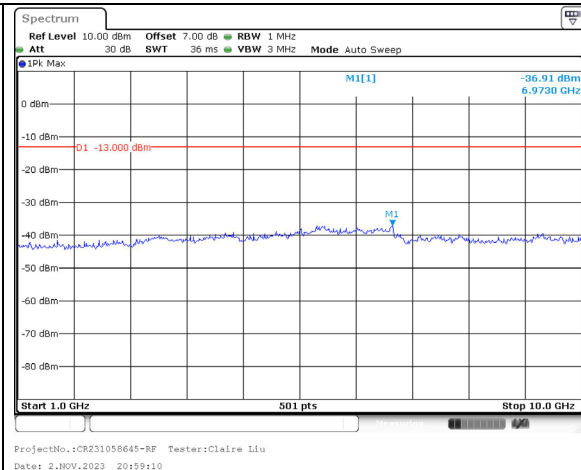
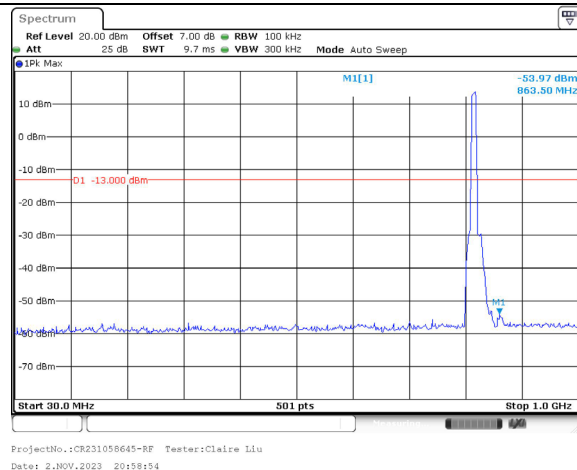
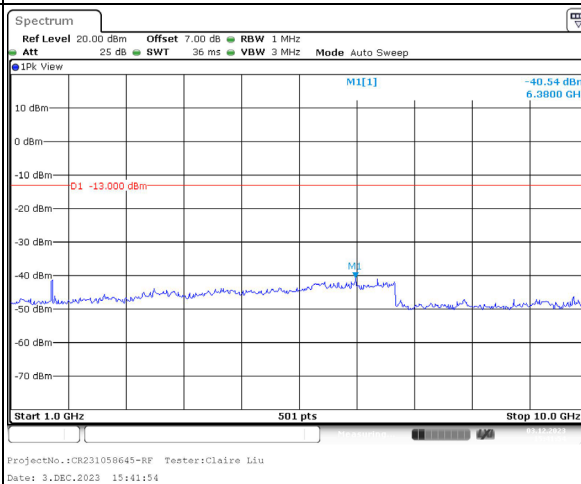
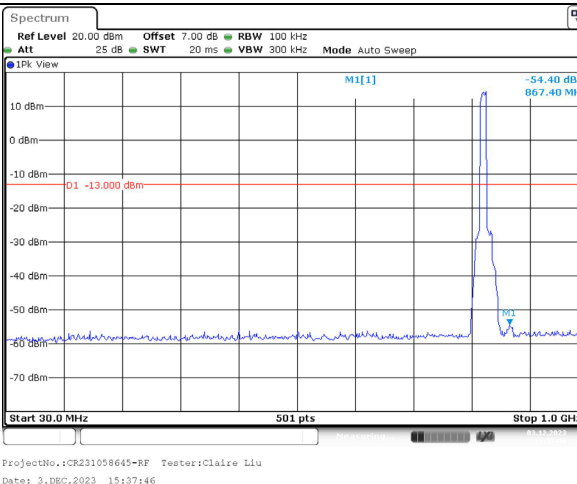


