

[d = 400 μm , a = 10 μm]

a = 10 μm : 1/20

Incident beam

[d = 400 μm , a = 10 μm]

Incident beam

Detector angle [mrad]	He ⁺ signal [count/s]
0	54
0.02001	55.5
0.04	60.5
0.06	66.5
0.07999	83.5
0.1	87.5
0.12001	105
0.14	90
0.16	127
0.17999	134
0.2	194.5
0.22001	221.5
0.24	265
0.26	363.5
0.27999	506
0.3	842
0.32001	1695
0.34	4803.5
0.36	15200.5
0.37999	35877.5
0.4	59961
0.42001	77851
0.44	86465.5
0.46	84122
0.47999	70550.5
0.5	47583
0.52001	23378.5
0.54	7679
0.56	2467.5
0.57999	1001
0.6	625
0.62001	410
0.64	297.5
0.66	229
0.67999	166
0.7	158
0.72001	123
0.74	118
0.76	100.5

[d = 400 μm , a = 10 μm]

a = 10 μm : 2/20

Incident beam

0.77999	83.5
0.8	73
0.82001	69.5
0.84	68
0.86	53
0.87999	52.5
0.9	55.5
0.92001	37
0.94	40
0.96	34
0.97999	39

[d = 400 μm , a = 10 μm]

a = 10 μm : 3/20

$\theta_{\text{in}} = 0.468$ mrad

[d = 400 μm , a = 10 μm]

$\theta_{\text{in}} = 0.468$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.61257	40.78
-0.59256	43.25
-0.57257	55.32
-0.55257	82.08
-0.53258	128.96
-0.51257	240.77
-0.49256	694.65
-0.47257	5046.86
-0.45257	18295.92
-0.43258	29067.02
-0.41257	30400.09
-0.39256	20145.48
-0.37257	7331.72
-0.35257	2429.92
-0.33258	1084.51
-0.31257	656.99
-0.29256	435.57
-0.27257	325.57
-0.25257	253.76
-0.23258	200.25
-0.21257	158.57
-0.19256	138.96
-0.17257	116.23
-0.15257	104.93
-0.13258	98.05
-0.11257	88.57
-0.09256	74.54
-0.07257	65.06
-0.05257	64.41
-0.03258	57.79
-0.01257	52.47
0.00744	52.47
0.02743	44.41
0.04743	46.62
0.06742	44.54
0.08743	39.48
0.10744	41.95
0.12743	38.83
0.14743	37.66

[d = 400 μm , a = 10 μm]

a = 10 μm : 4/20

$\theta_{\text{in}} = 0.468 \text{ mrad}$

0.16742	37.27
0.18743	32.86
0.20744	32.99
0.22743	31.30
0.24743	34.28
0.26742	30.78
0.28743	32.99
0.30744	30.26
0.32743	34.02
0.34743	41.95
0.36742	55.71
0.38743	138.44
0.40744	469.21
0.42743	1075.42
0.44743	1806.31
0.46742	2157.85
0.48743	1872.28
0.50744	1120.35
0.52743	415.18
0.54743	65.58
0.56742	24.80
0.58743	18.83
0.60744	16.62
0.62743	11.17
0.64743	14.16
0.66742	13.90
0.68743	13.38
0.70744	14.80
0.72743	9.74
0.74743	13.51
0.76742	12.08
0.78743	12.60
0.80744	11.82
0.82743	29.61
0.84743	86.10
0.86742	150.64
0.88743	246.36
0.90744	301.03
0.92743	316.74
0.94743	323.76
0.96742	289.86
0.98743	212.33
1.00744	123.11

[d = 400 μm , a = 10 μm]

a = 10 μm : 5/20

$\theta_{\text{in}} = 0.468 \text{ mrad}$

1.02743	35.45
1.04743	12.99
1.06742	10.00
1.08743	9.35
1.10744	13.12
1.12743	25.19
1.14743	55.06
1.16742	90.91
1.18743	115.19
1.20744	131.81
1.22743	133.50
1.24743	147.40
1.26742	131.29
1.28743	135.84
1.30744	113.24
1.32743	68.96
1.34743	34.15
1.36742	23.38
1.38743	34.67
1.40744	54.93
1.42743	70.13
1.44743	74.28
1.46742	81.43
1.48743	79.09
1.50744	79.87
1.52743	81.69
1.54743	86.36
1.56742	79.61
1.58743	64.67
1.60744	53.76
1.62743	51.17
1.64743	52.86
1.66742	49.87
1.68743	51.82
1.70744	47.92
1.72743	55.71
1.74743	64.80
1.76742	68.31
1.78743	73.89
1.80744	61.30
1.82743	46.75
1.84743	32.21
1.86742	36.10

[d = 400 μm , a = 10 μm]

a = 10 μm : 6/20

$\theta_{\text{in}} = 0.468$ mrad

1.88743	40.65
1.90744	44.93
1.92743	58.18
1.94743	66.36
1.96742	58.05
1.98743	54.28
2.00744	45.71
2.02743	35.84
2.04743	33.12
2.06742	33.25
2.08743	44.67
2.10744	46.49
2.12743	48.44
2.14743	42.08
2.16742	39.22
2.18743	36.62
2.20744	32.99
2.22743	33.77
2.24743	38.31
2.26742	39.74
2.28743	44.02
2.30744	44.67
2.32743	45.06
2.34743	33.64
2.36742	31.04
2.38743	29.48
2.40744	30.52
2.42743	33.38
2.44743	36.10
2.46742	40.39
2.48743	33.64
2.50744	29.35
2.52743	28.57
2.54743	30.13
2.56742	32.47
2.58743	32.47
2.60744	34.54
2.62743	34.02
2.64743	30.13
2.66742	29.87
2.68743	25.84
2.70744	27.01
2.72743	31.17

[d = 400 μm , a = 10 μm]

a = 10 μm : 7/20

$\theta_{\text{in}} = 0.468 \text{ mrad}$

2.74743	28.18
2.76742	27.66
2.78743	26.10
2.80744	27.53
2.82743	31.56
2.84743	29.22
2.86742	25.84
2.88743	27.27
2.90744	30.00
2.92743	28.05
2.94743	23.64
2.96742	24.16
2.98743	26.88
3.00744	27.92
3.02743	23.12
3.04743	23.90
3.06742	21.04
3.08743	22.73
3.10744	21.95
3.12743	23.77
3.14743	23.90
3.16742	24.67

[d = 400 μm , a = 10 μm]

a = 10 μm : 8/20

$\theta_{\text{in}} = 1.007 \text{ mrad}$

[d = 400 μm , a = 10 μm]

$\theta_{\text{in}} = 1.007 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-1.15197	5.06
-1.13196	4.93
-1.11197	5.19
-1.09197	7.01
-1.07198	8.57
-1.05197	10.00
-1.03196	15.97
-1.01197	23.77
-0.99197	51.56
-0.97198	181.42
-0.95197	866.34
-0.93196	1624.11
-0.91197	1942.02
-0.89197	1654.75
-0.87198	969.84
-0.85197	595.31
-0.83196	411.94
-0.81197	288.04
-0.79197	238.82
-0.77198	182.72
-0.75197	152.59
-0.73196	136.10
-0.71197	117.01
-0.69197	92.85
-0.67198	90.13
-0.65197	76.36
-0.63196	68.18
-0.61197	55.06
-0.59197	50.39
-0.57198	48.44
-0.55197	51.30
-0.53196	41.43
-0.51197	41.82
-0.49197	36.36
-0.47198	33.90
-0.45197	31.69
-0.43196	32.86
-0.41197	24.93
-0.39197	31.43

[d = 400 μm , a = 10 μm]

a = 10 μm : 9/20

$\theta_{\text{in}} = 1.007 \text{ mrad}$

-0.37198	28.44
-0.35197	24.54
-0.33196	21.82
-0.31197	20.00
-0.29197	20.39
-0.27198	21.56
-0.25197	20.13
-0.23196	18.57
-0.21197	16.23
-0.19197	18.44
-0.17198	15.97
-0.15197	17.40
-0.13196	12.99
-0.11197	18.31
-0.09197	14.93
-0.07198	15.58
-0.05197	12.99
-0.03196	16.10
-0.01197	11.04
0.00803	16.23
0.02802	12.47
0.04803	10.00
0.06804	13.12
0.08803	11.82
0.10803	12.47
0.12802	12.21
0.14803	12.08
0.16804	11.56
0.18803	13.38
0.20803	9.87
0.22802	9.48
0.24803	10.13
0.26804	10.39
0.28803	11.56
0.30803	9.09
0.32802	7.66
0.34803	8.05
0.36804	9.22
0.38803	10.00
0.40803	12.73
0.42802	11.69
0.44803	17.27
0.46804	43.25

[d = 400 μm , a = 10 μm]

a = 10 μm : 10/20

$\theta_{\text{in}} = 1.007 \text{ mrad}$

0.48803	84.67
0.50803	151.29
0.52802	207.79
0.54803	251.81
0.56804	271.29
0.58803	285.32
0.60803	220.90
0.62802	162.33
0.64803	84.67
0.66804	35.45
0.68803	11.43
0.70803	6.49
0.72802	7.66
0.74803	5.58
0.76804	6.88
0.78803	5.45
0.80803	5.71
0.82802	6.23
0.84803	7.27
0.86804	6.62
0.88803	11.56
0.90803	22.21
0.92802	38.44
0.94803	59.35
0.96804	75.84
0.98803	90.39
1.00803	91.43
1.02802	88.83
1.04803	78.83
1.06804	58.18
1.08803	37.66
1.10803	13.25
1.12802	7.53
1.14803	7.27
1.16804	7.14
1.18803	11.17
1.20803	18.83
1.22802	26.23
1.24803	38.44
1.26804	46.36
1.28803	48.05
1.30803	51.04
1.32802	45.45

[d = 400 μm , a = 10 μm]

a = 10 μm : 11/20

$\theta_{\text{in}} = 1.007 \text{ mrad}$

1.34803	50.39
1.36804	40.00
1.38803	22.73
1.40803	13.25
1.42802	13.90
1.44803	16.62
1.46804	22.08
1.48803	27.79
1.50803	29.61
1.52802	34.28
1.54803	34.15
1.56804	34.41
1.58803	28.31
1.60803	29.22
1.62802	21.82
1.64803	17.01
1.66804	18.96
1.68803	22.08
1.70803	25.32
1.72802	23.64
1.74803	25.19
1.76804	29.35
1.78803	26.88
1.80803	29.87
1.82802	23.25
1.84803	19.09
1.86804	18.31
1.88803	22.60
1.90803	16.36
1.92802	22.86
1.94803	22.99
1.96804	23.77
1.98803	22.99
2.00803	25.71
2.02802	21.82
2.04803	18.05
2.06804	17.14
2.08803	19.35
2.10803	17.14
2.12802	21.56
2.14803	21.43
2.16804	23.64
2.18803	19.61

[d = 400 μm , a = 10 μm]

a = 10 μm : 12/20

$\theta_{\text{in}} = 1.007 \text{ mrad}$

2.20803	19.35
2.22802	17.66
2.24803	18.70
2.26804	15.97
2.28803	18.57
2.30803	18.31
2.32802	17.40
2.34803	18.18
2.36804	15.97
2.38803	16.23
2.40803	16.75
2.42802	15.71
2.44803	17.66
2.46804	19.22
2.48803	20.91
2.50803	16.36
2.52802	15.45
2.54803	13.51
2.56804	16.23
2.58803	15.32
2.60803	17.53
2.62802	14.67

[d = 400 μm , a = 10 μm]

a = 10 μm : 13/20

$\theta_{\text{in}} = 1.509$ mrad

[d = 400 μm , a = 10 μm]

$\theta_{\text{in}} = 1.509$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.25797	7.79
-0.23798	9.22
-0.21798	8.05
-0.19799	8.70
-0.17798	7.27
-0.15797	5.45
-0.13798	8.44
-0.11798	7.01
-0.09799	6.75
-0.07798	6.88
-0.05797	6.49
-0.03798	10.91
-0.01798	7.01
0.00201	7.53
0.02202	8.44
0.04203	6.75
0.06202	7.27
0.08202	7.40
0.10201	5.45
0.12202	8.31
0.14203	6.23
0.16202	6.23
0.18202	6.62
0.20201	5.97
0.22202	5.32
0.24203	6.23
0.26202	7.01
0.28202	6.36
0.30201	5.19
0.32202	5.71
0.34203	5.84
0.36202	4.42
0.38202	6.36
0.40201	8.05
0.42202	8.83
0.44203	8.57
0.46202	13.38
0.48202	28.70
0.50201	46.88

[d = 400 μm , a = 10 μm]

a = 10 μm : 14/20

$\theta_{\text{in}} = 1.509 \text{ mrad}$

0.52202	66.88
0.54203	86.23
0.56202	95.45
0.58202	95.19
0.60201	93.50
0.62202	70.52
0.64203	45.97
0.66202	27.66
0.68202	9.87
0.70201	7.01
0.72202	6.75
0.74203	4.81
0.76202	4.03
0.78202	4.03
0.80201	3.38
0.82202	3.90
0.84203	5.06
0.86202	5.32
0.88202	7.53
0.90201	9.22
0.92202	19.48
0.94203	26.88
0.96202	36.36
0.98202	41.43
1.00201	44.02
1.02202	44.02
1.04203	42.08
1.06202	24.28
1.08202	10.13
1.10201	7.40
1.12202	3.64
1.14203	4.42
1.16202	4.16
1.18202	4.93
1.20201	10.26
1.22202	12.73
1.24203	18.57
1.26202	24.80
1.28202	27.40
1.30201	33.25
1.32202	25.71
1.34203	23.12
1.36202	14.29

[d = 400 μm , a = 10 μm]

a = 10 μm : 15/20

$\theta_{\text{in}} = 1.509 \text{ mrad}$

1.38202	10.00
1.40201	6.23
1.42202	5.84
1.44203	8.96
1.46202	12.34
1.48202	16.36
1.50201	18.05
1.52202	22.08
1.54203	18.83
1.56202	23.25
1.58202	16.88
1.60201	8.57
1.62202	8.44
1.64203	8.31
1.66202	9.09
1.68202	10.13
1.70201	13.90
1.72202	17.01
1.74203	17.40
1.76202	19.61
1.78202	14.93
1.80201	10.26
1.82202	8.83
1.84203	9.35
1.86202	10.13
1.88202	10.91
1.90201	14.67
1.92202	14.16
1.94203	14.55
1.96202	14.16
1.98202	13.64
2.00201	9.48
2.02202	10.65
2.04203	8.31
2.06202	10.39
2.08202	10.91
2.10201	12.60
2.12202	17.66
2.14203	12.47
2.16202	13.12
2.18202	11.56
2.20201	10.39
2.22202	9.74

[d = 400 μm , a = 10 μm]

a = 10 μm : 16/20

$\theta_{\text{in}} = 1.509 \text{ mrad}$

2.24203	8.57
2.26202	9.35
2.28202	9.74
2.30201	11.17
2.32202	10.65
2.34203	9.74
2.36202	7.01
2.38202	9.09
2.40201	9.09
2.42202	13.38
2.44203	10.91
2.46202	11.43
2.48202	9.74
2.50201	10.78
2.52202	9.61
2.54203	10.13
2.56202	11.95
2.58202	12.86

[d = 400 μm , a = 10 μm]

a = 10 μm : 17/20

$\theta_{\text{in}} = 1.961$ mrad

[d = 400 μm , a = 10 μm]

$\theta_{\text{in}} = 1.961$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.36599	5.89
-0.34599	6.84
-0.326	4.93
-0.30599	5.54
-0.28598	6.06
-0.26599	5.80
-0.24599	5.89
-0.226	5.97
-0.20599	4.68
-0.18598	6.49
-0.16599	5.37
-0.14599	4.68
-0.126	4.85
-0.10599	4.59
-0.08598	4.50
-0.06599	5.54
-0.04599	5.02
-0.026	4.50
-0.00599	5.54
0.01402	4.42
0.03401	4.07
0.05401	4.59
0.074	5.54
0.09401	4.24
0.11402	5.54
0.13401	3.98
0.15401	4.59
0.174	4.42
0.19401	3.90
0.21402	4.33
0.23401	4.85
0.25401	5.37
0.274	3.81
0.29401	5.63
0.31402	3.46
0.33401	3.64
0.35401	4.93
0.374	4.50
0.39401	4.50

[d = 400 μm , a = 10 μm]

a = 10 μm : 18/20

$\theta_{\text{in}} = 1.961 \text{ mrad}$

0.41402	4.85
0.43401	4.33
0.45401	4.16
0.474	4.93
0.49401	6.32
0.51402	4.24
0.53401	8.05
0.55401	13.42
0.574	19.31
0.59401	24.76
0.61402	30.73
0.63401	35.32
0.65401	36.88
0.674	37.23
0.69401	30.82
0.71402	24.76
0.73401	16.19
0.75401	8.31
0.774	5.28
0.79401	4.16
0.81402	3.20
0.83401	2.94
0.85401	3.12
0.874	3.29
0.89401	3.20
0.91402	3.98
0.93401	5.63
0.95401	7.19
0.974	11.95
0.99401	17.32
1.01402	20.52
1.03401	22.86
1.05401	21.56
1.074	22.16
1.09401	17.32
1.11402	9.52
1.13401	5.19
1.15401	3.12
1.174	2.94
1.19401	4.07
1.21402	4.24
1.23401	5.97
1.25401	7.97

[d = 400 μm , a = 10 μm]

a = 10 μm : 19/20

$\theta_{\text{in}} = 1.961 \text{ mrad}$

1.274	14.20
1.29401	13.07
1.31402	15.15
1.33401	18.18
1.35401	16.62
1.374	10.48
1.39401	8.83
1.41402	4.68
1.43401	3.46
1.45401	3.29
1.474	5.37
1.49401	8.31
1.51402	7.79
1.53401	12.03
1.55401	13.42
1.574	12.55
1.59401	10.56
1.61402	10.04
1.63401	5.89
1.65401	4.68
1.674	6.49
1.69401	7.01
1.71402	7.62
1.73401	12.03
1.75401	10.48
1.774	12.55
1.79401	9.70
1.81402	8.57
1.83401	7.45
1.85401	6.32
1.874	5.71
1.89401	6.93
1.91402	8.83
1.93401	10.39
1.95401	9.70
1.974	9.70
1.99401	8.31
2.01402	9.00
2.03401	6.84
2.05401	7.45
2.074	6.32
2.09401	9.70
2.11402	9.70

[d = 400 μm , a = 10 μm]

a = 10 μm : 20/20

$\theta_{\text{in}} = 1.961 \text{ mrad}$

2.13401	8.57
2.15401	8.83
2.174	6.49
2.19401	7.36
2.21402	8.05
2.23401	7.71
2.25401	7.88
2.274	8.83
2.29401	10.65
2.31402	6.84
2.33401	7.71
2.35401	5.37
2.374	6.58
2.39401	7.27
2.41402	8.40
2.43401	7.88
2.45401	7.53
2.474	7.71
2.49401	7.36
2.51402	5.97
2.53401	6.41
2.55401	8.05
2.574	8.40
2.59401	7.62
2.61402	5.97
2.63401	7.01
2.65401	6.41
2.674	7.79
2.69401	8.57
2.71402	6.67
2.73401	7.45
2.75401	4.33
2.774	7.71
2.79401	6.06

[d = 400 μm , a = 30 μm]

a = 30 μm : 1/20

Incident beam

[d = 400 μm , a = 30 μm]

Incident beam

Detector angle [mrad]	He ⁺ signal [count/s]
0	53.5
0.02001	67
0.04	67
0.06	73
0.07999	93.5
0.1	98
0.12001	111.5
0.14	114
0.16	136
0.17999	172
0.2	200
0.22001	257
0.24	329.5
0.26	470
0.27999	725.5
0.3	1384
0.32001	3754
0.34	12158.5
0.36	30653
0.37999	55035.5
0.4	75051.5
0.42001	85319.5
0.44	85462
0.46	74214
0.47999	53162.5
0.5	28179
0.52001	10229
0.54	3085.5
0.56	1245.5
0.57999	653.5
0.6	444.5
0.62001	317
0.64	247
0.66	198.5
0.67999	165
0.7	131.5
0.72001	122
0.74	109.5
0.76	84.5

