

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P623539

Luminaire Tested: **IFLD-M-SA4D-830-U-44**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623539
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-830-U-44
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 4 distribution lens
Light Source: (64) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	25811.1 lumens	Max Intensity:	83461.5 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	103.4 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 0.5' x H: 0')		

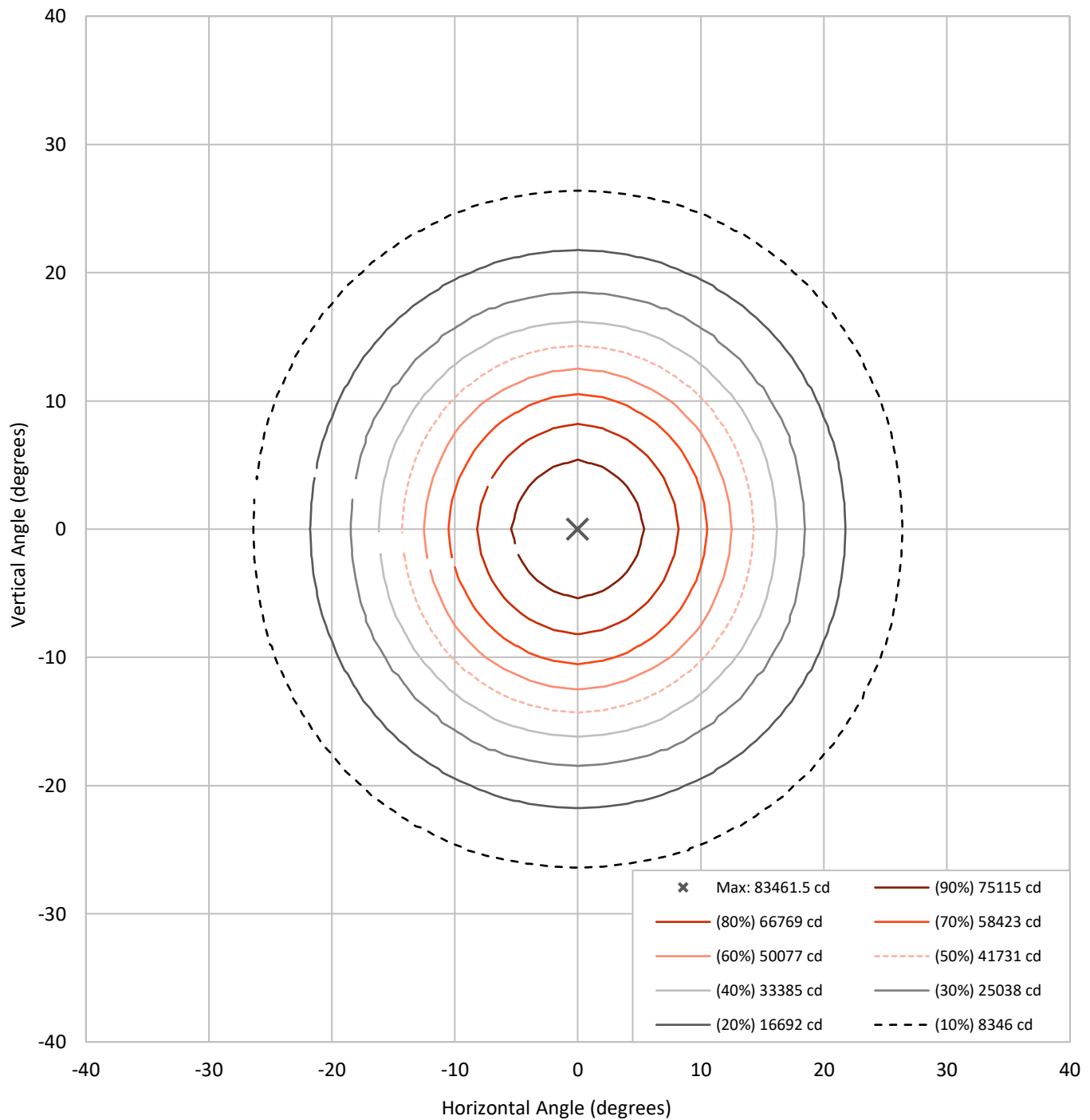
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	9313.1 lumens	Field Lumens:	15726.5 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

