n77(3700-3980) SCS=30kHz DFT_QAM64 BW=100MHz Channel=656000 RB=270@0

n77(3700-3980) SCS=30kHz DFT_QAM64 BW=10MHz Channel=656000 RB=24@0

n77(3700-3980) SCS=30kHz DFT_QAM64 BW=15MHz Channel=656000 RB=36@0

n77(3700-3980) SCS=30kHz DFT_QAM64 BW=20MHz Channel=656000 RB=50@0

n77(3700-3980) SCS=30kHz DFT_QAM64 BW=30MHz Channel=656000 RB=75@0

n77(3700-3980) SCS=30kHz DFT_QAM64 BW=40MHz Channel=656000 RB=100@0

n77(3700-3980) SCS=30kHz DFT_QAM64 BW=50MHz Channel=656000 RB=128@0

n77(3700-3980) SCS=30kHz DFT_QAM64 BW=60MHz Channel=656000 RB=162@0

n77(3700-3980) SCS=30kHz DFT_QAM64 BW=80MHz Channel=656000 RB=216@0

n77(3700-3980) SCS=30kHz DFT_QAM64 BW=90MHz Channel=656000 RB=240@0

n77(3700-3980) SCS=30kHz DFT_QPSK BW=100MHz Channel=656000 RB=270@0

n77(3700-3980) SCS=30kHz DFT_QPSK BW=10MHz Channel=656000 RB=24@0

n77(3700-3980) SCS=30kHz DFT_QPSK BW=15MHz Channel=656000 RB=36@0

n77(3700-3980) SCS=30kHz DFT_QPSK BW=20MHz Channel=656000 RB=50@0

n77(3700-3980) SCS=30kHz DFT_QPSK BW=30MHz Channel=656000 RB=75@0

n77(3700-3980) SCS=30kHz DFT_QPSK BW=40MHz Channel=656000 RB=100@0

n77(3700-3980) SCS=30kHz DFT_QPSK BW=50MHz Channel=656000 RB=128@0

n77(3700-3980) SCS=30kHz DFT_QPSK BW=60MHz Channel=656000 RB=162@0

n77(3700-3980) SCS=30kHz DFT_QPSK BW=80MHz Channel=656000 RB=216@0

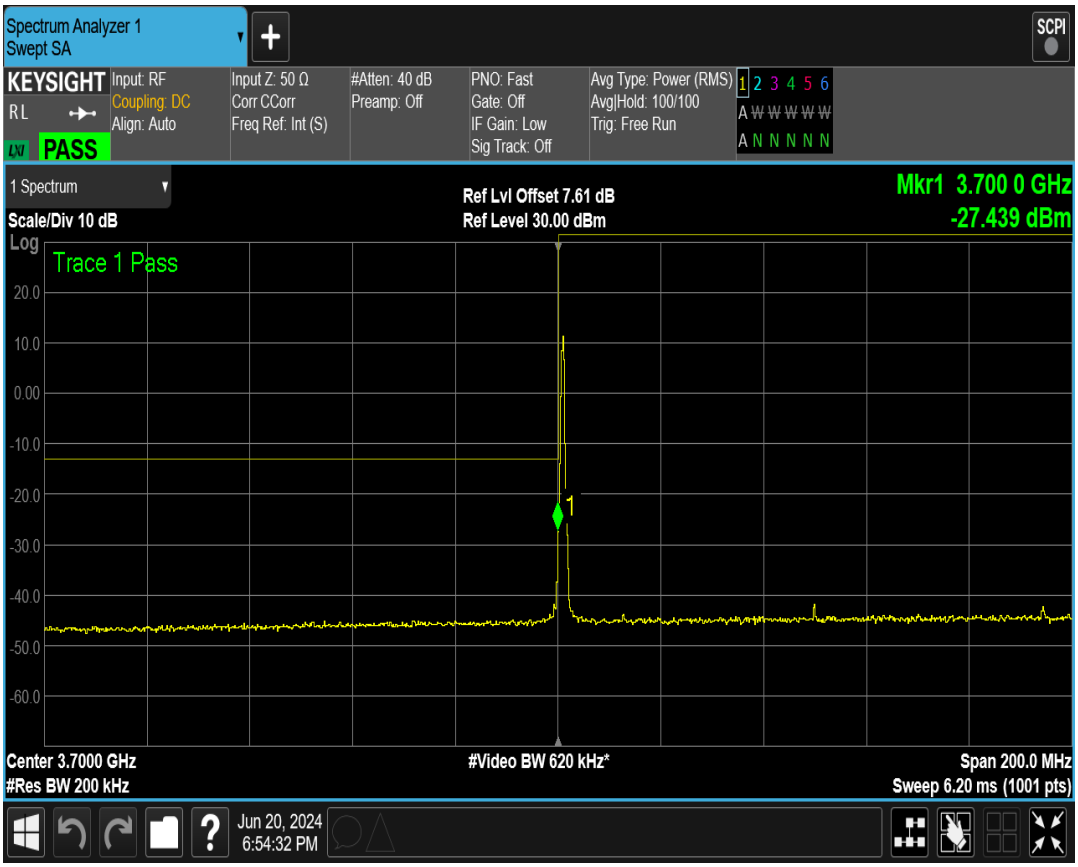
n77(3700-3980) SCS=30kHz DFT_QPSK BW=90MHz Channel=656000 RB=240@0

KEYSIGHT Keysight RF Application (2.0.50.10261)
NR1
CONNECTED
Band
N77
DL BW
90 MHz
Low
Mid
High
ARFCN/Freq
D: 656000
3840.00 MHz
U: 656000
3840.00 MHz
Cell Power
-44.48 dBm/BW
CLPC
All Up Bits
Test Case
Selected Case
SA
NR1
NR2
Cell Quick Config
Measurement
BLER/Tput
UE Info.
Msg. Summary
NR UE Power: 23 dBm DL BLER: 0 %
Duplex: TDD
Port: RFIO1
Freq: 3840 MHz
EIP: 26 dBm
Measuring
Acquiring
Avg: 2/2
Occupied Bandwidth
Amplitude (dBm)
-6.44
-12.87
-19.31
-25.75
-32.18
-38.62
-45.06
-51.49
-57.93
-64.37
3.762
3.780
3.798
3.816
3.834
3.852
3.870
3.888
3.906
3.924
Frequency (GHz)
Pass/Fail
Pass
OBW
86.321 MHz
Tx Freq Err
0.00 Hz
X dB BW
86.75 MHz
Total Power
22.56 dBm
Meas Cell
NR1
Meas Mode
Basic
Meas Select
UL Chnl Type
PUSCH
Average Count
2
Continuous
Off
Restart
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
p-UE-FR1
OFF
Addi. P-Max
OFF
PRACH
EIP
Auto
Addi. SEM
NS_01
Test Case Params
‹ Advanced
Connect
Disconnect
Aggregate
Load Configuration
Save Configuration
Preset
Local
Ready
BSE:CONFig:NR5G[:SELected]:OBANd
Copy
2024-06-18 11:25:09

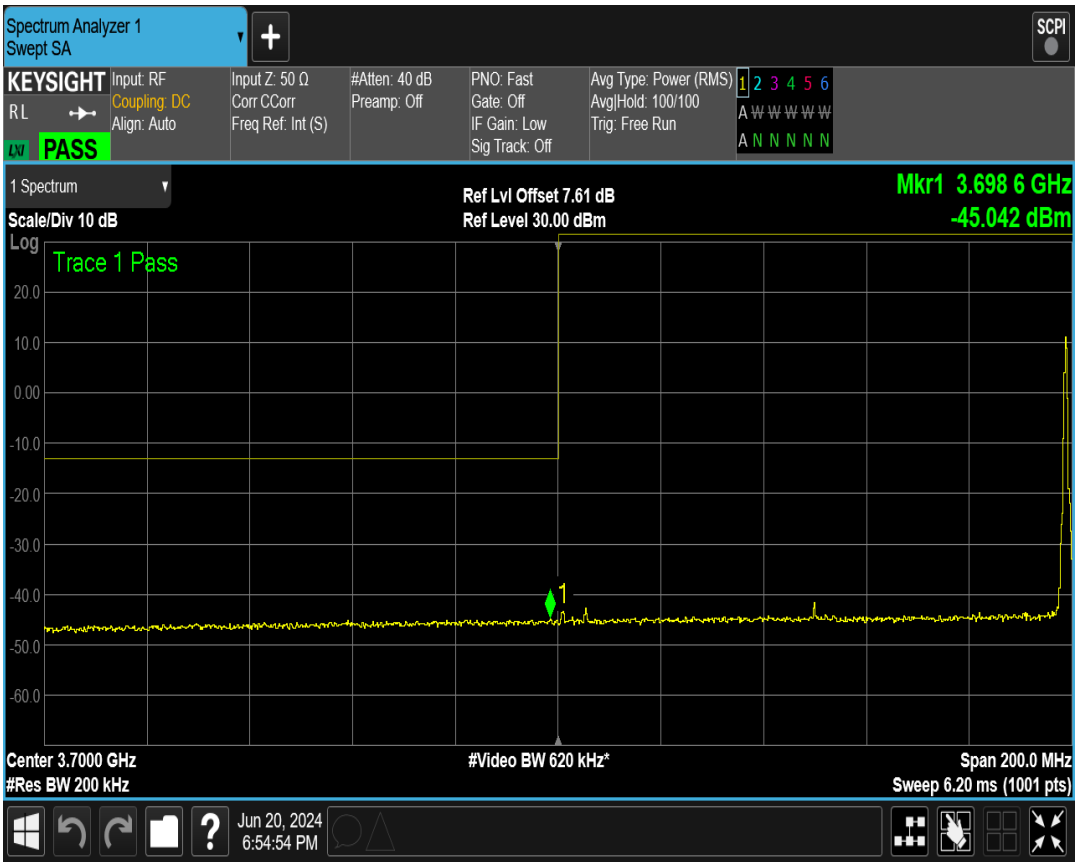
5 Band edge for NR FR1

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n77(3700-3980)	30	10	647000	24@0	CP_QPSK	3699.54	-40.77	-13	PASS
n77(3700-3980)	30	10	647000	1@0	CP_QPSK	3699.78	-39.41	-13	PASS
n77(3700-3980)	30	10	647000	1@23	CP_QPSK	3694.44	-44.49	-13	PASS
n77(3700-3980)	30	10	665000	24@0	CP_QPSK	3981.54	-38.63	-13	PASS
n77(3700-3980)	30	10	665000	1@0	CP_QPSK	3980.42	-45.28	-13	PASS
n77(3700-3980)	30	10	665000	1@23	CP_QPSK	3980.00	-36.58	-13	PASS
n77(3700-3980)	30	50	648334	133@0	CP_QPSK	3693.30	-36.96	-13	PASS
n77(3700-3980)	30	50	648334	1@0	CP_QPSK	3699.80	-42.45	-13	PASS
n77(3700-3980)	30	50	648334	1@132	CP_QPSK	3698.40	-44.92	-13	PASS
n77(3700-3980)	30	50	663666	133@0	CP_QPSK	3980.50	-37.96	-13	PASS
n77(3700-3980)	30	50	663666	1@0	CP_QPSK	3989.80	-45.90	-13	PASS
n77(3700-3980)	30	50	663666	1@132	CP_QPSK	3980.00	-40.20	-13	PASS
n77(3700-3980)	30	100	650000	273@0	CP_QPSK	3700.00	-21.71	-13	PASS
n77(3700-3980)	30	100	650000	1@0	CP_QPSK	3700.00	-27.43	-13	PASS
n77(3700-3980)	30	100	650000	1@272	CP_QPSK	3698.60	-45.04	-13	PASS
n77(3700-3980)	30	100	662000	273@0	CP_QPSK	3980.00	-20.94	-13	PASS
n77(3700-3980)	30	100	662000	1@0	CP_QPSK	3980.80	-45.75	-13	PASS
n77(3700-3980)	30	100	662000	1@272	CP_QPSK	3980.00	-40.61	-13	PASS

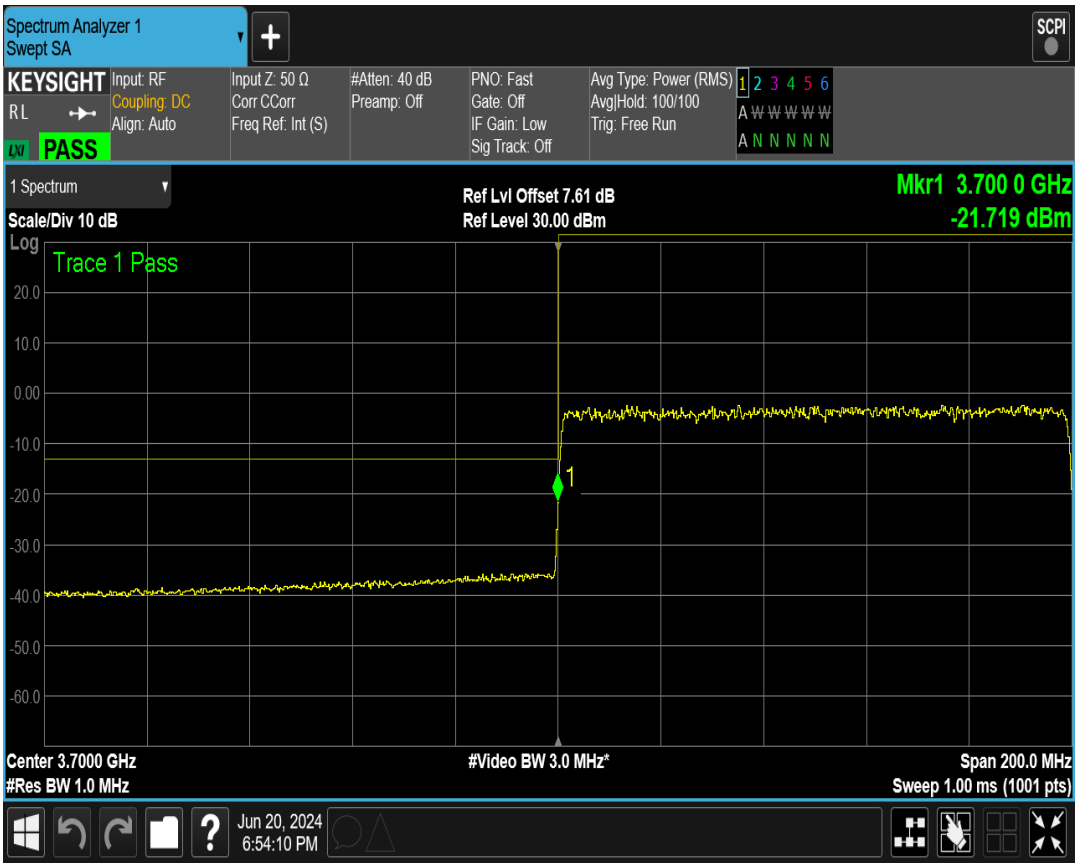
n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=650000 RB=1@0



