HCal Tile Testing Status

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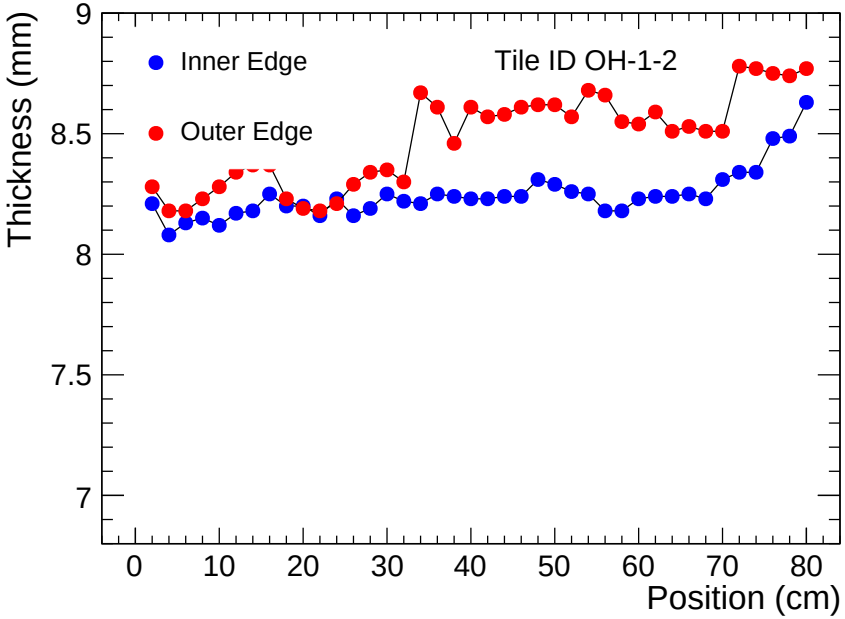
April 19th, 2016

