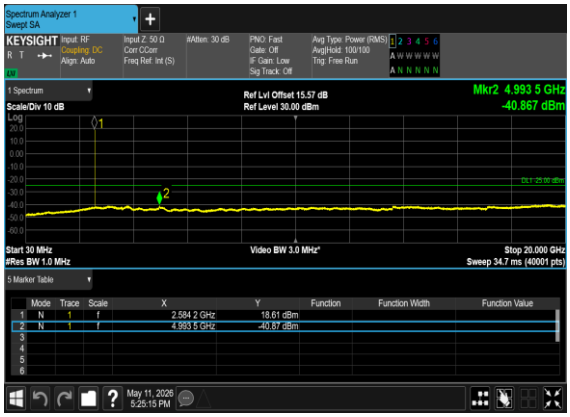
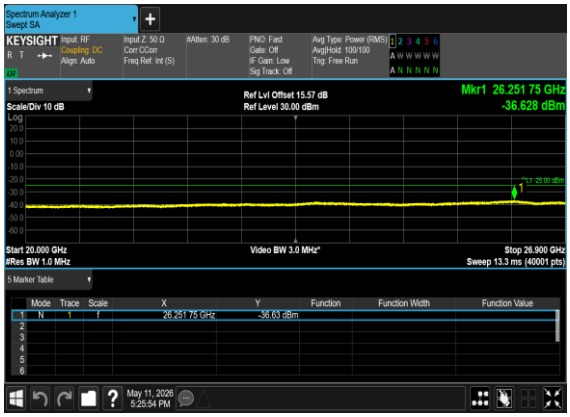
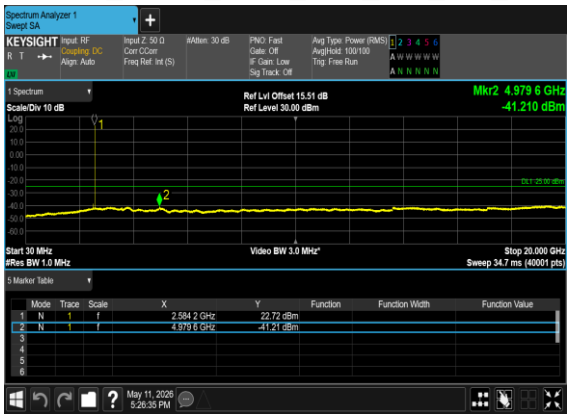
N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



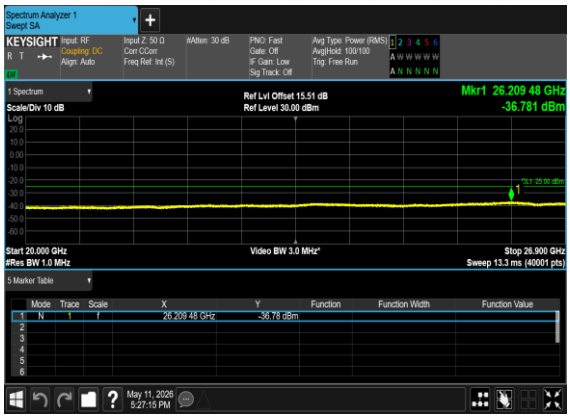
N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



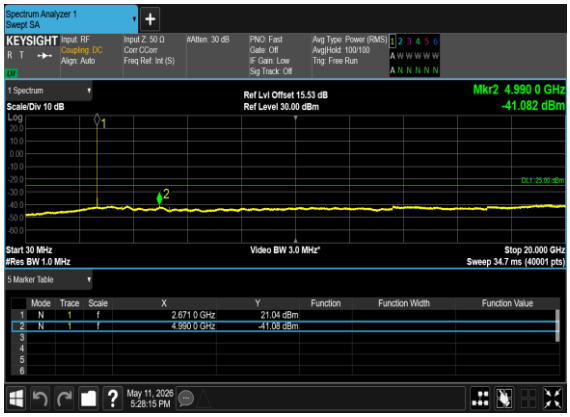
N41(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



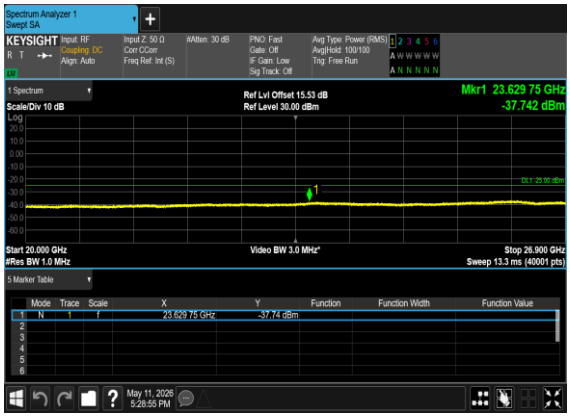
N41(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



