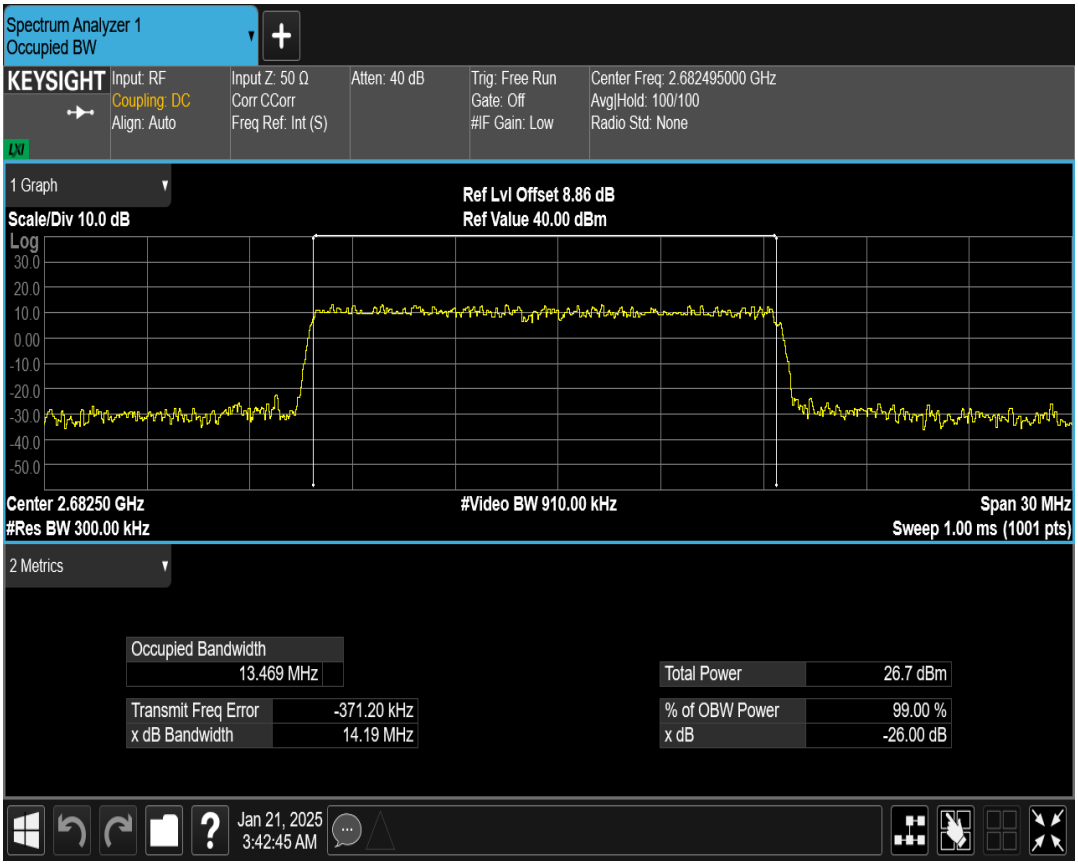
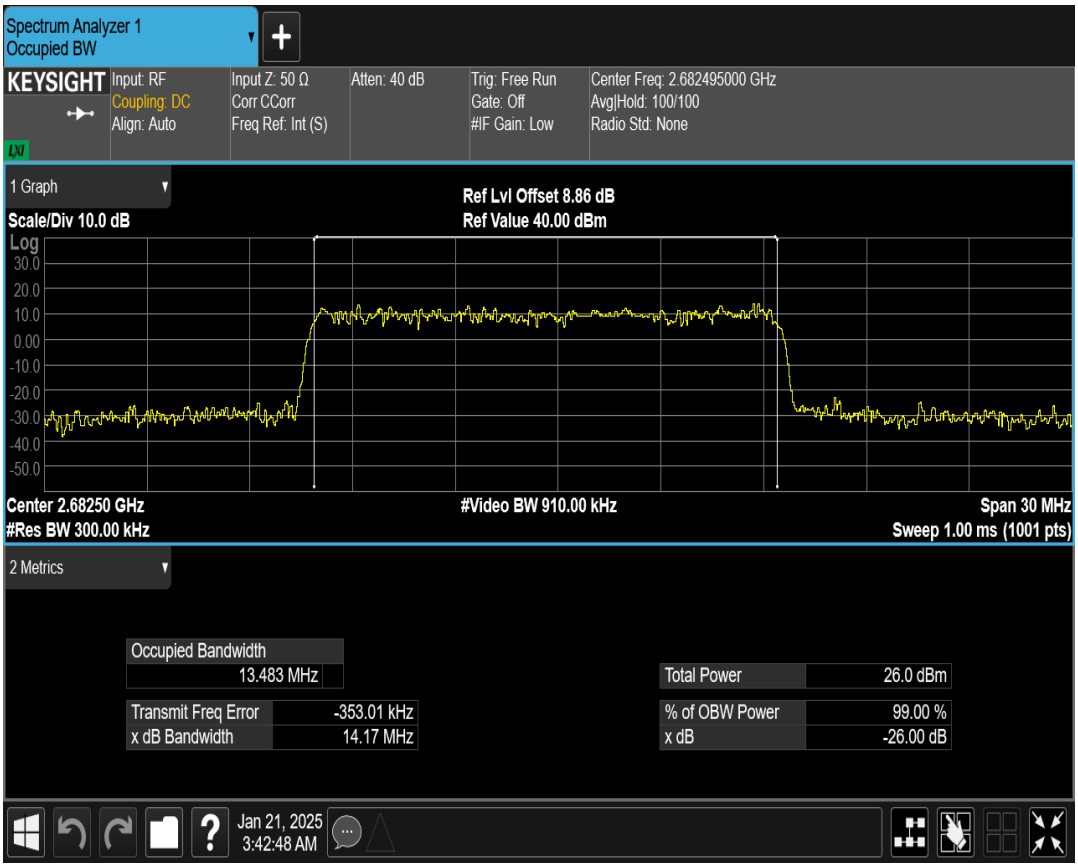
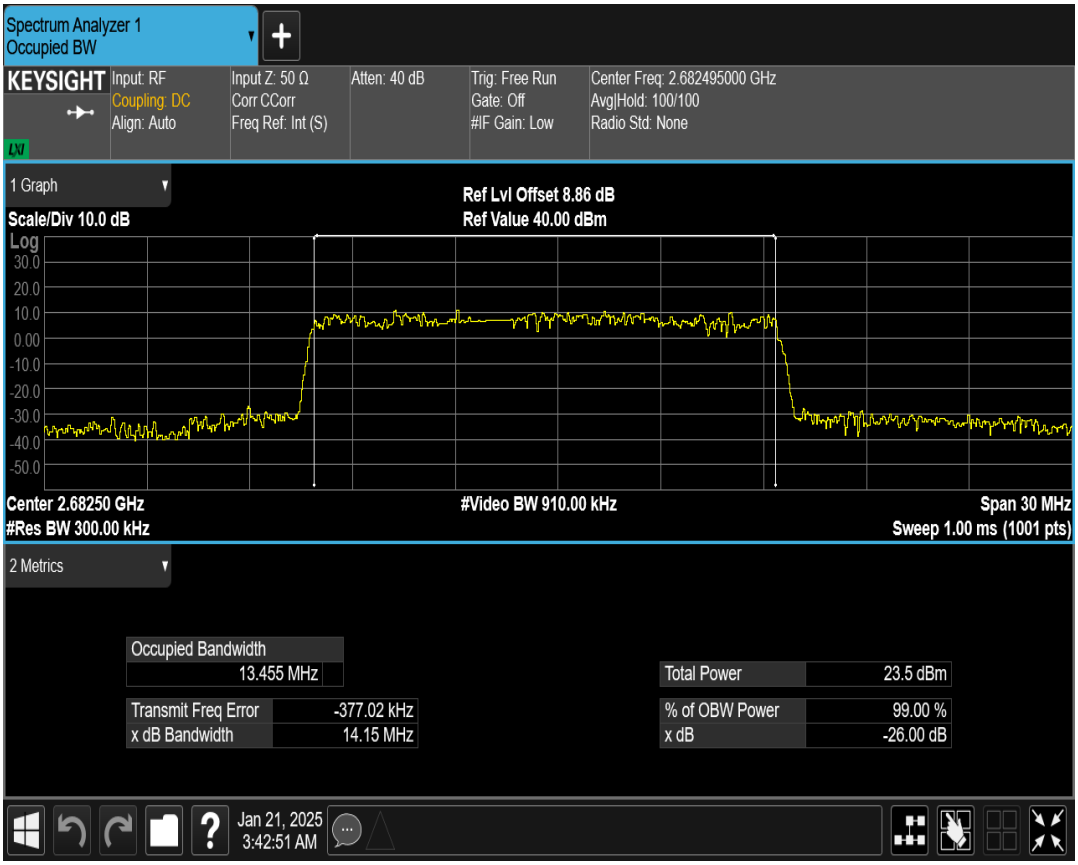
n41 SCS=15kHz DFT_QAM16 BW=15MHz Channel=536499 RB=75@0



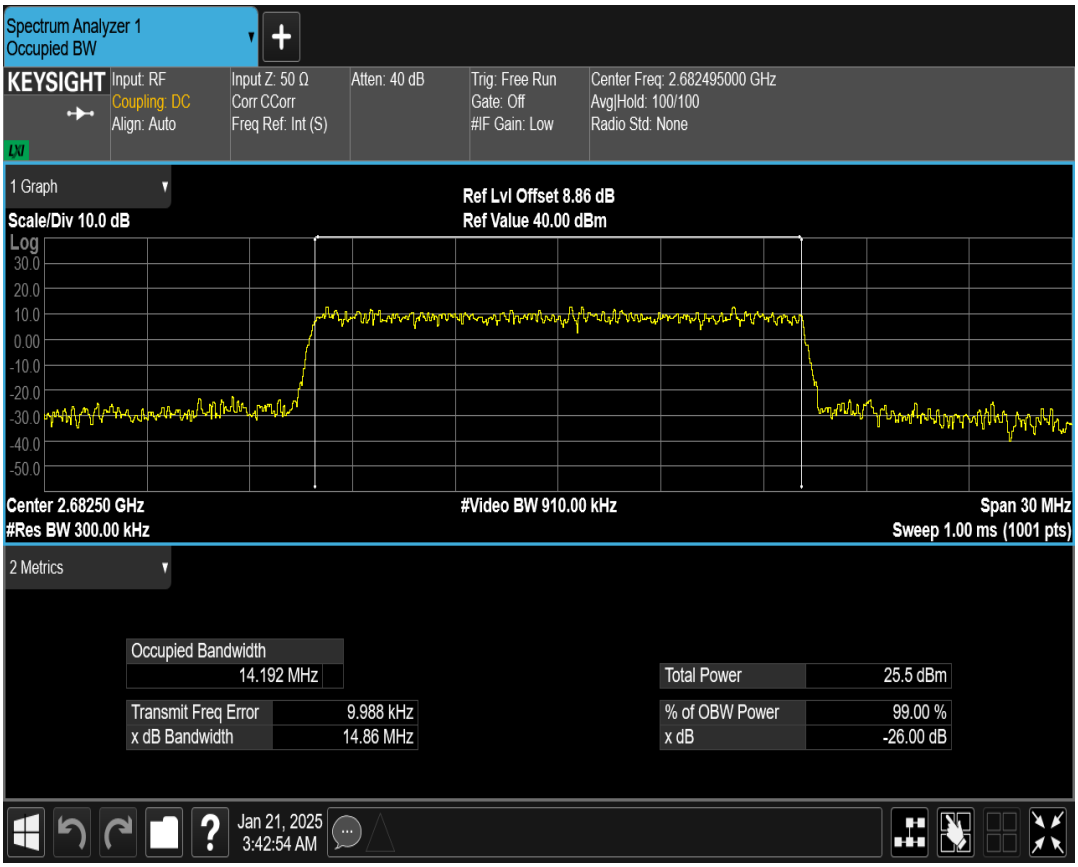
n41 SCS=15kHz DFT_QAM64 BW=15MHz Channel=536499 RB=75@0



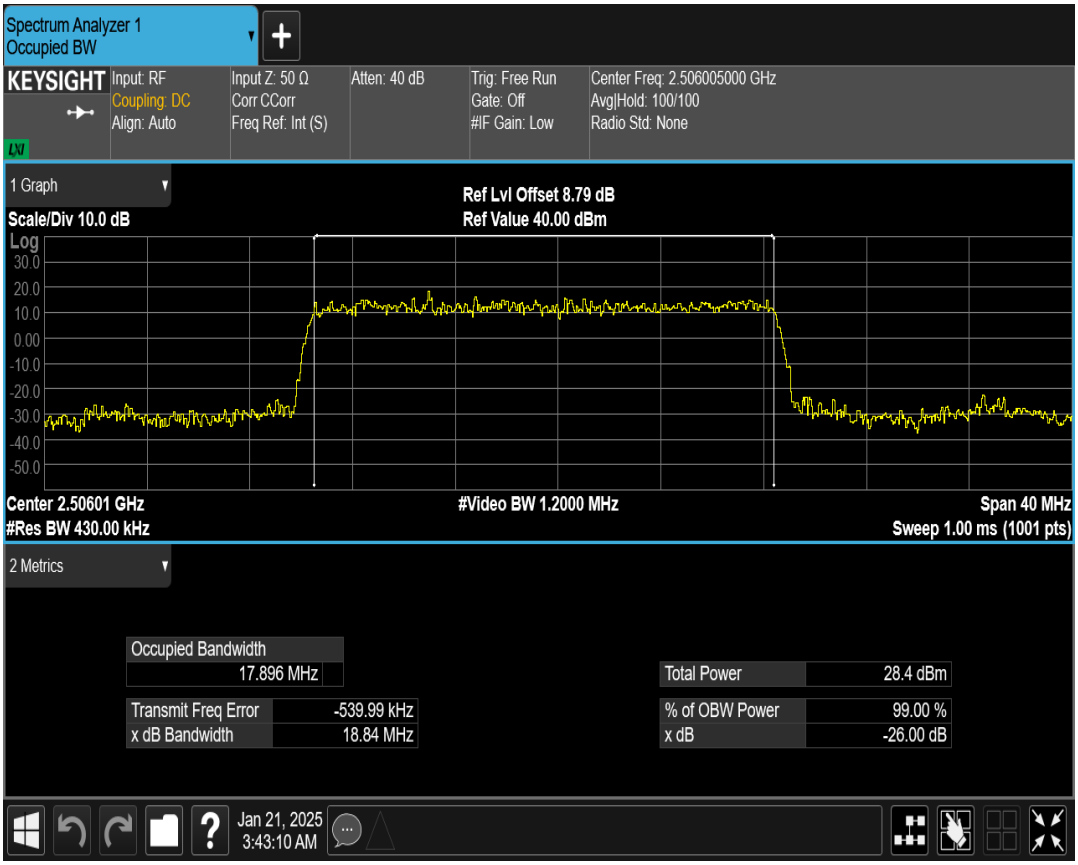
n41 SCS=15kHz DFT_QAM256 BW=15MHz Channel=536499 RB=75@0



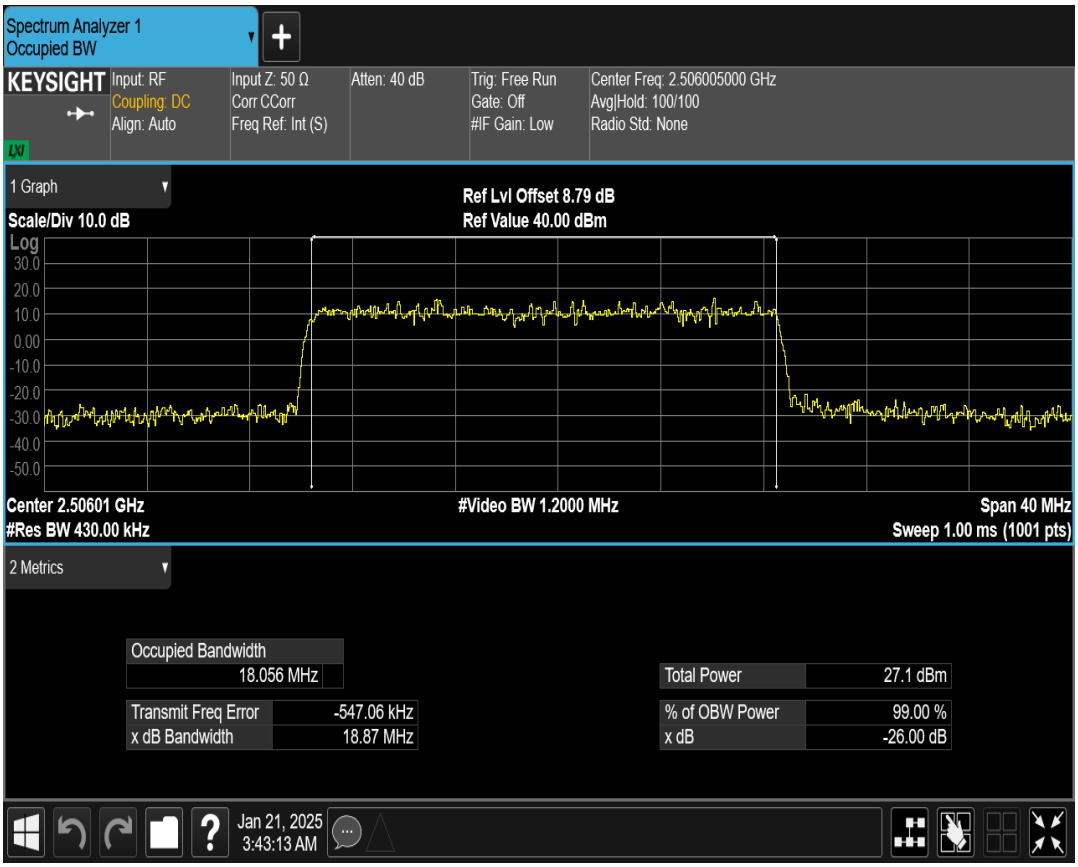
n41 SCS=15kHz CP_QPSK BW=15MHz Channel=536499 RB=79@0



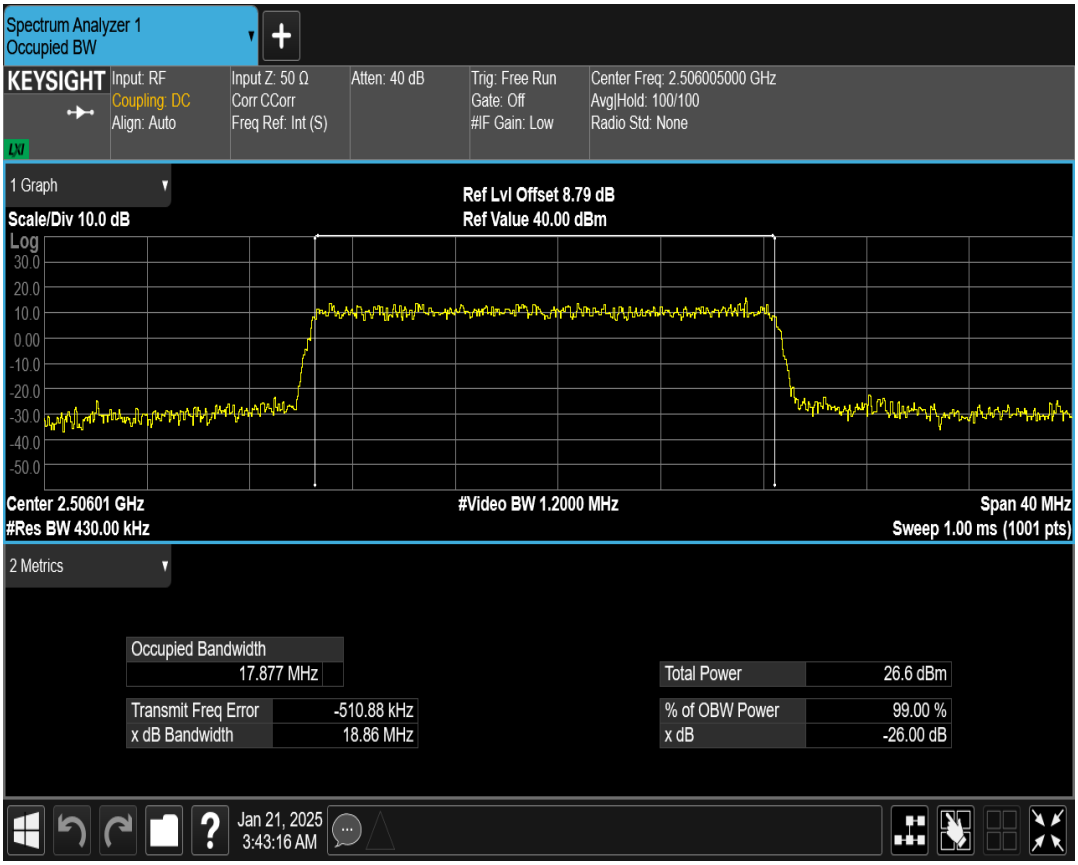
n41 SCS=15kHz DFT_BPSK BW=20MHz Channel=501201 RB=100@0



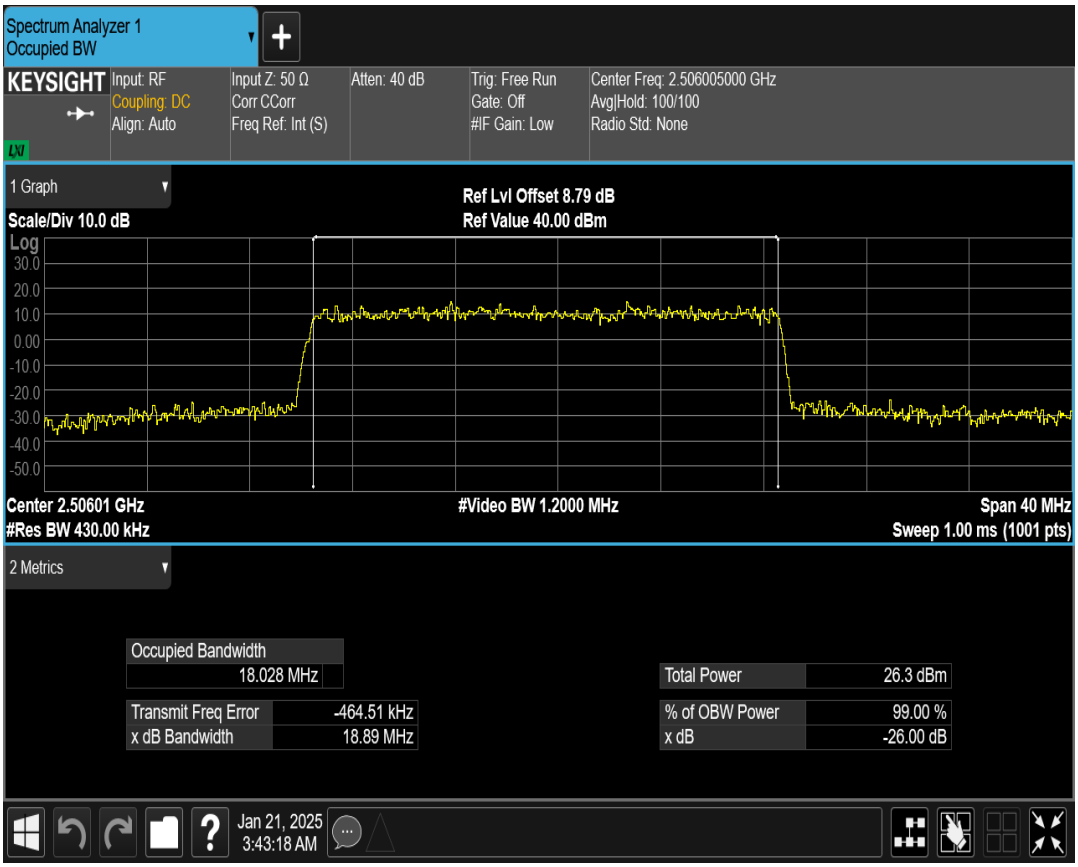
n41 SCS=15kHz DFT_QPSK BW=20MHz Channel=501201 RB=100@0



n41 SCS=15kHz DFT_QAM16 BW=20MHz Channel=501201 RB=100@0



n41 SCS=15kHz DFT_QAM64 BW=20MHz Channel=501201 RB=100@0



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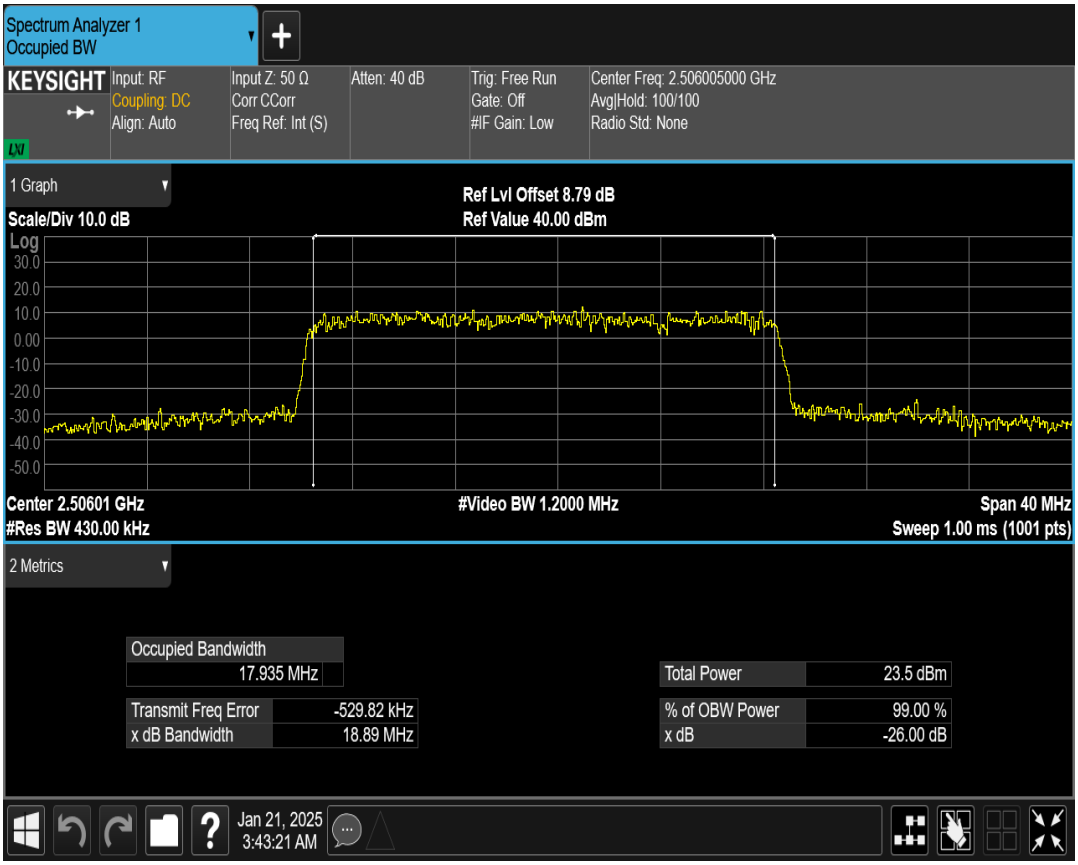
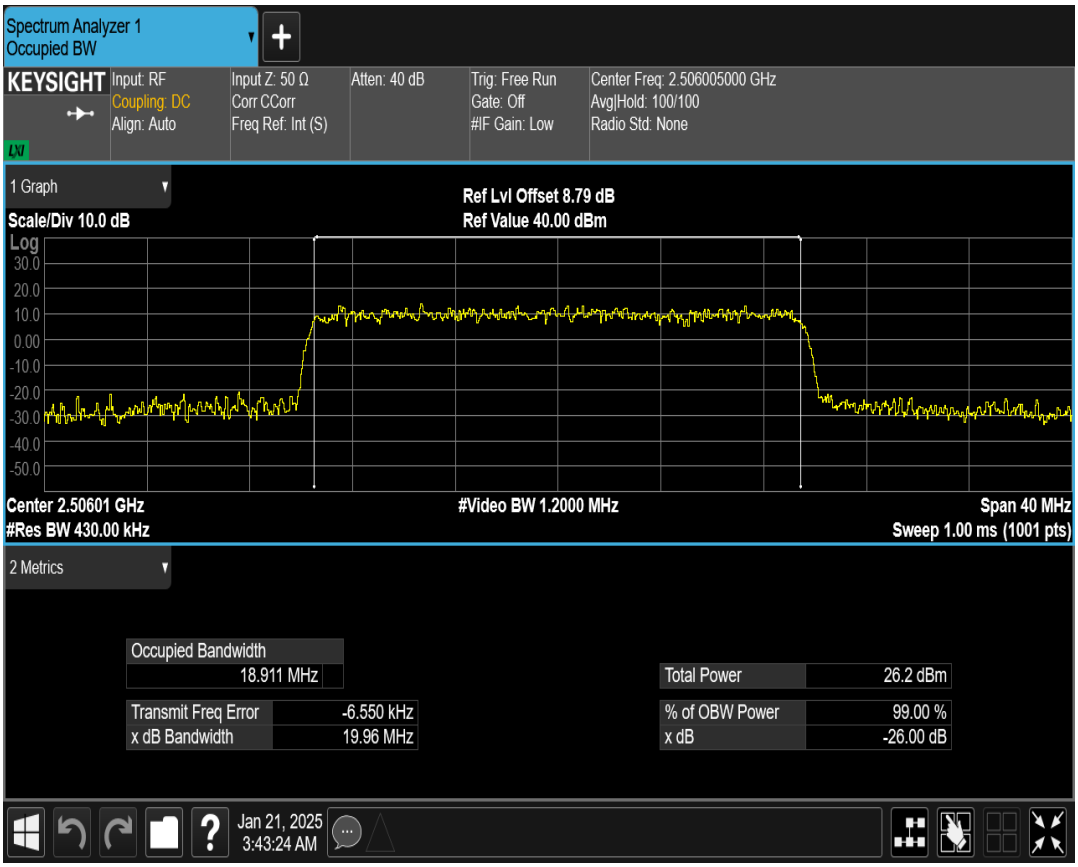
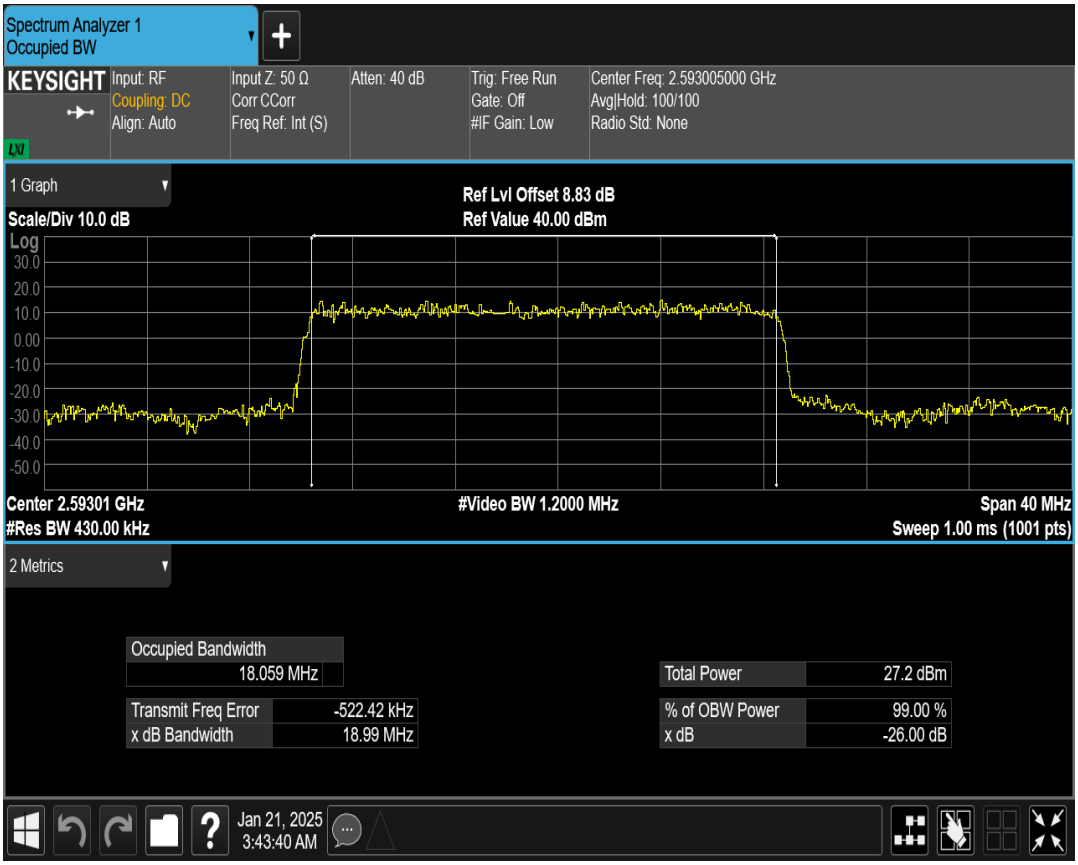


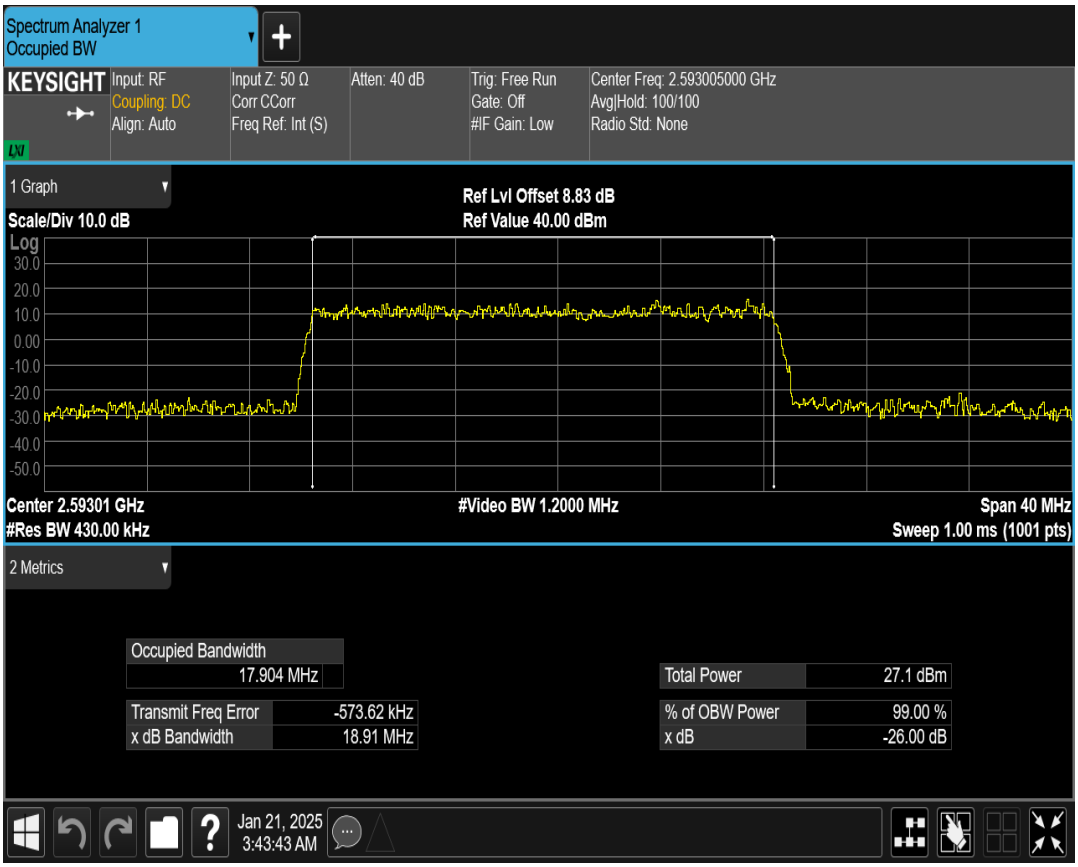
n41 SCS=15kHz CP_QPSK BW=20MHz Channel=501201 RB=106@0



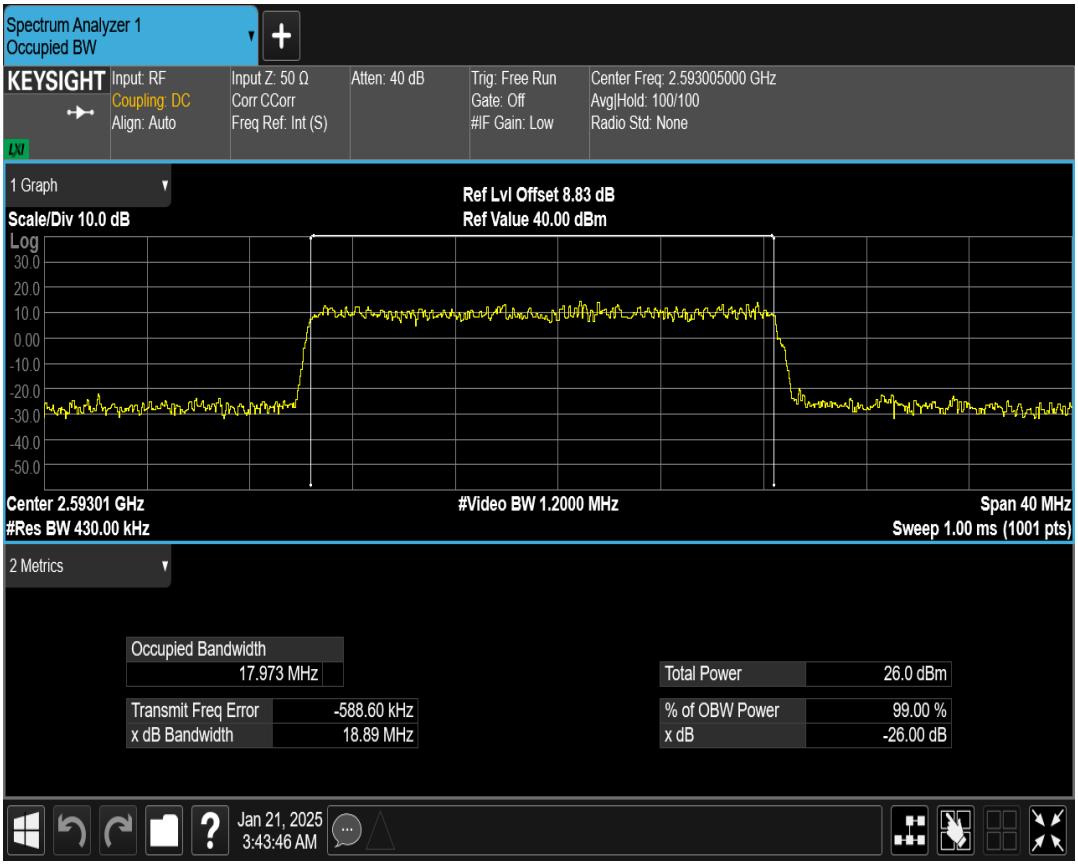
n41 SCS=15kHz DFT_BPSK BW=20MHz Channel=518601 RB=100@0



