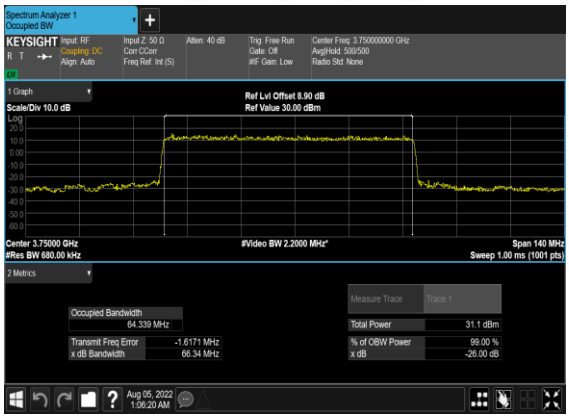
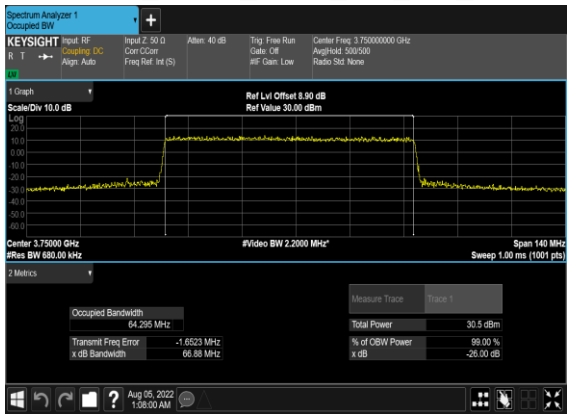
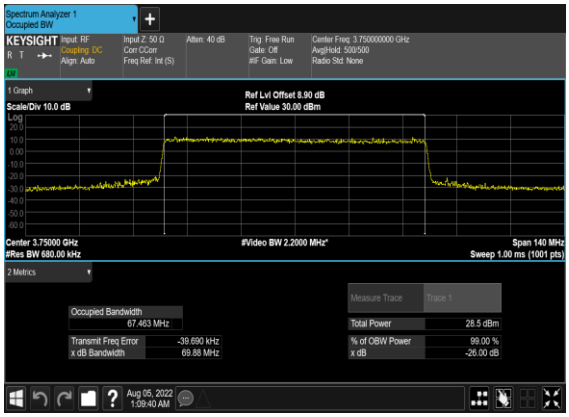
N78(70M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



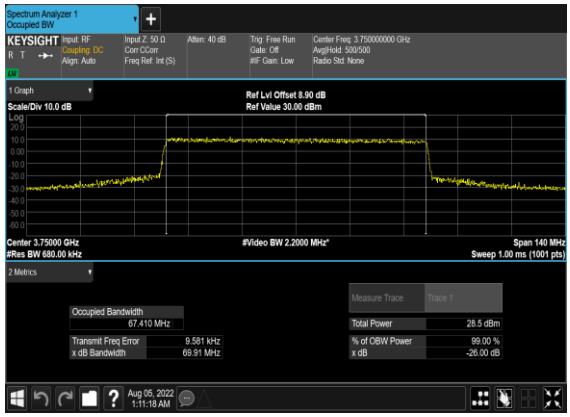
N78(70M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



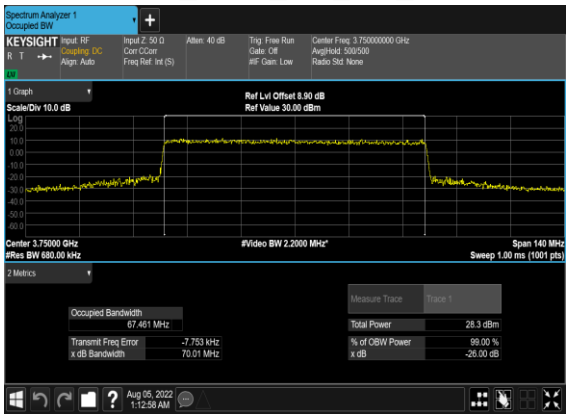
N78(70M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



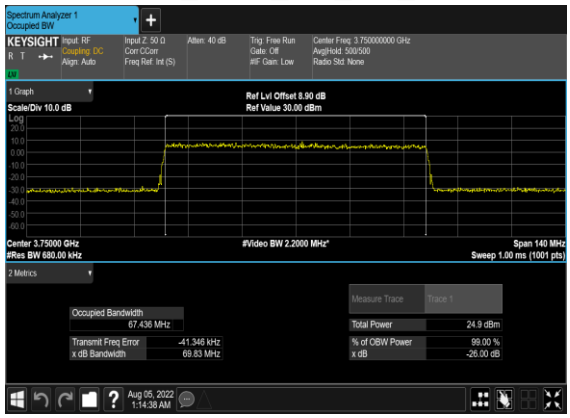
N78(70M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



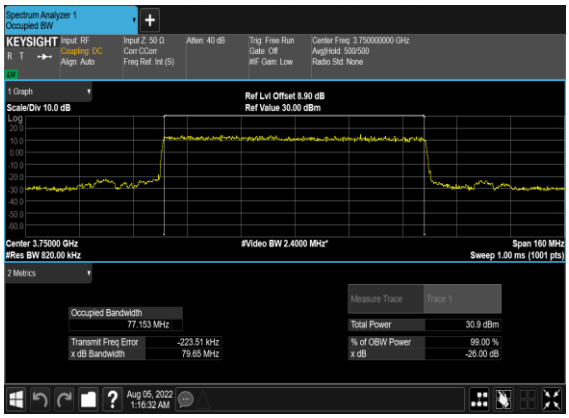
N78(70M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



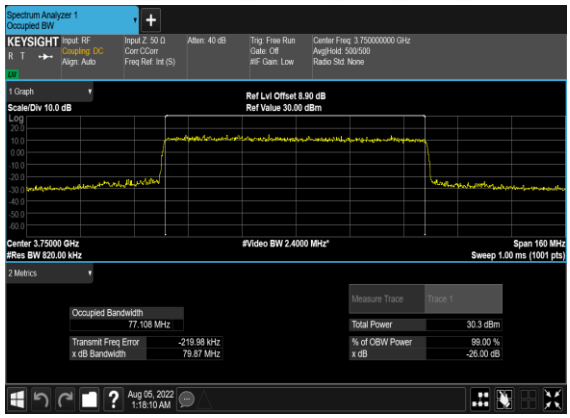
N78(70M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH



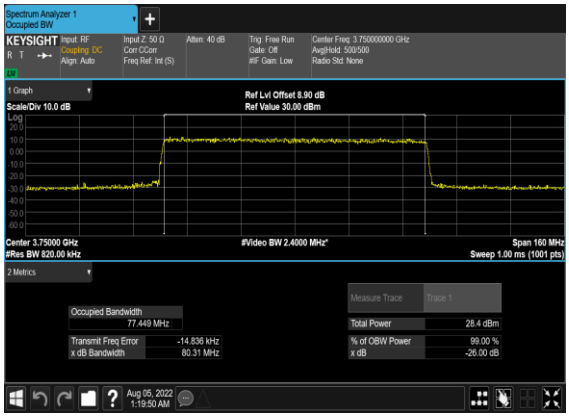
N78(80M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



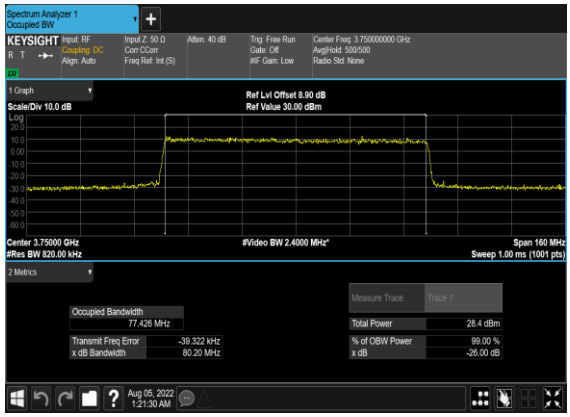
N78(80M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



