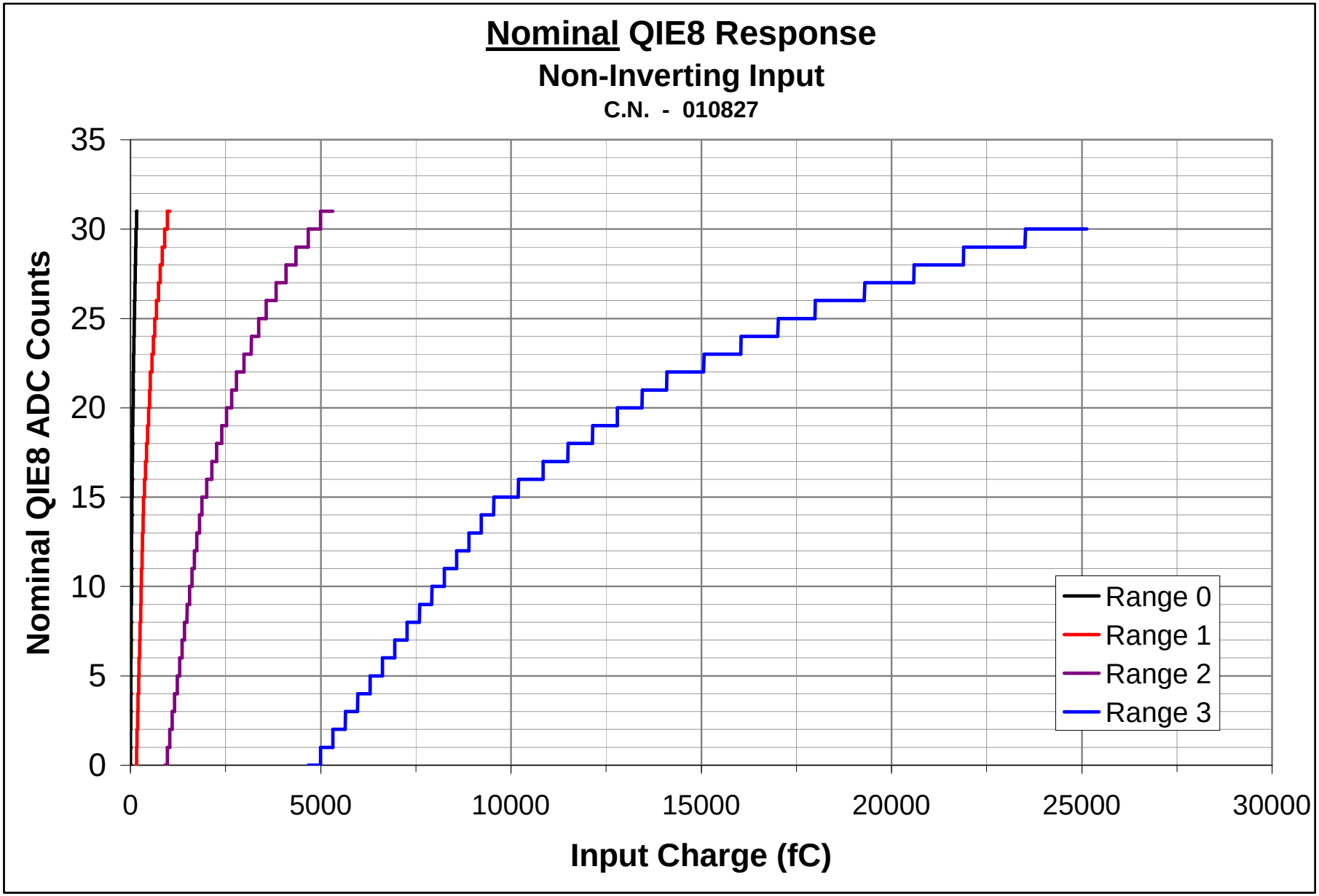
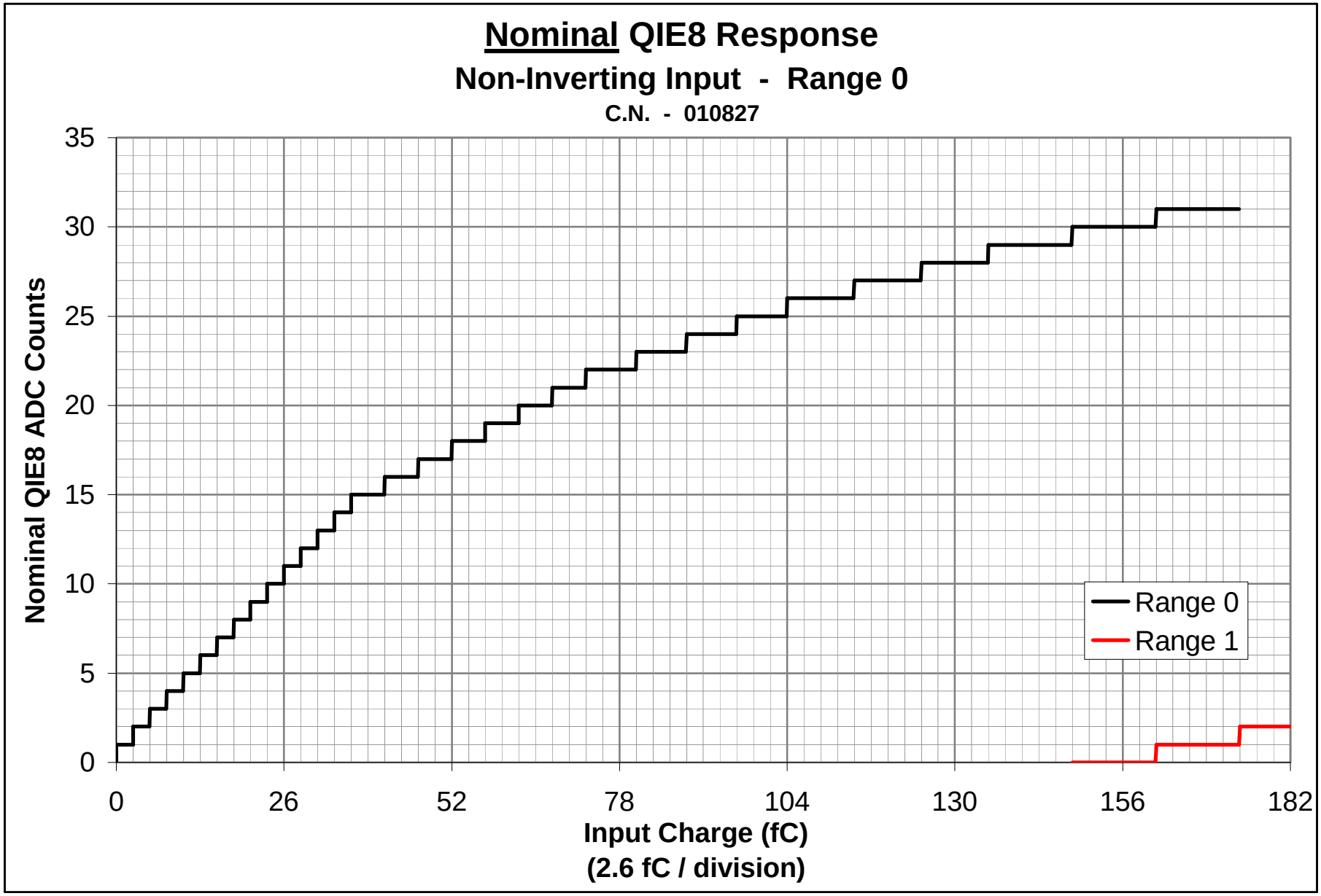
