



Appendix B

RF Test Data for 5.8GWIFI (Conducted Measurement)

Product Name: SPACTRA

Test Model: 7157+3157

Environmental Conditions

Temperature:	23.1°C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng





B.1 -6dB Bandwidth

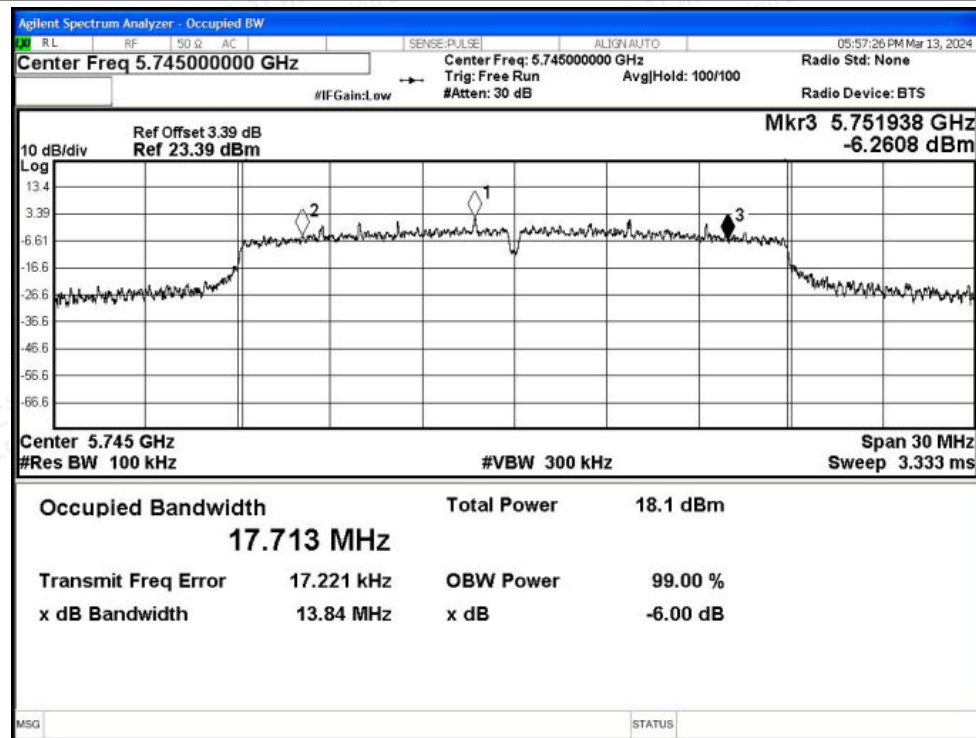
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	n20	5745	Ant0	13.842	≥ 0.5	Pass
NVNT	n20	5785	Ant0	15.599	≥ 0.5	Pass
NVNT	n20	5825	Ant0	15.072	≥ 0.5	Pass
NVNT	n40	5755	Ant0	35.065	≥ 0.5	Pass
NVNT	n40	5795	Ant0	33.854	≥ 0.5	Pass



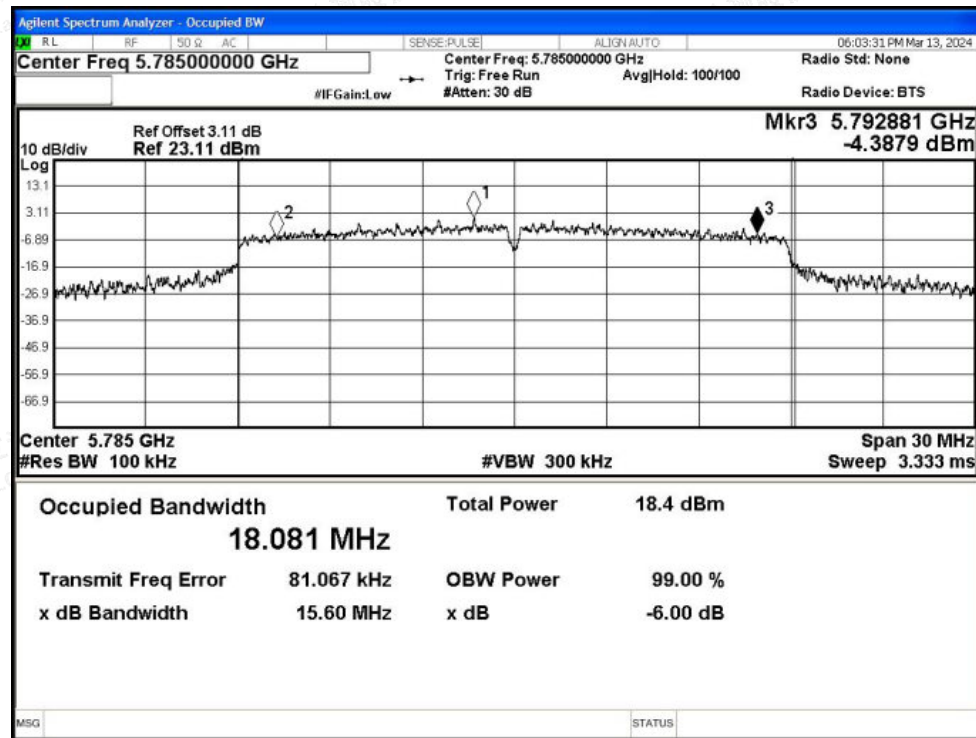


Test Graphs

-6dB Bandwidth NVNT n20 5745MHz Ant0



-6dB Bandwidth NVNT n20 5785MHz Ant0

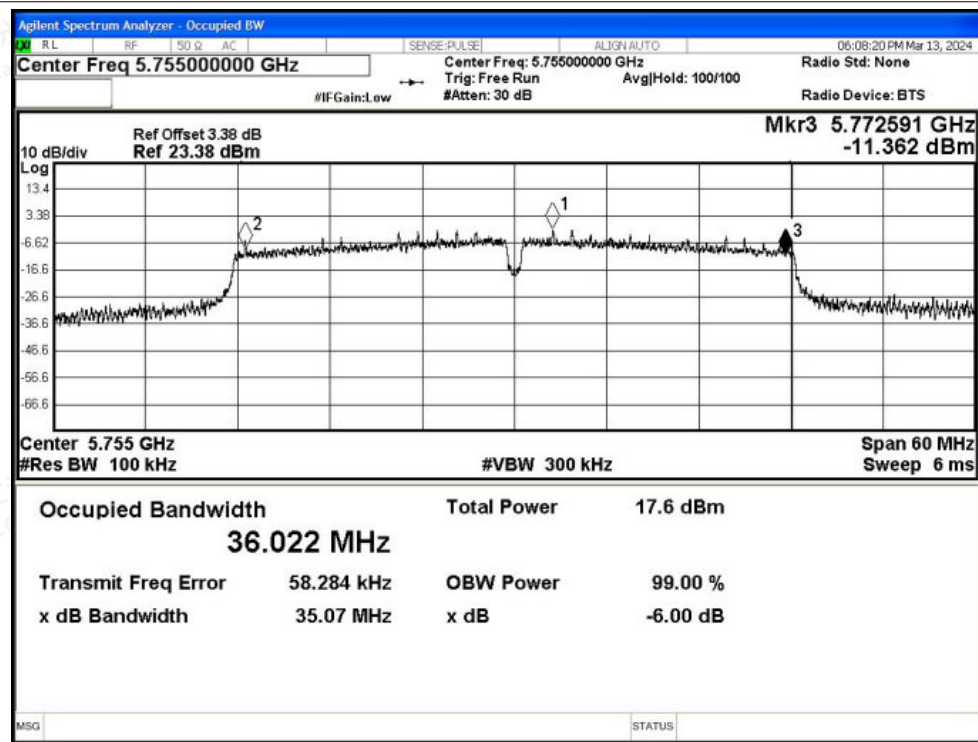


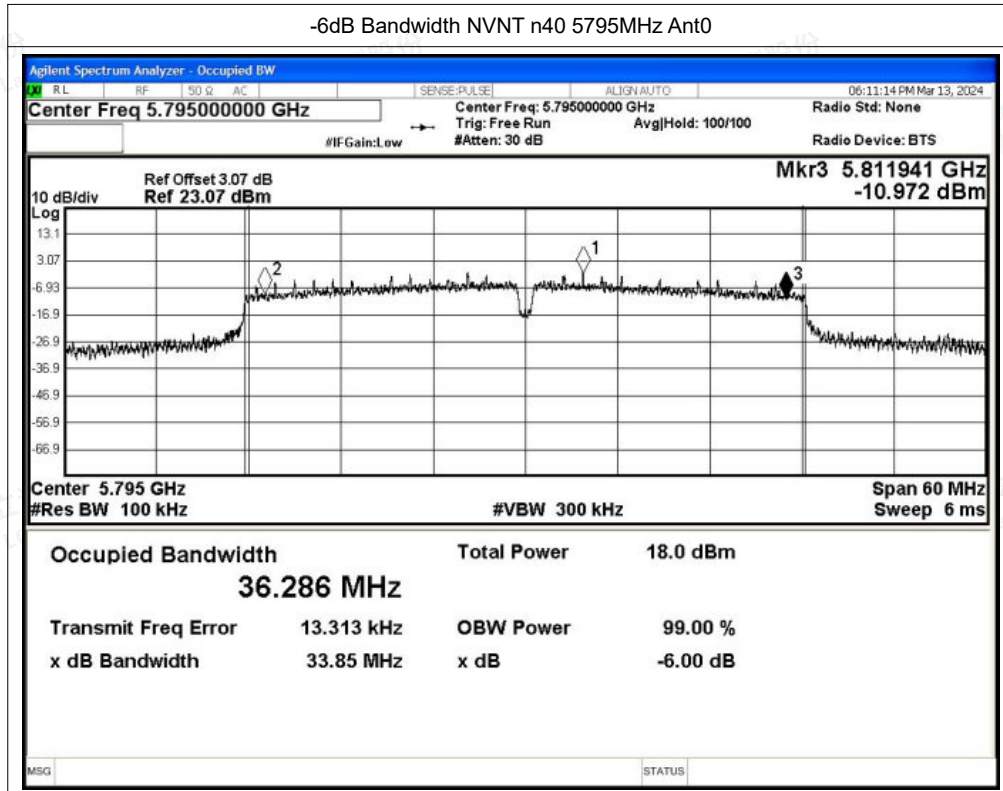


-6dB Bandwidth NVNT n20 5825MHz Ant0



-6dB Bandwidth NVNT n40 5755MHz Ant0







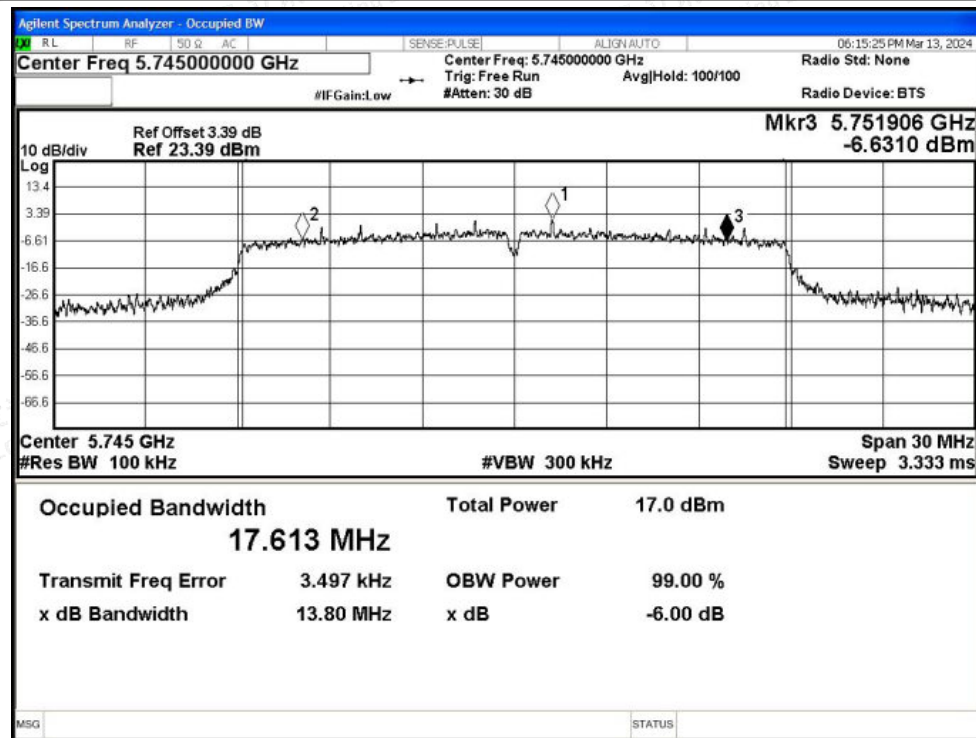
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	n20	5745	Ant1	13.804	≥ 0.5	Pass
NVNT	n20	5785	Ant1	14.972	≥ 0.5	Pass
NVNT	n20	5825	Ant1	14.719	≥ 0.5	Pass
NVNT	n40	5755	Ant1	33.844	≥ 0.5	Pass
NVNT	n40	5795	Ant1	33.865	≥ 0.5	Pass



