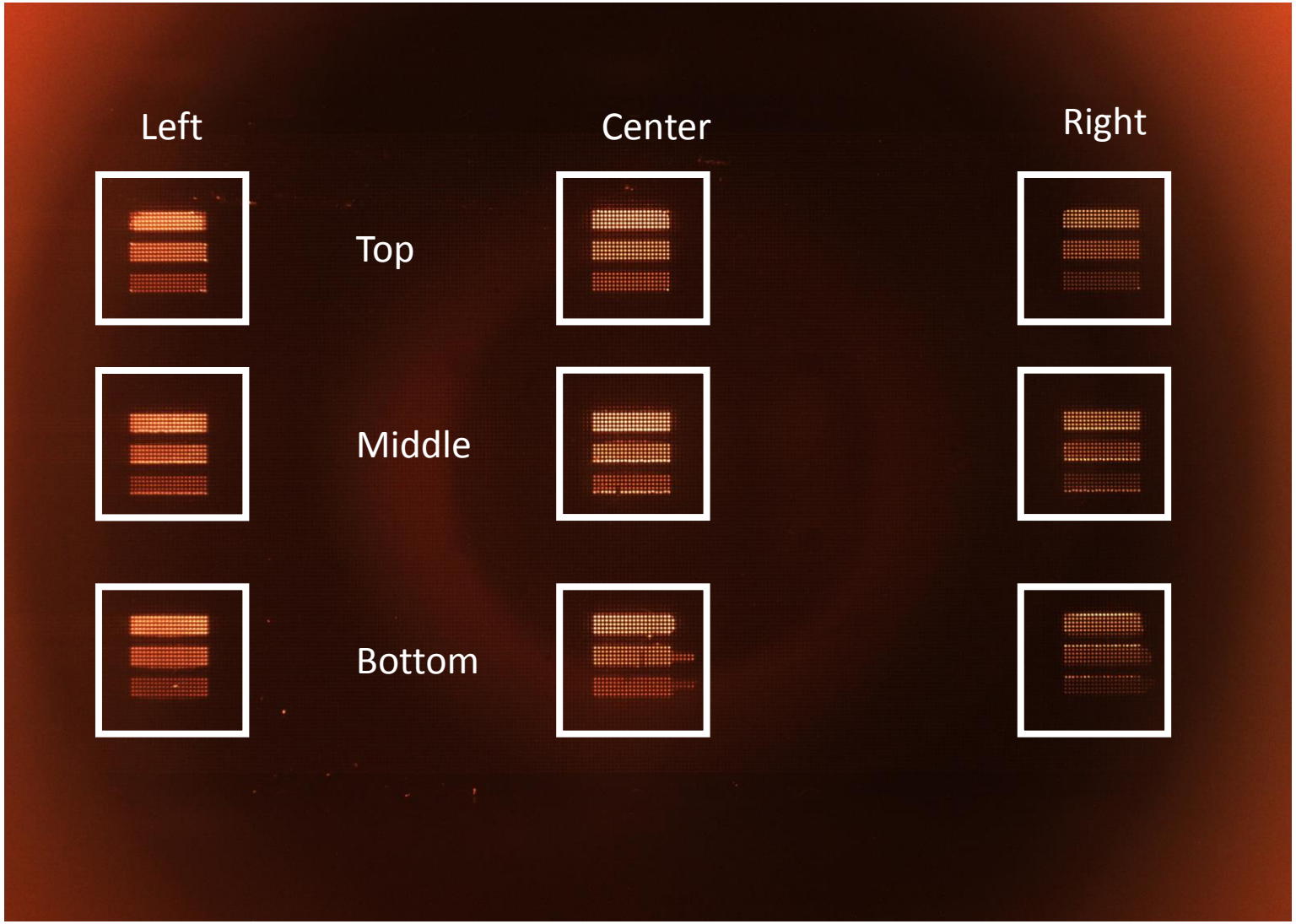
Fluorescence Data Analysis

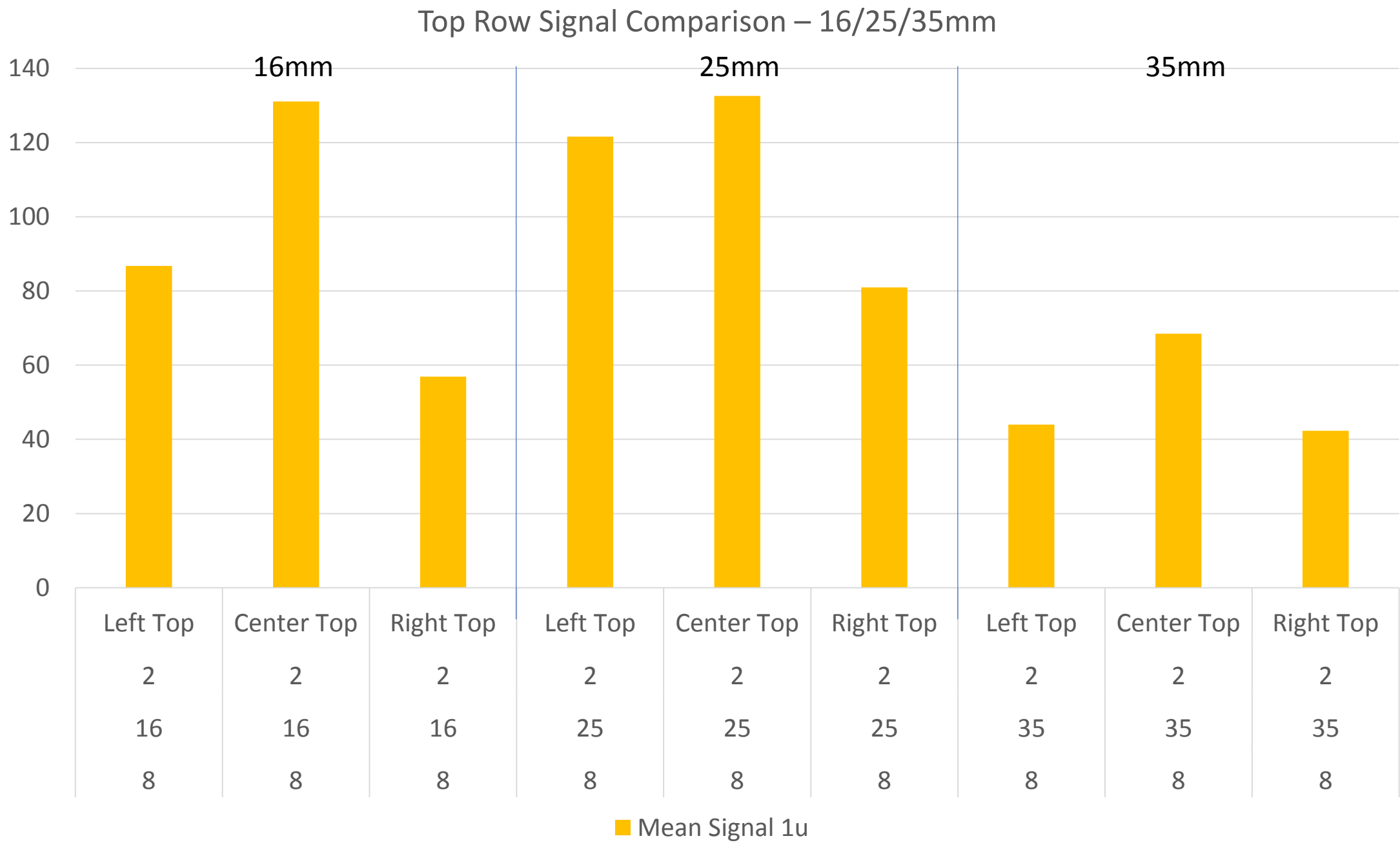
1-5-10uM and 1uM chips

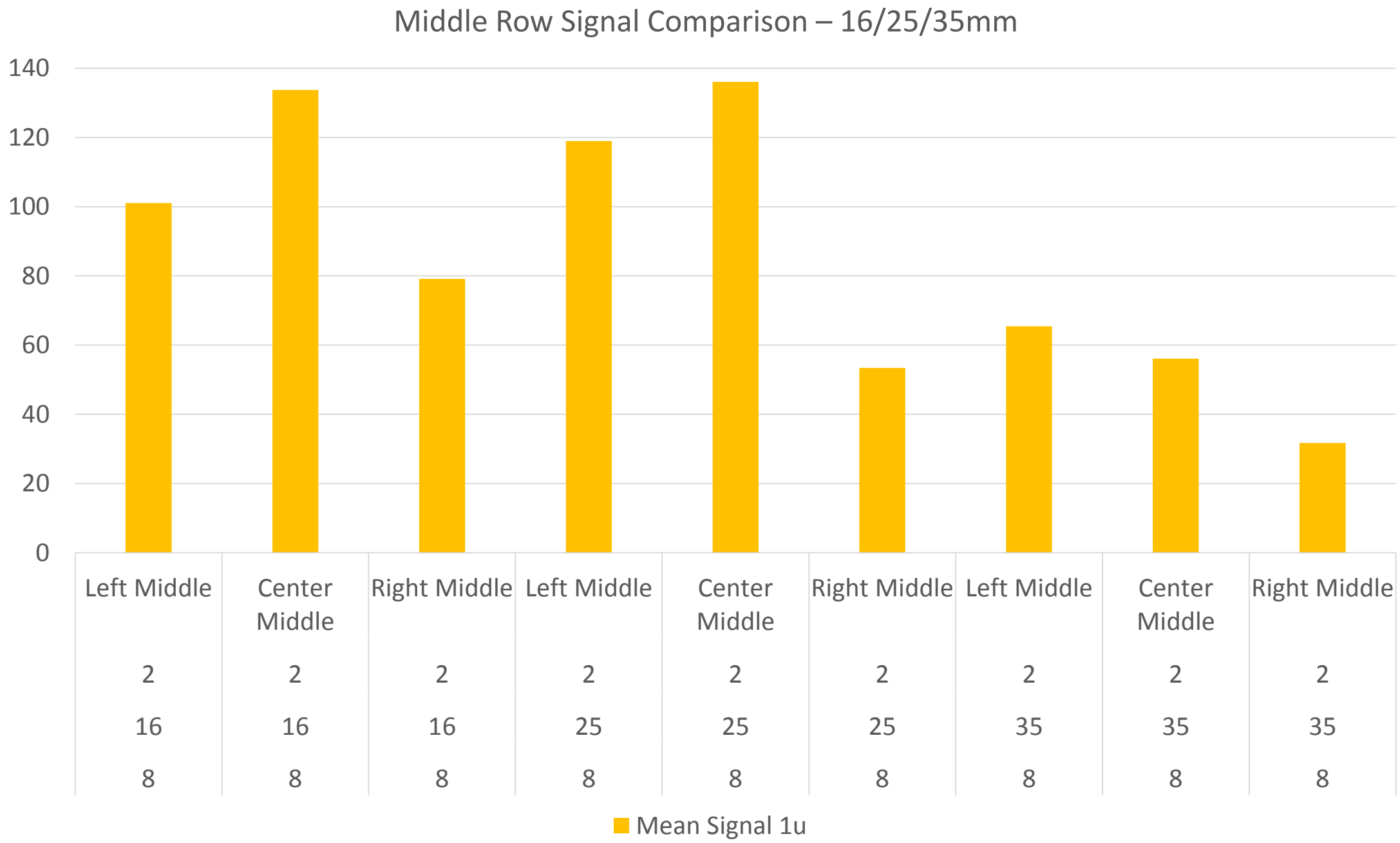
8A current, 2 seconds exposure

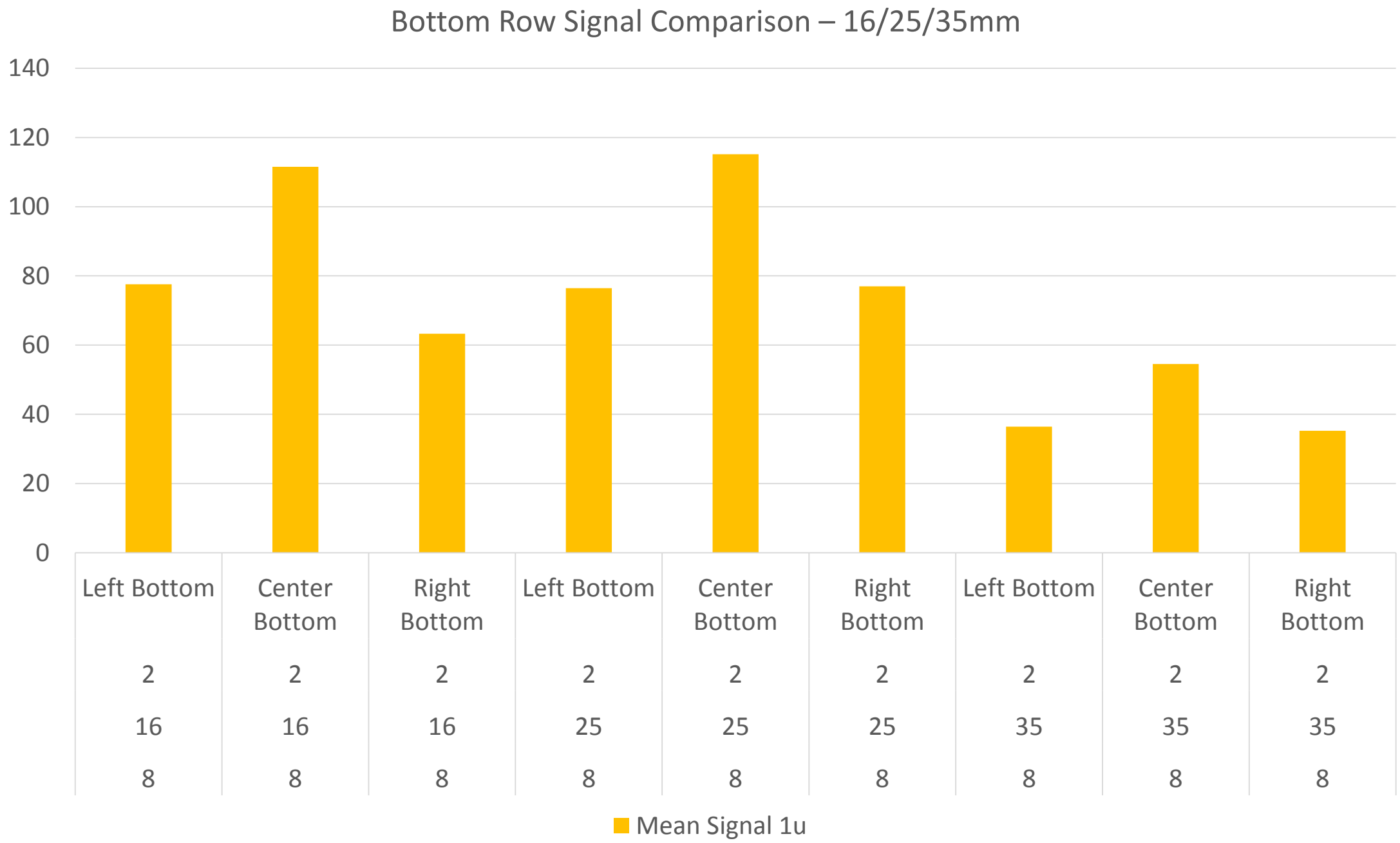
Lucky Jordan

1-5-10uM chip



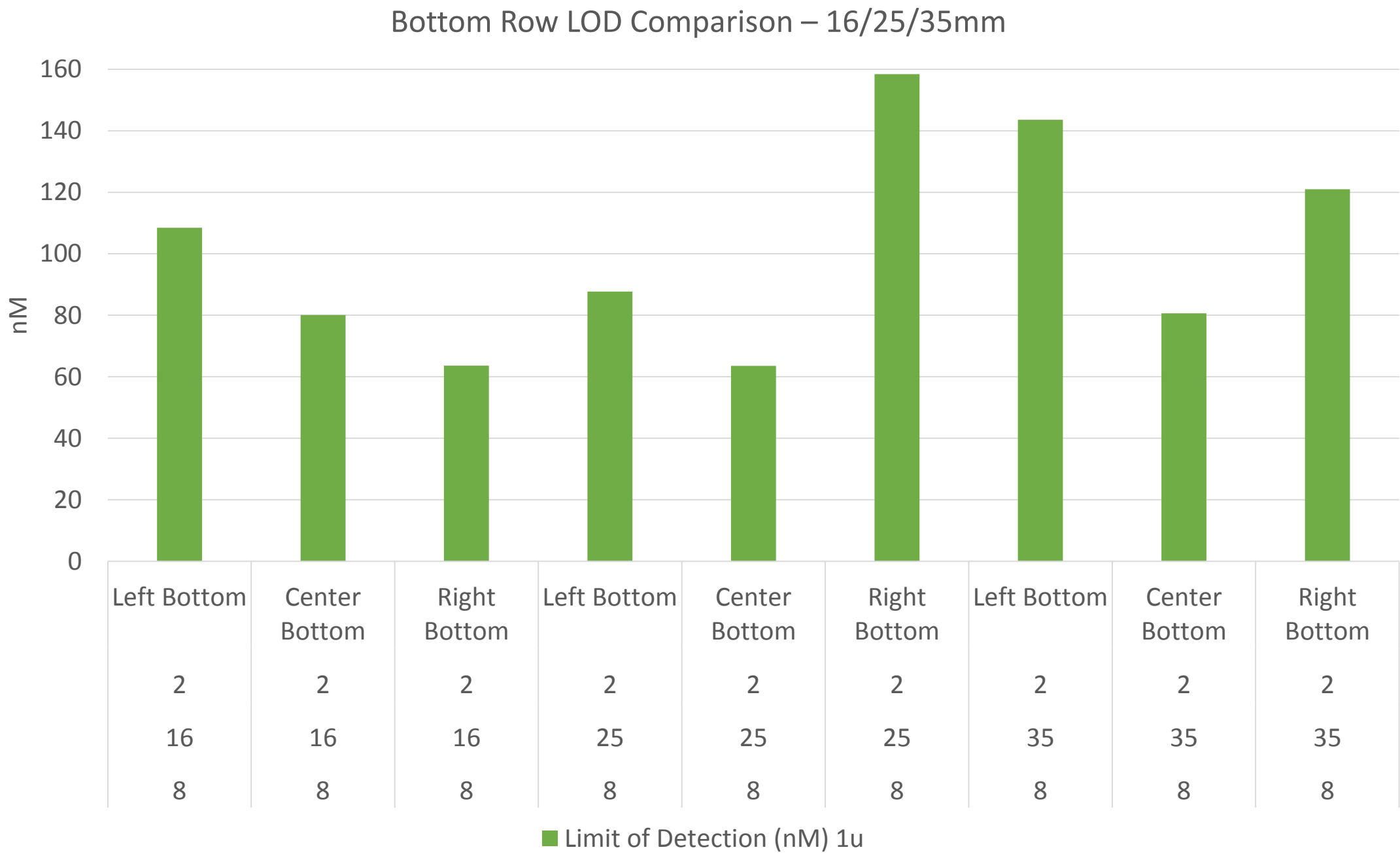

Top Row Signal Comparison – 16/25/35mm
16mm
25mm
35mm
140
120
100
80
60
40
20
0
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Mean Signal 1u

