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

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

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

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

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

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

n41 SCS=30kHz DFT_QAM16 BW=100MHz Channel=518598 RB=270@0

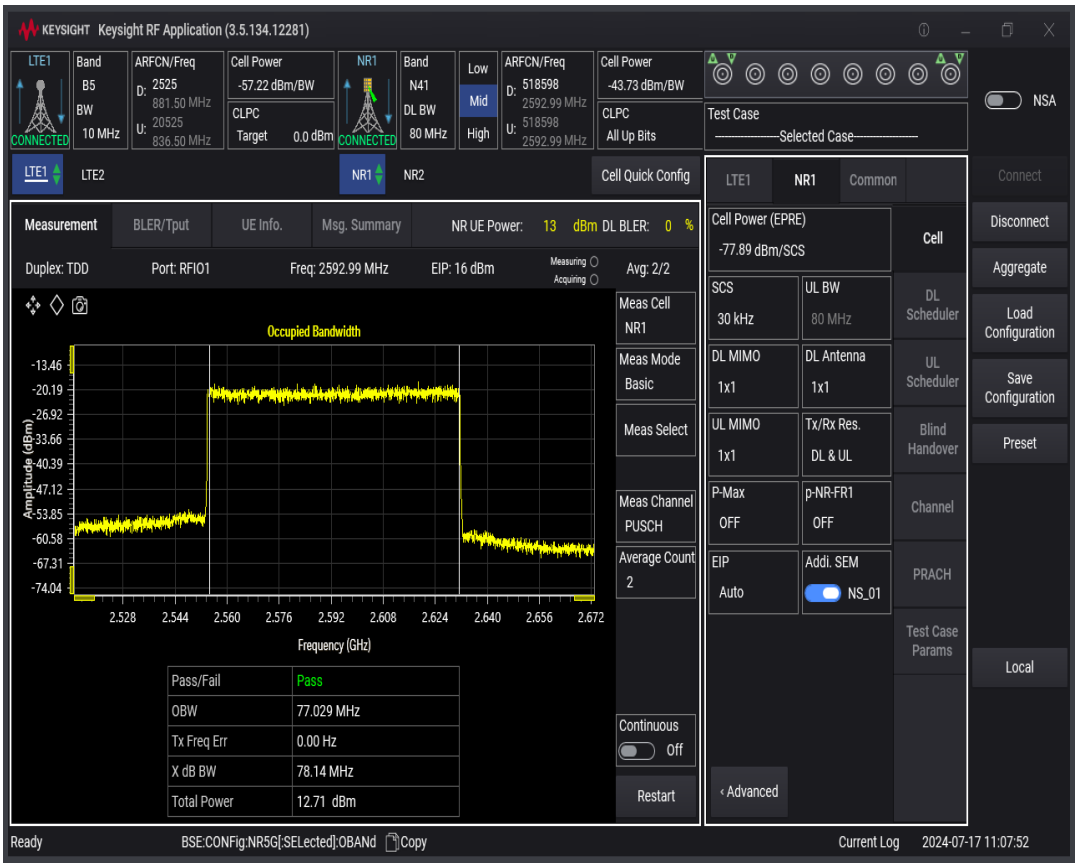
n41 SCS=30kHz DFT_QAM16 BW=20MHz Channel=518598 RB=50@0

n41 SCS=30kHz DFT_QAM16 BW=40MHz Channel=518598 RB=100@0

n41 SCS=30kHz DFT_QAM16 BW=50MHz Channel=518598 RB=128@0

n41 SCS=30kHz DFT_QAM16 BW=60MHz Channel=518598 RB=162@0

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



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

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

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

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

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

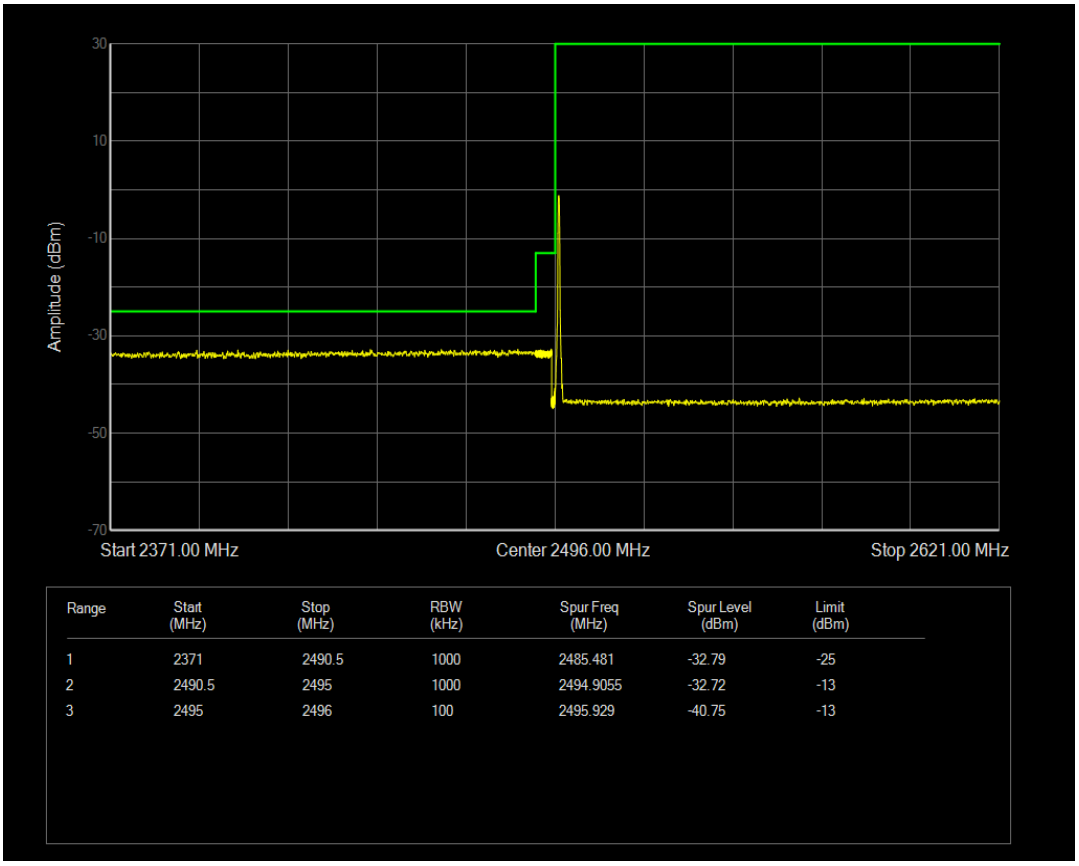
n41 SCS=30kHz DFT_QPSK BW=90MHz Channel=518598 RB=240@0

KEYSIGHT Keysight RF Application (3.5.134.12281)
LTE1
CONNECTED
Band
B5
BW
10 MHz
ARFCN/Freq
D: 2525
881.50 MHz
U: 20525
836.50 MHz
Cell Power
-57.22 dBm/BW
CLPC
Target 0.0 dBm
NR1
CONNECTED
Band
N41
DL BW
90 MHz
Low
Mid
High
ARFCN/Freq
D: 518598
2592.99 MHz
U: 518598
2592.99 MHz
Cell Power
-44.48 dBm/BW
CLPC
All Up Bits
Test Case
----------Selected Case----------
NSA
LTE1
LTE2
NR1
NR2
Cell Quick Config
Measurement
BLER/Tput
UE Info.
Msg. Summary
NR UE Power: 2 dBm DL BLER: 0 %
Duplex: TDD
Port: RFI01
Freq: 2592.99 MHz
EIP: 5 dBm
Measuring
Acquiring
Avg: 2/2
Occupied Bandwidth
Amplitude (dBm)
-12.63
-18.95
-25.26
-31.58
-37.89
-44.21
-50.52
-56.84
-63.16
-69.47
2.520
2.538
2.556
2.574
2.592
2.610
2.628
2.646
2.664
2.682
Frequency (GHz)
Pass/Fail Pass
OBW 86.645 MHz
Tx Freq Err 0.00 Hz
X dB BW 86.72 MHz
Total Power 13.70 dBm
Meas Cell
NR1
Meas Mode
Basic
Meas Select
Meas Channel
PUSCH
Average Count
2
Continuous
Off
Restart
LTE1
NR1
Common
Cell Power (EPRE)
-79.16 dBm/SCS
Cell
SCS
30 kHz
UL BW
90 MHz
DL Scheduler
DL MIMO
1x1
DL Antenna
1x1
UL Scheduler
UL MIMO
1x1
Tx/Rx Res.
DL & UL
Blind Handover
P-Max
OFF
p-NR-FR1
OFF
Channel
EIP
Auto
Addi. SEM
NS_01
PRACH
Test Case Params
‹ Advanced
Connect
Disconnect
Aggregate
Load Configuration
Save Configuration
Preset
Local
Ready
BSE:CONFig:NR5G[:SELected]:OBANd
Copy
Current Log
2024-07-17 11:08:16

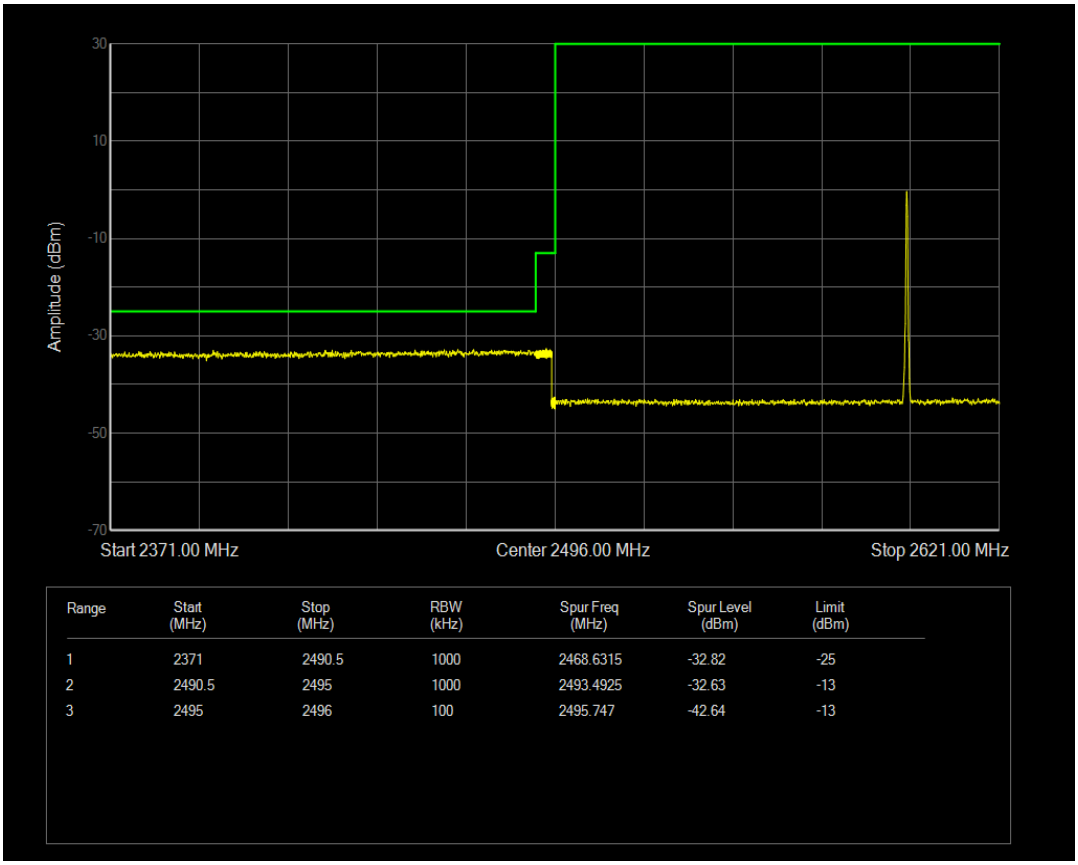
5 Band edge for EN-DC

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	2490.48	-32.53	-25	PASS
n41	30	20	501204	1@0	CP_QPSK	2474.00	-33.04	-25	PASS
n41	30	20	501204	1@50	CP_QPSK	2480.38	-32.77	-25	PASS
n41	30	20	535998	51@0	CP_QPSK	2713.99	-32.63	-25	PASS
n41	30	20	535998	1@0	CP_QPSK	2710.11	-32.67	-25	PASS
n41	30	20	535998	1@50	CP_QPSK	2711.57	-32.69	-25	PASS
n41	30	50	504204	133@0	CP_QPSK	2483.43	-32.53	-25	PASS
n41	30	50	504204	1@0	CP_QPSK	2461.26	-32.80	-25	PASS
n41	30	50	504204	1@132	CP_QPSK	2448.38	-32.77	-25	PASS
n41	30	50	532998	133@0	CP_QPSK	2746.45	-32.57	-25	PASS
n41	30	50	532998	1@0	CP_QPSK	2747.26	-32.62	-25	PASS
n41	30	50	532998	1@132	CP_QPSK	2747.26	-32.54	-25	PASS
n41	30	100	509202	273@0	CP_QPSK	2478.19	-32.70	-25	PASS
n41	30	100	509202	1@0	CP_QPSK	2485.48	-32.79	-25	PASS
n41	30	100	509202	1@272	CP_QPSK	2468.63	-32.82	-25	PASS
n41	30	100	528000	273@0	CP_QPSK	2806.33	-32.80	-25	PASS
n41	30	100	528000	1@0	CP_QPSK	2795.88	-32.80	-25	PASS
n41	30	100	528000	1@272	CP_QPSK	2794.35	-32.70	-25	PASS

