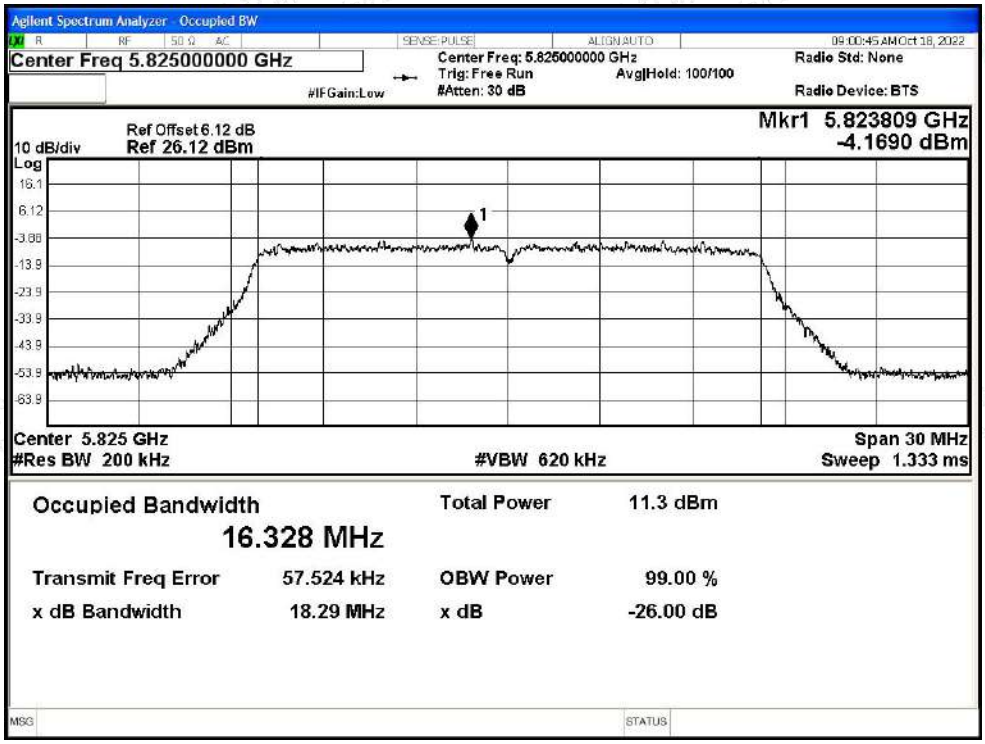
OBW NVNT a 5745MHz Ant0



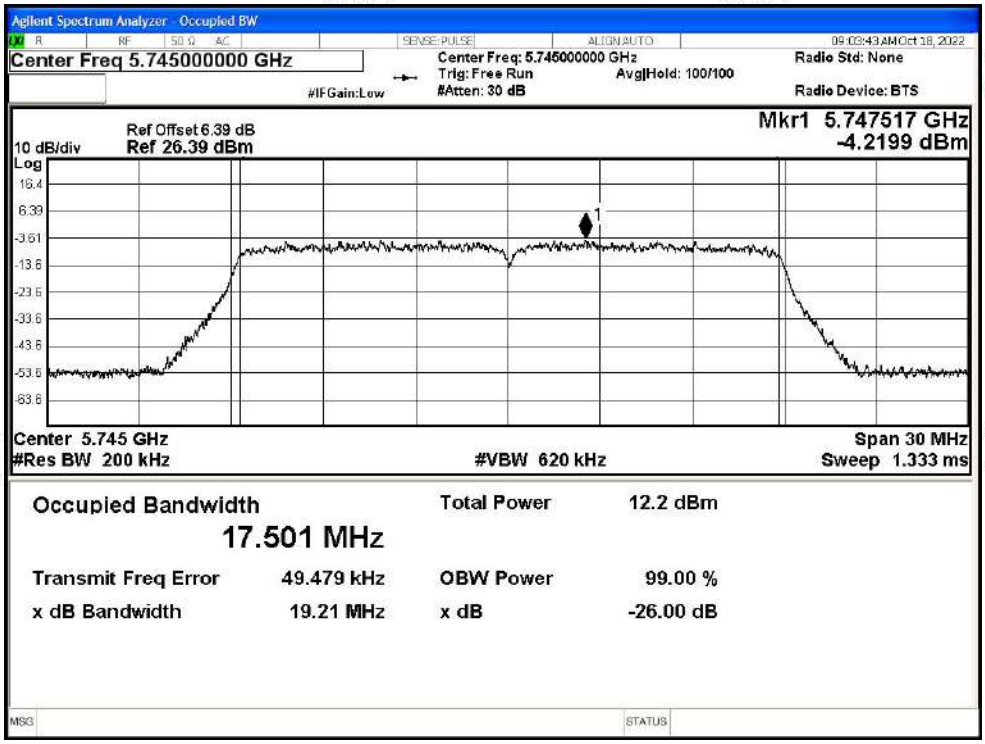
OBW NVNT a 5785MHz Ant0



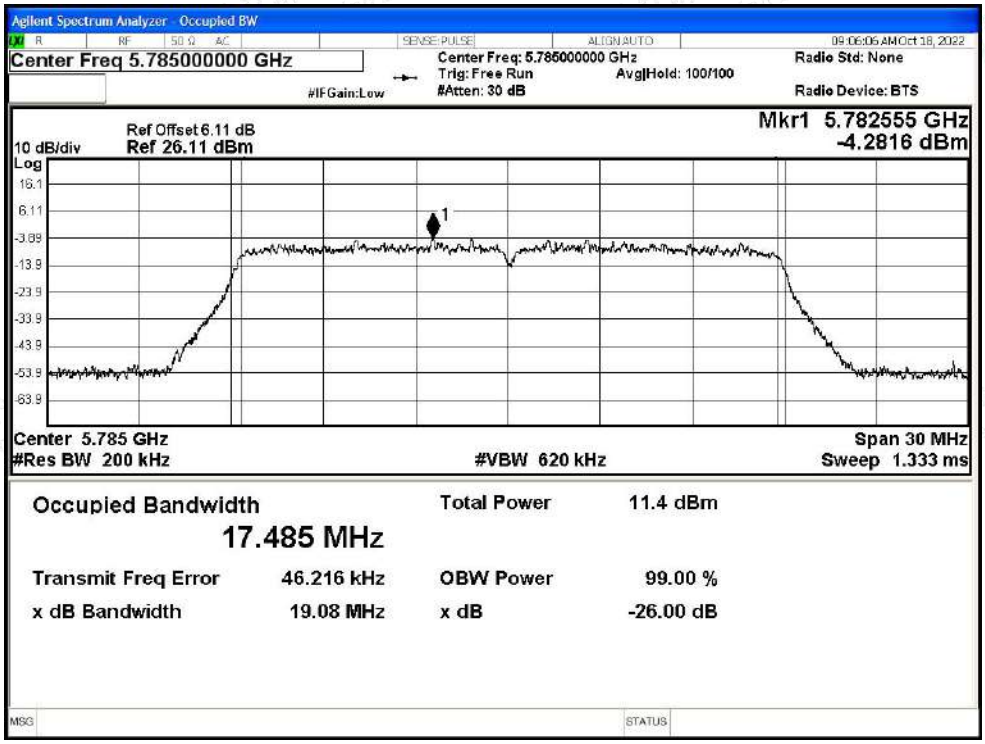
OBW NVNT a 5825MHz Ant0



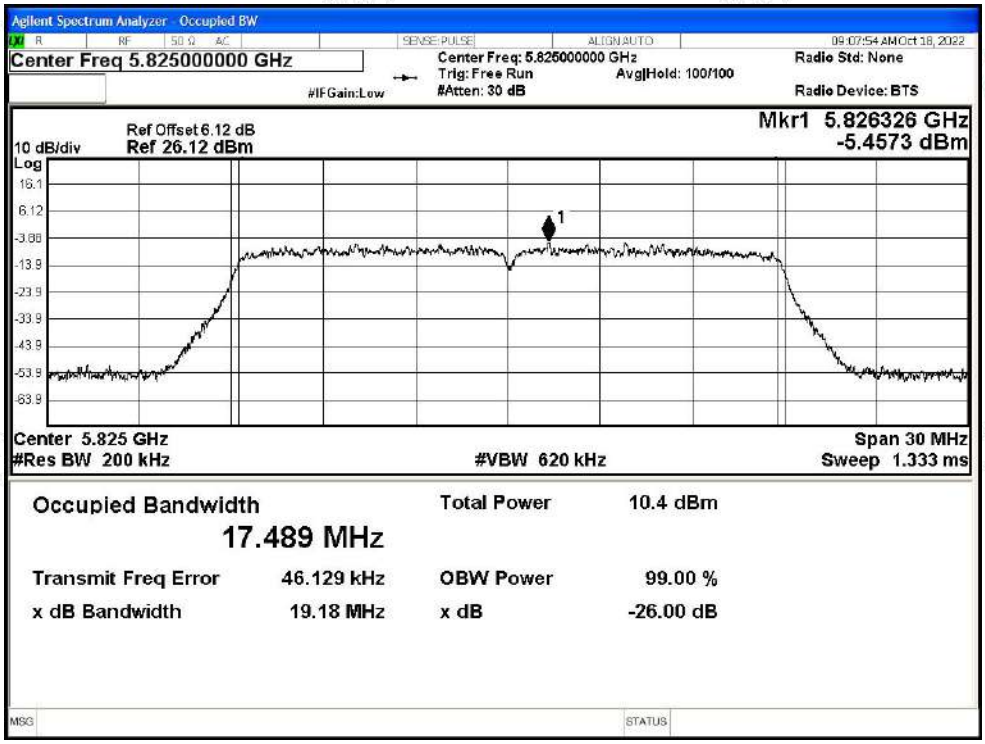
OBW NVNT n20 5745MHz Ant0



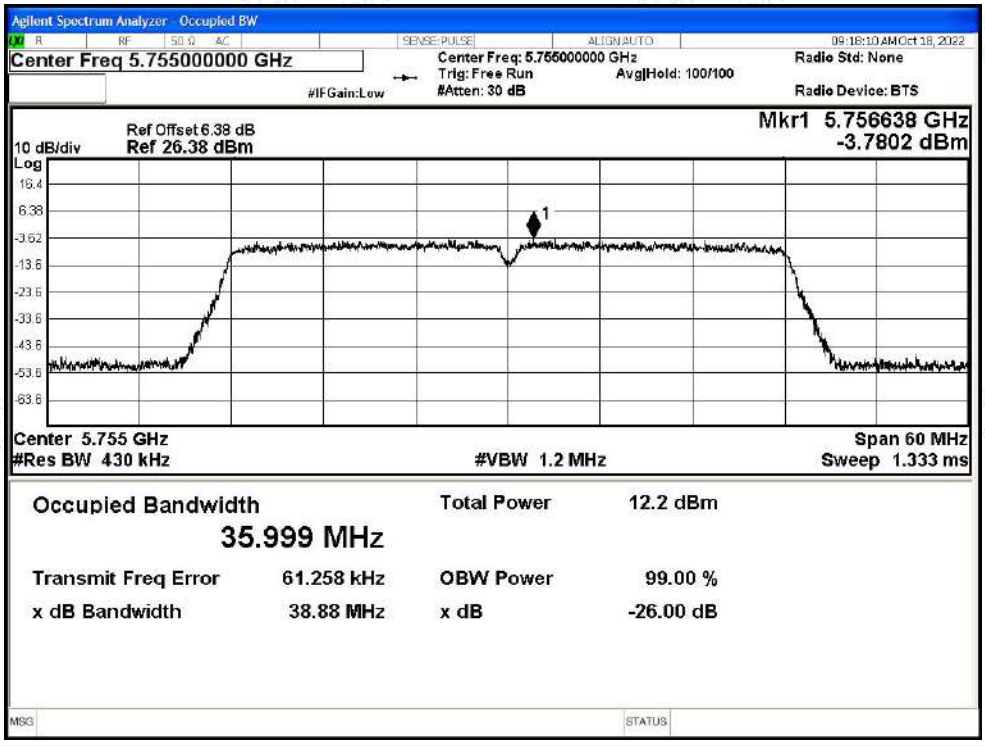
OBW NVNT n20 5785MHz Ant0



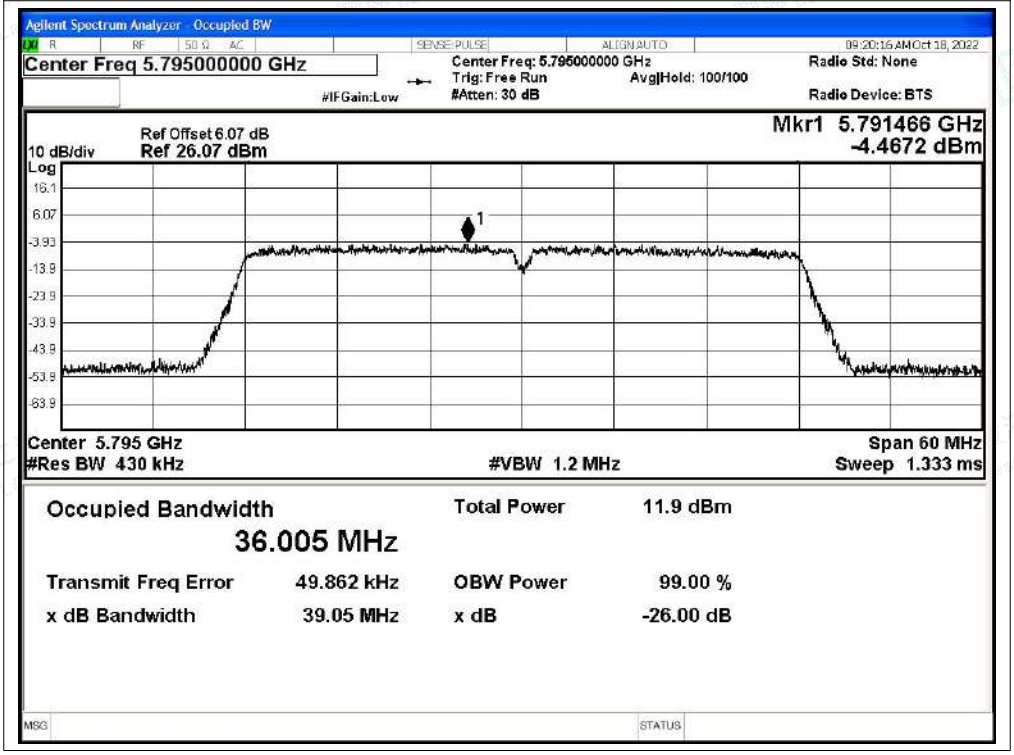
OBW NVNT n20 5825MHz Ant0



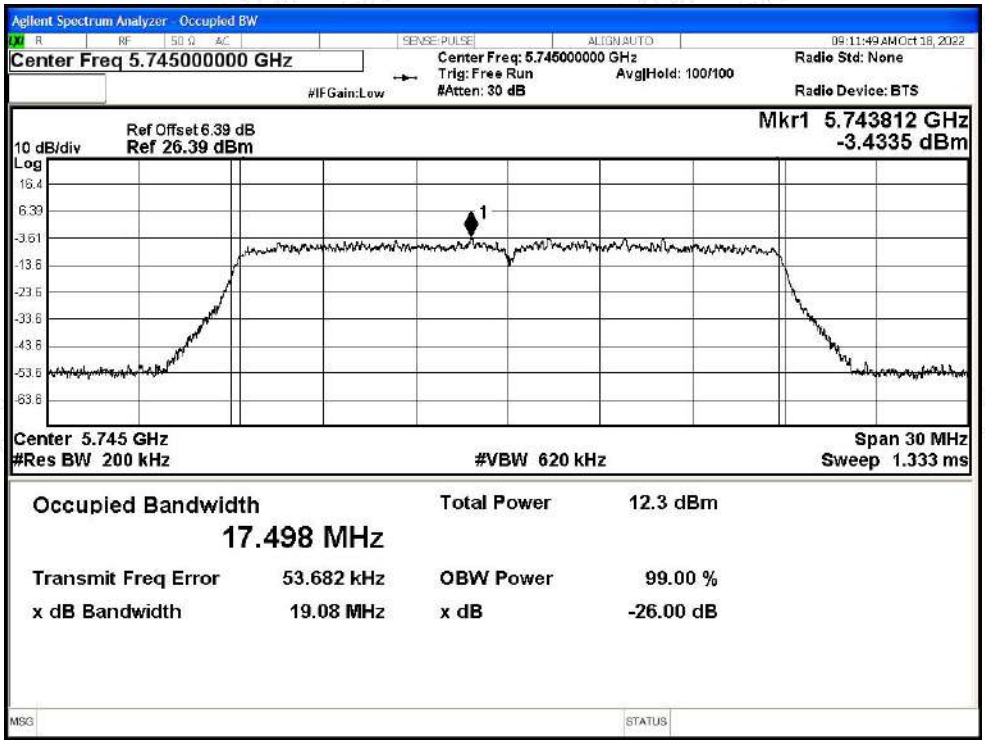
OBW NVNT n40 5755MHz Ant0



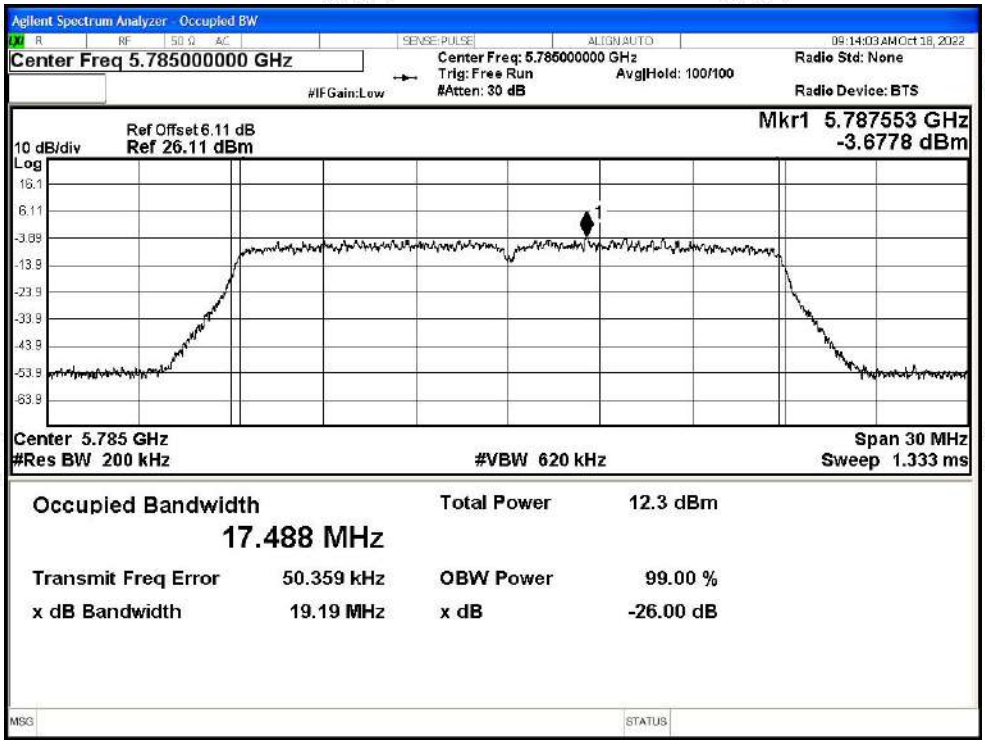
OBW NVNT n40 5795MHz Ant0



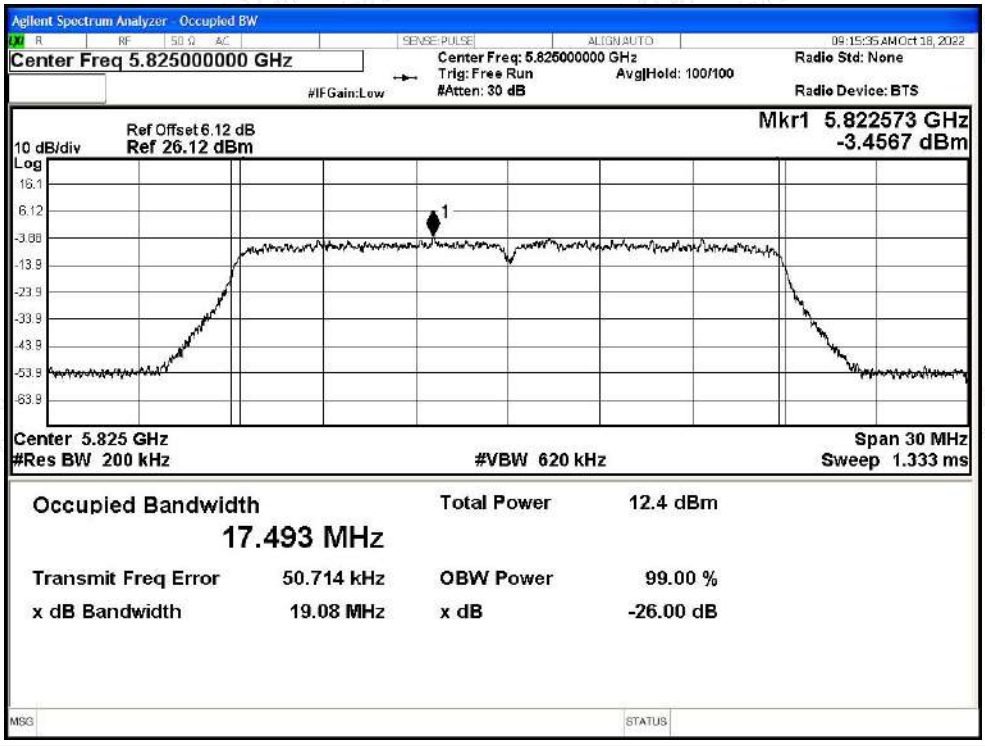
OBW NVNT ac20 5745MHz Ant0



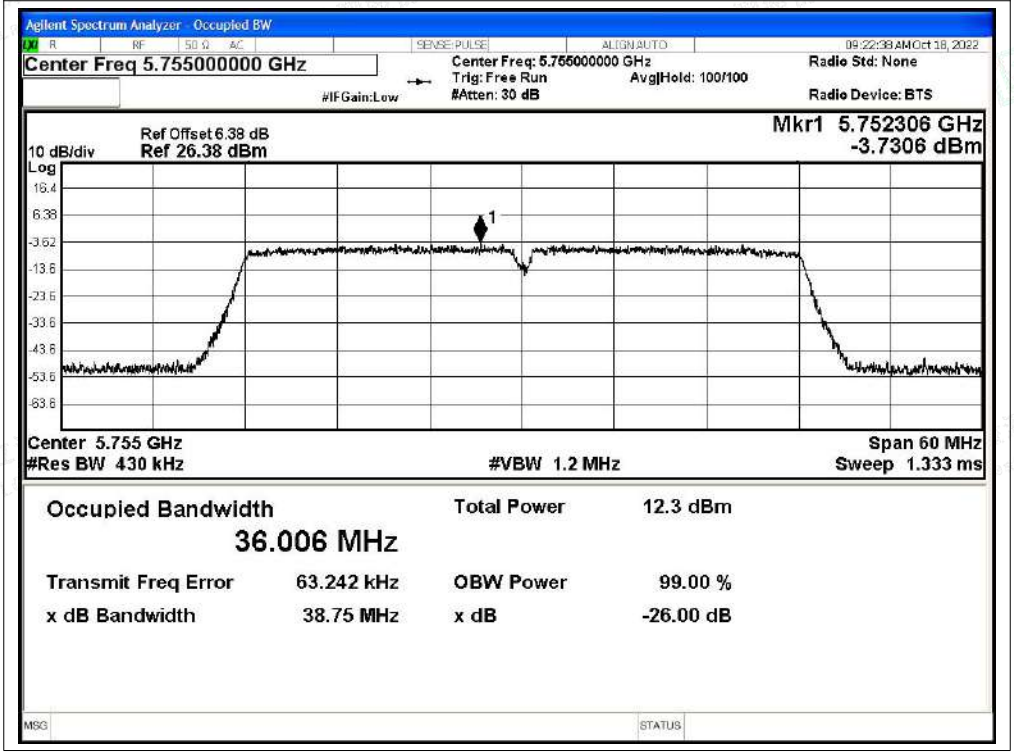
OBW NVNT ac20 5785MHz Ant0



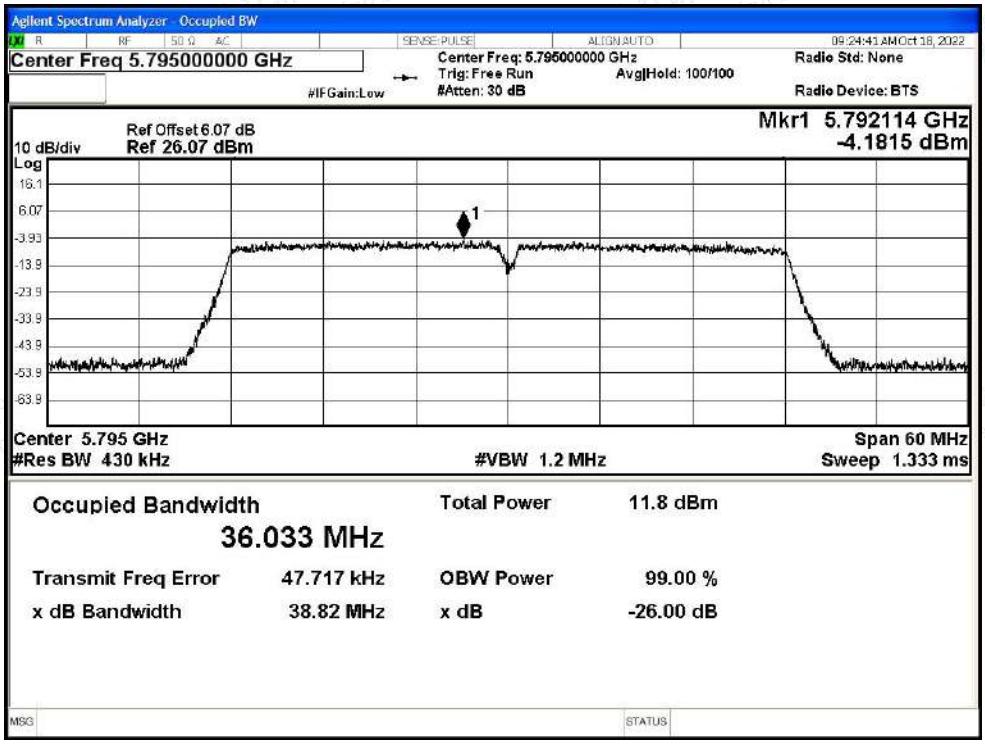
OBW NVNT ac20 5825MHz Ant0



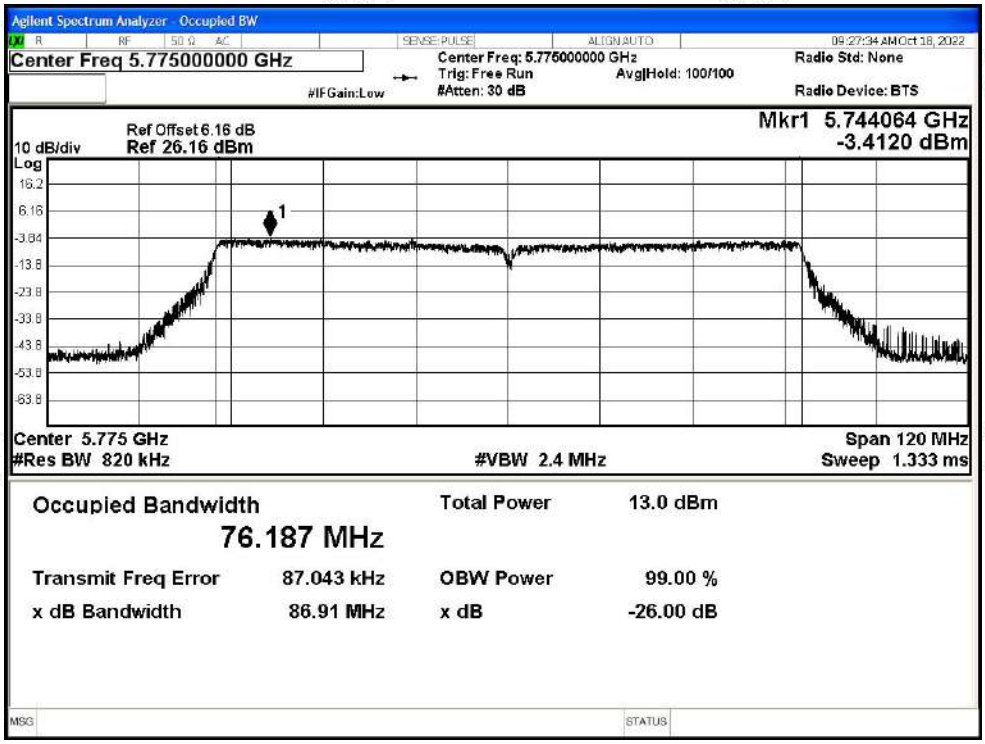
OBW NVNT ac40 5755MHz Ant0



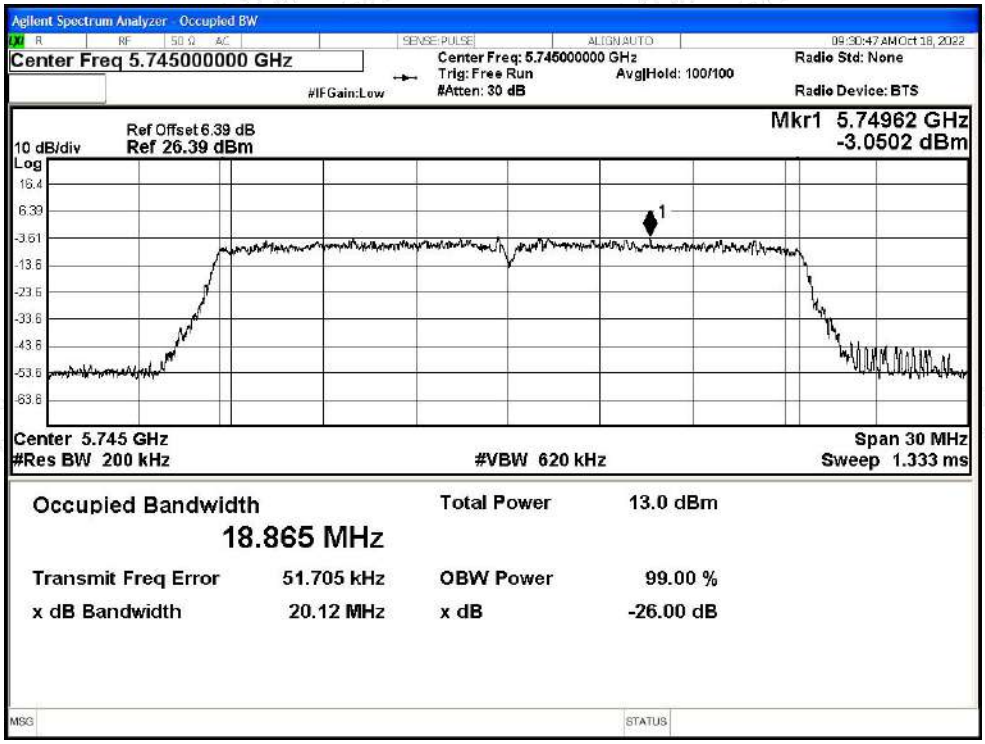
OBW NVNT ac40 5795MHz Ant0



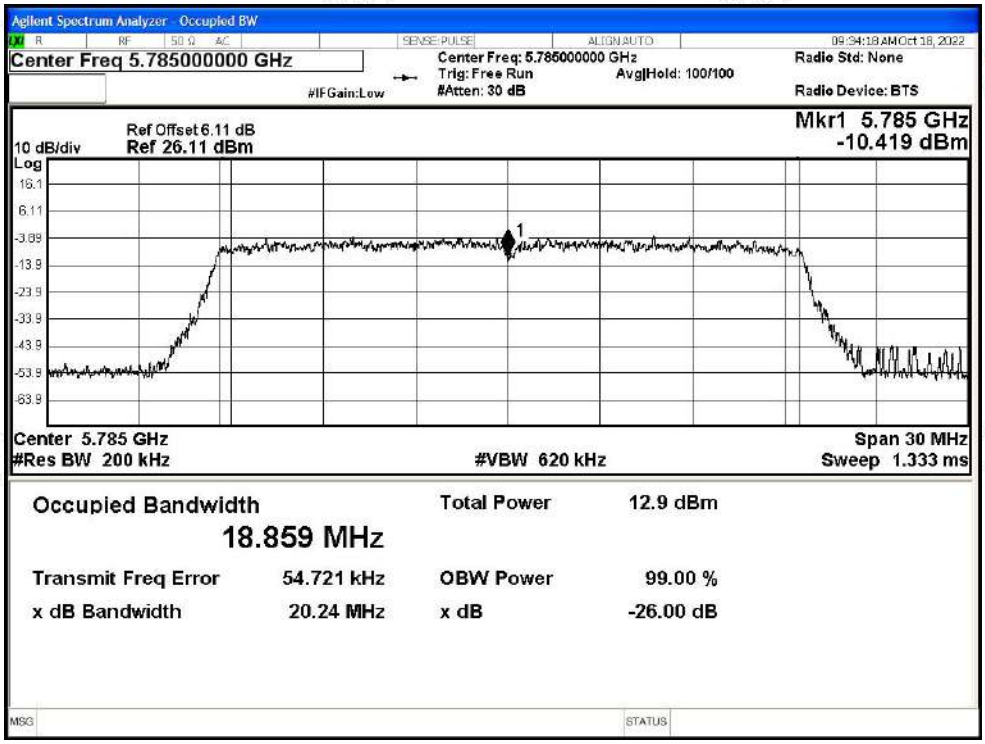
OBW NVNT ac80 5775MHz Ant0



