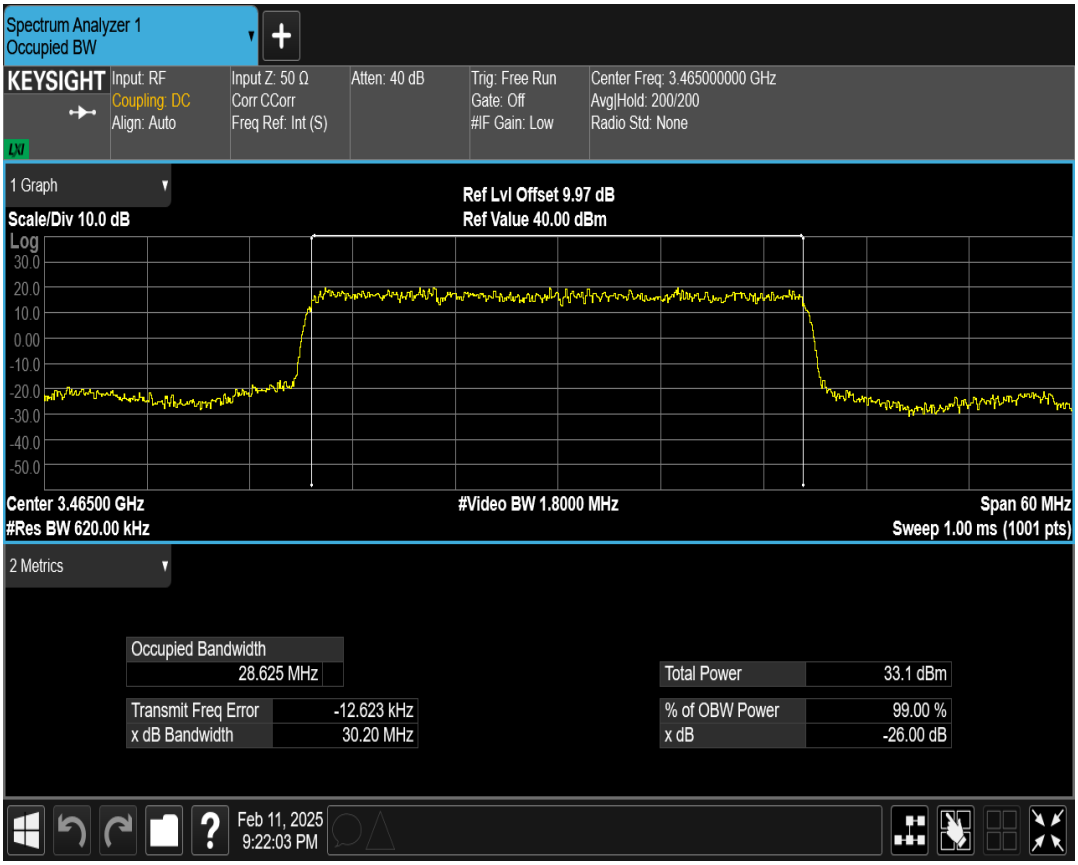
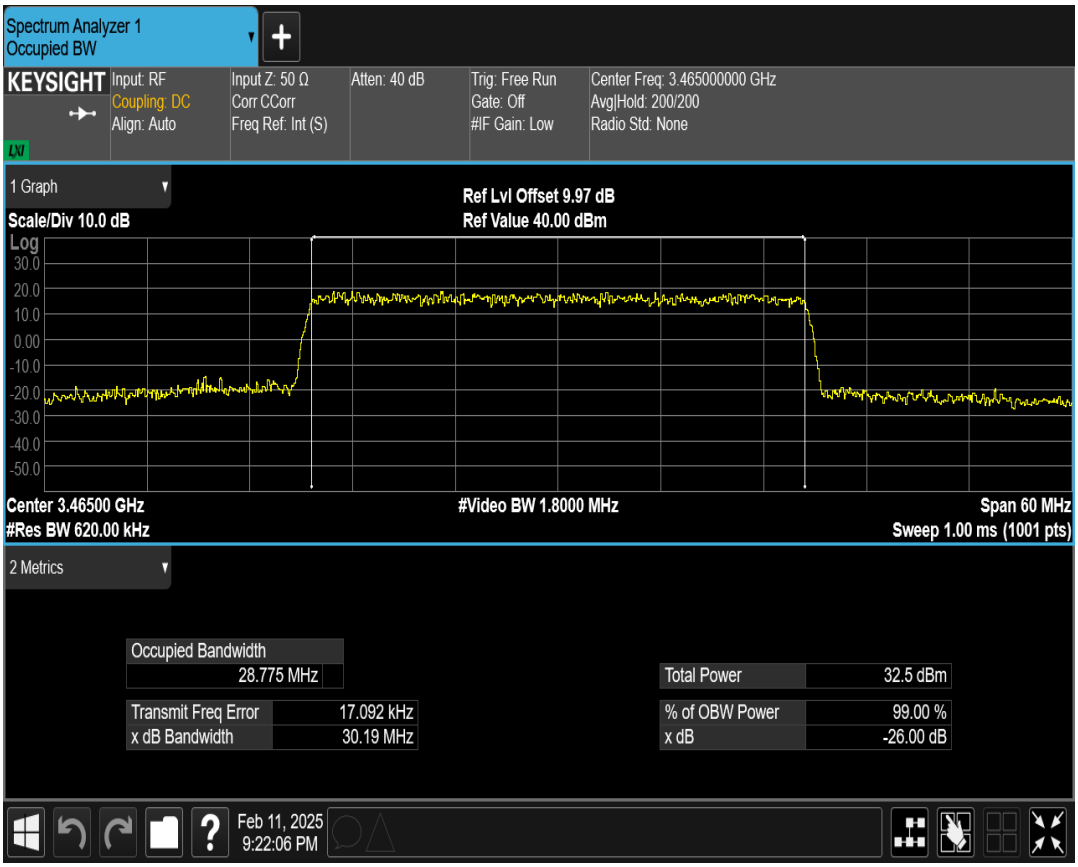
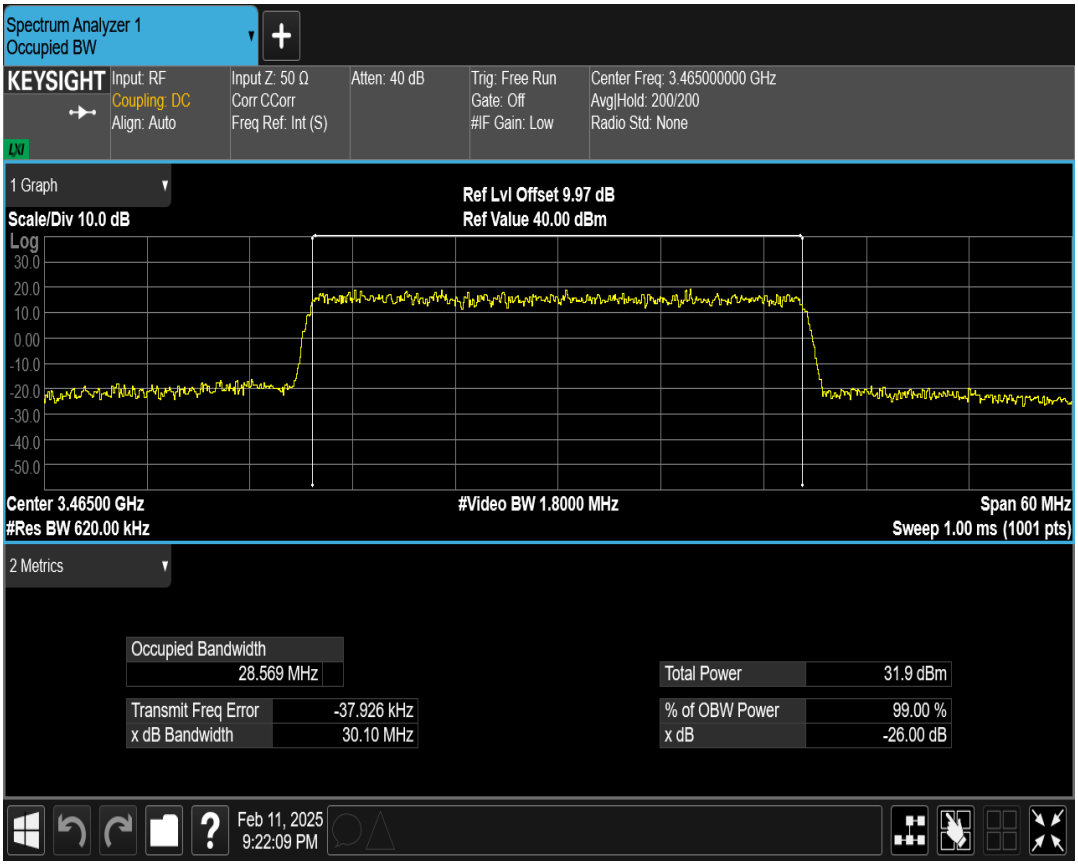
n78(3450-3550) SCS=15kHz DFT_BPSK BW=30MHz Channel=631000 RB=160@0



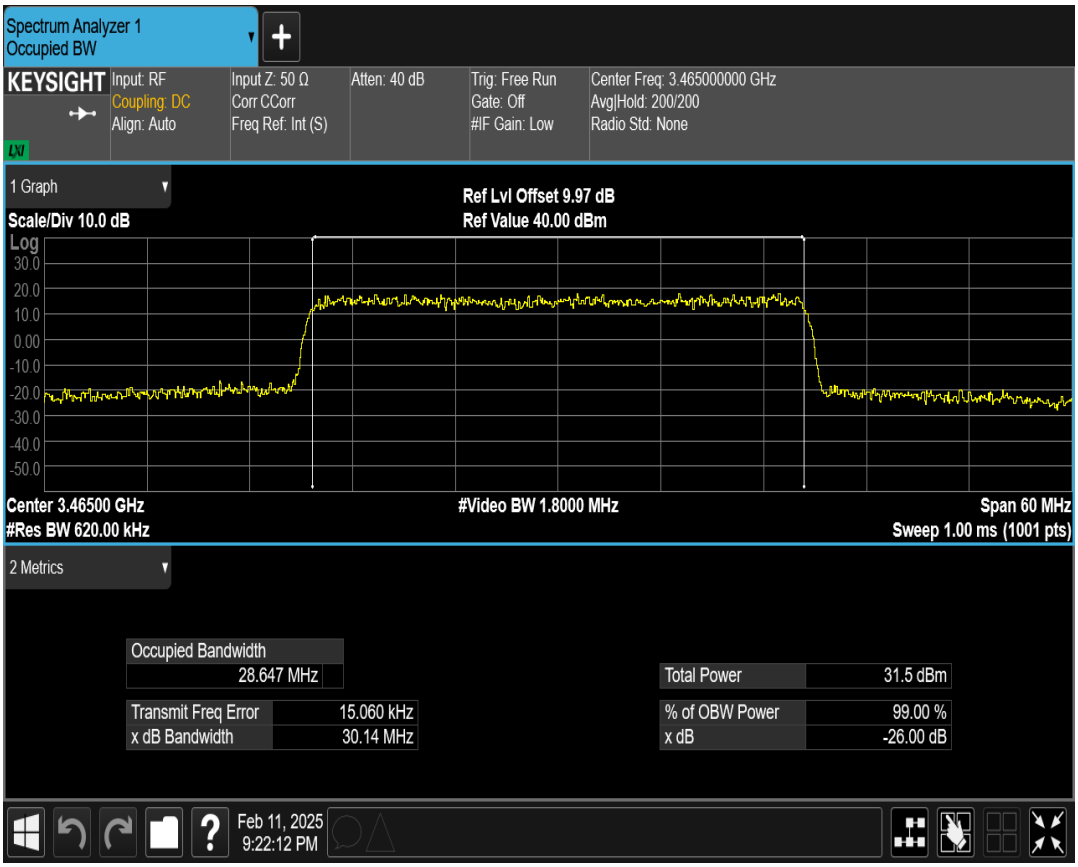
n78(3450-3550) SCS=15kHz DFT_QPSK BW=30MHz Channel=631000 RB=160@0



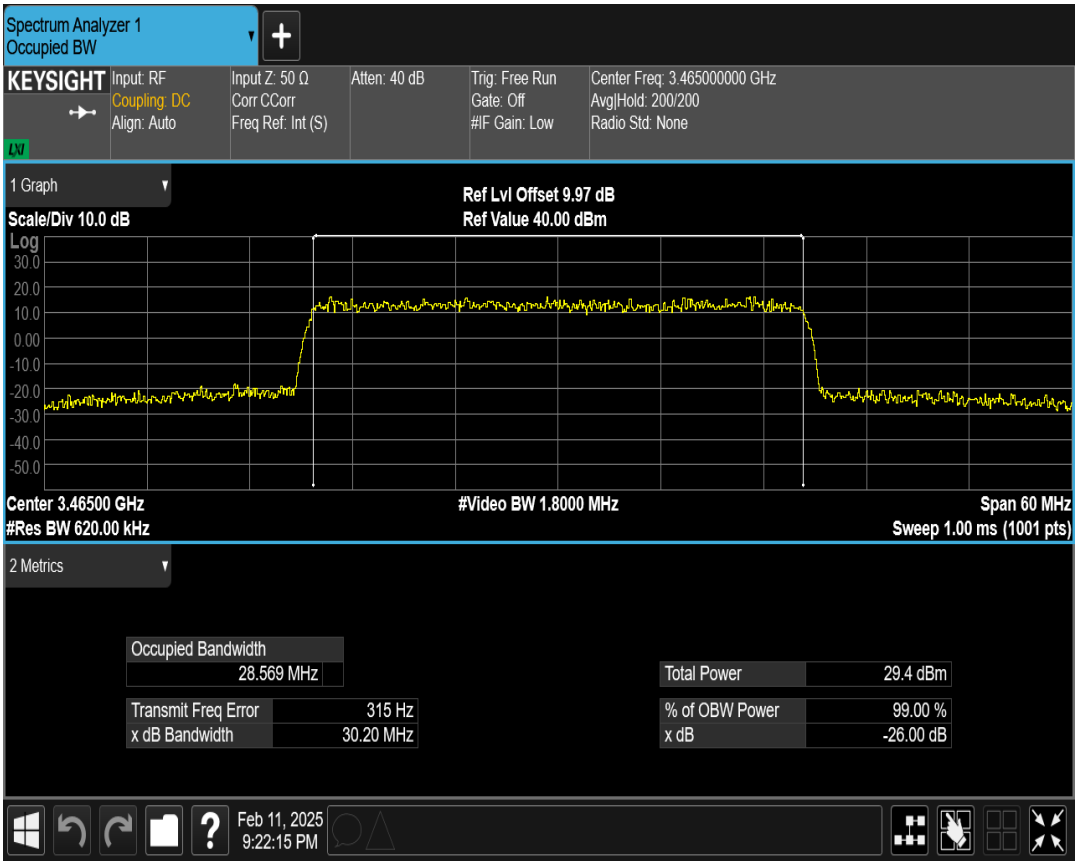
n78(3450-3550) SCS=15kHz DFT_QAM16 BW=30MHz Channel=631000 RB=160@0



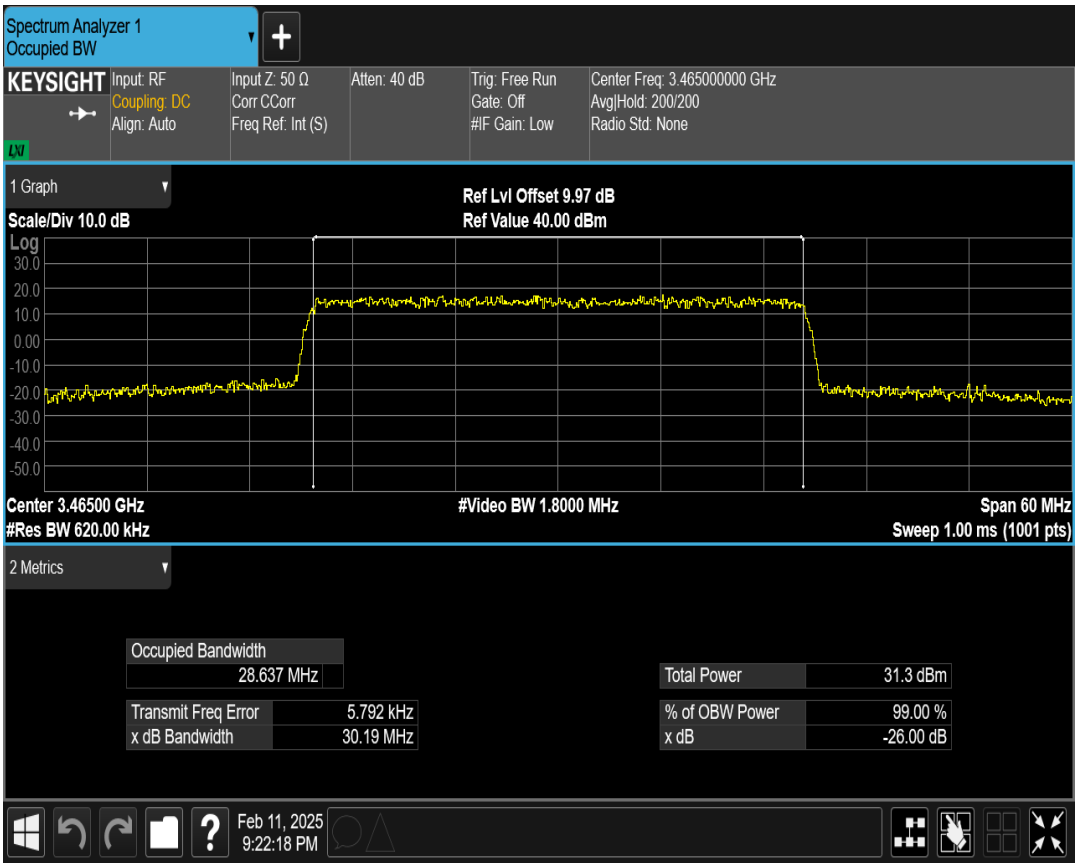
n78(3450-3550) SCS=15kHz DFT_QAM64 BW=30MHz Channel=631000 RB=160@0



n78(3450-3550) SCS=15kHz DFT_QAM256 BW=30MHz Channel=631000 RB=160@0



n78(3450-3550) SCS=15kHz CP_QPSK BW=30MHz Channel=631000 RB=160@0



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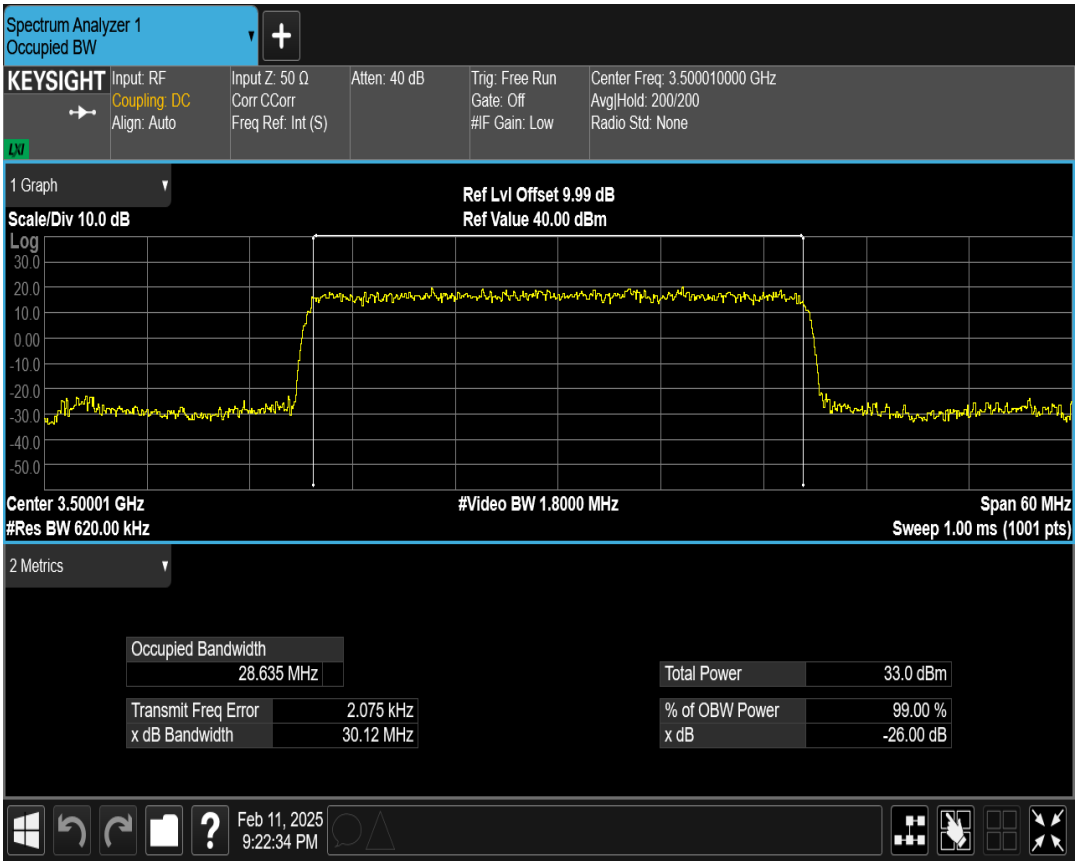

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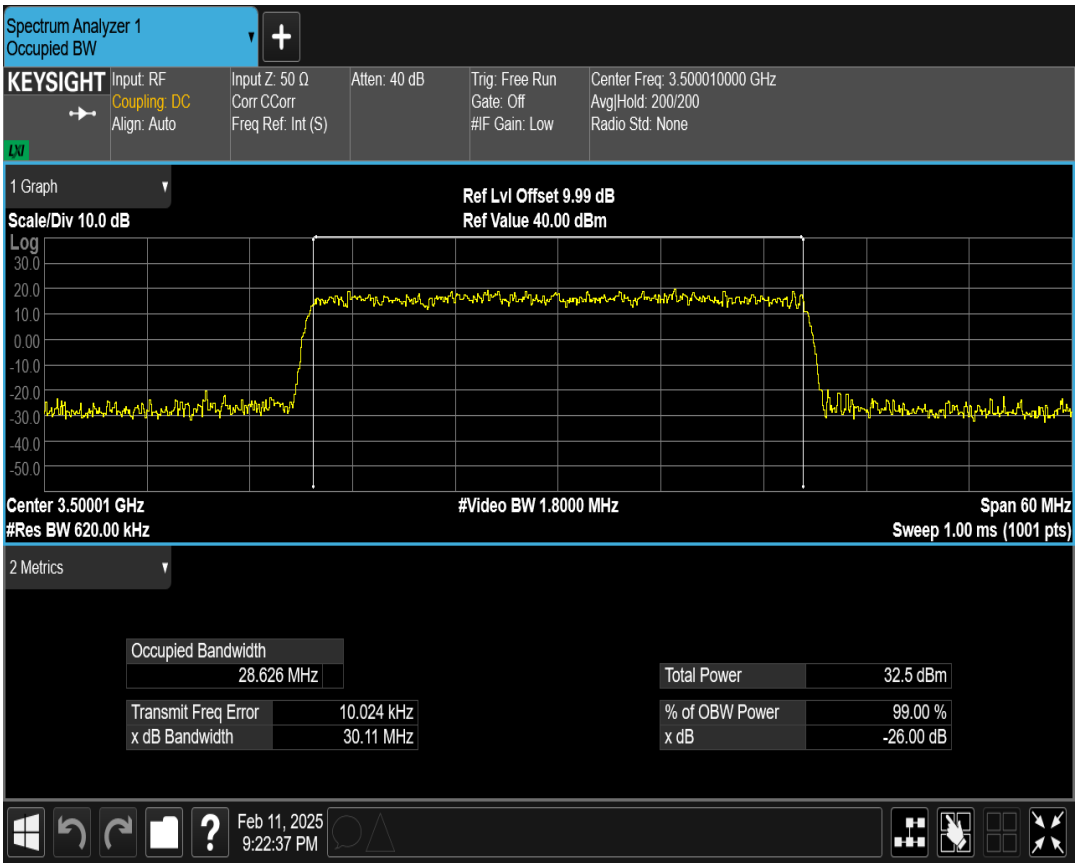

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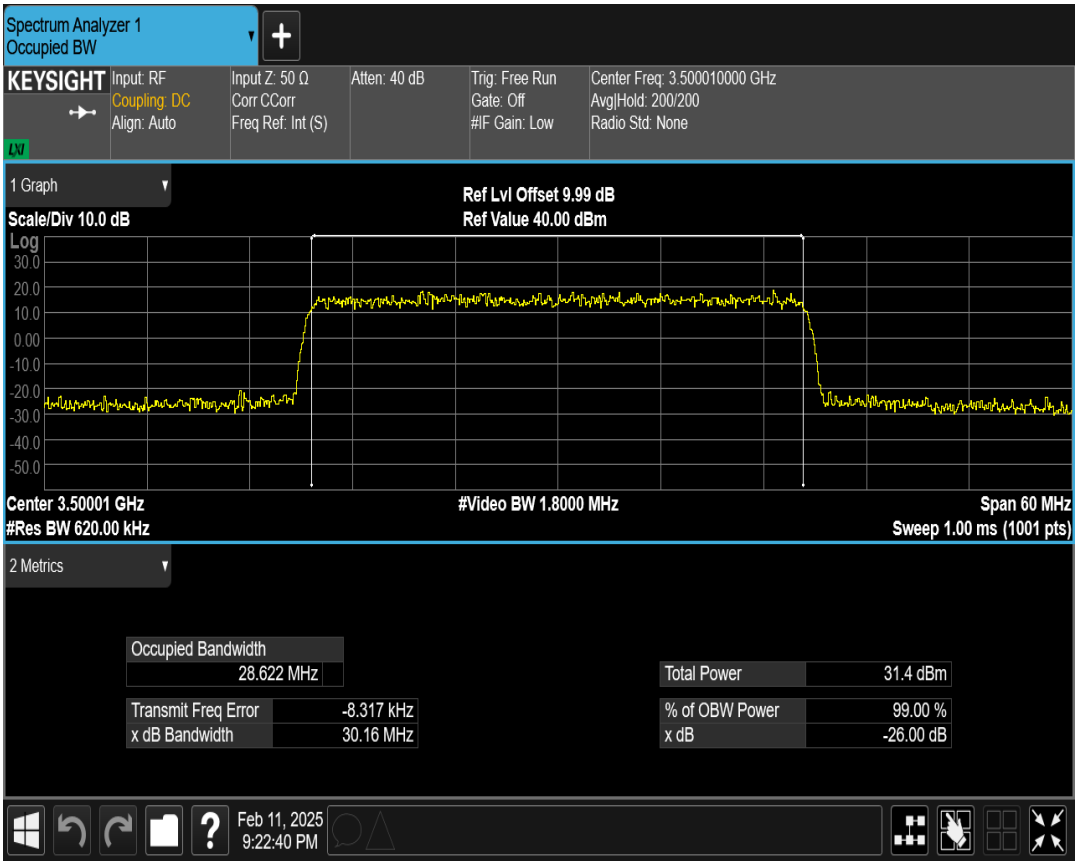

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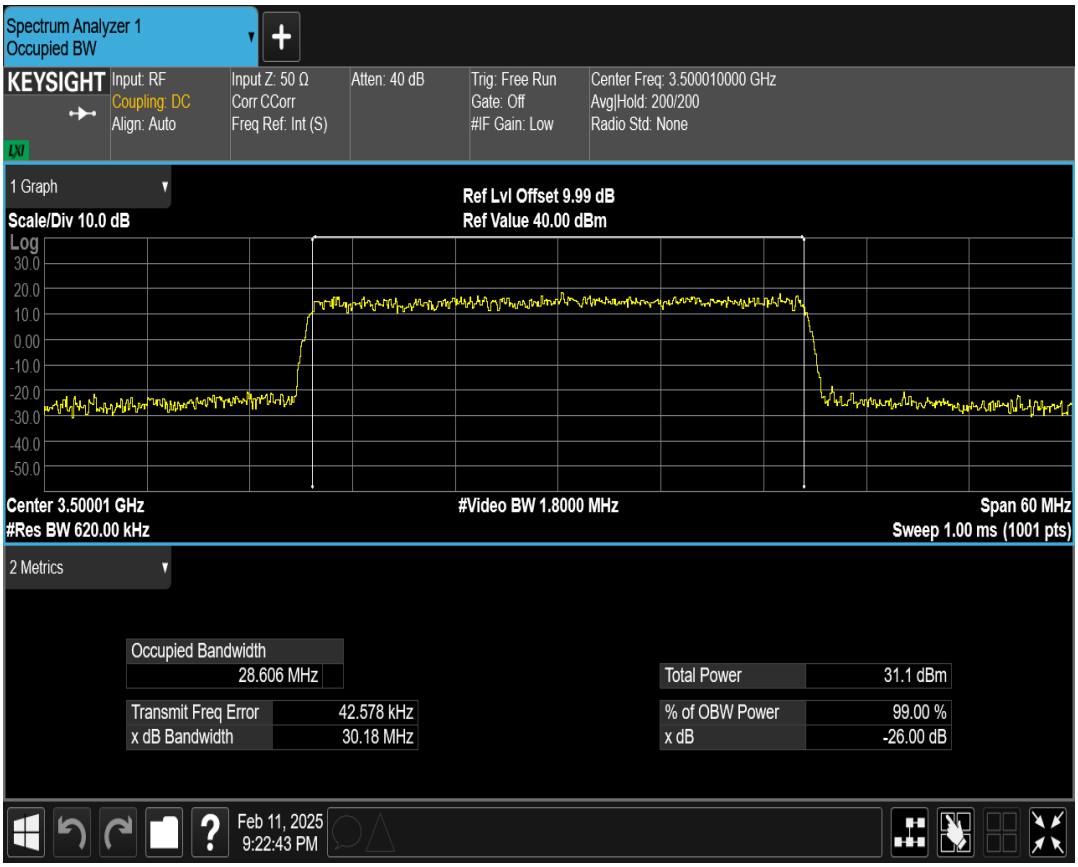