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

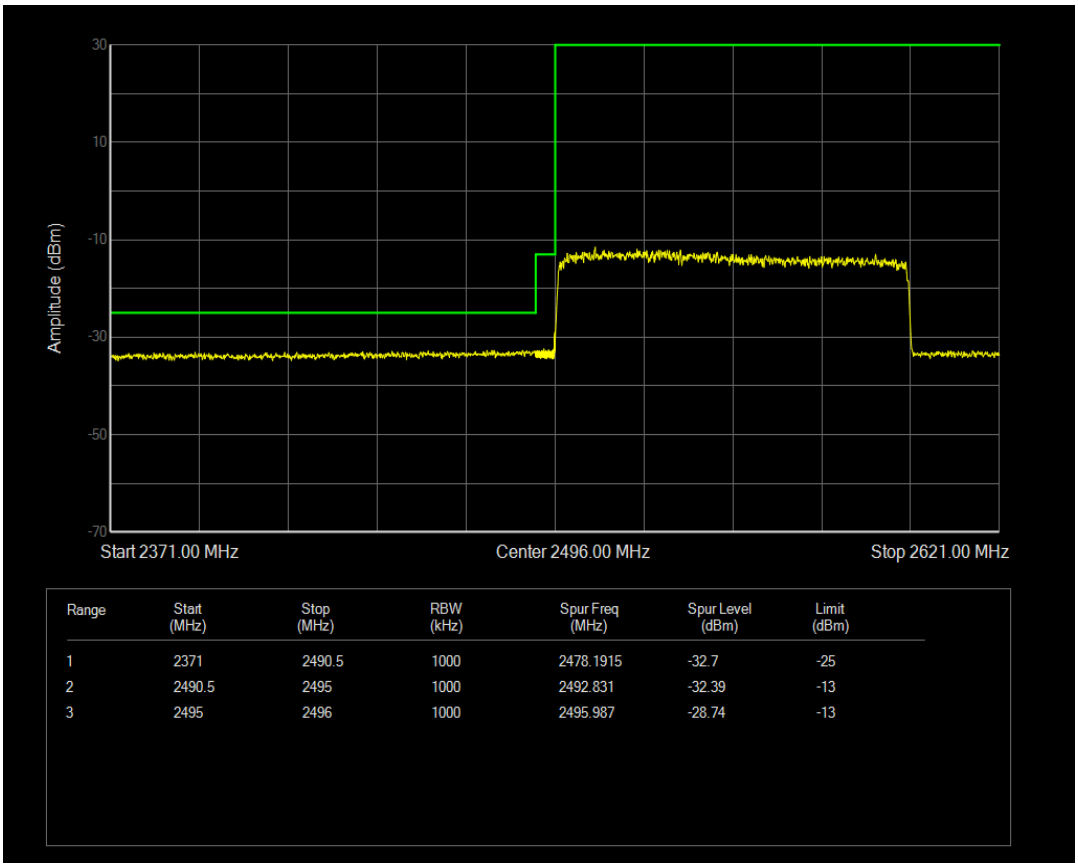


n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@272



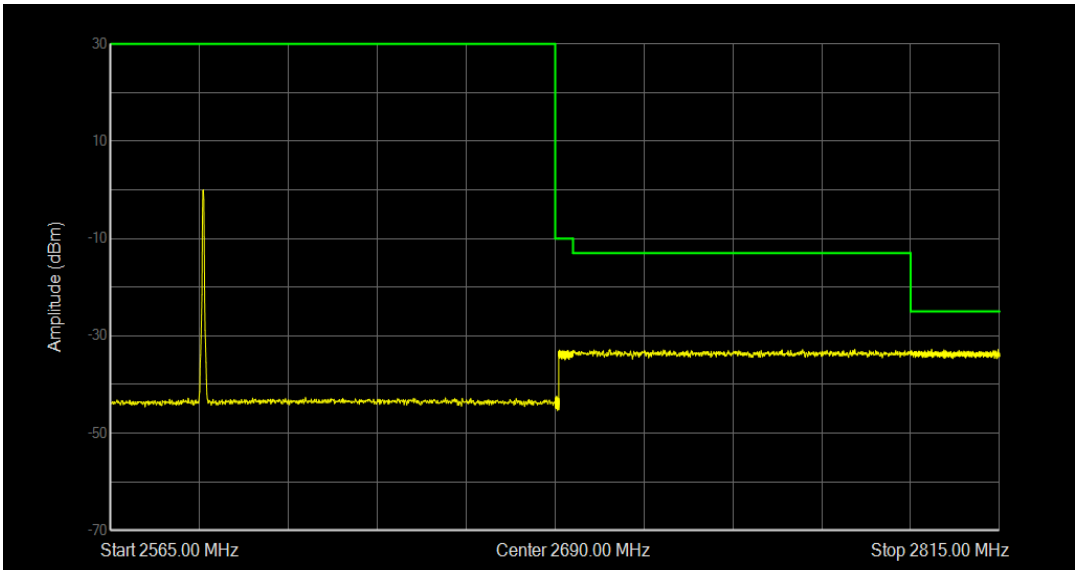
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2371	2490.5	1000	2468.6315	-32.82	-25
2	2490.5	2495	1000	2493.4925	-32.63	-13
3	2495	2496	100	2495.747	-42.64	-13

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



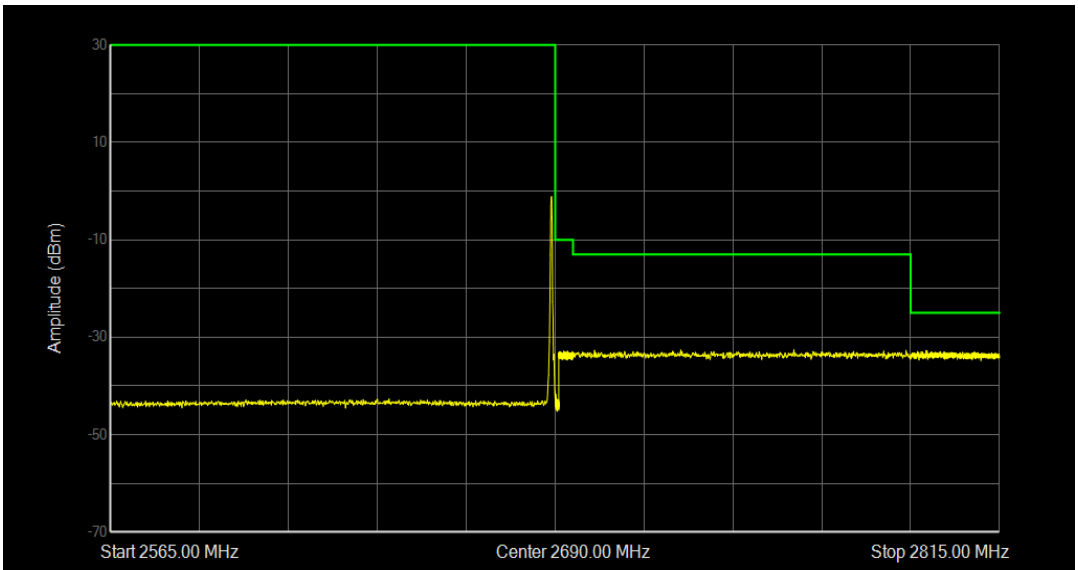
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2371	2490.5	1000	2478.1915	-32.7	-25
2	2490.5	2495	1000	2492.831	-32.39	-13
3	2495	2496	1000	2495.987	-28.74	-13

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



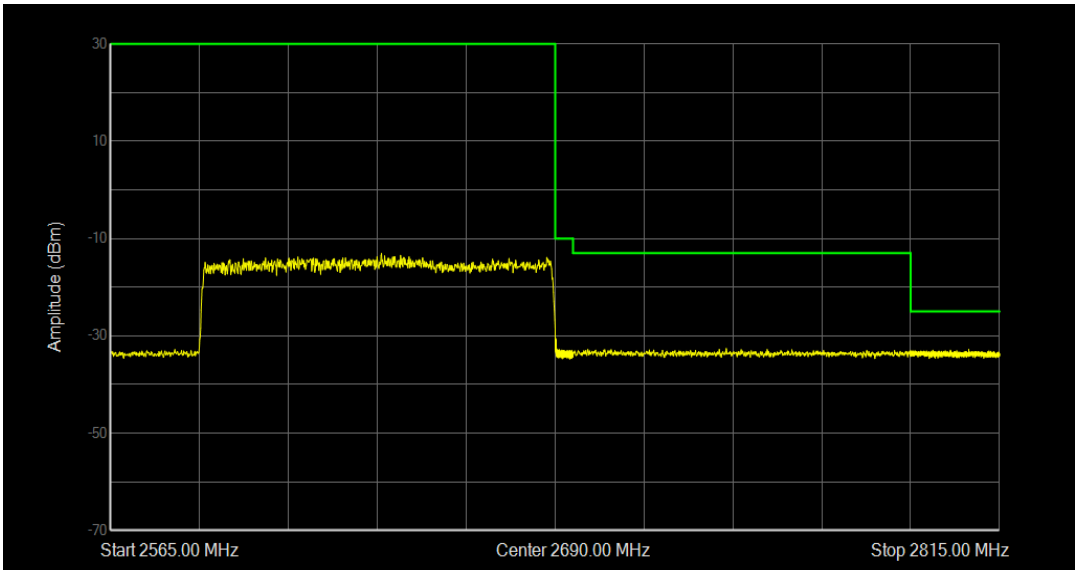
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.422	-42.49	-10
3	2691	2695	1000	2691.204	-32.93	-10
4	2695	2790	1000	2774.23	-32.82	-13
5	2790	2815	1000	2795.875	-32.8	-25

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



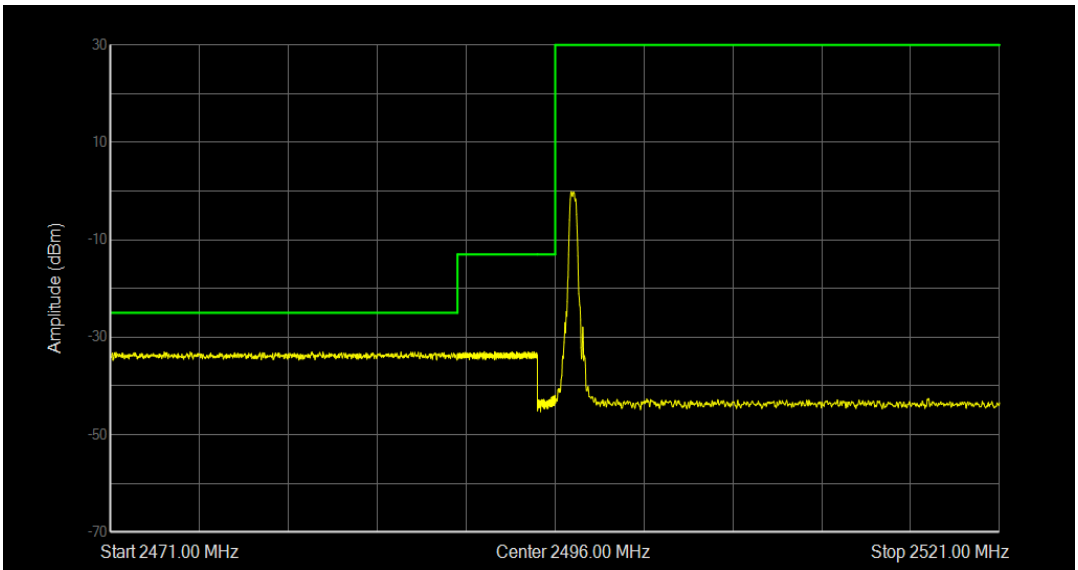
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.003	-41	-10
3	2691	2695	1000	2692.388	-32.86	-10
4	2695	2790	1000	2757.13	-32.55	-13
5	2790	2815	1000	2794.35	-32.7	-25