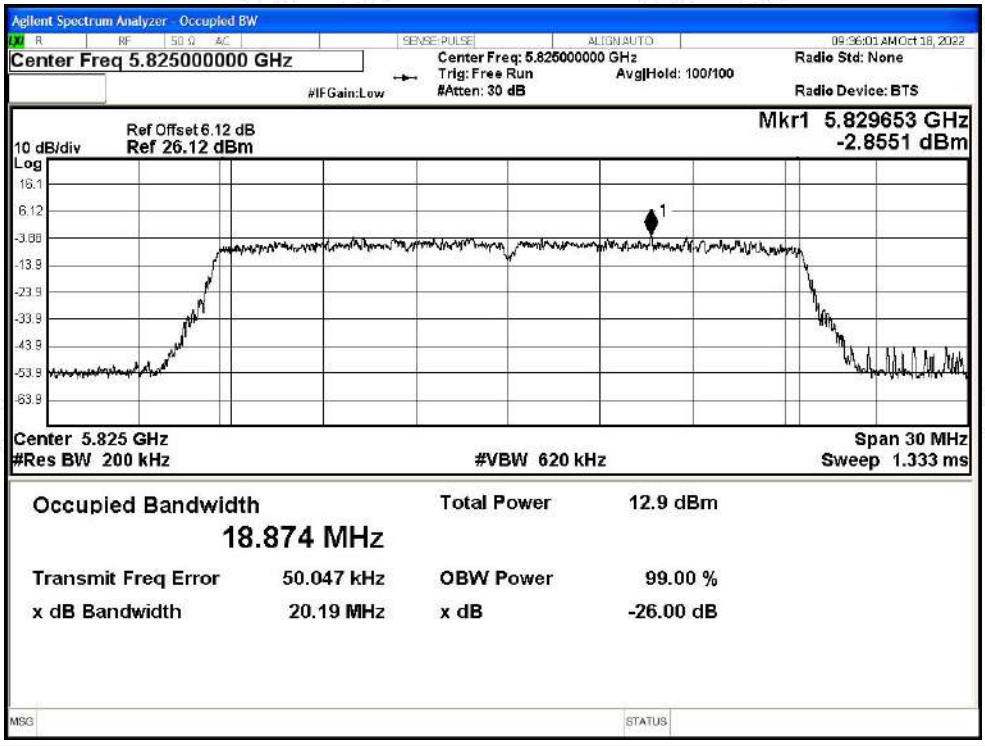
OBW NVNT ax20 5745MHz Ant0



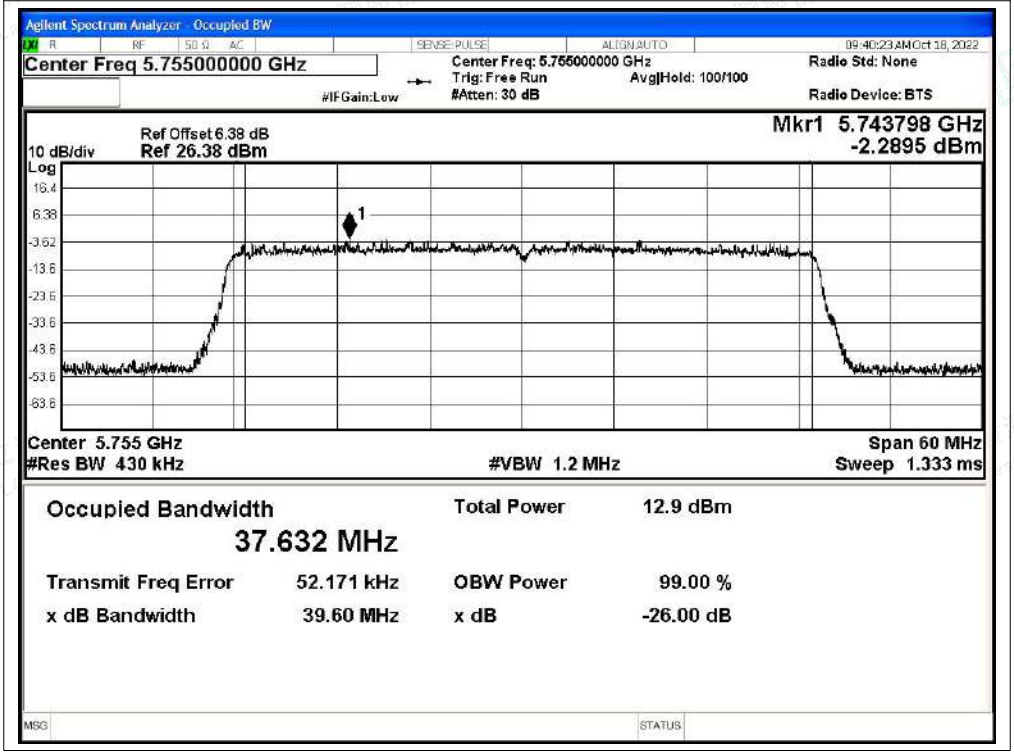
OBW NVNT ax20 5785MHz Ant0



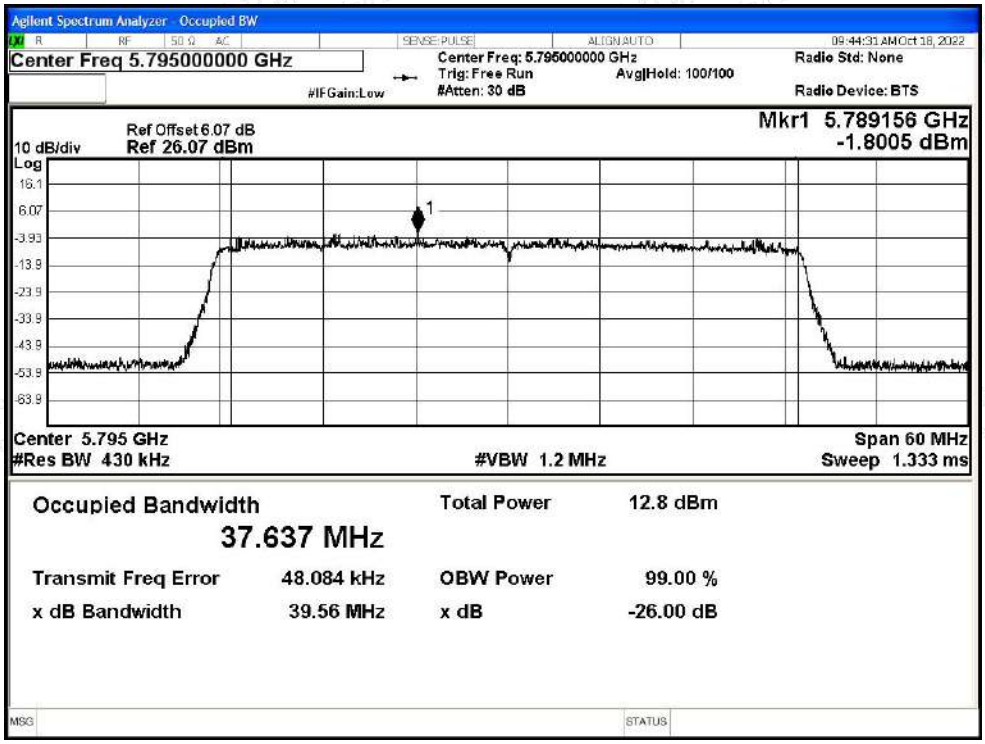
OBW NVNT ax20 5825MHz Ant0



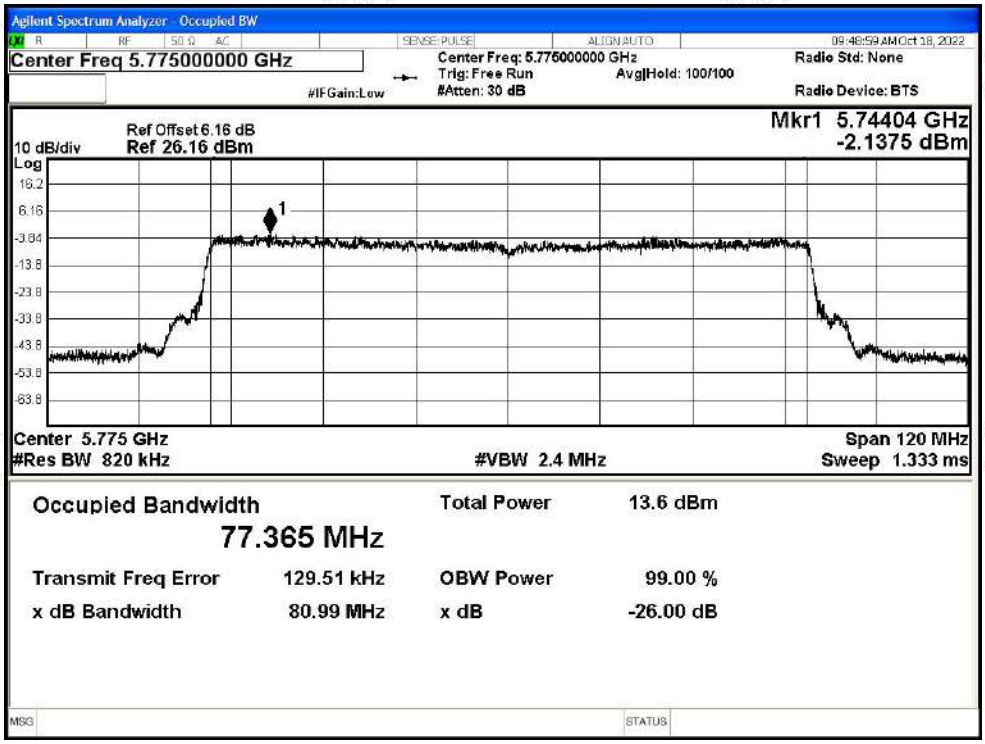
OBW NVNT ax40 5755MHz Ant0



OBW NVNT ax40 5795MHz Ant0



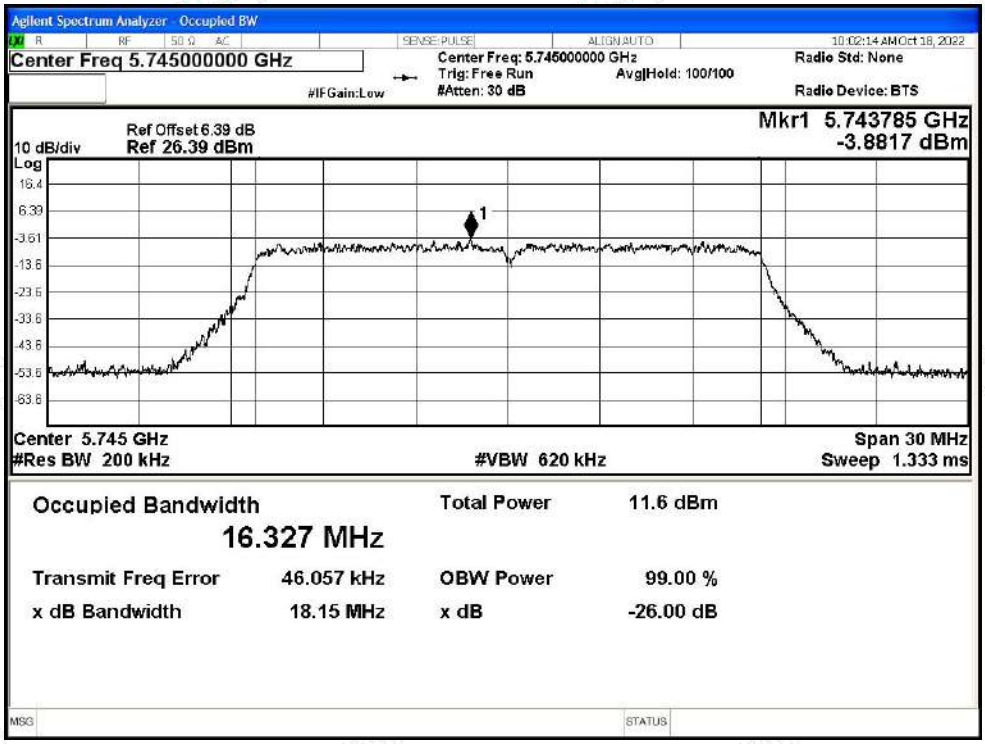
OBW NVNT ax80 5775MHz Ant0



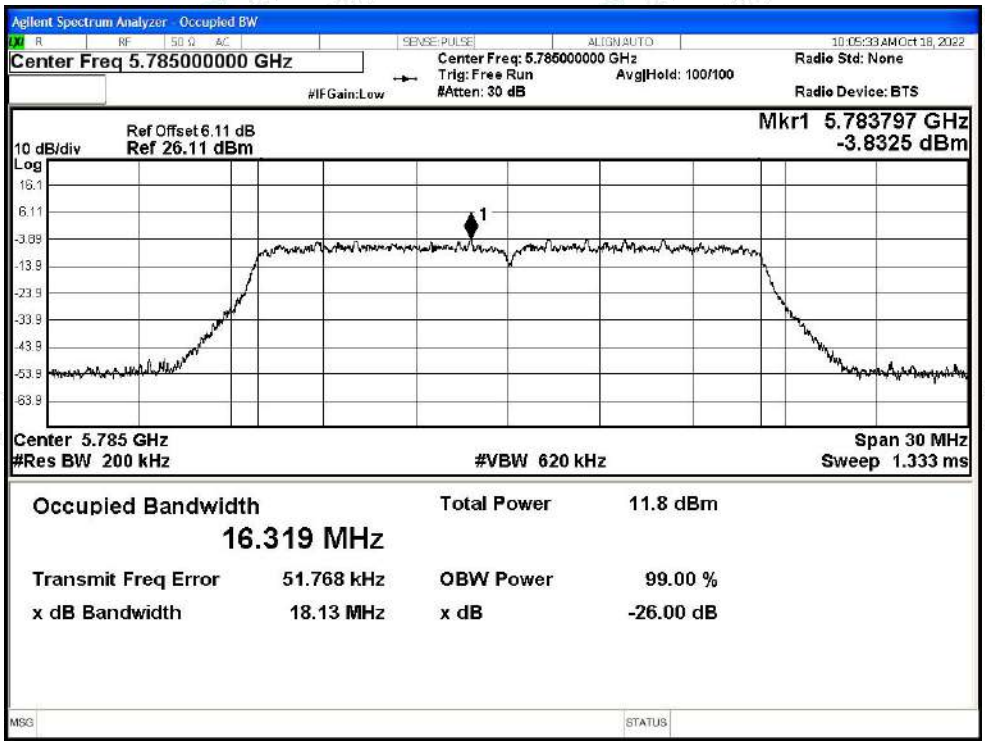
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.327
NVNT	a	5785	Ant1	16.319
NVNT	a	5825	Ant1	16.316
NVNT	n20	5745	Ant1	17.495
NVNT	n20	5785	Ant1	17.495
NVNT	n20	5825	Ant1	17.493
NVNT	n40	5755	Ant1	36.012
NVNT	n40	5795	Ant1	36.041
NVNT	ac20	5745	Ant1	17.508
NVNT	ac20	5785	Ant1	17.493
NVNT	ac20	5825	Ant1	17.498
NVNT	ac40	5755	Ant1	36.027
NVNT	ac40	5795	Ant1	36.045
NVNT	ac80	5775	Ant1	76.163
NVNT	ax20	5745	Ant1	18.868
NVNT	ax20	5785	Ant1	18.867
NVNT	ax20	5825	Ant1	18.882
NVNT	ax40	5755	Ant1	37.631
NVNT	ax40	5795	Ant1	37.691
NVNT	ax80	5775	Ant1	77.22