Spurious Emissions at Antenna Terminal

Channel

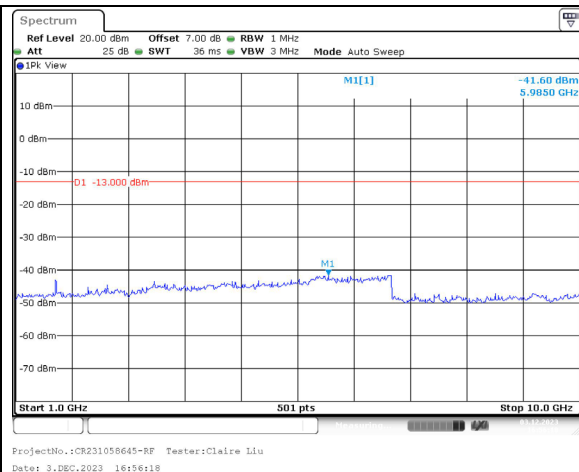
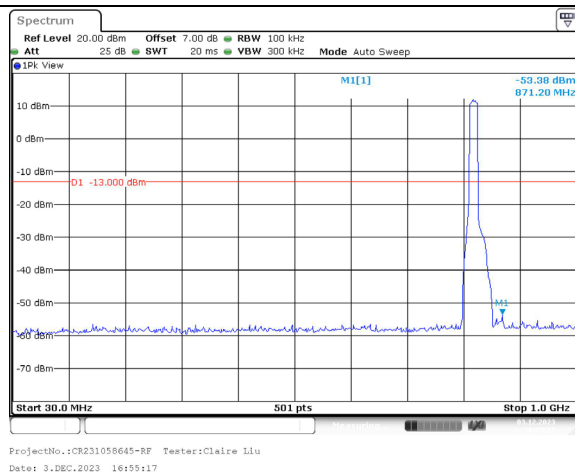
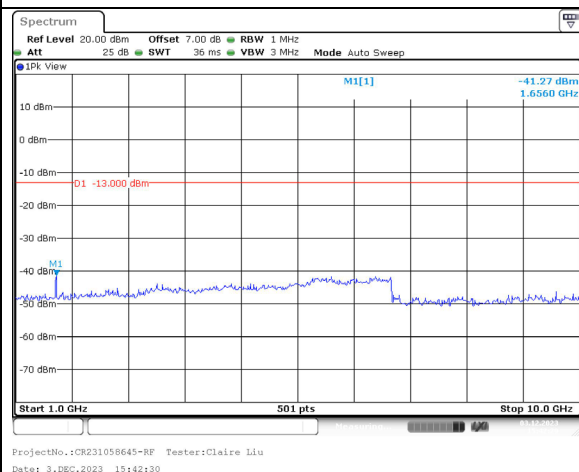
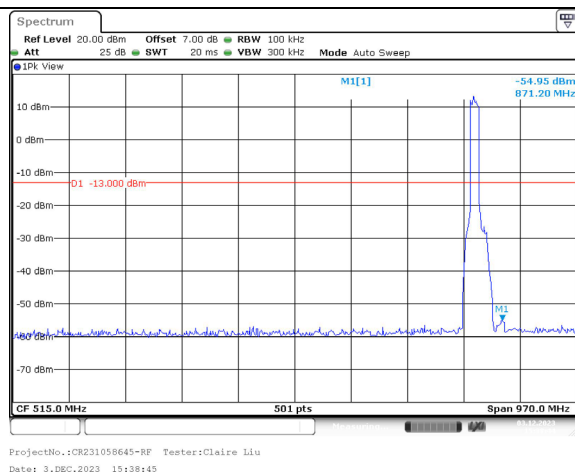
10MHz Bandwidth QPSK

