

Appendix B for 5.8GWIFI Test Data

Product Name: Car Navigation Multimedia

Test Model: P507SD

Environmental Conditions

Temperature:	23.8℃
Relative Humidity:	52%
ATM Pressure:	101.0 kPa
Test Engineer:	Leon Li
Supervised by:	Baret Wu

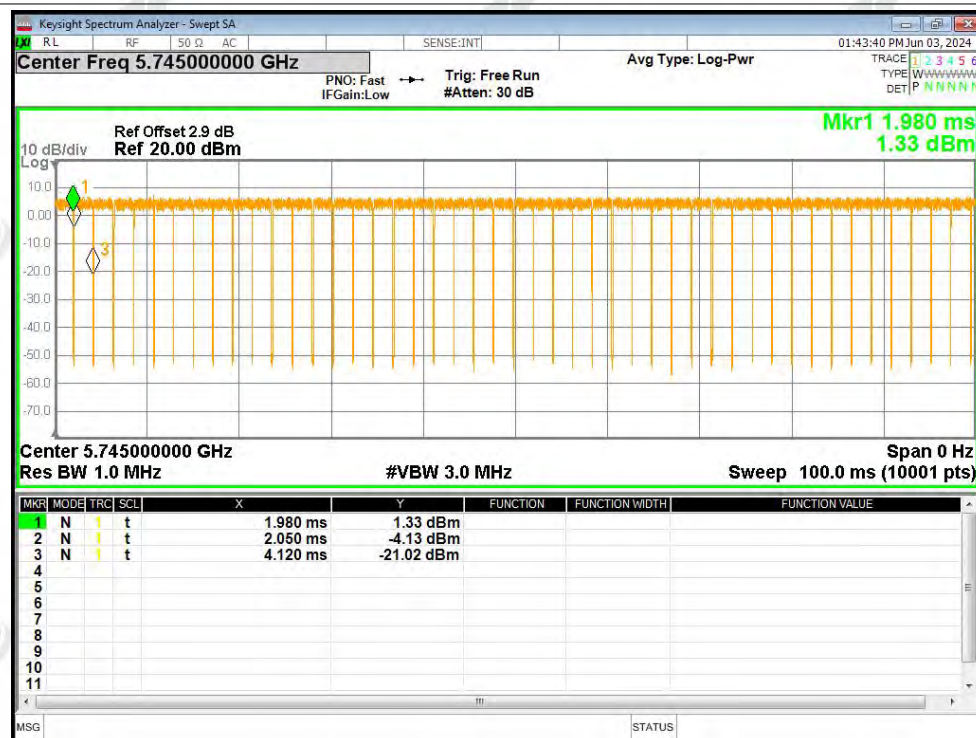
**B1. Duty Cycle**

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5745	Ant1	96.73	0.14	0.48
NVNT	a	5785	Ant1	97.18	0.12	0.48
NVNT	a	5825	Ant1	95.39	0.2	0.48
NVNT	n20	5745	Ant1	96.97	0.13	0.52
NVNT	n20	5785	Ant1	96.48	0.16	0.52
NVNT	n20	5825	Ant1	94.58	0.24	0.52
NVNT	n40	5755	Ant1	84.68	0.72	1.06
NVNT	n40	5795	Ant1	88.68	0.52	1.06
NVNT	ac20	5745	Ant1	96.02	0.18	0.52
NVNT	ac20	5785	Ant1	96.98	0.13	0.52
NVNT	ac20	5825	Ant1	92.34	0.35	0.52
NVNT	ac40	5755	Ant1	85.71	0.67	1.04
NVNT	ac40	5795	Ant1	85.59	0.68	1.05
NVNT	ac80	5775	Ant1	90.2	0.45	2.17