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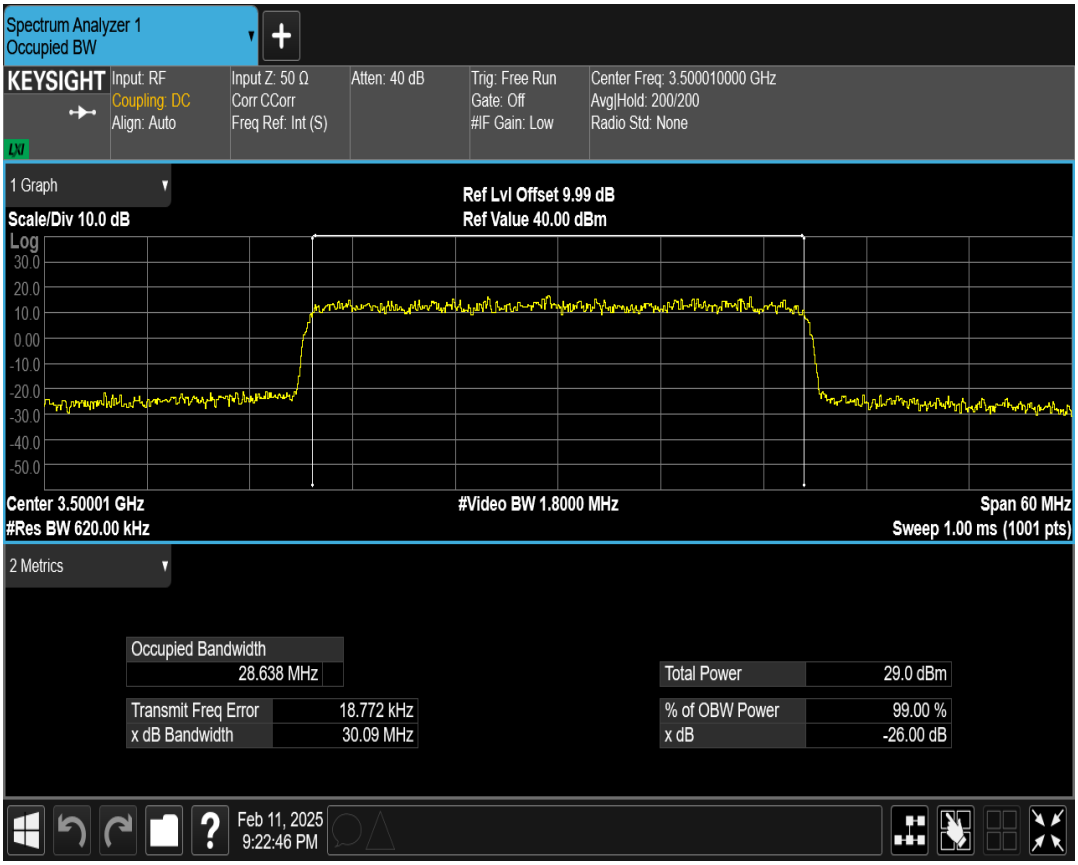
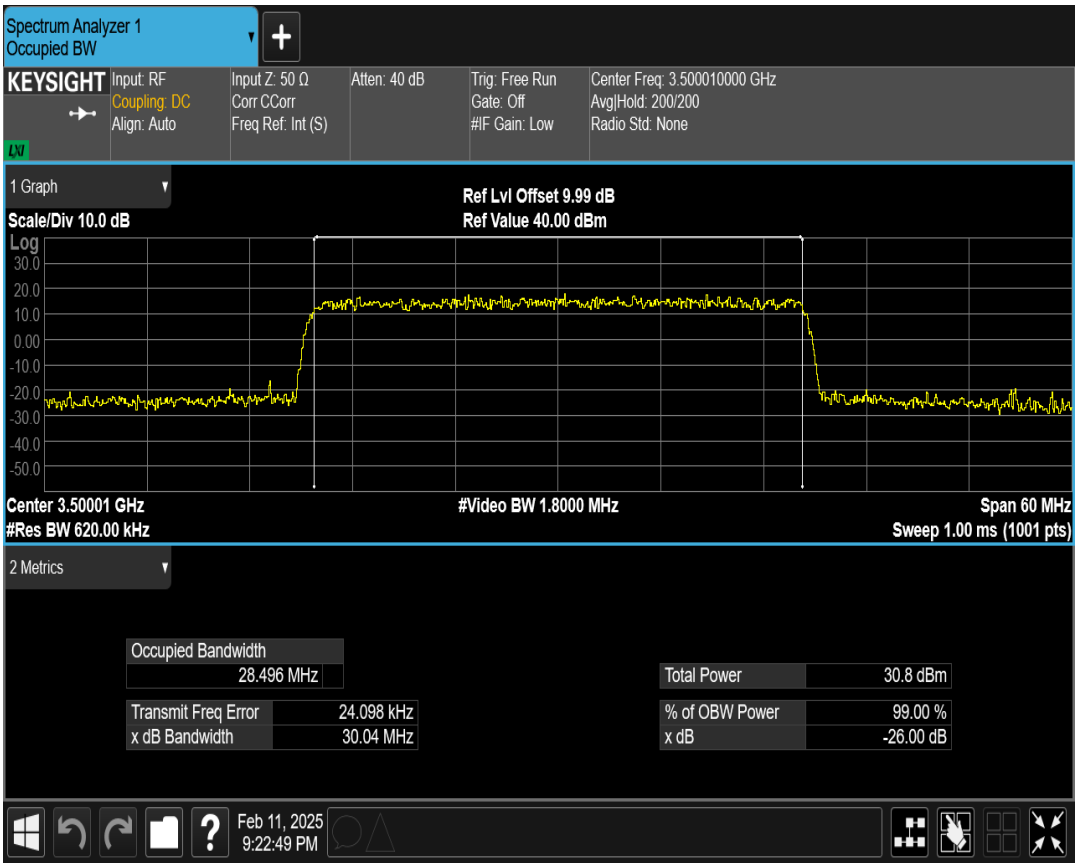
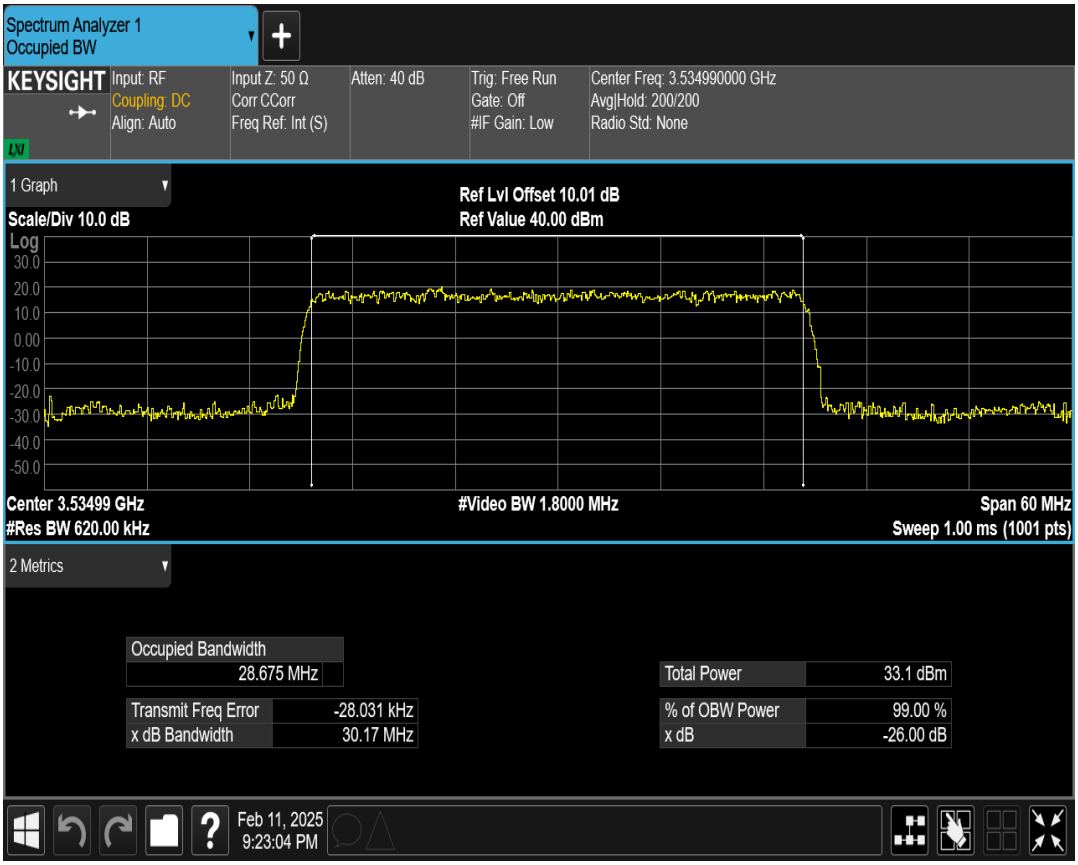


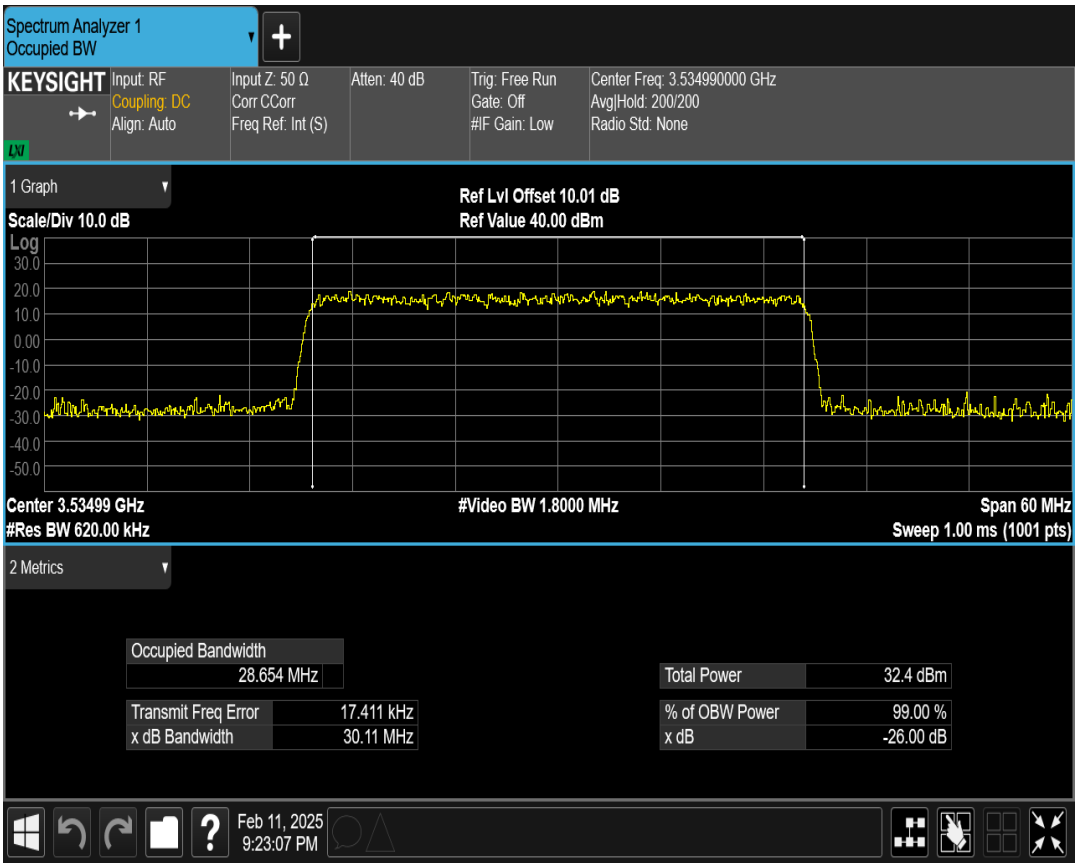
n78(3450-3550) SCS=15kHz CP_QPSK BW=30MHz Channel=633334 RB=160@0



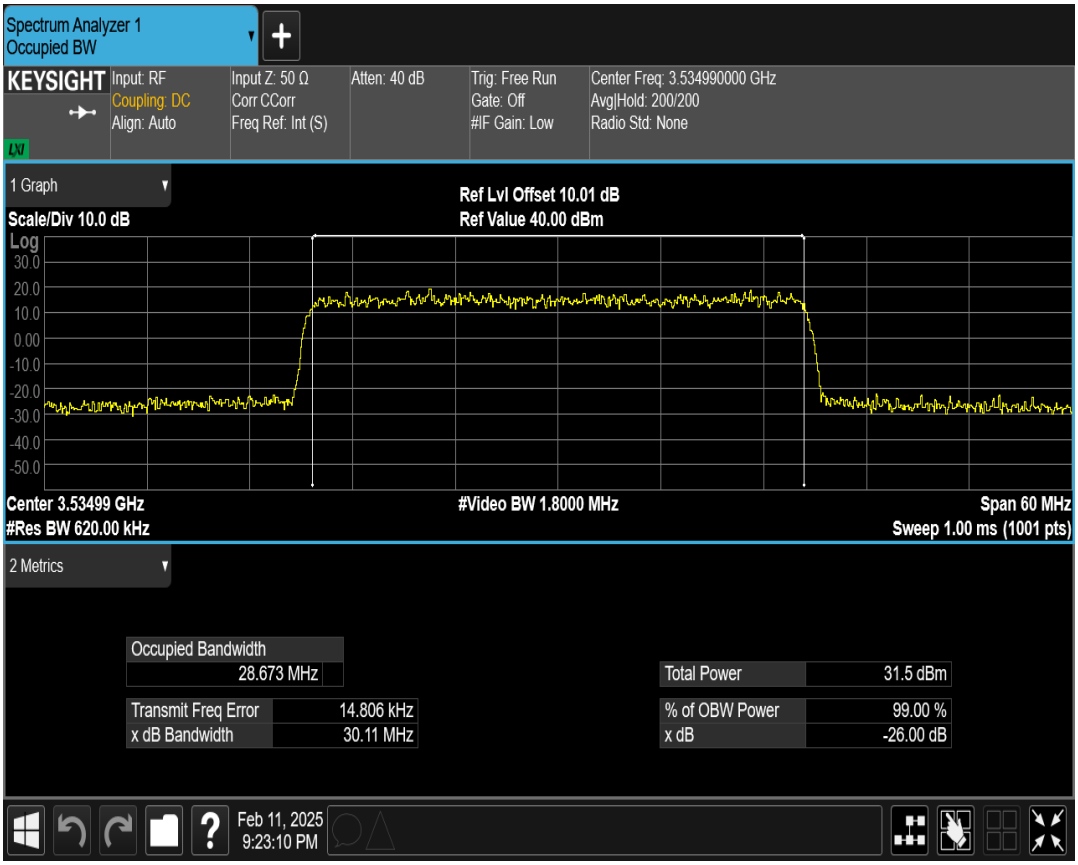
n78(3450-3550) SCS=15kHz DFT_BPSK BW=30MHz Channel=635666 RB=160@0



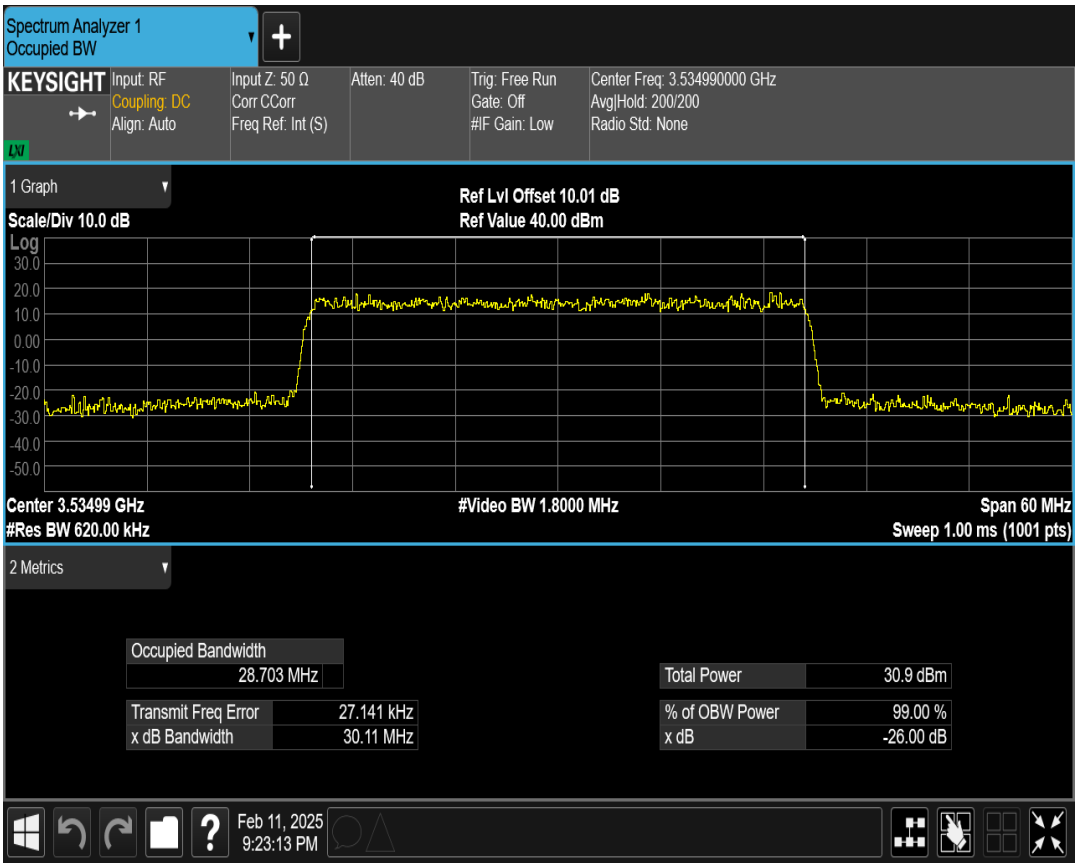
n78(3450-3550) SCS=15kHz DFT_QPSK BW=30MHz Channel=635666 RB=160@0



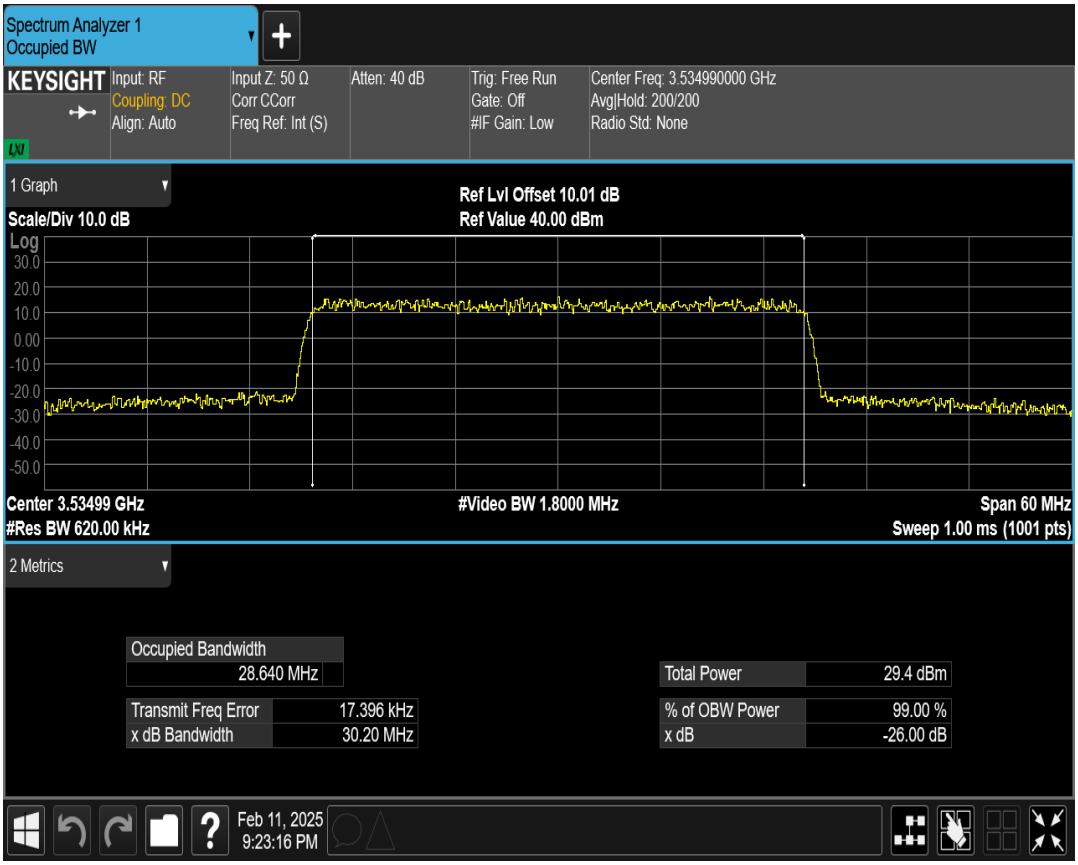
n78(3450-3550) SCS=15kHz DFT_QAM16 BW=30MHz Channel=635666 RB=160@0



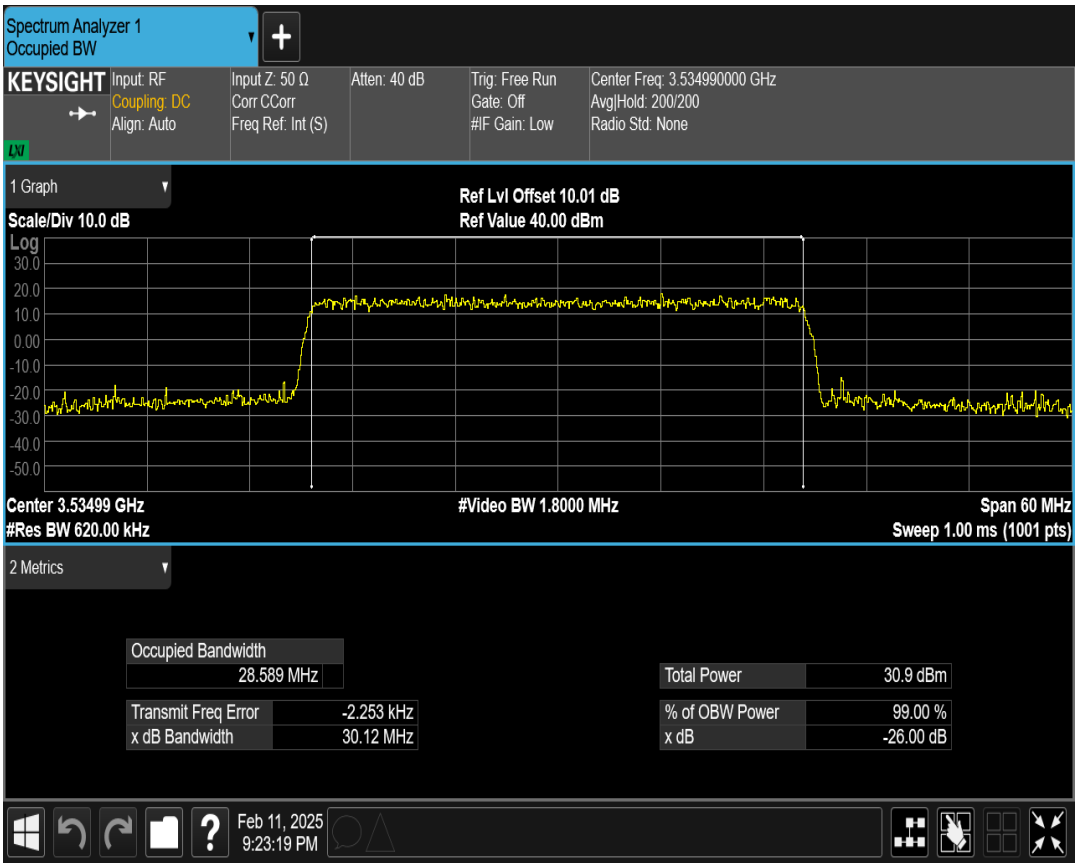
n78(3450-3550) SCS=15kHz DFT_QAM64 BW=30MHz Channel=635666 RB=160@0



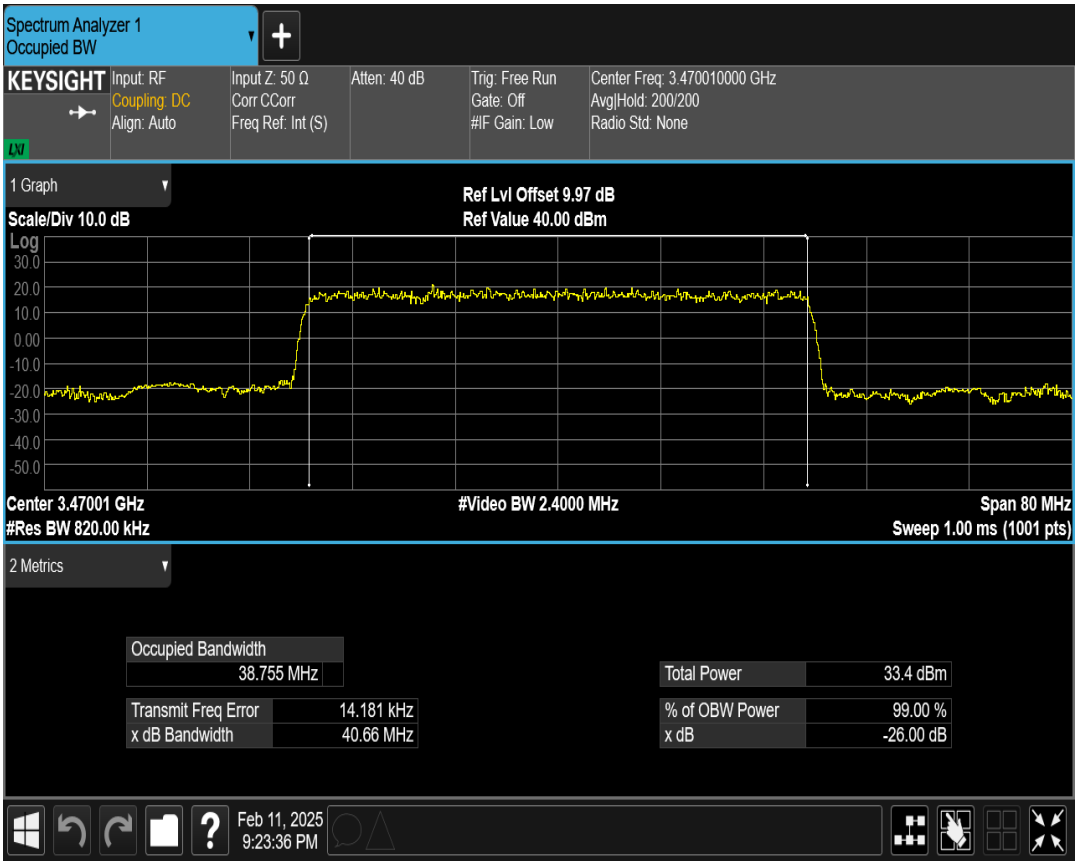
n78(3450-3550) SCS=15kHz DFT_QAM256 BW=30MHz Channel=635666 RB=160@0



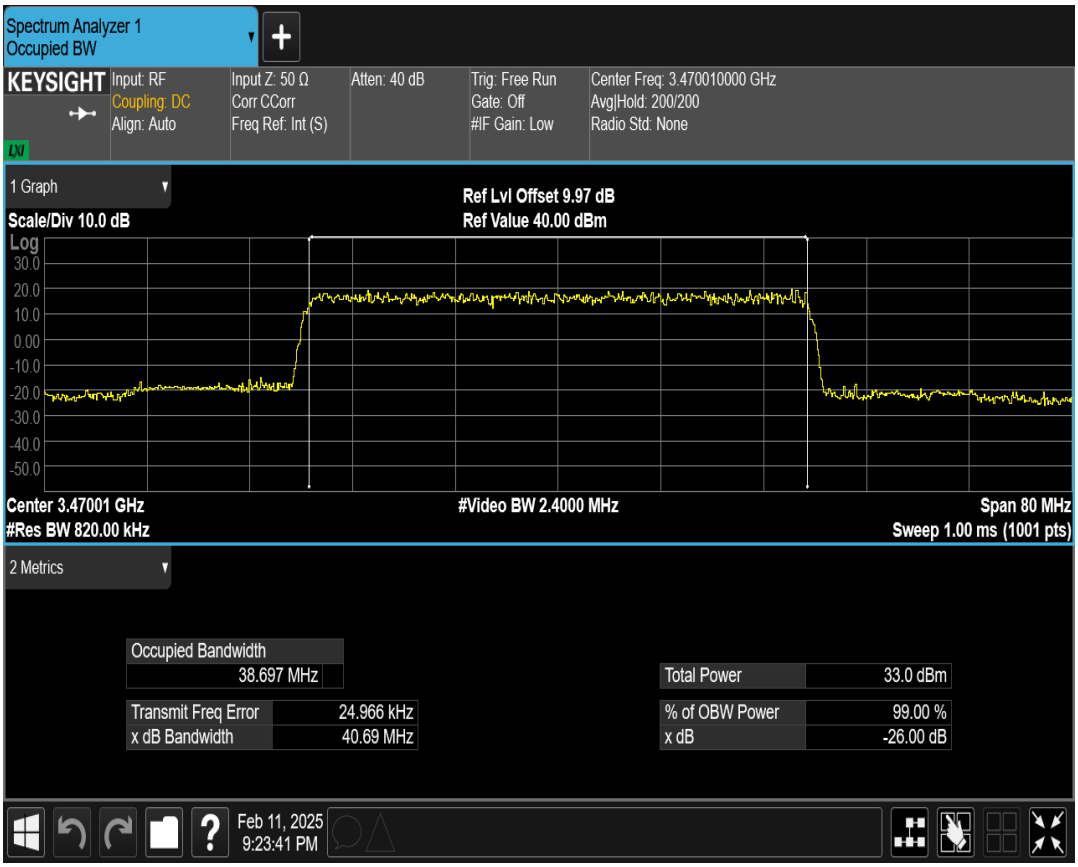
n78(3450-3550) SCS=15kHz CP_QPSK BW=30MHz Channel=635666 RB=160@0