[d = 400 μm , a = 30 μm]

a = 30 μm : 2/20

Incident beam

0.77999	83
0.8	58
0.82001	66.5
0.84	60.5
0.86	55.5
0.87999	40.5
0.9	46
0.92001	37
0.94	42
0.96	33
0.97999	35.5

[d = 400 μm , a = 30 μm]

a = 30 μm : 3/20

$\theta_{\text{in}} = 0.504 \text{ mrad}$

[d = 400 μm , a = 30 μm]

$\theta_{\text{in}} = 0.504 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.63283	36.07
-0.61282	36.86
-0.59283	54.44
-0.57283	78.40
-0.55284	142.08
-0.53283	364.51
-0.51282	1898.75
-0.49283	8645.84
-0.47283	13167.95
-0.45284	14100.66
-0.43283	9717.11
-0.41282	3604.12
-0.39283	1406.35
-0.37283	756.38
-0.35284	492.40
-0.33283	349.67
-0.31282	260.33
-0.29283	212.93
-0.27283	172.69
-0.25284	143.25
-0.23283	125.54
-0.21282	110.44
-0.19283	95.98
-0.17283	88.56
-0.15284	81.26
-0.13283	72.41
-0.11282	63.42
-0.09283	57.30
-0.07283	49.23
-0.05284	42.98
-0.03283	40.11
-0.01282	38.29
0.00717	38.29
0.02717	37.51
0.04716	34.64
0.06717	35.42
0.08718	40.24
0.10717	38.42
0.12717	36.59

[d = 400 μm , a = 30 μm]

a = 30 μm : 4/20

$\theta_{\text{in}} = 0.504 \text{ mrad}$

0.14716	35.55
0.16717	29.04
0.18718	29.82
0.20717	33.08
0.22717	32.56
0.24716	29.95
0.26717	32.56
0.28718	31.52
0.30717	28.13
0.32717	28.78
0.34716	34.12
0.36717	34.51
0.38718	51.57
0.40717	104.18
0.42717	320.76
0.44716	893.12
0.46717	1598.83
0.48718	2421.63
0.50717	2661.25
0.52717	2228.37
0.54716	1381.48
0.56717	545.01
0.58718	122.94
0.60717	45.19
0.62717	26.18
0.64716	21.62
0.66717	22.01
0.68718	20.71
0.70717	17.45
0.72717	17.45
0.74716	19.01
0.76717	16.80
0.78718	16.41
0.80717	15.11
0.82717	23.57
0.84716	64.98
0.86717	158.62
0.88718	293.54
0.90717	429.37
0.92717	512.46
0.94716	565.85
0.96717	610.91
0.98718	578.61

[d = 400 μm , a = 30 μm]

a = 30 μm : 5/20

$\theta_{\text{in}} = 0.504 \text{ mrad}$

1.00717	422.34
1.02717	239.88
1.04716	85.30
1.06717	22.66
1.08718	13.41
1.10717	12.89
1.12717	30.60
1.14716	58.99
1.16717	112.26
1.18718	172.29
1.20717	225.04
1.22717	249.39
1.24716	286.25
1.26717	293.93
1.28718	297.71
1.30717	295.36
1.32717	240.01
1.34716	146.51
1.36717	81.39
1.38718	62.38
1.40717	92.46
1.42717	117.47
1.44716	143.38
1.46717	159.27
1.48718	174.64
1.50717	165.78
1.52717	183.36
1.54716	190.40
1.56717	188.70
1.58718	160.96
1.60717	126.45
1.62717	108.87
1.64716	101.19
1.66717	118.90
1.68718	112.13
1.70717	116.56
1.72717	121.50
1.74716	135.57
1.76717	148.98
1.78718	158.36
1.80717	132.31
1.82717	109.91
1.84716	90.77

[d = 400 μm , a = 30 μm]

a = 30 μm : 6/20

$\theta_{\text{in}} = 0.504 \text{ mrad}$

1.86717	85.82
1.88718	86.99
1.90717	90.77
1.92717	97.80
1.94716	114.21
1.96717	122.81
1.98718	124.63
2.00717	105.36
2.02717	79.57
2.04716	73.32
2.06717	75.53
2.08718	82.04
2.10717	86.60
2.12717	98.58
2.14716	90.51
2.16717	95.59
2.18718	85.30
2.20717	67.33
2.22717	65.38
2.24716	62.25
2.26717	67.20
2.28718	68.63
2.30717	68.11
2.32717	71.63
2.34716	65.51
2.36717	59.52
2.38718	51.83
2.40717	49.36
2.42717	52.87
2.44716	55.35
2.46717	54.18
2.48718	49.75
2.50717	46.36
2.52717	39.59
2.54716	36.33
2.56717	42.06
2.58718	40.11
2.60717	42.98
2.62717	38.42
2.64716	36.07
2.66717	37.90
2.68718	31.52
2.70717	30.99

[d = 400 μm , a = 30 μm]

a = 30 μm : 7/20

$\theta_{\text{in}} = 0.504 \text{ mrad}$

2.72717	32.95
2.74716	29.04
2.76717	31.78
2.78718	30.08
2.80717	30.47

[d = 400 μm , a = 30 μm]

a = 30 μm : 8/20

$\theta_{\text{in}} = 1.003 \text{ mrad}$

[d = 400 μm , a = 30 μm]

$\theta_{\text{in}} = 1.003 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.18204	16.28
-0.16203	13.67
-0.14204	13.41
-0.12204	14.06
-0.10205	14.33
-0.08204	14.20
-0.06203	12.24
-0.04204	12.37
-0.02204	10.81
-0.00205	15.24
0.01796	13.54
0.03797	12.37
0.05796	12.63
0.07796	14.33
0.09795	14.33
0.11796	13.41
0.13797	11.07
0.15796	10.94
0.17796	9.38
0.19795	12.89
0.21796	11.33
0.23797	11.98
0.25796	12.37
0.27796	10.94
0.29795	8.60
0.31796	8.73
0.33797	10.81
0.35796	11.33
0.37796	12.89
0.39795	13.02
0.41796	17.84
0.43797	29.17
0.45796	62.64
0.47796	132.31
0.49795	265.28
0.51796	416.74
0.53797	555.56
0.55796	669.25
0.57796	703.24

[d = 400 μm , a = 30 μm]

a = 30 μm : 9/20

$\theta_{\text{in}} = 1.003 \text{ mrad}$

0.59795	628.88
0.61796	451.77
0.63797	259.81
0.65796	97.93
0.67796	33.08
0.69795	18.23
0.71796	11.98
0.73797	8.07
0.75796	7.94
0.77796	8.20
0.79795	7.16
0.81796	8.86
0.83797	7.94
0.85796	13.02
0.87796	24.35
0.89795	47.53
0.91796	92.98
0.93797	158.49
0.95796	223.34
0.97796	268.53
0.99795	295.62
1.01796	302.13
1.03797	274.39
1.05796	196.52
1.07796	105.23
1.09795	42.19
1.11796	16.80
1.13797	11.46
1.15796	13.93
1.17796	26.83
1.19795	50.66
1.21796	79.31
1.23797	121.11
1.25796	136.48
1.27796	177.37
1.29795	193.00
1.31796	190.53
1.33797	176.98
1.35796	130.36
1.37796	92.07
1.39795	48.84
1.41796	38.94
1.43797	50.27

[d = 400 μm , a = 30 μm]

a = 30 μm : 10/20

$\theta_{\text{in}} = 1.003 \text{ mrad}$

1.45796	74.10
1.47796	97.15
1.49795	112.13
1.51796	129.06
1.53797	124.11
1.55796	130.62
1.57796	135.44
1.59795	117.21
1.61796	86.86
1.63797	79.18
1.65796	67.33
1.67796	77.23
1.69795	88.82
1.71796	88.30
1.73797	97.93
1.75796	105.88
1.77796	108.35
1.79795	101.58
1.81796	94.16
1.83797	82.83
1.85796	69.93
1.87796	69.54
1.89795	70.85
1.91796	75.66
1.93797	84.65
1.95796	89.47
1.97796	92.20
1.99795	80.48
2.01796	76.18
2.03797	66.16
2.05796	65.38
2.07796	60.43
2.09795	69.15
2.11796	70.98
2.13797	79.44
2.15796	76.58
2.17796	66.55
2.19795	58.34
2.21796	59.12
2.23797	55.09
2.25796	55.48
2.27796	60.30
2.29795	61.34

[d = 400 μm , a = 30 μm]

a = 30 μm : 11/20

$\theta_{\text{in}} = 1.003 \text{ mrad}$

2.31796	62.51
2.33797	59.25
2.35796	49.88
2.37796	43.89
2.39795	48.84
2.41796	51.44
2.43797	48.45
2.45796	49.23
2.47796	46.10
2.49795	45.58
2.51796	40.63
2.53797	38.68

[d = 400 μm , a = 30 μm]

a = 30 μm : 12/20

$\theta_{\text{in}} = 1.514 \text{ mrad}$

[d = 400 μm , a = 30 μm]

$\theta_{\text{in}} = 1.514 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.50263	11.72
-0.48263	10.16
-0.46264	10.42
-0.44263	11.46
-0.42262	12.11
-0.40263	11.59
-0.38263	8.86
-0.36264	9.90
-0.34263	11.07
-0.32262	9.77
-0.30263	9.51
-0.28263	8.33
-0.26264	8.73
-0.24263	8.73
-0.22262	6.51
-0.20263	9.25
-0.18263	9.38
-0.16264	7.42
-0.14263	6.90
-0.12262	7.55
-0.10263	7.94
-0.08263	8.20
-0.06264	7.68
-0.04263	8.60
-0.02262	7.55
-0.00263	6.90
0.01737	6.25
0.03736	6.77
0.05737	4.95
0.07738	6.25
0.09737	7.16
0.11737	8.46
0.13736	7.03
0.15737	7.29
0.17738	7.81
0.19737	7.55
0.21737	7.42
0.23736	6.77
0.25737	6.77

[d = 400 μm , a = 30 μm]

a = 30 μm : 13/20

$\theta_{\text{in}} = 1.514 \text{ mrad}$

0.27738	8.46
0.29737	6.38
0.31737	6.25
0.33736	10.68
0.35737	13.54
0.37738	16.54
0.39737	30.47
0.41737	60.17
0.43736	116.95
0.45737	191.70
0.47738	253.30
0.49737	278.17
0.51737	312.03
0.53736	308.51
0.55737	282.47
0.57738	200.03
0.59737	113.56
0.61737	54.83
0.63736	22.40
0.65737	11.20
0.67738	8.86
0.69737	10.03
0.71737	5.86
0.73736	6.90
0.75737	5.34
0.77738	6.64
0.79737	5.47
0.81737	8.46
0.83736	8.20
0.85737	15.76
0.87738	32.56
0.89737	76.97
0.91737	110.57
0.93736	148.85
0.95737	173.86
0.97738	174.25
0.99737	178.42
1.01737	133.62
1.03736	79.57
1.05737	38.94
1.07738	17.19
1.09737	7.81
1.11737	5.86

[d = 400 μm , a = 30 μm]

a = 30 μm : 14/20

$\theta_{\text{in}} = 1.514 \text{ mrad}$

1.13736	9.77
1.15737	13.80
1.17738	30.21
1.19737	58.73
1.21737	82.70
1.23736	104.31
1.25737	131.79
1.27738	131.27
1.29737	142.60
1.31737	104.57
1.33736	61.08
1.35737	32.17
1.37738	15.24
1.39737	14.33
1.41737	26.57
1.43736	53.39
1.45737	73.58
1.47738	92.72
1.49737	111.09
1.51737	116.95
1.53736	106.66
1.55737	89.34
1.57738	57.69
1.59737	39.07
1.61737	29.56
1.63736	37.64
1.65737	61.21
1.67738	66.16
1.69737	75.40
1.71737	87.12
1.73736	102.49
1.75737	87.25
1.77738	67.33
1.79737	52.48
1.81737	44.93
1.83736	46.49
1.85737	53.39
1.87738	58.86
1.89737	70.71
1.91737	84.78
1.93736	78.27
1.95737	68.63
1.97738	58.86

[d = 400 μm , a = 30 μm]

a = 30 μm : 15/20

$\theta_{\text{in}} = 1.514 \text{ mrad}$

1.99737	53.92
2.01737	50.53
2.03736	52.35
2.05737	57.82
2.07738	63.81
2.09737	71.11
2.11737	68.50
2.13736	62.12
2.15737	57.43
2.17738	49.62
2.19737	45.58
2.21737	45.71
2.23736	56.26
2.25737	59.25
2.27738	58.60
2.29737	58.34
2.31737	52.74
2.33736	42.32
2.35737	39.98
2.37738	46.49
2.39737	46.36
2.41737	45.71
2.43736	48.84
2.45737	41.15
2.47738	37.25
2.49737	41.15
2.51737	39.20
2.53736	47.53
2.55737	44.02
2.57738	42.45
2.59737	39.59
2.61737	33.47
2.63736	31.65
2.65737	34.12
2.67738	37.25
2.69737	39.33
2.71737	31.12
2.73736	30.86
2.75737	30.73
2.77738	27.09
2.79737	30.08
2.81737	26.44
2.83736	23.57

[d = 400 μm , a = 30 μm]

a = 30 μm : 16/20

$\theta_{\text{in}} = 1.514 \text{ mrad}$

2.85737	22.14
2.87738	22.66
2.89737	23.96
2.91737	20.97

[d = 400 μm , a = 30 μm]

a = 30 μm : 17/20

$\theta_{\text{in}} = 1.970 \text{ mrad}$

[d = 400 μm , a = 30 μm]

$\theta_{\text{in}} = 1.970 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.0988	4.82
-0.07879	6.90
-0.0588	4.30
-0.0388	3.26
-0.01881	4.17
0.0012	4.69
0.02121	4.82
0.0412	6.12
0.0612	4.95
0.08119	5.99
0.1012	4.30
0.12121	3.78
0.1412	5.86
0.1612	4.30
0.18119	5.21
0.2012	5.47
0.22121	5.34
0.2412	4.69
0.2612	5.21
0.28119	7.29
0.3012	4.04
0.32121	4.82
0.3412	4.95
0.3612	5.34
0.38119	4.95
0.4012	6.25
0.42121	4.69
0.4412	5.08
0.4612	5.60
0.48119	6.38
0.5012	4.69
0.52121	6.38
0.5412	6.38
0.5612	11.33
0.58119	15.37
0.6012	31.12
0.62121	53.00
0.6412	76.97
0.6612	85.30

[d = 400 μm , a = 30 μm]

a = 30 μm : 18/20

$\theta_{\text{in}} = 1.970 \text{ mrad}$

0.68119	102.75
0.7012	100.80
0.72121	86.34
0.7412	76.71
0.7612	46.36
0.78119	25.79
0.8012	12.37
0.82121	8.20
0.8412	6.38
0.8612	3.78
0.88119	3.00
0.9012	4.30
0.92121	5.08
0.9412	6.38
0.9612	11.46
0.98119	23.57
1.0012	39.98
1.02121	61.34
1.0412	76.31
1.0612	84.78
1.08119	87.91
1.1012	78.01
1.12121	57.95
1.1412	38.29
1.1612	17.19
1.18119	7.55
1.2012	4.82
1.22121	5.86
1.2412	11.85
1.2612	26.05
1.28119	46.88
1.3012	59.65
1.32121	69.02
1.3412	72.80
1.3612	79.44
1.38119	76.05
1.4012	48.19
1.42121	25.13
1.4412	16.28
1.4612	13.02
1.48119	18.36
1.5012	33.34
1.52121	45.58

[d = 400 μm , a = 30 μm]

a = 30 μm : 19/20

$\theta_{\text{in}} = 1.970 \text{ mrad}$

1.5412	63.55
1.5612	64.98
1.58119	66.94
1.6012	74.23
1.62121	56.78
1.6412	36.07
1.6612	24.74
1.68119	22.92
1.7012	36.07
1.72121	50.01
1.7412	57.56
1.7612	61.47
1.78119	67.46
1.8012	64.20
1.82121	61.73
1.8412	42.98
1.8612	33.08
1.88119	36.20
1.9012	45.58
1.92121	52.35
1.9412	60.04
1.9612	67.20
1.98119	68.89
2.0012	62.51
2.02121	45.32
2.0412	40.37
2.0612	44.54
2.08119	42.45
2.1012	51.70
2.12121	53.39
2.1412	64.20
2.1612	62.12
2.18119	53.13
2.2012	49.75
2.22121	42.72
2.2412	46.23
2.2612	49.36
2.28119	54.83
2.3012	58.47
2.32121	53.26
2.3412	51.05
2.3612	42.19
2.38119	39.85

[d = 400 μm , a = 30 μm]

a = 30 μm : 20/20

$\theta_{\text{in}} = 1.970 \text{ mrad}$

2.4012	42.98
2.42121	48.84
2.4412	49.75
2.4612	54.44
2.48119	44.67
2.5012	47.53

[d = 400 μm , a = 70 μm]

a = 70 μm : 1/18

Incident beam

[d = 400 μm , a = 70 μm]

Incident beam

Detector angle [mrad]	He ⁺ signal [count/s]
0	69.5
0.02001	78.5
0.04	79.5
0.06	89.5
0.07999	98
0.1	98
0.12001	101
0.14	122.5
0.16	153
0.17999	154.5
0.2	170
0.22001	215
0.24	318
0.26	396.5
0.27999	556
0.3	967
0.32001	2013.5
0.34	6270.5
0.36	19236
0.37999	41877.5
0.4	66467
0.42001	83103
0.44	89985.5
0.46	85200.5
0.47999	70111
0.5	46191.5
0.52001	22041
0.54	6954
0.56	2292
0.57999	1003.5
0.6	578
0.62001	400.5
0.64	291
0.66	228
0.67999	200.5
0.7	136.5
0.72001	131
0.74	112
0.76	108.5

[d = 400 μm , a = 70 μm]

a = 70 μm : 2/18

Incident beam

0.77999	91.5
0.8	78.5
0.82001	65
0.84	73
0.86	59.5
0.87999	51
0.9	53
0.92001	45
0.94	39.5
0.96	37.5
0.97999	41.5

[d = 400 μm , a = 70 μm]

a = 70 μm : 3/18

$\theta_{\text{in}} = 0.501$ mrad

[d = 400 μm , a = 70 μm]

$\theta_{\text{in}} = 0.501$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.69288	11.55
-0.67287	14.78
-0.65288	15.90
-0.63288	18.88
-0.61289	28.57
-0.59288	33.16
-0.57287	44.09
-0.55288	75.89
-0.53288	121.47
-0.51289	364.79
-0.49288	2150.14
-0.47287	6909.48
-0.45288	9469.87
-0.43288	9663.14
-0.41289	5720.33
-0.39288	2087.04
-0.37287	954.77
-0.35288	590.23
-0.33288	397.46
-0.31289	287.17
-0.29288	227.92
-0.27287	186.81
-0.25288	155.88
-0.23288	140.23
-0.21289	108.93
-0.19288	96.88
-0.17287	93.28
-0.15288	81.23
-0.13288	74.03
-0.11289	65.33
-0.09288	56.39
-0.07287	51.79
-0.05288	50.92
-0.03288	41.98
-0.01289	44.22
0.00712	42.48
0.02713	41.61
0.04712	41.24
0.06712	44.34

