

# Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
26	15	20	167300	836.5	DFT-s-OFDM PI/2 BPSK	100@0	3.95	13	PASS
26	15	20	167300	836.5	DFT-s-OFDM QPSK	100@0	5.05	13	PASS

N26(20M)\_DFT-s-OFDM\_PI\_2-BPSK\_Outer\_Full\_Mid\_CH



N26(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



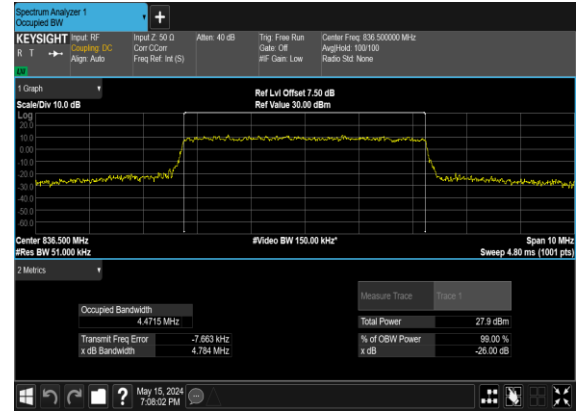
## Occupied Bandwidth

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
26	15	5	167300	836.5	CP-OFDM QPSK	25@0	4.4622	4.814
26	15	5	167300	836.5	CP-OFDM 16 QAM	25@0	4.4715	4.784
26	15	5	167300	836.5	CP-OFDM 64 QAM	25@0	4.4692	4.823
26	15	5	167300	836.5	CP-OFDM 256 QAM	25@0	4.4709	4.775
26	15	10	167300	836.5	CP-OFDM QPSK	52@0	9.2491	9.705
26	15	10	167300	836.5	CP-OFDM 16 QAM	52@0	9.2446	9.679
26	15	10	167300	836.5	CP-OFDM 64 QAM	52@0	9.2721	9.749
26	15	10	167300	836.5	CP-OFDM 256 QAM	52@0	9.2777	9.68
26	15	15	167300	836.5	CP-OFDM QPSK	79@0	14.09	14.71
26	15	15	167300	836.5	CP-OFDM 16 QAM	79@0	14.073	14.66
26	15	15	167300	836.5	CP-OFDM 64 QAM	79@0	14.082	14.63
26	15	15	167300	836.5	CP-OFDM 256 QAM	79@0	14.037	14.64
26	15	20	167300	836.5	CP-OFDM QPSK	106@0	18.916	19.62
26	15	20	167300	836.5	CP-OFDM 16 QAM	106@0	18.91	19.7
26	15	20	167300	836.5	CP-OFDM 64 QAM	106@0	18.892	19.63
26	15	20	167300	836.5	CP-OFDM 256 QAM	106@0	18.9	19.71

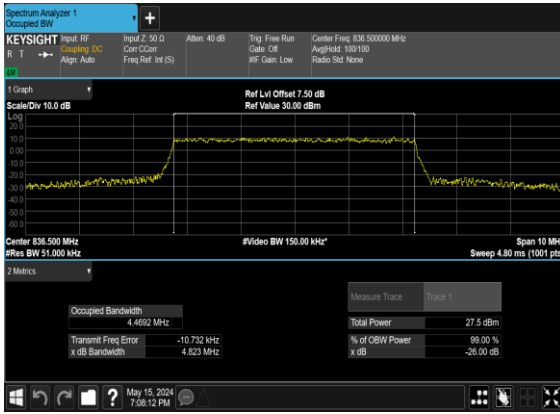
### N26(5M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



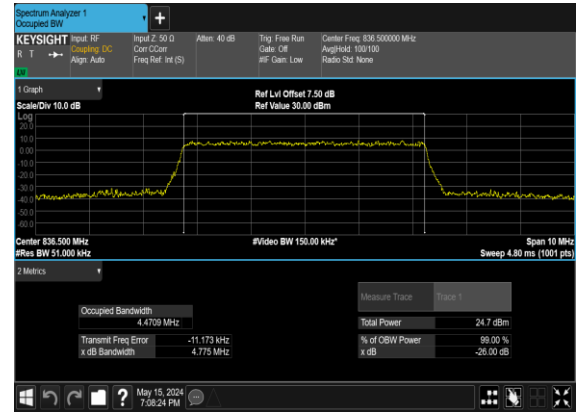
### N26(5M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



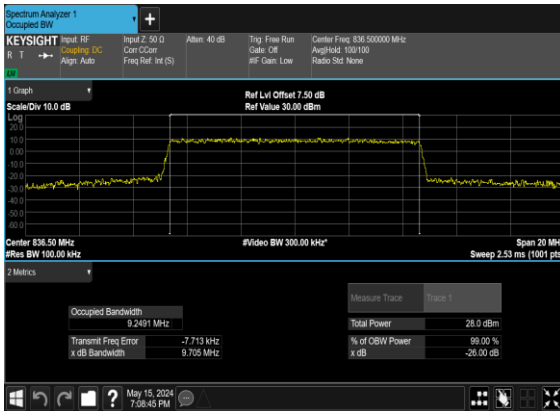
### N26(5M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



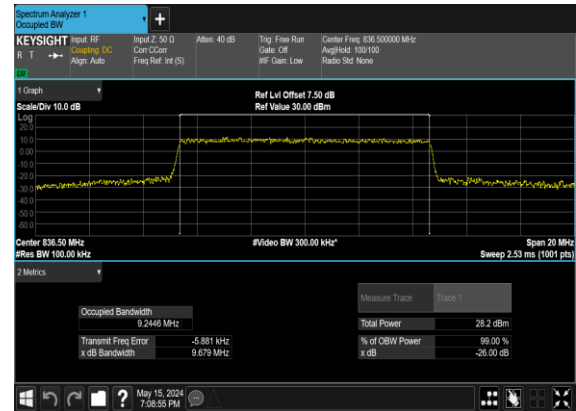
### N26(5M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH



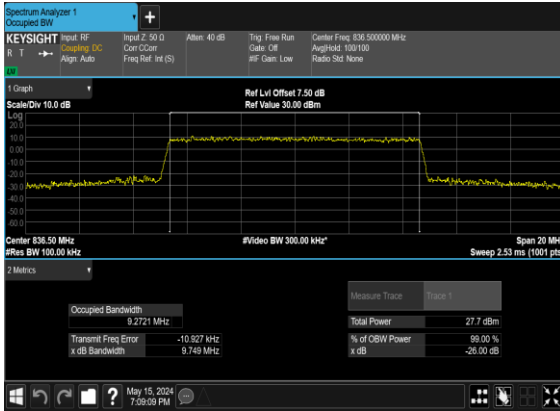
### N26(10M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



