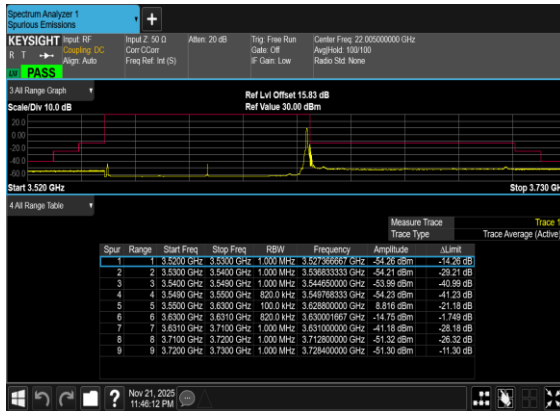
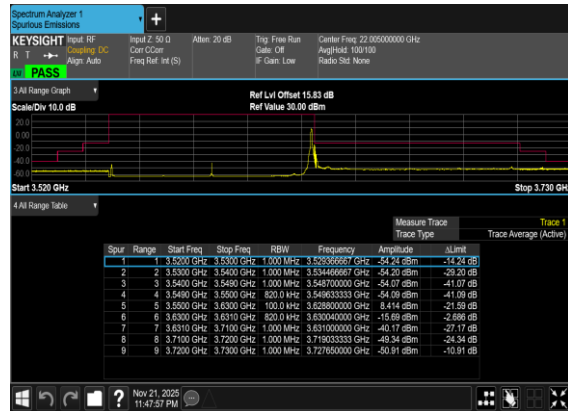




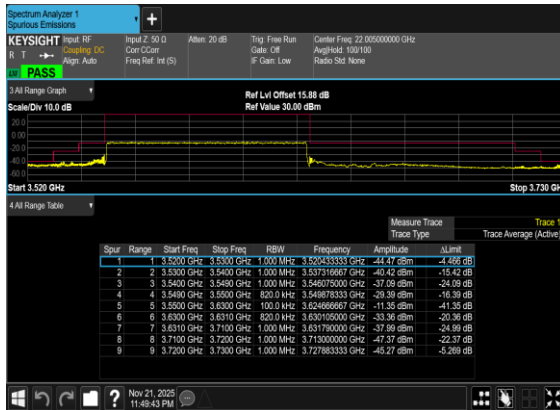
N77(80M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Low_CH



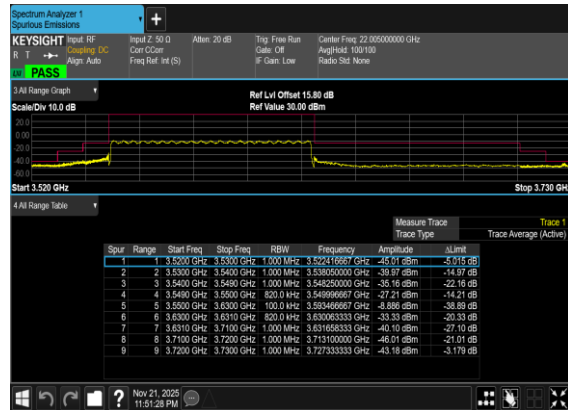
N77(80M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Low_CH



N77(80M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CH

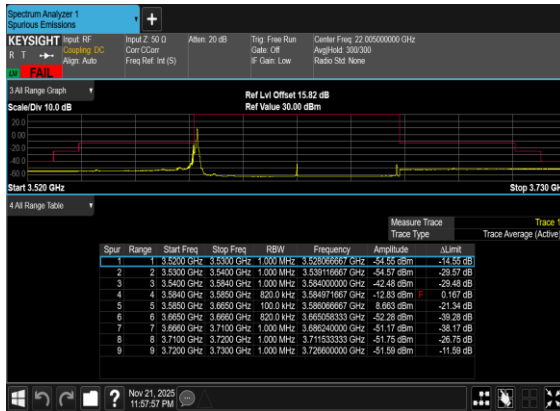


N77(80M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH

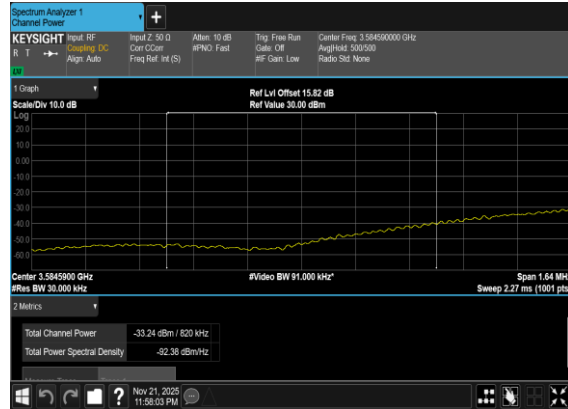




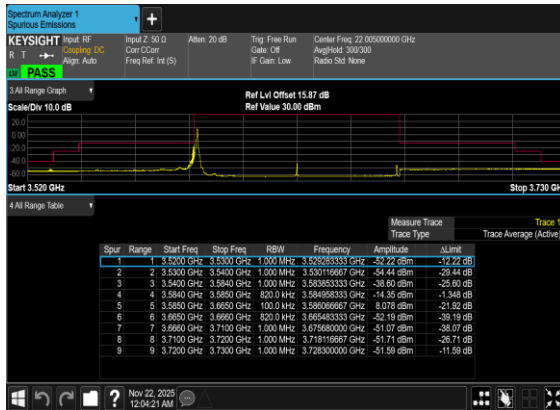
N77(80M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



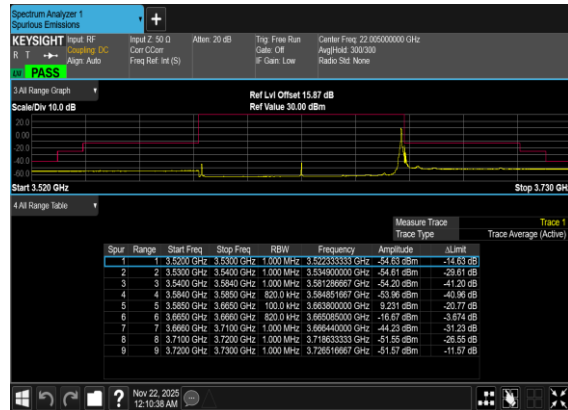
N77(80M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH_CHP_P
ASS



N77(80M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH

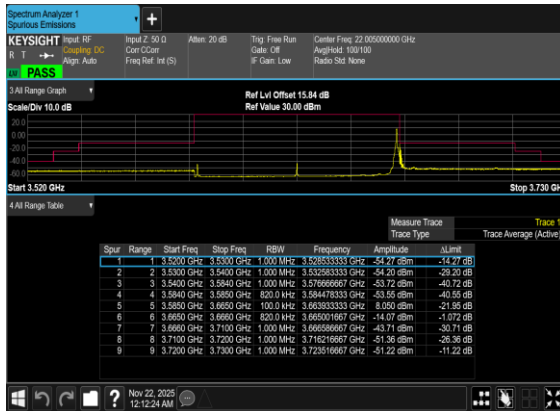


N77(80M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Mid_CH

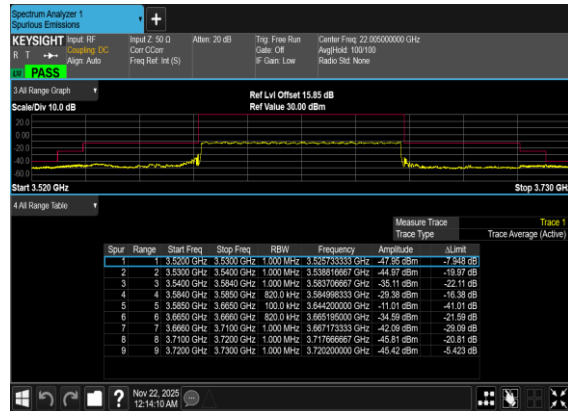




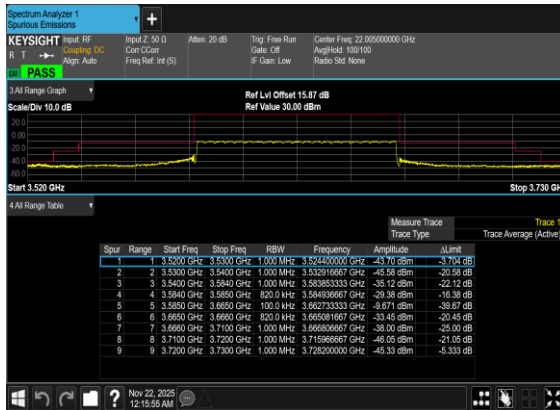
N77(80M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH