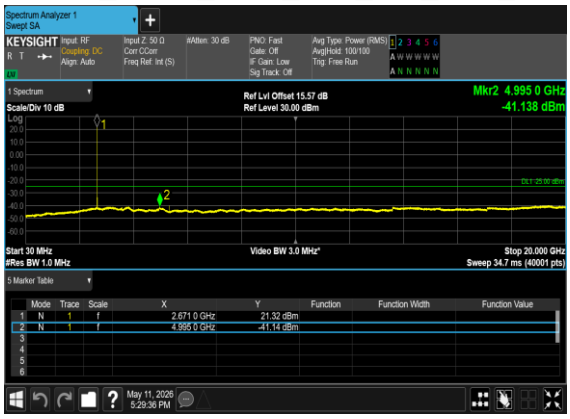
N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



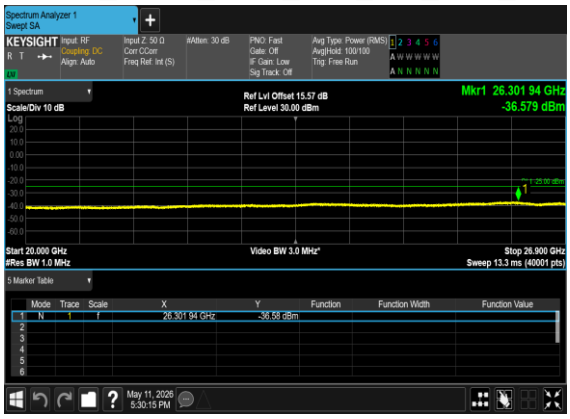
N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N41(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



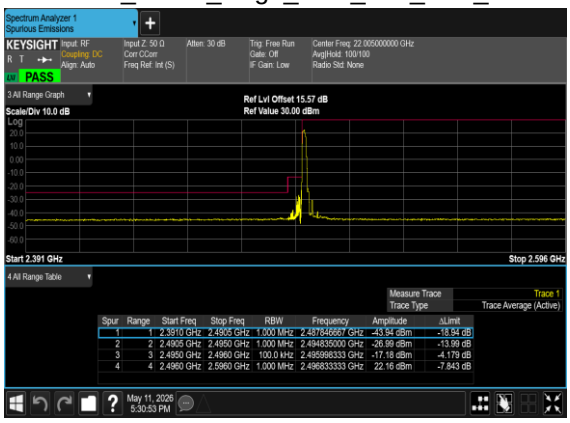
N41(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



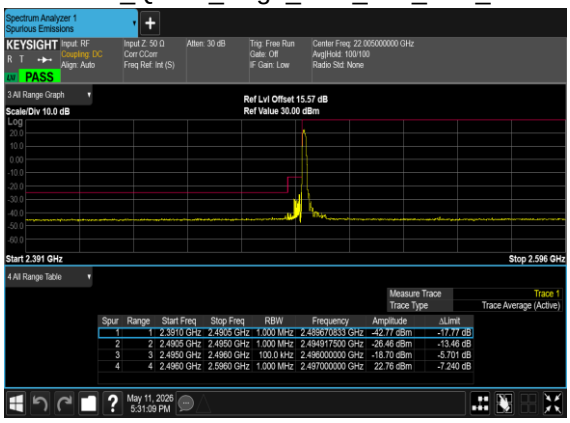
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
41	30	10	500202	2501.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
41	30	10	500202	2501.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
41	30	10	500202	2501.01	DFT-s-OFDM BPSK	24@0	see graph	**PASS**
41	30	10	500202	2501.01	DFT-s-OFDM QPSK	24@0	see graph	**PASS**
41	30	10	537000	2685.0	DFT-s-OFDM BPSK	1@23	see graph	**PASS**
41	30	10	537000	2685.0	DFT-s-OFDM QPSK	1@23	see graph	**PASS**
41	30	10	537000	2685.0	DFT-s-OFDM BPSK	24@0	see graph	**PASS**
41	30	10	537000	2685.0	DFT-s-OFDM QPSK	24@0	see graph	**PASS**
41	30	15	500700	2503.5	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
41	30	15	500700	2503.5	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
41	30	15	500700	2503.5	DFT-s-OFDM BPSK	36@0	see graph	**PASS**
41	30	15	500700	2503.5	DFT-s-OFDM QPSK	36@0	see graph	**PASS**
41	30	15	536496	2682.48	DFT-s-OFDM BPSK	1@37	see graph	**PASS**
41	30	15	536496	2682.48	DFT-s-OFDM QPSK	1@37	see graph	**PASS**
41	30	15	536496	2682.48	DFT-s-OFDM BPSK	36@0	see graph	**PASS**
41	30	15	536496	2682.48	DFT-s-OFDM QPSK	36@0	see graph	**PASS**
41	30	20	501204	2506.02	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
41	30	20	501204	2506.02	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	50@0	see graph	**PASS**
41	30	20	535998	2679.99	DFT-s-OFDM BPSK	1@50	see graph	**PASS**
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@50	see graph	**PASS**
41	30	20	535998	2679.99	DFT-s-OFDM BPSK	50@0	see graph	**PASS**
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	50@0	see graph	**PASS**