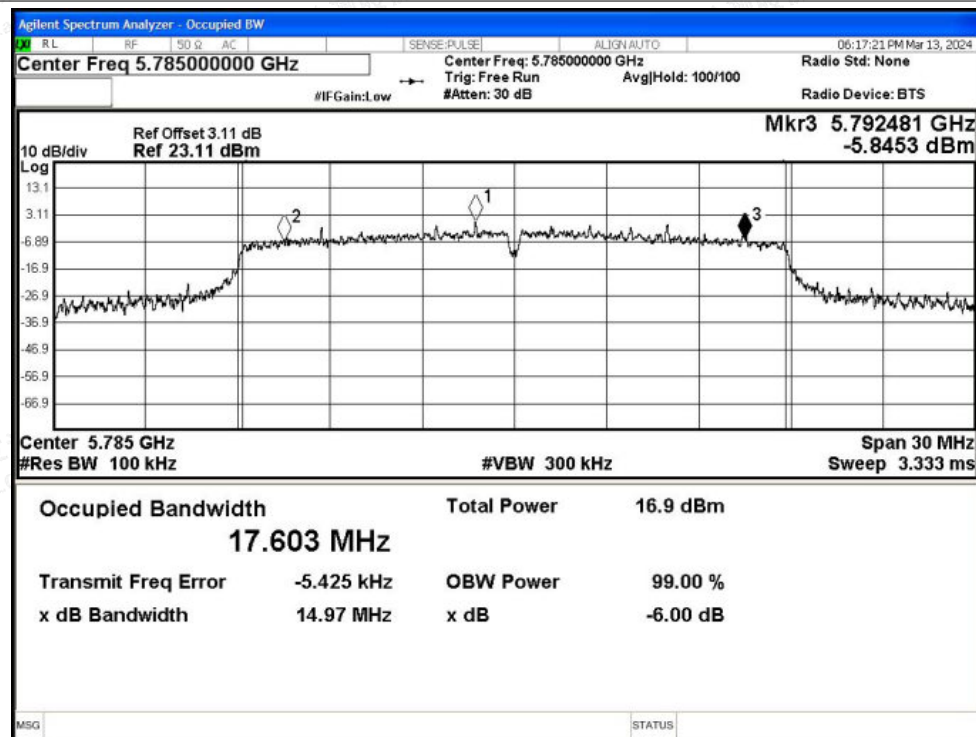


Test Graphs

-6dB Bandwidth NVNT n20 5745MHz Ant1



-6dB Bandwidth NVNT n20 5785MHz Ant1

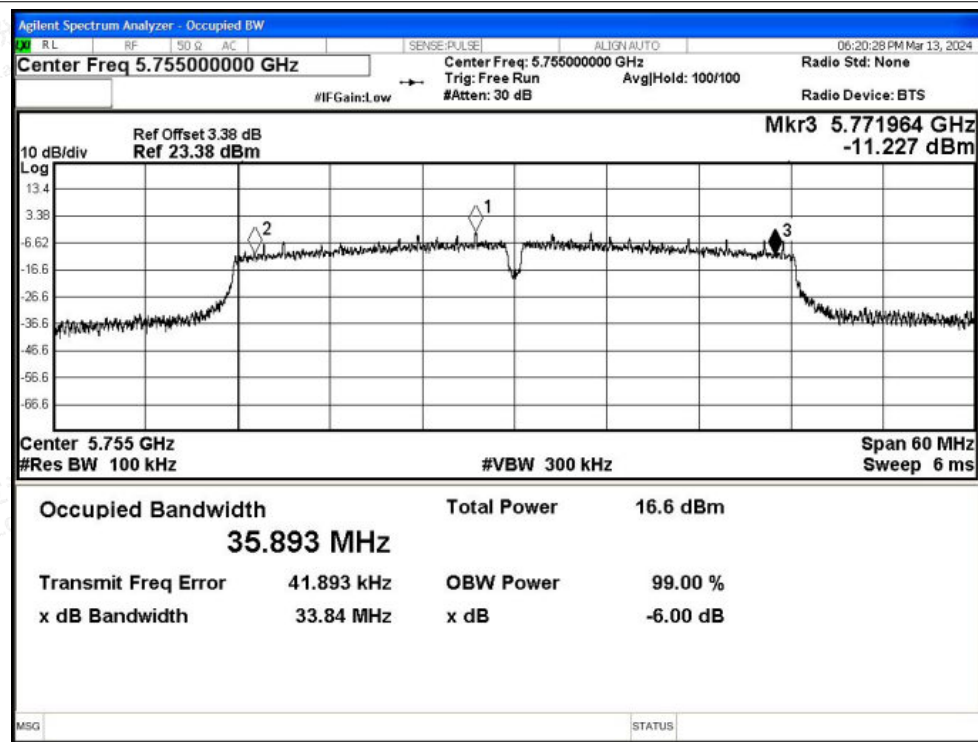


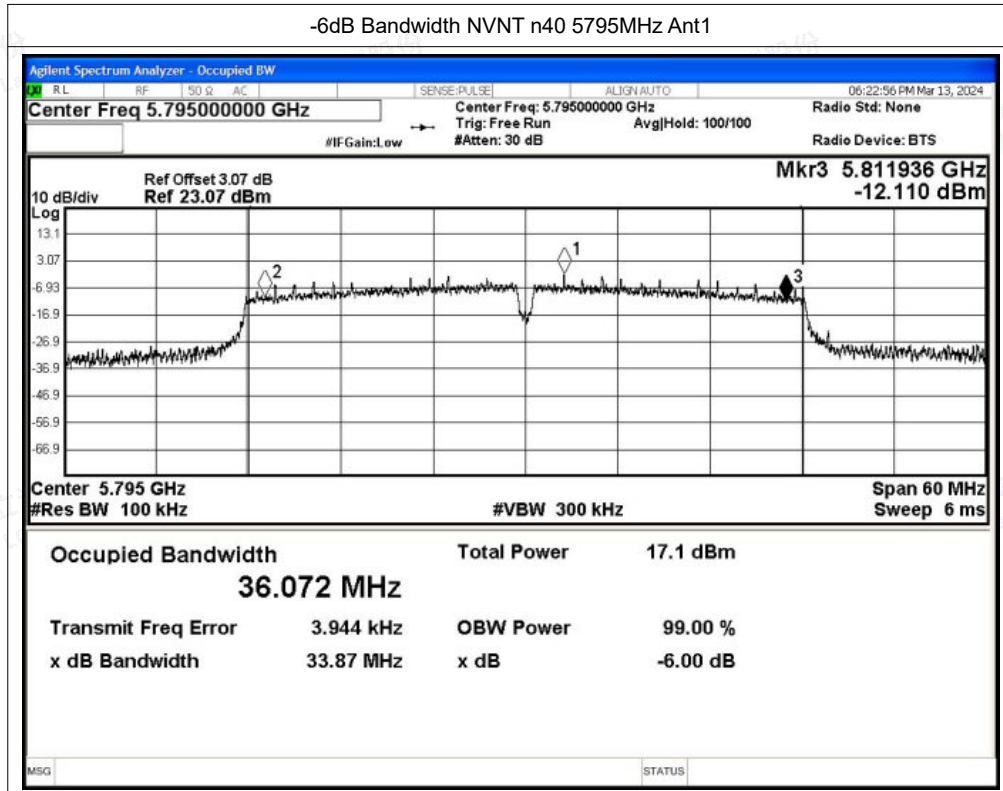


-6dB Bandwidth NVNT n20 5825MHz Ant1



-6dB Bandwidth NVNT n40 5755MHz Ant1







B.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	n20	5745	Ant0	11.07	0.1	11.17	30	Pass
NVNT	n20	5785	Ant0	11.3	0.1	11.4	30	Pass
NVNT	n20	5825	Ant0	11.32	0.1	11.42	30	Pass
NVNT	n40	5755	Ant0	11.14	0.2	11.34	30	Pass
NVNT	n40	5795	Ant0	11.58	0.2	11.78	30	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	n20	5745	Ant1	11	0.1	11.1	30	Pass
NVNT	n20	5785	Ant1	11.12	0.1	11.22	30	Pass
NVNT	n20	5825	Ant1	11.34	0.1	11.44	30	Pass
NVNT	n40	5755	Ant1	10.24	0.2	10.44	30	Pass
NVNT	n40	5795	Ant1	10.62	0.2	10.82	30	Pass

MIMO

Condition	Mode	Frequency (MHz)	Total Power (dBm)			Limit (dBm)	Verdict
			Ant0	Ant1	Ant0+Ant1		
NVNT	n20	5745	11.17	11.1	14.15	28.42	Pass
NVNT	n20	5785	11.4	11.22	14.32	28.42	Pass
NVNT	n20	5825	11.42	11.44	14.44	28.42	Pass
NVNT	n40	5755	11.34	10.44	13.92	28.42	Pass
NVNT	n40	5795	11.78	10.82	14.34	28.42	Pass





B.3 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	n20	5745	Ant0	-0.58	0.1	-0.48	30	Pass
NVNT	n20	5785	Ant0	-0.2	0.1	-0.1	30	Pass
NVNT	n20	5825	Ant0	-0.19	0.1	-0.09	30	Pass
NVNT	n40	5755	Ant0	-4.54	0.2	-4.34	30	Pass
NVNT	n40	5795	Ant0	-4.24	0.2	-4.04	30	Pass

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/500KHz)	Duty Factor (dB)	Total PSD (dBm/500KHz)	Limit (dBm/500KHz)	Verdict
NVNT	n20	5745	Ant1	-1.39	0.1	-1.29	30	Pass
NVNT	n20	5785	Ant1	-1.64	0.1	-1.54	30	Pass
NVNT	n20	5825	Ant1	-1.26	0.1	-1.16	30	Pass
NVNT	n40	5755	Ant1	-5.33	0.2	-5.13	30	Pass
NVNT	n40	5795	Ant1	-4.92	0.2	-4.72	30	Pass

MIMO

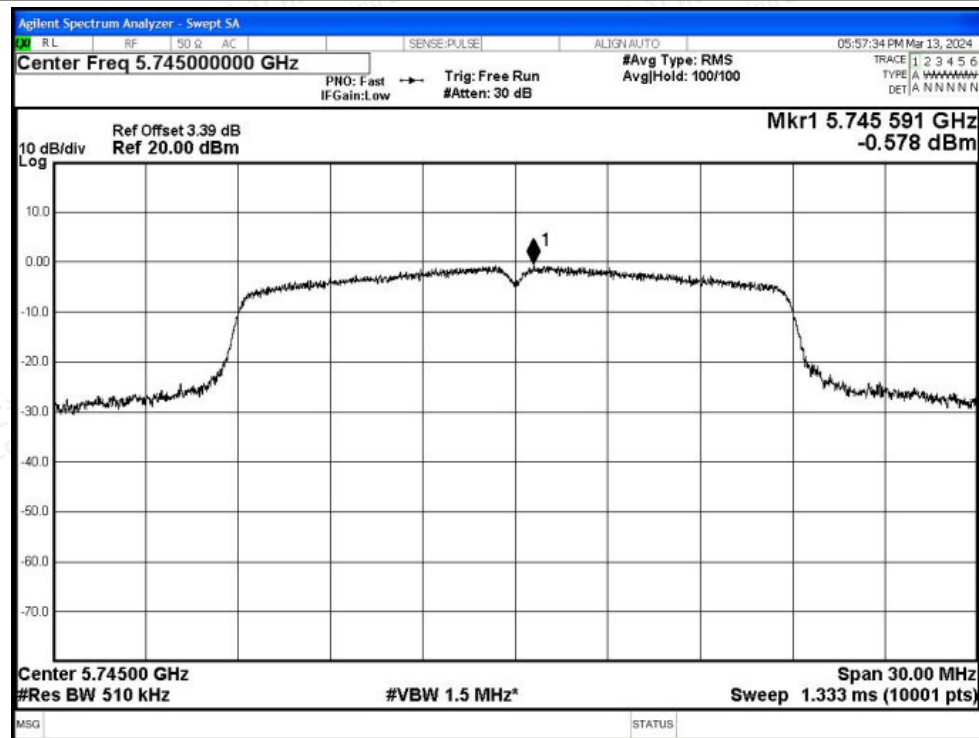
Condition	Mode	Frequency (MHz)	Total PSD (dBm/500KHz)			Limit (dBm/500KHz)	Verdict
			Ant0	Ant1	Ant0+Ant1		
NVNT	n20	5745	-0.48	-1.29	2.14	28.42	Pass
NVNT	n20	5785	-0.1	-1.54	2.25	28.42	Pass
NVNT	n20	5825	-0.09	-1.16	2.42	28.42	Pass
NVNT	n40	5755	-4.34	-5.13	-1.71	28.42	Pass
NVNT	n40	5795	-4.04	-4.72	-1.36	28.42	Pass