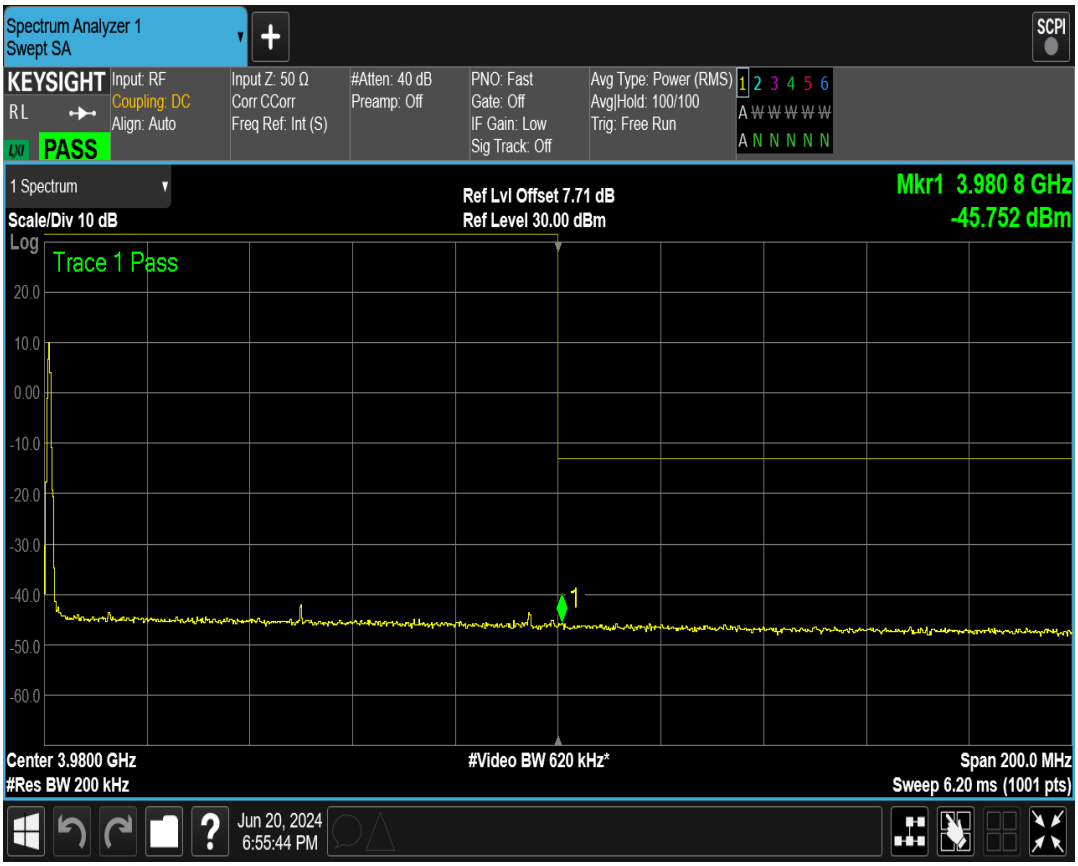
n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=650000 RB=1@272



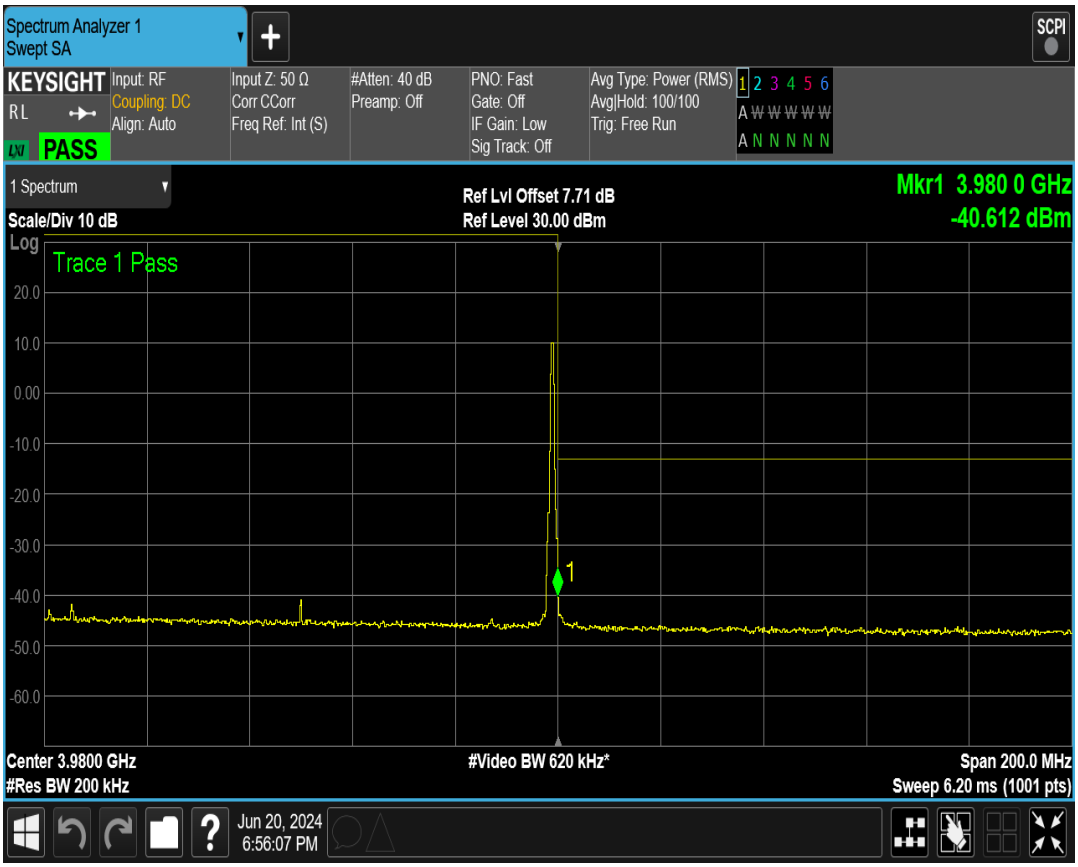
n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=650000 RB=273@0



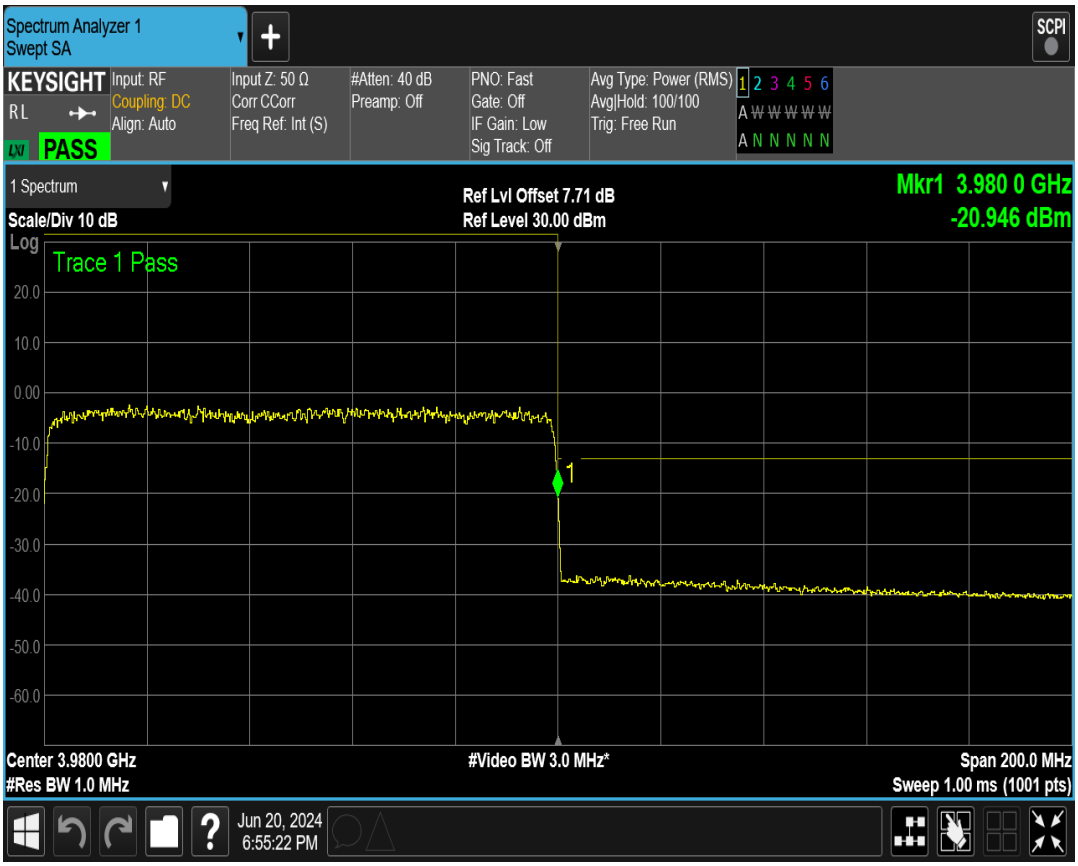
n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=662000 RB=1@0



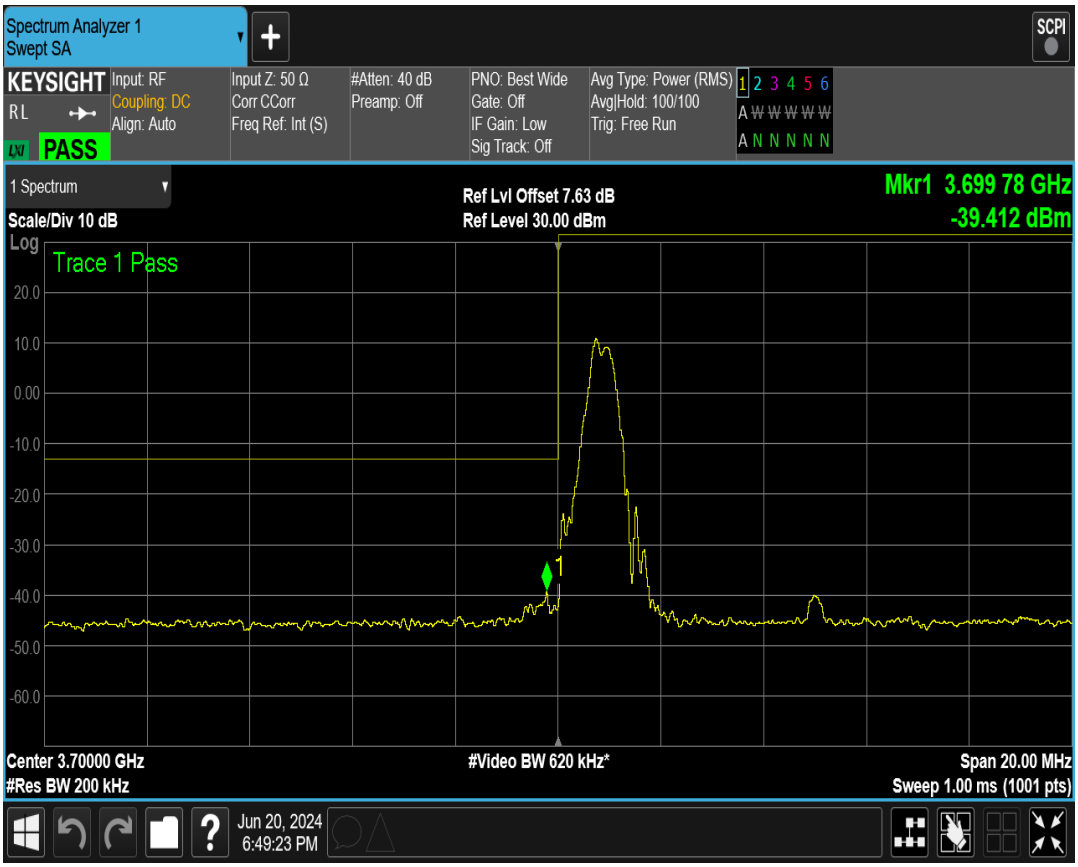
n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=662000 RB=1@272



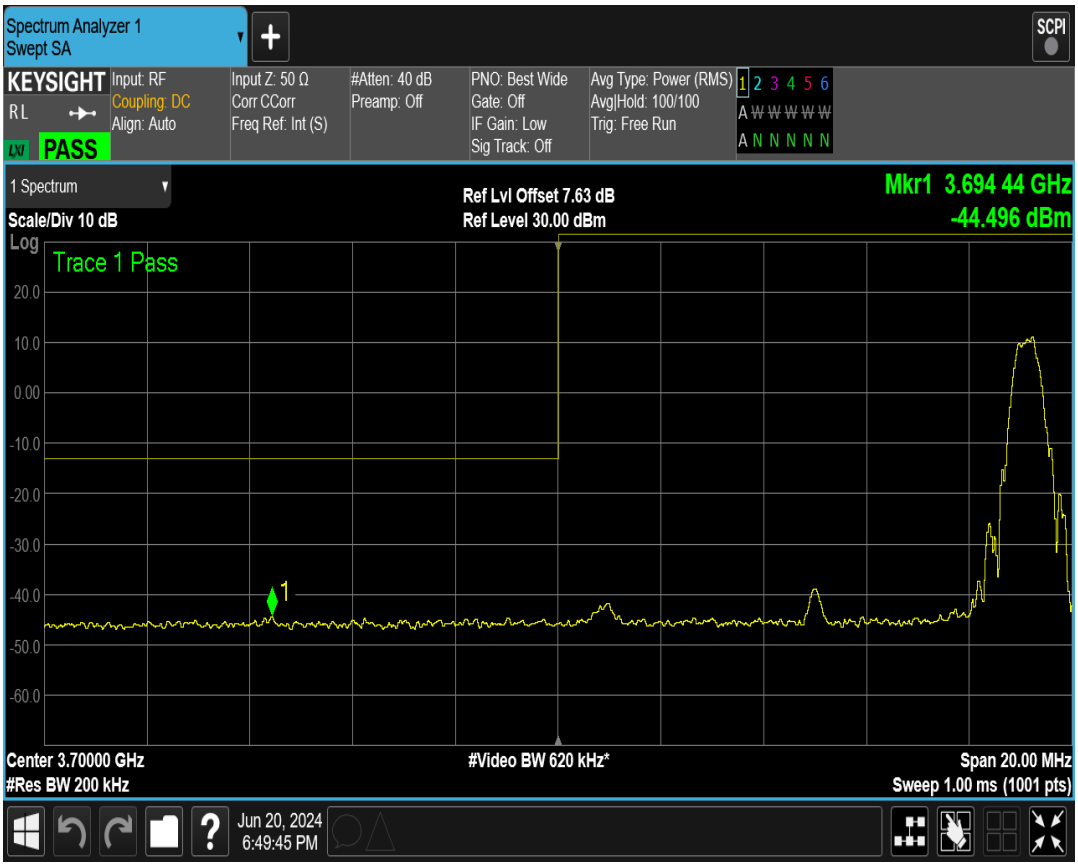
n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=662000 RB=273@0



