



n41 SCS=30kHz DFT_QAM16 BW=80MHz Channel=518598 RB=216@0



n41 SCS=30kHz DFT_QAM16 BW=90MHz Channel=518598 RB=240@0

KEYSIGHT Keysight RF Application (2.0.50.10261)

NR1 Band: N41, DL BW: 90 MHz, ARFCN/Freq: 518598, Cell Power: -44.48 dBm/BW, CLPC: All Up Bits

NR2

NR UE Power: 23 dBm DL BLER: 0 %

Msg. Summary

Cell	Time	Dir	Message
N1	2024/03/07 11:31:48.528	DL	NAS Security Mode Command
N1	2024/03/07 11:31:48.551	DL	DL Information Transfer
N1	2024/03/07 11:31:48.592	UL	UL Information Transfer
N1	2024/03/07 11:31:48.607	UL	NAS Security Mode Complete
N1	2024/03/07 11:31:48.661	DL	Security Mode Command
N1	2024/03/07 11:31:48.804	UL	Security Mode Complete
N1	2024/03/07 11:31:48.847	DL	UE Capability Enquiry
N1	2024/03/07 11:31:48.910	UL	UE Capability Information
N1	2024/03/07 11:31:48.948	DL	Registration Accept
N1	2024/03/07 11:31:48.970	DL	DL Information Transfer
N1	2024/03/07 11:31:49.010	UL	UL Information Transfer
N1	2024/03/07 11:31:49.030	UL	Registration Complete
N1	2024/03/07 11:31:49.302	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:31:49.478	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:31:52.096	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:31:52.254	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:31:57.045	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:31:57.197	UL	RRC Connection Reconfiguration Complete

Ready BSE.CONNECT Copy 2024-03-07 11:32:02

n41 SCS=30kHz DFT_QAM256 BW=100MHz Channel=518598 RB=270@0

KEYSIGHT Keysight RF Application (2.0.50.10261)

NR1 Band: N41, DL BW: 100 MHz, ARFCN/Freq: 518598, Cell Power: -44.53 dBm/BW, CLPC: All Up Bits

NR2

NR UE Power: 20 dBm DL BLER: 0 %

Msg. Summary

Cell	Time	Dir	Message
N1	2024/03/07 11:31:57.045	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:31:57.197	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:32:08.608	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:32:08.792	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:32:14.265	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:32:15.053	UL	NR Msg1
N1	2024/03/07 11:32:15.056	DL	NR Msg2
N1	2024/03/07 11:32:15.133	UL	NR Msg1
N1	2024/03/07 11:32:15.144	DL	NR Msg2
N1	2024/03/07 11:32:15.153	UL	NR Msg3
N1	2024/03/07 11:32:15.156	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:32:15.163	UL	NR Msg5
N1	2024/03/07 11:32:17.558	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:32:17.713	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:32:22.646	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:32:22.803	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:32:35.327	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:32:35.496	UL	RRC Connection Reconfiguration Complete

Ready BSE.CONNECT Copy 2024-03-07 11:32:37

n41 SCS=30kHz DFT_QAM256 BW=20MHz Channel=518598 RB=50@0



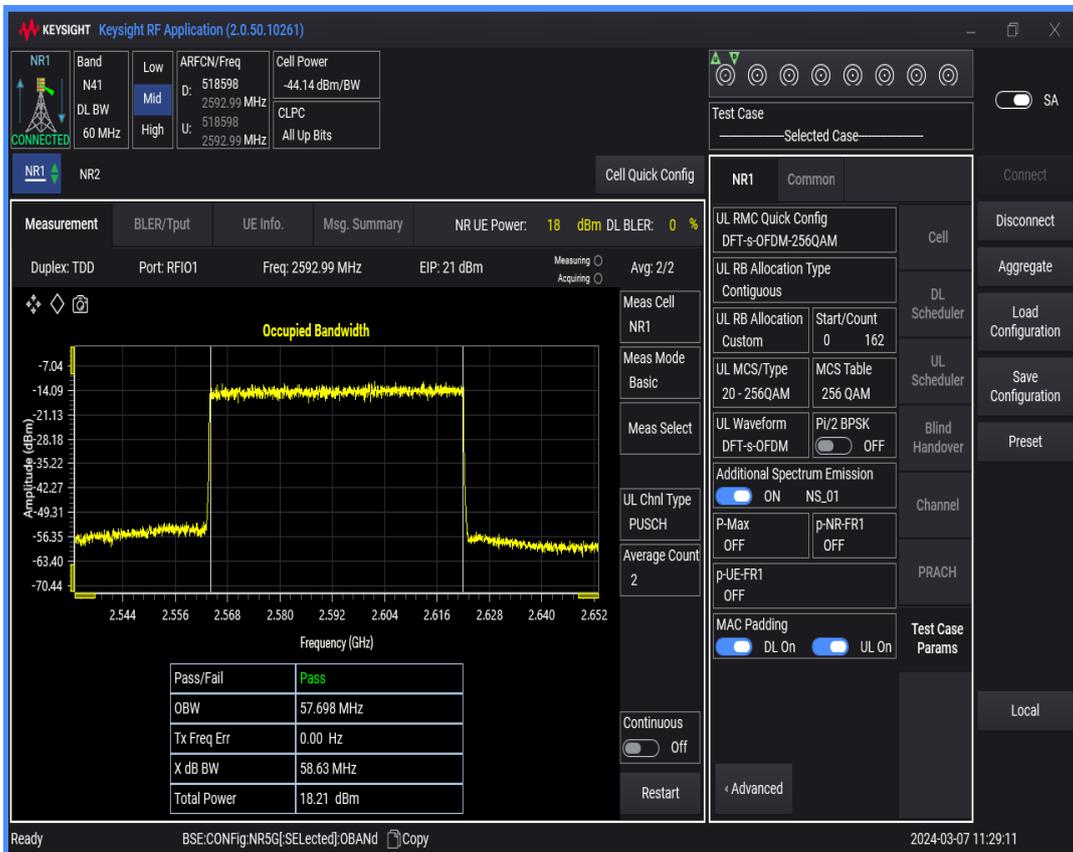
n41 SCS=30kHz DFT_QAM256 BW=40MHz Channel=518598 RB=100@0



n41 SCS=30kHz DFT_QAM256 BW=50MHz Channel=518598 RB=128@0



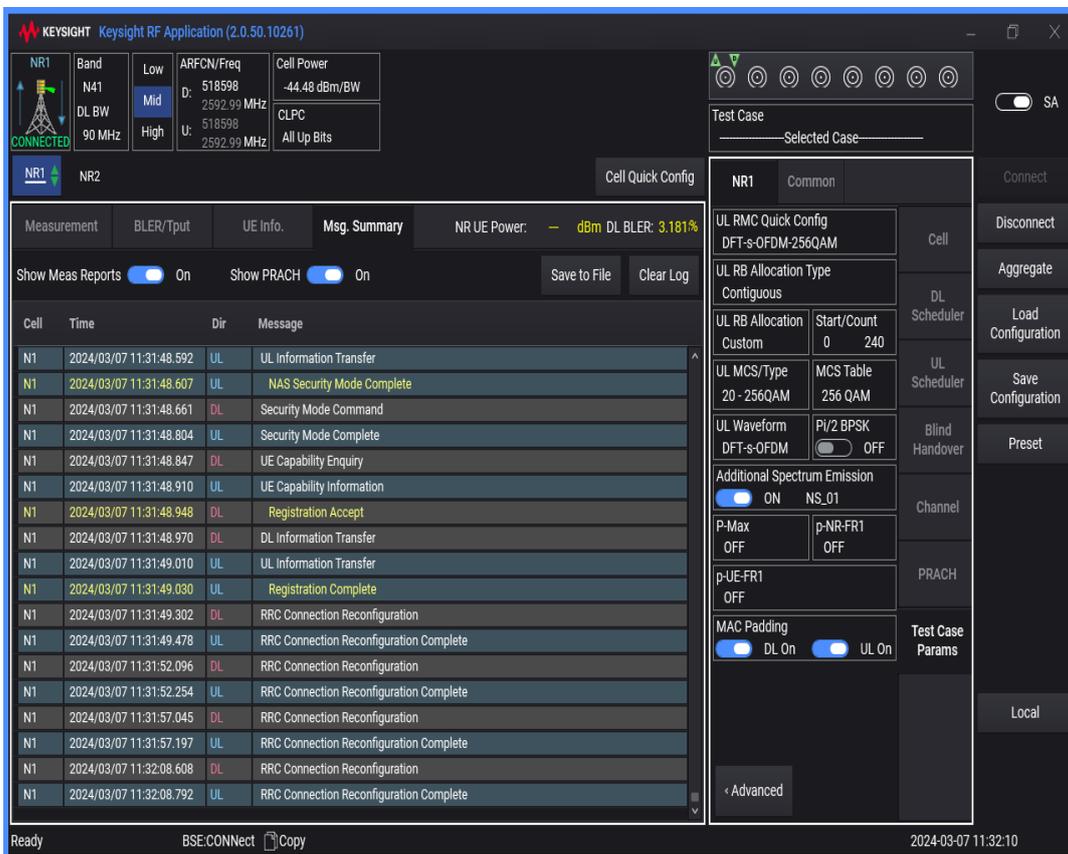
n41 SCS=30kHz DFT_QAM256 BW=60MHz Channel=518598 RB=162@0



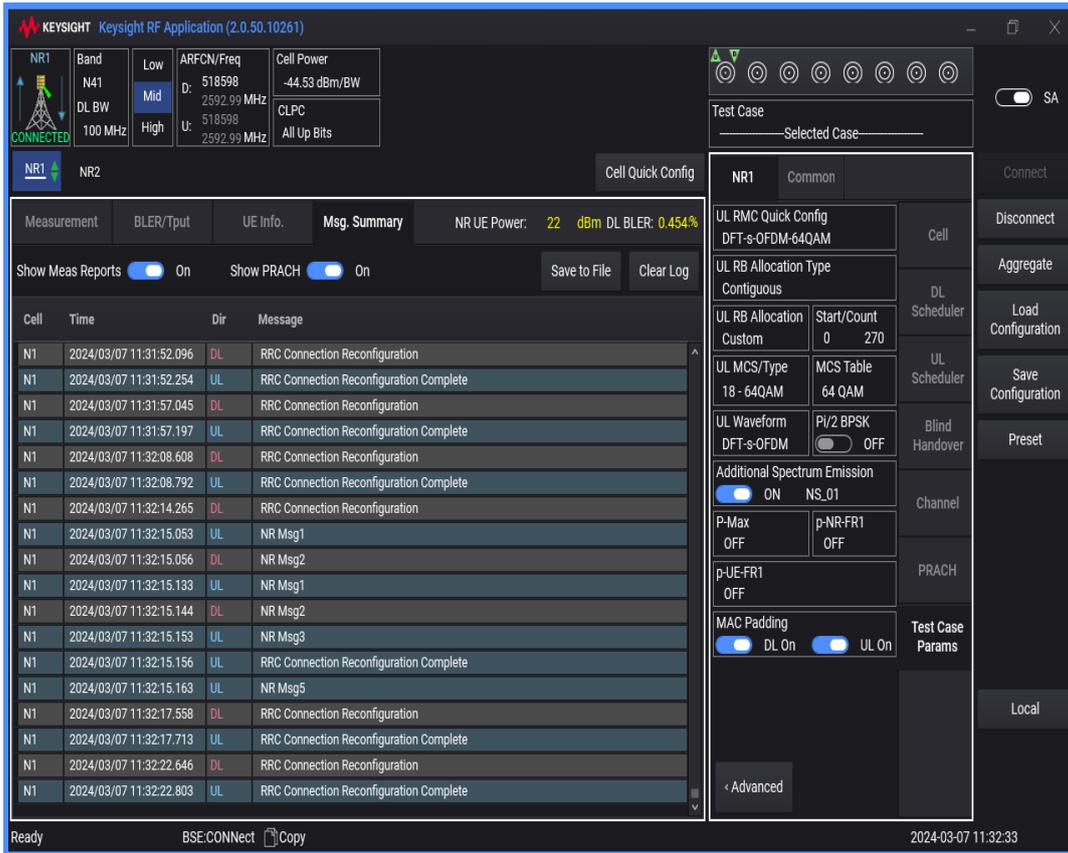
n41 SCS=30kHz DFT_QAM256 BW=80MHz Channel=518598 RB=216@0



n41 SCS=30kHz DFT_QAM256 BW=90MHz Channel=518598 RB=240@0



n41 SCS=30kHz DFT_QAM64 BW=100MHz Channel=518598 RB=270@0



n41 SCS=30kHz DFT_QAM64 BW=20MHz Channel=518598 RB=50@0



n41 SCS=30kHz DFT_QAM64 BW=40MHz Channel=518598 RB=100@0



n41 SCS=30kHz DFT_QAM64 BW=50MHz Channel=518598 RB=128@0



n41 SCS=30kHz DFT_QAM64 BW=60MHz Channel=518598 RB=162@0



n41 SCS=30kHz DFT_QAM64 BW=80MHz Channel=518598 RB=216@0



n41 SCS=30kHz DFT_QAM64 BW=90MHz Channel=518598 RB=240@0

KEYSIGHT Keysight RF Application (2.0.50.10261)

NR1 Band: N41, DL BW: 90 MHz, ARFCN/Freq: 518598, Cell Power: -44.48 dBm/BW, CLPC: All Up Bits

NR2

NR UE Power: 20 dBm DL BLER: 0.454%

Msg. Summary

Cell	Time	Dir	Message
N1	2024/03/07 11:31:48.528	DL	NAS Security Mode Command
N1	2024/03/07 11:31:48.551	DL	DL Information Transfer
N1	2024/03/07 11:31:48.592	UL	UL Information Transfer
N1	2024/03/07 11:31:48.607	UL	NAS Security Mode Complete
N1	2024/03/07 11:31:48.661	DL	Security Mode Command
N1	2024/03/07 11:31:48.804	UL	Security Mode Complete
N1	2024/03/07 11:31:48.847	DL	UE Capability Enquiry
N1	2024/03/07 11:31:48.910	UL	UE Capability Information
N1	2024/03/07 11:31:48.948	DL	Registration Accept
N1	2024/03/07 11:31:48.970	DL	DL Information Transfer
N1	2024/03/07 11:31:49.010	UL	UL Information Transfer
N1	2024/03/07 11:31:49.030	UL	Registration Complete
N1	2024/03/07 11:31:49.302	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:31:49.478	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:31:52.096	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:31:52.254	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:31:57.045	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:31:57.197	UL	RRC Connection Reconfiguration Complete

Ready BSE.CONNECT Copy 2024-03-07 11:32:06

n41 SCS=30kHz DFT_QPSK BW=100MHz Channel=518598 RB=270@0

KEYSIGHT Keysight RF Application (2.0.50.10261)

NR1 Band: N41, DL BW: 100 MHz, ARFCN/Freq: 518598, Cell Power: -44.53 dBm/BW, CLPC: All Up Bits

NR2

NR UE Power: 24 dBm DL BLER: 0.454%

Msg. Summary

Cell	Time	Dir	Message
N1	2024/03/07 11:31:52.096	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:31:52.254	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:31:57.045	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:31:57.197	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:32:08.608	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:32:08.792	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:32:14.265	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:32:15.053	UL	NR Msg1
N1	2024/03/07 11:32:15.056	DL	NR Msg2
N1	2024/03/07 11:32:15.133	UL	NR Msg1
N1	2024/03/07 11:32:15.144	DL	NR Msg2
N1	2024/03/07 11:32:15.153	UL	NR Msg3
N1	2024/03/07 11:32:15.156	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:32:15.163	UL	NR Msg5
N1	2024/03/07 11:32:17.558	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:32:17.713	UL	RRC Connection Reconfiguration Complete
N1	2024/03/07 11:32:22.646	DL	RRC Connection Reconfiguration
N1	2024/03/07 11:32:22.803	UL	RRC Connection Reconfiguration Complete

