

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: P623535

Luminaire Tested: **IFLD-S-SA6E-830-U-44**

Issue Date: 11/2/2022

Test Information

Test Method: LM-79-2019
Report Number: P623535
Test Lab: INNOVATION CENTER(G2)
Issue Date: 11/2/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA6E-830-U-44
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ Nema 4 distribution lens
Light Source: (96) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp:	N/A	NEMA Type:	4H x 4V
Luminaire Lumens:	43656.4 lumens	Max Intensity:	141165 candela
Efficiency:	N/A	Max Intensity Angle:	0°H x 0°V
Efficacy:	94.0 lumens/watt		
Luminous Opening:	Rectangular (W 1.5' x L: 1' x H: 0')		

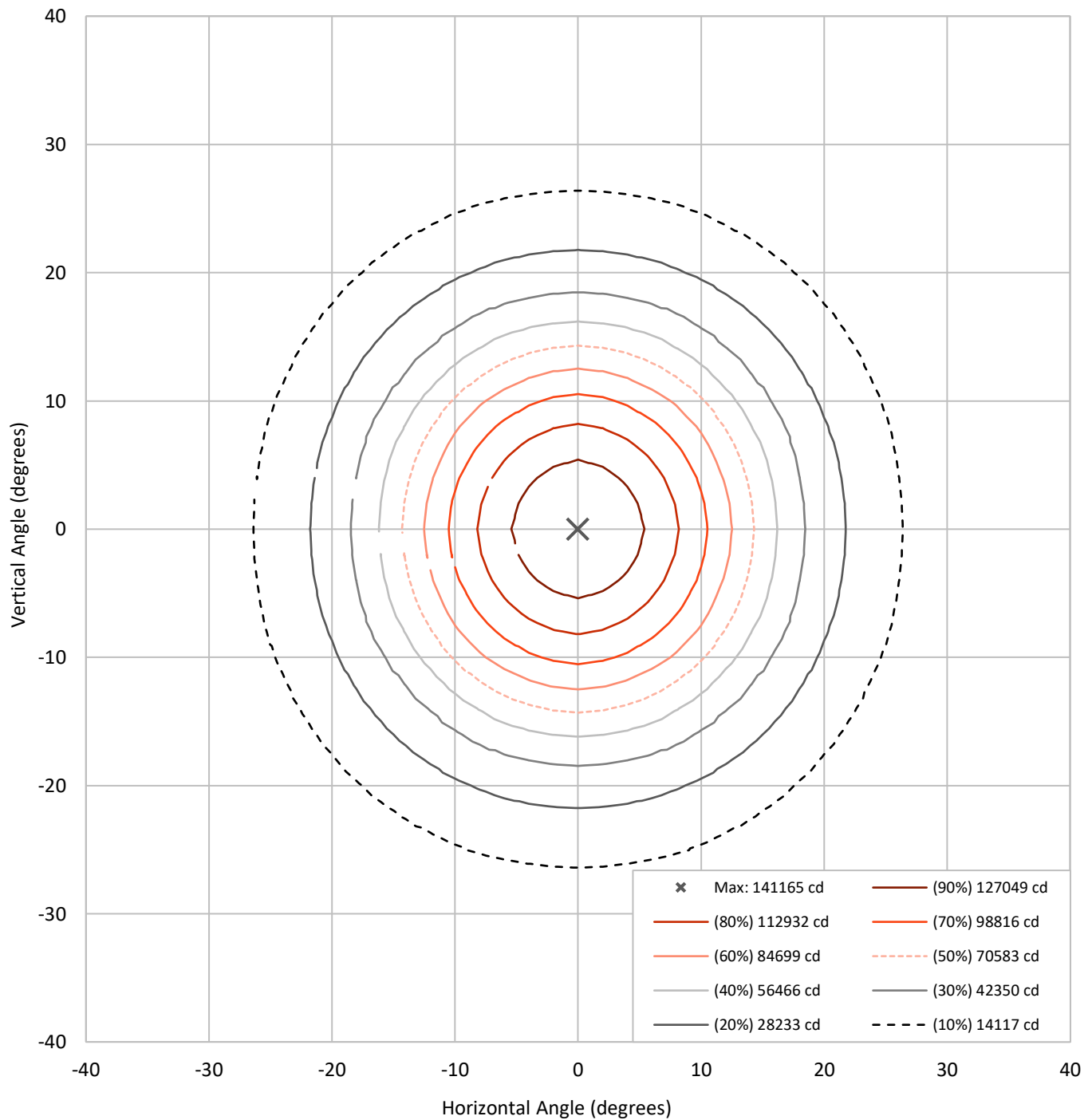
Beam Angle (50%):	28.6°H x 28.6°V	Field Angle (10%):	52.7°H x 52.7°V
Beam Lumens:	15752 lumens	Field Lumens:	26599.5 lumens
Beam Efficiency:	36.1%	Field Efficiency:	60.9%