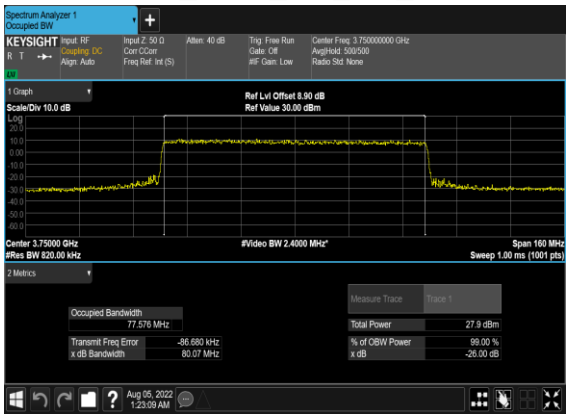
N78(80M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



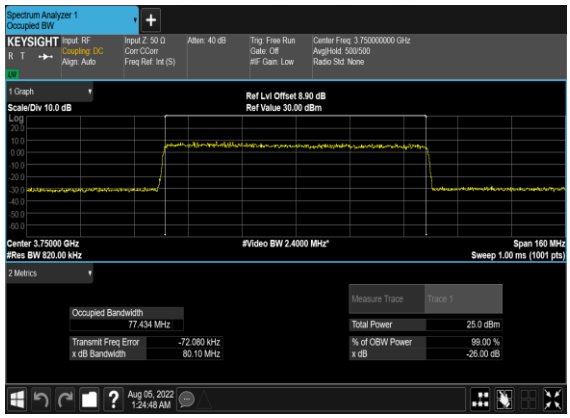
N78(80M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N78(80M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

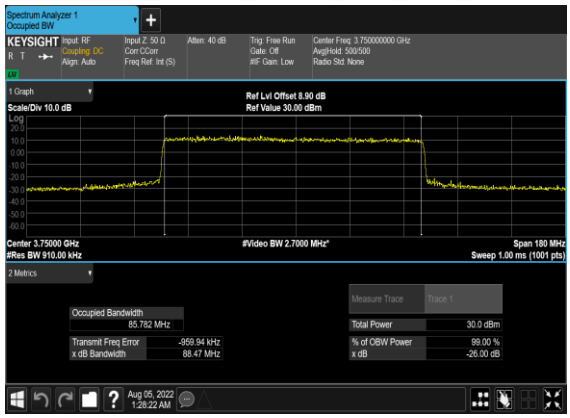


N78(80M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

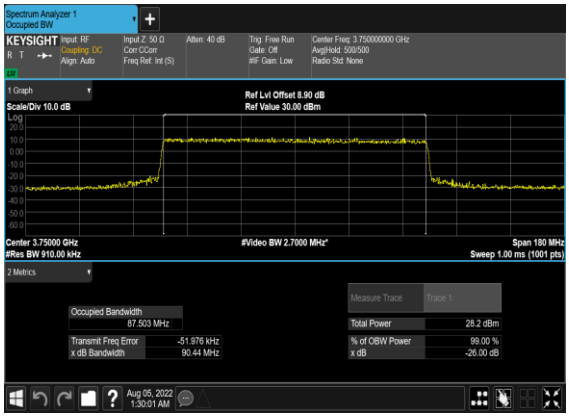


N78(90M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH

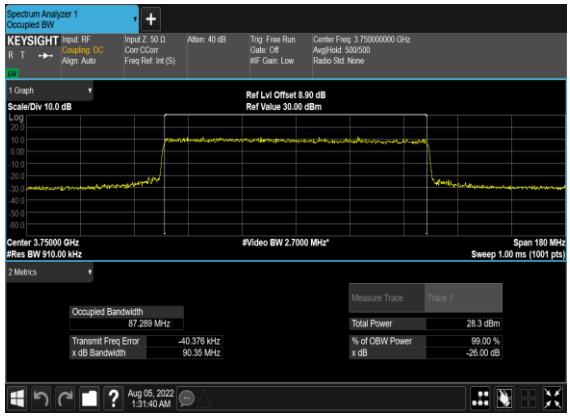
N78(90M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



N78(90M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



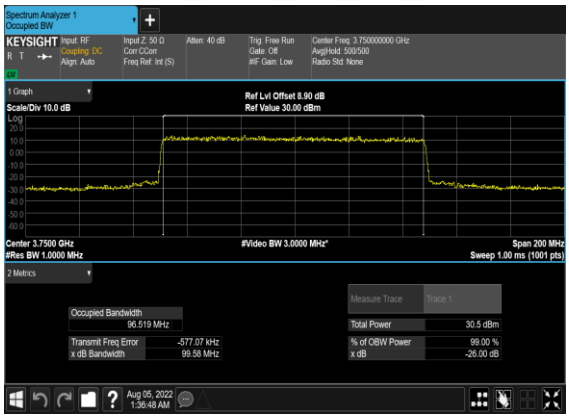
N78(90M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



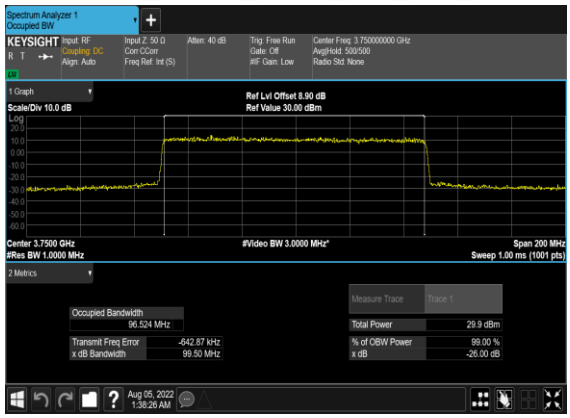
N78(90M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH

N78(90M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

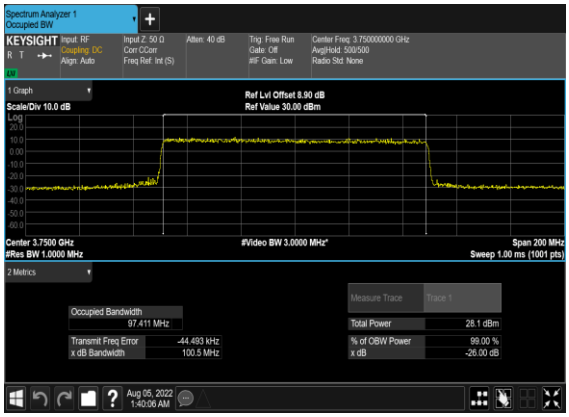
N78(100M)_DFT-s-OFDM_PI_2-BPSK_Outer_Full_Mid_CH



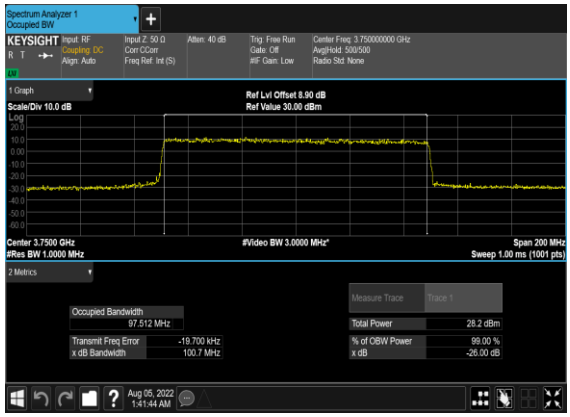
N78(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH



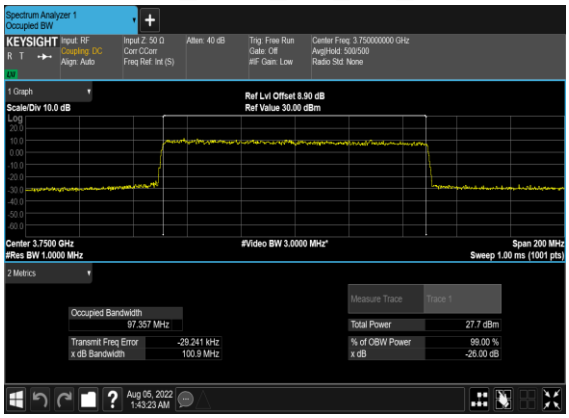
N78(100M)_CP-OFDM_QPSK_Outer_Full_Mid_CH