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



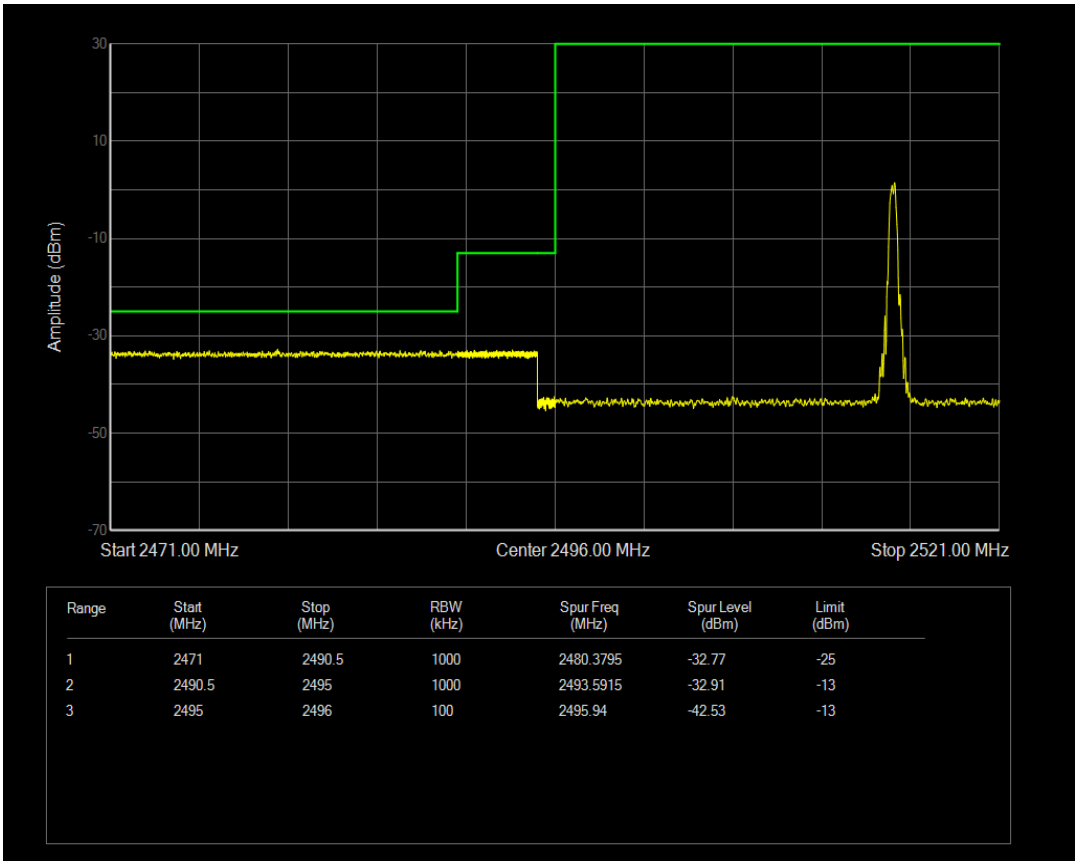
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	1000	2690.013	-30.01	-10
3	2691	2695	1000	2691.152	-32.84	-10
4	2695	2790	1000	2738.13	-32.61	-13
5	2790	2815	1000	2806.325	-32.8	-25

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



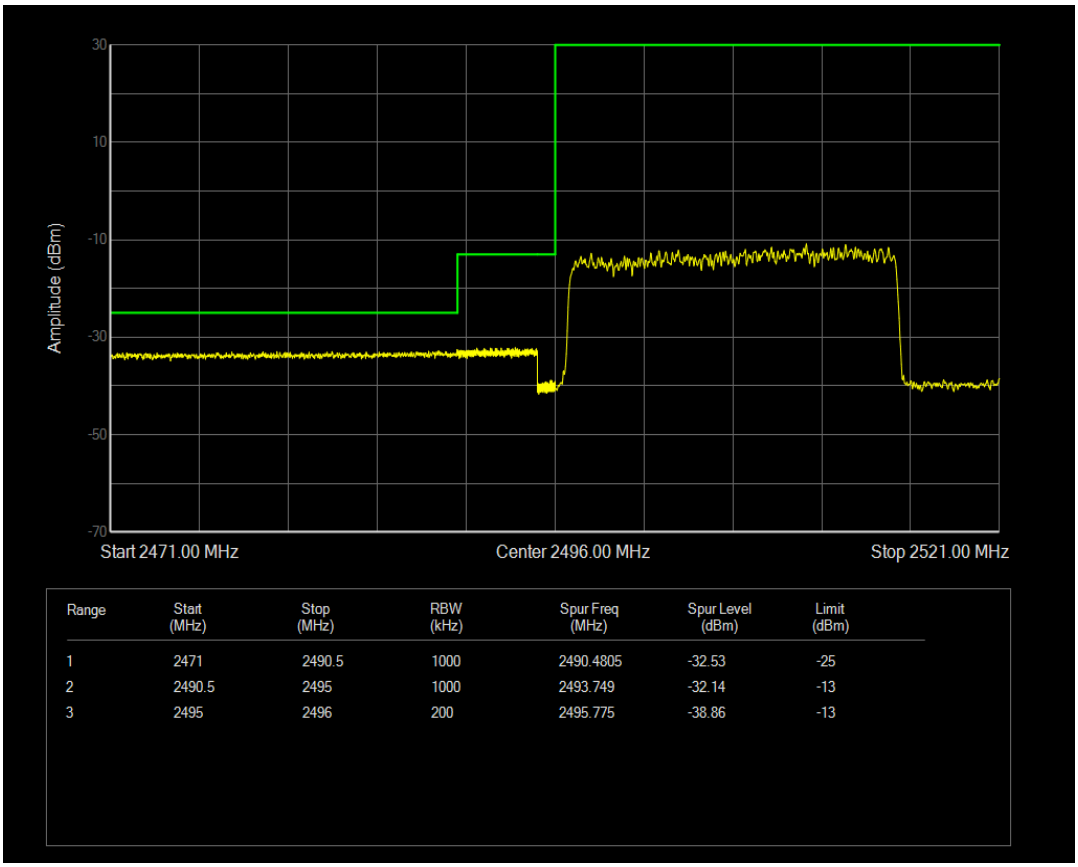
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2471	2490.5	1000	2474.003	-33.04	-25
2	2490.5	2495	1000	2492.012	-32.96	-13
3	2495	2496	100	2495.979	-41.95	-13

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



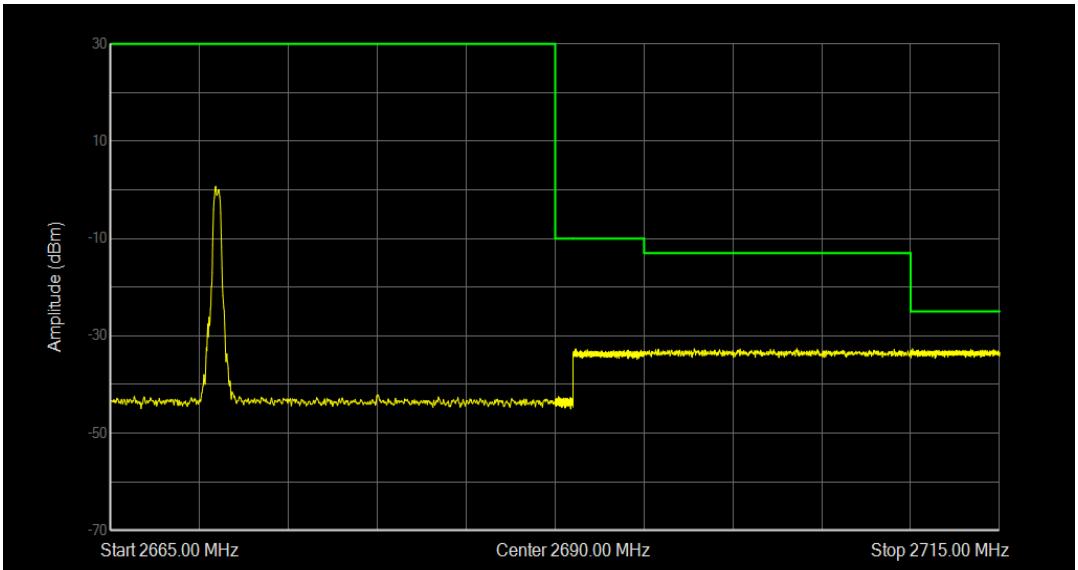
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2471	2490.5	1000	2480.3795	-32.77	-25
2	2490.5	2495	1000	2493.5915	-32.91	-13
3	2495	2496	100	2495.94	-42.53	-13

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



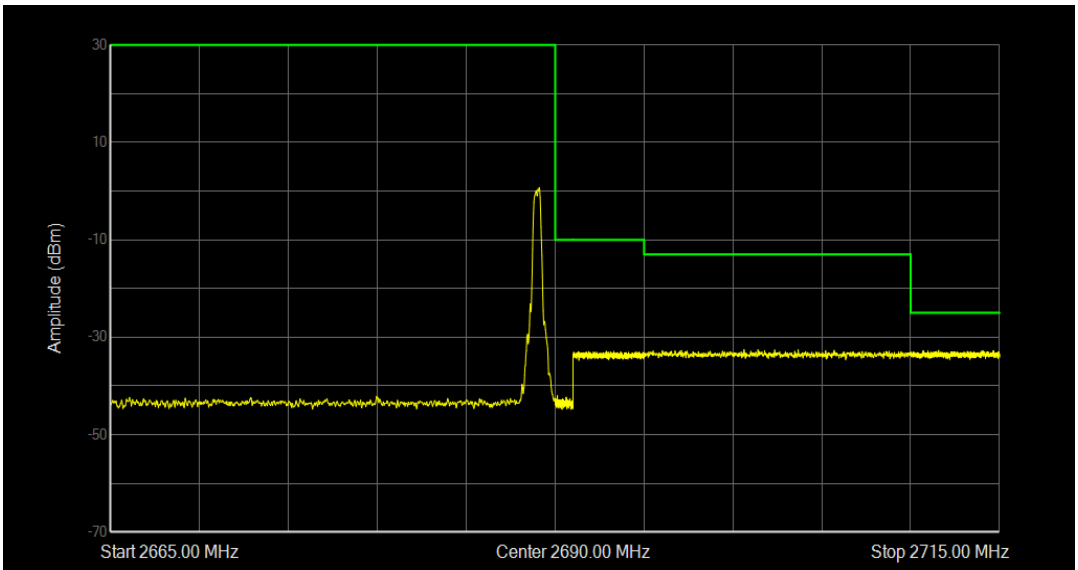
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2471	2490.5	1000	2490.4805	-32.53	-25
2	2490.5	2495	1000	2493.749	-32.14	-13
3	2495	2496	200	2495.775	-38.86	-13