Input Watts (W): 464.2
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





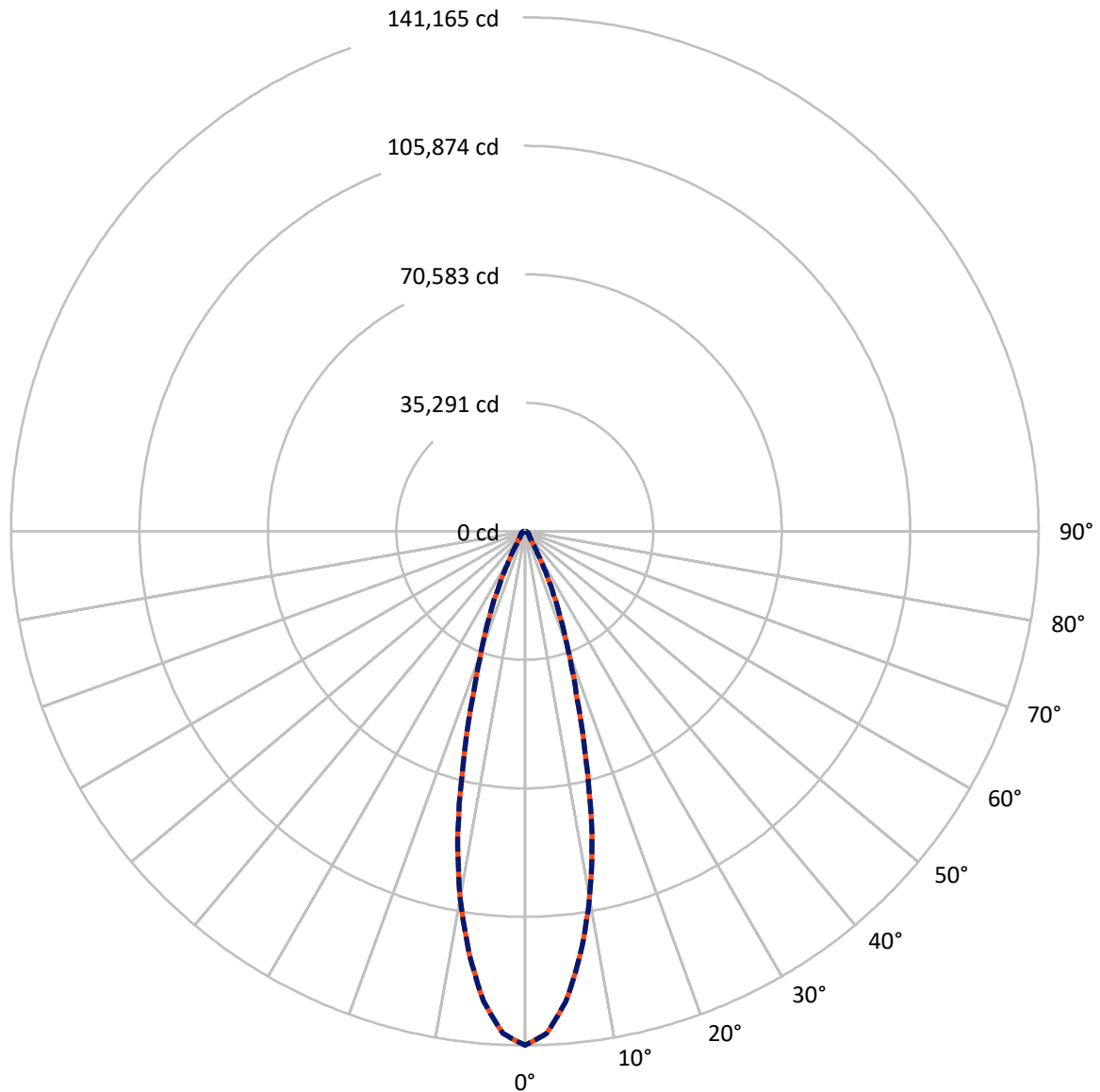
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Lumen Table

