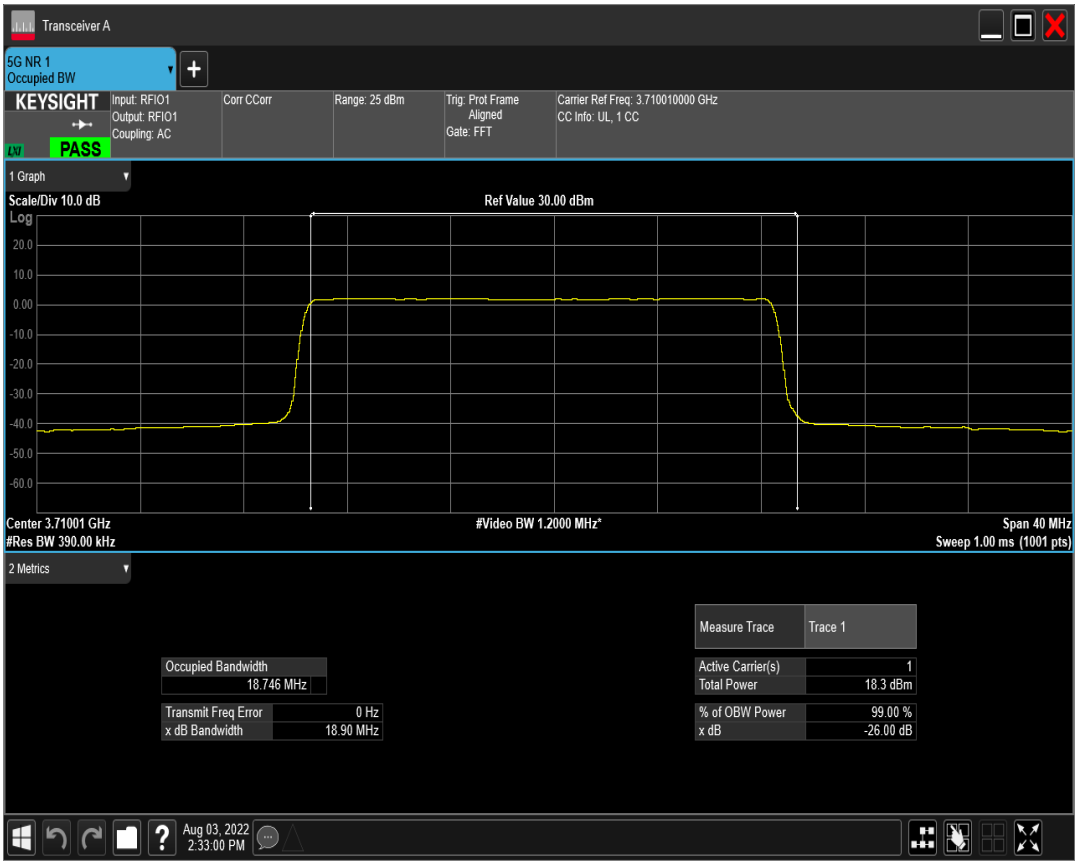
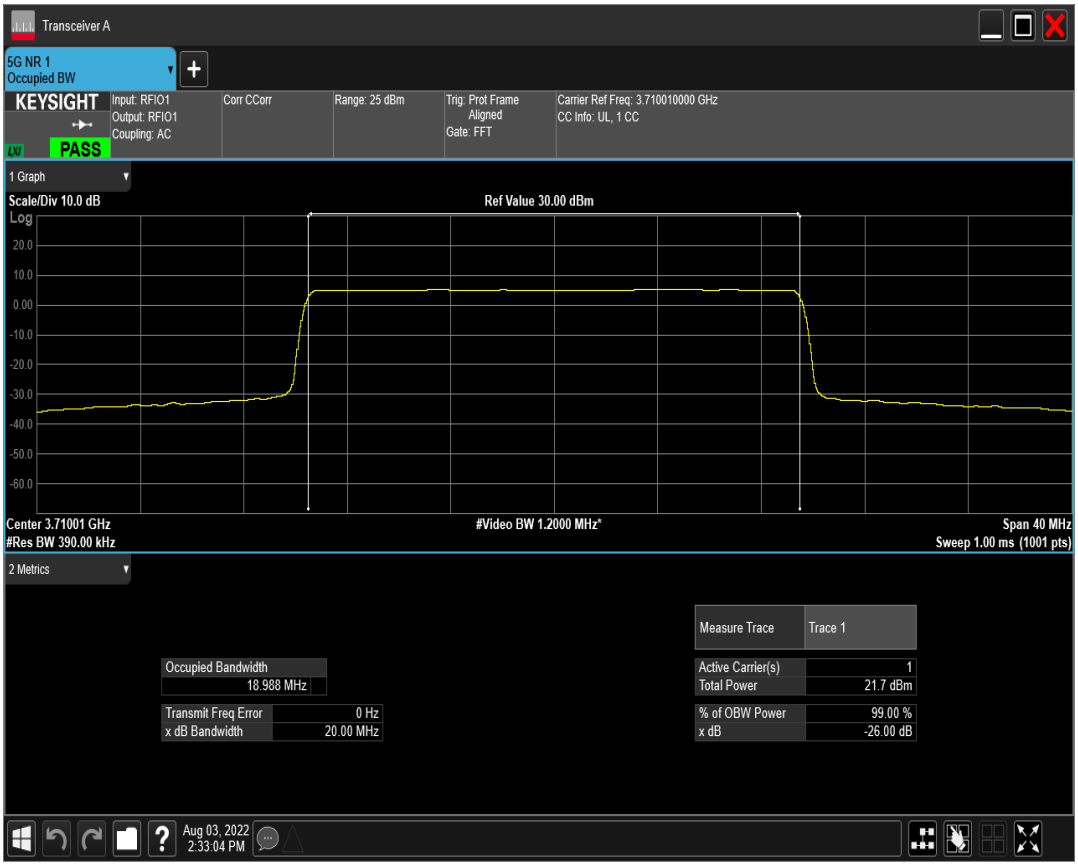
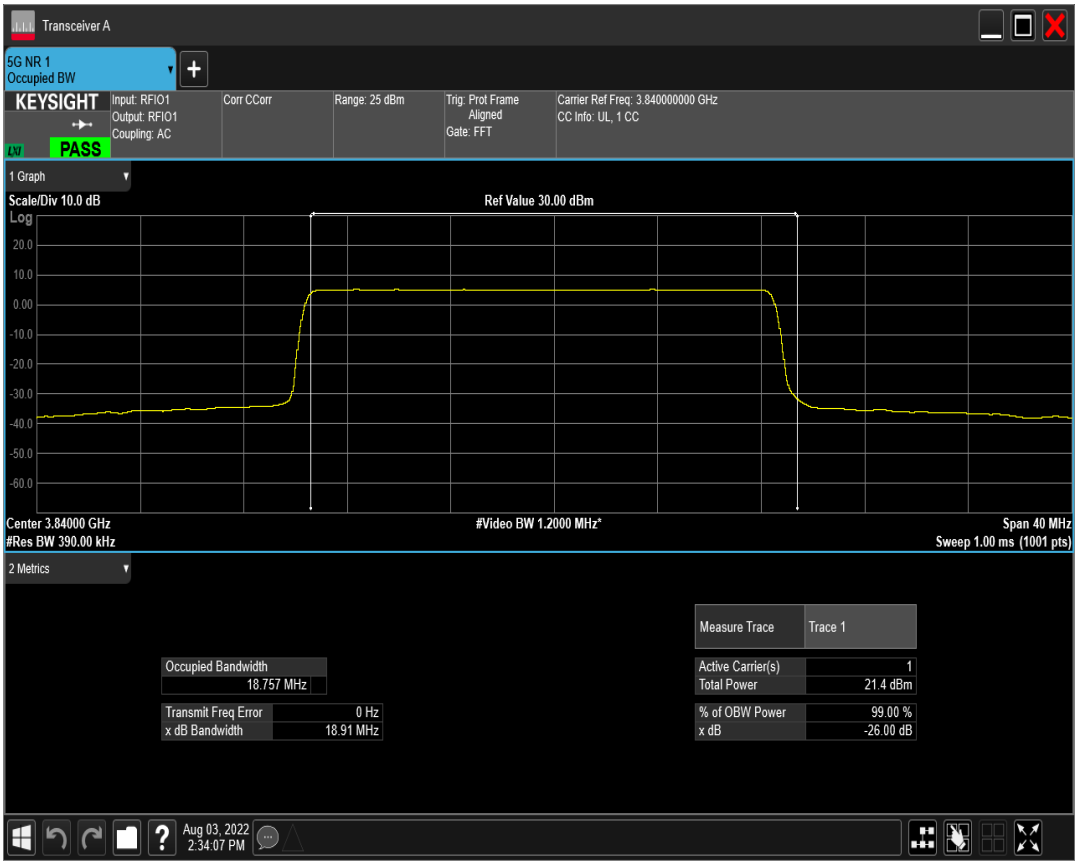
n77(3700-3980) SCS=15kHz DFT_QAM256 BW=20MHz Channel=647334 RB=100@0



n77(3700-3980) SCS=15kHz CP_QPSK BW=20MHz Channel=647334 RB=106@0



n77(3700-3980) SCS=15kHz DFT_BPSK BW=20MHz Channel=656000 RB=100@0



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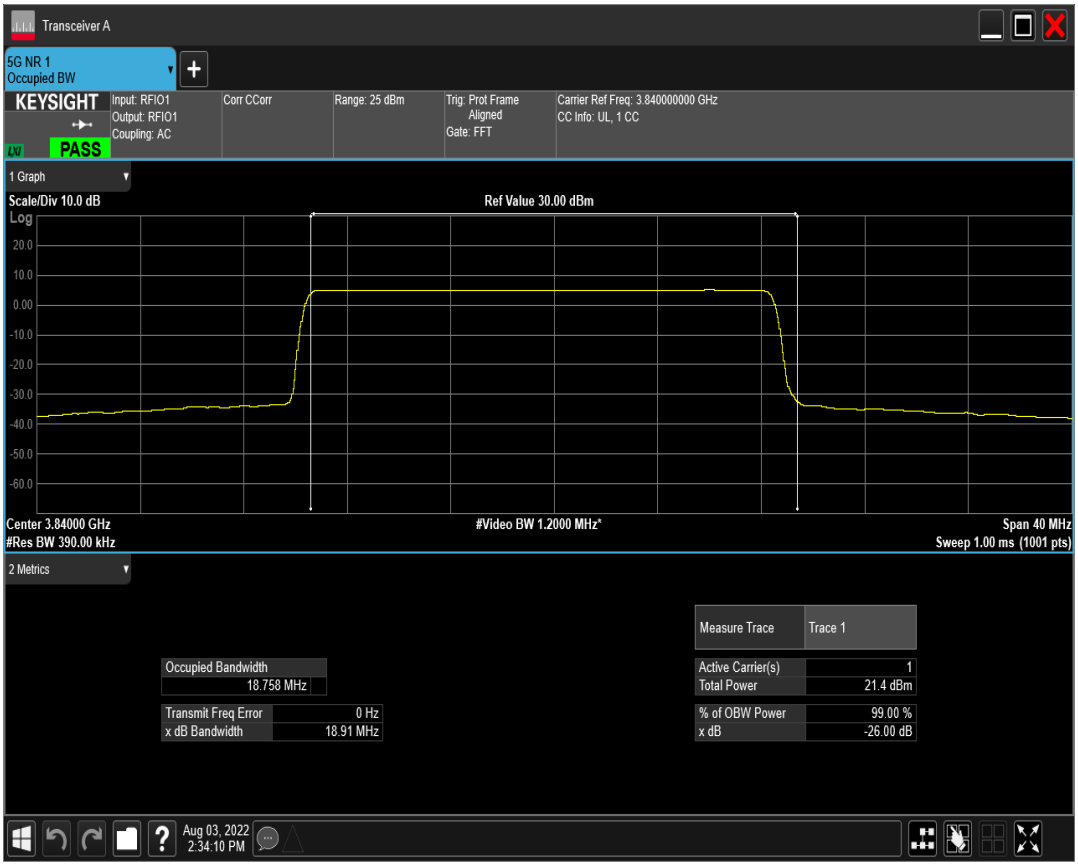

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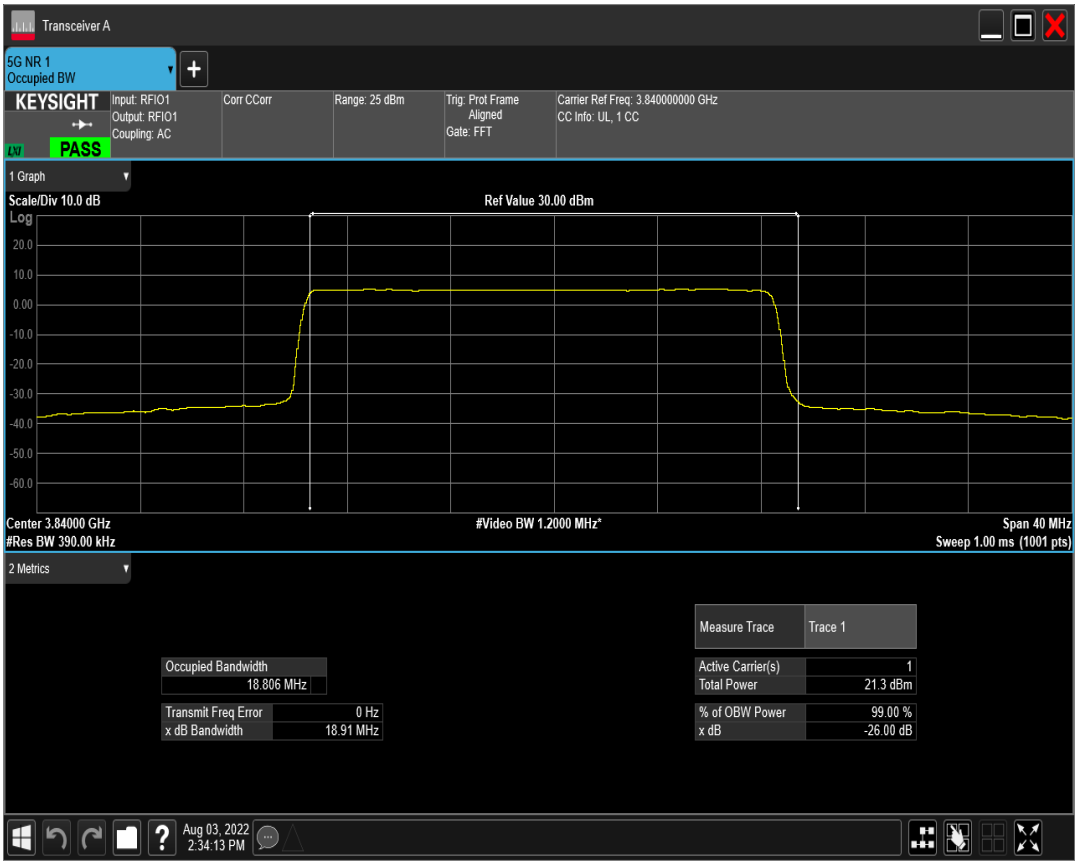

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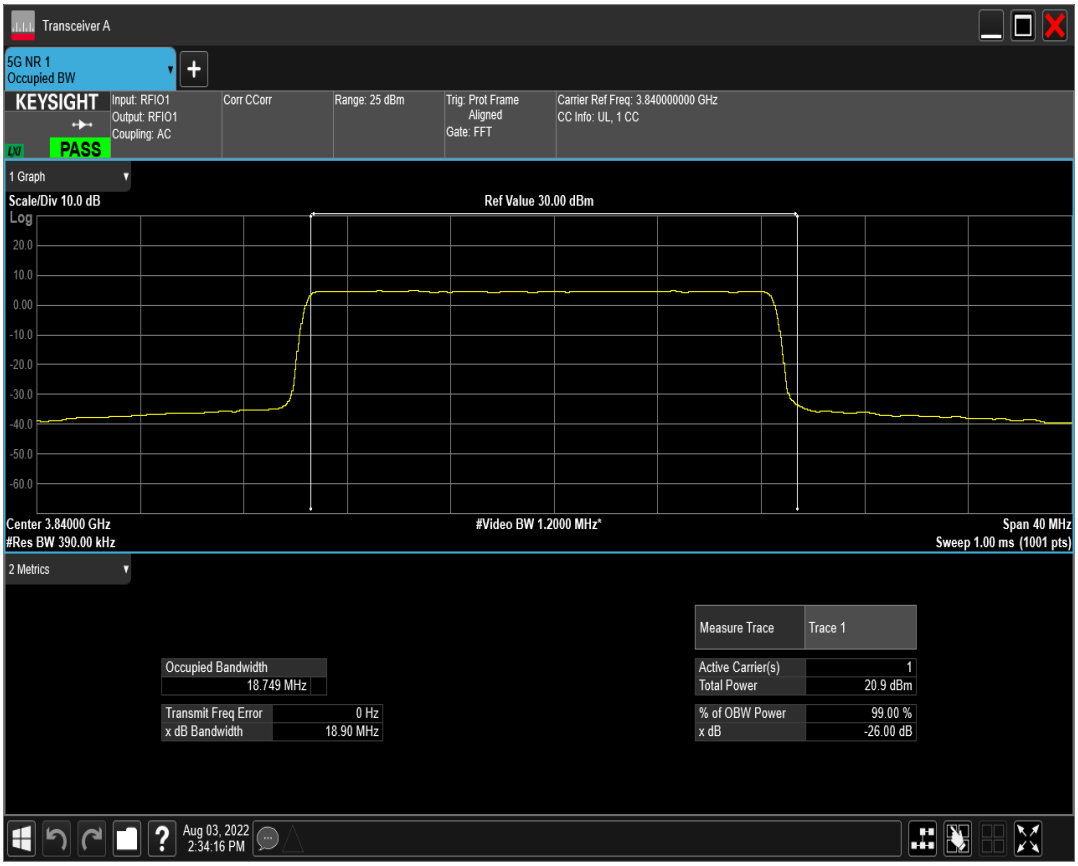

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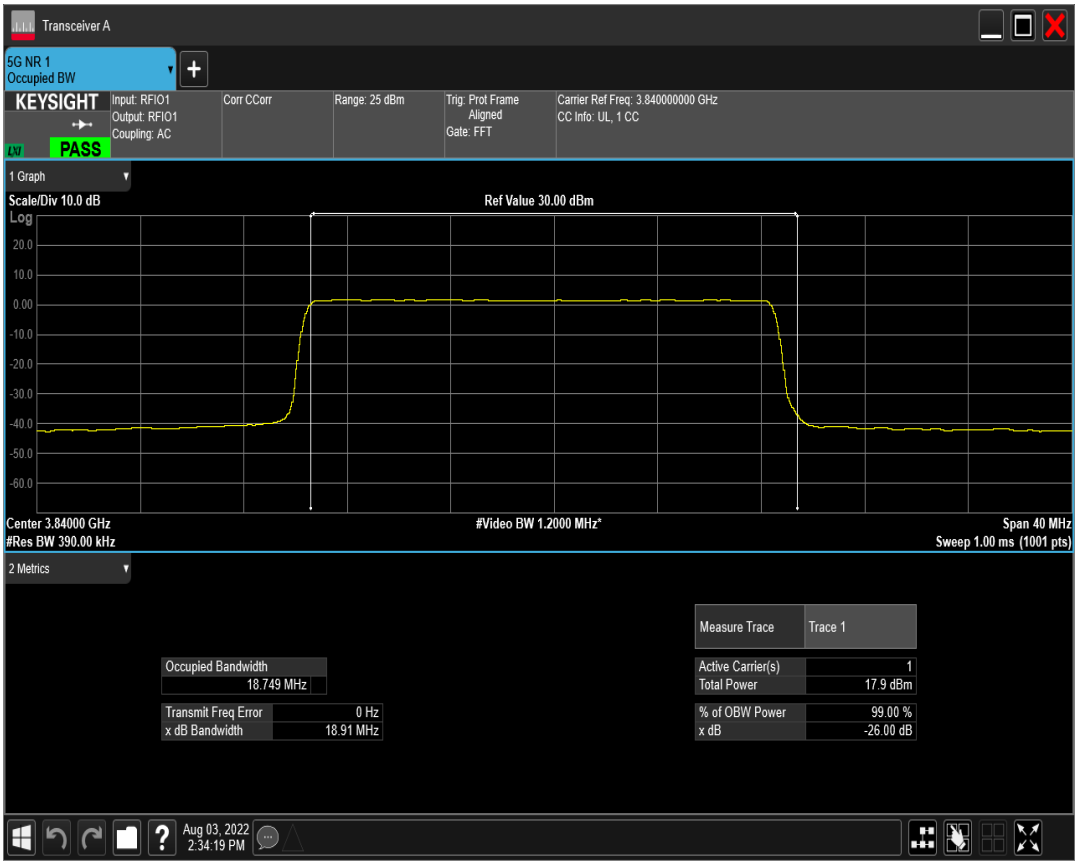
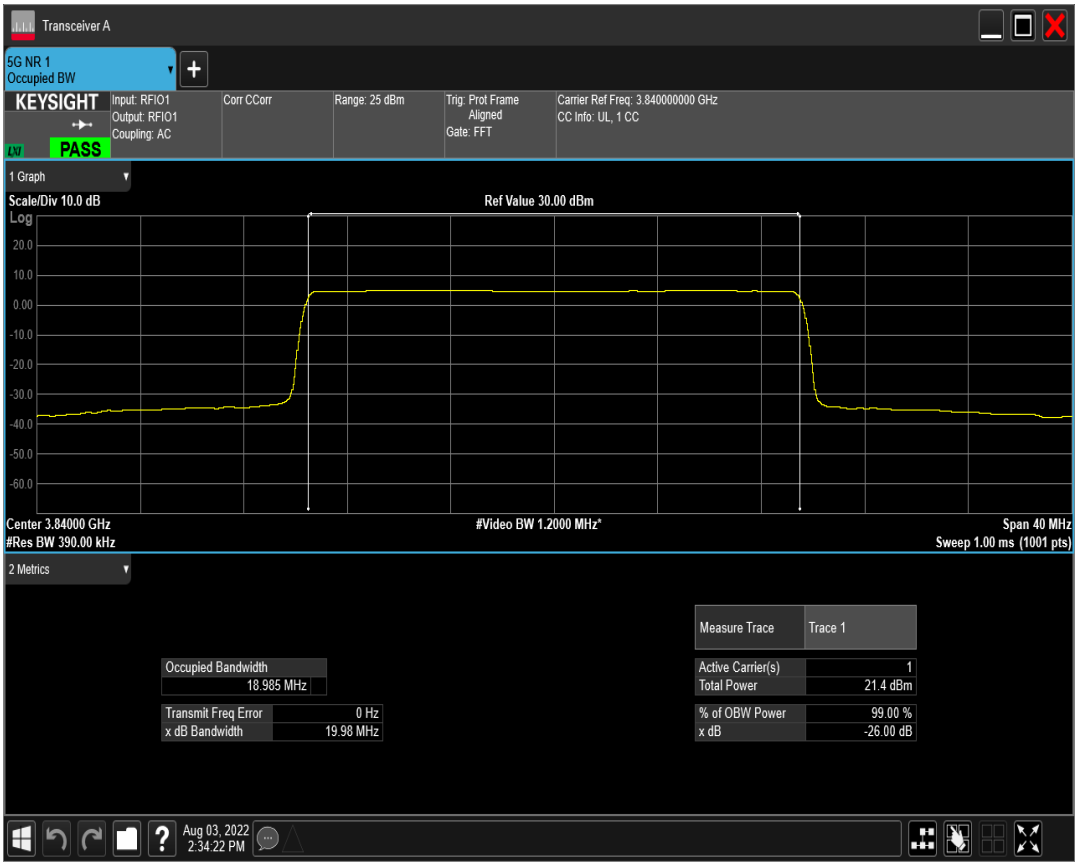


n77(3700-3980) SCS=15kHz CP_QPSK BW=20MHz Channel=656000 RB=106@0



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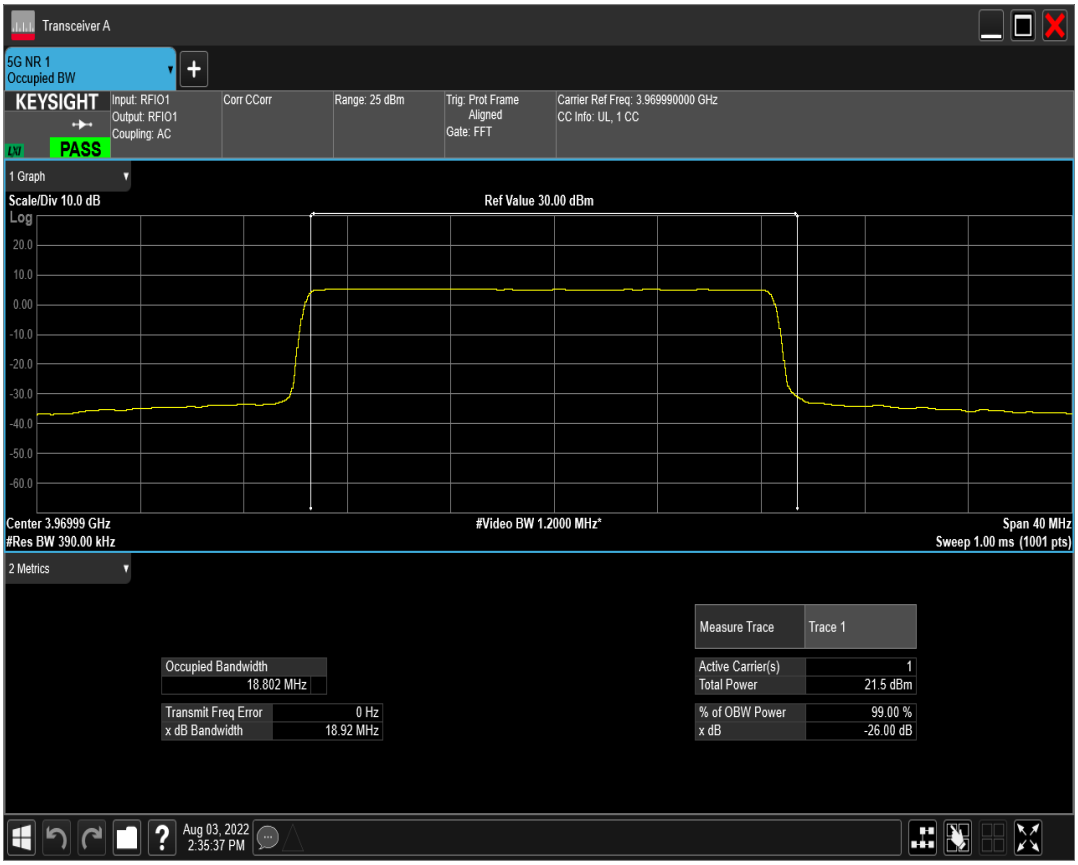
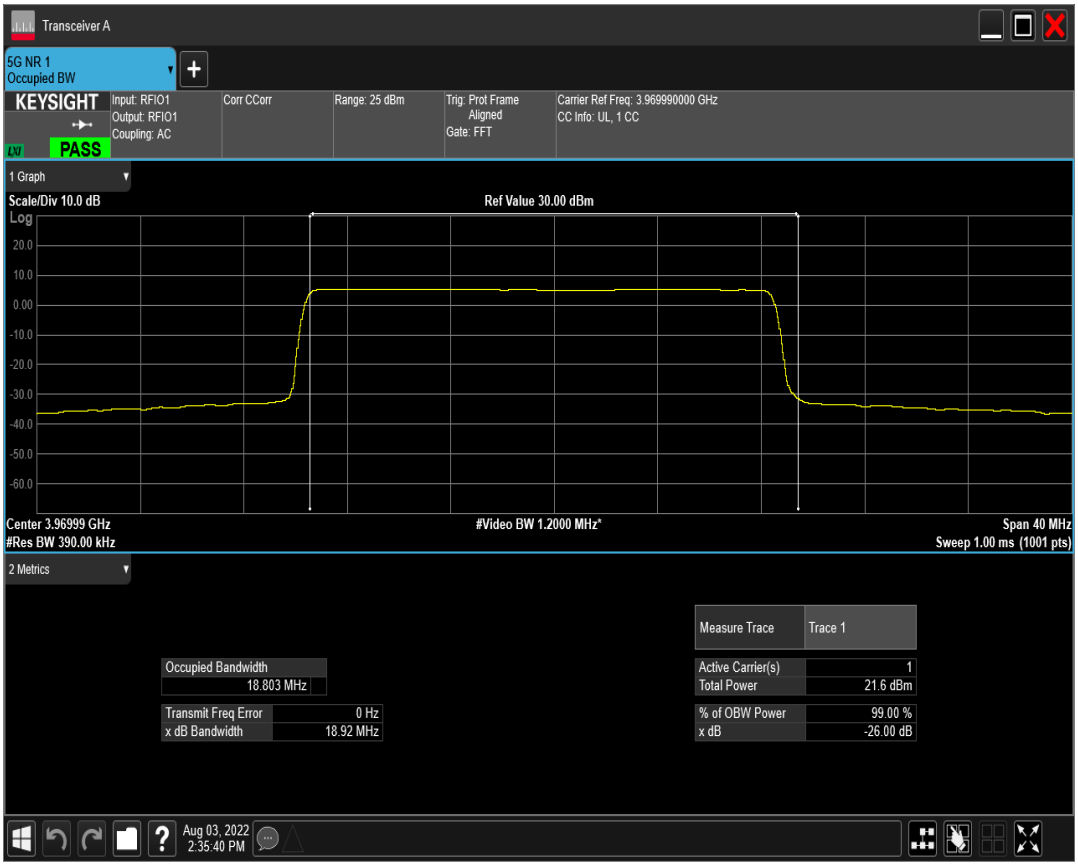