Lowest
For 90SCross
Channel

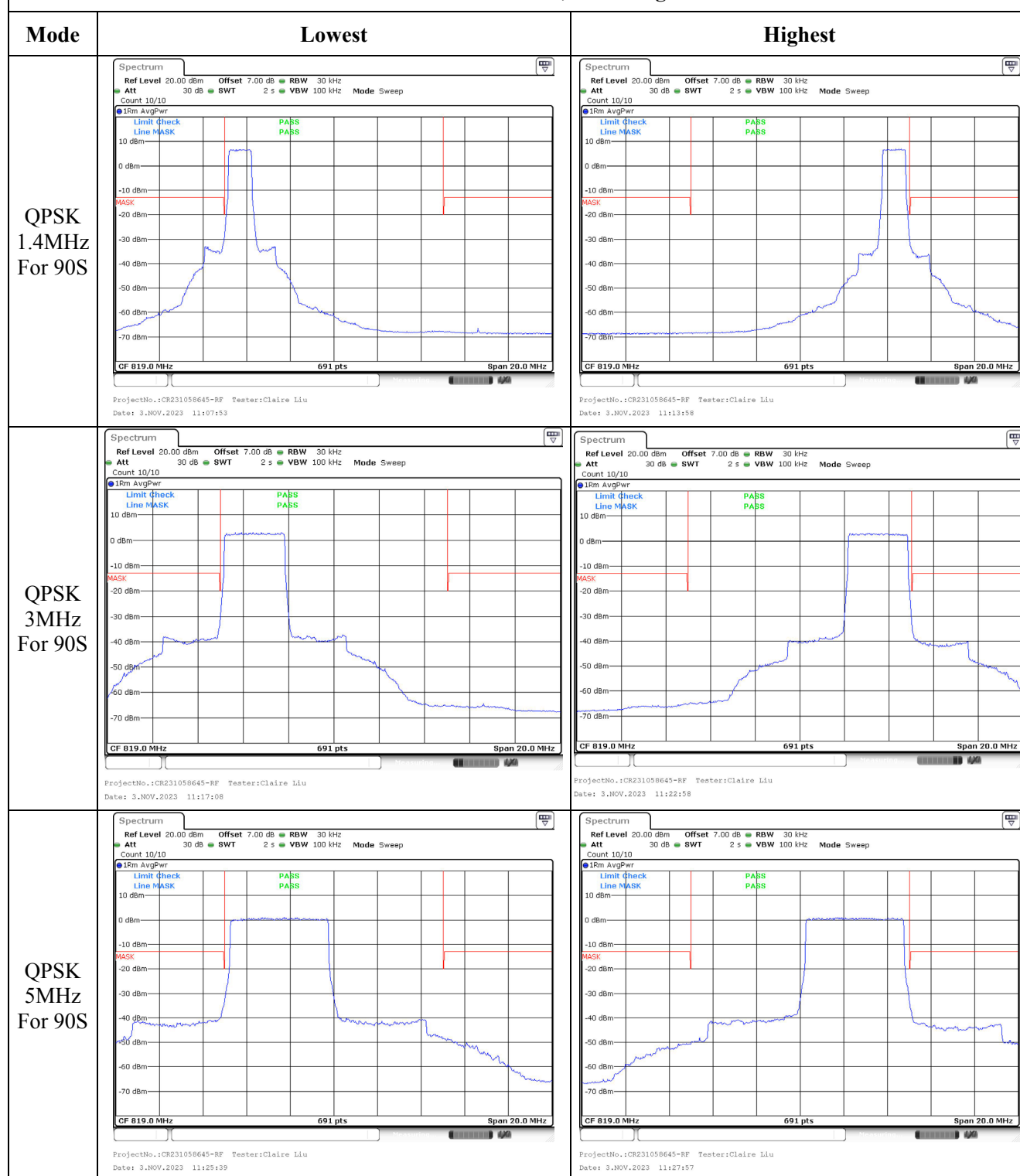
Spurious Emissions at Antenna Terminal

Channel

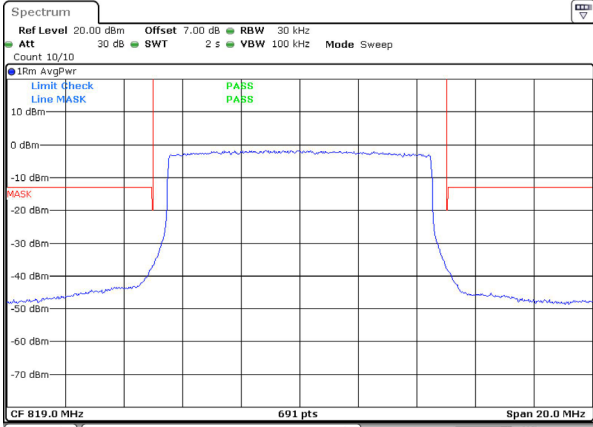
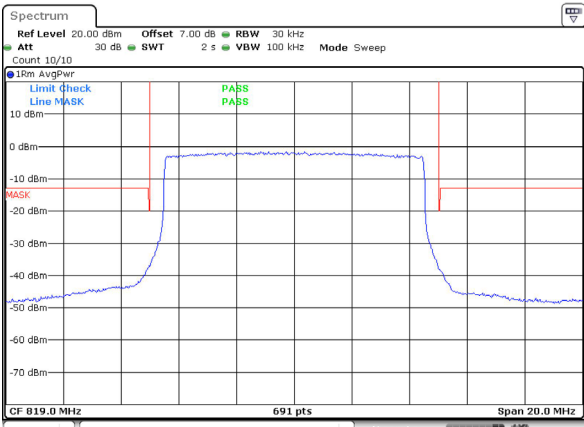
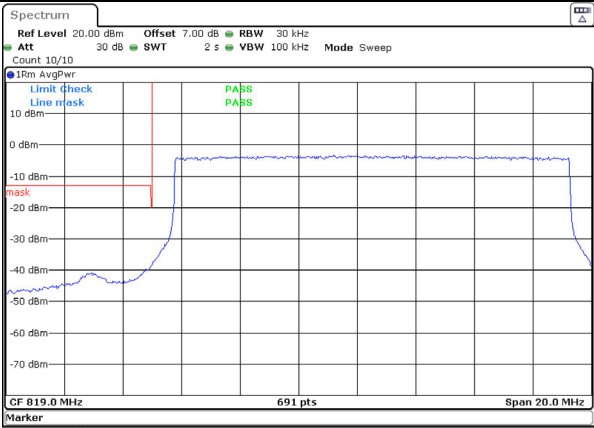
15MHz Bandwidth QPSK

