

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: P623341

Luminaire Tested: **IFLD-L-SA7D-727-U-44**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623341
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-727-U-44
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 4 distribution lens
Light Source: (112) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	42357.7 lumens	Max Intensity:	136965.7 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	100.2 lumens/watt		
Luminous Opening:	Rectangular (W 2' x L: 1' x H: 0')		

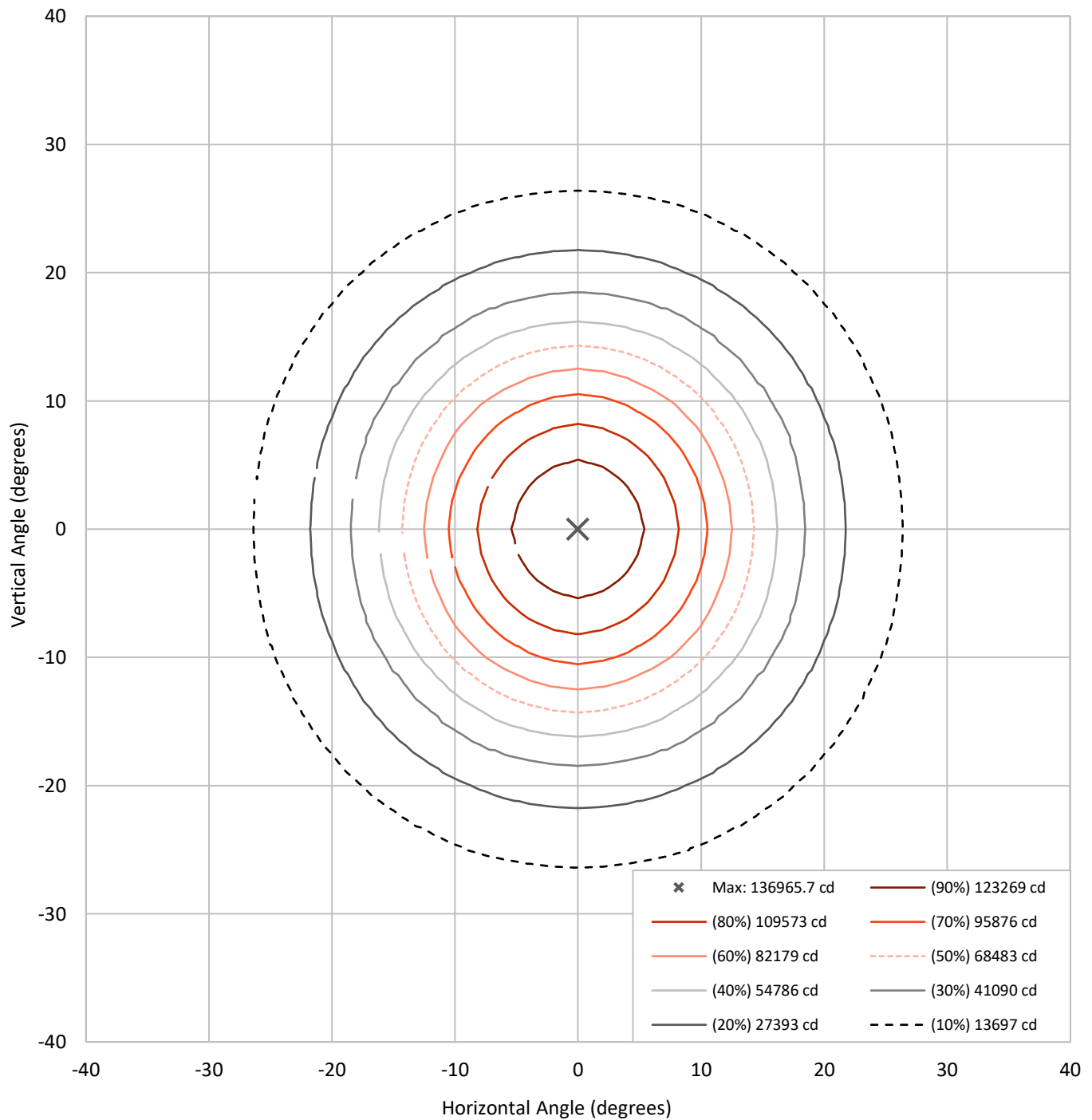
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	15283.5 lumens	Field Lumens:	25808.2 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