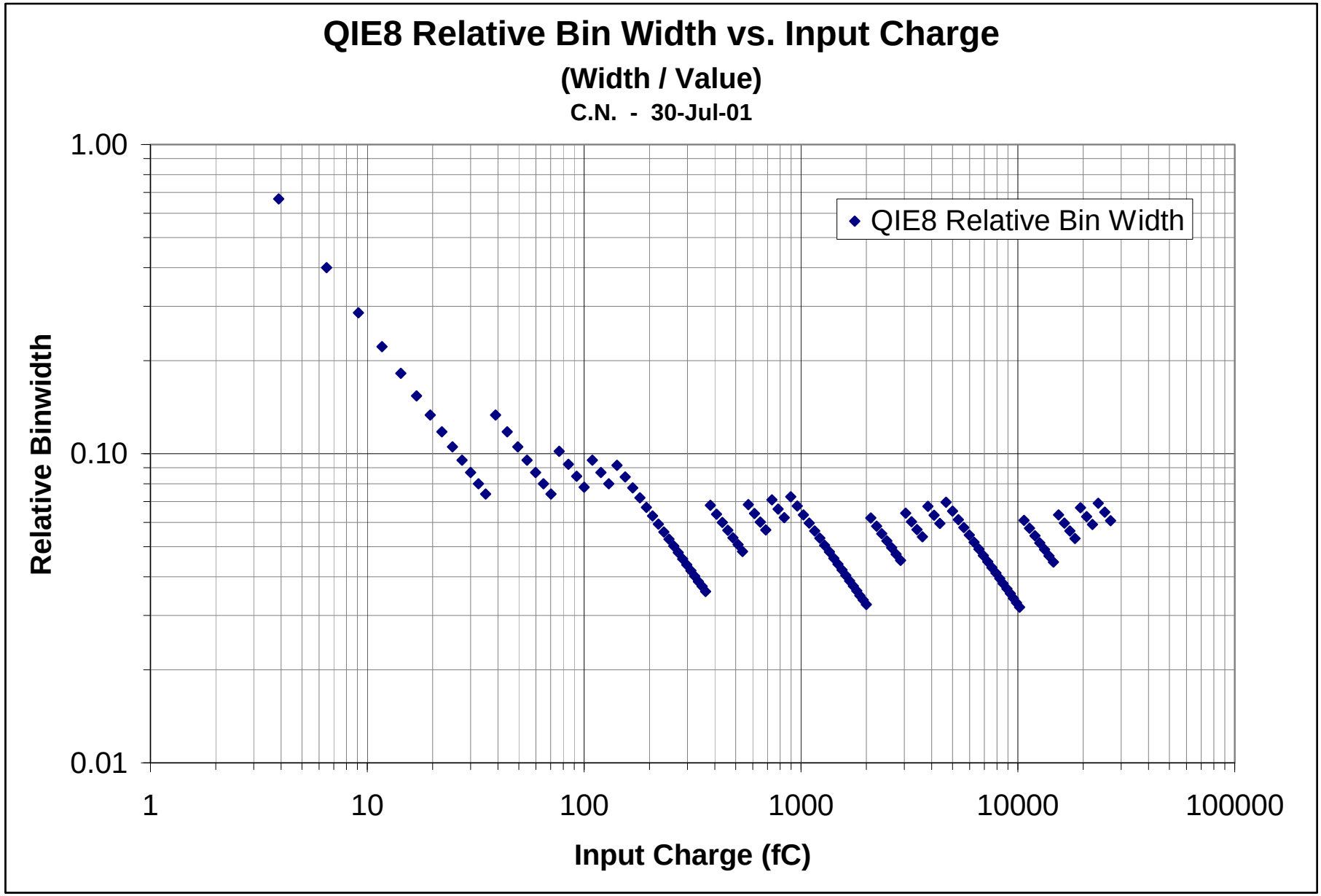