n77(3700-3980) SCS=15kHz DFT_QPSK BW=20MHz Channel=664666 RB=100@0



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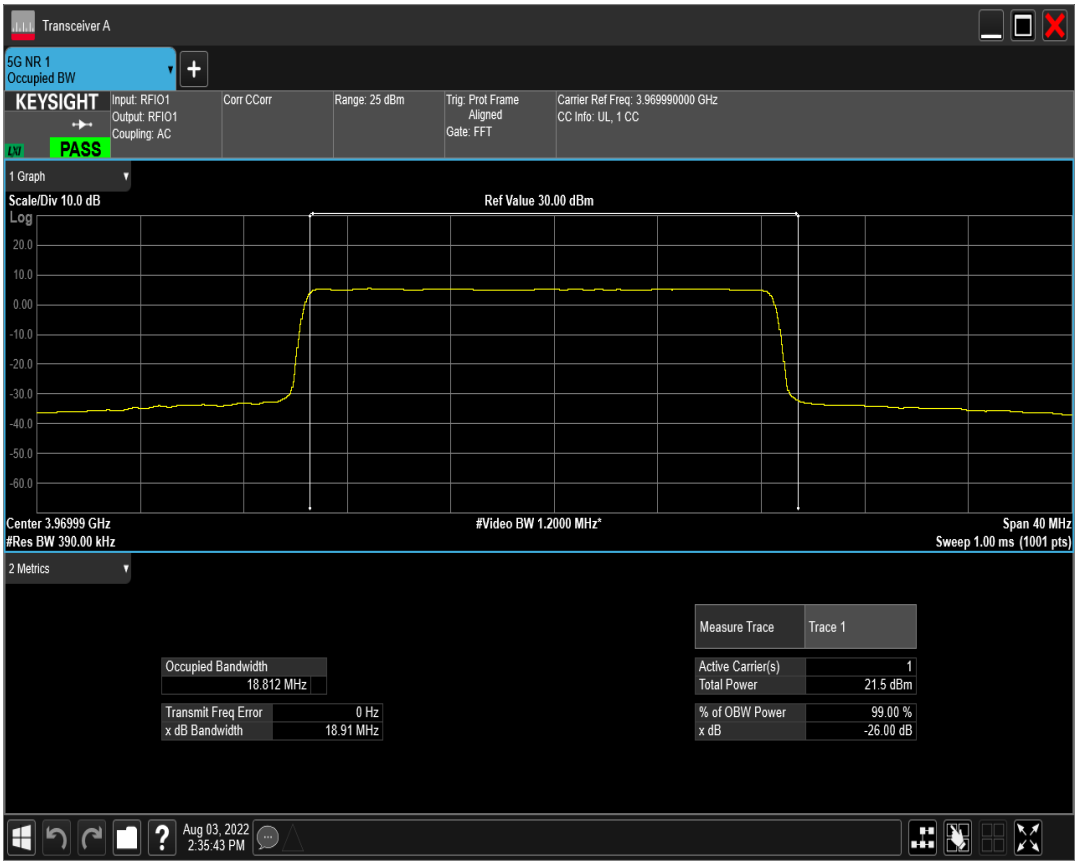
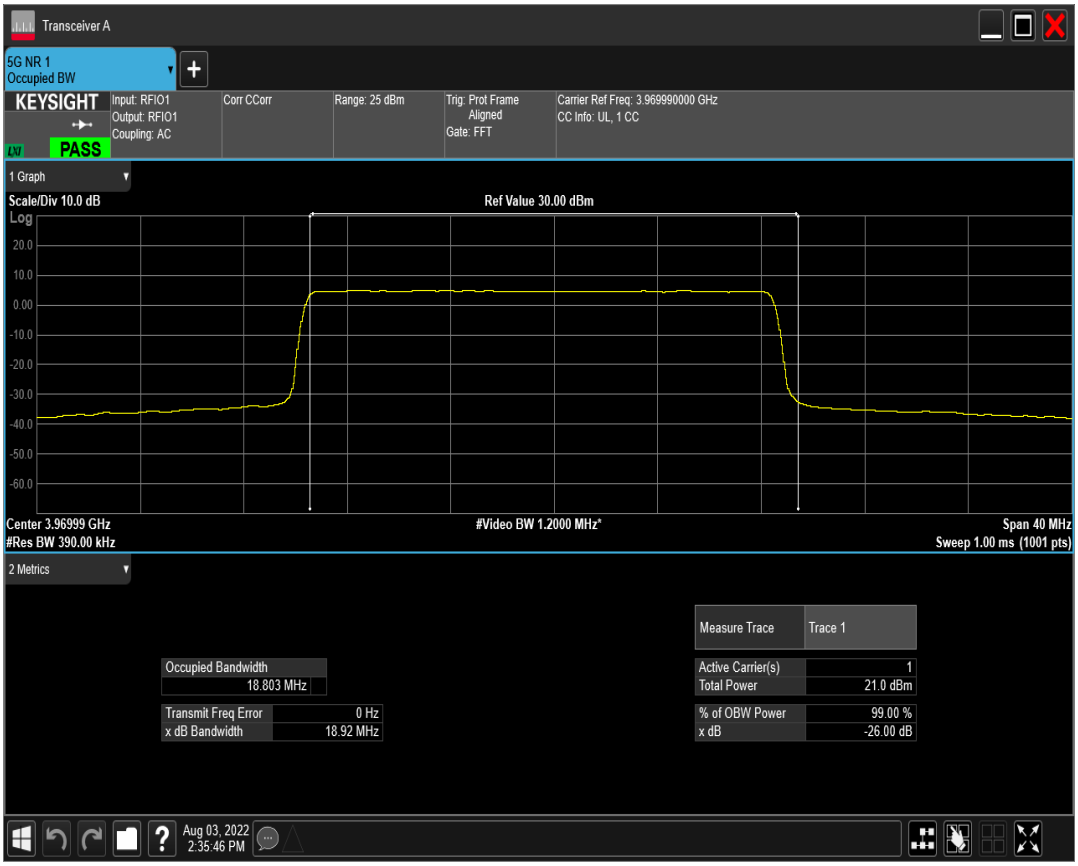


n77(3700-3980) SCS=15kHz DFT_QAM64 BW=20MHz Channel=664666 RB=100@0



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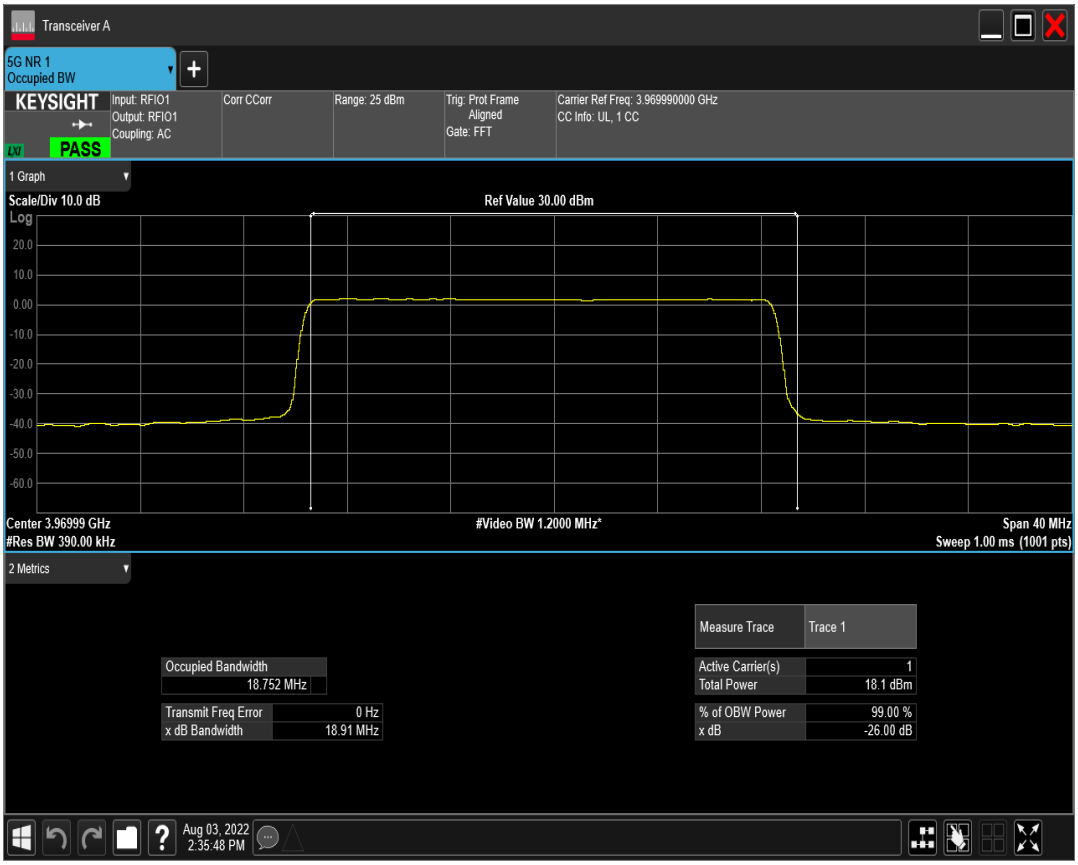
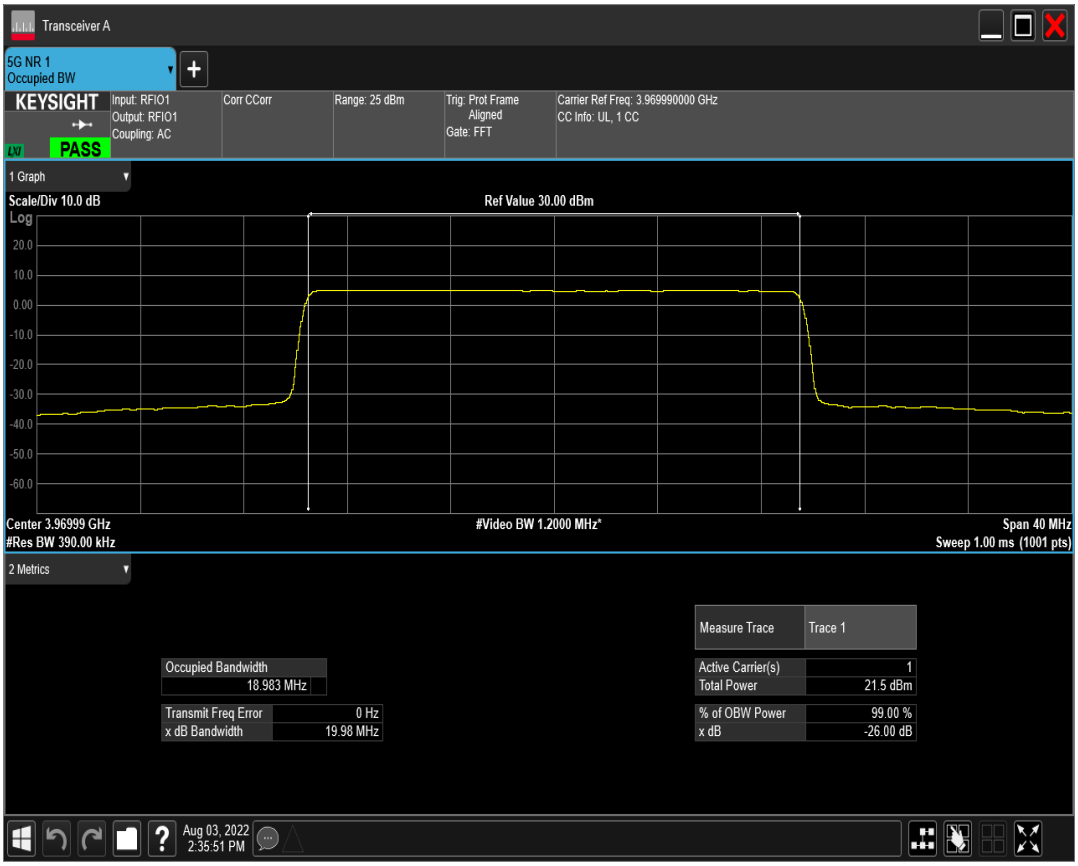
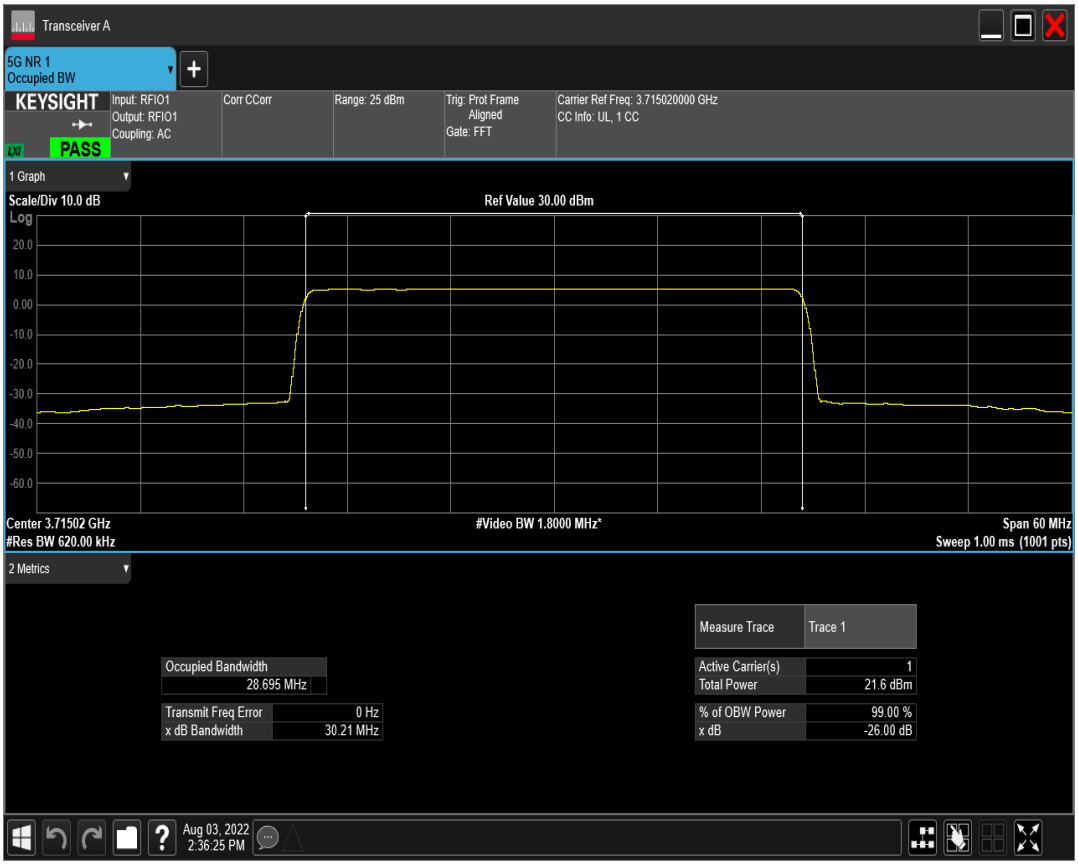


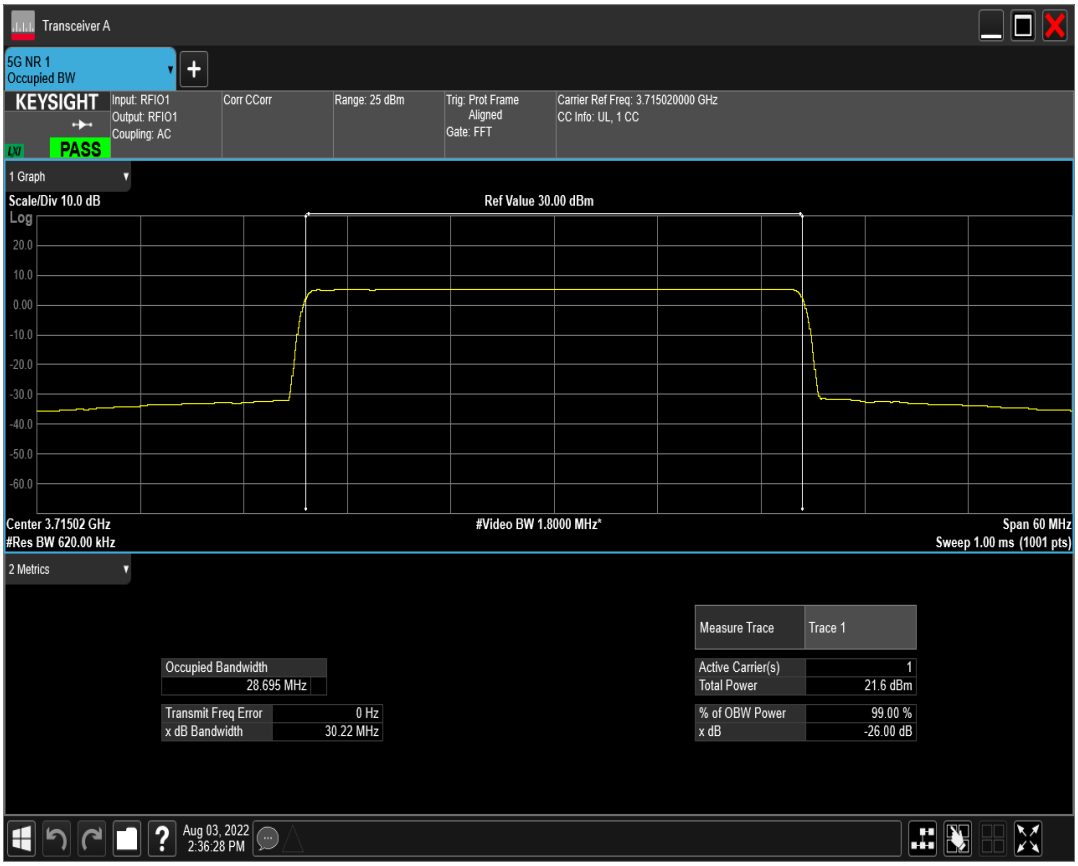
n77(3700-3980) SCS=15kHz CP_QPSK BW=20MHz Channel=664666 RB=106@0



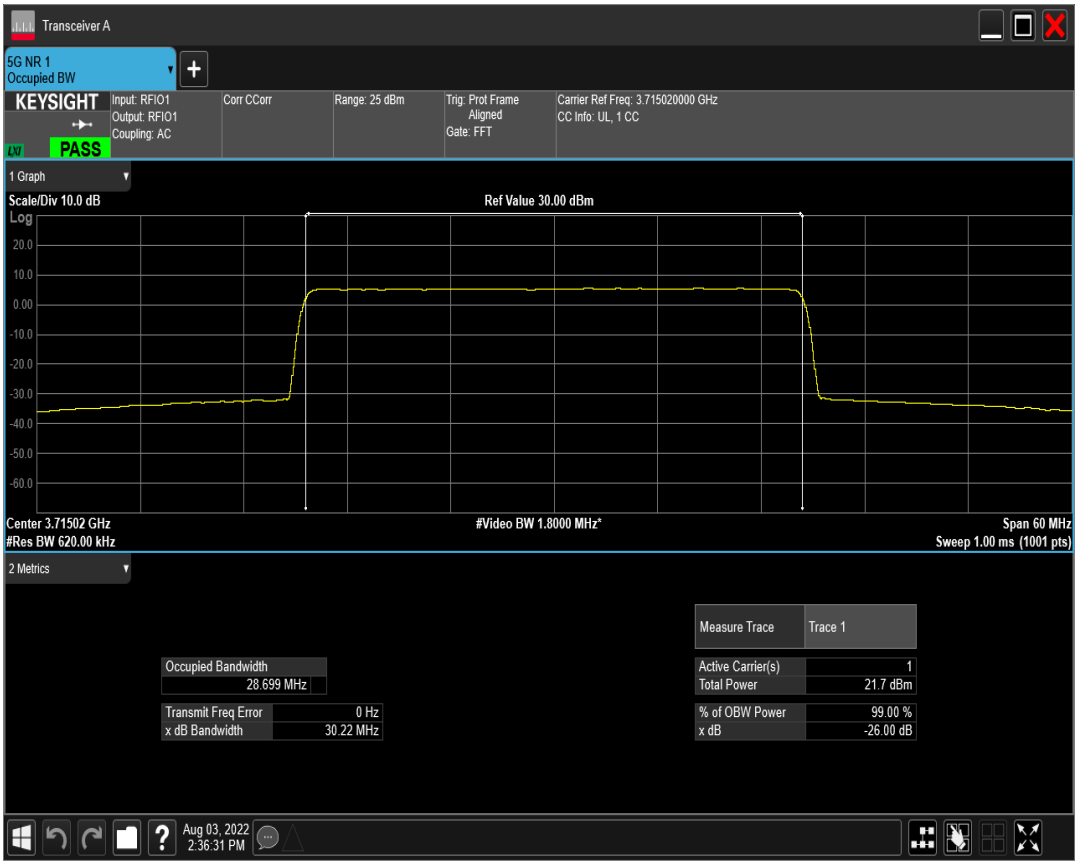
n77(3700-3980) SCS=15kHz DFT_BPSK BW=30MHz Channel=647668 RB=160@0



n77(3700-3980) SCS=15kHz DFT_QPSK BW=30MHz Channel=647668 RB=160@0



n77(3700-3980) SCS=15kHz DFT_QAM16 BW=30MHz Channel=647668 RB=160@0



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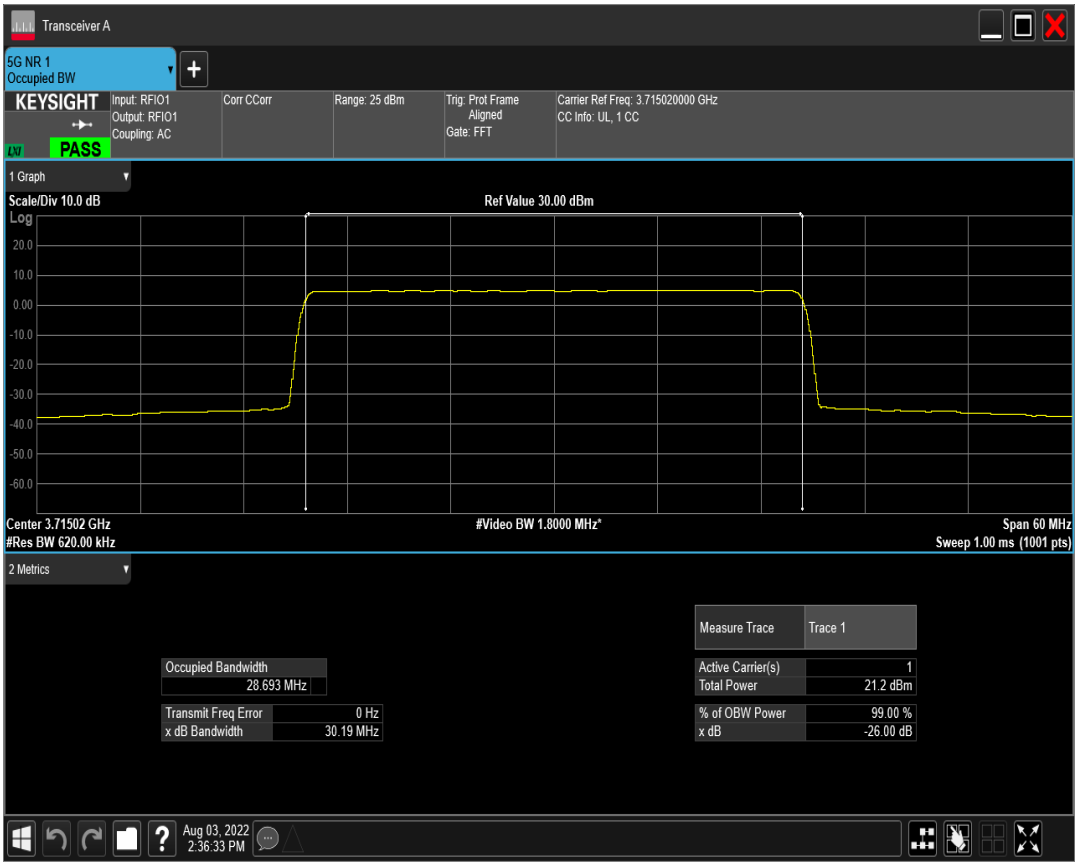

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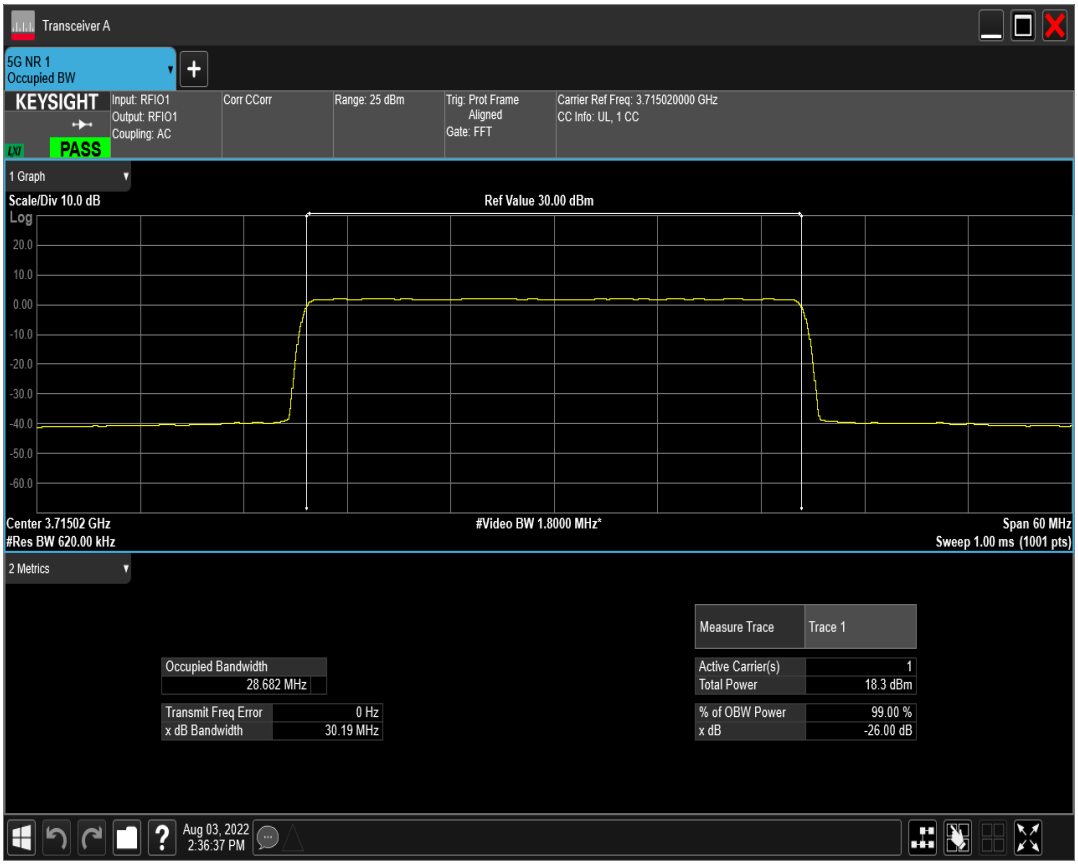
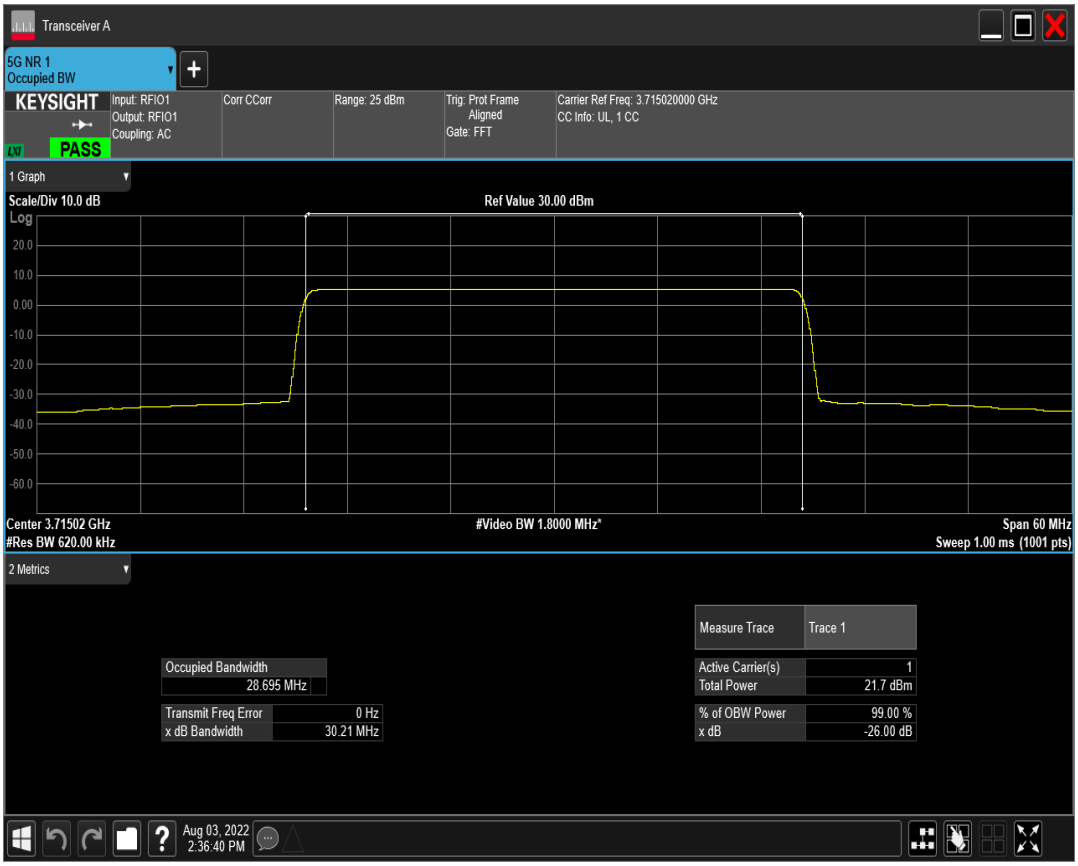
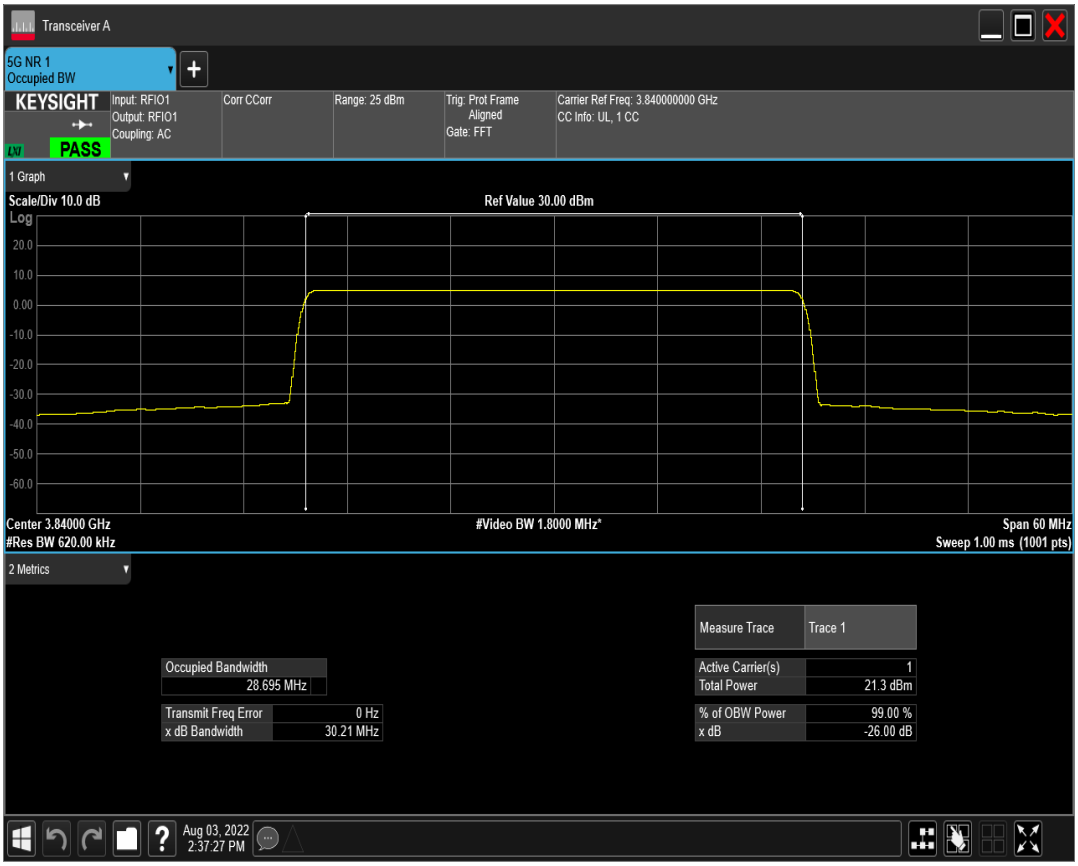


