

## Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: Unit D/E of 9/F and 16/F, Block A, Building 6, Baoneng science and technology park, Longhua district, Shenzhen, China

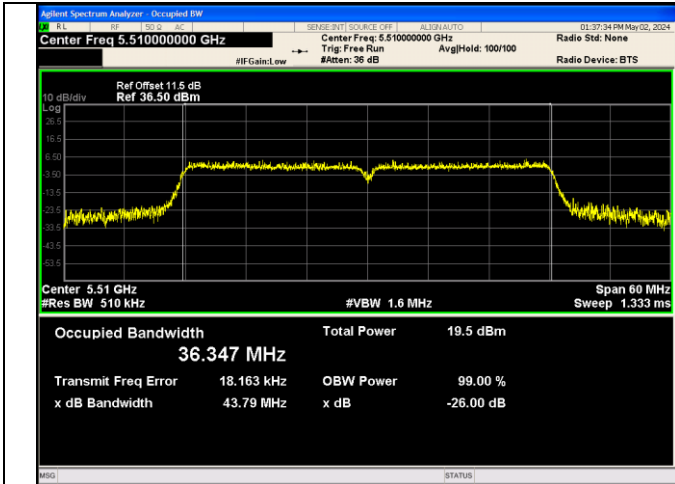
Tel: +86-755-28230888

Fax: +86-755-28230886

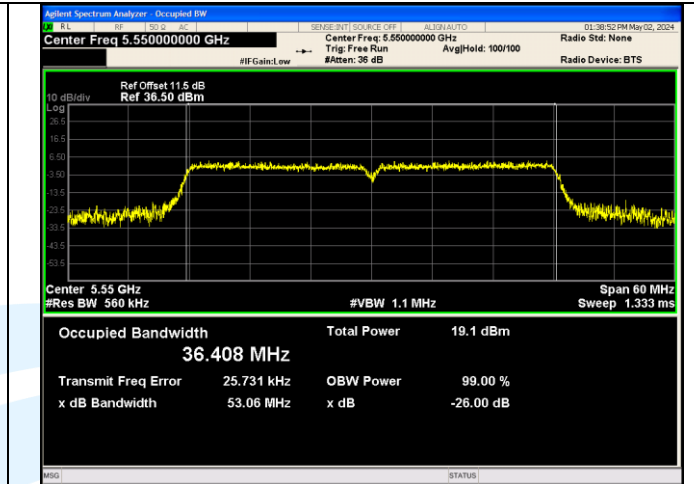
E-mail: info@uttlab.com

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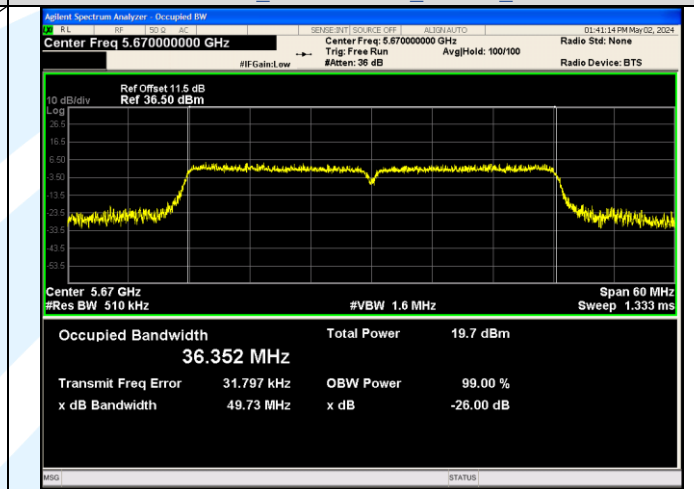
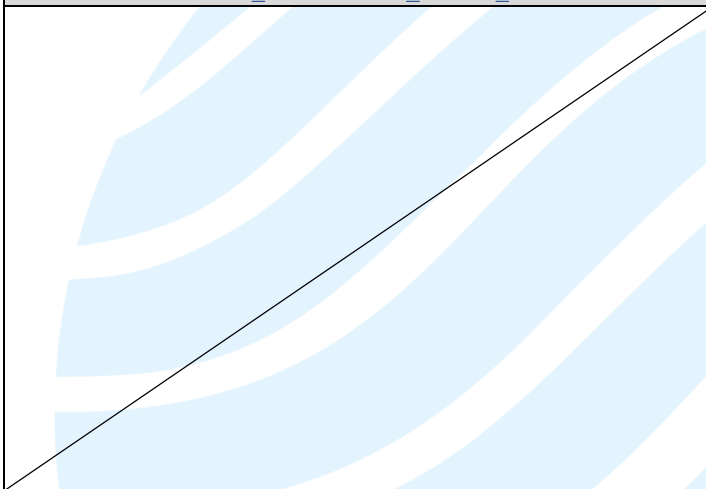
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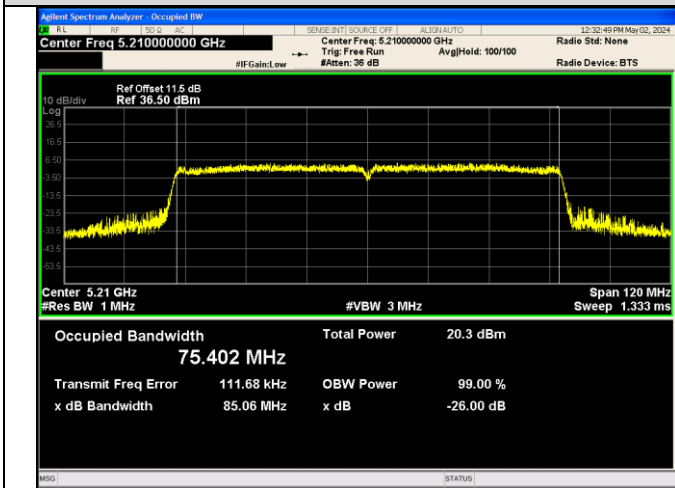
IEEE 802.11ac\_Channel 102\_40MHz\_Antenna 0



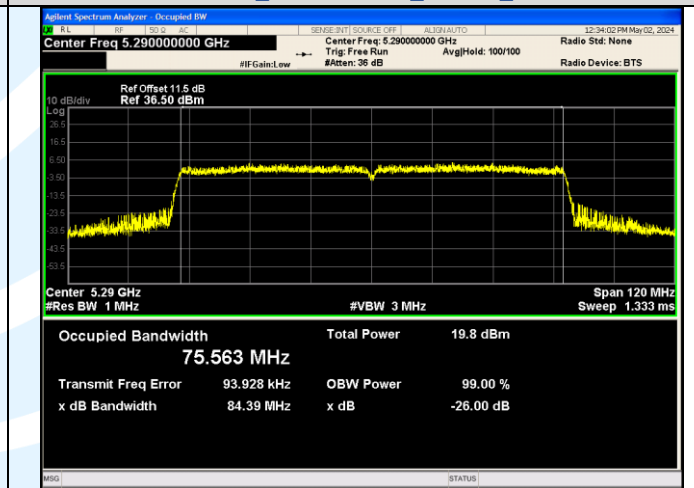
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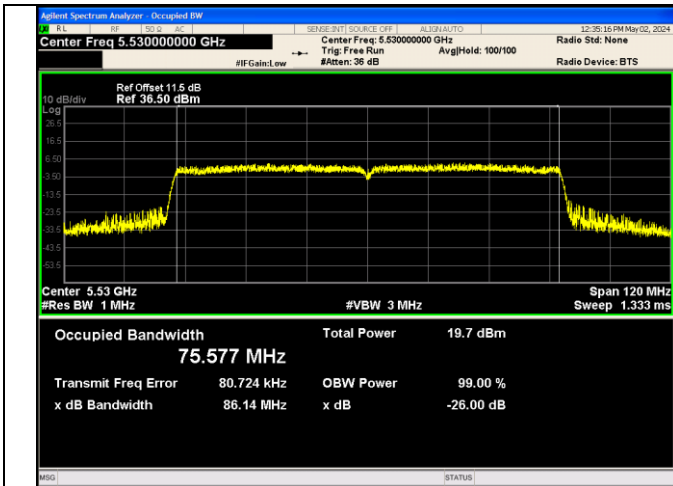
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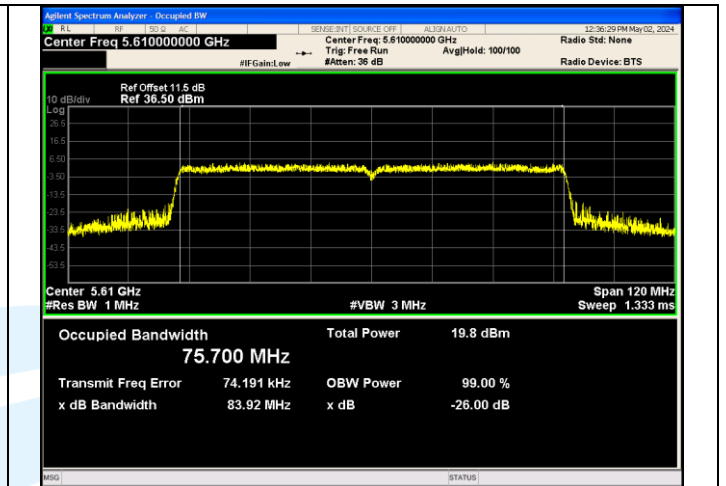
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IEEE 802.11ac\_Channel 58\_80MHz\_Antenna 0