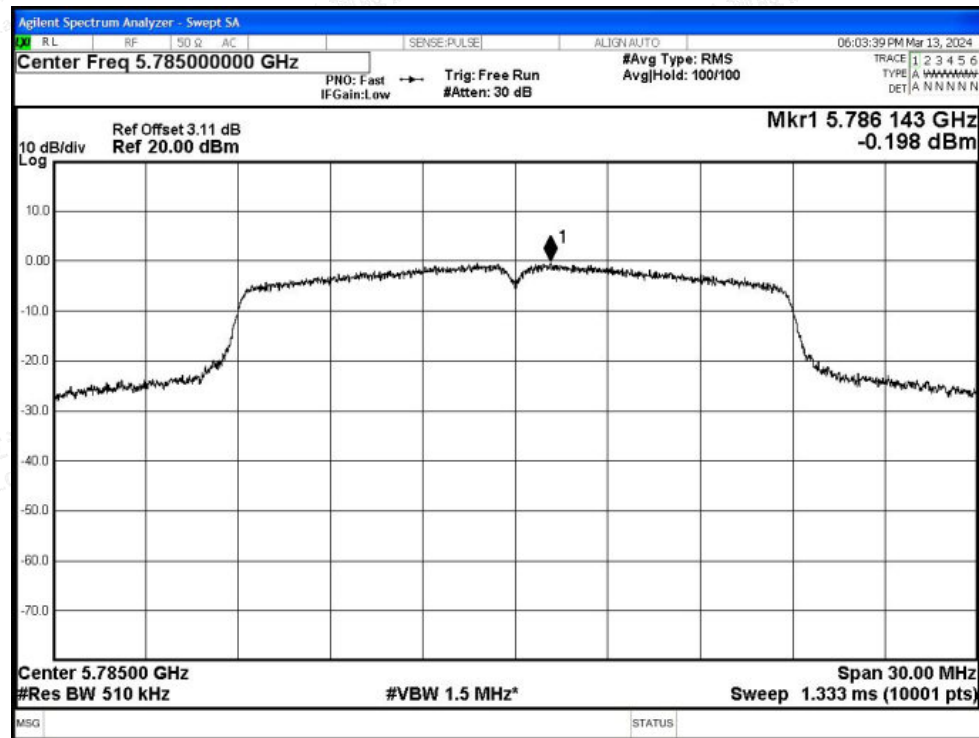


Test Graphs

PSD NVNT n20 5745MHz Ant0



PSD NVNT n20 5785MHz Ant0

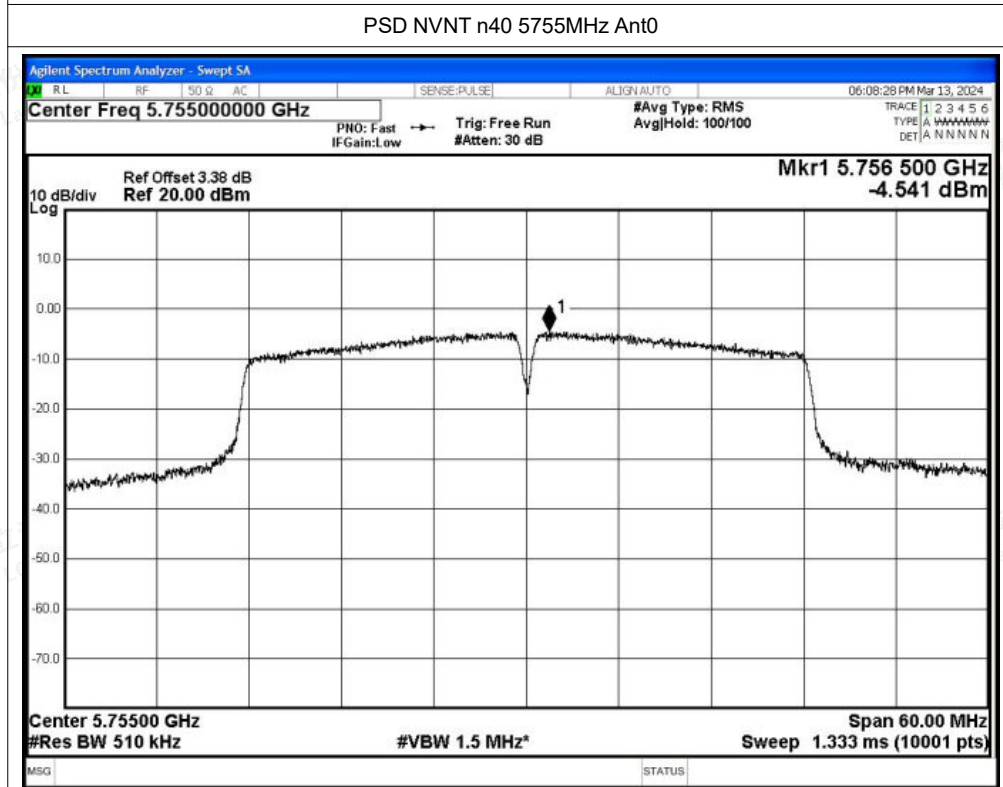
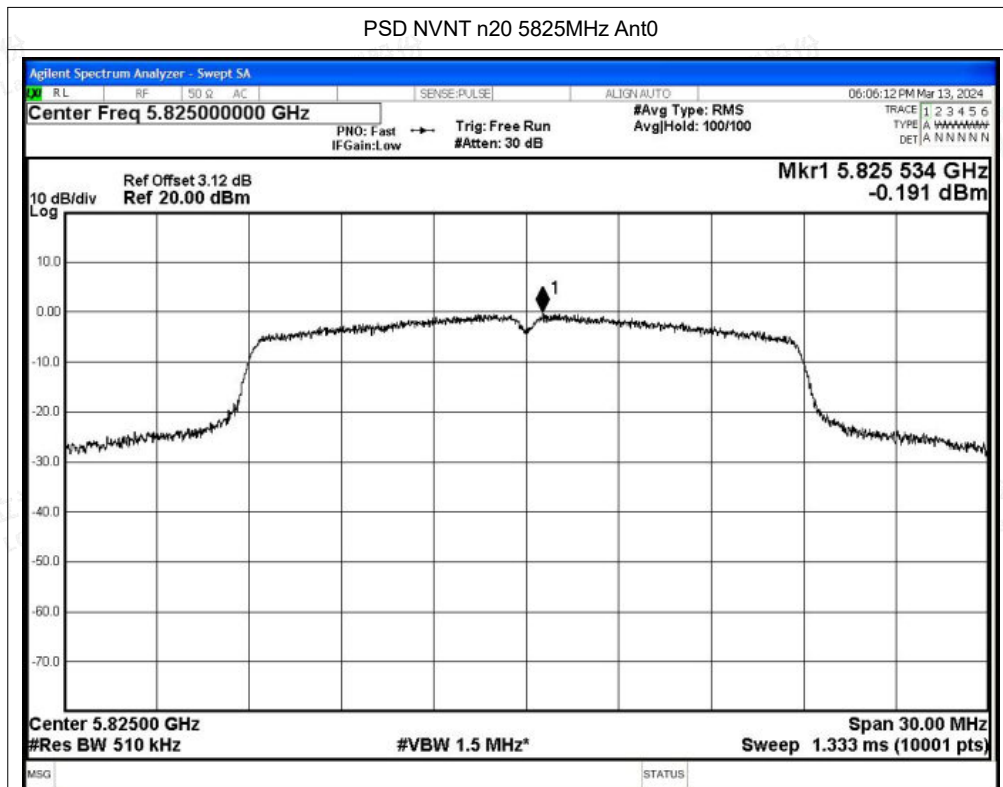


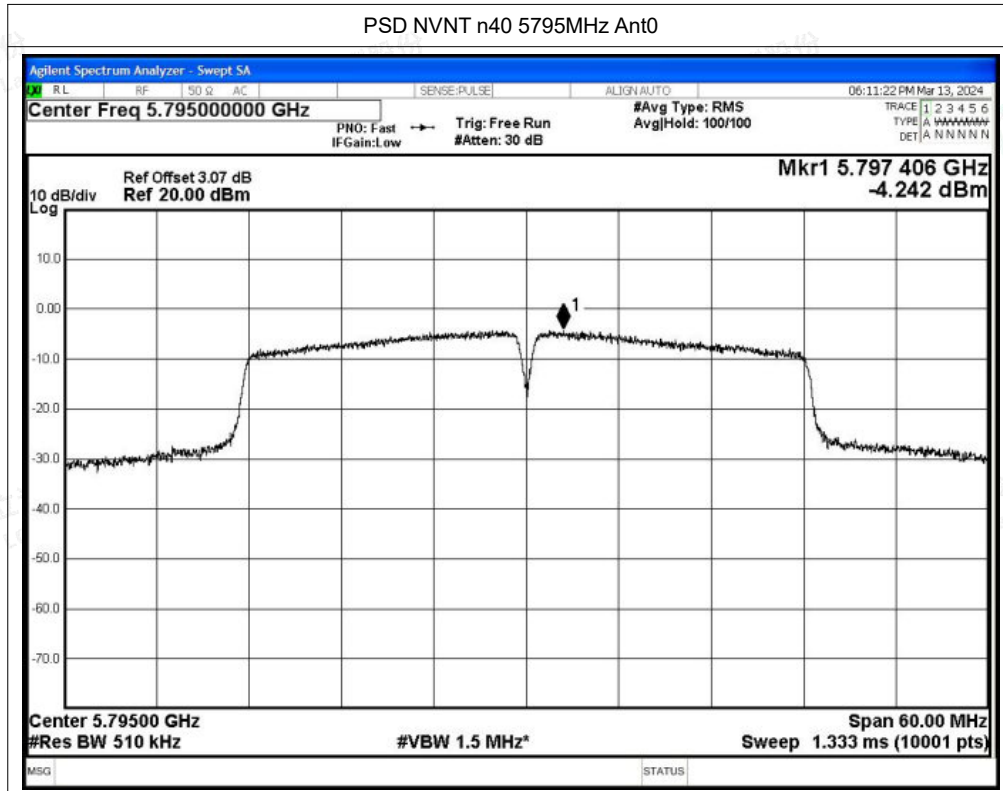
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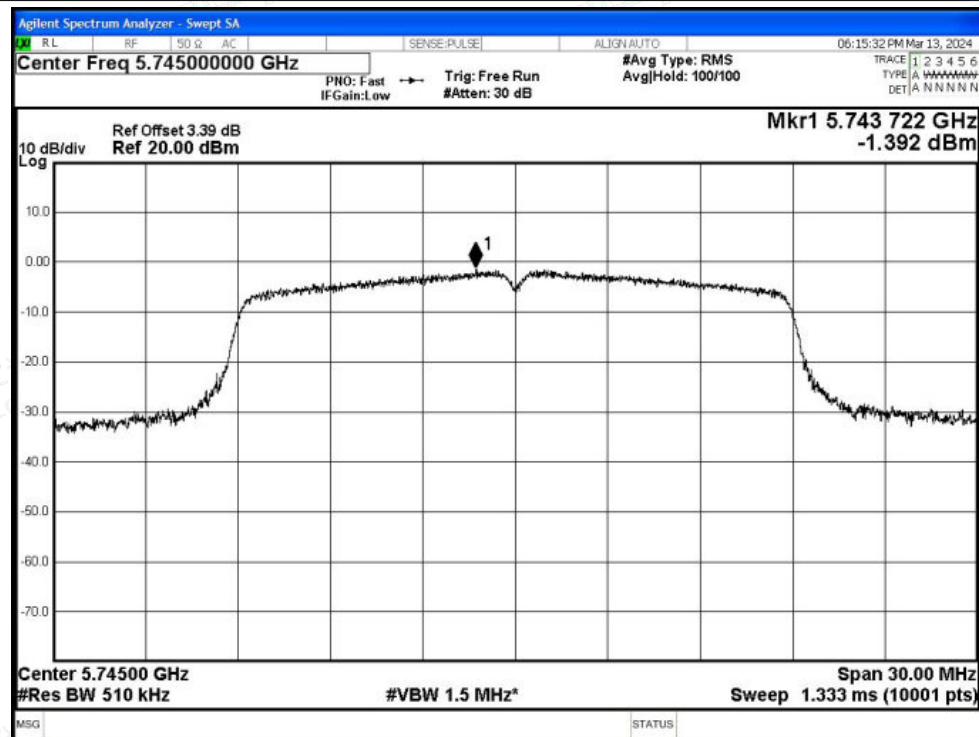