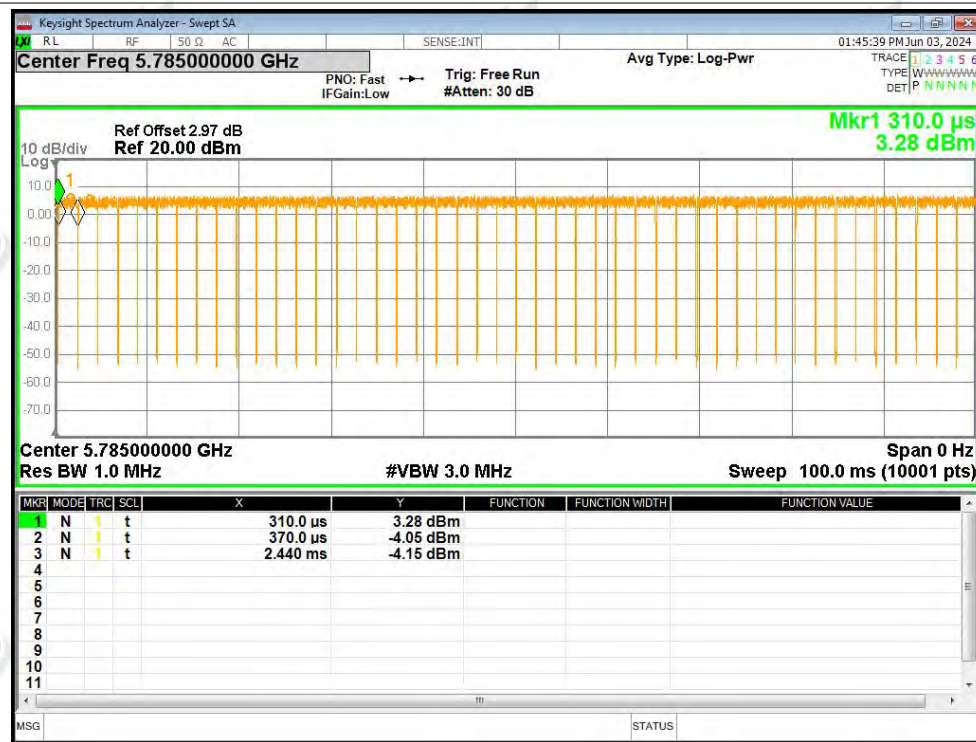


Test Graphs

Duty Cycle NVNT a 5745MHz Ant1

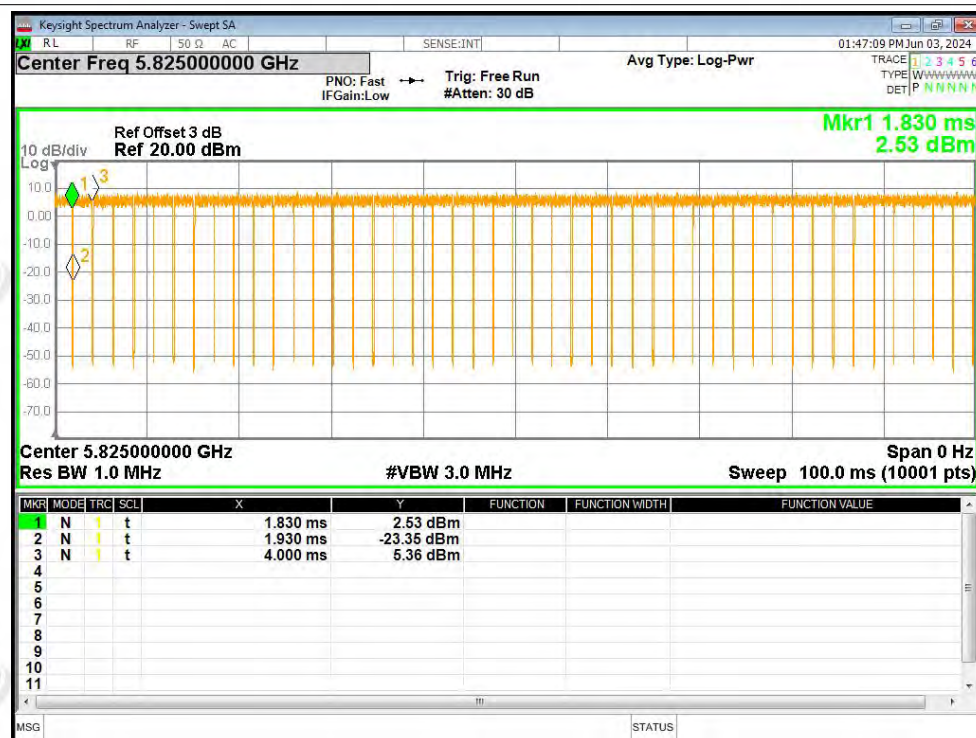


Duty Cycle NVNT a 5785MHz Ant1

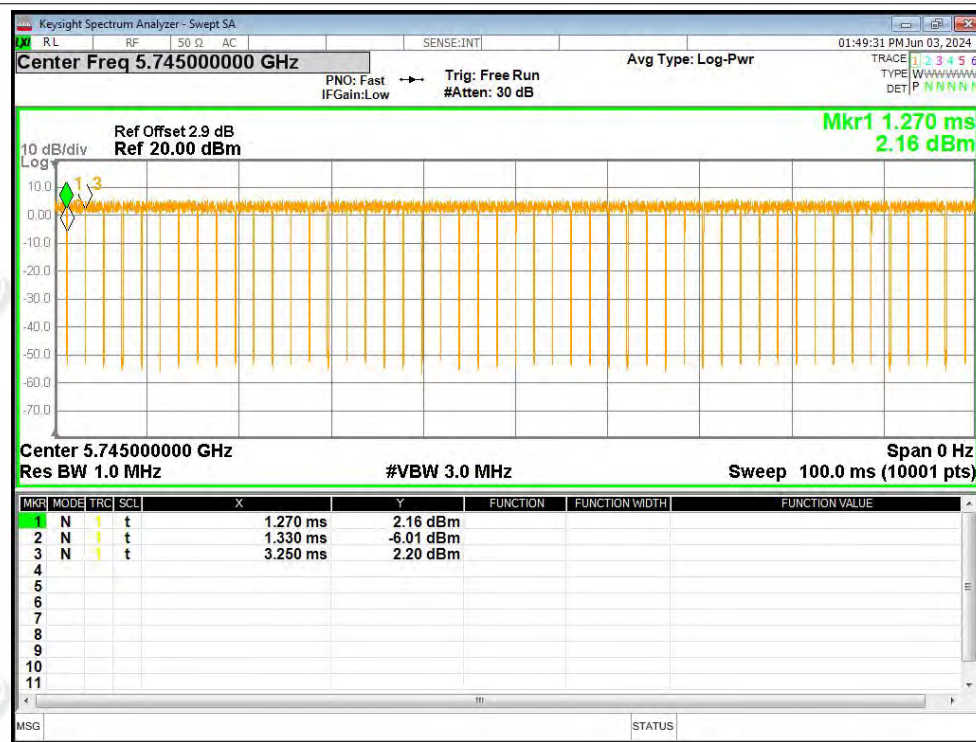




Duty Cycle NVNT a 5825MHz Ant1

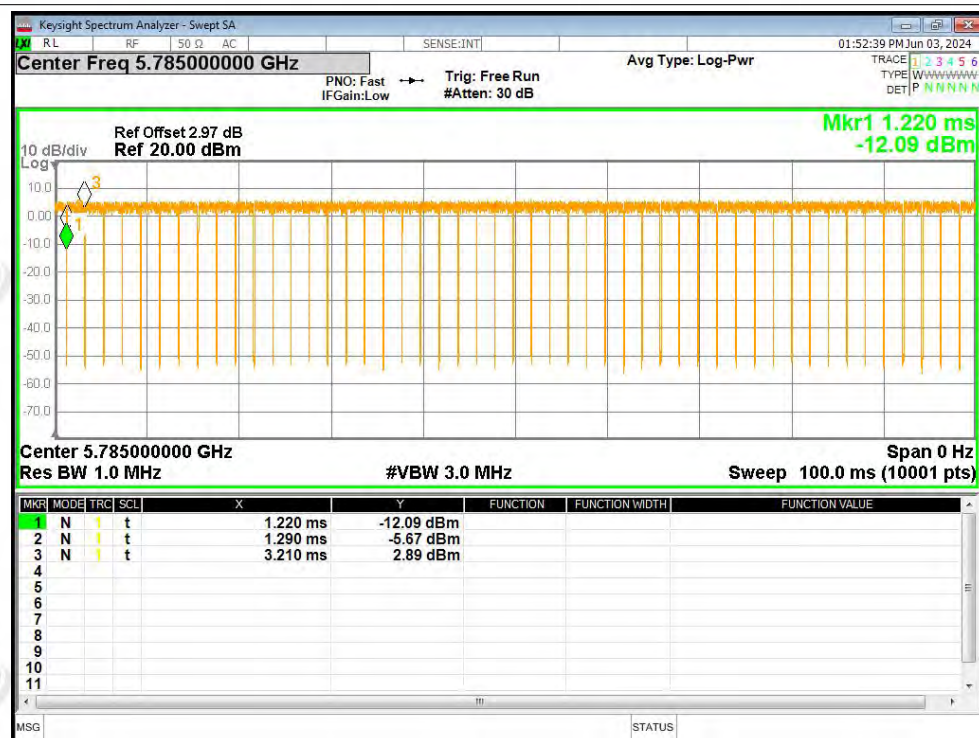


Duty Cycle NVNT n20 5745MHz Ant1

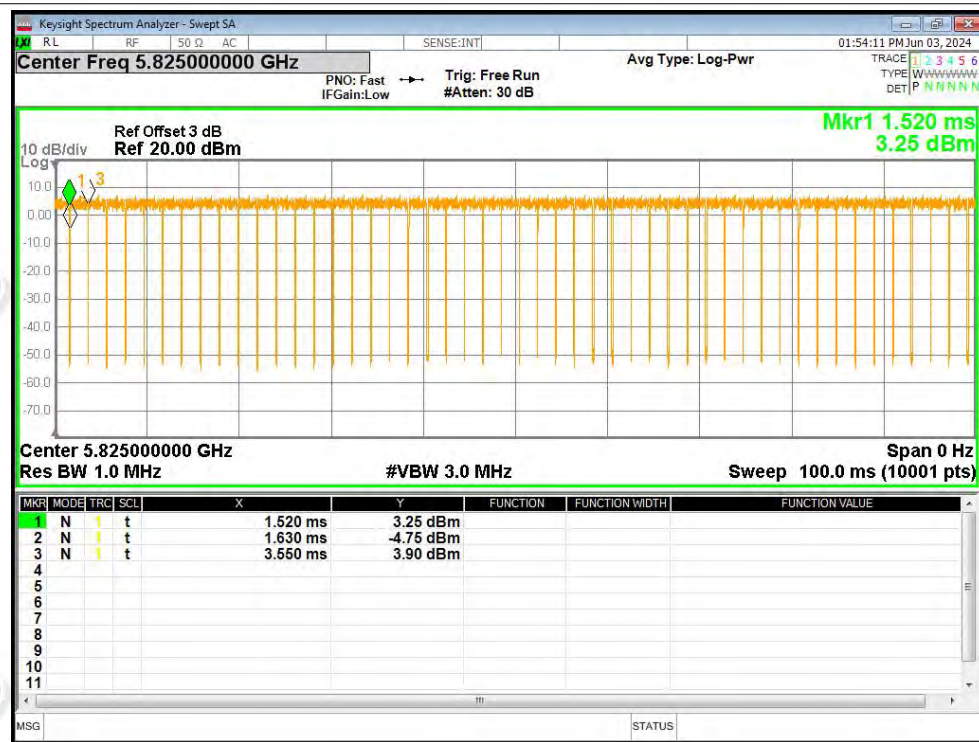




Duty Cycle NVNT n20 5785MHz Ant1

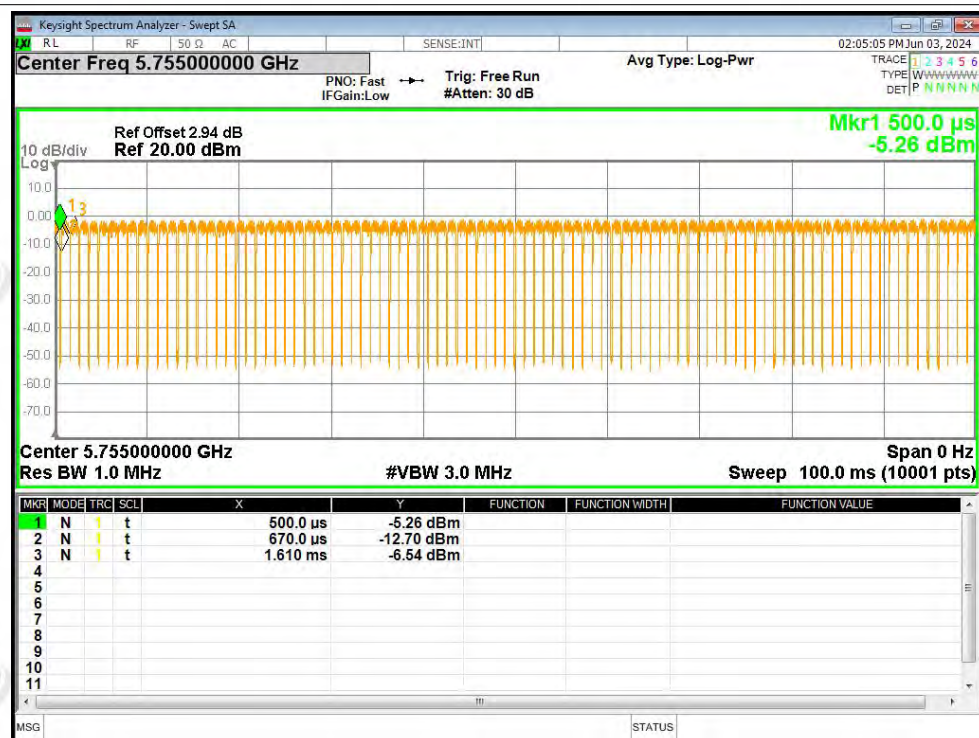


Duty Cycle NVNT n20 5825MHz Ant1

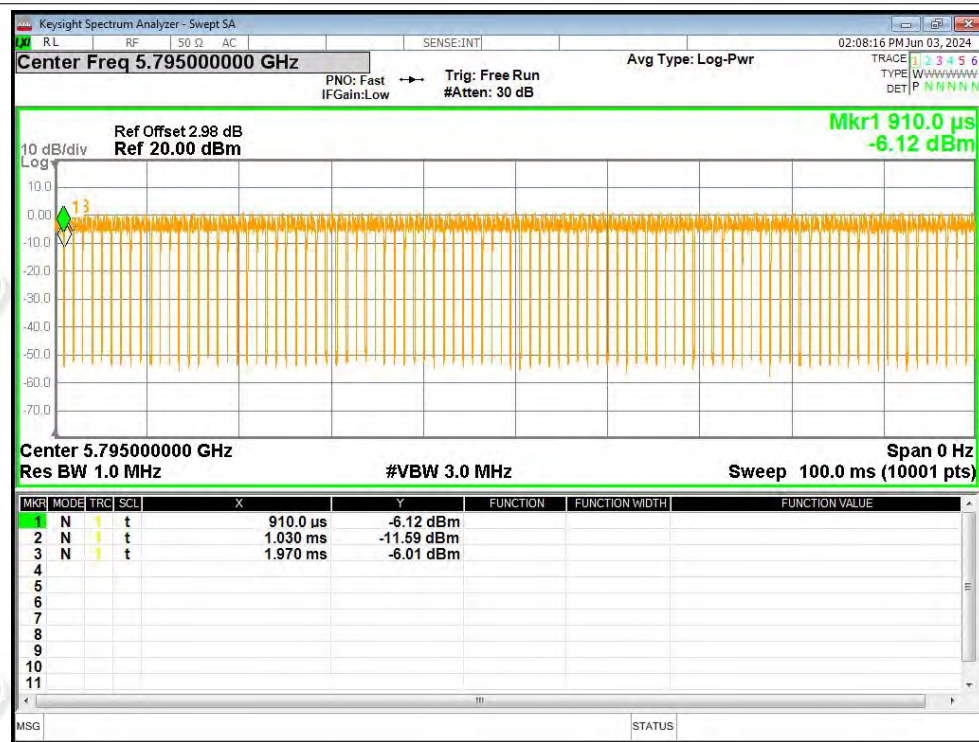




Duty Cycle NVNT n40 5755MHz Ant1

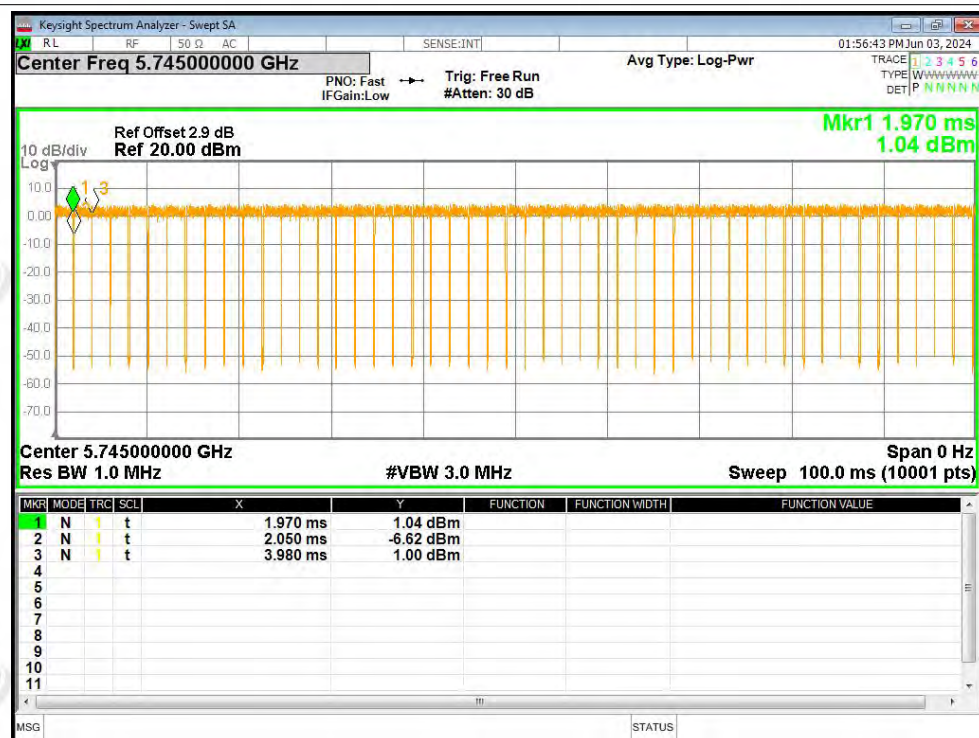


