99% & 26dB Bandwidth

Test Result

5G NR N48 SCS=30kHz 10MHz						
Modulation	CH	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	8.65	9.97	/	Pass
CP-OFDM QPSK		Outer_Full	8.65	10.23	/	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	8.66	10.22	/	Pass
CP-OFDM QPSK		Outer_Full	8.65	10.01	/	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	8.64	10.05	/	Pass
CP-OFDM QPSK		Outer_Full	8.68	10.17	/	Pass

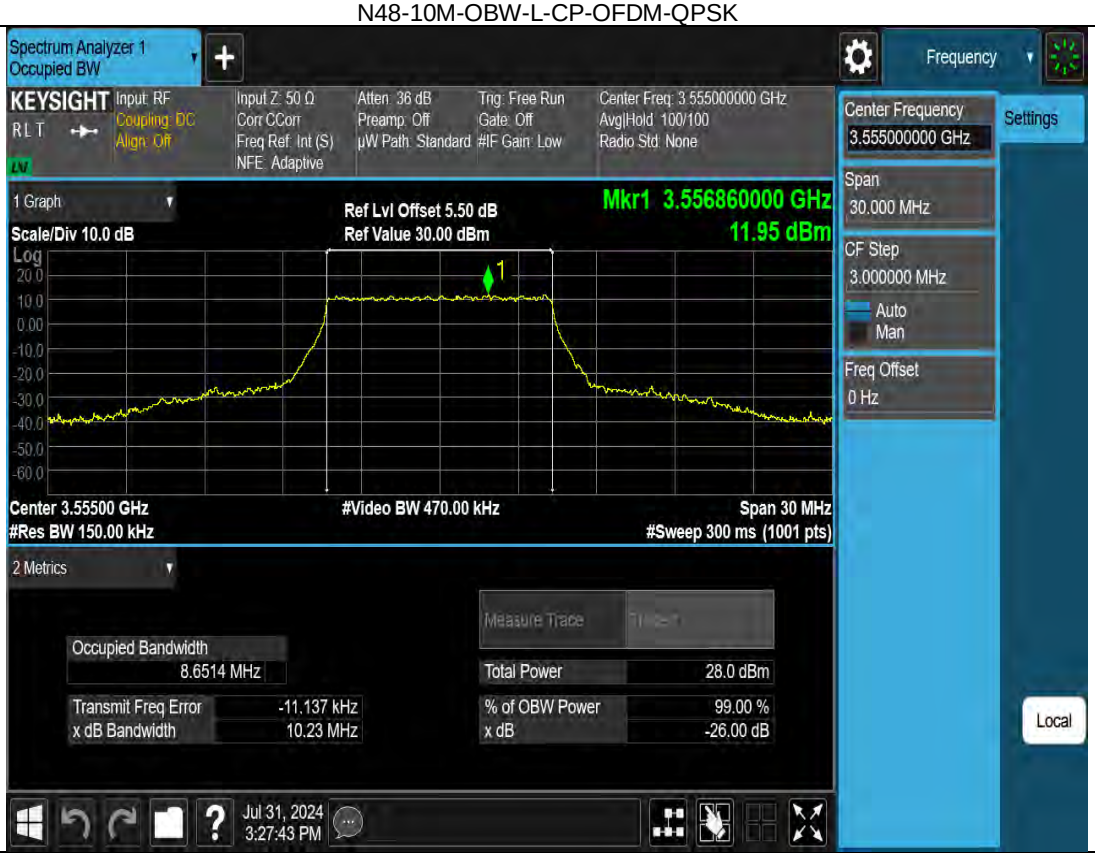
5G NR N48 SCS=30kHz 15MHz						
Modulation	CH	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	13.74	15.69	/	Pass
CP-OFDM QPSK		Outer_Full	12.98	14.7	/	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	13.71	15.34	/	Pass
CP-OFDM QPSK		Outer_Full	12.99	14.5	/	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	13.72	15.44	/	Pass
CP-OFDM QPSK		Outer_Full	8.63	10.1	/	Pass

5G NR N48 SCS=30kHz 20MHz						
Modulation	CH	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	18.33	20.32	/	Pass
CP-OFDM QPSK		Outer_Full	17.95	19.66	/	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	17.91	19.57	/	Pass
CP-OFDM QPSK		Outer_Full	18.3	20.07	/	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	18.3	20.21	/	Pass
CP-OFDM QPSK		Outer_Full	12.98	14.55	/	Pass

Test Graph

N48-10M-OBW-L-DFT-s-OFDM-Pi2 BPSK


N48-10M-OBW-L-CP-OFDM-QPSK

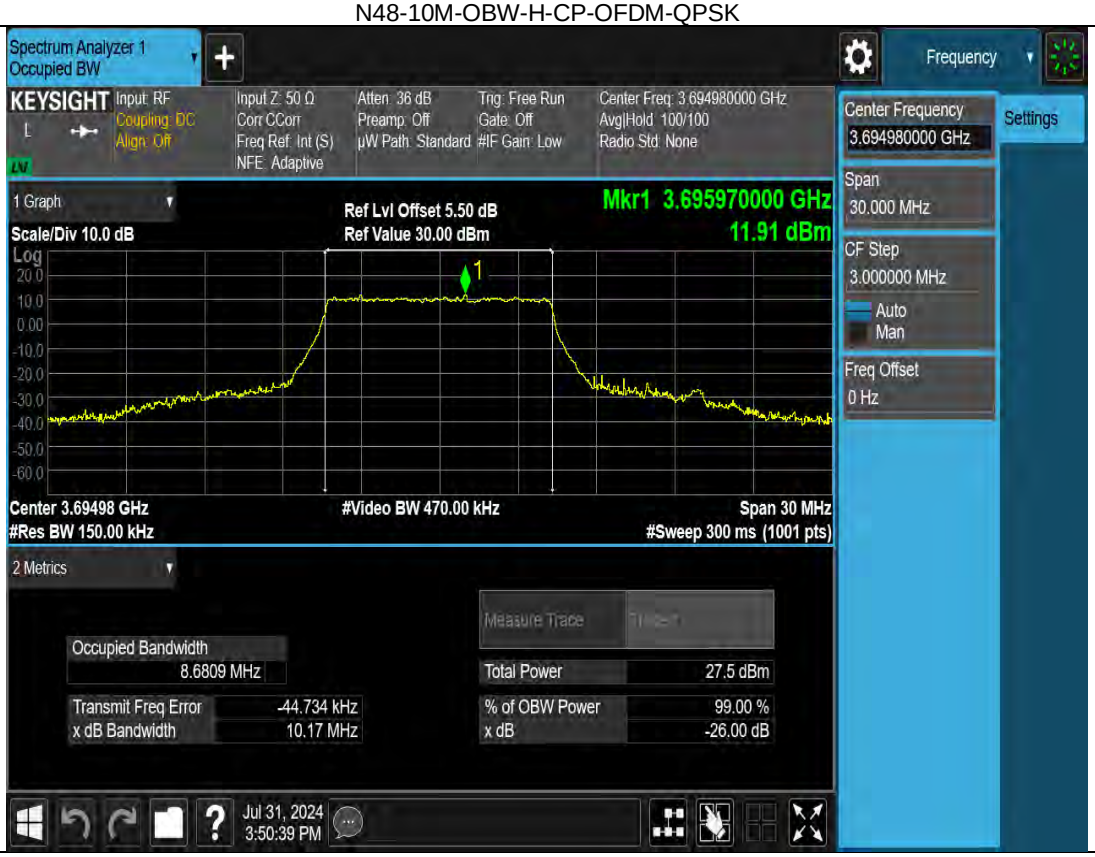


N48-10M-OBW-M-CP-OFDM-QPSK

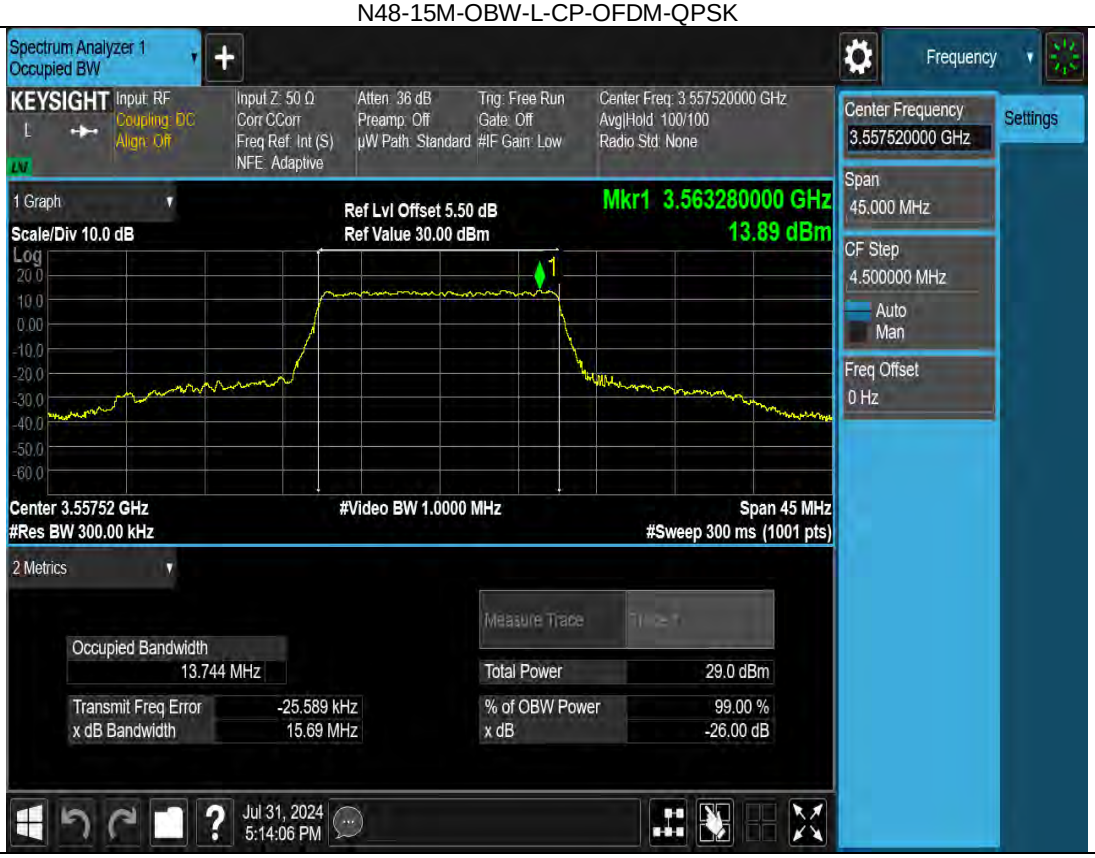
N48-10M-OBW-L-DFT-s-OFDM-Pi2 BPSK

N48-10M-OBW-H-DFT-s-OFDM-Pi2 BPSK

N48-10M-OBW-H-CP-OFDM-QPSK

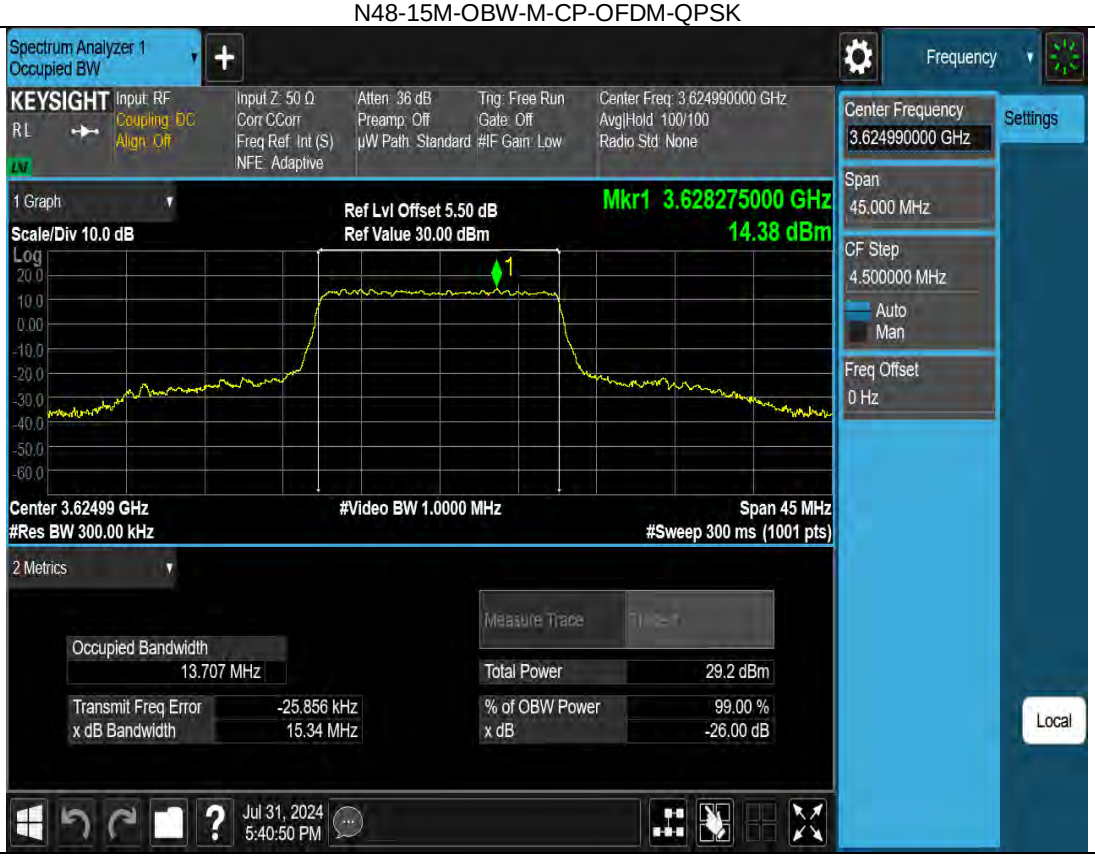


N48-15M-OBW-L-CP-OFDM-QPSK



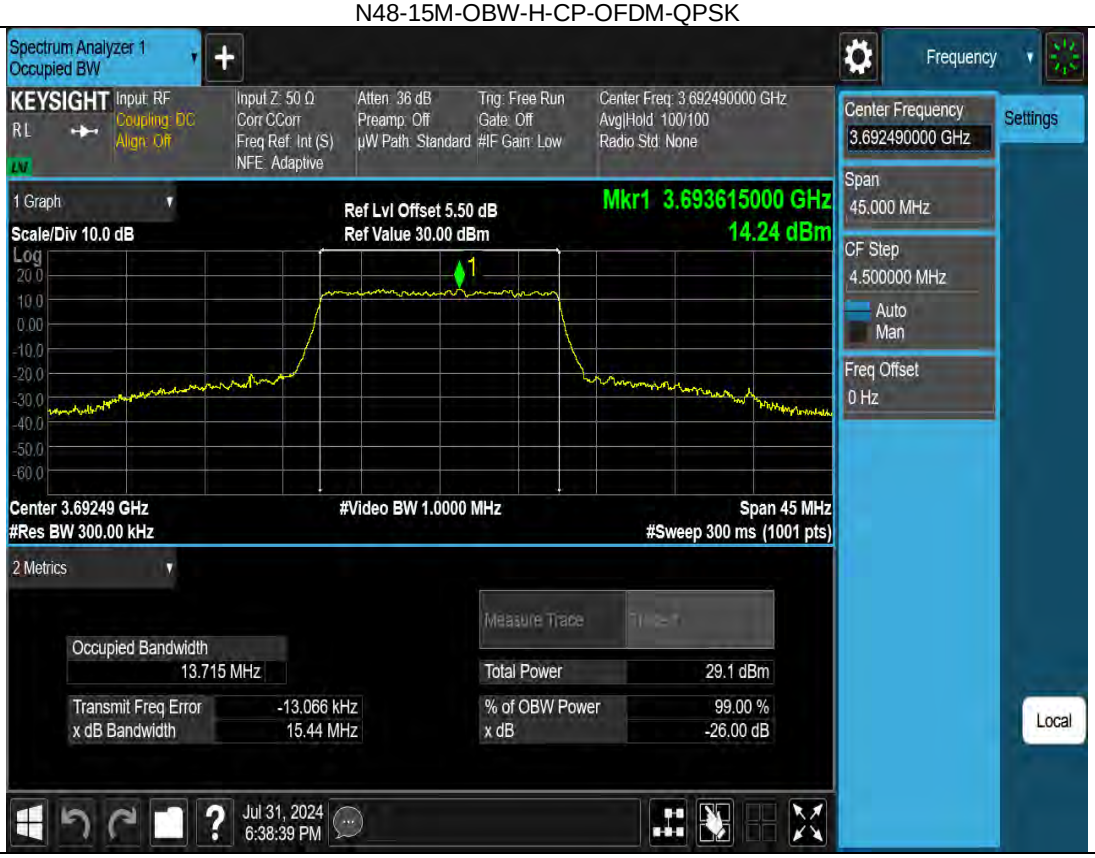
N48-15M-OBW-H-DFT-s-OFDM-Pi2 BPSK

N48-15M-OBW-M-CP-OFDM-QPSK



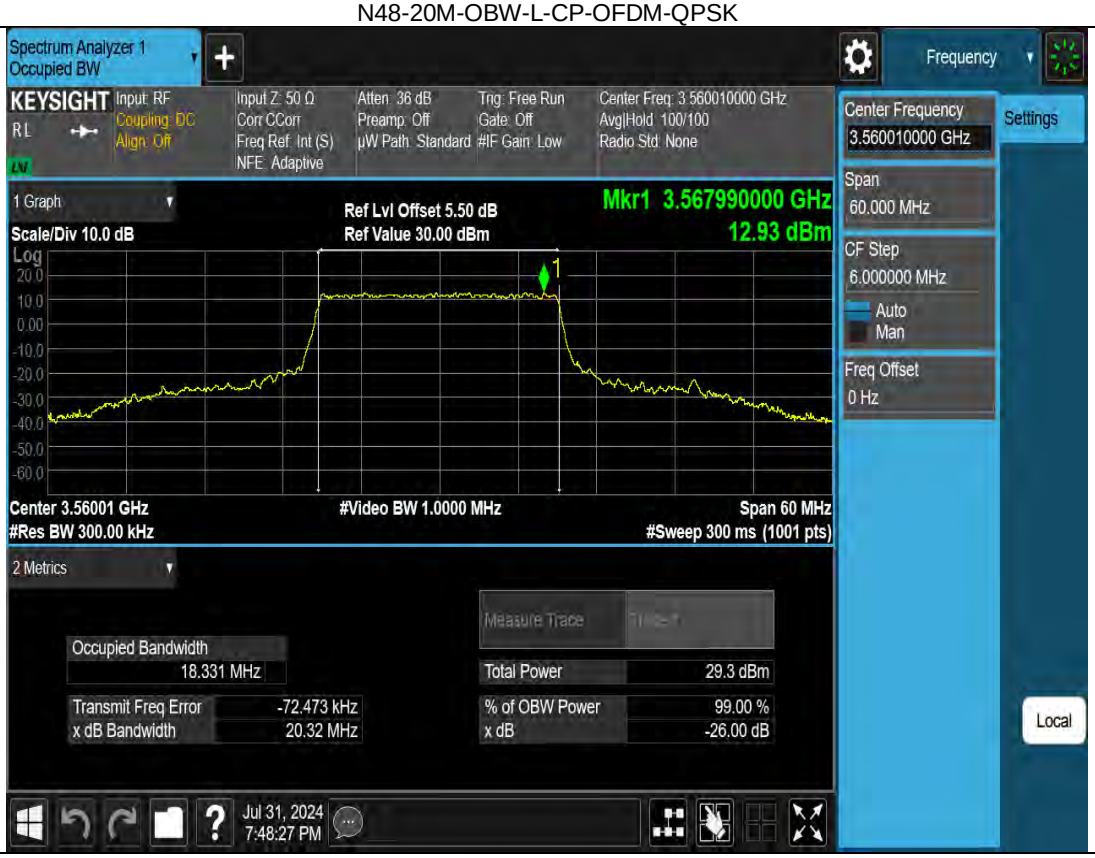
N48-15M-OBW-L-DFT-s-OFDM-Pi2 BPSK

N48-15M-OBW-H-CP-OFDM-QPSK



N48-10M-OBW-M-DFT-s-OFDM-Pi2 BPSK

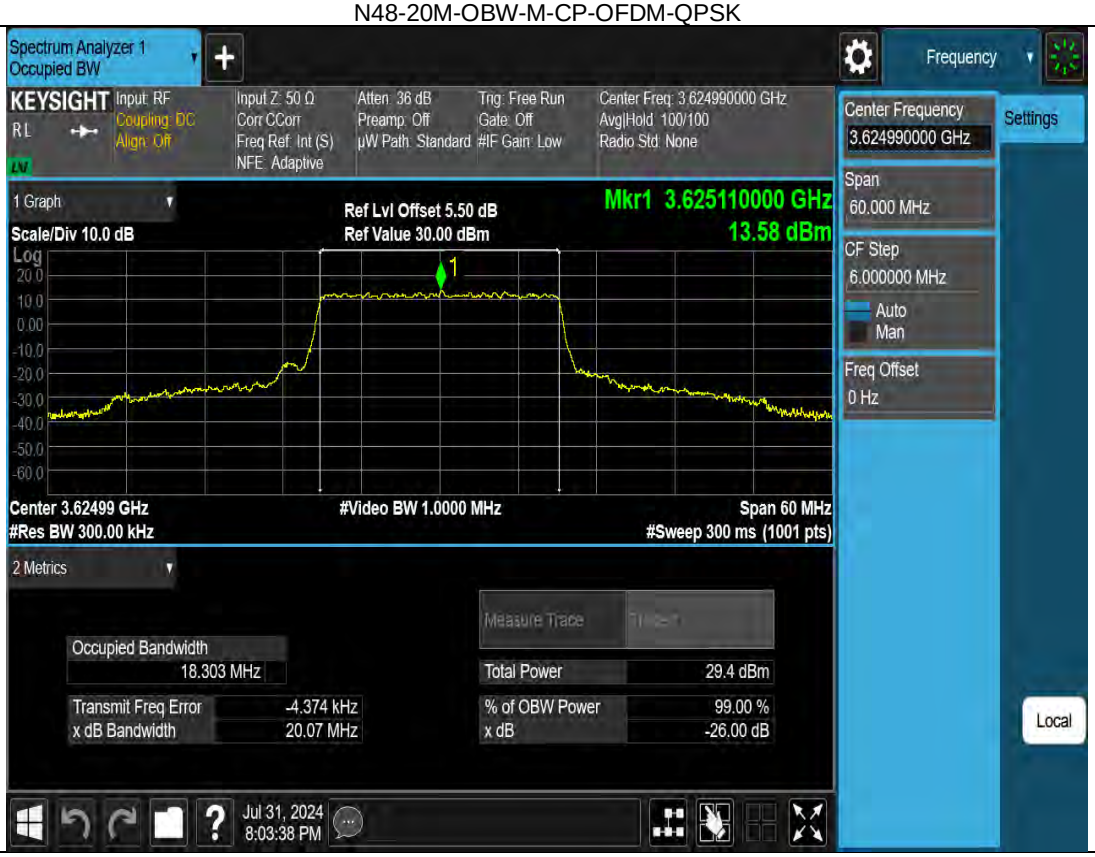
N48-20M-OBW-L-CP-OFDM-QPSK



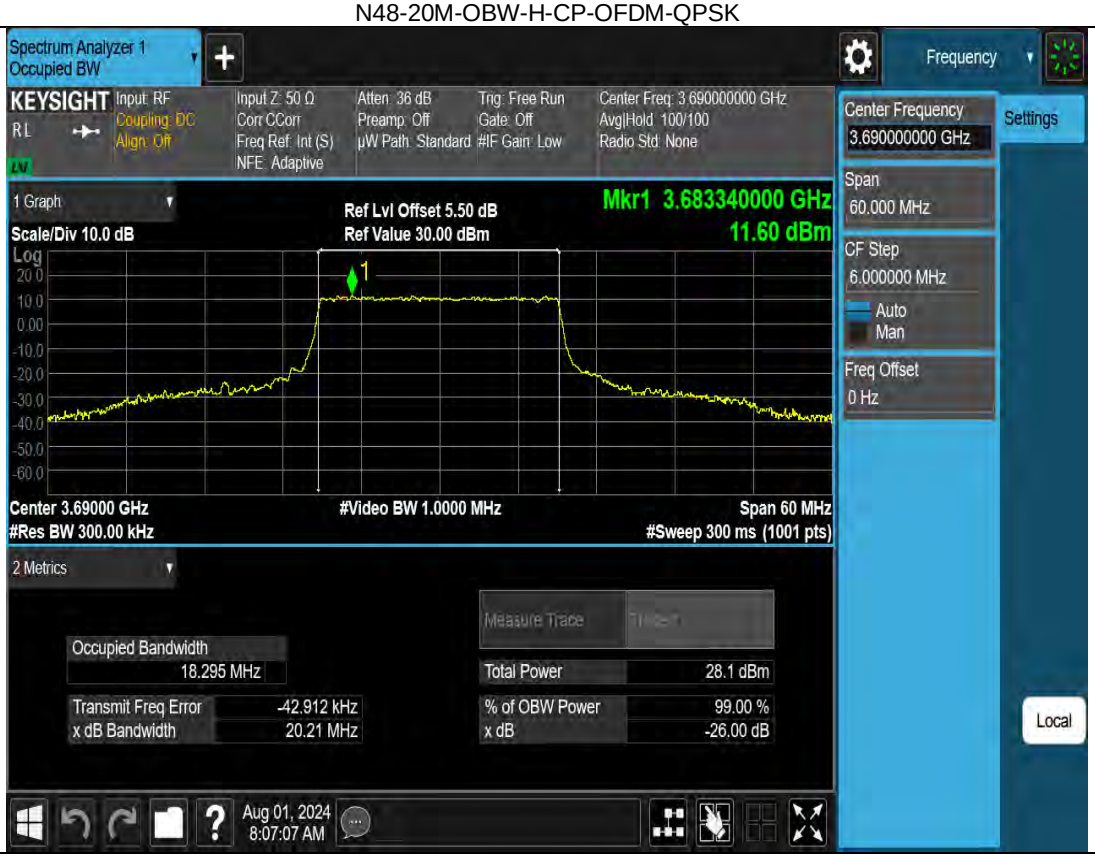
N48-20M-OBW-H-DFT-s-OFDM-Pi2 BPSK

N48-20M-OBW-M-DFT-s-OFDM-Pi2 BPSK

N48-20M-OBW-M-CP-OFDM-QPSK



N48-20M-OBW-H-CP-OFDM-QPSK



N48-15M-OBW-M-DFT-s-OFDM-Pi2 BPSK

Peak-Average Ratio

Test Result

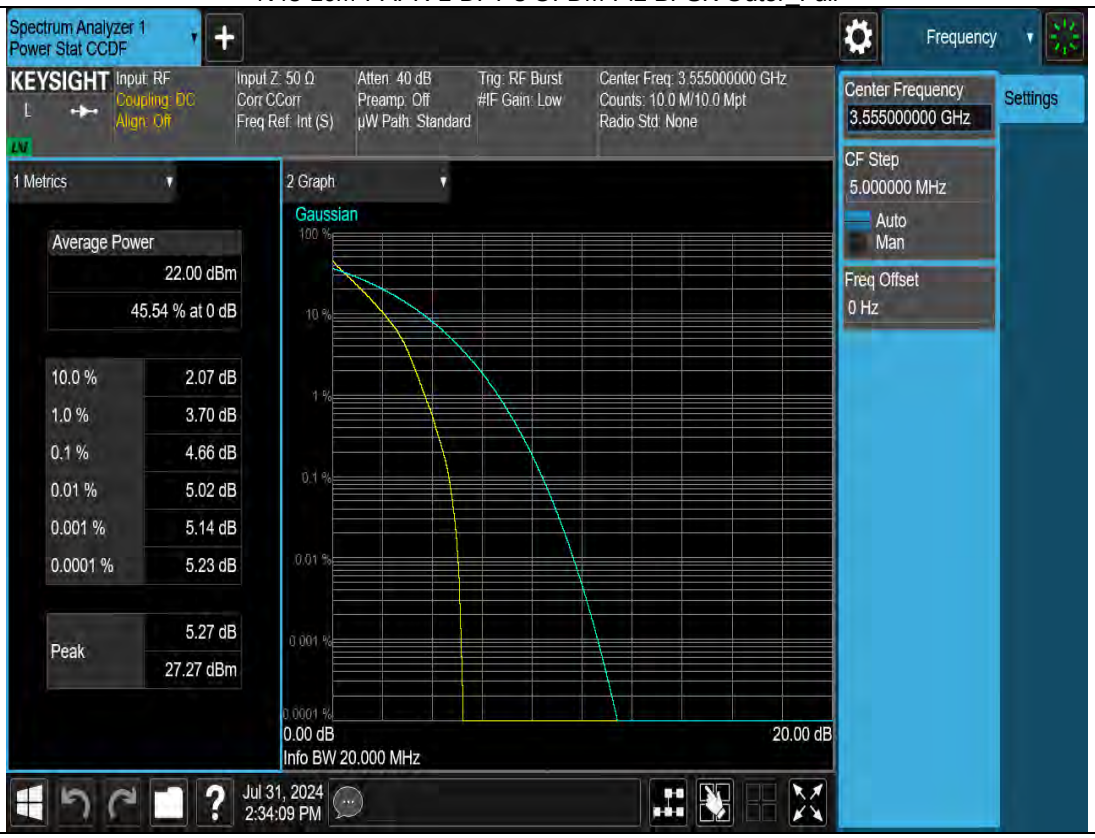
5G NR N48 SCS=30kHz 10MHz					
Modulation	CH	RB Allocation	Peak-Average Ratio (dB)	Limit	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	4.66	<=13	Pass
CP-OFDM QPSK		Outer_Full	7.05	<=13	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	7.07	<=13	Pass
CP-OFDM QPSK		Outer_Full	4.72	<=13	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	4.62	<=13	Pass
CP-OFDM QPSK		Outer_Full	7.06	<=13	Pass