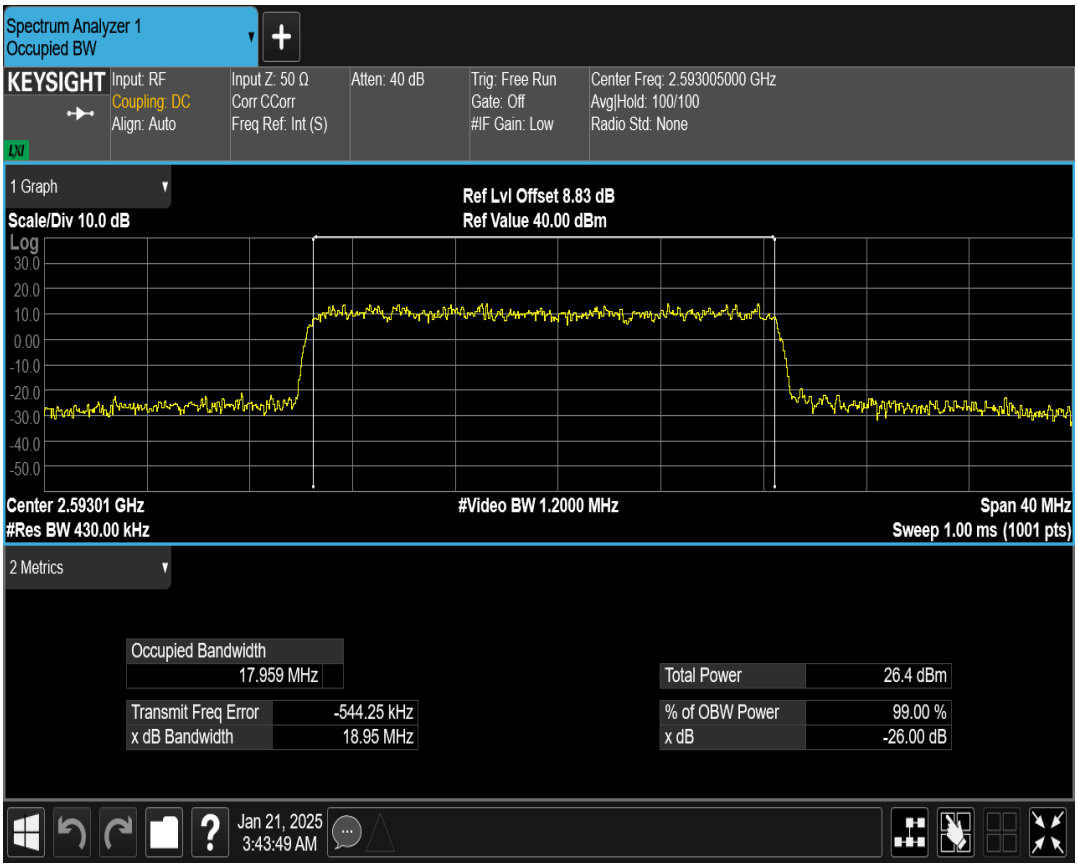
n41 SCS=15kHz DFT_QPSK BW=20MHz Channel=518601 RB=100@0



n41 SCS=15kHz DFT_QAM16 BW=20MHz Channel=518601 RB=100@0



n41 SCS=15kHz DFT_QAM64 BW=20MHz Channel=518601 RB=100@0



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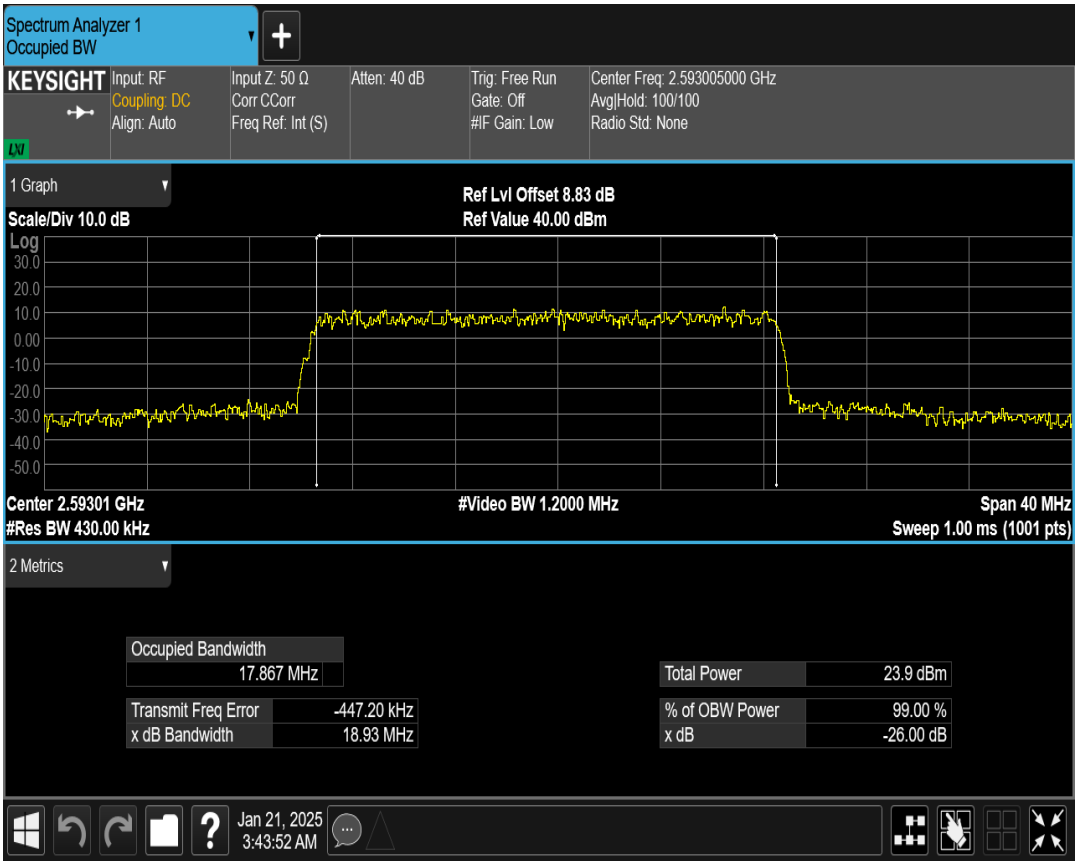
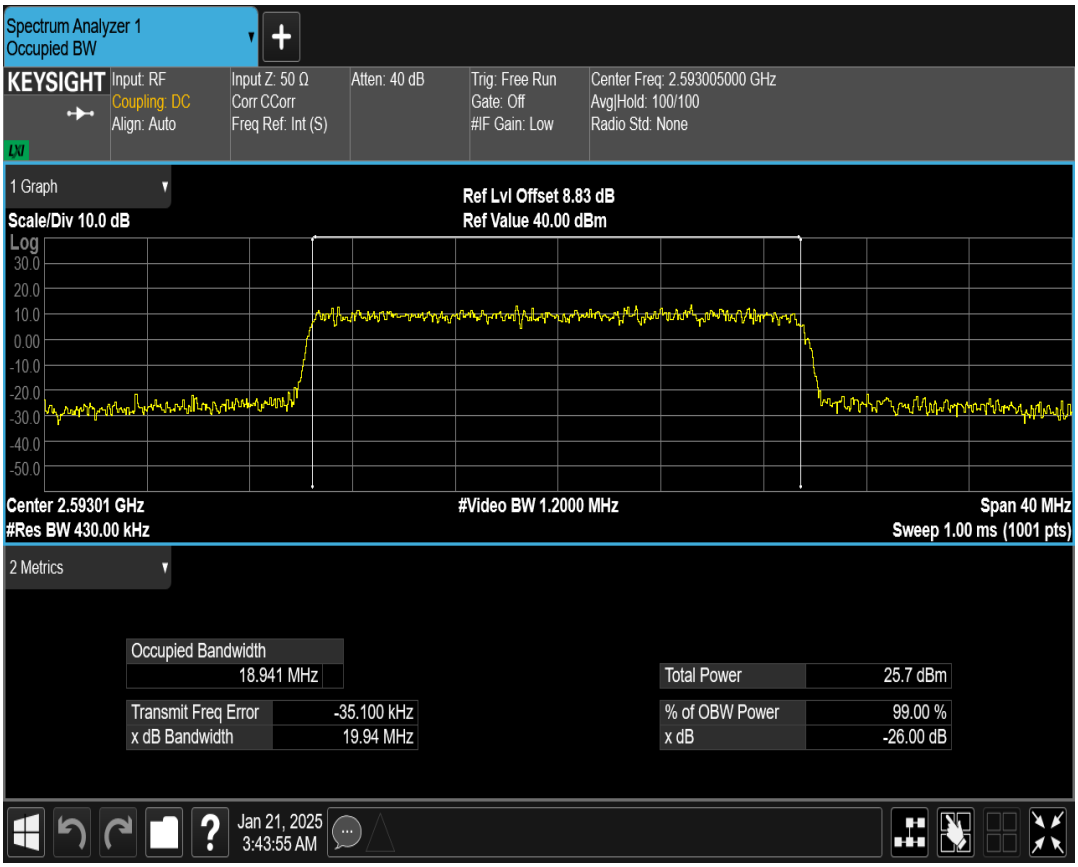
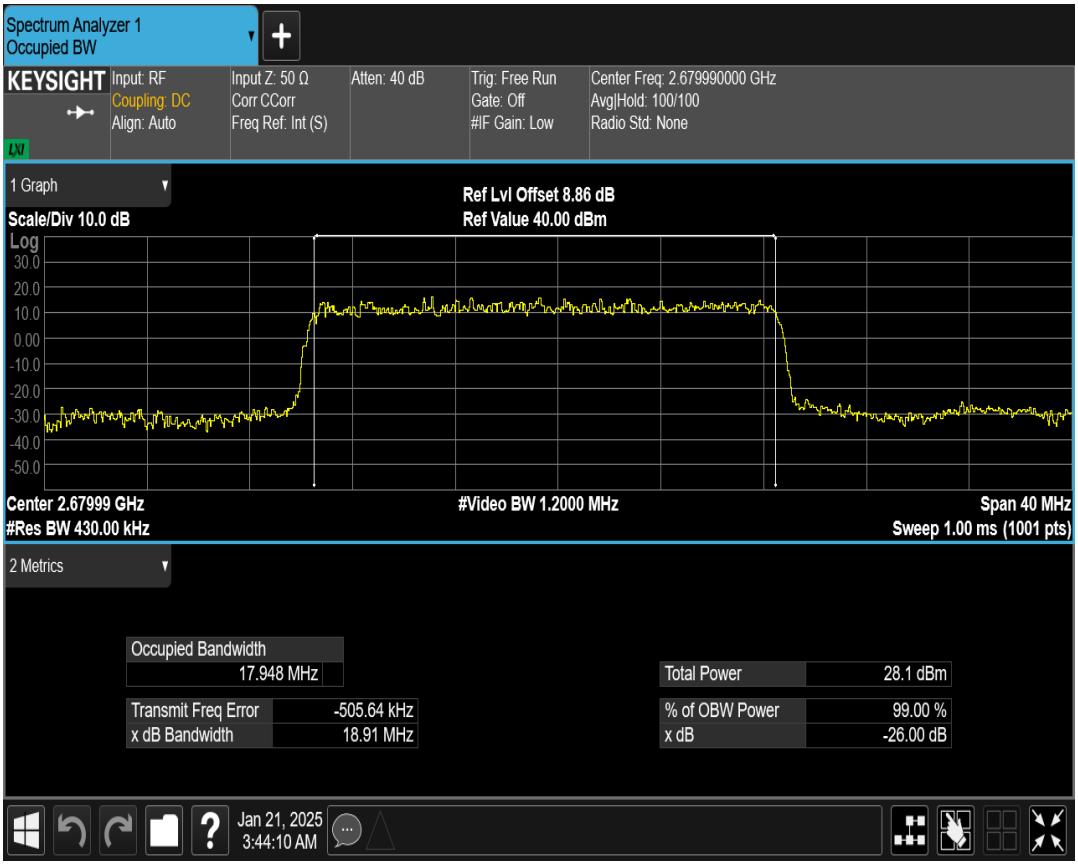


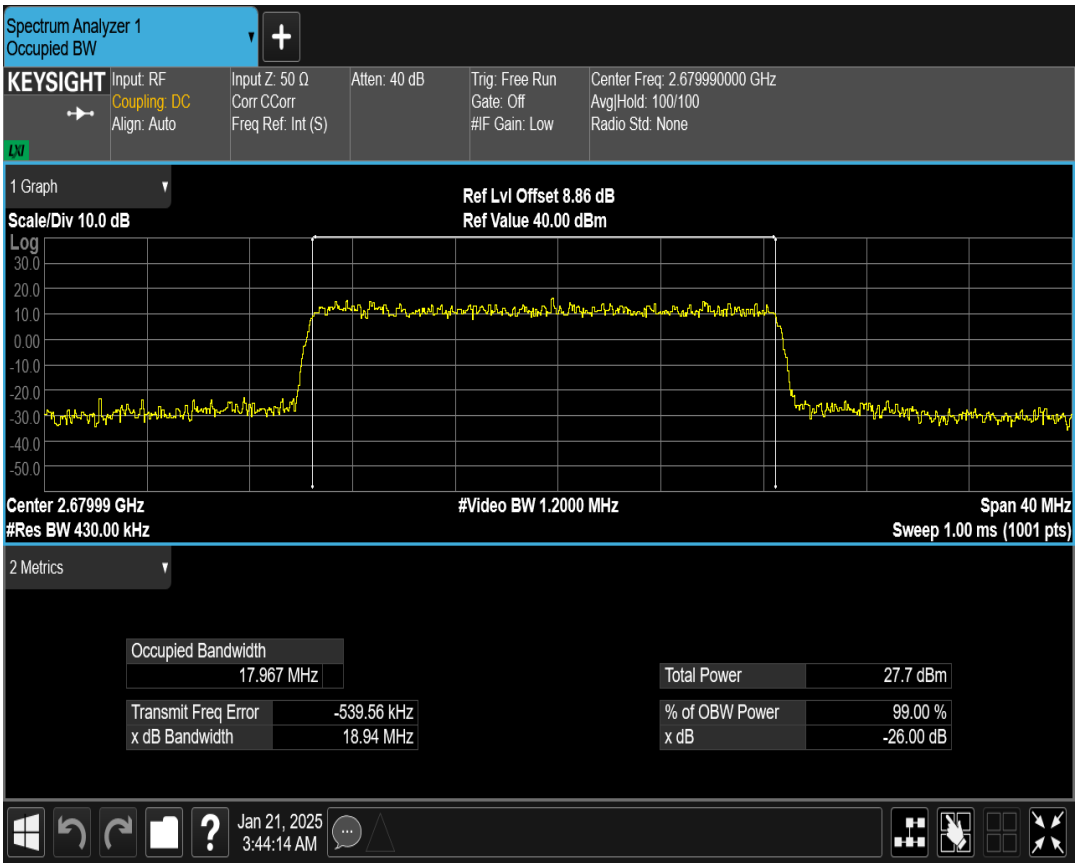
n41 SCS=15kHz CP_QPSK BW=20MHz Channel=518601 RB=106@0



n41 SCS=15kHz DFT_BPSK BW=20MHz Channel=535998 RB=100@0



n41 SCS=15kHz DFT_QPSK BW=20MHz Channel=535998 RB=100@0



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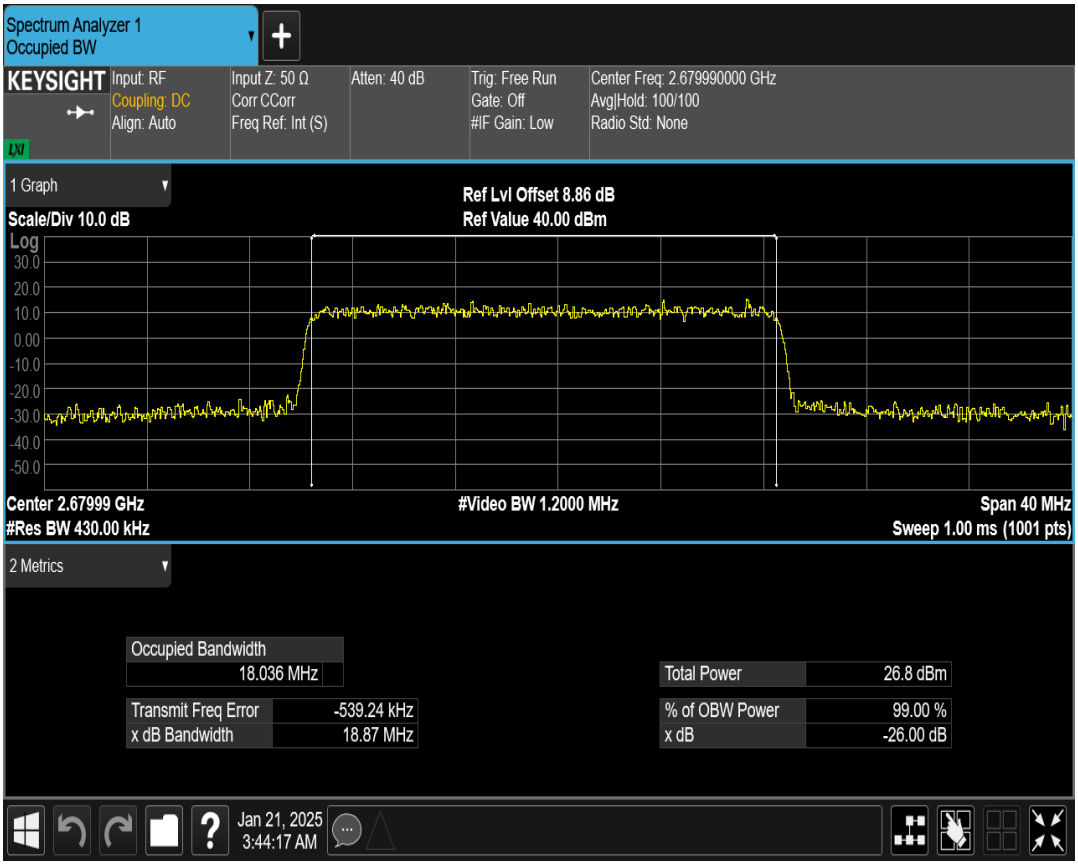
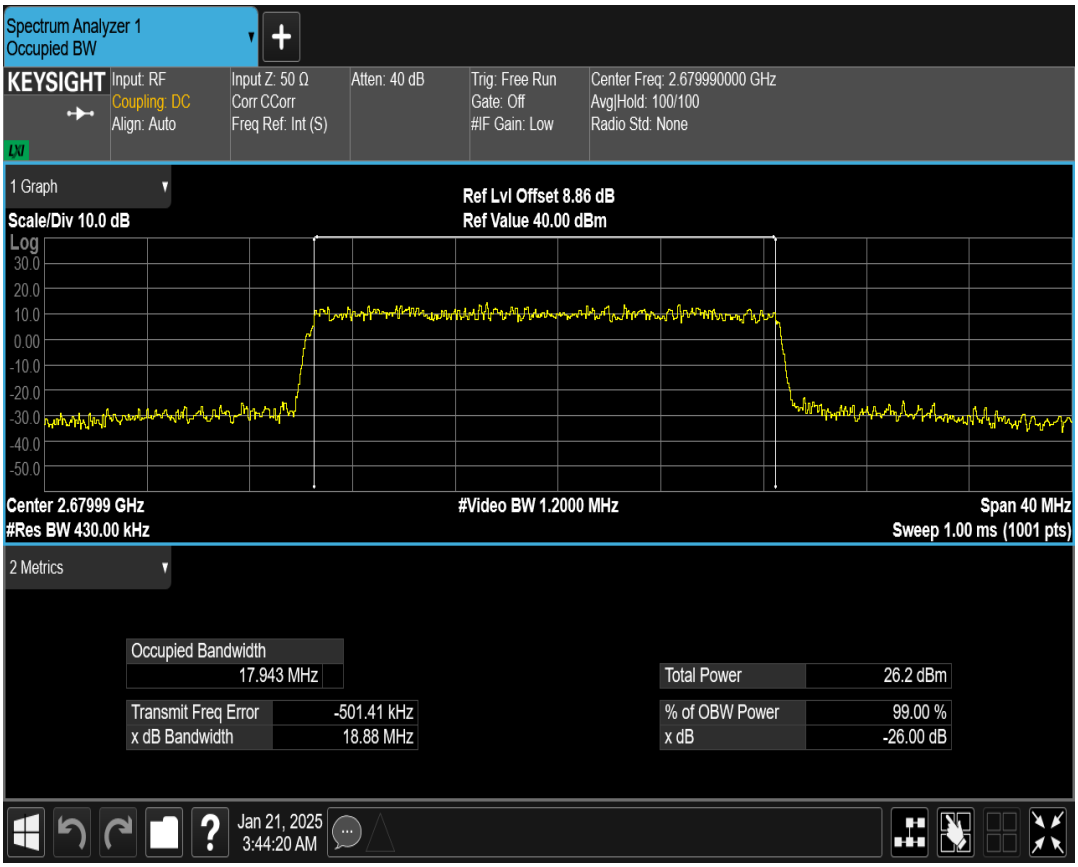
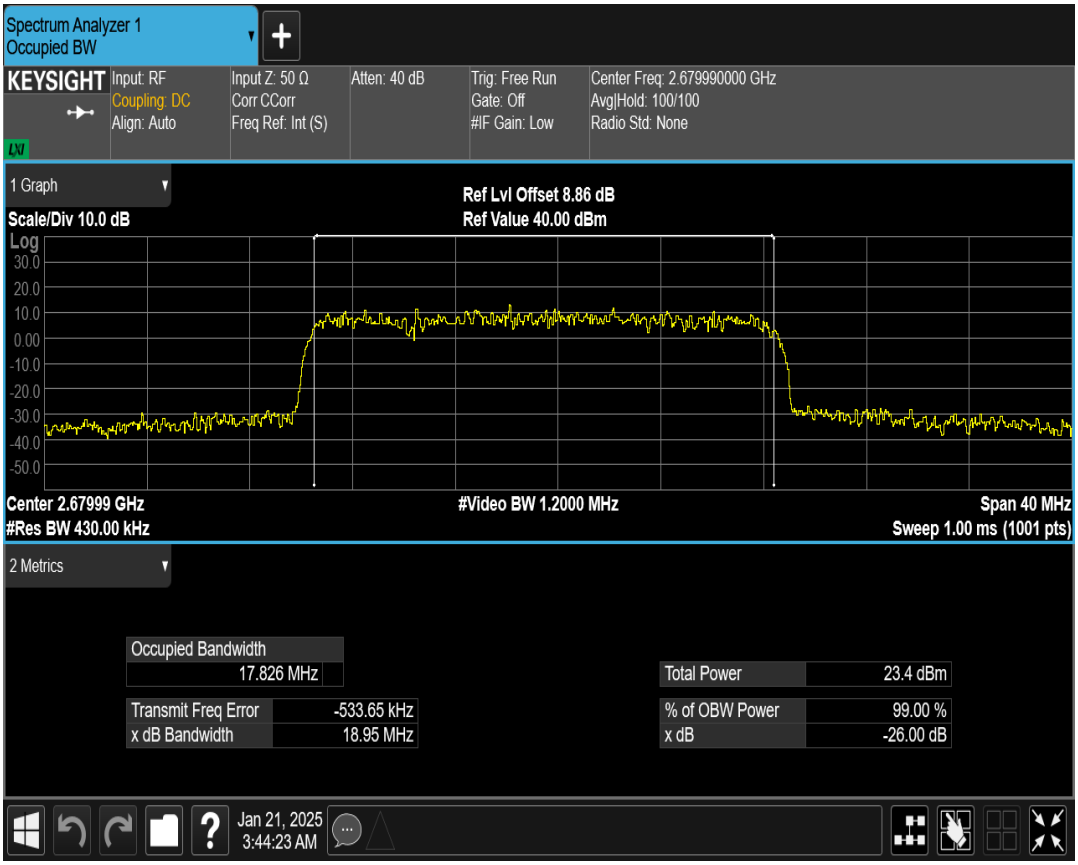


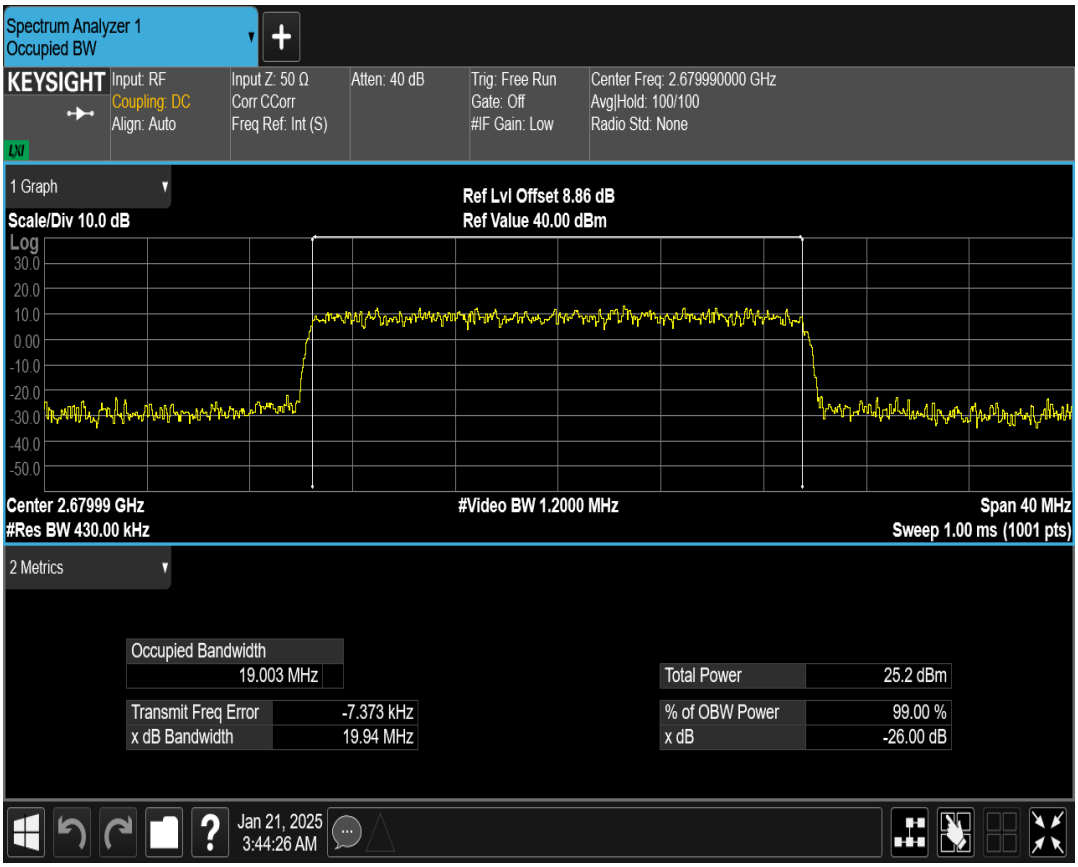
n41 SCS=15kHz DFT_QAM64 BW=20MHz Channel=535998 RB=100@0



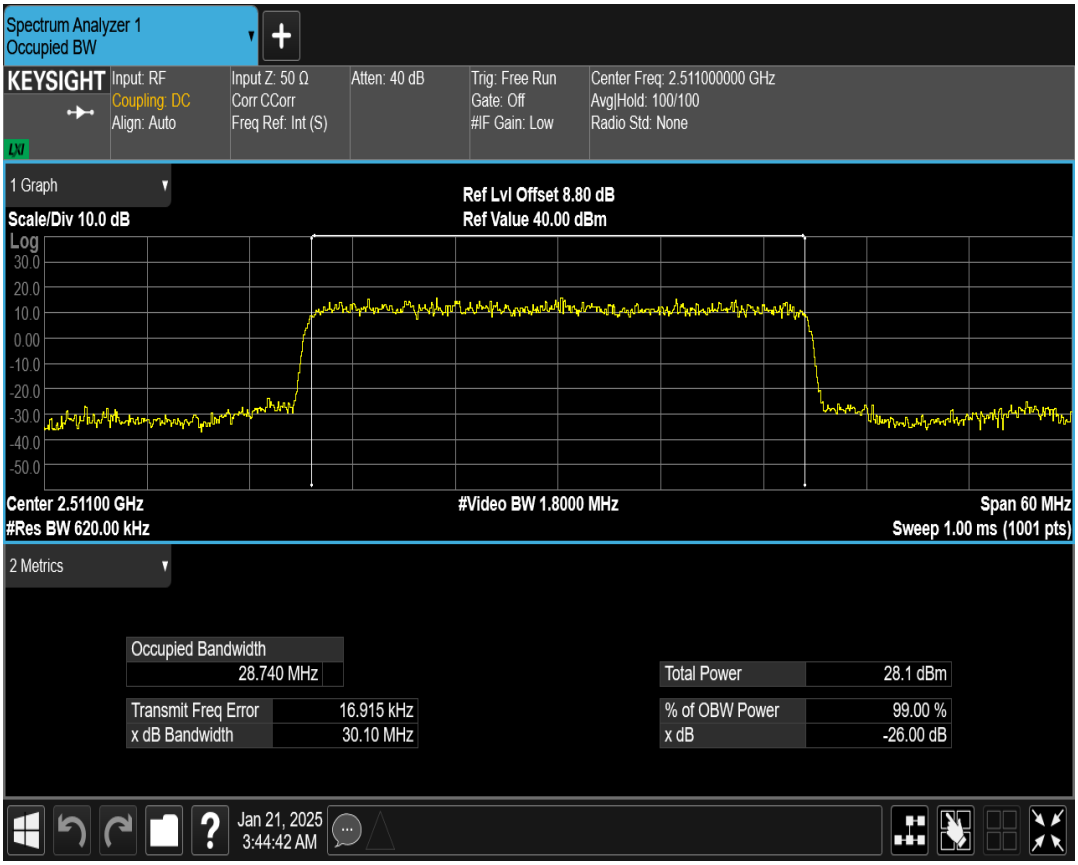
n41 SCS=15kHz DFT_QAM256 BW=20MHz Channel=535998 RB=100@0



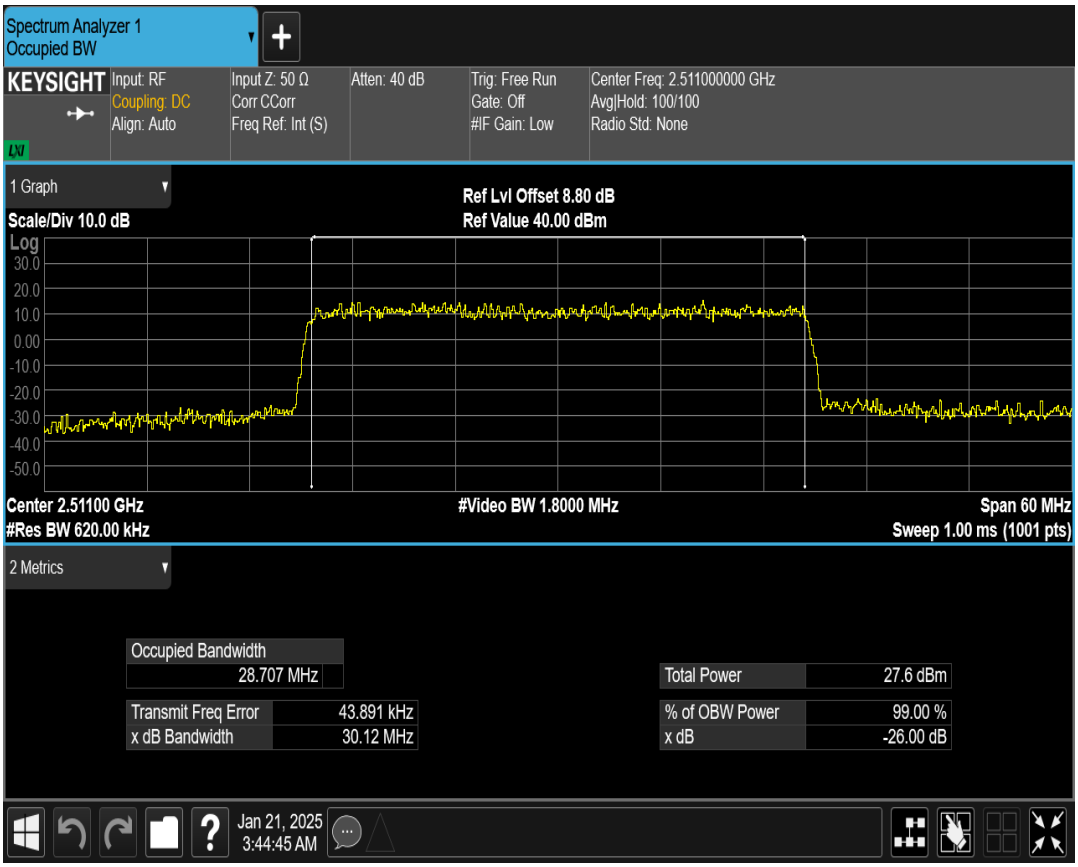
n41 SCS=15kHz CP_QPSK BW=20MHz Channel=535998 RB=106@0



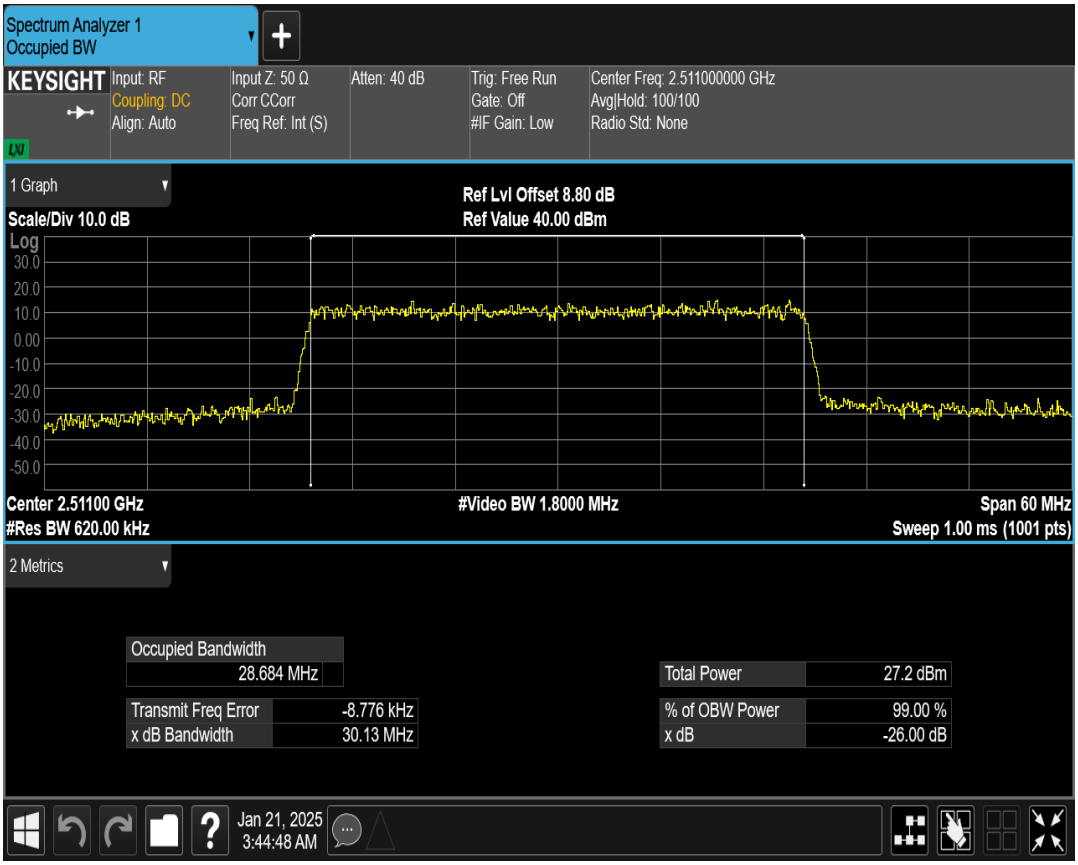
n41 SCS=15kHz DFT_BPSK BW=30MHz Channel=502200 RB=160@0



n41 SCS=15kHz DFT_QPSK BW=30MHz Channel=502200 RB=160@0



n41 SCS=15kHz DFT_QAM16 BW=30MHz Channel=502200 RB=160@0



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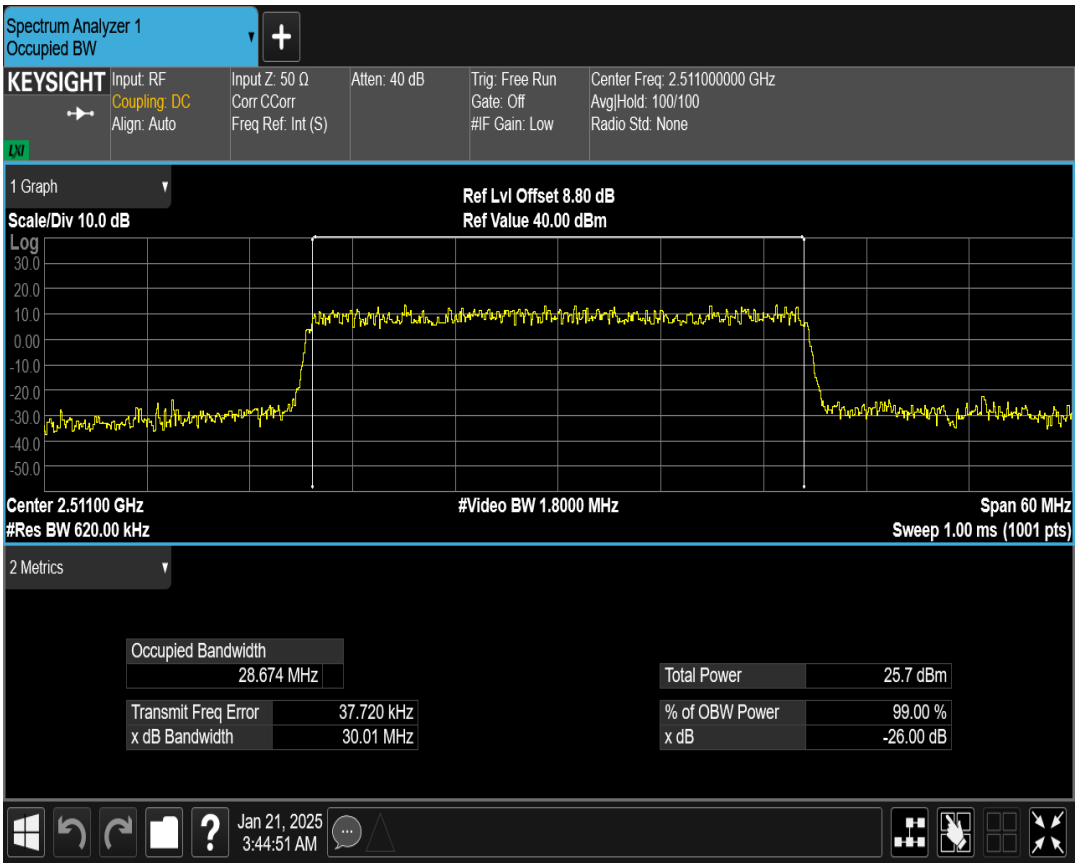

