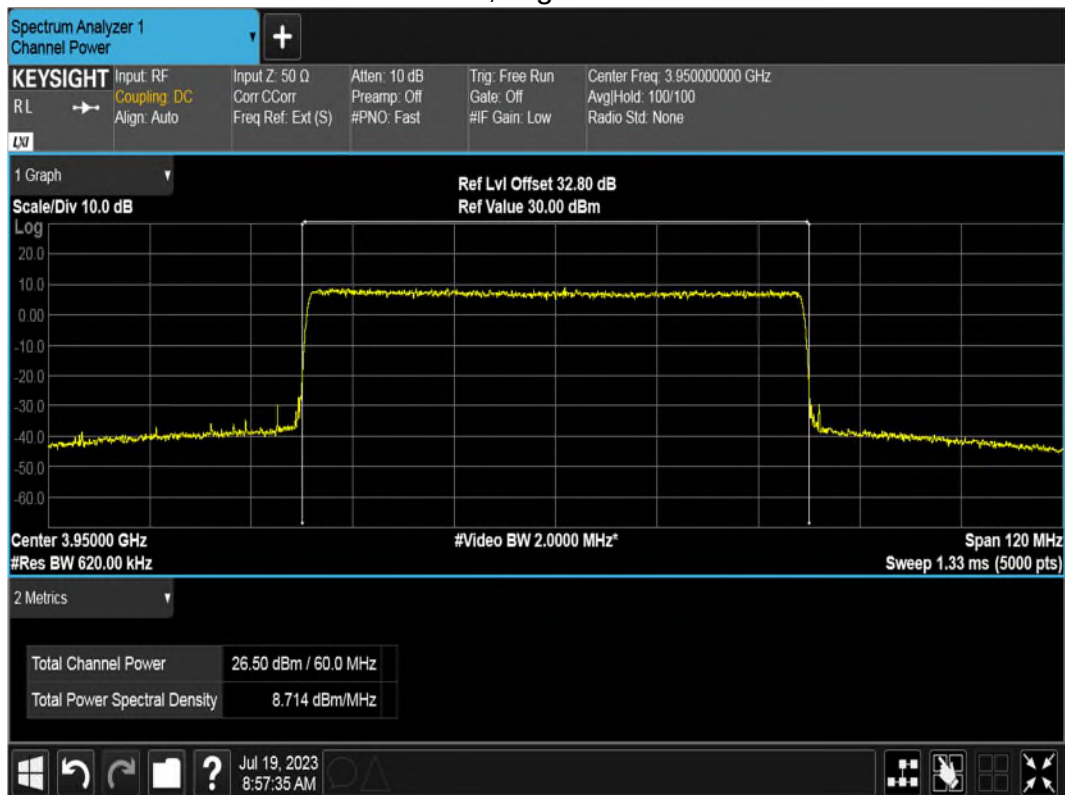
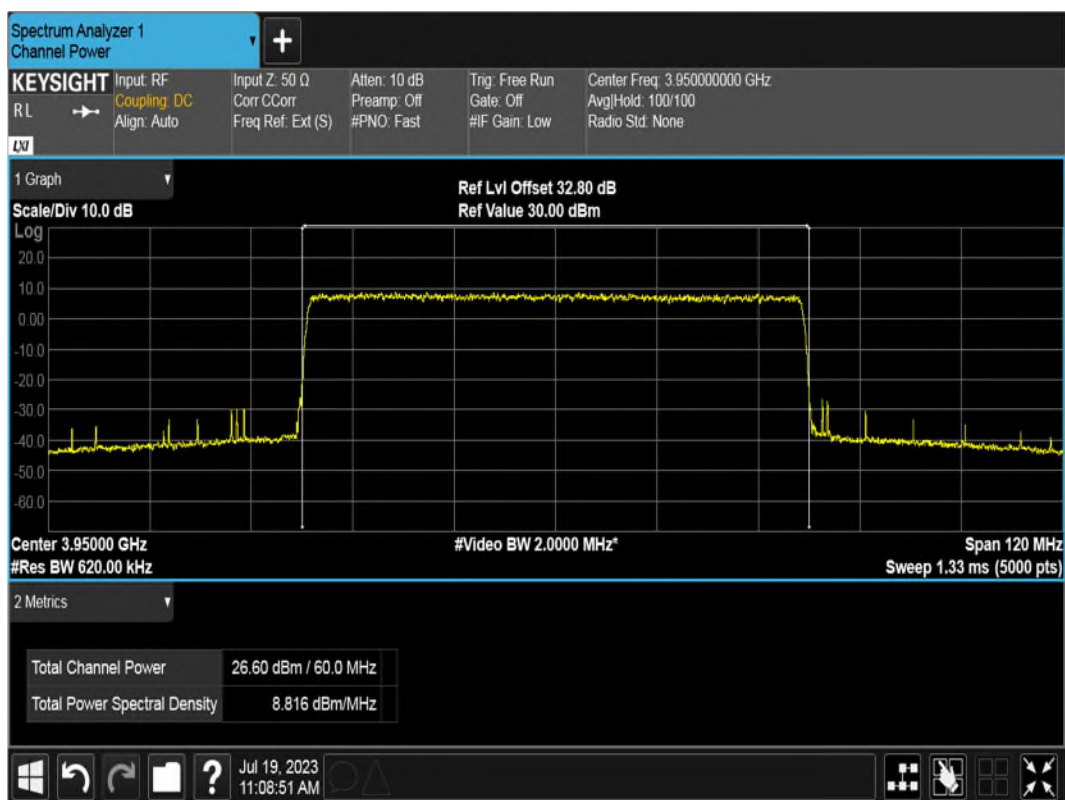


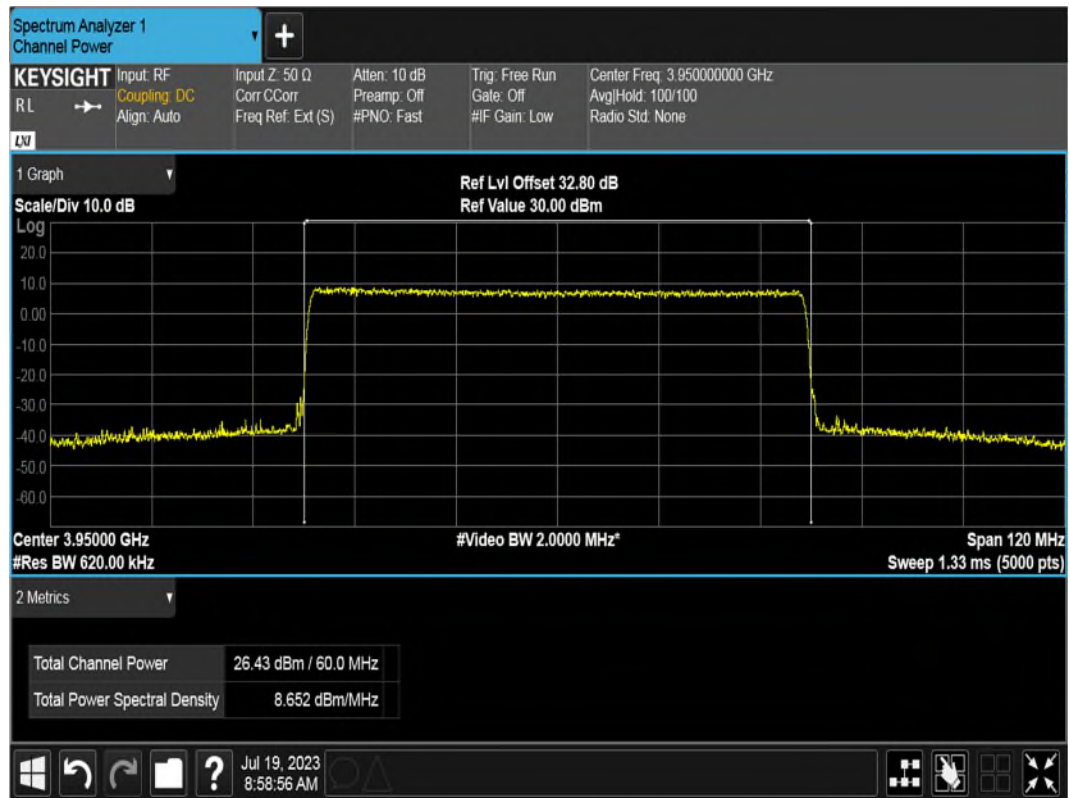
RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing
60 MHz, High Channel



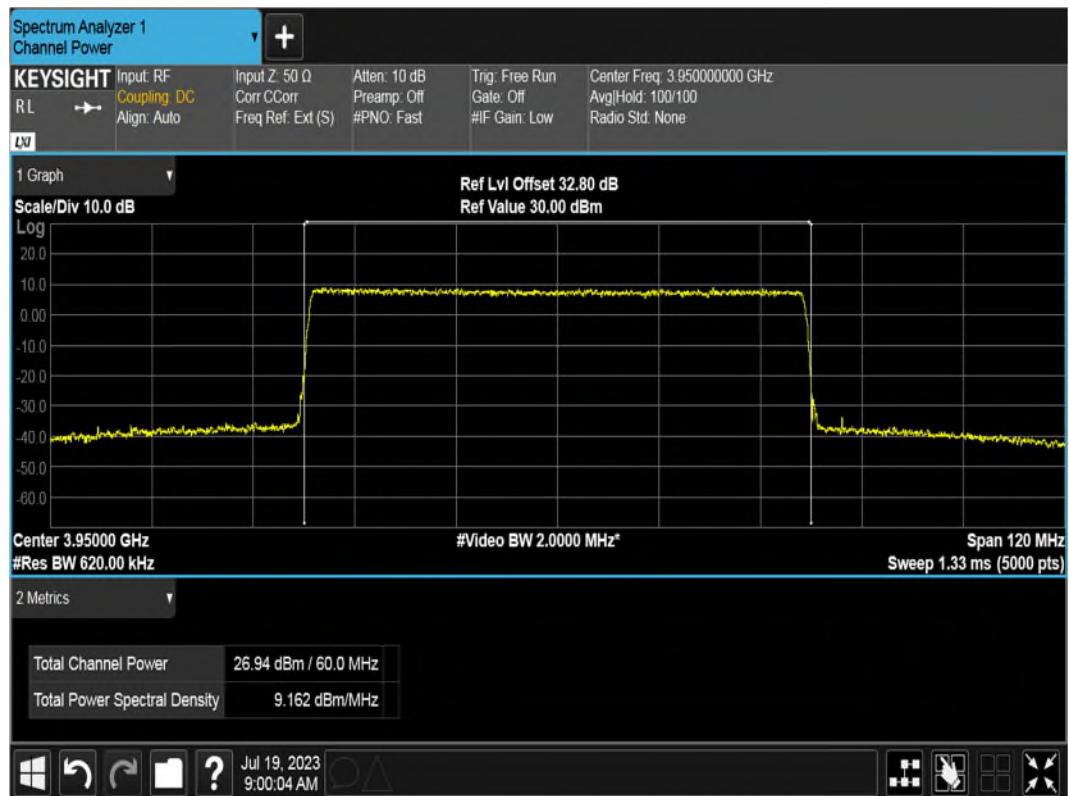
QPSK



16QAM



64QAM



256QAM

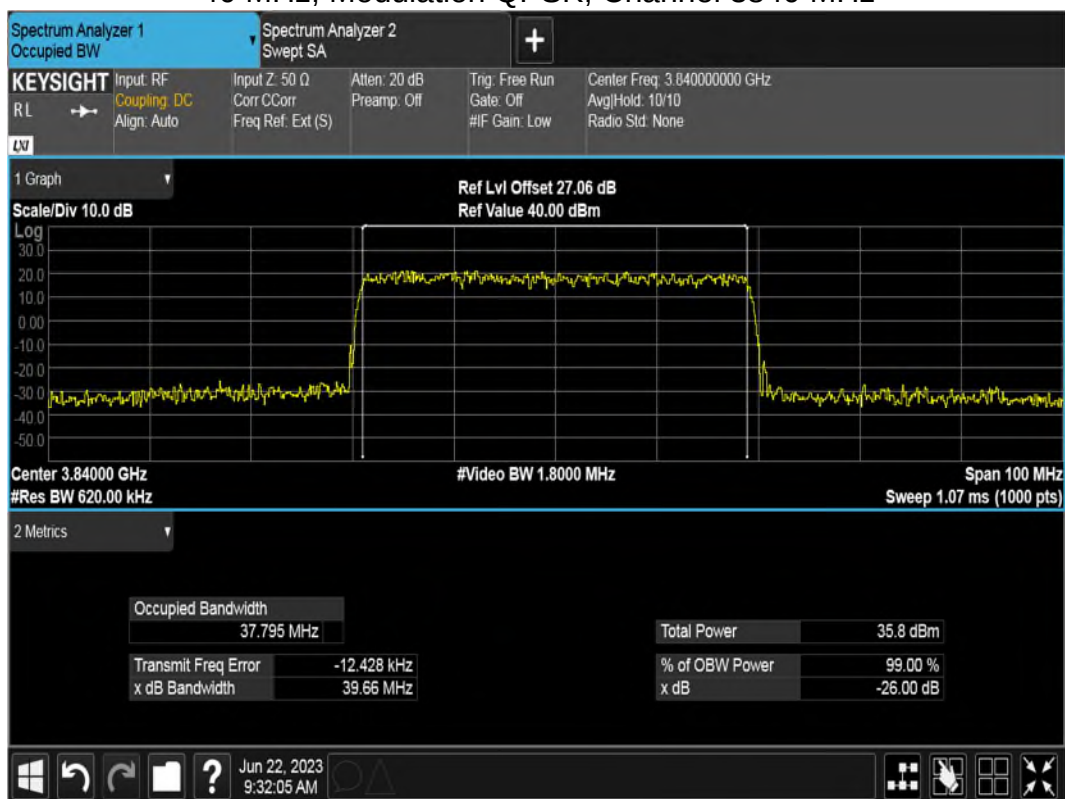
6.4 Occupied Bandwidth

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation QPSK, Channel 3720 MHz



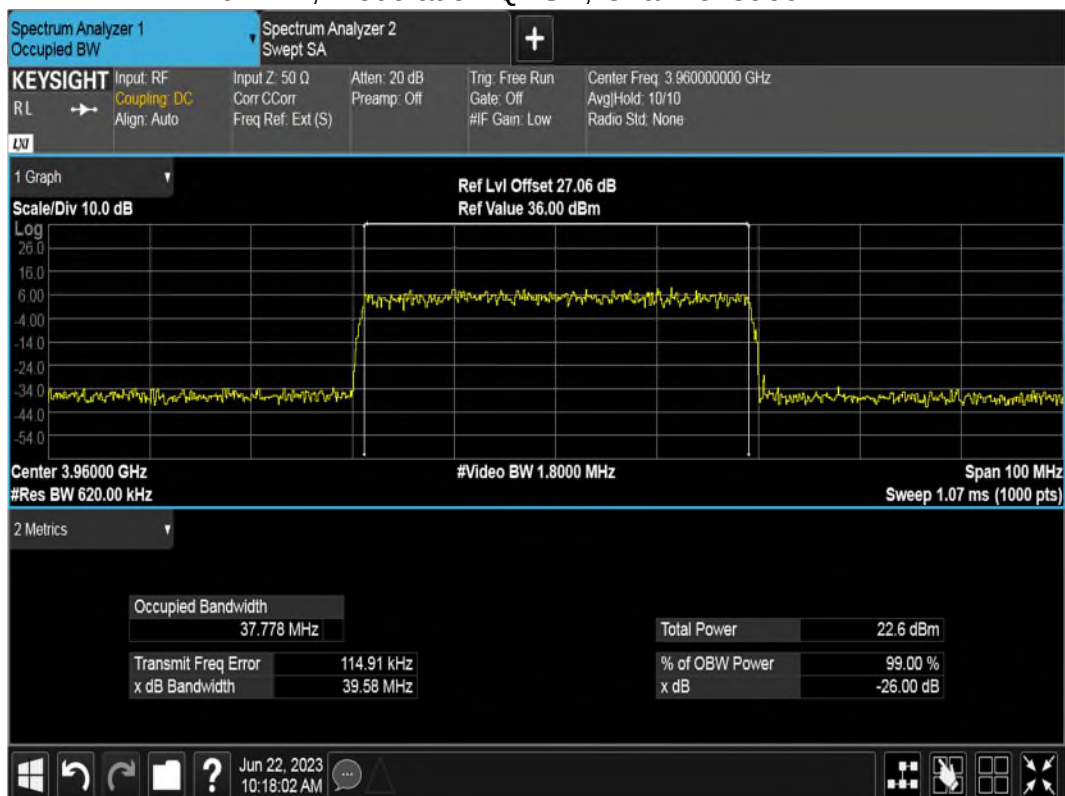
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation QPSK, Channel 3840 MHz



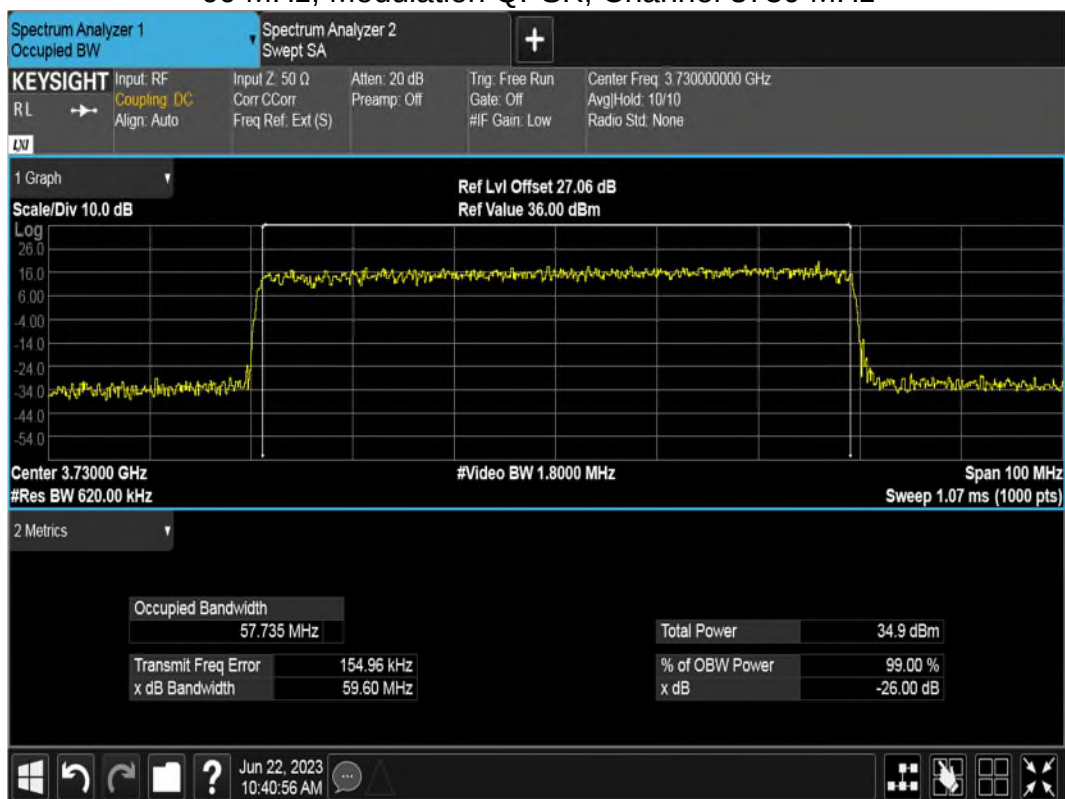
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation QPSK, Channel 3960 MHz



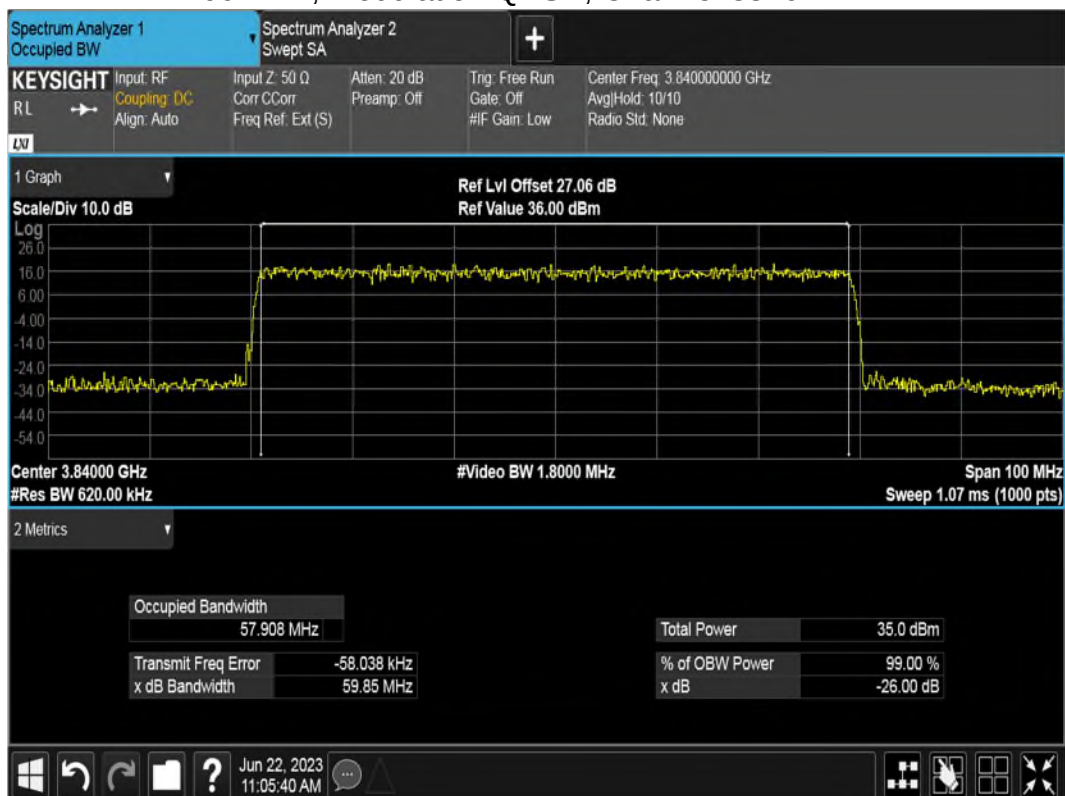
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation QPSK, Channel 3730 MHz



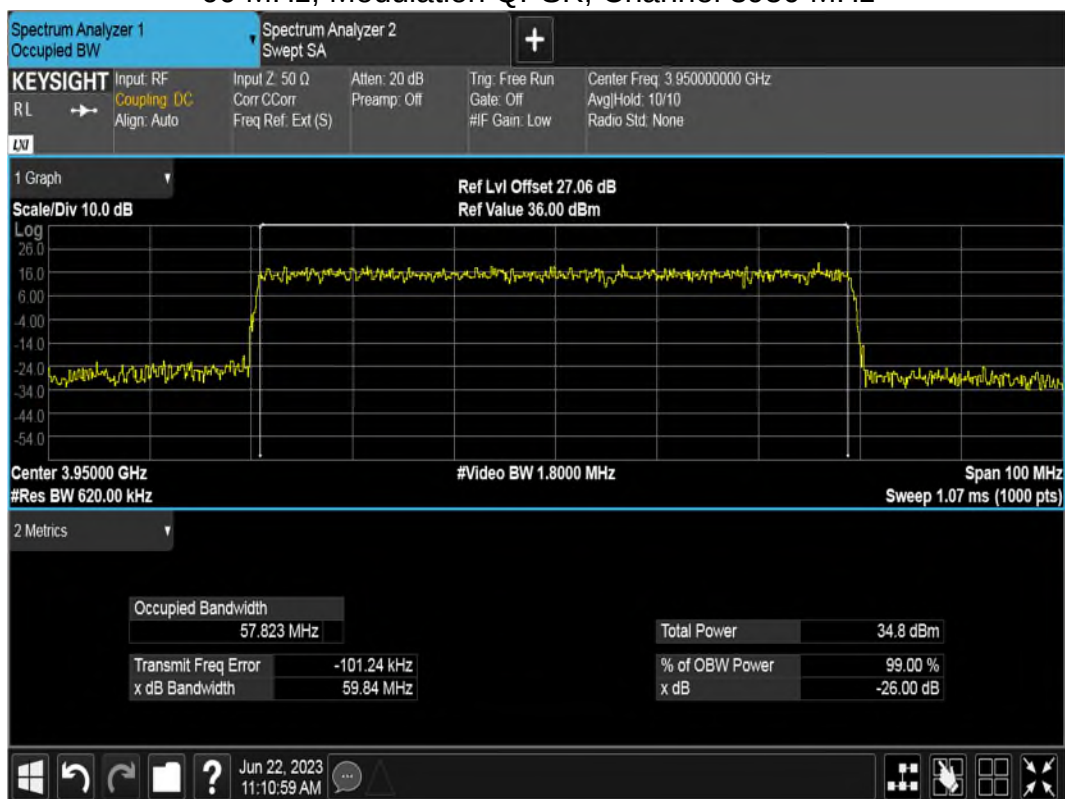
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation QPSK, Channel 3840 MHz



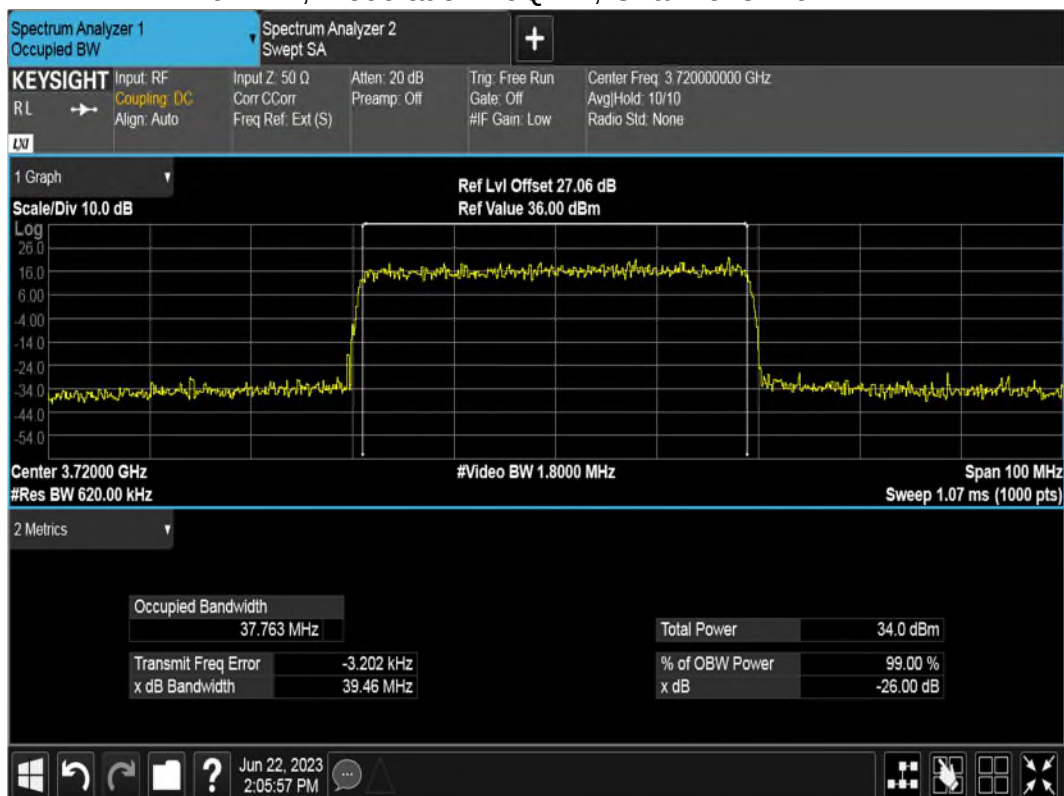
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation QPSK, Channel 3950 MHz



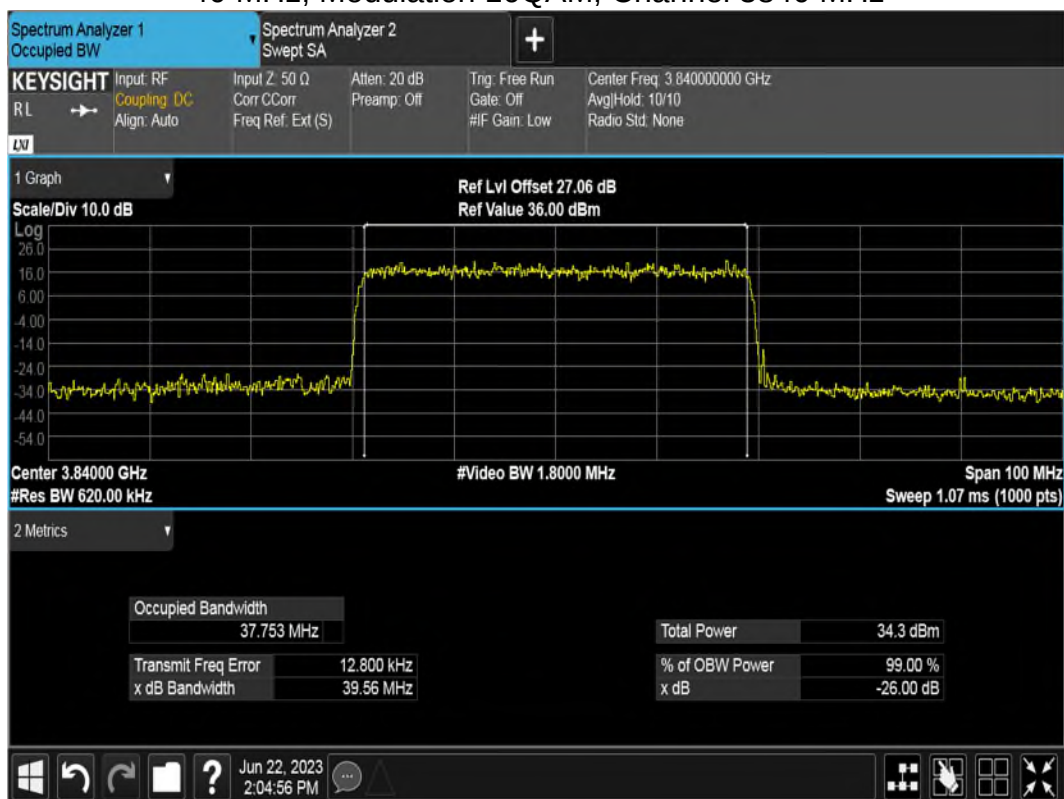
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation 16QAM, Channel 3720 MHz



Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation 16QAM, Channel 3840 MHz



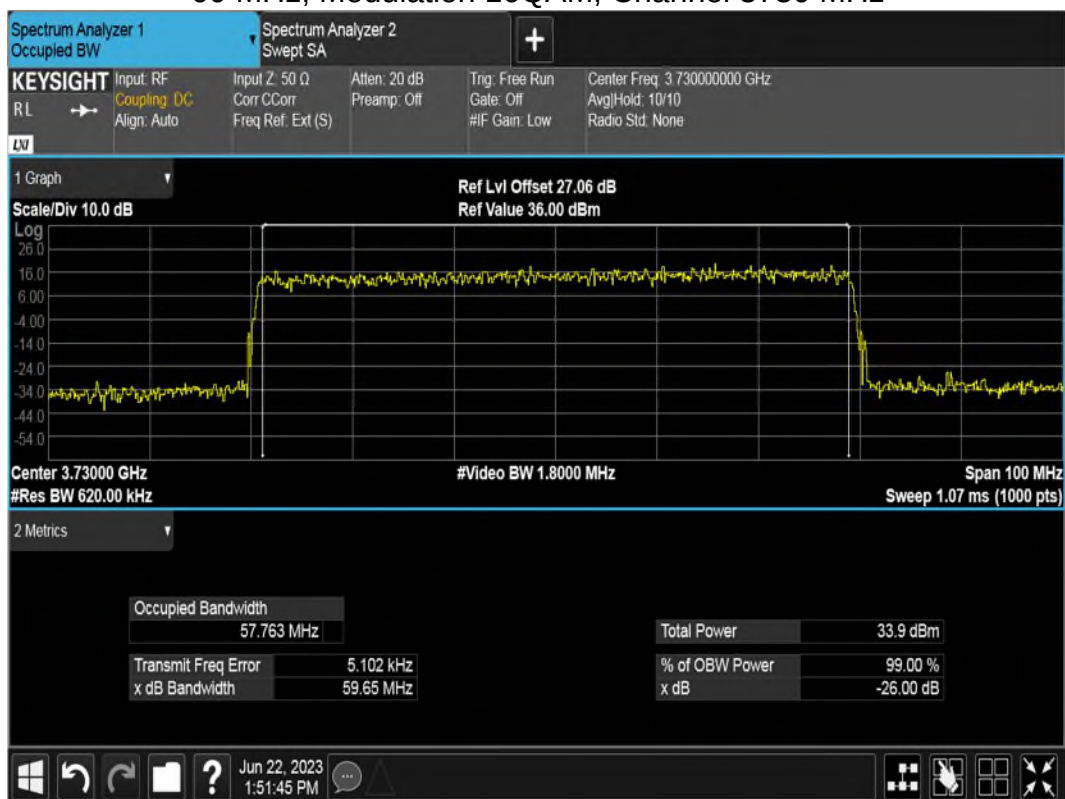
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation 16QAM, Channel 3960 MHz



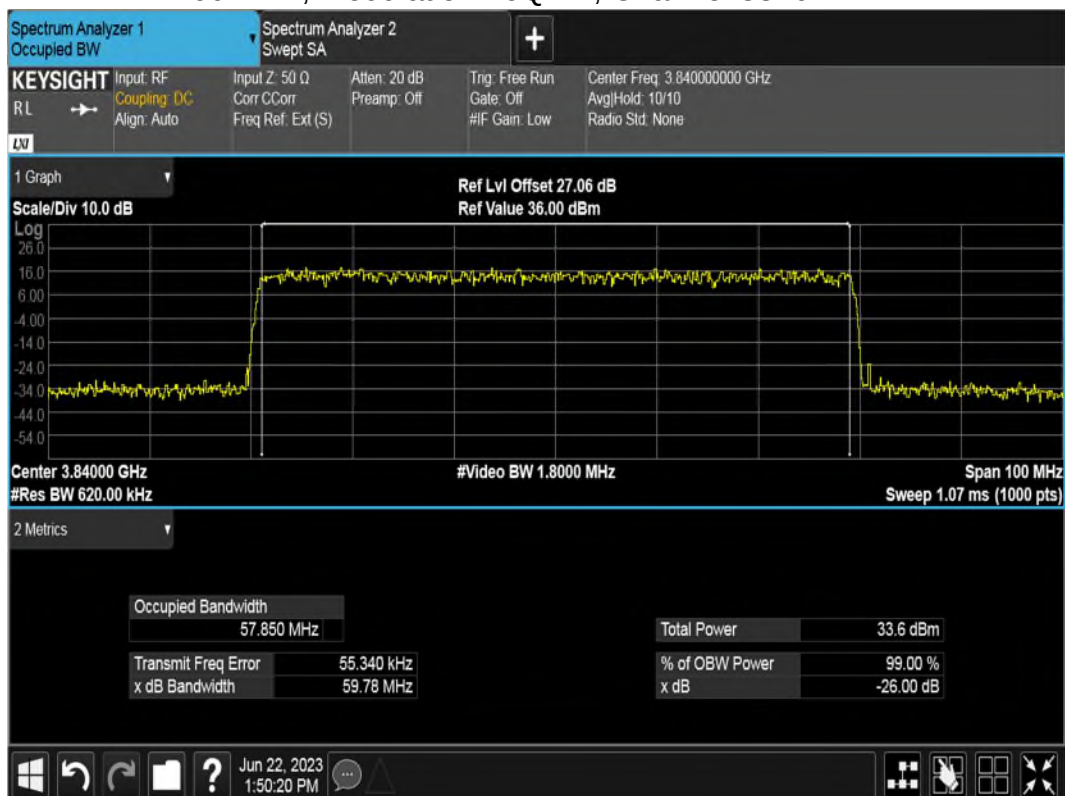
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation 16QAM, Channel 3730 MHz



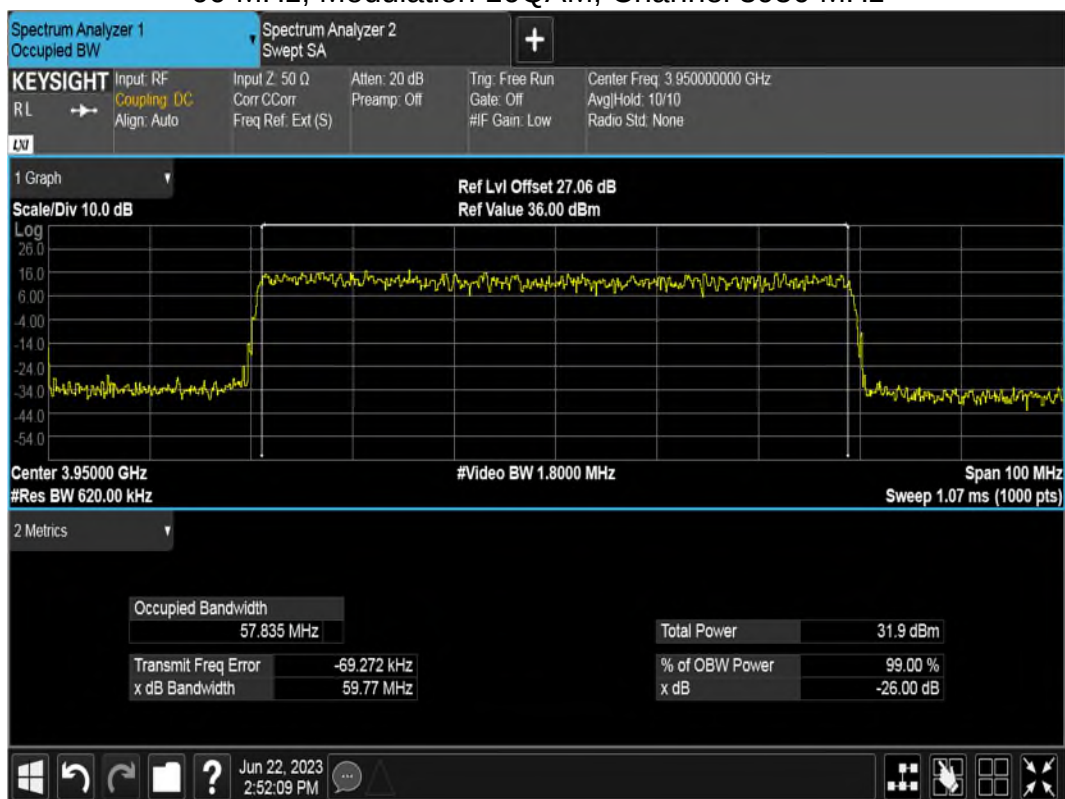
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation 16QAM, Channel 3840 MHz



Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation 16QAM, Channel 3950 MHz



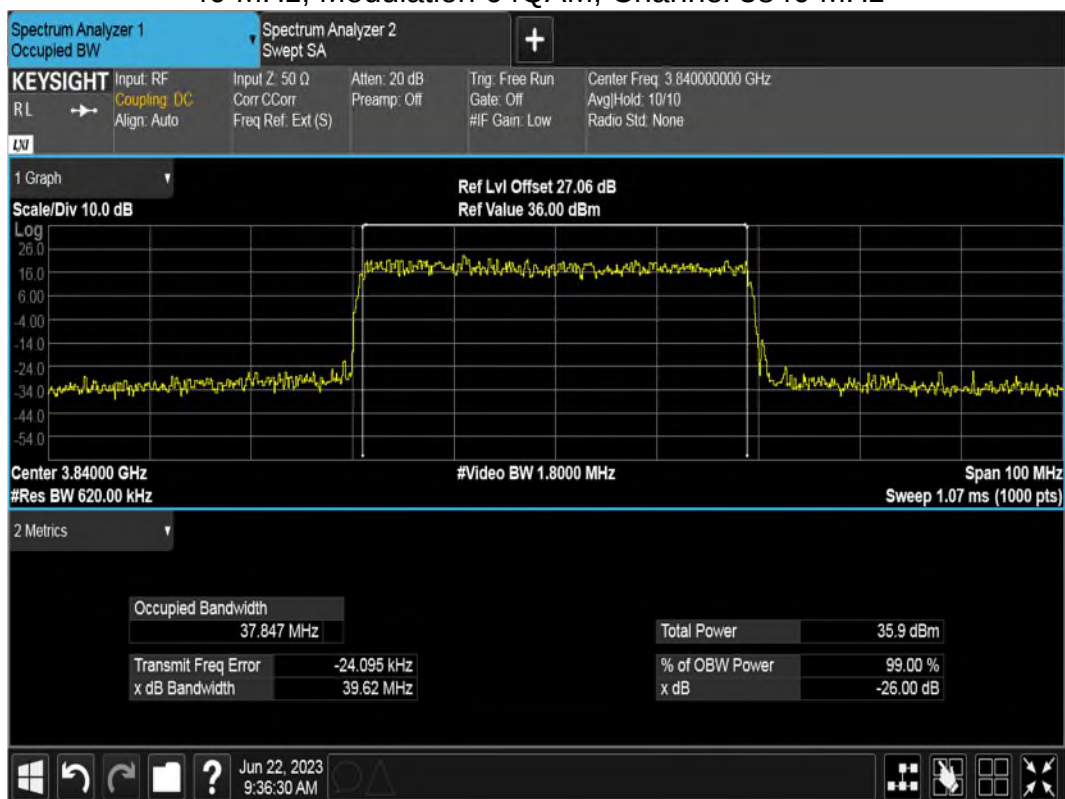
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation 64QAM, Channel 3720 MHz



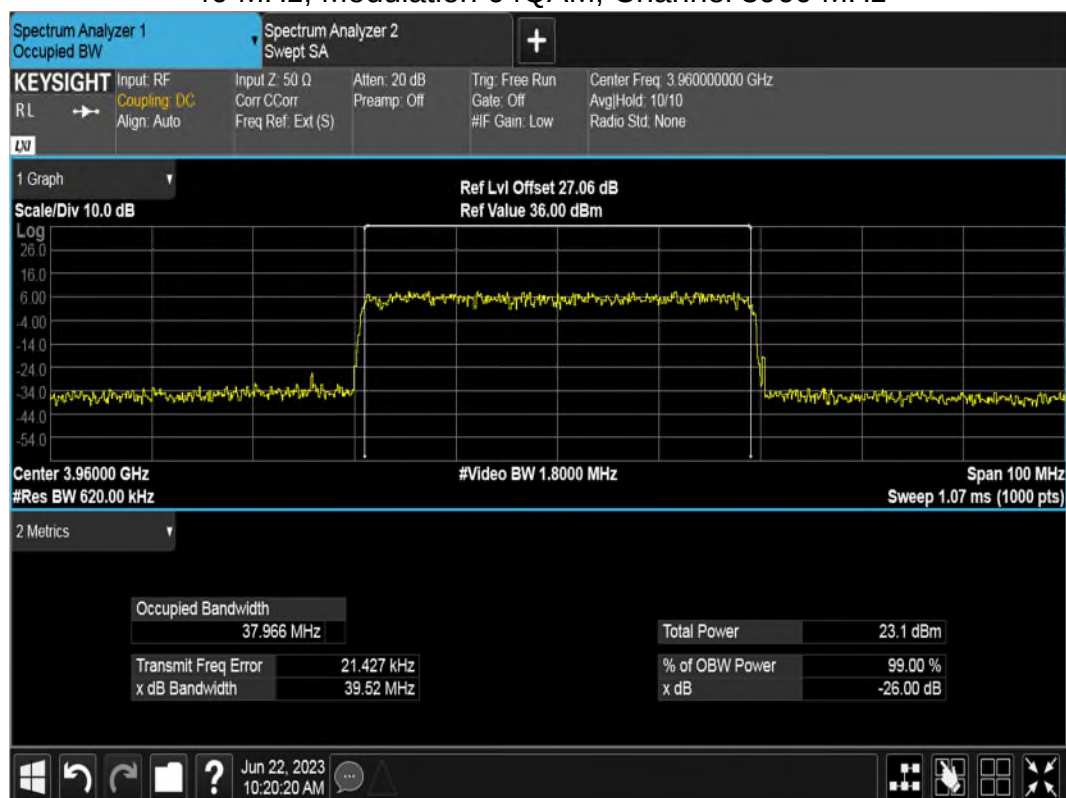
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation 64QAM, Channel 3840 MHz



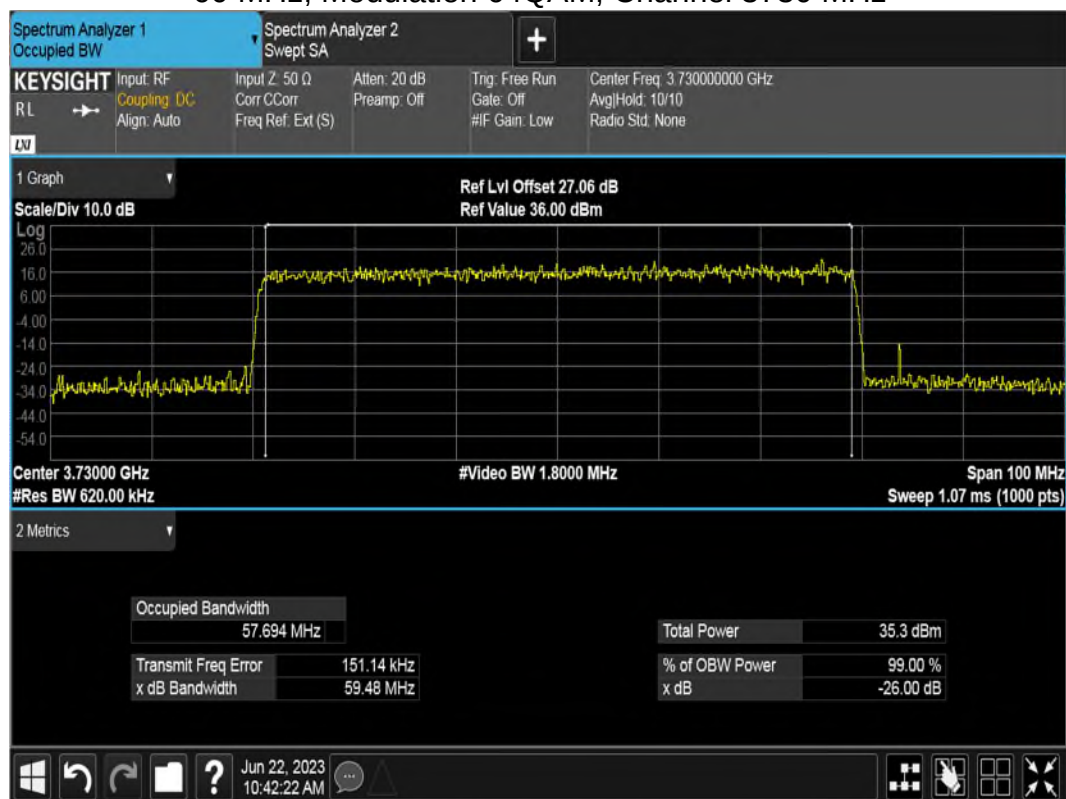
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation 64QAM, Channel 3960 MHz



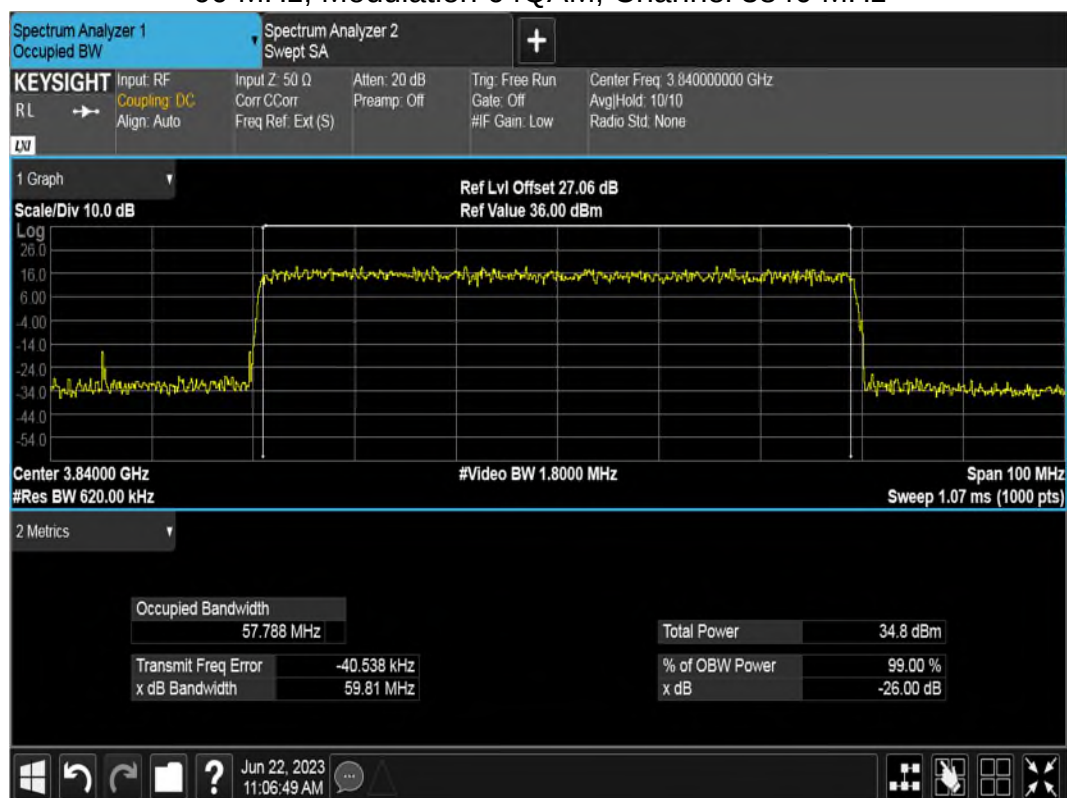
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation 64QAM, Channel 3730 MHz



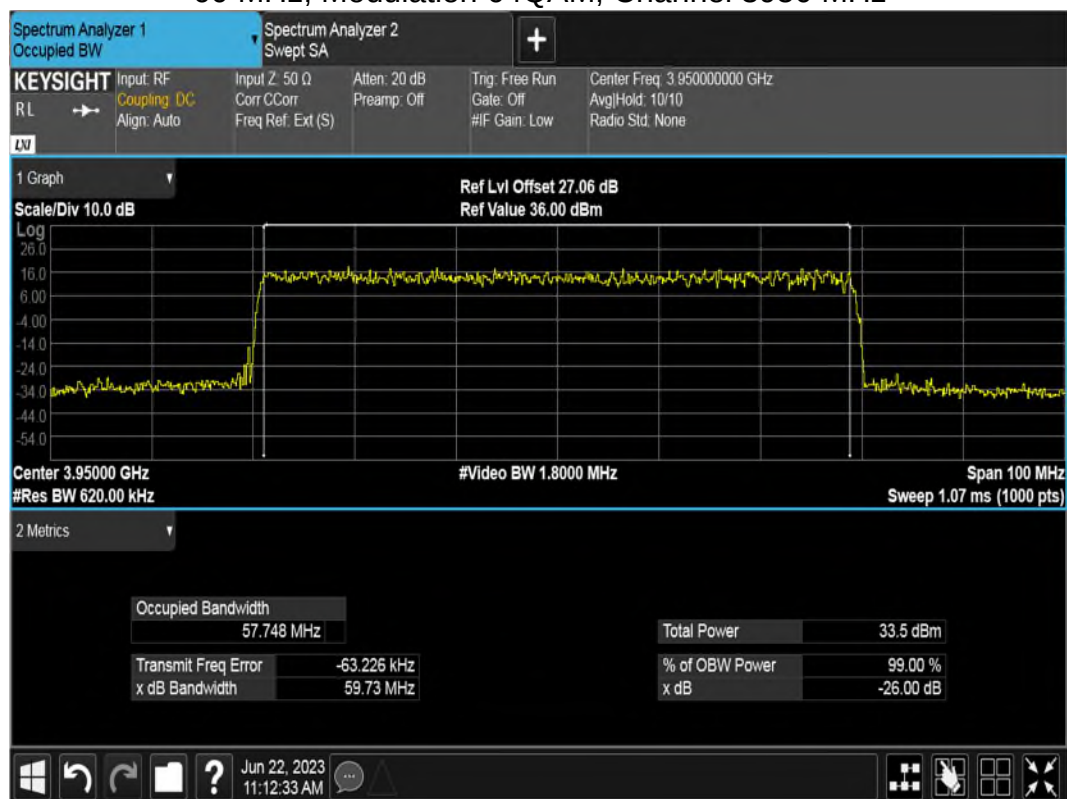
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation 64QAM, Channel 3840 MHz



Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation 64QAM, Channel 3950 MHz



Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation 256QAM, Channel 3720 MHz