n77(3700-3980) SCS=15kHz CP_QPSK BW=30MHz Channel=647668 RB=160@0



n77(3700-3980) SCS=15kHz DFT_BPSK BW=30MHz Channel=656000 RB=160@0

n77(3700-3980) SCS=15kHz DFT_QPSK BW=30MHz Channel=656000 RB=160@0



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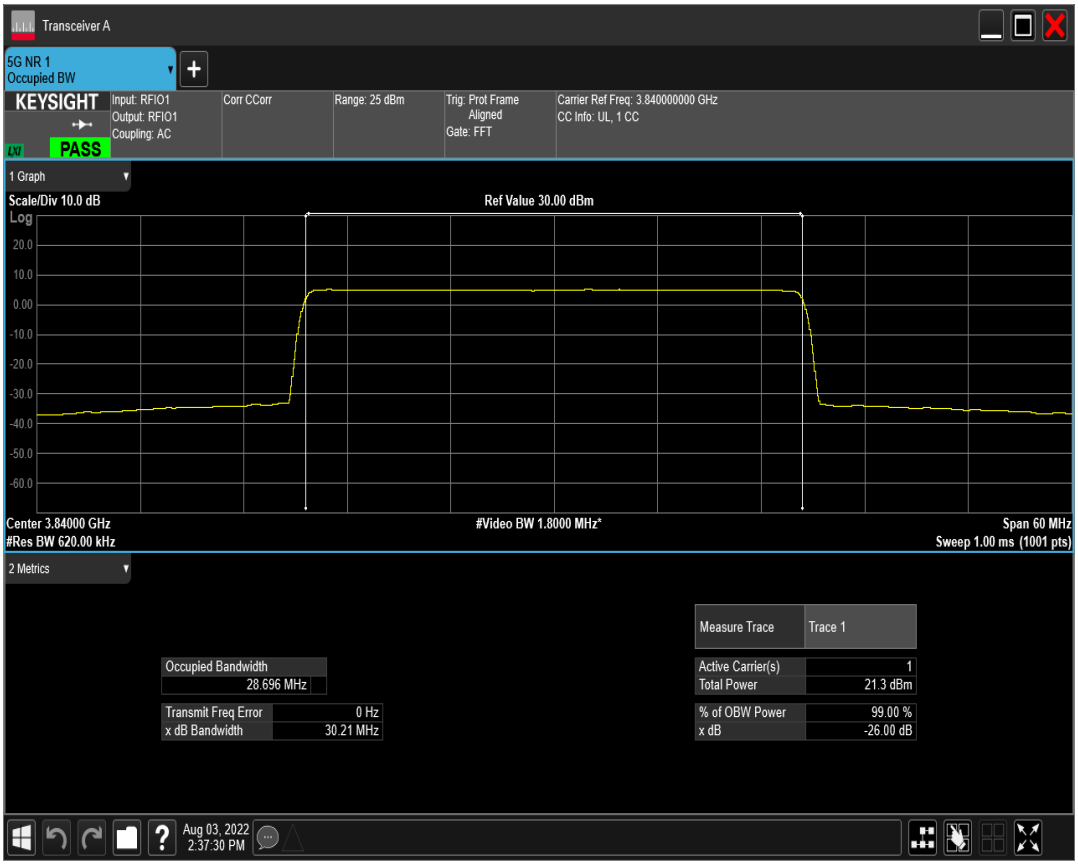
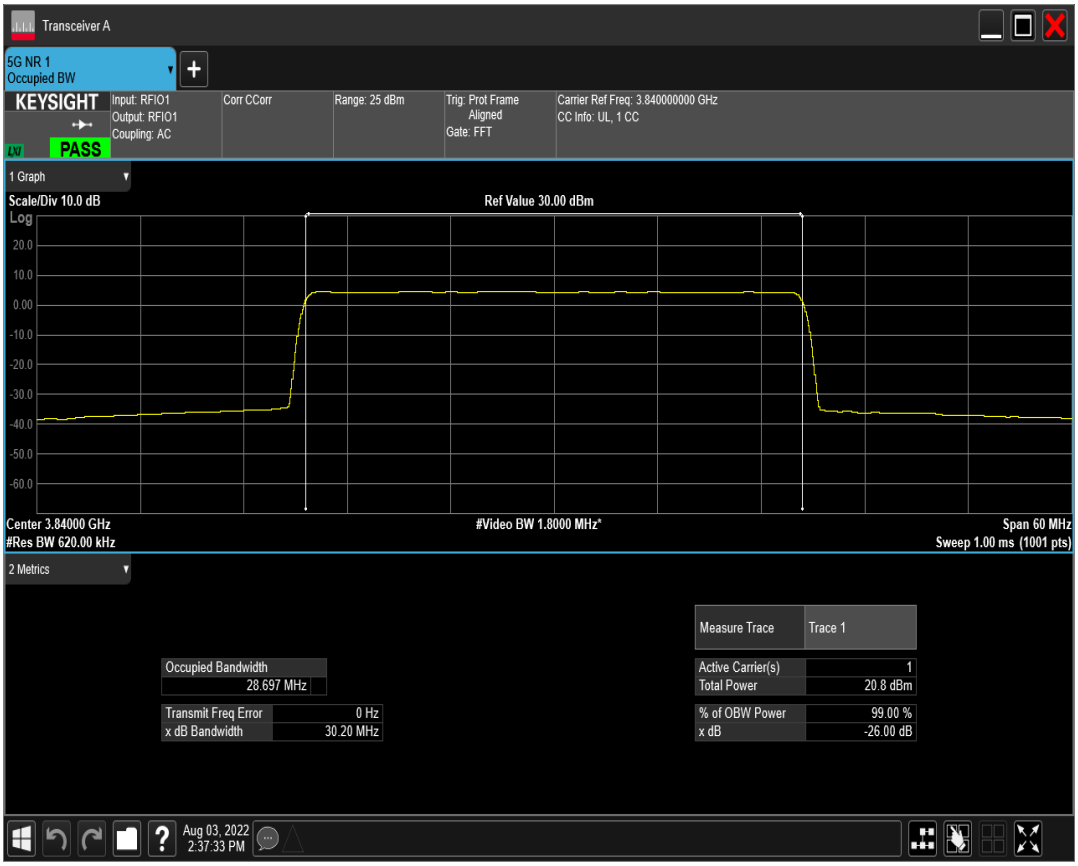
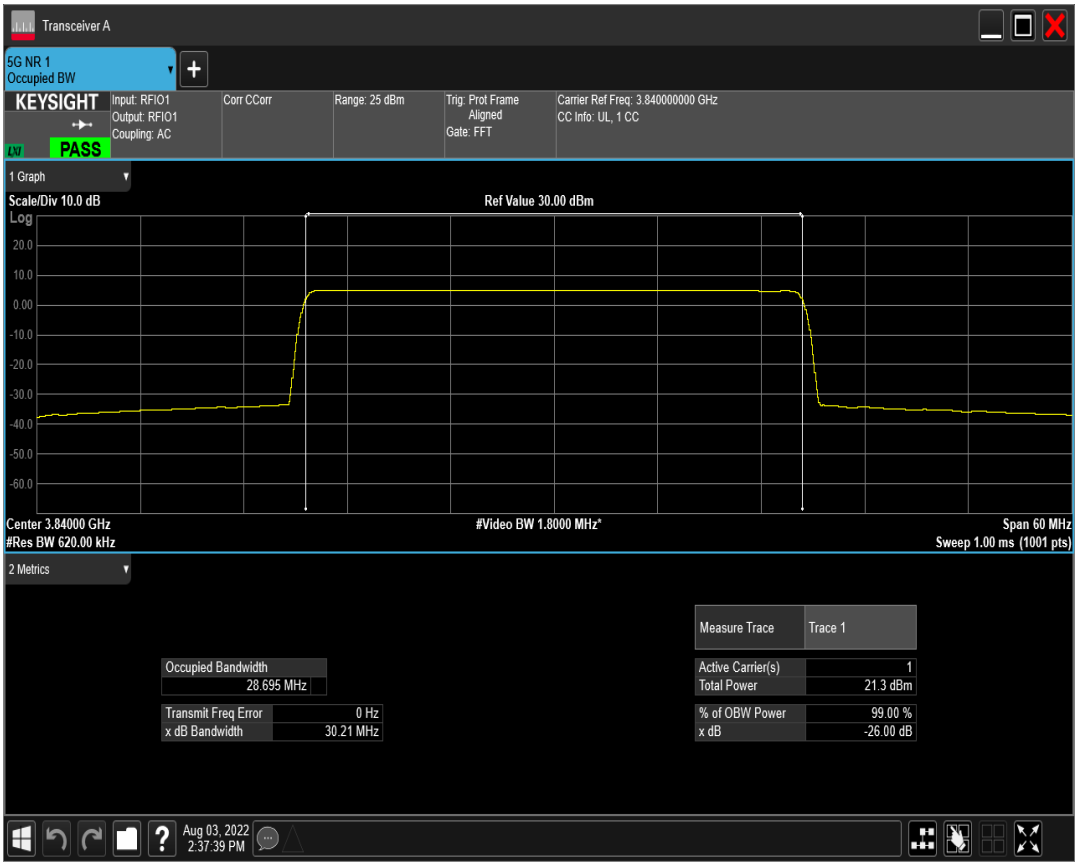


n77(3700-3980) SCS=15kHz DFT_QAM64 BW=30MHz Channel=656000 RB=160@0

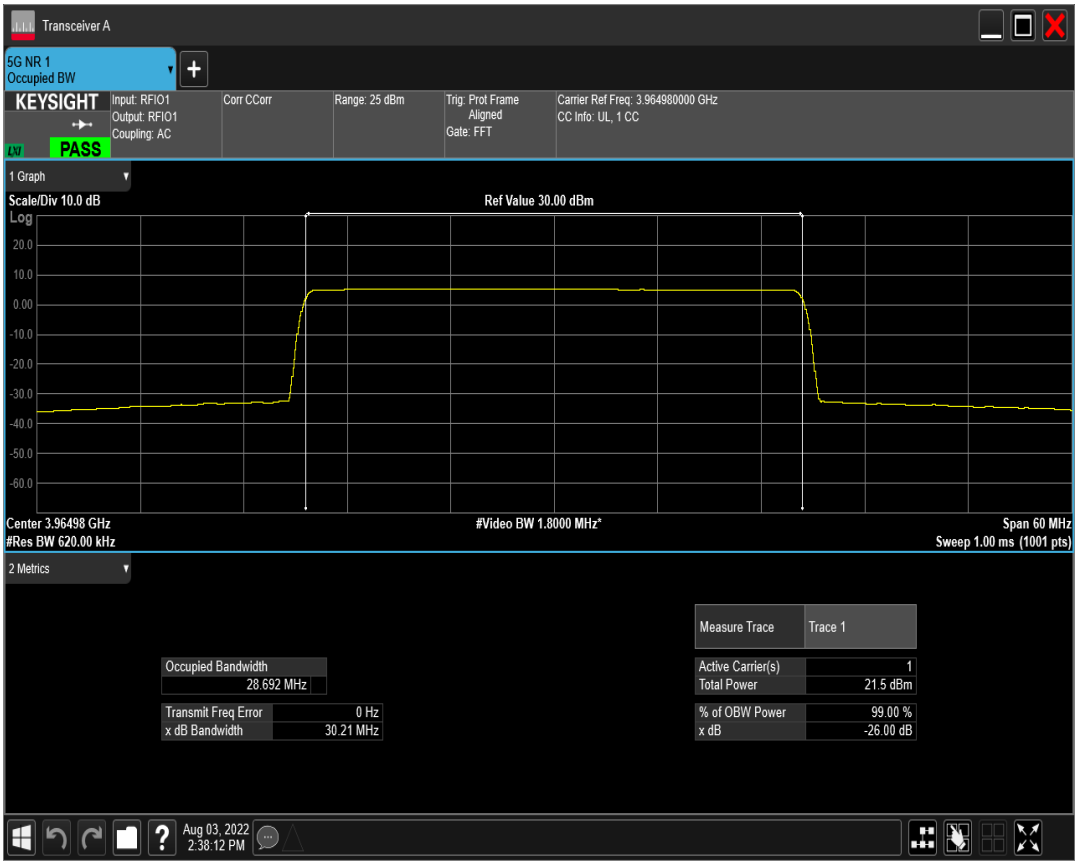


n77(3700-3980) SCS=15kHz DFT_QAM256 BW=30MHz Channel=656000 RB=160@0

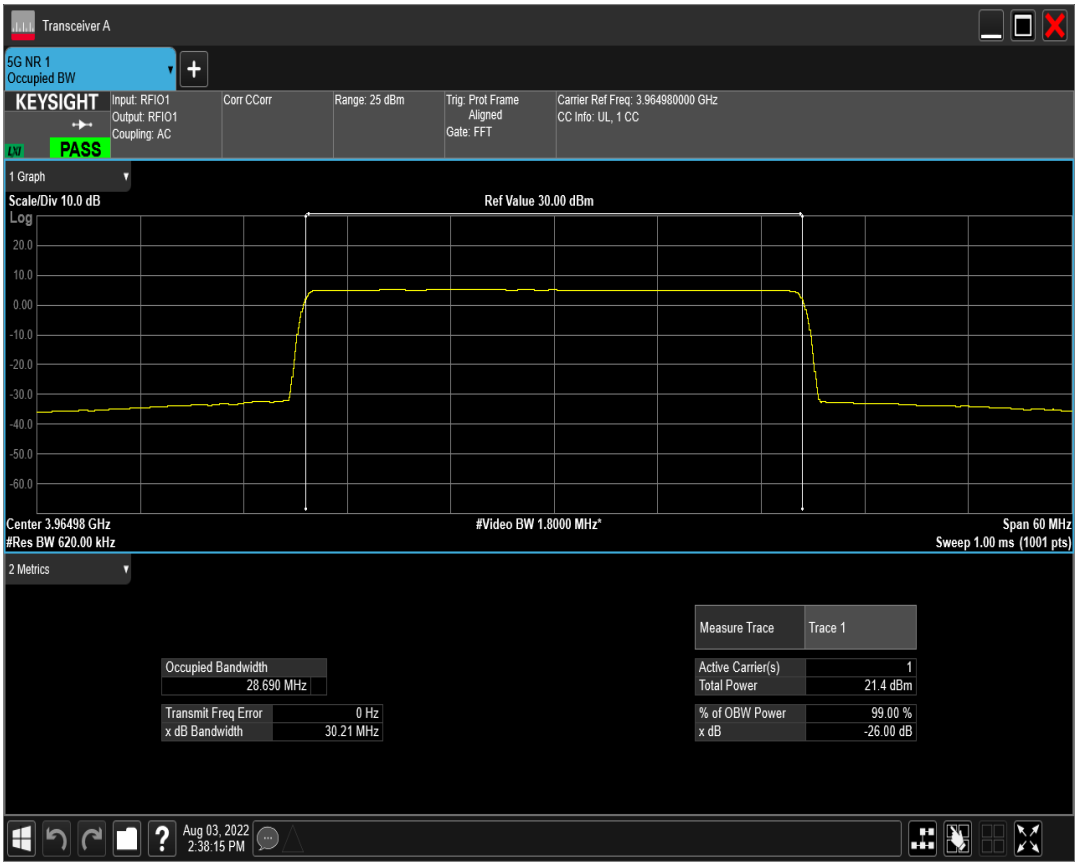
n77(3700-3980) SCS=15kHz CP_QPSK BW=30MHz Channel=656000 RB=160@0



n77(3700-3980) SCS=15kHz DFT_BPSK BW=30MHz Channel=664332 RB=160@0



n77(3700-3980) SCS=15kHz DFT_QPSK BW=30MHz Channel=664332 RB=160@0



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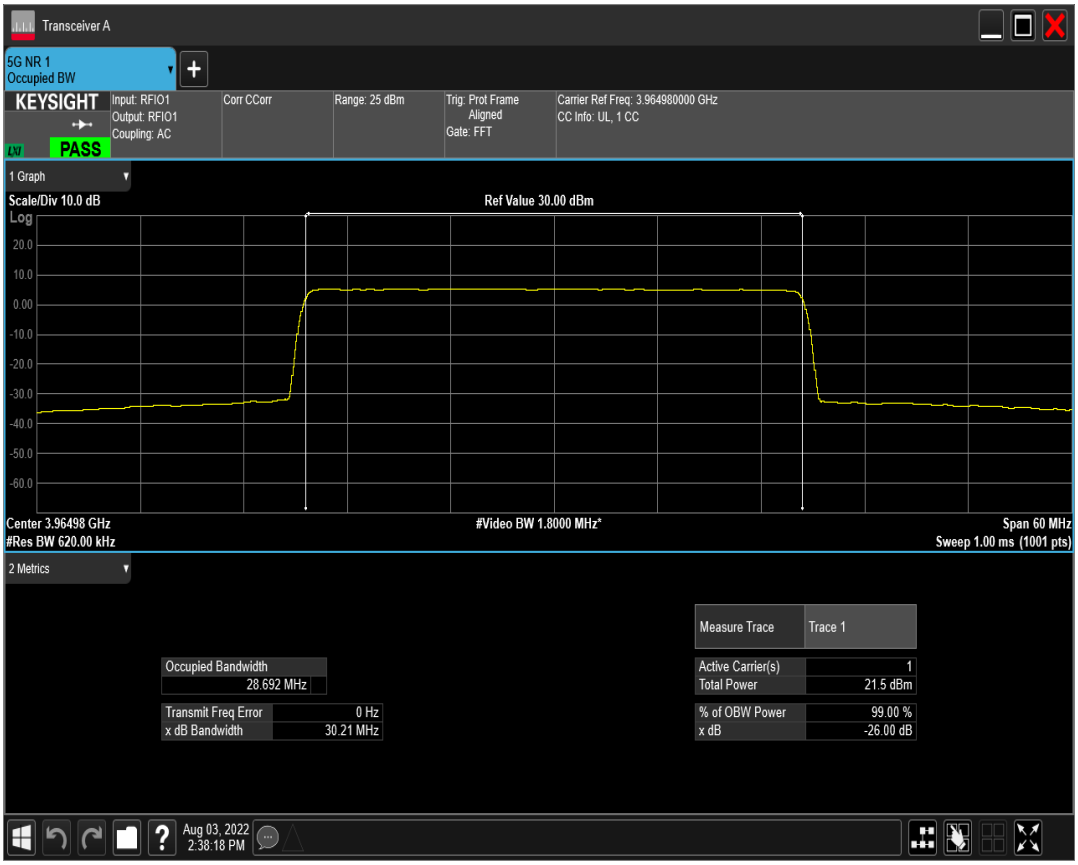

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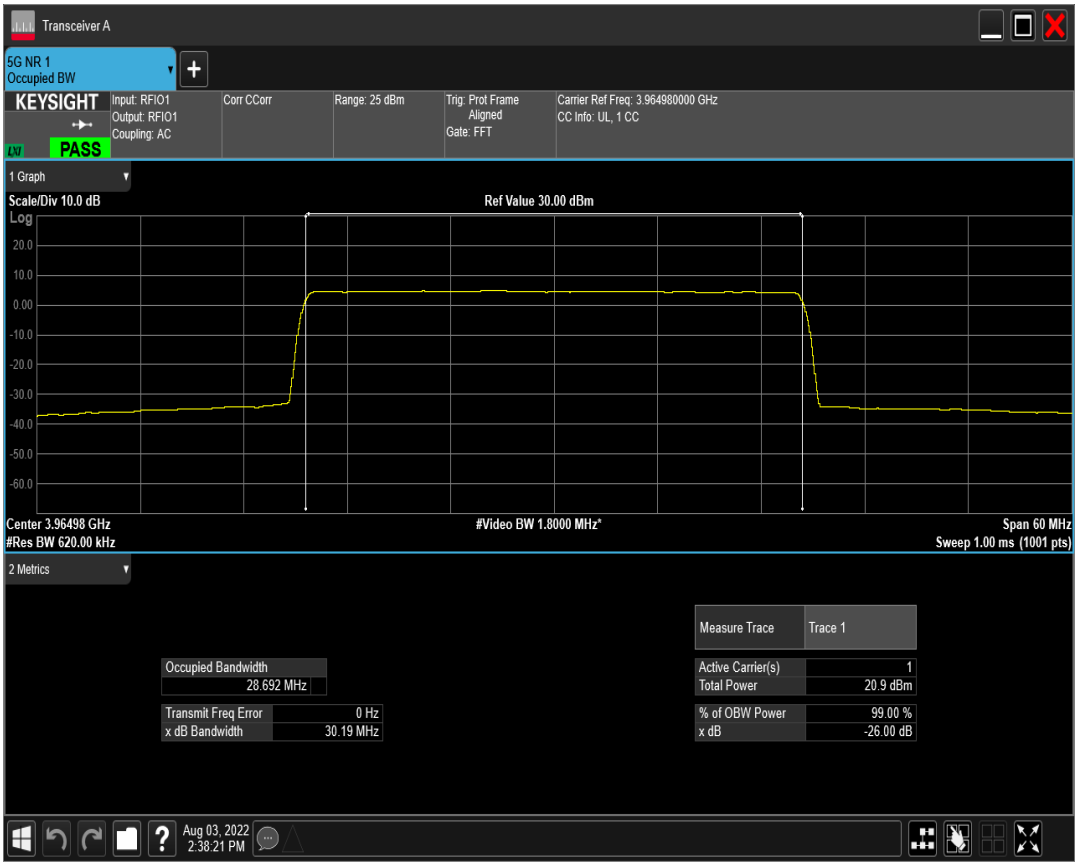
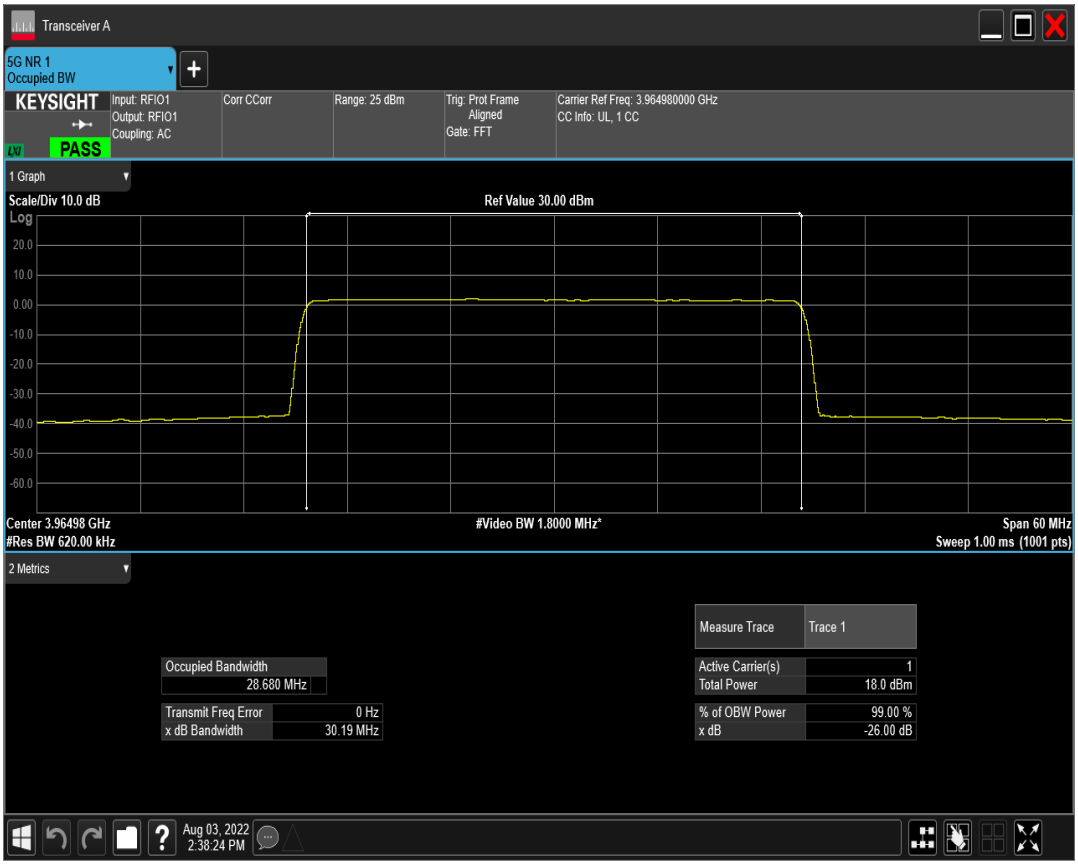
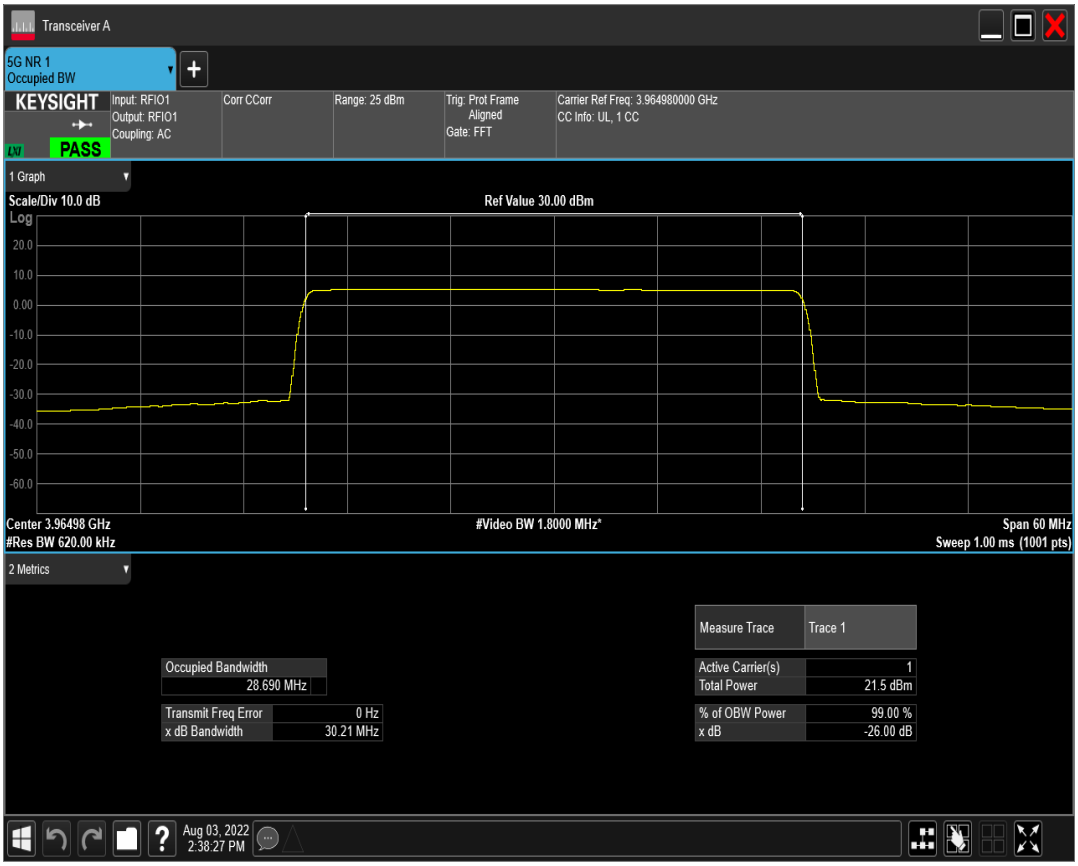


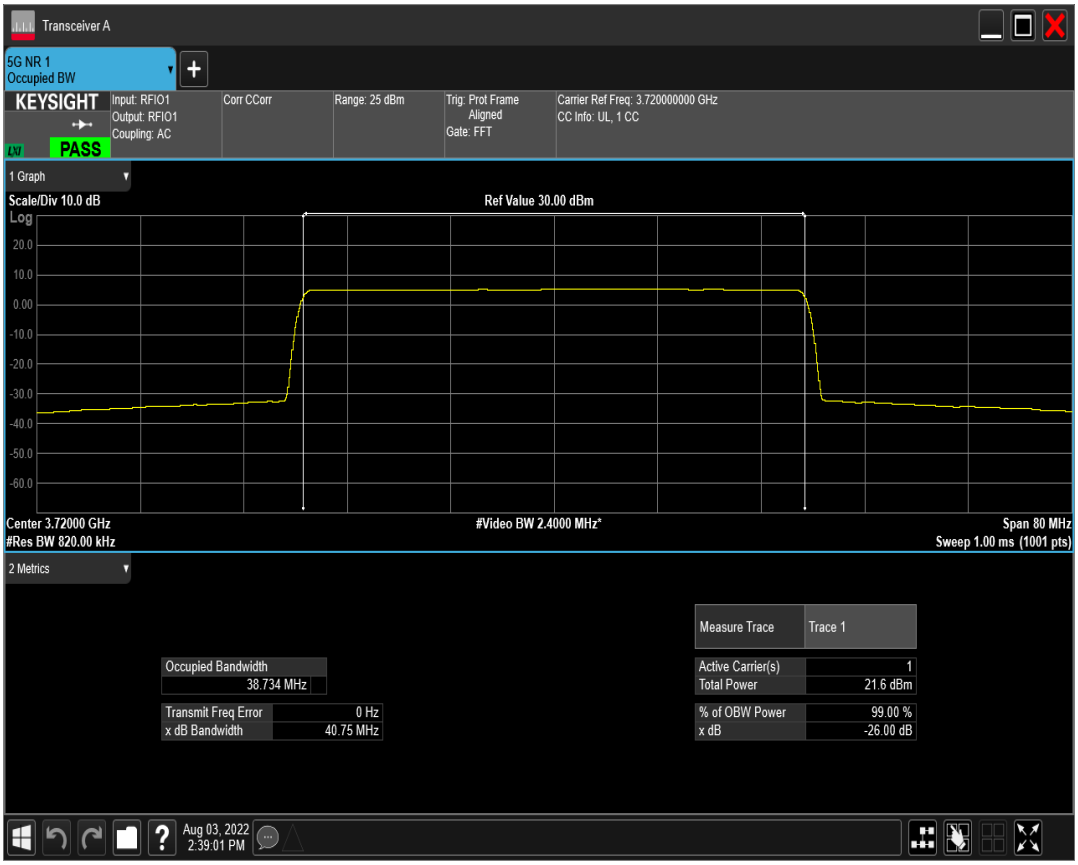
n77(3700-3980) SCS=15kHz DFT_QAM256 BW=30MHz Channel=664332 RB=160@0