Ready BSE.CONNECT Copy 2024-03-07 11:32:24

n41 SCS=30kHz DFT_QPSK BW=20MHz Channel=518598 RB=50@0



n41 SCS=30kHz DFT_QPSK BW=40MHz Channel=518598 RB=100@0



n41 SCS=30kHz DFT_QPSK BW=50MHz Channel=518598 RB=128@0



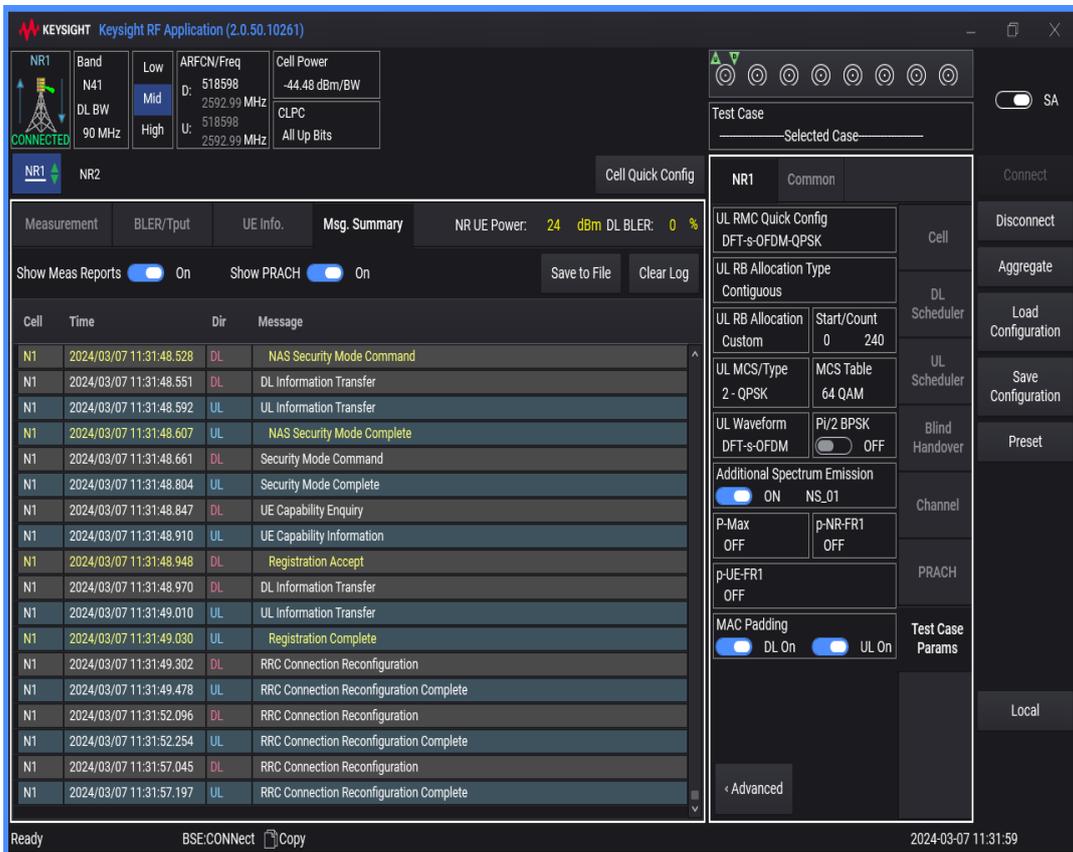
n41 SCS=30kHz DFT_QPSK BW=60MHz Channel=518598 RB=162@0



n41 SCS=30kHz DFT_QPSK BW=80MHz Channel=518598 RB=216@0



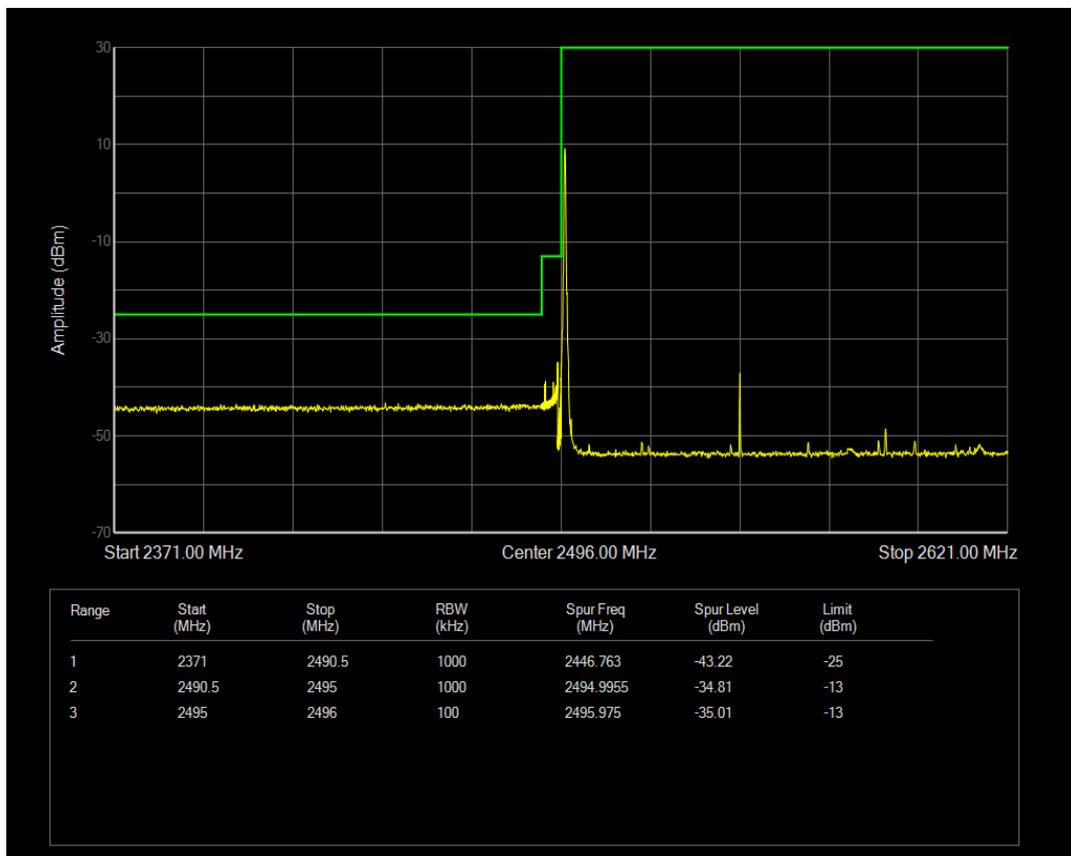
n41 SCS=30kHz DFT_QPSK BW=90MHz Channel=518598 RB=240@0



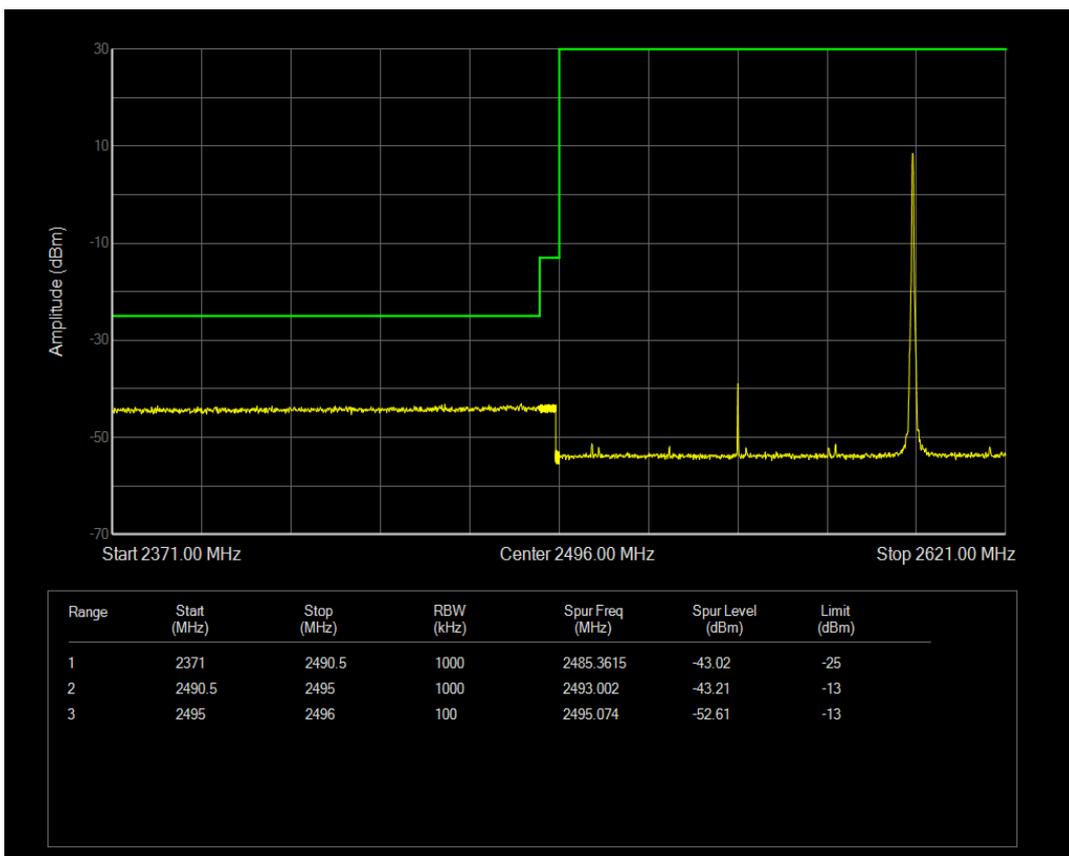
5 Band edge for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n41	30	20	501204	51@0	CP_QPSK	2490.38	-32.26	-25	PASS
n41	30	20	501204	1@0	CP_QPSK	2488.00	-42.60	-25	PASS
n41	30	20	501204	1@50	CP_QPSK	2489.33	-43.05	-25	PASS
n41	30	20	535998	51@0	CP_QPSK	2692.10	-25.26	-10	PASS
n41	30	20	535998	1@0	CP_QPSK	2712.11	-43.13	-25	PASS
n41	30	20	535998	1@50	CP_QPSK	2711.09	-43.09	-25	PASS
n41	30	50	504204	133@0	CP_QPSK	2490.44	-37.41	-25	PASS
n41	30	50	504204	1@0	CP_QPSK	2486.17	-42.71	-25	PASS
n41	30	50	504204	1@132	CP_QPSK	2489.76	-43.04	-25	PASS
n41	30	50	532998	133@0	CP_QPSK	2690.01	-25.26	-10	PASS
n41	30	50	532998	1@0	CP_QPSK	2745.56	-43.05	-25	PASS
n41	30	50	532998	1@132	CP_QPSK	2741.04	-43.06	-25	PASS
n41	30	100	509202	273@0	CP_QPSK	2496.00	-22.83	-13	PASS
n41	30	100	509202	1@0	CP_QPSK	2446.76	-43.22	-25	PASS
n41	30	100	509202	1@272	CP_QPSK	2485.36	-43.02	-25	PASS
n41	30	100	528000	273@0	CP_QPSK	2690.02	-21.80	-10	PASS
n41	30	100	528000	1@0	CP_QPSK	2801.50	-43.34	-25	PASS
n41	30	100	528000	1@272	CP_QPSK	2810.40	-43.30	-25	PASS

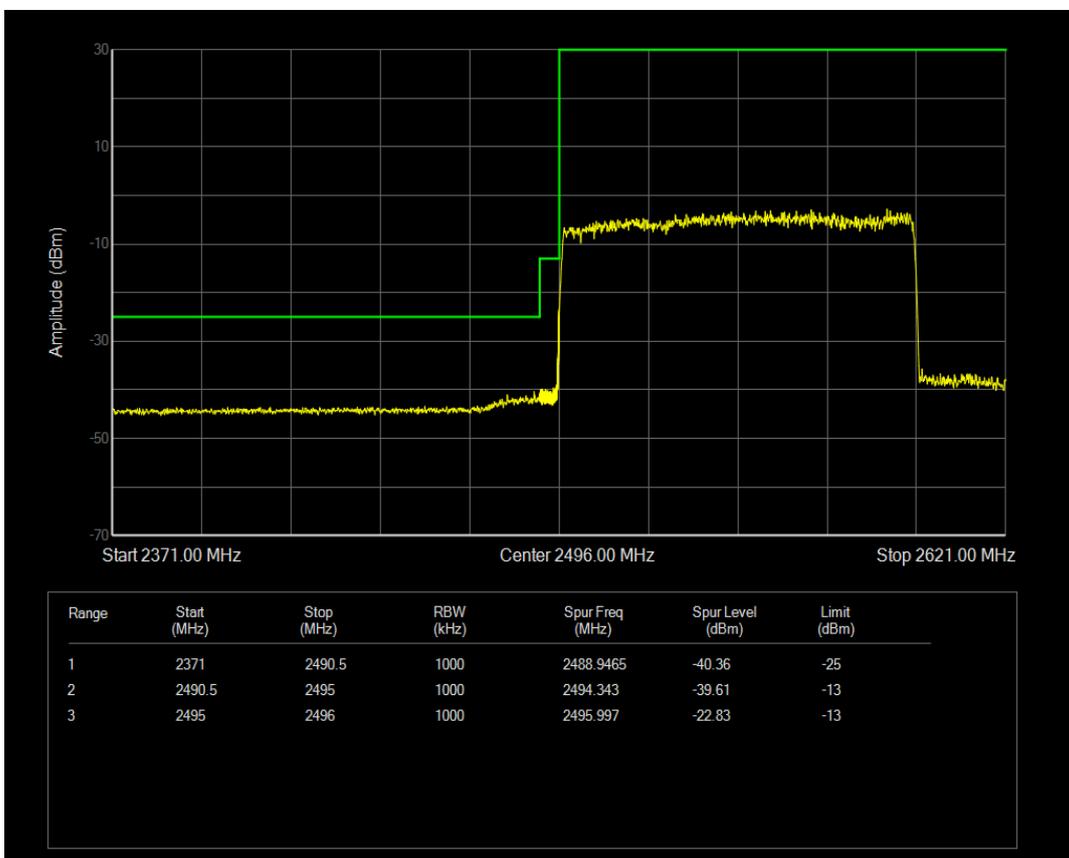
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@0