IEEE 802.11ac\_Channel 106\_80MHz\_Antenna 0



IEEE 802.11ac\_Channel 122\_80MHz\_Antenna 0

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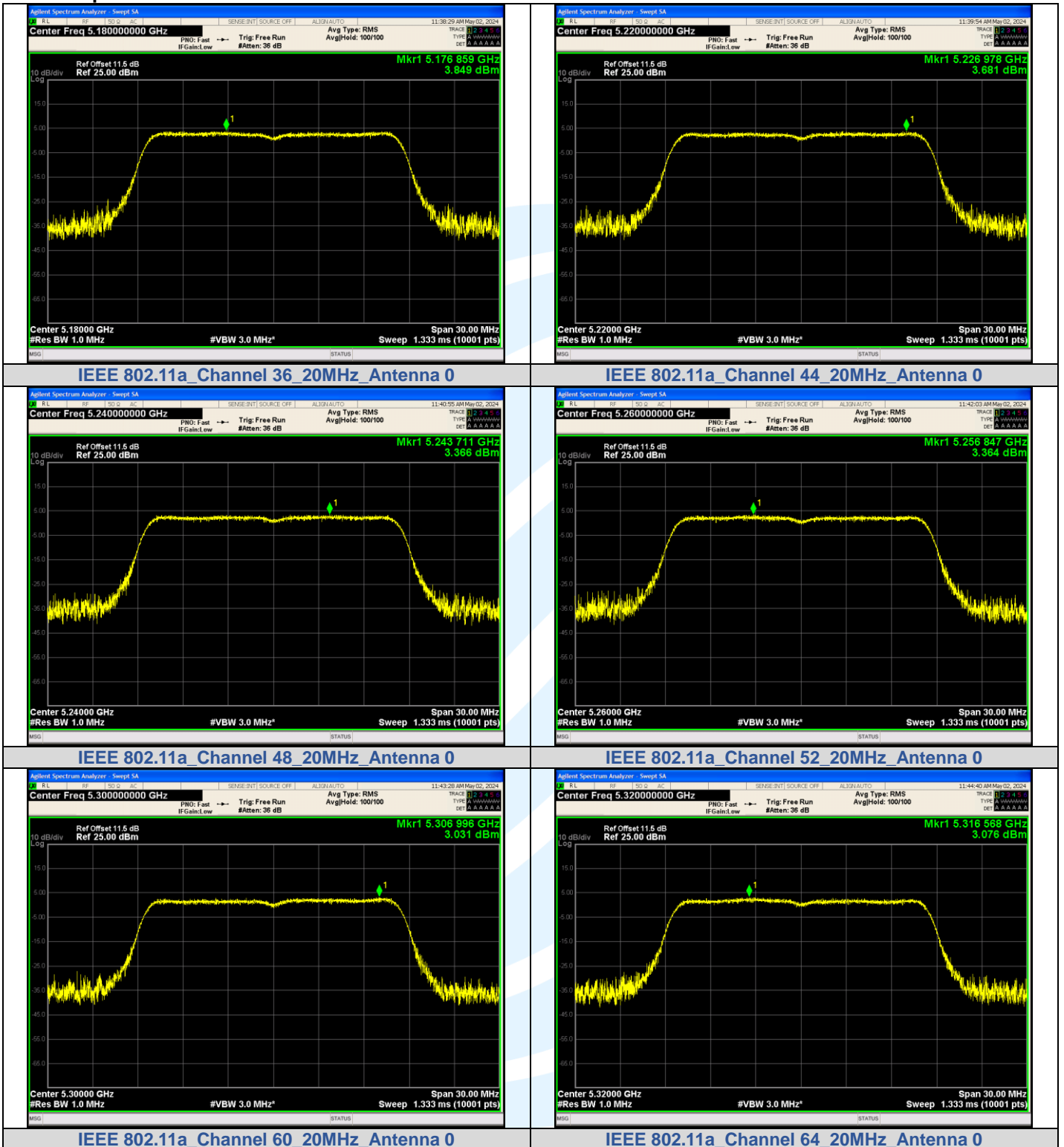
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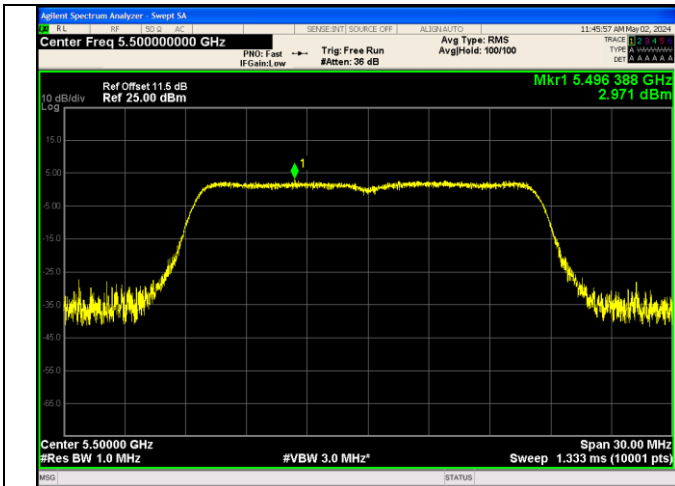
### A.3 PEAK POWER SPECTRAL DENSITY

For U-NII-1, U-NII-2A, U-NII-2C band

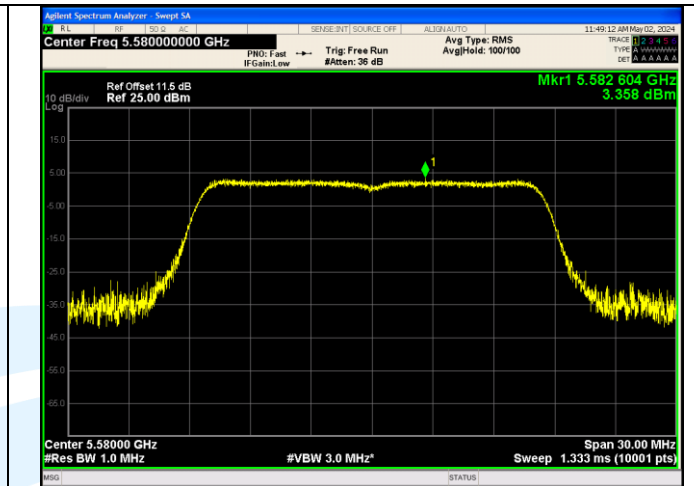
Mode	Channel	Ant. 0 Meas PSD (dBm/MHz or dBm/0.5MHz)	Ant. 0 Corr'd PSD (dBm/MHz or dBm/0.5MHz)	Limit (dBm/MHz or dBm/0.5MHz)	Result
IEEE 802.11a	36	3.849	4.389	11	PASS
	44	3.681	4.221		PASS
	48	3.366	3.906		PASS
	52	3.364	3.904		PASS
	60	3.031	3.571		PASS
	64	3.076	3.616		PASS
	100	2.971	3.511		PASS
	116	3.358	3.898		PASS
140	3.140	3.680	PASS		
IEEE 802.11n_20	36	3.508	4.158	11	PASS
	44	3.182	3.832		PASS
	48	2.945	3.595		PASS
	52	3.095	3.745		PASS
	60	2.946	3.596		PASS
	64	2.904	3.554		PASS
	100	2.842	3.492		PASS
	116	3.325	3.975		PASS
140	3.555	4.205	PASS		
IEEE 802.11n_40	38	0.757	2.277	11	PASS
	46	1.243	2.763		PASS
	54	-0.304	1.216		PASS
	62	-0.528	0.992		PASS
	102	-0.004	1.516		PASS
	110	0.394	1.914		PASS
	134	0.056	1.576		PASS
IEEE 802.11ac_20	36	3.001	3.681	11	PASS
	44	2.621	3.301		PASS
	48	2.693	3.373		PASS
	52	2.549	3.229		PASS
	60	2.393	3.073		PASS
	64	2.047	2.727		PASS
	100	2.161	2.841		PASS
	116	2.012	2.692		PASS
140	1.973	2.653	PASS		
IEEE 802.11ac_40	38	-0.281	1.179	11	PASS
	46	-0.135	1.325		PASS
	54	-0.744	0.716		PASS
	62	-0.752	0.708		PASS
	102	-0.835	0.625		PASS
	110	-1.014	0.446		PASS
IEEE 802.11ac_80	134	-0.739	0.721	11	PASS
	42	-4.390	-2.870		PASS
	58	-4.974	-3.454		PASS
	106	-5.229	-3.709		PASS
	122	-5.175	-3.655		PASS

## Test Graphs

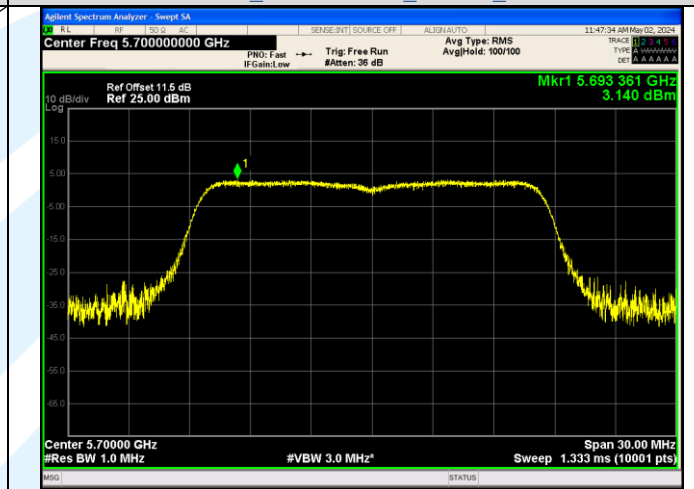
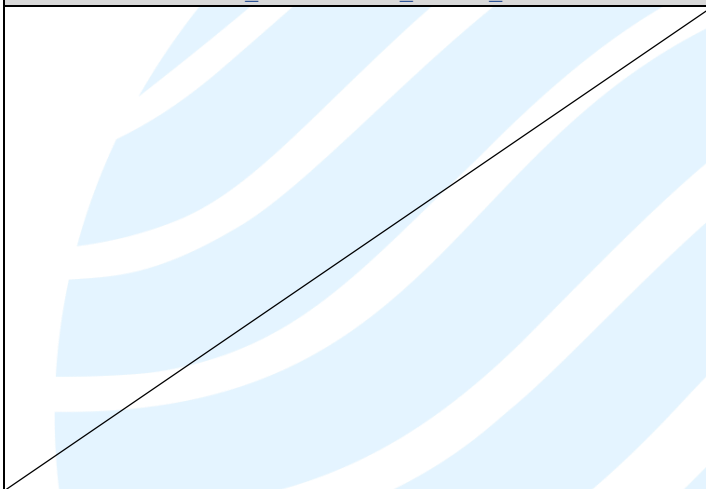




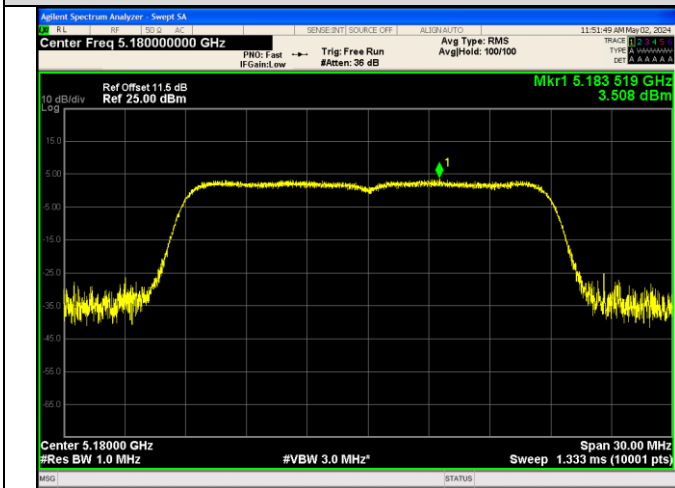
IEEE 802.11a Channel 100\_20MHz\_Antenna 0