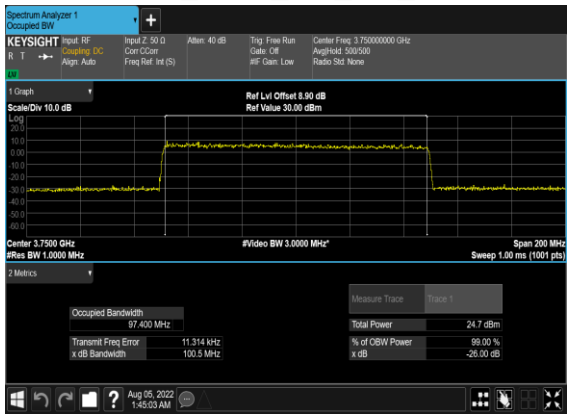
N78(100M)_CP-OFDM_16 QAM_Outer_Full_Mid_CH



N78(100M)_CP-OFDM_64 QAM_Outer_Full_Mid_CH



N78(100M)_CP-OFDM_256 QAM_Outer_Full_Mid_CH

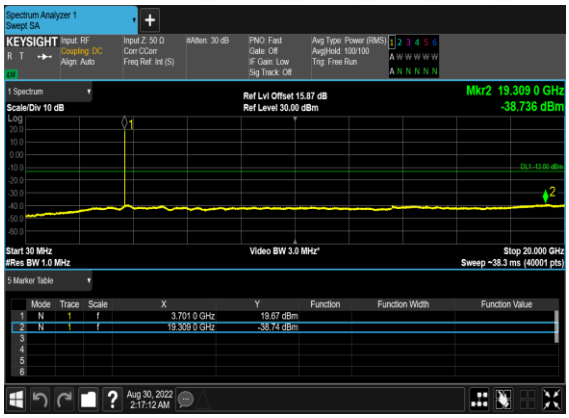


Conducted Spurious Emissions

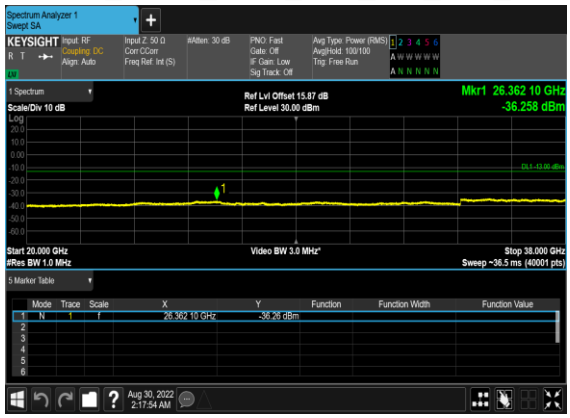
NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
78	30	10	647000	3705.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	30	10	647000	3705.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	10	647000	3705.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	10	647000	3705.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	30	10	647000	3705.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	10	647000	3705.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	10	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	30	10	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	10	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	10	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	30	10	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	10	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	10	653000	3795.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	30	10	653000	3795.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	10	653000	3795.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	10	653000	3795.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	30	10	653000	3795.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	10	653000	3795.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	50	648334	3725.01	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	30	50	648334	3725.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	50	648334	3725.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@0	see graph	**---**

78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	50	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	30	50	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	50	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	50	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	30	50	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	50	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	50	651666	3774.99	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	30	50	651666	3774.99	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	50	651666	3774.99	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**---**
78	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**---**
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**

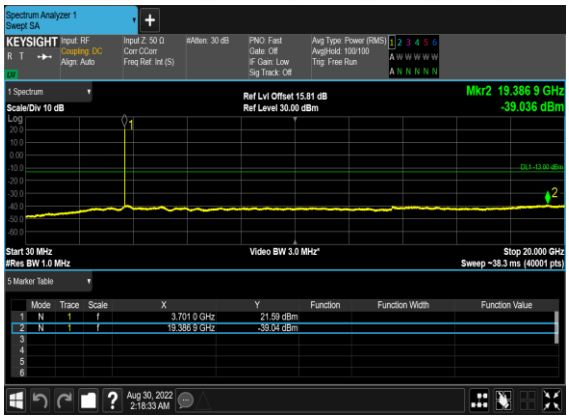
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



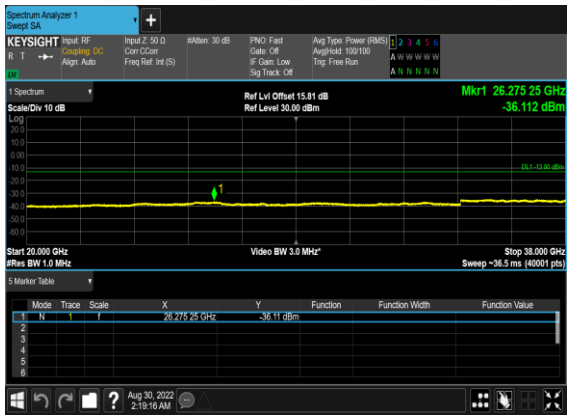
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



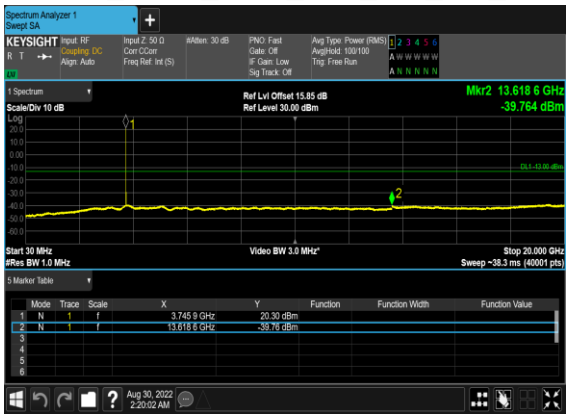
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



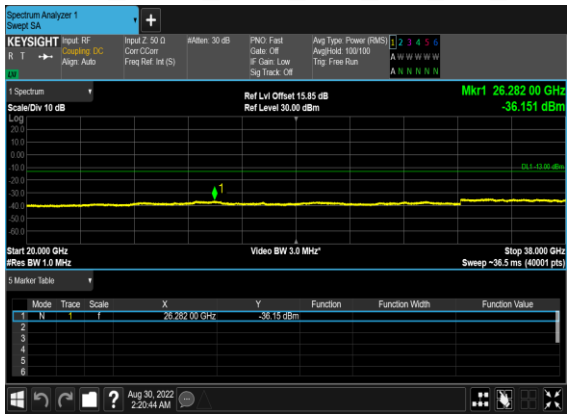
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



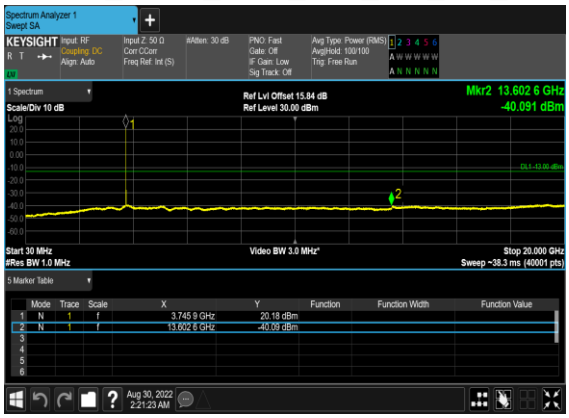
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



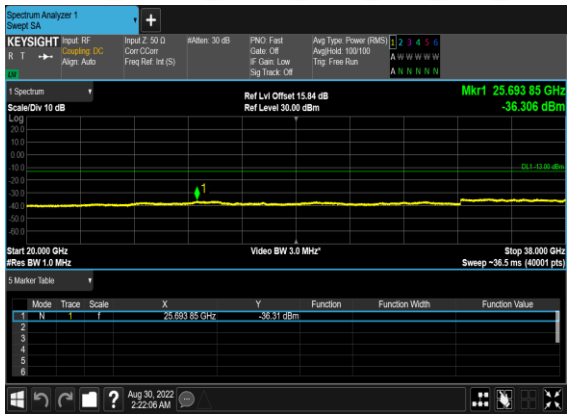
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