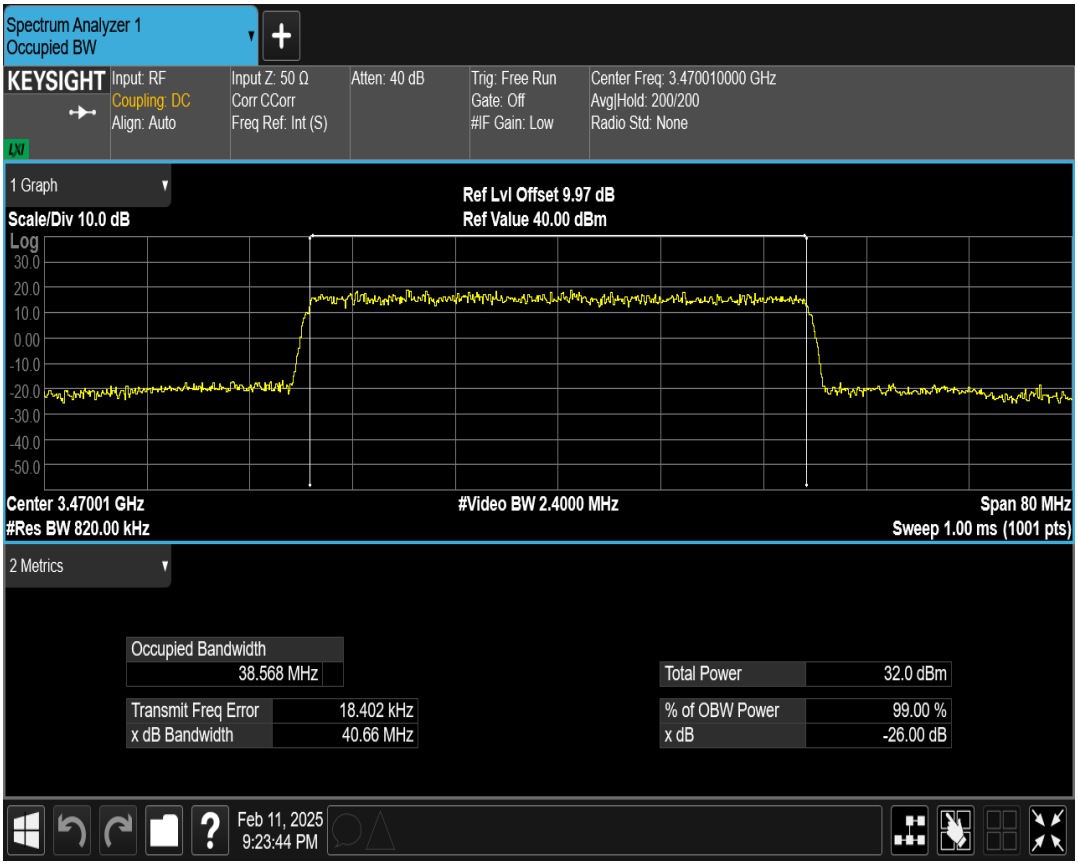
n78(3450-3550) SCS=15kHz DFT_BPSK BW=40MHz Channel=631334 RB=216@0



n78(3450-3550) SCS=15kHz DFT_QPSK BW=40MHz Channel=631334 RB=216@0



n78(3450-3550) SCS=15kHz DFT_QAM16 BW=40MHz Channel=631334 RB=216@0



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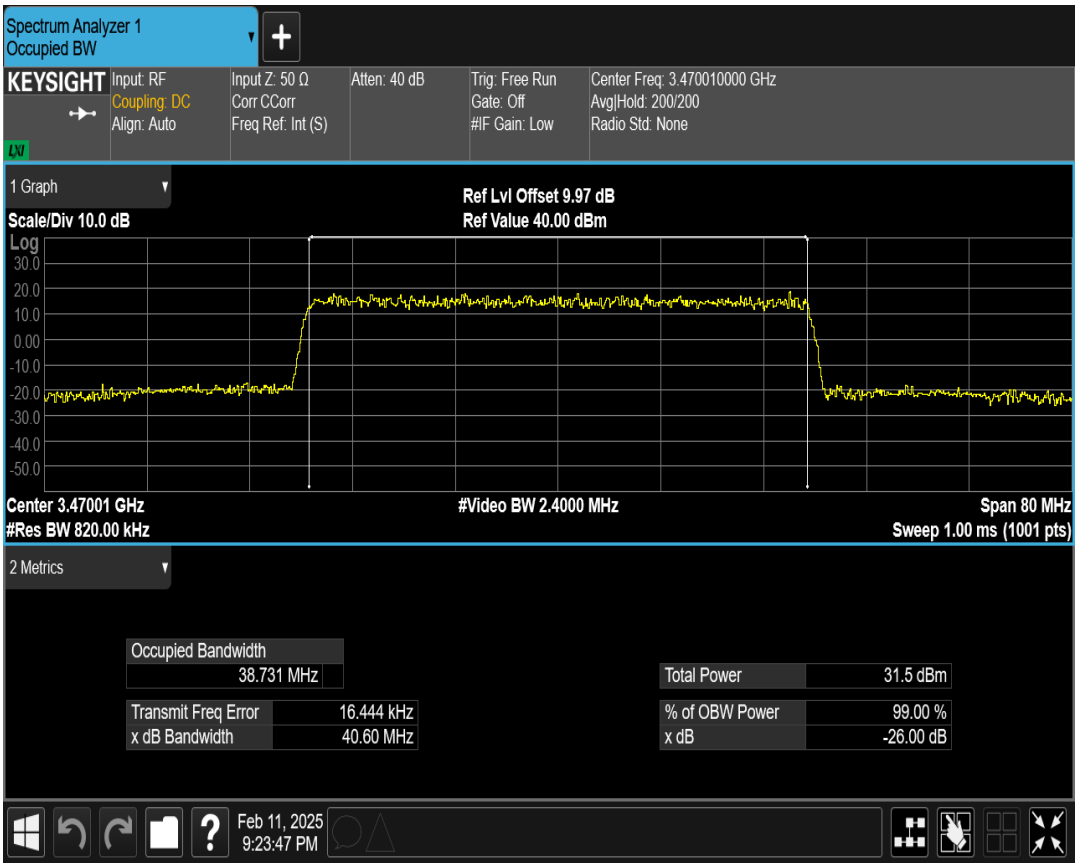

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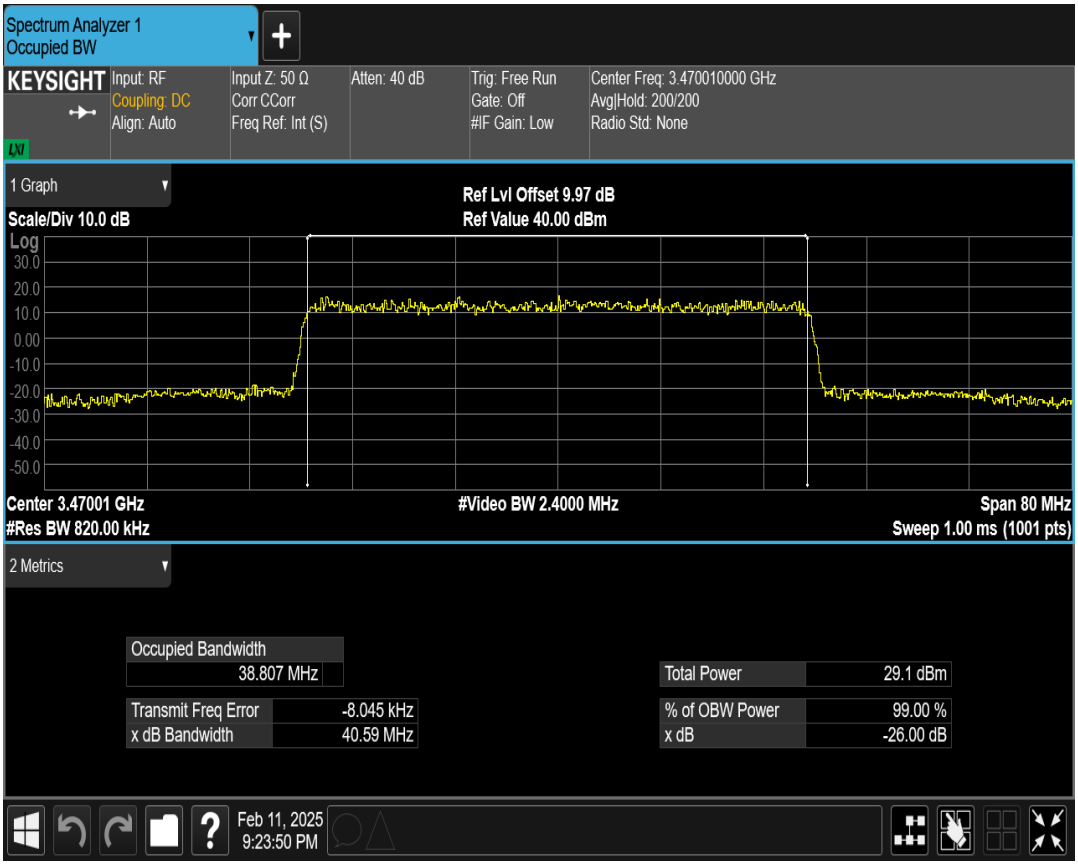
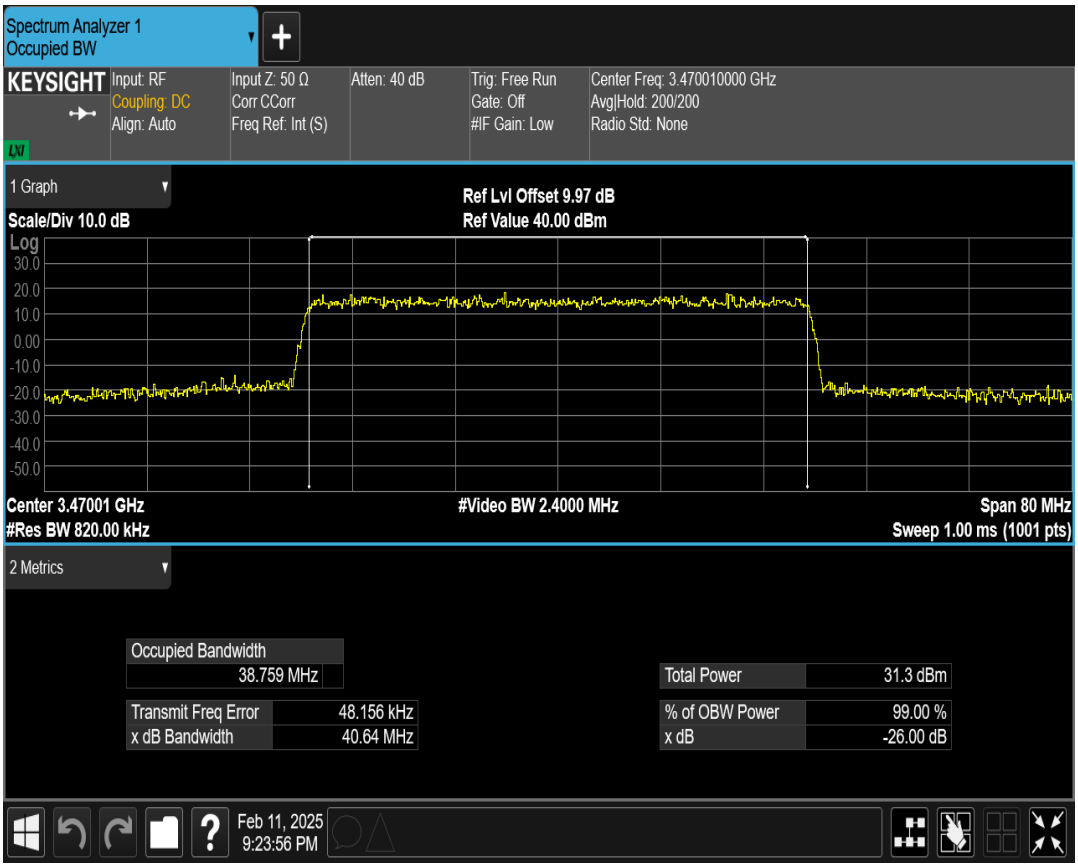


n78(3450-3550) SCS=15kHz CP_QPSK BW=40MHz Channel=631334 RB=216@0



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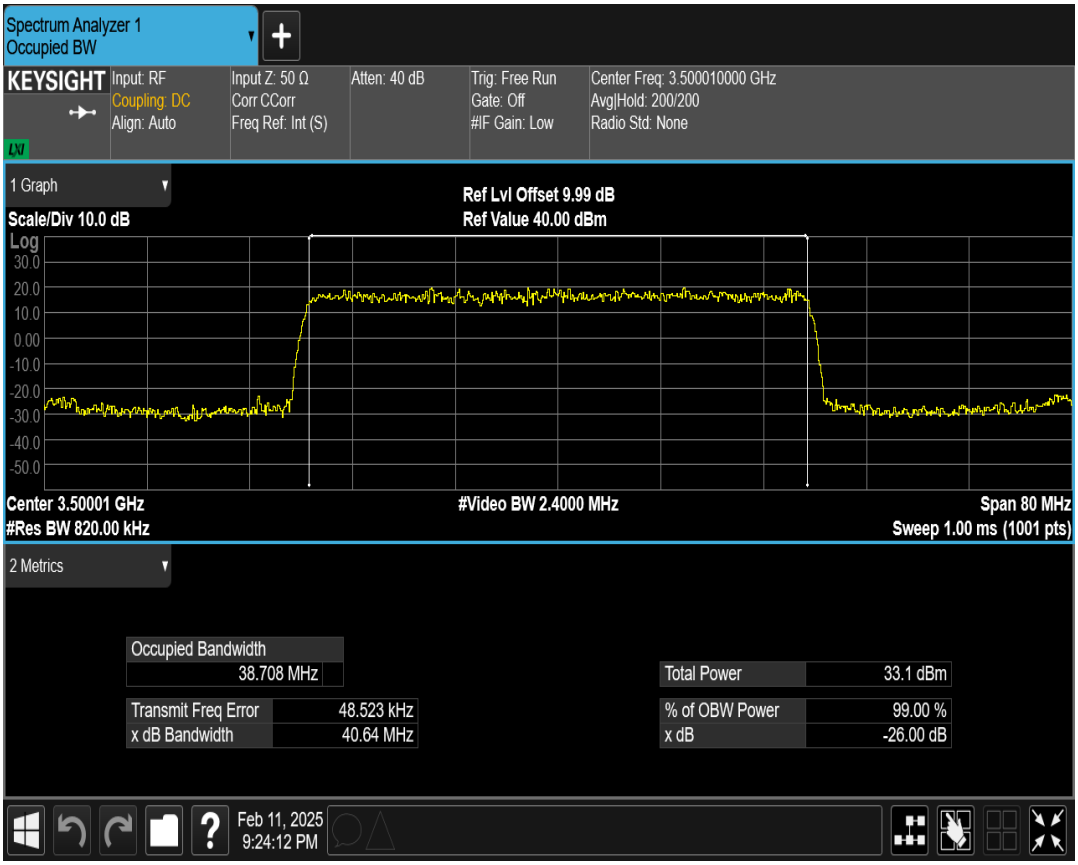

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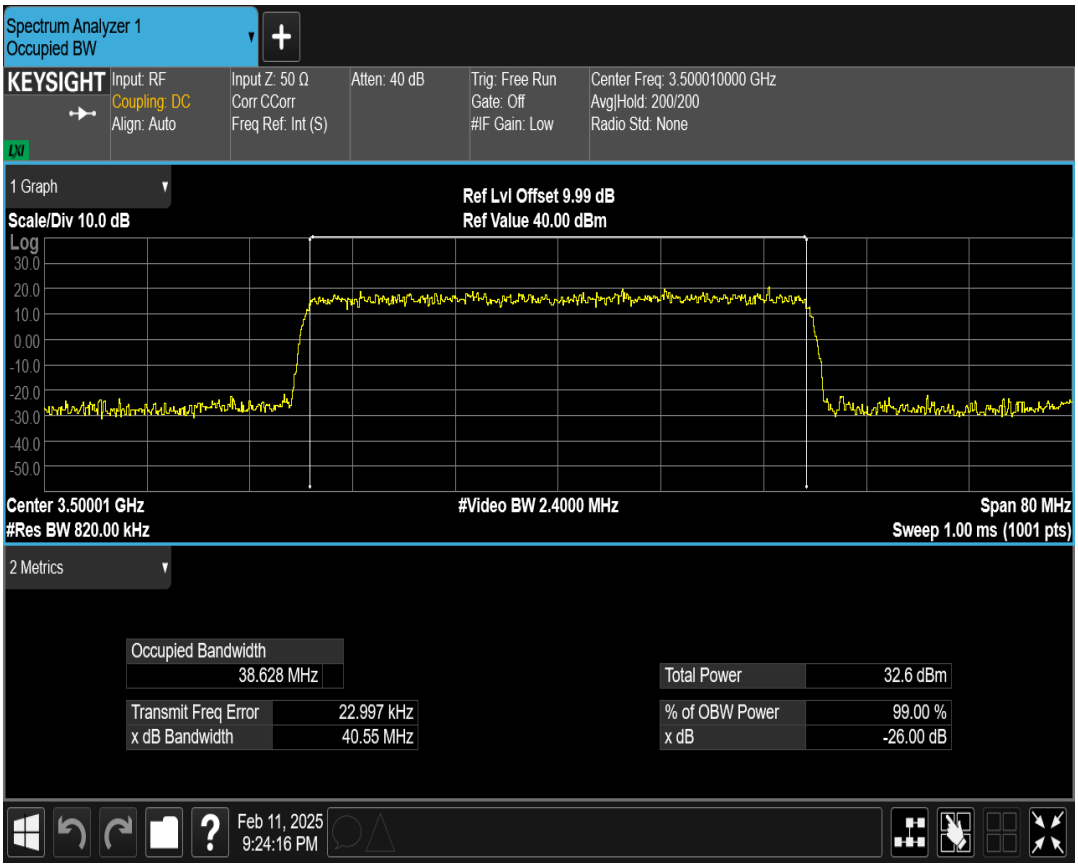

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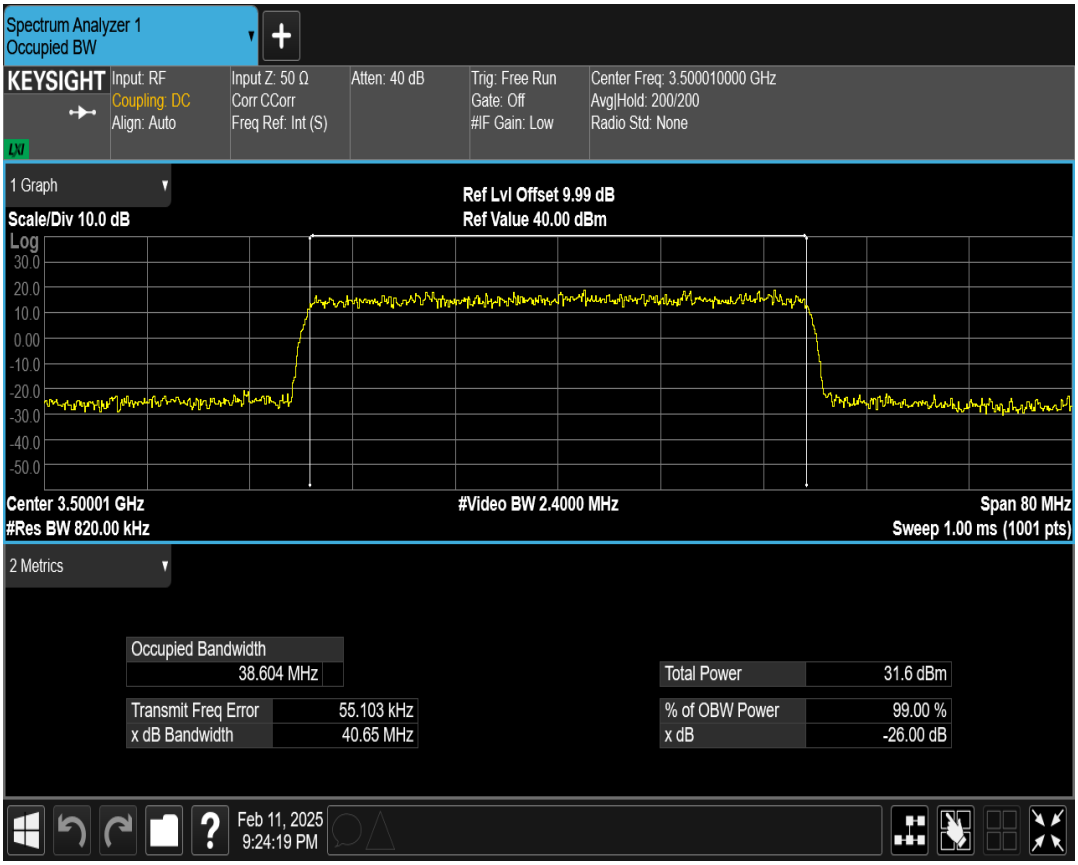
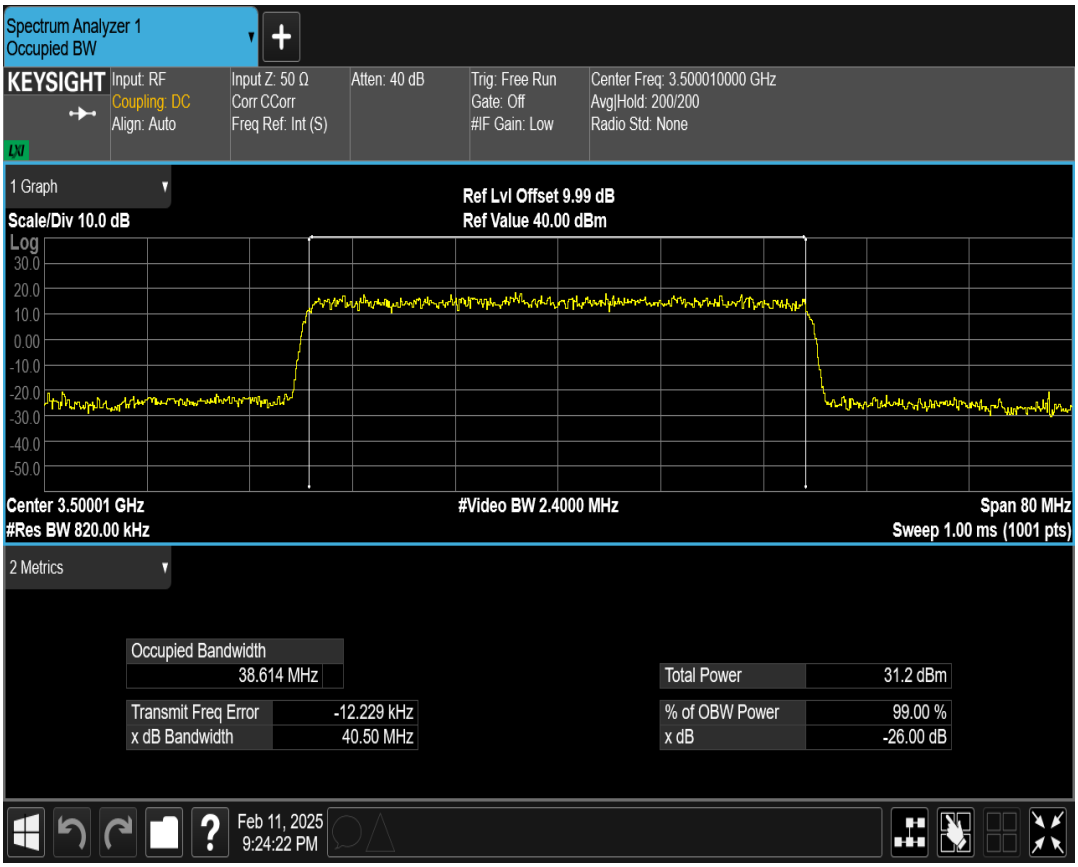
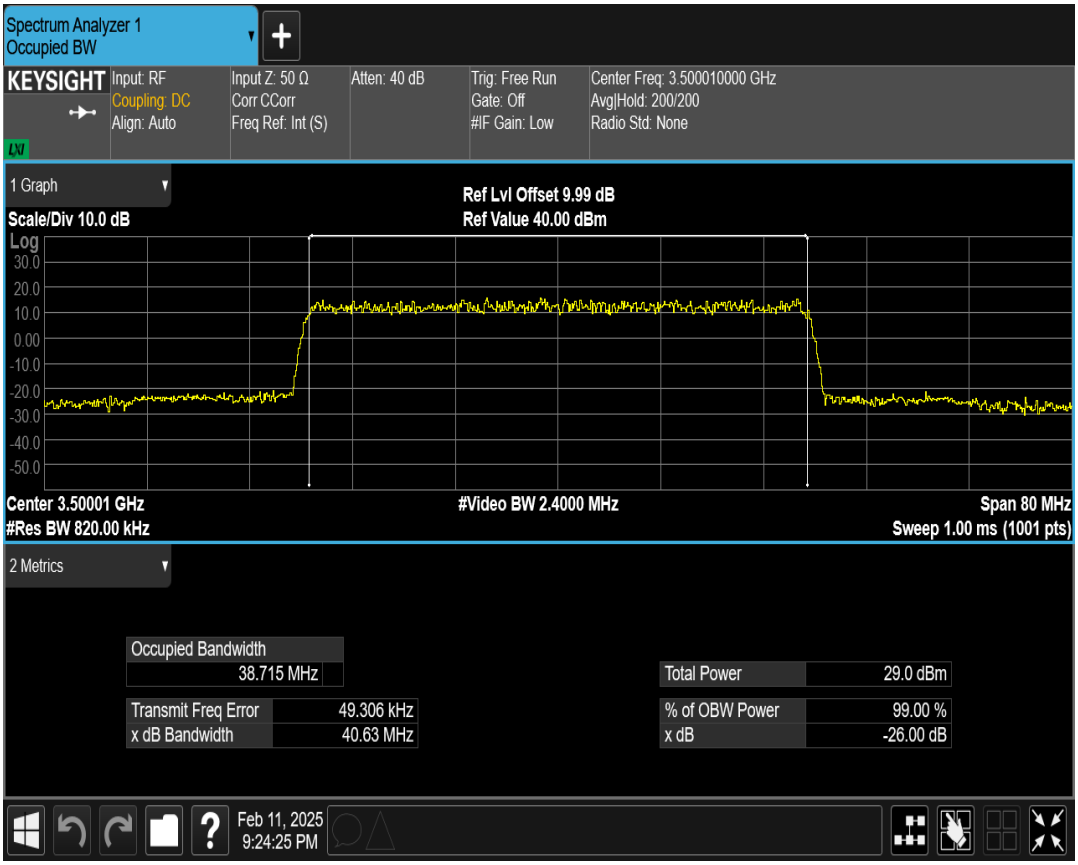


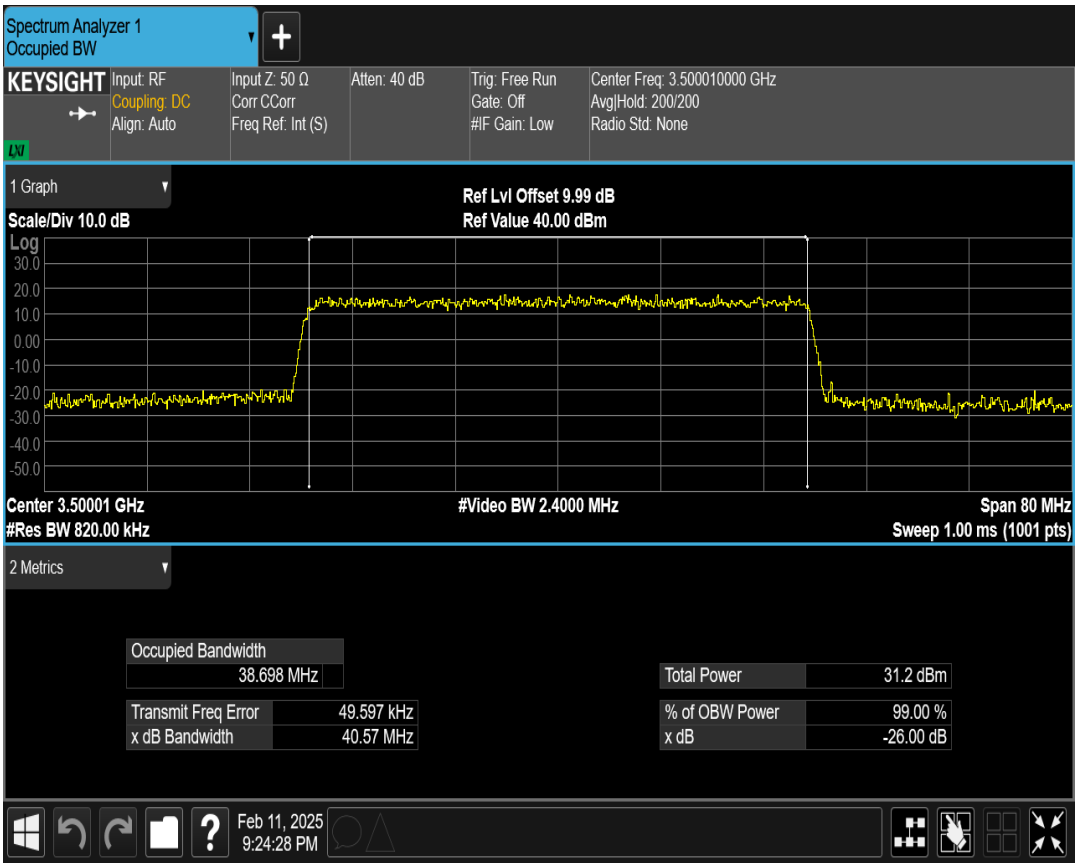
n78(3450-3550) SCS=15kHz DFT_QAM64 BW=40MHz Channel=633334 RB=216@0