Input Watts (W): 249.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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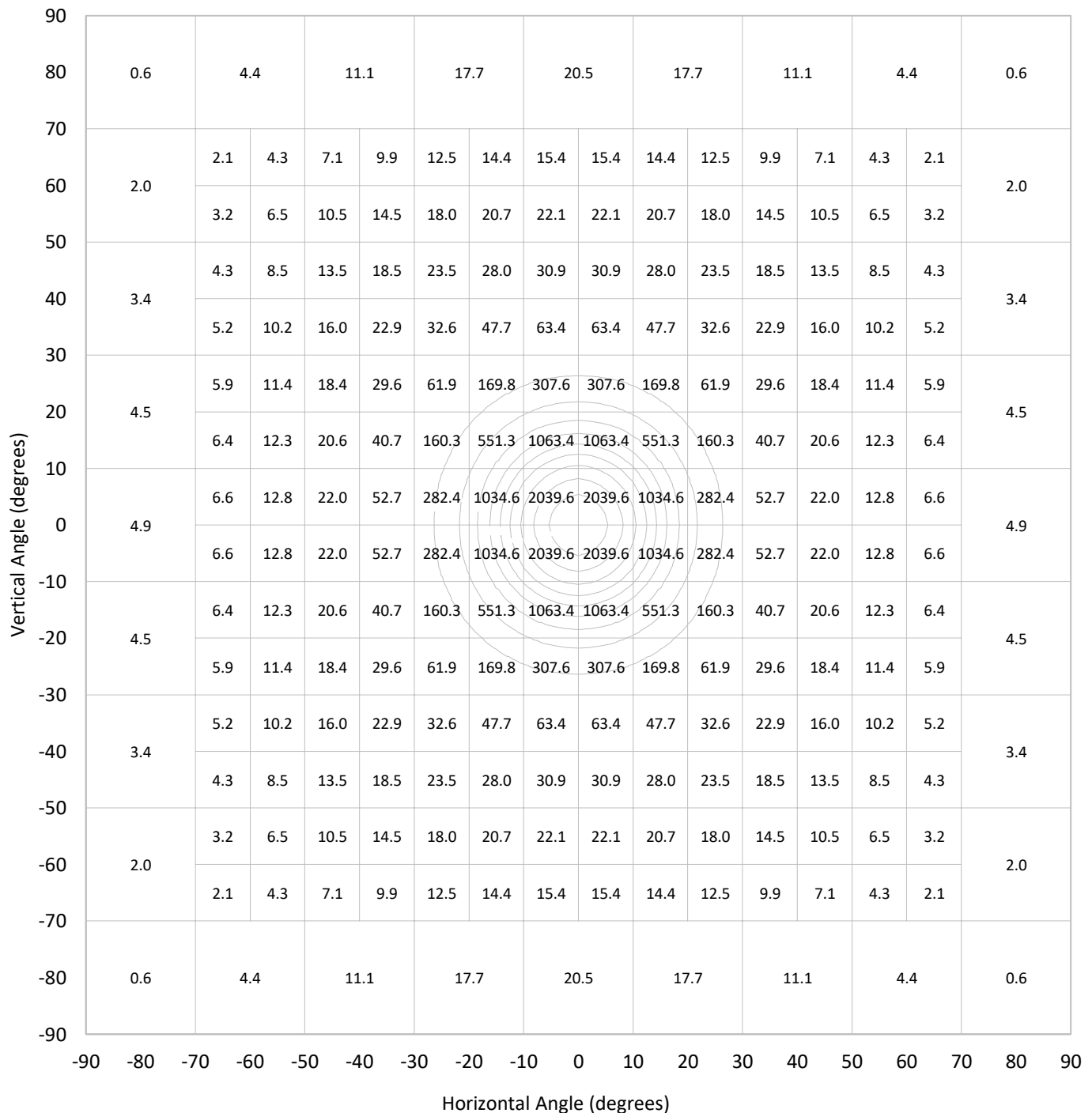
Iso-Candela Plot