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



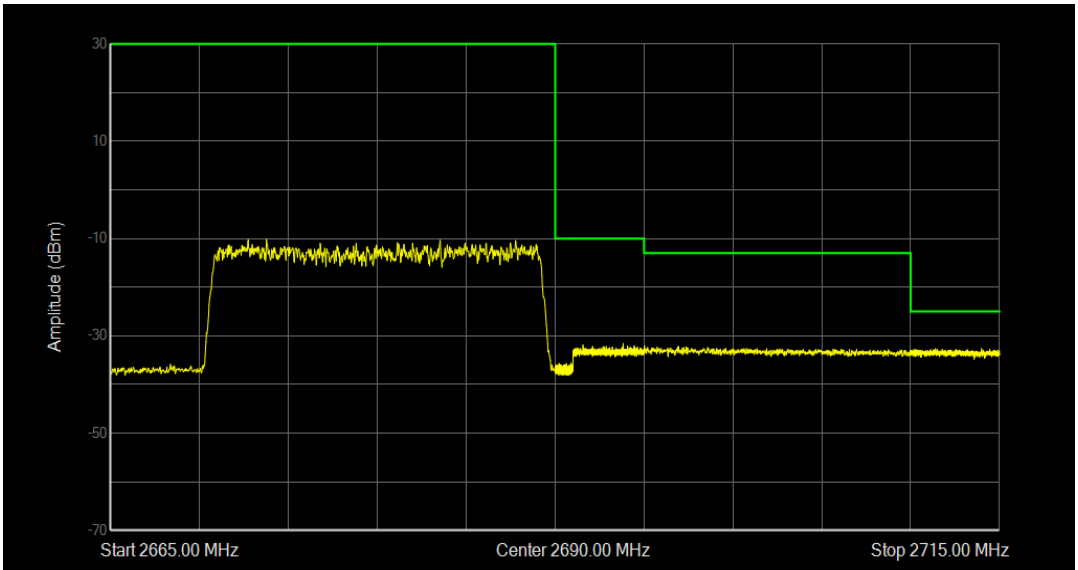
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.184	-42.48	-10
3	2691	2695	1000	2691.164	-32.69	-10
4	2695	2710	1000	2703.595	-32.62	-13
5	2710	2715	1000	2710.11	-32.67	-25

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



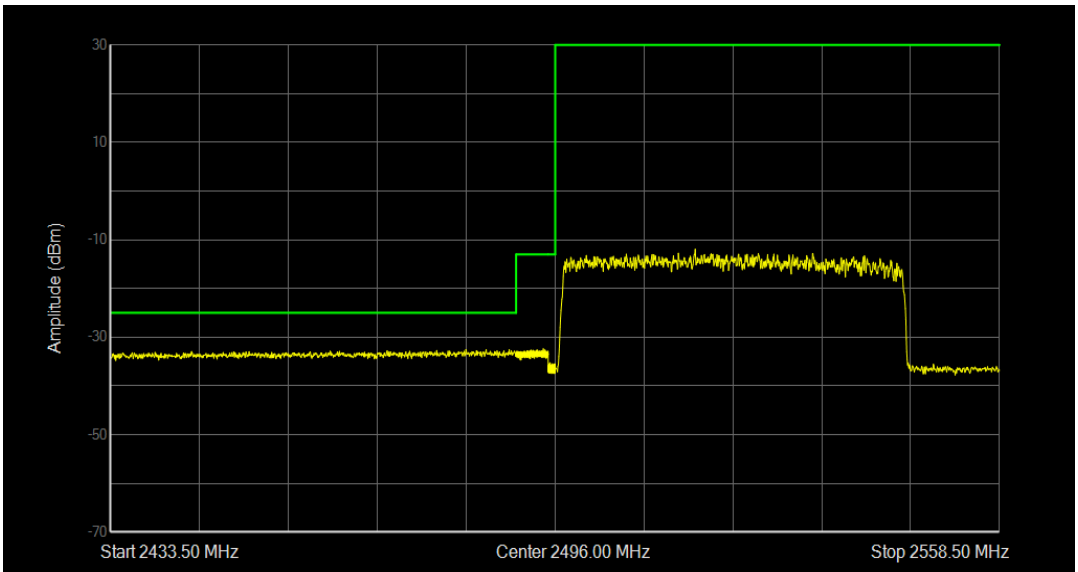
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.122	-42	-10
3	2691	2695	1000	2692.872	-32.88	-10
4	2695	2710	1000	2700.625	-32.56	-13
5	2710	2715	1000	2711.57	-32.69	-25

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



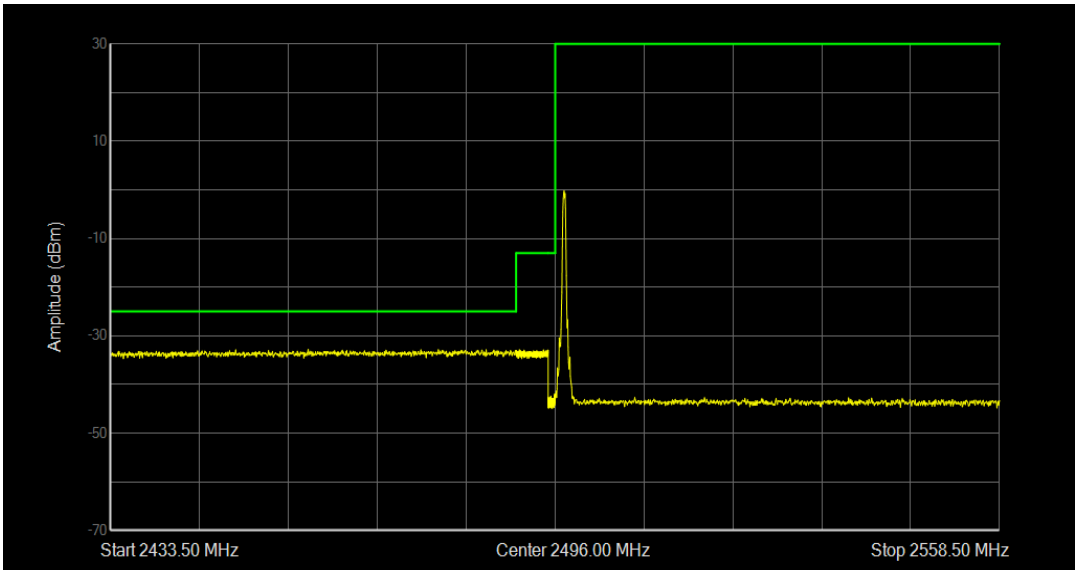
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	430	2690.888	-35.58	-10
3	2691	2695	1000	2693.828	-31.56	-10
4	2695	2710	1000	2695.015	-32.07	-13
5	2710	2715	1000	2713.985	-32.63	-25

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



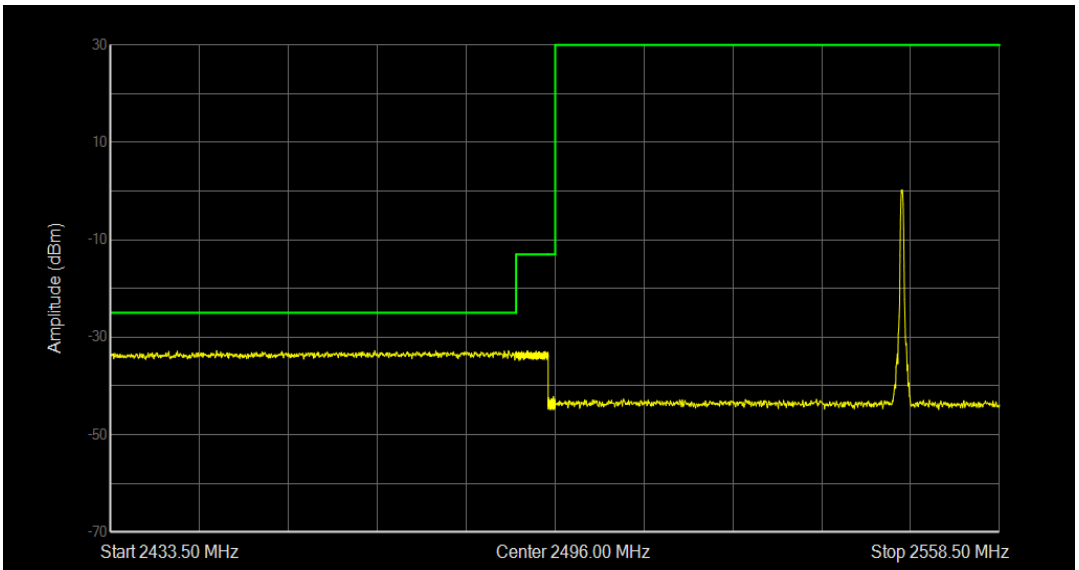
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2433.5	2490.5	1000	2483.432	-32.53	-25
2	2490.5	2495	1000	2494.3205	-32.37	-13
3	2495	2496	510	2495.281	-35.23	-13

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



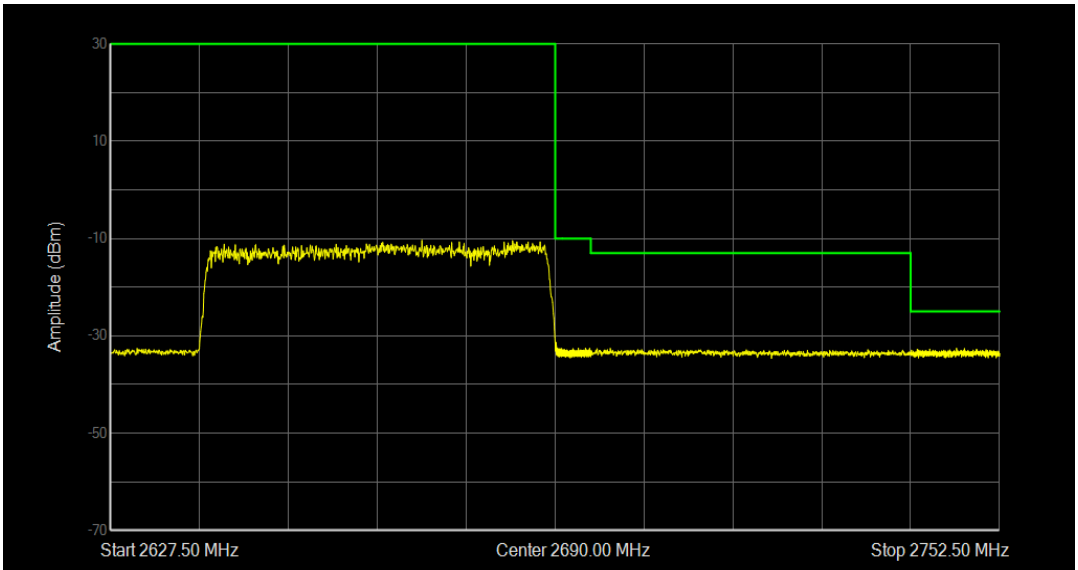
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2433.5	2490.5	1000	2461.259	-32.8	-25
2	2490.5	2495	1000	2490.9635	-32.87	-13
3	2495	2496	100	2495.941	-41.93	-13

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



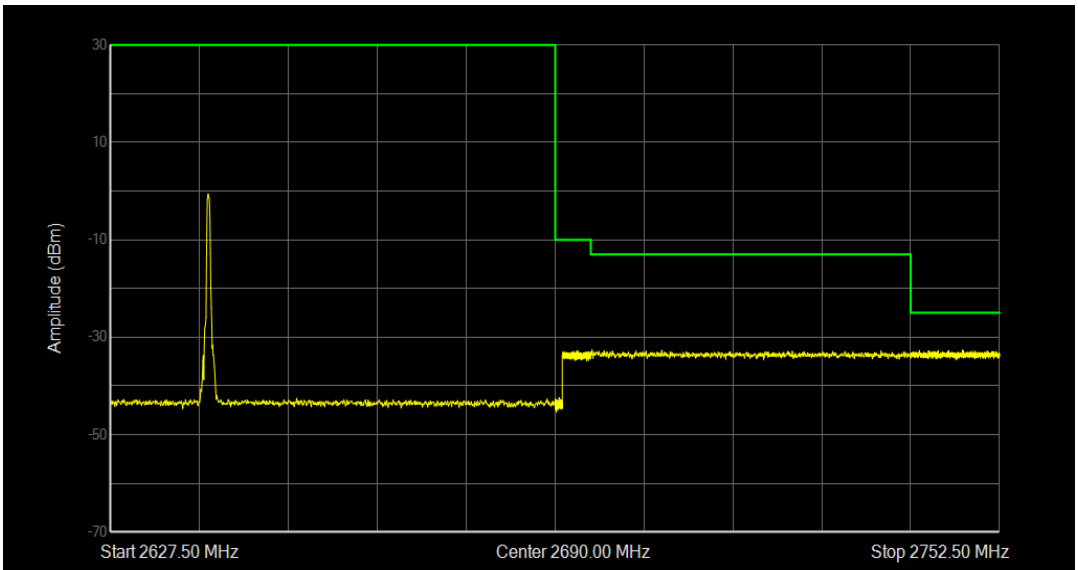
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	2433.5	2490.5	1000	2448.377	-32.77	-25
2	2490.5	2495	1000	2492.075	-32.77	-13
3	2495	2496	100	2495.747	-42.2	-13