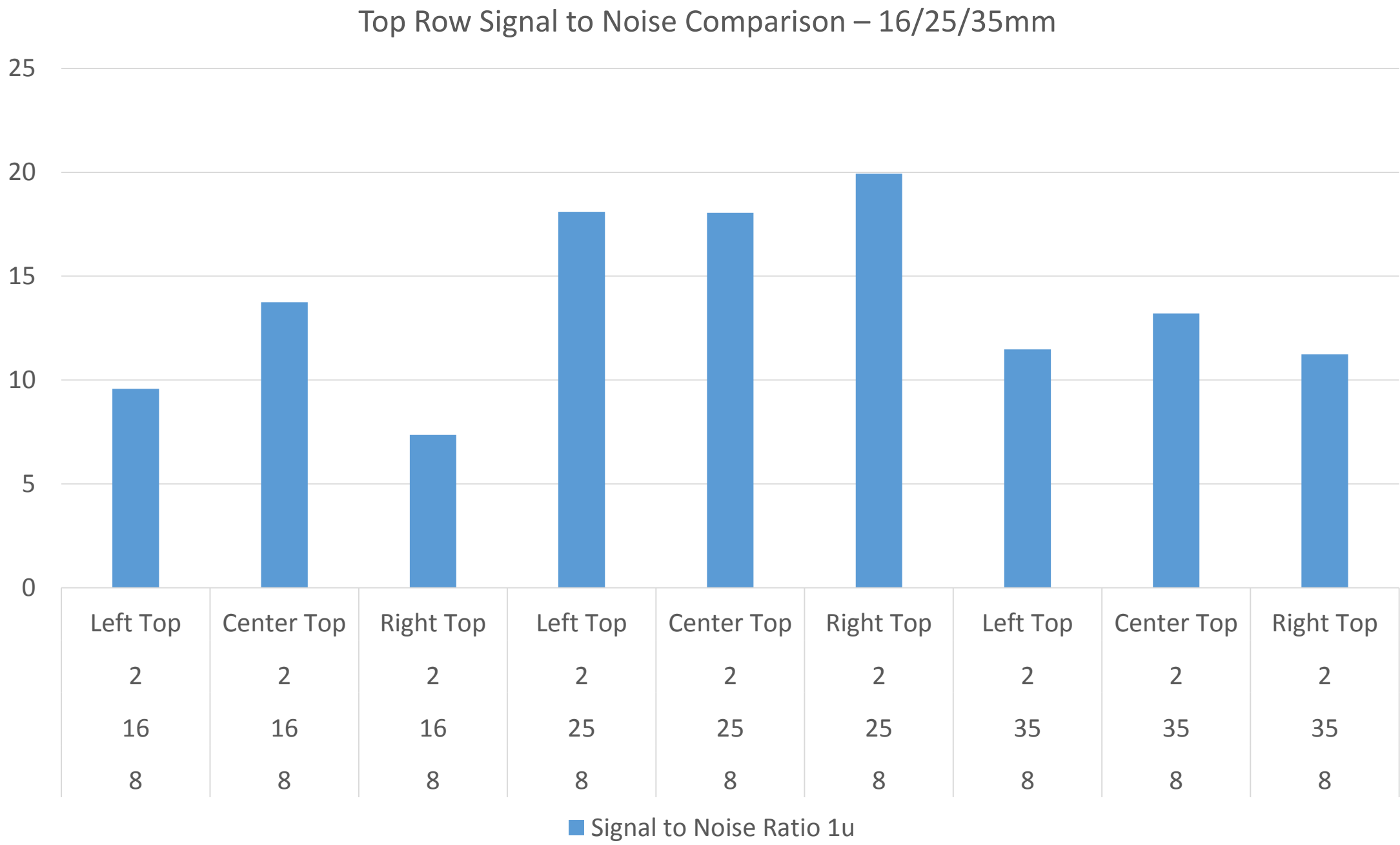

Middle Row Signal Comparison – 16/25/35mm
140
120
100
80
60
40
20
0
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Mean Signal 1u

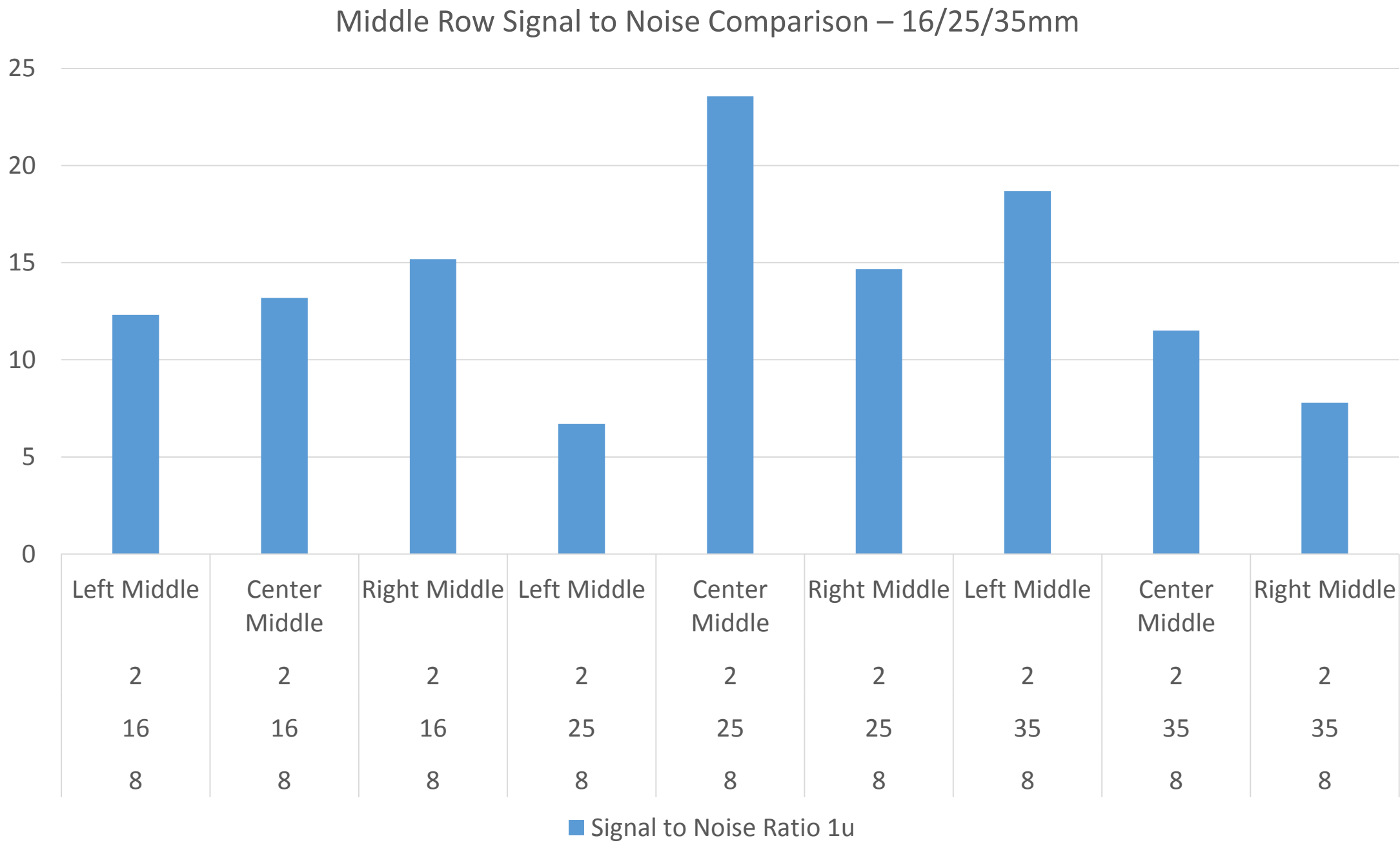

Bottom Row Signal Comparison – 16/25/35mm
140
120
100
80
60
40
20
0
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
2 2 2 2 2 2 2 2 2
16 16 16 25 25 25 35 35 35
8 8 8 8 8 8 8 8 8
Mean Signal 1u