Duty Cycle NVNT n40 5795MHz Ant1

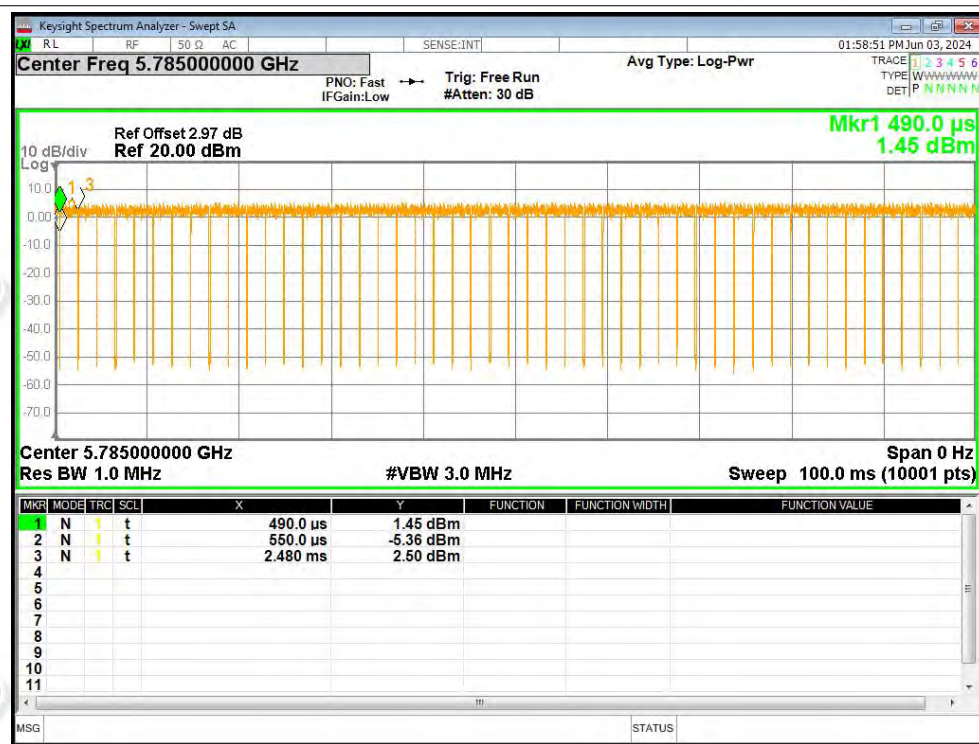




Duty Cycle NVNT ac20 5745MHz Ant1

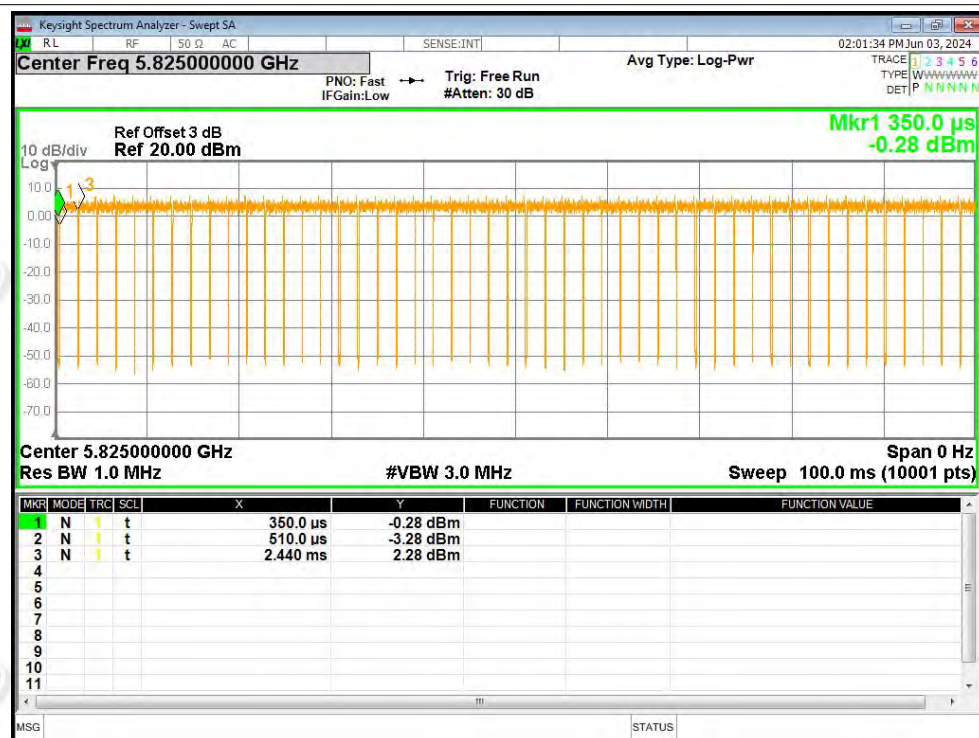


Duty Cycle NVNT ac20 5785MHz Ant1

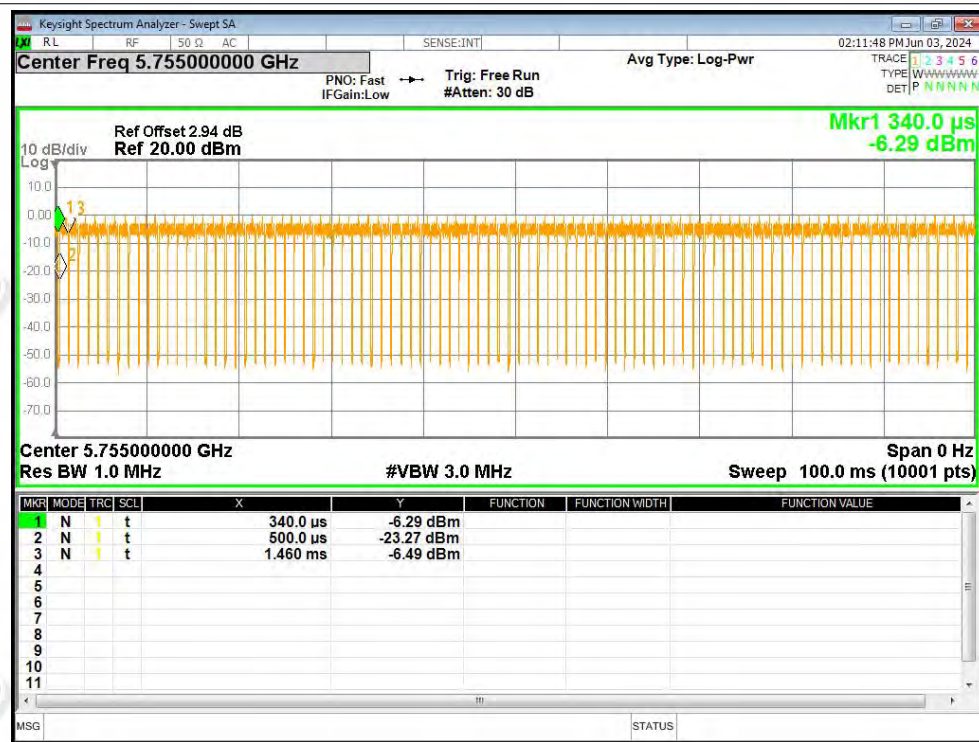




Duty Cycle NVNT ac20 5825MHz Ant1

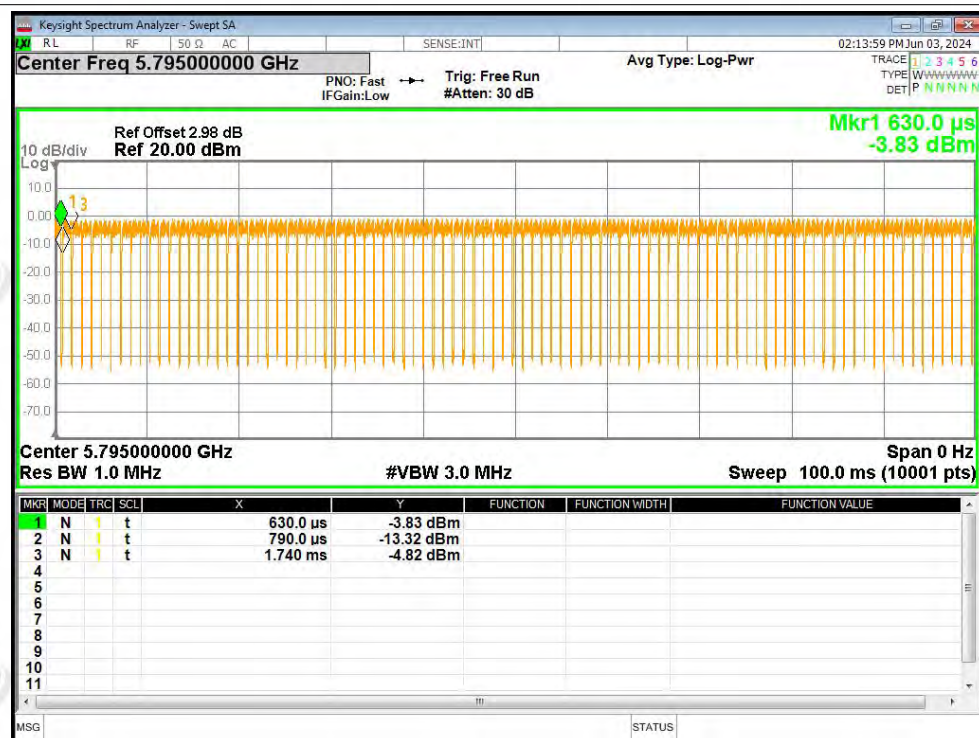


Duty Cycle NVNT ac40 5755MHz Ant1

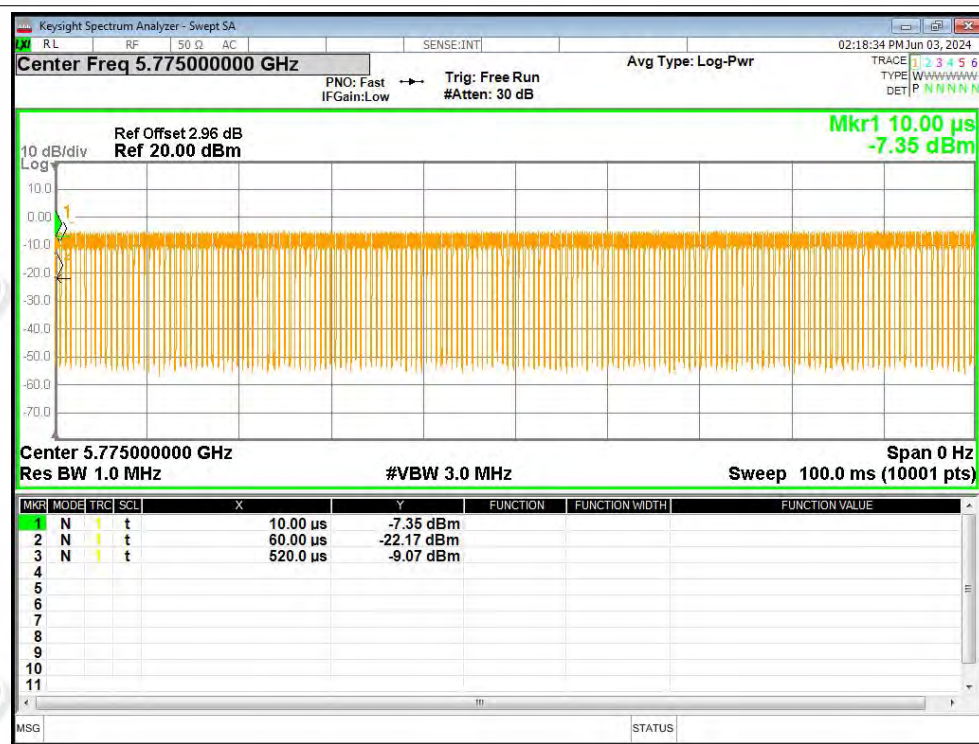




Duty Cycle NVNT ac40 5795MHz Ant1



Duty Cycle NVNT ac80 5775MHz Ant1



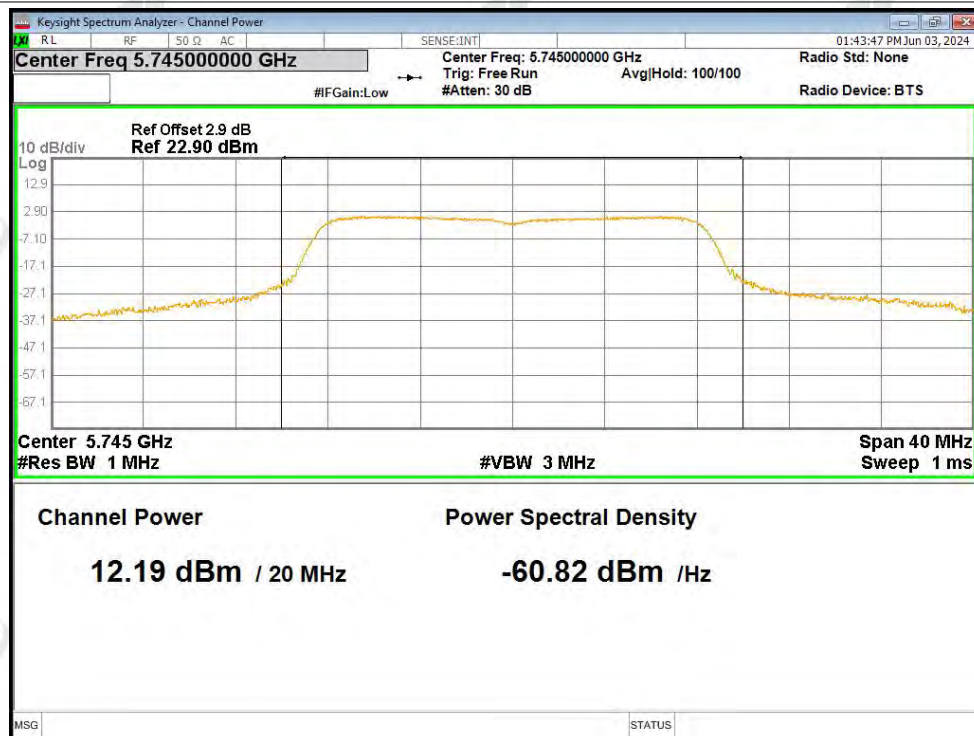
**ZHONGHAN****B2. Maximum Conducted Output Power**