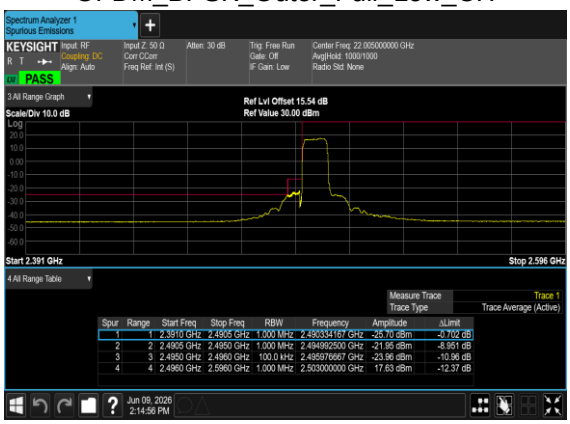
N41(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



N41(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

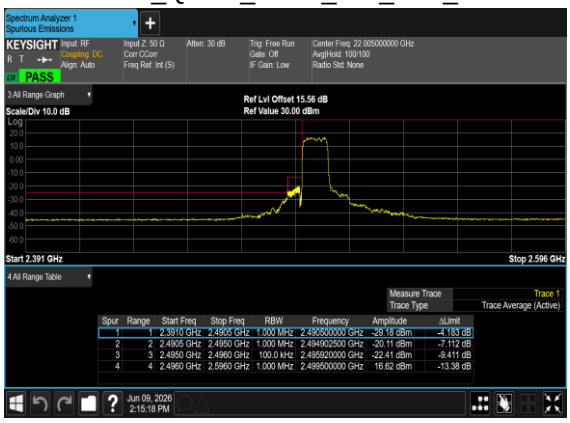


N41(10M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

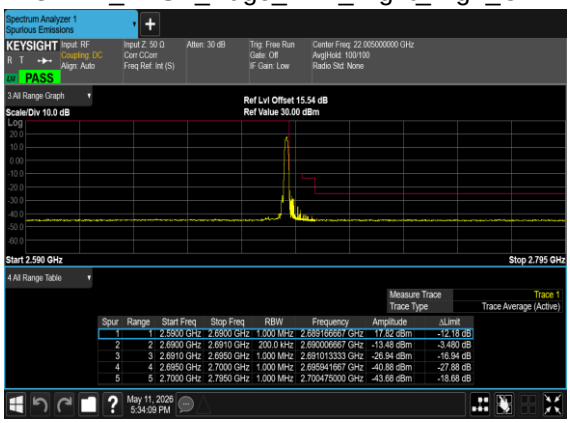


N41(10M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH_**CHP_PASS**

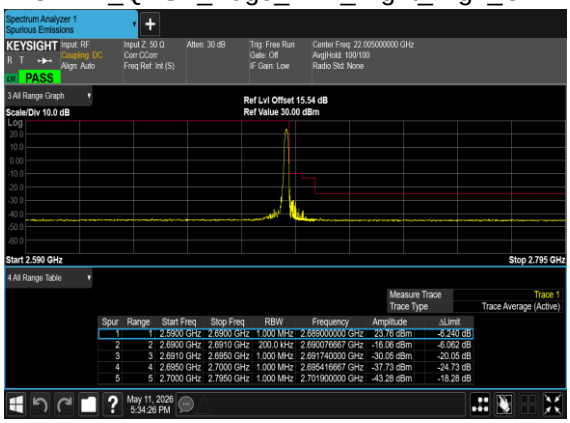
N41(10M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



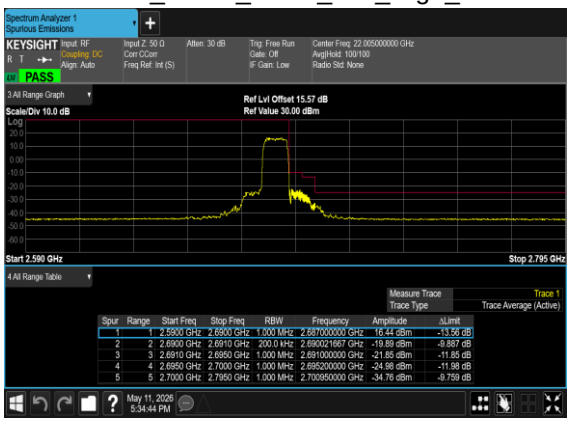
N41(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



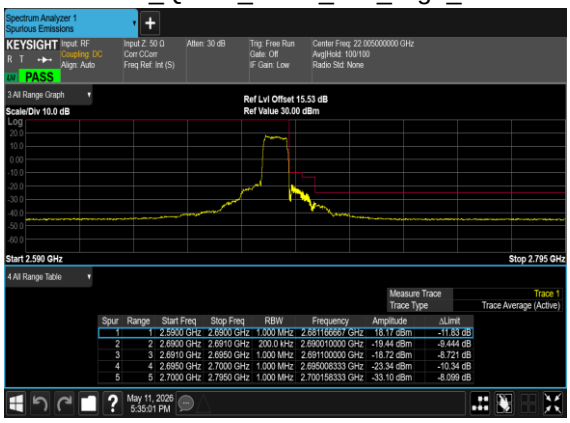
N41(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