Lowest
For 90SCross
Channel

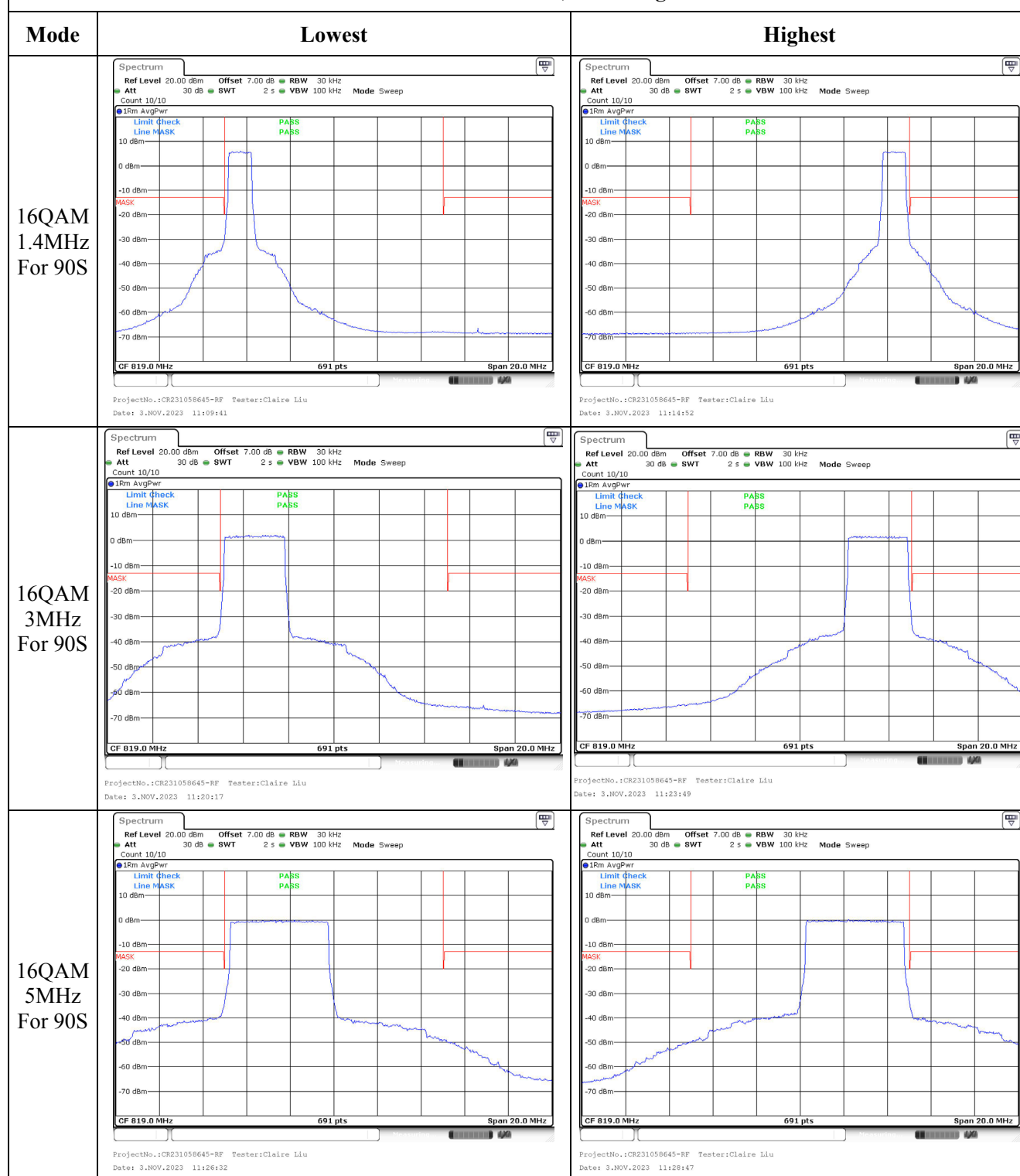
Out of band emission, Band Edge



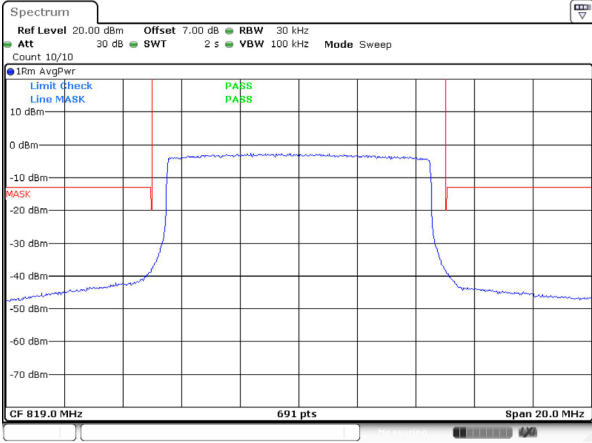
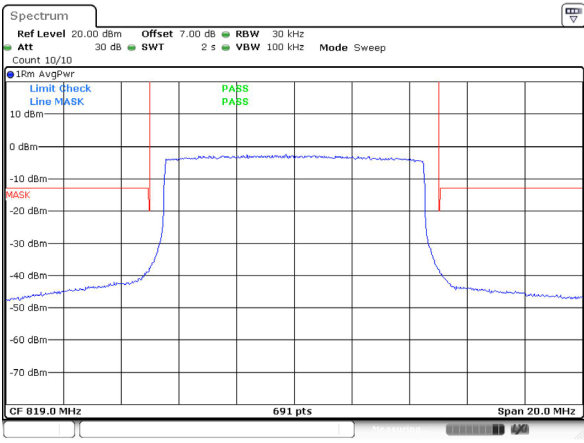
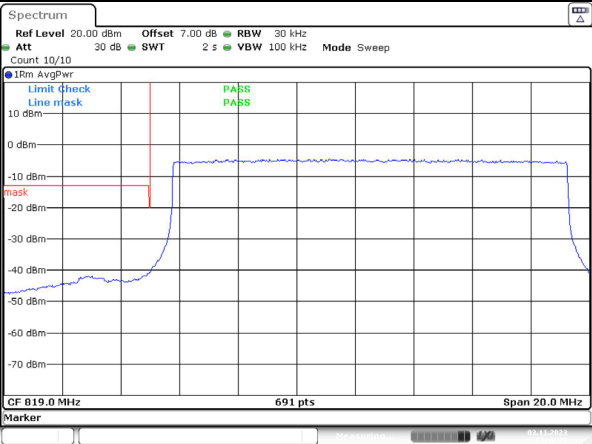
Out of band emission, Band Edge

Mode	Lowest	Highest
QPSK 10MHz For 90S	 ProjectNo.:CR231058645-RF Tester: Claire Liu Date: 3.NOV.2023 11:30:11	 ProjectNo.:CR231058645-RF Tester: Claire Liu Date: 3.NOV.2023 11:32:38
QPSK 15MHz Cross 90S and 22H	 ProjectNo.:CR231058645-RF Tester: Claire Liu Date: 3.NOV.2023 14:29:39	

Out of band emission, Band Edge



Out of band emission, Band Edge

Mode	Lowest	Highest
16QAM 10MHz For 90S	 ProjectNo.:CR231058645-RF Tester: Claire Liu Date: 3.NOV.2023 11:31:21	 ProjectNo.:CR231058645-RF Tester: Claire Liu Date: 3.NOV.2023 11:33:30
16QAM 15MHz Across 90S and 22H	 ProjectNo.:CR231058645-RF Tester: Claire Liu Date: 3.NOV.2023 14:40:28	

4.11.3 Test Data for Part 22H:

RF Output Power						
Test Bandwidth & Modulation	Resource Block & RB offset	Conducted Average Output Power(dBm)			Maximum ERP (dBm)	ERP Limit (dBm)
		Lowest Frequency For 22H	Middle Frequency For 22H	Highest Frequency For 22H		