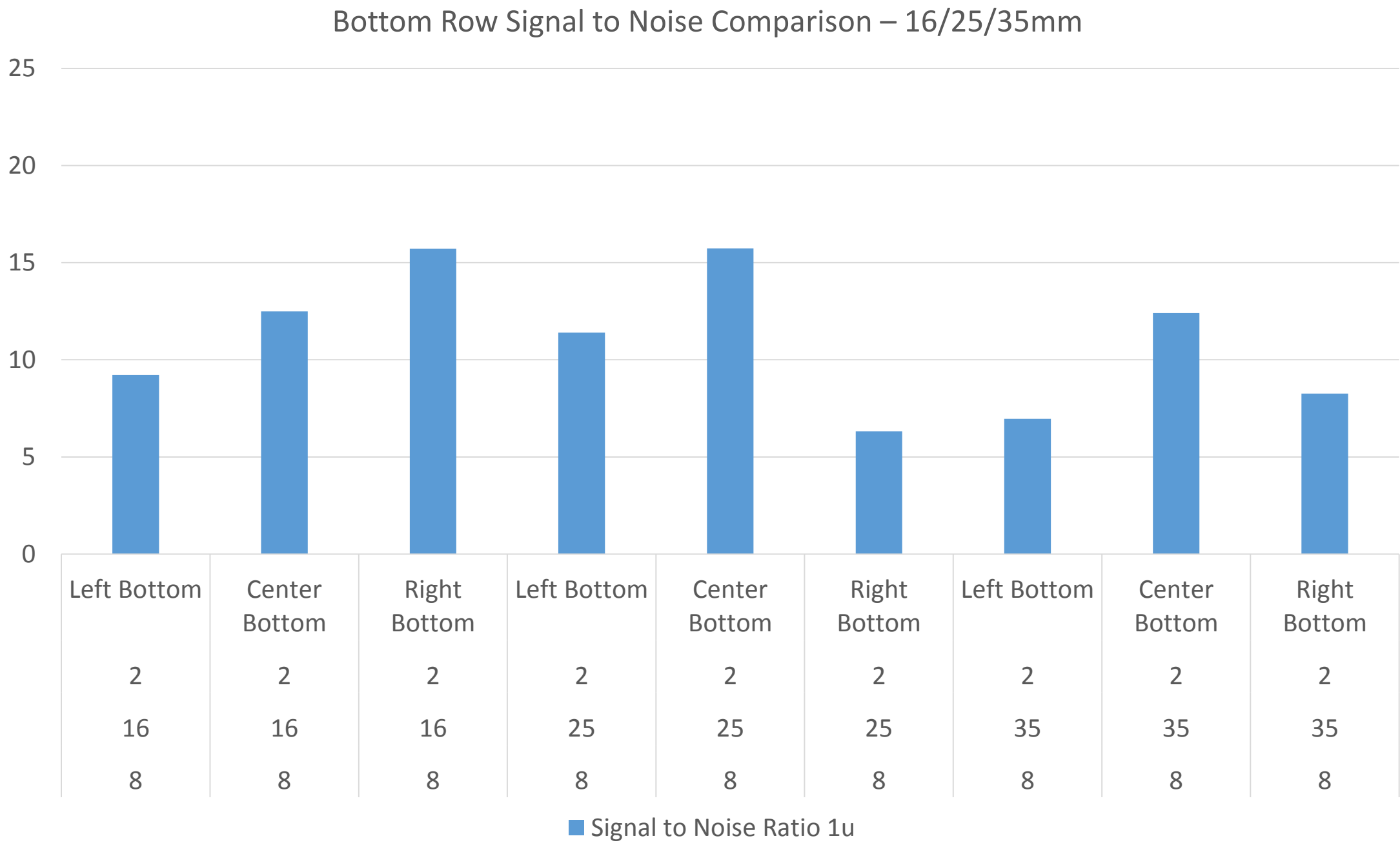

Top Row LOD Comparison – 16/25/35mm
nM
160
140
120
100
80
60
40
20
0
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Limit of Detection (nM) 1u


Middle Row LOD Comparison – 16/25/35mm
nM
160
140
120
100
80
60
40
20
0
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
2 2 2 2 2 2 2 2 2
16 16 16 25 25 25 35 35 35
8 8 8 8 8 8 8 8 8
Limit of Detection (nM) 1u

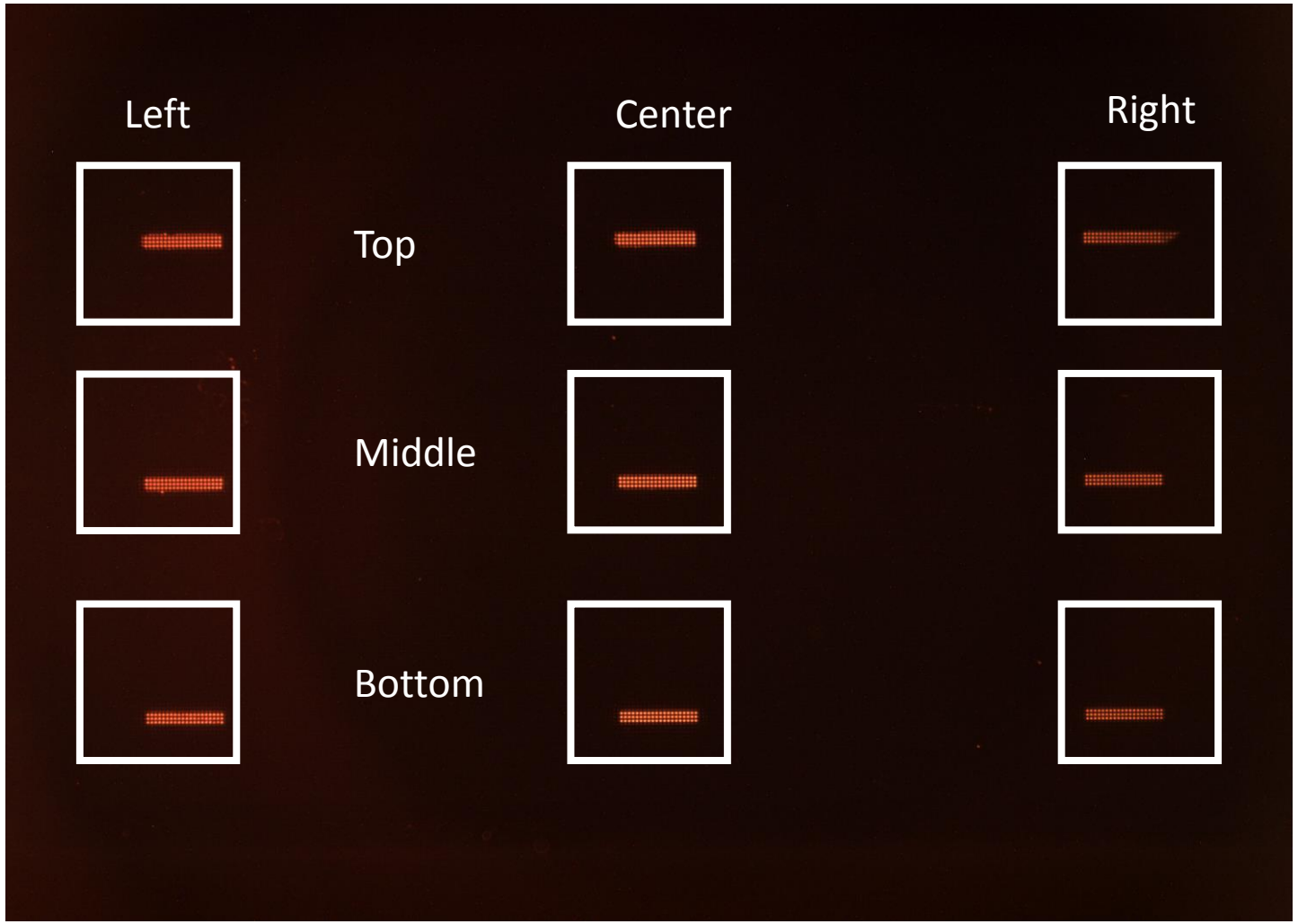

Bottom Row LOD Comparison – 16/25/35mm
nM
160
140
120
100
80
60
40
20
0
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Limit of Detection (nM) 1u

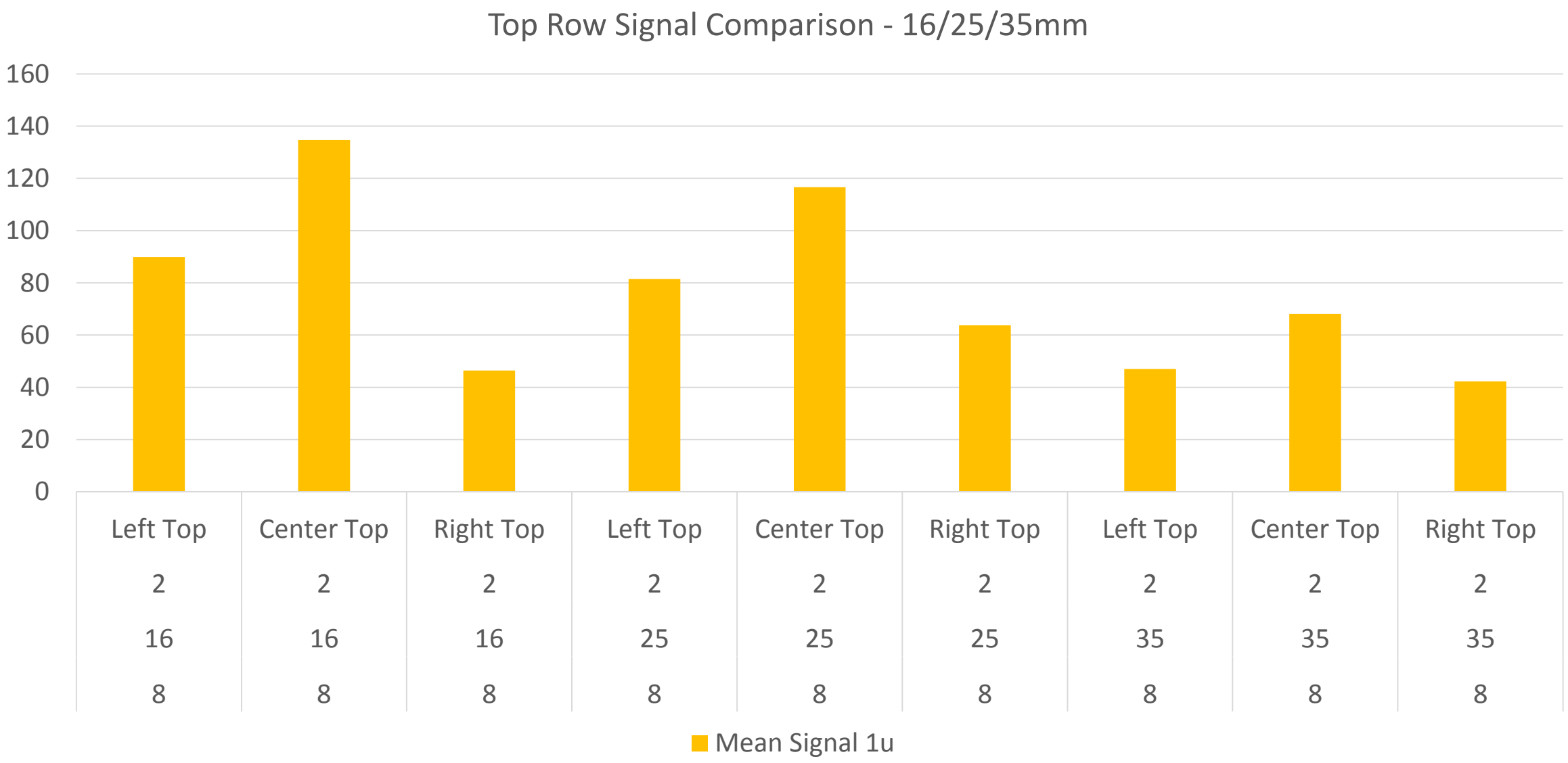

Top Row Signal to Noise Comparison – 16/25/35mm
25
20
15
10
5
0
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Signal to Noise Ratio 1u