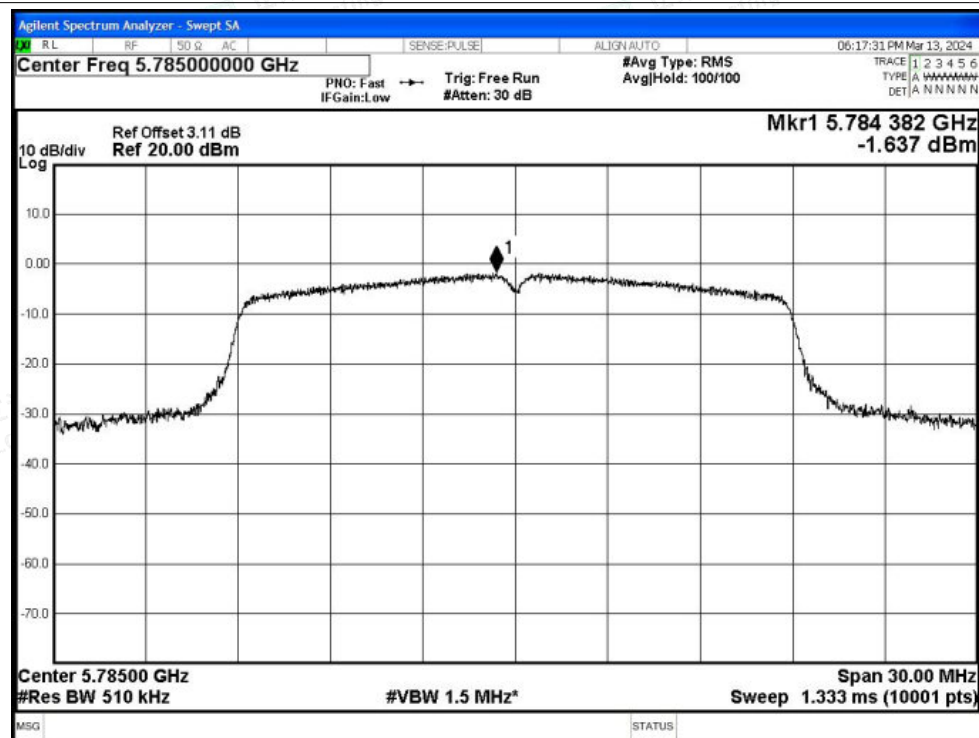


Test Graphs

PSD NVNT n20 5745MHz Ant1



PSD NVNT n20 5785MHz Ant1



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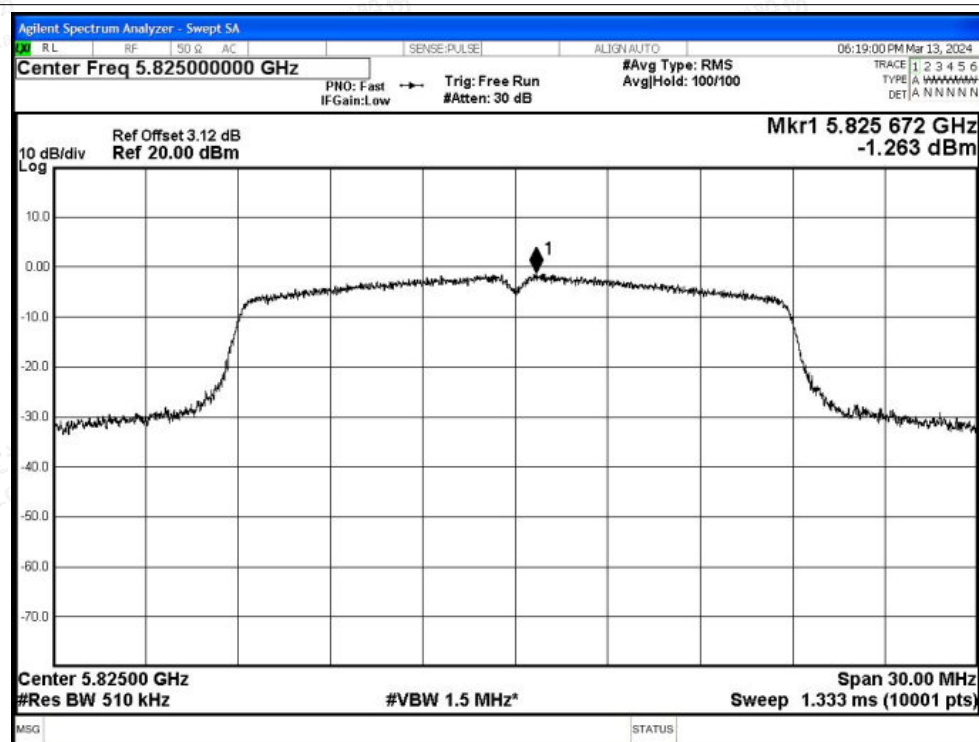
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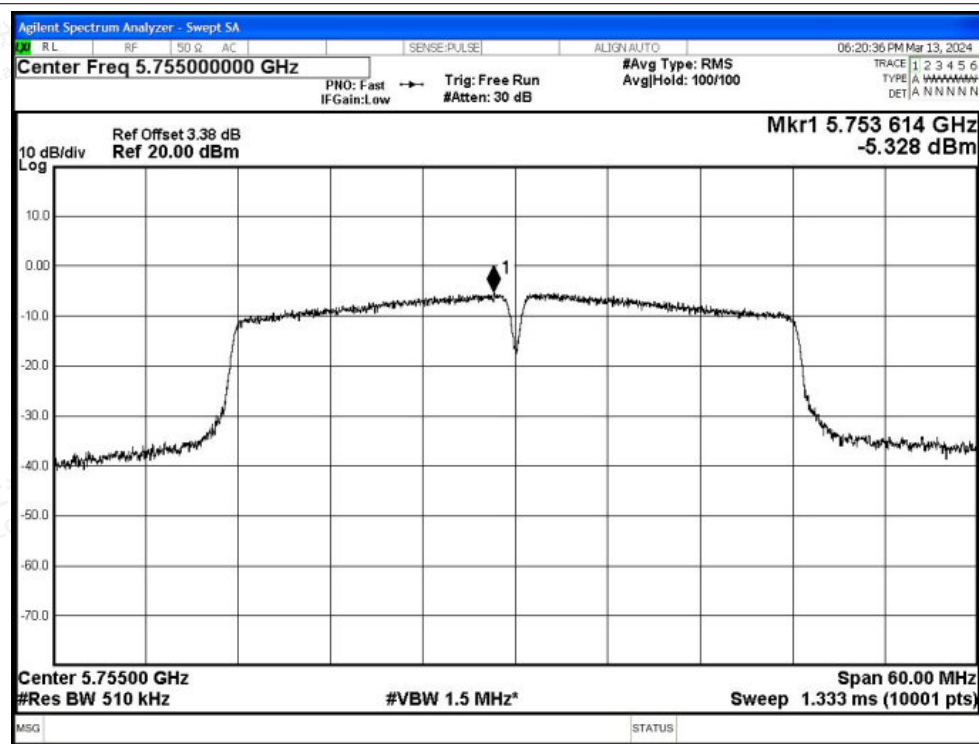
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PSD NVNT n20 5825MHz Ant1



PSD NVNT n40 5755MHz Ant1

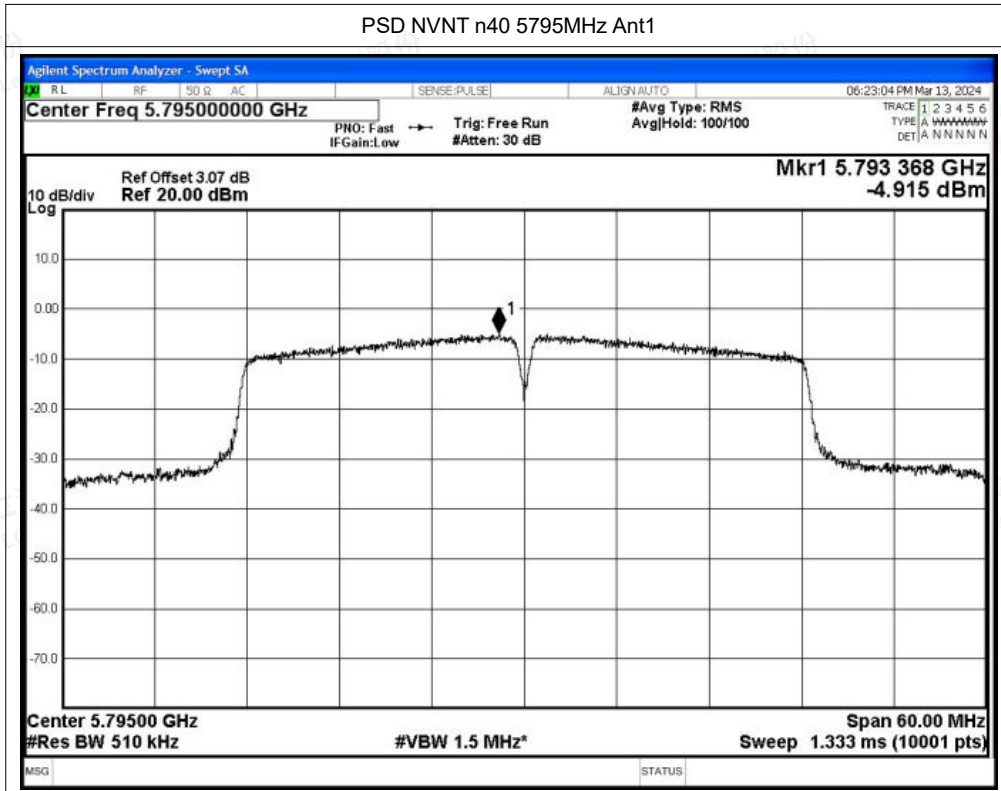


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B.4 Restrict Band

Condition	Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	EIRP Power (dBm)	Detector	Limit (dBm)	Verdict
NVNT	n20mimo	5745	5650	-49.68	7.58	-	-42.1	Peak	-27	Pass
NVNT	n20mimo	5745	5650	-56.93	7.58	0.1	-49.25	Average	-27	Pass
NVNT	n20mimo	5745	5700	-36.6	7.58	-	-29.02	Peak	10	Pass
NVNT	n20mimo	5745	5700	-47.59	7.58	0.1	-39.91	Average	10	Pass
NVNT	n20mimo	5745	5720	-26.33	7.58	-	-18.75	Peak	15.6	Pass
NVNT	n20mimo	5745	5720	-36.48	7.58	0.1	-28.8	Average	15.6	Pass
NVNT	n20mimo	5745	5725	-20.06	7.58	-	-12.48	Peak	27	Pass
NVNT	n20mimo	5745	5725	-31.7	7.58	0.1	-24.02	Average	27	Pass
NVNT	n20mimo	5825	5850	-28.33	7.58	-	-20.75	Peak	27	Pass
NVNT	n20mimo	5825	5850	-36.22	7.58	0.1	-28.54	Average	27	Pass
NVNT	n20mimo	5825	5855	-30.88	7.58	-	-23.3	Peak	15.6	Pass
NVNT	n20mimo	5825	5855	-40	7.58	0.1	-32.32	Average	15.6	Pass
NVNT	n20mimo	5825	5875	-38.73	7.58	-	-31.15	Peak	10	Pass
NVNT	n20mimo	5825	5875	-50.87	7.58	0.1	-43.19	Average	10	Pass
NVNT	n20mimo	5825	5925	-47.86	7.58	-	-40.28	Peak	-27	Pass
NVNT	n20mimo	5825	5925	-57.11	7.58	0.1	-49.43	Average	-27	Pass
NVNT	n40mimo	5755	5650	-47.91	7.58	-	-40.33	Peak	-27	Pass
NVNT	n40mimo	5755	5650	-55.78	7.58	0.2	-48	Average	-27	Pass
NVNT	n40mimo	5755	5700	-33.82	7.58	-	-26.24	Peak	10	Pass
NVNT	n40mimo	5755	5700	-44.59	7.58	0.2	-36.81	Average	10	Pass
NVNT	n40mimo	5755	5720	-23.56	7.58	-	-15.98	Peak	15.6	Pass
NVNT	n40mimo	5755	5720	-35.24	7.58	0.2	-27.46	Average	15.6	Pass
NVNT	n40mimo	5755	5725	-23.67	7.58	-	-16.09	Peak	27	Pass
NVNT	n40mimo	5755	5725	-32.38	7.58	0.2	-24.6	Average	27	Pass
NVNT	n40mimo	5795	5850	-33.07	7.58	-	-25.49	Peak	27	Pass
NVNT	n40mimo	5795	5850	-41.85	7.58	0.2	-34.07	Average	27	Pass
NVNT	n40mimo	5795	5855	-32.53	7.58	-	-24.95	Peak	15.6	Pass
NVNT	n40mimo	5795	5855	-43.36	7.58	0.2	-35.58	Average	15.6	Pass
NVNT	n40mimo	5795	5875	-39.68	7.58	-	-32.1	Peak	10	Pass
NVNT	n40mimo	5795	5875	-49.71	7.58	0.2	-41.93	Average	10	Pass
NVNT	n40mimo	5795	5925	-49.44	7.58	-	-41.86	Peak	-27	Pass
NVNT	n40mimo	5795	5925	-56.83	7.58	0.2	-49.05	Average	-27	Pass