5G NR N48 SCS=30kHz 15MHz					
Modulation	CH	RB Allocation	Peak-Average Ratio (dB)	Limit	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	7.39	<=13	Pass
CP-OFDM QPSK		Outer_Full	4.52	<=13	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	7.49	<=13	Pass
CP-OFDM QPSK		Outer_Full	4.52	<=13	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	7.49	<=13	Pass
CP-OFDM QPSK		Outer_Full	4.69	<=13	Pass

5G NR N48 SCS=30kHz 20MHz					
Modulation	CH	RB Allocation	Peak-Average Ratio (dB)	Limit	Verdict
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	6.96	<=13	Pass
CP-OFDM QPSK		Outer_Full	4.49	<=13	Pass
DFT-s-OFDM PI/2 BPSK	Middle	Outer_Full	4.5	<=13	Pass
CP-OFDM QPSK		Outer_Full	6.95	<=13	Pass
DFT-s-OFDM PI/2 BPSK	High	Outer_Full	7.33	<=13	Pass
CP-OFDM QPSK		Outer_Full	4.53	<=13	Pass

Test Graph

N48-10M-PAPR-L-DFT-s-OFDM-Pi2 BPSK-Outer_Full

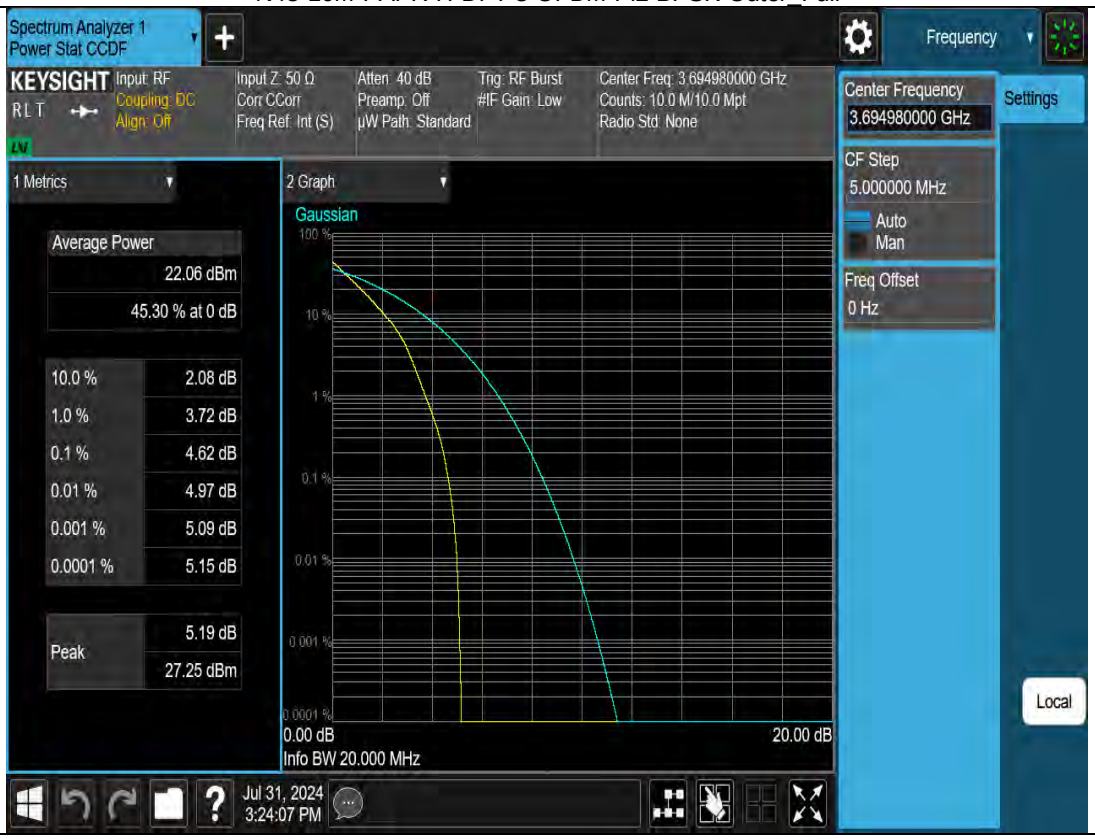


N48-10M-PAPR-L-CP-OFDM-QPSK-Outer_Full

N48-10M-PAPR-M-CP-OFDM-QPSK-Outer_Full

N48-10M-PAPR-L-DFT-s-OFDM-Pi2 BPSK-Outer_Full

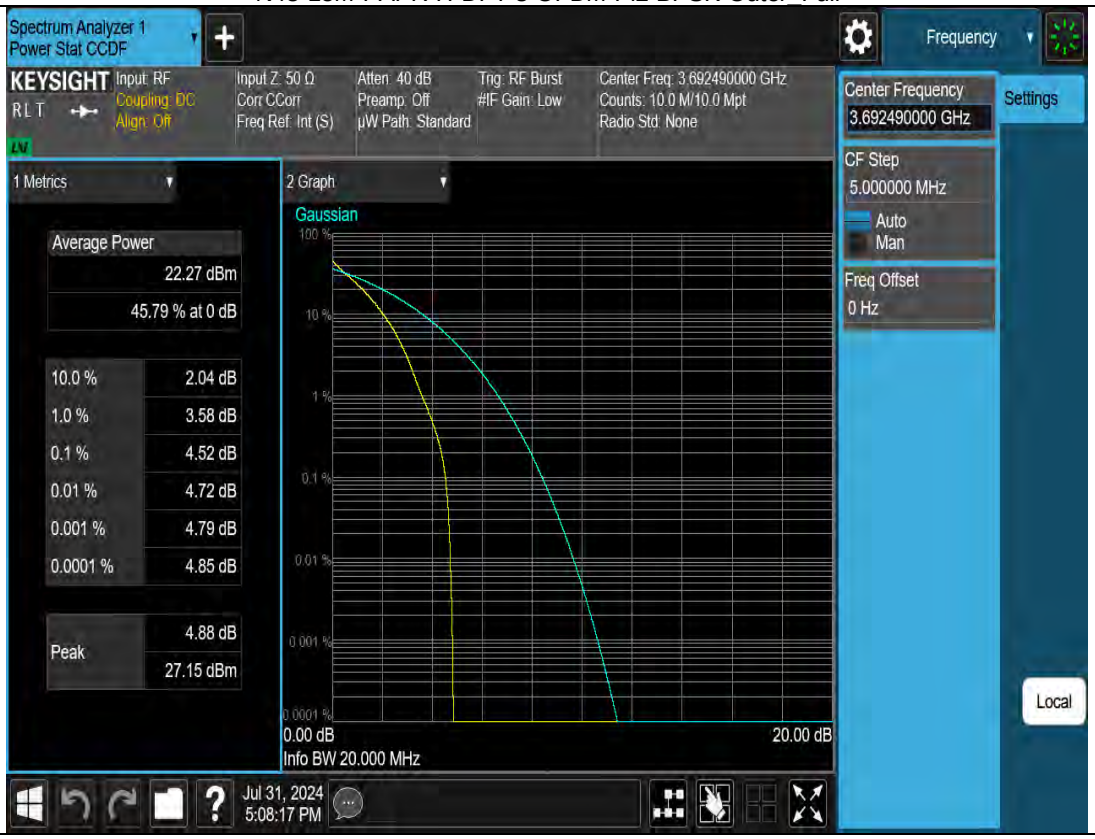
N48-10M-PAPR-H-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N48-10M-PAPR-H-CP-OFDM-QPSK-Outer_Full

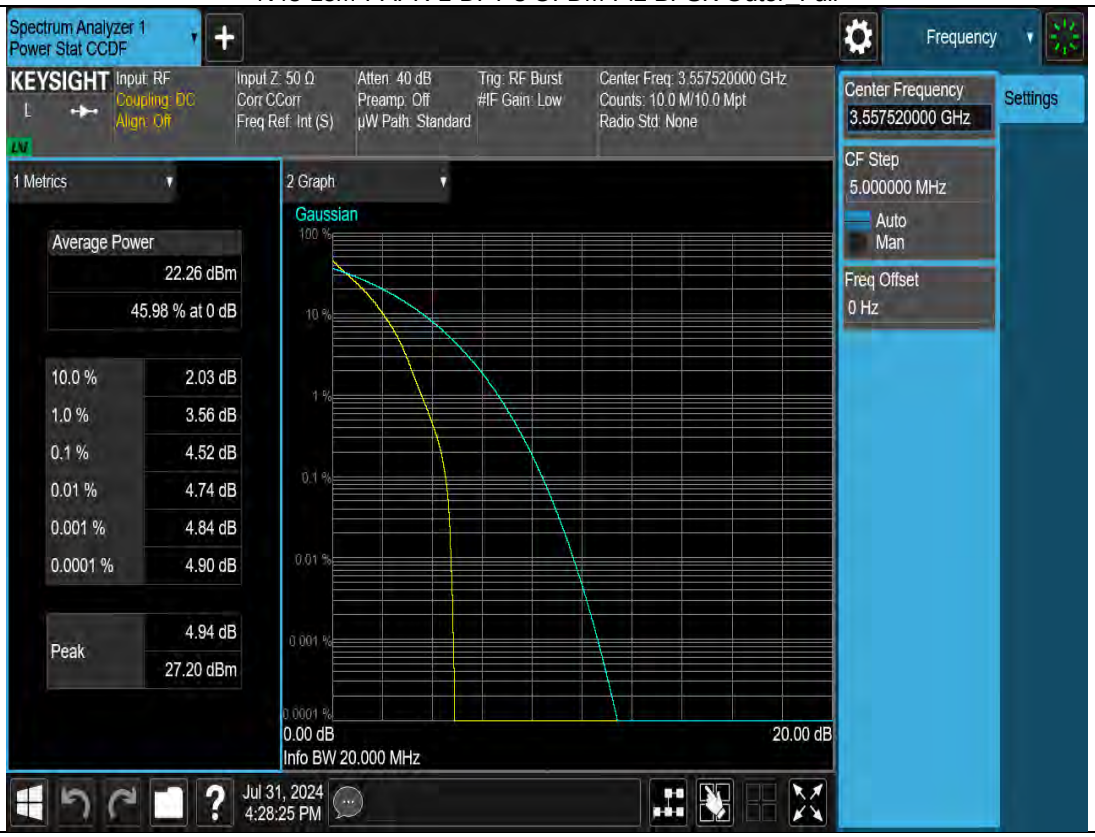
N48-15M-PAPR-L-CP-OFDM-QPSK-Outer_Full

N48-15M-PAPR-H-DFT-s-OFDM-Pi2 BPSK-Outer_Full



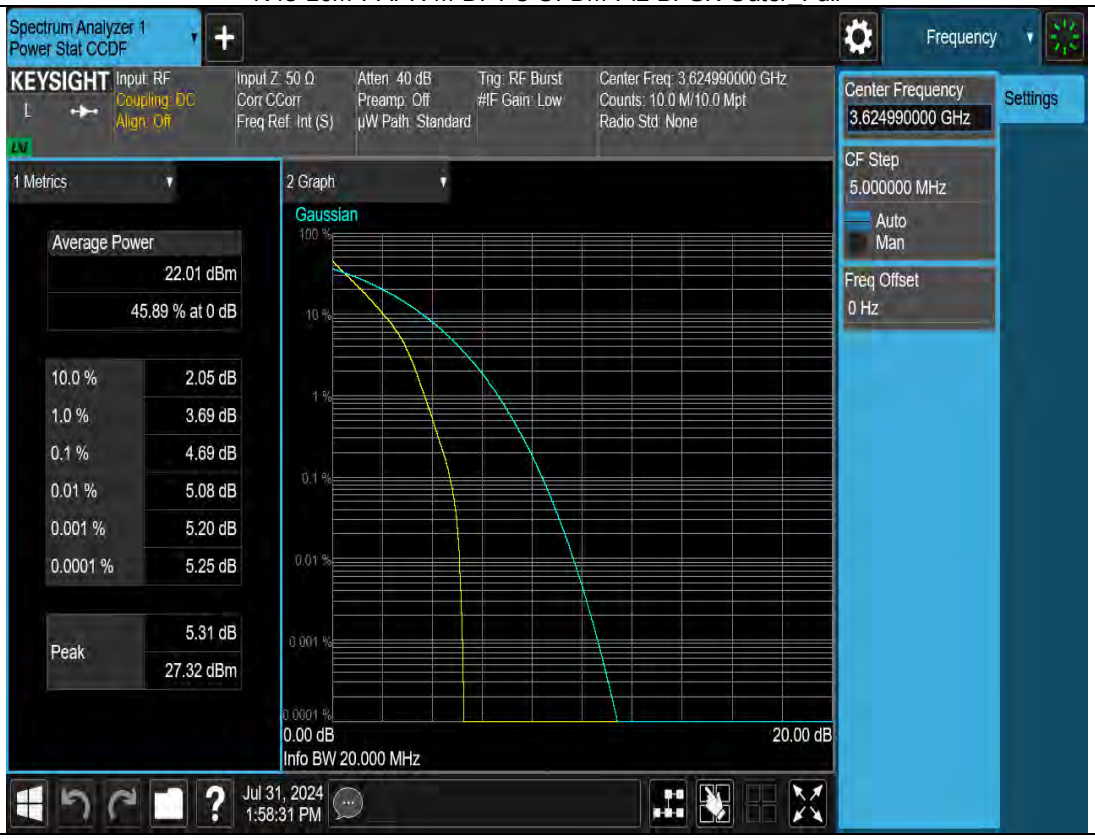
N48-15M-PAPR-M-CP-OFDM-QPSK-Outer_Full

N48-15M-PAPR-L-DFT-s-OFDM-Pi2 BPSK-Outer_Full



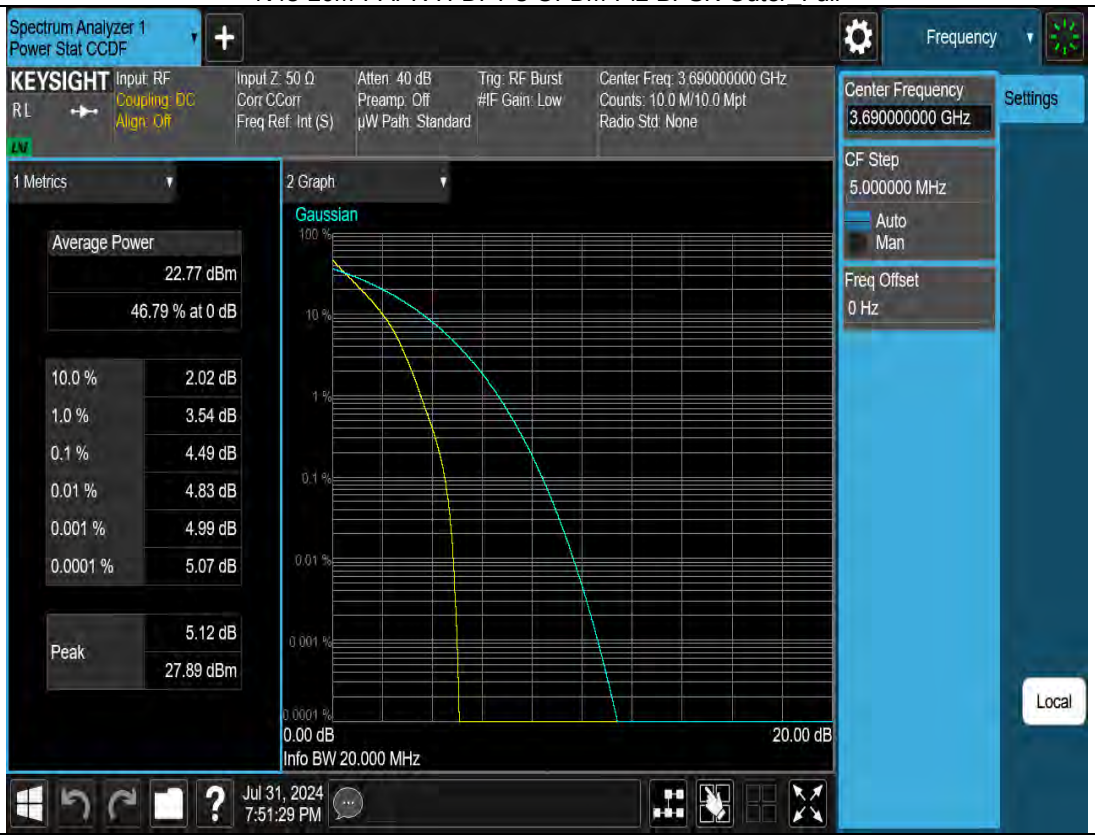
N48-15M-PAPR-H-CP-OFDM-QPSK-Outer_Full

N48-10M-PAPR-M-DFT-s-OFDM-Pi2 BPSK-Outer_Full



N48-20M-PAPR-L-CP-OFDM-QPSK-Outer_Full

N48-20M-PAPR-H-DFT-s-OFDM-Pi2 BPSK-Outer_Full

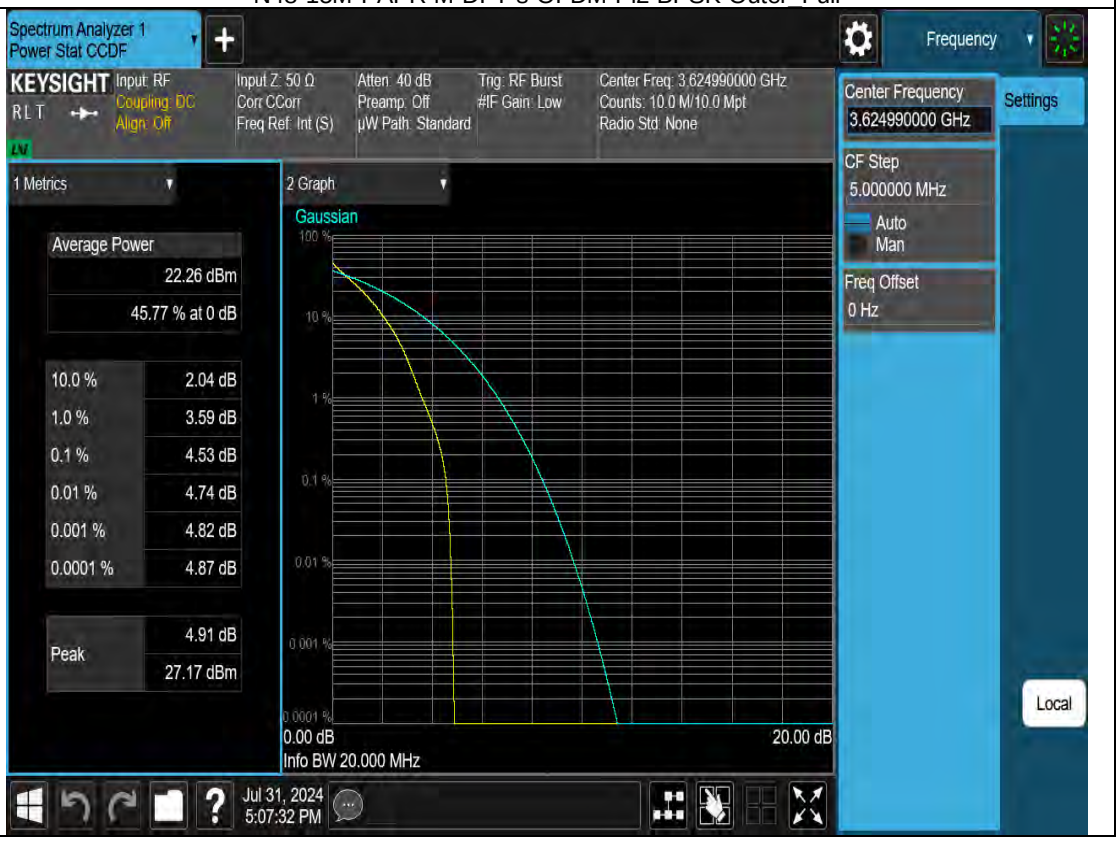


N48-20M-PAPR-M-DFT-s-OFDM-Pi2 BPSK-Outer_Full

N48-20M-PAPR-M-CP-OFDM-QPSK-Outer_Full

N48-20M-PAPR-H-CP-OFDM-QPSK-Outer_Full

N48-15M-PAPR-M-DFT-s-OFDM-Pi2 BPSK-Outer_Full



Adjacent Channel Power

5G NR N48 SCS=30kHz 10MHz						
Modulation	CH	RB Allocation	Channel Spacing (MHz)		Limit (dBc)	Verdict
			-10	+10		
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	42.9	42.44	⩾30	Pass
		1RB0	41.34	62.38	⩾30	Pass
		1RB_Max	64.95	41.24	⩾30	Pass
	Middle	Outer_Full	40.44	40.84	⩾30	Pass
		1RB0	40.7	63.38	⩾30	Pass
		1RB_Max	63.67	41.38	⩾30	Pass
	Middle	Outer_Full	42.71	42.27	⩾30	Pass
		1RB0	41.89	59.71	⩾30	Pass
		1RB_Max	59.84	42.58	⩾30	Pass
CP-OFDM QPSK	Low	Outer_Full	40.08	40.93	⩾30	Pass
		1RB0	39.6	57.88	⩾30	Pass
		1RB_Max	57.96	41.01	⩾30	Pass
	Middle	Outer_Full	43.44	43.16	⩾30	Pass
		1RB0	41.29	57.93	⩾30	Pass
		1RB_Max	58.24	41.5	⩾30	Pass
	Middle	Outer_Full	40.73	41.19	⩾30	Pass
		1RB0	40.34	56.05	⩾30	Pass
		1RB_Max	56.19	41.64	⩾30	Pass

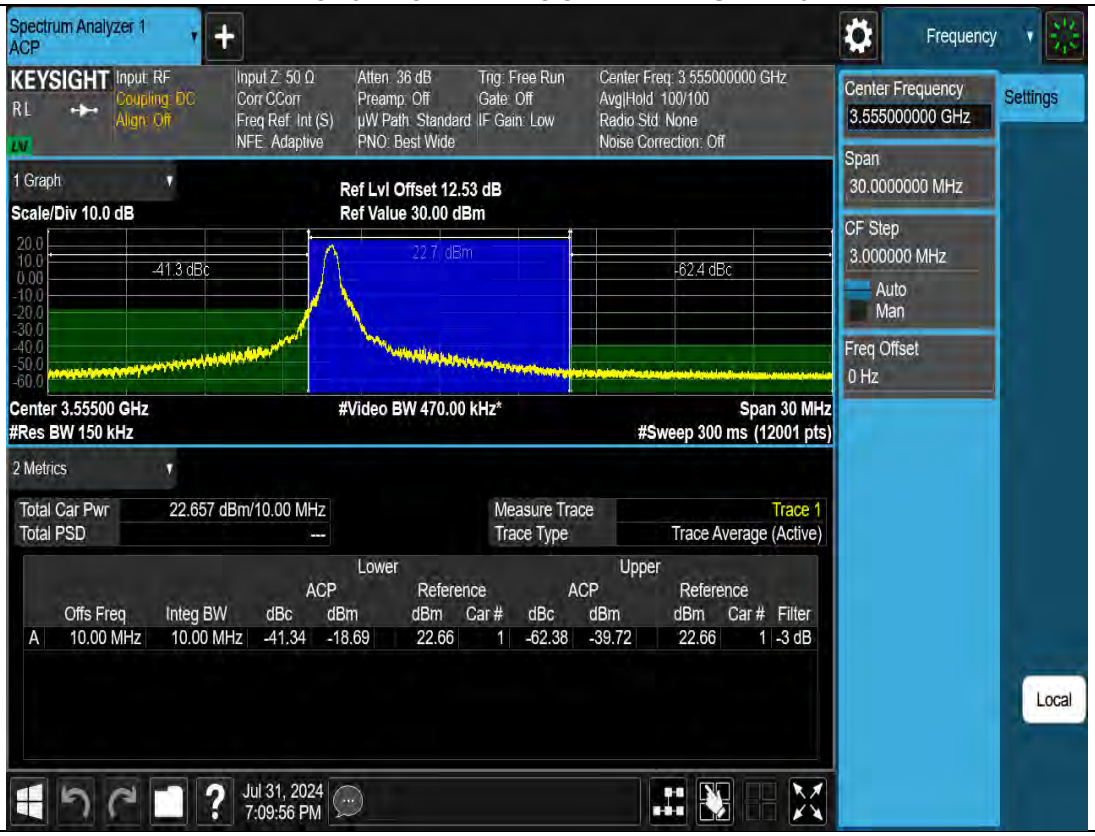
5G NR N48 SCS=30kHz 15MHz						
Modulation	CH	RB Allocation	Channel Spacing (MHz)		Limit (dBc)	Verdict
			-15	+15		
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	42.98	45.25	⩾30	Pass
		1RB0	38.07	64.33	⩾30	Pass
		1RB_Max	64.56	38.01	⩾30	Pass
	Middle	Outer_Full	40.57	40.93	⩾30	Pass
		1RB0	36.35	62.63	⩾30	Pass
		1RB_Max	61.24	38.68	⩾30	Pass
	Middle	Outer_Full	42.52	44.91	⩾30	Pass
		1RB0	37.96	59.01	⩾30	Pass
		1RB_Max	59.29	39.16	⩾30	Pass
CP-OFDM QPSK	Low	Outer_Full	40.18	40.36	⩾30	Pass
		1RB0	37.1	56.16	⩾30	Pass
		1RB_Max	56.41	38.03	⩾30	Pass
	Middle	Outer_Full	43.35	45.83	⩾30	Pass
		1RB0	37.83	56.97	⩾30	Pass
		1RB_Max	57.76	38.96	⩾30	Pass
	Middle	Outer_Full	40.23	40.35	⩾30	Pass
		1RB0	36.39	54.25	⩾30	Pass
		1RB_Max	54.6	37.91	⩾30	Pass

5G NR N48 SCS=30kHz 20MHz						
Modulation	CH	RB Allocation	Channel Spacing (MHz)		Limit (dBc)	Verdict
			-20	+20		
DFT-s-OFDM PI/2 BPSK	Low	Outer_Full	43.17	44.2	⩾30	Pass
		1RB0	41.1	61.49	⩾30	Pass
		1RB_Max	62.51	41.74	⩾30	Pass
	Middle	Outer_Full	39.78	40.01	⩾30	Pass
		1RB0	41.78	59.26	⩾30	Pass
		1RB_Max	59.8	42.29	⩾30	Pass
	Middle	Outer_Full	42.92	43.49	⩾30	Pass
		1RB0	42.82	56.28	⩾30	Pass
		1RB_Max	56.71	42.35	⩾30	Pass
CP-OFDM QPSK	Low	Outer_Full	39.93	40.2	⩾30	Pass
		1RB0	40.81	54.41	⩾30	Pass
		1RB_Max	54.76	40.93	⩾30	Pass
	Middle	Outer_Full	43.37	44.26	⩾30	Pass
		1RB0	42.27	54.57	⩾30	Pass
		1RB_Max	55.76	42.41	⩾30	Pass
	Middle	Outer_Full	40.12	40.58	⩾30	Pass
		1RB0	40.78	53.21	⩾30	Pass
		1RB_Max	53.93	41.4	⩾30	Pass