Test Graphs

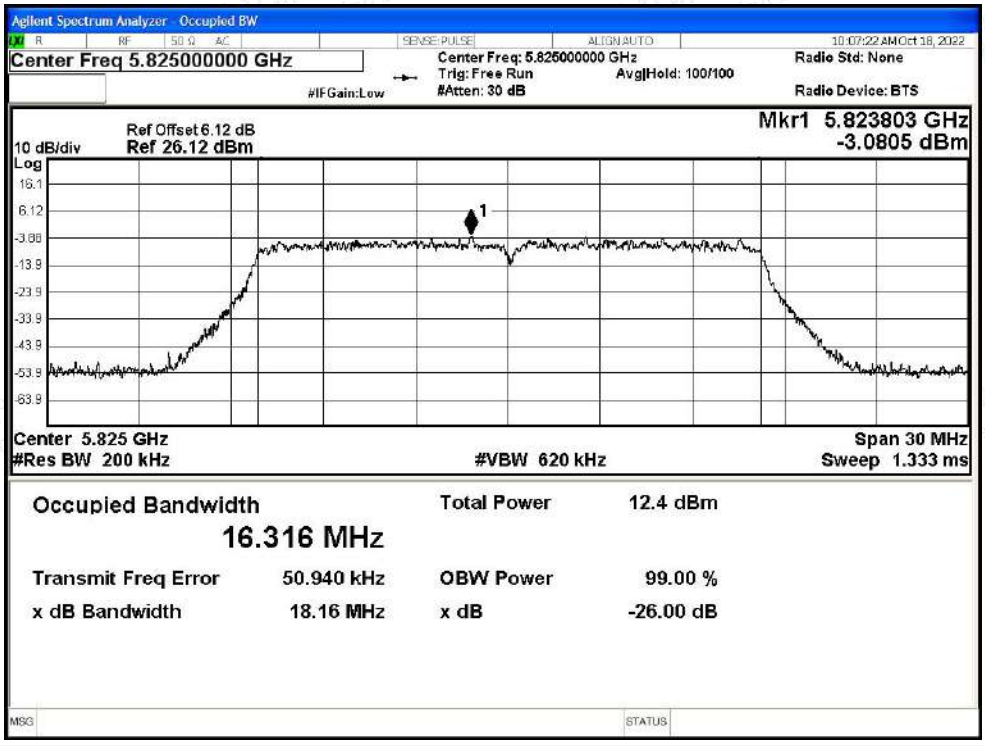
OBW NVNT a 5745MHz Ant1



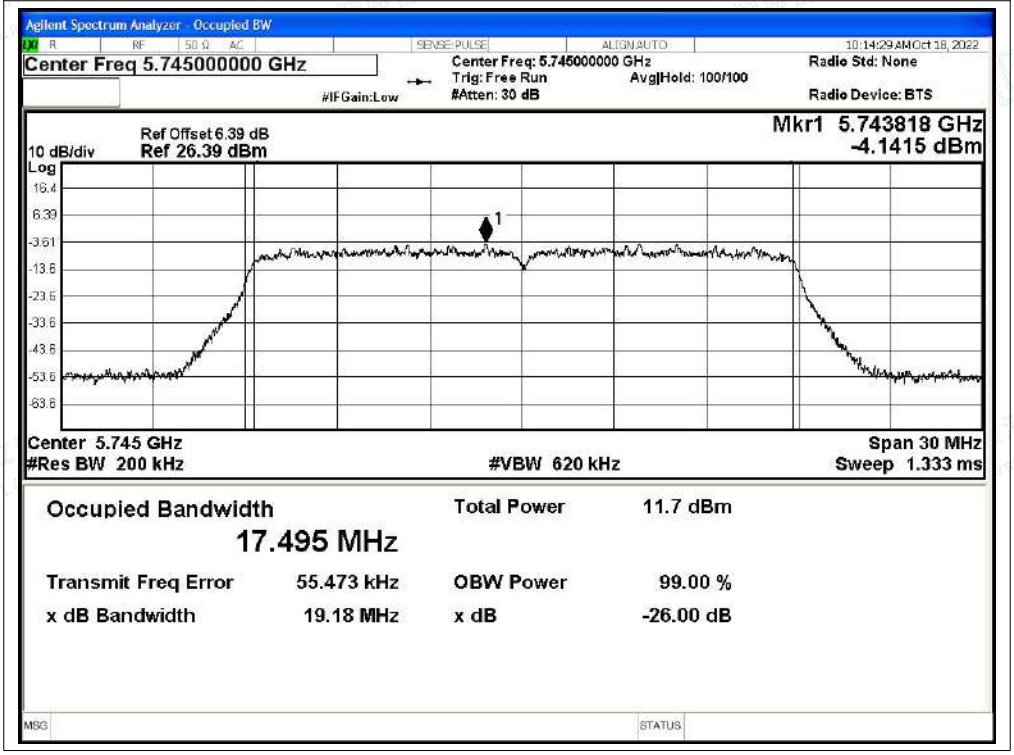
OBW NVNT a 5785MHz Ant1



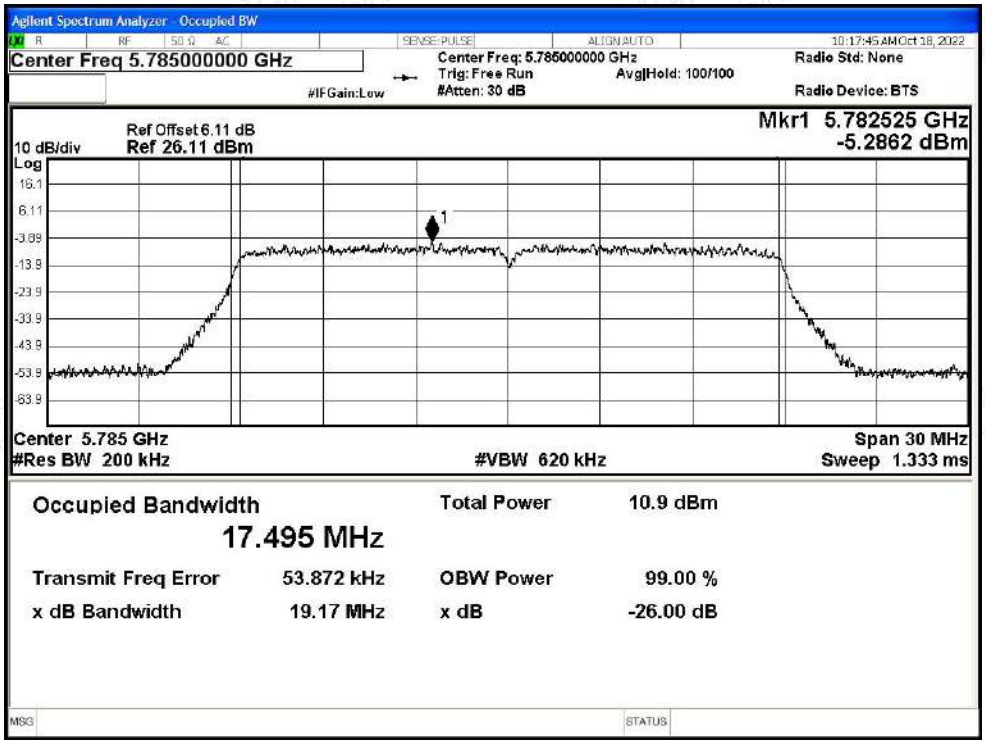
OBW NVNT a 5825MHz Ant1



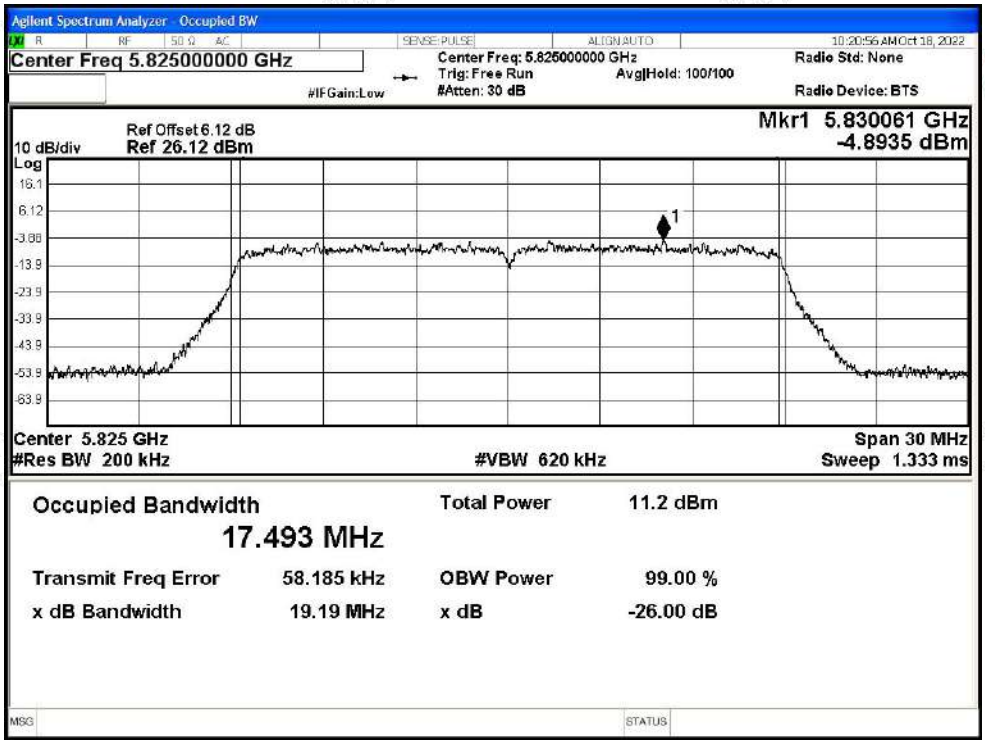
OBW NVNT n20 5745MHz Ant1



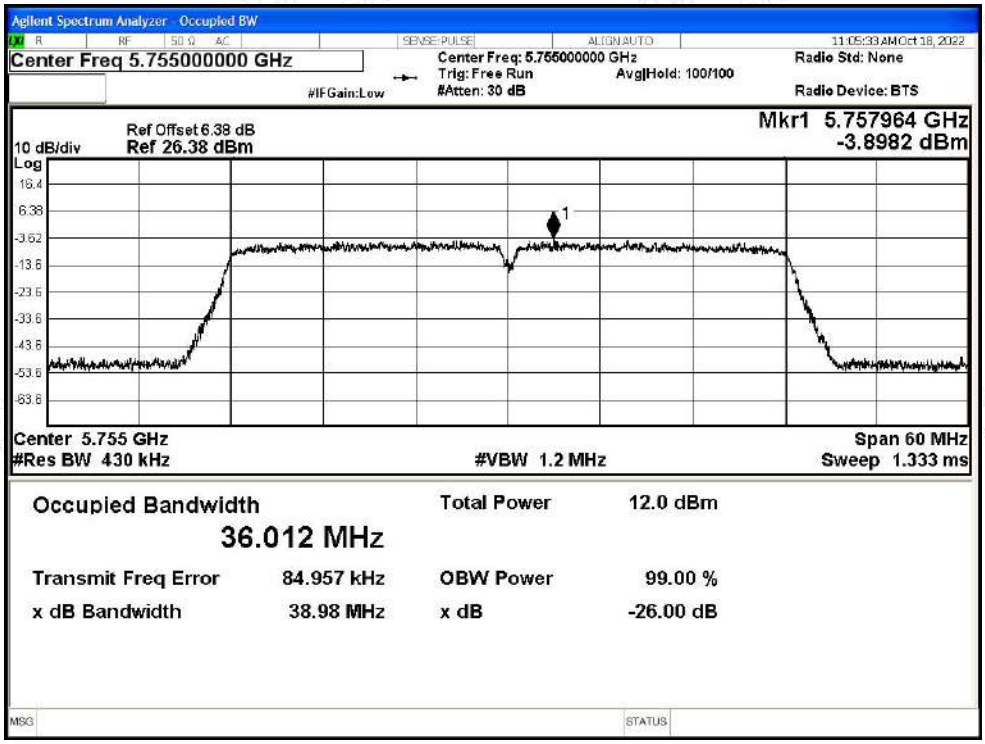
OBW NVNT n20 5785MHz Ant1



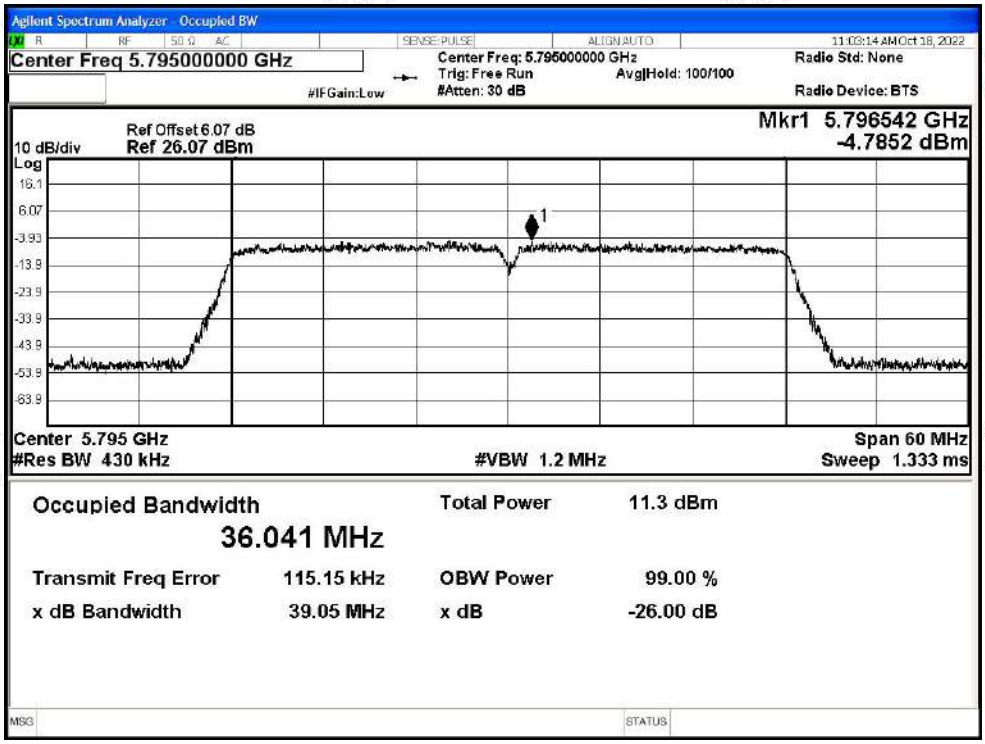
OBW NVNT n20 5825MHz Ant1



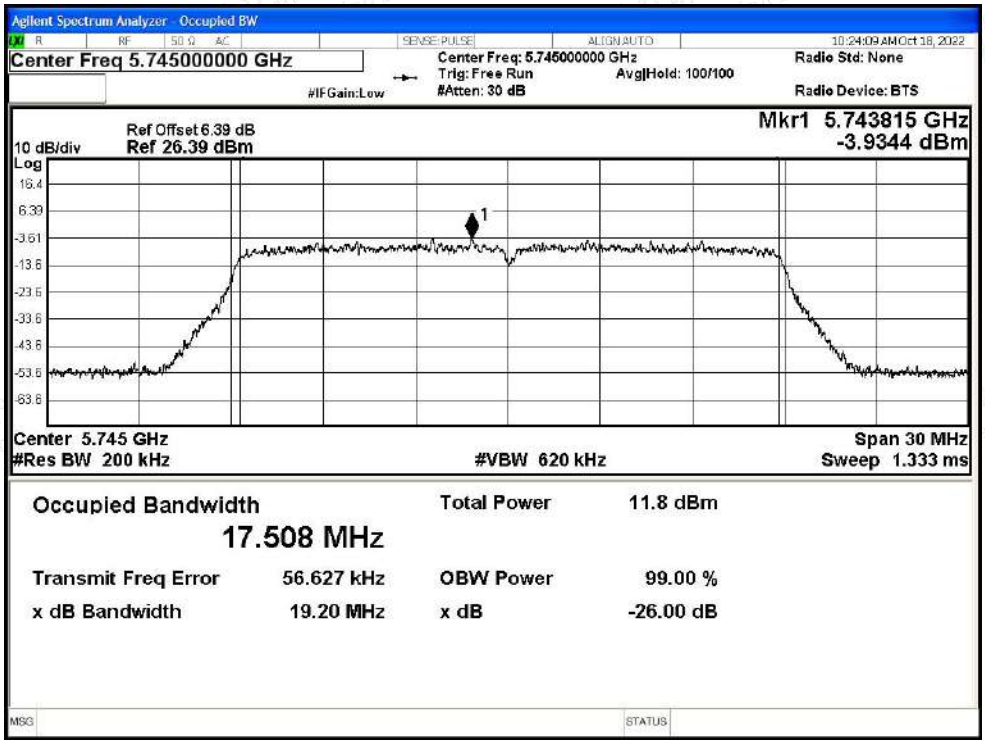
OBW NVNT n40 5755MHz Ant1



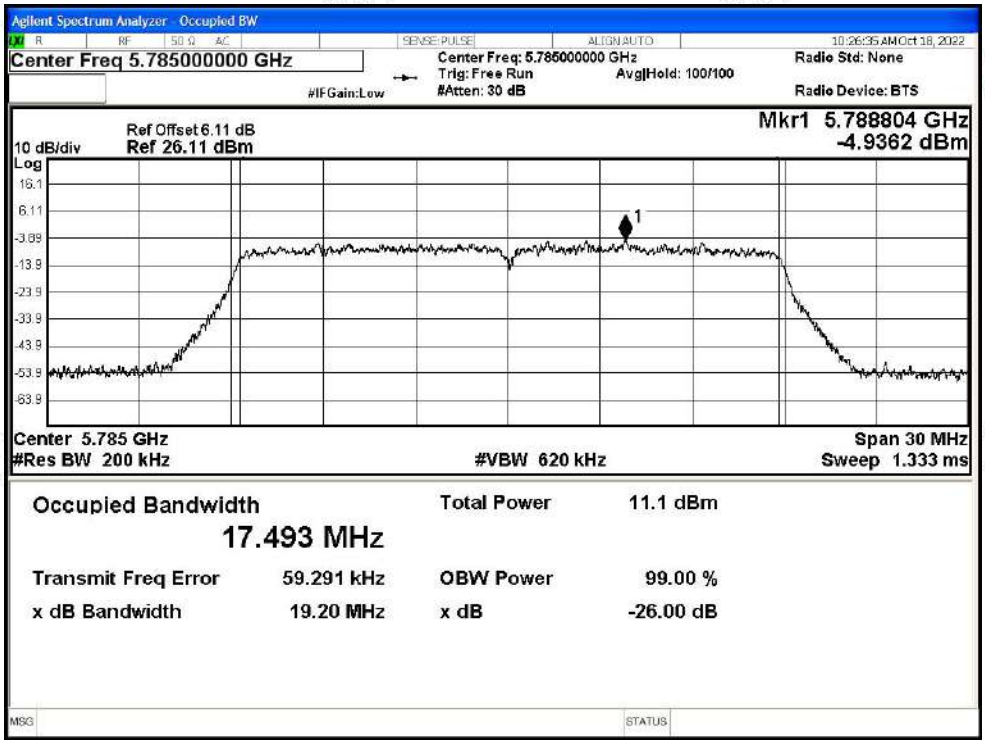
OBW NVNT n40 5795MHz Ant1



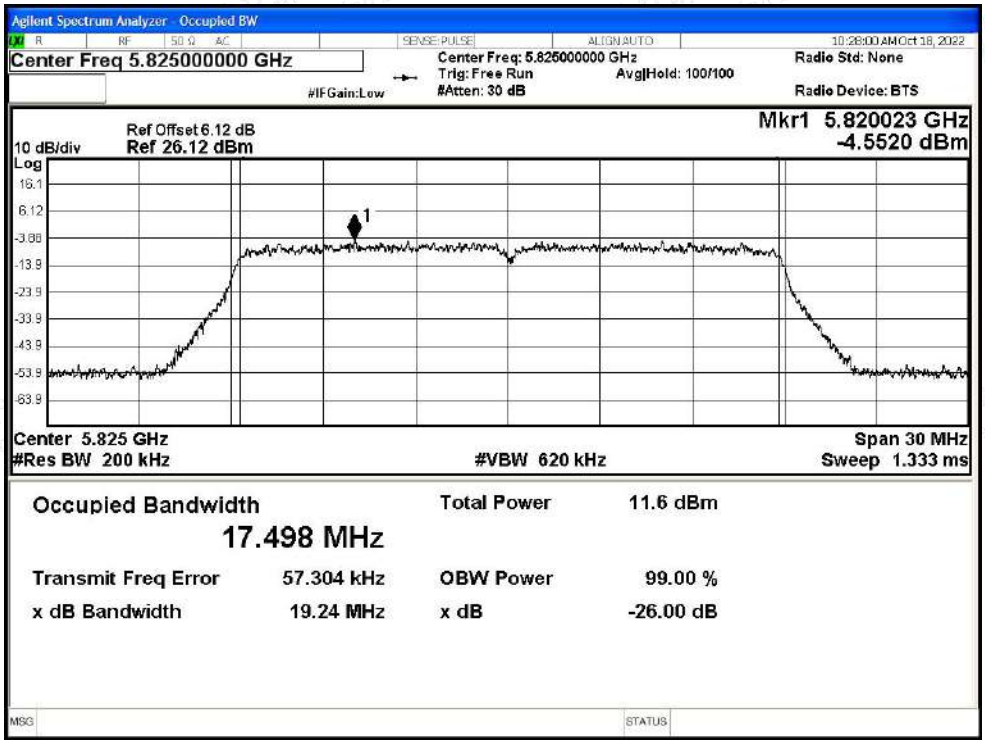
OBW NVNT ac20 5745MHz Ant1



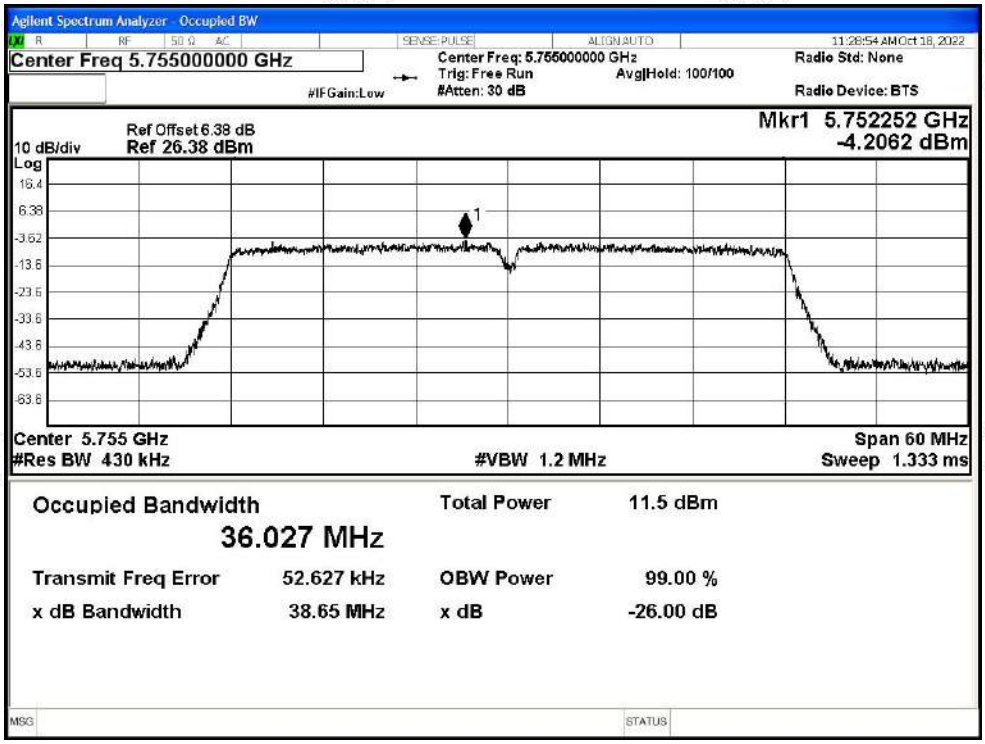
OBW NVNT ac20 5785MHz Ant1



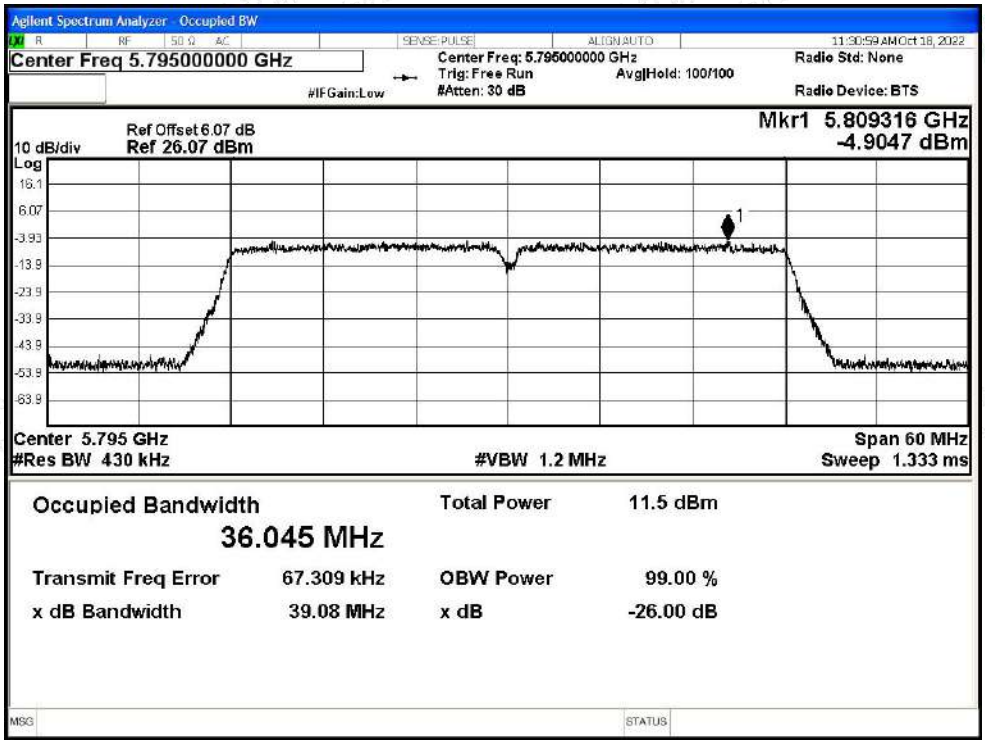
OBW NVNT ac20 5825MHz Ant1



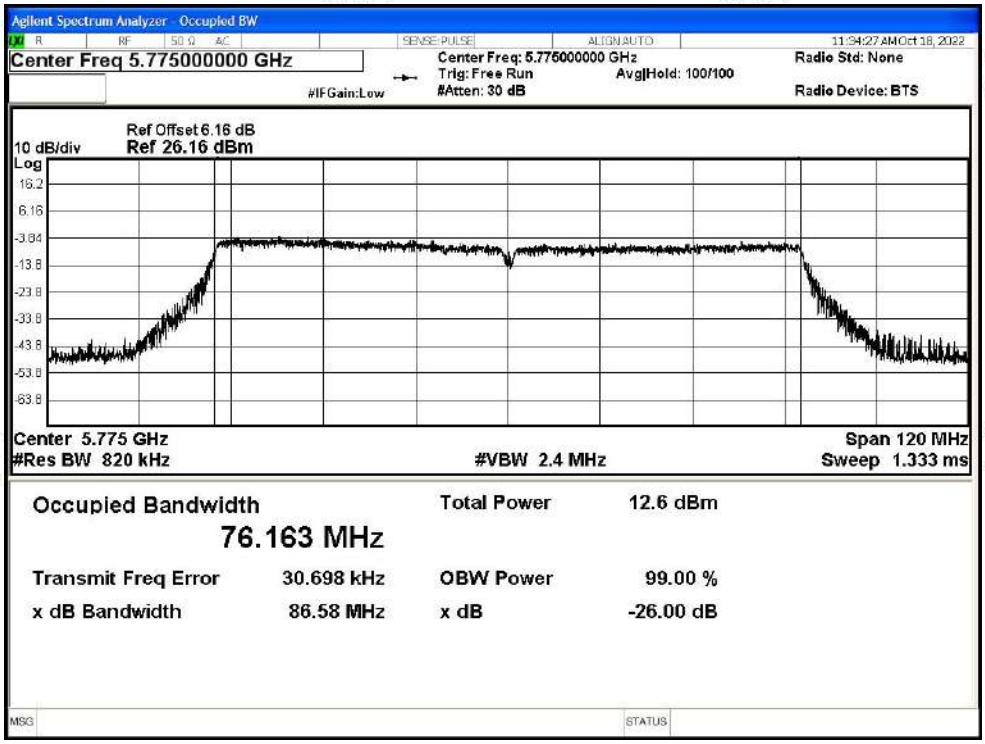
OBW NVNT ac40 5755MHz Ant1



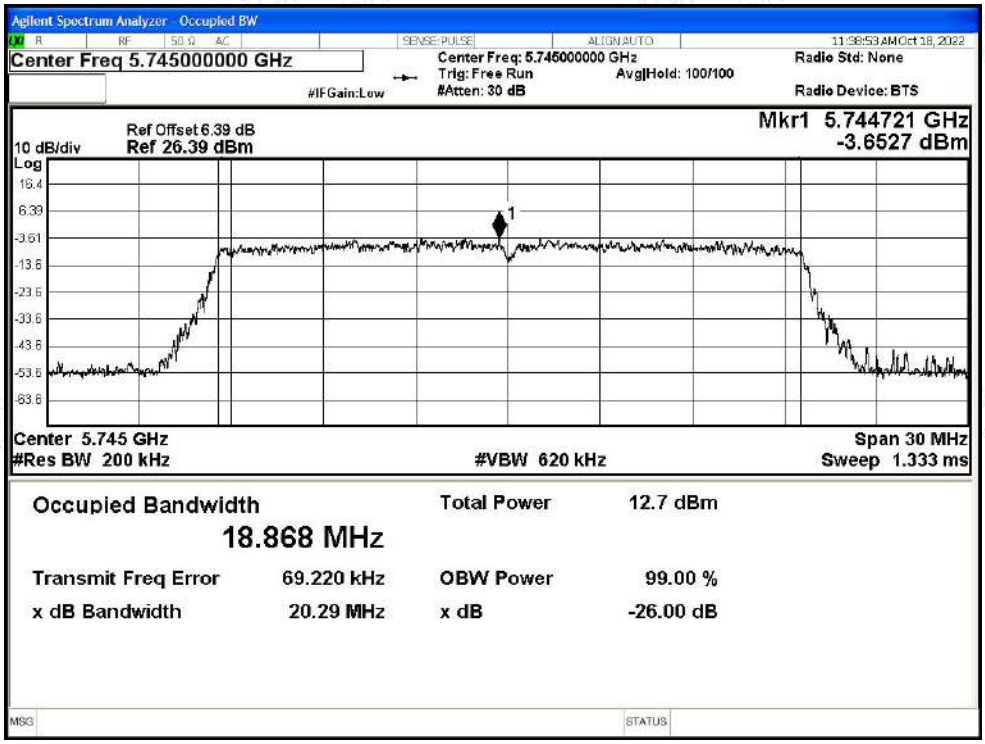
OBW NVNT ac40 5795MHz Ant1



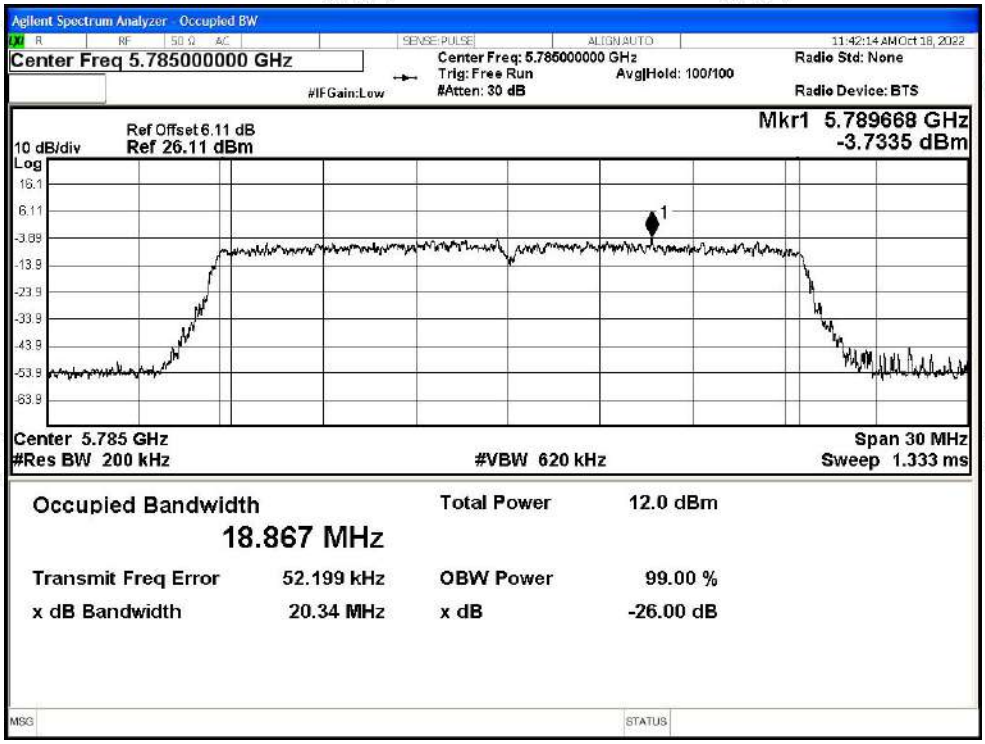
OBW NVNT ac80 5775MHz Ant1



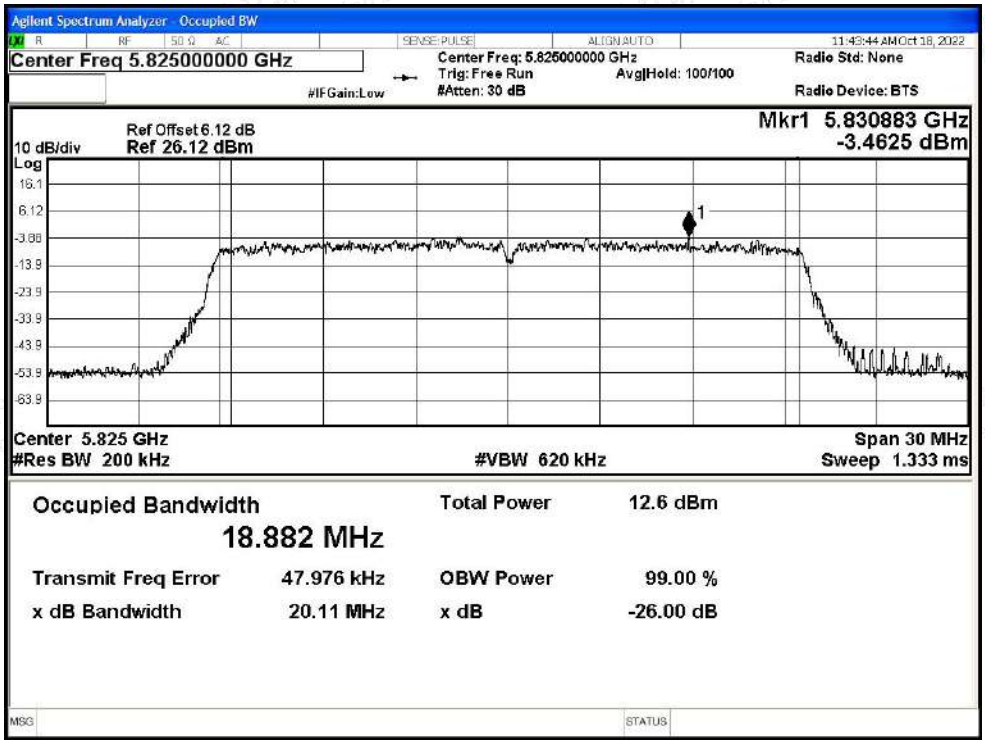
OBW NVNT ax20 5745MHz Ant1



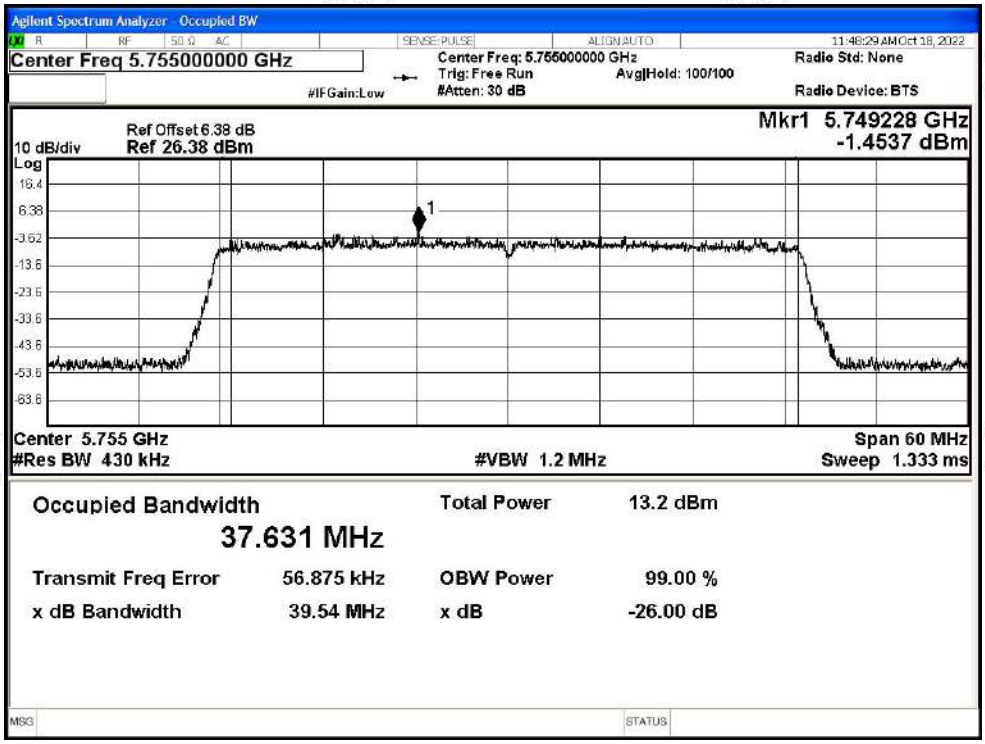
OBW NVNT ax20 5785MHz Ant1



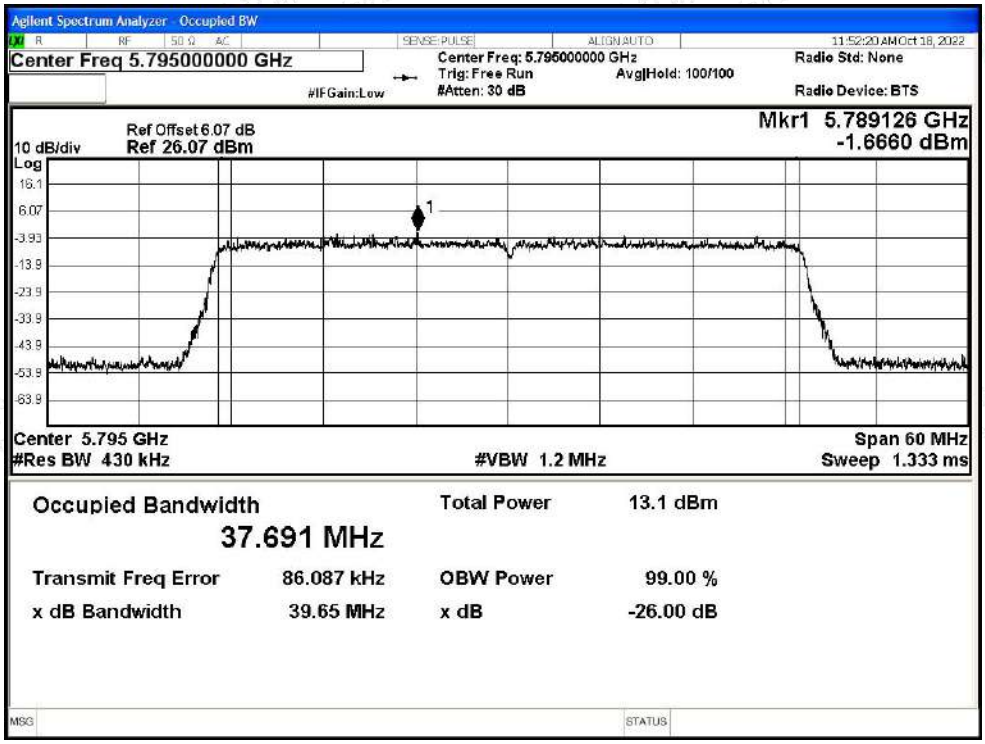
OBW NVNT ax20 5825MHz Ant1



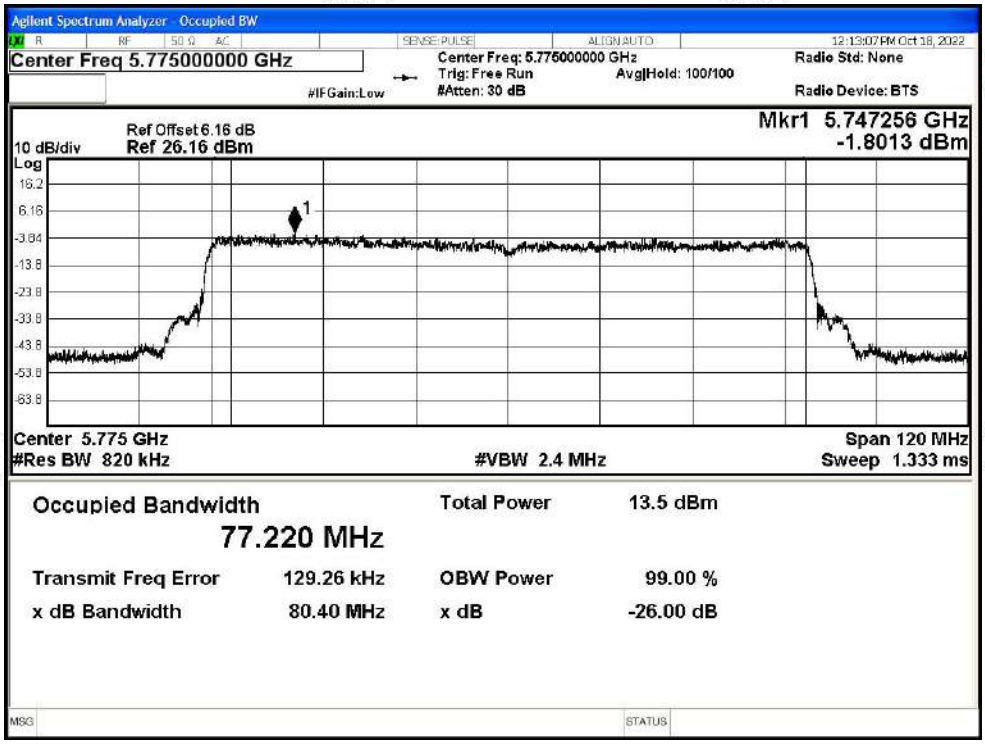
OBW NVNT ax40 5755MHz Ant1



OBW NVNT ax40 5795MHz Ant1



OBW NVNT ax80 5775MHz Ant1



E.3 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant0	6.65	0	6.65	30	Pass
NVNT	a	5785	Ant0	5.87	0	5.87	30	Pass
NVNT	a	5825	Ant0	5.97	0	5.97	30	Pass
NVNT	n20	5745	Ant0	6.69	0	6.69	30	Pass
NVNT	n20	5785	Ant0	5.86	0	5.86	30	Pass
NVNT	n20	5825	Ant0	6.78	0	6.78	30	Pass
NVNT	n40	5755	Ant0	6.57	0	6.57	30	Pass
NVNT	n40	5795	Ant0	6.35	0	6.35	30	Pass
NVNT	ac20	5745	Ant0	6.78	0	6.78	30	Pass
NVNT	ac20	5785	Ant0	6.67	0	6.67	30	Pass
NVNT	ac20	5825	Ant0	6.87	0	6.87	30	Pass
NVNT	ac40	5755	Ant0	6.73	0	6.73	30	Pass
NVNT	ac40	5795	Ant0	6.26	0	6.26	30	Pass
NVNT	ac80	5775	Ant0	6.47	0	6.47	30	Pass
NVNT	ax20	5745	Ant0	6.59	0	6.59	30	Pass
NVNT	ax20	5785	Ant0	6.56	0	6.56	30	Pass
NVNT	ax20	5825	Ant0	6.68	0	6.68	30	Pass
NVNT	ax40	5755	Ant0	6.38	0	6.38	30	Pass
NVNT	ax40	5795	Ant0	6.21	0	6.21	30	Pass
NVNT	ax80	5775	Ant0	6.46	0.11	6.57	30	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	6.47	0	6.47	30	Pass
NVNT	a	5785	Ant1	6.46	0	6.46	30	Pass
NVNT	a	5825	Ant1	6.19	0	6.19	30	Pass
NVNT	n20	5745	Ant1	6.11	0	6.11	30	Pass
NVNT	n20	5785	Ant1	5.41	0	5.41	30	Pass
NVNT	n20	5825	Ant1	5.75	0	5.75	30	Pass
NVNT	n40	5755	Ant1	6.37	0	6.37	30	Pass
NVNT	n40	5795	Ant1	5.66	0	5.66	30	Pass
NVNT	ac20	5745	Ant1	6.28	0	6.28	30	Pass
NVNT	ac20	5785	Ant1	6.69	0	6.69	30	Pass
NVNT	ac20	5825	Ant1	6.06	0	6.06	30	Pass
NVNT	ac40	5755	Ant1	5.96	0	5.96	30	Pass
NVNT	ac40	5795	Ant1	5.95	0	5.95	30	Pass
NVNT	ac80	5775	Ant1	6.05	0	6.05	30	Pass

NVNT	ax20	5745	Ant1	6.49	0	6.49	30	Pass
NVNT	ax20	5785	Ant1	6.91	0	6.91	30	Pass
NVNT	ax20	5825	Ant1	6.34	0	6.34	30	Pass
NVNT	ax40	5755	Ant1	6.57	0	6.57	30	Pass
NVNT	ax40	5795	Ant1	6.62	0	6.62	30	Pass
NVNT	ax80	5775	Ant1	6.42	0.11	6.53	30	Pass

MIMO

TestMode	Channel	Result[dBm]			Limit[dBm]	Verdict
		Ant0	Ant1	MIMO		
n20	5745	6.69	6.11	9.42	≤30.00	PASS
	5785	5.86	5.41	8.65	≤30.00	PASS
	5825	6.78	5.75	9.31	≤30.00	PASS