Input Watts (W): 422.6
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



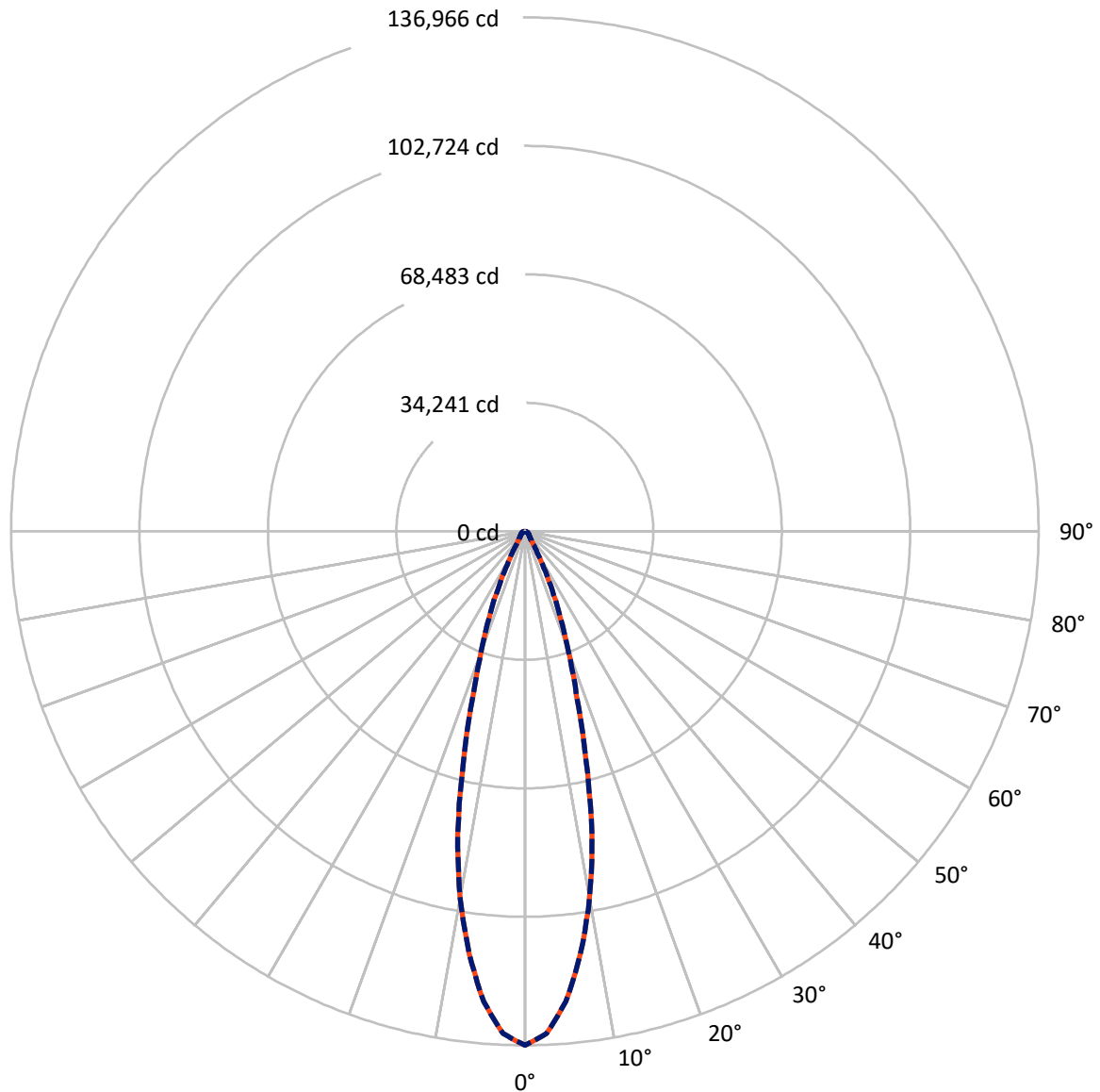
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Lumen Table