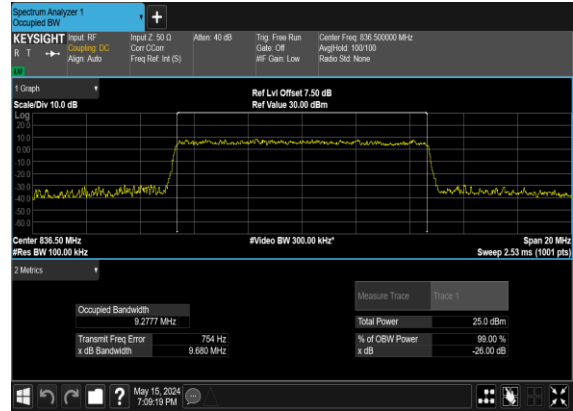
### N26(10M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



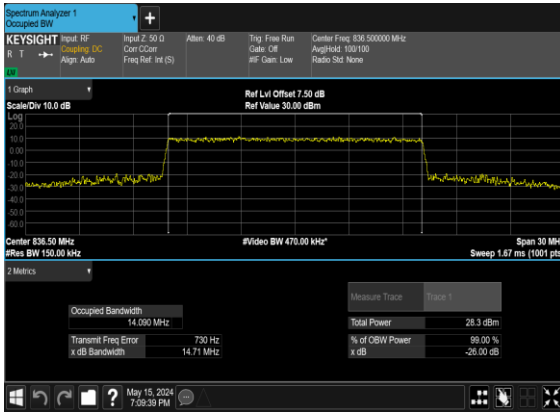
N26(10M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



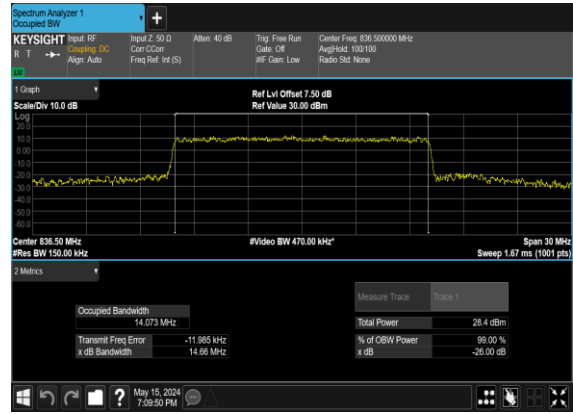
N26(10M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



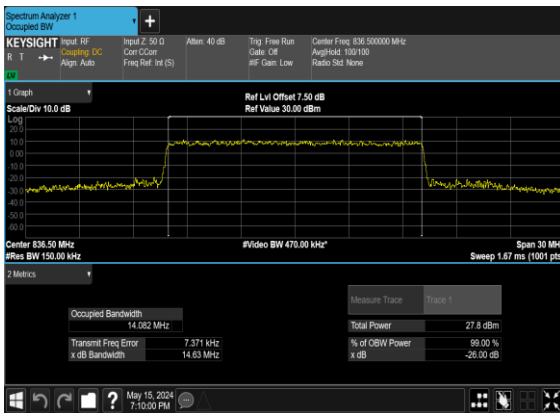
N26(15M)\_CP-  
OFDM\_QPSK\_Outer\_Full\_Mid\_CH



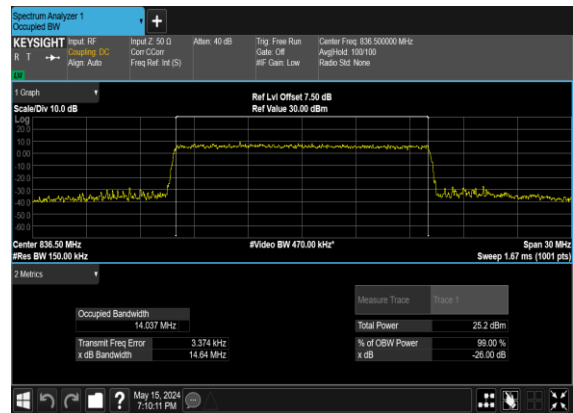
N26(15M)\_CP-OFDM\_16  
QAM\_Outer\_Full\_Mid\_CH



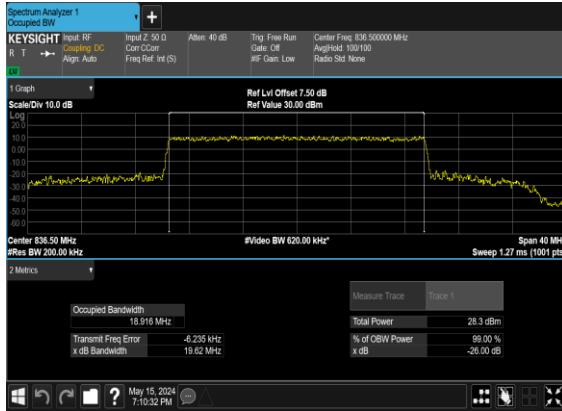
N26(15M)\_CP-OFDM\_64  
QAM\_Outer\_Full\_Mid\_CH



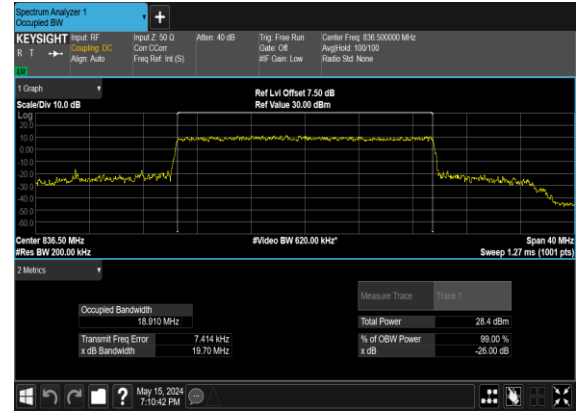
N26(15M)\_CP-OFDM\_256  
QAM\_Outer\_Full\_Mid\_CH



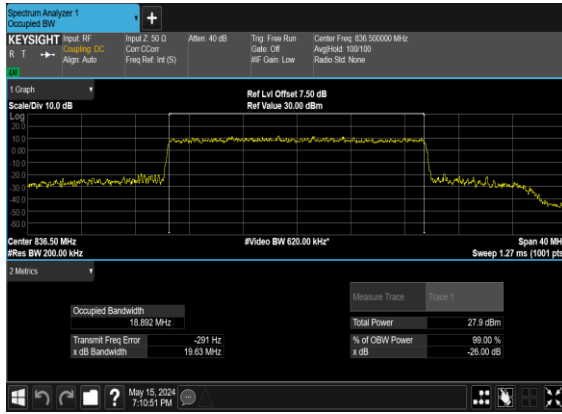
### N26(20M)\_CP-OFDM\_QPSK\_Outer\_Full\_Mid\_CH