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



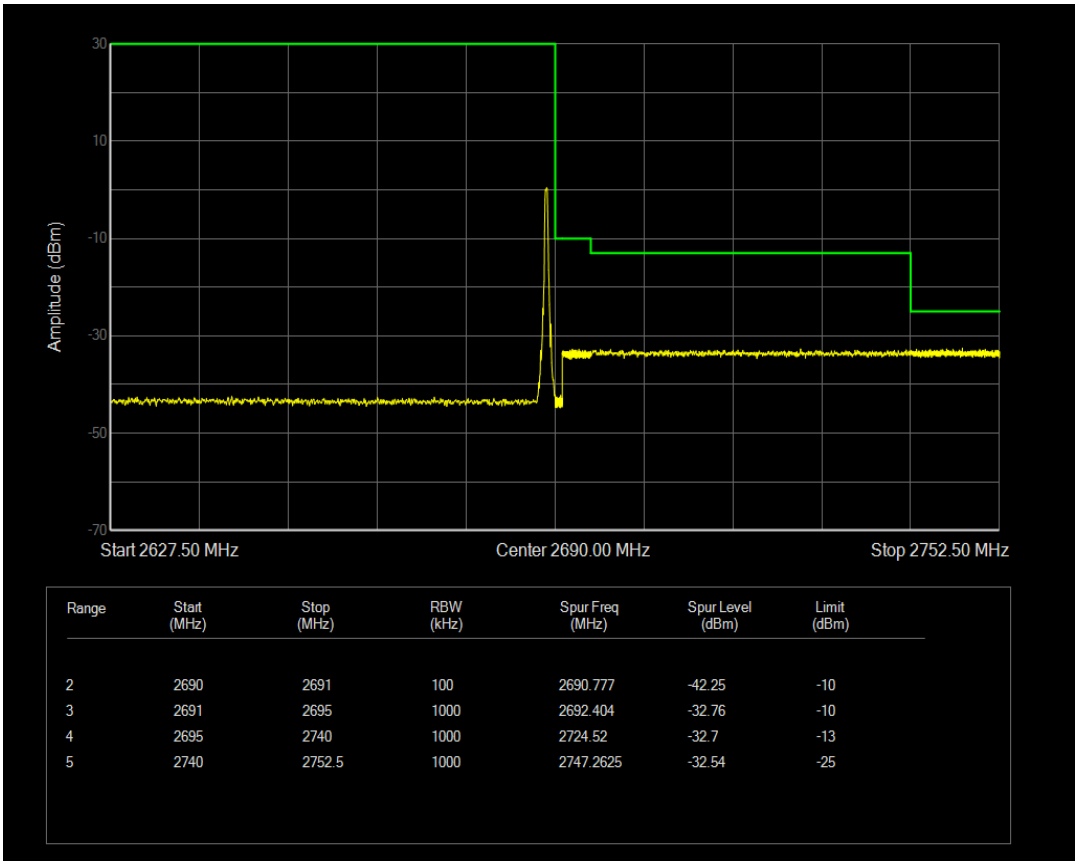
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	1000	2690.004	-31.02	-10
3	2691	2695	1000	2693.256	-32.56	-10
4	2695	2740	1000	2697.745	-32.59	-13
5	2740	2752.5	1000	2746.45	-32.57	-25

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



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.55	-42.42	-10
3	2691	2695	1000	2693.192	-32.78	-10
4	2695	2740	1000	2695.18	-32.6	-13
5	2740	2752.5	1000	2747.2625	-32.62	-25

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

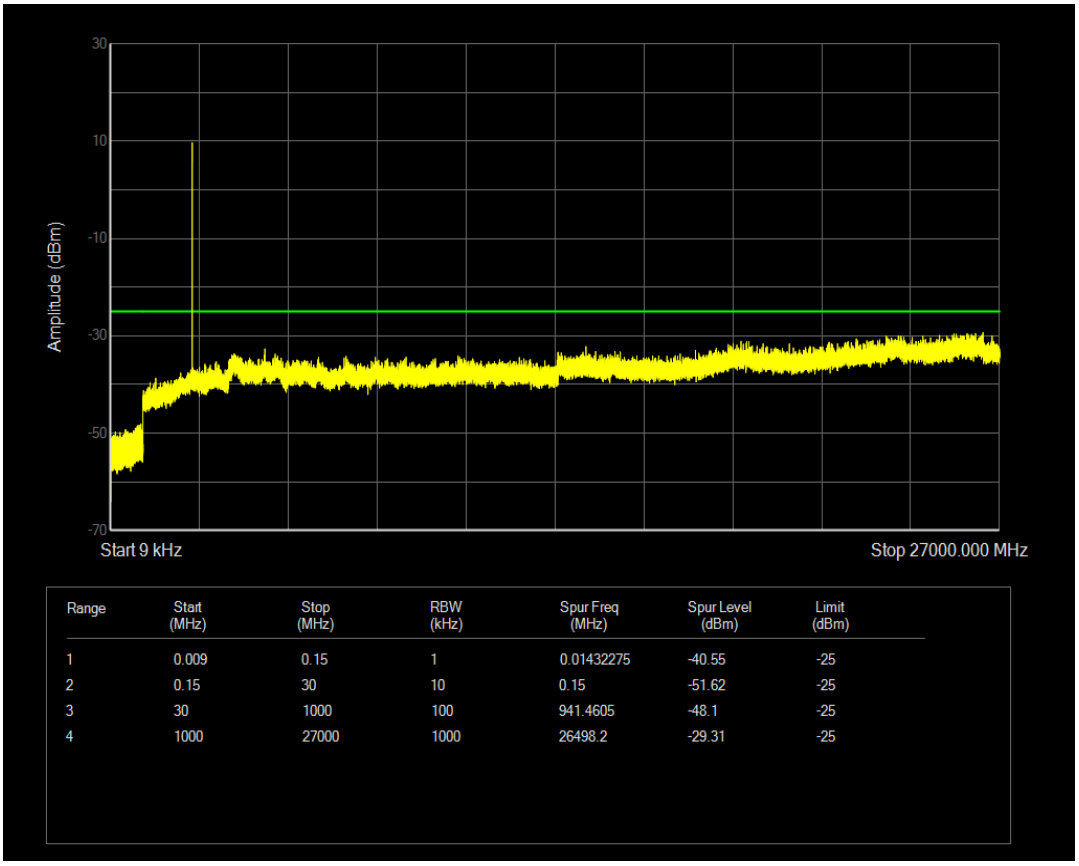


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
2	2690	2691	100	2690.777	-42.25	-10
3	2691	2695	1000	2692.404	-32.76	-10
4	2695	2740	1000	2724.52	-32.7	-13
5	2740	2752.5	1000	2747.2625	-32.54	-25

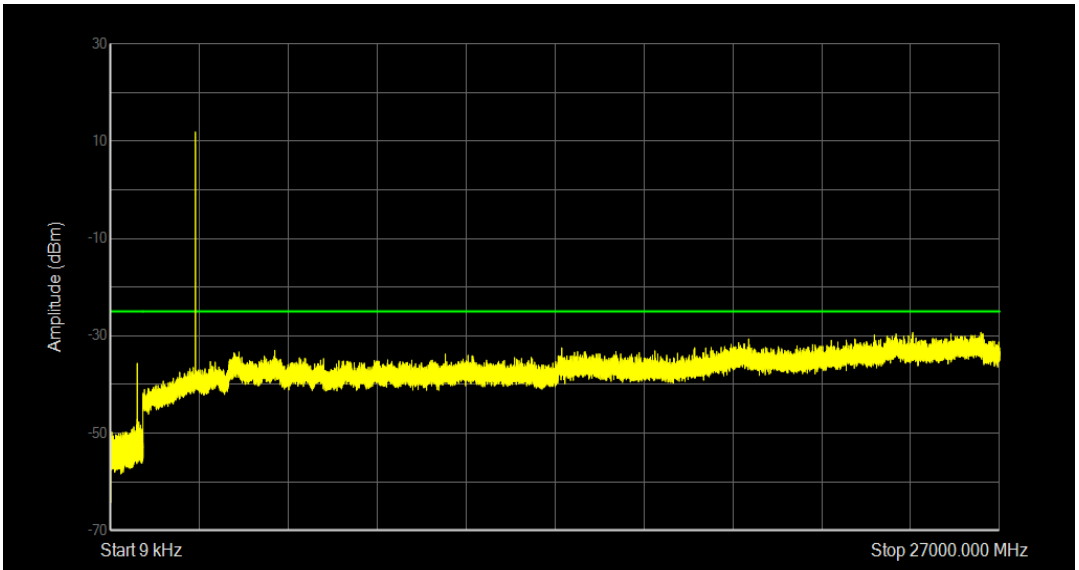
6 Out-of-band emissions for EN-DC

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	26420.20	-28.40	-25	PASS
n41	30	20	501204	1@0	CP_QPSK	26346.10	-29.00	-25	PASS
n41	30	20	501204	1@50	CP_QPSK	26418.25	-29.20	-25	PASS
n41	30	20	535998	51@0	CP_QPSK	23973.60	-28.20	-25	PASS
n41	30	20	535998	1@0	CP_QPSK	23818.25	-29.05	-25	PASS
n41	30	20	535998	1@50	CP_QPSK	25671.40	-28.43	-25	PASS
n41	30	50	504204	133@0	CP_QPSK	23990.50	-28.88	-25	PASS
n41	30	50	504204	1@0	CP_QPSK	26225.85	-28.99	-25	PASS
n41	30	50	504204	1@132	CP_QPSK	25749.40	-29.29	-25	PASS
n41	30	50	532998	133@0	CP_QPSK	25802.05	-28.43	-25	PASS
n41	30	50	532998	1@0	CP_QPSK	25811.15	-28.08	-25	PASS
n41	30	50	532998	1@132	CP_QPSK	23662.25	-28.91	-25	PASS
n41	30	100	509202	273@0	CP_QPSK	25500.45	-28.08	-25	PASS
n41	30	100	509202	1@0	CP_QPSK	26498.20	-29.31	-25	PASS
n41	30	100	509202	1@272	CP_QPSK	26431.90	-29.29	-25	PASS
n41	30	100	528000	273@0	CP_QPSK	26418.25	-28.92	-25	PASS
n41	30	100	528000	1@0	CP_QPSK	26242.10	-28.47	-25	PASS
n41	30	100	528000	1@272	CP_QPSK	25627.85	-29.24	-25	PASS