Vertical Angle (degrees)	Horizontal Angle (degrees)																	
	-90	-80	-70	-60	-50	-40	-30	-20	-10	0	10	20	30	40	50	60	70	80
90	1.0		7.2		18.2		29.1		33.6		29.1		18.2		7.2		1.0	
80	1.0		7.2		18.2		29.1		33.6		29.1		18.2		7.2		1.0	
70	3.3		3.4	7.0	11.6	16.3	20.5	23.6	25.3	25.3	23.6	20.5	16.3	11.6	7.0	3.4	3.3	
60			5.2	10.7	17.2	23.8	29.5	33.9	36.3	36.3	33.9	29.5	23.8	17.2	10.7	5.2		
50	5.6		7.0	14.0	22.1	30.3	38.5	45.9	50.7	50.7	45.9	38.5	30.3	22.1	14.0	7.0	5.6	
40			8.5	16.7	26.2	37.6	53.6	78.2	104.1	104.1	78.2	53.6	37.6	26.2	16.7	8.5		
30	7.4		9.7	18.8	30.1	48.5	101.6	278.7	504.7	504.7	278.7	101.6	48.5	30.1	18.8	9.7	7.4	
20			10.5	20.2	33.8	66.7	263.1	904.7	1745.1	1745.1	904.7	263.1	66.7	33.8	20.2	10.5		
10	8.1		10.9	21.0	36.1	86.5	463.4	1697.8	3347.1	3347.1	1697.8	463.4	86.5	36.1	21.0	10.9	8.1	
0			10.9	21.0	36.1	86.5	463.4	1697.8	3347.1	3347.1	1697.8	463.4	86.5	36.1	21.0	10.9		
-10	7.4		10.5	20.2	33.8	66.7	263.1	904.7	1745.1	1745.1	904.7	263.1	66.7	33.8	20.2	10.5	7.4	
-20			9.7	18.8	30.1	48.5	101.6	278.7	504.7	504.7	278.7	101.6	48.5	30.1	18.8	9.7		
-30	5.6		8.5	16.7	26.2	37.6	53.6	78.2	104.1	104.1	78.2	53.6	37.6	26.2	16.7	8.5	5.6	
-40			7.0	14.0	22.1	30.3	38.5	45.9	50.7	50.7	45.9	38.5	30.3	22.1	14.0	7.0		
-50	3.3		5.2	10.7	17.2	23.8	29.5	33.9	36.3	36.3	33.9	29.5	23.8	17.2	10.7	5.2	3.3	
-60			3.4	7.0	11.6	16.3	20.5	23.6	25.3	25.3	23.6	20.5	16.3	11.6	7.0	3.4		
-70	1.0		7.2		18.2		29.1		33.6		29.1		18.2		7.2		1.0	
-80			7.2		18.2		29.1		33.6		29.1		18.2		7.2			
-90	1.0		7.2		18.2		29.1		33.6		29.1		18.2		7.2		1.0	

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Luminous Intensity Polar Plot