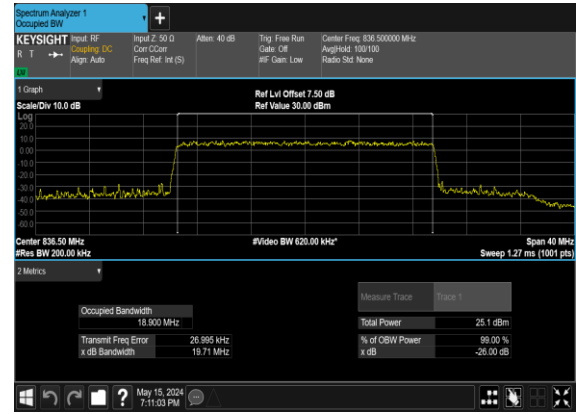
### N26(20M)\_CP-OFDM\_16QAM\_Outer\_Full\_Mid\_CH



### N26(20M)\_CP-OFDM\_64QAM\_Outer\_Full\_Mid\_CH



### N26(20M)\_CP-OFDM\_256QAM\_Outer\_Full\_Mid\_CH

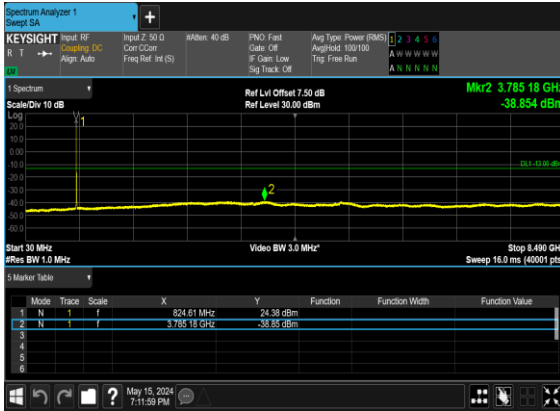


## Conducted Spurious Emissions

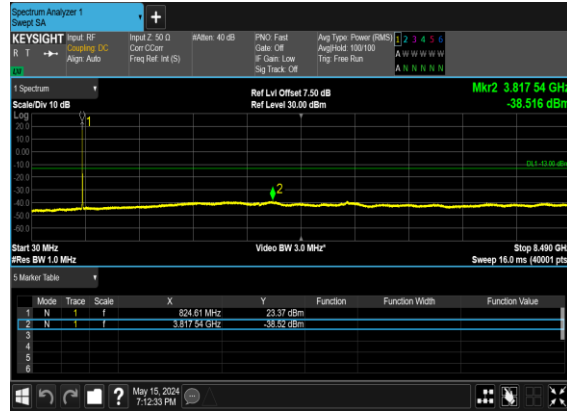
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
26	15	5	165300	826.5	DFT-s-OFDM BPSK	1@0	see graph	---
26	15	5	165300	826.5	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
26	15	5	165300	826.5	DFT-s-OFDM QPSK	1@0	see graph	---
26	15	5	165300	826.5	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
26	15	5	167300	836.5	DFT-s-OFDM BPSK	1@0	see graph	---
26	15	5	167300	836.5	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
26	15	5	167300	836.5	DFT-s-OFDM QPSK	1@0	see graph	---
26	15	5	167300	836.5	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
26	15	5	169300	846.5	DFT-s-OFDM BPSK	1@0	see graph	---
26	15	5	169300	846.5	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
26	15	5	169300	846.5	DFT-s-OFDM QPSK	1@0	see graph	---
26	15	5	169300	846.5	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
26	15	10	165800	829.0	DFT-s-OFDM BPSK	1@0	see graph	---
26	15	10	165800	829.0	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
26	15	10	165800	829.0	DFT-s-OFDM QPSK	1@0	see graph	---
26	15	10	165800	829.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
26	15	10	167300	836.5	DFT-s-OFDM BPSK	1@0	see graph	---
26	15	10	167300	836.5	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
26	15	10	167300	836.5	DFT-s-OFDM QPSK	1@0	see graph	---
26	15	10	167300	836.5	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
26	15	10	168800	844.0	DFT-s-OFDM BPSK	1@0	see graph	---
26	15	10	168800	844.0	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>

26	15	10	168800	844.0	DFT-s-OFDM QPSK	1@0	see graph	---
26	15	10	168800	844.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
26	15	20	166800	834.0	DFT-s-OFDM BPSK	1@0	see graph	---
26	15	20	166800	834.0	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
26	15	20	166800	834.0	DFT-s-OFDM QPSK	1@0	see graph	---
26	15	20	166800	834.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
26	15	20	167300	836.5	DFT-s-OFDM BPSK	1@0	see graph	---
26	15	20	167300	836.5	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
26	15	20	167300	836.5	DFT-s-OFDM QPSK	1@0	see graph	---
26	15	20	167300	836.5	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>
26	15	20	167800	839.0	DFT-s-OFDM BPSK	1@0	see graph	---
26	15	20	167800	839.0	DFT-s-OFDM BPSK	1@0	see graph	<b>PASS</b>
26	15	20	167800	839.0	DFT-s-OFDM QPSK	1@0	see graph	---
26	15	20	167800	839.0	DFT-s-OFDM QPSK	1@0	see graph	<b>PASS</b>

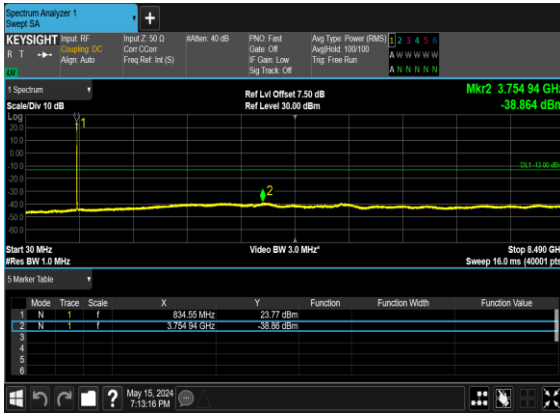
N26(5M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



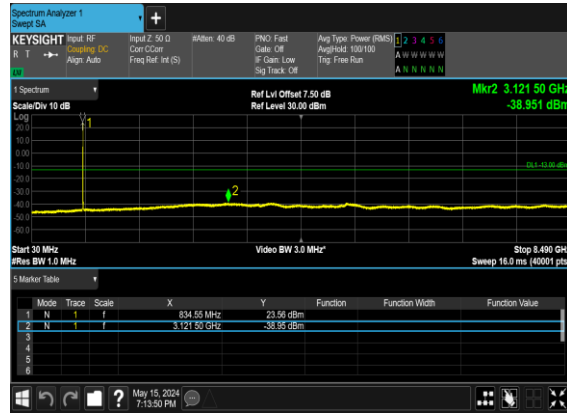
N26(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