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	12.19	0.14	12.33	30	Pass
NVNT	a	5785	Ant1	12.5	0.12	12.62	30	Pass
NVNT	a	5825	Ant1	13.26	0.2	13.46	30	Pass
NVNT	n20	5745	Ant1	11.1	0.13	11.23	30	Pass
NVNT	n20	5785	Ant1	11.34	0.16	11.5	30	Pass
NVNT	n20	5825	Ant1	12.1	0.24	12.34	30	Pass
NVNT	n40	5755	Ant1	9.62	0.72	10.34	30	Pass
NVNT	n40	5795	Ant1	10.12	0.52	10.64	30	Pass
NVNT	ac20	5745	Ant1	9.97	0.18	10.15	30	Pass
NVNT	ac20	5785	Ant1	10.5	0.13	10.63	30	Pass
NVNT	ac20	5825	Ant1	11.45	0.35	11.8	30	Pass
NVNT	ac40	5755	Ant1	8.43	0.67	9.1	30	Pass
NVNT	ac40	5795	Ant1	8.8	0.68	9.48	30	Pass
NVNT	ac80	5775	Ant1	7.59	0.45	8.04	30	Pass

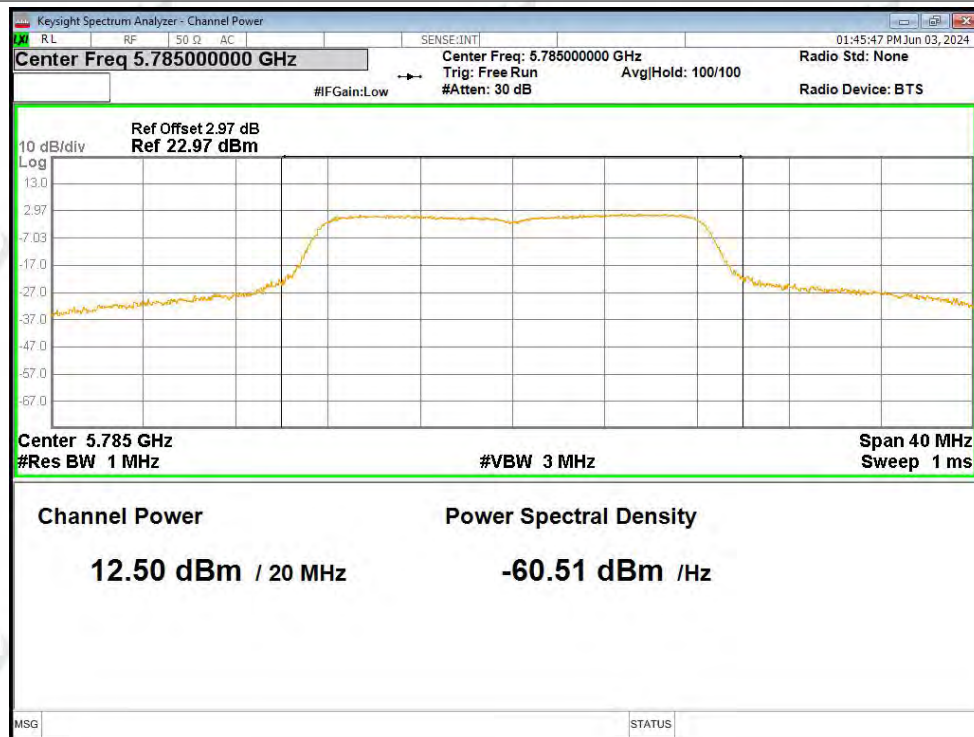


Test Graphs

Power NVNT a 5745MHz Ant1

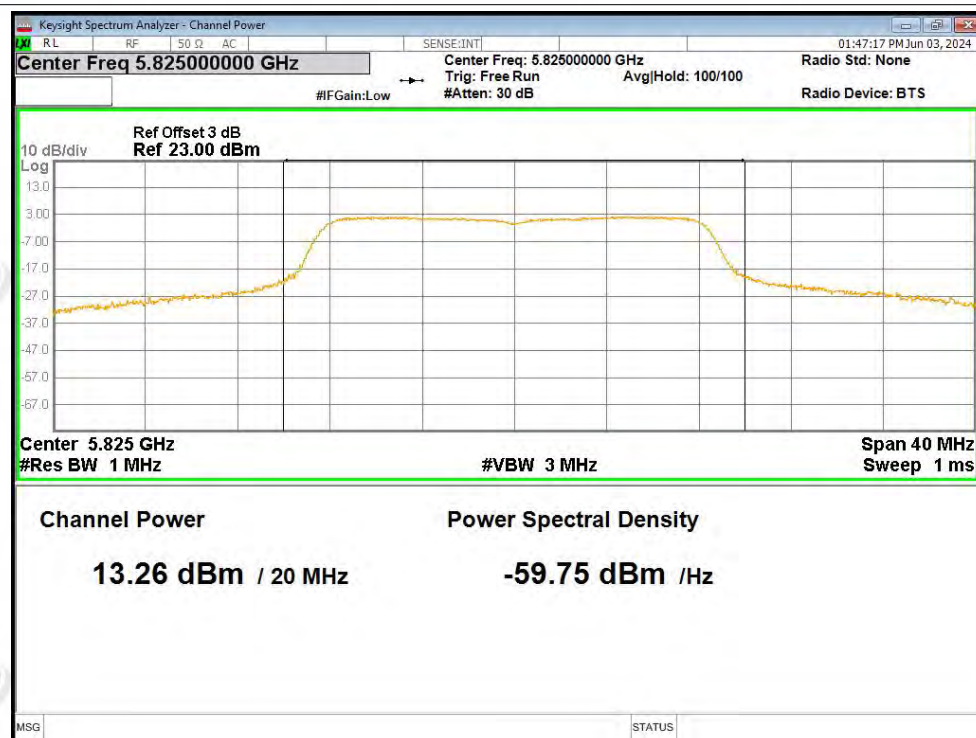


Power NVNT a 5785MHz Ant1

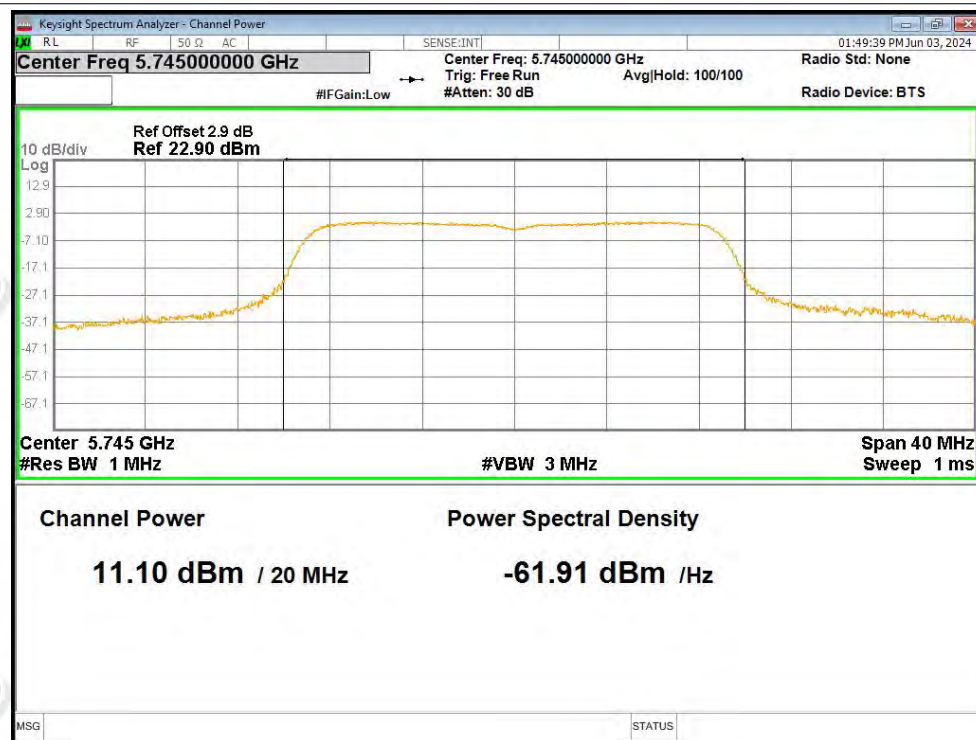




Power NVNT a 5825MHz Ant1

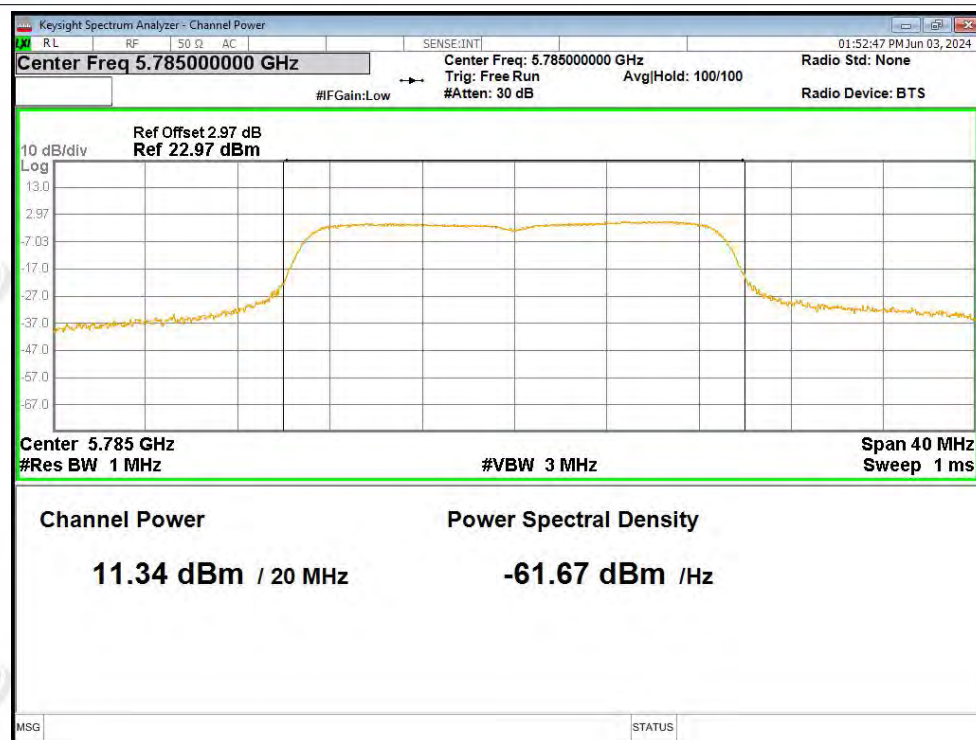


Power NVNT n20 5745MHz Ant1

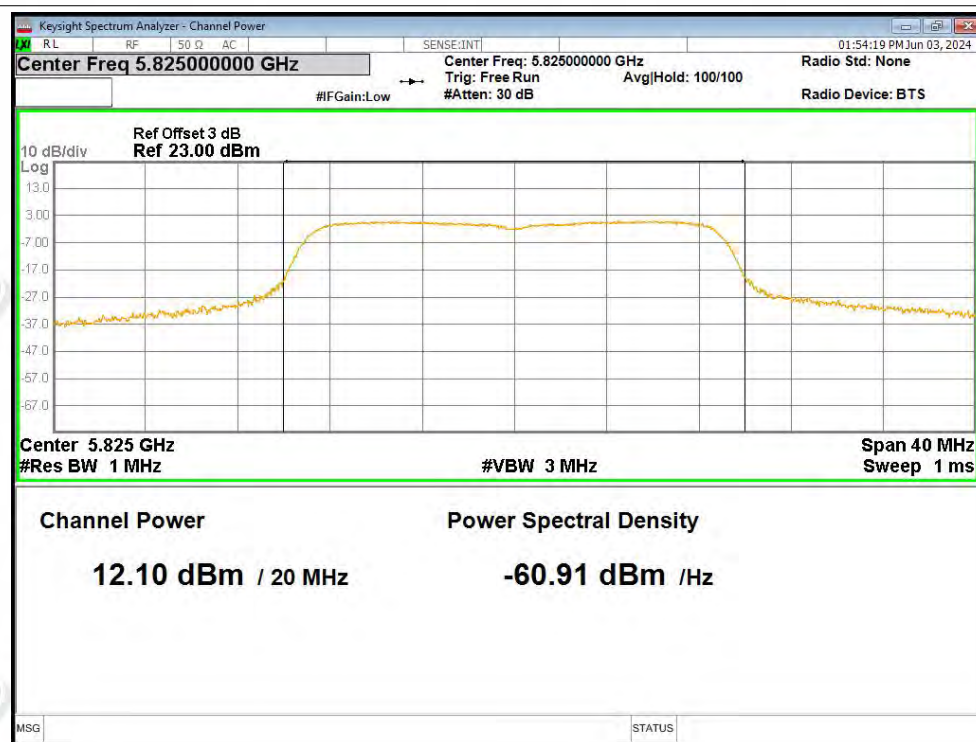




Power NVNT n20 5785MHz Ant1

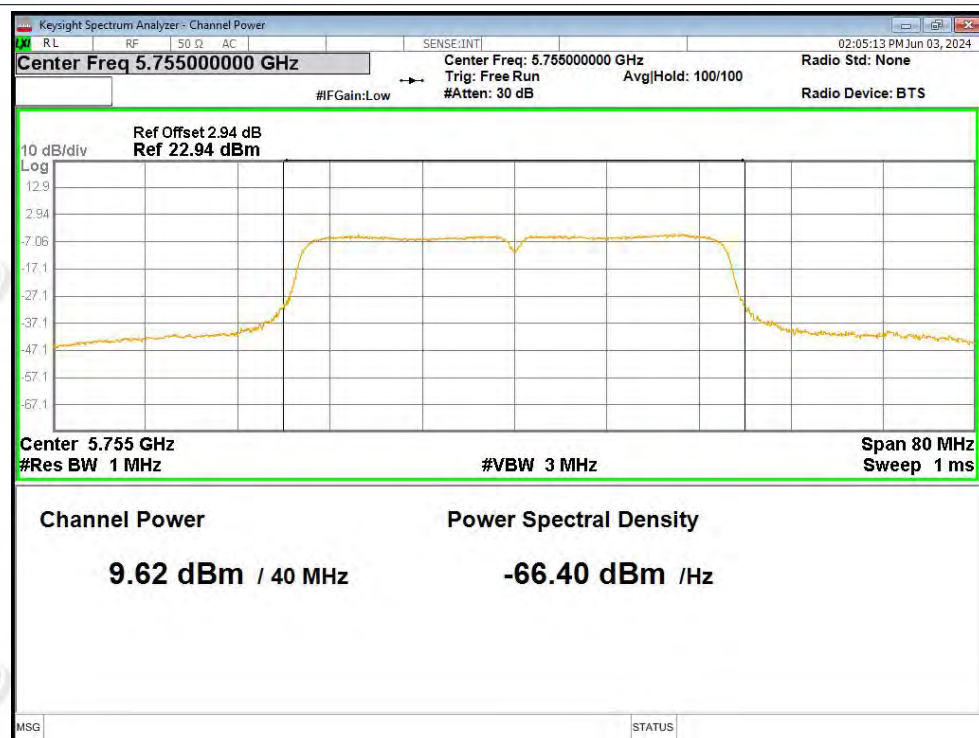


Power NVNT n20 5825MHz Ant1

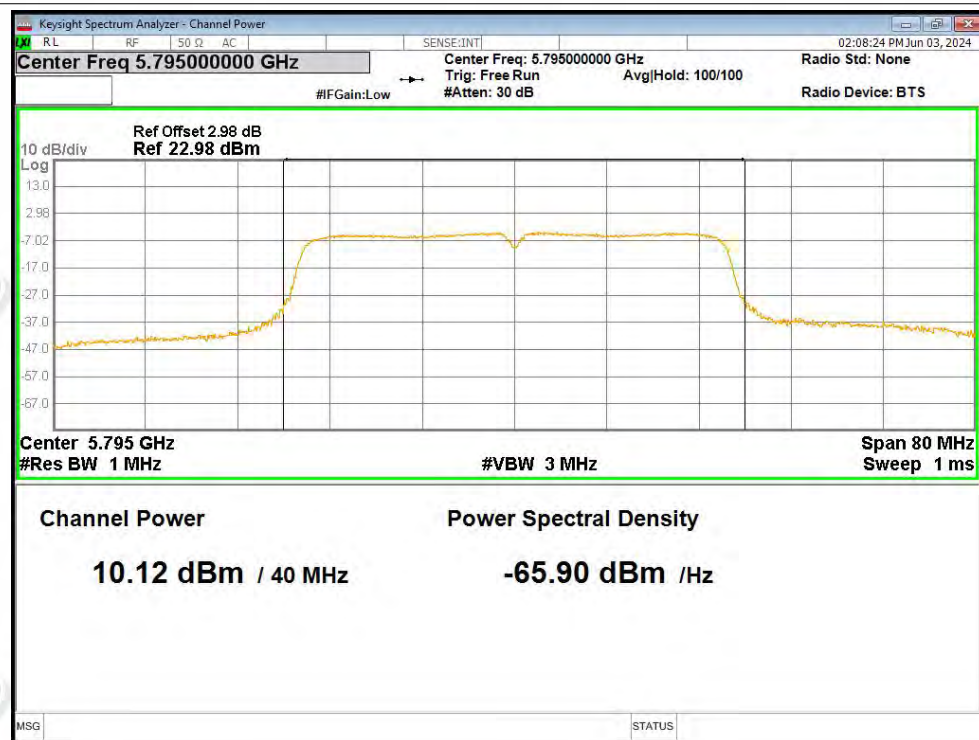