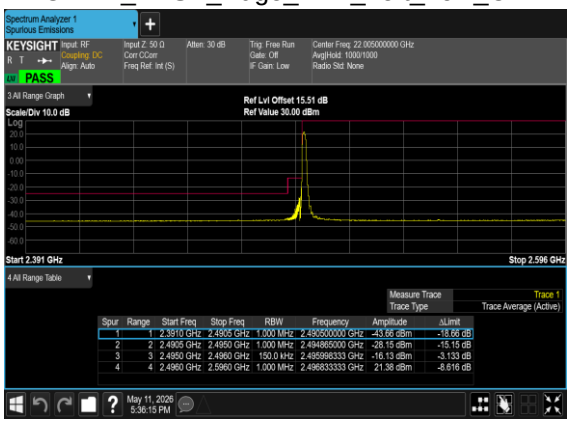
N41(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



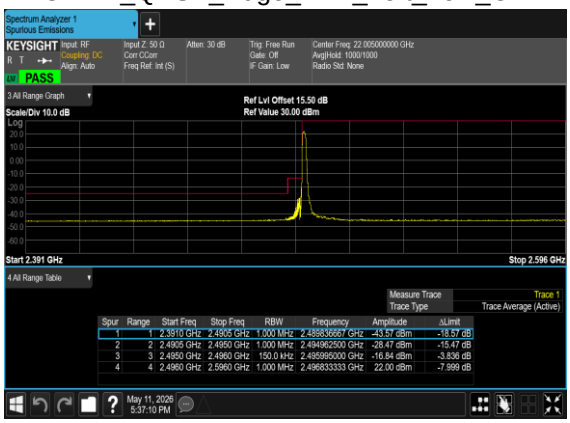
N41(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



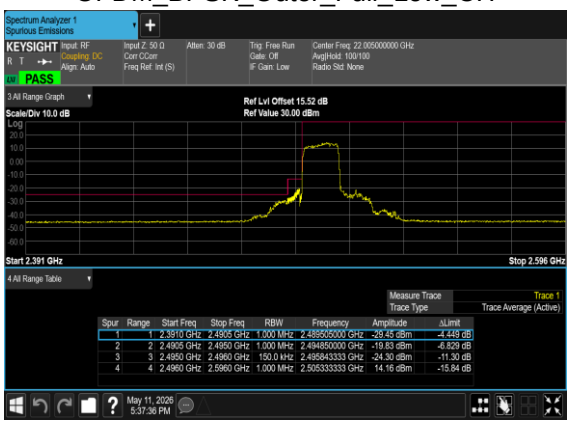
N41(15M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



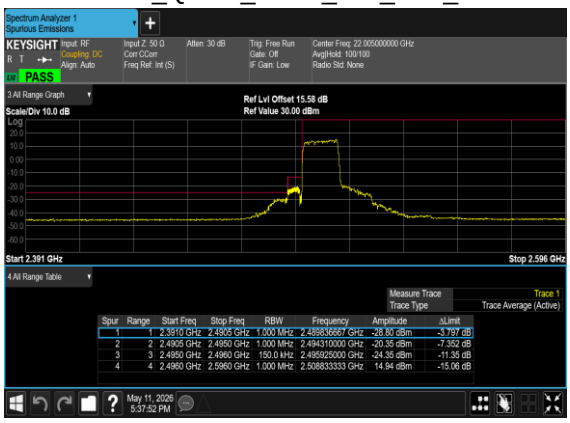
N41(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



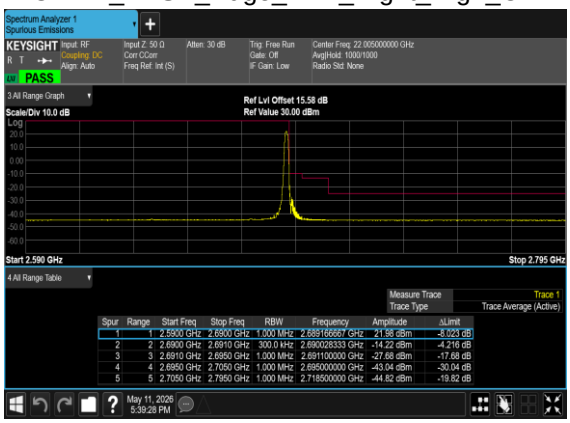
N41(15M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



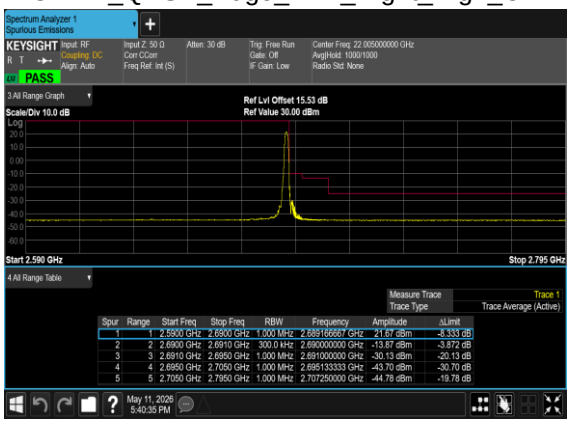
N41(15M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