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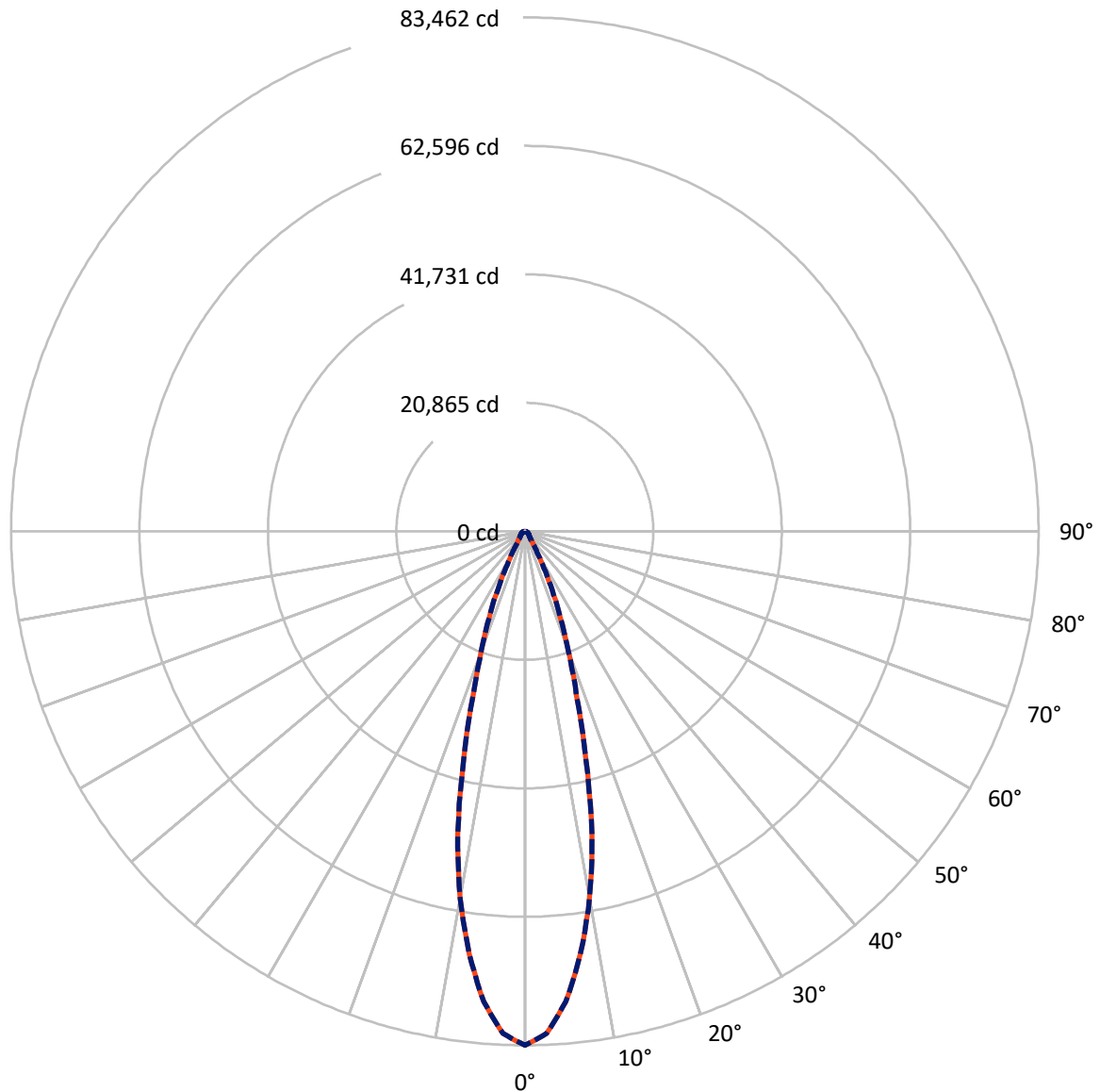
Lumen Table