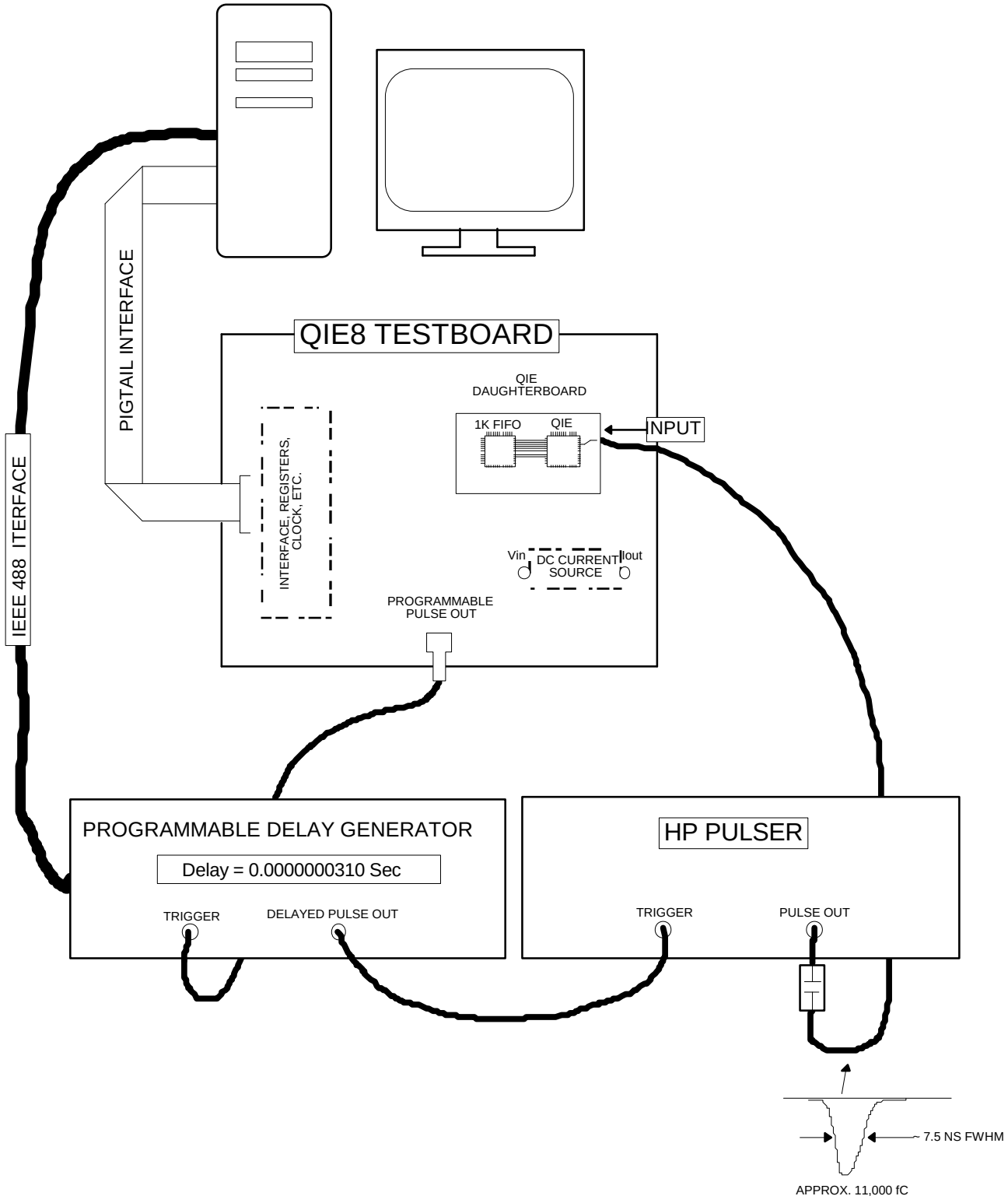
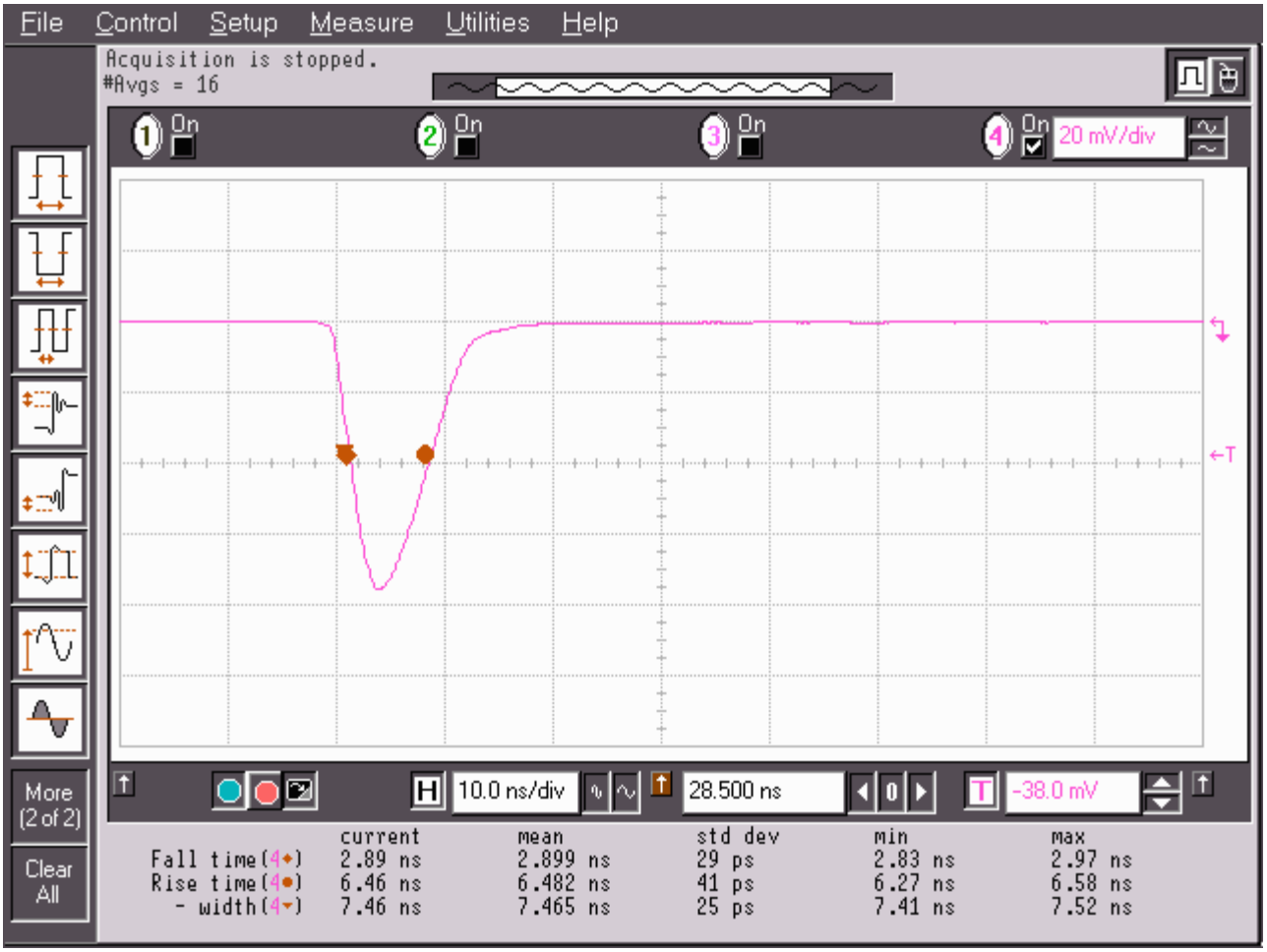