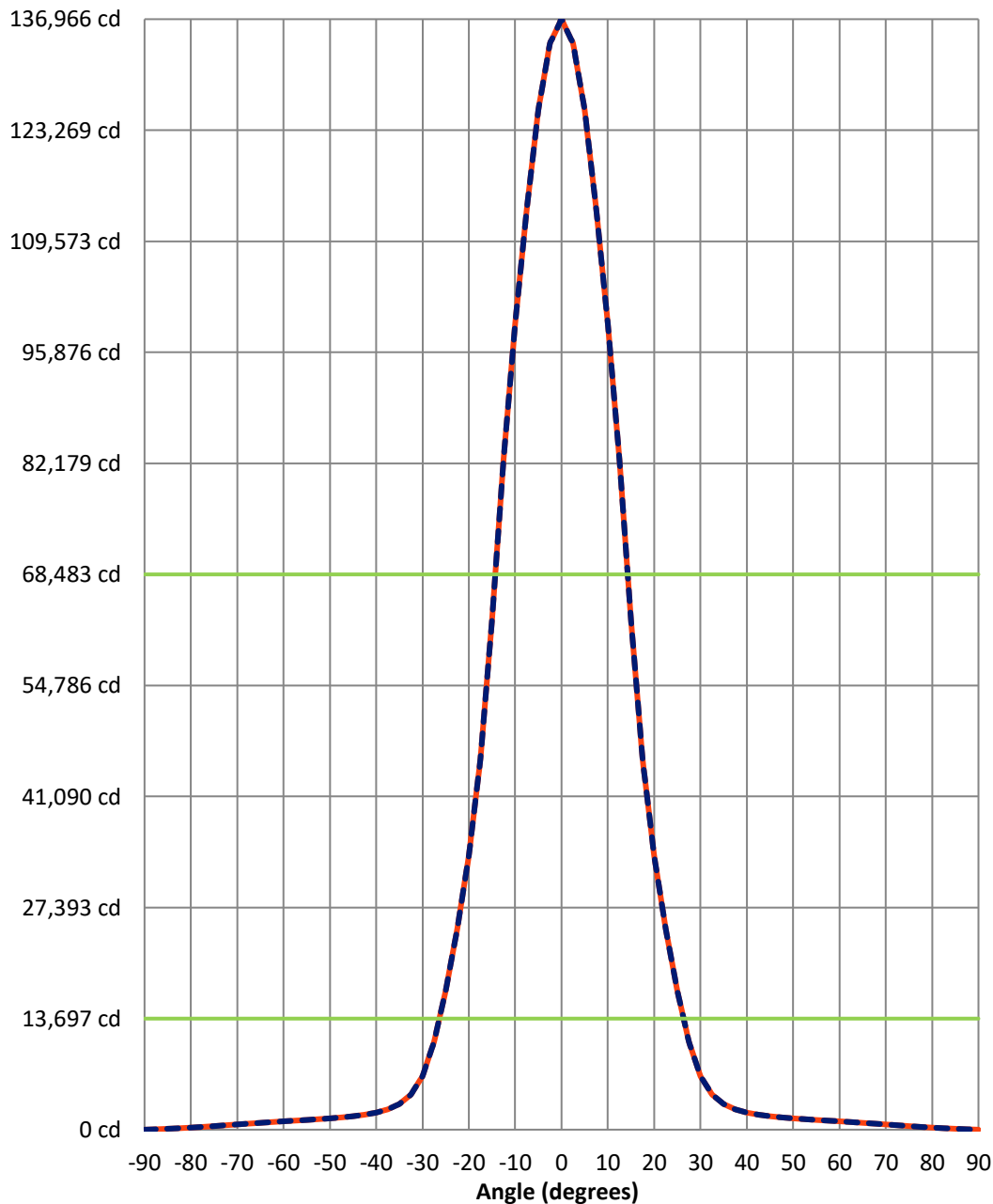


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 28.6°
V Angle: 28.6°
Lumens: 15283.5
Efficiency: 36.1%