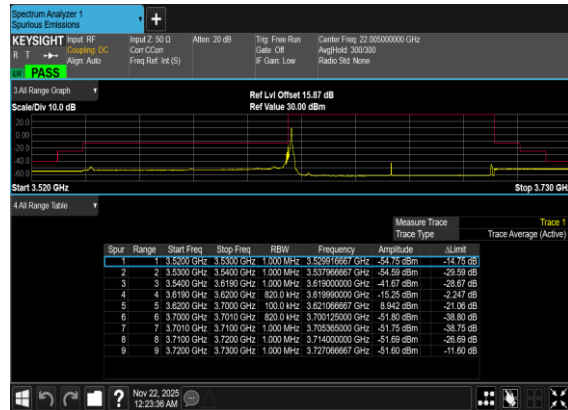
N77(80M)_DFT-s-
OFDM_BPSK_Outer_Full_Mid_CH



N77(80M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH

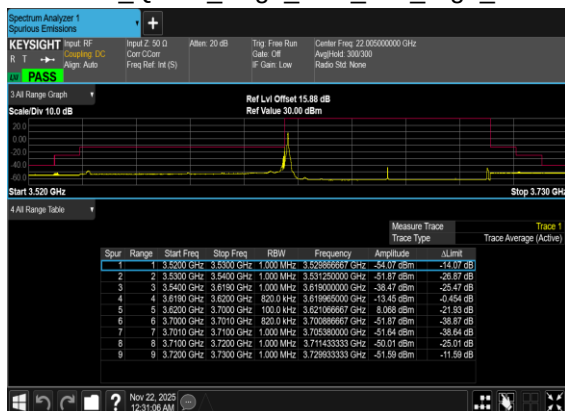


N77(80M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH

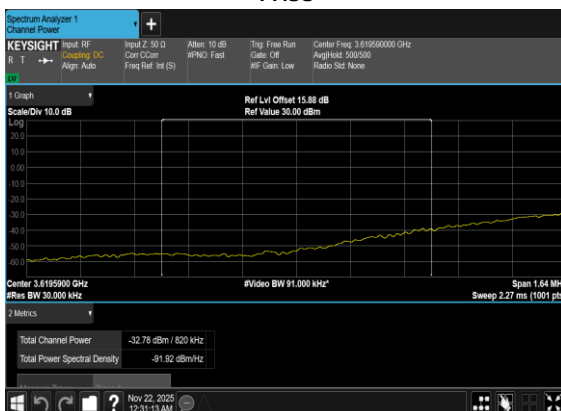




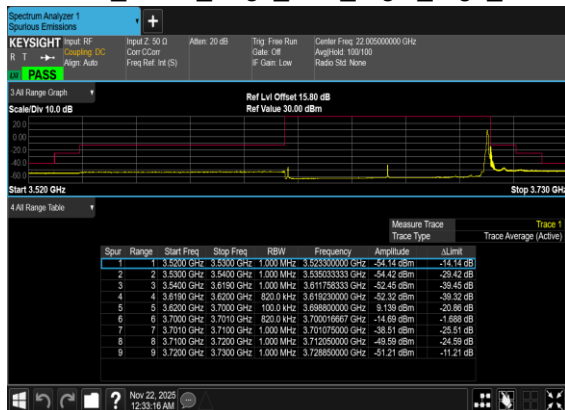
N77(80M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



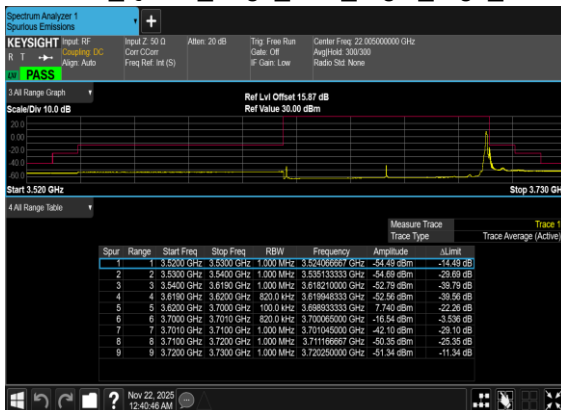
N77(80M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH_chP_ PASS



N77(80M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH

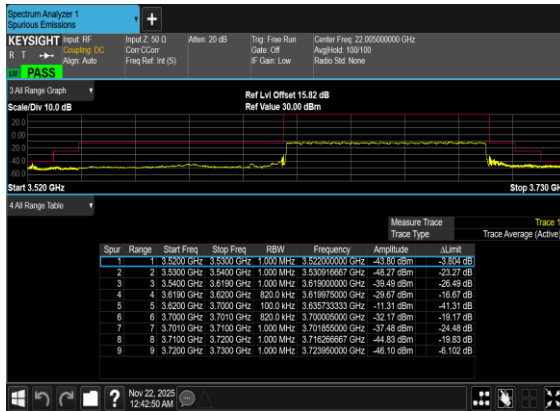


N77(80M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH

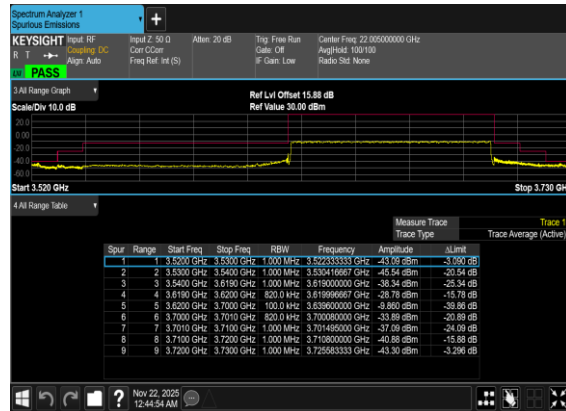




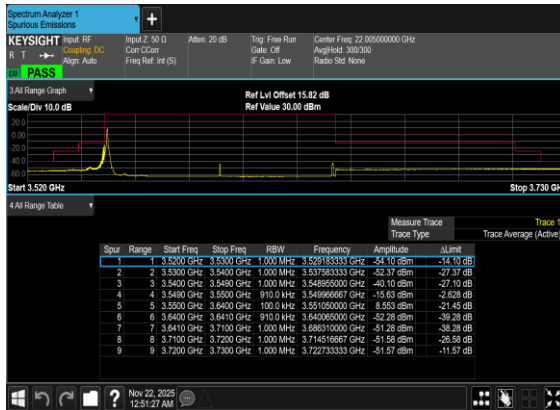
N77(80M)_DFT-s-
OFDM_BPSK_Outer_Full_High_CH



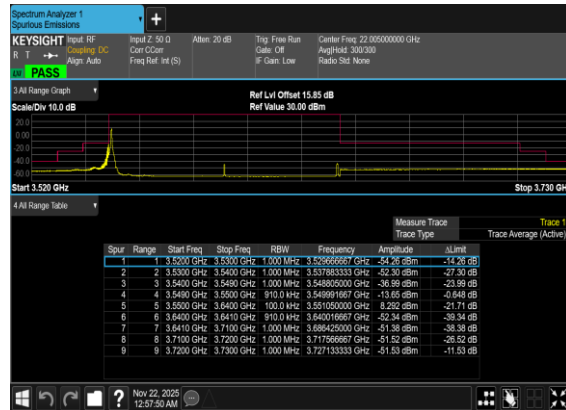
N77(80M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH



N77(90M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH

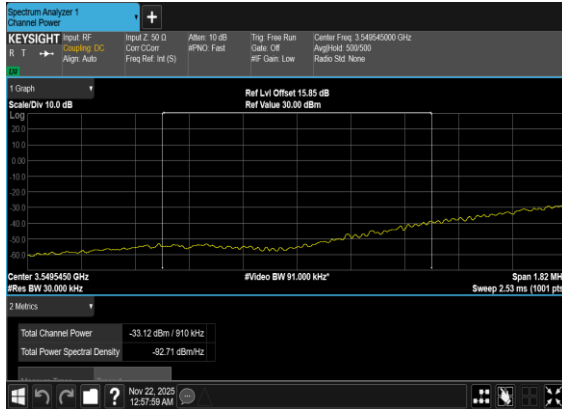


N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH

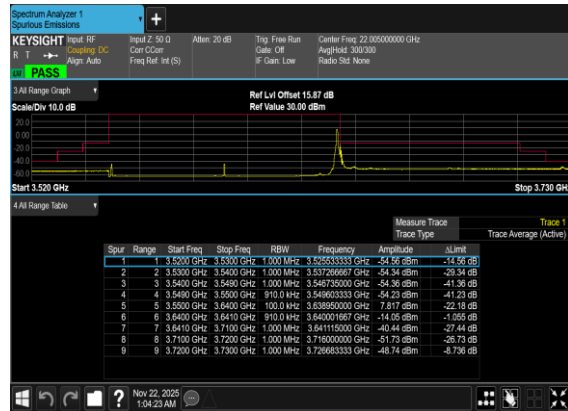




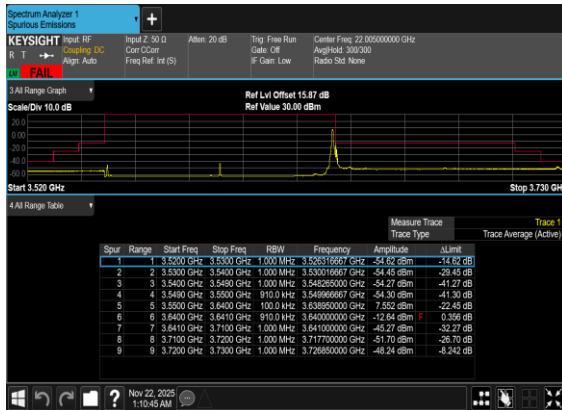
N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH_chp_ PASS