[d = 400 μm , a = 70 μm]

a = 70 μm : 4/18

$\theta_{\text{in}} = 0.501 \text{ mrad}$

0.08711	42.98
0.10712	43.60
0.12713	44.71
0.14712	38.26
0.16712	43.84
0.18711	45.46
0.20712	51.30
0.22713	39.75
0.24712	46.08
0.26712	44.47
0.28711	50.06
0.30712	48.94
0.32713	54.65
0.34712	56.64
0.36712	60.86
0.38711	75.27
0.40712	129.67
0.42713	407.40
0.44712	1489.98
0.46712	3066.41
0.48711	4720.96
0.50712	5071.97
0.52713	3859.09
0.54712	2091.02
0.56712	664.63
0.58711	179.85
0.60712	88.31
0.62713	56.64
0.64712	43.22
0.66712	34.90
0.68711	30.18
0.70712	29.19
0.72713	25.96
0.74712	28.82
0.76712	29.44
0.78711	27.45
0.80712	28.94
0.82713	31.55
0.84712	60.99
0.86712	214.26
0.88711	477.57
0.90712	828.46
0.92713	1125.31

[d = 400 μm , a = 70 μm]

a = 70 μm : 5/18

$\theta_{\text{in}} = 0.501 \text{ mrad}$

0.94712	1316.96
0.96712	1391.61
0.98711	1251.75
1.00712	933.78
1.02713	514.84
1.04712	190.16
1.06712	67.57
1.08711	32.91
1.10712	26.95
1.12713	27.95
1.14712	67.82
1.16712	164.70
1.18711	299.46
1.20712	399.70
1.22713	482.54
1.24712	557.31
1.26712	589.73
1.28711	603.39
1.30712	546.01
1.32713	411.50
1.34712	250.52
1.36712	112.16
1.38711	87.07
1.40712	108.56
1.42713	156.00
1.44712	190.16
1.46712	223.20
1.48711	233.63
1.50712	235.99
1.52713	253.26
1.54712	252.39
1.56712	221.21
1.58711	172.77
1.60712	131.66
1.62713	95.14
1.64712	84.96
1.66712	81.98
1.68711	98.37
1.70712	93.28
1.72713	99.49
1.74712	111.66
1.76712	109.43
1.78711	105.95

[d = 400 μm , a = 70 μm]

a = 70 μm : 6/18

$\theta_{\text{in}} = 0.501 \text{ mrad}$

1.80712	78.62
1.82713	65.33
1.84712	47.32
1.86712	44.47
1.88711	40.99
1.90712	47.32
1.92713	44.09
1.94712	54.90
1.96712	53.16
1.98711	56.39
2.00712	39.75
2.02713	37.39
2.04712	34.28
2.06712	37.26
2.08711	35.27
2.10712	44.47
2.12713	47.20
2.14712	40.49
2.16712	43.84
2.18711	43.22
2.20712	39.87
2.22713	41.24
2.24712	46.95
2.26712	49.81
2.28711	52.17
2.30712	49.81
2.32713	52.54
2.34712	51.17
2.36712	45.46
2.38711	42.35
2.40712	50.68
2.42713	52.42
2.44712	53.04
2.46712	50.55
2.48711	49.31
2.50712	44.71
2.52713	40.62
2.54712	38.88
2.56712	39.62
2.58711	37.01
2.60712	36.77
2.62713	36.14
2.64712	33.66

[d = 400 μm , a = 70 μm]

a = 70 μm : 7/18

$\theta_{\text{in}} = 1.010 \text{ mrad}$

[d = 400 μm , a = 70 μm]

$\theta_{\text{in}} = 1.010 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.231335	17.89
-0.211345	17.64
-0.191345	17.26
-0.171355	18.38
-0.151345	15.90
-0.131335	16.89
-0.111345	15.15
-0.091345	14.41
-0.071355	12.42
-0.051345	14.53
-0.031335	12.67
-0.011345	12.54
0.008655	15.28
0.028645	10.06
0.048655	10.18
0.068665	12.05
0.088655	14.04
0.108655	15.15
0.128645	14.04
0.148655	16.89
0.168665	15.53
0.188655	13.79
0.208655	15.65
0.228645	18.01
0.248655	17.51
0.268665	17.26
0.288655	19.62
0.308655	19.00
0.328645	19.62
0.348655	20.49
0.368665	20.62
0.388655	24.22
0.408655	26.58
0.428645	37.76
0.448655	76.88
0.468665	210.78
0.488655	500.30
0.508655	909.69
0.528645	1341.80

[d = 400 μm , a = 70 μm]

a = 70 μm : 8/18

$\theta_{\text{in}} = 1.010 \text{ mrad}$

0.548655	1711.44
0.568665	1882.97
0.588655	1675.30
0.608655	1174.74
0.628645	591.72
0.648655	210.53
0.668665	78.50
0.688655	41.61
0.708655	25.96
0.728645	20.62
0.748655	15.40
0.768665	14.90
0.788655	15.15
0.808655	20.87
0.828645	18.01
0.848655	19.38
0.868665	34.41
0.888655	87.44
0.908655	193.14
0.928645	371.50
0.948655	548.37
0.968665	725.99
0.988655	916.40
1.008655	1053.52
1.028645	1077.99
1.048655	835.66
1.068665	556.94
1.088655	264.06
1.108655	102.10
1.128645	45.46
1.148655	25.59
1.168665	38.01
1.188655	68.56
1.208655	148.30
1.228645	244.94
1.248655	369.27
1.268665	467.64
1.288655	559.92
1.308655	649.85
1.328645	709.84
1.348655	615.32
1.368665	452.11
1.388655	271.76

[d = 400 μm , a = 70 μm]

a = 70 μm : 9/18

$\theta_{\text{in}} = 1.010 \text{ mrad}$

1.408655	131.66
1.428645	86.08
1.448655	116.01
1.468665	166.19
1.488655	228.91
1.508655	272.01
1.528645	320.33
1.548655	372.99
1.568665	409.63
1.588655	403.92
1.608655	333.74
1.628645	216.62
1.648655	146.81
1.668665	117.25
1.688655	124.58
1.708655	142.71
1.728645	164.33
1.748655	187.68
1.768665	205.56
1.788655	206.06
1.808655	196.49
1.828645	169.17
1.848655	117.50
1.868665	92.78
1.888655	78.37
1.908655	70.05
1.928645	74.15
1.948655	79.49
1.968665	83.84
1.988655	80.86
2.008655	71.92
2.028645	57.26
2.048655	44.09
2.068665	32.54
2.088655	28.82
2.108655	28.44
2.128645	31.30
2.148655	29.44
2.168665	29.81
2.188655	21.12
2.208655	17.76
2.228645	19.13
2.248655	19.75

[d = 400 μm , a = 70 μm]

a = 70 μm : 10/18

$\theta_{\text{in}} = 1.010 \text{ mrad}$

2.268665	13.41
2.288655	18.38
2.308655	19.75
2.328645	19.62
2.348655	20.87
2.368665	19.50
2.388655	21.24
2.408655	22.23
2.428645	25.21
2.448655	25.83
2.468665	27.33
2.488655	29.31
2.508655	29.44
2.528645	29.81
2.548655	31.42
2.568665	34.78
2.588655	34.28
2.608655	34.03
2.628645	35.77
2.648655	32.29
2.668665	34.28
2.688655	26.21
2.708655	28.94
2.728645	28.32
2.748655	31.55
2.768665	28.82
2.788655	25.34
2.808655	21.86
2.828645	23.23
2.848655	20.62
2.868665	18.01
2.888655	19.25
2.908655	18.38
2.928645	16.40
2.948655	15.77
2.968665	13.29
2.988655	14.90
3.008655	13.41
3.028645	15.15
3.048655	13.04
3.068665	10.56
3.088655	13.41

[d = 400 μm , a = 70 μm]

a = 70 μm : 11/18

$\theta_{\text{in}} = 1.532\text{mrad}$

[d = 400 μm , a = 70 μm]

$\theta_{\text{in}} = 1.532\text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.05417	7.70
-0.03418	5.84
-0.01418	7.83
0.00581	7.33
0.02582	5.71
0.04583	6.96
0.06582	6.71
0.08582	6.21
0.10581	6.96
0.12582	6.46
0.14583	7.58
0.16582	6.96
0.18582	8.69
0.20581	5.34
0.22582	8.32
0.24583	7.95
0.26582	9.07
0.28582	8.82
0.30581	10.81
0.32582	9.81
0.34583	9.94
0.36582	13.29
0.38582	14.90
0.40581	24.72
0.42582	48.94
0.44583	94.52
0.46582	173.64
0.48582	260.21
0.50581	358.21
0.52582	452.61
0.54583	511.36
0.56582	480.80
0.58582	400.44
0.60581	244.19
0.62582	132.28
0.64583	57.26
0.66582	20.49
0.68582	13.04
0.70581	10.56

[d = 400 μm , a = 70 μm]

a = 70 μm : 12/18

$\theta_{\text{in}} = 1.532\text{mrad}$

0.72582	10.06
0.74583	9.56
0.76582	8.69
0.78582	7.33
0.80581	6.96
0.82582	10.18
0.84583	10.43
0.86582	23.60
0.88582	61.23
0.90581	124.45
0.92582	238.97
0.94583	346.54
0.96582	464.28
0.98582	540.05
1.00581	545.89
1.02582	420.07
1.04583	245.18
1.06582	111.16
1.08582	39.62
1.10581	16.77
1.12582	17.14
1.14583	16.89
1.16582	38.38
1.18582	77.38
1.20581	153.27
1.22582	255.12
1.24583	364.30
1.26582	485.15
1.28582	567.37
1.30581	549.24
1.32582	436.34
1.34583	278.84
1.36582	139.48
1.38582	56.64
1.40581	53.53
1.42582	84.83
1.44583	157.25
1.46582	239.59
1.48582	356.60
1.50581	439.69
1.52582	508.87
1.54583	523.65
1.56582	436.46

[d = 400 μm , a = 70 μm]

a = 70 μm : 13/18

$\theta_{\text{in}} = 1.532\text{mrad}$

1.58582	308.03
1.60581	169.42
1.62582	120.23
1.64583	128.31
1.66582	187.18
1.68582	245.93
1.70581	324.92
1.72582	371.63
1.74583	425.16
1.76582	375.85
1.78582	308.28
1.80581	207.67
1.82582	154.26
1.84583	148.92
1.86582	165.19
1.88582	216.99
1.90581	236.86
1.92582	275.99
1.94583	272.88
1.96582	235.12
1.98582	188.79
2.00581	135.26
2.02582	116.26
2.04583	110.05
2.06582	129.67
2.08582	143.46
2.10581	157.87
2.12582	135.76
2.14583	129.42
2.16582	105.82
2.18582	75.52
2.20581	61.23
2.22582	63.10
2.24583	60.74
2.26582	64.21
2.28582	60.99
2.30581	54.65
2.32582	38.63
2.34583	29.06
2.36582	23.35
2.38582	20.49
2.40581	18.01
2.42582	17.89

[d = 400 μm , a = 70 μm]

a = 70 μm : 14/18

$\theta_{\text{in}} = 1.532\text{mrad}$

2.44583	16.64
2.46582	14.41
2.48582	11.05
2.50581	7.45
2.52582	9.07
2.54583	8.32
2.56582	7.08
2.58582	7.70

[d = 400 μm , a = 70 μm]

a = 70 μm : 15/18

$\theta_{\text{in}} = 1.976 \text{ mrad}$

[d = 400 μm , a = 70 μm]

$\theta_{\text{in}} = 1.976 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.02814	3.60
-0.00814	3.97
0.01185	5.22
0.03186	3.85
0.05187	4.22
0.07186	2.73
0.09186	5.71
0.11185	4.47
0.13186	7.08
0.15187	4.97
0.17186	4.22
0.19186	4.72
0.21185	4.47
0.23186	5.84
0.25187	7.08
0.27186	6.09
0.29186	5.59
0.31185	6.58
0.33186	7.08
0.35187	6.83
0.37186	6.58
0.39186	4.47
0.41185	5.47
0.43186	3.48
0.45187	6.58
0.47186	7.58
0.49186	6.21
0.51185	4.60
0.53186	8.20
0.55187	9.44
0.57186	17.02
0.59186	22.23
0.61185	26.70
0.63186	46.95
0.65187	57.76
0.67186	67.20
0.69186	63.47
0.71185	53.66
0.73186	40.74

[d = 400 μm , a = 70 μm]

a = 70 μm : 16/18

$\theta_{\text{in}} = 1.976 \text{ mrad}$

0.75187	23.60
0.77186	16.27
0.79186	7.83
0.81185	6.58
0.83186	5.59
0.85187	5.09
0.87186	5.84
0.89186	5.09
0.91185	4.72
0.93186	7.33
0.95187	11.18
0.97186	23.85
0.99186	42.35
1.01185	64.46
1.03186	91.29
1.05187	121.72
1.07186	123.71
1.09186	113.77
1.11185	83.72
1.13186	52.29
1.15187	25.96
1.17186	13.04
1.19186	10.31
1.21185	9.56
1.23186	17.76
1.25187	35.65
1.27186	67.69
1.29186	100.11
1.31185	150.41
1.33186	216.86
1.35187	222.83
1.37186	207.30
1.39186	154.26
1.41185	95.27
1.43186	46.83
1.45187	26.83
1.47186	39.87
1.49186	71.67
1.51185	128.06
1.53186	196.25
1.55187	265.80
1.57186	299.83
1.59186	316.23

[d = 400 μm , a = 70 μm]

a = 70 μm : 17/18

$\theta_{\text{in}} = 1.976 \text{ mrad}$

1.61185	268.53
1.63186	184.69
1.65187	119.98
1.67186	83.09
1.69186	86.94
1.71185	150.91
1.73186	207.18
1.75187	287.29
1.77186	343.06
1.79186	351.50
1.81185	344.18
1.83186	262.08
1.85187	175.75
1.87186	151.90
1.89186	159.61
1.91185	200.47
1.93186	262.20
1.95187	345.91
1.97186	364.30
1.99186	355.48
2.01185	299.96
2.03186	219.72
2.05187	193.14
2.07186	183.83
2.09186	213.88
2.11185	270.65
2.13186	300.83
2.15187	297.23
2.17186	289.53
2.19186	222.33
2.21185	185.69
2.23186	170.29
2.25187	178.36
2.27186	202.46
2.29186	218.73
2.31185	211.28
2.33186	181.96
2.35187	147.06
2.37186	135.88
2.39186	112.16
2.41185	118.00
2.43186	118.74
2.45187	131.91

[d = 400 μm , a = 70 μm]

a = 70 μm : 18/18

$\theta_{\text{in}} = 1.976 \text{ mrad}$

2.47186	107.81
2.49186	94.40
2.51185	76.14
2.53186	62.60
2.55187	56.76
2.57186	54.90
2.59186	50.80
2.61185	47.07
2.63186	37.63

[d = 400 μm , a = 100 μm]

a = 100 μm : 1/23

Incident beam

[d = 400 μm , a = 100 μm]

Incident beam

Detector angle [mrad]	He ⁺ signal [count/s]
0	49.5
0.02001	55.5
0.04	70.5
0.06	69.5
0.07999	96.5
0.1	81
0.12001	107.5
0.14	119
0.16	133.5
0.17999	172.5
0.2	183.5
0.22001	227.5
0.24	286.5
0.26	376
0.27999	566
0.3	957
0.32001	2434.5
0.34	6113.5
0.36	17651.5
0.37999	45985
0.4	67851.5
0.42001	83326.5
0.44	88265
0.46	81046.5
0.47999	67263
0.5	36976.5
0.52001	19796
0.54	6196.5
0.56	1811
0.57999	826
0.6	520.5
0.62001	373.5
0.64	295
0.66	203
0.67999	191
0.7	146
0.72001	109
0.74	106
0.76	92.5

[d = 400 μm , a = 100 μm]

a = 100 μm : 2/23

Incident beam

0.77999	92
0.8	77.5
0.82001	57
0.84	65
0.86	57.5
0.87999	47
0.9	56.5
0.92001	39
0.94	43
0.96	40
0.97999	37

[d = 400 μm , a = 100 μm]

a = 100 μm : 3/23

$\theta_{\text{in}} = 0.482$ mrad

[d = 400 μm , a = 100 μm]

$\theta_{\text{in}} = 0.482$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.62056	48.19
-0.60055	57.57
-0.58056	79.68
-0.56056	117.98
-0.54057	205.24
-0.52056	471.26
-0.50055	2380.85
-0.48056	13725.31
-0.46056	25697.82
-0.44057	28468.59
-0.42056	22582.51
-0.40055	8243.80
-0.38056	2596.63
-0.36056	1153.41
-0.34057	686.39
-0.32056	454.43
-0.30055	334.65
-0.28056	258.57
-0.26056	203.82
-0.24057	175.42
-0.22056	146.63
-0.20055	131.08
-0.18056	106.67
-0.16056	93.69
-0.14057	92.40
-0.12056	79.94
-0.10055	68.37
-0.08056	66.70
-0.06056	54.10
-0.04057	55.90
-0.02056	49.09
-5.50E-04	48.45
0.01944	50.89
0.03944	46.52
0.05943	48.96
0.07944	55.00
0.09945	49.09
0.11944	50.89
0.13944	47.55

[d = 400 μm , a = 100 μm]

a = 100 μm : 4/23

$\theta_{\text{in}} = 0.482 \text{ mrad}$

0.15943	49.48
0.17944	49.61
0.19945	46.01
0.21944	55.13
0.23944	53.72
0.25943	50.38
0.27944	57.83
0.29945	56.93
0.31944	54.88
0.33944	63.74
0.35943	70.43
0.37944	116.69
0.39945	507.50
0.41944	2448.97
0.43944	4944.33
0.45943	6471.20
0.47944	7181.24
0.49945	6487.52
0.51944	5266.64
0.53944	3331.73
0.55943	1026.31
0.57944	156.40
0.59945	60.14
0.61944	34.57
0.63944	35.60
0.65943	34.31
0.67944	32.00
0.69945	29.82
0.71944	37.78
0.73944	32.26
0.75943	36.37
0.77944	38.55
0.79945	36.37
0.81944	43.95
0.83944	190.84
0.85943	734.97
0.87944	1415.45
0.89945	1809.61
0.91944	1737.51
0.93944	1586.51
0.95943	1685.59
0.97944	1721.96
0.99945	1347.86

[d = 400 μm , a = 100 μm]

a = 100 μm : 5/23

$\theta_{\text{in}} = 0.482$ mrad

1.01944	747.57
1.03944	199.58
1.05943	43.95
1.07944	28.66
1.09945	25.45
1.11944	46.65
1.13944	172.98
1.15943	362.80
1.17944	538.73
1.19945	581.27
1.21944	527.94
1.23944	478.20
1.25943	465.86
1.27944	522.92
1.29945	549.91
1.31944	443.76
1.33944	257.54
1.35943	107.44
1.37944	73.25
1.39945	104.35
1.41944	131.73
1.43944	132.50
1.45943	114.25
1.47944	110.01
1.49945	98.44
1.51944	116.43
1.53944	118.75
1.55943	126.71
1.57944	111.42
1.59945	84.82
1.61944	68.37
1.63944	56.03
1.65943	51.41
1.67944	48.19
1.69945	46.52
1.71944	45.62
1.73944	58.09
1.75943	73.64
1.77944	94.71
1.79945	89.57
1.81944	80.06
1.83944	65.80
1.85943	57.06

[d = 400 μm , a = 100 μm]

a = 100 μm : 6/23

$\theta_{\text{in}} = 0.482 \text{ mrad}$

1.87944	60.79
1.89945	63.23
1.91944	77.62
1.93944	105.51
1.95943	119.78
1.97944	108.59
1.99945	96.26
2.01944	74.28
2.03944	51.66
2.05943	56.67
2.07944	69.53
2.09945	77.11
2.11944	79.81
2.13944	81.09
2.15943	67.73
2.17944	64.51
2.19945	47.04
2.21944	34.70
2.23944	37.27
2.25943	37.91
2.27944	44.85
2.29945	39.71
2.31944	41.38
2.33944	45.49
2.35943	40.22
2.37944	37.78
2.39945	32.26
2.41944	30.33
2.43944	38.17
2.45943	40.22
2.47944	41.64
2.49945	44.21
2.51944	38.04
2.53944	39.33
2.55943	34.31
2.57944	44.47
2.59945	39.45
2.61944	46.14
2.63944	37.01
2.65943	34.31
2.67944	34.70
2.69945	34.06
2.71944	33.41