Field:
H Angle: 52.7°
V Angle: 52.7°
Lumens: 25808.2
Efficiency: 60.9%

Spill:
Lumens: 16549.5
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°	48.6	48.6	48.6	48.6	48.6	48.6	48.6	44.2	44.2	44.2	44.2
85°	110.4	110.4	110.4	110.4	110.4	106.0	106.0	106.0	101.6	101.6	97.2
82.5°	176.7	176.7	176.7	176.7	172.2	172.2	167.8	167.8	163.4	163.4	159.0
80°	251.7	251.7	251.7	251.7	247.3	242.9	242.9	238.5	234.1	229.6	225.2
77.5°	340.1	340.1	340.1	335.6	331.2	331.2	326.8	318.0	313.6	304.7	300.3
75°	437.2	437.2	437.2	432.8	428.4	424.0	415.1	410.7	401.9	393.0	379.8
72.5°	543.2	543.2	543.2	538.8	530.0	525.5	516.7	507.9	499.0	485.8	472.5
70°	644.8	644.8	644.8	635.9	631.5	622.7	613.9	605.0	591.8	578.5	565.3
67.5°	746.3	746.3	746.3	737.5	733.1	724.3	715.4	702.2	688.9	671.3	658.0
65°	839.1	839.1	834.7	830.3	825.8	817.0	803.8	794.9	781.7	764.0	746.3
62.5°	936.2	936.2	931.8	927.4	918.6	909.7	896.5	883.3	865.6	847.9	830.3
60°	1033.4	1033.4	1029.0	1024.6	1015.7	1002.5	989.2	976.0	958.3	936.2	914.2
57.5°	1112.9	1112.9	1108.5	1104.1	1095.2	1086.4	1073.2	1059.9	1042.2	1024.6	998.1
55°	1196.8	1196.8	1192.4	1183.6	1174.7	1165.9	1152.6	1135.0	1117.3	1095.2	1077.6
52.5°	1294.0	1294.0	1289.5	1280.7	1267.5	1254.2	1236.6	1214.5	1192.4	1170.3	1143.8
50°	1391.1	1391.1	1382.3	1373.5	1364.6	1347.0	1329.3	1307.2	1280.7	1254.2	1223.3
47.5°	1510.4	1510.4	1501.5	1488.3	1470.6	1452.9	1426.5	1395.5	1369.0	1338.1	1302.8
45°	1656.1	1656.1	1642.8	1629.6	1607.5	1576.6	1545.7	1510.4	1470.6	1430.9	1386.7
42.5°	1846.0	1846.0	1828.3	1806.2	1775.3	1735.6	1687.0	1638.4	1589.9	1536.9	1483.9
40°	2102.1	2102.1	2075.6	2044.7	1996.1	1938.7	1868.1	1801.8	1735.6	1660.5	1594.3
37.5°	2504.0	2504.0	2459.9	2402.4	2323.0	2225.8	2106.6	2018.2	1916.7	1819.5	1731.2
35°	3162.0	3162.0	3082.5	2981.0	2839.7	2663.0	2473.1	2323.0	2155.1	2018.2	1890.2
32.5°	4332.3	4332.3	4173.4	3974.6	3705.2	3360.8	3042.8	2777.8	2504.0	2292.0	2088.9
30°	6597.9	6597.9	6257.8	5838.3	5259.8	4535.5	3992.3	3484.4	3020.7	2671.8	2375.9
27.5°	10850.7	10674.1	10144.1	9274.1	8081.7	6597.9	5652.8	4579.7	3846.6	3179.7	2769.0
25°	17130.7	16839.2	15964.8	14538.3	12595.2	10391.4	8461.5	6425.7	5140.5	4032.0	3268.0
22.5°	24761.9	24360.1	23172.1	21233.4	18605.7	15673.3	12551.0	9623.0	7017.4	5330.4	4032.0
20°	33797.6	33258.8	31664.6	29076.6	25596.6	21864.9	17695.9	13774.3	10016.1	7017.4	5140.5
17.5°	45725.9	44904.5	42488.8	38602.5	33797.6	28767.5	23556.3	18495.3	13774.3	9623.0	6425.7
15°	62874.2	61487.5	57433.4	50994.5	43513.4	36500.3	29853.9	23556.3	17695.9	12551.0	8461.5
12.5°	82698.8	80768.9	75182.3	66469.1	56302.8	45213.6	36500.3	28767.5	21864.9	15673.3	10391.4
10°	99401.1	97365.2	91593.1	82853.4	69962.3	56302.8	43513.4	33797.6	25596.6	18605.7	12595.2
7.5°	113511.0	111232.2	105009.7	95448.5	82853.4	66469.1	50994.5	38602.5	29076.6	21233.4	14538.3
5°	125766.1	122877.9	115635.2	105009.7	91593.1	75182.3	57433.4	42488.8	31664.6	23172.1	15964.8
2.5°	133953.9	130562.2	122877.9	111232.2	97365.2	80768.9	61487.5	44904.5	33258.8	24360.1	16839.2
0°	136965.7	133953.9	125766.1	113511.0	99401.1	82698.8	62874.2	45725.9	33797.6	24761.9	17130.7