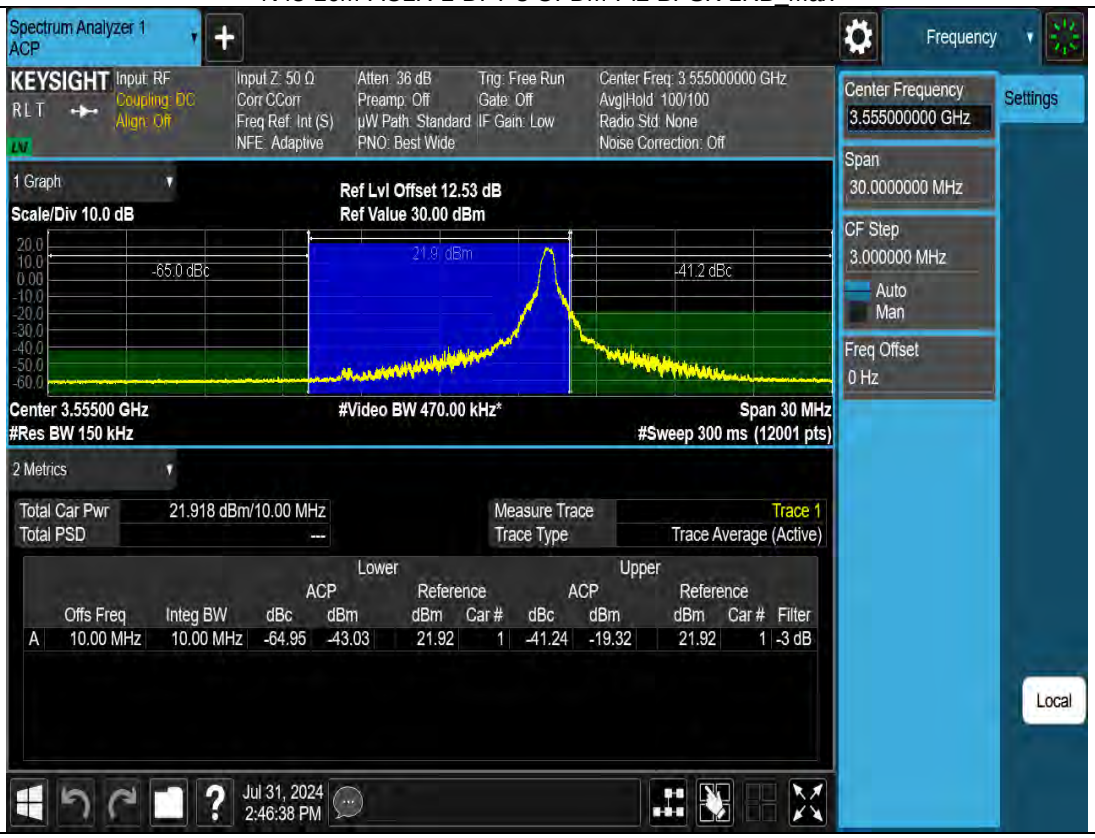
Test graph

N48-10M-ACLR-L-DFT-s-OFDM-Pi2 BPSK-Outer_Full

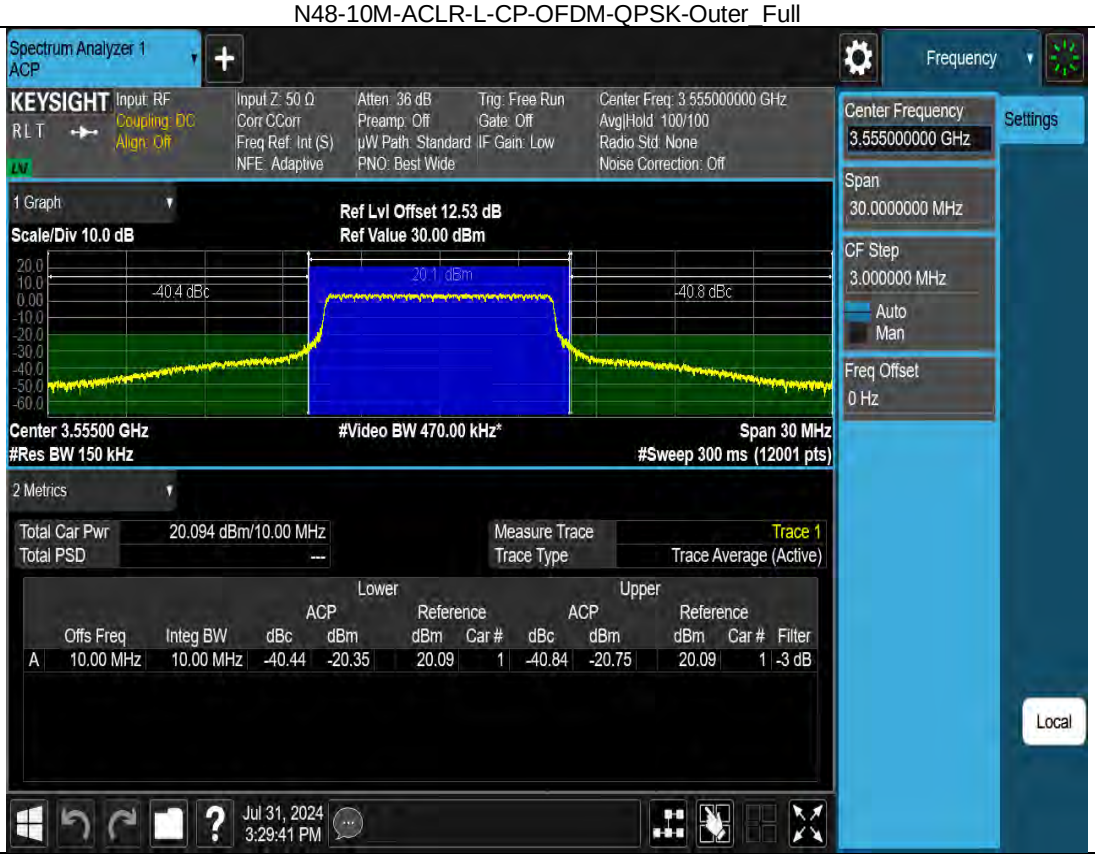
N48-10M-ACLR-L-DFT-s-OFDM-Pi2 BPSK-1RB0



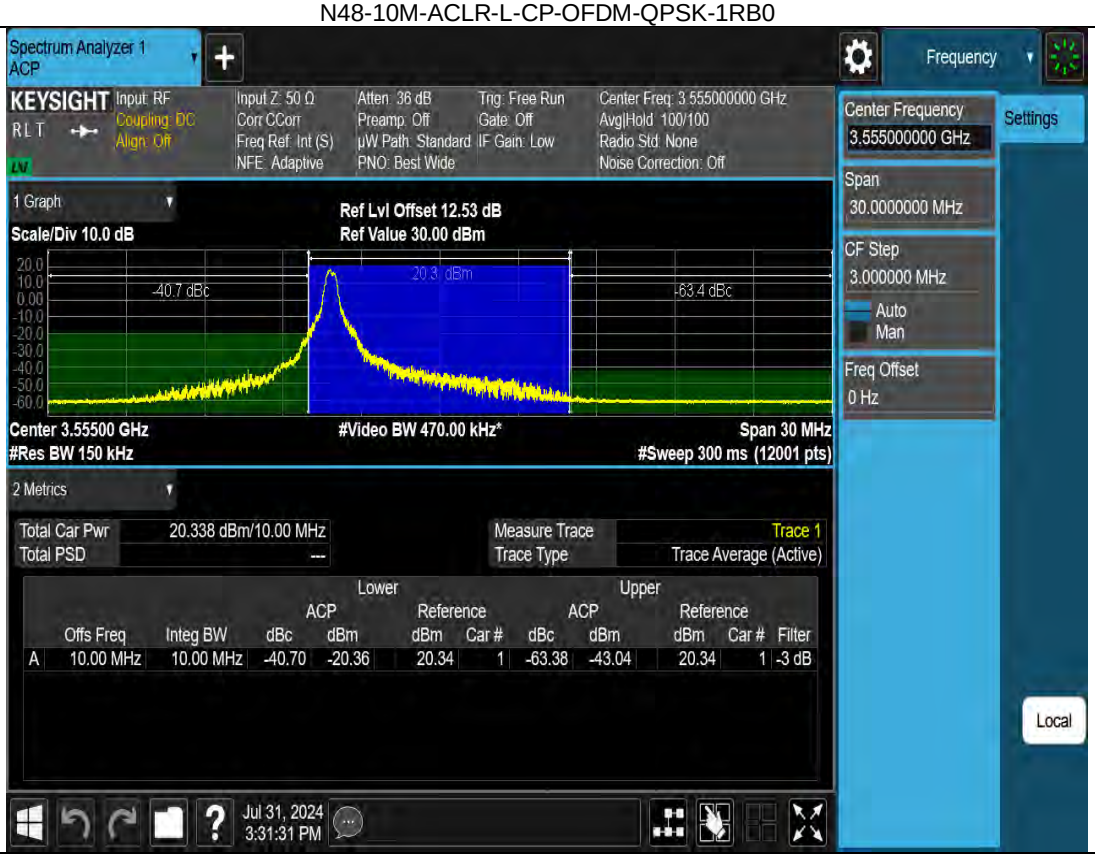
N48-10M-ACLR-L-DFT-s-OFDM-Pi2 BPSK-1RB_Max



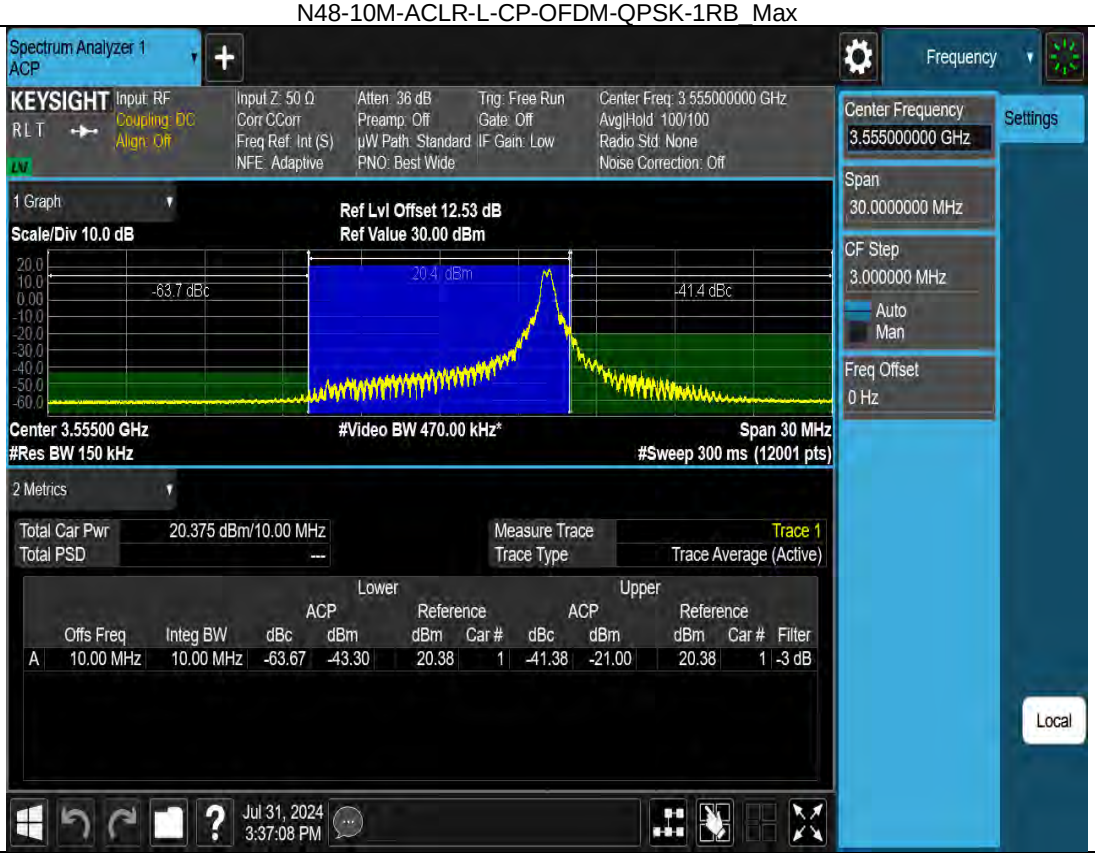
N48-10M-ACLR-L-CP-OFDM-QPSK-Outer_Full



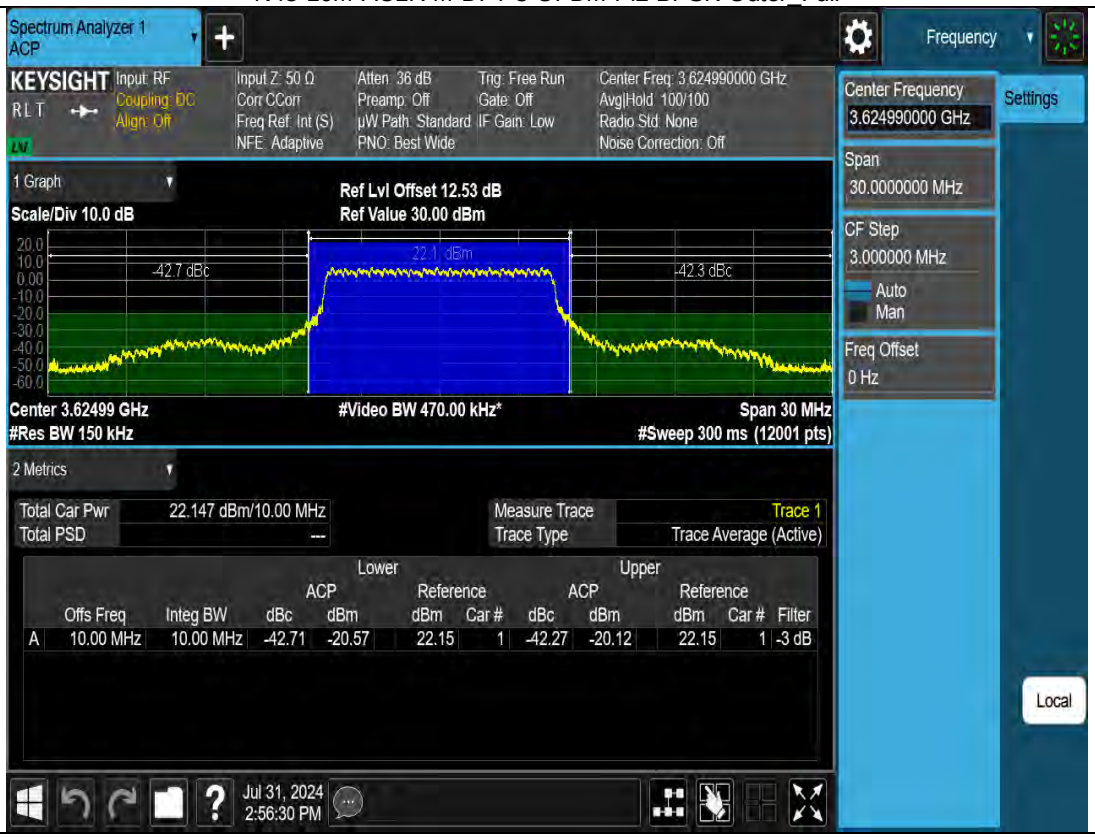
N48-10M-ACLR-L-CP-OFDM-QPSK-1RB0



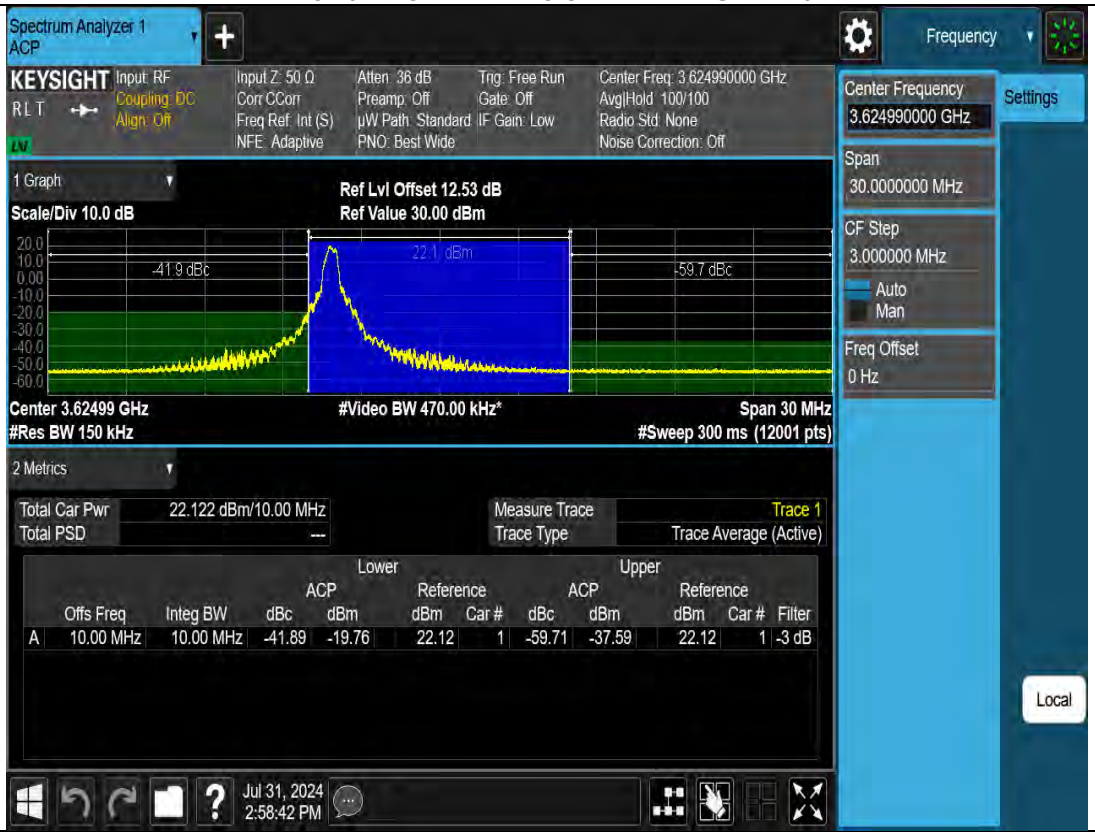
N48-10M-ACLR-L-CP-OFDM-QPSK-1RB_Max



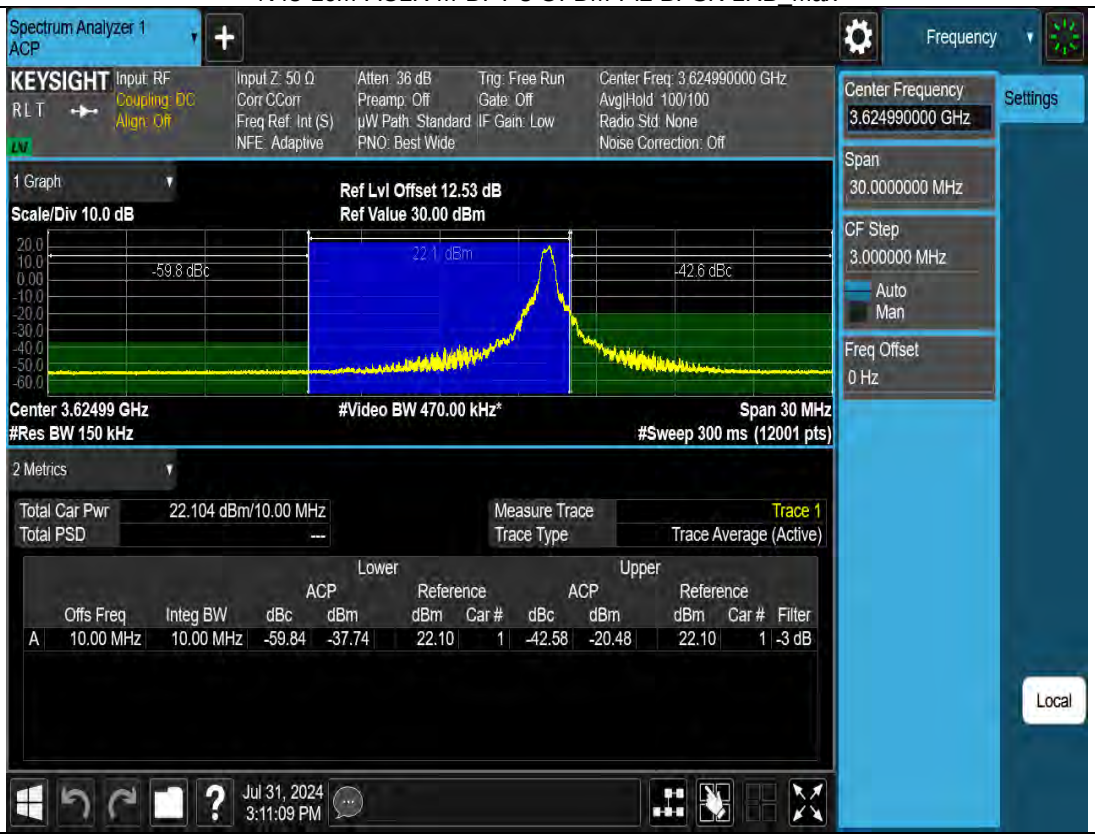
N48-10M-ACLR-M-DFT-s-OFDM-Pi2 BPSK-Outer_Full



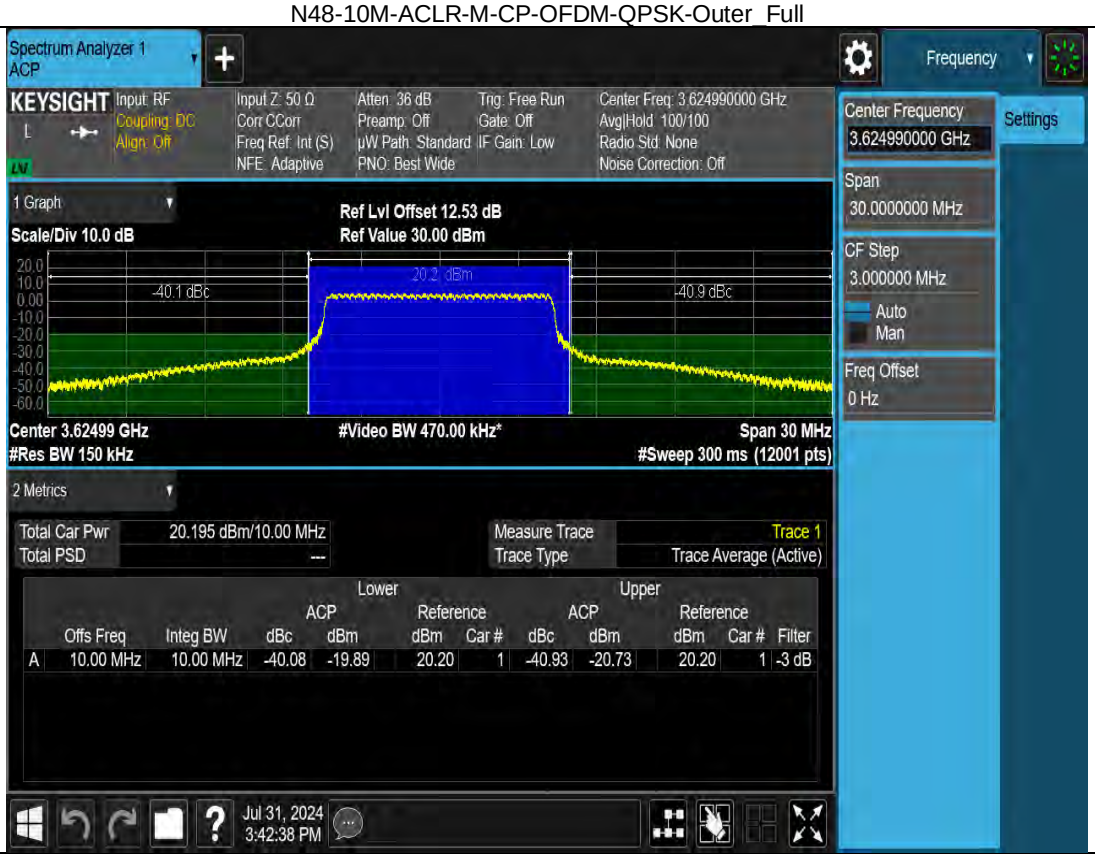
N48-10M-ACLR-M-DFT-s-OFDM-Pi2 BPSK-1RB0



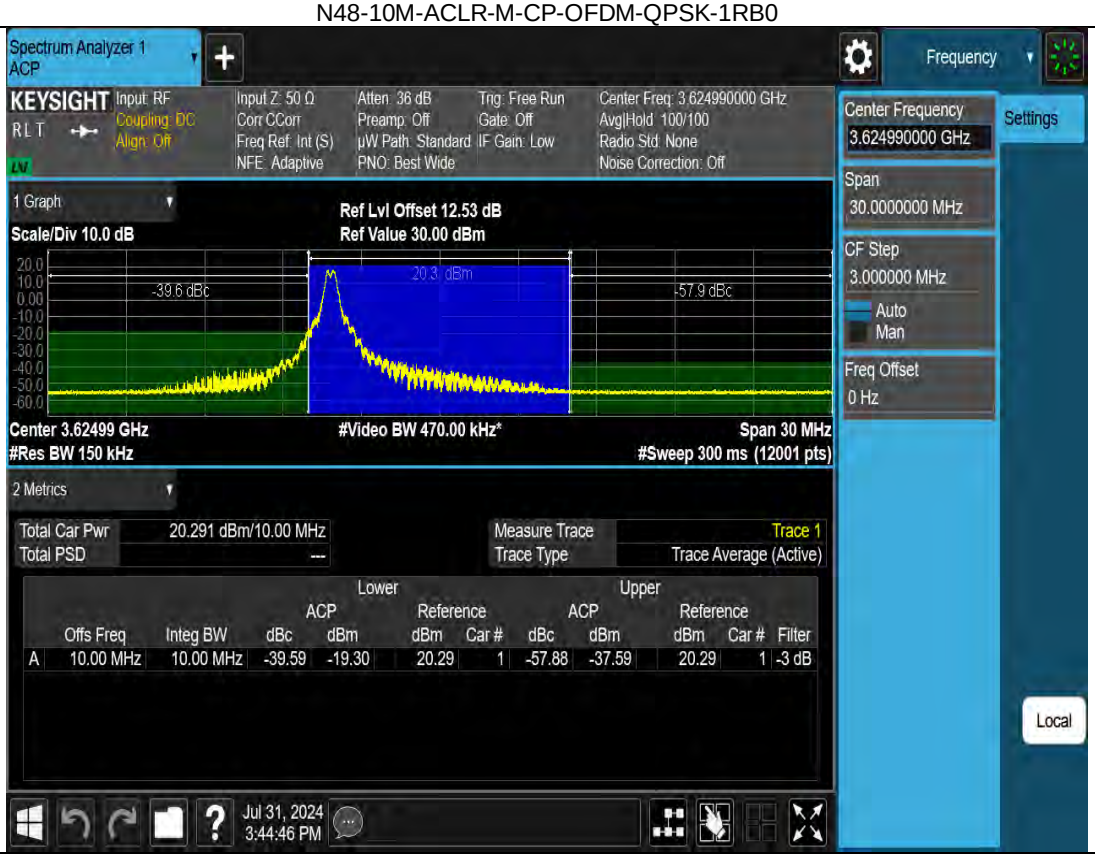
N48-10M-ACLR-M-DFT-s-OFDM-Pi2 BPSK-1RB_Max