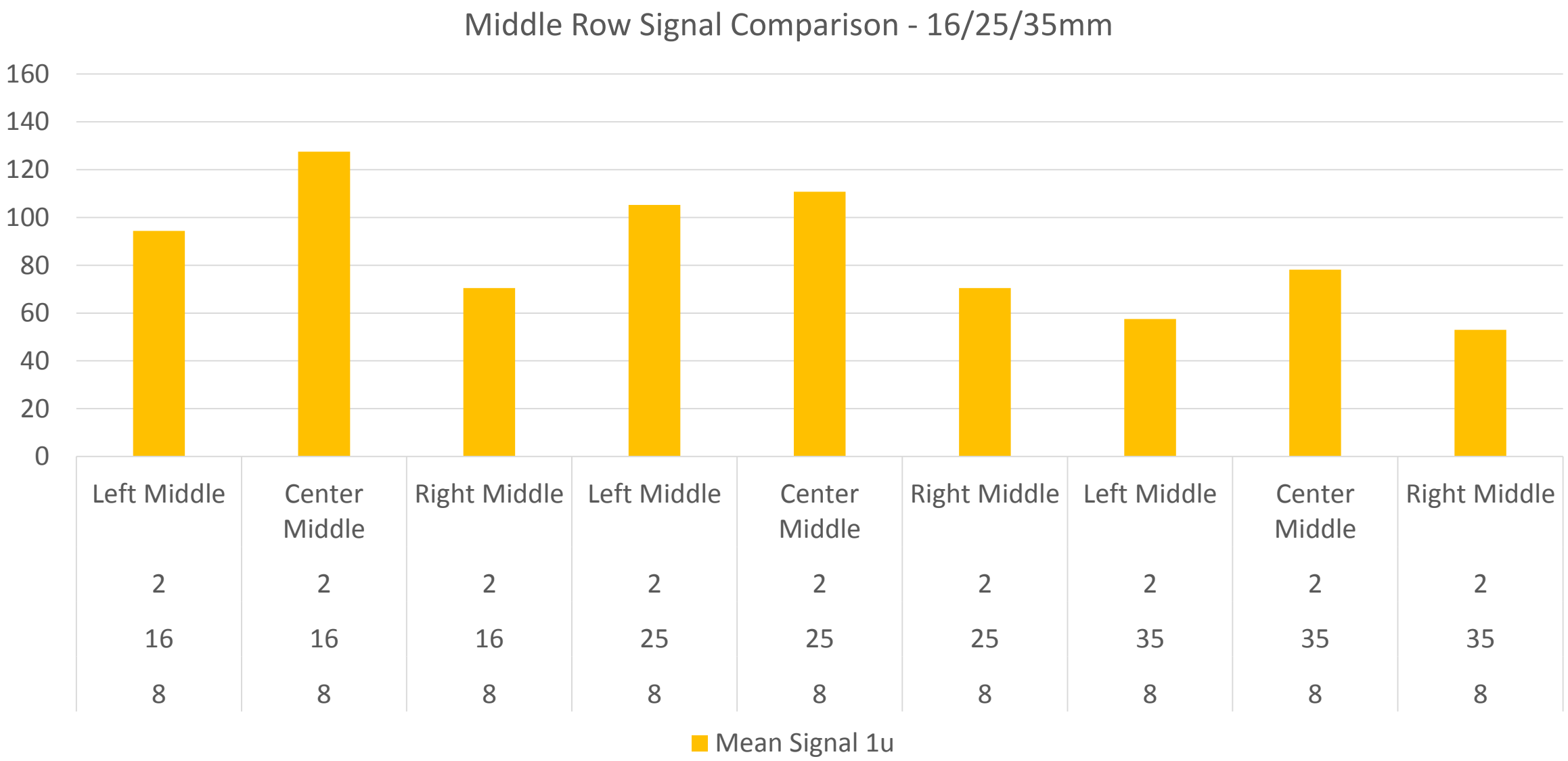

Middle Row Signal to Noise Comparison – 16/25/35mm
25
20
15
10
5
0
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Signal to Noise Ratio 1u

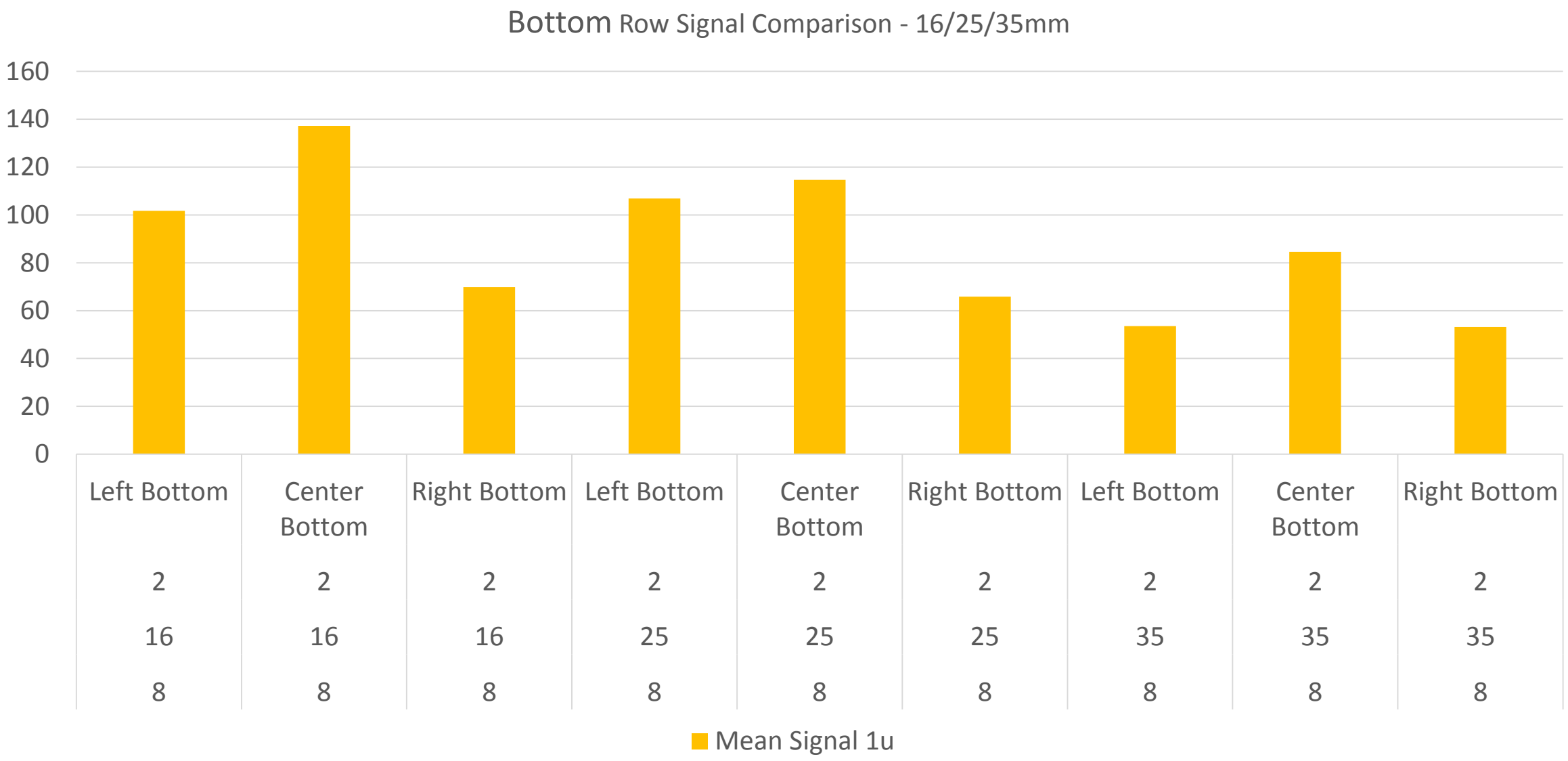

Bottom Row Signal to Noise Comparison – 16/25/35mm
25
20
15
10
5
0
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Signal to Noise Ratio 1u