Vertical Angle (degrees)		Horizontal Angle (degrees)																																					
90		-90		-80		-70		-60		-50		-40		-30		-20		-10		0		10		20		30		40		50		60		70		80		90	
80	1.0			7.4				18.8				30.0				34.7				30.0				18.8				7.4				1.0							
70	3.4	3.5	7.3	11.9	16.8	21.1	24.3	26.1	26.1	24.3	21.1	16.8	11.9	7.3	3.5	3.4																							
60																																							
50	5.8	5.4	11.0	17.7	24.5	30.4	34.9	37.4	37.4	34.9	30.4	24.5	17.7	11.0	5.4	5.8																							
40																																							
30	7.6	7.2	14.4	22.8	31.2	39.7	47.3	52.2	52.2	47.3	39.7	31.2	22.8	14.4	7.2	7.6																							
20																																							
10	8.3	10.0	19.4	31.1	50.0	104.7	287.2	520.2	520.2	287.2	104.7	50.0	31.1	19.4	10.0	8.3																							
0																																							
-10	8.3	10.8	20.9	34.8	68.8	271.1	932.4	1798.6	1798.6	932.4	271.1	68.8	34.8	20.9	10.8	7.6																							
-20																																							
-30	7.6	11.2	21.7	37.3	89.1	477.6	1749.8	3449.8	3449.8	1749.8	477.6	89.1	37.3	21.7	11.2	8.3																							
-40																																							
-50	7.6	11.2	21.7	37.3	89.1	477.6	1749.8	3449.8	3449.8	1749.8	477.6	89.1	37.3	21.7	11.2	7.6																							
-60																																							
-70	5.8	10.8	20.9	34.8	68.8	271.1	932.4	1798.6	1798.6	932.4	271.1	68.8	34.8	20.9	10.8	5.8																							
-80																																							
-90	5.8	10.0	19.4	31.1	50.0	104.7	287.2	520.2	520.2	287.2	104.7	50.0	31.1	19.4	10.0	7.6																							
-80																																							
-70	3.4	8.8	17.2	27.0	38.8	55.2	80.6	107.3	107.3	80.6	55.2	38.8	27.0	17.2	8.8	3.4																							
-60																																							
-50	3.4	7.2	14.4	22.8	31.2	39.7	47.3	52.2	52.2	47.3	39.7	31.2	22.8	14.4	7.2	5.8																							
-40																																							
-30	1.0	5.4	11.0	17.7	24.5	30.4	34.9	37.4	37.4	34.9	30.4	24.5	17.7	11.0	5.4	3.4																							
-20																																							
-10	1.0	3.5	7.3	11.9	16.8	21.1	24.3	26.1	26.1	24.3	21.1	16.8	11.9	7.3	3.5	1.0																							
0																																							
10	1.0	7.4		18.8		30.0		34.7		30.0		18.8		7.4		1.0																							
20																																							
30	1.0	7.4		18.8		30.0		34.7		30.0		18.8		7.4		1.0																							
40																																							
50	1.0	7.4		18.8		30.0		34.7		30.0		18.8		7.4		1.0																							
60																																							
70	1.0	7.4		18.8		30.0		34.7		30.0		18.8		7.4		1.0																							
80																																							
90	1.0	7.4		18.8		30.0		34.7		30.0		18.8		7.4		1.0																							
80																																							

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Luminous Intensity Polar Plot