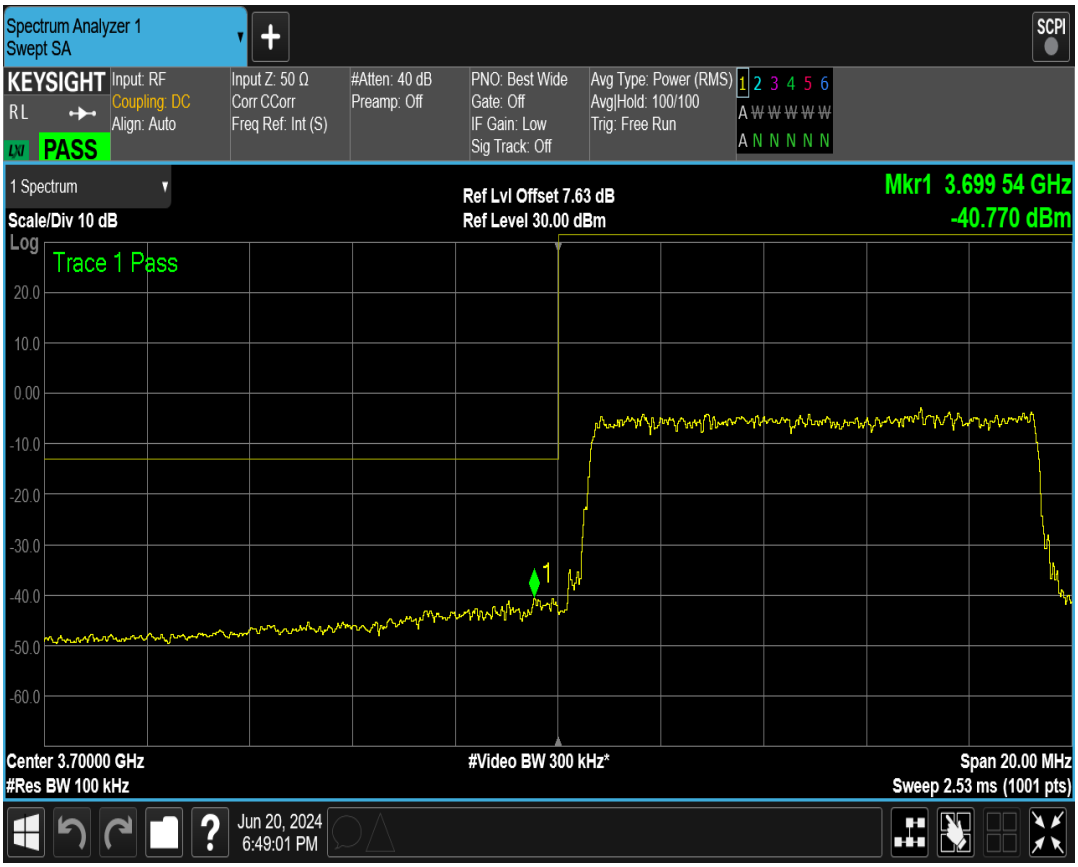
n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=647000 RB=1@0



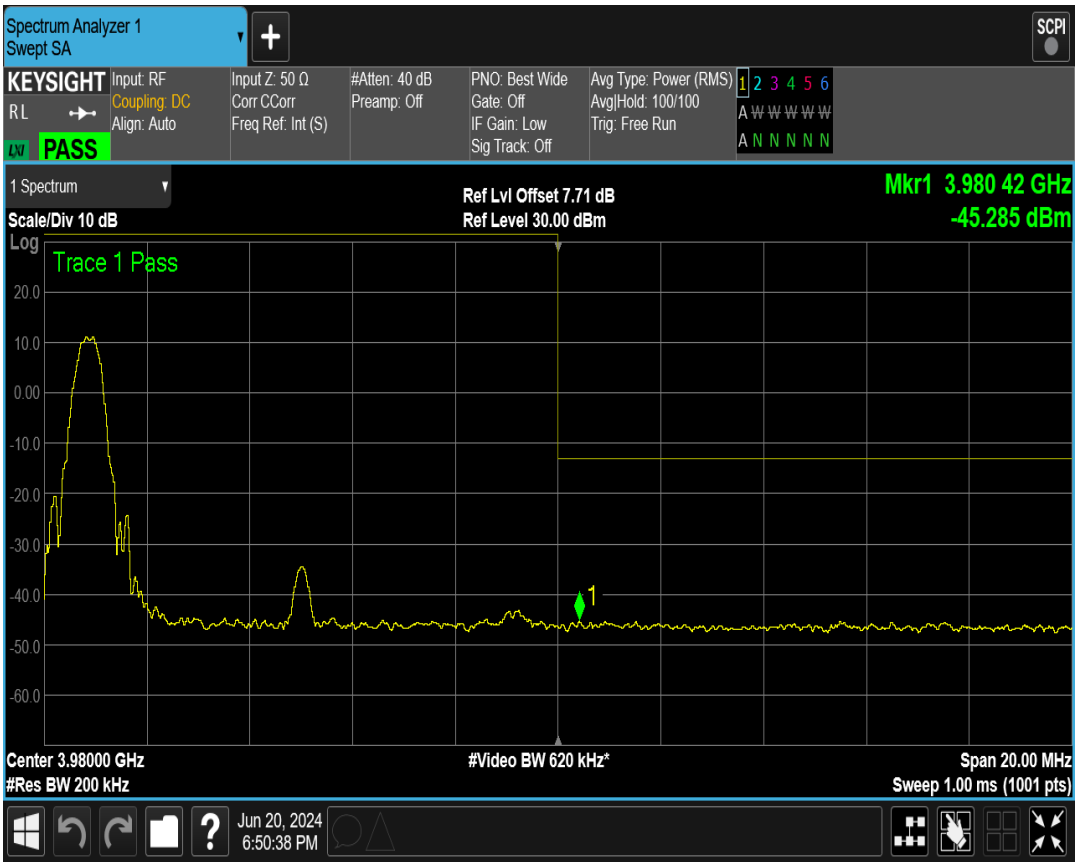
n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=647000 RB=1@23



n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=647000 RB=24@0

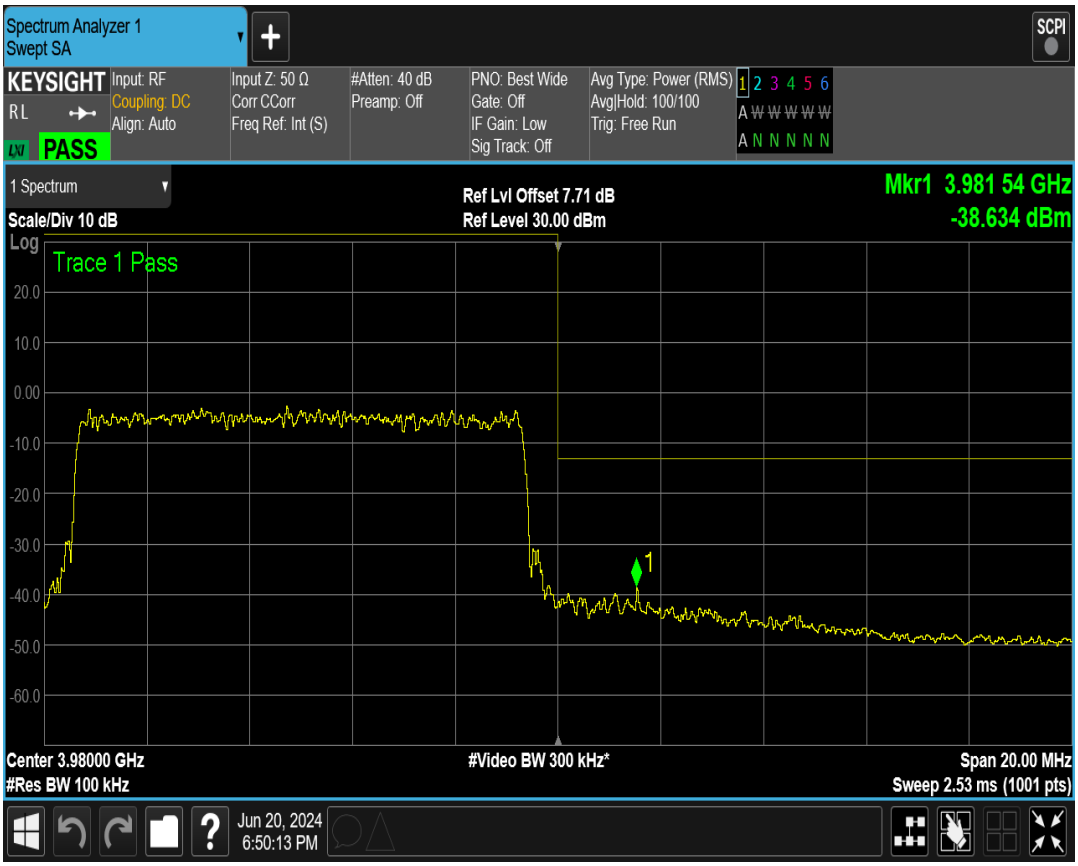


n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=665000 RB=1@0

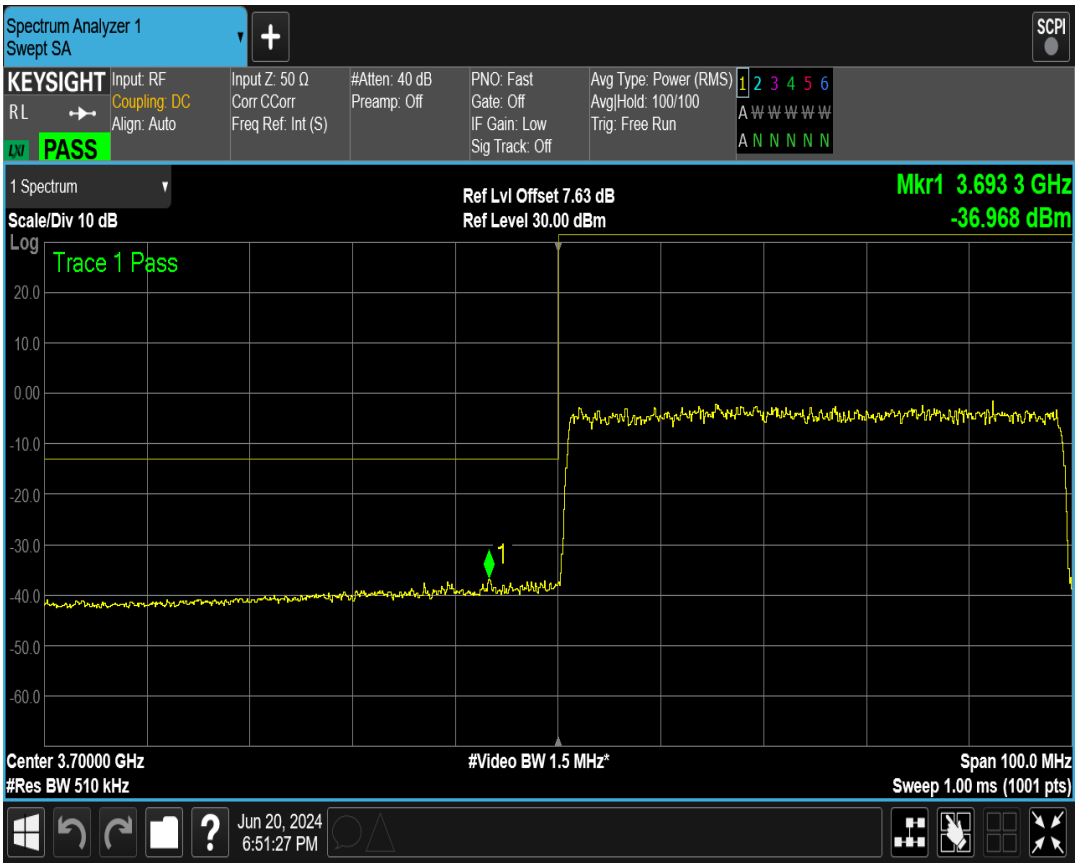


n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=665000 RB=1@23

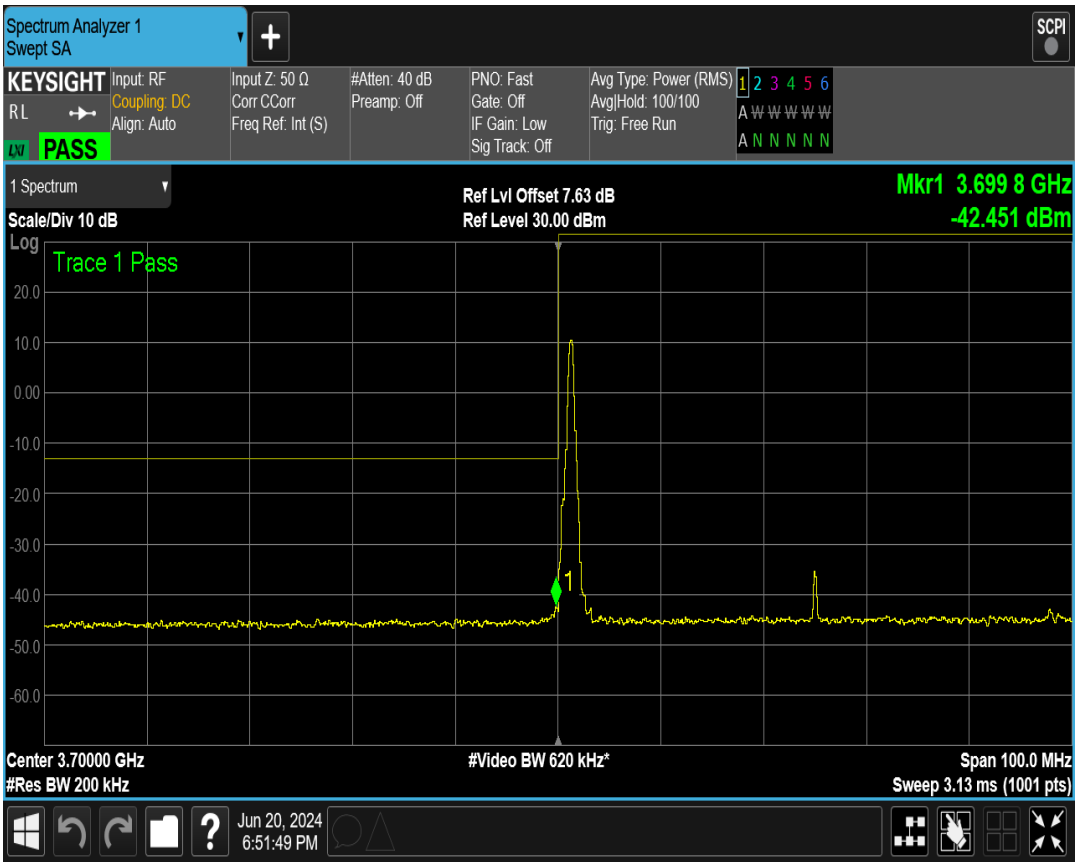
n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=665000 RB=24@0