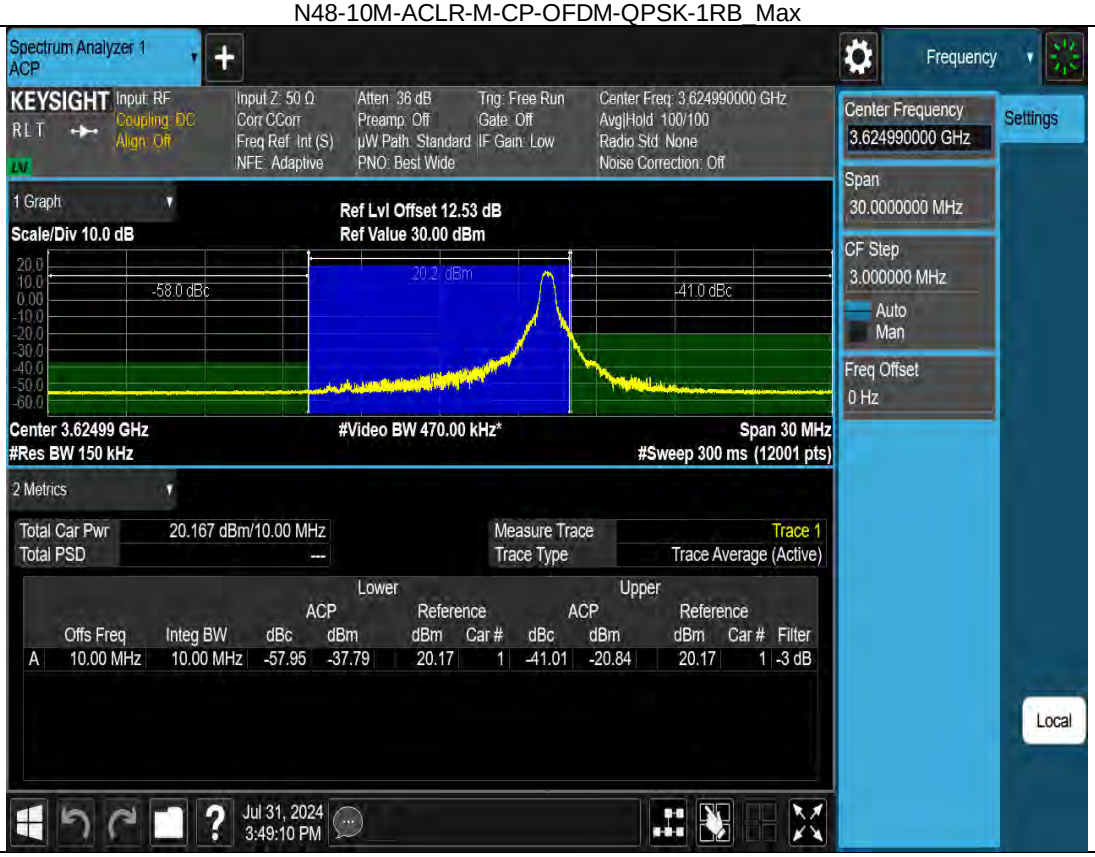
N48-10M-ACLR-M-CP-OFDM-QPSK-Outer_Full



N48-10M-ACLR-M-CP-OFDM-QPSK-1RB0

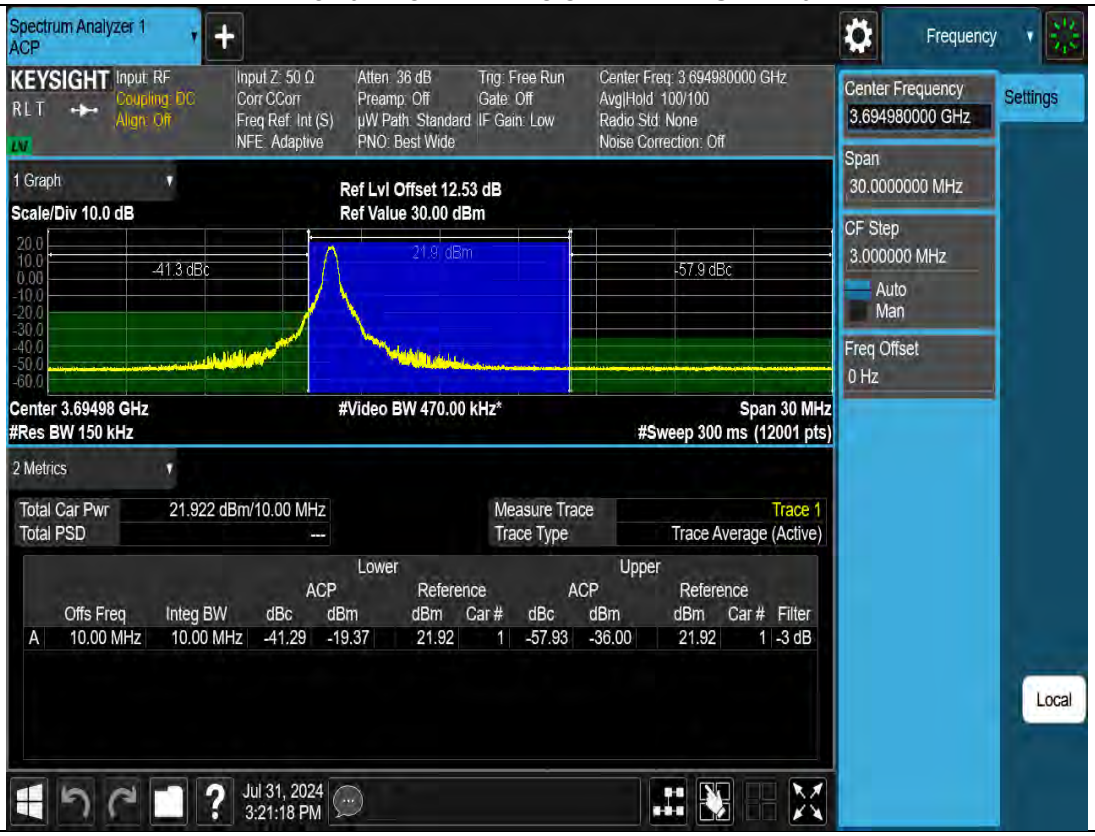


N48-10M-ACLR-M-CP-OFDM-QPSK-1RB_Max

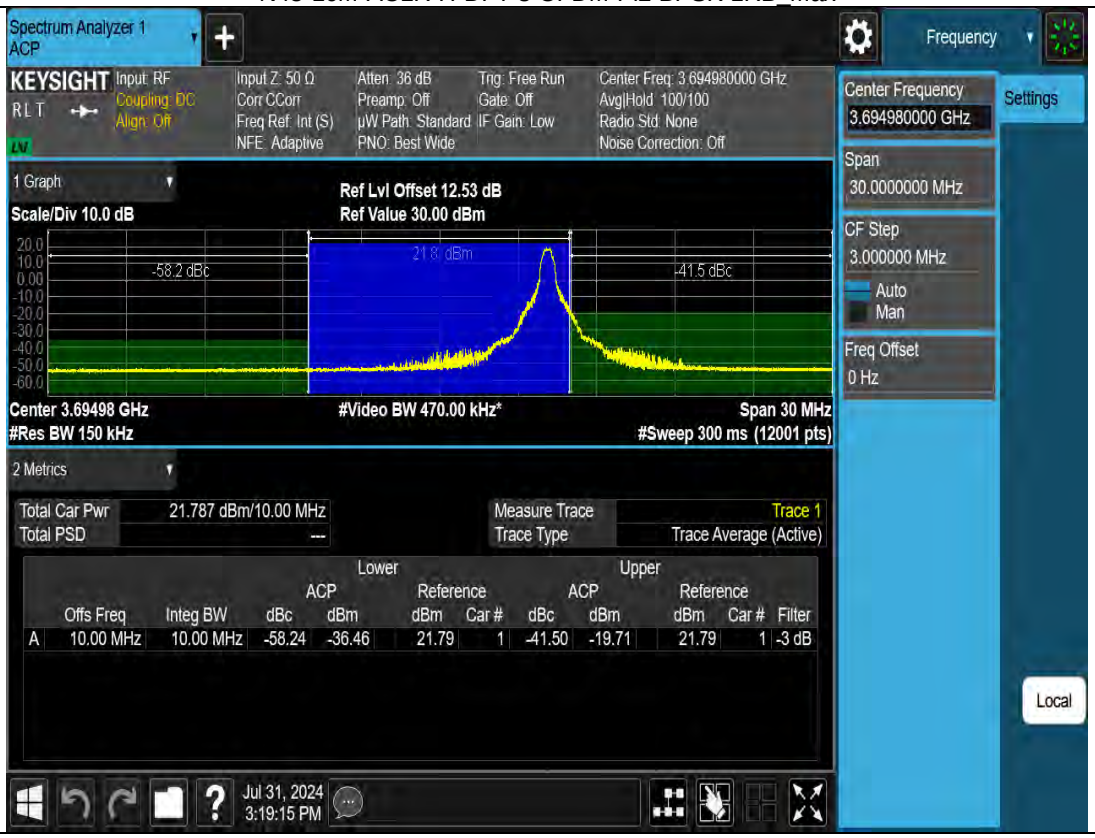


N48-10M-ACLR-H-DFT-s-OFDM-Pi2 BPSK-Outer_Full

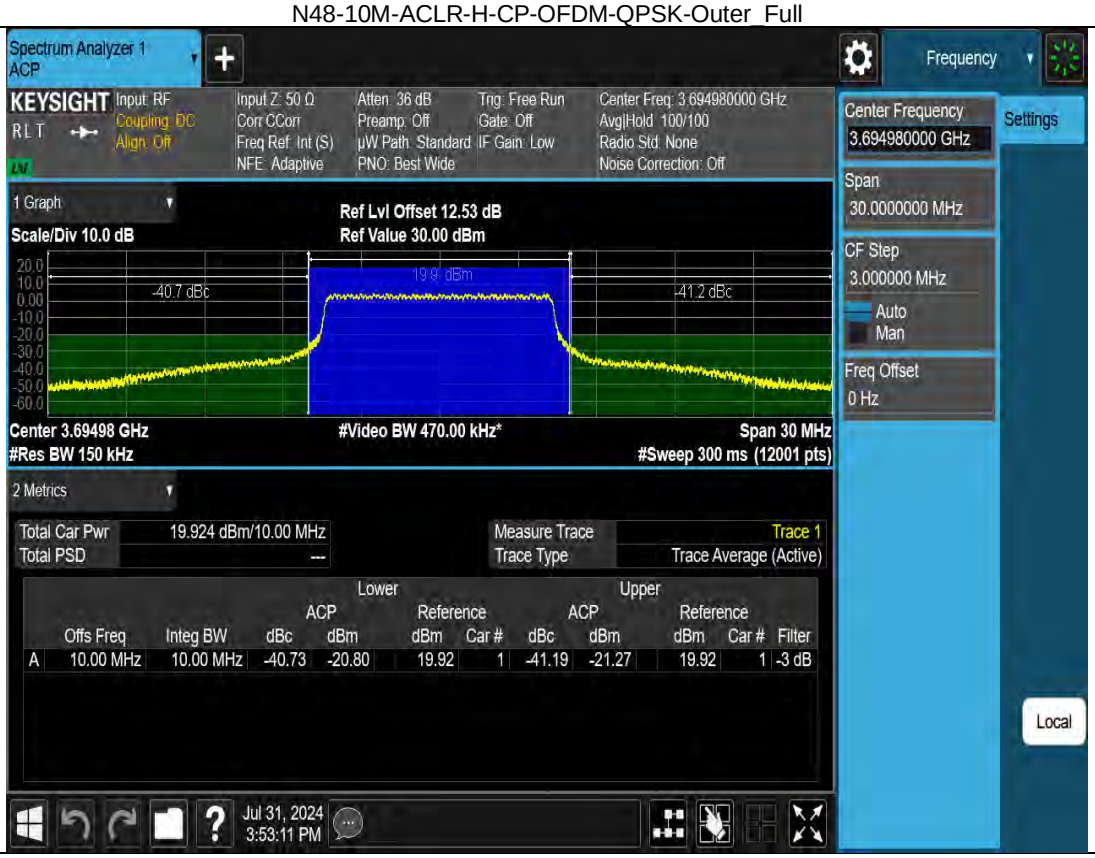
N48-10M-ACLR-H-DFT-s-OFDM-Pi2 BPSK-1RB0



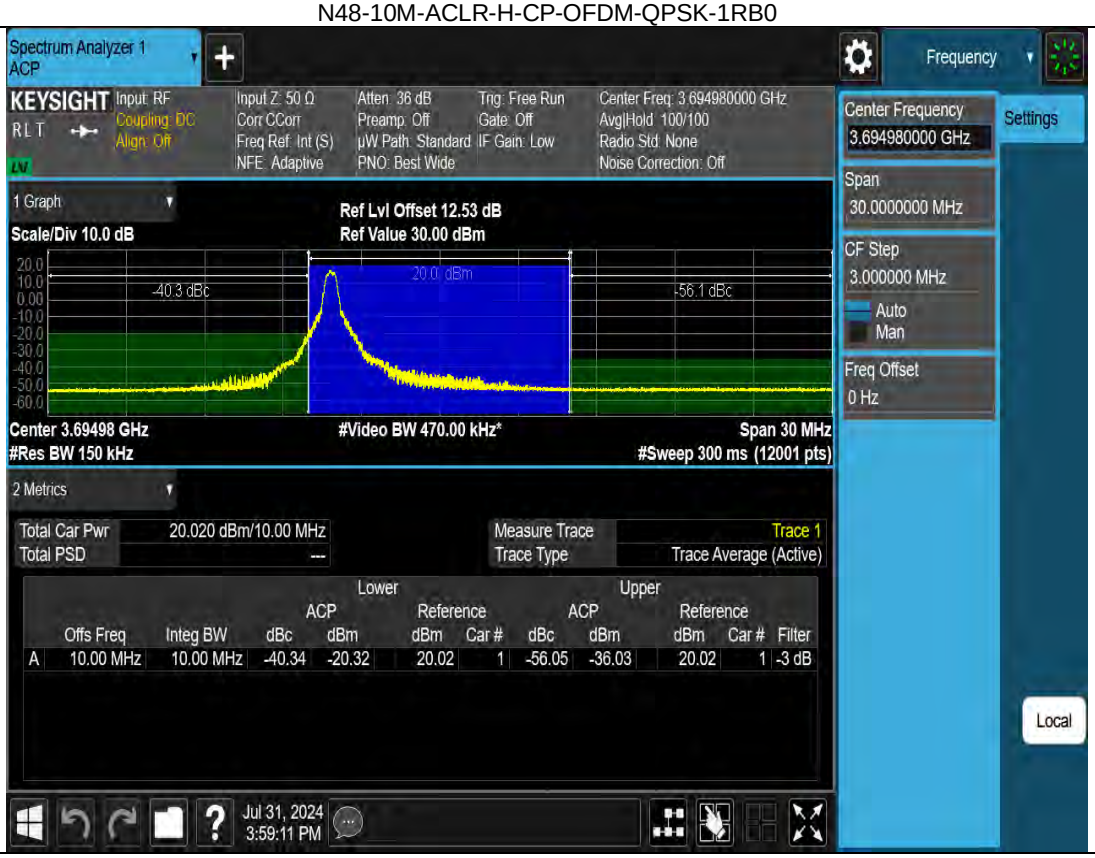
N48-10M-ACLR-H-DFT-s-OFDM-Pi2 BPSK-1RB_Max



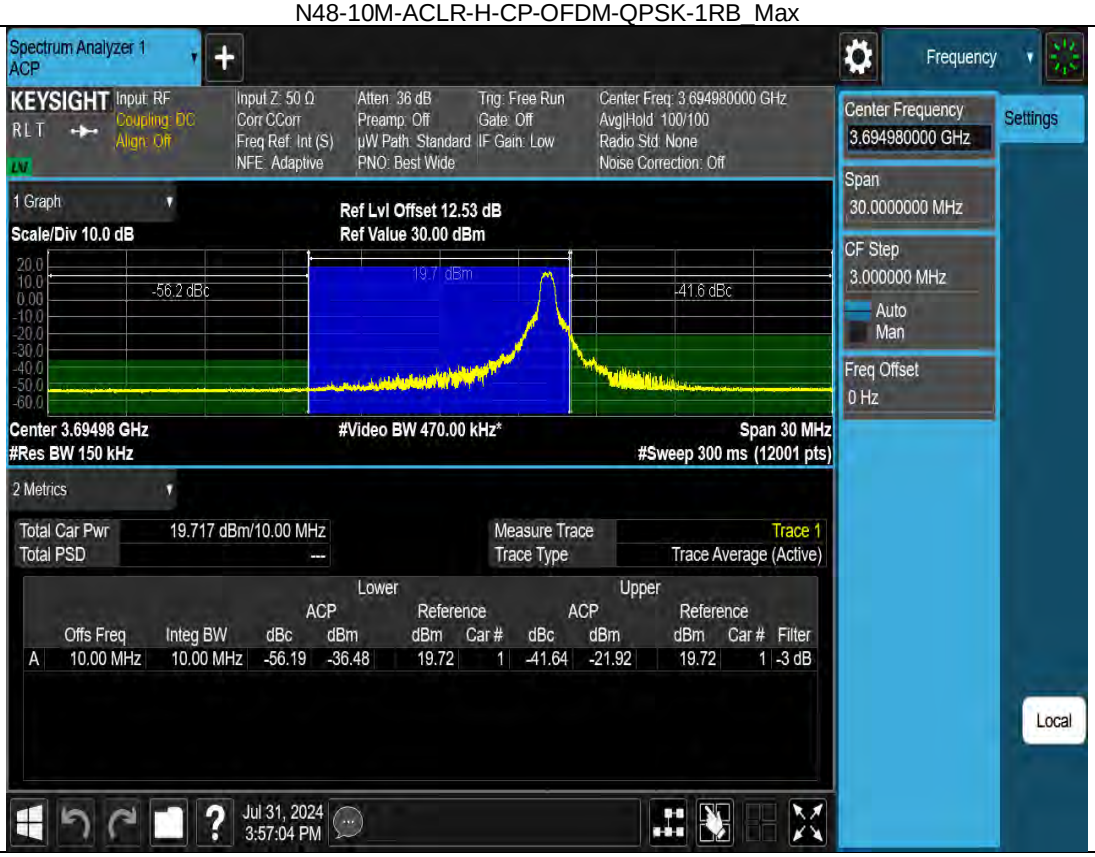
N48-10M-ACLR-H-CP-OFDM-QPSK-Outer_Full



N48-10M-ACLR-H-CP-OFDM-QPSK-1RB0



N48-10M-ACLR-H-CP-OFDM-QPSK-1RB_Max



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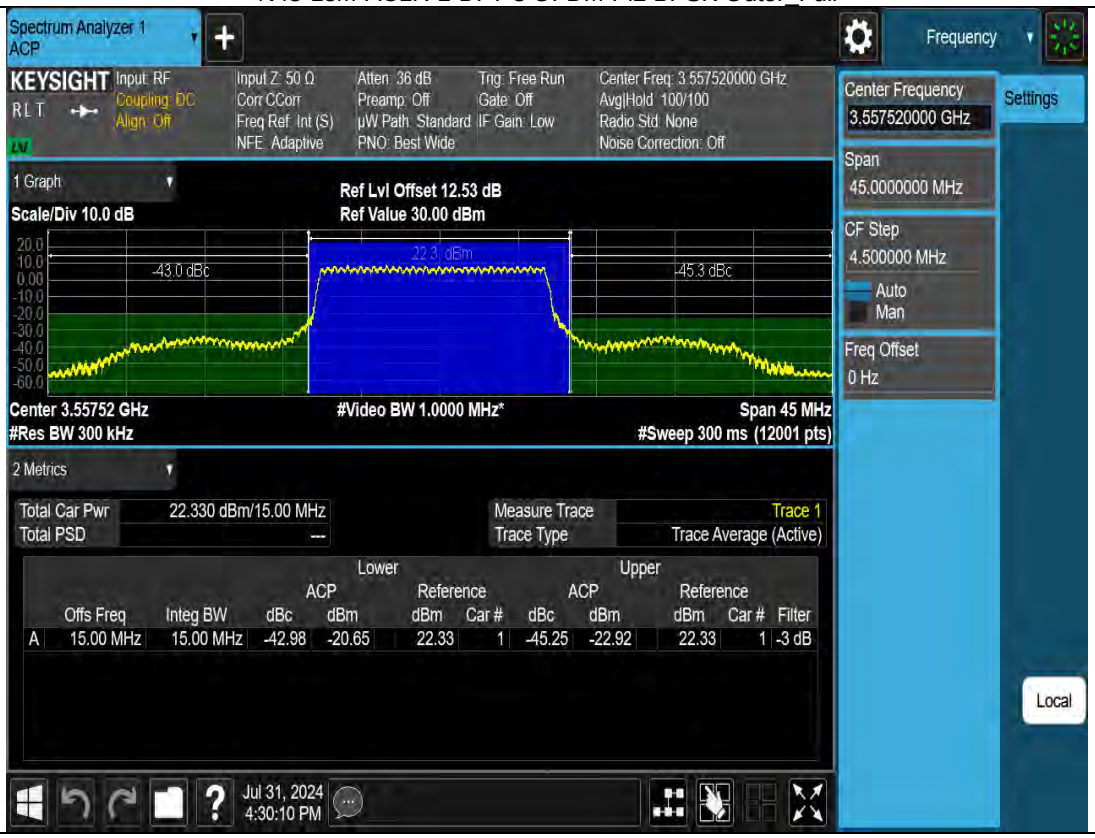

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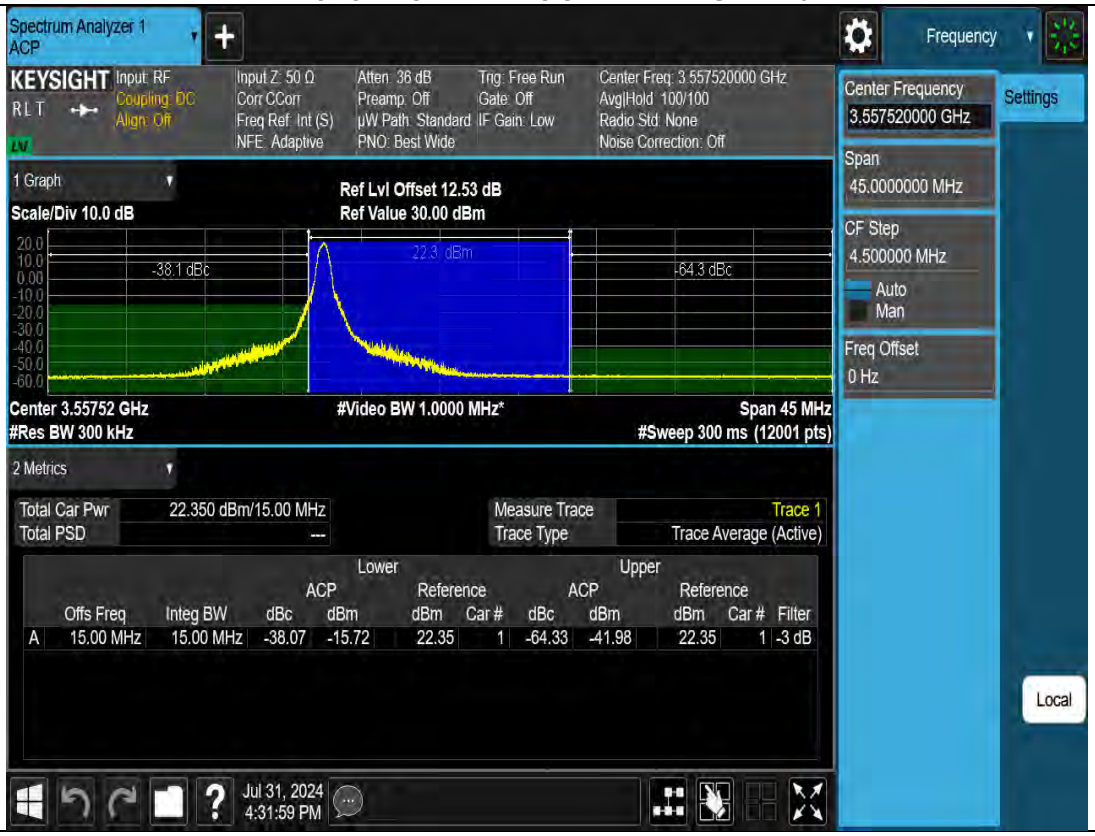

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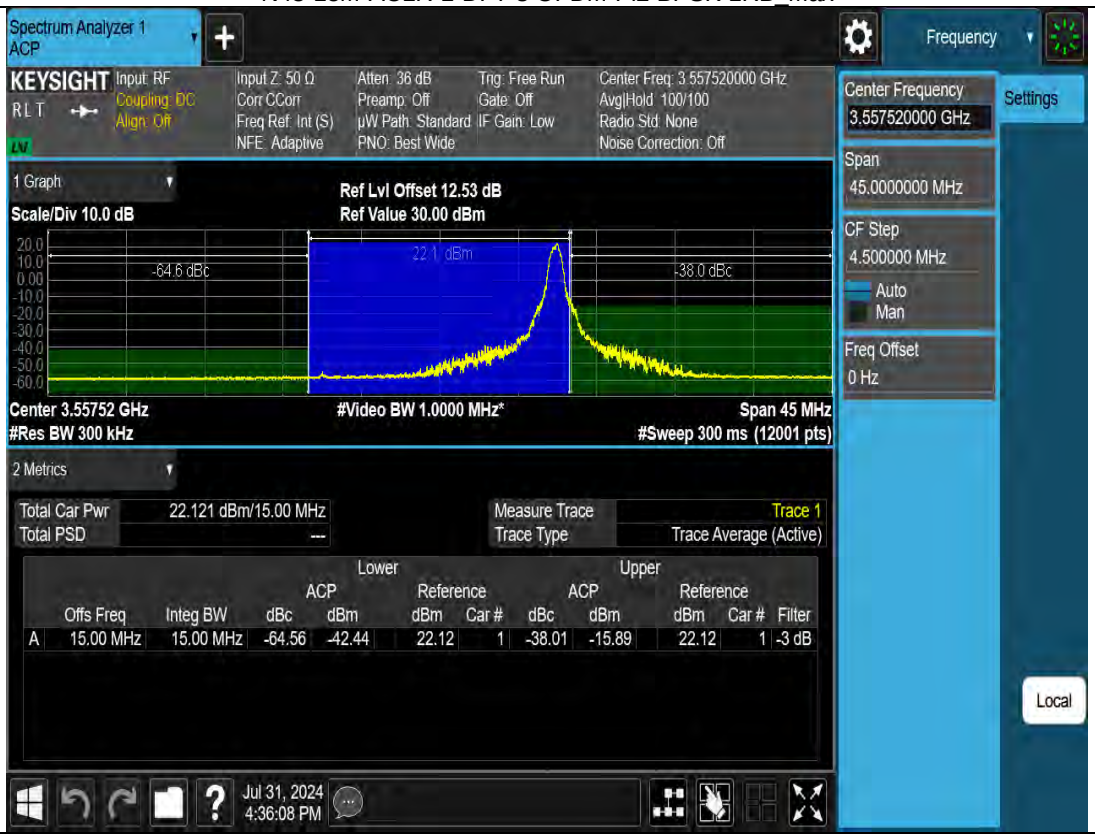

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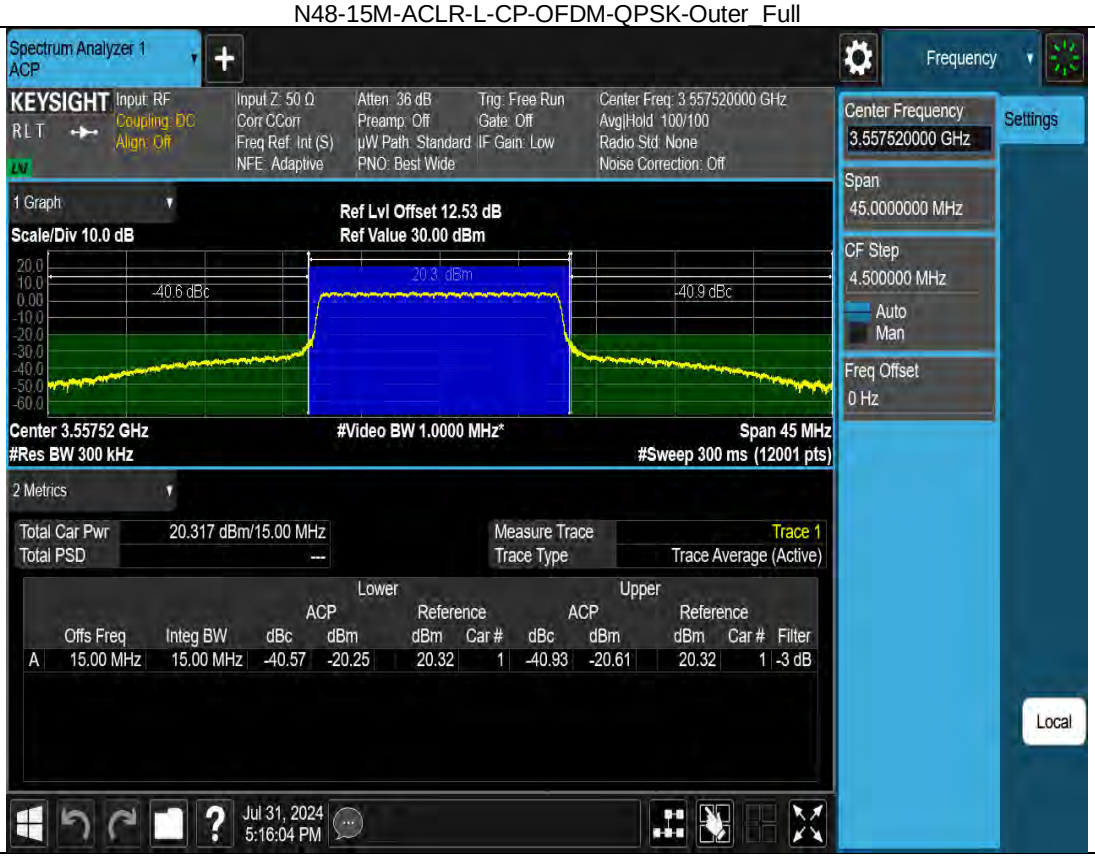

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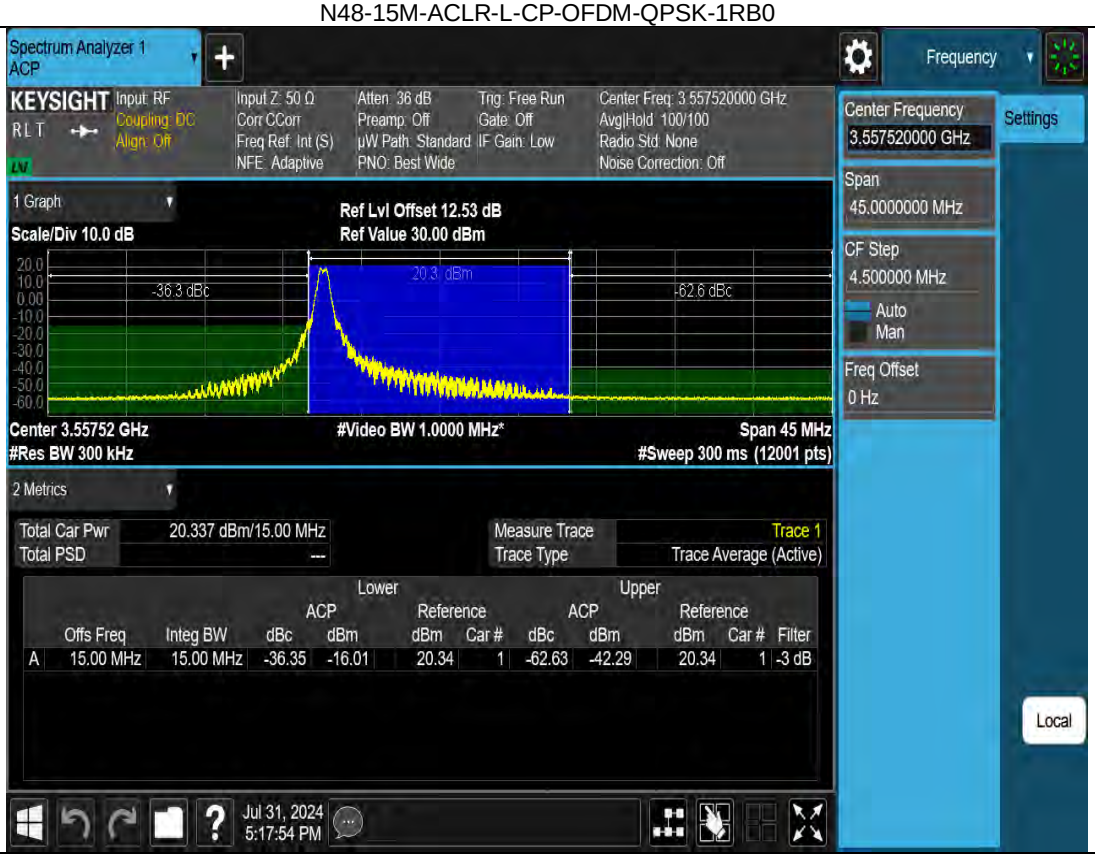