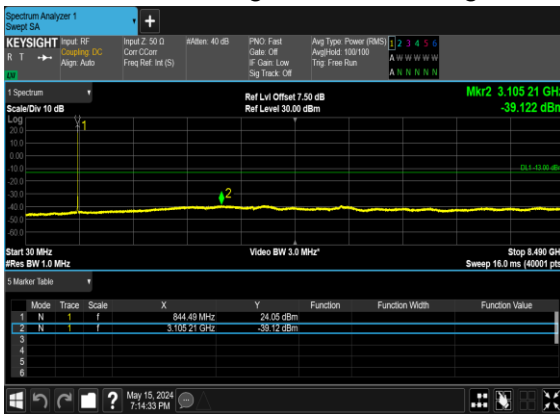
N26(5M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



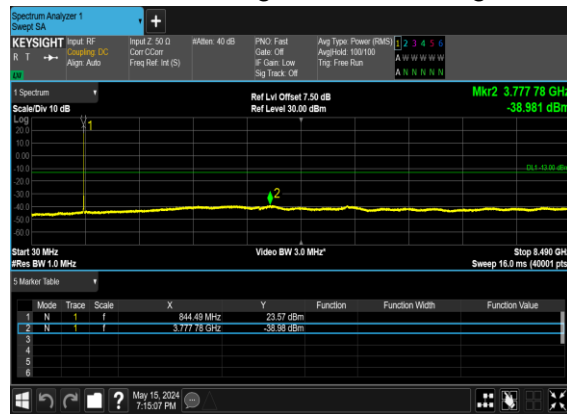
N26(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N26(5M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



N26(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH

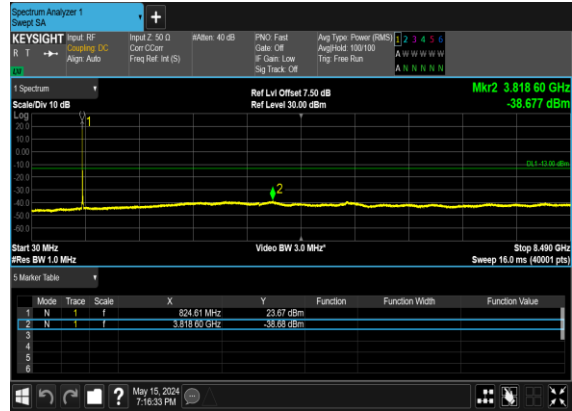




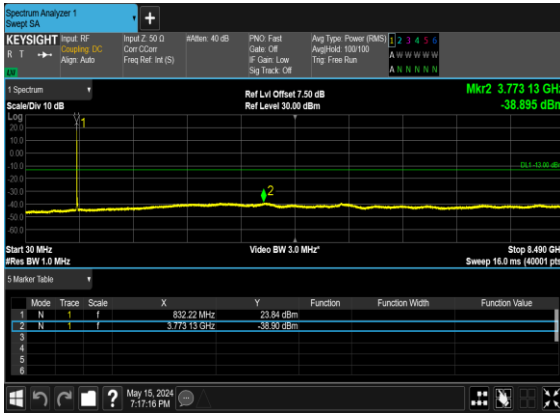
N26(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



N26(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



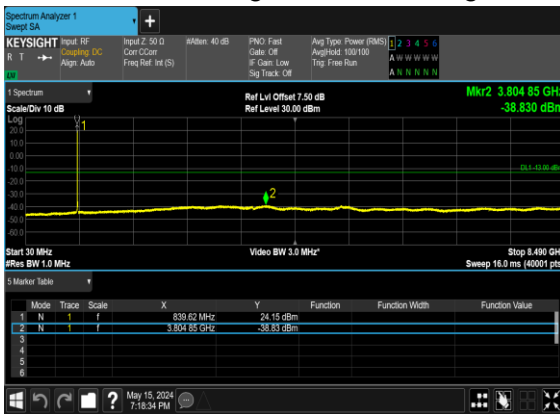
N26(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



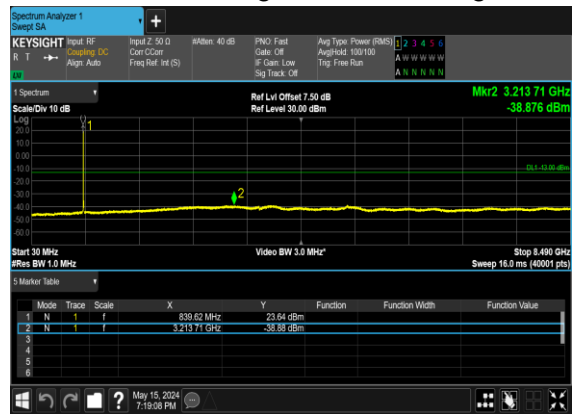
N26(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N26(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



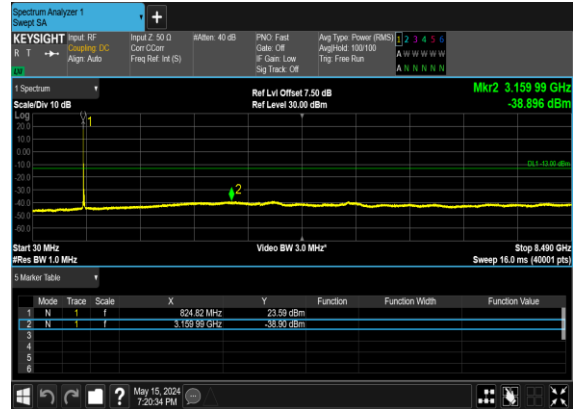
N26(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



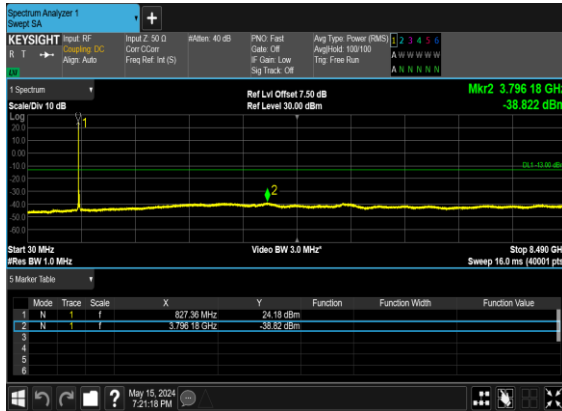
N26(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