N40	5755	6.57	6.37	9.48	≤30.00	PASS
	5795	6.35	5.66	9.03	≤30.00	PASS
ac20	5745	6.78	6.28	9.55	≤30.00	PASS
	5785	6.67	6.69	9.69	≤30.00	PASS
	5825	6.87	6.06	9.49	≤30.00	PASS
ac40	5755	6.73	5.96	9.37	≤30.00	PASS
	5795	6.26	5.95	9.12	≤30.00	PASS
ac80	5775	6.47	6.05	9.28	≤30.00	PASS
ax20	5745	6.59	6.49	9.55	≤30.00	PASS
	5785	6.56	6.91	9.75	≤30.00	PASS
	5825	6.68	6.34	9.52	≤30.00	PASS
ax40	5755	6.38	6.57	9.49	≤30.00	PASS
	5795	6.21	6.62	9.43	≤30.00	PASS
ax80	5775	6.57	6.53	9.56	≤30.00	PASS

E.4 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
NVNT	a	5745	Ant0	-8.88	0	-8.88	30	Pass
NVNT	a	5785	Ant0	-9.69	0	-9.69	30	Pass
NVNT	a	5825	Ant0	-9.22	0	-9.22	30	Pass
NVNT	n20	5745	Ant0	-8.95	0	-8.95	30	Pass
NVNT	n20	5785	Ant0	-10.05	0	-10.05	30	Pass
NVNT	n20	5825	Ant0	-8.49	0	-8.49	30	Pass
NVNT	n40	5755	Ant0	-12.1	0	-12.1	30	Pass
NVNT	n40	5795	Ant0	-12.12	0	-12.12	30	Pass
NVNT	ac20	5745	Ant0	-8.75	0	-8.75	30	Pass
NVNT	ac20	5785	Ant0	-8.56	0	-8.56	30	Pass
NVNT	ac20	5825	Ant0	-8.72	0	-8.72	30	Pass
NVNT	ac40	5755	Ant0	-11.72	0	-11.72	30	Pass
NVNT	ac40	5795	Ant0	-12.34	0	-12.34	30	Pass
NVNT	ac80	5775	Ant0	-14.85	0	-14.85	30	Pass
NVNT	ax20	5745	Ant0	-9.27	0	-9.27	30	Pass
NVNT	ax20	5785	Ant0	-9.05	0	-9.05	30	Pass
NVNT	ax20	5825	Ant0	-9.21	0	-9.21	30	Pass
NVNT	ax40	5755	Ant0	-12.7	0	-12.7	30	Pass
NVNT	ax40	5795	Ant0	-12.79	0	-12.79	30	Pass
NVNT	ax80	5775	Ant0	-14.4	0.11	-14.29	30	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/500kHz)	Duty Factor (dB)	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Verdict
NVNT	a	5745	Ant1	-9.1	0	-9.1	30	Pass
NVNT	a	5785	Ant1	-8.87	0	-8.87	30	Pass
NVNT	a	5825	Ant1	-9.27	0	-9.27	30	Pass
NVNT	n20	5745	Ant1	-9.84	0	-9.84	30	Pass
NVNT	n20	5785	Ant1	-9.98	0	-9.98	30	Pass
NVNT	n20	5825	Ant1	-10.11	0	-10.11	30	Pass
NVNT	n40	5755	Ant1	-12.28	0	-12.28	30	Pass
NVNT	n40	5795	Ant1	-12.18	3.01	-9.17	30	Pass
NVNT	ac20	5745	Ant1	-9.27	0	-9.27	30	Pass
NVNT	ac20	5785	Ant1	-8.65	0	-8.65	30	Pass
NVNT	ac20	5825	Ant1	-9.34	0	-9.34	30	Pass
NVNT	ac40	5755	Ant1	-12.54	0	-12.54	30	Pass
NVNT	ac40	5795	Ant1	-13.05	0	-13.05	30	Pass
NVNT	ac80	5775	Ant1	-15.02	0	-15.02	30	Pass

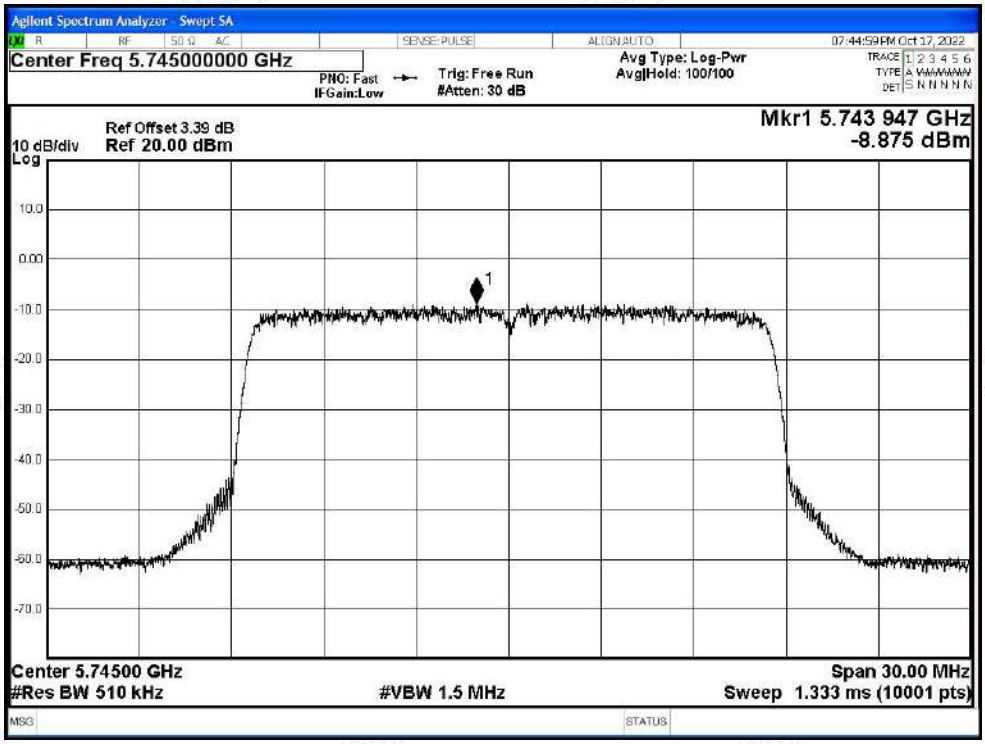
NVNT	ax20	5745	Ant1	-9.55	0	-9.55	30	Pass
NVNT	ax20	5785	Ant1	-9.15	0	-9.15	30	Pass
NVNT	ax20	5825	Ant1	-9.66	0	-9.66	30	Pass
NVNT	ax40	5755	Ant1	-12.52	0	-12.52	30	Pass
NVNT	ax40	5795	Ant1	-12.75	0	-12.75	30	Pass
NVNT	ax80	5775	Ant1	-14.16	0.11	-14.05	30	Pass

MIMO

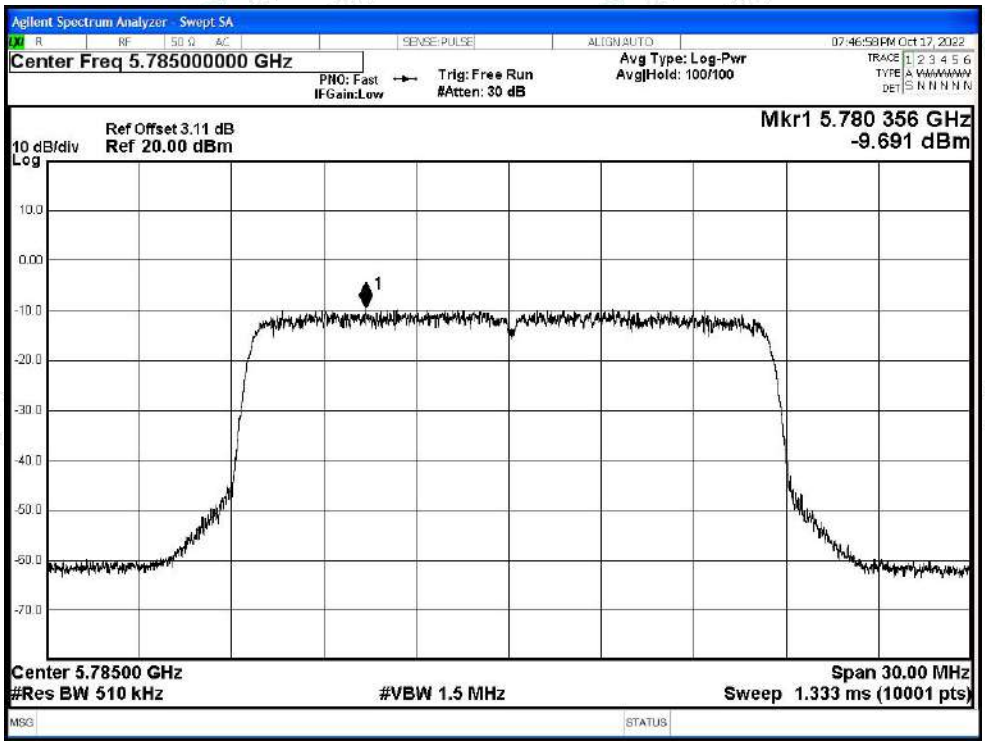
TestMode	Channel	Result [dBm/500kHz]			Limit[dBm/500kHz]	Verdict
		Ant0	Ant1	MIMO		
n20	5745	-8.95	-9.84	-6.36	≤30.00	PASS
	5785	-10.05	-9.98	-7.00	≤30.00	PASS
	5825	-8.49	-10.11	-6.21	≤30.00	PASS
N40	5755	-12.1	-12.28	-9.18	≤30.00	PASS
	5795	-12.12	-9.17	-7.39	≤30.00	PASS
ac20	5745	-8.75	-9.27	-5.99	≤30.00	PASS
	5785	-8.56	-8.65	-5.59	≤30.00	PASS
	5825	-8.72	-9.34	-6.01	≤30.00	PASS
ac40	5755	-11.72	-12.54	-9.10	≤30.00	PASS
	5795	-12.34	-13.05	-9.67	≤30.00	PASS
ac80	5775	-14.85	-15.02	-11.92	≤30.00	PASS
ax20	5745	-9.27	-9.55	-6.40	≤30.00	PASS
	5785	-9.05	-9.15	-6.09	≤30.00	PASS
	5825	-9.21	-9.66	-6.42	≤30.00	PASS
ax40	5755	-12.7	-12.52	-9.60	≤30.00	PASS
	5795	-12.79	-12.75	-9.76	≤30.00	PASS
ax80	5775	-14.29	-14.05	-11.16	≤30.00	PASS