1.4MHz QPSK	RB1#0	24.39	24.06	24.09	21.93	38.45
	RB1#3	24.5	24.26	24.3		
	RB1#5	24.55	24.01	24.05		
	RB3#0	24.37	24.31	24.11		
	RB3#3	24.43	24.26	24.16		
	RB6#0	23.28	23.13	23.35		
1.4MHz 16QAM	RB1#0	23.38	23.82	23.28	21.31	38.45
	RB1#3	23.89	23.93	23.29		
	RB1#5	23.49	23.83	23.13		
	RB3#0	23.41	23.18	23.31		
	RB3#3	23.47	23.25	23.2		
	RB6#0	22.37	22.22	22.33		
3MHz QPSK	RB1#0	24.5	24.24	24.2	21.9	38.45
	RB1#8	24.1	24.08	24.16		
	RB1#14	24.44	24.52	24.25		
	RB6#0	23.28	23.12	23.17		
	RB6#9	23.14	22.99	23.22		
	RB15#0	23.21	23.17	23.4		
3MHz 16QAM	RB1#0	23.41	23.64	23.67	21.05	38.45
	RB1#8	23.09	23.39	23.22		
	RB1#14	23.17	23.58	23.33		
	RB6#0	22.21	22.14	22.21		
	RB6#9	21.95	22.12	22.38		
	RB15#0	22.33	22.19	22.14		
5MHz QPSK	RB1#0	24.33	24.31	24.18	21.75	38.45
	RB1#13	24.17	24.23	24.27		
	RB1#24	24.37	24.06	24.17		
	RB15#0	23.33	23.15	23.23		
	RB15#10	23.29	23.06	23.05		
	RB25#0	23.31	23.29	23.22		
5MHz 16QAM	RB1#0	22.94	22.63	23.66	21.04	38.45
	RB1#13	22.76	22.63	23.46		
	RB1#24	22.95	22.75	23.47		
	RB15#0	22.2	22.19	22.01		
	RB15#10	22.35	22.11	21.95		
	RB25#0	22.34	22.31	22.31		