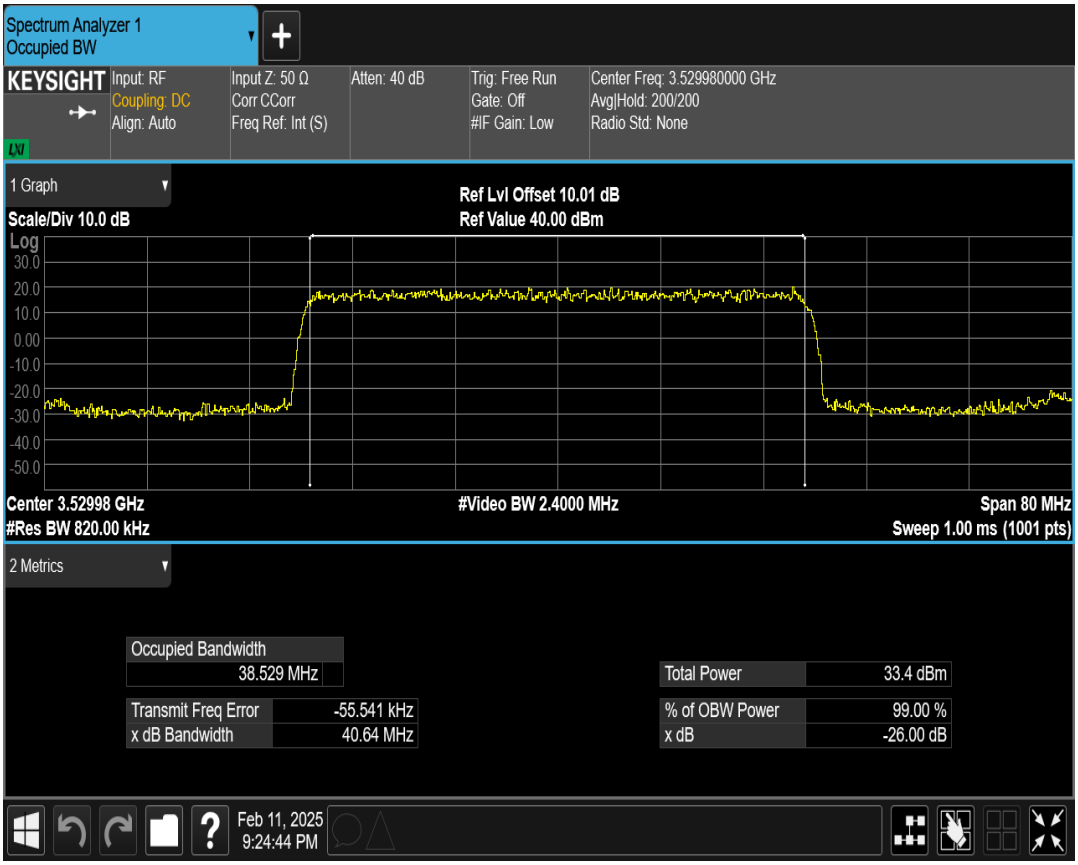
n78(3450-3550) SCS=15kHz DFT_QAM256 BW=40MHz Channel=633334 RB=216@0



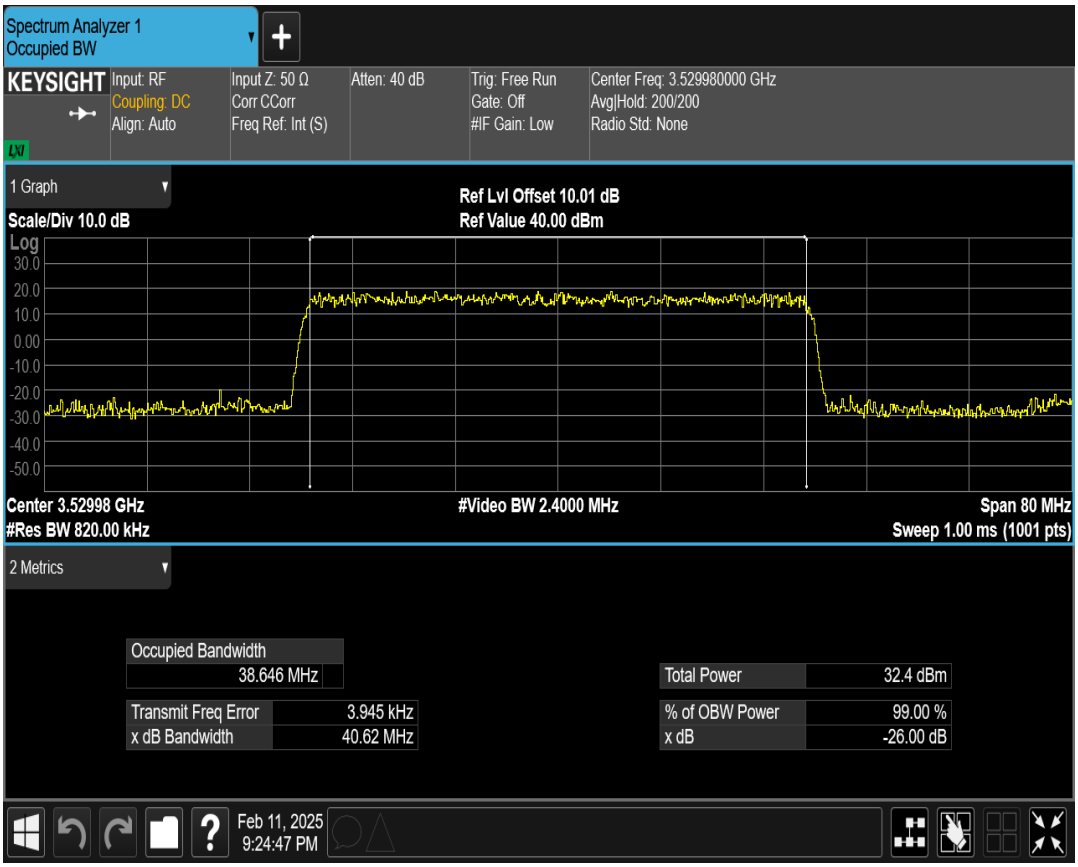
n78(3450-3550) SCS=15kHz CP_QPSK BW=40MHz Channel=633334 RB=216@0



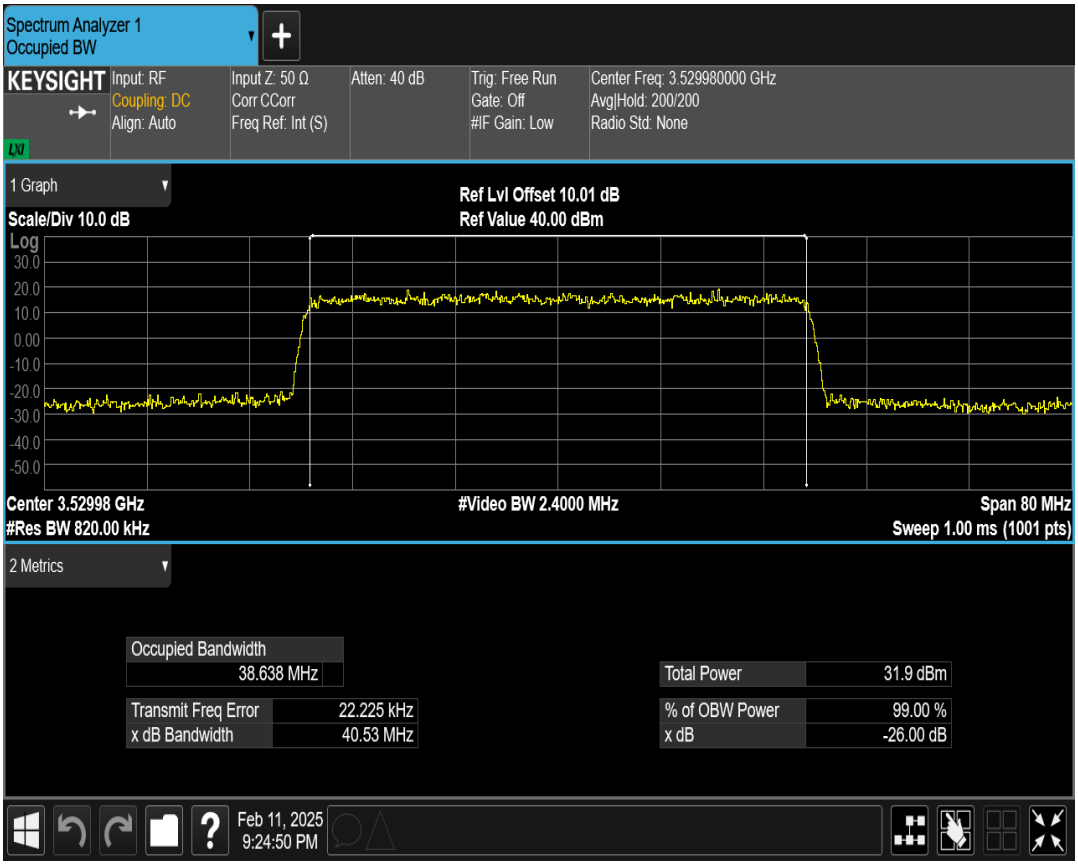
n78(3450-3550) SCS=15kHz DFT_BPSK BW=40MHz Channel=635332 RB=216@0



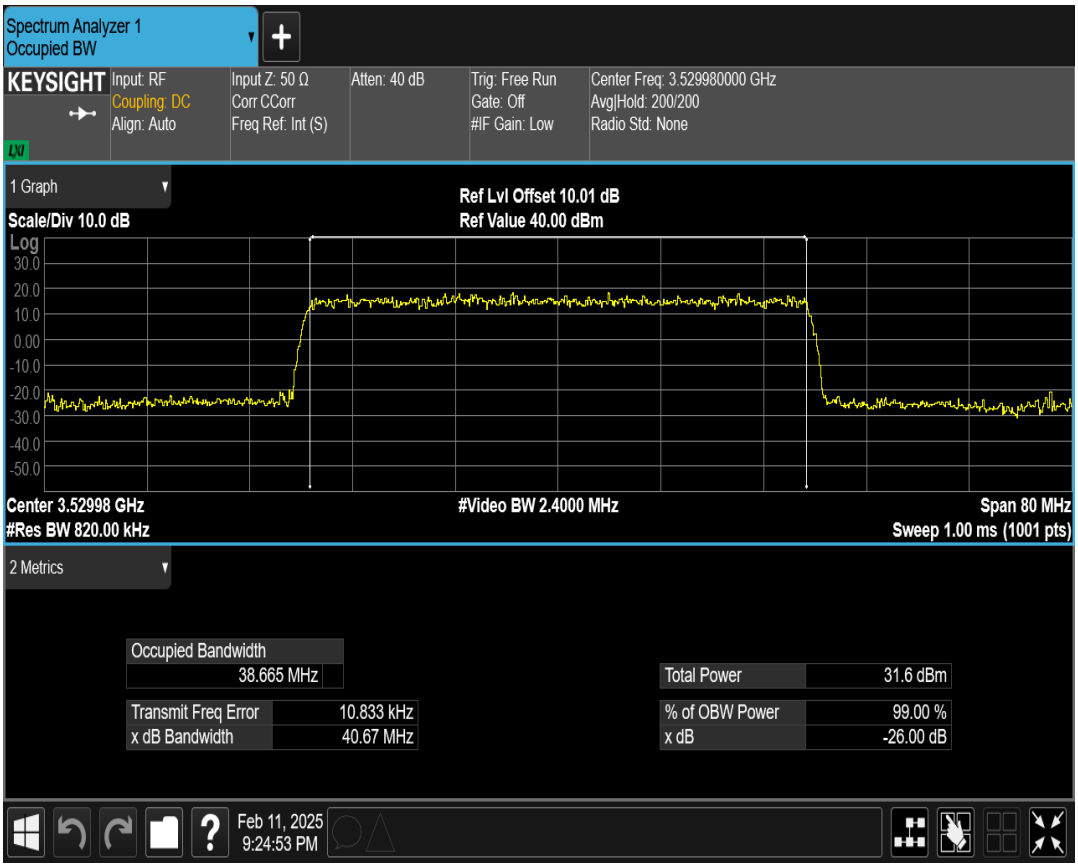
n78(3450-3550) SCS=15kHz DFT_QPSK BW=40MHz Channel=635332 RB=216@0



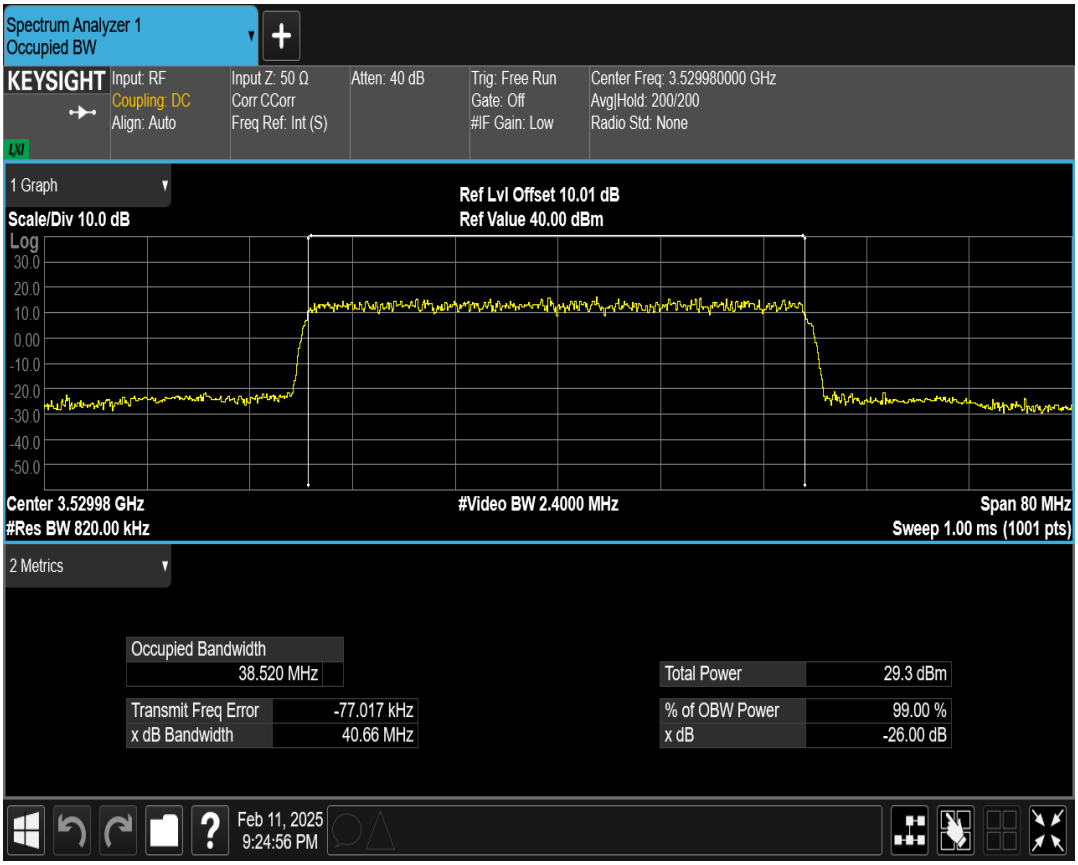
n78(3450-3550) SCS=15kHz DFT_QAM16 BW=40MHz Channel=635332 RB=216@0



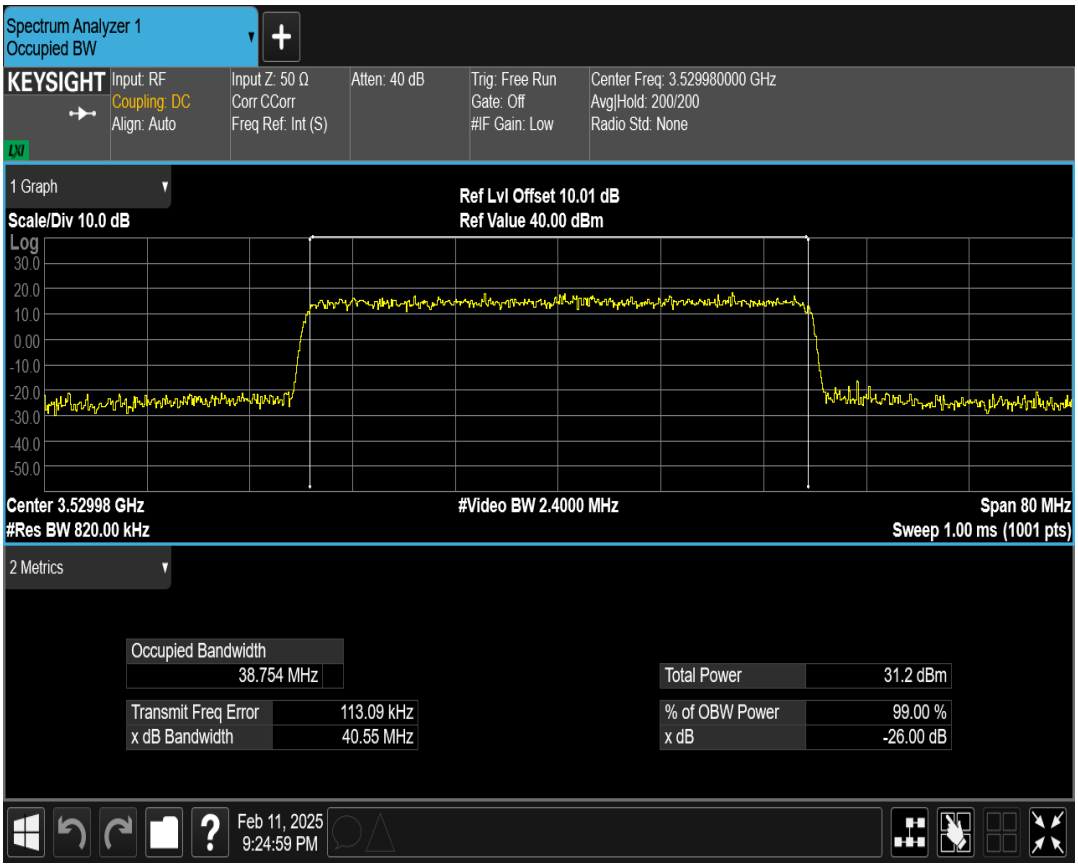
n78(3450-3550) SCS=15kHz DFT_QAM64 BW=40MHz Channel=635332 RB=216@0



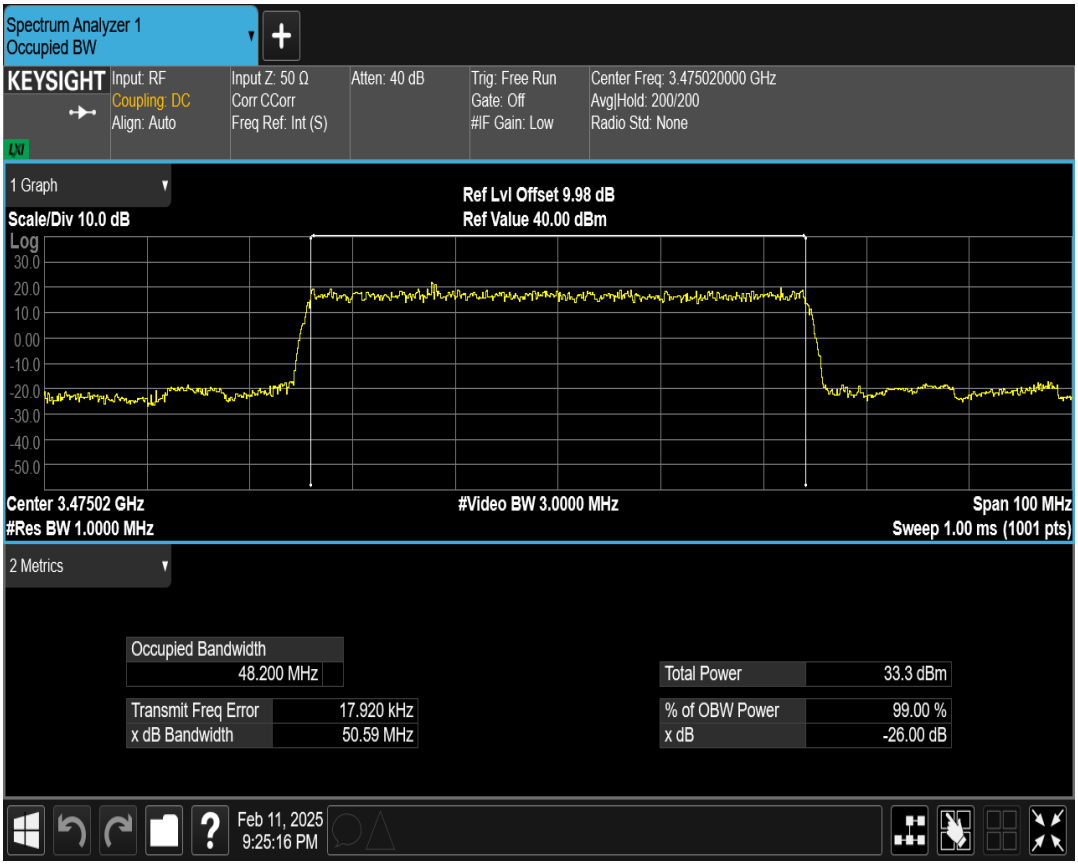
n78(3450-3550) SCS=15kHz DFT_QAM256 BW=40MHz Channel=635332 RB=216@0



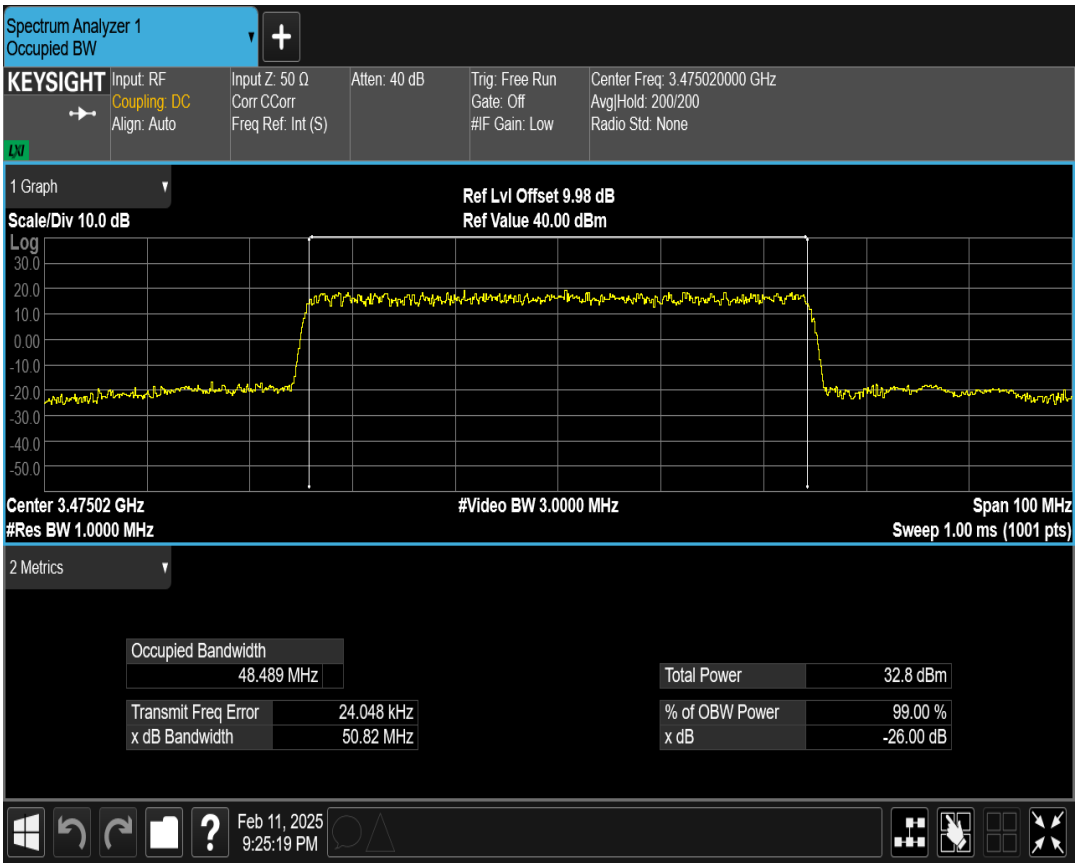
n78(3450-3550) SCS=15kHz CP_QPSK BW=40MHz Channel=635332 RB=216@0



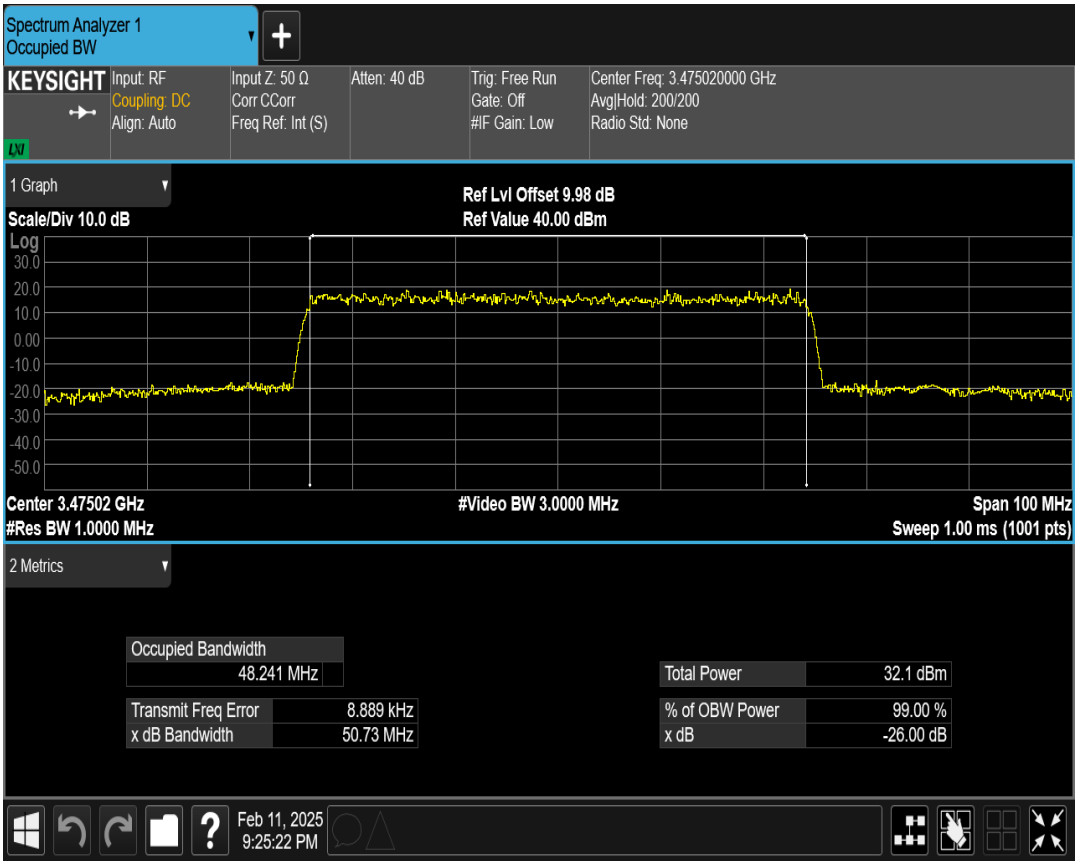
n78(3450-3550) SCS=15kHz DFT_BPSK BW=50MHz Channel=631668 RB=270@0



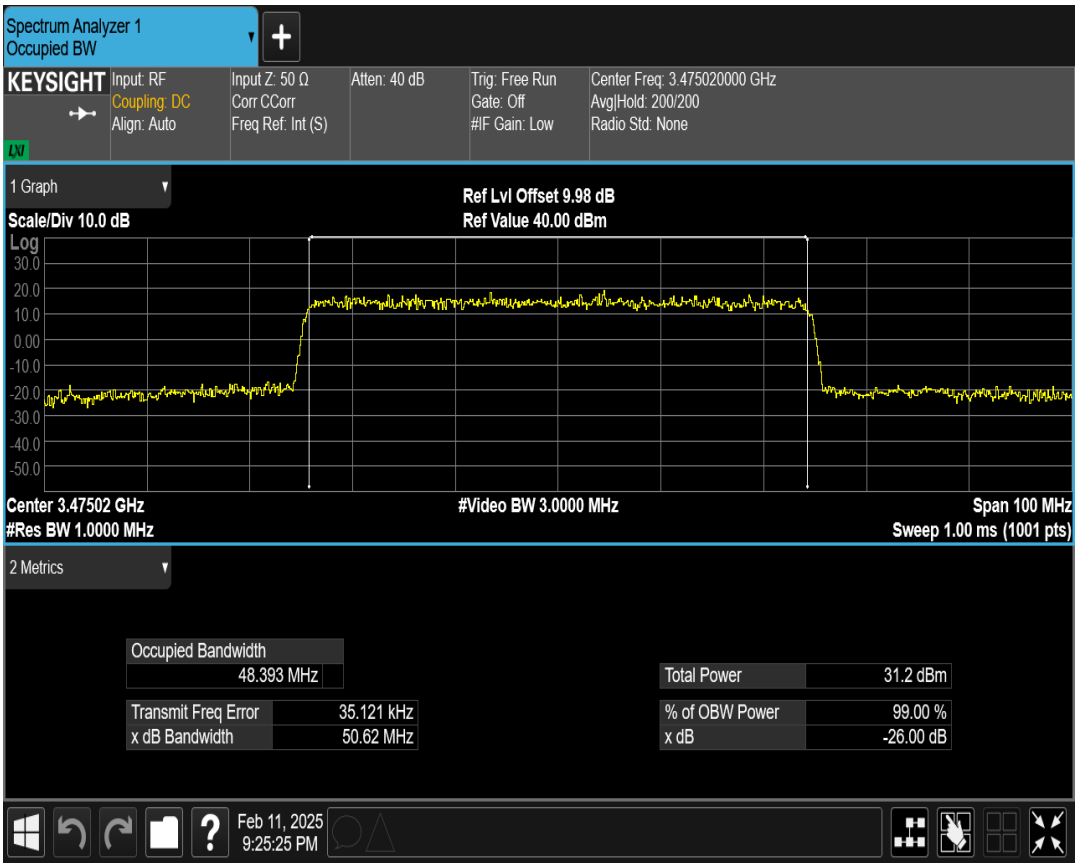
n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=631668 RB=270@0