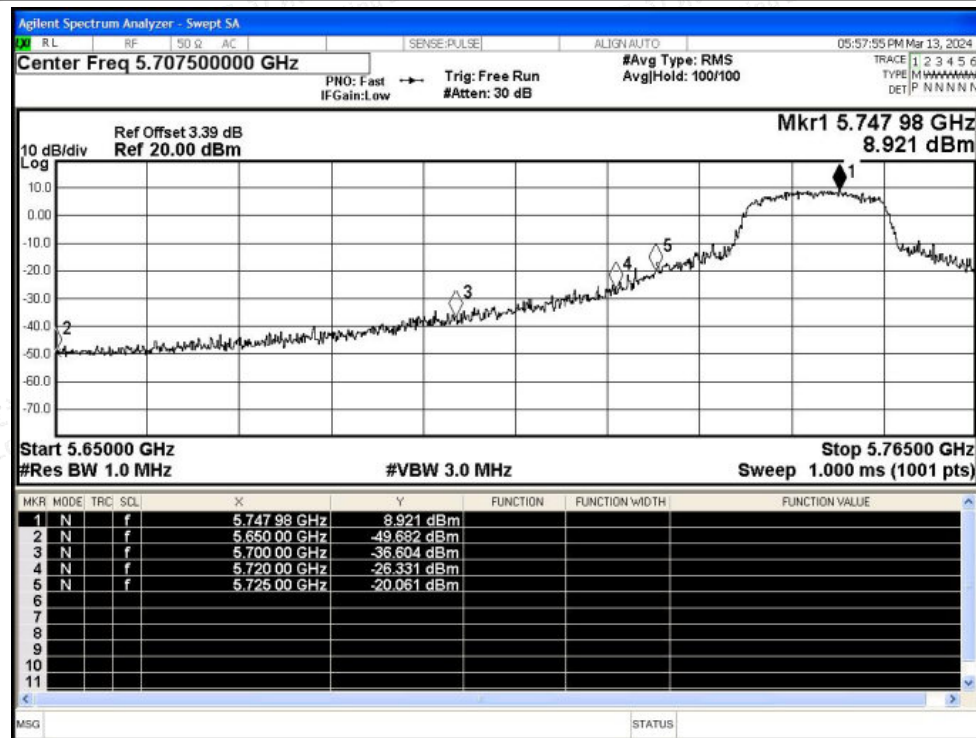
Note: Only show the worst set of data.



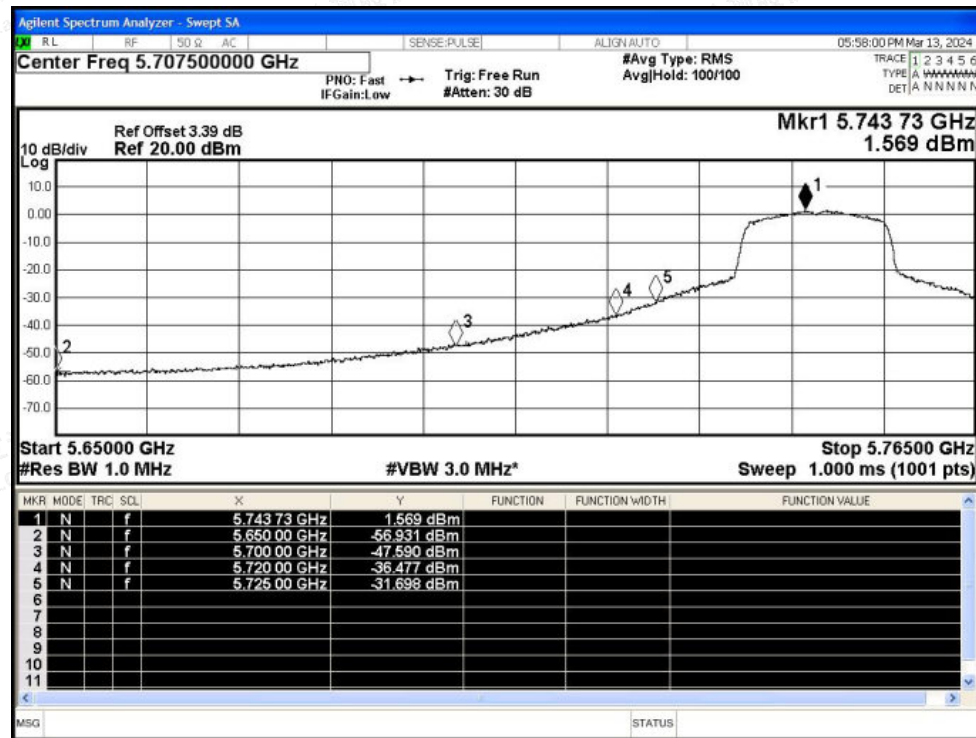


Test Graphs

Restrict Band NVNT n20mimo 5745MHz Peak



Restrict Band NVNT n20mimo 5745MHz Average



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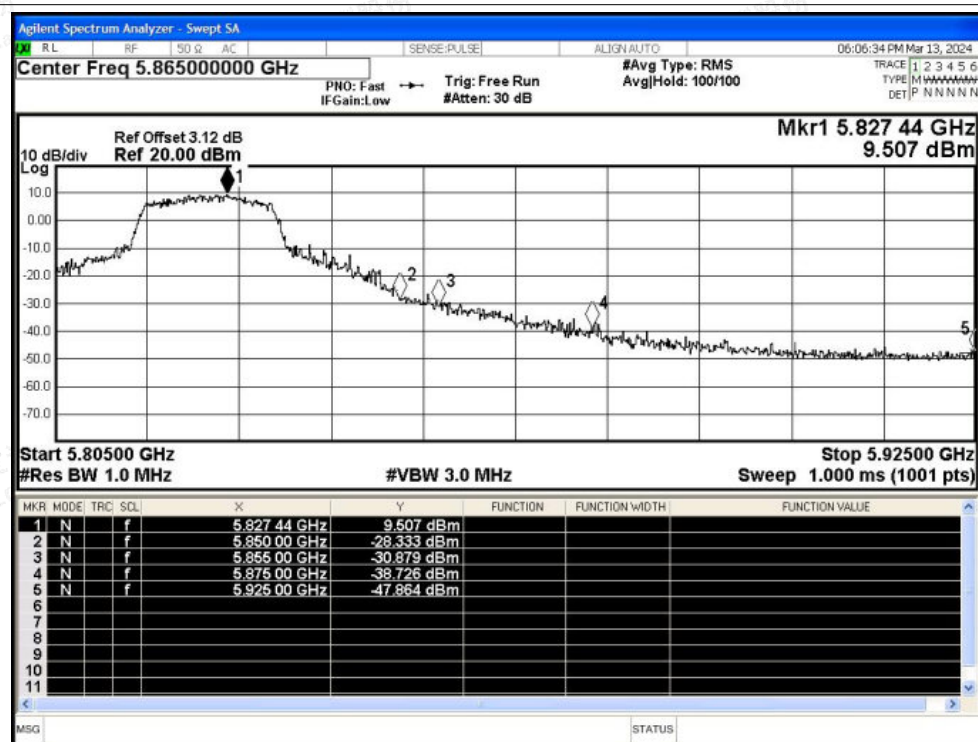
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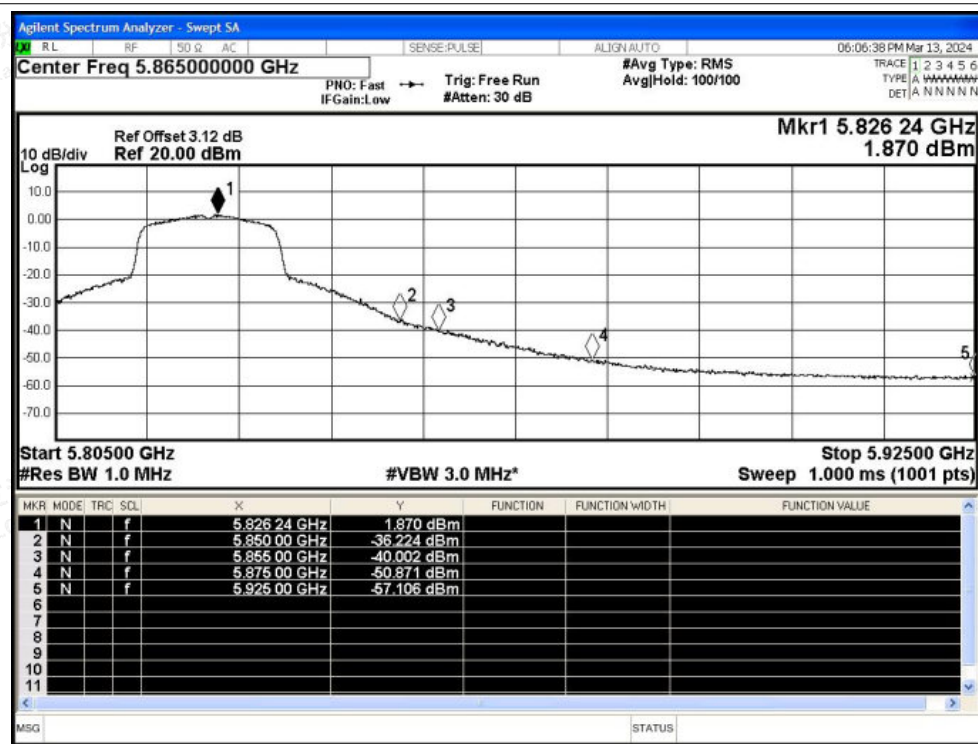
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Restrict Band NVNT n20mimo 5825MHz Peak



Restrict Band NVNT n20mimo 5825MHz Average



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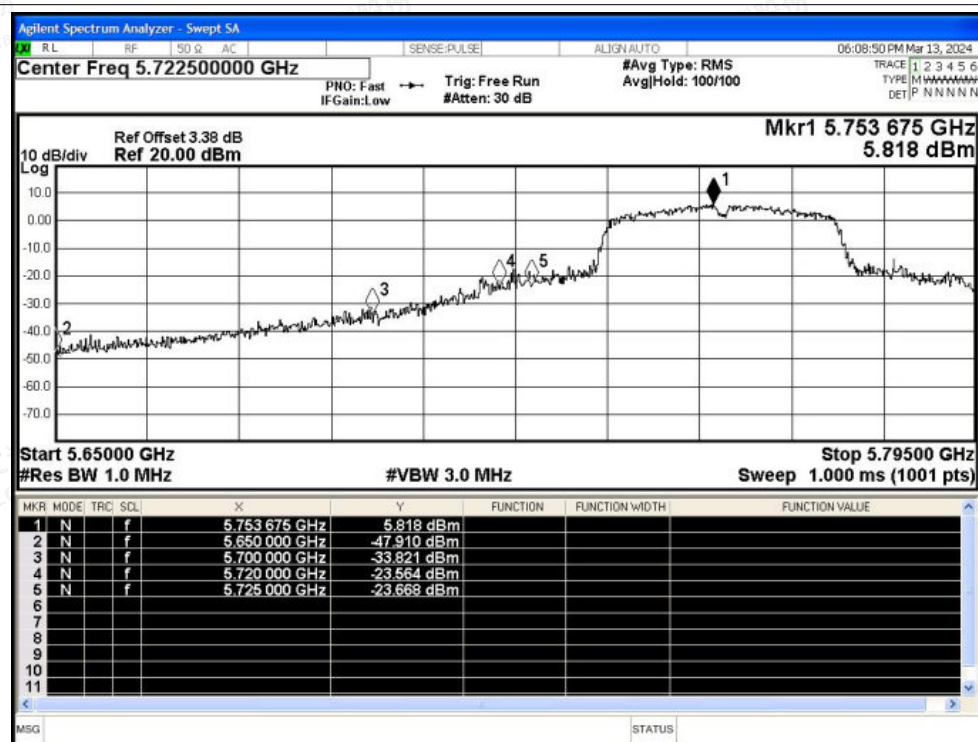
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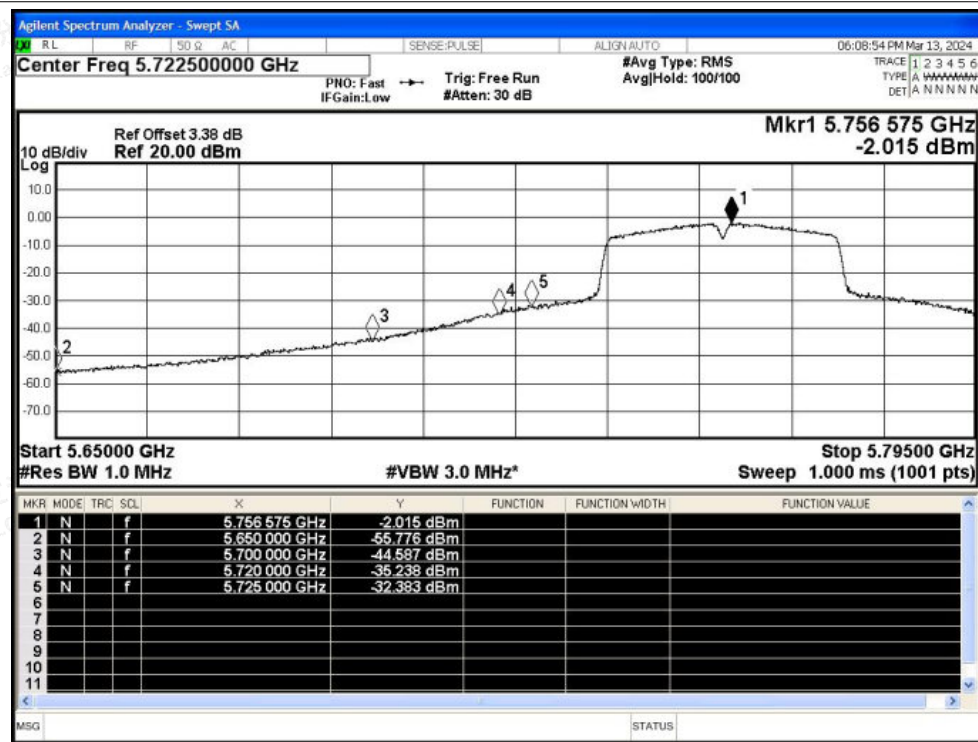
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Restrict Band NVNT n40mimo 5755MHz Peak