Test Graphs

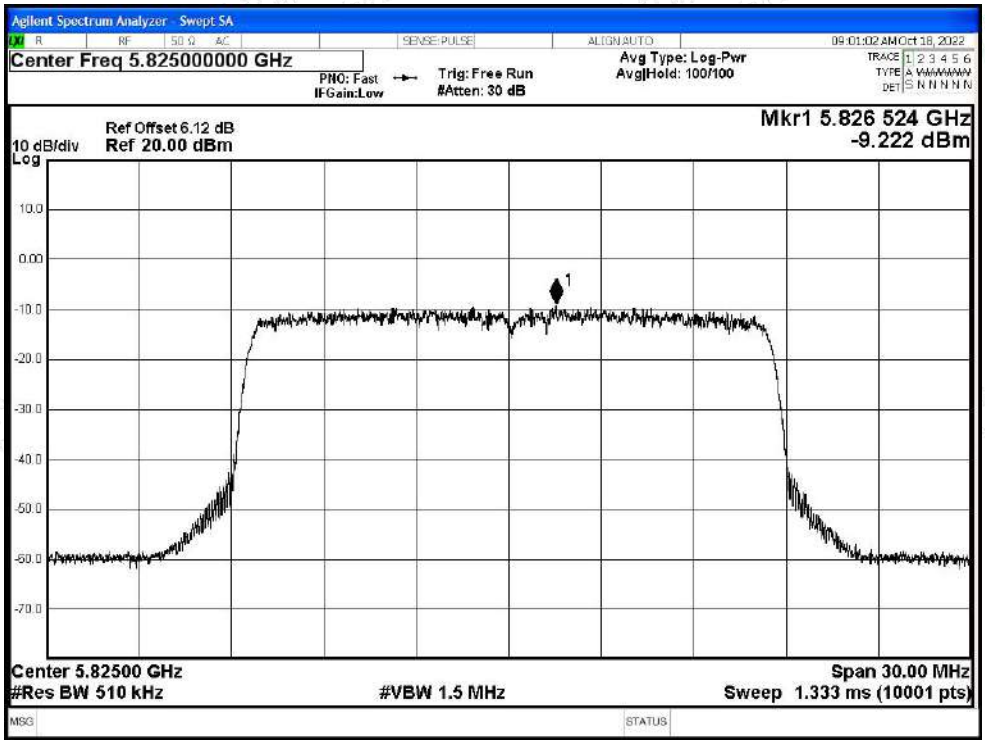
PSD NVNT a 5745MHz Ant0



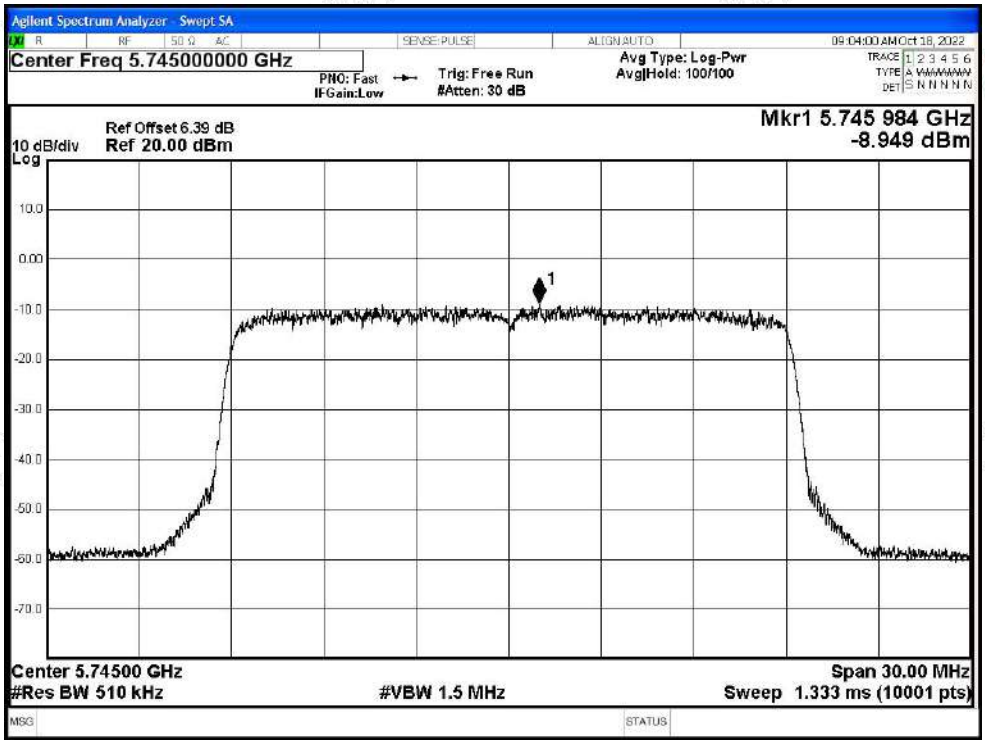
PSD NVNT a 5785MHz Ant0



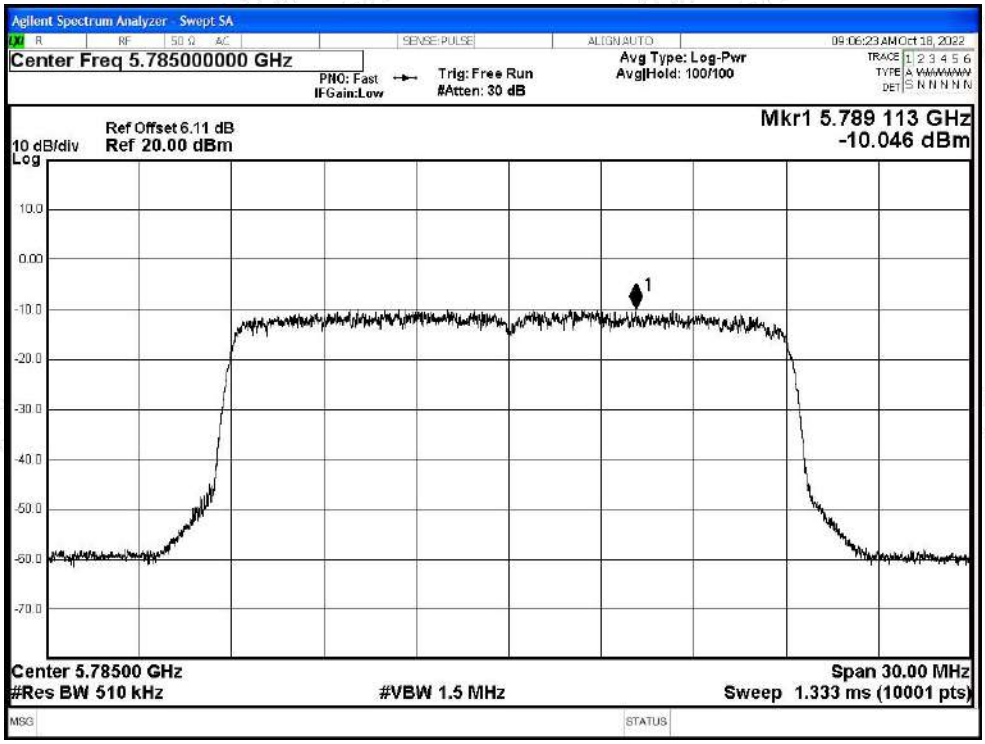
PSD NVNT a 5825MHz Ant0



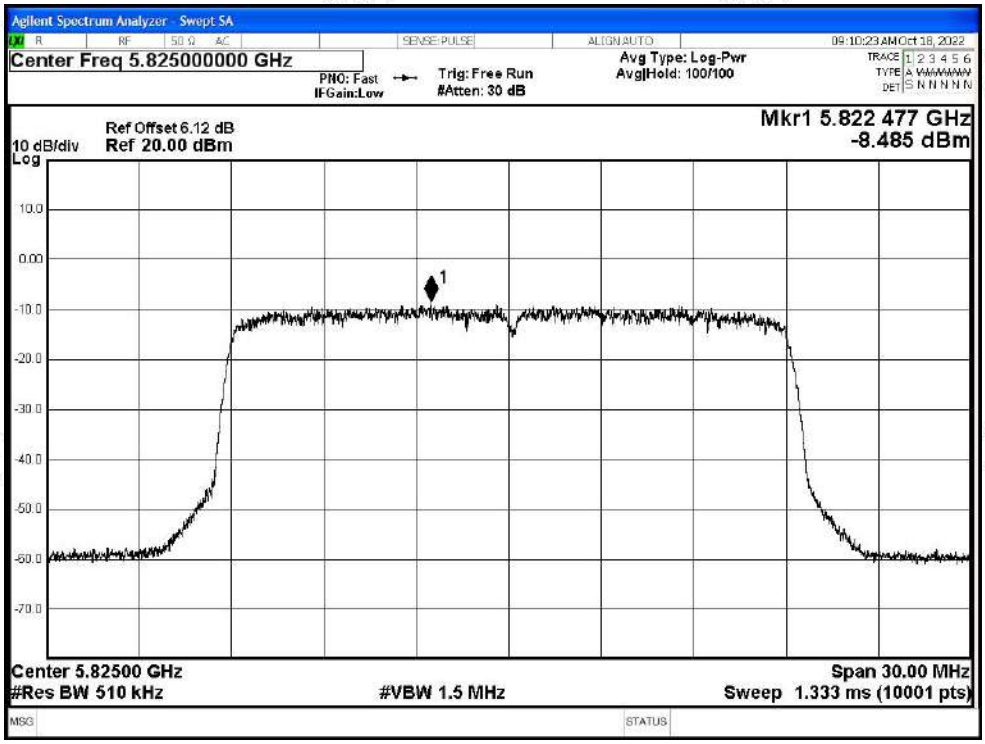
PSD NVNT n20 5745MHz Ant0



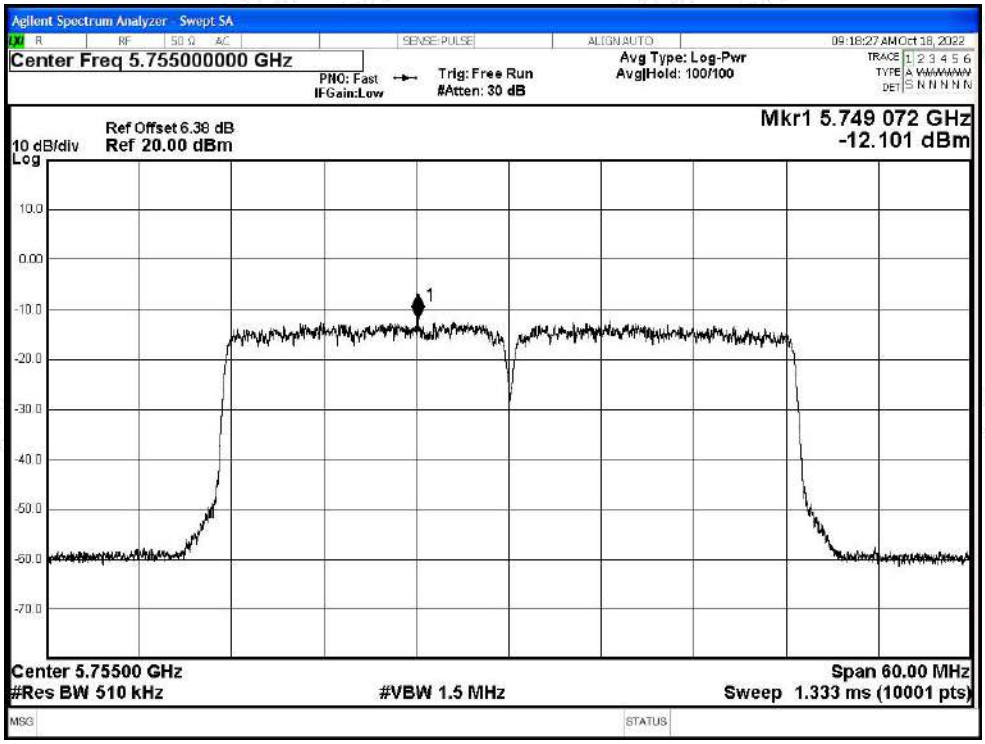
PSD NVNT n20 5785MHz Ant0



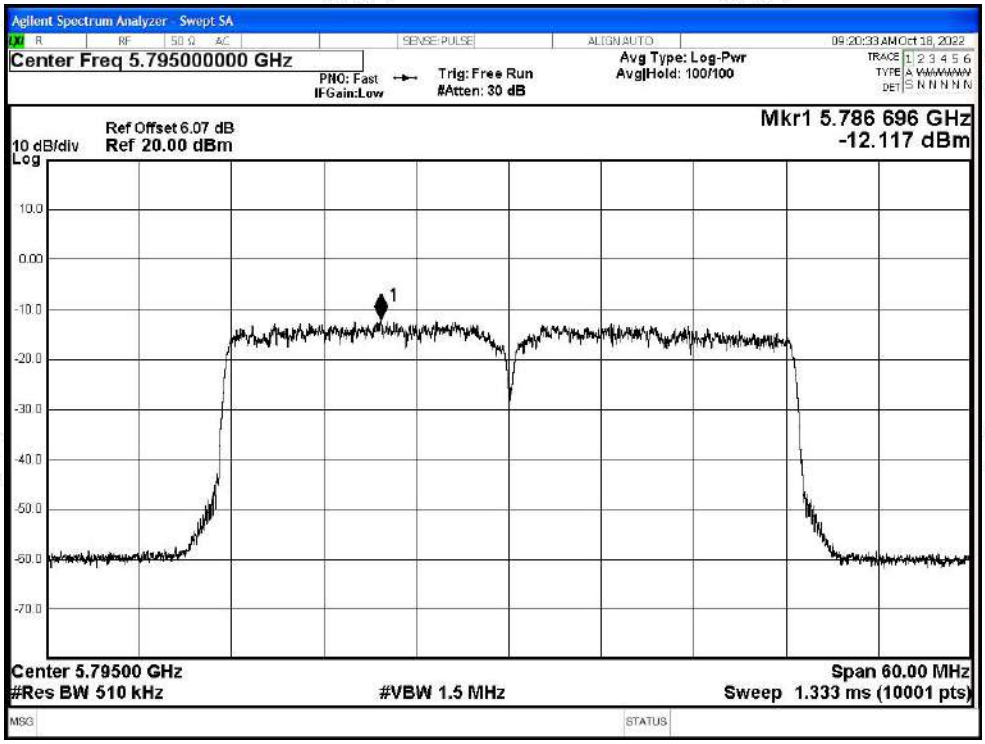
PSD NVNT n20 5825MHz Ant0



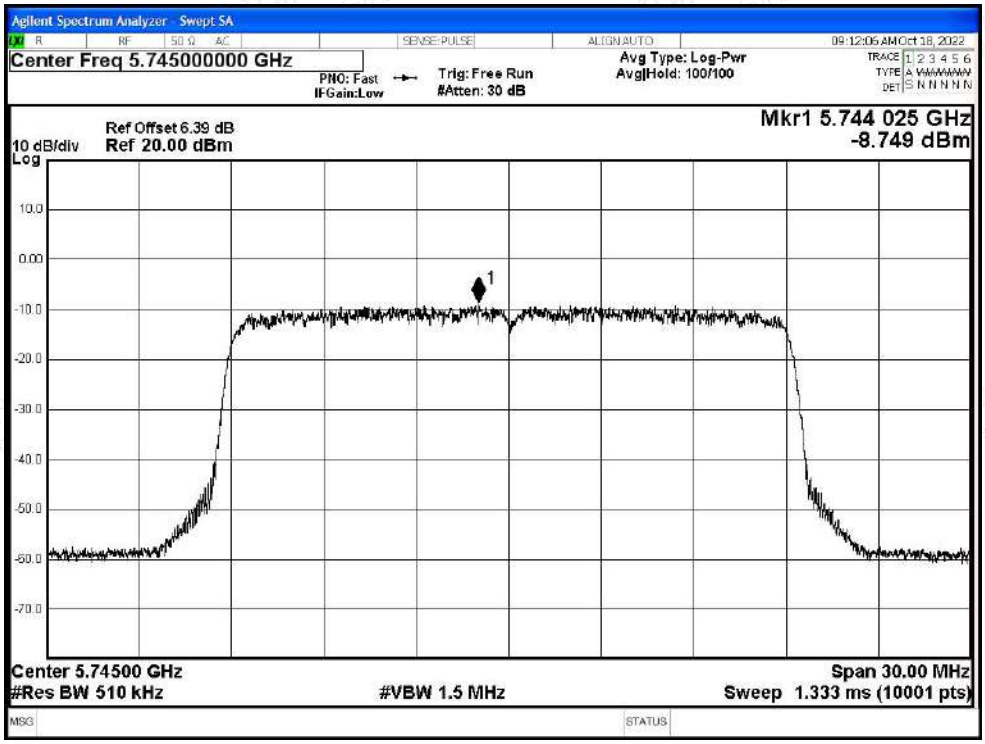
PSD NVNT n40 5755MHz Ant0



PSD NVNT n40 5795MHz Ant0



PSD NVNT ac20 5745MHz Ant0



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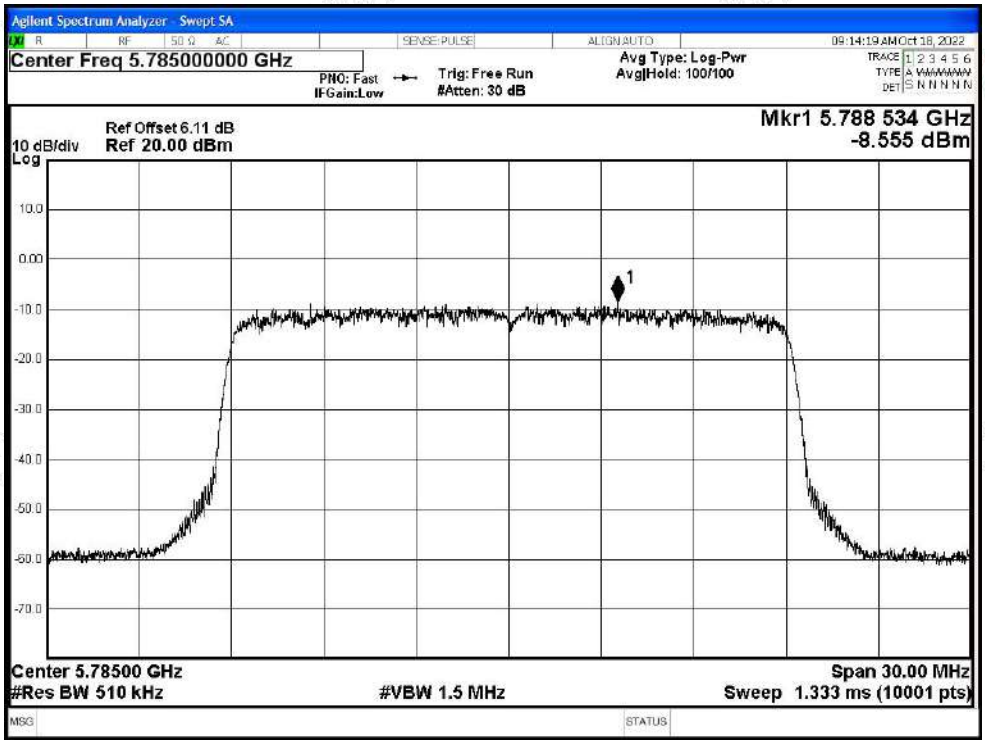

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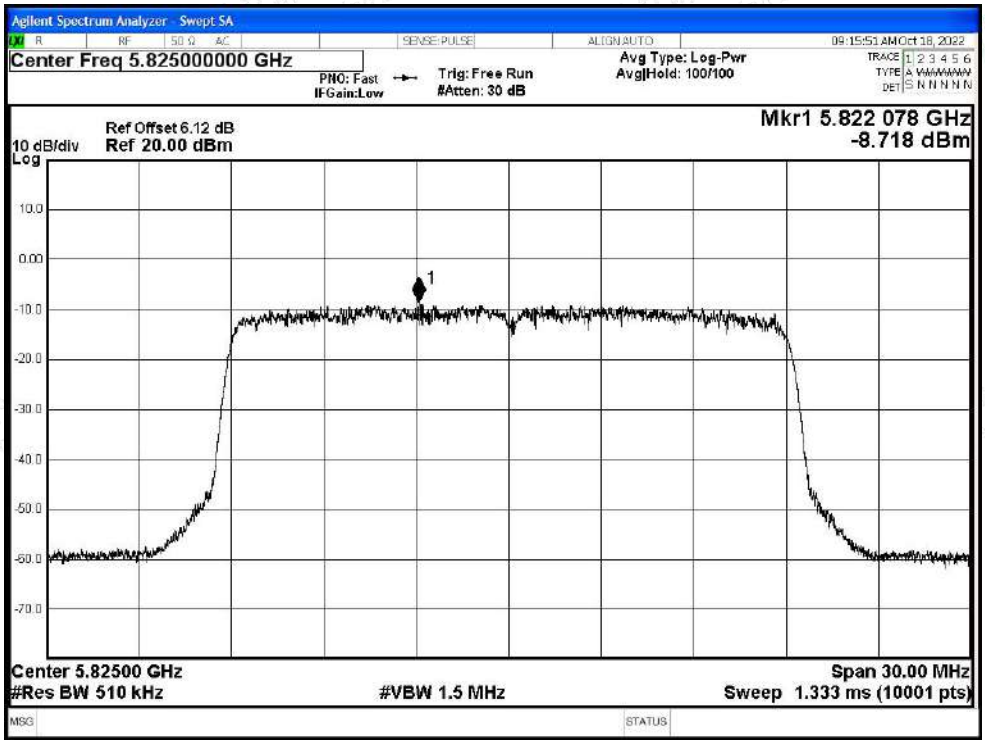

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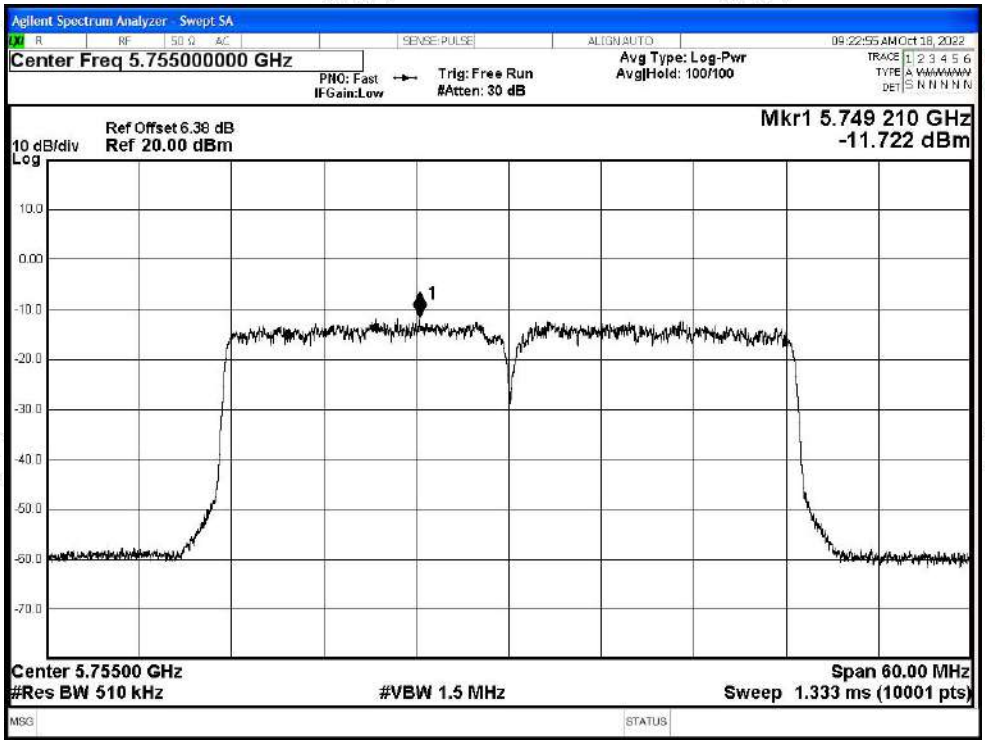
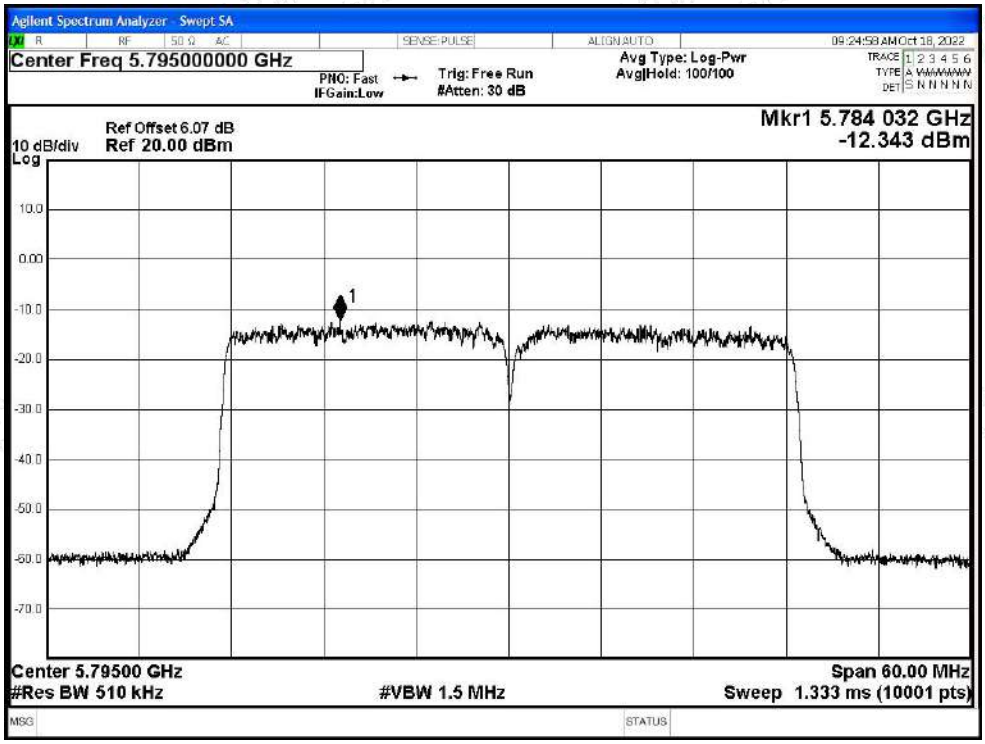