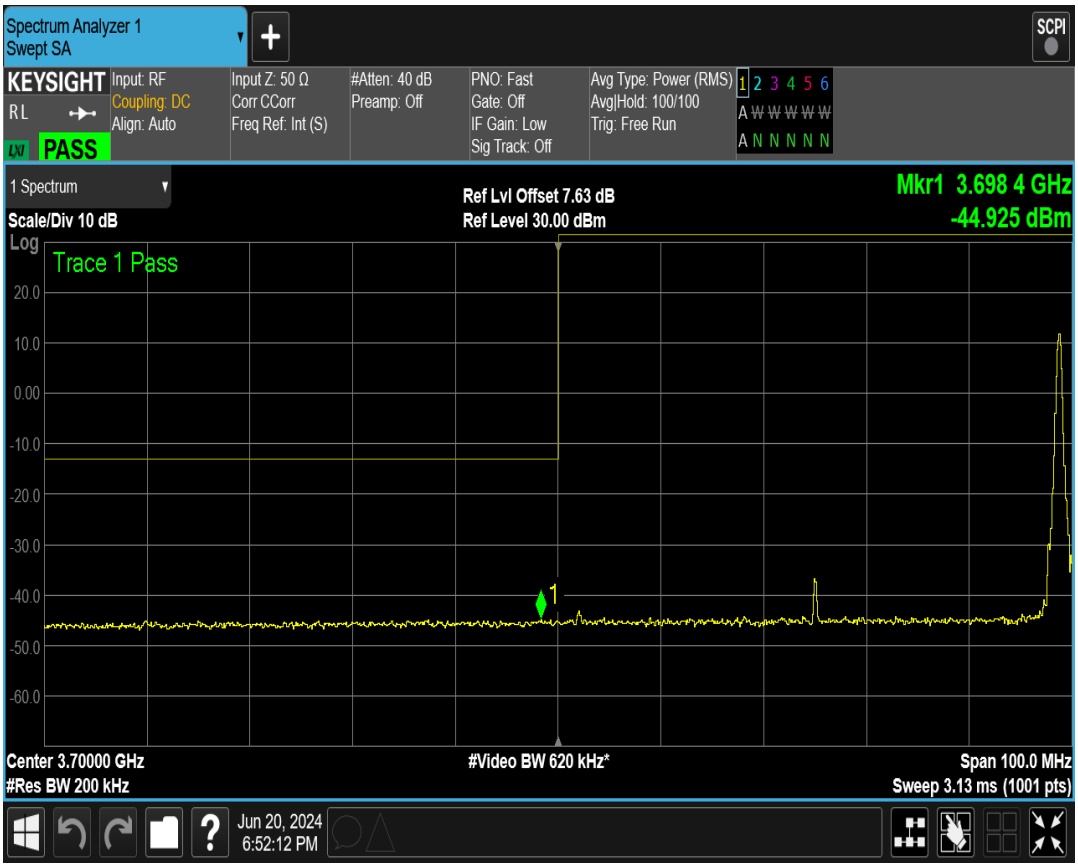
n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=648334 RB=133@0



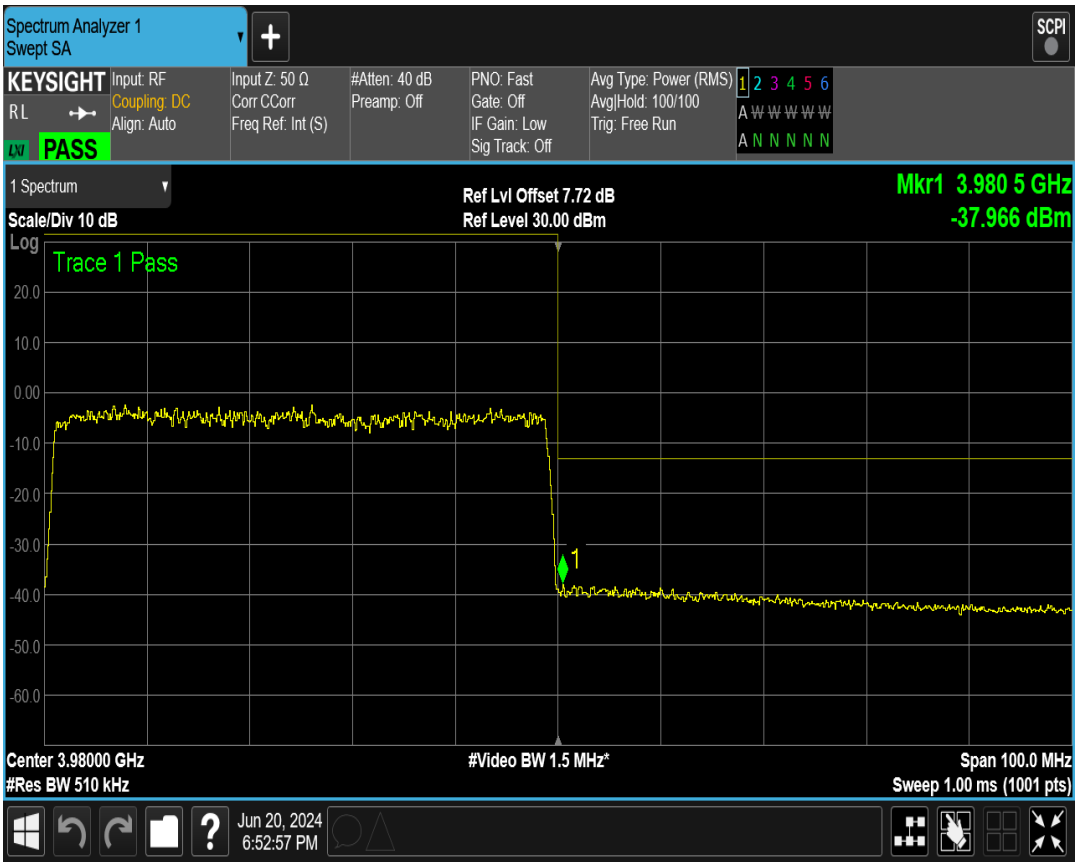
n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=648334 RB=1@0



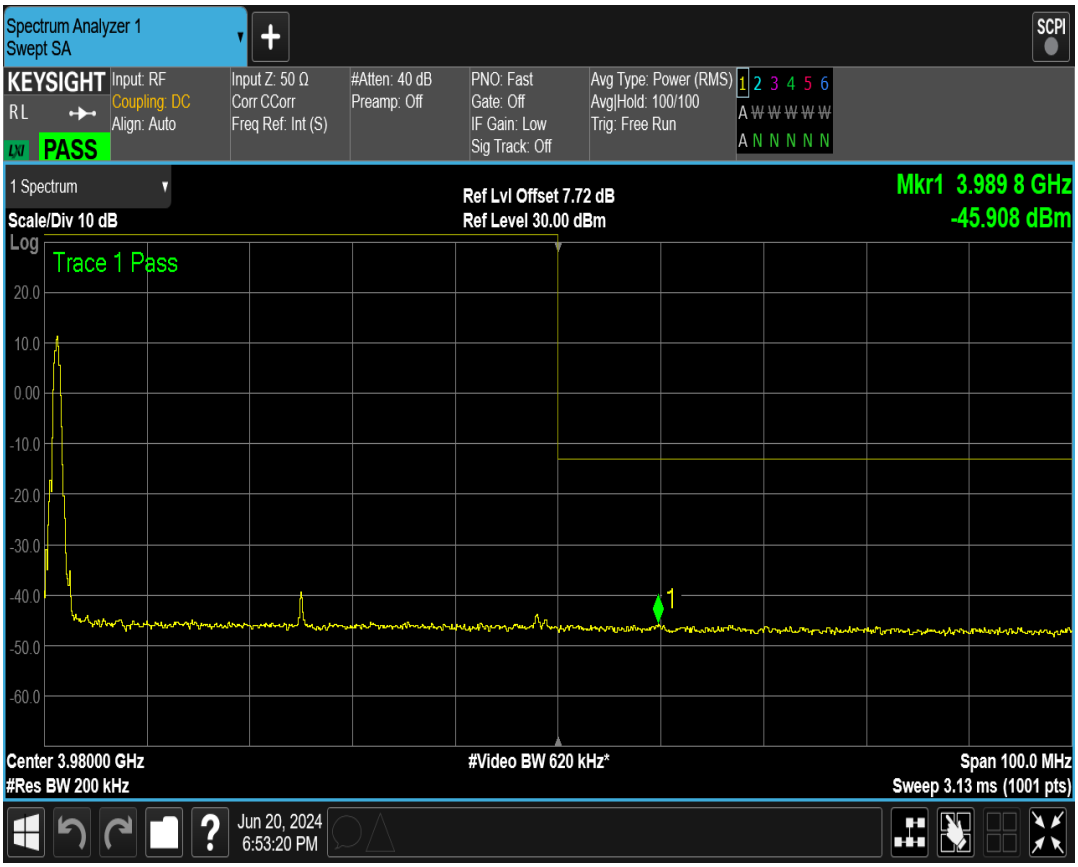
n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=648334 RB=1@132



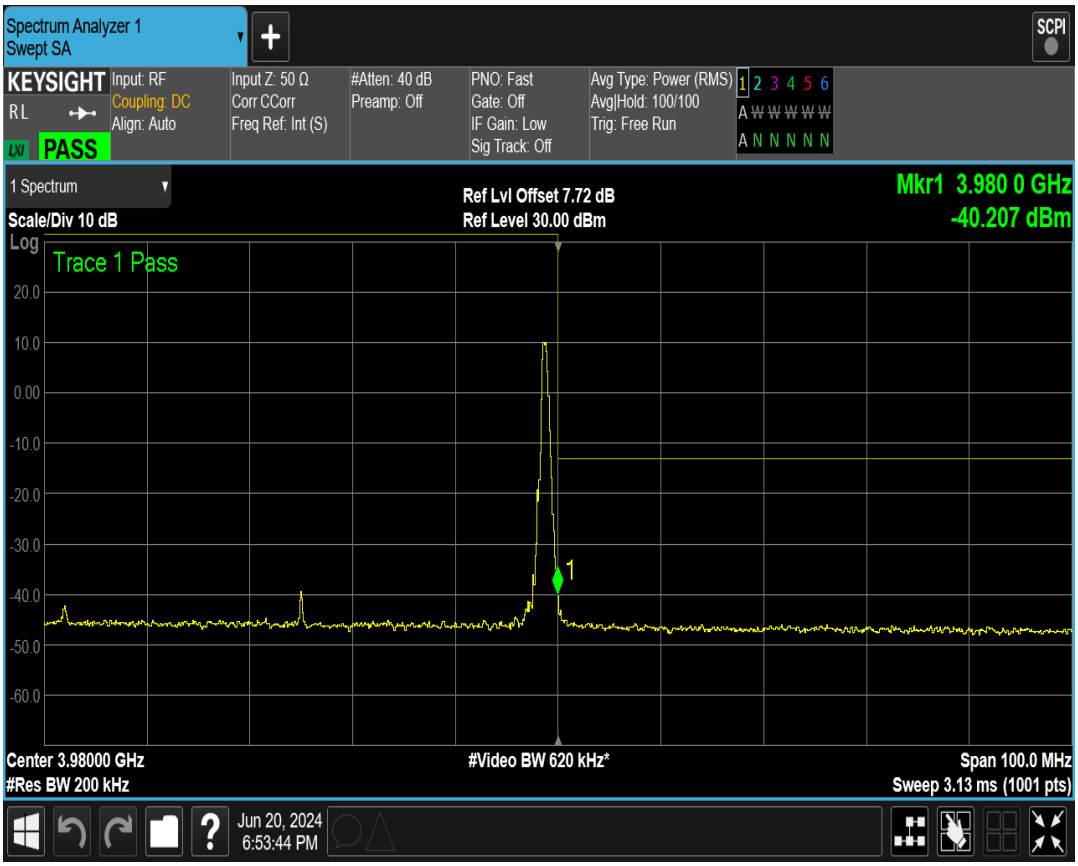
n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=663666 RB=133@0