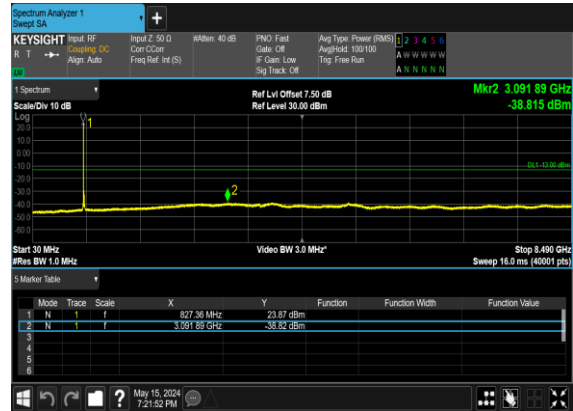
N26(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



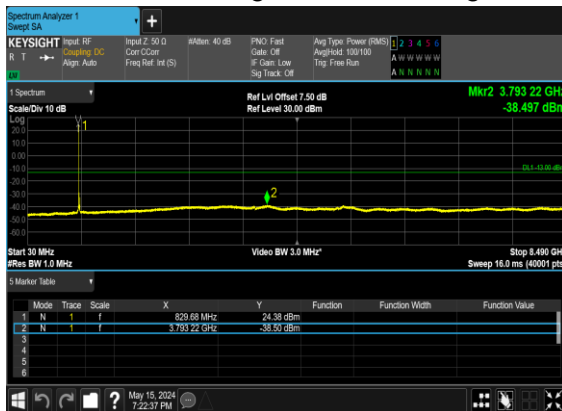
N26(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Mid\_CH



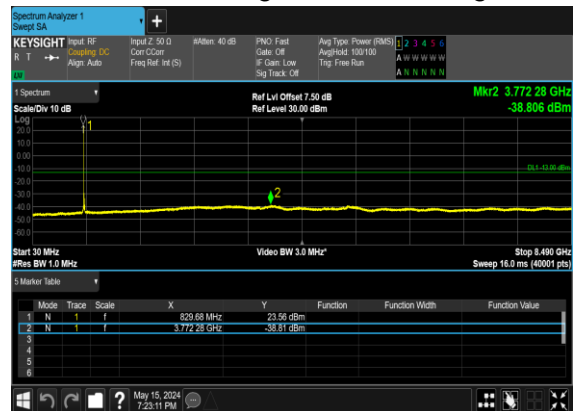
N26(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Mid\_CH



N26(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_High\_CH



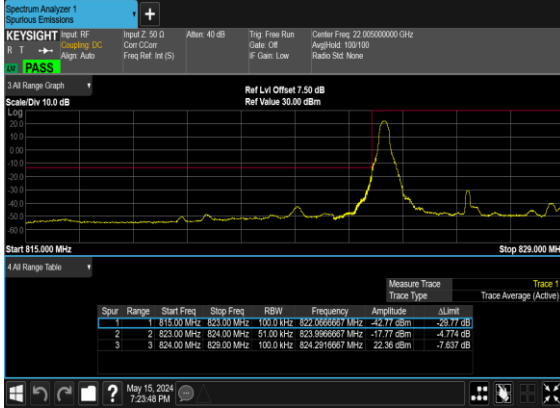
N26(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_High\_CH



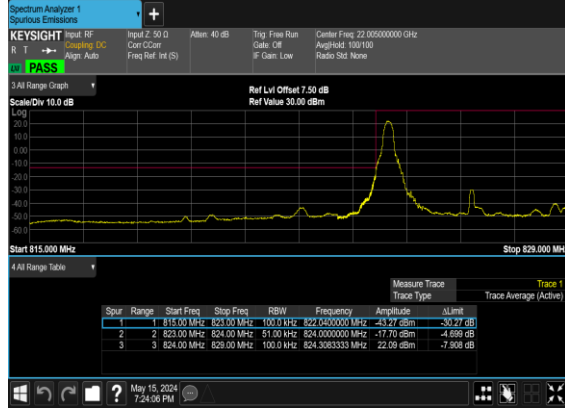
## Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
26	15	5	165300	826.5	DFT-s-OFDM BPSK	1@0	see graph	PASS
26	15	5	165300	826.5	DFT-s-OFDM QPSK	1@0	see graph	PASS
26	15	5	165300	826.5	DFT-s-OFDM BPSK	25@0	see graph	PASS
26	15	5	165300	826.5	DFT-s-OFDM QPSK	25@0	see graph	PASS
26	15	5	169300	846.5	DFT-s-OFDM BPSK	1@24	see graph	PASS
26	15	5	169300	846.5	DFT-s-OFDM QPSK	1@24	see graph	PASS
26	15	5	169300	846.5	DFT-s-OFDM BPSK	25@0	see graph	PASS
26	15	5	169300	846.5	DFT-s-OFDM QPSK	25@0	see graph	PASS
26	15	10	165800	829.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
26	15	10	165800	829.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
26	15	10	165800	829.0	DFT-s-OFDM BPSK	50@0	see graph	PASS
26	15	10	165800	829.0	DFT-s-OFDM QPSK	50@0	see graph	PASS
26	15	10	168800	844.0	DFT-s-OFDM BPSK	1@51	see graph	PASS
26	15	10	168800	844.0	DFT-s-OFDM QPSK	1@51	see graph	PASS
26	15	10	168800	844.0	DFT-s-OFDM BPSK	50@0	see graph	PASS
26	15	10	168800	844.0	DFT-s-OFDM QPSK	50@0	see graph	PASS
26	15	20	166800	834.0	DFT-s-OFDM BPSK	1@0	see graph	PASS
26	15	20	166800	834.0	DFT-s-OFDM QPSK	1@0	see graph	PASS
26	15	20	166800	834.0	DFT-s-OFDM BPSK	100@0	see graph	PASS
26	15	20	166800	834.0	DFT-s-OFDM QPSK	100@0	see graph	PASS
26	15	20	167800	839.0	DFT-s-OFDM BPSK	1@105	see graph	PASS
26	15	20	167800	839.0	DFT-s-OFDM QPSK	1@105	see graph	PASS
26	15	20	167800	839.0	DFT-s-OFDM BPSK	100@0	see graph	PASS
26	15	20	167800	839.0	DFT-s-OFDM QPSK	100@0	see graph	PASS

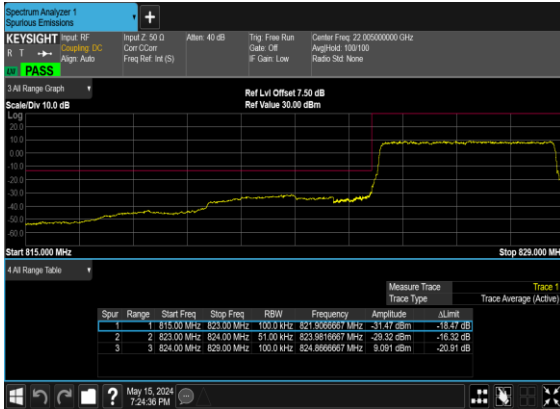
N26(5M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