[d = 400 μm , a = 100 μm]

a = 100 μm : 7/23

$\theta_{\text{in}} = 0.482 \text{ mrad}$

2.73944	35.34
2.75943	31.74
2.77944	29.82
2.79945	23.78
2.81944	27.76
2.83944	25.06
2.85943	27.63
2.87944	25.70
2.89945	24.29
2.91944	28.53
2.93944	23.13
2.95943	20.05
2.97944	28.79
2.99945	23.39
3.01944	22.49
3.03944	25.19
3.05943	29.04
3.07944	22.75
3.09945	24.80
3.11944	24.29
3.13944	23.90
3.15943	22.23
3.17944	21.59
3.19945	23.26
3.21944	21.98
3.23944	21.08
3.25943	23.00
3.27944	19.79
3.29945	23.65
3.31944	19.66
3.33944	22.49
3.35943	22.49
3.37944	22.49
3.39945	20.31
3.41944	15.16
3.43944	19.02
3.45943	18.38

[d = 400 μm , a = 100 μm]

a = 100 μm : 8/23

$\theta_{\text{in}} = 1.013 \text{ mrad}$

[d = 400 μm , a = 100 μm]

$\theta_{\text{in}} = 1.013 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.29124	18.51
-0.27125	18.76
-0.25124	16.71
-0.23123	17.61
-0.21124	16.58
-0.19124	18.38
-0.17125	15.94
-0.15124	16.06
-0.13123	12.85
-0.11124	15.68
-0.09124	14.91
-0.07125	13.11
-0.05124	11.31
-0.03123	11.05
-0.01124	13.37
0.00876	11.69
0.02875	12.59
0.04876	12.98
0.06877	12.34
0.08876	12.21
0.10876	11.82
0.12875	13.24
0.14876	12.59
0.16877	11.44
0.18876	12.21
0.20876	15.94
0.22875	14.52
0.24876	16.71
0.26877	14.65
0.28876	14.65
0.30876	16.84
0.32875	14.01
0.34876	15.29
0.36877	16.06
0.38876	20.05
0.40876	21.72
0.42875	22.88
0.44876	33.93
0.46877	97.67

[d = 400 μm , a = 100 μm]

a = 100 μm : 9/23

$\theta_{\text{in}} = 1.013 \text{ mrad}$

0.48876	340.56
0.50876	783.29
0.52875	1346.96
0.54876	1719.91
0.56877	1833.64
0.58876	1904.07
0.60876	1996.47
0.62875	1904.32
0.64876	1486.91
0.66877	852.18
0.68876	330.15
0.70876	76.08
0.72875	23.00
0.74876	17.35
0.76877	18.25
0.78876	15.42
0.80876	17.73
0.82875	15.55
0.84876	17.99
0.86877	29.17
0.88876	125.43
0.90876	352.90
0.92875	763.63
0.94876	1146.22
0.96877	1381.66
0.98876	1448.23
1.00876	1464.55
1.02875	1588.82
1.04876	1566.46
1.06877	1247.74
1.08876	704.00
1.10876	272.19
1.12875	64.39
1.14876	30.97
1.16877	81.61
1.18876	189.69
1.20876	390.04
1.22875	638.84
1.24876	778.92
1.26877	844.60
1.28876	870.55
1.30876	932.24
1.32875	1004.47

[d = 400 μm , a = 100 μm]

a = 100 μm : 10/23

$\theta_{\text{in}} = 1.013 \text{ mrad}$

1.34876	971.44
1.36877	751.94
1.38876	441.57
1.40876	220.92
1.42875	160.51
1.44876	226.18
1.46877	304.58
1.48876	339.02
1.50876	336.19
1.52875	340.18
1.54876	384.26
1.56877	417.93
1.58876	404.31
1.60876	333.62
1.62875	212.69
1.64876	124.53
1.66877	92.27
1.68876	73.90
1.70876	68.76
1.72875	65.93
1.74876	71.45
1.76877	84.56
1.78876	89.70
1.80876	76.59
1.82875	60.66
1.84876	45.88
1.86877	26.09
1.88876	17.35
1.90876	13.75
1.92875	16.84
1.94876	17.35
1.96877	23.78
1.98876	26.60
2.00876	31.74
2.02875	41.00
2.04876	37.65
2.06877	34.83
2.08876	39.20
2.10876	40.61
2.12875	56.03
2.14876	65.93
2.16877	64.77
2.18876	51.66

[d = 400 μm , a = 100 μm]

a = 100 μm : 11/23

$\theta_{\text{in}} = 1.013 \text{ mrad}$

2.20876	42.80
2.22875	44.59
2.24876	37.78
2.26877	46.52
2.28876	55.52
2.30876	54.75
2.32875	56.55
2.34876	46.65
2.36877	33.29
2.38876	25.57
2.40876	19.53
2.42875	21.72
2.44876	26.47
2.46877	25.45
2.48876	21.46
2.50876	19.53
2.52875	17.48
2.54876	12.98
2.56877	15.68
2.58876	15.04
2.60876	16.96
2.62875	15.81
2.64876	20.43
2.66877	22.75
2.68876	20.56
2.70876	21.46
2.72875	26.60
2.74876	23.90
2.76877	25.19
2.78876	22.75
2.80876	22.23
2.82875	24.16
2.84876	18.51
2.86877	21.20
2.88876	21.33
2.90876	18.38
2.92875	17.86
2.94876	16.45
2.96877	14.78
2.98876	15.29
3.00876	13.37
3.02875	15.29
3.04876	14.01

[d = 400 μm , a = 100 μm]

a = 100 μm : 12/23

$\theta_{\text{in}} = 1.013 \text{ mrad}$

3.06877	11.44
3.08876	12.08
3.10876	11.44
3.12875	12.98
3.14876	13.88
3.16877	13.75
3.18876	15.16
3.20876	13.62
3.22875	17.35
3.24876	15.16
3.26877	17.35
3.28876	15.42
3.30876	15.68
3.32875	13.62
3.34876	11.57
3.36877	15.55
3.38876	13.75
3.40876	12.85
3.42875	11.69
3.44876	12.59
3.46877	11.31
3.48876	11.57
3.50876	10.02
3.52875	12.21
3.54876	11.44
3.56877	10.15
3.58876	11.31
3.60876	9.00
3.62875	10.41
3.64876	11.18
3.66877	11.05
3.68876	11.05
3.70876	12.59
3.72875	13.37
3.74876	10.92
3.76877	10.80
3.78876	10.41
3.80876	13.11
3.82875	9.90
3.84876	9.64

[d = 400 μm , a = 100 μm]

a = 100 μm : 13/23

$\theta_{\text{in}} = 1.498 \text{ mrad}$

[d = 400 μm , a = 100 μm]

$\theta_{\text{in}} = 1.498 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.08708	7.71
-0.06707	7.58
-0.04708	5.91
-0.02708	7.45
-0.00709	6.04
0.01292	7.33
0.03293	6.17
0.05292	7.33
0.07292	7.07
0.09291	9.12
0.11292	6.43
0.13293	6.17
0.15292	6.94
0.17292	6.68
0.19291	10.02
0.21292	6.17
0.23293	9.00
0.25292	9.64
0.27292	7.84
0.29291	9.12
0.31292	10.28
0.33293	7.71
0.35292	11.69
0.37292	21.20
0.39291	31.36
0.41292	54.23
0.43293	95.49
0.45292	136.74
0.47292	158.97
0.49291	171.05
0.51292	175.29
0.53293	169.00
0.55292	160.64
0.57292	143.42
0.59291	113.48
0.61292	78.39
0.63293	42.41
0.65292	22.49
0.67292	10.67

[d = 400 μm , a = 100 μm]

a = 100 μm : 14/23

$\theta_{\text{in}} = 1.498 \text{ mrad}$

0.69291	12.21
0.71292	9.38
0.73293	8.10
0.75292	7.71
0.77292	6.94
0.79291	8.22
0.81292	12.98
0.83293	23.39
0.85292	63.23
0.87292	151.90
0.89291	278.62
0.91292	396.34
0.93293	430.39
0.95292	461.49
0.97292	434.89
0.99291	418.70
1.01292	313.19
1.03293	206.52
1.05292	101.27
1.07292	36.76
1.09291	19.41
1.11292	27.89
1.13293	43.69
1.15292	132.24
1.17292	309.98
1.19291	506.73
1.21292	677.53
1.23293	773.53
1.25292	801.67
1.27292	787.28
1.29291	731.25
1.31292	598.62
1.33293	370.51
1.35292	185.32
1.37292	108.85
1.39291	176.19
1.41292	363.05
1.43293	588.21
1.45292	787.41
1.47292	877.88
1.49291	883.92
1.51292	844.72
1.53293	818.51

[d = 400 μm , a = 100 μm]

a = 100 μm : 15/23

$\theta_{\text{in}} = 1.498 \text{ mrad}$

1.55292	659.02
1.57292	449.03
1.59291	311.26
1.61292	312.29
1.63293	448.77
1.65292	575.49
1.67292	624.96
1.69291	658.76
1.71292	651.82
1.73293	613.66
1.75292	572.15
1.77292	442.60
1.79291	344.42
1.81292	292.50
1.83293	303.29
1.85292	306.76
1.87292	299.95
1.89291	301.37
1.91292	293.40
1.93293	289.29
1.95292	239.81
1.97292	188.27
1.99291	139.82
2.01292	104.87
2.03293	77.24
2.05292	71.97
2.07292	69.91
2.09291	64.51
2.11292	66.96
2.13293	54.10
2.15292	41.12
2.17292	20.95
2.19291	12.34
2.21292	12.08
2.23293	12.98
2.25292	13.11
2.27292	14.52
2.29291	19.15
2.31292	22.88
2.33293	23.00
2.35292	27.25
2.37292	30.33
2.39291	30.07

[d = 400 μm , a = 100 μm]

a = 100 μm : 16/23

$\theta_{\text{in}} = 1.498 \text{ mrad}$

2.41292	39.84
2.43293	41.64
2.45292	37.01
2.47292	41.51
2.49291	35.98
2.51292	36.11
2.53293	37.01
2.55292	42.02
2.57292	37.01
2.59291	36.50
2.61292	24.29
2.63293	20.69
2.65292	20.43
2.67292	19.28
2.69291	18.38
2.71292	17.99
2.73293	14.01
2.75292	10.54
2.77292	9.38
2.79291	8.74
2.81292	10.54
2.83293	9.64
2.85292	11.31
2.87292	12.59
2.89291	12.34
2.91292	16.58
2.93293	16.96
2.95292	15.94
2.97292	19.66
2.99291	13.37
3.01292	14.39
3.03293	17.22
3.05292	17.09
3.07292	16.96
3.09291	13.49
3.11292	11.82
3.13293	11.69
3.15292	13.49
3.17292	12.59
3.19291	9.12
3.21292	8.61
3.23293	8.74
3.25292	6.94

[d = 400 μm , a = 100 μm]

a = 100 μm : 17/23

$\theta_{\text{in}} = 1.498 \text{ mrad}$

3.27292	7.97
3.29291	11.05
3.31292	10.15
3.33293	7.71
3.35292	9.77
3.37292	8.35
3.39291	11.69
3.41292	9.90
3.43293	11.69
3.45292	9.64
3.47292	11.44
3.49291	10.80
3.51292	10.02
3.53293	10.92
3.55292	9.38
3.57292	7.84
3.59291	7.45
3.61292	7.07
3.63293	8.35
3.65292	6.17
3.67292	8.35
3.69291	7.33
3.71292	6.81
3.73293	7.71
3.75292	8.10

[d = 400 μm , a = 100 μm]

a = 100 μm : 18/23

$\theta_{\text{in}} = 1.968$ mrad

[d = 400 μm , a = 100 μm]

$\theta_{\text{in}} = 1.968$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.287	5.40
-0.26701	4.76
-0.24701	5.65
-0.22702	6.55
-0.20701	7.20
-0.187	5.27
-0.16701	4.50
-0.14701	4.37
-0.12702	4.76
-0.10701	4.24
-0.087	5.27
-0.06701	3.98
-0.04701	4.76
-0.02702	6.04
-0.00701	4.24
0.013	4.50
0.03299	5.14
0.05299	3.98
0.07298	5.01
0.09299	3.60
0.113	6.81
0.13299	3.34
0.15299	5.65
0.17298	5.91
0.19299	5.40
0.213	4.50
0.23299	5.78
0.25299	5.78
0.27298	4.50
0.29299	4.24
0.313	3.73
0.33299	7.97
0.35299	5.53
0.37298	6.81
0.39299	5.65
0.413	5.14
0.43299	5.53
0.45299	6.68
0.47298	6.68

[d = 400 μm , a = 100 μm]

a = 100 μm : 19/23

$\theta_{\text{in}} = 1.968 \text{ mrad}$

0.49299	8.22
0.513	6.94
0.53299	9.77
0.55299	10.67
0.57298	20.05
0.59299	30.33
0.613	38.43
0.63299	52.18
0.65299	51.79
0.67298	55.52
0.69299	69.40
0.713	58.09
0.73299	50.63
0.75299	33.54
0.77298	22.10
0.79299	8.87
0.813	6.55
0.83299	6.17
0.85299	5.78
0.87298	5.91
0.89299	4.50
0.913	4.24
0.93299	5.14
0.95299	6.17
0.97298	10.02
0.99299	9.90
1.013	10.92
1.03299	15.16
1.05299	15.55
1.07298	12.47
1.09299	13.37
1.113	10.92
1.13299	9.12
1.15299	5.53
1.17298	6.43
1.19299	6.68
1.213	10.15
1.23299	16.32
1.25299	32.90
1.27298	46.27
1.29299	60.66
1.313	68.24
1.33299	81.48

[d = 400 μm , a = 100 μm]

a = 100 μm : 20/23

$\theta_{\text{in}} = 1.968 \text{ mrad}$

1.35299	72.87
1.37298	80.45
1.39299	60.53
1.413	39.58
1.43299	27.89
1.45299	34.57
1.47298	79.68
1.49299	134.81
1.513	201.00
1.53299	256.77
1.55299	304.06
1.57298	315.63
1.59299	320.39
1.613	262.30
1.63299	205.49
1.65299	143.42
1.67298	171.31
1.69299	261.53
1.713	381.30
1.73299	470.75
1.75299	553.00
1.77298	592.19
1.79299	599.00
1.813	546.31
1.83299	419.60
1.85299	363.57
1.87298	342.88
1.89299	431.29
1.913	535.52
1.93299	605.43
1.95299	644.88
1.97298	709.40
1.99299	649.64
2.013	570.35
2.03299	468.18
2.05299	386.83
2.07298	401.86
2.09299	442.47
2.113	501.21
2.13299	532.82
2.15299	519.20
2.17298	464.32
2.19299	369.09

[d = 400 μm , a = 100 μm]

a = 100 μm : 21/23

$\theta_{\text{in}} = 1.968 \text{ mrad}$

2.213	274.25
2.23299	231.84
2.25299	236.34
2.27298	252.27
2.29299	264.74
2.313	243.28
2.33299	209.22
2.35299	138.28
2.37298	88.03
2.39299	62.33
2.413	65.29
2.43299	69.14
2.45299	61.04
2.47298	56.42
2.49299	31.49
2.513	17.48
2.53299	10.80
2.55299	9.25
2.57298	12.08
2.59299	14.39
2.613	20.69
2.63299	19.28
2.65299	20.69
2.67298	25.45
2.69299	28.40
2.713	30.59
2.73299	31.49
2.75299	31.61
2.77298	29.82
2.79299	30.59
2.813	30.46
2.83299	34.96
2.85299	33.93
2.87298	30.84
2.89299	20.05
2.913	18.38
2.93299	16.32
2.95299	17.73
2.97298	14.01
2.99299	11.69
3.013	11.18
3.03299	6.68
3.05299	9.38

[d = 400 μm , a = 100 μm]

a = 100 μm : 22/23

$\theta_{\text{in}} = 1.968 \text{ mrad}$

3.07298	8.87
3.09299	11.05
3.113	8.35
3.13299	9.77
3.15299	12.21
3.17298	11.95
3.19299	11.05
3.213	11.69
3.23299	14.27
3.25299	12.34
3.27298	16.19
3.29299	15.42
3.313	16.19
3.33299	13.37
3.35299	11.69
3.37298	11.05
3.39299	8.74
3.413	11.82
3.43299	10.54
3.45299	8.61
3.47298	7.33
3.49299	5.65
3.513	8.22
3.53299	6.68
3.55299	8.61
3.57298	9.38
3.59299	8.10
3.613	11.18
3.63299	10.80
3.65299	8.48
3.67298	7.97
3.69299	10.02
3.713	9.90
3.73299	9.25
3.75299	6.43
3.77298	9.38
3.79299	7.07
3.813	5.27
3.83299	6.43
3.85299	6.43
3.87298	6.30
3.89299	4.63
3.913	7.20

[d = 400 μm , a = 100 μm]

a = 100 μm : 23/23

$\theta_{\text{in}} = 1.968 \text{ mrad}$

3.93299	6.81
3.95299	7.07
3.97298	8.22
3.99299	8.22
4.013	6.30
4.03299	6.94
4.05299	5.01
4.07298	6.17
4.09299	6.04
4.113	6.68
4.13299	8.10
4.15299	6.55
4.17298	6.17
4.19299	8.22
4.213	5.91
4.23299	4.50
4.25299	3.98
4.27298	5.01
4.29299	6.43
4.313	5.27
4.33299	5.65
4.35299	5.14
4.37298	5.78
4.39299	6.17
4.413	6.04
4.43299	7.33
4.45299	4.63
4.47298	5.14
4.49299	6.04
4.513	5.27
4.53299	7.20
4.55299	5.14
4.57298	4.37
4.59299	5.27
4.613	4.88
4.63299	6.30
4.65299	5.65
4.67298	5.01
4.69299	5.27
4.713	4.37
4.73299	5.01
4.75299	4.11

[d = 400 μm , a = 300 μm]

a = 300 μm : 1/24

Incident beam

[d = 400 μm , a = 300 μm]

Incident beam

Detector angle [mrad]	He ⁺ signal [count/s]
0	58.5
0.02001	54.5
0.04	60
0.06	58
0.07999	59
0.1	67.5
0.12001	81
0.14	89
0.16	97
0.17999	117
0.2	125.5
0.22001	154.5
0.24	198
0.26	223
0.27999	303
0.3	496
0.32001	800.5
0.34	1242
0.36	2980.5
0.37999	9523.5
0.4	26875
0.42001	50824.5
0.44	73313.5
0.46	86422.5
0.47999	88644
0.5	79111
0.52001	58817
0.54	32860.5
0.56	13034
0.57999	3998
0.6	1424.5
0.62001	738
0.64	497
0.66	339.5
0.67999	239
0.7	199
0.72001	188.5
0.74	131.5
0.76	117.5

[d = 400 μm , a = 300 μm]

a = 300 μm : 2/24

Incident beam

0.77999	113.5
0.8	96.5
0.82001	85.5
0.84	60
0.86	70.5
0.87999	60.5
0.9	55
0.92001	44.5
0.94	49
0.96	40
0.97999	43

[d = 400 μm , a = 300 μm]

a = 300 μm : 3/24

$\theta_{\text{in}} = 0.482$ mrad

[d = 400 μm , a = 300 μm]