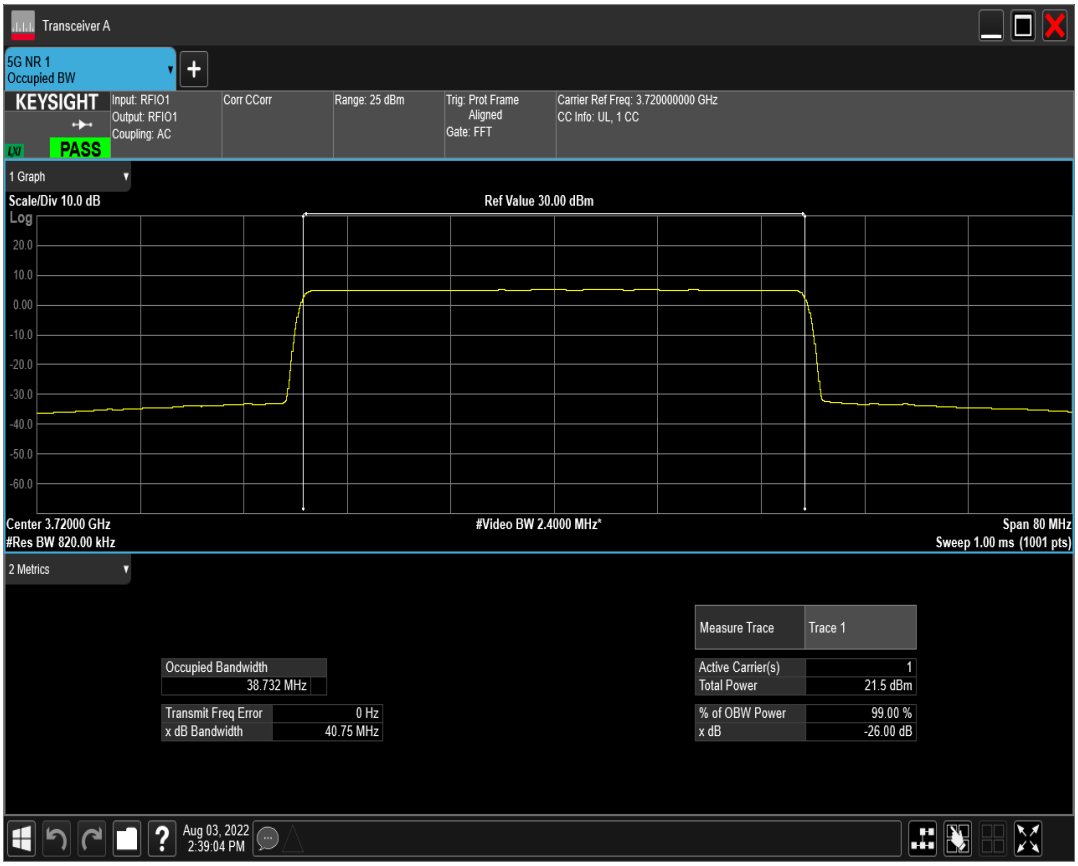
n77(3700-3980) SCS=15kHz CP_QPSK BW=30MHz Channel=664332 RB=160@0



n77(3700-3980) SCS=15kHz DFT_BPSK BW=40MHz Channel=648000 RB=216@0

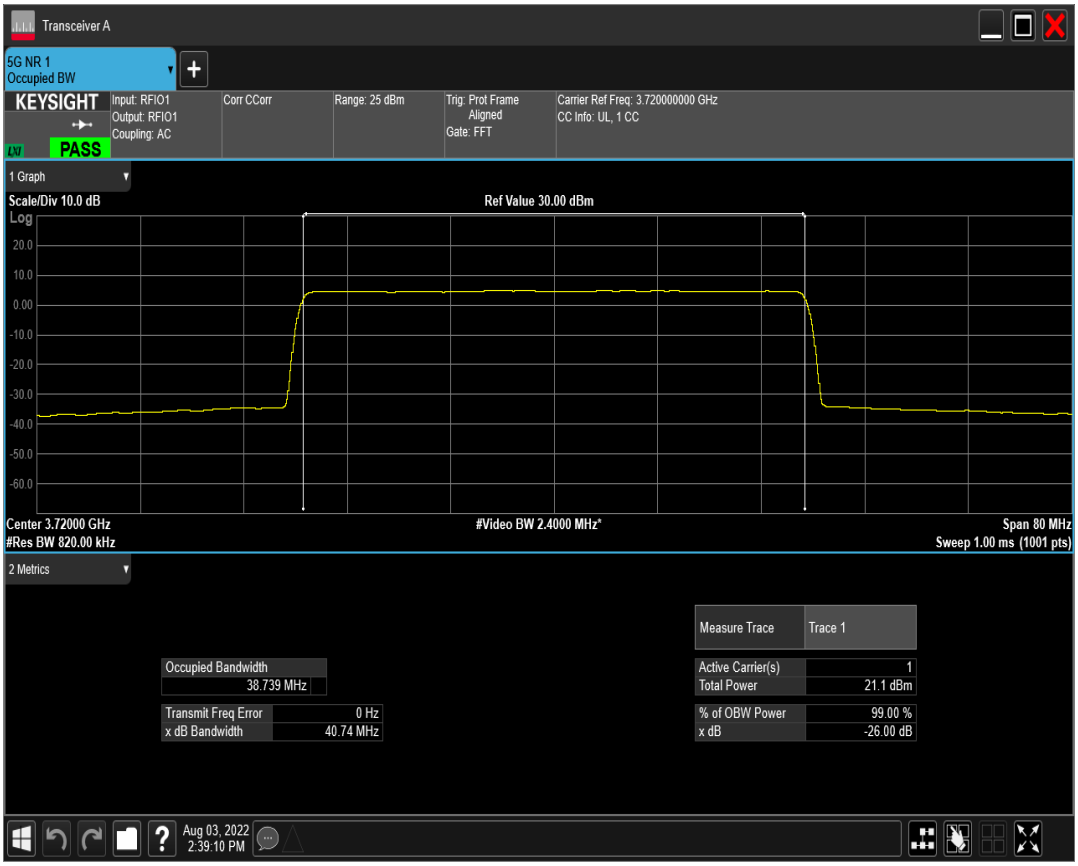


n77(3700-3980) SCS=15kHz DFT_QPSK BW=40MHz Channel=648000 RB=216@0



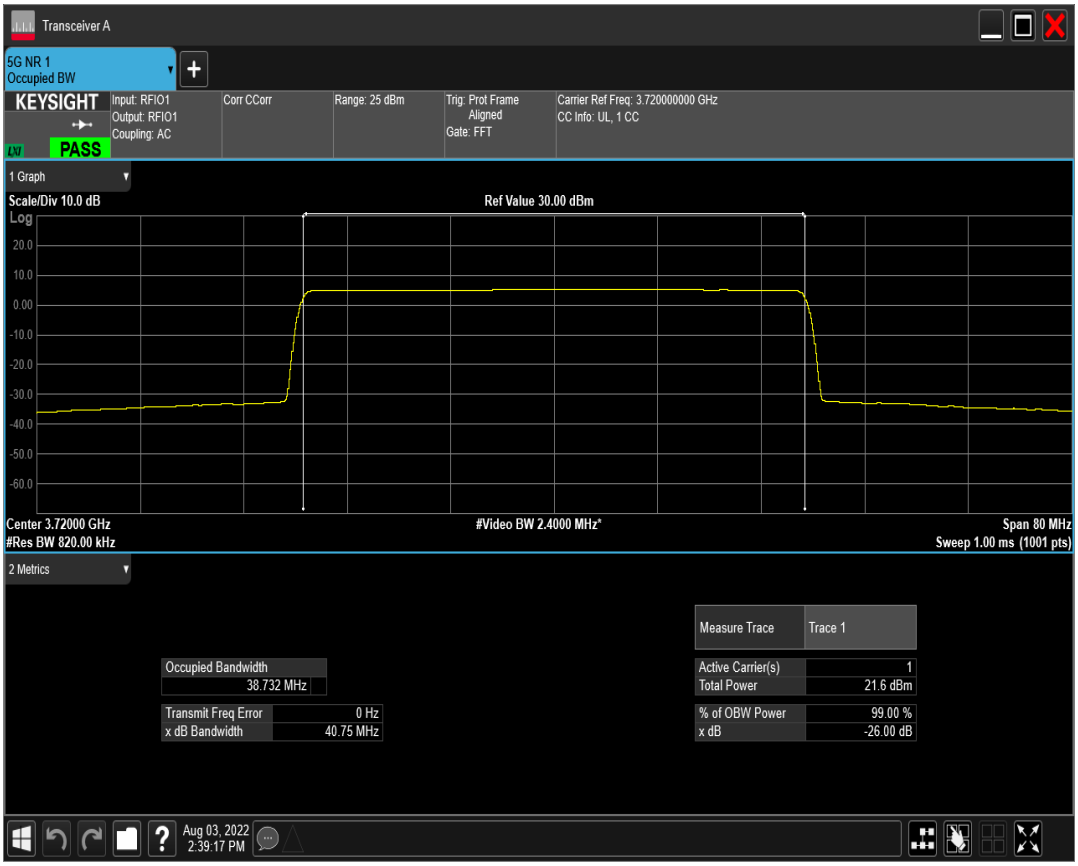
n77(3700-3980) SCS=15kHz DFT_QAM16 BW=40MHz Channel=648000 RB=216@0

n77(3700-3980) SCS=15kHz DFT_QAM64 BW=40MHz Channel=648000 RB=216@0

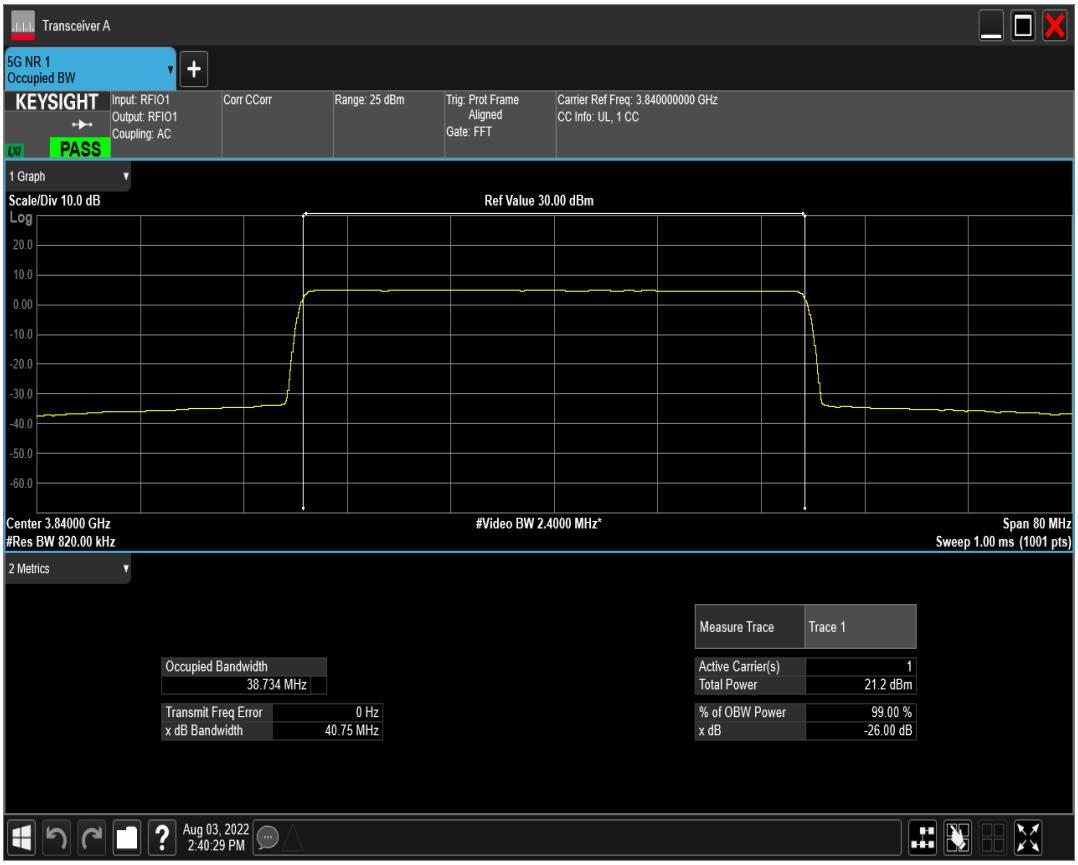


n77(3700-3980) SCS=15kHz DFT_QAM256 BW=40MHz Channel=648000 RB=216@0

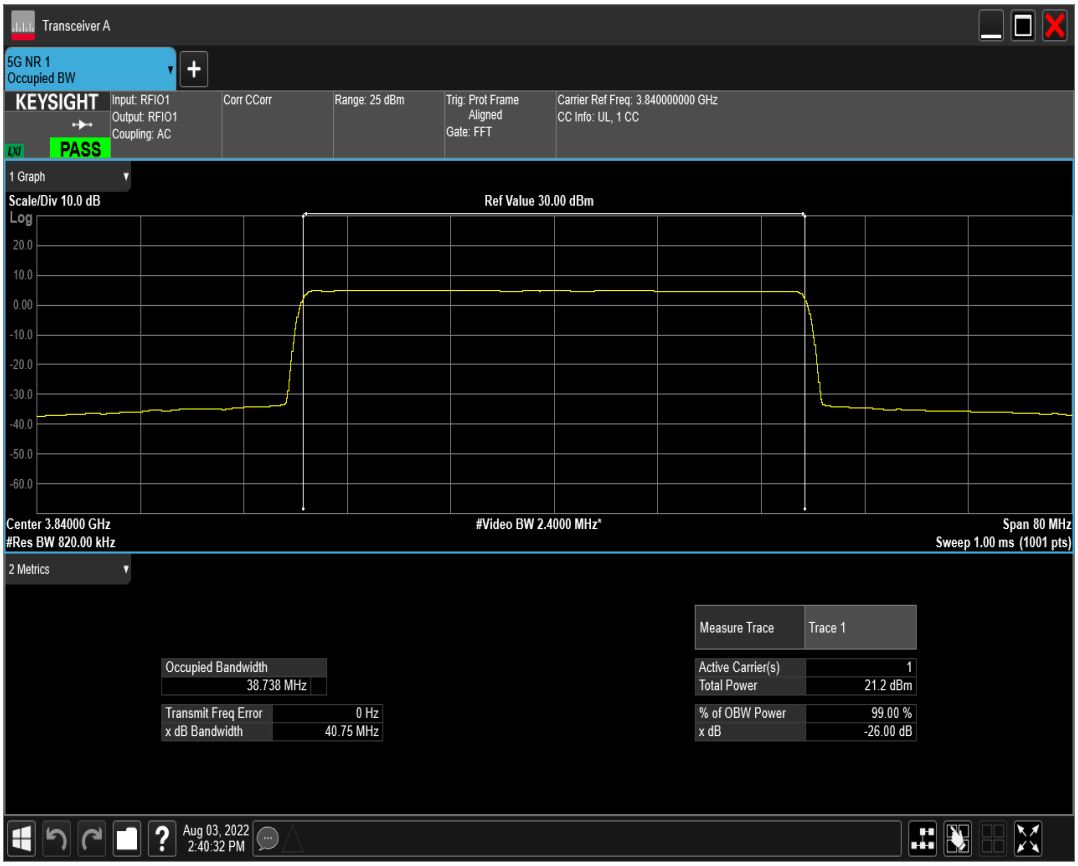
n77(3700-3980) SCS=15kHz CP_QPSK BW=40MHz Channel=648000 RB=216@0



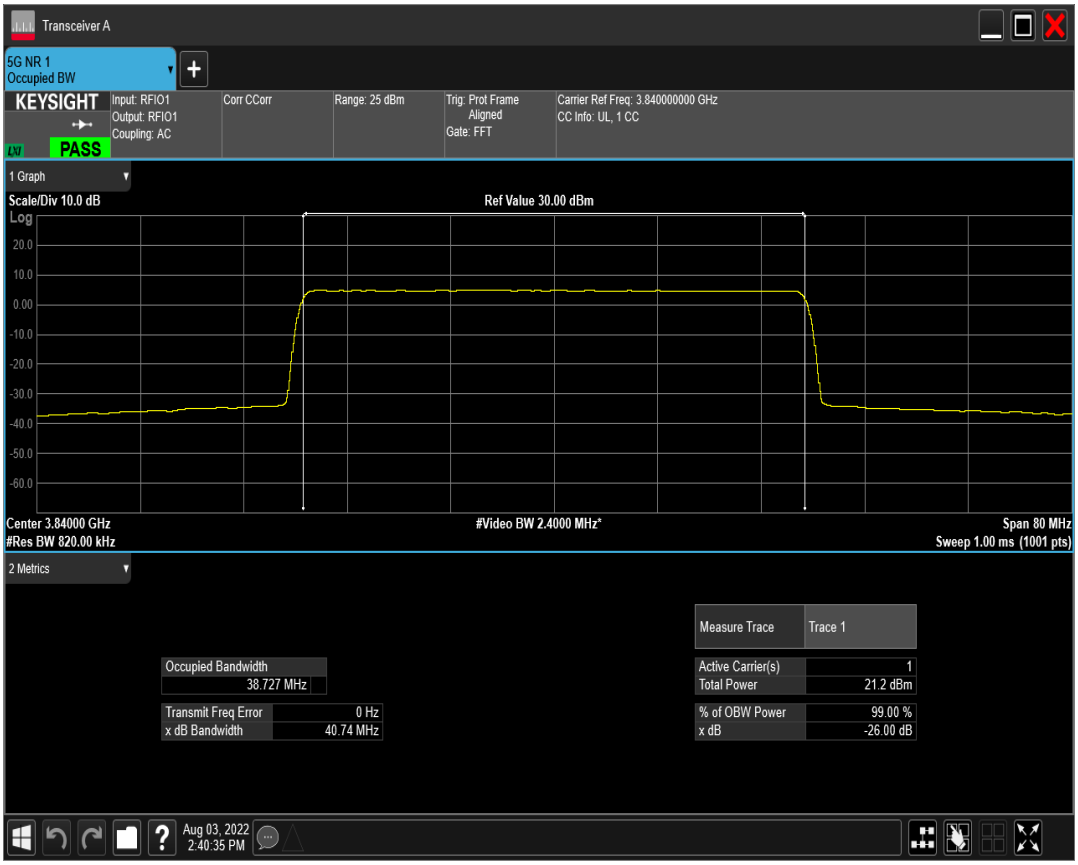
n77(3700-3980) SCS=15kHz DFT_BPSK BW=40MHz Channel=656000 RB=216@0



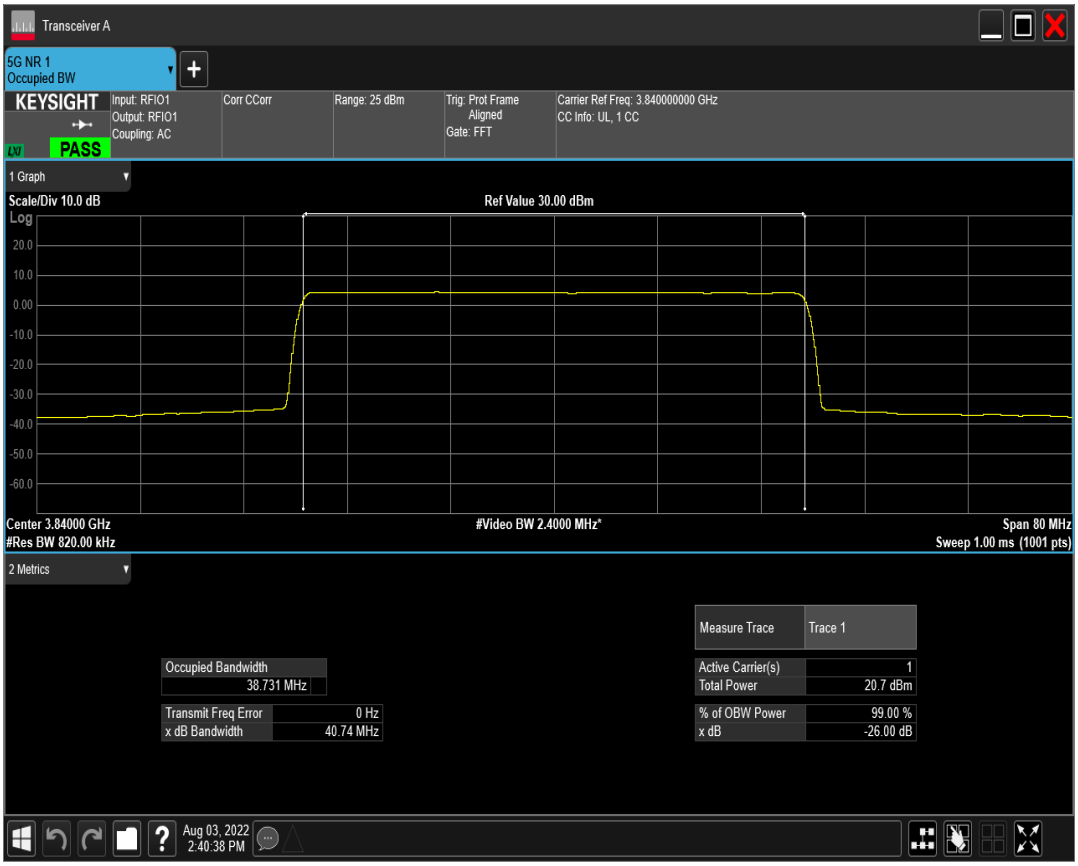
n77(3700-3980) SCS=15kHz DFT_QPSK BW=40MHz Channel=656000 RB=216@0



n77(3700-3980) SCS=15kHz DFT_QAM16 BW=40MHz Channel=656000 RB=216@0

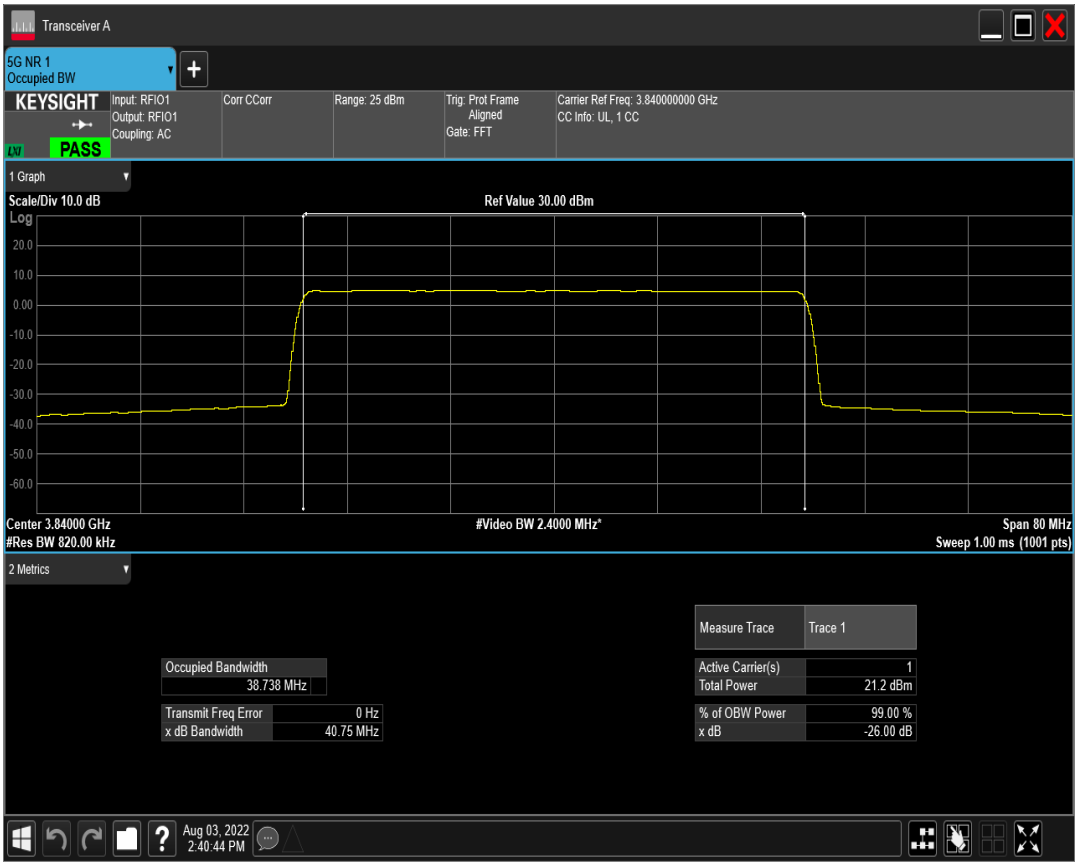


n77(3700-3980) SCS=15kHz DFT_QAM64 BW=40MHz Channel=656000 RB=216@0



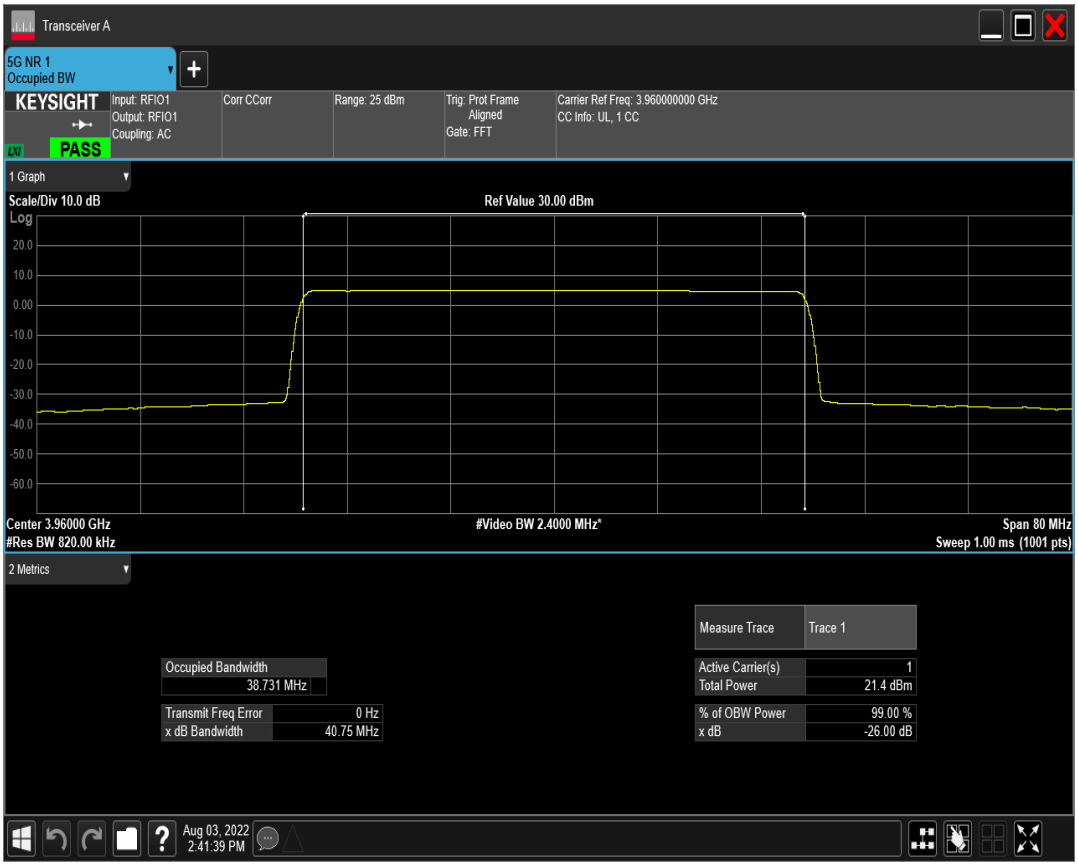
n77(3700-3980) SCS=15kHz DFT_QAM256 BW=40MHz Channel=656000 RB=216@0

n77(3700-3980) SCS=15kHz CP_QPSK BW=40MHz Channel=656000 RB=216@0

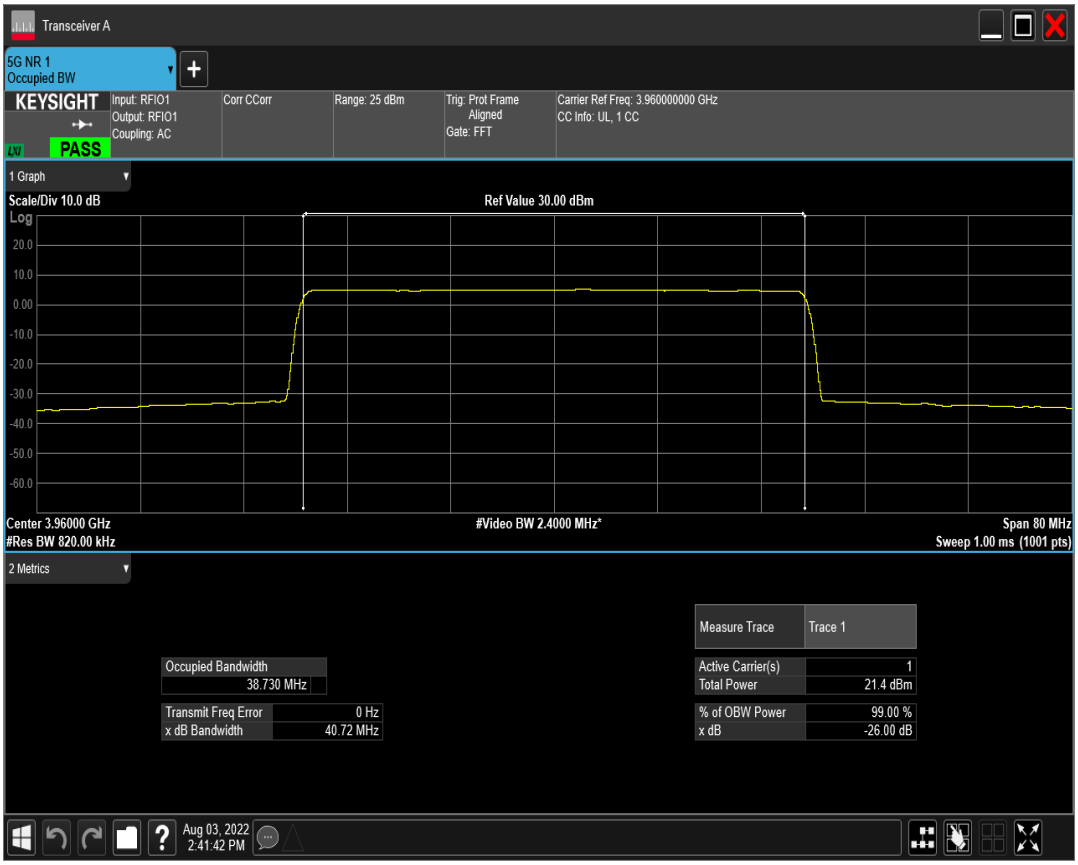


n77(3700-3980) SCS=15kHz DFT_BPSK BW=40MHz Channel=664000 RB=216@0

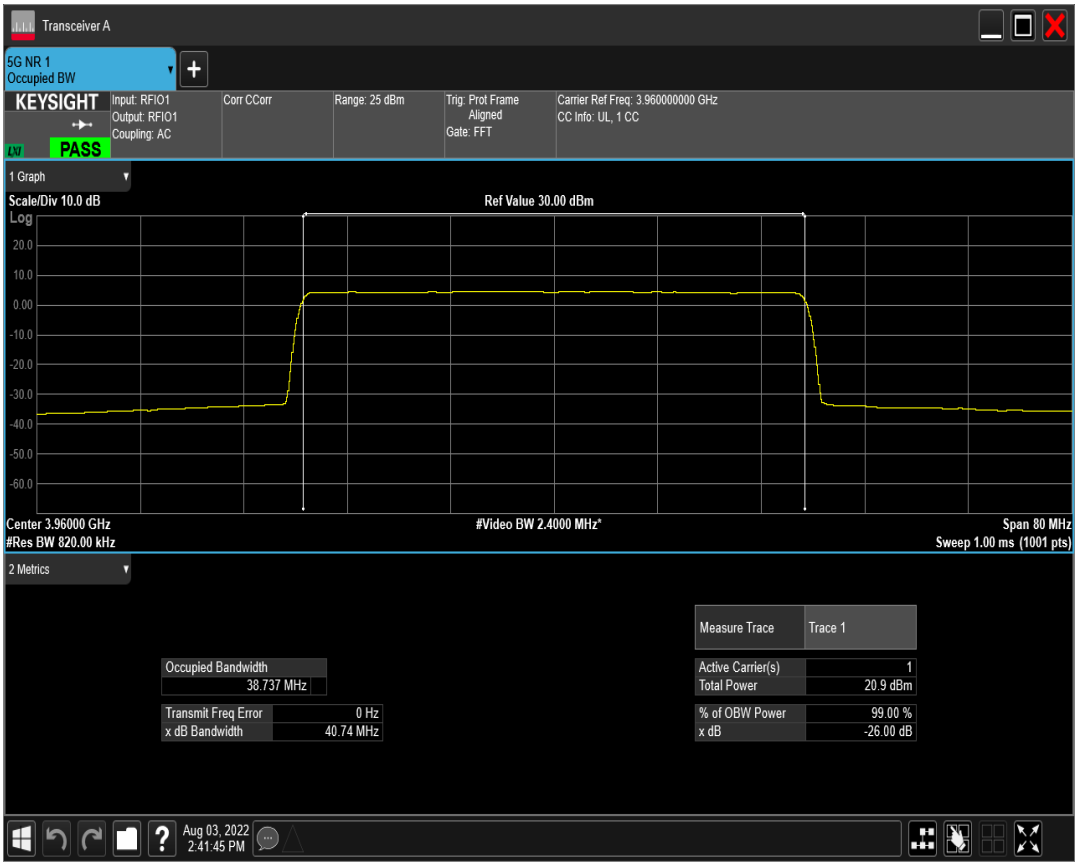
n77(3700-3980) SCS=15kHz DFT_QPSK BW=40MHz Channel=664000 RB=216@0