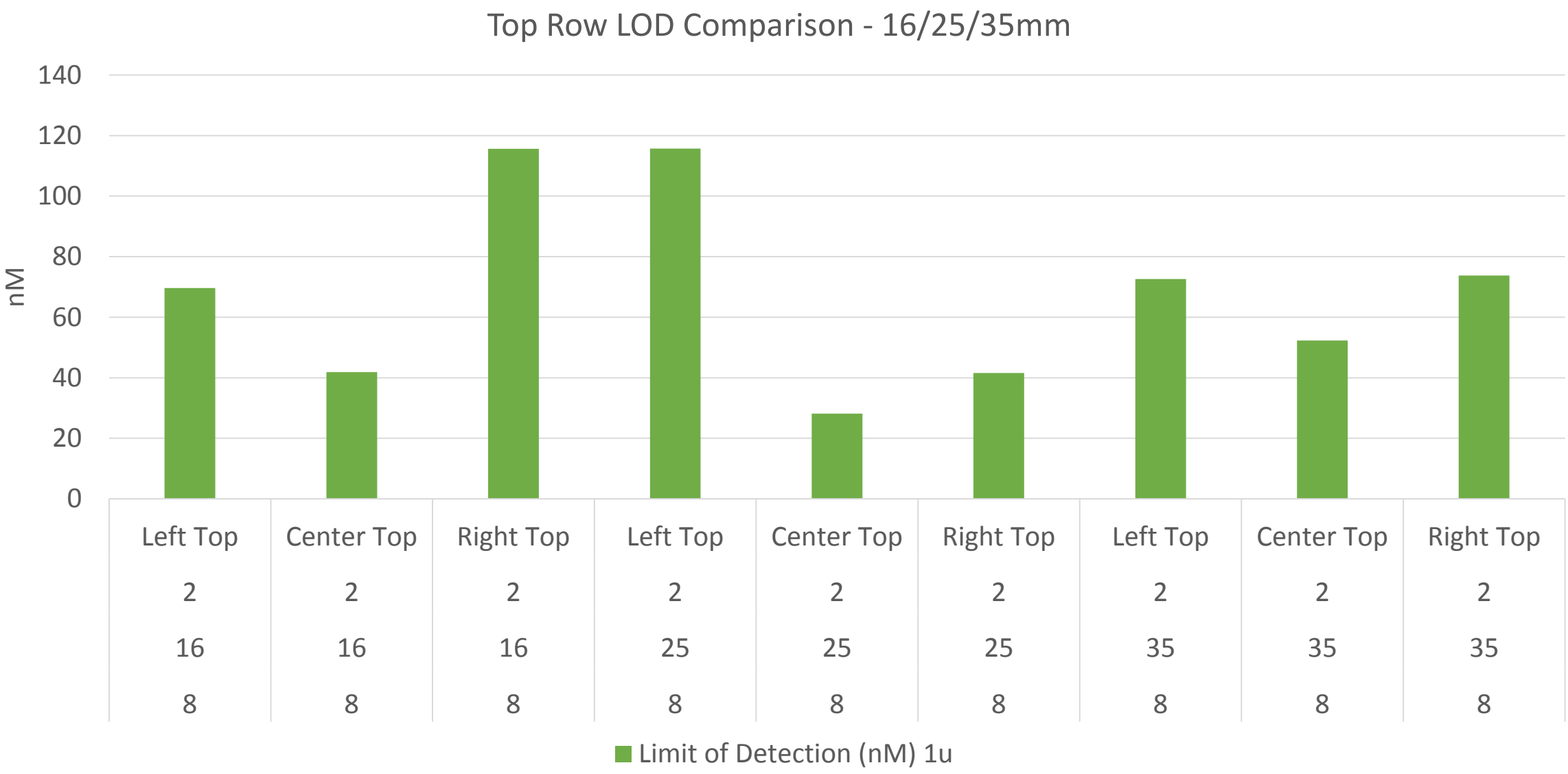
1uM chip

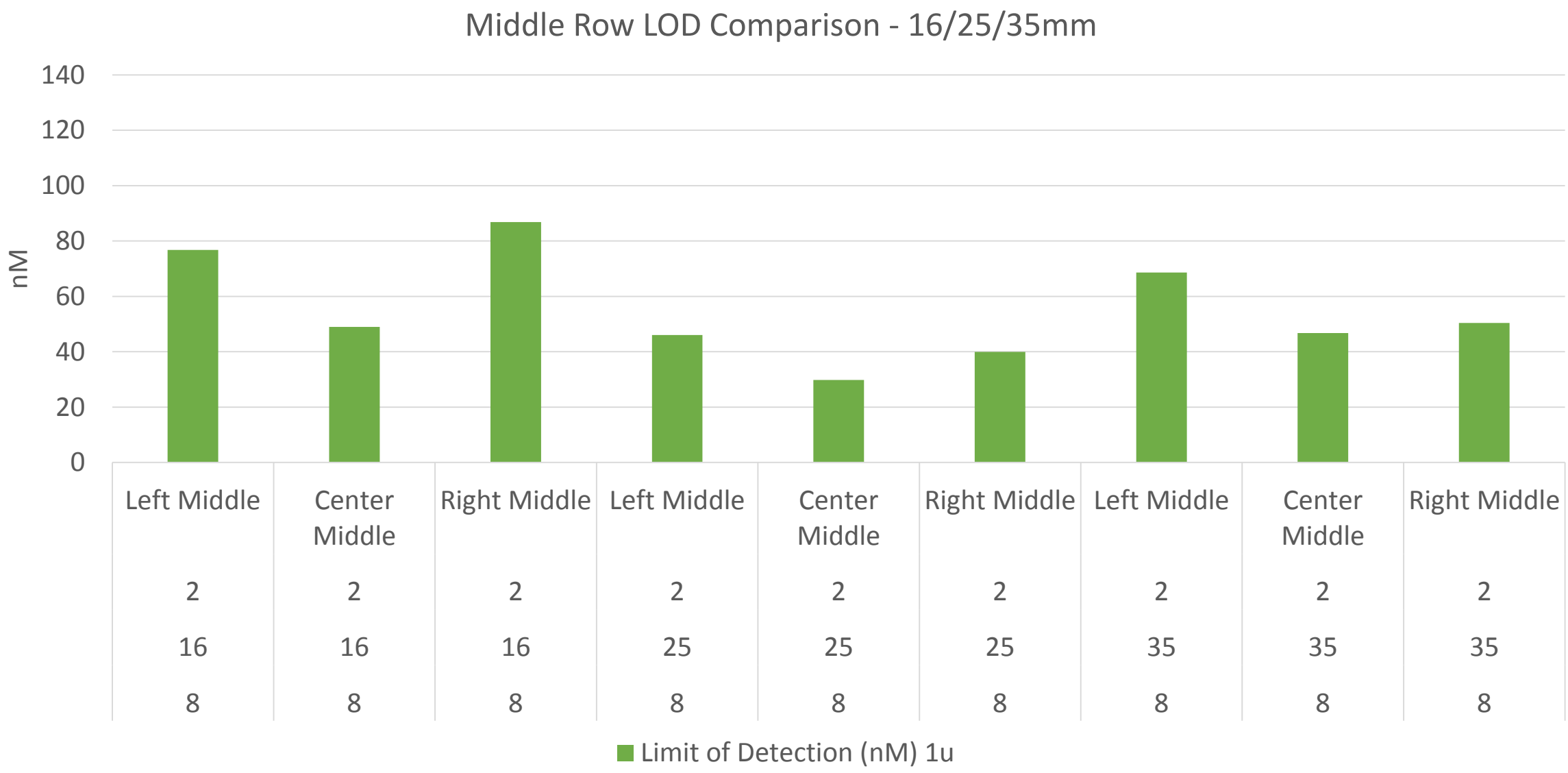


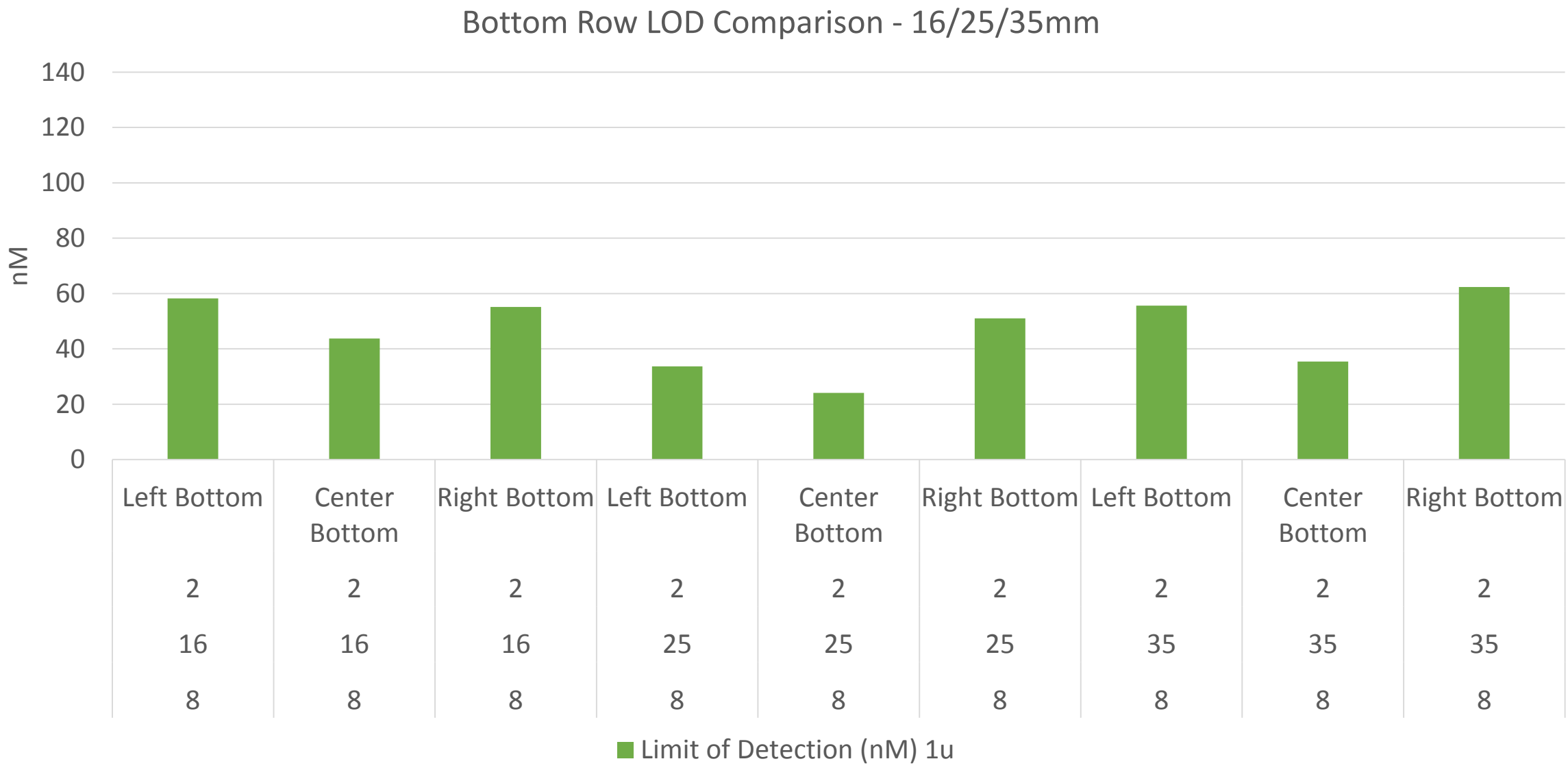

Top Row Signal Comparison - 16/25/35mm
160
140
120
100
80
60
40
20
0
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Mean Signal 1u

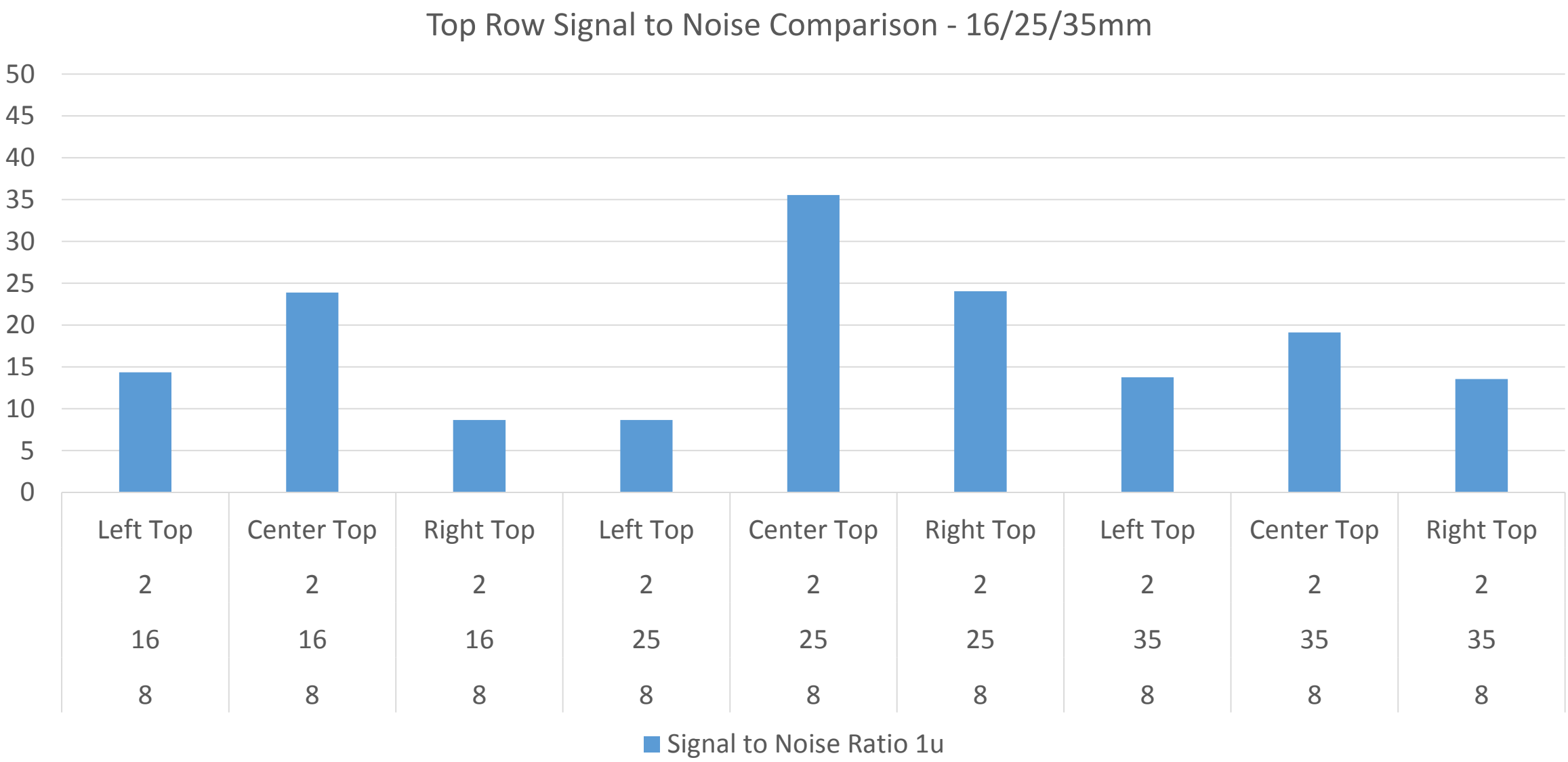

Middle Row Signal Comparison - 16/25/35mm
160
140
120
100
80
60
40
20
0
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Mean Signal 1u

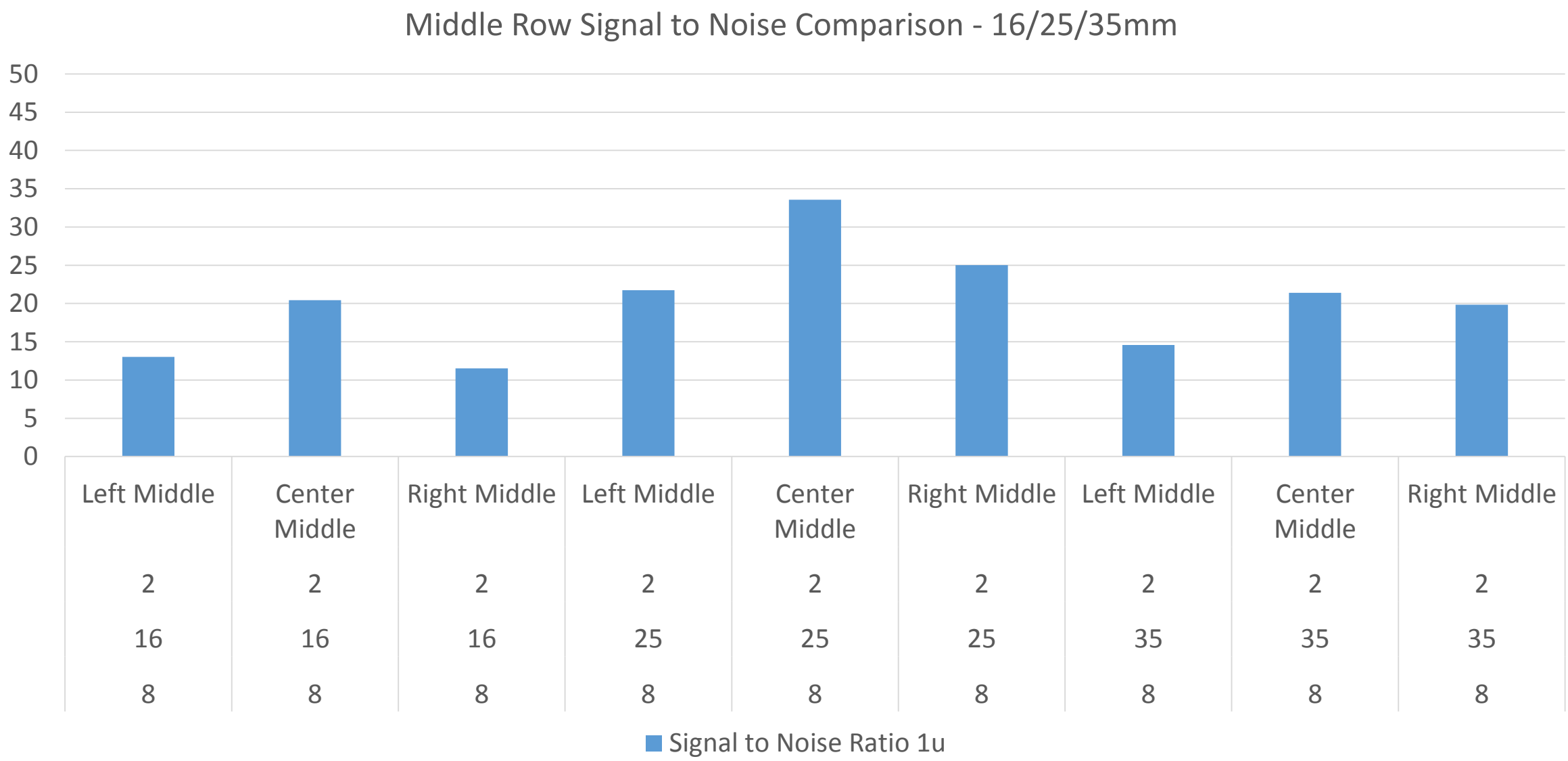

Bottom Row Signal Comparison - 16/25/35mm
160
140
120
100
80
60
40
20
0
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Mean Signal 1u