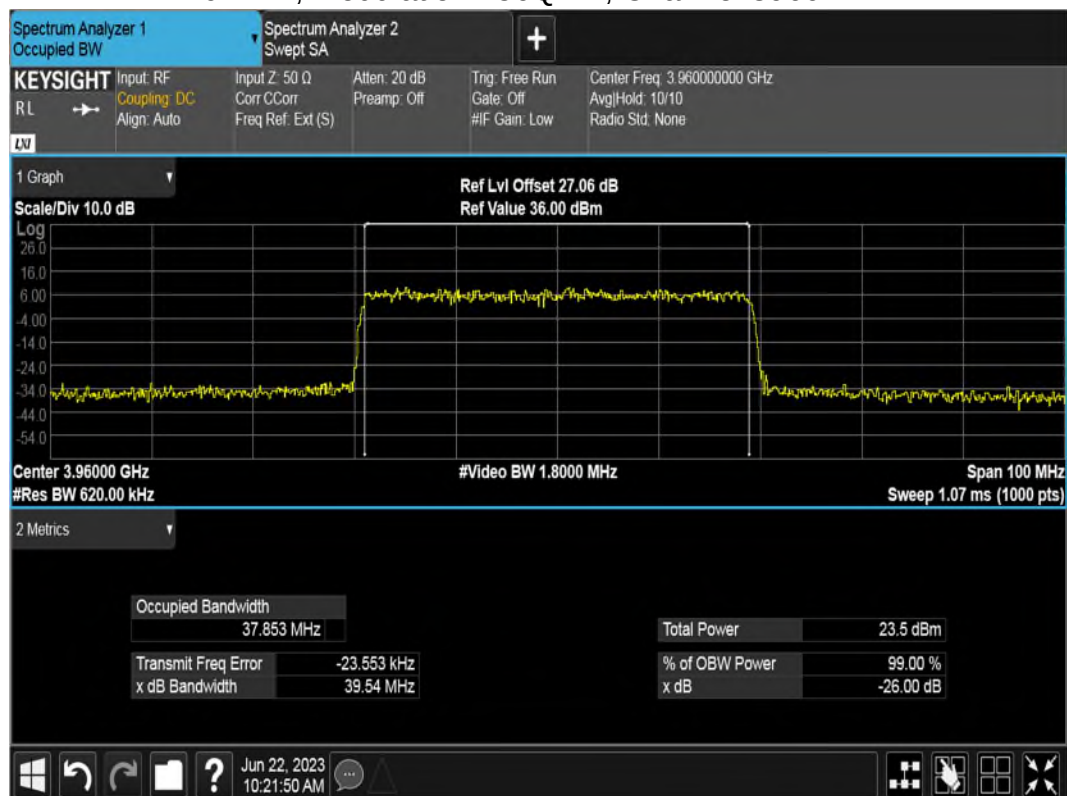
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation 256QAM, Channel 3840 MHz



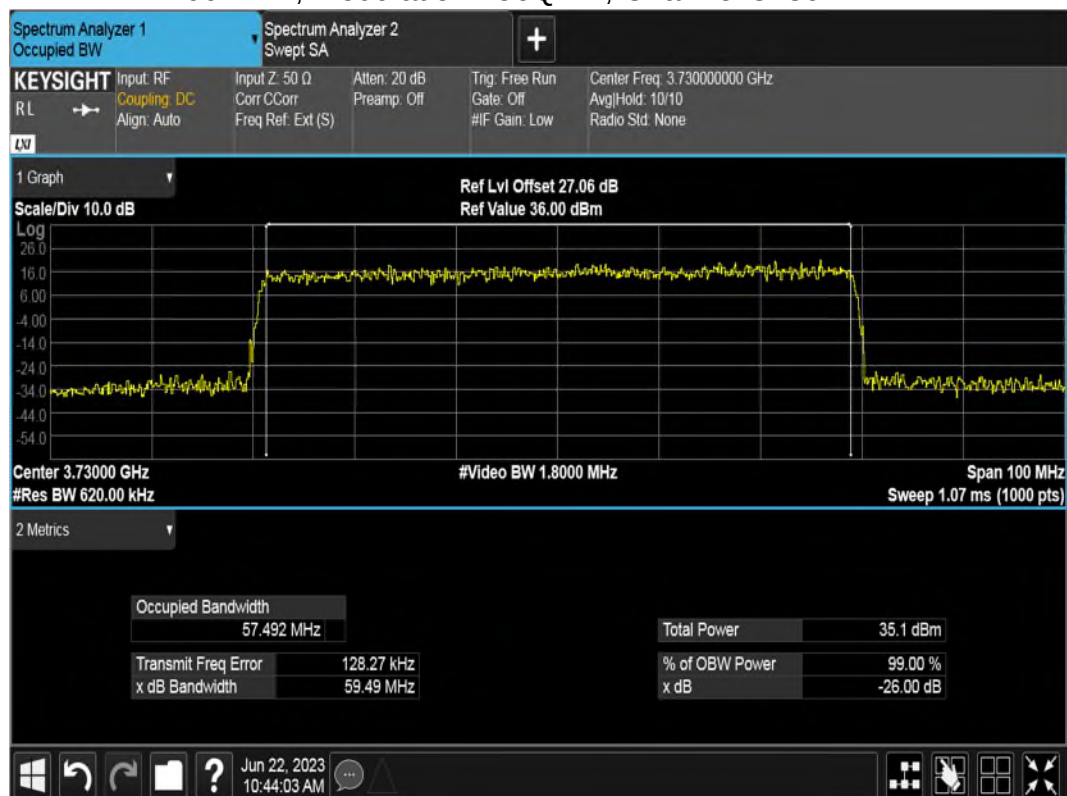
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Modulation 256QAM, Channel 3960 MHz



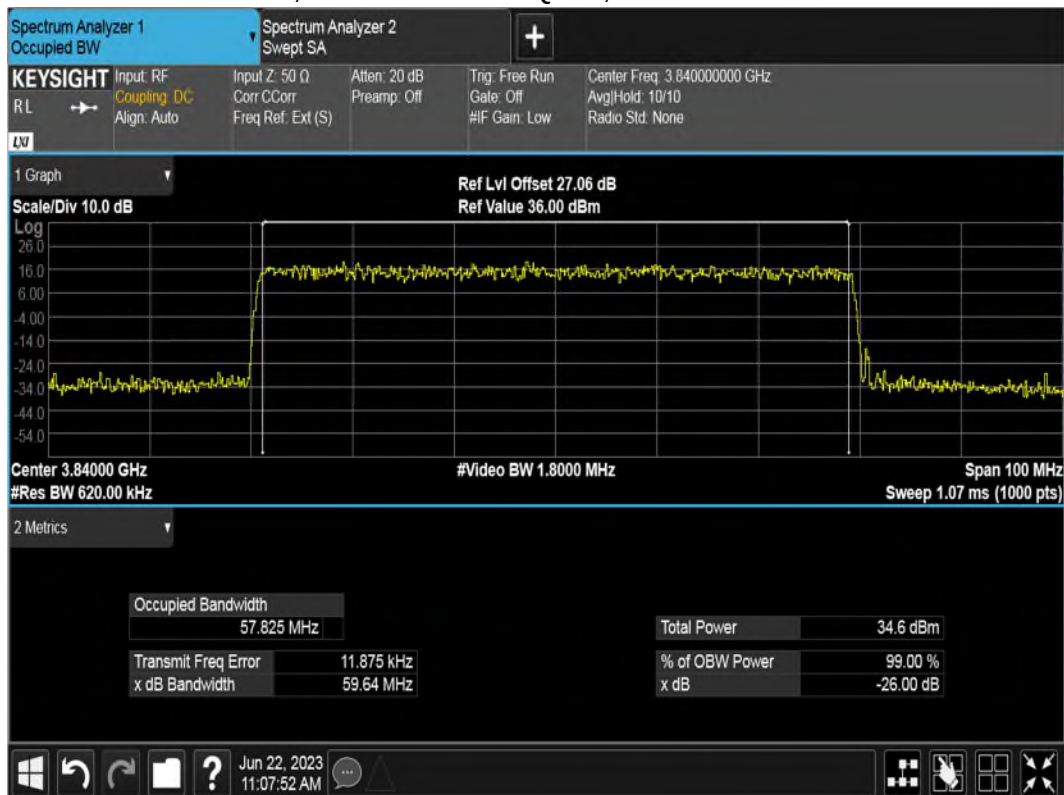
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation 256QAM, Channel 3730 MHz



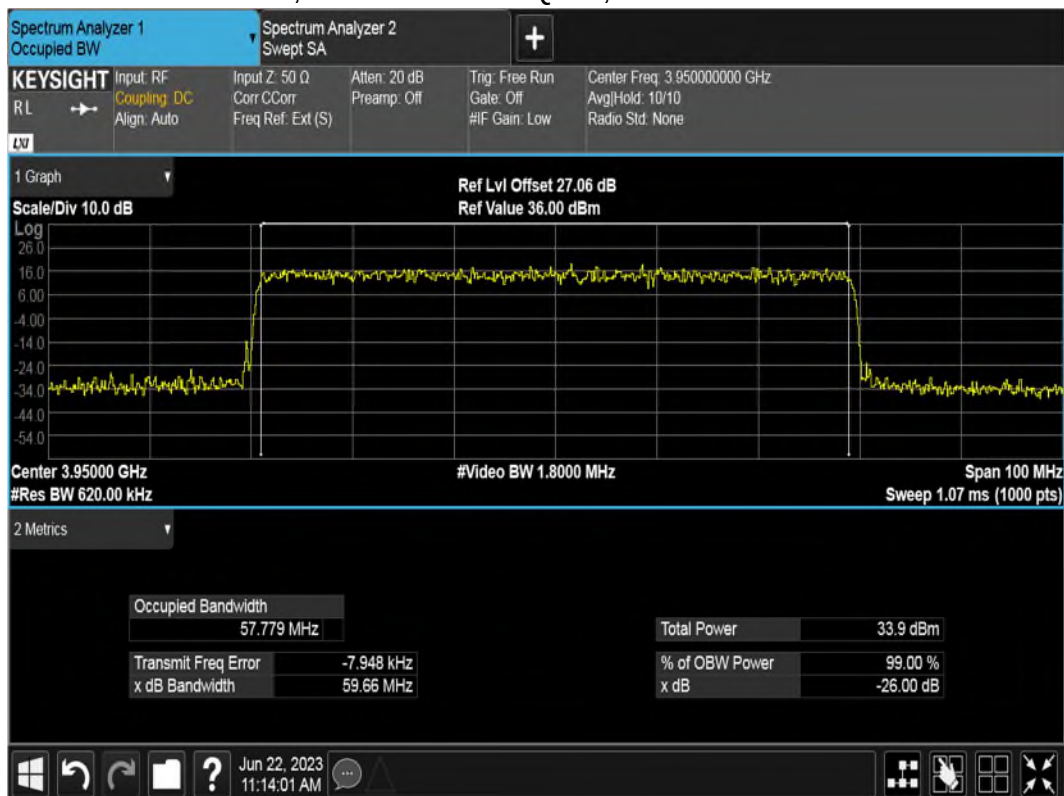
Plot for 99 % Bandwidth (MHz)

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation 256QAM, Channel 3840 MHz



Plot for 99 % Bandwidth (MHz)

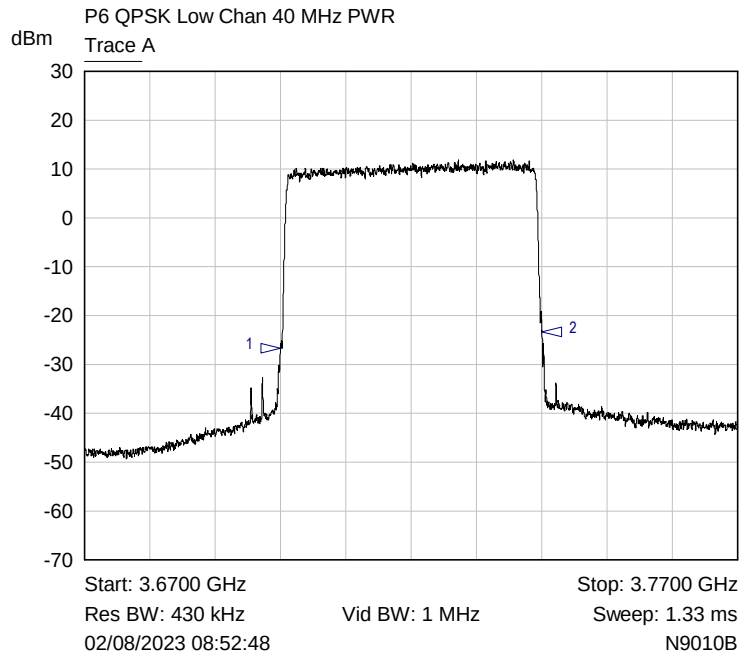
RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Modulation 256QAM, Channel 3950 MHz



Plot for 99 % Bandwidth (MHz)

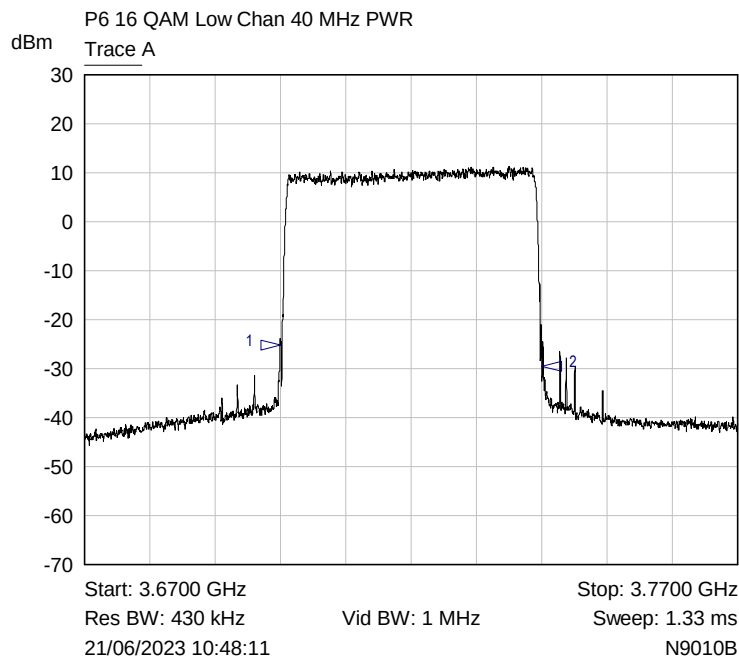
6.5 Band edge / spectrum mask additional emissions limitations

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, Low Channel



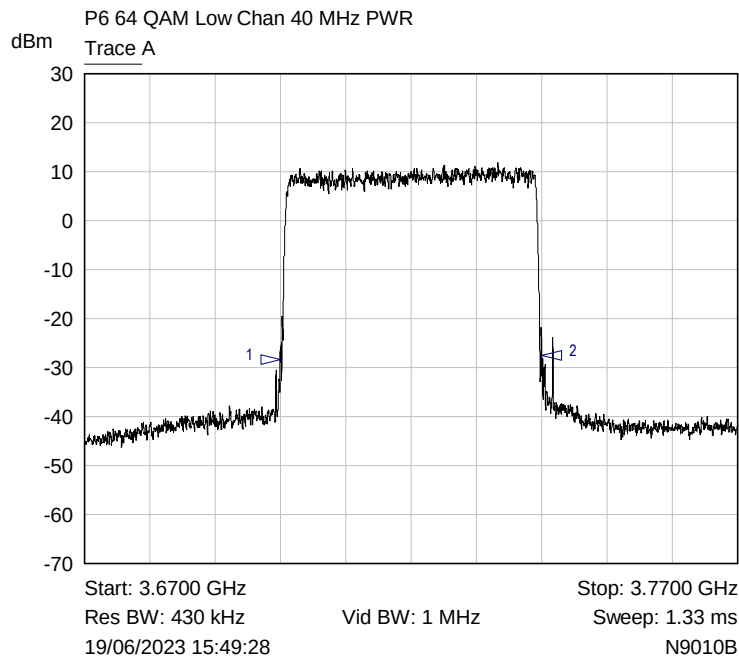
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.7000 GHz	-26.63 dBm	
2 ▽	Trace A	3.7400 GHz	-23.28 dBm	

QPSK



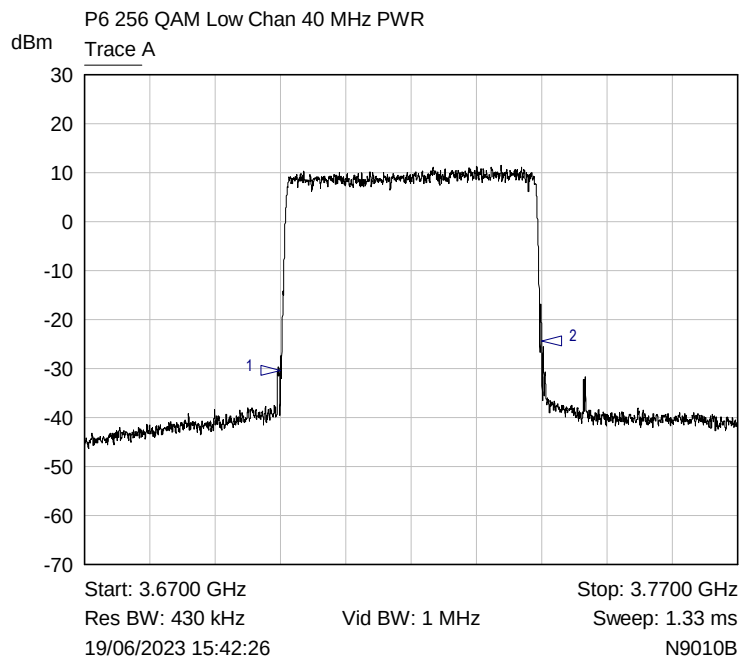
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.7000 GHz	-25.19 dBm	
2 ▽	Trace A	3.7400 GHz	-29.54 dBm	

16QAM



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.7000 GHz	-28.29 dBm	
2 ▽	Trace A	3.7400 GHz	-27.58 dBm	

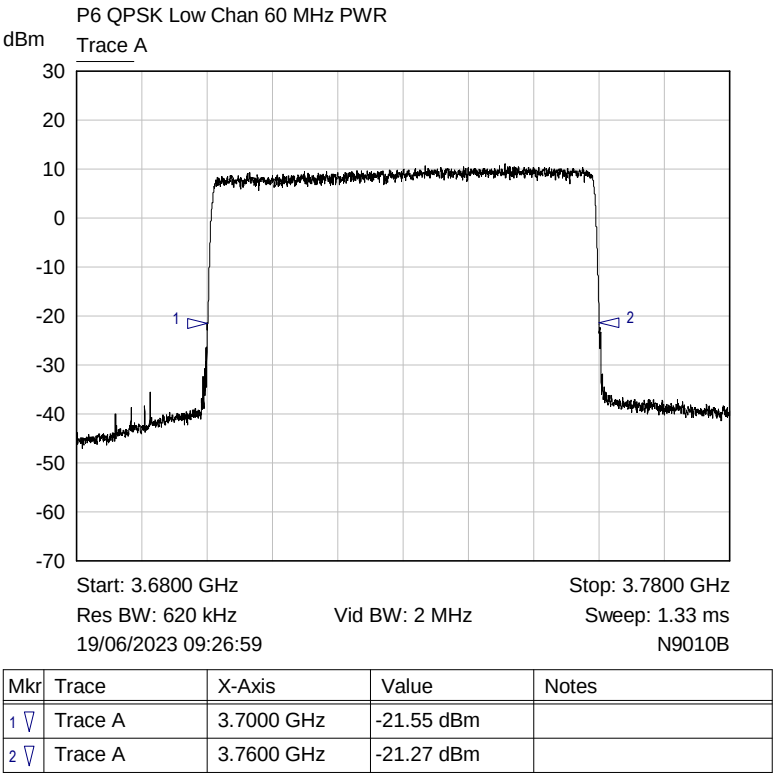
64QAM



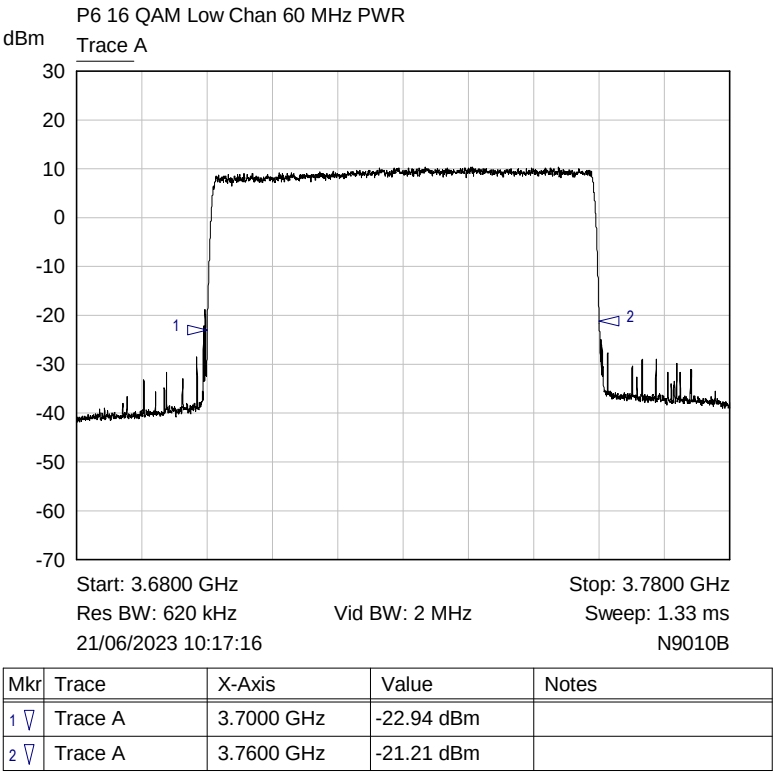
Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.7000 GHz	-30.28 dBm	
2 ▽	Trace A	3.7400 GHz	-24.33 dBm	

256QAM

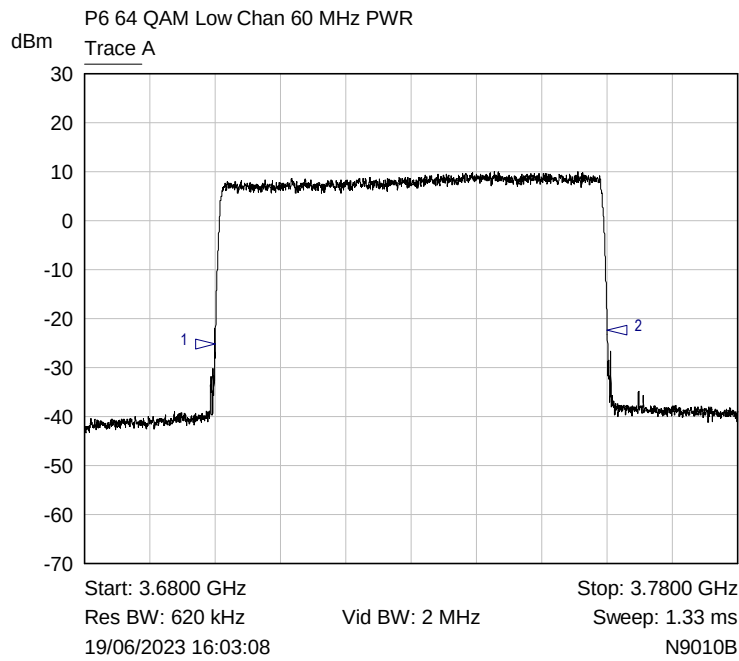
RF Parameters: RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set),
Channel Spacing 60 MHz, Low Channel



QPSK

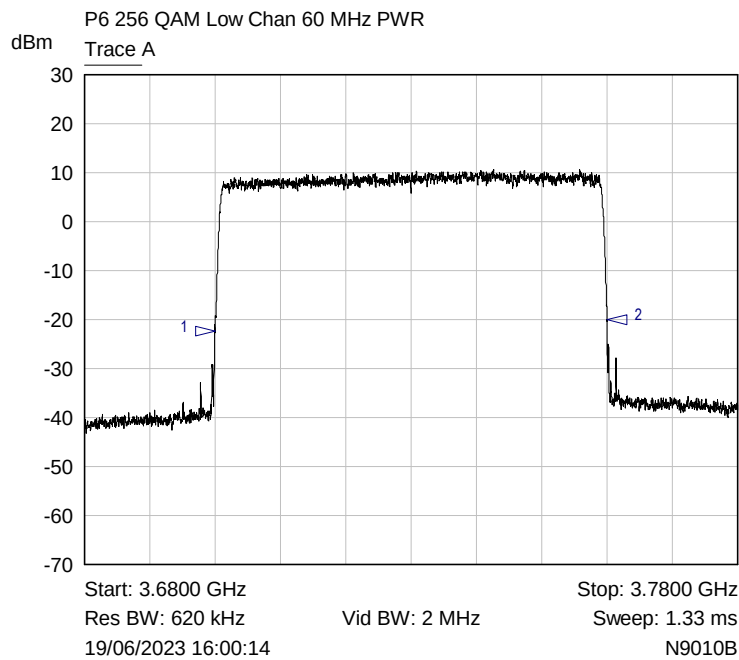


16QAM



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.7000 GHz	-25.23 dBm	
2 ▽	Trace A	3.7600 GHz	-22.35 dBm	

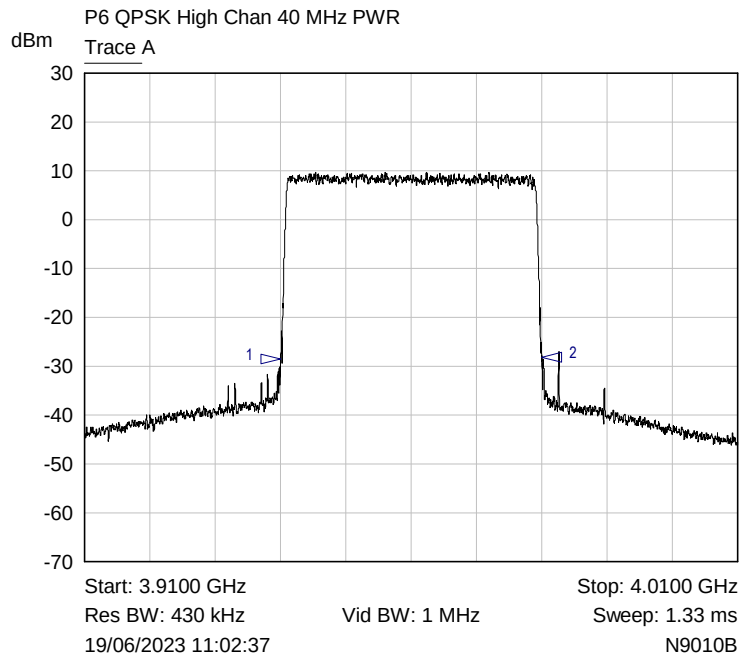
64QAM



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.7000 GHz	-22.34 dBm	
2 ▽	Trace A	3.7600 GHz	-20.07 dBm	

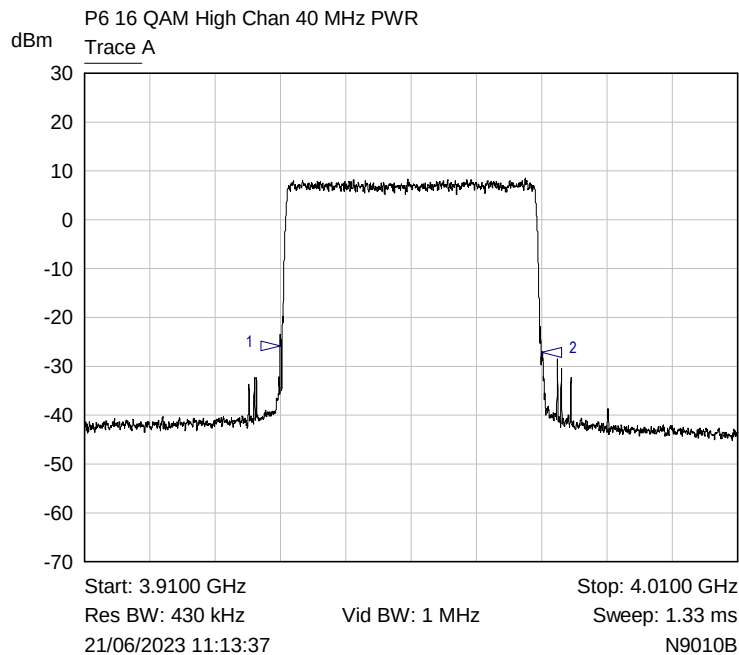
256QAM

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, High Channel



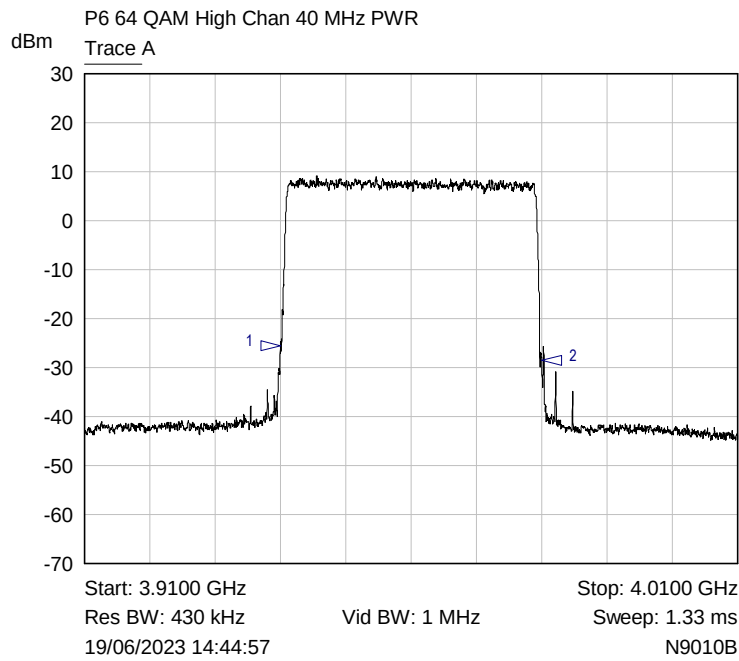
Mkr	Trace	X-Axis	Value	Notes
1 ▾	Trace A	3.9400 GHz	-28.51 dBm	
2 ▾	Trace A	3.9800 GHz	-28.23 dBm	

QPSK



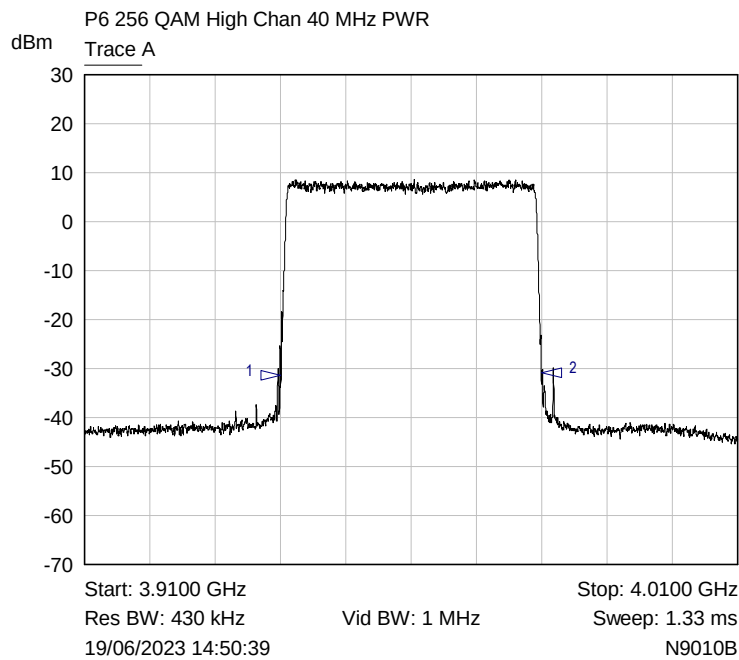
Mkr	Trace	X-Axis	Value	Notes
1 ▾	Trace A	3.9400 GHz	-25.76 dBm	
2 ▾	Trace A	3.9800 GHz	-27.19 dBm	

16QAM



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.9400 GHz	-25.53 dBm	
2 ▽	Trace A	3.9800 GHz	-28.47 dBm	

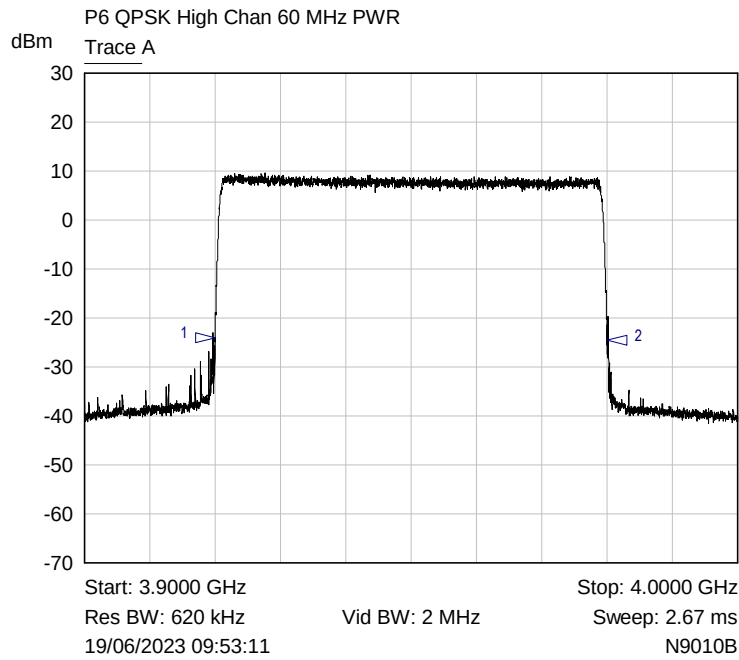
64QAM



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.9400 GHz	-31.28 dBm	
2 ▽	Trace A	3.9800 GHz	-30.83 dBm	

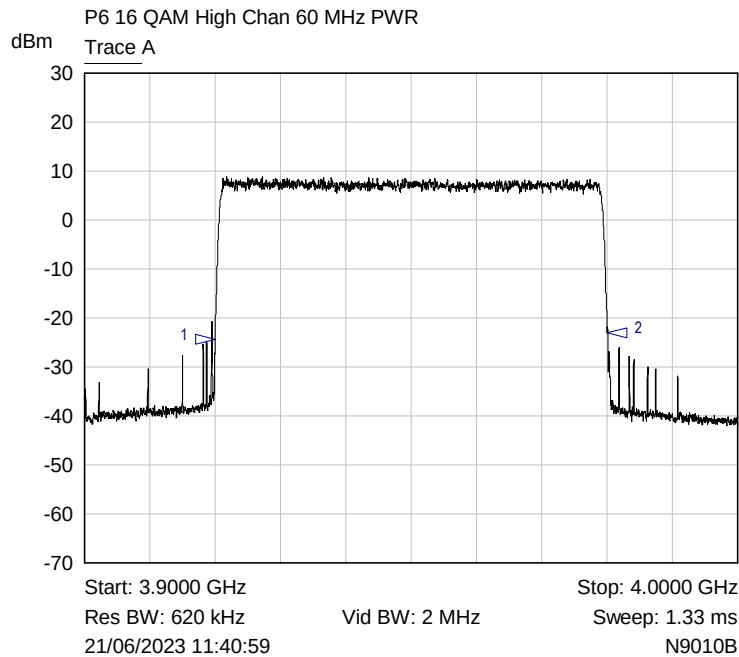
256QAM

RF Parameters: RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set),
Channel Spacing 60 MHz, High Channel



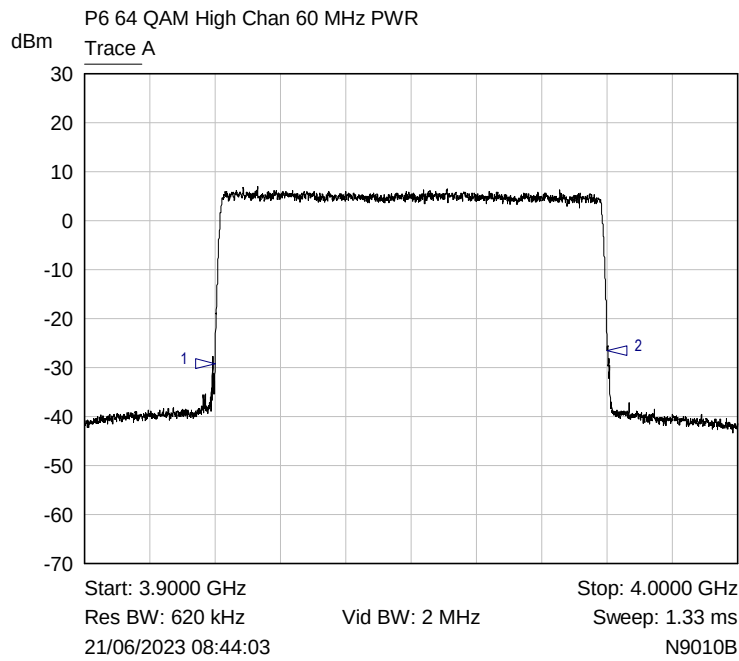
Mkr	Trace	X-Axis	Value	Notes
1 ▾	Trace A	3.9200 GHz	-23.95 dBm	
2 ▾	Trace A	3.9800 GHz	-24.49 dBm	

QPSK



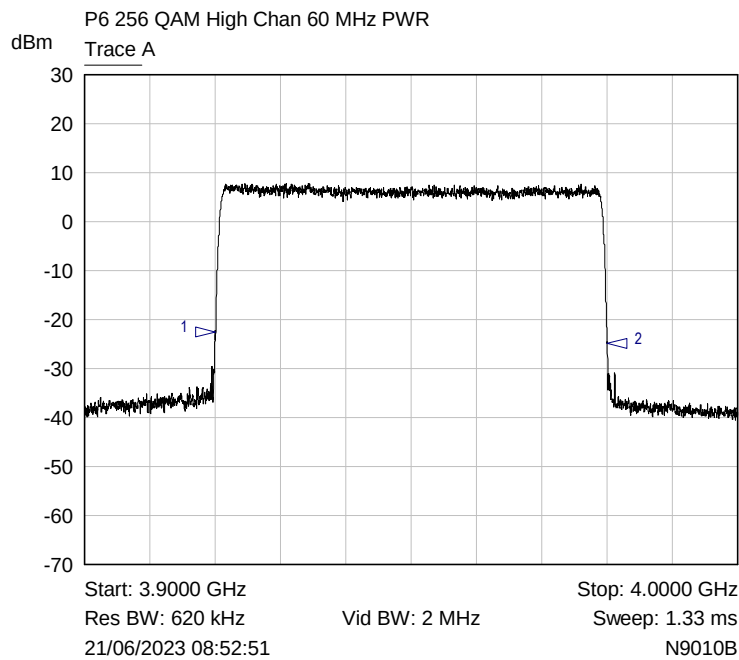
Mkr	Trace	X-Axis	Value	Notes
1 ▾	Trace A	3.9200 GHz	-24.38 dBm	
2 ▾	Trace A	3.9800 GHz	-23.06 dBm	

16QAM



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.9200 GHz	-29.14 dBm	
2 ▽	Trace A	3.9800 GHz	-26.46 dBm	

64QAM

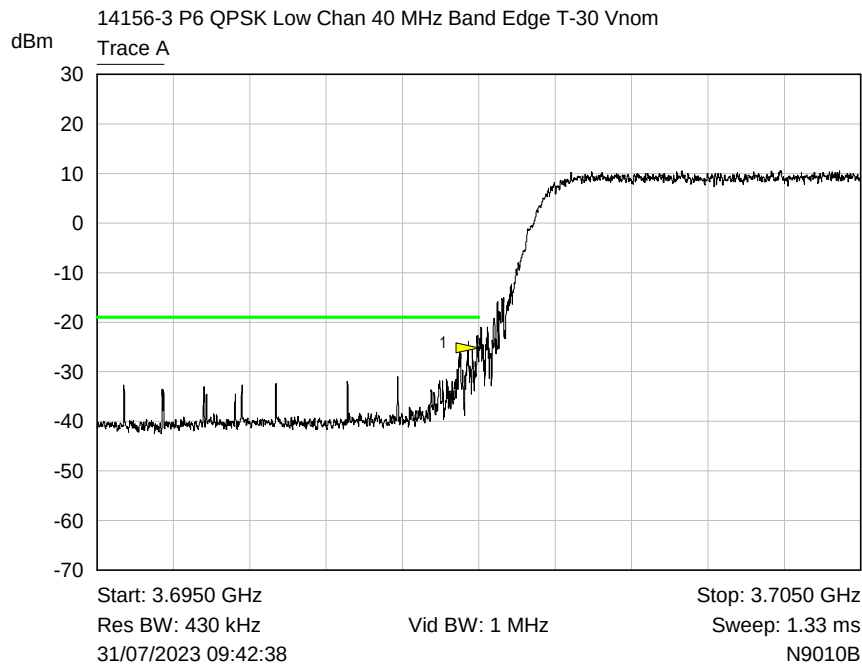


Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	3.9200 GHz	-22.45 dBm	
2 ▽	Trace A	3.9800 GHz	-24.83 dBm	

256QAM

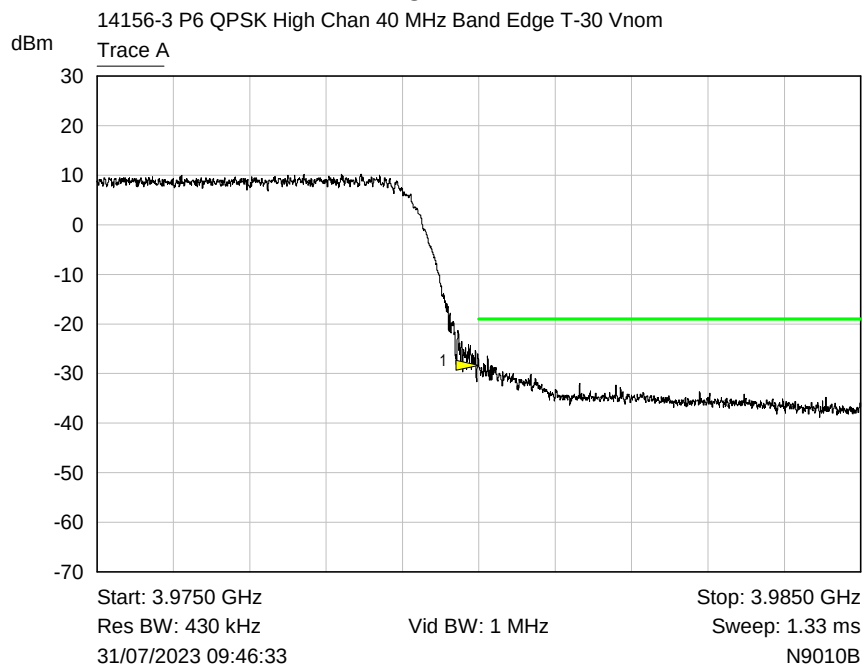
6.6 Frequency stability

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 40 MHz, QPSK



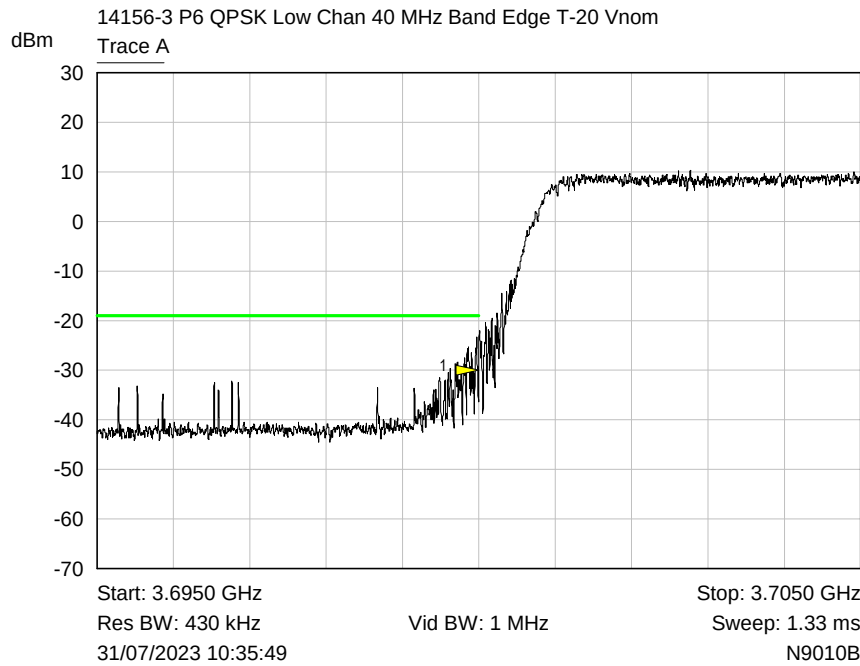
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-25.18 dBm	