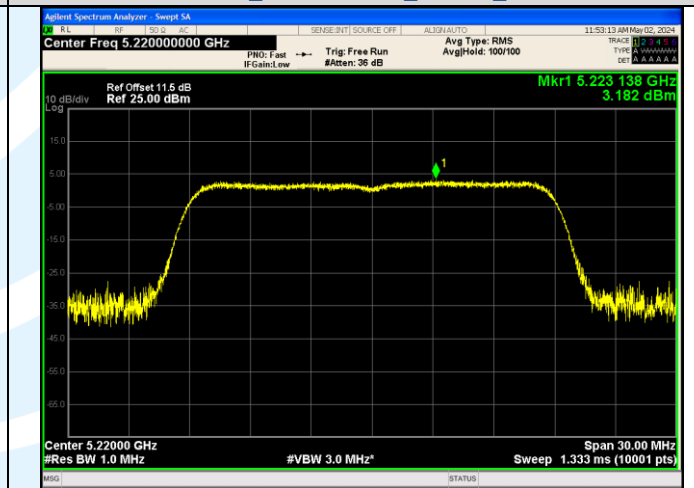
IEEE 802.11a Channel 116\_20MHz\_Antenna 0



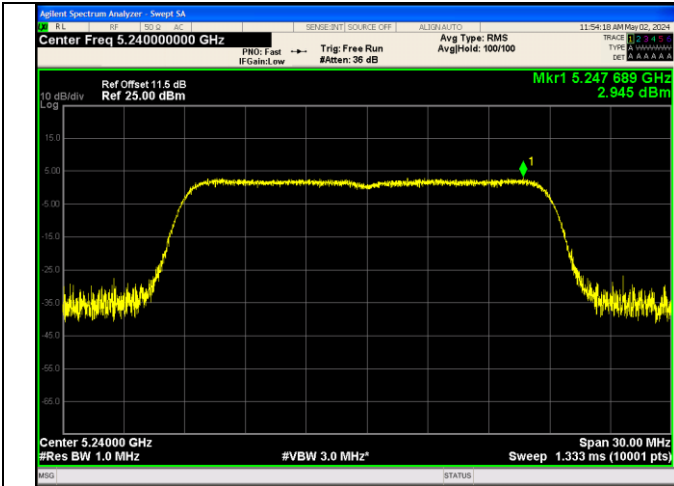
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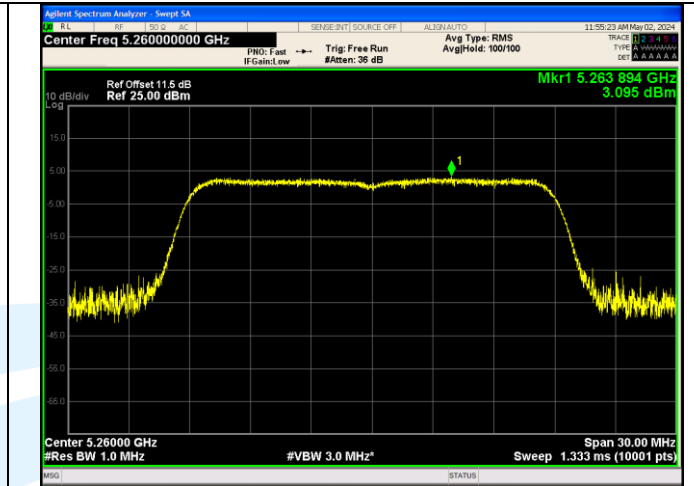
IEEE 802.11n Channel 36\_20MHz\_Antenna 0



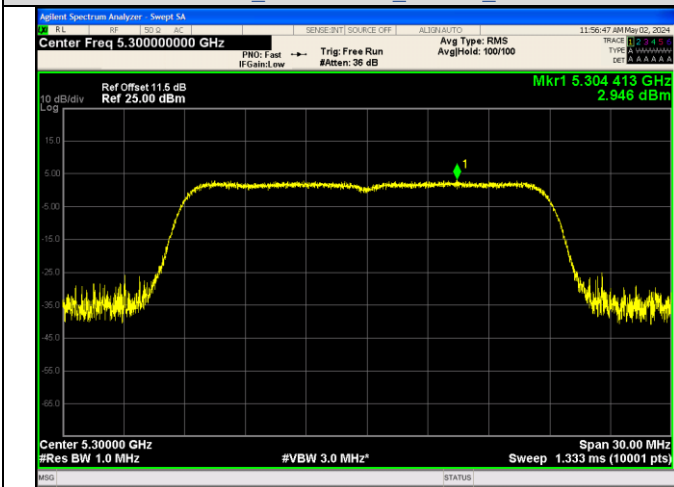
IEEE 802.11n Channel 44\_20MHz\_Antenna 0



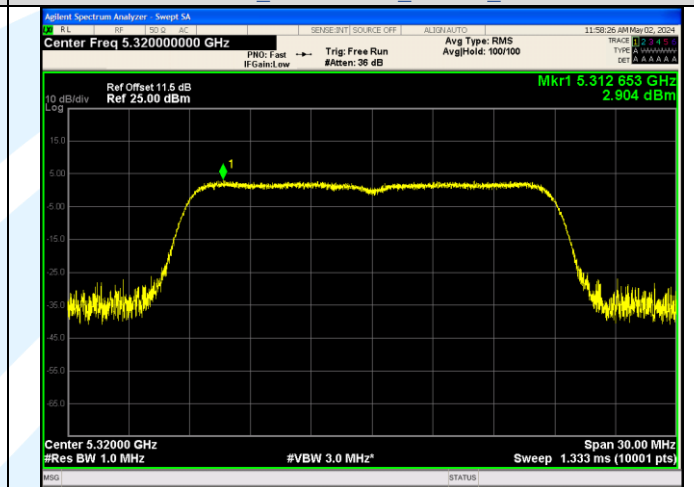
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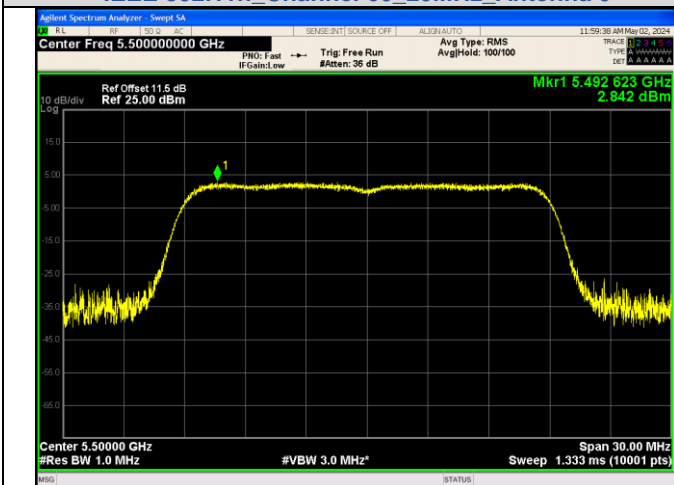
IEEE 802.11n\_Channel 52\_20MHz\_Antenna 0



IEEE 802.11n\_Channel 60\_20MHz\_Antenna 0



IEEE 802.11n\_Channel 64\_20MHz\_Antenna 0



IEEE 802.11n\_Channel 100\_20MHz\_Antenna 0



IEEE 802.11n\_Channel 116\_20MHz\_Antenna 0

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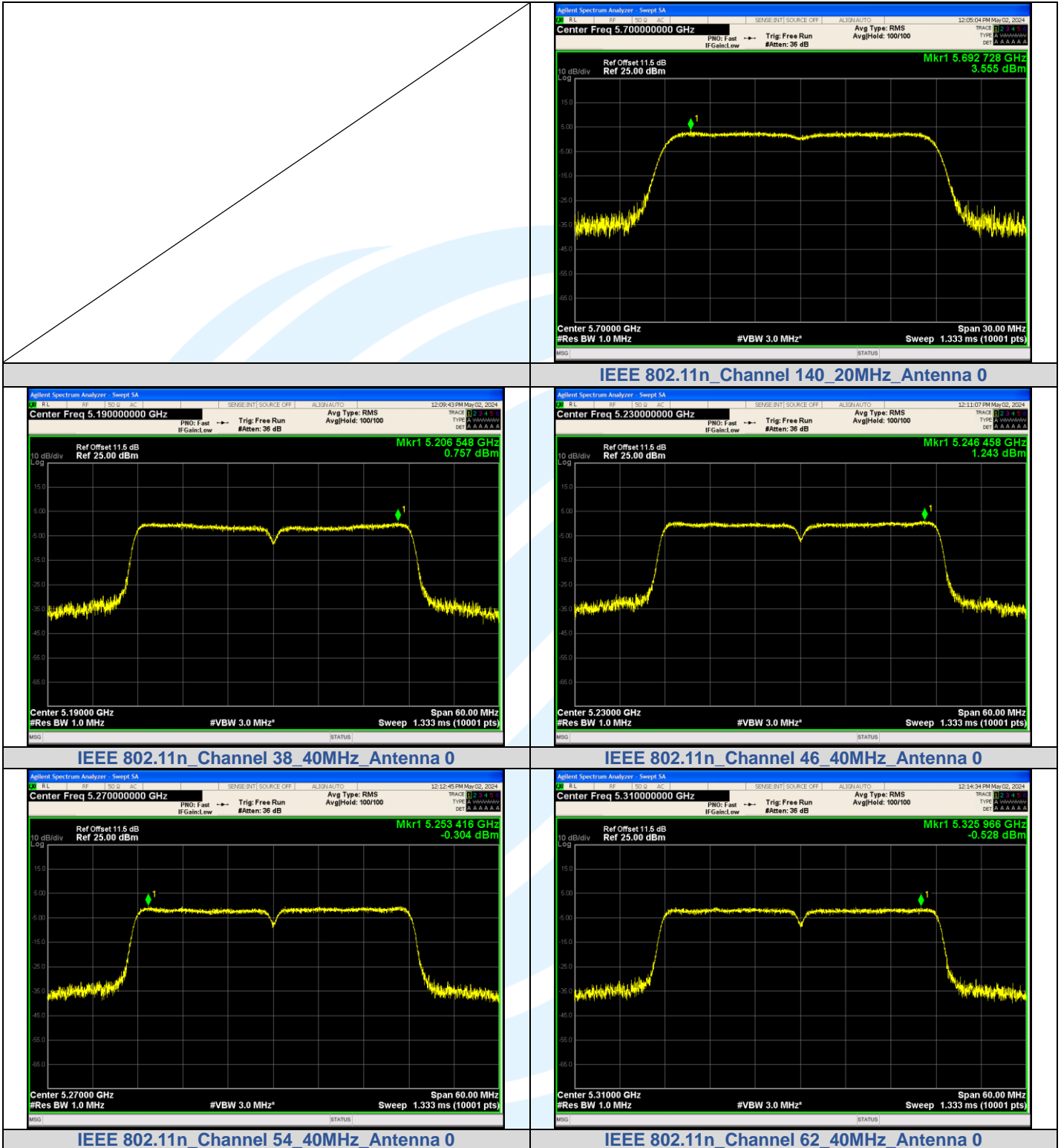
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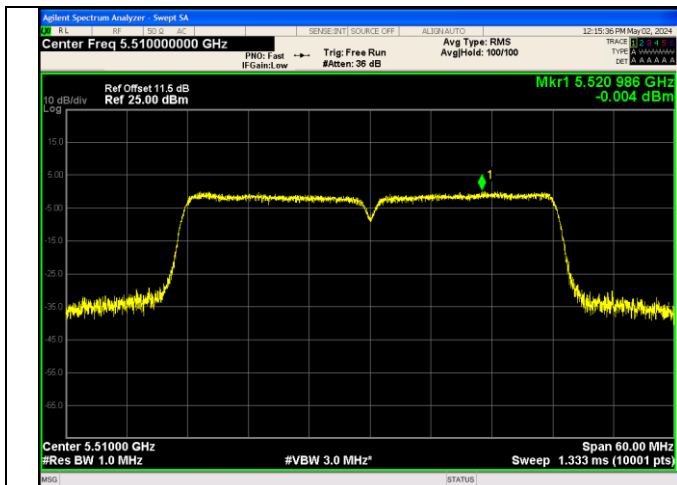
Fax: +86-755-28230886