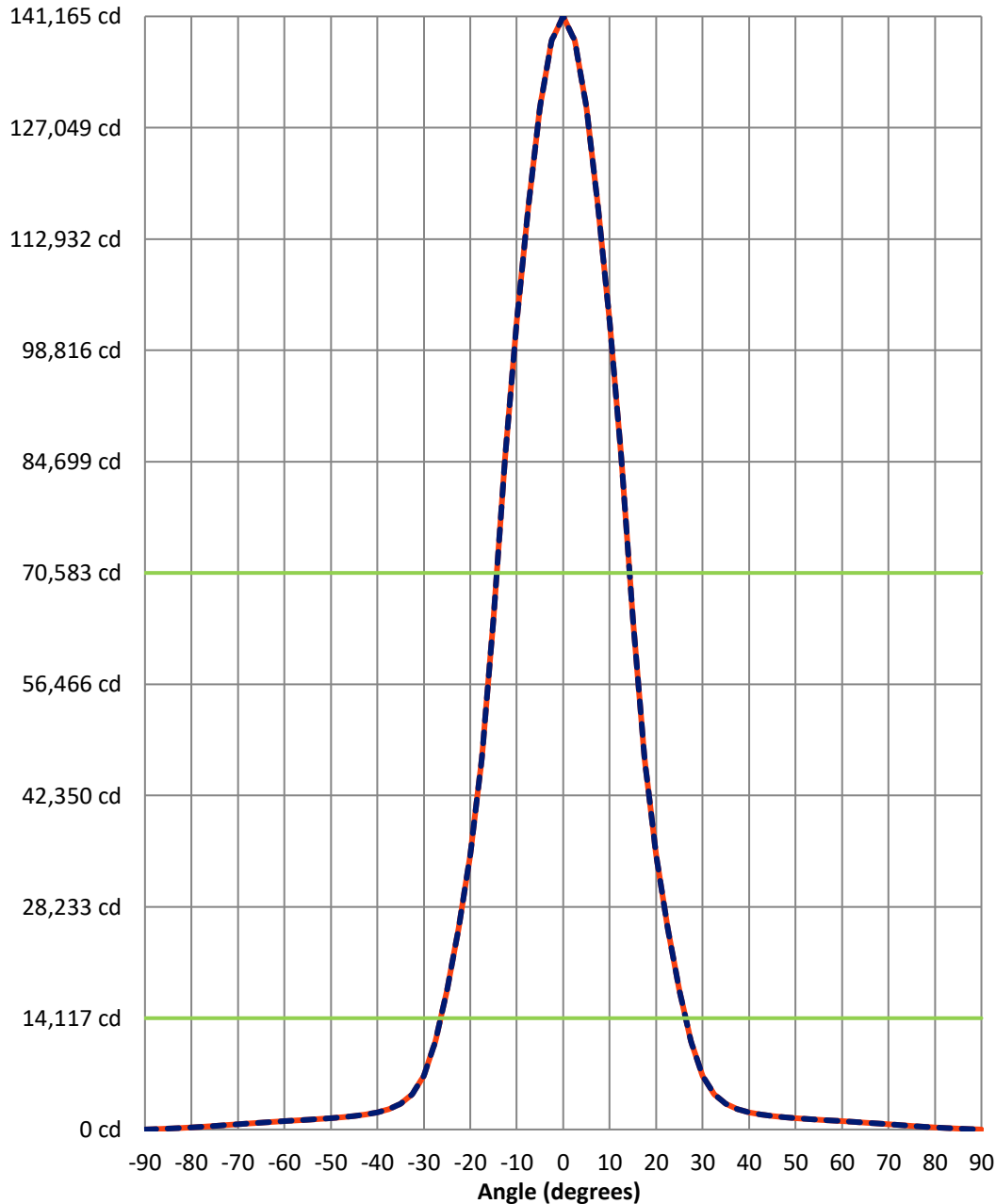


— Vertical Distribution Through 0-Deg - - - Horizontal Distribution Through 0-Deg