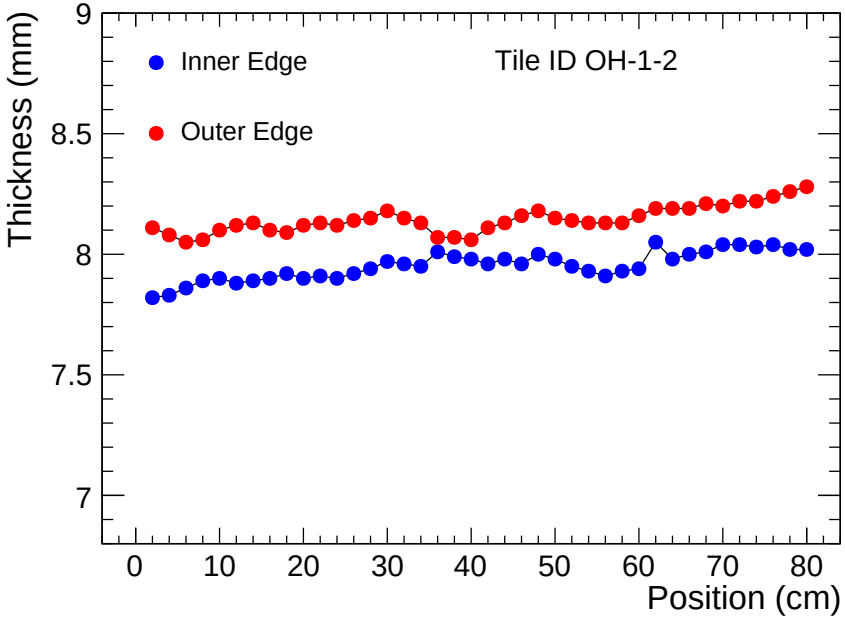
Tile thickness, wrapped and unwrapped

OH-1-2

Wrapped

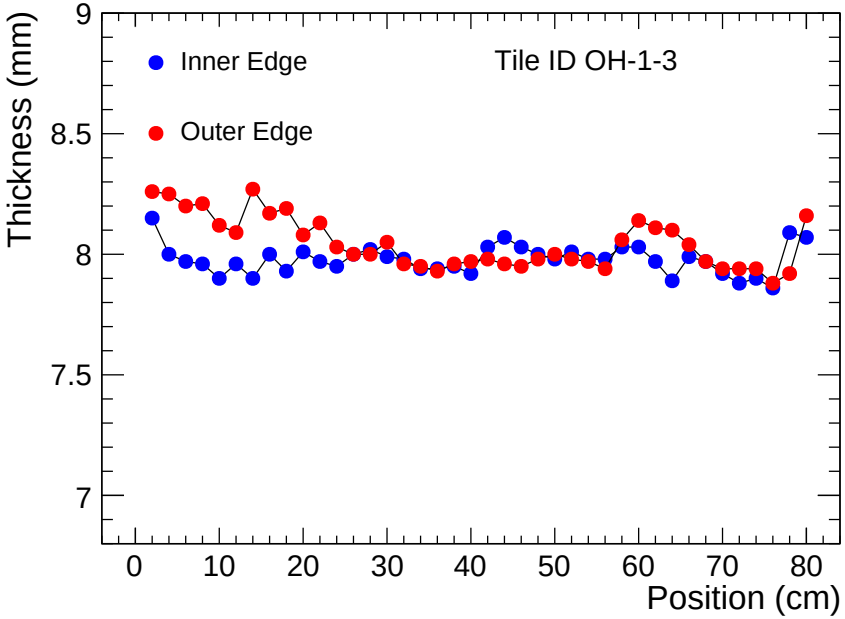


Unwrapped

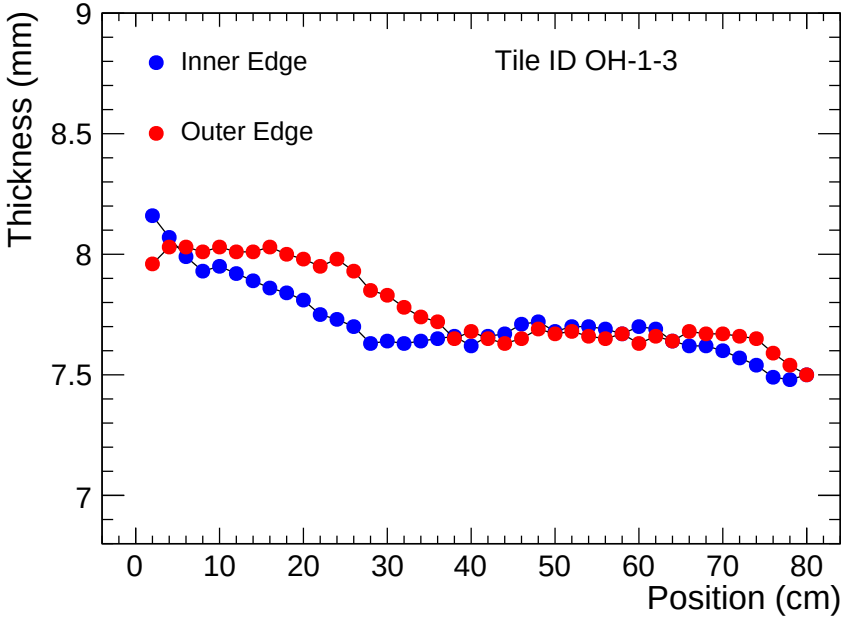


OH-1-3

Wrapped

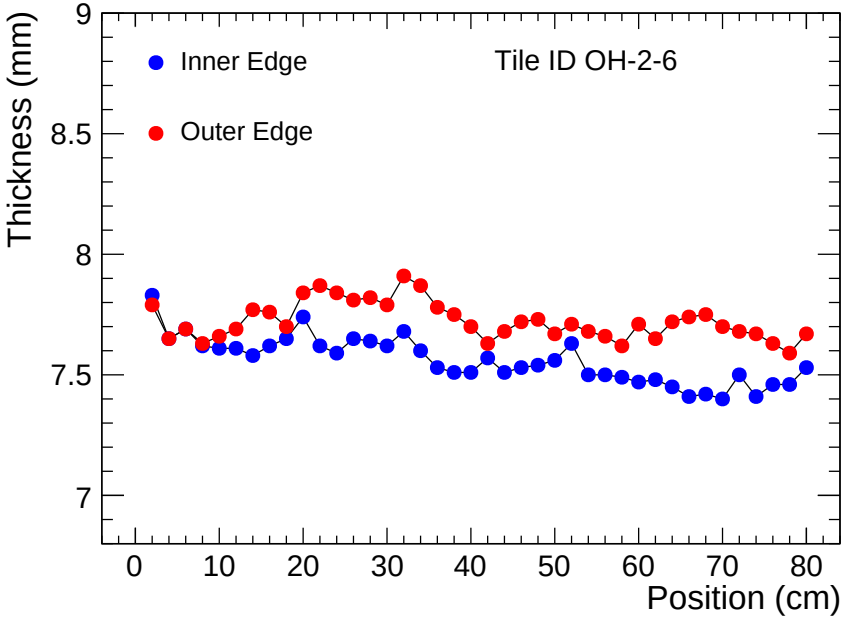


Unwrapped