n77(3700-3980) SCS=15kHz DFT_QAM16 BW=40MHz Channel=664000 RB=216@0

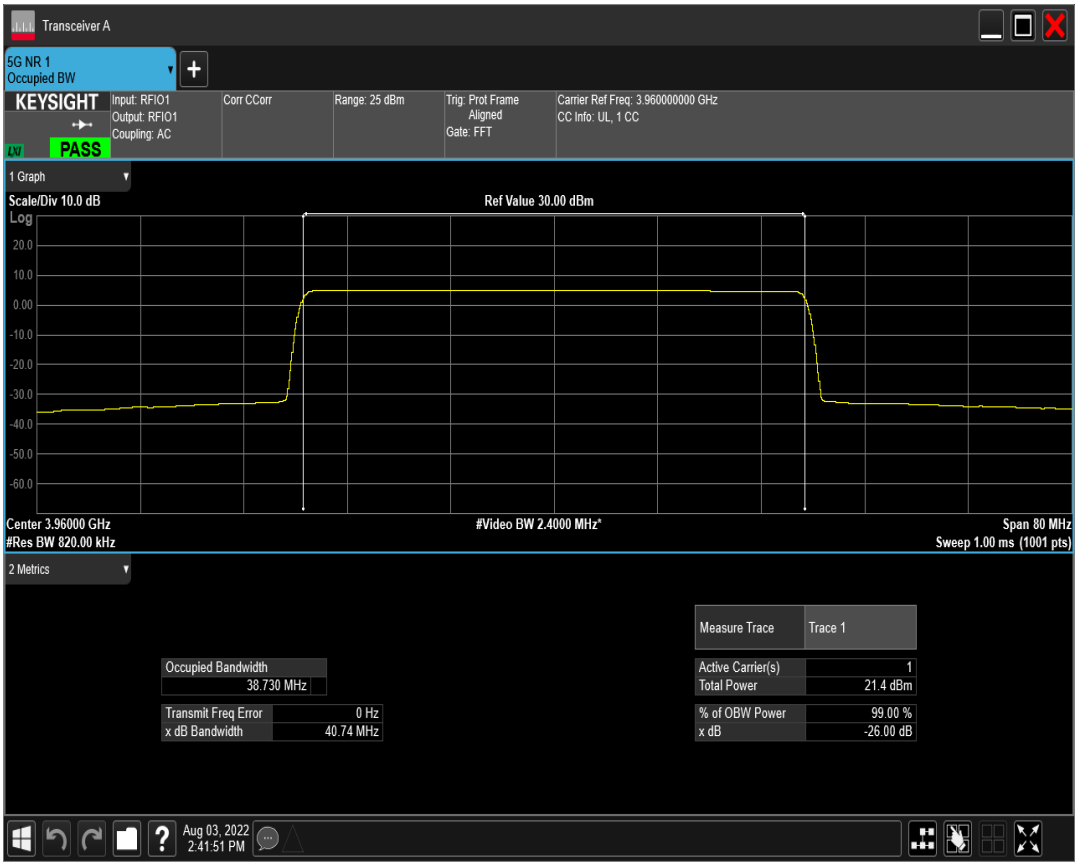


n77(3700-3980) SCS=15kHz DFT_QAM64 BW=40MHz Channel=664000 RB=216@0



n77(3700-3980) SCS=15kHz DFT_QAM256 BW=40MHz Channel=664000 RB=216@0

n77(3700-3980) SCS=15kHz CP_QPSK BW=40MHz Channel=664000 RB=216@0



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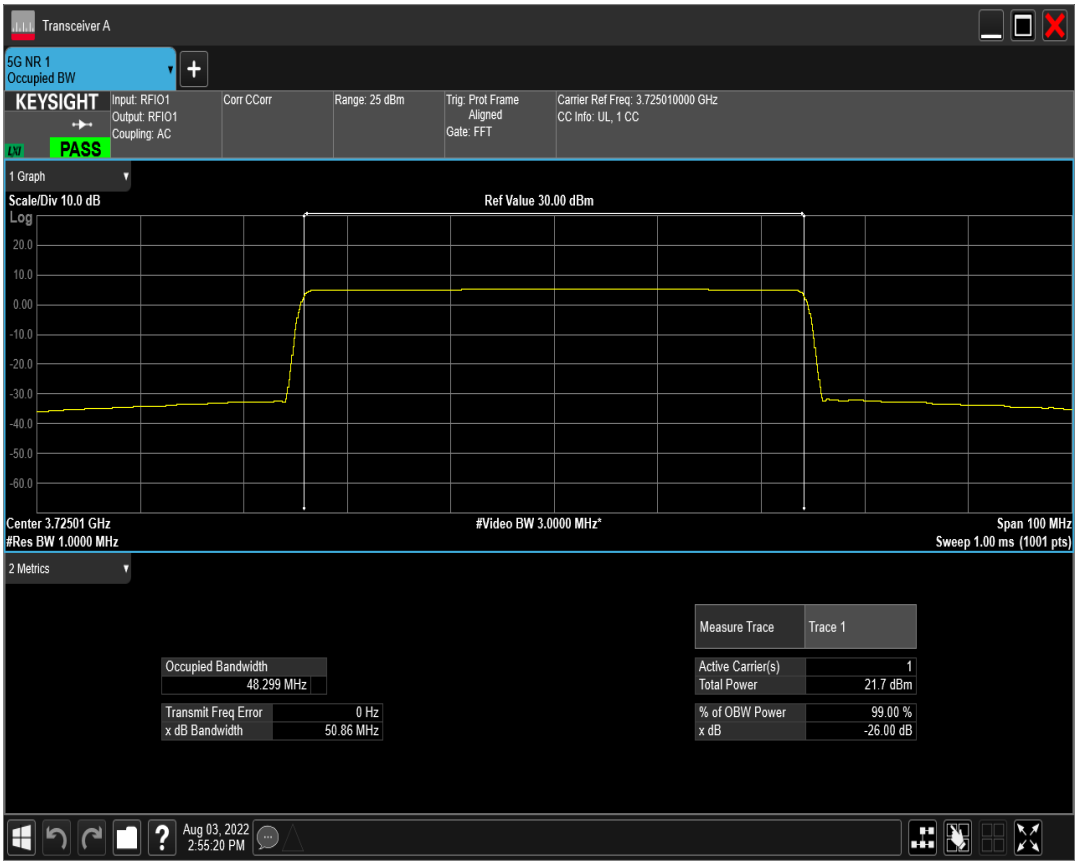
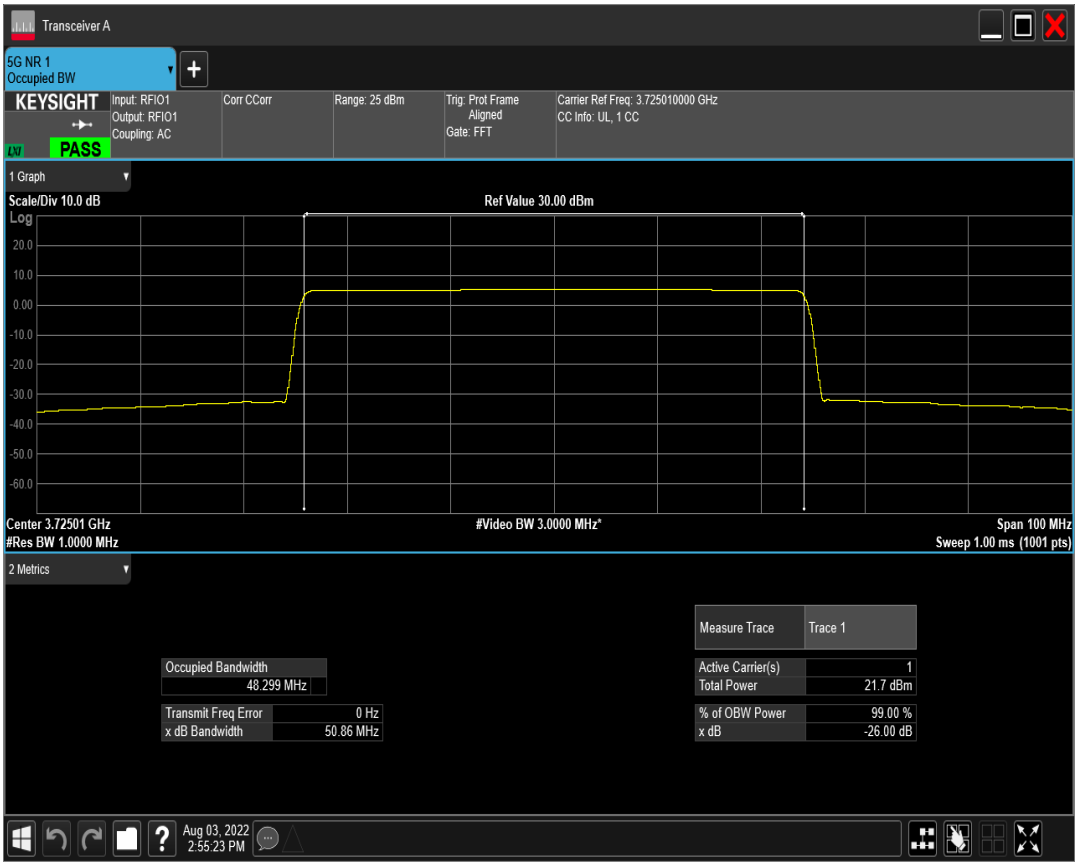
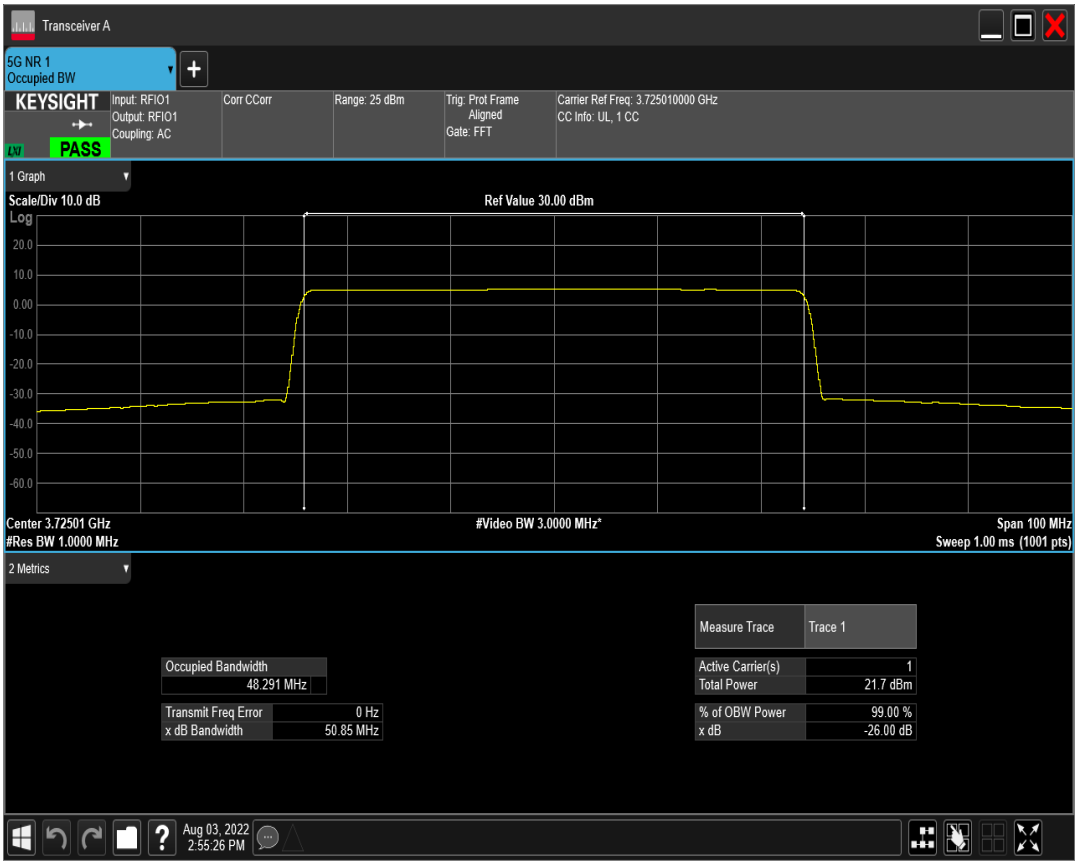


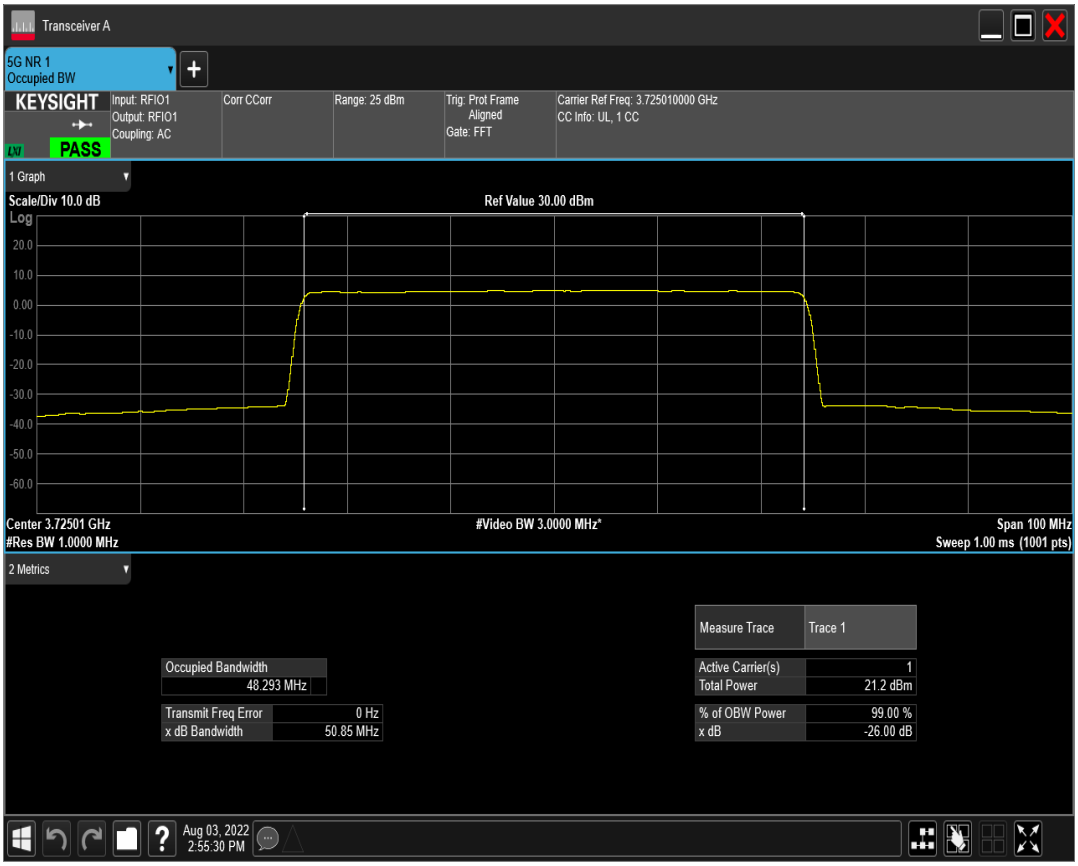
n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=648334 RB=270@0



n77(3700-3980) SCS=15kHz DFT_QAM16 BW=50MHz Channel=648334 RB=270@0

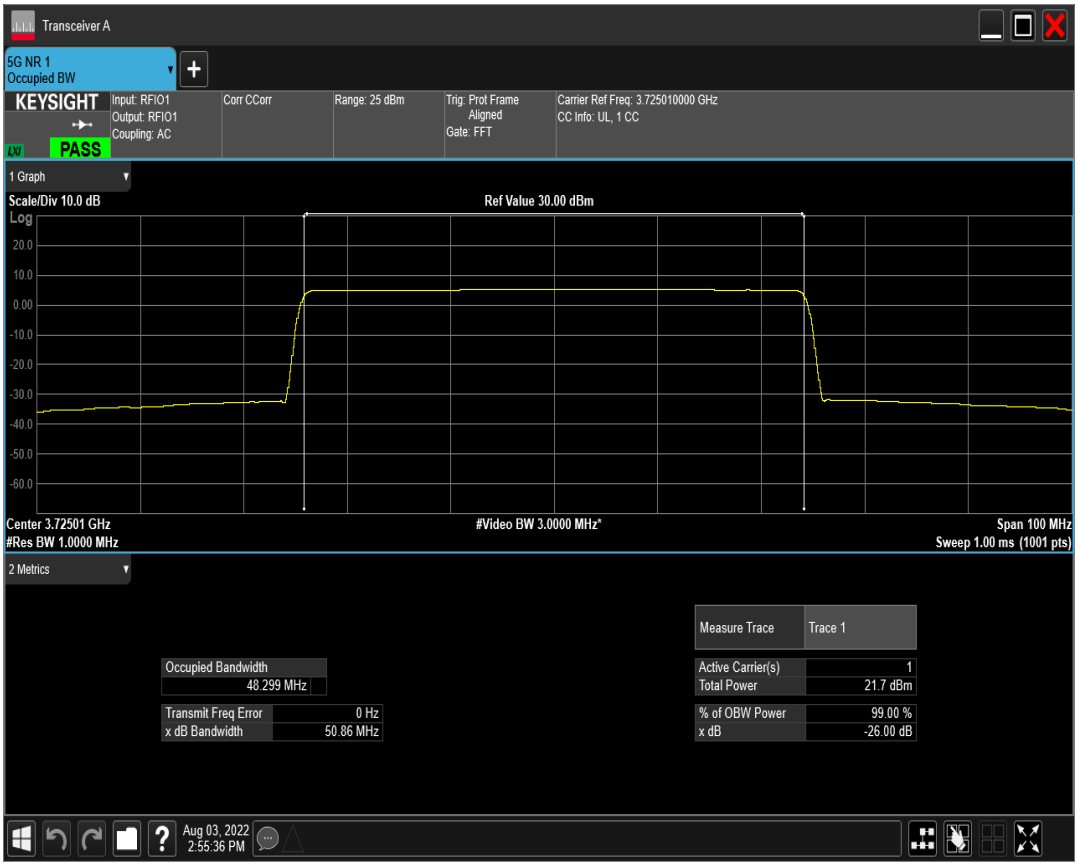


n77(3700-3980) SCS=15kHz DFT_QAM64 BW=50MHz Channel=648334 RB=270@0

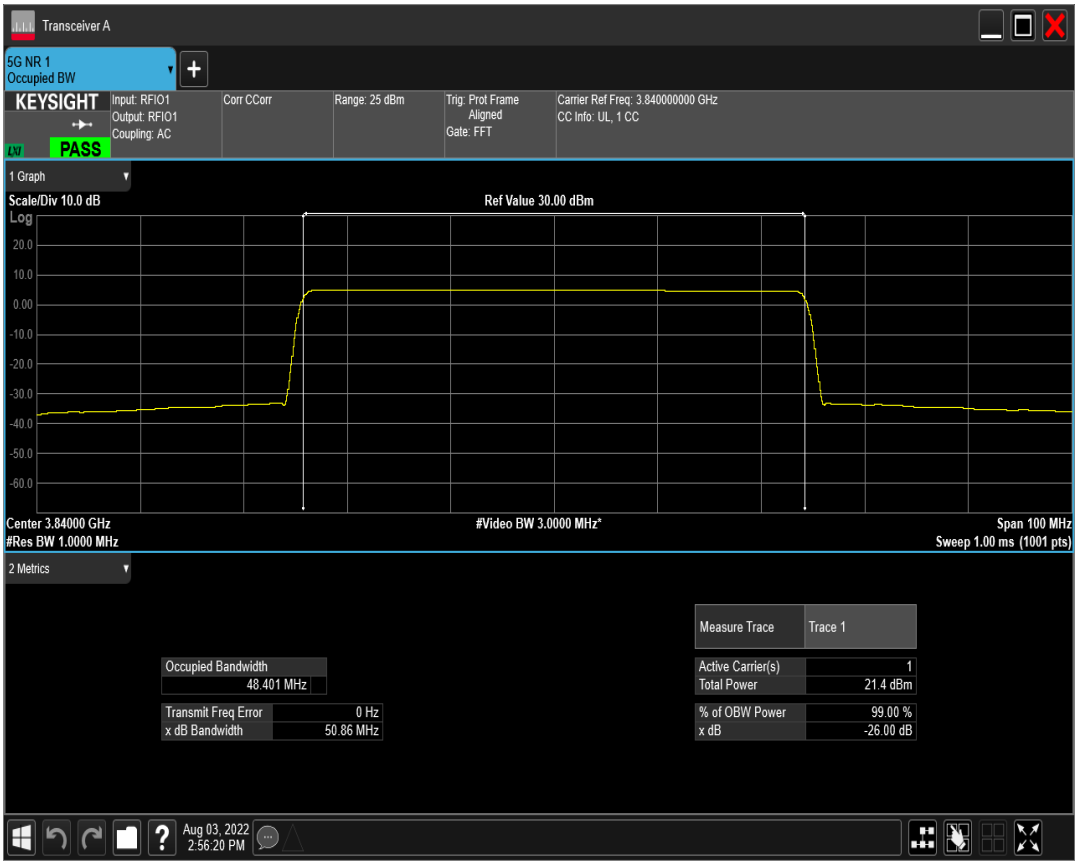


n77(3700-3980) SCS=15kHz DFT_QAM256 BW=50MHz Channel=648334 RB=270@0

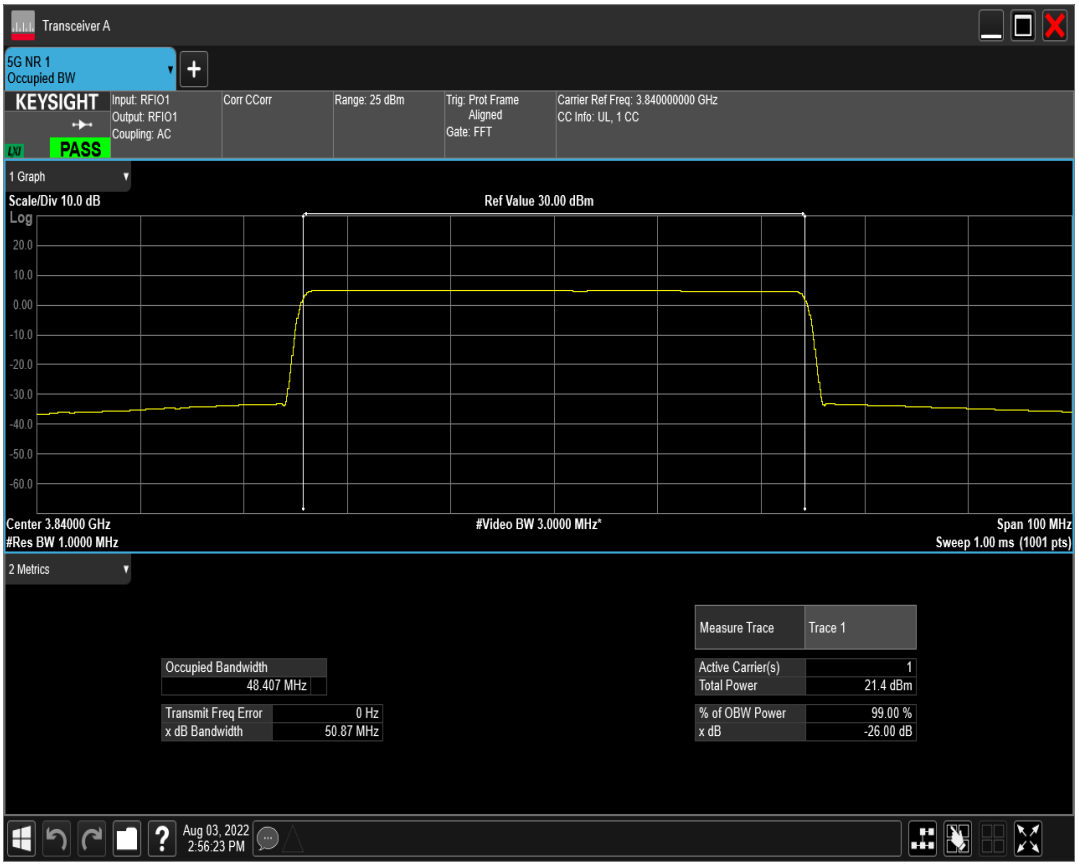
n77(3700-3980) SCS=15kHz CP_QPSK BW=50MHz Channel=648334 RB=270@0



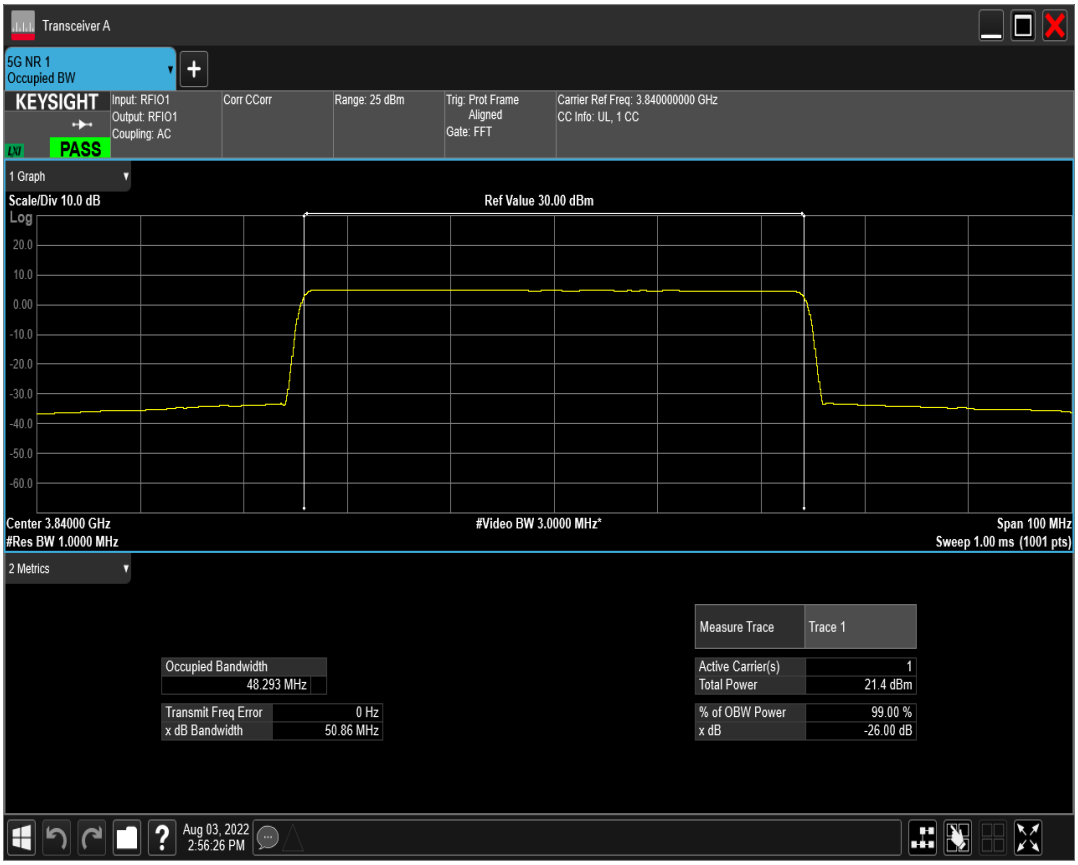
n77(3700-3980) SCS=15kHz DFT_BPSK BW=50MHz Channel=656000 RB=270@0