-30 Degrees Low Chan

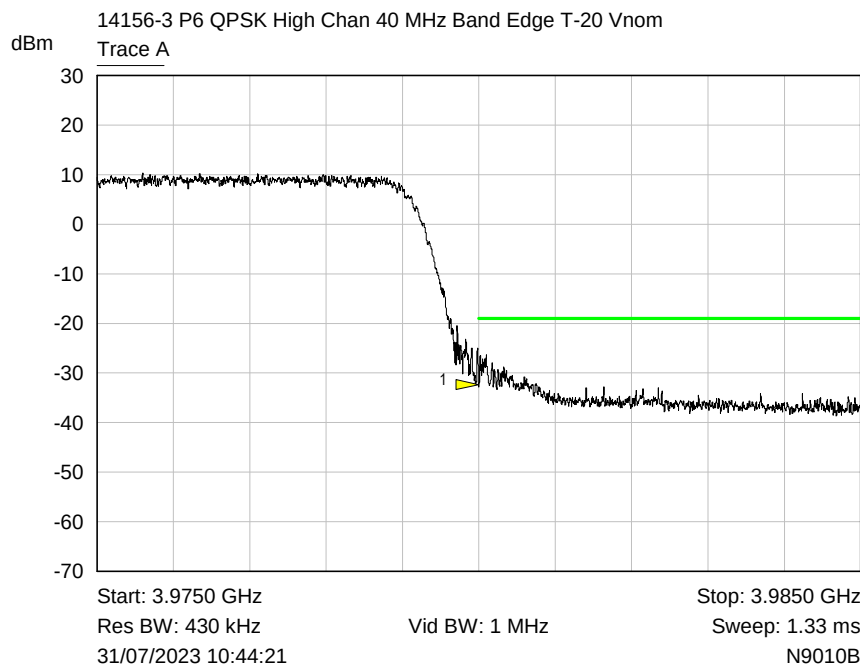


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-28.38 dBm	

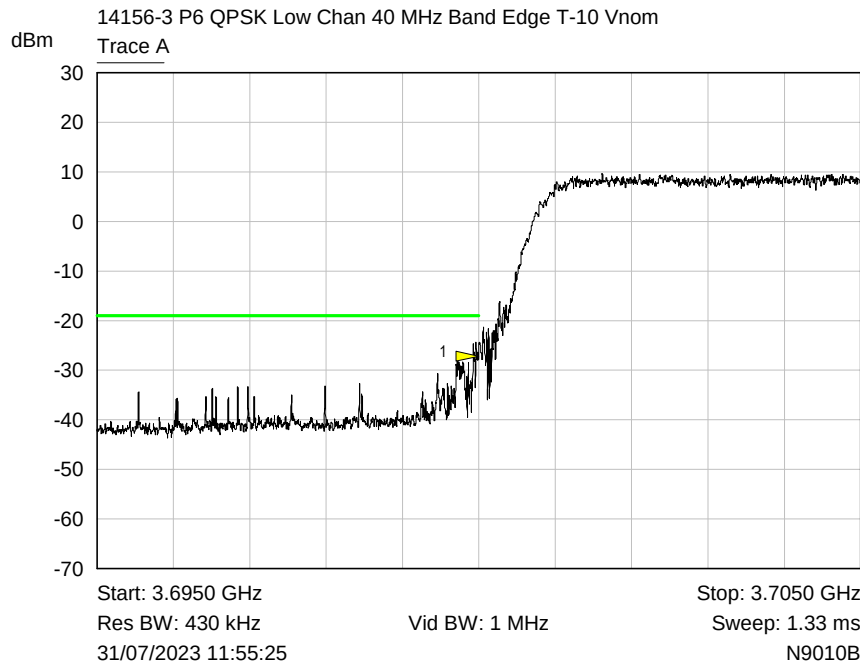
-30 Degrees High Chan



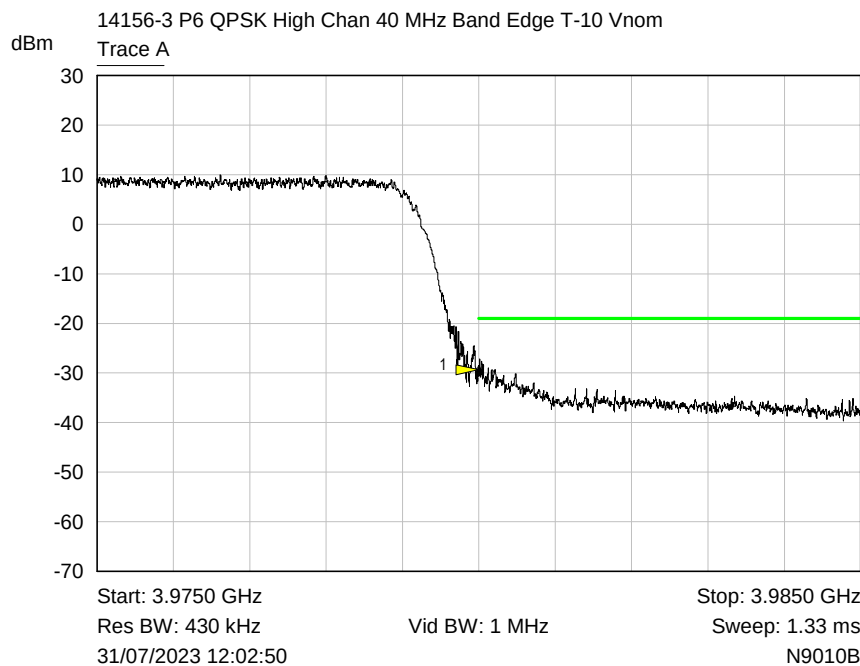
-20 Degrees Low Chan



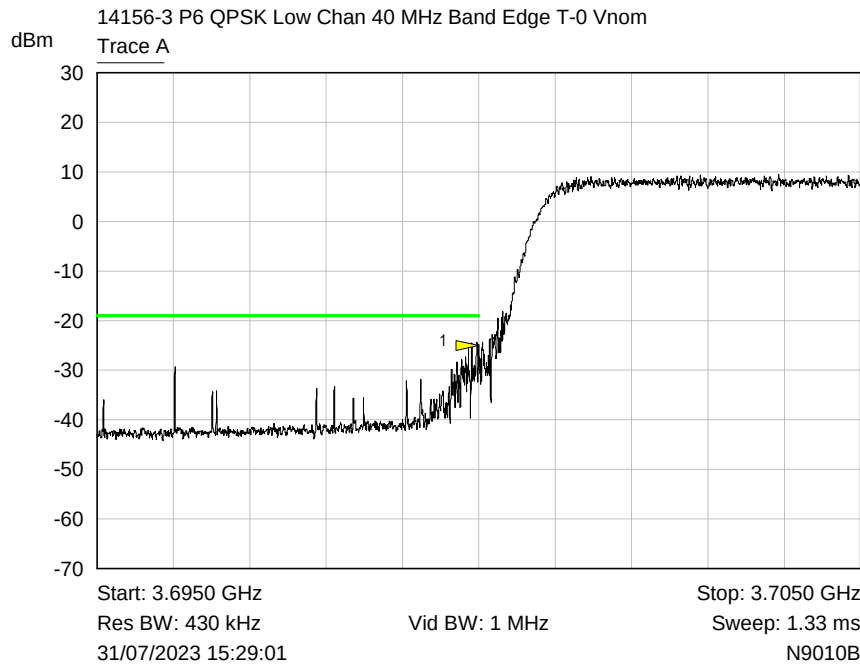
-20 Degrees High Chan



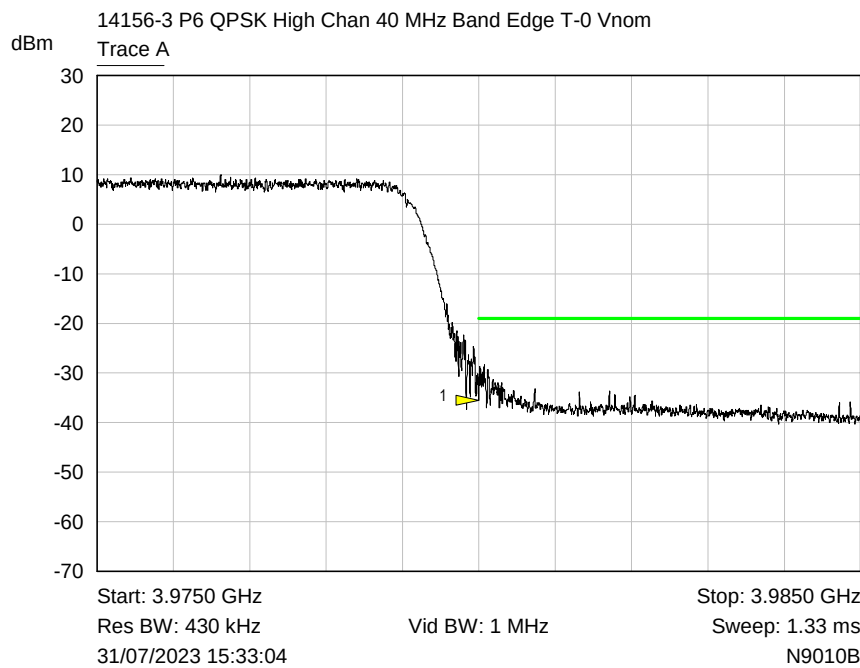
-10 Degrees Low Chan



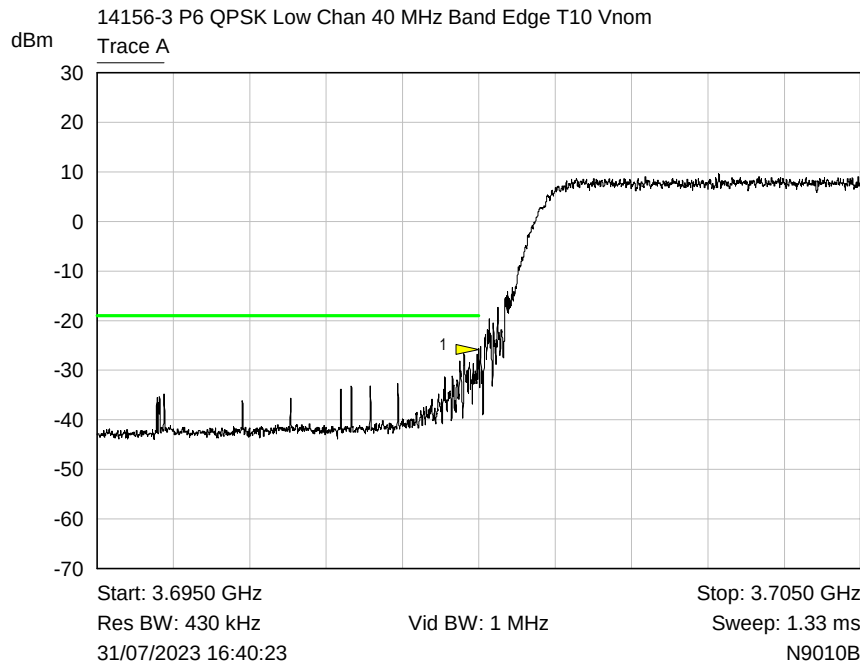
-10 Degrees High Chan



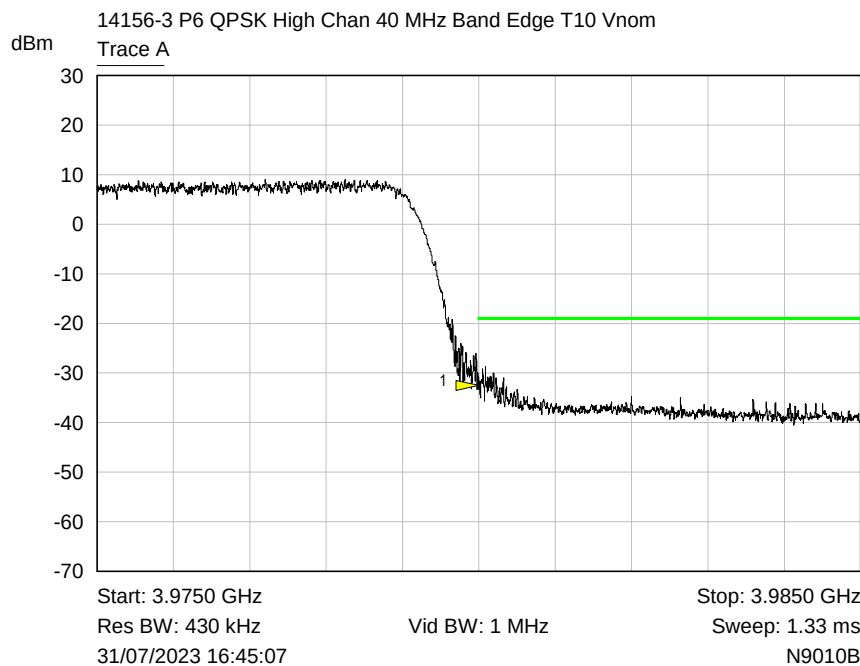
0 Degrees Low Chan



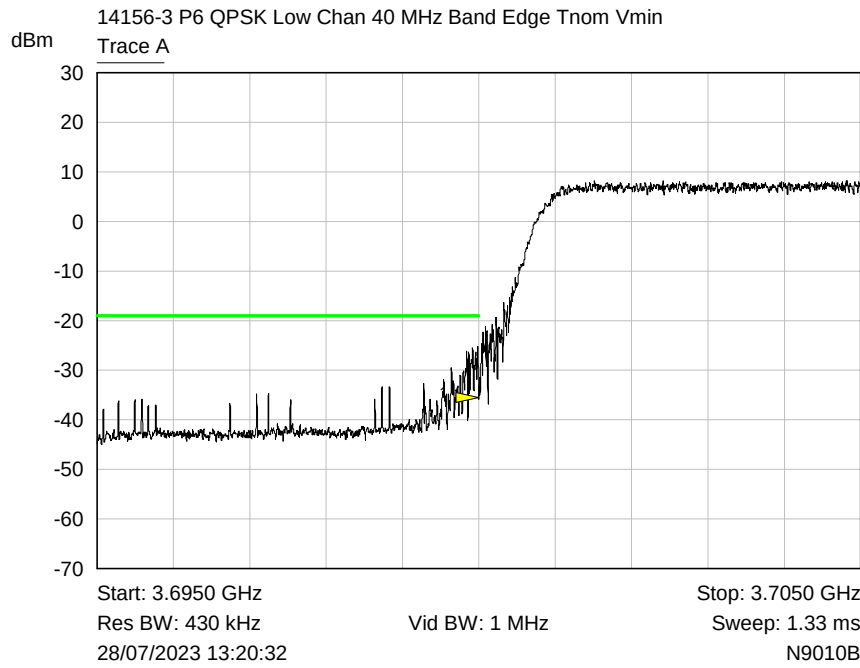
0 Degrees High Chan



+10 Degrees Low Chan

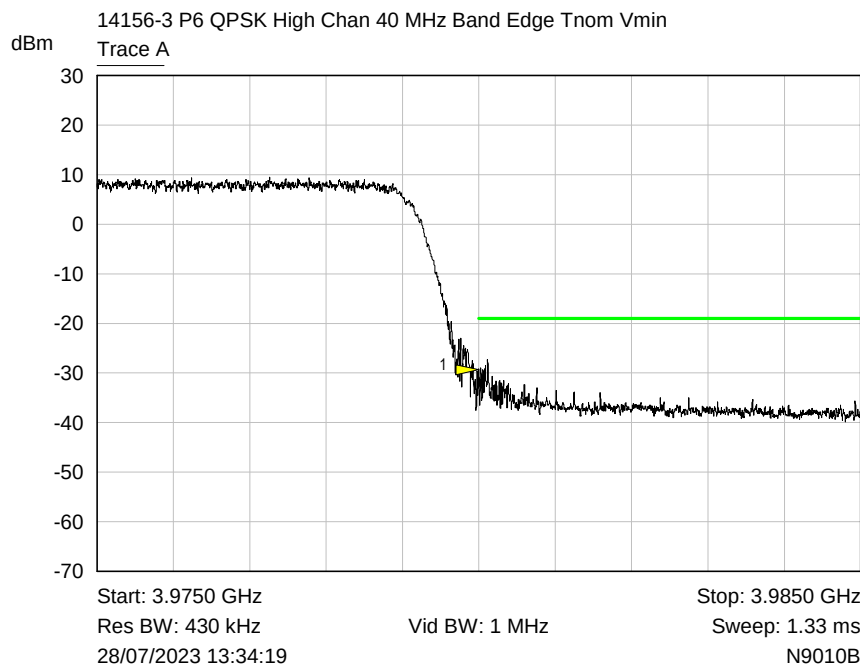


+10 Degrees High Chan



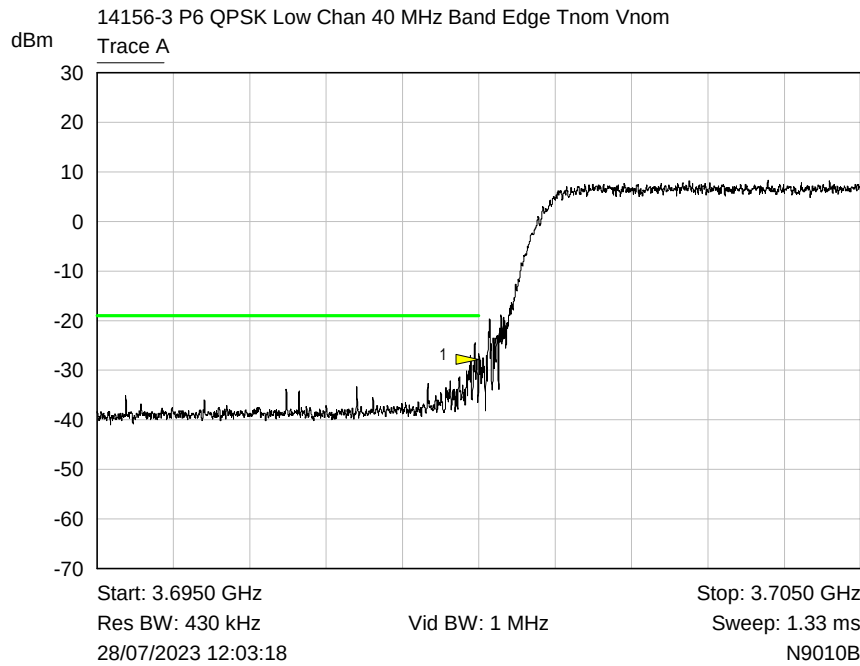
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-35.54 dBm	

+20 Degrees Min Voltage Low Chan

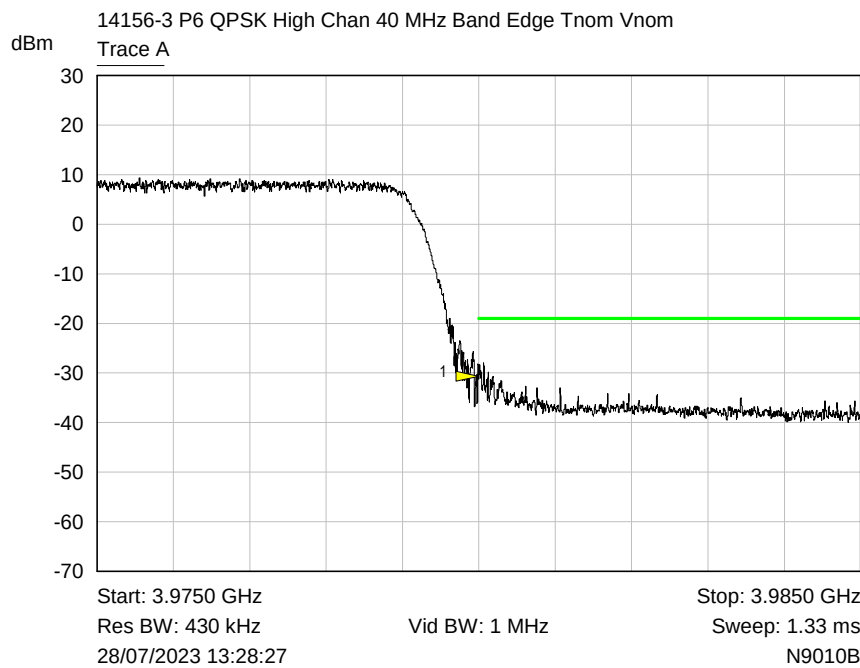


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-29.28 dBm	

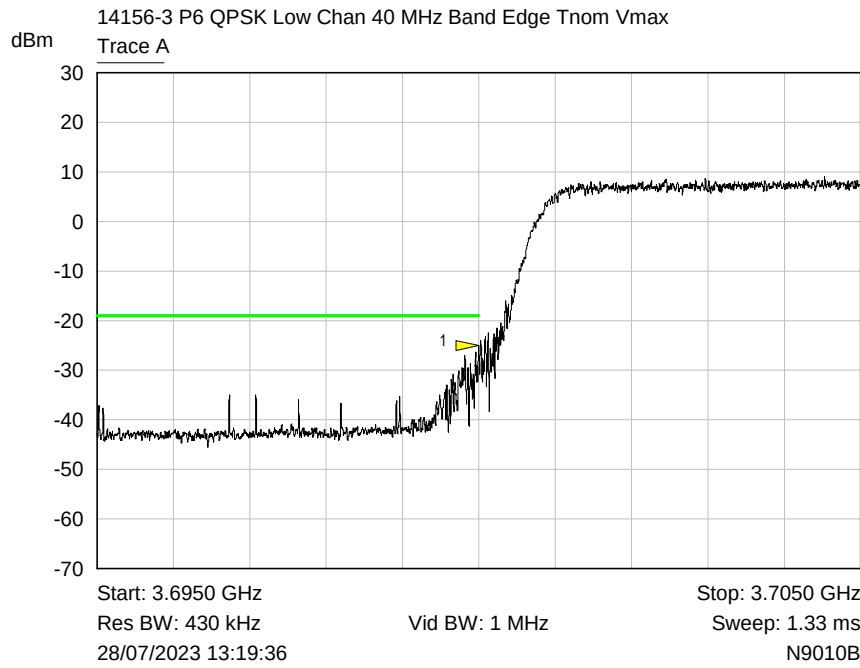
+20 Degrees Min Voltage High Chan



+20 Degrees Nominal Voltage Low Chan

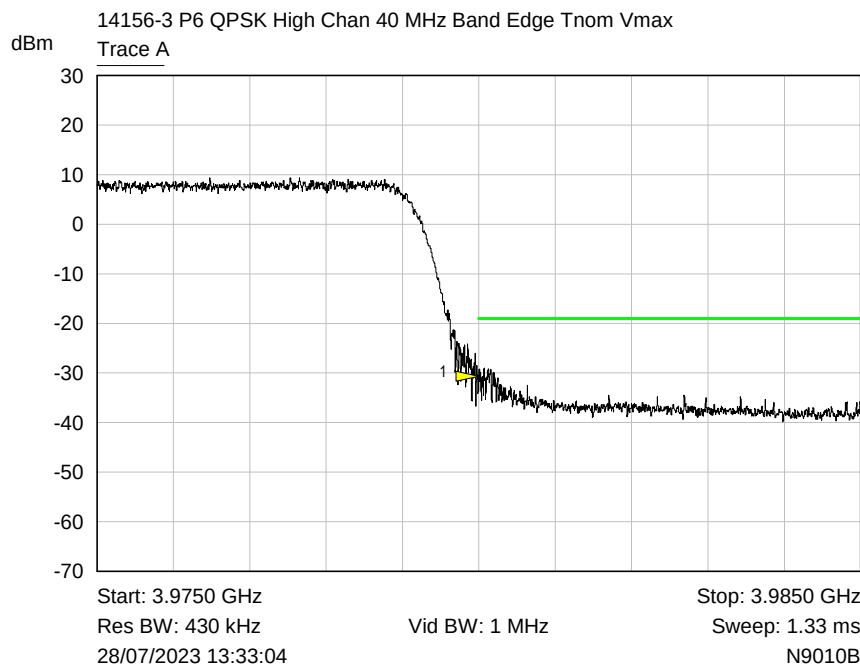


+20 Degrees Nominal Voltage High Chan



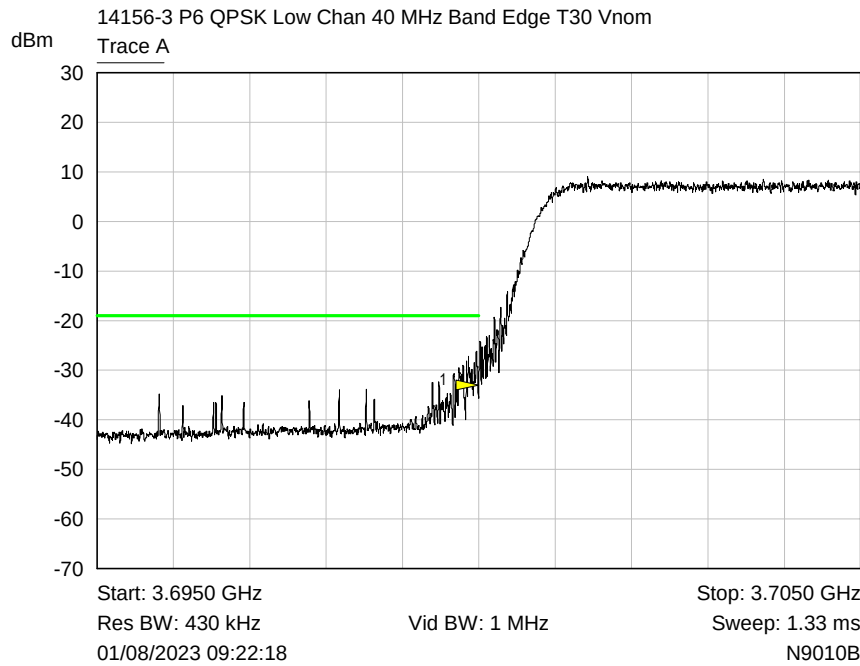
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-25.02 dBm	

+20 Degrees Max Voltage Low Chan



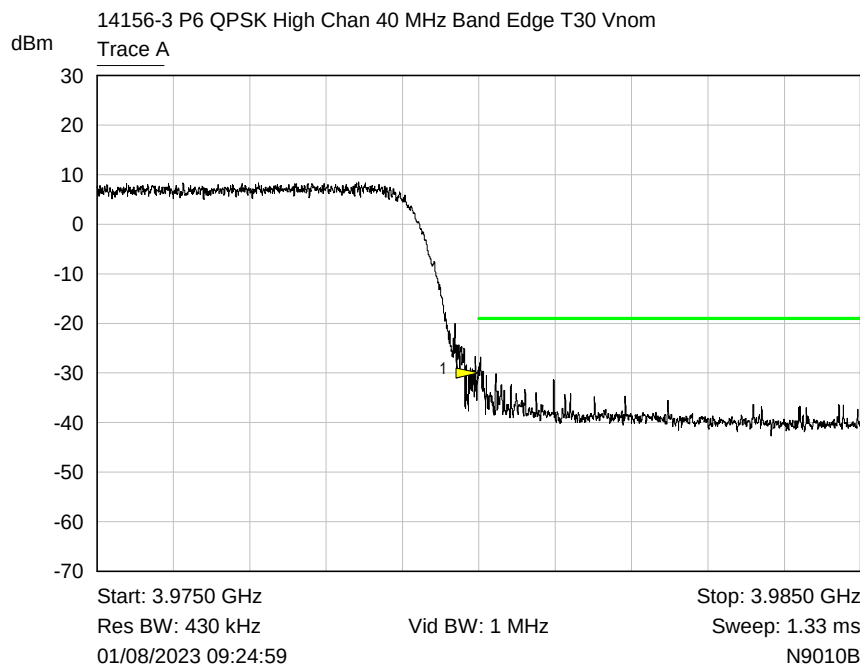
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-30.62 dBm	

+20 Degrees Max Voltage High Chan



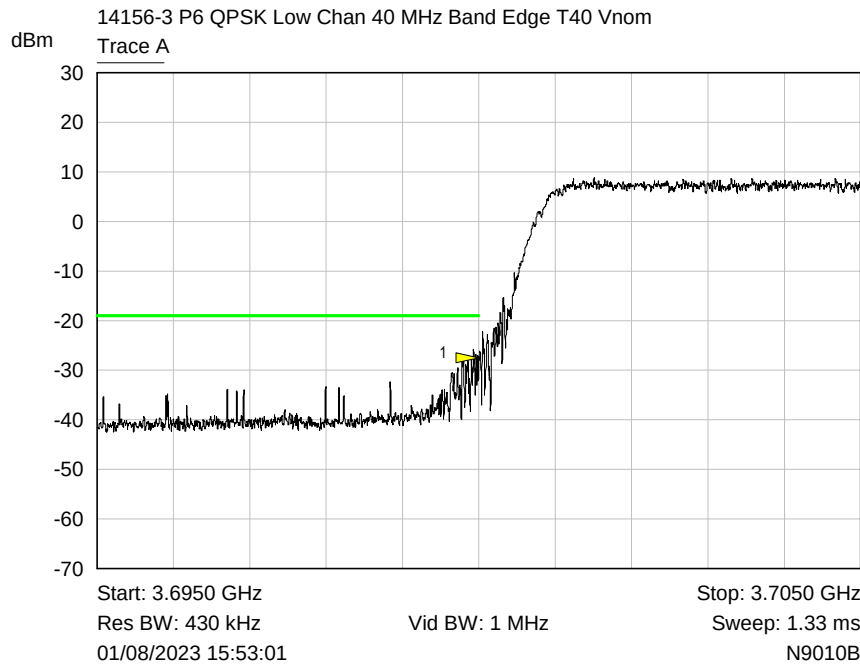
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-33.04 dBm	

+30 Degrees Low Chan

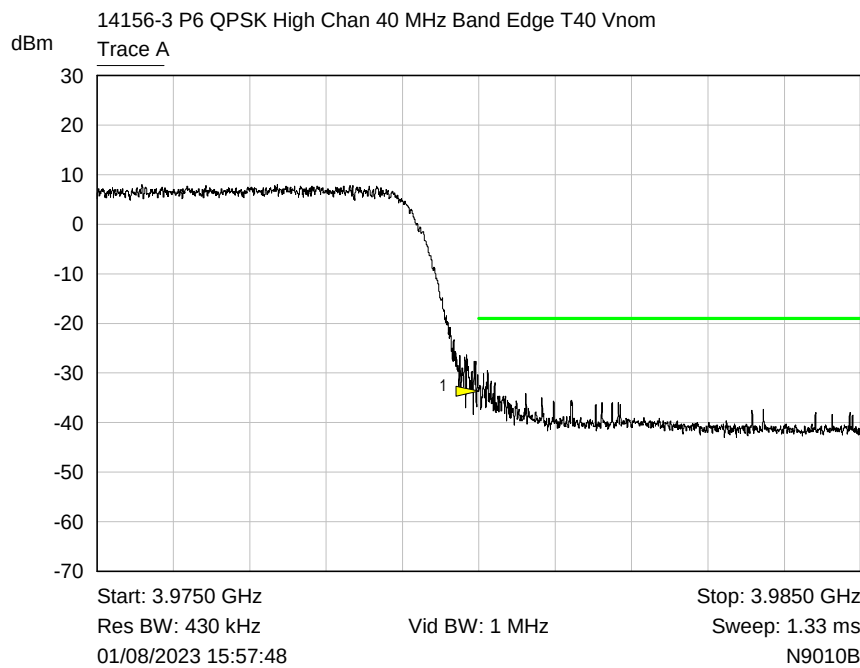


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-29.97 dBm	

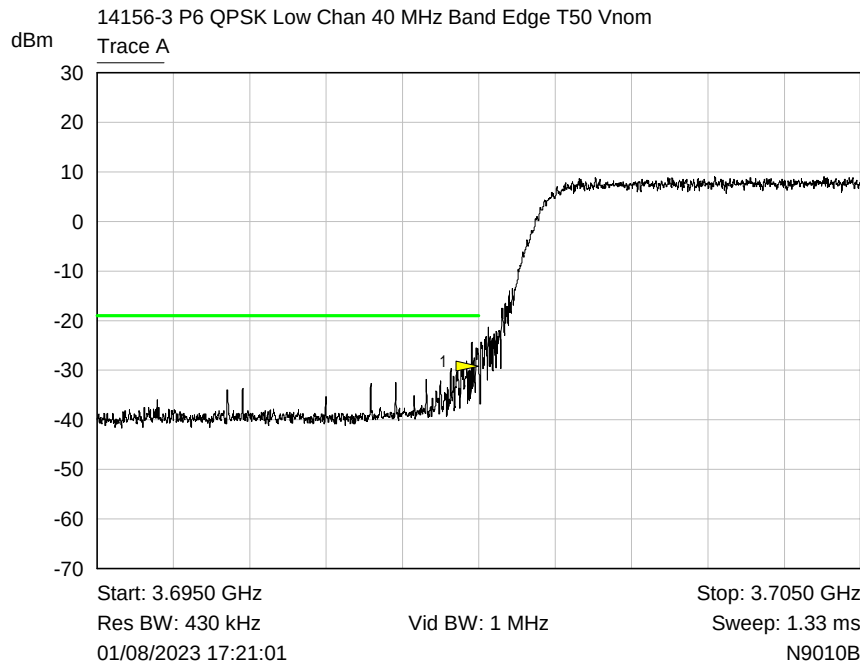
+30 Degrees High Chan



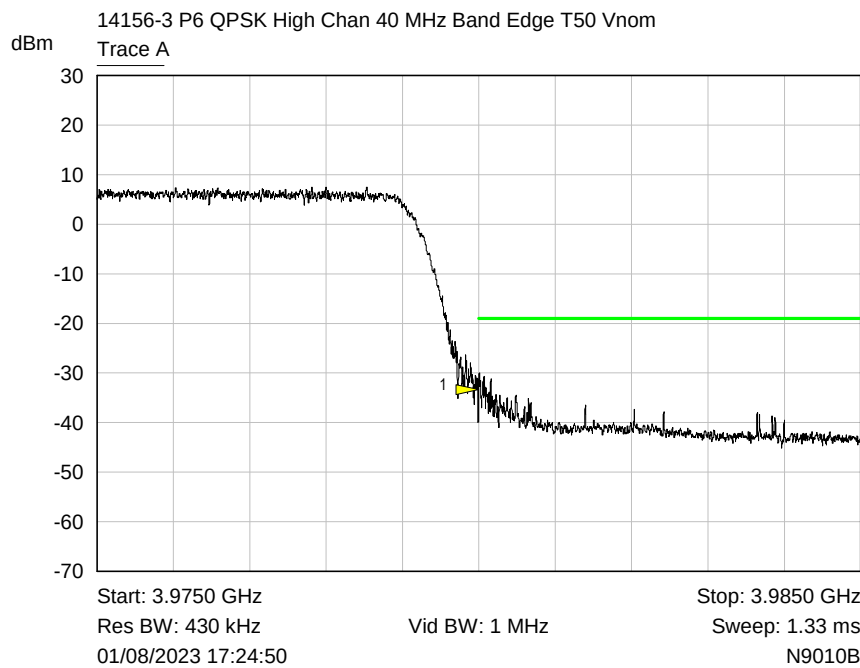
+40 Degrees Low Chan



+40 Degrees High Chan

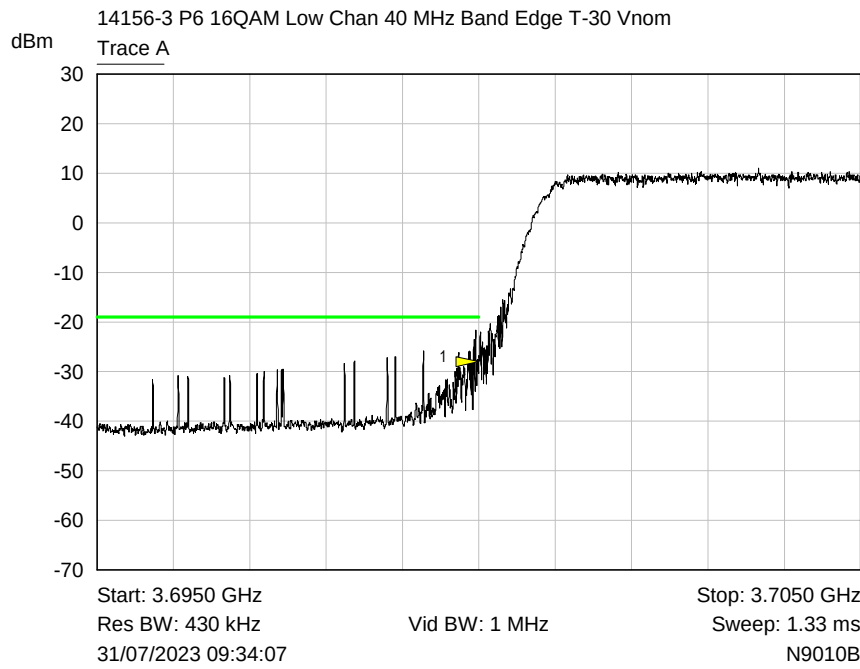


+50 Degrees Low Chan



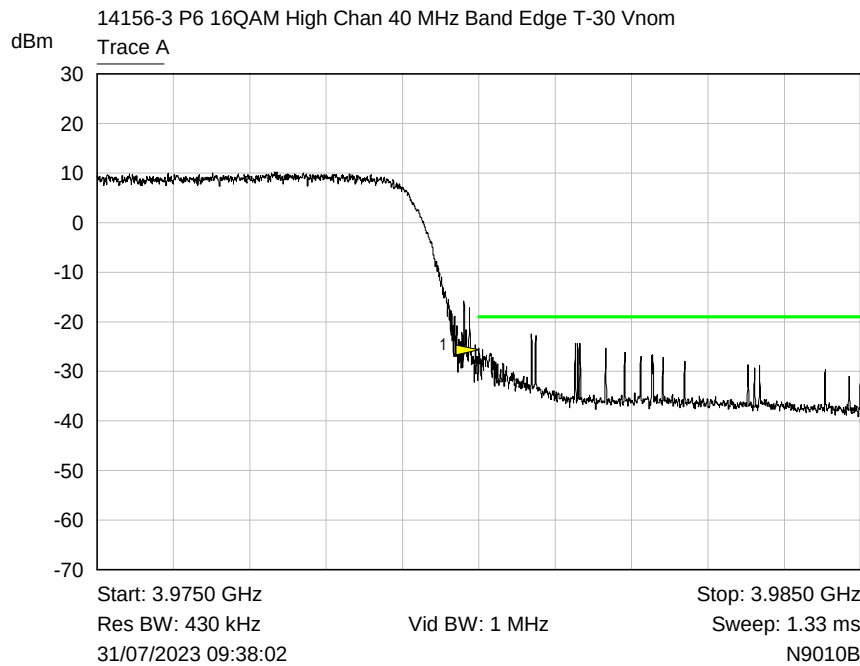
+50 Degrees High Chan

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing
40 MHz, 16 QAM



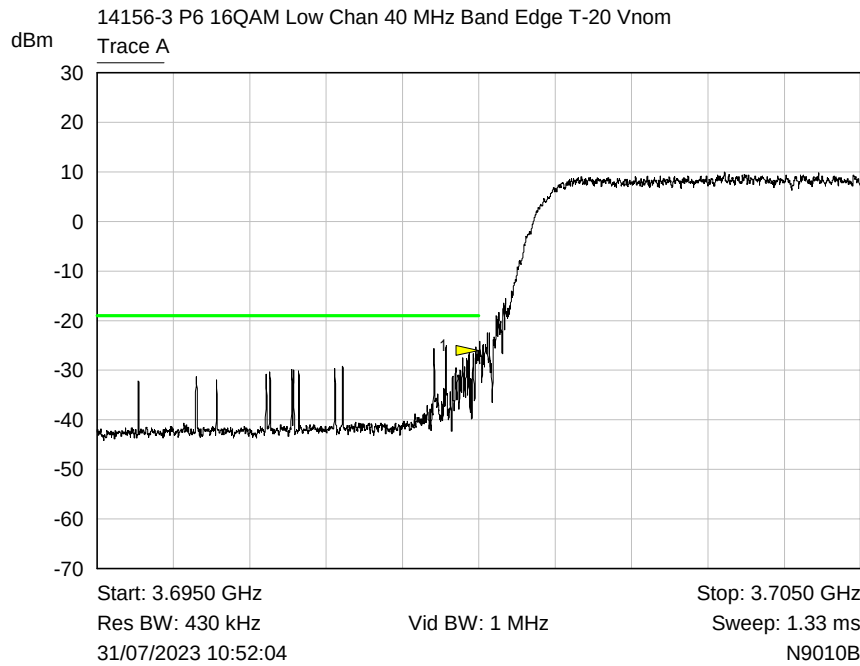
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-27.97 dBm	

-30 Degrees Low Chan

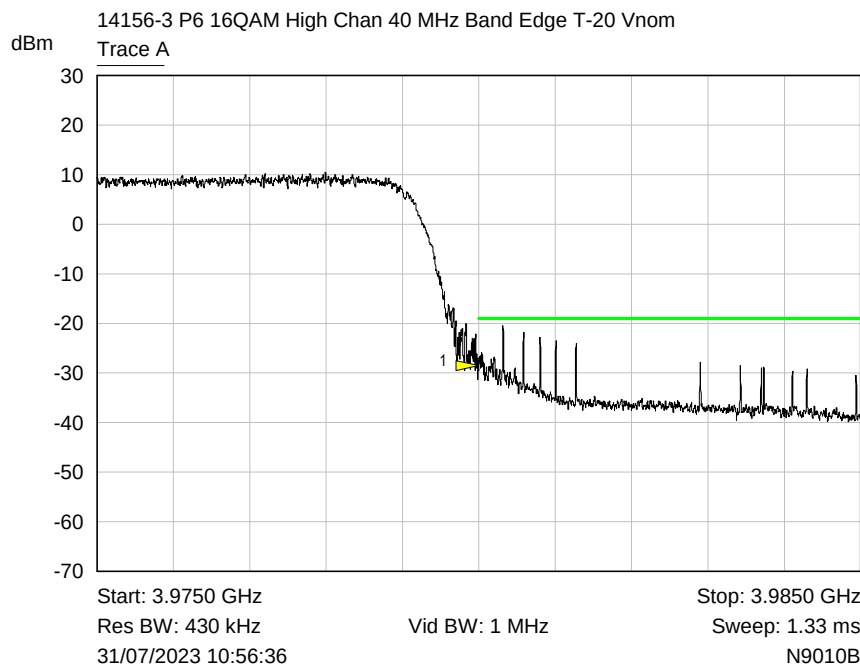


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-25.73 dBm	

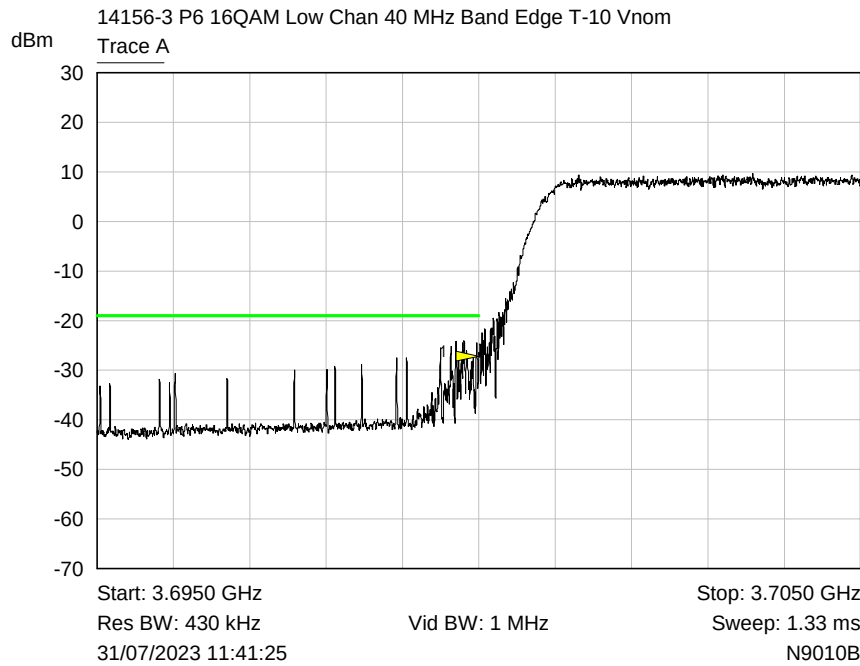
-30 Degrees High Chan



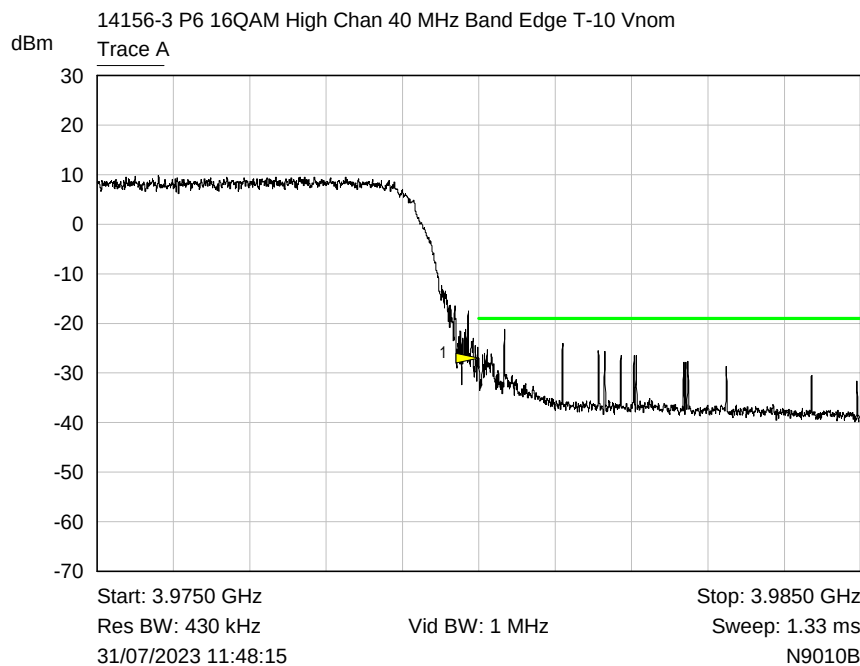
-20 Degrees Low Chan



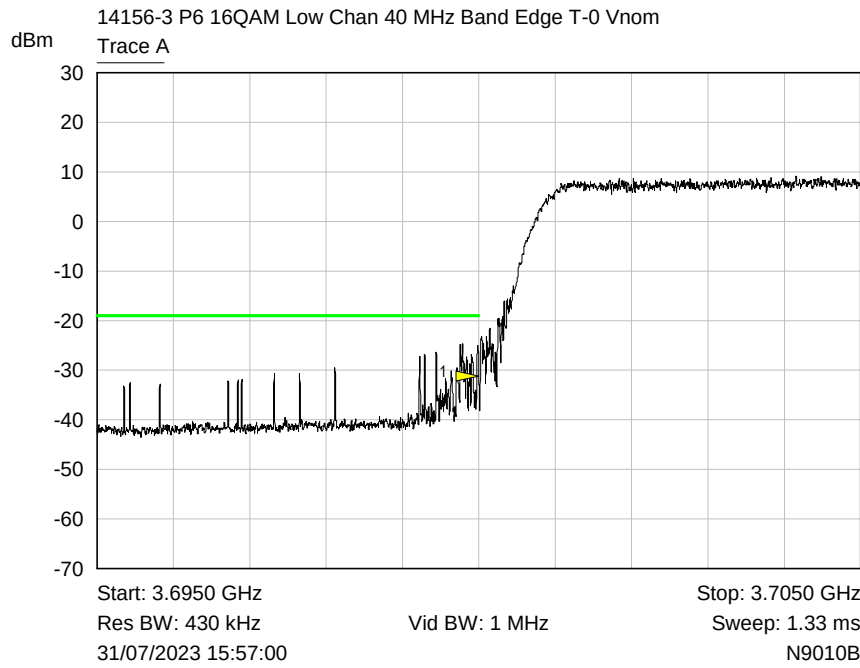
-20 Degrees High Chan



-10 Degrees Low Chan

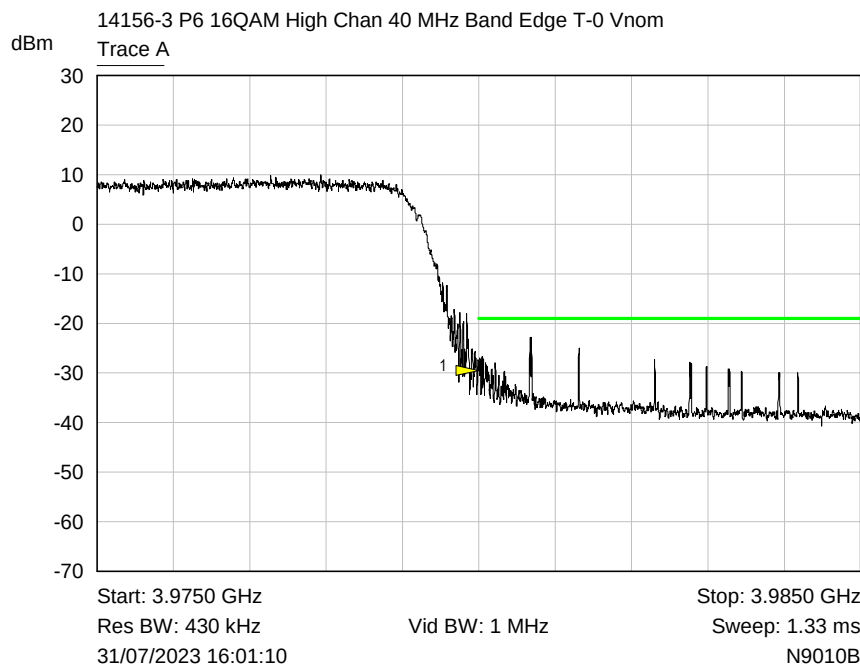


-10 Degrees High Chan



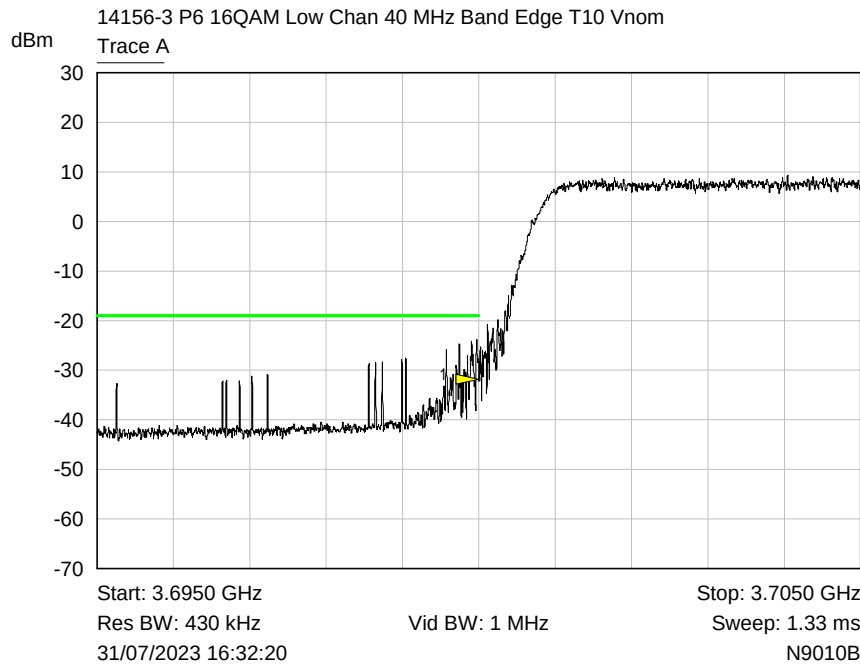
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-31.25 dBm	

0 Degrees Low Chan



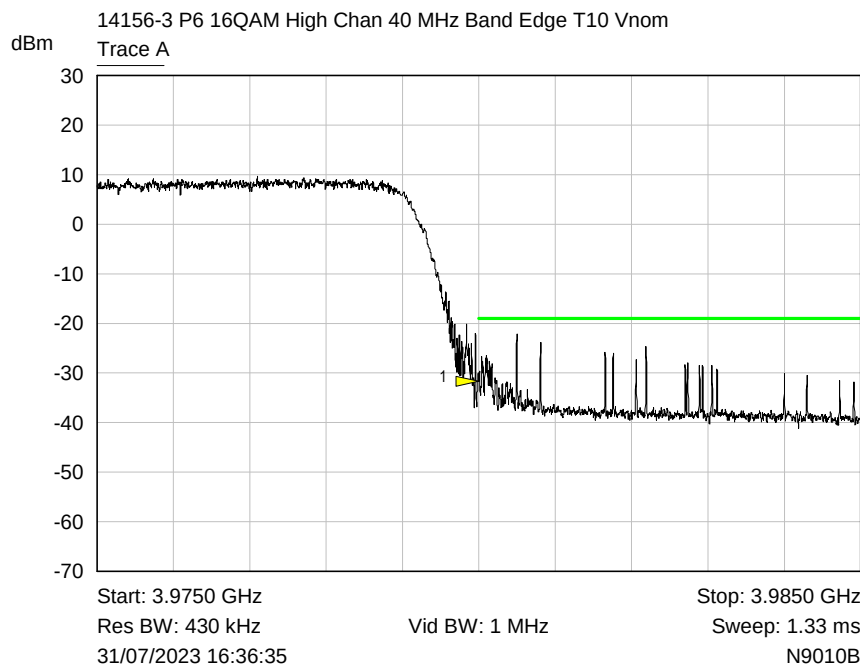
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-29.52 dBm	

0 Degrees High Chan



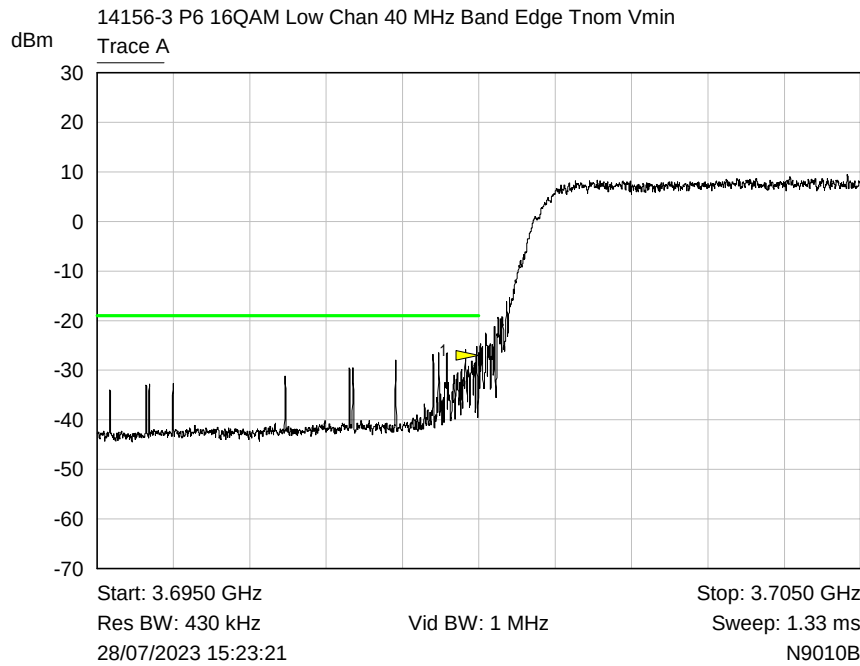
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-31.84 dBm	

+10 Degrees Low Chan

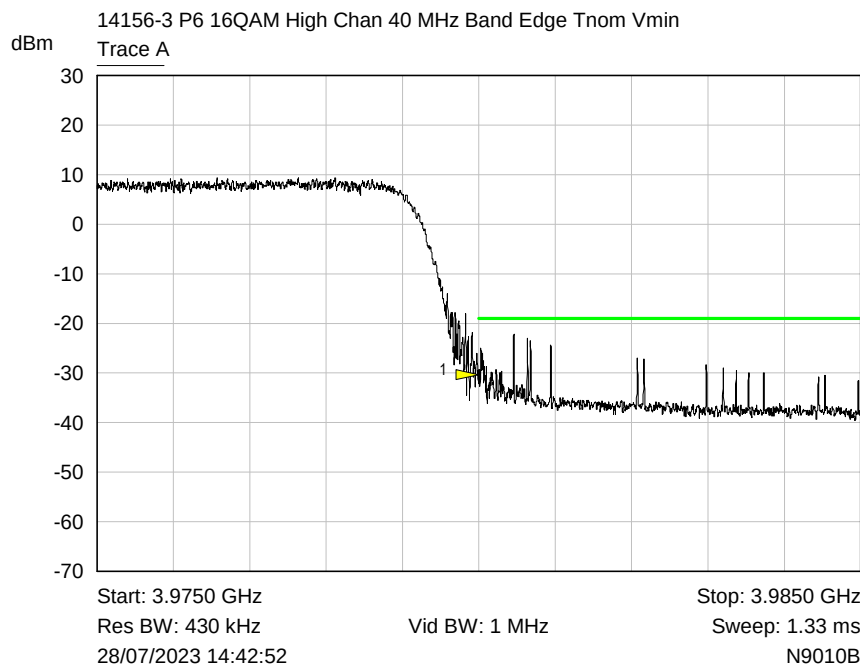


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-31.59 dBm	

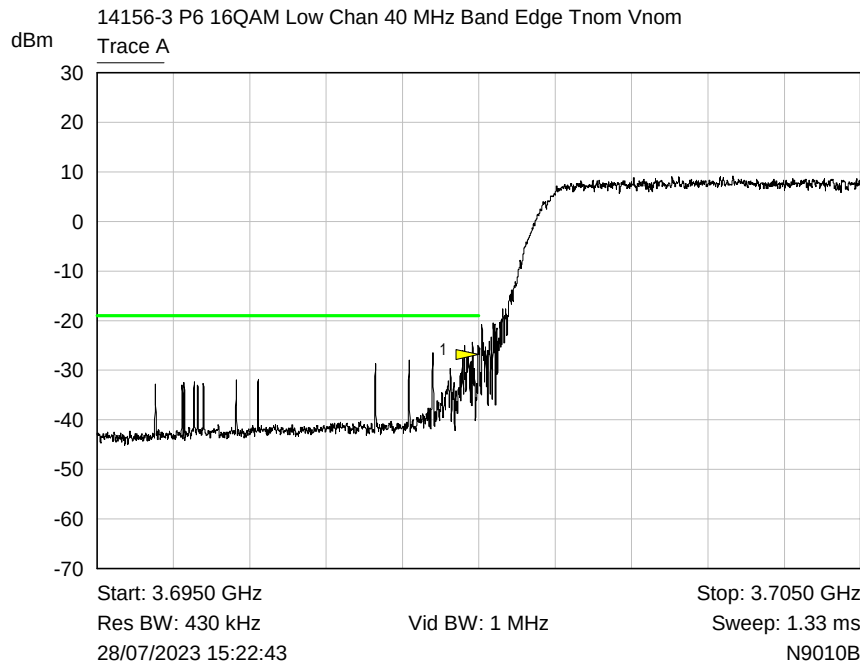
+10 Degrees High Chan



+20 Degrees Min Voltage Low Chan

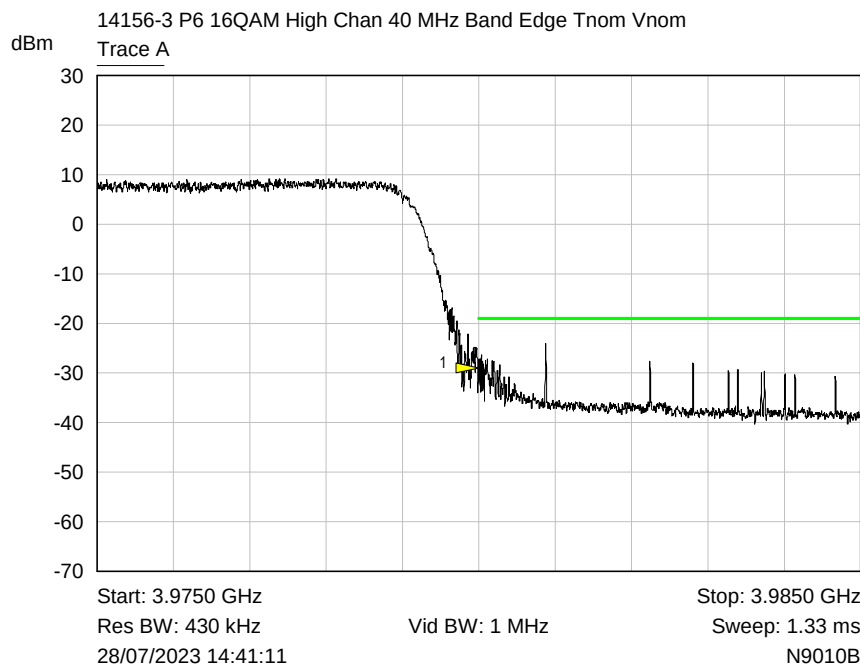


+20 Degrees Min Voltage High Chan



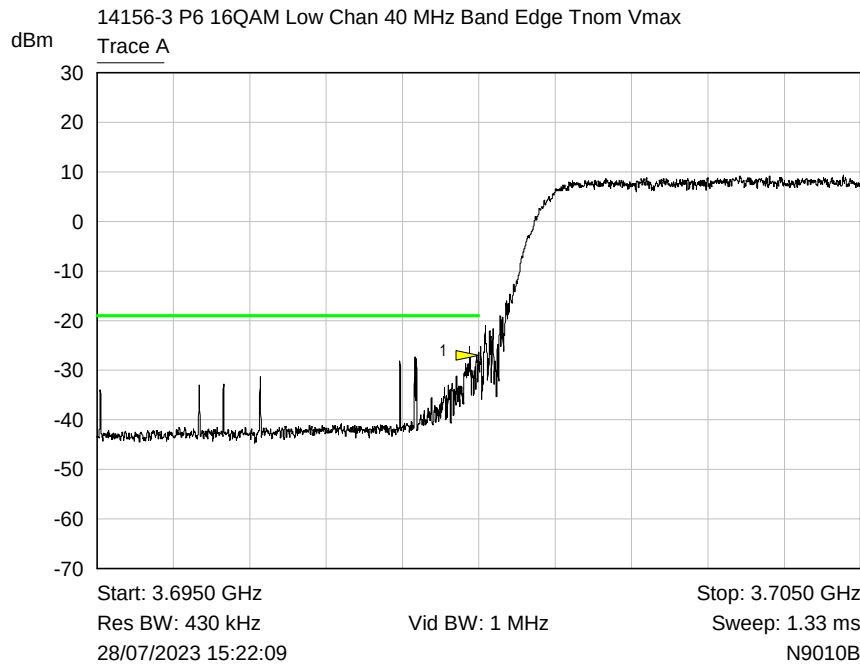
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-26.84 dBm	