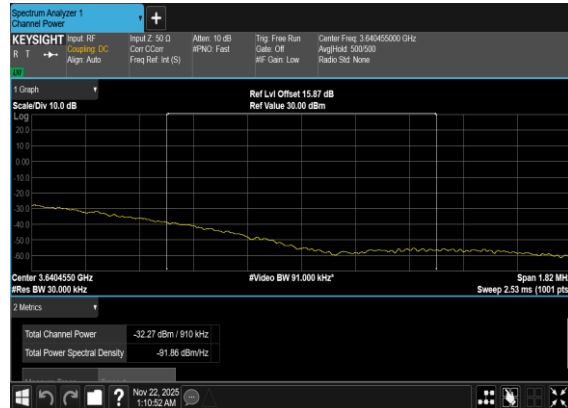
N77(90M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Low_CH



N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Low_CH

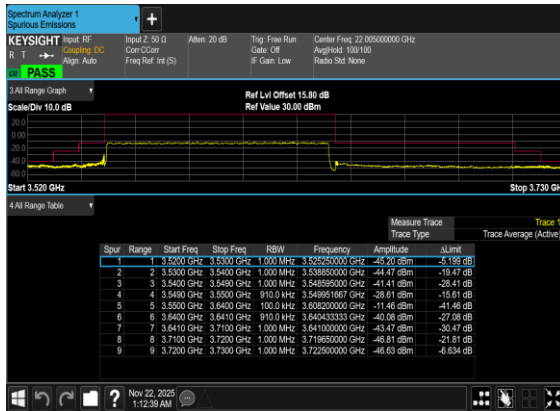


N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Low_CH_chp_ PASS

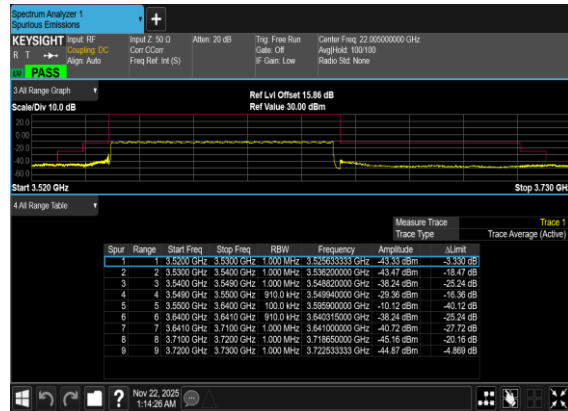




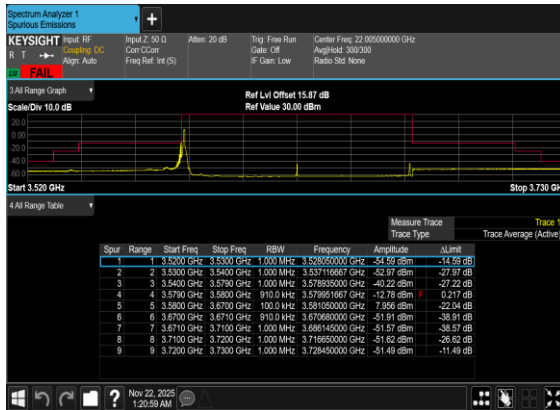
N77(90M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CH



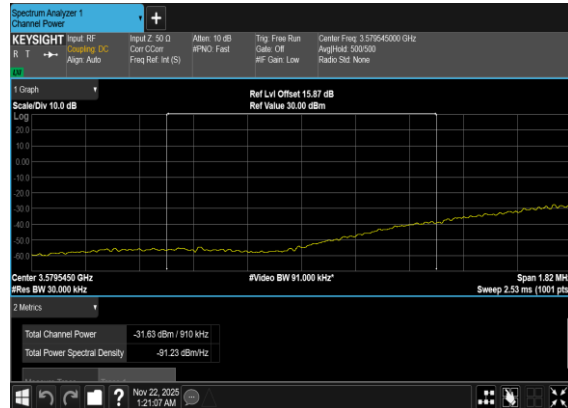
N77(90M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



N77(90M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH

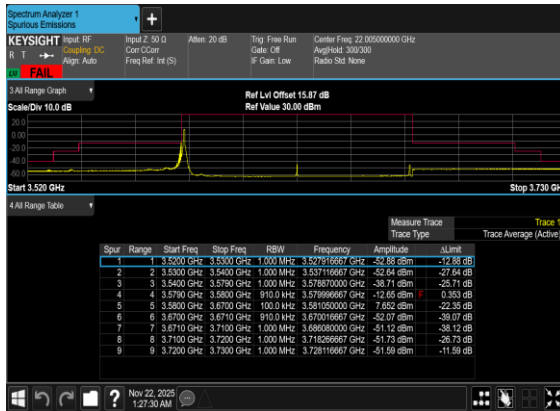


N77(90M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH_chp_P
ASS

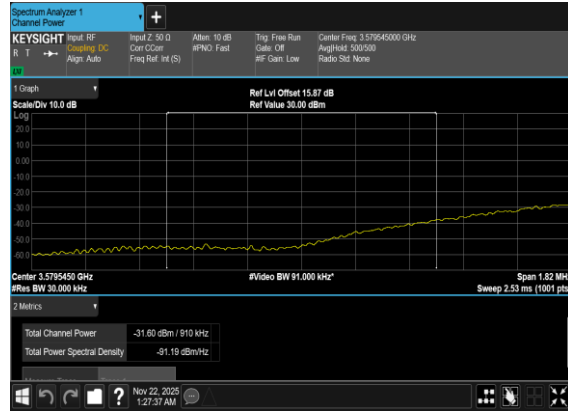




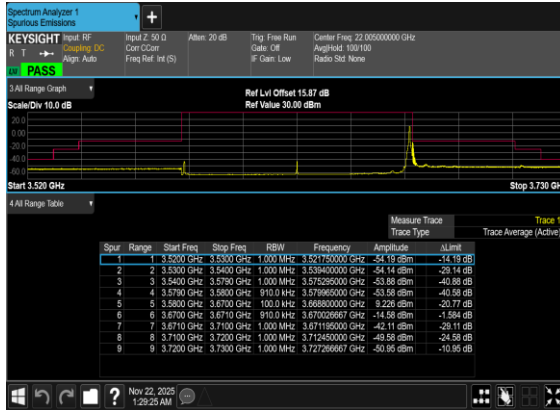
N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH



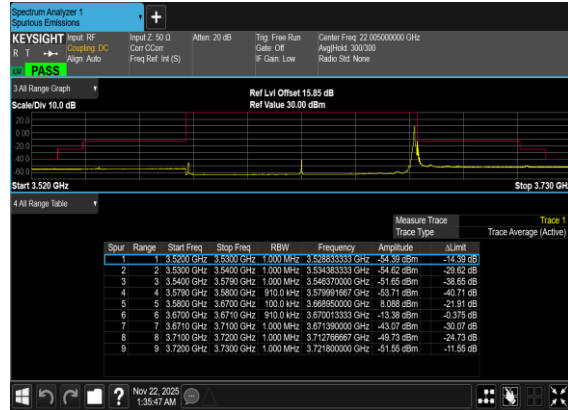
N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH_chp_P
ASS