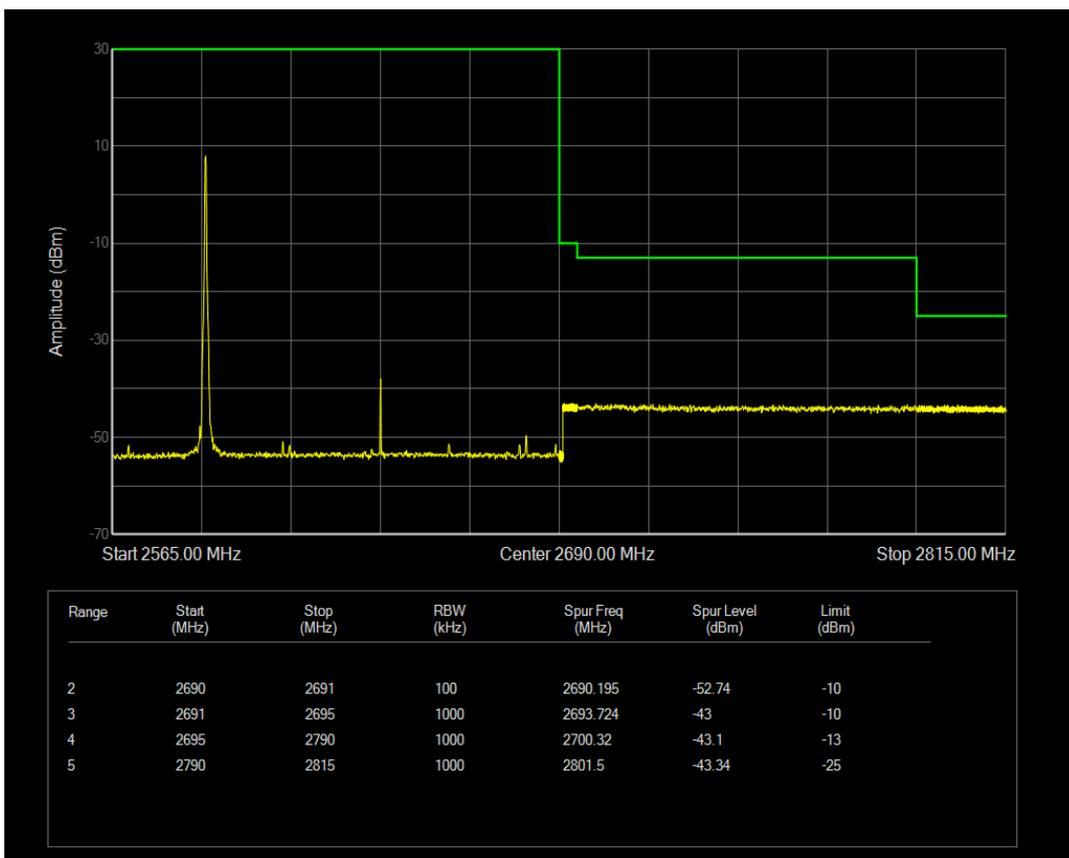
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@272



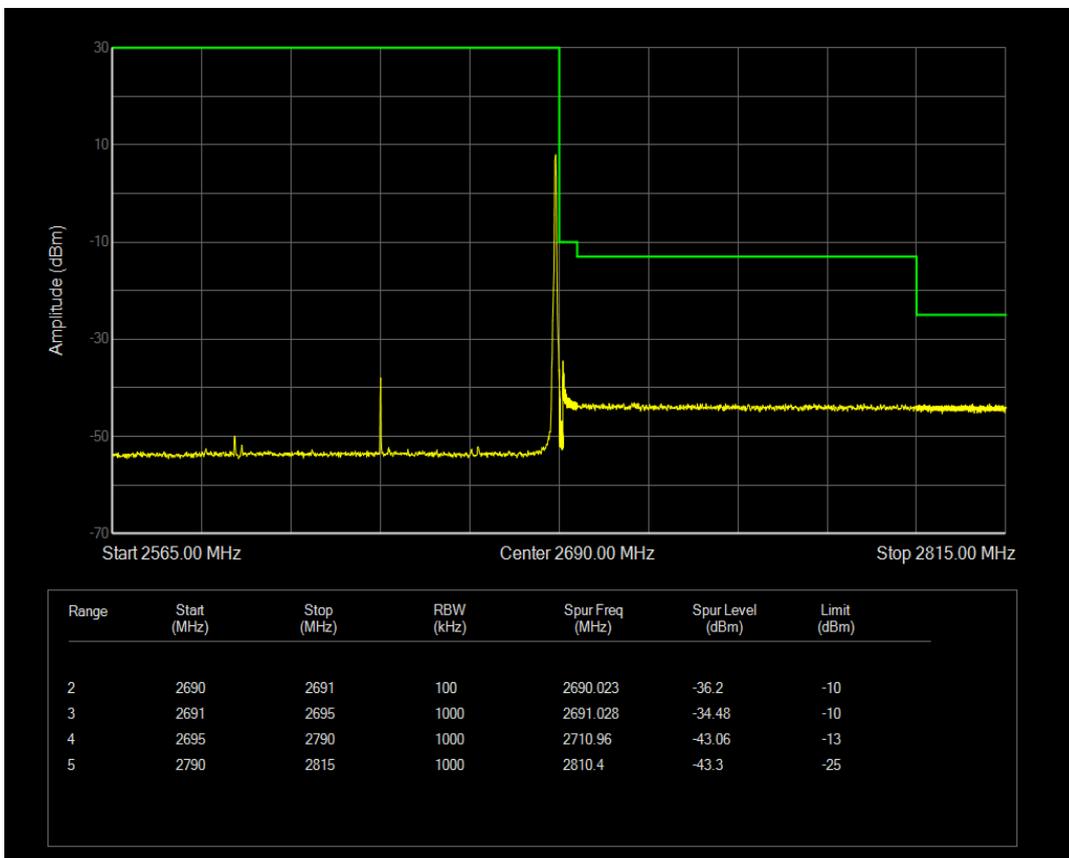
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=273@0



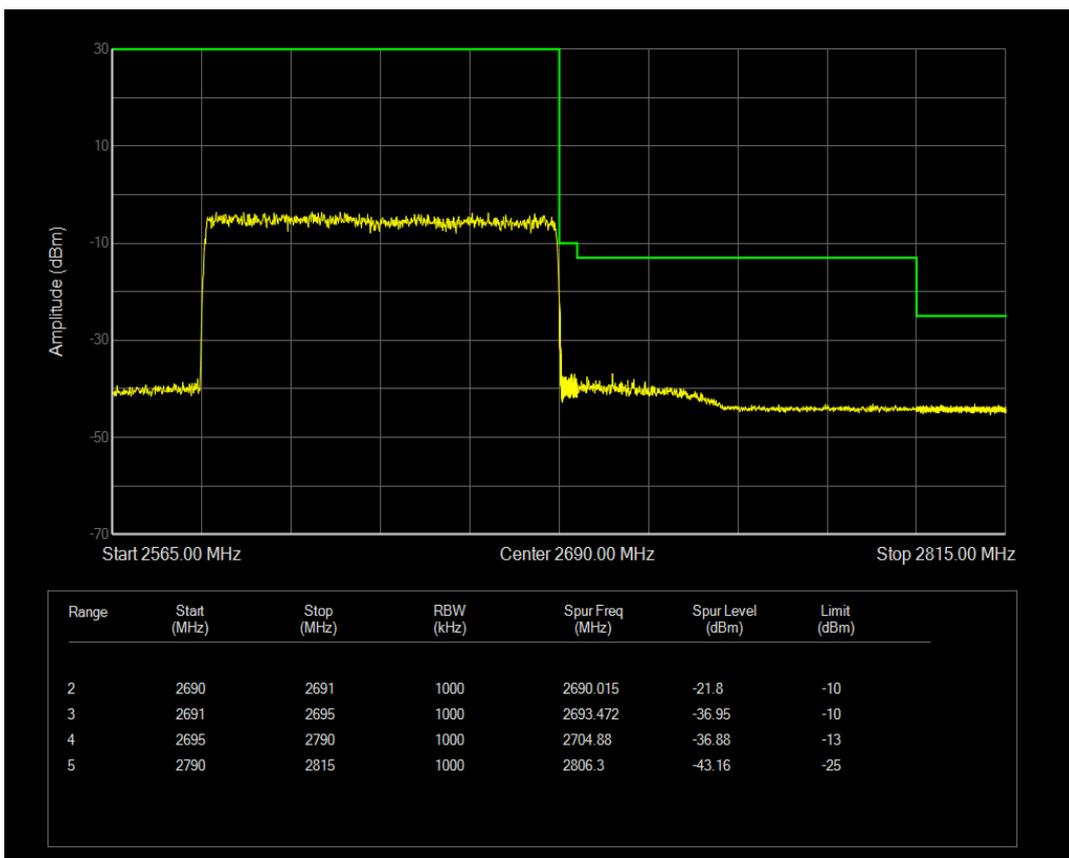
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=1@0



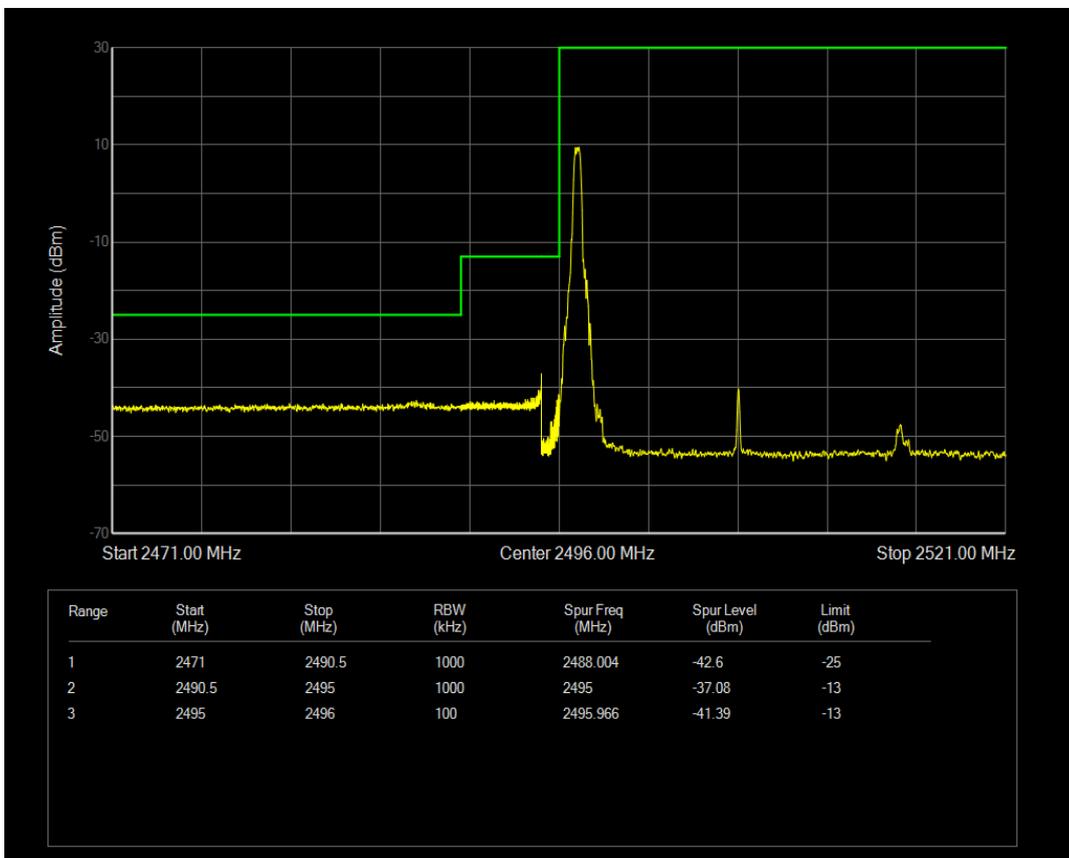
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=1@272



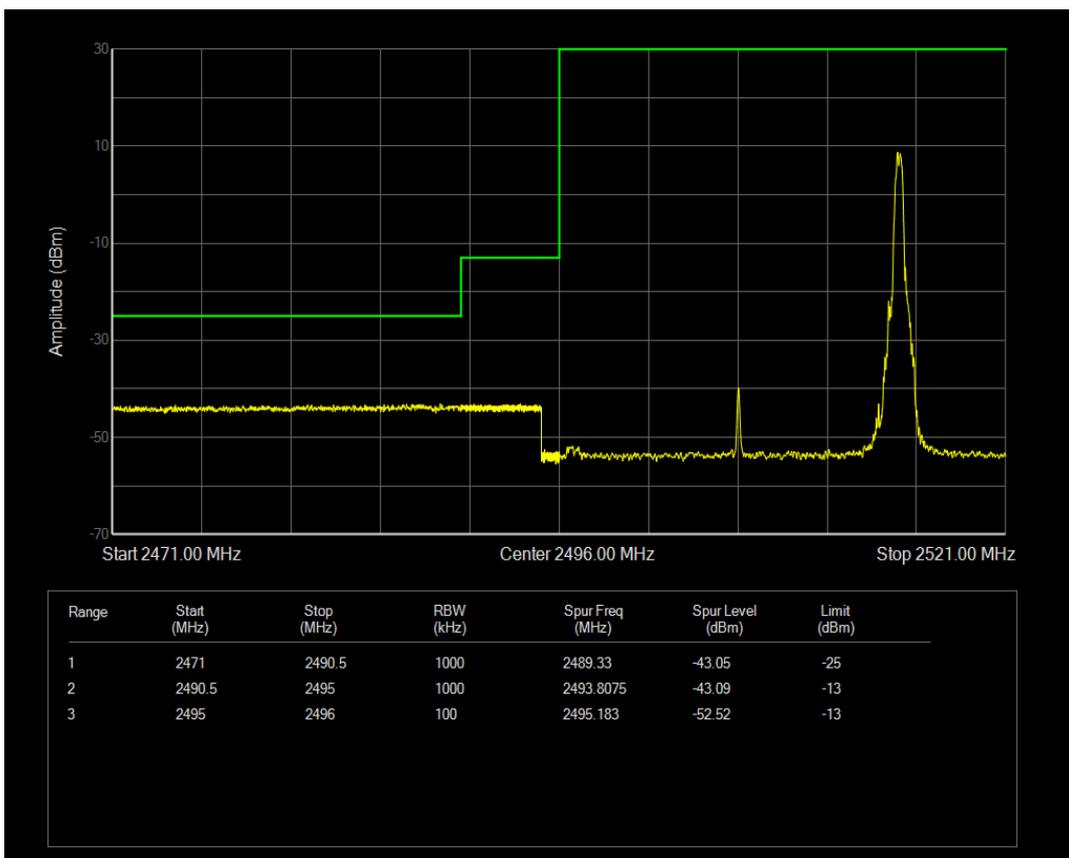
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=273@0