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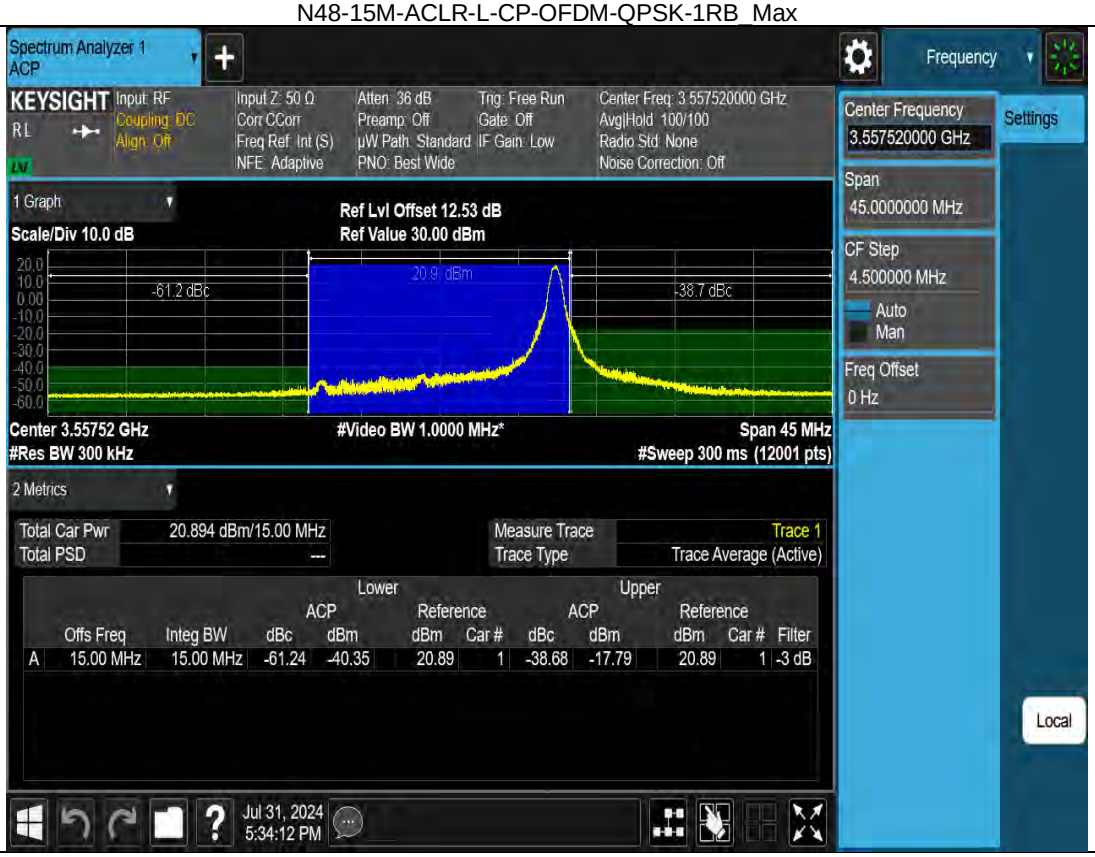

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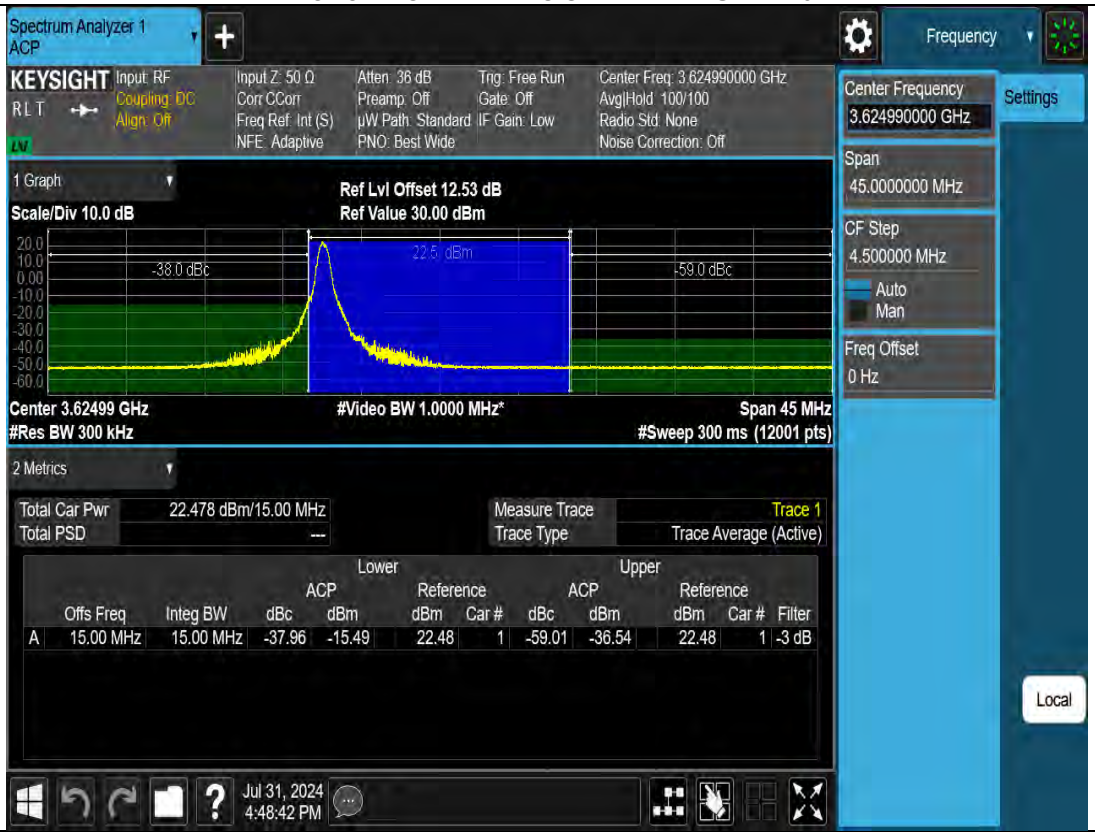

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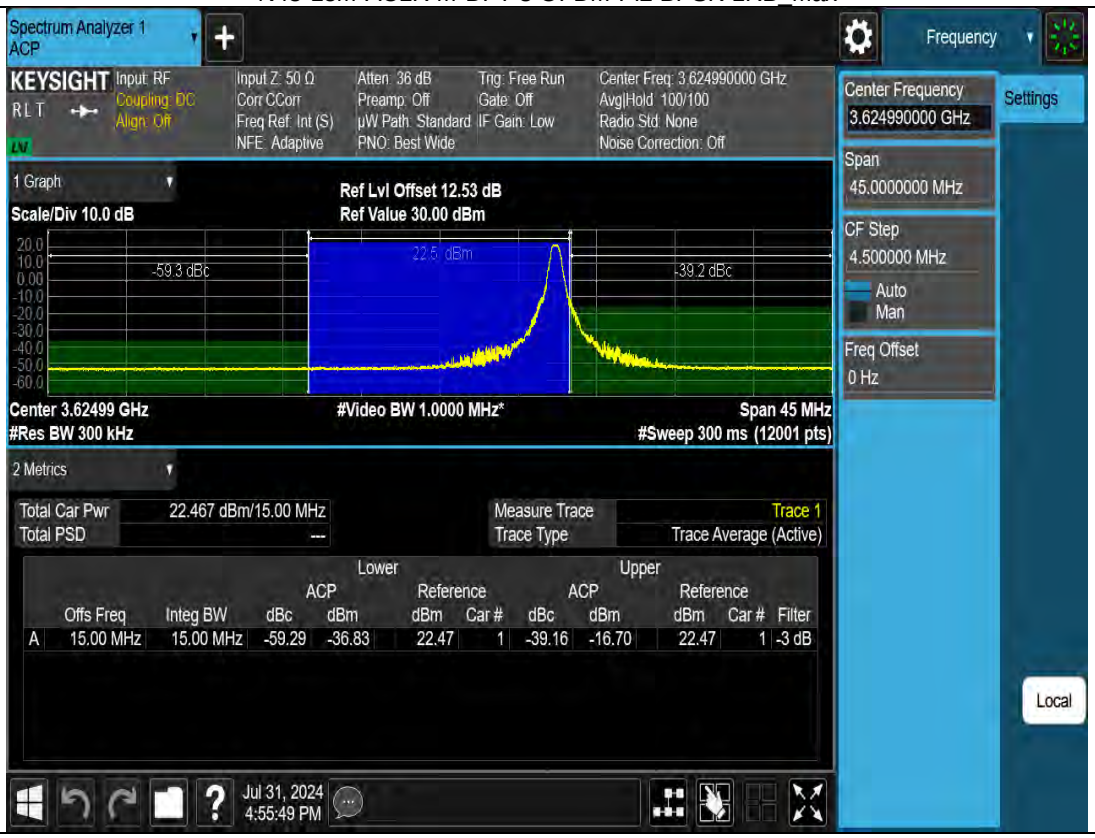

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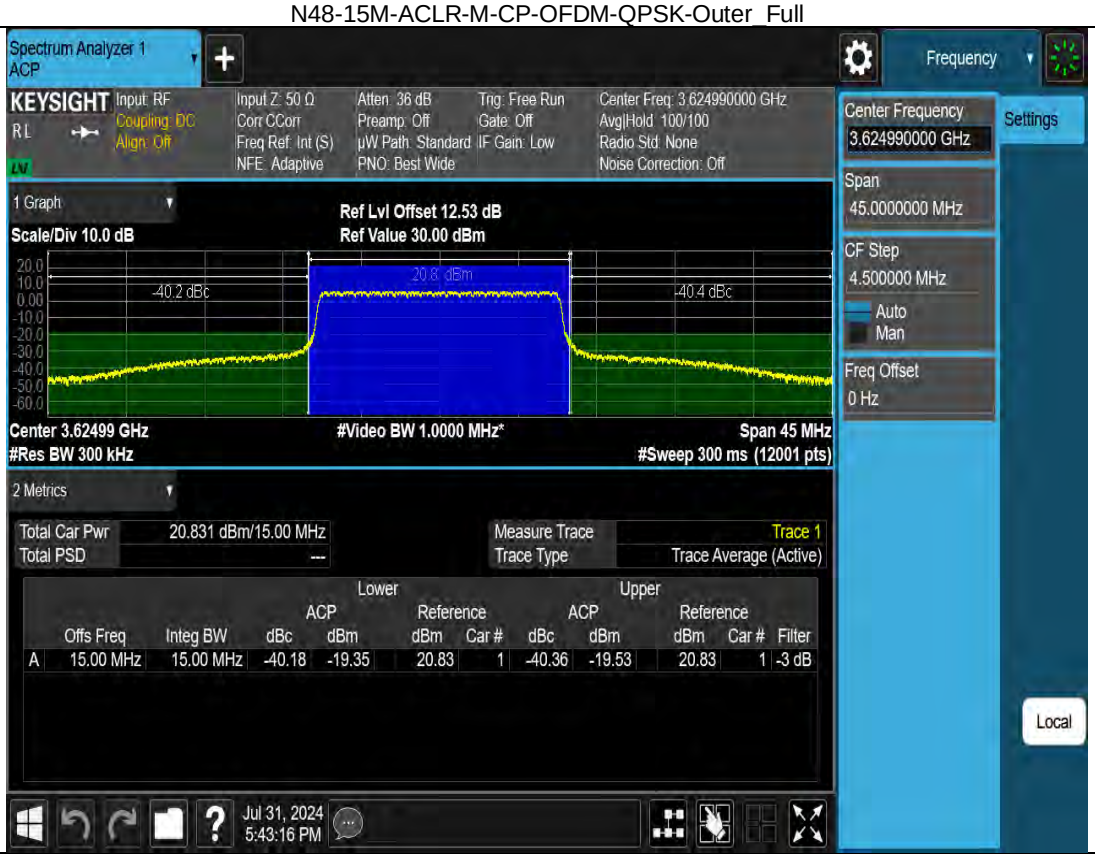

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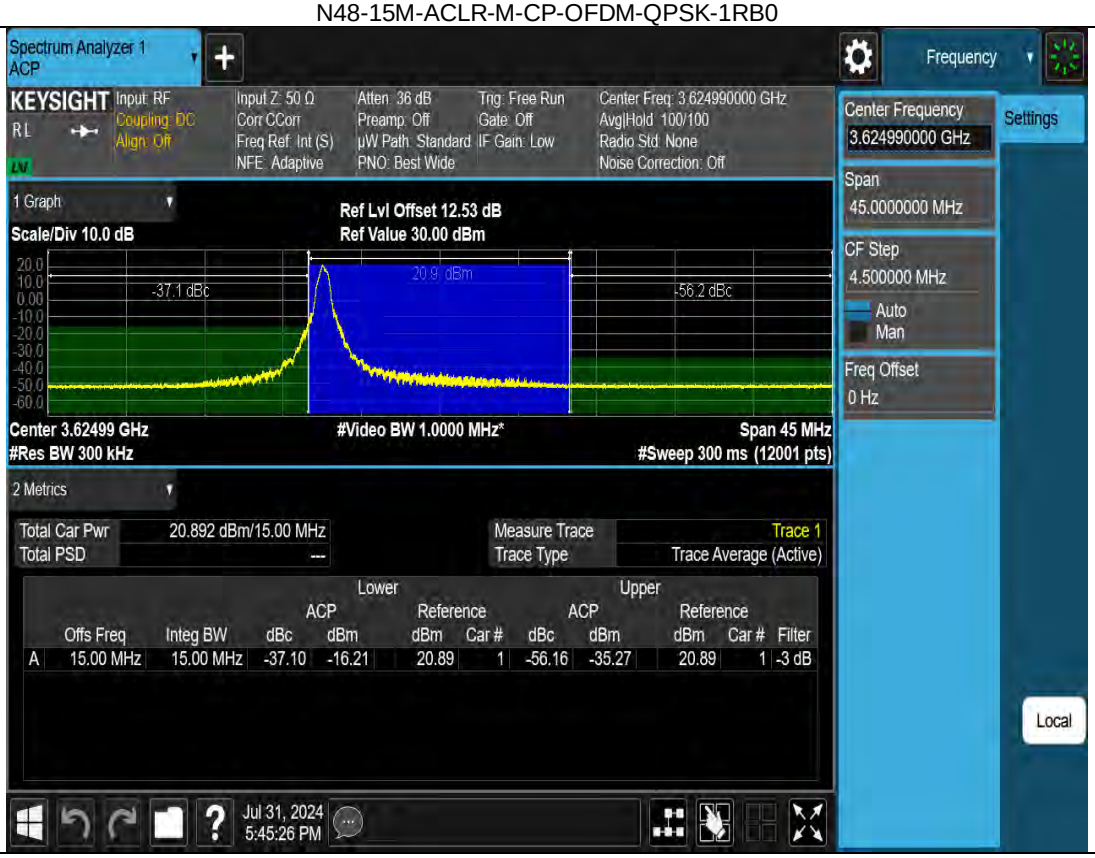

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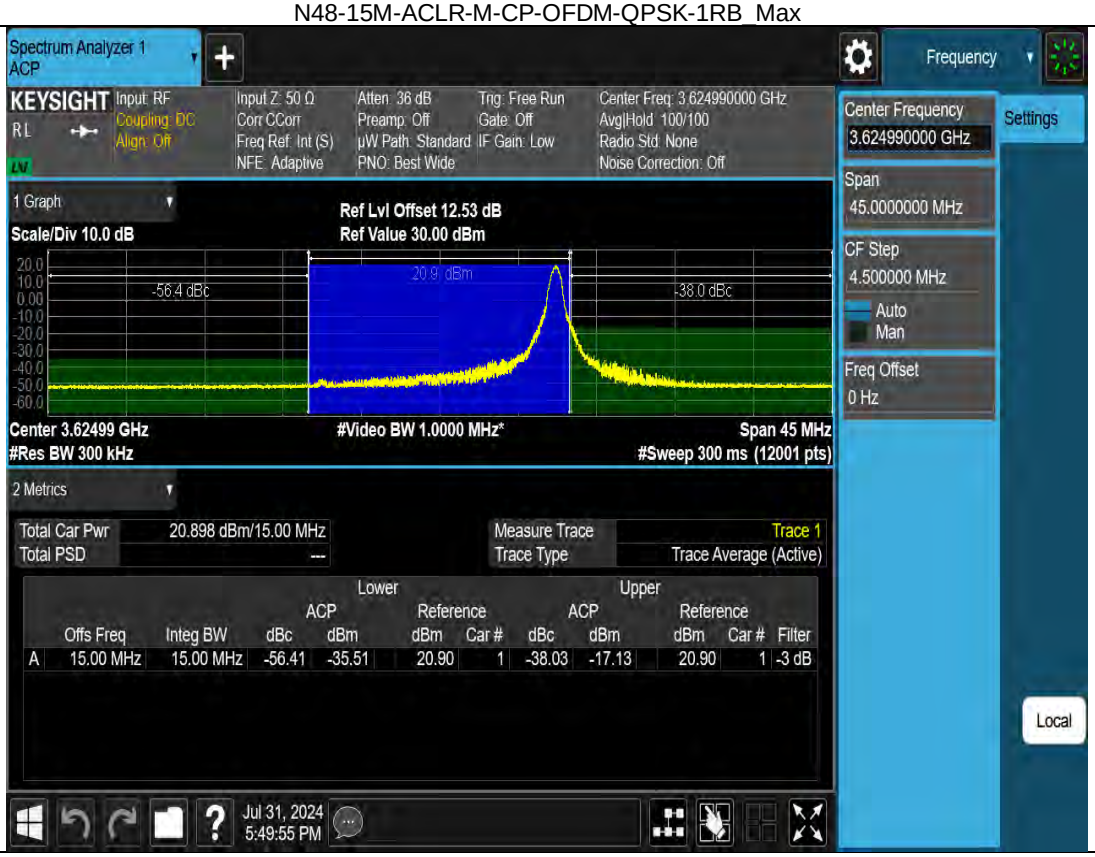

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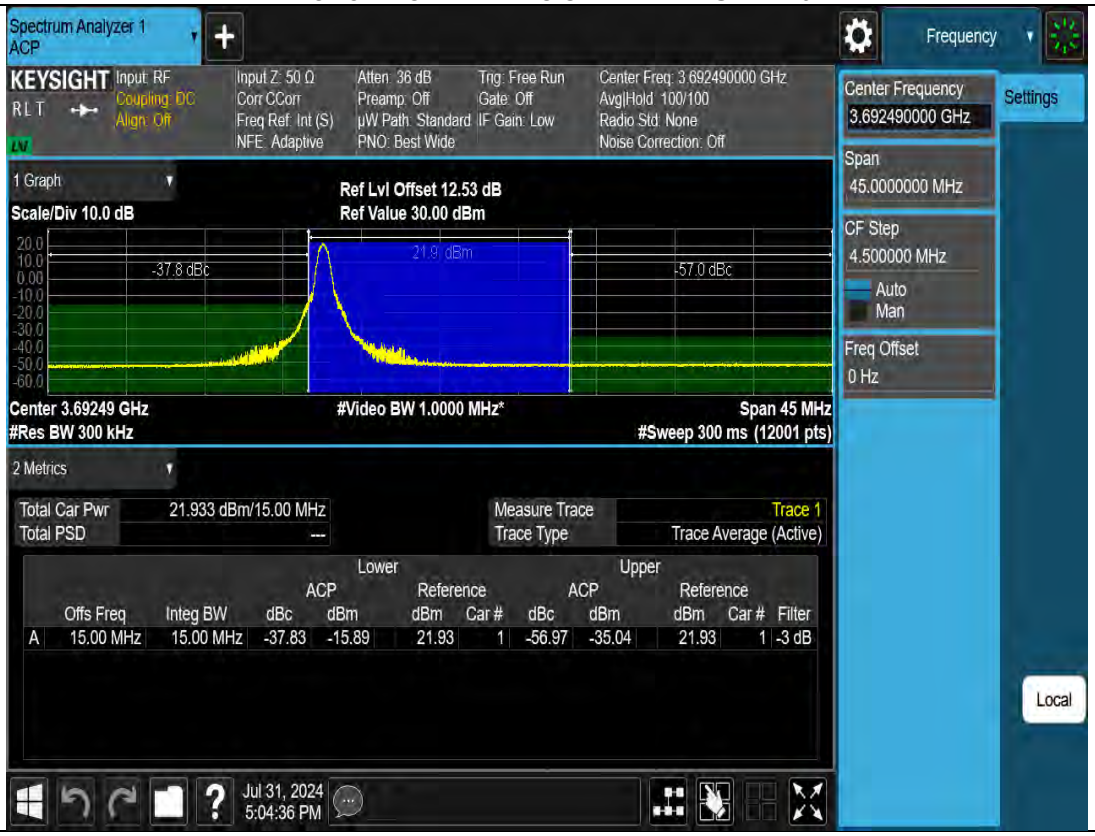

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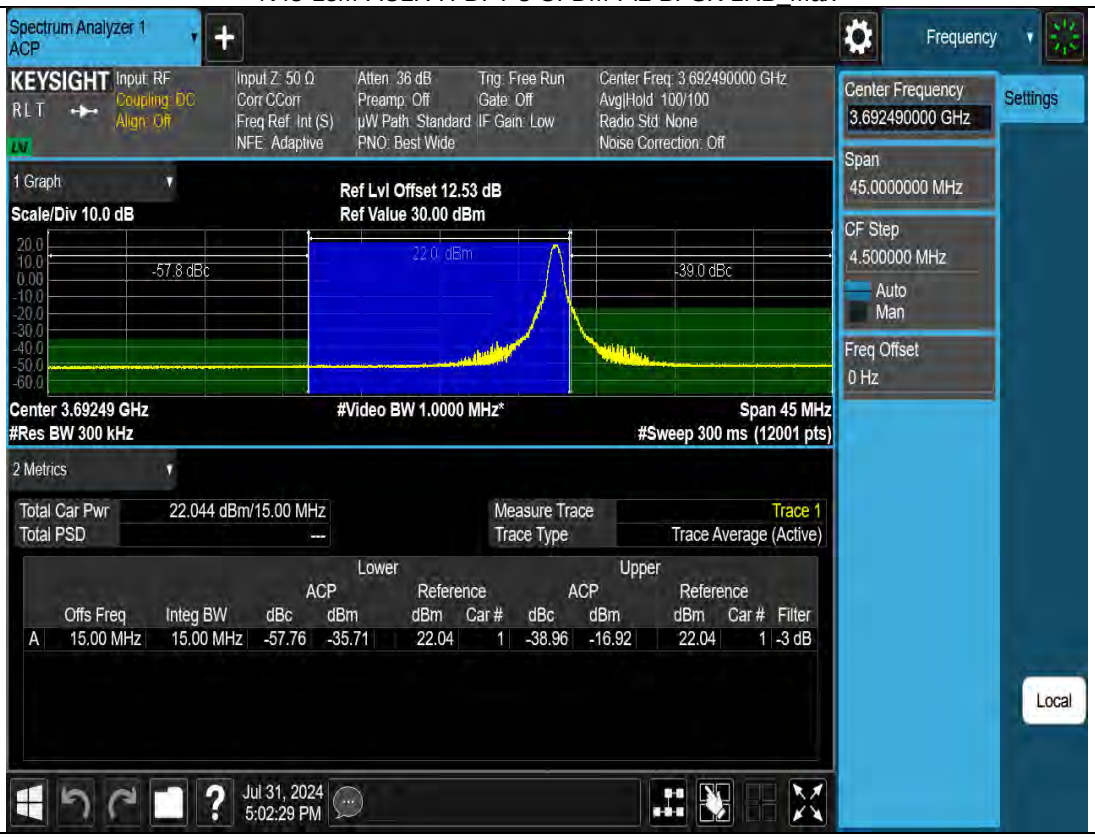

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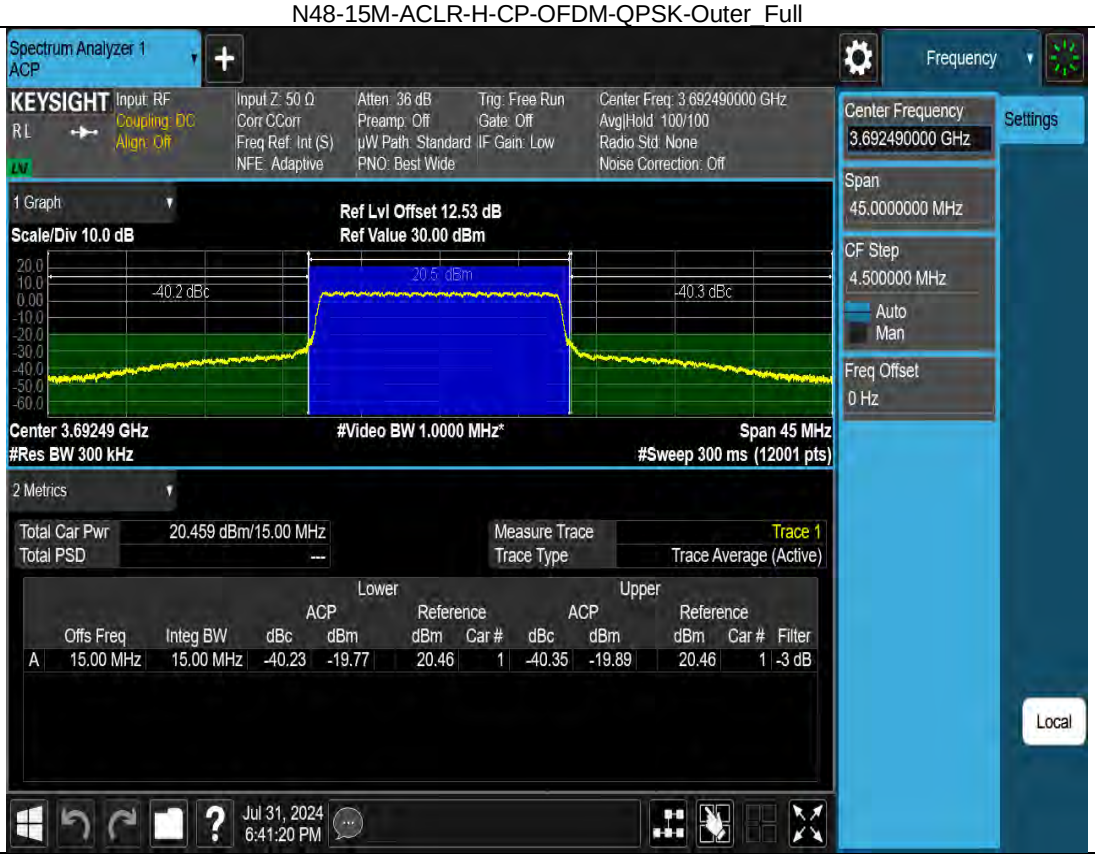

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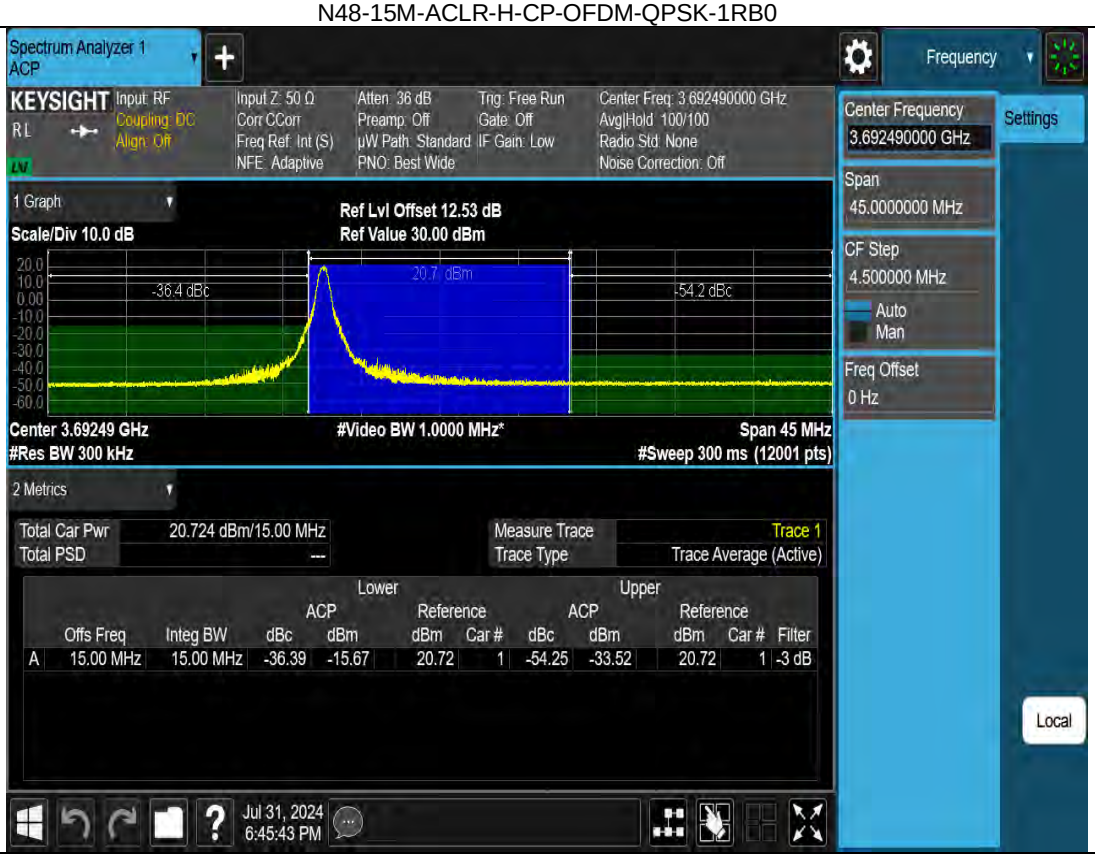