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Luminous Intensity Polar Plot



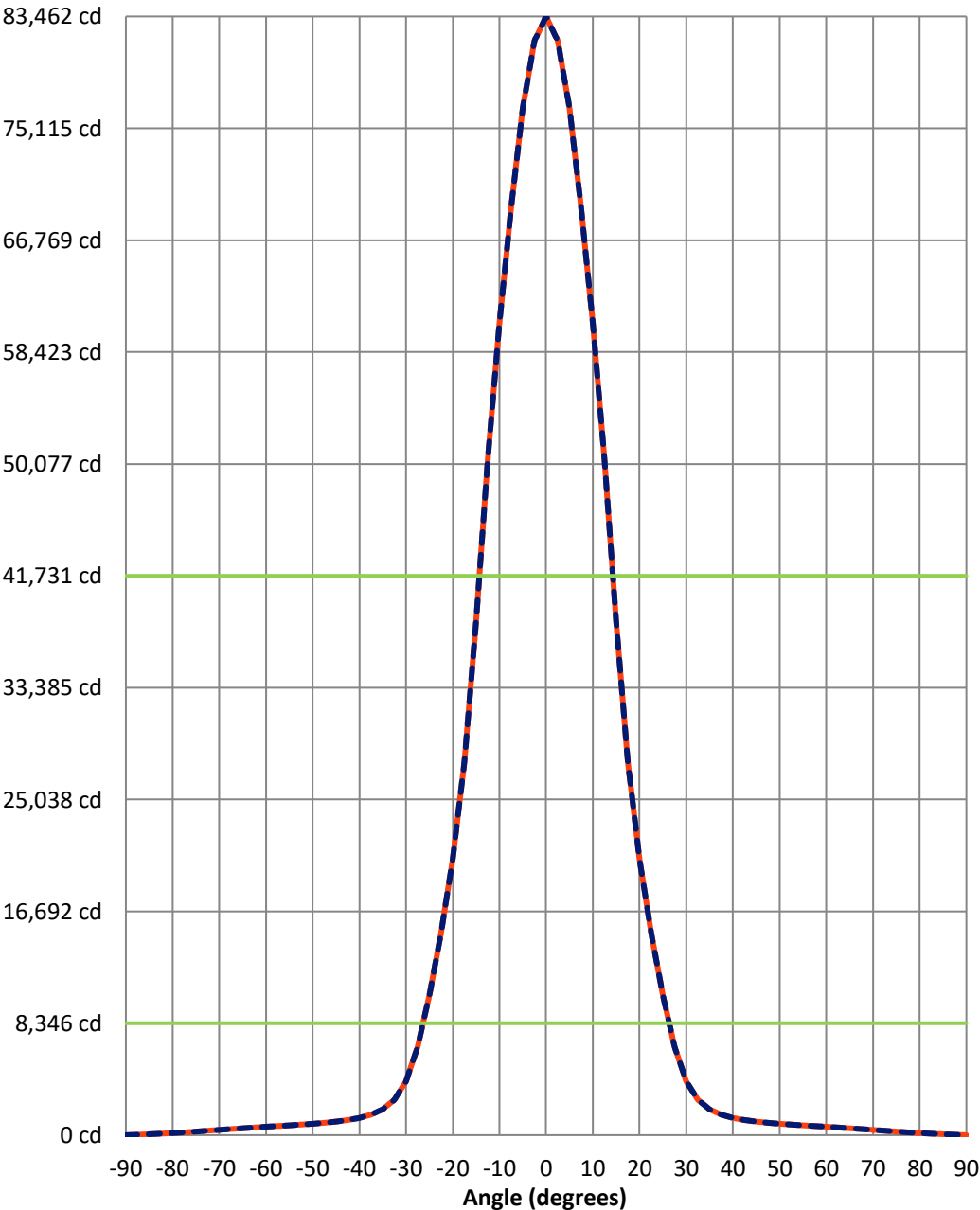
— Vertical Distribution Through 0-Deg

- - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 28.6°
V Angle: 28.6°
Lumens: 9313.1
Efficiency: 36.1%