Nominal QIE8 Response
Non-Inverting Input
C.N. - 010827
Nominal QIE8 ADC Counts
35
30
25
20
15
10
5
0
0
5000
10000
15000
20000
25000
30000
Input Charge (fC)
Range 0
Range 1
Range 2
Range 3

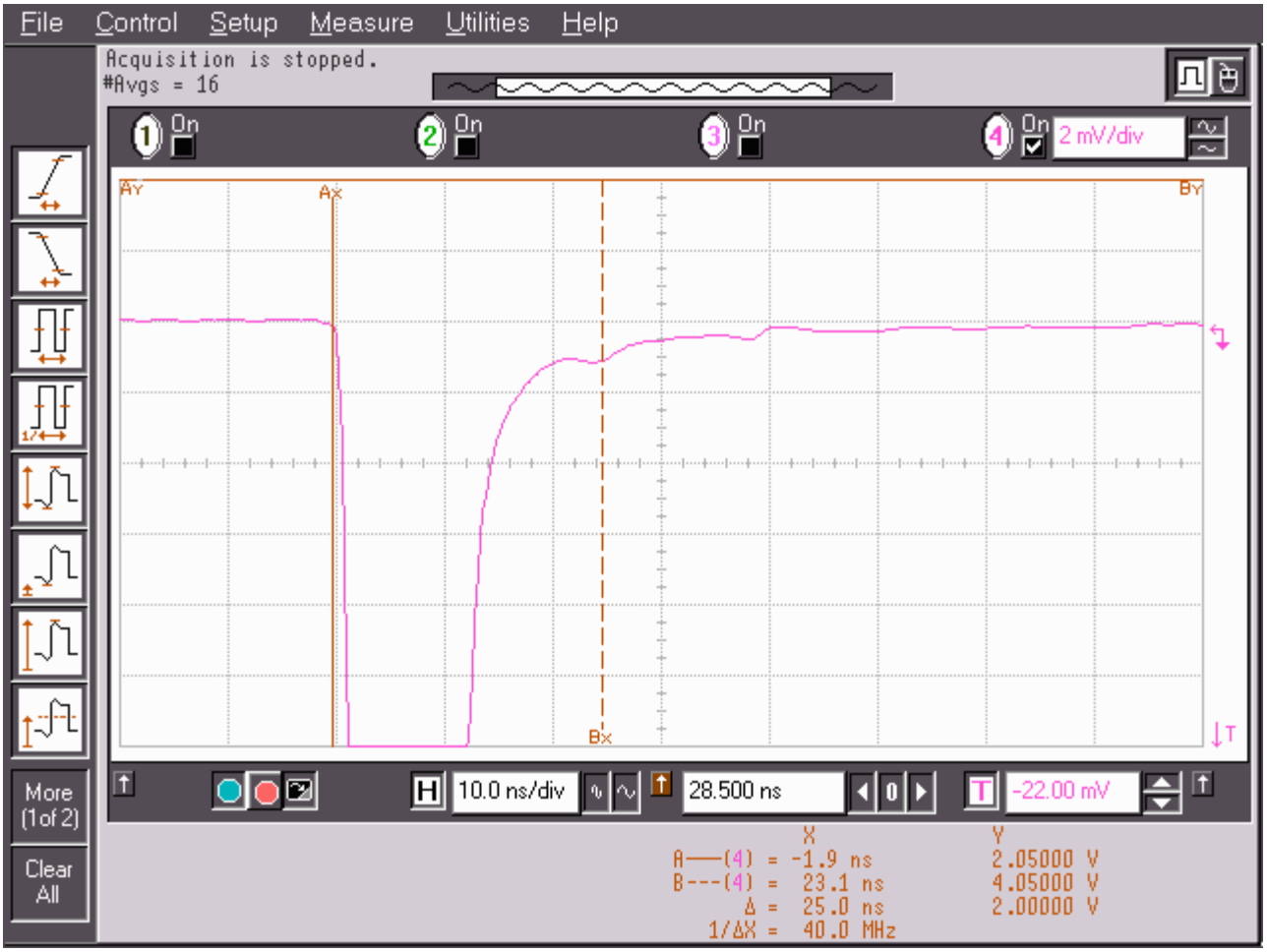

Nominal QIE8 Response
Non-Inverting Input - Range 0
C.N. - 010827
Nominal QIE8 ADC Counts
35
30
25
20
15
10
5
0
0
26
52
78
104
130
156
182
Input Charge (fC)
(2.6 fC / division)
Range 0
Range 1