N77(90M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Mid_CH

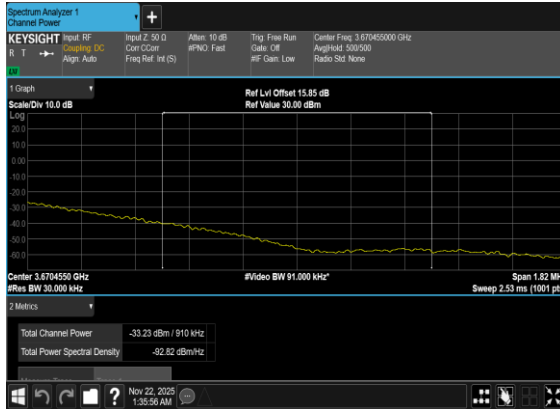


N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH

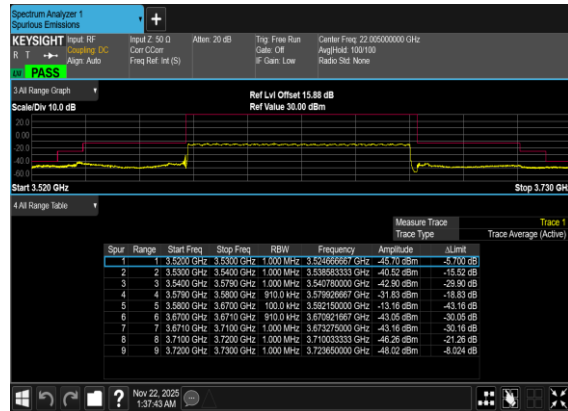




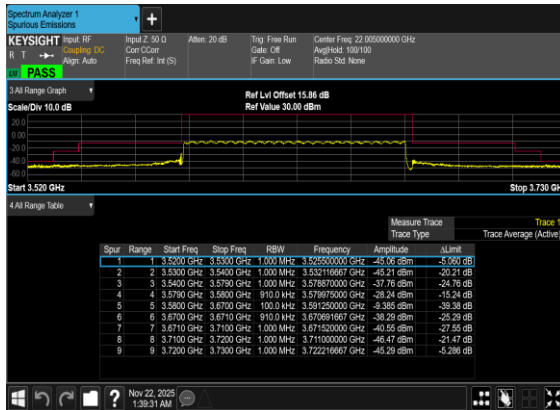
N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH_chp
_PASS



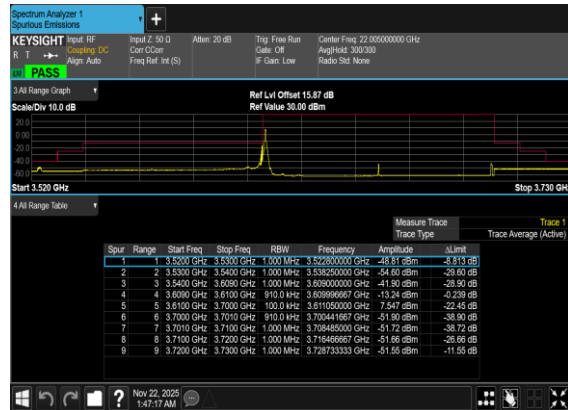
N77(90M)_DFT-s-
OFDM_BPSK_Outer_Full_Mid_CH



N77(90M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH

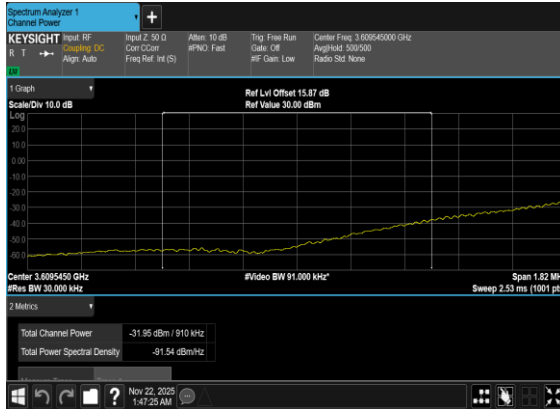


N77(90M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH

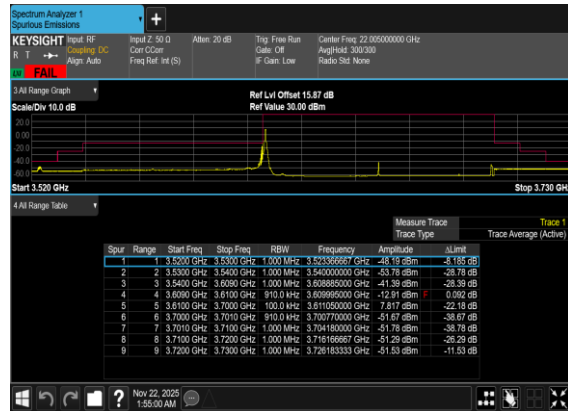




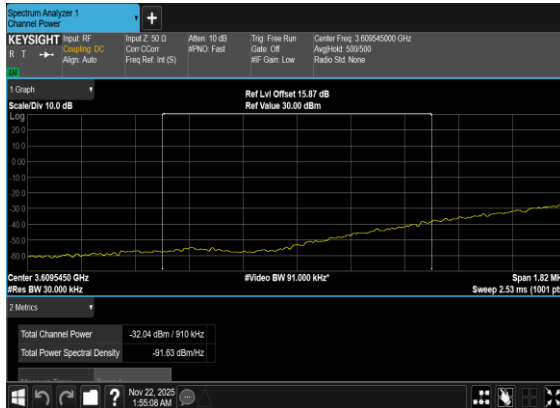
N77(90M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH_chp_
PASS



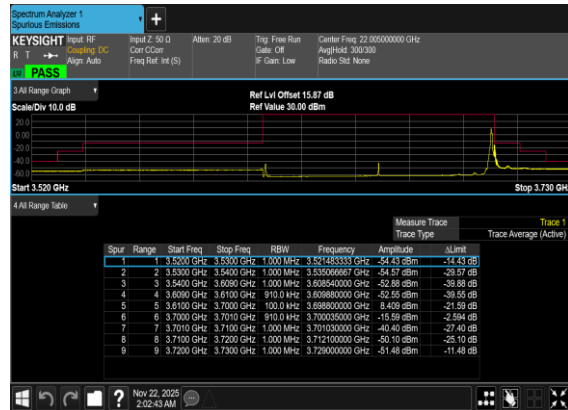
N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH_chp_
PASS

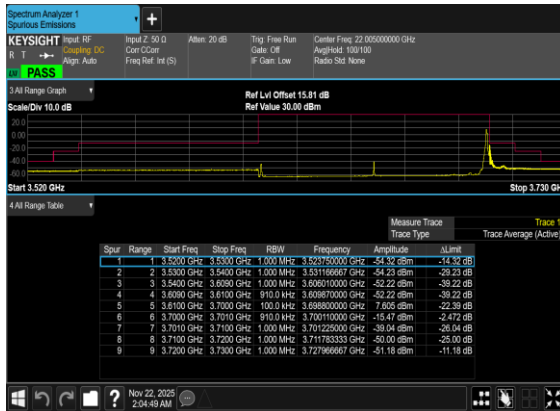


N77(90M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH

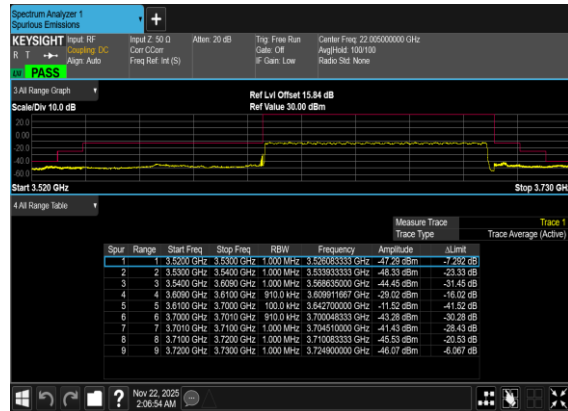




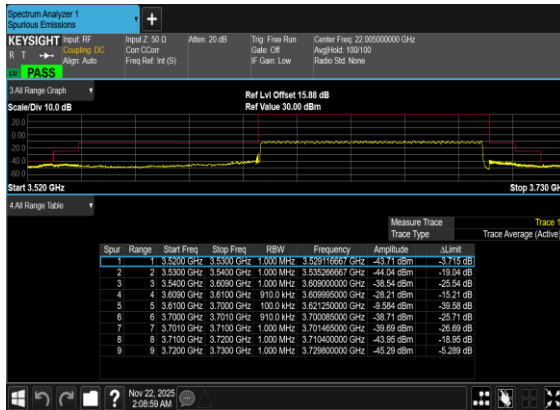
N77(90M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH



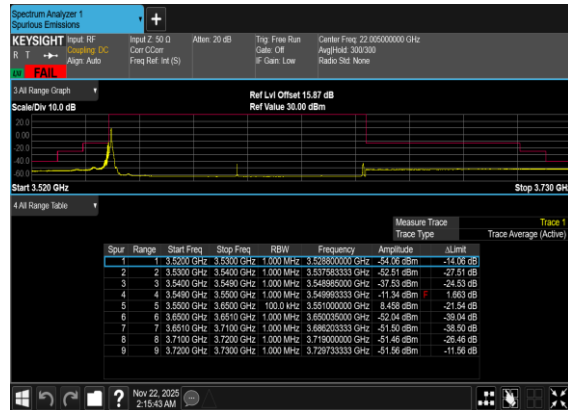
N77(90M)_DFT-s-
OFDM_BPSK_Outer_Full_High_CH