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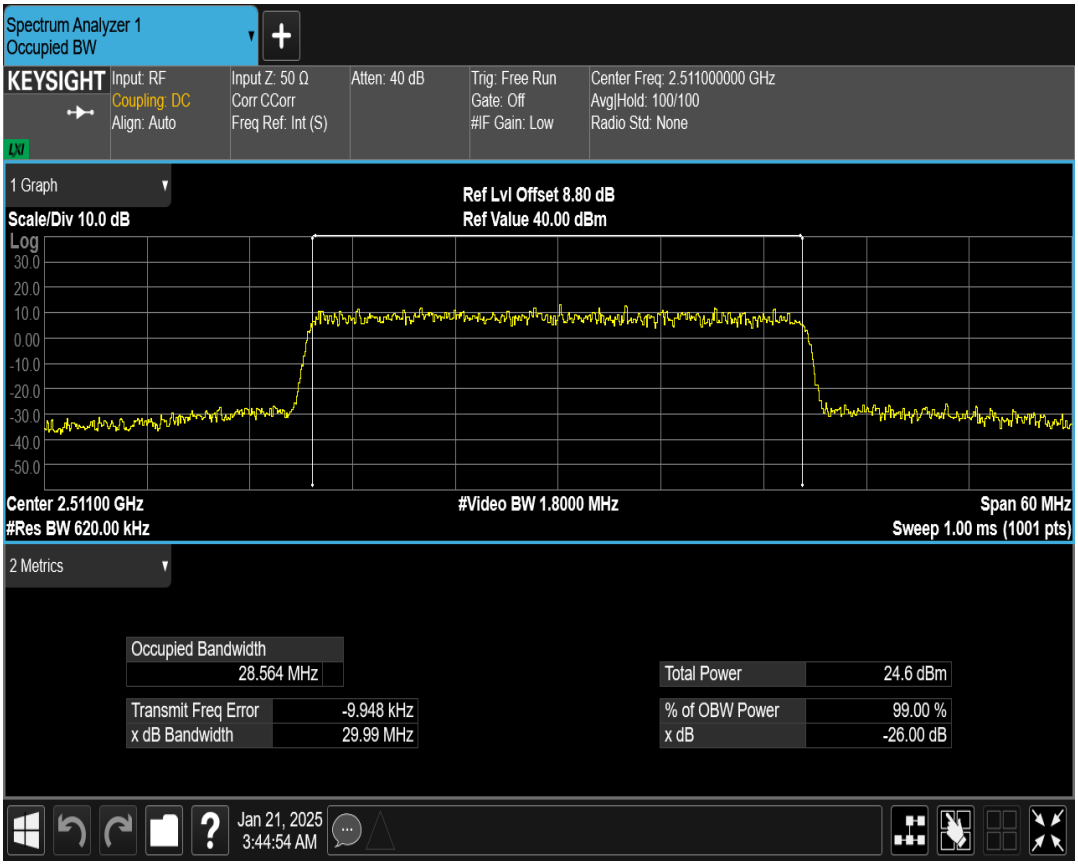

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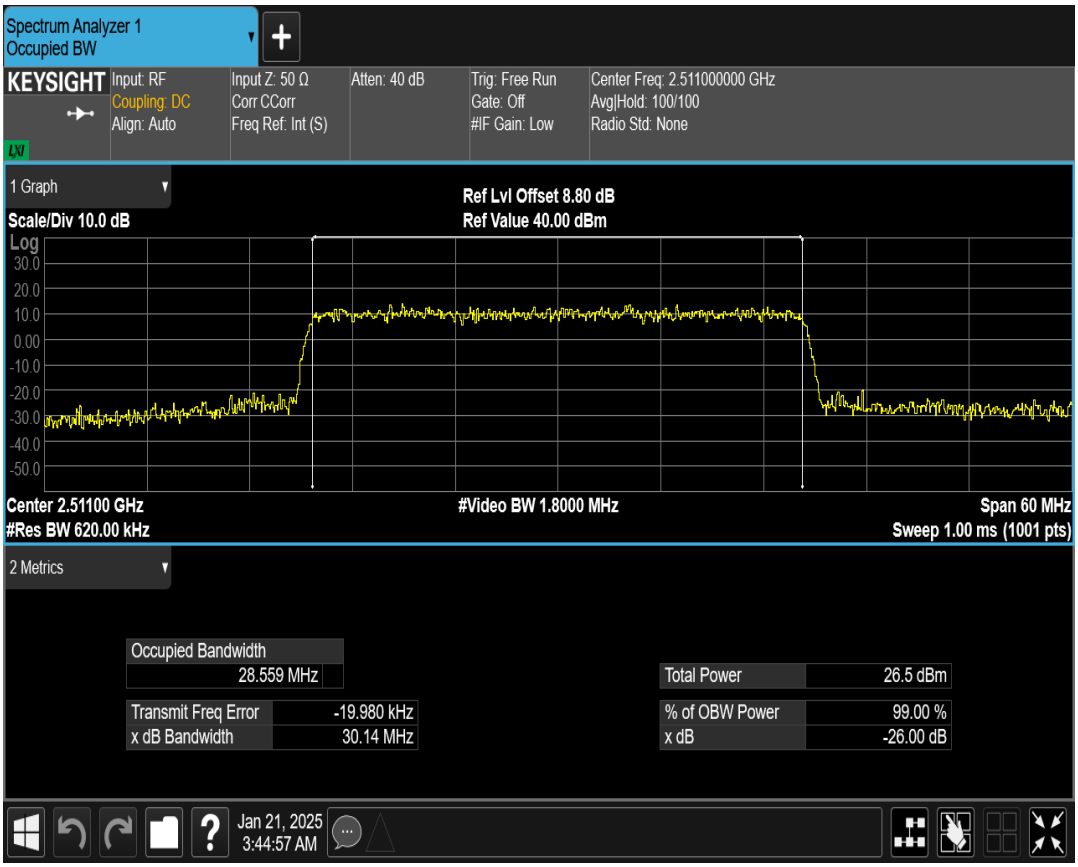
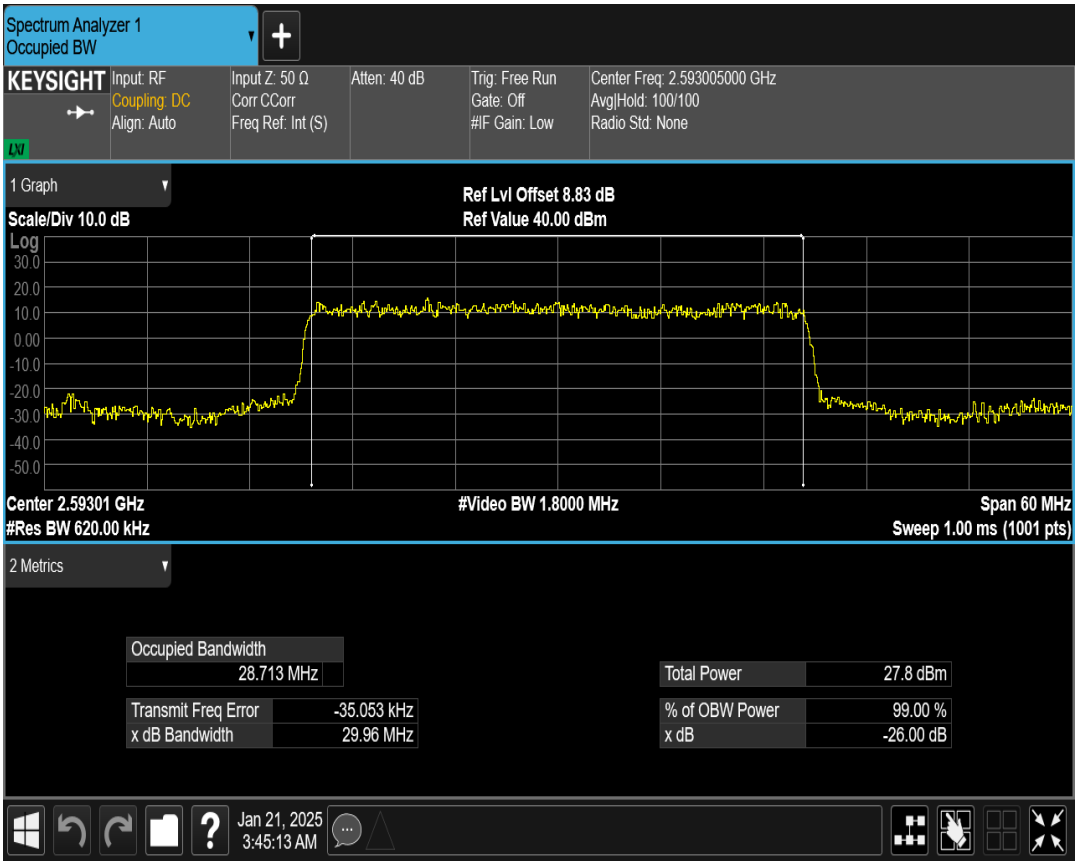
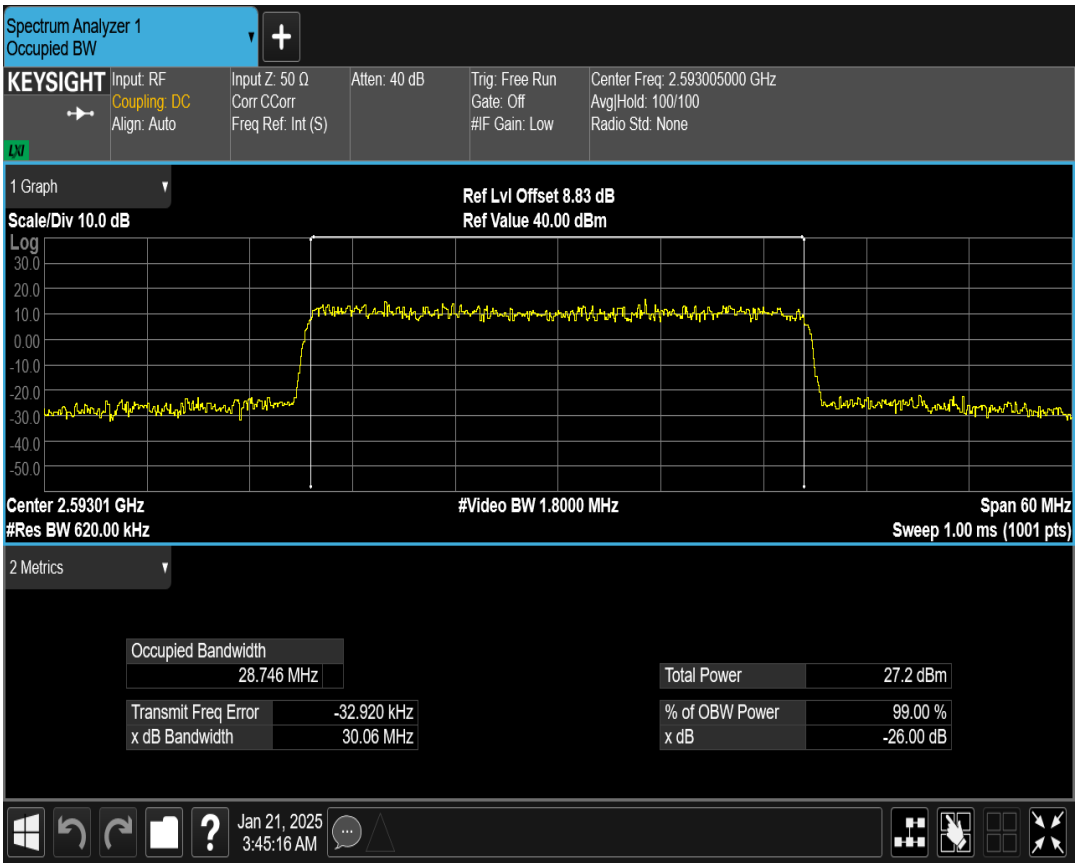


n41 SCS=15kHz DFT_BPSK BW=30MHz Channel=518601 RB=160@0



n41 SCS=15kHz DFT_QPSK BW=30MHz Channel=518601 RB=160@0



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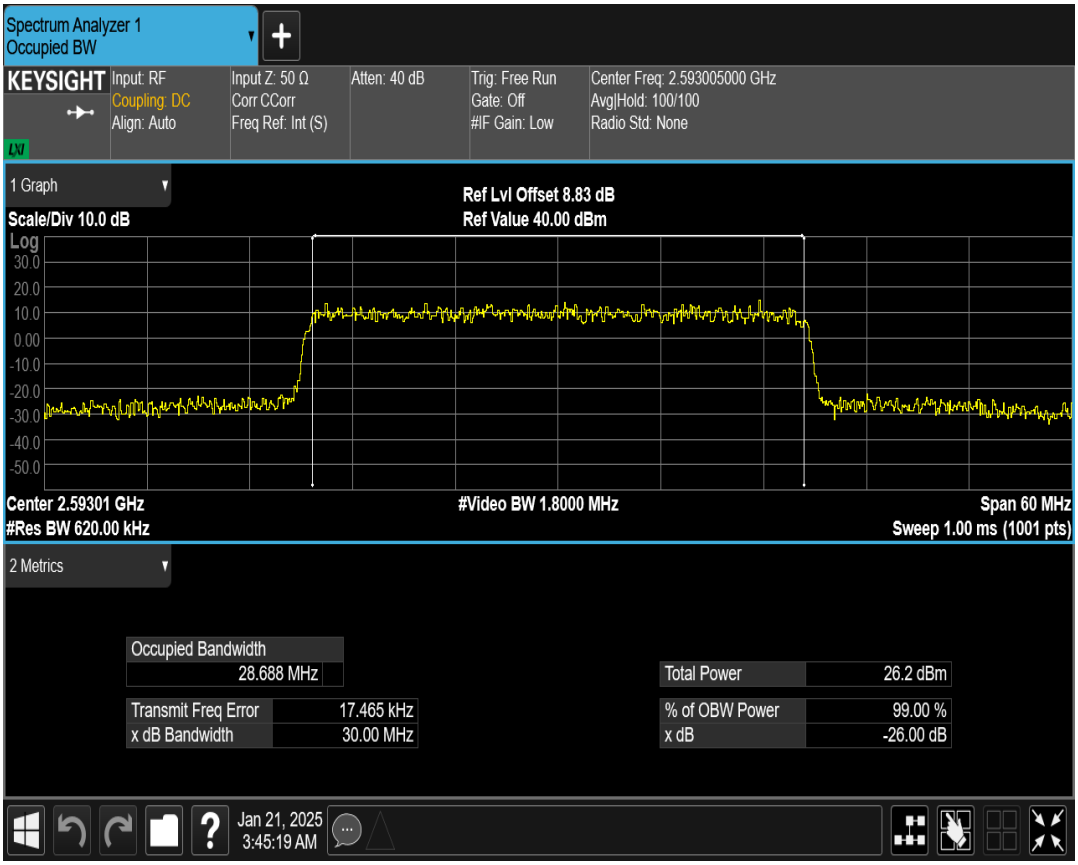
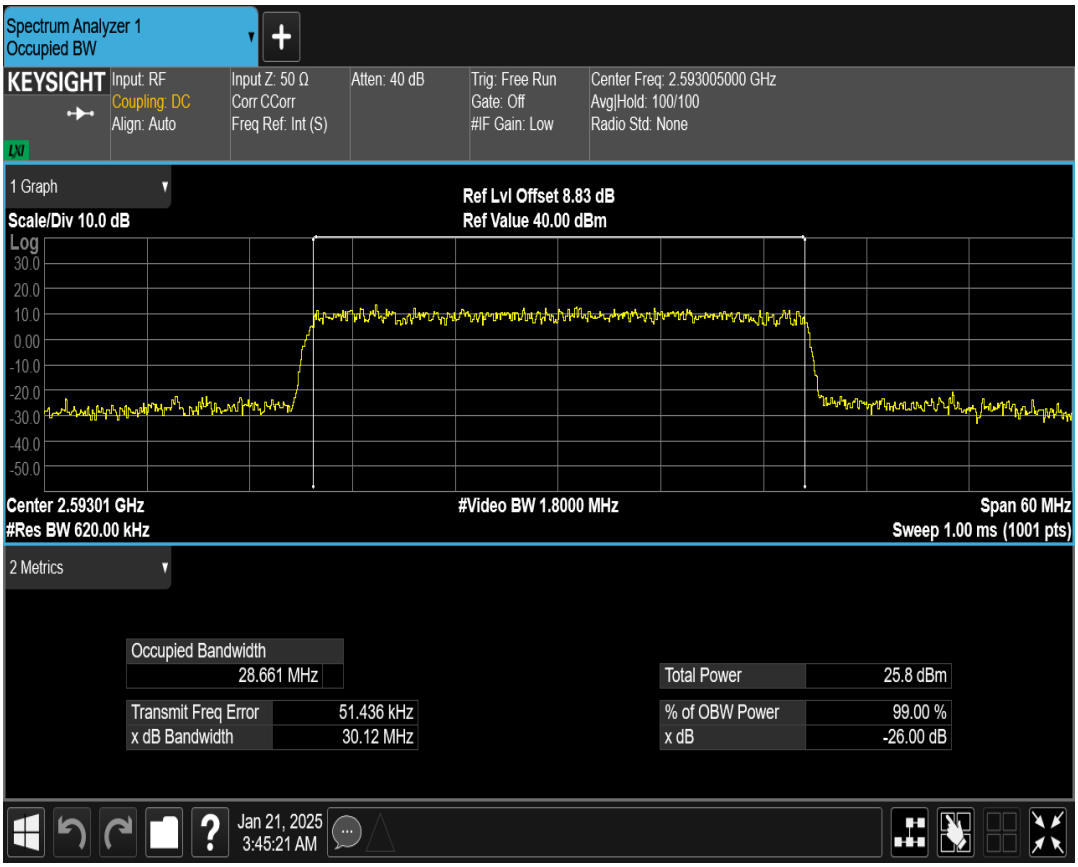
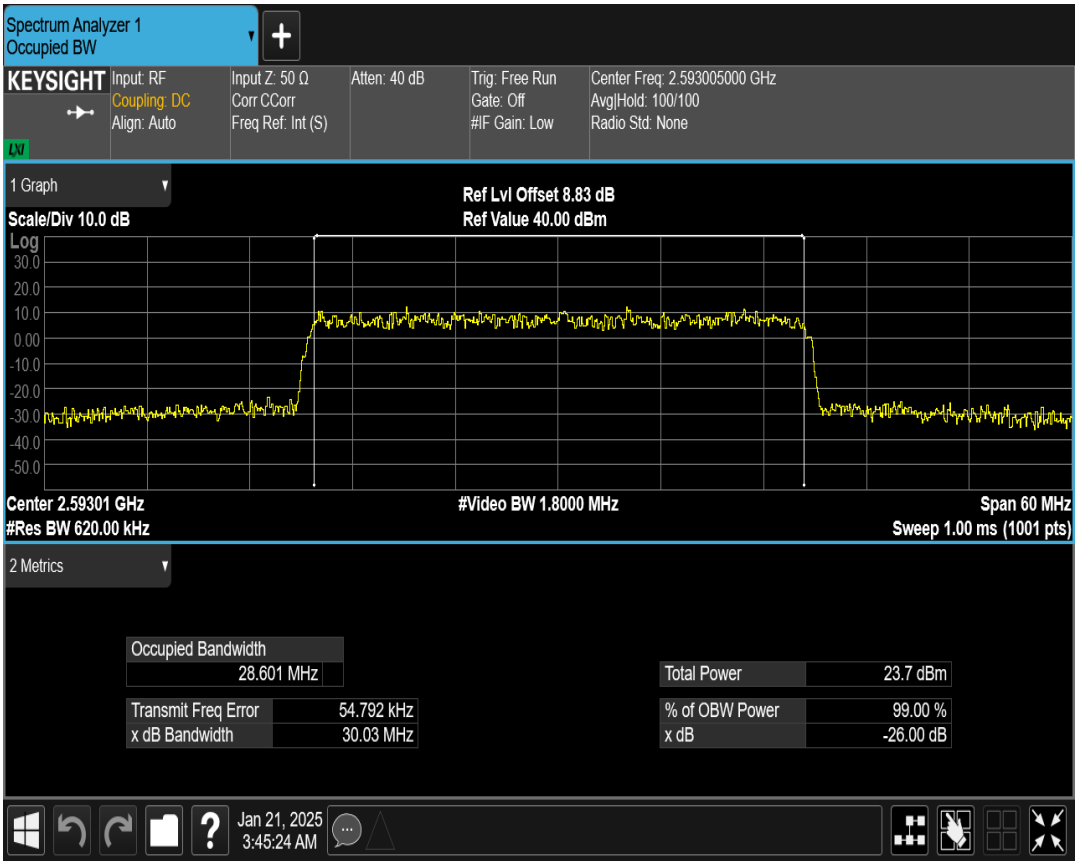


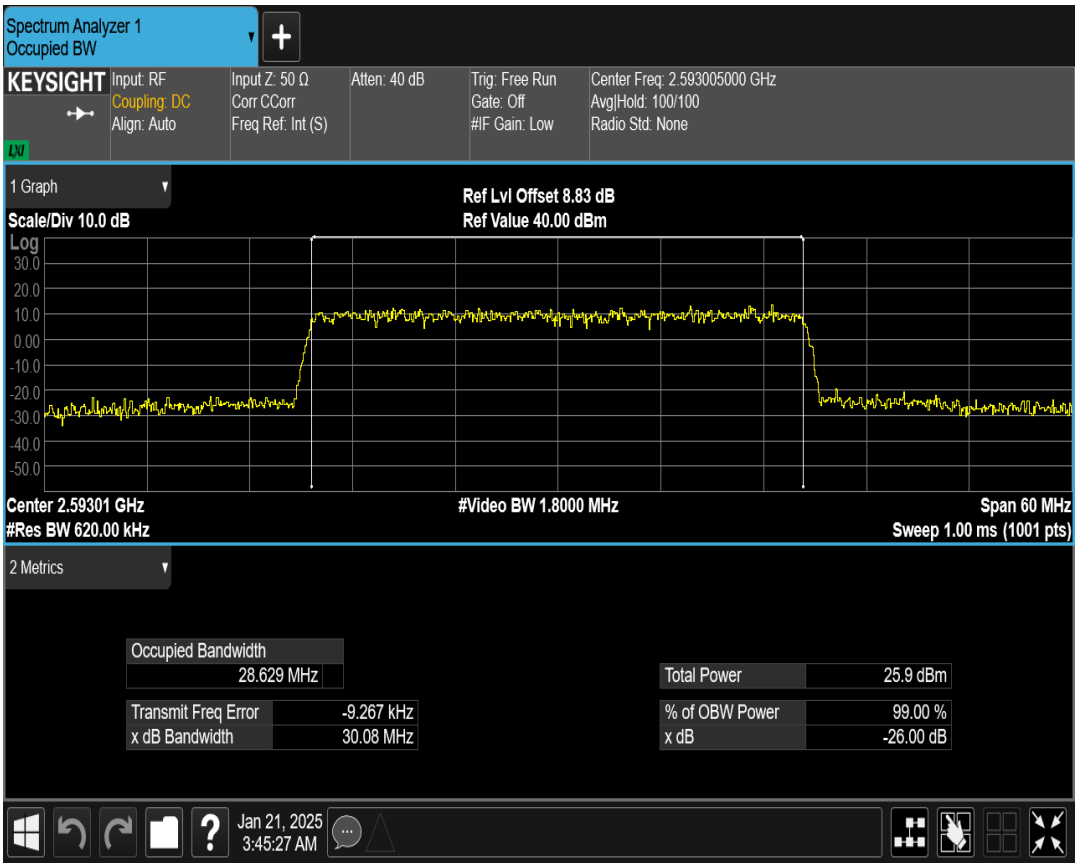
n41 SCS=15kHz DFT_QAM64 BW=30MHz Channel=518601 RB=160@0



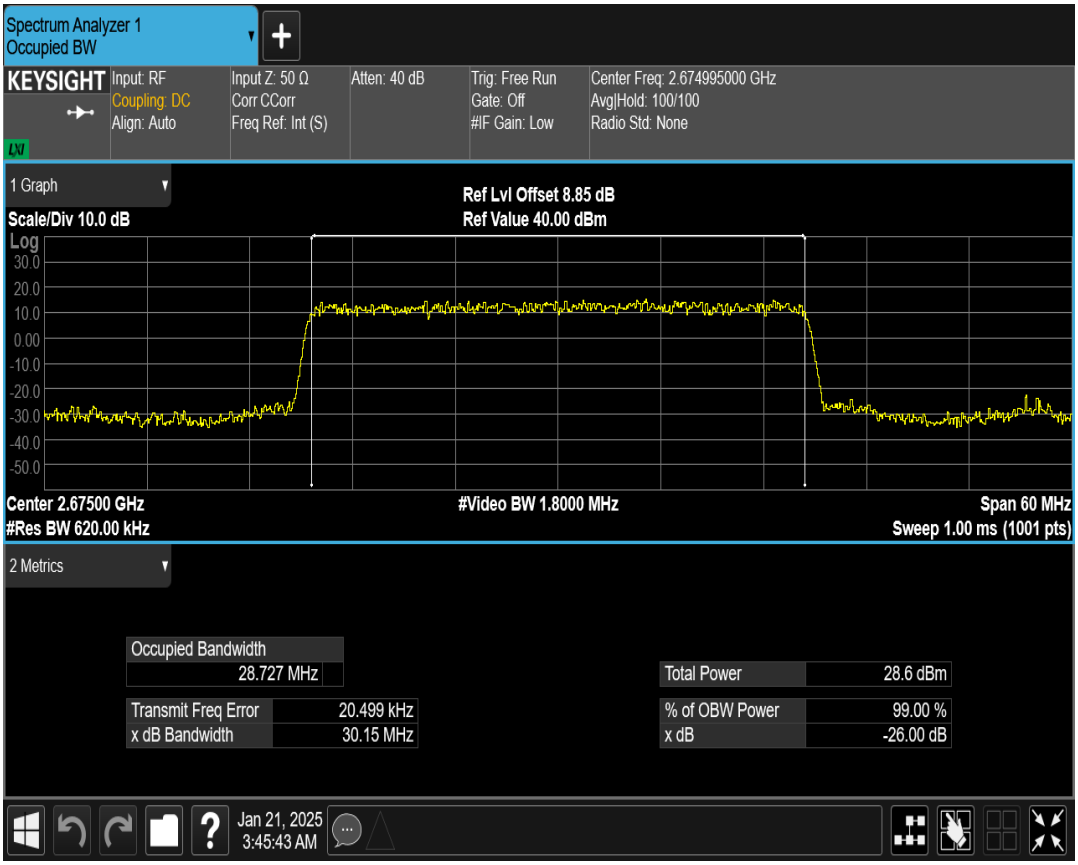
n41 SCS=15kHz DFT_QAM256 BW=30MHz Channel=518601 RB=160@0



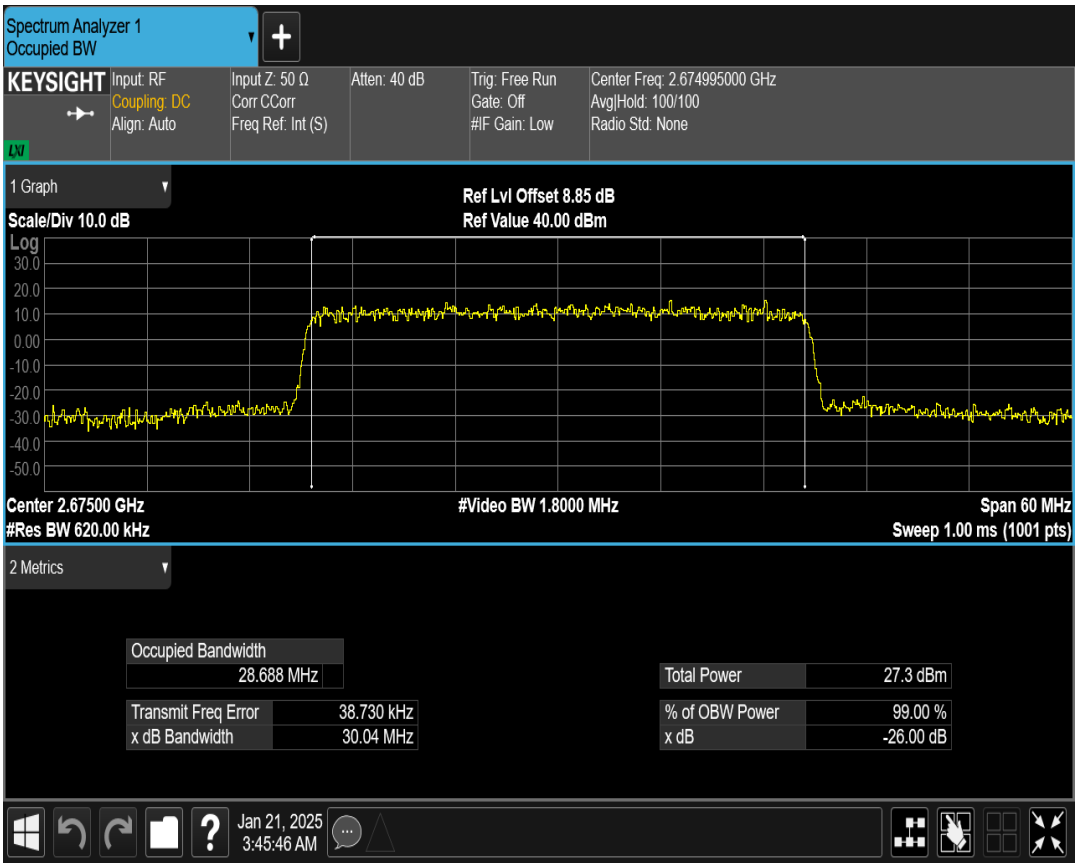
n41 SCS=15kHz CP_QPSK BW=30MHz Channel=518601 RB=160@0



n41 SCS=15kHz DFT_BPSK BW=30MHz Channel=534999 RB=160@0



n41 SCS=15kHz DFT_QPSK BW=30MHz Channel=534999 RB=160@0



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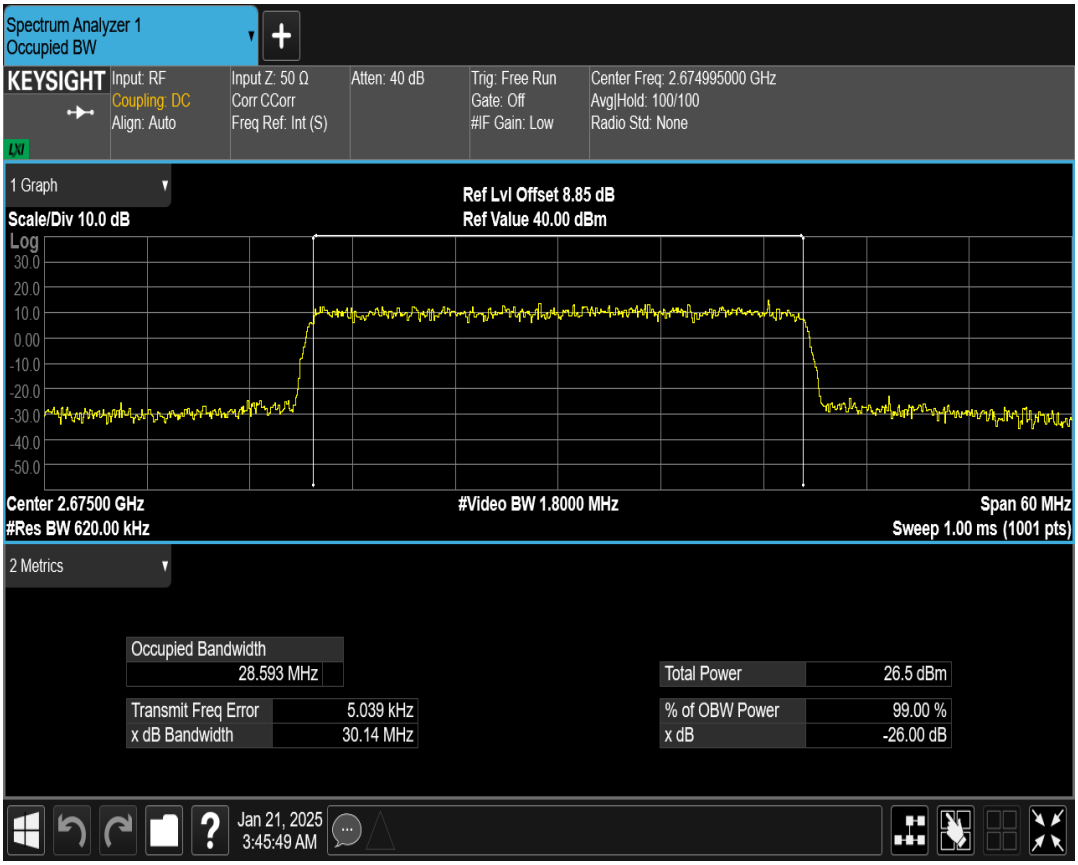

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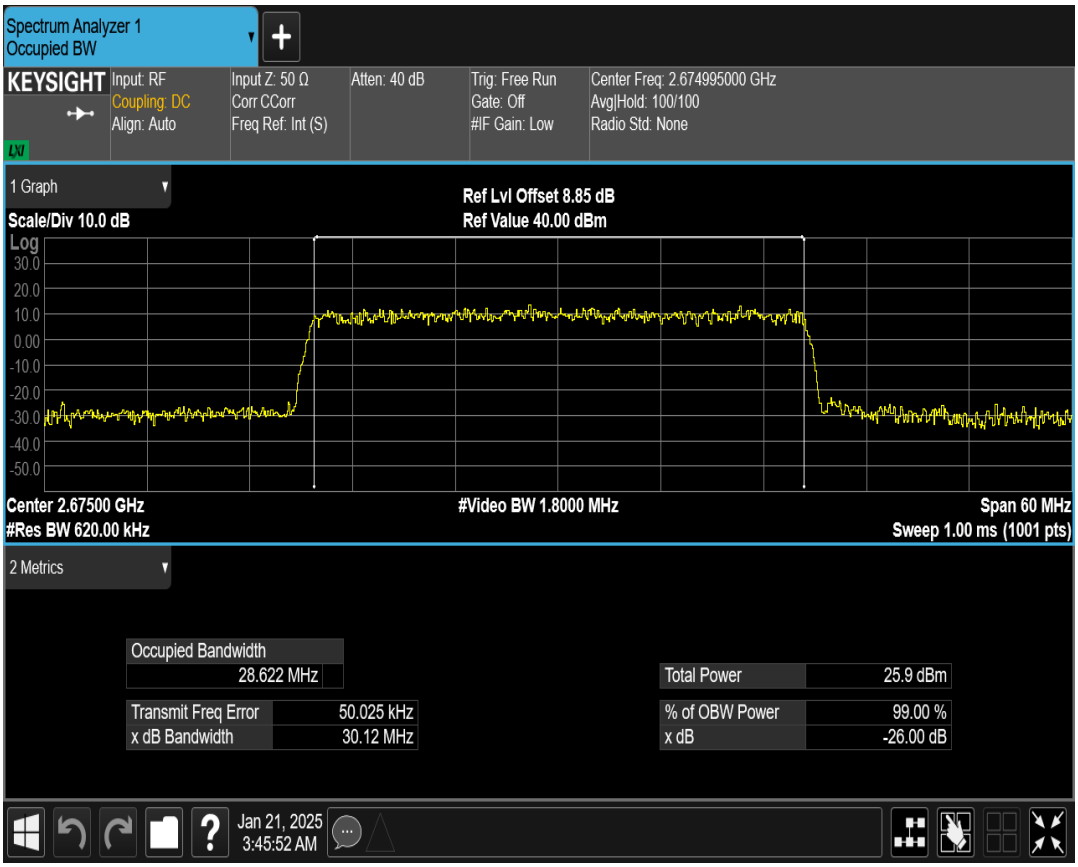