E-mail: info@uttlab.com

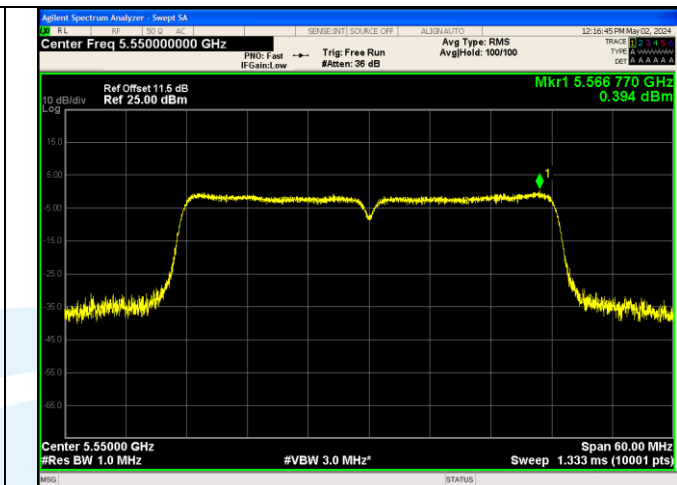
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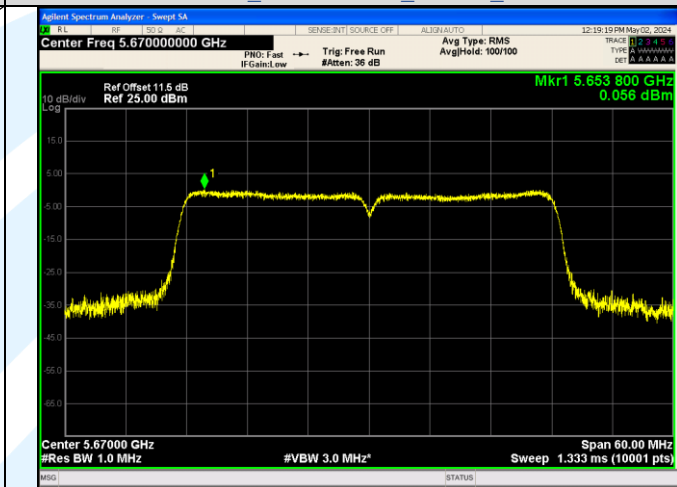
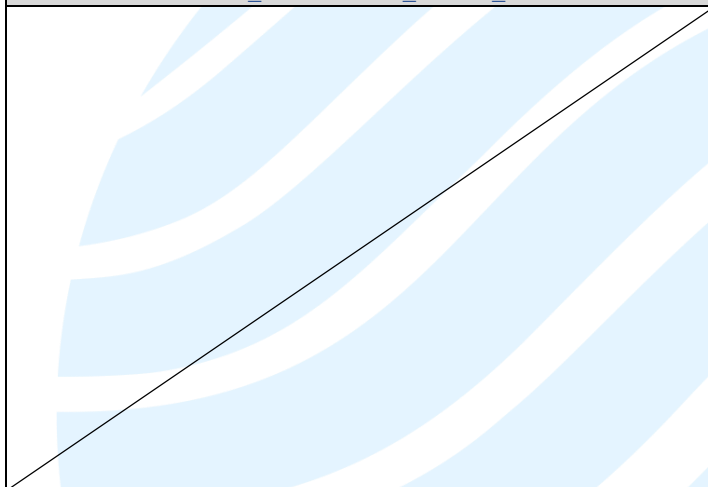




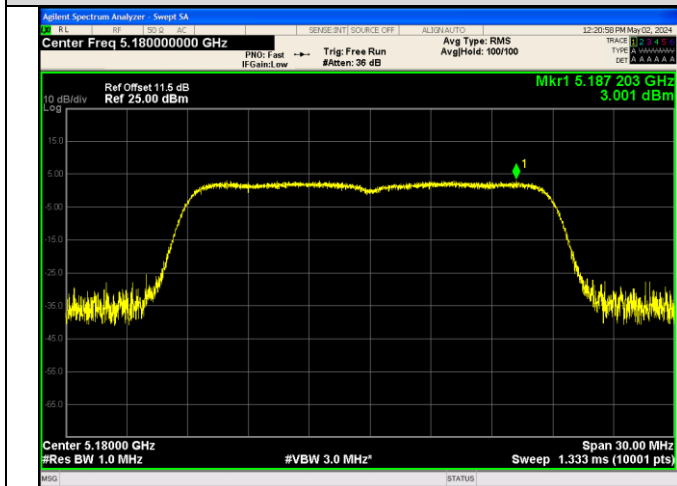
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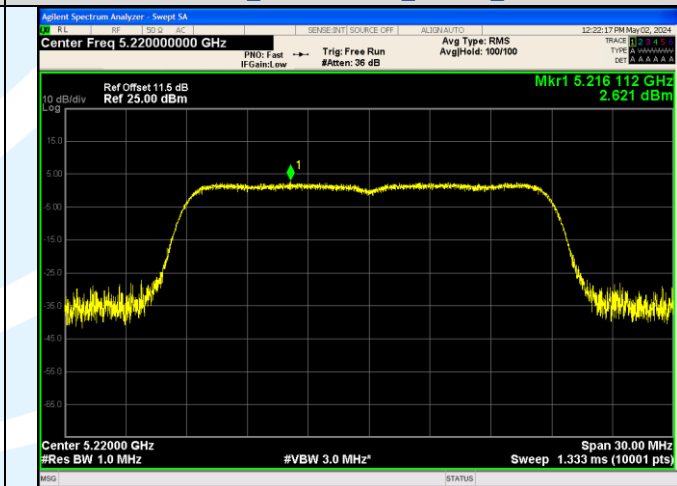
IEEE 802.11n\_Channel 110\_40MHz\_Antenna 0



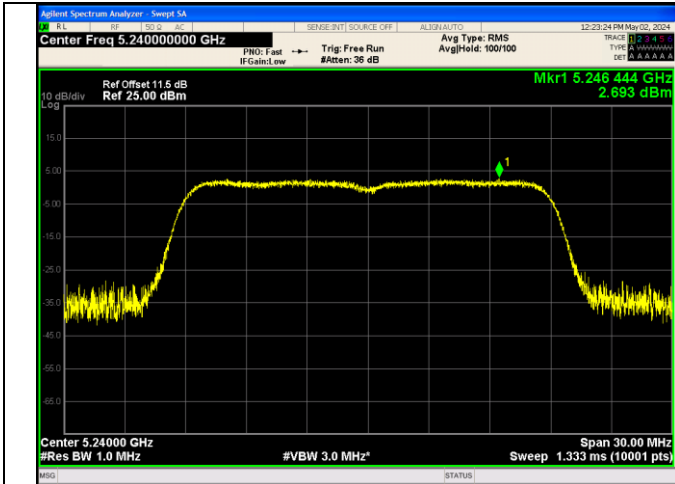
IEEE 802.11n\_Channel 134\_40MHz\_Antenna 0