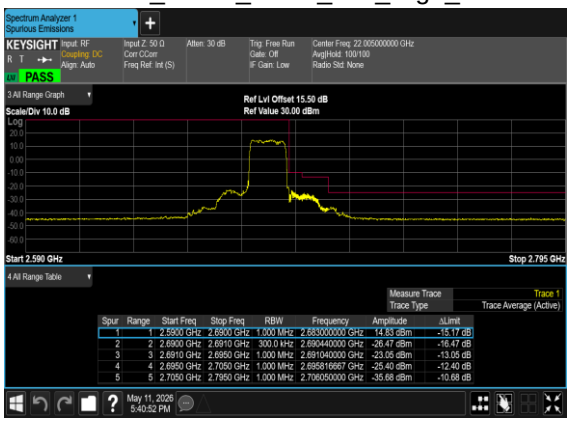
N41(15M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



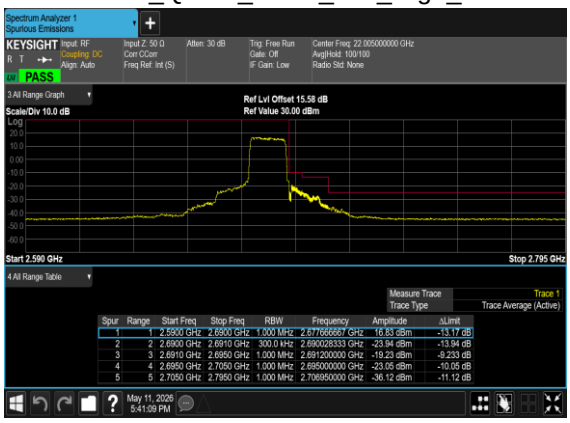
N41(15M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



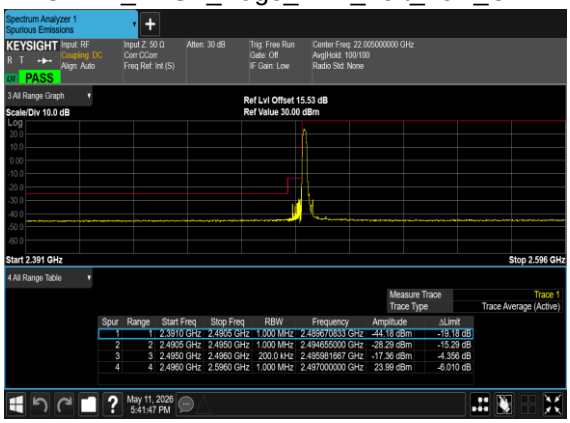
N41(15M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



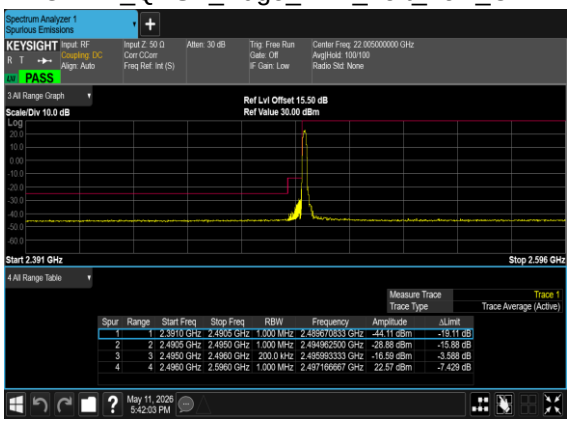
N41(15M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



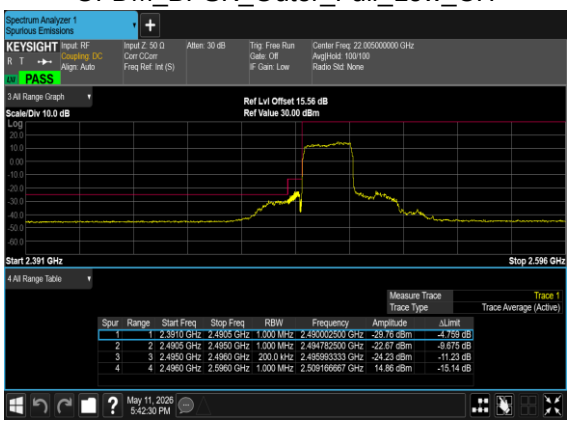
N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



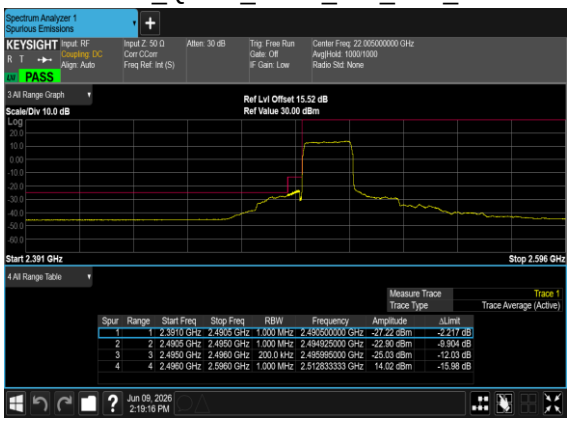
N41(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