+20 Degrees Nominal Voltage Low Chan

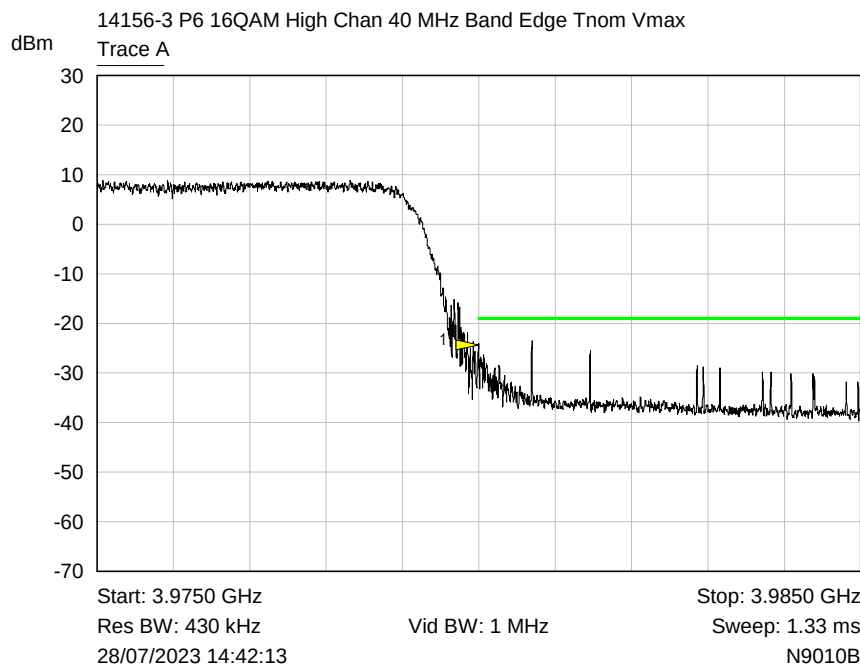


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-28.93 dBm	

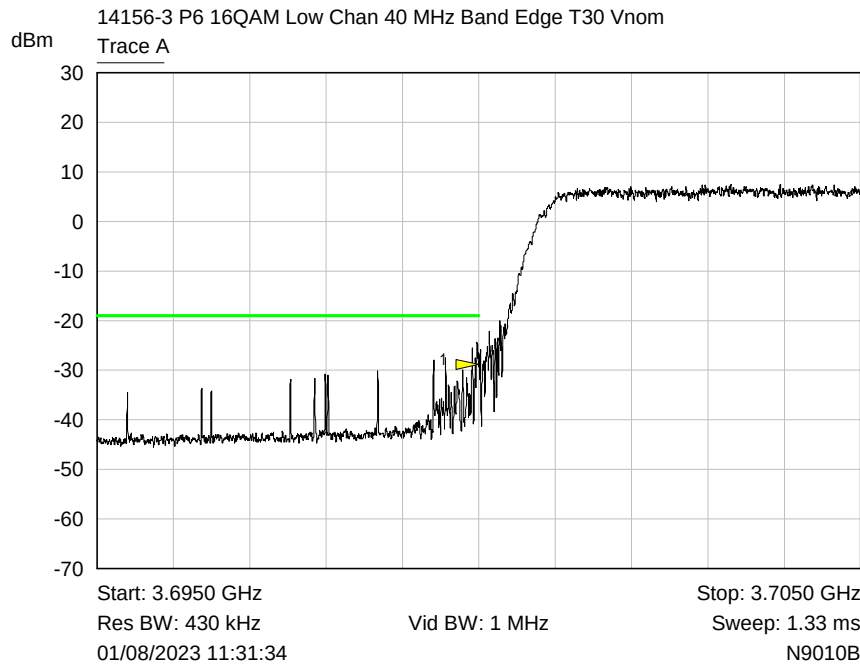
+20 Degrees Nominal Voltage High Chan



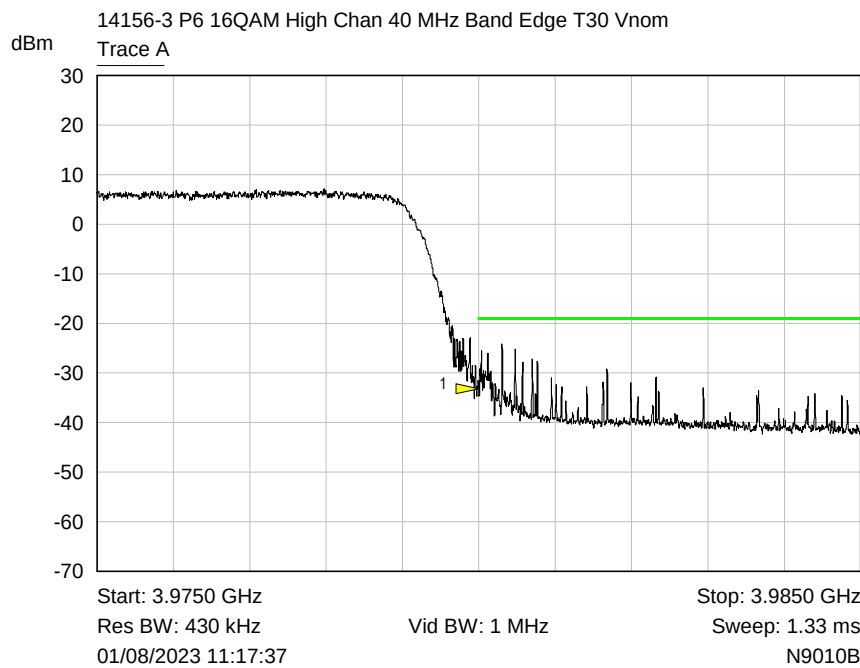
+20 Degrees Max Voltage Low Chan



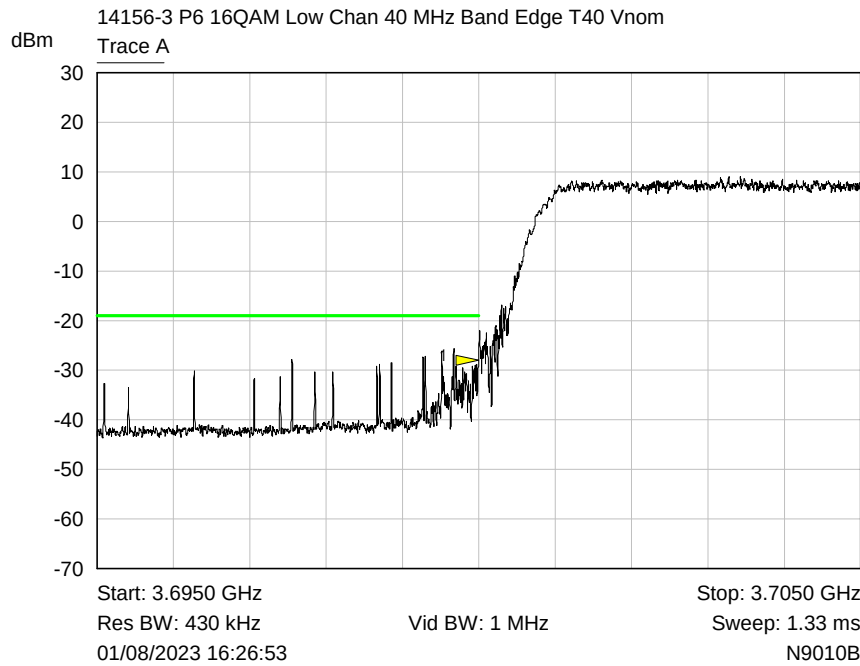
+20 Degrees Max Voltage High Chan



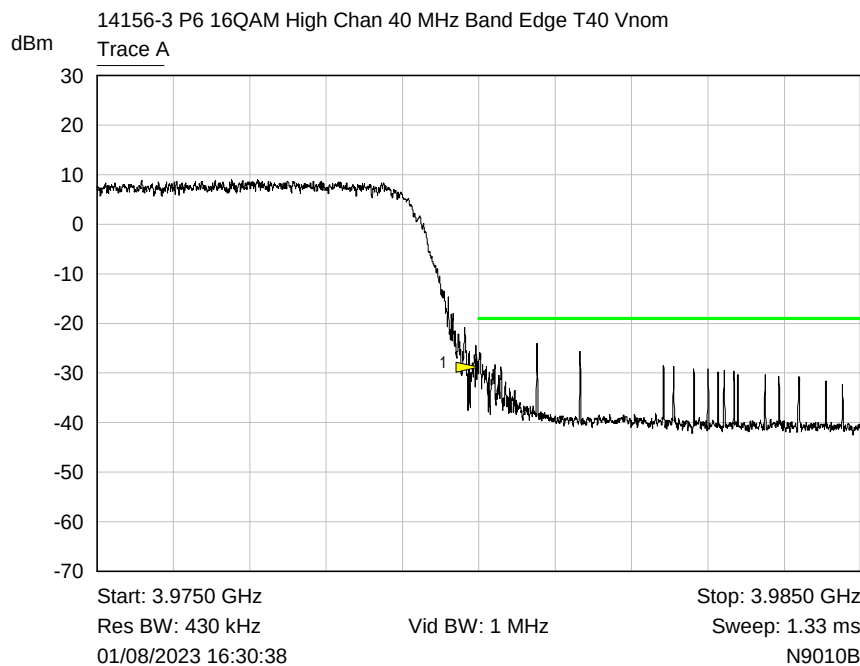
+30 Degrees Low Chan



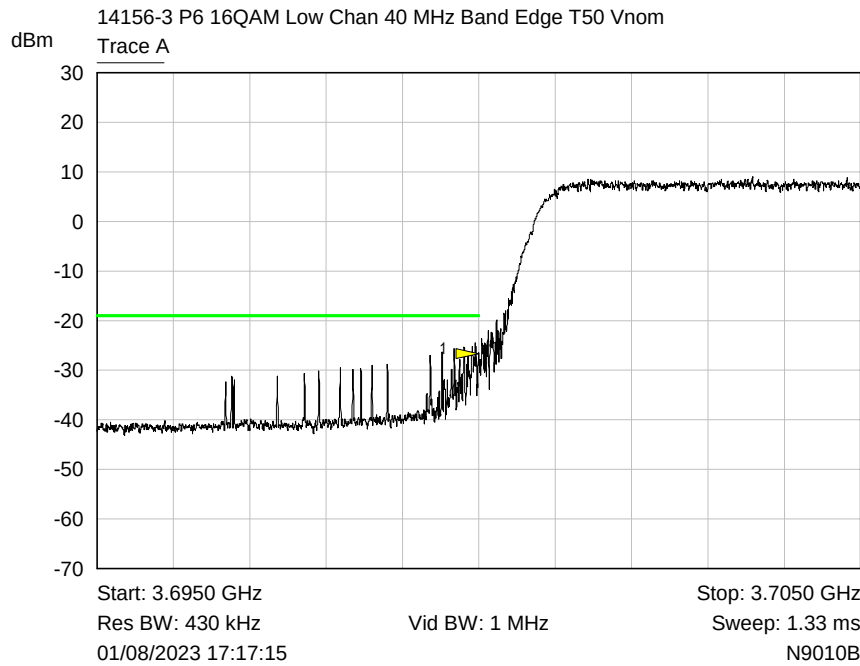
+30 Degrees High Chan



+40 Degrees Low Chan



+40 Degrees High Chan

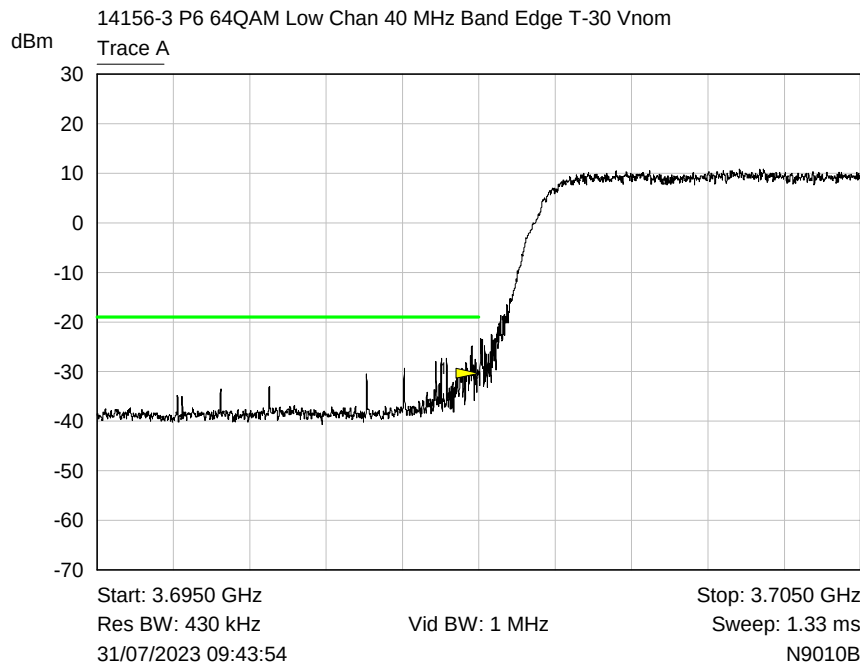


+50 Degrees Low Chan



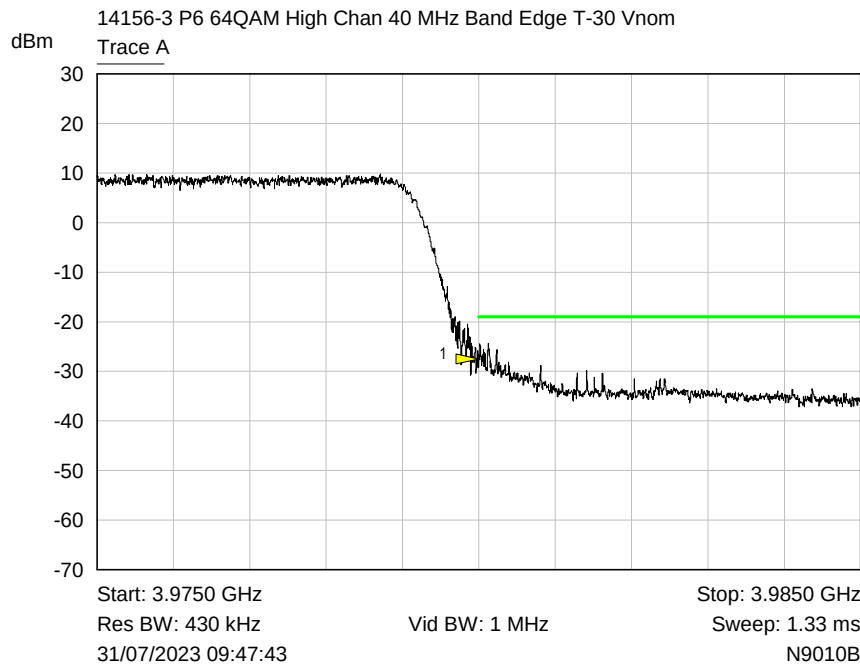
+50 Degrees High Chan

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing
40 MHz, 64 QAM



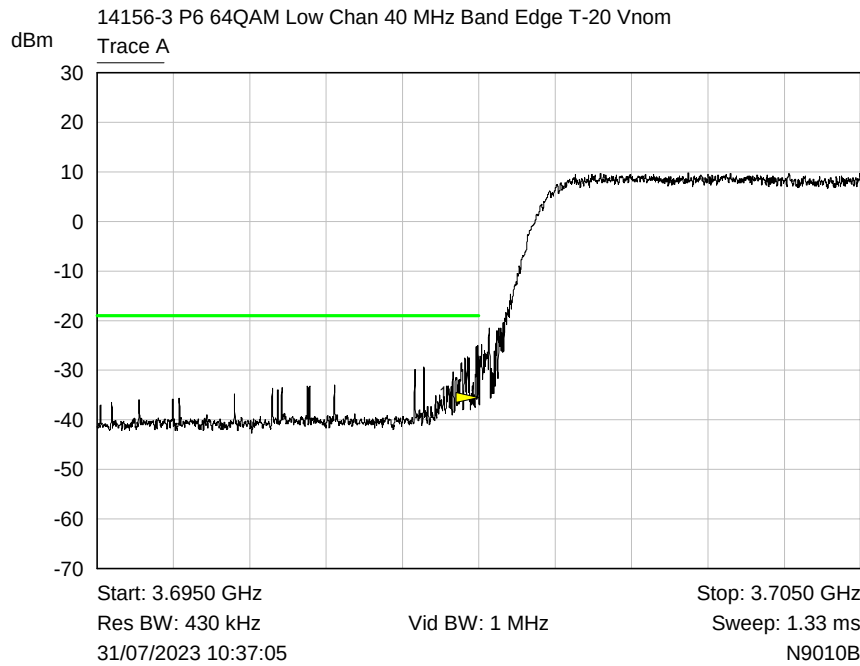
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-30.26 dBm	

-30 Degrees Low Chan

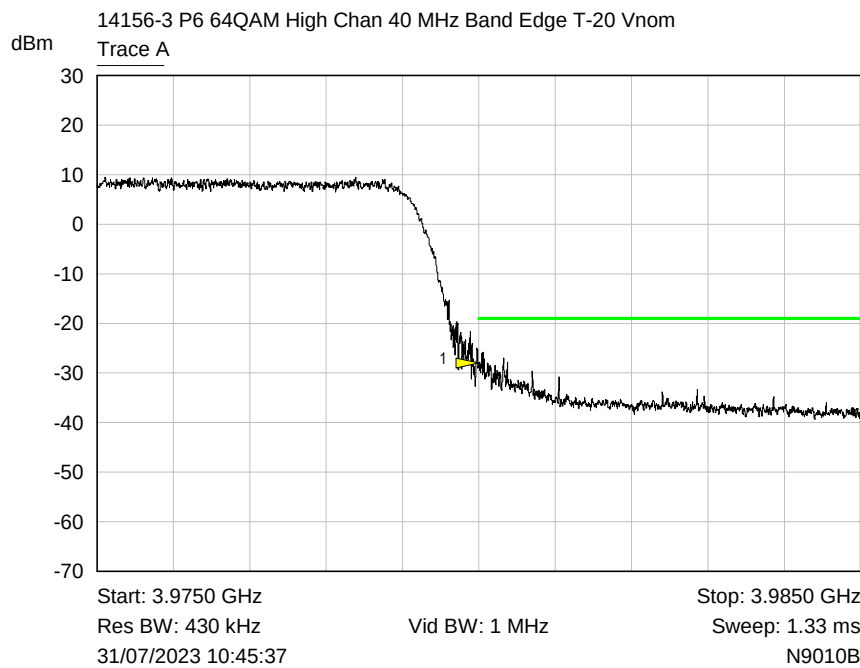


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-27.51 dBm	

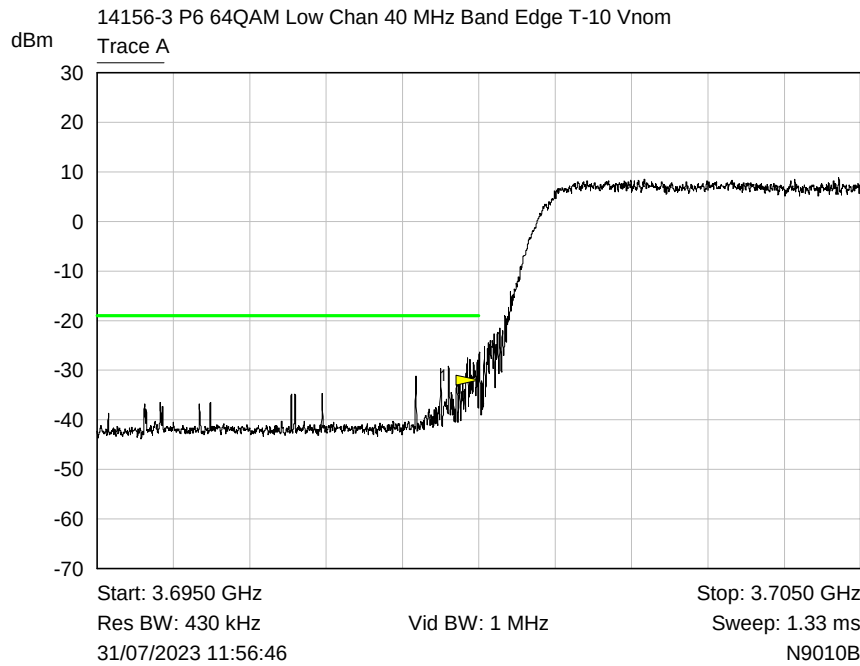
-30 Degrees High Chan



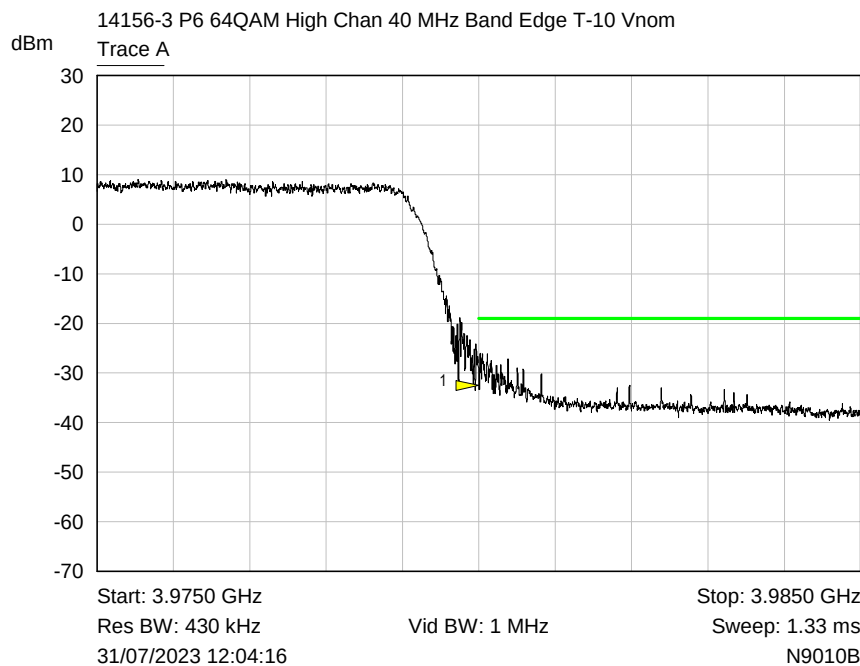
-20 Degrees Low Chan



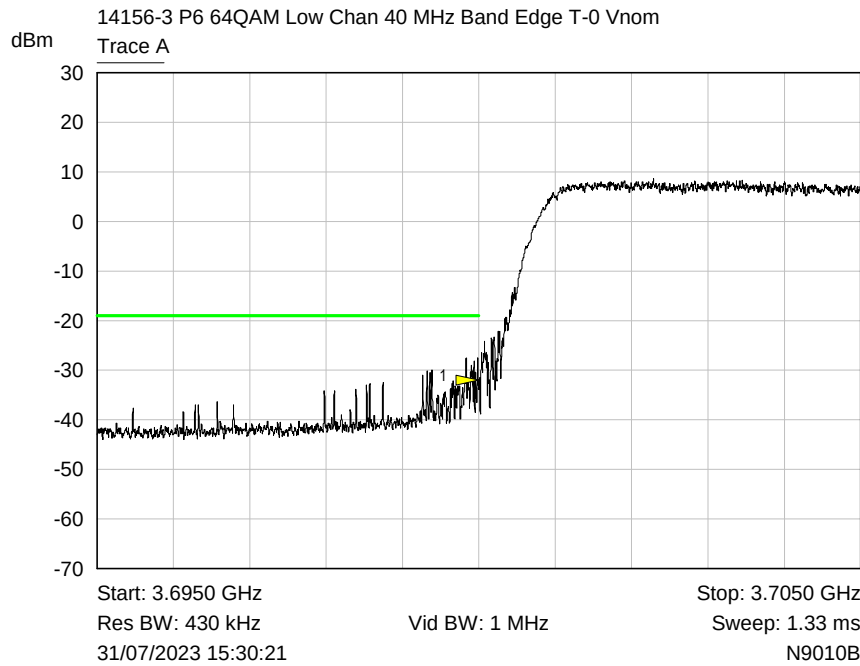
-20 Degrees High Chan



-10 Degrees Low Chan

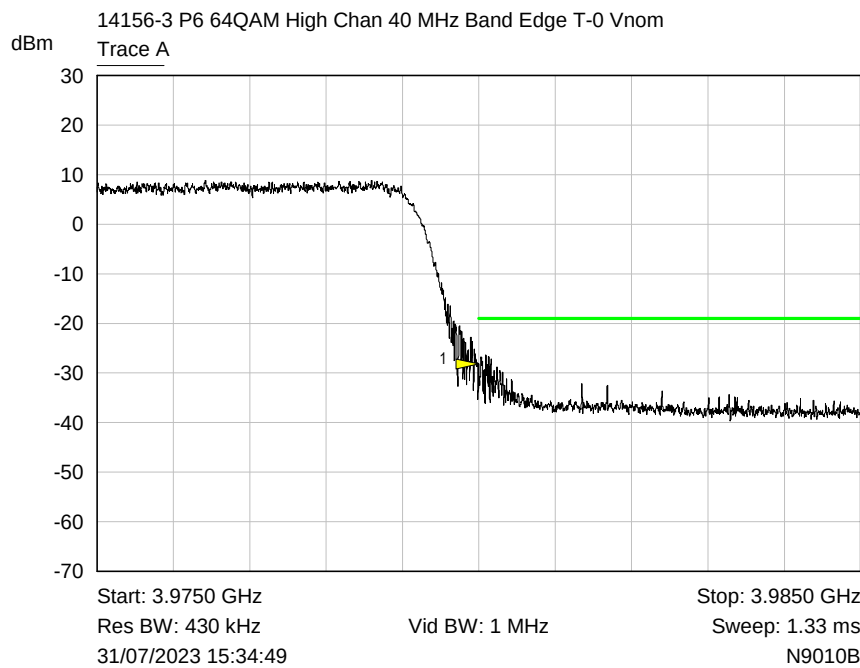


-10 Degrees High Chan



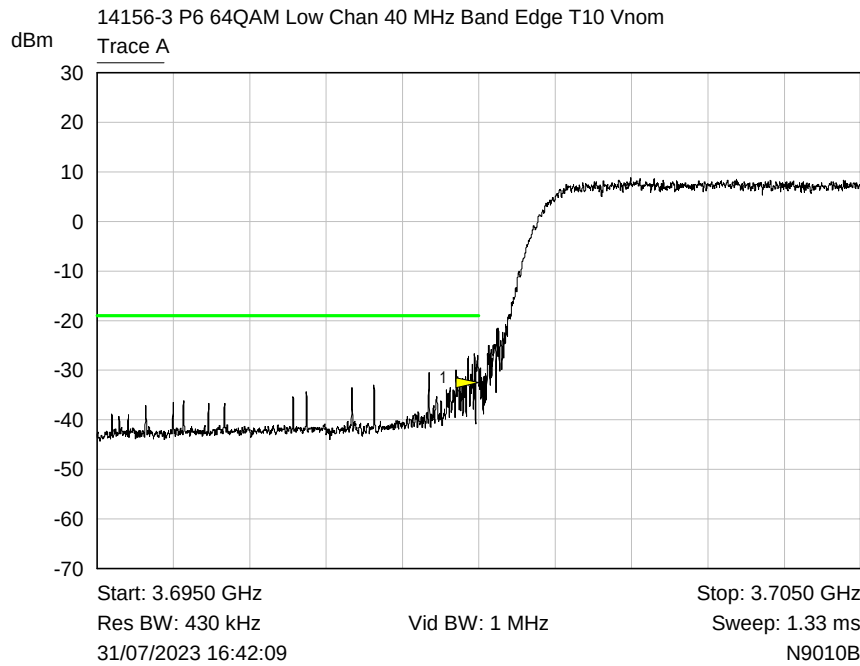
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-32.05 dBm	

0 Degrees Low Chan

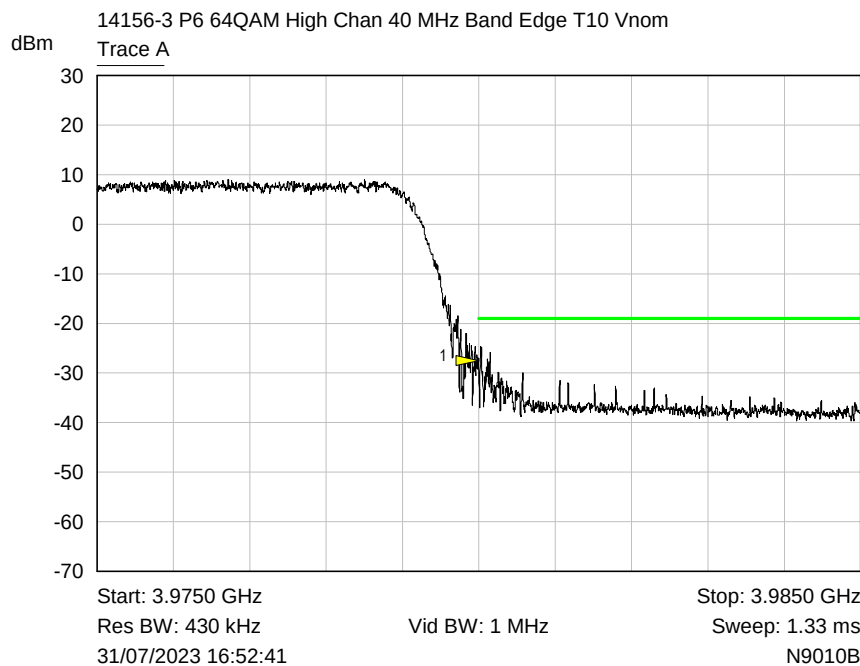


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-28.18 dBm	

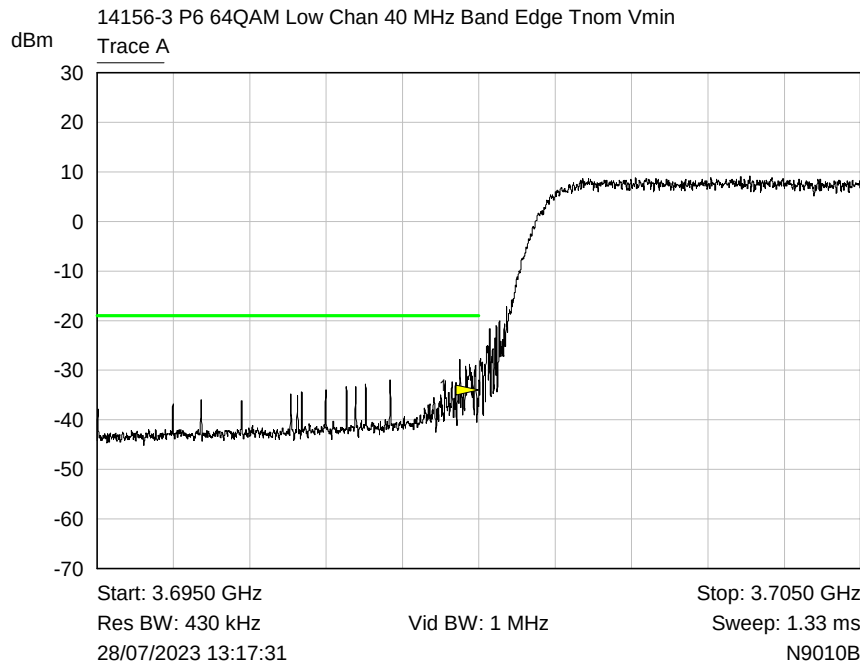
0 Degrees High Chan



+10 Degrees Low Chan

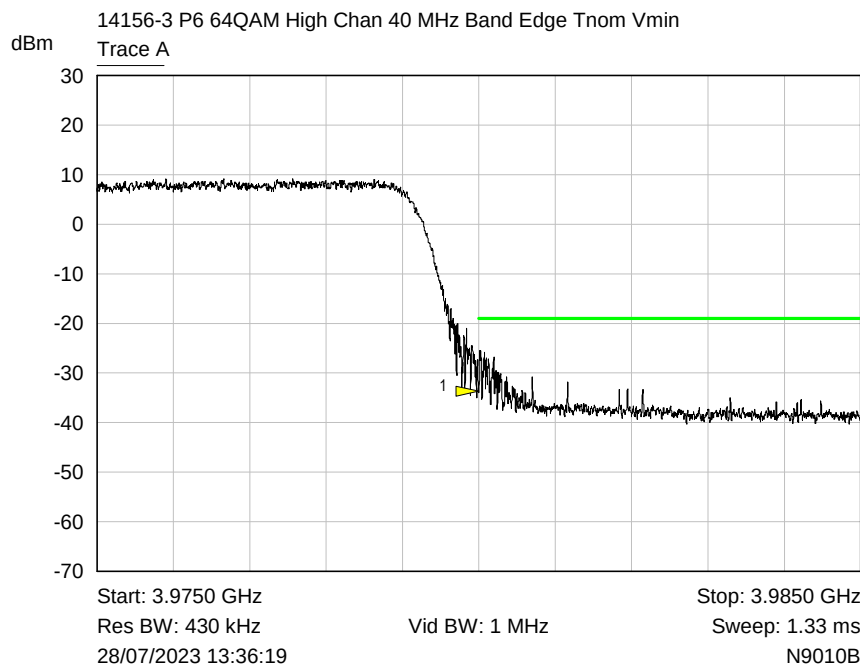


+10 Degrees High Chan



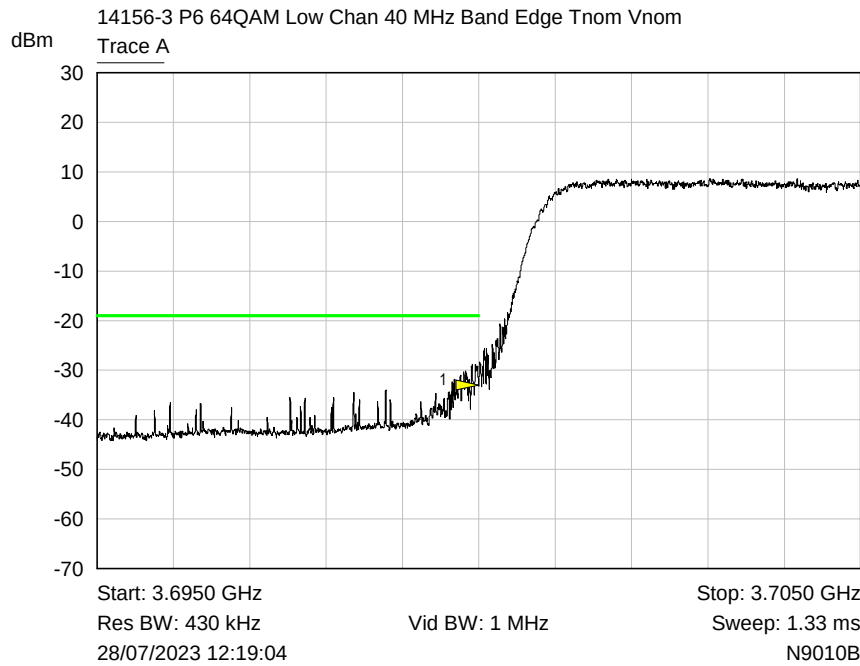
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-34.03 dBm	

+20 Degrees Min Voltage Low Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-33.71 dBm	

+20 Degrees Min Voltage High Chan



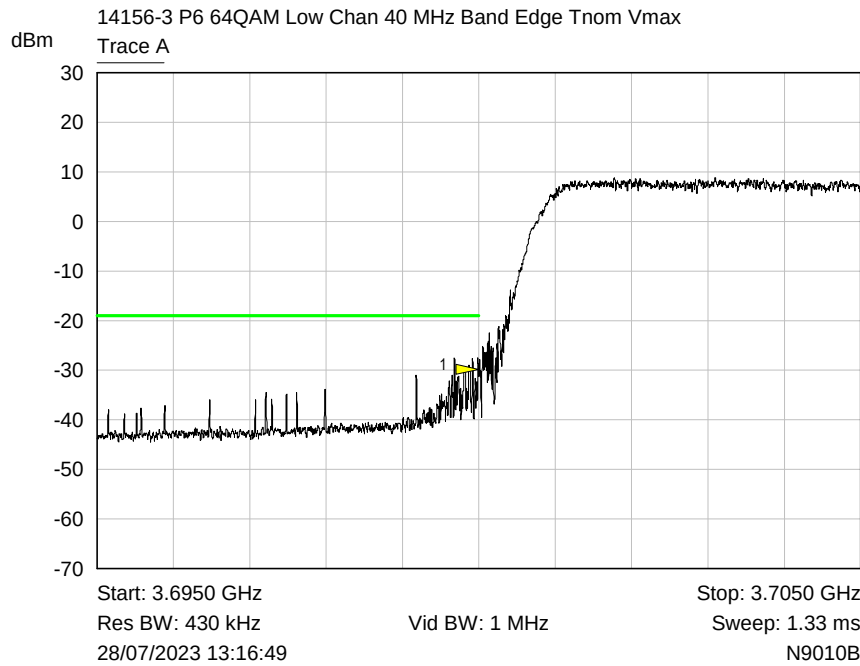
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-32.98 dBm	

+20 Degrees Nominal Voltage Low Chan



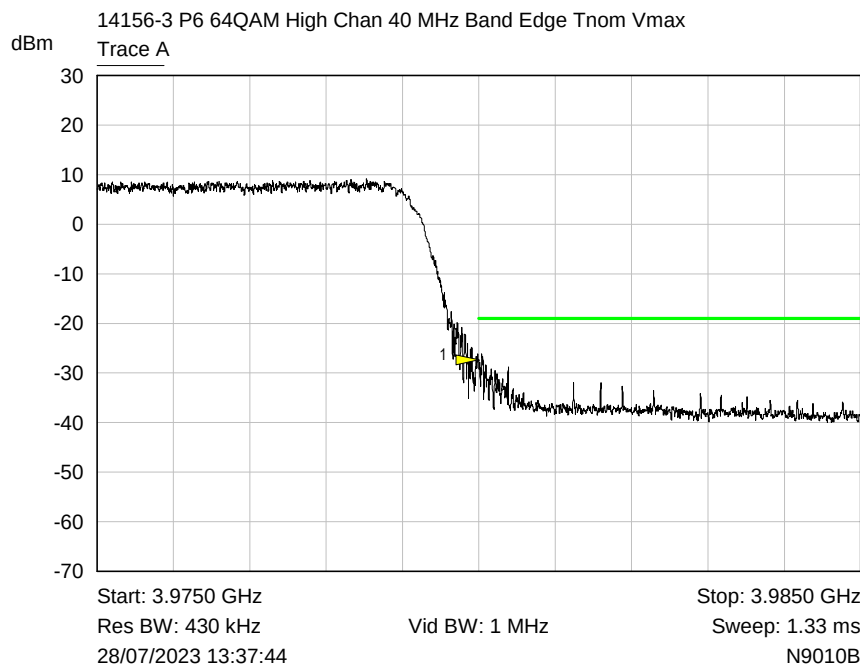
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-24.41 dBm	

+20 Degrees Nominal Voltage High Chan



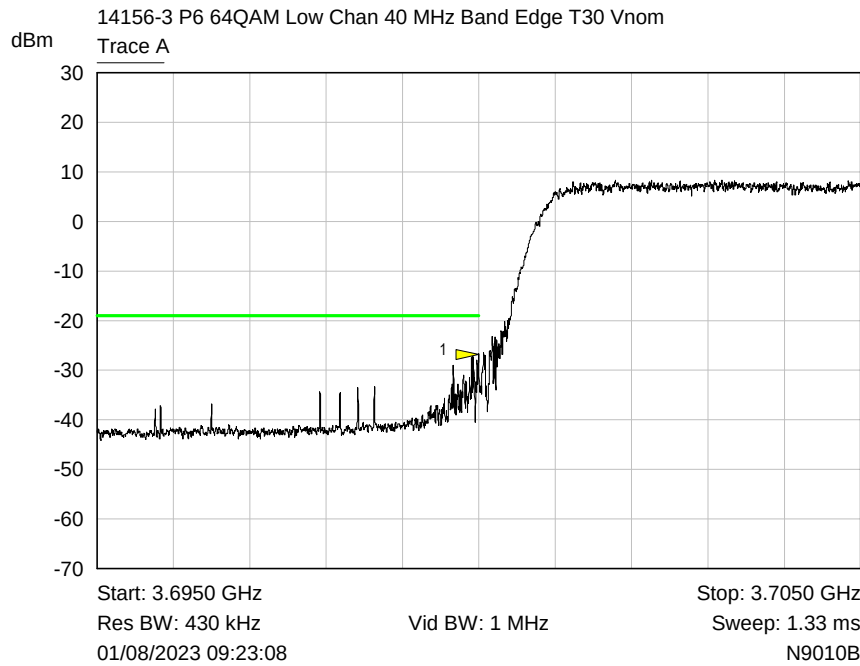
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-29.84 dBm	

+20 Degrees Max Voltage Low Chan

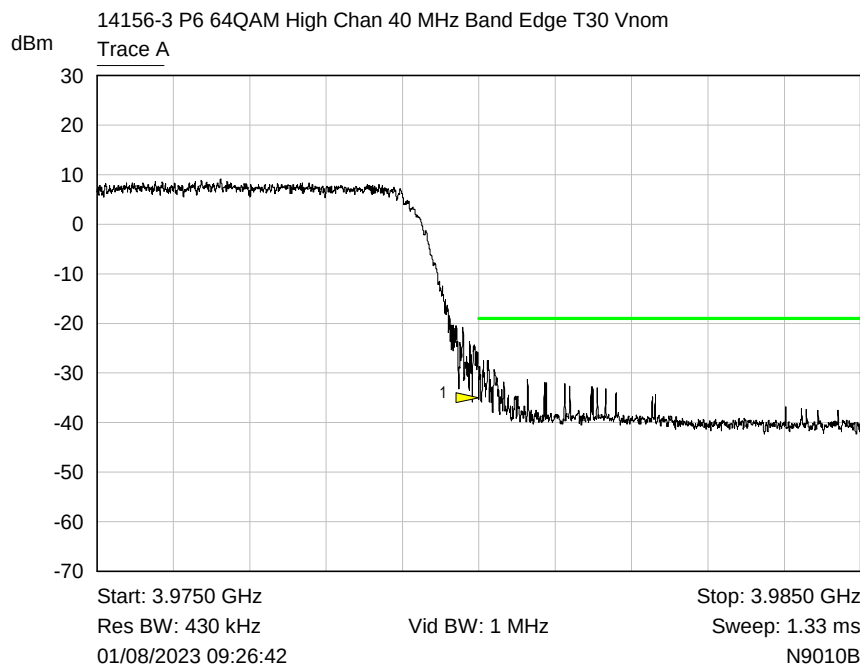


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-27.41 dBm	

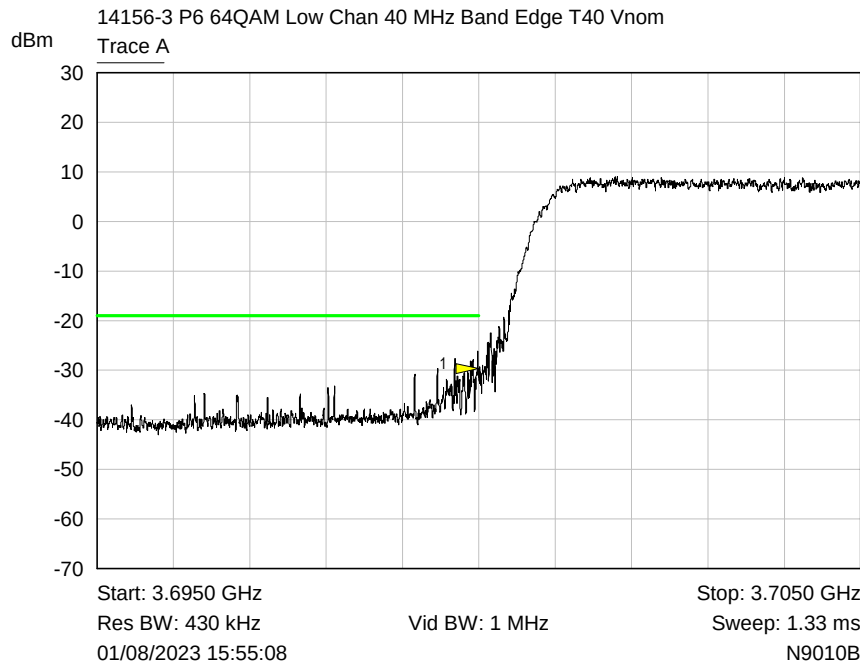
+20 Degrees Max Voltage High Chan



+30 Degrees Low Chan

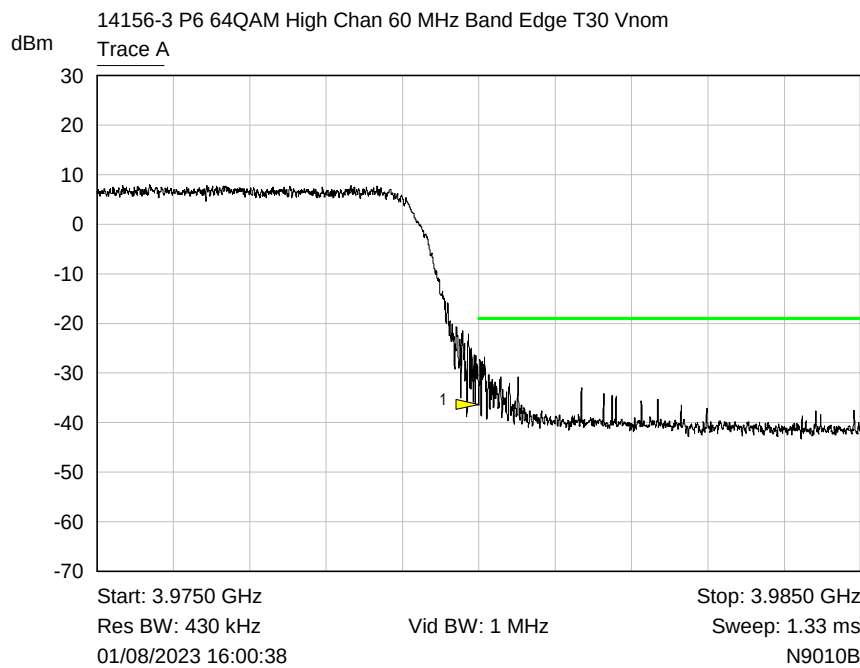


+30 Degrees High Chan



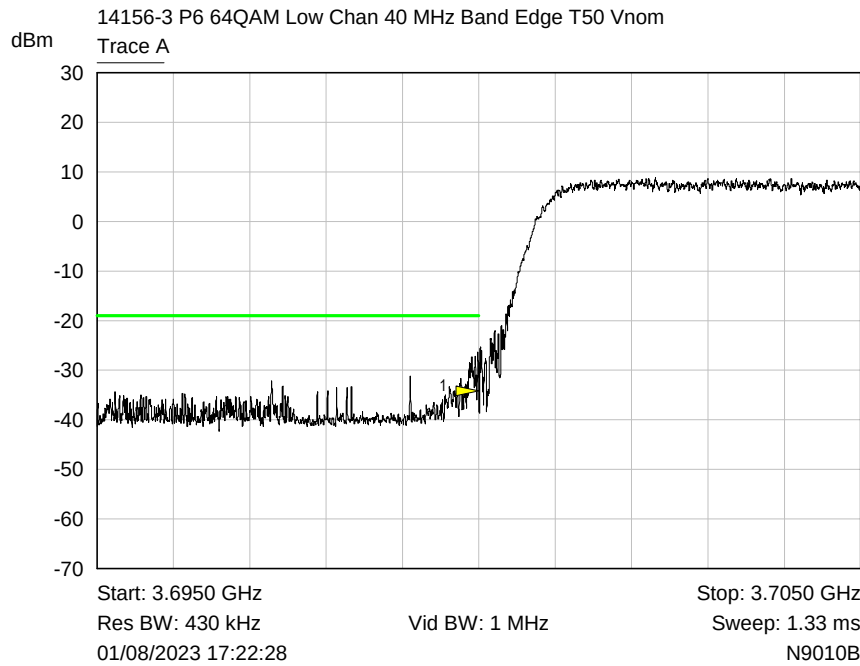
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-29.63 dBm	