$\theta_{\text{in}} = 0.482$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.65491	24.94
-0.6349	30.56
-0.61491	34.14
-0.59491	46.80
-0.57492	65.09
-0.55491	104.48
-0.5349	169.18
-0.51491	340.41
-0.49491	1487.33
-0.47492	8950.85
-0.45491	19384.67
-0.4349	22320.34
-0.41491	18809.36
-0.39491	7330.78
-0.37492	2376.33
-0.35491	1065.60
-0.3349	638.87
-0.31491	442.71
-0.29491	327.75
-0.27492	253.58
-0.25491	208.69
-0.2349	173.91
-0.21491	148.85
-0.19491	126.21
-0.17492	110.23
-0.15491	88.62
-0.1349	85.55
-0.11491	73.78
-0.09491	71.48
-0.07492	64.58
-0.05491	62.40
-3.49E-02	54.86
-0.01491	50.77
0.00509	49.36
0.02508	49.87
0.04509	51.66
0.0651	52.56
0.08509	49.74
0.10509	57.93

[d = 400 μm , a = 300 μm]

a = 300 μm : 4/24

$\theta_{\text{in}} = 0.482 \text{ mrad}$

0.12508	55.75
0.14509	59.33
0.1651	58.95
0.18509	59.46
0.20509	63.94
0.22508	65.34
0.24509	72.25
0.2651	70.97
0.28509	75.32
0.30509	86.57
0.32508	94.50
0.34509	107.80
0.3651	127.49
0.38509	218.67
0.40509	1844.36
0.42508	9387.03
0.44509	18496.57
0.4651	25185.54
0.48509	27244.73
0.50509	22373.15
0.52508	15695.18
0.54509	7303.28
0.5651	1578.00
0.58509	467.13
0.60509	255.50
0.62508	189.51
0.64509	145.91
0.6651	120.59
0.68509	102.56
0.70509	94.37
0.72508	82.86
0.74509	77.11
0.7651	73.15
0.78509	62.40
0.80509	60.61
0.82508	58.70
0.84509	89.90
0.8651	267.13
0.88509	474.68
0.90509	618.03
0.92508	598.21
0.94509	545.52
0.9651	556.77

[d = 400 μm , a = 300 μm]

a = 300 μm : 5/24

$\theta_{\text{in}} = 0.482 \text{ mrad}$

0.98509	517.90
1.00509	391.56
1.02508	229.92
1.04509	83.89
1.0651	41.30
1.08509	33.38
1.10509	30.56
1.12508	32.48
1.14509	83.25
1.1651	191.30
1.18509	287.59
1.20509	351.15
1.22508	325.83
1.24509	306.14
1.2651	322.76
1.28509	340.66
1.30509	339.64
1.32508	262.27
1.34509	164.70
1.3651	81.20
1.38509	58.06
1.40509	80.18
1.42508	108.06
1.44509	119.56
1.4651	115.22
1.48509	111.12
1.50509	117.13
1.52508	121.74
1.54509	119.31
1.5651	125.57
1.58509	98.46
1.60509	76.09
1.62508	47.57
1.64509	34.27
1.6651	34.53
1.68509	34.65
1.70509	30.95
1.72508	30.43
1.74509	34.53
1.7651	39.64
1.78509	42.97
1.80509	42.97
1.82508	36.06

[d = 400 μm , a = 300 μm]

a = 300 μm : 6/24

$\theta_{\text{in}} = 0.482 \text{ mrad}$

1.84509	33.63
1.8651	31.46
1.88509	28.13
1.90509	29.54
1.92508	43.35
1.94509	50.00
1.9651	56.39
1.98509	54.48
2.00509	48.72
2.02508	41.56
2.04509	35.29
2.0651	35.93
2.08509	44.12
2.10509	48.21
2.12508	53.20
2.14509	53.71
2.1651	52.30
2.18509	41.18
2.20509	36.70
2.22508	29.67
2.24509	27.37
2.2651	33.25
2.28509	34.91
2.30509	31.46
2.32508	31.07
2.34509	29.16
2.3651	28.39
2.38509	22.25
2.40509	22.38
2.42508	20.33
2.44509	20.97
2.4651	22.63
2.48509	25.58
2.50509	27.49
2.52508	19.69
2.54509	20.46
2.5651	21.99
2.58509	30.69
2.60509	26.34
2.62508	27.37
2.64509	21.87
2.6651	24.81
2.68509	22.89

[d = 400 μm , a = 300 μm]

a = 300 μm : 7/24

$\theta_{\text{in}} = 0.482$ mrad

2.70509	23.15
2.72508	26.09
2.74509	21.61
2.7651	23.53
2.78509	21.48
2.80509	22.89
2.82508	17.01

[d = 400 μm , a = 300 μm]

a = 300 μm : 8/24

$\theta_{\text{in}} = 1.011$ mrad

[d = 400 μm , a = 300 μm]

$\theta_{\text{in}} = 1.011$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.29389	19.57
-0.27389	17.65
-0.2539	16.50
-0.23389	19.82
-0.21388	18.41
-0.19389	15.47
-0.17389	15.22
-0.1539	16.11
-0.13389	14.83
-0.11388	13.17
-0.09389	11.89
-0.07389	15.09
-0.0539	14.32
-0.03389	15.86
-0.01388	11.38
0.00611	11.76
0.02611	11.76
0.0461	14.45
0.06611	13.55
0.08612	12.66
0.10611	14.71
0.12611	11.00
0.1461	14.07
0.16611	13.94
0.18612	12.28
0.20611	16.88
0.22611	15.98
0.2461	14.19
0.26611	15.98
0.28612	15.86
0.30611	15.60
0.32611	18.54
0.3461	18.16
0.36611	18.03
0.38612	21.10
0.40611	20.46
0.42611	21.36
0.4461	22.12
0.46611	51.53

[d = 400 μm , a = 300 μm]

a = 300 μm : 9/24

$\theta_{\text{in}} = 1.011 \text{ mrad}$

0.48612	144.37
0.50611	328.64
0.52611	501.92
0.5461	671.48
0.56611	807.03
0.58612	903.19
0.60611	932.22
0.62611	869.82
0.6461	590.41
0.66611	296.03
0.68612	122.89
0.70611	46.67
0.72611	37.21
0.7461	31.33
0.76611	30.82
0.78612	32.22
0.80611	31.46
0.82611	39.90
0.8461	46.80
0.86611	77.62
0.88612	717.90
0.90611	2278.76
0.92611	4860.59
0.9461	7721.95
0.96611	10085.62
0.98612	11265.41
1.00611	12428.83
1.02611	12973.20
1.0461	12044.05
1.06611	8703.40
1.08612	4613.78
1.10611	1554.34
1.12611	380.43
1.1461	105.24
1.16611	112.28
1.18612	241.81
1.20611	427.36
1.22611	675.32
1.2461	847.18
1.26611	910.48
1.28612	940.53
1.30611	1013.04
1.32611	1049.87

[d = 400 μm , a = 300 μm]

a = 300 μm : 10/24

$\theta_{\text{in}} = 1.011 \text{ mrad}$

1.3461	927.23
1.36611	667.26
1.38612	391.94
1.40611	205.75
1.42611	189.51
1.4461	254.86
1.46611	346.67
1.48612	403.96
1.50611	431.46
1.52611	463.42
1.5461	484.65
1.56611	538.36
1.58612	489.64
1.60611	385.68
1.62611	251.02
1.6461	165.98
1.66611	119.95
1.68612	118.54
1.70611	109.97
1.72611	120.46
1.7461	131.20
1.76611	144.63
1.78612	136.57
1.80611	121.87
1.82611	94.63
1.8461	64.58
1.86611	36.70
1.88612	27.88
1.90611	31.33
1.92611	26.73
1.9461	36.44
1.96611	42.46
1.98612	49.36
2.00611	54.73
2.02611	48.21
2.0461	50.00
2.06611	54.48
2.08612	50.13
2.10611	64.96
2.12611	70.59
2.1461	77.49
2.16611	84.78
2.18612	65.47

[d = 400 μm , a = 300 μm]

a = 300 μm : 11/24

$\theta_{\text{in}} = 1.011 \text{ mrad}$

2.20611	70.20
2.22611	58.95
2.2461	62.02
2.26611	59.21
2.28612	74.55
2.30611	76.85
2.32611	67.77
2.3461	58.06
2.36611	43.61
2.38612	35.55
2.40611	33.25
2.42611	33.12
2.4461	34.40
2.46611	31.84
2.48612	32.35
2.50611	32.10
2.52611	28.39
2.5461	26.98
2.56611	28.52
2.58612	31.71
2.60611	31.46
2.62611	26.85
2.6461	32.35
2.66611	31.07
2.68612	33.50
2.70611	32.35
2.72611	38.36
2.7461	32.74
2.76611	32.48
2.78612	36.06
2.80611	31.97
2.82611	31.20
2.8461	29.41
2.86611	33.89
2.88612	27.37
2.90611	28.77
2.92611	24.42
2.9461	25.32
2.96611	18.93
2.98612	22.63
3.00611	21.99
3.02611	21.87
3.0461	19.31

[d = 400 μm , a = 300 μm]

a = 300 μm : 12/24

$\theta_{\text{in}} = 1.011 \text{ mrad}$

3.06611	20.33
3.08612	21.48
3.10611	22.38
3.12611	20.97
3.1461	23.53
3.16611	18.80
3.18612	26.21
3.20611	23.79
3.22611	24.42
3.2461	25.83
3.26611	27.24
3.28612	26.47
3.30611	23.53
3.32611	23.15
3.3461	20.46
3.36611	19.57
3.38612	18.16
3.40611	17.26
3.42611	18.03
3.4461	18.29
3.46611	16.37
3.48612	14.96
3.50611	17.52
3.52611	17.14
3.5461	17.14
3.56611	17.26
3.58612	18.41
3.60611	16.75
3.62611	17.39
3.6461	16.37
3.66611	18.80
3.68612	17.65
3.70611	14.07
3.72611	19.05
3.7461	17.90
3.76611	13.04
3.78612	16.50
3.80611	15.47

[d = 400 μm , a = 300 μm]

a = 300 μm : 13/24

$\theta_{\text{in}} = 1.507 \text{ mrad}$

[d = 400 μm , a = 300 μm]

$\theta_{\text{in}} = 1.507 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.06048	7.80
-0.04049	7.93
-0.02049	6.91
-5.00E-04	8.82
0.01951	5.88
0.03952	8.06
0.05951	6.52
0.07951	7.29
0.0995	8.18
0.11951	8.44
0.13952	5.12
0.15951	6.14
0.17951	8.82
0.1995	7.03
0.21951	6.27
0.23952	7.93
0.25951	8.82
0.27951	8.57
0.2995	6.52
0.31951	9.59
0.33952	10.36
0.35951	11.89
0.37951	19.44
0.3995	35.68
0.41951	59.59
0.43952	97.95
0.45951	140.41
0.47951	166.11
0.4995	193.22
0.51951	199.49
0.53952	200.38
0.55951	172.63
0.57951	156.90
0.5995	101.79
0.61951	54.22
0.63952	31.07
0.65951	16.75
0.67951	14.71
0.6995	14.71

[d = 400 μm , a = 300 μm]

a = 300 μm : 14/24

$\theta_{\text{in}} = 1.507 \text{ mrad}$

0.71951	12.02
0.73952	11.51
0.75951	11.38
0.77951	14.19
0.7995	15.47
0.81951	18.67
0.83952	33.12
0.85951	78.00
0.87951	187.21
0.8995	315.60
0.91951	493.99
0.93952	581.33
0.95951	637.21
0.97951	636.44
0.9995	578.77
1.01951	454.86
1.03952	278.00
1.05951	114.83
1.07951	46.55
1.0995	26.85
1.11951	28.77
1.13952	56.27
1.15951	124.94
1.17951	278.64
1.1995	474.42
1.21951	689.89
1.23952	818.41
1.25951	904.60
1.27951	929.28
1.2995	868.67
1.31951	681.71
1.33952	428.39
1.35951	321.35
1.37951	531.20
1.3995	1359.58
1.41951	2842.31
1.43952	4740.64
1.45951	6602.90
1.47951	7597.40
1.4995	8100.72
1.51951	8160.18
1.53952	7852.51
1.55951	6429.76

[d = 400 μm , a = 300 μm]

a = 300 μm : 15/24

$\theta_{\text{in}} = 1.507 \text{ mrad}$

1.57951	4201.51
1.5995	1861.24
1.61951	833.12
1.63952	601.28
1.65951	664.70
1.67951	702.55
1.6995	704.73
1.71951	694.50
1.73952	672.50
1.75951	615.34
1.77951	486.19
1.7995	321.23
1.81951	241.30
1.83952	252.68
1.85951	284.01
1.87951	301.28
1.8995	287.21
1.91951	298.21
1.93952	289.90
1.95951	247.31
1.97951	173.14
1.9995	104.60
2.01951	75.45
2.03952	72.76
2.05951	67.26
2.07951	68.16
2.0995	71.61
2.11951	68.03
2.13952	55.63
2.15951	35.55
2.17951	23.27
2.1995	19.31
2.21951	18.29
2.23952	17.90
2.25951	17.65
2.27951	24.94
2.2995	27.49
2.31951	29.80
2.33952	27.75
2.35951	39.00
2.37951	35.42
2.3995	37.47
2.41951	39.39

[d = 400 μm , a = 300 μm]

a = 300 μm : 16/24

$\theta_{\text{in}} = 1.507 \text{ mrad}$

2.43952	45.78
2.45951	39.90
2.47951	39.39
2.4995	36.96
2.51951	35.55
2.53952	38.24
2.55951	39.00
2.57951	37.98
2.5995	26.34
2.61951	24.55
2.63952	18.80
2.65951	15.22
2.67951	21.74
2.6995	17.52
2.71951	16.62
2.73952	15.09
2.75951	13.81
2.77951	13.68
2.7995	13.43
2.81951	16.24
2.83952	13.81
2.85951	17.01
2.87951	19.05
2.8995	18.03
2.91951	20.08
2.93952	21.10
2.95951	21.36
2.97951	14.07
2.9995	17.90
3.01951	16.75
3.03952	15.98
3.05951	18.67
3.07951	15.86
3.0995	15.98
3.11951	12.79
3.13952	14.07
3.15951	9.85
3.17951	12.15
3.1995	12.15
3.21951	11.13
3.23952	11.13
3.25951	11.51
3.27951	13.30

[d = 400 μm , a = 300 μm]

a = 300 μm : 17/24

$\theta_{\text{in}} = 1.507 \text{ mrad}$

3.2995	12.79
3.31951	12.53
3.33952	14.71
3.35951	13.68
3.37951	14.83
3.3995	14.96
3.41951	15.35
3.43952	11.25
3.45951	13.04
3.47951	13.30
3.4995	11.00
3.51951	11.89
3.53952	12.40
3.55951	11.64
3.57951	11.38
3.5995	9.85
3.61951	9.97
3.63952	8.44
3.65951	10.36
3.67951	10.74
3.6995	9.85
3.71951	12.79
3.73952	10.10
3.75951	12.02
3.77951	10.49
3.7995	11.89
3.81951	11.51
3.83952	10.10
3.85951	11.76
3.87951	10.23
3.8995	9.33
3.91951	8.18
3.93952	10.87
3.95951	9.72
3.97951	11.51
4.87951	35.81
4.8995	35.04
4.91951	37.60
4.93952	39.90
4.95951	38.36
4.97951	31.97
4.9995	37.85
5.01951	30.69

[d = 400 μm , a = 300 μm]

a = 300 μm : 18/24

$\theta_{\text{in}} = 1.507 \text{ mrad}$

5.03952	33.25
5.05951	34.53
5.07951	32.22
5.0995	36.06
5.11951	30.18
5.13952	28.13
5.15951	27.37
5.17951	34.53
5.1995	30.43
5.21951	37.85
5.23952	31.71
5.25951	28.90
5.27951	31.20
5.2995	31.71
5.31951	25.58

[d = 400 μm , a = 300 μm]

a = 300 μm : 19/24

$\theta_{\text{in}} = 1.970$ mrad

[d = 400 μm , a = 300 μm]

$\theta_{\text{in}} = 1.970$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.14319	6.78
-0.12318	4.60
-0.10319	5.12
-0.08319	4.99
-0.0632	3.32
-0.04319	4.60
-0.02318	5.50
-0.00319	3.45
0.01681	4.73
0.0368	3.58
0.05681	5.50
0.07682	3.20
0.09681	5.24
0.11681	3.71
0.1368	4.22
0.15681	3.96
0.17682	4.86
0.19681	5.37
0.21681	4.09
0.2368	4.35
0.25681	5.50
0.27682	6.52
0.29681	3.84
0.31681	5.50
0.3368	5.88
0.35681	4.09
0.37682	4.99
0.39681	4.99
0.41681	4.73
0.4368	4.86
0.45681	6.27
0.47682	4.22
0.49681	6.27
0.51681	6.39
0.5368	6.52
0.55681	5.37
0.57682	9.46
0.59681	12.53
0.61681	17.65

[d = 400 μm , a = 300 μm]

a = 300 μm : 20/24

$\theta_{\text{in}} = 1.970 \text{ mrad}$

0.6368	25.19
0.65681	35.81
0.67682	44.25
0.69681	49.36
0.71681	50.64
0.7368	48.72
0.75681	52.81
0.77682	41.18
0.79681	30.82
0.81681	18.93
0.8368	10.49
0.85681	8.95
0.87682	7.54
0.89681	5.75
0.91681	7.93
0.9368	8.44
0.95681	8.70
0.97682	12.15
0.99681	14.45
1.01681	18.80
1.0368	21.74
1.05681	18.93
1.07682	20.33
1.09681	19.69
1.11681	21.23
1.1368	16.75
1.15681	14.71
1.17682	12.15
1.19681	9.97
1.21681	10.87
1.2368	13.43
1.25681	21.48
1.27682	35.29
1.29681	52.81
1.31681	71.99
1.3368	78.90
1.35681	80.82
1.37682	74.04
1.39681	65.34
1.41681	44.63
1.4368	36.32
1.45681	30.18
1.47682	52.81

[d = 400 μm , a = 300 μm]

a = 300 μm : 21/24

$\theta_{\text{in}} = 1.970 \text{ mrad}$

1.49681	108.95
1.51681	178.90
1.5368	260.23
1.55681	302.81
1.57682	326.98
1.59681	335.93
1.61681	326.21
1.6368	249.49
1.65681	169.69
1.67682	148.85
1.69681	187.21
1.71681	313.68
1.7368	432.86
1.75681	541.81
1.77682	619.69
1.79681	695.01
1.81681	745.39
1.8368	812.66
1.85681	1180.81
1.87682	1974.29
1.89681	3169.29
1.91681	4492.05
1.9368	5285.52
1.95681	5823.11
1.97682	6135.64
1.99681	6091.53
2.01681	5120.43
2.0368	3456.12
2.05681	1886.05
2.07682	941.30
2.09681	675.44
2.11681	615.98
2.1368	604.60
2.15681	625.19
2.17682	581.20
2.19681	464.32
2.21681	347.06
2.2368	278.13
2.25681	261.51
2.27682	273.14
2.29681	269.31
2.31681	267.52
2.3368	215.73

[d = 400 μm , a = 300 μm]

a = 300 μm : 22/24

$\theta_{\text{in}} = 1.970 \text{ mrad}$

2.35681	157.80
2.37682	97.44
2.39681	68.41
2.41681	65.86
2.4368	69.31
2.45681	68.93
2.47682	56.78
2.49681	40.66
2.51681	28.26
2.5368	19.95
2.55681	15.09
2.57682	21.23
2.59681	24.94
2.61681	29.80
2.6368	28.13
2.65681	33.63
2.67682	32.86
2.69681	37.08
2.71681	45.01
2.7368	48.59
2.75681	43.86
2.77682	38.75
2.79681	35.17
2.81681	34.91
2.8368	38.87
2.85681	30.82
2.87682	33.63
2.89681	22.76
2.91681	20.08
2.9368	18.67
2.95681	17.01
2.97682	16.11
2.99681	17.01
3.01681	16.75
3.0368	12.28
3.05681	12.92
3.07682	16.50
3.09681	16.88
3.11681	16.50
3.1368	18.03
3.15681	19.31
3.17682	23.15
3.19681	18.80