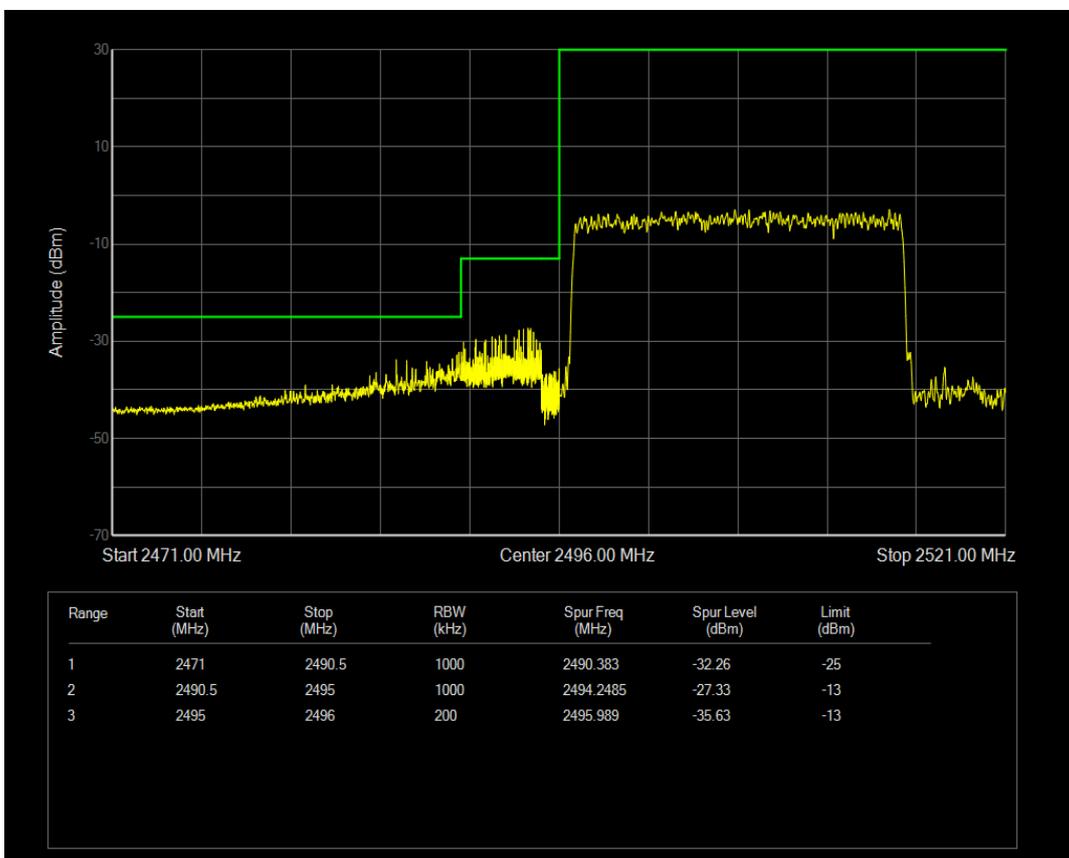
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=1@0



n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=1@50



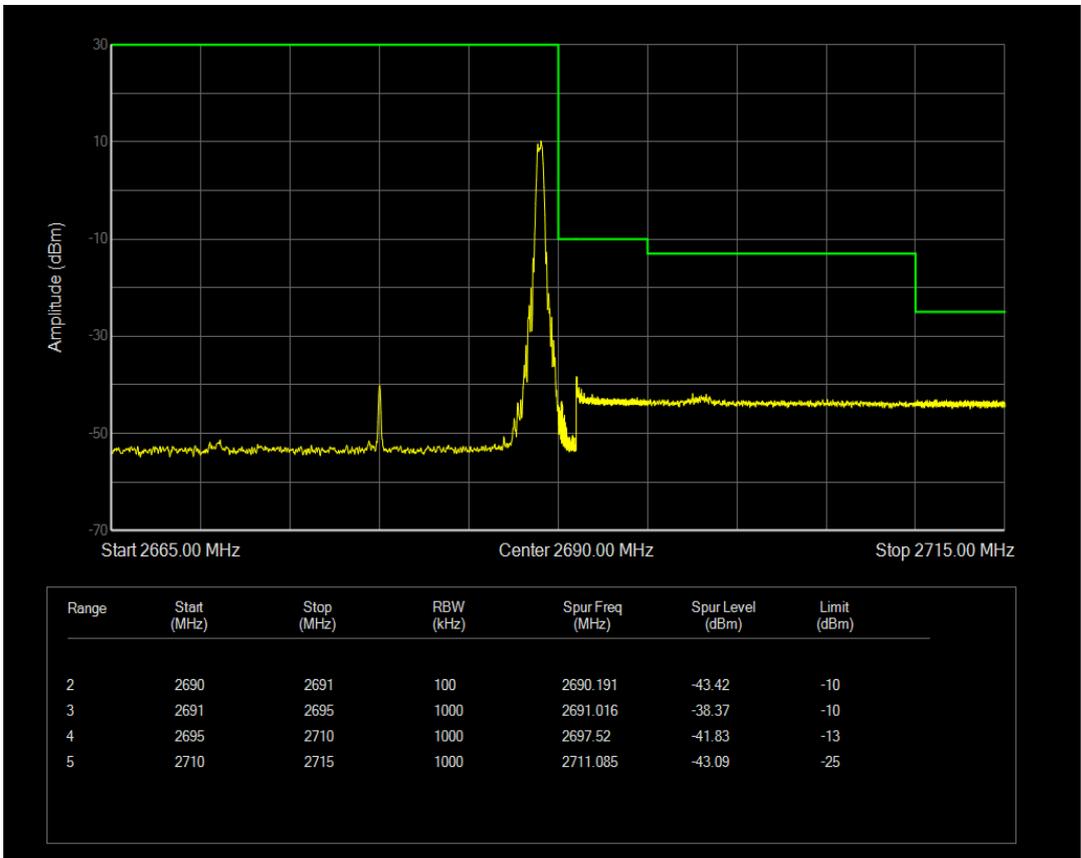
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=51@0



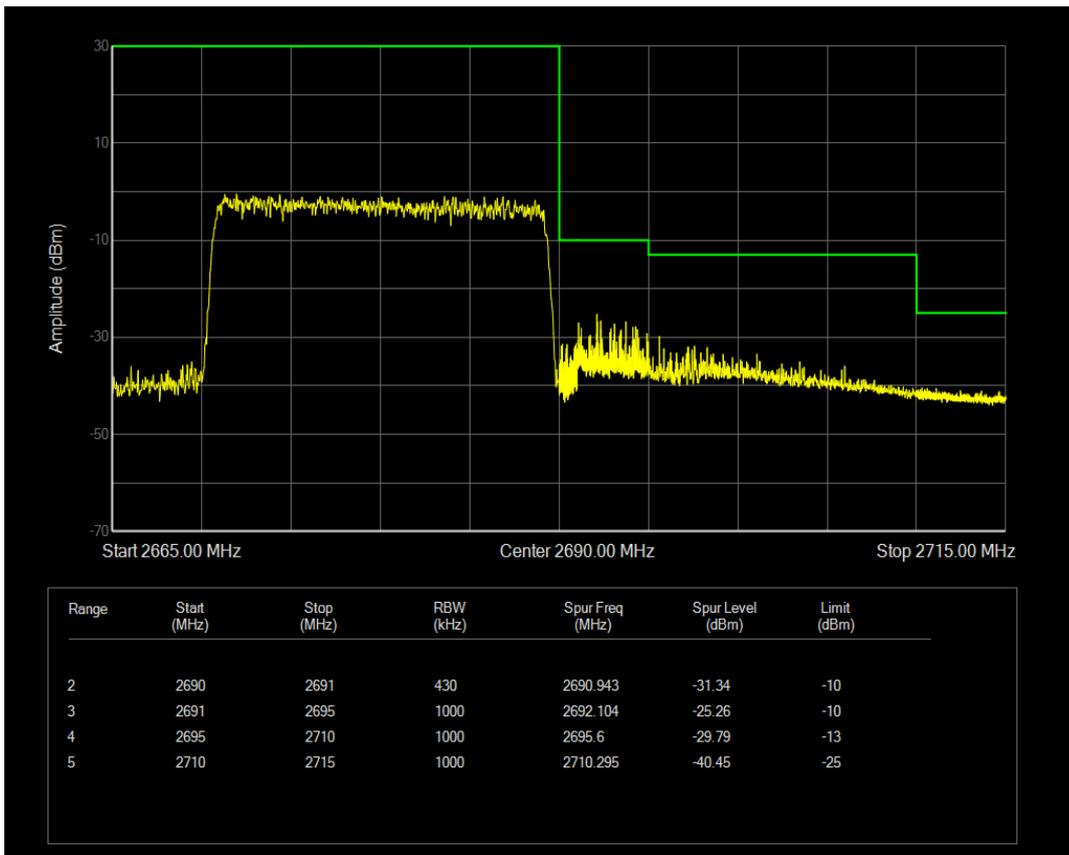
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=1 @0



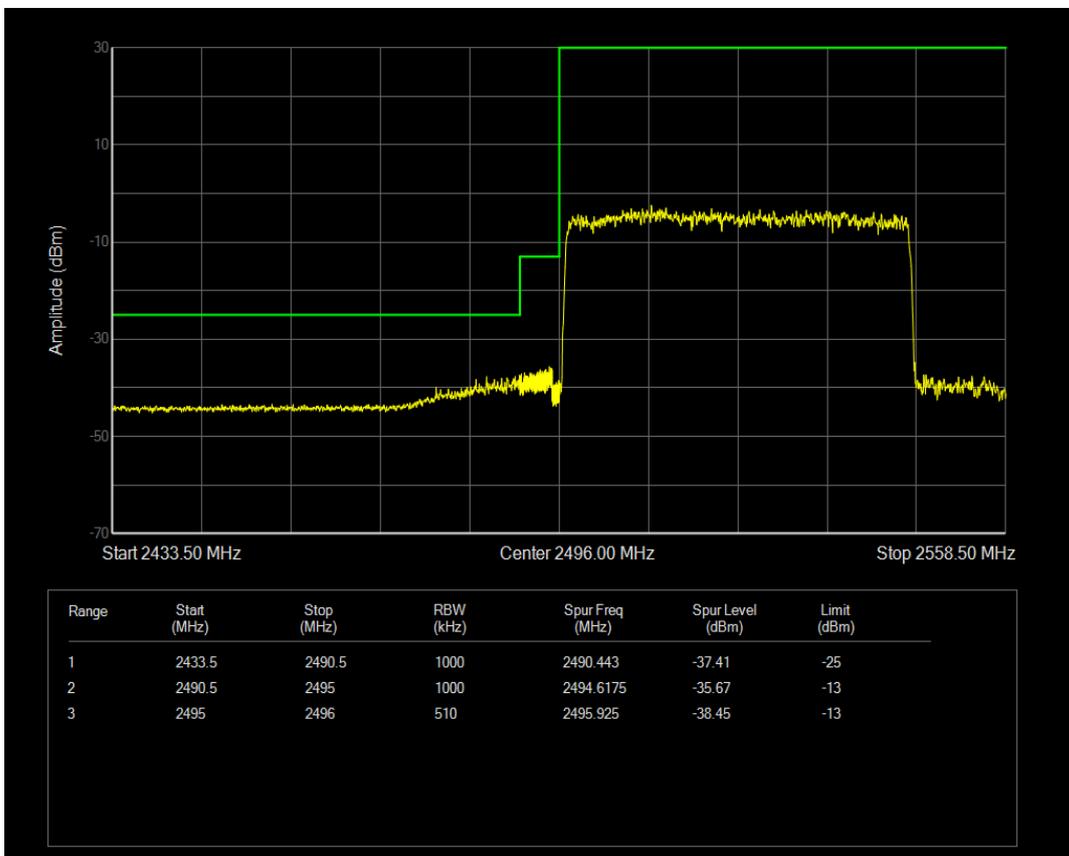
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=1 @50



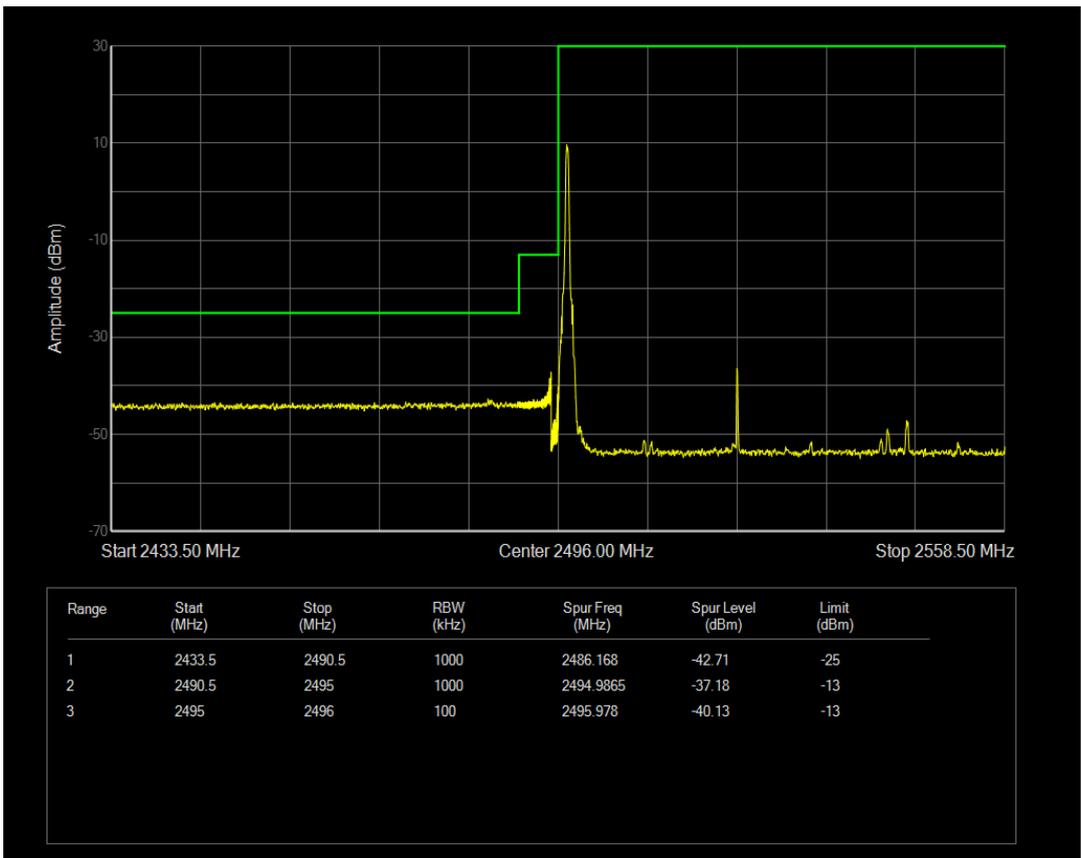
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=51 @0



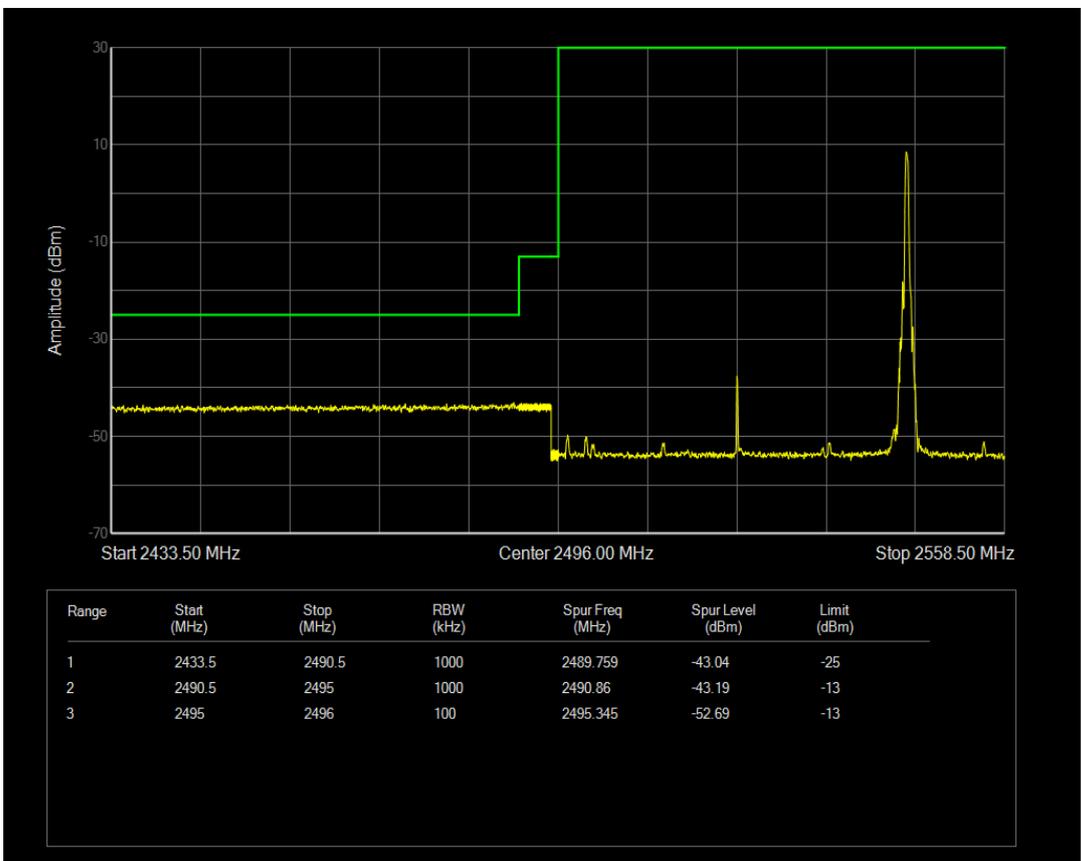
n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=133 @0