+40 Degrees Low Chan

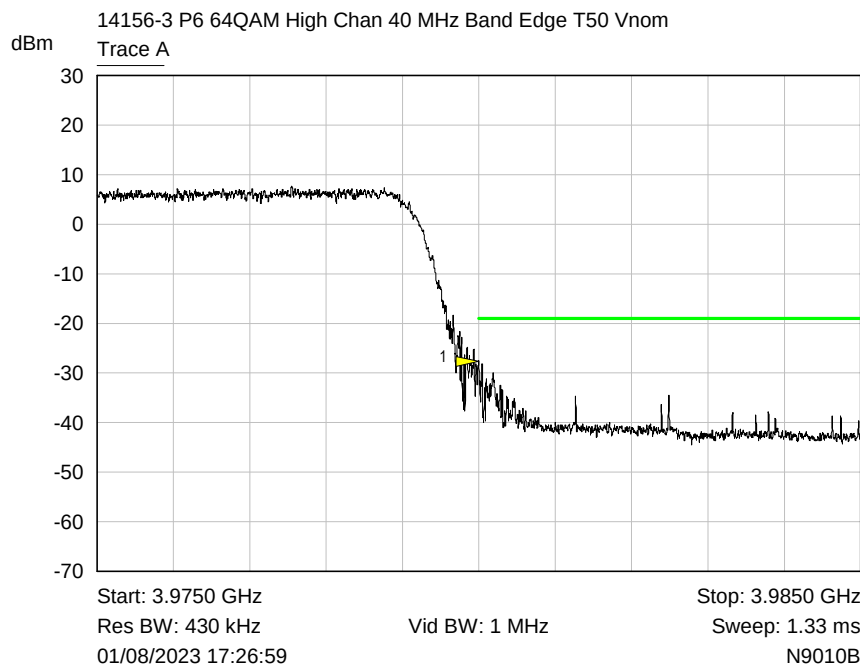


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-36.27 dBm	

+40 Degrees High Chan

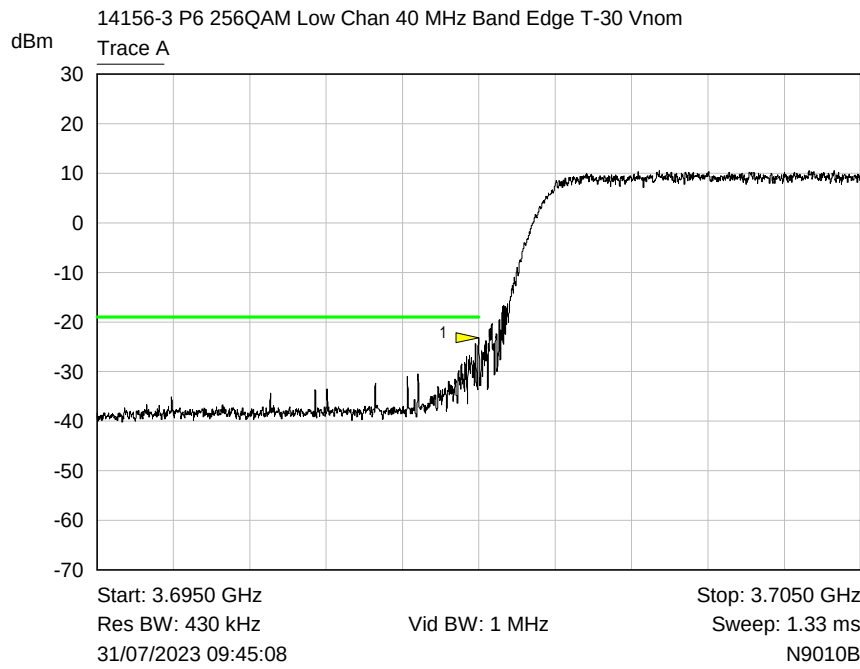


+50 Degrees Low Chan



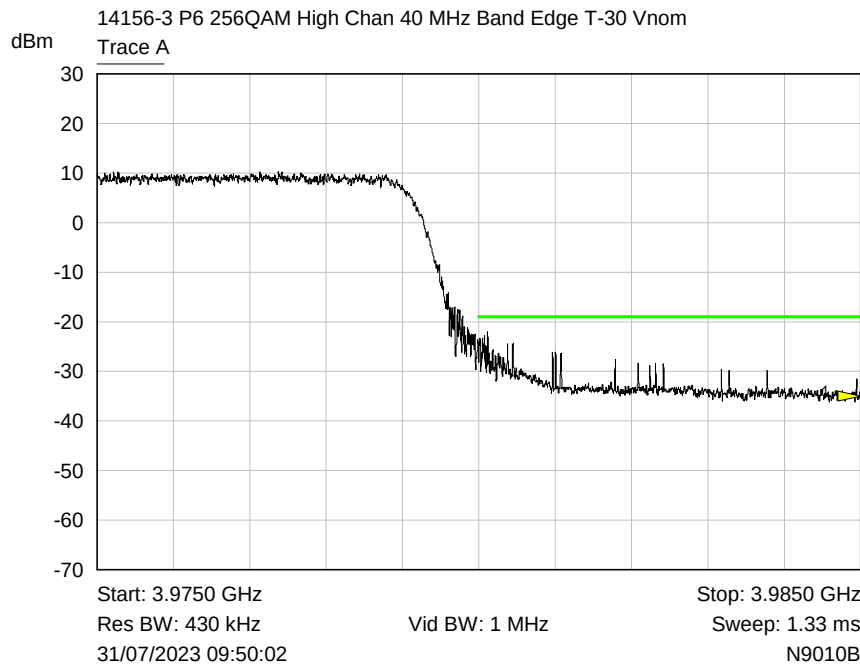
+50 Degrees High Chan

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing
40 MHz, 256 QAM



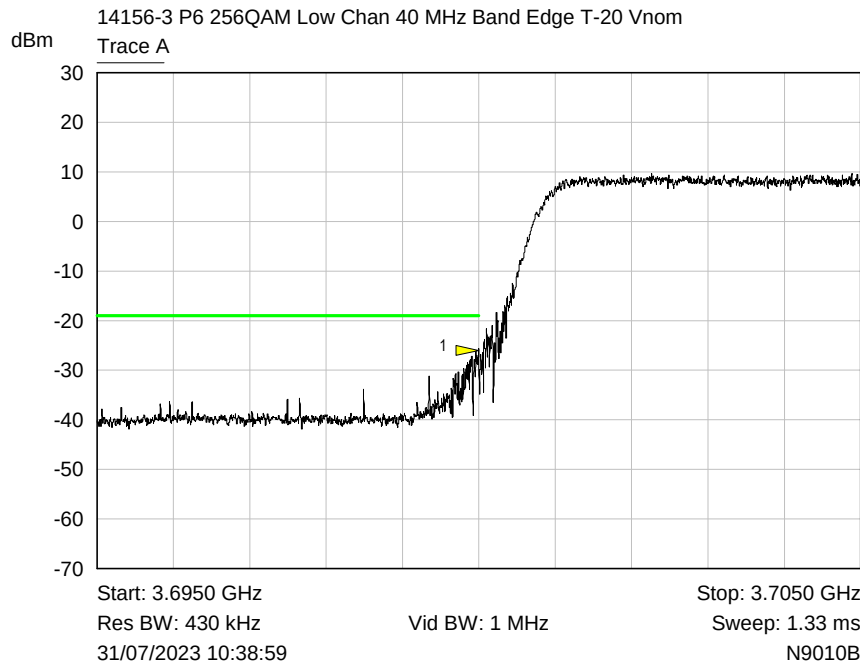
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-23.25 dBm	

-30 Degrees Low Chan

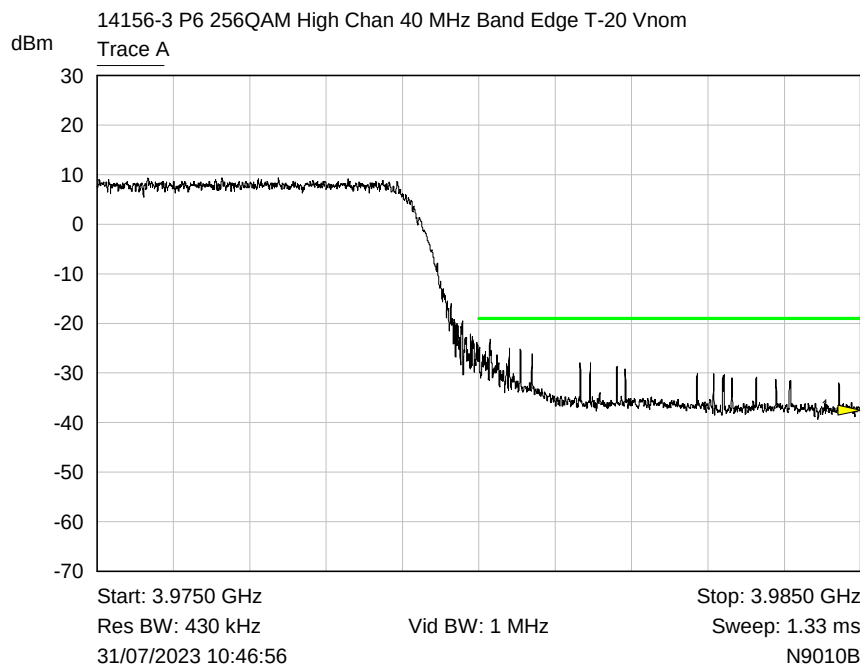


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9850 GHz	-34.99 dBm	

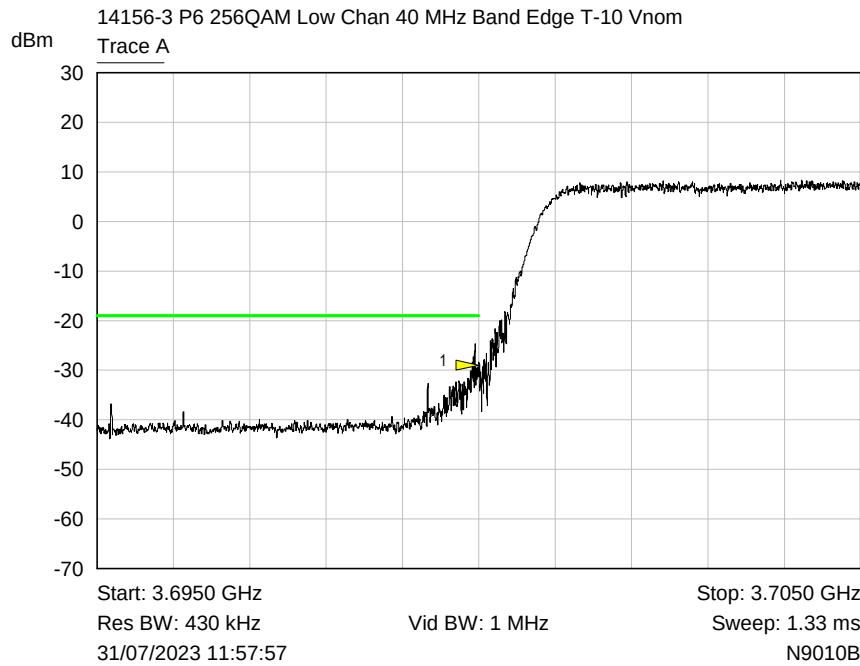
-30 Degrees High Chan



-20 Degrees Low Chan



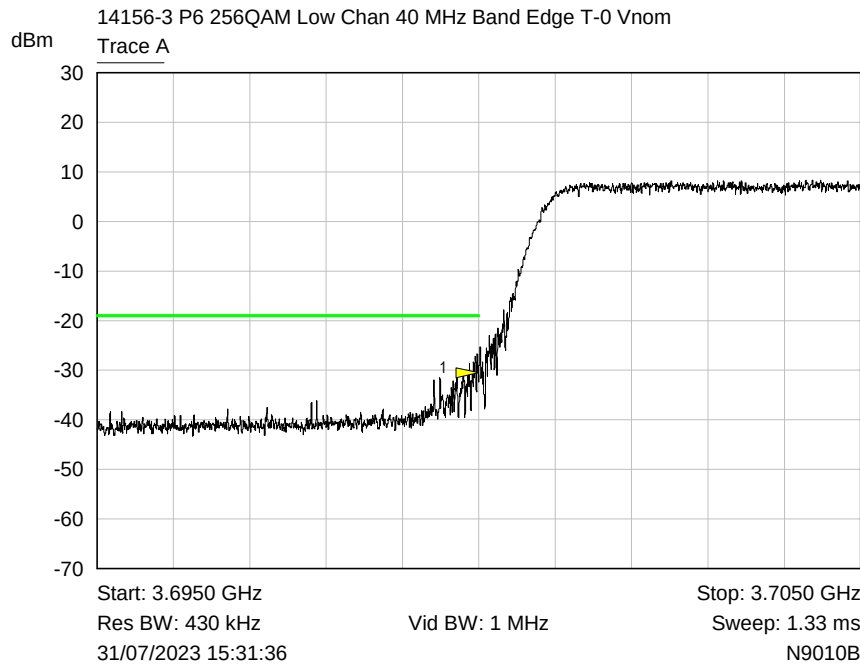
-20 Degrees High Chan



-10 Degrees Low Chan

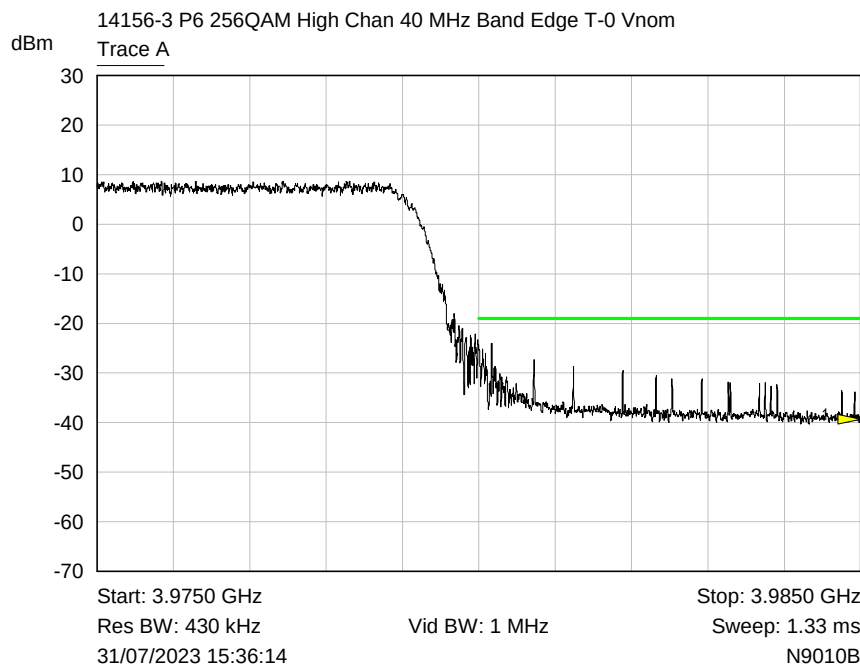


-10 Degrees High Chan



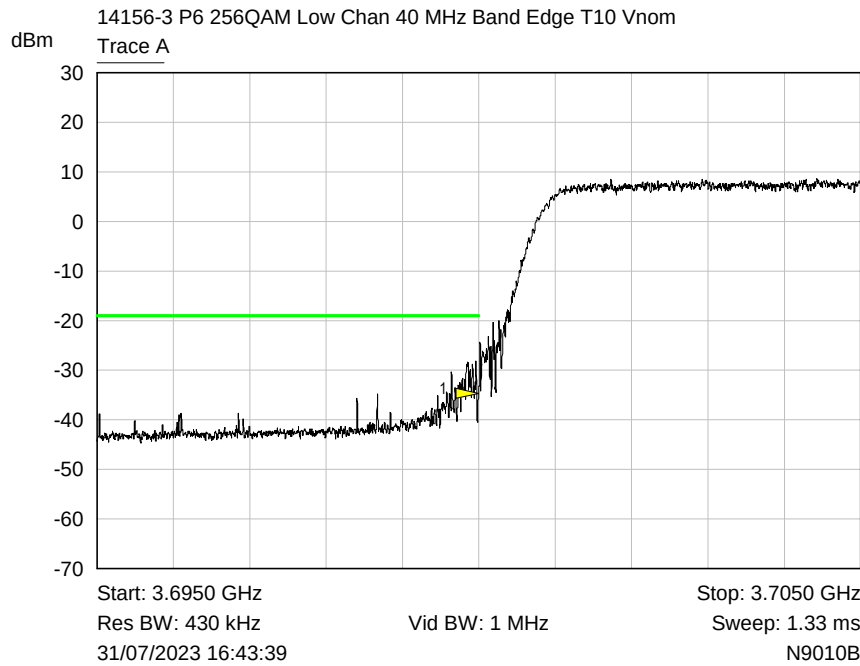
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-30.53 dBm	

0 Degrees Low Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9850 GHz	-39.26 dBm	

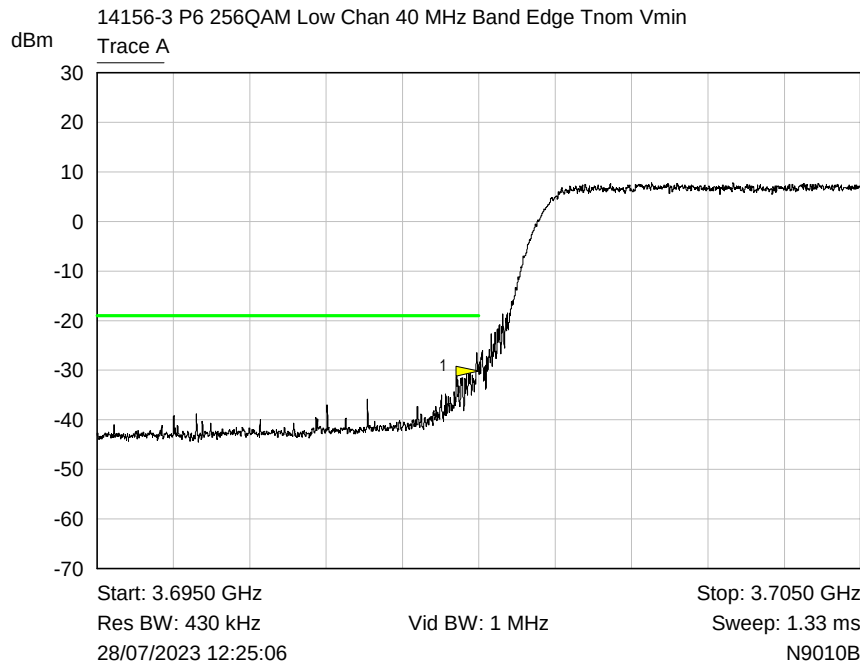
0 Degrees High Chan



+10 Degrees Low Chan

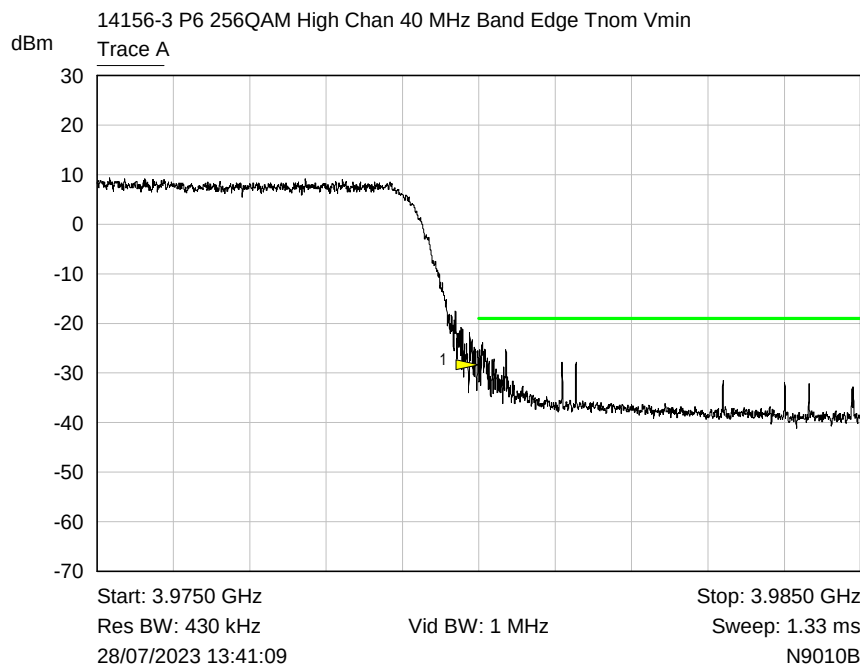


+10 Degrees High Chan



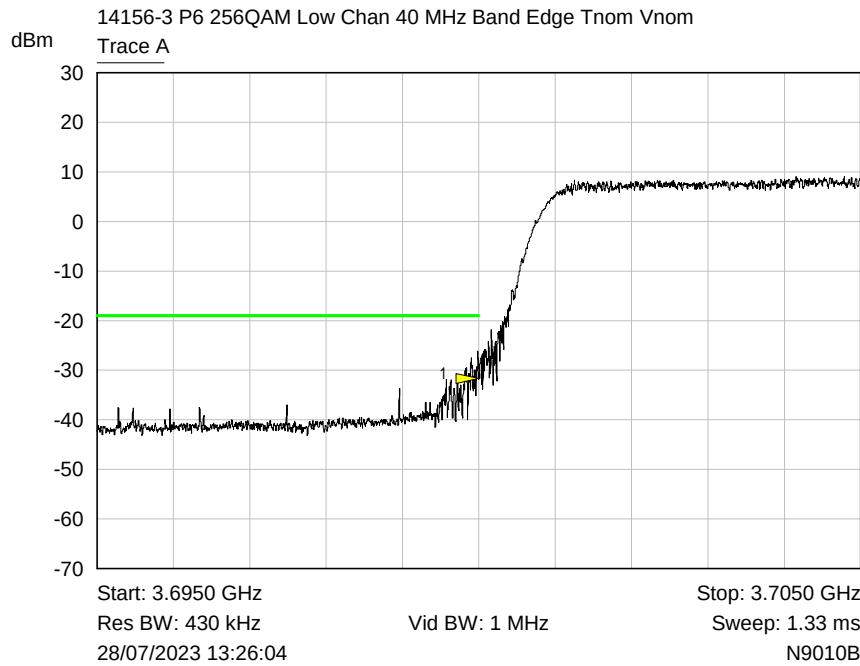
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-30.09 dBm	

+20 Degrees Min Voltage Low Chan

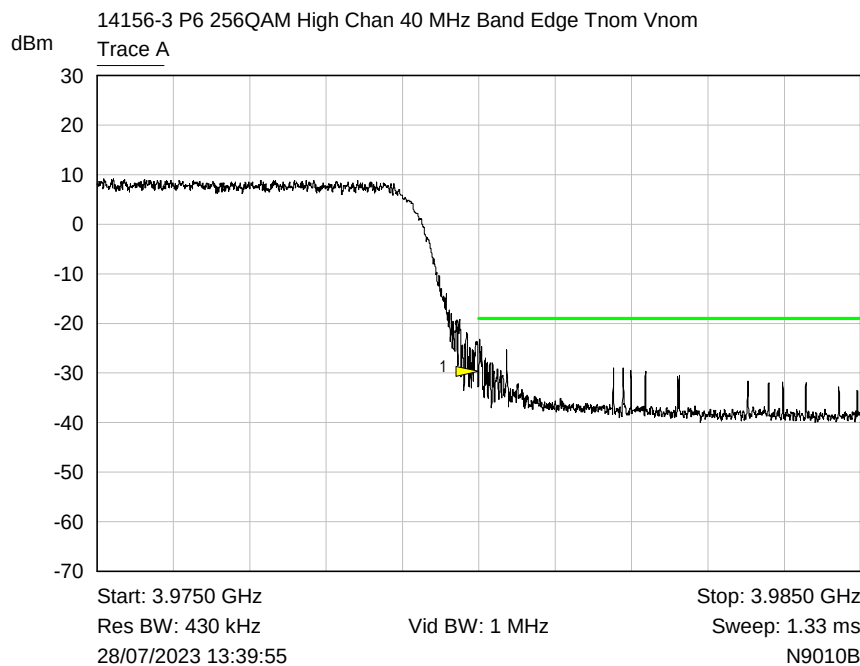


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-28.40 dBm	

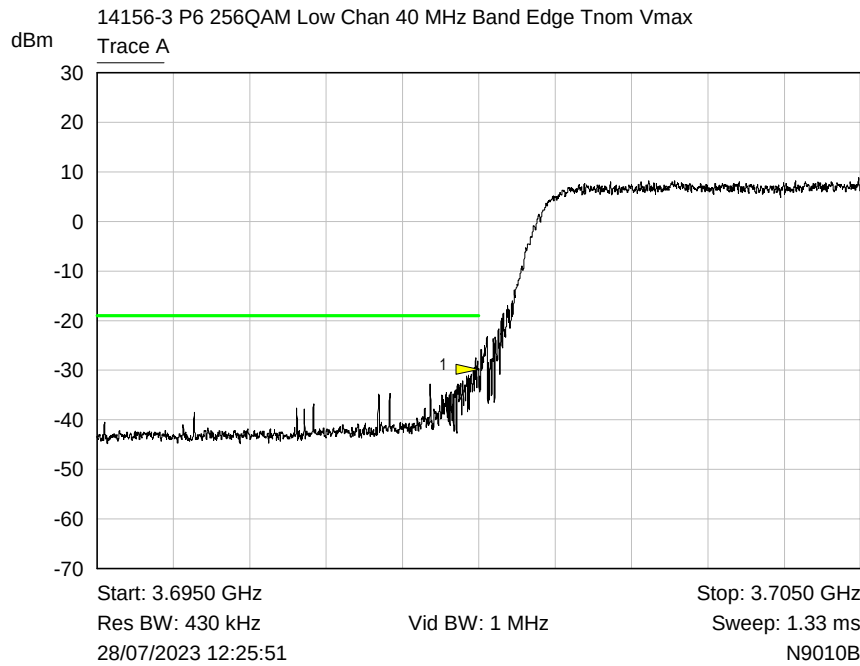
+20 Degrees Min Voltage High Chan



+20 Degrees Nominal Voltage Low Chan



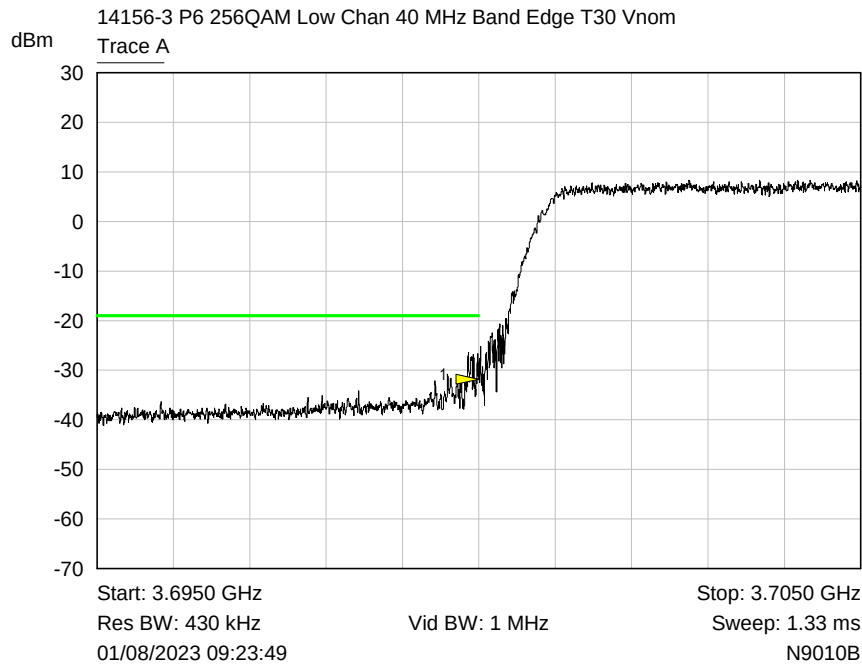
+20 Degrees Nominal Voltage High Chan



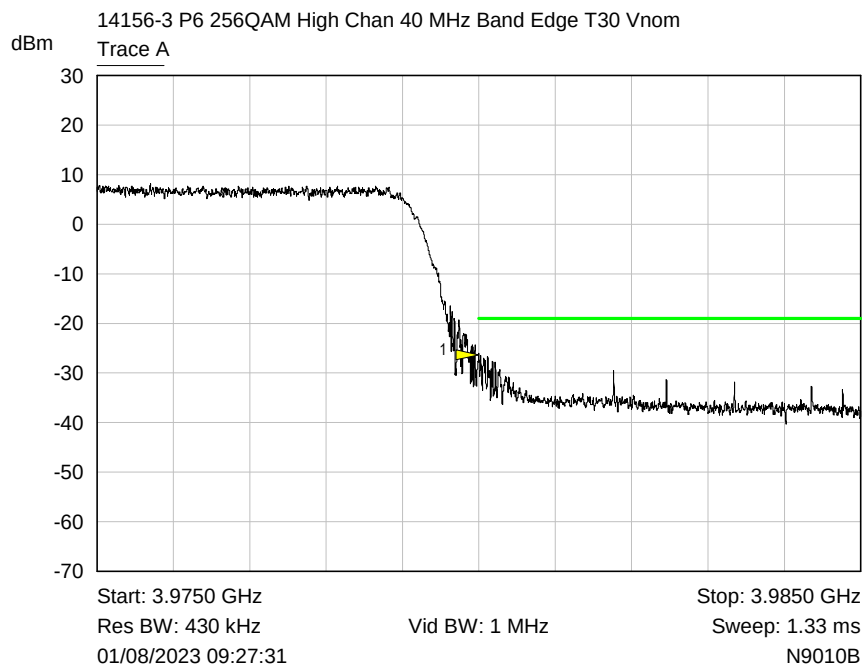
+20 Degrees Max Voltage Low Chan



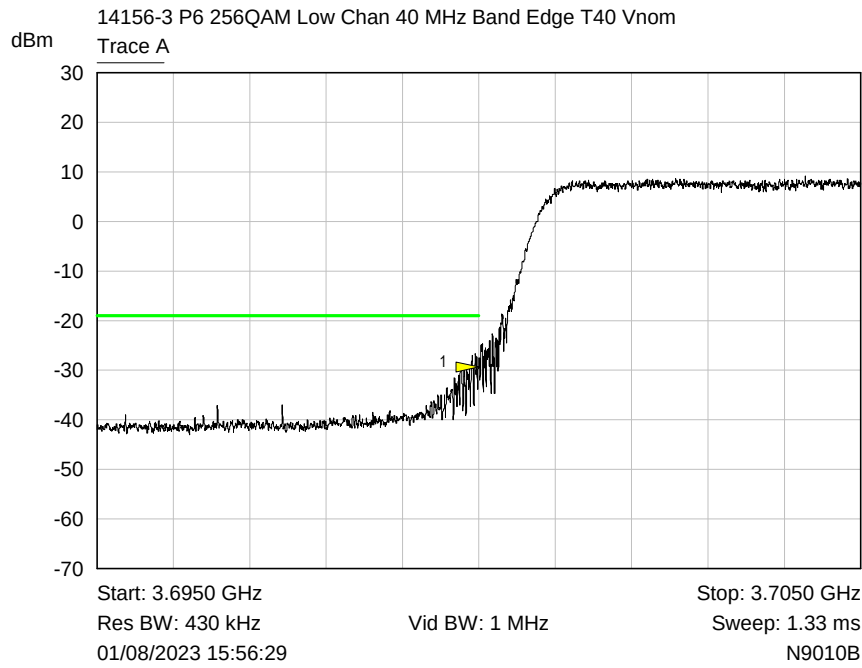
+20 Degrees Max Voltage High Chan



+30 Degrees Low Chan

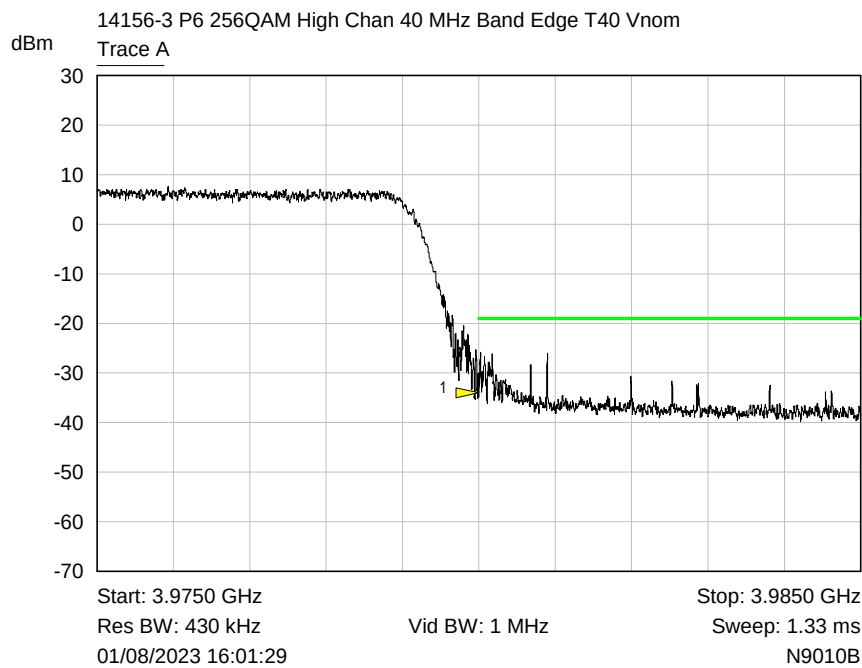


+30 Degrees High Chan



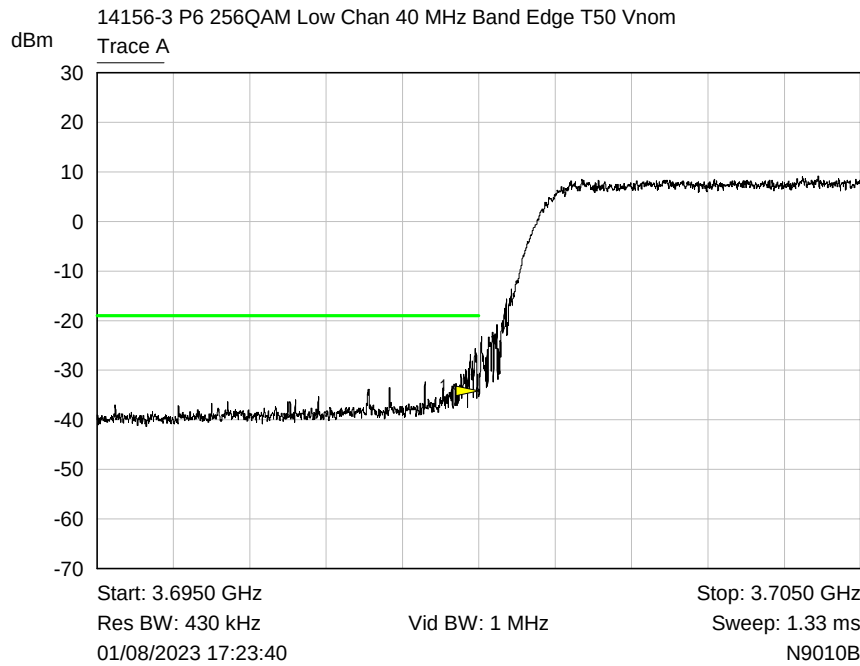
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-29.33 dBm	

+40 Degrees Low Chan



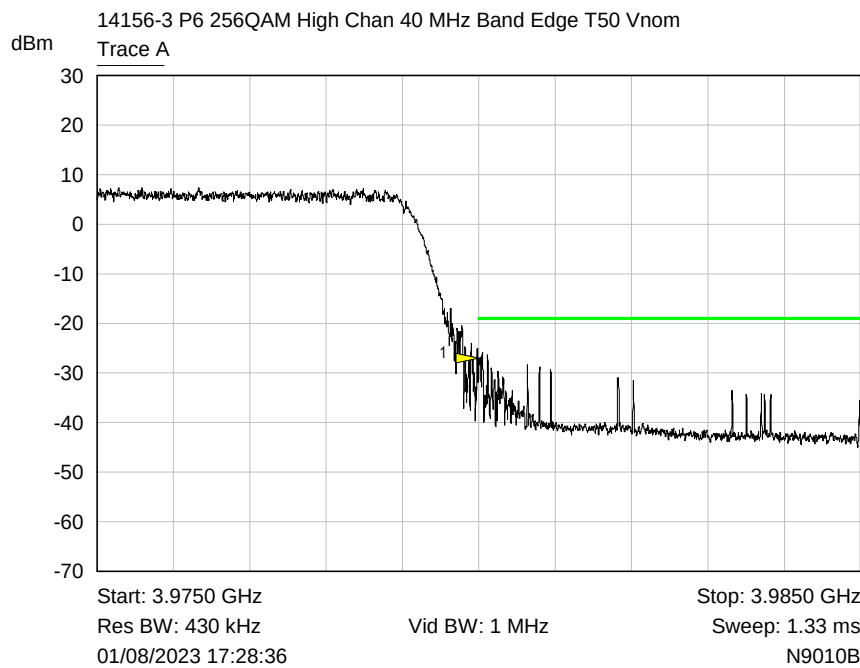
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-33.98 dBm	

+40 Degrees High Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-34.11 dBm	

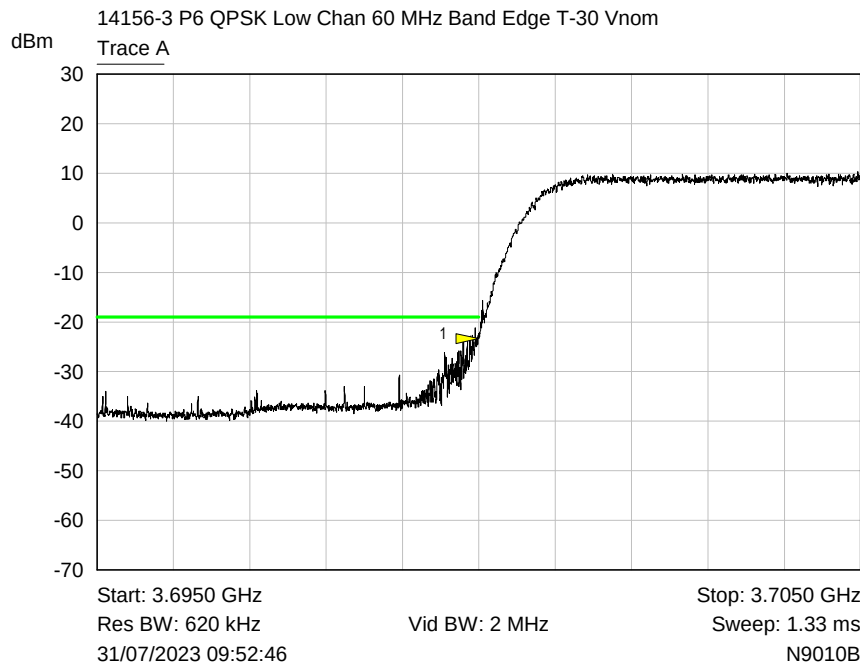
+50 Degrees Low Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-27.00 dBm	

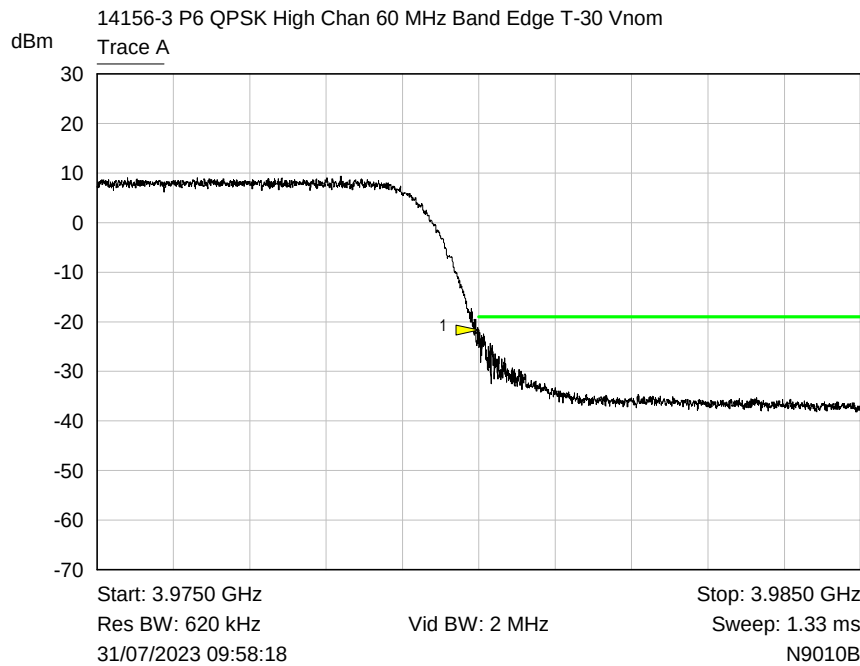
+50 Degrees High Chan

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing
60 MHz, QPSK



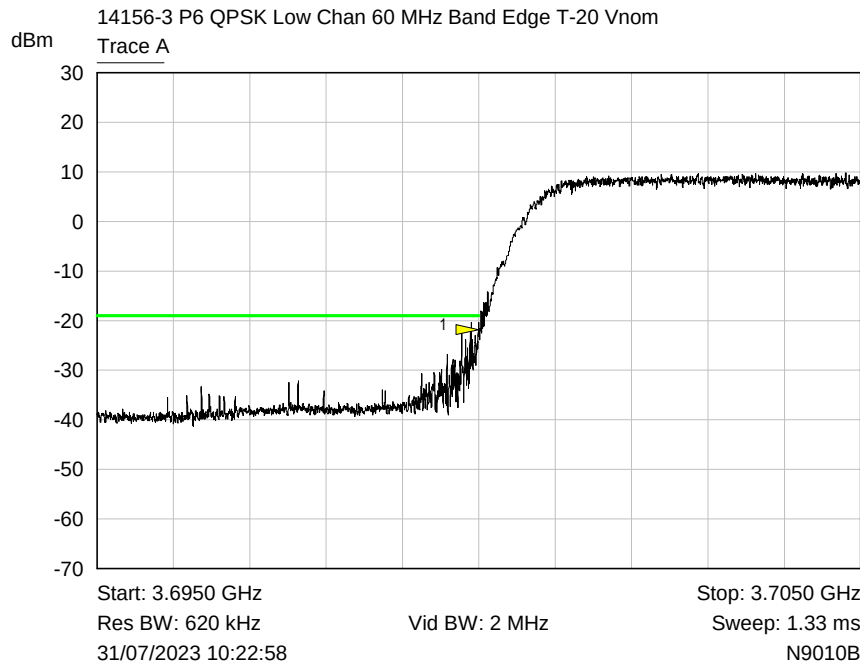
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-23.41 dBm	