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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°	44.2	44.2	39.7	39.7	39.7	35.3	35.3	35.3	30.9	30.9	30.9
85°	97.2	92.7	92.7	88.3	83.9	79.5	79.5	75.1	70.7	66.2	61.8
82.5°	154.6	150.2	145.7	141.3	136.9	128.1	123.7	119.2	110.4	106.0	101.6
80°	216.4	212.0	203.1	198.7	189.9	181.1	172.2	163.4	154.6	145.7	136.9
77.5°	291.5	278.2	269.4	260.6	247.3	238.5	225.2	216.4	203.1	189.9	176.7
75°	371.0	357.7	344.5	331.2	318.0	300.3	287.1	269.4	256.1	238.5	225.2
72.5°	459.3	441.6	424.0	406.3	388.6	371.0	353.3	331.2	313.6	291.5	269.4
70°	547.6	530.0	512.3	490.2	468.1	446.0	424.0	397.5	375.4	348.9	322.4
67.5°	640.4	618.3	596.2	574.1	552.0	525.5	494.6	468.1	437.2	406.3	379.8
65°	728.7	706.6	680.1	653.6	627.1	600.6	569.7	538.8	503.5	468.1	437.2
62.5°	808.2	786.1	764.0	733.1	706.6	675.7	644.8	605.0	569.7	534.4	494.6
60°	892.1	865.6	839.1	808.2	777.3	746.3	711.0	671.3	635.9	591.8	552.0
57.5°	971.6	945.1	914.2	883.3	847.9	812.6	777.3	737.5	697.8	653.6	609.4
55°	1051.1	1024.6	993.7	958.3	918.6	878.8	839.1	799.3	759.6	711.0	662.4
52.5°	1117.3	1090.8	1059.9	1033.4	989.2	949.5	905.3	856.8	812.6	764.0	715.4
50°	1188.0	1157.1	1121.7	1090.8	1055.5	1015.7	967.2	918.6	865.6	817.0	764.0
47.5°	1267.5	1227.7	1188.0	1148.2	1112.9	1068.7	1029.0	976.0	923.0	865.6	812.6
45°	1347.0	1302.8	1258.6	1210.1	1165.9	1121.7	1077.6	1033.4	976.0	918.6	856.8
42.5°	1430.9	1377.9	1329.3	1280.7	1227.7	1174.7	1126.1	1077.6	1029.0	967.2	905.3
40°	1528.0	1466.2	1404.4	1347.0	1294.0	1232.1	1174.7	1121.7	1068.7	1015.7	949.5
37.5°	1638.4	1563.4	1488.3	1417.6	1351.4	1294.0	1227.7	1165.9	1112.9	1055.5	989.2
35°	1779.8	1669.3	1581.0	1492.7	1417.6	1347.0	1280.7	1210.1	1148.2	1090.8	1033.4
32.5°	1938.7	1801.8	1682.6	1581.0	1488.3	1404.4	1329.3	1258.6	1188.0	1121.7	1059.9
30°	2133.1	1956.4	1801.8	1669.3	1563.4	1466.2	1377.9	1302.8	1227.7	1157.1	1090.8
27.5°	2406.9	2133.1	1938.7	1779.8	1638.4	1528.0	1430.9	1347.0	1267.5	1188.0	1117.3
25°	2769.0	2375.9	2088.9	1890.2	1731.2	1594.3	1483.9	1386.7	1302.8	1223.3	1143.8
22.5°	3179.7	2671.8	2292.0	2018.2	1819.5	1660.5	1536.9	1430.9	1338.1	1254.2	1170.3
20°	3846.6	3020.7	2504.0	2155.1	1916.7	1735.6	1589.9	1470.6	1369.0	1280.7	1192.4
17.5°	4579.7	3484.4	2777.8	2323.0	2018.2	1801.8	1638.4	1510.4	1395.5	1307.2	1214.5
15°	5652.8	3992.3	3042.8	2473.1	2106.6	1868.1	1687.0	1545.7	1426.5	1329.3	1236.6
12.5°	6597.9	4535.5	3360.8	2663.0	2225.8	1938.7	1735.6	1576.6	1452.9	1347.0	1254.2
10°	8081.7	5259.8	3705.2	2839.7	2323.0	1996.1	1775.3	1607.5	1470.6	1364.6	1267.5
7.5°	9274.1	5838.3	3974.6	2981.0	2402.4	2044.7	1806.2	1629.6	1488.3	1373.5	1280.7
5°	10144.1	6257.8	4173.4	3082.5	2459.9	2075.6	1828.3	1642.8	1501.5	1382.3	1289.5
2.5°	10674.1	6597.9	4332.3	3162.0	2504.0	2102.1	1846.0	1656.1	1510.4	1391.1	1294.0
0°	10850.7	6597.9	4332.3	3162.0	2504.0	2102.1	1846.0	1656.1	1510.4	1391.1	1294.0