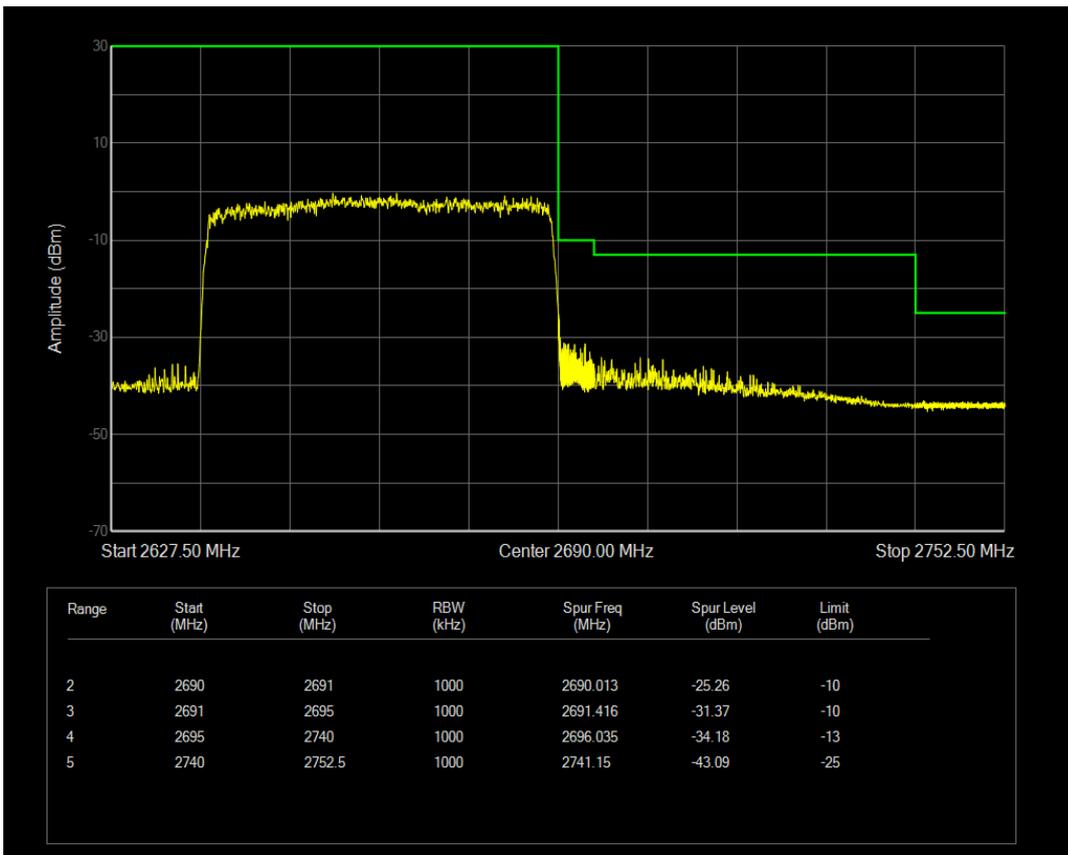
n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=1@0



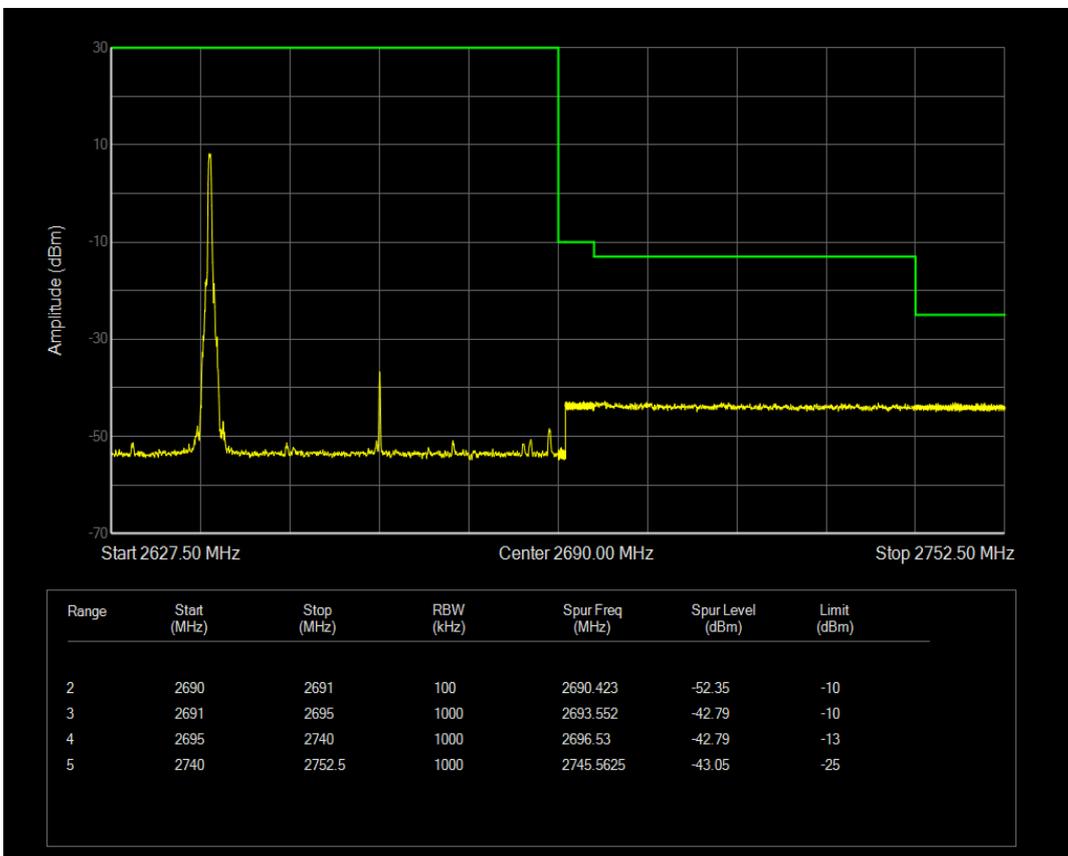
n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=1@132



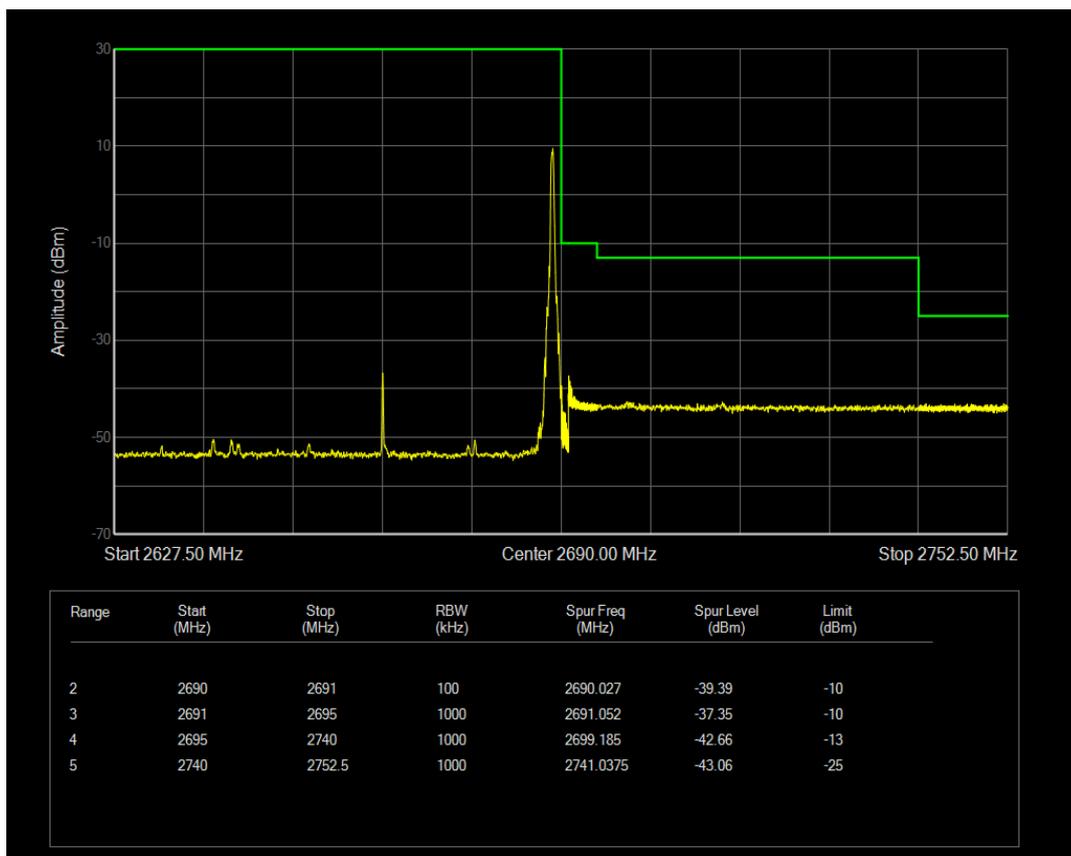
n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=133@0



n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=1@0



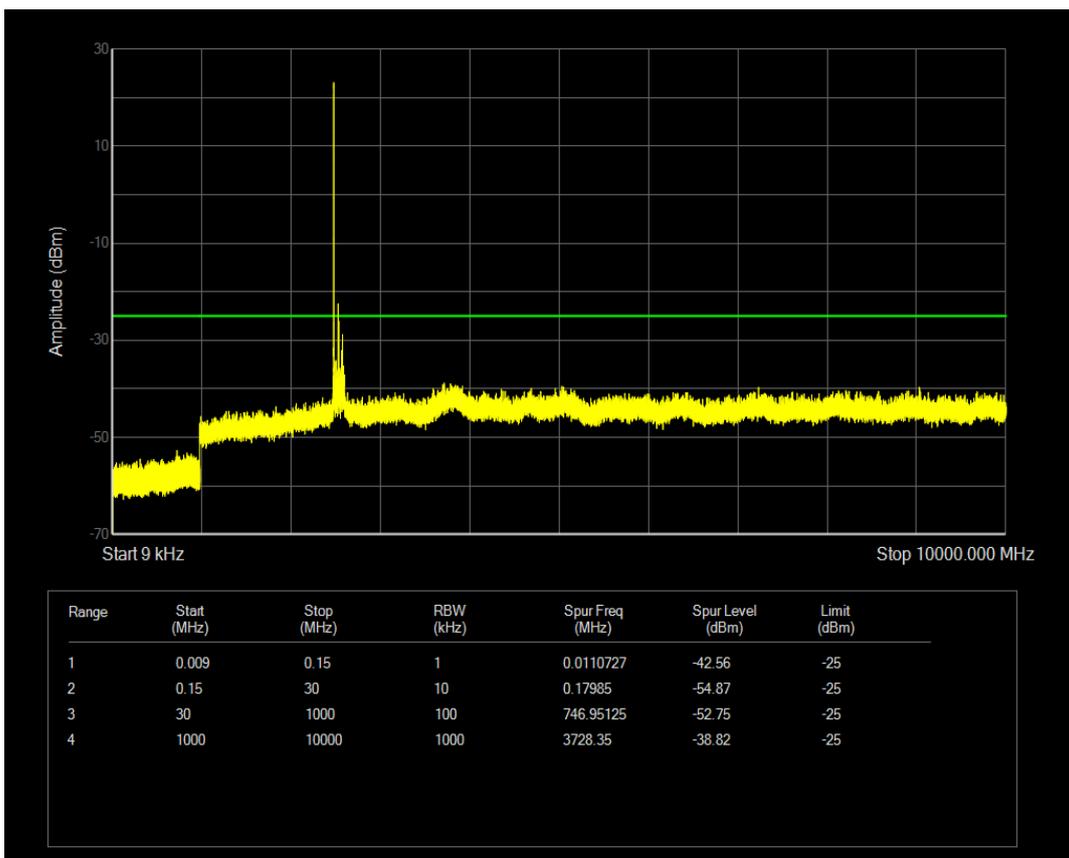
n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=1@132



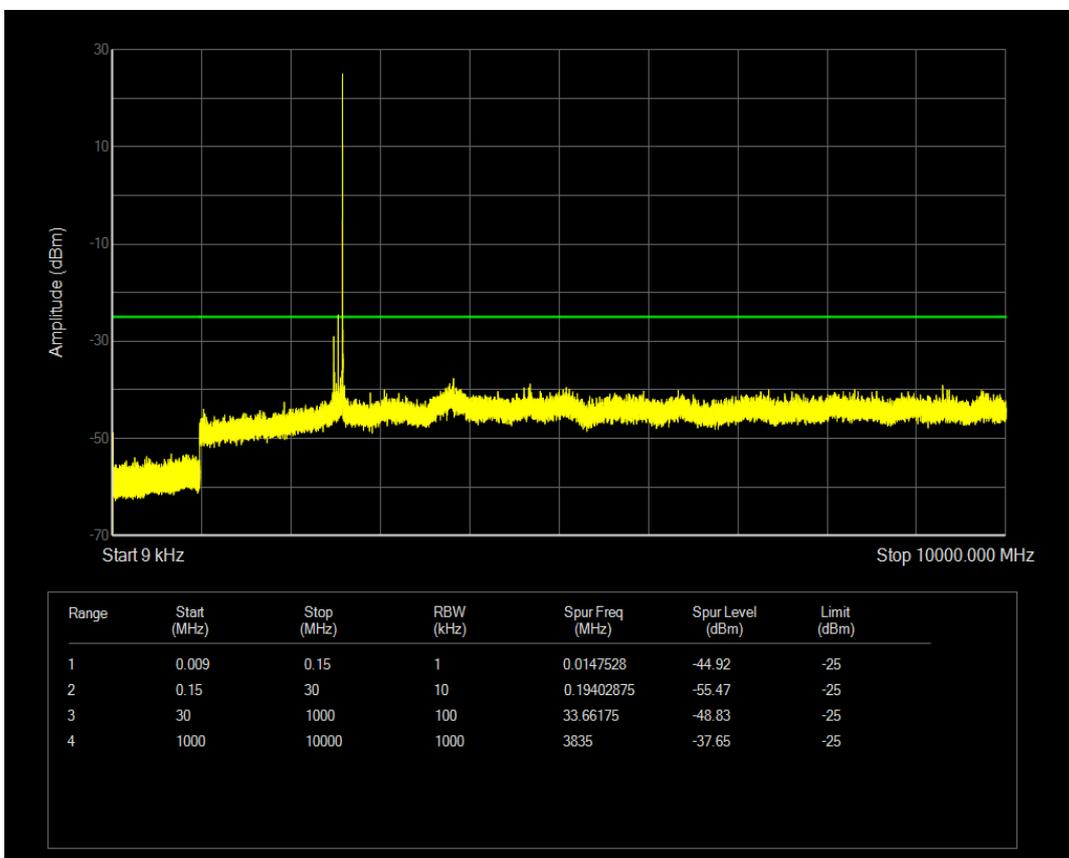
6 Out-of-band emissions for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n41	30	20	501204	51@0	CP_QPSK	3699.78	-38.85	-25	PASS
n41	30	20	501204	1@0	CP_QPSK	3804.85	-37.90	-25	PASS
n41	30	20	501204	1@50	CP_QPSK	3803.95	-38.22	-25	PASS
n41	30	20	535998	51@0	CP_QPSK	3859.08	-38.65	-25	PASS
n41	30	20	535998	1@0	CP_QPSK	3811.38	-38.95	-25	PASS
n41	30	20	535998	1@50	CP_QPSK	3745.45	-38.72	-25	PASS
n41	30	50	504204	133@0	CP_QPSK	3928.60	-38.42	-25	PASS
n41	30	50	504204	1@0	CP_QPSK	3795.40	-38.71	-25	PASS
n41	30	50	504204	1@132	CP_QPSK	3787.98	-38.94	-25	PASS
n41	30	50	532998	133@0	CP_QPSK	3805.08	-38.80	-25	PASS
n41	30	50	532998	1@0	CP_QPSK	3829.38	-37.48	-25	PASS
n41	30	50	532998	1@132	CP_QPSK	5028.63	-38.97	-25	PASS
n41	30	100	509202	273@0	CP_QPSK	3723.63	-37.91	-25	PASS
n41	30	100	509202	1@0	CP_QPSK	3728.35	-38.82	-25	PASS
n41	30	100	509202	1@272	CP_QPSK	3835.00	-37.65	-25	PASS
n41	30	100	528000	273@0	CP_QPSK	3801.25	-38.58	-25	PASS
n41	30	100	528000	1@0	CP_QPSK	3666.70	-38.96	-25	PASS
n41	30	100	528000	1@272	CP_QPSK	3864.48	-38.43	-25	PASS