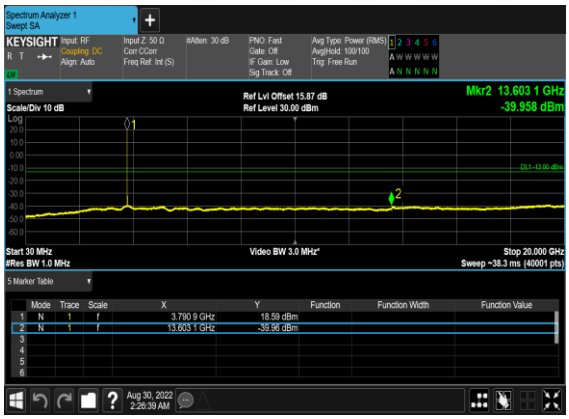
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



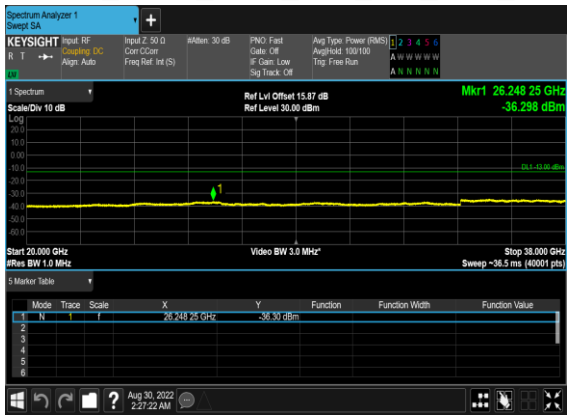
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



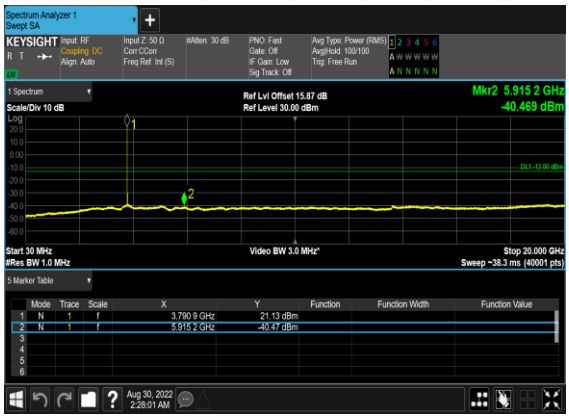
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



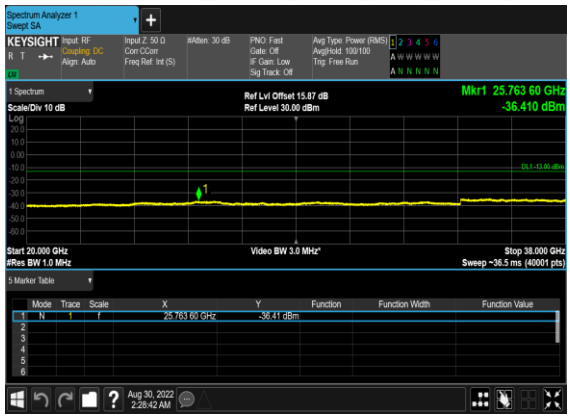
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



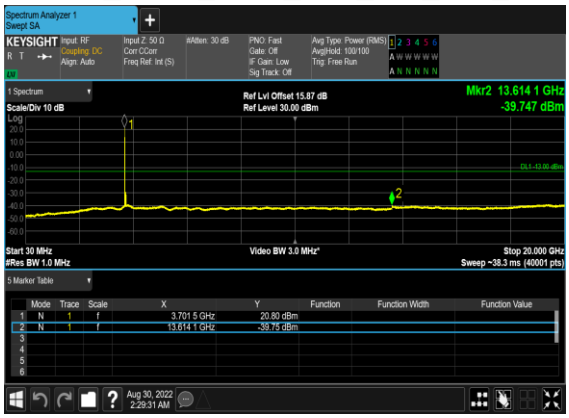
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



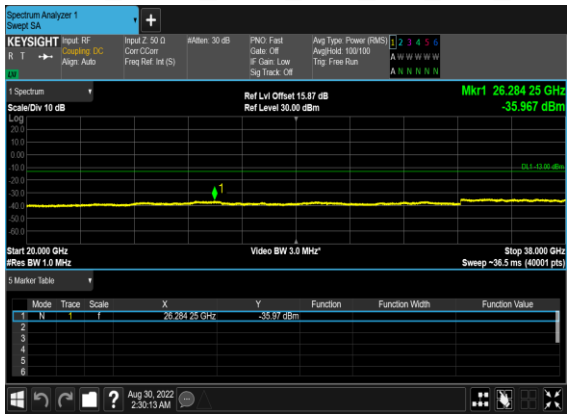
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



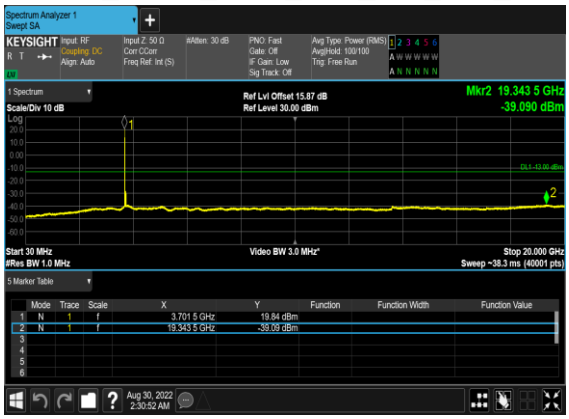
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



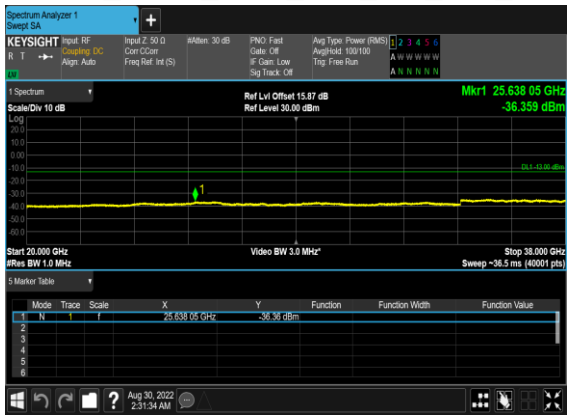
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



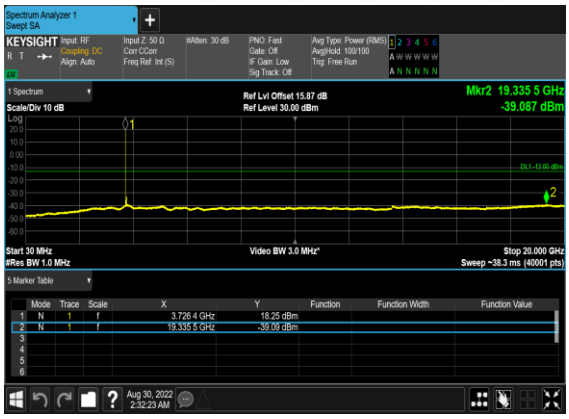
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



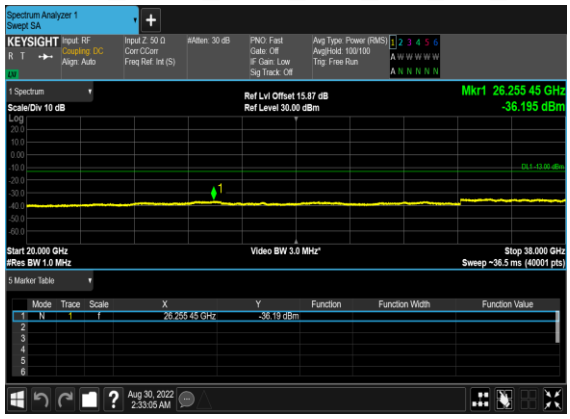
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