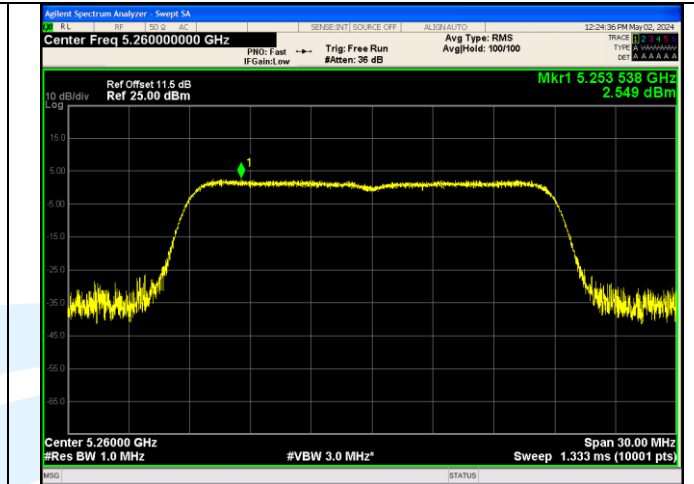
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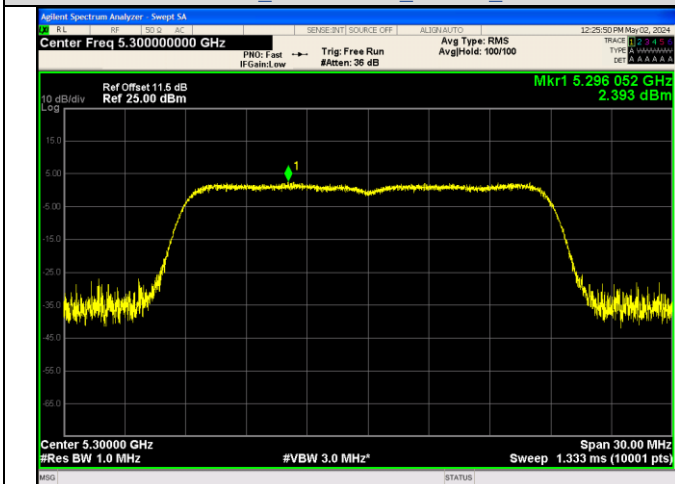
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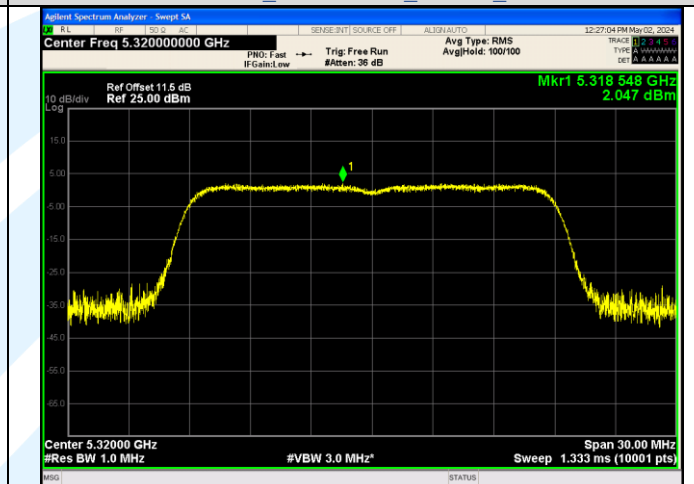
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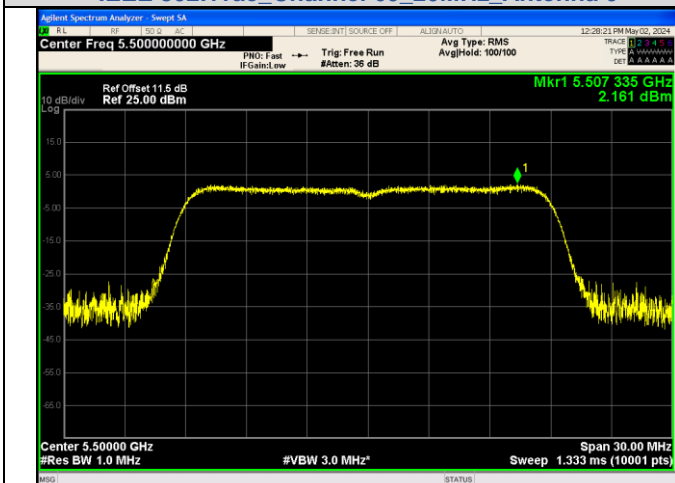
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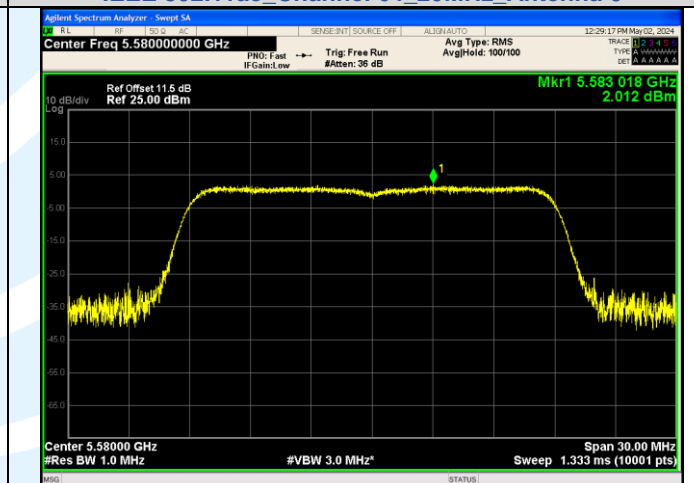
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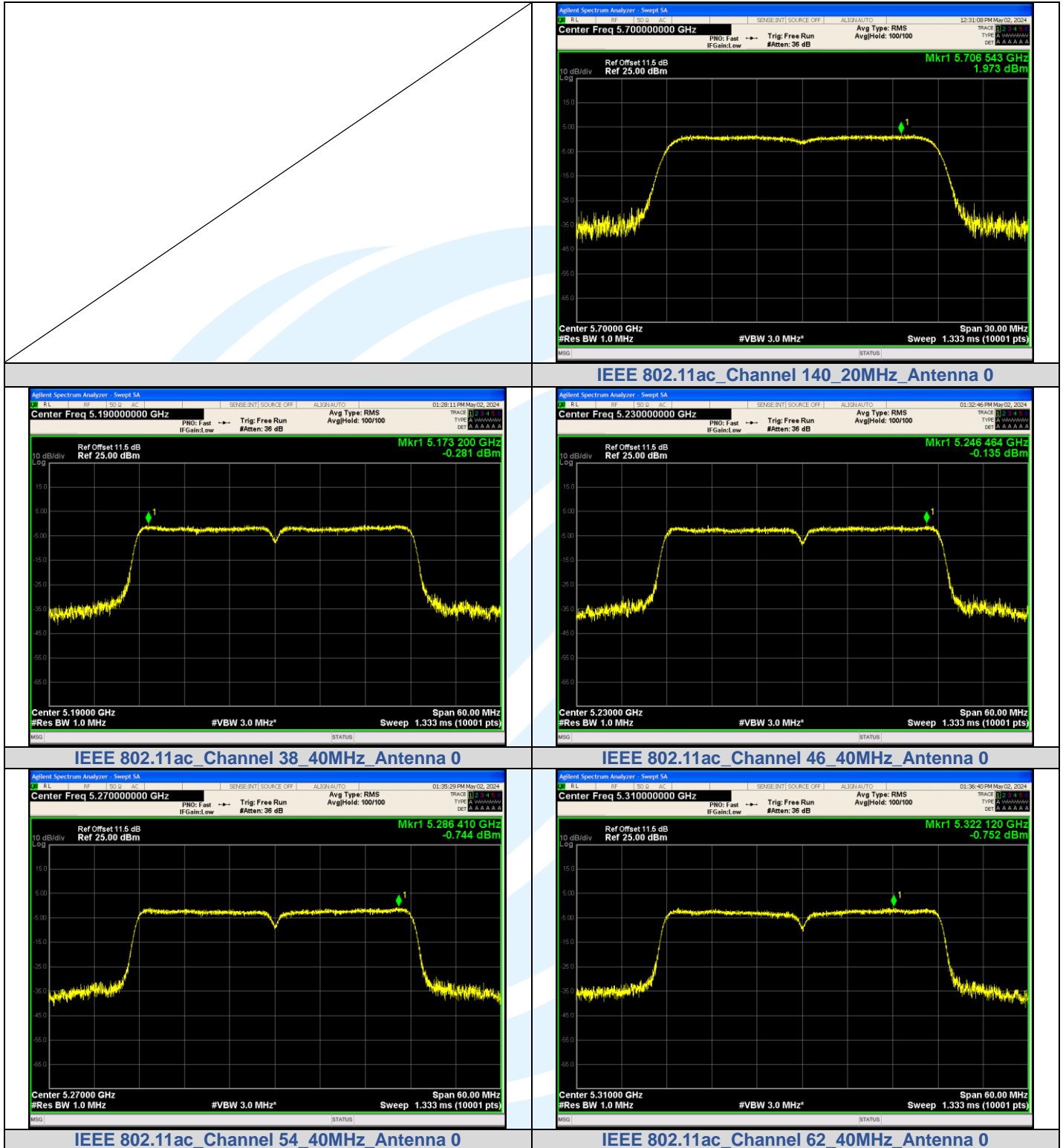
IEEE 802.11ac\_Channel 64\_20MHz\_Antenna 0



IEEE 802.11ac\_Channel 100\_20MHz\_Antenna 0



IEEE 802.11ac\_Channel 116\_20MHz\_Antenna 0



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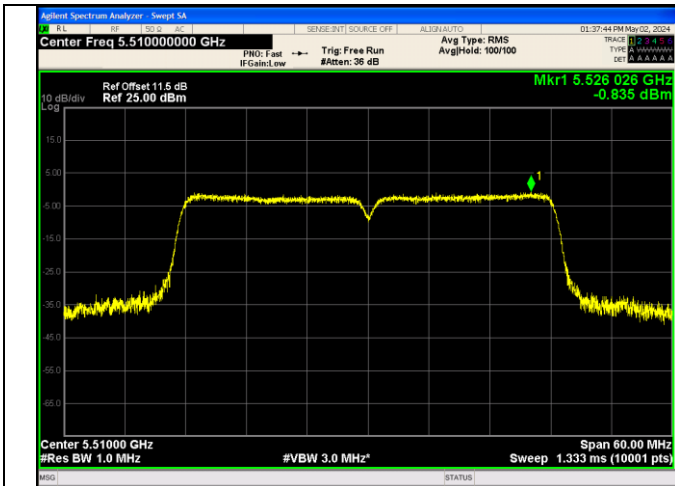
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Fax: +86-755-28230886

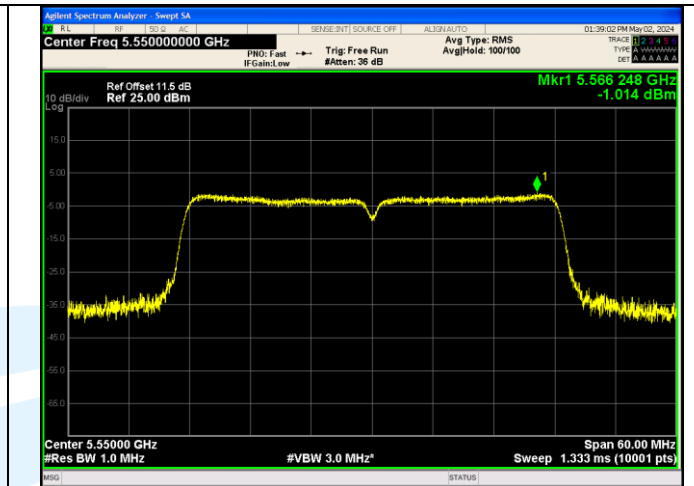
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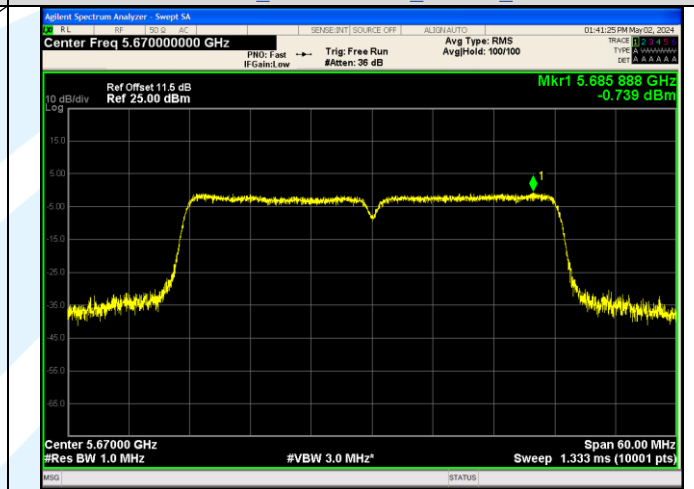
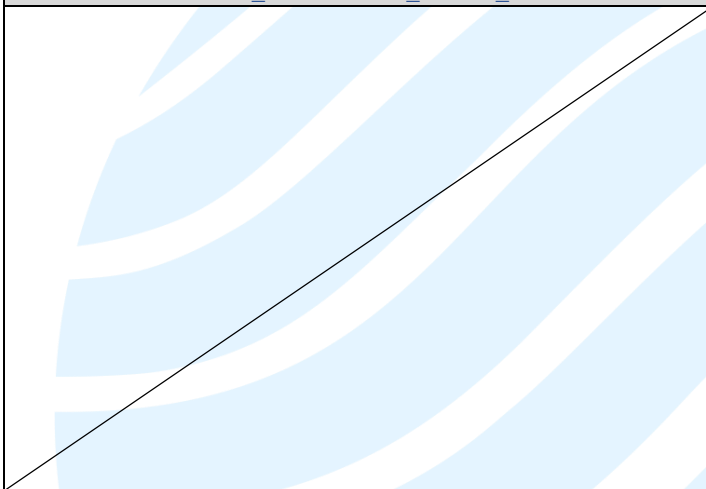
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IEEE 802.11ac\_Channel 102\_40MHz\_Antenna 0