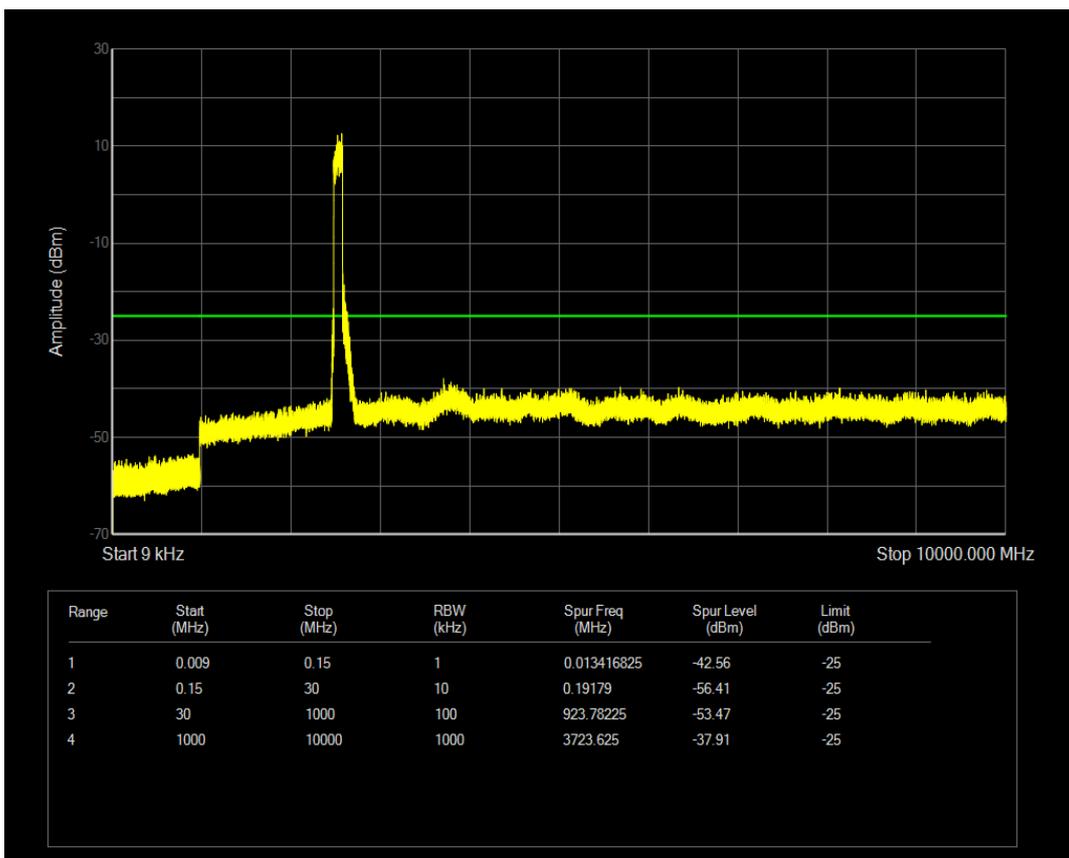
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@0



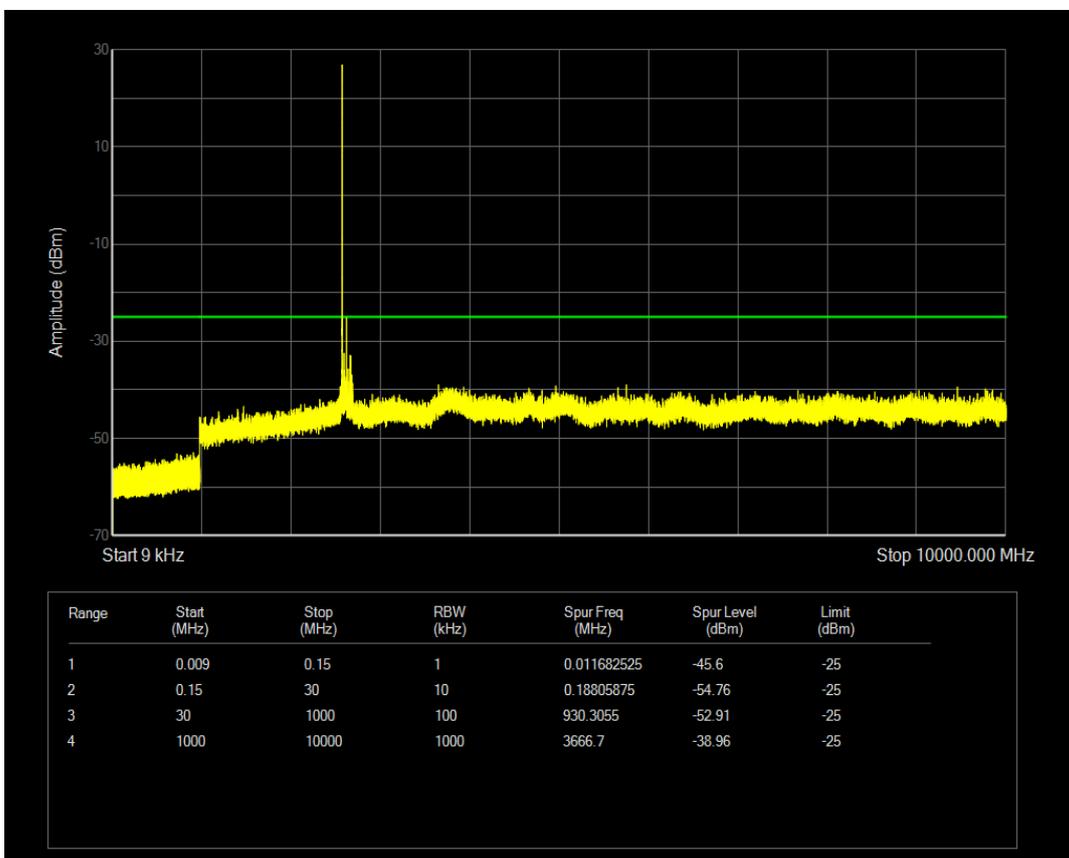
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@272



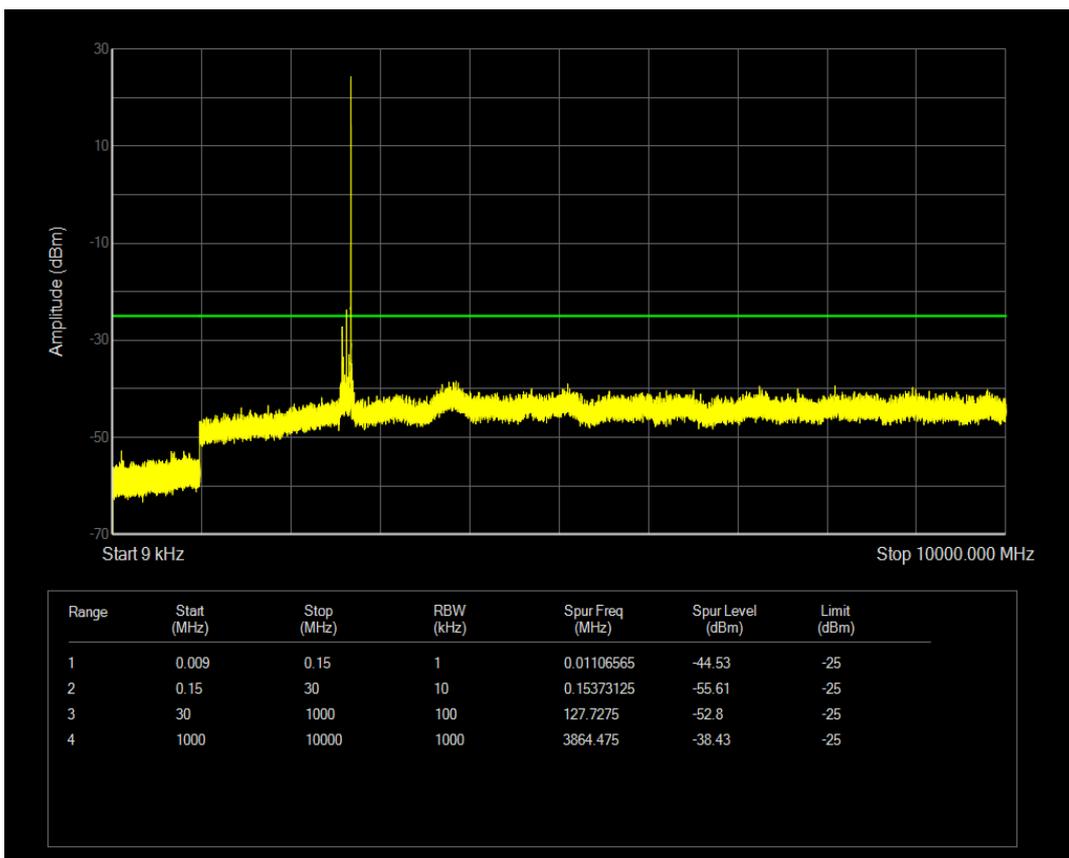
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=273@0



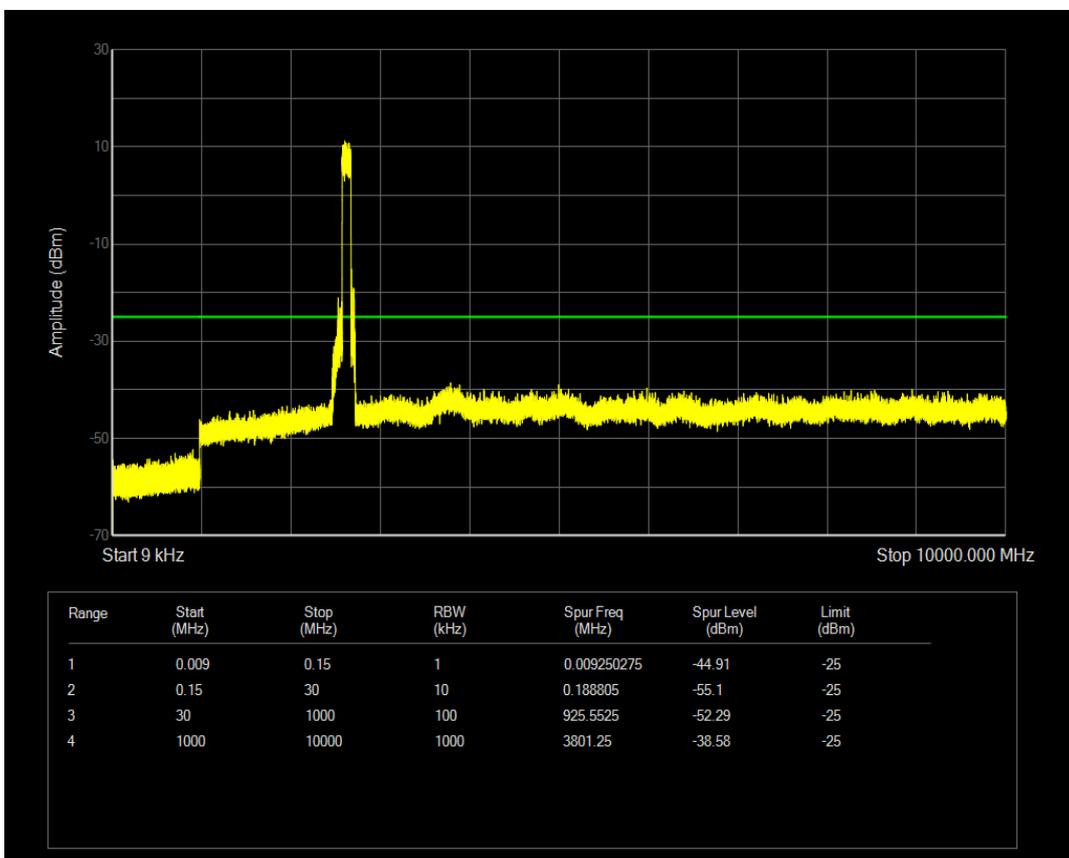
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=1@0



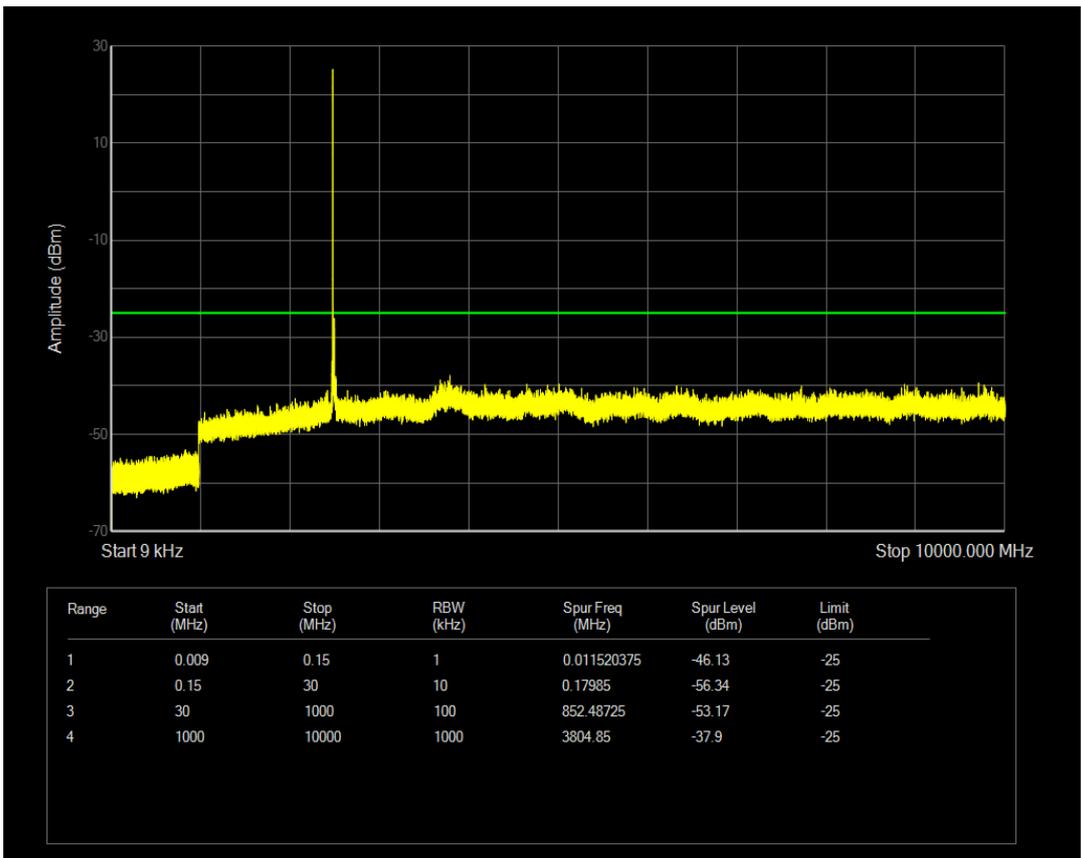
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=1@272