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Luminous Intensity Plot



Beam:
H Angle: 28.6°
V Angle: 28.6°
Lumens: 15752
Efficiency: 36.1%

Field:
H Angle: 52.7°
V Angle: 52.7°
Lumens: 26599.5
Efficiency: 60.9%

Spill:
Lumens: 17056.9
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°	50.1	50.1	50.1	50.1	50.1	50.1	50.1	45.5	45.5	45.5	45.5
85°	113.8	113.8	113.8	113.8	113.8	109.2	109.2	109.2	104.7	104.7	100.1
82.5°	182.1	182.1	182.1	182.1	177.5	177.5	173.0	173.0	168.4	168.4	163.9
80°	259.4	259.4	259.4	259.4	254.9	250.3	250.3	245.8	241.2	236.7	232.1
77.5°	350.5	350.5	350.5	345.9	341.4	341.4	336.8	327.7	323.2	314.1	309.5
75°	450.6	450.6	450.6	446.1	441.5	437.0	427.9	423.3	414.2	405.1	391.4
72.5°	559.9	559.9	559.9	555.3	546.2	541.6	532.5	523.4	514.3	500.7	487.0
70°	664.5	664.5	664.5	655.4	650.9	641.8	632.7	623.6	609.9	596.3	582.6
67.5°	769.2	769.2	769.2	760.1	755.6	746.5	737.4	723.7	710.1	691.9	678.2
65°	864.8	864.8	860.3	855.7	851.2	842.1	828.4	819.3	805.6	787.4	769.2
62.5°	965.0	965.0	960.4	955.8	946.7	937.6	924.0	910.3	892.1	873.9	855.7
60°	1065.1	1065.1	1060.5	1056.0	1046.9	1033.2	1019.6	1005.9	987.7	965.0	942.2
57.5°	1147.0	1147.0	1142.5	1137.9	1128.8	1119.7	1106.1	1092.4	1074.2	1056.0	1028.7
55°	1233.5	1233.5	1228.9	1219.8	1210.7	1201.6	1188.0	1169.8	1151.6	1128.8	1110.6
52.5°	1333.6	1333.6	1329.1	1320.0	1306.3	1292.7	1274.5	1251.7	1228.9	1206.2	1178.9
50°	1433.8	1433.8	1424.7	1415.6	1406.5	1388.3	1370.0	1347.3	1320.0	1292.7	1260.8
47.5°	1556.7	1556.7	1547.6	1533.9	1515.7	1497.5	1470.2	1438.3	1411.0	1379.2	1342.7
45°	1706.9	1706.9	1693.2	1679.6	1656.8	1624.9	1593.1	1556.7	1515.7	1474.7	1429.2
42.5°	1902.6	1902.6	1884.4	1861.6	1829.8	1788.8	1738.7	1688.7	1638.6	1584.0	1529.4
40°	2166.6	2166.6	2139.3	2107.4	2057.3	1998.2	1925.3	1857.1	1788.8	1711.4	1643.1
37.5°	2580.8	2580.8	2535.3	2476.1	2394.2	2294.0	2171.1	2080.1	1975.4	1875.3	1784.2
35°	3259.0	3259.0	3177.1	3072.4	2926.7	2744.6	2548.9	2394.2	2221.2	2080.1	1948.1
32.5°	4465.2	4465.2	4301.3	4096.5	3818.8	3463.8	3136.1	2863.0	2580.8	2362.3	2152.9
30°	6800.2	6800.2	6449.7	6017.3	5421.0	4674.5	4114.7	3591.3	3113.3	2753.8	2448.8
27.5°	11183.4	11001.3	10455.1	9558.5	8329.5	6800.2	5826.1	4720.1	3964.5	3277.2	2853.9
25°	17655.9	17355.5	16454.2	14984.0	12981.3	10710.0	8721.0	6622.7	5298.1	4155.7	3368.2
22.5°	25521.1	25106.9	23882.5	21884.4	19176.1	16153.8	12935.8	9918.1	7232.6	5493.8	4155.7
20°	34833.8	34278.5	32635.4	29968.1	26381.4	22535.2	18238.5	14196.6	10323.2	7232.6	5298.1
17.5°	47127.8	46281.2	43791.5	39786.0	34833.8	29649.5	24278.5	19062.3	14196.6	9918.1	6622.7
15°	64801.9	63372.7	59194.3	52558.0	44847.5	37619.4	30769.2	24278.5	18238.5	12935.8	8721.0
12.5°	85234.3	83245.2	77487.4	68506.9	58029.0	46599.8	37619.4	29649.5	22535.2	16153.8	10710.0
10°	102448.6	100350.3	94401.3	85393.6	72107.3	58029.0	44847.5	34833.8	26381.4	19176.1	12981.3
7.5°	116991.2	114642.5	108229.2	98374.9	85393.6	68506.9	52558.0	39786.0	29968.1	21884.4	14984.0
5°	129622.0	126645.2	119180.5	108229.2	94401.3	77487.4	59194.3	43791.5	32635.4	23882.5	16454.2
2.5°	138060.8	134565.1	126645.2	114642.5	100350.3	83245.2	63372.7	46281.2	34278.5	25106.9	17355.5
0°	141165.0	138060.8	129622.0	116991.2	102448.6	85234.3	64801.9	47127.8	34833.8	25521.1	17655.9