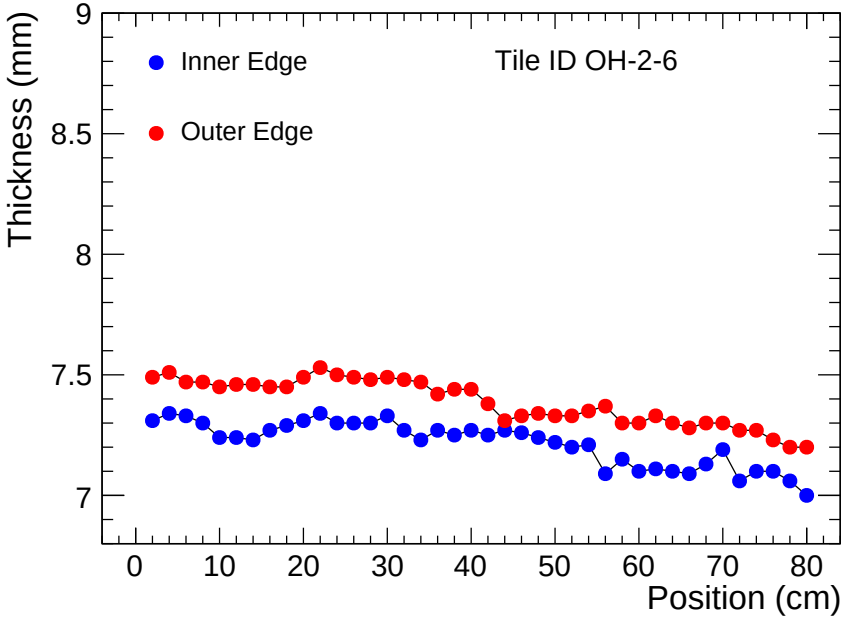


OH-2-6

Wrapped

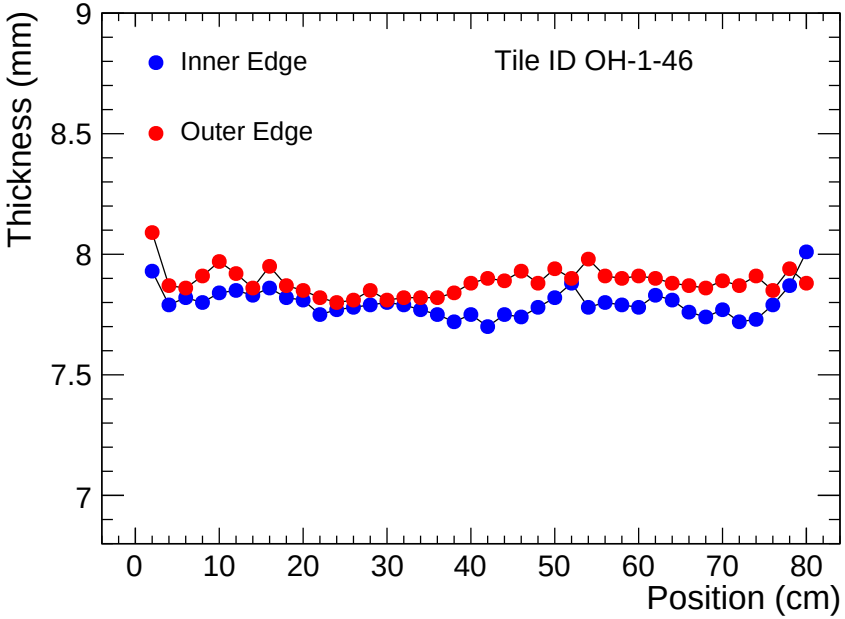


Unwrapped



OH-1-46

Wrapped



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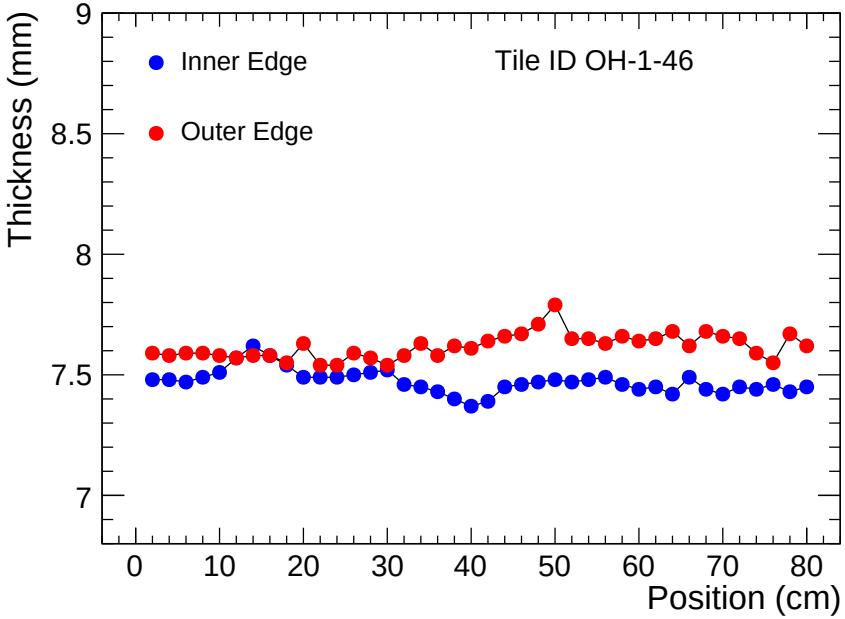
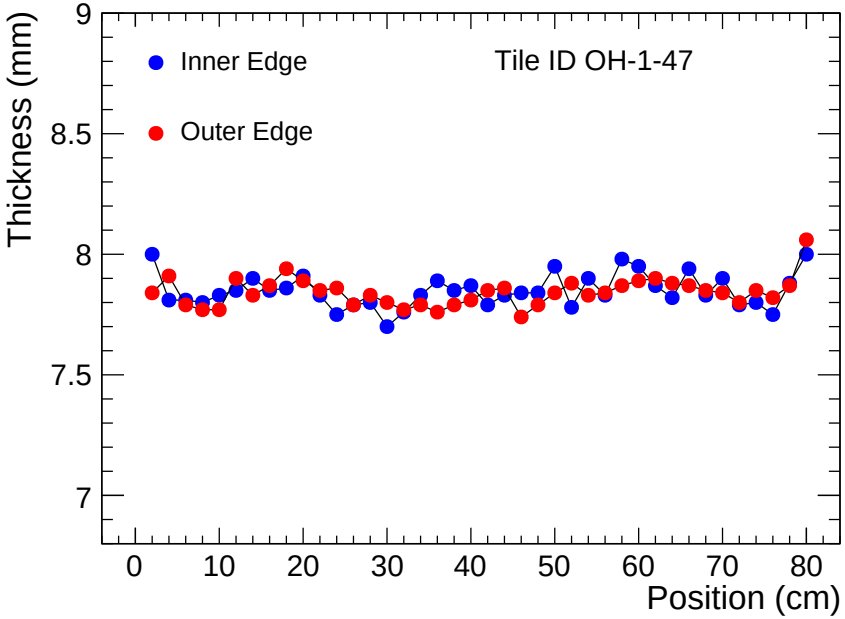