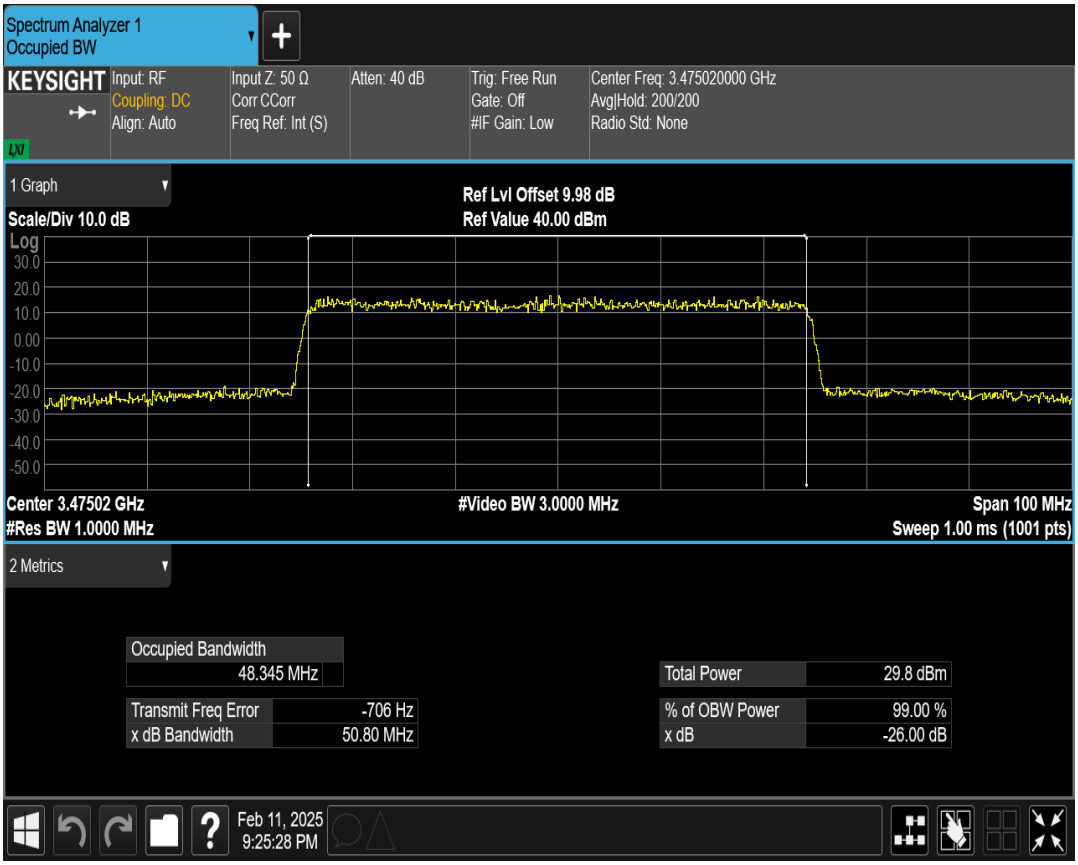
n78(3450-3550) SCS=15kHz DFT_QAM16 BW=50MHz Channel=631668 RB=270@0



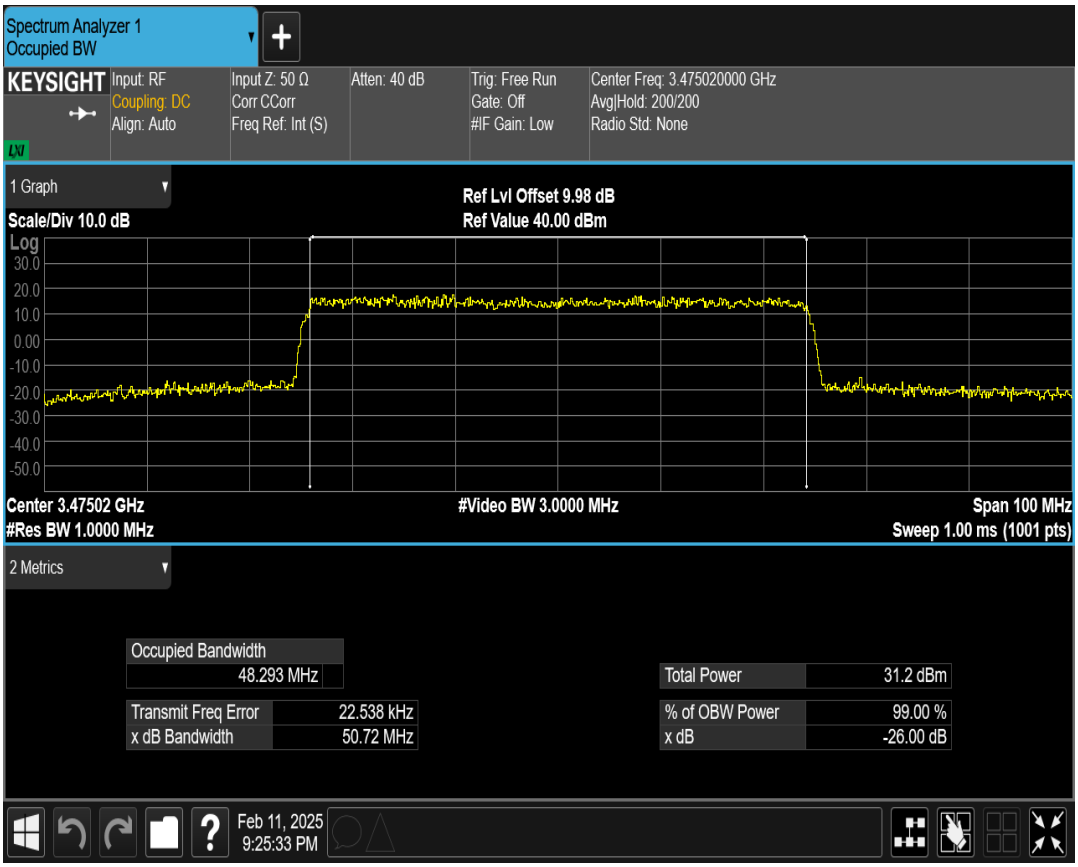
n78(3450-3550) SCS=15kHz DFT_QAM64 BW=50MHz Channel=631668 RB=270@0



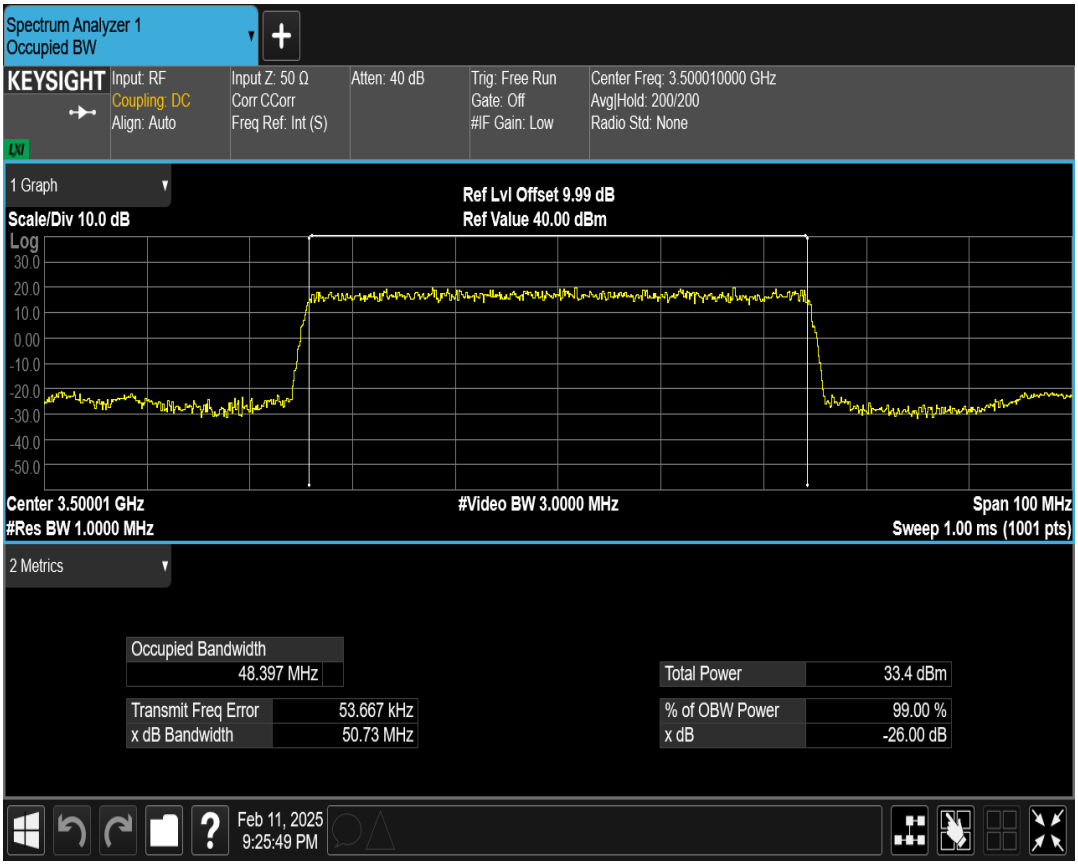
n78(3450-3550) SCS=15kHz DFT_QAM256 BW=50MHz Channel=631668 RB=270@0



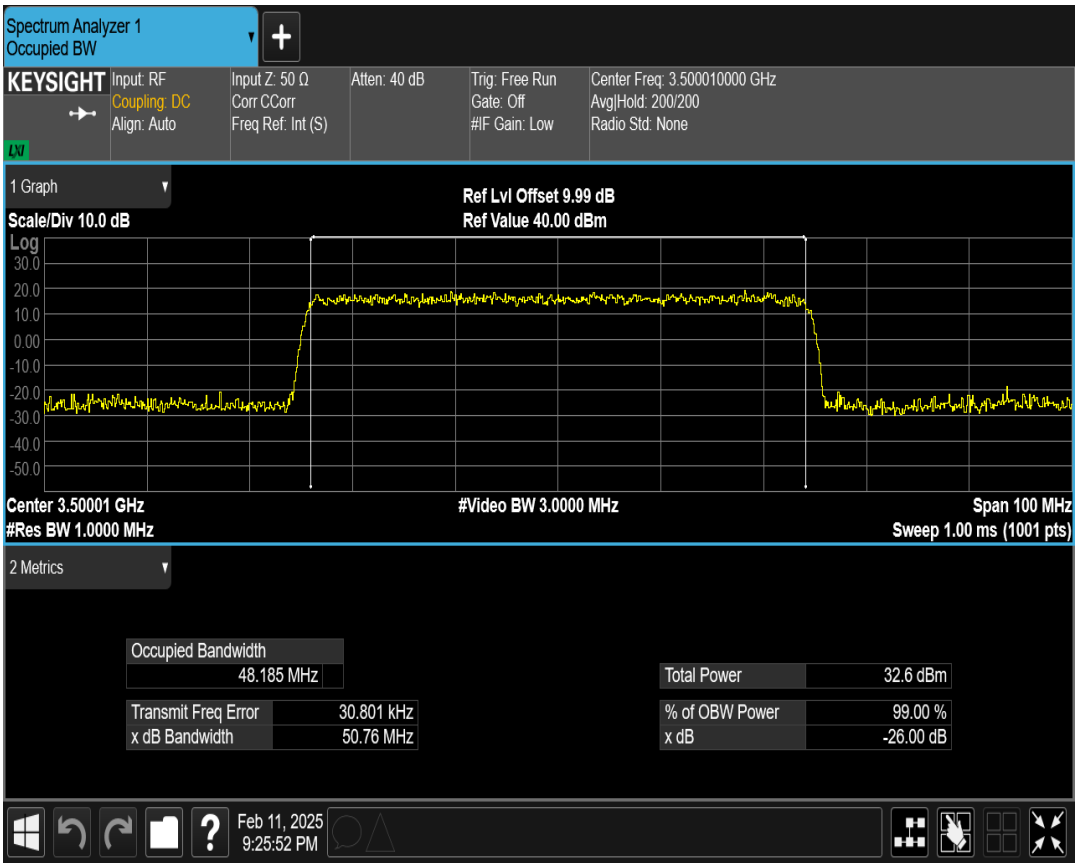
n78(3450-3550) SCS=15kHz CP_QPSK BW=50MHz Channel=631668 RB=270@0



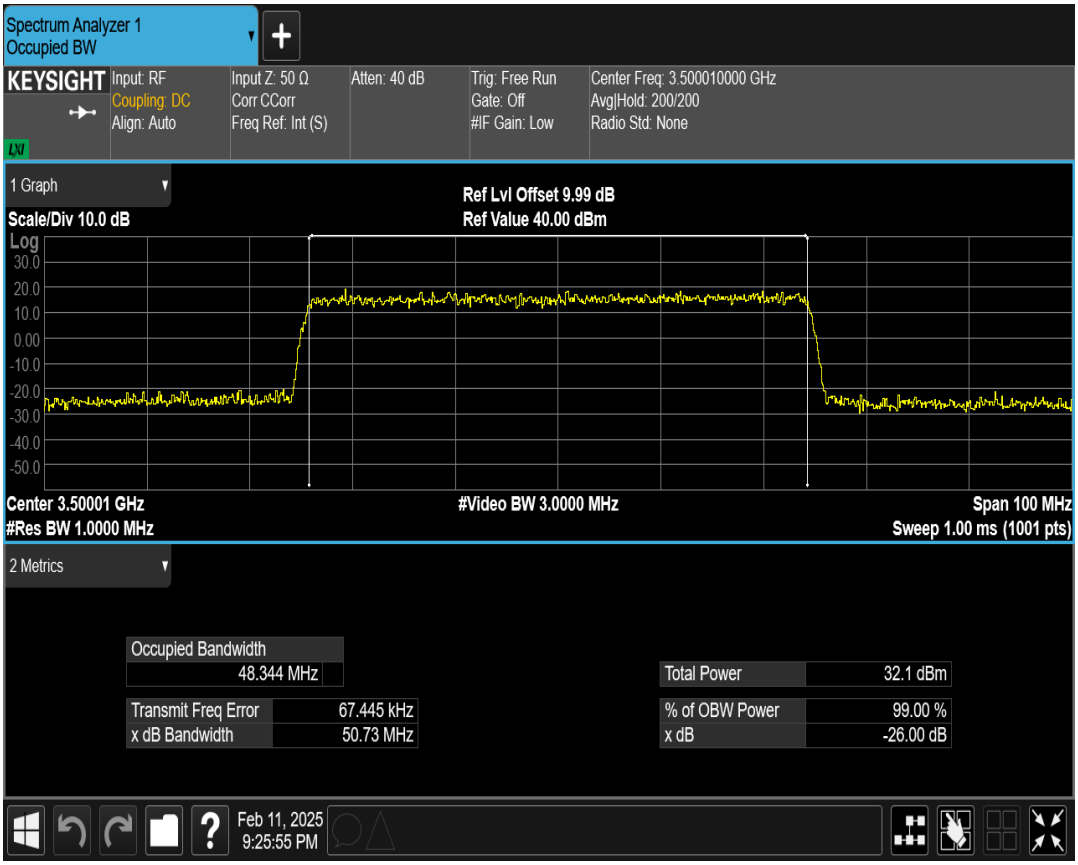
n78(3450-3550) SCS=15kHz DFT_BPSK BW=50MHz Channel=633334 RB=270@0



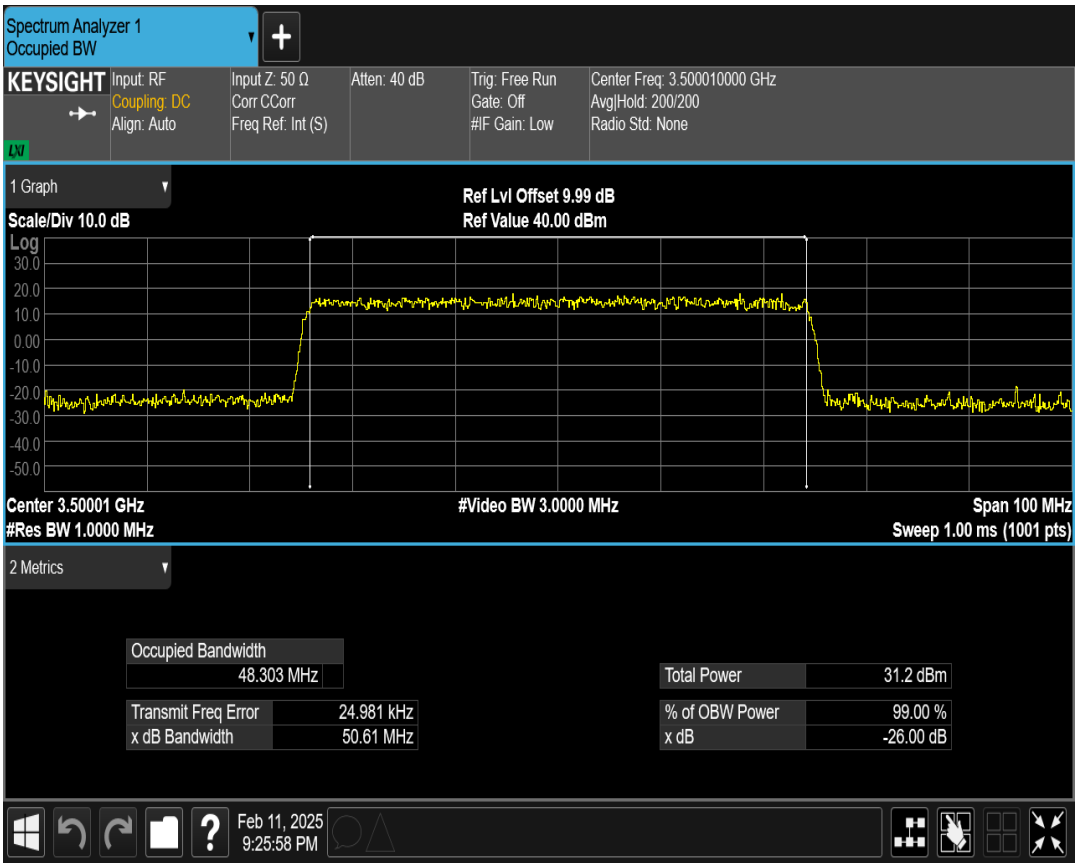
n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=633334 RB=270@0



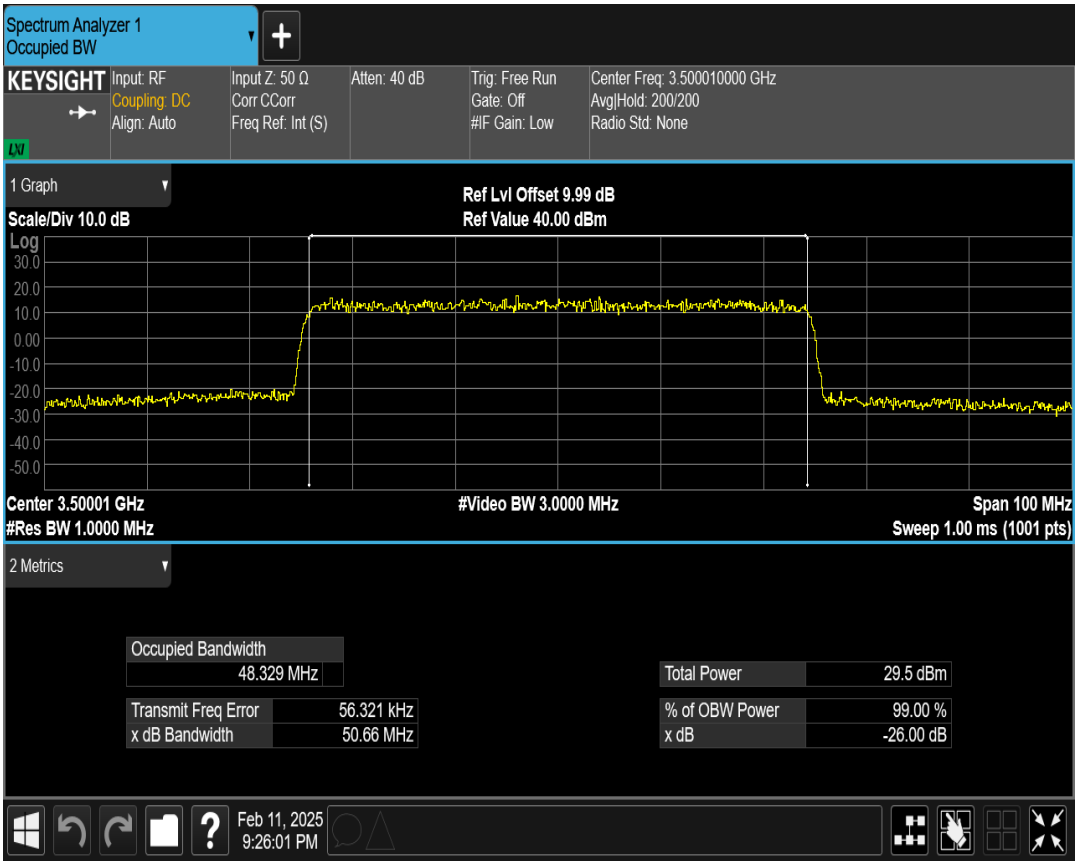
n78(3450-3550) SCS=15kHz DFT_QAM16 BW=50MHz Channel=633334 RB=270@0



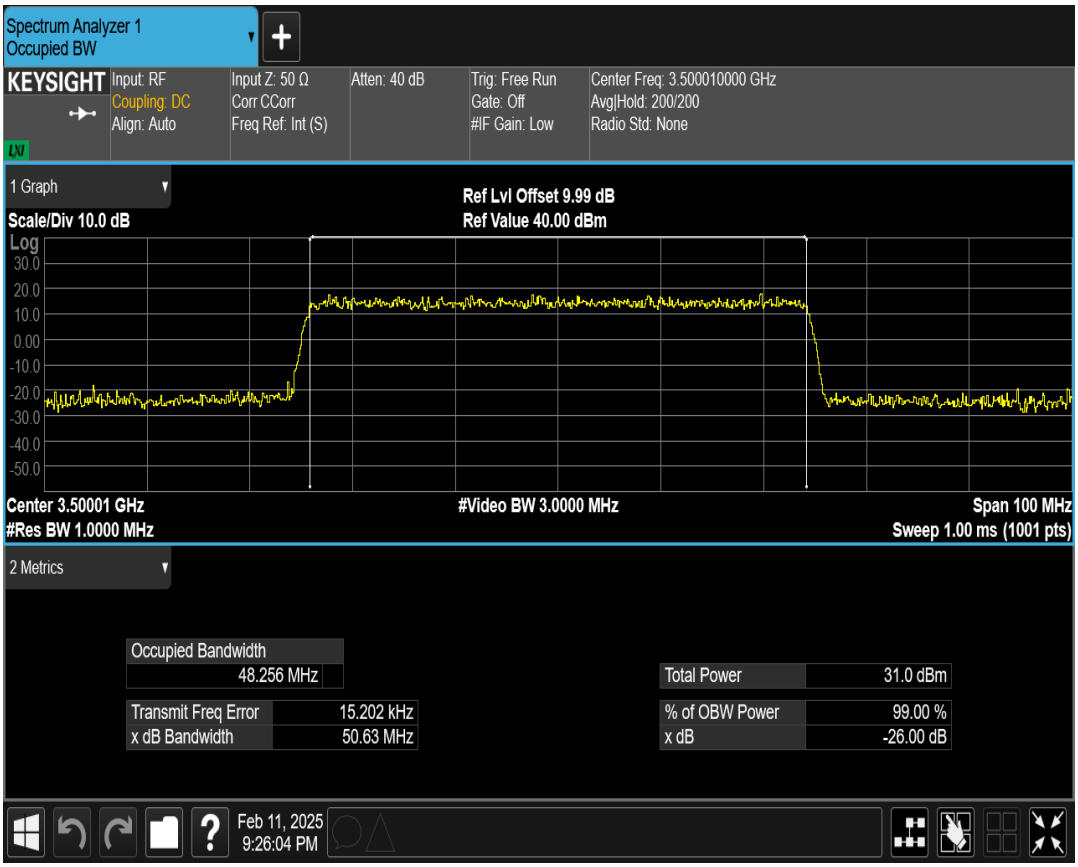
n78(3450-3550) SCS=15kHz DFT_QAM64 BW=50MHz Channel=633334 RB=270@0



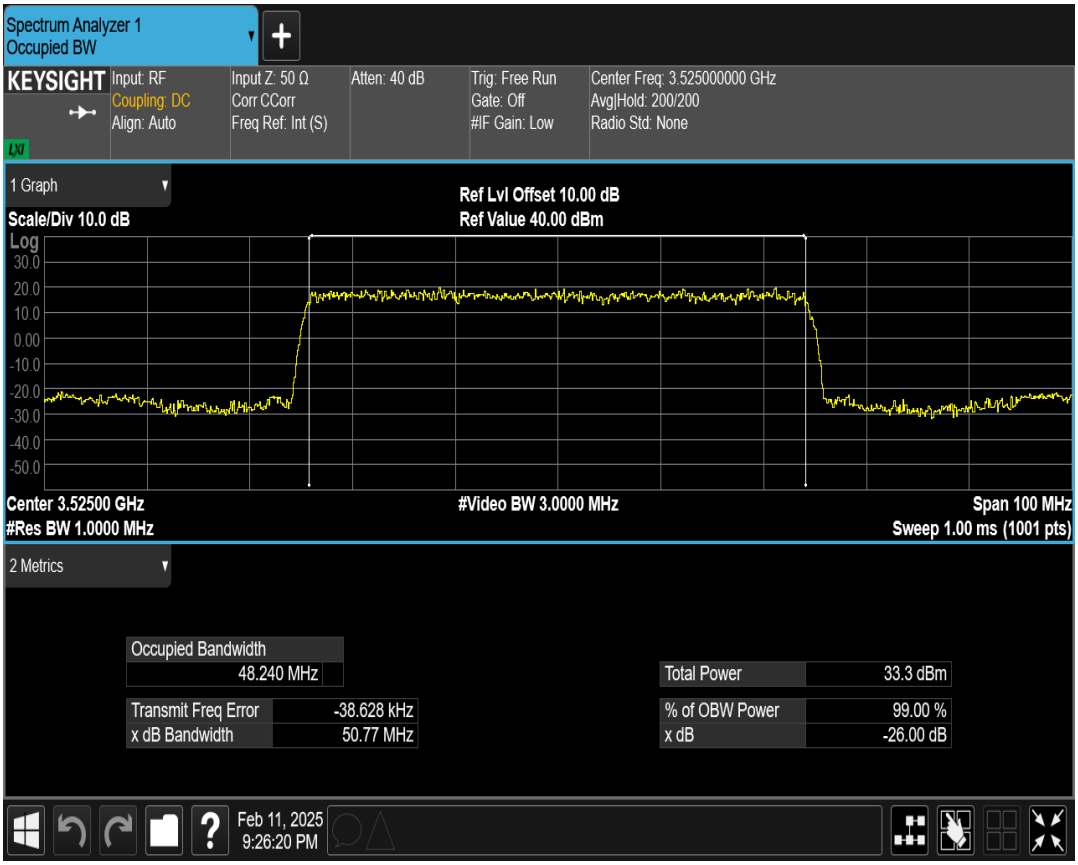
n78(3450-3550) SCS=15kHz DFT_QAM256 BW=50MHz Channel=633334 RB=270@0



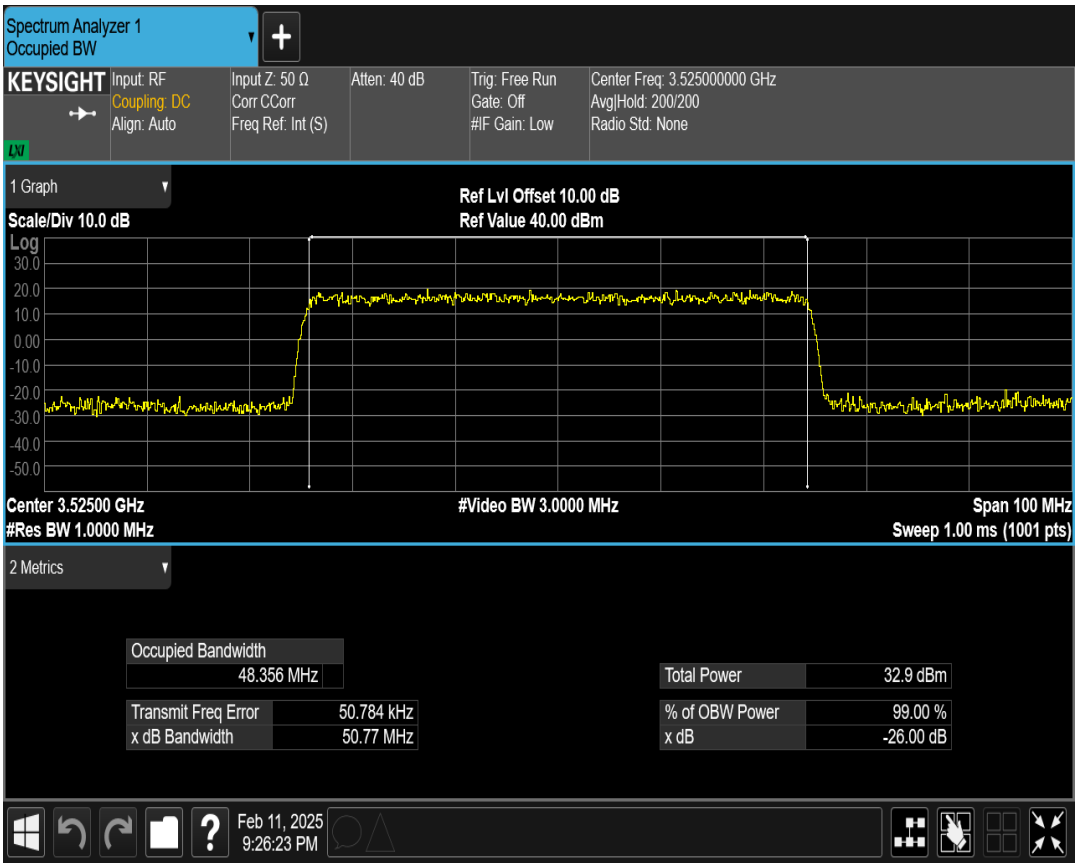
n78(3450-3550) SCS=15kHz CP_QPSK BW=50MHz Channel=633334 RB=270@0