PSD NVNT ac40 5795MHz Ant0



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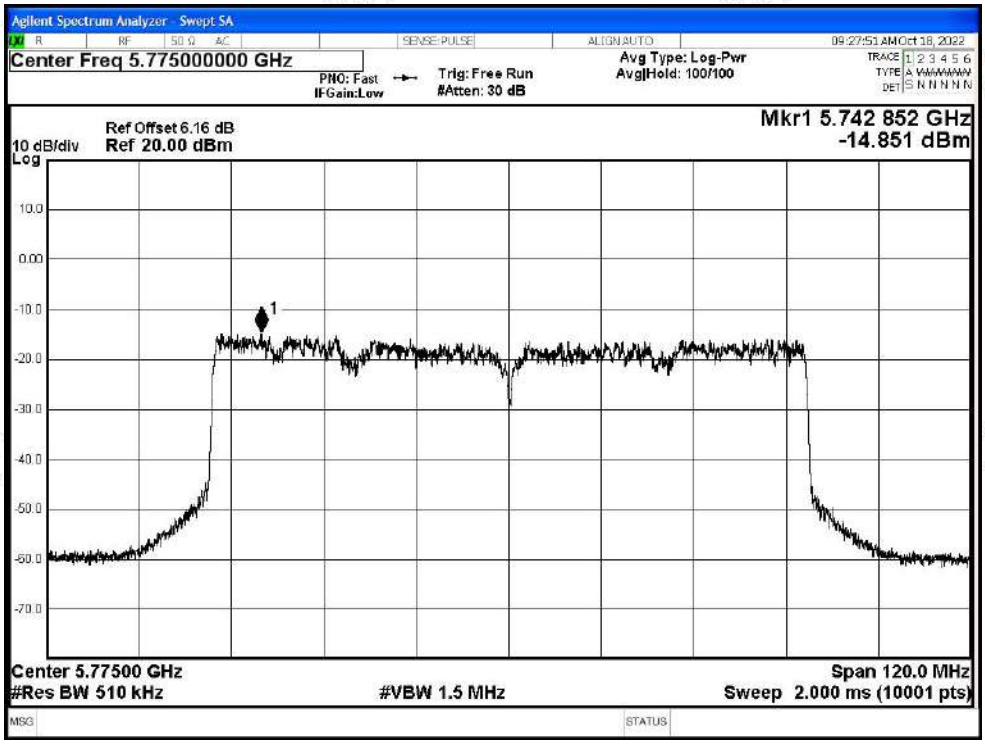
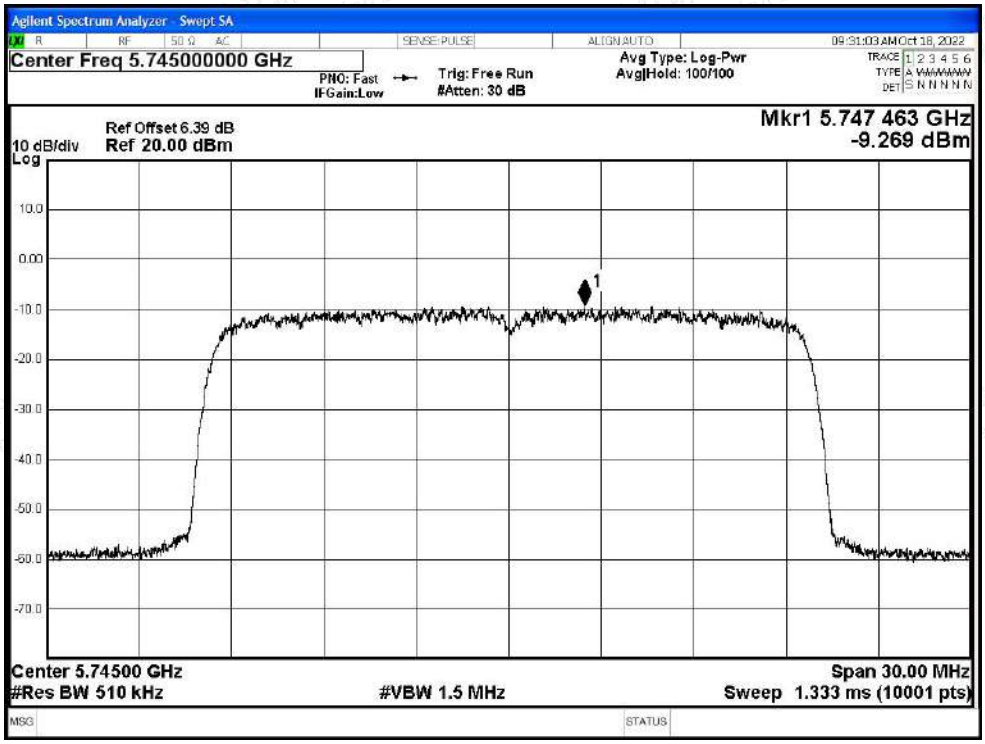
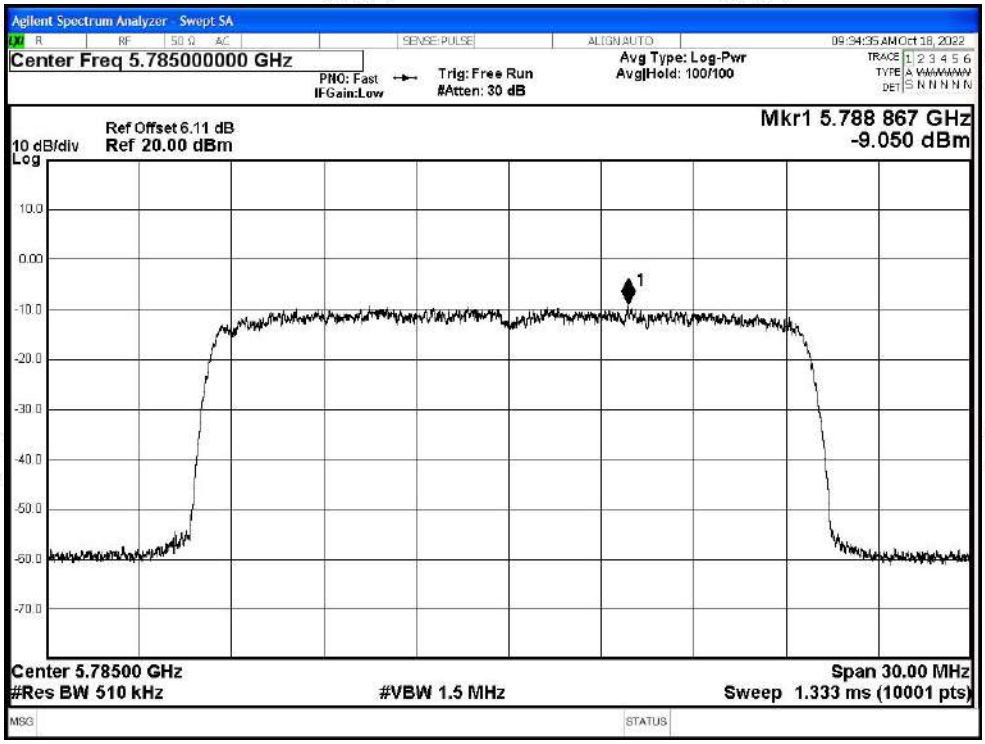