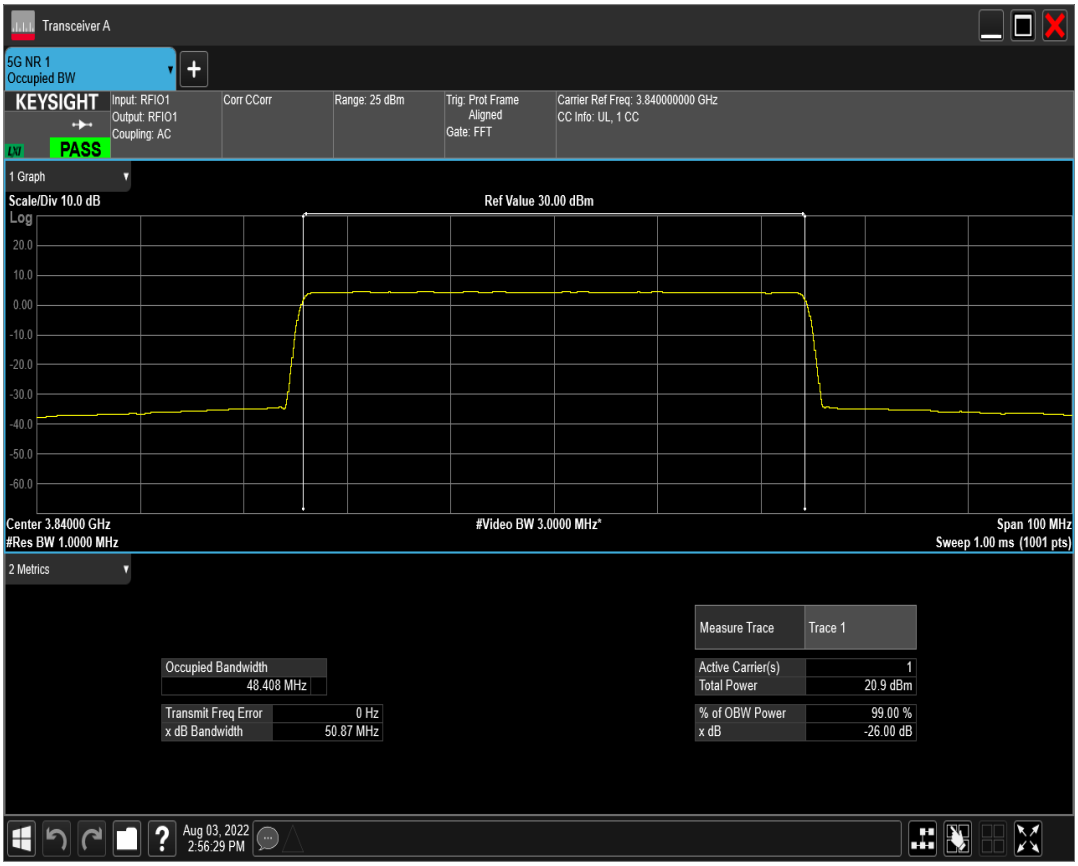
n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=656000 RB=270@0



n77(3700-3980) SCS=15kHz DFT_QAM16 BW=50MHz Channel=656000 RB=270@0

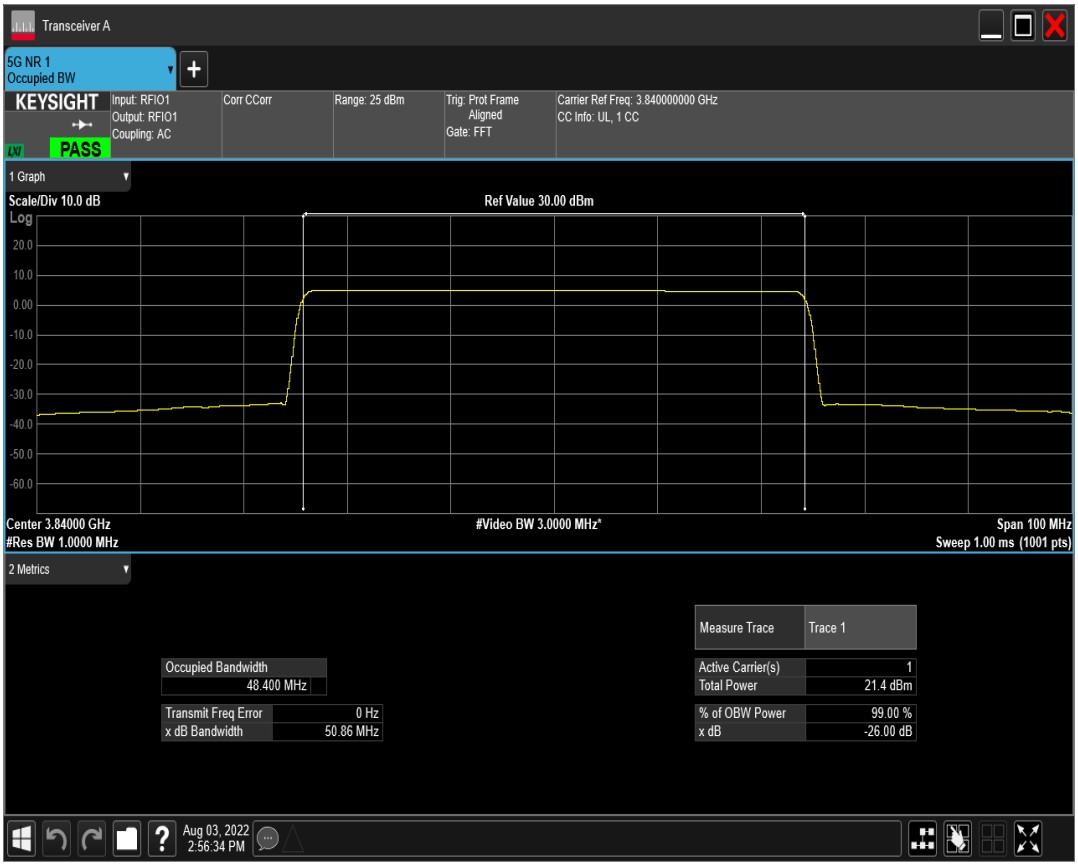


n77(3700-3980) SCS=15kHz DFT_QAM64 BW=50MHz Channel=656000 RB=270@0

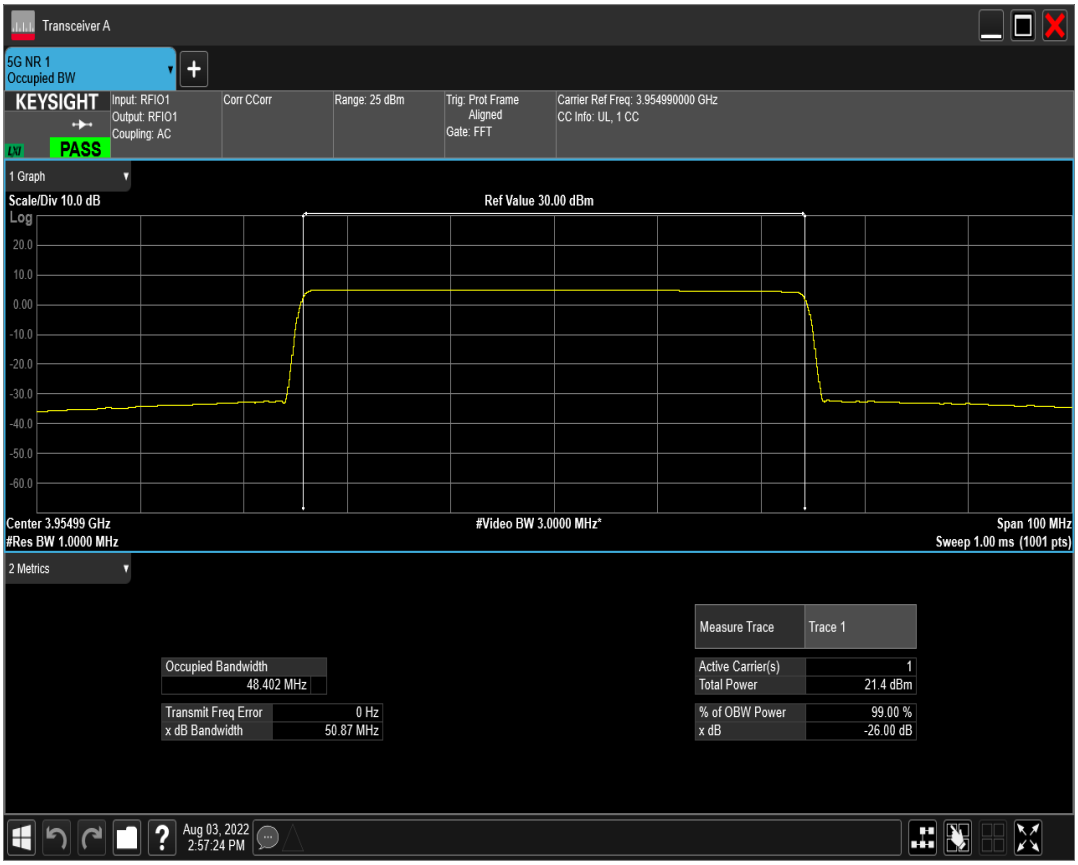


n77(3700-3980) SCS=15kHz DFT_QAM256 BW=50MHz Channel=656000 RB=270@0

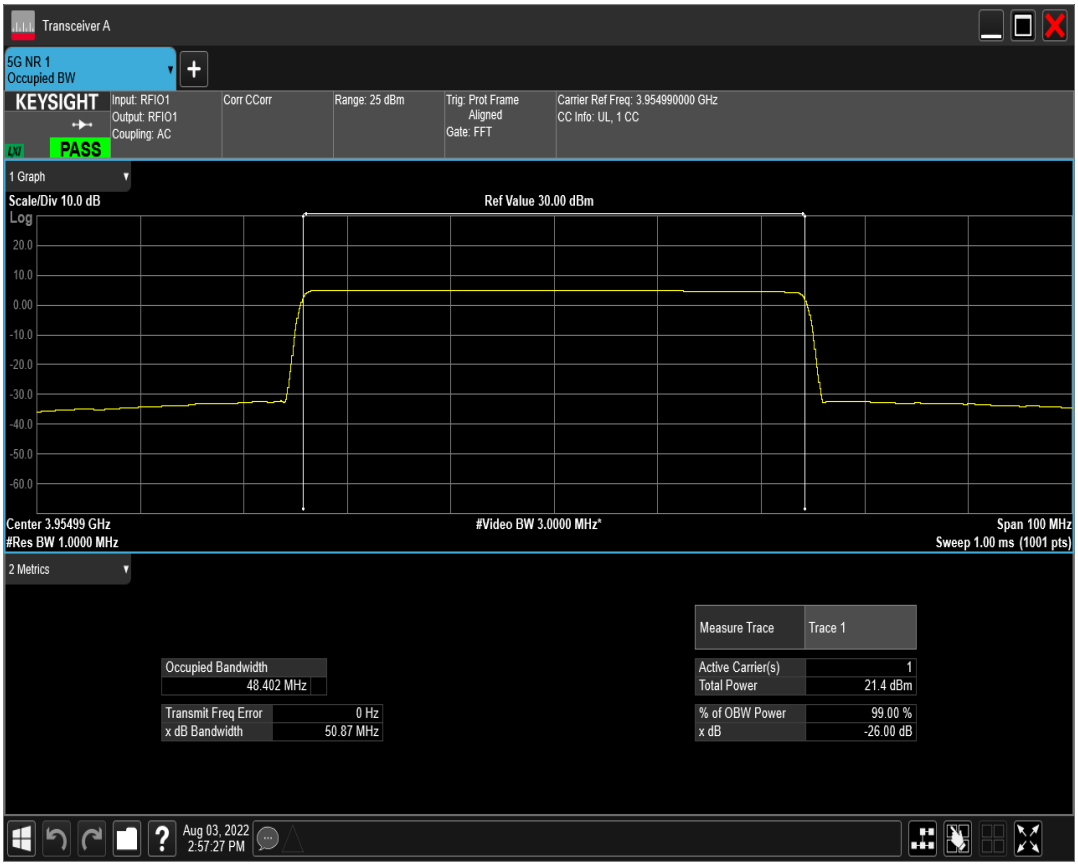
n77(3700-3980) SCS=15kHz CP_QPSK BW=50MHz Channel=656000 RB=270@0



n77(3700-3980) SCS=15kHz DFT_BPSK BW=50MHz Channel=663666 RB=270@0

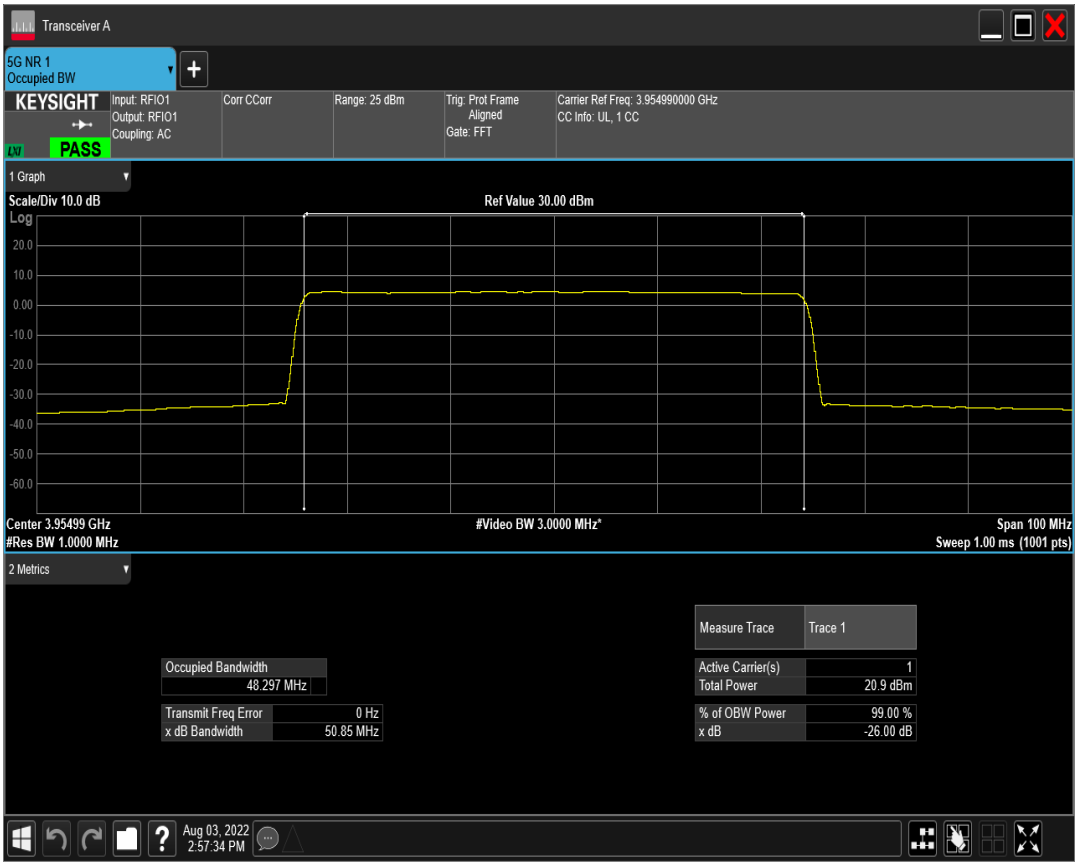


n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=663666 RB=270@0



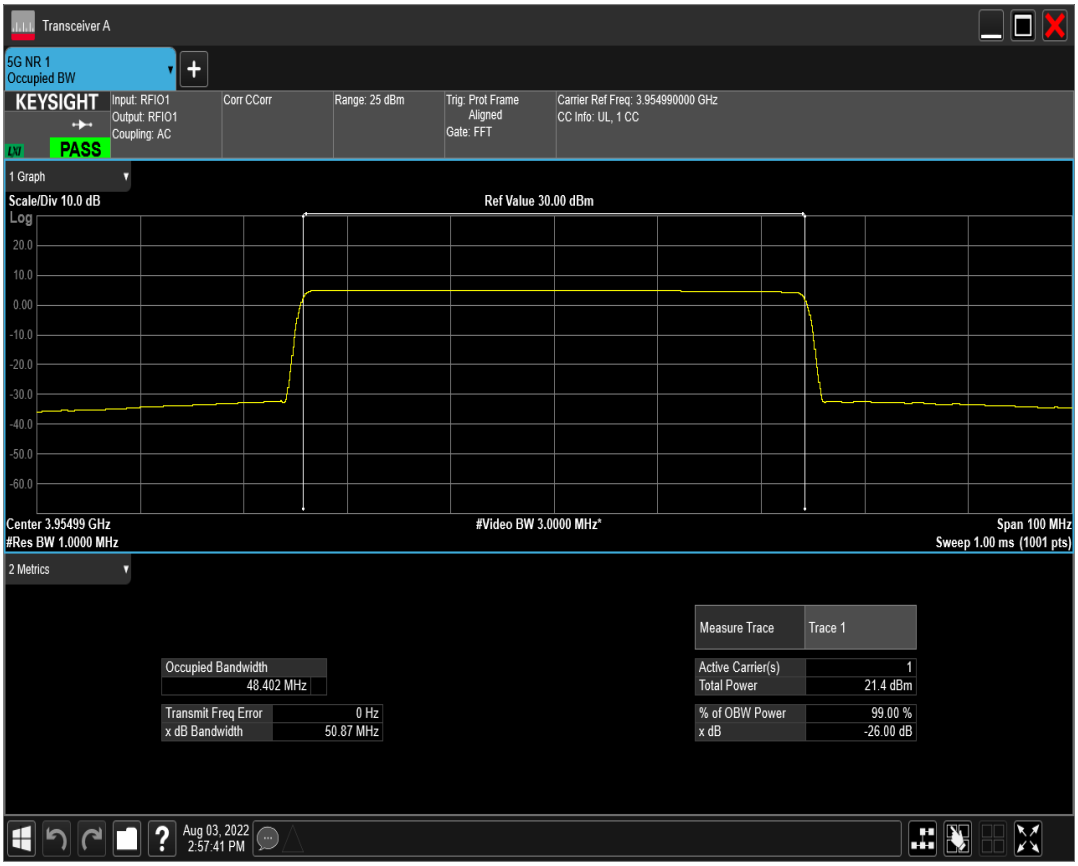
n77(3700-3980) SCS=15kHz DFT_QAM16 BW=50MHz Channel=663666 RB=270@0

n77(3700-3980) SCS=15kHz DFT_QAM64 BW=50MHz Channel=663666 RB=270@0



n77(3700-3980) SCS=15kHz DFT_QAM256 BW=50MHz Channel=663666 RB=270@0

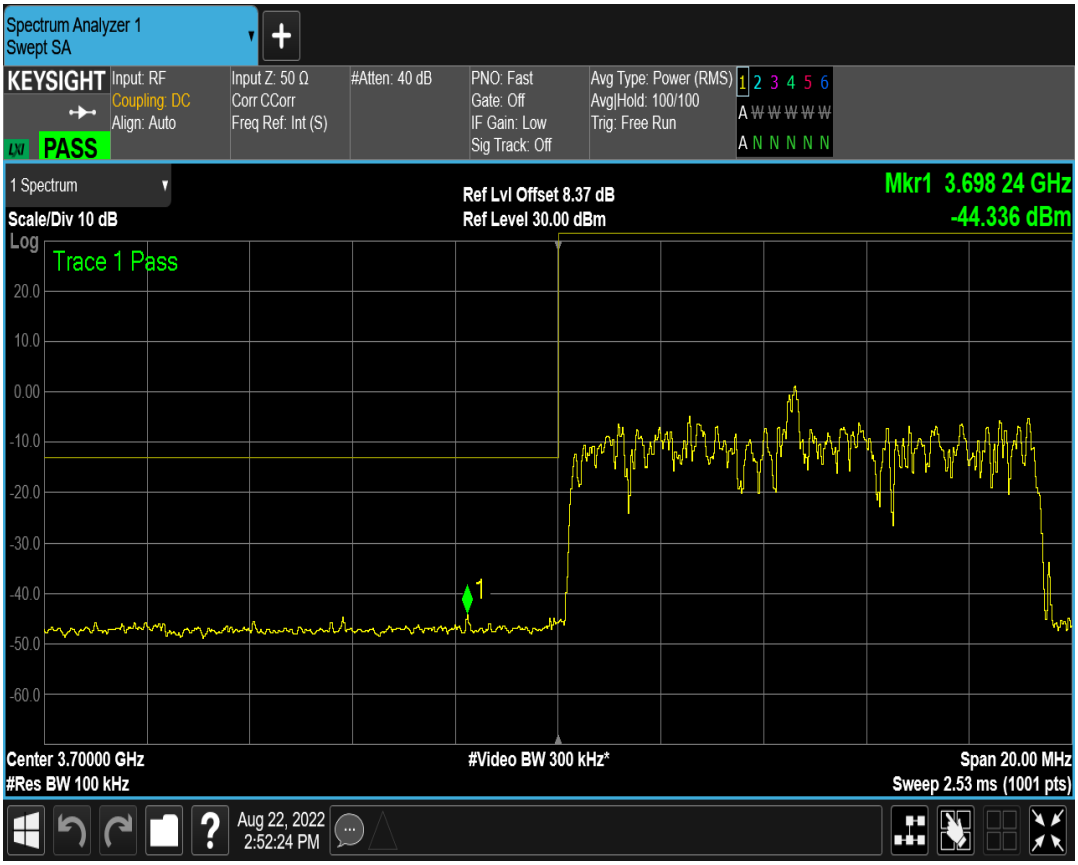
n77(3700-3980) SCS=15kHz CP_QPSK BW=50MHz Channel=663666 RB=270@0



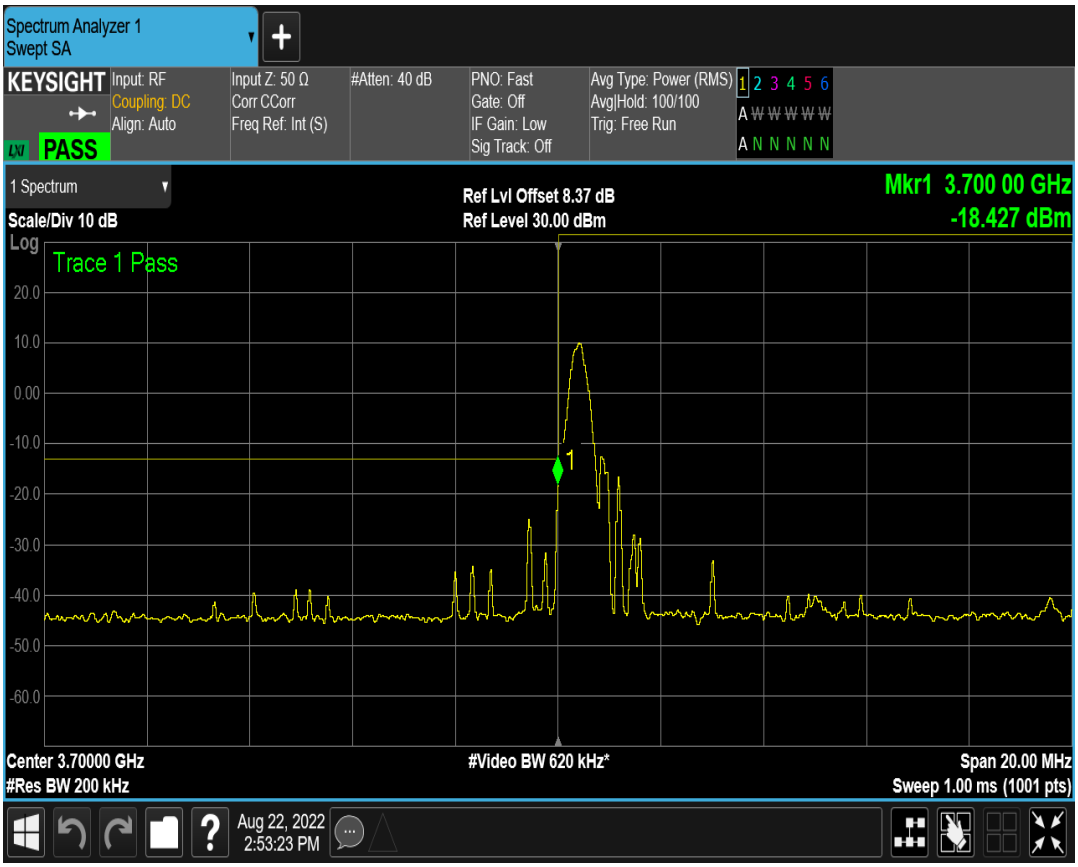
5 Band edge for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n77(3700-3980)	15	10	647000	50@0	DFT_QPSK	3698.24	-44.33	-13	PASS
n77(3700-3980)	15	10	647000	1@0	DFT_QPSK	3700.00	-18.42	-13	PASS
n77(3700-3980)	15	10	665000	50@0	DFT_QPSK	3980.44	-38.66	-13	PASS
n77(3700-3980)	15	10	665000	1@51	DFT_QPSK	3980.00	-30.88	-13	PASS
n77(3700-3980)	15	50	648334	270@0	DFT_QPSK	3700.00	-22.79	-13	PASS
n77(3700-3980)	15	50	648334	1@0	DFT_QPSK	3700.00	-32.48	-13	PASS
n77(3700-3980)	15	50	663666	270@0	DFT_QPSK	3980.00	-34.76	-13	PASS
n77(3700-3980)	15	50	663666	1@269	DFT_QPSK	3980.60	-33.00	-13	PASS

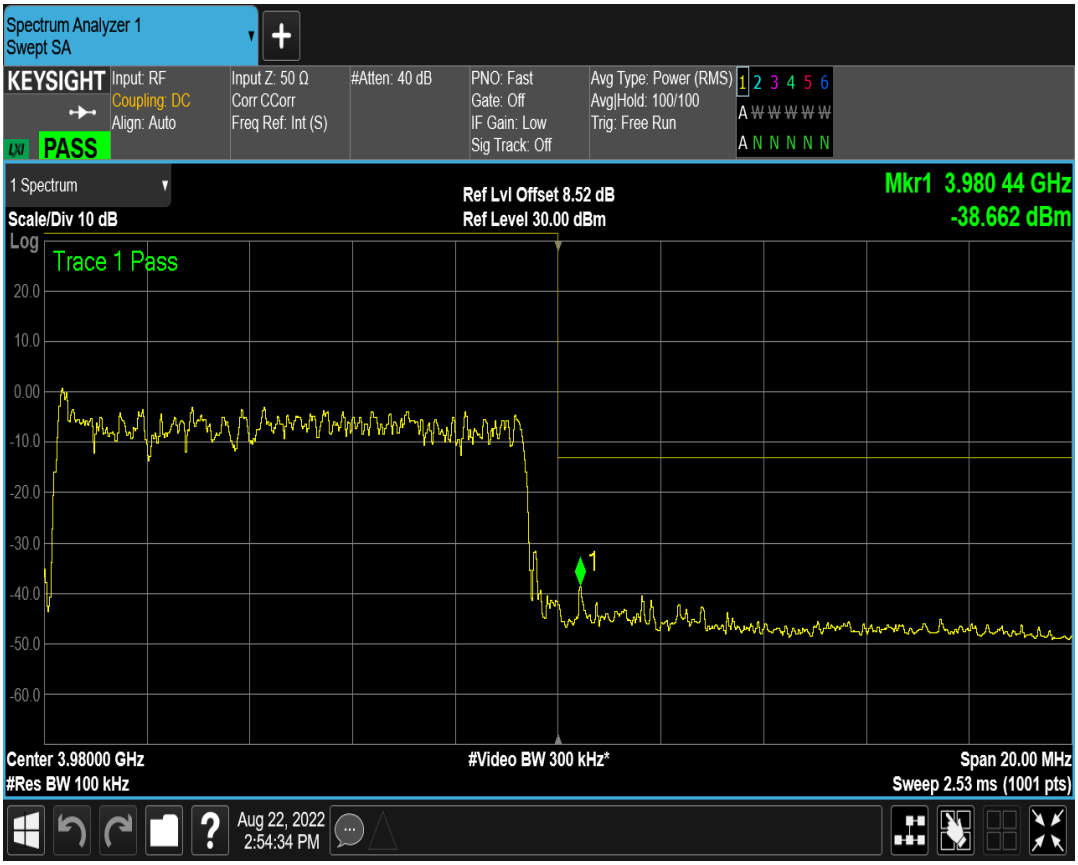
n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=647000 RB=50@0



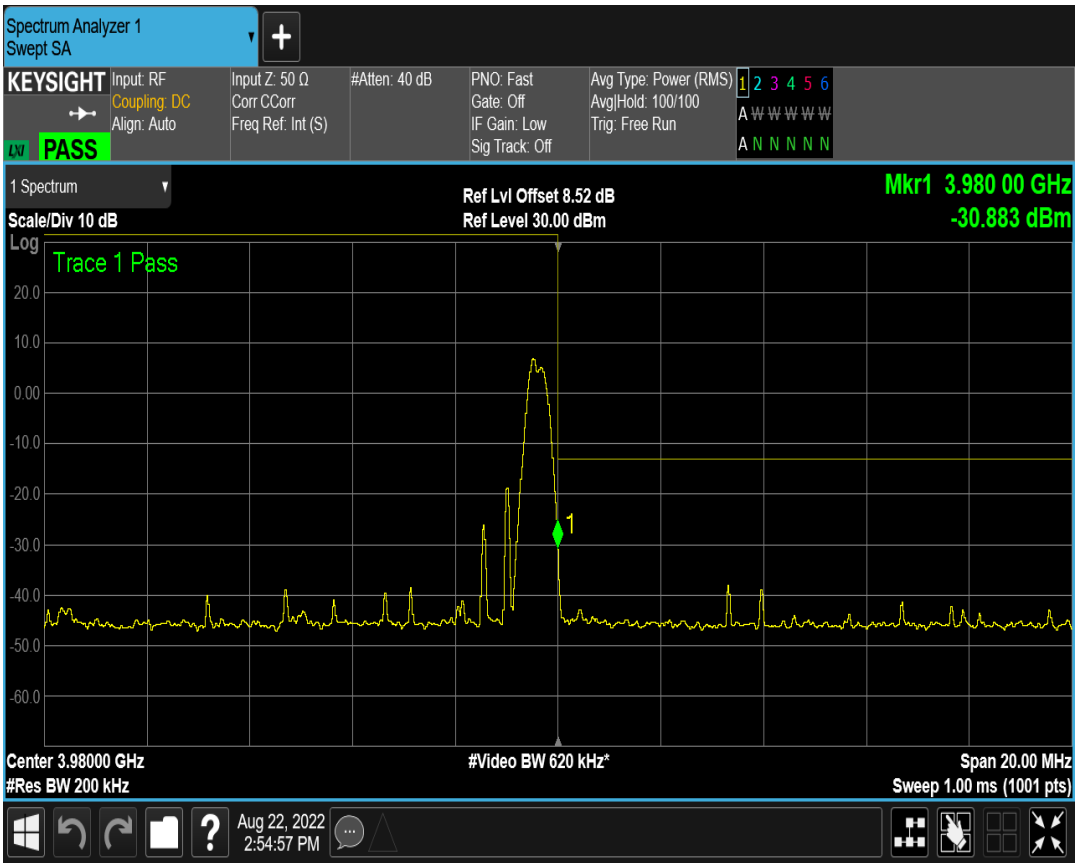
n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=647000 RB=1@0



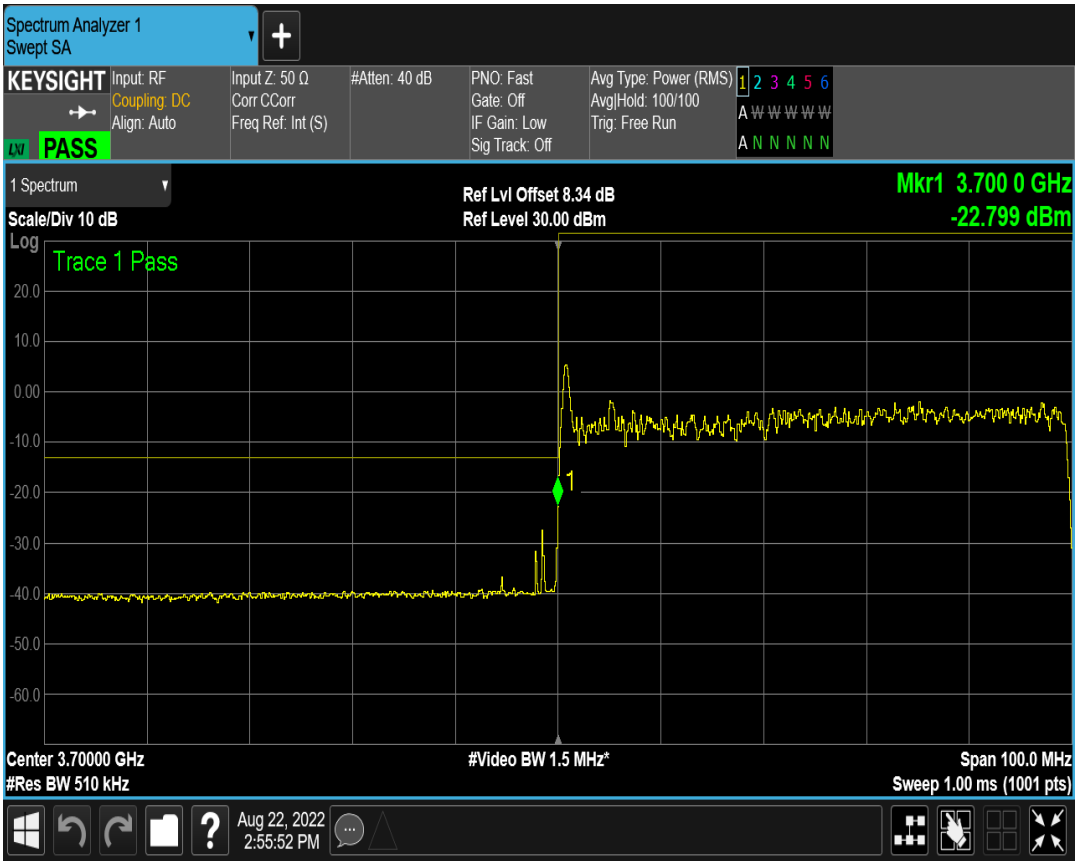
n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=665000 RB=50@0