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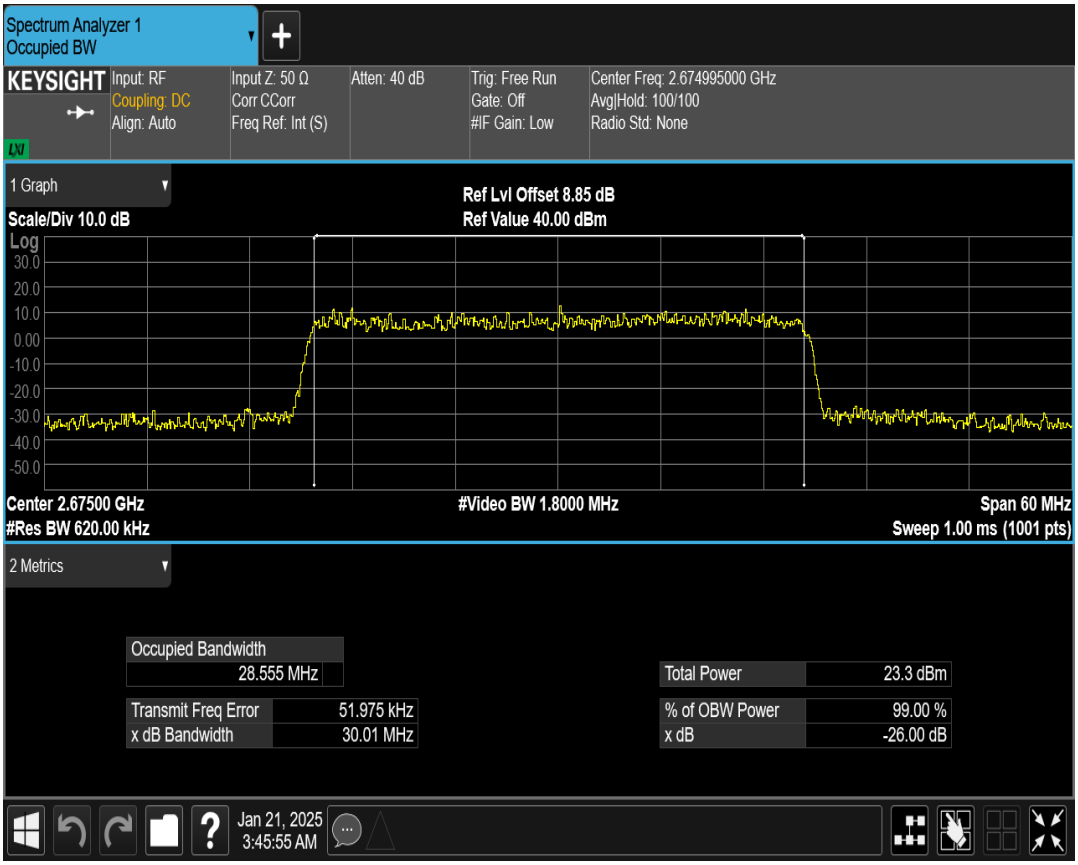
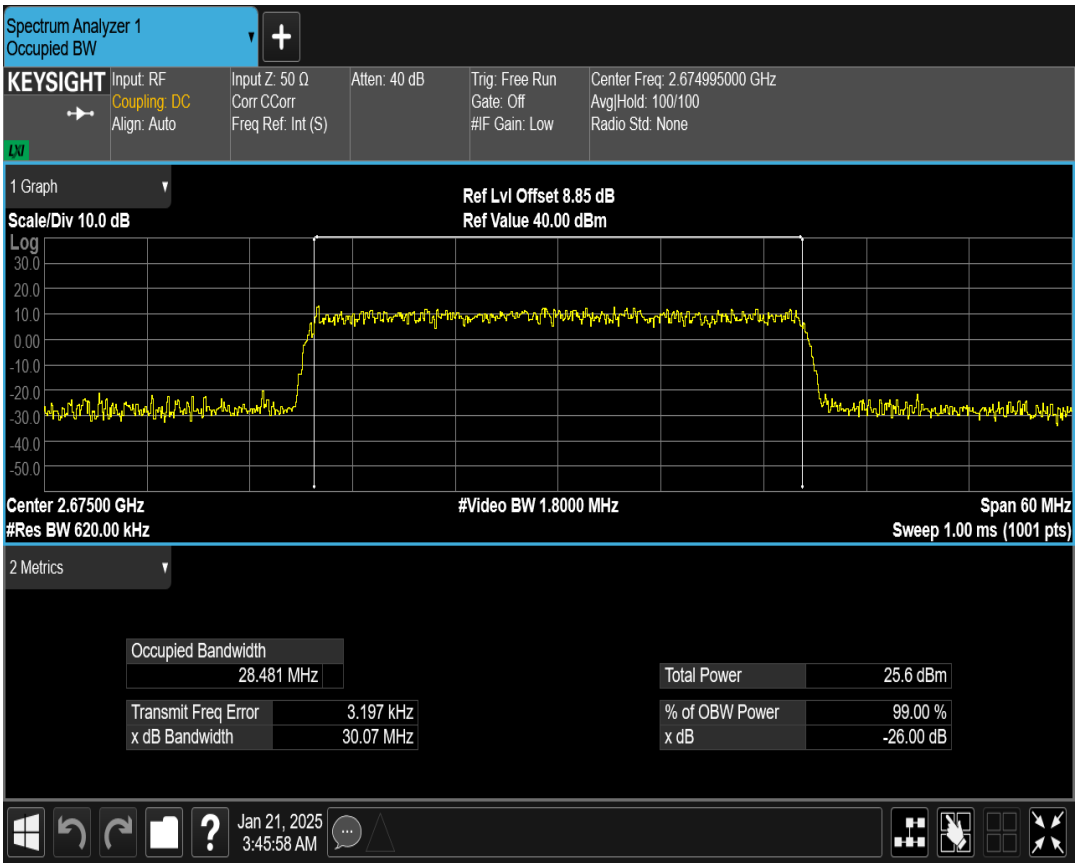
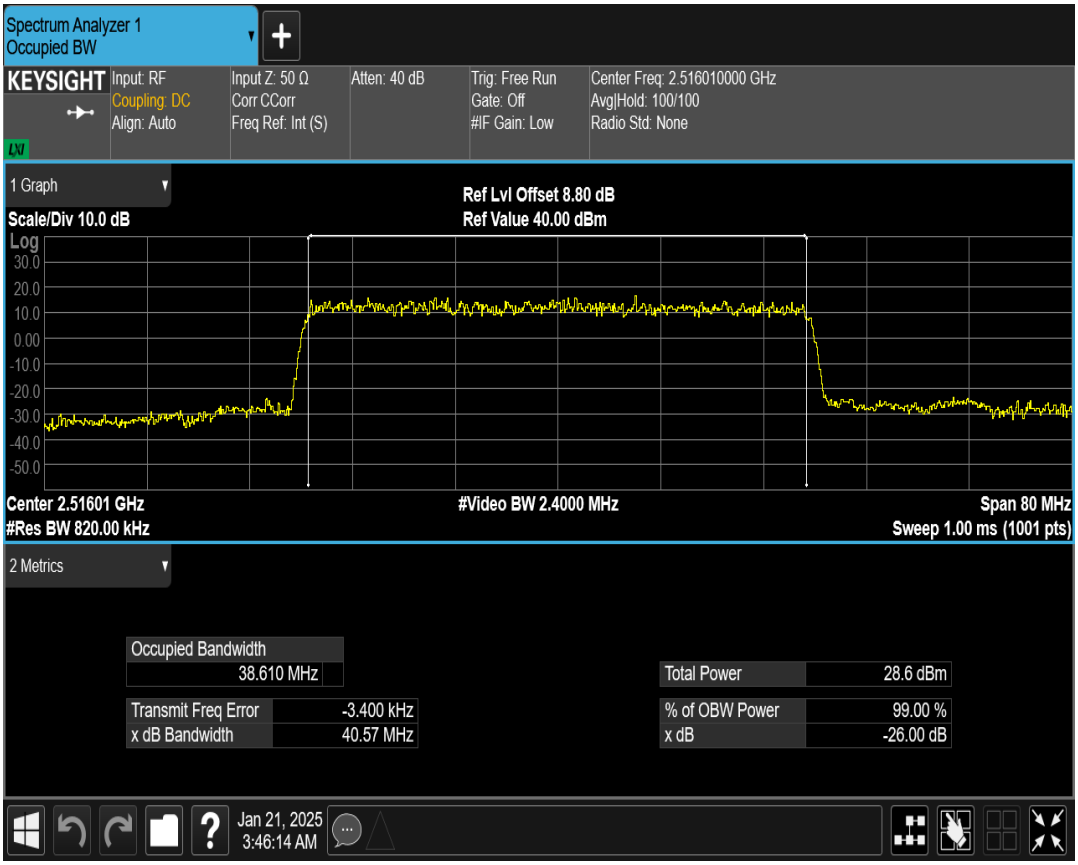


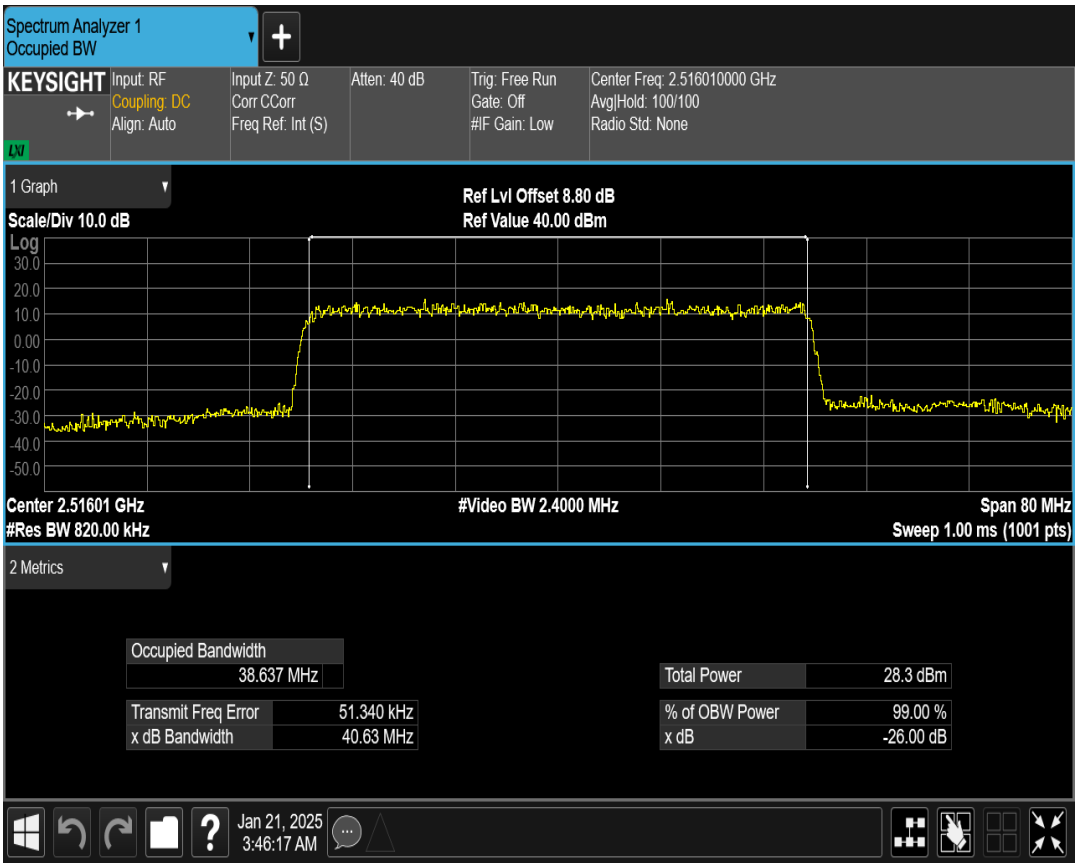
n41 SCS=15kHz CP_QPSK BW=30MHz Channel=534999 RB=160@0



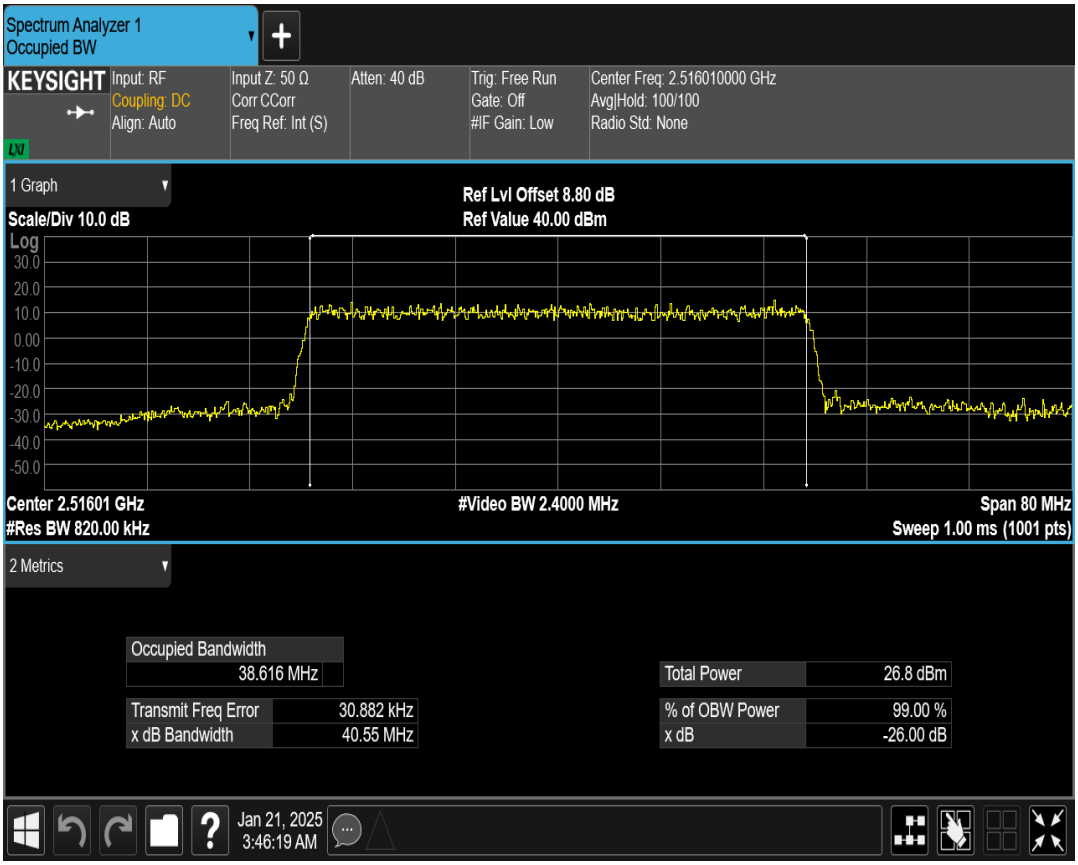
n41 SCS=15kHz DFT_BPSK BW=40MHz Channel=503202 RB=216@0



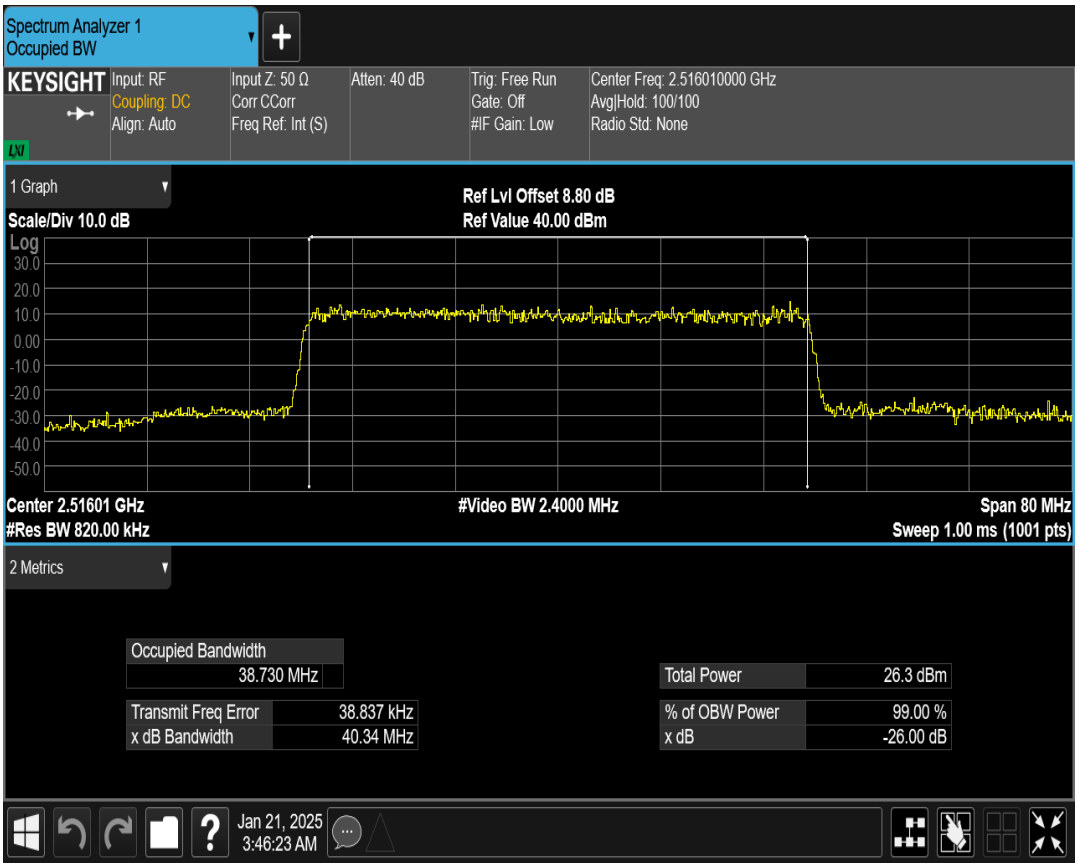
n41 SCS=15kHz DFT_QPSK BW=40MHz Channel=503202 RB=216@0



n41 SCS=15kHz DFT_QAM16 BW=40MHz Channel=503202 RB=216@0



n41 SCS=15kHz DFT_QAM64 BW=40MHz Channel=503202 RB=216@0



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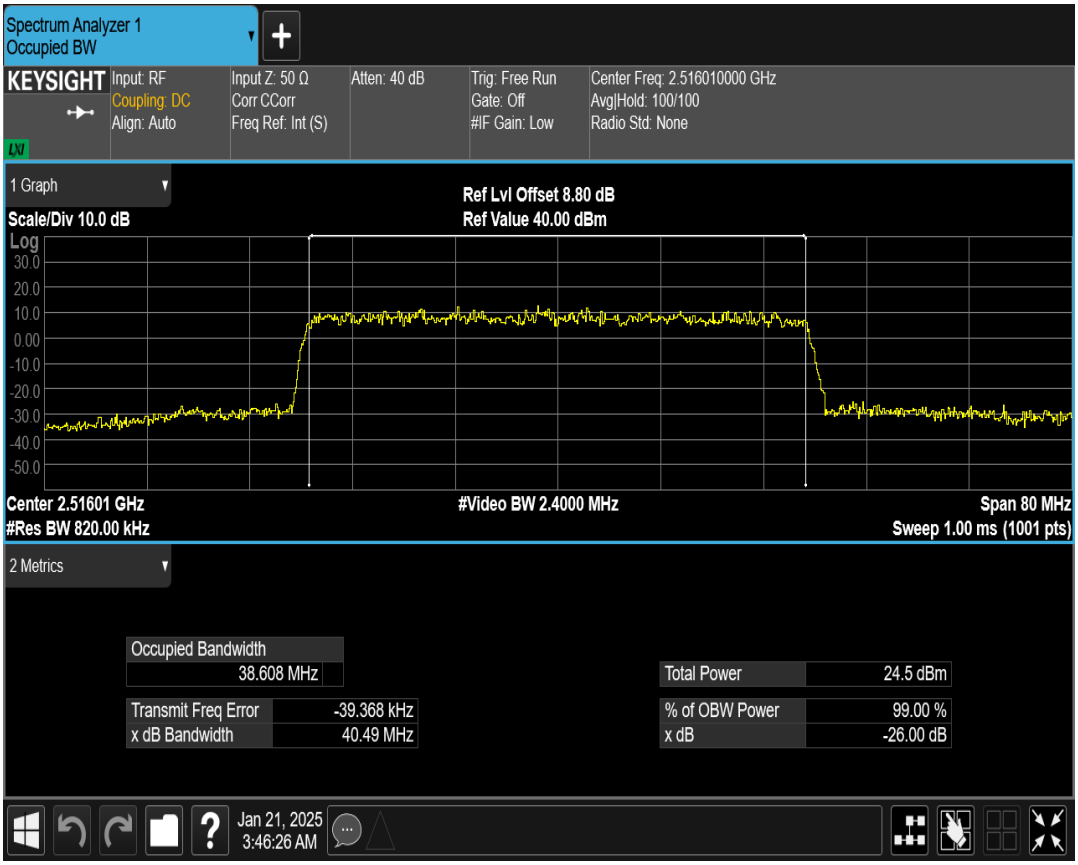
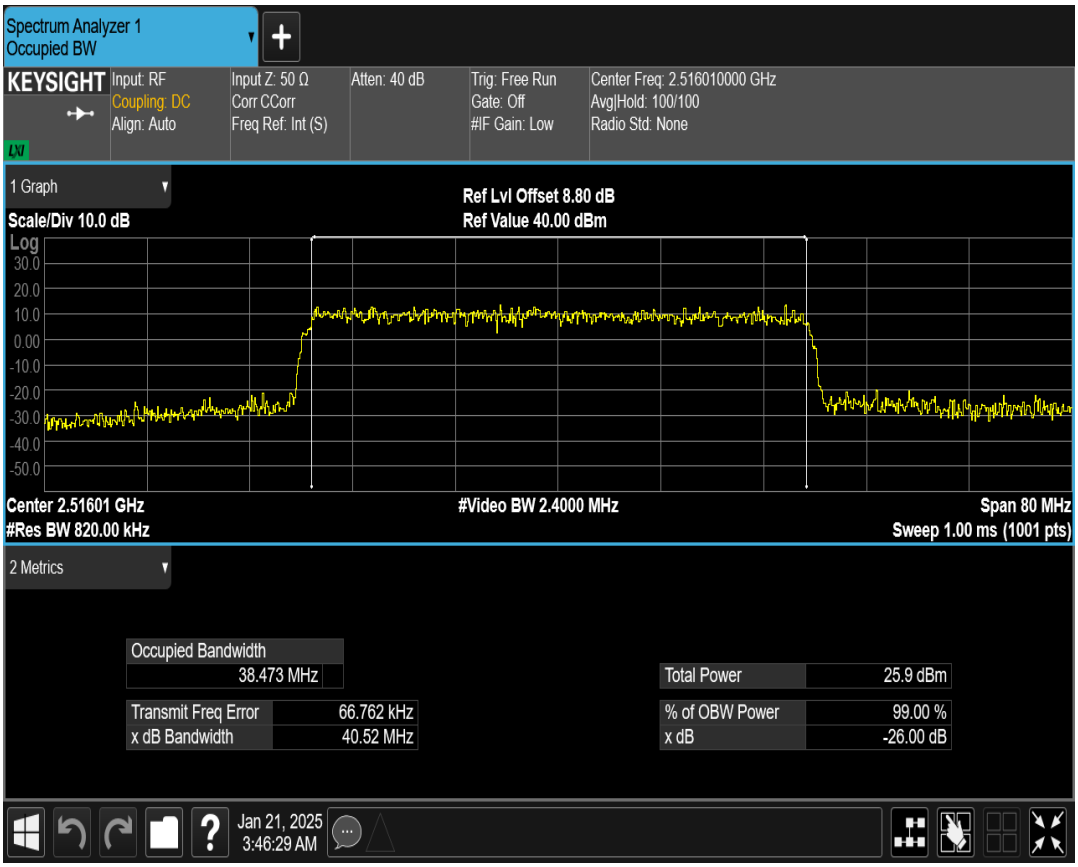
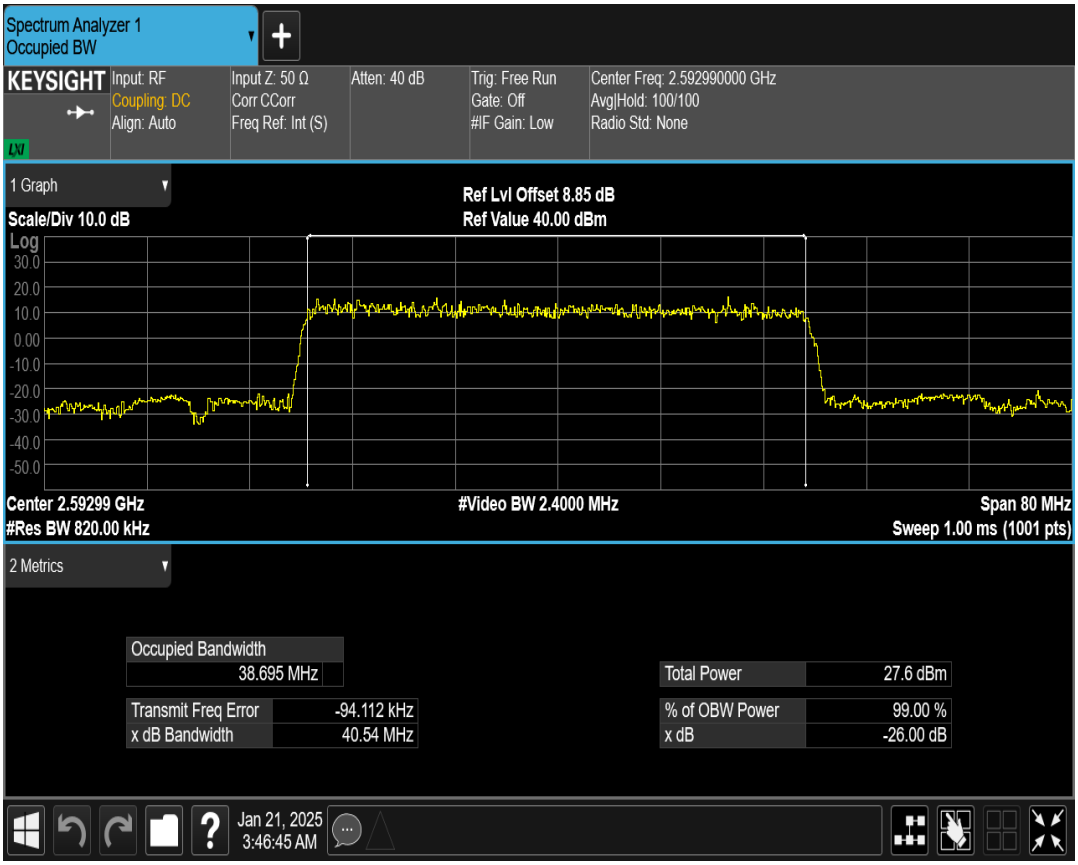


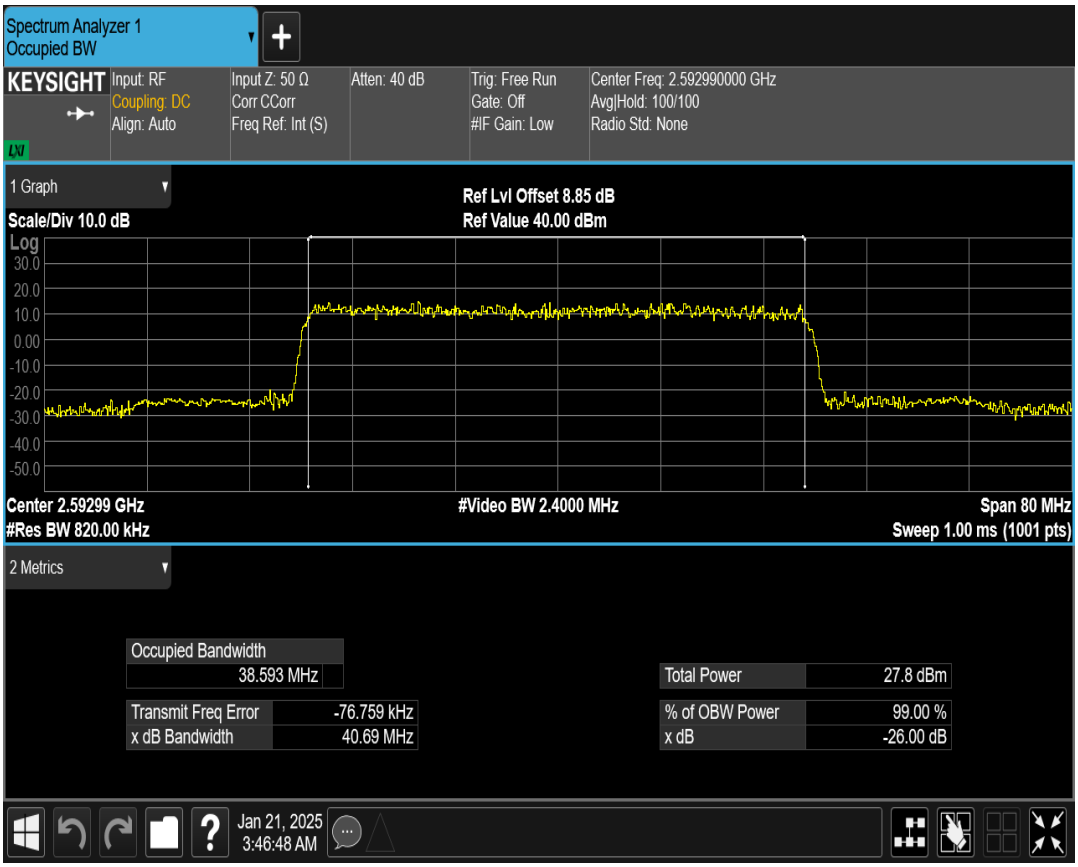
n41 SCS=15kHz CP_QPSK BW=40MHz Channel=503202 RB=216@0



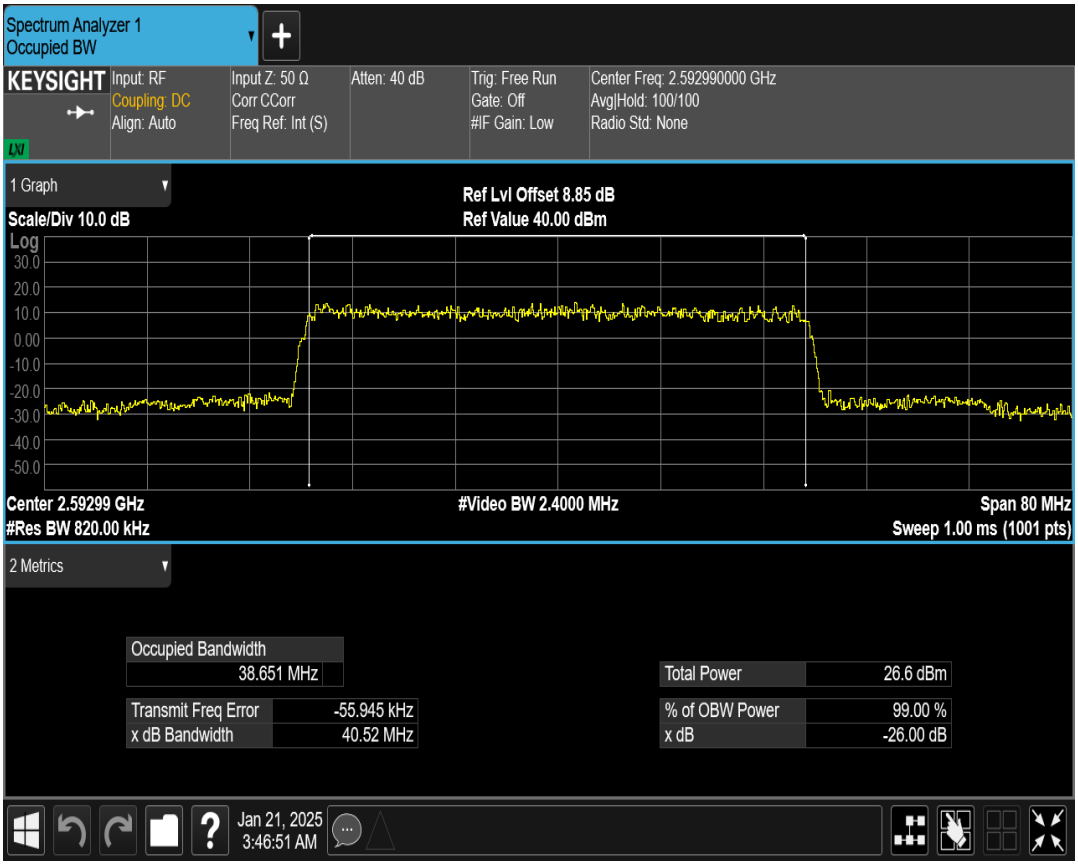
n41 SCS=15kHz DFT_BPSK BW=40MHz Channel=518598 RB=216@0



n41 SCS=15kHz DFT_QPSK BW=40MHz Channel=518598 RB=216@0



n41 SCS=15kHz DFT_QAM16 BW=40MHz Channel=518598 RB=216@0



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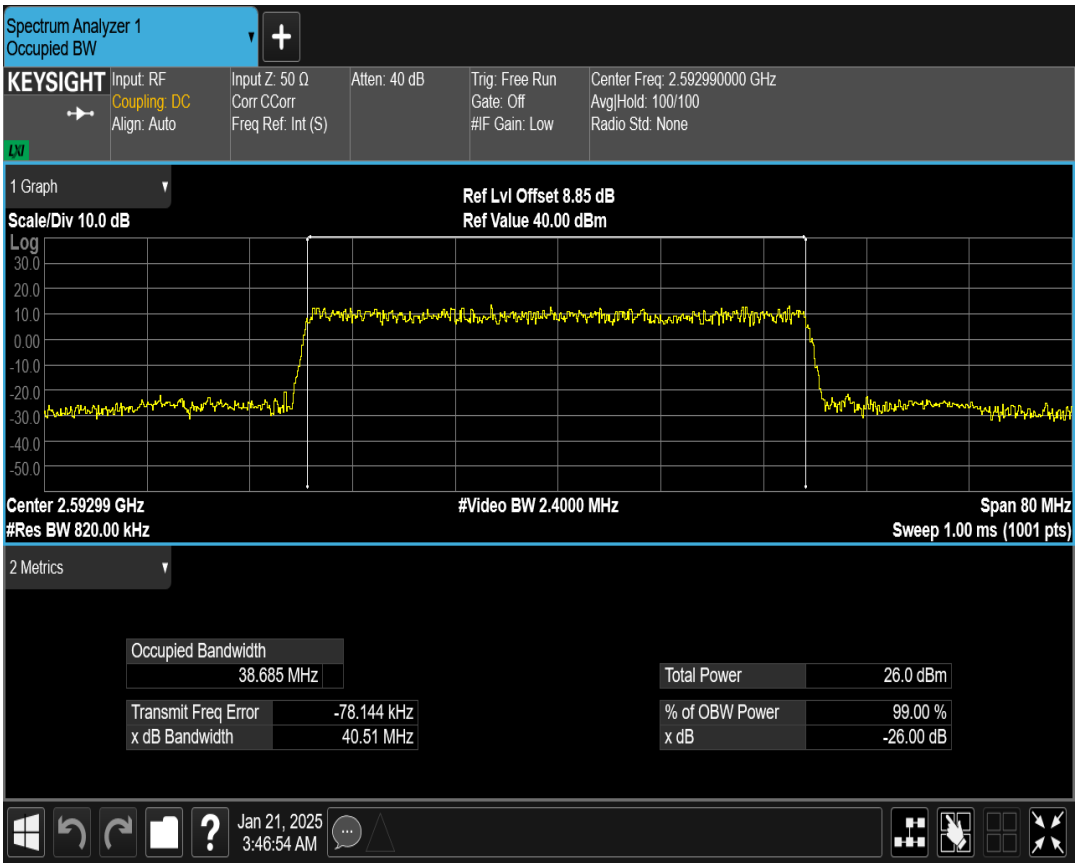

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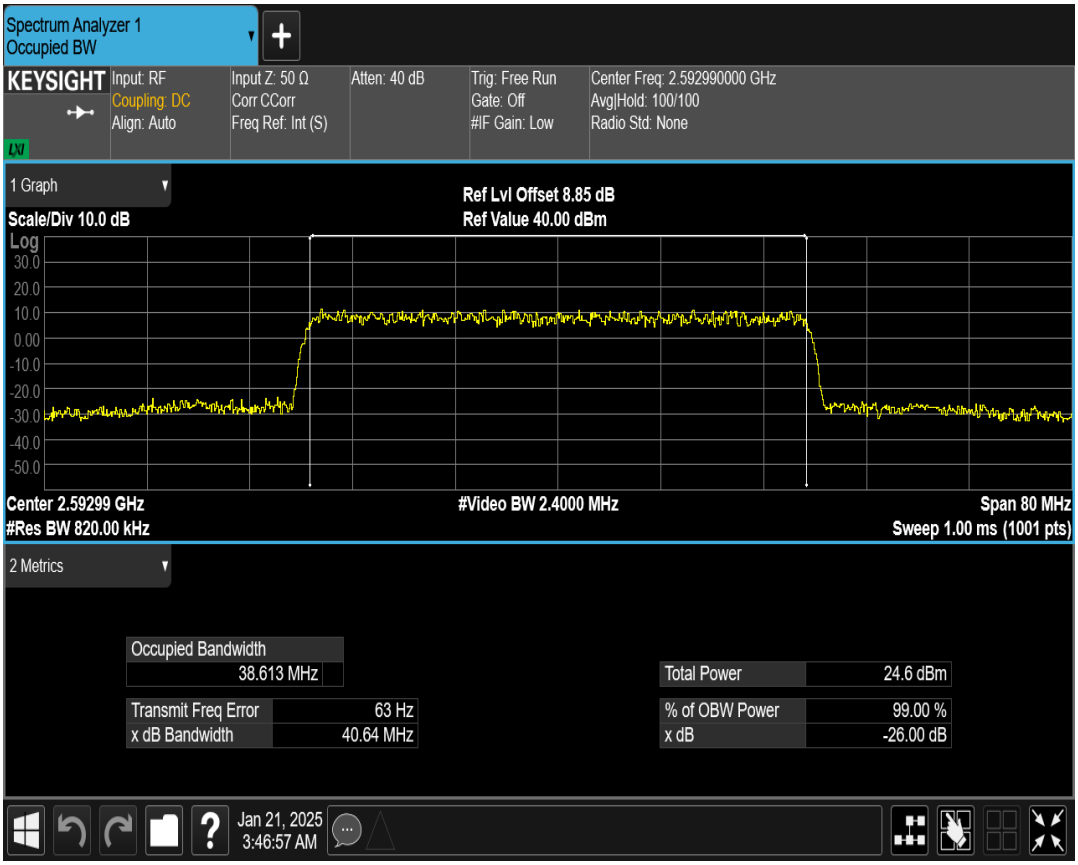