N77(90M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH

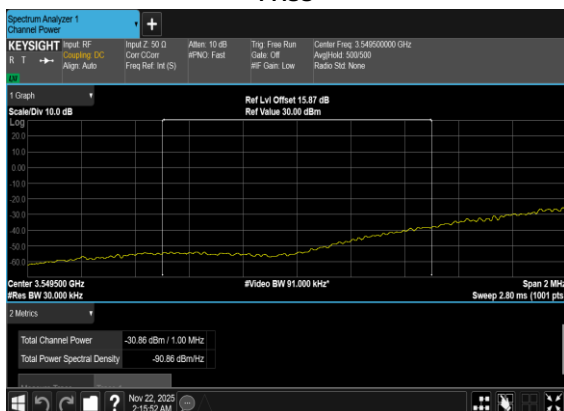


N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH

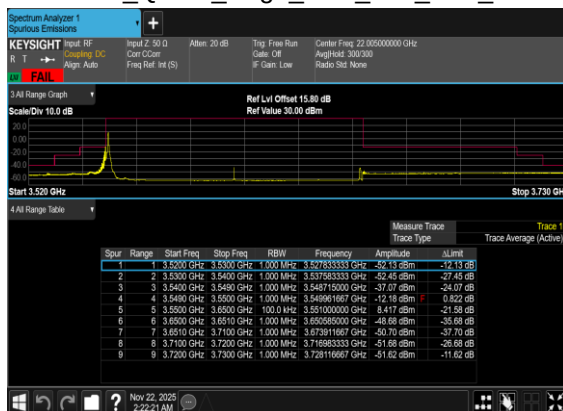




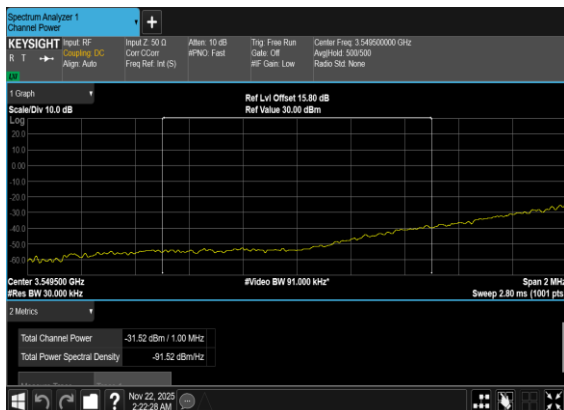
N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Low_CH_chp_
PASS



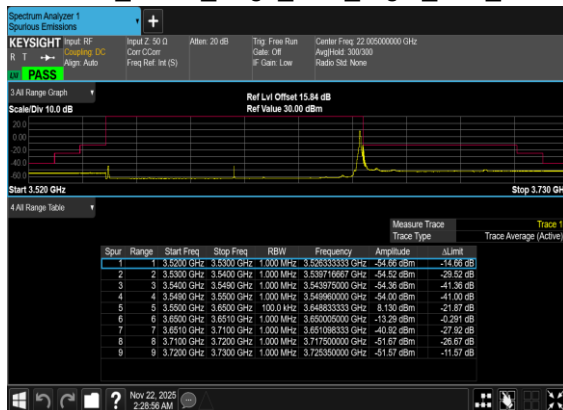
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH

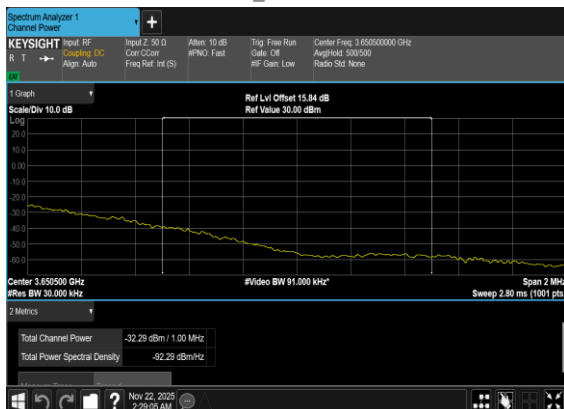
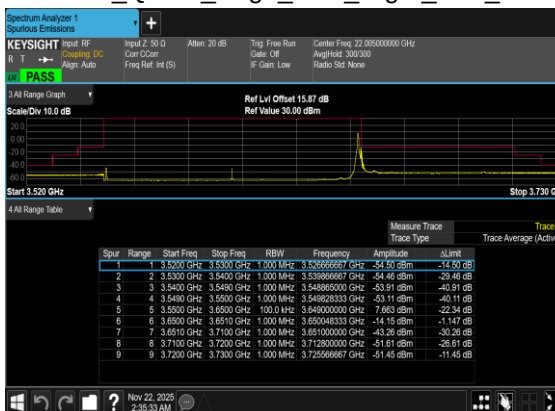
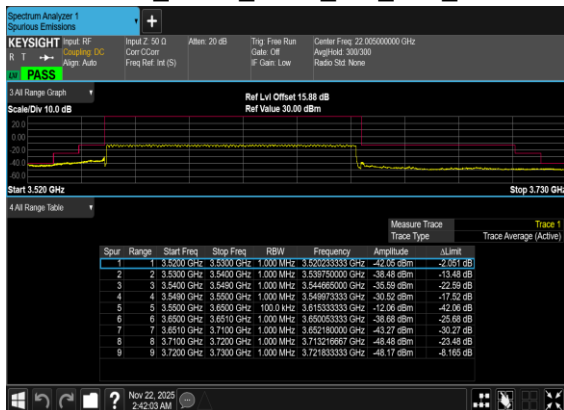
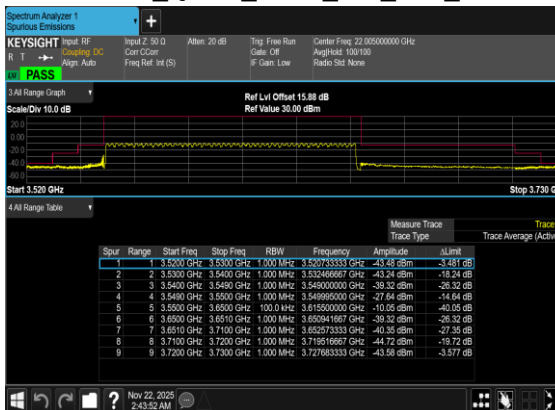


N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Low_CH_chp_
PASS



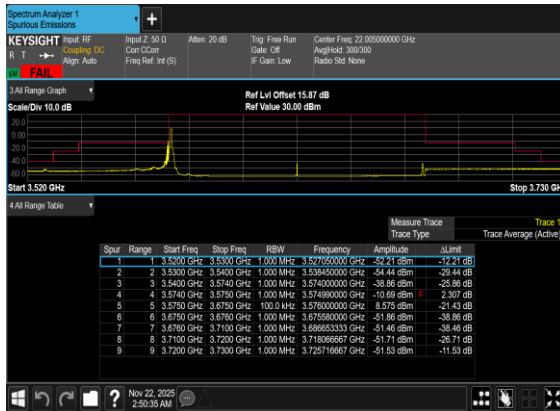
N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Low_CH



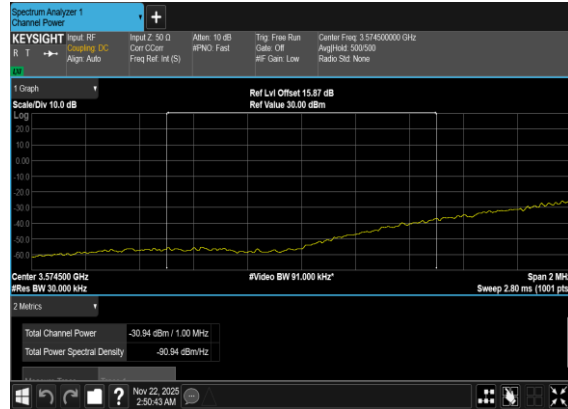
N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Low_CH_chp
_PASSN77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Low_CHN77(100M)_DFT-s-
OFDM_BPSK_Outer_Full_Low_CHN77(100M)_DFT-s-
OFDM_QPSK_Outer_Full_Low_CH