-30 Degrees Low Chan

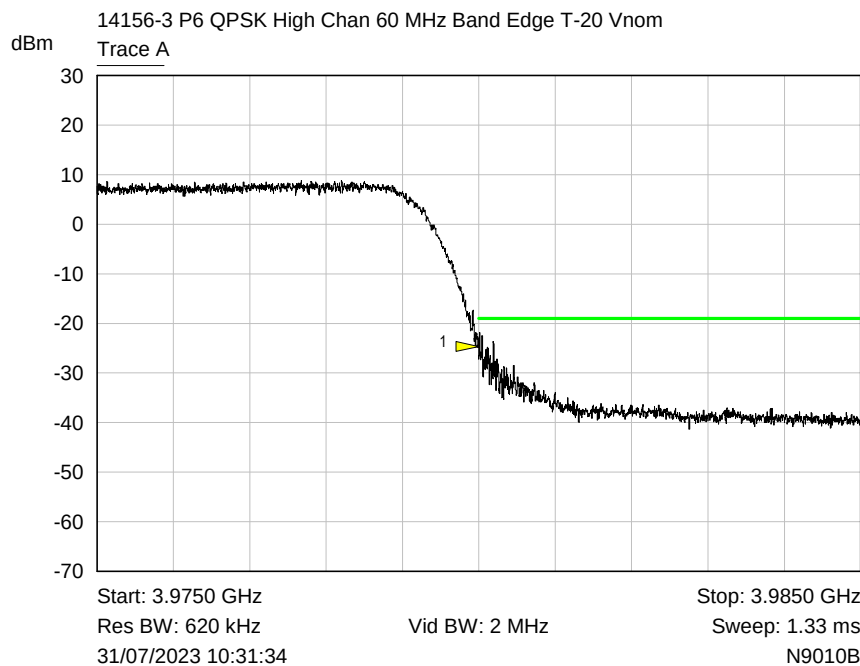


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-21.73 dBm	

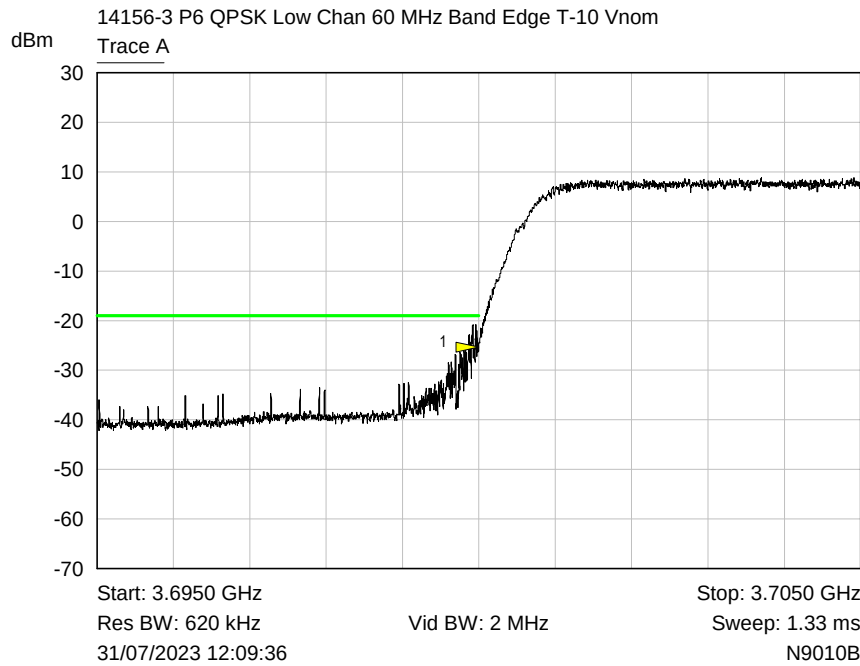
-30 Degrees High Chan



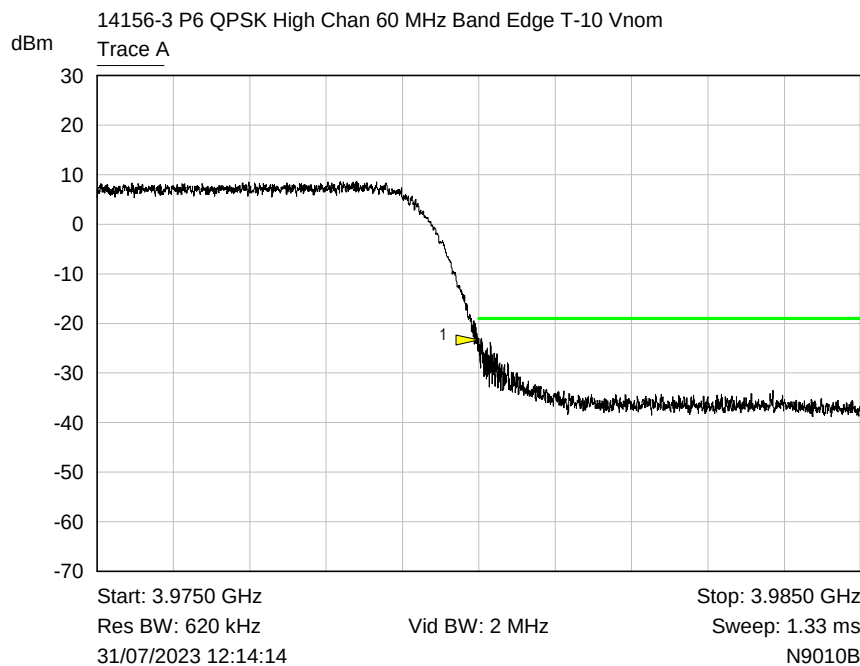
-20 Degrees Low Chan



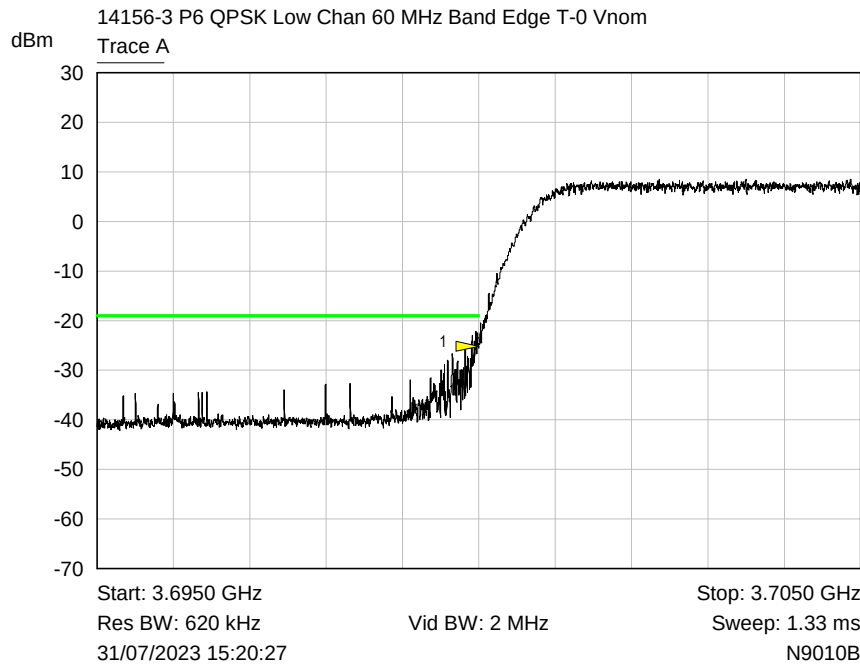
-20 Degrees High Chan



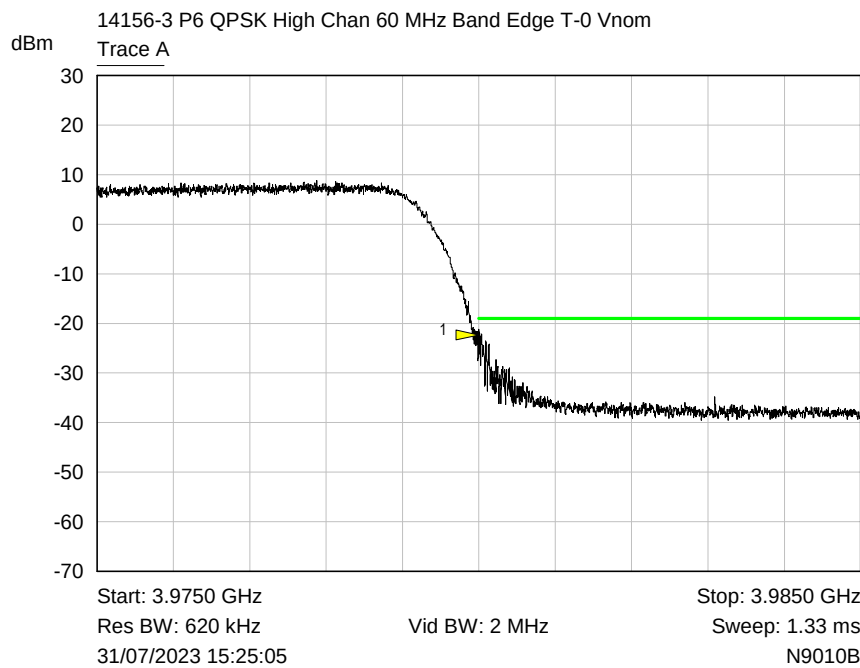
-10 Degrees Low Chan



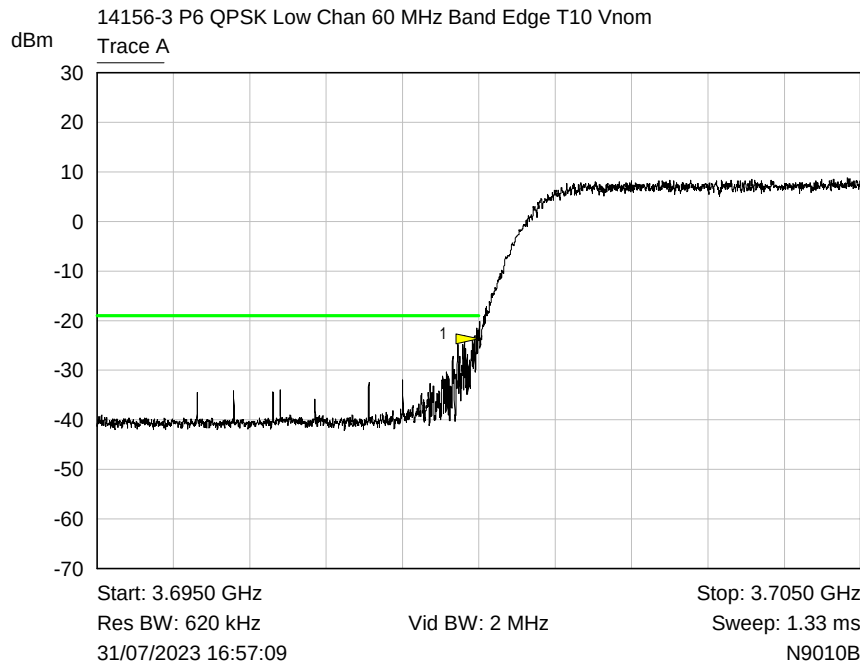
-10 Degrees High Chan



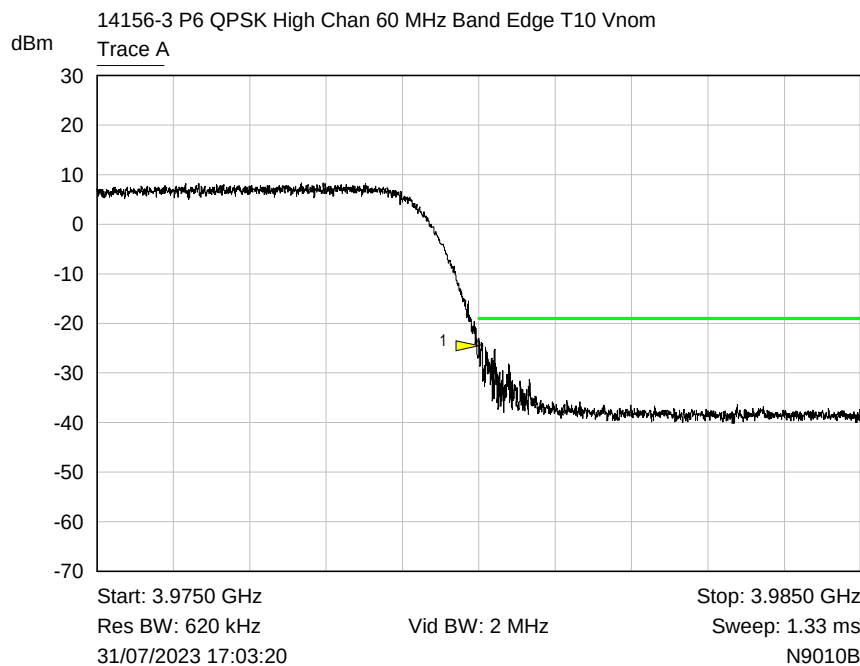
0 Degrees Low Chan



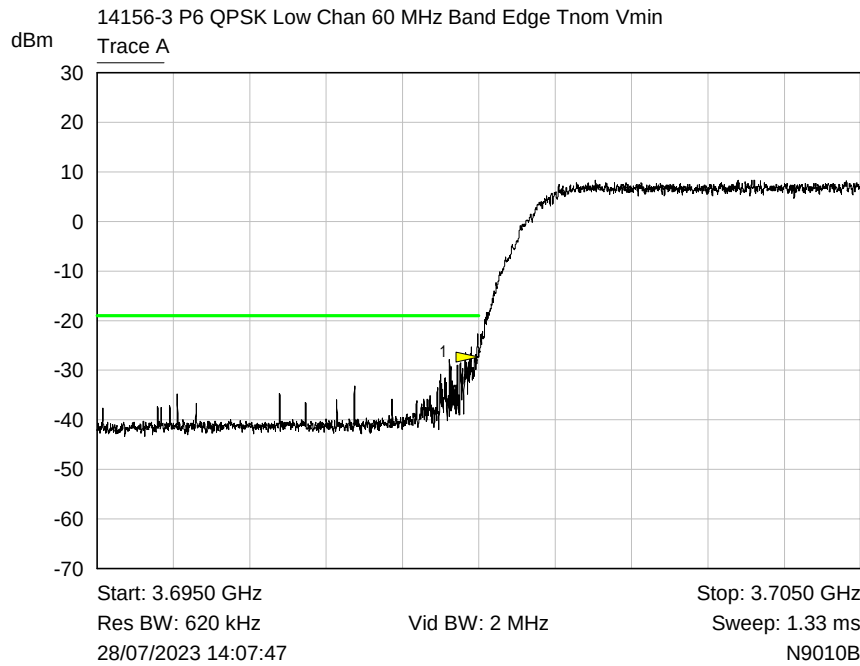
0 Degrees High Chan



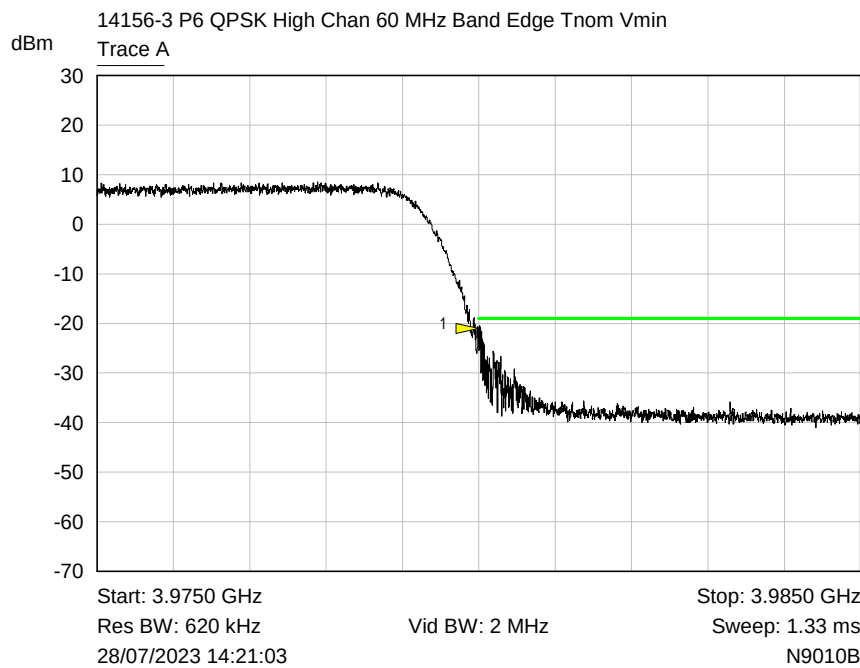
+10 Degrees Low Chan



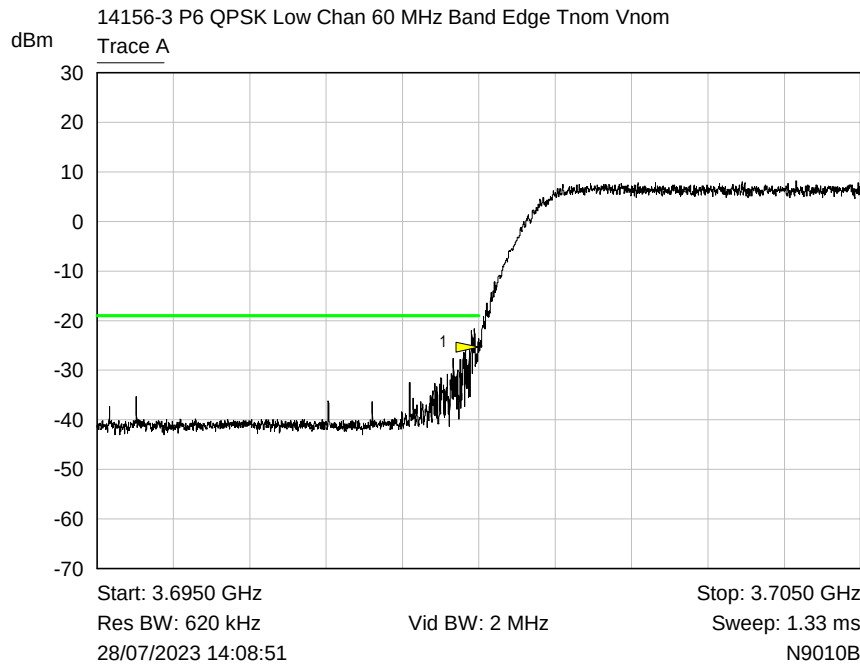
+10 Degrees High Chan



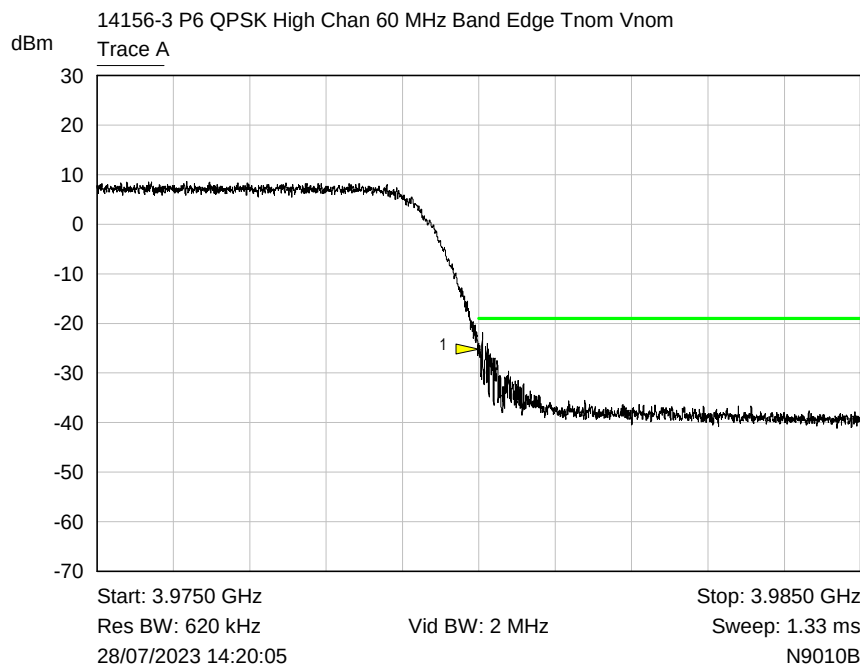
+20 Degrees Min Voltage Low Chan



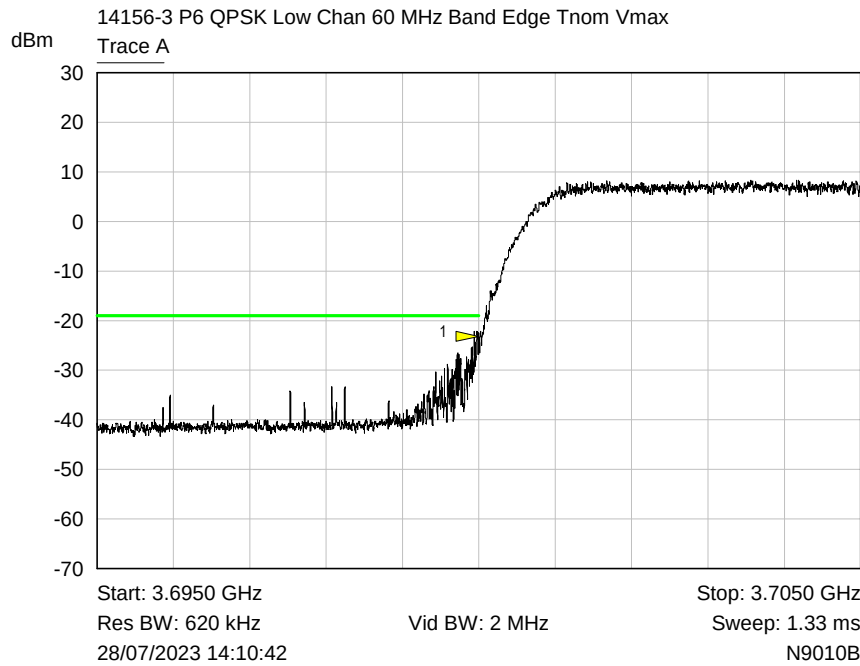
+20 Degrees Min Voltage High Chan



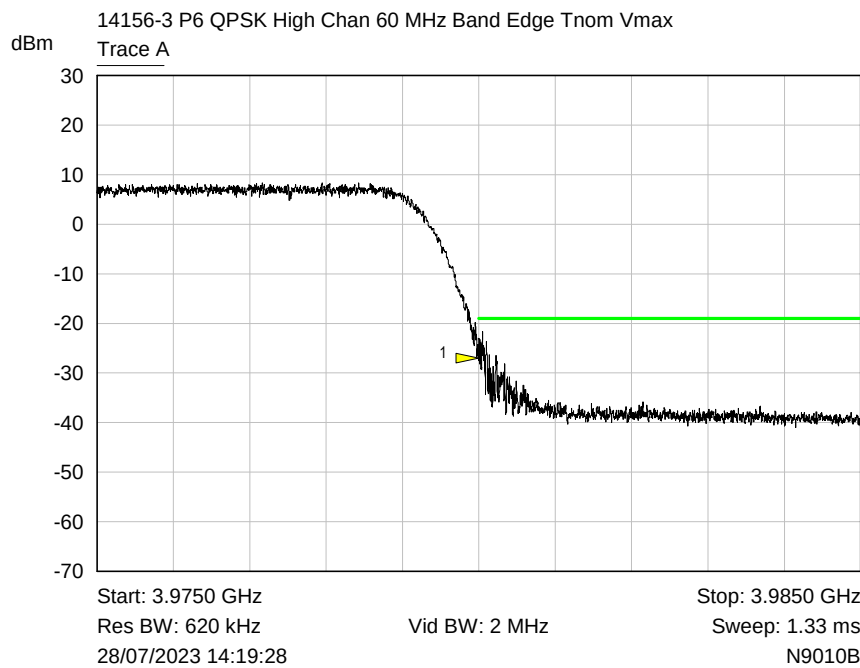
+20 Degrees Nominal Voltage Low Chan



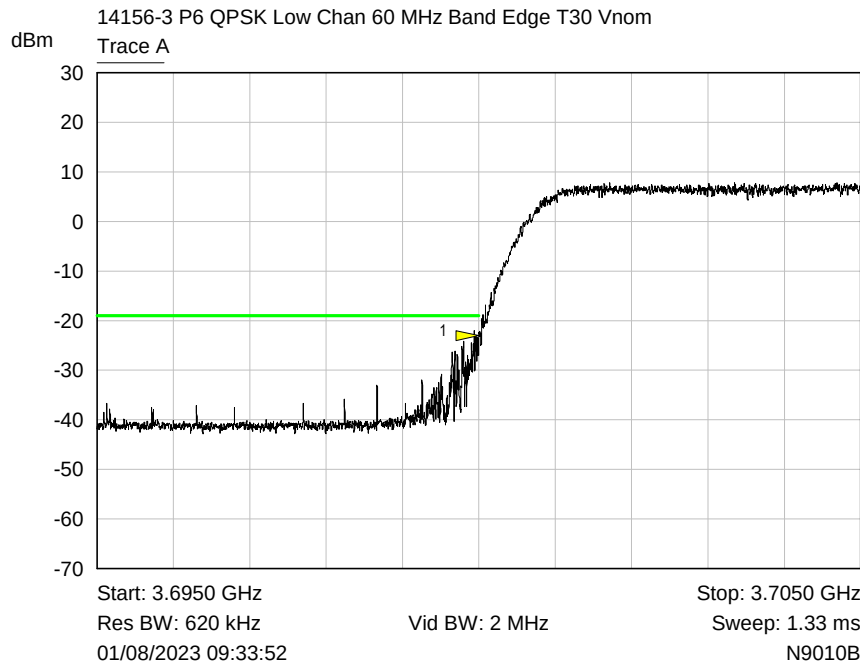
+20 Degrees Nominal Voltage High Chan



+20 Degrees Max Voltage Low Chan

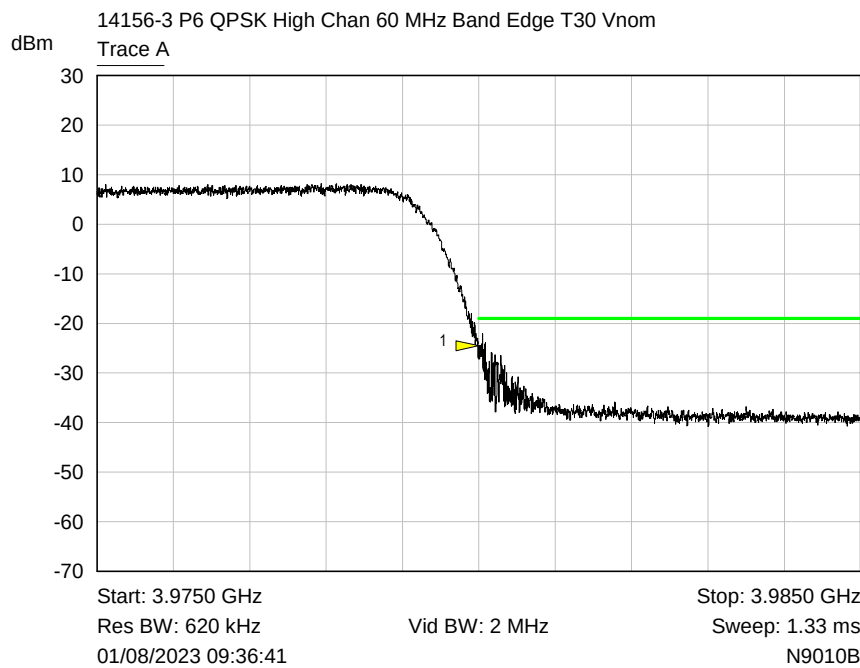


+20 Degrees Max Voltage High Chan



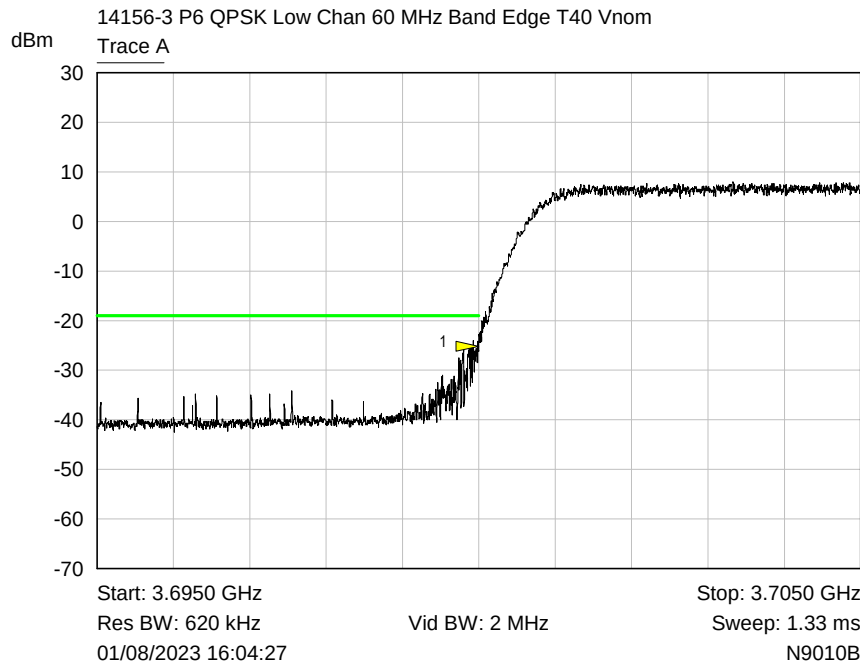
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-22.98 dBm	

+30 Degrees Low Chan



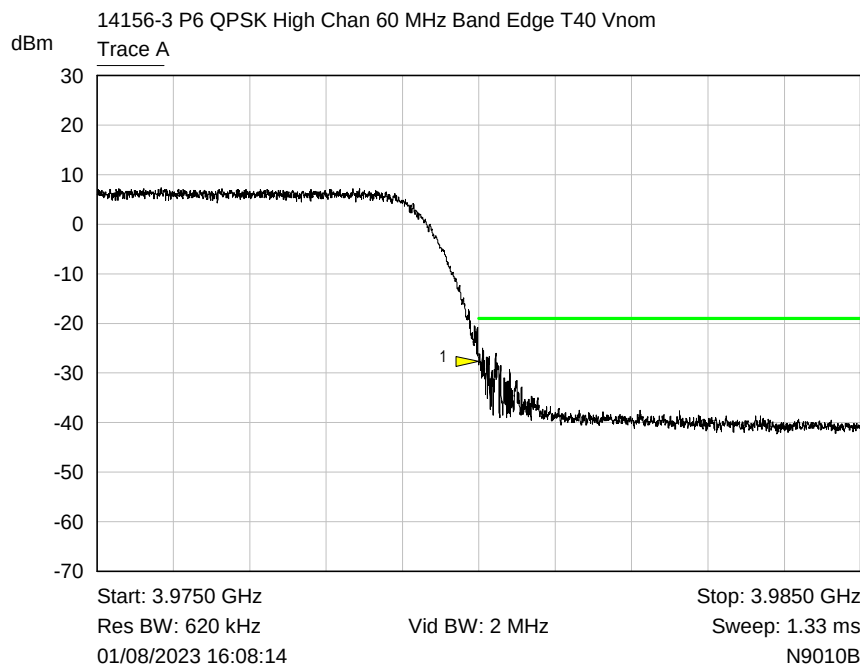
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-24.46 dBm	

+30 Degrees High Chan



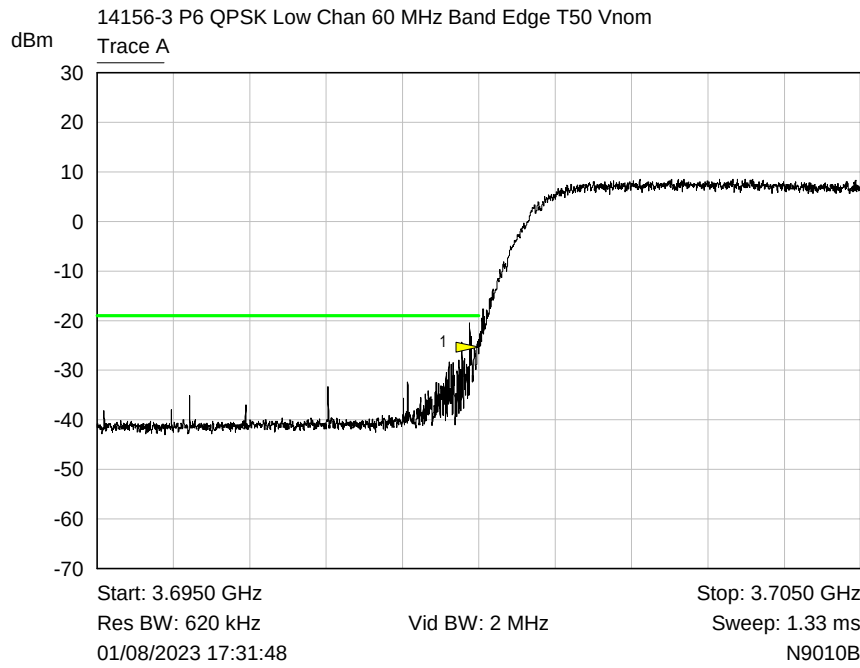
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-25.22 dBm	

+40 Degrees Low Chan



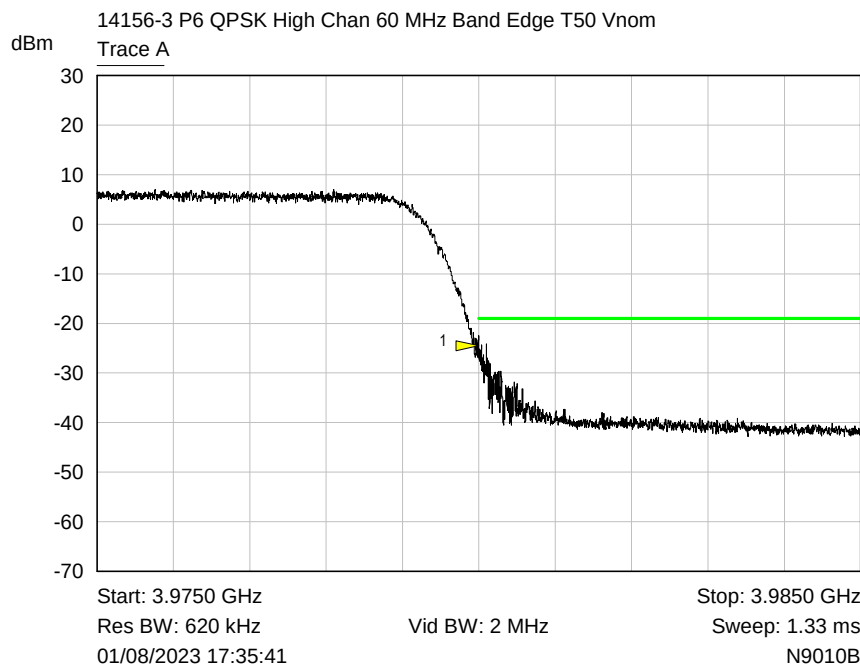
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-27.72 dBm	

+40 Degrees High Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-25.26 dBm	

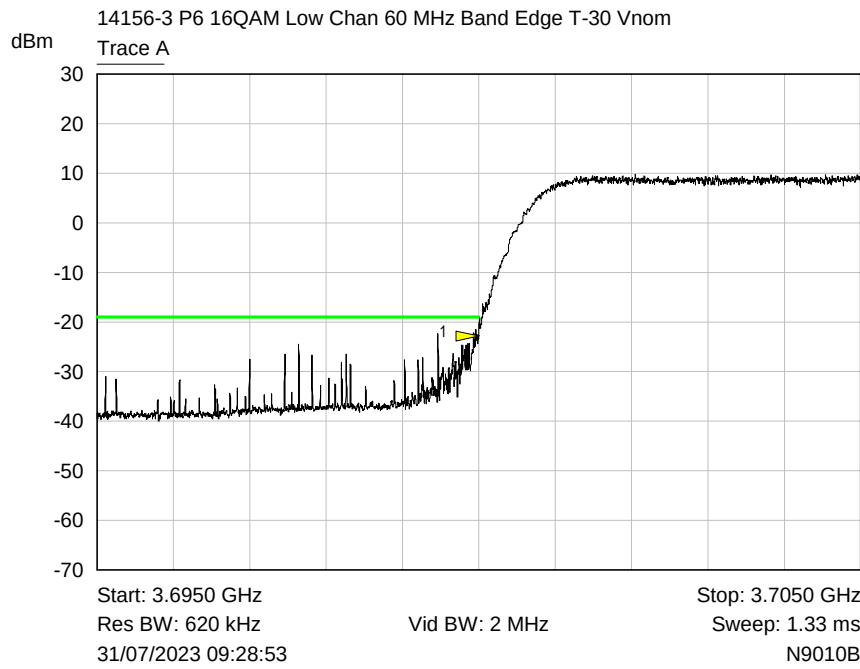
+50 Degrees Low Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-24.47 dBm	

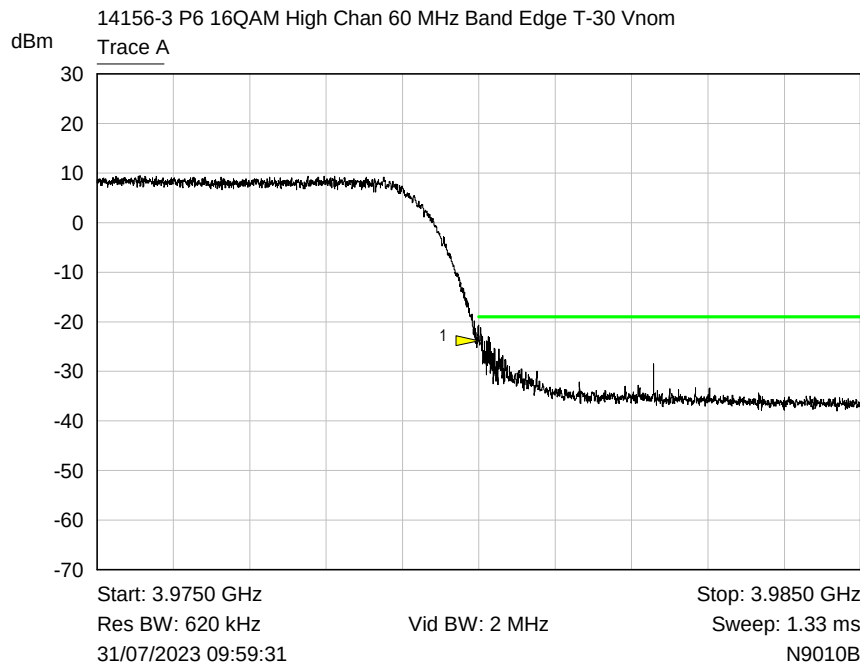
+50 Degrees High Chan

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing
60 MHz, 16 QAM



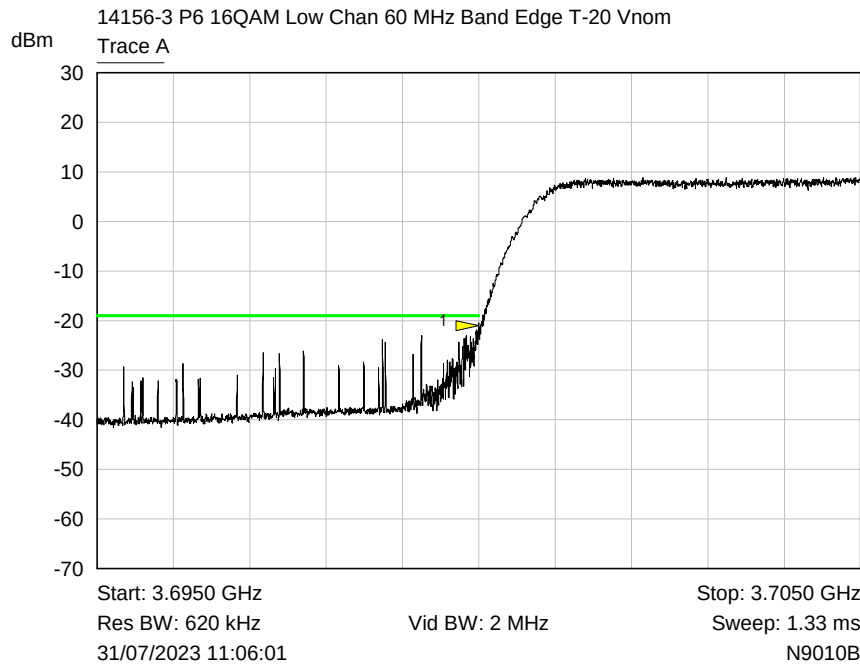
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-22.82 dBm	

-30 Degrees Low Chan

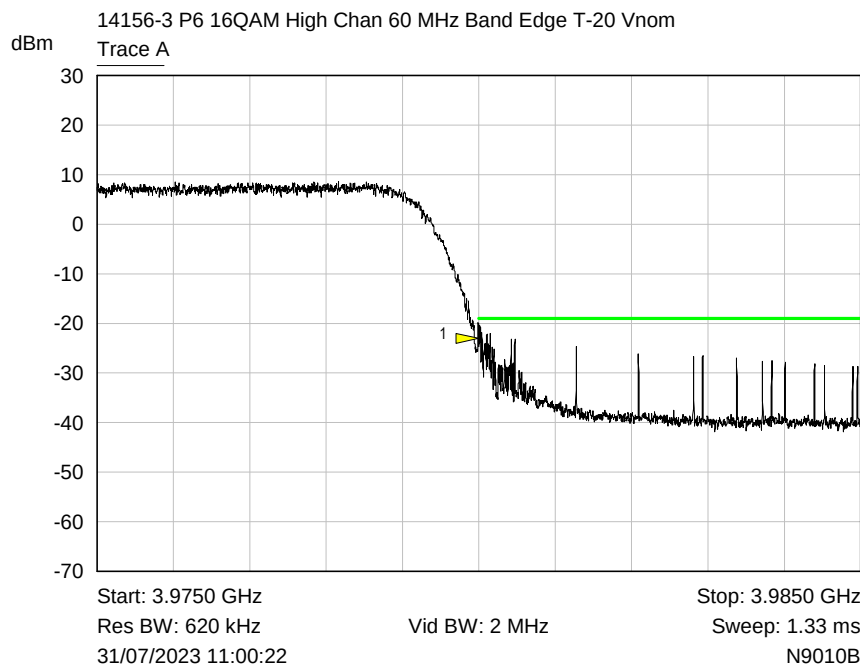


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-23.79 dBm	

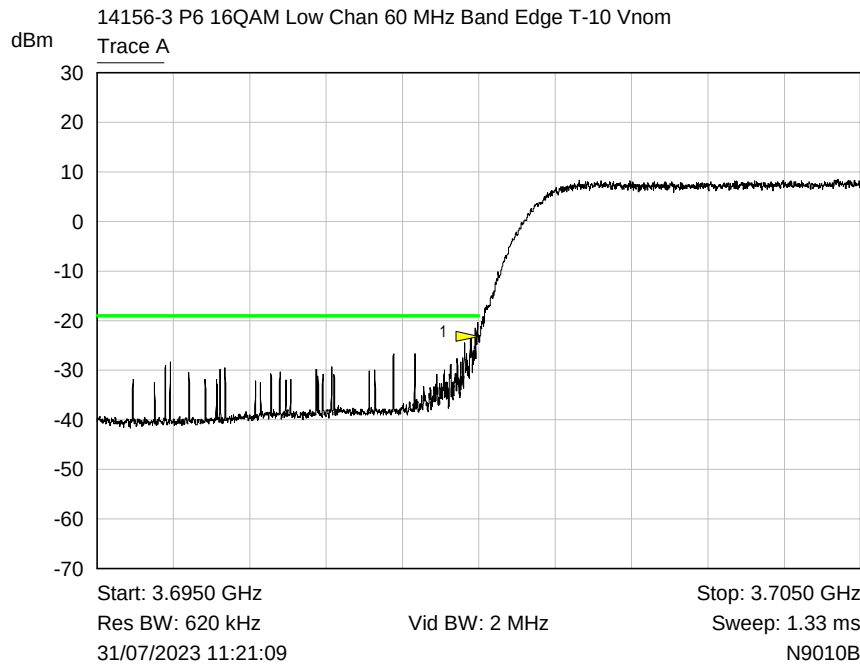
-30 Degrees High Chan



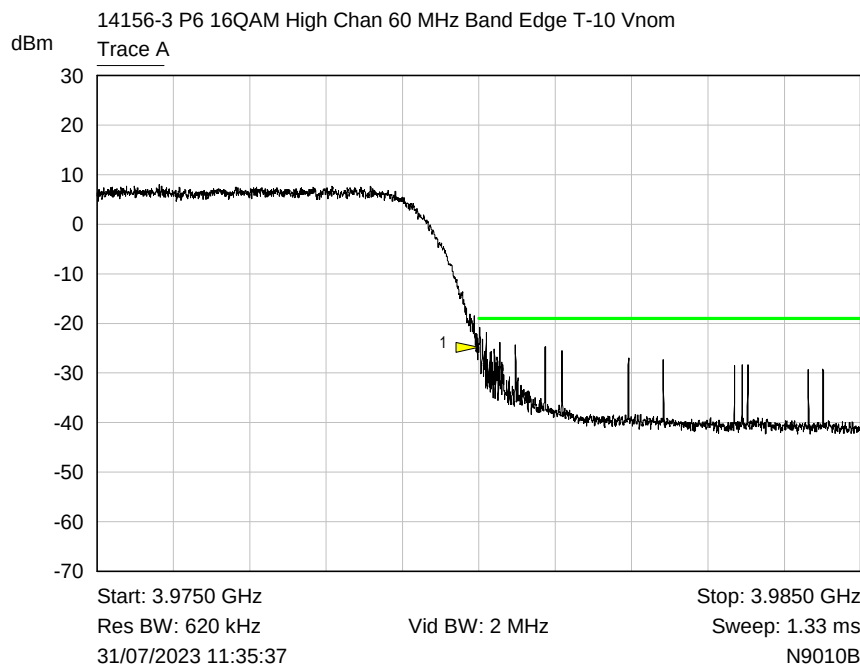
-20 Degrees Low Chan



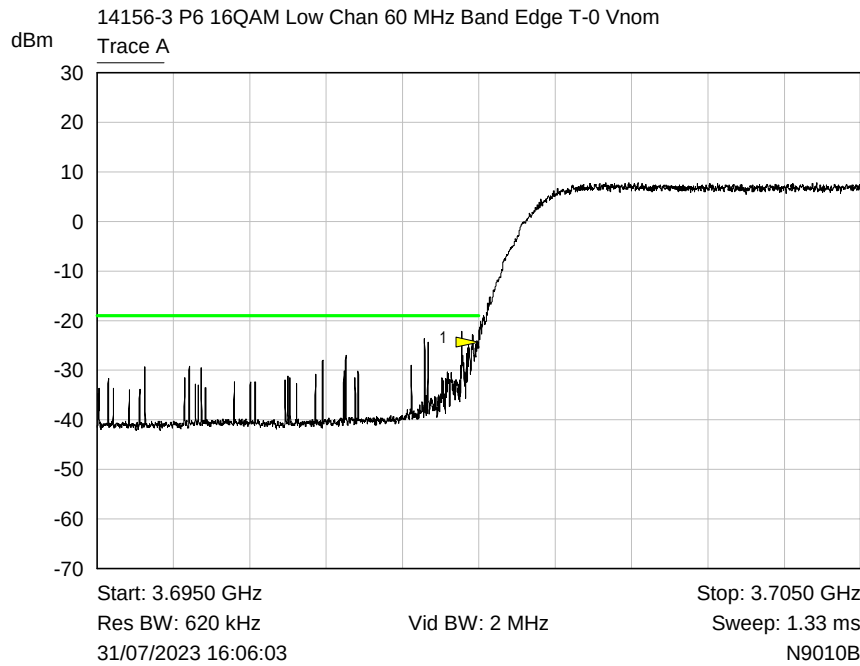
-20 Degrees High Chan



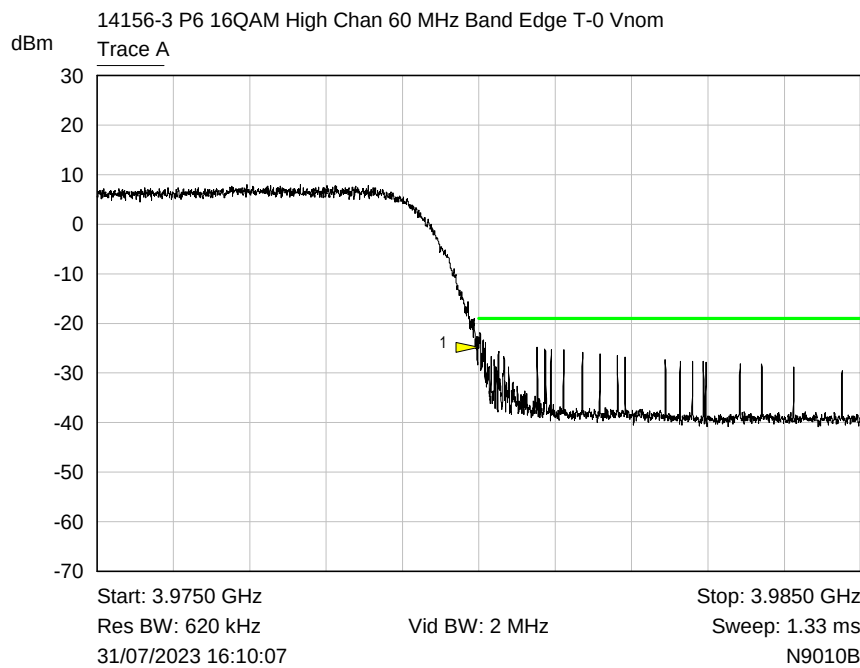
-10 Degrees Low Chan



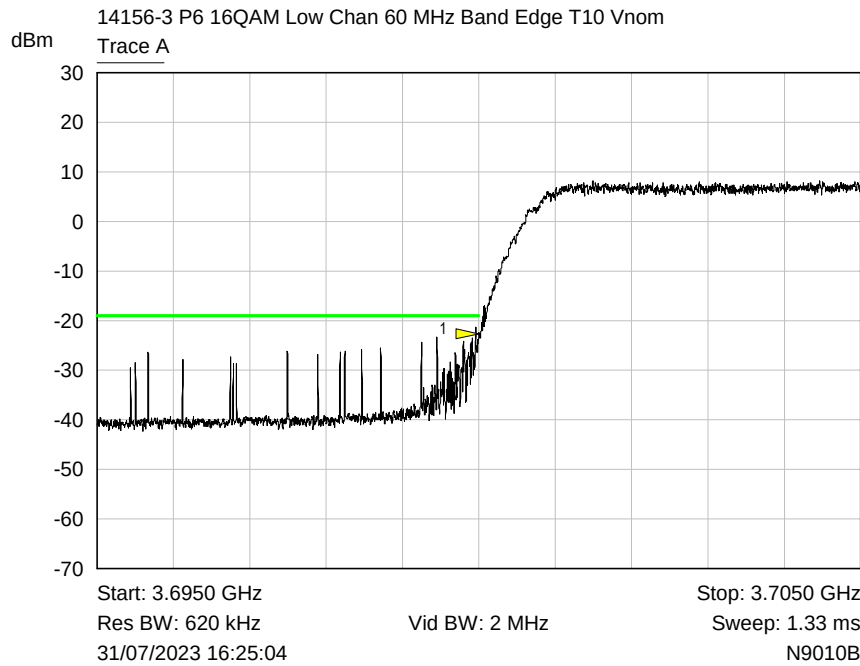
-10 Degrees High Chan



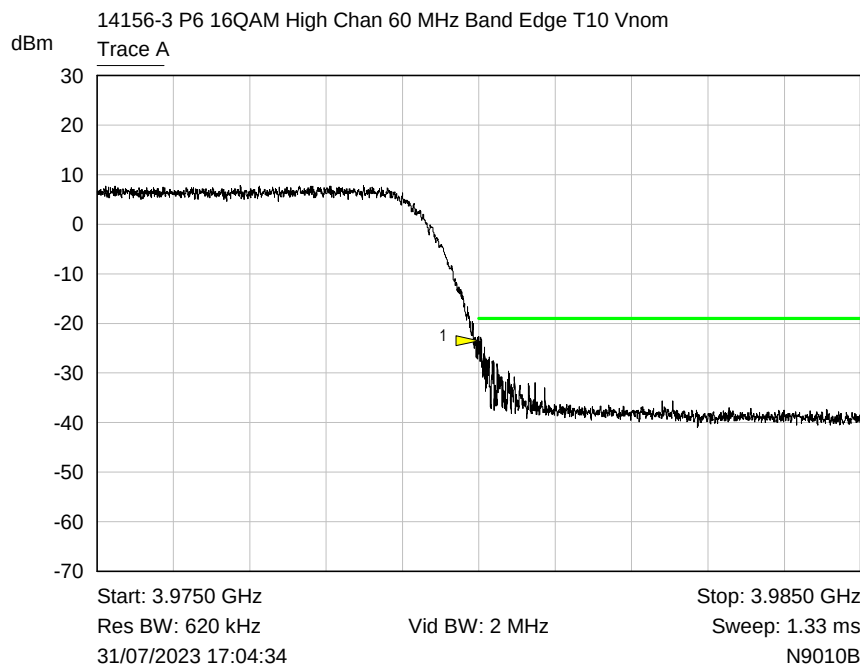
0 Degrees Low Chan



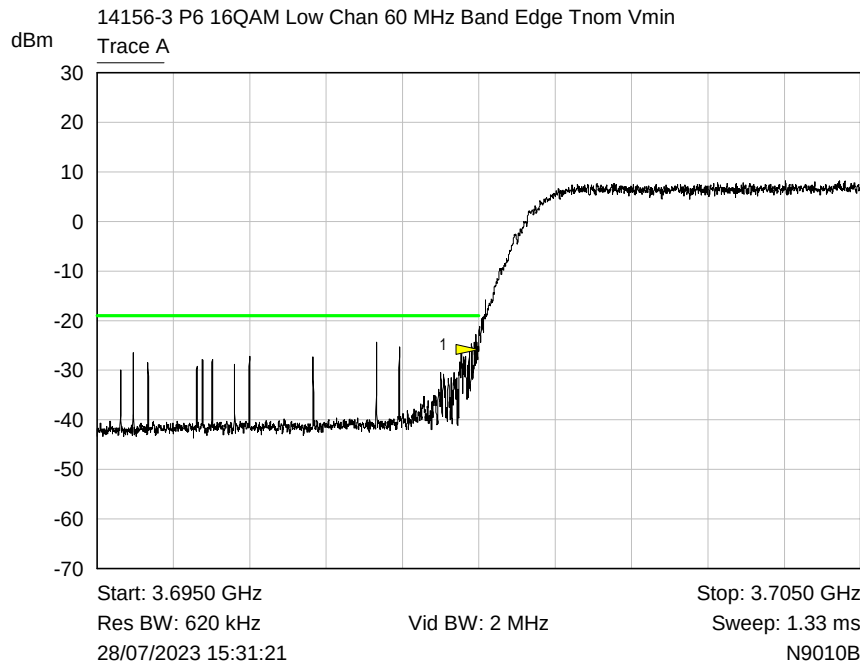
0 Degrees High Chan



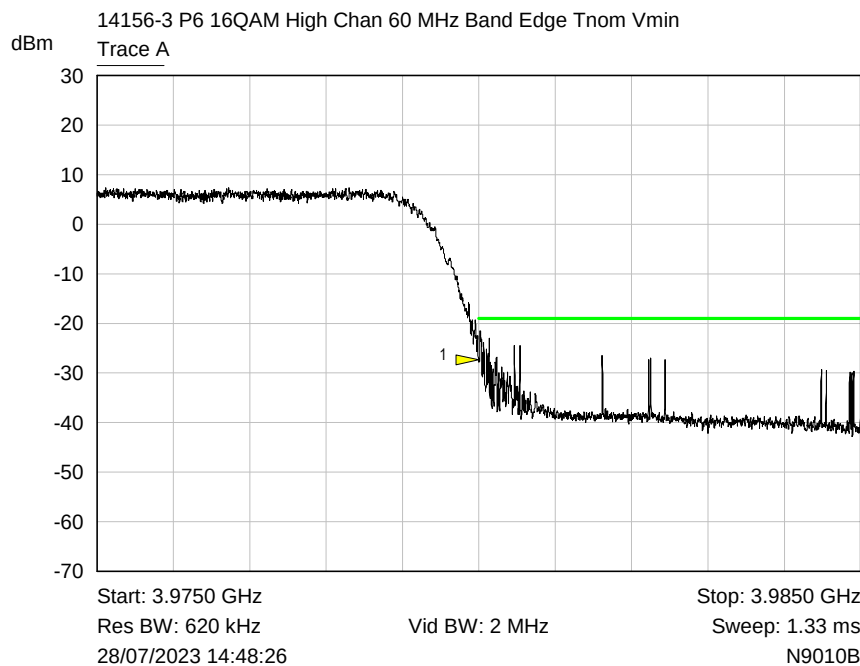
+10 Degrees Low Chan



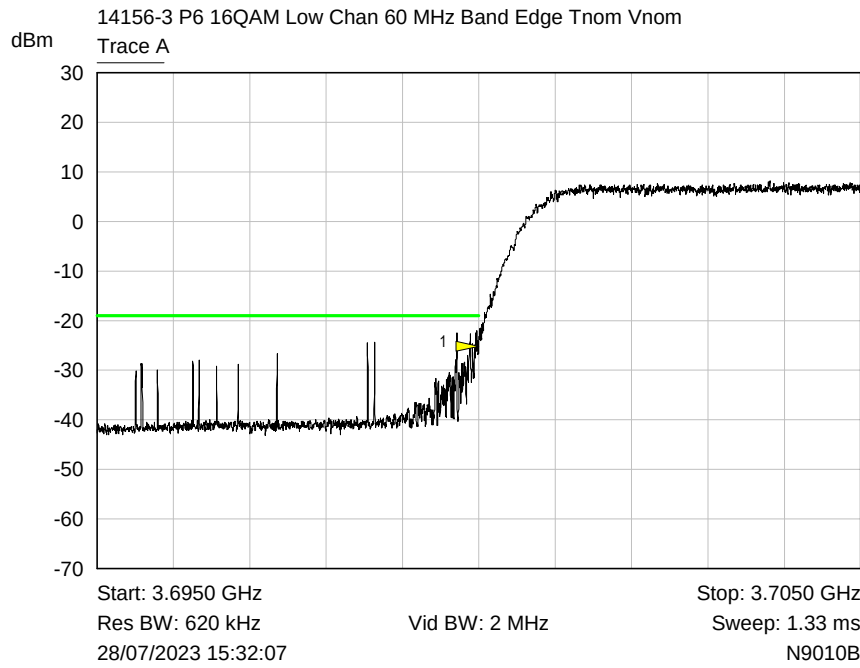
+10 Degrees High Chan



+20 Degrees Min Voltage Low Chan

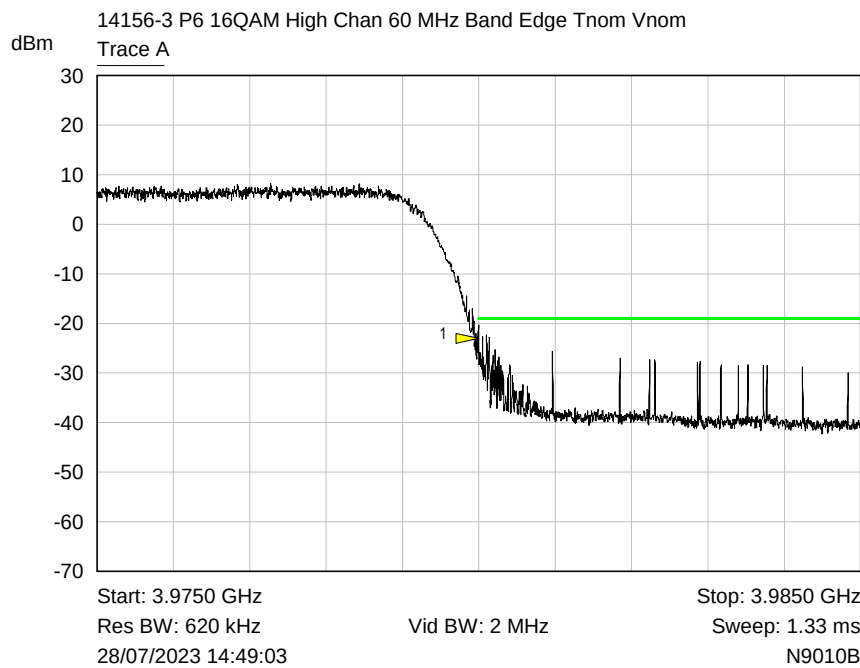


+20 Degrees Min Voltage High Chan



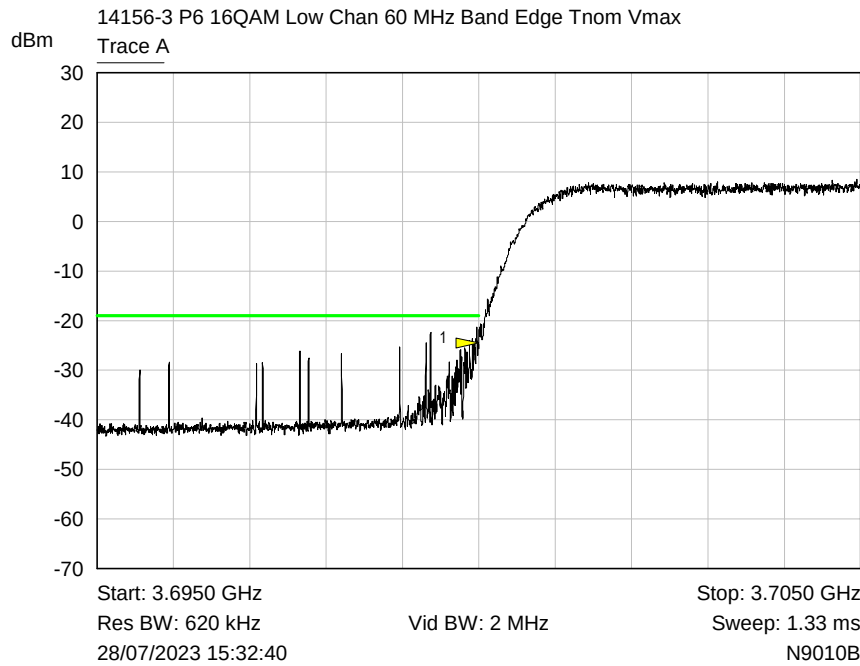
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-25.22 dBm	