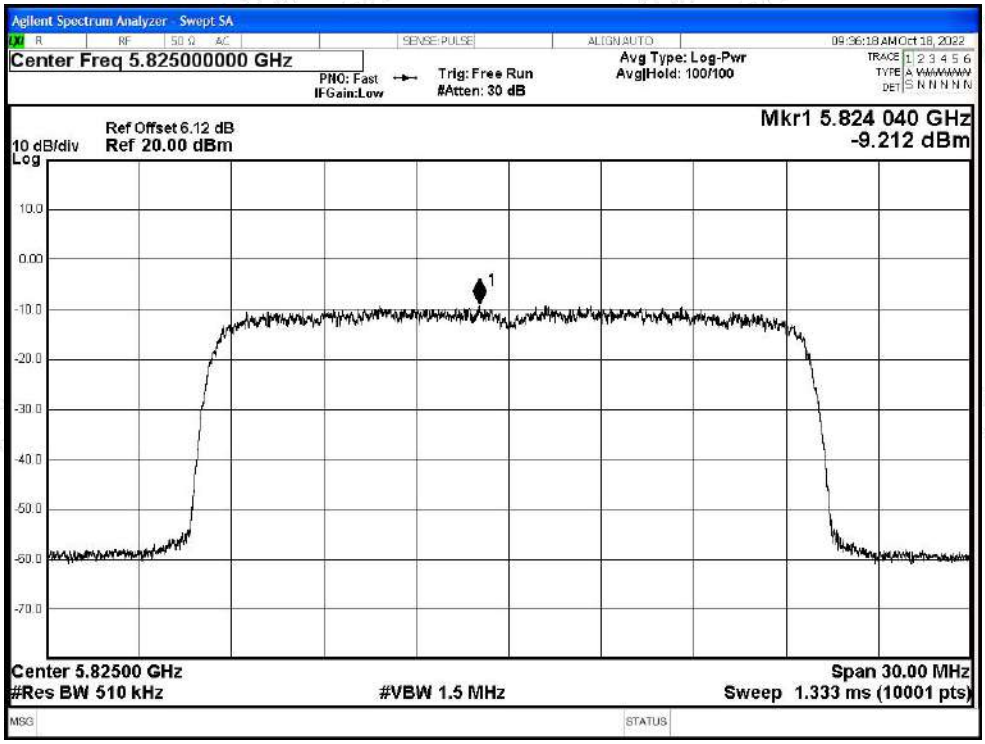
PSD NVNT ax20 5745MHz Ant0



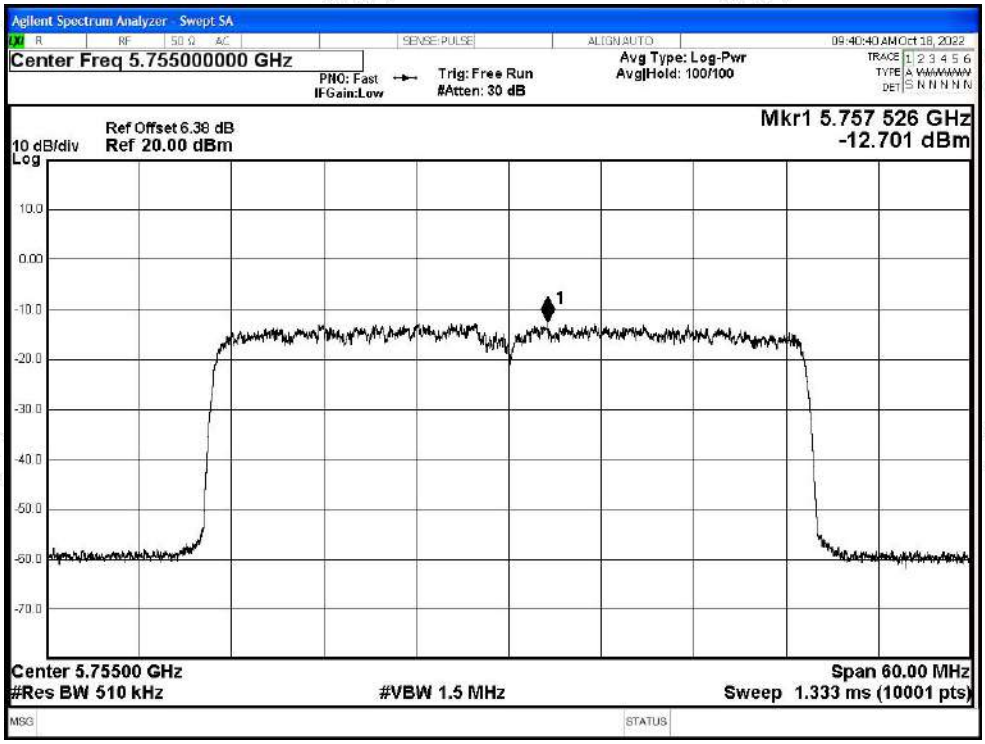
PSD NVNT ax20 5785MHz Ant0



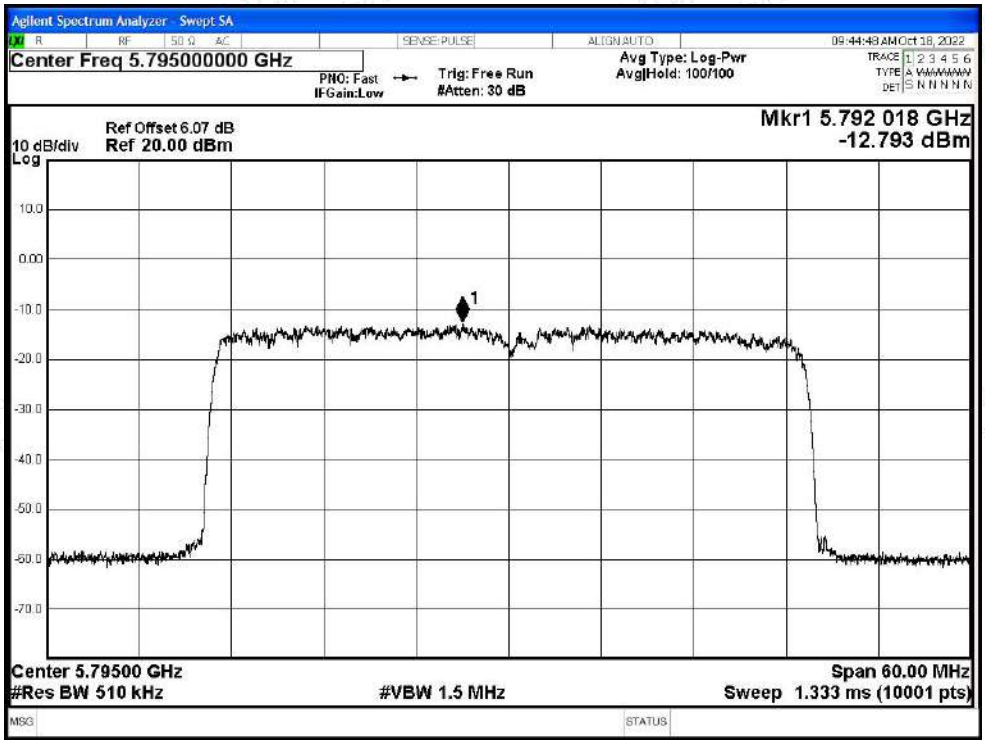
PSD NVNT ax20 5825MHz Ant0



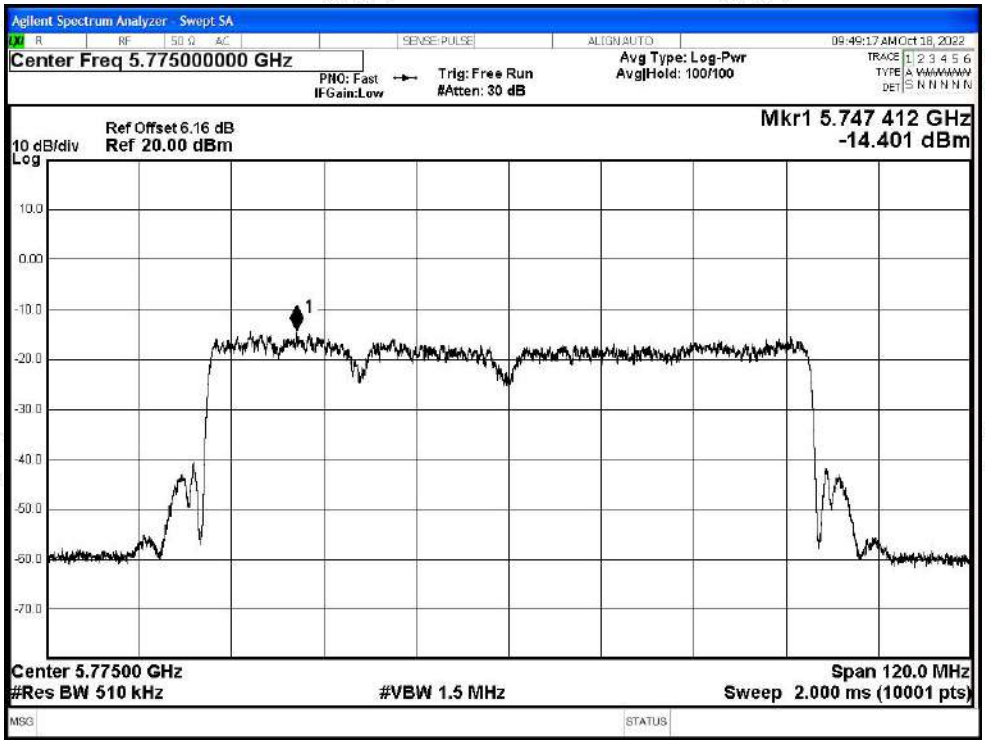
PSD NVNT ax40 5755MHz Ant0



PSD NVNT ax40 5795MHz Ant0

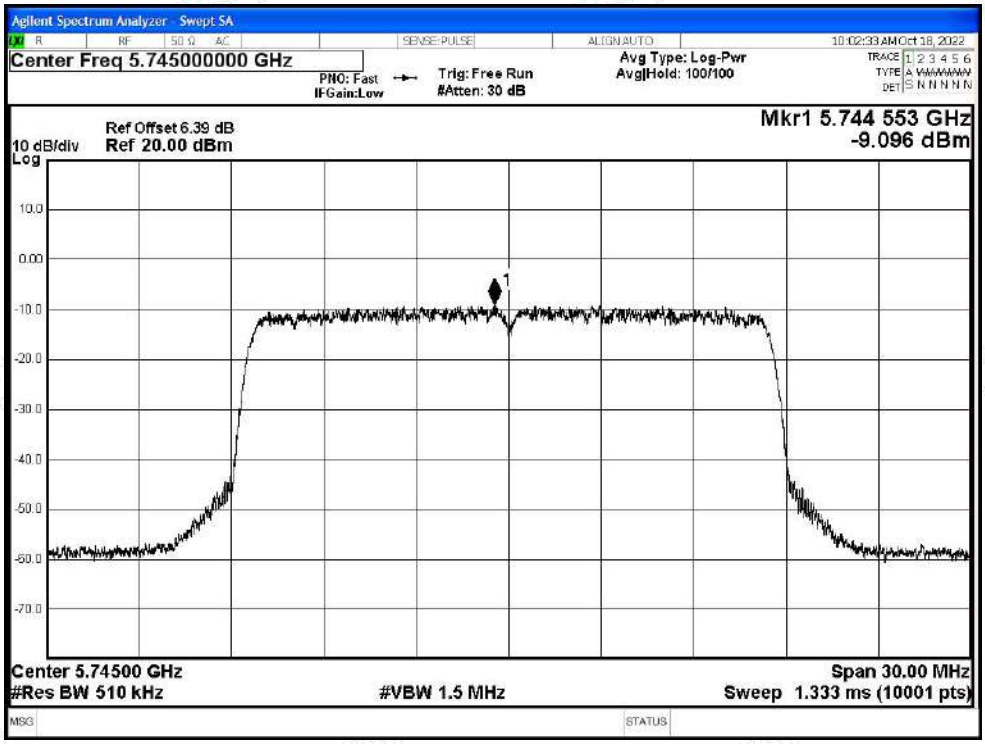


PSD NVNT ax80 5775MHz Ant0

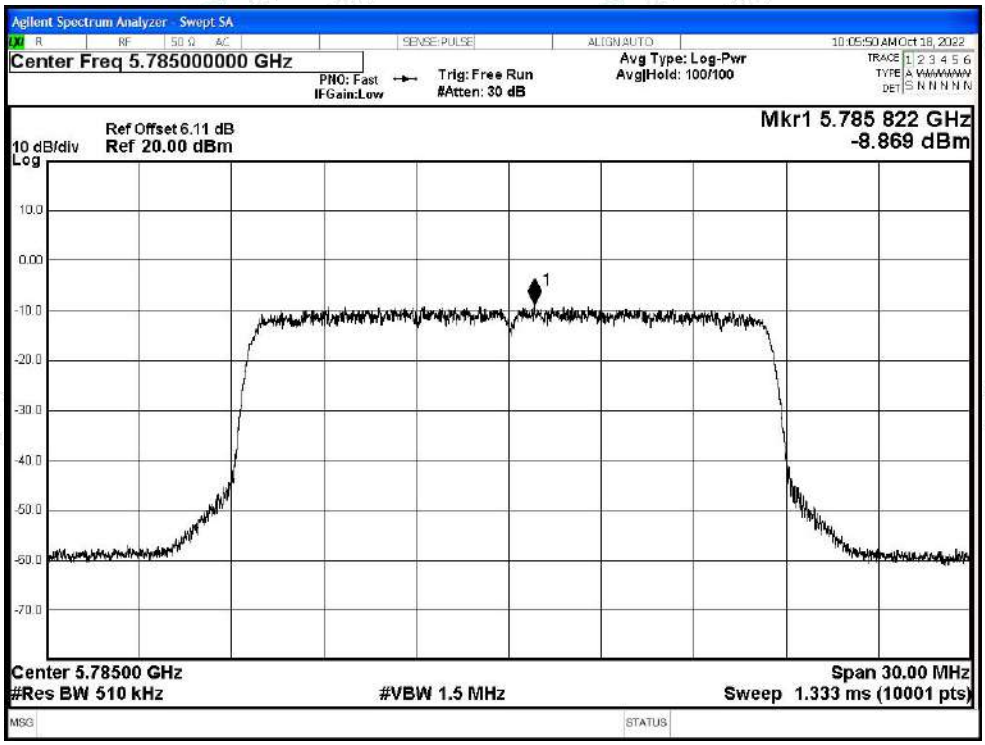


Test Graphs

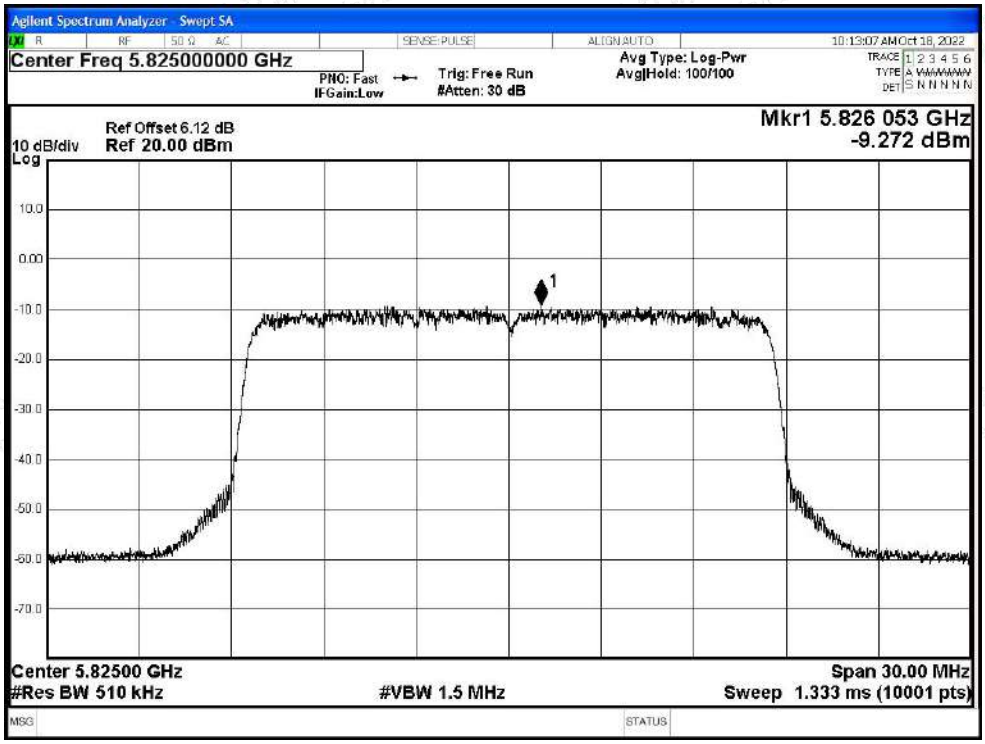
PSD NVNT a 5745MHz Ant1



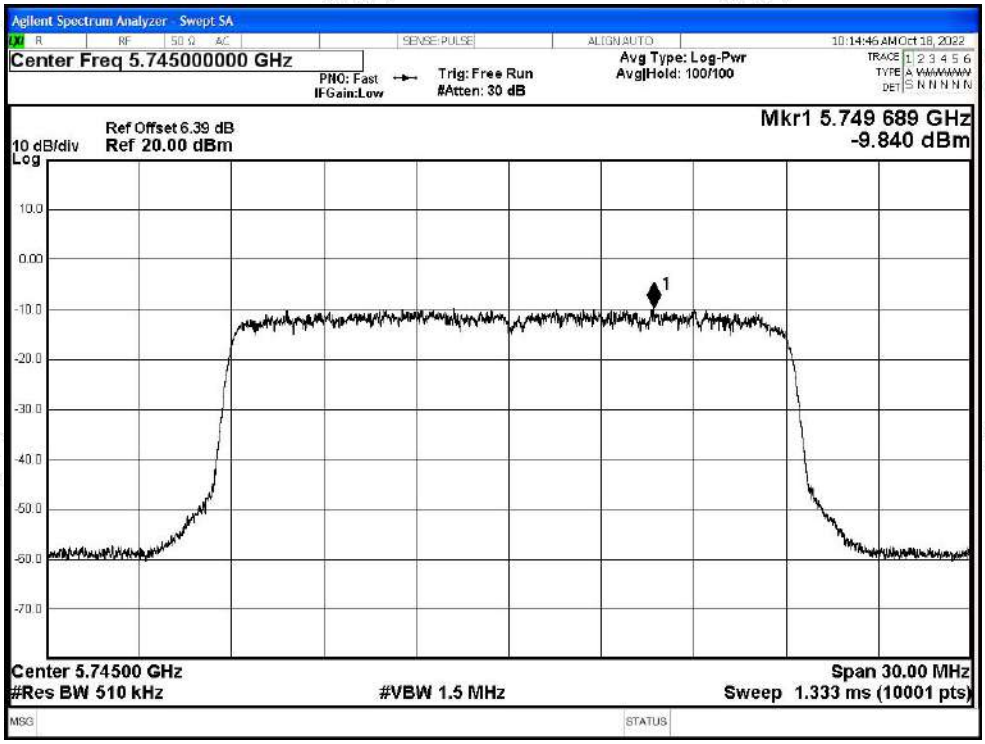
PSD NVNT a 5785MHz Ant1



PSD NVNT a 5825MHz Ant1



PSD NVNT n20 5745MHz Ant1