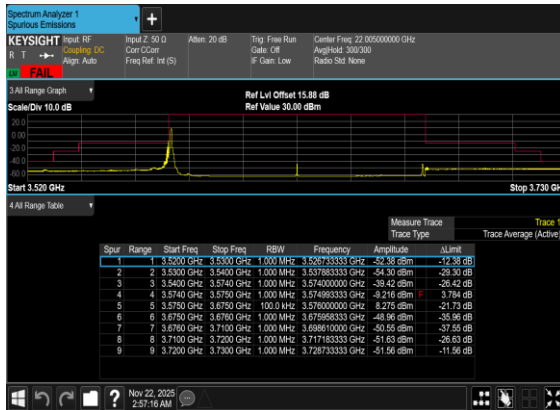
N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH



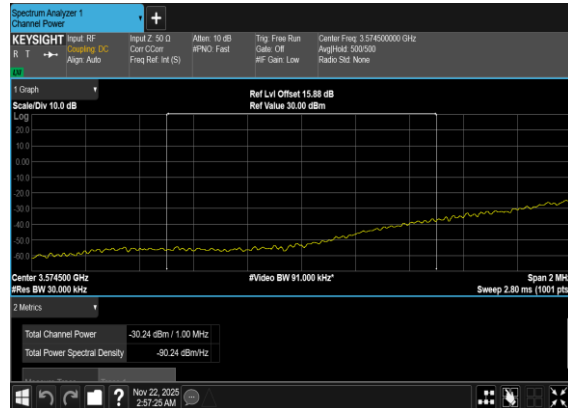
N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_Mid_CH_CHP_P
ASS



N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH

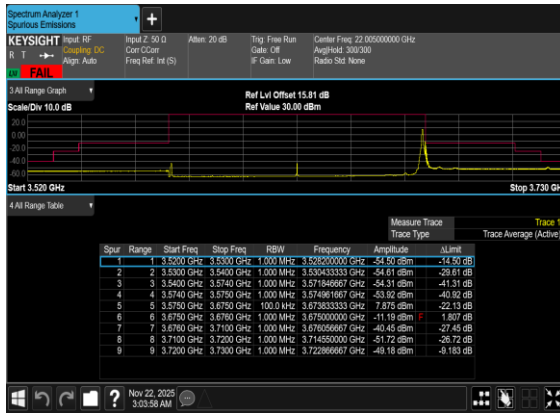


N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_Mid_CH_CHP_P
ASS

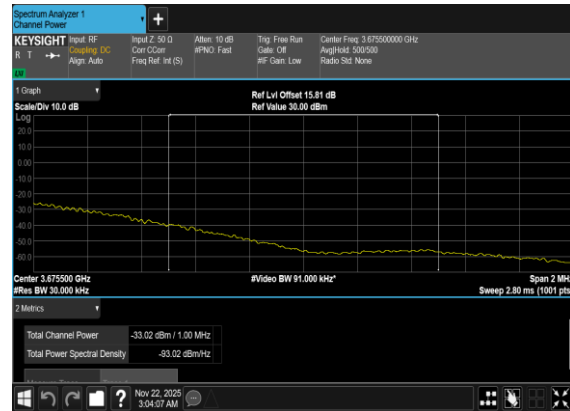




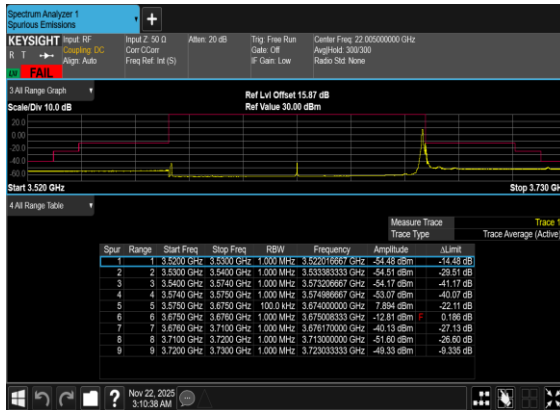
N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Mid_CH



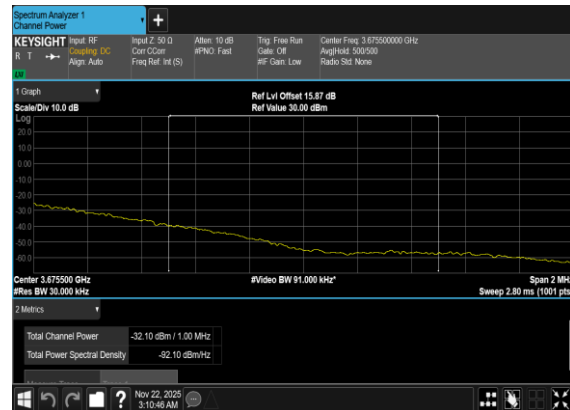
N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_Mid_CH_chp_ PASS



N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH

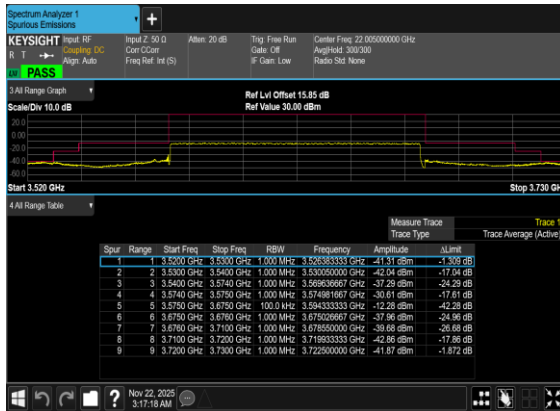


N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_Mid_CH_chp_ PASS

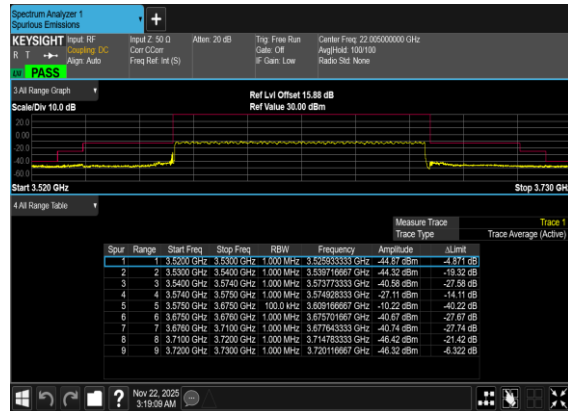




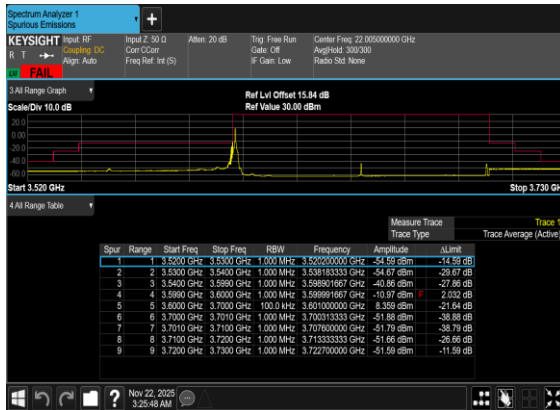
N77(100M)_DFT-s-
OFDM_BPSK_Outer_Full_Mid_CH



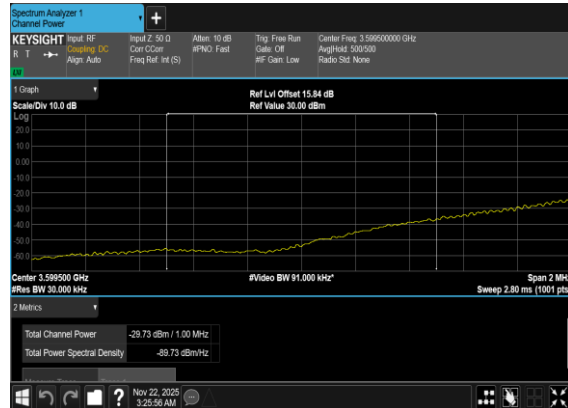
N77(100M)_DFT-s-
OFDM_QPSK_Outer_Full_Mid_CH