Restrict Band NVNT n40mimo 5755MHz Average



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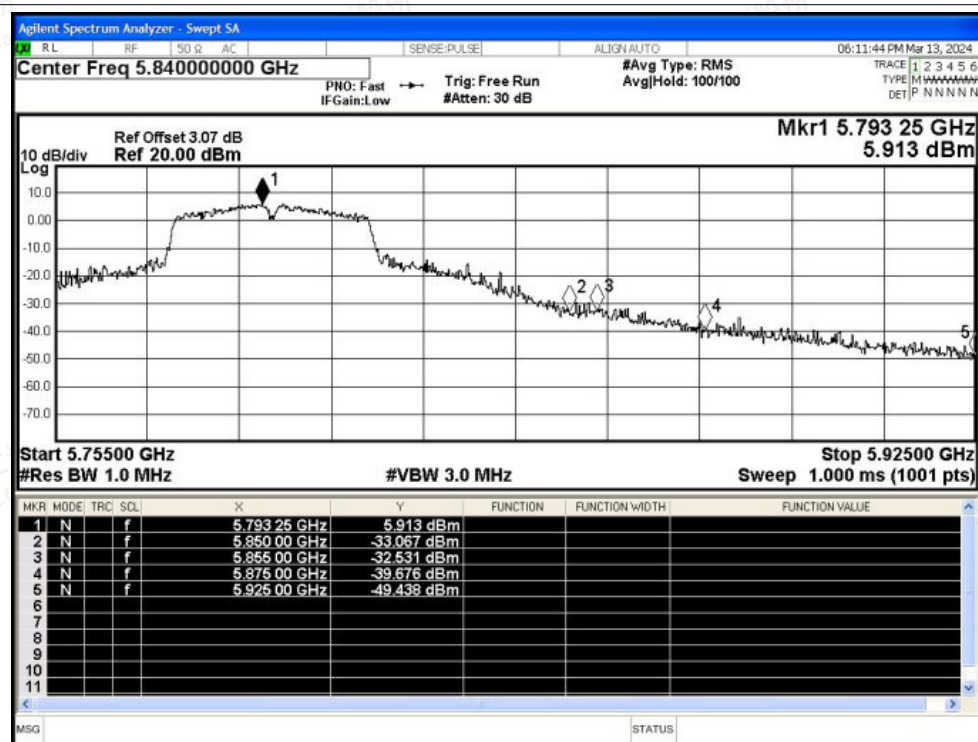
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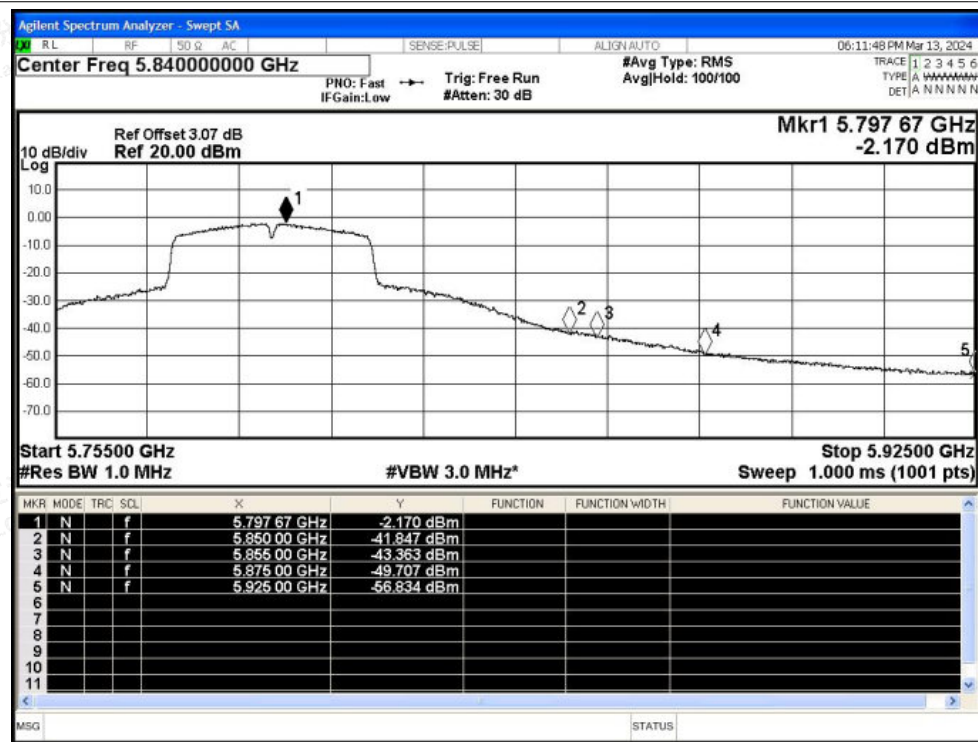
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Restrict Band NVNT n40mimo 5795MHz Peak



Restrict Band NVNT n40mimo 5795MHz Average



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B.5 Frequency Stability

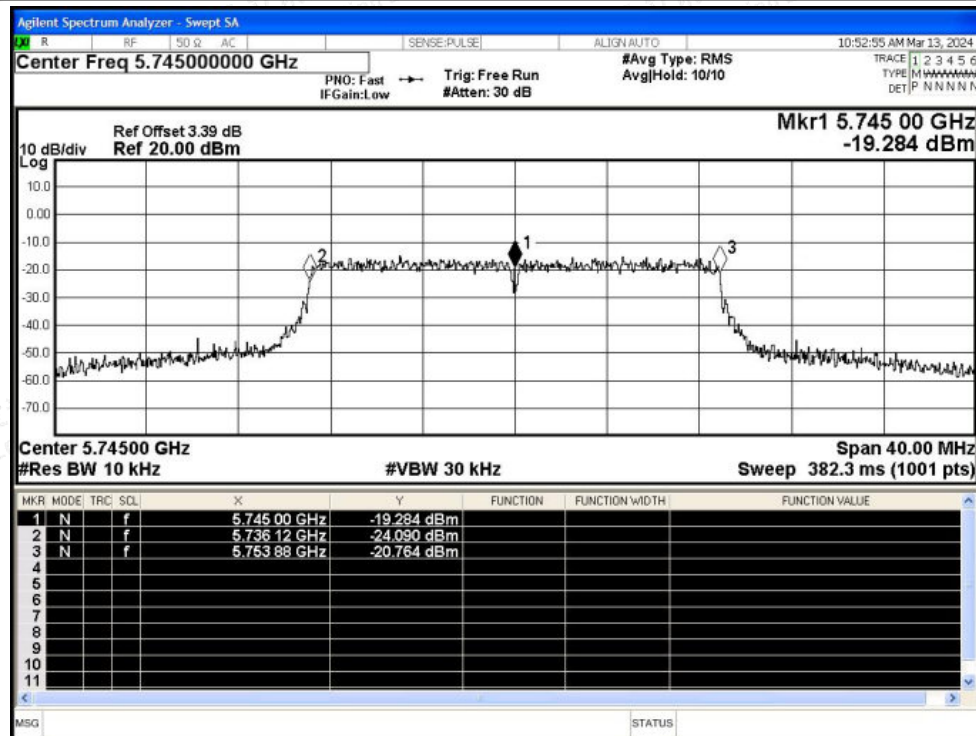
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	n20	5745	Ant1	5745	0	0	25	Pass
NVNT	n20	5785	Ant1	5785	0	0	25	Pass
NVNT	n20	5825	Ant1	5825	0	0	25	Pass
NVNT	n40	5755	Ant1	5755	0	0	25	Pass
NVNT	n40	5795	Ant1	5795	0	0	25	Pass