[d = 400 μm , a = 300 μm]

a = 300 μm : 23/24

$\theta_{\text{in}} = 1.970 \text{ mrad}$

3.21681	22.51
3.2368	19.44
3.25681	17.77
3.27682	21.87
3.29681	15.98
3.31681	17.39
3.3368	14.71
3.35681	13.94
3.37682	11.89
3.39681	11.25
3.41681	10.36
3.4368	10.74
3.45681	12.92
3.47682	12.53
3.49681	12.79
3.51681	15.22
3.5368	11.00
3.55681	13.30
3.57682	14.83
3.59681	13.55
3.61681	14.58
3.6368	14.58
3.65681	14.58
3.67682	13.43
3.69681	13.17
3.71681	12.02
3.7368	10.74
3.75681	10.36
3.77682	10.49
3.79681	10.49
3.81681	11.64
3.8368	11.89
3.85681	11.25
3.87682	10.61
3.89681	10.49
3.91681	12.92
3.9368	11.76
3.95681	11.51
3.97682	11.76
3.99681	12.66
4.01681	10.74
4.0368	9.33
4.05681	8.82

[d = 400 μm , a = 300 μm]

a = 300 μm : 24/24

$\theta_{\text{in}} = 1.970 \text{ mrad}$

4.07682	9.59
4.09681	10.87
4.11681	7.54
4.1368	11.38
4.15681	10.36
4.17682	9.97
4.19681	7.80
4.21681	10.10
4.2368	7.93
4.25681	11.13
4.27682	10.23
4.29681	8.57
4.31681	11.64
4.3368	10.74
4.35681	10.23

[d = 400 μm , a = 330 μm]

a = 330 μm : 1/24

Incident beam

[d = 400 μm , a = 330 μm]

Incident beam

Detector angle [mrad]	He ⁺ signal [count/s]
0	46.5
0.02001	37
0.04	49.5
0.06	49
0.07999	58.5
0.1	63
0.12001	61.5
0.14	79
0.16	90
0.17999	95
0.2	111
0.22001	111.5
0.24	159.5
0.26	186.5
0.27999	235
0.3	287
0.32001	416
0.34	592.5
0.36	1077.5
0.37999	2320.5
0.4	8476
0.42001	22406
0.44	44990
0.46	72546
0.47999	89818.5
0.5	88973
0.52001	84263
0.54	67069.5
0.56	42389.5
0.57999	18977.5
0.6	5779
0.62001	1954
0.64	892.5
0.66	540.5
0.67999	401
0.7	311
0.72001	209
0.74	182.5
0.76	161.5

[d = 400 μm , a = 330 μm]

a = 330 μm : 2/24

Incident beam

0.77999	147
0.8	100
0.82001	99.5
0.84	83
0.86	68.5
0.87999	70.5
0.9	68
0.92001	53.5
0.94	53
0.96	57
0.97999	49

[d = 400 μm , a = 330 μm]

a = 330 μm : 3/24

$\theta_{\text{in}} = 0.501$ mrad

[d = 400 μm , a = 330 μm]

$\theta_{\text{in}} = 0.501$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.69928	5.27
-0.67927	7.72
-0.65928	9.43
-0.63928	10.90
-0.61929	13.85
-0.59928	19.48
-0.57927	25.00
-0.55928	33.69
-0.53928	57.34
-0.51929	128.29
-0.49928	501.38
-0.47927	2476.64
-0.45928	4090.81
-0.43928	4548.94
-0.41929	3498.27
-0.39928	1445.45
-0.37927	766.78
-0.35928	498.69
-0.33928	354.23
-0.31929	263.80
-0.29928	206.46
-0.27927	173.25
-0.25928	144.34
-0.23928	131.72
-0.21929	107.21
-0.19928	100.35
-0.17927	82.83
-0.15928	75.84
-0.13928	69.60
-0.11929	61.26
-0.09928	58.08
-7.93E-02	47.17
-0.05928	47.91
-0.03928	42.03
-0.01929	40.43
7.20E-04	37.00
0.02073	35.41
0.04072	37.13
0.06072	35.78

[d = 400 μm , a = 330 μm]

a = 330 μm : 4/24

$\theta_{\text{in}} = 0.501 \text{ mrad}$

0.08071	35.53
0.10072	33.82
0.12073	32.84
0.14072	37.00
0.16072	39.94
0.18071	38.72
0.20072	45.21
0.22073	43.74
0.24072	52.56
0.26072	65.80
0.28071	66.04
0.30072	71.19
0.32073	85.65
0.34072	97.65
0.36072	124.98
0.38071	166.64
0.40072	273.60
0.42073	1190.60
0.44072	8795.74
0.46072	18289.02
0.48071	27423.67
0.50072	32216.32
0.52073	26803.43
0.54072	19546.39
0.56072	9146.65
0.58071	2549.42
0.60072	886.85
0.62073	402.62
0.64072	176.81
0.66072	98.39
0.68071	72.90
0.70072	69.11
0.72073	69.60
0.74072	61.14
0.76072	51.09
0.78071	54.52
0.80072	40.68
0.82073	47.66
0.84072	41.54
0.86072	62.61
0.88071	160.63
0.90072	258.04
0.92073	349.20

[d = 400 μm , a = 330 μm]

a = 330 μm : 5/24

$\theta_{\text{in}} = 0.501 \text{ mrad}$

0.94072	366.85
0.96072	357.78
0.98071	330.21
1.00072	286.22
1.02073	185.14
1.04072	96.31
1.06072	55.50
1.08071	38.23
1.10072	33.08
1.12073	34.06
1.14072	34.92
1.16072	68.49
1.18071	127.06
1.20072	178.15
1.22073	198.25
1.24072	217.73
1.26072	212.58
1.28071	210.26
1.30072	217.98
1.32073	200.94
1.34072	145.32
1.36072	83.69
1.38071	46.19
1.40072	64.20
1.42073	94.22
1.44072	120.57
1.46072	128.90
1.48071	119.59
1.50072	121.18
1.52073	130.37
1.54072	131.35
1.56072	138.46
1.58071	121.42
1.60072	102.07
1.62073	87.36
1.64072	71.56
1.66072	66.41
1.68071	64.57
1.70072	58.32
1.72073	60.65
1.74072	63.10
1.76072	70.45
1.78071	67.76

[d = 400 μm , a = 330 μm]

a = 330 μm : 6/24

$\theta_{\text{in}} = 0.501 \text{ mrad}$

1.80072	75.48
1.82073	59.67
1.84072	41.41
1.86072	33.20
1.88071	25.49
1.90072	24.02
1.92073	28.30
1.94072	28.67
1.96072	36.02
1.98071	32.71
2.00072	30.75
2.02073	27.45
2.04072	19.73
2.06072	19.85
2.08071	18.75
2.10072	18.75
2.12073	22.55
2.14072	25.36
2.16072	22.18
2.18071	22.91
2.20072	23.04
2.22073	25.24
2.24072	21.07
2.26072	26.59
2.28071	28.55
2.30072	26.22
2.32073	25.24
2.34072	28.06
2.36072	26.10
2.38071	29.04
2.40072	26.83
2.42073	27.08
2.44072	28.06
2.46072	27.81
2.48071	29.65
2.50072	28.55
2.52073	26.71
2.54072	22.30
2.56072	23.89
2.58071	21.93
2.60072	22.67
2.62073	24.26
2.64072	25.85

[d = 400 μm , a = 330 μm]

a = 330 μm : 7/24

$\theta_{\text{in}} = 0.501 \text{ mrad}$

2.66072	24.26
2.68071	19.73
2.70072	16.91
2.72073	17.77
2.74072	20.34
2.76072	17.40
2.78071	19.11
2.80072	15.68
2.82073	16.17
2.84072	17.40
2.86072	15.68
2.88071	14.95
2.90072	17.52
2.92073	17.52
2.94072	19.36
2.96072	14.58
2.98071	13.85
3.00072	17.52
3.02073	21.44
3.04072	19.48
3.06072	17.03
3.08071	17.77
3.10072	15.81
3.12073	17.28
3.14072	18.01
3.16072	17.03
3.18071	16.91
3.20072	13.23
3.22073	16.17
3.24072	14.95

[d = 400 μm , a = 330 μm]

a = 330 μm : 8/24

$\theta_{\text{in}} = 1.000 \text{ mrad}$

[d = 400 μm , a = 330 μm]

$\theta_{\text{in}} = 1.000 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-1.19789	1.10
-1.17788	0.12
-1.15789	1.84
-1.13789	1.10
-1.1179	1.35
-1.09789	1.72
-1.07788	0.98
-1.05789	2.45
-1.03789	1.10
-1.0179	2.08
-0.99789	2.21
-0.97788	3.68
-0.95789	7.72
-0.93789	21.81
-0.9179	121.06
-0.89789	281.81
-0.87788	407.65
-0.85789	440.00
-0.83789	355.82
-0.8179	274.83
-0.79789	231.58
-0.77788	186.12
-0.75789	145.44
-0.73789	123.87
-0.7179	111.87
-0.69789	102.43
-0.67788	82.71
-0.65789	70.21
-0.63789	68.74
-0.6179	62.86
-0.59789	54.03
-0.57788	49.75
-0.55789	44.60
-0.53789	41.90
-0.5179	39.70
-0.49789	34.92
-0.47788	36.27
-0.45789	34.06
-0.43789	26.47

[d = 400 μm , a = 330 μm]

a = 330 μm : 9/24

$\theta_{\text{in}} = 1.000 \text{ mrad}$

-0.4179	28.92
-0.39789	20.22
-0.37788	24.38
-0.35789	22.79
-0.33789	23.77
-0.3179	26.34
-0.29789	20.95
-0.27788	23.65
-0.25789	19.48
-0.23789	17.40
-0.2179	20.34
-0.19789	17.28
-0.17788	18.99
-0.15789	14.70
-0.13789	14.95
-0.1179	15.44
-0.09789	13.36
-0.07788	16.30
-0.05789	13.23
-0.03789	13.72
-0.0179	11.40
0.00211	12.13
0.02212	8.70
0.04211	13.23
0.06211	10.90
0.0821	11.89
0.10211	11.76
0.12212	10.41
0.14211	11.15
0.16211	12.13
0.1821	9.92
0.20211	10.90
0.22212	10.29
0.24211	11.76
0.26211	12.01
0.2821	11.89
0.30211	10.29
0.32212	10.17
0.34211	12.01
0.36211	14.58
0.3821	12.25
0.40211	15.07
0.42212	14.09

[d = 400 μm , a = 330 μm]

a = 330 μm : 10/24

$\theta_{\text{in}} = 1.000 \text{ mrad}$

0.44211	14.95
0.46211	29.77
0.4821	110.52
0.50211	208.17
0.52212	297.86
0.54211	362.31
0.56211	407.40
0.5821	469.52
0.60211	444.53
0.62212	335.97
0.64211	198.98
0.66211	87.61
0.6821	37.00
0.70211	30.88
0.72212	28.67
0.74211	25.85
0.76211	28.30
0.7821	29.28
0.80211	33.57
0.82212	37.00
0.84211	48.15
0.86211	85.40
0.8821	490.35
0.90211	2911.74
0.92212	7581.61
0.94211	12399.51
0.96211	15931.23
0.9821	17649.92
1.00211	18717.13
1.02212	18799.35
1.04211	16372.94
1.06211	10802.98
1.0821	5152.88
1.10211	1575.21
1.12212	528.34
1.14211	190.41
1.16211	73.39
1.1821	103.29
1.20211	235.50
1.22212	419.41
1.24211	593.40
1.26211	683.58
1.2821	718.74

[d = 400 μm , a = 330 μm]

a = 330 μm : 11/24

$\theta_{\text{in}} = 1.000 \text{ mrad}$

1.30211	749.38
1.32212	776.82
1.34211	706.12
1.36211	506.04
1.3821	258.78
1.40211	100.72
1.42212	99.74
1.44211	166.51
1.46211	245.67
1.4821	319.06
1.50211	364.89
1.52212	356.80
1.54211	383.63
1.56211	405.56
1.5821	401.40
1.60211	329.97
1.62212	246.03
1.64211	177.66
1.66211	162.72
1.6821	189.79
1.70211	200.70
1.72212	188.45
1.74211	210.50
1.76211	210.99
1.7821	225.94
1.80211	229.62
1.82212	198.37
1.84211	146.91
1.86211	108.56
1.8821	94.22
1.90211	83.20
1.92212	80.26
1.94211	99.74
1.96211	105.74
1.9821	99.86
2.00211	85.52
2.02212	75.23
2.04211	60.53
2.06211	39.58
2.0821	32.22
2.10211	35.90
2.12212	38.23
2.14211	40.19

[d = 400 μm , a = 330 μm]

a = 330 μm : 12/24

$\theta_{\text{in}} = 1.000 \text{ mrad}$

2.16211	37.98
2.1821	33.57
2.20211	29.53
2.22212	25.36
2.24211	25.85
2.26211	27.94
2.2821	30.02
2.30211	32.96
2.32212	37.62
2.34211	33.08
2.36211	36.39
2.3821	34.68
2.40211	38.60
2.42212	43.01
2.44211	43.50
2.46211	47.05
2.4821	51.83
2.50211	45.21
2.52212	42.76
2.54211	45.58
2.56211	45.58
2.5821	44.35
2.60211	48.28
2.62212	50.48
2.64211	46.81
2.66211	44.97
2.6821	38.11
2.70211	32.59
2.72212	39.45
2.74211	37.13
2.76211	33.20
2.7821	29.65
2.80211	26.10
2.82212	25.73
2.84211	28.43
2.86211	23.16
2.8821	23.28
2.90211	22.91
2.92212	23.65
2.94211	22.30
2.96211	21.69
2.9821	20.95
3.00211	21.44

[d = 400 μm , a = 330 μm]

a = 330 μm : 13/24

$\theta_{\text{in}} = 1.000 \text{ mrad}$

3.02212	21.07
3.04211	21.32
3.06211	25.49
3.0821	25.73
3.10211	24.75
3.12212	23.89
3.14211	23.04
3.16211	27.69
3.1821	25.61
3.20211	25.12
3.22212	26.71
3.24211	23.65

[d = 400 μm , a = 330 μm]

a = 330 μm : 14/24

$\theta_{\text{in}} = 1.531 \text{ mrad}$

[d = 400 μm , a = 330 μm]

$\theta_{\text{in}} = 1.531 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.10869	7.72
-0.0887	7.84
-0.0687	6.62
-4.87E-02	7.47
-0.0287	6.13
-0.00869	6.98
0.0113	4.17
0.0313	6.00
0.05129	6.37
0.0713	5.51
0.09131	5.64
0.1113	5.51
0.1313	5.64
0.15129	6.00
0.1713	6.62
0.19131	7.60
0.2113	5.27
0.2313	6.00
0.25129	4.78
0.2713	5.51
0.29131	6.13
0.3113	6.37
0.3313	5.39
0.35129	4.29
0.3713	5.64
0.39131	8.09
0.4113	12.13
0.4313	20.71
0.45129	44.84
0.4713	90.06
0.49131	135.52
0.5113	175.21
0.5313	213.81
0.55129	260.13
0.5713	284.14
0.59131	274.09
0.6113	220.30
0.6313	137.23
0.65129	68.37

[d = 400 μm , a = 330 μm]

a = 330 μm : 15/24

$\theta_{\text{in}} = 1.531 \text{ mrad}$

0.6713	31.00
0.69131	13.97
0.7113	9.19
0.7313	10.17
0.75129	8.21
0.7713	7.60
0.79131	10.05
0.8113	9.92
0.8313	9.68
0.85129	11.76
0.8713	21.56
0.89131	58.94
0.9113	147.40
0.9313	258.90
0.95129	374.81
0.9713	462.79
0.99131	543.16
1.0113	571.22
1.0313	484.59
1.05129	338.54
1.0713	170.31
1.09131	67.88
1.1113	26.71
1.1313	15.19
1.15129	17.77
1.1713	29.41
1.19131	76.33
1.2113	169.95
1.2313	275.32
1.25129	386.57
1.2713	463.52
1.29131	566.08
1.3113	545.74
1.3313	469.16
1.35129	321.14
1.3713	223.49
1.39131	269.31
1.4113	734.67
1.4313	2248.25
1.45129	4534.49
1.4713	6915.19
1.49131	9061.87
1.5113	10278.93

[d = 400 μm , a = 330 μm]

a = 330 μm : 16/24

$\theta_{\text{in}} = 1.531 \text{ mrad}$

1.5313	11665.45
1.55129	11390.49
1.5713	9895.17
1.59131	6503.50
1.6113	3341.07
1.6313	1266.32
1.65129	610.92
1.6713	566.57
1.69131	634.32
1.7113	669.86
1.7313	713.84
1.75129	719.36
1.7713	682.35
1.79131	556.40
1.8113	356.55
1.8313	246.65
1.85129	218.71
1.8713	241.62
1.89131	289.78
1.9113	296.27
1.9313	313.55
1.95129	314.53
1.9713	279.36
1.99131	219.81
2.0113	161.37
2.0313	145.81
2.05129	138.58
2.0713	145.68
2.09131	154.14
2.1113	150.34
2.1313	148.26
2.15129	125.84
2.1713	94.71
2.19131	71.07
2.2113	58.08
2.2313	53.30
2.25129	49.38
2.2713	52.56
2.29131	49.38
2.3113	48.52
2.3313	34.55
2.35129	21.81
2.3713	16.79

[d = 400 μm , a = 330 μm]

a = 330 μm : 17/24

$\theta_{\text{in}} = 1.531 \text{ mrad}$

2.39131	17.40
2.4113	18.50
2.4313	19.97
2.45129	22.05
2.4713	20.09
2.49131	17.64
2.5113	16.79
2.5313	16.66
2.55129	22.05
2.5713	25.24
2.59131	27.08
2.6113	24.87
2.6313	24.75
2.65129	26.59
2.6713	31.00
2.69131	40.19
2.7113	35.90
2.7313	32.22
2.75129	28.92
2.7713	30.63
2.79131	29.16
2.8113	33.94
2.8313	30.75
2.85129	29.28
2.8713	27.45
2.89131	25.49
2.9113	23.28
2.9313	21.69
2.95129	20.83
2.9713	21.20
2.99131	18.01
3.0113	18.50
3.0313	15.44
3.05129	13.85
3.0713	13.11
3.09131	15.68
3.1113	18.62
3.1313	12.74
3.15129	15.32
3.1713	15.93
3.19131	16.42
3.2113	14.95
3.2313	16.42

[d = 400 μm , a = 330 μm]

a = 330 μm : 18/24

$\theta_{\text{in}} = 1.531 \text{ mrad}$

3.25129	19.24
3.2713	17.03
3.29131	18.87
3.3113	18.99
3.3313	20.95
3.35129	18.50
3.3713	22.18
3.39131	20.22
3.4113	24.02
3.4313	18.13
3.45129	19.24
3.4713	16.17
3.49131	14.21
3.5113	13.85
3.5313	16.42
3.55129	17.03
3.5713	14.09
3.59131	14.21
3.6113	14.09
3.6313	15.19
3.65129	13.72

[d = 400 μm , a = 330 μm]

a = 330 μm : 19/24

$\theta_{\text{in}} = 1.974 \text{ mrad}$

[d = 400 μm , a = 330 μm]

$\theta_{\text{in}} = 1.974 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.31238	4.66
-0.29239	6.74
-0.27238	5.39
-0.25237	3.68
-0.23238	5.15
-0.21238	5.39
-0.19239	4.17
-0.17238	4.53
-0.15237	4.29
-0.13238	4.04
-0.11238	3.92
-0.09239	2.82
-0.07238	4.78
-0.05237	4.29
-0.03238	3.43
-0.01238	5.39
0.00761	3.68
0.02762	3.31
0.04763	4.17
0.06762	5.15
0.08762	4.41
0.10761	4.90
0.12762	2.70
0.14763	3.55
0.16762	4.41
0.18762	3.92
0.20761	3.92
0.22762	4.41
0.24763	3.92
0.26762	3.92
0.28762	2.82
0.30761	3.31
0.32762	3.31
0.34763	3.68
0.36762	3.68
0.38762	4.78
0.40761	4.41
0.42762	4.17
0.44763	5.64