N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH

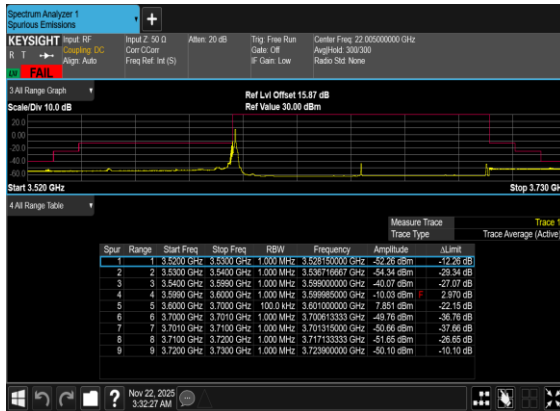


N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Left_High_CH_CHP_ PASS

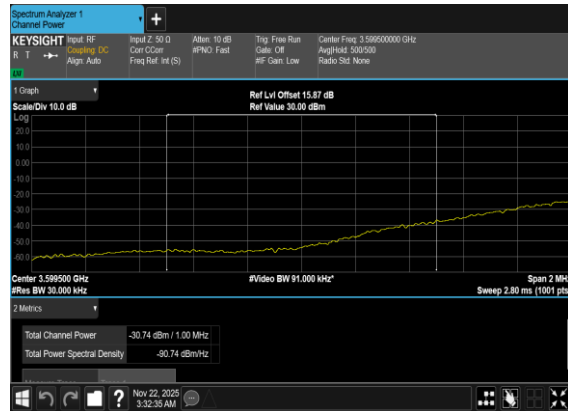




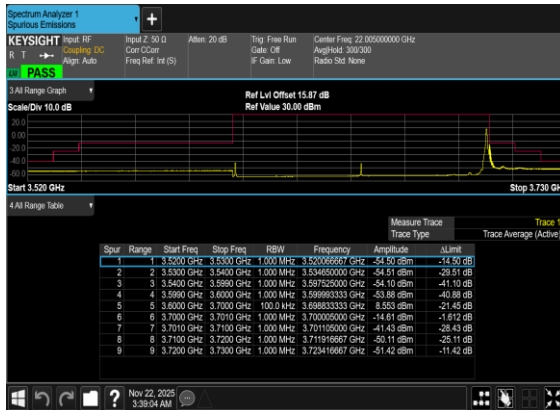
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH



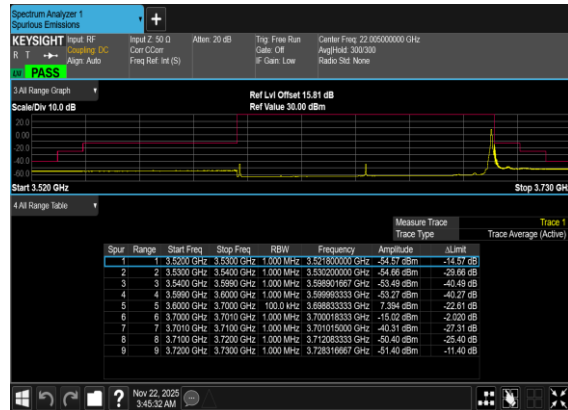
N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Left_High_CH_chp_ PASS



N77(100M)_DFT-s-
OFDM_BPSK_Edge_1RB_Right_High_CH

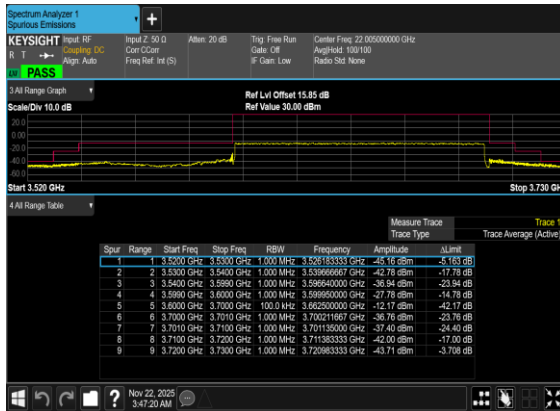


N77(100M)_DFT-s-
OFDM_QPSK_Edge_1RB_Right_High_CH

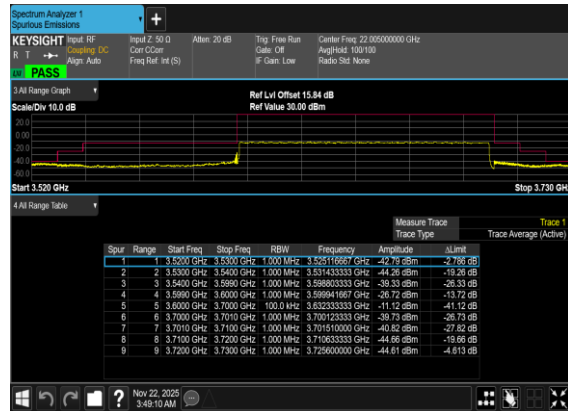




N77(100M)_DFT-s-
OFDM_BPSK_Outer_Full_High_CH



N77(100M)_DFT-s-
OFDM_QPSK_Outer_Full_High_CH





FR1 N77(Other PA)_Ant9

LTE Band: 5, LTE BW: 10M, LTE ARFCN: Mid

Software Version: 23.06.1602

Frequency Stability

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Deviation (Hz)	Verdict	Environment
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	11.1	PASS	NV
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	12.4	PASS	LV
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	16.9	PASS	HV
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	16.9	PASS	-30℃
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	17	PASS	-20℃
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	19.5	PASS	-10℃
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	13.4	PASS	0℃
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	12.6	PASS	10℃
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	14.4	PASS	20℃
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	14.8	PASS	30℃
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	16.9	PASS	40℃
77	30	20	637334	3560.01	DFT-s-OFDM QPSK	50@0	16.6	PASS	50℃
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	13.6	PASS	NV
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	19.3	PASS	LV
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	14.1	PASS	HV
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	10.5	PASS	-30℃
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	17.2	PASS	-20℃
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	12.1	PASS	-10℃
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	17.8	PASS	0℃



77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	16	PASS	10°C
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	17.7	PASS	20°C
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	13.1	PASS	30°C
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	10.5	PASS	40°C
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	17.7	PASS	50°C
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	16.1	PASS	NV
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	14.8	PASS	LV
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	11.5	PASS	HV
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	14.5	PASS	-30°C
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	18.8	PASS	-20°C
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	13.5	PASS	-10°C
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	16.6	PASS	0°C
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	14.8	PASS	10°C
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	12.6	PASS	20°C
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	19.1	PASS	30°C
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	14.5	PASS	40°C
77	30	20	646000	3690	DFT-s-OFDM QPSK	50@0	14.3	PASS	50°C

 $|\text{MAX}(\Delta f)| = 19.5\text{Hz}$

Frequency Stability	Frequency (MHz)	Limit Line	Result
$f_L - \text{MAX}(\Delta f) $	3550.998913	$\geq 3550\text{ MHz}$	PASS
$f_H + \text{MAX}(\Delta f) $	3699.112911	$\leq 3700\text{ MHz}$	

Peak to Average Ratio

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result (dB)	Limit (dB)	Verdict
77	30	20	641666	3624.99	DFT-s-OFDM PI/2 BPSK	50@0	4.15	13	PASS
77	30	20	641666	3624.99	DFT-s-OFDM QPSK	50@0	4.74	13	PASS

B5_N77(20M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



B5_N77(20M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



**Occupied Bandwidth**

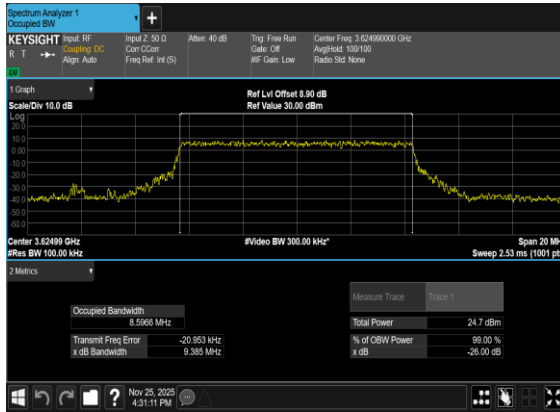
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	OBW (MHz)	26dB BW (MHz)
77	30	10	641666	3624.99	CP-OFDM QPSK	24@0	8.5966	9.385
77	30	10	641666	3624.99	CP-OFDM 16 QAM	24@0	8.5595	9.546
77	30	10	641666	3624.99	CP-OFDM 64 QAM	24@0	8.5852	9.701
77	30	10	641666	3624.99	CP-OFDM 256 QAM	24@0	8.5791	9.561
77	30	15	641666	3624.99	CP-OFDM QPSK	38@0	13.597	14.73
77	30	15	641666	3624.99	CP-OFDM 16 QAM	38@0	13.543	14.51
77	30	15	641666	3624.99	CP-OFDM 64 QAM	38@0	13.598	14.52
77	30	15	641666	3624.99	CP-OFDM 256 QAM	38@0	13.564	14.94
77	30	20	641666	3624.99	CP-OFDM QPSK	51@0	18.217	19.89
77	30	20	641666	3624.99	CP-OFDM 16 QAM	51@0	18.187	19.22
77	30	20	641666	3624.99	CP-OFDM 64 QAM	51@0	18.173	19.27
77	30	20	641666	3624.99	CP-OFDM 256 QAM	51@0	18.239	19.45
77	30	25	641666	3624.99	CP-OFDM QPSK	65@0	23.236	24.21
77	30	25	641666	3624.99	CP-OFDM 16 QAM	65@0	23.213	24.48
77	30	25	641666	3624.99	CP-OFDM 64 QAM	65@0	23.246	24.56
77	30	25	641666	3624.99	CP-OFDM 256 QAM	65@0	23.282	25.11
77	30	30	641666	3624.99	CP-OFDM QPSK	78@0	27.893	28.91
77	30	30	641666	3624.99	CP-OFDM 16 QAM	78@0	27.859	29.06
77	30	30	641666	3624.99	CP-OFDM 64 QAM	78@0	27.836	28.84
77	30	30	641666	3624.99	CP-OFDM 256 QAM	78@0	27.822	29.32
77	30	40	641666	3624.99	CP-OFDM QPSK	106@0	37.843	39.69
77	30	40	641666	3624.99	CP-OFDM 16 QAM	106@0	37.879	39.52
77	30	40	641666	3624.99	CP-OFDM 64 QAM	106@0	37.793	39.64