IEEE 802.11ac\_Channel 110\_40MHz\_Antenna 0



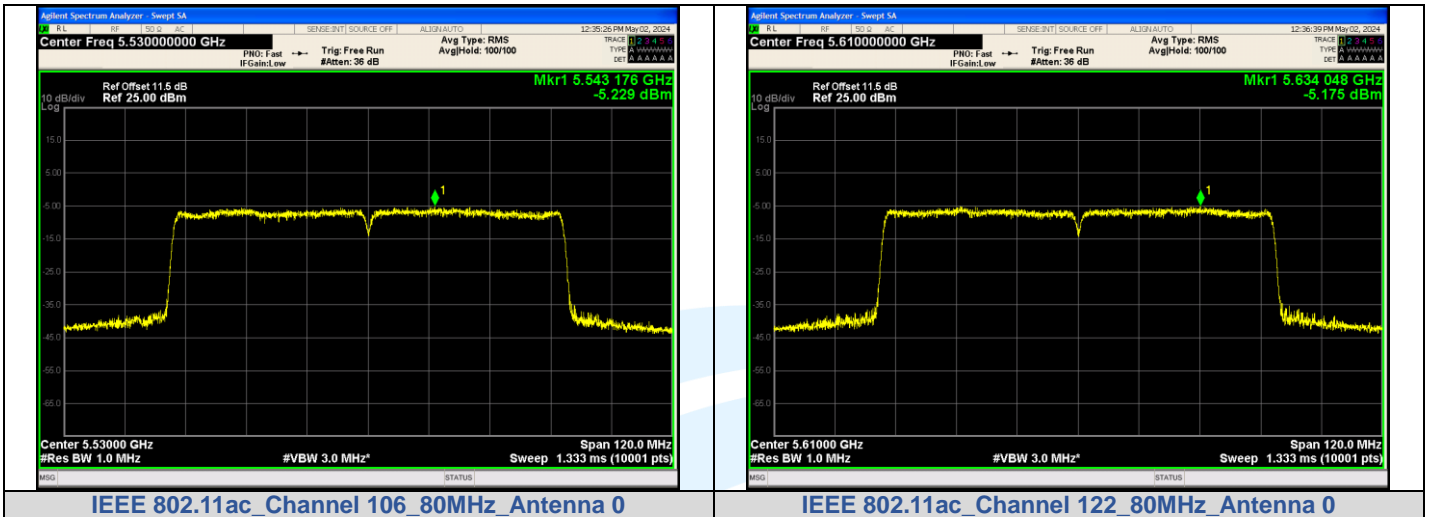
IEEE 802.11ac\_Channel 134\_40MHz\_Antenna 0



IEEE 802.11ac\_Channel 42\_80MHz\_Antenna 0



IEEE 802.11ac\_Channel 58\_80MHz\_Antenna 0



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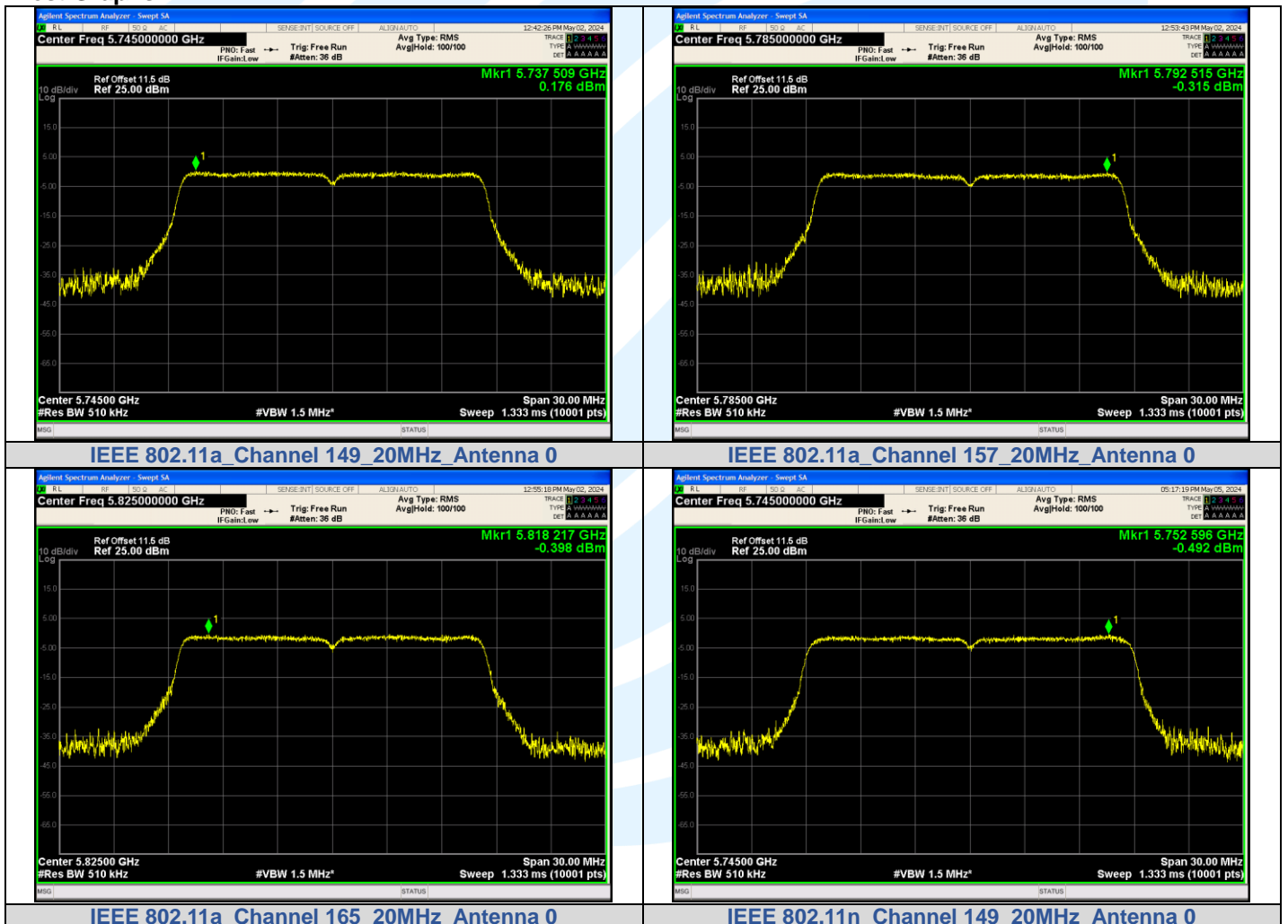
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For U-NII-3 band

Mode	Channel	Ant. 0 Meas PSD (dBm/MHz or dBm/0.5MHz)	Ant. 0 Corr'd PSD (dBm/MHz or dBm/0.5MHz)	Limit (dBm/MHz or dBm/0.5MHz)	Result
IEEE 802.11a	149	0.176	0.716	30	PASS
	157	-0.315	0.225		PASS
	165	-0.398	0.142		PASS
IEEE 802.11n_20	149	-0.492	0.158		PASS
	157	-0.371	0.279		PASS
IEEE 802.11n_40	165	-0.321	0.329		PASS
	151	-3.604	-2.084		PASS
IEEE 802.11ac_20	159	-2.976	-1.456		PASS
	149	-0.806	-0.126		PASS
	157	-0.877	-0.197		PASS
IEEE 802.11ac_40	165	-0.961	-0.281		PASS
	151	-3.963	-2.503		PASS
IEEE 802.11ac_80	159	-4.379	-2.919	PASS	
	155	-7.598	-6.078	PASS	

Test Graphs



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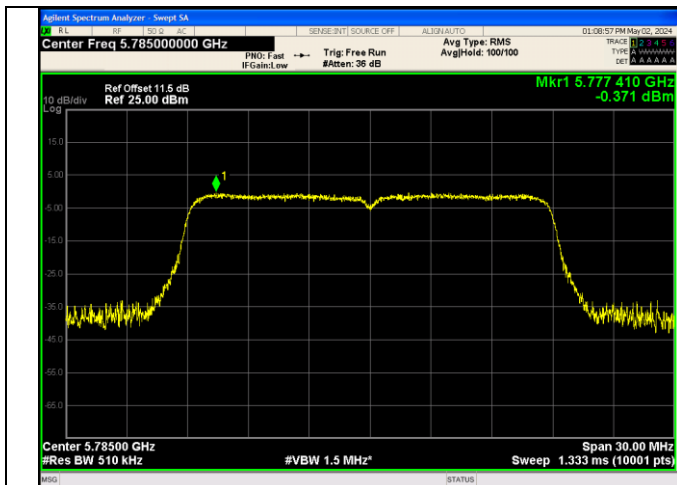
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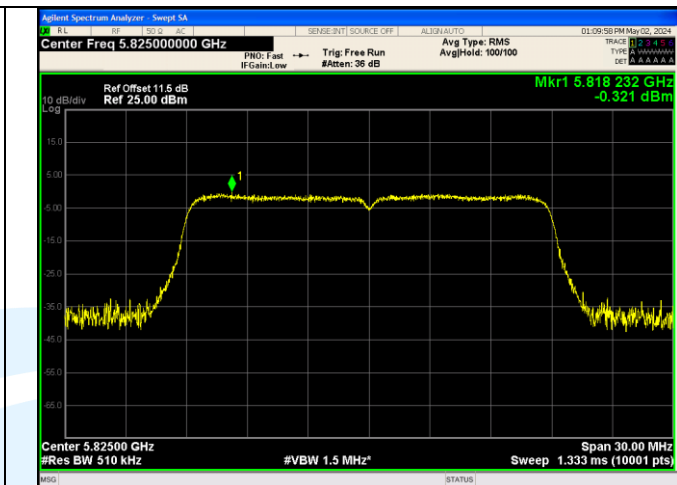
E-mail: info@uttlab.com