[d = 400 μm , a = 330 μm]

a = 330 μm : 20/24

$\theta_{\text{in}} = 1.974 \text{ mrad}$

0.46762	3.92
0.48762	4.29
0.50761	4.66
0.52762	5.27
0.54763	5.27
0.56762	7.47
0.58762	9.68
0.60761	17.40
0.62762	23.28
0.64763	33.94
0.66762	42.52
0.68762	49.50
0.70761	49.50
0.72762	55.26
0.74763	43.01
0.76762	31.49
0.78762	21.07
0.80761	12.50
0.82762	8.21
0.84763	6.49
0.86762	5.64
0.88762	7.35
0.90761	7.72
0.92762	6.98
0.94763	10.90
0.96762	19.24
0.98762	32.96
1.00761	55.99
1.02762	83.81
1.04763	110.40
1.06762	125.84
1.08762	146.42
1.10761	129.63
1.12762	101.21
1.14763	56.49
1.16762	25.85
1.18762	14.34
1.20761	12.74
1.22762	15.32
1.24763	29.28
1.26762	60.90
1.28762	107.70
1.30761	158.18

[d = 400 μm , a = 330 μm]

a = 330 μm : 21/24

$\theta_{\text{in}} = 1.974 \text{ mrad}$

1.32762	206.58
1.34763	268.33
1.36762	268.70
1.38762	242.36
1.40761	180.48
1.42762	87.85
1.44763	43.99
1.46762	33.45
1.48762	66.29
1.50761	107.33
1.52762	191.63
1.54763	266.74
1.56762	330.95
1.58762	381.79
1.60761	370.77
1.62762	322.74
1.64763	203.27
1.66762	99.61
1.68762	80.75
1.70761	95.69
1.72762	155.73
1.74763	228.76
1.76762	288.06
1.78762	365.62
1.80761	388.41
1.82762	441.71
1.84763	671.57
1.86762	1383.21
1.88762	2610.56
1.90761	4325.09
1.92762	6324.36
1.94763	7577.82
1.96762	8831.88
1.98762	9096.42
2.00761	8043.54
2.02762	5907.53
2.04763	2982.43
2.06762	1428.18
2.08762	739.82
2.10761	600.51
2.12762	601.49
2.14763	575.63
2.16762	540.10

[d = 400 μm , a = 330 μm]

a = 330 μm : 22/24

$\theta_{\text{in}} = 1.974 \text{ mrad}$

2.18762	441.96
2.20761	291.86
2.22762	238.19
2.24763	219.32
2.26762	212.83
2.28762	233.05
2.30761	233.05
2.32762	217.85
2.34763	177.54
2.36762	130.98
2.38762	114.07
2.40761	111.01
2.42762	117.14
2.44763	119.83
2.46762	119.22
2.48762	106.23
2.50761	76.09
2.52762	59.43
2.54763	47.54
2.56762	49.26
2.58762	46.44
2.60761	43.62
2.62762	39.09
2.64763	23.40
2.66762	21.93
2.68762	17.52
2.70761	14.21
2.72762	13.23
2.74763	16.30
2.76762	13.85
2.78762	13.85
2.80761	15.07
2.82762	14.95
2.84763	17.40
2.86762	18.01
2.88762	20.71
2.90761	16.30
2.92762	22.05
2.94763	21.07
2.96762	23.04
2.98762	29.28
3.00761	27.69
3.02762	27.69

[d = 400 μm , a = 330 μm]

a = 330 μm : 23/24

$\theta_{\text{in}} = 1.974 \text{ mrad}$

3.04763	23.53
3.06762	26.71
3.08762	26.34
3.10761	26.34
3.12762	26.47
3.14763	23.40
3.16762	20.09
3.18762	20.34
3.20761	21.32
3.22762	19.48
3.24763	13.72
3.26762	15.07
3.28762	14.58
3.30761	14.34
3.32762	14.46
3.34763	11.76
3.36762	12.25
3.38762	14.46
3.40761	11.03
3.42762	13.48
3.44763	15.32
3.46762	14.09
3.48762	15.81
3.50761	12.87
3.52762	17.40
3.54763	17.64
3.56762	15.32
3.58762	14.95
3.60761	14.46
3.62762	15.56
3.64763	14.70
3.66762	17.89
3.68762	16.54
3.70761	17.40
3.72762	15.81
3.74763	12.87
3.76762	14.58
3.78762	13.11
3.80761	11.40
3.82762	12.87
3.84763	12.87
3.86762	12.99
3.88762	13.85

[d = 400 μm , a = 330 μm]

a = 330 μm : 24/24

$\theta_{\text{in}} = 1.974 \text{ mrad}$

3.90761	14.09
3.92762	12.62
3.94763	13.48
3.96762	12.13
3.98762	12.01
4.00761	13.48
4.02762	15.32
4.04763	13.11
4.06762	15.19
4.08762	12.25
4.10761	13.72
4.12762	13.36

[d = 400 μm , a = 370 μm]

a = 370 μm : 1/18

Incident beam

[d = 400 μm , a = 370 μm]

Incident beam

Detector angle [mrad]	He ⁺ signal [count/s]
0	46.5
0.02001	50.5
0.04	60.5
0.06	56
0.07999	54.5
0.1	67
0.12001	80.5
0.14	85.5
0.16	102.5
0.17999	114
0.2	133
0.22001	159
0.24	184.5
0.26	216
0.27999	306.5
0.3	378
0.32001	585.5
0.34	969.5
0.36	2039
0.37999	6398
0.4	19519
0.42001	41726
0.44	66911
0.46	84012.5
0.47999	90894
0.5	85499.5
0.52001	69181.5
0.54	43139.5
0.56	19789
0.57999	6187.5
0.6	1992
0.62001	901
0.64	548.5
0.66	368.5
0.67999	283.5
0.7	232.5
0.72001	179.5
0.74	148
0.76	132

[d = 400 μm , a = 370 μm]

a = 370 μm : 2/18

Incident beam

0.77999	103
0.8	95
0.82001	88

[d = 400 μm , a = 370 μm]

a = 370 μm : 3/18

$\theta_{\text{in}} = 0.498$ mrad

[d = 400 μm , a = 370 μm]

$\theta_{\text{in}} = 0.498$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.67983	20.35
-0.65982	26.80
-0.63983	27.79
-0.61983	36.48
-0.59984	45.16
-0.57983	54.10
-0.55982	83.63
-0.53983	139.46
-0.51983	280.16
-0.49984	1062.33
-0.47983	6538.77
-0.45982	15115.11
-0.43983	17930.39
-0.41983	15533.50
-0.39984	6370.53
-0.37983	2038.06
-0.35982	992.60
-0.33983	595.56
-0.31983	426.57
-0.29984	312.67
-0.27983	252.12
-0.25982	201.99
-0.23983	165.76
-0.21983	127.30
-0.19984	120.35
-0.17983	98.02
-0.15982	94.79
-0.13983	72.96
-0.11983	74.45
-0.09984	65.39
-0.07983	59.43
-5.98E-02	53.97
-0.03983	50.25
-0.01983	51.49
1.60E-04	46.28
2.02E-02	44.54
0.04018	37.72
0.06017	43.55
0.08017	42.06

[d = 400 μm , a = 370 μm]

a = 370 μm : 4/18

$\theta_{\text{in}} = 0.498 \text{ mrad}$

0.10016	42.93
0.12017	40.82
0.14018	48.51
0.16017	47.40
0.18017	52.48
0.20016	54.84
0.22017	60.80
0.24018	60.42
0.26017	72.09
0.28017	77.30
0.30016	92.68
0.32017	107.33
0.34018	129.66
0.36017	158.69
0.38017	226.93
0.40016	459.20
0.42017	2469.85
0.44018	12409.40
0.46017	22891.54
0.48017	31477.93
0.50016	35261.61
0.52017	28891.70
0.54018	21639.99
0.56017	10049.74
0.58017	2331.75
0.60016	519.63
0.62017	214.03
0.64018	142.93
0.66017	101.49
0.68017	89.95
0.70016	78.54
0.72017	80.28
0.74018	70.35
0.76017	67.25
0.78017	65.14
0.80016	58.44
0.82017	53.97
0.84018	48.39
0.86017	50.50
0.88017	69.61
0.90016	90.45
0.92017	100.38
0.94018	101.99

[d = 400 μm , a = 370 μm]

a = 370 μm : 5/18

$\theta_{\text{in}} = 0.498 \text{ mrad}$

0.96017	101.37
0.98017	92.81
1.00016	84.87
1.02017	62.91
1.04018	45.16
1.06017	31.14
1.08017	31.89
1.10016	29.53
1.12017	26.68
1.14018	28.29
1.16017	36.73
1.18017	43.18
1.20016	58.44
1.22017	62.16
1.24018	54.84
1.26017	55.83
1.28017	49.26
1.30016	55.71
1.32017	51.12
1.34018	40.57
1.36017	33.00
1.38017	25.56
1.40016	29.41
1.42017	36.60
1.44018	46.40
1.46017	43.55
1.48017	41.57
1.50016	41.44
1.52017	39.70
1.54018	38.34
1.56017	42.19
1.58017	42.93
1.60016	40.45
1.62017	38.34
1.64018	38.34
1.66017	38.71
1.68017	31.76
1.70016	33.13
1.72017	30.65
1.74018	33.38
1.76017	39.08
1.78017	40.57
1.80016	45.16

[d = 400 μm , a = 370 μm]

a = 370 μm : 6/18

$\theta_{\text{in}} = 0.498 \text{ mrad}$

1.82017	39.58
1.84018	32.51
1.86017	31.76
1.88017	27.79
1.90016	28.41
1.92017	27.30
1.94018	32.51
1.96017	43.92
1.98017	38.46
2.00016	41.32
2.02017	35.36
2.04018	30.89
2.06017	26.68
2.08017	26.92
2.10016	32.01
2.12017	32.63
2.14018	34.99
2.16017	35.86
2.18017	31.14
2.20016	28.17
2.22017	24.32
2.24018	26.68
2.26017	26.92
2.28017	25.56
2.30016	26.43
2.32017	25.56
2.34018	25.81
2.36017	24.19
2.38017	21.59
2.40016	19.11
2.42017	21.59
2.44018	21.34
2.46017	22.58
2.48017	23.95
2.50016	19.48

[d = 400 μm , a = 370 μm]

a = 370 μm : 7/18

$\theta_{\text{in}} = 1.003 \text{ mrad}$

[d = 400 μm , a = 370 μm]

$\theta_{\text{in}} = 1.003 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.18429	14.39
-0.16428	12.66
-0.14429	12.53
-0.12429	12.04
-0.1043	15.01
-0.08429	14.76
-0.06428	11.79
-0.04429	12.66
-0.02429	12.41
-0.0043	12.28
0.01571	11.66
0.03572	9.68
0.05571	12.41
0.07571	13.03
0.0957	10.17
0.11571	10.55
0.13572	9.55
0.15571	8.69
0.17571	11.79
0.1957	10.17
0.21571	11.91
0.23572	12.78
0.25571	10.92
0.27571	12.16
0.2957	9.80
0.31571	12.66
0.33572	12.04
0.35571	14.89
0.37571	12.04
0.3957	12.04
0.41571	13.40
0.43572	11.41
0.45571	16.38
0.47571	24.19
0.4957	36.11
0.51571	48.27
0.53572	58.94
0.55571	67.37
0.57571	78.04

[d = 400 μm , a = 370 μm]

a = 370 μm : 8/18

$\theta_{\text{in}} = 1.003 \text{ mrad}$

0.5957	86.36
0.61571	76.18
0.63572	65.88
0.65571	48.39
0.67571	27.42
0.6957	21.84
0.71571	22.33
0.73572	25.19
0.75571	23.70
0.77571	26.43
0.7957	31.02
0.81571	39.83
0.83572	50.75
0.85571	134.00
0.87571	691.22
0.8957	2914.04
0.91571	8007.21
0.93572	13070.35
0.95571	16810.98
0.97571	18759.95
0.9957	21254.86
1.01571	23145.77
1.03572	21794.84
1.05571	16504.14
1.07571	9069.54
1.0957	3611.59
1.11571	817.91
1.13572	161.55
1.15571	85.49
1.17571	70.35
1.1957	88.47
1.21571	113.90
1.23572	137.23
1.25571	160.80
1.27571	173.33
1.2957	190.83
1.31571	197.78
1.33572	188.84
1.35571	137.85
1.37571	80.65
1.3957	38.46
1.41571	33.00
1.43572	50.50

[d = 400 μm , a = 370 μm]

a = 370 μm : 9/18

$\theta_{\text{in}} = 1.003 \text{ mrad}$

1.45571	59.56
1.47571	72.96
1.4957	85.61
1.51571	82.76
1.53572	89.71
1.55571	90.82
1.57571	95.29
1.5957	83.50
1.61571	70.35
1.63572	55.21
1.65571	54.35
1.67571	52.24
1.6957	55.83
1.71571	61.67
1.73572	64.77
1.75571	75.81
1.77571	79.66
1.7957	84.74
1.81571	71.72
1.83572	69.36
1.85571	61.91
1.87571	52.86
1.8957	53.60
1.91571	56.83
1.93572	59.43
1.95571	70.35
1.97571	73.58
1.9957	78.42
2.01571	66.50
2.03572	64.40
2.05571	47.89
2.07571	46.65
2.0957	49.75
2.11571	59.93
2.13572	63.15
2.15571	67.50
2.17571	71.10
2.1957	61.05
2.21571	50.13
2.23572	42.81
2.25571	44.79
2.27571	51.24
2.2957	54.35

[d = 400 μm , a = 370 μm]

a = 370 μm : 10/18

$\theta_{\text{in}} = 1.003 \text{ mrad}$

2.31571	54.72
2.33572	58.32
2.35571	49.63
2.37571	42.19
2.3957	43.30
2.41571	39.33
2.43572	42.31
2.45571	41.81
2.47571	43.67
2.4957	37.72
2.51571	38.71
2.53572	34.12
2.55571	35.86
2.57571	32.88
2.5957	34.99
2.61571	30.15
2.63572	30.89
2.65571	30.03
2.67571	29.41
2.6957	26.80
2.71571	28.17
2.73572	26.43
2.75571	27.17
2.77571	22.95
2.7957	24.32
2.81571	21.71
2.83572	21.96
2.85571	18.49
2.87571	18.49
2.8957	18.86
2.91571	17.00
2.93572	17.37
2.95571	17.74
2.97571	16.63
2.9957	14.27
3.01571	15.88
3.03572	13.15
3.05571	14.64
3.07571	15.14
3.0957	15.14
3.11571	12.16

[d = 400 μm , a = 370 μm]

a = 370 μm : 11/18

$\theta_{\text{in}} = 1.515 \text{ mrad}$

[d = 400 μm , a = 370 μm]

$\theta_{\text{in}} = 1.515 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.01652	5.96
0.00349	6.82
0.0235	4.59
4.35E-02	6.08
0.06349	6.20
0.08348	6.33
0.10349	4.96
0.1235	6.82
0.14349	5.58
0.16349	5.71
0.18348	4.96
0.20349	6.58
0.2235	6.08
0.24349	4.96
0.26349	5.46
0.28348	3.97
0.30349	5.83
0.3235	5.34
0.34349	6.33
0.36349	7.94
0.38348	10.92
0.40349	15.14
0.4235	21.96
0.44349	29.03
0.46349	34.74
0.48348	41.69
0.50349	48.14
0.5235	53.85
0.54349	46.78
0.56349	49.01
0.58348	30.15
0.60349	20.47
0.6235	14.27
0.64349	8.19
0.66349	9.68
0.68348	6.45
0.70349	6.33
0.7235	7.20
0.74349	8.31

[d = 400 μm , a = 370 μm]

a = 370 μm : 12/18

$\theta_{\text{in}} = 1.515 \text{ mrad}$

0.76349	7.32
0.78348	7.94
0.80349	7.82
0.8235	6.45
0.84349	10.42
0.86349	20.35
0.88348	32.14
0.90349	46.16
0.9235	58.07
0.94349	69.98
0.96349	91.94
0.98348	99.01
1.00349	88.84
1.0235	69.48
1.04349	42.31
1.06349	23.70
1.08348	13.77
1.10349	14.14
1.1235	11.91
1.14349	12.04
1.16349	23.33
1.18348	43.80
1.20349	62.53
1.2235	89.71
1.24349	108.19
1.26349	124.32
1.28348	136.73
1.30349	131.64
1.3235	134.87
1.34349	141.57
1.36349	240.09
1.38348	643.95
1.40349	2189.31
1.4235	4929.14
1.44349	7947.03
1.46349	10528.79
1.48348	11850.19
1.50349	13891.24
1.5235	15135.71
1.54349	14814.98
1.56349	11900.94
1.58348	6819.81
1.60349	2905.47

[d = 400 μm , a = 370 μm]

a = 370 μm : 13/18

$\theta_{\text{in}} = 1.515 \text{ mrad}$

1.6235	967.54
1.64349	432.65
1.66349	293.56
1.68348	256.71
1.70349	259.69
1.7235	279.54
1.74349	285.00
1.76349	259.94
1.78348	197.90
1.80349	132.88
1.8235	83.13
1.84349	93.06
1.86349	98.64
1.88348	108.19
1.90349	114.89
1.9235	124.94
1.94349	120.35
1.96349	118.00
1.98348	101.62
2.00349	83.50
2.0235	82.39
2.04349	78.42
2.06349	86.98
2.08348	92.81
2.10349	96.90
2.1235	104.10
2.14349	95.04
2.16349	85.24
2.18348	75.07
2.20349	69.73
2.2235	62.91
2.24349	78.29
2.26349	76.93
2.28348	84.50
2.30349	84.87
2.3235	76.06
2.34349	65.51
2.36349	58.56
2.38348	64.52
2.40349	65.02
2.4235	73.70
2.44349	72.71
2.46349	66.88

[d = 400 μm , a = 370 μm]

a = 370 μm : 14/18

$\theta_{\text{in}} = 1.515 \text{ mrad}$

2.48348	57.70
2.50349	46.90
2.5235	50.87
2.54349	56.70
2.56349	61.17
2.58348	63.77
2.60349	54.22

[d = 400 μm , a = 370 μm]

a = 370 μm : 15/18

$\theta_{\text{in}} = 1.978 \text{ mrad}$

[d = 400 μm , a = 370 μm]

$\theta_{\text{in}} = 1.978 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.05952	4.84
-0.03951	4.59
-0.01952	3.72
4.80E-04	4.22
0.02047	3.23
0.04048	4.09
0.06049	3.72
0.08048	4.34
0.10048	1.86
0.12047	2.61
0.14048	3.85
0.16049	3.72
0.18048	3.10
0.20048	3.47
0.22047	4.22
0.24048	3.10
0.26049	3.35
0.28048	5.34
0.30048	3.10
0.32047	4.96
0.34048	4.09
0.36049	4.22
0.38048	4.22
0.40048	4.96
0.42047	4.47
0.44048	4.71
0.46049	3.97
0.48048	2.85
0.50048	5.71
0.52047	2.98
0.54048	5.46
0.56049	7.20
0.58048	7.82
0.60048	13.15
0.62047	20.84
0.64048	26.18
0.66049	34.49
0.68048	36.73
0.70048	52.86

[d = 400 μm , a = 370 μm]

a = 370 μm : 16/18

$\theta_{\text{in}} = 1.978 \text{ mrad}$

0.72047	52.61
0.74048	52.86
0.76049	50.25
0.78048	33.25
0.80048	22.83
0.82047	10.30
0.84048	8.44
0.86049	5.46
0.88048	7.57
0.90048	7.20
0.92047	6.33
0.94048	9.06
0.96049	13.40
0.98048	17.25
1.00048	31.14
1.02047	46.90
1.04048	54.59
1.06049	76.68
1.08048	75.44
1.10048	87.85
1.12047	74.69
1.14048	53.60
1.16049	28.91
1.18048	18.86
1.20048	12.16
1.22047	10.67
1.24048	14.64
1.26049	24.07
1.28048	37.97
1.30048	51.86
1.32047	71.84
1.34048	88.59
1.36049	97.52
1.38048	100.87
1.40048	87.60
1.42047	61.91
1.44048	37.72
1.46049	21.09
1.48048	23.57
1.50048	38.22
1.52047	54.72
1.54048	71.34
1.56049	89.33