n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=663666 RB=1@0



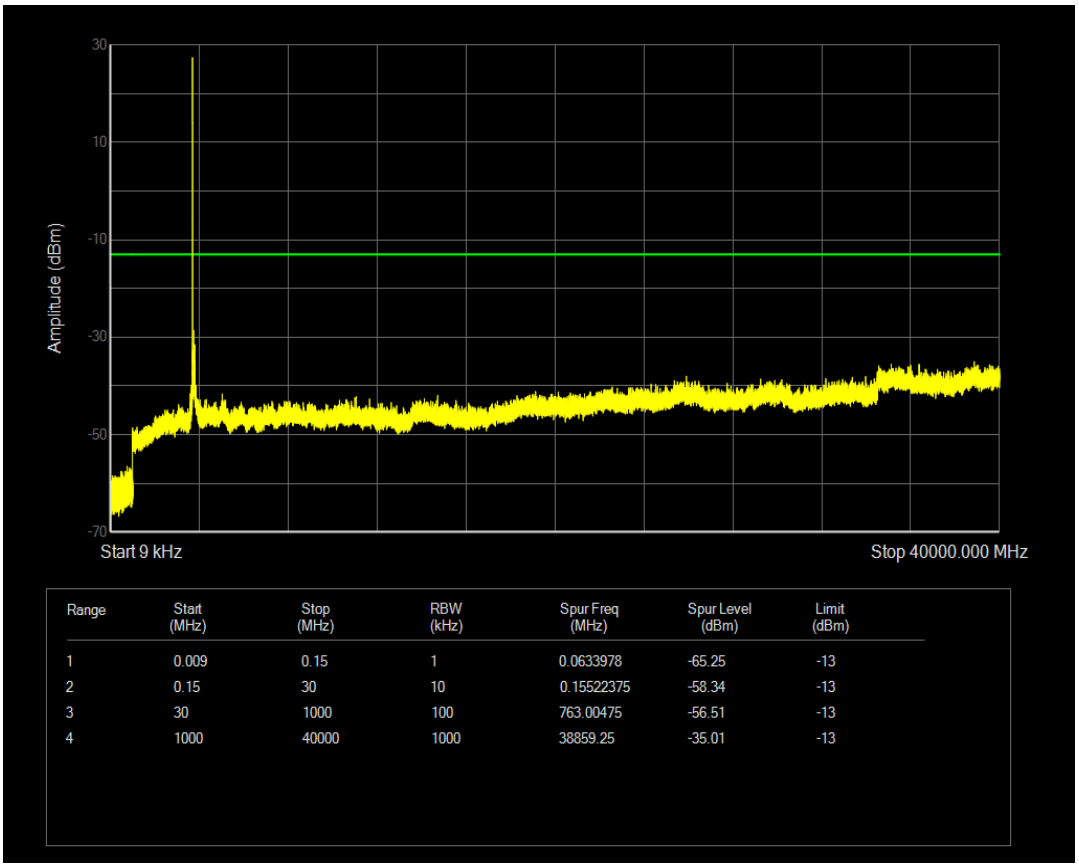
n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=663666 RB=1@132



6 Out-of-band emissions for NR FR1

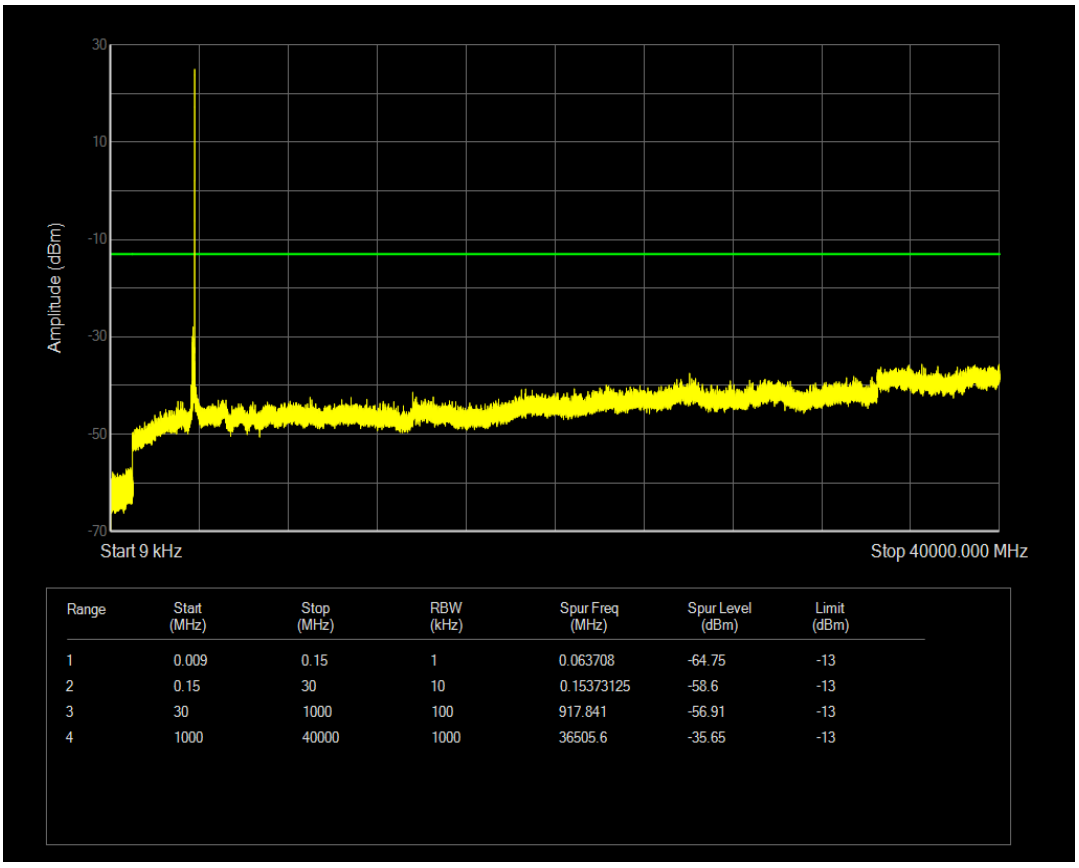
Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)	Verdict
n77(3700-3980)	30	10	647000	24@0	CP_QPSK	38848.53	-35.42	-13	PASS
n77(3700-3980)	30	10	647000	1@0	CP_QPSK	39819.63	-34.53	-13	PASS
n77(3700-3980)	30	10	647000	1@23	CP_QPSK	39381.85	-34.69	-13	PASS
n77(3700-3980)	30	10	665000	24@0	CP_QPSK	35173.75	-34.32	-13	PASS
n77(3700-3980)	30	10	665000	1@0	CP_QPSK	35193.25	-34.69	-13	PASS
n77(3700-3980)	30	10	665000	1@23	CP_QPSK	35164.00	-35.23	-13	PASS
n77(3700-3980)	30	50	648334	133@0	CP_QPSK	39008.43	-34.69	-13	PASS
n77(3700-3980)	30	50	648334	1@0	CP_QPSK	39492.03	-34.08	-13	PASS
n77(3700-3980)	30	50	648334	1@132	CP_QPSK	35177.65	-34.53	-13	PASS
n77(3700-3980)	30	50	663666	133@0	CP_QPSK	38822.20	-35.16	-13	PASS
n77(3700-3980)	30	50	663666	1@0	CP_QPSK	38921.65	-35.10	-13	PASS
n77(3700-3980)	30	50	663666	1@132	CP_QPSK	39884.95	-34.90	-13	PASS
n77(3700-3980)	30	100	650000	273@0	CP_QPSK	38969.43	-34.58	-13	PASS
n77(3700-3980)	30	100	650000	1@0	CP_QPSK	38859.25	-35.01	-13	PASS
n77(3700-3980)	30	100	650000	1@272	CP_QPSK	36505.60	-35.65	-13	PASS
n77(3700-3980)	30	100	662000	273@0	CP_QPSK	38929.45	-34.53	-13	PASS
n77(3700-3980)	30	100	662000	1@0	CP_QPSK	38783.20	-34.37	-13	PASS
n77(3700-3980)	30	100	662000	1@272	CP_QPSK	35285.88	-35.01	-13	PASS

n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=650000 RB=1@0



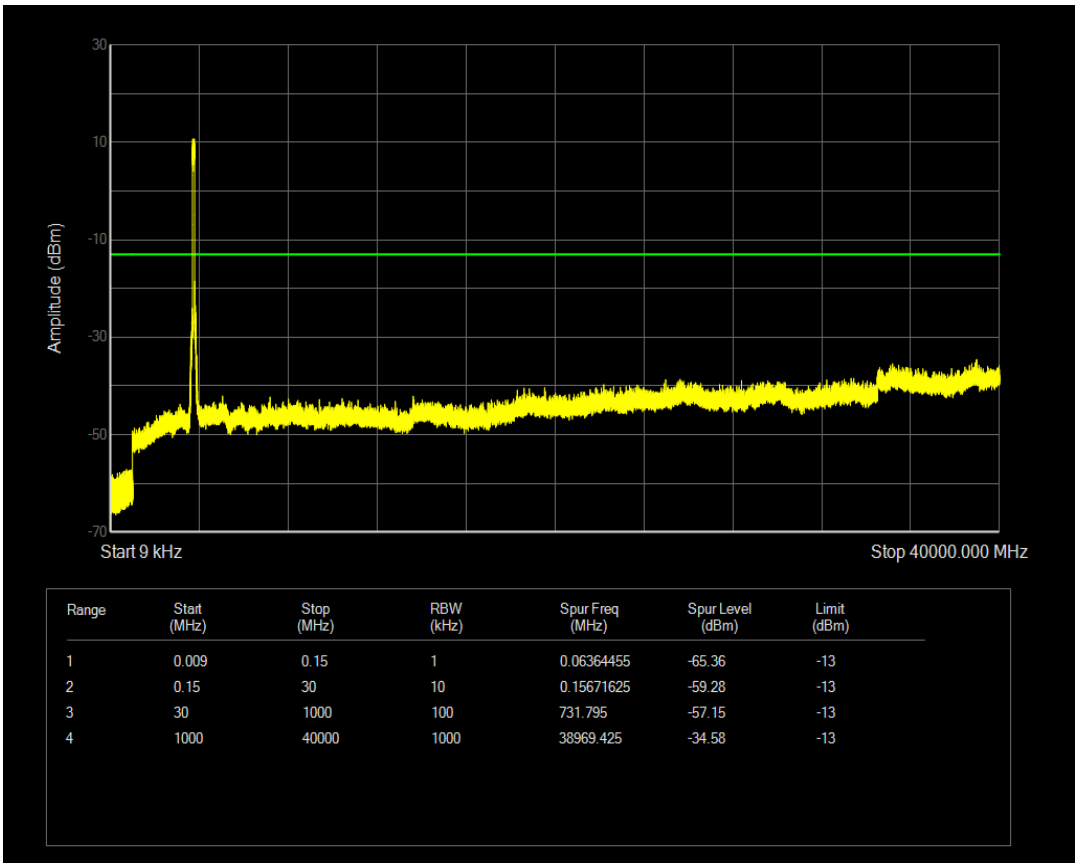
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0633978	-65.25	-13
2	0.15	30	10	0.15522375	-58.34	-13
3	30	1000	100	763.00475	-56.51	-13
4	1000	40000	1000	38859.25	-35.01	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=650000 RB=1@272



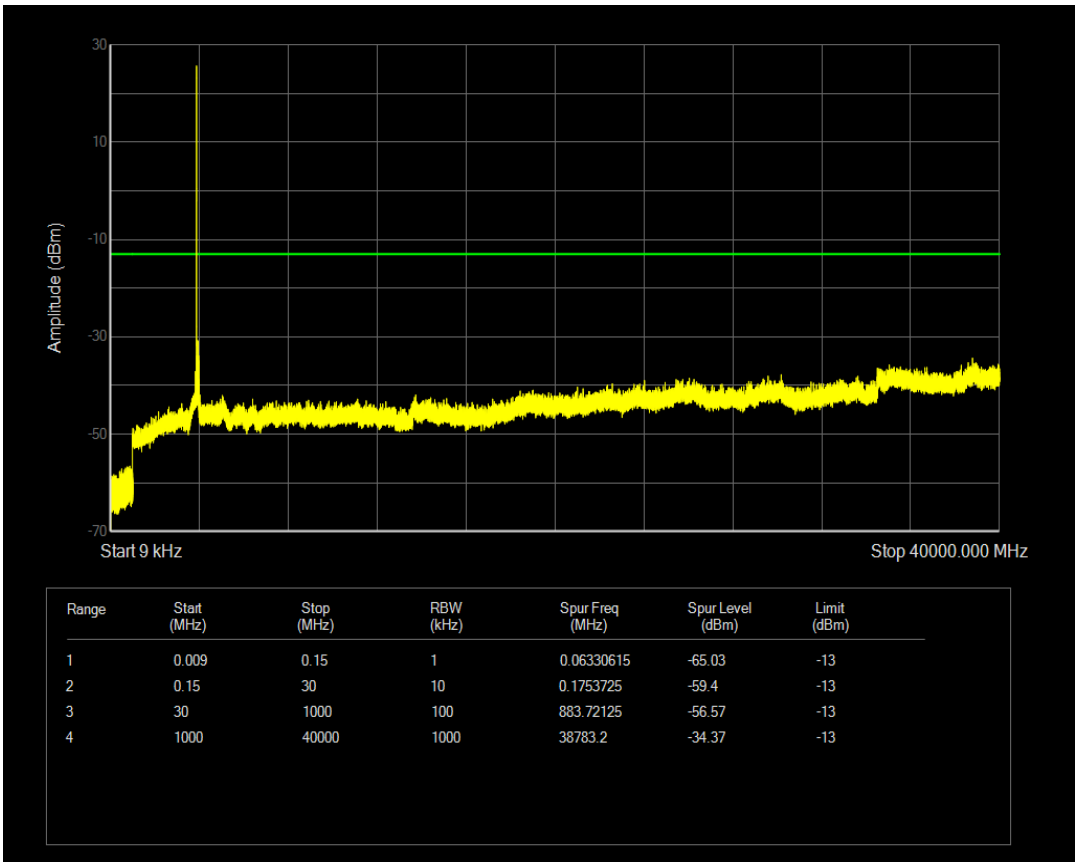
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.063708	-64.75	-13
2	0.15	30	10	0.15373125	-58.6	-13
3	30	1000	100	917.841	-56.91	-13
4	1000	40000	1000	36505.6	-35.65	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=650000 RB=273@0