Power NVNT n40 5755MHz Ant1

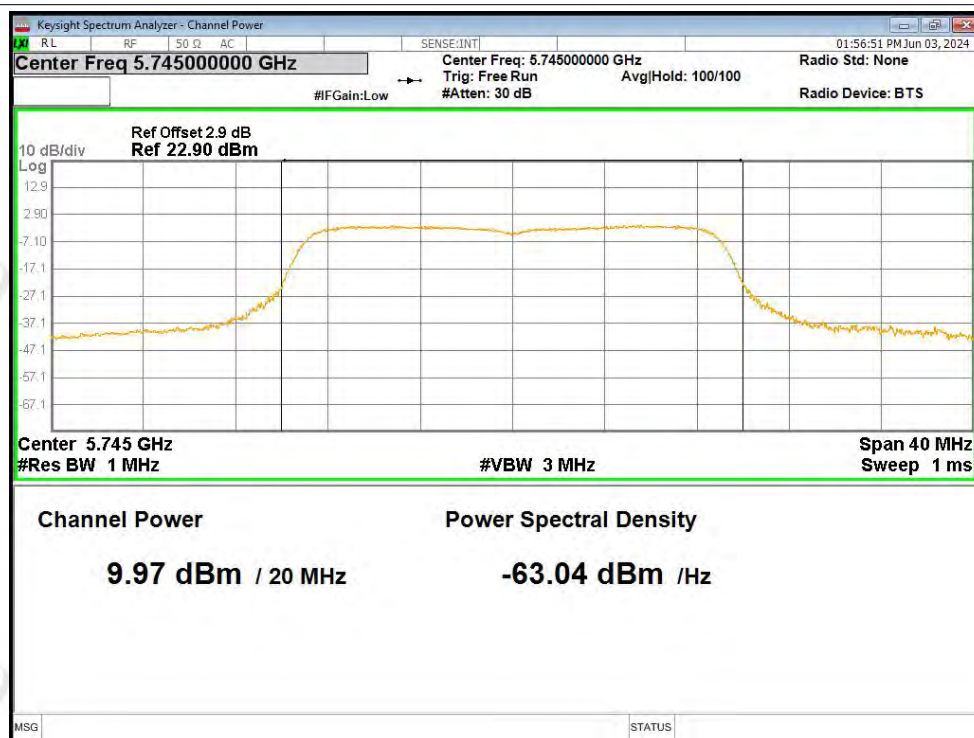


Power NVNT n40 5795MHz Ant1

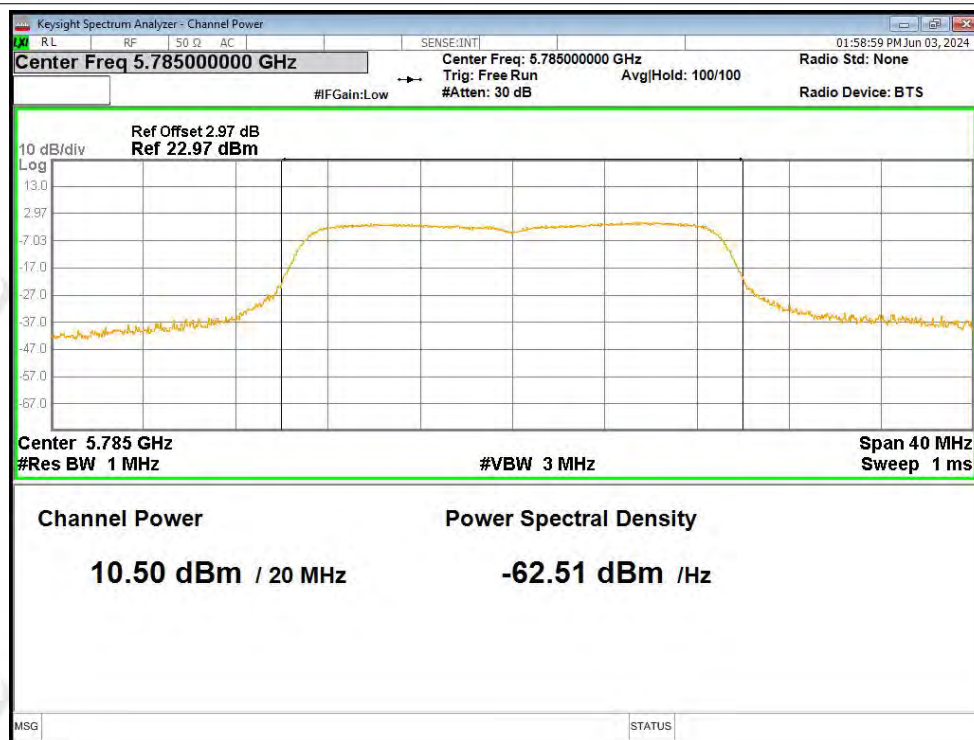




Power NVNT ac20 5745MHz Ant1

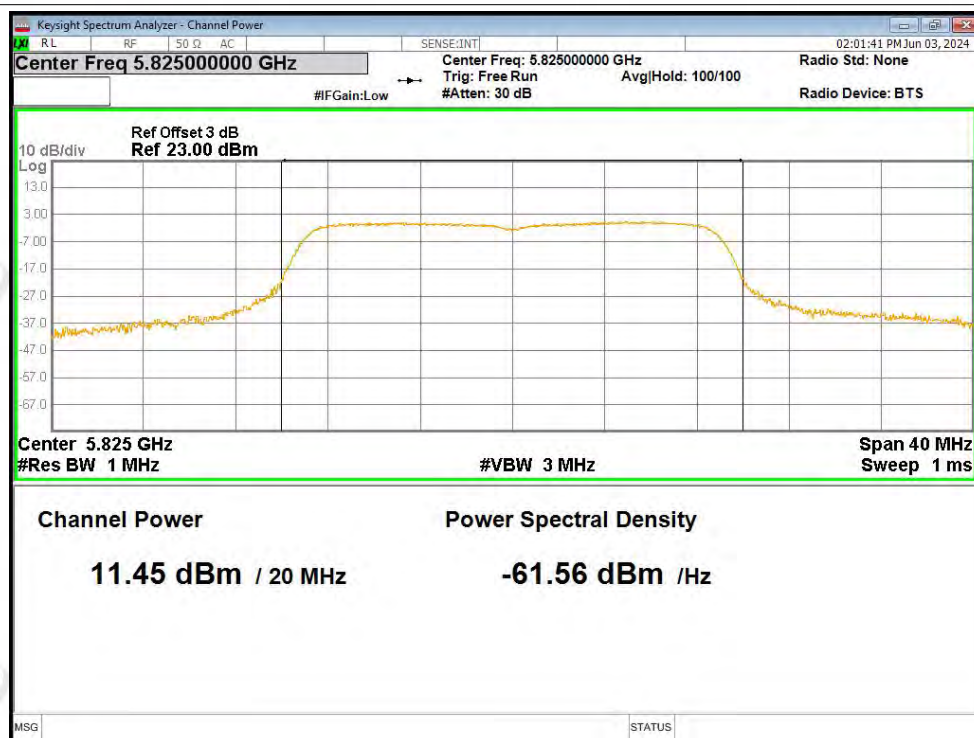


Power NVNT ac20 5785MHz Ant1

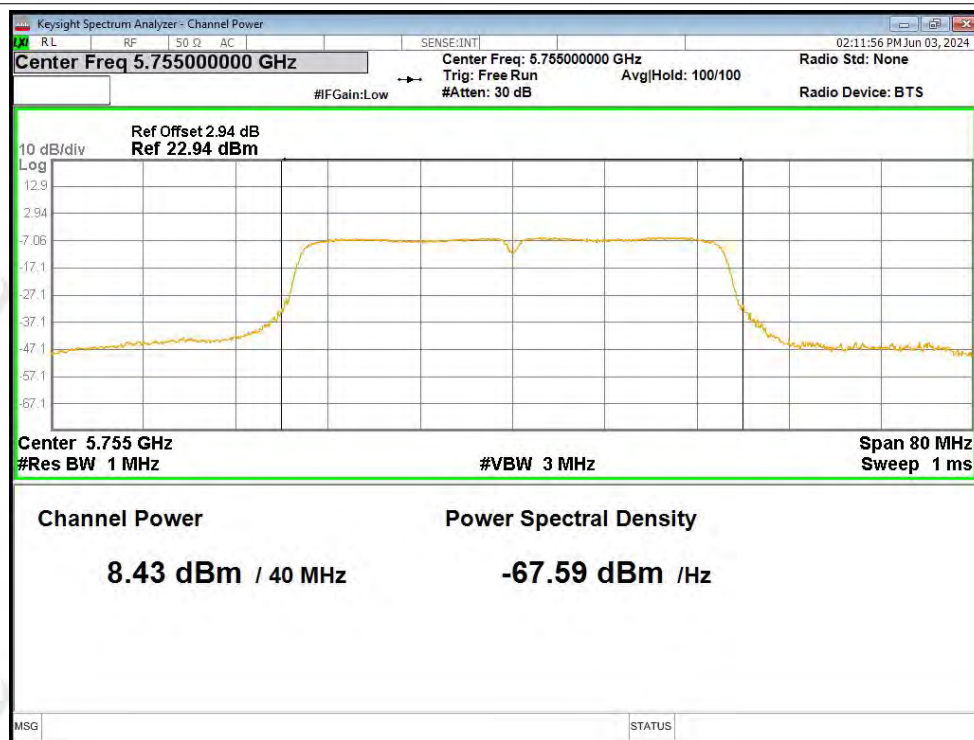




Power NVNT ac20 5825MHz Ant1

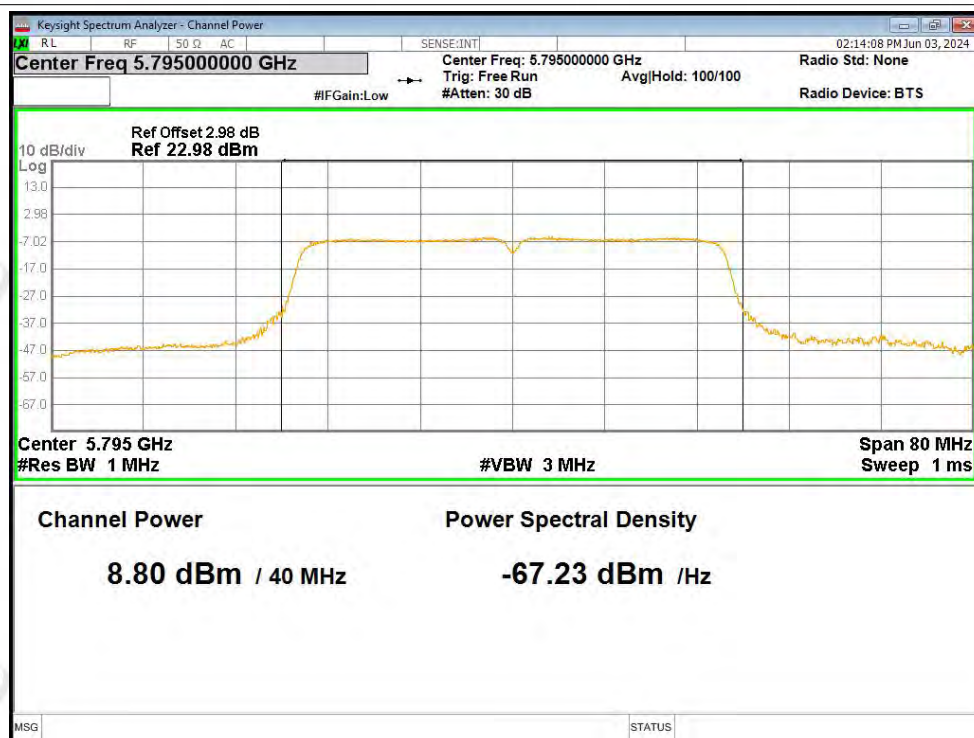


Power NVNT ac40 5755MHz Ant1

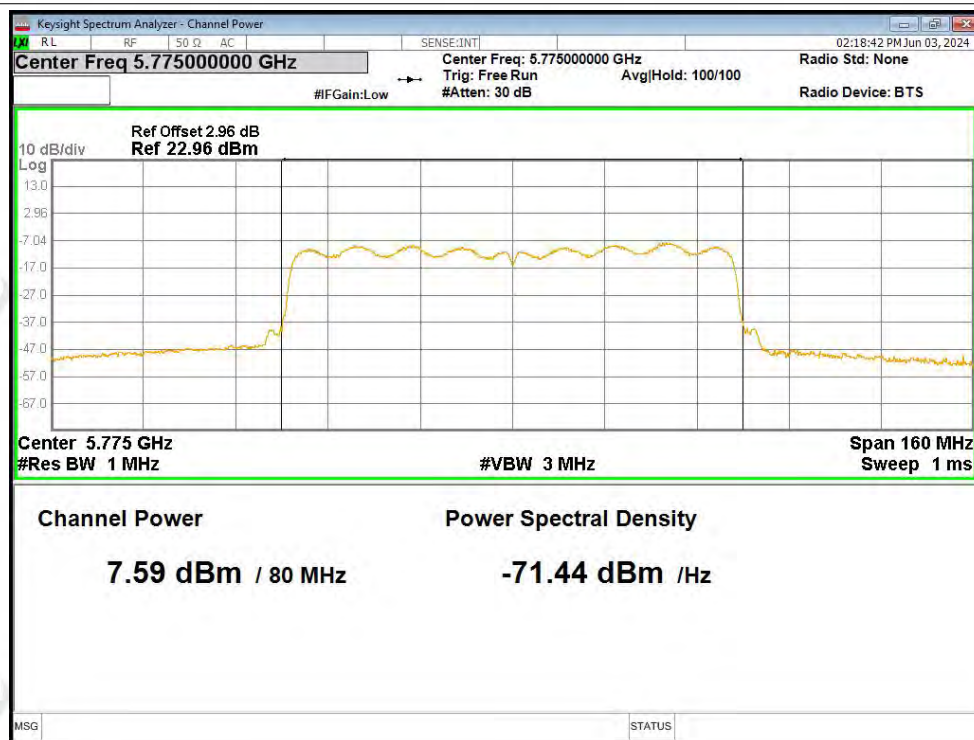




Power NVNT ac40 5795MHz Ant1



Power NVNT ac80 5775MHz Ant1



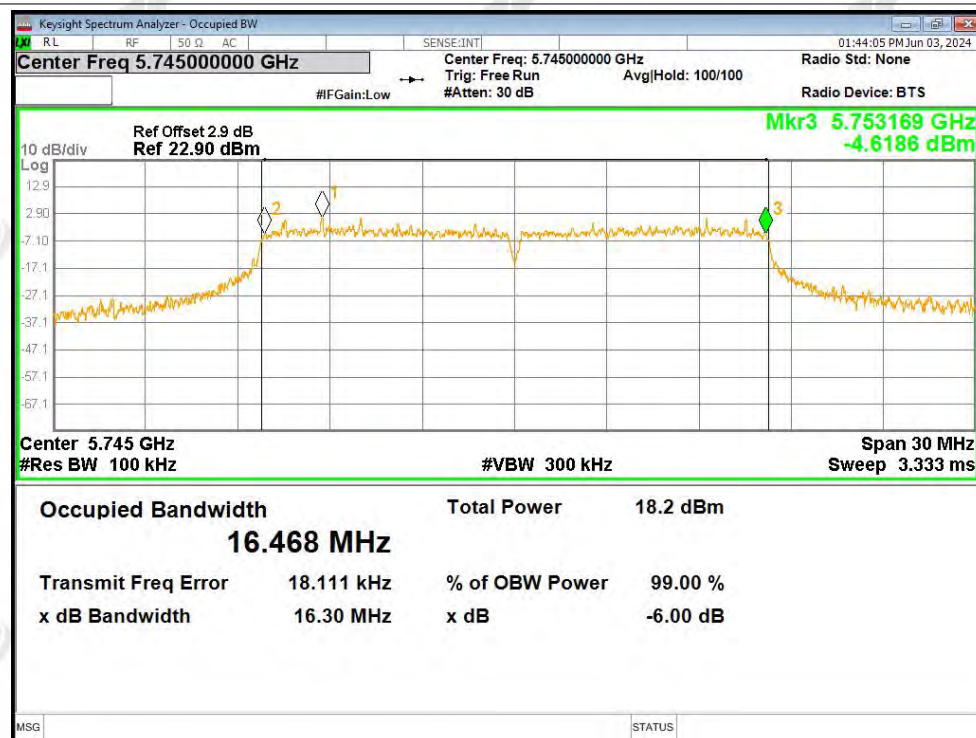
**ZHONGHAN****B3. -6dB Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	a	5745	Ant1	16.301	0.5	Pass
NVNT	a	5785	Ant1	16.329	0.5	Pass
NVNT	a	5825	Ant1	16.303	0.5	Pass
NVNT	n20	5745	Ant1	17.528	0.5	Pass
NVNT	n20	5785	Ant1	17.328	0.5	Pass
NVNT	n20	5825	Ant1	16.972	0.5	Pass
NVNT	n40	5755	Ant1	35.159	0.5	Pass
NVNT	n40	5795	Ant1	35.351	0.5	Pass
NVNT	ac20	5745	Ant1	17.307	0.5	Pass
NVNT	ac20	5785	Ant1	17.175	0.5	Pass
NVNT	ac20	5825	Ant1	16.545	0.5	Pass
NVNT	ac40	5755	Ant1	35.122	0.5	Pass
NVNT	ac40	5795	Ant1	34.842	0.5	Pass
NVNT	ac80	5775	Ant1	75.069	0.5	Pass