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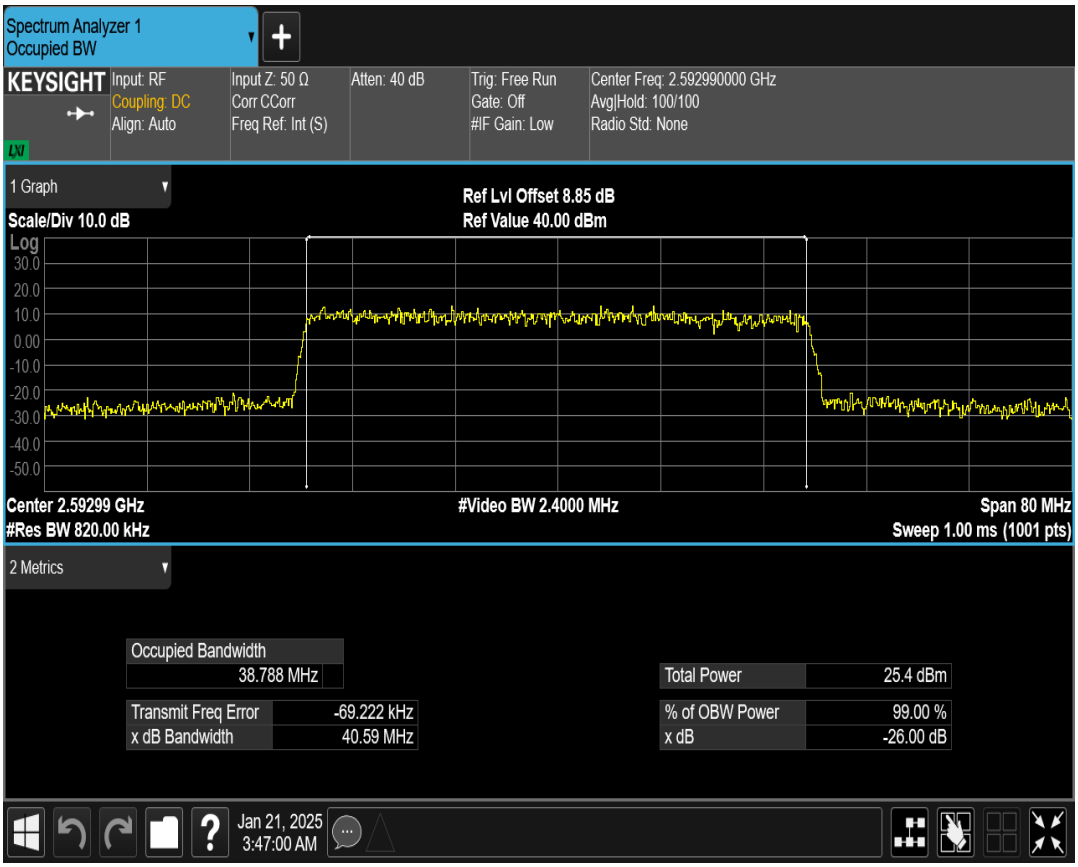
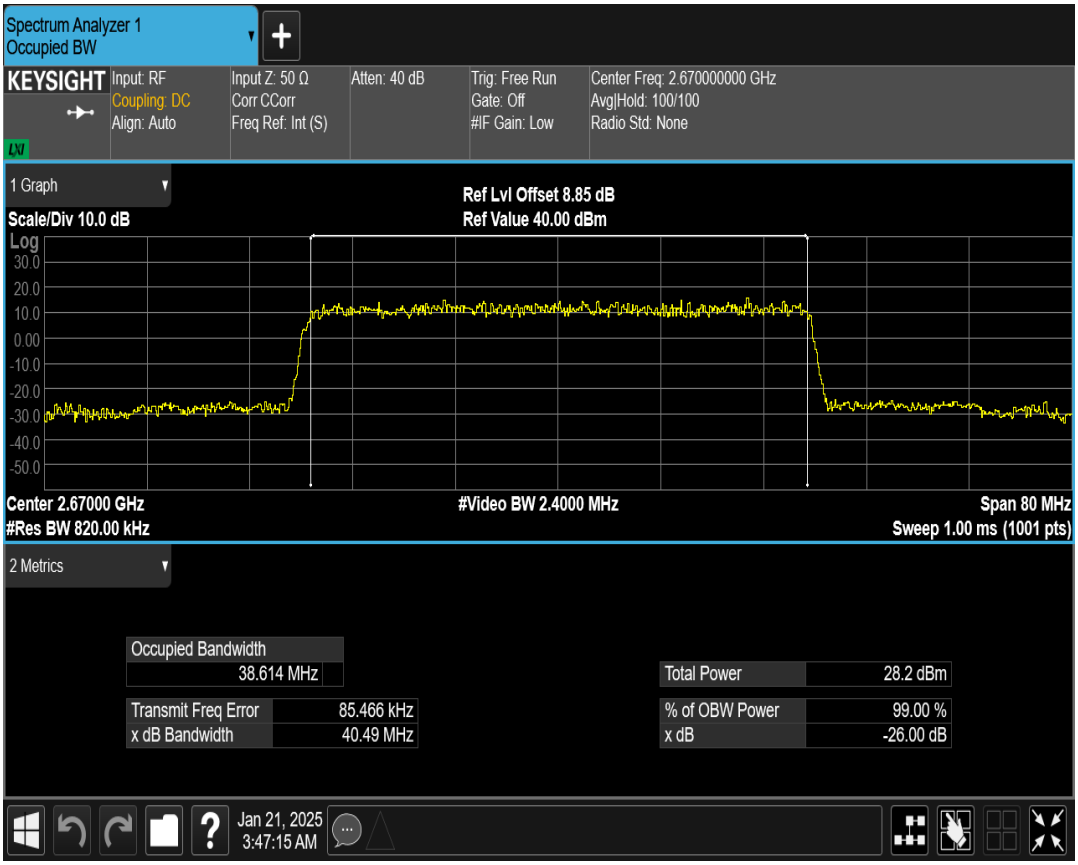
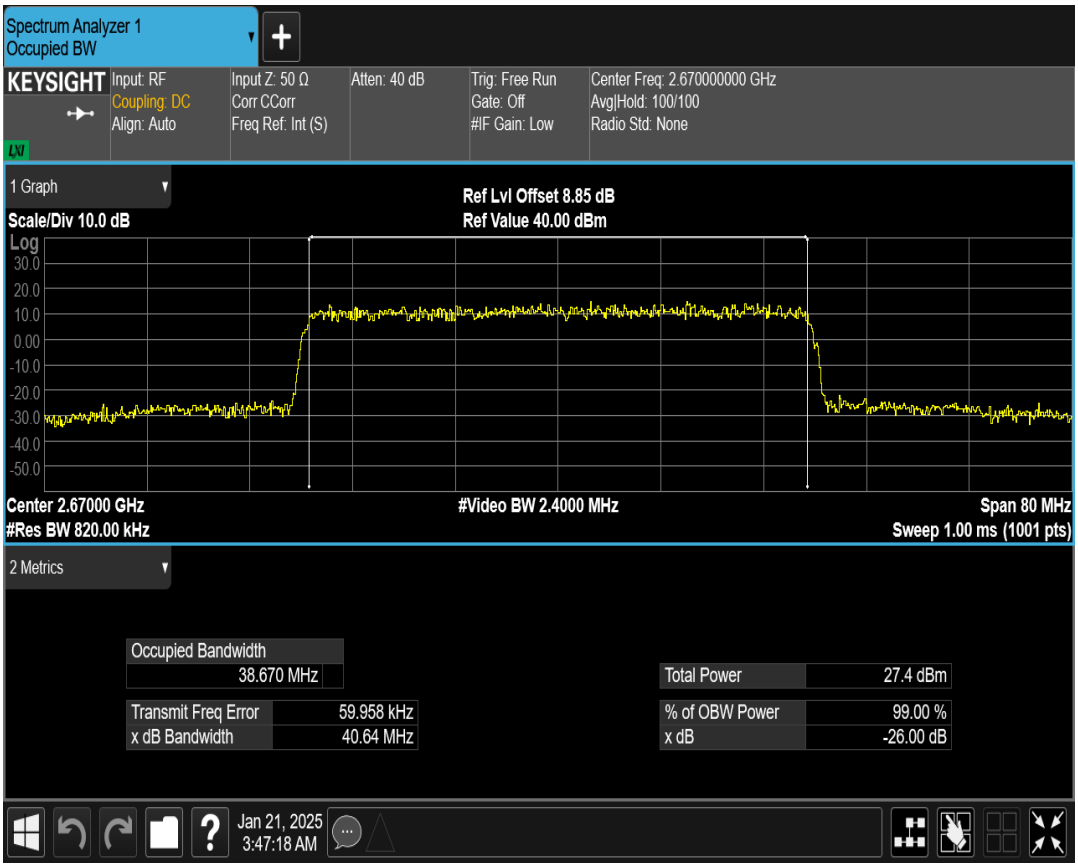


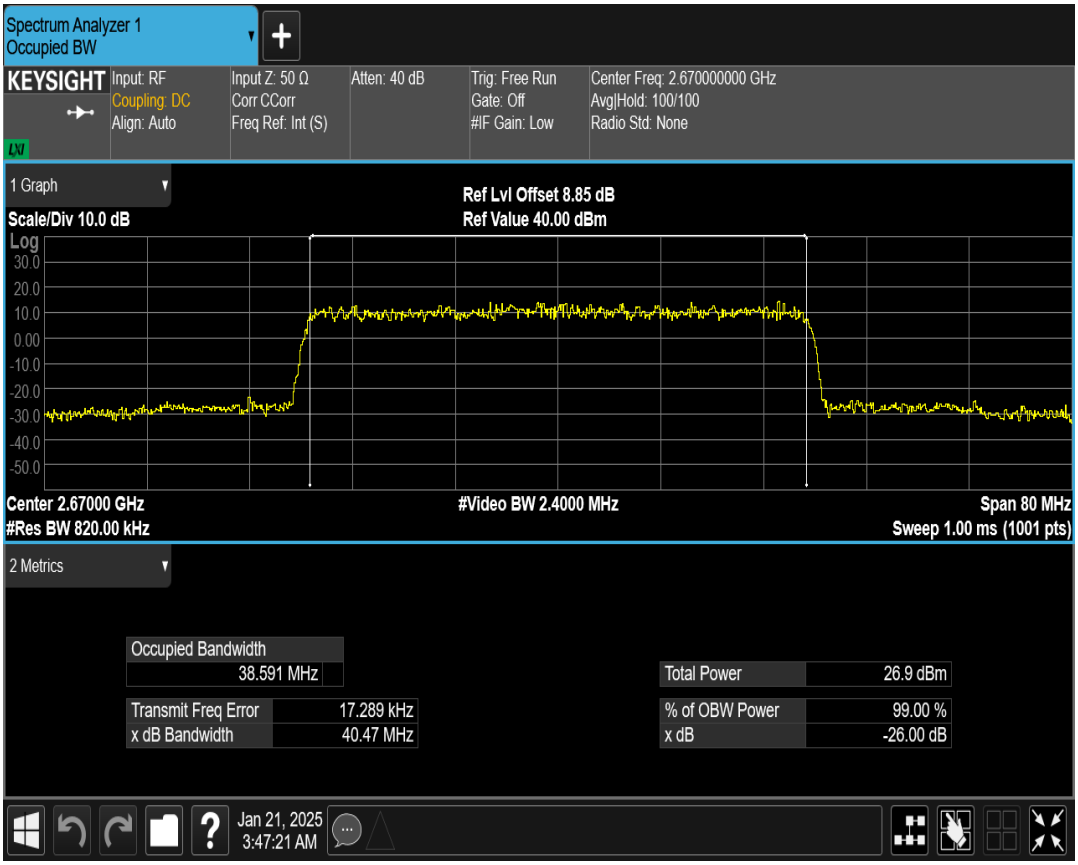
n41 SCS=15kHz DFT_BPSK BW=40MHz Channel=534000 RB=216@0



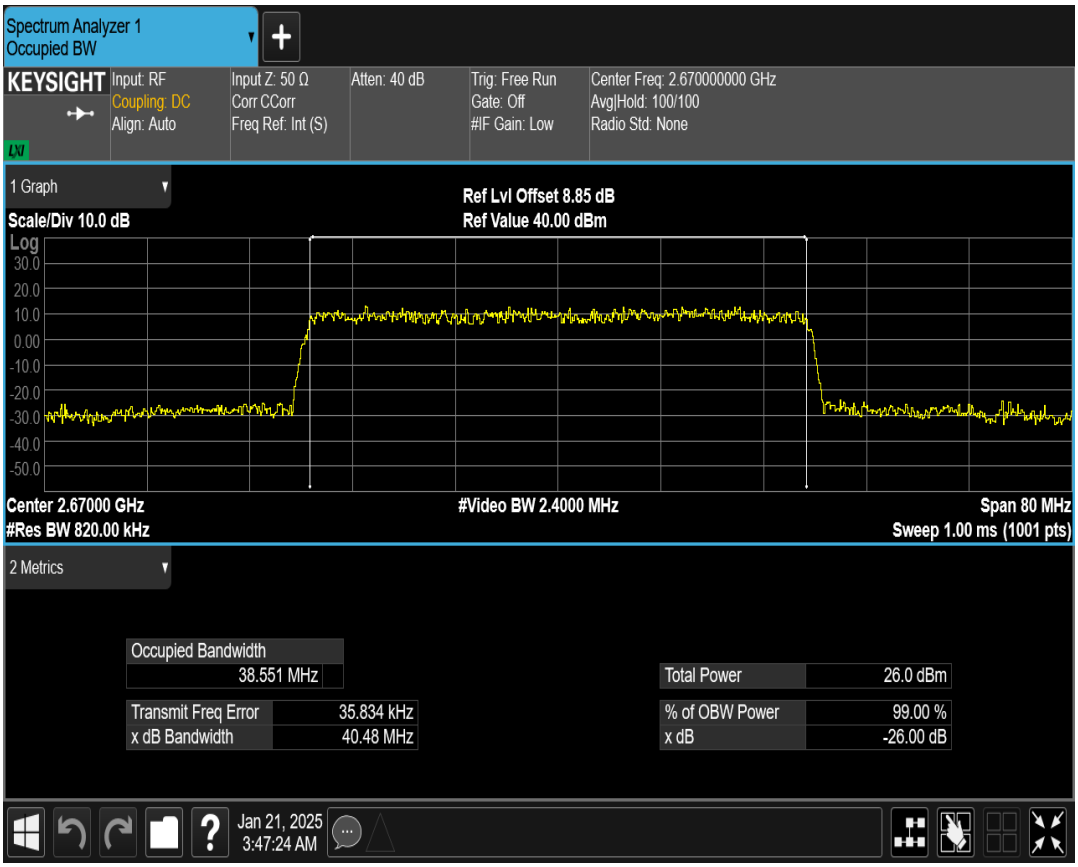
n41 SCS=15kHz DFT_QPSK BW=40MHz Channel=534000 RB=216@0



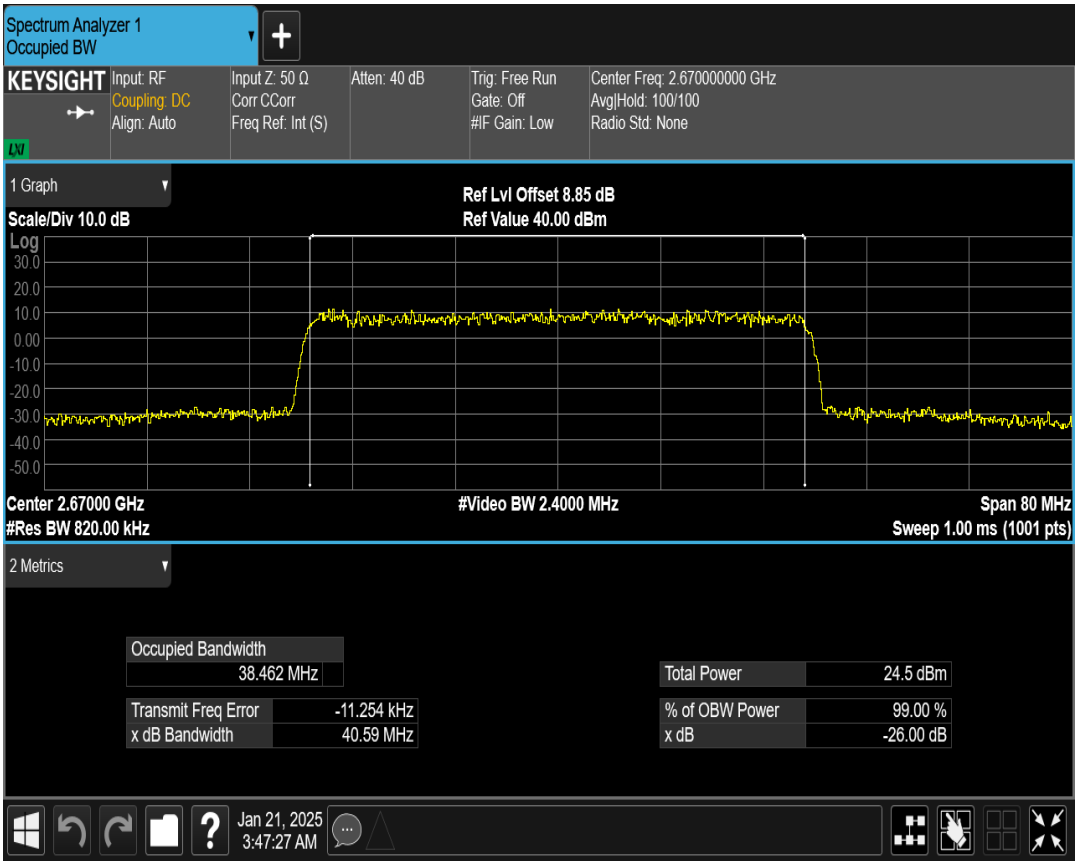
n41 SCS=15kHz DFT_QAM16 BW=40MHz Channel=534000 RB=216@0



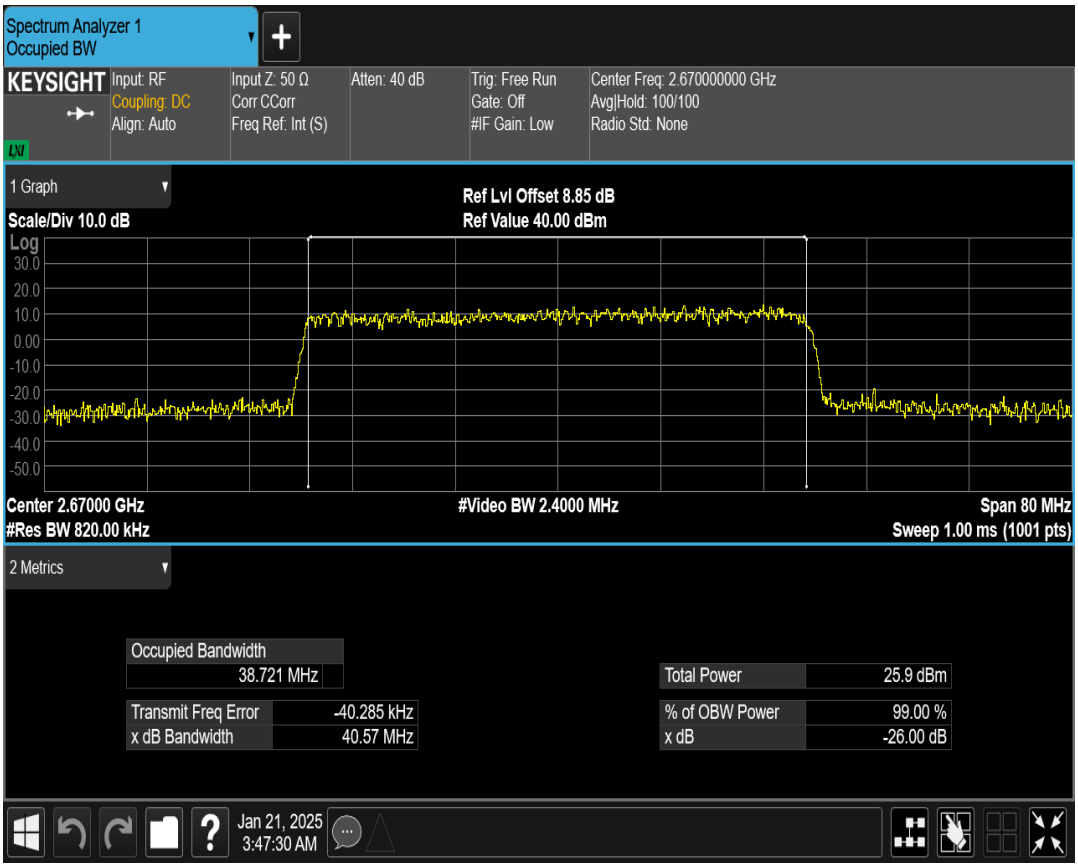
n41 SCS=15kHz DFT_QAM64 BW=40MHz Channel=534000 RB=216@0



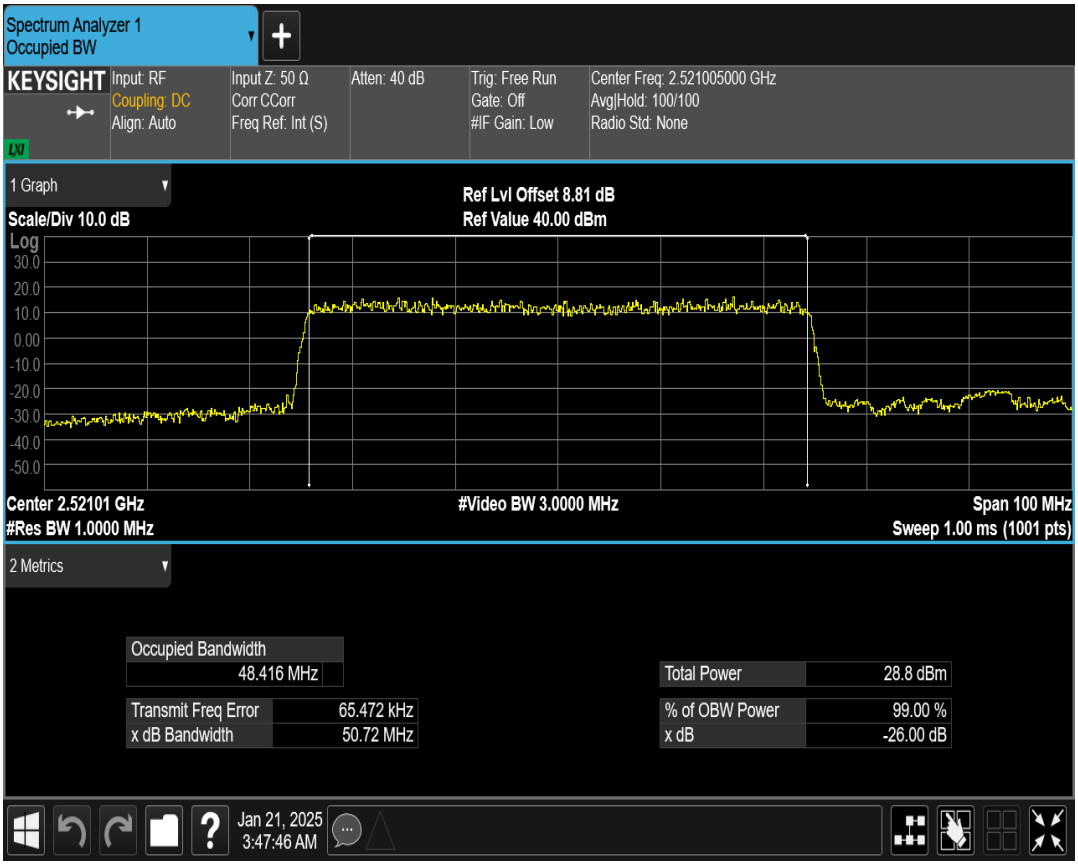
n41 SCS=15kHz DFT_QAM256 BW=40MHz Channel=534000 RB=216@0



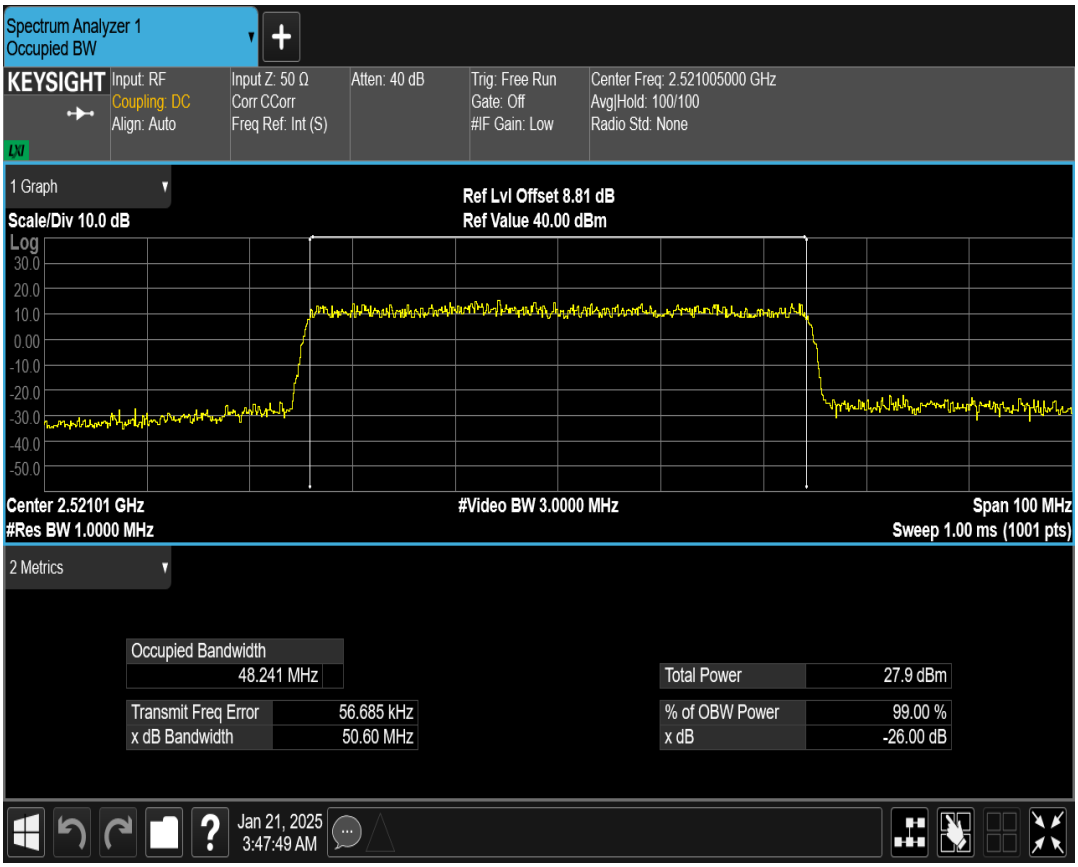
n41 SCS=15kHz CP_QPSK BW=40MHz Channel=534000 RB=216@0



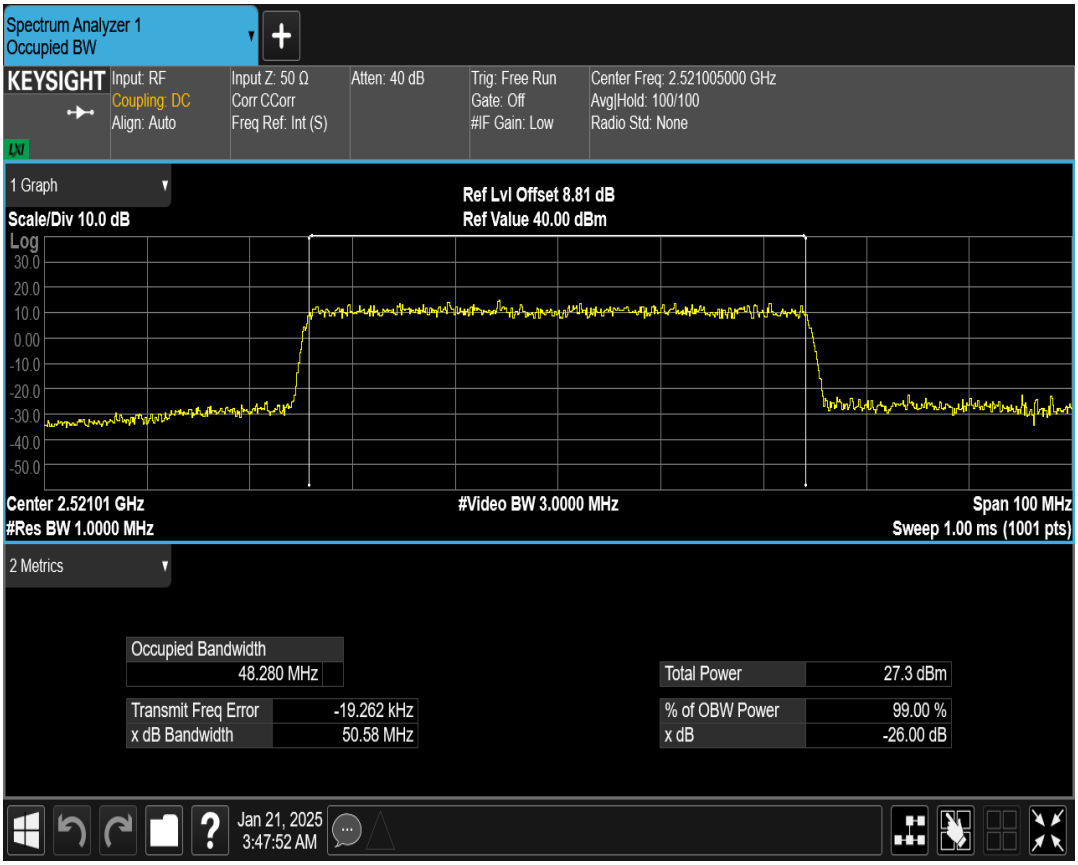
n41 SCS=15kHz DFT_BPSK BW=50MHz Channel=504201 RB=270@0



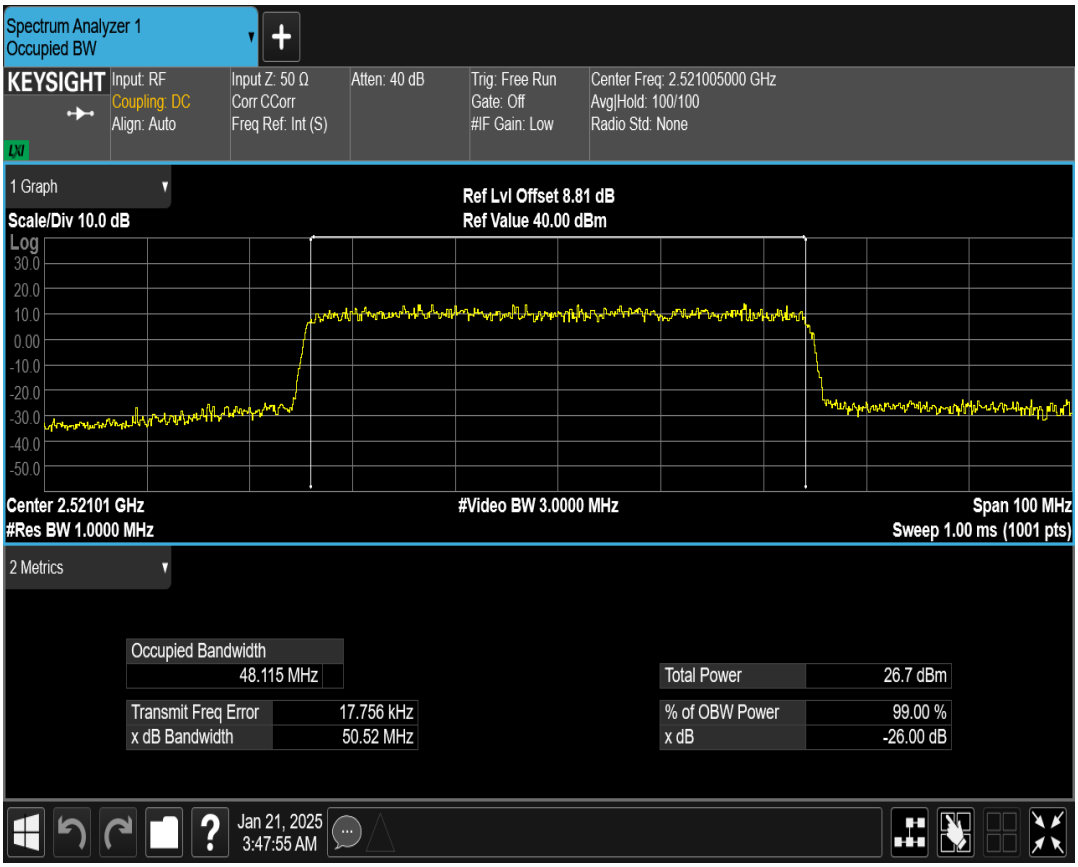
n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=504201 RB=270@0



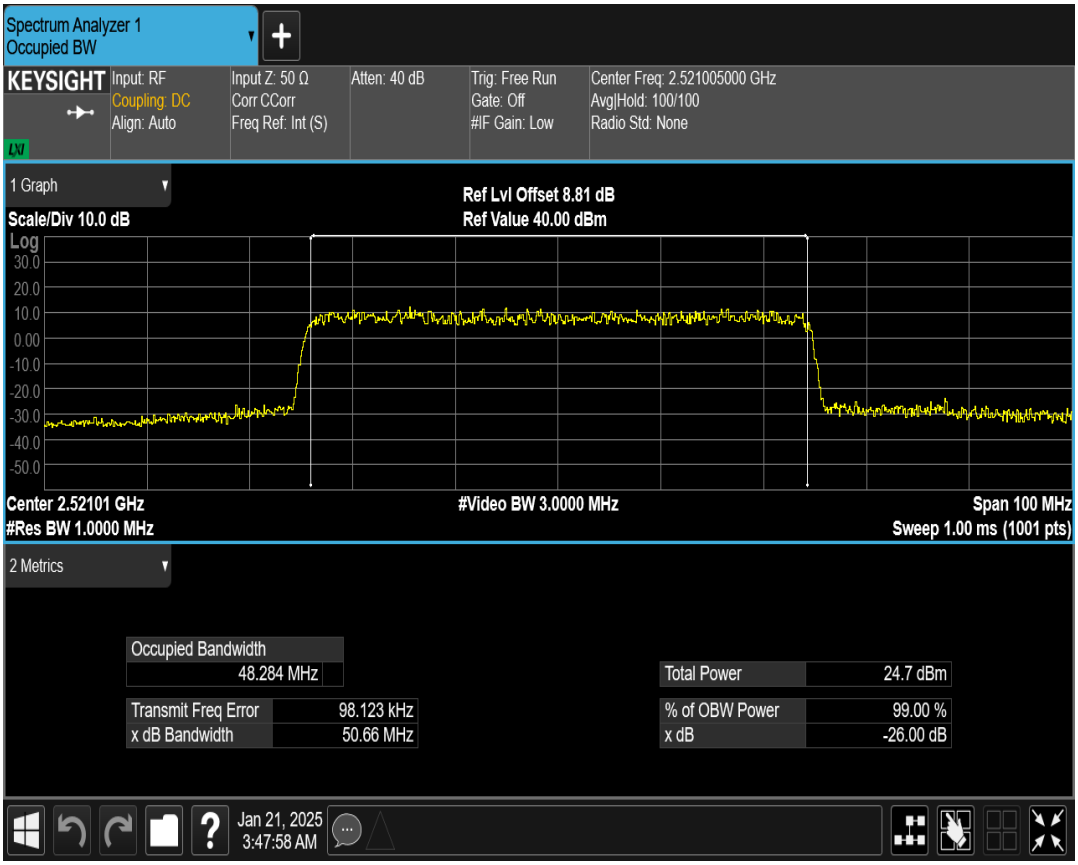
n41 SCS=15kHz DFT_QAM16 BW=50MHz Channel=504201 RB=270@0



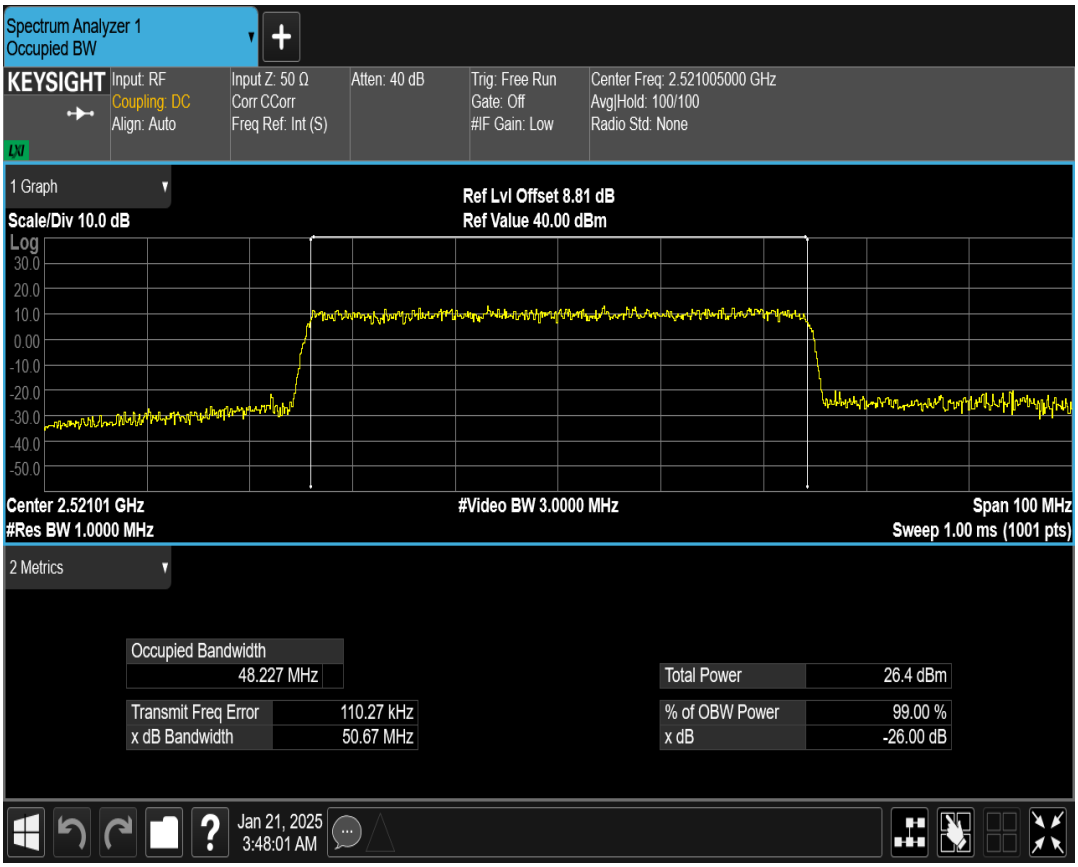
n41 SCS=15kHz DFT_QAM64 BW=50MHz Channel=504201 RB=270@0