N41(20M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

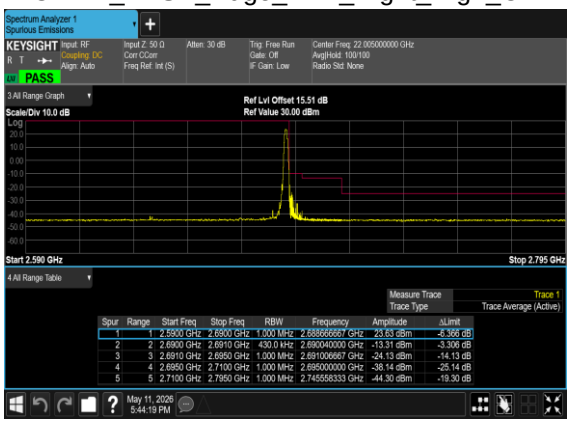


N41(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH

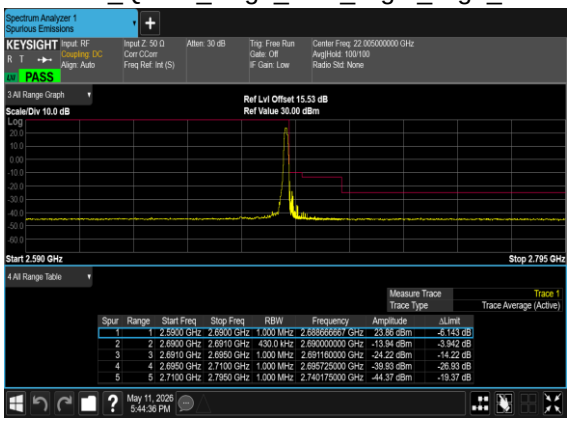


N41(20M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH_**CHP_PASS**

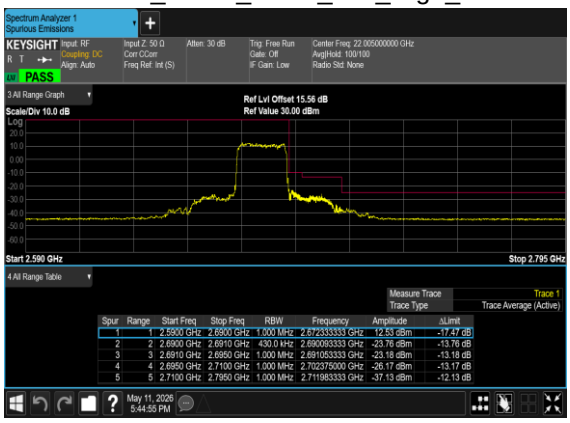
N41(20M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



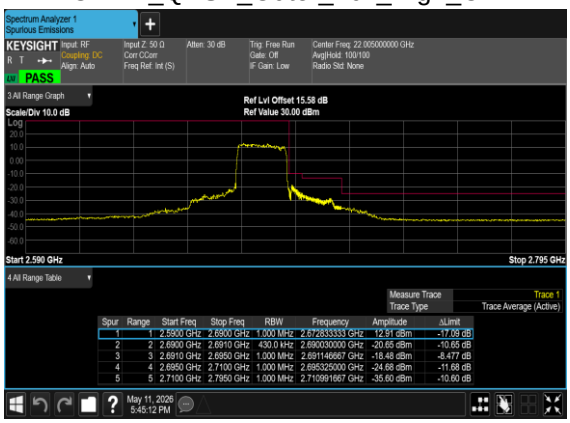
N41(20M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