[d = 400 μm , a = 370 μm]

a = 370 μm : 17/18

$\theta_{\text{in}} = 1.978 \text{ mrad}$

1.58048	102.24
1.60048	109.93
1.62047	111.67
1.64048	85.98
1.66049	61.54
1.68048	43.43
1.70048	52.61
1.72047	64.64
1.74048	92.06
1.76049	121.47
1.78048	158.20
1.80048	201.62
1.82047	256.71
1.84048	471.11
1.86049	1330.09
1.88048	2876.69
1.90048	4732.73
1.92047	7070.69
1.94048	8385.88
1.96049	9549.96
1.98048	10333.37
2.00048	10545.79
2.02047	9033.31
2.04048	6267.79
2.06049	2997.79
2.08048	1224.38
2.10048	542.46
2.12047	381.90
2.14048	342.32
2.16049	329.17
2.18048	281.90
2.20048	228.42
2.22047	164.90
2.24048	121.84
2.26049	115.64
2.28048	107.82
2.30048	123.21
2.32047	125.44
2.34048	114.27
2.36049	104.35
2.38048	84.74
2.40048	85.98
2.42047	83.87

[d = 400 μm , a = 370 μm]

a = 370 μm : 18/18

$\theta_{\text{in}} = 1.978 \text{ mrad}$

2.44048	90.20
2.46049	97.15
2.48048	94.17
2.50048	89.71
2.52047	76.31
2.54048	69.48

[d = 400 μm , a = 390 μm]

a = 390 μm : 1/19

Incident beam

[d = 400 μm , a = 390 μm]

Incident beam

Detector angle [mrad]	He ⁺ signal [count/s]
0	17.5
0.02001	12.5
0.04	11.5
0.06	15
0.07999	13
0.1	17
0.12001	38
0.14	55
0.16	68
0.17999	98
0.2	132
0.22001	157
0.24	180
0.26	227.5
0.27999	282
0.3	356.5
0.32001	570
0.34	849
0.36	1835.5
0.37999	5317.5
0.4	17219.5
0.42001	38324
0.44	63507.5
0.46	81612.5
0.47999	90504.5
0.5	87106.5
0.52001	72985.5
0.54	48049.5
0.56	23214
0.57999	7777
0.6	2410.5
0.62001	1031
0.64	625.5
0.66	420
0.67999	305.5
0.7	253.5
0.72001	188.5
0.74	159.5
0.76	138.5

[d = 400 μm , a = 390 μm]

a = 390 μm : 2/19

Incident beam

0.77999	135.5
0.8	109
0.82001	86
0.84	79.5
0.86	72
0.87999	64
0.9	63
0.92001	54.5
0.94	41
0.96	49.5
0.97999	52

[d = 400 μm , a = 390 μm]

a = 390 μm : 3/19

$\theta_{\text{in}} = 0.469$ mrad

[d = 400 μm , a = 390 μm]

$\theta_{\text{in}} = 0.469$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.6534	17.49
-0.63339	20.37
-0.6134	26.99
-0.5934	28.24
-0.57341	42.24
-0.5534	49.24
-0.53339	79.10
-0.5134	125.71
-0.4934	257.55
-0.47341	986.71
-0.4534	6324.66
-0.43339	13832.10
-0.4134	16187.54
-0.3934	14105.40
-0.37341	5789.57
-0.3534	1939.06
-0.33339	929.73
-0.3134	593.08
-0.2934	404.63
-0.27341	301.41
-0.2534	242.93
-0.23339	193.44
-0.2134	169.33
-0.1934	144.71
-0.17341	112.97
-0.1534	103.10
-0.13339	92.35
-0.1134	76.85
-0.0934	72.35
-0.07341	67.61
-0.0534	62.98
-3.34E-02	58.23
-0.0134	53.48
0.0066	50.86
2.66E-02	46.61
4.66E-02	45.24
0.06661	48.86
0.0866	48.11
0.1066	51.11

[d = 400 μm , a = 390 μm]

a = 390 μm : 4/19

$\theta_{\text{in}} = 0.469 \text{ mrad}$

0.12659	53.86
0.1466	57.36
0.16661	58.23
0.1866	65.36
0.2066	79.73
0.22659	89.72
0.2466	100.97
0.26661	113.72
0.2866	132.21
0.3066	155.08
0.32659	200.57
0.3466	281.29
0.36661	494.98
0.3866	1558.30
0.4066	8196.24
0.42659	18885.13
0.4466	28840.98
0.46661	37321.52
0.4866	32055.17
0.5066	23257.36
0.52659	9785.78
0.5466	1208.02
0.56661	219.31
0.5866	131.34
0.6066	103.10
0.62659	94.97
0.6466	75.85
0.66661	74.48
0.6866	66.48
0.7066	54.61
0.72659	51.11
0.7466	52.48
0.76661	41.36
0.7866	41.24
0.8066	41.11
0.82659	38.36
0.8466	36.36
0.86661	38.74
0.8866	37.49
0.9066	31.99
0.92659	37.49
0.9466	38.61
0.96661	32.62

[d = 400 μm , a = 390 μm]

a = 390 μm : 5/19

$\theta_{\text{in}} = 0.469 \text{ mrad}$

0.9866	31.74
1.0066	23.87
1.02659	24.87
1.0466	22.62
1.06661	23.49
1.0866	23.74
1.1066	20.37
1.12659	23.12
1.1466	21.62
1.16661	18.62
1.1866	22.12
1.2066	22.62
1.22659	18.74
1.2466	21.99
1.26661	18.12
1.2866	20.62
1.3066	18.24
1.32659	17.00
1.3466	16.50
1.36661	17.49
1.3866	15.00
1.4066	20.99
1.42659	17.12
1.4466	17.99
1.46661	17.99
1.4866	15.75
1.5066	19.24
1.52659	17.12
1.5466	17.00
1.56661	14.12
1.5866	16.62
1.6066	13.87
1.62659	14.75
1.6466	13.50
1.66661	15.75
1.6866	17.99
1.7066	14.62
1.72659	16.12
1.7466	14.50
1.76661	16.50
1.7866	17.00
1.8066	17.12
1.82659	17.99

[d = 400 μm , a = 390 μm]

a = 390 μm : 6/19

$\theta_{\text{in}} = 0.469 \text{ mrad}$

1.8466	19.87
1.86661	14.00
1.8866	15.12
1.9066	13.25
1.92659	17.12
1.9466	17.49
1.96661	14.50
1.9866	12.75
2.0066	12.37
2.02659	14.50
2.0466	13.87
2.06661	15.62
2.0866	10.75
2.1066	15.25
2.12659	13.50
2.1466	12.62
2.16661	13.37
2.1866	15.12
2.2066	11.12
2.22659	12.87
2.2466	10.75
2.26661	12.37
2.2866	11.87
2.3066	10.50
2.32659	12.12
2.3466	11.50
2.36661	11.00
2.3866	11.12
2.4066	10.75
2.42659	9.75
2.4466	10.75
2.46661	11.50
2.4866	11.87
2.5066	10.25
2.52659	13.50
2.5466	12.37
2.56661	10.12
2.5866	10.50
2.6066	11.25
2.62659	11.75
2.6466	14.75
2.66661	10.00
2.6866	11.00

$$[d = 400 \mu\text{m}, a = 390 \mu\text{m}]$$

$$\theta_{\text{in}} = 0.469 \text{ mrad}$$

$$a = 390 \mu\text{m}: 7/19$$

2.7066 | 12.50

[d = 400 μm , a = 390 μm]

a = 390 μm : 8/19

$\theta_{\text{in}} = 0.990$ mrad

[d = 400 μm , a = 390 μm]

$\theta_{\text{in}} = 0.990$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.30431	22.99
-0.28432	20.62
-0.26432	21.87
-0.24433	19.37
-0.22432	15.37
-0.20431	18.24
-0.18432	17.49
-0.16432	20.37
-0.14433	15.25
-0.12432	14.50
-0.10431	15.62
-0.08432	13.37
-0.06432	15.37
-0.04433	12.50
-0.02432	11.50
-0.00431	12.37
0.01568	15.12
0.03568	13.50
0.05567	13.00
0.07568	12.50
0.09569	13.12
0.11568	12.50
0.13568	12.75
0.15567	12.87
0.17568	13.12
0.19569	13.62
0.21568	13.37
0.23568	15.12
0.25567	16.50
0.27568	12.50
0.29569	12.62
0.31568	14.25
0.33568	14.62
0.35567	14.25
0.37568	13.37
0.39569	16.00
0.41568	17.62
0.43568	15.87
0.45567	16.00

[d = 400 μm , a = 390 μm]

a = 390 μm : 9/19

$\theta_{\text{in}} = 0.990 \text{ mrad}$

0.47568	21.12
0.49569	25.87
0.51568	25.49
0.53568	27.24
0.55567	22.49
0.57568	29.37
0.59569	25.12
0.61568	29.12
0.63568	28.12
0.65567	24.37
0.67568	29.12
0.69569	32.49
0.71568	32.24
0.73568	33.99
0.75567	34.12
0.77568	40.49
0.79569	43.36
0.81568	61.73
0.83568	86.10
0.85567	235.06
0.87568	1356.73
0.89569	4612.78
0.91568	10589.17
0.93568	16971.94
0.95567	20271.48
0.97568	21395.40
0.99569	22140.18
1.01568	22343.63
1.03568	19620.42
1.05567	12673.81
1.07568	5469.03
1.09569	1318.62
1.11568	130.46
1.13568	63.23
1.15567	43.49
1.17568	36.36
1.19569	35.86
1.21568	36.99
1.23568	44.11
1.25567	49.49
1.27568	46.36
1.29569	44.61
1.31568	47.24

[d = 400 μm , a = 390 μm]

a = 390 μm : 10/19

$\theta_{\text{in}} = 0.990$ mrad

1.33568	51.98
1.35567	44.86
1.37568	33.99
1.39569	19.12
1.41568	18.62
1.43568	18.37
1.45567	22.74
1.47568	20.99
1.49569	22.87
1.51568	21.87
1.53568	20.62
1.55567	24.37
1.57568	23.87
1.59569	20.49
1.61568	17.62
1.63568	20.24
1.65567	16.87
1.67568	16.75
1.69569	17.00
1.71568	18.37
1.73568	18.12
1.75567	16.87
1.77568	21.12
1.79569	19.87
1.81568	18.24
1.83568	18.37
1.85567	14.62
1.87568	15.62
1.89569	18.12
1.91568	18.62
1.93568	16.12
1.95567	16.00
1.97568	19.49
1.99569	15.37
2.01568	17.99
2.03568	16.75
2.05567	17.12
2.07568	16.25
2.09569	15.37
2.11568	14.50
2.13568	18.62
2.15567	15.62
2.17568	17.87

[d = 400 μm , a = 390 μm]

a = 390 μm : 11/19

$\theta_{\text{in}} = 0.990 \text{ mrad}$

2.19569	16.87
2.21568	19.87
2.23568	15.12
2.25567	15.62
2.27568	16.37
2.29569	15.87
2.31568	16.37
2.33568	14.62
2.35567	17.99
2.37568	15.00
2.39569	16.25
2.41568	16.12
2.43568	14.00
2.45567	16.87
2.47568	18.24
2.49569	17.12
2.51568	17.49
2.53568	17.49
2.55567	16.37
2.57568	14.37
2.59569	14.00
2.61568	16.25
2.63568	16.37
2.65567	13.12
2.67568	13.75
2.69569	13.75
2.71568	13.87
2.73568	15.50
2.75567	13.00
2.77568	16.25
2.79569	17.62
2.81568	14.00
2.83568	15.62
2.85567	15.12
2.87568	14.12
2.89569	15.25

[d = 400 μm , a = 390 μm]

a = 390 μm : 12/19

$\theta_{\text{in}} = 1.501 \text{ mrad}$

[d = 400 μm , a = 390 μm]

$\theta_{\text{in}} = 1.501 \text{ mrad}$

Detection angle [mrad]	He ⁺ signal [count/s]
-0.15292	6.62
-0.13292	8.00
-0.11292	7.25
-9.29E-02	6.12
-0.07293	7.75
-0.05292	5.62
-0.03292	4.62
-0.01292	7.12
0.00708	6.12
0.02707	7.00
0.04708	5.25
0.06708	5.12
0.08708	6.37
0.10708	7.25
0.12707	6.87
0.14708	6.87
0.16708	6.37
0.18708	5.37
0.20708	5.87
0.22707	6.87
0.24708	6.87
0.26708	6.75
0.28708	7.37
0.30708	7.37
0.32707	7.50
0.34708	7.75
0.36708	7.00
0.38708	10.00
0.40708	8.62
0.42707	9.37
0.44708	10.50
0.46708	9.50
0.48708	8.00
0.50708	10.12
0.52707	9.87
0.54708	8.50
0.56708	7.25
0.58708	7.25
0.60708	6.75

[d = 400 μm , a = 390 μm]

a = 390 μm : 13/19

$\theta_{\text{in}} = 1.501 \text{ mrad}$

0.62707	7.37
0.64708	7.75
0.66708	7.75
0.68708	7.25
0.70708	6.62
0.72707	9.25
0.74708	8.00
0.76708	8.50
0.78708	9.62
0.80708	7.50
0.82707	9.75
0.84708	13.50
0.86708	11.62
0.88708	16.37
0.90708	16.62
0.92707	16.25
0.94708	14.75
0.96708	13.12
0.98708	13.25
1.00708	12.87
1.02707	9.87
1.04708	9.37
1.06708	12.75
1.08708	12.25
1.10708	13.25
1.12707	17.74
1.14708	19.99
1.16708	20.87
1.18708	28.87
1.20708	29.87
1.22707	39.24
1.24708	48.24
1.26708	52.36
1.28708	87.35
1.30708	151.21
1.32707	342.40
1.34708	1041.32
1.36708	2861.29
1.38708	5786.07
1.40708	8900.91
1.42707	11430.42
1.44708	13566.80
1.46708	15854.01

[d = 400 μm , a = 390 μm]

a = 390 μm : 14/19

$\theta_{\text{in}} = 1.501 \text{ mrad}$

1.48708	16715.64
1.50708	15604.59
1.52707	11537.89
1.54708	6391.39
1.56708	2443.04
1.58708	706.92
1.60708	177.07
1.62707	70.60
1.64708	62.61
1.66708	59.23
1.68708	62.48
1.70708	63.11
1.72707	57.23
1.74708	46.36
1.76708	33.49
1.78708	22.87
1.80708	25.24
1.82707	23.74
1.84708	23.99
1.86708	32.24
1.88708	27.62
1.90708	25.49
1.92707	28.49
1.94708	22.99
1.96708	22.62
1.98708	22.12
2.00708	18.87
2.02707	21.37
2.04708	20.99
2.06708	24.49
2.08708	25.24
2.10708	23.74
2.12707	20.24
2.14708	20.12
2.16708	20.49
2.18708	17.00
2.20708	16.87
2.22707	21.24
2.24708	21.24
2.26708	19.99
2.28708	20.87
2.30708	19.37
2.32707	19.24

[d = 400 μm , a = 390 μm]

a = 390 μm : 15/19

$\theta_{\text{in}} = 1.501 \text{ mrad}$

2.34708	19.74
2.36708	17.62
2.38708	19.99
2.40708	18.49
2.42707	20.49
2.44708	15.87
2.46708	14.37
2.48708	18.37
2.50708	18.49
2.52707	18.37
2.54708	19.99
2.56708	18.37
2.58708	15.75
2.60708	14.87
2.62707	16.75
2.64708	16.87
2.66708	21.99
2.68708	20.87
2.70708	17.00
2.72707	16.62

[d = 400 μm , a = 390 μm]

a = 390 μm : 16/19

$\theta_{\text{in}} = 1.961$ mrad

[d = 400 μm , a = 390 μm]

$\theta_{\text{in}} = 1.961$ mrad

Detection angle [mrad]	He ⁺ signal [count/s]
-0.27527	3.62
-0.25528	6.25
-0.23528	5.37
-2.15E-01	4.25
-0.19528	5.37
-0.17527	5.25
-0.15528	5.12
-0.13528	3.75
-0.11529	4.50
-0.09528	5.00
-0.07527	5.00
-0.05528	4.25
-0.03528	4.50
-0.01529	4.25
0.00472	4.37
0.02473	4.62
0.04472	4.12
0.06472	4.37
0.08471	3.62
0.10472	5.00
0.12473	4.37
0.14472	4.25
0.16472	3.75
0.18471	4.62
0.20472	2.75
0.22473	2.62
0.24472	4.75
0.26472	5.62
0.28471	4.50
0.30472	4.50
0.32473	5.12
0.34472	4.00
0.36472	4.37
0.38471	4.87
0.40472	5.25
0.42473	4.25
0.44472	5.00
0.46472	4.50
0.48471	4.75

[d = 400 μm , a = 390 μm]

a = 390 μm : 17/19

$\theta_{\text{in}} = 1.961 \text{ mrad}$

0.50472	5.37
0.52473	6.50
0.54472	7.75
0.56472	8.25
0.58471	8.50
0.60472	6.87
0.62473	10.37
0.64472	6.75
0.66472	10.75
0.68471	8.37
0.70472	4.25
0.72473	8.00
0.74472	5.87
0.76472	5.87
0.78471	6.12
0.80472	5.87
0.82473	5.75
0.84472	5.37
0.86472	4.37
0.88471	6.50
0.90472	7.62
0.92473	7.00
0.94472	8.00
0.96472	7.87
0.98471	12.37
1.00472	12.25
1.02473	13.75
1.04472	14.00
1.06472	10.62
1.08471	8.12
1.10472	8.87
1.12473	4.62
1.14472	7.37
1.16472	7.12
1.18471	6.50
1.20472	9.75
1.22473	12.25
1.24472	10.50
1.26472	15.00
1.28471	13.62
1.30472	12.37
1.32473	18.99
1.34472	14.87

[d = 400 μm , a = 390 μm]

a = 390 μm : 18/19

$\theta_{\text{in}} = 1.961 \text{ mrad}$

1.36472	15.00
1.38471	13.62
1.40472	8.25
1.42473	8.25
1.44472	9.75
1.46472	11.75
1.48471	12.37
1.50472	17.24
1.52473	18.74
1.54472	23.49
1.56472	26.24
1.58471	23.62
1.60472	24.24
1.62473	22.12
1.64472	17.99
1.66472	21.12
1.68471	25.74
1.70472	37.74
1.72473	51.36
1.74472	74.73
1.76472	103.72
1.78471	139.96
1.80472	233.81
1.82473	547.47
1.84472	1552.67
1.86472	3192.32
1.88471	5400.55
1.90472	7598.41
1.92473	9270.05
1.94472	10821.35
1.96472	11993.26
1.98471	12019.00
2.00472	10059.45
2.02473	6664.69
2.04472	3220.56
2.06472	1202.03
2.08471	392.76
2.10472	204.07
2.12473	137.34
2.14472	103.34
2.16472	84.23
2.18471	59.36
2.20472	47.36

[d = 400 μm , a = 390 μm]

a = 390 μm : 19/19

$\theta_{\text{in}} = 1.961 \text{ mrad}$

2.22473	39.99
2.24472	34.12
2.26472	35.86
2.28471	32.12
2.30472	35.61
2.32473	32.37
2.34472	27.62
2.36472	25.87
2.38471	20.74
2.40472	23.12
2.42473	27.37
2.44472	27.12
2.46472	26.37
2.48471	22.24
2.50472	23.37
2.52473	20.74
2.54472	21.87
2.56472	23.37
2.58471	23.12
2.60472	24.24