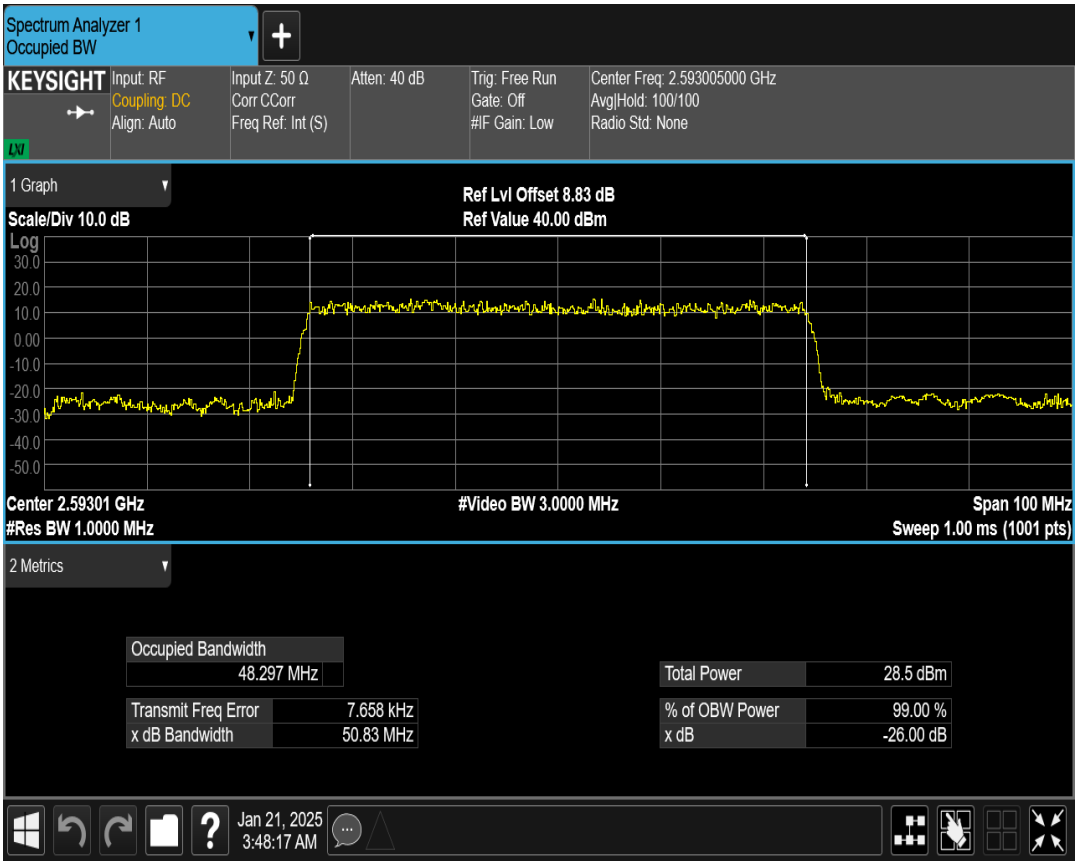
n41 SCS=15kHz DFT_QAM256 BW=50MHz Channel=504201 RB=270@0



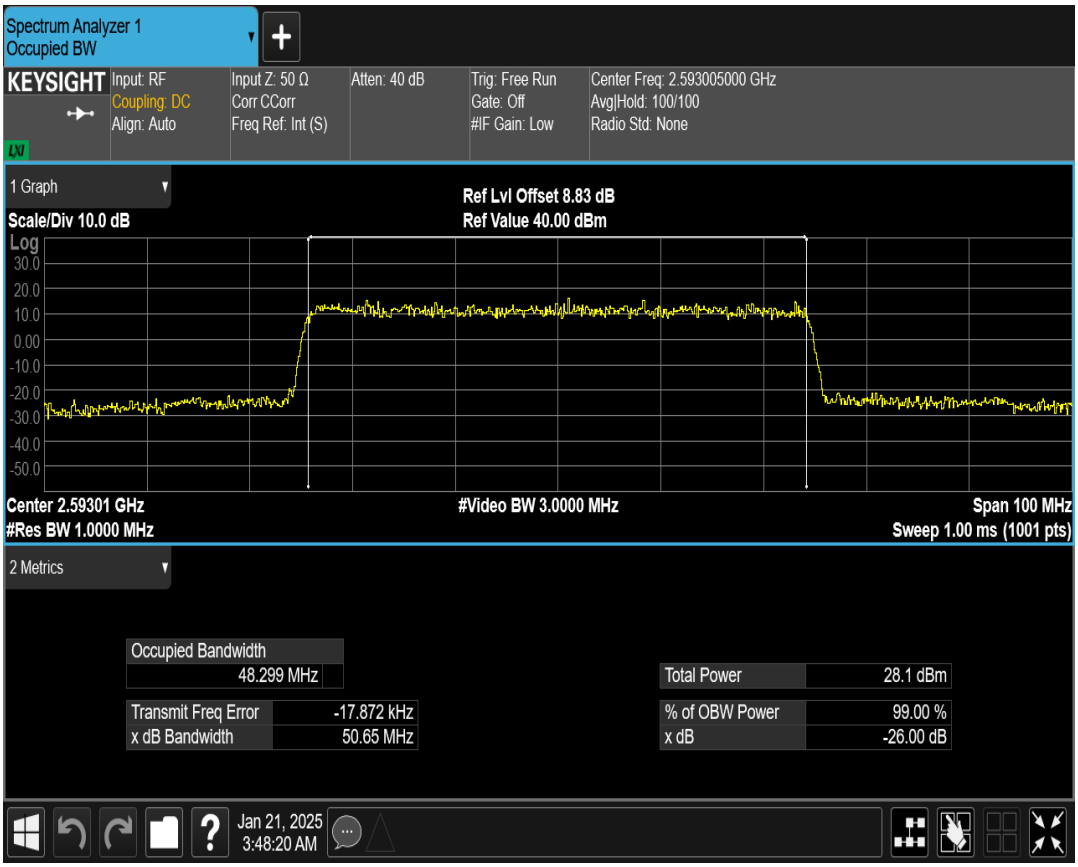
n41 SCS=15kHz CP_QPSK BW=50MHz Channel=504201 RB=270@0



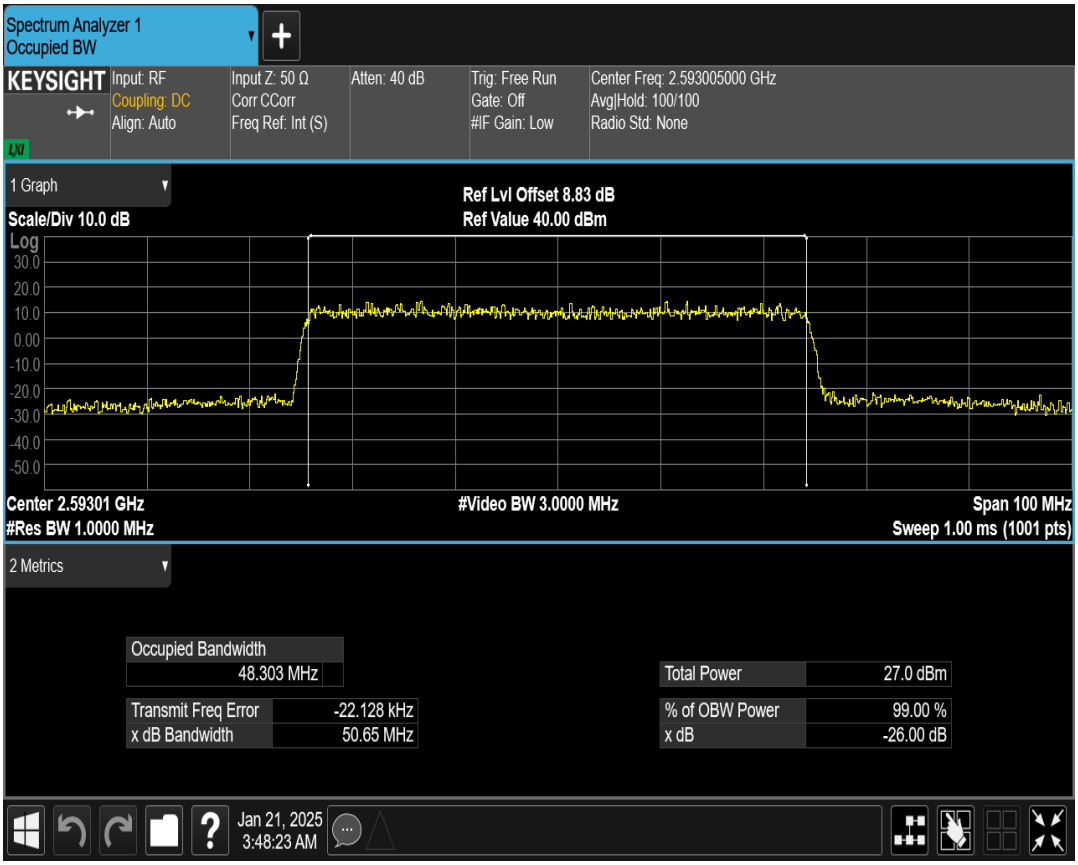
n41 SCS=15kHz DFT_BPSK BW=50MHz Channel=518601 RB=270@0



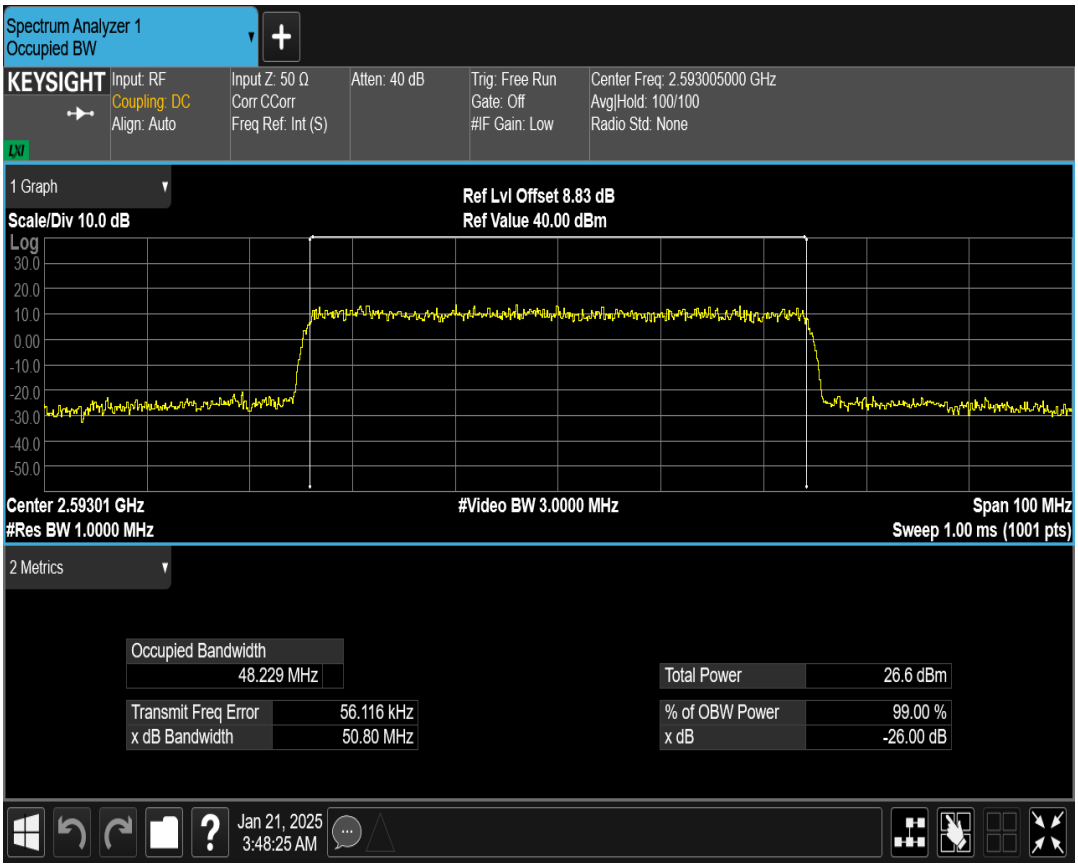
n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=518601 RB=270@0



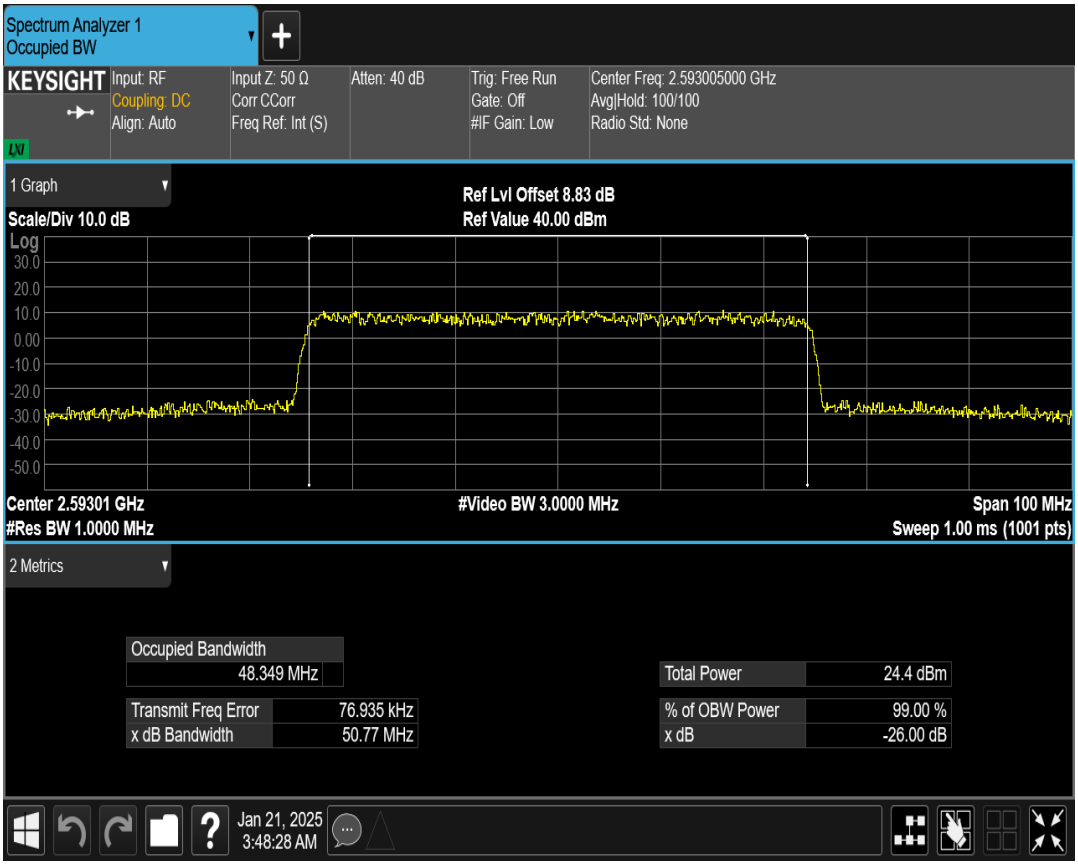
n41 SCS=15kHz DFT_QAM16 BW=50MHz Channel=518601 RB=270@0



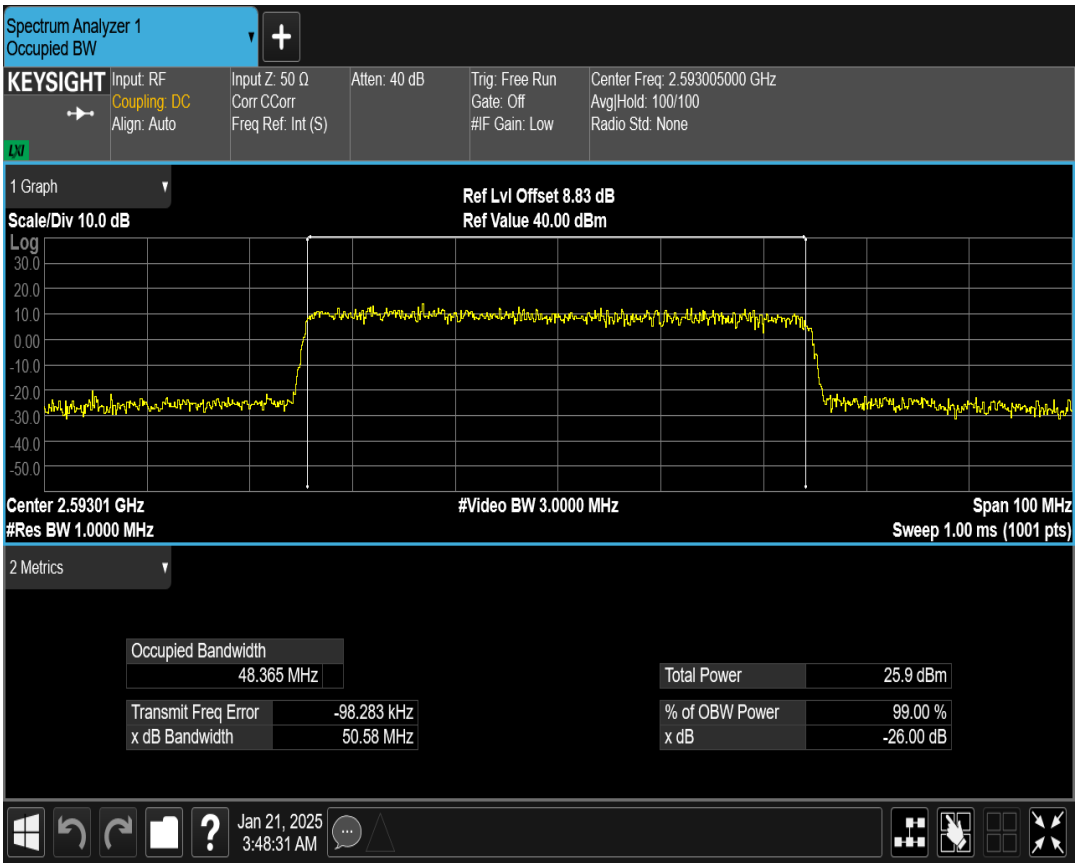
n41 SCS=15kHz DFT_QAM64 BW=50MHz Channel=518601 RB=270@0



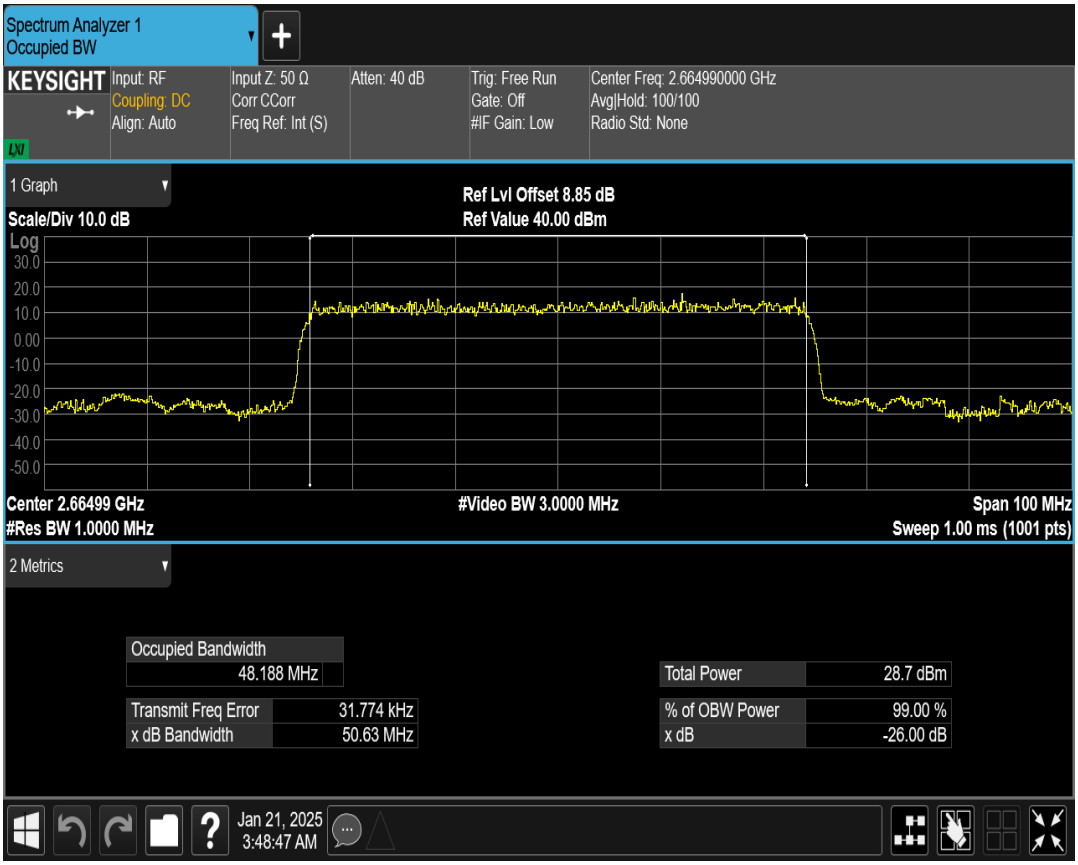
n41 SCS=15kHz DFT_QAM256 BW=50MHz Channel=518601 RB=270@0



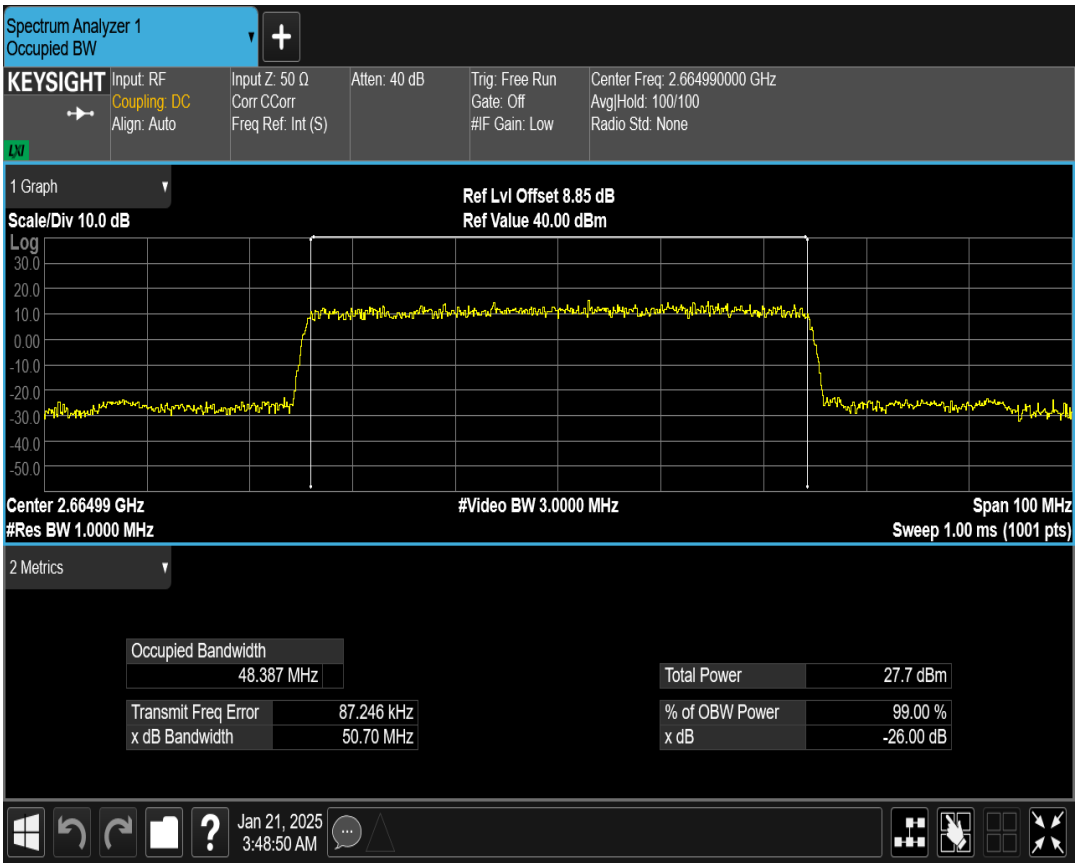
n41 SCS=15kHz CP_QPSK BW=50MHz Channel=518601 RB=270@0



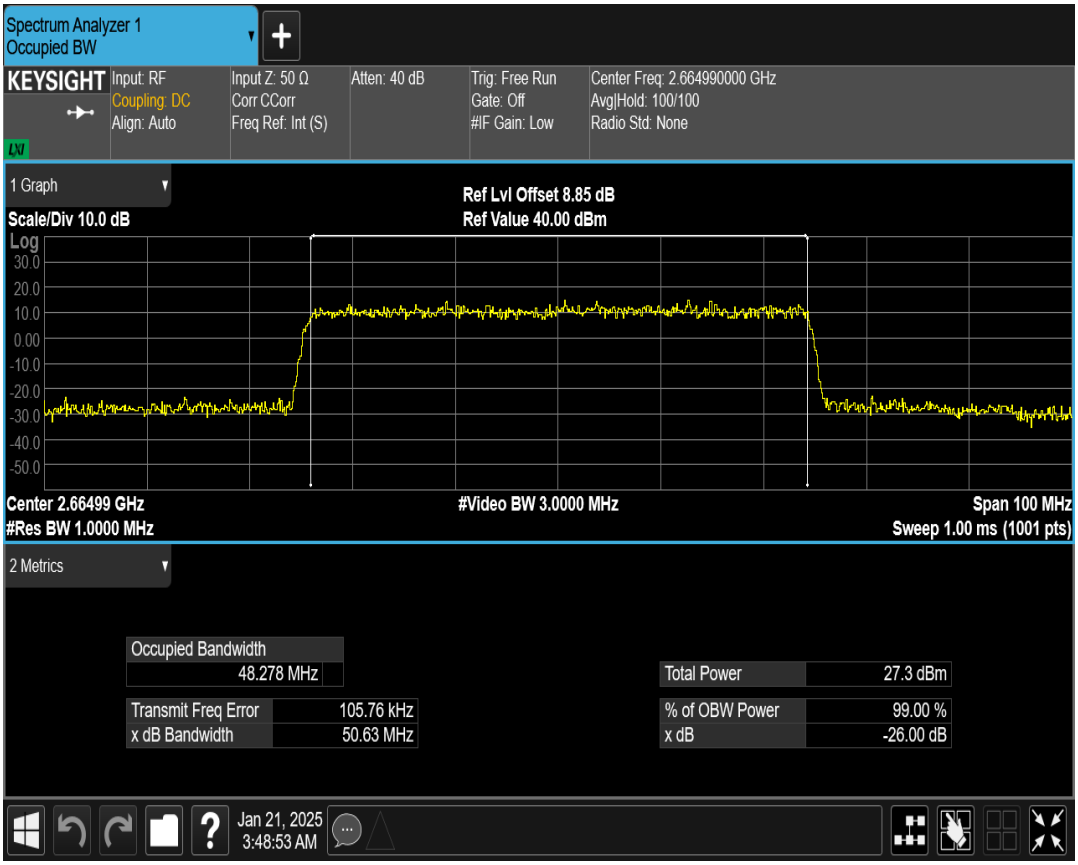
n41 SCS=15kHz DFT_BPSK BW=50MHz Channel=532998 RB=270@0



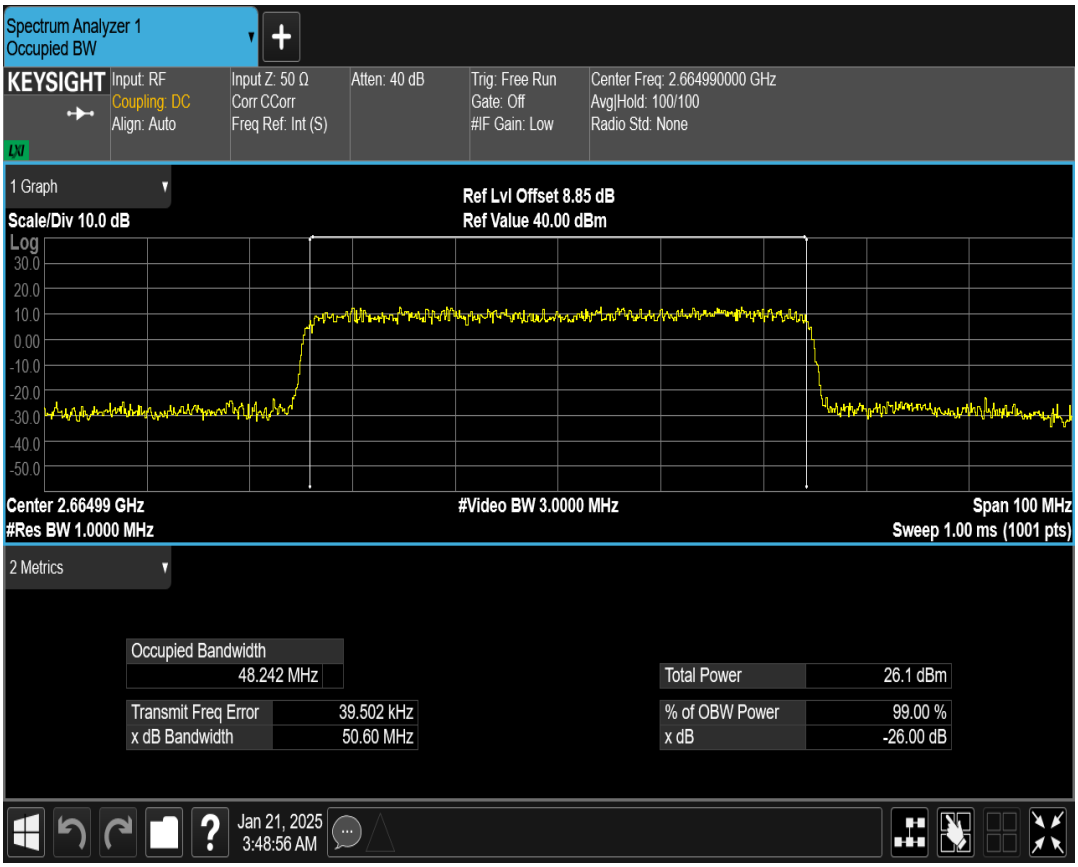
n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=532998 RB=270@0



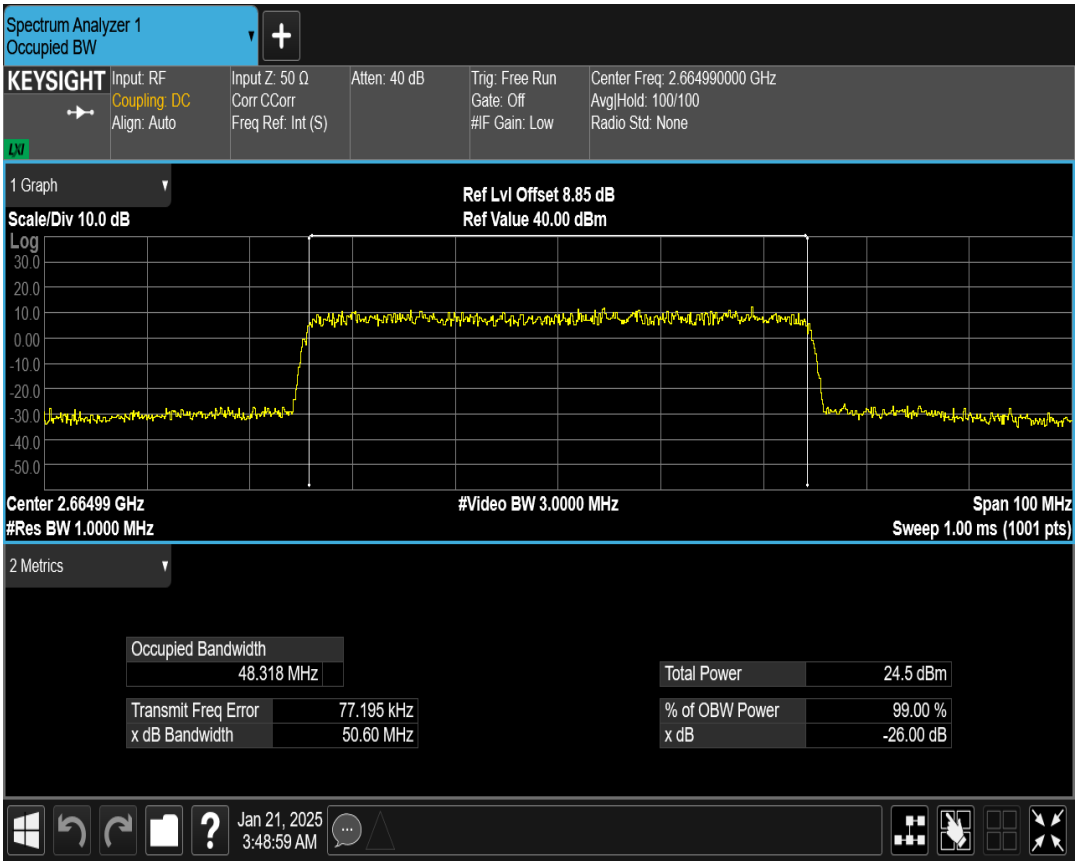
n41 SCS=15kHz DFT_QAM16 BW=50MHz Channel=532998 RB=270@0



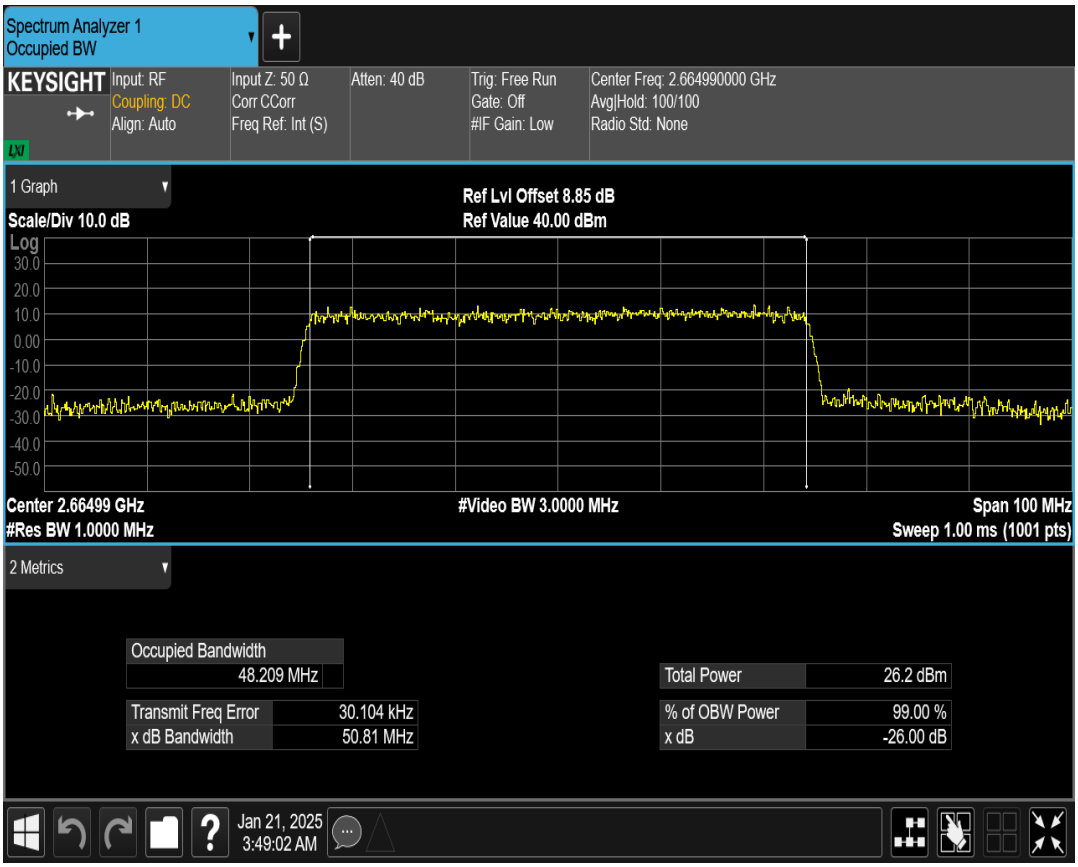
n41 SCS=15kHz DFT_QAM64 BW=50MHz Channel=532998 RB=270@0



n41 SCS=15kHz DFT_QAM256 BW=50MHz Channel=532998 RB=270@0



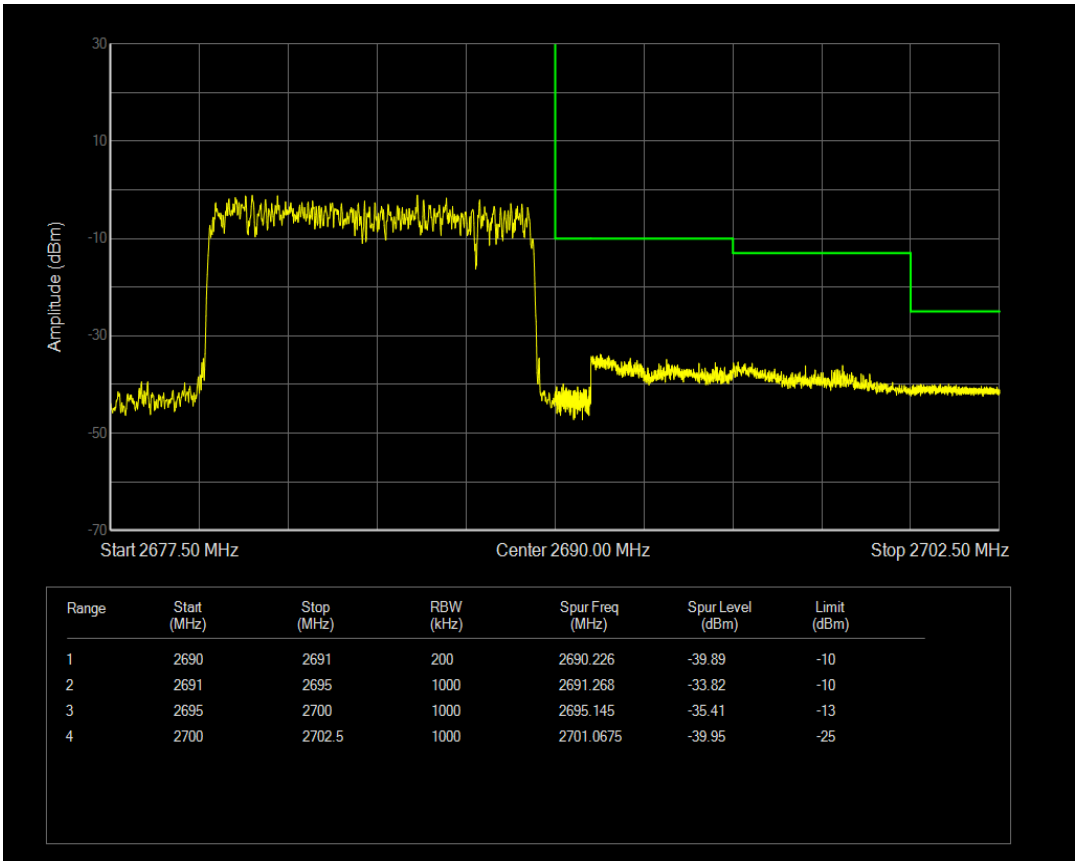
n41 SCS=15kHz CP_QPSK BW=50MHz Channel=532998 RB=270@0