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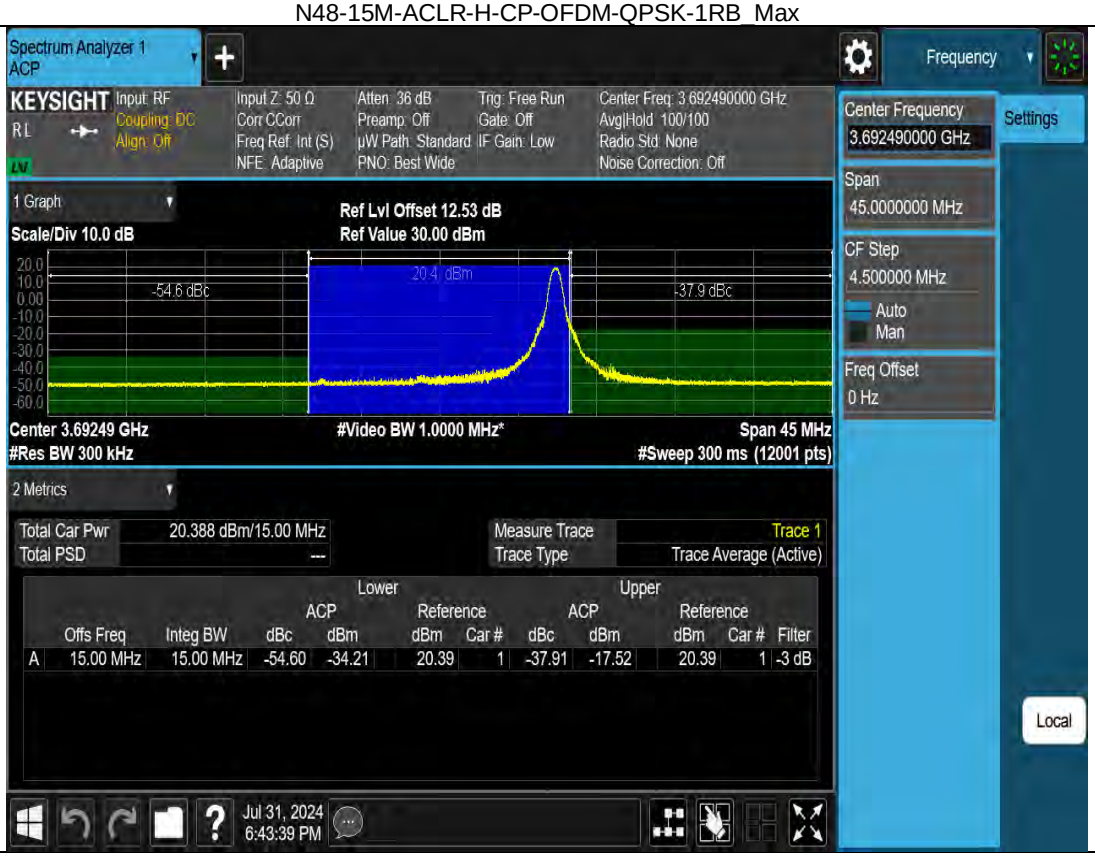

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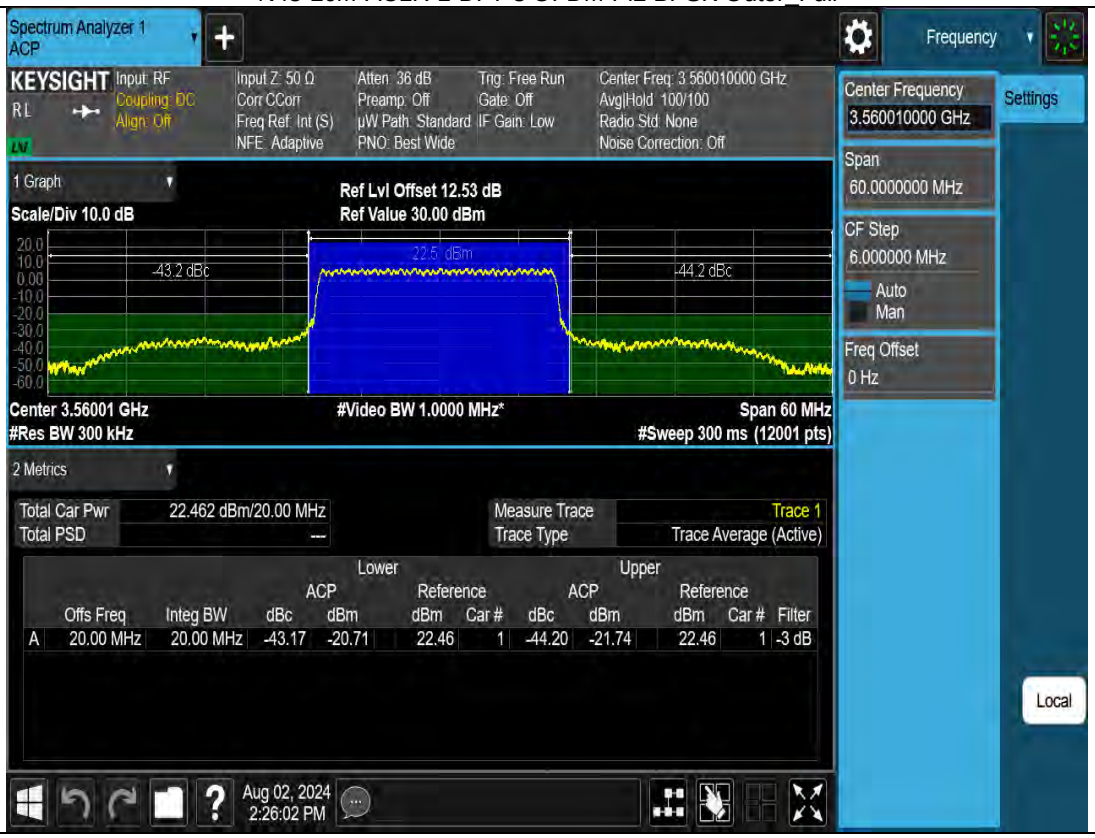

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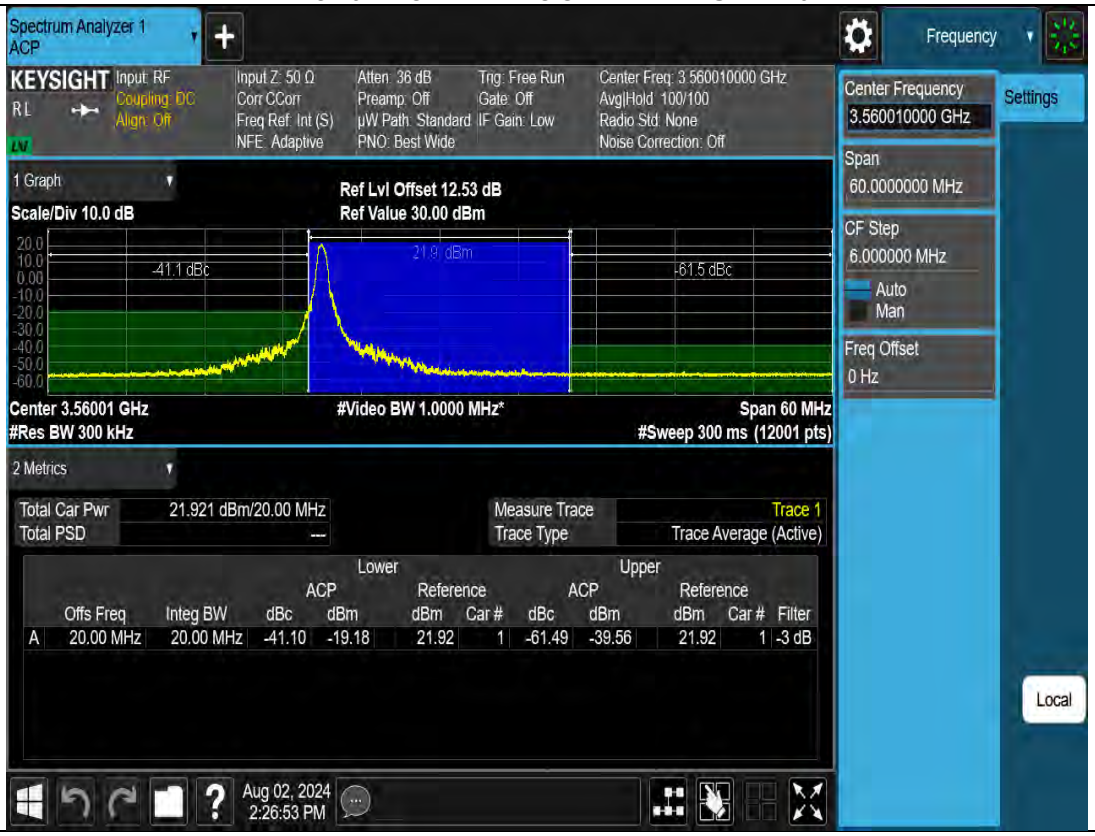

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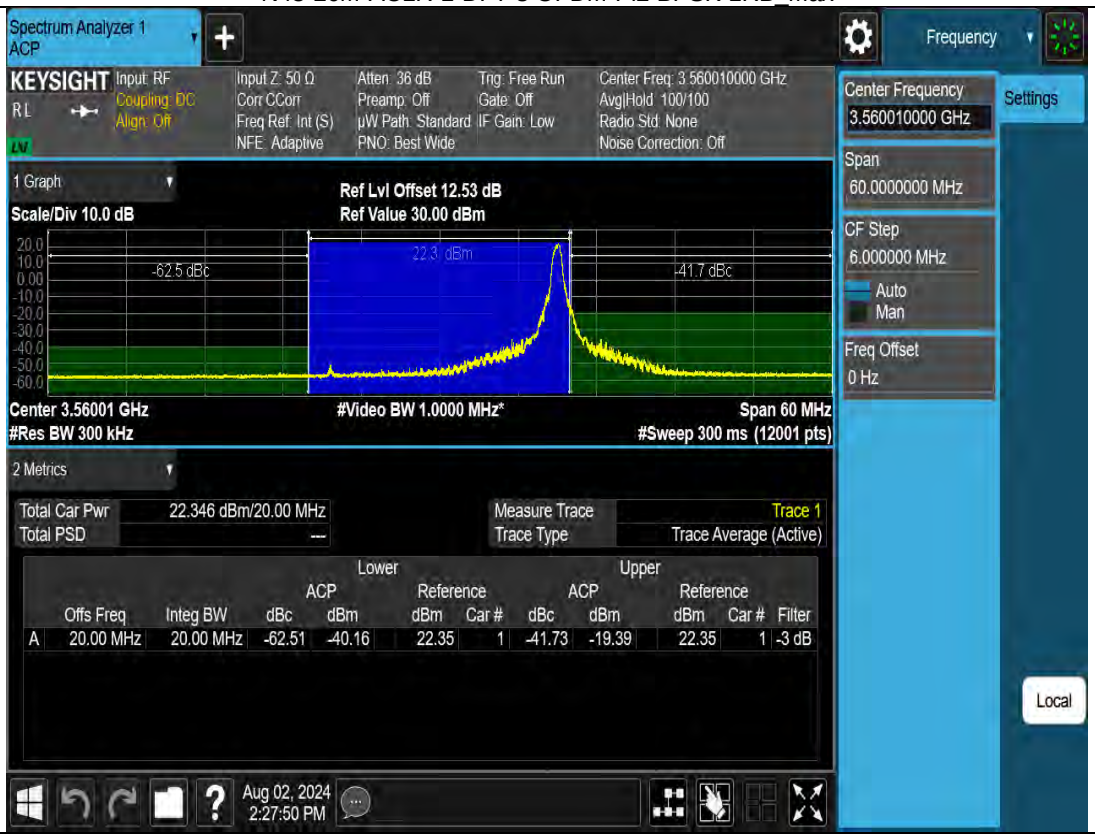

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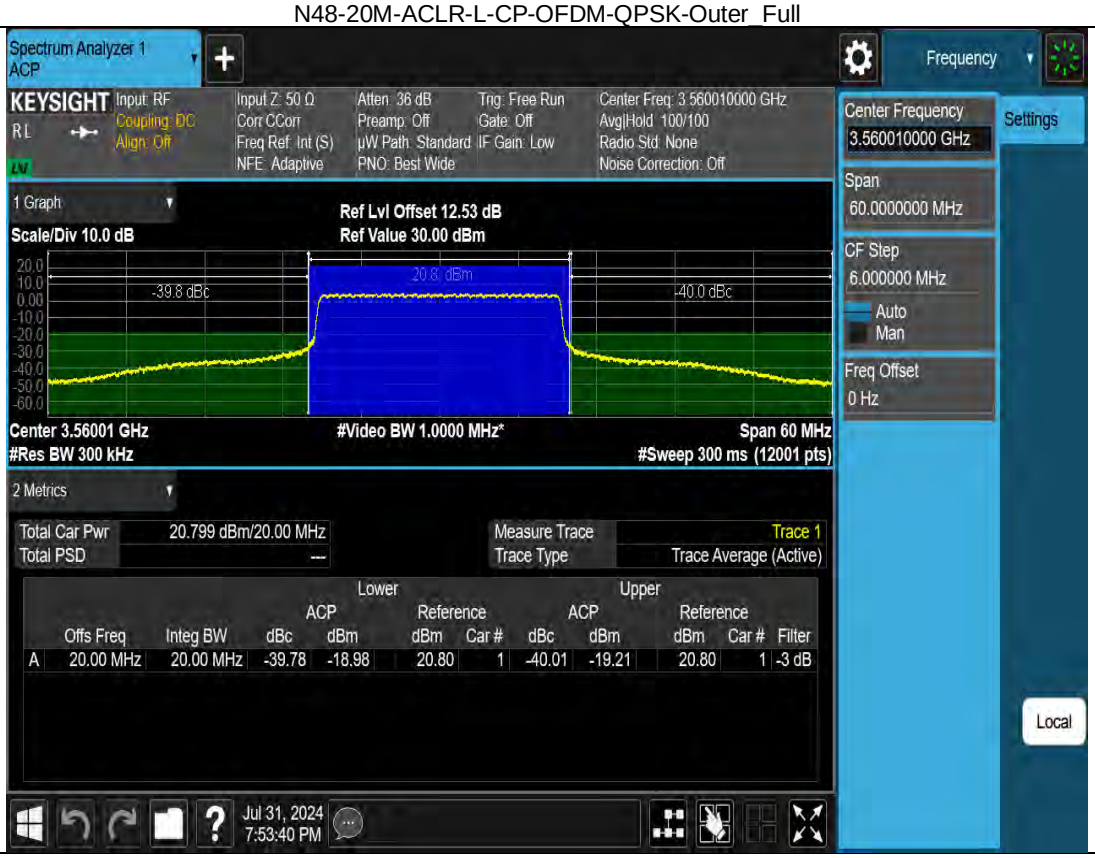

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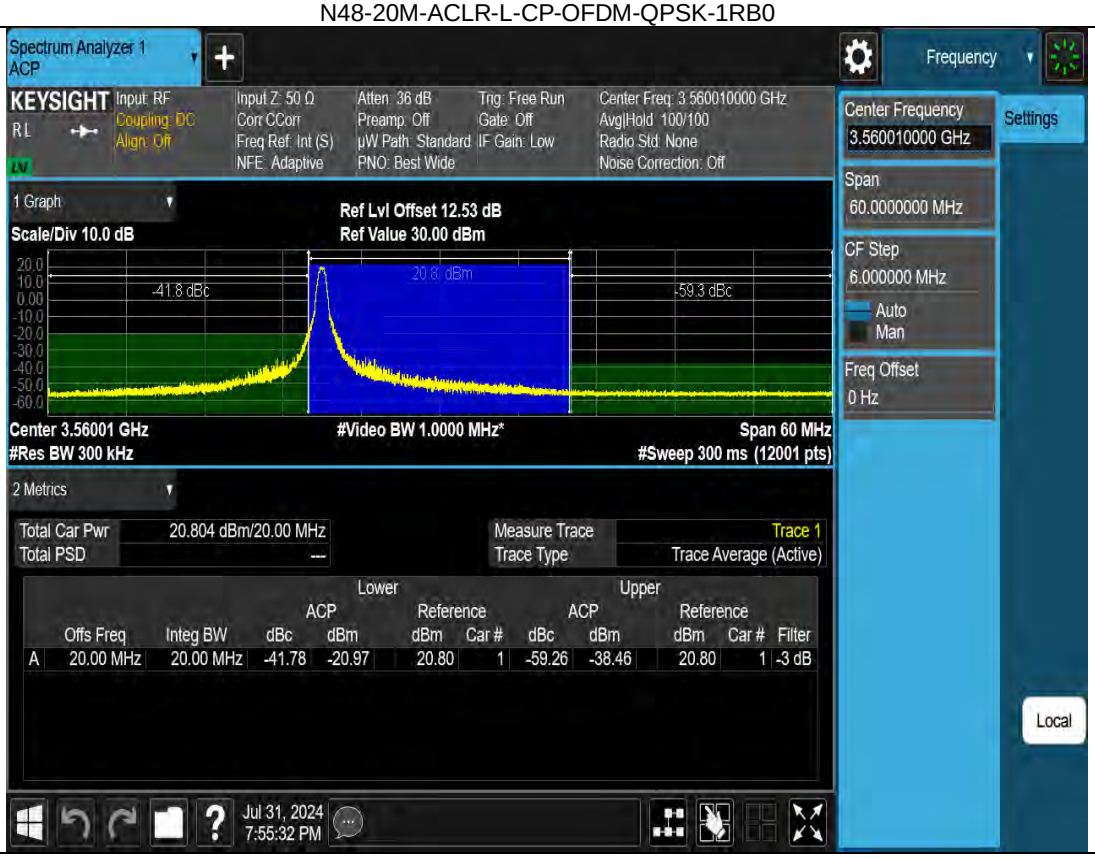

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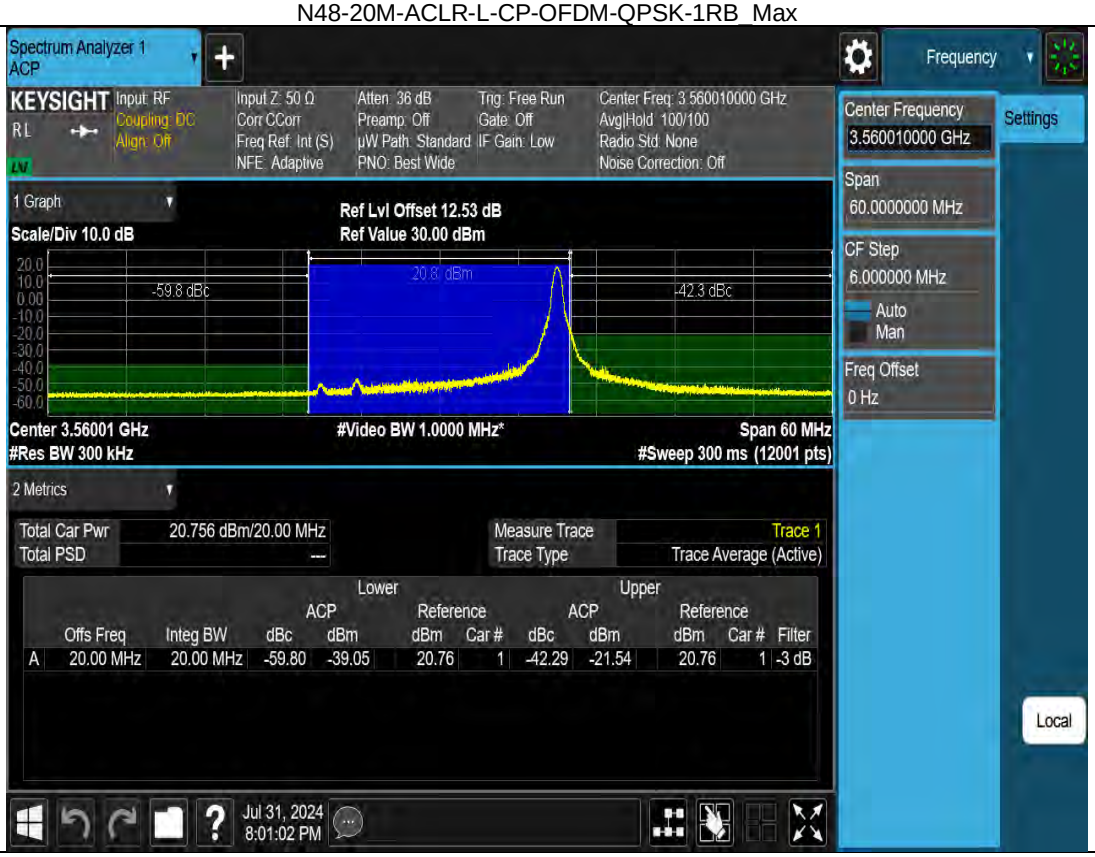

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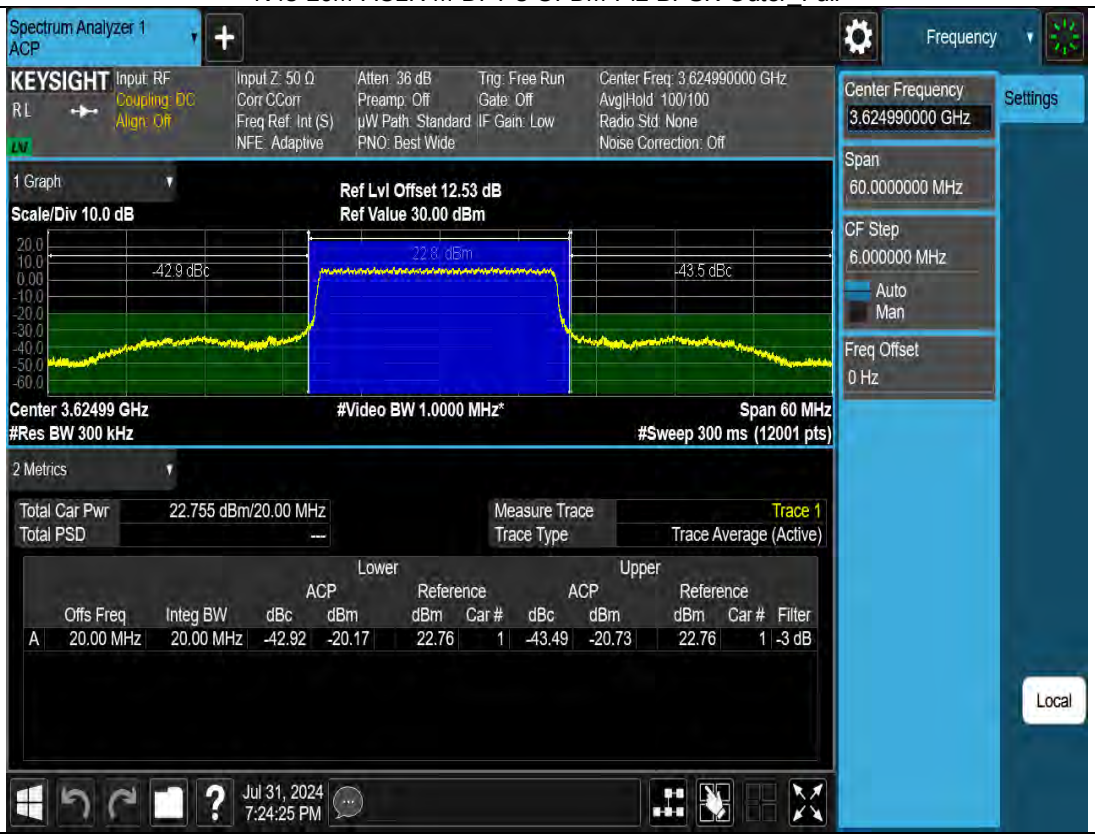

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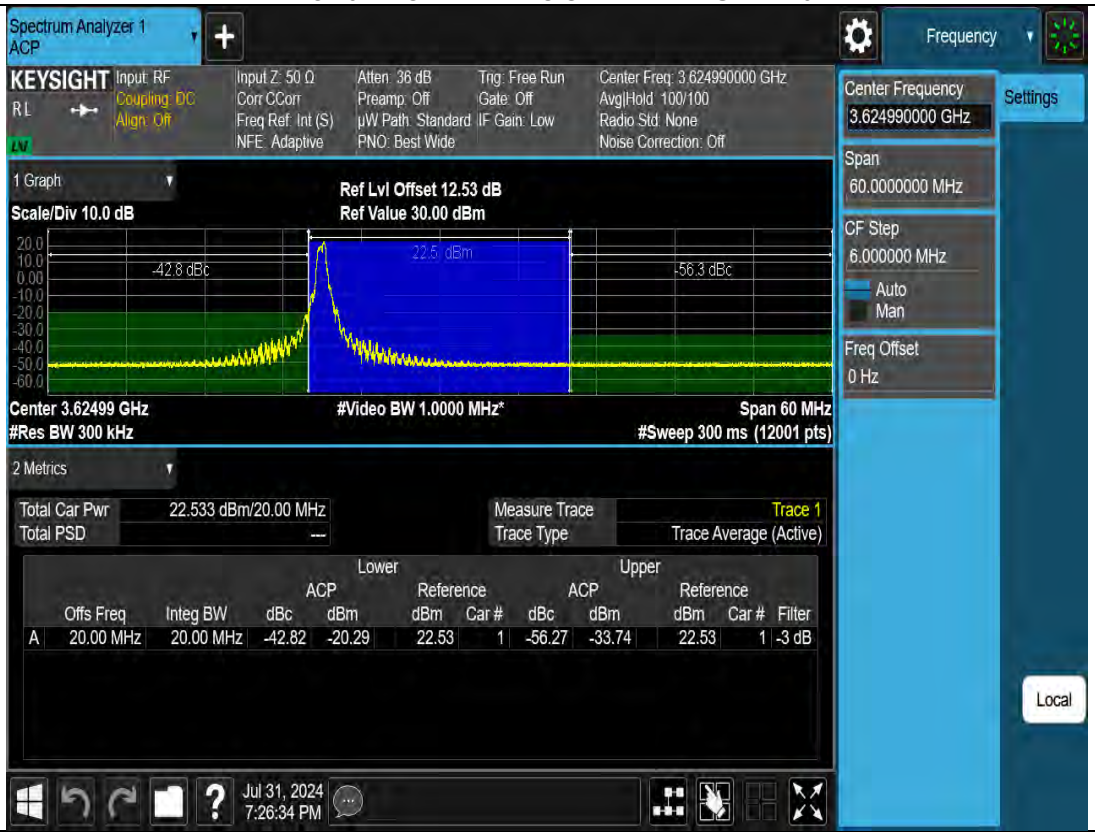

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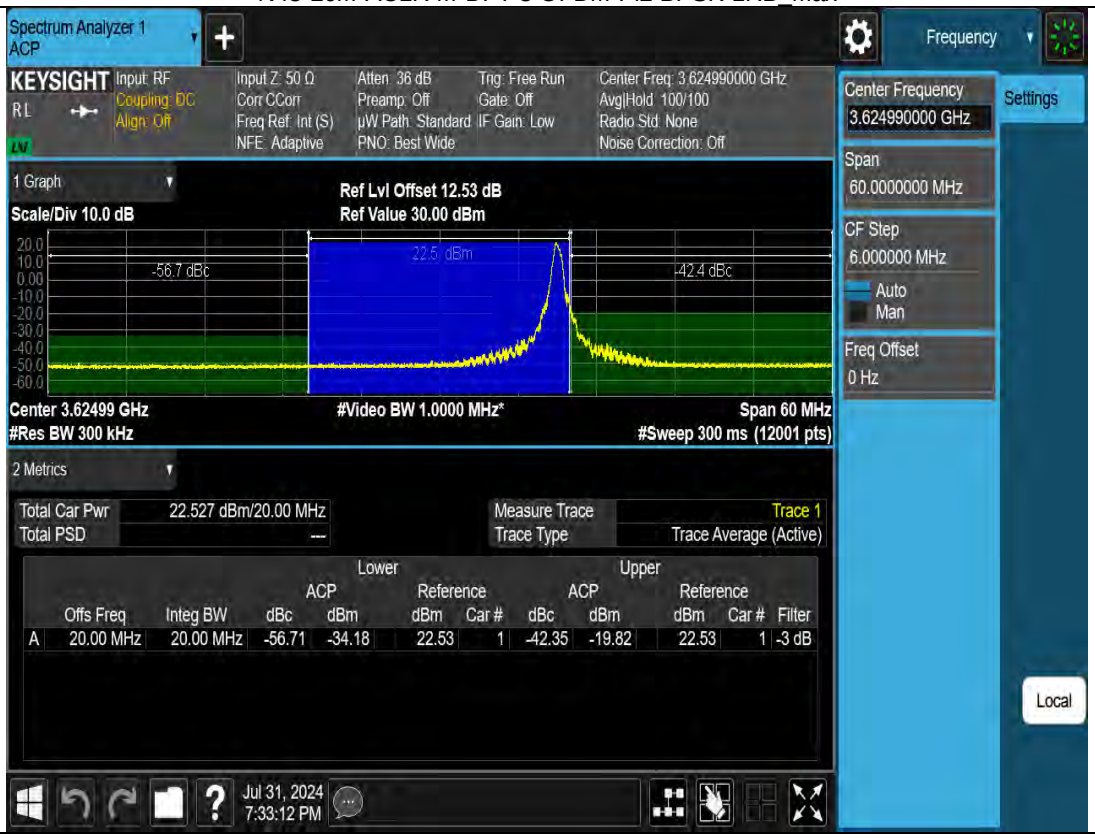