OH-1-47

Wrapped



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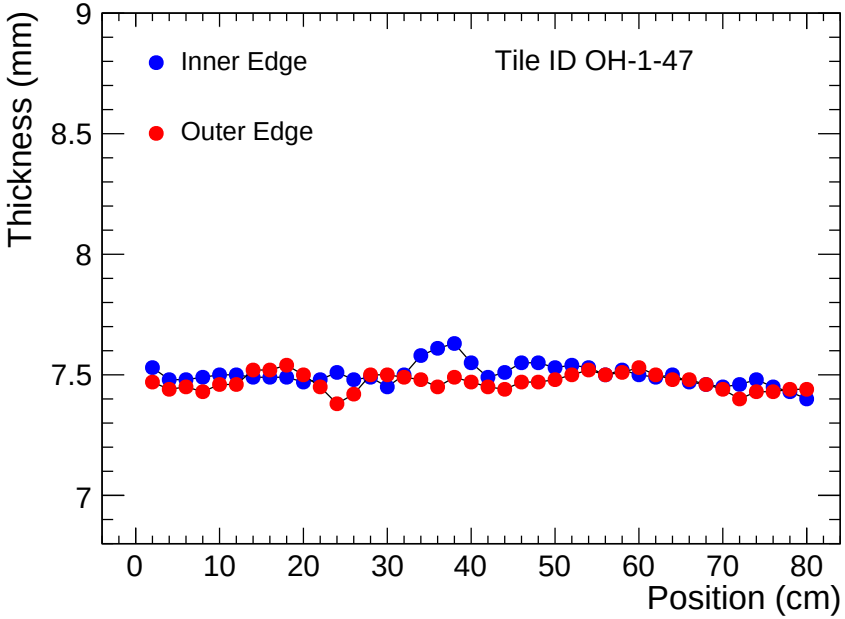

OH-2-46

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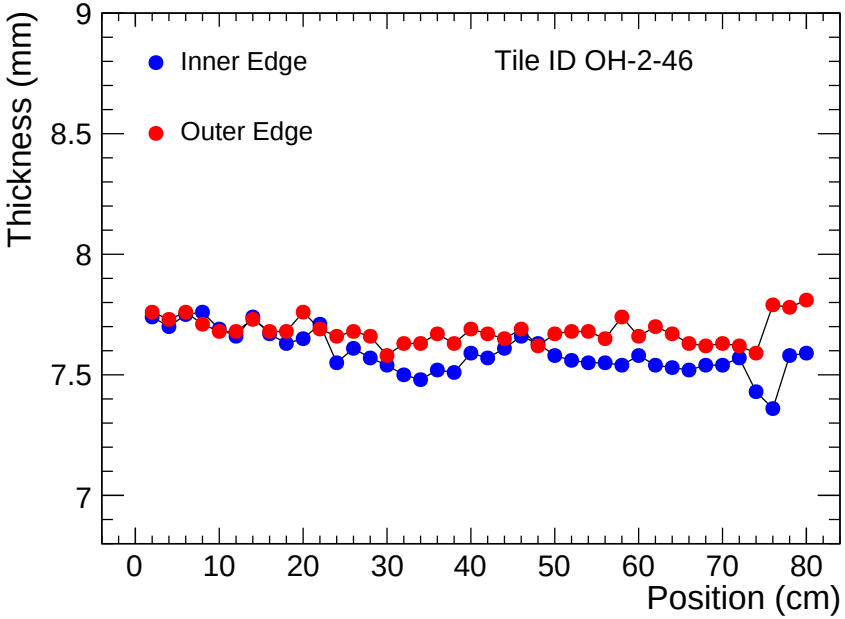

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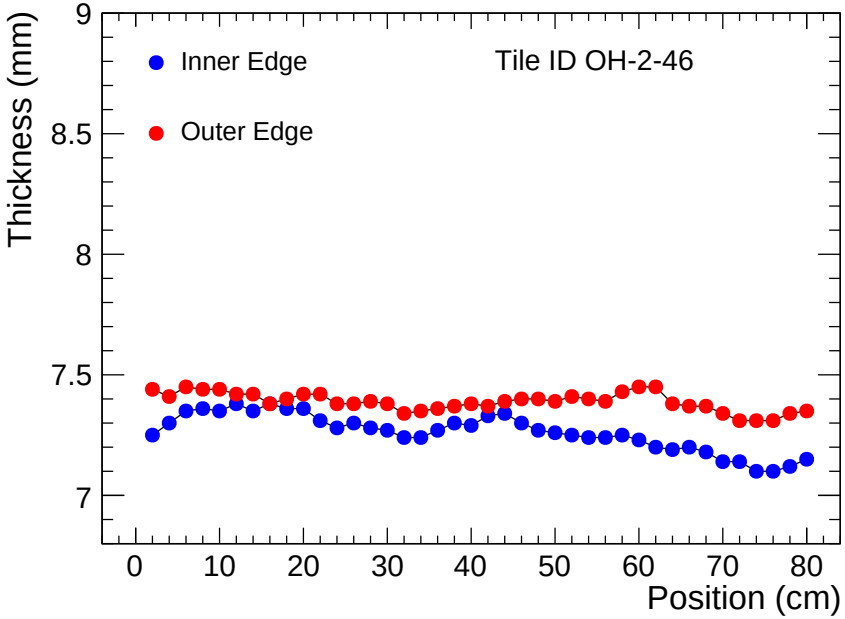