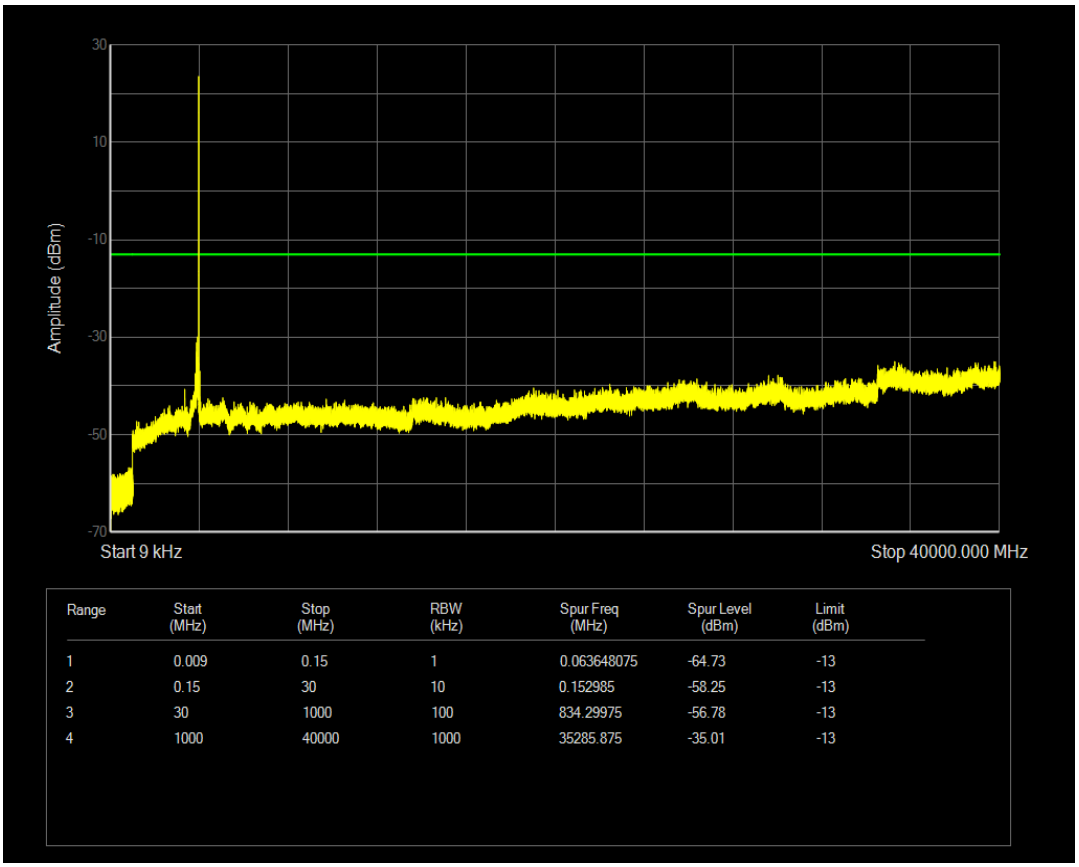
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.06364455	-65.36	-13
2	0.15	30	10	0.15671625	-59.28	-13
3	30	1000	100	731.795	-57.15	-13
4	1000	40000	1000	38969.425	-34.58	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=662000 RB=1@0



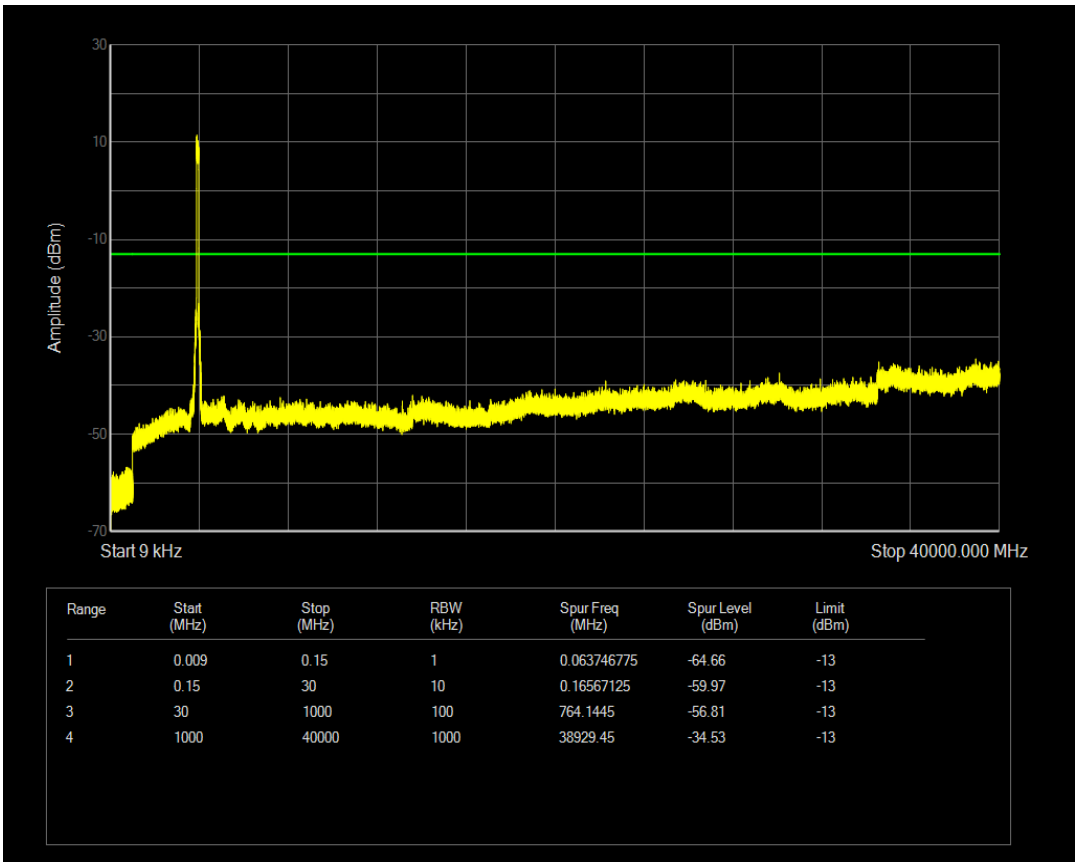
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.06330615	-65.03	-13
2	0.15	30	10	0.1753725	-59.4	-13
3	30	1000	100	883.72125	-56.57	-13
4	1000	40000	1000	38783.2	-34.37	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=662000 RB=1@272



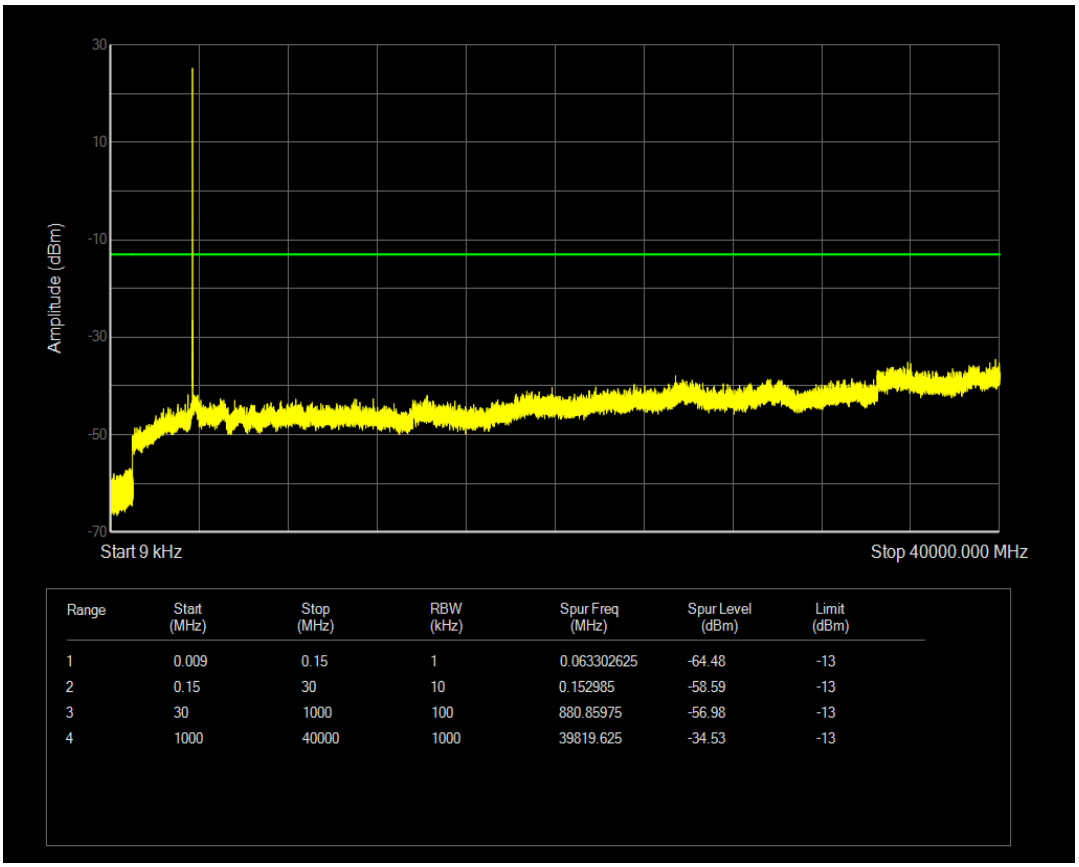
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.063648075	-64.73	-13
2	0.15	30	10	0.152985	-58.25	-13
3	30	1000	100	834.29975	-56.78	-13
4	1000	40000	1000	35285.875	-35.01	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=100MHz Channel=662000 RB=273@0



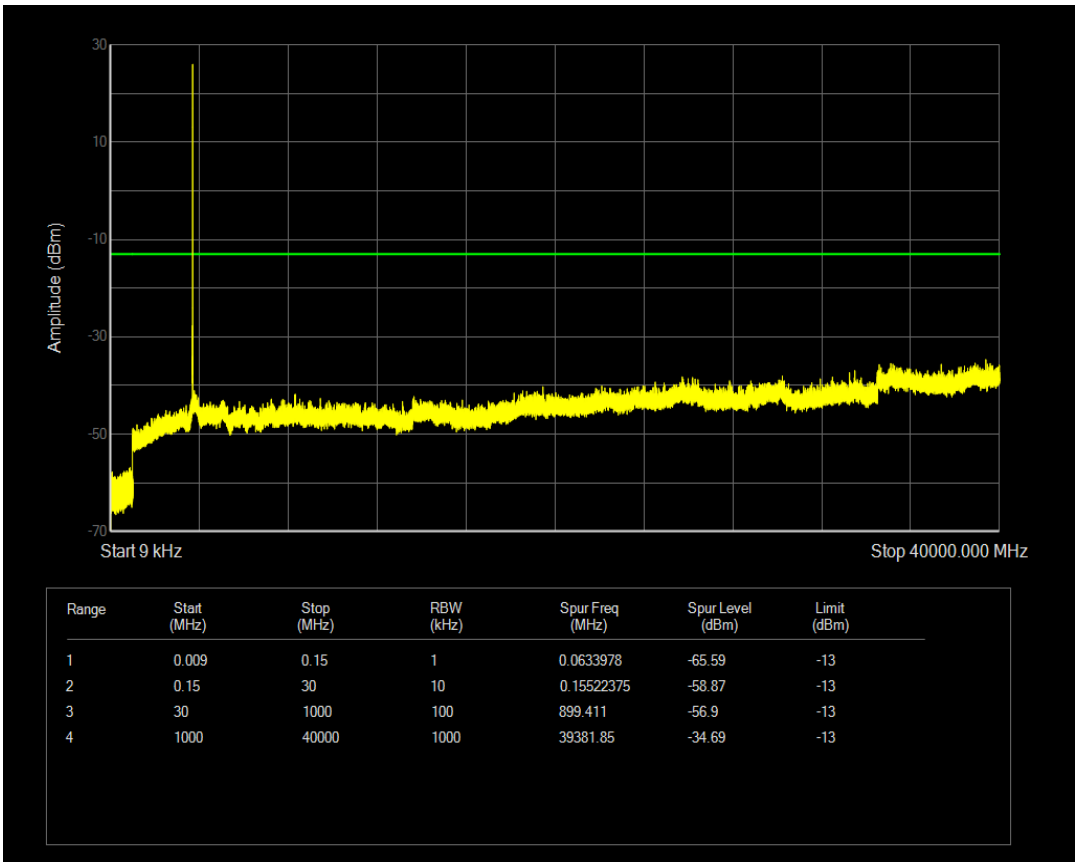
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.063746775	-64.66	-13
2	0.15	30	10	0.16567125	-59.97	-13
3	30	1000	100	764.1445	-56.81	-13
4	1000	40000	1000	38929.45	-34.53	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=647000 RB=1@0



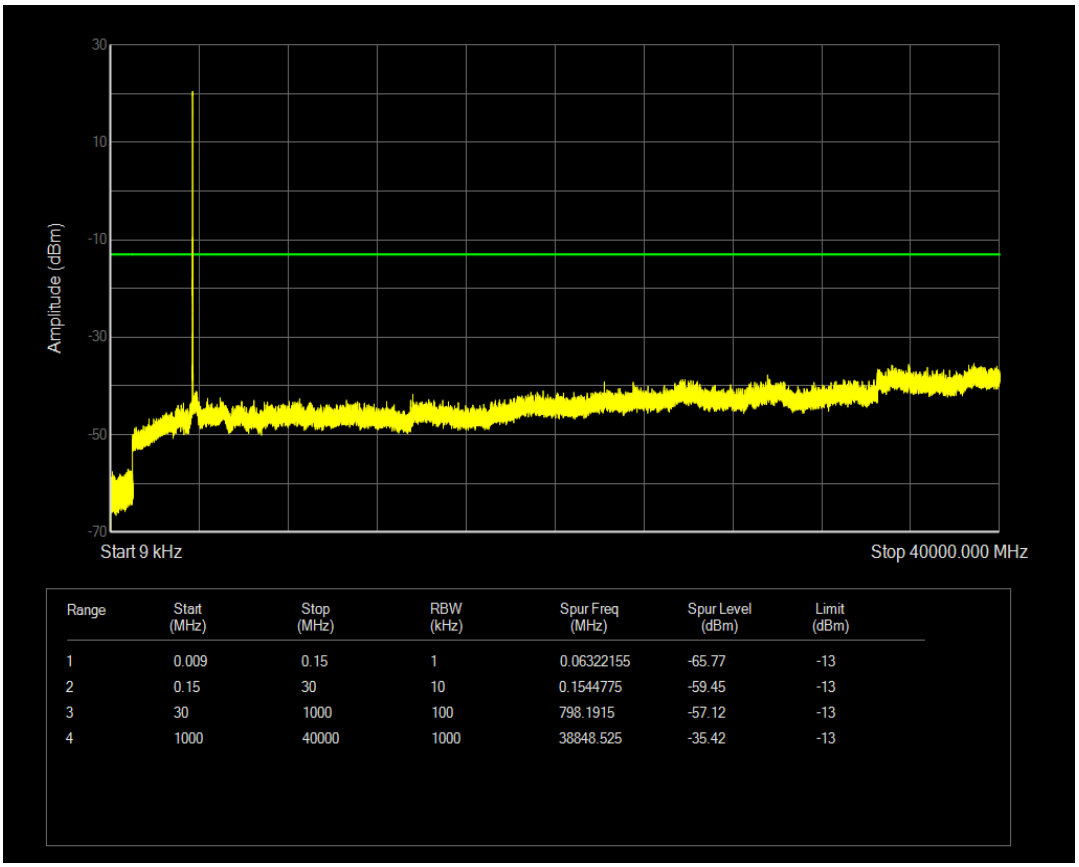
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.063302625	-64.48	-13
2	0.15	30	10	0.152985	-58.59	-13
3	30	1000	100	880.85975	-56.98	-13
4	1000	40000	1000	39819.625	-34.53	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=647000 RB=1@23