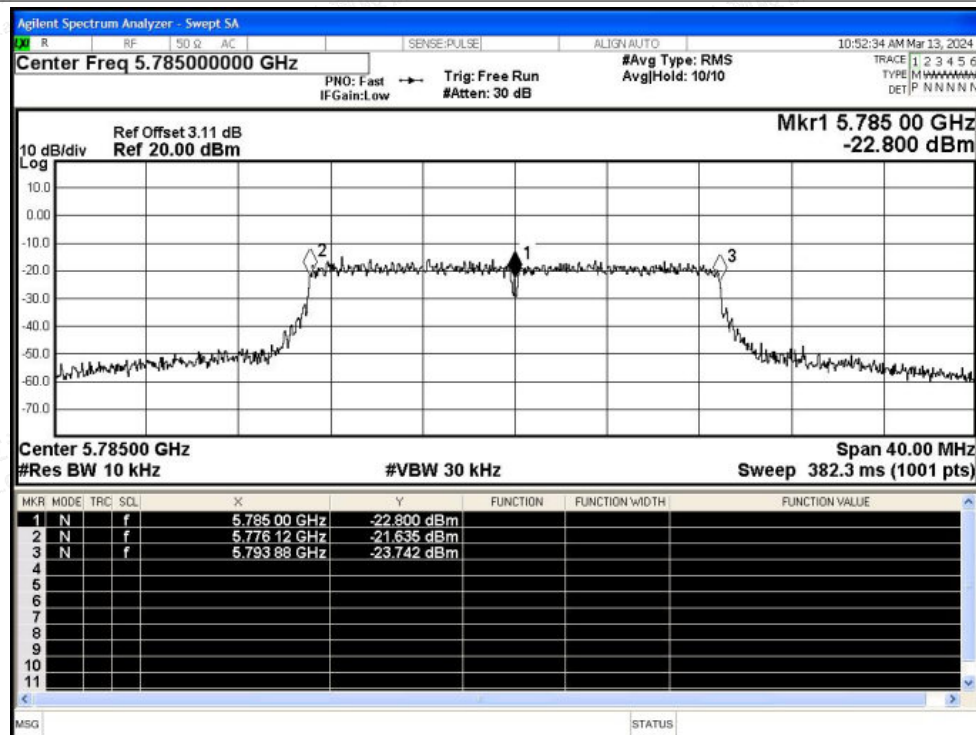


Test Graphs

Freq. Stability NVNT n20 5745MHz Ant1



Freq. Stability NVNT n20 5785MHz Ant1



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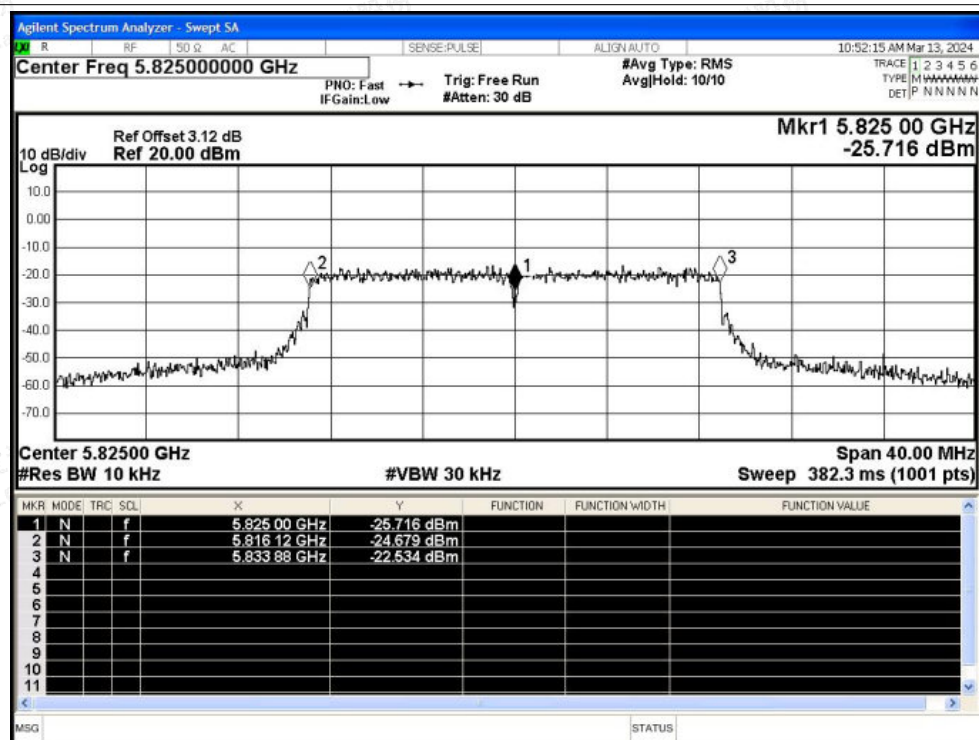
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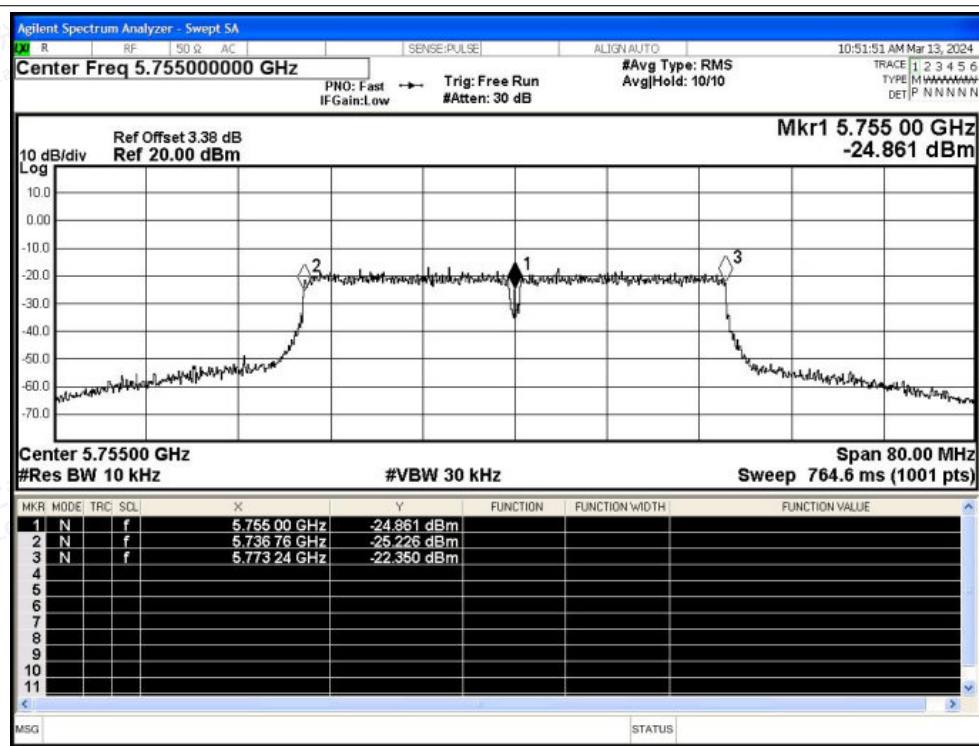
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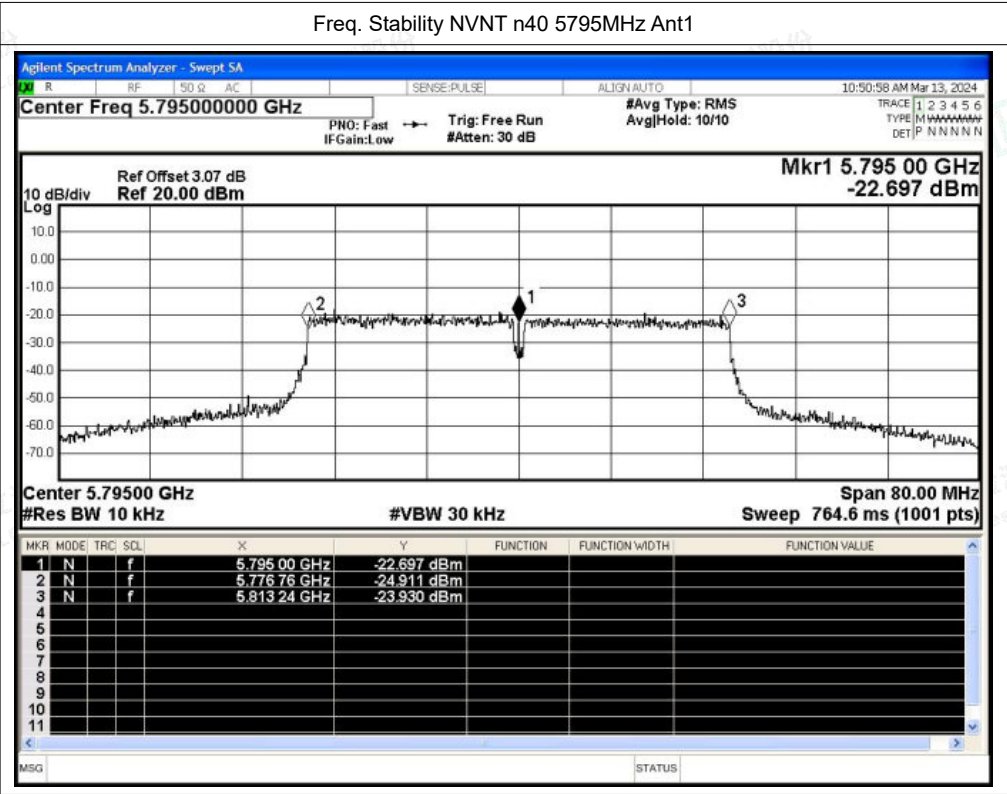


Freq. Stability NVNT n20 5825MHz Ant1



Freq. Stability NVNT n40 5755MHz Ant1







B.6 Duty Cycle

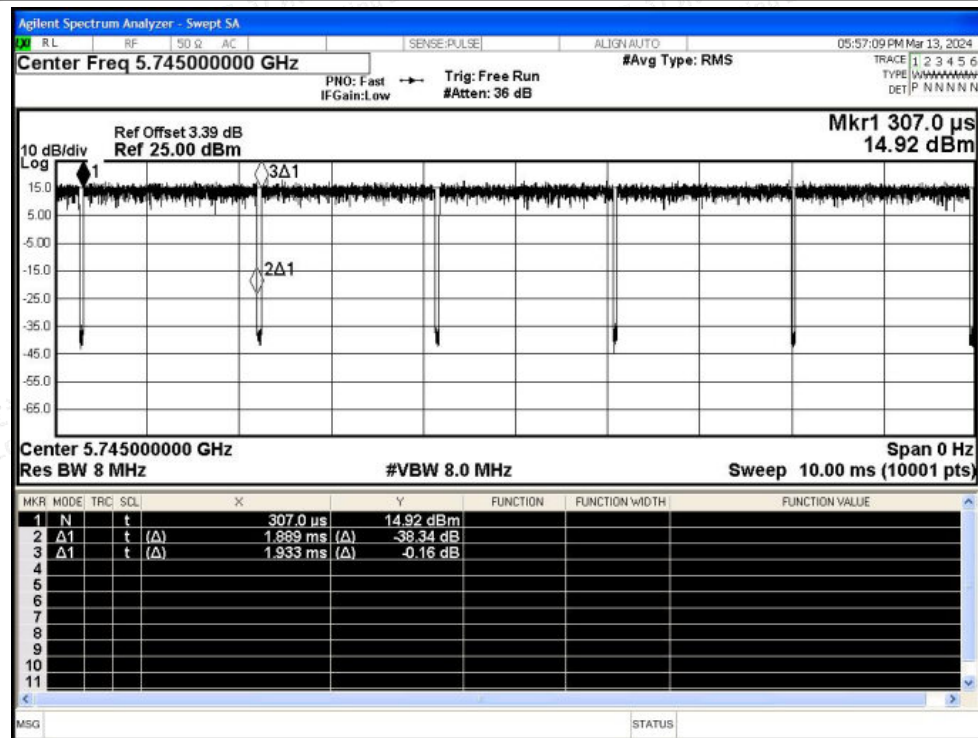
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	n20	5745	Ant0	97.72	0.1	0.53
NVNT	n20	5785	Ant0	97.72	0.1	0.53
NVNT	n20	5825	Ant0	97.72	0.1	0.53
NVNT	n40	5755	Ant0	95.48	0.2	1.08
NVNT	n40	5795	Ant0	95.48	0.2	1.08



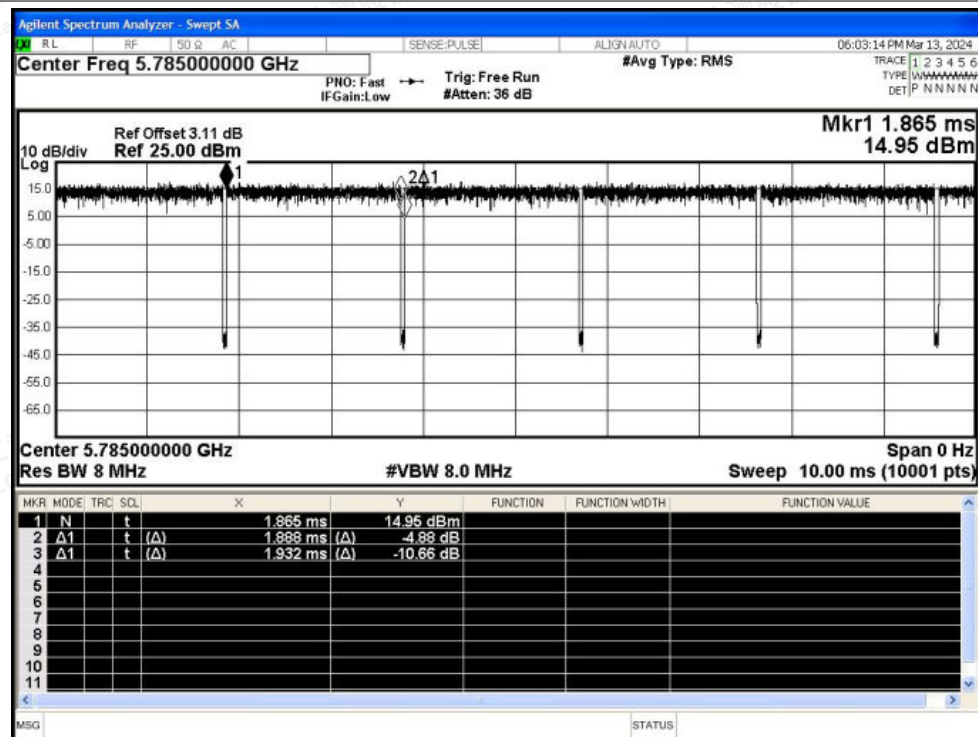


Test Graphs

Duty Cycle NVNT n20 5745MHz Ant0



Duty Cycle NVNT n20 5785MHz Ant0



Shenzhen LCS Compliance Testing Laboratory Ltd.