5 Band edge for NR FR1

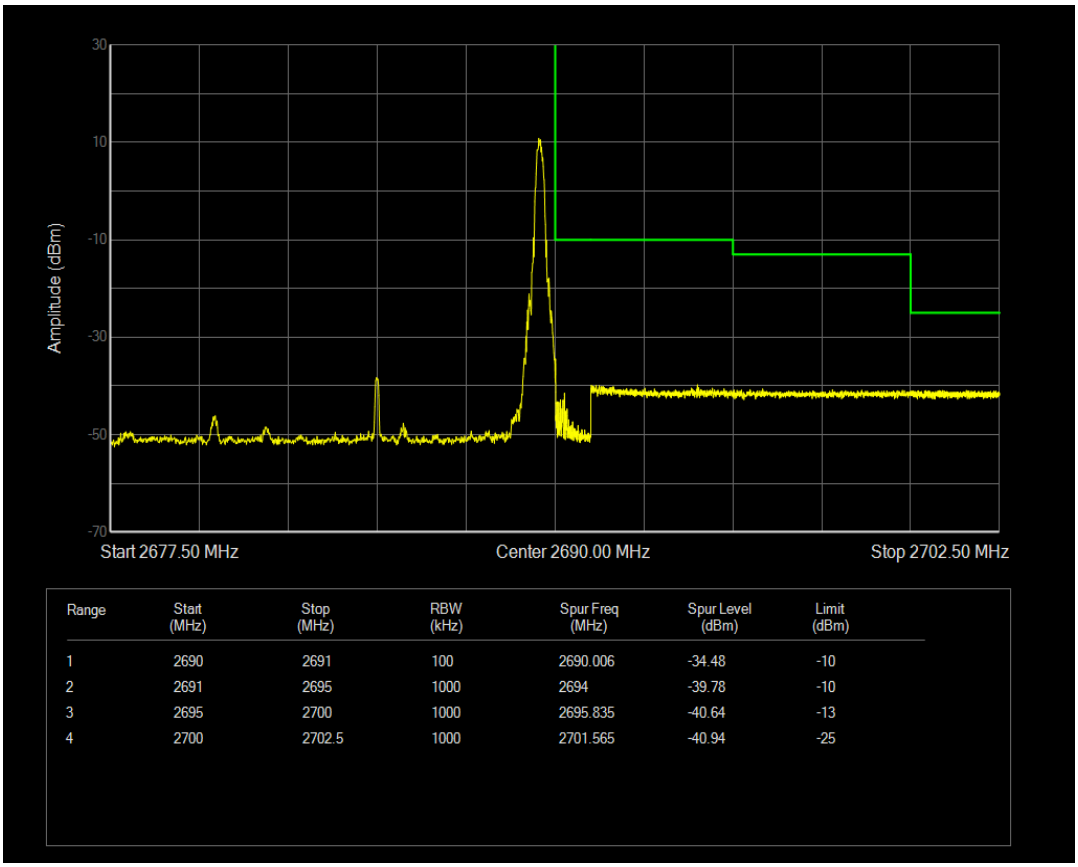
Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n41	15	10	500202	50@0	DFT_QPSK	2487.92	-34.82	-25	PASS
n41	15	10	500202	1@0	DFT_QPSK	2483.97	-41.17	-25	PASS
n41	15	10	537000	50@0	DFT_QPSK	2701.07	-39.95	-25	PASS
n41	15	10	537000	1@51	DFT_QPSK	2701.57	-40.94	-25	PASS
n41	15	50	504201	270@0	DFT_QPSK	2489.82	-39.93	-25	PASS
n41	15	50	504201	1@0	DFT_QPSK	2483.20	-41.18	-25	PASS
n41	15	50	532998	270@0	DFT_QPSK	2741.64	-40.80	-25	PASS
n41	15	50	532998	1@269	DFT_QPSK	2751.41	-40.85	-25	PASS

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=537000 RB=50@0



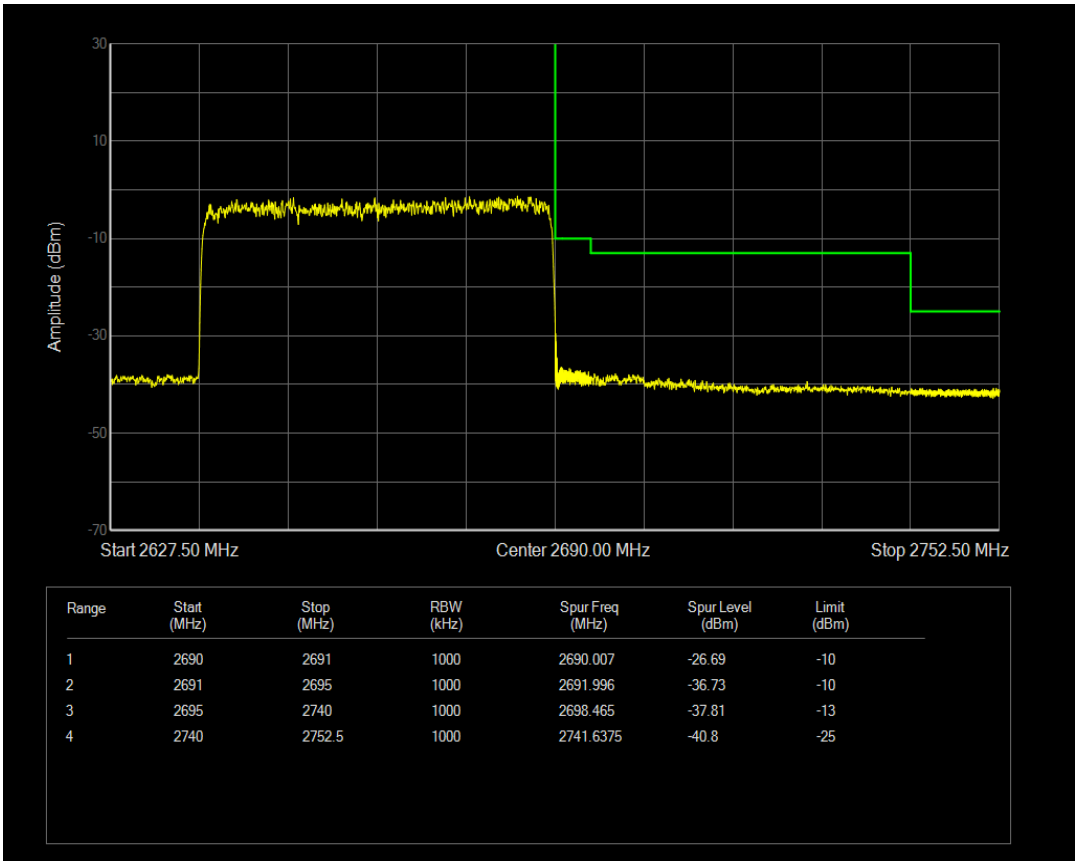
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2690	2691	200	2690.226	-39.89	-10
2	2691	2695	1000	2691.268	-33.82	-10
3	2695	2700	1000	2695.145	-35.41	-13
4	2700	2702.5	1000	2701.0675	-39.95	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=537000 RB=1@51



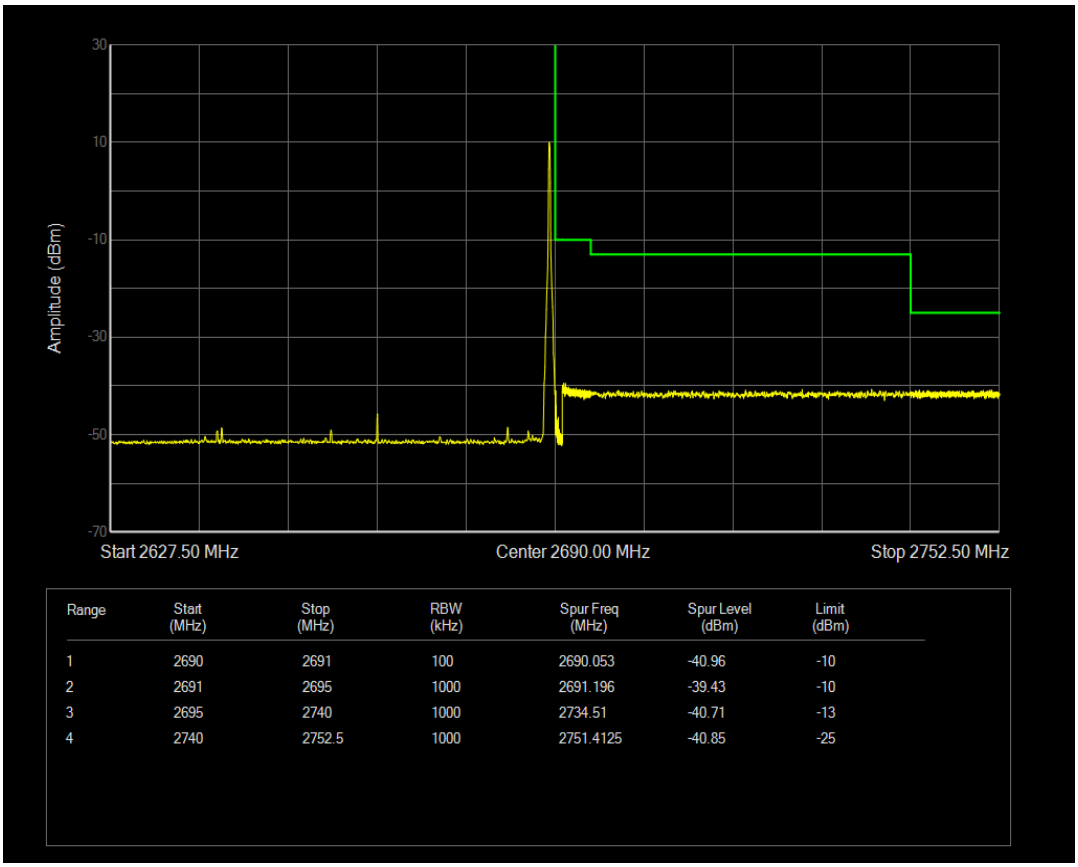
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2690	2691	100	2690.006	-34.48	-10
2	2691	2695	1000	2694	-39.78	-10
3	2695	2700	1000	2695.835	-40.64	-13
4	2700	2702.5	1000	2701.565	-40.94	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=532998 RB=270@0



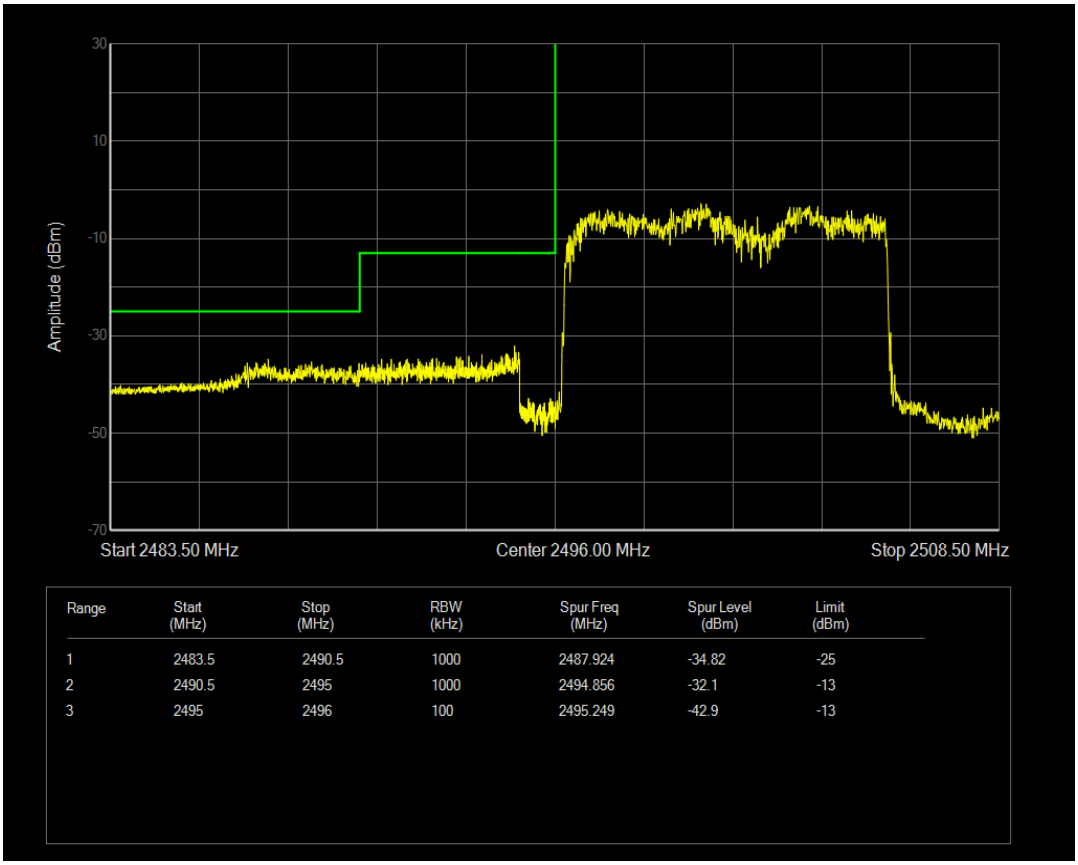
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2690	2691	1000	2690.007	-26.69	-10
2	2691	2695	1000	2691.996	-36.73	-10
3	2695	2740	1000	2698.465	-37.81	-13
4	2740	2752.5	1000	2741.6375	-40.8	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=532998 RB=1@269



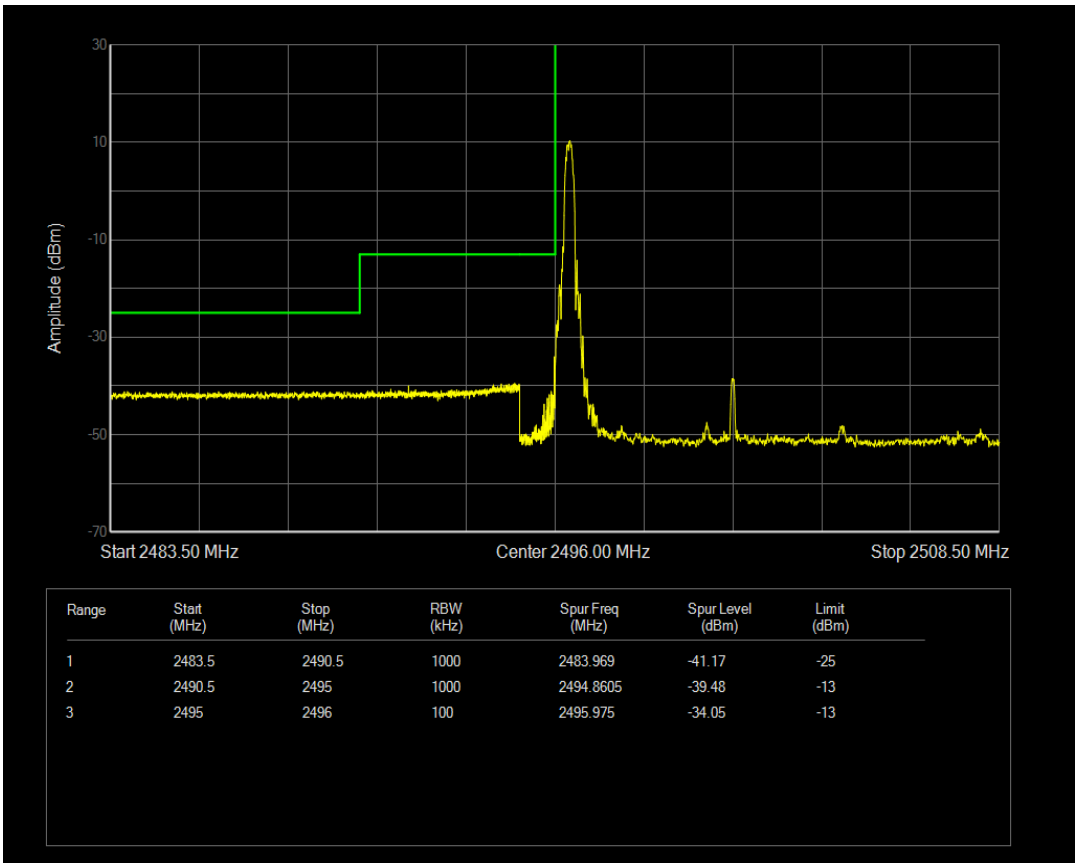
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2690	2691	100	2690.053	-40.96	-10
2	2691	2695	1000	2691.196	-39.43	-10
3	2695	2740	1000	2734.51	-40.71	-13
4	2740	2752.5	1000	2751.4125	-40.85	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=500202 RB=50@0



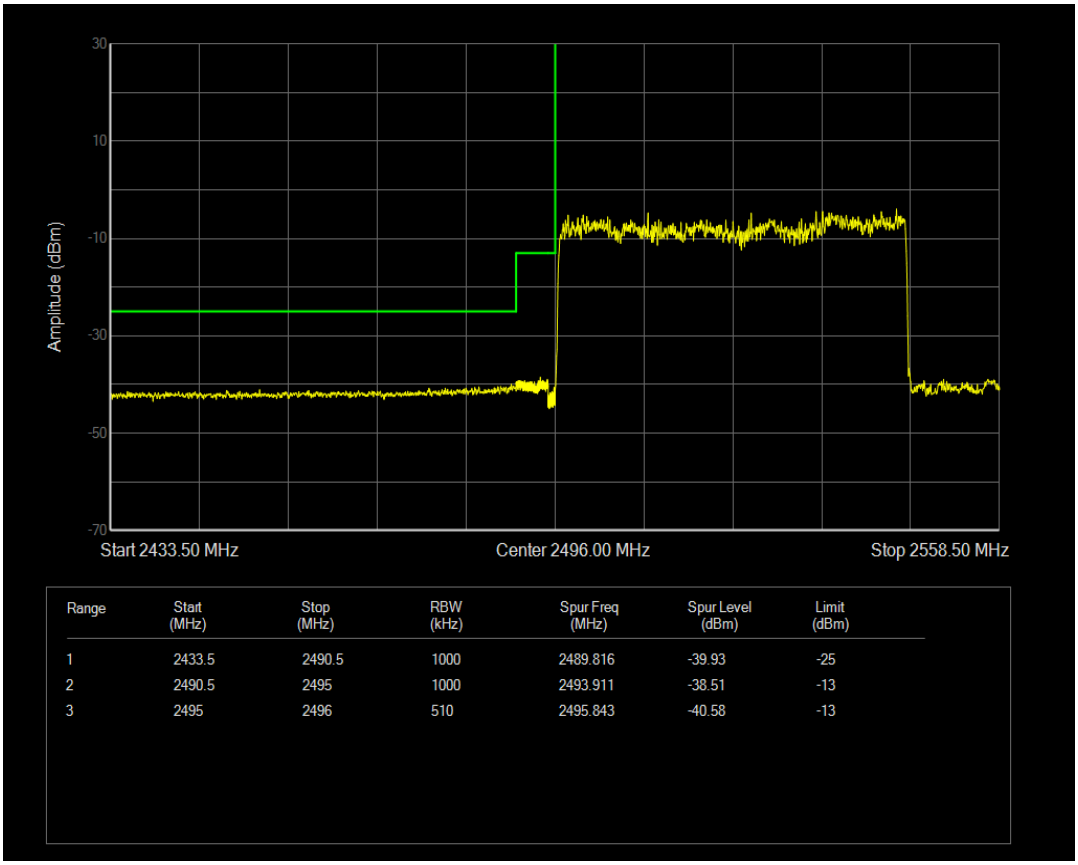
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2483.5	2490.5	1000	2487.924	-34.82	-25
2	2490.5	2495	1000	2494.856	-32.1	-13
3	2495	2496	100	2495.249	-42.9	-13

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=500202 RB=1@0



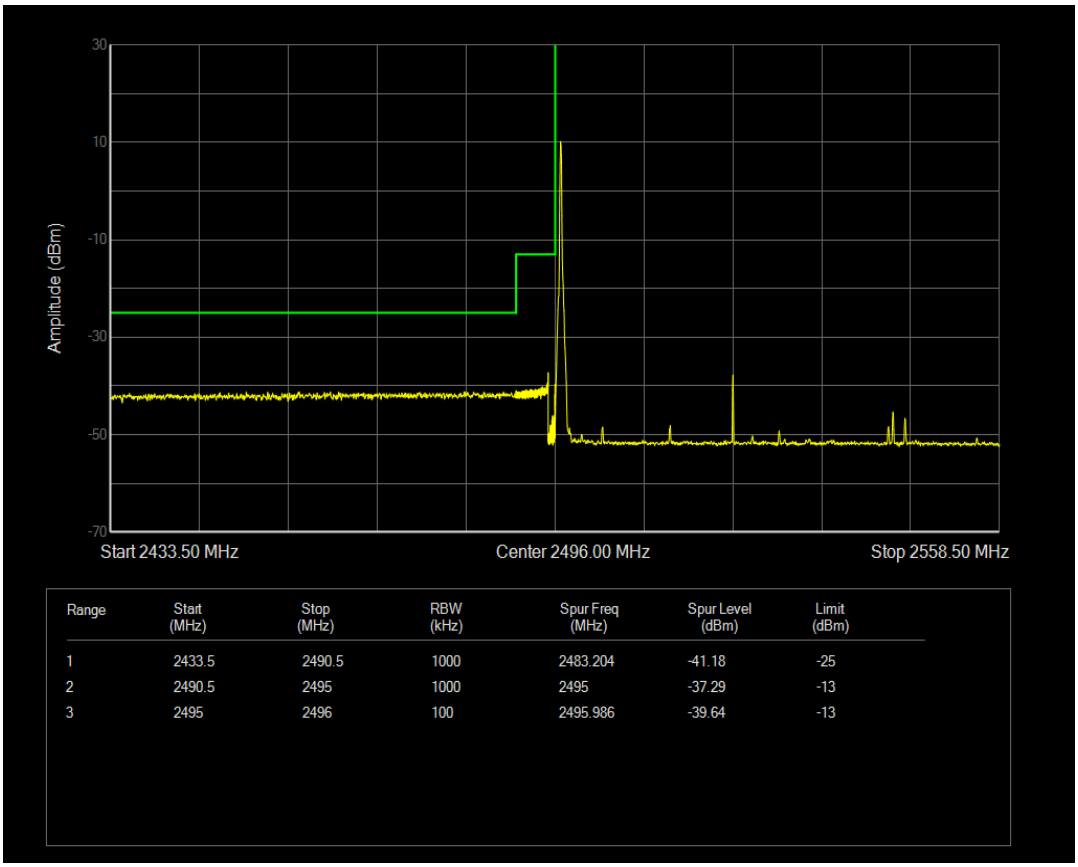
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2483.5	2490.5	1000	2483.969	-41.17	-25
2	2490.5	2495	1000	2494.8605	-39.48	-13
3	2495	2496	100	2495.975	-34.05	-13

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=504201 RB=270@0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2433.5	2490.5	1000	2489.816	-39.93	-25
2	2490.5	2495	1000	2493.911	-38.51	-13
3	2495	2496	510	2495.843	-40.58	-13

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=504201 RB=1@0

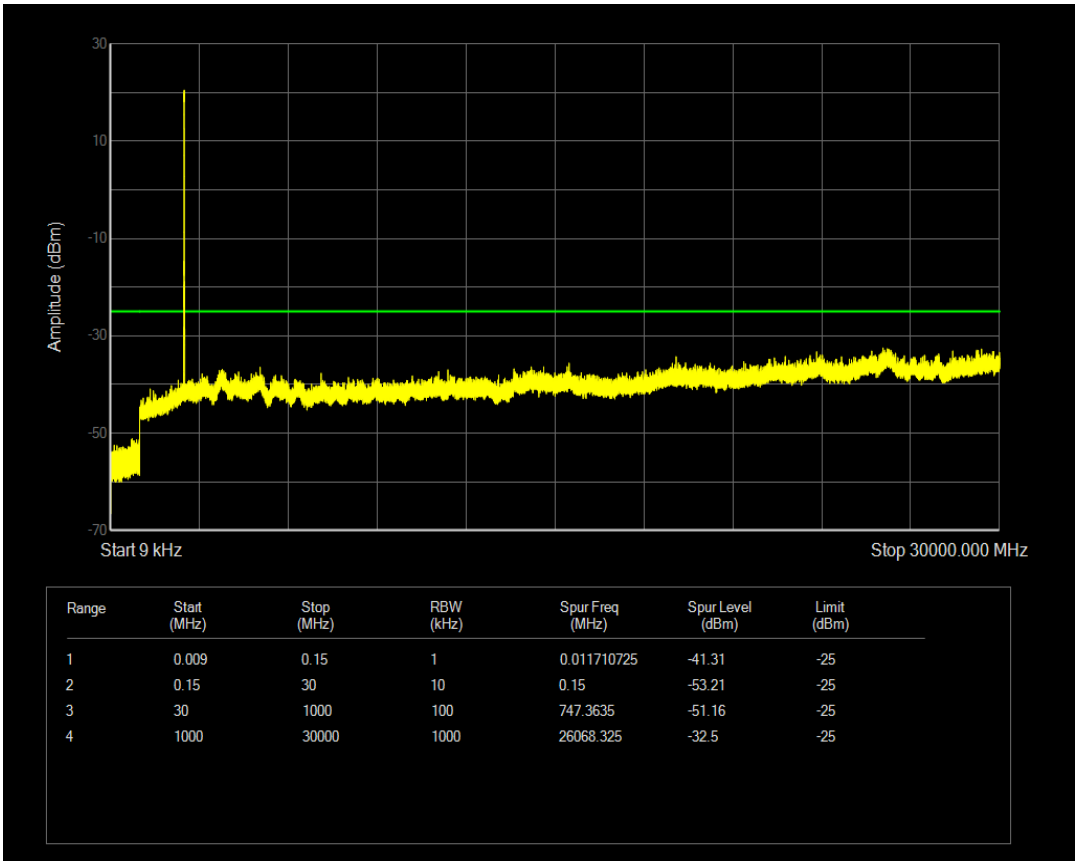


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2433.5	2490.5	1000	2483.204	-41.18	-25
2	2490.5	2495	1000	2495	-37.29	-13
3	2495	2496	100	2495.986	-39.64	-13

6 Out-of-band emissions for NR FR1

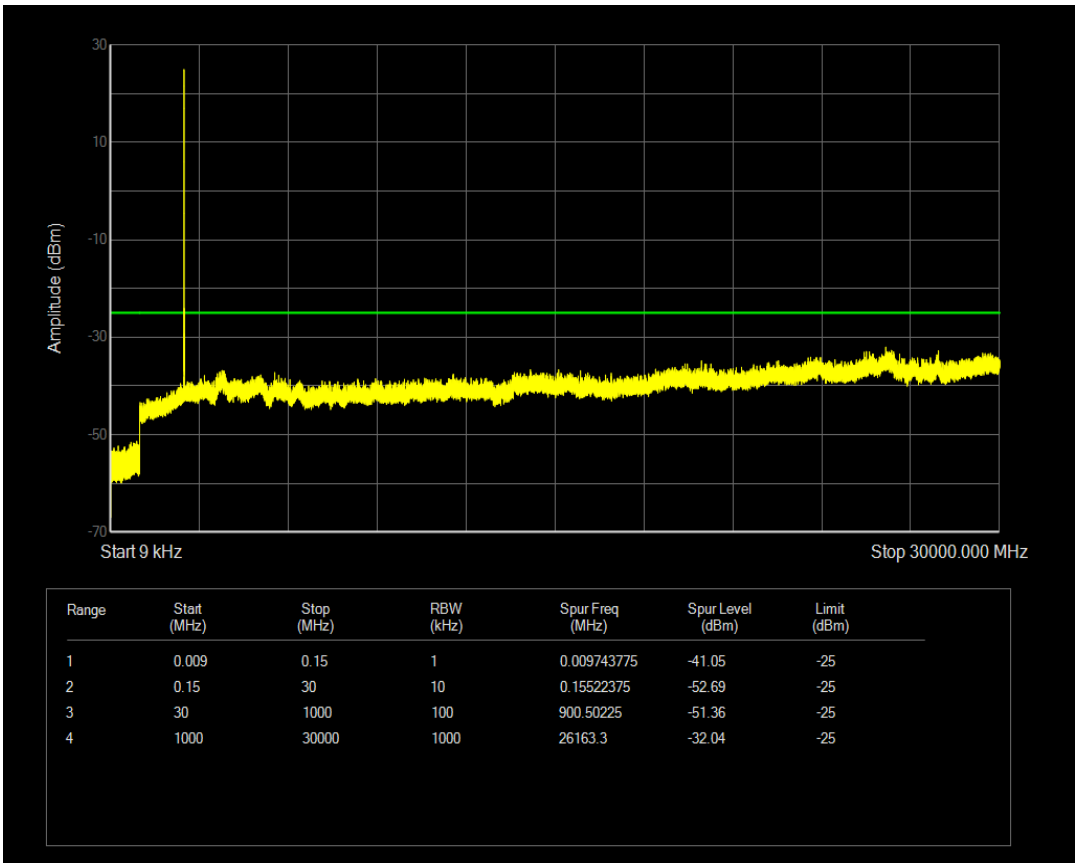
Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n41	15	10	500202	50@0	DFT_QPSK	26068.33	-32.50	-25	PASS
n41	15	10	500202	1@0	DFT_QPSK	26163.30	-32.04	-25	PASS
n41	15	10	500202	1@51	DFT_QPSK	26358.33	-32.58	-25	PASS
n41	15	10	518601	50@0	DFT_QPSK	29485.98	-32.54	-25	PASS
n41	15	10	518601	1@0	DFT_QPSK	25722.50	-32.05	-25	PASS
n41	15	10	518601	1@51	DFT_QPSK	26338.03	-31.17	-25	PASS
n41	15	10	537000	50@0	DFT_QPSK	26256.83	-32.63	-25	PASS
n41	15	10	537000	1@0	DFT_QPSK	24334.85	-32.41	-25	PASS
n41	15	10	537000	1@51	DFT_QPSK	26243.78	-31.66	-25	PASS
n41	15	50	504201	270@0	DFT_QPSK	26254.65	-32.10	-25	PASS
n41	15	50	504201	1@0	DFT_QPSK	26409.08	-32.30	-25	PASS
n41	15	50	504201	1@269	DFT_QPSK	26233.63	-32.00	-25	PASS
n41	15	50	518601	270@0	DFT_QPSK	26257.55	-32.29	-25	PASS
n41	15	50	518601	1@0	DFT_QPSK	27179.75	-31.98	-25	PASS
n41	15	50	518601	1@269	DFT_QPSK	26211.88	-31.53	-25	PASS
n41	15	50	532998	270@0	DFT_QPSK	26303.23	-32.35	-25	PASS
n41	15	50	532998	1@0	DFT_QPSK	29893.43	-32.15	-25	PASS
n41	15	50	532998	1@269	DFT_QPSK	26190.13	-32.05	-25	PASS

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=500202 RB=50@0



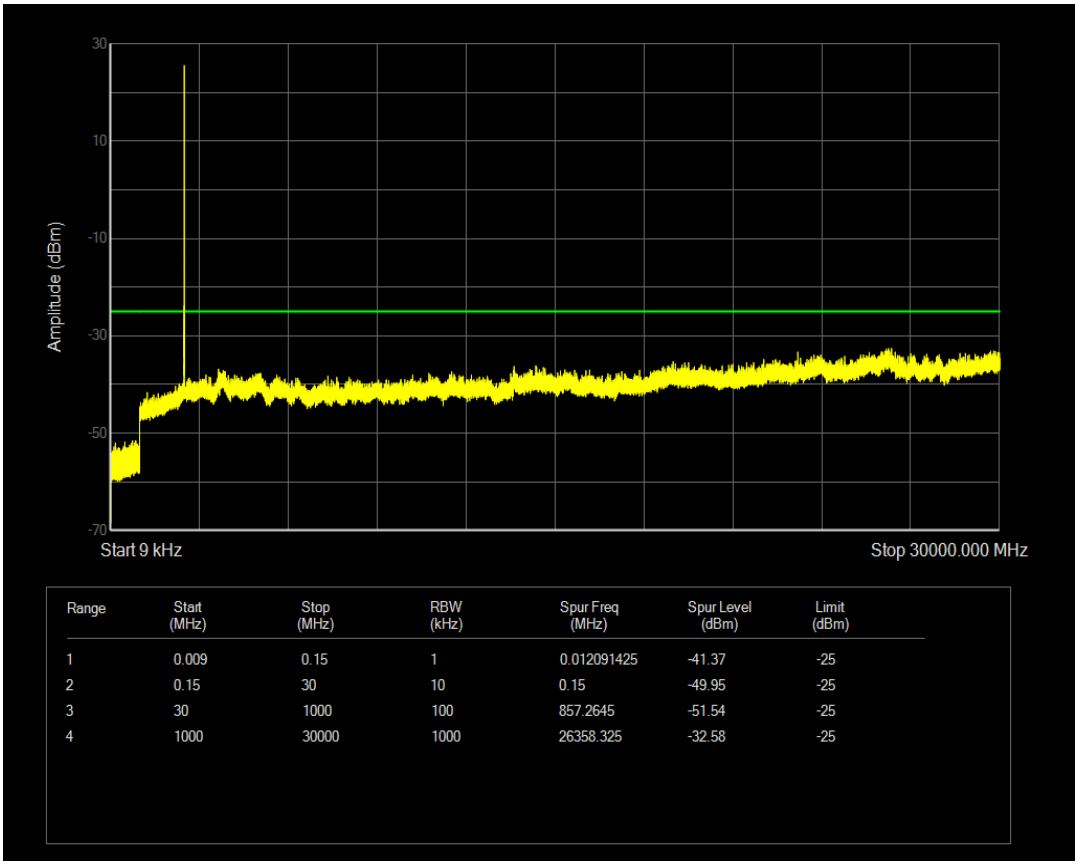
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011710725	-41.31	-25
2	0.15	30	10	0.15	-53.21	-25
3	30	1000	100	747.3635	-51.16	-25
4	1000	30000	1000	26068.325	-32.5	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=500202 RB=1@0



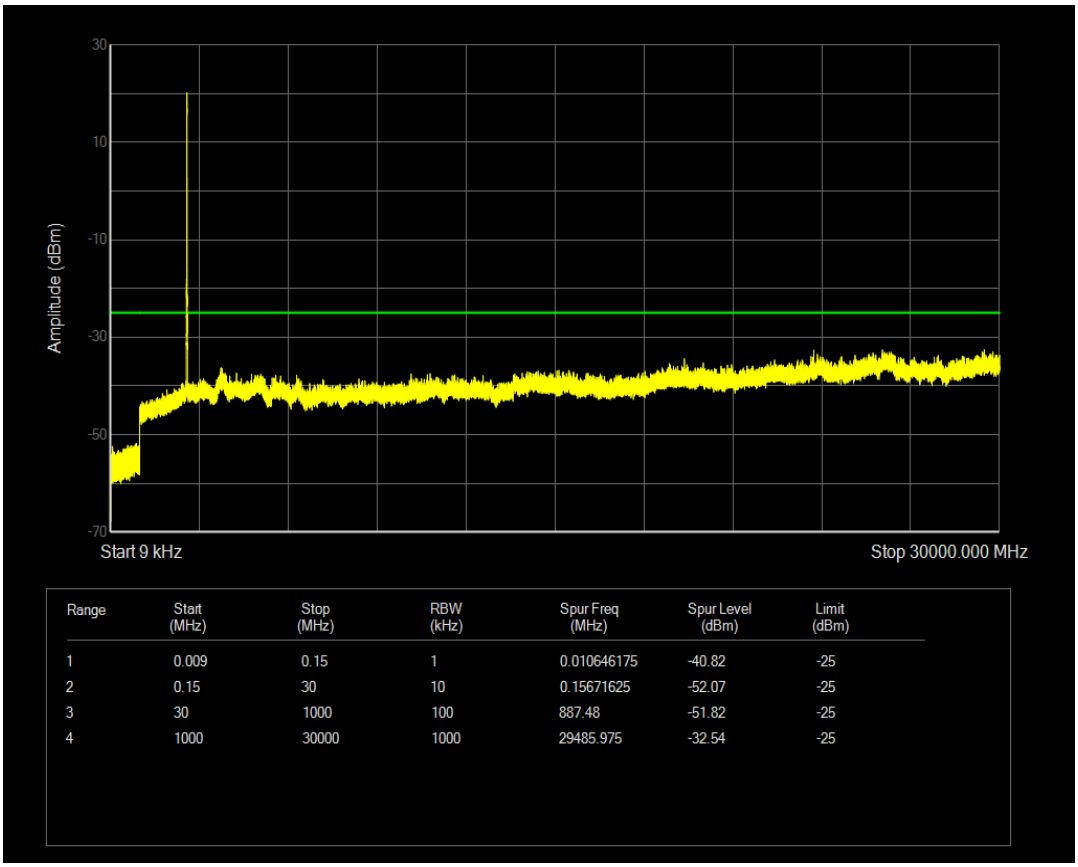
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009743775	-41.05	-25
2	0.15	30	10	0.15522375	-52.69	-25
3	30	1000	100	900.50225	-51.36	-25
4	1000	30000	1000	26163.3	-32.04	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=500202 RB=1@51