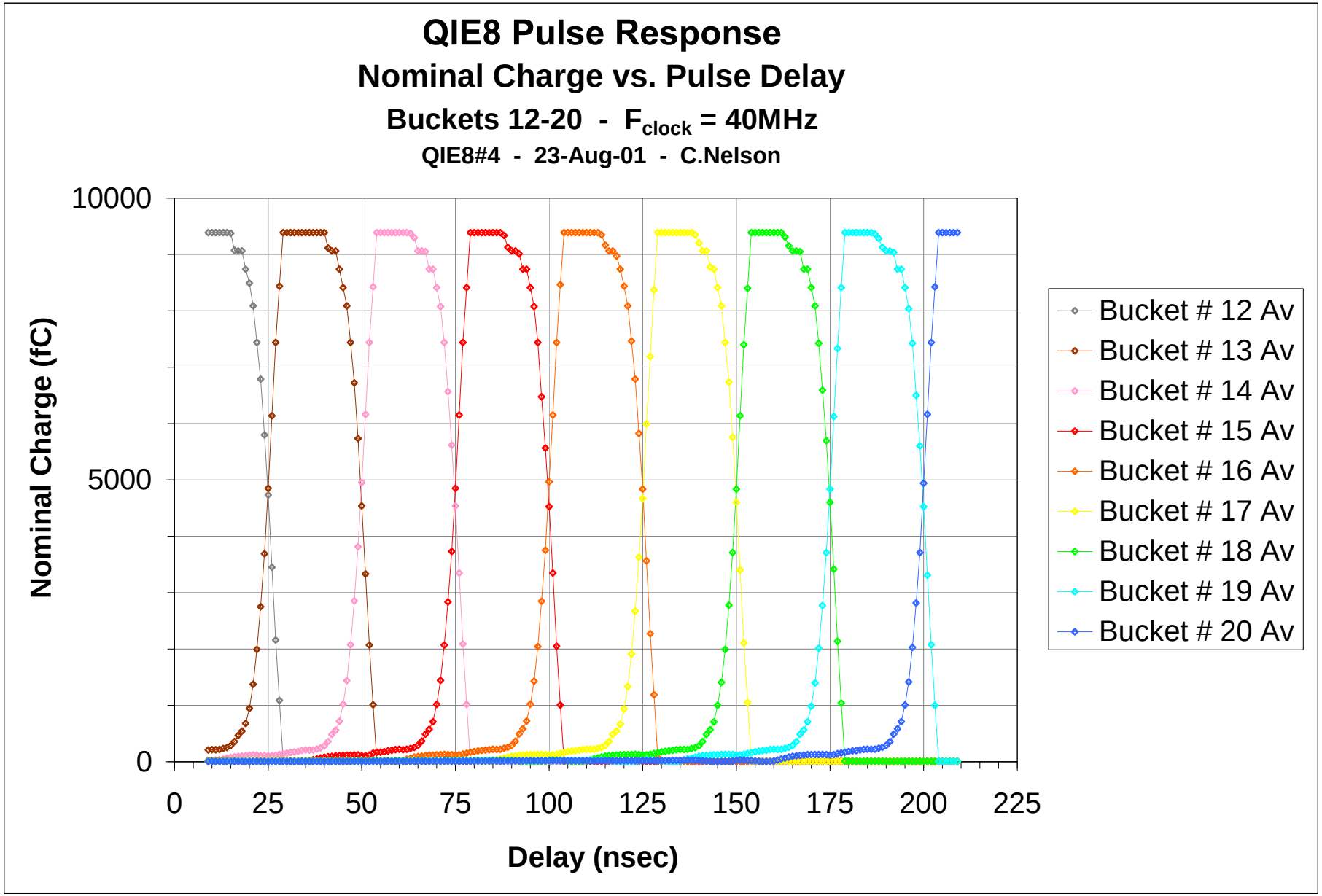

QIE8 Relative Bin Width vs. Input Charge
(Width / Value)
C.N. - 30-Jul-01
1.00
0.10
0.01
Relative Binwidth
QIE8 Relative Bin Width
1
10
100
1000
10000
100000
Input Charge (fC)

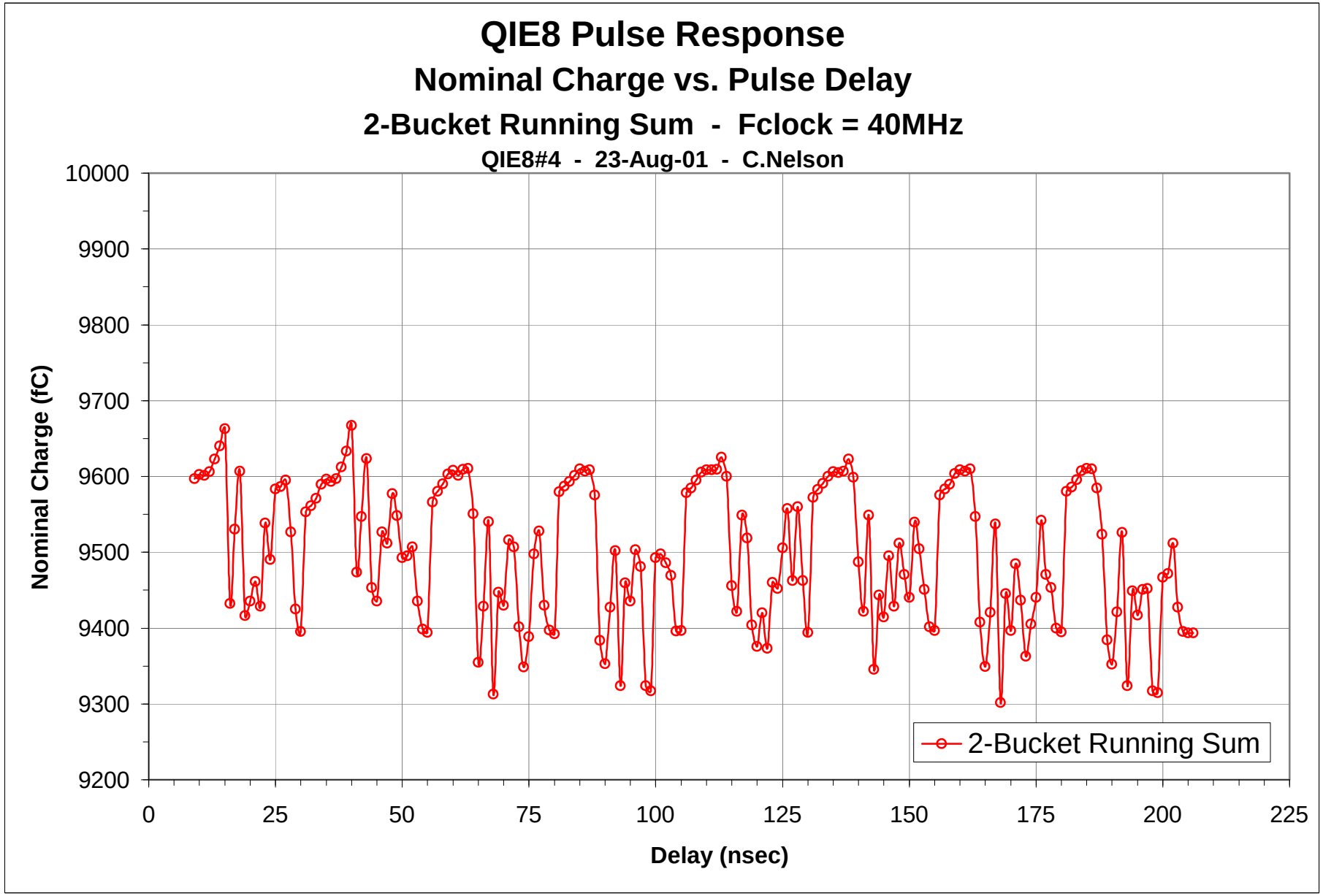
# SETUP FOR SWEEPING A PULSE ACROSS PHASES