10MHz QPSK	RB1#0	24.38	24.31	24.15	21.78	38.45
	RB1#25	24.25	24.33	24.02		
	RB1#49	24.24	24.4	24.26		
	RB25#0	23.14	23.2	23.31		
	RB25#25	23.06	23.25	23.23		
	RB50#0	23.09	23.13	23.24		
10MHz 16QAM	RB1#0	23.66	23.34	23.44	21.28	38.45
	RB1#25	23.9	23.07	23.47		
	RB1#49	23.49	23.22	23.35		
	RB25#0	22.32	22.34	22.32		
	RB25#25	22.09	22.72	22.28		
	RB50#0	22.13	22.17	22.24		
15MHz QPSK	RB1#0	24.33	24.24	24.26	21.71	38.45
	RB1#38	24.01	24.09	24.05		
	RB1#74	24.15	24.11	24.08		
	RB36#0	23.02	23.1	23.26		
	RB36#39	23.12	23.31	23.13		
	RB75#0	23.21	23.03	23.28		
15MHz 16QAM	RB1#0	24.16	23.65	23.31	21.65	38.45
	RB1#38	23.37	23.42	23.2		
	RB1#74	23.49	24.27	23.06		
	RB36#0	22.2	22.08	22.17		
	RB36#39	22.29	22.42	22.12		
	RB75#0	22.2	22.15	22.29		

Note:

ERP= Conducted Power(dBm) - Lc(dB) + G_T(dBd)G_T(dBd)=G_T(dBi)-2.15**Result:****Pass****Peak-to-average Ratio(PAR)**

Test Bandwidth & Modulation	Resource Block & RB offset	Peak-to-average Ratio(dB)			Limit (dB)
		Lowest Frequency For 22H	Middle Frequency For 22H	Highest Frequency For 22H	
15MHz QPSK	RB1#0	3.57	3.36	3.33	13
	RB75#0	4.26	4.29	4.17	13
15MHz 16QAM	RB1#0	4.41	4.23	4.17	13
	RB75#0	5.51	5.54	5.51	13
				Result:	Pass

Operation Mode	99% Occupied Bandwidth (MHz)			26 dB Occupied Bandwidth (MHz)		
	Lowest Frequency For 22H	Middle Frequency For 22H	Highest Frequency For 22H	Lowest Frequency For 22H	Middle Frequency For 22H	Highest Frequency For 22H
1.4MHz QPSK	1.096	1.102	1.102	1.314	1.314	1.308
1.4MHz 16QAM	1.096	1.096	1.102	1.308	1.296	1.302
3MHz QPSK	2.695	2.683	2.695	2.94	2.964	2.94
3MHz 16QAM	2.683	2.683	2.683	2.952	2.94	2.976
5MHz QPSK	4.511	4.511	4.511	5.04	5.02	5.04
5MHz 16QAM	4.511	4.511	4.491	5.04	5.06	5.02
10MHz QPSK	8.942	8.942	8.902	9.72	9.72	9.76
10MHz 16QAM	8.942	8.942	8.902	9.64	9.72	9.68
15MHz QPSK	13.473	13.413	13.473	14.82	14.7	14.82
15MHz 16QAM	13.473	13.413	13.473	14.76	14.7	14.76