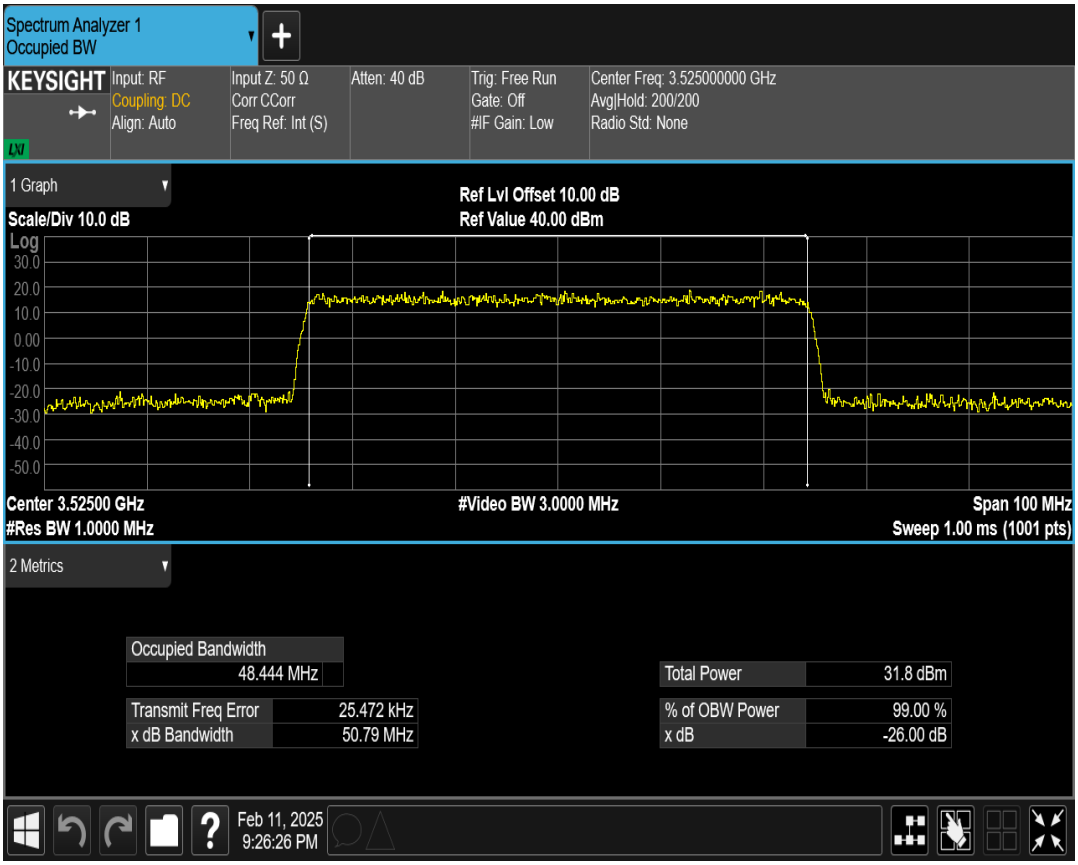
n78(3450-3550) SCS=15kHz DFT_BPSK BW=50MHz Channel=635000 RB=270@0



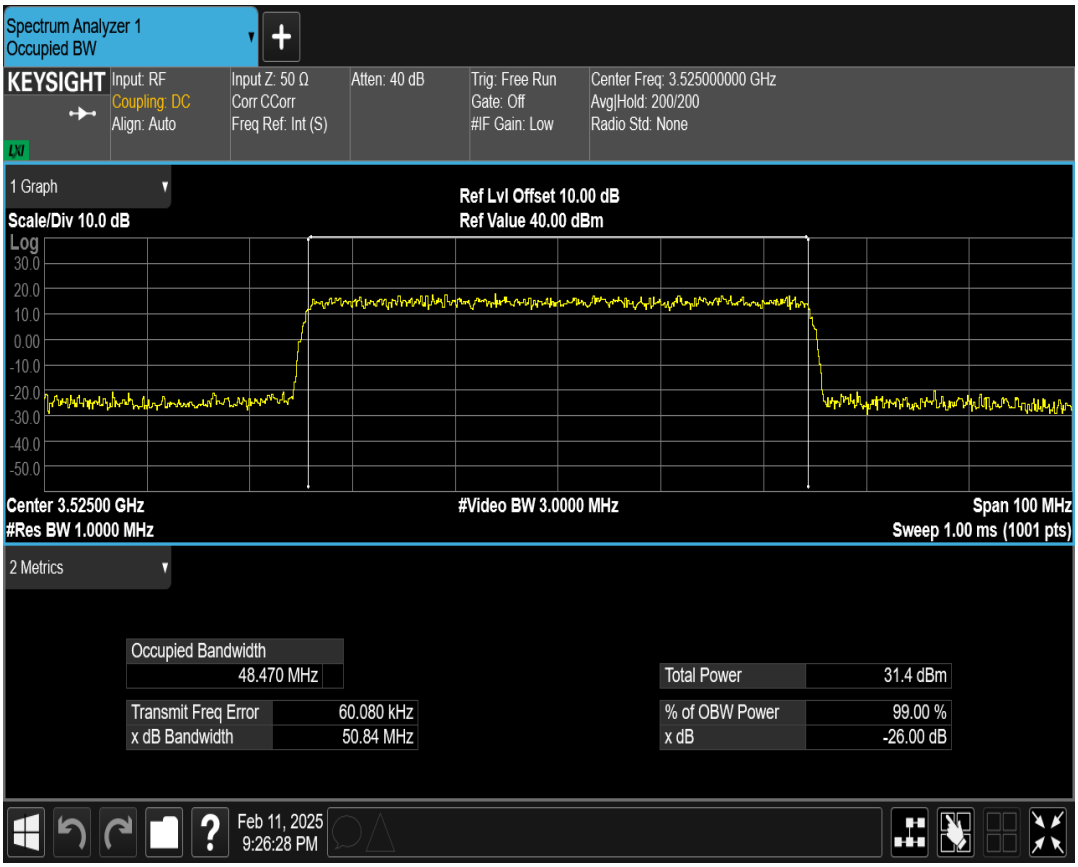
n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=635000 RB=270@0



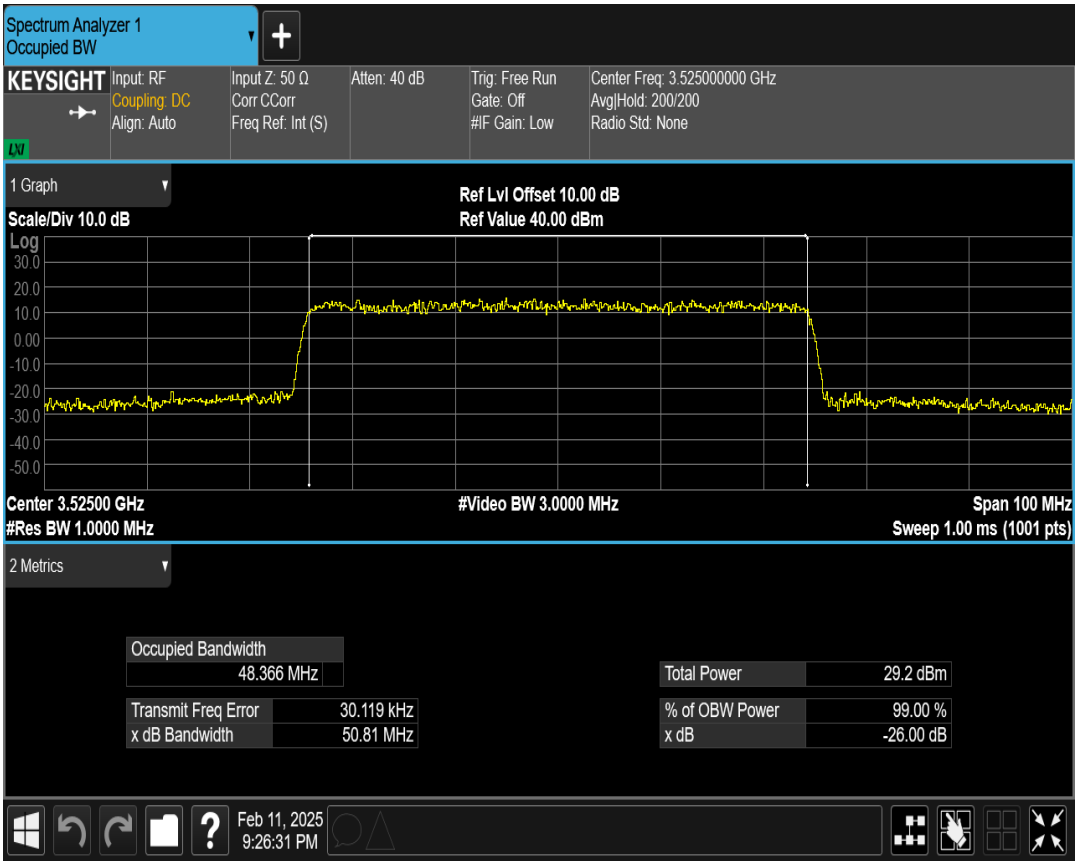
n78(3450-3550) SCS=15kHz DFT_QAM16 BW=50MHz Channel=635000 RB=270@0



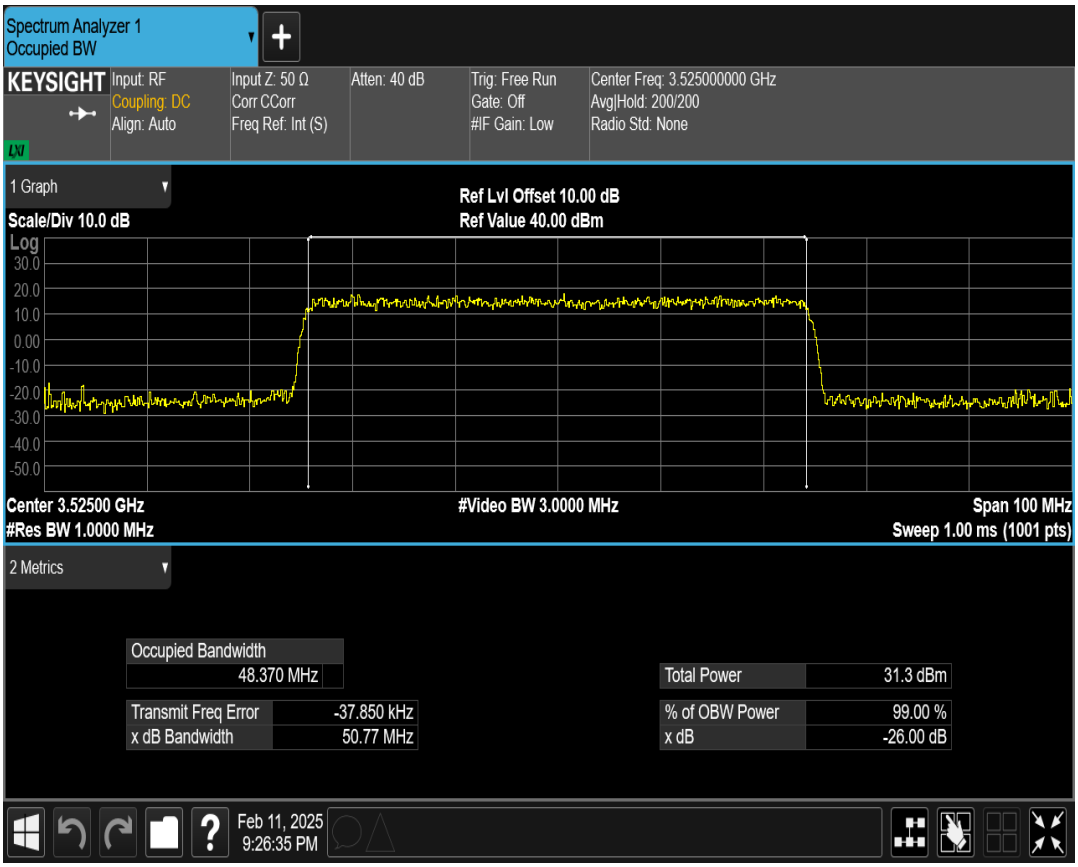
n78(3450-3550) SCS=15kHz DFT_QAM64 BW=50MHz Channel=635000 RB=270@0



n78(3450-3550) SCS=15kHz DFT_QAM256 BW=50MHz Channel=635000 RB=270@0



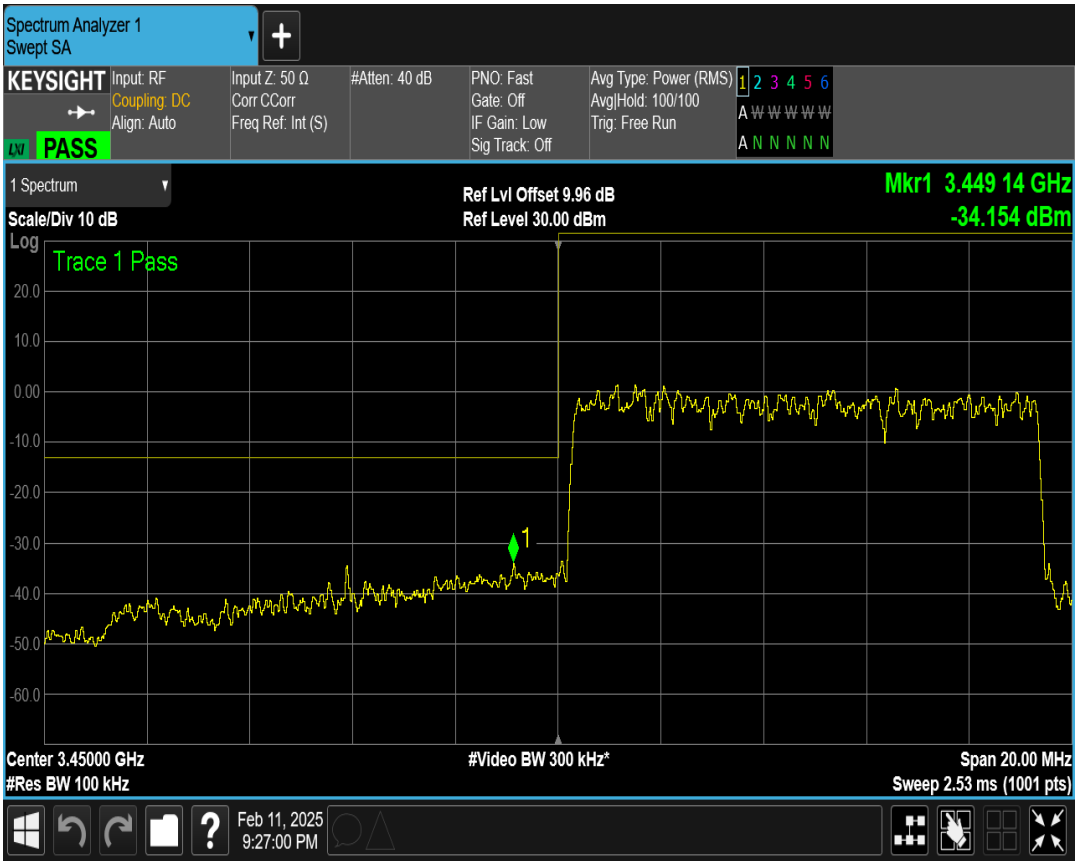
n78(3450-3550) SCS=15kHz CP_QPSK BW=50MHz Channel=635000 RB=270@0



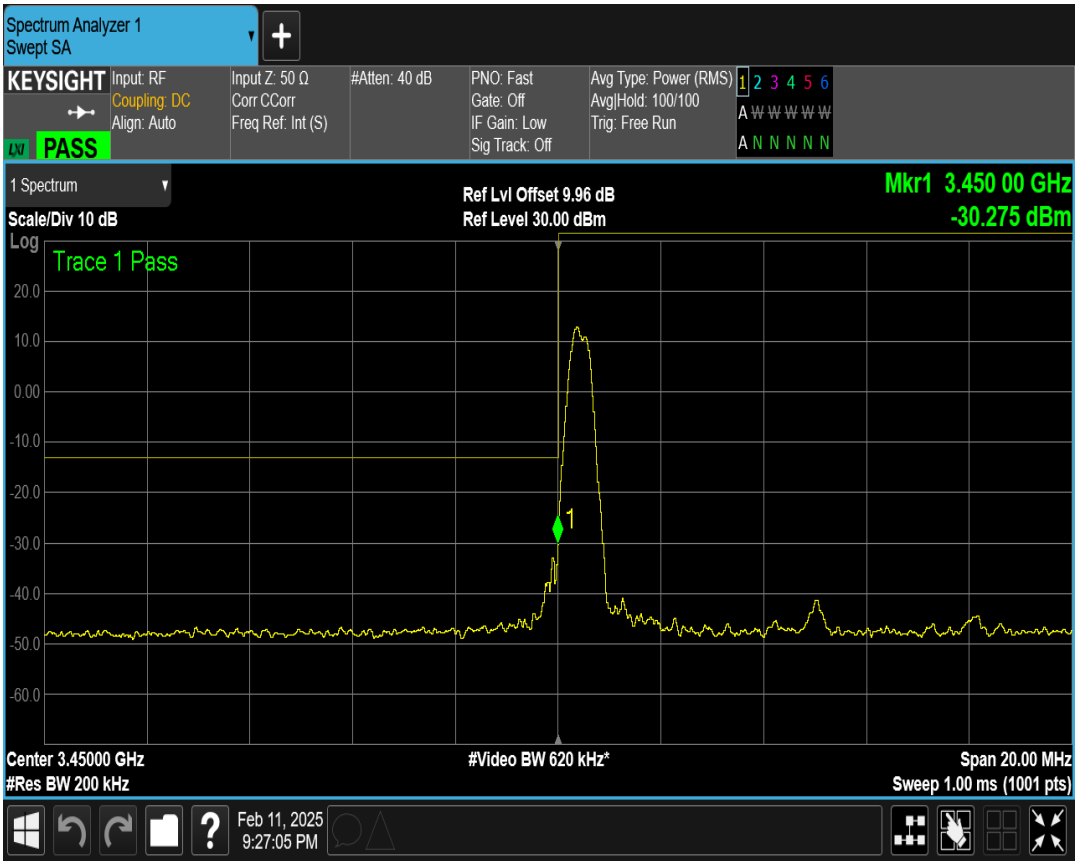
5 Band edge for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n78(3450-3550)	15	10	630334	50@0	DFT_QPSK	3449.14	-34.15	-13	PASS
n78(3450-3550)	15	10	630334	1@0	DFT_QPSK	3450.00	-30.27	-13	PASS
n78(3450-3550)	15	10	636332	50@0	DFT_QPSK	3554.16	-43.60	-13	PASS
n78(3450-3550)	15	10	636332	1@51	DFT_QPSK	3550.04	-25.79	-13	PASS
n78(3450-3550)	15	50	631668	270@0	DFT_QPSK	3450.00	-33.69	-13	PASS
n78(3450-3550)	15	50	631668	1@0	DFT_QPSK	3449.90	-39.51	-13	PASS
n78(3450-3550)	15	50	635000	270@0	DFT_QPSK	3550.00	-31.08	-13	PASS
n78(3450-3550)	15	50	635000	1@269	DFT_QPSK	3550.00	-32.62	-13	PASS

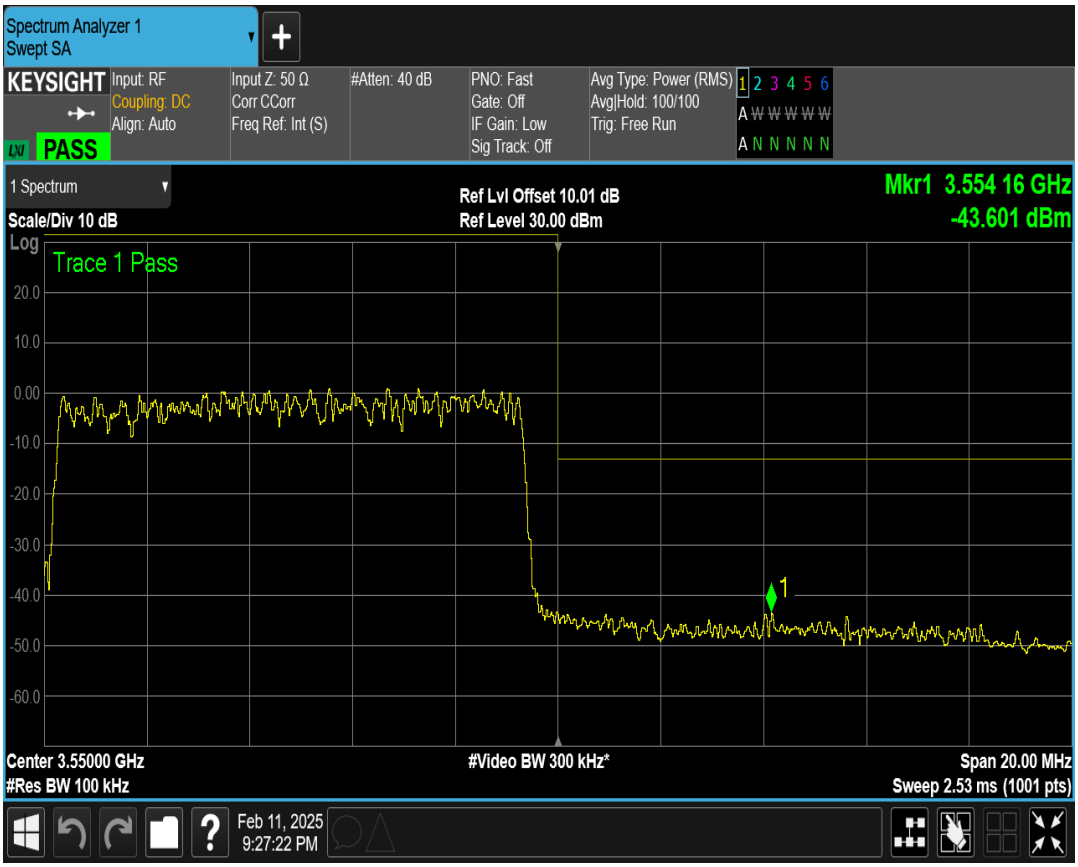
n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=630334 RB=50@0



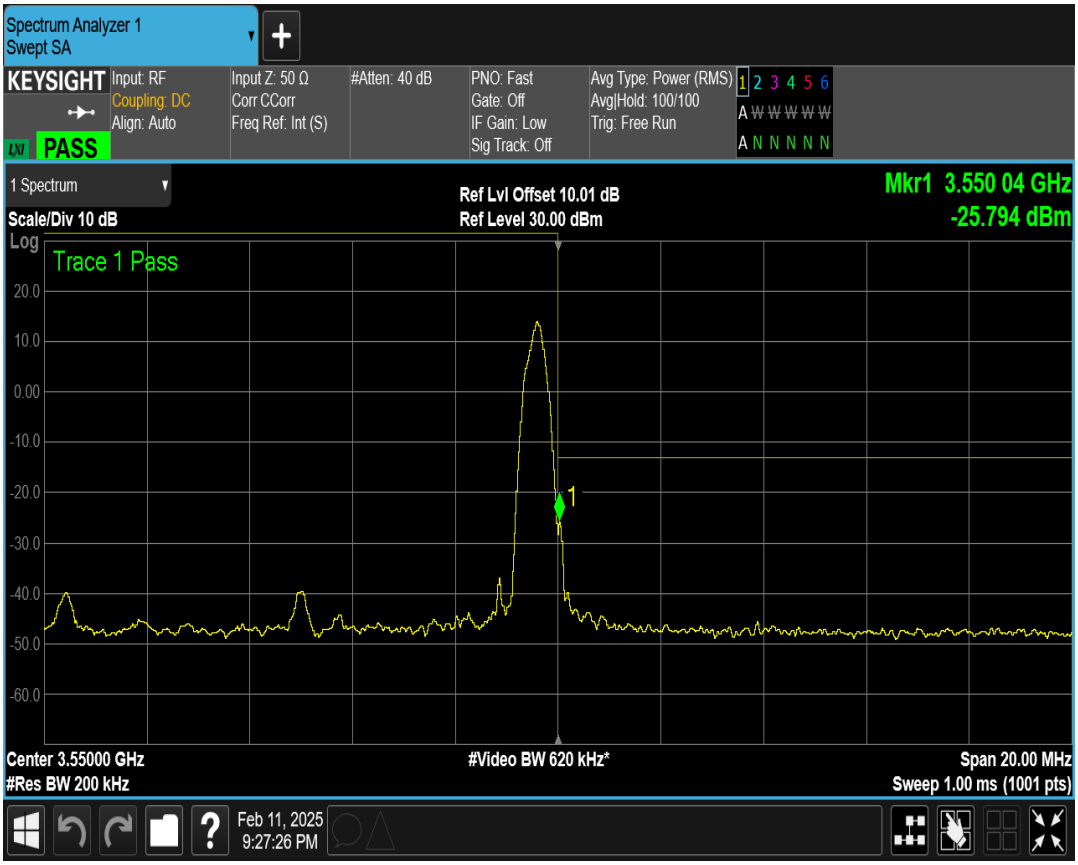
n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=630334 RB=1@0



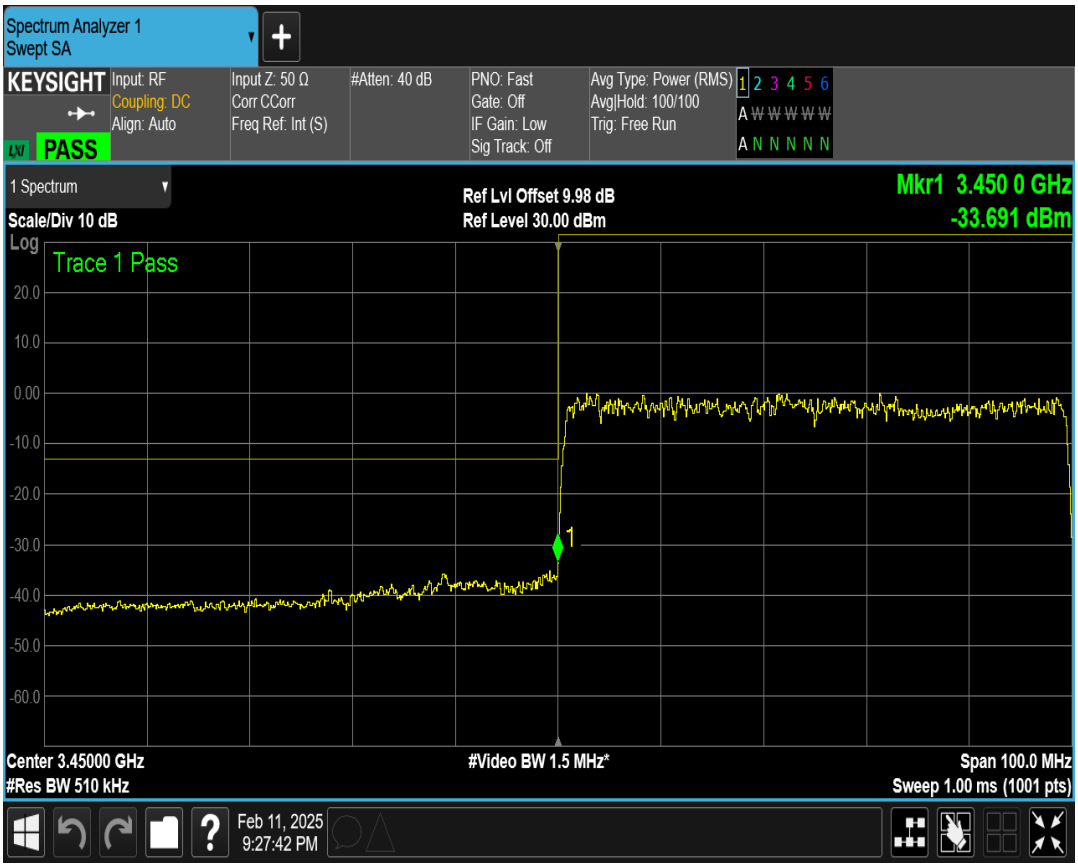
n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=636332 RB=50@0