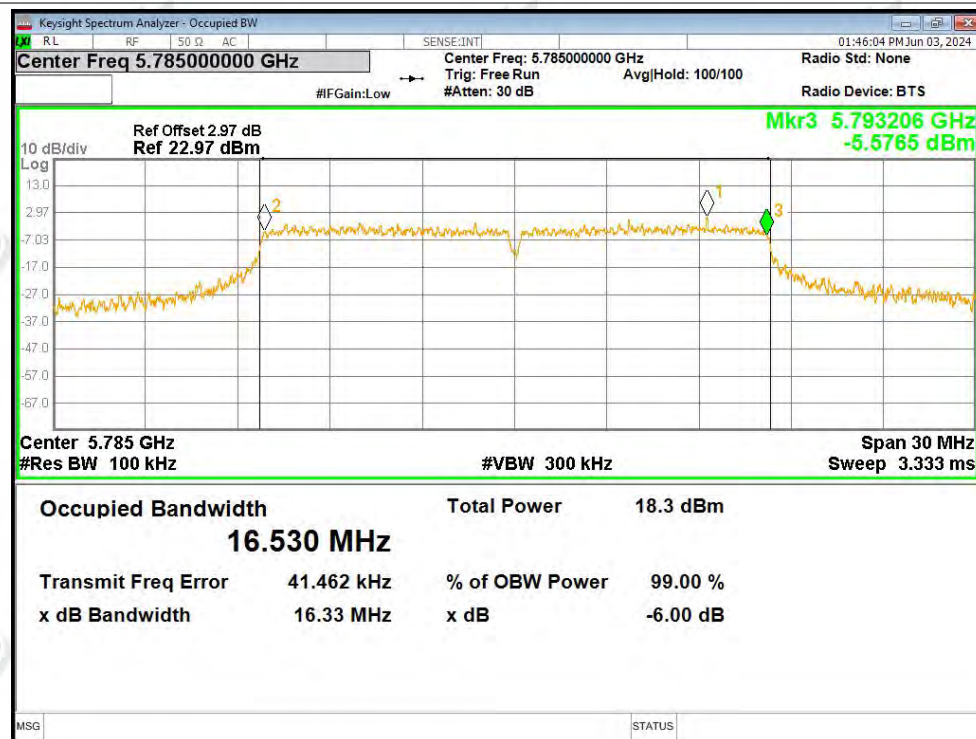


Test Graphs

-6dB Bandwidth NVNT a 5745MHz Ant1

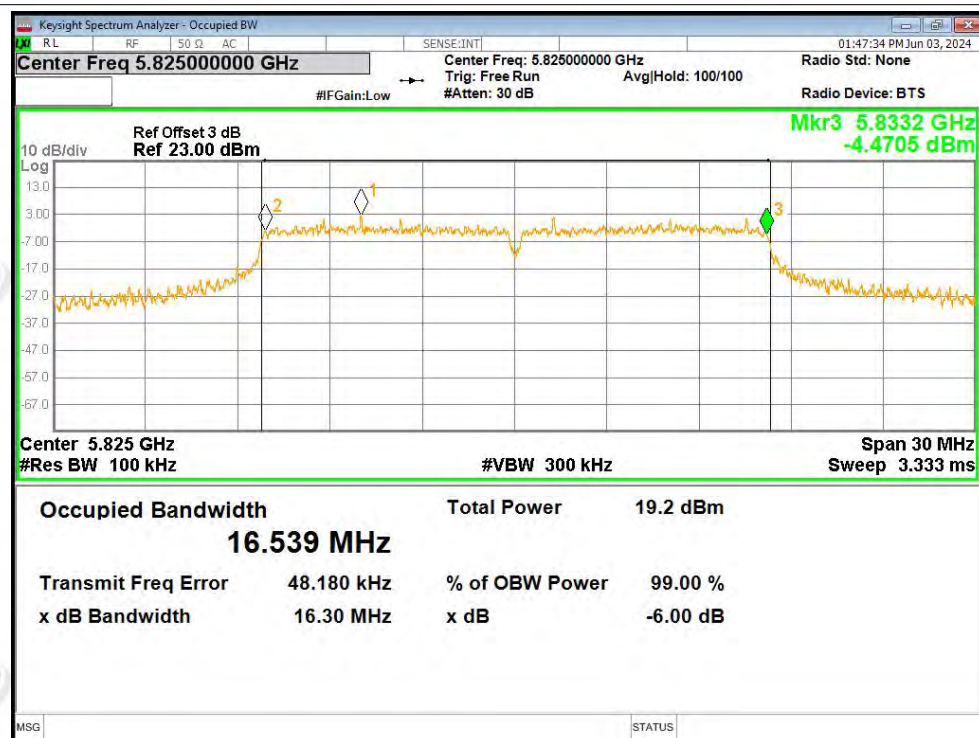


-6dB Bandwidth NVNT a 5785MHz Ant1

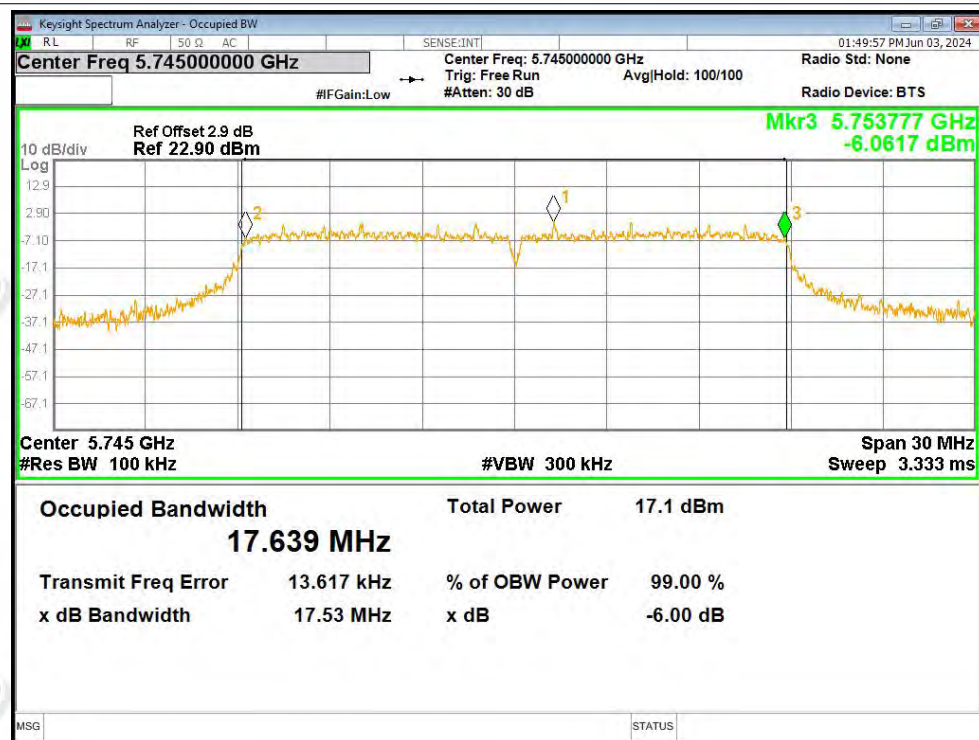




-6dB Bandwidth NVNT a 5825MHz Ant1

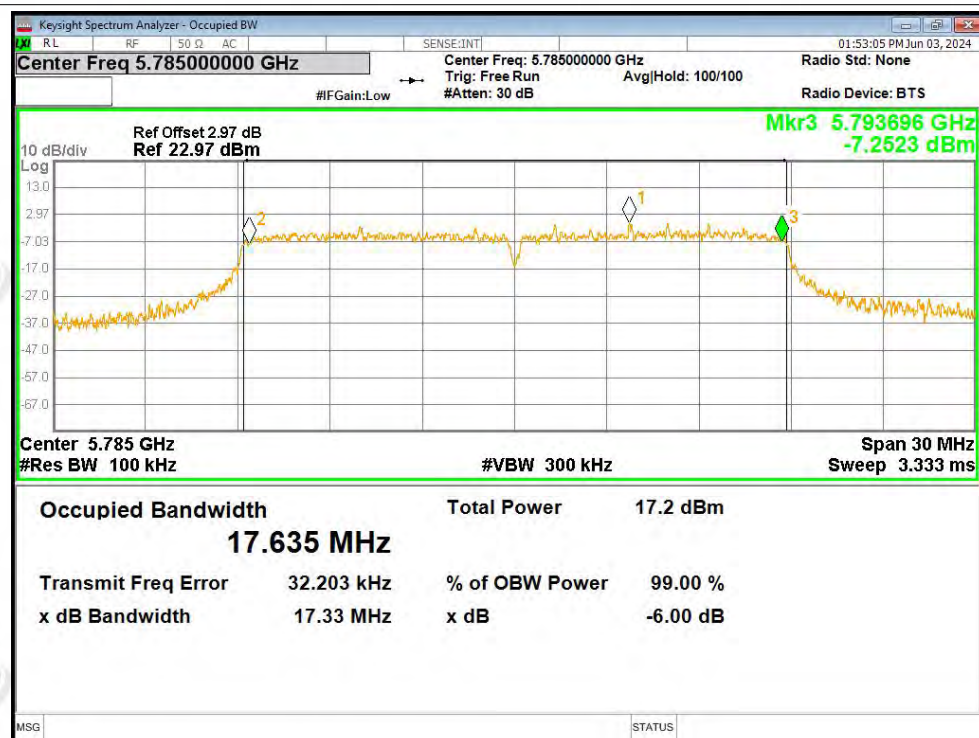


-6dB Bandwidth NVNT n20 5745MHz Ant1

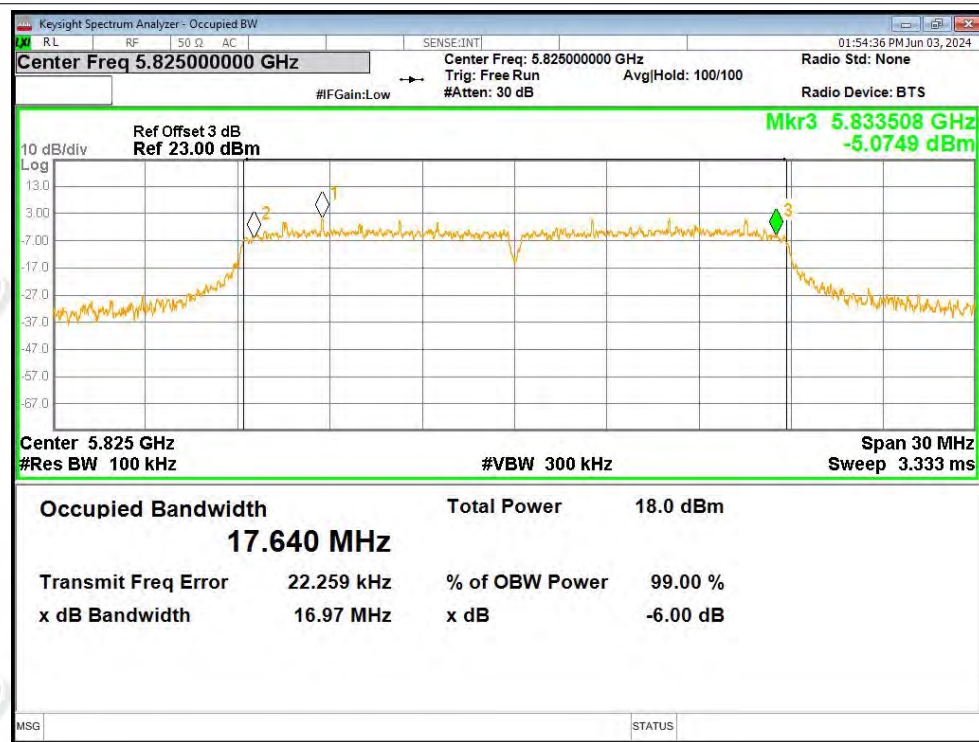




-6dB Bandwidth NVNT n20 5785MHz Ant1

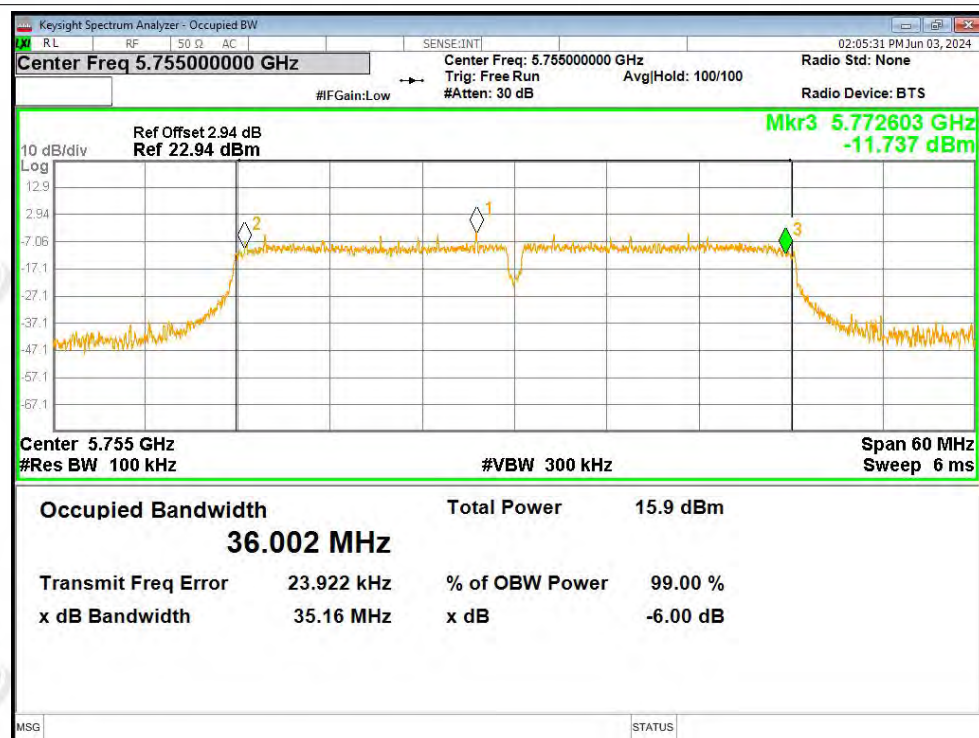


-6dB Bandwidth NVNT n20 5825MHz Ant1

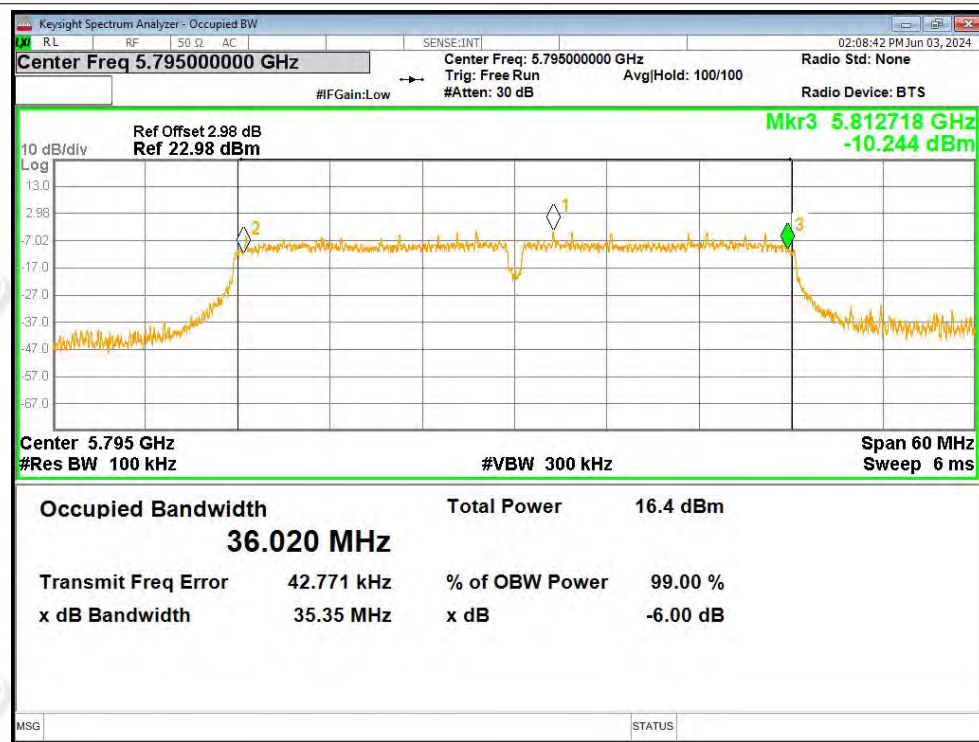




-6dB Bandwidth NVNT n40 5755MHz Ant1

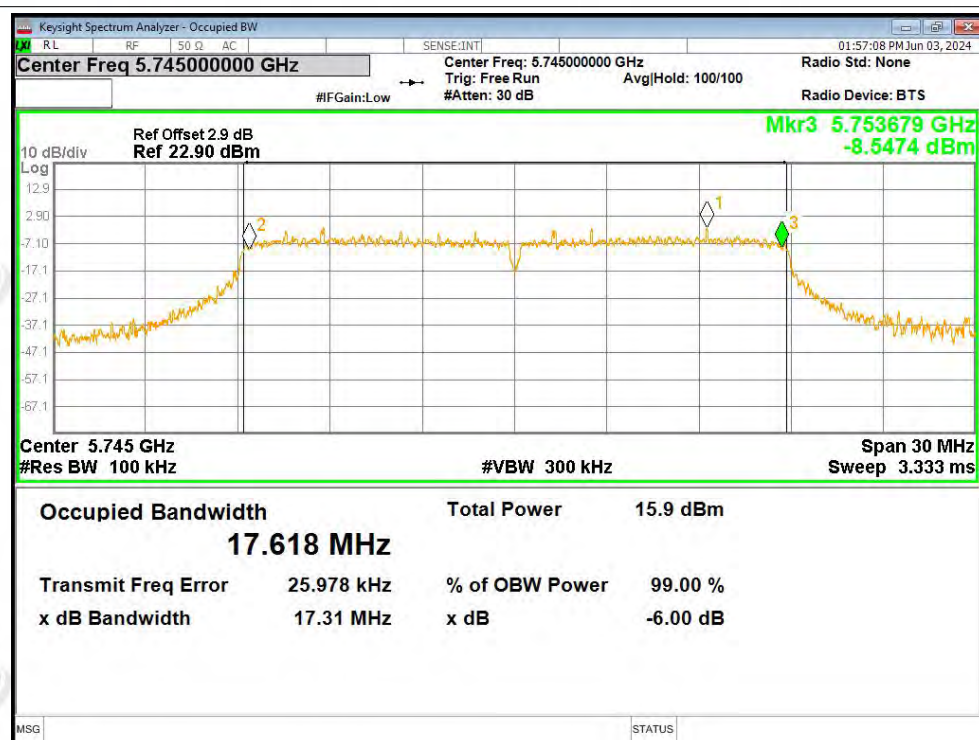