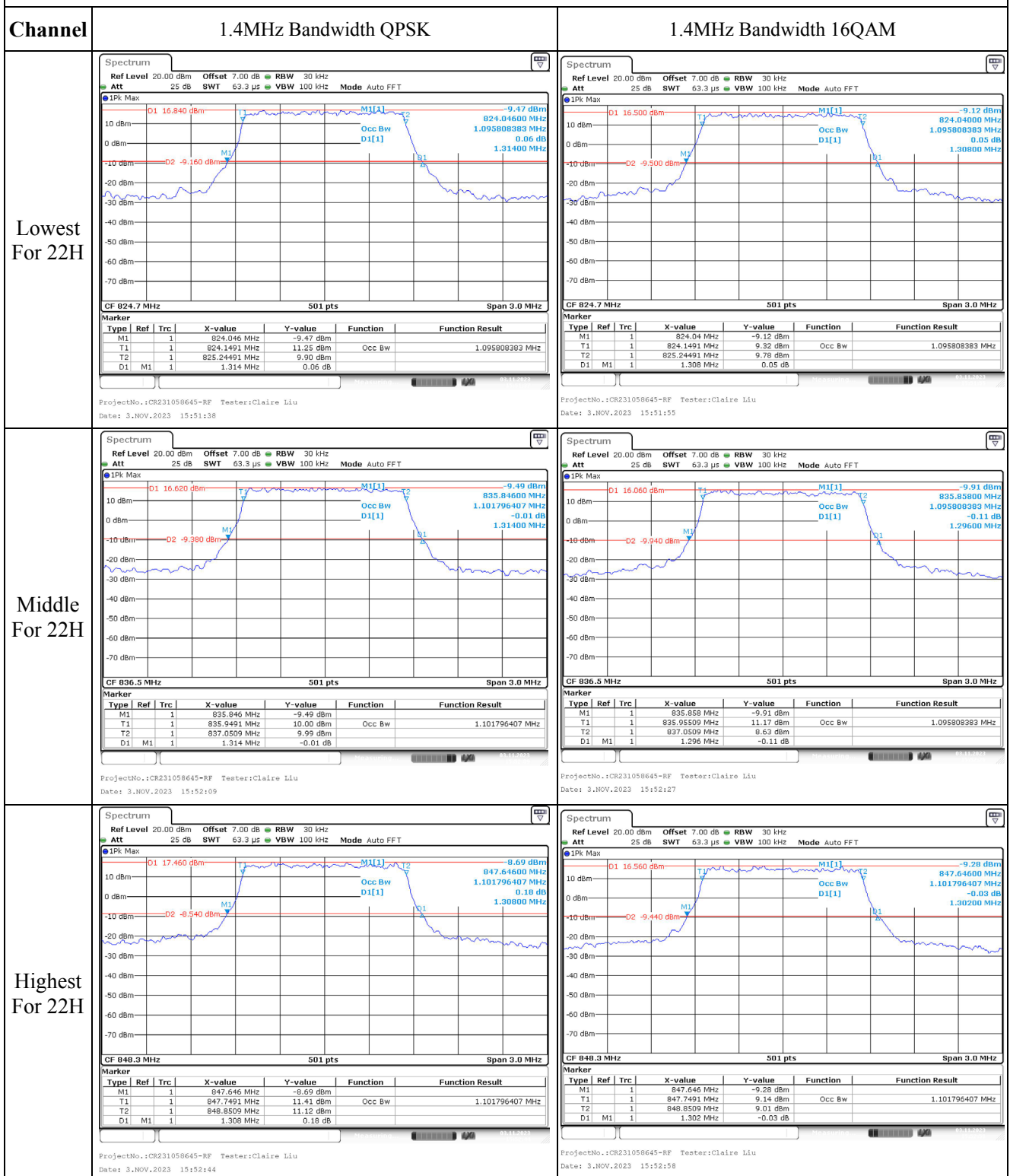
Note: The test plots please refer to the Plots of Occupied Bandwidth

Frequency Stability					
Test Modulation:	15 MHz QPSK		Test Channel:	831.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	7.6	-0.78	-0.001	2.5
	-20	7.6	-2.31	-0.003	2.5
	-10	7.6	-3.27	-0.004	2.5
	0	7.6	-0.26	0.000	2.5
	10	7.6	0.23	0.000	2.5
	20	7.6	-0.86	-0.001	2.5
	30	7.6	0.73	0.001	2.5
	40	7.6	-1.77	-0.002	2.5
	50	7.6	-1.65	-0.002	2.5
Frequency Stability vs. Voltage	20	6.8	1.53	0.002	2.5
	20	8.7	-1.76	-0.002	2.5
Result:				Pass	

FCC §2.1055, §22.355, §90.213: Frequency Stability					
Test Modulation:	15 MHz 16QAM		Test Channel:	831.5	MHz
Test Item	Temperature (°C)	Voltage (V _{DC})	Frequency Error		Limit
			(Hz)	(ppm)	(ppm)
Frequency Stability vs. Temperature	-30	7.6	-1.12	-0.001	2.5
	-20	7.6	-1.69	-0.002	2.5
	-10	7.6	-0.04	0.000	2.5
	0	7.6	-2.59	-0.003	2.5
	10	7.6	-2.03	-0.002	2.5
	20	7.6	-2.39	-0.003	2.5
	30	7.6	-4.79	-0.006	2.5
	40	7.6	0.06	0.000	2.5
	50	7.6	-3.44	-0.004	2.5
Frequency Stability vs. Voltage	20	6.8	-4.17	-0.005	2.5
	20	8.7	-3.96	-0.005	2.5
				Result:	Pass