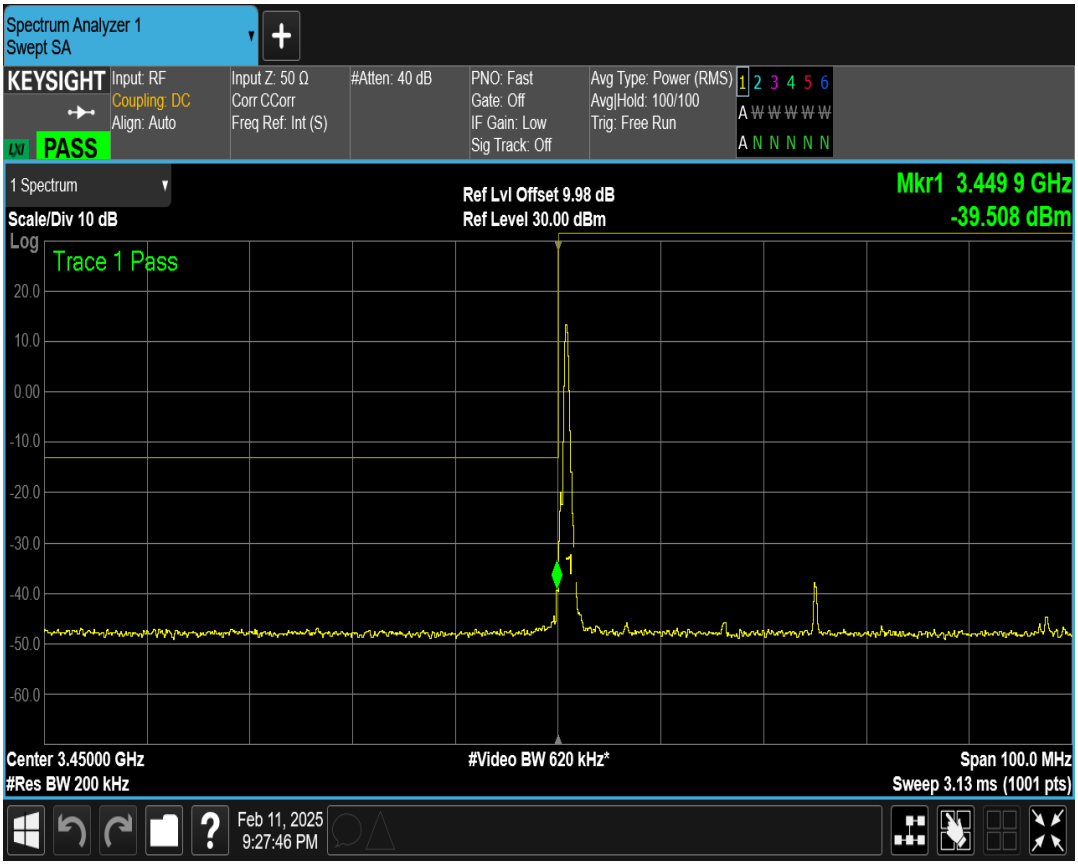
n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=636332 RB=1@51



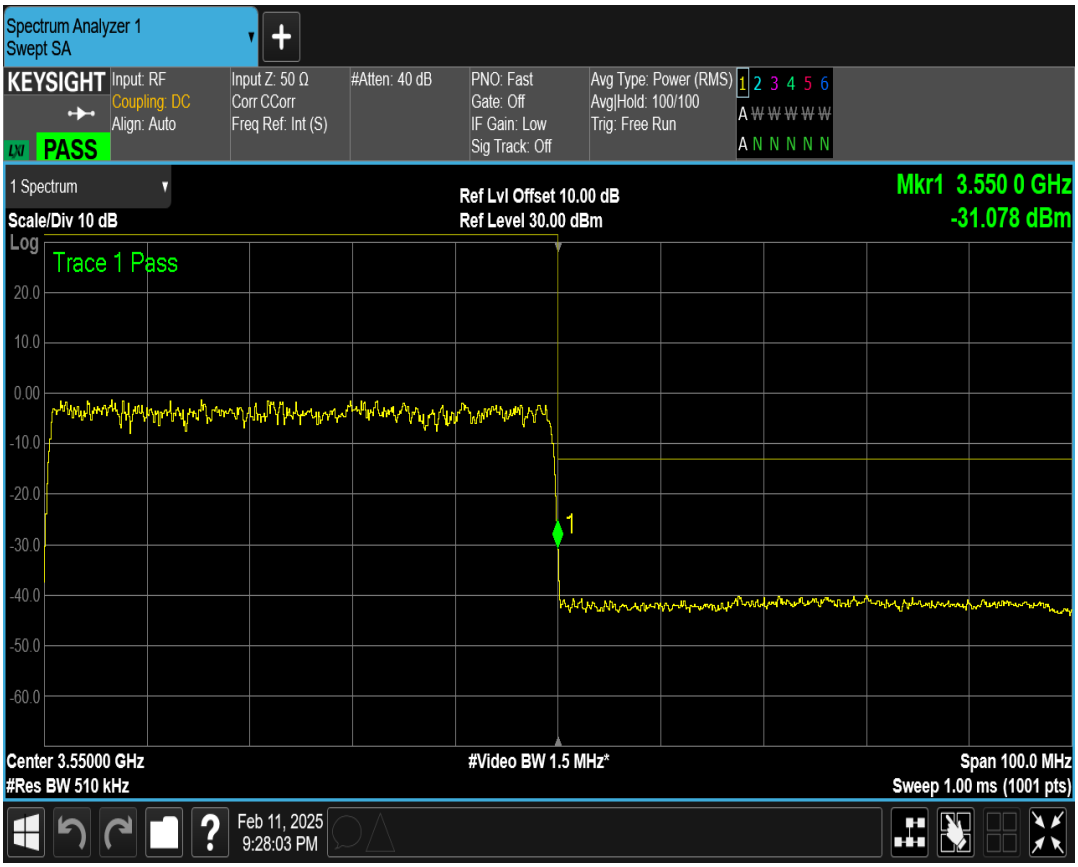
n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=631668 RB=270@0



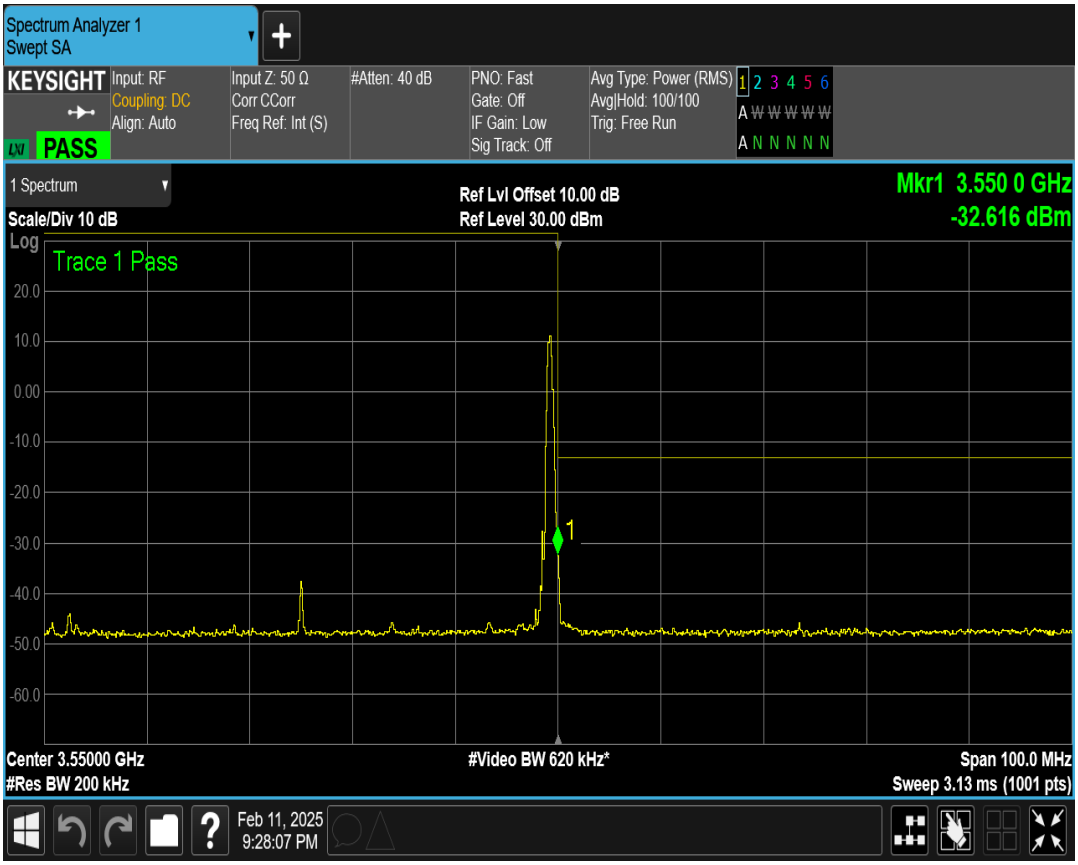
n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=631668 RB=1@0



n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=635000 RB=270@0



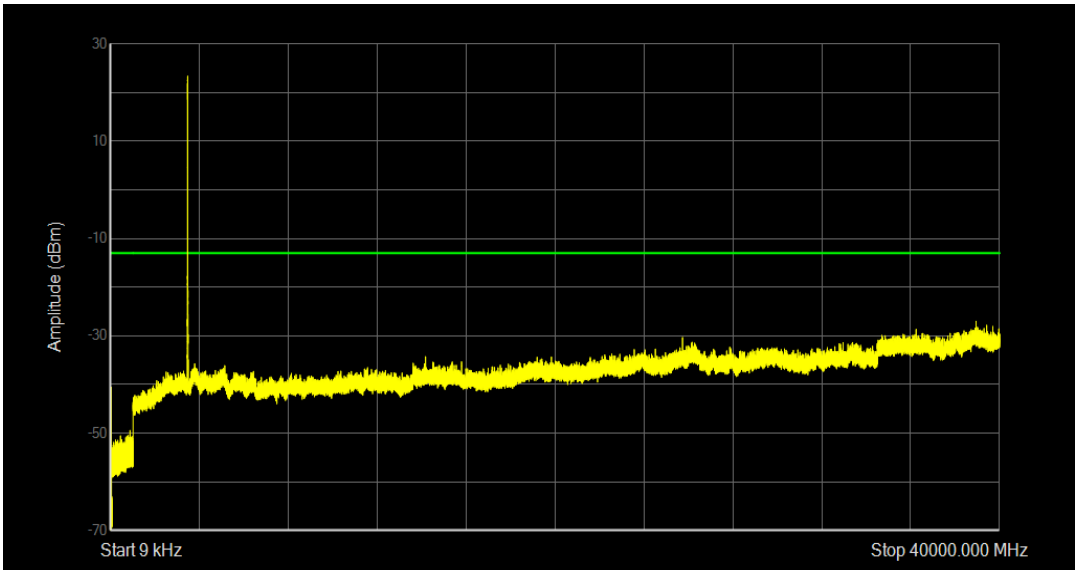
n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=635000 RB=1@269



6 Out-of-band emissions for NR FR1

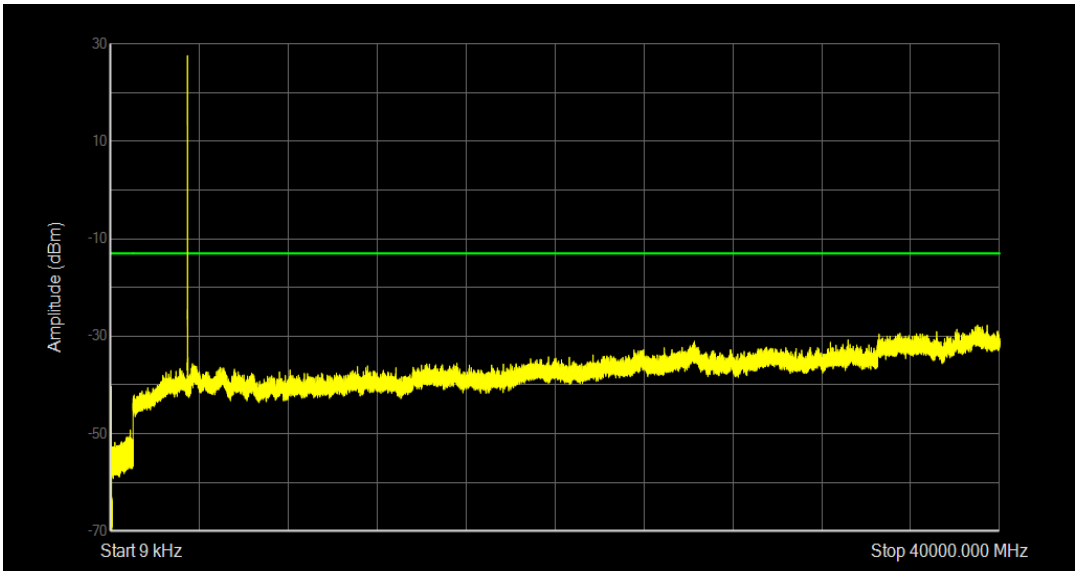
Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n78(3450-3550)	15	10	630334	50@0	DFT_QPSK	38941.15	-27.01	-13	PASS
n78(3450-3550)	15	10	630334	1@0	DFT_QPSK	39010.38	-27.73	-13	PASS
n78(3450-3550)	15	10	630334	1@51	DFT_QPSK	39030.85	-27.21	-13	PASS
n78(3450-3550)	15	10	633334	50@0	DFT_QPSK	38846.58	-27.56	-13	PASS
n78(3450-3550)	15	10	633334	1@0	DFT_QPSK	39257.05	-28.42	-13	PASS
n78(3450-3550)	15	10	633334	1@51	DFT_QPSK	39122.50	-27.87	-13	PASS
n78(3450-3550)	15	10	636332	50@0	DFT_QPSK	39097.15	-27.85	-13	PASS
n78(3450-3550)	15	10	636332	1@0	DFT_QPSK	39621.70	-27.49	-13	PASS
n78(3450-3550)	15	10	636332	1@51	DFT_QPSK	39070.83	-27.64	-13	PASS
n78(3450-3550)	15	50	631668	270@0	DFT_QPSK	39002.58	-27.49	-13	PASS
n78(3450-3550)	15	50	631668	1@0	DFT_QPSK	38701.30	-27.57	-13	PASS
n78(3450-3550)	15	50	631668	1@269	DFT_QPSK	38843.65	-28.22	-13	PASS
n78(3450-3550)	15	50	633334	270@0	DFT_QPSK	38884.60	-27.62	-13	PASS
n78(3450-3550)	15	50	633334	1@0	DFT_QPSK	38908.00	-27.79	-13	PASS
n78(3450-3550)	15	50	633334	1@269	DFT_QPSK	39019.15	-27.86	-13	PASS
n78(3450-3550)	15	50	635000	270@0	DFT_QPSK	38913.85	-27.63	-13	PASS
n78(3450-3550)	15	50	635000	1@0	DFT_QPSK	39233.65	-27.35	-13	PASS
n78(3450-3550)	15	50	635000	1@269	DFT_QPSK	38801.73	-27.84	-13	PASS

n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=630334 RB=50@0



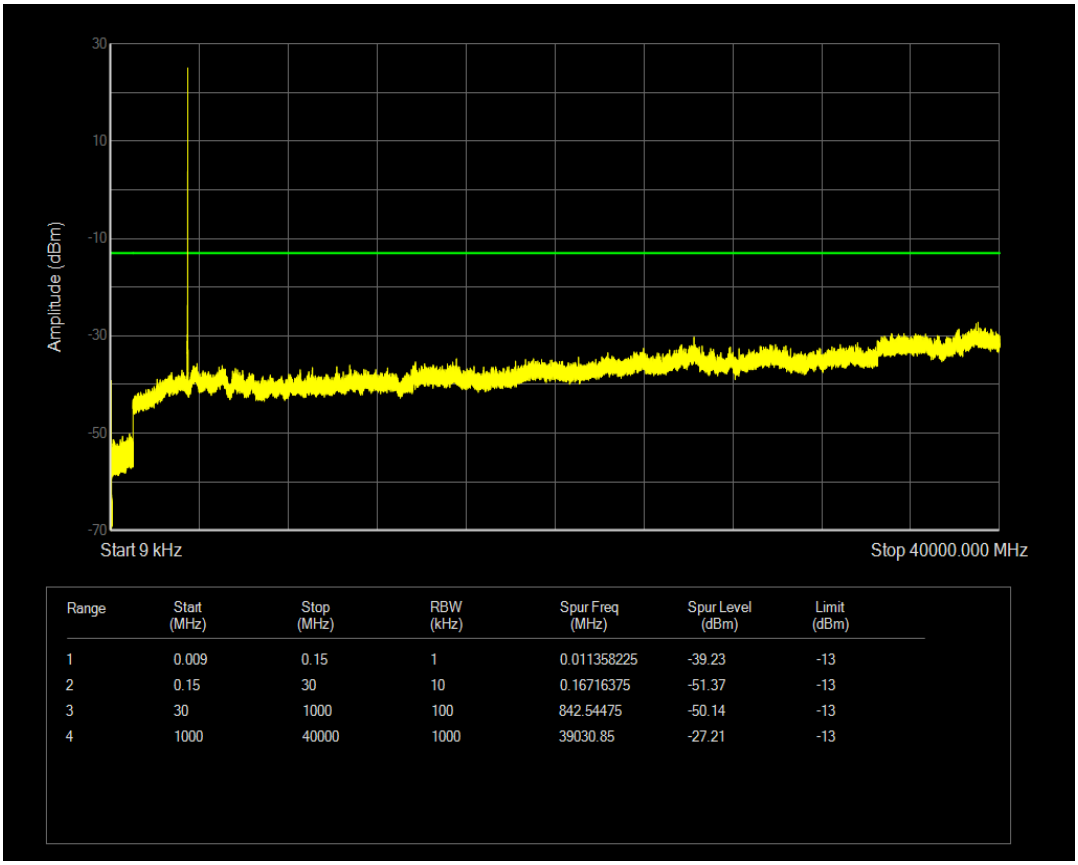
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01123485	-40.65	-13
2	0.15	30	10	0.15970125	-50.43	-13
3	30	1000	100	864.491	-49.44	-13
4	1000	40000	1000	38941.15	-27.01	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=630334 RB=1@0



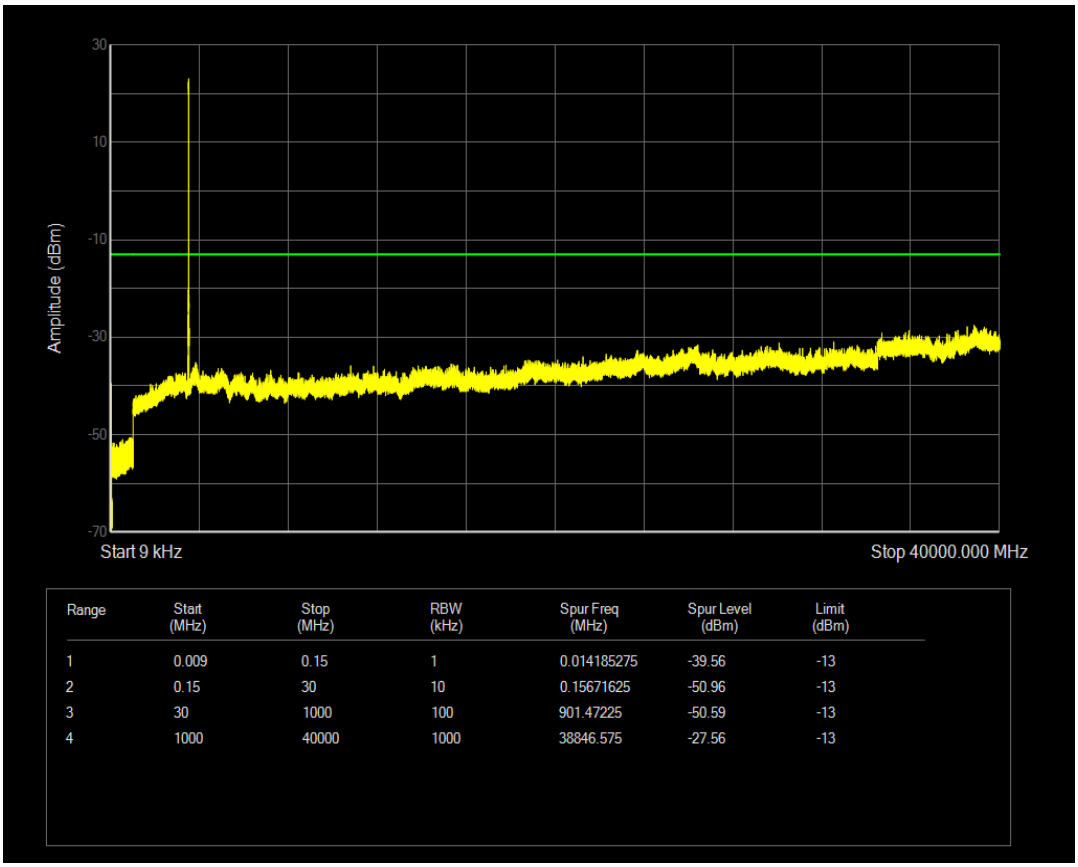
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0100998	-40.36	-13
2	0.15	30	10	0.15	-51.77	-13
3	30	1000	100	876.907	-49.24	-13
4	1000	40000	1000	39010.375	-27.73	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=630334 RB=1@51



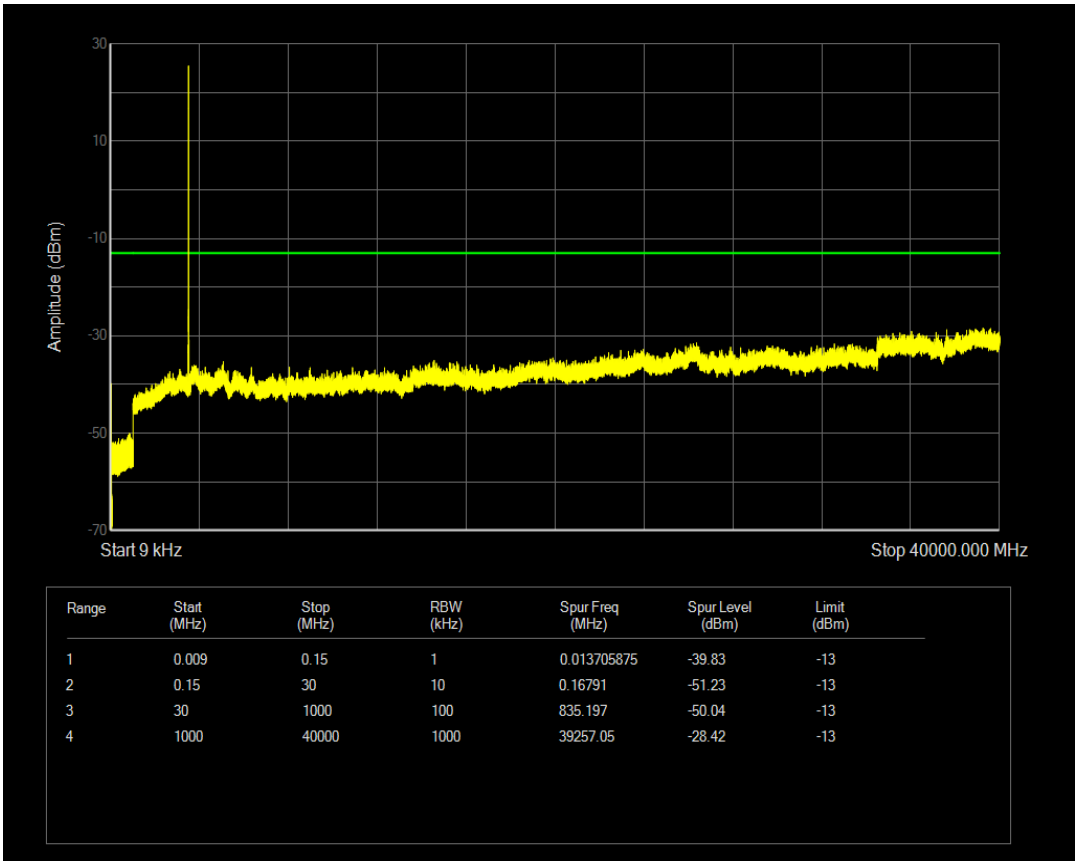
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011358225	-39.23	-13
2	0.15	30	10	0.16716375	-51.37	-13
3	30	1000	100	842.54475	-50.14	-13
4	1000	40000	1000	39030.85	-27.21	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=633334 RB=50@0



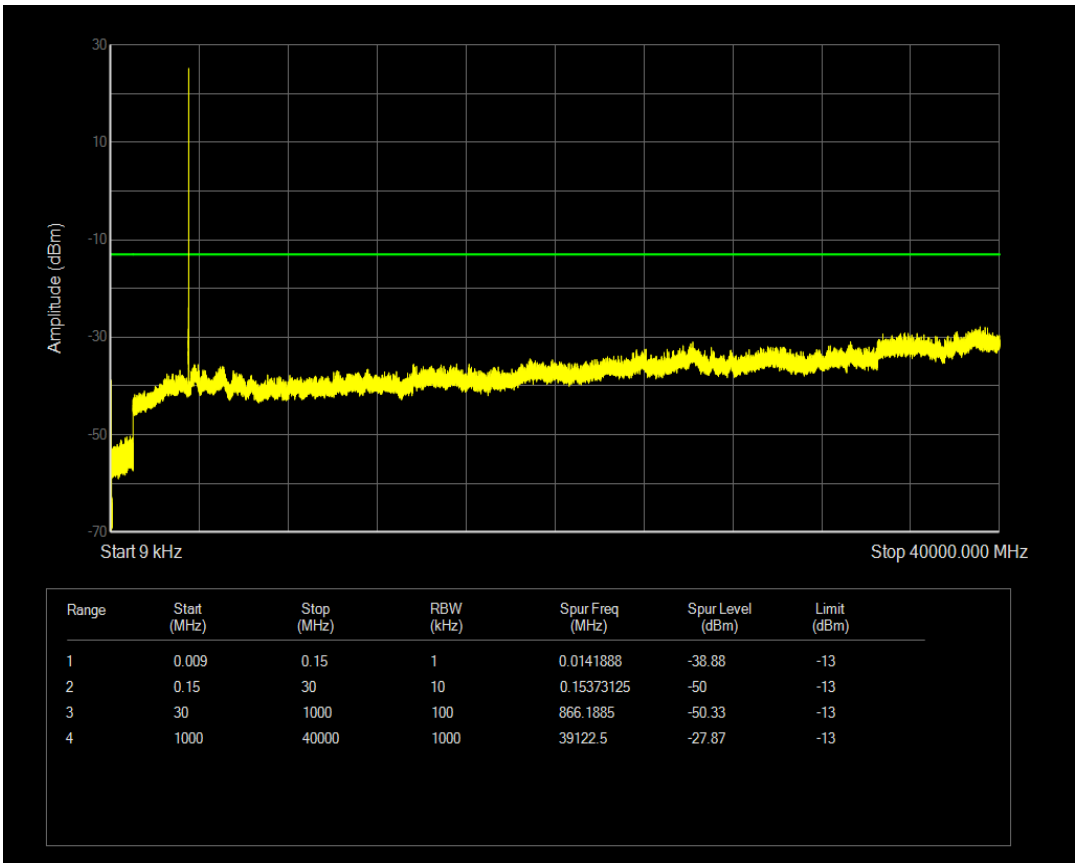
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.014185275	-39.56	-13
2	0.15	30	10	0.15671625	-50.96	-13
3	30	1000	100	901.47225	-50.59	-13
4	1000	40000	1000	38846.575	-27.56	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=633334 RB=1@0



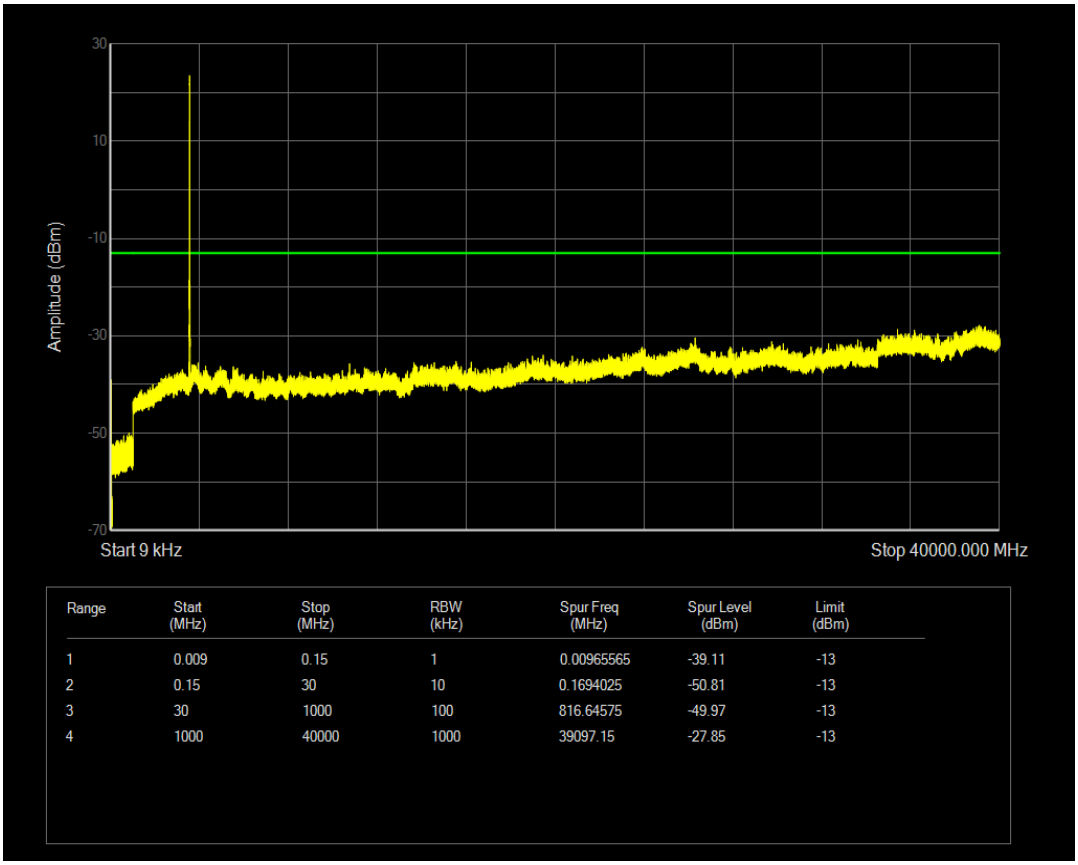
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.013705875	-39.83	-13
2	0.15	30	10	0.16791	-51.23	-13
3	30	1000	100	835.197	-50.04	-13
4	1000	40000	1000	39257.05	-28.42	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=633334 RB=1@51