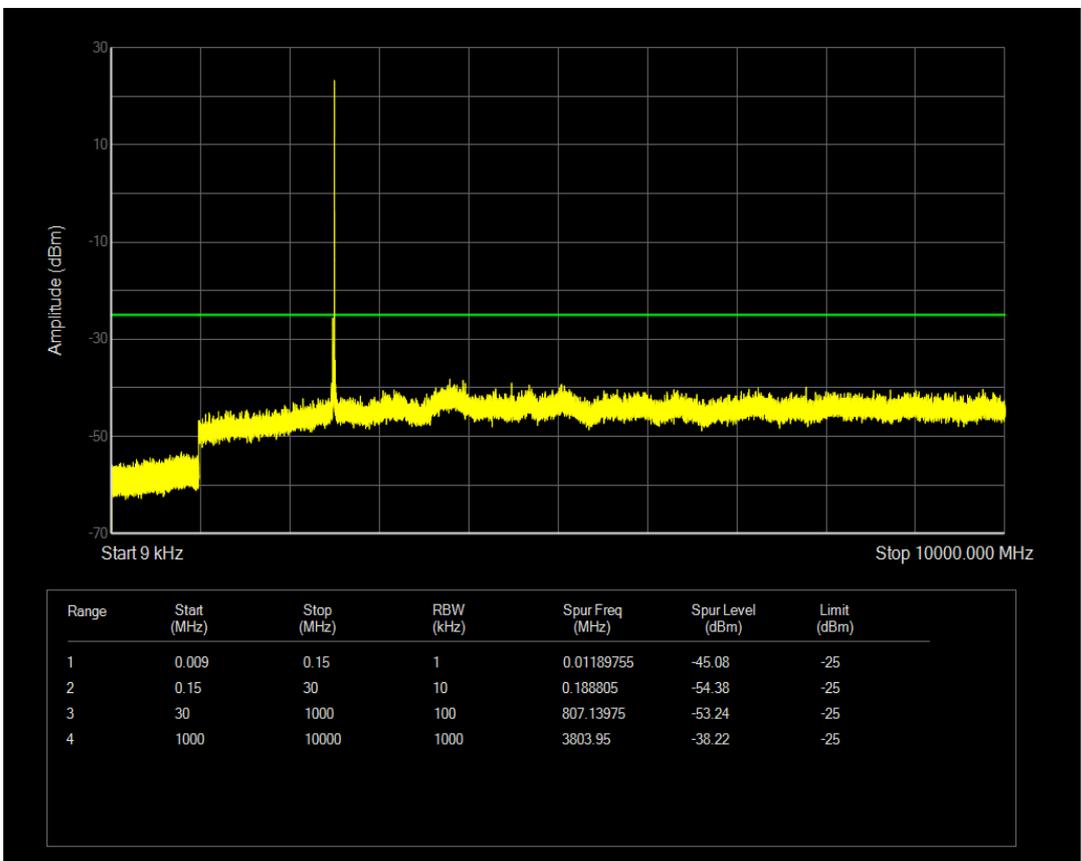
n41 SCS=30kHz CP_QPSK BW=100MHz Channel=528000 RB=273@0



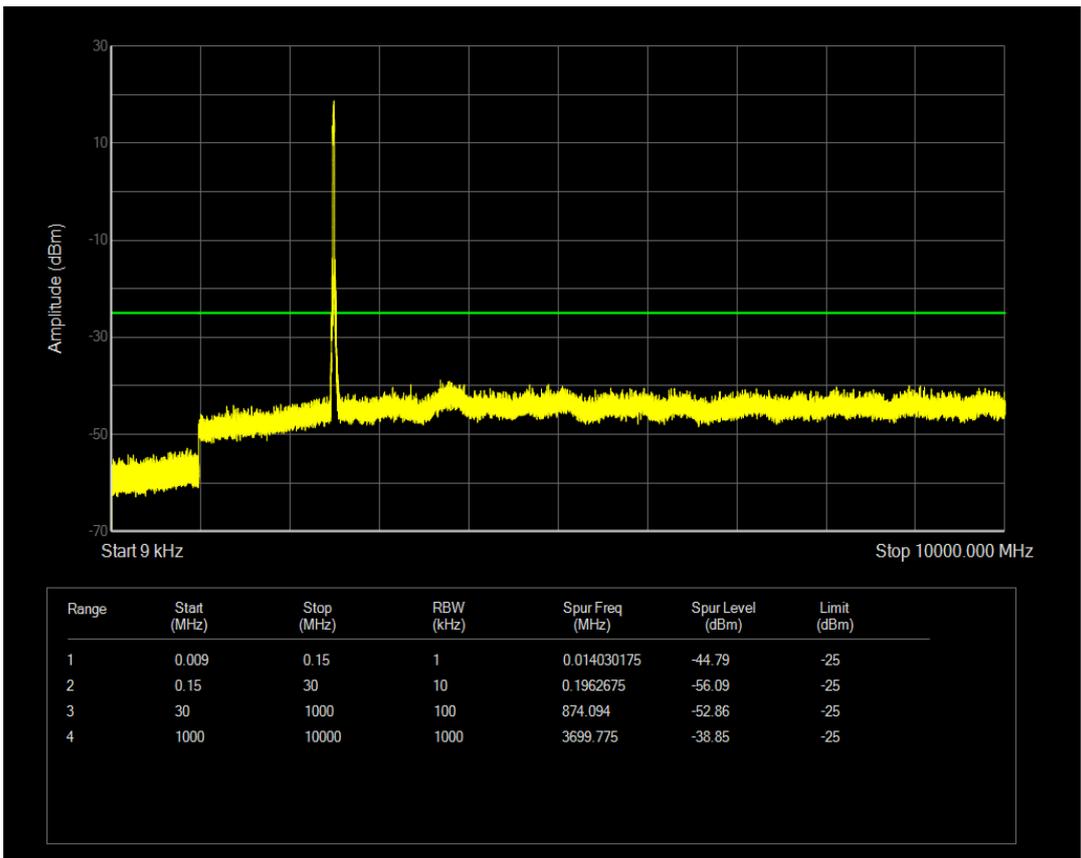
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=1@0



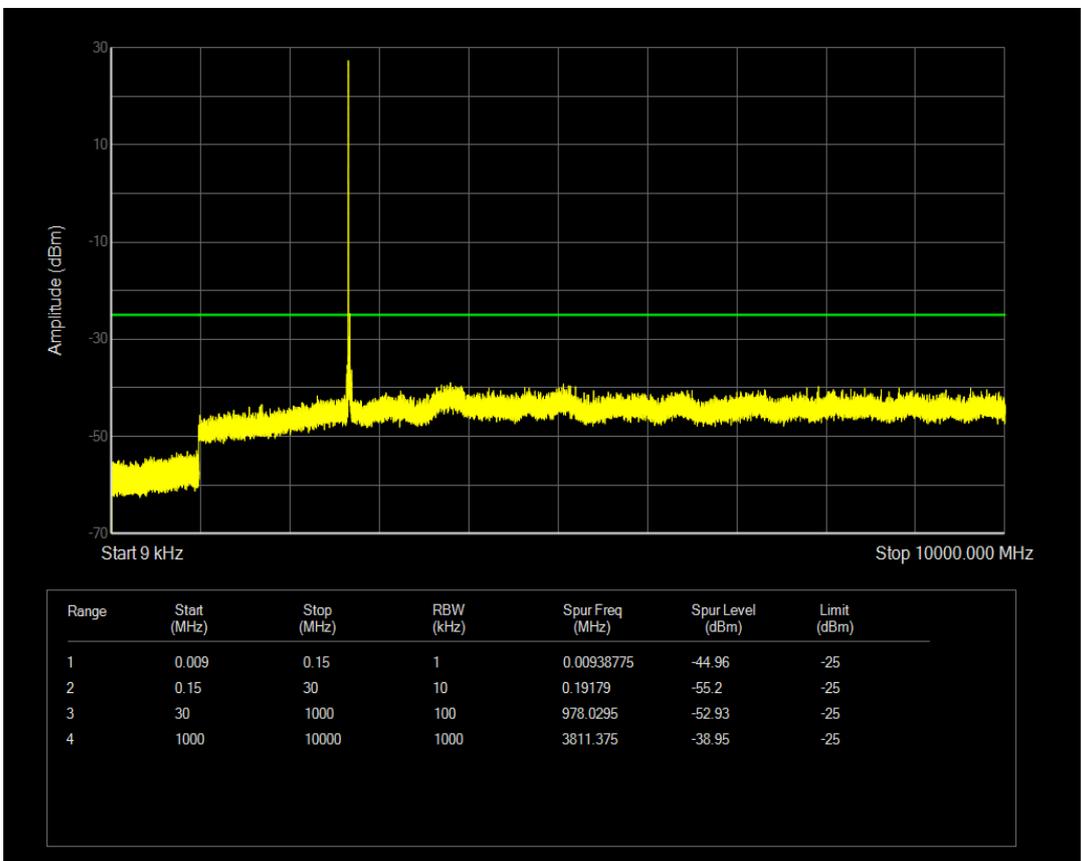
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=1@50



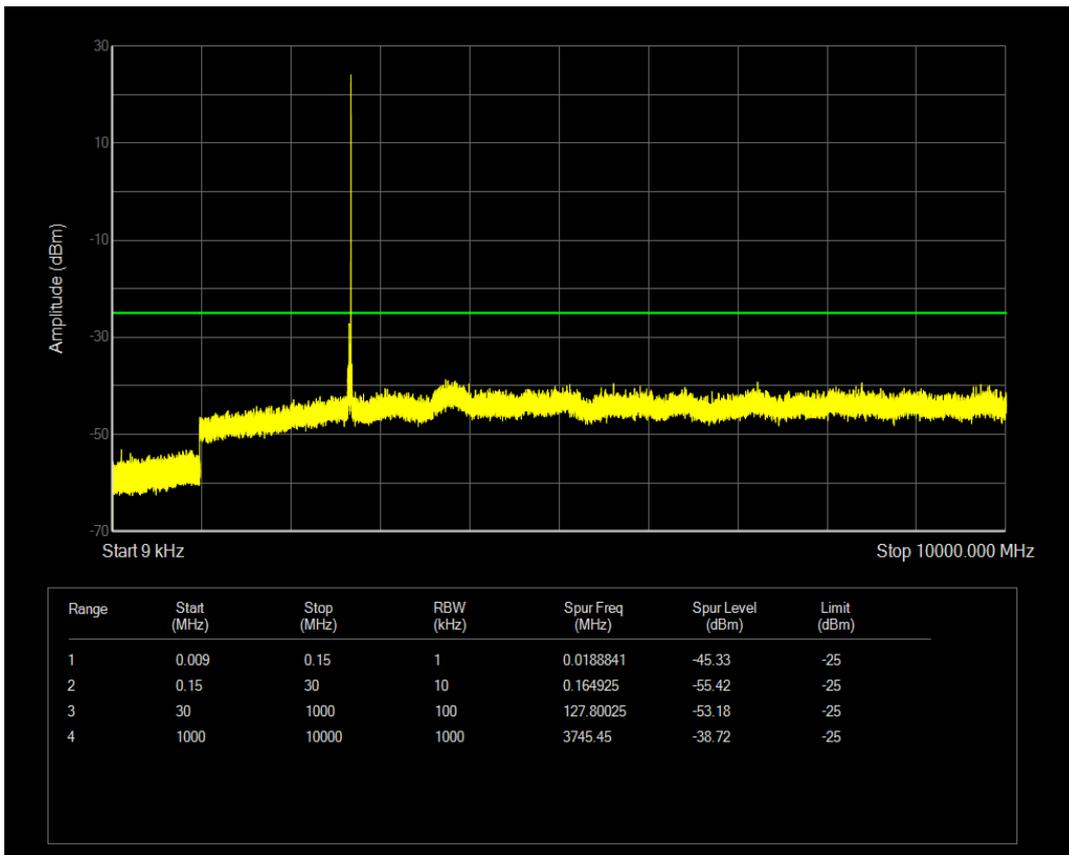
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=501204 RB=51 @0



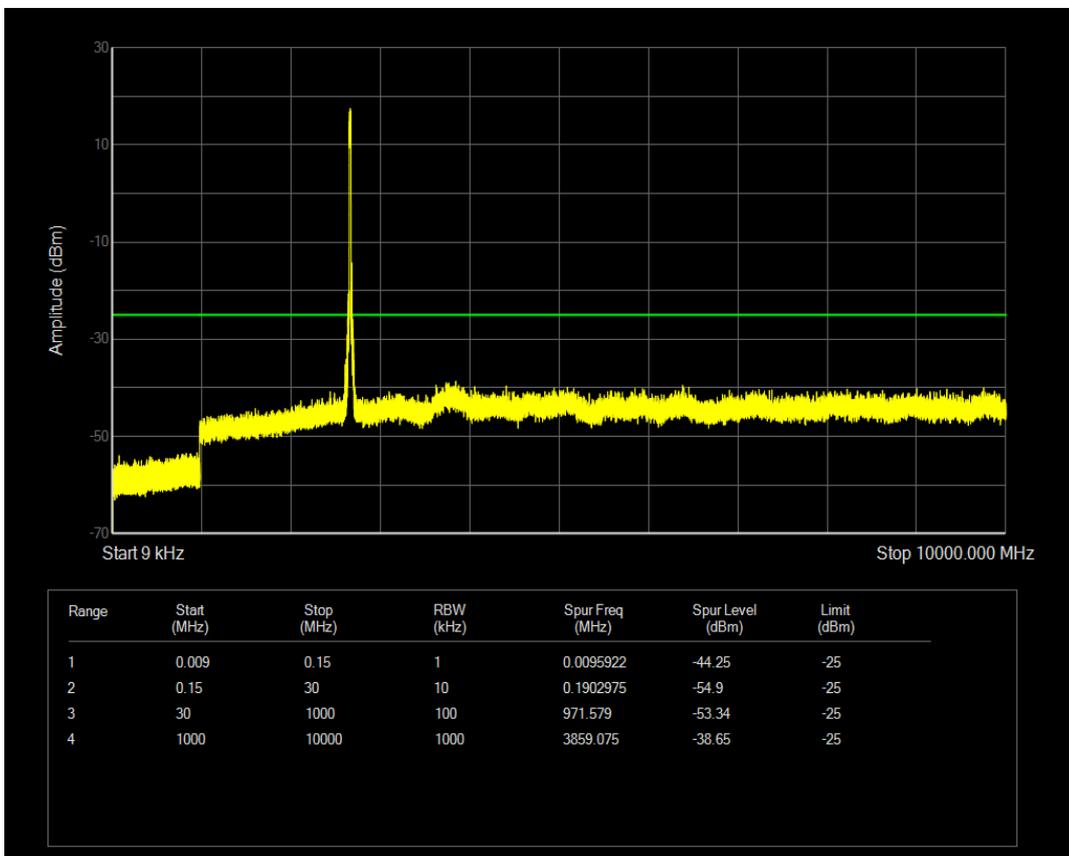
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=1 @0