-6dB Bandwidth NVNT n40 5795MHz Ant1

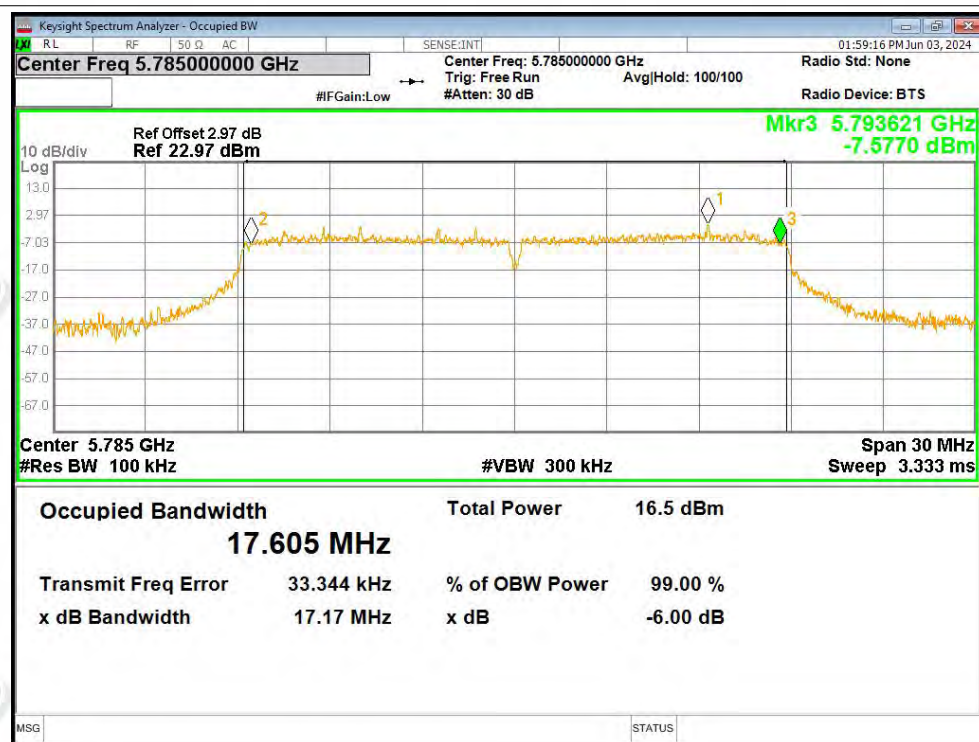




-6dB Bandwidth NVNT ac20 5745MHz Ant1

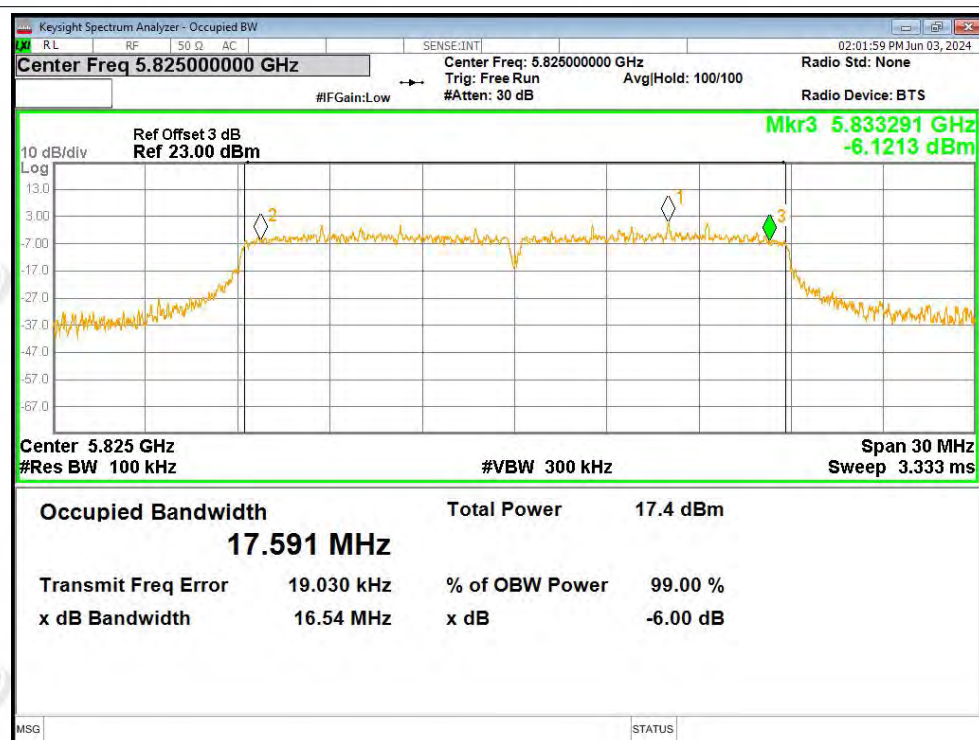


-6dB Bandwidth NVNT ac20 5785MHz Ant1

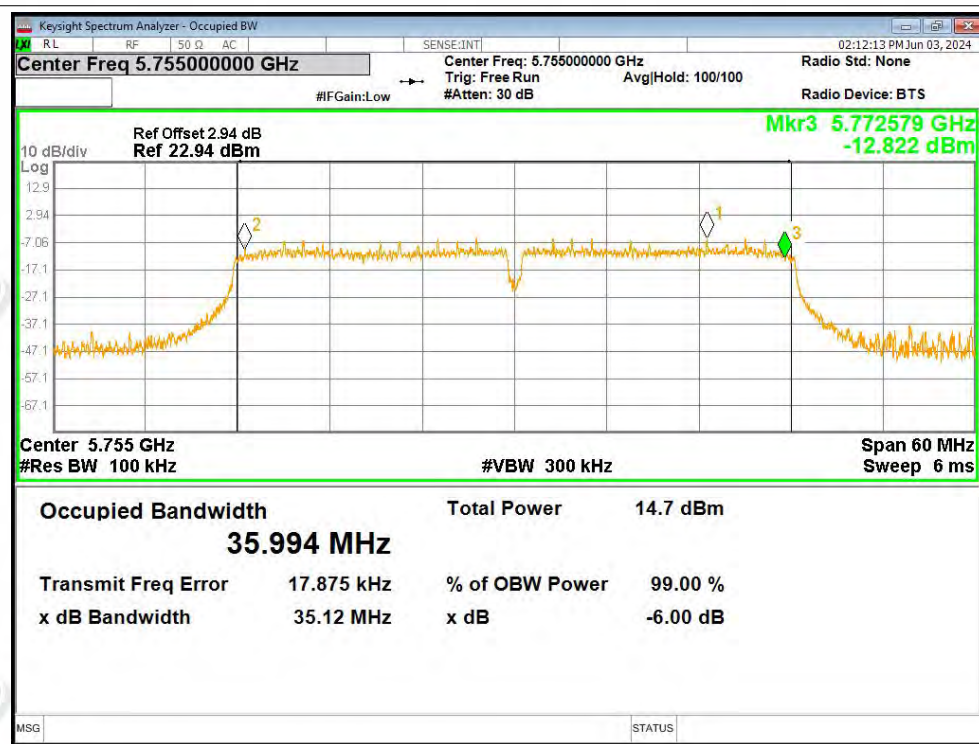




-6dB Bandwidth NVNT ac20 5825MHz Ant1

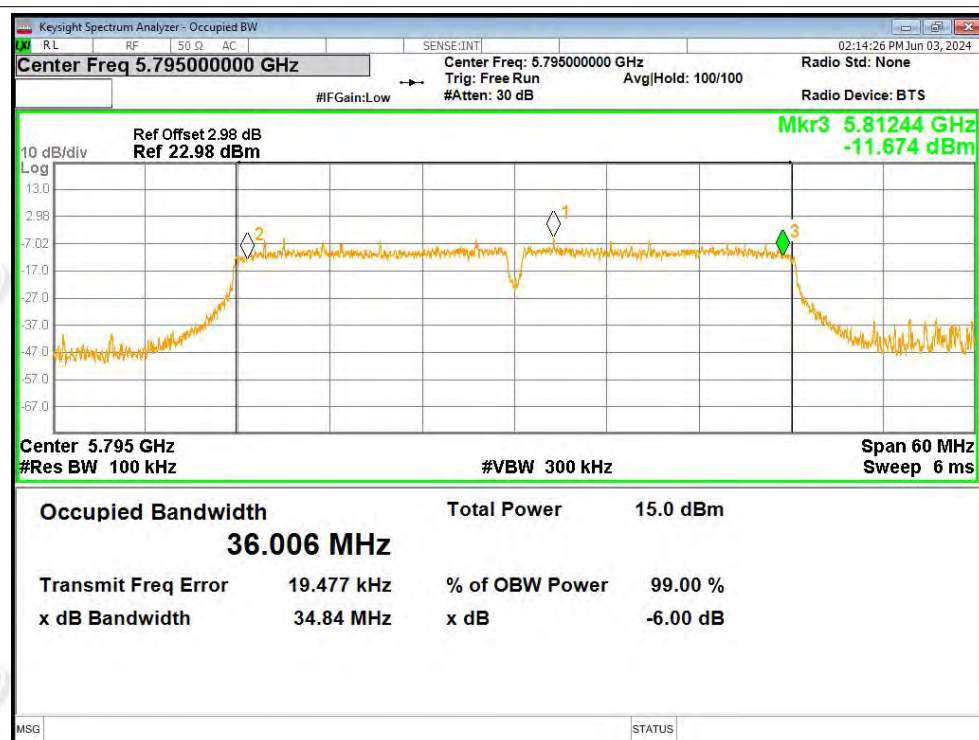


-6dB Bandwidth NVNT ac40 5755MHz Ant1

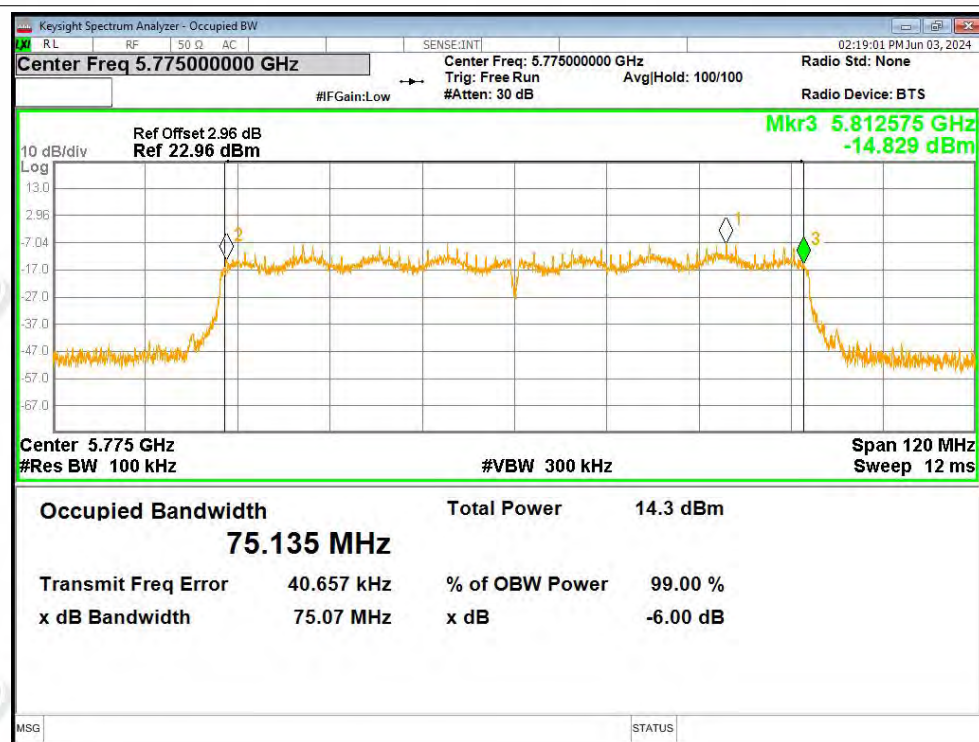




-6dB Bandwidth NVNT ac40 5795MHz Ant1



-6dB Bandwidth NVNT ac80 5775MHz Ant1



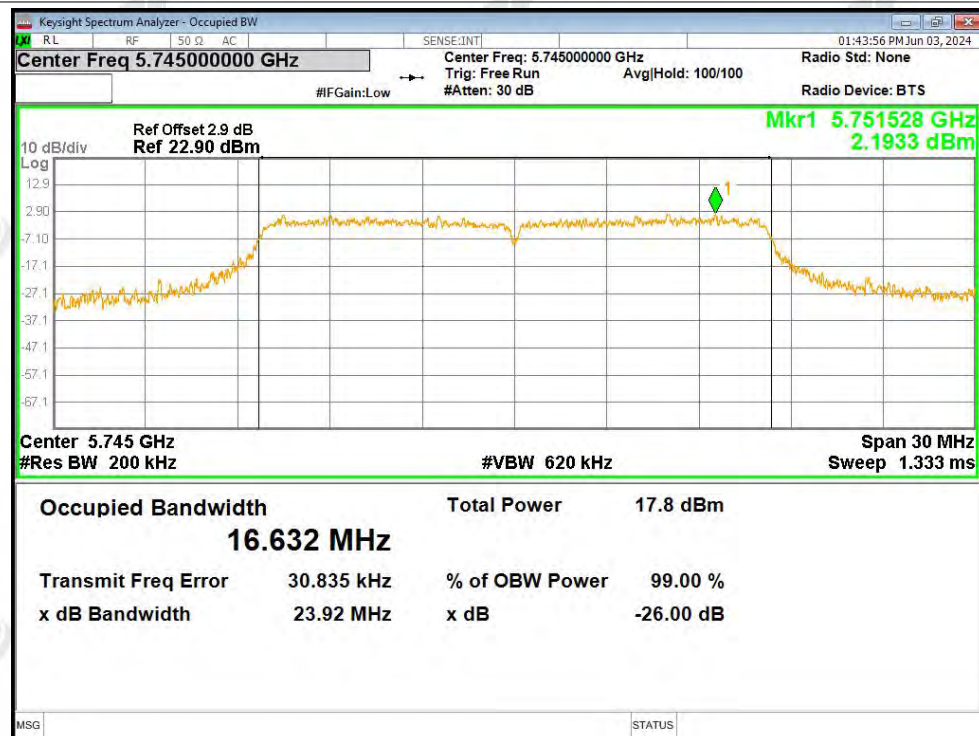
**ZHONGHAN****B4. Occupied Channel Bandwidth**