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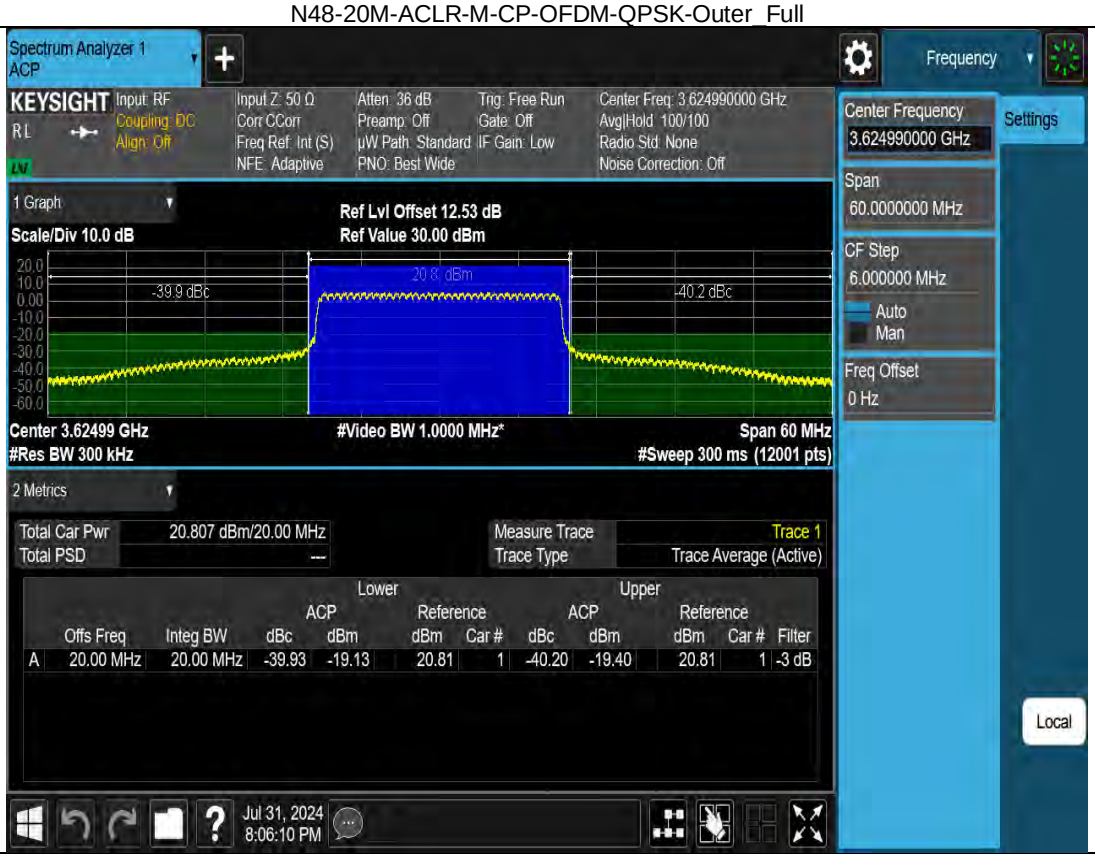

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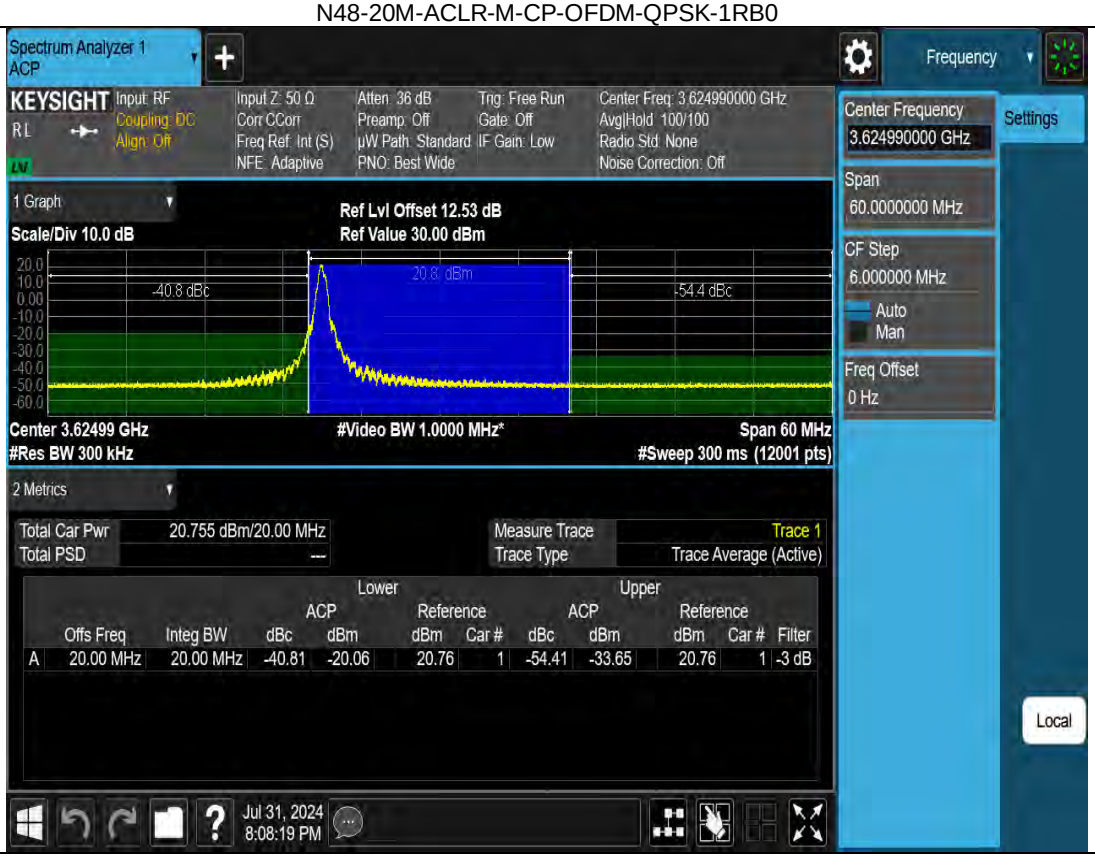

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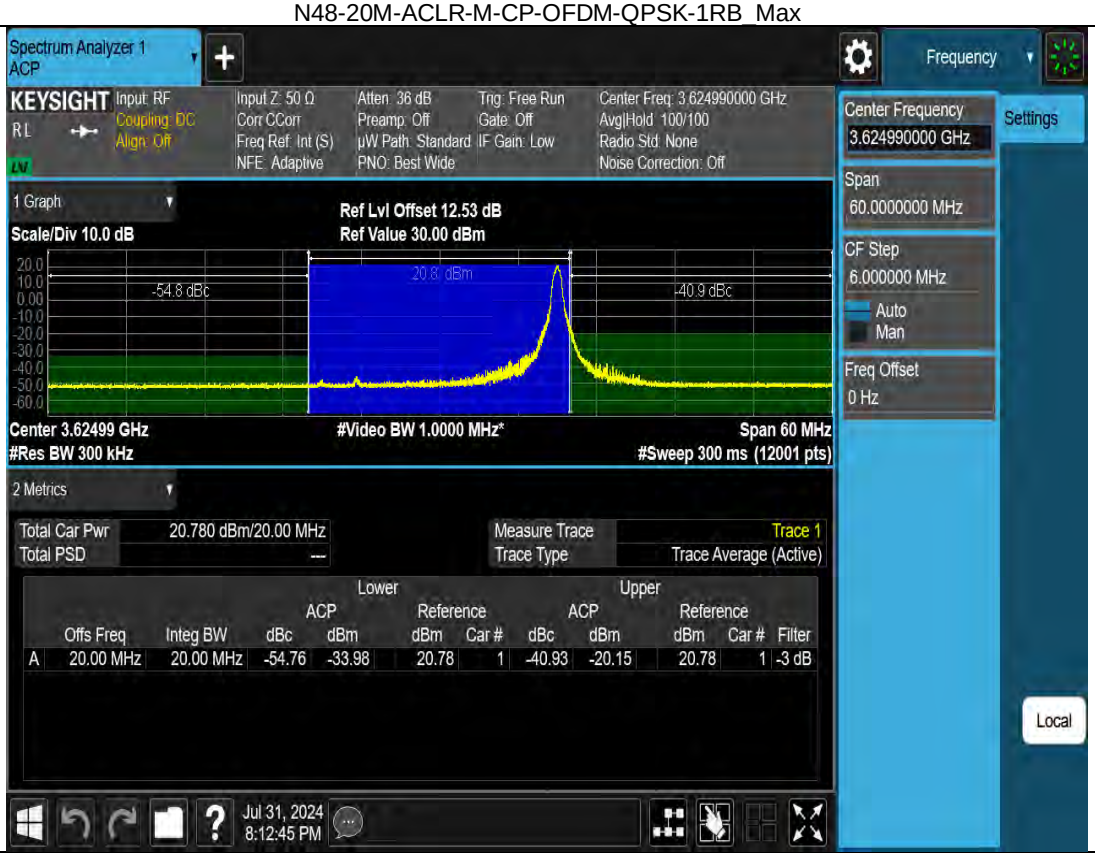

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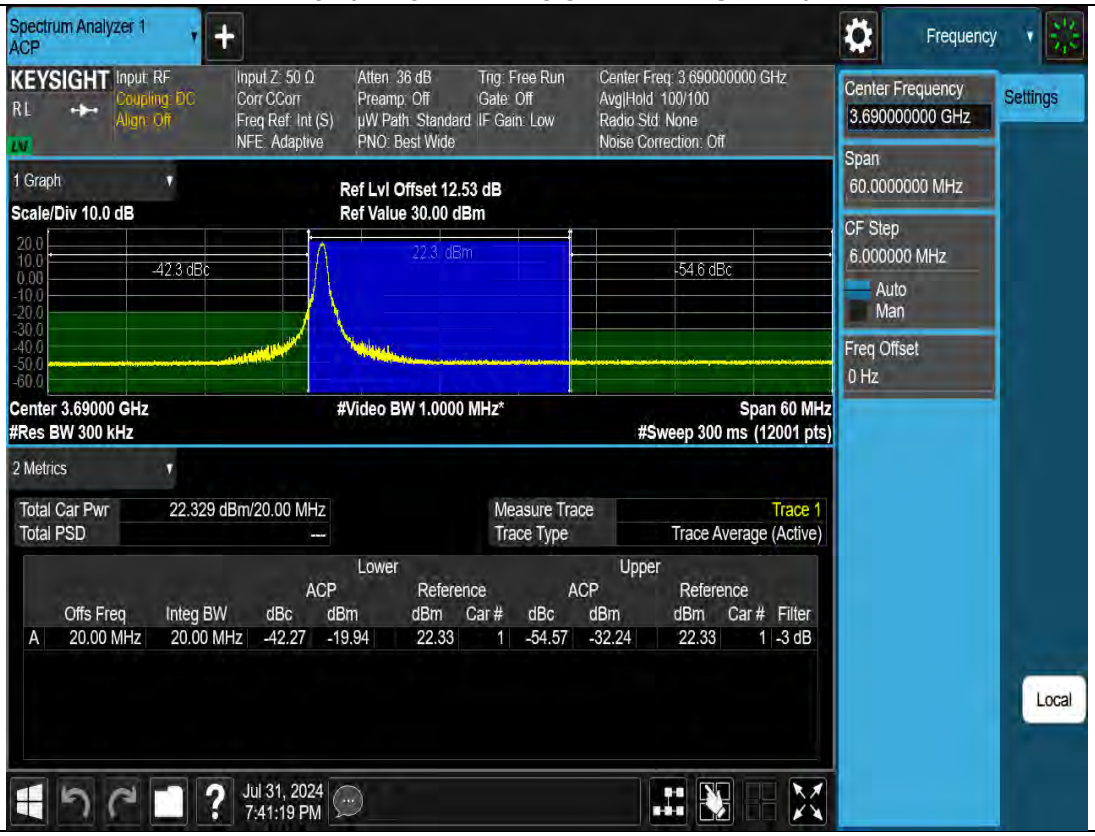

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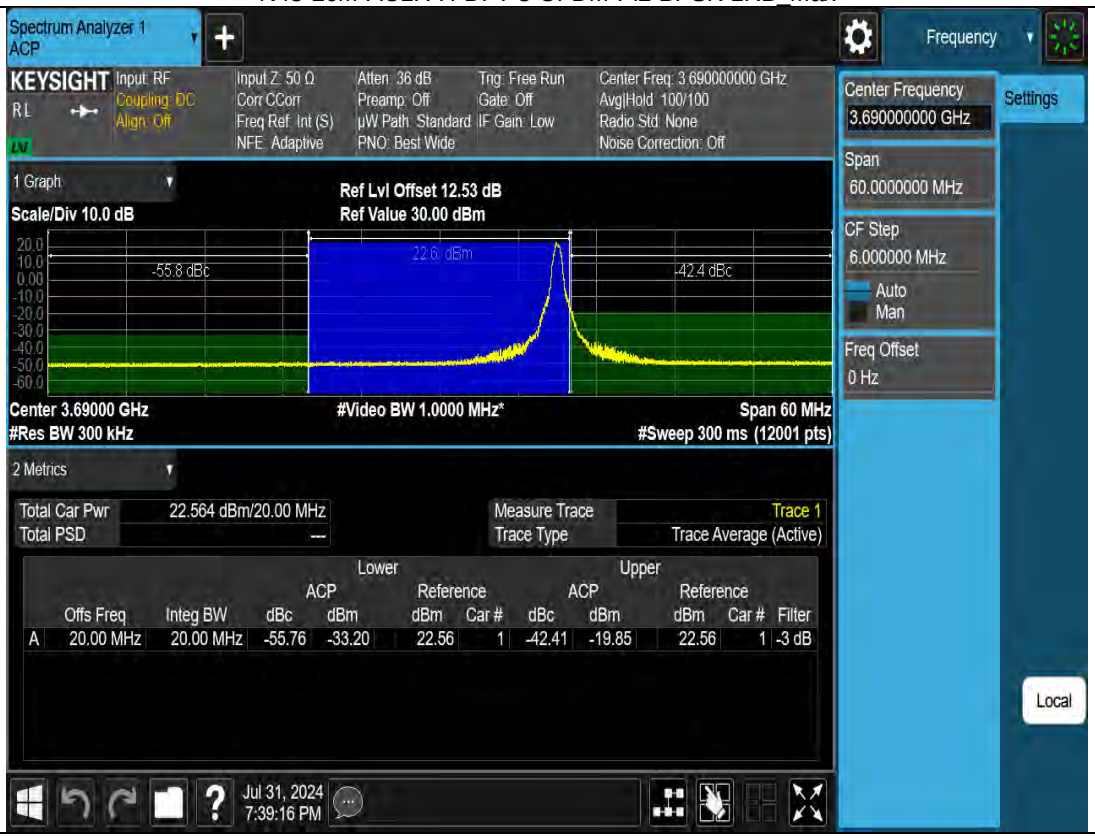

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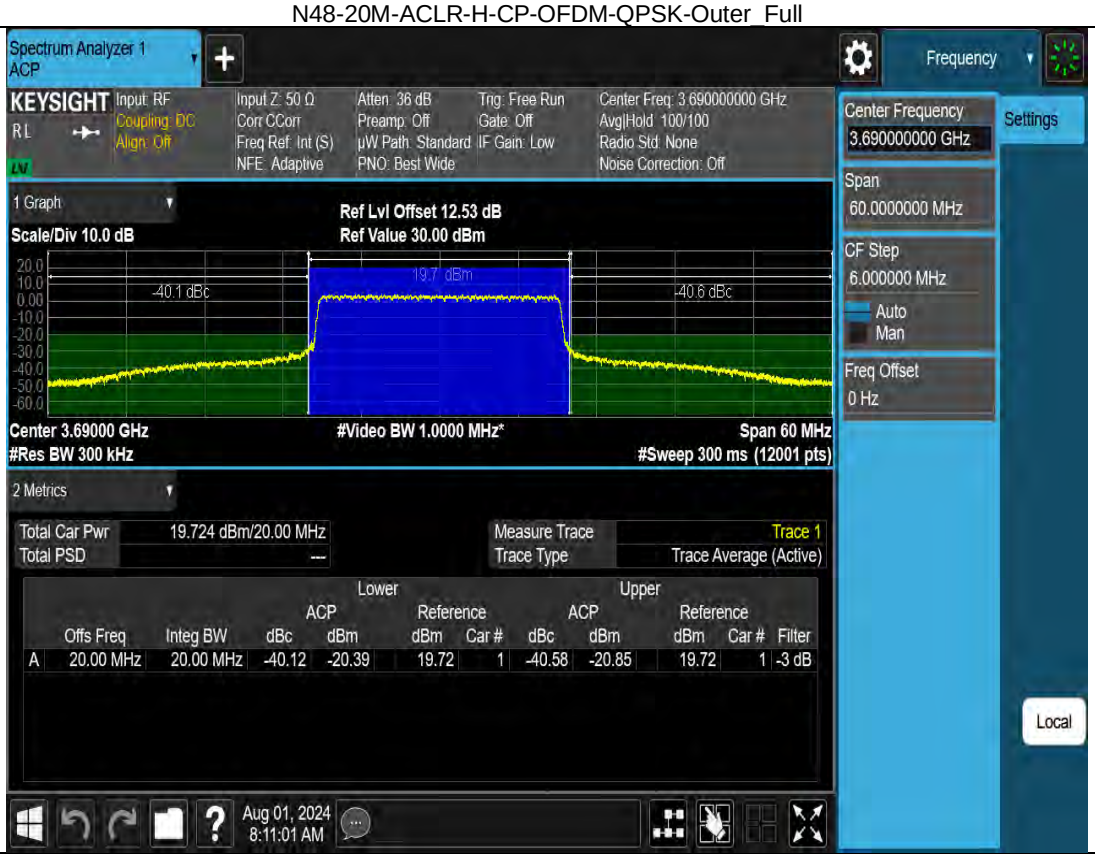

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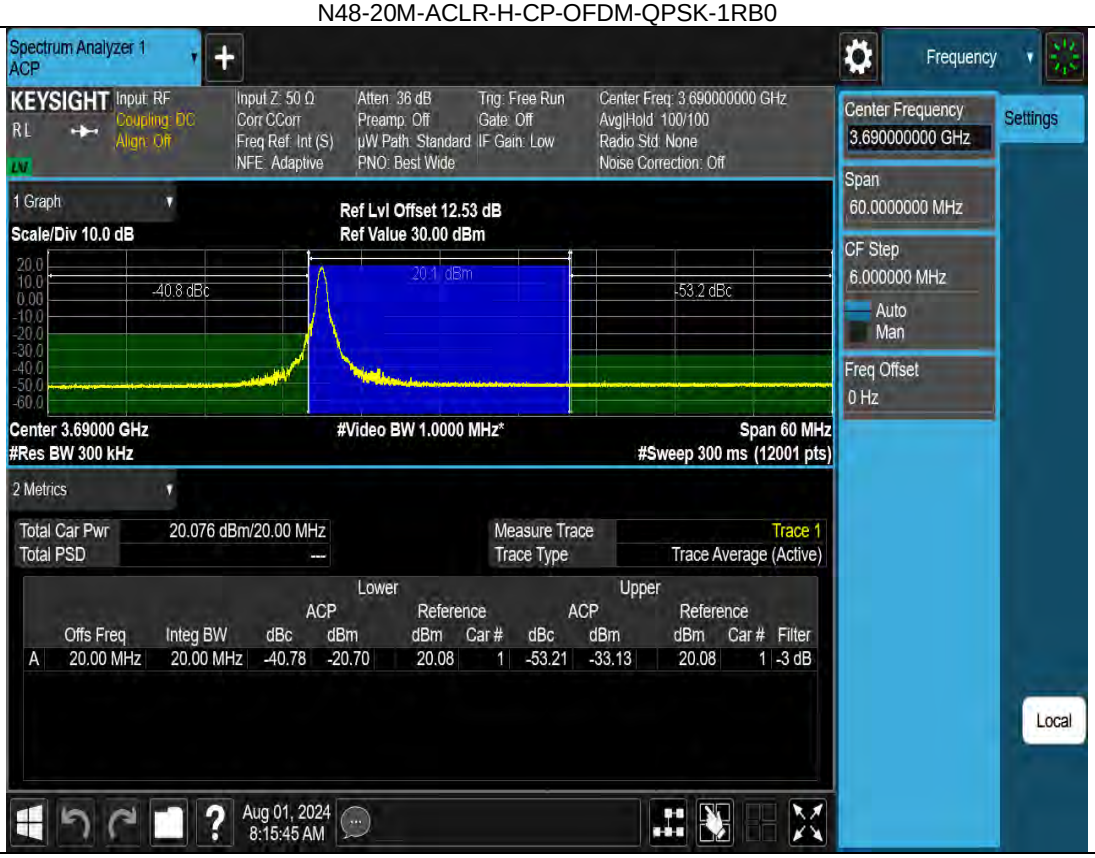

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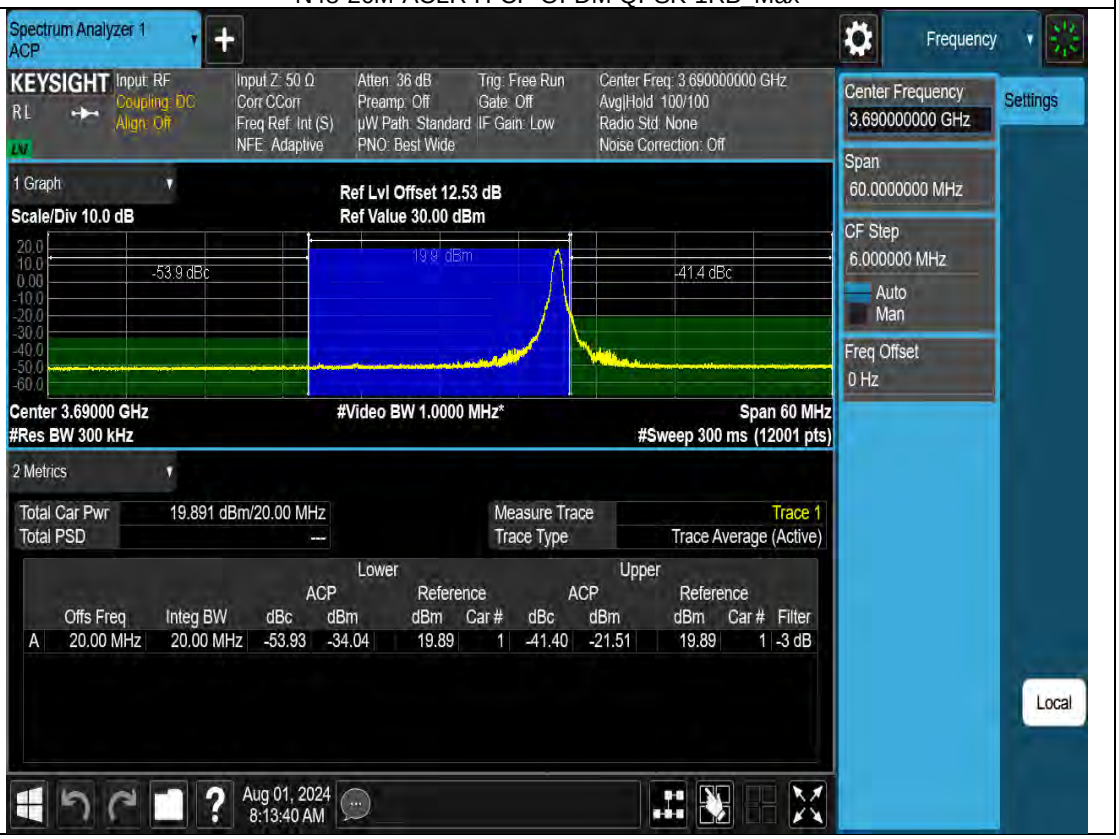
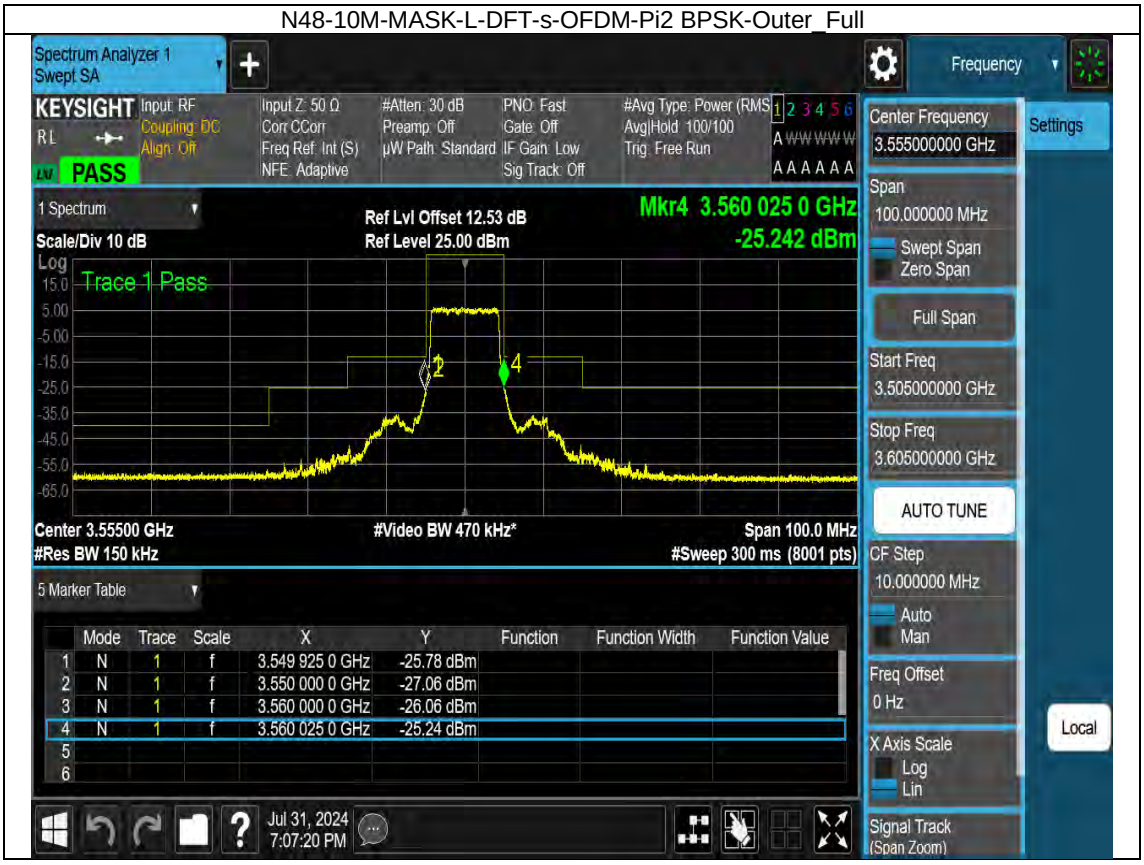


Emission mask

test graph

N48-10M-MASK-L-DFT-s-OFDM-Pi2 BPSK-Outer_Full



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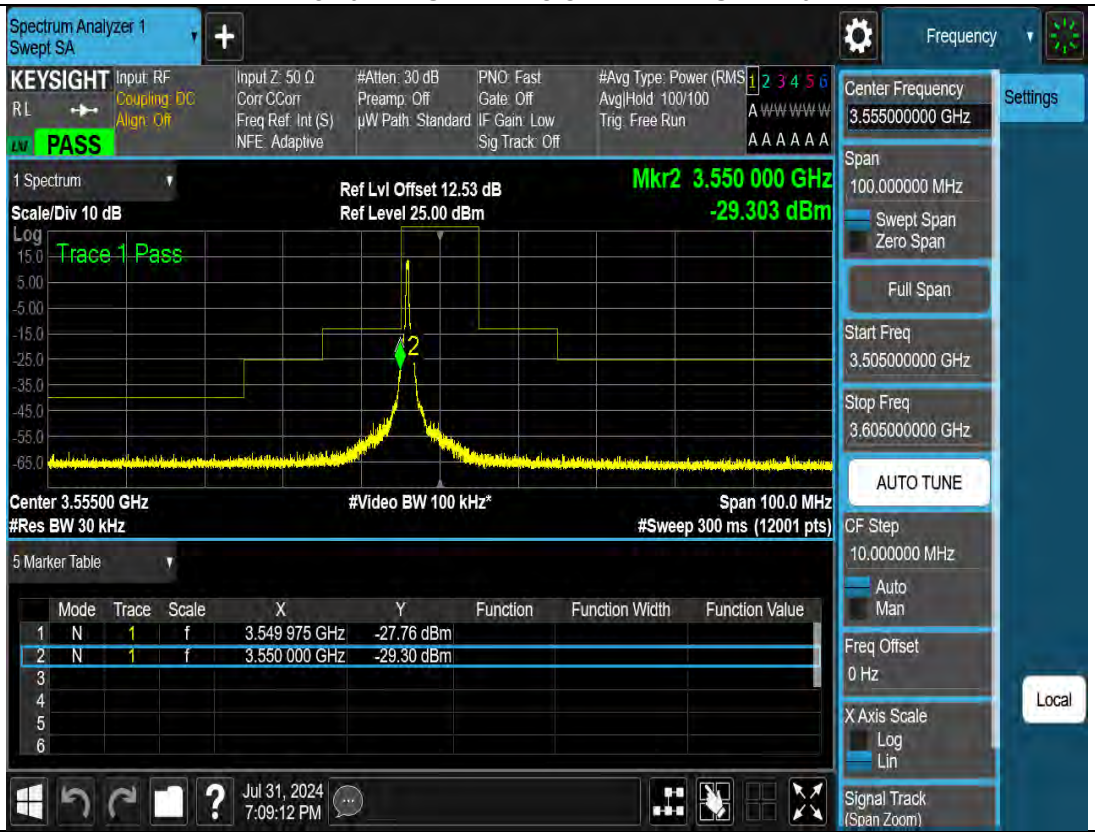