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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°	45.5	45.5	41.0	41.0	41.0	36.4	36.4	36.4	31.9	31.9	31.9
85°	100.1	95.6	95.6	91.0	86.5	81.9	81.9	77.4	72.8	68.3	63.7
82.5°	159.3	154.8	150.2	145.7	141.1	132.0	127.4	122.9	113.8	109.2	104.7
80°	223.0	218.5	209.4	204.8	195.7	186.6	177.5	168.4	159.3	150.2	141.1
77.5°	300.4	286.8	277.7	268.5	254.9	245.8	232.1	223.0	209.4	195.7	182.1
75°	382.3	368.7	355.0	341.4	327.7	309.5	295.9	277.7	264.0	245.8	232.1
72.5°	473.4	455.2	437.0	418.8	400.5	382.3	364.1	341.4	323.2	300.4	277.7
70°	564.4	546.2	528.0	505.2	482.5	459.7	437.0	409.6	386.9	359.6	332.3
67.5°	660.0	637.2	614.5	591.7	569.0	541.6	509.8	482.5	450.6	418.8	391.4
65°	751.0	728.3	701.0	673.6	646.3	619.0	587.2	555.3	518.9	482.5	450.6
62.5°	833.0	810.2	787.4	755.6	728.3	696.4	664.5	623.6	587.2	550.8	509.8
60°	919.4	892.1	864.8	833.0	801.1	769.2	732.8	691.9	655.4	609.9	569.0
57.5°	1001.4	974.1	942.2	910.3	873.9	837.5	801.1	760.1	719.2	673.6	628.1
55°	1083.3	1056.0	1024.1	987.7	946.7	905.8	864.8	823.8	782.9	732.8	682.7
52.5°	1151.6	1124.3	1092.4	1065.1	1019.6	978.6	933.1	883.0	837.5	787.4	737.4
50°	1224.4	1192.5	1156.1	1124.3	1087.8	1046.9	996.8	946.7	892.1	842.1	787.4
47.5°	1306.3	1265.4	1224.4	1183.4	1147.0	1101.5	1060.5	1005.9	951.3	892.1	837.5
45°	1388.3	1342.7	1297.2	1247.2	1201.6	1156.1	1110.6	1065.1	1005.9	946.7	883.0
42.5°	1474.7	1420.1	1370.0	1320.0	1265.4	1210.7	1160.7	1110.6	1060.5	996.8	933.1
40°	1574.9	1511.1	1447.4	1388.3	1333.6	1269.9	1210.7	1156.1	1101.5	1046.9	978.6
37.5°	1688.7	1611.3	1533.9	1461.1	1392.8	1333.6	1265.4	1201.6	1147.0	1087.8	1019.6
35°	1834.3	1720.5	1629.5	1538.5	1461.1	1388.3	1320.0	1247.2	1183.4	1124.3	1065.1
32.5°	1998.2	1857.1	1734.2	1629.5	1533.9	1447.4	1370.0	1297.2	1224.4	1156.1	1092.4
30°	2198.4	2016.4	1857.1	1720.5	1611.3	1511.1	1420.1	1342.7	1265.4	1192.5	1124.3
27.5°	2480.7	2198.4	1998.2	1834.3	1688.7	1574.9	1474.7	1388.3	1306.3	1224.4	1151.6
25°	2853.9	2448.8	2152.9	1948.1	1784.2	1643.1	1529.4	1429.2	1342.7	1260.8	1178.9
22.5°	3277.2	2753.8	2362.3	2080.1	1875.3	1711.4	1584.0	1474.7	1379.2	1292.7	1206.2
20°	3964.5	3113.3	2580.8	2221.2	1975.4	1788.8	1638.6	1515.7	1411.0	1320.0	1228.9
17.5°	4720.1	3591.3	2863.0	2394.2	2080.1	1857.1	1688.7	1556.7	1438.3	1347.3	1251.7
15°	5826.1	4114.7	3136.1	2548.9	2171.1	1925.3	1738.7	1593.1	1470.2	1370.0	1274.5
12.5°	6800.2	4674.5	3463.8	2744.6	2294.0	1998.2	1788.8	1624.9	1497.5	1388.3	1292.7
10°	8329.5	5421.0	3818.8	2926.7	2394.2	2057.3	1829.8	1656.8	1515.7	1406.5	1306.3
7.5°	9558.5	6017.3	4096.5	3072.4	2476.1	2107.4	1861.6	1679.6	1533.9	1415.6	1320.0
5°	10455.1	6449.7	4301.3	3177.1	2535.3	2139.3	1884.4	1693.2	1547.6	1424.7	1329.1
2.5°	11001.3	6800.2	4465.2	3259.0	2580.8	2166.6	1902.6	1706.9	1556.7	1433.8	1333.6
0°	11183.4	6800.2	4465.2	3259.0	2580.8	2166.6	1902.6	1706.9	1556.7	1433.8	1333.6