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	a	5745	Ant1	16.632
NVNT	a	5785	Ant1	16.702
NVNT	a	5825	Ant1	16.712
NVNT	n20	5745	Ant1	17.677
NVNT	n20	5785	Ant1	17.708
NVNT	n20	5825	Ant1	17.684
NVNT	n40	5755	Ant1	36.125
NVNT	n40	5795	Ant1	36.224
NVNT	ac20	5745	Ant1	17.682
NVNT	ac20	5785	Ant1	17.655
NVNT	ac20	5825	Ant1	17.642
NVNT	ac40	5755	Ant1	36.171
NVNT	ac40	5795	Ant1	36.153
NVNT	ac80	5775	Ant1	75.271

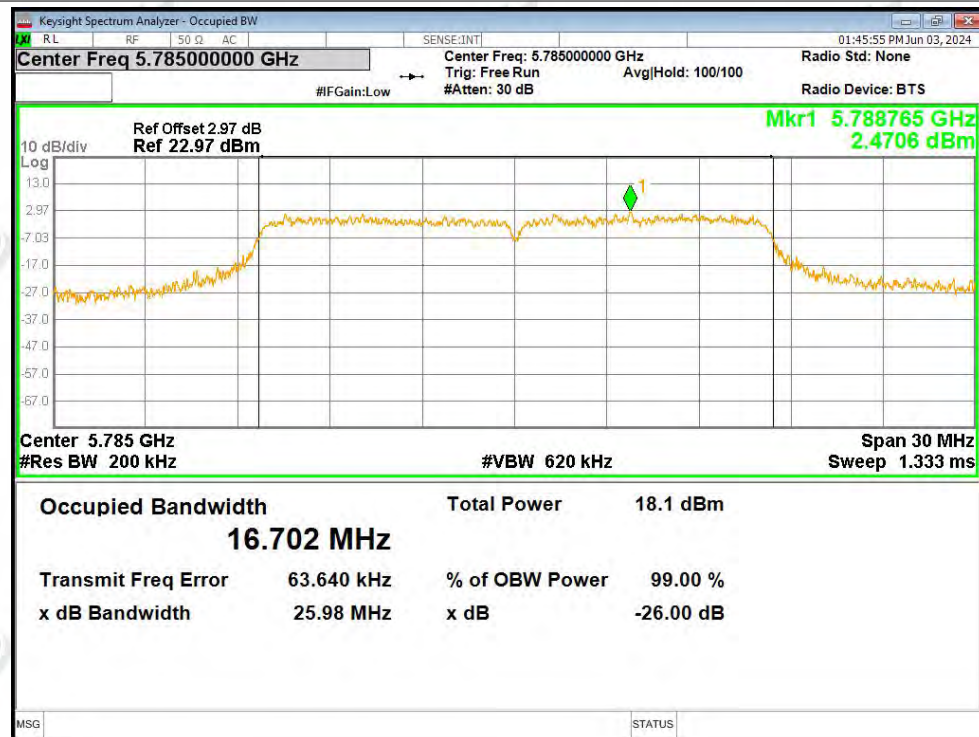


Test Graphs

OBW NVNT a 5745MHz Ant1

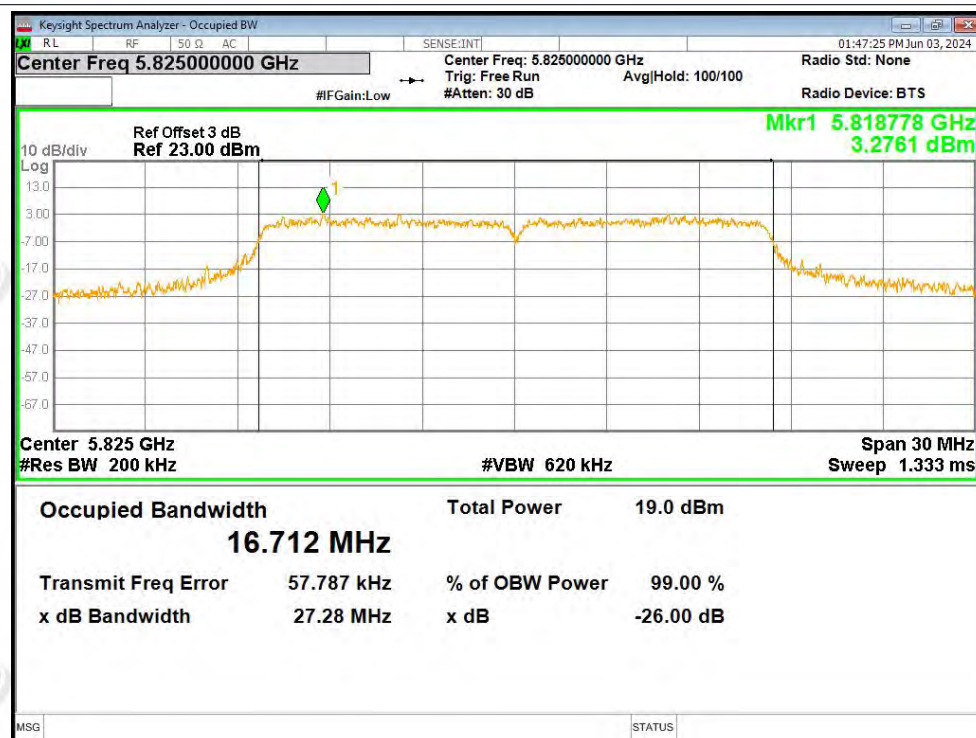


OBW NVNT a 5785MHz Ant1

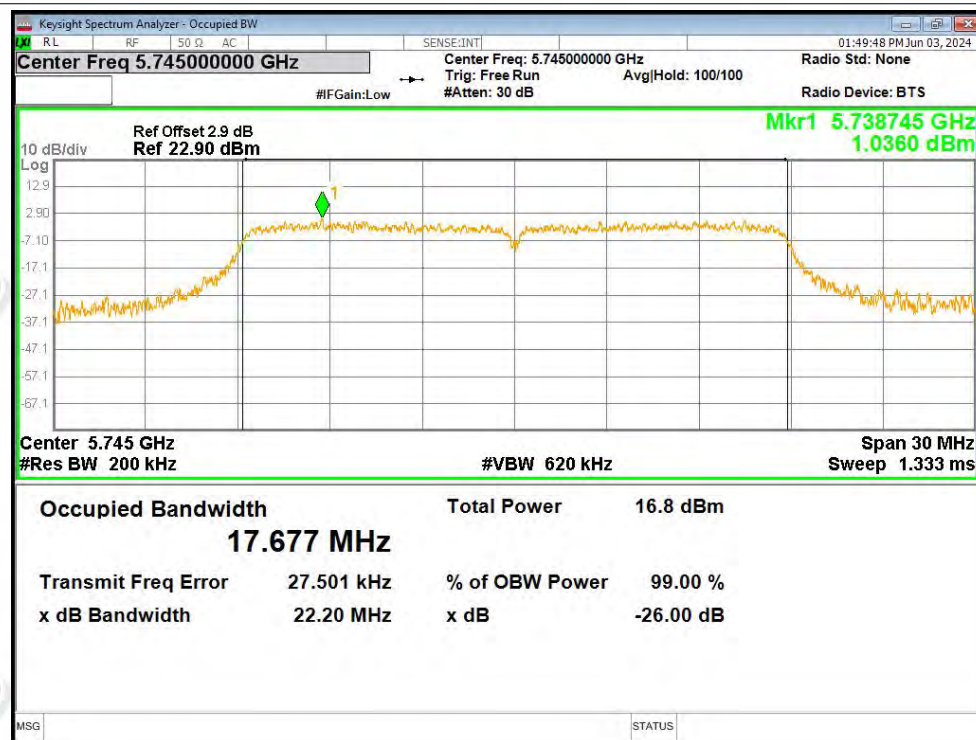




OBW NVNT a 5825MHz Ant1

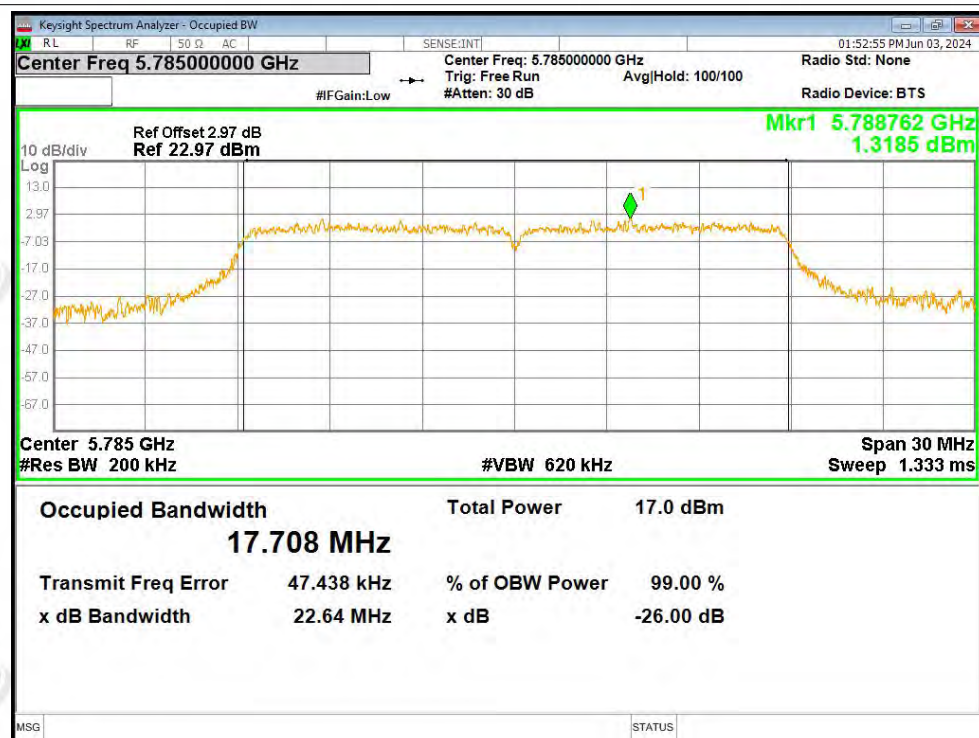


OBW NVNT n20 5745MHz Ant1

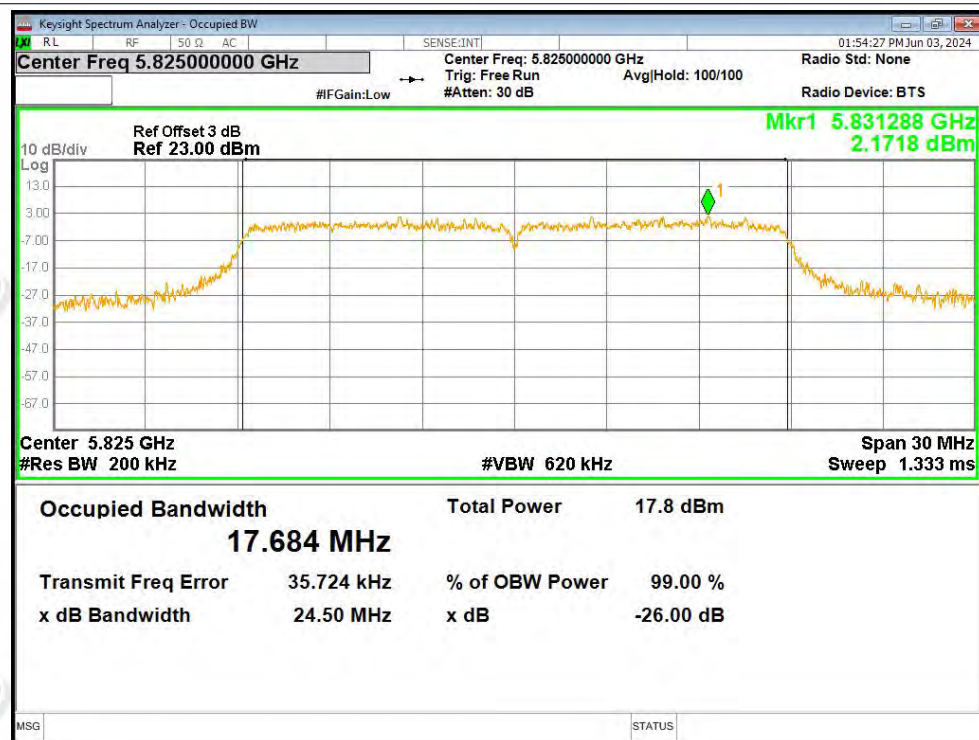




OBW NVNT n20 5785MHz Ant1

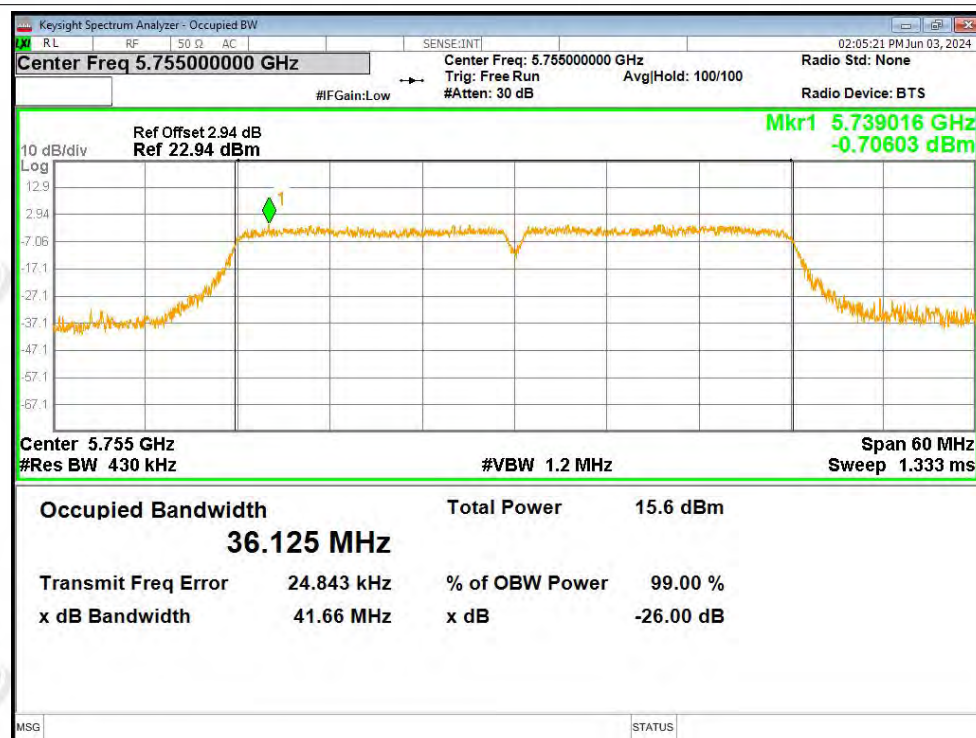


OBW NVNT n20 5825MHz Ant1

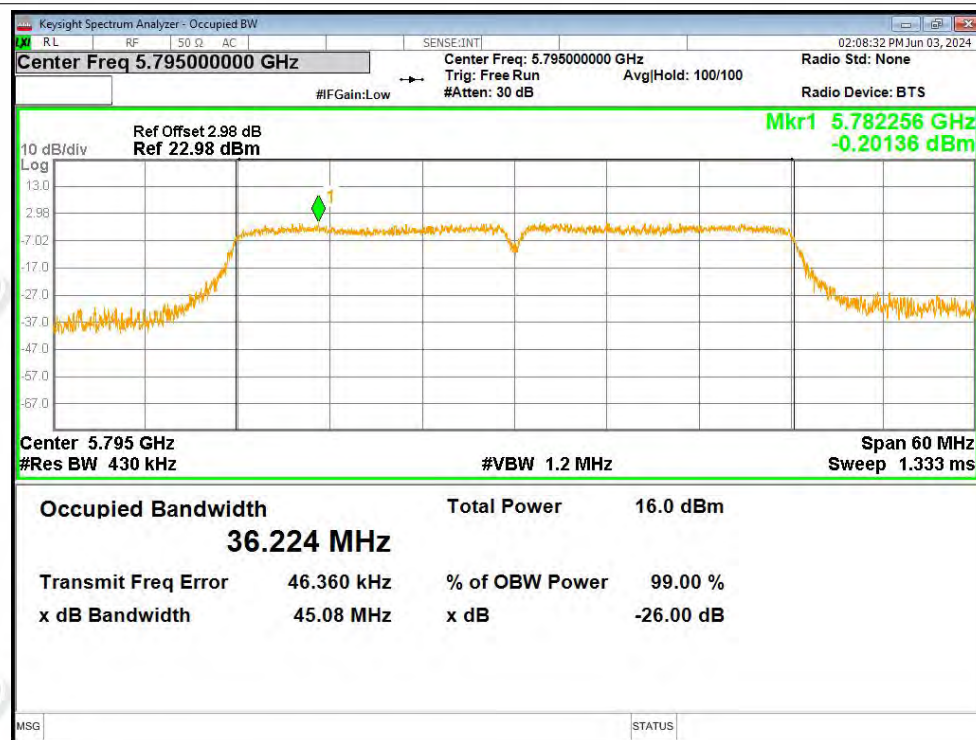




OBW NVNT n40 5755MHz Ant1

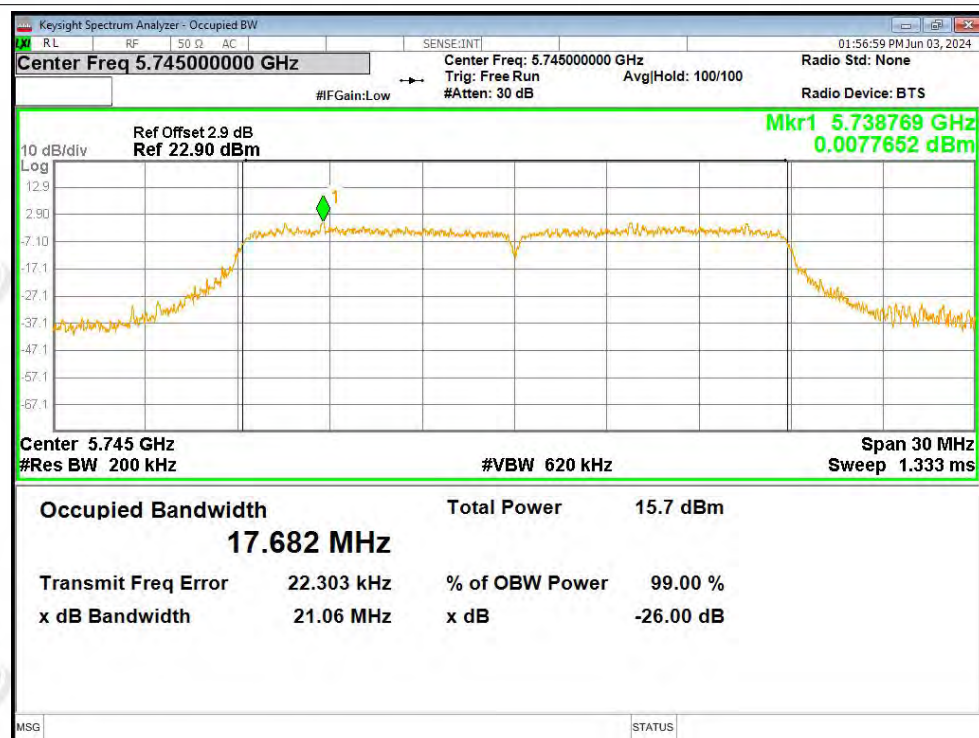


OBW NVNT n40 5795MHz Ant1

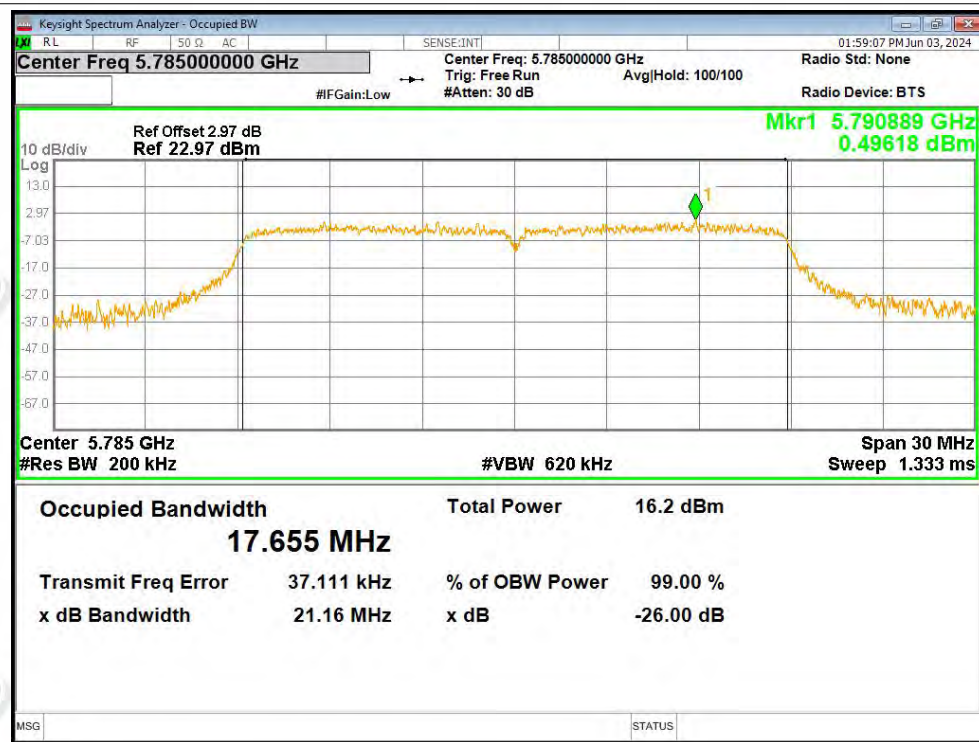




OBW NVNT ac20 5745MHz Ant1

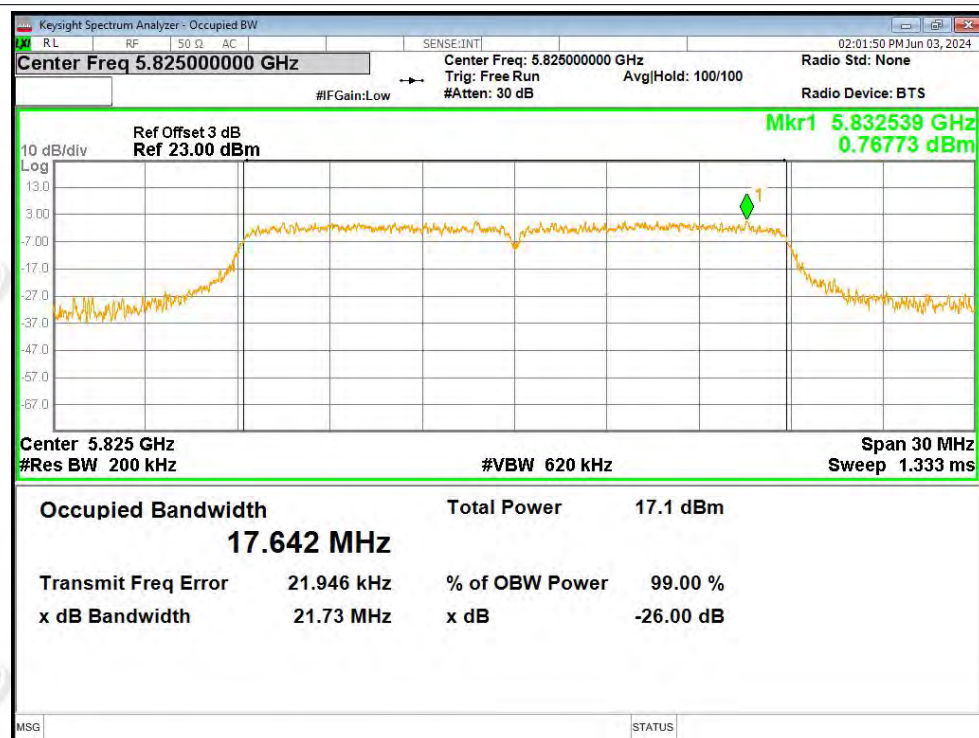


OBW NVNT ac20 5785MHz Ant1

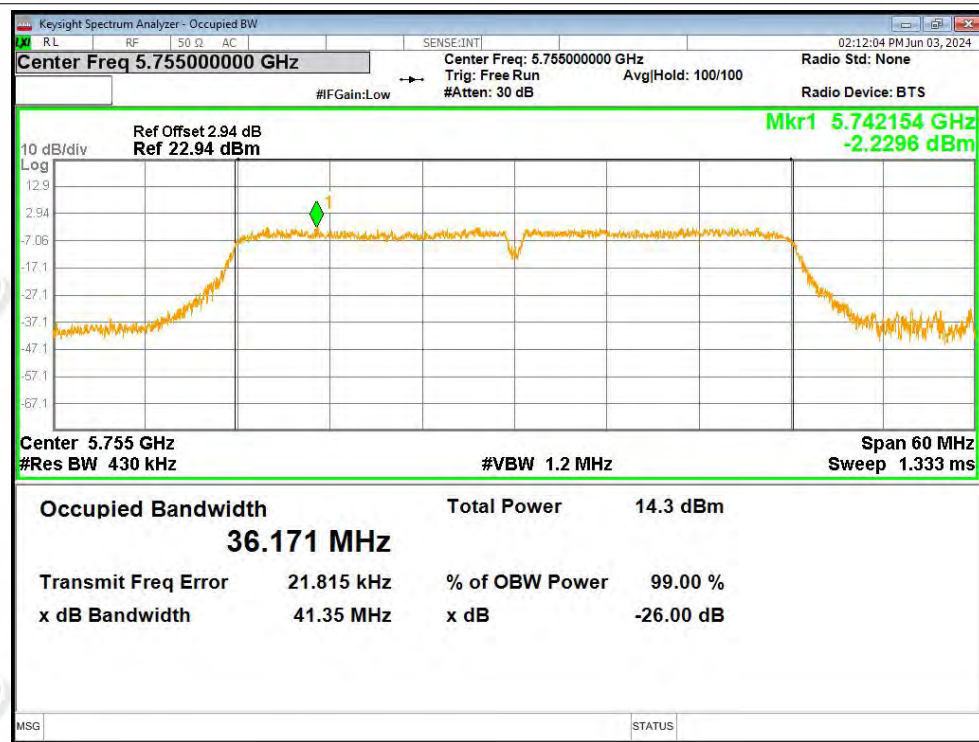




OBW NVNT ac20 5825MHz Ant1

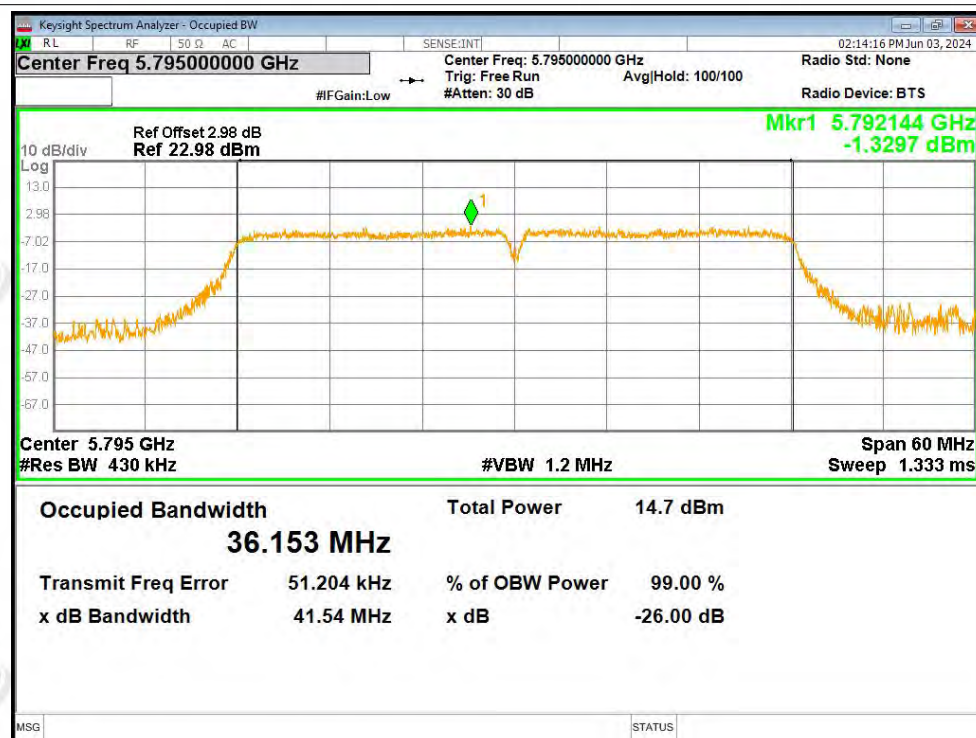


OBW NVNT ac40 5755MHz Ant1

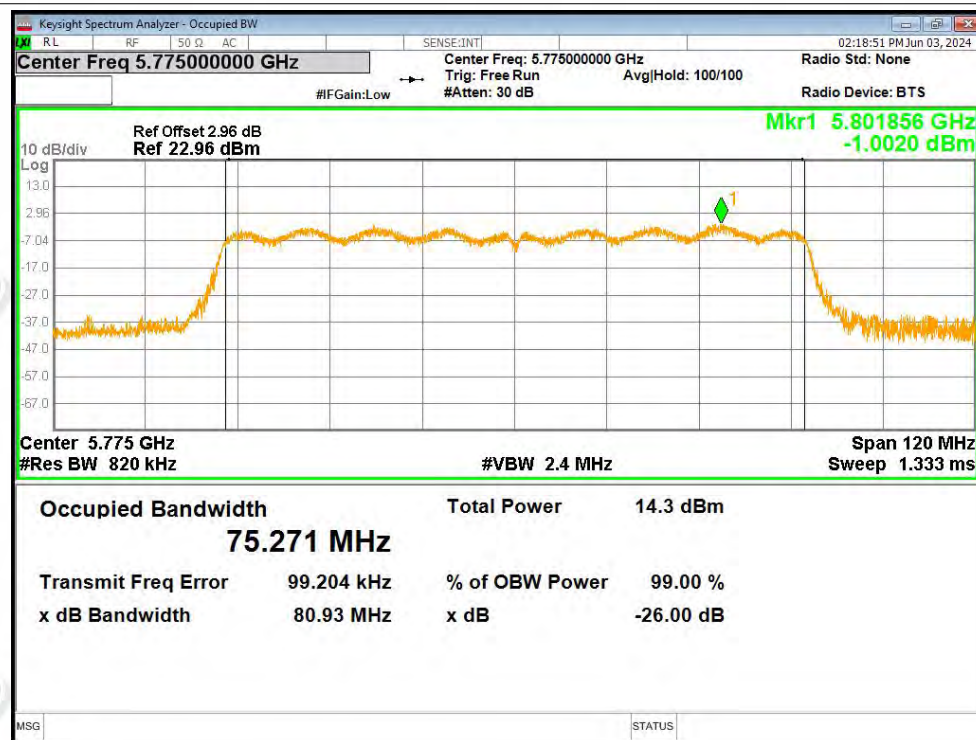




OBW NVNT ac40 5795MHz Ant1



OBW NVNT ac80 5775MHz Ant1



**ZHONGHAN****B5. Maximum Power Spectral Density Level**

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm)	Duty Factor (dB)	Total PSD (dBm)	Limit (dBm)	Verdict
NVNT	a	5745	Ant1	-4.18	0.14	-4.04	30	Pass
NVNT	a	5785	Ant1	-3.12	0.12	-3	30	Pass
NVNT	a	5825	Ant1	-2.4	0.2	-2.2	30	Pass
NVNT	n20	5745	Ant1	-6.32	0.13	-6.19	30	Pass
NVNT	n20	5785	Ant1	-4.94	0.16	-4.78	30	Pass
NVNT	n20	5825	Ant1	-4.59	0.24	-4.35	30	Pass
NVNT	n40	5755	Ant1	-13.09	0.72	-12.37	30	Pass
NVNT	n40	5795	Ant1	-11.28	0.52	-10.76	30	Pass
NVNT	ac20	5745	Ant1	-6.15	0.18	-5.97	30	Pass
NVNT	ac20	5785	Ant1	-6.11	0.13	-5.98	30	Pass
NVNT	ac20	5825	Ant1	-4.79	0.35	-4.44	30	Pass
NVNT	ac40	5755	Ant1	-12.5	0.67	-11.83	30	Pass
NVNT	ac40	5795	Ant1	-12.94	0.68	-12.26	30	Pass
NVNT	ac80	5775	Ant1	-17.72	0.45	-17.27	30	Pass



Test Graphs

PSD NVNT a 5745MHz Ant1



PSD NVNT a 5785MHz Ant1





PSD NVNT a 5825MHz Ant1



PSD NVNT n20 5745MHz Ant1





PSD NVNT n20 5785MHz Ant1



PSD NVNT n20 5825MHz Ant1