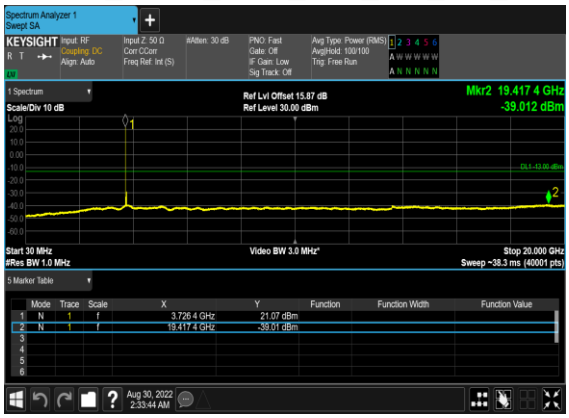
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



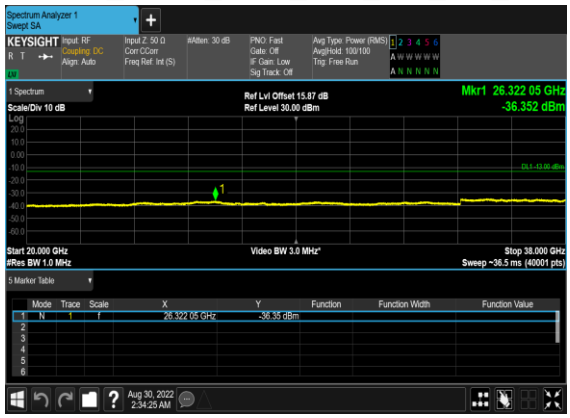
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



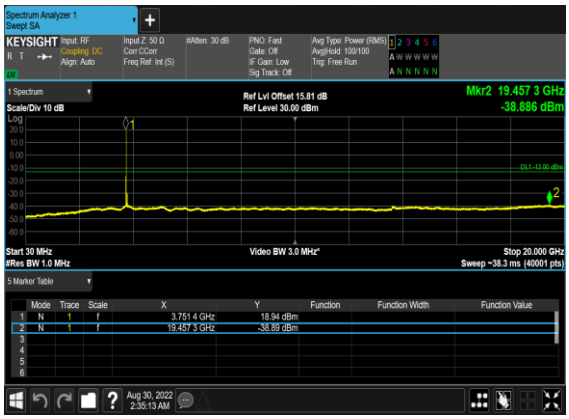
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



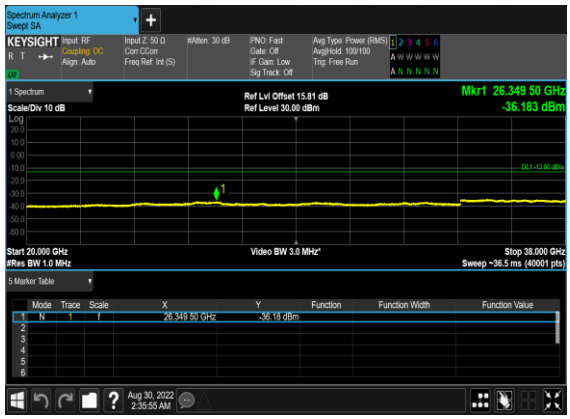
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_High_CH



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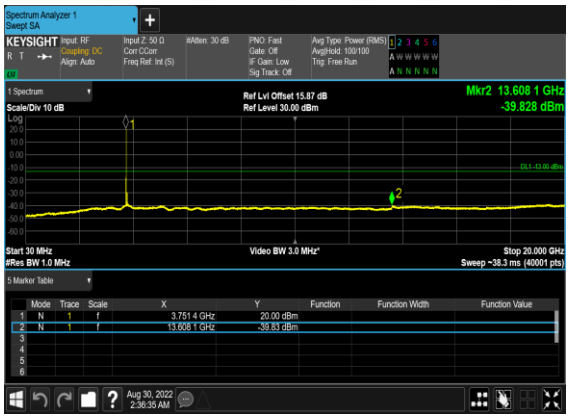
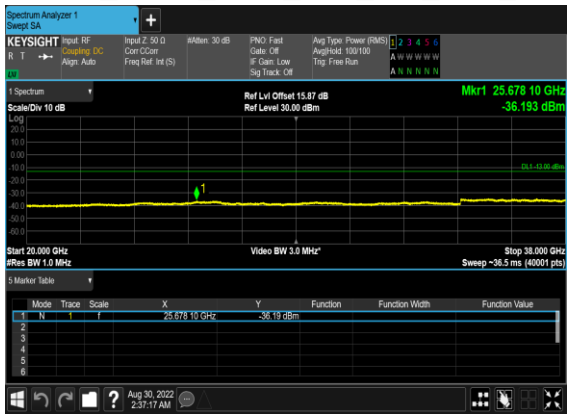
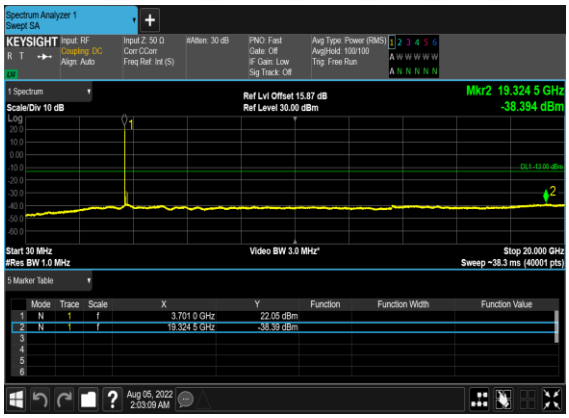


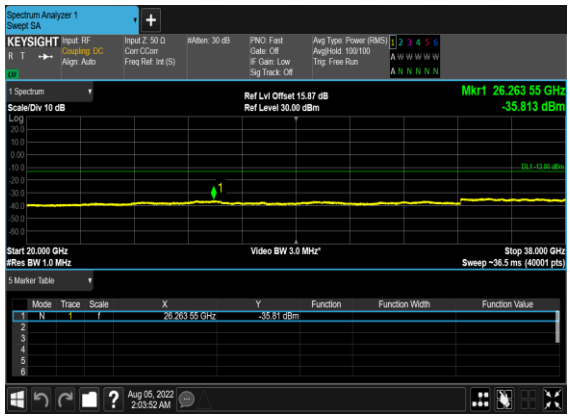
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_High_CH



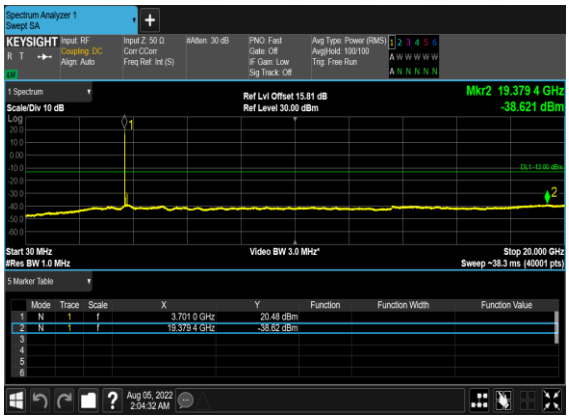
N78(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



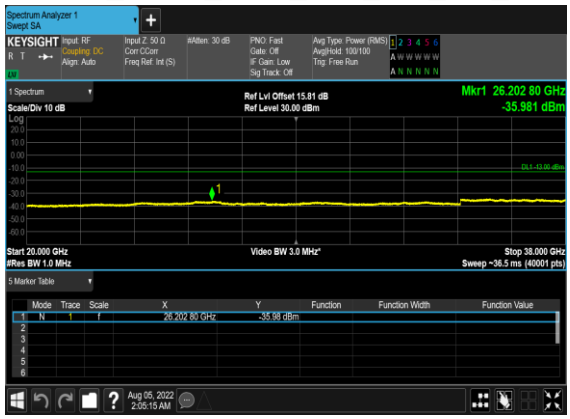
N78(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