N41(20M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



N41(20M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



Software Version: 23.06.1602

FR1 N41 for 5G Redcap

Transmitter Conducted Output Power And EIRP, (G_T - L_C)= 3.0 dB

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power (dBm)	EIRP (dBm)	EIRP (W)
41	30	10	500202	2501.01	DFT-s-OFDM QPSK	12@6	23.79	26.79	0.4775
41	30	10	500202	2501.01	DFT-s-OFDM QPSK	1@1	23.7	26.7	0.4677
41	30	10	500202	2501.01	DFT-s-OFDM QPSK	1@22	23.76	26.76	0.4742
41	30	10	500202	2501.01	DFT-s-OFDM 16 QAM	12@6	22.78	25.78	0.3784
41	30	10	500202	2501.01	DFT-s-OFDM 16 QAM	1@1	22.9	25.9	0.3890
41	30	10	500202	2501.01	DFT-s-OFDM 16 QAM	1@22	22.79	25.79	0.3793
41	30	10	518598	2592.99	DFT-s-OFDM QPSK	12@6	23.71	26.71	0.4688
41	30	10	518598	2592.99	DFT-s-OFDM QPSK	1@1	23.72	26.72	0.4699
41	30	10	518598	2592.99	DFT-s-OFDM QPSK	1@22	23.65	26.65	0.4624
41	30	10	518598	2592.99	DFT-s-OFDM 16 QAM	12@6	22.74	25.74	0.3750
41	30	10	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	22.85	25.85	0.3846
41	30	10	518598	2592.99	DFT-s-OFDM 16 QAM	1@22	22.72	25.72	0.3733
41	30	10	537000	2685	DFT-s-OFDM QPSK	12@6	23.77	26.77	0.4753
41	30	10	537000	2685	DFT-s-OFDM QPSK	1@1	23.76	26.76	0.4742
41	30	10	537000	2685	DFT-s-OFDM QPSK	1@22	23.66	26.66	0.4634
41	30	10	537000	2685	DFT-s-OFDM 16 QAM	12@6	22.71	25.71	0.3724
41	30	10	537000	2685	DFT-s-OFDM 16 QAM	1@1	22.82	25.82	0.3819
41	30	10	537000	2685	DFT-s-OFDM 16 QAM	1@22	22.79	25.79	0.3793
41	30	15	500700	2503.5	DFT-s-OFDM QPSK	18@9	23.79	26.79	0.4775
41	30	15	500700	2503.5	DFT-s-OFDM QPSK	1@1	23.68	26.68	0.4656
41	30	15	500700	2503.5	DFT-s-OFDM QPSK	1@36	23.71	26.71	0.4688
41	30	15	500700	2503.5	DFT-s-OFDM 16 QAM	18@9	22.79	25.79	0.3793
41	30	15	500700	2503.5	DFT-s-OFDM 16 QAM	1@1	22.53	25.53	0.3573
41	30	15	500700	2503.5	DFT-s-OFDM 16 QAM	1@36	22.59	25.59	0.3622
41	30	15	518598	2592.99	DFT-s-OFDM QPSK	18@9	23.81	26.81	0.4797
41	30	15	518598	2592.99	DFT-s-OFDM QPSK	1@1	23.66	26.66	0.4634
41	30	15	518598	2592.99	DFT-s-OFDM QPSK	1@36	23.7	26.7	0.4677
41	30	15	518598	2592.99	DFT-s-OFDM 16 QAM	18@9	22.73	25.73	0.3741
41	30	15	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	22.84	25.84	0.3837
41	30	15	518598	2592.99	DFT-s-OFDM 16 QAM	1@36	22.66	25.66	0.3681
41	30	15	536496	2682.48	DFT-s-OFDM QPSK	18@9	23.59	26.59	0.4560
41	30	15	536496	2682.48	DFT-s-OFDM QPSK	1@1	23.7	26.7	0.4677
41	30	15	536496	2682.48	DFT-s-OFDM QPSK	1@36	23.59	26.59	0.4560
41	30	15	536496	2682.48	DFT-s-OFDM 16 QAM	18@9	22.71	25.71	0.3724
41	30	15	536496	2682.48	DFT-s-OFDM 16 QAM	1@1	22.66	25.66	0.3681
41	30	15	536496	2682.48	DFT-s-OFDM 16 QAM	1@36	22.69	25.69	0.3707

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power (dBm)	EIRP (dBm)	EIRP (W)
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	25@12	23.83	26.83	0.4819
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	1@1	23.74	26.74	0.4721
41	30	20	501204	2506.02	DFT-s-OFDM PI/2 BPSK	1@49	23.67	26.67	0.4645
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	25@12	23.91	26.91	0.4909
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@1	23.6	26.6	0.4571
41	30	20	501204	2506.02	DFT-s-OFDM QPSK	1@49	23.62	26.62	0.4592
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	25@12	22.77	25.77	0.3776
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	1@1	22.55	25.55	0.3589
41	30	20	501204	2506.02	DFT-s-OFDM 16 QAM	1@49	22.81	25.81	0.3811
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	25@12	21.37	24.37	0.2735
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	1@1	20.83	23.83	0.2415
41	30	20	501204	2506.02	DFT-s-OFDM 64 QAM	1@49	20.84	23.84	0.2421
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	25@12	19.33	22.33	0.1710
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	1@1	18.75	21.75	0.1496
41	30	20	501204	2506.02	DFT-s-OFDM 256 QAM	1@49	18.63	21.63	0.1455
41	30	20	501204	2506.02	CP-OFDM QPSK	25@12	22.24	25.24	0.3342
41	30	20	501204	2506.02	CP-OFDM QPSK	1@1	22.16	25.16	0.3281
41	30	20	501204	2506.02	CP-OFDM QPSK	1@49	22.14	25.14	0.3266
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	25@12	23.82	26.82	0.4808
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@1	23.7	26.7	0.4677
41	30	20	518598	2592.99	DFT-s-OFDM PI/2 BPSK	1@49	23.76	26.76	0.4742
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	25@12	23.66	26.66	0.4634
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@1	23.7	26.7	0.4677
41	30	20	518598	2592.99	DFT-s-OFDM QPSK	1@49	23.79	26.79	0.4775
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	25@12	22.77	25.77	0.3776
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	1@1	22.65	25.65	0.3673
41	30	20	518598	2592.99	DFT-s-OFDM 16 QAM	1@49	22.76	25.76	0.3767
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	25@12	21.37	24.37	0.2735
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	1@1	21	24	0.2512
41	30	20	518598	2592.99	DFT-s-OFDM 64 QAM	1@49	20.82	23.82	0.2410
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	25@12	19.29	22.29	0.1694
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	1@1	18.81	21.81	0.1517
41	30	20	518598	2592.99	DFT-s-OFDM 256 QAM	1@49	18.9	21.9	0.1549
41	30	20	518598	2592.99	CP-OFDM QPSK	25@12	22.37	25.37	0.3443
41	30	20	518598	2592.99	CP-OFDM QPSK	1@1	22.25	25.25	0.3350
41	30	20	518598	2592.99	CP-OFDM QPSK	1@49	22.16	25.16	0.3281
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	25@12	23.84	26.84	0.4831
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	1@1	23.7	26.7	0.4677
41	30	20	535998	2679.99	DFT-s-OFDM PI/2 BPSK	1@49	23.66	26.66	0.4634
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	25@12	23.9	26.9	0.4898
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@1	23.73	26.73	0.4710
41	30	20	535998	2679.99	DFT-s-OFDM QPSK	1@49	23.66	26.66	0.4634