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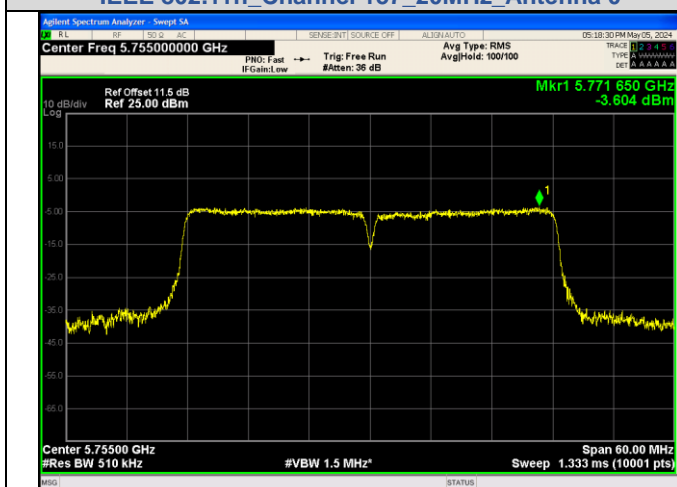
UTTR-RF-FCCPART15.407-V1.2



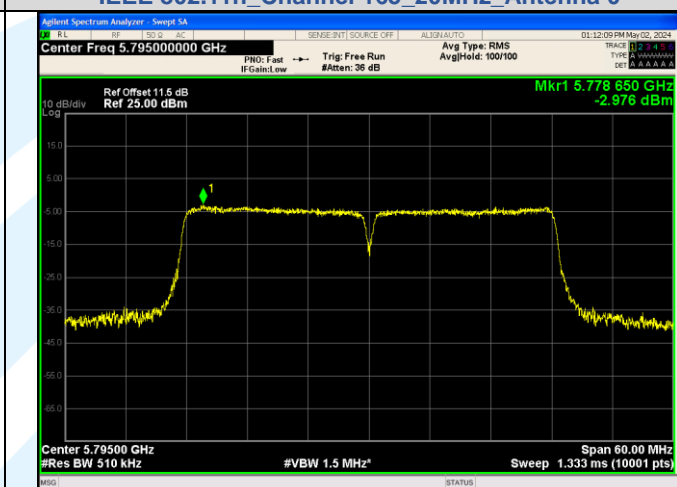
IEEE 802.11n\_Channel 157\_20MHz\_Antenna 0



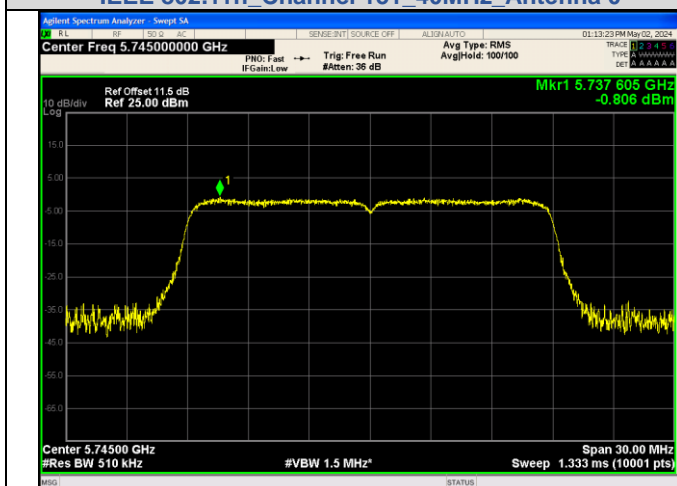
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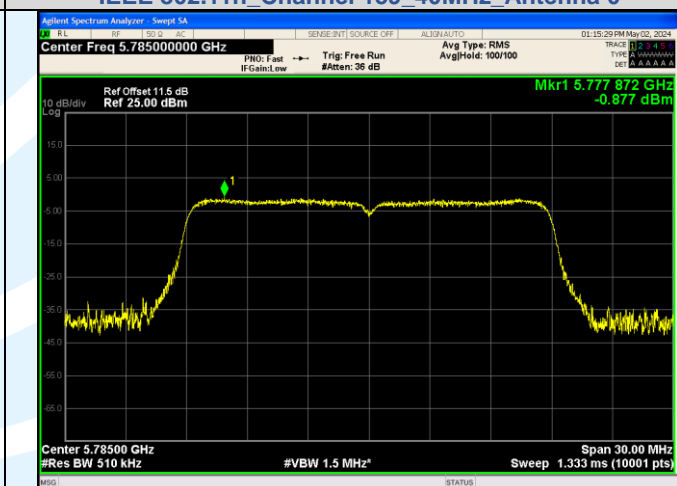
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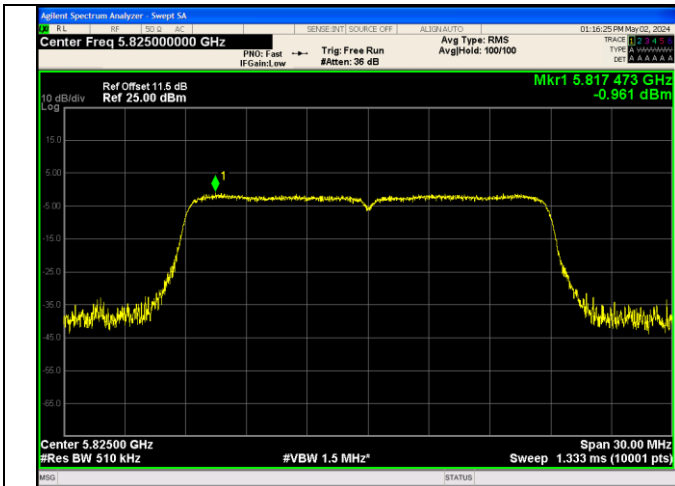
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IEEE 802.11ac\_Channel 149\_20MHz\_Antenna 0



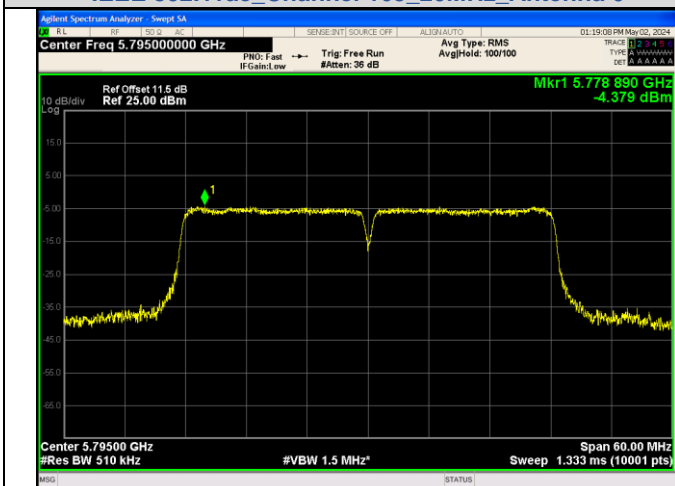
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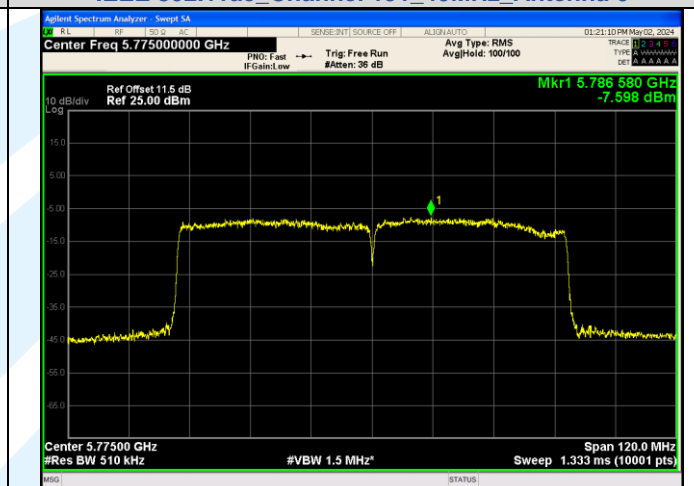
IEEE 802.11ac\_Channel 165\_20MHz\_Antenna 0