OH-2-47

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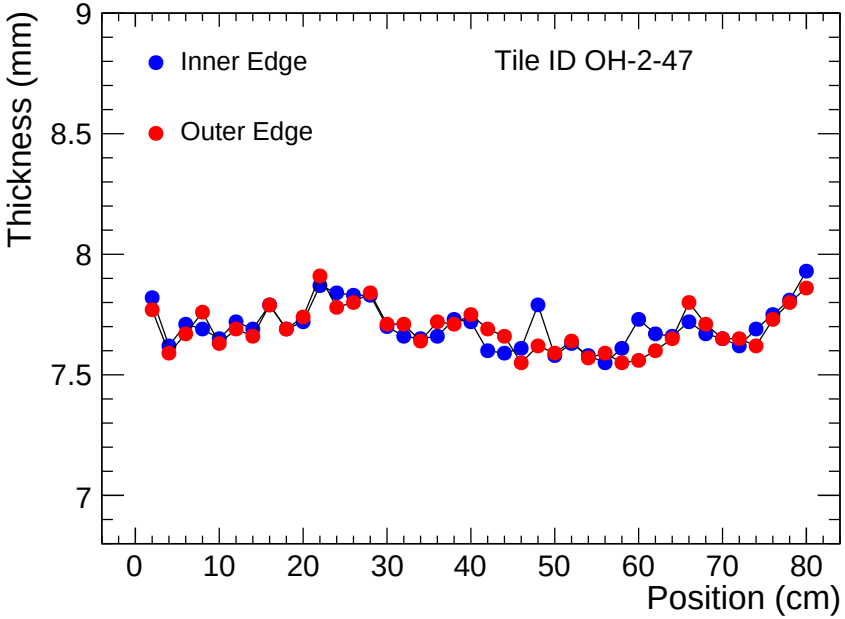
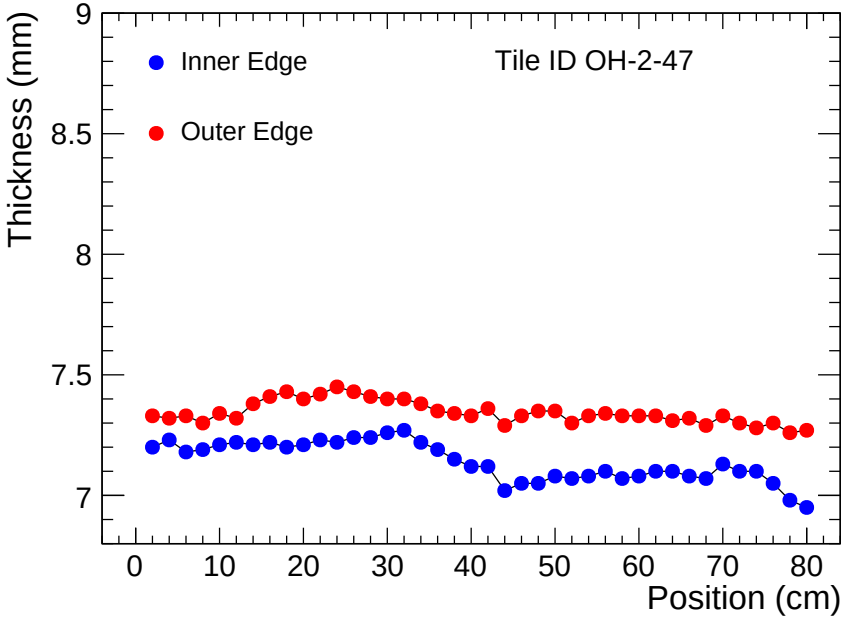