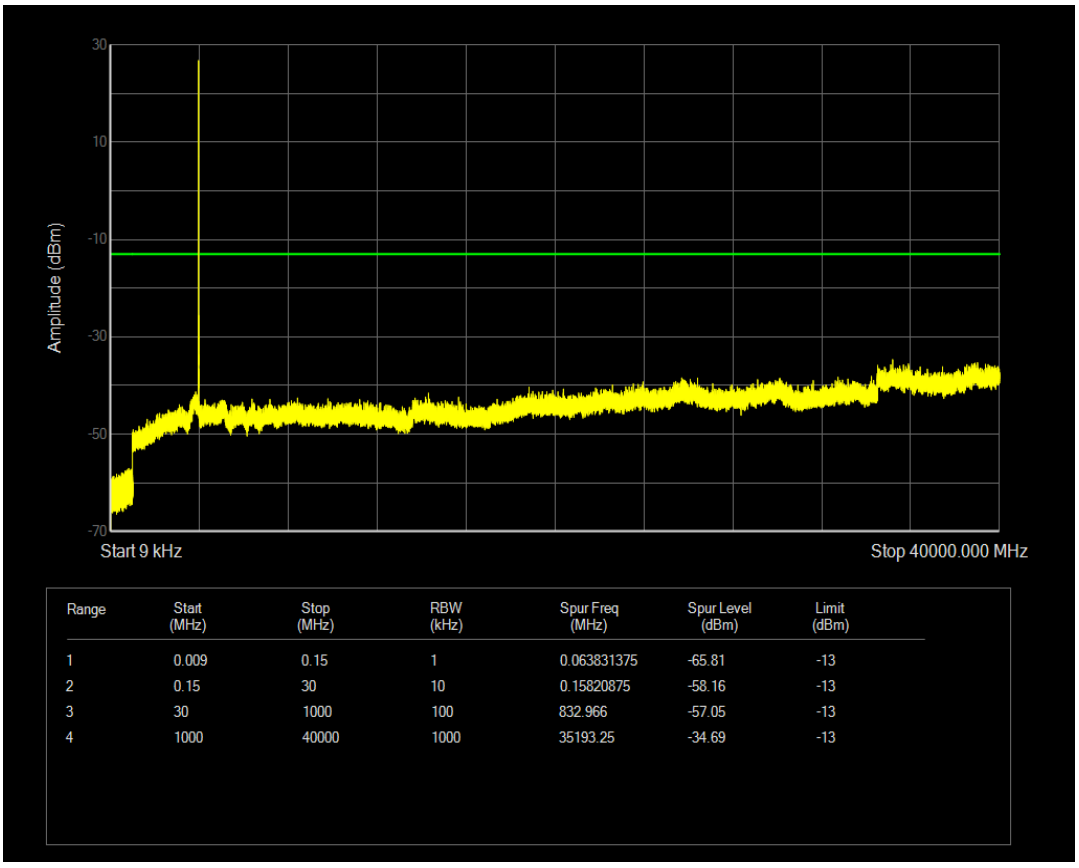
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0633978	-65.59	-13
2	0.15	30	10	0.15522375	-58.87	-13
3	30	1000	100	899.411	-56.9	-13
4	1000	40000	1000	39381.85	-34.69	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=647000 RB=24@0



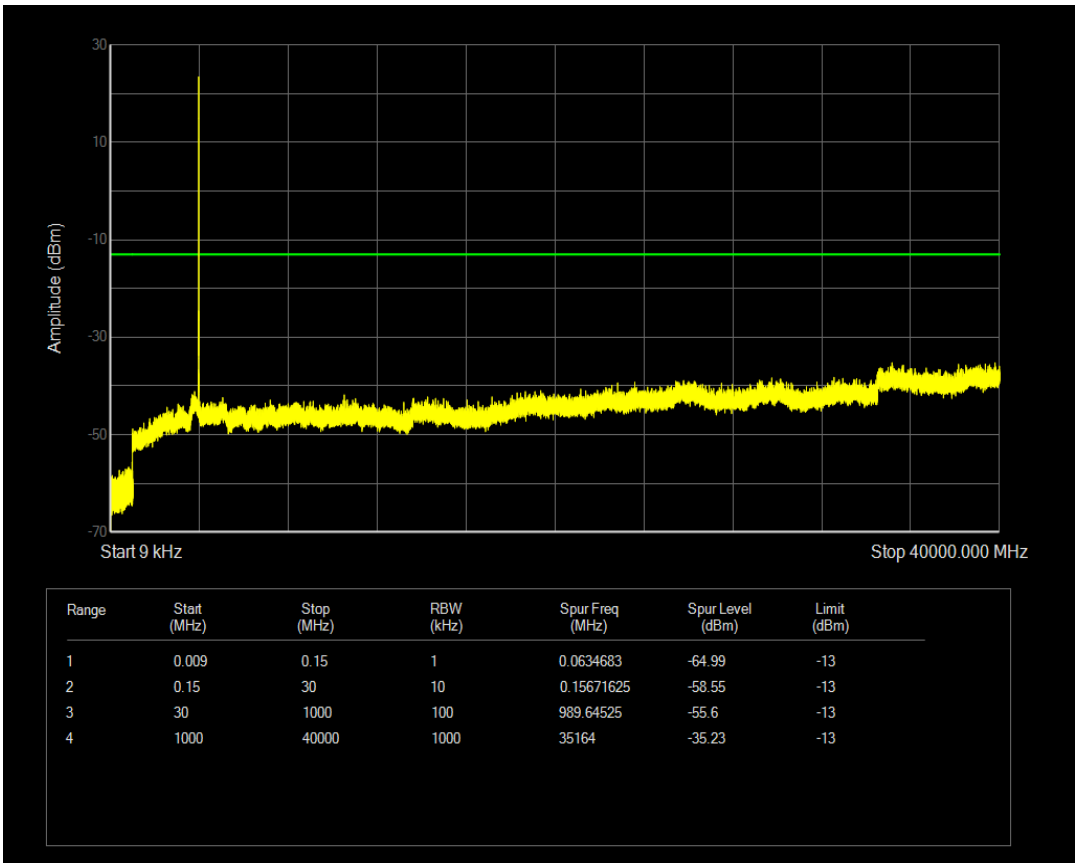
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.06322155	-65.77	-13
2	0.15	30	10	0.1544775	-59.45	-13
3	30	1000	100	798.1915	-57.12	-13
4	1000	40000	1000	38848.525	-35.42	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=665000 RB=1@0



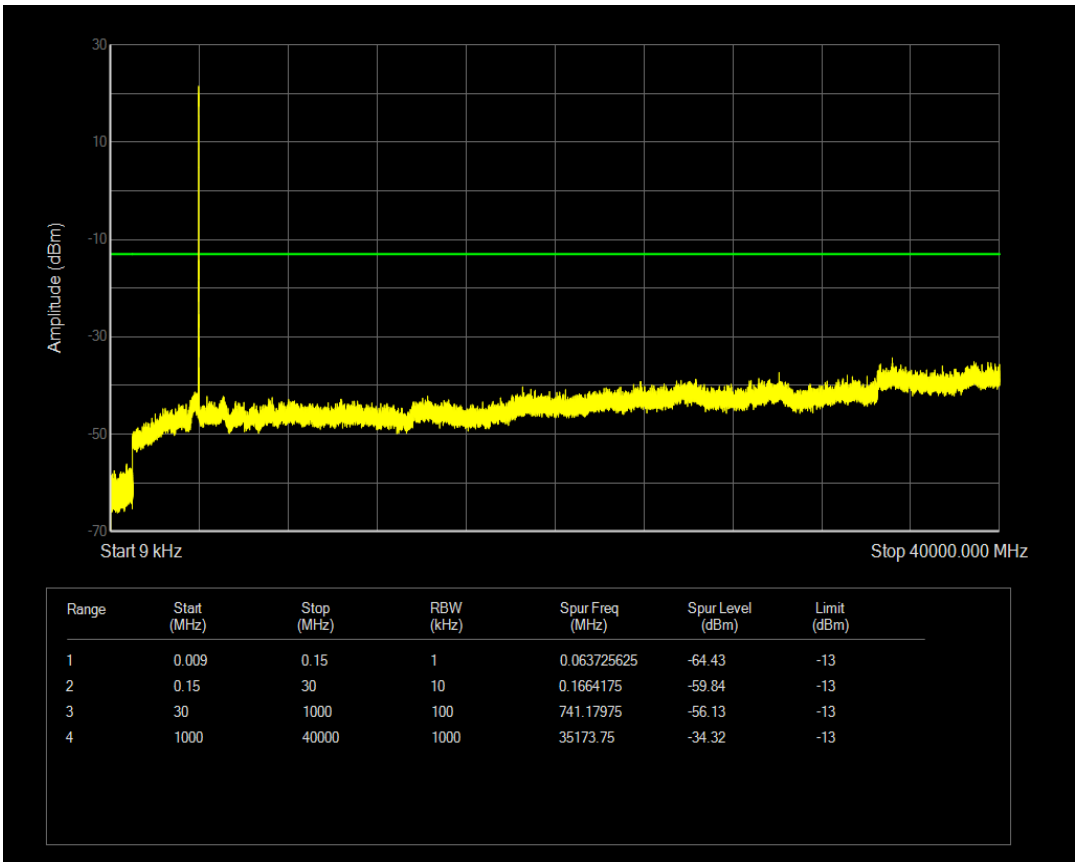
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.063831375	-65.81	-13
2	0.15	30	10	0.15820875	-58.16	-13
3	30	1000	100	832.966	-57.05	-13
4	1000	40000	1000	35193.25	-34.69	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=665000 RB=1@23



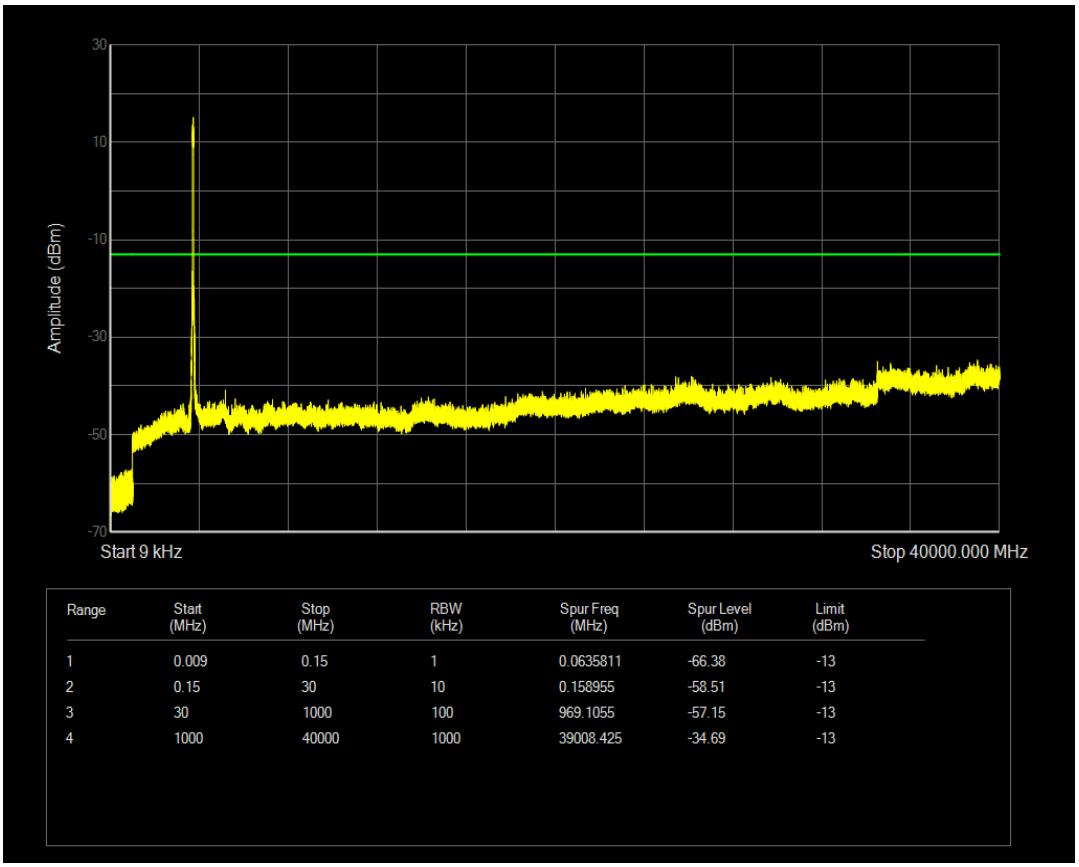
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0634683	-64.99	-13
2	0.15	30	10	0.15671625	-58.55	-13
3	30	1000	100	989.64525	-55.6	-13
4	1000	40000	1000	35164	-35.23	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=10MHz Channel=665000 RB=24@0