IEEE 802.11ac\_Channel 151\_40MHz\_Antenna 0



IEEE 802.11ac\_Channel 159\_40MHz\_Antenna 0



IEEE 802.11ac\_Channel 155\_80MHz\_Antenna 0

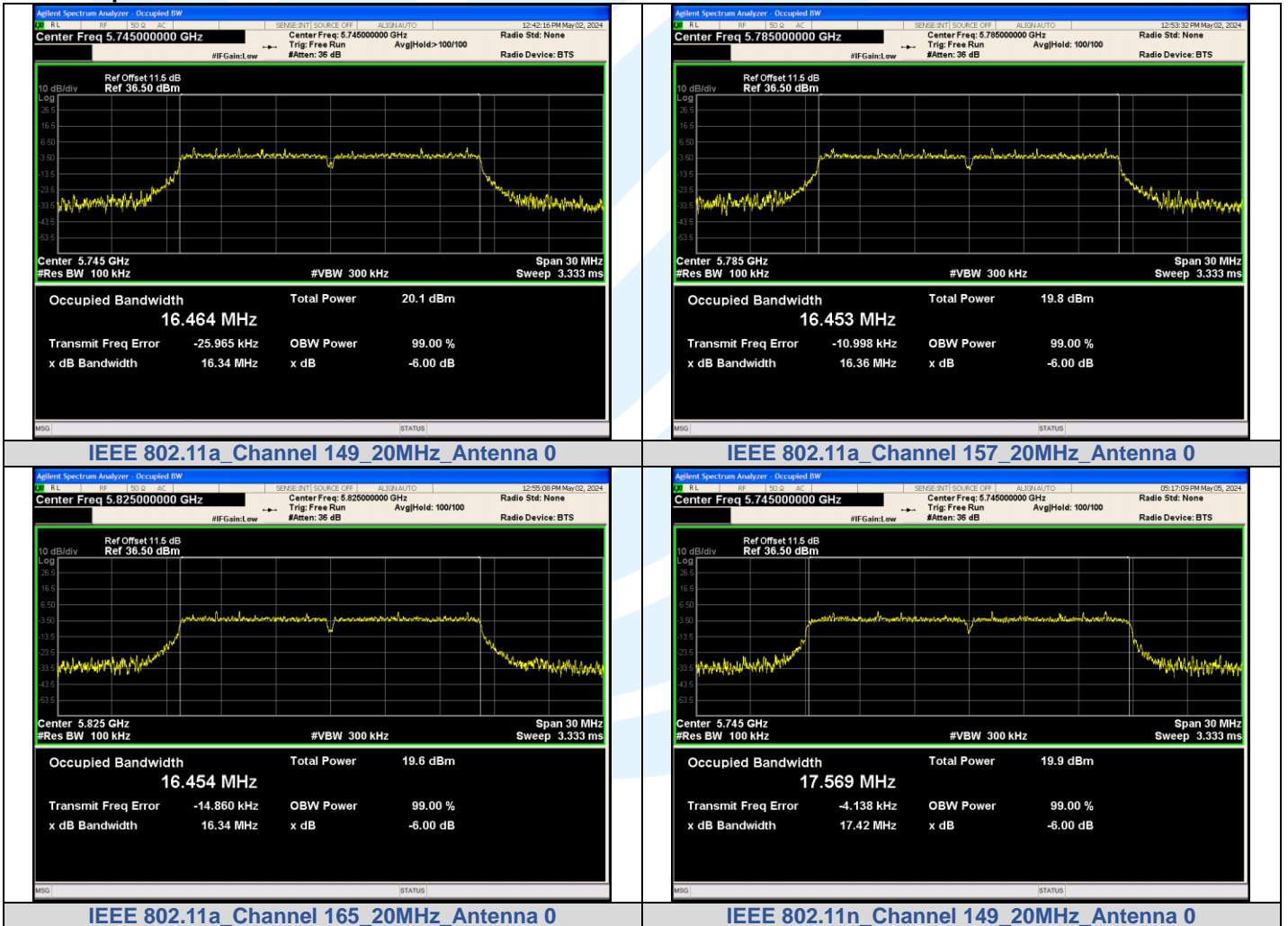


### A.4 6DB BANDWIDTH

For U-NII-3 band

Mode	Channel	Ant.	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
IEEE 802.11a	149	0	5745	16.34	0.5	PASS
	157		5785	16.36		PASS
	165		5825	16.34		PASS
IEEE 802.11n_20	149		5745	17.42		PASS
	157		5785	17.30		PASS
	165		5825	17.37		PASS
IEEE 802.11n_40	151		5755	36.29		PASS
	159		5795	36.01		PASS
IEEE 802.11ac_20	149		5745	17.16		PASS
	157		5785	17.40		PASS
	165		5825	17.39		PASS
IEEE 802.11ac_40	151		5755	35.98		PASS
	159	5795	36.02	PASS		
IEEE 802.11ac_80	155	5775	75.12	PASS		

### Test Graphs



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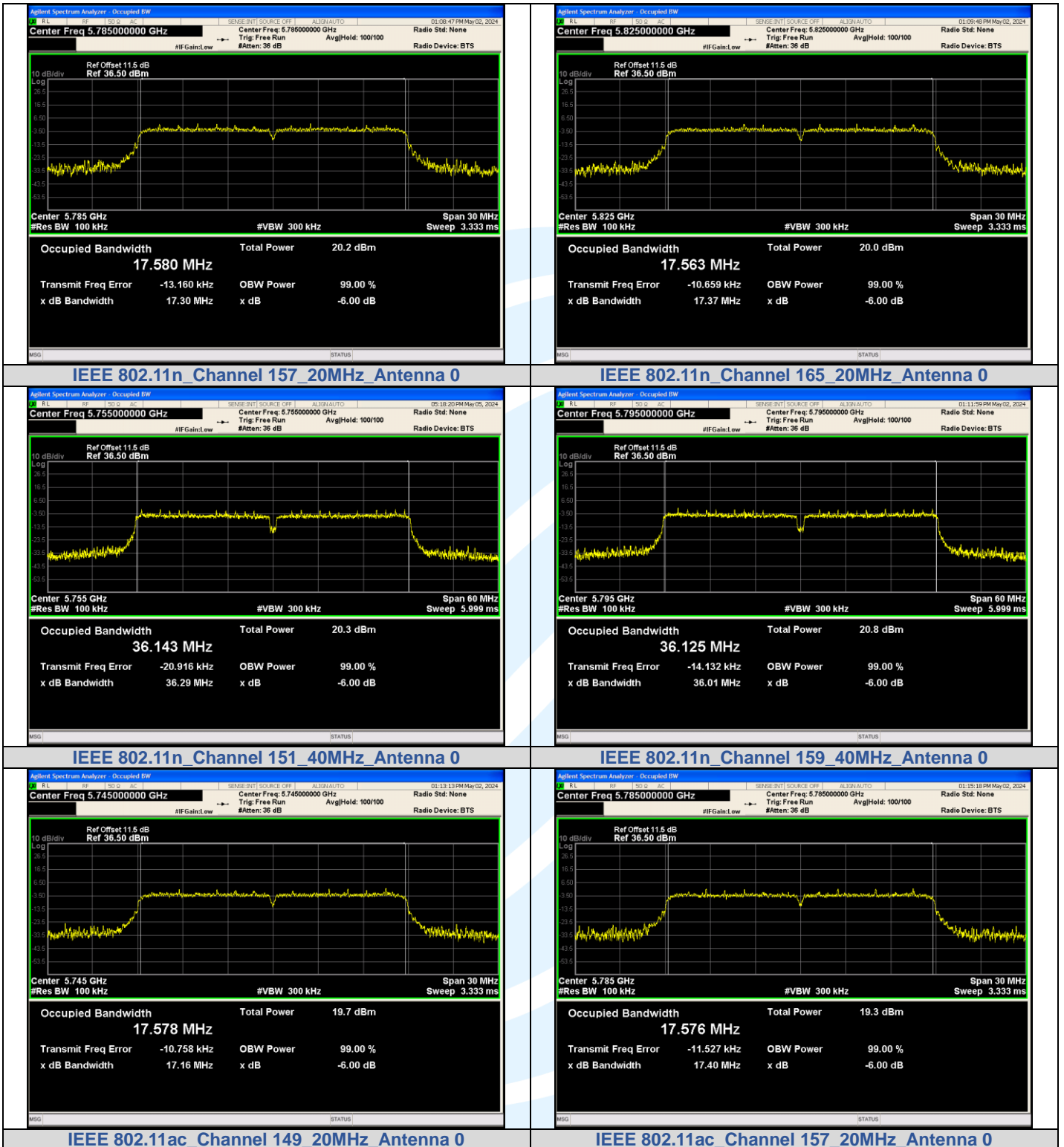
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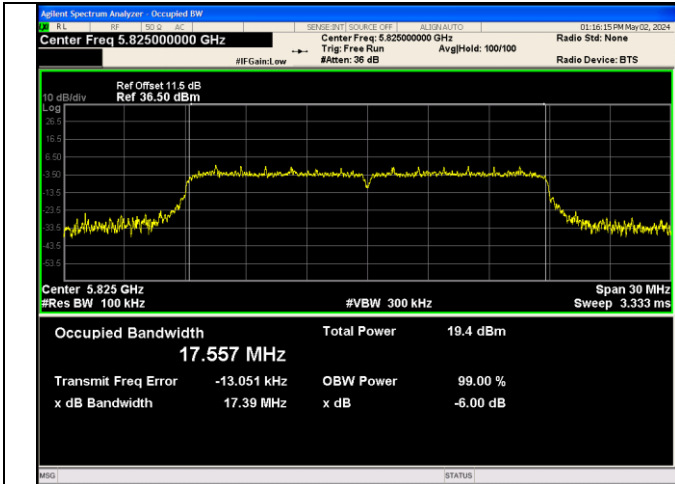
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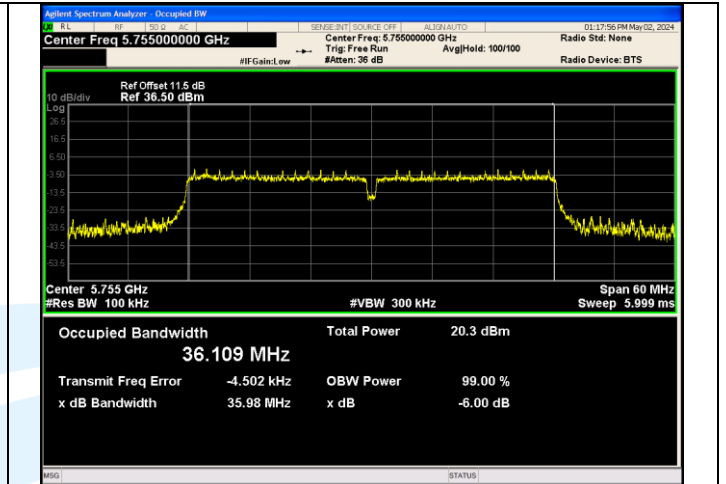
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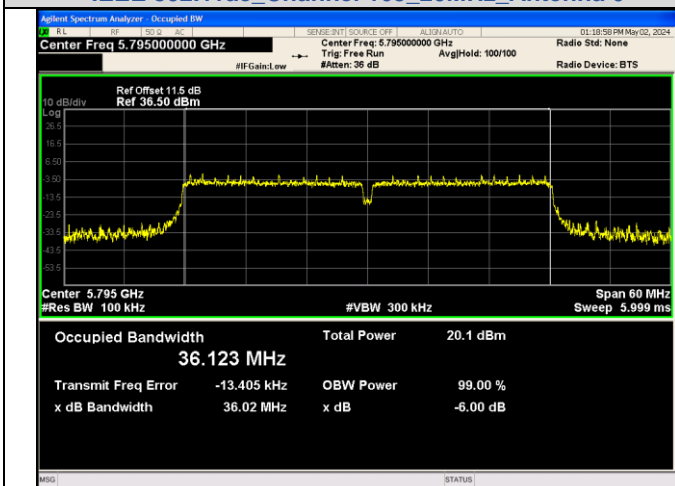
UTTR-RF-FCCPART15.407-V1.2



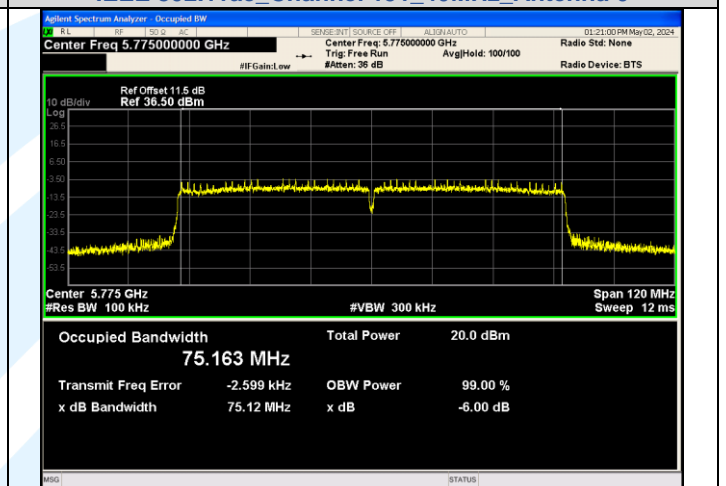
IEEE 802.11ac\_Channel 165\_20MHz\_Antenna 0



IEEE 802.11ac\_Channel 151\_40MHz\_Antenna 0



IEEE 802.11ac\_Channel 159\_40MHz\_Antenna 0



IEEE 802.11ac\_Channel 155\_80MHz\_Antenna 0

## APPENDIX 1 PHOTOS OF TEST SETUP

See test photos attached in Appendix 1 for the actual connections between Product and support equipment.

## APPENDIX 2 PHOTOS OF EUT CONSTRUCTIONAL DETAILS

Refer to Appendix 2 for EUT external and internal photos.

\*\*\* End of Report \*\*\*

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