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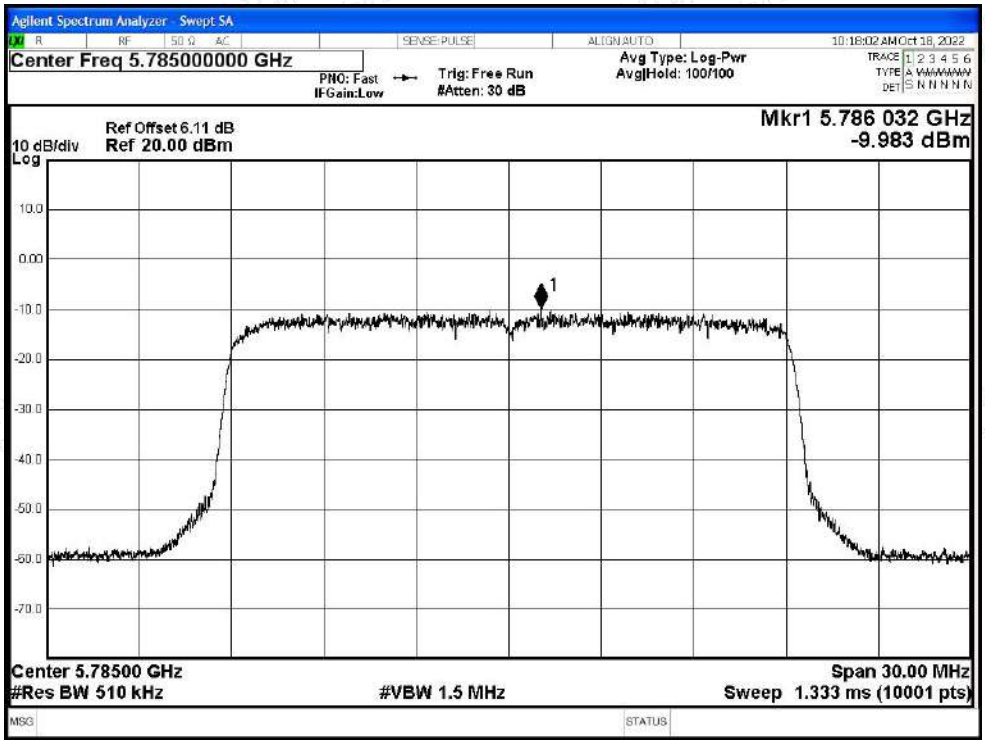
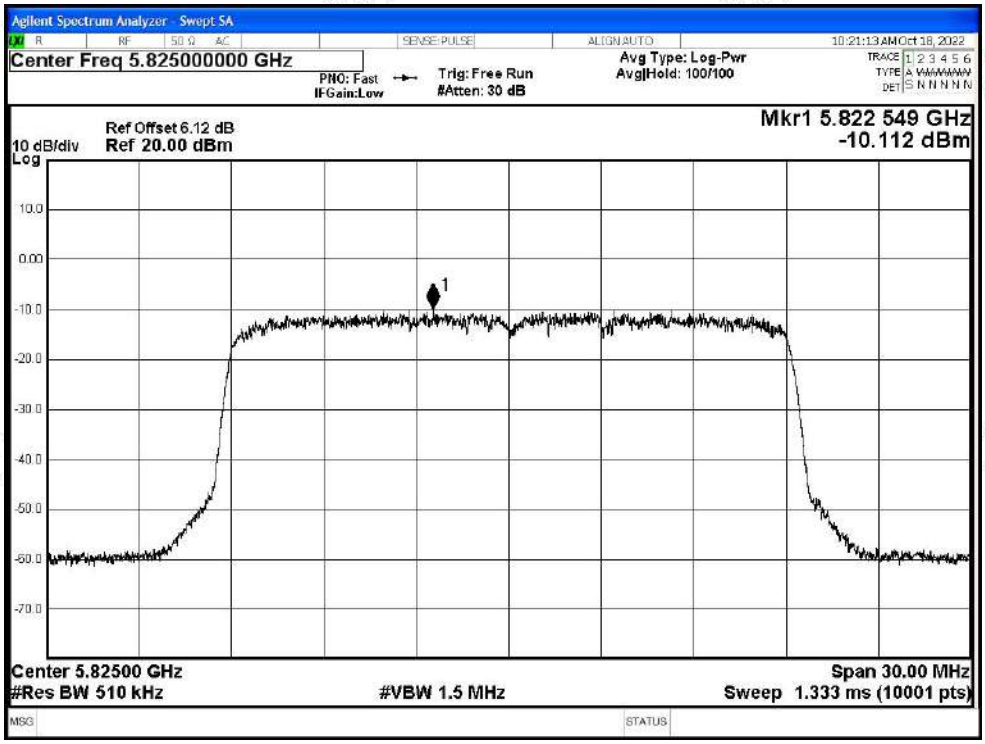
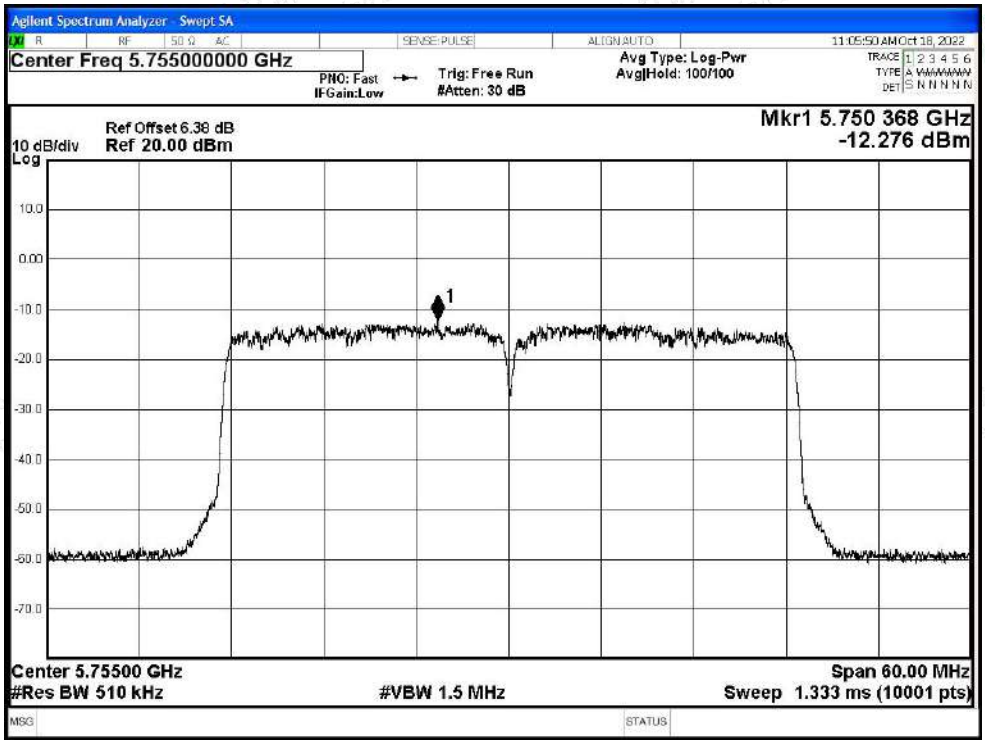


PSD NVNT n20 5825MHz Ant1



PSD NVNT n40 5755MHz Ant1



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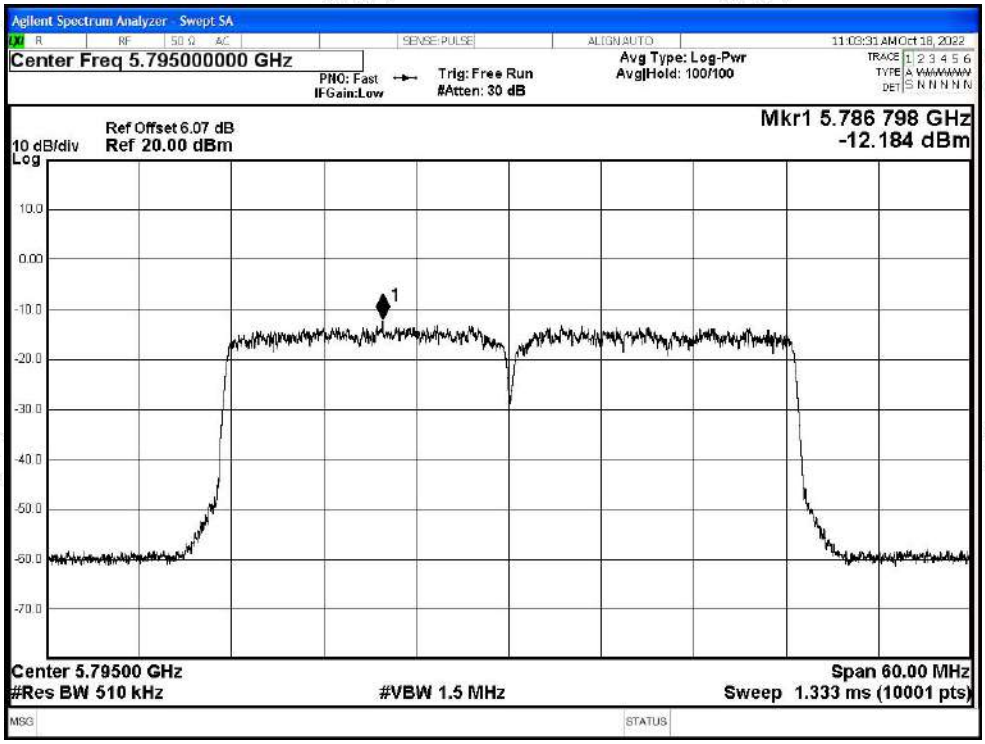
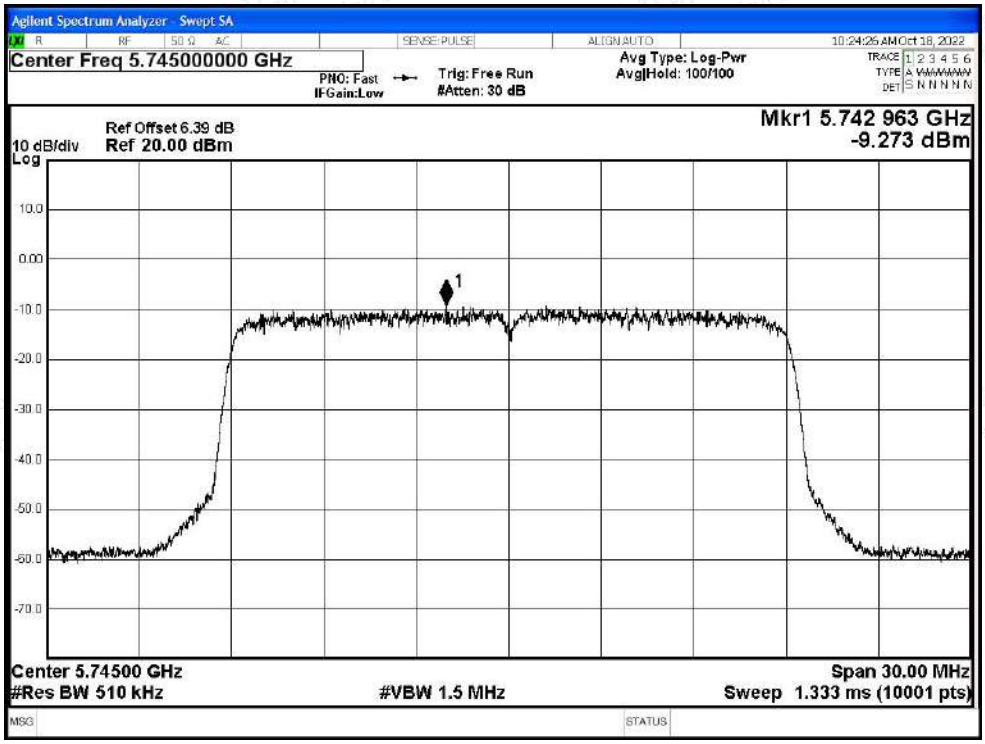
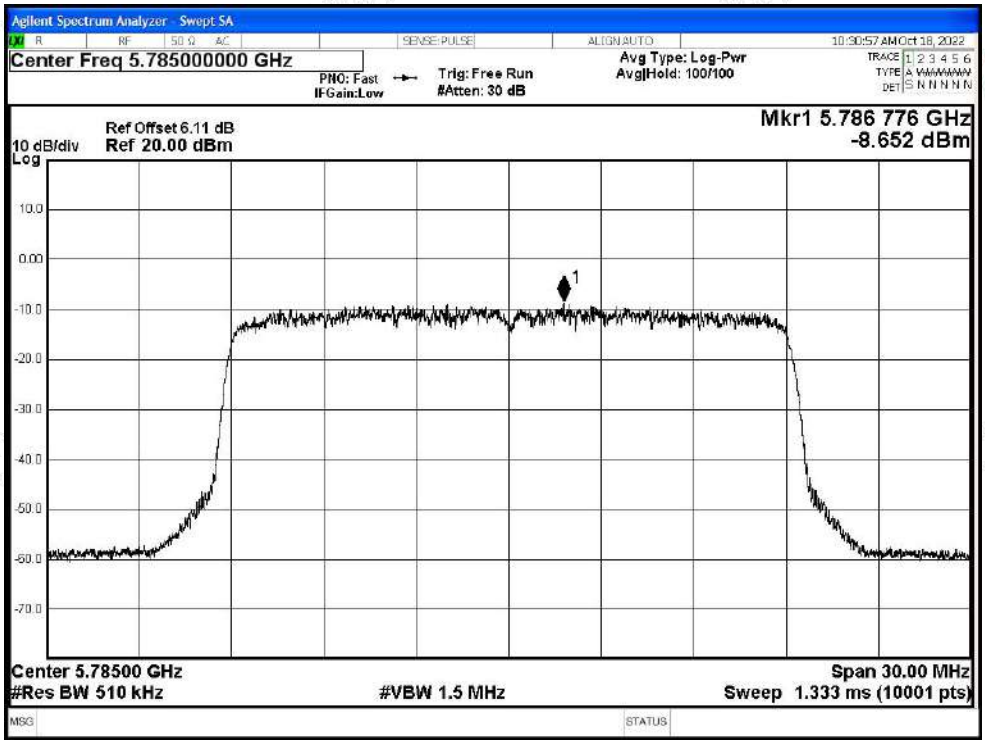


PSD NVNT ac20 5745MHz Ant1



PSD NVNT ac20 5785MHz Ant1



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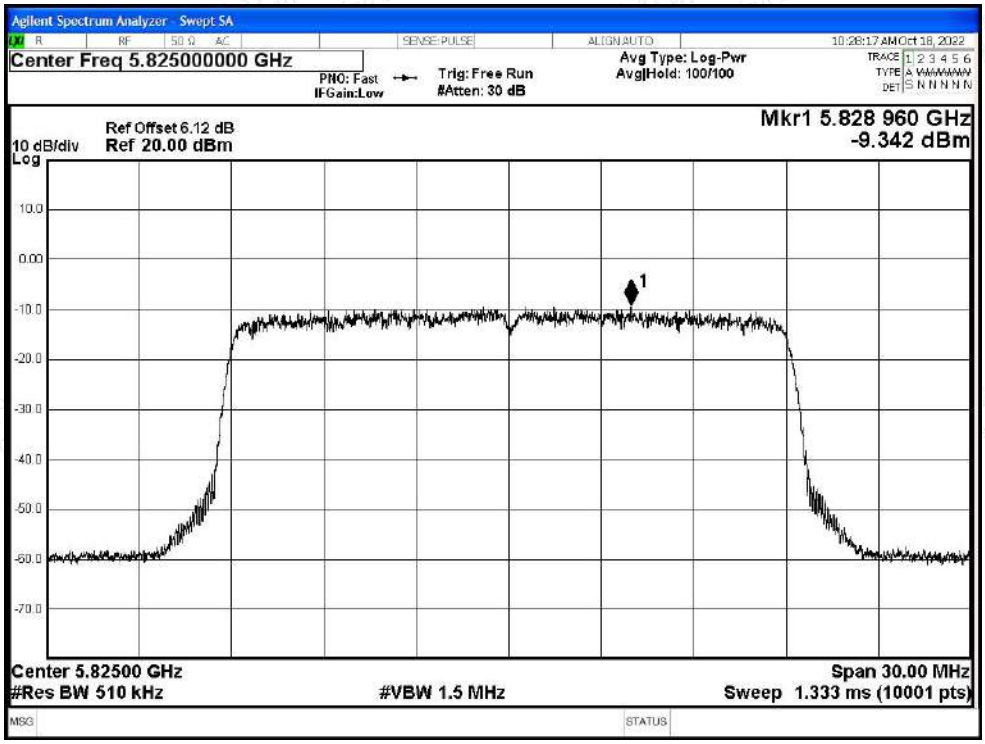
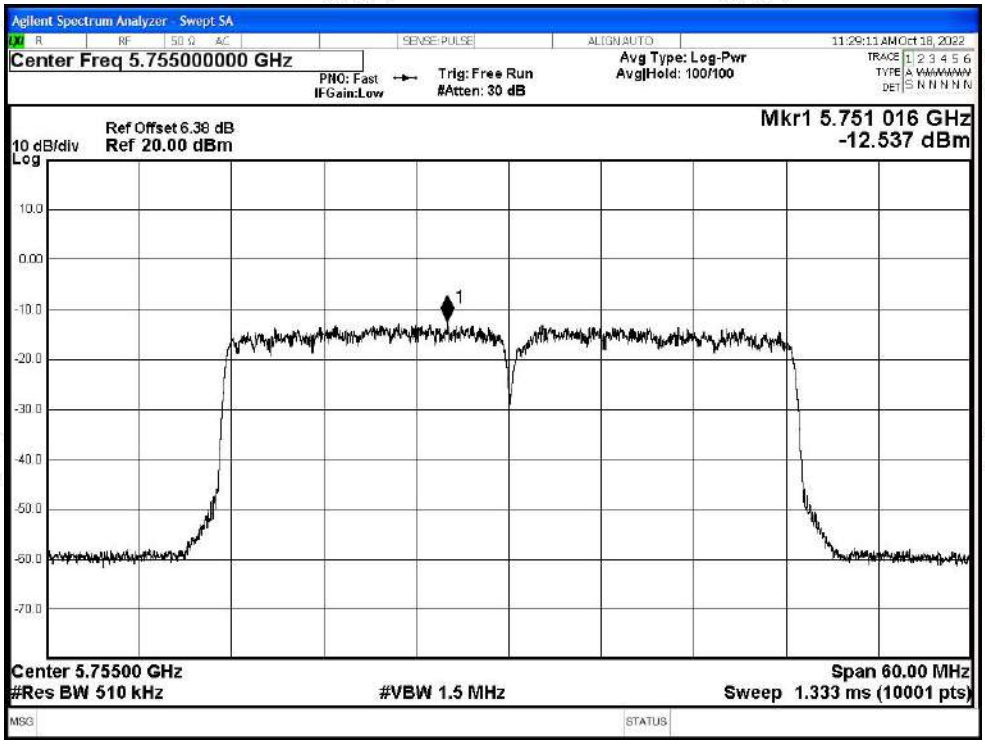
PSD NVNT ac40 5755MHz Ant1