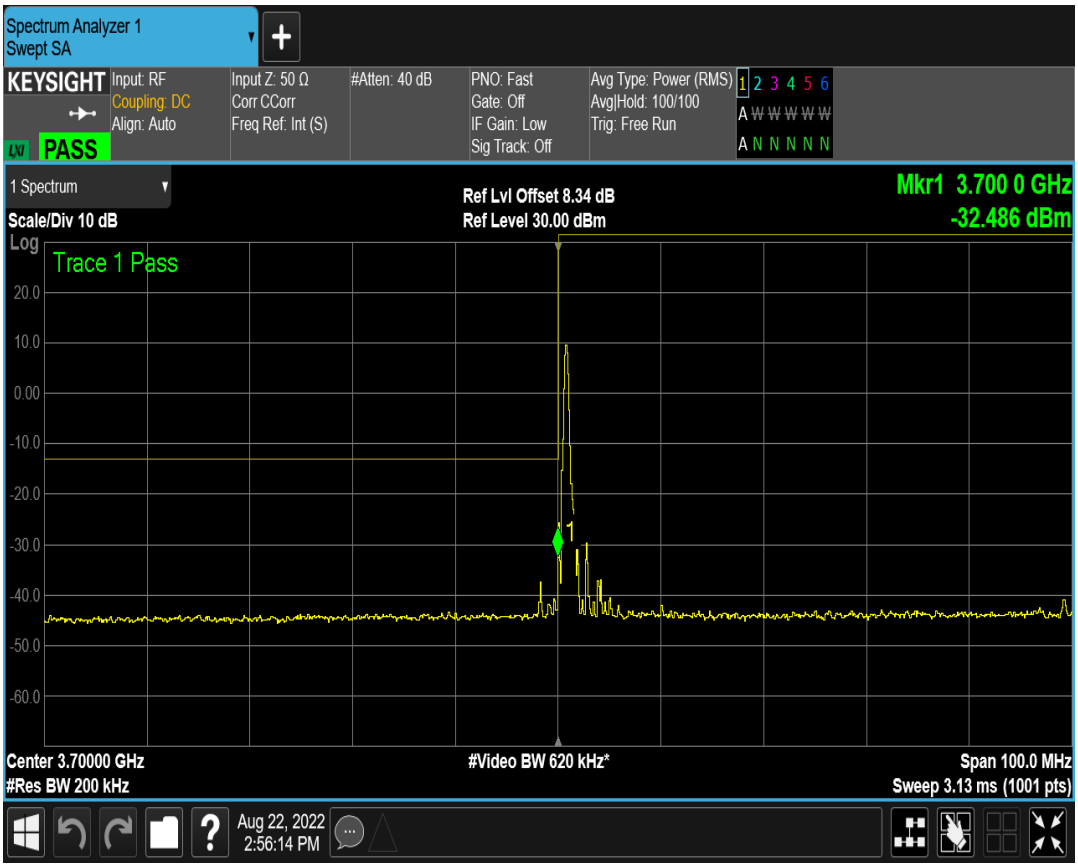
n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=665000 RB=1@51



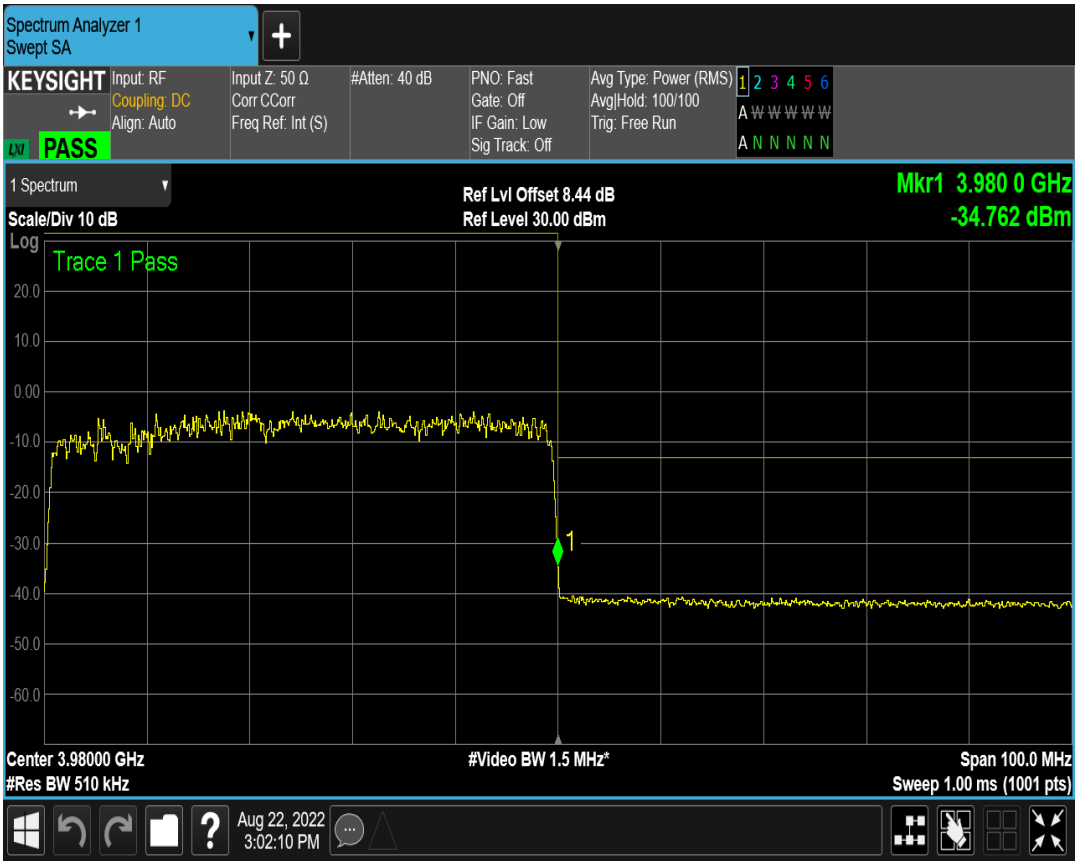
n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=648334 RB=270@0



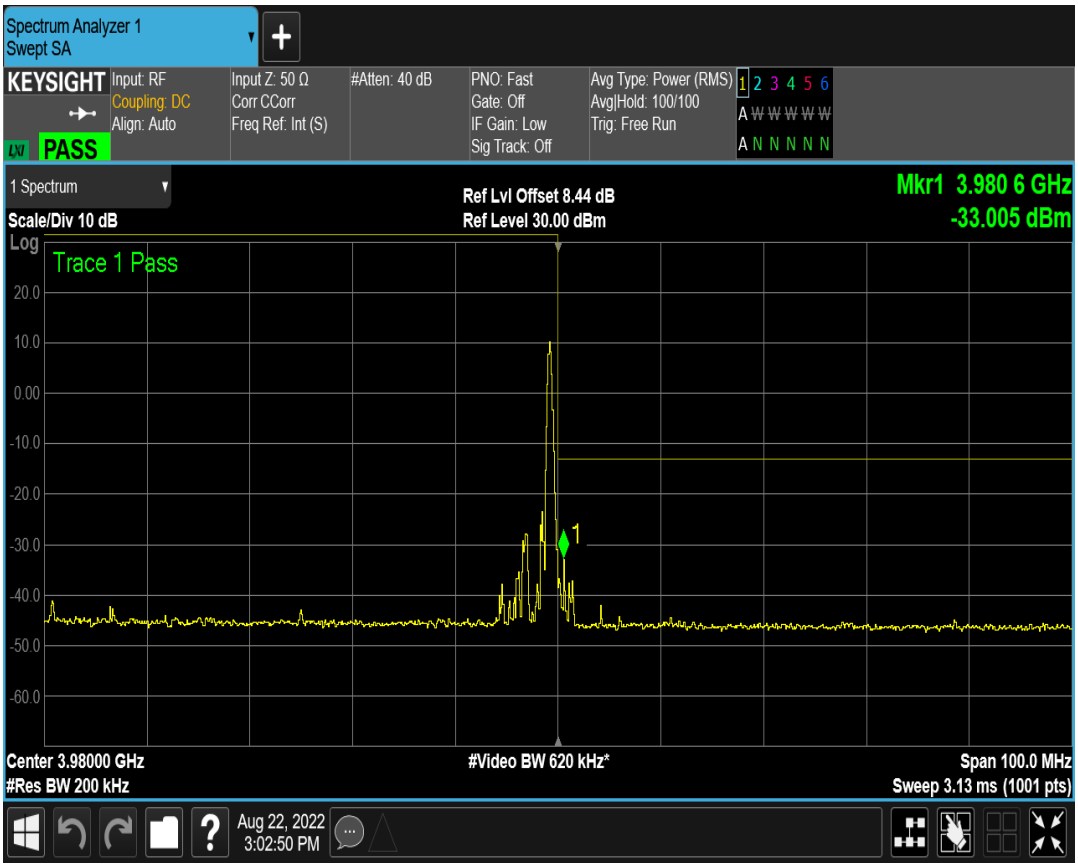
n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=648334 RB=1@0



n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=663666 RB=270@0



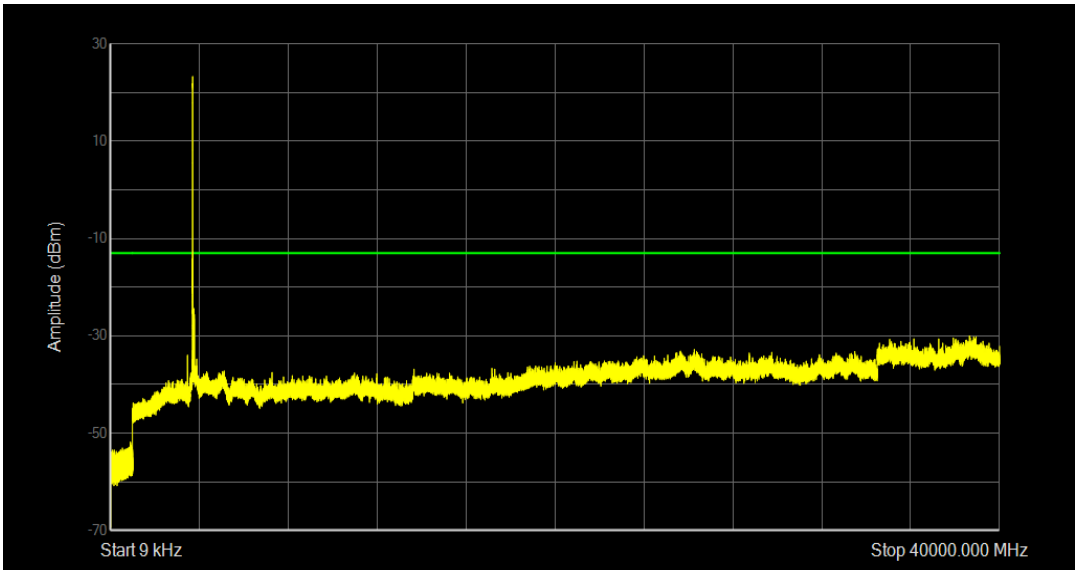
n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=663666 RB=1@269



6 Out-of-band emissions for NR FR1

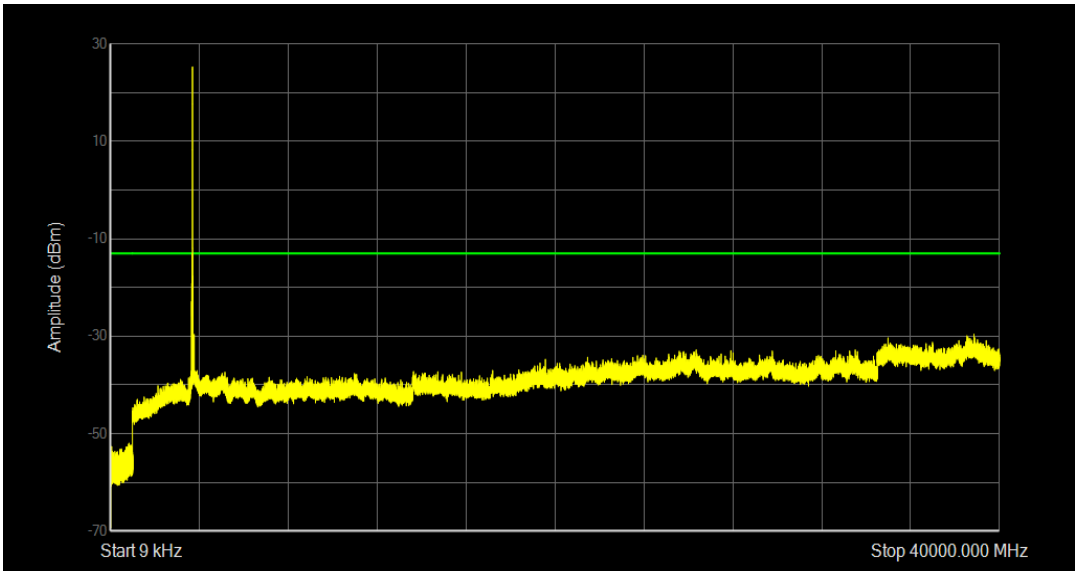
Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n77(3700-3980)	15	10	647000	50@0	DFT_QPSK	38647.68	-30.03	-13	PASS
n77(3700-3980)	15	10	647000	1@0	DFT_QPSK	3656.88	-22.90	-13	PASS
n77(3700-3980)	15	10	647000	1@51	DFT_QPSK	38925.55	-29.71	-13	PASS
n77(3700-3980)	15	10	656000	50@0	DFT_QPSK	34937.80	-29.83	-13	PASS
n77(3700-3980)	15	10	656000	1@0	DFT_QPSK	38500.45	-30.30	-13	PASS
n77(3700-3980)	15	10	656000	1@51	DFT_QPSK	38658.40	-30.43	-13	PASS
n77(3700-3980)	15	10	665000	50@0	DFT_QPSK	38691.55	-30.19	-13	PASS
n77(3700-3980)	15	10	665000	1@0	DFT_QPSK	4040.05	-29.56	-13	PASS
n77(3700-3980)	15	10	665000	1@51	DFT_QPSK	38782.23	-30.18	-13	PASS
n77(3700-3980)	15	50	648334	270@0	DFT_QPSK	35905.98	-29.57	-13	PASS
n77(3700-3980)	15	50	648334	1@0	DFT_QPSK	38765.65	-30.08	-13	PASS
n77(3700-3980)	15	50	648334	1@269	DFT_QPSK	38600.88	-30.32	-13	PASS
n77(3700-3980)	15	50	656000	270@0	DFT_QPSK	38912.88	-29.40	-13	PASS
n77(3700-3980)	15	50	656000	1@0	DFT_QPSK	38497.53	-30.03	-13	PASS
n77(3700-3980)	15	50	656000	1@269	DFT_QPSK	38555.05	-30.23	-13	PASS
n77(3700-3980)	15	50	663666	270@0	DFT_QPSK	38698.38	-29.40	-13	PASS
n77(3700-3980)	15	50	663666	1@0	DFT_QPSK	38023.68	-30.11	-13	PASS
n77(3700-3980)	15	50	663666	1@269	DFT_QPSK	38089.98	-28.60	-13	PASS

n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=647000 RB=50@0



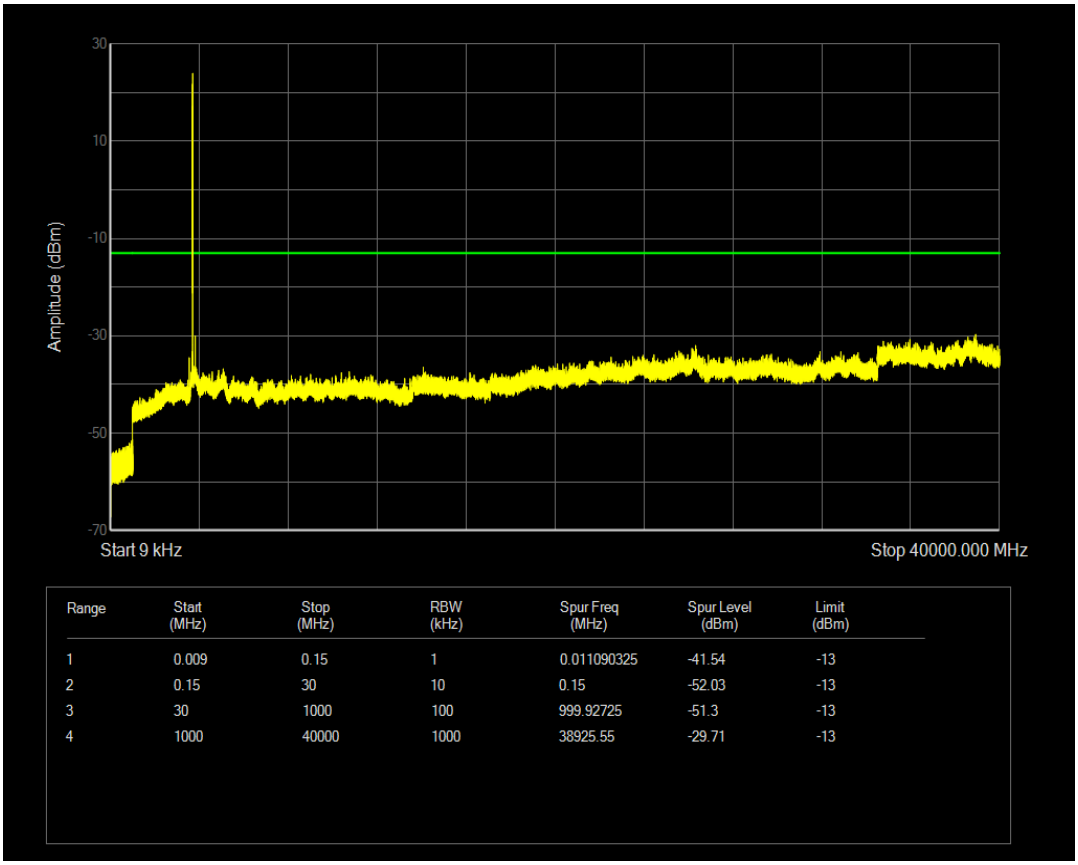
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009518175	-42.04	-13
2	0.15	30	10	0.16268625	-51.88	-13
3	30	1000	100	915.05225	-51.89	-13
4	1000	40000	1000	38647.675	-30.03	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=647000 RB=1@0



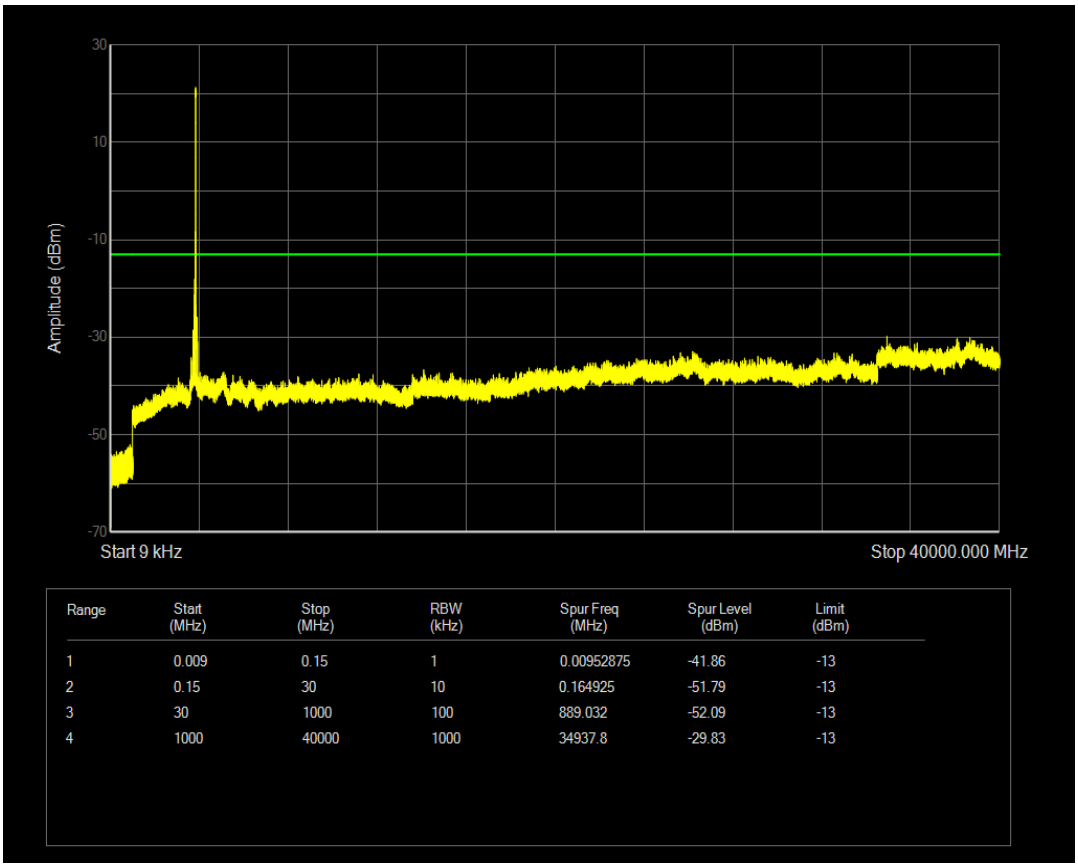
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010166775	-40.47	-13
2	0.15	30	10	0.17164125	-51.77	-13
3	30	1000	100	848.1465	-51.95	-13
4	1000	40000	1000	3656.875	-22.9	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=647000 RB=1@51



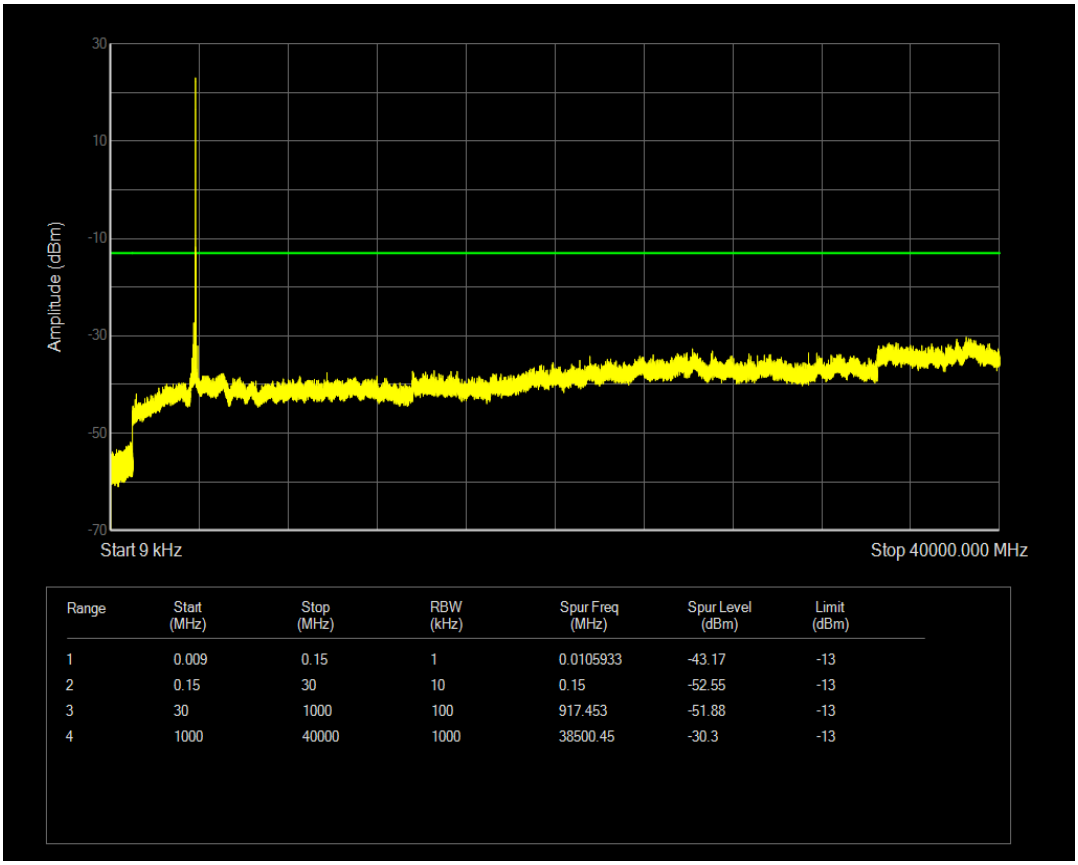
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011090325	-41.54	-13
2	0.15	30	10	0.15	-52.03	-13
3	30	1000	100	999.92725	-51.3	-13
4	1000	40000	1000	38925.55	-29.71	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=656000 RB=50@0



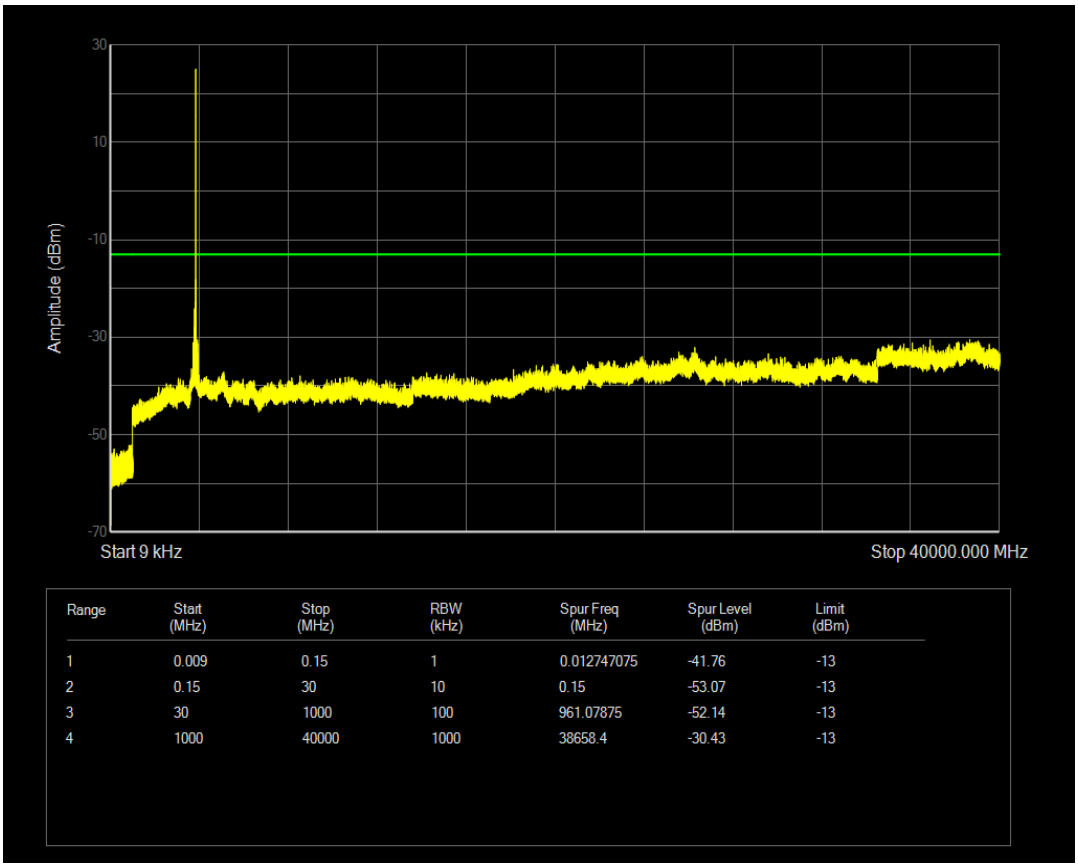
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00952875	-41.86	-13
2	0.15	30	10	0.164925	-51.79	-13
3	30	1000	100	889.032	-52.09	-13
4	1000	40000	1000	34937.8	-29.83	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=656000 RB=1@0



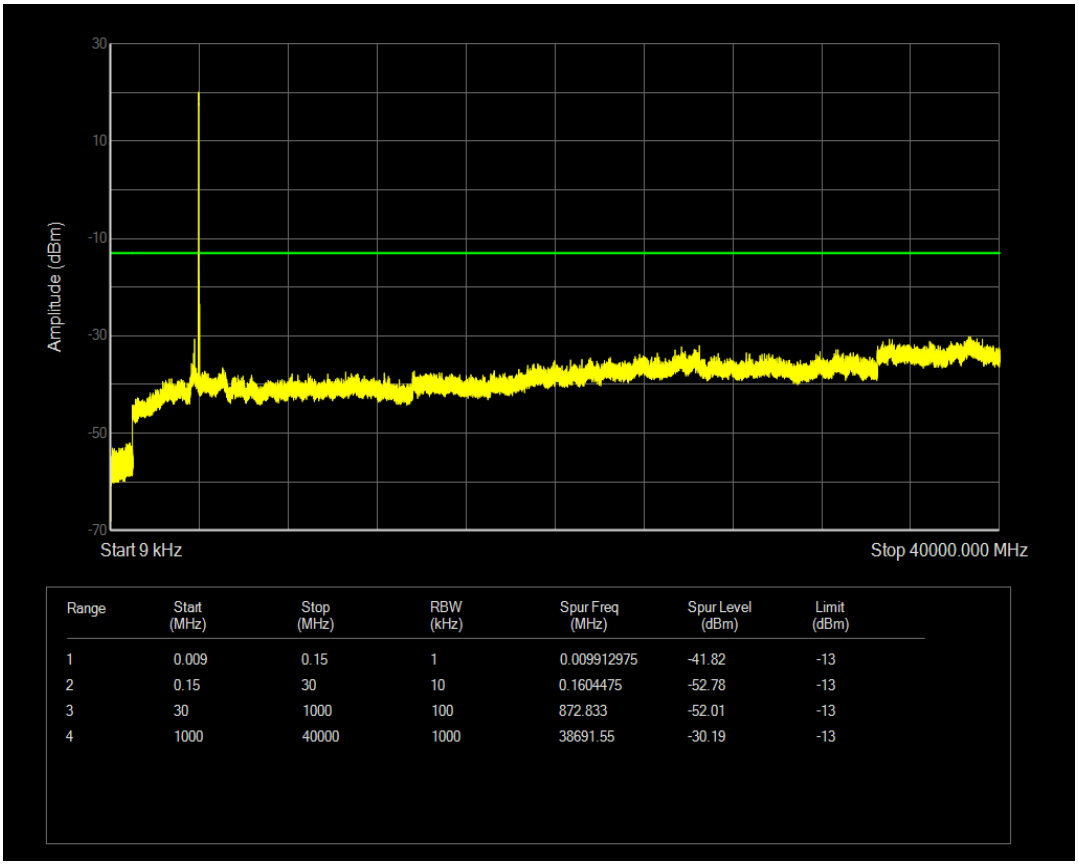
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0105933	-43.17	-13
2	0.15	30	10	0.15	-52.55	-13
3	30	1000	100	917.453	-51.88	-13
4	1000	40000	1000	38500.45	-30.3	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=656000 RB=1@51



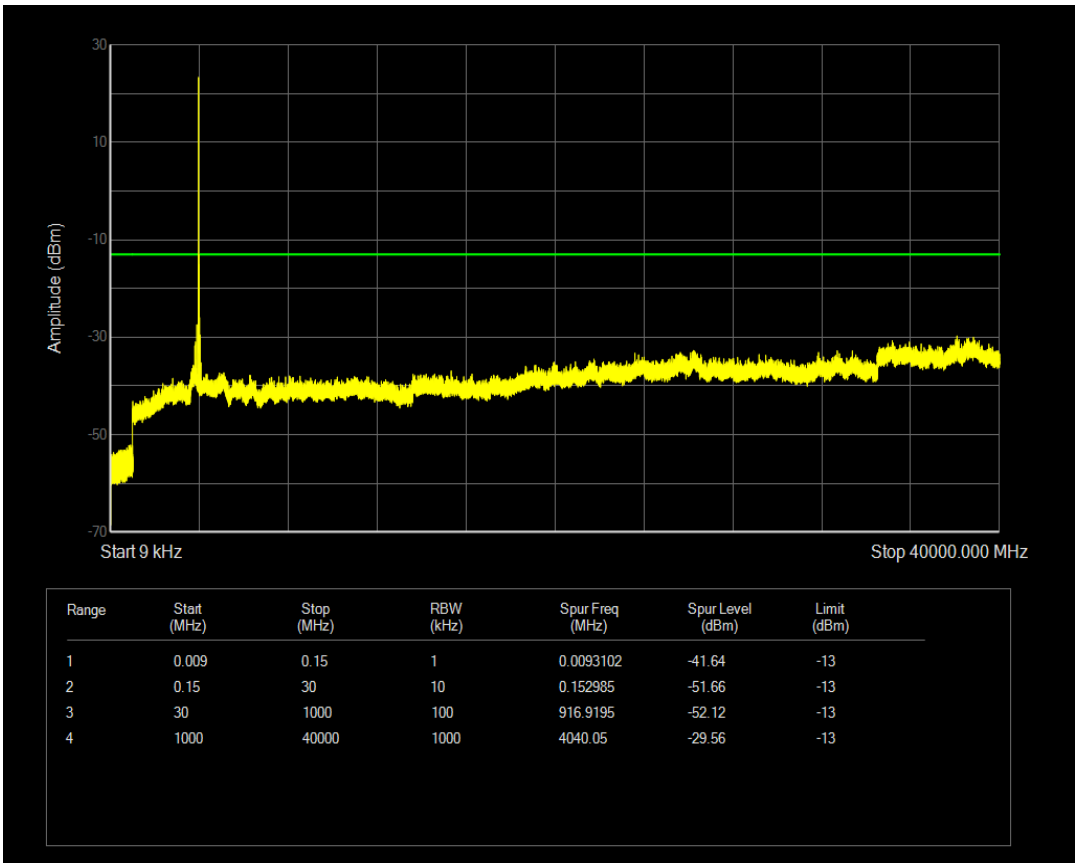
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.012747075	-41.76	-13
2	0.15	30	10	0.15	-53.07	-13
3	30	1000	100	961.07875	-52.14	-13
4	1000	40000	1000	38658.4	-30.43	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=665000 RB=50@0