N78(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



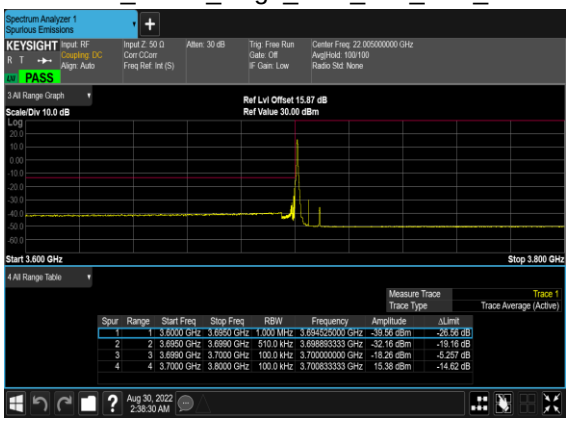
N78(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



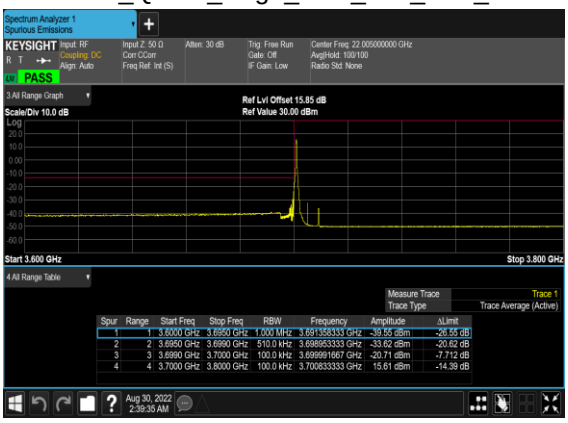
Conducted Band Edge

NR Band	SCS (kHz)	Bandwidth (MHz)	Arfcn	Freq (MHz)	Modulation	RB	Result	Verdict
78	30	10	647000	3705.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	10	647000	3705.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	10	647000	3705.0	DFT-s-OFDM BPSK	24@0	see graph	**PASS**
78	30	10	647000	3705.0	DFT-s-OFDM QPSK	24@0	see graph	**PASS**
78	30	10	653000	3795.0	DFT-s-OFDM BPSK	1@23	see graph	**PASS**
78	30	10	653000	3795.0	DFT-s-OFDM QPSK	1@23	see graph	**PASS**
78	30	10	653000	3795.0	DFT-s-OFDM BPSK	24@0	see graph	**PASS**
78	30	10	653000	3795.0	DFT-s-OFDM QPSK	24@0	see graph	**PASS**
78	30	50	648334	3725.01	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	50	648334	3725.01	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
78	30	50	648334	3725.01	DFT-s-OFDM QPSK	128@0	see graph	**PASS**
78	30	50	651666	3774.99	DFT-s-OFDM BPSK	1@132	see graph	**PASS**
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	1@132	see graph	**PASS**
78	30	50	651666	3774.99	DFT-s-OFDM BPSK	128@0	see graph	**PASS**
78	30	50	651666	3774.99	DFT-s-OFDM QPSK	128@0	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@0	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@0	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM BPSK	1@272	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	1@272	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM BPSK	270@0	see graph	**PASS**
78	30	100	650000	3750.0	DFT-s-OFDM QPSK	270@0	see graph	**PASS**

N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH

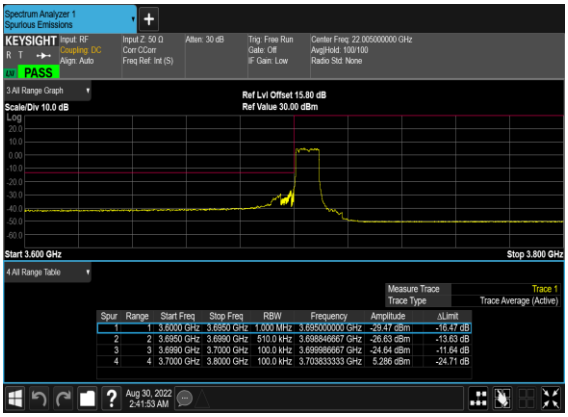


N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH

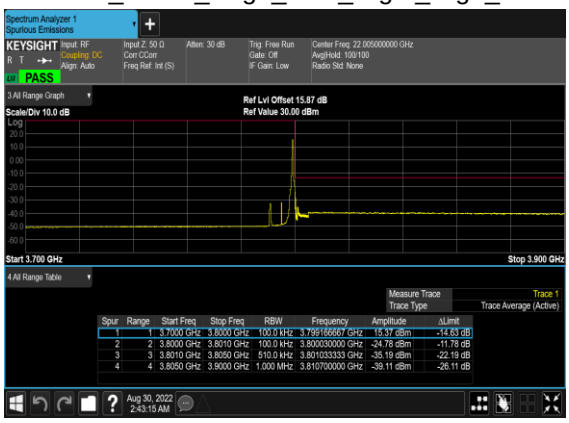


N78(10M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH

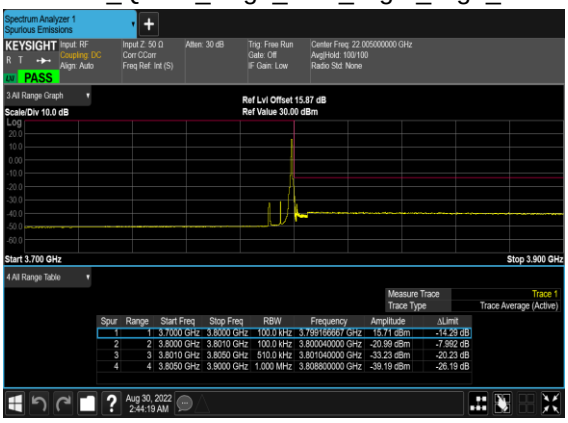
N78(10M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



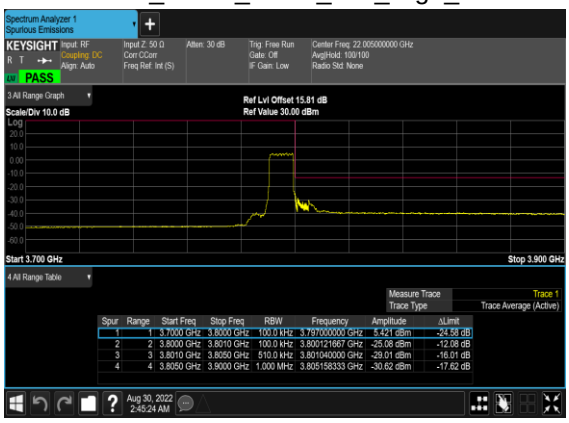
N78(10M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH



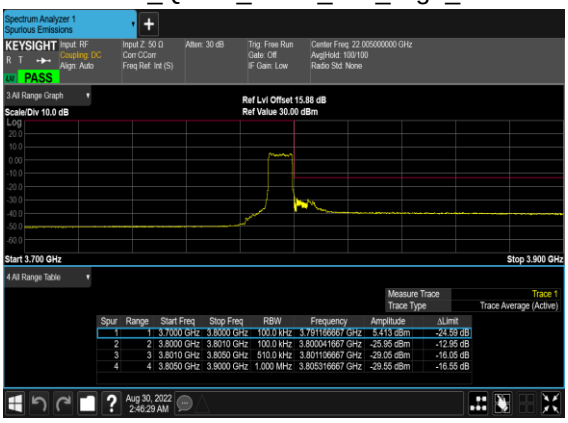
N78(10M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH



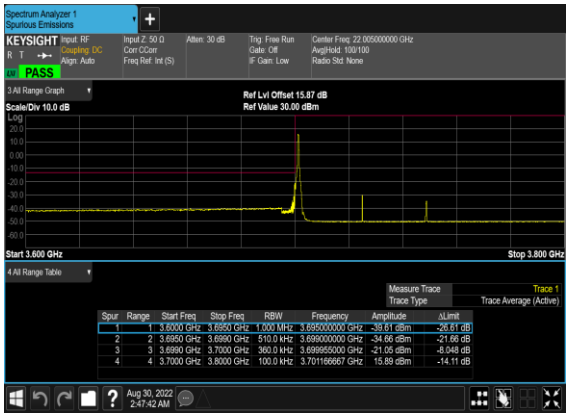
N78(10M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH



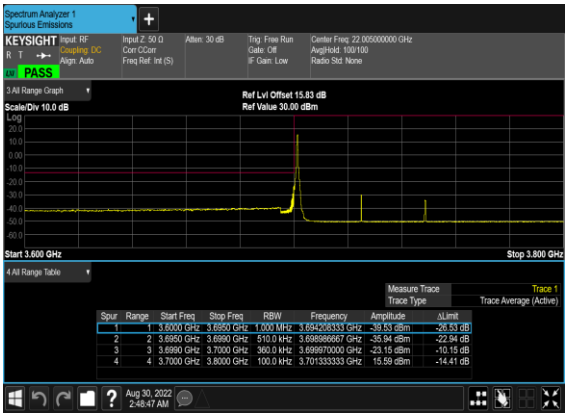
N78(10M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



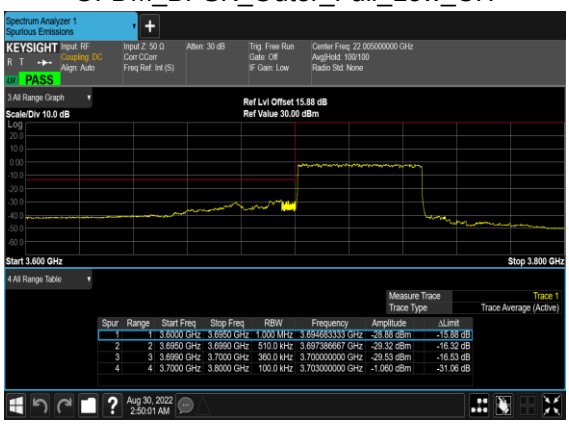
N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Low_CH



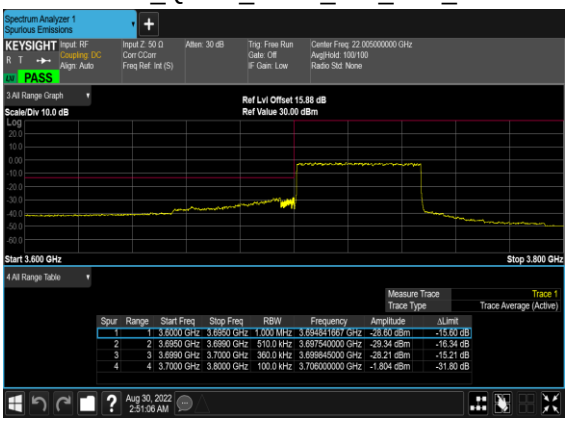
N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Low_CH



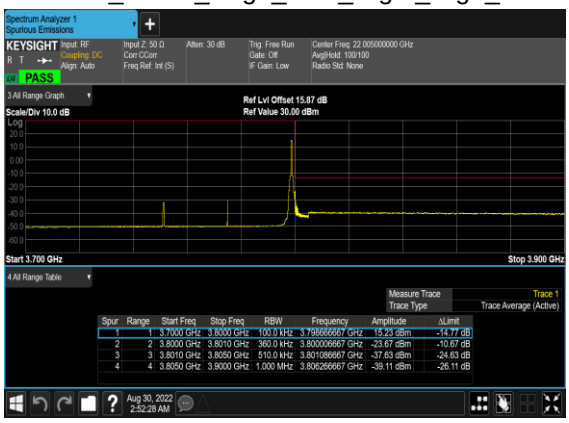
N78(50M)_DFT-s-OFDM_BPSK_Outer_Full_Low_CH



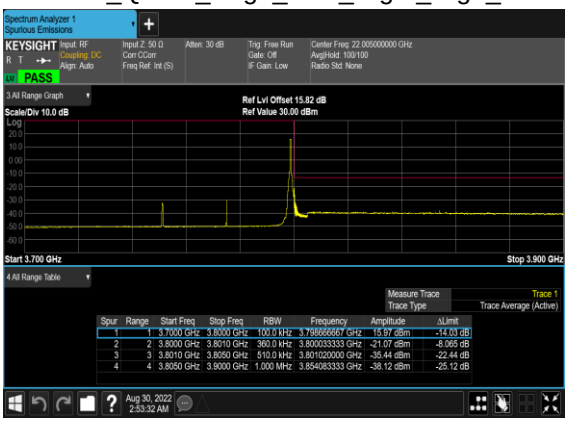
N78(50M)_DFT-s-OFDM_QPSK_Outer_Full_Low_CH



N78(50M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_High_CH

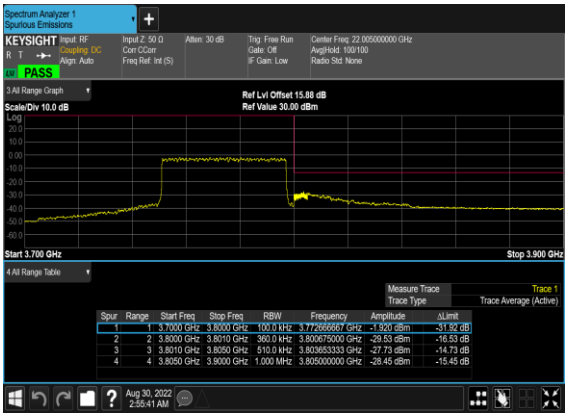


N78(50M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_High_CH

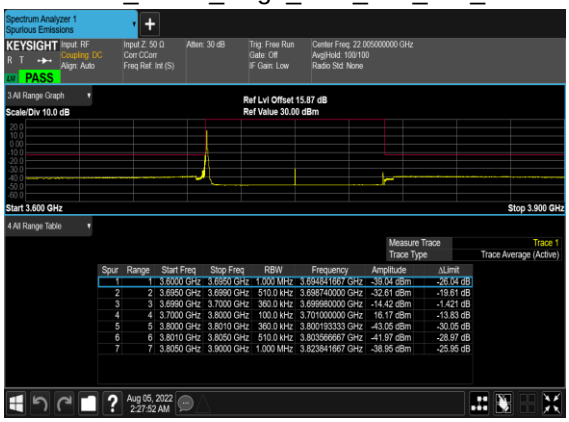


N78(50M)_DFT-s-OFDM_BPSK_Outer_Full_High_CH

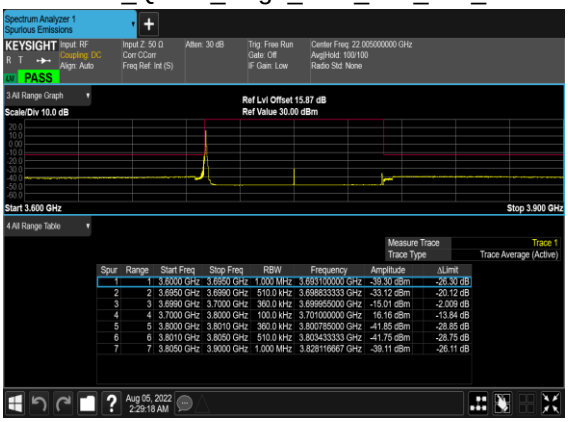
N78(50M)_DFT-s-OFDM_QPSK_Outer_Full_High_CH



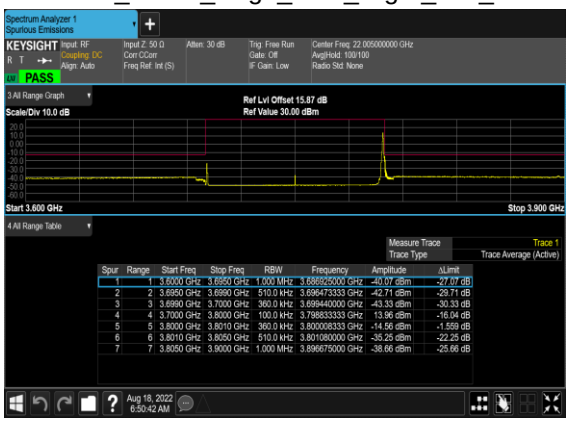
N78(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Left_Mid_CH