N26(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



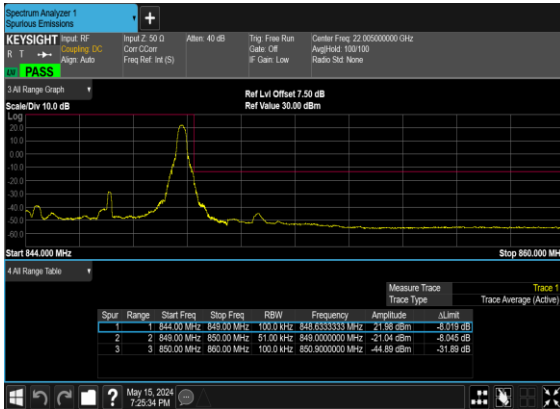
N26(5M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Low\_CH



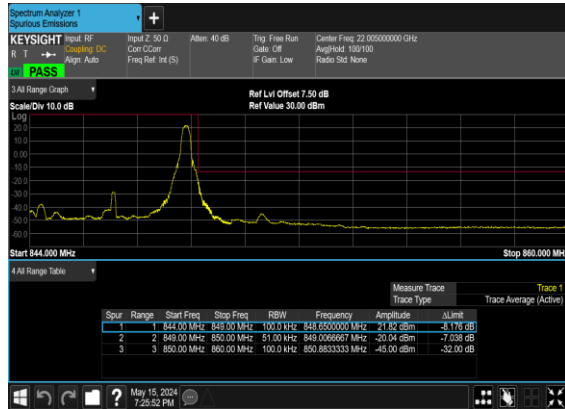
N26(5M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



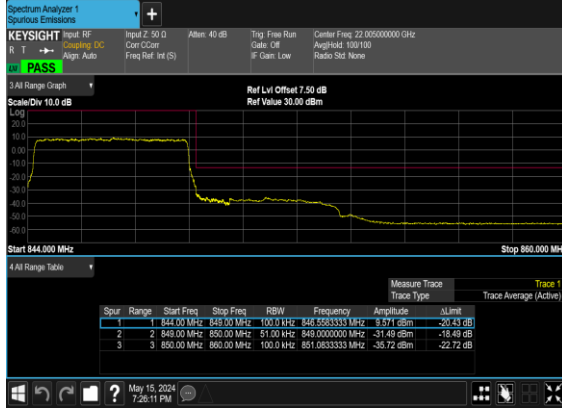
N26(5M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Right\_High\_CH



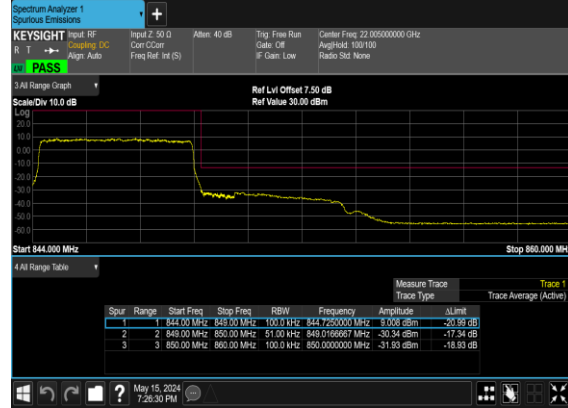
N26(5M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



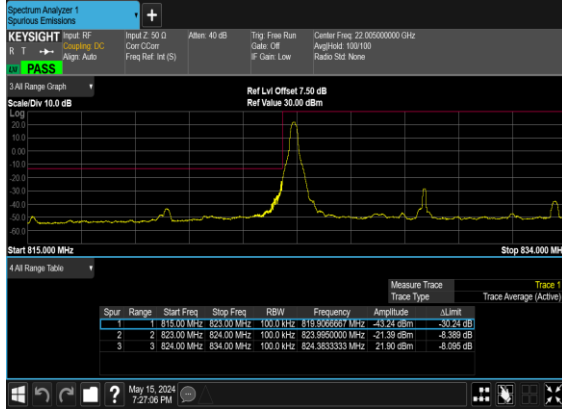
N26(5M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_High\_CH



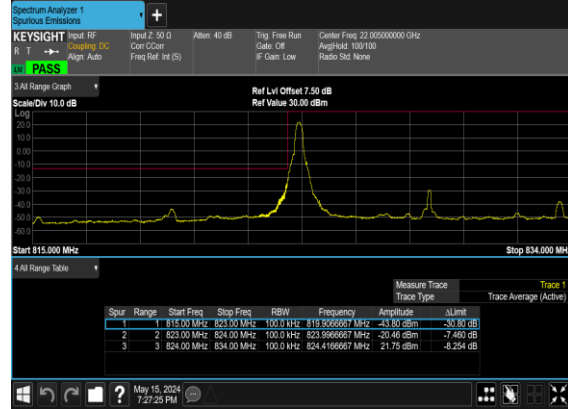
N26(5M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH



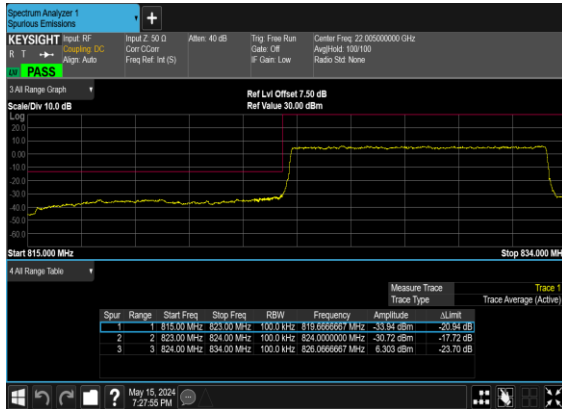
N26(10M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



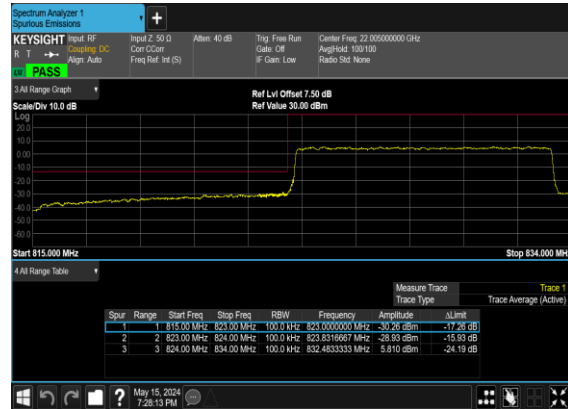
N26(10M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