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

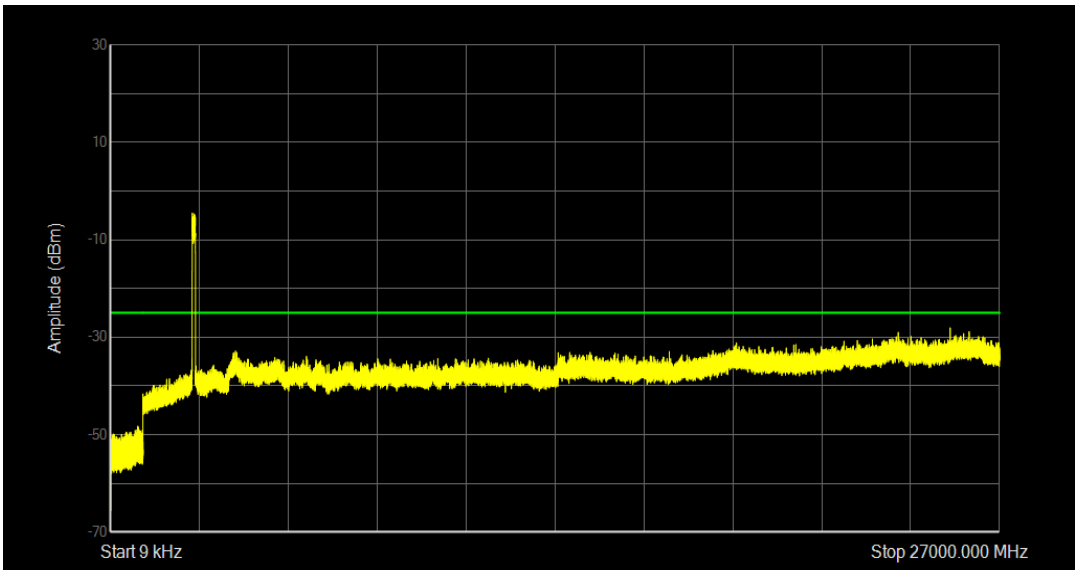


n41 SCS=30kHz CP_QPSK BW=100MHz Channel=509202 RB=1@272



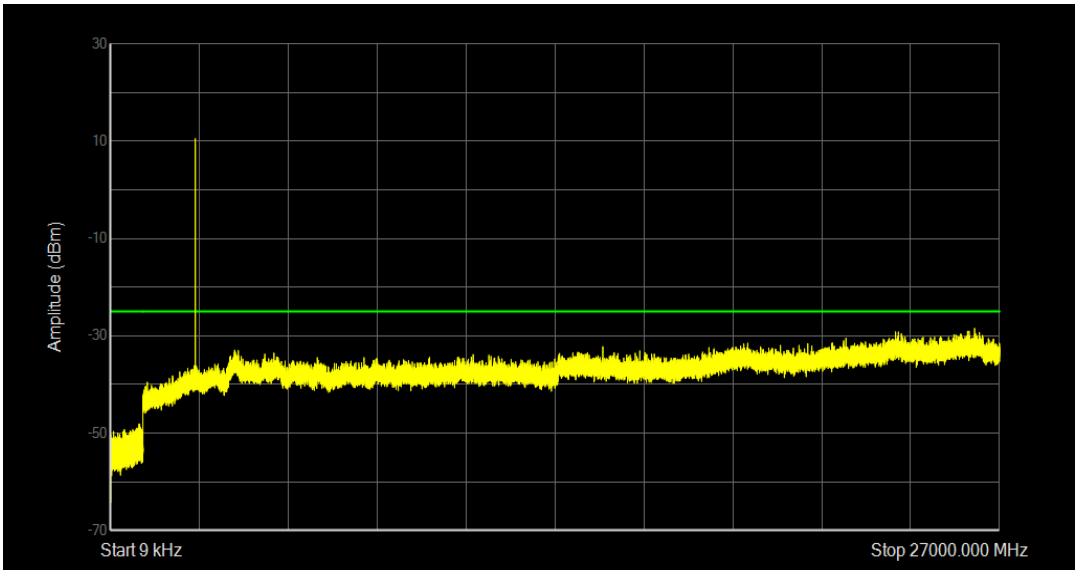
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0100293	-41.28	-25
2	0.15	30	10	0.1514925	-50.71	-25
3	30	1000	100	832.45675	-35.65	-25
4	1000	27000	1000	26431.9	-29.29	-25

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



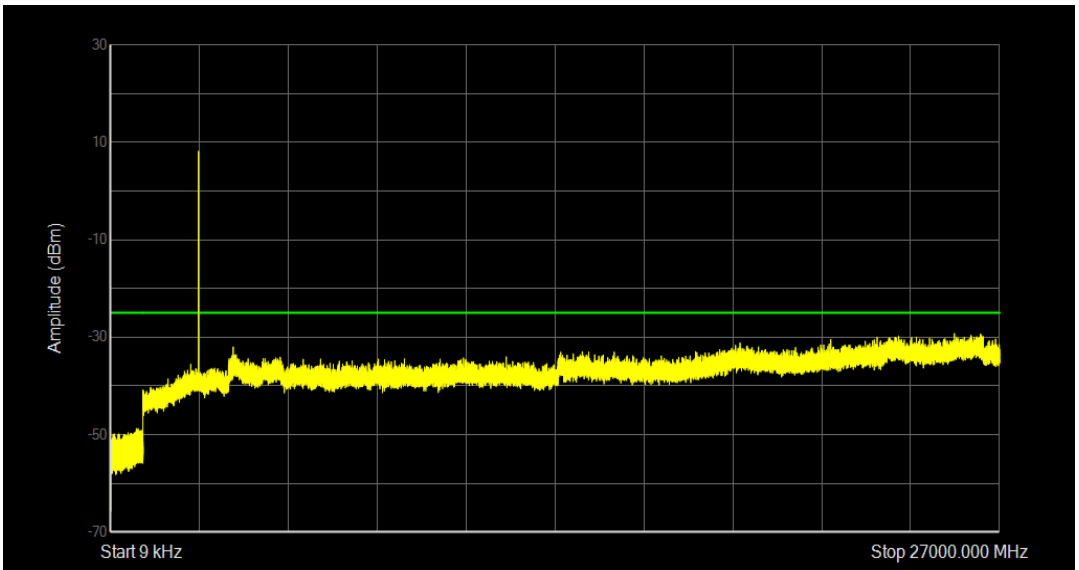
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.011040975	-41.21	-25
2	0.15	30	10	0.15223875	-51.07	-25
3	30	1000	100	847.00675	-48.28	-25
4	1000	27000	1000	25500.45	-28.08	-25

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



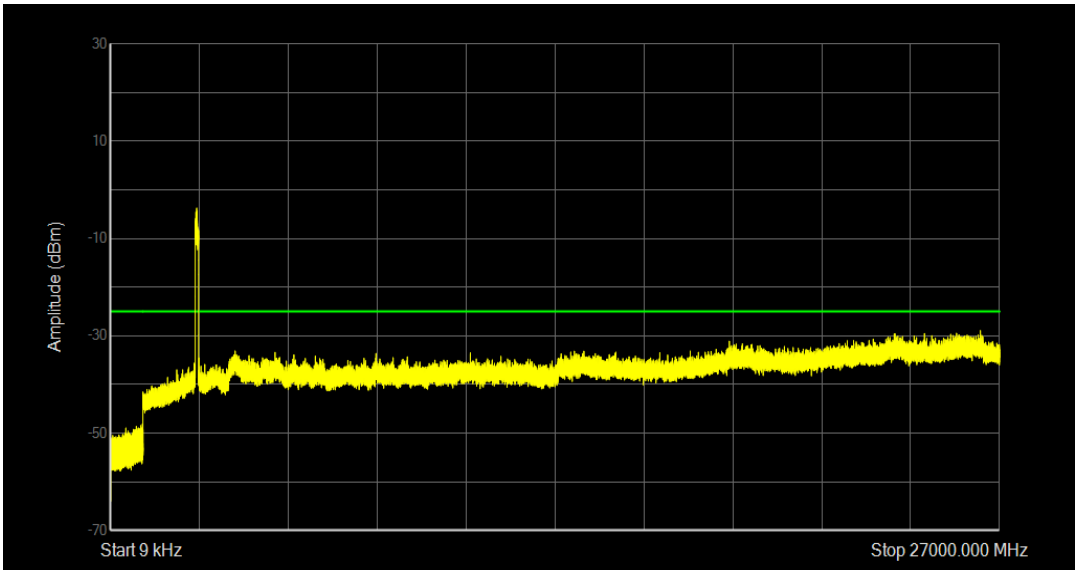
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0117918	-39.58	-25
2	0.15	30	10	0.152985	-48.83	-25
3	30	1000	100	885.37025	-48.14	-25
4	1000	27000	1000	26242.1	-28.47	-25

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



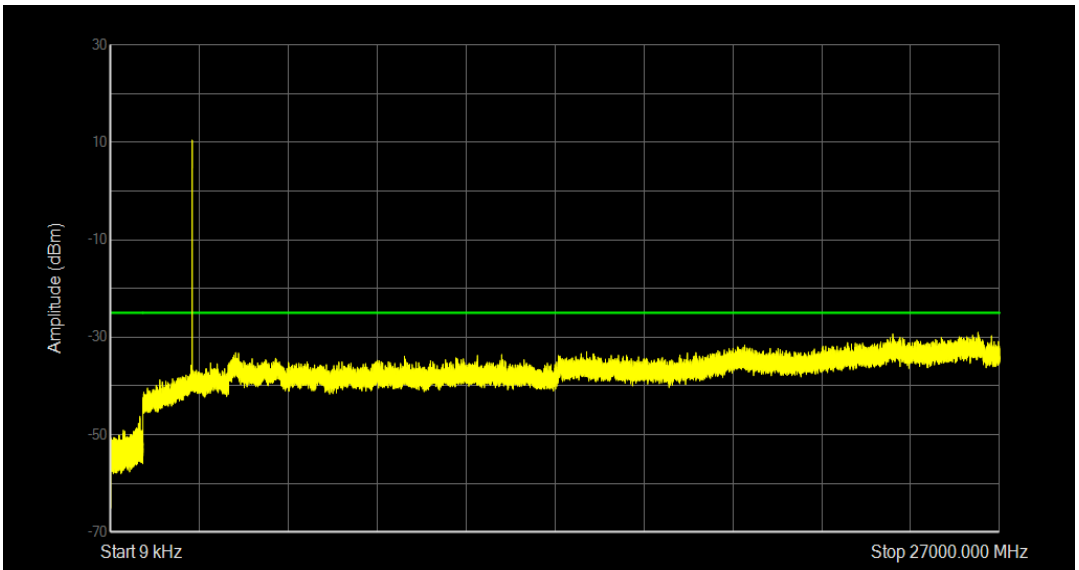
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010025775	-40.63	-25
2	0.15	30	10	0.1634325	-51.43	-25
3	30	1000	100	802.48375	-48.78	-25
4	1000	27000	1000	25627.85	-29.24	-25

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



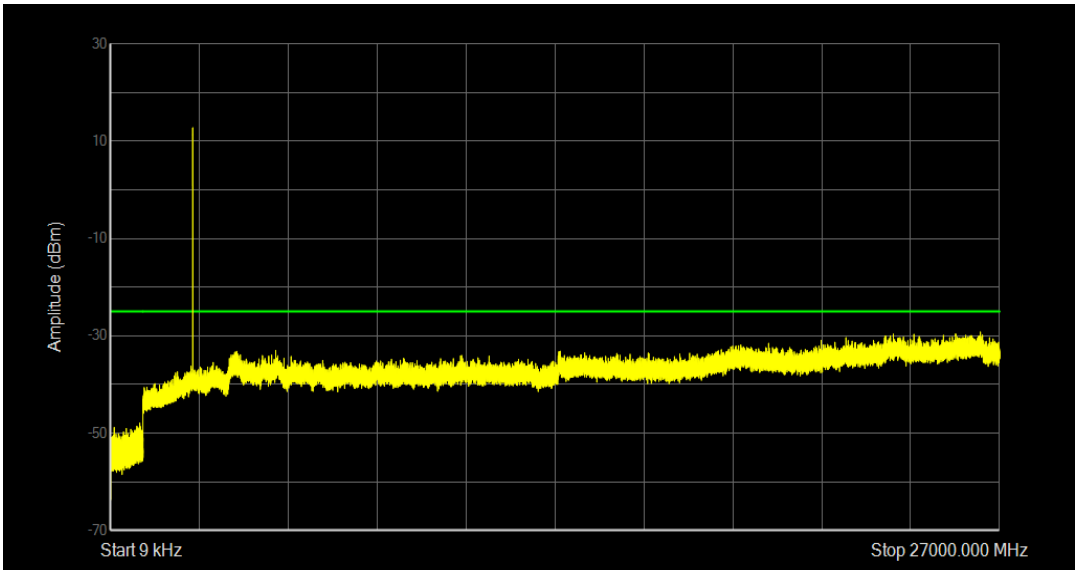
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00975435	-40.32	-25
2	0.15	30	10	0.15	-51.81	-25
3	30	1000	100	988.86925	-48.11	-25
4	1000	27000	1000	26418.25	-28.92	-25