Unwrapped

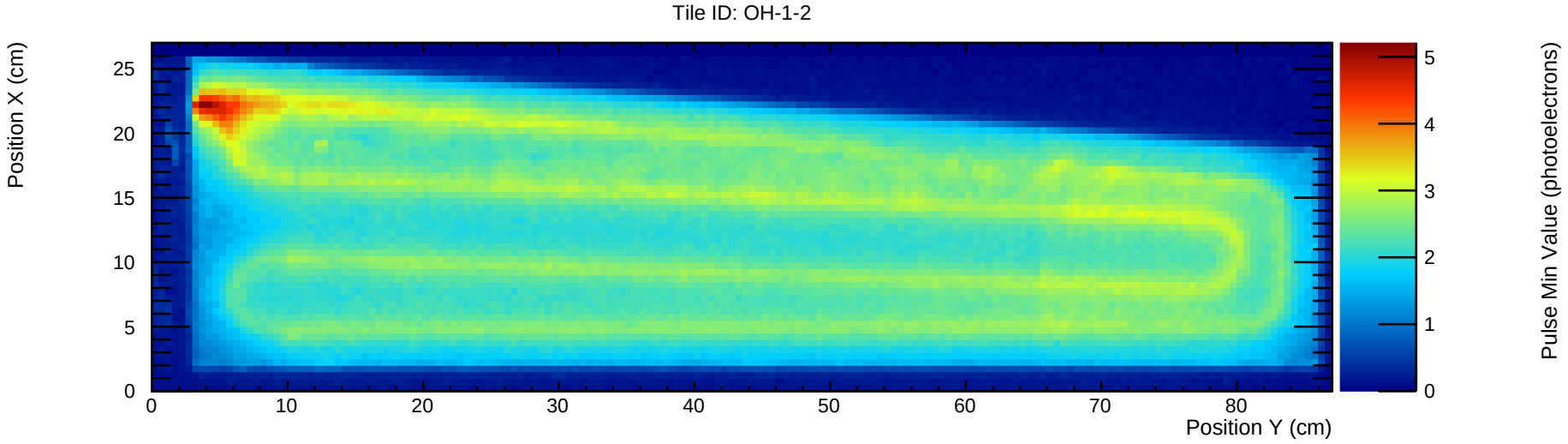


Thickness Summary

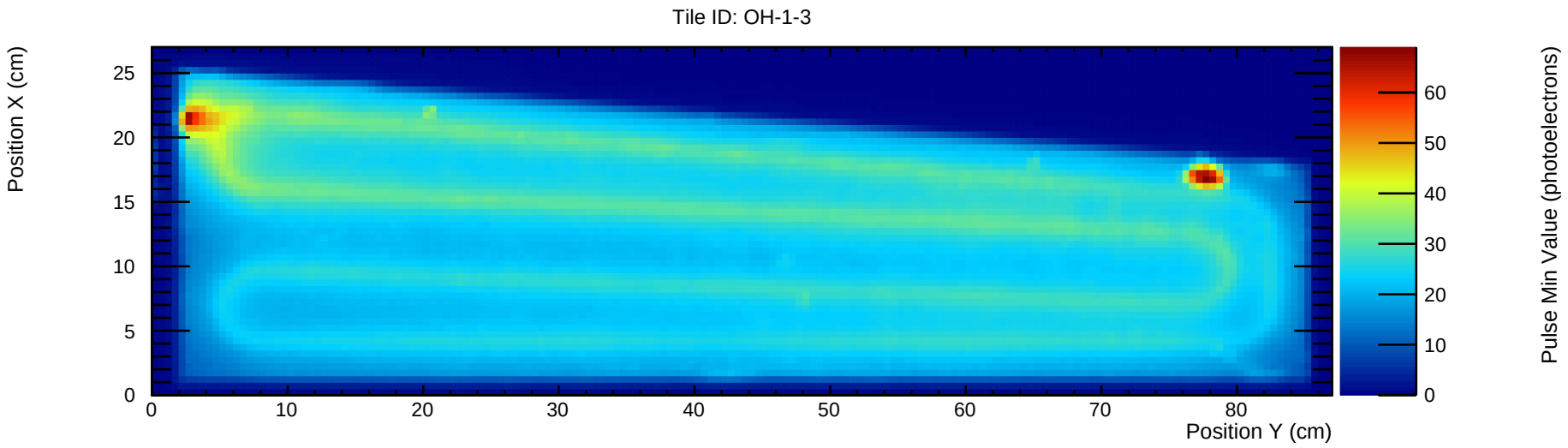
- The wrapping seems to be done haphazardly and causes significant excess thickness

LED scans
Overall normalization is not meaningful

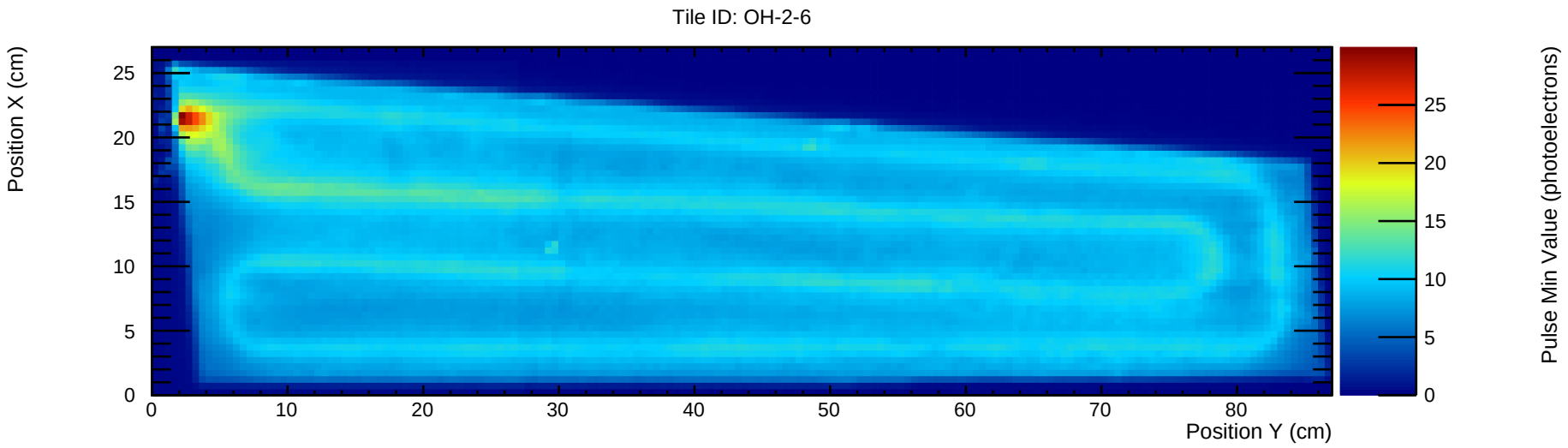
OH-1-2


Tile ID: OH-1-2
Position X (cm)
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
Position Y (cm)
0
1
2
3
4
5
Pulse Min Value (photoelectrons)