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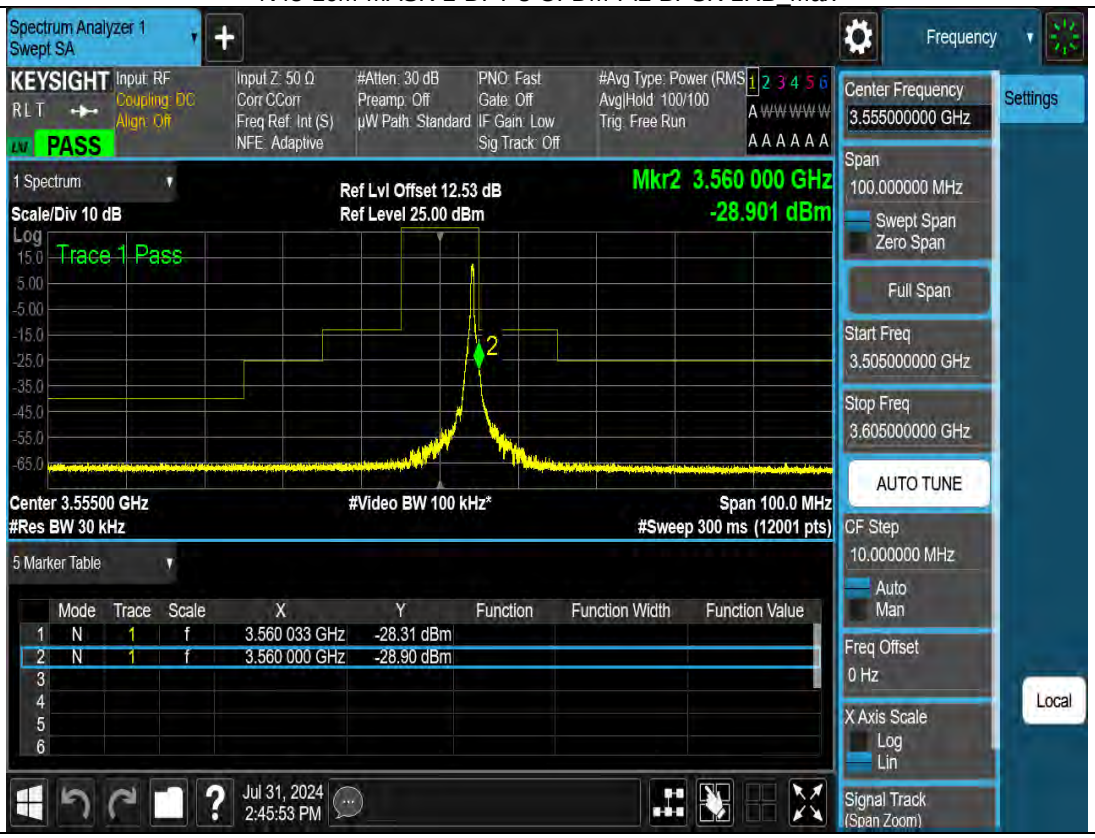

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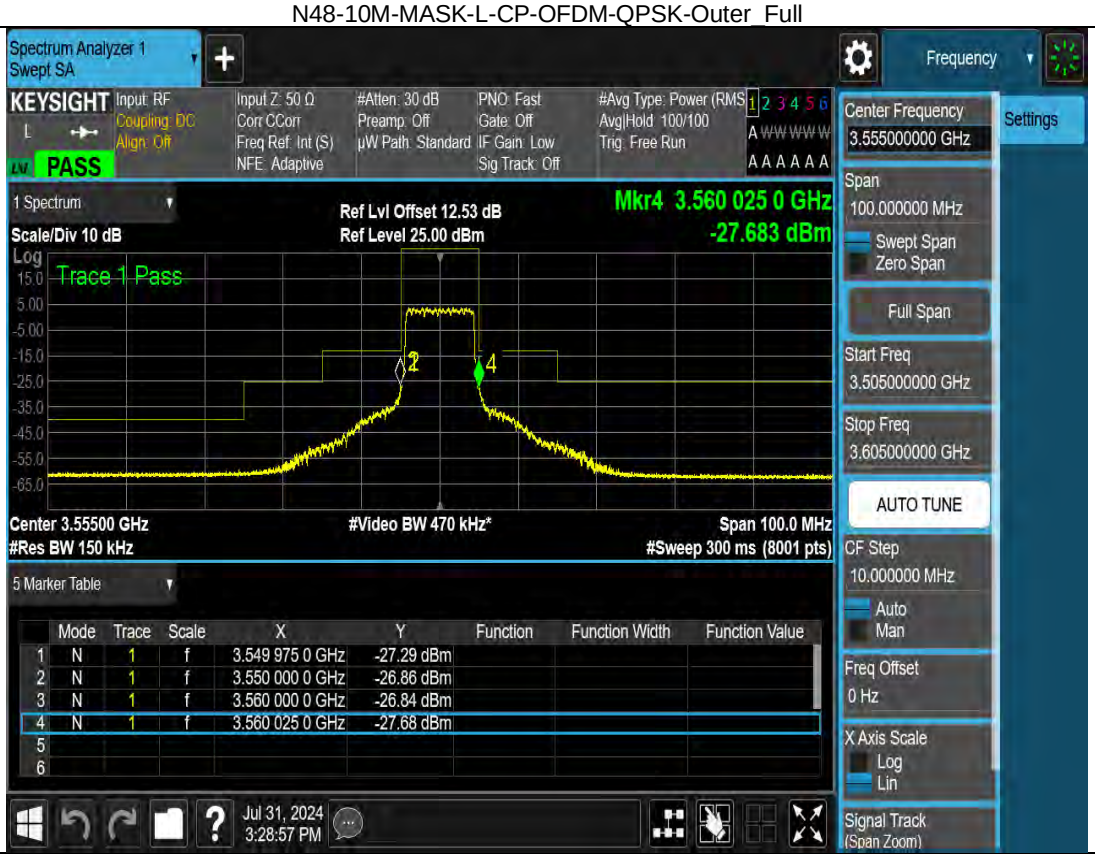

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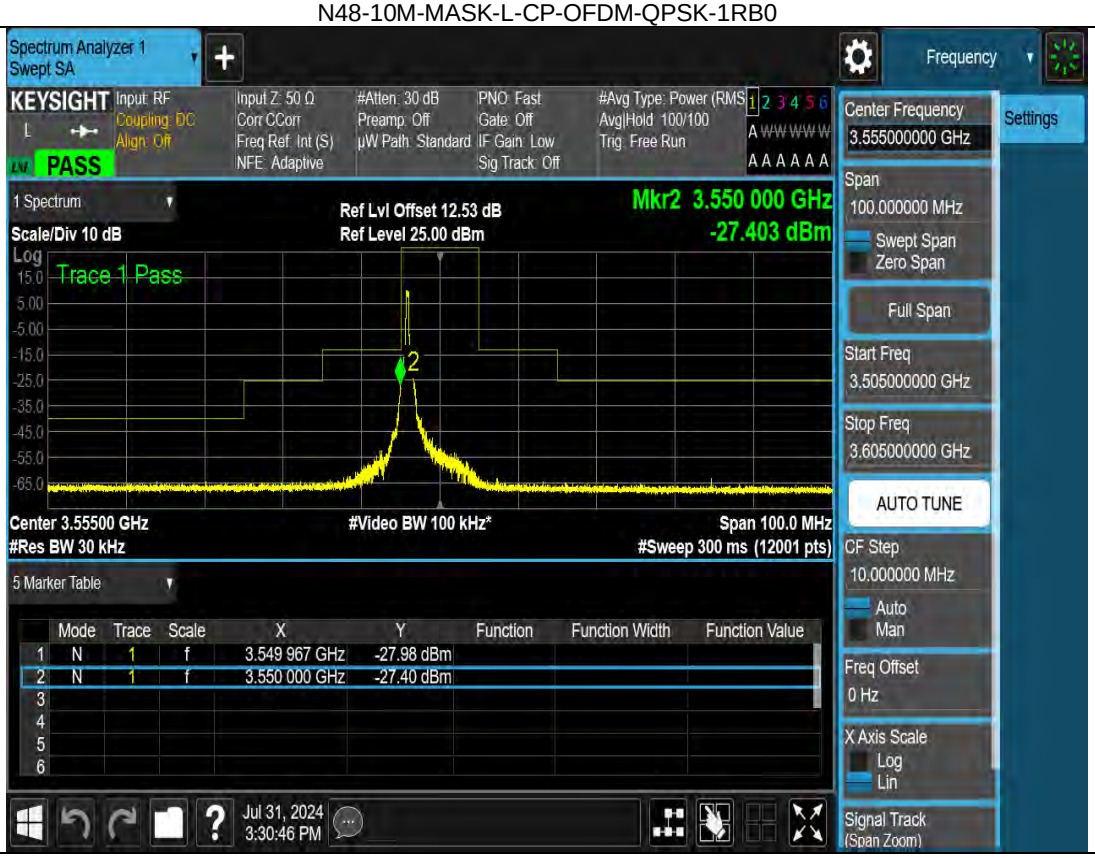

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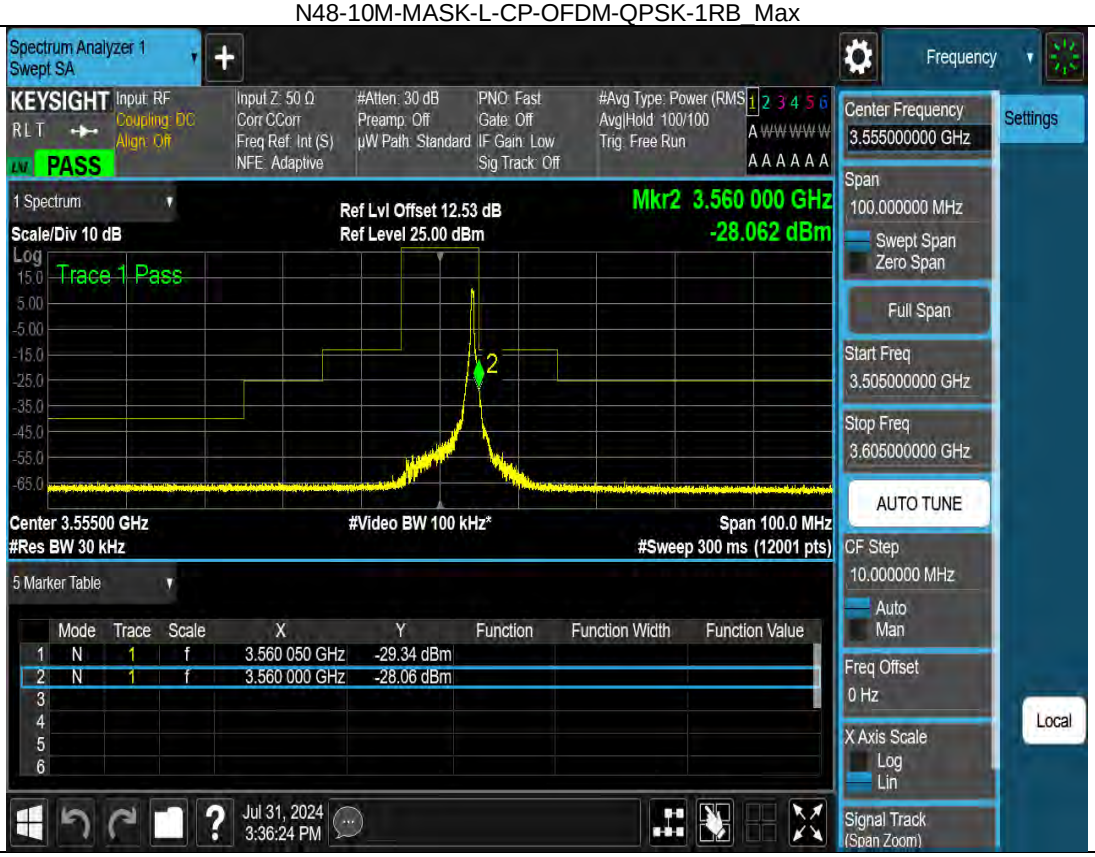

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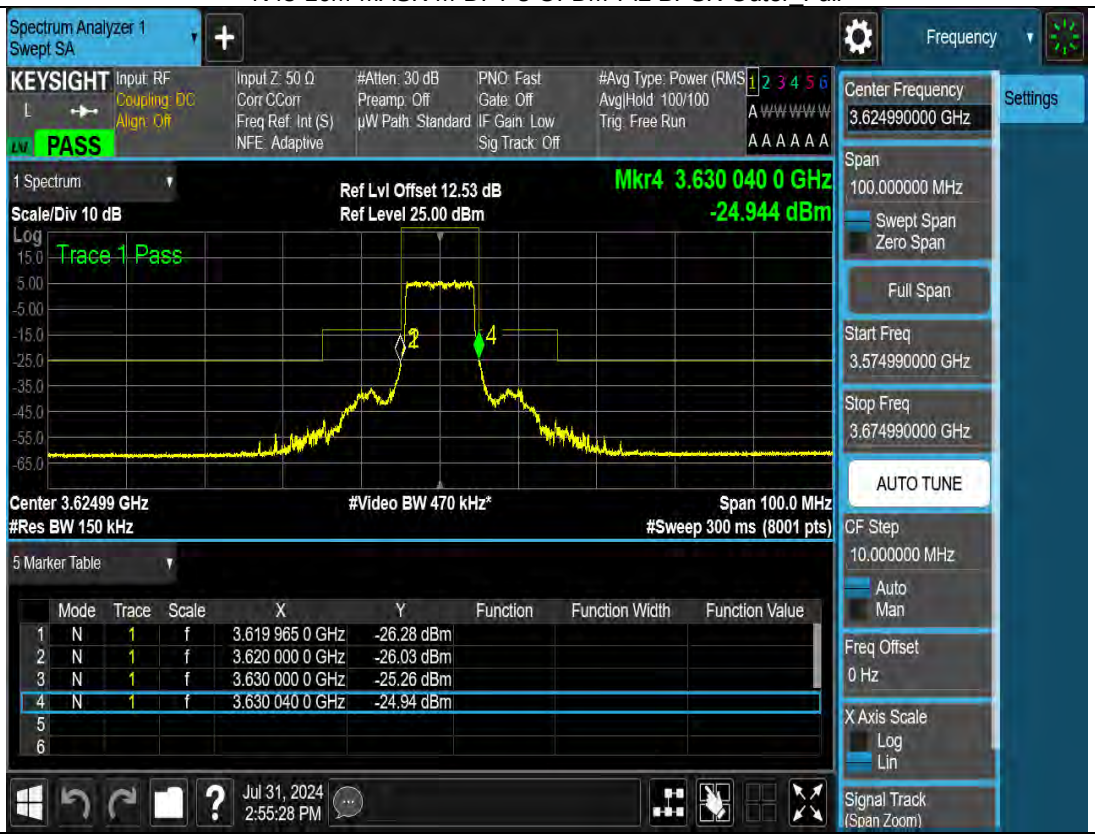

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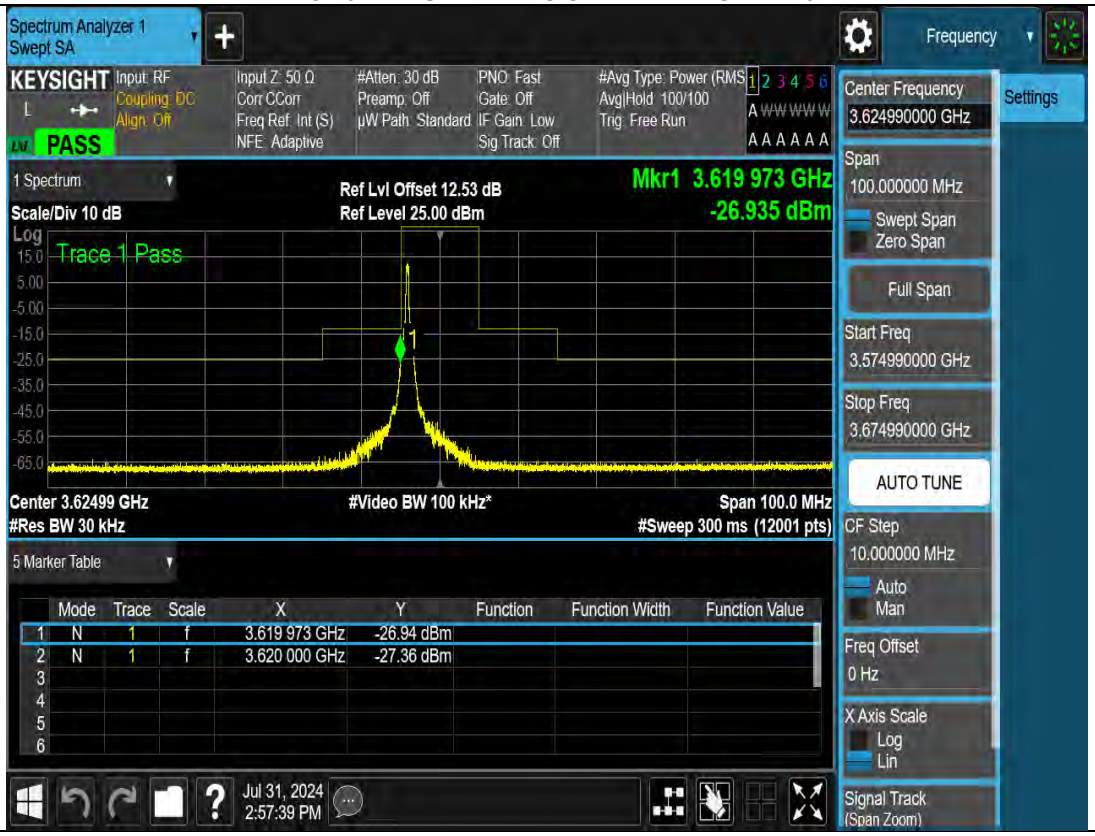

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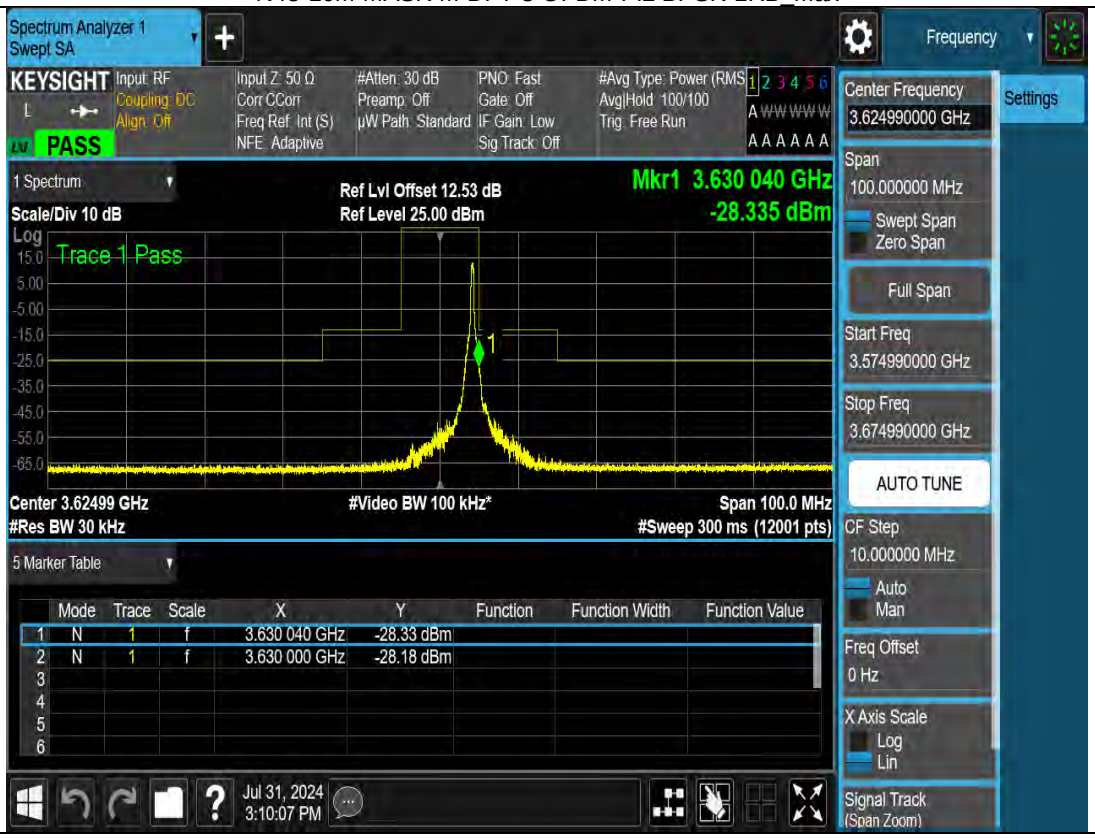

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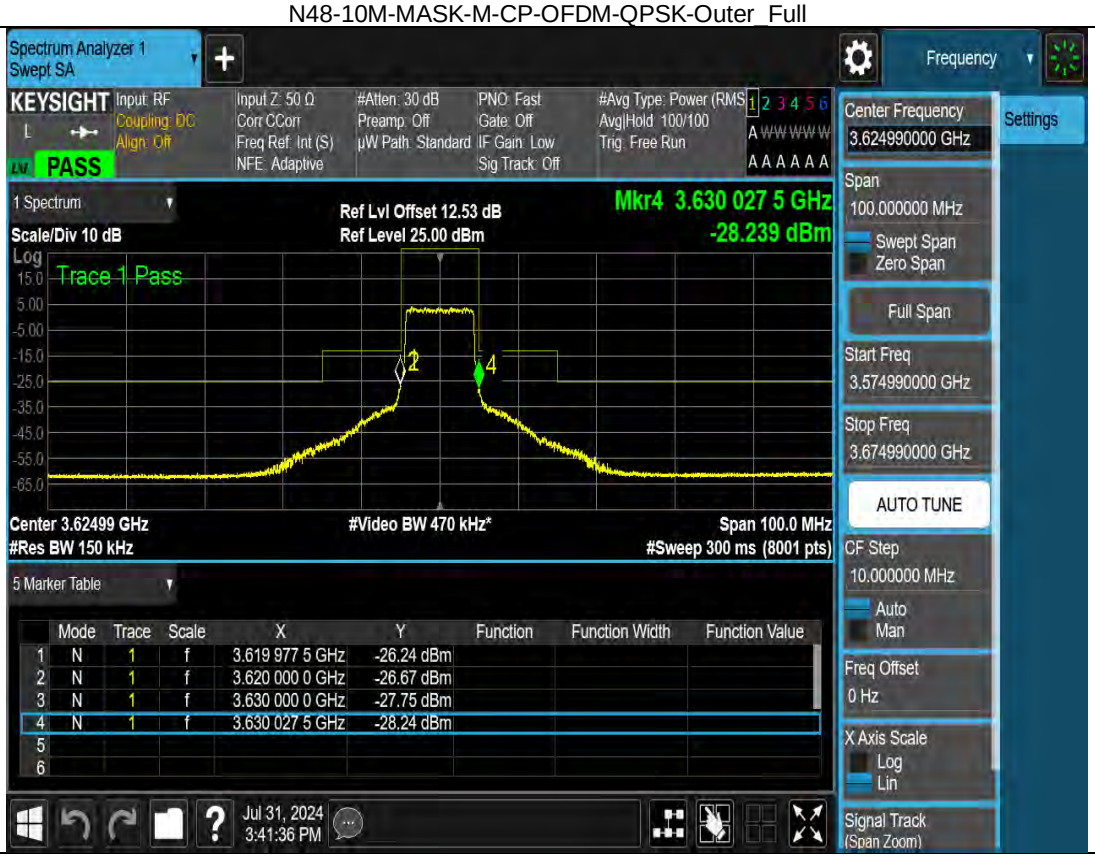

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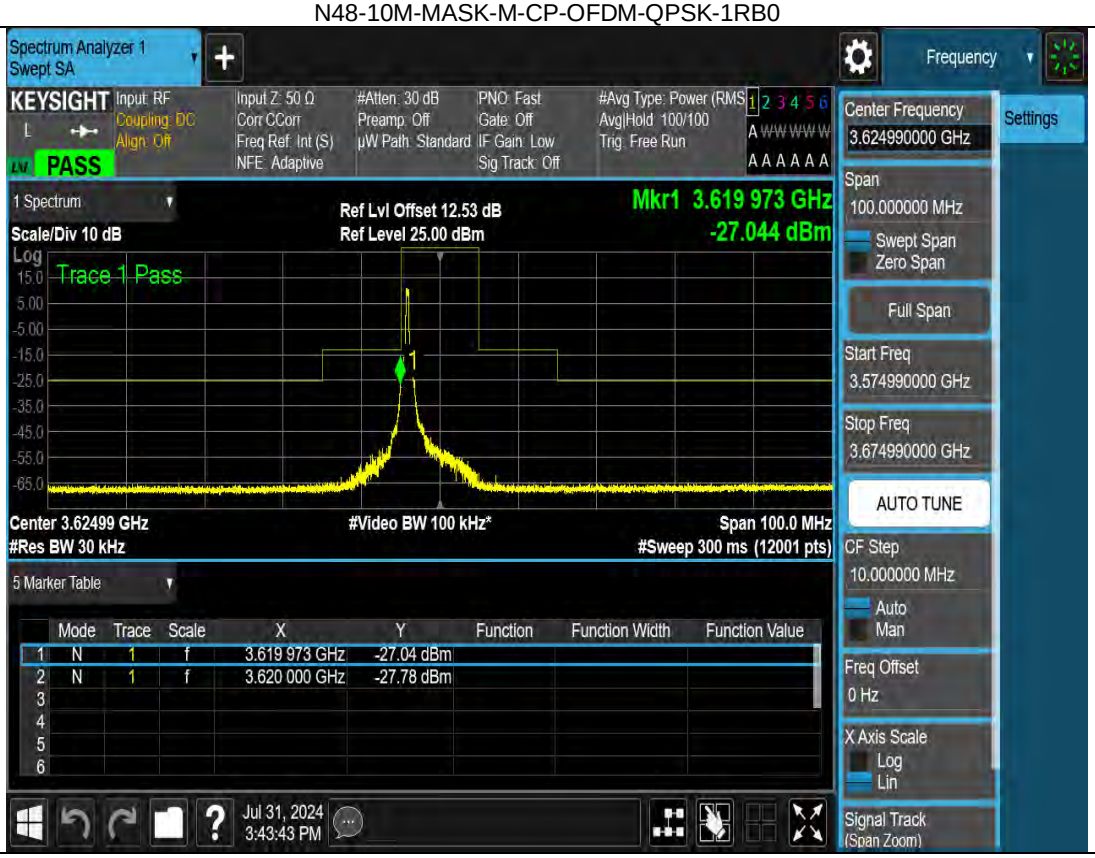

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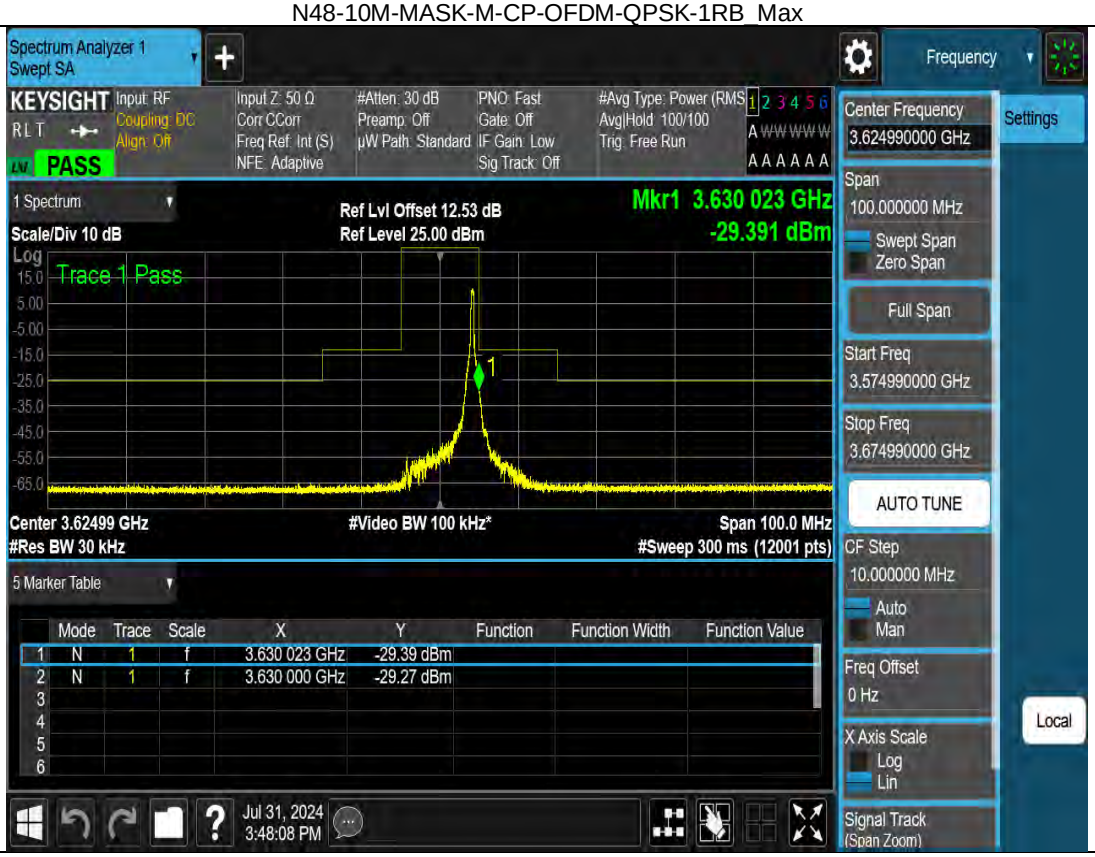

N48-10M-MASK-H-DFT-s-OFDM-Pi2 BPSK-Outer_Full