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



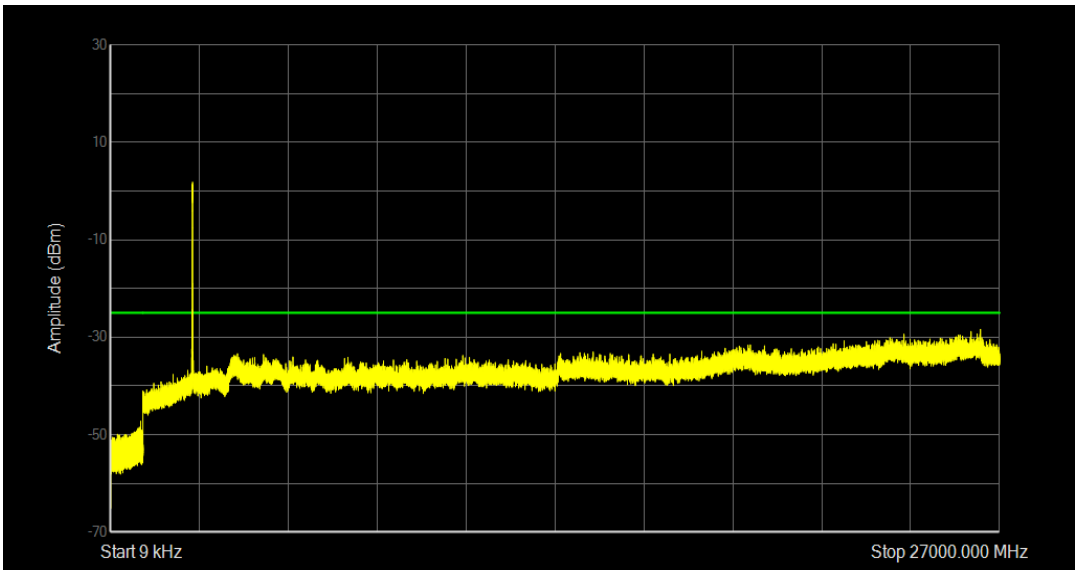
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.01199625	-39.81	-25
2	0.15	30	10	0.1694025	-51.94	-25
3	30	1000	100	910.8085	-46.24	-25
4	1000	27000	1000	26346.1	-29	-25

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



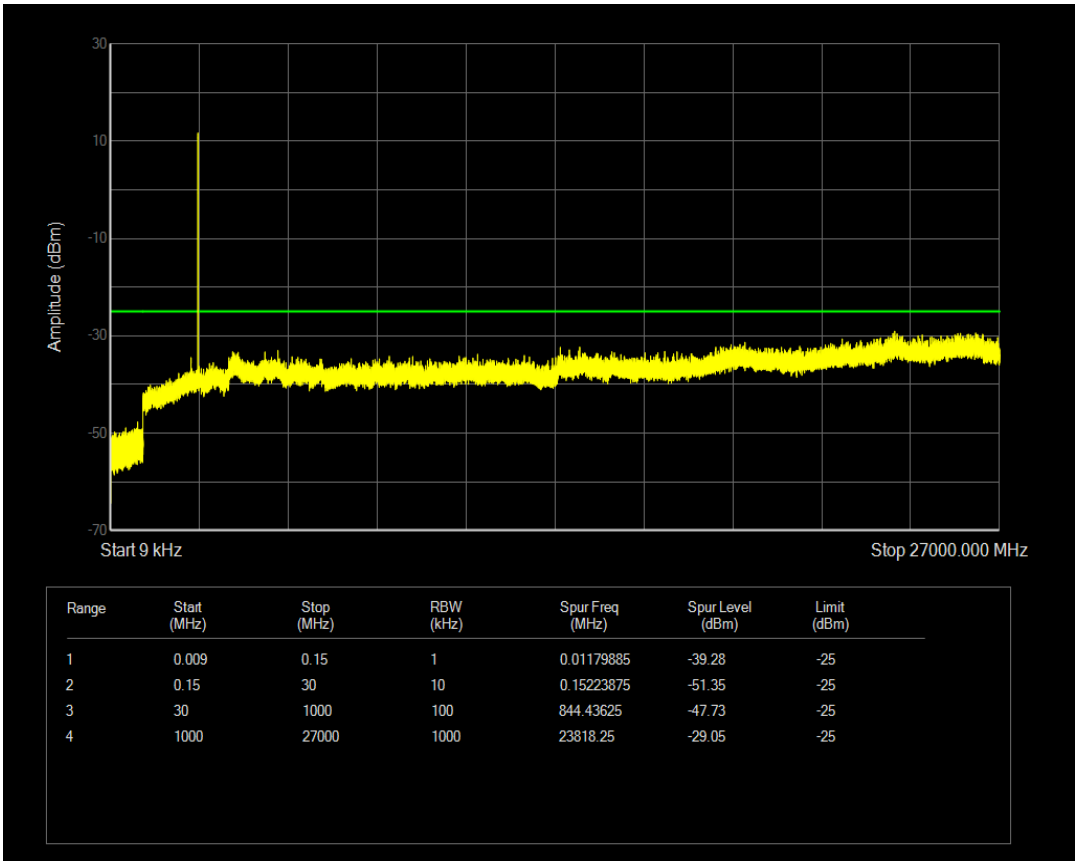
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010187925	-38.1	-25
2	0.15	30	10	0.16716375	-50.83	-25
3	30	1000	100	907.8985	-47.94	-25
4	1000	27000	1000	26418.25	-29.2	-25

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

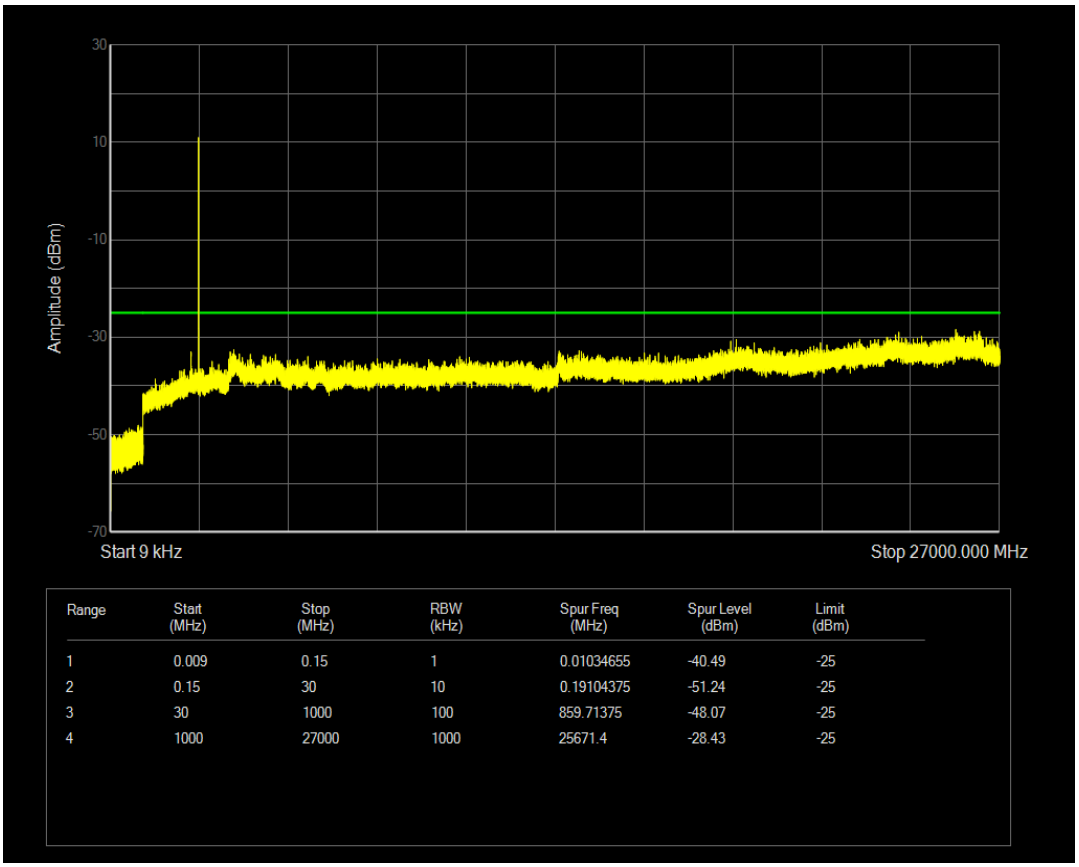


Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0113265	-40.36	-25
2	0.15	30	10	0.15	-51.33	-25
3	30	1000	100	933.8945	-47.28	-25
4	1000	27000	1000	26420.2	-28.4	-25

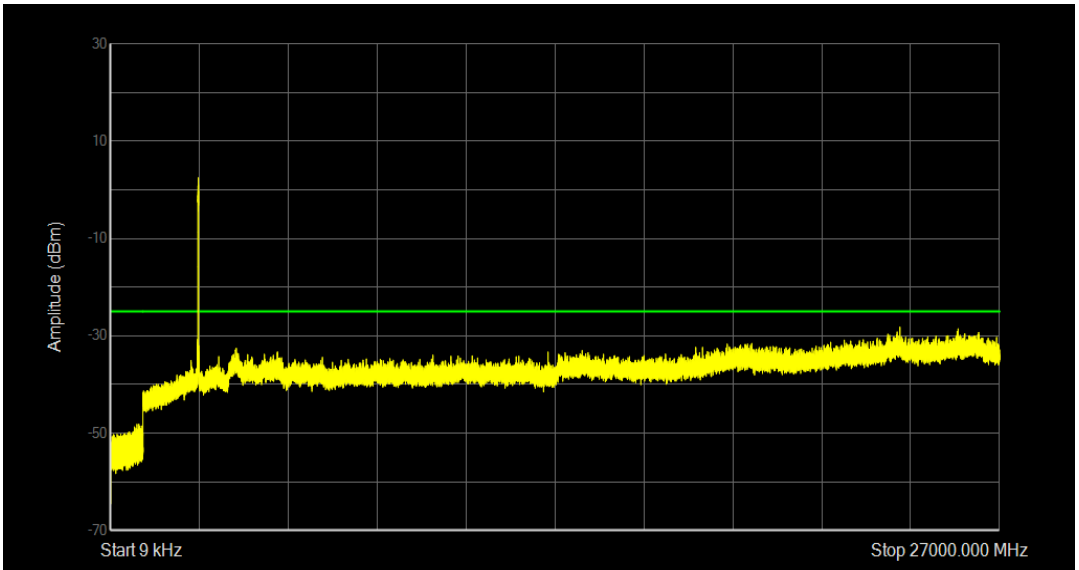
n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=1@0