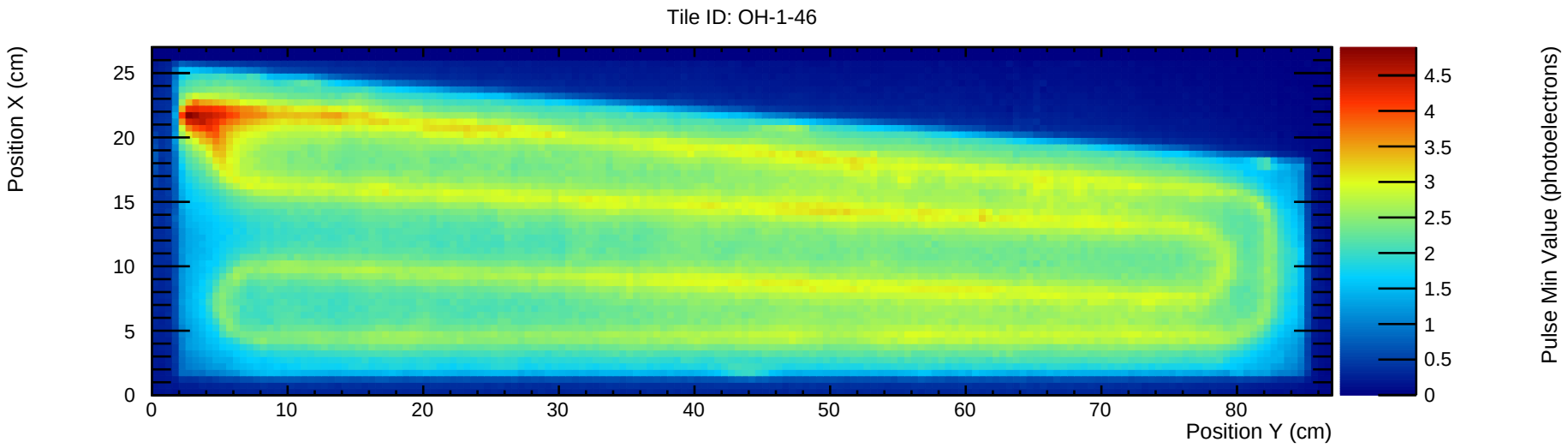
OH-1-3


Tile ID: OH-1-3
Position X (cm)
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
Position Y (cm)
0
10
20
30
40
50
60
Pulse Min Value (photoelectrons)

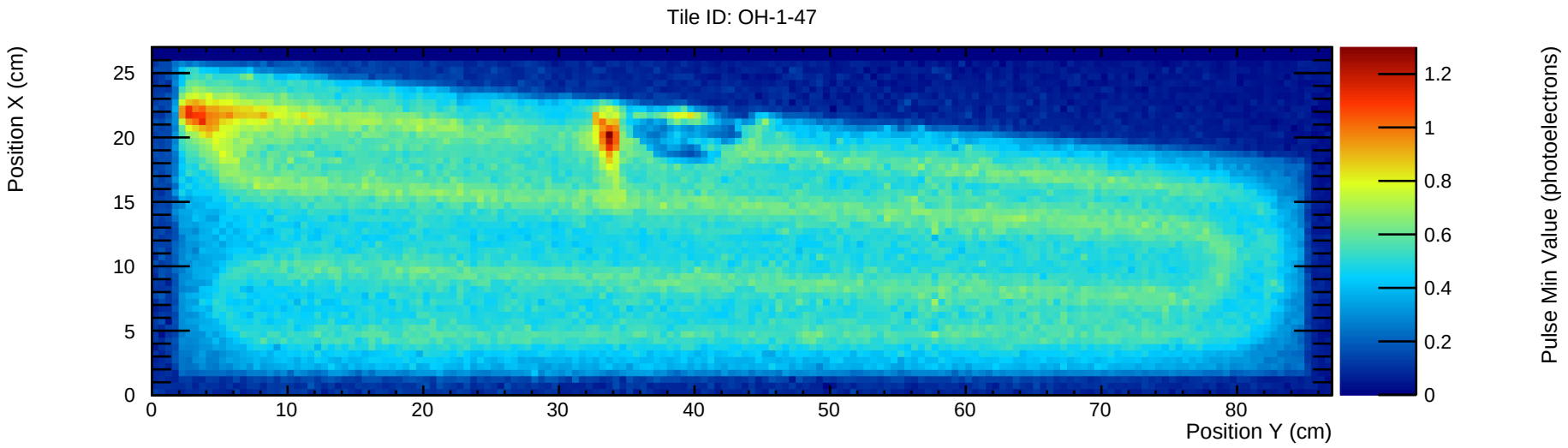
OH-2-6


Tile ID: OH-2-6
Position X (cm)
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
Position Y (cm)
0
5
10
15
20
25
Pulse Min Value (photoelectrons)