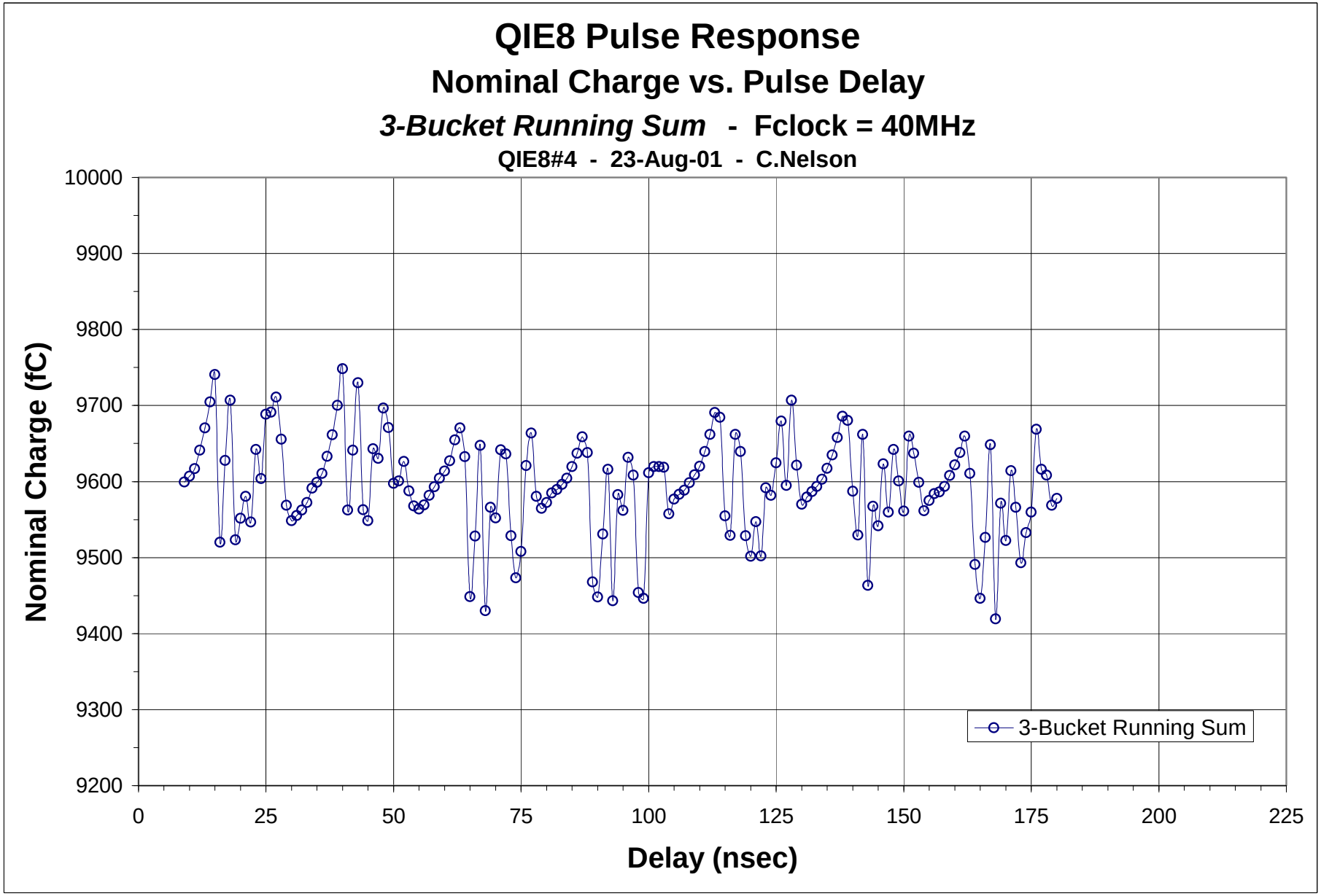


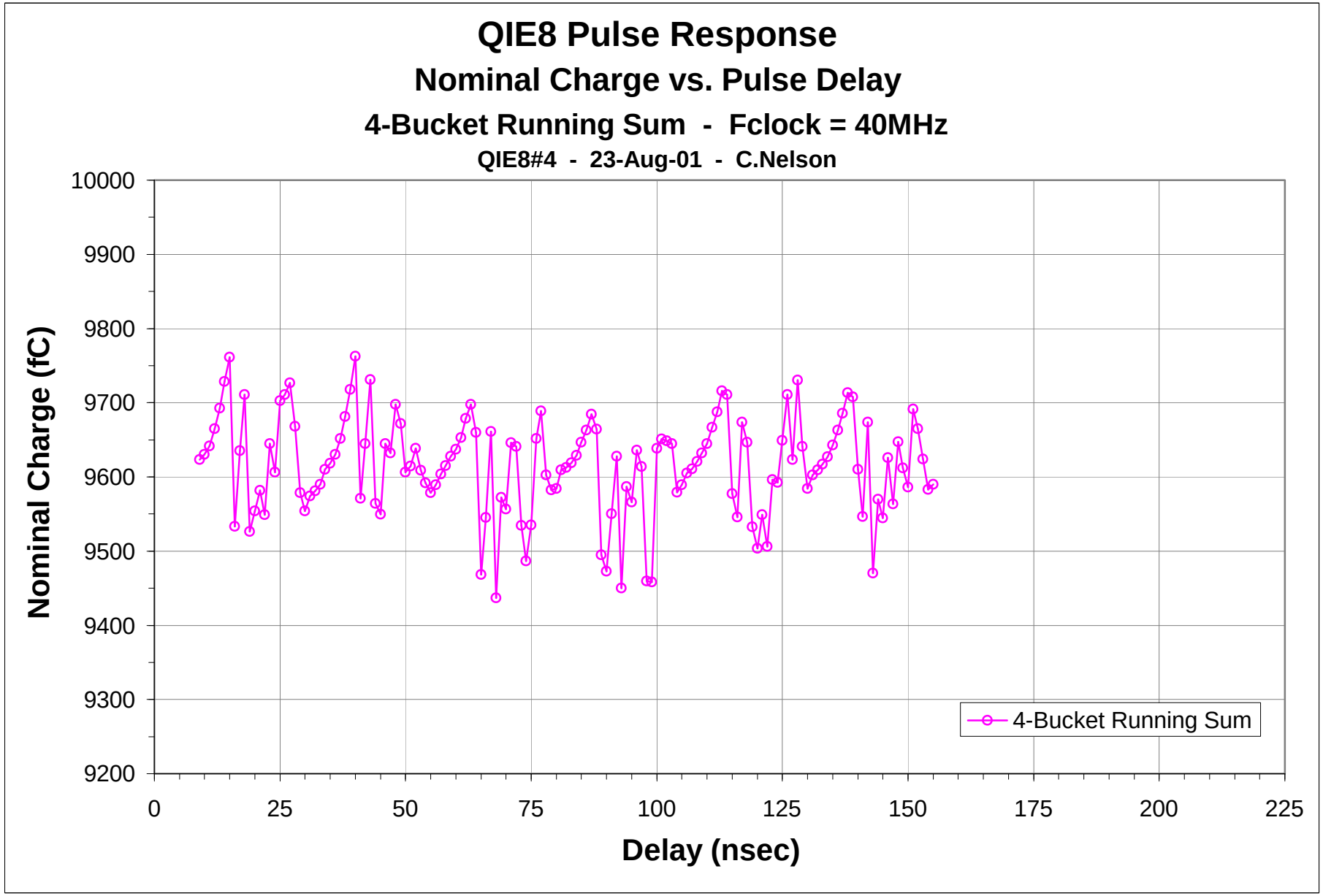

File Control Setup Measure Utilities Help
Acquisition is stopped.
#Avgs = 16
On
20 mV/div
10.0 ns/div
28.500 ns
-38.0 mV
More (2 of 2)
Clear All
current mean std dev min max
Fall time(4) 2.89 ns 2.899 ns 29 ps 2.83 ns 2.97 ns
Rise time(4) 6.46 ns 6.482 ns 41 ps 6.27 ns 6.58 ns