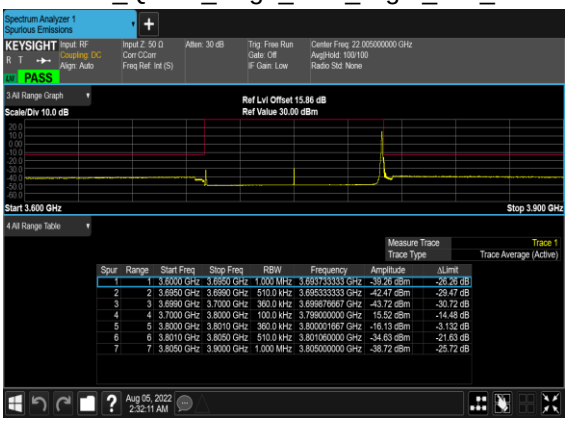
N78(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Left_Mid_CH



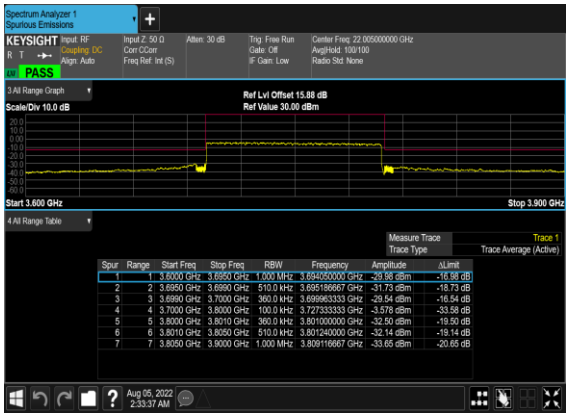
N78(100M)_DFT-s-OFDM_BPSK_Edge_1RB_Right_Mid_CH



N78(100M)_DFT-s-OFDM_QPSK_Edge_1RB_Right_Mid_CH



N78(100M)_DFT-s-OFDM_BPSK_Outer_Full_Mid_CH



N78(100M)_DFT-s-OFDM_QPSK_Outer_Full_Mid_CH

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Levi Zhuo	Temperature :	22~23℃
		Relative Humidity :	41~42%

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

SA n77 / NR 100MHz / QPSK DFT-s-OFDM / ANT11								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7590	-60.73	-13	-47.73	-71.21	2.76	13.24	H
	11388	-60.44	-13	-47.44	-70.03	3.42	13.01	H
	15180	-59.81	-13	-46.81	-69.42	3.83	13.44	H
	7590	-62.65	-13	-49.65	-73.09	2.80	13.24	V
	11388	-60.66	-13	-47.66	-70.21	3.46	13.01	V
	15180	-59.70	-13	-46.70	-69.26	3.88	13.44	V

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

EN-DC_41A_n77 / LTE 20MHz + NR 100MHz / QPSK / ANT4 (LTE) & ANT11(NR)								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7590	-62.56	-13	-49.56	-73.04	2.76	13.24	H
	11388	-60.71	-13	-47.71	-70.30	3.42	13.01	H
	15180	-59.85	-13	-46.85	-69.46	3.83	13.44	H
	7590	-62.40	-13	-49.40	-72.84	2.80	13.24	V
	11388	-59.45	-13	-46.45	-69.00	3.46	13.01	V
	15180	-59.22	-13	-46.22	-68.78	3.88	13.44	V

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

SA n78 / NR 100MHz / QPSK DFT-s-OFDM / ANT11								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7410	-62.66	-13	-49.66	-73.14	2.76	13.24	H
	11112	-54.28	-13	-41.28	-63.87	3.42	13.01	H
	14820	-59.49	-13	-46.49	-69.10	3.83	13.44	H
	7410	-62.89	-13	-49.89	-73.33	2.80	13.24	V
	11112	-51.62	-13	-38.62	-61.17	3.46	13.01	V
	14820	-59.15	-13	-46.15	-68.71	3.88	13.44	V

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

EN-DC_2A_n78 / LTE 20MHz + NR 100MHz / QPSK / ANT4 (LTE) & ANT11(NR)								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7410	-62.71	-13	-49.71	-73.19	2.76	13.24	H
	11112	-60.72	-13	-47.72	-70.31	3.42	13.01	H
	14820	-60.46	-13	-47.46	-70.07	3.83	13.44	H
	7410	-62.94	-13	-49.94	-73.38	2.80	13.24	V
	11112	-60.53	-13	-47.53	-70.08	3.46	13.01	V
	14820	-59.91	-13	-46.91	-69.47	3.88	13.44	V

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

EN-DC_5A_n78 / LTE 10MHz + NR 100MHz / QPSK / ANT0 (LTE) & ANT11(NR)								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7410	-62.41	-13	-49.41	-72.89	2.76	13.24	H
	11112	-60.80	-13	-47.80	-70.39	3.42	13.01	H
	14820	-60.36	-13	-47.36	-69.97	3.83	13.44	H
	7410	-62.70	-13	-49.70	-73.14	2.80	13.24	V
	11112	-60.61	-13	-47.61	-70.16	3.46	13.01	V
	14820	-59.90	-13	-46.90	-69.46	3.88	13.44	V

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

EN-DC_7A_n78 / LTE 20MHz + NR 100MHz / QPSK / ANT4 (LTE) & ANT11(NR)								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7410	-62.74	-13	-49.74	-73.22	2.76	13.24	H
	11112	-60.52	-13	-47.52	-70.11	3.42	13.01	H
	14820	-60.12	-13	-47.12	-69.73	3.83	13.44	H
	7410	-62.97	-13	-49.97	-73.41	2.80	13.24	V
	11112	-60.73	-13	-47.73	-70.28	3.46	13.01	V
	14820	-59.80	-13	-46.80	-69.36	3.88	13.44	V

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

EN-DC_38A_n78 / LTE 20MHz + NR 100MHz / QPSK / ANT4 (LTE) & ANT11(NR)								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7404	-61.91	-13	-48.91	-72.39	2.76	13.24	H
	11112	-60.75	-13	-47.75	-70.34	3.42	13.01	H
	14820	-60.14	-13	-47.14	-69.75	3.83	13.44	H
	7404	-61.26	-13	-48.26	-71.70	2.80	13.24	V
	11112	-60.81	-13	-47.81	-70.36	3.46	13.01	V
	14820	-59.55	-13	-46.55	-69.11	3.88	13.44	V

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

EN-DC_41A_n78 / LTE 20MHz + NR 100MHz / QPSK / ANT4 (LTE) & ANT11(NR)								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7410	-62.69	-13	-49.69	-73.17	2.76	13.24	H
	11112	-60.47	-13	-47.47	-70.06	3.42	13.01	H
	14820	-60.34	-13	-47.34	-69.95	3.83	13.44	H
	7410	-62.90	-13	-49.90	-73.34	2.80	13.24	V
	11112	-60.72	-13	-47.72	-70.27	3.46	13.01	V
	14820	-60.08	-13	-47.08	-69.64	3.88	13.44	V

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

EN-DC_66A_n78 / LTE 20MHz + NR 100MHz / QPSK / ANT4 (LTE) & ANT11(NR)								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	7410	-62.60	-13	-49.60	-73.08	2.76	13.24	H
	11112	-60.62	-13	-47.62	-70.21	3.42	13.01	H
	14820	-60.31	-13	-47.31	-69.92	3.83	13.44	H
	7410	-63.02	-13	-50.02	-73.46	2.80	13.24	V
	11112	-60.64	-13	-47.64	-70.19	3.46	13.01	V
	14820	-60.46	-13	-47.46	-70.02	3.88	13.44	V

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