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

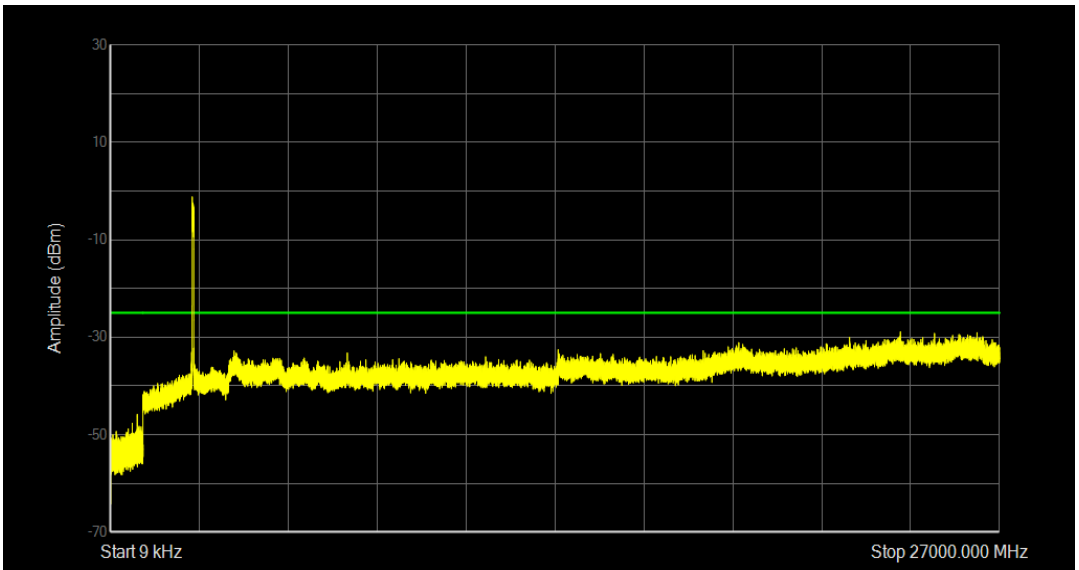


n41 SCS=30kHz CP_QPSK BW=20MHz Channel=535998 RB=51@0



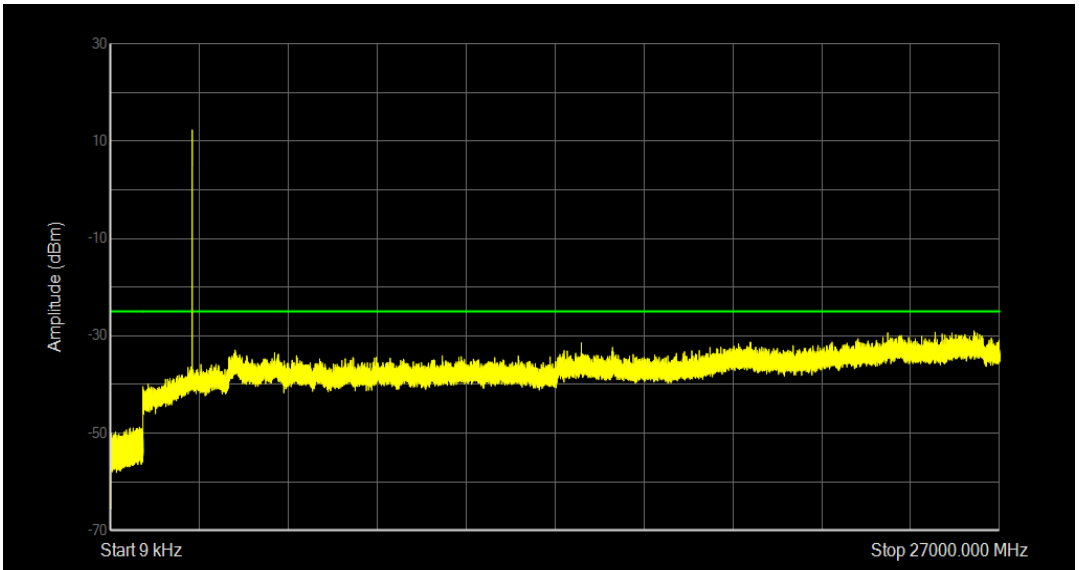
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0143298	-41.04	-25
2	0.15	30	10	0.15597	-51	-25
3	30	1000	100	880.13225	-48.15	-25
4	1000	27000	1000	23973.6	-28.2	-25

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



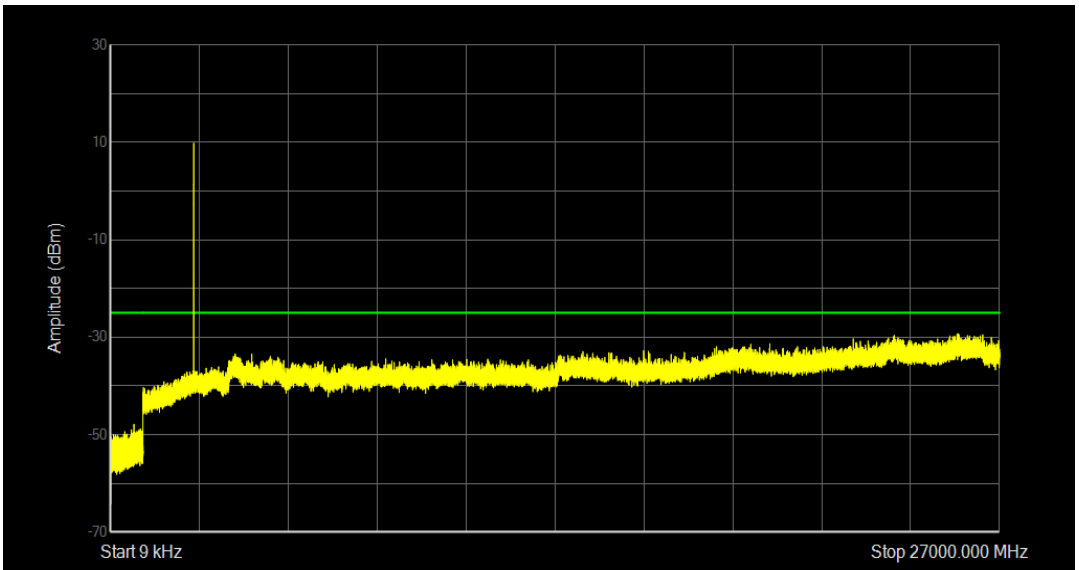
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.010152675	-41.39	-25
2	0.15	30	10	0.158955	-52.09	-25
3	30	1000	100	829.59525	-45.86	-25
4	1000	27000	1000	23990.5	-28.88	-25

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



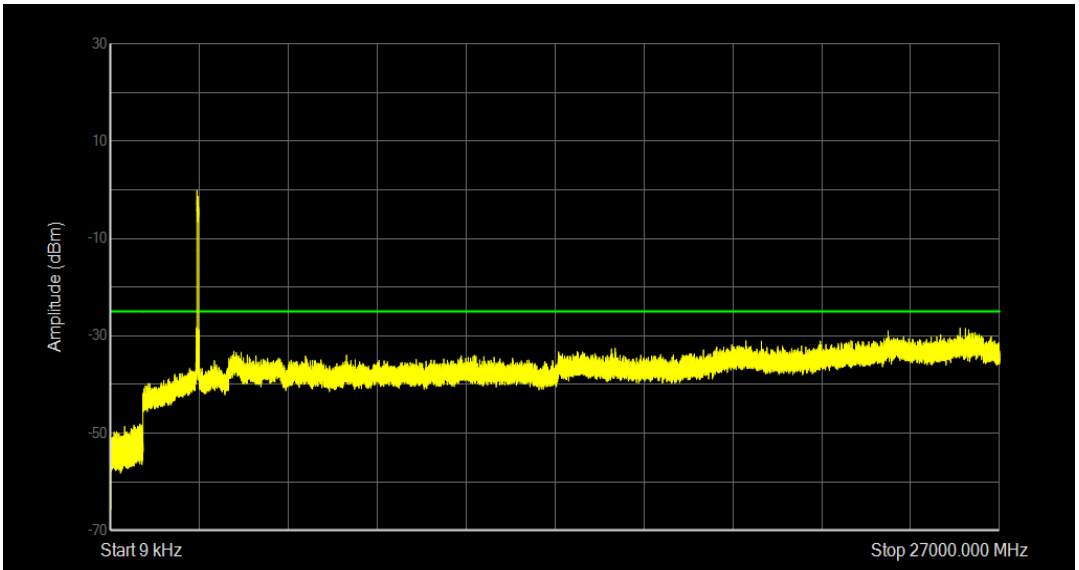
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00972615	-41.06	-25
2	0.15	30	10	0.152985	-51.74	-25
3	30	1000	100	897.0345	-48.77	-25
4	1000	27000	1000	26225.85	-28.99	-25

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



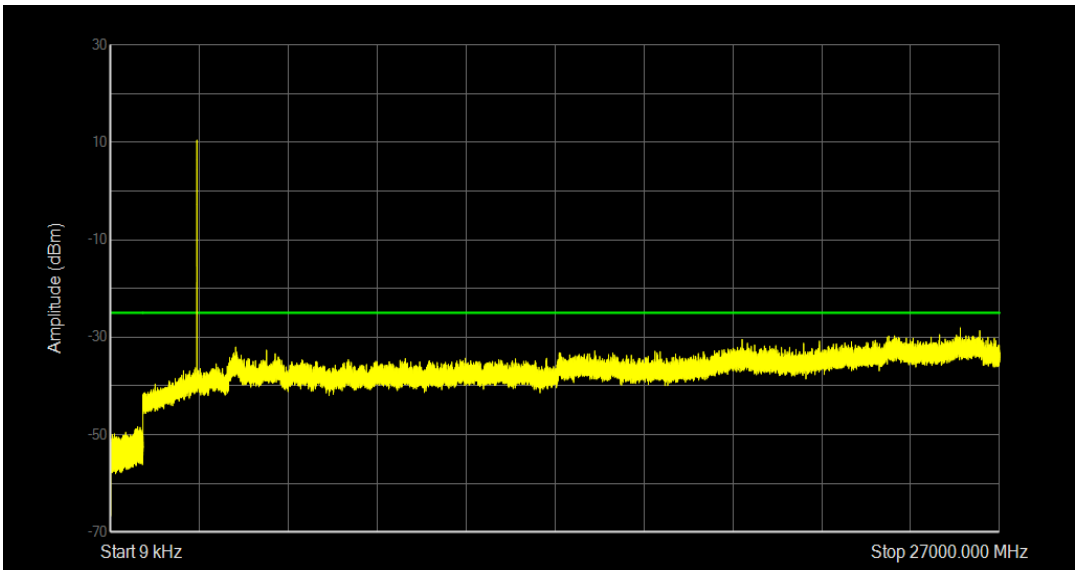
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.009567525	-40.52	-25
2	0.15	30	10	0.15597	-52.17	-25
3	30	1000	100	730.6795	-47.87	-25
4	1000	27000	1000	25749.4	-29.29	-25

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



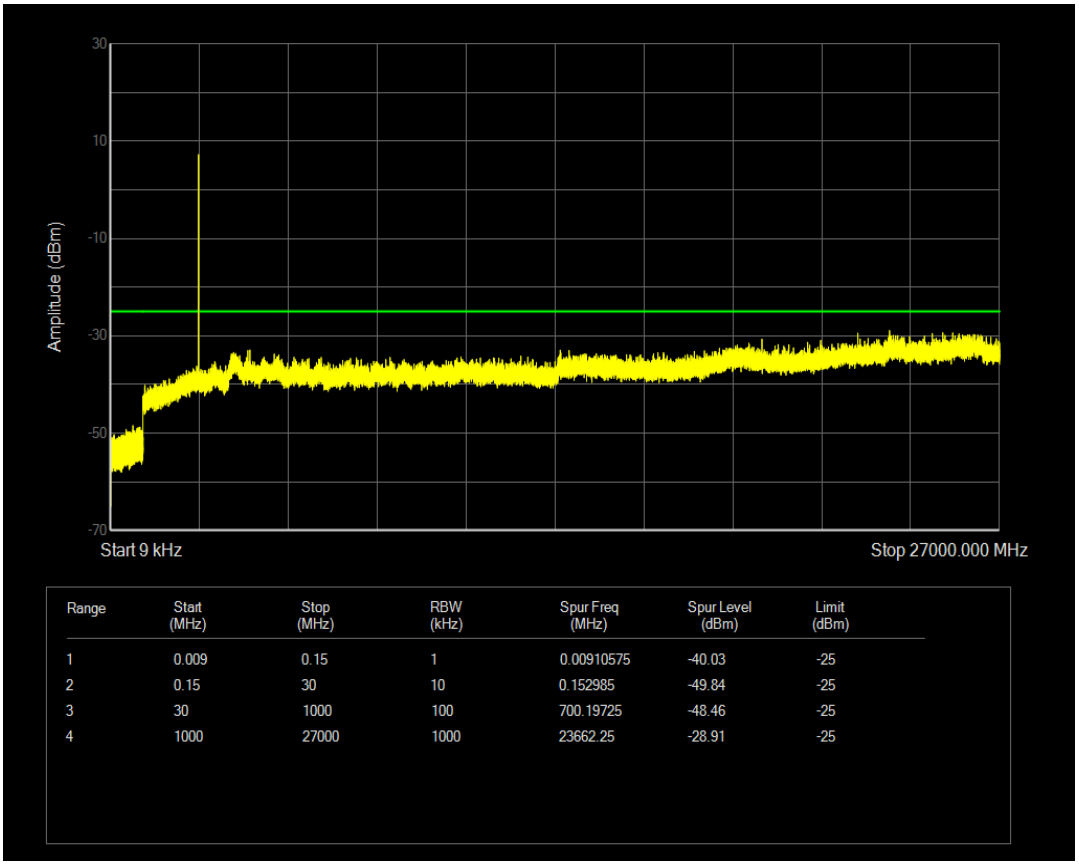
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0107061	-38.35	-25
2	0.15	30	10	0.18358125	-50.68	-25
3	30	1000	100	912.6515	-48.13	-25
4	1000	27000	1000	25802.05	-28.43	-25

n41 SCS=30kHz CP_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	0.0094089	-37.38	-25
2	0.15	30	10	0.16268625	-52.86	-25
3	30	1000	100	843.5875	-48.38	-25
4	1000	27000	1000	25811.15	-28.08	-25

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



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.00910575	-40.03	-25
2	0.15	30	10	0.152985	-49.84	-25
3	30	1000	100	700.19725	-48.46	-25
4	1000	27000	1000	23662.25	-28.91	-25