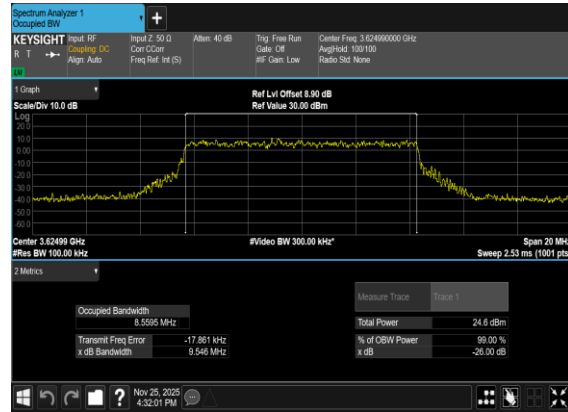
77	30	40	641666	3624.99	CP-OFDM 256 QAM	106@0	37.839	39.59
77	30	50	641666	3624.99	CP-OFDM QPSK	133@0	47.539	49.1
77	30	50	641666	3624.99	CP-OFDM 16 QAM	133@0	47.595	49.32
77	30	50	641666	3624.99	CP-OFDM 64 QAM	133@0	47.538	49.41
77	30	50	641666	3624.99	CP-OFDM 256 QAM	133@0	47.358	49.03
77	30	60	641666	3624.99	CP-OFDM QPSK	162@0	57.923	60.03
77	30	60	641666	3624.99	CP-OFDM 16 QAM	162@0	57.848	59.69
77	30	60	641666	3624.99	CP-OFDM 64 QAM	162@0	57.838	59.61
77	30	60	641666	3624.99	CP-OFDM 256 QAM	162@0	57.895	59.63
77	30	70	641666	3624.99	CP-OFDM QPSK	189@0	67.579	69.87
77	30	70	641666	3624.99	CP-OFDM 16 QAM	189@0	67.566	69.82
77	30	70	641666	3624.99	CP-OFDM 64 QAM	189@0	67.396	69.74
77	30	70	641666	3624.99	CP-OFDM 256 QAM	189@0	67.573	70.05
77	30	80	641666	3624.99	CP-OFDM QPSK	217@0	77.44	79.97
77	30	80	641666	3624.99	CP-OFDM 16 QAM	217@0	77.555	80.29
77	30	80	641666	3624.99	CP-OFDM 64 QAM	217@0	77.488	80.22
77	30	80	641666	3624.99	CP-OFDM 256 QAM	217@0	77.574	80.1
77	30	90	641666	3624.99	CP-OFDM QPSK	245@0	87.53	90.3
77	30	90	641666	3624.99	CP-OFDM 16 QAM	245@0	87.475	90.32
77	30	90	641666	3624.99	CP-OFDM 64 QAM	245@0	87.555	90.42
77	30	90	641666	3624.99	CP-OFDM 256 QAM	245@0	87.614	90.3
77	30	100	641666	3624.99	CP-OFDM QPSK	273@0	97.499	100.6
77	30	100	641666	3624.99	CP-OFDM 16 QAM	273@0	97.501	100.7
77	30	100	641666	3624.99	CP-OFDM 64 QAM	273@0	97.589	100.6
77	30	100	641666	3624.99	CP-OFDM 256 QAM	273@0	97.628	100.6



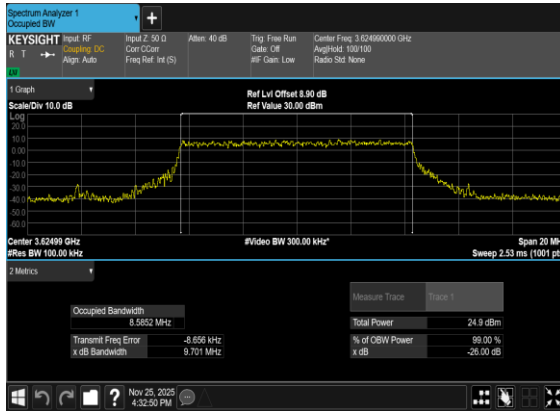
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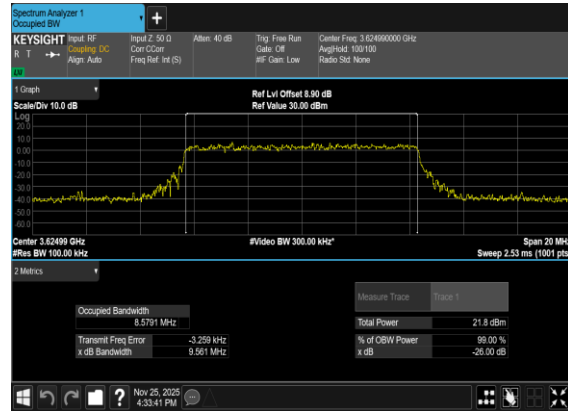
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QAM_Outer_Full_Mid_CH



B5_N77(10M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH

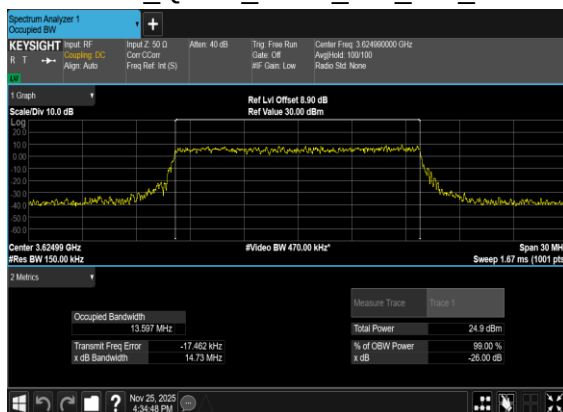


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QAM_Outer_Full_Mid_CH

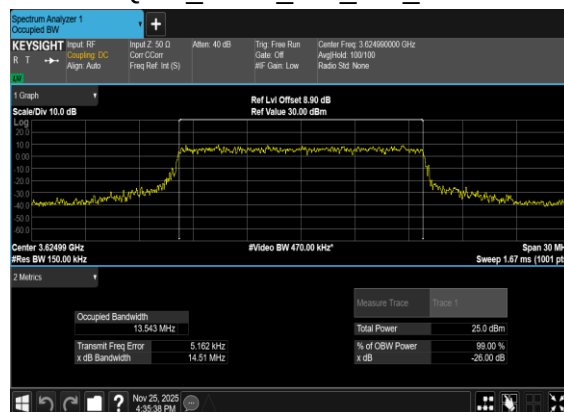




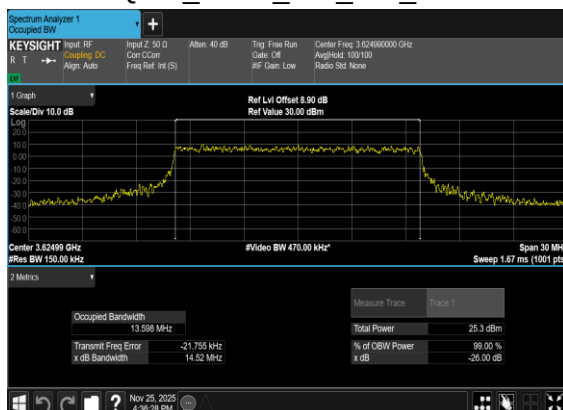
B5_N77(15M)_CP-
OFDM_QPSK_Outer_Full_Mid_CH



B5_N77(15M)_CP-OFDM_16
QAM_Outer_Full_Mid_CH



B5_N77(15M)_CP-OFDM_64
QAM_Outer_Full_Mid_CH



B5_N77(15M)_CP-OFDM_256
QAM_Outer_Full_Mid_CH