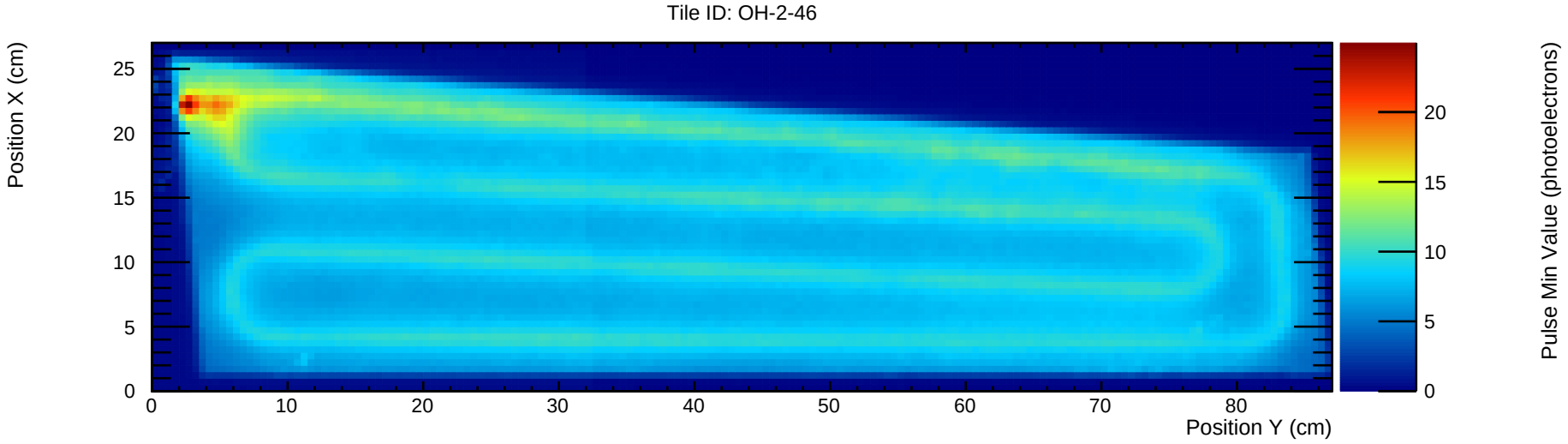
OH-1-46


Tile ID: OH-1-46
Position X (cm)
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
Position Y (cm)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Pulse Min Value (photoelectrons)

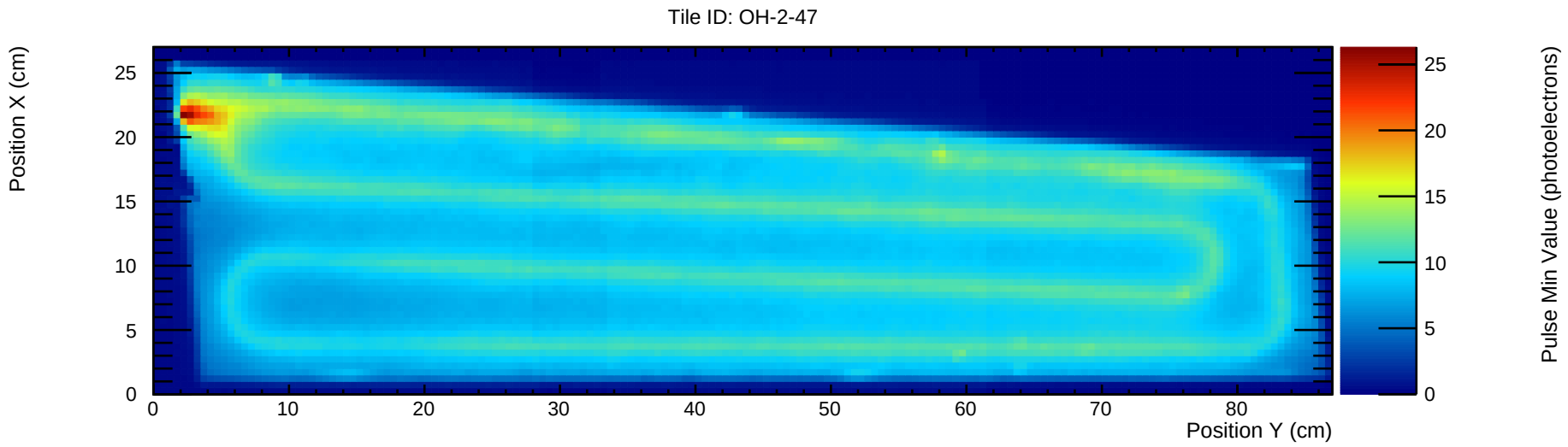
OH-1-47


Tile ID: OH-1-47
Position X (cm)
25
20
15
10
5
0
0
10
20
30
40
50
60
70
80
Position Y (cm)
1.2
1
0.8
0.6
0.4
0.2
0
Pulse Min Value (photoelectrons)

OH-2-46


Tile ID: OH-2-46
Position X (cm)
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
Position Y (cm)
0
5
10
15
20
Pulse Min Value (photoelectrons)

OH-2-47


Tile ID: OH-2-47
Position X (cm)
0
5
10
15
20
25
0
10
20
30
40
50
60
70
80
Position Y (cm)
Pulse Min Value (photoelectrons)
0
5
10
15
20
25

LED Summary

- LED scans show there are no major structural issues
- Some potentially significant issues with coating: in a few areas it looks like the coating is too thick or too thing
- We will perform destructive evaluation on certain areas on certain panels pretty soon (possibly as soon as I return to Colorado from FTBF), but first we want to be sure that all other desired tests are finished