- width(4) 7.46 ns 7.465 ns 25 ps 7.41 ns 7.52 ns

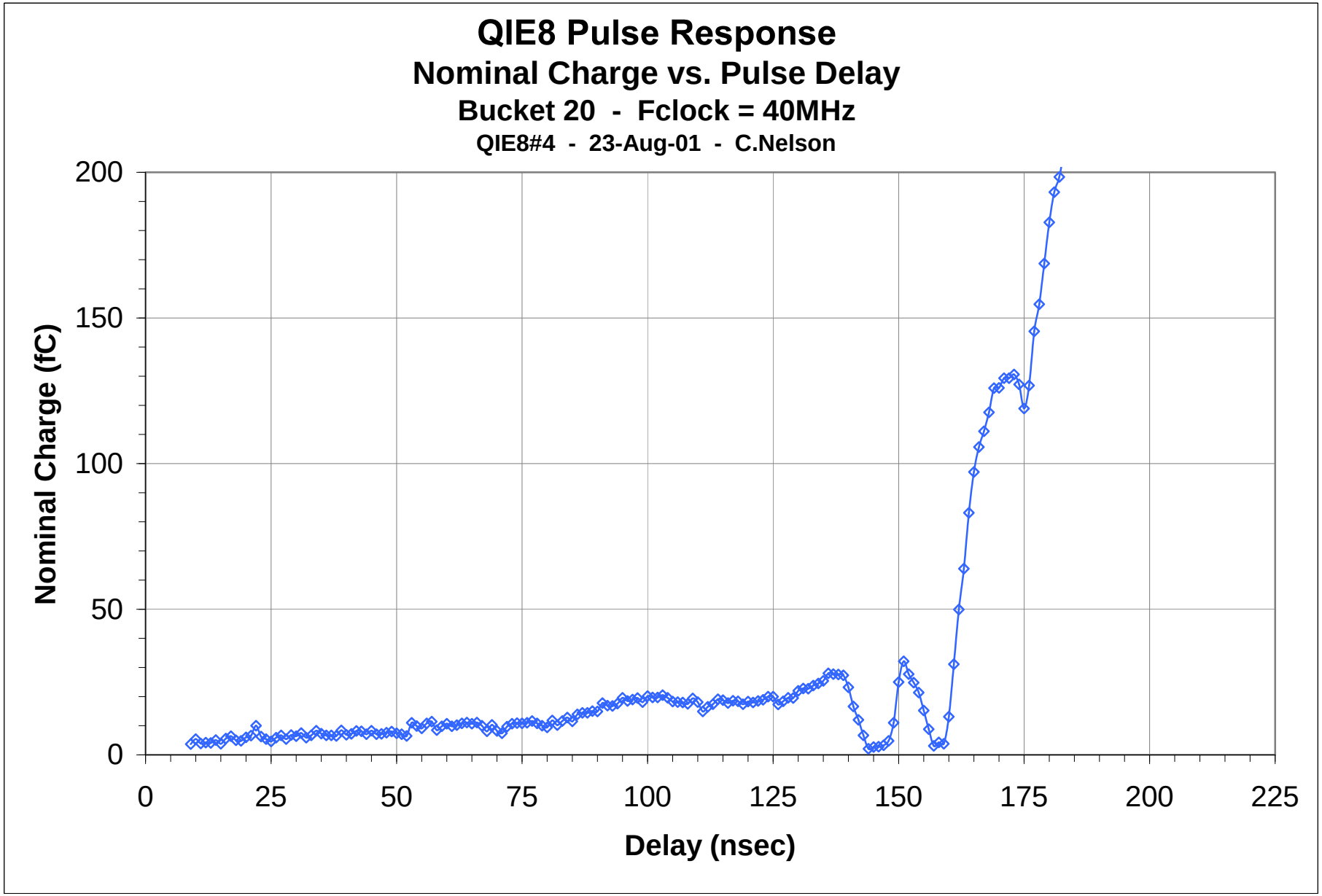

File Control Setup Measure Utilities Help
Acquisition is stopped.
#Avgs = 16
On
On
On
On
2 mV/div
AY
AX
BY
BX
10.0 ns/div
28.500 ns
-22.00 mV
More (1of 2)
Clear All
X
Y
A——(4) = -1.9 ns 2.05000 V
B---(4) = 23.1 ns 4.05000 V
Δ = 25.0 ns 2.00000 V
1/ΔX = 40.0 MHz