NR Band	SCS	Band Width	Arfcn	Freq (MHz)	Modulation	RB	Conducted Power (dBm)	EIRP (dBm)	EIRP (W)
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	25@12	22.7	25.7	0.3715
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	1@1	22.66	25.66	0.3681
41	30	20	535998	2679.99	DFT-s-OFDM 16 QAM	1@49	22.81	25.81	0.3811
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	25@12	21.37	24.37	0.2735
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	1@1	21.03	24.03	0.2529
41	30	20	535998	2679.99	DFT-s-OFDM 64 QAM	1@49	21.11	24.11	0.2576
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	25@12	19.04	22.04	0.1600
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	1@1	18.92	21.92	0.1556
41	30	20	535998	2679.99	DFT-s-OFDM 256 QAM	1@49	18.69	21.69	0.1476
41	30	20	535998	2679.99	CP-OFDM QPSK	25@12	22.2	25.2	0.3311
41	30	20	535998	2679.99	CP-OFDM QPSK	1@1	22.16	25.16	0.3281
41	30	20	535998	2679.99	CP-OFDM QPSK	1@49	22.3	25.3	0.3388

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Wenbo Xiao	Temperature :	22~25℃
		Relative Humidity :	48~52%

n7 SA / NR 20MHz / QPSK									
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)
Lowest	5001.00	-58.87	-25	-33.87	-80.76	-64.43	7.12	12.68	H
	7501.50	-53.52	-25	-28.52	-79.42	-56.85	8.26	11.59	H
	10002.00	-46.68	-25	-21.68	-76.91	-48.21	10.45	11.98	H
	5001.00	-58.32	-25	-33.32	-80.26	-63.88	7.12	12.68	V
	7501.50	-53.80	-25	-28.80	-79.69	-57.13	8.26	11.59	V
	10002.00	-51.08	-25	-26.08	-79.68	-52.61	10.45	11.98	V
Middle	5101.00	-58.42	-25	-33.42	-80.13	-63.98	7.14	12.70	H
	7651.50	-53.62	-25	-28.62	-79.40	-56.92	8.30	11.60	H
	10202.00	-42.49	-25	-17.49	-72.60	-44.01	10.48	12.00	H
	5101.00	-58.49	-25	-33.49	-80.38	-64.05	7.14	12.70	V
	7651.50	-54.04	-25	-29.04	-79.74	-57.34	8.30	11.60	V
	10202.00	-47.39	-25	-22.39	-76.29	-48.91	10.48	12.00	V
Highest	5051.00	-58.71	-25	-33.71	-80.51	-64.27	7.16	12.72	H
	7576.50	-54.34	-25	-29.34	-80.06	-57.64	8.33	11.63	H
	10102.00	-46.03	-25	-21.03	-76.20	-47.63	10.50	12.10	H
	5051.00	-58.64	-25	-33.64	-80.56	-64.20	7.16	12.72	V
	7576.50	-53.92	-25	-28.92	-79.6	-57.22	8.33	11.63	V
	10102.00	-49.64	-25	-24.64	-78.37	-51.24	10.50	12.10	V

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

N41 SA / NR 20MHz / QPSK									
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)
Lowest	4993.64	-58.63	-25	-33.63	-80.52	-64.19	7.12	12.68	H
	7490.46	-53.71	-25	-28.71	-79.61	-57.04	8.26	11.59	H
	9987.28	-48.05	-25	-23.05	-78.33	-49.58	10.45	11.98	H
	4993.64	-58.64	-25	-33.64	-80.58	-64.20	7.12	12.68	V
	7490.46	-53.90	-25	-28.90	-79.79	-57.23	8.26	11.59	V
	9987.28	-51.28	-25	-26.28	-79.89	-52.81	10.45	11.98	V
Middle	5168.00	-58.49	-25	-33.49	-80.07	-64.05	7.14	12.70	H
	7752.00	-53.14	-25	-28.14	-79.13	-56.44	8.30	11.60	H
	10336.00	-39.73	-25	-14.73	-69.76	-41.25	10.48	12.00	H
	5168.00	-58.07	-25	-33.07	-79.92	-63.63	7.14	12.70	V
	7752.00	-53.66	-25	-28.66	-79.5	-56.96	8.30	11.60	V
	10336.00	-45.90	-25	-20.90	-75.02	-47.42	10.48	12.00	V
Highest	5341.58	-59.84	-25	-34.84	-81.30	-65.40	7.16	12.72	H
	8012.37	-52.72	-25	-27.72	-80.48	-56.02	8.33	11.63	H
	10683.16	-48.52	-25	-23.52	-78.90	-50.12	10.50	12.10	H
	5341.58	-59.45	-25	-34.45	-81.06	-65.01	7.16	12.72	V
	8012.37	-52.86	-25	-27.86	-80.36	-56.16	8.33	11.63	V
	10683.16	-49.36	-25	-24.36	-79.29	-50.96	10.50	12.10	V

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