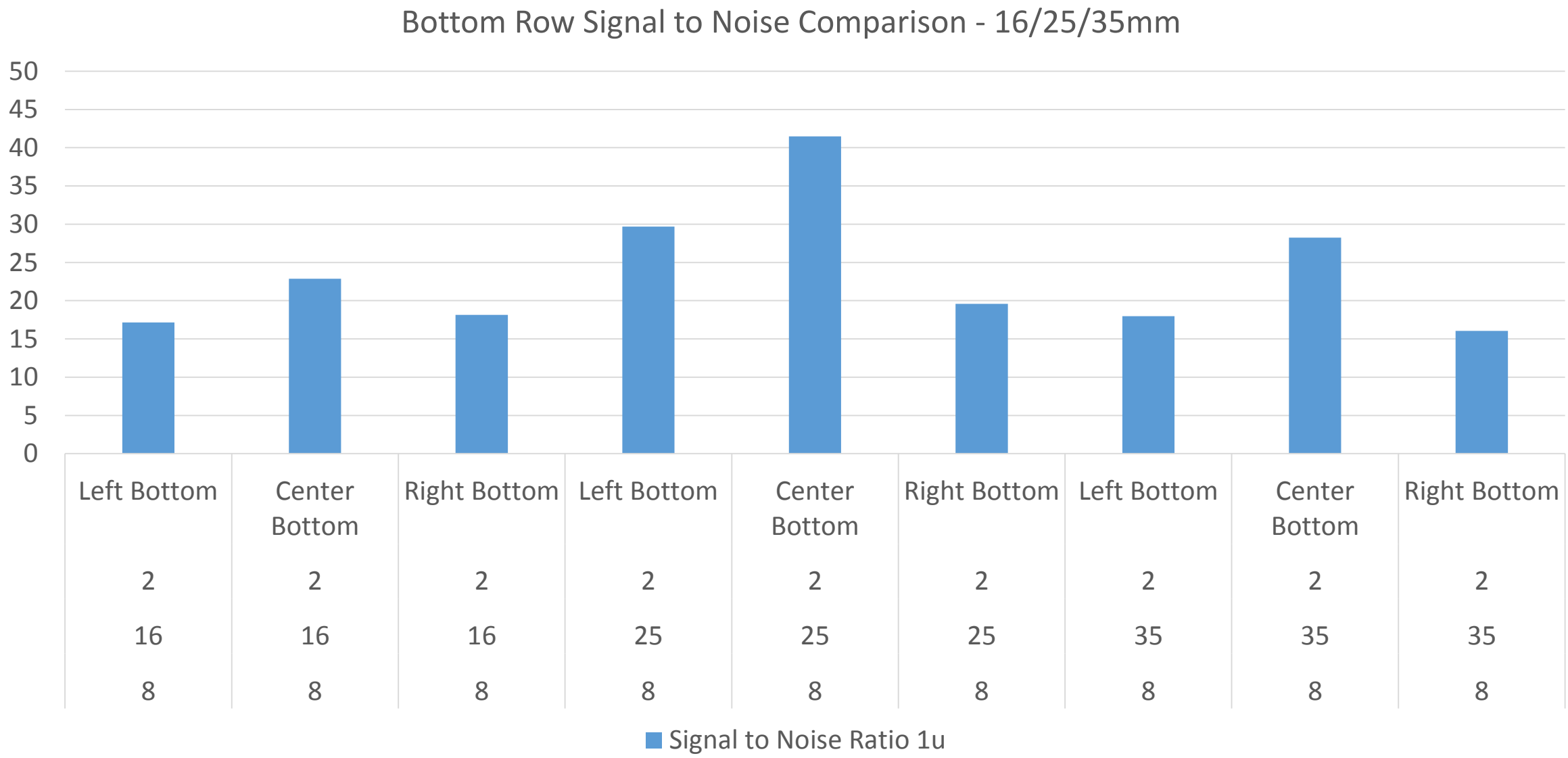

Top Row LOD Comparison - 16/25/35mm
nM
140
120
100
80
60
40
20
0
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Limit of Detection (nM) 1u


Middle Row LOD Comparison - 16/25/35mm
nM
140
120
100
80
60
40
20
0
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
2 2 2 2 2 2 2 2 2
16 16 16 25 25 25 35 35 35
8 8 8 8 8 8 8 8 8
Limit of Detection (nM) 1u


Bottom Row LOD Comparison - 16/25/35mm
nM
140
120
100
80
60
40
20
0
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Limit of Detection (nM) 1u

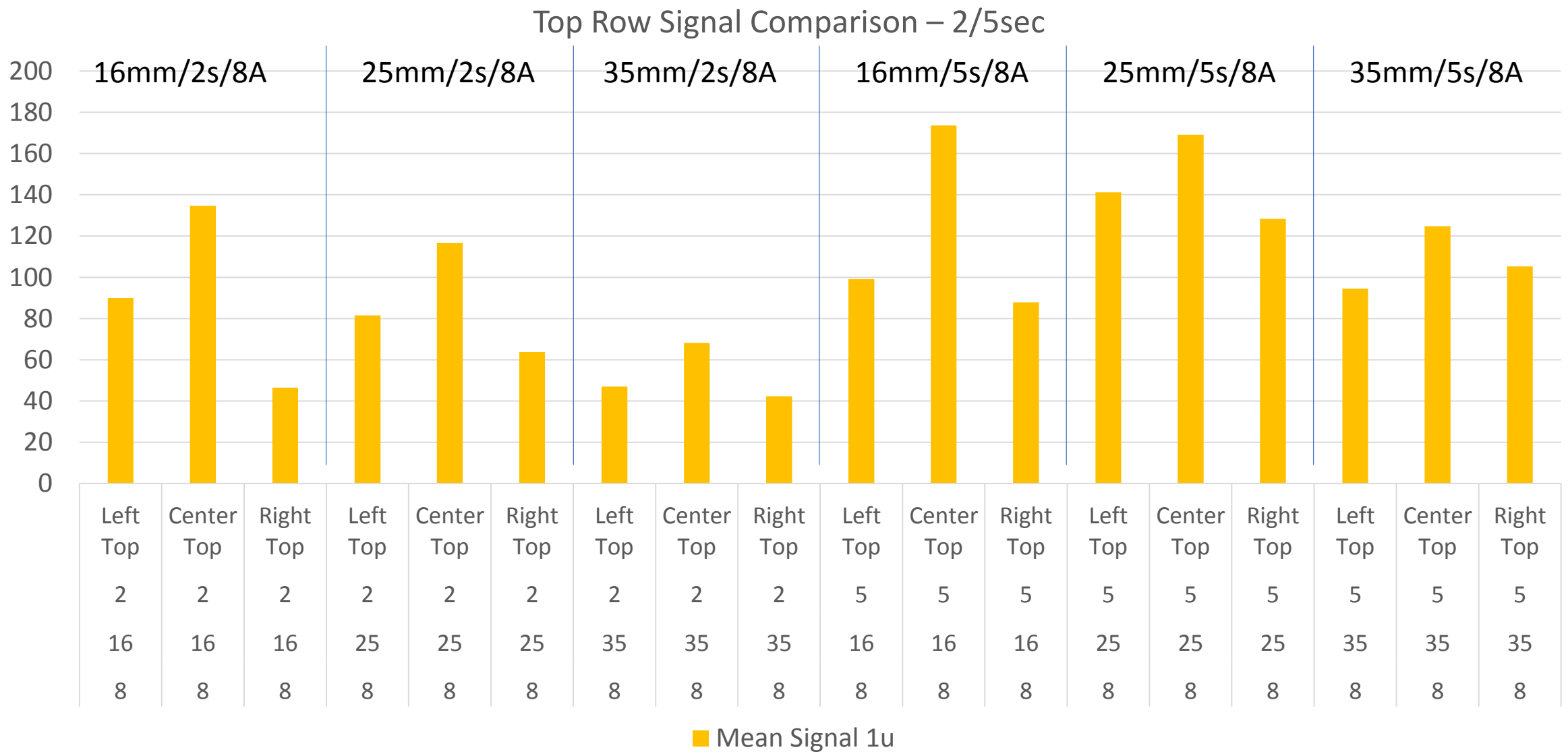

Top Row Signal to Noise Comparison - 16/25/35mm
50
45
40
35
30
25
20
15
10
5
0
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
Left Top
Center Top
Right Top
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Signal to Noise Ratio 1u


Middle Row Signal to Noise Comparison - 16/25/35mm
50
45
40
35
30
25
20
15
10
5
0
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
Left Middle
Center Middle
Right Middle
2
2
2
2
2
2
2
2
2
16
16
16
25
25
25
35
35
35
8
8
8
8
8
8
8
8
8
Signal to Noise Ratio 1u

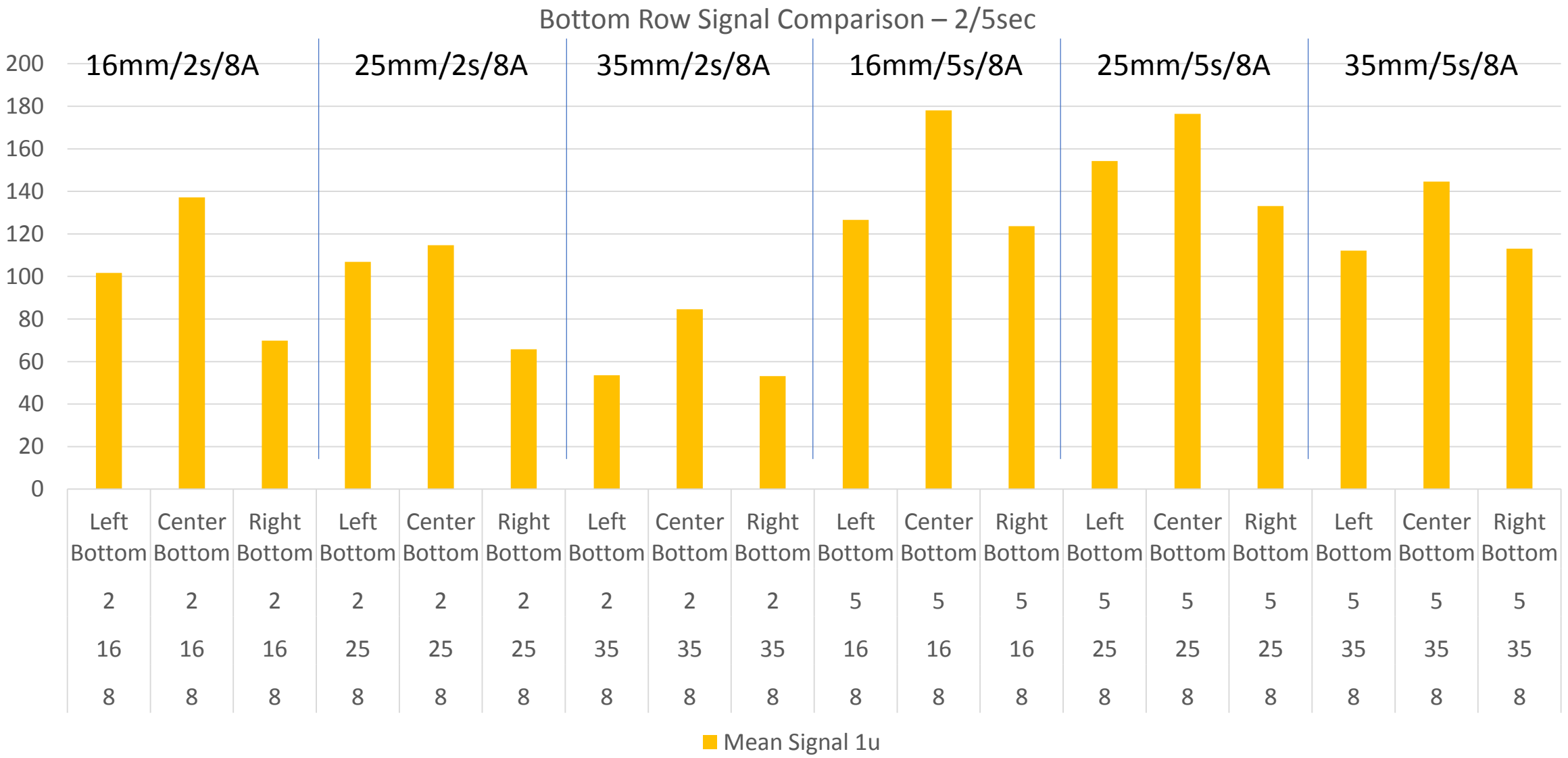

Bottom Row Signal to Noise Comparison - 16/25/35mm
50
45
40
35
30
25
20
15
10
5
0
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
Left Bottom
Center Bottom
Right Bottom
2 2 2 2 2 2 2 2 2
16 16 16 25 25 25 35 35 35
8 8 8 8 8 8 8 8 8
Signal to Noise Ratio 1u