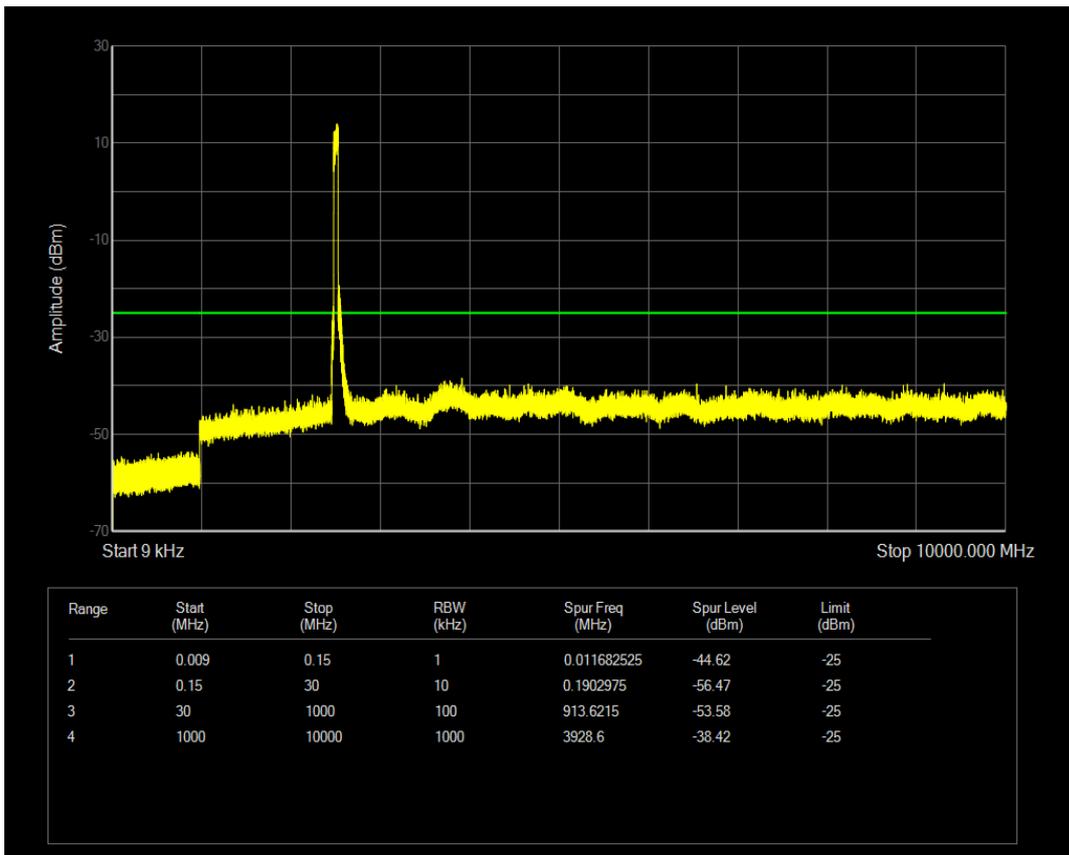
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=1@50



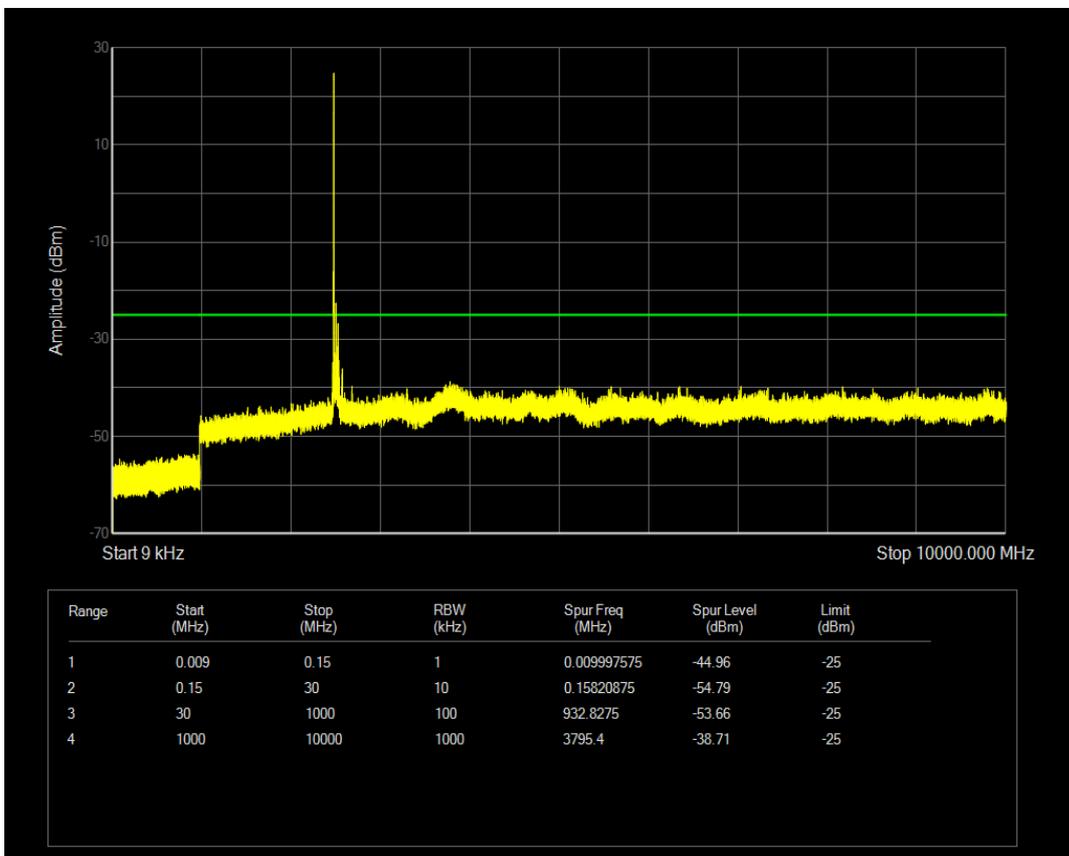
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=51@0



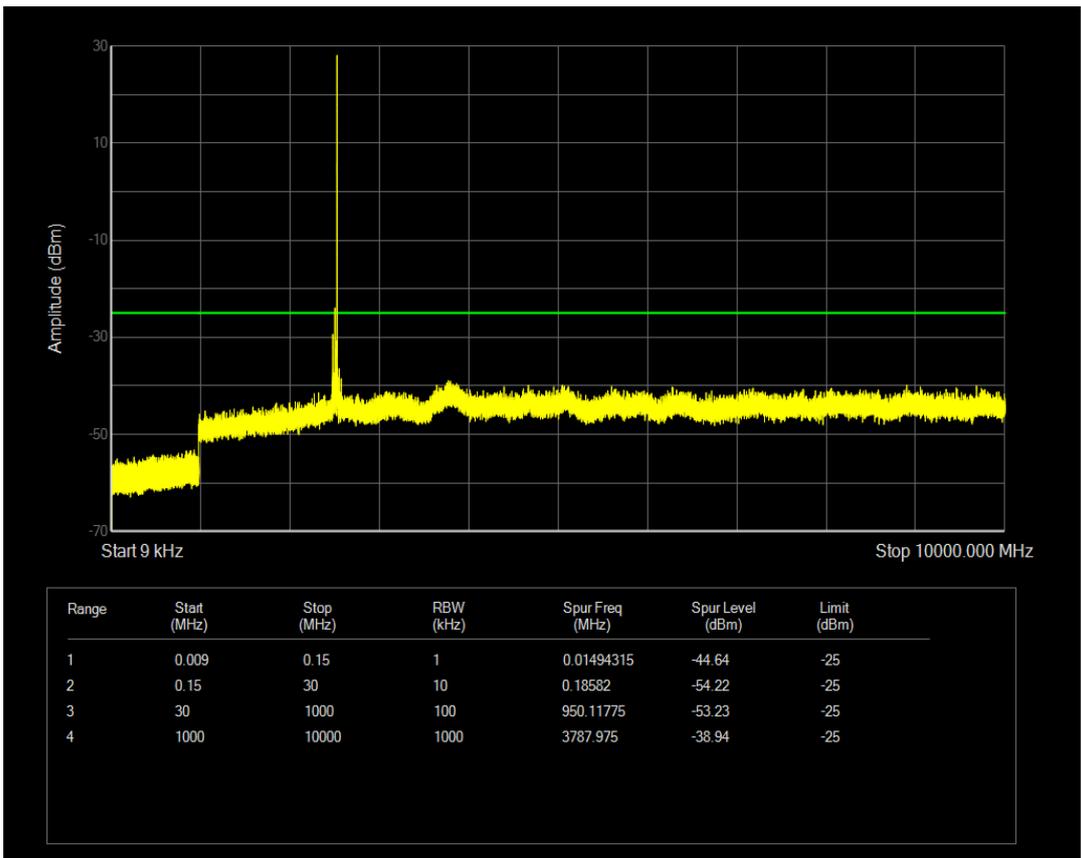
n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=133@0



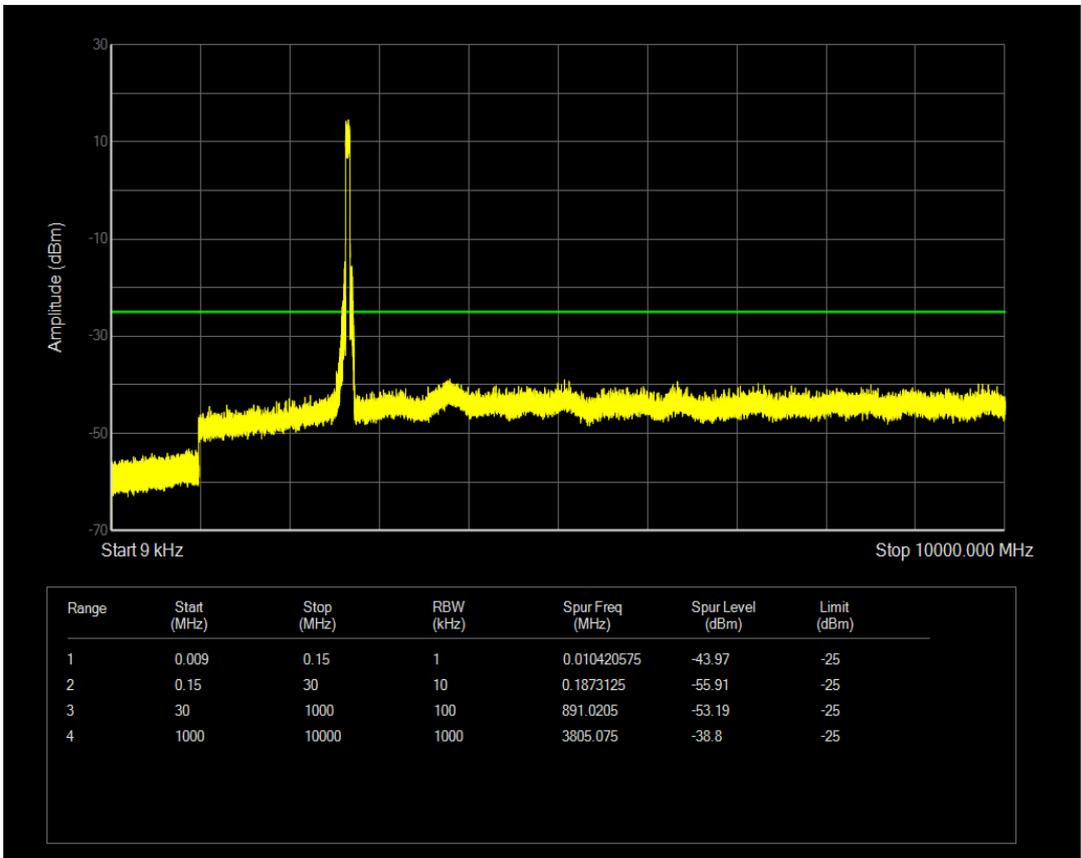
n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=1@0



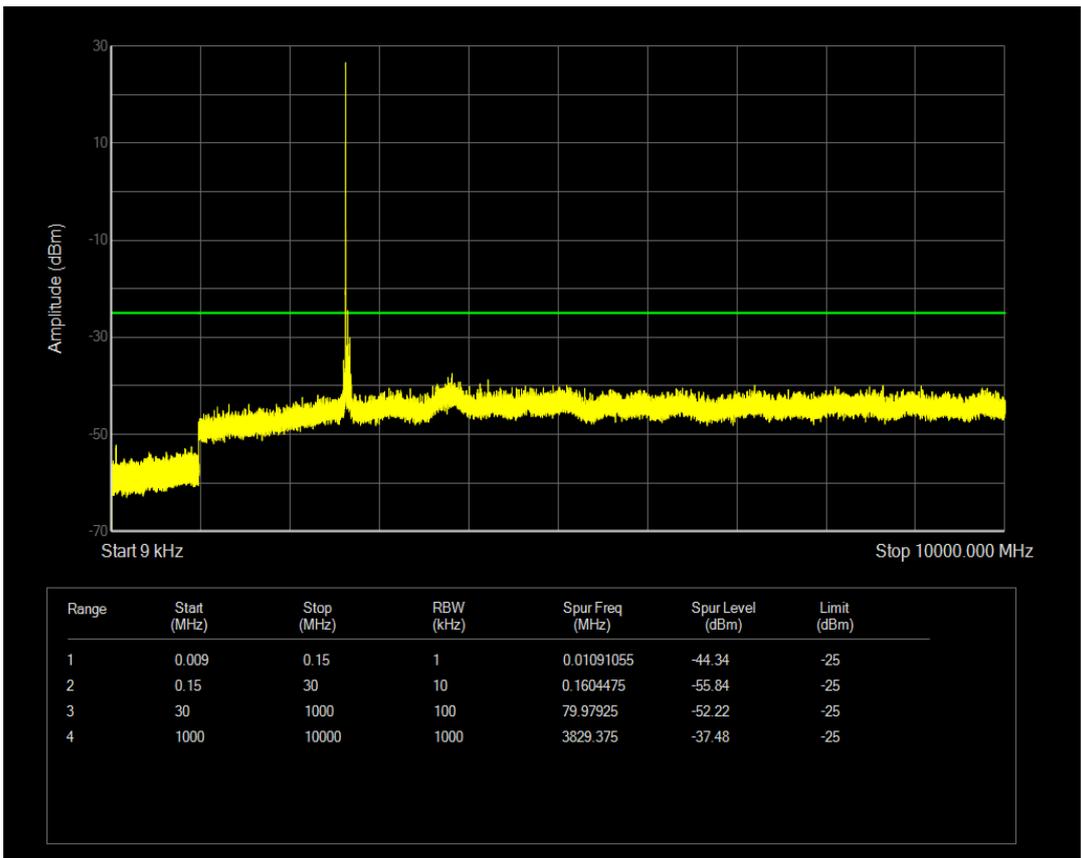
n41 SCS=30kHz CP_QPSK BW=50MHz Channel=504204 RB=1 @132



n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=133 @0



n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=1 @0



n41 SCS=30kHz CP_QPSK BW=50MHz Channel=532998 RB=1 @132