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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°	27.3	27.3	22.8	22.8	22.8	18.2	18.2	13.7	13.7	9.1	9.1
85°	59.2	54.6	50.1	45.5	41.0	36.4	36.4	31.9	27.3	22.8	18.2
82.5°	95.6	91.0	81.9	72.8	68.3	59.2	50.1	45.5	41.0	31.9	27.3
80°	132.0	122.9	113.8	104.7	95.6	81.9	72.8	63.7	50.1	41.0	36.4
77.5°	173.0	159.3	145.7	132.0	118.3	109.2	95.6	81.9	68.3	54.6	41.0
75°	213.9	195.7	182.1	163.9	150.2	132.0	113.8	100.1	86.5	68.3	50.1
72.5°	259.4	236.7	218.5	195.7	177.5	159.3	136.5	118.3	100.1	81.9	63.7
70°	309.5	282.2	254.9	232.1	209.4	182.1	159.3	136.5	113.8	95.6	72.8
67.5°	359.6	327.7	295.9	264.0	236.7	209.4	182.1	159.3	132.0	109.2	81.9
65°	409.6	373.2	341.4	305.0	268.5	236.7	209.4	177.5	150.2	118.3	95.6
62.5°	464.3	423.3	382.3	341.4	305.0	264.0	232.1	195.7	163.9	132.0	104.7
60°	523.4	477.9	427.9	382.3	341.4	295.9	254.9	218.5	182.1	145.7	113.8
57.5°	578.1	528.0	477.9	423.3	373.2	327.7	282.2	236.7	195.7	159.3	122.9
55°	632.7	578.1	523.4	464.3	409.6	359.6	309.5	259.4	213.9	173.0	132.0
52.5°	682.7	628.1	569.0	509.8	450.6	391.4	332.3	277.7	232.1	182.1	141.1
50°	732.8	673.6	609.9	550.8	482.5	418.8	359.6	300.4	245.8	195.7	150.2
47.5°	782.9	719.2	655.4	587.2	518.9	450.6	386.9	323.2	264.0	209.4	159.3
45°	823.8	760.1	691.9	623.6	555.3	482.5	409.6	341.4	277.7	223.0	168.4
42.5°	864.8	801.1	732.8	664.5	587.2	509.8	437.0	364.1	295.9	232.1	177.5
40°	905.8	837.5	769.2	696.4	619.0	541.6	459.7	382.3	309.5	245.8	186.6
37.5°	946.7	873.9	801.1	728.3	646.3	569.0	482.5	400.5	327.7	254.9	195.7
35°	987.7	910.3	833.0	755.6	673.6	591.7	505.2	418.8	341.4	268.5	204.8
32.5°	1024.1	942.2	864.8	787.4	701.0	614.5	528.0	437.0	355.0	277.7	209.4
30°	1056.0	974.1	892.1	810.2	728.3	637.2	546.2	455.2	368.7	286.8	218.5
27.5°	1083.3	1001.4	919.4	833.0	751.0	660.0	564.4	473.4	382.3	300.4	223.0
25°	1110.6	1028.7	942.2	855.7	769.2	678.2	582.6	487.0	391.4	309.5	232.1
22.5°	1128.8	1056.0	965.0	873.9	787.4	691.9	596.3	500.7	405.1	314.1	236.7
20°	1151.6	1074.2	987.7	892.1	805.6	710.1	609.9	514.3	414.2	323.2	241.2
17.5°	1169.8	1092.4	1005.9	910.3	819.3	723.7	623.6	523.4	423.3	327.7	245.8
15°	1188.0	1106.1	1019.6	924.0	828.4	737.4	632.7	532.5	427.9	336.8	250.3
12.5°	1201.6	1119.7	1033.2	937.6	842.1	746.5	641.8	541.6	437.0	341.4	250.3
10°	1210.7	1128.8	1046.9	946.7	851.2	755.6	650.9	546.2	441.5	341.4	254.9
7.5°	1219.8	1137.9	1056.0	955.8	855.7	760.1	655.4	555.3	446.1	345.9	259.4
5°	1228.9	1142.5	1060.5	960.4	860.3	769.2	664.5	559.9	450.6	350.5	259.4
2.5°	1233.5	1147.0	1065.1	965.0	864.8	769.2	664.5	559.9	450.6	350.5	259.4
0°	1233.5	1147.0	1065.1	965.0	864.8	769.2	664.5	559.9	450.6	350.5	259.4