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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°	26.5	26.5	22.1	22.1	22.1	17.7	17.7	13.2	13.2	8.8	8.8
85°	57.4	53.0	48.6	44.2	39.7	35.3	35.3	30.9	26.5	22.1	17.7
82.5°	92.7	88.3	79.5	70.7	66.2	57.4	48.6	44.2	39.7	30.9	26.5
80°	128.1	119.2	110.4	101.6	92.7	79.5	70.7	61.8	48.6	39.7	35.3
77.5°	167.8	154.6	141.3	128.1	114.8	106.0	92.7	79.5	66.2	53.0	39.7
75°	207.6	189.9	176.7	159.0	145.7	128.1	110.4	97.2	83.9	66.2	48.6
72.5°	251.7	229.6	212.0	189.9	172.2	154.6	132.5	114.8	97.2	79.5	61.8
70°	300.3	273.8	247.3	225.2	203.1	176.7	154.6	132.5	110.4	92.7	70.7
67.5°	348.9	318.0	287.1	256.1	229.6	203.1	176.7	154.6	128.1	106.0	79.5
65°	397.5	362.1	331.2	295.9	260.6	229.6	203.1	172.2	145.7	114.8	92.7
62.5°	450.5	410.7	371.0	331.2	295.9	256.1	225.2	189.9	159.0	128.1	101.6
60°	507.9	463.7	415.1	371.0	331.2	287.1	247.3	212.0	176.7	141.3	110.4
57.5°	560.9	512.3	463.7	410.7	362.1	318.0	273.8	229.6	189.9	154.6	119.2
55°	613.9	560.9	507.9	450.5	397.5	348.9	300.3	251.7	207.6	167.8	128.1
52.5°	662.4	609.4	552.0	494.6	437.2	379.8	322.4	269.4	225.2	176.7	136.9
50°	711.0	653.6	591.8	534.4	468.1	406.3	348.9	291.5	238.5	189.9	145.7
47.5°	759.6	697.8	635.9	569.7	503.5	437.2	375.4	313.6	256.1	203.1	154.6
45°	799.3	737.5	671.3	605.0	538.8	468.1	397.5	331.2	269.4	216.4	163.4
42.5°	839.1	777.3	711.0	644.8	569.7	494.6	424.0	353.3	287.1	225.2	172.2
40°	878.8	812.6	746.3	675.7	600.6	525.5	446.0	371.0	300.3	238.5	181.1
37.5°	918.6	847.9	777.3	706.6	627.1	552.0	468.1	388.6	318.0	247.3	189.9
35°	958.3	883.3	808.2	733.1	653.6	574.1	490.2	406.3	331.2	260.6	198.7
32.5°	993.7	914.2	839.1	764.0	680.1	596.2	512.3	424.0	344.5	269.4	203.1
30°	1024.6	945.1	865.6	786.1	706.6	618.3	530.0	441.6	357.7	278.2	212.0
27.5°	1051.1	971.6	892.1	808.2	728.7	640.4	547.6	459.3	371.0	291.5	216.4
25°	1077.6	998.1	914.2	830.3	746.3	658.0	565.3	472.5	379.8	300.3	225.2
22.5°	1095.2	1024.6	936.2	847.9	764.0	671.3	578.5	485.8	393.0	304.7	229.6
20°	1117.3	1042.2	958.3	865.6	781.7	688.9	591.8	499.0	401.9	313.6	234.1
17.5°	1135.0	1059.9	976.0	883.3	794.9	702.2	605.0	507.9	410.7	318.0	238.5
15°	1152.6	1073.2	989.2	896.5	803.8	715.4	613.9	516.7	415.1	326.8	242.9
12.5°	1165.9	1086.4	1002.5	909.7	817.0	724.3	622.7	525.5	424.0	331.2	242.9
10°	1174.7	1095.2	1015.7	918.6	825.8	733.1	631.5	530.0	428.4	331.2	247.3
7.5°	1183.6	1104.1	1024.6	927.4	830.3	737.5	635.9	538.8	432.8	335.6	251.7
5°	1192.4	1108.5	1029.0	931.8	834.7	746.3	644.8	543.2	437.2	340.1	251.7
2.5°	1196.8	1112.9	1033.4	936.2	839.1	746.3	644.8	543.2	437.2	340.1	251.7
0°	1196.8	1112.9	1033.4	936.2	839.1	746.3	644.8	543.2	437.2	340.1	251.7