+20 Degrees Nominal Voltage Low Chan

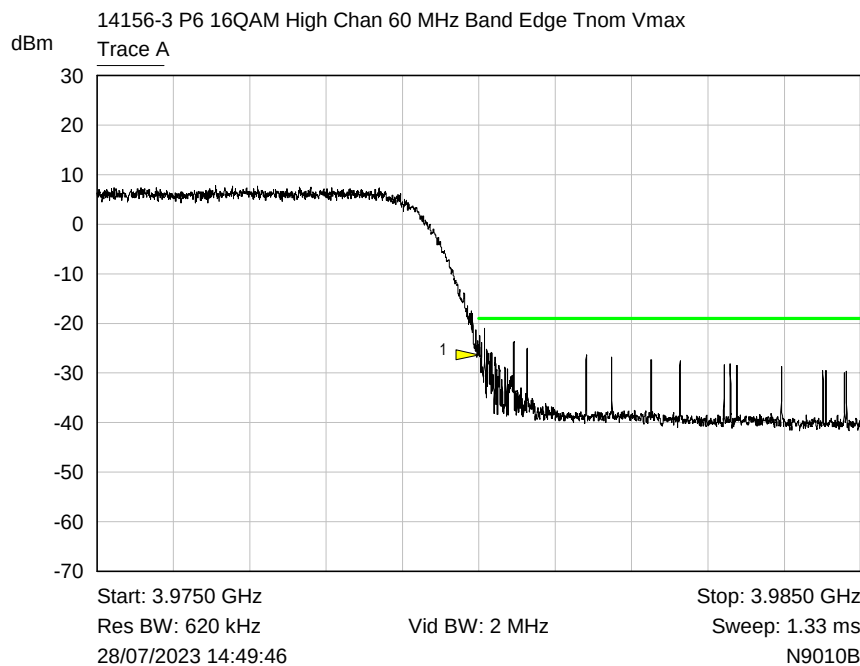


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-22.98 dBm	

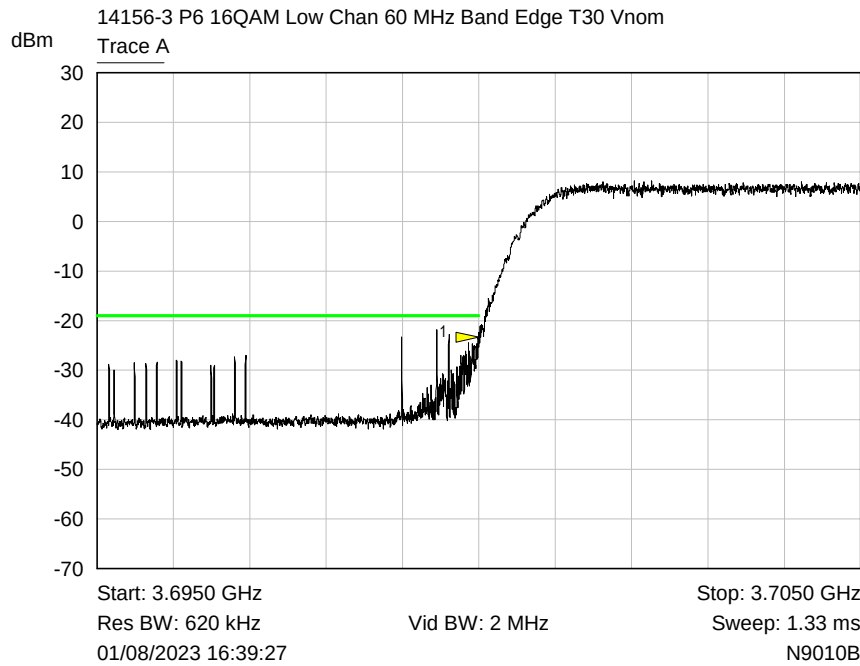
+20 Degrees Nominal Voltage High Chan



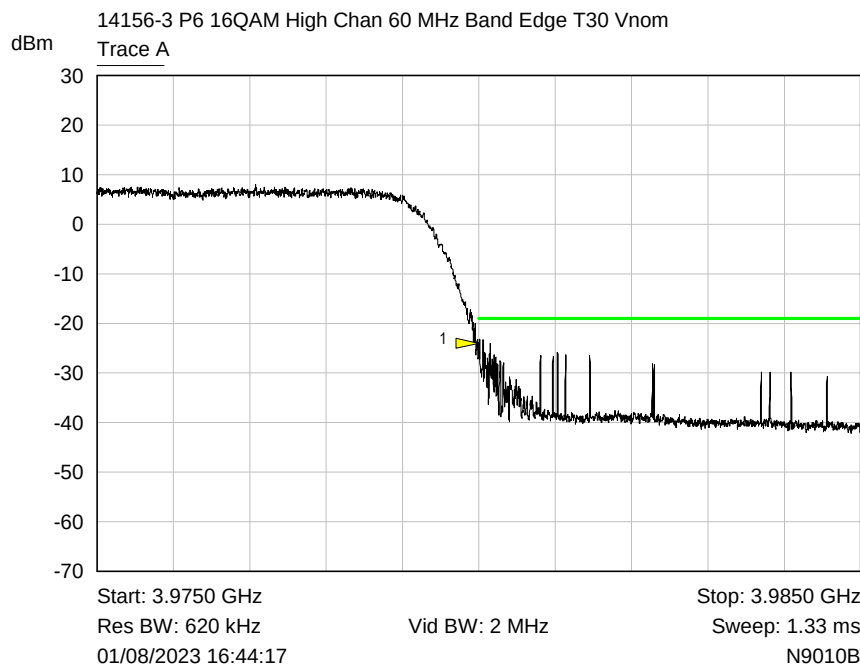
+20 Degrees Max Voltage Low Chan



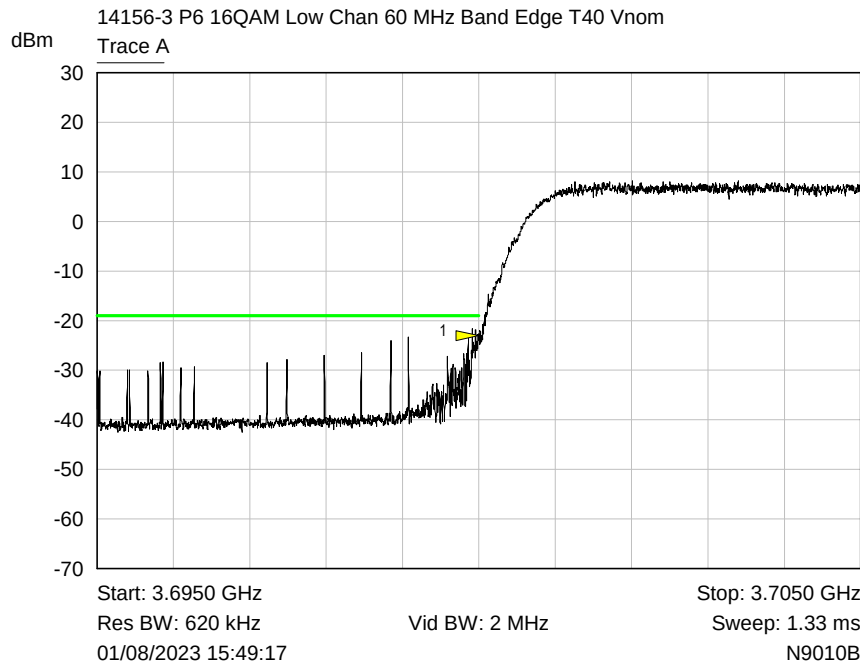
+20 Degrees Max Voltage High Chan



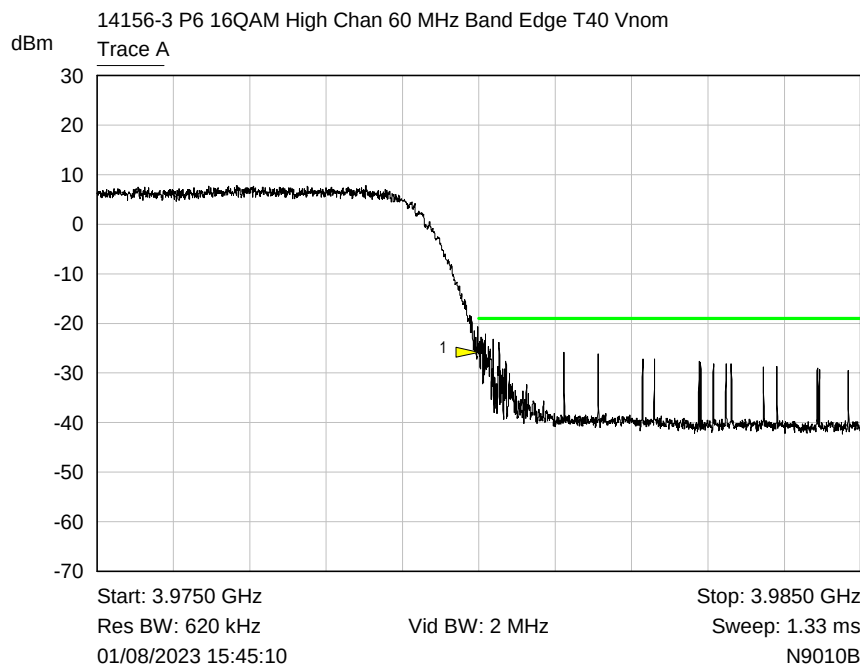
+30 Degrees Low Chan



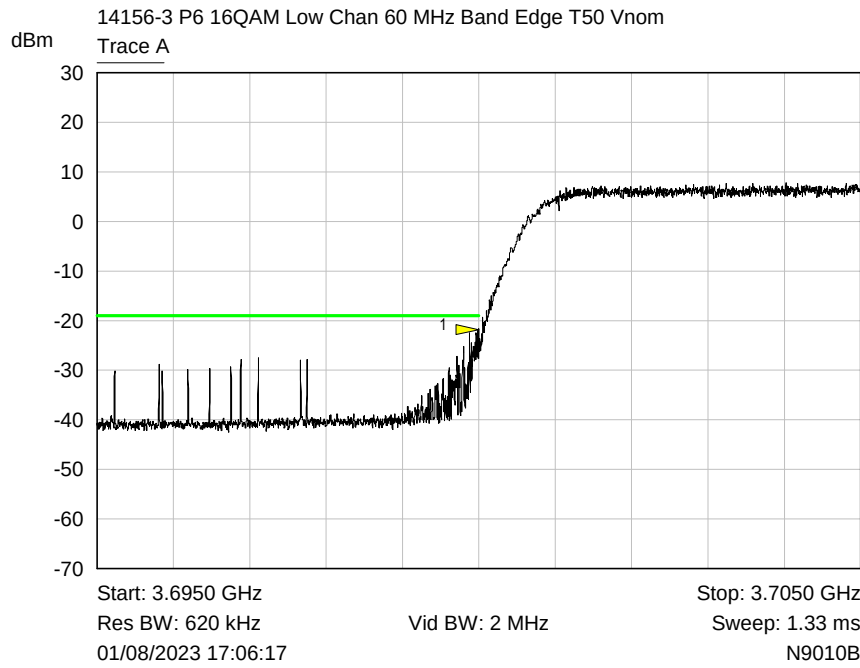
+30 Degrees High Chan



+40 Degrees Low Chan

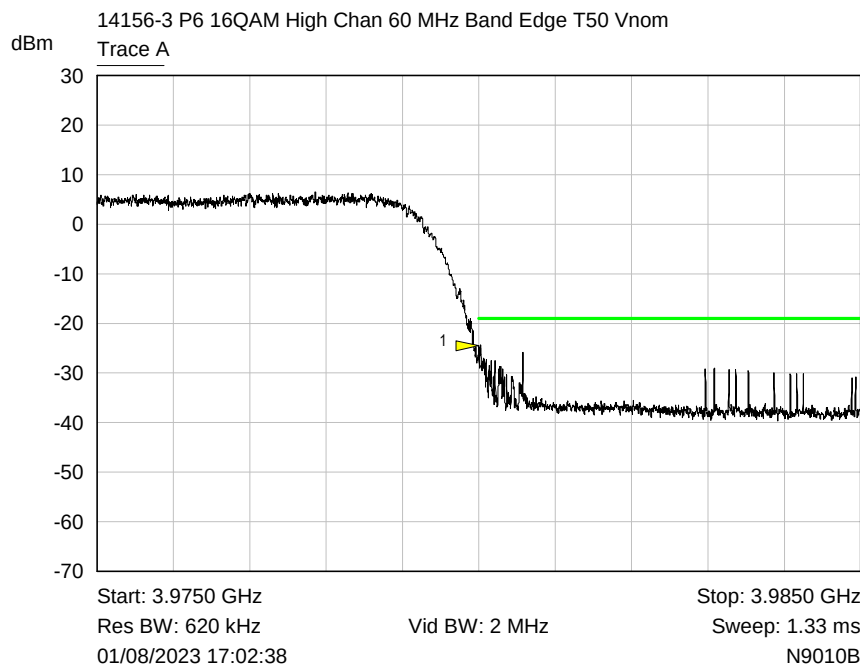


+40 Degrees High Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-21.81 dBm	

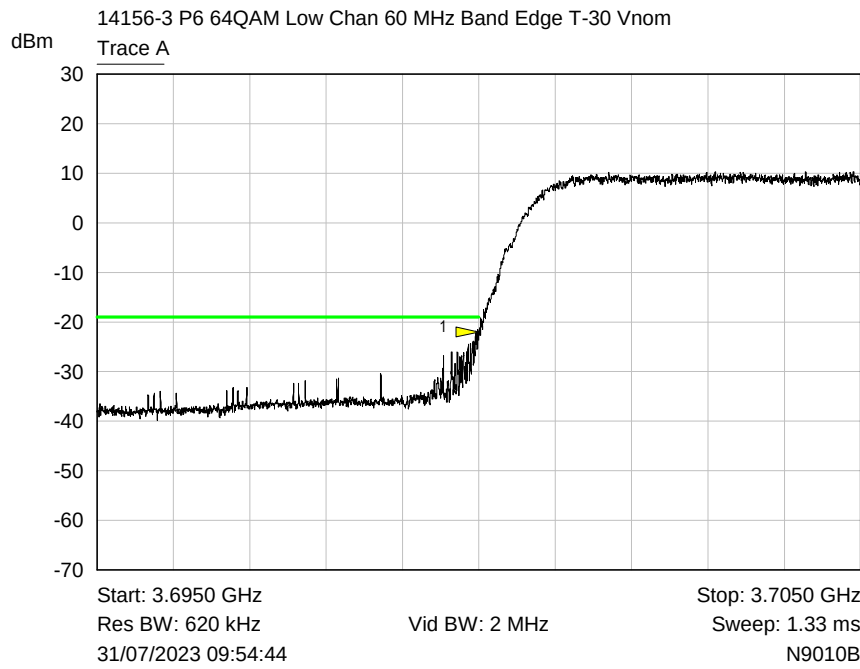
+50 Degrees Low Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-24.49 dBm	

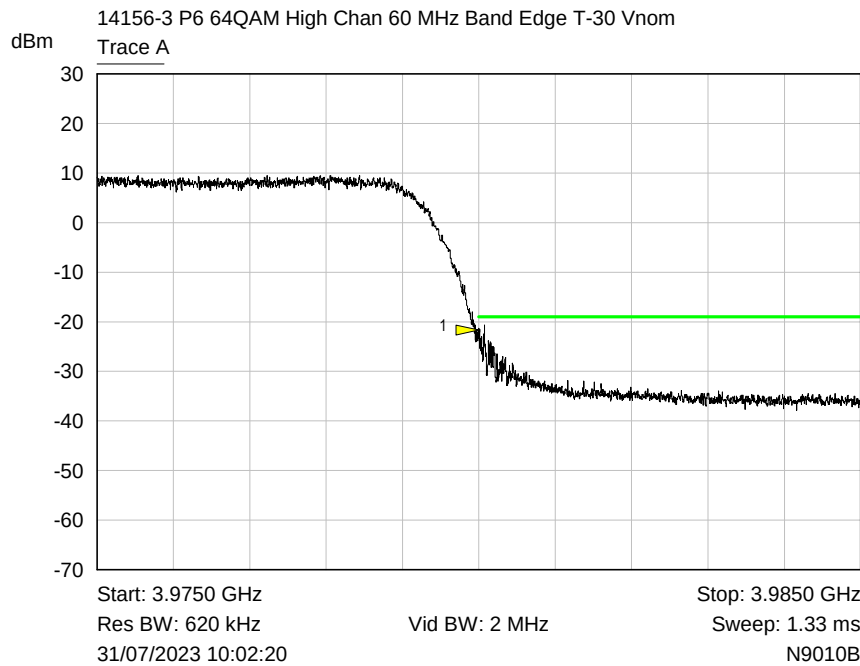
+50 Degrees High Chan

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing
60 MHz, 64 QAM



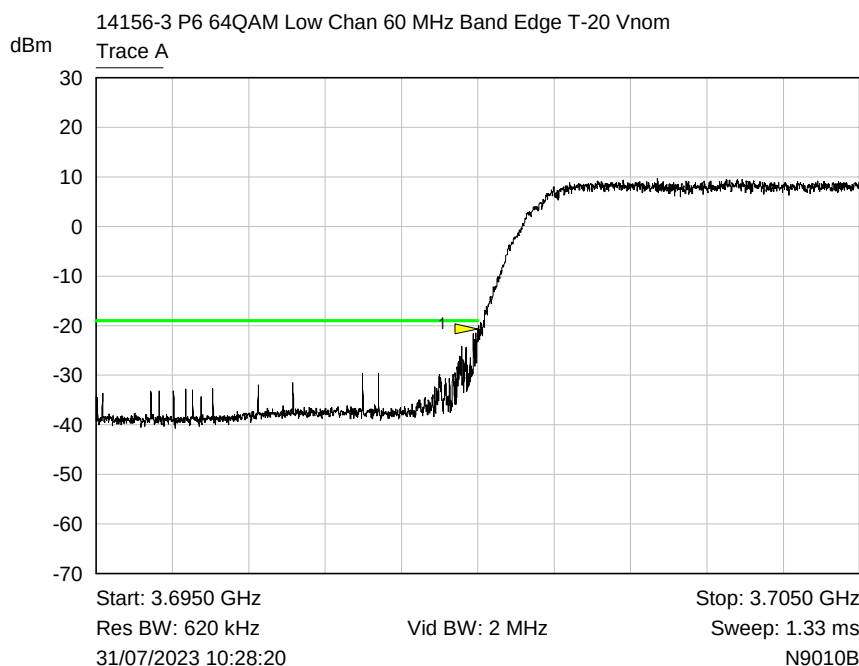
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-21.93 dBm	

-30 Degrees Low Chan



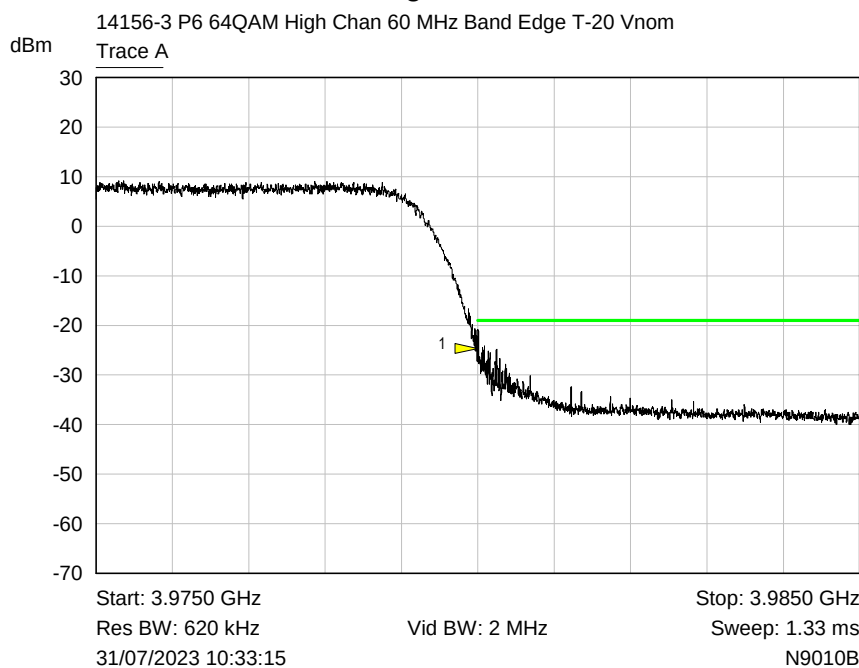
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-21.64 dBm	

-30 Degrees High Chan



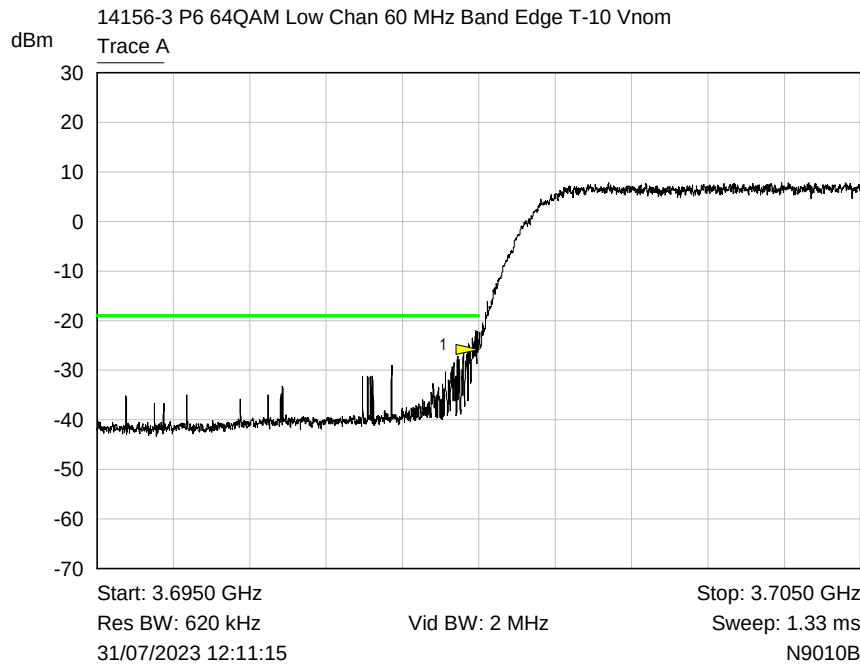
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-20.71 dBm	

-20 Degrees Low Chan

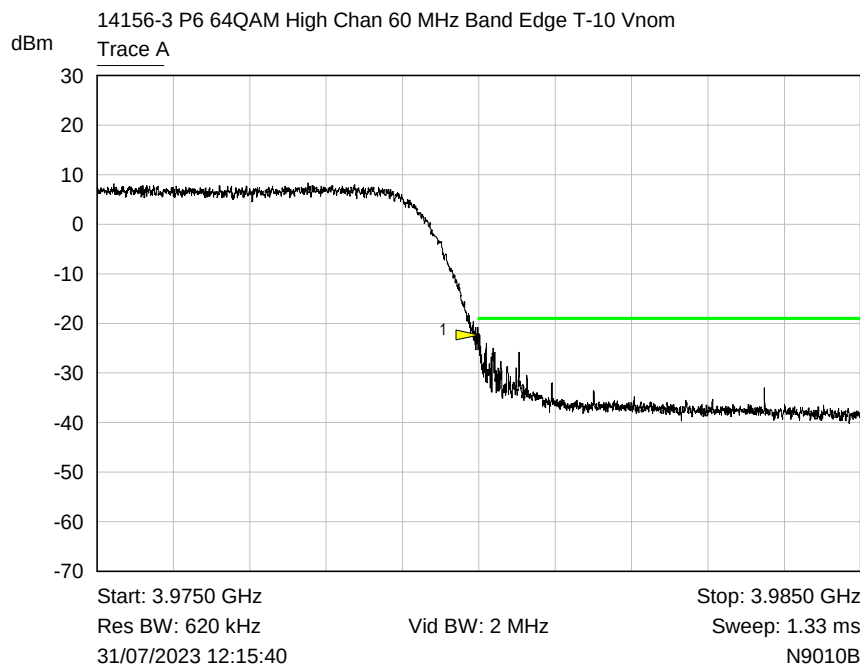


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-24.61 dBm	

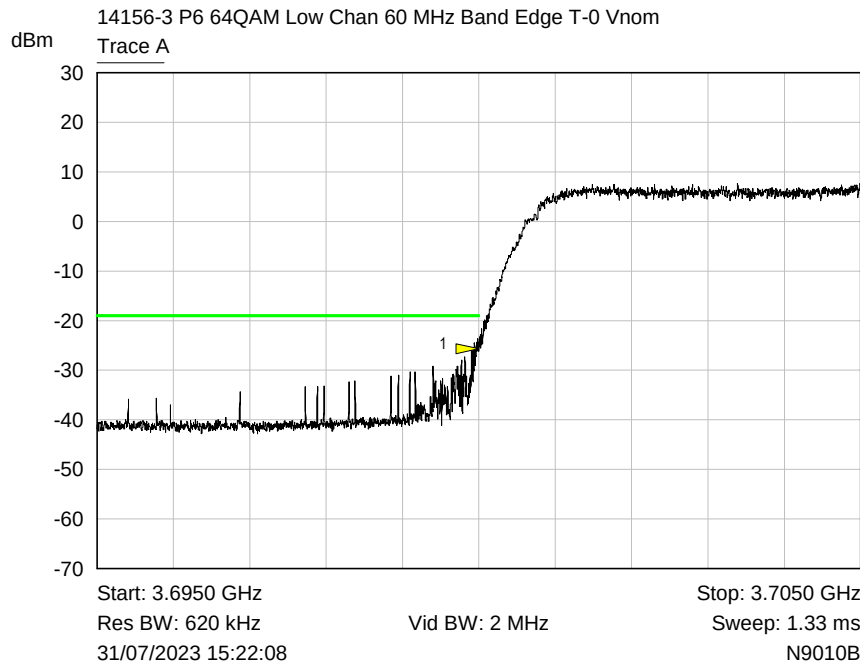
-20 Degrees High Chan



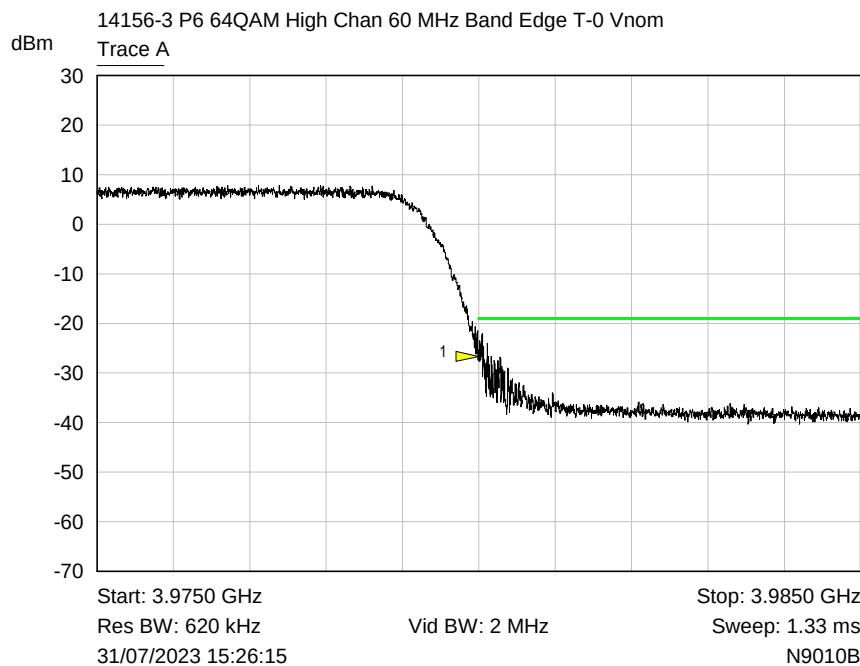
-10 Degrees Low Chan



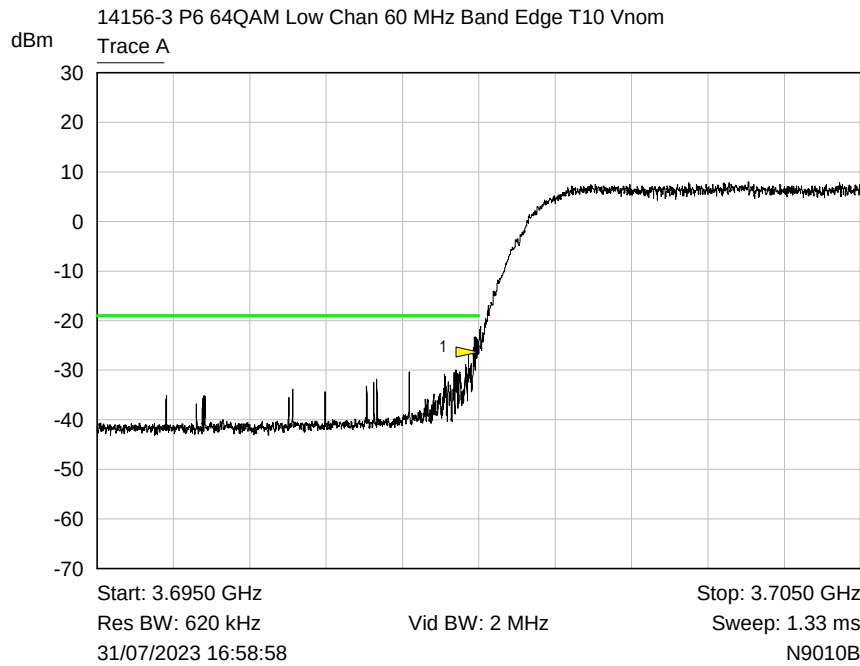
-10 Degrees High Chan



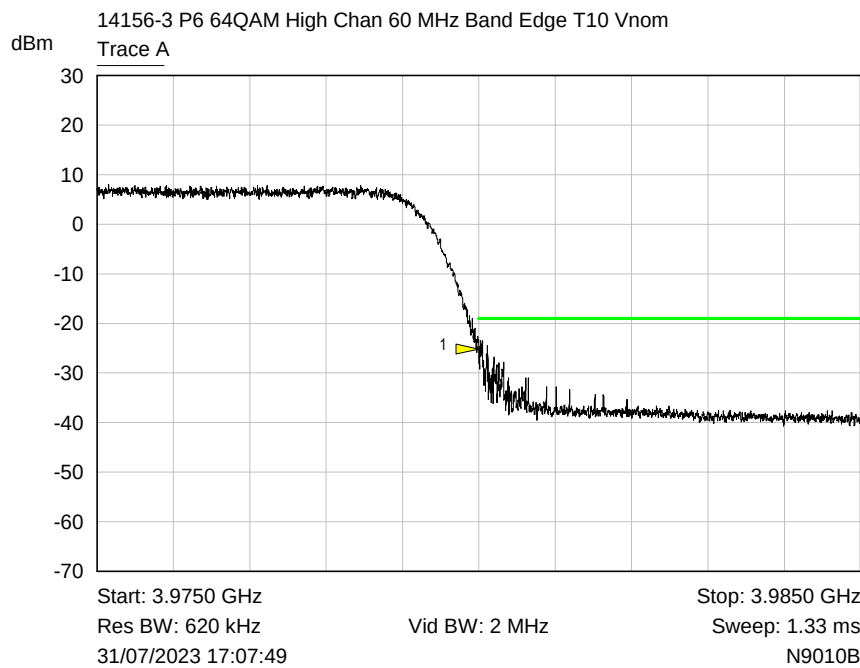
0 Degrees Low Chan



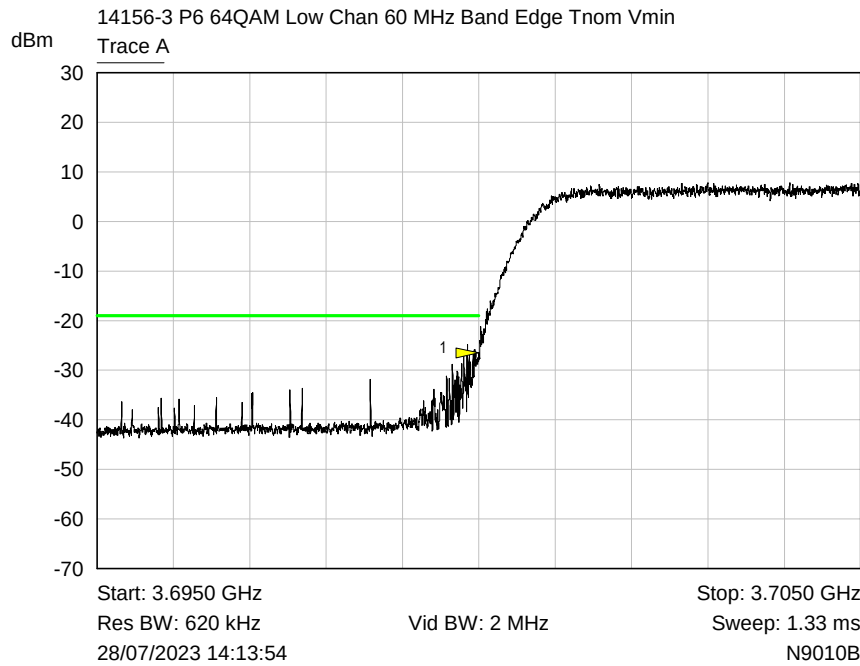
0 Degrees High Chan



+10 Degrees Low Chan



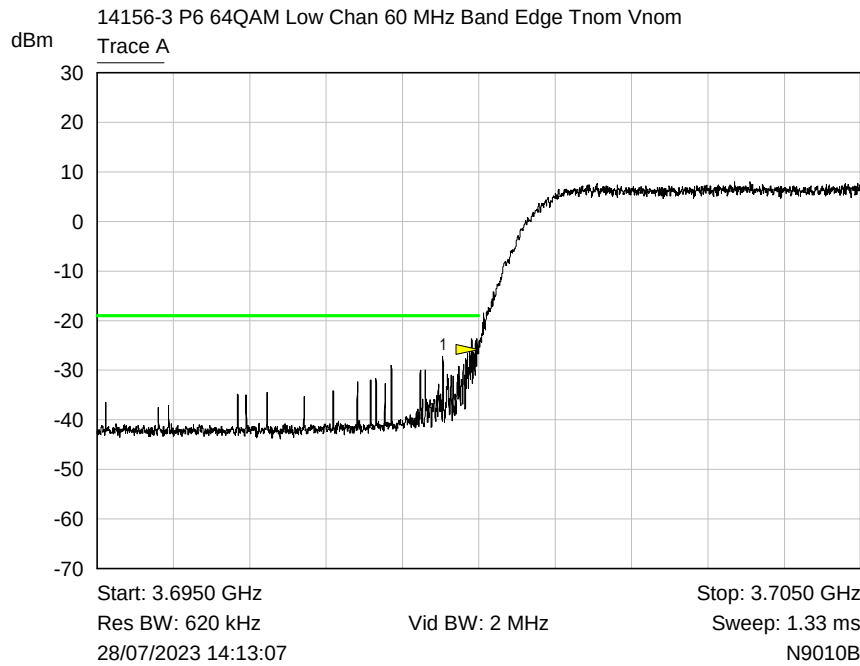
+10 Degrees High Chan



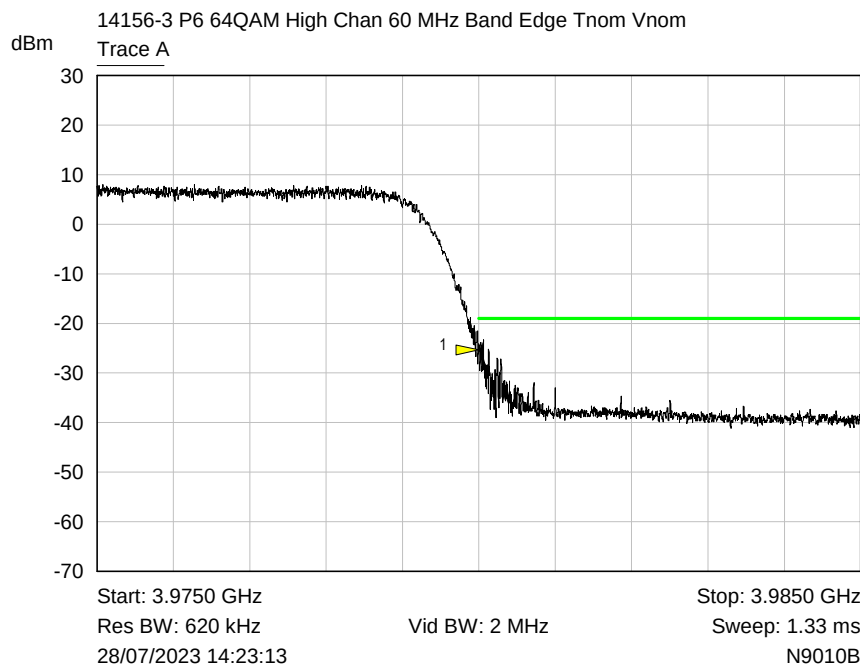
+20 Degrees Min Voltage Low Chan



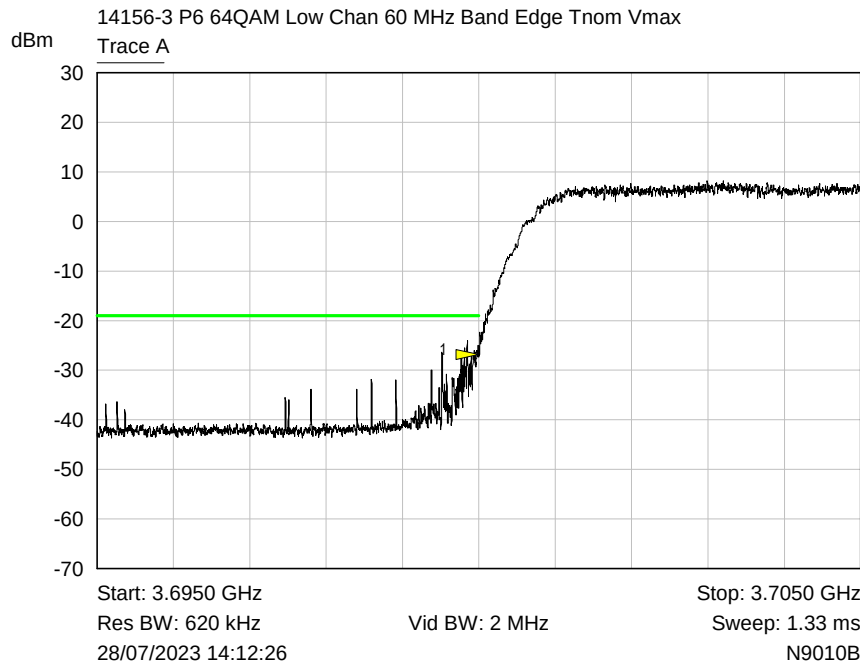
+20 Degrees Min Voltage High Chan



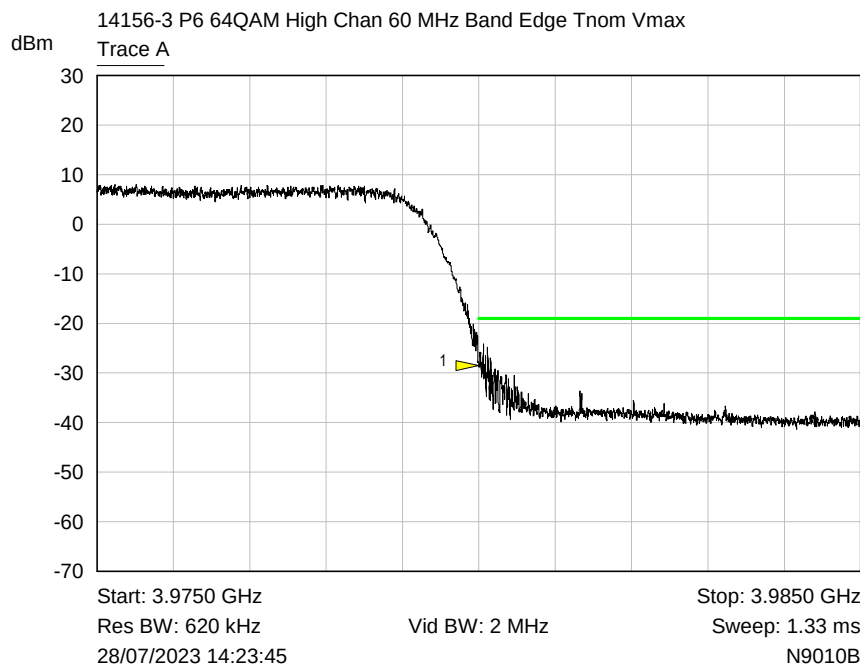
+20 Degrees Nominal Voltage Low Chan



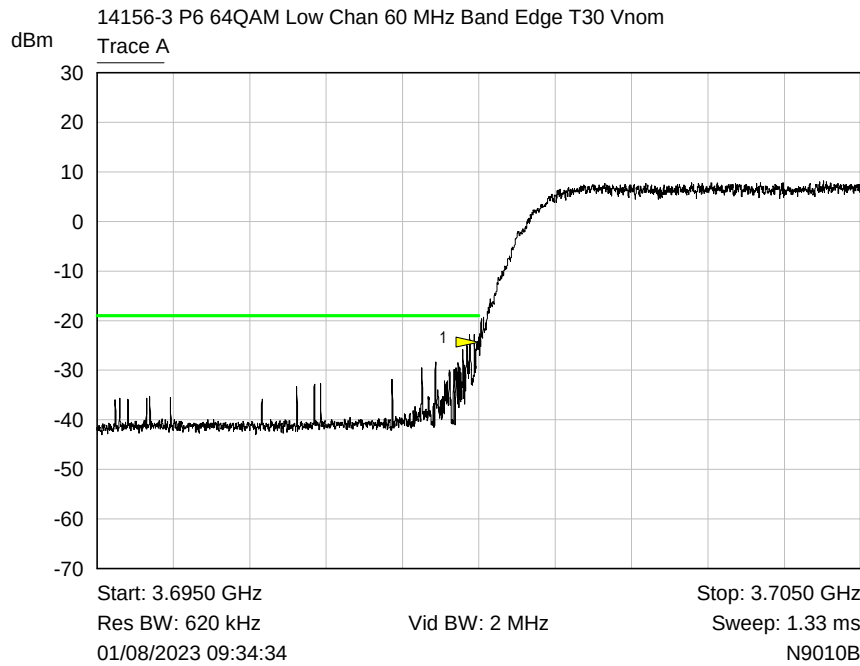
+20 Degrees Nominal Voltage High Chan



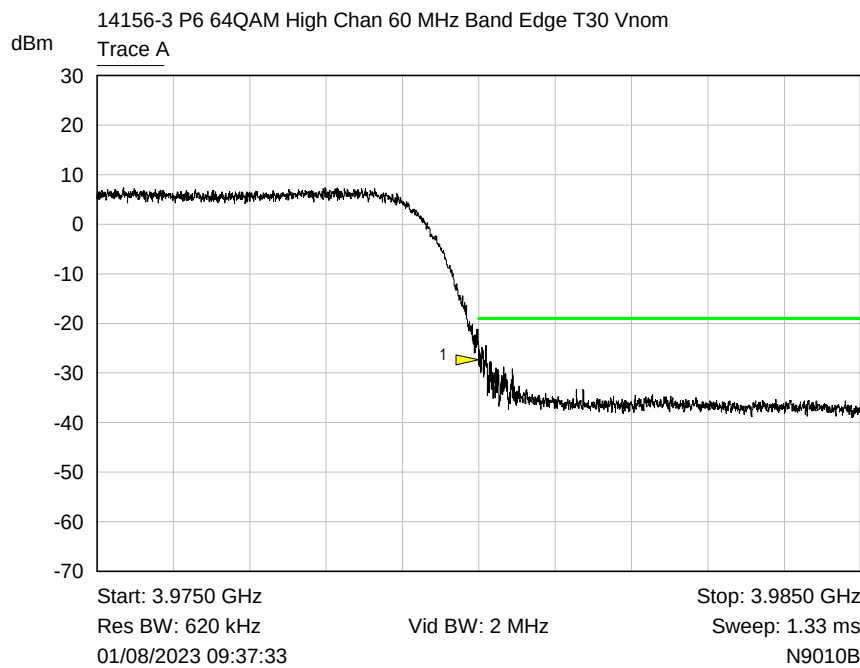
+20 Degrees Max Voltage Low Chan



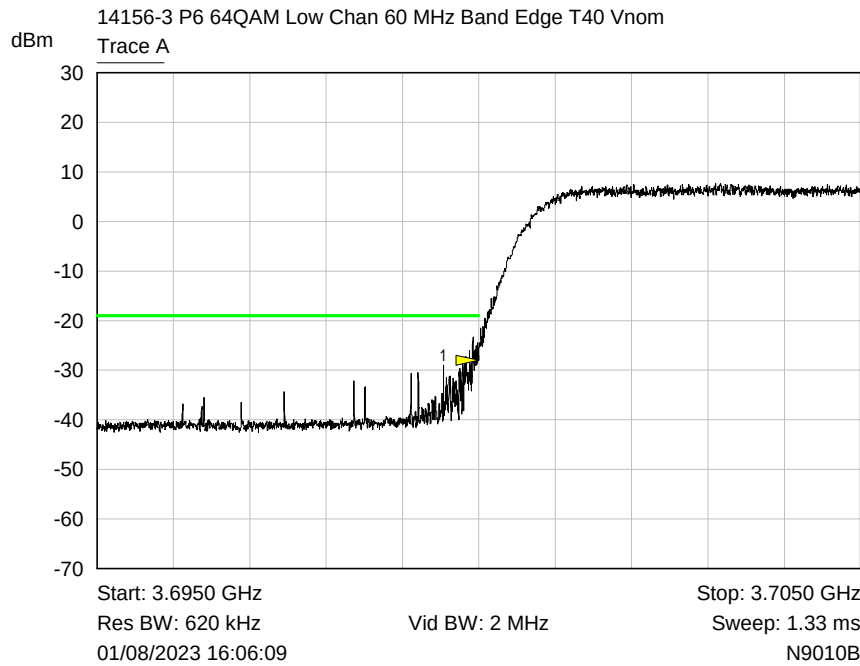
+20 Degrees Max Voltage High Chan



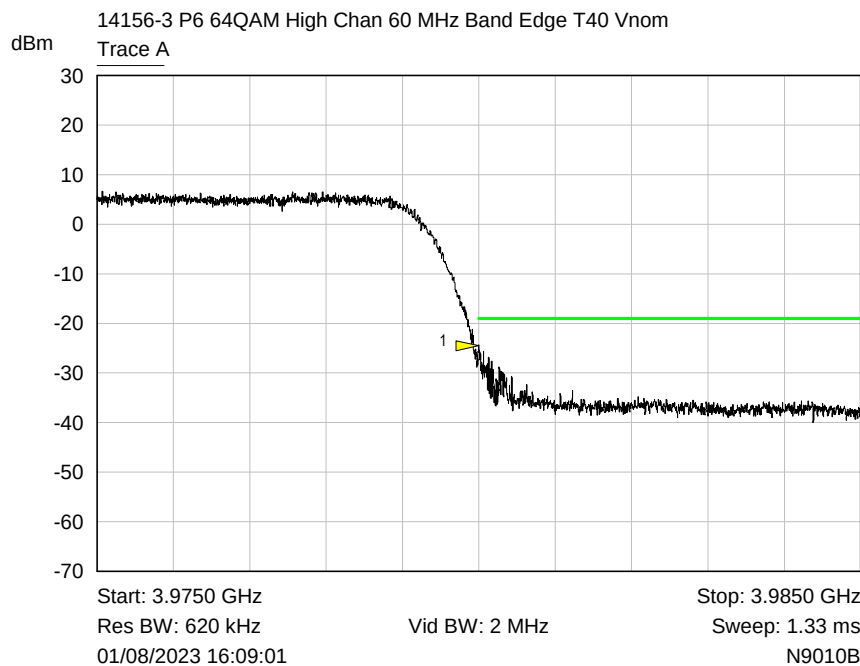
+30 Degrees Low Chan



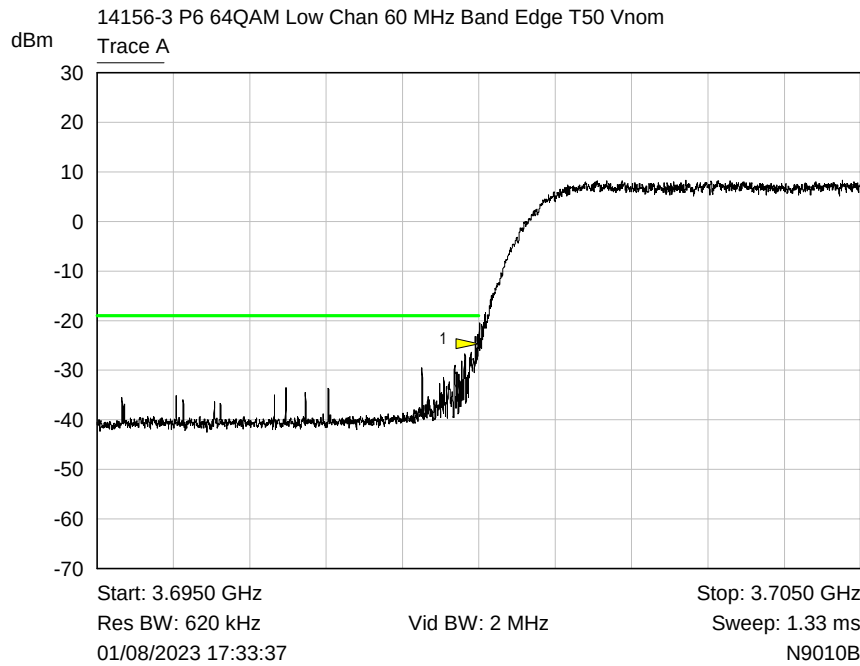
+30 Degrees High Chan



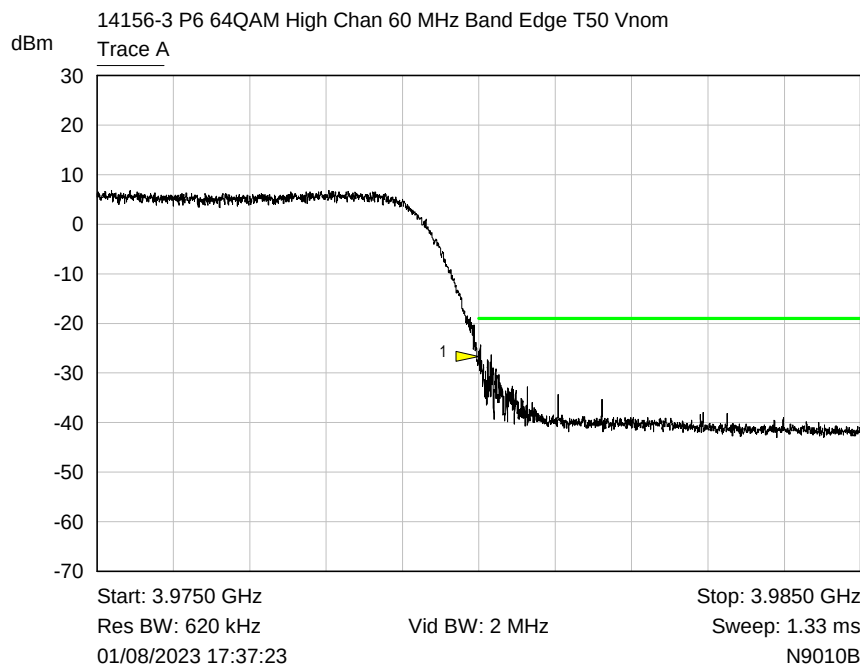
+40 Degrees Low Chan



+40 Degrees High Chan

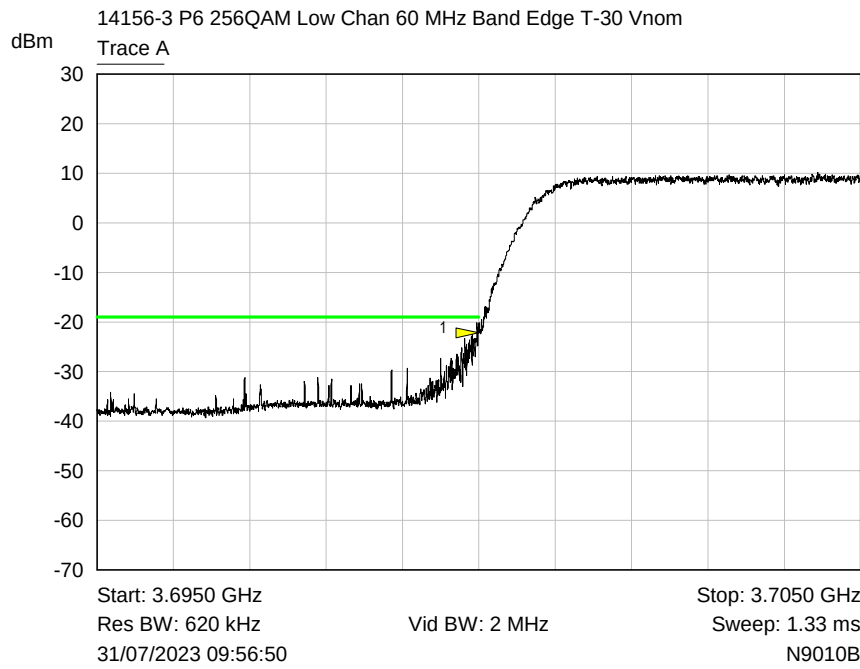


+50 Degrees Low Chan



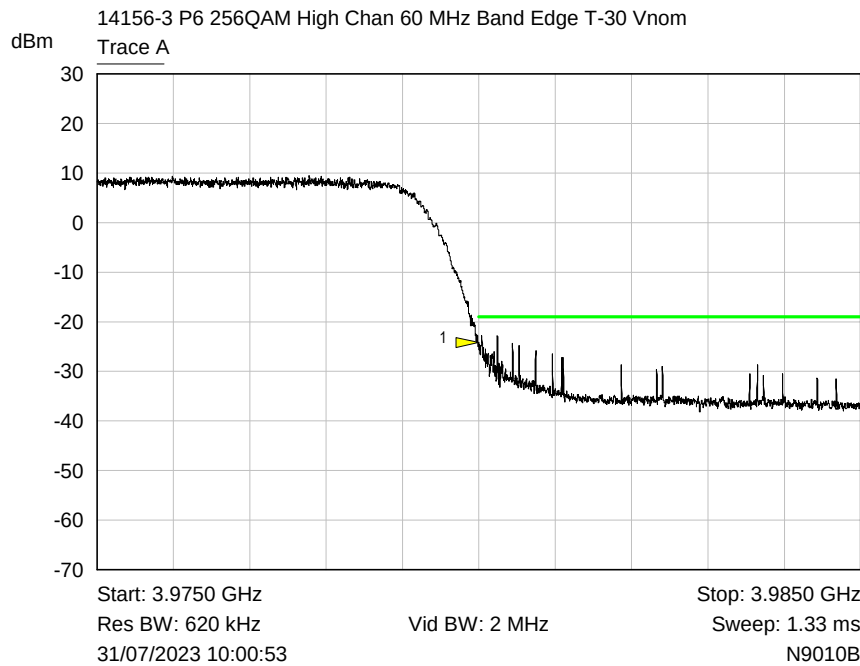
+50 Degrees High Chan

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 0
60 MHz, 256 QAM



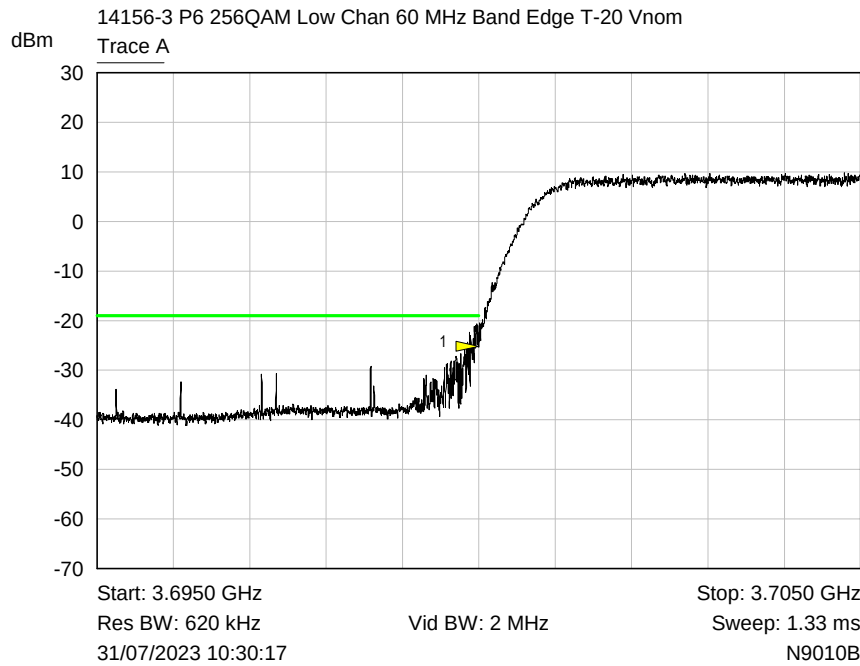
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-22.12 dBm	