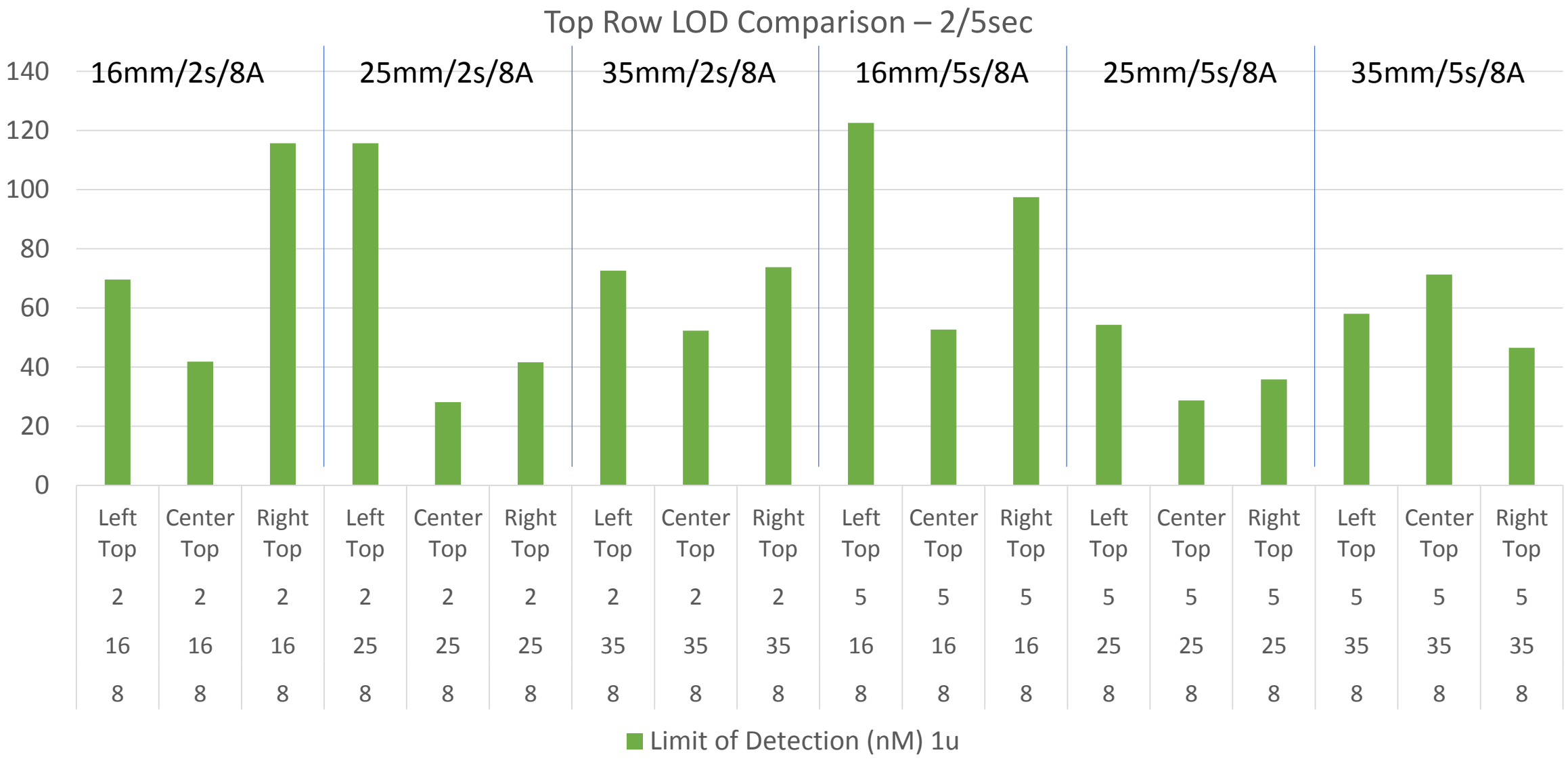
1uM continued

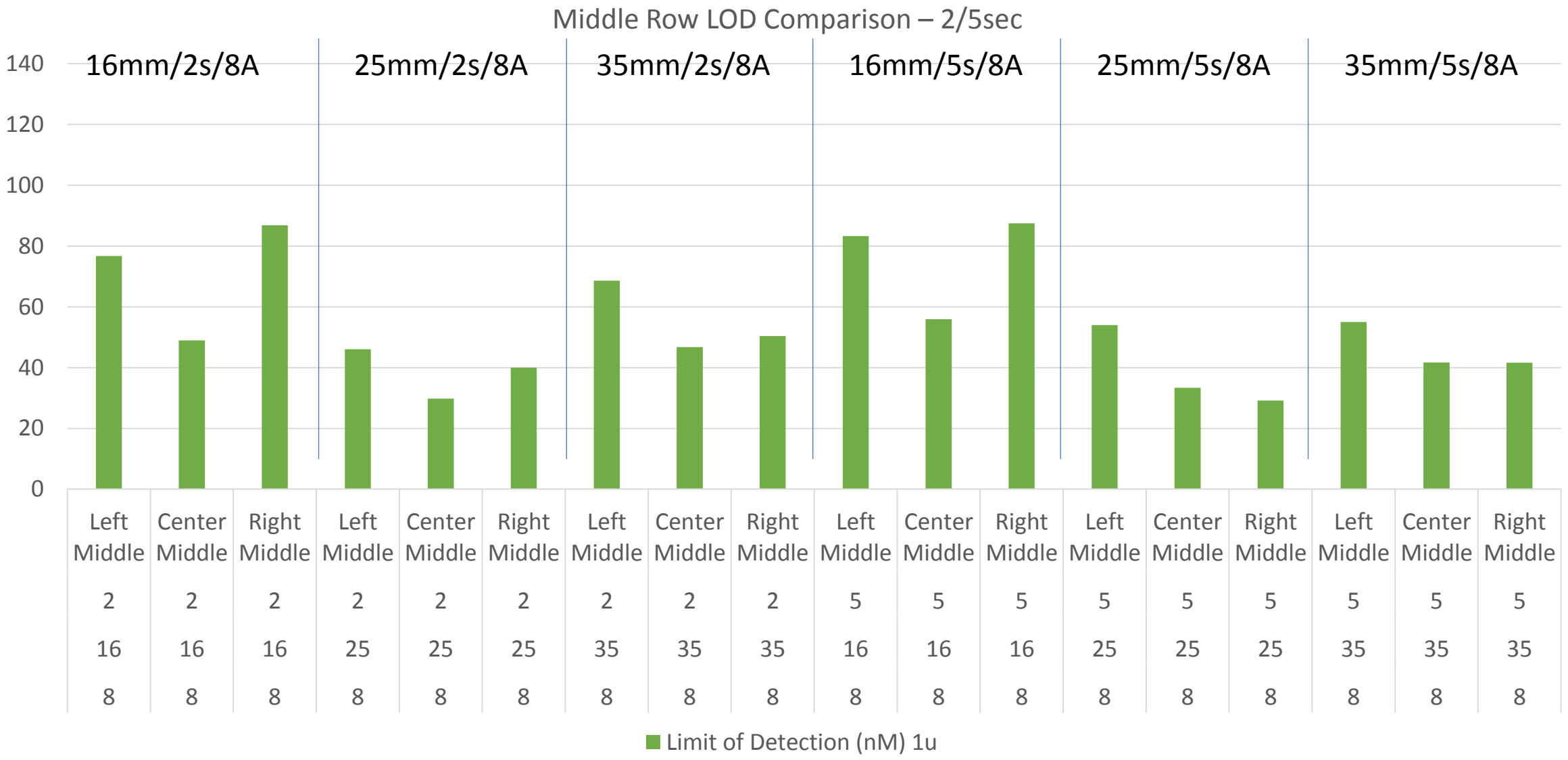
- The following slides compare data across as three lenses at maximum LED drive current with two different exposure times: 2 seconds and 5 seconds.

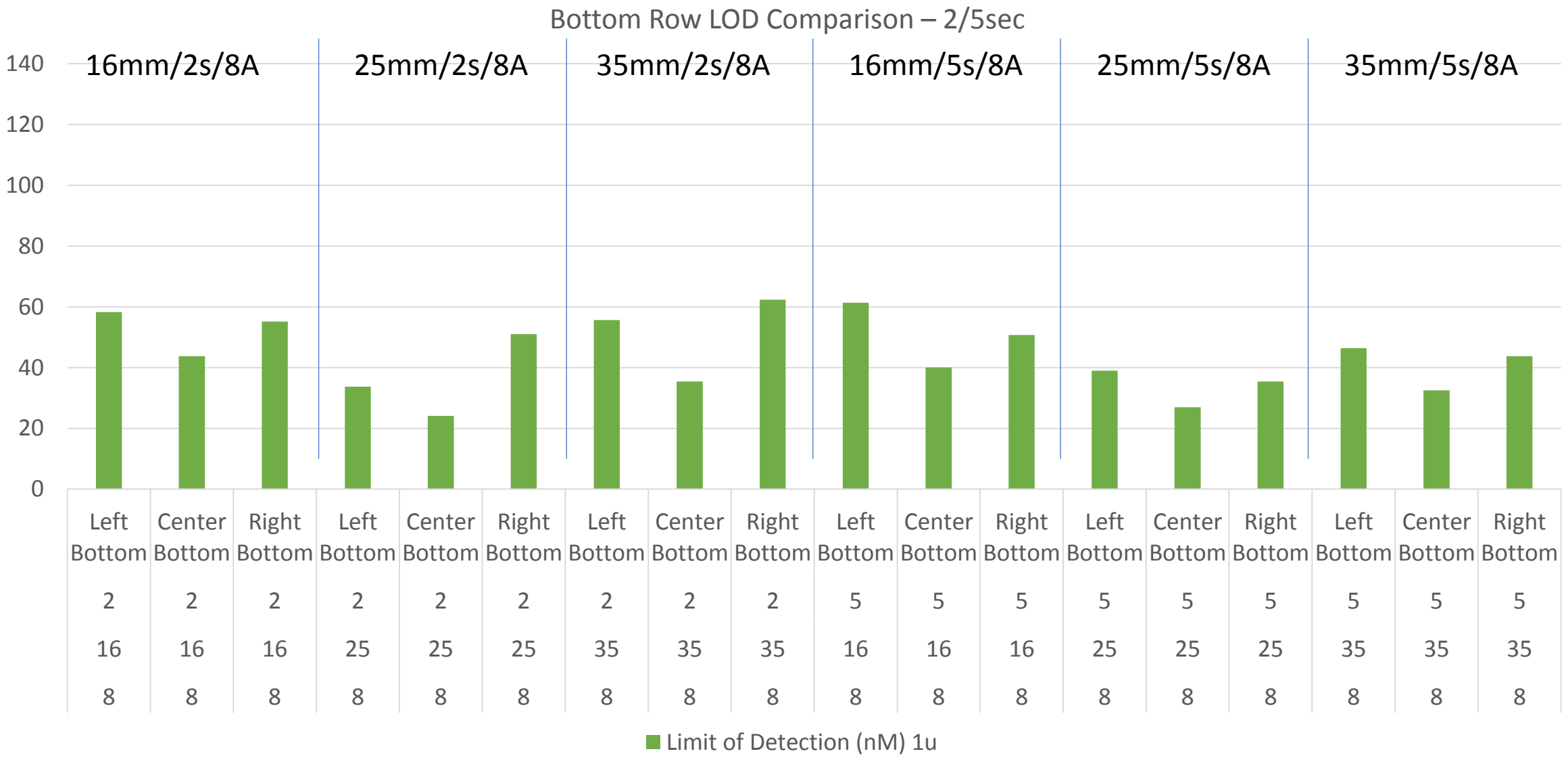

Top Row Signal Comparison – 2/5sec
16mm/2s/8A
25mm/2s/8A
35mm/2s/8A
16mm/5s/8A
25mm/5s/8A
35mm/5s/8A
200
180
160
140
120
100
80
60
40
20
0
Left Top
Center Top
Right Top
2
16
8
25
35
5
Mean Signal 1u