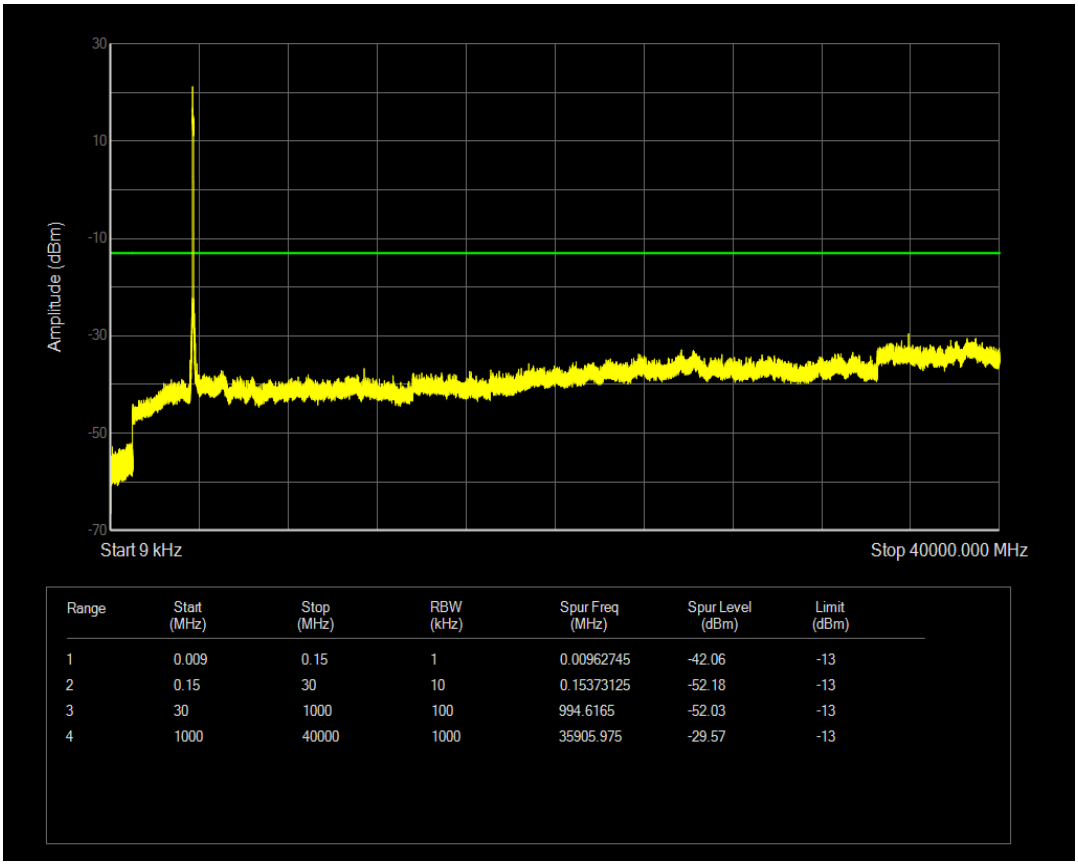
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009912975	-41.82	-13
2	0.15	30	10	0.1604475	-52.78	-13
3	30	1000	100	872.833	-52.01	-13
4	1000	40000	1000	38691.55	-30.19	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=665000 RB=1@0



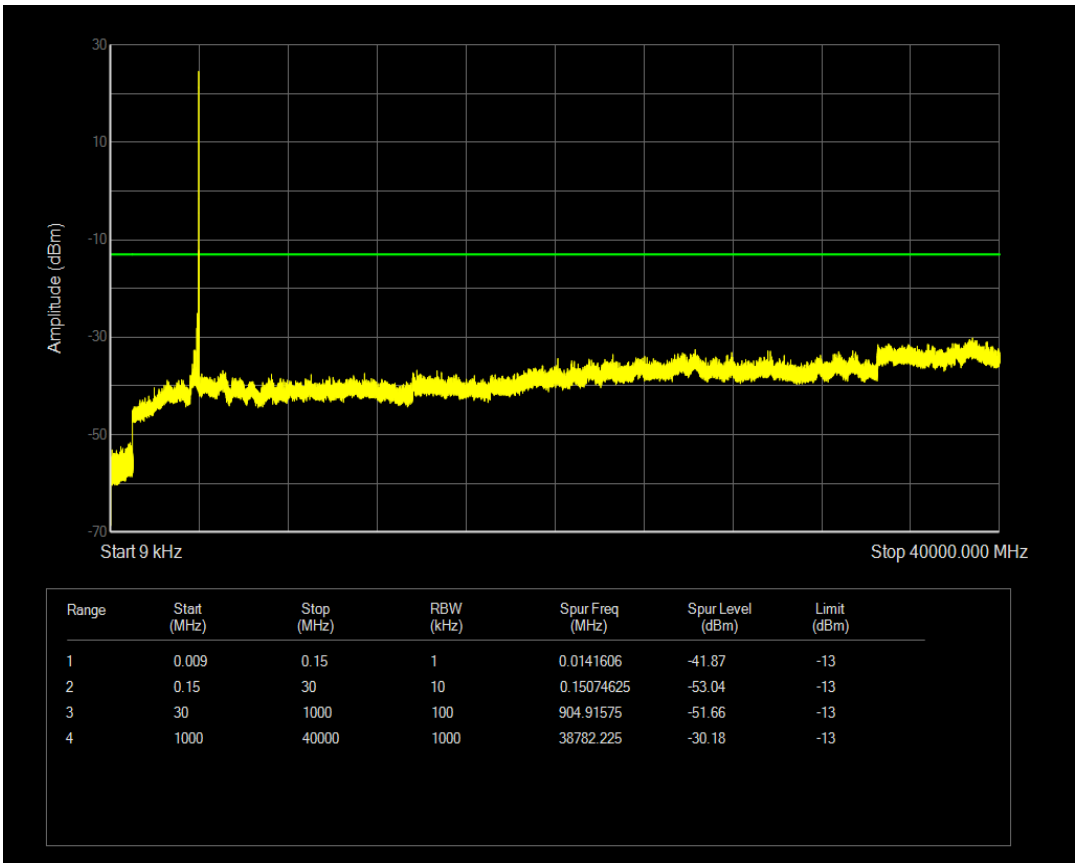
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0093102	-41.64	-13
2	0.15	30	10	0.152985	-51.66	-13
3	30	1000	100	916.9195	-52.12	-13
4	1000	40000	1000	4040.05	-29.56	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=648334 RB=270@0



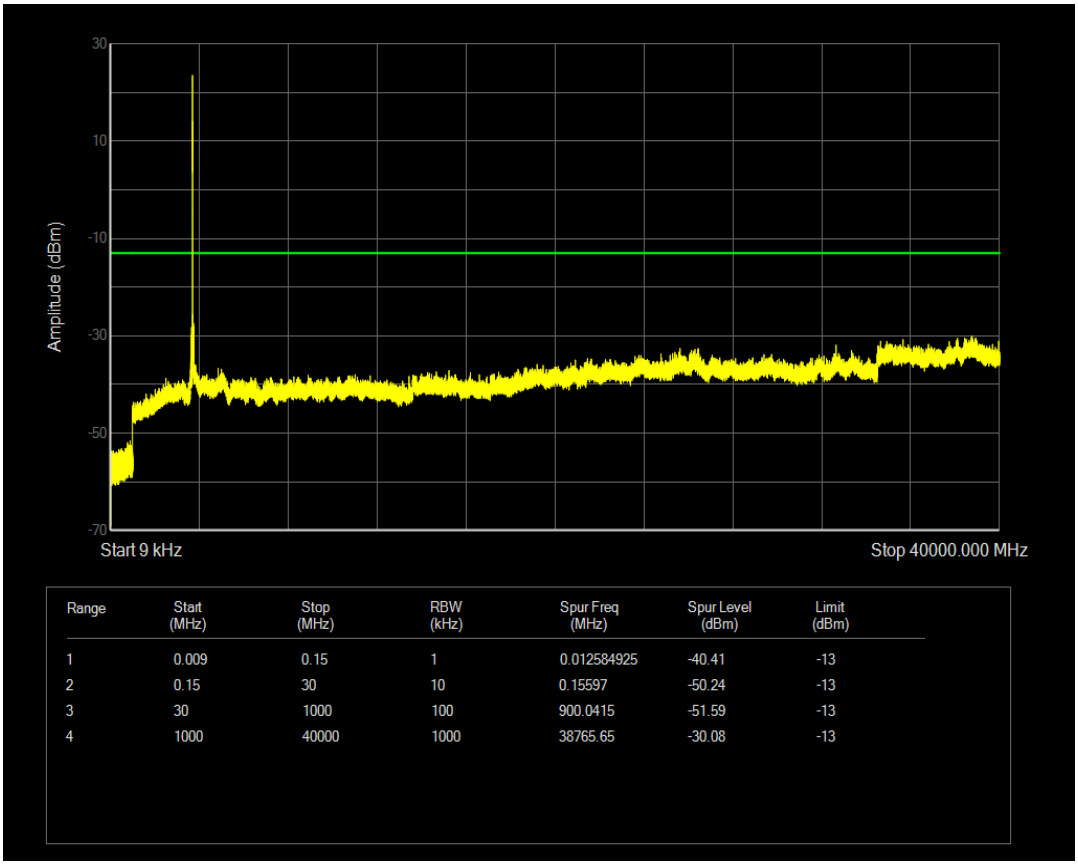
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00962745	-42.06	-13
2	0.15	30	10	0.15373125	-52.18	-13
3	30	1000	100	994.6165	-52.03	-13
4	1000	40000	1000	35905.975	-29.57	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=10MHz Channel=665000 RB=1@51



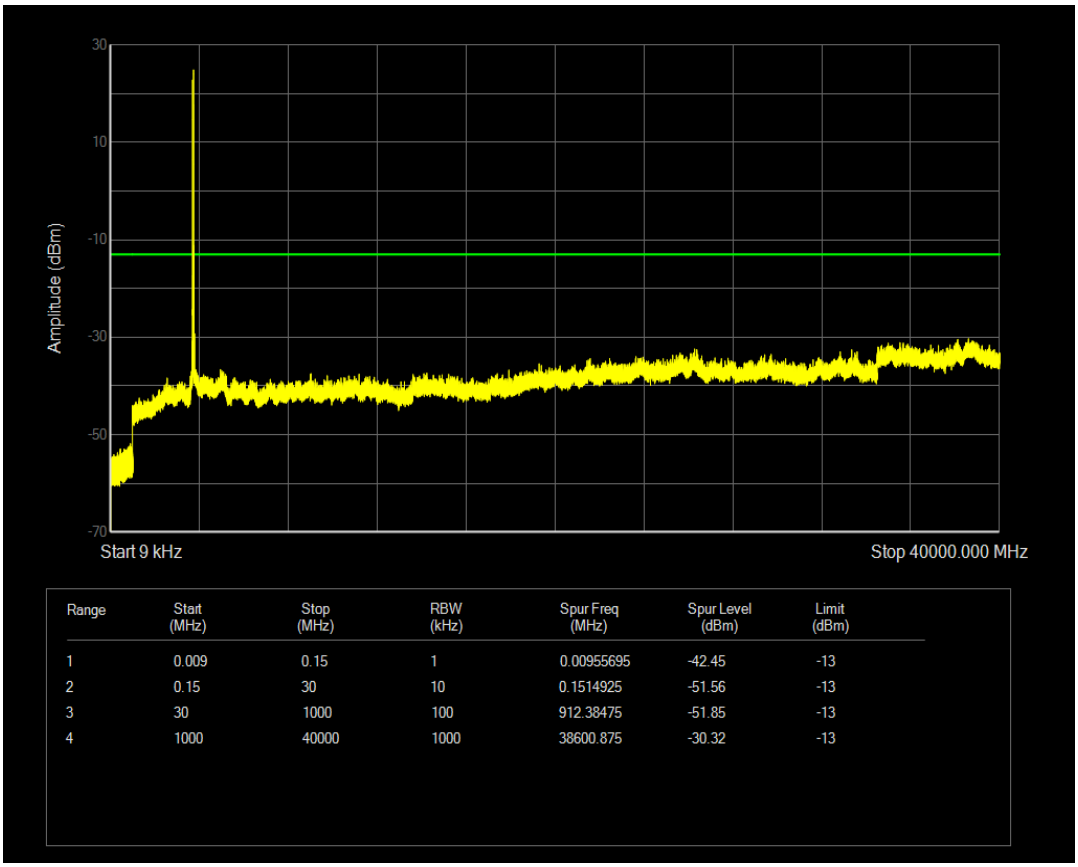
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0141606	-41.87	-13
2	0.15	30	10	0.15074625	-53.04	-13
3	30	1000	100	904.91575	-51.66	-13
4	1000	40000	1000	38782.225	-30.18	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=648334 RB=1@0



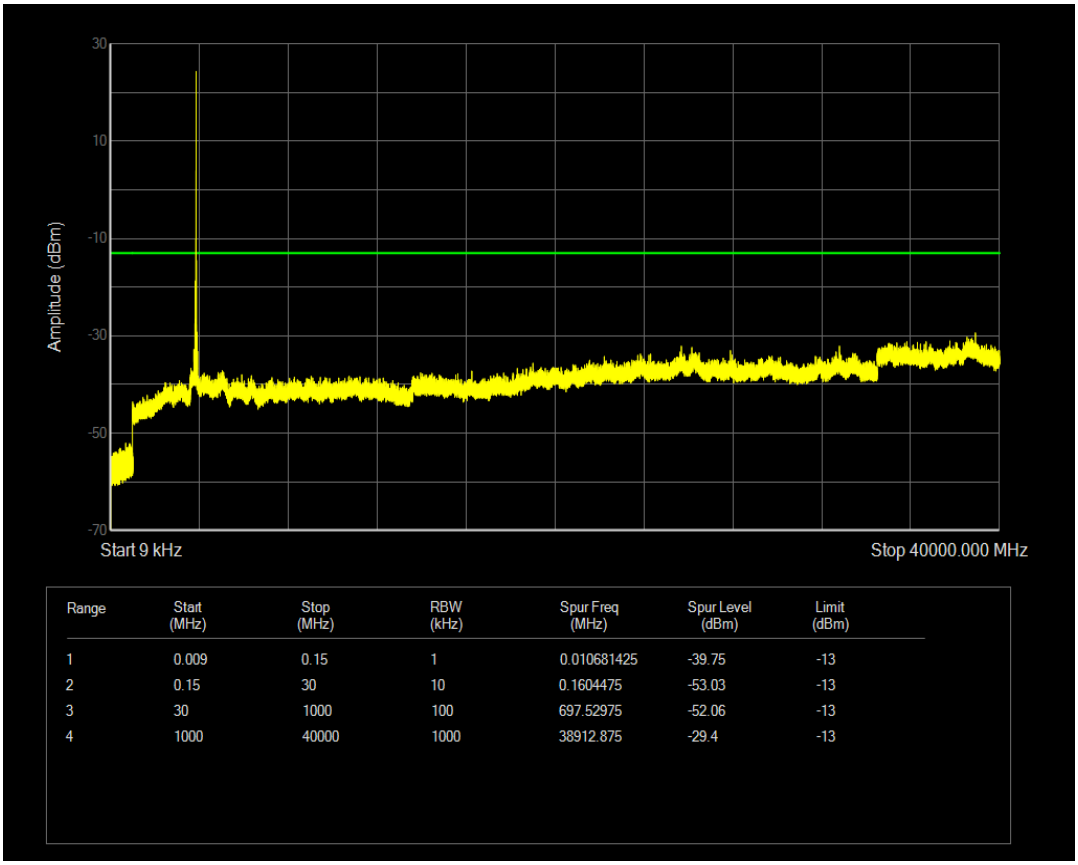
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.012584925	-40.41	-13
2	0.15	30	10	0.15597	-50.24	-13
3	30	1000	100	900.0415	-51.59	-13
4	1000	40000	1000	38765.65	-30.08	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=648334 RB=1@269



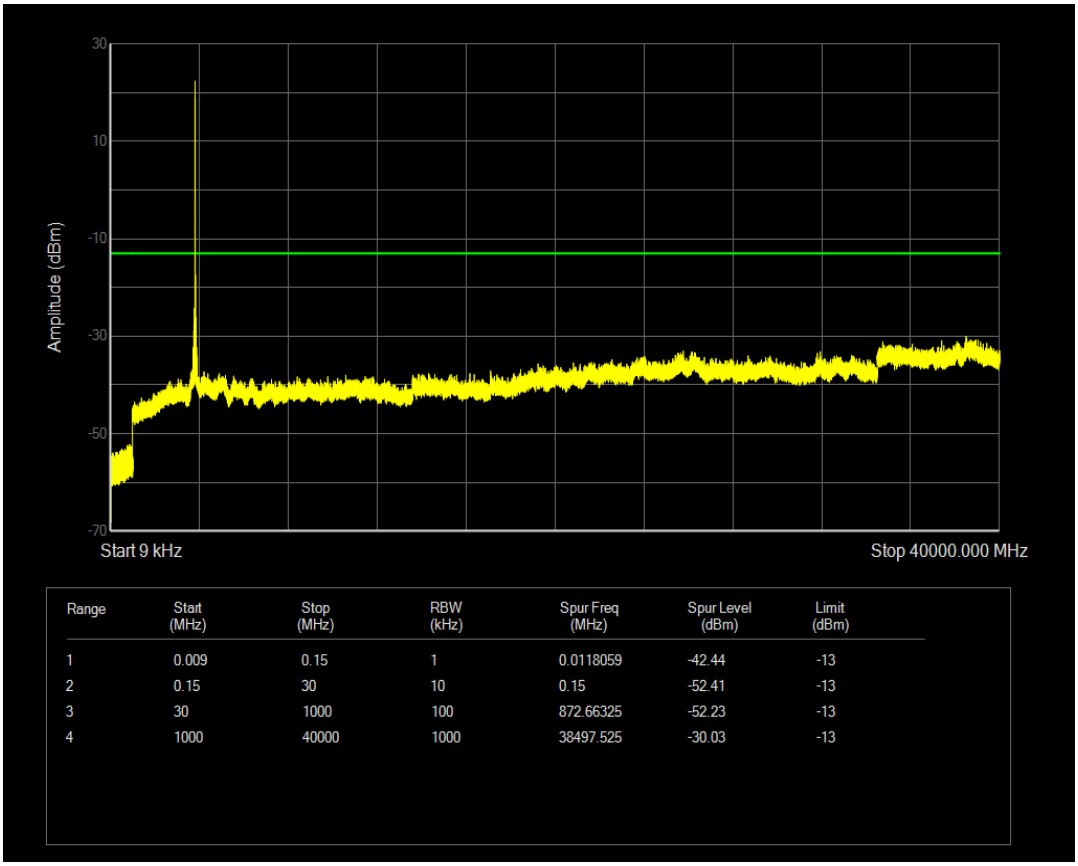
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00955695	-42.45	-13
2	0.15	30	10	0.1514925	-51.56	-13
3	30	1000	100	912.38475	-51.85	-13
4	1000	40000	1000	38600.875	-30.32	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=656000 RB=270@0



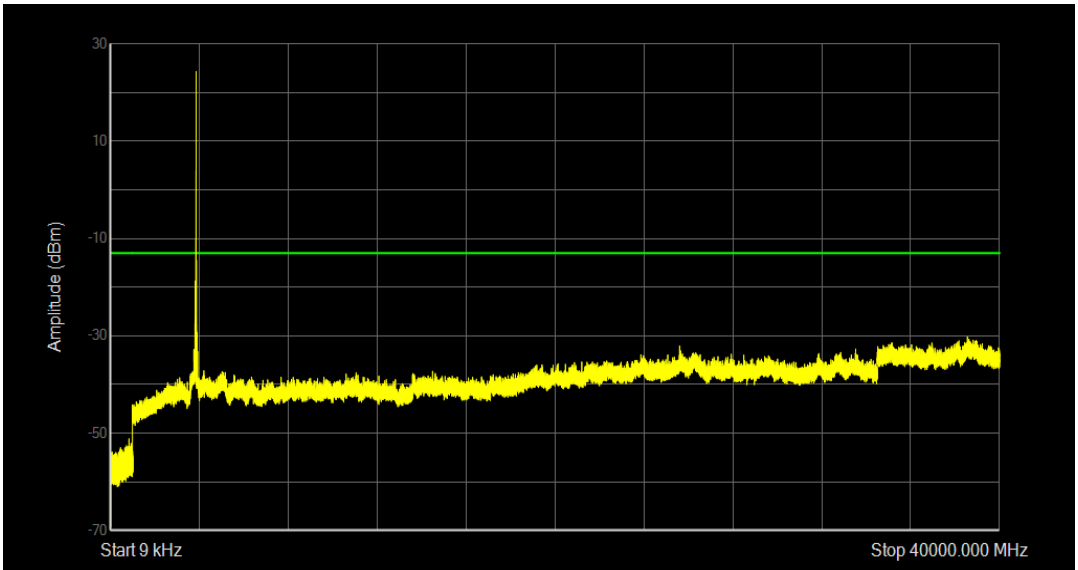
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010681425	-39.75	-13
2	0.15	30	10	0.1604475	-53.03	-13
3	30	1000	100	697.52975	-52.06	-13
4	1000	40000	1000	38912.875	-29.4	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=656000 RB=1@0



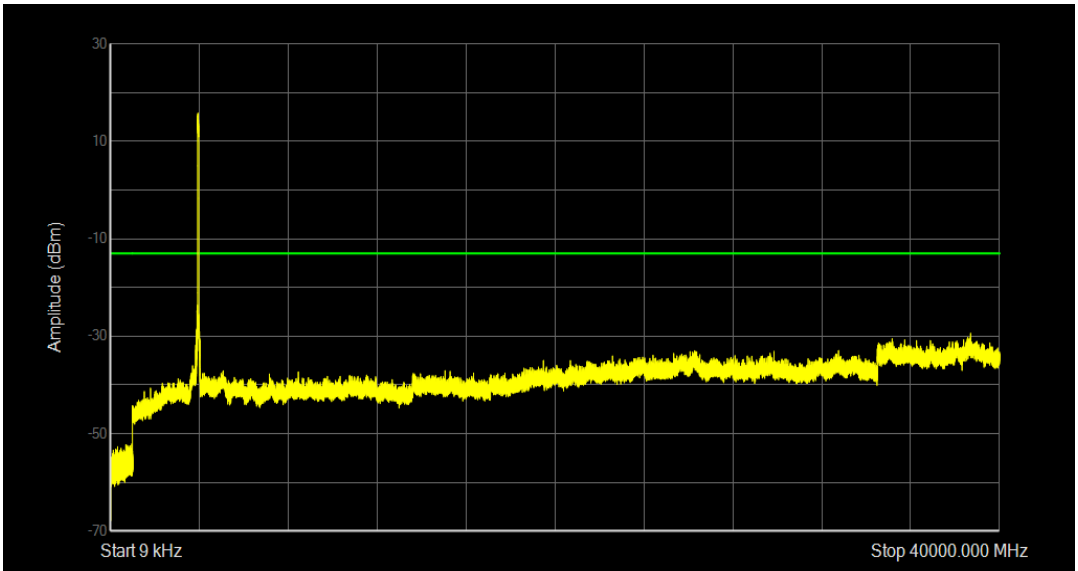
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0118059	-42.44	-13
2	0.15	30	10	0.15	-52.41	-13
3	30	1000	100	872.66325	-52.23	-13
4	1000	40000	1000	38497.525	-30.03	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=656000 RB=1@269



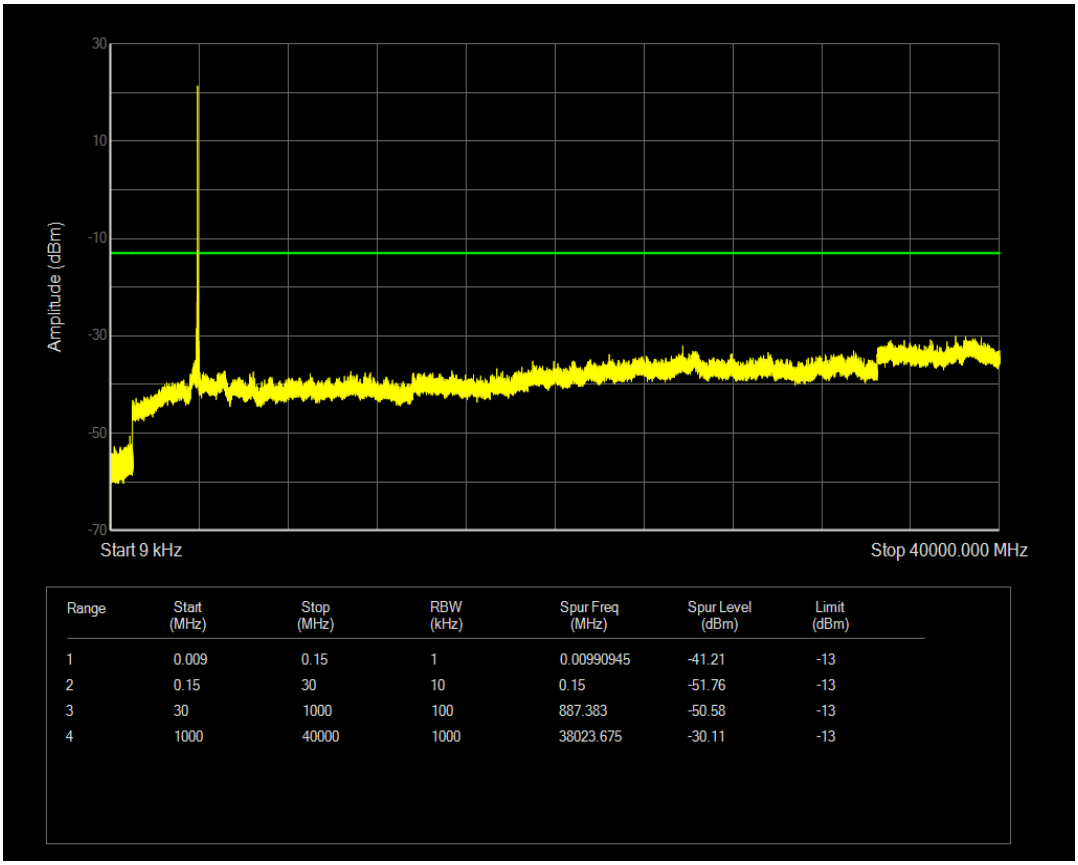
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-42.33	-13
2	0.15	30	10	0.16268625	-51.78	-13
3	30	1000	100	844.509	-51.19	-13
4	1000	40000	1000	38555.05	-30.23	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=663666 RB=270@0



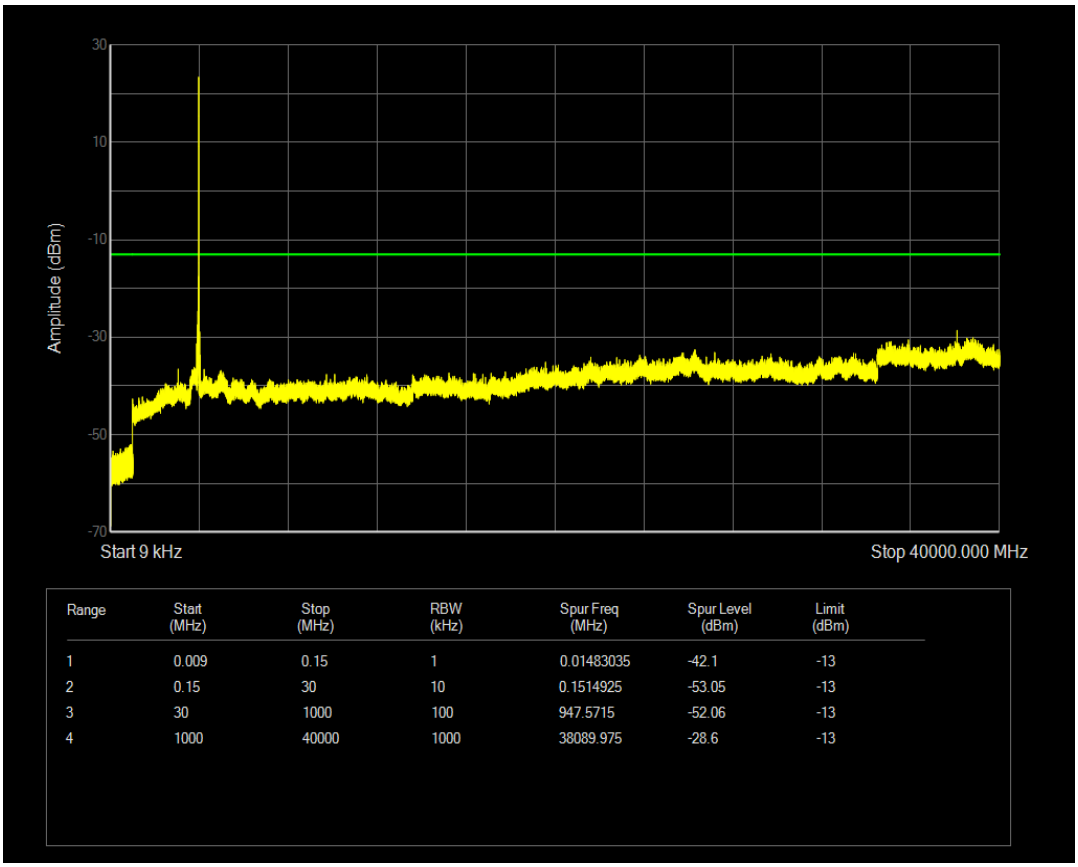
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01406895	-41.13	-13
2	0.15	30	10	0.152985	-52.22	-13
3	30	1000	100	968.96	-52.11	-13
4	1000	40000	1000	38698.375	-29.4	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=663666 RB=1@0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00990945	-41.21	-13
2	0.15	30	10	0.15	-51.76	-13
3	30	1000	100	887.383	-50.58	-13
4	1000	40000	1000	38023.675	-30.11	-13

n77(3700-3980) SCS=15kHz DFT_QPSK BW=50MHz Channel=663666 RB=1@269



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01483035	-42.1	-13
2	0.15	30	10	0.1514925	-53.05	-13
3	30	1000	100	947.5715	-52.06	-13
4	1000	40000	1000	38089.975	-28.6	-13