-30 Degrees Low Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-24.13 dBm	

-30 Degrees High Chan



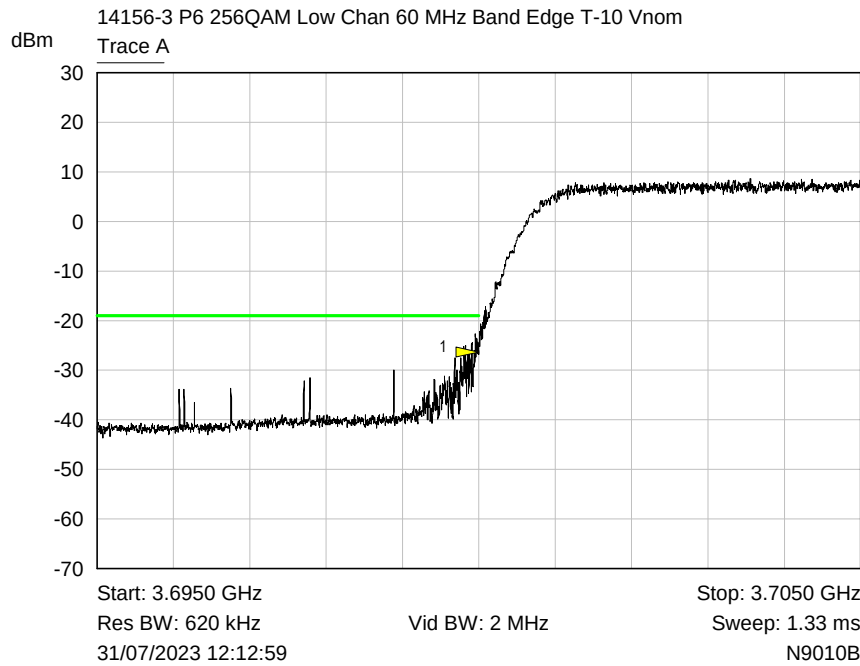
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-25.13 dBm	

-20 Degrees Low Chan



Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-25.28 dBm	

-20 Degrees High Chan



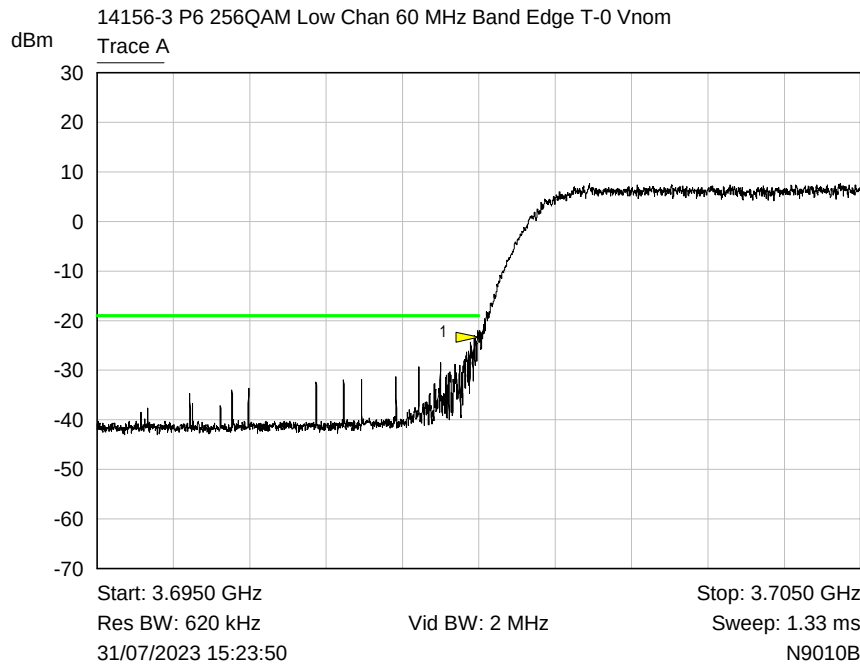
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-26.39 dBm	

-10 Degrees Low Chan



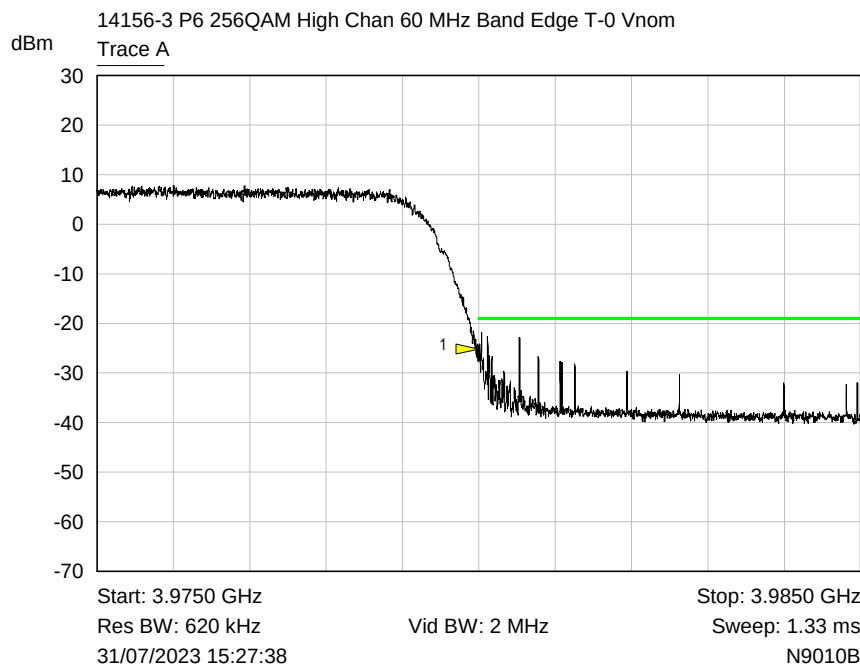
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-24.90 dBm	

-10 Degrees High Chan



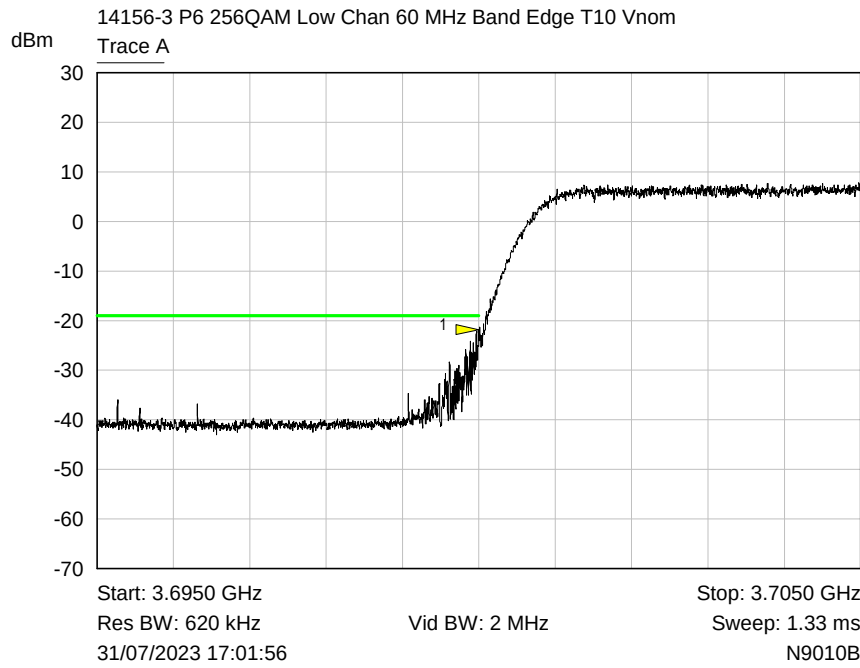
Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.7000 GHz	-23.39 dBm	

0 Degrees Low Chan

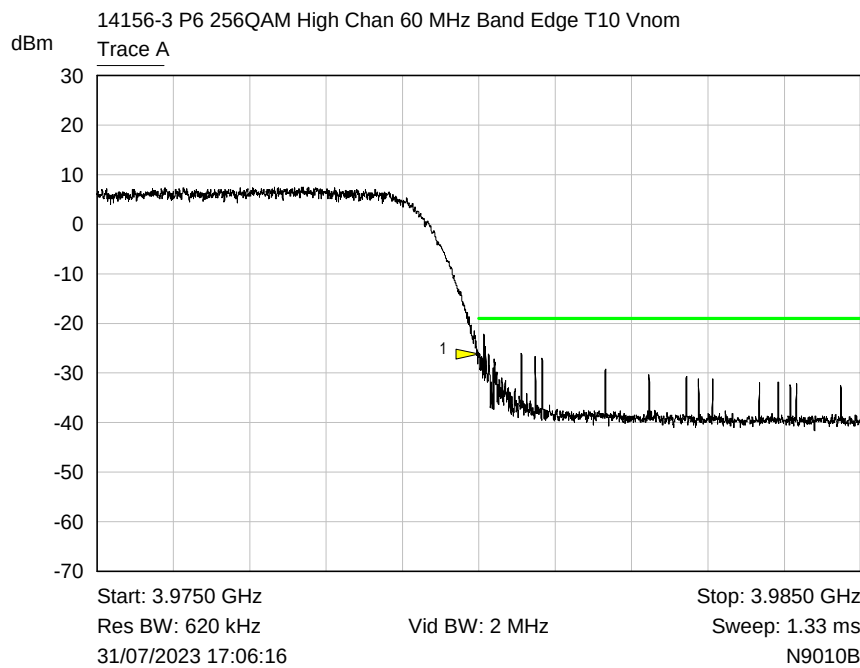


Mkr	Trace	X-Axis	Value	Notes
1 ▼	Trace A	3.9800 GHz	-25.24 dBm	

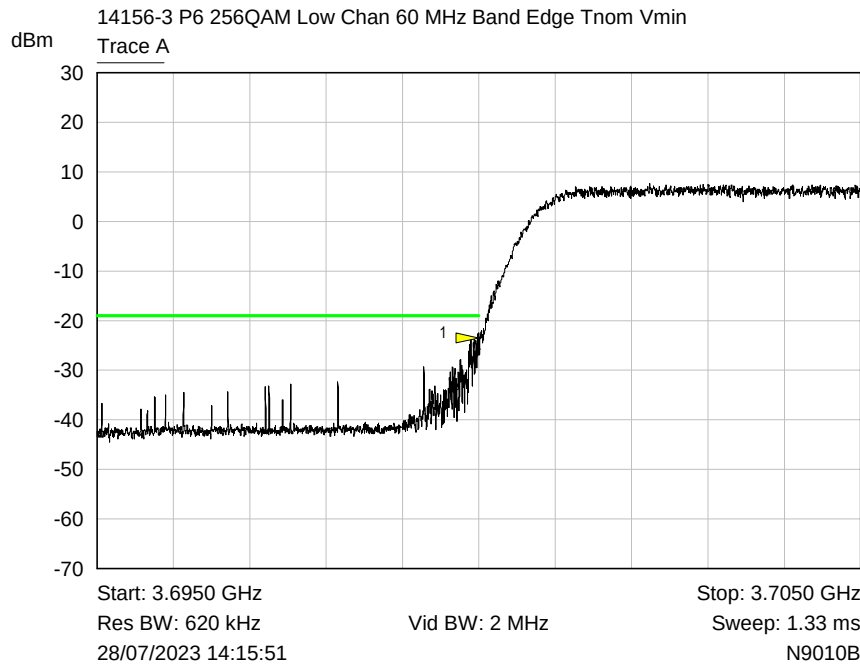
0 Degrees High Chan



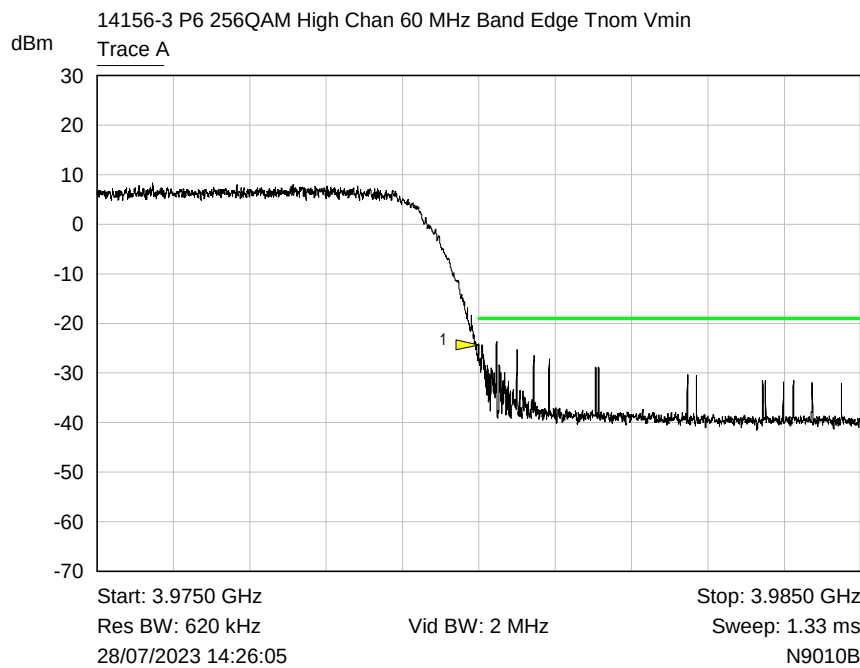
+10 Degrees Low Chan



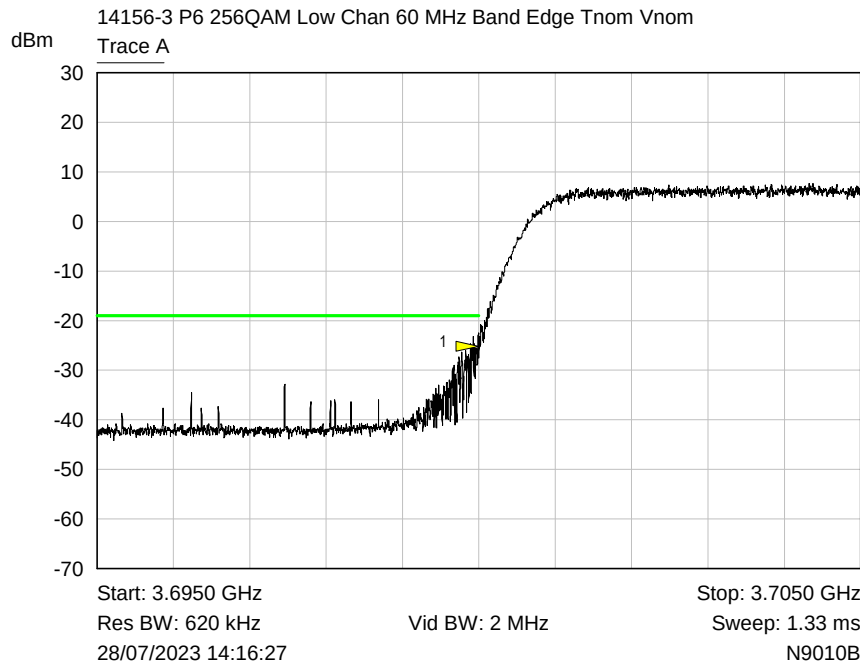
+10 Degrees High Chan



+20 Degrees Min Voltage Low Chan



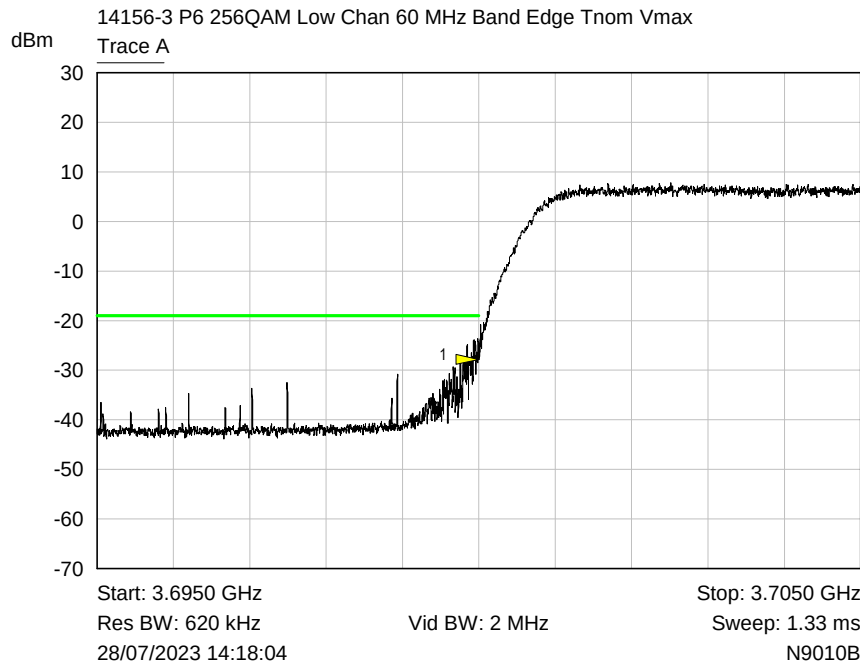
+20 Degrees Min Voltage High Chan



+20 Degrees Nominal Voltage Low Chan



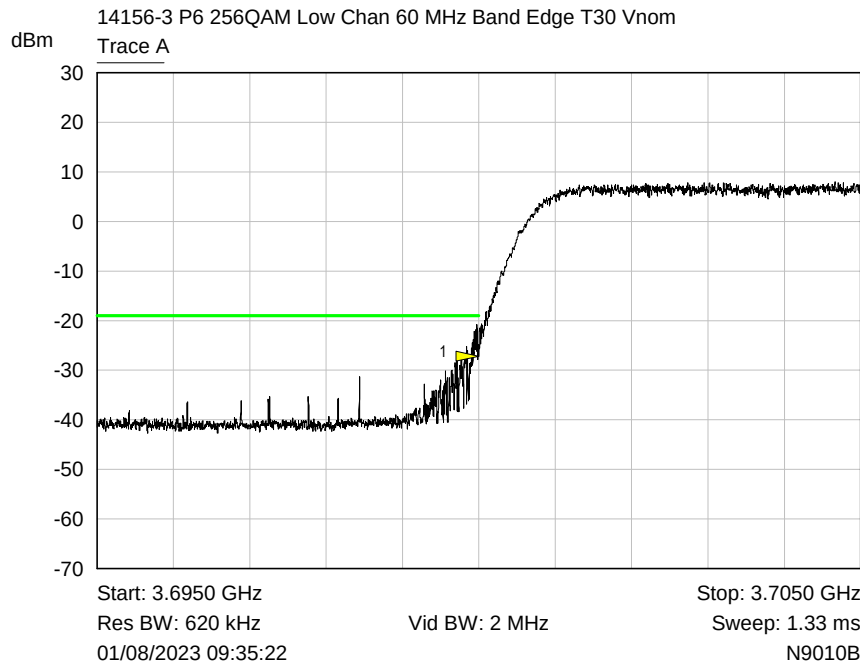
+20 Degrees Nominal Voltage High Chan



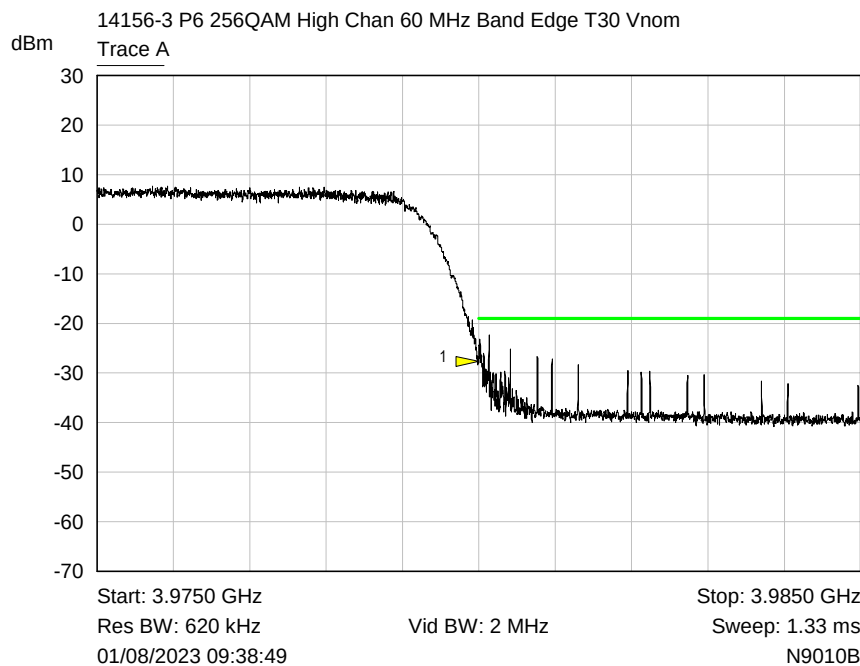
+20 Degrees Max Voltage Low Chan



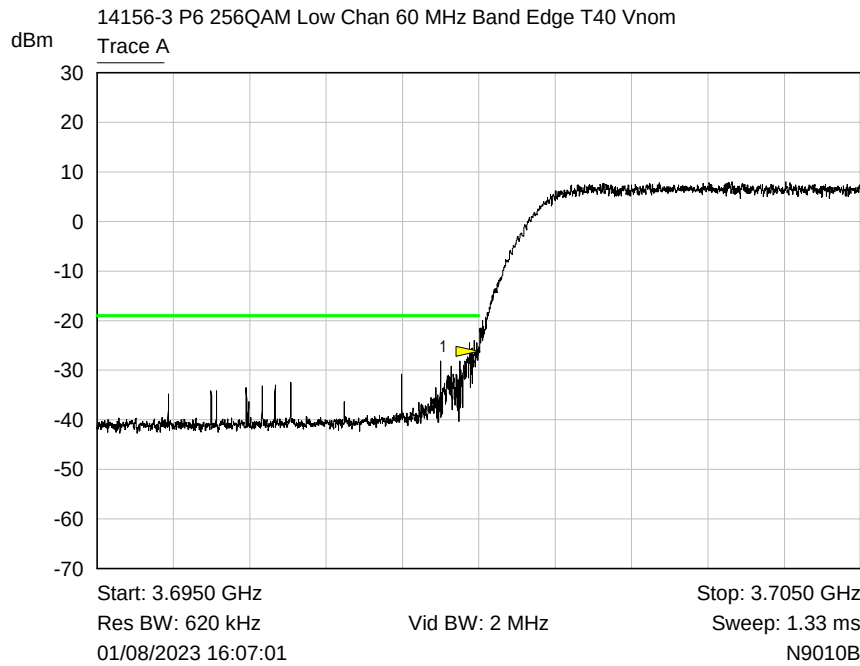
+20 Degrees Max Voltage High Chan



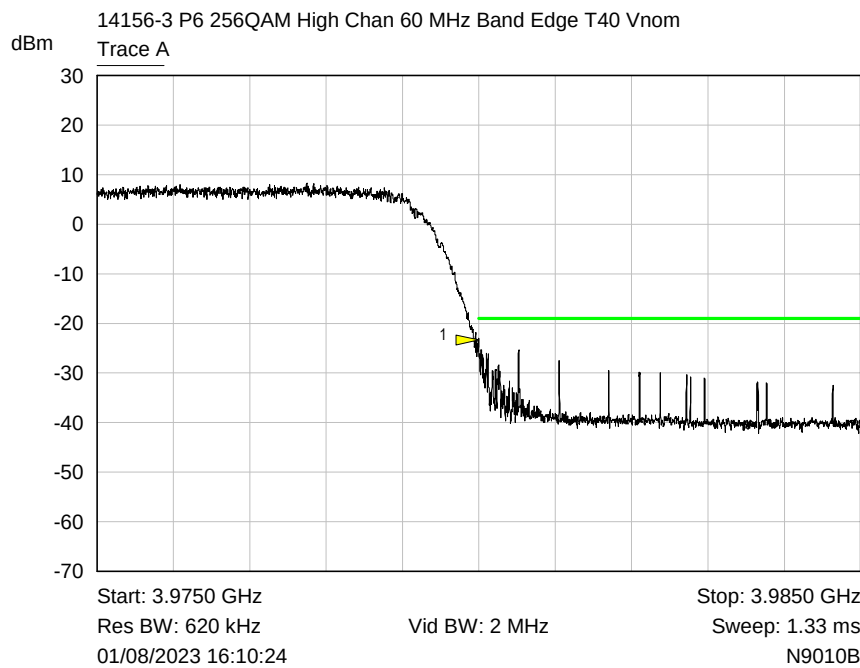
+30 Degrees Low Chan



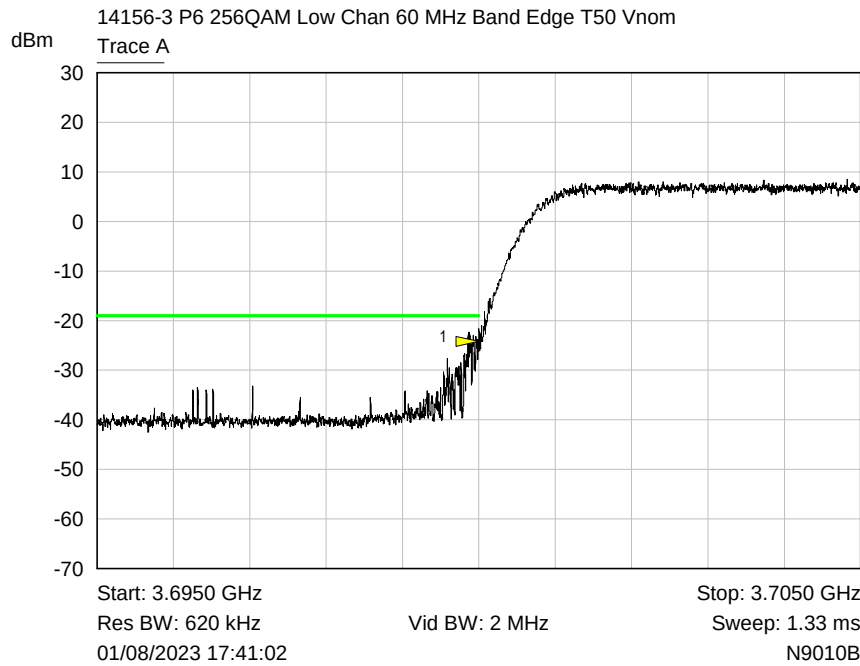
+30 Degrees High Chan



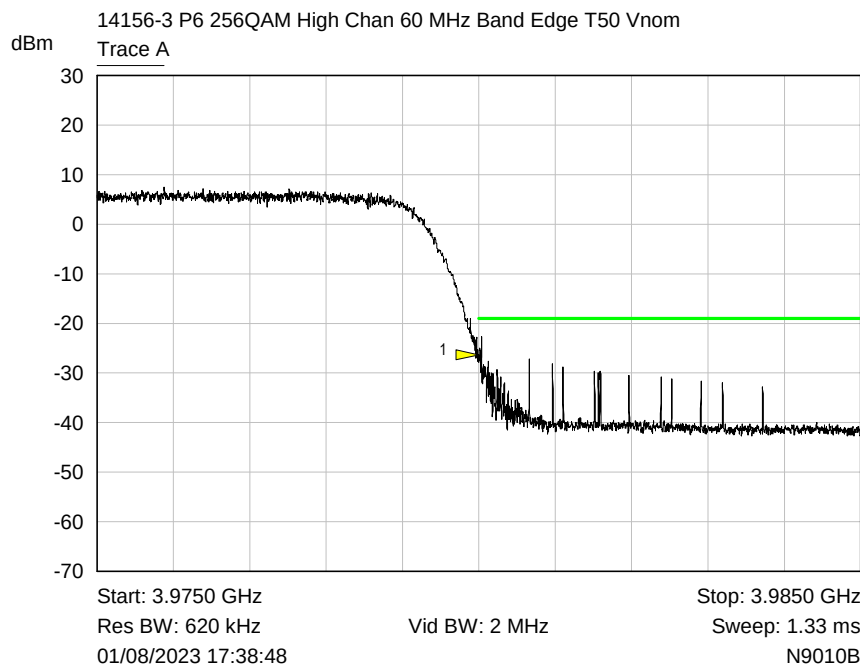
+40 Degrees Low Chan



+40 Degrees High Chan



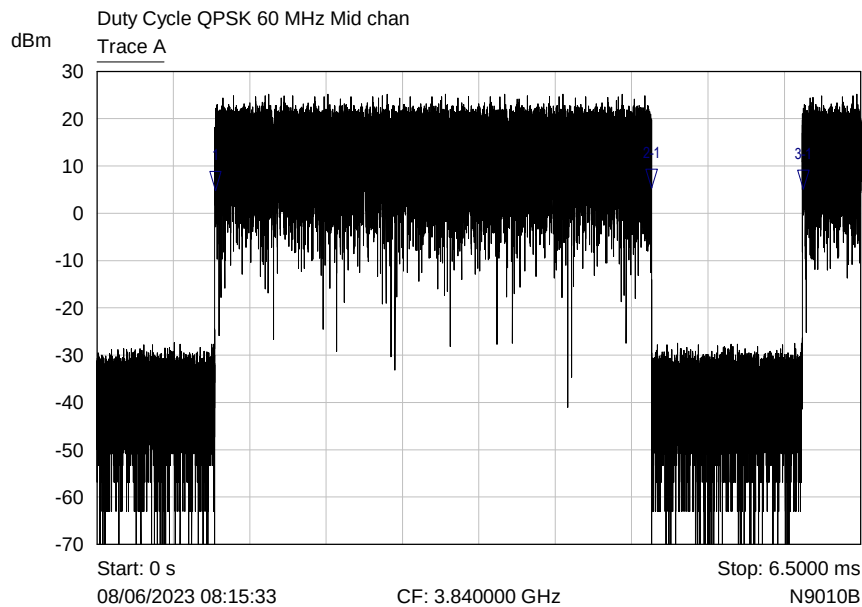
+50 Degrees Low Chan



+50 Degrees High Chan

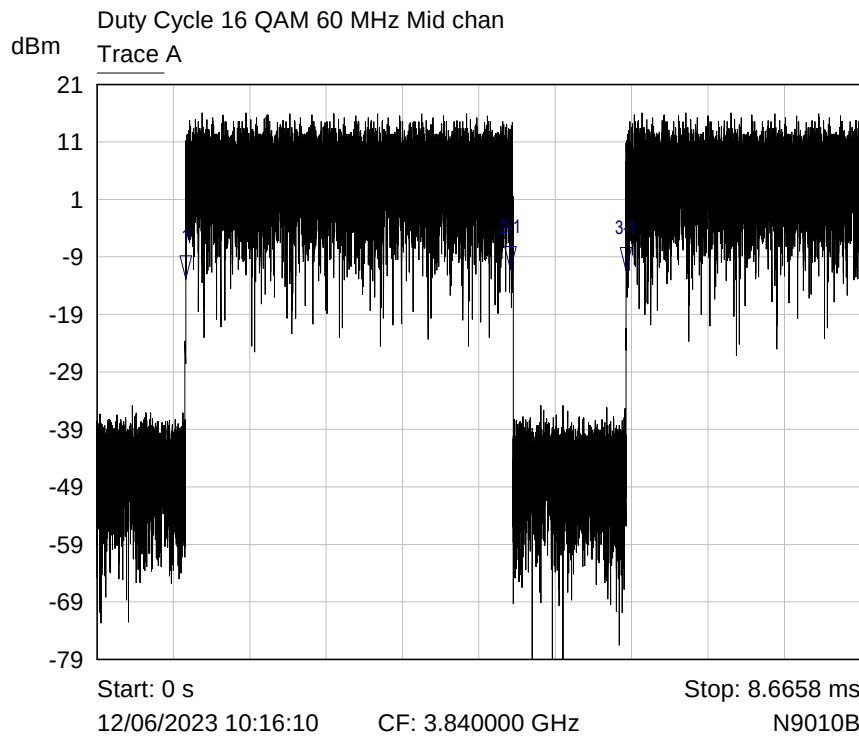
6.7 Duty Cycle

RF Parameters: Band 3700-3980 MHz, Power +33 dBm conducted (set), Channel Spacing 60 MHz, Mid Channel



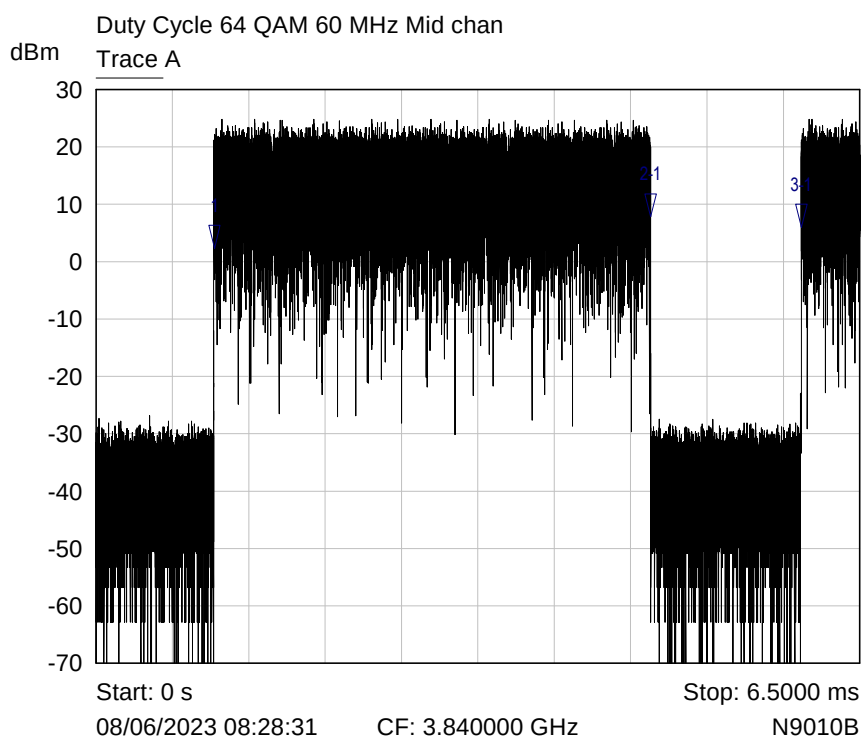
Mkr	Trace	X-Axis	Value	Notes
1 ▾	Trace A	1.0096 ms	4.91 dBm	Duty is 74.15%
2-1 ▾	Trace A	3.7073 ms	5.40 dBm	On Time
3-1 ▾	Trace A	4.9996 ms	5.11 dBm	Cycle Time

QPSK

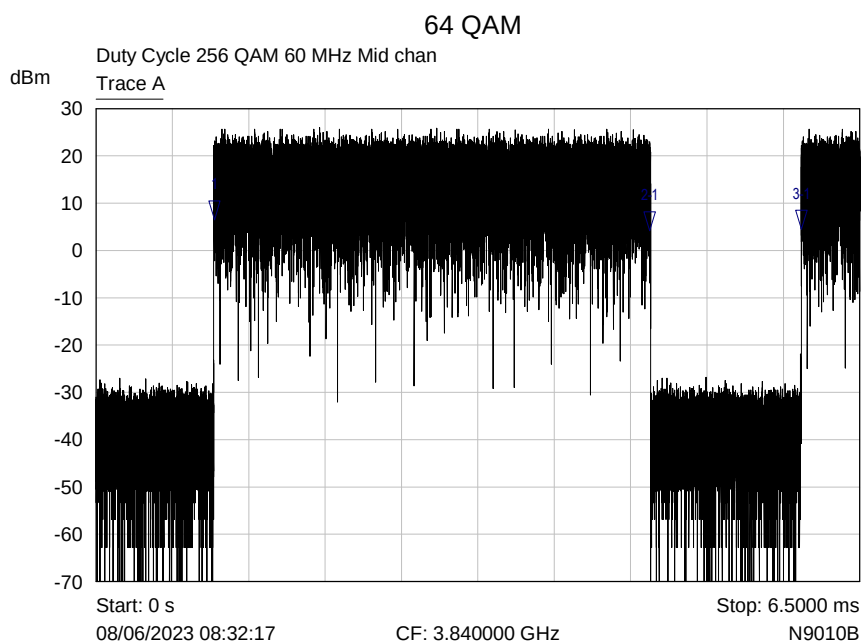


Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	1.0114 ms	-12.86 dBm	Duty is 76.4 %
2-1 ▽	Trace A	3.6816 ms	-11.19 dBm	On Time
3-1 ▽	Trace A	4.9937 ms	-11.35 dBm	Cycle Time

16 QAM



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	1.0063 ms	2.34 dBm	Duty is 74.22%
2-1 ▽	Trace A	3.7106 ms	7.80 dBm	On Time
3-1 ▽	Trace A	4.9996 ms	5.94 dBm	Cycle Time



Mkr	Trace	X-Axis	Value	Notes
1 ▽	Trace A	1.0063 ms	6.53 dBm	Duty is 74.20%
2-1 ▽	Trace A	3.7099 ms	4.10 dBm	On Time
3-1 ▽	Trace A	4.9996 ms	4.52 dBm	Cycle Time

256 QAM

7 Photographs

No photos included in report due to requested confidentiality under FCC certification.

7.1 Radiated emission diagrams

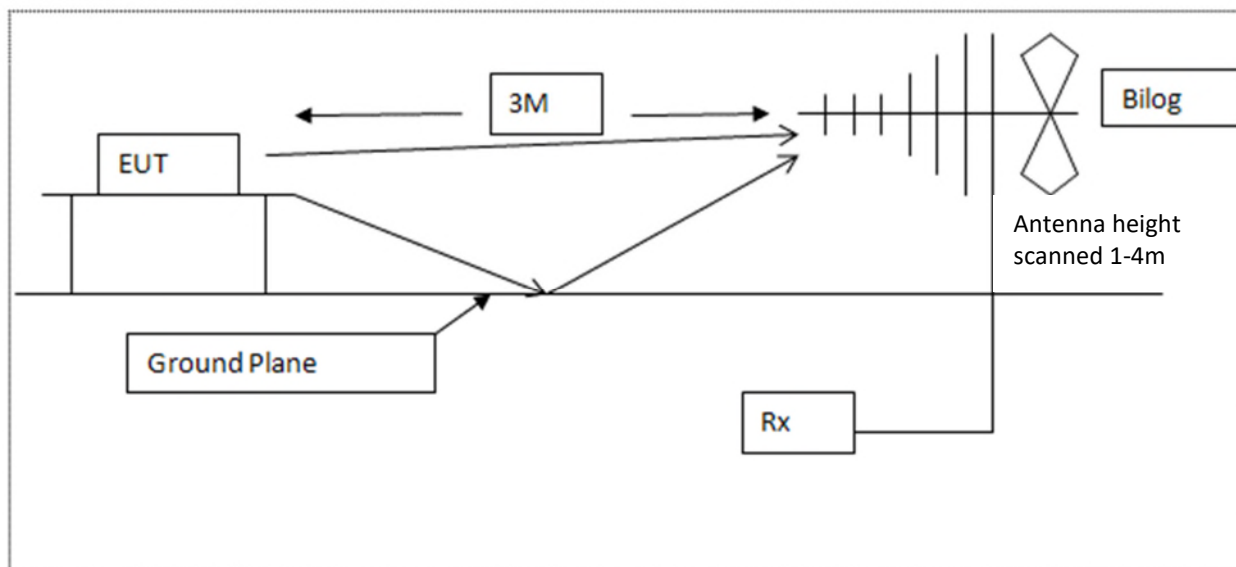


Diagram of the radiated emissions test setup 30 – 1000 MHz

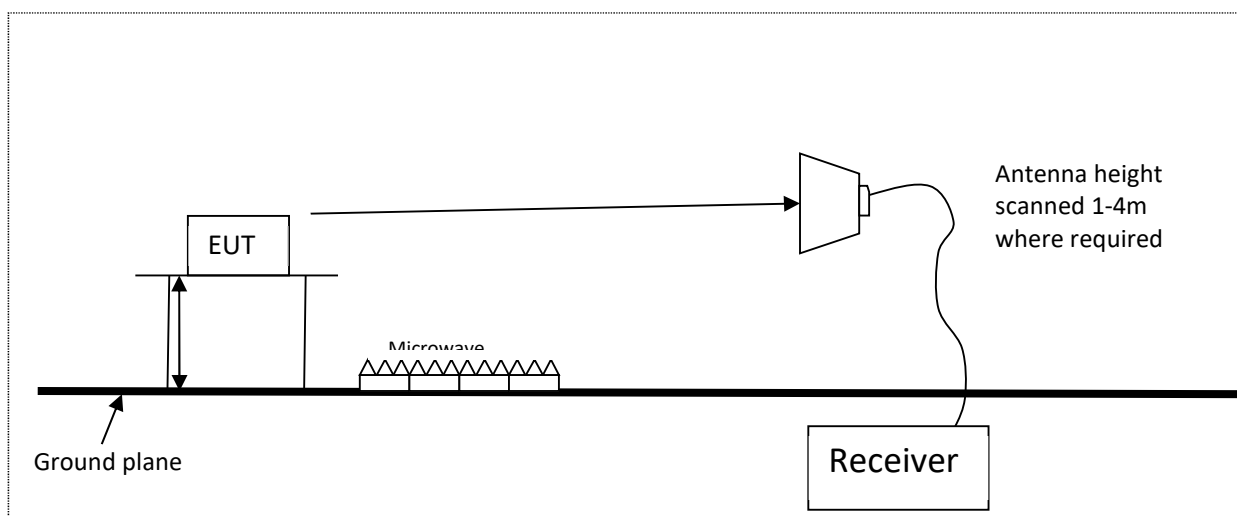


Diagram of the radiated emissions test setup above 1GHz

8 Test equipment calibration list

The following is a list of the test equipment used by R.N. Electronics Ltd to test the unit detailed within this report. In line with our procedures, the equipment was within calibration for the period during which testing was carried out.

RN No.	Model No.	Description	Manufacturer	Calibration date	Cal period
E136	3105	Horn Antenna 1 - 12.5 GHz	EMCO	02-Apr-2023	12 months
E253	6810.19.A	Attenuator 10dB 18GHz	Suhner	08-Jul-2022	12 months
E296-2	11970A	Harmonic Mixer 26.5-40GHz	Hewlett Packard	27-Jun-2022	12 months
E330	2224-20	Horn Antenna 26.5-40GHz	Flann (FMI)	17-Apr-2023	12 months
E411	N9039A	9 kHz - 1 GHz RF Filter Section	Agilent Technologies	07-Jul-2022	12 months
E412	E4440A	PSA 3 Hz - 26.5 GHz	Agilent Technologies	21-Jun-2022	24 months
E533	N5182A	Signal Generator 6 GHz MXG	Agilent Technologies	07-Dec-2022	36 months
E534	E4440A	PSA 3 Hz - 26.5 GHz	Agilent Technologies	25-Jan-2023	24 months
E615	4768-10	Attenuator 10dB 40GHz	Narda	28-Feb-2023	12 months
E624	E4440A	PSA 3 Hz - 26.5 GHz	Agilent Technologies	06-Jul-2022	24 months
E725	6610.42	Attenuator 10dB 40GHz	Suhner	29-Mar-2023	12 months
E743	2017 4/2dB	Attenuator 4/2dB 30-1000MHz	RN Electronics	15-Mar-2023	12 months
E853	C-2.4PKP-1501-500mm	Cable 2.4mm to 2.92mm 50cm Yellow	Intelliconnect	Not Applicable	
E887	BW-S6-2W263+	Attenuator SMA 6dB 26GHz	Mini-Circuits	14-Feb-2023	12 months
E899	1851	Directional Coupler .5 - 18.5GHz	Krytar	20-Apr-2022	12 months
E928	794-2891	UFL to SMA cable set	RS Components	21-May-2020	12 months
E938	BW-N10W5+	Attenuator N 10dB 18GHz	Mini-Circuits	17-Mar-2022	12 months
F077	AA18-10H	Attenuator SMA 10dB 18GHz	AtlanTecRF	03-Aug-2022	12 months
F153	08673-60083	Detector 2 - 26.5 GHz	Hewlett Packard	Not Applicable	
F249	ZFSC-2-10G-1	Power splitter 2GHz to 10GHz	Mini-Circuits	11-Aug-2022	12 months
H071	N9010B	EXA Signal Analyser 10 Hz to 44 GHz	Keysight Technologies	12-Dec-2022	24 months
L264	DT75	Digital Thermometer	Instrotech Ltd	20-Dec-2021	24 months
LPE364	CBL6112A	Antenna BiLog 30MHz - 2GHz	Chase Electronics Ltd	28-Mar-2022	24 months
S036	FMH1 420	Temperature & Humidity Test Chamber	JTS Ltd	Not Applicable	
TMS57	PM2534	Digital Multimeter	Philips	13-Apr-2022	12 months
TMS78	3160-08	Horn Std Gain 12.4 - 18 GHz	ETS Systems	30-Sep-2022	12 months
TMS79	3160-09	Horn Std Gain 18 - 26.5 GHz	ETS Systems	25-May-2022	12 months
TMS81	6502	Antenna Active Loop	EMCO	22-Jul-2021	24 months
TMS82	8449B	Pre-Amplifier 1GHz - 26.5GHz	Agilent Technologies	16-Dec-2022	12 months

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9 Auxiliary and peripheral equipment

9.1 Customer supplied equipment

Item No.	Model No.	Description	Manufacturer	Serial No.
1	Latitude 74900	Laptop	Dell	7N635S2
2	ZM1833	USB C to multi-port adaptor	ZmUIPnG	-
3	-	Serial to Ethernet adaptor	TRIPP-LITE	N034-35N BL
4	CPX200D	Dual 180 Watt DC Power Supply	Aim-TTI	558035
5		4off 20dB attenuators	Mini circuits	-
6		4off 30dB Attenuators	Mini circuits	-

9.2 RN Electronics supplied equipment

RN No.	Model No.	Description	Manufacturer	Serial No
N532	-	GPS Repeater	-	-
		DC PSU		

10 Condition of the equipment tested

In order for the EUT to produce the results shown within this report the following modifications, if any, were implemented.

10.1 Modifications before test

No modifications were made before test by RN Electronics Ltd.

10.2 Modifications during test

No modifications were made during test by RN Electronics Ltd.

11 Description of test sites

Site A	Radio Laboratory and Anechoic Chamber
Site B	Semi-Anechoic Chamber and Control Room FCC Registration No. 293246, ISED Registration No. 5612A-4
Site C	Transient Laboratory
Site D	Screened Room (Conducted Immunity)
Site E	Screened Room (Control Room for Site D)
Site F	Screened Room (Conducted Emissions)
Site G	Screened Room (Control Room for Site H)
Site H	3m Semi-Anechoic Chamber (indoor OATS) FCC Registration No. 293246, ISED Registration No. 5612A-2, VCCI Registration No. 4065
Site J	Transient Laboratory
Site K	Screened Room (Control Room for Site M)
Site M	3m Semi-Anechoic Chamber (indoor OATS) FCC Registration No. 293246, ISED Registration No. 5612A-3
Site N	Radio Laboratory
Site Q	Fully-Anechoic Chamber
Site OATS 3m and 10m Open Area Test Site	FCC Registration No. 293246, ISED Registration No. 5612A-1
Site R	Screened Room (Conducted Immunity)
Site S	Safety Laboratory
Site T	Transient Laboratory

RN Electronics CAB identifier as issued by Innovation, Science and Economic Development Canada is UK0002

RN Electronics CAB identifier as issued by FCC is UK2015

12 Abbreviations and units

%	Percent	dBμV	decibels relative to 1μV
λ	Wavelength	dBμV/m	decibels relative to 1μV/m
μA/m	microAmps per metre	dBc	decibels relative to Carrier
μV	microVolts	dBd	decibels relative to dipole gain
μW	microWatts	dBi	decibels relative to isotropic gain
AC	Alternating Current	dBm	decibels relative to 1mW
ACK	ACKnowledgement	dBm	decibels relative to 1mW
ACP	Adjacent Channel Power	dBm	decibels relative to 1mW
AFA	Adaptive Frequency Agility	DC	Direct Current
ALSE	Absorber Lined Screened Enclosure	DFS	Dynamic Frequency Selection
AM	Amplitude Modulation	DMO	Dynamic Modulation Order
Amb	Ambient	DSSS	Direct Sequence Spread Spectrum
ANSI	American National Standards Institute	DTA	Digital Transmission Analyser
ATPC	Automatic Transmit Power Control	EIRP	Equivalent Isotropic Radiated Power
AVG	Average	emf	electromotive force
AWGN	Additive White Gaussian Noise	ERC	European Radiocommunications Committee
BER	Bit Error Rate	ERP	Effective Radiated Power
BPSK	Binary Phase Shift Keying	ETSI	European Telecommunications Standards Institute
BT	Bluetooth	EU	European Union
BLE	Bluetooth Low Energy	EUT	Equipment Under Test
BW	Bandwidth	FCC	Federal Communications Commission
°C	Degrees Celsius	FER	Frame Error Rate
C/I	Carrier / Interferer	FHSS	Frequency Hopping Spread Spectrum
CAC	Channel Availability Check	FM	Frequency Modulation
CCA	Clear Channel Assessment	FSK	Frequency Shift Keying
CEPT	European Conference of Postal and Telecommunications Administrations	FSS	Fixed Satellite Service
CFR	Code of Federal Regulations	g	Grams
CISPR	Comité International Spécial des Perturbations Radioélectriques	GHz	GigaHertz
cm	centimetre	GNSS	Global Navigation Satellite System
COFDM	Coherent OFDM	GPS	Global Positioning System
COT	Channel Occupancy Time	Hz	Hertz
CS	Channel Spacing	IEEE	Institute of Electrical and Electronics Engineers
CW	Continuous Wave	IF	Intermediate Frequency
DAA	Detect And Avoid	ISED	Innovation Science and Economic Development
dB	decibels	ITU	International Telecommunications Union
dBμA/m	decibels relative to 1μA/m	KDB	Knowledge DataBase

kg	kilogram	pW	picoWatts
kHz	kiloHertz	QAM	Quadrature Amplitude Modulation
kPa	Kilopascal	QP	Quasi Peak
LBT	Listen Before Talk	QPSK	Quadrature Phase Shift Keying
LISN	Line Impedance Stabilisation Network	RBW	Resolution Band Width
LNA	Low Noise Amplifier	RED	Radio Equipment Directive
LNB	Low Noise Block	R&TTE	Radio and Telecommunication Terminal Equipment
LO	Local Oscillator	Ref	Reference
m	metre	RF	Radio Frequency
mA	milliAmps	RFC	Remote Frequency Control
max	maximum	RFID	Radio Frequency IDentification
Mbit/s	MegaBits per second	RLAN	Radio Local Area Network
MCS	Modulation and Coding Scheme	RMS	Root Mean Square
MHz	MegaHertz	RNSS	Radio Navigation Satellite Service
mic	Microphone	RSL	Received Signal Level
MIMO	Multiple Input, Multiple Output	RSSI	Received Signal Strength Indicator
min	minimum	RTP	Room Temperature and Pressure
mm	millimetres	RTPC	Remote Transmit Power Control
ms	milliseconds	Rx	Receiver
mW	milliWatts	s	Seconds
NA	Not Applicable	SINAD	Signal to Noise And Distortion
NFC	Near Field Communications	SRD	Short Range Device
nom	Nominal	Tx	Transmitter
nW	nanoWatt	UKAS	United Kingdom Accreditation Service
OATS	Open Area Test Site	UKCA	United Kingdom Conformity Assessed
OBW	Occupied Band Width	UKRER	United Kingdom Radio Equipment Regulations
OCW	Occupied Channel Width	UHF	Ultra High Frequency
OFDM	Orthogonal Frequency Division Multiplexing	U-NII	Unlicensed National Information Infrastructure
OOB	Out Of Band	USB	Universal Serial Bus
ppm	Parts per million	UWB	Ultra Wide Band
PER	Packet Error Rate	V	Volts
PK	Peak	V/m	Volts per metre
PMR	Private Mobile Radio	VBW	Video Band Width
PRBS	Pseudo Random Bit Sequence	VHF	Very High Frequency
PRF	Pulse Repitition Frequency	VSAT	Very Small Aperture Terminal
PSD	Power Spectral Density	W	Watts
PSU	Power Supply Unit		

===== END OF TEST REPORT =====