4.11.4 Test Plots for Part 22H:

(Note: The 7dB is the Insertion loss of the RF cable, Power Splitter and DC Block, which was offset into the Spectrum Analyzer);

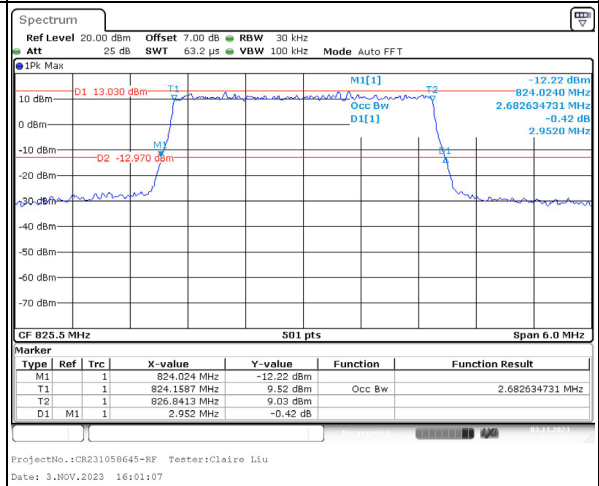
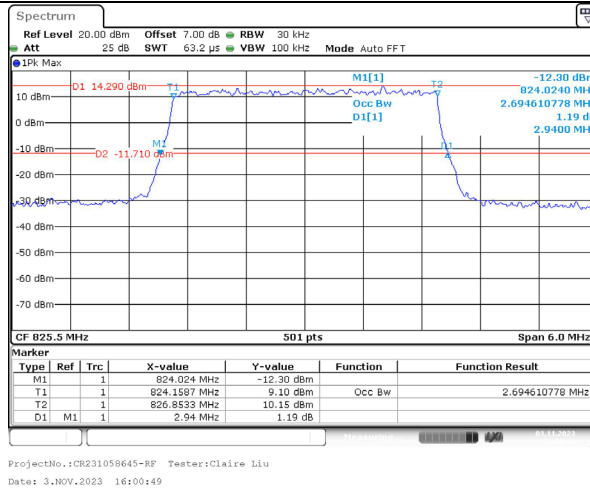
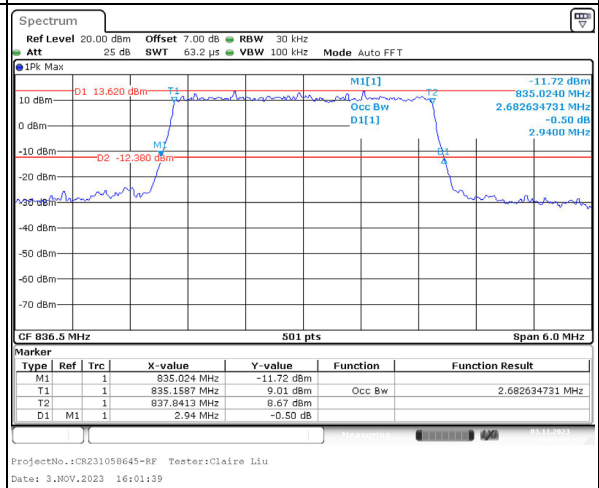
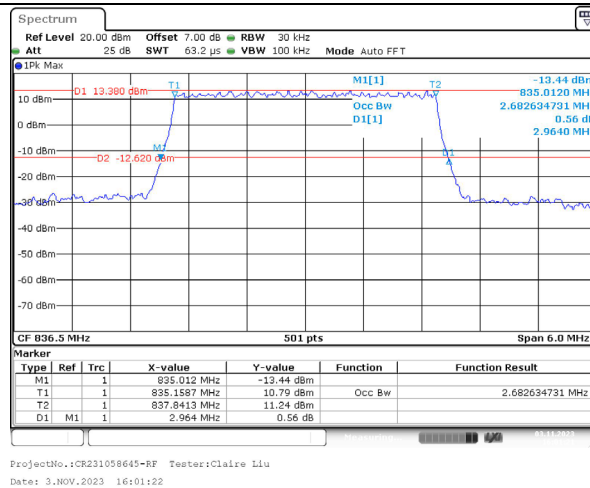
Occupied Bandwidth

Occupied Bandwidth

Channel

3MHz Bandwidth QPSK

3MHz Bandwidth 16QAM

Lowest
For 22HMiddle
For 22HHighest
For 22H