Field:
H Angle: 52.7°
V Angle: 52.7°
Lumens: 15726.5
Efficiency: 60.9%

Spill:
Lumens: 10084.6
Efficiency: 39.1%

— Vertical Distribution through 0-Deg
- - - Horizontal Distribution through 0-Deg

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FIELD
BEAM

CANDELA DISTRIBUTION:

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	25°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	29.6	29.6	29.6	29.6	29.6	29.6	29.6	26.9	26.9	26.9	26.9
85°	67.3	67.3	67.3	67.3	67.3	64.6	64.6	64.6	61.9	61.9	59.2
82.5°	107.6	107.6	107.6	107.6	105.0	105.0	102.3	102.3	99.6	99.6	96.9
80°	153.4	153.4	153.4	153.4	150.7	148.0	148.0	145.3	142.6	139.9	137.2
77.5°	207.2	207.2	207.2	204.5	201.8	201.8	199.1	193.8	191.1	185.7	183.0
75°	266.4	266.4	266.4	263.7	261.0	258.3	253.0	250.3	244.9	239.5	231.4
72.5°	331.0	331.0	331.0	328.3	322.9	320.2	314.9	309.5	304.1	296.0	287.9
70°	392.9	392.9	392.9	387.5	384.8	379.4	374.1	368.7	360.6	352.5	344.5
67.5°	454.8	454.8	454.8	449.4	446.7	441.3	436.0	427.9	419.8	409.0	401.0
65°	511.3	511.3	508.6	505.9	503.2	497.9	489.8	484.4	476.3	465.6	454.8
62.5°	570.5	570.5	567.8	565.1	559.7	554.4	546.3	538.2	527.5	516.7	505.9
60°	629.7	629.7	627.0	624.3	619.0	610.9	602.8	594.7	584.0	570.5	557.1
57.5°	678.2	678.2	675.5	672.8	667.4	662.0	653.9	645.9	635.1	624.3	608.2
55°	729.3	729.3	726.6	721.2	715.8	710.4	702.4	691.6	680.8	667.4	656.6
52.5°	788.5	788.5	785.8	780.4	772.3	764.3	753.5	740.1	726.6	713.1	697.0
50°	847.7	847.7	842.3	836.9	831.5	820.8	810.0	796.6	780.4	764.3	745.4
47.5°	920.4	920.4	915.0	906.9	896.1	885.4	869.2	850.4	834.2	815.4	793.9
45°	1009.2	1009.2	1001.1	993.0	979.6	960.7	941.9	920.4	896.1	871.9	845.0
42.5°	1124.9	1124.9	1114.1	1100.7	1081.8	1057.6	1028.0	998.4	968.8	936.5	904.2
40°	1281.0	1281.0	1264.8	1246.0	1216.4	1181.4	1138.3	1098.0	1057.6	1011.9	971.5
37.5°	1525.8	1525.8	1498.9	1464.0	1415.5	1356.3	1283.7	1229.8	1167.9	1108.7	1054.9
35°	1926.8	1926.8	1878.4	1816.5	1730.4	1622.7	1507.0	1415.5	1313.3	1229.8	1151.8
32.5°	2640.0	2640.0	2543.1	2422.0	2257.8	2047.9	1854.2	1692.7	1525.8	1396.7	1272.9
30°	4020.5	4020.5	3813.3	3557.6	3205.1	2763.8	2432.7	2123.3	1840.7	1628.1	1447.8
27.5°	6612.0	6504.4	6181.4	5651.3	4924.7	4020.5	3444.6	2790.7	2343.9	1937.6	1687.3
25°	10438.7	10261.1	9728.3	8859.1	7675.0	6332.1	5156.1	3915.5	3132.4	2457.0	1991.4
22.5°	15088.9	14844.1	14120.2	12938.8	11337.6	9550.7	7648.1	5863.9	4276.1	3248.1	2457.0
20°	20594.9	20266.6	19295.1	17718.1	15597.6	13323.6	10783.2	8393.5	6103.4	4276.1	3132.4
17.5°	27863.6	27363.0	25891.0	23522.8	20594.9	17529.8	14354.3	11270.3	8393.5	5863.9	3915.5
15°	38313.1	37468.1	34997.6	31074.0	26515.3	22241.9	18191.8	14354.3	10783.2	7648.1	5156.1
12.5°	50393.4	49217.4	45813.1	40503.6	34308.7	27551.4	22241.9	17529.8	13323.6	9550.7	6332.1
10°	60571.1	59330.5	55813.2	50487.6	42632.3	34308.7	26515.3	20594.9	15597.6	11337.6	7675.0
7.5°	69169.1	67780.5	63988.8	58162.5	50487.6	40503.6	31074.0	23522.8	17718.1	12938.8	8859.1
5°	76636.9	74876.9	70463.5	63988.8	55813.2	45813.1	34997.6	25891.0	19295.1	14120.2	9728.3
2.5°	81626.2	79559.4	74876.9	67780.5	59330.5	49217.4	37468.1	27363.0	20266.6	14844.1	10261.1
0°	83461.5	81626.2	76636.9	69169.1	60571.1	50393.4	38313.1	27863.6	20594.9	15088.9	10438.7