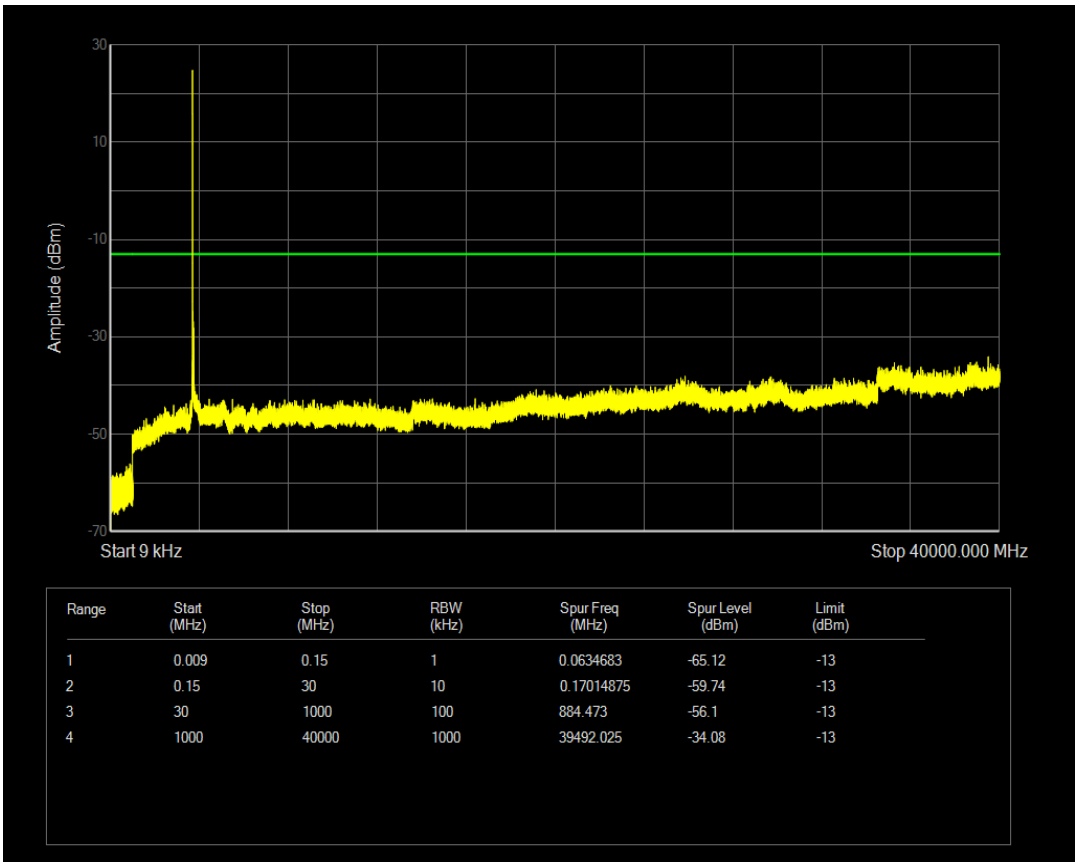
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.063725625	-64.43	-13
2	0.15	30	10	0.1664175	-59.84	-13
3	30	1000	100	741.17975	-56.13	-13
4	1000	40000	1000	35173.75	-34.32	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=648334 RB=133@0



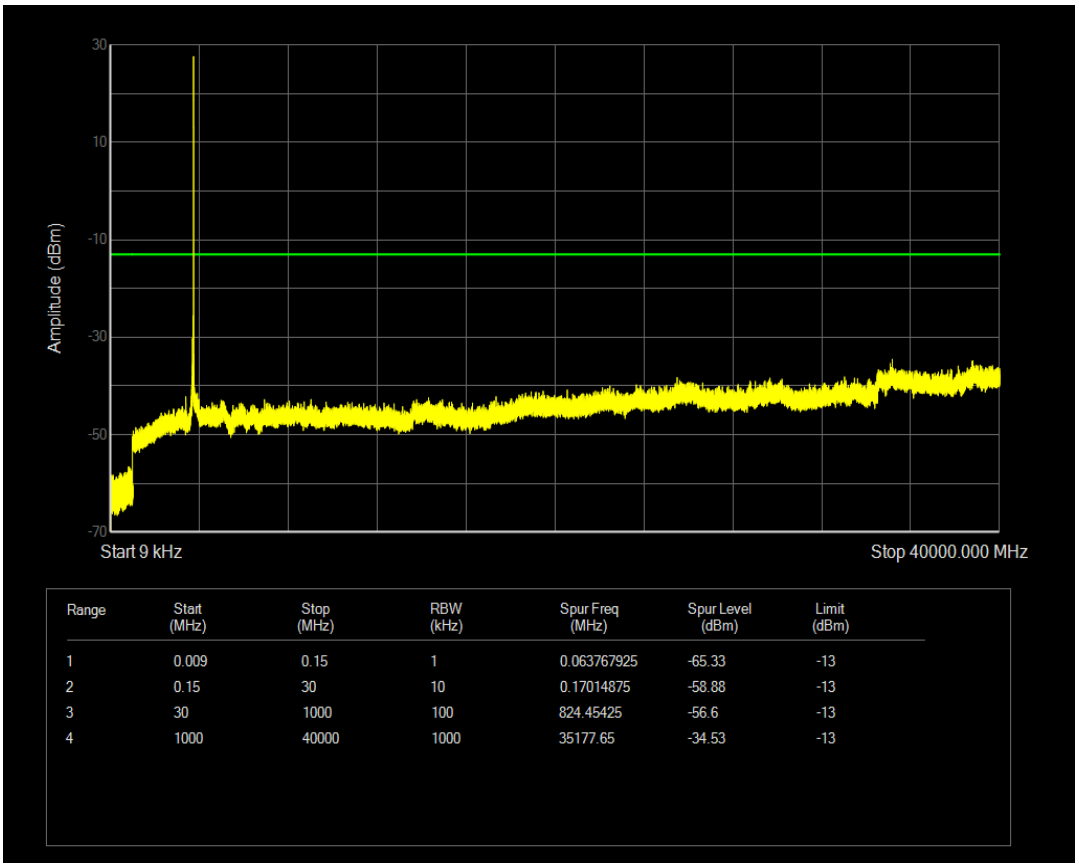
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0635811	-66.38	-13
2	0.15	30	10	0.158955	-58.51	-13
3	30	1000	100	969.1055	-57.15	-13
4	1000	40000	1000	39008.425	-34.69	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=648334 RB=1@0



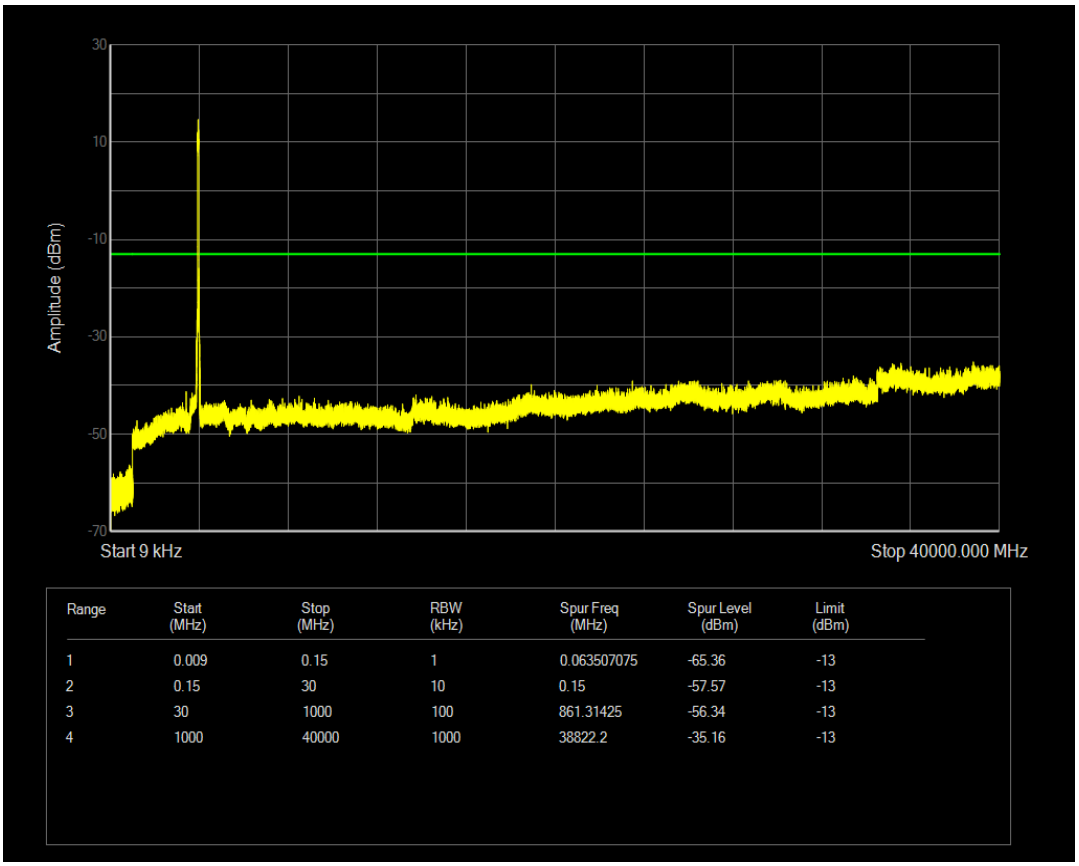
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.0634683	-65.12	-13
2	0.15	30	10	0.17014875	-59.74	-13
3	30	1000	100	884.473	-56.1	-13
4	1000	40000	1000	39492.025	-34.08	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=648334 RB=1@132



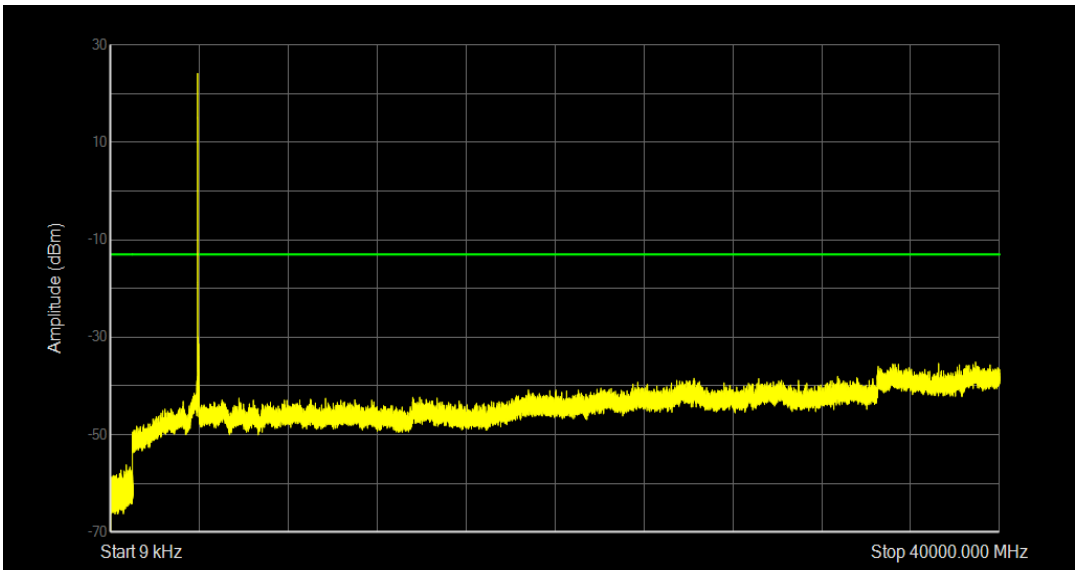
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.063767925	-65.33	-13
2	0.15	30	10	0.17014875	-58.88	-13
3	30	1000	100	824.45425	-56.6	-13
4	1000	40000	1000	35177.65	-34.53	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=663666 RB=133@0



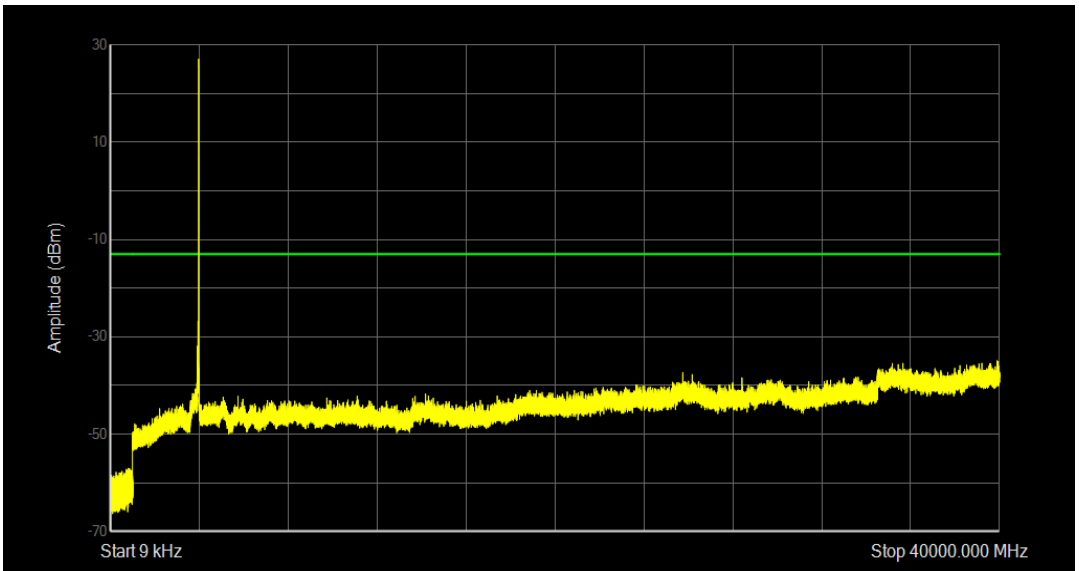
Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.063507075	-65.36	-13
2	0.15	30	10	0.15	-57.57	-13
3	30	1000	100	861.31425	-56.34	-13
4	1000	40000	1000	38822.2	-35.16	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=663666 RB=1@0



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.063739725	-64.88	-13
2	0.15	30	10	0.16119375	-58.61	-13
3	30	1000	100	722.94375	-56.21	-13
4	1000	40000	1000	38921.65	-35.1	-13

n77(3700-3980) SCS=30kHz CP_QPSK BW=50MHz Channel=663666 RB=1@132



Range	Start (MHz)	Stop (MHz)	RBW (kHz)	Spur Freq (MHz)	Spur Level (dBm)	Limit (dBm)
1	0.009	0.15	1	0.06391245	-65.29	-13
2	0.15	30	10	0.15074625	-59.45	-13
3	30	1000	100	823.557	-57.03	-13
4	1000	40000	1000	39884.95	-34.9	-13