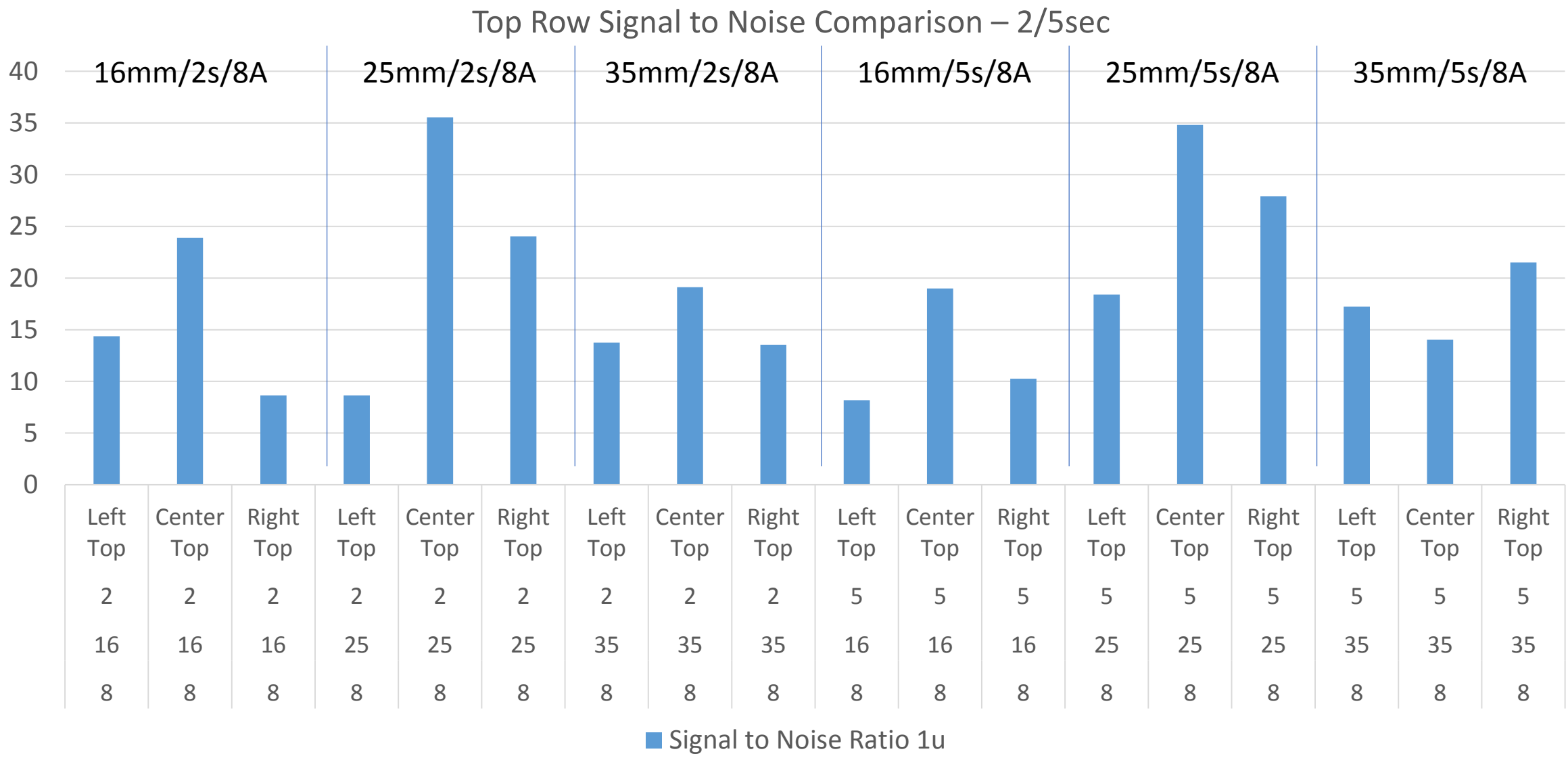

Middle Row Signal Comparison – 2/5sec
16mm/2s/8A
25mm/2s/8A
35mm/2s/8A
16mm/5s/8A
25mm/5s/8A
35mm/5s/8A
200
180
160
140
120
100
80
60
40
20
0
Left Middle 2 16 8
Center Middle 2 16 8
Right Middle 2 16 8
Left Middle 2 25 8
Center Middle 2 25 8
Right Middle 2 25 8
Left Middle 2 35 8
Center Middle 2 35 8
Right Middle 2 35 8
Left Middle 5 16 8
Center Middle 5 16 8
Right Middle 5 16 8
Left Middle 5 25 8
Center Middle 5 25 8
Right Middle 5 25 8
Left Middle 5 35 8
Center Middle 5 35 8
Right Middle 5 35 8
Mean Signal 1u

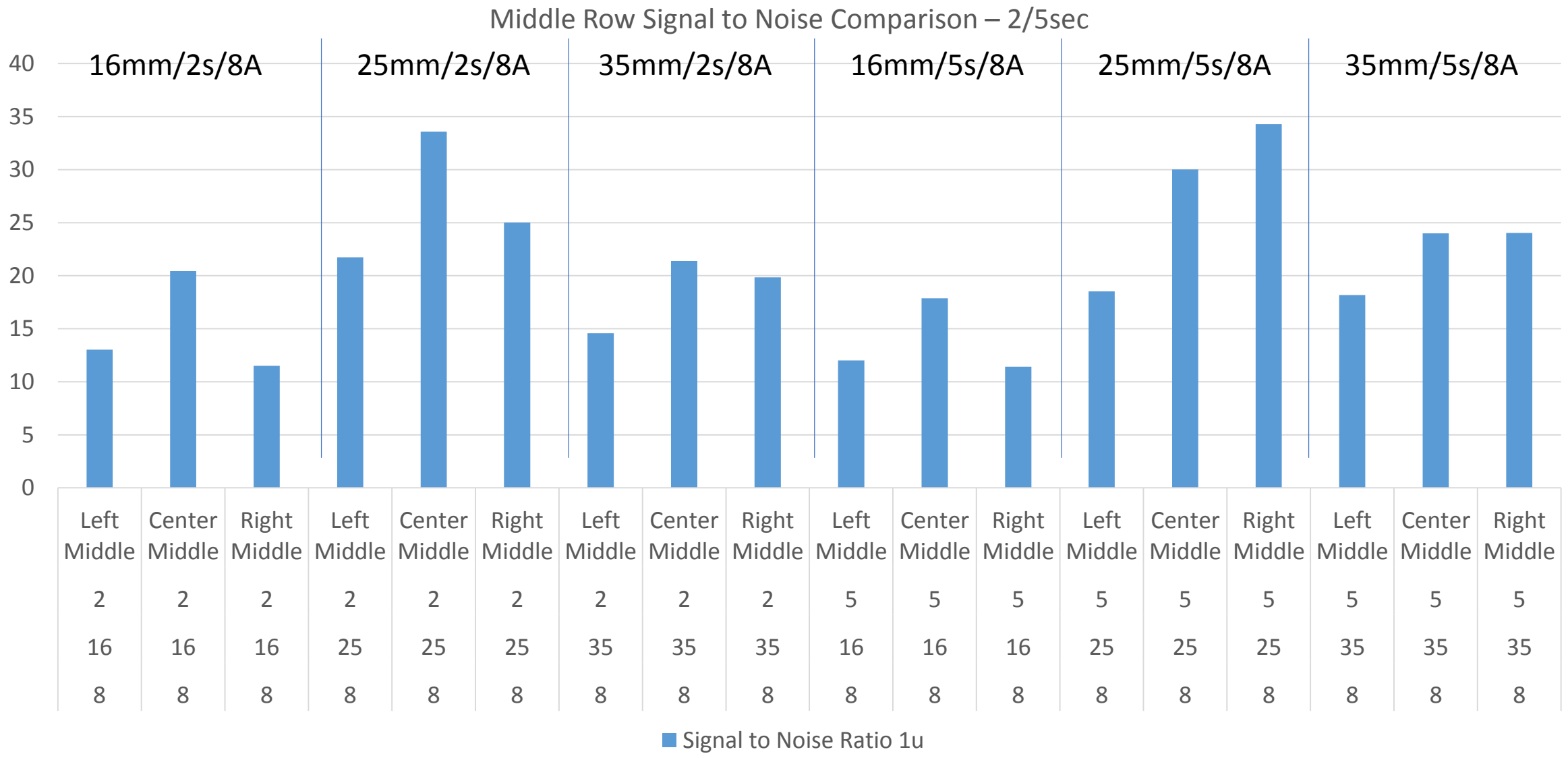

Bottom Row Signal Comparison – 2/5sec
16mm/2s/8A
25mm/2s/8A
35mm/2s/8A
16mm/5s/8A
25mm/5s/8A
35mm/5s/8A
200
180
160
140
120
100
80
60
40
20
0
Left Bottom
Center Bottom
Right Bottom
2
16
8
5
25
35
Mean Signal 1u

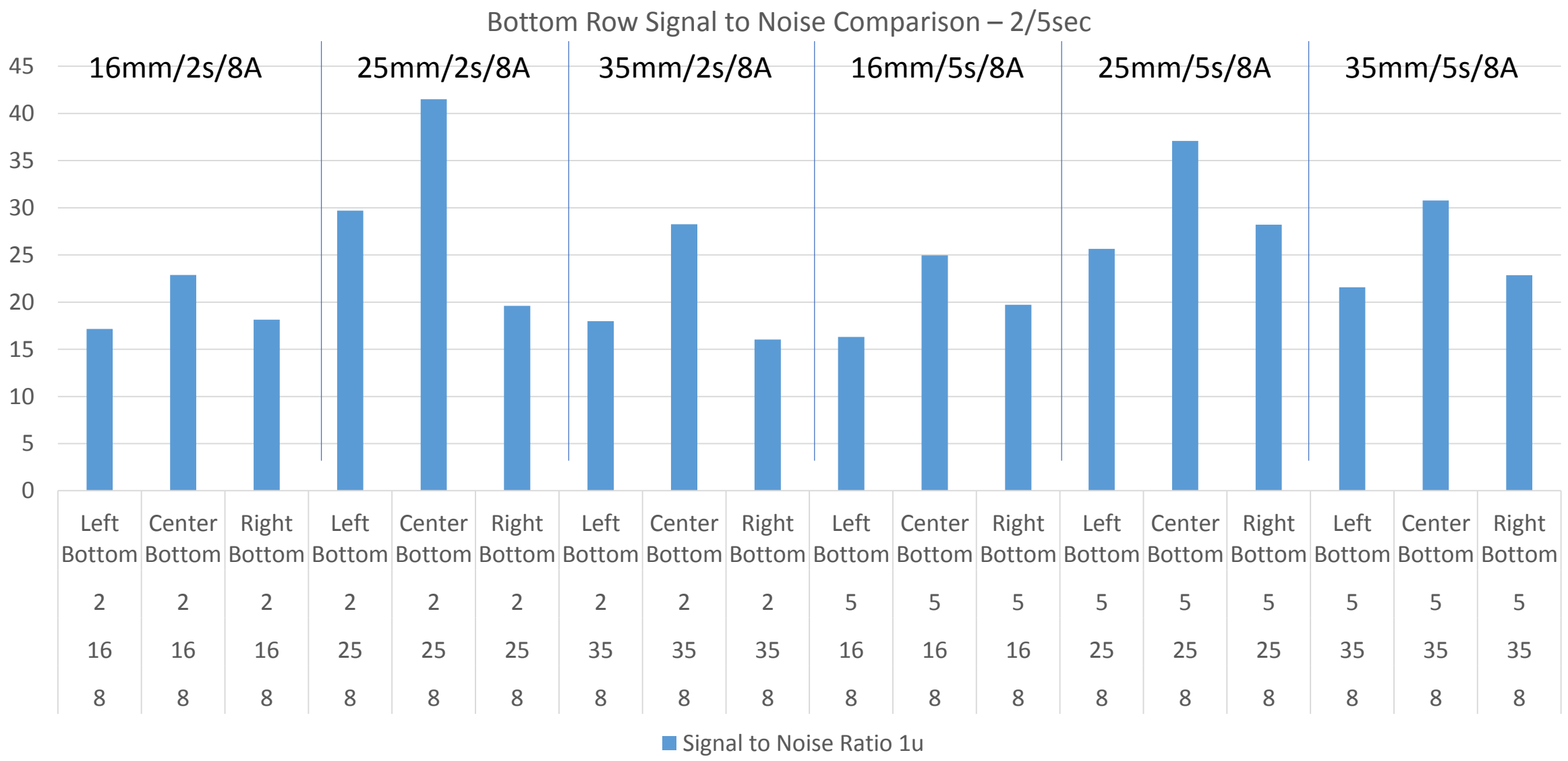

Top Row LOD Comparison – 2/5sec
16mm/2s/8A
25mm/2s/8A
35mm/2s/8A
16mm/5s/8A
25mm/5s/8A
35mm/5s/8A
140
120
100
80
60
40
20
0
Left Top
Center Top
Right Top
2
16
8
5
25
35
Limit of Detection (nM) 1u


Middle Row LOD Comparison – 2/5sec
16mm/2s/8A
25mm/2s/8A
35mm/2s/8A
16mm/5s/8A
25mm/5s/8A
35mm/5s/8A
140
120
100
80
60
40
20
0
Left Middle
Center Middle
Right Middle
2
16
8
5
25
35
Limit of Detection (nM) 1u


Bottom Row LOD Comparison – 2/5sec
16mm/2s/8A
25mm/2s/8A
35mm/2s/8A
16mm/5s/8A
25mm/5s/8A
35mm/5s/8A
140
120
100
80
60
40
20
0
Left Bottom
Center Bottom
Right Bottom
2
16
8
5
25
35
Limit of Detection (nM) 1u


Top Row Signal to Noise Comparison – 2/5sec
16mm/2s/8A
25mm/2s/8A
35mm/2s/8A
16mm/5s/8A
25mm/5s/8A
35mm/5s/8A
40
35
30
25
20
15
10
5
0
Left Top
Center Top
Right Top
2
16
8
5
25
35
Signal to Noise Ratio 1u


Middle Row Signal to Noise Comparison – 2/5sec
16mm/2s/8A
25mm/2s/8A
35mm/2s/8A
16mm/5s/8A
25mm/5s/8A
35mm/5s/8A
40
35
30
25
20
15
10
5
0
Left Middle 2 16 8
Center Middle 2 16 8
Right Middle 2 16 8
Left Middle 2 25 8
Center Middle 2 25 8
Right Middle 2 25 8
Left Middle 2 35 8
Center Middle 2 35 8
Right Middle 2 35 8
Left Middle 5 16 8
Center Middle 5 16 8
Right Middle 5 16 8
Left Middle 5 25 8
Center Middle 5 25 8
Right Middle 5 25 8
Left Middle 5 35 8
Center Middle 5 35 8
Right Middle 5 35 8
Signal to Noise Ratio 1u


Bottom Row Signal to Noise Comparison – 2/5sec
16mm/2s/8A
25mm/2s/8A
35mm/2s/8A
16mm/5s/8A
25mm/5s/8A
35mm/5s/8A
45
40
35
30
25
20
15
10
5
0
Left Bottom
Center Bottom
Right Bottom
2
16
8
5
25
35
Signal to Noise Ratio 1u