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CANDELA DISTRIBUTION (continued):

	27.5°	30°	32.5°	35°	37.5°	40°	42.5°	45°	47.5°	50°	52.5°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	26.9	26.9	24.2	24.2	24.2	21.5	21.5	21.5	18.8	18.8	18.8
85°	59.2	56.5	56.5	53.8	51.1	48.4	48.4	45.7	43.1	40.4	37.7
82.5°	94.2	91.5	88.8	86.1	83.4	78.0	75.4	72.7	67.3	64.6	61.9
80°	131.9	129.2	123.8	121.1	115.7	110.3	105.0	99.6	94.2	88.8	83.4
77.5°	177.6	169.5	164.2	158.8	150.7	145.3	137.2	131.9	123.8	115.7	107.6
75°	226.1	218.0	209.9	201.8	193.8	183.0	174.9	164.2	156.1	145.3	137.2
72.5°	279.9	269.1	258.3	247.6	236.8	226.1	215.3	201.8	191.1	177.6	164.2
70°	333.7	322.9	312.2	298.7	285.3	271.8	258.3	242.2	228.7	212.6	196.4
67.5°	390.2	376.8	363.3	349.8	336.4	320.2	301.4	285.3	266.4	247.6	231.4
65°	444.0	430.6	414.4	398.3	382.1	366.0	347.2	328.3	306.8	285.3	266.4
62.5°	492.5	479.0	465.6	446.7	430.6	411.7	392.9	368.7	347.2	325.6	301.4
60°	543.6	527.5	511.3	492.5	473.6	454.8	433.3	409.0	387.5	360.6	336.4
57.5°	592.0	575.9	557.1	538.2	516.7	495.2	473.6	449.4	425.2	398.3	371.4
55°	640.5	624.3	605.5	584.0	559.7	535.5	511.3	487.1	462.9	433.3	403.7
52.5°	680.8	664.7	645.9	629.7	602.8	578.6	551.7	522.1	495.2	465.6	436.0
50°	723.9	705.1	683.5	664.7	643.2	619.0	589.3	559.7	527.5	497.9	465.6
47.5°	772.3	748.1	723.9	699.7	678.2	651.2	627.0	594.7	562.4	527.5	495.2
45°	820.8	793.9	767.0	737.4	710.4	683.5	656.6	629.7	594.7	559.7	522.1
42.5°	871.9	839.6	810.0	780.4	748.1	715.8	686.2	656.6	627.0	589.3	551.7
40°	931.1	893.4	855.8	820.8	788.5	750.8	715.8	683.5	651.2	619.0	578.6
37.5°	998.4	952.6	906.9	863.8	823.5	788.5	748.1	710.4	678.2	643.2	602.8
35°	1084.5	1017.2	963.4	909.6	863.8	820.8	780.4	737.4	699.7	664.7	629.7
32.5°	1181.4	1098.0	1025.3	963.4	906.9	855.8	810.0	767.0	723.9	683.5	645.9
30°	1299.8	1192.2	1098.0	1017.2	952.6	893.4	839.6	793.9	748.1	705.1	664.7
27.5°	1466.6	1299.8	1181.4	1084.5	998.4	931.1	871.9	820.8	772.3	723.9	680.8
25°	1687.3	1447.8	1272.9	1151.8	1054.9	971.5	904.2	845.0	793.9	745.4	697.0
22.5°	1937.6	1628.1	1396.7	1229.8	1108.7	1011.9	936.5	871.9	815.4	764.3	713.1
20°	2343.9	1840.7	1525.8	1313.3	1167.9	1057.6	968.8	896.1	834.2	780.4	726.6
17.5°	2790.7	2123.3	1692.7	1415.5	1229.8	1098.0	998.4	920.4	850.4	796.6	740.1
15°	3444.6	2432.7	1854.2	1507.0	1283.7	1138.3	1028.0	941.9	869.2	810.0	753.5
12.5°	4020.5	2763.8	2047.9	1622.7	1356.3	1181.4	1057.6	960.7	885.4	820.8	764.3
10°	4924.7	3205.1	2257.8	1730.4	1415.5	1216.4	1081.8	979.6	896.1	831.5	772.3
7.5°	5651.3	3557.6	2422.0	1816.5	1464.0	1246.0	1100.7	993.0	906.9	836.9	780.4
5°	6181.4	3813.3	2543.1	1878.4	1498.9	1264.8	1114.1	1001.1	915.0	842.3	785.8
2.5°	6504.4	4020.5	2640.0	1926.8	1525.8	1281.0	1124.9	1009.2	920.4	847.7	788.5
0°	6612.0	4020.5	2640.0	1926.8	1525.8	1281.0	1124.9	1009.2	920.4	847.7	788.5