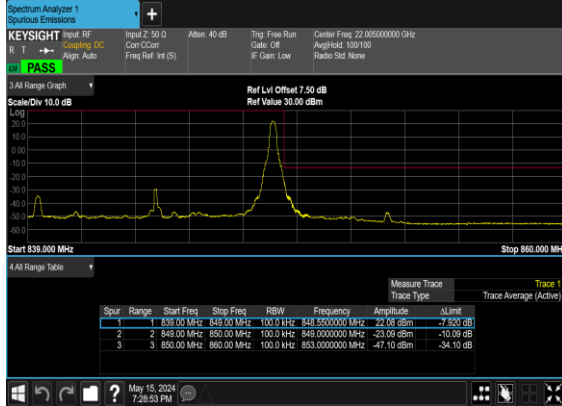
N26(10M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Low\_CH



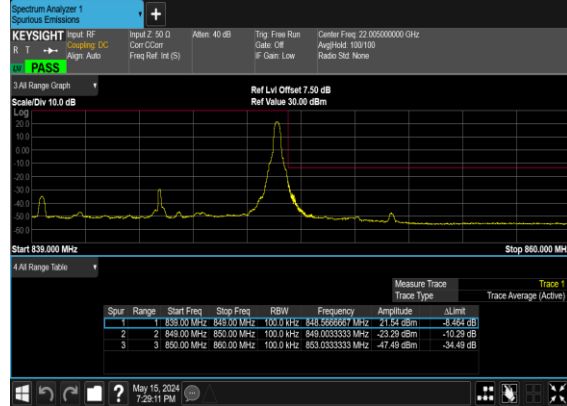
N26(10M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



N26(10M)\_DFT-s-  
OFDM\_BPSK\_Edge\_1RB\_Right\_High\_CH



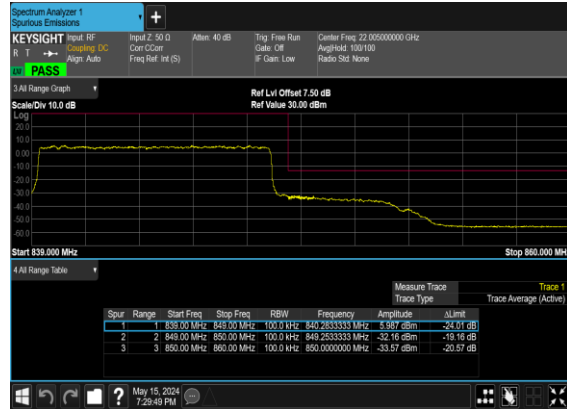
N26(10M)\_DFT-s-  
OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



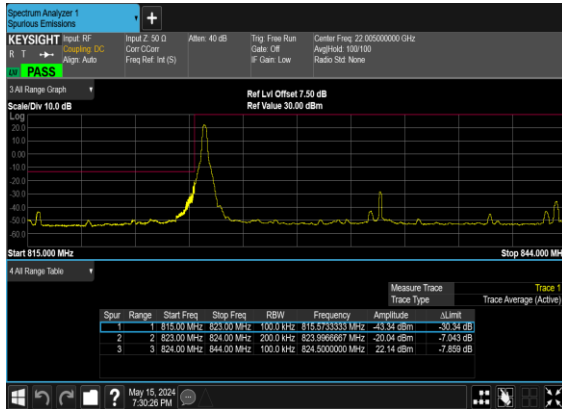
N26(10M)\_DFT-s-  
OFDM\_BPSK\_Outer\_Full\_High\_CH



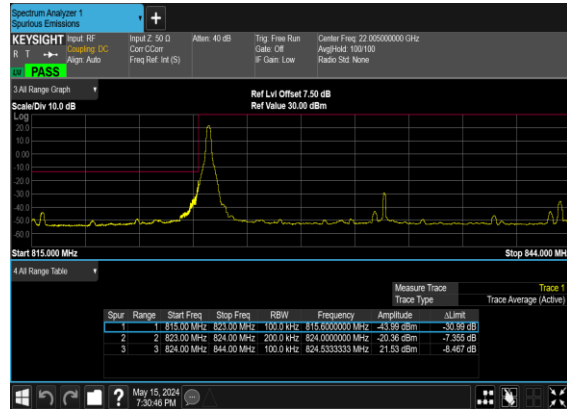
N26(10M)\_DFT-s-  
OFDM\_QPSK\_Outer\_Full\_High\_CH



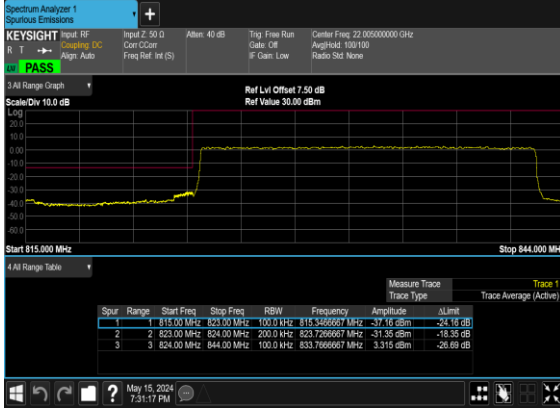
N26(20M)\_DFT-s-  
OFDM\_BPSK\_Edge\_1RB\_Left\_Low\_CH



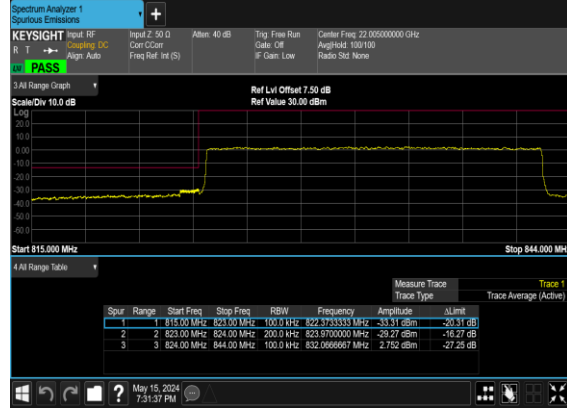
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OFDM\_QPSK\_Edge\_1RB\_Left\_Low\_CH



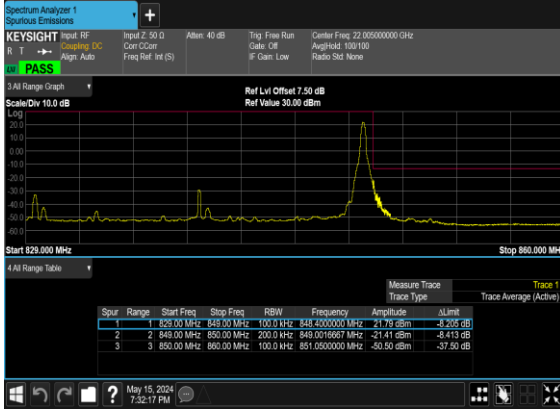
### N26(20M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_Low\_CH