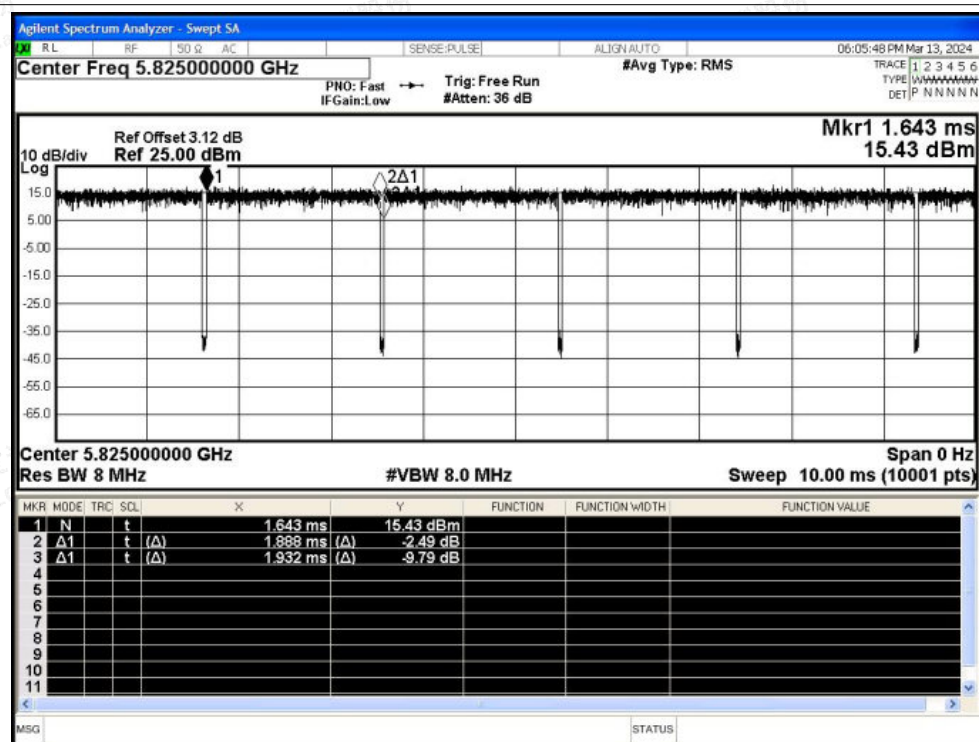
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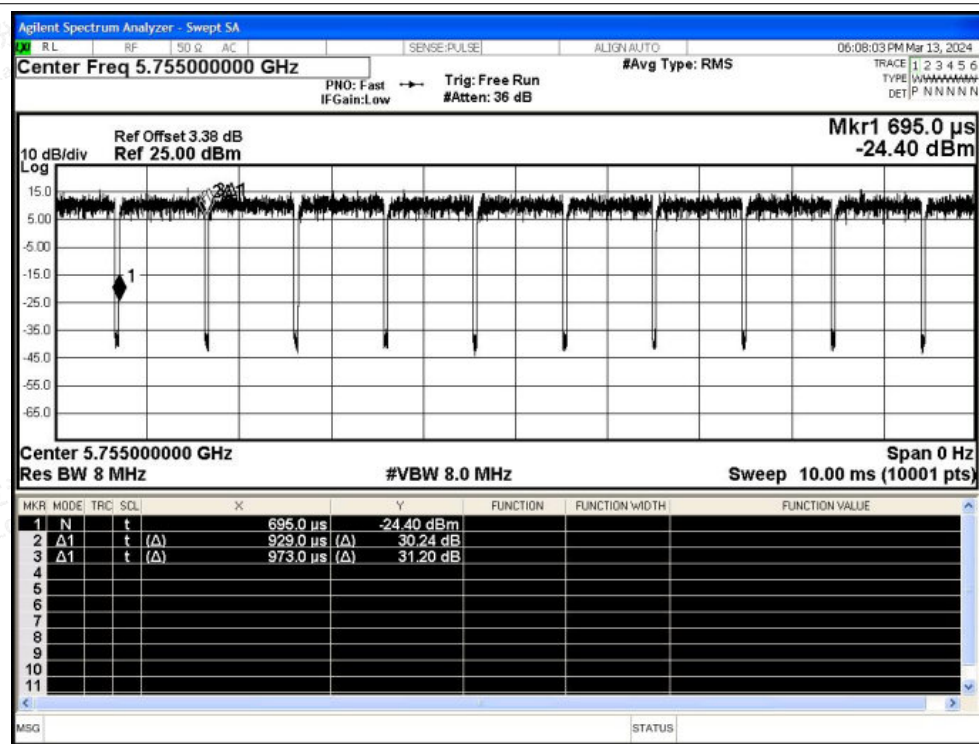
Scan code to check authenticity



Duty Cycle NVNT n20 5825MHz Ant0



Duty Cycle NVNT n40 5755MHz Ant0

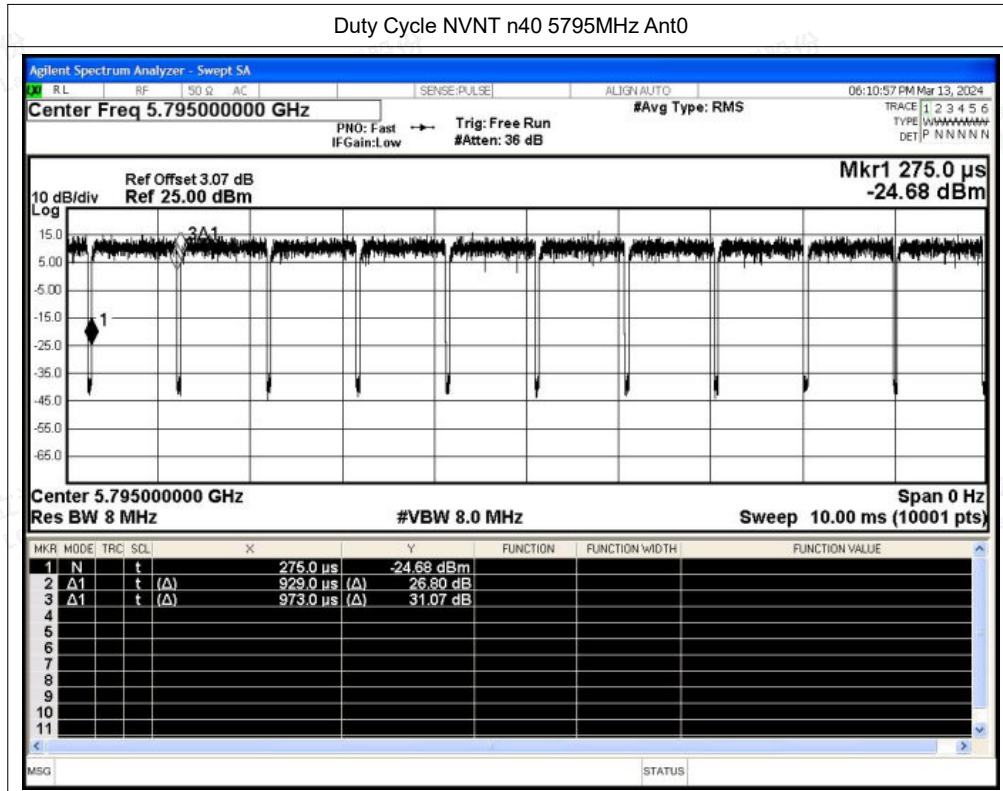


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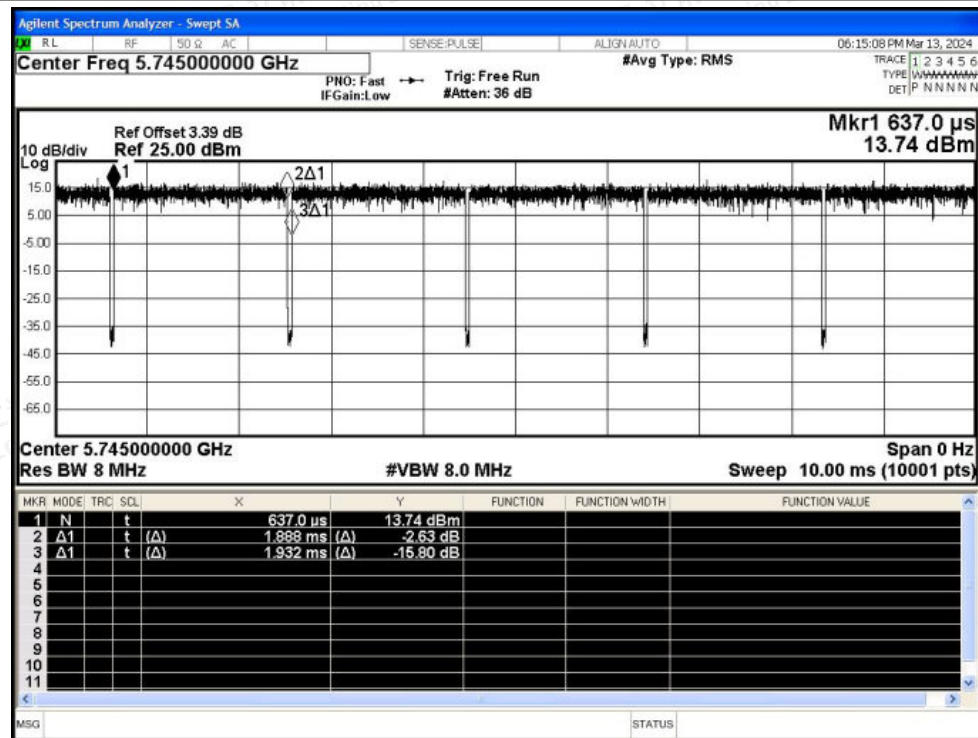
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	n20	5745	Ant1	97.72	0.1	0.53
NVNT	n20	5785	Ant1	97.72	0.1	0.53
NVNT	n20	5825	Ant1	97.72	0.1	0.53
NVNT	n40	5755	Ant1	95.47	0.2	1.08
NVNT	n40	5795	Ant1	95.47	0.2	1.08



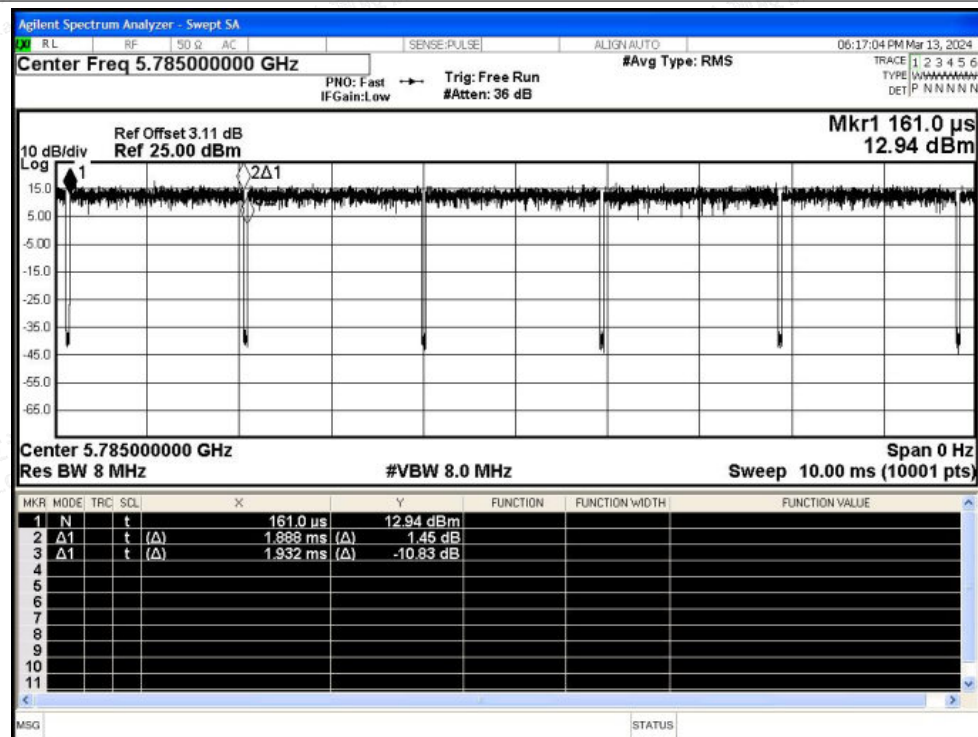


Test Graphs

Duty Cycle NVNT n20 5745MHz Ant1



Duty Cycle NVNT n20 5785MHz Ant1



Shenzhen LCS Compliance Testing Laboratory Ltd.

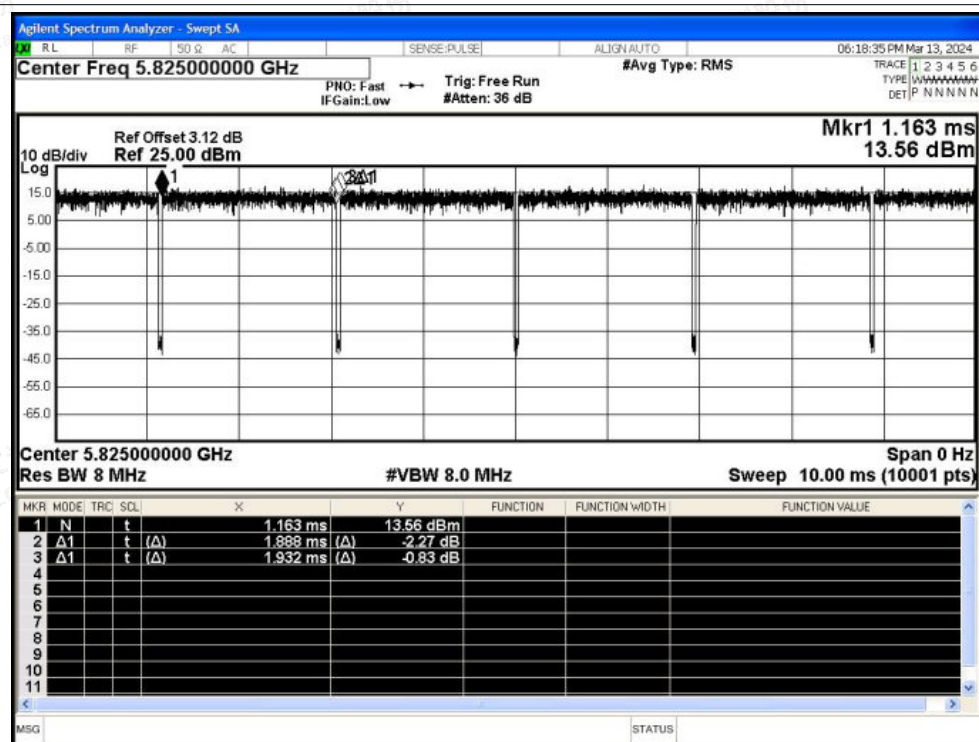
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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Scan code to check authenticity



Duty Cycle NVNT n20 5825MHz Ant1



Duty Cycle NVNT n40 5755MHz Ant1