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CANDELA DISTRIBUTION (continued):

	55°	57.5°	60°	62.5°	65°	67.5°	70°	72.5°	75°	77.5°	80°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	16.1	16.1	13.5	13.5	13.5	10.8	10.8	8.1	8.1	5.4	5.4
85°	35.0	32.3	29.6	26.9	24.2	21.5	21.5	18.8	16.1	13.5	10.8
82.5°	56.5	53.8	48.4	43.1	40.4	35.0	29.6	26.9	24.2	18.8	16.1
80°	78.0	72.7	67.3	61.9	56.5	48.4	43.1	37.7	29.6	24.2	21.5
77.5°	102.3	94.2	86.1	78.0	70.0	64.6	56.5	48.4	40.4	32.3	24.2
75°	126.5	115.7	107.6	96.9	88.8	78.0	67.3	59.2	51.1	40.4	29.6
72.5°	153.4	139.9	129.2	115.7	105.0	94.2	80.7	70.0	59.2	48.4	37.7
70°	183.0	166.8	150.7	137.2	123.8	107.6	94.2	80.7	67.3	56.5	43.1
67.5°	212.6	193.8	174.9	156.1	139.9	123.8	107.6	94.2	78.0	64.6	48.4
65°	242.2	220.7	201.8	180.3	158.8	139.9	123.8	105.0	88.8	70.0	56.5
62.5°	274.5	250.3	226.1	201.8	180.3	156.1	137.2	115.7	96.9	78.0	61.9
60°	309.5	282.6	253.0	226.1	201.8	174.9	150.7	129.2	107.6	86.1	67.3
57.5°	341.8	312.2	282.6	250.3	220.7	193.8	166.8	139.9	115.7	94.2	72.7
55°	374.1	341.8	309.5	274.5	242.2	212.6	183.0	153.4	126.5	102.3	78.0
52.5°	403.7	371.4	336.4	301.4	266.4	231.4	196.4	164.2	137.2	107.6	83.4
50°	433.3	398.3	360.6	325.6	285.3	247.6	212.6	177.6	145.3	115.7	88.8
47.5°	462.9	425.2	387.5	347.2	306.8	266.4	228.7	191.1	156.1	123.8	94.2
45°	487.1	449.4	409.0	368.7	328.3	285.3	242.2	201.8	164.2	131.9	99.6
42.5°	511.3	473.6	433.3	392.9	347.2	301.4	258.3	215.3	174.9	137.2	105.0
40°	535.5	495.2	454.8	411.7	366.0	320.2	271.8	226.1	183.0	145.3	110.3
37.5°	559.7	516.7	473.6	430.6	382.1	336.4	285.3	236.8	193.8	150.7	115.7
35°	584.0	538.2	492.5	446.7	398.3	349.8	298.7	247.6	201.8	158.8	121.1
32.5°	605.5	557.1	511.3	465.6	414.4	363.3	312.2	258.3	209.9	164.2	123.8
30°	624.3	575.9	527.5	479.0	430.6	376.8	322.9	269.1	218.0	169.5	129.2