### N26(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_Low\_CH



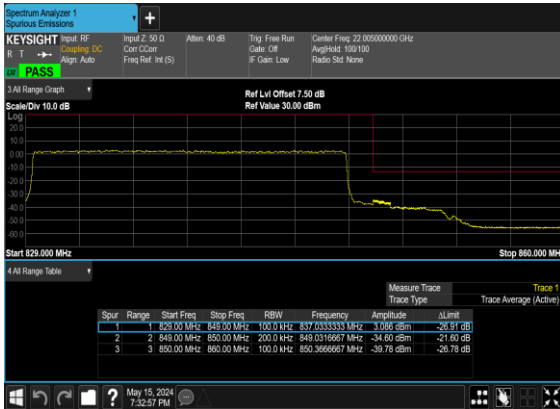
### N26(20M)\_DFT-s-OFDM\_BPSK\_Edge\_1RB\_Right\_High\_CH



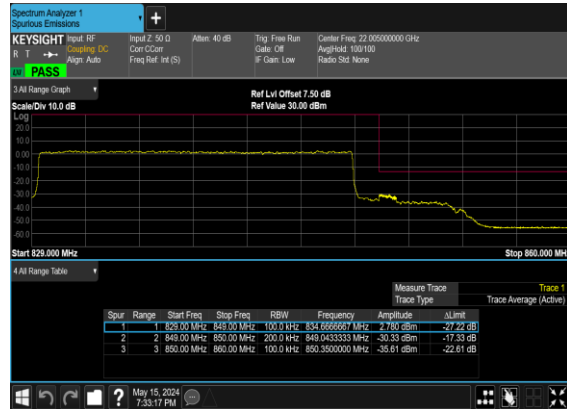
### N26(20M)\_DFT-s-OFDM\_QPSK\_Edge\_1RB\_Right\_High\_CH



### N26(20M)\_DFT-s-OFDM\_BPSK\_Outer\_Full\_High\_CH



### N26(20M)\_DFT-s-OFDM\_QPSK\_Outer\_Full\_High\_CH





## Appendix B. Test Results of Radiated Test

### Radiated Spurious Emission

Test Engineer :	Qingsheng He	Temperature :	22~25°C
		Relative Humidity :	48~52%

RSE Pre-scanned harmonic for the different antenna combinations, we choose the worst antenna mode to perform final test.

n5 SA / NR 20MHz / QPSK / (ANT0)									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1654.5	-68.47	-13	-55.47	-74.75	-71.72	4.00	9.40	H
	2481.75	-65.40	-13	-52.40	-75.72	-68.97	4.88	10.60	H
	3309	-64.31	-13	-51.31	-76.64	-69.24	5.52	12.60	H
	1654.5	-68.39	-13	-55.39	-74.52	-71.64	4.00	9.40	V
	2481.75	-65.13	-13	-52.13	-75.81	-68.70	4.88	10.60	V
	3309	-64.08	-13	-51.08	-76.85	-69.01	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_7A_n5A / LTE 10MHz + NR 20MHz / QPSK (ANT5+0)									
Channel	Frequency ( MHz )	ERP/EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
LTE Band7 Middle	5052.18	-61.20	-25	-36.20	-78.62	-66.76	7.14	12.70	H
	7578.27	-56.73	-25	-31.73	-78.92	-60.03	8.30	11.60	H
	10104.36	-52.17	-25	-27.17	-79.26	-53.69	10.48	12.00	H
	5052.18	-61.71	-25	-36.71	-79.06	-67.27	7.14	12.70	V
	7578.27	-56.74	-25	-31.74	-78.73	-60.04	8.30	11.60	V
	10104.36	-52.76	-25	-27.76	-79.36	-54.28	10.48	12.00	V
NR n5 Middle	1654.5	-67.68	-13	-54.68	-73.96	-70.93	4.00	9.40	H
	2481.75	-64.66	-13	-51.66	-74.98	-68.23	4.88	10.60	H
	3309	-64.49	-13	-51.49	-76.82	-69.42	5.52	12.60	H
	1654.5	-67.92	-13	-54.92	-74.05	-71.17	4.00	9.40	V
	2481.75	-65.26	-13	-52.26	-75.94	-68.83	4.88	10.60	V
	3309	-63.74	-13	-50.74	-76.51	-68.67	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.





N12 SA / NR 15MHz / QPSK / (ANT0)									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1401.08	-65.57	-13	-52.57	-73.71	-68.82	4.00	9.40	H
	2101.6	-65.66	-13	-52.66	-75.30	-69.23	4.88	10.60	H
	2802.16	-63.83	-13	-50.83	-75.83	-68.76	5.52	12.60	H
	1401.08	-65.53	-13	-52.53	-73.74	-68.78	4.00	9.40	V
	2101.6	-65.24	-13	-52.24	-75.25	-68.81	4.88	10.60	V
	2802.16	-63.76	-13	-50.76	-75.99	-68.69	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

n25 SA / NR 40MHz / QPSK / (ANT2)									
Channel	Frequency ( MHz )	EIRP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3726.6	-62.86	-13	-49.86	-77.45	-69.61	5.85	12.60	H
	5589.9	-62.36	-13	-49.36	-80.02	-68.16	7.30	13.10	H
	7453.2	-55.81	-13	-42.81	-78.33	-58.96	8.35	11.50	H
	3726.6	-62.65	-13	-49.65	-77.49	-69.40	5.85	12.60	V
	5589.9	-62.39	-13	-49.39	-80.01	-68.19	7.30	13.10	V
	7453.2	-56.14	-13	-43.14	-78.63	-59.29	8.35	11.50	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

n26 SA / NR 20MHz / QPSK / (ANT0)									
Channel	Frequency ( MHz )	ERP ( dBm )	Limit ( dBm )	Over Limit ( dB )	SPA Reading (dBm)	S.G. Power ( dBm )	TX Cable loss ( dB )	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1654.2	-67.75	-13	-54.75	-74.03	-71.00	4.00	9.40	H
	2481.3	-64.73	-13	-51.73	-75.05	-68.30	4.88	10.60	H
	3308.4	-63.58	-13	-50.58	-75.92	-68.51	5.52	12.60	H
	1654.2	-68.31	-13	-55.31	-74.44	-71.56	4.00	9.40	V
	2481.3	-64.88	-13	-51.88	-75.56	-68.45	4.88	10.60	V
	3308.4	-64.05	-13	-51.05	-76.83	-68.98	5.52	12.60	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.