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	4.4	4.4	0.0	0.0
85°	13.2	8.8	4.4	0.0
82.5°	17.7	13.2	4.4	0.0
80°	26.5	17.7	8.8	0.0
77.5°	30.9	22.1	8.8	0.0
75°	39.7	26.5	13.2	0.0
72.5°	44.2	30.9	13.2	0.0
70°	48.6	35.3	17.7	0.0
67.5°	57.4	35.3	17.7	0.0
65°	66.2	39.7	22.1	0.0
62.5°	70.7	44.2	22.1	0.0
60°	79.5	48.6	22.1	0.0
57.5°	88.3	53.0	26.5	0.0
55°	92.7	57.4	26.5	0.0
52.5°	101.6	61.8	30.9	0.0
50°	106.0	66.2	30.9	0.0
47.5°	110.4	70.7	30.9	0.0
45°	119.2	75.1	35.3	0.0
42.5°	123.7	79.5	35.3	0.0
40°	128.1	79.5	35.3	0.0
37.5°	136.9	83.9	39.7	0.0
35°	141.3	88.3	39.7	0.0
32.5°	145.7	92.7	39.7	0.0
30°	150.2	92.7	44.2	0.0
27.5°	154.6	97.2	44.2	0.0
25°	159.0	97.2	44.2	0.0
22.5°	163.4	101.6	44.2	0.0
20°	163.4	101.6	44.2	0.0
17.5°	167.8	106.0	44.2	0.0
15°	167.8	106.0	48.6	0.0
12.5°	172.2	106.0	48.6	0.0
10°	172.2	110.4	48.6	0.0
7.5°	176.7	110.4	48.6	0.0
5°	176.7	110.4	48.6	0.0
2.5°	176.7	110.4	48.6	0.0
0°	176.7	110.4	48.6	0.0

(END OF REPORT)