27.5°	640.5	592.0	543.6	492.5	444.0	390.2	333.7	279.9	226.1	177.6	131.9
25°	656.6	608.2	557.1	505.9	454.8	401.0	344.5	287.9	231.4	183.0	137.2
22.5°	667.4	624.3	570.5	516.7	465.6	409.0	352.5	296.0	239.5	185.7	139.9
20°	680.8	635.1	584.0	527.5	476.3	419.8	360.6	304.1	244.9	191.1	142.6
17.5°	691.6	645.9	594.7	538.2	484.4	427.9	368.7	309.5	250.3	193.8	145.3
15°	702.4	653.9	602.8	546.3	489.8	436.0	374.1	314.9	253.0	199.1	148.0
12.5°	710.4	662.0	610.9	554.4	497.9	441.3	379.4	320.2	258.3	201.8	148.0
10°	715.8	667.4	619.0	559.7	503.2	446.7	384.8	322.9	261.0	201.8	150.7
7.5°	721.2	672.8	624.3	565.1	505.9	449.4	387.5	328.3	263.7	204.5	153.4
5°	726.6	675.5	627.0	567.8	508.6	454.8	392.9	331.0	266.4	207.2	153.4
2.5°	729.3	678.2	629.7	570.5	511.3	454.8	392.9	331.0	266.4	207.2	153.4
0°	729.3	678.2	629.7	570.5	511.3	454.8	392.9	331.0	266.4	207.2	153.4

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	2.7	2.7	0.0	0.0
85°	8.1	5.4	2.7	0.0
82.5°	10.8	8.1	2.7	0.0
80°	16.1	10.8	5.4	0.0
77.5°	18.8	13.5	5.4	0.0
75°	24.2	16.1	8.1	0.0
72.5°	26.9	18.8	8.1	0.0
70°	29.6	21.5	10.8	0.0
67.5°	35.0	21.5	10.8	0.0
65°	40.4	24.2	13.5	0.0
62.5°	43.1	26.9	13.5	0.0
60°	48.4	29.6	13.5	0.0
57.5°	53.8	32.3	16.1	0.0
55°	56.5	35.0	16.1	0.0
52.5°	61.9	37.7	18.8	0.0
50°	64.6	40.4	18.8	0.0
47.5°	67.3	43.1	18.8	0.0
45°	72.7	45.7	21.5	0.0
42.5°	75.4	48.4	21.5	0.0
40°	78.0	48.4	21.5	0.0
37.5°	83.4	51.1	24.2	0.0
35°	86.1	53.8	24.2	0.0
32.5°	88.8	56.5	24.2	0.0
30°	91.5	56.5	26.9	0.0
27.5°	94.2	59.2	26.9	0.0
25°	96.9	59.2	26.9	0.0
22.5°	99.6	61.9	26.9	0.0
20°	99.6	61.9	26.9	0.0
17.5°	102.3	64.6	26.9	0.0
15°	102.3	64.6	29.6	0.0
12.5°	105.0	64.6	29.6	0.0
10°	105.0	67.3	29.6	0.0
7.5°	107.6	67.3	29.6	0.0
5°	107.6	67.3	29.6	0.0
2.5°	107.6	67.3	29.6	0.0
0°	107.6	67.3	29.6	0.0

(END OF REPORT)