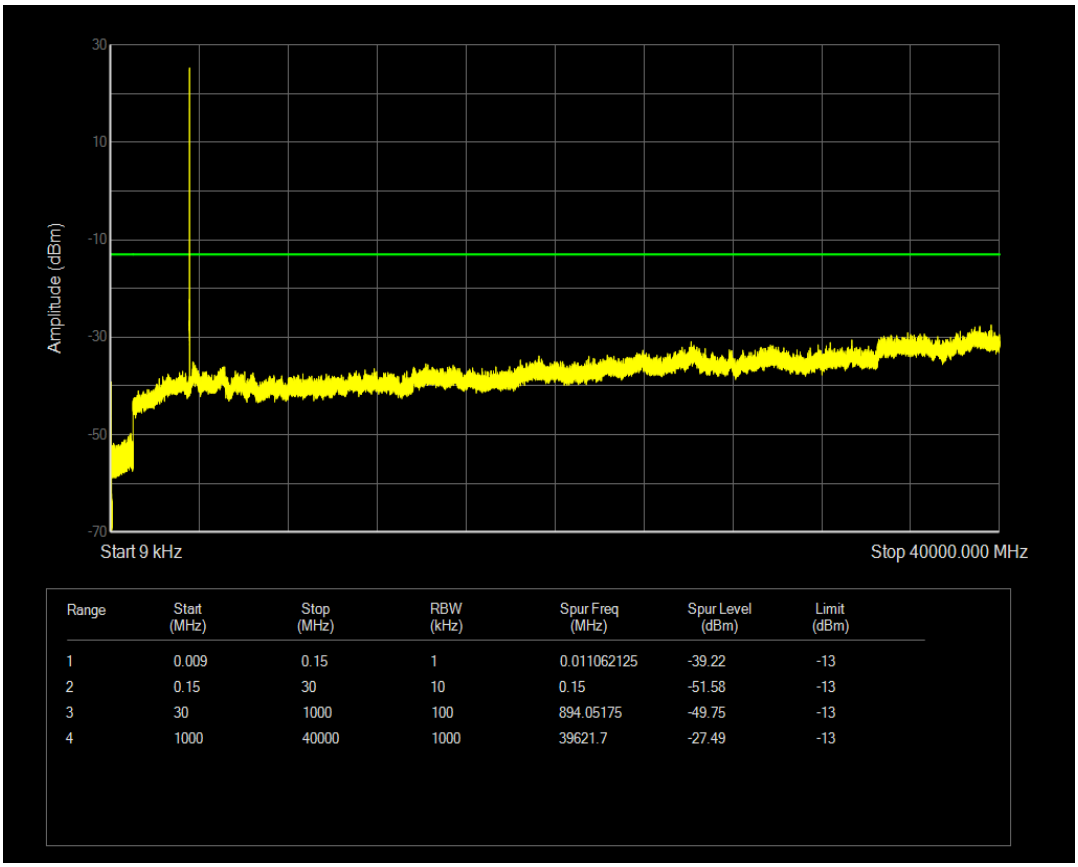
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0141888	-38.88	-13
2	0.15	30	10	0.15373125	-50	-13
3	30	1000	100	866.1885	-50.33	-13
4	1000	40000	1000	39122.5	-27.87	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=636332 RB=50@0



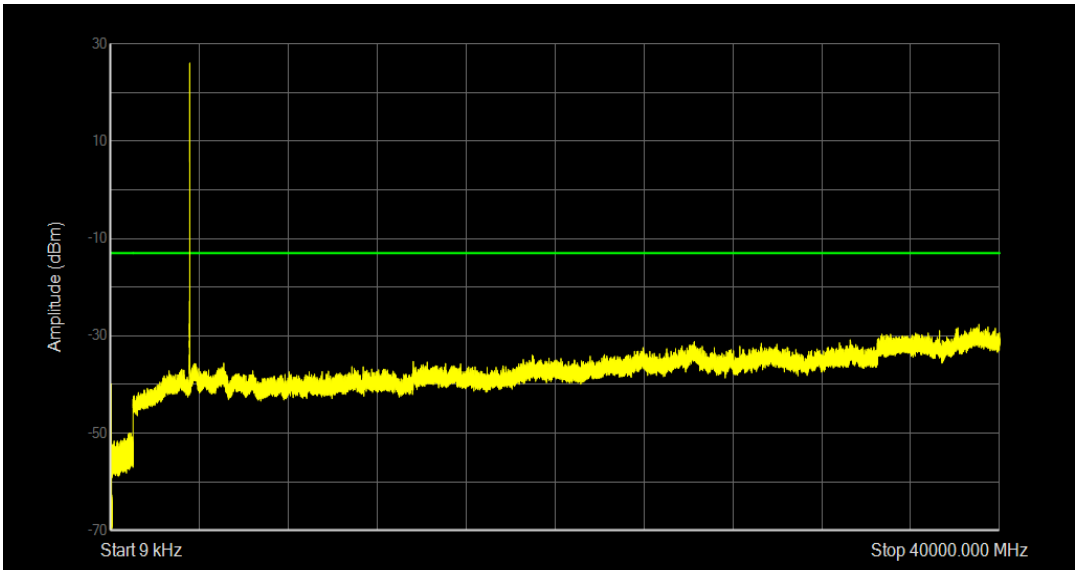
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00965565	-39.11	-13
2	0.15	30	10	0.1694025	-50.81	-13
3	30	1000	100	816.64575	-49.97	-13
4	1000	40000	1000	39097.15	-27.85	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=636332 RB=1@0



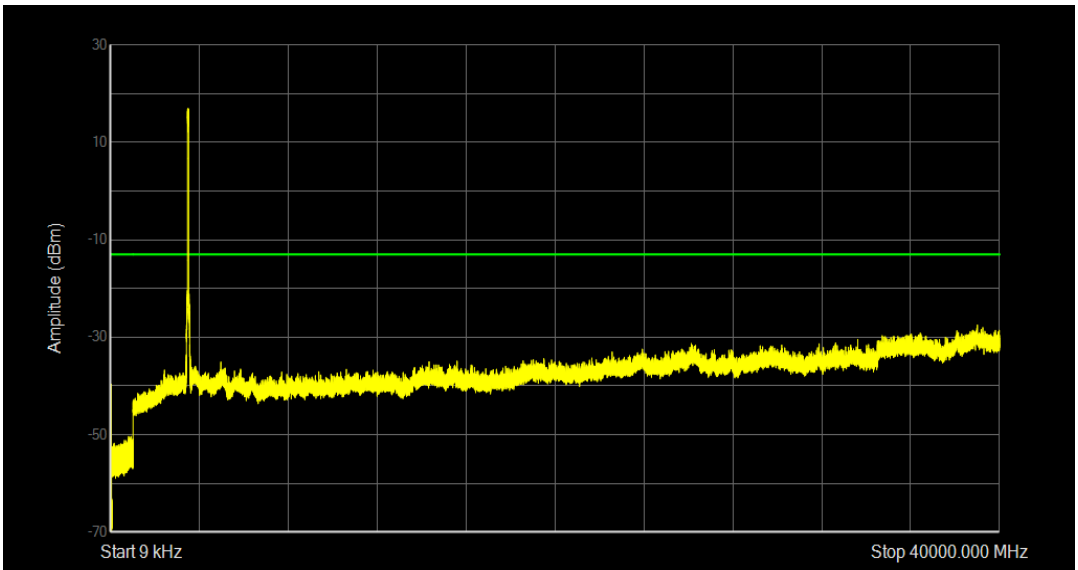
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011062125	-39.22	-13
2	0.15	30	10	0.15	-51.58	-13
3	30	1000	100	894.05175	-49.75	-13
4	1000	40000	1000	39621.7	-27.49	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=10MHz Channel=636332 RB=1@51



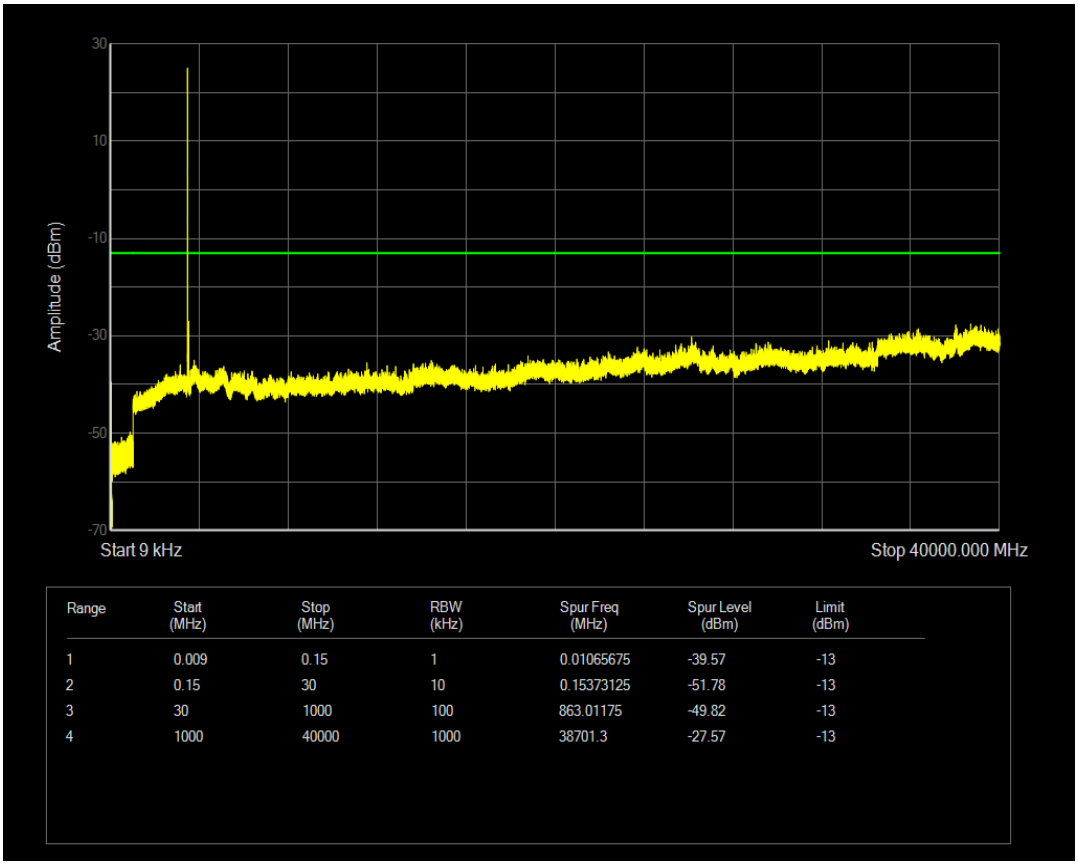
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011115	-39.91	-13
2	0.15	30	10	0.15074625	-49.2	-13
3	30	1000	100	840.65325	-49.98	-13
4	1000	40000	1000	39070.825	-27.64	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=631668 RB=270@0



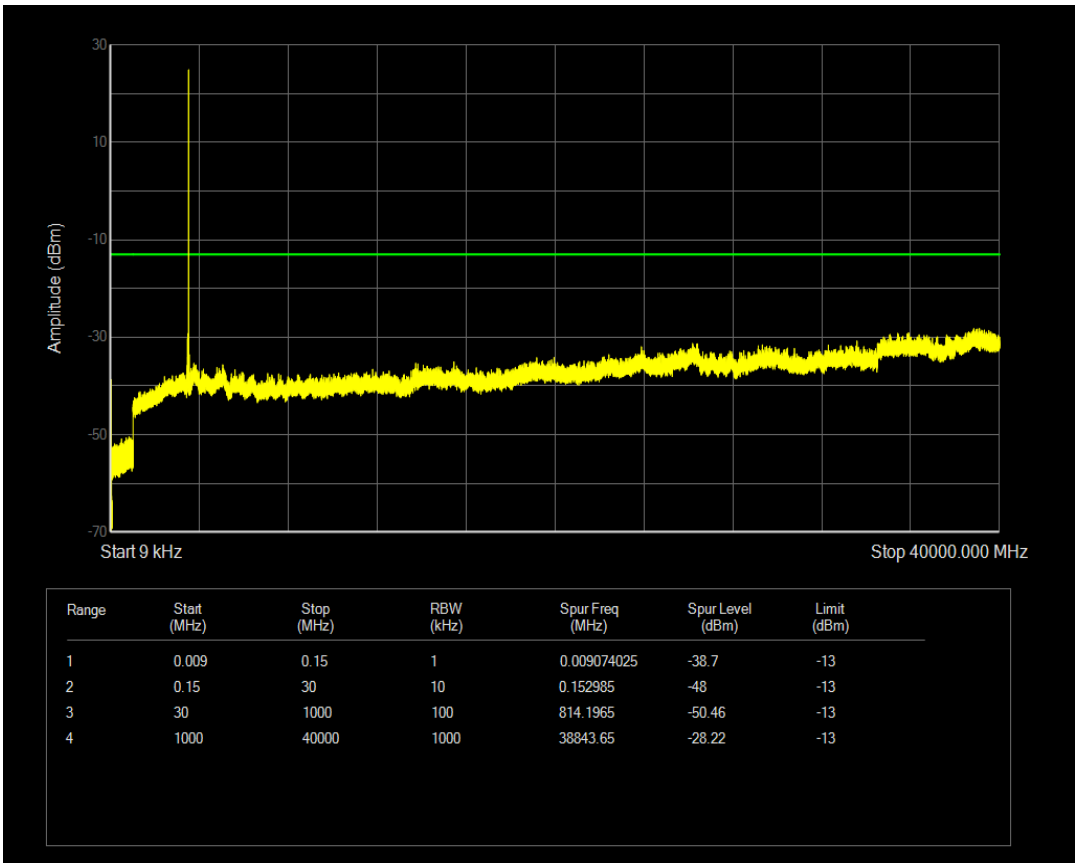
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01041705	-39.66	-13
2	0.15	30	10	0.1514925	-51.02	-13
3	30	1000	100	903.582	-50.37	-13
4	1000	40000	1000	39002.575	-27.49	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=631668 RB=1@0



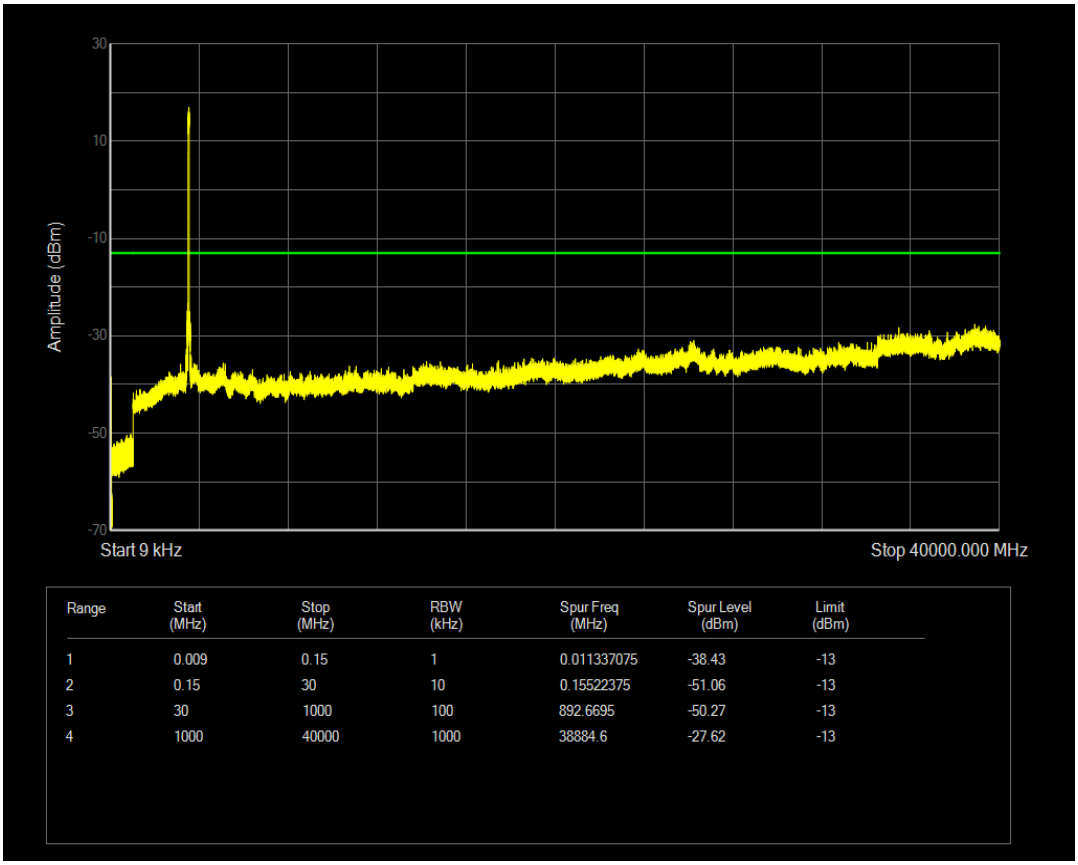
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01065675	-39.57	-13
2	0.15	30	10	0.15373125	-51.78	-13
3	30	1000	100	863.01175	-49.82	-13
4	1000	40000	1000	38701.3	-27.57	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=631668 RB=1@269



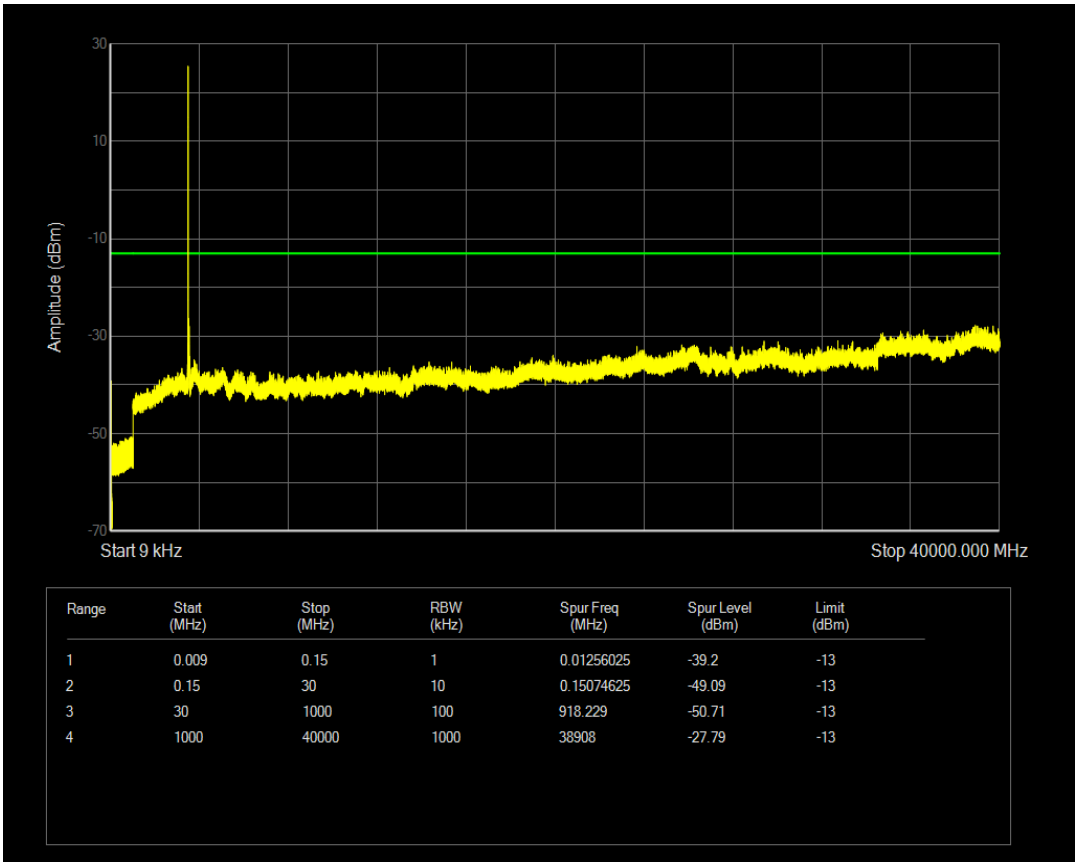
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009074025	-38.7	-13
2	0.15	30	10	0.152985	-48	-13
3	30	1000	100	814.1965	-50.46	-13
4	1000	40000	1000	38843.65	-28.22	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=633334 RB=270@0



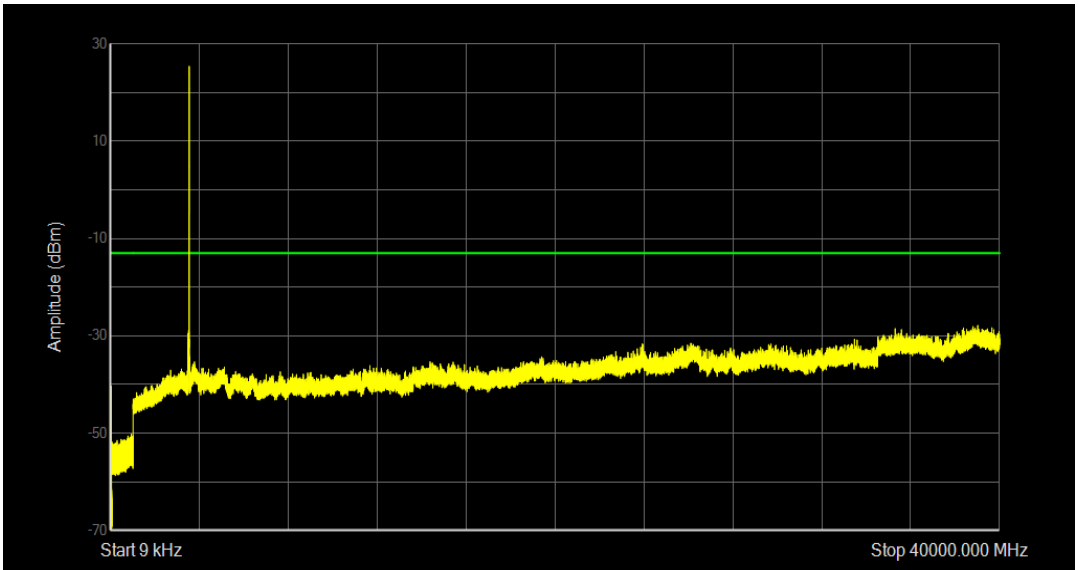
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011337075	-38.43	-13
2	0.15	30	10	0.15522375	-51.06	-13
3	30	1000	100	892.6695	-50.27	-13
4	1000	40000	1000	38884.6	-27.62	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=633334 RB=1@0



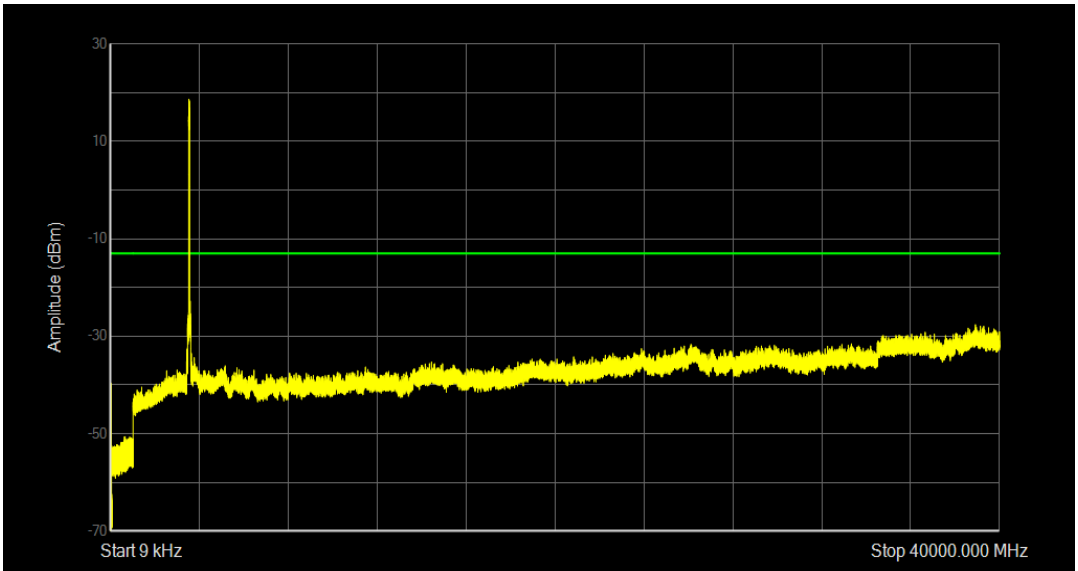
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01256025	-39.2	-13
2	0.15	30	10	0.15074625	-49.09	-13
3	30	1000	100	918.229	-50.71	-13
4	1000	40000	1000	38908	-27.79	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=633334 RB=1@269



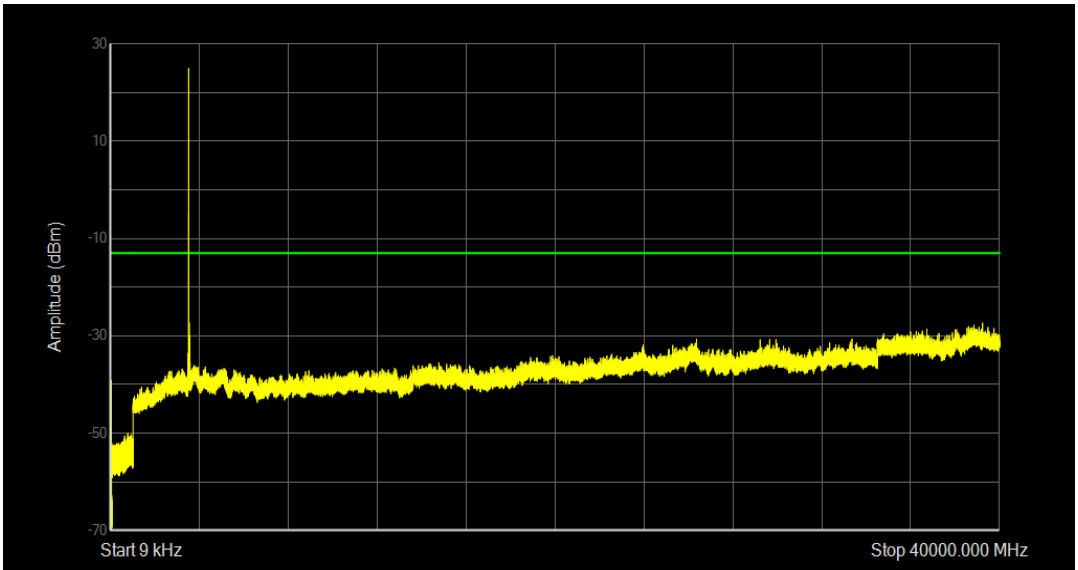
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0090987	-40.43	-13
2	0.15	30	10	0.1574625	-49.75	-13
3	30	1000	100	920.072	-50.18	-13
4	1000	40000	1000	39019.15	-27.86	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=635000 RB=270@0



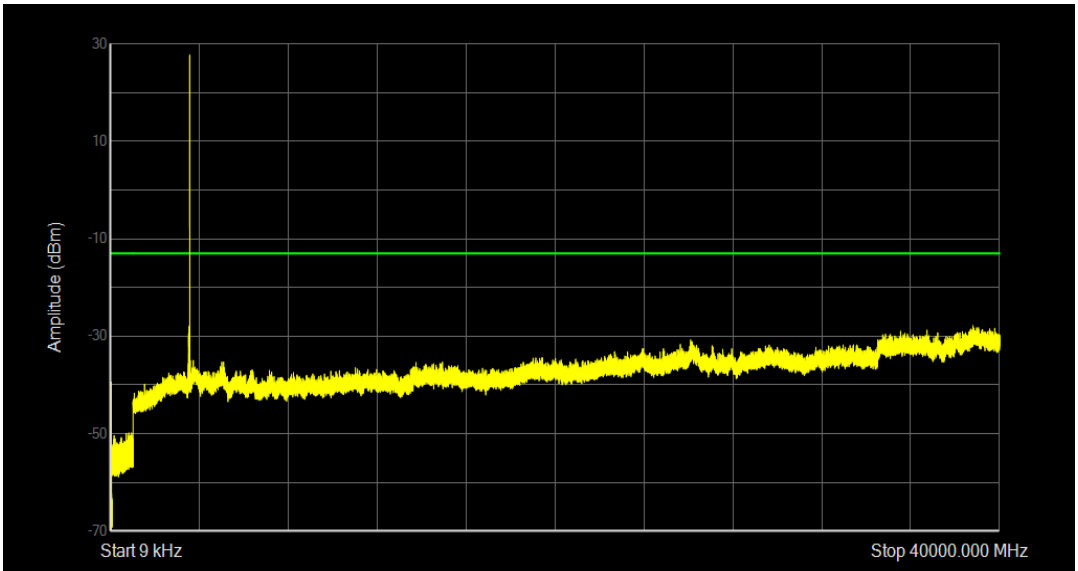
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.015327375	-39.77	-13
2	0.15	30	10	0.1574625	-48.94	-13
3	30	1000	100	637.705	-50.63	-13
4	1000	40000	1000	38913.85	-27.63	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=635000 RB=1@0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009320775	-39.29	-13
2	0.15	30	10	0.16567125	-50.89	-13
3	30	1000	100	760.62825	-50.09	-13
4	1000	40000	1000	39233.65	-27.35	-13

n78(3450-3550) SCS=15kHz DFT_QPSK BW=50MHz Channel=635000 RB=1@269



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010766025	-39.52	-13
2	0.15	30	10	0.15	-50.36	-13
3	30	1000	100	932.0515	-49.86	-13
4	1000	40000	1000	38801.725	-27.84	-13