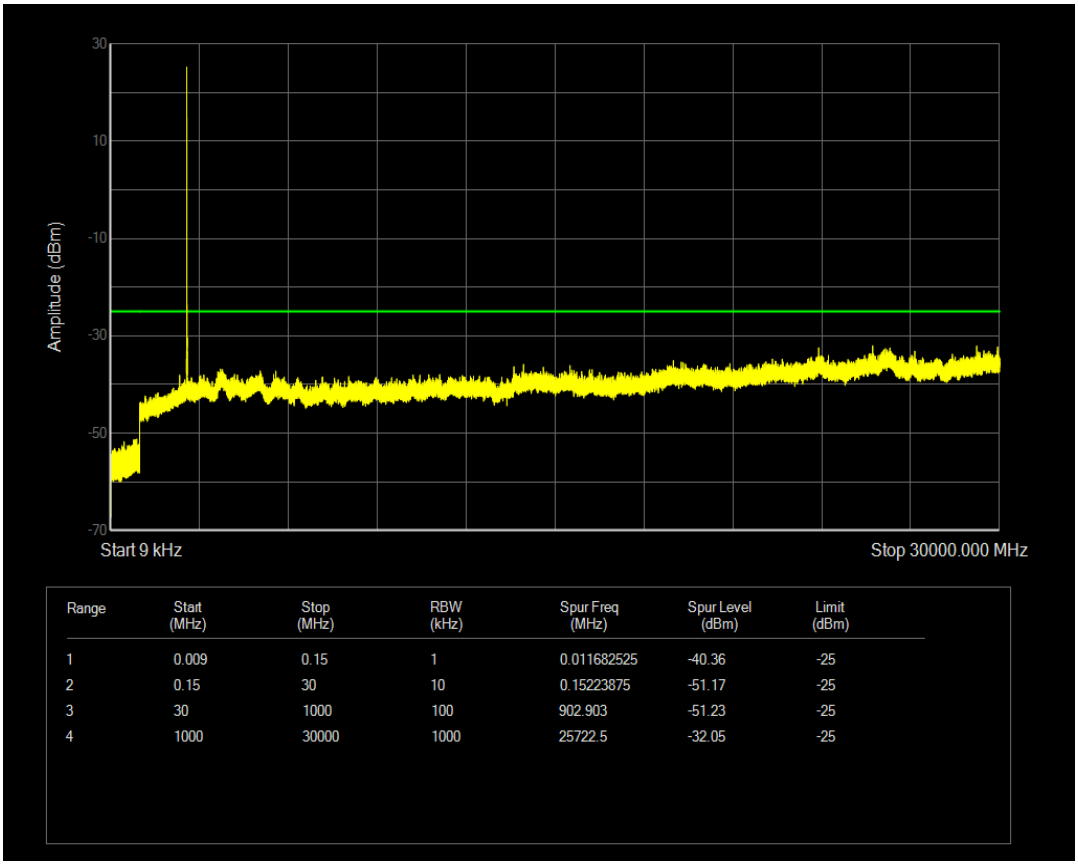
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.012091425	-41.37	-25
2	0.15	30	10	0.15	-49.95	-25
3	30	1000	100	857.2645	-51.54	-25
4	1000	30000	1000	26358.325	-32.58	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=518601 RB=50@0



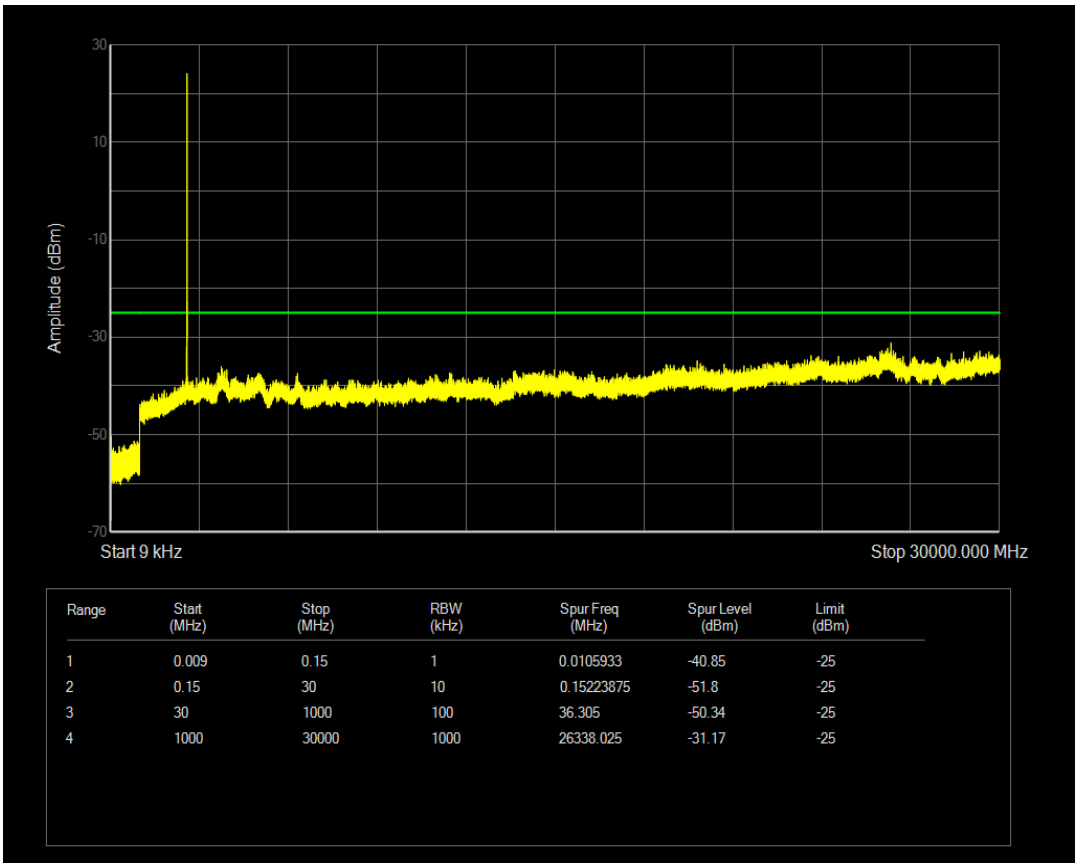
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010646175	-40.82	-25
2	0.15	30	10	0.15671625	-52.07	-25
3	30	1000	100	887.48	-51.82	-25
4	1000	30000	1000	29485.975	-32.54	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=518601 RB=1@0



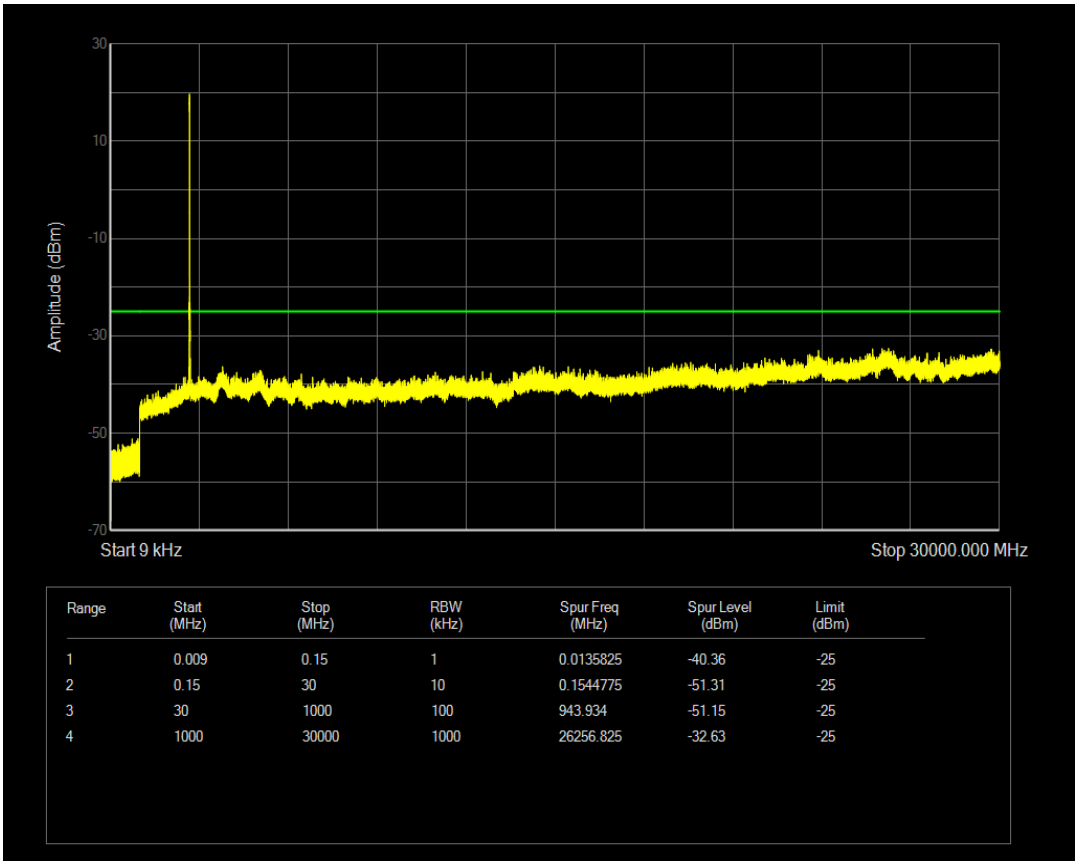
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011682525	-40.36	-25
2	0.15	30	10	0.15223875	-51.17	-25
3	30	1000	100	902.903	-51.23	-25
4	1000	30000	1000	25722.5	-32.05	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=518601 RB=1@51



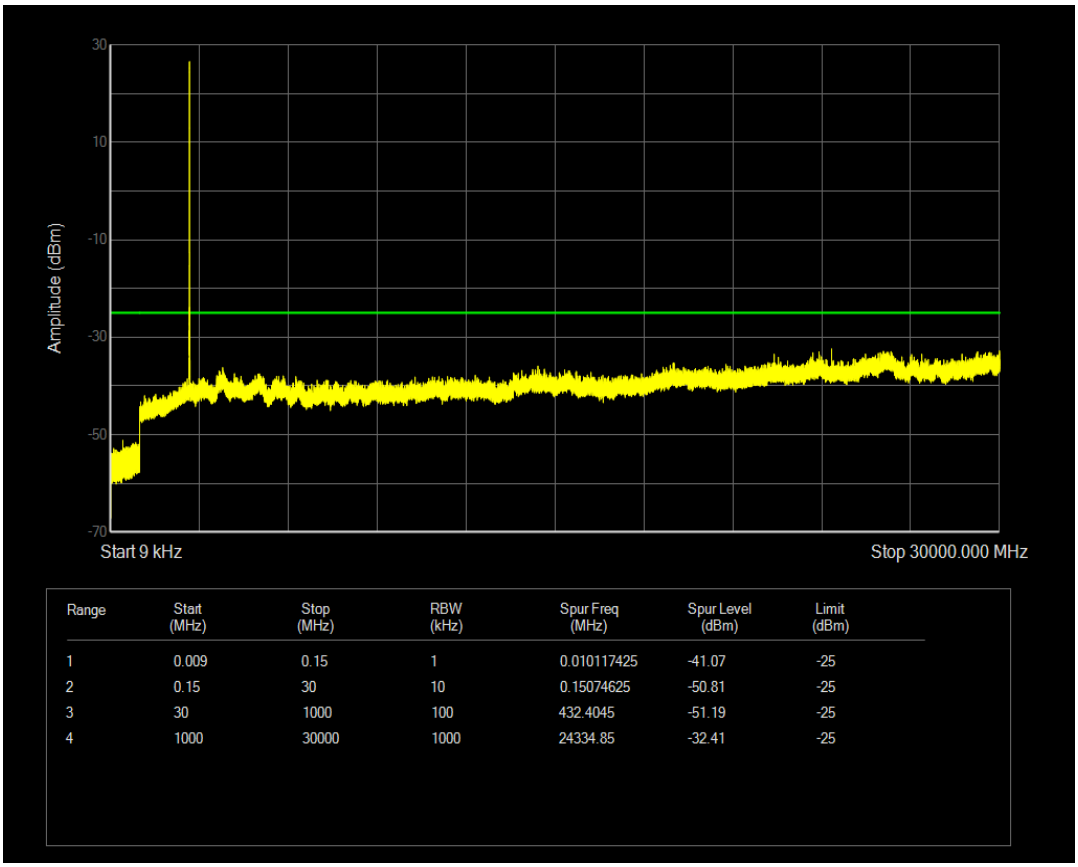
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0105933	-40.85	-25
2	0.15	30	10	0.15223875	-51.8	-25
3	30	1000	100	36.305	-50.34	-25
4	1000	30000	1000	26338.025	-31.17	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=537000 RB=50@0



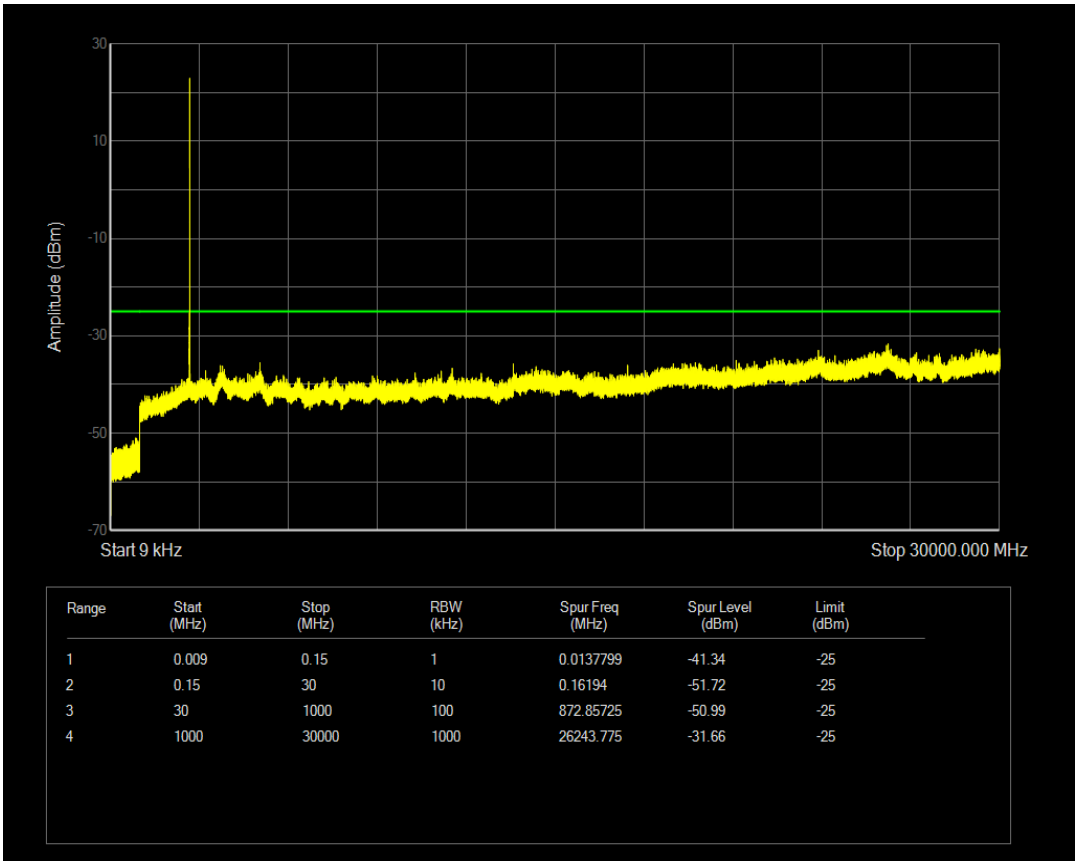
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0135825	-40.36	-25
2	0.15	30	10	0.1544775	-51.31	-25
3	30	1000	100	943.934	-51.15	-25
4	1000	30000	1000	26256.825	-32.63	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=537000 RB=1@0



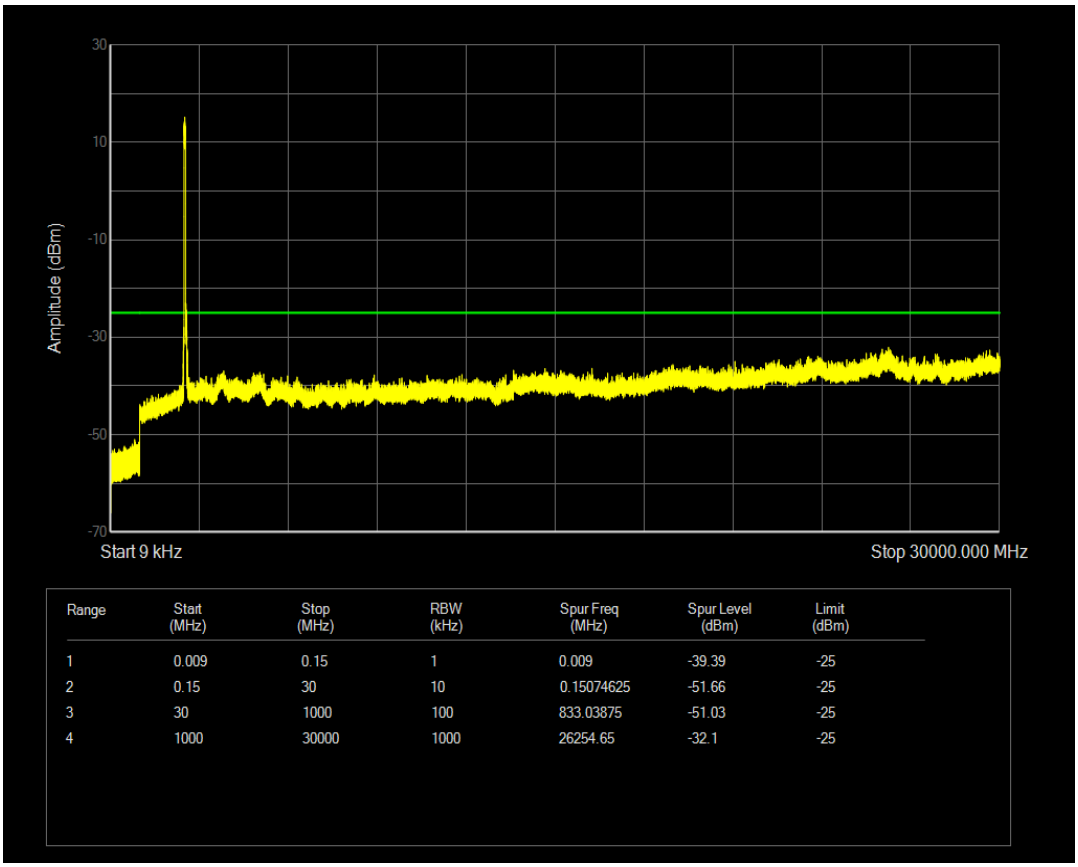
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010117425	-41.07	-25
2	0.15	30	10	0.15074625	-50.81	-25
3	30	1000	100	432.4045	-51.19	-25
4	1000	30000	1000	24334.85	-32.41	-25

n41 SCS=15kHz DFT_QPSK BW=10MHz Channel=537000 RB=1@51



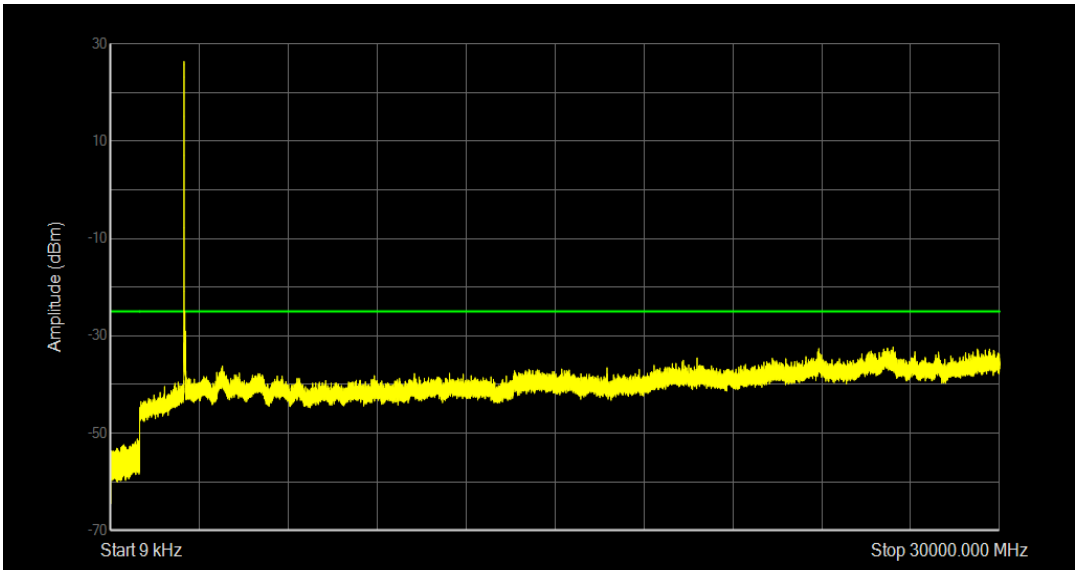
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0137799	-41.34	-25
2	0.15	30	10	0.16194	-51.72	-25
3	30	1000	100	872.85725	-50.99	-25
4	1000	30000	1000	26243.775	-31.66	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=504201 RB=270@0



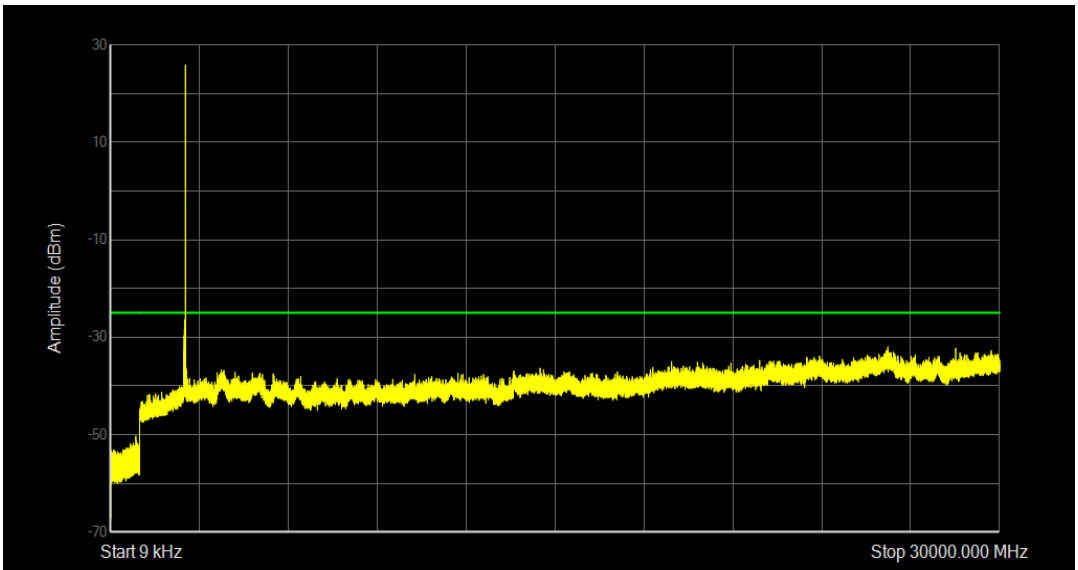
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009	-39.39	-25
2	0.15	30	10	0.15074625	-51.66	-25
3	30	1000	100	833.03875	-51.03	-25
4	1000	30000	1000	26254.65	-32.1	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=504201 RB=1@0



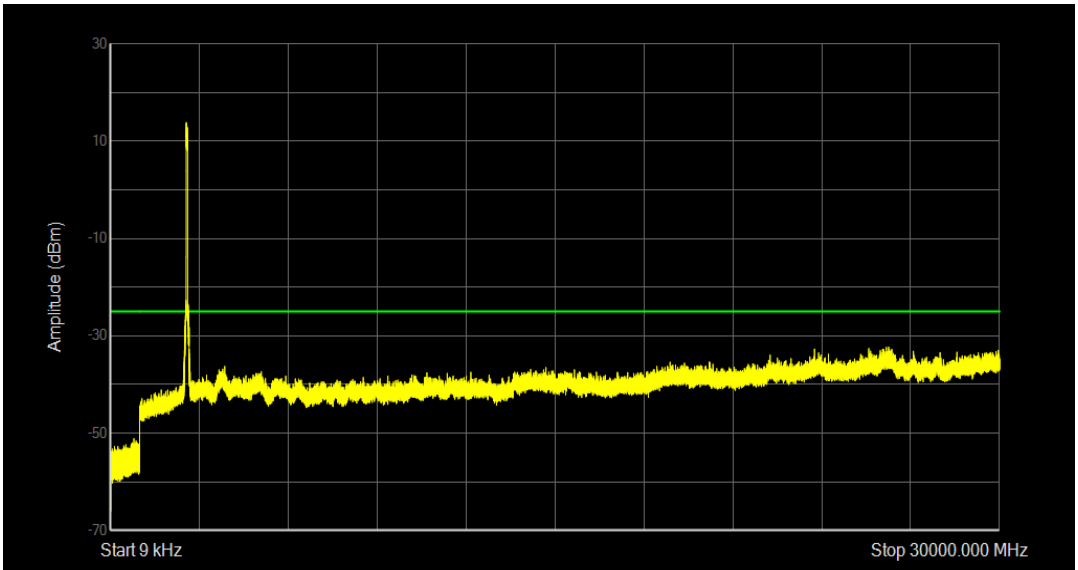
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010702575	-40.62	-25
2	0.15	30	10	0.17388	-51.52	-25
3	30	1000	100	921.624	-51.2	-25
4	1000	30000	1000	26409.075	-32.3	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=504201 RB=1@269



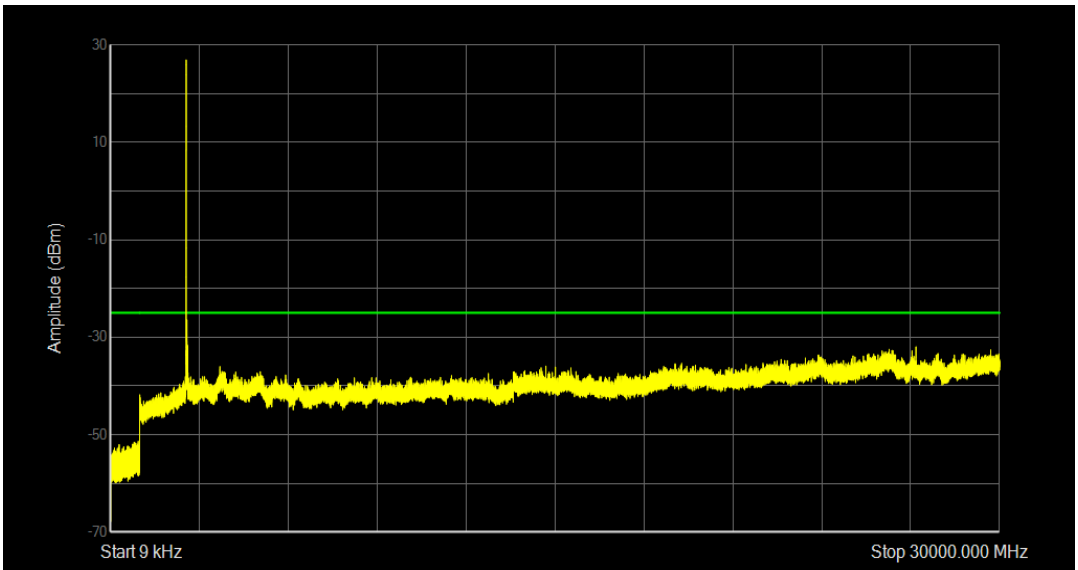
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.013741125	-40.96	-25
2	0.15	30	10	0.15	-52.53	-25
3	30	1000	100	871.863	-50.31	-25
4	1000	30000	1000	26233.625	-32	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=518601 RB=270@0



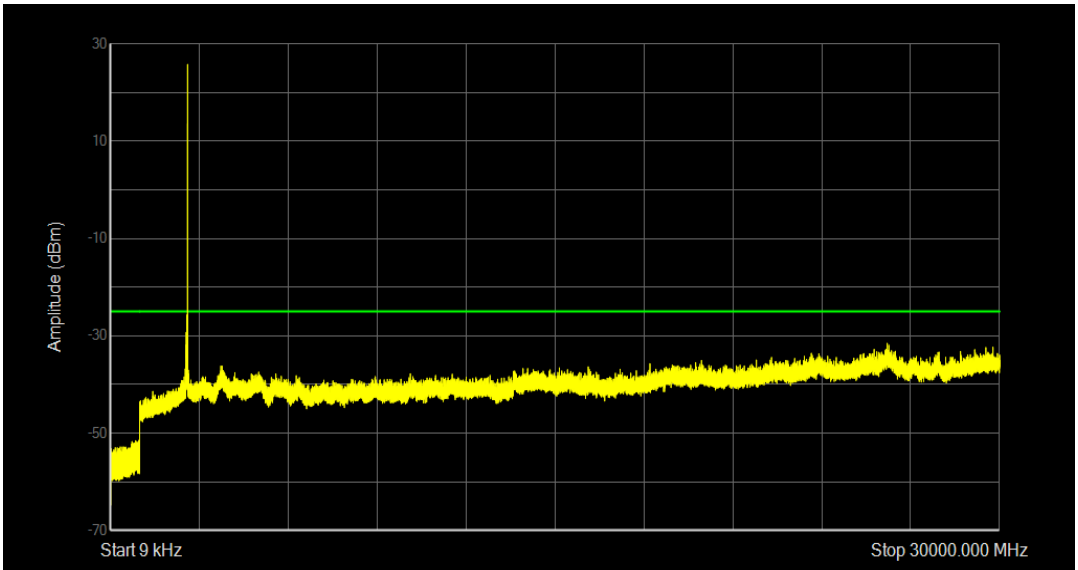
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010787175	-40.63	-25
2	0.15	30	10	0.18059625	-51.8	-25
3	30	1000	100	807.28525	-51.16	-25
4	1000	30000	1000	26257.55	-32.29	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=518601 RB=1@0



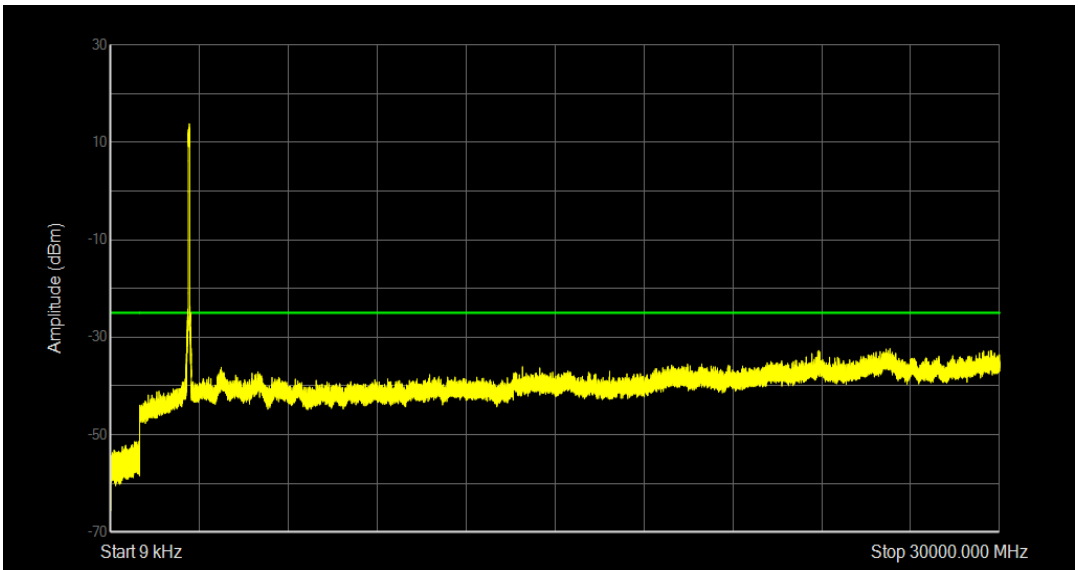
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011971575	-40.74	-25
2	0.15	30	10	0.15074625	-51.11	-25
3	30	1000	100	950.94225	-51.38	-25
4	1000	30000	1000	27179.75	-31.98	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=518601 RB=1@269



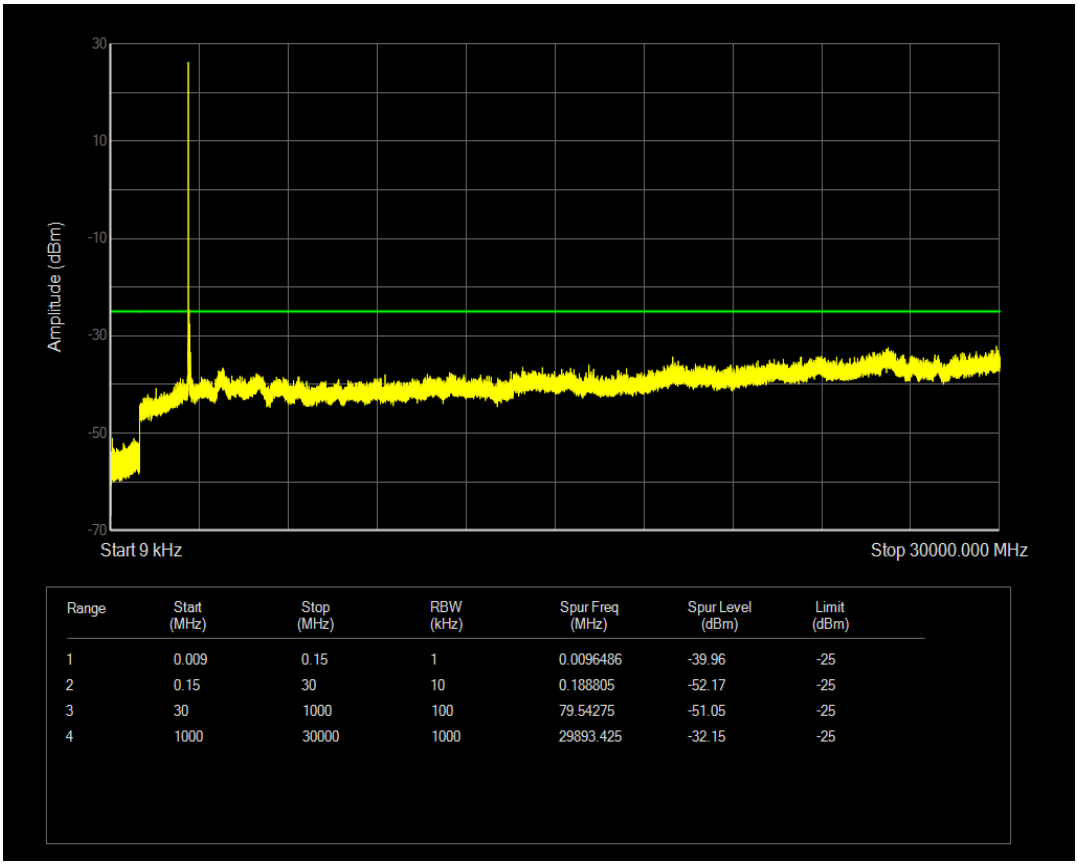
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0123276	-41.22	-25
2	0.15	30	10	0.1514925	-50.3	-25
3	30	1000	100	973.97975	-51.49	-25
4	1000	30000	1000	26211.875	-31.53	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=532998 RB=270@0



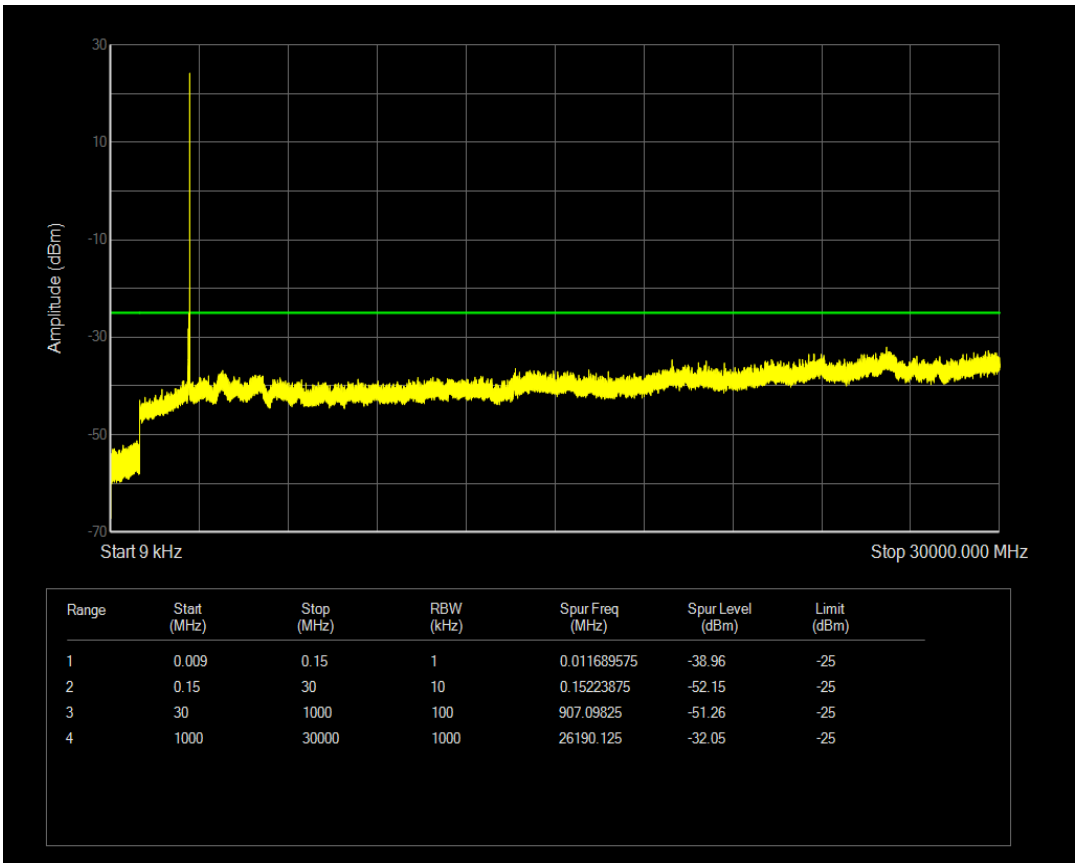
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.013120725	-39.71	-25
2	0.15	30	10	0.15522375	-52.24	-25
3	30	1000	100	977.496	-51.37	-25
4	1000	30000	1000	26303.225	-32.35	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=532998 RB=1@0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0096486	-39.96	-25
2	0.15	30	10	0.188805	-52.17	-25
3	30	1000	100	79.54275	-51.05	-25
4	1000	30000	1000	29893.425	-32.15	-25

n41 SCS=15kHz DFT_QPSK BW=50MHz Channel=532998 RB=1@269



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011689575	-38.96	-25
2	0.15	30	10	0.15223875	-52.15	-25
3	30	1000	100	907.09825	-51.26	-25
4	1000	30000	1000	26190.125	-32.05	-25