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CANDELA DISTRIBUTION (continued):

	82.5°	85°	87.5°	90°
90°	0.0	0.0	0.0	0.0
87.5°	4.6	4.6	0.0	0.0
85°	13.7	9.1	4.6	0.0
82.5°	18.2	13.7	4.6	0.0
80°	27.3	18.2	9.1	0.0
77.5°	31.9	22.8	9.1	0.0
75°	41.0	27.3	13.7	0.0
72.5°	45.5	31.9	13.7	0.0
70°	50.1	36.4	18.2	0.0
67.5°	59.2	36.4	18.2	0.0
65°	68.3	41.0	22.8	0.0
62.5°	72.8	45.5	22.8	0.0
60°	81.9	50.1	22.8	0.0
57.5°	91.0	54.6	27.3	0.0
55°	95.6	59.2	27.3	0.0
52.5°	104.7	63.7	31.9	0.0
50°	109.2	68.3	31.9	0.0
47.5°	113.8	72.8	31.9	0.0
45°	122.9	77.4	36.4	0.0
42.5°	127.4	81.9	36.4	0.0
40°	132.0	81.9	36.4	0.0
37.5°	141.1	86.5	41.0	0.0
35°	145.7	91.0	41.0	0.0
32.5°	150.2	95.6	41.0	0.0
30°	154.8	95.6	45.5	0.0
27.5°	159.3	100.1	45.5	0.0
25°	163.9	100.1	45.5	0.0
22.5°	168.4	104.7	45.5	0.0
20°	168.4	104.7	45.5	0.0
17.5°	173.0	109.2	45.5	0.0
15°	173.0	109.2	50.1	0.0
12.5°	177.5	109.2	50.1	0.0
10°	177.5	113.8	50.1	0.0
7.5°	182.1	113.8	50.1	0.0
5°	182.1	113.8	50.1	0.0
2.5°	182.1	113.8	50.1	0.0
0°	182.1	113.8	50.1	0.0

(END OF REPORT)