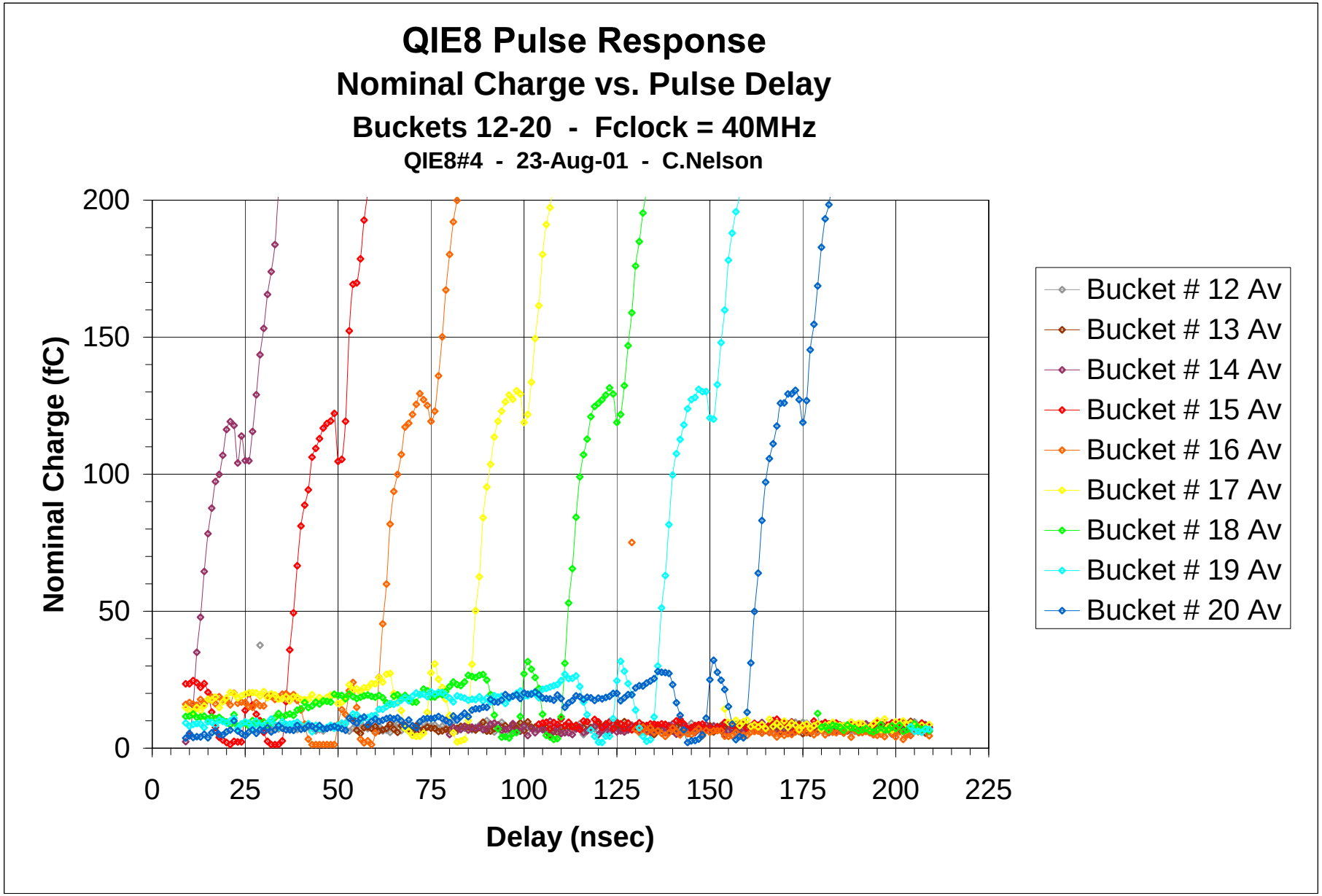

QIE8 Pulse Response
Nominal Charge vs. Pulse Delay
Buckets 12-20 - $F_{clock}$ = 40MHz
QIE8#4 - 23-Aug-01 - C.Nelson
Nominal Charge (fC)
10000
5000
0
0
25
50
75
100
125
150
175
200
225
Delay (nsec)
Bucket # 12 Av
Bucket # 13 Av
Bucket # 14 Av
Bucket # 15 Av
Bucket # 16 Av
Bucket # 17 Av
Bucket # 18 Av
Bucket # 19 Av
Bucket # 20 Av


QIE8 Pulse Response
Nominal Charge vs. Pulse Delay
2-Bucket Running Sum - Fclock = 40MHz
QIE8#4 - 23-Aug-01 - C.Nelson
Nominal Charge (fC)
10000
9900
9800
9700
9600
9500
9400
9300
9200
0
25
50
75
100
125
150
175
200
225
Delay (nsec)
2-Bucket Running Sum


QIE8 Pulse Response
Nominal Charge vs. Pulse Delay
3-Bucket Running Sum - Fclock = 40MHz
QIE8#4 - 23-Aug-01 - C.Nelson
Nominal Charge (fC)
10000
9900
9800
9700
9600
9500
9400
9300
9200
0
25
50
75
100
125
150
175
200
225
Delay (nsec)
3-Bucket Running Sum


QIE8 Pulse Response
Nominal Charge vs. Pulse Delay
4-Bucket Running Sum - Fclock = 40MHz
QIE8#4 - 23-Aug-01 - C.Nelson
Nominal Charge (fC)
10000
9900
9800
9700
9600
9500
9400
9300
9200
0
25
50
75
100
125
150
175
200
225
Delay (nsec)
4-Bucket Running Sum


QIE8 Pulse Response
Nominal Charge vs. Pulse Delay
Bucket 20 - Fclock = 40MHz
QIE8#4 - 23-Aug-01 - C.Nelson
Nominal Charge (fC)
200
150
100
50
0
0
25
50
75
100
125
150
175
200
225
Delay (nsec)


QIE8 Pulse Response
Nominal Charge vs. Pulse Delay
Buckets 12-20 - Fclock = 40MHz
QIE8#4 - 23-Aug-01 - C.Nelson
Nominal Charge (fC)
200
150
100
50
0
0
25
50
75
100
125
150
175
200
225
Delay (nsec)
Bucket # 12 Av
Bucket # 13 Av
Bucket # 14 Av
Bucket # 15 Av
Bucket # 16 Av
Bucket # 17 Av
Bucket # 18 Av
Bucket # 19 Av
Bucket # 20 Av